```
From 2290834972702600952
X-Google-Thread: a4a23d5f63,b51047545cfb5ec0,start
X-Google-Attributes: gida4a23d5f63,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
X-Received: by 10.180.24.132 with SMTP id u4mr316606wif.6.1361153352241;
        Sun, 17 Feb 2013 18:09:12 -0800 (PST)
Path: bp2ni43642wib.1!nntp.google.com!feeder1.cambriumusenet.nl!
82.197.223.103.MISMATCH!feeder3.cambriumusenet.nl!feed.tweaknews.nl!
216.196.110.146.MISMATCH!border3.nntp.ams.giganews.com!
border1.nntp.ams.giganews.com!nntp.giganews.com!de-l.enfer-du-nord.net!
feeder2.enfer-du-nord.net!usenet.blueworldhosting.com!npeer02.iad.highwinds-
media.com!news.highwinds-media.com!feed-me.highwinds-media.com!
nx01.iad01.newshosting.com!newshosting.com!news-out.readnews.com!
transit3.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-041 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Sat, 9 Feb 2013 21:16:13 EST
Organization: The Radio Amateur Satellite Corporation
Lines: 2624
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <001c01ce0734$4ac659d0$e0530d70$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
X-Trace: reader1.panix.com 1360462572 5793 166.84.1.6 (10 Feb 2013 02:16:12 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 10 Feb 2013 02:16:12 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
DKIM-Signature: v=1; a=rsa-sha256; c=relaxed/relaxed; d=comcast.net;
     s=q20121106; t=1360462557;
     bh=fwujx456uzDfZB57rlxlvzDLZy5GBBsL3nJ56AOv0Z8=;
     h=Received:Received:From:To:Subject:Date:Message-ID:MIME-Version:
      Content-Type;
     b=inb+VYoaFXRJMcCTOui3CgKbVjOcSRQlZ66LWKw+0MuZ0YEUcefbxZp0yizCEZiS3
      BqXrNVOlnH1l280tyUVSuv9X+RdGjgcBReZ9Xib7jkNGxvooFVK7m7FJ+4umakGMsq
      zr8JTH8rhCihMXSaAxUatxrBLDkY9AyApCoenckbxsMjf79rSKs1GXhnUML/zn1Ese
      ZGXZ7fPG4MvAbNCFIc/sOt3KmJjo0SxU8/x5pMfoTvmOpkMQqs+gMznQMU92s6zR2/
      7AGW4BDgO0elVPHDNFoelTT6m2wHkS0VdQazncb4OySD+o141lbB5EUWpvzTR5kRUL
      MwwZmykUeWPzA==
X-Received-Bytes: 61628
```

```
Bytes: 61905
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
Content-Language: en-us

This report is organized into four (4) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - deborbited/returned satellites

SB SAT @ AMSAT W8ISS $WSR-041.S1
WSR 041 Part 1 02/11/2013

AMSAT NEWS SERVICE BULLETIN 041.S1
FROM AMSAT HQ SILVER SPRING, MD, February 11, 2013
TO ALL RADIO AMATEURS
BID: $WSR-041.S1

PW-Sat
Catalog Number: 38083
Launch Date: Febrauary 13, 2012 1000z
Launch Site: Kourou, French Guiana

Status: On Orbit

Uplink:   435.020 MHz FM
Downlink: 145.900 MHz DSB

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=132
[02112013]
=====
DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational
Current Mode: Science Mode - Beacon ONLY

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink:   435.530 to 435.570 MHz
```

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=68
[02112013]
=====
VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05, 2005 0444z
Launch site: Satish Dhawan Space Centre, India

Status: Operational
Current Mode: U/v - Dutch Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.9360 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=30

To know what transponder is switched on please listen for the beacon
that is active. Each transponder has a different beacon.
[02112013]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002 1700z
Launch site: Baikonur, Kazakhstan

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:

V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz. The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10 minute timer.
[02112013]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Operational
Current Mode: V/u (Mode JA)

Voice/CW (Mode JA)
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage:
http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts.htm

```
[02112013]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974
Launch site: Vandenberg AFB, California, USA

Status: Operational

Current Mode: Alternating between Mode A and B every 24 hours

Uplink:   145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink:  29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons:   29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php
[02112013]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998 0640z (ZARYA module)
Launch sites: Baikonur, Kazakhstan
              Kourou, French Guiana
              Uchinoura Space Center, Japan
              Kennedy Space Center, Titusville, Florida, USA

Status: Operational

Current Active Modes: FM Repeater - OFF
                      Voice -       V/v
                      BBS -         V/v
                      2m APRS -     V/v
                      2m Digi -     V/v
                      70cm APRS -   ?
                      70cm Digi -   ?
                      SSTV -        V/v


Expedition 34 Crew (November 2012 - March 2013):
Commander:                Kevin Ford          KF5GPP
Flight Engineer:          Oleg Novitskiy
Flight Engineer:          Evgeny Tarelkin
Flight Engineer:          Roman Romanenko
Flight Engineer:          Chris Hadfield      KC5RNJ/VA3OOG
Flight Engineer:          Tom Marshburn       KE5HOC
```

```
Available Modes and Frequencies:
Digital/APRS:
Worldwide 2m packet uplink:     145.825 MHz FM 1k2
Worldwide 2m packet downlink:   145.825 Mhz FM 1k2
Worldwide 70cm packet uplink:   437.550 Mhz FM 1k2
Worldwide 70cm packet downlink: 437.550 Mhz FM 1k2

Voice:
Region 1 voice uplink:          145.200 MHz FM
Region 2/3 voice uplink:        144.490 MHz FM
Worldwide downlink:             145.800 MHz FM

Crossband Repeater:
Repeater Uplinks:              1269.650 MHz FM
                                437.800 MHz FM
                                145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink:              145.800 MHz FM
                                437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink:                       145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian:                        OR4ISS
German:                         DP0ISS
Russian:                        RS0ISS
                                RZ3DZR
United States:                  NA1SS
2m Packet Mailbox:              RS0ISS-11
2m Digipeater alias:            ARISS
70cm Packet Mailbox:            RS0ISS-1
70cm Digipeater callsign:       RS0ISS
70cm Digipeater alias:          ARISS


Official ARISS Webpage:         http://www.rac.ca/ariss
ISS Fan Club Webpage:           http://www.issfanclub.com
APRS tracking page:             http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[02112013]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-041.S2
WSR 041 Part 2 02/11/2013
```

AMSAT NEWS SERVICE BULLETIN 041.S2
FROM AMSAT HQ SILVER SPRING, MD, February 11, 2013
TO ALL RADIO AMATEURS
BID: $WSR-041.S2

Fitsat-1
Catalog number: 38853
Launch Date: October 04, 2012
Launch site: Kibo Japanese Experiment Module, International Space Station

Status: Operational

Uplink:
Downlink(s): 437.445MHz 1k2 AFSK
5840.00 MHz 115k2 data
LED CW (200w pulses)

Beacon(s): 437.250 MHz CW

Callsign: NIWAKA

URL: http://carpcomm.com/satellite/fitsat1
[10292012]
=====
TechEdSat
Catalog number: 38854
Launch date: October 04, 2012
Launch site: Kibo Japanese Experiment Module, International Space Station

Uplink(s):
Downlink(s): 437.465 1k2 AFSK

Beacon(s):

Callsign:

URL:http://www.techedsat.com/
[10152012]
=====
We Wish
Catalog number: 38856
Launch date: October 04,2012
Launch Site: Kibo Japanese Experiment Module, International Space Station

Uplink(s):
Downlink(s): 437.505MHz 1k2 AFSK
437.505MHz SSTV

Beacon(s): 437.505MHz CW

```
Callsign: JQ1ZIJ

URL:
[10152012]
=====
F-1
Catalog number: 38855
Launch Date: October 04, 2012
Launch Site: Kibo Japanese Experiment Module, International Space
Station

Uplink(s):
Downlink(s): 145.980MHz 1k2 AFSK
             437.485MHz FM moduled CW

Baecon(s):

Callsign: XV1VN

URL: http://fspace.edu.vn/
[10152012]
=====
Aeneas
Catalog Number: 38760
Launch Date: September 13, 2012 2139z
Launch Site: Wallops Island, Virginia, USA

Status: On Orbit

Uplink: WiFi 2425MHz
Downlink:
WiFi: 2425MHz
Spread Spectrum: Somewhere in the 70cm band

Beacon: 437.600MHz 1k2 ax25 every 10 seconds

Callsign:

URL:
[10012012]
=====
CSSWE (Colorado Student Space Weather Experiment)
Catalog Number: 38761
Launch Date: September 12, 2012 2139z
Launch Site: Wallops Island, Virginia, USA

Status: On Orbit

Uplink:
Downlink:       437.345MHz 9k6 with ax.25

Beacon:
```

```
Callsign:

URL:
[10012012]
=====
CP5 (Polysat)
Catalog Number: 38763
Launch Date: September 12, 2012 2139z
Launch Site: Wallops Island, Virginia, USA

Status: On Orbit

Uplink:
Downlink:       437.405MHz AFSK on LSB ax.25 over NRZI at 1k2 baud,
every 2
                minutes, begins 3.5 hours after first turn-on

Beacon:

Callsign:

URL:
[10012012]
=====
CXBN (Cosmic X-Ray Background Nanosatellite)
Catalog Number: 38762
Launch Date: September 12, 2012 2139z
Launch Site: Wallops Island, Virginia, USA

Status: On Orbit

Uplink:
Downlink:       437.525MHz GFSK ax.25

Beacon:

Callsign:

URL:
[10012012]
=====
Proiteres
Catalog Number: 38756
Launch Date: September 09, 2012 2139z
Launch Site: Satish Dhawan Space Centre, India

Status: On Orbit

Uplink:
Downlink: 437.485MHz FM/AFSK

Beacon:
```

```
Callsign: JL3YZK

URL:
[10012012]
=====
RS-40 MiR (Yubileiny-2)
Catalog Number: 38735
Launch Date: July 28, 2012
Launch Site: Plesetsk Missile and Space Complex, Russia

Status: On Orbit

Uplink:
Downlink(s):    435.265 MHz
                435.365 MHz

Beacon:

Callsign:

URL:
[08272012]
=====
HORYU-II
Catalog number: 38340
Launch Date: May 17, 2012 1639z

Status: On Orbit

Uplink:   145.??? MHz
Downlink: 437.375 MHz CW/AX25/FSK

Beacon: 437.375 MHz CW

Callsign: JG6YBW

URL:

IARU Coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=216
[10012012]
=====
XaTcobeo
Catalog Number: 38082
Launch Date: Febrauary 13, 2012 1000z
Launch Site: Kourou, French Guiana

Status: Operational

Uplink:
Downlink: 437.365 MHz FFSK with AX.25
```

```
Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=135
[100162012]
=====
UniCubeSat
Catalog Number: 38085(?)
Launch Date: Febrauary 13, 2012 1000z
Launch Site: Kourou, French Guiana

Status: Operational

Uplink:
Downlink: 437.305 MHz 9k6 bps GMSK

Beacon:

Callsign:

URL:
http://www.gaussteam.com/index.php?option=com_content&view=article&id=
96:unicu
besat&catid=36:unicubesat&Itemid=183

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=133
[10012012]
=====
Robusta
Catalog Number: 38083(?)
Launch Date: Febrauary 13, 2012 1000z
Launch Site: Kourou, French Guiana

Status: On Orbit

Uplink:
Downlink: 437.325 MHz 1k2 FM telemetry (data every 3 min, 20 sec.
burst)

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=122
[10012012]
```

```
=====
MO-72 MaSat-1
Catalog Number: 38081
Launch Date: Febrauary 13, 2012 1000z
Launch Site: Kourou, French Guiana

Status: Operational

Uplink:
Downlink: 437.345 MHz GFSK 625/1250 bps
          437.345 MHz CW

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=126
[10012012]
=====
Goliat
Catalog Number: 38084(?)
Launch Date: Febrauary 13, 2012 1000z
Launch Site: Kourou, French Guiana

Status: Operational

Uplink:
Downlink: 437.485 MHz 1k2 AFSK

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=98
[10012012]
=====
E-St@r
Catalog Number: 38079
Launch Date: Febrauary 13, 2012 1000z
Launch Site: Kourou, French Guiana

Status: On Orbit

Uplink:
Downlink: 437.445 MHz 1k2 bps AFSK

Beacon:
```

```
Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=130
[10012012]
=====
ALMASat-1
Catalog Number: 38078
Launch Date: Febrauary 13, 2012 1000z
Launch Site: Kourou, French Guiana

Status: On Orbit

Uplink:
Downlink:  437.465 MHz 1k2 bps FSK
          2407.850 MHz

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=39
[10012012]
=====
RS-39 Chibis-M
Catalog Number: 38051
Launch Date: October 30, 2011 10:11:00 UTC
Launch site: Tyuratam (Baikonur Cosmodrome), Kazakhstan

Status: Operational

Uplink:
Downlink:

Beacon: 435.315 MHz CW
        435.215 MHz CW

Callsign:

URL:

IARU coordination status page:
[07302012]
=====
JUGNU
Catalog Number: 37839
Launch Date: October 12, 2011 05:30:00 UTC
Launch site: Satish Dhawan Space Centre, India

Status: On Orbit

Uplink:   145.??? MHz 1k2 (mode?)
Downlink: 437.505 MHz 9k6 (mode?)

Beacon: 437.275 MHz 15 wpm (?) CW

Callsign:

URL: http://www.iitk.ac.in/me/jugnu/index.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=160
[07092012]
=====
SRMSAT
Catalog Number: 37841
Launch Date: October 12, 2011 05:30:00 UTC
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Uplink:   145.900 MHz 1k  AX.25 (speed?)
Downlink: 437.500 MHz 2k4 AX.25

Beacon: 437.425 MHz 12 wpm CW

Callsign:

URL: http://srmsat.in/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=181
[01282013]
=====
HRBE (E1P Explorer 1 [Prime] CubeSat (E1P-U2))
Catalog Number: 37855
Launch Date: October 28, 2011
Launch site: Vandenberg Air Force Base, California, USA

Status: On Orbit

Uplink:   437.305 MHz (???)
Downlink: 437.505 MHz AX.25 (SSB?)

Beacon:

Callsign:

URL: http://ssel.montana.edu/
```

```
IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=116
[01122012]
=====
M-Cubed
Catalog Number: 37855
Launch Date: October 28, 2011
Launch site: Vandenberg Air Force Base, California, USA

Status: On Orbit

Uplink:
Downlink: 437.485 MHz AX.25

Beacon:

Callsign:

URL: http://umcubed.org/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=215
[01122012]
=====
RAX-2
Catalog Number: 37853
Launch Date: October 28, 2011
Launch site: Vandenberg Air Force Base, California, USA

Status: Operational

Uplink:
Downlink: 437.345MHz 9k6 GMSK

Beacon:

Callsign:

URL: http://rax.engin.umich.edu//

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=221
[03232012]
=====
AO-71 AubieSat-1
Catalog Number: 37854
Launch Date: October 28, 2011
Launch site: Vandenberg Air Force Base, California, USA

Status: On Orbit

Uplink:
Downlink: 437.475 MHz 1k2 AX.25
```

Beacon: 437.475 MHz CW

Callsign: KI4NQO

URL: http://www.space.auburn.edu/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=148
[12262011]
=====
O/OREOS
Catalog Number: 37224
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: On Orbit

Uplink:
Downlink: 437.035 MHZ AX.25

Beacon:

Callsign:

URL: http://www.ooreos.org/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=146
[02092011]
=====
Rax-1 Radio Aurora Explorer
Catalog Number: 37223
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: On Orbit

Uplink:
Downlink: 437.505 MHz 9k6 GMSK

Beacon:

Callsign: RAX-1

URL: http://rax.engin.umich.edu/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=165
[02092011]
=====
FO-69 Fastrac-1 Sara Lily
Catalog Number: 37227

```
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: Operational

Uplink 1: 145.980 MHz 1k2 baud
Uplink 2: 145.825 MHz 1k2 baud
Downlink: 437.345 MHz 1k2 and 9k6 baud

Beacon:   437.435 MHz 1k2 AX.25

Callsign: Fast1

URL: http://fastrac.ae.utexas.edu/index.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=83
[07052011]
=====
FO-70 Fastrac-2 Emma
Catalog Number: 37380
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: Operational

Uplink 1: 435.025 MHz 1k2 baud
Uplink 2: 437.435 MHz 9k6 baud
Downlink: 145.825 MHz 1k2 and 9k6 baud

Beacon:   145.825 MHz 1k2 AX.25

Callsign: Fast2

URL: http://fastrac.ae.utexas.edu/index.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=84
[12162011]
=====
StudSat
Catalog Number: 36796
Launch Date: July 12, 2010 0352z
Launch site: Satish Dhawan Space Centre, India

Status: On Orbit

Uplink:   437.505MHz, 9600bps FSK
Downlink: 437.505MHz, 9600bps FSK
Beacon  : 437.505MHz,   20bps ASK

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=164
```

```
[02092011]
=====
TIsat-1
Catalog Number: 36799
Launch Date: July 12, 2010 0352z
Launch site: Satish Dhawan Space Centre, India

Status: On orbit

Callsign: HB9DE

Uplink:   145.980MHz FM, AFSK
Downlink: 437.305MHz FM, AFSK
Beacon:   437.305MHz CW

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=118
[02092011]
=====
SwissCube
Catalog Number: 35932
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Callsign: HB9EG

Beacon(100mw): 437.5050MHz CW
Beacon(1w):    437.5050MHz FSK 1k2bps

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=109
[02092011]
=====
UWE-2
Catalog Number: 35934
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: In Orbit

Beacon(500mw): 437.3850 MHz AFSK 1k2bps
               437.3850 MHz FSK 9k6bps

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=110
[02092011]
=====
ITUpsAT1
Catalog Number: 35935
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India
```

```
Status: Operational

Beacon(100mw): 437.325MHz CW
Beacon(1w): 437.325MHz 19k2bps

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=113
[02092011]
=====
BEESAT
Catalog Number: 35933
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Callsign: DP0BEE

Beacon(100mw): 436.000MHz CW
Beacon(500mw): 436.000MHz GMSK 4k8bps
Beacon(500mw): 436.000MHz GMSK 9k6bp
[02092011]
=====
SOHLA-1 (ASTRO TECH.)
Catalog Number: 33496
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational

Proposed Frequencies and Modes:
Downlink: 437.505 MHz AFSK/CW
Beacon:   437.505 MHz AFSK/CW

Callsign:

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=101
[02092011]
=====
KAGAYAKI (Solan Co.)
Catalog Number: 33495
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: In Orbit

Downlink: 437.375 MHZ    FSK9k6/CW
Beacon:   437.375 MHz    FSK9k6/CW

IARU coordination status page:
```

```
AMSAT-NA webpage:

[02092011]
=====
STARS (Kagawa Univ.) (Twin Satellites)
Catalog Number: 33498
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational ?

Downlinks: 437.485 MHz FM/CW
           437.465 MHz FM/CW
Beacons:   437.305 MHz FM/CW
           437.275 MHz FM/CW

Callsigns: JR5YBN
           JR5YBO

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=99

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=121&retURL
=/satellites/status.php
[02092011]
=====
KKS-1 (Tokyo MCIT)
Catalog Number: 33499
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational

Downlink:  437.455 MHz AFSK/CW
Beacon:    437.385 MHz AFSK/CW

Callsign: JQ1YYY

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=107

AMSAT-NA webapge:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=120&retURL
=/satellites/status.php
[20092011]
=====
PRISM (Tokyo Univ.)
Catalog Number: 33493
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational
```

Uplink: 145.xxx MHz AFSK 1k2
Downlink: 437.425 MHz AFSK 1k2
Beacon: 437.250 MHz CW

Callsign: JQ1YCX

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=97

Read terms and conditions of operations at the PRISM web page to find
out how
to properly operate on the satellite and to get the uplink frequency.
It
has
been asked that the uplink frequency not be given out untik you have
read and
understood the terms of usage.

URL:
http://www.space.t.u-tokyo.ac.jp/prism/en/HAMservice.html
[10282012]

=====

RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number: 32953
Launch Date: May 23, 2008 1520z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational

Curent Modes: Telemetry
              Audio
              Images

Downlinks: 435.315 MHz
           435.215 MHz

AMSAT-NA website:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=115&ret
URL=/satellites/status.php

Official website:
http://www.npopm.com/?cid=leoca&caid=43
[02092011]

=====

CanX-2
Catalog number: 32790
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational in range of ground station only

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=46
[02092011]
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Downlink: 437.425 MHz 1k2 baud packet

For the latest project status update please visit the AAUSAT-II web page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=60
[02092011]
=====
CO-65 CUTE-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Downlink: 437.475 MHz 9k6 Packet
Uplink: 1267.600 Mhz

Telemetry Beacon:
Downlink: 437.2750 MHz CW

For the latest project status update please visit the Cute-1.7+APD II web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=78

Command Station blog website:
http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=112&retURL=/satellites/status.php
[03232012]
=====
Compass-1

Catalog number: 32787
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Current Mode: dependant on last received command

Uplink: 145.980 MHz FM
Downlink: 437.275 Mhz CW
          437.405 MHz Packet

For the latest project status update please visit the Compass 1 web page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=52

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=114&retURL=/satellites/status.php
[06162011]
=====
CO-66 Seeds II
Catalog number: 32791
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Downlink: 437.485 MHz

Callsign: JQ1YGU

For the latest project status update please visit the Seeds 2 web page: http://cubesat.aero.cst.nihon-u.ac.jp/english/seeds_2_e.html

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=36

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=113&retURL=/satellites/status.php
[073092011]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007 0702z
Launch site: Baikonur, Kazakhstan

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=94&retURL=/satellites/status.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=72
[02092011]
=====
CP3
Catalog Number: 31129
Launch Date: April 17,2007 0702z
Launch site: Baikonur, Kazakhstan

Status: Operational

Current Mode: /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=74
[02092011]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005 0652z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon: 437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/xivpicte.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=37
[02092011]

```
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: ?????

Current Mode: /u

Beacon:     436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=96&retURL
=/satellites/status.php

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[02092011]
=====
QuakeSat
Catalog Number: 27845
Launch Date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Telemetry only

Current Mode: 9600 baud data packet

Mode U packet
Downlink: 436.675 MHz 9k6 BPS

Quakesat webpage:
http://www.quakefinder.com/services/quakesat-ssite/
[02252011]
=====
CO-55 Cute-1.7+APD II
Catalog Number: 27844
Launch date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational

Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW
```

```
AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=69&retURL
=/satellites/status.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=78
[02092011]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001 0240z
Launch site: Kodiak Launch Complex, Alaska, USA

Status: Operational

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink:        144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[10292012]
=====
RS-22 RADIO SPORT 22 (MOZHAYETS 4)
Catalog number: 27939
Launch Date: September 27, 2003 0612z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational - 70cm cw only

Current Mode:  /u

CW Beacon - 435.352 MHz
            145.818 MHz

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=76&retURL
=/satellites/status.php
[02092011]
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990
Launch site: Kourou, French Guiana

Status: CW Beacon only

Uplinks:          145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink:      437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[02092011]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984
Launch site: Vandenburg AFB, California, USA

Status: Operational ?

Current Mode:  /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon:           435.025 MHz
Mode-S Beacon:     2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[07052011]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998 0640z (ZARYA module)
Launch sites: Baikonur, Kazakhstan
              Kourou, French Guiana
              Uchinoura Space Center, Japan
              Kennedy Space Center, Titusville, Florida, USA

Status: Operational

Current Active Modes: FM Repeater - OFF
                      Voice -       V/v
                      BBS -         V/v
                      2m APRS -     V/v
                      2m Digi -     V/v
                      70cm APRS -   ?
                      70cm Digi -   ?
                      SSTV -        V/v
```

Expedition 34 Crew (November 2012 - March 2013):
Commander: Kevin Ford KF5GPP
Flight Engineer: Oleg Novitskiy
Flight Engineer: Evgeny Tarelkin
Flight Engineer: Roman Romanenko
Flight Engineer: Chris Hadfield KC5RNJ/VA3OOG
Flight Engineer: Tom Marshburn KE5HOC

Available Modes and Frequencies:
Digital/APRS:
Worldwide 2m packet uplink: 145.825 MHz FM 1k2
Worldwide 2m packet downlink: 145.825 Mhz FM 1k2
Worldwide 70cm packet uplink: 437.550 Mhz FM 1k2
Worldwide 70cm packet downlink: 437.550 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
2m Packet Mailbox: RS0ISS-11
2m Digipeater alias: ARISS
70cm Packet Mailbox: RS0ISS-1
70cm Digipeater callsign: RS0ISS
70cm Digipeater alias: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time line is NOT translated from Russian and posted.
[12242012]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-041.S3
WSR 041 Part 3 02/11/2013

AMSAT NEWS SERVICE BULLETIN 041.S3
FROM AMSAT HQ SILVER SPRING, MD, February 11, 2013
TO ALL RADIO AMATEURS
BID: $WSR-041.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

NANOSAIL-D
Catalog Number: 37361
Ejection Date: January 17, 2011

Status: Non - Operational

Downlink: 437.270 MHz AX.25

URL: http://nanosaild.engr.scu.edu/dashboard.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=115
[07302012]

=====
HO-68 HOPE-1 (CAS-1) (XW-1)
Catalog Number: 36122
Launch Date: December 15, 2009 0231z
Launch site: Taiyuan Space Center, PRC

Status: Telemetry only

Callsign:
Broadcast: BJ1SA-11
BBS: BJ1SA-12

Uplinks: 145.8250 MHz FM, PL 67.0 Hz.
           145.9250 - 145.9750 MHz SSB/CW
           145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
           435.7650 - 435.7150 MHz SSB/CW
           435.6750 MHz AFSK 1200 BPS

Beacon: 435.7900 MHz CW

Mode and Antenna Polarization:
V: LHCP 2.0dBi max

U: RHCP 3.0dBi max

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=108

For more information about XW-1 (CAS-1):
http://
[04302012]
=====
SO-67 SumbandilaSat
Catalog Number: 35870
Launch Date: September 17, 2009 1555z
Launch site: Baikonur, Kazakhstan

Status: Non - Operational

Callsign: ZS0SUM

Uplink: 145.875MHz FM tone 233.6 Hz
Downlink: 435.345MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

For more information about SO-67:
http://www.amsatsa.org.za/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=88
[01272012]
=====
CP4
Catalog Number: 31132
Launch Date: April 17, 2007

Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon: 437.325 MHz CW

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=79
[09062010]
=====
LIBERTAD-1
Catalog Number: 31128
Launch Date: April 17, 2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink: 145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=76
[09062010]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: Non-Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder: 145.825 Mhz FM

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=51
[09062010]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
                             2407.250

Official Website: http://www.ncube.no

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=24
[09062010]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 MHz FM 67Hz CTCSS
Voice Downlink: 2401.835 MHz FM
Packet Up/Downlink: 437.250 MHz 9k6 packet

```
Packet Downlink     2401.835 MHz 38k4 packet

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=54
[09062010]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non-Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=53
[09062010]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004 0745z
Launch site: Baikonur, Kazakhstan

Status: Non - Operational

Current Mode(s):
Voice repeater: V/u
Uplink:      145.880 MHz FM
Downlink:    435.150 MHz FM

Telemetry: Recovery efforts
Downlink:    435.150MHz 9k6


Analog voice downlink:     435.300 MHz FM
                           435.150 MHz FM
                          2401.200 Mhz FM
Analog voice uplink:       145.860 MHZ FM
                           145.880 MHz USB
                           145.880 MHz FM
                           145.920 MHz FM
                           145.920 MHz FM - 67 Hz PL tone burst
                          1268.705 MHz FM
Digital Downlinks:         435.150 MHz FM 38k4 PBP, 1 watt output
                           435.150 MHz FM 9k6 Pacsat Broadcast
Protocol
                          2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:            145.860 MHz FM 9k6 Pacsat Broadcast
Protocol
                          1268.703 mhz FM 9k6 Pacsat Broadcast
Protocol
Beacon:                    435.150 MHz
```

```
Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=19
[12062011]
=====
CANX-1
Catalog Number: 27847
Launch Date: June 30, 2003

Status: Non-Operational

Downlink: 437.8800 MHz AFSK 1k2bps
[06052009]
=====
DTUSAT
Catalog Number: 27842
Launch Date: June 30, 2003

Status: Non-Operational

Current Mode: 2k4 AFSK Packet last reported

Downlink: 437.475MHz

Officail webpage: http://dtusat1.dtusat.dtu.dk/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=101&retURL
=satellites/all_oscars.php
[02212009]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink:   435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)
```

```
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Telemetry only

Uplinks:   145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink:  437.325 MHz

Broadcast callsign: MYSAT3-11
BBS:                MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial land and weather imaging payloads offers FM and FSK
Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as
a collaborative effort between the Malaysian government and Surrey
Satellite Technology Ltd.
[03302009]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink:   145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS:                SASAT2-12
```

```
Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink:   145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
V-band:   145.840 -  145.990 MHz CW/LSB
U-band:   435.550 -  435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks
---------
S2-band:  2401.225 -  2401.475 MHz CW/USB
K-band:  24048.010 - 24048.060 MHz CW/USB
Beacon:   2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)
----------------------------
BEACON   General Beacon(GB)  Middle Beacon(MB)  Engineering Beacon(EB)
2 m                   none        145.898 MHz                     none
70cm           435.438 MHz        435.588 MHz              435.838 MHz
13cm(1)       2400.188 MHz       2400.338 MHz             2400.588 MHz
13cm(2)       2401.173 MHz       2401.323 MHz             2401.573 MHz
3cm          10450.975 MHz      10451.125 MHz            10451.375 MHz
1.5cm        24047.885 MHz      24048.035 MHz            24048.285 MHz
[07162007]
=====
OO-38 OPAL
```

```
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink:    145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: 25636
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater:         436.250 MHz

Uplinks: Mode B Repeater:  145.825 MHz
Mode J Digipeater:         145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
```

```
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Non-Operational

Current Modes:
Telemetry : /u

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign:       4XTECH-12

More information of GO-32 can be found at:
http://asri.technion.ac.il/techsat/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=14&retURL
=/satellites/status.php
[07172010]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink:   145.925 MHz 9600 baud FSK
```

```
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
MO-30 UNAMSAT-2
Catalog Number: 24305
Launch Date: September 5, 1996

Status: Non-operational

Downlink:       435.1380 MHz AFSK 1200 BPS
Downlink:       435.2060 MHz AFSK 1200 BPS
Uplink:         145.8150 MHz AFSK 1200 BPS
Uplink:         145.8350 MHz AFSK 1200 BPS
Uplink:         145.8550 MHz AFSK 1200 BPS
Uplink:         145.8750 MHz AFSK 1200 BPS
[06042009]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Non-operational

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign:       POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012009]
=====
AO-27 AMRAD
Catalog number: 22825
Launch Date: September 26, 1993 0140z
Launch site: Kourou, French Guiana

Status: Recovery efforts in progress

Current Mode: V/u

Uplink:   145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear
```

Official Webpage: http://www.ao27.org
[12032012]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993 0140z

Status: PSK carrier only

Current Mode:

Uplinks: 145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
AO-24 ARSENE
Catalog Number: 22654
Launch Date: May 13, 1993

Status: Non-operational

Uplink: 435.0625 MHz FM 1k2bps AFSK
           435.1125 MHz FM 1k2bps AFSK
           435.1375 MHz FM 1k2bps AFSK
Downlink: 145.9750 MHz FM 1k2bps AFSK
          2446.5025 MHz FM 1k2bps AFSK

Beacon: 2446.4700 MHz CW

Broadcast callsign:

```
BBS:
[12162009]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HL01-11
BBS: HL01-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
```

```
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
[05012006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: non-operational

Current Mode:  V/u

Uplink:         145.900 MHz FM 1200-baud Manchester FSK (reserved)
                145.920 MHz FM VOICE
                145.940 MHz FM 1200-baud Manchester FSK (reserved)
                145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink:       437.026 MHz USB VOICE
                (1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
```

```
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[07242009]
=====
UO-15 UoSAT-4
Catalog Number: 20438
Launch Date: January 22, 1990

Status: Non-operational

Uplink: ?
Downlink: 435.1250MHz (?)
          435.1200MHz (?)
[06042009]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational
```

```
Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon:   145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink  29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
Beacons:   29.450 MHz
          435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
```

```
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon 1:  29.352 MHz (intermittent)
Beacon 2:  29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink:     21.260 to 21.300 MHz CW/USB
Downlink:  145.860 to 145.900 MHz CW/USB

Beacon:    145.860 MHz

Robot:     145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink:   21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon:   29.408 MHz

Robot:    29.454 MHz
[05232004]
NNNN
/EX
```

SB SAT @ AMSAT W8ISS $WSR-041.S4
WSR 041 Part 4 02/11/2013

AMSAT NEWS SERVICE BULLETIN 041.S4
FROM AMSAT HQ SILVER SPRING, MD, February 11, 2013
TO ALL RADIO AMATEURS
BID: $WSR-041.S4

THE FOLLOWING SATELLITES HAVE RE-ENTERED OR HAVE BEEN RETURNED SAFELY:

HAWKSAT 1
Catalog number: 35004
Launch Date: May 19, 2009 2355z
Launch site: Wallops Island, Virginia, USA

Status: re-entered
Re-entry date: September 04, 2012

Downlink: 437.345 MHz ?

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=105
[02112013]
=====
ARISSat-1
Catalog number: 37772
Launch date: August 03, 2011 1843z
Launch site: International Space Station

Status: Re-entered January 05, 2012

Callsign: RS01S

Current Mode(s):
Linear Transponder: U/v
Uplink: 435.758 to 435.742 MHz CW/LSB
Downlink: 145.922 to 145.938 MHz CW/USB

FM Telemetry/SSTV/Messages/ID:
Downlink: 145.950 MHz FM

Telemetry/Beacon:
Downlink: 145.939 MHz CW1
             145.919 MHz CW2
             145.920 MHz 1k BPSK USB
             145.920 MHz 400b BPSK USB

Official Webpage:http://www.amsat.org/amsat-new/ARISSat/ARISSat.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/informal_detail.php?serialnum=89

```
[01052012]
=====
CP-6
Catalog Number: 35003
Launch Date: May 19, 2009 2355z
Launch site: Wallops Island, Virginia, USA

Status: Re-enetered October 06, 2011

Downlink: 437.365 MHz 1k2 AFSK

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=121
[01282013]
=====
Pharmasat
Catalog Number: 35002
Launch Date: May 19, 2009 2355z
Launch site: Wallops Island, Virginia, USA

Status: Re-entered August 14, 2012

Downlink: 437.465 MHz 1k2 AFSK

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=94
[01282013]
=====
ANUSAT
Catalog Number: 34808
Launch Date: April 20, 2009 0115z
Launch Site: Satish Dhawan Space Centre, India

Status: Re-entered
Re-entery date : April 18, 2012


Downlink:  435.000 MHz
Uplink:    145.800 MHz

Telemetry: 137.400 MHz
[02112013]
=====
CAERUS (Mayflower)
Catalog Number: 37252
Launch Date: December 08, 2010 15:43:00 UTC
Launch site: Kennedy Space Center, Titusville, Florida, USA

Status: Re-entered December 22, 2010

Uplink:
Downlink: 437.600 MHz 1k2 AX.25
```

```
Beacon:   437.600 MHz CW

Callsign: KJ6FIX

URL:
http://www2.isi.edu/research/prj-serc/prj-serc_projects/prj-serc_proje
cts-8.htm

IARU coordination status page:

[01282013]
=====
Cinema
Catalog Number: 36764
Launch Date: September 13, 2012 2139z
Launch Site: Wallops Island, Virginia, USA

Status: Ren-entered
Re-entry date: Spetember 10, 2010

Uplink:
Downlink:
Engineering:    2400 - 2450MHz
Telemetery:     2200 - 2300MHz

Beacon:

Callsign:

URL:
[02112013]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Re-entered
Re-entered: October 25, 2009

Uplink:  1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=56
[09062010]
=====
BEVO-1 (DRAGONSAT-1)
```

```
Catalog Number: 35690
Launch Date: May 19, 2009

Status: Re-entered
Re-entered:

Downlink: 437.325 MHz 9k6 GMSK
          437.325 MHz CW 20wpm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=117
[07312009]
=====
AggieSat2 (DRAGONSAT-2)
Catalog Number: 35690
Launch Date: May 19, 2009

Status: Re-entered
Re-entered:

Downlink: 436.250 MHz 9k6 FHSS
[11112009]
=====
Pollux
Catalog Number: 35693
Launch Date: July 31, 2009

Status: Re-entered
Re-entered:

Callsign: POLLUX-1

Downlink: 145.825MHz 1k2 AX.25

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=139
[09062010]
=====
Castor (ANDE-2)
Catalog Number: 35694
Launch Date: July 31, 2009

Status: Re-entered
Re-entered:

Callsign: KD4HBO-1

Downlink: 145.825 MHz 1k2 AX.25

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=144
[09062010]
=====
NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: July 28, 2008

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=59
[01012009]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink:      145.825 Mhz FM APRS AX25
APRS Uplink:        145.825 MHz FM APRS AX25
Voice/PSK31 Uplink:  28.120 MHz

Packet to Voice ID: RAFT
[06112007]
=====
GENESAT-1
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Re-Entered
Re-entered date: August 8, 2010

Current Mode: /u

Callsign: KE7EGC

Telemetry Beacon Downlink: 437.0695 MHz AFSK 1200 BPS
```

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[08082010]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Re-Entered
Re-entered: June 18, 2008

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon: 437.2750 MHz CW

Callsign: JR8YJT
[01012009]
=====
SO-43 Starshine 3
Catalog Number: 26929
Launch Date: September 30, 2001

Status: Re-Entered
Re-entered: January 21, 2003

Beacon: 145.825Mhz
[02212009]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)

* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at}
amsat.org
NNNN
/EX

____
Via the ANS mailing list courtesy of AMSAT-NA
http://amsat.org/mailman/listinfo/ans

```
From 1528272416087599877
X-Google-Thread: 8f86f75953,cff00562e6f47657,start
X-Google-Attributes: gid8f86f75953,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII
X-Received: by 10.181.11.170 with SMTP id ej10mr549650wid.1.1360928105973;
        Fri, 15 Feb 2013 03:35:05 -0800 (PST)
MIME-Version: 1.0
Path: g1ni12396wig.0!nntp.google.com!feeder1.cambriumusenet.nl!
193.141.40.65.MISMATCH!npeer.de.kpn-eurorings.net!npeer-ng0.de.kpn-eurorings.net!
xlned.com!feeder3.xlned.com!newsfeed.xs4all.nl!newsfeed1.news.xs4all.nl!xs4all!
feeder3.cambriumusenet.nl!feed.tweaknews.nl!216.40.29.245.MISMATCH!novia!
border4.nntp.dca.giganews.com!border2.nntp.dca.giganews.com!nntp.giganews.com!
newsfeed.news.ucla.edu!usenet.stanford.edu!panix!rri.panix.com!robomod!not-for-
mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-041 AMSAT News Service Weekly Bulletins
```

```
Followup-To: rec.radio.amateur.space
Date: Sun, 10 Feb 2013 22:10:16 EST
Organization: The Radio Amateur Satellite Corporation
Lines: 543
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <001501ce0805$4dd163f0$e9742bd0$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
X-Trace: reader1.panix.com 1360552216 22029 166.84.1.6 (11 Feb 2013 03:10:16 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Mon, 11 Feb 2013 03:10:16 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
DKIM-Signature: v=1; a=rsa-sha256; c=relaxed/relaxed; d=comcast.net;
     s=q20121106; t=1360552205;
     bh=PNd4HwsAoRNX/LC0sM31eWEgI4IuyhOl6Mqc+E3QuyY=;
     h=Received:Received:From:To:Subject:Date:Message-ID:MIME-Version:
      Content-Type;
     b=aBrpnTggrcKAinhCmT4CrHLjfB9tPR4L1glyyLqRq7zex8n/i5XILpOj4F8uOm6ua
      KFdouRfs1t4nb0tWufohK2cJdqRxM6qiIQCN7R2ILBx6m7yxzRzOLnrMyC9LNM3sq7
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      0/sljkJptJKjjkuQ7OpJZ2yiL/VN7wciZPtCKdnqQKqodFNvB5dY1kyGWS9cNP3MUN
      2RlL8pQe3sUF8ISuURTBbx1Hzktd2L/sdAdWF6j6AH1QuMXVZKKHzlPQi1i+d6RWvm
      RkRTUkHT9GGvw==
Content-Language: en-us
```

AMSAT NEWS SERVICE
ANS-041

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

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SB SAT @ AMSAT $ANS-041.01
ANS-041 AMSAT News Service Weekly Bulletins

AMSAT News Service Bulletin 041.01
>From AMSAT HQ SILVER SPRING, MD.
February 10, 2013
To All RADIO AMATEURS
BID: $ANS-041.01

Mid-West USA High Altitude Balloon Launch on February 16

The Iowa High Altitude Balloon team says their iHAB-9 balloon flight is scheduled to launch February 16, 2013 at 16:00Z (9AM CDT). The Mission Control web page will give you flight status, an APRS tracking map, webcast, and live chat. Please go to:
http://www.ihabproject.com/iHAB-9/
http://www.ihabproject.com/iHAB-9/MissionControl/

On February 16 the flight schedule is presently at:
Webcast: 14:00Z - 8AM CDT
Launch: 15:00Z - 9AM CDT

The payload includes:

+ APRS beacon - W0OTM-11 on 144.39Mhz running OpenTracker+
  and Alinco DJ-C7 - VHF/UHF 300/500mw

+ 20M QRP Beacon, 1.5 Watts on 14.057.85 +/- Mhz

+ 1.2Ghz live video downlink

The latest flight status and additional information can be accessed on the iHAB web pages.

[ANS thanks the iHAB-9 Team for the above information]

Amateur Radio Participates in ISS Plasma Thrust Shadow Experiment

On February 1, 2, 3, and on February 8, 9, 10 the Russian Central Research Institute of Machine Building (TSNIIMASH) conducted a space plasma experiment from the International Space Station to evaluate the shape of a "radio dead zone" which is expected to occur with the use of an on-board arcjet plasma source.

Future space exploration plans to use electric thrusters. Integration of electric thrusters causes an electromagnetic compatibility side-effect when highly ionized exhaust plumes of the thrusters may scatter RF-signals producing large "dead" zone for communications.

The SpEx Shadow experiment on the ISS activated an onboard arcjet source to inject a plasma plume in space. The amateur radio packet beacon operating on 145.825 MHz was activated to transmit a VHF sounding signal with time ticks. Due to refraction/scattering of the sounding signals in the exhaust plume, the shadow region would occur. Participating amateur radio stations noted the time tick to register loss of signal and re-acquisition of the 145.825 MHZ signal as the footprint caused by the plasma jet passed their geographic location.

An example of the ISS SpEx Shadowing Beacon can be found on the DK3WN SatBlog website at:

http://www.dk3wn.info:

```
RS0ISS]CQ,qAR,SR5GK-3:]ARISS - International Space Station
DK3WN]BEACON,RS0ISS*,qAR,SR5GK-3:SpEx SHADOW 20:30:57 *DL* 02-02-2013/
DK3WN]BEACON,RS0ISS*,qAR,SR5GK-3:SpEx SHADOW 20:30:39 *DL* 02-02-2013/
```

Additional details of the Shadowing Experiment are posted on the TSNIIMASH web site at:

http://knts.tsniimash.ru/Shadow/en/Default.aspx

[ANS thanks TSNIIMASH and Mike Rupprecht, DK3WN for the above information]

CubeSats Form Asteroid Mining Exploration Fleet

In an article posted on the SpaceDaily.com website, "Commercial Asteroid Hunters Announce Plans For New Robotic Exploration Fleet", Deep Space Industries claims it will send a fleet of asteroid-prospecting spacecraft out into the solar system to hunt for resources to accelerate space development to benefit Earth.

These "FireFly" spacecraft utilize low-cost CubeSat components and get discounted delivery to space by ride-sharing on the launch of larger communications satellites.

FireFlies with a mass of about 55 lb will first be launched in 2015 on journeys of two to six months. Starting in 2016, Deep Space will begin launching 70-lb DragonFlies for round-trip visits that bring back samples. The DragonFly expeditions will take two to four years, depending on the target, and will return 60 to 150 lb.

Read the full article posted at:
http://www.tinyurl.com/CubeSat-Explorer-Fleet (SpaceDaily.com)

[ANS thanks SpaceDaily.com for the above information]

PCSAT normal(?) operations resume

PCSAT (NO44) is again returned to users (but not usable until a few weeks when sun angles get better).

The variation of power available to PCSAT is inversely proportional to the "sun-to-orbitplane-angle" (viewable in Instantrack with the "E" and "D" keys. It is currently above 78 degrees. Once it went above about 65 degrees was our last successful commanding.

Recovery did not work this period. But we learned enough to be more successful in the Fall.

A "sun-to-orbitplane-angle" means PCsat's orbit is now over the day/night terminator meaning it is in full sun (no eclipses) with solar power coming in on the (weaker) side panels and little if any on the +Z face(best panel). Attitude is maintained by alignment with the Earth's magnetic field. It's the best time for a recovery (no eclipses to cause a reset), but the worst time for commanding. It is too weak to respond to the needed logon and 3 additional commands. Though it will be strong again as the sun angle improves (lower).

Then it will have better sun on the +Z face for commanding, but then it will be doing Eclipses. And even though we can then command it to turn off unnecessary loads, it does not have enough time before the next eclipse to charge up enough to survive the next eclipse.

What we did (re)learn is a condensed command method where we can put all 3 PCSAT low-power commands in a single packet (using the TNC's ^V pass character). That way, we only need a successful logon to complete the Restoration. 1) The CONNECT ACK. 2) The password challenge, 3) Then the command prompt. Then we can hit it with the full low-power command set and disconnect all in one packet which cancels the need for PCSAT to respond to each command separately.

On the FIRST day available in full sun(our best shot), I not only got logged on, but completed all 3 requried functions. Then signals sounded so good, I got greedy and put in the another three (which also improves power budget, but not as much as the first three). Yep, I gambled and lost. It died on the last one! The next day I got all 3 in, and it died on the 3rdcommand due to a user packet I think.

Days since, I have been unable to logon. Hence, end of this attempt period.

In most attempts in the past (after successful logon) we would send one command at a time to give it a few seconds rest between each one. But these 3 commands then required 3 ACKS and 3 RESPONSES in addition to the 3 required to get logged. Those extra 6 packets kill it, especially if there was a user packet in there. Next time all we need are the 3 loggon responses.

Also, next time, we will give users advance warning to QRT all transmissions when we are trying to command. Each one of their packets robs us of power we need to complete the command. I failed to warn everyone this time, and so we had some interference.

As sun angle improves, You may continue to experiment with PCSAT during MIDDAY passes. That is when it is strongest (in the Northern Hemisphere), but do limit yourself to only attended operations so humans can actually contact humans, or if you are doing an unattended test, keep your transmissions to once every 2 minutes. That should let you get one good successful packet per pass. Which is the mission of PCSAT.

See the downlink on http://pcsat.aprs.org

There you can see the telemetry packets (list at the bottom of page) right now are rarely getting above 001 meaning typically a minute or so of life before it gets overloaded and resets back to 000.

It is easy to visualize the relationship of the sun angle to the orbit plane and to see how that affects power budget given that our best panel (out of 5) is on the +Z face and that is magnetically aligned to point towards magnetic South. There is NO panel on the -Z which is why PCsat is rarely usable in the Southern Hemisphere (not planned, but just a result of it crashing in every eclipse).

Just thought you would like to know what is going on with one of the oldest student projects in space that is still "semi-operational" for users.

[ANS thanks Bob, Wb4APR for the above information]

AMSAT-UK to provide Amateur Radio payload for ESEO satellite

AMSAT-UK will be providing a 1260/145 MHz FM transponder and a 145 MHz BPSK telemetry beacon for the European Student Earth Orbiter (ESEO). This is the third mission within the European Space Agency’s Education Satellite Programme.

Nine European universities will be working with the prime contractor ALMASpace, Italy, on the mission. Cranfield University in Bedfordshire will be supplying a small sail that will be deployed to demonstrate the de-orbiting of spacecraft at the end of the mission.

The primary purpose of the AMSAT-UK payload is to provide a downlink telemetry that can be easily received by schools and colleges for educational outreach purposes. The data will be displayed in an attractive format and provide stimulation and encouragement for students to become interested in all STEM subjects in a unique way.

The target audience is primarily students at both primary and secondary levels and the project includes the development of a simple and cheap “ground station” operating on VHF frequencies
in the
Amateur Satellite Service. This station is an omni-directional antenna feeding a FUNcube DonglePRO+ SDR receiver which will receive the signals direct from the satellite and transfer the data to specially developed graphical software running on any Windows laptop.

More information is available at
http://www.uk.amsat.org/?p487

[ANS thanks Trevor Essex, M5AKA for the above information]

OSCAR-11 ANNUAL REPORT 2012

This report covers the period from 01 January 2012 to 01 January 2013. During this time there have been no significant changes apart from the gradual drift of the on-board clock. The satellite has been transmitting on a regular cycle of 10.35 days on followed by 10.35 days off.

OSCAR-11 (AKA UoSAT-2 and UO-11) celebrated it's 28th birthday in space on 01 March! It was designed, built and launched within a period of six months, using commercially available 'off the shelf' components (COTS). Once again, congratulations to Professor Sir Martin Sweeting G3YJO, his team at the University of Surrey and the groups of radio amateurs who also contributed to the project.

Good copy has been obtained obtained from decoded telemetry frames and many reports have been posted on the DCARR general satellite status website, The satellite continues to be subjected to eclipses during each orbit, resulting in weaker signals at those times. During the summer in the UK all passes were in sunlight, however the eclipses gradually returned during the autumn and now all evening passes are eclipsed and signals are significantly weaker than in the morning passes.

The on-board clock gained 85 seconds during the year, which is comparable with the 60 seconds gain per year when the satellite was launched. There is however a large accumulated error of 308.54204 days slow. This was caused mainly by the clock stopping during eclipses, when there was also an unknown drain on the power supply. The units of the least significant digit correspond approximately to seconds (0.86 seconds actually).

At the present time, while OSCAR-11 is operating in a predictable way, please DO NOT send reports or files by e-mail. However, could all listeners continue to enter their reports on the general satellite status website. This is a very convenient and easy to use facility, which shows the current status of all the amateur satellites, and is of use to everyone. Reports around the expected times of switch-on and switch-off are of special interest, especially for times 13:00 to 18:00 and 22:00 to 08:00 UTC, to when the satellite is out-of-range in the UK . The URL is http://oscar.dcarr.org/index.php

The VHF beacon frequency is 145.826 MHz. AFSK FM ASCII Telemetry. The satellite is operating in the default mode, controlled by the watchdog timer, with a cycle time of 20.7 days. 10.35 days on followed by 10.35 days off.

An extended version of this report is available on my website, and new listeners to OSCAR-11 should read this for further information. The URL is www.g3cwv.co.uk/oscar11.htm . This page contains links to the report, a short audio clip to help you identify the satellite and a file of recent telemetry received. The website also contains an archive of news & telemetry data which is updated from time to time, and details about using a soundcard or hardware demodulators for data capture. There is also software for capturing data, and decoding ASCII telemetry. The easiest way to check whether OSCAR-11 is operational is to look at the General Satellite Status website http://oscar.dcarr.org/index.php .

If you place this bulletin on a terrestrial packet network, please use the bulletin identifier $BID:U2RPT158.CWV, to prevent duplication.

[ANS thanks Clive Wallis, G3CWV for the above information]

UKube-1 to launch in June 2013

The Herald newspaper reports that the CubeSat UKube-1 will be launched in June, 2013.

The spacecraft is being built for the UK Space Agency (UKSA) by Clyde Space and the launch will take place from Baikonur in

Kazakhstan on a Soyuz-2 along with TechDemoSat-1.

The newspaper reports that Clyde Space has announced plans for a base in the United States.

UKube-1 will carry a set of AMSAT-UK FUNcube boards to provide an amateur radio 435/145 MHz linear transponder and a 1200 bps BPSK beacon for educational outreach

[ANS thanks Trevor, M5AKA for the above information]

Five new CubeSats hope for 2013 launch

Five new CubeSats being developed in Taiwan, Vietnam and the United States are hoping to fly during 2013.

PACE is the first nanosatellite developed the National Cheng Kung University (NCKU) of Taiwan and has the objective to provide a platform for attitude control experiments in space.
More Information is available at
http://satellite.ncku.edu.tw/pace/en/home.htm

TARO is a 2U CubeSat developed by the National Cheng Kung University (NCKU) of Taiwan. TARO is the precursor of PACE satellite which was also developed by NCKU and has an objective to verify the function of sensors and actuators which have been used at PACE.
More Information is available at
http://satellite.ncku.edu.tw/pace/en/home.htm

PicoDragon is a 1U CubeSat project intended to take low resolution earth images and to test on board systems. Planning to use two UHF transmitters. One 100mW CW beacon on 437.250 MHz and a 1k2 AFSK 800mW AX25 telemetry downlink. Commands will be uplinked on VHF.
More Information is available at
http://vnsc.org.vn/

United States, Alabama – ChargerSat-1. The primary mission is to perform a technology demonstration of gravity gradient stabilization, improved solar collection and improved horizon communications on a pico-satellite. This is the team’s first CubeSat and is a technology
demonstration of their capabilities as students
More Information is available at
http://space.uah.edu/

United States, California – SNAPS. This spacecraft has dimensions of
25x113x113mm, has a mass of less than 0.5kg and is intended to image other CubeSats autonomously using H264 compression. The team is

proposing a UHF downlink using 9k6 AFSK and will utilize Carpcomm ground stations.
Planned for a SpaceX flight from Vandenberg AFB in April 2013 together with POPACS.

[ANS thanks Trevor, M5AKA for the above information]

ARISS News

ARISS Switches to Ericsson Radio After experiencing Problems with tthe Kenwood D700

After experiencing issues with the Kenwood D700 on two consecutive school contacts, ARISS will use the Ericsson Radio on the Columbus module for ARISS contacts until problems with D700 are resolved.

According to Frank Bauer, KA3HDO, AMSAT's Vice President for Human Spaceflight Programs, "...for some reason, our signals from the Service Module Kenwood D700 radio are much diminished. Our contact with Israel last Sunday had low audio levels, with good signals only near TCA. Our contact yesterday with the Hospital for Sick Children was even worse. Only one student was able to talk to Chris Hadfield before we lost the signal. The crew reports hearing the ground station well. Both these contacts were with our telebridge stations, some of the best out there. Also note that Chris Hadfield got on the IP Phone, immediately after the Hospital radio contact and answered all the student’s questions, using that communications medium.
So,
while not optimal, we were able to make both these ARISS events successful

After the Hospital contact, we had a full court press to revise uplinks and procedures to use the Ericsson radio that was recently installed in the Columbus Module instead of the D700. This was worked well into the crew sleep period, with the procedures ready for the crew at wakeup. While we had not fully checked out the radio, we felt the benefits of using this system outweighed the risks of using the D700, given its recent past performance. Our contact with the Japan school, using the Columbus Module Ericsson radio was very successful. We plan to use it on the contacts planned for next week."

+ Contacts scheduled for this coming week

ARISS is requesting listener reports for these contacts. Due to issues with the Kenwood radio that are not fully understood at present, the Ericsson radio is going to be used for these contacts. ARISS thanks everyone in advance for their assistance.

Breadalbane Academy, Aberfeldy, United Kingdom, telebridge via W6SRJ
Contact is a go for: Tue 2013-02-12 09:22:57 UTC 26 deg

Chief Peguis Jr. High, Winnipeg, Manitoba, Canada, telebridge via VK5ZAI
Contact is a go for: Wed 2013-02-13 19:47:43 UTC 55 deg

+ At the following link you will find a listing of all scheduled school contacts, and questions, other ISS related websites, IRLP and Echolink websites, and instructions for any contact that may be streamed live.
http://www.amsat.org/amsat/ariss/news/arissnews.rtf

+ QSL information may be found at:
http://www.arrl.org/ARISS/arissfaq.html
http://www.rac.ca/ariss/oindex.htm#QSL's

+ ISS callsigns: DP0ISS, NA1SS, OR4ISS, RS0ISS

+ There have been rumors in the past indicating that the ISS was having direct contacts on the 40 meter band. The HF antenna is mounted, however, there is no HF radio equipment on board. Sometimes WA3NAN will retransmit shuttle audio.

[ANS thanks ARISS and AJ9N for the above information]

Satellite Shorts From All Around

+ The FITSAT-1 optical experiment is the topic of an article posted at Space.com. See "Tiny Japanese Satellite Beams Morse Code Messages from Space", by Leonard David at:
http://tinyurl.com/ag47bed [Space.com]

+ The AMSAT mail list archives remain accessible despite the temporary outage of general content at www.amsat.org. Access the the amsat-bb and sarex lists can be found at:
http://www.amsat.org/amsat-new/tools/maillist/
Access to subscribe to AMSAT mail lists can be found at:
http://www.amsat.org/mailman/listinfo
Access the AMSAT News Service Archives can be found at:
http://amsat.org/pipermail/ans/ [Joanne Maenpaa]

+ Who is On Board the ISS

Exp. 33/34
Oleg Novitskiy
Kevin Ford KF5GPP
Evgeny Tarelkin

Exp. 34/35
Chris Hadfield KC5RNJ/VA3OOG
Roman Romanenko
Tom Marshburn KE5HOC

[ANS thanks Charlie AJ9N for the above information]

+ Near Earth asteroid 2012 DA14 will pass inside the geostationary satellite orbits February 15. This object will make an extremely close approach to within 0.00023 AU of Earth at 19:25 UT (11:25 AM PST) on February 15, 2013.

  For more information visit
  http://echo.jpl.nasa.gov/asteroids/2012DA14/2012DA14_planning.html

  [ANS thanks Tom Clark K3IO for the the above information]

+ Hello Kitty in Near Space
  Near space weather balloon built by seventh grader Lauren Rojas and launched with help from her father, Rod, Reaching an altitude of over 90,000. The photography in this video is quite good, especially when the balloon bursts.

  YouTube Video
  http://www.youtube.com/watch?v�EsCTG4-Gg

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

Primary and secondary school students are eligible for membership at one-half the standard yearly rate. Post-secondary school students enrolled in at least half time status shall be eligible for the student rate for a maximum of 6 post-secondary years in this status. Contact Martha at the AMSAT Office for additional student membership information.

73,
This week's ANS Editor,
EMike McCardel, KC8YLD

From 9365554713035449226
X-Google-Thread: 9e586c3d78,4fa5688b4eab902e,start
X-Google-Attributes: gid9e586c3d78,public,usenet

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X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
X-Received: by 10.180.93.230 with SMTP id cx6mr323809wib.5.1360928150244;
        Fri, 15 Feb 2013 03:35:50 -0800 (PST)
MIME-Version: 1.0
Path: bp2ni38509wib.1!nntp.google.com!feeder1.cambriumusenet.nl!
82.197.223.108.MISMATCH!feeder2.cambriumusenet.nl!feed.tweaknews.nl!
194.109.133.81.MISMATCH!newsfeed.xs4all.nl!newsfeed2.news.xs4all.nl!xs4all!
border4.nntp.ams.giganews.com!border2.nntp.ams.giganews.com!
border2.nntp.dca.giganews.com!nntp.giganews.com!newsfeed.news.ucla.edu!
news.snarked.org!xmission!newsswitch.lcs.mit.edu!bloom-beacon.mit.edu!panix!
rri.panix.com!robomod!not-for-mail
From: SWPC.Webmaster@noaa.gov
Newsgroups:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.shor
twave,rec.radio.info
Subject: Weekly Highlights of Solar and Geomagnetic Activity, 04 - 10 February
2013
Followup-To:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.shor
twave
Date: Mon, 11 Feb 2013 11:33:37 EST
Organization: NOAA Space Weather Prediction Center
Lines: 59
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <20130211163001.B555F33C8C@panix2.panix.com>
NNTP-Posting-Host: panix6.panix.com
X-Trace: reader1.panix.com 1360600417 18922 166.84.1.6 (11 Feb 2013 16:33:37 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Mon, 11 Feb 2013 16:33:37 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump

:Product: Weekly Highlights and Forecasts
:Issued: 2013 Feb 11 1018 UTC
# Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center
# Product description and SWPC contact on the Web
# http://www.swpc.noaa.gov/weekly.html
#
#                 Weekly Highlights and Forecasts
#
Highlights of Solar and Geomagnetic Activity
04 - 10 February 2013
```

Solar activity was low. The largest flare of the period, a C8/1f with associated Type-II (estimated at 548 km/s) and Type-IV radio sweeps, originated from Region 1667 (N22, L=200, class/area Dso/100) on 06/0021 UTC. A CME with an earth-directed component was subsequently observed in LASCO C3 imagery at 06/0042 UTC. A long duration C2 flare associated with a 27 heliographic degree Hyder flare eruption centered near N23W06 at 09/0640 UTC was also observed. This event also produced a potentially earth-directed CME which was observed in LASCO C2 imagery at 09/0709 UTC. The largest active region of the period was Region 1665 (N10, L=242, class/area Hsx/170 on 04 February), but this region failed to produce any flare events. The most magnetically complex region was Region 1670 (N17, L=161, class/area Dsi/160 on 10 February), although still on the disk, this region has also failed to produce any flare events. In additon to the CMEs already described, several other were noted on LASCO and STEREO coronagraph imagery throughout the week. Most of these were associated with filament eruptions, but none deemed geoeffective.

No proton events were observed at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit was at normal to moderate levels.

Geomagnetic field activity was predominately quiet with two periods of unsettled conditions (08/0600-0900 UTC and 08/1500-1800 UTC) prompted by the 08/0400 UTC arrival of the 06 Feb CME desribed above.

Forecast of Solar and Geomagnetic Activity
11 February - 09 March 2013

Solar activity is expected to be very low to low.

No proton events are expected at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to be at normal to moderate levels for most of the week, possibly reaching high levels on 13 - 18 February in response to positive polarity coronal holes/high speed streams (CHs/HSSs) 93 and 94.

Geomagnetic field activity is expected to be predominately quiet, with isolated unsettled conditions on 12 Feb, when the Hyder flare CME mentioned earlier is expected to arrive. Quiet to unsettled conditions are expected to persist through 16 February due to CH HSS effects.

From 7939057168883475161
X-Google-Thread: 108122,7c22afdba35eea89,start
X-Google-NewGroupId: yes

```
X-Google-Thread: 107ada,7c22afdba35eea89,start
X-Google-NewGroupId: yes
X-Google-Thread: 10e8ad,7c22afdba35eea89,start
X-Google-NewGroupId: yes
X-Google-Attributes:
gidd7f5508063,gida3e752f117,gid8f86f75953,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
X-Received: by 10.180.106.73 with SMTP id gs9mr575927wib.2.1360911605310;
        Thu, 14 Feb 2013 23:00:05 -0800 (PST)
MIME-Version: 1.0
Path: bp2ni38106wib.1!nntp.google.com!goblin1!goblin3!goblin.stu.neva.ru!
news.ripco.com!news.glorb.com!border3.nntp.dca.giganews.com!
border1.nntp.dca.giganews.com!nntp.giganews.com!novia!news-out.readnews.com!
transit4.readnews.com!panix!panix2.panix.com!not-for-mail
From: rram@panix.com (rec.radio.amateur.moderated Admin)
Newsgroups:
rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.rad
io.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amat
eur.space,rec.radio.info
Subject: Crossposting Permitted to rec.radio.amateur.moderated
Supersedes: <radio/ham-radio/moderated/crossposting-1-1359702000@panix.com>
Followup-To: poster
Date: 15 Feb 2013 02:00:03 -0500
Organization: rec.radio.amateur.moderated Moderation Team
Lines: 47
Approved: RRI Admin <rec-radio-info-request@panix.com>
Distribution: world
Expires: 05 Mar 2013 02:00:02 -0000
Message-ID: <radio/ham-radio/moderated/crossposting-1-1360911602@panix.com>
Reply-To: rec-radio-amateur-moderated-request@panix.com
(rec.radio.amateur.moderated Admin)
NNTP-Posting-Host: panix2.panix.com
X-Trace: reader1.panix.com 1360911604 17331 166.84.1.2 (15 Feb 2013 07:00:04 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Fri, 15 Feb 2013 07:00:04 +0000 (UTC)
Summary: Short reminder for unmoderated newsgroups that crossposting is permitted
Keywords: FAQ, ham, amateur, radio, moderated, unmoderated, crossposting,
permitted
```

```
Posted-By: auto-faq 3.3.2 beta (PGPMoose V2.0, Perl 5.005)
Archive-name: radio/ham-radio/moderated/crossposting
Revision: 1.2 2011/11/02 04:08:53
Posting-Frequency: posted twice monthly
URL: http://www.panix.com/~rram/usenet/rram/index.html
```

Changes followed by "|".

After a 30-day public discussion and feedback period to gauge reader
opinions in March of 2009:

http://groups.google.com/group/rec.radio.amateur.moderated/browse_thread/thread/
d7d337db35f23326

```
the rec.radio.amateur.moderated Moderation Team had decided to consider       |
amending its charter, and permit limited simultaneous crossposting to
rec.radio.amateur.moderated and one other unmoderated
amateur-radio-related discussion newsgroup.  After a successful trial         |
period (90 days, through early July 2009), we decided to adopt this           |
change permanently.                                                           |
```

Approved rec.radio.amateur.* newsgroups are those that are currently listed in the latest version of the "List of Big Eight Newsgroups" which is crossposted monthly to news.announce.newgroups, news.groups, and news.lists.misc.

Approved alt.radio.amateur.* and alt.ham-radio.* newsgroups are those that have been created consistent with the suggestions in "So You Want to Create an Alt Newsgroup" at:

  http://www.faqs.org/faqs/alt-creation-guide/

Approved regional hierarchy newsgroups are those that contain either "radio.amateur" or "ham-radio" in their names, including uk.radio.amateur and aus.radio.amateur.misc.

We will make every reasonable effort to keep our list of approved newsgroups up-to-date. In case we have overlooked any, and a submission is rejected in error as a result, the rejected submitter can E-mail us at our administrative contact address (in the signature at the bottom of this article, and the default Reply-To for the rejection message) requesting that it be added, and that the article be approved. We may still choose to reject articles crossposted to any alt.* newsgroup with an inappropriate name, including obscene language, embedded name-calling, or encouragement of unlawful conduct.

Please direct any comments, questions, or criticisms to rec-radio-amateur-moderated-request@panix.com.

```
From -1212275745140808271
X-Google-Thread: 8f86f75953,96185650b5382a8f,start
X-Google-Attributes: gid8f86f75953,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
X-Received: by 10.66.15.134 with SMTP id x6mr1093890pac.42.1361043675255;
        Sat, 16 Feb 2013 11:41:15 -0800 (PST)
Path: ov8ni4715pbb.1!nntp.google.com!border1.nntp.dca.giganews.com!
border4.nntp.dca.giganews.com!border2.nntp.dca.giganews.com!nntp.giganews.com!
news.glorb.com!news-out.readnews.com!transit4.readnews.com!panix!rri.panix.com!
robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-049 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Sat, 16 Feb 2013 14:41:13 EST
Organization: The Radio Amateur Satellite Corporation
```

```
Lines: 2327
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <001c01ce0c7d$41666d00$c4334700$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
X-Trace: reader1.panix.com 1361043674 26968 166.84.1.6 (16 Feb 2013 19:41:14 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sat, 16 Feb 2013 19:41:14 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
DKIM-Signature: v=1; a=rsa-sha256; c=relaxed/relaxed; d=comcast.net;
     s=q20121106; t=1361043655;
     bh=kPWovz5gizenfSdmbvJED6sWSXezcnm3ln5MzUUPQ/A=;
     h=Received:Received:From:To:Subject:Date:Message-ID:MIME-Version:
      Content-Type;
     b=VRy8FCRRTPxtn3YrSTBw4g/wdPdYC92ZuV4Nfgcx7BBu+tfmWvJTwUg04qZbpJ3rp
      7AH2uiM8hy51uZeuABMK/LIv8/meo/quvEVjm/5cBP4Oalt2iUl88y2aSH4XuK3abk
      dvPismpQYoIpM0jAUS4CFRq19e+Bs3oWaJzdaqKZ6nofRVXk/p405roDl9QGGt/pOF
      UNsWhE3oqKgw+pNZCoBK1uT67M4fci55LR76Uk5RHvKRI9cxI/JXmNTO9DjH6e25ED
      BiY7T0s3f/374LwfTo0apHH40w43mEvC41NvpcaD6H2IWPdtypRgqVnToTwFCKl4if
      bTnBzKUBAKm7Q==
Bytes: 55606
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
Content-Language: en-us
```

This report is organized into three (3) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites

SB SAT @ AMSAT W8ISS $WSR-049.S1
WSR 049 Part 1 02/18/2013

AMSAT NEWS SERVICE BULLETIN 049.S1
FROM AMSAT HQ SILVER SPRING, MD, February 18, 2013
TO ALL RADIO AMATEURS
BID: $WSR-049.S1

PW-Sat
Catalog Number: 38083
Launch Date: Febrauary 13, 2012 1000z

```
Launch Site: Kourou, French Guiana

Status: On Orbit

Uplink:   435.020 MHz FM
Downlink: 145.900 MHz DSB

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=132
[02112013]
=====
DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational
Current Mode: Science Mode - Beacon ONLY

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink:   435.530 to 435.570 MHz

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=68
[02112013]
=====
VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05, 2005 0444z
Launch site: Satish Dhawan Space Centre, India

Status: Operational
Current Mode: U/v - Dutch Transponder

Frequencies:
Indian Transponder:
Uplink:   435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink:   435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW
```

Indian Beacon: 145.9360 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=30

To know what transponder is switched on please listen for the beacon that is active. Each transponder has a different beacon.
[02112013]

=====

SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002 1700z
Launch site: Baikonur, Kazakhstan

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz. The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10 minute timer.

[02112013]

=====

FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Operational
Current Mode: V/u (Mode JA)

Voice/CW (Mode JA)
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage:
http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's
CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/
fo29cwts.htm
[02112013]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974
Launch site: Vandenberg AFB, California, USA

Status: Operational

Current Mode: Alternating between Mode A and B every 24 hours

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

```
[02112013]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998 0640z (ZARYA module)
Launch sites: Baikonur, Kazakhstan
              Kourou, French Guiana
              Uchinoura Space Center, Japan
              Kennedy Space Center, Titusville, Florida, USA

Status: Operational

Current Active Modes: FM Repeater - OFF
                      Voice -       V/v
                      BBS -         V/v
                      2m APRS -     V/v
                      2m Digi -     V/v
                      70cm APRS -   ?
                      70cm Digi -   ?
                      SSTV -        V/v


Expedition 34 Crew (November 2012 - March 2013):
Commander:                Kevin Ford          KF5GPP
Flight Engineer:          Oleg Novitskiy
Flight Engineer:          Evgeny Tarelkin
Flight Engineer:          Roman Romanenko
Flight Engineer:          Chris Hadfield      KC5RNJ/VA3OOG
Flight Engineer:          Tom Marshburn       KE5HOC


Available Modes and Frequencies:
Digital/APRS:
Worldwide 2m packet uplink:     145.825 MHz FM 1k2
Worldwide 2m packet downlink:   145.825 Mhz FM 1k2
Worldwide 70cm packet uplink:   437.550 Mhz FM 1k2
Worldwide 70cm packet downlink: 437.550 Mhz FM 1k2

Voice:
Region 1 voice uplink:          145.200 MHz FM
Region 2/3 voice uplink:        144.490 MHz FM
Worldwide downlink:             145.800 MHz FM

Crossband Repeater:
Repeater Uplinks:              1269.650 MHz FM
                                437.800 MHz FM
                                145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink:              145.800 MHz FM
                                437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink:                       145.800 MHz FM
```

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
2m Packet Mailbox: RS0ISS-11
2m Digipeater alias: ARISS
70cm Packet Mailbox: RS0ISS-1
70cm Digipeater callsign: RS0ISS
70cm Digipeater alias: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time line is NOT translated from Russian and posted.
[02112013]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-049.S2
WSR 049 Part 2 02/18/2013

AMSAT NEWS SERVICE BULLETIN 049.S2
FROM AMSAT HQ SILVER SPRING, MD, February 18, 2013
TO ALL RADIO AMATEURS
BID: $WSR-049.S2

Fitsat-1
Catalog number: 38853
Launch Date: October 04, 2012
Launch site: Kibo Japanese Experiment Module, International Space Station

Status: Operational

Uplink:
Downlink(s): 437.445MHz 1k2 AFSK
5840.00 MHz 115k2 data
LED CW (200w pulses)

Beacon(s): 437.250 MHz CW

Callsign: NIWAKA

```
URL: http://carpcomm.com/satellite/fitsat1
[10292012]
=====
TechEdSat
Catalog number: 38854
Launch date: October 04, 2012
Launch site: Kibo Japanese Experiment Module, International Space
Station

Uplink(s):
Downlink(s): 437.465 1k2 AFSK

Beacon(s):

Callsign:

URL:http://www.techedsat.com/
[10152012]
=====
We Wish
Catalog number: 38856
Launch date: October 04,2012
Launch Site: Kibo Japanese Experiment Module, International Space
Station

Uplink(s):
Downlink(s): 437.505MHz 1k2 AFSK
             437.505MHz SSTV

Beacon(s): 437.505MHz CW

Callsign: JQ1ZIJ

URL:
[10152012]
=====
F-1
Catalog number: 38855
Launch Date: October 04, 2012
Launch Site: Kibo Japanese Experiment Module, International Space
Station

Uplink(s):
Downlink(s): 145.980MHz 1k2 AFSK
             437.485MHz FM moduled CW

Baecon(s):

Callsign: XV1VN

URL: http://fspace.edu.vn/
[10152012]
=====
Aeneas
Catalog Number: 38760
Launch Date: September 13, 2012 2139z
Launch Site: Wallops Island, Virginia, USA

Status: On Orbit

Uplink: WiFi 2425MHz
Downlink:
WiFi: 2425MHz
Spread Spectrum: Somewhere in the 70cm band

Beacon: 437.600MHz 1k2 ax25 every 10 seconds

Callsign:

URL:
[10012012]
=====
CSSWE (Colorado Student Space Weather Experiment)
Catalog Number: 38761
Launch Date: September 12, 2012 2139z
Launch Site: Wallops Island, Virginia, USA

Status: On Orbit

Uplink:
Downlink:       437.345MHz 9k6 with ax.25

Beacon:

Callsign:

URL:
[10012012]
=====
CP5 (Polysat)
Catalog Number: 38763
Launch Date: September 12, 2012 2139z
Launch Site: Wallops Island, Virginia, USA

Status: On Orbit

Uplink:
Downlink:       437.405MHz AFSK on LSB ax.25 over NRZI at 1k2 baud,
every 2
                minutes, begins 3.5 hours after first turn-on

Beacon:

Callsign:

URL:
```

```
[10012012]
=====
CXBN (Cosmic X-Ray Background Nanosatellite)
Catalog Number: 38762
Launch Date: September 12, 2012 2139z
Launch Site: Wallops Island, Virginia, USA

Status: On Orbit

Uplink:
Downlink:       437.525MHz GFSK ax.25

Beacon:

Callsign:

URL:
[10012012]
=====
Proiteres
Catalog Number: 38756
Launch Date: September 09, 2012 2139z
Launch Site: Satish Dhawan Space Centre, India

Status: On Orbit

Uplink:
Downlink: 437.485MHz FM/AFSK

Beacon:

Callsign: JL3YZK

URL:
[10012012]
=====
RS-40 MiR (Yubileiny-2)
Catalog Number: 38735
Launch Date: July 28, 2012
Launch Site: Plesetsk Missile and Space Complex, Russia

Status: On Orbit

Uplink:
Downlink(s):    435.265 MHz
                435.365 MHz

Beacon:

Callsign:

URL:
[08272012]
```

```
=====
HORYU-II
Catalog number: 38340
Launch Date: May 17, 2012 1639z

Status: On Orbit

Uplink:   145.??? MHz
Downlink: 437.375 MHz CW/AX25/FSK

Beacon: 437.375 MHz CW

Callsign: JG6YBW

URL:

IARU Coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=216
[10012012]
=====
XaTcobeo
Catalog Number: 38082
Launch Date: Febrauary 13, 2012 1000z
Launch Site: Kourou, French Guiana

Status: Operational

Uplink:
Downlink: 437.365 MHz FFSK with AX.25

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=135
[100162012]
=====
UniCubeSat
Catalog Number: 38085(?)
Launch Date: Febrauary 13, 2012 1000z
Launch Site: Kourou, French Guiana

Status: Operational

Uplink:
Downlink: 437.305 MHz 9k6 bps GMSK

Beacon:

Callsign:
```

```
URL:
http://www.gausssteam.com/index.php?option=com_content&view=article&id=
96:unicu
besat&catid=36:unicubesat&Itemid=183

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=133
[10012012]
=====
Robusta
Catalog Number: 38083(?)
Launch Date: Febrauary 13, 2012 1000z
Launch Site: Kourou, French Guiana

Status: On Orbit

Uplink:
Downlink: 437.325 MHz 1k2 FM telemetry (data every 3 min, 20 sec.
burst)

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=122
[10012012]
=====
MO-72 MaSat-1
Catalog Number: 38081
Launch Date: Febrauary 13, 2012 1000z
Launch Site: Kourou, French Guiana

Status: Operational

Uplink:
Downlink: 437.345 MHz GFSK 625/1250 bps
          437.345 MHz CW

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=126
[10012012]
=====
Goliat
```

```
Catalog Number: 38084(?)
Launch Date: Febrauary 13, 2012 1000z
Launch Site: Kourou, French Guiana

Status: Operational

Uplink:
Downlink: 437.485 MHz 1k2 AFSK

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=98
[10012012]
=====
E-St@r
Catalog Number: 38079
Launch Date: Febrauary 13, 2012 1000z
Launch Site: Kourou, French Guiana

Status: On Orbit

Uplink:
Downlink: 437.445 MHz 1k2 bps AFSK

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=130
[10012012]
=====
ALMASat-1
Catalog Number: 38078
Launch Date: Febrauary 13, 2012 1000z
Launch Site: Kourou, French Guiana

Status: On Orbit

Uplink:
Downlink:  437.465 MHz 1k2 bps FSK
          2407.850 MHz

Beacon:

Callsign:
```

```
URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=39
[10012012]
=====
RS-39 Chibis-M
Catalog Number: 38051
Launch Date: October 30, 2011 10:11:00 UTC
Launch site: Tyuratam (Baikonur Cosmodrome), Kazakhstan

Status: Operational

Uplink:
Downlink:

Beacon: 435.315 MHz CW
        435.215 MHz CW

Callsign:

URL:

IARU coordination status page:
[07302012]
=====
JUGNU
Catalog Number: 37839
Launch Date: October 12, 2011 05:30:00 UTC
Launch site: Satish Dhawan Space Centre, India

Status: On Orbit

Uplink:   145.??? MHz 1k2 (mode?)
Downlink: 437.505 MHz 9k6 (mode?)

Beacon: 437.275 MHz 15 wpm (?) CW

Callsign:

URL: http://www.iitk.ac.in/me/jugnu/index.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=160
[07092012]
=====
SRMSAT
Catalog Number: 37841
Launch Date: October 12, 2011 05:30:00 UTC
Launch site: Satish Dhawan Space Centre, India

Status: Operational
```

```
Uplink:   145.900 MHz 1k  AX.25 (speed?)
Downlink: 437.500 MHz 2k4 AX.25

Beacon: 437.425 MHz 12 wpm CW

Callsign:

URL: http://srmsat.in/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=181
[01282013]
=====
HRBE (E1P Explorer 1 [Prime] CubeSat (E1P-U2))
Catalog Number: 37855
Launch Date: October 28, 2011
Launch site: Vandenberg Air Force Base, California, USA

Status: On Orbit

Uplink:   437.305 MHz (???)
Downlink: 437.505 MHz AX.25 (SSB?)

Beacon:

Callsign:

URL: http://ssel.montana.edu/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=116
[01122012]
=====
M-Cubed
Catalog Number: 37855
Launch Date: October 28, 2011
Launch site: Vandenberg Air Force Base, California, USA

Status: On Orbit

Uplink:
Downlink: 437.485 MHz AX.25

Beacon:

Callsign:

URL: http://umcubed.org/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=215
[01122012]
```

```
=====
RAX-2
Catalog Number: 37853
Launch Date: October 28, 2011
Launch site: Vandenberg Air Force Base, California, USA

Status: Operational

Uplink:
Downlink: 437.345MHz 9k6 GMSK

Beacon:

Callsign:

URL: http://rax.engin.umich.edu//

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=221
[03232012]
=====
AO-71 AubieSat-1
Catalog Number: 37854
Launch Date: October 28, 2011
Launch site: Vandenberg Air Force Base, California, USA

Status: On Orbit

Uplink:
Downlink: 437.475 MHz 1k2 AX.25

Beacon: 437.475 MHz CW

Callsign: KI4NQO

URL: http://www.space.auburn.edu/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=148
[12262011]
=====
O/OREOS
Catalog Number: 37224
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: On Orbit

Uplink:
Downlink: 437.035 MHZ AX.25

Beacon:
```

Callsign:

URL: http://www.ooreos.org/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=146
[02092011]
=====
Rax-1 Radio Aurora Explorer
Catalog Number: 37223
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: On Orbit

Uplink:
Downlink: 437.505 MHz 9k6 GMSK

Beacon:

Callsign: RAX-1

URL: http://rax.engin.umich.edu/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=165
[02092011]
=====
FO-69 Fastrac-1 Sara Lily
Catalog Number: 37227
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: Operational

Uplink 1: 145.980 MHz 1k2 baud
Uplink 2: 145.825 MHz 1k2 baud
Downlink: 437.345 MHz 1k2 and 9k6 baud

Beacon: 437.435 MHz 1k2 AX.25

Callsign: Fast1

URL: http://fastrac.ae.utexas.edu/index.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=83
[07052011]
=====
FO-70 Fastrac-2 Emma
Catalog Number: 37380
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

```
Status: Operational

Uplink 1: 435.025 MHz 1k2 baud
Uplink 2: 437.435 MHz 9k6 baud
Downlink: 145.825 MHz 1k2 and 9k6 baud

Beacon:   145.825 MHz 1k2 AX.25

Callsign: Fast2

URL: http://fastrac.ae.utexas.edu/index.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=84
[12162011]
=====
StudSat
Catalog Number: 36796
Launch Date: July 12, 2010 0352z
Launch site: Satish Dhawan Space Centre, India

Status: On Orbit

Uplink:   437.505MHz, 9600bps FSK
Downlink: 437.505MHz, 9600bps FSK
Beacon  : 437.505MHz,   20bps ASK

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=164
[02092011]
=====
TIsat-1
Catalog Number: 36799
Launch Date: July 12, 2010 0352z
Launch site: Satish Dhawan Space Centre, India

Status: On orbit

Callsign: HB9DE

Uplink:   145.980MHz FM, AFSK
Downlink: 437.305MHz FM, AFSK
Beacon:   437.305MHz CW

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=118
[02092011]
=====
SwissCube
Catalog Number: 35932
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India
```

```
Status: Operational

Callsign: HB9EG

Beacon(100mw): 437.5050MHz CW
Beacon(1w):    437.5050MHz FSK 1k2bps

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=109
[02092011]
=====
UWE-2
Catalog Number: 35934
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: In Orbit

Beacon(500mw): 437.3850 MHz AFSK 1k2bps
               437.3850 MHz FSK 9k6bps

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=110
[02092011]
=====
ITUpsAT1
Catalog Number: 35935
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Beacon(100mw): 437.325MHz CW
Beacon(1w): 437.325MHz 19k2bps

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=113
[02092011]
=====
BEESAT
Catalog Number: 35933
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Callsign: DP0BEE

Beacon(100mw): 436.000MHz CW
Beacon(500mw): 436.000MHz GMSK 4k8bps
Beacon(500mw): 436.000MHz GMSK 9k6bp
[02092011]
```

```
=====
SOHLA-1 (ASTRO TECH.)
Catalog Number: 33496
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational

Proposed Frequencies and Modes:
Downlink: 437.505 MHz AFSK/CW
Beacon:   437.505 MHz AFSK/CW

Callsign:

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=101
[02092011]
=====
KAGAYAKI (Solan Co.)
Catalog Number: 33495
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: In Orbit

Downlink: 437.375 MHZ    FSK9k6/CW
Beacon:   437.375 MHz    FSK9k6/CW

IARU coordination status page:

AMSAT-NA webpage:

[02092011]
=====
STARS (Kagawa Univ.) (Twin Satellites)
Catalog Number: 33498
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational ?

Downlinks: 437.485 MHz FM/CW
           437.465 MHz FM/CW
Beacons:   437.305 MHz FM/CW
           437.275 MHz FM/CW

Callsigns: JR5YBN
           JR5YBO

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=99

AMSAT-NA webpage:
```

```
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=121&retURL
=/satellites/status.php
[02092011]
=====
KKS-1 (Tokyo MCIT)
Catalog Number: 33499
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational

Downlink:  437.455 MHz AFSK/CW
Beacon:    437.385 MHz AFSK/CW

Callsign: JQ1YYY

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=107

AMSAT-NA webapge:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=120&retURL
=/satellites/status.php
[20092011]
=====
PRISM (Tokyo Univ.)
Catalog Number: 33493
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational

Uplink:   145.xxx MHz AFSK 1k2
Downlink: 437.425 MHz AFSK 1k2
Beacon:   437.250 MHz CW

Callsign: JQ1YCX

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=97

Read terms and conditions of operations at the PRISM web page to find
out how
to properly operate on the satellite and to get the uplink frequency.
It
has
been asked that the uplink frequency not be given out untik you have
read and
understood the terms of usage.

URL:
http://www.space.t.u-tokyo.ac.jp/prism/en/HAMservice.html
[10282012]
=====
```

RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number: 32953
Launch Date: May 23, 2008 1520z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational

Curent Modes: Telemetry
              Audio
              Images

Downlinks: 435.315 MHz
           435.215 MHz

AMSAT-NA website:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=115&retURL=/satellites/status.php

Official website:
http://www.npopm.com/?cid=leoca&caid=43
[02092011]
=====
CanX-2
Catalog number: 32790
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational in range of ground station only

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=46
[02092011]
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Downlink: 437.425 MHz 1k2 baud packet

For the latest project status update please visit the AAUSAT-II web page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=60

```
[02092011]
=====
CO-65 CUTE-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Downlink:  437.475 MHz 9k6 Packet
Uplink:   1267.600 Mhz

Telemetry Beacon:
Downlink: 437.2750 MHz CW

For the latest project status update please visit the Cute-1.7+APD II
web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=78

Command Station blog website:
http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=112&retURL
=/satellites/status.php
[03232012]
=====
Compass-1
Catalog number: 32787
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Current Mode: dependant on last received command

Uplink:   145.980 MHz FM
Downlink: 437.275 Mhz CW
          437.405 MHz Packet

For the latest project status update please visit the Compass 1 web
page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=52

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=114&retURL
=/satellites/status.php
[06162011]
=====
```

CO-66 Seeds II
Catalog number: 32791
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Downlink: 437.485 MHz

Callsign: JQ1YGU

For the latest project status update please visit the Seeds 2 web
page: http://cubesat.aero.cst.nihon-u.ac.jp/english/seeds_2_e.html

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=36

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=113&retURL
=/satellites/status.php
[073092011]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007 0702z
Launch site: Baikonur, Kazakhstan

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=94&retURL=
/satellites/status.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=72
[02092011]
=====
CP3
Catalog Number: 31129
Launch Date: April 17,2007 0702z
Launch site: Baikonur, Kazakhstan

Status: Operational

Current Mode: /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=74
[02092011]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005 0652z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational - CW Beacon only

Current Mode: /u

```
Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon:             437.2750 MHz CW
```

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/xivpicte.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=37
[02092011]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: ?????

Current Mode: /u

```
Beacon:     436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS
```

Callsign: JQ1YGW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=96&retURL
=/satellites/status.php

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[02092011]
=====
QuakeSat

```
Catalog Number: 27845
Launch Date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Telemetry only

Current Mode: 9600 baud data packet

Mode U packet
Downlink: 436.675 MHz 9k6 BPS

Quakesat webpage:
http://www.quakefinder.com/services/quakesat-ssite/
[02252011]
=====
CO-55 Cute-1.7+APD II
Catalog Number: 27844
Launch date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational

Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=69&retURL
=/satellites/status.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=78
[02092011]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001 0240z
Launch site: Kodiak Launch Complex, Alaska, USA

Status: Operational

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink:        144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org
```

```
aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[10292012]
=====
RS-22 RADIO SPORT 22 (MOZHAYETS 4)
Catalog number: 27939
Launch Date: September 27, 2003 0612z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational - 70cm cw only

Current Mode:  /u

CW Beacon - 435.352 MHz
            145.818 MHz

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=76&retURL
=/satellites/status.php
[02092011]
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990
Launch site: Kourou, French Guiana

Status: CW Beacon only

Uplinks:          145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink:      437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[02092011]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984
Launch site: Vandenburg AFB, California, USA

Status: Operational ?

Current Mode:  /v
```

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon: 435.025 MHz
Mode-S Beacon: 2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[07052011]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998 0640z (ZARYA module)
Launch sites: Baikonur, Kazakhstan
Kourou, French Guiana
Uchinoura Space Center, Japan
Kennedy Space Center, Titusville, Florida, USA

Status: Operational

Current Active Modes: FM Repeater - OFF
Voice - V/v
BBS - V/v
2m APRS - V/v
2m Digi - V/v
70cm APRS - ?
70cm Digi - ?
SSTV - V/v

Expedition 34 Crew (November 2012 - March 2013):
Commander: Kevin Ford KF5GPP
Flight Engineer: Oleg Novitskiy
Flight Engineer: Evgeny Tarelkin
Flight Engineer: Roman Romanenko
Flight Engineer: Chris Hadfield KC5RNJ/VA3OOG
Flight Engineer: Tom Marshburn KE5HOC

Available Modes and Frequencies:
Digital/APRS:
Worldwide 2m packet uplink: 145.825 MHz FM 1k2
Worldwide 2m packet downlink: 145.825 Mhz FM 1k2
Worldwide 70cm packet uplink: 437.550 Mhz FM 1k2
Worldwide 70cm packet downlink: 437.550 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
2m Packet Mailbox: RS0ISS-11
2m Digipeater alias: ARISS
70cm Packet Mailbox: RS0ISS-1
70cm Digipeater callsign: RS0ISS
70cm Digipeater alias: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[12242012]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-049.S3
WSR 049 Part 3 02/18/2013

AMSAT NEWS SERVICE BULLETIN 049.S3
FROM AMSAT HQ SILVER SPRING, MD, February 18, 2013
TO ALL RADIO AMATEURS
BID: $WSR-049.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

NANOSAIL-D
Catalog Number: 37361
Ejection Date: January 17, 2011

Status: Non - Operational

```
Downlink: 437.270 MHz AX.25

URL: http://nanosaild.engr.scu.edu/dashboard.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=115
[07302012]
=====
HO-68 HOPE-1 (CAS-1) (XW-1)
Catalog Number: 36122
Launch Date: December 15, 2009 0231z
Launch site: Taiyuan Space Center, PRC

Status: Telemetry only

Callsign:
Broadcast:    BJ1SA-11
BBS:     BJ1SA-12

Uplinks:   145.8250 MHz FM, PL 67.0 Hz.
           145.9250 - 145.9750 MHz SSB/CW
           145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
           435.7650 - 435.7150 MHz SSB/CW
           435.6750 MHz AFSK 1200 BPS

Beacon:    435.7900 MHz CW

Mode and Antenna Polarization:
V: LHCP 2.0dBi max
U: RHCP 3.0dBi max

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=108

For more information about XW-1 (CAS-1):
http://
[04302012]
=====
SO-67 SumbandilaSat
Catalog Number: 35870
Launch Date: September 17, 2009 1555z
Launch site: Baikonur, Kazakhstan

Status: Non - Operational

Callsign: ZS0SUM

Uplink:   145.875MHz FM tone 233.6 Hz
Downlink: 435.345MHz FM

Mode and Antenna Polarization:
V: Linear
```

U: Linear

For more information about SO-67:
http://www.amsatsa.org.za/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=88
[01272012]
=====
CP4
Catalog Number: 31132
Launch Date: April 17, 2007

Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon: 437.325 MHz CW

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=79
[09062010]
=====
LIBERTAD-1
Catalog Number: 31128
Launch Date: April 17, 2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink: 145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=76
[09062010]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: Non-Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder: 145.825 Mhz FM

```
IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=51
[09062010]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency:  437.305
                             2407.250

Official Website: http://www.ncube.no

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=24
[09062010]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink:         437.250 MHz FM 67Hz CTCSS
Voice Downlink:      2401.835 MHz FM
Packet Up/Downlink:   437.250 MHz 9k6 packet
Packet Downlink      2401.835 MHz 38k4 packet

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=54
[09062010]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non-Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=53
[09062010]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004 0745z
Launch site: Baikonur, Kazakhstan
```

Status: Non - Operational

Current Mode(s):
Voice repeater: V/u
Uplink: 145.880 MHz FM
Downlink: 435.150 MHz FM

Telemetry: Recovery efforts
Downlink: 435.150MHz 9k6

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.860 MHZ FM
145.880 MHz USB
145.880 MHz FM
145.920 MHz FM
145.920 MHz FM - 67 Hz PL tone burst
1268.705 MHz FM
Digital Downlinks: 435.150 MHz FM 38k4 PBP, 1 watt output
435.150 MHz FM 9k6 Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Pacsat Broadcast Protocol
1268.703 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=19
[12062011]

=====

CANX-1
Catalog Number: 27847
Launch Date: June 30, 2003

Status: Non-Operational

Downlink: 437.8800 MHz AFSK 1k2bps
[06052009]
=====
DTUSAT
Catalog Number: 27842
Launch Date: June 30, 2003

Status: Non-Operational

Current Mode: 2k4 AFSK Packet last reported

Downlink: 437.475MHz

Officail webpage: http://dtusat1.dtusat.dtu.dk/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=101&retURL=satellites/all_oscars.php
[02212009]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)

Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Telemetry only

Uplinks: 145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as
a collaborative effort between the Malaysian government and Surrey
Satellite Technology Ltd.
[03302009]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609

Launch Date: November 16, 2000

Status: Non-Operational

Uplinks

V-band: 145.840 - 145.990 MHz CW/LSB
U-band: 435.550 - 435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks

S2-band: 2401.225 - 2401.475 MHz CW/USB
K-band: 24048.010 - 24048.060 MHz CW/USB
Beacon: 2401.323 MHz
24048.035 MHz

P3-D Telemetry Beacons (IHU)

BEACON	General Beacon(GB)	Middle Beacon(MB)	Engineering Beacon(EB)
2 m	none	145.898 MHz	none
70cm	435.438 MHz	435.588 MHz	435.838 MHz
13cm(1)	2400.188 MHz	2400.338 MHz	2400.588 MHz
13cm(2)	2401.173 MHz	2401.323 MHz	2401.573 MHz
3cm	10450.975 MHz	10451.125 MHz	10451.375 MHz
1.5cm	24047.885 MHz	24048.035 MHz	24048.285 MHz

[07162007]

OO-38 OPAL

Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]

UO-36 UoSAT-12

Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web

site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: 25636
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Non-Operational

Current Modes:
Telemetry : /u

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks: 145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://asri.technion.ac.il/techsat/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=14&retURL
=/satellites/status.php
[07172010]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink: 145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
MO-30 UNAMSAT-2
Catalog Number: 24305
Launch Date: September 5, 1996

Status: Non-operational

Downlink: 435.1380 MHz AFSK 1200 BPS
Downlink: 435.2060 MHz AFSK 1200 BPS
Uplink: 145.8150 MHz AFSK 1200 BPS
Uplink: 145.8350 MHz AFSK 1200 BPS
Uplink: 145.8550 MHz AFSK 1200 BPS
Uplink: 145.8750 MHz AFSK 1200 BPS
[06042009]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

```
Status: Non-operational

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign:       POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012009]
=====
AO-27 AMRAD
Catalog number: 22825
Launch Date: September 26, 1993 0140z
Launch site: Kourou, French Guiana

Status: Recovery efforts in progress

Current Mode: V/u

Uplink:   145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[12032012]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993 0140z

Status: PSK carrier only

Current Mode:

Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
```

```
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
AO-24 ARSENE
Catalog Number: 22654
Launch Date: May 13, 1993

Status: Non-operational

Uplink:    435.0625 MHz FM 1k2bps AFSK
           435.1125 MHz FM 1k2bps AFSK
           435.1375 MHz FM 1k2bps AFSK
Downlink:  145.9750 MHz FM 1k2bps AFSK
          2446.5025 MHz FM 1k2bps AFSK

Beacon:    2446.4700 MHz CW

Broadcast callsign:
BBS:
[12162009]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
```

```
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990
```

```
Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
[05012006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: non-operational

Current Mode:  V/u

Uplink:         145.900 MHz FM 1200-baud Manchester FSK (reserved)
                145.920 MHz FM VOICE
                145.940 MHz FM 1200-baud Manchester FSK (reserved)
                145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink:       437.026 MHz USB VOICE
                (1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[07242009]
=====
UO-15 UoSAT-4
Catalog Number: 20438
Launch Date: January 22, 1990

Status: Non-operational

Uplink: ?
Downlink: 435.1250MHz (?)
          435.1200MHz (?)
[06042009]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
```

```
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon:   145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
```

```
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink  29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
Beacons:   29.450 MHz
          435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon 1:  29.352 MHz (intermittent)
Beacon 2:  29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
```

=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB

Beacon: 145.860 MHz

Robot: 145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at}
amsat.org
NNNN
/EX

```
From -5730309772176963721
X-Google-Thread: a4a23d5f63,b5f12d12e1cddcb9,start
X-Google-Attributes: gida4a23d5f63,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII
X-Received: by 10.180.92.202 with SMTP id co10mr1081346wib.1.1361476355505;
        Thu, 21 Feb 2013 11:52:35 -0800 (PST)
MIME-Version: 1.0
Path: g1ni24810wig.0!nntp.google.com!feeder1.cambriumusenet.nl!feed.tweaknews.nl!
85.12.40.130.MISMATCH!xlned.com!feeder1.xlned.com!newsfeed.xs4all.nl!
newsfeed4.news.xs4all.nl!xs4all!border4.nntp.ams.giganews.com!
border2.nntp.ams.giganews.com!border2.nntp.dca.giganews.com!nntp.giganews.com!
border1.nntp.hkg.giganews.com!news.netfront.net!newsgate.cuhk.edu.hk!
news.glorb.com!usenet.stanford.edu!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-048 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sat, 16 Feb 2013 21:19:40 EST
```

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Organization: The Radio Amateur Satellite Corporation
Lines: 658
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000601ce0cb4$f0037c90$d00a75b0$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
X-Trace: reader1.panix.com 1361067580 7279 166.84.1.6 (17 Feb 2013 02:19:40 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 17 Feb 2013 02:19:40 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
DKIM-Signature: v=1; a=rsa-sha256; c=relaxed/relaxed; d=comcast.net;
     s=q20121106; t=1361067570;
     bh=OZ8LhDuc+nukwyuwhEBZtRbbf/wq/LO+IlEmRwIISZY=;
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      hewQKL3Bx7RKw==
Content-Language: en-us
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AMSAT NEWS SERVICE
ANS-048

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor at amsat.org

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* Amateur Satellite Allocations on the Agenda at Vienna
* April-May 2013 Launch for TURKSAT-3USAT Linear Transponder Cubesat
* New Cuban Satellite Operators Now On-the-Air

* NASA Long-Distance Google+ Hangout to Connect with Space Station
* JAMSAT 2013 Symposium in Tokyo - March 9-10
* ARISS School Contacts This Week
* Israeli Students Speak with Canadian Astronaut in Space
* Changes Announced at Space-Track Website to Access Tracking Data
* Satellite Shorts From All Over

SB SAT @ AMSAT $ANS-048.01
ANS-048 AMSAT News Service Weekly Bulletins

AMSAT News Service Bulletin 048.01
>From AMSAT HQ SILVER SPRING, MD.
February 17, 2013
To All RADIO AMATEURS
BID: $ANS-048.01

Monday February 18 OSCAR 7 Close Approach With Orbital Debris

According to orbital predictions from United States Joint Space Operations Center (JSpOC) the OSCAR 7 amateur radio satellite is heading for a close call with orbital space debris on Monday, February 18 at 22:06 UTC.

Please post your AO-7 reception reports after this event via amsat-bb@amsat.org and also via the Live OSCAR Satellite Status Page at: http://oscar.dcarr.org/

The near-miss is predicted with the following parameters:

Primary Object: OSCAR 7 (SCC# 7530)
Secondary Object: SCC# 18116
Time of Closest Approach: 18 FEB 2013 22:06 UTC

Overall miss distance: 57 meters
Radial (dU) miss distance: 25 meters
In-Track (dV) miss distance: -25 meters
Cross-track (dW) miss distance: 46 meters

Primary Radial Error (U): 11 meters
Primary In-Track Error (U): 57 meters
Primary Cross-track Error (U): 6 meters

Secondary Radial Error (U): 12 meters
Secondary In-Track Error (U): 55 meters
Secondary Cross-Track Error (U): 11 meters

[ANS thanks Drew Glasbrenner, KO4MA and the United States Joint Space Operations Center for the above information]

UK Space Mission - STRaND-1 Plans for Launch on February 25

A UK mission, jointly developed by the University of Surrey's Surrey Space Centre (SSC) and Surrey Satellite Technology Limited (SSTL), to send the world's first smartphone satellite into orbit, is due to launch on February 25 from India on PSLV-C20. This launch will also carry the ocean study spacecraft SARAL as well as satellites carrying amateur radio payloads.

STRaND-1 will be the first UK CubeSat to be launched and has been developed by talented space engineers and researchers at Surrey with the majority of the design and developmental work being carried out in their spare time. The build and test phase of the project has been completed in just three months. At the heart of STRaND-1 is a Google Nexus One smartphone with an Android operating system.

During the first phase of the mission, STRaND-1 will use a number of experimental 'Apps' to collect data while a high-speed linux-based CubeSat computer developed by SSC takes care of the satellite. During phase two, the STRaND-1 team plan to switch the satellite's in-orbit operations to the smartphone, testing the capabilities of a number of standard smartphone components for a space environment. The satellite will be commissioned and operated from the Surrey Space Centre's ground station at the University of Surrey.

Being the first smartphone satellite in orbit is just one of many 'firsts' that STRaND-1 is hoping to achieve. It will also fly innovative new technologies such as a 'WARP DRiVE' (Water Alcohol Resistojet Propulsion Deorbit Re-entry Velocity Experiment) and electric Pulsed Plasma Thrusters (PPTs); both 'firsts' to fly on a nanosatellite. It is also flying a 3D printed part - believed to be the first to fly in space!

A software-based speech synthesiser will be included to pay homage to the UOSAT family of satellites OSCAR 9 and 11, that were launched in 1980 & 1982. There will be an amateur radio AX.25 packet radio downlink on 437.575 MHz using data rates of 9k6 or 19k2 bps.

On-line articles of the STRaND-1 mission can be found at:
http://www.amsat-uk.org/
http://spaceref.com/news/viewsr.html?pidC314

[ANS thanks AMSAT-UK and Spaceref.com for the above information]

Additional Satellites on India's PSLV-C20 Launch on February 25

The STRaND-1 smart phone based CubeSat will share the ride to space with additional satellites:

+ SARAL (Satellite with ARgos and ALtiKa) ocean study spacecraft is a joint ISRO � CNES mission aimed at sun-synchronous orbit with descending node at 18:00 local time, and altitude around 800 km. Ka-band radar altimeter operating at 35.75 GHz. http://smsc.cnes.fr/SARAL/

+ NEOSSat (Near Earth Object Surveillance Satellite) � space telescope that will split its time 50/50 to search for near-Earth asteroids that could potentially impact the Earth, and search for satellites and space debris in orbit around the Earth. Research project for Defence Research and Development Canada (DRDC). http://www.asc-csa.gc.ca/eng/satellites/neossat/

+ Sapphire � Canadian Department of National Defence first dedicated military satellite, designed to provide tracking data on space objects at orbit altitudes between 6,000km and 40,000km, data will be shared with the US Space Surveillance Network.

http://www.sstl.co.uk/Missions/Sapphire/Sapphire/Sapphire�The-Mission

+ CanX-3a, BRITE (BRIght-star Target Explorer) � small satellite designed to make photometric observations of bright stars in order to study their variability. Built by the University of Toronto Institute for Aerospace Studies Space Flight Laboratory, and operated by the Universit� de Montr�al and University of Vienna. http://www.utias-sfl.net/nanosatellites/CanX3/

+ TUGSat-1 (Technische Universit�t Graz Satellit), BRITE � Austria
�
small satellite from Austria designed to make photometric observations of bright stars in order to study their variability. The IARU Amateur Satellite Frequency Coordination status pages note that it will be using S-Band for telemetry downlinks and will have a 145 MHz CW beacon. http://www.tugsat.tugraz.at/

+ AAUSat 3 � 1U cubesat developed and constructed by students from Department of Electronic Systems at Aalborg University Denmark, testbed for a pair of AIS receivers concentrating on the area around Greenland in cooperation with the Danish Maritime Authority. The IARU Amateur Radio coordinated frequency is 437.425 MHz and the radio link will use Viterbi and Reed Solomon encoding. http://www.space.aau.dk/aausat3/

[ANS thanks AMSAT-UK and the Zarya Space Calendar for the above information - http://www.zarya.info/Calendar.php]

Amateur Satellite Allocations on the Agenda at Vienna

In the coming months meetings will take place in both IARU Region 1 and Region 2 to discuss HF and VHF bandplans.

The IARU Region 1 2013 Interim Meeting in Vienna April 19-21 will be discussing two proposals relating to the Amateur-Satellite Service:

+ VIE13_C4_02 - Amendment to the 28 MHz Bandplan in relation to the Amateur Satellite Service. This proposes the removal of the downlink only restriction on the 29.300-29.510 MHz satellite segment. See http://tinyurl.com/vienna2013-10M (http://uska.ch/)

+ VIE13_C5_03 - Increased Amateur-Satellite Service 144 MHz Usage. This proposes the introduction of a new satellite downlink band for CW/SSB transponders at 144.000-144.035 MHz:
  See http://tinyurl.com/vienna2013-2M (http://uska.ch/)

A report on the ARRL website has requested input for the IARU Region 2 conference will be held later this year in Mexico.. At this time it is not known if satellite allocations will be raised at the meeting in Region 2. The ARRL item is posted at:
http://www.arrl.org/news/iaru-region-2-seeks-input-on-hf-band-plan
This page includes instructions to post comments via e-mail to the ARRL as the IARU Member Society for the United States.

[ANS thanks Trevor, M5AKA and the ARRL for the above information]

May 2013 Launch for TURKSAT-3USAT Linear Transponder Cubesat

TAMSAT reports the TURKSAT-3USAT, the first communication nanosatellite mission of ITU, Istanbul Technical University, Istanbul, Turkey is expected to launch in the May 2013 timeframe aboard China's Chang Zheng-2D rocket. Also aboard this launch will be Ecuador's NEE 01 Pegaso 1U cubesat.

TURKSAT-3USAT is a three unit CubeSat developed to provide SSB/CW communications in a 680 km Low Earth Orbit. It will fly a V/U linear transponder developed by TAMSAT, the Turkish Amateur Satellite Technologies Organisation.

+ Uplink center frequency   145.965 MHz
  (145.940-145.990 MHz bandwidth)
  Receive sensitivity -120 dBm

+ Downlink center frequency 435.225 MHz

(435.200-435.250 MHz bandwidth)
Output power 30 dBm (1W)

+ CW beacon on 437.225 MHz

TurkSat features a 3U CubeSat structure of ISIS (Innovative Solutions In Space BV), Delft, The Netherlands, with a size of 10 cm x 10 cm x 30 cm. The total mass of the nanosatellite is ~ 4 kg. The computer is a Pumpkin OBC. A camera and an attitude determination and control subsystem is part of the mission.

The satellite has a de-orbiting system which will make it re-enter the atmosphere following completion of its life time. The deorbiting system consists of a lightweight thin membrane when deployed is expected to deorbit the nanosatellite within 25 years.

Additional information can be accessed on-line at:
http://www.tamsat.org.tr/tr/turksat-3usat-is-almost-ready/
http://www.uk.amsat.org/?p670

[ANS thanks TAMSAT for the above information]

New Cuban Satellite Operators Now On-the-Air

Cuba's new amateur satellite group, Grupo de Radioaficionados para Operaciones Satelitales, or GROS says this week two Cuban amateurs have made their first satellite contact via SO-50. GROS Coordinator Raydel, CM2ESP reported on the success of Pavel, CO7WT and Jose, CM2XN, "This may look simple, but for a Cuban Ham this is a great success which follows many weeks of antenna building, equipment adjustments and learning, these two hams enjoyed their first success-contact on an FM transponder satellite. They know there is a lot more of operating skills to learn and they are very happy to do so."

Grupo de Radioaficionados para Operaciones Satelitales, loosely interpreted as "Ham Radio Group for Satellite Operations", says this reflects on the successful mentorship to get Cuban radio amateurs on the satellites. Few Cuban hams have the required radio gear and require a degree of inventiveness and perseverance to put their technical skills to the test to acheive success.

The intial success of this small group of Cuban hams hopes to inspire and train more hams to build their satellite stations, get on the air and activate new grids.

GROS hosts a VHF net in the Havana Province twice monthly on Friday. They are working on creating a monthly HF satellite net in the near future. GROS continues to work with Cuban National Amateur Radio Federation, F.R.C., the Federaci�n de Radioaficionados de Cuba, on the logistical arrangements to hold the first national meeting of Cuban amateur satellite operators.

Raydel invites questions and comments to the group to be sent to any members of the Coordination Board using these contacts:

- CO6CBF, Hector, Vice-Coordinator (co6cbf@frcuba.co.cu)
- CO7WT, Pavel, Technical Vice-Coordinator (pavel@conas.cu)
- CM2ESP, Raydel, Coordinator (cm2esp@frcuba.co.cu)

A video of Hector, CO6CBF, at the 2012 AMSAT Space Symposium talking about how a Cuban Ham operates via satellite can be found on YouTube: http://www.youtube.com/watch?v�cmIubIBQ4.

[ANS thanks GROS Coordinator Raydel, CM2ESP for the above information]

NASA Long-Distance Google+ Hangout to Connect with Space Station

In a first for the agency, NASA will host a Google+ Hangout live with the International Space Station between 11 a.m. to noon EST on February 22. Google+ Hangouts allow people to chat face-to-face while thousands more can tune in to watch the conversation live on Google+.

Although the deadline to submit video questions was February 12 you will be able to watch replies to selected questions. Several video questions will be selected and answered by astronauts on the space station and on the ground. Additionally, NASA will ask real-time questions submitted by followers on Google+, Twitter, and Facebook.

To join the hangout, and for updates and opportunities to participate in upcoming hangouts, visit NASA's Google+ page: https://plus.google.com/+NASA/posts

Information on this Hangout and future sessions can be found at: http://www.nasa.gov/connect/hangout.html

[ANS thanks NASA for the above information]

JAMSAT 2013 Symposium in Tokyo - March 9-10

JAMSAT announces their 2013 Symposium to be held in Tokyo on March 9 to March 10. The Symposium will be held at the National Museum of Emerging Science and Innovation (Miraikan) - 7F Conference Room CR2.

All amateur radio satellite operators are welcome to attend.

The Symposium schdule will be:

March 9
- 14:30 - 17:00 Papers and Technical Presentations
- 17:30 - 19:30 Dinner Party

March 10
- 10:00 - 13:00 Papers and Technical Presentations

The list of technical topics includes:
- Problem of 1.2GHz Band License
- Interference with QZSS Satellite
- FitSAT Report
- JAMSAT Activities
- Progress in Transponder and 38.4Kbps Transmitter
- Noise Environment at 2.4GHz Band
- Progress in Nippon University Cubesat "NEXUS"
- Introduction to AMSAT-NA FOX-Project
- SDR and Satellite Communication

Openings remain available for the addition of last minute presentations on topics pertaining to amateur radio in space. If you are interested in making a presentation please contact madoguchi@jamsat.or.jp or ja3gep@jamsat.or.jp

Information on the Museum meeting location can be accessed on-line:
http://www.miraikan.jst.go.jp/en/

[ANS thanks Mikio Mouri, JA3GEP of JAMSAT for the above information]

ARISS School Contacts This Week

United Kingdom

An International Space Station school contact was successfully completed with participants at Breadalbane Academy, Aberfeldy, United Kingdom on February 12. The contact was made with a telebridge between NA1SS and W6SRJ.

Breadalbane Academy is a rural school serving Highland Perthshire in the heart of Scotland. The school has 700 pupils coming from Aberfeldy, Pitlochry, Rannoch and Dunkeld. The students are very interested in all aspects of the space program.

Manitoba, Canada

An International Space Station school contact was successfully completed with participants at Chief Peguis Junior High School, Winnipeg, Manitoba, Canada on February 13. The contact was made with a telebridge between NA1SS and VK5ZAI.

Chief Peguis Junior High is a grade 7-9 school with a population of about 550 students and staff. In April of 2011 Chris Hadfield made a personal appearance at the school to talk to the students. Those grade 7 students at that time are currently grade 9 students and they remember his visit. They feel they already have a personal connection with him.

This coming week International Space Station school contacts are planned on Tuesday and Friday with:

+ The 4th Dimotiko Scholeio Chaidariou, Chaidari (near Athens), Greece. This will be a direct contact via J41ISS on Tuesday, February 19 at 12:30 UTC.

+ The Uplands Elementary School, Penticton, BC, Canada, with a telebridge via IK1SLD on Friday, February 22 at 19:36 UTC.

ARISS is requesting listener reports for these contact. Due to issues with the Kenwood radio that are not fully understood at present, the Ericsson radio is going to be used for this contact. ARISS thanks everyone in advance for their assistance.
If you are in range the downlink is 145.800 MHz.

[ANS thanks ARISS for the above information]

Israeli Students Speak with Canadian Astronaut in Space

JERUSALEM (http://www.algemeiner.com/) - Ninth grade physics students at Hebrew University Secondary School (Leyada) in Jerusalem spoke with Canadian astronaut Chris Hadfield, as he orbited the Earth aboard the International Space Station (ISS) on Sunday, February 3.

The Israeli high school students were the recent winners of the Ilan Ramon Space Olympics hosted each year by the Ilan Ramon Foundation, established in honor of Israel's first astronaut, Ilan Ramon. Ramon perished in the Space Shuttle Columbia disaster with six other American crew members, when the shuttle disintegrated reentering to earth 10 years ago.

Out of the 2,000 students from across Israel who participated in the Space Olympics, Leyada's 19-member team won first prize, for building a space platform to repair satellites and constructing a guesthouse in space.

The first prize granted the winning students a chance to speak with Canadian astronaut Chris Hadfield, who recently spoke with public school students in Ontario. According to Leyada's Reuben Tel-Dan, the proud physics teacher who oversaw the project, "I believe that Leyada is the first school in Israel to communicate with space." The special event is part of NASA's Teaching From Space Program, which gives schoolchildren the chance to ask questions and hear answers from astronauts living aboard the space station via Amateur Radio on the International Space Station (ARISS). The contact is performed using the Amateur Radio telebridge network, a world-wide network of amateur radio ground stations that allow students to contact the space station, as it flies more than 200 miles above Earth.

Leyada students came prepared with a list of 20 questions for Hadfield, from everything about what life in space is like to homesickness and boredom. One of the ninth grade students, Ron, asked Hadfield where he slept more comfortably - on Earth or in the space station. Hadfield laughed, replying that "sleeping in the space station is comfortable, but I sleep better at home with my wife." Another student, Yoni wanted to know how astronauts distinguish between day and night in the space station. Hadfield explained that there were 16 sunrises a day, but the crew uses an alarm clock for their sleep routines.

Along with the physics team, over 200 Leyada students listened carefully to the audio conversation which took place at 11 am in the morning.

Although the weak signals cut the fascinating conversation short, for Ya'arit Segal, one of the student leaders of the project, the prize was worth the hours that she and her team spent on the project for the past three months. The ninth grader described many sleepless nights that she her teammates experienced creating their successful space project. "We spent days and nights working on our project and the process had a huge impact on us," she told Tazpit News Agency.

"I don't know if I'll be an astronaut someday," concedes Segal. "But it would be so interesting to conduct experiments in space and learn how to work together with a crew." Leyada's principal, Dr. Gilead Amir, was especially impressed with the students' initiative. "Today was a great example for all of us, both students and teachers - in learning how school projects can directly impact our lives. Sometimes what we do at school can even lead to historical moments."

[ANS thanks NASA Teaching From Space and www.algemeiner.com for the above information]

Changes Announced at Space-Track Website to Access Tracking Data

This week the Space-Track website published the following memo to the satellite community who use their site to access the latest Keplerian Elements for tracking:

We are pleased to announce that we will upgrade the current http://www.Space-Track.org on Wednesday, 20 February 2013 at 12:00 PST to add the look and functionality that matches what is now on https://beta.space-track.org. The bulk file downloads from our current Space-Track site will continue to be available to scripters for a limited time after the upgrade using established URLs.

This upgrade will vastly improve how the Space-Track User community interacts with orbital element sets, the satellite catalog and conjunction data. With a robust Representational State Transfer (RESTful) Application Programming Interface (API), scripters will be able to get the latest data available, customized for their purposes.

Here are just a few of the new features that will become part of the upgraded www.Space-Track.org:

+ A streamlined and intuitive user interface that is easier to navigate and allows simple searches.

+ A robust help and documentation section - "Favorites" lists to identify logical groupings of catalog objects that Users can monitor via the web interface or with the site's API.

If you have production scripts that currently use beta.space-track.org, we recommend that you change your scripts to point at www.Space-Track.org on or after 20 February 2013.

If you have scripts that screen-scrape or download text/zip files from the current yellow-colored legacy www.Space-Track.org, they will continue to perform correctly for a few months, but we recommend that you quickly transition your scripts to take advantage of the new API. Documentation is available under "Help" to assist you, as well as the API query builder tool on the upgraded site.

We have also started sharing information about Space-Track's new features on tumblr, facebook and twitter, so please engage us on your favorite social media platform.

Our sites are http://space-track.tumblr.com,
http://www.facebook.com/SpaceTrack, and
http://www.twitter.com/SpaceTrackOrg

We understand that any significant upgrade has the potential to cause frustration for our user community and we apologize if this creates any adjustment problems for you. For help or clarification, please email us at admin@space-track.org.

Thank you,
The www.Space-Track.org Team

[ANS thanks Space-Track.org for the above information]

Satellite Shorts From All Over

- Effective Monday, February 18 AMSAT-UK Change of Domain - the AMSAT-UK website will be moving to a new URL of: http://www.amsat-uk.org/

- AMSAT has received the sad news of the passing of John Heath, G7HIA on February 15. John is remembered for his passion passion for satellites and the cosmos, his patience in explaining and teaching others, his companionship and friendship, and establishing and improving contacts with Russian satellite operators. See: http://www.amsat-uk.org/ (Andy, G0FSJ and Trevor, M5AKA)

- Expedition 34 Flight Engineer Chris Hadfield of the Canadian Space Agency (CSA) speaks with Canadian-born actor William Shatner, the original Captain Kirk on the "Star Trek" television series on this YouTube video: http://www.youtube.com/watch?v�ro4zkw-LA

- Enjoy a HD video, made by Sylvain Draux F0FVK, featuring the amateur radio satellite Fuji-OSCAR-29 (JAS-2). The video was shown at the Amateur Radio Fair held in Pordenone, Italy on November 17-18, 2012: http://www.uk.amsat.org/?p592

- Doug, VK3UM reports that his EME Calculator Software - EMECalc Ver 9.00 has been released. Enhancements include expansion of the Yagi Data base with the VE7BQH yagi comparison tables allowing selections of over 490 antennas. Additional features include Beam Fill Calculations and an updated EME Planner Ver 1.78. The software can be found at: http://www.vk3um.com

- The Gateway to Astronaut Photography of Earth hosts the best and most complete online collection of astronaut photographs of the Earth at: http://eol.jsc.nasa.gov/

- Michael, HB9WDF is reported to be active as FM/HB9WDF from Martinique between February 11-21. Activity will be holiday style on the satellites AO-7, FO-29, VO-52, SO-50 and others if they are active, and the HF bands on PSK-31 and some SSB. QSL via home calls. (Ohio/Penn DX Bulletin No. 1099) and (DX Newsletter DXNL 1819 - Feb 13, 2013)

+ A video of the West Palm Beach Amateur Radio Group hosting the largest ever ARISS contact at the South Florida Science Museum has been posted at: http://www.youtube.com/watch?feature�ayer_embedded&v�cGLKSvBnQ This contact had a live audience of hundreds in the Museum plus a live TV feed to the entire county school system of about 180,000 students and 12,000 teachers. Plus a live audience on The Education Channel of another 25,000 in private and home schools, plus live broadcast on the PBS station with another 15,000 viewers and live feed on 2 Comcast Cable TV channels with another 30,000 viewers. It was also streamed live on the Internet. (Southgate.org)

+ The Winter 2013 CQ VHF Magazine has several articles of interest to amateur satellite operators:
  o Transatlantic Balloon Flight 2012 - CNSP 18 - K6RPT-12
  o K6RPT-12 Recovery Effort
  o A Panadaptor for FT-817 using the FUNCube Dongle
  o Raspberry Pi in the Sky
  o CQ Satellite and 6 Meter WAZ Award Update
  o Satellites Column by AMSAT's Keith Pugh, W5IU

[ANS thanks everyone for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

Primary and secondary school students are eligible for membership at one-half the standard yearly rate. Post-secondary school students enrolled in at least half time status shall be eligible for the student rate for a maximum of 6 post-secondary years in this status. Contact Martha at the AMSAT Office for additional student membership information. And with that, please keep in mind a team of astronomers from Johns Hopkins University in their paper, "The 2dF Galaxy Redshift Survey: constraints on cosmic star-formation history from the cosmic spectrum", reported that their survey of the color of all light in the universe added up to a slightly beige white they named 'Cosmic Latte'. The survey included more than 200,000 galaxies, and measured the spectral range of the light from a large volume of the universe. The hexadecimal RGB value for Cosmic Latte is #FFF8E7. (Credit: http://www.oddee.com/item_63950.aspx#lrmr9I6M5Glrh4rD.99)

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM

```
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Newsgroups:
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Subject: Weekly Highlights of Solar and Geomagnetic Activity, 11 - 17 February
2013
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Date: Mon, 18 Feb 2013 11:30:06 EST
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Message-ID: <20130218163002.235CC33C8C@panix2.panix.com>
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X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump

:Product: Weekly Highlights and Forecasts
:Issued: 2013 Feb 18 0317 UTC
# Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center
# Product description and SWPC contact on the Web
# http://www.swpc.noaa.gov/weekly.html
#
#                 Weekly Highlights and Forecasts
#
Highlights of Solar and Geomagnetic Activity
```

11 - 17 February 2013

Solar activity was moderate. The largest flare of the period was a M1/Sf with an associated Tenflare (340 sfu) radio burst from Region 1675 (N12, L=37, class/area Cso/050 on 17 February) at 17/1550 UTC. The largest and most magnetically complex region of the period was Region 1670 (N17, L166, class/area Dai/170 on 12 February). It managed to produce two C-class flares before finally rotating off the west limb on 16 February. Two filament eruptions occurred near the southwest quadrant during the period. The first, a 7-degree long filament located near S26W63, erupted beginning at approximately 12/2200 UTC. The second, a 10-degree long filament located near S29W48, erupted at approximately 13/0300 UTC. It was later determined that neither coronal mass ejection (CME) associated with these filaments had a substantial Earthward trajectory. Several other non-Earth directed CMEs were observed throughout the period as well. However, late in the period a NE limb event showed a potential Earth-directed CME. The ejecta was shown to be moving slowly (approximately 300-400 km/s) using the plane-of-sky estimate but is anticipated to be caught up in a coronal hole high speed stream (CH HSS) and be nearly imperceptible as it passes.

No proton events were observed at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit was at normal to moderate levels.

Geomagnetic field activity was quiet to unsettled with a couple of isolated active periods. The first was on 13 February from 21000-2400 UTC due to prolonged periods of sustained negative Bz. The second occurred on 16 February from 1500-1800 UTC due to the passage of a weak transient CME.

Forecast of Solar and Geomagnetic Activity
18 February - 16 March 2013

Solar activity is expected to be very low to low.

No proton events are expected at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to be at normal to moderate levels from 18-23 February in response to negative polarity CH HSS from CH95 and CH96, and again from 1-2 March due to a recurrent negative polarity CH HSS.

Geomagnetic field activity is expected to be predominantly quiet to unsettled with a slight chance for isolated active periods due to the effects of the negative polarity CHs mentioned previously.

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From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-056 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Sat, 23 Feb 2013 21:12:12 EST
Organization: The Radio Amateur Satellite Corporation
Lines: 2327
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X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
DKIM-Signature: v=1; a=rsa-sha256; c=relaxed/relaxed; d=comcast.net;
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This report is organized into three (3) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites

SB SAT @ AMSAT W8ISS $WSR-056.S1
WSR 056 Part 1 02/25/2013

AMSAT NEWS SERVICE BULLETIN 056.S1
FROM AMSAT HQ SILVER SPRING, MD, February 25, 2013
TO ALL RADIO AMATEURS
BID: $WSR-056.S1

PW-Sat
Catalog Number: 38083
Launch Date: Febrauary 13, 2012 1000z
Launch Site: Kourou, French Guiana

Status: On Orbit

Uplink: 435.020 MHz FM
Downlink: 145.900 MHz DSB

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=132
[02112013]
=====
DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational
Current Mode: Science Mode - Beacon ONLY

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink: 435.530 to 435.570 MHz

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=68
[02112013]
=====
VO-52 HAMSAT

```
Catalog number: 28650
Launch Date: May 05, 2005 0444z
Launch site: Satish Dhawan Space Centre, India

Status: Operational
Current Mode: U/v - Dutch Transponder

Frequencies:
Indian Transponder:
Uplink:   435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink:   435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW


Indian Beacon:  145.9360 MHZ CW
Dutch Beacon:   145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=30

To know what transponder is switched on please listen for the beacon
that is active. Each transponder has a different beacon.
[02112013]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002 1700z
Launch site: Baikonur, Kazakhstan

Status: Operational

Current Mode: V/u

Uplink:   145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4
```

Hz. The order of operation is thus: (allow for Doppler as necessary):

1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10 minute timer.

[02112013]

=====

FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Operational
Current Mode: V/u (Mode JA)

Voice/CW (Mode JA)
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage:
http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts.htm

[02112013]

=====

AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974
Launch site: Vandenberg AFB, California, USA

Status: Operational

Current Mode: Alternating between Mode A and B every 24 hours

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz CW
145.972 MHz CW
435.100 MHz CW
2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php
[02112013]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998 0640z (ZARYA module)
Launch sites: Baikonur, Kazakhstan
Kourou, French Guiana
Uchinoura Space Center, Japan
Kennedy Space Center, Titusville, Florida, USA

Status: Operational

Current Active Modes: FM Repeater - OFF
Voice - V/v
BBS - V/v
2m APRS - V/v
2m Digi - V/v
70cm APRS - ?
70cm Digi - ?
SSTV - V/v

Expedition 34 Crew (November 2012 - March 2013):

Commander:	Kevin Ford	KF5GPP
Flight Engineer:	Oleg Novitskiy	
Flight Engineer:	Evgeny Tarelkin	
Flight Engineer:	Roman Romanenko	
Flight Engineer:	Chris Hadfield	KC5RNJ/VA3OOG
Flight Engineer:	Tom Marshburn	KE5HOC

Available Modes and Frequencies:
Digital/APRS:

Worldwide 2m packet uplink:	145.825 MHz FM 1k2
Worldwide 2m packet downlink:	145.825 Mhz FM 1k2
Worldwide 70cm packet uplink:	437.550 Mhz FM 1k2
Worldwide 70cm packet downlink:	437.550 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
2m Packet Mailbox: RS0ISS-11
2m Digipeater alias: ARISS
70cm Packet Mailbox: RS0ISS-1
70cm Digipeater callsign: RS0ISS
70cm Digipeater alias: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[02112013]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-056.S2
WSR 056 Part 2 02/25/2013

AMSAT NEWS SERVICE BULLETIN 056.S2
FROM AMSAT HQ SILVER SPRING, MD, February 25, 2013
TO ALL RADIO AMATEURS
BID: $WSR-056.S2

Fitsat-1

Catalog number: 38853
Launch Date: October 04, 2012
Launch site: Kibo Japanese Experiment Module, International Space Station

Status: Operational

Uplink:
Downlink(s): 437.445MHz 1k2 AFSK
            5840.00 MHz 115k2 data
            LED CW (200w pulses)

Beacon(s): 437.250 MHz CW

Callsign: NIWAKA

URL: http://carpcomm.com/satellite/fitsat1
[10292012]
=====
TechEdSat
Catalog number: 38854
Launch date: October 04, 2012
Launch site: Kibo Japanese Experiment Module, International Space Station

Uplink(s):
Downlink(s): 437.465 1k2 AFSK

Beacon(s):

Callsign:

URL:http://www.techedsat.com/
[10152012]
=====
We Wish
Catalog number: 38856
Launch date: October 04,2012
Launch Site: Kibo Japanese Experiment Module, International Space Station

Uplink(s):
Downlink(s): 437.505MHz 1k2 AFSK
             437.505MHz SSTV

Beacon(s): 437.505MHz CW

Callsign: JQ1ZIJ

URL:
[10152012]
=====
F-1

```
Catalog number: 38855
Launch Date: October 04, 2012
Launch Site: Kibo Japanese Experiment Module, International Space
Station

Uplink(s):
Downlink(s): 145.980MHz 1k2 AFSK
             437.485MHz FM moduled CW

Baecon(s):

Callsign: XV1VN

URL: http://fspace.edu.vn/
[10152012]
=====
Aeneas
Catalog Number: 38760
Launch Date: September 13, 2012 2139z
Launch Site: Wallops Island, Virginia, USA

Status: On Orbit

Uplink: WiFi 2425MHz
Downlink:
WiFi: 2425MHz
Spread Spectrum: Somewhere in the 70cm band

Beacon: 437.600MHz 1k2 ax25 every 10 seconds

Callsign:

URL:
[10012012]
=====
CSSWE (Colorado Student Space Weather Experiment)
Catalog Number: 38761
Launch Date: September 12, 2012 2139z
Launch Site: Wallops Island, Virginia, USA

Status: On Orbit

Uplink:
Downlink:       437.345MHz 9k6 with ax.25

Beacon:

Callsign:

URL:
[10012012]
=====
CP5 (Polysat)
```

```
Catalog Number: 38763
Launch Date: September 12, 2012 2139z
Launch Site: Wallops Island, Virginia, USA

Status: On Orbit

Uplink:
Downlink:       437.405MHz AFSK on LSB ax.25 over NRZI at 1k2 baud,
every 2
                minutes, begins 3.5 hours after first turn-on

Beacon:

Callsign:

URL:
[10012012]
=====
CXBN (Cosmic X-Ray Background Nanosatellite)
Catalog Number: 38762
Launch Date: September 12, 2012 2139z
Launch Site: Wallops Island, Virginia, USA

Status: On Orbit

Uplink:
Downlink:       437.525MHz GFSK ax.25

Beacon:

Callsign:

URL:
[10012012]
=====
Proiteres
Catalog Number: 38756
Launch Date: September 09, 2012 2139z
Launch Site: Satish Dhawan Space Centre, India

Status: On Orbit

Uplink:
Downlink: 437.485MHz FM/AFSK

Beacon:

Callsign: JL3YZK

URL:
[10012012]
=====
RS-40 MiR (Yubileiny-2)
```

```
Catalog Number: 38735
Launch Date: July 28, 2012
Launch Site: Plesetsk Missile and Space Complex, Russia

Status: On Orbit

Uplink:
Downlink(s):    435.265 MHz
                435.365 MHz

Beacon:

Callsign:

URL:
[08272012]
=====
HORYU-II
Catalog number: 38340
Launch Date: May 17, 2012 1639z

Status: On Orbit

Uplink:   145.??? MHz
Downlink: 437.375 MHz CW/AX25/FSK

Beacon: 437.375 MHz CW

Callsign: JG6YBW

URL:

IARU Coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=216
[10012012]
=====
XaTcobeo
Catalog Number: 38082
Launch Date: Febrauary 13, 2012 1000z
Launch Site: Kourou, French Guiana

Status: Operational

Uplink:
Downlink: 437.365 MHz FFSK with AX.25

Beacon:

Callsign:

URL:

IARU coordination page:
```

http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=135
[100162012]
=====
UniCubeSat
Catalog Number: 38085(?)
Launch Date: Febrauary 13, 2012 1000z
Launch Site: Kourou, French Guiana

Status: Operational

Uplink:
Downlink: 437.305 MHz 9k6 bps GMSK

Beacon:

Callsign:

URL:
http://www.gaussteam.com/index.php?option=com_content&view=article&id=96:unicubesat&catid=36:unicubesat&Itemid=183

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=133
[10012012]
=====
Robusta
Catalog Number: 38083(?)
Launch Date: Febrauary 13, 2012 1000z
Launch Site: Kourou, French Guiana

Status: On Orbit

Uplink:
Downlink: 437.325 MHz 1k2 FM telemetry (data every 3 min, 20 sec. burst)

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=122
[10012012]
=====
MO-72 MaSat-1
Catalog Number: 38081
Launch Date: Febrauary 13, 2012 1000z
Launch Site: Kourou, French Guiana

Status: Operational

```
Uplink:
Downlink: 437.345 MHz GFSK 625/1250 bps
          437.345 MHz CW

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=126
[10012012]
=====
Goliat
Catalog Number: 38084(?)
Launch Date: Febrauary 13, 2012 1000z
Launch Site: Kourou, French Guiana

Status: Operational

Uplink:
Downlink: 437.485 MHz 1k2 AFSK

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=98
[10012012]
=====
E-St@r
Catalog Number: 38079
Launch Date: Febrauary 13, 2012 1000z
Launch Site: Kourou, French Guiana

Status: On Orbit

Uplink:
Downlink: 437.445 MHz 1k2 bps AFSK

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=130
```

```
[10012012]
=====
ALMASat-1
Catalog Number: 38078
Launch Date: Febrauary 13, 2012 1000z
Launch Site: Kourou, French Guiana

Status: On Orbit

Uplink:
Downlink:  437.465 MHz 1k2 bps FSK
          2407.850 MHz

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=39
[10012012]
=====
RS-39 Chibis-M
Catalog Number: 38051
Launch Date: October 30, 2011 10:11:00 UTC
Launch site: Tyuratam (Baikonur Cosmodrome), Kazakhstan

Status: Operational

Uplink:
Downlink:

Beacon: 435.315 MHz CW
        435.215 MHz CW

Callsign:

URL:

IARU coordination status page:
[07302012]
=====
JUGNU
Catalog Number: 37839
Launch Date: October 12, 2011 05:30:00 UTC
Launch site: Satish Dhawan Space Centre, India

Status: On Orbit

Uplink:   145.??? MHz 1k2 (mode?)
Downlink: 437.505 MHz 9k6 (mode?)
```

Beacon: 437.275 MHz 15 wpm (?) CW

Callsign:

URL: http://www.iitk.ac.in/me/jugnu/index.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=160
[07092012]
=====
SRMSAT
Catalog Number: 37841
Launch Date: October 12, 2011 05:30:00 UTC
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Uplink: 145.900 MHz 1k AX.25 (speed?)
Downlink: 437.500 MHz 2k4 AX.25

Beacon: 437.425 MHz 12 wpm CW

Callsign:

URL: http://srmsat.in/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=181
[01282013]
=====
HRBE (E1P Explorer 1 [Prime] CubeSat (E1P-U2))
Catalog Number: 37855
Launch Date: October 28, 2011
Launch site: Vandenberg Air Force Base, California, USA

Status: On Orbit

Uplink: 437.305 MHz (???)
Downlink: 437.505 MHz AX.25 (SSB?)

Beacon:

Callsign:

URL: http://ssel.montana.edu/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=116
[01122012]
=====
M-Cubed
Catalog Number: 37855
Launch Date: October 28, 2011

Launch site: Vandenberg Air Force Base, California, USA

Status: On Orbit

Uplink:
Downlink: 437.485 MHz AX.25

Beacon:

Callsign:

URL: http://umcubed.org/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=215
[01122012]
=====
RAX-2
Catalog Number: 37853
Launch Date: October 28, 2011
Launch site: Vandenberg Air Force Base, California, USA

Status: Operational

Uplink:
Downlink: 437.345MHz 9k6 GMSK

Beacon:

Callsign:

URL: http://rax.engin.umich.edu//

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=221
[03232012]
=====
AO-71 AubieSat-1
Catalog Number: 37854
Launch Date: October 28, 2011
Launch site: Vandenberg Air Force Base, California, USA

Status: On Orbit

Uplink:
Downlink: 437.475 MHz 1k2 AX.25

Beacon: 437.475 MHz CW

Callsign: KI4NQO

URL: http://www.space.auburn.edu/

```
IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=148
[12262011]
=====
O/OREOS
Catalog Number: 37224
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: On Orbit

Uplink:
Downlink: 437.035 MHZ AX.25

Beacon:

Callsign:

URL: http://www.ooreos.org/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=146
[02092011]
=====
Rax-1 Radio Aurora Explorer
Catalog Number: 37223
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: On Orbit

Uplink:
Downlink: 437.505 MHz 9k6 GMSK

Beacon:

Callsign: RAX-1

URL: http://rax.engin.umich.edu/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=165
[02092011]
=====
FO-69 Fastrac-1 Sara Lily
Catalog Number: 37227
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: Operational

Uplink 1: 145.980 MHz 1k2 baud
Uplink 2: 145.825 MHz 1k2 baud
```

```
Downlink: 437.345 MHz 1k2 and 9k6 baud

Beacon:   437.435 MHz 1k2 AX.25

Callsign: Fast1

URL: http://fastrac.ae.utexas.edu/index.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=83
[07052011]
=====
FO-70 Fastrac-2 Emma
Catalog Number: 37380
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: Operational

Uplink 1: 435.025 MHz 1k2 baud
Uplink 2: 437.435 MHz 9k6 baud
Downlink: 145.825 MHz 1k2 and 9k6 baud

Beacon:   145.825 MHz 1k2 AX.25

Callsign: Fast2

URL: http://fastrac.ae.utexas.edu/index.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=84
[12162011]
=====
StudSat
Catalog Number: 36796
Launch Date: July 12, 2010 0352z
Launch site: Satish Dhawan Space Centre, India

Status: On Orbit

Uplink:   437.505MHz, 9600bps FSK
Downlink: 437.505MHz, 9600bps FSK
Beacon  : 437.505MHz,   20bps ASK

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=164
[02092011]
=====
TIsat-1
Catalog Number: 36799
Launch Date: July 12, 2010 0352z
Launch site: Satish Dhawan Space Centre, India
```

```
Status: On orbit

Callsign: HB9DE

Uplink:   145.980MHz FM, AFSK
Downlink: 437.305MHz FM, AFSK
Beacon:   437.305MHz CW

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=118
[02092011]
=====
SwissCube
Catalog Number: 35932
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Callsign: HB9EG

Beacon(100mw): 437.5050MHz CW
Beacon(1w):    437.5050MHz FSK 1k2bps

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=109
[02092011]
=====
UWE-2
Catalog Number: 35934
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: In Orbit

Beacon(500mw): 437.3850 MHz AFSK 1k2bps
               437.3850 MHz FSK 9k6bps

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=110
[02092011]
=====
ITUpsAT1
Catalog Number: 35935
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Beacon(100mw): 437.325MHz CW
Beacon(1w): 437.325MHz 19k2bps

IARU coordination status page:
```

```
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=113
[02092011]
=====
BEESAT
Catalog Number: 35933
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Callsign: DP0BEE

Beacon(100mw): 436.000MHz CW
Beacon(500mw): 436.000MHz GMSK 4k8bps
Beacon(500mw): 436.000MHz GMSK 9k6bp
[02092011]
=====
SOHLA-1 (ASTRO TECH.)
Catalog Number: 33496
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational

Proposed Frequencies and Modes:
Downlink: 437.505 MHz AFSK/CW
Beacon:   437.505 MHz AFSK/CW

Callsign:

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=101
[02092011]
=====
KAGAYAKI (Solan Co.)
Catalog Number: 33495
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: In Orbit

Downlink: 437.375 MHZ    FSK9k6/CW
Beacon:   437.375 MHz    FSK9k6/CW

IARU coordination status page:

AMSAT-NA webpage:

[02092011]
=====
STARS (Kagawa Univ.) (Twin Satellites)
Catalog Number: 33498
Launch Date: January 23, 2009 0354z
```

Launch site: Tanegashima Space Center, Japan

Status: Operational ?

Downlinks: 437.485 MHz FM/CW
           437.465 MHz FM/CW
Beacons: 437.305 MHz FM/CW
           437.275 MHz FM/CW

Callsigns: JR5YBN
           JR5YBO

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=99

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=121&retURL
=/satellites/status.php
[02092011]
=====
KKS-1 (Tokyo MCIT)
Catalog Number: 33499
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational

Downlink: 437.455 MHz AFSK/CW
Beacon: 437.385 MHz AFSK/CW

Callsign: JQ1YYY

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=107

AMSAT-NA webapge:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=120&retURL
=/satellites/status.php
[20092011]
=====
PRISM (Tokyo Univ.)
Catalog Number: 33493
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational

Uplink: 145.xxx MHz AFSK 1k2
Downlink: 437.425 MHz AFSK 1k2
Beacon: 437.250 MHz CW

Callsign: JQ1YCX

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=97

Read terms and conditions of operations at the PRISM web page to find out how
to properly operate on the satellite and to get the uplink frequency. It
has
been asked that the uplink frequency not be given out untik you have read and
understood the terms of usage.

URL:
http://www.space.t.u-tokyo.ac.jp/prism/en/HAMservice.html
[10282012]
=====
RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number: 32953
Launch Date: May 23, 2008 1520z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational

Curent Modes: Telemetry
Audio
Images

Downlinks: 435.315 MHz
435.215 MHz

AMSAT-NA website:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=115&retURL=/satellites/status.php

Official website:
http://www.npopm.com/?cid=leoca&caid=43
[02092011]
=====
CanX-2
Catalog number: 32790
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational in range of ground station only

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web
page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=46
[02092011]

```
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Downlink: 437.425 MHz 1k2 baud packet

For the latest project status update please visit the AAUSAT-II web
page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=60
[02092011]
=====
CO-65 CUTE-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Downlink:  437.475 MHz 9k6 Packet
Uplink:   1267.600 Mhz

Telemetry Beacon:
Downlink: 437.2750 MHz CW

For the latest project status update please visit the Cute-1.7+APD II
web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=78

Command Station blog website:
http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=112&retURL
=/satellites/status.php
[03232012]
=====
Compass-1
Catalog number: 32787
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Current Mode: dependant on last received command
```

```
Uplink:   145.980 MHz FM
Downlink: 437.275 Mhz CW
          437.405 MHz Packet

For the latest project status update please visit the Compass 1 web
page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=52

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=114&retURL
=/satellites/status.php
[06162011]
=====
CO-66 Seeds II
Catalog number: 32791
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Downlink: 437.485 MHz

Callsign: JQ1YGU

For the latest project status update please visit the Seeds 2 web
page: http://cubesat.aero.cst.nihon-u.ac.jp/english/seeds_2_e.html

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=36

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=113&retURL
=/satellites/status.php
[073092011]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007 0702z
Launch site: Baikonur, Kazakhstan

Status: Intermittent

Current Mode:  /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon:    435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.
```

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=94&retURL=
/satellites/status.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=72
[02092011]
=====
CP3
Catalog Number: 31129
Launch Date: April 17,2007 0702z
Launch site: Baikonur, Kazakhstan

Status: Operational

Current Mode: /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=74
[02092011]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005 0652z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon: 437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/xivpicte.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=37
[02092011]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: ?????

Current Mode: /u

Beacon: 436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=96&retURL=/satellites/status.php

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[02092011]
=====
QuakeSat
Catalog Number: 27845
Launch Date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Telemetry only

Current Mode: 9600 baud data packet

Mode U packet
Downlink: 436.675 MHz 9k6 BPS

Quakesat webpage:
http://www.quakefinder.com/services/quakesat-ssite/
[02252011]
=====
CO-55 Cute-1.7+APD II
Catalog Number: 27844
Launch date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational

Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=69&retURL=/satellites/status.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=78

```
[02092011]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001 0240z
Launch site: Kodiak Launch Complex, Alaska, USA

Status: Operational

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink:        144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[10292012]
=====
RS-22 RADIO SPORT 22 (MOZHAYETS 4)
Catalog number: 27939
Launch Date: September 27, 2003 0612z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational - 70cm cw only

Current Mode:  /u

CW Beacon - 435.352 MHz
            145.818 MHz

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=76&retURL
=/satellites/status.php
[02092011]
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990
Launch site: Kourou, French Guiana

Status: CW Beacon only

Uplinks:          145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink:      437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)
```

```
Broadcast Callsign: LUSAT-11
BBS: LUSAT-12

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[02092011]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984
Launch site: Vandenburg AFB, California, USA

Status: Operational ?

Current Mode:  /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon:           435.025 MHz
Mode-S Beacon:     2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[07052011]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998 0640z (ZARYA module)
Launch sites: Baikonur, Kazakhstan
              Kourou, French Guiana
              Uchinoura Space Center, Japan
              Kennedy Space Center, Titusville, Florida, USA

Status: Operational

Current Active Modes: FM Repeater - OFF
                      Voice -       V/v
                      BBS -         V/v
                      2m APRS -     V/v
                      2m Digi -     V/v
                      70cm APRS -   ?
                      70cm Digi -   ?
                      SSTV -        V/v


Expedition 34 Crew (November 2012 - March 2013):
Commander:                Kevin Ford          KF5GPP
Flight Engineer:          Oleg Novitskiy
Flight Engineer:          Evgeny Tarelkin
Flight Engineer:          Roman Romanenko
```

Flight Engineer: Chris Hadfield KC5RNJ/VA3OOG
Flight Engineer: Tom Marshburn KE5HOC

Available Modes and Frequencies:
Digital/APRS:
Worldwide 2m packet uplink: 145.825 MHz FM 1k2
Worldwide 2m packet downlink: 145.825 Mhz FM 1k2
Worldwide 70cm packet uplink: 437.550 Mhz FM 1k2
Worldwide 70cm packet downlink: 437.550 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
2m Packet Mailbox: RS0ISS-11
2m Digipeater alias: ARISS
70cm Packet Mailbox: RS0ISS-1
70cm Digipeater callsign: RS0ISS
70cm Digipeater alias: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time line is NOT translated from Russian and posted.
[12242012]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-056.S3
WSR 056 Part 3 02/25/2013

AMSAT NEWS SERVICE BULLETIN 056.S3
FROM AMSAT HQ SILVER SPRING, MD, February 25, 2013
TO ALL RADIO AMATEURS
BID: $WSR-056.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

NANOSAIL-D
Catalog Number: 37361
Ejection Date: January 17, 2011

Status: Non - Operational

Downlink: 437.270 MHz AX.25

URL: http://nanosaild.engr.scu.edu/dashboard.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=115
[07302012]
=====
HO-68 HOPE-1 (CAS-1) (XW-1)
Catalog Number: 36122
Launch Date: December 15, 2009 0231z
Launch site: Taiyuan Space Center, PRC

Status: Telemetry only

Callsign:
Broadcast: BJ1SA-11
BBS: BJ1SA-12

Uplinks: 145.8250 MHz FM, PL 67.0 Hz.
           145.9250 - 145.9750 MHz SSB/CW
           145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
           435.7650 - 435.7150 MHz SSB/CW
           435.6750 MHz AFSK 1200 BPS

Beacon: 435.7900 MHz CW

Mode and Antenna Polarization:
V: LHCP 2.0dBi max
U: RHCP 3.0dBi max

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=108

For more information about XW-1 (CAS-1):
http://

```
[04302012]
=====
SO-67 SumbandilaSat
Catalog Number: 35870
Launch Date: September 17, 2009 1555z
Launch site: Baikonur, Kazakhstan

Status: Non - Operational

Callsign: ZS0SUM

Uplink:   145.875MHz FM tone 233.6 Hz
Downlink: 435.345MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

For more information about SO-67:
http://www.amsatsa.org.za/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=88
[01272012]
=====
CP4
Catalog Number: 31132
Launch Date: April 17, 2007

Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon:    437.325 MHz CW

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=79
[09062010]
=====
LIBERTAD-1
Catalog Number: 31128
Launch Date: April 17, 2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink:   145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS
```

```
Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=76
[09062010]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: Non-Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder:  145.825 Mhz FM

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=51
[09062010]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency:  437.305
                             2407.250

Official Website: http://www.ncube.no

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=24
[09062010]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink:         437.250 MHz FM 67Hz CTCSS
Voice Downlink:      2401.835 MHz FM
Packet Up/Downlink:   437.250 MHz 9k6 packet
Packet Downlink      2401.835 MHz 38k4 packet

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=54
[09062010]
=====
UWE-1
```

Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non-Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=53
[09062010]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004 0745z
Launch site: Baikonur, Kazakhstan

Status: Non - Operational

Current Mode(s):
Voice repeater: V/u
Uplink: 145.880 MHz FM
Downlink: 435.150 MHz FM

Telemetry: Recovery efforts
Downlink: 435.150MHz 9k6

Analog voice downlink: 435.300 MHz FM
                           435.150 MHz FM
                          2401.200 Mhz FM
Analog voice uplink: 145.860 MHZ FM
                           145.880 MHz USB
                           145.880 MHz FM
                           145.920 MHz FM
                           145.920 MHz FM - 67 Hz PL tone burst
                          1268.705 MHz FM
Digital Downlinks: 435.150 MHz FM 38k4 PBP, 1 watt output
                           435.150 MHz FM 9k6 Pacsat Broadcast Protocol
                          2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Pacsat Broadcast Protocol
                          1268.703 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear

```
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=19
[12062011]
=====
CANX-1
Catalog Number: 27847
Launch Date: June 30, 2003

Status: Non-Operational

Downlink: 437.8800 MHz AFSK 1k2bps
[06052009]
=====
DTUSAT
Catalog Number: 27842
Launch Date: June 30, 2003

Status: Non-Operational

Current Mode: 2k4 AFSK Packet last reported

Downlink: 437.475MHz

Officail webpage: http://dtusat1.dtusat.dtu.dk/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=101&retURL
=satellites/all_oscars.php
[02212009]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink:   435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)

Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
```

```
Catalog number: 26548
Launch date: September 26, 2000

Status: Telemetry only

Uplinks:   145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink:  437.325 MHz

Broadcast callsign: MYSAT3-11
BBS:                MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial land and weather imaging payloads offers FM and FSK
Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as
a collaborative effort between the Malaysian government and Surrey
Satellite Technology Ltd.
[03302009]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink:   145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS:                SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
```

Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]

AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks

V-band: 145.840 - 145.990 MHz CW/LSB
U-band: 435.550 - 435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks

S2-band: 2401.225 - 2401.475 MHz CW/USB
K-band: 24048.010 - 24048.060 MHz CW/USB
Beacon: 2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)

BEACON	General Beacon(GB)	Middle Beacon(MB)	Engineering Beacon(EB)
2 m	none	145.898 MHz	none
70cm	435.438 MHz	435.588 MHz	435.838 MHz
13cm(1)	2400.188 MHz	2400.338 MHz	2400.588 MHz
13cm(2)	2401.173 MHz	2401.323 MHz	2401.573 MHz
3cm	10450.975 MHz	10451.125 MHz	10451.375 MHz
1.5cm	24047.885 MHz	24048.035 MHz	24048.285 MHz

[07162007]

OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK

```
[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink:    145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: 25636
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater:         436.250 MHz

Uplinks: Mode B Repeater:  145.825 MHz
Mode J Digipeater:         145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational
```

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Non-Operational

Current Modes:
Telemetry : /u

```
Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign:       4XTECH-12
```

More information of GO-32 can be found at:
http://asri.technion.ac.il/techsat/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=14&retURL=/satellites/status.php
[07172010]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink: 145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
MO-30 UNAMSAT-2

```
Catalog Number: 24305
Launch Date: September 5, 1996

Status: Non-operational

Downlink:       435.1380 MHz AFSK 1200 BPS
Downlink:       435.2060 MHz AFSK 1200 BPS
Uplink:         145.8150 MHz AFSK 1200 BPS
Uplink:         145.8350 MHz AFSK 1200 BPS
Uplink:         145.8550 MHz AFSK 1200 BPS
Uplink:         145.8750 MHz AFSK 1200 BPS
[06042009]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Non-operational

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign:       POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012009]
=====
AO-27 AMRAD
Catalog number: 22825
Launch Date: September 26, 1993 0140z
Launch site: Kourou, French Guiana

Status: Recovery efforts in progress

Current Mode: V/u

Uplink:   145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[12032012]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993 0140z
```

```
Status: PSK carrier only

Current Mode:

Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
AO-24 ARSENE
Catalog Number: 22654
Launch Date: May 13, 1993

Status: Non-operational

Uplink:    435.0625 MHz FM 1k2bps AFSK
           435.1125 MHz FM 1k2bps AFSK
           435.1375 MHz FM 1k2bps AFSK
Downlink:  145.9750 MHz FM 1k2bps AFSK
          2446.5025 MHz FM 1k2bps AFSK

Beacon:    2446.4700 MHz CW

Broadcast callsign:
BBS:
[12162009]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992
```

```
Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
```

http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink: 145.825 MHz FM 1200 Baud AFSK
Beacon: 2401.220 MHz
[05012006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: non-operational

Current Mode: V/u

```
Uplink:         145.900 MHz FM 1200-baud Manchester FSK (reserved)
                145.920 MHz FM VOICE
                145.940 MHz FM 1200-baud Manchester FSK (reserved)
                145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink:       437.026 MHz USB VOICE
                (1200-baud PSK - MBL Telemetry Only)
```

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

```
Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12
```

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[07242009]
=====
UO-15 UoSAT-4
Catalog Number: 20438

```
Launch Date: January 22, 1990

Status: Non-operational

Uplink: ?
Downlink: 435.1250MHz (?)
          435.1200MHz (?)
[06042009]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon:   145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
```

```
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink  29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
Beacons:   29.450 MHz
          435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
```

[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB

Beacon 1: 29.352 MHz (intermittent)
Beacon 2: 29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB

Beacon: 145.860 MHz

Robot: 145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at

19:30
UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at}
amsat.org
NNNN
/EX

From 6846369884262062625
X-Google-Thread: 8f86f75953,d472f9cff680bf89,start
X-Google-Attributes: gid8f86f75953,public,usenet

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X-Google-Language: ENGLISH,ASCII-7-bit
X-Received: by 10.180.94.41 with SMTP id cz9mr170609wib.1.1362104394420;
        Thu, 28 Feb 2013 18:19:54 -0800 (PST)
Path: g1ni39049wig.0!nntp.google.com!feeder1.cambriumusenet.nl!feed.tweaknews.nl!
193.141.40.65.MISMATCH!npeer.de.kpn-eurorings.net!npeer-ng0.de.kpn-eurorings.net!
border2.nntp.ams2.giganews.com!border1.nntp.ams2.giganews.com!
border3.nntp.ams.giganews.com!border1.nntp.ams.giganews.com!nntp.giganews.com!
news.meeh.mikalv.net!aioe.org!news.glorb.com!news-out.readnews.com!
transit3.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-055 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sun, 24 Feb 2013 09:30:46 EST
Organization: The Radio Amateur Satellite Corporation
Lines: 446
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000c01ce129b$3f26c7a0$bd7456e0$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
X-Trace: reader1.panix.com 1361716246 6384 166.84.1.6 (24 Feb 2013 14:30:46 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 24 Feb 2013 14:30:46 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
DKIM-Signature: v=1; a=rsa-sha256; c=relaxed/relaxed; d=comcast.net;
     s=q20121106; t=1361716239;
     bh=fNDP/Uxbi5fF/7l+n6UYx4/UteD9FYgzqIpK9lVHJ4w=;
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      Content-Type;
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Content-Transfer-Encoding: 7bit
Content-Language: en-us
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AMSAT NEWS SERVICE
ANS-055

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:

* STRaND-1 Launch Information
* AMSAT and Virginia Tech Sign Collaboration Agreement
* Upcoming ARISS Contacts
* AMSAT-DC Workshop on Portable Satellite Ground Stations
* US Airforce Upgrades SpaceTrack Website For Keplarian Orbital Data
* Mission to Mars Announcement Expected

SB SAT @ AMSAT $ANS-055.01
ANS-055 AMSAT News Service Weekly Bulletins

AMSAT News Service Bulletin 055.01
From AMSAT HQ SILVER SPRING, MD.
February 24, 2013
To All RADIO AMATEURS
BID: $ANS-055.01

STRaND-1 Launch Information

For those following the STRaND-1 launch on Twitter, the official launch hashtag of STRaND-1 spacecraft is #S1Launch. Post lunch we #STRaND1 hashtag will be used.

Launch time is 12:25 GMT 25th Feb 2013 and has been cleared by the Launch Authorization Board (LAB) for PSLV - C20

Live video launch feeds for Monday's PSLV launch will be available at
http://www.webcast.gov.in/live/ and http://ibnlive.in.com/livetv/

STRaND-1 telemetry format http://www.amsat-uk.org/?page_id=12875

STRaND-1 information http://www.amsat-uk.org/?page_id=12196

[ANS thanks Trever, M5AKA, for the above information]

AMSAT and Virginia Tech Sign Collaboration Agreement

Virginia Polytechnic Institute and State University ("Virginia Tech") and Radio Amateur Satellite Corp. ("AMSAT") signed a Collaboration Agreement on February 4, 2013 that establishes a relationship for future projects in the development of space hardware, software, algorithms, documentation of same and an agreement to protect each other by protecting ITAR-covered materials and identifying same for the other. The agreement was signed by AMSAT President Barry Baines, WD4ASW and Virginia Tech Assistant Vice President for Sponsored Programs Administration John Rudd.

The Agreement establishes a relationship that will allow both organizations to work together on future space mission opportunities as may arise. VT established the Center for Space Science and Engineering (Space@VT) in 2007 and with completion of the new Center for Space Science and Engineering Research Facility in 2012, has facilities for development of space hardware and cubesat development. Programmatic and technical coordination and direction will be coordinated between Dr. Robert W. McGwier ,PhD of Virginia Tech and Anthony Monteiro, AA2TX AMSAT's VP-Engineering.

"Establishment of a formal relationship between VT and AMSAT provides the foundation for potential future satellite program opportunities for AMSAT as well as enhances prospects for AMSAT support of STEM (Science, Technology, Engineering and Mathematics) education outreach" notes AMSAT President

Barry Baines, WD4ASW. "Space@VT recognizes the success that AMSAT brings to building successful spacecraft and with the development of Fox-1, to bring reliable hardware in support of scientific payloads as well as enhance prospects for student projects to successfully fly in space. AMSAT benefits from a partner that will help provide justification for funding of spacecraft that supports amateur radio in space," he added.

Virginia Tech Professor Bob McGwier, N4HY is looking forward to working with AMSAT on future projects. Bob remarked, "Being able to combine the student space science and engineering programs of Virginia Tech with AMSAT's long history of innovative technical development in spacecraft is a win-win for both parties. I look forward to working with AMSAT on projects that mutually benefit space science, student engineering programs, and the amateur radio community."

[ANS thanks AMSAT President Barry Baines, WD4ASW, for the above information]

Upcoming ARISS Contacts

An International Space Station school contact has been planned with participants at Soleado Elementary School, Ranchos Palos Verdes, CA on 25 Feb. The event is scheduled to begin at approximately 19:53 UTC. The duration of the contact is approximately 9 minutes and 30 seconds. The contact will be direct between NA1SS and KE6JPM. The contact should be audible over California and portions of the western U.S. Interested parties are invited to listen in on the 145.80 MHz downlink. The contact is expected to be conducted in English.

Soleado Elementary School's mission is to educate each and every one of its students to their fullest potential while cultivating a lifelong love of learning. Named for its beautiful location in the hills of Rancho Palos Verdes, our school is proud of its rich cultural background, academic achievement, and involvement in extra-curricular activities. Our mascot, a rosy-cheeked sun, is an exceptionally fitting characterization of our school, which wraps our students in the arms of a caring and supportive community that nurtures development of the whole child.

Founded in 1968, even Soleado's physical design embodies community and cooperation, with each core educational building housing five classrooms with one wall "open" to a shared "big room" in the center. The open classroom environment facilitates daily teacher collaboration and student interaction within and among grade levels, while "big rooms" allow for large group activities and foster a positive feeling of family among our students and staff.

In addition to our strong sense of community and our open classroom model, another distinguishing characteristic of our school is its cultural and linguistic diversity. With 420 "Soleado Suns" this year in grades DK through 5, our student body encompasses families who come directly from 30 different countries speaking 21 languages.

Other upcoming contacts:

- 4th Dimotiko Scholeio Chaidariou, Chaidari (near Athens), Greece,
  direct via J41ISS
  Thu, 28Feb2013, 09:42 UTC

- Talcott Mountain Science Center & Academy, Avon, CT,
  direct via W1TMS
  Thu, 28Feb2013 15:53 UTC

ARISS is an international educational outreach program partnering the participating space agencies, NASA, Russian Space Agency, ESA, CNES, JAXA, and CSA, with the AMSAT and IARU organizations from participating countries.

ARISS offers an opportunity for students to experience the excitement of Amateur Radio by talking directly with crew members on-board the International

Space Station. Teachers, parents and communities see, first hand, how Amateur Radio and crew members on ISS can energize youngsters' interest in science, technology, and learning. Further information on the ARISS program is available on the website http://www.ariss.org/ (graciously hosted by the Radio Amateurs of Canada).

[ANS thanks David, AA4KN, for the above information]

AMSAT-DC Workshop on Portable Satellite Ground Stations

REGISTER NOW for the AMSAT-DC Spring Workshop 2013. Those who wish to attend the "Workshop on Portable Satellite Ground Stations" on Saturday, March 23, must call Martha in advance at AMSAT headquarters at 301-589-6062 to receive a workshop registration number. Your unique registration number is your ticket to get in, starting NET 9:00 A.M. EST. There will be no registration at the door.

The suggested donation for advanced registration and admission for non-members is $25. Registration for each AMSAT member who participates in the event and registers in advance is free. "The $25 USD donations collected by Martha will go directly to a worthy cause," says AMSAT Area Coordinator Pat Kilroy, "namely, to the AMSAT Fox Project."

In lieu of the $25 suggested donation by non-members, one may apply for AMSAT membership with Martha at the standard rate and then receive a workshop registration number for free.

The door to the Visitor Center auditorium at the NASA Goddard Space Flight Center in Greenbelt, Maryland (ZIP Code 20771) will open for station set ups no earlier than 9:00 A.M. The program will officially begin at ten and run nearly all day continuously, easily to 4:00 P.M. or beyond. Participants are welcome to bring their own brown bag lunch. Drinks and condiments will be donated by fellow AMSAT members.

The workshop program will be informal, with participants given the floor to show their wares and explain their operation. That is, one teaching one another the best practices, tools and techniques of successful satellite contacts. "Our program will be an experiment unto itself to gauge interest and to plan future AMSAT workshops. Feedback is always welcome," says Pat.

All participants are encouraged to bring their wares to assemble, show and explain.

To volunteer or ask questions contact Pat Kilroy, N8PK, at n8pk@amsat.org.

[ANS thanks Pat Kilroy, N8PK, for the above information]

US Airforce Upgrades SpaceTrack Website For Keplarian Orbital Data

The following is the latest from Vandenburg:

****

We are pleased to announce the upgrade of www.Space-Track.org to add the look and functionality that matches what is now on https://beta.space-track.org. The bulk file downloads from our current Space-Track site will continue to be available to scripters for a limited time after the upgrade using established URLs.

This upgrade will vastly improve how the Space-Track User community interacts with orbital element sets, the satellite catalog and conjunction data. With a robust Representational State Transfer (REST-ful) Application Programming Interface (API), scripters will be able to get the latest data available, customized for their purposes.

Here are just a few of the new features that will become part of the upgraded www.Space-Track.org:

- A streamlined and intuitive user interface that is easier to navigate and allows simple searches
- A robust help and documentation section - "Favorites" lists to identify logical groupings of catalog objects that Users can monitor via the web interface or with the site's API

If you have production scripts that currently use beta.space-track.org, we recommend that you change your scripts to point at www.Space-Track.org on or after 20 February 2013.

If you have scripts that screen-scrape or download text/zip files from the current yellow-colored legacy www.Space-Track.org, they will continue to perform correctly for a few months, but we recommend that you quickly transition your scripts to take advantage of the new API. Documentation is available under "Help" to assist you, as well as the API query builder tool on the upgraded site.

We have also started sharing information about Space-Track's new features on tumblr, facebook and twitter, so please engage us on your favorite social media platform.

Our sites are http://space-track.tumblr.com, http://www.facebook.com/SpaceTrack and http://www.twitter.com/SpaceTrackOrg

We understand that any significant upgrade has the potential to cause frustration for our user community and we apologize if this creates any adjustment problems for you. For help or clarification, please email us at admin@space-track.org.

Thank you,
The www.Space-Track.org Team

[ANS thanks the Space-Track Team for the above information]

Mission to Mars Announcement Expected

Inspiration Mars Foundation, led by the first private space traveler, Dennis Tito, has announced they intend to make a major announcement next Wednesday, February 27th concerning a 501 day mission to Mars.

The press release said the news conference next week would be "detailing its plans to take advantage of a unique window of opportunity to launch an historic journey to Mars and back in 501 days, starting in January 2018. This "Mission for America" will generate new knowledge, experience and momentum for the next great era of space exploration. It is intended to encourage all Americans to believe again, in doing the hard things that make our nation great, while inspiring youth through Science, Technology, Engineering and Mathematics (STEM) education and motivation."

With the stated goal of "accelerating America's human exploration of space" one can surmise that the mission is a human mission to Mars.

The other people who will take part in the news conference include:

- Taber MacCallum, chief executive officer and chief technology officer of Paragon Space Development Corporation and crew member for two-year mission in Biosphere 2

- Dr. Jonathan Clark, associate professor of Neurology and Space Medicine at Baylor College of Medicine and space medicine advisor for the National Space Biomedical Research Institute

- Jane Poynter, president and chairwoman of Paragon Space Development Corporation and crew member for two-year mission in Biosphere 2

This kind of expertise in closed ecological life support systems lends credence to a human mission to Mars.

[ANS thanks SpaceRef for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

Primary and secondary school students are eligible for membership at one-half the standard yearly rate. Post-secondary school students enrolled in at least half time status shall be eligible for the student rate for a maximum of 6 post-secondary years in this status. Contact Martha at the AMSAT Office for additional student membership information.

73,
This week's ANS Editor,
Lee McLamb, KU4OS
ku4os at amsat dot org

```
From -7215733632899609349
X-Google-Thread: a4a23d5f63,faa2a69df3303ca6,start
X-Google-Attributes: gida4a23d5f63,public,usenet
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MIME-Version: 1.0
Path: ov8ni25590pbb.1!nntp.google.com!npeer02.iad.highwinds-media.com!
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border3.nntp.dca.giganews.com!border1.nntp.dca.giganews.com!
border4.nntp.dca.giganews.com!border2.nntp.dca.giganews.com!novia!news-peer1!
btnet!zen.net.uk!hamilton.zen.co.uk!xlned.com!feeder5.xlned.com!
feeder1.cambriumusenet.nl!feed.tweaknews.nl!216.196.110.142.MISMATCH!
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border4.nntp.ams.giganews.com!border2.nntp.ams.giganews.com!nntp.giganews.com!
news.meeh.mikalv.net!gandalf.srv.welterde.de!news.mixmin.net!news.linkpendium.com!
news.linkpendium.com!panix!rri.panix.com!robomod!not-for-mail
From: SWPC.Webmaster@noaa.gov
Newsgroups:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.shor
twave,rec.radio.info
Subject: Weekly Highlights of Solar and Geomagnetic Activity, 18 - 24 February
2013
Followup-To:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.shor
twave
Date: Mon, 25 Feb 2013 11:30:07 EST
Organization: NOAA Space Weather Prediction Center
```

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Lines: 58
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <20130225163002.1D8BD33C3C@panix2.panix.com>
NNTP-Posting-Host: panix6.panix.com
X-Trace: reader1.panix.com 1361809807 9762 166.84.1.6 (25 Feb 2013 16:30:07 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Mon, 25 Feb 2013 16:30:07 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Bytes: 4731
X-Original-Bytes: 4597
X-Received-Bytes: 4850
```

```
:Product: Weekly Highlights and Forecasts
:Issued: 2013 Feb 25 0208 UTC
# Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center
# Product description and SWPC contact on the Web
# http://www.swpc.noaa.gov/weekly.html
#
#                Weekly Highlights and Forecasts
#
```

Highlights of Solar and Geomagnetic Activity
18 - 24 February 2013

Solar activity was low. 15 C-class flares were observed throughout the week, 13 of which originated from Region 1678 (N11, L=069, class/area=Dkc/470 on 21 Feb). This region was numbered on 18 Feb and quickly evolved from a beta to a complex beta-gamma-delta type magnetic configuration. By 20 Feb, it had grown to 12 times its original size and produced the largest flare of the week, a C8/Sf at 24/1111 UTC. Region 1678 rotated off the visible disk on 23 February as a Dko type region with beta-gamma magnetic characteristics. Over a dozen coronal mass ejections were observed during the week. Many of the CMEs were associated with disappearing solar filaments. An 8-degree filament erupted near N25W18 between 0147 and 0548 UTC on the 19th. Analysis of the associated CME suggested it had an Earth-directed component. The largest filament eruption of the week occurred later that day when a 41 degree long filament centered near S22W10 left the disk between 1006 and 2310 UTC. Analysis suggested there was no earth-directed component with that CME.

No proton events were observed at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit remained at normal levels throughout the week.

Geomagnetic field activity was at quiet levels until mid-day on 22 Feb when major storm levels were observed at high latitudes and the planetary K-index reached unsettled levels. The increased activity was tied to the arrival of a geoeffective coronal hole high speed stream, possibly coupled with a transient solar wind feature. The unsettled conditions lasted through the first period of 23 February after which quiet activity levels prevailed.

Forecast of Solar and Geomagnetic Activity
25 February - 23 March 2013

Solar activity is expected to be at very low to low levels throughout the forecast period with a slight chance for an M-class event after 10 March when Region 1675 returns.

No proton events are expected at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to be at normal to moderate levels.

Geomagnetic field activity is expected to be at quiet levels through the majority of the forecast period. Unsettled levels are predicted for 01 and 21 March when recurrent coronal hole high speed streams are forecast to be geoeffective.

```
From -3998384020579623543
X-Google-Thread: fc2a5,7719cfc71a79f5,start
X-Google-NewGroupId: yes
X-Google-Thread: 107ada,7719cfc71a79f5,start
X-Google-NewGroupId: yes
X-Google-Thread: 10bf43,7719cfc71a79f5,start
X-Google-NewGroupId: yes
X-Google-Thread: 10e8ad,7719cfc71a79f5,start
X-Google-NewGroupId: yes
X-Google-Attributes:
gid241b302a50,gida3e752f117,gide721ae2bf6,gid8f86f75953,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
X-Received: by 10.180.86.34 with SMTP id m2mr707910wiz.5.1362145655525;
        Fri, 01 Mar 2013 05:47:35 -0800 (PST)
MIME-Version: 1.0
Path: bp2ni66187wib.1!nntp.google.com!feeder1-2.proxad.net!proxad.net!
feeder2-2.proxad.net!nx01.iad01.newshosting.com!newshosting.com!novia!news-
out.readnews.com!transit4.readnews.com!panix!panix2.panix.com!not-for-mail
From: rram@panix.com (rec.radio.amateur.moderated Admin)
Newsgroups:
rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.rad
io.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amat
eur.space,rec.radio.info
Subject: Crossposting Permitted to rec.radio.amateur.moderated
```

Supersedes: <radio/ham-radio/moderated/crossposting-1-1360911602@panix.com>
Followup-To: poster
Date: 1 Mar 2013 08:47:34 -0500
Organization: rec.radio.amateur.moderated Moderation Team
Lines: 47
Approved: RRI Admin <rec-radio-info-request@panix.com>
Distribution: world
Expires: 05 Jun 2013 09:47:34 -0000
Message-ID: <radio/ham-radio/moderated/crossposting-1-1362145654@panix.com>
Reply-To: rec-radio-amateur-moderated-request@panix.com
(rec.radio.amateur.moderated Admin)
NNTP-Posting-Host: panix2.panix.com
X-Trace: reader1.panix.com 1362145655 15575 166.84.1.2 (1 Mar 2013 13:47:35 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Fri, 1 Mar 2013 13:47:35 +0000 (UTC)
Summary: Short reminder for unmoderated newsgroups that crossposting is permitted
Keywords: FAQ, ham, amateur, radio, moderated, unmoderated, crossposting,
permitted

Posted-By: auto-faq 3.3.2 beta (PGPMoose V2.0, Perl 5.005)
Archive-name: radio/ham-radio/moderated/crossposting
Revision: 1.2 2011/11/02 04:08:53
Posting-Frequency: posted quarterly
URL: http://www.panix.com/~rram/usenet/rram/index.html

Changes followed by "|".

After a 30-day public discussion and feedback period to gauge reader
opinions in March of 2009:

http://groups.google.com/group/rec.radio.amateur.moderated/browse_thread/thread/
d7d337db35f23326

the rec.radio.amateur.moderated Moderation Team had decided to consider |
amending its charter, and permit limited simultaneous crossposting to
rec.radio.amateur.moderated and one other unmoderated
amateur-radio-related discussion newsgroup. After a successful trial |
period (90 days, through early July 2009), we decided to adopt this |
change permanently. |

Approved rec.radio.amateur.* newsgroups are those that are currently
listed in the latest version of the "List of Big Eight Newsgroups" which
is crossposted monthly to news.announce.newgroups, news.groups, and
news.lists.misc.

Approved alt.radio.amateur.* and alt.ham-radio.* newsgroups are those
that have been created consistent with the suggestions in "So You Want
to Create an Alt Newsgroup" at:

  http://www.faqs.org/faqs/alt-creation-guide/

Approved regional hierarchy newsgroups are those that contain either
"radio.amateur" or "ham-radio" in their names, including

uk.radio.amateur and aus.radio.amateur.misc.

We will make every reasonable effort to keep our list of approved newsgroups up-to-date. In case we have overlooked any, and a submission is rejected in error as a result, the rejected submitter can E-mail us at our administrative contact address (in the signature at the bottom of this article, and the default Reply-To for the rejection message) requesting that it be added, and that the article be approved. We may still choose to reject articles crossposted to any alt.* newsgroup with an inappropriate name, including obscene language, embedded name-calling, or encouragement of unlawful conduct.

Please direct any comments, questions, or criticisms to rec-radio-amateur-moderated-request@panix.com.

```
From 4681483338410221136
X-Google-Thread: 8f86f75953,c49d96628765052,start
X-Google-Attributes: gid8f86f75953,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
X-Received: by 10.180.19.132 with SMTP id f4mr3565105wie.2.1362535933964;
        Tue, 05 Mar 2013 18:12:13 -0800 (PST)
Path: bp2ni75049wib.1!nntp.google.com!feeder1.cambriumusenet.nl!feed.tweaknews.nl!
194.109.133.86.MISMATCH!newsfeed.xs4all.nl!newsfeed3.news.xs4all.nl!xs4all!
border4.nntp.ams.giganews.com!border2.nntp.ams.giganews.com!
border3.nntp.ams.giganews.com!border1.nntp.ams.giganews.com!nntp.giganews.com!de-
l.enfer-du-nord.net!feeder1.enfer-du-nord.net!usenet.blueworldhosting.com!
news.glorb.com!news-out.readnews.com!transit4.readnews.com!panix!rri.panix.com!
robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-063 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Sat, 2 Mar 2013 15:24:46 EST
Organization: The Radio Amateur Satellite Corporation
Lines: 2638
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <001801ce1783$a91bf760$fb53e620$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
X-Trace: reader1.panix.com 1362255886 28299 166.84.1.6 (2 Mar 2013 20:24:46 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sat, 2 Mar 2013 20:24:46 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
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X-Comment-3: Acceptance does not convey approval of any external references.
```

```
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
```

```
DKIM-Signature: v=1; a=rsa-sha256; c=relaxed/relaxed; d=comcast.net;
     s=q20121106; t=1362255869;
     bh=I12xuFQtE2PWdLABnWu/3VVuotGZxagHhSIk0Pm+YB0=;
     h=Received:Received:From:To:Subject:Date:Message-ID:MIME-Version:
      Content-Type;
     b=hio8vvewY/zyldm+q3cm4S1xKxMxCPo+sPMZDrUjX046PSlROCGotdrwJInTDCSSU
      s/C4FaJIJ4Iowo5CqNmqd+VIYX1P2ml5/8z2f9wG7RfOrs1im7fmiRjwF4Solu+Kke
      +VQG9+qTb1N2FZYW0jyFfcQ5TKzA1YvN4qKuaj4/ARreDXs5WcI6XDYvWvJXEHkm2t
      0fui2j0qmPBrSGYROw+kaPFFQks15o5/ZnZFn/ZN6jrXbb+dY4TehGYDZvDPpknd8j
      MTjkQjHF42dNu8zKqA9OD/EDMADpLmeFy6CV8bp/jk0vETUrcsYbtsRdrVllX1Hde7
      yTRTwzj/mEOmw==
```

```
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
Content-Language: en-us
```

This report is organized into four (4) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - deborbited/returned satellites

SB SAT @ AMSAT W8ISS $WSR-063.S1
WSR 063 Part 1 03/04/2013

AMSAT NEWS SERVICE BULLETIN 063.S1
FROM AMSAT HQ SILVER SPRING, MD, March 04, 2013
TO ALL RADIO AMATEURS
BID: $WSR-063.S1

PW-Sat
Catalog Number: 38083
Launch Date: Febrauary 13, 2012 1000z
Launch Site: Kourou, French Guiana

Status: On Orbit

Uplink: 435.020 MHz FM
Downlink: 145.900 MHz DSB

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=132
[02112013]
=====

DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational
Current Mode: Science Mode - Beacon ONLY

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink: 435.530 to 435.570 MHz

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=68
[02112013]
=====
VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05, 2005 0444z
Launch site: Satish Dhawan Space Centre, India

Status: Operational
Current Mode: U/v - Dutch Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.9360 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=30

To know what transponder is switched on please listen for the beacon
that is active. Each transponder has a different beacon.
[02112013]
=====

```
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002 1700z
Launch site: Baikonur, Kazakhstan

Status: Operational

Current Mode: V/u

Uplink:   145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4
Hz. The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute
   timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the re-
   peater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset
   the 10 minute timer.
[02112013]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Operational
Current Mode: V/u (Mode JA)

Voice/CW (Mode JA)
Uplink:   145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon:   435.795 MHz

Digital Mode JD
Uplinks:  145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP
```

```
For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage:
http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's
CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/
fo29cwts.htm
[02112013]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974
Launch site: Vandenberg AFB, California, USA

Status: Operational

Current Mode: Alternating between Mode A and B every 24 hours

Uplink:   145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink:  29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons:   29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php
[02112013]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998 0640z (ZARYA module)
Launch sites: Baikonur, Kazakhstan
              Kourou, French Guiana
              Uchinoura Space Center, Japan
              Kennedy Space Center, Titusville, Florida, USA

Status: Operational

Current Active Modes: FM Repeater - OFF
                      Voice -       V/v
                      BBS -         V/v
                      2m APRS -     V/v
                      2m Digi -     V/v
```

70cm APRS - ?
70cm Digi - ?
SSTV - V/v

Expedition 34 Crew (November 2012 - March 2013):
Commander: Kevin Ford KF5GPP
Flight Engineer: Oleg Novitskiy
Flight Engineer: Evgeny Tarelkin
Flight Engineer: Roman Romanenko
Flight Engineer: Chris Hadfield KC5RNJ/VA3OOG
Flight Engineer: Tom Marshburn KE5HOC

Available Modes and Frequencies:
Digital/APRS:
Worldwide 2m packet uplink: 145.825 MHz FM 1k2
Worldwide 2m packet downlink: 145.825 Mhz FM 1k2
Worldwide 70cm packet uplink: 437.550 Mhz FM 1k2
Worldwide 70cm packet downlink: 437.550 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
2m Packet Mailbox: RS0ISS-11
2m Digipeater alias: ARISS
70cm Packet Mailbox: RS0ISS-1
70cm Digipeater callsign: RS0ISS
70cm Digipeater alias: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[02112013]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-063.S2
WSR 063 Part 2 03/04/2013

AMSAT NEWS SERVICE BULLETIN 063.S2
FROM AMSAT HQ SILVER SPRING, MD, March 04, 2013
TO ALL RADIO AMATEURS
BID: $WSR-063.S2

STRaND-1
Catalog Number:
Launch Date: February 25, 2013 12:31z
Launch Site: Satish Dhawan Space Centre, India

Status: Operational

Uplink:
Downlink:437.568MHz 9k6 FSK

Beacon: None(?)

Callsign:

URL: http://www.sstl.co.uk/Missions/STRaND-1--Launched-2013
[03042013]
=====
Fitsat-1
Catalog number: 38853
Launch Date: October 04, 2012
Launch site: Kibo Japanese Experiment Module, International Space Station

Status: Operational

Uplink:
Downlink(s): 437.445MHz 1k2 AFSK
5840.00 MHz 115k2 data
LED CW (200w pulses)

Beacon(s): 437.250 MHz CW

Callsign: NIWAKA

```
URL: http://carpcomm.com/satellite/fitsat1
[10292012]
=====
TechEdSat
Catalog number: 38854
Launch date: October 04, 2012
Launch site: Kibo Japanese Experiment Module, International Space
Station

Uplink(s):
Downlink(s): 437.465 1k2 AFSK

Beacon(s):

Callsign:

URL:http://www.techedsat.com/
[10152012]
=====
We Wish
Catalog number: 38856
Launch date: October 04,2012
Launch Site: Kibo Japanese Experiment Module, International Space
Station

Uplink(s):
Downlink(s): 437.505MHz 1k2 AFSK
             437.505MHz SSTV

Beacon(s): 437.505MHz CW

Callsign: JQ1ZIJ

URL:
[10152012]
=====
F-1
Catalog number: 38855
Launch Date: October 04, 2012
Launch Site: Kibo Japanese Experiment Module, International Space
Station

Uplink(s):
Downlink(s): 145.980MHz 1k2 AFSK
             437.485MHz FM moduled CW

Baecon(s):

Callsign: XV1VN

URL: http://fspace.edu.vn/
[10152012]
=====
Aeneas
Catalog Number: 38760
Launch Date: September 13, 2012 2139z
Launch Site: Wallops Island, Virginia, USA

Status: On Orbit

Uplink: WiFi 2425MHz
Downlink:
WiFi: 2425MHz
Spread Spectrum: Somewhere in the 70cm band

Beacon: 437.600MHz 1k2 ax25 every 10 seconds

Callsign:

URL:
[10012012]
=====
CSSWE (Colorado Student Space Weather Experiment)
Catalog Number: 38761
Launch Date: September 12, 2012 2139z
Launch Site: Wallops Island, Virginia, USA

Status: On Orbit

Uplink:
Downlink:       437.345MHz 9k6 with ax.25

Beacon:

Callsign:

URL:
[10012012]
=====
CP5 (Polysat)
Catalog Number: 38763
Launch Date: September 12, 2012 2139z
Launch Site: Wallops Island, Virginia, USA

Status: On Orbit

Uplink:
Downlink:       437.405MHz AFSK on LSB ax.25 over NRZI at 1k2 baud,
every 2
                minutes, begins 3.5 hours after first turn-on

Beacon:

Callsign:

URL:
```

```
[10012012]
=====
CXBN (Cosmic X-Ray Background Nanosatellite)
Catalog Number: 38762
Launch Date: September 12, 2012 2139z
Launch Site: Wallops Island, Virginia, USA

Status: On Orbit

Uplink:
Downlink:       437.525MHz GFSK ax.25

Beacon:

Callsign:

URL:
[10012012]
=====
Proiteres
Catalog Number: 38756
Launch Date: September 09, 2012 2139z
Launch Site: Satish Dhawan Space Centre, India

Status: On Orbit

Uplink:
Downlink: 437.485MHz FM/AFSK

Beacon:

Callsign: JL3YZK

URL:
[10012012]
=====
RS-40 MiR (Yubileiny-2)
Catalog Number: 38735
Launch Date: July 28, 2012
Launch Site: Plesetsk Missile and Space Complex, Russia

Status: On Orbit

Uplink:
Downlink(s):    435.265 MHz
                435.365 MHz

Beacon:

Callsign:

URL:
[08272012]
```

```
=====
HORYU-II
Catalog number: 38340
Launch Date: May 17, 2012 1639z

Status: On Orbit

Uplink:   145.??? MHz
Downlink: 437.375 MHz CW/AX25/FSK

Beacon: 437.375 MHz CW

Callsign: JG6YBW

URL:

IARU Coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=216
[10012012]
=====
XaTcobeo
Catalog Number: 38082
Launch Date: Febrauary 13, 2012 1000z
Launch Site: Kourou, French Guiana

Status: Operational

Uplink:
Downlink: 437.365 MHz FFSK with AX.25

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=135
[100162012]
=====
UniCubeSat
Catalog Number: 38085(?)
Launch Date: Febrauary 13, 2012 1000z
Launch Site: Kourou, French Guiana

Status: Operational

Uplink:
Downlink: 437.305 MHz 9k6 bps GMSK

Beacon:

Callsign:
```

```
URL:
http://www.gausssteam.com/index.php?option=com_content&view=article&id=
96:unicu
besat&catid=36:unicubesat&Itemid=183

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=133
[10012012]
=====
Robusta
Catalog Number: 38083(?)
Launch Date: Febrauary 13, 2012 1000z
Launch Site: Kourou, French Guiana

Status: On Orbit

Uplink:
Downlink: 437.325 MHz 1k2 FM telemetry (data every 3 min, 20 sec.
burst)

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=122
[10012012]
=====
MO-72 MaSat-1
Catalog Number: 38081
Launch Date: Febrauary 13, 2012 1000z
Launch Site: Kourou, French Guiana

Status: Operational

Uplink:
Downlink: 437.345 MHz GFSK 625/1250 bps
          437.345 MHz CW

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=126
[10012012]
=====
Goliat
```

```
Catalog Number: 38084(?)
Launch Date: Febrauary 13, 2012 1000z
Launch Site: Kourou, French Guiana

Status: Operational

Uplink:
Downlink: 437.485 MHz 1k2 AFSK

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=98
[10012012]
=====
E-St@r
Catalog Number: 38079
Launch Date: Febrauary 13, 2012 1000z
Launch Site: Kourou, French Guiana

Status: On Orbit

Uplink:
Downlink: 437.445 MHz 1k2 bps AFSK

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=130
[10012012]
=====
ALMASat-1
Catalog Number: 38078
Launch Date: Febrauary 13, 2012 1000z
Launch Site: Kourou, French Guiana

Status: On Orbit

Uplink:
Downlink:  437.465 MHz 1k2 bps FSK
          2407.850 MHz

Beacon:

Callsign:
```

```
URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=39
[10012012]
=====
RS-39 Chibis-M
Catalog Number: 38051
Launch Date: October 30, 2011 10:11:00 UTC
Launch site: Tyuratam (Baikonur Cosmodrome), Kazakhstan

Status: Operational

Uplink:
Downlink:

Beacon: 435.315 MHz CW
        435.215 MHz CW

Callsign:

URL:

IARU coordination status page:
[07302012]
=====
JUGNU
Catalog Number: 37839
Launch Date: October 12, 2011 05:30:00 UTC
Launch site: Satish Dhawan Space Centre, India

Status: On Orbit

Uplink:   145.??? MHz 1k2 (mode?)
Downlink: 437.505 MHz 9k6 (mode?)

Beacon: 437.275 MHz 15 wpm (?) CW

Callsign:

URL: http://www.iitk.ac.in/me/jugnu/index.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=160
[07092012]
=====
SRMSAT
Catalog Number: 37841
Launch Date: October 12, 2011 05:30:00 UTC
Launch site: Satish Dhawan Space Centre, India

Status: Operational
```

```
Uplink:   145.900 MHz 1k  AX.25 (speed?)
Downlink: 437.500 MHz 2k4 AX.25

Beacon: 437.425 MHz 12 wpm CW

Callsign:

URL: http://srmsat.in/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=181
[01282013]
=====
HRBE (E1P Explorer 1 [Prime] CubeSat (E1P-U2))
Catalog Number: 37855
Launch Date: October 28, 2011
Launch site: Vandenberg Air Force Base, California, USA

Status: On Orbit

Uplink:   437.305 MHz (???)
Downlink: 437.505 MHz AX.25 (SSB?)

Beacon:

Callsign:

URL: http://ssel.montana.edu/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=116
[01122012]
=====
M-Cubed
Catalog Number: 37855
Launch Date: October 28, 2011
Launch site: Vandenberg Air Force Base, California, USA

Status: On Orbit

Uplink:
Downlink: 437.485 MHz AX.25

Beacon:

Callsign:

URL: http://umcubed.org/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=215
[01122012]
```

```
=====
RAX-2
Catalog Number: 37853
Launch Date: October 28, 2011
Launch site: Vandenberg Air Force Base, California, USA

Status: Operational

Uplink:
Downlink: 437.345MHz 9k6 GMSK

Beacon:

Callsign:

URL: http://rax.engin.umich.edu//

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=221
[03232012]
=====
AO-71 AubieSat-1
Catalog Number: 37854
Launch Date: October 28, 2011
Launch site: Vandenberg Air Force Base, California, USA

Status: On Orbit

Uplink:
Downlink: 437.475 MHz 1k2 AX.25

Beacon: 437.475 MHz CW

Callsign: KI4NQO

URL: http://www.space.auburn.edu/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=148
[12262011]
=====
O/OREOS
Catalog Number: 37224
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: On Orbit

Uplink:
Downlink: 437.035 MHZ AX.25

Beacon:
```

```
Callsign:

URL: http://www.ooreos.org/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=146
[02092011]
=====
Rax-1 Radio Aurora Explorer
Catalog Number: 37223
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: On Orbit

Uplink:
Downlink: 437.505 MHz 9k6 GMSK

Beacon:

Callsign: RAX-1

URL: http://rax.engin.umich.edu/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=165
[02092011]
=====
FO-69 Fastrac-1 Sara Lily
Catalog Number: 37227
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: Operational

Uplink 1: 145.980 MHz 1k2 baud
Uplink 2: 145.825 MHz 1k2 baud
Downlink: 437.345 MHz 1k2 and 9k6 baud

Beacon:   437.435 MHz 1k2 AX.25

Callsign: Fast1

URL: http://fastrac.ae.utexas.edu/index.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=83
[07052011]
=====
FO-70 Fastrac-2 Emma
Catalog Number: 37380
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA
```

```
Status: Operational

Uplink 1: 435.025 MHz 1k2 baud
Uplink 2: 437.435 MHz 9k6 baud
Downlink: 145.825 MHz 1k2 and 9k6 baud

Beacon:   145.825 MHz 1k2 AX.25

Callsign: Fast2

URL: http://fastrac.ae.utexas.edu/index.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=84
[12162011]
=====
StudSat
Catalog Number: 36796
Launch Date: July 12, 2010 0352z
Launch site: Satish Dhawan Space Centre, India

Status: On Orbit

Uplink:   437.505MHz, 9600bps FSK
Downlink: 437.505MHz, 9600bps FSK
Beacon  : 437.505MHz,   20bps ASK

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=164
[02092011]
=====
TIsat-1
Catalog Number: 36799
Launch Date: July 12, 2010 0352z
Launch site: Satish Dhawan Space Centre, India

Status: On orbit

Callsign: HB9DE

Uplink:   145.980MHz FM, AFSK
Downlink: 437.305MHz FM, AFSK
Beacon:   437.305MHz CW

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=118
[02092011]
=====
SwissCube
Catalog Number: 35932
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India
```

Status: Operational

Callsign: HB9EG

Beacon(100mw): 437.5050MHz CW
Beacon(1w):   437.5050MHz FSK 1k2bps

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=109
[02092011]
=====
UWE-2
Catalog Number: 35934
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: In Orbit

Beacon(500mw): 437.3850 MHz AFSK 1k2bps
               437.3850 MHz FSK 9k6bps

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=110
[02092011]
=====
ITUpsAT1
Catalog Number: 35935
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Beacon(100mw): 437.325MHz CW
Beacon(1w): 437.325MHz 19k2bps

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=113
[02092011]
=====
BEESAT
Catalog Number: 35933
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Callsign: DP0BEE

Beacon(100mw): 436.000MHz CW
Beacon(500mw): 436.000MHz GMSK 4k8bps
Beacon(500mw): 436.000MHz GMSK 9k6bp
[02092011]

```
=====
SOHLA-1 (ASTRO TECH.)
Catalog Number: 33496
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational

Proposed Frequencies and Modes:
Downlink: 437.505 MHz AFSK/CW
Beacon:   437.505 MHz AFSK/CW

Callsign:

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=101
[02092011]
=====
KAGAYAKI (Solan Co.)
Catalog Number: 33495
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: In Orbit

Downlink: 437.375 MHZ    FSK9k6/CW
Beacon:   437.375 MHz    FSK9k6/CW

IARU coordination status page:

AMSAT-NA webpage:

[02092011]
=====
STARS (Kagawa Univ.) (Twin Satellites)
Catalog Number: 33498
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational ?

Downlinks: 437.485 MHz FM/CW
           437.465 MHz FM/CW
Beacons:   437.305 MHz FM/CW
           437.275 MHz FM/CW

Callsigns: JR5YBN
           JR5YBO

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=99

AMSAT-NA webpage:
```

```
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=121&retURL
=/satellites/status.php
[02092011]
=====
KKS-1 (Tokyo MCIT)
Catalog Number: 33499
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational

Downlink:  437.455 MHz AFSK/CW
Beacon:    437.385 MHz AFSK/CW

Callsign: JQ1YYY

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=107

AMSAT-NA webapge:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=120&retURL
=/satellites/status.php
[20092011]
=====
PRISM (Tokyo Univ.)
Catalog Number: 33493
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational

Uplink:   145.xxx MHz AFSK 1k2
Downlink: 437.425 MHz AFSK 1k2
Beacon:   437.250 MHz CW

Callsign: JQ1YCX

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=97

Read terms and conditions of operations at the PRISM web page to find
out how
to properly operate on the satellite and to get the uplink frequency.
It
has
been asked that the uplink frequency not be given out untik you have
read and
understood the terms of usage.

URL:
http://www.space.t.u-tokyo.ac.jp/prism/en/HAMservice.html
[10282012]
=====
```

RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number: 32953
Launch Date: May 23, 2008 1520z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational

Curent Modes: Telemetry
              Audio
              Images

Downlinks: 435.315 MHz
           435.215 MHz

AMSAT-NA website:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=115&retURL=/satellites/status.php

Official website:
http://www.npopm.com/?cid=leoca&caid=43
[02092011]
=====
CanX-2
Catalog number: 32790
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational in range of ground station only

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=46
[02092011]
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Downlink: 437.425 MHz 1k2 baud packet

For the latest project status update please visit the AAUSAT-II web page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=60

```
[02092011]
=====
CO-65 CUTE-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Downlink:  437.475 MHz 9k6 Packet
Uplink:   1267.600 Mhz

Telemetry Beacon:
Downlink: 437.2750 MHz CW

For the latest project status update please visit the Cute-1.7+APD II
web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=78

Command Station blog website:
http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=112&retURL
=/satellites/status.php
[03232012]
=====
Compass-1
Catalog number: 32787
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Current Mode: dependant on last received command

Uplink:   145.980 MHz FM
Downlink: 437.275 Mhz CW
          437.405 MHz Packet

For the latest project status update please visit the Compass 1 web
page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=52

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=114&retURL
=/satellites/status.php
[06162011]
=====
```

CO-66 Seeds II
Catalog number: 32791
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Downlink: 437.485 MHz

Callsign: JQ1YGU

For the latest project status update please visit the Seeds 2 web page: http://cubesat.aero.cst.nihon-u.ac.jp/english/seeds_2_e.html

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=36

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=113&retURL=/satellites/status.php
[073092011]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007 0702z
Launch site: Baikonur, Kazakhstan

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=94&retURL=/satellites/status.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=72
[02092011]
=====
CP3
Catalog Number: 31129
Launch Date: April 17,2007 0702z
Launch site: Baikonur, Kazakhstan

Status: Operational

```
Current Mode:  /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=74
[02092011]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005 0652z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon:             437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/xivpicte.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=37
[02092011]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: ?????

Current Mode: /u

Beacon:     436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=96&retURL
=/satellites/status.php

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[02092011]
=====
QuakeSat
```

Catalog Number: 27845
Launch Date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Telemetry only

Current Mode: 9600 baud data packet

Mode U packet
Downlink: 436.675 MHz 9k6 BPS

Quakesat webpage:
http://www.quakefinder.com/services/quakesat-ssite/
[02252011]
=====
CO-55 Cute-1.7+APD II
Catalog Number: 27844
Launch date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational

Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=69&retURL
=/satellites/status.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=78
[02092011]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001 0240z
Launch site: Kodiak Launch Complex, Alaska, USA

Status: Operational

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[10292012]
=====
RS-22 RADIO SPORT 22 (MOZHAYETS 4)
Catalog number: 27939
Launch Date: September 27, 2003 0612z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational - 70cm cw only

Current Mode: /u

CW Beacon - 435.352 MHz
            145.818 MHz

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=76&retURL=/satellites/status.php
[02092011]
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990
Launch site: Kourou, French Guiana

Status: CW Beacon only

Uplinks: 145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink: 437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[02092011]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984
Launch site: Vandenburg AFB, California, USA

Status: Operational ?

Current Mode: /v

```
Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon:           435.025 MHz
Mode-S Beacon:      2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[07052011]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998 0640z (ZARYA module)
Launch sites: Baikonur, Kazakhstan
              Kourou, French Guiana
              Uchinoura Space Center, Japan
              Kennedy Space Center, Titusville, Florida, USA

Status: Operational

Current Active Modes: FM Repeater - OFF
                      Voice -       V/v
                      BBS -         V/v
                      2m APRS -     V/v
                      2m Digi -     V/v
                      70cm APRS -   ?
                      70cm Digi -   ?
                      SSTV -        V/v


Expedition 34 Crew (November 2012 - March 2013):
Commander:                Kevin Ford          KF5GPP
Flight Engineer:          Oleg Novitskiy
Flight Engineer:          Evgeny Tarelkin
Flight Engineer:          Roman Romanenko
Flight Engineer:          Chris Hadfield      KC5RNJ/VA3OOG
Flight Engineer:          Tom Marshburn       KE5HOC


Available Modes and Frequencies:
Digital/APRS:
Worldwide 2m packet uplink:     145.825 MHz FM 1k2
Worldwide 2m packet downlink:   145.825 Mhz FM 1k2
Worldwide 70cm packet uplink:   437.550 Mhz FM 1k2
Worldwide 70cm packet downlink: 437.550 Mhz FM 1k2

Voice:
Region 1 voice uplink:          145.200 MHz FM
Region 2/3 voice uplink:        144.490 MHz FM
Worldwide downlink:             145.800 MHz FM
```

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
2m Packet Mailbox: RS0ISS-11
2m Digipeater alias: ARISS
70cm Packet Mailbox: RS0ISS-1
70cm Digipeater callsign: RS0ISS
70cm Digipeater alias: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[12242012]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-063.S3
WSR 063 Part 3 03/04/2013

AMSAT NEWS SERVICE BULLETIN 063.S3
FROM AMSAT HQ SILVER SPRING, MD, March 04, 2013
TO ALL RADIO AMATEURS
BID: $WSR-063.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

NANOSAIL-D
Catalog Number: 37361
Ejection Date: January 17, 2011

Status: Non - Operational

```
Downlink: 437.270 MHz AX.25

URL: http://nanosaild.engr.scu.edu/dashboard.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=115
[07302012]
=====
HO-68 HOPE-1 (CAS-1) (XW-1)
Catalog Number: 36122
Launch Date: December 15, 2009 0231z
Launch site: Taiyuan Space Center, PRC

Status: Telemetry only

Callsign:
Broadcast:    BJ1SA-11
BBS:     BJ1SA-12

Uplinks:   145.8250 MHz FM, PL 67.0 Hz.
           145.9250 - 145.9750 MHz SSB/CW
           145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
           435.7650 - 435.7150 MHz SSB/CW
           435.6750 MHz AFSK 1200 BPS

Beacon:    435.7900 MHz CW

Mode and Antenna Polarization:
V: LHCP 2.0dBi max
U: RHCP 3.0dBi max

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=108

For more information about XW-1 (CAS-1):
http://
[04302012]
=====
SO-67 SumbandilaSat
Catalog Number: 35870
Launch Date: September 17, 2009 1555z
Launch site: Baikonur, Kazakhstan

Status: Non - Operational

Callsign: ZS0SUM

Uplink:   145.875MHz FM tone 233.6 Hz
Downlink: 435.345MHz FM

Mode and Antenna Polarization:
V: Linear
```

```
U: Linear

For more information about SO-67:
http://www.amsatsa.org.za/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=88
[01272012]
=====
CP4
Catalog Number: 31132
Launch Date: April 17, 2007

Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon:    437.325 MHz CW

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=79
[09062010]
=====
LIBERTAD-1
Catalog Number: 31128
Launch Date: April 17, 2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink:   145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=76
[09062010]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: Non-Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder:  145.825 Mhz FM
```

```
IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=51
[09062010]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency:  437.305
                             2407.250

Official Website: http://www.ncube.no

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=24
[09062010]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink:         437.250 MHz FM 67Hz CTCSS
Voice Downlink:      2401.835 MHz FM
Packet Up/Downlink:   437.250 MHz 9k6 packet
Packet Downlink      2401.835 MHz 38k4 packet

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=54
[09062010]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non-Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=53
[09062010]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004 0745z
Launch site: Baikonur, Kazakhstan
```

Status: Non - Operational

Current Mode(s):
Voice repeater: V/u
Uplink: 145.880 MHz FM
Downlink: 435.150 MHz FM

Telemetry: Recovery efforts
Downlink: 435.150MHz 9k6

Analog voice downlink:	435.300 MHz FM
	435.150 MHz FM
	2401.200 Mhz FM
Analog voice uplink:	145.860 MHZ FM
	145.880 MHz USB
	145.880 MHz FM
	145.920 MHz FM
	145.920 MHz FM - 67 Hz PL tone burst
	1268.705 MHz FM
Digital Downlinks:	435.150 MHz FM 38k4 PBP, 1 watt output
	435.150 MHz FM 9k6 Pacsat Broadcast Protocol
	2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:	145.860 MHz FM 9k6 Pacsat Broadcast Protocol
	1268.703 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon:	435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=19
[12062011]
=====
CANX-1
Catalog Number: 27847
Launch Date: June 30, 2003

Status: Non-Operational

Downlink: 437.8800 MHz AFSK 1k2bps
[06052009]
=====
DTUSAT
Catalog Number: 27842
Launch Date: June 30, 2003

Status: Non-Operational

Current Mode: 2k4 AFSK Packet last reported

Downlink: 437.475MHz

Officail webpage: http://dtusat1.dtusat.dtu.dk/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=101&retURL=satellites/all_oscars.php
[02212009]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)

Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Telemetry only

Uplinks: 145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[03302009]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609

```
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
V-band:   145.840 -  145.990 MHz CW/LSB
U-band:   435.550 -  435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks
---------
S2-band:  2401.225 -  2401.475 MHz CW/USB
K-band:  24048.010 - 24048.060 MHz CW/USB
Beacon:   2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)
----------------------------
BEACON   General Beacon(GB)  Middle Beacon(MB)  Engineering Beacon(EB)
2 m                   none        145.898 MHz                     none
70cm           435.438 MHz        435.588 MHz              435.838 MHz
13cm(1)       2400.188 MHz       2400.338 MHz             2400.588 MHz
13cm(2)       2401.173 MHz       2401.323 MHz             2401.573 MHz
3cm          10450.975 MHz      10451.125 MHz            10451.375 MHz
1.5cm        24047.885 MHz      24048.035 MHz            24048.285 MHz
[07162007]
=====
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink:    145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
```

```
site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: 25636
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater:         436.250 MHz

Uplinks: Mode B Repeater:  145.825 MHz
Mode J Digipeater:         145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Non-Operational
```

Current Modes:
Telemetry : /u

Downlink: 435.225 MHz FM (9600-baud FSK)
435.325 Mhz - Not Available - temperature problems
Uplinks: 145.850 FM
145.890 FM
145.930 FM
1269.700 FM
1269.800 FM
1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://asri.technion.ac.il/techsat/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=14&retURL
=/satellites/status.php
[07172010]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink: 145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
MO-30 UNAMSAT-2
Catalog Number: 24305
Launch Date: September 5, 1996

Status: Non-operational

Downlink: 435.1380 MHz AFSK 1200 BPS
Downlink: 435.2060 MHz AFSK 1200 BPS
Uplink: 145.8150 MHz AFSK 1200 BPS
Uplink: 145.8350 MHz AFSK 1200 BPS
Uplink: 145.8550 MHz AFSK 1200 BPS
Uplink: 145.8750 MHz AFSK 1200 BPS
[06042009]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

```
Status: Non-operational

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign:       POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012009]
=====
AO-27 AMRAD
Catalog number: 22825
Launch Date: September 26, 1993 0140z
Launch site: Kourou, French Guiana

Status: Recovery efforts in progress

Current Mode: V/u

Uplink:   145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[12032012]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993 0140z

Status: PSK carrier only

Current Mode:

Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
```

```
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
AO-24 ARSENE
Catalog Number: 22654
Launch Date: May 13, 1993

Status: Non-operational

Uplink:    435.0625 MHz FM 1k2bps AFSK
           435.1125 MHz FM 1k2bps AFSK
           435.1375 MHz FM 1k2bps AFSK
Downlink:  145.9750 MHz FM 1k2bps AFSK
          2446.5025 MHz FM 1k2bps AFSK

Beacon:    2446.4700 MHz CW

Broadcast callsign:
BBS:
[12162009]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
```

```
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990
```

```
Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
[05012006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: non-operational

Current Mode:  V/u

Uplink:         145.900 MHz FM 1200-baud Manchester FSK (reserved)
                145.920 MHz FM VOICE
                145.940 MHz FM 1200-baud Manchester FSK (reserved)
                145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink:       437.026 MHz USB VOICE
                (1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[07242009]
=====
UO-15 UoSAT-4
Catalog Number: 20438
Launch Date: January 22, 1990

Status: Non-operational

Uplink: ?
Downlink: 435.1250MHz (?)
          435.1200MHz (?)
[06042009]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
```

```
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon:   145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
```

```
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink  29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
Beacons:   29.450 MHz
          435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon 1:  29.352 MHz (intermittent)
Beacon 2:  29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
```

=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB

Beacon: 145.860 MHz

Robot: 145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-063.S4
WSR 063 Part 4 03/04/2013

AMSAT NEWS SERVICE BULLETIN 063.S4
FROM AMSAT HQ SILVER SPRING, MD, March 04, 2013
TO ALL RADIO AMATEURS
BID: $WSR-063.S4

THE FOLLOWING SATELLITES HAVE RE-ENTERED OR HAVE BEEN RETURNED SAFELY:

HAWKSAT 1
Catalog number: 35004
Launch Date: May 19, 2009 2355z
Launch site: Wallops Island, Virginia, USA

Status: re-entered
Re-entry date: September 04, 2012

Downlink: 437.345 MHz ?

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=105

```
[02112013]
=====
ARISSat-1
Catalog number: 37772
Launch date: August 03, 2011 1843z
Launch site: International Space Station

Status: Re-entered January 05, 2012

Callsign: RS01S

Current Mode(s):
Linear Transponder: U/v
Uplink:      435.758 to 435.742 MHz CW/LSB
Downlink:    145.922 to 145.938 MHz CW/USB

FM Telemetry/SSTV/Messages/ID:
Downlink:    145.950 MHz FM

Telemetry/Beacon:
Downlink:    145.939 MHz CW1
             145.919 MHz CW2
             145.920 MHz 1k BPSK USB
             145.920 MHz 400b BPSK USB


Official Webpage:http://www.amsat.org/amsat-new/ARISSat/ARISSat.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/informal_detail.php?serialnum=89
[01052012]
=====
CP-6
Catalog Number: 35003
Launch Date: May 19, 2009 2355z
Launch site: Wallops Island, Virginia, USA

Status: Re-enetered October 06, 2011

Downlink: 437.365 MHz 1k2 AFSK

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=121
[01282013]
=====
Pharmasat
Catalog Number: 35002
Launch Date: May 19, 2009 2355z
Launch site: Wallops Island, Virginia, USA

Status: Re-entered August 14, 2012

Downlink: 437.465 MHz 1k2 AFSK
```

```
IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=94
[01282013]
=====
ANUSAT
Catalog Number: 34808
Launch Date: April 20, 2009 0115z
Launch Site: Satish Dhawan Space Centre, India

Status: Re-entered
Re-entery date : April 18, 2012


Downlink:  435.000 MHz
Uplink:    145.800 MHz

Telemetry: 137.400 MHz
[02112013]
=====
CAERUS (Mayflower)
Catalog Number: 37252
Launch Date: December 08, 2010 15:43:00 UTC
Launch site: Kennedy Space Center, Titusville, Florida, USA

Status: Re-entered December 22, 2010

Uplink:
Downlink: 437.600 MHz 1k2 AX.25

Beacon:   437.600 MHz CW

Callsign: KJ6FIX

URL:
http://www2.isi.edu/research/prj-serc/prj-serc_projects/prj-serc_proje
cts-8.htm

IARU coordination status page:

[01282013]
=====
Cinema
Catalog Number: 36764
Launch Date: September 13, 2012 2139z
Launch Site: Wallops Island, Virginia, USA

Status: Ren-entered
Re-entry date: Spetember 10, 2010

Uplink:
Downlink:
Engineering:    2400 - 2450MHz
```

```
Telemetery:     2200 - 2300MHz

Beacon:

Callsign:

URL:
[02112013]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Re-entered
Re-entered: October 25, 2009

Uplink:  1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=56
[09062010]
=====
BEVO-1 (DRAGONSAT-1)
Catalog Number: 35690
Launch Date: May 19, 2009

Status: Re-entered
Re-entered:

Downlink: 437.325 MHz 9k6 GMSK
          437.325 MHz CW 20wpm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=117
[07312009]
=====
AggieSat2 (DRAGONSAT-2)
Catalog Number: 35690
Launch Date: May 19, 2009

Status: Re-entered
Re-entered:

Downlink: 436.250 MHz 9k6 FHSS
[11112009]
=====
Pollux
Catalog Number: 35693
Launch Date: July 31, 2009

Status: Re-entered
Re-entered:

Callsign: POLLUX-1

Downlink: 145.825MHz 1k2 AX.25

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=139
[09062010]
=====
Castor (ANDE-2)
Catalog Number: 35694
Launch Date: July 31, 2009

Status: Re-entered
Re-entered:

Callsign: KD4HBO-1

Downlink: 145.825 MHz 1k2 AX.25

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=144
[09062010]
=====
NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: July 28, 2008

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=59
[01012009]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: December 25, 2007
```

```
Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink:      145.825 Mhz FM APRS AX25
APRS Uplink:        145.825 MHz FM APRS AX25
Voice/PSK31 Uplink:  28.120 MHz

Packet to Voice ID: RAFT
[06112007]
=====
GENESAT-1
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Re-Entered
Re-entered date: August 8, 2010

Current Mode: /u

Callsign: KE7EGC

Telemetry Beacon Downlink: 437.0695 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[08082010]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Re-Entered
Re-entered: June 18, 2008

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon:             437.2750 MHz CW

Callsign: JR8YJT
[01012009]
=====
SO-43 Starshine 3
Catalog Number: 26929
Launch Date: September 30, 2001

Status: Re-Entered
Re-entered: January 21, 2003
```

Beacon: 145.825Mhz
[02212009]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live
radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz.
Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30
UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at}
amsat.org
NNNN
/EX

```
From -6958061621107718507
X-Google-Thread: 8f86f75953,787a97007bc9d8d2,start
X-Google-Attributes: gid8f86f75953,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII
X-Received: by 10.68.196.134 with SMTP id im6mr2999285pbc.5.1362844372605;
        Sat, 09 Mar 2013 07:52:52 -0800 (PST)
MIME-Version: 1.0
Path: q9ni6091pba.1!nntp.google.com!npeer01.iad.highwinds-media.com!
news.highwinds-media.com!feed-me.highwinds-media.com!
border3.nntp.dca.giganews.com!border1.nntp.dca.giganews.com!
backlog1.nntp.ams.giganews.com!border3.nntp.ams.giganews.com!
border1.nntp.ams.giganews.com!border4.nntp.ams.giganews.com!
border2.nntp.ams.giganews.com!nntp.giganews.com!de-l.enfer-du-nord.net!
feeder2.enfer-du-nord.net!news.glorb.com!news.linkpendium.com!
news.linkpendium.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-062 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sat, 2 Mar 2013 21:36:59 EST
Organization: The Radio Amateur Satellite Corporation
Lines: 667
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000f01ce17b7$adaf8ba0$090ea2e0$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
X-Trace: reader1.panix.com 1362278219 1864 166.84.1.6 (3 Mar 2013 02:36:59 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 3 Mar 2013 02:36:59 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
DKIM-Signature: v=1; a=rsa-sha256; c=relaxed/relaxed; d=comcast.net;
     s=q20121106; t=1362278210;
     bh=GJiew5fBXJH/aBDyWqTbRwUb6lJZ1/3YsKbKzvHbC18=;
     h=Received:Received:From:To:Subject:Date:Message-ID:MIME-Version:
      Content-Type;
     b=RI6IP/IGrUUkFk4XwfSTY2BxbB5itFFs8mMJzG60jbLIl2Ldamx83BOy1D8DINOwr
      IE7nLpQF6JiwG7uz4F2be3cMjYqvVr0ezPbv5I3tQRlijh8Cw3XYKtaqCDTf3KTYcS
      /MO5bKkZ+5/Ny2e4ShBreby5U7PtsaLB99DCp26BXR0AhbA+lilaaj2gJJPpvN2Ktw
      zjoFy+OE0B3QZk1tlHJSMllqDj3JRFN2c23231yFgQTUmFQ34iaVRMKRy8PKmGQAsx
      bzYhOGfL1hWY3k4TNZF2Pd0biFp3UYj0US3pYr3cftuXiDK1VM/gLN+wIFs2hK/UvP
      G62ElzaGOD/Lg==
Bytes: 30479
X-Original-Bytes: 30314
X-Received-Bytes: 30539
Content-Language: en-us
```

AMSAT NEWS SERVICE
ANS-062

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:

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* AMSAT Shows New President’s Club Pin
* 5th European CubeSat Symposium, 3-5 June 2013, Brussels - Belgium
* American satellite starts transmitting after being abandoned in 1967
* STRaND-1 Information and Telemetry
* ARISS NEWS
* AMSAT-DC Workshop on Portable Satellite Ground Stations
* AMSAT Forum at ACADIANA ARA Hamfest - Free Admission Coupons for Youth
* Korean OSSI-1 Ham Radio CubeSat Frequency Coordinated
* ARRL Offers Two Sessions of their Teachers Institute

SB SAT @ AMSAT $ANS-062.01
ANS-062 AMSAT News Service Weekly Bulletins

AMSAT News Service Bulletin 062.01
>From AMSAT HQ SILVER SPRING, MD.
DATE, 2013
To All RADIO AMATEURS
BID: $ANS-062.01

Vanderbilt-AMSAT RadFxSat Cubesat Selected for NASA ELaNa Program

On February 26th, NASA announced the winning projects for the fourth round of their CubeSat Launch Initiative. Project Selection was based on technical feasability and the assessed merit for conducting technology demonstrations, STEM education, and science research. These selected projects are eligible for a free launch on NASA Educational Launch of Nanosatellite (ELaNa) missions as auxiliary payloads on launches planned for 2014, 2015 and 2016. The 24 winning cubeSat proposals came from universities, a Florida high school, non-profit organizations and NASA field centers.

AMSAT partnered with the Institute for Space and Defense Electronics (ISDE) at Vanderbilt University to develop our winning proposal. The official name of the project is RadFxSat and we were selected at priority 15 out of the 24 winners. AMSAT and ISDE plan to fly a Fox-1 type satellite with a sophisticated space radiation effects experiment to be developed by ISDE. This experiment is intended to improve computer modeling of radiation effects and help improve the survivability of modern semiconductor devices in the harsh radiation environment of earth orbit. AMSAT is especially interested in this area of science research since it affects our ham radio satellites. This project also represents an exciting "first" for AMSAT with the satellite's primary mission being science research. We believe that partnering on science and education missions will open up new launch opportunities for AMSAT satellites in the future.

Of course, RadFxSat also carries the same ham radio FM transponder as Fox-1 but on a different frequency pair. We believe we will have enough power to run the FM transponder simultaneously with the science mission most of the time. The transponder capability was an important component of our NASA ELaNa proposal since it enhances the opportunities for formal science, technology, engineering and math (STEM) education via "hands-on" school activites using an actual communications satellite. It also allows informal groups such as the boy scouts, girl scouts and ham radio clubs to introduce radio and satellite communications to our young people. AMSAT aims to show that STEM education can be exciting and fun!

The full text of the NASA announcement can be accessed on-line at:
http://www.nasa.gov/home/hqnews/2013/feb/HQ_13-064_CubeSat_4.html

[ANS thanks AMSAT VP Engineering Tony Monteiro, AA2TX and Joshua Buck at NASA Headquarters, Washington for the above information]

AMSAT Shows New President’s Club Pin

You can join the AMSAT President’s Club with your contribution directly through easy, automatic charges to your credit card. Since AMSAT is a 501(C)(3) organization donations may be USA tax deductible. (Check with your tax advisor.)

Titanium Donors contribute at least US $400 per month or $4800 one time payment.
Platinum Donors contribute at least US $200 per month or $2400 one time payment.
Gold Donors contribute at least US $100 per month or $1200 one time payment.
Silver Donors contribute at least US $50 per month or $600 one time payment.
Bronze Donors contribute at least US $25 per month or $300 one time payment.
Core Donors contribute at least US $10 per month or $120 one time payment.
Every donor will receive the specially designed pin and the unique AMSAT President's Club Certificate. Starting at the Gold Donor level
and higher you will also receive a personal invitation to the AMSAT Dayton Dinner as our guest.

You choose where your contribution should go:

AMSAT-Fox
ARISS
Future Projects
General Fund
To join you can go to the AMSAT On-Line Store or contact Martha at the AMSAT office!

Phone: US Toll Free 888-322-6728 or 301-589-6062
E-mail: martha@amsat.org

The link to the AMSAT On-Line Store is
http://store.amsat.org/catalog/

[ANS thanks AMSAT for the above information]

5th European CubeSat Symposium, 3-5 June 2013, Brussels - Belgium

It is with great pleasure to remind you about the 5th European CubeSat Symposium that will take place on 3-5 June 2013 at the premises of Royal Military Academy in Brussels, Belgium.

This is the biggest CubeSat related event in Europe and last year it attracted more than 250 participants and industrial exhibits of 7 specialized companies. This year, we are expecting more participation. Applicants from all around the world are welcome.

The call for proposals and the online abstract submission system is available at www.CubeSatSymposium.eu

The important dates are:

15 Mar 2013: Deadline for the submission of abstracts
15 April 2013: Notification of acceptance
15 May 2013: Publication of the programme and the abstracts
24 May 2013: Deadline for online registration
3-5 June 2013: 5th European CubeSat Symposium at ERM, Brussels (3 full days)
6 June 2013: 6th QB50 Workshop at VKI, Brussels (by invitation only)

The session topics are:
CubeSat networks/constellations/swarms
Scientific instruments/sensors on CubeSats
Biology and microgravity experiments on CubeSats
Technology demonstration on CubeSats
Micropropulsion subsystems, formation flying
Attitude determination and control subsystem
Telecommunications, ground stations, ground station networks
Orbital dynamics for CubeSats, lifetimes of CubeSats in orbit
CubeSat flight experience, lessons learned
Other topics (e.g. expandable solar arrays, atmospheric re-entry, CubeSats as free-flying payloads for the exploration of the Solar System)
Future technologies on CubeSats
Deployment systems for CubeSats

[ANS thanks Cem Ozan Asma, PhD for the above information]

American satellite starts transmitting after being abandoned in 1967

An American satellite, abandoned in 1967 as a piece of Space Junk has begun transmitting again after 46 years.

An Amateur Radio Astronomer in North Cornwall accidentally picked up the signal and after cross checking with various lists, has identified it as LES1 built by the Massachusetts Institute of Technology and launched in 1965. The satellite failed to reach its intended orbit owing to a wiring error and has been drifting out of control ever since.

Phil Williams G3YPQ from near Bude noticed its peculiar signal drift caused by its tumbling end over end every 4 seconds as the solar panels become shadowed by the engine. ‘This gives the signal a particularly ghostly sound as the voltage from the solar panels fluctuates’ Phil says.

It is likely that the on board batteries have now disintegrated and some other component failure has caused the transmitter on 237Mhz, to start up when its in sunlight.

LES1 is about the size of a small car, It is not likely to re-enter the atmosphere for a long time as the orbit is still relatively high. It poses no threat other than that caused by the thousands of other pieces of space junk in orbit.

Phil says its remarkable to think that electronics built nearly 50 years ago, 12 years before Voyager 1, and long before microprocessors and integrated circuits, is still capable of working in the hostile environs of space.

Listening to the signal you can easily imagine the craft tumbling over and over every 4 seconds and the transmitter starting up as the sun rises. He refers to the hobby as ‘Radio-Archeology’!

[ANS thanks Phil Williams G3YPQ and Southgate ARN for the above information]

STRaND-1 Information and Telemetry

STRaND-1 carries an amateur radio AX.25 packet radio downlink on 437.568 MHz using 9600 bps FSK modulated data with HDLC frame, NRZI encoding.

Free satellite tracking software:
- SimpleSat Look Down http://www.amsat-uk.org/?p�17
- Gpredict http://gpredict.oz9aec.net/
- Orbitron http://www.amsat-uk.org/?p�51

Dr Chris Bridges would be delighted to receive all available telemetry files by email to C.P.Bridges@surrey.ac.uk

Mark Hammond N8MH has provided these tips to decode STRaND-1:

(1) Sprint-2 TNC set at 9600 baud in KISS mode (or any 9600 TNC in KISS mode probably)
(2) Using this software to capture http://www.dk3wn.info/files/online_kiss_plus.zip
(3) And using this software to decode the captured KISS files http://www.dk3wn.info/files/kissdump.zip

Thanks to Mike Rupprecht DK3WN for the excellent software.

Jan PE0SAT describes how he used the free TNC emulator software AGWPE and SDR# to decode the telemetry. This approach means you don’t have to buy a dedicated hardware TNC it simply uses your existing PC and radio that supports 9600 bps data:

(1) Record a pass using SDR# and a FUNcube Dongle Pro+ and save the IQ wav file so you can work with it after the pass.
(2) Configure AGW Packet Engine (AGWPE) as a 9600 baud modem using your audio mixer as input. If you don’t have an audio mixer, use audio VAC to route the received audio to the AGW audio input.
(3) When the AGW packet engine is running use AGW-Online-KISS from DK3WN to connect to the packet engine and decode the telemetry.
(4) Open the IQ wav file within SDR# and playback the recorded file and tune to the correct receive frequency, now you can see decoded data within Online-Kiss.
(5) Feed the files captured to KISS-Dump

Descriptions of ONLINE KISS +, AGW ONLINE KISS and KISS Dump + are at http://tinyurl.com/SatSoftwareDK3WN/

The free AGWPE soundcard packet software AGWPE.zip is available at http://www.sv2agw.com/downloads/

Guide on how to use AGWPE http://www.soundcardpacket.org/

Latest Keps for the objects from the PSLV-C20 launch. Note: At the current time the object to satellite mapping is not known:

```
2013-009A
1 39086U 13009A   13057.07723200 -.00000047  00000-0  00000+0 0    66
2 39086  98.6489 247.4456 0046840  48.7060 103.7711 14.45874186    76
2013-009B
1 39087U 13009B   13057.12205894 -.00000045  00000-0  00000+0 0    65
2 39087  98.6295 247.4478 0010362 263.0055  96.9849 14.33603731    70
2013-009C
1 39088U 13009C   13057.12202184 -.00000045  00000-0  00000+0 0    54
2 39088  98.6260 247.4462 0010229 264.9844  95.0146 14.33699090    77
2013-009D
1 39089U 13009D   13057.12196648 -.00000045  00000-0  00000+0 0    52
2 39089  98.6302 247.4430 0009913 269.8258  90.1934 14.33842702    72
2013-009E
1 39090U 13009E   13057.12180062 -.00000045  00000-0  00000+0 0    57
2 39090  98.6314 247.4520 0008151 271.9062  88.1247 14.34269067    79
2013-009F
1 39091U 13009F   13057.12171611 -.00000045  00000-0  00000+0 0    69
2 39091  98.6289 247.4453 0009293 286.2139  73.7956 14.34449938    72
2013-009G
1 39092U 13009G   13057.12216226 -.00000045  00000-0  00000+0 0    62
2 39092  98.6325 247.4484 0010738 258.3712 101.6263 14.33353747    74
```

For more information visit
http://amsat-uk.org/satellites/strand-1/strand-1-telemetry/

[ANS thanks AMSAT-UK for the above information]

ARISS NEWS

Succesful ARISS Contacts

Uplands Elementary School Penticton, British Columbia, Canada - 2013-02-22

A successful ARISS Contact was made with with participants at Uplands Elementary School, Penticton, BC, Canada on 22 Feb. The contact began at approximately 19:36 UTC. The duration of the contact was approximately 9 minutes and 30 seconds. The contact was a telebridge between OR4ISS and IK1SLD.

Astronaut Chris Hadfield talked to students (K-6) throughout the South Okanagan & Similkameen Valleys in beautiful BC. They had students & home school students from Penticton, West Bench, Oliver & Keremeos. The event was hosted at Uplands Elementary, a school located in Penticton. Lisa Edwards, Principal, believes that students can "SOAR with a view to excellence" in the right environment. There has been a team of people in the community whose goal is to make the Ham Radio contact as part of a wider educational experience that inspired students & educators to continue to explore STEM & space exploration for years to come.

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Soleado Elementary School Ranchos Palos, California, USA - 2013-02-25

A successful ARISS Contact was made with with participants at Uplands Elementary School, Penticton, BC, Canada on 22 Feb. Soleado Elementary School, Ranchos Palos Verdes, CA on 25 Feb. The event began at approximately 19:53 UTC. The duration of the contact was approximately 9 minutes and 30 seconds. The contact was direct between NA1SS and KE6JPM. Astronaut Chris Hadfield talked to students.

Soleado Elementary School's mission is to educate each and every one of its students to their fullest potential while cultivating a lifelong love of learning. Named for its beautiful location in the hills of Rancho Palos Verdes, our school is proud of its rich cultural background, academic achievement, and involvement in extra-curricular activities. Our mascot, a rosy-cheeked sun, is an exceptionally fitting characterization of our school, which wraps our students in the arms of a caring and supportive community that nurtures development of the whole child.

Founded in 1968, even Soleado's physical design embodies community and cooperation, with each core educational building housing five classrooms with one wall "open" to a shared "big room" in the center. The open classroom environment facilitates daily teacher collaboration and student interaction within and among grade levels, while "big rooms" allow for large group activities and foster a positive feeling of family among our students and staff. In addition to our strong sense of community and our open classroom model, another distinguishing characteristic of our school is its cultural and linguistic diversity. With 420 "Soleado Suns" this year in grades DK through 5, our student body encompasses families who come directly from 30 different countries speaking 21 languages.

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4th Dimotiko Scholeio Chaidariou, Chaidari, Greece - 2013-02-28

A successful ARISS Contact was made with with participants at 4th Dimotiko Scholeio Chaidariou, Chaidari, Greece on 28 Feb. The event began at approximately 09:42 UTC. The duration of the contact was approximately 9 minutes and 30 seconds. The contact was direct between OR4ISS and J41ISS.

4th Dimotiko Scholeio Chaidariou is located in Chaidari, a suburb in the north-west of Athens. It was constructed in 1978, but it is now being renovated so as to be more energy efficient. It is a two-storey building with 16 classrooms, a Head office and a stuff room.

The school serves 256 pupils, aged between 6 and 12 years old, from 1st Grade through 6th Grade. It is staffed by a headmistress and 24 teachers, 12 of whom teach all subjects required in the curriculum (that is: Greek Language, Mathematics, Geography, History, Science, Religious Education) plus two Physical Education teachers, a Music lessons teacher, two English language teachers, a French language teacher, a German language teacher, a teacher of Art, a teacher for Theatre, an Information & Technology teacher and a teacher responsible for the afternoon zone study. There is also a teacher who helps those pupils with special educational problems. The official lessons are in the morning (Monday - Friday) start at 8:10a.m. and finish at 2:00p.m. All pupils attend morning lessons, but those pupils whose both parents work, stay on at school and they study and prepare their homework for the next day starting at 12:30 p.m. and finish at 4:15p.m.

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Talcott Mountain Science Center & Academy, Avon, Connecticut, USA - 2013-02-28

A successful ARISS Contact was made with with participants at Talcott Mountain Science Center & Academy, Avon, Connecticut, USA on 28 Feb. The event began at approximately 15:53 UTC. The duration of the contact was approximately 9 minutes and 30 seconds. The contact was direct between NA1SS and W1TMS.

Talcott Mountain Science Center is one of Connecticut's premier informal science education institutions. The Center has been an initiator and catalyst in providing enrichment science education to students throughout the Northeast and a leader in teacher in-service education, including special programs for girls in science. TMSC is recognized for its innovations in gifted and talented programs, for its earth and space, alternative energy, atmospheric and environmental science activities for students, with ongoing science and technology in-service education for teachers as well as its one-of-a-kind k-8 model school for intellectually excited students, Talcott Mountain Academy for Mathematics, Science and Technology. Since 1985, Talcott Mountain Science Center has been nationally recognized as a pioneer in the development of interactive video programming in math and science education.

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Contacts hopeful for the coming week

ARISS is requesting listener reports for these contacts. Due to issues with the Kenwood radio that are not fully understood at present, the Ericsson radio is going to be used for these contacts. ARISS thanks everyone in advance for their assistance.

Lycée Polyvalent Anatole France, Cedex, France, direct via F4KIS/P
Contact is a go for: Mon 2013-03-04 11:06:27 UTC 67 deg (If Space X launches on time)

Canyon Owyhee School Services Agency (COSSA), Wilder, ID, direct via W7VOI
Contact is a go for: Mon 2013-03-04 18:49:04 UTC 37 deg (If Space X launches on time)

Stonepark Intermediate School, Charlottetown, Prince Edward Island, Canada, direct via VY2PEI
Contact is a go for: Thu 2013-03-07 16:26:42 UTC 33 deg (If Space X launches on time).

ARISS is an international educational outreach program partnering the participating space agencies, NASA, Russian Space Agency, ESA, CNES, JAXA, and CSA, with the AMSAT and IARU organizations from participating countries.

ARISS offers an opportunity for students to experience the excitement of Amateur Radio by talking directly with crew members on-board the International Space Station. Teachers, parents and communities see, first hand, how Amateur Radio and crew members on ISS can energize youngsters' interest in science, technology, and learning. Further information on the ARISS program is available on the website http://www.ariss.org/ (graciously hosted by the Radio Amateurs of Canada).

[ANS thanks ARISS for the above information]

AMSAT-DC Workshop on Portable Satellite Ground Stations

[This originally appeared in ANS-020, see ANS-055 for details on registration]

The AMSAT-DC Group is planning for a Spring Workshop 2013, to take place on Saturday, March 23, at the NASA Goddard Space Flight Center in Greenbelt, Maryland. It will be a nearly all-day event.

This is a workshop for those who wish to learn more about satellite operations and develop their own portable ground station. Participants will bring their wares to assemble, show, and explain to others that which will feature one or more of the following:

+ One's own laptop computer, with appropriate software installed, such as for satellite tracking, SDR receiver control, antenna control (optional), audio recording, time stamp track, and any of many other apps.

+ The FUNcube Dongle Pro receiver or equivalent. We will emphasize receiving only, and not the transmit side at this particular time.

+ One or more antennas for 146 MHz and 436 MHz, Arrow, Elk, or homebrew on a camera tripod, small mast, homebrew PVC, or handheld.

+ Everything, or almost everything, ought to be designed to be powered from a regulated 12-volt DC source of your choosing. A table will be provided with a shared 120VAC wall outlet within about 50 feet.

Volunteers are invited to join the planning committee (contact Pat at n8pk at amsat.org.) Registration information will be announced by February 15 via the AMSAT News Service (ANS), and on the AMSAT Calendar of Events under http://www.amsat.org

The workshop cost is expected to be low (for incidental items) or free to AMSAT members. Any non-US citizen who would like to attend must contact Pat by February 15 at the latest.

To volunteer or ask questions contact Pat at n8pk at amsat.org.

Links for antenna ideas:
http://arrowantennas.com/
http://www.elkantennas.com/
http://www.g6lvb.com/homebrewarrow.htm
http://www.amsat.org/amsat-new/information/faqs/crow/index.php
http://www.amsat.org/amsat-new/echo/Az_El_Pos.pdf
http://www.wa5vjb.com/references/Cheap%20Antennas-LEOs.pdf
http://www.amsat.org/amsat-new/tools/downloads/iROTOR.pdf
http://www.arrl.org/shop/The-ARRL-Satellite-Handbook/
http://ac6v.com/antprojects.htm

Links for software ideas:
http://www.amsat.org/amsat-new/tools/software.php
http://www.amsat.org/amsat-new/tools/
http://www.moetronix.com/spectravue.htm
http://www.amsat.org/amsat-new/information/faqs/resguide.pdf
http://sdrsharp.com/

Links for receiver ideas:
http://www.funcubedongle.com/
http://www.amsat.org/amsat/intro/sats_faq.html
http://tinyurl.com/cdo9tyo (Spectravue Configuration)
http://sdrsharp.com/

AMSAT-DC
http://patkilroy.com/amsat-dc/

[ANS thanks Pat Kilroy, N8PK, AMSAT Area Coordinator, Maryland-DC for the above information]

AMSAT Forum at ACADIANA ARA Hamfest - Free Admission Coupons for Youth

ACADIANA ARA would like to invite you to our 2013 Hamfest, March 8 and 9 at the Rayne Civic Center, Rayne Louisiana . Attached is our Hamfest flyer with all the information and a FREE admission coupon for you and your parents to attend our hamfest. Come out to the hamfest to meet other hams, see new and used radio equipment, attend forums, operate the radios set up for demonstration, or watch AARL movies.

This is a once a year opportunity to enjoy this segment of the hobby, I hope you can join us.

Note that Nick Pugh, K5QXJ, will be sponsoring an AMSAT Forum Saturday March 9 at 9am, during the Hamfest.

For more information visit
http://www.w5ddl.org/hamfest/Files/AARA%20Hamfest%20Flyer.pdf

[ANS thanks Nick Pugh for the above information]

Korean OSSI-1 Ham Radio CubeSat Frequency Coordinated

The IARU amateur radio satellite frequency coordination panel has announced the frequencies for the OSSI-1 CubeSat developed by Hojun

Song DS1SBO.

Artist and radio amateur Hojun Song DS1SBO has spent 7 years developing his Open Source Satellite Initiative satellite OSSI-1. He has designed and developed it from scratch using readily available components rather than expensive space qualified hardware. It has a beacon in the 145 MHz band, a data communications transceiver in the 435 MHz band and carries a 44 watt LED optical beacon to flash Morse Code messages to observers on Earth.

OSSI-1 is planned to launch on April 19, 2013 into a 575 km 64.9° inclination orbit on a Soyuz-2-1b rocket from the Baikonur launch facility in Kazakhstan along with the Bion-M1, SOMP, BEESAT 2, BEESAT 3 and Dove-2 satellites.

The IARU amateur satellite frequency coordination panel has announced frequencies for a downlink on 145.980 MHz and an uplink/downlink on 437.525 MHz.

Video – How the Amateur Radio Satellite OSSI-1 Works
http://tinyurl.com/bdckaqb

Watch the BBC TV report: Korean artist has high hopes for his homemade satellite
http://www.bbc.co.uk/news/world-asia-19007475

OSSI CubeSat in New Scientist Magazine
http://amsat-uk.org/2012/11/06/ossi-cubesat-in-new-scientist-magazine/

Hojun Song DS1SBO visited London to give a well received presentation on his CubeSat to WIRED 2012
http://tinyurl.com/bcjw83z

Data Format for Korean OSSI CubeSat
http://amsat-uk.org/2013/01/23/data-format-for-korean-ossi-cubesat/

More background on OSSI Cubesate can be found in ANS-027:
Open Source Satellite OSSI CubeSat Launch in April 201

Open Source Satellite Initiative (OSSI) http://opensat.cc/

[ANS thanks AMSAT-UK for the above information]

ARRL Offers Two Sessions of their Teachers Institute

The ARRL Education & Technology Program has announced the schedule for two sessions of our professional development workshop, the Teachers Institute on Wireless Technology (TI-1) being offered during July 2013.

"We are also pleased to announce that Dayton Amateur Radio Association will be supporting and hosting a new professional development opportunity, an advanced Teachers Institute (TI-2) on Remote Sensing and Data Gathering, at their new educational facility. A March QST article includes a description of this new workshop. Please visit the ARRL website at:
http://www.arrl.org/teachers-institute-on-wireless-technology
for more information about Teachers Institute curriculum content, participant requirements, dates and locations and other details. Go to www.arrl.org/teachers-institute-application to download an application."

Tuition, resources and most expenses to attend the Teachers Institute are paid by donations to the ARRL Education & Technology Fund. Donate to support Wireless Technology Literacy today!

[ANS thanks Debra Johnson and the ARRL for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

Primary and secondary school students are eligible for membership at one-half the standard yearly rate. Post-secondary school students enrolled in at least half time status shall be eligible for the student rate for a maximum of 6 post-secondary years in this status. Contact Martha at the AMSAT Office for additional student membership information.

73,
This week's ANS Editor,
EMike McCardel, KC8YLD
kc8yld at amsat dot org

```
From 3012842483358093346
X-Google-Thread: 8f86f75953,4f97760f92140378,start
X-Google-Attributes: gid8f86f75953,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
X-Received: by 10.180.24.132 with SMTP id u4mr669685wif.6.1362844066097;
        Sat, 09 Mar 2013 07:47:46 -0800 (PST)
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border4.nntp.ams.giganews.com!border2.nntp.ams.giganews.com!nntp.giganews.com!de-
l.enfer-du-nord.net!feeder2.enfer-du-nord.net!newsfeed.kamp.net!newsfeed.kamp.net!
newsfeeder.ewetel.de!npeer.de.kpn-eurorings.net!npeer-ng0.de.kpn-eurorings.net!
bloom-beacon.mit.edu!panix!rri.panix.com!robomod!not-for-mail
From: SWPC.Webmaster@noaa.gov
Newsgroups:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.shor
twave,rec.radio.info
Subject: Weekly Highlights of Solar and Geomagnetic Activity, 25 February - 03
March 2013
Followup-To:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.shor
twave
Date: Mon, 4 Mar 2013 11:34:54 EST
Organization: NOAA Space Weather Prediction Center
Lines: 72
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <20130304163002.3A3E933C8E@panix2.panix.com>
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X-Trace: reader1.panix.com 1362414894 16133 166.84.1.6 (4 Mar 2013 16:34:54 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Mon, 4 Mar 2013 16:34:54 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to            rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Bytes: 5499
```

```
:Product: Weekly Highlights and Forecasts
:Issued: 2013 Mar 04 0205 UTC
# Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center
# Product description and SWPC contact on the Web
# http://www.swpc.noaa.gov/weekly.html
#
#                 Weekly Highlights and Forecasts
#
```

Highlights of Solar and Geomagnetic Activity
25 February - 03 March 2013

Solar activity was very low for most of the week, with only B-class flares observed. The majority of the B-class activity was split between Regions 1682 (S18, L=299, class/area=Dai/240 on 01 Mar) and

1683 (S16, L=202, class/area=Eai/210 on 02 Mar) both of which developed beta-gamma magnetic characteristics during the week. Activity increased to low levels on 02 Mar, when Region 1687 (N06, L=166, class/area=Cro/30 on 03 Mar) produced a C1 flare at 1511 UTC and again at 1847 UTC. All three of the regions mentioned remain on the visible disk at the time of this report.

A greater than 10 MeV proton enhancement was observed from a long duration B9 flare which occurred on 25 Feb at 1151 UTC and was attributed to old Region 1678 (N11, L=069) which had rotated around the West Limb two days earlier. The proton flux enhancement began on 27 Feb, reached a peak of 0.995 pfu at 28/0440 UTC, and returned to background levels early on 01 Mar.

The greater than 2 MeV electron flux at geosynchronous orbit was at low to moderate levels until 02 Mar when it rose to 3800 pfu in response to the arrival of a significant coronal hole high speed stream. Flux remained at high levels through the end of the period.

Geomagnetic field activity was quiet for most of the week. However, on 28 Feb around 15-17 UTC, a corotating interaction region (CIR) and subsequent high speed solar wind stream (HSS) became geoeffective. Solar wind speed which had been in the mid 300 km/s range began rising and eventually peaked at 675 km/s early on 02 Mar. Bt rose to 18 nT by 01/0817 UTC while Bz ranged from +14 to -16 nT. The Phi angle shifted from a positive (away) orientation to a negative (towards) orientation. The magnetosphere responded with unsettled levels late on 28 Feb. Geomagnetic activity quickly climbed to active levels for most of 01 Mar, punctuated by one period of minor storm levels during the 09-12 UTC synoptic period. This response was no doubt exacerbated by the favorable orientation described by the Russel-McPherron effect. Solar wind speed declined abruptly between 02/11-15 UTC, dropping from about 590 to around 480 km/s, then began a slow decline back to around 400 km/s by the end of the week. After an active first period on 02 Mar, the remainder of the week saw quiet to unsettled activity levels.

Forecast of Solar and Geomagnetic Activity
04 March - 30 March 2013

Solar activity is expected to be very low to low with a slight chance for an isolated M-class event. The threat of an M-class flare is most probable between 11 and 23 Mar with the return of old Region 1675.

No proton events are expected at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to begin the period at high levels in response to the continued presence of a recurrent coronal hole high speed stream but decline to normal to moderate levels after 06 Mar. High levels are possible again in the last day of the forecast period with the return of a recurrent coronal hole high speed stream.

Geomagnetic field activity is expected to be predominantly quiet to
unsettled. Active periods are possible on 28 March with the return
of a recurrent coronal hole high speed stream.

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X-Google-Attributes: gid8f86f75953,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
X-Received: by 10.224.213.197 with SMTP id gx5mr20543000qab.8.1362595672843;
        Wed, 06 Mar 2013 10:47:52 -0800 (PST)
X-Received: by 10.49.1.70 with SMTP id 6mr3142786qek.27.1362595672780; Wed, 06
 Mar 2013 10:47:52 -0800 (PST)
Path: p7ni59qai.0!nntp.google.com!dd2no7585782qab.0!postnews.google.com!
glegroupsg2000goo.googlegroups.com!not-for-mail
Newsgroups: rec.radio.amateur.space
Date: Wed, 6 Mar 2013 10:47:52 -0800 (PST)
Complaints-To: groups-abuse@google.com
Injection-Info: glegroupsg2000goo.googlegroups.com; posting-host=188.190.124.68;
 posting-account=lpvsOQoAAADrItjCNLUGUA4f5NKzjLsd
NNTP-Posting-Host: 188.190.124.68
User-Agent: G2/1.0
MIME-Version: 1.0
Message-ID: <231b980d-7e58-4d2f-b147-c5584b34535d@googlegroups.com>
Subject: Darlas footjob
From: Iran <tamarmadgecay@gmail.com>
Injection-Date: Wed, 06 Mar 2013 18:47:52 +0000
Content-Type: text/plain; charset=ISO-8859-1
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Darlas footjob   http://t.co/vLN1gAxF

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X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
X-Received: by 10.182.0.19 with SMTP id 19mr2587964oba.38.1363060954656;
        Mon, 11 Mar 2013 21:02:34 -0700 (PDT)
Path: q9ni12235pba.1!nntp.google.com!border1.nntp.dca.giganews.com!
backlog1.nntp.ams.giganews.com!border3.nntp.ams.giganews.com!
border1.nntp.ams.giganews.com!border4.nntp.ams.giganews.com!
border2.nntp.ams.giganews.com!nntp.giganews.com!weretis.net!
feeder1.news.weretis.net!feeder.erje.net!eu.feeder.erje.net!goblin1!
goblin.stu.neva.ru!news.astraweb.com!border6.a.newsrouter.astraweb.com!not-for-
mail
From: Chris Steyaert <observations@rmob.org>
Newsgroups: rec.radio.amateur.space,sci.astro.amateur
Subject: Radio Meteor Obs. Bull. February 2013
Date: Wed, 06 Mar 2013 20:19:13 +0100
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Message-ID: <sj5fj8t9fk98uv8sm8jn6oo1jbhrgqg782@4ax.com>
X-Newsreader: Forte Agent 5.00/32.1171
MIME-Version: 1.0
Lines: 14
Organization: Unlimited download news at news.astraweb.com
NNTP-Posting-Host: 206e9a3b.news.astraweb.com
X-Trace: DXC=>D_<6Jf7?I^;0`5D\QI41SL?
0kYOcDh@Zh5C[T]=8RhV_b@5OPGQ]WT]JePKYMDORYb3<D_UX>L;YY49]Cn<7>KP9F=3V^:g?
>Xh2>hNeX?bCQ
Bytes: 1370
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Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
```

Radio Meteor Observation Bulletin No. 235 of February 2013 (72 K) is available now as

http://www.rmob.org/rmobtext/rmob1302.txt

More information and the visual presentation of the hourly forward scatter counts can be found on

http://www.rmob.org

Chris

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From -6423940739378750141
X-Google-Thread: addc8bf063,19f256845cda15e9
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X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII
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X-Received: by 10.49.120.105 with SMTP id lb9mr1676527qeb.17.1362602961843;
 Wed, 06 Mar 2013 12:49:21 -0800 (PST)
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l9g2000yqp.googlegroups.com!not-for-mail
Newsgroups: rec.radio.amateur.space,sci.astro.amateur
Date: Wed, 6 Mar 2013 12:49:21 -0800 (PST)
Complaints-To: groups-abuse@google.com
Injection-Info: l9g2000yqp.googlegroups.com; posting-host=98.141.188.45; posting-
account=LrLGLAkAAAAGjouKUEM9rprSVVG_OeJd
NNTP-Posting-Host: 98.141.188.45
References: <sj5fj8t9fk98uv8sm8jn6oo1jbhrgqg782@4ax.com>
User-Agent: G2/1.0
X-HTTP-UserAgent: Mozilla/5.0 (Windows NT 6.0) AppleWebKit/537.22 (KHTML, like
 Gecko) Chrome/25.0.1364.97 Safari/537.22,gzip(gfe)
Message-ID: <c676aecc-7800-4b62-96eb-d34a44dad357@l9g2000yqp.googlegroups.com>
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Subject: Re: Radio Meteor Obs. Bull. February 2013
From: Robert Clark <rgregoryclark@gmail.com>
Injection-Date: Wed, 06 Mar 2013 20:49:21 +0000
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: quoted-printable

On Mar 6, 2:19=A0pm, Chris Steyaert <observati...@rmob.org> wrote:
> Radio Meteor Observation Bulletin No. 235 of February 2013 (72 K) is avai=
lable
> now as
>
> =A0 =A0 =A0 =A0http://www.rmob.org/rmobtext/rmob1302.txt
>
> More information and the visual presentation of the hourly forward scatte=
r
> counts can be found on
>
> =A0 =A0 =A0 =A0http://www.rmob.org
>
> =A0 =A0 =A0 =A0 Chris

 Were there observed a greater number than usual this last February?

  Bob Clark


From 4198077778831180757
X-Google-Thread: a4a23d5f63,309207f218e646fe,start
X-Google-Attributes: gida4a23d5f63,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII
X-Received: by 10.180.189.209 with SMTP id gk17mr848994wic.7.1362880119851;
        Sat, 09 Mar 2013 17:48:39 -0800 (PST)
MIME-Version: 1.0
Path: g1ni56624wig.0!nntp.google.com!proxad.net!feeder1-2.proxad.net!
news.glorb.com!news-out.readnews.com!transit3.readnews.com!panix!rri.panix.com!
robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-069 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sat, 9 Mar 2013 20:48:39 EST
Organization: The Radio Amateur Satellite Corporation
Lines: 521
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <001e01ce1d31$0f15c110$2d414330$@net>
Reply-To: ans-editor@amsat.org
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NNTP-Posting-Date: Sun, 10 Mar 2013 01:48:39 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
```

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X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
DKIM-Signature: v=1; a=rsa-sha256; c=relaxed/relaxed; d=comcast.net;
     s=q20121106; t=1362880099;
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AMSAT NEWS SERVICE
ANS-069

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor at amsat.org

In this edition:

- AMSAT Now Preparing for Two Launch Opportunities
- AMSAT.ORG Web Site Testing On-Line Now
- SpaceTrack Approves AMSAT Request for Redistribution of KEPS
- Help Wanted: AMSAT News Service Rotating Editor Positions Available
- Rare Grid Square Opportunities
- SARL National Convention Includes SumbandilaSat Ground Station Visit
- NASA-TV Coverage Schedule for ISS Expedition 34 Departure/Landing
- 2013 Amateur Transponder Launch Opportunity Summary
- ARISS School Contacts Nearing 800 Mark
- NASA Summer 2013 Internship Applications Close on March 15
- Microsoft Blocking arrl.net and arrl.org E-mail Addresses
- Satellite Shorts From All Over

SB SAT @ AMSAT $ANS-069.01
ANS-069 AMSAT News Service Weekly Bulletins

AMSAT News Service Bulletin 069.01
>From AMSAT HQ SILVER SPRING, MD.
March 10, 2013
To All RADIO AMATEURS
BID: $ANS-069.01

Reminder! AMSAT-DC Spring Workshop on Portable Satellite Ground Stations - Saturday, March 23, 2013, at the NASA Goddard Space Flight Center in Greenbelt, MD beginning at 9:00AM EDT. Pre-registration is required. To register call Martha at the AMSAT Office 301-589-6062 no later than Thursday, March 21. Sorry, no late registration at the door! See full details at:

http://patkilroy.com/amsat-dc/

The suggested donation for advanced registration and admission for non-AMSAT members is $25. Registration for AMSAT members registering in advance is free.

AMSAT Now Preparing for Two Launch Opportunities

AMSAT's focus on STEM education and development of a cubesat platform capable of flying a science mission with a reliable communications link resulted in our previous selection of Fox-1 in the third round and RadFxSat (Fox-1B) in the recent fourth round of NASA's Cubesat Launch Initiative. Actual launch vehicle selections are dependent on the availability of auxiliary payload space and on what orbits are required.

AMSAT VP Engineering Tony Monteiro reports that he has been in conversation with NASA about our orbital preferences/priorities and we're awaiting a response from NASA as to a specific launch selection. In the meantime, the engineering team expects to complete Fox-1 in 2013 and have RadFxSat ready in the 2nd half of 2014 in order to take advantage of launch opportunities that may be offered by NASA.

Fox-1 and the RadFxSat missions are based on similar system architecture. Both satellites:

+ Include a U/V (mode B) FM analog transponder. Its 2 meter down link should be even easier to hear than AO-51.

+ Are designed so you can work it with just a dual-band HT and an "arrow" hand-held antenna.

+ Will send telemetry on the voice downlink in the frequencies below the audible band as low-speed FSK with forward error correction.

- Will support a high speed digital data mode.

- A free telemetry decode program, FoxTLM, will be available to decode and display the low-speed telemetry and the high speed data downlink on Fox-1. An update will be provided for RadFxSat.

- All Fox cubesats are designed to host advanced science payloads to support future science missions that help us to continue qualify for NASA ELaNa (free) launches.

AMSAT President Barry Baines, WD4ASW summarized the Fox cubesat program, "Although we are subject to the same launch constraints as every other satellite builder accepted in the Cubesat Launch Initiative, we will be ready for a launch opportunity when it is offered. As soon as we know when we're manifested that information will be shared with our members."

[ANS thanks the Fox Engineering Team and AMSAT President Barry Baines, WD4ASW for the above information]

AMSAT.ORG Web Site Testing On-Line Now

The web development team, working on the recovery of the AMSAT-NA web at http://www.amsat.org, reports the site is becoming active with testing of the system. As testing proceeds visitors to AMSAT's site will begin to see restoration of prior functionality and introduction of new features where appropriate.

AMSAT VP User Services Gould Smith, WA4SXM said, "Our web team is making good progress in the restoration of popular features our users counted on in the past. This also gives us an opportunity to review some of the older content to prioritize in what order the system is brought back up."

Although the pages seem sparsely populated at present, soon the entire web presence will assume a new look-and-feel with additional functionality, restored features, background graphics templates and overall look-and-feel. A site map feature is planned for development allowing quick navigation of the site's future multiple features.

Clicking on "SAT STATUS" on the top of the new page will bring you to the Live OSCAR Satellite Status Page which currently resides at http://oscar.dcarr.org/.

The roll-out of the Fox Project web pages can be accessed with a click on the menu bar at the top of the home page.

Gould noted, "With the introduction of AMSAT's new web technology we plan to use a new content management system to roll out important and and breaking satellite news via the web page as soon as our volunteers have the chance to post them." Continuing, Gould said, "We will still maintain our existing distribution via the AMSAT News Service so e-mail subscribers will not need to change anything. The ANS bulletins will still arrive in your in-box once a week."

You are invited to view the prototyping work in-progress on the new AMSAT-NA web. Use the URL http://www.amsat.org. If you have prior cache entries or bookmarks set to www.amsat.org/amsat-new those will no longer work.

[ANS thanks AMSAT VP User Services Gould Smith, WA4SXM and Joe Fitzgerald, KM1P for the above information]

SpaceTrack Approves AMSAT Request for Redistribution of KEPS

AMSAT-NA Orbital Data Manager Ray Hoad, WA5QGD announced this week that AMSAT's request to re-distribute Air Force Space Command (AFSPC) Keplerian elements from SpaceTrack has been approved on March 7 for the period April 1, 2013 to April 1, 2014. Ray wrote, "Thanks to AFSPC, Perry Klein, W3PK and Paul Williamson, KB5MU for their help in this process. Once again, we are 'good to go"' for another year."

[ANS thanks Ray Hoad, WA5QGD for the above information]

Help Wanted: AMSAT News Service Rotating Editor Positions Available

The AMSAT News Service (ANS) is responsible for researching, writing, editing, and publishing the weekly amateur satellite news bulletins.

With the addition of a couple of volunteers this would generally involve taking a turn about every 3 to 4 weeks.

At present we a looking for interested satellite enthusiasts to join the ANS editorial team. Professional writing/editing experience is NOT a requirement. Your interest and enthusiasm in following and reporting on amateur radio in space will get you started! The ANS Editor team helps each other by rounding up items of interest. Plus we receive submitted items for publication ... so you won't be left all alone!

If you can commit to working on the bulletins for a week on a rotating basis please reply via e-mail to AMSAT News Service Editor

Lee McLamb, KU4OS via ku4os at amsat.org.

[ANS thanks AMSAT Vice-President User Services, Gould Smith, WA4SXM for the above information]

Rare Grid Square Opportunities

Antigua and Barbuda

Nikolai Ozerov, VE3NKL plans to operate as V26NK from grid square FK97 in Aruba on daytime SO-50 passes between March 11-16. He will be looking for contacts with North American, Caribbean, Central American, and South American stations depending on the pass.

Mawson Station, Antarctic

Craig Hayhow signing VK0JJJ from Australia's Mawson Base in the Antarctic, 67�36' S 62�52' E, grid MC12kj is reportedly equipped with an Arrow antenna for operating satellites. Craig has also activated the VK0RTM/B 6 meter beacon on 50.300 MHz running at 50 watts. He will also be on the air on HF phone and digital modes. (via Austraila WIA News, March 3)

[ANS thanks Nikolai Ozerov, VE3NKL, and Australia WIA News for the above information]

Plan Ahead for KV1J on Satellites from Island of Miquelon

Eric, KV1J, will once again be operating from the Island of Miquelon (NA-032, DIFO FP-002 WLOTA 1417, Grid GN17) as FP/KV1J between July 6-16th. Activity will include HF and 6M and look for him on the satellites, weather permitting.

[ANS thanks OPDX Bulletin, ARRL DX News for the above information]

NASA-TV Coverage Schedule for ISS Expedition 34 Departure/Landing

Expedition 34 will handover command of the International Space Staon on Wednesday, March 13 as Commander Kevin Ford KF5GPP of NASA, Russian Soyuz Commander Oleg Novitskiy and Russian Flight Engineer Evgeny Tarelkin prepare for their return to Earth aboard a Soyuz spacecraft. Landing in Kazakhstan is planned to occur on March 14 at 11:57 PM EDT (UTC-4).

Expedition 35 will begin aboard the station under the command of

Chris Hadfield KC5RNJ/VA3OOG of the Canadian Space Agency. Hadfield will be the first Canadian commander. Expedition 35 also includes NASA astronaut Tom Marshburn KE5HOC and Russian cosmonaut Roman Romanenko. In two weeks they will be joined by three additional crew members: NASA astronaut Chris Cassidy and Russian cosmonauts Pavel Vinogradov RV3BS and Alexander Misurkin.

NASA TV has posted the following schedule of events which will be streamed on-line at http:www.nasa.gov/ntv:

(all times are US Eastern Daylight Time EDT or UTC-4)

March 13, Wednesday
5:10 p.m. - ISS Expedition 34/35 Change of Command Ceremony Ford hands over ISS command to Hadfield

March 14, Thursday
4:45 p.m. - ISS Expedition 34 Farewells and Hatch Closure Coverage with hatch closure scheduled at 5:15 p.m.
8:15 p.m. - ISS Expedition 34/Soyuz TMA-06M Undocking Coverage with undocking scheduled at 8:30 p.m.
10:45 p.m. - ISS Expedition 34/Soyuz TMA-06M Deorbit Burn and Landing Coverage with Deorbit burn scheduled at 11:04 p.m.; landing near Arkalyk, Kazakhstan scheduled at 11:57 p.m.

March 15, Friday
2 a.m. - Video File of the ISS Expedition 34/Soyuz TMA-06M Landing and Post-Landing Activities
1:40 p.m. - ISS Expedition 35 VIP Event for the Canadian Space Agency
2 p.m. - Video File of the ISS Expedition 34/Soyuz TMA-06M Landing and Post-Landing Activities; scheduled to include post-landing interview with Expedition 34 Commander Kevin Ford of NASA and the return of Cosmonauts Oleg Novitskiy and Evgeny Tarelkin to Chkalovsky Airfield near Star City, Russia.

[ANS thanks NASA for the above information]

SARL National Convention Includes SumbandilaSat Ground Station Visit

The South African Radio League (SARL) 2013 National Convention will open on April 26 with a welcoming function at the West Rand Amateur Radio Club. The SARL Annual General Meeting will be held on Saturday morning April 27. Beginning on March 4, registration forms and program details will be available on http://www.sarl.org.za.

On Saturday afternoon there is a visit to the Hartbeeshoek satellite tracking station where many international satellites are tracked and managed. This also includes a visit to see the SumbandilaSat ground station.

[ANS thanks SARL News, March 3 for the above information]

2013 Amateur Transponder Launch Opportunity Summary

In addition to the AMSAT-NA Fox cubesat launch opportunity announcements several other satellites with amateur radio transponders are expected to launch during 2013. Here is a summary of the upcoming launch plans:

- A 2013 Yasny Dnepr Launch should have:
  - AMSAT-UK FUNcube-1 435/145 MHz 500mW PEP linear transponder and 1200 bps BPSK beacon for educational outreach for a planned 600-700km orbit.
  - Delfi n3xT 435/145 MHz linear transponder
  - Triton-1 435/145 MHz single channel FM to DSB transponder
  - Triton-2 435/2408 MHz FM transponder + 435/145 MHz FM to DSB transponder
  - CPUT ZACube-1 435/145 MHz FM transponder

- In 2nd quarter 2013 TURKSAT-3USAT with a 145/435 MHz linear transponder (see ANS-069: "May 2013 Launch for TURKSAT-3USAT Linear Transponder Cubesat", http://amsat.org/pipermail/ans/2013/000694.html)

- June 2013 Ukube-1 with AMSAT-UK FUNcube boards to provide an amateur radio 435/145 MHz linear transponder and a 1200 bps BPSK beacon for educational outreach.

[ANS thanks the satellite teams for the above information]

ARISS School Contacts Nearing 800 Mark

This week the total number of ARISS ISS to earth school events (each school counts as one event) is 797.

Prince Edward Island, Canada

A successful ARISS contact was completed with the Stonepark Intermediate School, Charlottetown, Prince Edward Island, Canada, on Thursday, March 7. The contact was be direct between NA1SS and VY2PEI.

Grade 9 students at Stonepark Intermediate, Charlottetown, PEI preparing for their contact with the International Space Station through a number of in class activities, research and guest speakers. In the past three months they researched life on the ISS and watched YouTube segments of various facets of the ISS. Any news stories featuring Chris Hadfield and the ISS were read and discussed. The students attended sessions by a local university professor of engineering who worked for NASA and local amateur radio operators. Both sessions gave students insight into the workings ISS, NASA and the ham radio.

France

A successful ARISS contact was completed with the Lyc�e Polyvalent Anatole France, Cedex, France on March 9. The contact was direct between OR4ISS and F4KIS.

Anatole France is a French high school located in Lillers, a small town in the center of the Pas-de-Calais department. There are about 850 students aged between 15 and 20 years old. The science teachers and the local amateur radio club F6KIS, which became in 2010 the "Artois Lys Radio Club", have developed a partnership since 2007 collaborating on projects to send sounding balloons into the stratosphere. This year, they are working with a group of students to contact the ISS. The students are preparing the TPE project for their final exam. They need to define the subject of their research, find information about it and run experiments over a period of six months in order to give an oral presentation of their work in front of a jury.

ARISS Contacts Planned for Coming Week

Monday, March 9: Valley Manor School, Martensville, SK, Canada, direct via VE5RAC at 19:23:56 UTC 34 deg.

Tuesday, March 12: Mt. Ousley Public School, Fairy Meadow, NSW, Australia, telebridge via IK1SLD at 07:35:42 UTC 44 deg. For listeners in the Wollongong and Sydney area, the historic event will be relayed onto the VK 2 RMP repeater on 6850 at Maddens Plains. For interstate or overseas listeners, the event will be relayed onto IRLP Node 9010 and on Echolink via the AMSAT Conference Bridge.

ARISS is requesting listener reports for this contact. Due to issues with the Kenwood radio that are not fully understood at present, the Ericsson radio is going to be used for this contact. ARISS thanks everyone in advance for their assistance. Due to continuing Space X operations, the above times are subject to last minute changes or cancellations.

[ANS thanks ARISS for the above information]

NASA Summer 2013 Internship Applications Close on March 15

The NASA One Stop Shopping Initiative, or OSSI, strives to provide students at all institutions of higher education access to a portfolio of internship, fellowship and scholarship opportunities offered by NASA mission directorates and centers.

Visit the Office of Education Infrastructure Division LaunchPad to find information on internship, fellowship and scholarship opportunities. The site features the OSSI online application for recruiting NASA Interns, Fellows and Scholars, or NIFS. This innovative system allows students to search and apply for all types of higher-education NASA internship, fellowship and scholarship opportunities in one location. A single application places the student in the applicant pool for consideration by all NASA mentors.

Applications for summer 2013 opportunities are due March 15, 2013.

To find available opportunities and to fill out an OSSI online application for recruiting NIFS, visit https://intern.nasa.gov/index.html.

Inquiries about the OSSI should be submitted via https://intern.nasa.gov/oic/.

[ANS thanks NASA Education Express Message, March 7, 2013 for the above information]

Microsoft Blocking arrl.net and arrl.org E-mail Addresses

The ARRL IT staff has been notified that Microsoft is blocking e-mail to the more than 20,000 members who use the arrl.net e-mail forwarding service to forward e-mail to Microsoft domains (hotmail.com, msn.com, live.com and outlook.com). In addition, the blockage is also affecting those members of the ARRL's Field Organization and other ARRL volunteers who use an arrl.org alias e-mail address to have e-mail delivered to an address with a Microsoft domain. According to ARRL Information Technology Manager Michael Keane, K1MK, the IT staff is working to have these blocks lifted and e-mail delivery restored to normal operation as quickly as possible.

[ANS thanks the ARRL Letter March 7, 2013 for the above information]

Satellite Shorts From All Over

+ Mike Rupprecht DK3WN has produced a summary of all active amateur radio satellites with frequencies and links to more detailed information. See: http://www.dk3wn.info/p/?page_id)535

+ Here is another one of the outstandingly cool time-lapse photography-videos from the ISS: http://tinyurl.com/cool-ISS-video (youtube)

+ SpaceRef.com posted video of the March 4 SpaceX Dragon docking with the International Space Station: http://tinyurl.com/SpaceRef-Dragon-Docking (SpaceRef.com)

+ AMSAT-UK gets nice recognition in this article about STRaND-1: http://spaceref.com/news/viewpr.html?pid@267

+ The on-line CQ Newsroom posted news of amateur radio participation during the recent Plasma Shadowing Experiment aboard the ISS. This story and other amateur radio news can be read at: http://cqnewsroom.blogspot.com/

+ The VHF Plus column by Joe Lynch, N6CL in the March 2013 CQ Magazine discusses the Fox-1 satellite (pages 78-79).

+ This coming week is the best time to watch for the Comet PanSTARRS. Viewing information and diagrams are posted at: http://www.skyandtelescope.com/letsgo/whatsuptonight/194257261.html

+ HAM RADIO 2013 Convention, organized by Deutscher Amateur Radio Club will take place from Friday, June 28 through Sunday, June 30, 2013 in Friedrichshafen, Germany.

[ANS thanks everyone for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

Primary and secondary school students are eligible for membership at one-half the standard yearly rate. Post-secondary school students enrolled in at least half time status shall be eligible for the student rate for a maximum of 6 post-secondary years in this status.

Contact Martha at the AMSAT Office for additional student membership information. And with that please keep in mind when in 1987 Ivan Sutherland, when asked "How could you possibly have done the first interactive graphics program, the first non-procedural programming language, the first object-oriented software system, all in one year?" ... replied, "Well, I didn't know it was hard."

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM

```
From 8360918383530635258
X-Google-Thread: 10e8ad,19f256845cda15e9
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X-Received: by 10.180.24.132 with SMTP id u4mr1409646wif.6.1362940153986;
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eu.feeder.erje.net!eweka.nl!lightspeed.eweka.nl!69.16.177.246.MISMATCH!
cyclone03.ams2.highwinds-media.com!news.highwinds-media.com!voer-me.highwinds-
media.com!news.astraweb.com!border6.a.newsrouter.astraweb.com!not-for-mail
From: Chris Steyaert <observations@rmob.org>
Newsgroups: rec.radio.amateur.space
Subject: Re: Radio Meteor Obs. Bull. February 2013
Date: Sun, 10 Mar 2013 19:29:13 +0100
Message-ID: <q4kpj8l9h1hdfjili3hdfmcf4s98rgm0ub@4ax.com>
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X-Newsreader: Forte Agent 5.00/32.1171
MIME-Version: 1.0
Lines: 32
Organization: Unlimited download news at news.astraweb.com
NNTP-Posting-Host: 0a470ced.news.astraweb.com
X-Trace: DXC=j8gM6KQP2]^;0`5D\QI41SL?
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X-Received-Bytes: 1582
Content-Type: text/plain; charset=utf-8
Content-Transfer-Encoding: 8bit
```

> Were there observed a greater number than usual this last February?
>
> Bob Clark

No. Compare with past years:

http://rmob.org/articles.php?lng=en&pg=28

```
     Regards,

     Chris

On Wed, 6 Mar 2013 12:49:21 -0800 (PST), Robert Clark <rgregoryclark@gmail.com>
wrote:

>On Mar 6, 2:19 pm, Chris Steyaert <observati...@rmob.org> wrote:
>> Radio Meteor Observation Bulletin No. 235 of February 2013 (72 K) is available
>> now as
>>
>>        http://www.rmob.org/rmobtext/rmob1302.txt
>>
>> More information and the visual presentation of the hourly forward scatter
>> counts can be found on
>>
>>        http://www.rmob.org
>>
>>         Chris
>
> Were there observed a greater number than usual this last February?
>
>  Bob Clark


From 6846732431601342618
X-Google-Thread: a4a23d5f63,6c1584e155edcda8,start
X-Google-Attributes: gida4a23d5f63,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
X-Received: by 10.68.138.165 with SMTP id qr5mr7944837pbb.8.1363015810853;
        Mon, 11 Mar 2013 08:30:10 -0700 (PDT)
MIME-Version: 1.0
Path: q9ni11150pba.1!nntp.google.com!news.glorb.com!usenet.stanford.edu!panix!
rri.panix.com!robomod!not-for-mail
From: SWPC.Webmaster@noaa.gov
Newsgroups:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.shor
twave,rec.radio.info
Subject: Weekly Highlights of Solar and Geomagnetic Activity, 04 - 10 March 2013
Followup-To:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.shor
twave
Date: Mon, 11 Mar 2013 11:30:09 EDT
Organization: NOAA Space Weather Prediction Center
Lines: 63
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <20130311153001.5E5C833C8E@panix2.panix.com>
NNTP-Posting-Host: panix6.panix.com
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X-RRI-Info-1: Send submissions to            rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump

:Product: Weekly Highlights and Forecasts
:Issued: 2013 Mar 11 0413 UTC
# Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center
# Product description and SWPC contact on the Web
# http://www.swpc.noaa.gov/weekly.html
#
#                 Weekly Highlights and Forecasts
#
```

Highlights of Solar and Geomagnetic Activity
04 - 10 March 2013

Solar activity ranged from very low to moderate levels. A majority of the week was dominated by very low levels with only B-class events observed on 04, 06 and 08 - 10 March. Activity increased to moderate levels on 05 March when Region 1686 (S13, L=263, class/area Dac/140 on 06 March) produced an impulsive M1/Sf flare at 05/0754 UTC. Associated with this event were weak, low frequency radio emissions including a Type II signature with an estimated shock velocity of 1011 km/s. Later on 05 March, this region produced a C1 event at 2044 UTC as well as another C1 event at 08/1644 UTC as it rotated off the visible disk. The other spotted regions on the disk were quiet and stable through the period. No Earth-directed CMEs were detected during the week.

No proton events were observed at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit was at high levels 04 - 08 March, reaching a peak flux of 7905 pfu at 06/1925 UTC. Flux levels decayed to moderate levels on 09 - 10 March.

Geomagnetic field activity was at predominately quiet levels with an isolated unsettled period observed at 05/0000 - 0300 UTC. Solar wind speed, as measured at the ACE spacecraft, ranged from a high of about 500 km/s early on 04 March and exhibited a slow, steady decay in speed through the week, ending the period near 340 km/s. Total field measurements ranged from 1 nT to 9 nT while interplanetary magnetic field Bz ranged between +/- 5 nT. The Phi angle began the period in a mostly negative (towards) orientation through about 06/0800 UTC. Through the remainder of the period, field orientation was variable, shifting from negative to positive (away).

Forecast of Solar and Geomagnetic Activity
11 March - 06 April 2013

Solar activity is likely to be low through the period. A slight chance for M-class activity exists through 16 March while Region 1689 remains on the disk, and again from 21 March - 03 April with the return of old Region 1686 (S12, L=263).

No proton events are expected at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to be at normal to moderate levels through 28 March. Moderate to high levels are possible from 29 March - 04 April with the return of a recurrent coronal hole high speed stream (CH HSS). Normal to moderate levels are expected for the remainder of the period.

Geomagnetic field activity is expected to be predominately quiet to unsettled. Active periods are possible on 28 March due to CH HSS effects.

```
From -3568822959275014401
X-Google-Thread: 8f86f75953,abe839036d851321,start
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        Fri, 15 Mar 2013 11:00:21 -0700 (PDT)
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border4.nntp.ams.giganews.com!border2.nntp.ams.giganews.com!
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multikabel.net!newsfeed20.multikabel.net!news.mi.ras.ru!goblin1!goblin2!
goblin.stu.neva.ru!usenet.blueworldhosting.com!npeer03.iad.highwinds-media.com!
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newshosting.com!news-out.readnews.com!transit3.readnews.com!panix!rri.panix.com!
robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-070 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Mon, 11 Mar 2013 22:11:15 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 2345
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000501ce1ec6$8e81eb40$ab85c1c0$@net>
Reply-To: ans-editor@amsat.org
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X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
DKIM-Signature: v=1; a=rsa-sha256; c=relaxed/relaxed; d=comcast.net;
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This report is organized into four (4) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - deborbited/returned satellites

SB SAT @ AMSAT W8ISS $WSR-070.S1
WSR 070 Part 1 03/11/2013

AMSAT NEWS SERVICE BULLETIN 070.S1
FROM AMSAT HQ SILVER SPRING, MD, March 11, 2013
TO ALL RADIO AMATEURS
BID: $WSR-070.S1

PW-Sat
Catalog Number: 38083
Launch Date: Febrauary 13, 2012 1000z
Launch Site: Kourou, French Guiana

Status: On Orbit

```
Uplink:   435.020 MHz FM
Downlink: 145.900 MHz DSB

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=132
[02112013]
=====
DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational
Current Mode: Science Mode - Beacon ONLY

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink:   435.530 to 435.570 MHz

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=68
[02112013]
=====
VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05, 2005 0444z
Launch site: Satish Dhawan Space Centre, India

Status: Operational
Current Mode: U/v - Dutch Transponder

Frequencies:
Indian Transponder:
Uplink:   435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink:   435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW


Indian Beacon:  145.9360 MHZ CW
Dutch Beacon:   145.860 MHz 12WPM with CW message
```

```
Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=30

To know what transponder is switched on please listen for the beacon
that is active. Each transponder has a different beacon.
[02112013]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002 1700z
Launch site: Baikonur, Kazakhstan

Status: Operational

Current Mode: V/u

Uplink:   145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4
Hz. The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute
   timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the re-
   peater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset
   the 10 minute timer.
[02112013]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Operational
Current Mode: V/u (Mode JA)

Voice/CW (Mode JA)
Uplink:   145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon:   435.795 MHz
```

```
Digital Mode JD
Uplinks:  145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage:
http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's
CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/
fo29cwts.htm
[02112013]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974
Launch site: Vandenberg AFB, California, USA

Status: Operational

Current Mode: Alternating between Mode A and B every 24 hours

Uplink:   145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink:  29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons:   29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php
[02112013]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
```

Launch date: November 20, 1998 0640z (ZARYA module)
Launch sites: Baikonur, Kazakhstan
Kourou, French Guiana
Uchinoura Space Center, Japan
Kennedy Space Center, Titusville, Florida, USA

Status: Operational

Current Active Modes: FM Repeater - OFF
Voice - V/v
BBS - V/v
2m APRS - V/v
2m Digi - V/v
70cm APRS - ?
70cm Digi - ?
SSTV - V/v

Expedition 34 Crew (November 2012 - March 2013):
Commander: Kevin Ford KF5GPP
Flight Engineer: Oleg Novitskiy
Flight Engineer: Evgeny Tarelkin
Flight Engineer: Roman Romanenko
Flight Engineer: Chris Hadfield KC5RNJ/VA3OOG
Flight Engineer: Tom Marshburn KE5HOC

Available Modes and Frequencies:
Digital/APRS:
Worldwide 2m packet uplink: 145.825 MHz FM 1k2
Worldwide 2m packet downlink: 145.825 Mhz FM 1k2
Worldwide 70cm packet uplink: 437.550 Mhz FM 1k2
Worldwide 70cm packet downlink: 437.550 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
2m Packet Mailbox: RS0ISS-11
2m Digipeater alias: ARISS
70cm Packet Mailbox: RS0ISS-1
70cm Digipeater callsign: RS0ISS
70cm Digipeater alias: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[02112013]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-070.S2
WSR 070 Part 2 03/11/2013

AMSAT NEWS SERVICE BULLETIN 070.S2
FROM AMSAT HQ SILVER SPRING, MD, March 11, 2013
TO ALL RADIO AMATEURS
BID: $WSR-070.S2

STRaND-1
Catalog Number:
Launch Date: February 25, 2013 12:31z
Launch Site: Satish Dhawan Space Centre, India

Status: Operational

Uplink:
Downlink:437.568MHz 9k6 FSK

Beacon: None(?)

Callsign:

URL: http://www.sstl.co.uk/Missions/STRaND-1--Launched-2013
[03042013]
=====
Fitsat-1
Catalog number: 38853
Launch Date: October 04, 2012
Launch site: Kibo Japanese Experiment Module, International Space

```
Station

Status: Operational

Uplink:
Downlink(s): 437.445MHz 1k2 AFSK
            5840.00 MHz 115k2 data
            LED CW (200w pulses)

Beacon(s): 437.250 MHz CW

Callsign:  NIWAKA

URL: http://carpcomm.com/satellite/fitsat1
[10292012]
=====
TechEdSat
Catalog number: 38854
Launch date: October 04, 2012
Launch site: Kibo Japanese Experiment Module, International Space
Station

Uplink(s):
Downlink(s): 437.465 1k2 AFSK

Beacon(s):

Callsign:

URL:http://www.techedsat.com/
[10152012]
=====
We Wish
Catalog number: 38856
Launch date: October 04,2012
Launch Site: Kibo Japanese Experiment Module, International Space
Station

Uplink(s):
Downlink(s): 437.505MHz 1k2 AFSK
             437.505MHz SSTV

Beacon(s): 437.505MHz CW

Callsign: JQ1ZIJ

URL:
[10152012]
=====
F-1
Catalog number: 38855
Launch Date: October 04, 2012
Launch Site: Kibo Japanese Experiment Module, International Space
```

```
Station

Uplink(s):
Downlink(s): 145.980MHz 1k2 AFSK
             437.485MHz FM moduled CW

Baecon(s):

Callsign: XV1VN

URL: http://fspace.edu.vn/
[10152012]
=====
Aeneas
Catalog Number: 38760
Launch Date: September 13, 2012 2139z
Launch Site: Wallops Island, Virginia, USA

Status: On Orbit

Uplink: WiFi 2425MHz
Downlink:
WiFi: 2425MHz
Spread Spectrum: Somewhere in the 70cm band

Beacon: 437.600MHz 1k2 ax25 every 10 seconds

Callsign:

URL:
[10012012]
=====
CSSWE (Colorado Student Space Weather Experiment)
Catalog Number: 38761
Launch Date: September 12, 2012 2139z
Launch Site: Wallops Island, Virginia, USA

Status: On Orbit

Uplink:
Downlink:       437.345MHz 9k6 with ax.25

Beacon:

Callsign:

URL:
[10012012]
=====
CP5 (Polysat)
Catalog Number: 38763
Launch Date: September 12, 2012 2139z
Launch Site: Wallops Island, Virginia, USA
```

```
Status: On Orbit

Uplink:
Downlink:       437.405MHz AFSK on LSB ax.25 over NRZI at 1k2 baud,
every 2
                minutes, begins 3.5 hours after first turn-on

Beacon:

Callsign:

URL:
[10012012]
=====
CXBN (Cosmic X-Ray Background Nanosatellite)
Catalog Number: 38762
Launch Date: September 12, 2012 2139z
Launch Site: Wallops Island, Virginia, USA

Status: On Orbit

Uplink:
Downlink:       437.525MHz GFSK ax.25

Beacon:

Callsign:

URL:
[10012012]
=====
Proiteres
Catalog Number: 38756
Launch Date: September 09, 2012 2139z
Launch Site: Satish Dhawan Space Centre, India

Status: On Orbit

Uplink:
Downlink: 437.485MHz FM/AFSK

Beacon:

Callsign: JL3YZK

URL:
[10012012]
=====
RS-40 MiR (Yubileiny-2)
Catalog Number: 38735
Launch Date: July 28, 2012
Launch Site: Plesetsk Missile and Space Complex, Russia
```

```
Status: On Orbit

Uplink:
Downlink(s):    435.265 MHz
                435.365 MHz

Beacon:

Callsign:

URL:
[08272012]
=====
HORYU-II
Catalog number: 38340
Launch Date: May 17, 2012 1639z

Status: On Orbit

Uplink:   145.??? MHz
Downlink: 437.375 MHz CW/AX25/FSK

Beacon: 437.375 MHz CW

Callsign: JG6YBW

URL:

IARU Coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=216
[10012012]
=====
XaTcobeo
Catalog Number: 38082
Launch Date: Febrauary 13, 2012 1000z
Launch Site: Kourou, French Guiana

Status: Operational

Uplink:
Downlink: 437.365 MHz FFSK with AX.25

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=135
[100162012]
=====
UniCubeSat
Catalog Number: 38085(?)
Launch Date: Febrauary 13, 2012 1000z
Launch Site: Kourou, French Guiana

Status: Operational

Uplink:
Downlink: 437.305 MHz 9k6 bps GMSK

Beacon:

Callsign:

URL:
http://www.gaussteam.com/index.php?option=com_content&view=article&id=
96:unicu
besat&catid=36:unicubesat&Itemid=183

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=133
[10012012]
=====
Robusta
Catalog Number: 38083(?)
Launch Date: Febrauary 13, 2012 1000z
Launch Site: Kourou, French Guiana

Status: On Orbit

Uplink:
Downlink: 437.325 MHz 1k2 FM telemetry (data every 3 min, 20 sec.
burst)

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=122
[10012012]
=====
MO-72 MaSat-1
Catalog Number: 38081
Launch Date: Febrauary 13, 2012 1000z
Launch Site: Kourou, French Guiana

Status: Operational

Uplink:
Downlink: 437.345 MHz GFSK 625/1250 bps
```

437.345 MHz CW

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=126
[10012012]
=====
Goliat
Catalog Number: 38084(?)
Launch Date: Febrauary 13, 2012 1000z
Launch Site: Kourou, French Guiana

Status: Operational

Uplink:
Downlink: 437.485 MHz 1k2 AFSK

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=98
[10012012]
=====
E-St@r
Catalog Number: 38079
Launch Date: Febrauary 13, 2012 1000z
Launch Site: Kourou, French Guiana

Status: On Orbit

Uplink:
Downlink: 437.445 MHz 1k2 bps AFSK

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=130
[10012012]
=====
ALMASat-1

```
Catalog Number: 38078
Launch Date: Febrauary 13, 2012 1000z
Launch Site: Kourou, French Guiana

Status: On Orbit

Uplink:
Downlink:  437.465 MHz 1k2 bps FSK
          2407.850 MHz

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=39
[10012012]
=====
RS-39 Chibis-M
Catalog Number: 38051
Launch Date: October 30, 2011 10:11:00 UTC
Launch site: Tyuratam (Baikonur Cosmodrome), Kazakhstan

Status: Operational

Uplink:
Downlink:

Beacon: 435.315 MHz CW
        435.215 MHz CW

Callsign:

URL:

IARU coordination status page:
[07302012]
=====
JUGNU
Catalog Number: 37839
Launch Date: October 12, 2011 05:30:00 UTC
Launch site: Satish Dhawan Space Centre, India

Status: On Orbit

Uplink:   145.??? MHz 1k2 (mode?)
Downlink: 437.505 MHz 9k6 (mode?)

Beacon: 437.275 MHz 15 wpm (?) CW

Callsign:
```

```
URL: http://www.iitk.ac.in/me/jugnu/index.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=160
[07092012]
=====
SRMSAT
Catalog Number: 37841
Launch Date: October 12, 2011 05:30:00 UTC
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Uplink:   145.900 MHz 1k  AX.25 (speed?)
Downlink: 437.500 MHz 2k4 AX.25

Beacon: 437.425 MHz 12 wpm CW

Callsign:

URL: http://srmsat.in/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=181
[01282013]
=====
HRBE (E1P Explorer 1 [Prime] CubeSat (E1P-U2))
Catalog Number: 37855
Launch Date: October 28, 2011
Launch site: Vandenberg Air Force Base, California, USA

Status: On Orbit

Uplink:   437.305 MHz (???)
Downlink: 437.505 MHz AX.25 (SSB?)

Beacon:

Callsign:

URL: http://ssel.montana.edu/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=116
[01122012]
=====
M-Cubed
Catalog Number: 37855
Launch Date: October 28, 2011
Launch site: Vandenberg Air Force Base, California, USA

Status: On Orbit
```

Uplink:
Downlink: 437.485 MHz AX.25

Beacon:

Callsign:

URL: http://umcubed.org/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=215
[01122012]
=====
RAX-2
Catalog Number: 37853
Launch Date: October 28, 2011
Launch site: Vandenberg Air Force Base, California, USA

Status: Operational

Uplink:
Downlink: 437.345MHz 9k6 GMSK

Beacon:

Callsign:

URL: http://rax.engin.umich.edu//

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=221
[03232012]
=====
AO-71 AubieSat-1
Catalog Number: 37854
Launch Date: October 28, 2011
Launch site: Vandenberg Air Force Base, California, USA

Status: On Orbit

Uplink:
Downlink: 437.475 MHz 1k2 AX.25

Beacon: 437.475 MHz CW

Callsign: KI4NQO

URL: http://www.space.auburn.edu/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=148
[12262011]

```
=====
O/OREOS
Catalog Number: 37224
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: On Orbit

Uplink:
Downlink: 437.035 MHZ AX.25

Beacon:

Callsign:

URL: http://www.ooreos.org/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=146
[02092011]
=====
Rax-1 Radio Aurora Explorer
Catalog Number: 37223
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: On Orbit

Uplink:
Downlink: 437.505 MHz 9k6 GMSK

Beacon:

Callsign: RAX-1

URL: http://rax.engin.umich.edu/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=165
[02092011]
=====
FO-69 Fastrac-1 Sara Lily
Catalog Number: 37227
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: Operational

Uplink 1: 145.980 MHz 1k2 baud
Uplink 2: 145.825 MHz 1k2 baud
Downlink: 437.345 MHz 1k2 and 9k6 baud

Beacon:   437.435 MHz 1k2 AX.25
```

Callsign: Fast1

URL: http://fastrac.ae.utexas.edu/index.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=83
[07052011]
=====
FO-70 Fastrac-2 Emma
Catalog Number: 37380
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: Operational

Uplink 1: 435.025 MHz 1k2 baud
Uplink 2: 437.435 MHz 9k6 baud
Downlink: 145.825 MHz 1k2 and 9k6 baud

Beacon: 145.825 MHz 1k2 AX.25

Callsign: Fast2

URL: http://fastrac.ae.utexas.edu/index.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=84
[12162011]
=====
StudSat
Catalog Number: 36796
Launch Date: July 12, 2010 0352z
Launch site: Satish Dhawan Space Centre, India

Status: On Orbit

Uplink: 437.505MHz, 9600bps FSK
Downlink: 437.505MHz, 9600bps FSK
Beacon : 437.505MHz,   20bps ASK

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=164
[02092011]
=====
TIsat-1
Catalog Number: 36799
Launch Date: July 12, 2010 0352z
Launch site: Satish Dhawan Space Centre, India

Status: On orbit

Callsign: HB9DE

```
Uplink:   145.980MHz FM, AFSK
Downlink: 437.305MHz FM, AFSK
Beacon:   437.305MHz CW

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=118
[02092011]
=====
SwissCube
Catalog Number: 35932
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Callsign: HB9EG

Beacon(100mw): 437.5050MHz CW
Beacon(1w):    437.5050MHz FSK 1k2bps

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=109
[02092011]
=====
UWE-2
Catalog Number: 35934
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: In Orbit

Beacon(500mw): 437.3850 MHz AFSK 1k2bps
               437.3850 MHz FSK 9k6bps

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=110
[02092011]
=====
ITUpsAT1
Catalog Number: 35935
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Beacon(100mw): 437.325MHz CW
Beacon(1w): 437.325MHz 19k2bps

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=113
[02092011]
=====
BEESAT
Catalog Number: 35933
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Callsign: DP0BEE

Beacon(100mw): 436.000MHz CW
Beacon(500mw): 436.000MHz GMSK 4k8bps
Beacon(500mw): 436.000MHz GMSK 9k6bp
[02092011]
=====
SOHLA-1 (ASTRO TECH.)
Catalog Number: 33496
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational

Proposed Frequencies and Modes:
Downlink: 437.505 MHz AFSK/CW
Beacon:   437.505 MHz AFSK/CW

Callsign:

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=101
[02092011]
=====
KAGAYAKI (Solan Co.)
Catalog Number: 33495
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: In Orbit

Downlink: 437.375 MHZ    FSK9k6/CW
Beacon:   437.375 MHz    FSK9k6/CW

IARU coordination status page:

AMSAT-NA webpage:

[02092011]
=====
STARS (Kagawa Univ.) (Twin Satellites)
Catalog Number: 33498
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational ?
```

Downlinks: 437.485 MHz FM/CW
           437.465 MHz FM/CW
Beacons: 437.305 MHz FM/CW
           437.275 MHz FM/CW

Callsigns: JR5YBN
           JR5YBO

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=99

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=121&retURL
=/satellites/status.php
[02092011]
=====
KKS-1 (Tokyo MCIT)
Catalog Number: 33499
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational

Downlink: 437.455 MHz AFSK/CW
Beacon: 437.385 MHz AFSK/CW

Callsign: JQ1YYY

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=107

AMSAT-NA webapge:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=120&retURL
=/satellites/status.php
[20092011]
=====
PRISM (Tokyo Univ.)
Catalog Number: 33493
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational

Uplink: 145.xxx MHz AFSK 1k2
Downlink: 437.425 MHz AFSK 1k2
Beacon: 437.250 MHz CW

Callsign: JQ1YCX

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=97

Read terms and conditions of operations at the PRISM web page to find
out how
to properly operate on the satellite and to get the uplink frequency.
It
has
been asked that the uplink frequency not be given out untik you have
read and
understood the terms of usage.

URL:
http://www.space.t.u-tokyo.ac.jp/prism/en/HAMservice.html
[10282012]
=====
RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number: 32953
Launch Date: May 23, 2008 1520z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational

```
Curent Modes: Telemetry
              Audio
              Images

Downlinks: 435.315 MHz
           435.215 MHz
```

AMSAT-NA website:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=115&ret
URL=/satellites/status.php

Official website:
http://www.npopm.com/?cid=leoca&caid=43
[02092011]
=====
CanX-2
Catalog number: 32790
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational in range of ground station only

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web
page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=46
[02092011]
=====
AAUSAT-II
Catalog number: 32788

Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Downlink: 437.425 MHz 1k2 baud packet

For the latest project status update please visit the AAUSAT-II web page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=60
[02092011]
=====
CO-65 CUTE-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Downlink: 437.475 MHz 9k6 Packet
Uplink: 1267.600 Mhz

Telemetry Beacon:
Downlink: 437.2750 MHz CW

For the latest project status update please visit the Cute-1.7+APD II web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=78

Command Station blog website:
http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=112&retURL=/satellites/status.php
[03232012]
=====
Compass-1
Catalog number: 32787
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Current Mode: dependant on last received command

Uplink: 145.980 MHz FM
Downlink: 437.275 Mhz CW

437.405 MHz Packet

For the latest project status update please visit the Compass 1 web page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=52

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=114&retURL=/satellites/status.php
[06162011]
=====
CO-66 Seeds II
Catalog number: 32791
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Downlink: 437.485 MHz

Callsign: JQ1YGU

For the latest project status update please visit the Seeds 2 web page: http://cubesat.aero.cst.nihon-u.ac.jp/english/seeds_2_e.html

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=36

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=113&retURL=/satellites/status.php
[073092011]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007 0702z
Launch site: Baikonur, Kazakhstan

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=94&retURL=

/satellites/status.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=72
[02092011]
=====
CP3
Catalog Number: 31129
Launch Date: April 17,2007 0702z
Launch site: Baikonur, Kazakhstan

Status: Operational

Current Mode: /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=74
[02092011]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005 0652z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon: 437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/xivpicte.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=37
[02092011]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: ?????

Current Mode: /u

Beacon: 436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=96&retURL=/satellites/status.php

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[02092011]
=====
QuakeSat
Catalog Number: 27845
Launch Date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Telemetry only

Current Mode: 9600 baud data packet

Mode U packet
Downlink: 436.675 MHz 9k6 BPS

Quakesat webpage:
http://www.quakefinder.com/services/quakesat-ssite/
[02252011]
=====
CO-55 Cute-1.7+APD II
Catalog Number: 27844
Launch date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational

Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=69&retURL=/satellites/status.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=78
[02092011]
=====
NO-44 PCSAT

```
Catalog number: 26931
Launch Date: September 30, 2001 0240z
Launch site: Kodiak Launch Complex, Alaska, USA

Status: Operational

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink:        144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[10292012]
=====
RS-22 RADIO SPORT 22 (MOZHAYETS 4)
Catalog number: 27939
Launch Date: September 27, 2003 0612z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational - 70cm cw only

Current Mode:  /u

CW Beacon - 435.352 MHz
            145.818 MHz

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=76&retURL
=/satellites/status.php
[02092011]
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990
Launch site: Kourou, French Guiana

Status: CW Beacon only

Uplinks:           145.840 MHz 1200-baud Manchester FSK
                   145.860 MHz 1200-baud Manchester FSK
                   145.880 MHz 1200-baud Manchester FSK
                   145.900 MHz 1200-baud Manchester FSK

CW downlink:       437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12
```

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[02092011]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984
Launch site: Vandenburg AFB, California, USA

Status: Operational ?

Current Mode: /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon: 435.025 MHz
Mode-S Beacon: 2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[07052011]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998 0640z (ZARYA module)
Launch sites: Baikonur, Kazakhstan
Kourou, French Guiana
Uchinoura Space Center, Japan
Kennedy Space Center, Titusville, Florida, USA

Status: Operational

Current Active Modes: FM Repeater - OFF
Voice - V/v
BBS - V/v
2m APRS - V/v
2m Digi - V/v
70cm APRS - ?
70cm Digi - ?
SSTV - V/v

Expedition 34 Crew (November 2012 - March 2013):

Commander:	Kevin Ford	KF5GPP
Flight Engineer:	Oleg Novitskiy	
Flight Engineer:	Evgeny Tarelkin	
Flight Engineer:	Roman Romanenko	
Flight Engineer:	Chris Hadfield	KC5RNJ/VA3OOG
Flight Engineer:	Tom Marshburn	KE5HOC

Available Modes and Frequencies:
Digital/APRS:
Worldwide 2m packet uplink: 145.825 MHz FM 1k2
Worldwide 2m packet downlink: 145.825 Mhz FM 1k2
Worldwide 70cm packet uplink: 437.550 Mhz FM 1k2
Worldwide 70cm packet downlink: 437.550 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
2m Packet Mailbox: RS0ISS-11
2m Digipeater alias: ARISS
70cm Packet Mailbox: RS0ISS-1
70cm Digipeater callsign: RS0ISS
70cm Digipeater alias: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[12242012]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-070.S3
WSR 070 Part 3 03/11/2013

AMSAT NEWS SERVICE BULLETIN 070.S3
FROM AMSAT HQ SILVER SPRING, MD, March 11, 2013
TO ALL RADIO AMATEURS
BID: $WSR-070.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

NANOSAIL-D
Catalog Number: 37361
Ejection Date: January 17, 2011

Status: Non - Operational

Downlink: 437.270 MHz AX.25

URL: http://nanosaild.engr.scu.edu/dashboard.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=115
[07302012]
=====
HO-68 HOPE-1 (CAS-1) (XW-1)
Catalog Number: 36122
Launch Date: December 15, 2009 0231z
Launch site: Taiyuan Space Center, PRC

Status: Telemetry only

Callsign:
Broadcast: BJ1SA-11
BBS: BJ1SA-12

Uplinks: 145.8250 MHz FM, PL 67.0 Hz.
145.9250 - 145.9750 MHz SSB/CW
145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
435.7650 - 435.7150 MHz SSB/CW
435.6750 MHz AFSK 1200 BPS

Beacon: 435.7900 MHz CW

Mode and Antenna Polarization:
V: LHCP 2.0dBi max
U: RHCP 3.0dBi max

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=108

For more information about XW-1 (CAS-1):
http://
[04302012]
=====
SO-67 SumbandilaSat

Catalog Number: 35870
Launch Date: September 17, 2009 1555z
Launch site: Baikonur, Kazakhstan

Status: Non - Operational

Callsign: ZS0SUM

Uplink: 145.875MHz FM tone 233.6 Hz
Downlink: 435.345MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

For more information about SO-67:
http://www.amsatsa.org.za/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=88
[01272012]
=====
CP4
Catalog Number: 31132
Launch Date: April 17, 2007

Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon: 437.325 MHz CW

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=79
[09062010]
=====
LIBERTAD-1
Catalog Number: 31128
Launch Date: April 17, 2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink: 145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25

IARU coordination status page:

```
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=76
[09062010]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: Non-Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder:  145.825 Mhz FM

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=51
[09062010]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency:  437.305
                             2407.250

Official Website: http://www.ncube.no

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=24
[09062010]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink:        437.250 MHz FM 67Hz CTCSS
Voice Downlink:     2401.835 MHz FM
Packet Up/Downlink:  437.250 MHz 9k6 packet
Packet Downlink     2401.835 MHz 38k4 packet

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=54
[09062010]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005
```

Status: Non-Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=53
[09062010]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004 0745z
Launch site: Baikonur, Kazakhstan

Status: Non - Operational

Current Mode(s):
Voice repeater: V/u
Uplink: 145.880 MHz FM
Downlink: 435.150 MHz FM

Telemetry: Recovery efforts
Downlink: 435.150MHz 9k6

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.860 MHZ FM
145.880 MHz USB
145.880 MHz FM
145.920 MHz FM
145.920 MHz FM - 67 Hz PL tone burst
1268.705 MHz FM
Digital Downlinks: 435.150 MHz FM 38k4 PBP, 1 watt output
435.150 MHz FM 9k6 Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Pacsat Broadcast Protocol
1268.703 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11

```
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=19
[12062011]
=====
CANX-1
Catalog Number: 27847
Launch Date: June 30, 2003

Status: Non-Operational

Downlink: 437.8800 MHz AFSK 1k2bps
[06052009]
=====
DTUSAT
Catalog Number: 27842
Launch Date: June 30, 2003

Status: Non-Operational

Current Mode: 2k4 AFSK Packet last reported

Downlink: 437.475MHz

Officail webpage: http://dtusat1.dtusat.dtu.dk/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=101&retURL
=satellites/all_oscars.php
[02212009]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink:   435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)

Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000
```

Status: Telemetry only

Uplinks: 145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[03302009]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks

V-band: 145.840 - 145.990 MHz CW/LSB
U-band: 435.550 - 435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks

S2-band: 2401.225 - 2401.475 MHz CW/USB
K-band: 24048.010 - 24048.060 MHz CW/USB
Beacon: 2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)

BEACON	General Beacon(GB)	Middle Beacon(MB)	Engineering Beacon(EB)
2 m	none	145.898 MHz	none
70cm	435.438 MHz	435.588 MHz	435.838 MHz
13cm(1)	2400.188 MHz	2400.338 MHz	2400.588 MHz
13cm(2)	2401.173 MHz	2401.323 MHz	2401.573 MHz
3cm	10450.975 MHz	10451.125 MHz	10451.375 MHz
1.5cm	24047.885 MHz	24048.035 MHz	24048.285 MHz

[07162007]
=====
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
=====
UO-36 UoSAT-12

```
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink:    145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: 25636
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater:         436.250 MHz

Uplinks: Mode B Repeater:  145.825 MHz
Mode J Digipeater:         145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)
```

The satellite is not currently available for uplink transmissions and the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Non-Operational

Current Modes:
Telemetry : /u

```
Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign:       4XTECH-12
```

More information of GO-32 can be found at:
http://asri.technion.ac.il/techsat/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=14&retURL=/satellites/status.php
[07172010]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

```
Uplink:   145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK
```

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
MO-30 UNAMSAT-2
Catalog Number: 24305
Launch Date: September 5, 1996

```
Status: Non-operational

Downlink:       435.1380 MHz AFSK 1200 BPS
Downlink:       435.2060 MHz AFSK 1200 BPS
Uplink:         145.8150 MHz AFSK 1200 BPS
Uplink:         145.8350 MHz AFSK 1200 BPS
Uplink:         145.8550 MHz AFSK 1200 BPS
Uplink:         145.8750 MHz AFSK 1200 BPS
[06042009]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Non-operational

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign:       POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012009]
=====
AO-27 AMRAD
Catalog number: 22825
Launch Date: September 26, 1993 0140z
Launch site: Kourou, French Guiana

Status: Recovery efforts in progress

Current Mode: V/u

Uplink:   145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[12032012]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993 0140z

Status: PSK carrier only

Current Mode:
```

```
Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
AO-24 ARSENE
Catalog Number: 22654
Launch Date: May 13, 1993

Status: Non-operational

Uplink:    435.0625 MHz FM 1k2bps AFSK
           435.1125 MHz FM 1k2bps AFSK
           435.1375 MHz FM 1k2bps AFSK
Downlink:  145.9750 MHz FM 1k2bps AFSK
          2446.5025 MHz FM 1k2bps AFSK

Beacon:    2446.4700 MHz CW

Broadcast callsign:
BBS:
[12162009]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
```

```
Downlink: 435.170 MHz FM

Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
[05012006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: non-operational

Current Mode:  V/u

Uplink:         145.900 MHz FM 1200-baud Manchester FSK (reserved)
                145.920 MHz FM VOICE
                145.940 MHz FM 1200-baud Manchester FSK (reserved)
                145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink:       437.026 MHz USB VOICE
                (1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[07242009]
=====
UO-15 UoSAT-4
Catalog Number: 20438
Launch Date: January 22, 1990

Status: Non-operational
```

```
Uplink: ?
Downlink: 435.1250MHz (?)
          435.1200MHz (?)
[06042009]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon:   145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
```

```
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink  29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
Beacons:   29.450 MHz
          435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
```

Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB

Beacon 1: 29.352 MHz (intermittent)
Beacon 2: 29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB

Beacon: 145.860 MHz

Robot: 145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at}
amsat.org
NNNN
/EX

```
From -1597630842260786790
X-Google-Thread: 8f86f75953,d5b7ec6e674fd4c7,start
X-Google-Attributes: gid8f86f75953,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
X-Received: by 10.180.8.4 with SMTP id n4mr2647108wia.0.1363919199153;
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82.197.223.108.MISMATCH!feeder2.cambriumusenet.nl!feed.tweaknews.nl!
193.141.40.65.MISMATCH!npeer.de.kpn-eurorings.net!npeer-ng0.de.kpn-eurorings.net!
border2.nntp.ams2.giganews.com!border1.nntp.ams2.giganews.com!
border3.nntp.ams.giganews.com!border1.nntp.ams.giganews.com!nntp.giganews.com!
newsreader4.netcologne.de!news.netcologne.de!news.glorb.com!news-out.readnews.com!
transit3.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-076  AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sun, 17 Mar 2013 14:47:52 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 269
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <001d01ce233f$e817aaa0$b846ffe0$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
X-Trace: reader2.panix.com 1363546073 20588 166.84.1.6 (17 Mar 2013 18:47:53 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 17 Mar 2013 18:47:53 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
DKIM-Signature: v=1; a=rsa-sha256; c=relaxed/relaxed; d=comcast.net;
     s=q20121106; t=1363546063;
     bh=JEtAimHY9wRuQIwPlI55M5NjY8MHLcFe7zK/NKIo5pc=;
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Content-Transfer-Encoding: 7bit
Content-Language: en-us
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AMSAT NEWS SERVICE
ANS-076

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:

* Call for Volunteers for the AMSAT Booth at Dayton 2013
* FCC Guidance On Obtaining Licenses For Small Satellites
* Satellite DX in Pacific
* European CubeSat Symposium

SB SAT @ AMSAT $ANS-076.01
ANS-076 AMSAT News Service Weekly Bulletins

AMSAT News Service Bulletin 055.01
  From AMSAT HQ SILVER SPRING, MD.
March 17, 2013
To All RADIO AMATEURS
BID: $ANS-076.01

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********************************************************************
*  AMSAT-DC Spring Workshop on Portable Satellite Ground           *
*  Stations - Saturday, March 23, 2013, at the NASA Goddard Space  *
*  Flight Center in Greenbelt, MD beginning at 9:00AM EDT. Pre-    *
*  registration is required. To register call Martha at the AMSAT  *
*  Office 301-589-6062 no later than Thursday, March 21. Sorry,    *
*  no late registration at the door! See full details at:          *
*               http://patkilroy.com/amsat-dc/                     *
*                                                                  *
*  The suggested donation for advanced registration and admission  *
*  for non-AMSAT members is $25. Registration for AMSAT members    *
*  registering in advance is free.                                 *
********************************************************************
```

Call for Volunteers for the AMSAT Booth at Dayton 2013

The 2013 Dayton Hamvention, sponsored by the Dayton Amateur Radio Association will be held this year on May 17-19, 2013. "Dayton" is the largest hamfest in the United States, and AMSAT will be there again this year.

You can assist AMSAT by volunteering to help staff the booth. While there, you will meet other AMSAT members, interact with the satellite designers, builders, and operators, and enjoy all that Dayton has to offer.

People are needed to assist with the setup of the booth on Thursday, May 16 (11 a.m. to 4 p.m.), to staff the booth Friday (9 to 6), Saturday (9 to 5), and Sunday (9 to 1), and packup on Sunday (1 to 3). Most people volunteer for one or more 2 hour shifts in the booth.

Unfortunately, Gould Smith WA4SXM, AMSAT's VP-User Services and long-time Dayton Team Leader will be unable to attend Dayton this year because of health issues. AMSAT President Barry Baines, WD4ASW has asked Steve Belter, N9IP to take the lead on AMSAT's Dayton Operations and he has graciously agreed to coordinate AMSAT's activities at Dayton for this year. Steve is a long-time volunteer who has assisted AMSAT at Hamvention in prior years. Please send an e-mail to Steve Belter,n9ip@amsat.org, if you are willing to help AMSAT at the Hamvention. Please advise by April 30thl if you're available to assist.

Additional information on the Hamvention can be found at www.hamvention.org.
Information on AMSAT's extensive Hamvention activities, including details about the informal "Get Together" on Thursday evening, the joint AMSAT-TAPR Dinner on Friday evening, the AMSAT Forum on Saturday, satellite demonstrations, etc. will be available on the AMSAT website (www.amsat.org) "soon."

(ANS thanks AMSAT President Barry Baines, WD4ASW and Steve Belter, N9IP for the above information)

FCC Guidance On Obtaining Licenses For Small Satellites

The Federal Communications Commission (FCC) released a Public Notice to provide guidance concerning FCC licensing of spectrum for use by small satellites, including satellites that fall within the categories of pico-satellites, nano-satellites and cubesats. The advent of such small satellite designs has brought with it dramatically lower launch costs, enabling a larger range of organizations to directly launch satellites. Institutions such as universities and research organizations that previously found it cost prohibitive to launch their own satellite can now participate in the exploration of space. Many of these participants may be unfamiliar with the spectrum licensing, scheduling and other requirements attendant on satellites. This Public Notice seeks to alert affected parties of these requirements and thus aid small satellite operators in the planning necessary for a successful launch operation.

The Commission's rules set forth three different procedures for licensing satellites. The Commission's Part 25 rules are the primary vehicle for satellite licensing, and are used for licensing a wide range of satellite operations, including commercial communication and remote sensing satellites. The Commission's Part 5 rules cover experimental operations. The Commission's Part 97 rules cover amateur radio service satellite operations.

Currently, many small satellite missions involve experimental operations - i.e. scientific and research missions, including missions conducted under government contract - and many operate in amateur frequency bands. These satellites are therefore licensed under Parts 5 or 97 of FCC rules. Because of the significant interest in small satellites in the amateur and research communities, the primary focus of this Public Notice is on such operations, although certain guidance in this Public Notice is also applicable to Part 25

licensing.
licenses well in advance of a launch.

The full public notice can be found at
http://www.fcc.gov/document/guidance-obtaining-licenses-small-satellites

[ANS thanks the FCC for the above information]

Satellite DX in Pacific

JD1, OGASAWARA. Makoto, JI5RPT, will once again be active as JD1BLY from Chichijima Island (AS-031), Ogasawara, between April 28th and May 4th.
Activity will be on 40-6 meters, including the satellites, using CW, SSB and the Digital modes (NO 6m EME). QSL via his home callsign JI5RPT.

His log search will be available on his Web site at:
http://www.ji5rpt.com/jd1
He will also use Twitter to inform his real-time activities at:
http://twitter.com/jd1bly

[ANS thanks the Ohio/Penn DX Bulletin for the above information]

European CubeSat Symposium

The 5th European CubeSat Symposium that will take place on 3-5 June 2013 at the
premises of Royal Military Academy in Brussels, Belgium.

This is the biggest CubeSat related event in Europe and last year it attracted
more than 250 participants and industrial exhibits of 7 specialized companies.
This year even greater participation is expected.
Applicants from all around the
world are welcome.

The call for proposals and the online abstract
submission system is available at
www.CubeSatSymposium.eu

The important dates are:

15 Mar 2013: Deadline for the submission of abstracts
15 April 2013: Notification of acceptance
15 May 2013: Publication of the programme and the abstracts
24 May 2013: Deadline for online registration
3-5 June 2013: 5th European CubeSat Symposium at ERM, Brussels (3 full days)
6 June 2013: 6th QB50 Workshop at VKI, Brussels (by invitation only)

The session topics are:

CubeSat networks/constellations/swarms
Scientific instruments/sensors on CubeSats
Biology and microgravity experiments on CubeSats
Technology demonstration on CubeSats
Micropropulsion subsystems, formation flying
Attitude determination and control subsystem
Telecommunications, ground stations, ground station networks
Orbital dynamics for CubeSats, lifetimes of CubeSats in orbit
CubeSat flight experience, lessons learned
Other topics (e.g. expandable solar arrays, atmospheric re-entry, CubeSats as free-flying payloads for the exploration of the Solar System)
Future technologies on CubeSats
Deployment systems for CubeSats

[ANS thanks Cem O. Asma for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

Primary and secondary school students are eligible for membership at one-half the standard yearly rate. Post-secondary school students enrolled in at least half time status shall be eligible for the student rate for a maximum of 6 post-secondary years in this status. Contact Martha at the AMSAT Office for additional student membership information.

73,
This week's ANS Editor,
Lee McLamb, KU4OS
ku4os at amsat dot org

```
From -6557240532144954838
X-Google-Thread: a4a23d5f63,c296fe24dc4cdac2,start
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X-Received: by 10.180.8.4 with SMTP id n4mr2646103wia.0.1363919083087;
        Thu, 21 Mar 2013 19:24:43 -0700 (PDT)
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194.109.133.86.MISMATCH!newsfeed.xs4all.nl!newsfeed3.news.xs4all.nl!xs4all!
border4.nntp.ams.giganews.com!border2.nntp.ams.giganews.com!
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newsreader4.netcologne.de!news.netcologne.de!news.glorb.com!news-out.readnews.com!
transit3.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: SWPC.Webmaster@noaa.gov
Newsgroups:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.shor
twave,rec.radio.info
Subject: Weekly Highlights of Solar and Geomagnetic Activity, 11 - 17 March 2013
Followup-To:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.shor
twave
Date: Mon, 18 Mar 2013 11:30:07 EDT
Organization: NOAA Space Weather Prediction Center
Lines: 70
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <20130318153001.7692133C8E@panix2.panix.com>
NNTP-Posting-Host: panix6.panix.com
X-Trace: reader2.panix.com 1363620607 8311 166.84.1.6 (18 Mar 2013 15:30:07 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Mon, 18 Mar 2013 15:30:07 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump

:Product: Weekly Highlights and Forecasts
:Issued: 2013 Mar 18 0210 UTC
# Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center
# Product description and SWPC contact on the Web
# http://www.swpc.noaa.gov/weekly.html
```

#
Weekly Highlights and Forecasts
#

Highlights of Solar and Geomagnetic Activity
11 - 17 March 2013

Solar activity was low to moderate. Low activity dominated the week with only low level C-class events observed on 11-14 and 16-17 March. A long duration C2/1f flare associated with a filament eruption near N20E05 occurred at around 12/1107 UTC. An associated asymmetric full halo was assessed to be Earth-directed with a velocity in the low 700 km/s range at departure. Activity increased to moderate levels on 15 March when Region 1692 (N09, L=077, class/area Hhx/250 on 09 March) produced an M1/1f long duration flare at 15/0658 UTC. This flare appeared in H-alpha imagery to erupt along a NE to SW oriented filament channel and partially through Region 1692 beginning at 15/0615 UTC. Associated with this flare were a 150 sfu Tenflare, a Type IV radio sweep, and an asymmetrical full-halo CME (estimated plane-of-sky speed of 1399 km/s). The CME first appeared in SOHO/LASCO C2 imagery at 15/0712 UTC.

A greater than 10 MeV proton event associated with the 15 March CME began at 16/1940 UTC, reached a maximum flux of 16 pfu at 17/0700 UTC, and ended at 17/0825 UTC.

The greater than 2 MeV electron flux at geosynchronous orbit was at normal to moderate levels throughout the period.

Geomagnetic field activity was quiet from 11-14 March. Activity increased slightly to yield a few isolated unsettled periods on 15-16 March due to weak effects from the 12 March CME. The geomagnetic field began at quiet levels on 17 March. At 17/0601 UTC, a geomagnetic Sudden Impulse (41 nT on the Boulder magnetometer) was observed as the 15 March CME became geoeffective. Minor to major storm periods were subsequently observed with major to severe storm periods at high latitudes for the 17/0900-2100 UTC periods.

Forecast of Solar and Geomagnetic Activity
18 March - 13 April 2013

Solar activity is expected to be low throughout the period. A slight chance for M-class activity exists through 20 March while Regions 1696 (N04, L=095, class/area Eai/190 on 16 March) and 1698 (S19, L=118, class/area Eao/200 on 17 March) remain on the disk, and again from 01-13 April when the two regions are expected to return to the visible disk.

No proton events are expected at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to begin the period at moderate levels but rise to high levels from 19-24 March due to effects from the 15 March CME. A decrease to normal to moderate levels is then expected through 28 March. High levels are expected from 29 March-04 April due to effects from a recurrent coronal hole high speed stream (CH HSS). A return to normal to moderate levels is expected for the remainder of the period.

Geomagnetic field activity is expected to be at quiet to minor storm levels on 18 March due to continued effects from the 15 March CME. Quiet to unsettled levels are expected to prevail throughout the remainder of the period with the exception of possible active periods on 28 March due to CH HSS effects.

```
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X-Google-Thread: 9e586c3d78,49d287d7c7582a1,start
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X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
X-Received: by 10.180.95.3 with SMTP id dg3mr2698596wib.4.1364453688066;
        Wed, 27 Mar 2013 23:54:48 -0700 (PDT)
MIME-Version: 1.0
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209.197.12.246.MISMATCH!nx02.iad01.newshosting.com!newshosting.com!
news.linkpendium.com!news.linkpendium.com!news.ett.com.ua!newsfeed.straub-nv.de!
goblin2!goblin1!goblin.stu.neva.ru!news.glorb.com!news-out.readnews.com!
transit3.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: SWPC.Webmaster@noaa.gov
Newsgroups:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.shor
twave,rec.radio.info
Subject: Weekly Highlights of Solar and Geomagnetic Activity, 18 - 24 March 2013
Followup-To:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.shor
twave
Date: Mon, 25 Mar 2013 11:30:08 EDT
Organization: NOAA Space Weather Prediction Center
Lines: 61
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <20130325153001.CF31733C8E@panix2.panix.com>
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X-Trace: reader2.panix.com 1364225408 10733 166.84.1.6 (25 Mar 2013 15:30:08 GMT)
X-Complaints-To: abuse@panix.com
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X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
```

X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump

:Product: Weekly Highlights and Forecasts
:Issued: 2013 Mar 25 0252 UTC
Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center
Product description and SWPC contact on the Web
# http://www.swpc.noaa.gov/weekly.html
#
Weekly Highlights and Forecasts
#
Highlights of Solar and Geomagnetic Activity
18 - 24 March 2013

Solar activity was very low to moderate. Low activity dominated the week with low level C-class flares observed on 18-20 and March. Activity increased to moderate levels on 21 March when Region 1692 (N09, L=077, class/area Dki/340 on 20 Mar) produced an M1flare at 21/2204 UTC. A filament eruption was observed around 19/1400 UTC from the area surrounding Region 1695 (N10, L=055, class/area Dao/180 on 18 Mar). A faint Earth-directed CME was associated with this event, as well as Type II (850 km/s) and Type IV radio sweeps. The period ended with very low levels on 23-24 March.

No proton events were observed at geosynchronous orbit. The period began with slightly enhanced proton levels due to residual effects from the 15 March CME but returned to background levels by 19 March.

The greater than 2 MeV electron flux at geosynchronous orbit was at moderate to high levels. Moderate levels were observed on 18-19 March followed by an increase to high levels on 20-23 March reaching a peak flux of 3,880 particle flux units (pfu) at 22/1640 UTC. Flux decayed to moderate levels on 24 March.

Geomagnetic field activity was at quiet to active levels. The period began with mostly quiet conditions from 18-20 March. An increase to quiet to active levels was observed on 21 March due to effects from the two CMEs related to filament activity on 17 March. Quiet conditions prevailed for the remainder of the period with the exception of an isolated active period at the close of 23 March. This increase in activity was possibly related to the weak CME observed on 19 March.

Forecast of Solar and Geomagnetic Activity
25 March - 20 April 2013

Solar activity is expected to be very low to low throughout the period. A slight chance for M-class activity is possible from 01-13 April when old Regions 1692, 1696 (N04, L=095) and 1698 (S19, L=118) return to the visible disk.

No proton events are expected at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to begin the period at normal to moderate levels. High levels are expected from 29 March-04 April due to recurrent coronal hole high speed stream effects (CH HSS). A return to normal to moderate levels is expected for the remainder of the period.

Geomagnetic field activity is expected to begin the period at moslty quiet levels. Quiet to active conditions with a chance for minor storm periods are expected on 28-30 March due to recurrent CH HSS effects.

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transit3.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-083 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Mon, 25 Mar 2013 15:37:50 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 563
Approved: RRI Admin <rec-radio-info-request@panix.com>
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X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
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X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
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AMSAT NEWS SERVICE
ANS-083

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:

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* ARISS News
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* March/April 2013 AMSAT Journal Heading for the Print Shop
* KiwiSAT - All systems are now flight ready
* New Swiss Small Satellite Launch System
* Raspberry Pi as WSPR transmitter up to 250 MHz
* Houston based WebSDR for 2m Ham Band
* AMSAT Helps at Monrovia HS Science Expo and ISS Downlink
* Music in Space Downlink With the International Space Station
* Argentine CubeBug-1 satellite will have amateur radio digipeater

SB SAT @ AMSAT $ANS-083.01
ANS-083 AMSAT News Service Weekly Bulletins

AMSAT News Service Bulletin 083.01
>From AMSAT HQ SILVER SPRING, MD.
March 24, 2013
To All RADIO AMATEURS
BID: $ANS-083.01

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*****************************************************************
* Volunteers are needed to help at the AMSAT booth at Dayton.   *
* Steve Belter N9IP, is looking for volunteers to help man the  *
* AMSAT booth during the 2013 Hamvention. If you are willing    *
* to help at the Hamvention, please send an e-mail by April 30  *
* to Steve Belter, n9ip@amsat.org.                              *
*                                                               *
* Monitor the 'AMSAT at Dayton Hamvention 2013' link on the new *
* AMSAT Web Site http://www.amsat.org for the latest AMSAT at   *
* Dayton news and developments                                  *
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Come See AMSAT at Dayton 2013

The 2013 Dayton Hamvention, sponsored by the Dayton Amateur Radio Association will be held this year on May 17-19, 2013. "Dayton" is the largest hamfest in the United States, and AMSAT will be there again this year.

AMSAT's theme for Dayton will be "AMSAT - A View to the Future." Come see AMSAT in Ball Arena, right across from the ARRL area and just inside the door from the Satellite Demonstration area.

The AMSAT booth will feature AMSAT Engineering, new publications, new apparel, amateur satellite hardware and software. The AMSAT Forum will be on Saturday May 18. Plan to visit all of the AMSAT activities!

+ The booth will feature an engineering model of the 1U Fox Cubesat
+ AMSAT Publications
+ AMSAT Apparel
+ Station Hardware
+ The latest version SatPC32 tracking software
+ Renew your AMSAT membership at the AMSAT booth too.

[ANS thanks JoAnne Maenpaa, K9JKM for the above information]

Dayton Hamvention 2013 AMSAT Forum

This year's AMSAT Forum will be held is on Saturday in Room 5, from 1115 to 1330 EDT. There will be an open Q&A session after the talks.

Moderator: Alan Biddle, WA4SCA

Speakers:

"AMSAT Status Report." Barry Baines, WD4ASW, AMSAT-NA President, will highlight recent activities within AMSAT and discuss some of the challenges, accomplishments, and exciting projects of the organization.

"A report on ARISS." Frank Bauer, KA3HDO, AMSAT-NA Vice President for Human Spaceflight, will discuss amateur operations on the International Space Station.

"AMSAT Fox Satellite Program," Tony Monteiro, AA2TX, AMSAT-NA Engineering VP, will present the current Status of the AMSAT Fox CubeSat Projects.

"The AMSAT-UK FUNcube CubeSat." Howard Long, G6LVB, AMSAT-UK Committee Member, will discuss the FUNcube project which will enable amateurs and students to use and learn about satellites.

"Amateur Satellites, Education, and You!" Mark Hammond, N8MH, AMSAT-NA Educational Relations VP, will discuss what satellite operators can do to support the educational goals of AMSAT.

[ANS thanks Alan WA4SCA for the above information]

More 'AMSAT at Dayton' News

+ AMSAT Hotel

The cutoff date to book a room with the AMSAT group is April 25. If you are interested in staying with AMSAT at Dayton, please call Martha at the AMSAT Office at 301-589-6062.

+ Thursday Night Dinner and Beverages at Tickets Pub and Eatery

Thursday night, May 16, 1830-???? at the Tickets Pub and Eatery in Fairborn, OH. This is a great chance to relax after a hard day's travel or setting up the AMSAT display area. Very informal. Click the 'AMSAT at Dayton Hamvention 2013' button on the new Web Site: http://www.amsat.org.

+ AMSAT/TAPR Friday Night Banquet

AMSAT/TAPR Banquet on Friday night, May 17 is one of the main AMSAT activities during the 2013 Hamvention at Dayton. Banquet tickets will not be sold at the AMSAT booth during the Hamvention so reservations must be made through the AMSAT Store. For the latest details about the Banquet go to the 'AMSAT at Dayton Hamvention 2013' button on the new Web Site: http://www.amsat.org. The link to the AMSAT Store to purchase the Banquet tickets will be found there. Tickets are $30 apiece.

+ Satellite Demonstration Area

AMSAT is encouraging everyone attending the 2013 Dayton Hamvention to come by the Satellite Demonstration Area just outside of the Ball Arena entrance for live demonstrations making contacts using the amateur satellites. There will be AMSAT volunteers there to explain how to make the contacts and during actual satellite passes. Lists of satellite pass times will be posted in the satellite demonstration area and at the AMSAT booth.

[ANS thanks AMSAT's 2013 Dayton Committee for the above information]

ISS Expedition 35 Crew To Include Three Licensed Hams

A report posted on Space-Travel.com says Russian cosmonauts Pavel Vinogradov, RV3BS and Alexander Misurkin and NASA astronaut Chris Cassidy have arrived at the Baikonur Cosmodrome in Kazakhstan to prepare for the March 29 launch to the International Space Station.

Their Soyuz spacecraft is to reach the ISS in a record six hours due to a new fast-track launch trajectory.

The ISS will have a crew of six upon arrival of the Soyuz when Vinogradov, Misurkin and Cassidy join with Russian cosmonaut Roman Romanenko, Canadian astronaut Chris Hadfield, KC5RNJ/VA3OOG, and US astronaut Thomas Marshburn, KE5HOC are already aboard the space station.

See http://tinyurl.com/March29-Launch (Space-Travel.com) for their orginal posting.

[ANS thanks Space-Travel.com for the above information]

ARISS News

Recent ARISS Contacts

+ Christ the King School, Adelaide, South Australia, Australia on 20 March 2013

A successful ARISS Contact was made with with participants at Christ the King School, Adelaide, South Australia, Australia on 20 Mar. The contact began at approximately 07:15 UTC, and lasted for about 9 minutes and 30 seconds. The contact was a telebridge between OR4ISS and IK1SLD and was audible over Italy and adjacent areas.

Established by the Sisters of the Good Samaritan, Christ the King School, Warradale, is a small, Reception to Year 5 Catholic parish school within the Brighton Parish in Adelaide. The school has approximately 190 students across 7 classes. In the Catholic tradition, they seek to provide a comprehensive Catholic education to children in a caring, faith community.

+ Ann Richards School for Young Women Leaders, Austin, TX on 20 March 2013

A successful ARISS Contact was made with with participants at Ann Richards School for Young Women Leaders, Austin, TX on 20 Mar. The contact began at approximately 14:20 UTC, and lasted for about 9 minutes and 30 seconds. The contact was a telebridge between NA1SS and VK6MJ and was audible over portions of Australia and adjacent areas.

The Ann Richards School for Young Women Leaders is a unique all-girls school founded to educate young women and give them the confidence and skills necessary to succeed in college, in their careers, and in their communities. They are a public school in the Austin Independent School District serving over 700 girls in 6th through 12th grade. The girls partake and excel in engineering design projects and robotics competitions. The demographics of our student body mirror that of our local community. During the 2011 - 2012 school year, 61% percent of our students were Hispanic, 22% are Caucasian, 13% were African-American, 3% were Asian-American and 1% were American Indian/Alaskan Native. Two hundred of the girls were gathered as 10 of their peers asked questions on behalf of all grade levels during the ARISS contact.

+ UA Huntsville Space Hardware Club, Huntsville, AL, on 21 March 2013

A successful ARISS Contact was made with with participants at UA Huntsville Space Hardware Club, Huntsville, AL, on 21 Mar. The contact began at approximately 15:50 UTC, and lasted for about 9 minutes and 30 seconds. The contact was a direct between NA1SS and K4UAH and was audible over portions of the U.S.

The Space Hardware Club is a UA Huntsville student organization. The club is student run and is strictly volunteer. Using the capacities of a multi-disciplinary team of engineering to conceptualize, design, build, test and fly flight hardware for orbital spaceflight, high altitude ballooning, competitive mock-satellite design, build, launch competitions, and other space related engineering problems. Involvement in The Space Hardware Club allows students to experience real life time sensitive deadlines, and design payloads to mission specification. The students learn to design mechanical structures, software, and circuit boards while considering thermal forces, shock loads, and other realistic environmental limitations.

Upcoming ARISS Contacs For This Week

+ Thornton Middle School, Katy, TX on 25 Mar. The event is scheduled to begin at approximately 15:39 UTC. The duration of the contact is approximately 9 minutes and 30 seconds. The contact will be direct between NA1SS and KF5NZD. The contact should be audible over portions of the U.S. Interested parties are invited to listen in on the 145.80

MHz downlink. The contact is expected to be conducted in English.

+ Des Cardinaux School, Sainte-Rose, Laval, Quebec, Canada on 26 Mar. The event is scheduled to begin at approximately 13:13 UTC. The duration of the contact is approximately 9 minutes and 30 seconds. The contact will be a telebridge between NA1SS and K6DUE. The contact should be audible over the east coast of the U.S. Interested parties are invited to listen in on the 145.80 MHz downlink. The contact is expected to be conducted in French.

[ANS thanks ARISS for the above information]

[QB50] 5th European CubeSat Symposium - ESA sponsorship - Deadline postponed

Cem O. Asma, PhD, Aeronautics & Aerospace Dept von Karman Institute, reports, "We have good news regarding the 5th European CubeSat Symposium that
will be held on 3-5 June 2013 at Brussels, Belgium. The Education Office of European Space Agency has kindly offered scholarships to selected students to attend the European CubeSat Symposium. More information on the rules and how to apply are given at the Symposium web site:
https://cubesatsymposium.eu/

We have therefore decided to postpone the deadline of abstract submission to 29 Mar 2013 so that those who consider an ESA sponsorship can apply as well."

[ANS thanks Cem O. Asma, PhD for the above information]

March/April 2013 AMSAT Journal Heading for the Print Shop

AMSAT Journal Editor, JoAnne K9JKM reports that the March/April 2013 issue is on its way to the print shop this week. It should reach your mailbox in early to mid-April. This issue features two technical projects, operating features, and the latest news from AMSAT's officers.

We'll update you on all the content next week when the March/April Issue is completed, packed up, and ready for delivery.

Thanks for all the help from our Journal Editorial Team: Douglas Quagliana, KA2UPW/5; Mike Sedlak, K4ERA; Bernhard Jatzeck, VA6BMJ; Bill Hook, W3QBC, and Martha at the AMSAT Office.

The AMSAT Journal is pleased to publish your articles and photos of satellite operations and all aspects of amateur radio in space. Send your ideas and questions to journal at amsat.org.

[ANS thanks AMSAT Journal Editor JoAnne Maenpaa, K9JKM for the above information]

KiwiSAT - All systems are now flight ready

The KiwiSAT website reports that all hardware is complete and the KiwiSAT micro-satellite is operational. Final integration to launch ready awaits completion of command and control testing.

They say software is being developed and launch negotiation is underway in New Zealand. Earlier reports indicated that $1 million was required for a launch to a 700 km orbit.

Read the status report dated March 13, 2013 at
http://www.kiwisat.org.nz/status.html

[ANS thanks Trevor M5AKA and AMSAT-UK for the above information]

New Swiss Small Satellite Launch System

Swiss Space Systems – S3 a new Swiss aerospace company, was officially inaugurated in Payerne on Thursday, March 14, in the presence of representatives of the national authorities and of prestigious Swiss and international partners such as the ESA, Dassault Aviation, the Von Karman Institute, Sonaca, Meggitt and Stanford University. S3 aims to develop, build, certify and operate suborbital space shuttles dedicated to launching small satellites, enabling space access to be made more democratic thanks to an original system with launching costs reduced to a quarter of the present cost. The first test launches are planned to be carried out by the end of 2017.

The Swiss Space Systems launch model uses an Airbus A300, an aircraft already certified for zero gravity flights, to take the shuttle up to 10,000m on its back; the shuttle will then be launched from there. Combining the internal architecture developed by the French company Dassault for Hermes with the external architecture developed by the Belgian companies Sonaca and Space Application Services will develop the shuttle. Discussions are at an advanced stage concerning the engine supplier. The shuttle-drone will take care of the next part of the ascent up to an altitude of 80km, the height at which the upper stage will be launched in order to put the satellites into orbit. Once this operation has been completed, the shuttle will return to earth by gliding towards its launch airport, where it will be taken care of by the maintenance teams who will prepare it for a new launch.

S3 say agreements have already been signed for four launches for the Von Karman Institute.

How will the in-orbit delivery of small satellites work ? Video at
http://tinyurl.com/b27atko

Swiss Space Systems – S3 http://www.s-3.ch/

[ANS thanks AMSAT-UK for the above information]

Raspberry Pi as WSPR transmitter up to 250 MHz

Guido PE1NNZ has released code that he says enables the Raspberry Pi to operate as a WSPR transmitter at HF and VHF.

Guido has modified the WsprryPi code originally developed by Dan Ankers MD1CLV. He says the Raspberry Pi requires just a Low Pass Filter (LPF) and antenna connected to the GPIO4 pin in order to function as a WSPR transmitter.

The PE1NNZ code and binary is available at
https://github.com/threeme3/WsprryPi

Turning the Raspberry Pi into an FM Transmitter
http://www.southgatearc.org/news/march2013/
turning_the_raspberry_pi_into_an_fm_transmitter.htm

Dan Ankers MD1CLV WSPR
http://m0xpd.blogspot.co.uk/2013/01/raspberry-whispers.html

WSPR on the Raspberry Pi
http://www.southgatearc.org/news/march2013/
wspr_on_the_raspberry_pi.htm

[ANS thanks Southgate Amateur radio News for the above information]

Houston based WebSDR for 2m Ham Band

Thomas Krahn KT5TK has made available a Houston-based Web Software Defined Radio for the 144-146 MHz amateur radio band.

The WebSDR receiver is located in the 8th floor of a Houston office building. The receiver is a simple RTLSDR dongle with an Elonics E4000 tuner. The brand is: Terratec NOXON DAB/DAB+ USB dongle (rev 2). Currently a telescopic antenna is being used but it's planned to change to a bi-quad antenna.

Thomas notes that the Houston AMSAT NET can be heard on Tuesdays at 8pm Central Time (Wednesday 0100 UT) 0n 145.470 MHz FM. (Also available on Echolink AMSAT node.)

The Houston 2m WebSDR is available at
http://websdr.tkrahn.com:8901

[ANS thanks Southgate ARC for the above information]

AMSAT Helps at Monrovia HS Science Expo and ISS Downlink

On Saturday, March 2, the Pasadena Radio Club participated in the Monrovia High School Science Expo with the help of local AMSAT members.Set up started at 8 am and the display began at 10. Tom Berne gave students the opportunity to talk over amateur radio while Robert and Irene Allen and Kate Hutton transmitted radiograms. Tom Mikkelsen, Tim LaMarca, and Dale Hunzeker demonstrated amateur radio satellite communications with an AMSAT satellite simulator and a satellite receiving station. All spent considerable time answering questions
and sharing their ham radio experiences.

Other actives at the Science Expo included a FIRST Robotics competition, demonstrations by the Remote Control Aircraft Club, and booths from Sidewalk Astronomers, NASA, Planetary Society, FTC/FRC Robotics, and Miachi/UniTek. Stargazing activities continued into the evening.

Science Expo activities continued on Tuesday, March 5, with a NASA sponsored live International Space Station downlink. Over one thousand 5th - 12th grade Monrovian students watched as three astronauts "floated" inside the space station while answering students' questions. Tim LaMarca, Jutti Marsh, and Dale Hunzeker were in the audience. These activities are examples of ways amateur radio can work with schools in STEM (Science, Technology, Engineering, and Mathematics) education.

[ANS thanks Dale L. Hunzeker, KJ6VUC for the above information]

Music in Space Downlink With the International Space Station

Join NASA's Johnson Space Center, or JSC, Digital Learning Network for a live International Space Station downlink with astronaut Chris Hadfield, space station commander. Commander Hadfield and students from the Pasadena Independent School District's Pearl Hall Elementary will explore the many cultures and music surrounding the International Space Station partners. Students will perform songs at JSC with astronaut Dan Burbank and with space station astronaut Chris Hadfield. Students from Pearl Hall Elementary in Pasadena, Texas, and the Chris Hadfield Public School in Ontario, Canada, will speak to Chris while exploring about the connection between the arts and science, technology, engineering and mathematics.

Watch the webcast live on March 27, 2013, from 2:30-3:45 p.m. CDT* by clicking on the link below.
http://tinyurl.com/2aufnge

Questions about the program may be directed to
Patricia Moore at patricia.l.moore@nasa.gov.

*The webcast time is subject change due to communication with the space station. Please visit http://dln.nasa.gov for the most recent information.

[ANS thanks NASA Education Express Message -- March 21, 2013

Argentine CubeBug-1 satellite will have amateur radio digipeater

CubeBug-1 is the first technology demonstration mission for a new CubeSat platform design (mechanics, hardware and software) intended to be released as Open Source and Open Hardware for its use in Amateur projects, University projects and research labs.

The project is sponsored by the Argentinian Ministry of Science, Technology and Productive Innovation.

Payloads on this first mission include:
- an ARM based on-board computer
- a nano-reaction wheel with its driver circuit
- a low resolution camera

all based on COTS components

CubeBug-1 is a 2U CubeSat and the team are planning to use half duplex communications on 437.445 MHz with 9k6 GMSK data. Telemetry information is at http://1.cubebug.org/coms/telemetry

After the technology demonstration part of the mission is over, the satellite will enter a mode that will include services to the Amateur radio community, including a Digipeater, science data downloads from the payload (including images if possible).

CubeBug-1 is expected to launch on a Long March CZ-2D rocket from the Jiuquan Space Center on April 28, 2013. Other satellites on the same launch include NEE-01 Pegasus and TURKSAT-3USAT.

Watch a CubeBug-1 video at http://vimeo.com/56055215

CubeBug-1 website http://1.cubebug.org/

[ANS thanks AMSAT-UK for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

Primary and secondary school students are eligible for membership at one-half the standard yearly rate. Post-secondary school students enrolled in at least half time status shall be eligible for the student rate for a maximum of 6 post-secondary years in this status. Contact Martha at the AMSAT Office for additional student membership information.

73,
This week's ANS Editor,
EMike McCardel, KC8YLD
kc8yld at amsat dot org

____
Via the ANS mailing list courtesy of AMSAT-NA
http://amsat.org/mailman/listinfo/ans

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X-Google-Thread: 10e8ad,886836fb7268e0eb,start
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From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-084 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Mon, 25 Mar 2013 15:37:58 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 2345
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <003c01ce298f$d5f99990$81ecccb0$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
X-Trace: reader2.panix.com 1364240278 26556 166.84.1.6 (25 Mar 2013 19:37:58 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Mon, 25 Mar 2013 19:37:58 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
DKIM-Signature: v=1; a=rsa-sha256; c=relaxed/relaxed; d=comcast.net;
     s=q20121106; t=1364240219;
     bh=o2E559T2JpRwgcOZbFCzKqPyZy7ghkdHrJ86i9BHtMs=;
     h=Received:Received:From:To:Subject:Date:Message-ID:MIME-Version:
      Content-Type;
     b=kLI9X75EDzudU8sR796r6TVeSApuREdBxNUU41BastMgcb2hQD96IS2U1C1R1Zvn9
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      /OegJcTMBTsbMQpzMqdKI3r4qnzERxBhFpOBZQcJqEXFhdqsnV4IyMnBLhJBFflRCu
      z9khQFyUFEvUA==
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
Content-Language: en-us
```

This report is organized into four (4) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - deorbited/returned satellites

SB SAT @ AMSAT W8ISS $WSR-084.S1
WSR 084 Part 1 03/25/2013

AMSAT NEWS SERVICE BULLETIN 084.S1

FROM AMSAT HQ SILVER SPRING, MD, March 25, 2013
TO ALL RADIO AMATEURS
BID: $WSR-084.S1

PW-Sat
Catalog Number: 38083
Launch Date: Febrauary 13, 2012 1000z
Launch Site: Kourou, French Guiana

Status: On Orbit

Uplink: 435.020 MHz FM
Downlink: 145.900 MHz DSB

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=132
[02112013]
=====
DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational
Current Mode: Science Mode - Beacon ONLY

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink: 435.530 to 435.570 MHz

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=68
[02112013]
=====
VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05, 2005 0444z
Launch site: Satish Dhawan Space Centre, India

Status: Operational
Current Mode: U/v - Dutch Transponder

Frequencies:
Indian Transponder:

Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.9360 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=30

To know what transponder is switched on please listen for the beacon that is active. Each transponder has a different beacon.
[02112013]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002 1700z
Launch site: Baikonur, Kazakhstan

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz. The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10 minute timer.
[02112013]
=====

FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Operational
Current Mode: V/u (Mode JA)

Voice/CW (Mode JA)
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage:
http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts.htm
[02112013]

=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974
Launch site: Vandenberg AFB, California, USA

Status: Operational

Current Mode: Alternating between Mode A and B every 24 hours

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)

```
Beacons:   29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php
[02112013]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998 0640z (ZARYA module)
Launch sites: Baikonur, Kazakhstan
              Kourou, French Guiana
              Uchinoura Space Center, Japan
              Kennedy Space Center, Titusville, Florida, USA

Status: Operational

Current Active Modes: FM Repeater - OFF
                      Voice -       V/v
                      BBS -         V/v
                      2m APRS -     V/v
                      2m Digi -     V/v
                      70cm APRS -   ?
                      70cm Digi -   ?
                      SSTV -        V/v


Expedition 35 Crew (March 2013 - September 2013):
Commander:                Chris Hadfield      KC5RNJ/VA3OOG
Flight Engineer:          Tom Marshburn       KE5HOC
Flight Engineer:          Roman Romanenko
Flight Engineer:
Flight Engineer:
Flight Engineer:


Available Modes and Frequencies:
Digital/APRS:
Worldwide 2m packet uplink:     145.825 MHz FM 1k2
Worldwide 2m packet downlink:   145.825 Mhz FM 1k2
Worldwide 70cm packet uplink:   437.550 Mhz FM 1k2
Worldwide 70cm packet downlink: 437.550 Mhz FM 1k2

Voice:
Region 1 voice uplink:          145.200 MHz FM
Region 2/3 voice uplink:        144.490 MHz FM
Worldwide downlink:             145.800 MHz FM

Crossband Repeater:
Repeater Uplinks:              1269.650 MHz FM
                                437.800 MHz FM
```

145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
2m Packet Mailbox: RS0ISS-11
2m Digipeater alias: ARISS
70cm Packet Mailbox: RS0ISS-1
70cm Digipeater callsign: RS0ISS
70cm Digipeater alias: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[03182013]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-084.S2
WSR 084 Part 2 03/25/2013

AMSAT NEWS SERVICE BULLETIN 084.S2
FROM AMSAT HQ SILVER SPRING, MD, March 25, 2013
TO ALL RADIO AMATEURS
BID: $WSR-084.S2

STRaND-1
Catalog Number:
Launch Date: February 25, 2013 12:31z
Launch Site: Satish Dhawan Space Centre, India

Status: Operational

Uplink:
Downlink:437.568MHz 9k6 FSK

```
Beacon: None(?)

Callsign:

URL: http://www.sstl.co.uk/Missions/STRaND-1--Launched-2013
[03042013]
=====
Fitsat-1
Catalog number: 38853
Launch Date: October 04, 2012
Launch site: Kibo Japanese Experiment Module, International Space
Station

Status: Operational

Uplink:
Downlink(s): 437.445MHz 1k2 AFSK
            5840.00 MHz 115k2 data
            LED CW (200w pulses)

Beacon(s): 437.250 MHz CW

Callsign:  NIWAKA

URL: http://carpcomm.com/satellite/fitsat1
[10292012]
=====
TechEdSat
Catalog number: 38854
Launch date: October 04, 2012
Launch site: Kibo Japanese Experiment Module, International Space
Station

Uplink(s):
Downlink(s): 437.465 1k2 AFSK

Beacon(s):

Callsign:

URL:http://www.techedsat.com/
[10152012]
=====
We Wish
Catalog number: 38856
Launch date: October 04,2012
Launch Site: Kibo Japanese Experiment Module, International Space
Station

Uplink(s):
Downlink(s): 437.505MHz 1k2 AFSK
             437.505MHz SSTV
```

```
Beacon(s): 437.505MHz CW

Callsign: JQ1ZIJ

URL:
[10152012]
=====
F-1
Catalog number: 38855
Launch Date: October 04, 2012
Launch Site: Kibo Japanese Experiment Module, International Space
Station

Uplink(s):
Downlink(s): 145.980MHz 1k2 AFSK
             437.485MHz FM moduled CW

Baecon(s):

Callsign: XV1VN

URL: http://fspace.edu.vn/
[10152012]
=====
Aeneas
Catalog Number: 38760
Launch Date: September 13, 2012 2139z
Launch Site: Wallops Island, Virginia, USA

Status: On Orbit

Uplink: WiFi 2425MHz
Downlink:
WiFi: 2425MHz
Spread Spectrum: Somewhere in the 70cm band

Beacon: 437.600MHz 1k2 ax25 every 10 seconds

Callsign:

URL:
[10012012]
=====
CSSWE (Colorado Student Space Weather Experiment)
Catalog Number: 38761
Launch Date: September 12, 2012 2139z
Launch Site: Wallops Island, Virginia, USA

Status: On Orbit

Uplink:
Downlink:       437.345MHz 9k6 with ax.25
```

```
Beacon:

Callsign:

URL:
[10012012]
=====
CP5 (Polysat)
Catalog Number: 38763
Launch Date: September 12, 2012 2139z
Launch Site: Wallops Island, Virginia, USA

Status: On Orbit

Uplink:
Downlink:       437.405MHz AFSK on LSB ax.25 over NRZI at 1k2 baud,
every 2
                minutes, begins 3.5 hours after first turn-on

Beacon:

Callsign:

URL:
[10012012]
=====
CXBN (Cosmic X-Ray Background Nanosatellite)
Catalog Number: 38762
Launch Date: September 12, 2012 2139z
Launch Site: Wallops Island, Virginia, USA

Status: On Orbit

Uplink:
Downlink:       437.525MHz GFSK ax.25

Beacon:

Callsign:

URL:
[10012012]
=====
Proiteres
Catalog Number: 38756
Launch Date: September 09, 2012 2139z
Launch Site: Satish Dhawan Space Centre, India

Status: On Orbit

Uplink:
Downlink: 437.485MHz FM/AFSK
```

Beacon:

Callsign: JL3YZK

URL:
[10012012]
=====
RS-40 MiR (Yubileiny-2)
Catalog Number: 38735
Launch Date: July 28, 2012
Launch Site: Plesetsk Missile and Space Complex, Russia

Status: On Orbit

Uplink:
Downlink(s):   435.265 MHz
                435.365 MHz

Beacon:

Callsign:

URL:
[08272012]
=====
HORYU-II
Catalog number: 38340
Launch Date: May 17, 2012 1639z

Status: On Orbit

Uplink: 145.??? MHz
Downlink: 437.375 MHz CW/AX25/FSK

Beacon: 437.375 MHz CW

Callsign: JG6YBW

URL:

IARU Coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=216
[10012012]
=====
XaTcobeo
Catalog Number: 38082
Launch Date: Febrauary 13, 2012 1000z
Launch Site: Kourou, French Guiana

Status: Operational

Uplink:
Downlink: 437.365 MHz FFSK with AX.25

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=135
[100162012]
=====
UniCubeSat
Catalog Number: 38085(?)
Launch Date: Febrauary 13, 2012 1000z
Launch Site: Kourou, French Guiana

Status: Operational

Uplink:
Downlink: 437.305 MHz 9k6 bps GMSK

Beacon:

Callsign:

URL:
http://www.gaussteam.com/index.php?option=com_content&view=article&id=
96:unicu
besat&catid=36:unicubesat&Itemid=183

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=133
[10012012]
=====
Robusta
Catalog Number: 38083(?)
Launch Date: Febrauary 13, 2012 1000z
Launch Site: Kourou, French Guiana

Status: On Orbit

Uplink:
Downlink: 437.325 MHz 1k2 FM telemetry (data every 3 min, 20 sec. burst)

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=122

```
[10012012]
=====
MO-72 MaSat-1
Catalog Number: 38081
Launch Date: Febrauary 13, 2012 1000z
Launch Site: Kourou, French Guiana

Status: Operational

Uplink:
Downlink: 437.345 MHz GFSK 625/1250 bps
          437.345 MHz CW

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=126
[10012012]
=====
Goliat
Catalog Number: 38084(?)
Launch Date: Febrauary 13, 2012 1000z
Launch Site: Kourou, French Guiana

Status: Operational

Uplink:
Downlink: 437.485 MHz 1k2 AFSK

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=98
[10012012]
=====
E-St@r
Catalog Number: 38079
Launch Date: Febrauary 13, 2012 1000z
Launch Site: Kourou, French Guiana

Status: On Orbit

Uplink:
Downlink: 437.445 MHz 1k2 bps AFSK
```

```
Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=130
[10012012]
=====
ALMASat-1
Catalog Number: 38078
Launch Date: Febrauary 13, 2012 1000z
Launch Site: Kourou, French Guiana

Status: On Orbit

Uplink:
Downlink:  437.465 MHz 1k2 bps FSK
          2407.850 MHz

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=39
[10012012]
=====
RS-39 Chibis-M
Catalog Number: 38051
Launch Date: October 30, 2011 10:11:00 UTC
Launch site: Tyuratam (Baikonur Cosmodrome), Kazakhstan

Status: Operational

Uplink:
Downlink:

Beacon: 435.315 MHz CW
        435.215 MHz CW

Callsign:

URL:

IARU coordination status page:
[07302012]
=====
JUGNU
Catalog Number: 37839
```

```
Launch Date: October 12, 2011 05:30:00 UTC
Launch site: Satish Dhawan Space Centre, India

Status: On Orbit

Uplink:   145.??? MHz 1k2 (mode?)
Downlink: 437.505 MHz 9k6 (mode?)

Beacon: 437.275 MHz 15 wpm (?) CW

Callsign:

URL: http://www.iitk.ac.in/me/jugnu/index.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=160
[07092012]
=====
SRMSAT
Catalog Number: 37841
Launch Date: October 12, 2011 05:30:00 UTC
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Uplink:   145.900 MHz 1k  AX.25 (speed?)
Downlink: 437.500 MHz 2k4 AX.25

Beacon: 437.425 MHz 12 wpm CW

Callsign:

URL: http://srmsat.in/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=181
[01282013]
=====
HRBE (E1P Explorer 1 [Prime] CubeSat (E1P-U2))
Catalog Number: 37855
Launch Date: October 28, 2011
Launch site: Vandenberg Air Force Base, California, USA

Status: On Orbit

Uplink:   437.305 MHz (???)
Downlink: 437.505 MHz AX.25 (SSB?)

Beacon:

Callsign:

URL: http://ssel.montana.edu/
```

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=116
[01122012]
=====
M-Cubed
Catalog Number: 37855
Launch Date: October 28, 2011
Launch site: Vandenberg Air Force Base, California, USA

Status: On Orbit

Uplink:
Downlink: 437.485 MHz AX.25

Beacon:

Callsign:

URL: http://umcubed.org/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=215
[01122012]
=====
RAX-2
Catalog Number: 37853
Launch Date: October 28, 2011
Launch site: Vandenberg Air Force Base, California, USA

Status: Operational

Uplink:
Downlink: 437.345MHz 9k6 GMSK

Beacon:

Callsign:

URL: http://rax.engin.umich.edu//

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=221
[03232012]
=====
AO-71 AubieSat-1
Catalog Number: 37854
Launch Date: October 28, 2011
Launch site: Vandenberg Air Force Base, California, USA

Status: On Orbit

Uplink:

Downlink: 437.475 MHz 1k2 AX.25

Beacon: 437.475 MHz CW

Callsign: KI4NQO

URL: http://www.space.auburn.edu/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=148
[12262011]
=====
O/OREOS
Catalog Number: 37224
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: On Orbit

Uplink:
Downlink: 437.035 MHZ AX.25

Beacon:

Callsign:

URL: http://www.ooreos.org/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=146
[02092011]
=====
Rax-1 Radio Aurora Explorer
Catalog Number: 37223
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: On Orbit

Uplink:
Downlink: 437.505 MHz 9k6 GMSK

Beacon:

Callsign: RAX-1

URL: http://rax.engin.umich.edu/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=165
[02092011]
=====
FO-69 Fastrac-1 Sara Lily

Catalog Number: 37227
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: Operational

Uplink 1: 145.980 MHz 1k2 baud
Uplink 2: 145.825 MHz 1k2 baud
Downlink: 437.345 MHz 1k2 and 9k6 baud

Beacon: 437.435 MHz 1k2 AX.25

Callsign: Fast1

URL: http://fastrac.ae.utexas.edu/index.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=83
[07052011]
=====
FO-70 Fastrac-2 Emma
Catalog Number: 37380
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: Operational

Uplink 1: 435.025 MHz 1k2 baud
Uplink 2: 437.435 MHz 9k6 baud
Downlink: 145.825 MHz 1k2 and 9k6 baud

Beacon: 145.825 MHz 1k2 AX.25

Callsign: Fast2

URL: http://fastrac.ae.utexas.edu/index.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=84
[12162011]
=====
StudSat
Catalog Number: 36796
Launch Date: July 12, 2010 0352z
Launch site: Satish Dhawan Space Centre, India

Status: On Orbit

Uplink: 437.505MHz, 9600bps FSK
Downlink: 437.505MHz, 9600bps FSK
Beacon : 437.505MHz,   20bps ASK

IARU coordination status page:

```
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=164
[02092011]
=====
TIsat-1
Catalog Number: 36799
Launch Date: July 12, 2010 0352z
Launch site: Satish Dhawan Space Centre, India

Status: On orbit

Callsign: HB9DE

Uplink:   145.980MHz FM, AFSK
Downlink: 437.305MHz FM, AFSK
Beacon:   437.305MHz CW

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=118
[02092011]
=====
SwissCube
Catalog Number: 35932
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Callsign: HB9EG

Beacon(100mw): 437.5050MHz CW
Beacon(1w):    437.5050MHz FSK 1k2bps

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=109
[02092011]
=====
UWE-2
Catalog Number: 35934
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: In Orbit

Beacon(500mw): 437.3850 MHz AFSK 1k2bps
               437.3850 MHz FSK 9k6bps

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=110
[02092011]
=====
ITUpsAT1
Catalog Number: 35935
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Beacon(100mw): 437.325MHz CW
Beacon(1w): 437.325MHz 19k2bps

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=113
[02092011]
=====
BEESAT
Catalog Number: 35933
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Callsign: DP0BEE

Beacon(100mw): 436.000MHz CW
Beacon(500mw): 436.000MHz GMSK 4k8bps
Beacon(500mw): 436.000MHz GMSK 9k6bp
[02092011]
=====
SOHLA-1 (ASTRO TECH.)
Catalog Number: 33496
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational

Proposed Frequencies and Modes:
Downlink: 437.505 MHz AFSK/CW
Beacon:   437.505 MHz AFSK/CW

Callsign:

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=101
[02092011]
=====
KAGAYAKI (Solan Co.)
Catalog Number: 33495
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: In Orbit

Downlink: 437.375 MHZ    FSK9k6/CW
Beacon:   437.375 MHz    FSK9k6/CW

IARU coordination status page:
```

```
AMSAT-NA webpage:

[02092011]
=====
STARS (Kagawa Univ.) (Twin Satellites)
Catalog Number: 33498
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational ?

Downlinks: 437.485 MHz FM/CW
           437.465 MHz FM/CW
Beacons:   437.305 MHz FM/CW
           437.275 MHz FM/CW

Callsigns: JR5YBN
           JR5YBO

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=99

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=121&retURL
=/satellites/status.php
[02092011]
=====
KKS-1 (Tokyo MCIT)
Catalog Number: 33499
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational

Downlink:  437.455 MHz AFSK/CW
Beacon:    437.385 MHz AFSK/CW

Callsign: JQ1YYY

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=107

AMSAT-NA webapge:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=120&retURL
=/satellites/status.php
[20092011]
=====
PRISM (Tokyo Univ.)
Catalog Number: 33493
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan
```

Status: Operational

Uplink: 145.xxx MHz AFSK 1k2
Downlink: 437.425 MHz AFSK 1k2
Beacon: 437.250 MHz CW

Callsign: JQ1YCX

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=97

Read terms and conditions of operations at the PRISM web page to find
out how
to properly operate on the satellite and to get the uplink frequency.
It
has
been asked that the uplink frequency not be given out untik you have
read and
understood the terms of usage.

URL:
http://www.space.t.u-tokyo.ac.jp/prism/en/HAMservice.html
[10282012]
=====
RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number: 32953
Launch Date: May 23, 2008 1520z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational

Curent Modes: Telemetry
              Audio
              Images

Downlinks: 435.315 MHz
           435.215 MHz

AMSAT-NA website:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=115&ret
URL=/satellites/status.php

Official website:
http://www.npopm.com/?cid=leoca&caid=43
[02092011]
=====
CanX-2
Catalog number: 32790
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational in range of ground station only

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=46
[02092011]

=====

AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Downlink: 437.425 MHz 1k2 baud packet

For the latest project status update please visit the AAUSAT-II web page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=60
[02092011]

=====

CO-65 CUTE-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Downlink: 437.475 MHz 9k6 Packet
Uplink: 1267.600 Mhz

Telemetry Beacon:
Downlink: 437.2750 MHz CW

For the latest project status update please visit the Cute-1.7+APD II web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=78

Command Station blog website:
http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=112&retURL=/satellites/status.php
[03232012]

=====

```
Compass-1
Catalog number: 32787
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Current Mode: dependant on last received command

Uplink:   145.980 MHz FM
Downlink: 437.275 Mhz CW
          437.405 MHz Packet

For the latest project status update please visit the Compass 1 web
page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=52

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=114&retURL
=/satellites/status.php
[06162011]
=====
CO-66 Seeds II
Catalog number: 32791
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Downlink: 437.485 MHz

Callsign: JQ1YGU

For the latest project status update please visit the Seeds 2 web
page: http://cubesat.aero.cst.nihon-u.ac.jp/english/seeds_2_e.html

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=36

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=113&retURL
=/satellites/status.php
[073092011]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007 0702z
Launch site: Baikonur, Kazakhstan

Status: Intermittent
```

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=94&retURL=/satellites/status.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=72
[02092011]
=====
CP3
Catalog Number: 31129
Launch Date: April 17,2007 0702z
Launch site: Baikonur, Kazakhstan

Status: Operational

Current Mode: /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=74
[02092011]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005 0652z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon: 437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/xivpicte.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=37

```
[02092011]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: ?????

Current Mode: /u

Beacon:     436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=96&retURL
=/satellites/status.php

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[02092011]
=====
QuakeSat
Catalog Number: 27845
Launch Date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Telemetry only

Current Mode: 9600 baud data packet

Mode U packet
Downlink: 436.675 MHz 9k6 BPS

Quakesat webpage:
http://www.quakefinder.com/services/quakesat-ssite/
[02252011]
=====
CO-55 Cute-1.7+APD II
Catalog Number: 27844
Launch date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational

Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
```

Downlink: 436.8375 MHz CW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=69&retURL=/satellites/status.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=78
[02092011]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001 0240z
Launch site: Kodiak Launch Complex, Alaska, USA

Status: Operational

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[10292012]
=====
RS-22 RADIO SPORT 22 (MOZHAYETS 4)
Catalog number: 27939
Launch Date: September 27, 2003 0612z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational - 70cm cw only

Current Mode: /u

CW Beacon - 435.352 MHz
            145.818 MHz

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=76&retURL=/satellites/status.php
[02092011]
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990
Launch site: Kourou, French Guiana

Status: CW Beacon only

Uplinks: 145.840 MHz 1200-baud Manchester FSK

```
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink:      437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[02092011]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984
Launch site: Vandenburg AFB, California, USA

Status: Operational ?

Current Mode:  /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon:           435.025 MHz
Mode-S Beacon:     2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[07052011]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998 0640z (ZARYA module)
Launch sites: Baikonur, Kazakhstan
              Kourou, French Guiana
              Uchinoura Space Center, Japan
              Kennedy Space Center, Titusville, Florida, USA

Status: Operational

Current Active Modes: FM Repeater - OFF
                      Voice -       V/v
                      BBS -         V/v
                      2m APRS -     V/v
                      2m Digi -     V/v
                      70cm APRS -   ?
                      70cm Digi -   ?
```

SSTV - V/v

Expedition 35 Crew (March 2013 - September 2013):

Commander:	Chris Hadfield	KC5RNJ/VA3OOG
Flight Engineer:	Tom Marshburn	KE5HOC
Flight Engineer:	Roman Romanenko	
Flight Engineer:		
Flight Engineer:		
Flight Engineer:		

Available Modes and Frequencies:

Digital/APRS:

Worldwide 2m packet uplink:	145.825 MHz FM 1k2
Worldwide 2m packet downlink:	145.825 Mhz FM 1k2
Worldwide 70cm packet uplink:	437.550 Mhz FM 1k2
Worldwide 70cm packet downlink:	437.550 Mhz FM 1k2

Voice:

Region 1 voice uplink:	145.200 MHz FM
Region 2/3 voice uplink:	144.490 MHz FM
Worldwide downlink:	145.800 MHz FM

Crossband Repeater:

Repeater Uplinks:	1269.650 MHz FM 437.800 MHz FM 145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink:	145.800 MHz FM 437.800 MHz FM (Kenwood)

SSTV Robot 36:

Downlink:	145.800 MHz FM

Mode and Antenna Polarization:

V: Linear

U: Linear

Callsigns:

Belgian:	OR4ISS
German:	DP0ISS
Russian:	RS0ISS RZ3DZR
United States:	NA1SS
2m Packet Mailbox:	RS0ISS-11
2m Digipeater alias:	ARISS
70cm Packet Mailbox:	RS0ISS-1
70cm Digipeater callsign:	RS0ISS
70cm Digipeater alias:	ARISS

Official ARISS Webpage:	http://www.rac.ca/ariss
ISS Fan Club Webpage:	http://www.issfanclub.com
APRS tracking page:	http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[03182013]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-084.S3
WSR 084 Part 3 03/25/2013

AMSAT NEWS SERVICE BULLETIN 084.S3
FROM AMSAT HQ SILVER SPRING, MD, March 25, 2013
TO ALL RADIO AMATEURS
BID: $WSR-084.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

NANOSAIL-D
Catalog Number: 37361
Ejection Date: January 17, 2011

Status: Non - Operational

Downlink: 437.270 MHz AX.25

URL: http://nanosaild.engr.scu.edu/dashboard.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=115
[07302012]
=====
HO-68 HOPE-1 (CAS-1) (XW-1)
Catalog Number: 36122
Launch Date: December 15, 2009 0231z
Launch site: Taiyuan Space Center, PRC

Status: Telemetry only

```
Callsign:
Broadcast:    BJ1SA-11
BBS:     BJ1SA-12

Uplinks:   145.8250 MHz FM, PL 67.0 Hz.
           145.9250 - 145.9750 MHz SSB/CW
           145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
           435.7650 - 435.7150 MHz SSB/CW
           435.6750 MHz AFSK 1200 BPS

Beacon:    435.7900 MHz CW
```

Mode and Antenna Polarization:

```
V: LHCP 2.0dBi max
U: RHCP 3.0dBi max

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=108

For more information about XW-1 (CAS-1):
http://
[04302012]
=====
SO-67 SumbandilaSat
Catalog Number: 35870
Launch Date: September 17, 2009 1555z
Launch site: Baikonur, Kazakhstan

Status: Non - Operational

Callsign: ZS0SUM

Uplink:   145.875MHz FM tone 233.6 Hz
Downlink: 435.345MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

For more information about SO-67:
http://www.amsatsa.org.za/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=88
[01272012]
=====
CP4
Catalog Number: 31132
Launch Date: April 17, 2007

Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon:    437.325 MHz CW

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=79
[09062010]
=====
LIBERTAD-1
Catalog Number: 31128
Launch Date: April 17, 2007

Status: Non-Operational
```

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink: 145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=76
[09062010]

=====

PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: Non-Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder: 145.825 Mhz FM

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=51
[09062010]

=====

NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
2407.250

Official Website: http://www.ncube.no

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=24
[09062010]

=====

XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 MHz FM 67Hz CTCSS
Voice Downlink: 2401.835 MHz FM

Packet Up/Downlink: 437.250 MHz 9k6 packet
Packet Downlink   2401.835 MHz 38k4 packet

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=54
[09062010]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non-Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=53
[09062010]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004 0745z
Launch site: Baikonur, Kazakhstan

Status: Non - Operational

Current Mode(s):
Voice repeater: V/u
Uplink: 145.880 MHz FM
Downlink: 435.150 MHz FM

Telemetry: Recovery efforts
Downlink: 435.150MHz 9k6

Analog voice downlink: 435.300 MHz FM
                           435.150 MHz FM
                          2401.200 Mhz FM
Analog voice uplink: 145.860 MHZ FM
                           145.880 MHz USB
                           145.880 MHz FM
                           145.920 MHz FM
                           145.920 MHz FM - 67 Hz PL tone burst
                          1268.705 MHz FM
Digital Downlinks: 435.150 MHz FM 38k4 PBP, 1 watt output
                           435.150 MHz FM 9k6 Pacsat Broadcast Protocol
                          2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Pacsat Broadcast Protocol
                          1268.703 mhz FM 9k6 Pacsat Broadcast Protocol

```
Beacon:                    435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=19
[12062011]
=====
CANX-1
Catalog Number: 27847
Launch Date: June 30, 2003

Status: Non-Operational

Downlink: 437.8800 MHz AFSK 1k2bps
[06052009]
=====
DTUSAT
Catalog Number: 27842
Launch Date: June 30, 2003

Status: Non-Operational

Current Mode: 2k4 AFSK Packet last reported

Downlink: 437.475MHz

Officail webpage: http://dtusat1.dtusat.dtu.dk/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=101&retURL
=satellites/all_oscars.php
[02212009]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink:   435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
```

```
(optional voice message)

Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Telemetry only

Uplinks:   145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink:  437.325 MHz

Broadcast callsign: MYSAT3-11
BBS:                MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial land and weather imaging payloads offers FM and FSK
Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as
a collaborative effort between the Malaysian government and Surrey
Satellite Technology Ltd.
[03302009]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink:   145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
```

BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks

V-band: 145.840 - 145.990 MHz CW/LSB
U-band: 435.550 - 435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks

S2-band: 2401.225 - 2401.475 MHz CW/USB
K-band: 24048.010 - 24048.060 MHz CW/USB
Beacon: 2401.323 MHz
24048.035 MHz

P3-D Telemetry Beacons (IHU)

BEACON	General Beacon(GB)	Middle Beacon(MB)	Engineering Beacon(EB)
2 m	none	145.898 MHz	none
70cm	435.438 MHz	435.588 MHz	435.838 MHz
13cm(1)	2400.188 MHz	2400.338 MHz	2400.588 MHz
13cm(2)	2401.173 MHz	2401.323 MHz	2401.573 MHz
3cm	10450.975 MHz	10451.125 MHz	10451.375 MHz
1.5cm	24047.885 MHz	24048.035 MHz	24048.285 MHz

[07162007]
=====

```
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink:    145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: 25636
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater:         436.250 MHz

Uplinks: Mode B Repeater:  145.825 MHz
Mode J Digipeater:         145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz
```

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Non-Operational

Current Modes:
Telemetry : /u

```
Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign:       4XTECH-12
```

More information of GO-32 can be found at:
http://asri.technion.ac.il/techsat/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=14&retURL
=/satellites/status.php
[07172010]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

```
Uplink:   145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
MO-30 UNAMSAT-2
Catalog Number: 24305
Launch Date: September 5, 1996

Status: Non-operational

Downlink:       435.1380 MHz AFSK 1200 BPS
Downlink:       435.2060 MHz AFSK 1200 BPS
Uplink:         145.8150 MHz AFSK 1200 BPS
Uplink:         145.8350 MHz AFSK 1200 BPS
Uplink:         145.8550 MHz AFSK 1200 BPS
Uplink:         145.8750 MHz AFSK 1200 BPS
[06042009]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Non-operational

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign:       POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012009]
=====
AO-27 AMRAD
Catalog number: 22825
Launch Date: September 26, 1993 0140z
Launch site: Kourou, French Guiana

Status: Recovery efforts in progress

Current Mode: V/u

Uplink:   145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear
```

```
Official Webpage: http://www.ao27.org
[12032012]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993 0140z

Status: PSK carrier only

Current Mode:

Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
AO-24 ARSENE
Catalog Number: 22654
Launch Date: May 13, 1993

Status: Non-operational

Uplink:    435.0625 MHz FM 1k2bps AFSK
           435.1125 MHz FM 1k2bps AFSK
           435.1375 MHz FM 1k2bps AFSK
Downlink:  145.9750 MHz FM 1k2bps AFSK
          2446.5025 MHz FM 1k2bps AFSK

Beacon:    2446.4700 MHz CW
```

```
Broadcast callsign:
BBS:
[12162009]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HL01-11
BBS: HL01-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB
```

Digital Transponder:
Uplinks: 145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink: 145.825 MHz FM 1200 Baud AFSK
Beacon: 2401.220 MHz
[05012006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: non-operational

Current Mode: V/u

Uplink: 145.900 MHz FM 1200-baud Manchester FSK (reserved)
                145.920 MHz FM VOICE
                145.940 MHz FM 1200-baud Manchester FSK (reserved)
                145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink: 437.026 MHz USB VOICE
                (1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC 437.050 MHz RHCP
   PSK 437.026 MHz LHCP
V: Linear

```
Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[07242009]
=====
UO-15 UoSAT-4
Catalog Number: 20438
Launch Date: January 22, 1990

Status: Non-operational

Uplink: ?
Downlink: 435.1250MHz (?)
          435.1200MHz (?)
[06042009]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational
```

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon: 145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.8500 - 145.9000 MHz SSB/CW
Downlink 29.4000 - 29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink: 29.4500 - 29.5500 MHz SSB/CW
Beacons: 29.450 MHz
          435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====

```
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon 1:  29.352 MHz (intermittent)
Beacon 2:  29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink:     21.260 to 21.300 MHz CW/USB
Downlink:  145.860 to 145.900 MHz CW/USB

Beacon:    145.860 MHz

Robot:     145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink:   21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon:   29.408 MHz

Robot:    29.454 MHz
[05232004]
NNNN
```

/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live
radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz.
Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30
UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at}
amsat.org
NNNN

/EX

```
From -7106776864989028312
X-Google-Thread: 3a471f,2f2310e59fc9f723,start
X-Google-NewGroupId: yes
X-Google-Thread: 10e8ad,2f2310e59fc9f723,start
X-Google-NewGroupId: yes
X-Google-Attributes: gidfffa10410,gid8f86f75953,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
X-Received: by 10.66.17.162 with SMTP id p2mr2770784pad.47.1364401216540;
        Wed, 27 Mar 2013 09:20:16 -0700 (PDT)
MIME-Version: 1.0
Path: q9ni25860pba.1!nntp.google.com!npeer03.iad.highwinds-media.com!
news.highwinds-media.com!feed-me.highwinds-media.com!news.glorb.com!
newspump.sol.net!news-out.readnews.com!transit3.readnews.com!panix!rram.panix.com!
robomod!not-for-mail
From: Paul W. Schleck <pschleck@oasis.novia.net>"
Newsgroups:
rec.radio.amateur.moderated,rec.radio.amateur.digital.misc,rec.radio.amateur.space
Subject: 30 Years Ago: Japanese Amateur Radio Satellite JAS-1 Announced
Date: Wed, 27 Mar 2013 12:20:15 EDT
Organization: Novia Internetworking, http://www.novia.net/
Lines: 55
Approved: RRAM Approval Key <rram-approval-key@panix.com>
Message-ID: <5152ff9c$0$71764$540ea2cf@novia.net>
NNTP-Posting-Host: panix6.panix.com
X-Trace: reader2.panix.com 1364401216 10506 166.84.1.6 (27 Mar 2013 16:20:16 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Wed, 27 Mar 2013 16:20:16 +0000 (UTC)
X-RRAM-Policy: http://www.panix.com/~rram/usenet/rram/index.html
X-RRAM-Info-1: Send submissions to             rec-radio-amateur-
moderated@panix.com
X-RRAM-Info-2: Send technical complaints to    rec-radio-amateur-moderated-
request@panix.com
X-RRAM-Info-3: Send complaints about policy to rec-radio-amateur-moderated-
request@panix.com
X-RRAM-Info-4: GnuPG 1.4.5 Public Key at http://www.panix.com/~rram/gpg.html
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
User-Agent: nn/6.7.3
X-Auth: PGPMoose V2.0 PGP rec.radio.amateur.moderated
 iJwEAQECAAYFAlFTHEAACgkQSO8RITXCfvtzhgP+PWgaY1HZdCpDROyk1Qkl6gV9
 qqgqU2iiH/G6eCPg81Ln2EGCjS0KRjkIR2Uhtl8FCMEKTlkSDW5aZv1AD4dmO27Y
 zDOU/dPsZI5N2uhNnnz3RPgZTQsI14E5bDB0mPu6yXm3Ivvi+huiYXVKlMXlkwxb
 SKWB2Z3vHcbxOvCOLdc=
```

=YKOF
X-Received-Bytes: 4004

-----BEGIN PGP SIGNED MESSAGE-----
Hash: SHA1

This is from a web-site that is replaying Usenet, including net.ham-radio, from 30 years ago (currently early 1983). The site is:

http://www.olduse.net

If you prefer to use your own newsreader, the site also supports an NNTP connection at:

nntp.olduse.net:119

>From: karn <utzoo!decvax!harpo!eagle!karn>
>Subject: JAS-1 announced
>Newsgroups: net.ham-radio, net.space
>Date: Fri Mar 25 16:24:07 1983

Last weekend, JAMSAT and JARL (the Japanese branch of AMSAT and the Japanese Amateur Radio League) formally announced a project to build an amateur radio satellite for launch in 1986 aboard a new Japanese launch vehicle, the H-1 (similar to the American Delta).

The satellite will physically resemble Oscar-8, and carry two communications payloads. One will be a Mode J 2m-to-70cm linear transponder like that on Oscar-8, and the other will be a digital store-and-forward "mailbox".

The digital half of JAS-1 will be in addition to the similar PACSAT project being planned in the US for one of three launch possibilities: aboard a Space Services launcher, a Delta with Landsat D', or aboard the Landsat 4 Recovery shuttle mission from Vandenburg.

Discussions have been underway between AMSAT and JAMSAT for some time to establish common modulation, protocols and user interfaces wherever possible for PACSAT and the digital portion of JAS-1 in order to minimize user inconvenience.

Launch of JAS-1 is planned for early 1986 into a 1500 km altitude, 50 degree inclination orbit. Note that this orbit will NOT be sun-synchronous, unlike that planned for PACSAT.

Phil Karn, KA9Q
Asst. VP Engineering, AMSAT

-----BEGIN PGP SIGNATURE-----
Version: GnuPG v2.0.19 (FreeBSD)

```
iEYEARECAAYFAlFS/2sACgkQ6Pj0az779o5jXACgtU3BcWlpcfR0/GVffAEmy0Zh
PUAAoM2i7GrroIhLGDsELePL59BZG2Je
=R/oT
-----END PGP SIGNATURE-----
```

```
From 1111385379445652135
X-Google-Thread: 8f86f75953,2f2310e59fc9f723
X-Google-Attributes: gid8f86f75953,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
X-Received: by 10.205.24.134 with SMTP id re6mr1365719bkb.7.1364937905777;
        Tue, 02 Apr 2013 14:25:05 -0700 (PDT)
MIME-Version: 1.0
Path: ex12ni19299wid.1!nntp.google.com!feeder1.cambriumusenet.nl!
82.197.223.103.MISMATCH!feeder3.cambriumusenet.nl!feed.tweaknews.nl!
194.109.133.86.MISMATCH!newsfeed.xs4all.nl!newsfeed3.news.xs4all.nl!xs4all!
newspeer1.nac.net!border4.nntp.dca.giganews.com!border2.nntp.dca.giganews.com!
border3.nntp.dca.giganews.com!border1.nntp.dca.giganews.com!nntp.giganews.com!
news.bbs-scene.org!xmission!news.glorb.com!news-out.readnews.com!
transit4.readnews.com!panix!rram.panix.com!robomod!not-for-mail
From: Rob <nomail@example.com>
Newsgroups:
rec.radio.amateur.moderated,rec.radio.amateur.digital.misc,rec.radio.amateur.space
Subject: Re: 30 Years Ago: Japanese Amateur Radio Satellite JAS-1 Announced
Date: Wed, 27 Mar 2013 15:13:19 EDT
Organization: PANIX Public Access Internet and UNIX, NYC
Lines: 9
Approved: RRAM Approval Key <rram-approval-key@panix.com>
Message-ID: <slrnkl69ke.g1l.nomail@xs8.xs4all.nl>
References: <5152ff9c$0$71764$540ea2cf@novia.net>
NNTP-Posting-Host: panix6.panix.com
X-Trace: reader2.panix.com 1364411600 21916 166.84.1.6 (27 Mar 2013 19:13:20 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Wed, 27 Mar 2013 19:13:20 +0000 (UTC)
X-RRAM-Policy: http://www.panix.com/~rram/usenet/rram/index.html
X-RRAM-Info-1: Send submissions to             rec-radio-amateur-
moderated@panix.com
X-RRAM-Info-2: Send technical complaints to    rec-radio-amateur-moderated-
request@panix.com
X-RRAM-Info-3: Send complaints about policy to rec-radio-amateur-moderated-
request@panix.com
X-RRAM-Info-4: GnuPG 1.4.5 Public Key at http://www.panix.com/~rram/gpg.html
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
User-Agent: slrn/pre1.0.0-18 (Linux)
Old-NNTP-Posting-Host: 2001:888:0:1::888
```

```
Old-X-Complaints-To: abuse@xs4all.nl
X-Auth: PGPMoose V2.0 PGP rec.radio.amateur.moderated
 iJwEAQECAAYFAlFTRNAACgkQSO8RITXCfvtYFwP/badK1QM2EPE2wYkqaJetAOaF
 M4JhZ/BNJlDsH7dAOo5KrO2PANpOO7wwRvQYMVV8ntaSgs1iBTW45K5A8Oe/DWQU
 cO/Pknk1SF1rJ7YIkeIBCTBGvTvxxEnbfXrDKS+mlZlccvweS6BJcj1XJMDe0otX
 ZjMOmrnBhkoGIo6Jfrw=
 =rFen
```

Paul W Schleck <pschleck@oasis.novia.net> wrote:

> The satellite will physically resemble Oscar-8, and carry two
> communications payloads. One will be a Mode J 2m-to-70cm linear
> transponder like that on Oscar-8, and the other will be a digital
> store-and-forward "mailbox".

I still have my JAS-1 modem (combined with an early TNC2 clone)
and a printout of a session with the mailbox...

```
From 5124419549344025235
X-Google-Thread: a4a23d5f63,b8661f05e4f9e458,start
X-Google-Attributes: gida4a23d5f63,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,UTF8
X-Received: by 10.180.20.239 with SMTP id q15mr3488121wie.7.1364940181492;
        Tue, 02 Apr 2013 15:03:01 -0700 (PDT)
Path: p18ni33744wiv.0!nntp.google.com!feeder1.cambriumusenet.nl!feed.tweaknews.nl!
194.109.133.83.MISMATCH!newsfeed.xs4all.nl!newsfeed4.news.xs4all.nl!xs4all!
newspeer1.nac.net!border4.nntp.dca.giganews.com!border2.nntp.dca.giganews.com!
nntp.giganews.com!news.bbs-scene.org!xmission!news.glorb.com!news-
out.readnews.com!transit4.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: rec-radio-info-request@panix.com (Ham Radio Now via rec.radio.info Admin)
Newsgroups: rec.radio.amateur.misc,rec.radio.amateur.space,rec.radio.info
Subject: Ham Radio Now for Saturday 30 March 2013
Followup-To: rec.radio.amateur.misc,rec.radio.amateur.space
Date: Sat, 30 Mar 2013 04:03:55 EDT
Organization: Ham Radio Now
Lines: 12
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <e89a8fb1fca259050704d91fd35b@google.com>
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
X-Trace: reader1.panix.com 1364630635 12422 166.84.1.6 (30 Mar 2013 08:03:55 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sat, 30 Mar 2013 08:03:55 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
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```

```
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
DKIM-Signature: v=1; a=rsa-sha256; c=relaxed/relaxed;
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Ham Radio Now

///
HamRadioNow: West Palm Beach ARC's Science Museum Station

Posted: 29 Mar 2013 05:13 AM PDT
http://hamradionow.tv

This Hamvention® Club of the Year launched a ham station at the South Florida Science Museum. We talk to club president Tom AJ4XM at the Orlando HamCation

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        Tue, 02 Apr 2013 15:16:25 -0700 (PDT)
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border2.nntp.dca.giganews.com!nntp.giganews.com!news.bbs-scene.org!xmission!
news.glorb.com!news-out.readnews.com!transit4.readnews.com!panix!rri.panix.com!
robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-090 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sat, 30 Mar 2013 21:26:35 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 602
Approved: RRI Admin <rec-radio-info-request@panix.com>
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X-Complaints-To: abuse@panix.com
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X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
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AMSAT NEWS SERVICE
ANS-090

The AMSAT News Service bulletins are a free, weekly news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS publishes news related to Amateur Radio in Space including reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

The news feed on http://www.amsat.org publishes news of Amateur Radio in Space as soon as our volunteers can post it.

Please send any amateur satellite news or reports to:
ans-editor at amsat.org.

In this edition:

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* South Africa AMSAT Space Symposium to Feature Interesting Topics
* VO-52 HAMSAT Transponder User Feedback Requested
* Cubesat Launches Planned for April
* ARISS School Contacts This Week
* Satellite Shorts From All Over

SB SAT @ AMSAT $ANS-090.01
ANS-090 AMSAT News Service Weekly Bulletins

AMSAT News Service Bulletin 090.01
>From AMSAT HQ SILVER SPRING, MD.
March 31, 2013
To All RADIO AMATEURS
BID: $ANS-090.01

```
*****************************************************************
* Volunteers are needed to help at the AMSAT booth at Dayton.   *
* Steve Belter N9IP, is looking for volunteers to help man the  *
* AMSAT booth during the 2013 Hamvention. If you are willing    *
* to help at the Hamvention, please send an e-mail by April 30  *
* to Steve Belter, n9ip@amsat.org.                              *
*                                                               *
* Monitor the 'AMSAT at Dayton Hamvention 2013' link on the new *
* AMSAT Web Site http://www.amsat.org for the latest AMSAT at   *
* Dayton news and developments                                  *
*****************************************************************
```

Schedule of AMSAT Activities at Dayton Hamvention

AMSAT Hamvention activities and displays are planned to take place at the new booth location (444-446 and 433-435) in the Ball Arena, and outside in the Satellite Demonstration Area just outside the Ball Arena entrance.

2013 theme for AMSAT at Dayton is "AMSAT - A View to the Future."

Here are the daily AMSAT activities for on-site and off-site events at the 2013 Hamvention!

Thursday 16 May 2013

+ 11:00 AM - 5:00 PM
  AMSAT Booth Setup at Ball Arena (contact Steve Belter, N9IP,
  n9ip at amsat.org if you can help during this time).

+ 6:30 PM - 10:00 PM

The third Annual AMSAT "Dinner at Tickets" party will be held at Tickets Pub & Eatery in Fairborn, OH. Check out the 'AMSAT at Dayton Hamvention 2013' link to the page 'AMSAT Dayton Social Events' on the new Web Site: http://www.amsat.org.

Friday 17 May 2013

+ 9:00 AM - 6:00 PM at the AMSAT Booth
  AMSAT Booth open for membership renewals, books, new items and information.

+ 6:30 PM - 10:30 PM AMSAT/TAPR Banquet at Dayton 2013
  AMSAT/TAPR Banquet on Friday night, May 18 is one of the main AMSAT activities during the 2013 Hamvention at Dayton. See the bulletin below for details!

Saturday 18 May 2013

+ 9:00 AM - 5:00 PM at the AMSAT Booth
  AMSAT Booth open for membership renewals, books, new items and information.

+ 11:15 AM - 1:30 PM The AMSAT Forum
  Get the latest information about what is going on with AMSAT and its projects. The AMSAT Forum will be held in Forum Room 5. See the bulletin below for details!

Sunday 19 May 2013

+ 9:00 AM - 1:00PM at the AMSAT Booth
  AMSAT Booth open for membership renewals, books, new items and information.

+ 1:00PM - 3:00PM at the AMSAT Booth
  Take down and storage of the AMSAT Booth. (contact Steve Belter, N9IP, n9ip at amsat.org if you can help during this time).

Demos Daily on Friday, Saturday, and Sunday for All Available Passes

AMSAT is encouraging everyone attending the 2013 Dayton Hamvention to come by the Satellite Demonstration Area just outside of the Ball Area entrance and make a contact using the amateur satellites. There will be AMSAT volunteers to explain how to make the contacts and during actual satellite passes will complete as many actual contacts as possible. Satellite pass times will be posted in the satellite demonstration area and at the AMSAT booth.

[ANS thanks AMSAT's 2013 Dayton Committee for the above information]

AMSAT/TAPR Banquet Speaker: Bruce Perens, K6BP

The seventh annual AMSAT/TAPR Banquet will be held on Friday evening, May 17. This dinner will be one of the highlights of the AMSAT activities during the 2013 Hamvention at Dayton.

This year's speaker will be Bruce Perens, K6BP, with a humorous history of technology evangelism: "The Evangelist's Dilemma: Driving New Ideas With Nothing But Words." As you can imagine, when you're promoting new ideas, there are things that inevitably go wrong. Bruce will pull examples from his history with Open Source, No-Code, Software Freedom, Codec2, and Open Hardware, and he'll introduce a few of the new battle grounds.

[ANS thanks AMSAT's 2013 Dayton Committee for the above information]

AMSAT Store Now Selling Tickets for AMSAT/TAPR Friday Night Banquet

Tickets for the dinner are $30 each, and must be purchased from the AMSAT Store at http://store.amsat.org/catalog/ by Tuesday, May 14.

The dinner will be held at:

The Kohler Presidential Banquet Center
4548 Presidential Way
Kettering, OH 45429

Doors open at 1830 for a cash bar with buffet dinner served at 1915.

Seating is limited to the number of meals we reserve with the Kohler caterers, based on the number of tickets sold by the deadline. Tickets will not be sold at Dayton, but tickets purchased online may be collected at the AMSAT booth (444-446 and 433-435).

Join us for a fun evening with good food, great company, and an outstanding speaker.

[ANS thanks AMSAT's 2013 Dayton Committee for the above information]

"Dayton Only" Special Deals at the AMSAT Store

As usual, during the Hamvention AMSAT will have a number of special items and packages available at the booth. These will range from new design shirts and hats, to tracking hardware and software, to Elk antennas.

Many of the shirts and trinkets are only available at Dayton. When they are gone, they are gone! Be sure to stop by the booth early while we have a full range of sizes.

Here are some of the bargains announced for Dayton Hamvention 2013:

+ SATPC32 - $40 (normally $45 for members)
+ AMSAT TOTE BAG - $5.00 (Free for new and renewing members and for those who buy a LVB Tracker Box.)
+ AMSAT LICENSE PLATE HOLDER - $5.00 (Free for new and renewing members)

These items are only available at Dayton:
+ LVB TRACKER BOX - $200
+ ELK ANTENNA - $125

The full shopping list, including publications, software, hardware, apparel, and sustaining memberships are posted on the AMSAT On-Line Store at: http://ww2.amsat.org/?page_id)6

Please do not contact the AMSAT office requesting Dayton-only specials. Our regular offerings remain available at the AMSAT Store: http://store.amsat.org/catalog/

[ANS thanks Alan Biddle, WA4SCA for the above information]

Google Earth Satellite Tracker Software Rollout for Demo and Testing

Joseph Armbruster, KJ4JIO has rolled out his software project for testing by interested amateur satellite operators. His Python-based Google Earth Satellite Tracker adds satellite tracking to the Google Earth map features.

This is an on-going development project which, at present, requires you to have Python 2.7, and supporting environment installed on your computer. Full details of the installation steps are documented on Joe's Google Earth Satellite Tracker project page: https://code.google.com/p/ge-satellite-tracker/

Example screen shots along with an ongoing blog of the project's development is posted at: http://libjoe.blogspot.com/2013/03/google-earth-satellite-tracker.html

[ANS thanks Joseph Armbruster, KJ4JIO for the above information]

AMSAT-UK Colloquium 2013 Announced for July 19-21

The AMSAT-UK International Space Colloquium 2013 will be held on July 19-21, 2013 at the Holiday Inn, Guildford, GU2 7XZ, United Kingdom. In conjunction with the event a Hands-on CubeSat Workshop will take place at the nearby University of Surrey on Friday, July 19. Colloquium program information, travel information and hotel booking information is posted at:

http://amsat-uk.org/colloquium/colloquium-2013/

The Colloquium attracts an international audience from across Europe as well as North America and the Middle East. Attendees range from the builders of the CubeSats and Nanosats, those who communicate through them and beginners who wish to find out more about this fascinating branch of the hobby.

Call For Papers and Speakers

AMSAT-UK invites speakers, to cover topics about micro-satellites, CubeSats, Nanosats, space and associated activities, for this event.

They are also invited to submit papers for subsequent publishing on the AMSAT-UK web site. We normally prefer authors to present talks themselves rather than having someone else give them in the authors� absence. We also welcome �unpresented� papers for the web site.

We appreciate that it is not always possible to give a firm indication of attendance at this stage but expressions of interest would be appreciated.

Submissions should be sent *ONLY* to G4DPZ, via the following routes:
e-mail: dave at g4dpz dot me dot uk
Postal address at http://www.qrz.com/db/G4DPZ

AMSAT-UK also invite anyone with requests for Program Topics to submit them as soon as possible to G4DPZ.

[ANS thanks AMSAT-UK for the above information]

South Africa AMSAT Space Symposium to Feature Interesting Topics

The South Africa AMSAT Space Symposium will be held at the Innovation Hub in Pretoria on Saturday, May 18, 2013. Some of the topics on the agenda include:

+ A full report on the SA AMSAT KLETSkous cubesat
+ How DynaCube will, after launch, study the particle radiation in

the South Atlantic
+ Building a 14 MHz receiver to measure signal properties of the ZACUBE 1
+ Innovative Solutions in Space by ISIS

The full program and registration forms will be available soon at: http://www.amsatsa.org.za/.

[ANS thanks SA AMSAT and SARL News 3/30/2013 for the above information]

VO-52 HAMSAT Transponder User Feedback Requested

Mani, VU2WMY, Secretary & Station-In-Charge of the Upagrah Amateur Radio Club VU2URC at India's ISRO Satellite Centre, has issued a request for user feedback from amateur satellite operators using the VO-52 HAMSAT transponder.

Mani wrote, "We are in need of the latest user feed backs and reports on the performance of the current transponder on-board VO-52 [Hamsat] for routine official documentation purposes.

"Hence, We request VO-52 users to kindly send in their latest reports and valuable feed backs, so as to enable us to complete the procedures at the earliest."

Reports should be sent via e-mail to Mani at: wmy@isac.gov.in
He also requests you to copy your report to tprangan@istrac.org

[ANS thanks Mani, VU2WMY for the above information]

Cubesat Launches Planned for April

April 19 BAIKONUR Soyuz-2-1b

A Soyuz-2-1b from the Baikonur launch facility, in Kazakhstan on April 19, 2013 will include three cubesat missions:

Satellite	Downlink	Mode
OSSI-1	145.980/437.525	CW/1200bps
SOMP	437.485	1200, 9600bps BPSK
BEESAT-2/3	435.950	4800bps GMSK

Bion-M1	Biological research satellites
AIST	Measurement of the Earth's geomagnetic field
Dove-2	Commercial technology demonstration mission

OSSI-1

145.980 MHz CW, 437.525 MHz 1k2

OSSI-1, the Open Source Satellite Initiative satellite is a cubesat developed by Hojun Song DS1SBO. In addition to the radio beacons OSSI-1 also carries a 44 watt LED optical beacon to flash Morse Code messages to observers on Earth.

The development of the satellite has been documented on the Open Source Satellite Initiative Blog http://opensat.cc/blog/ and the Wiki http://opensat.cc/wiki/
http://www.youtube.com/watch?v�OL0zSY6cg

SOMP

Downlink on 437.485 MHz including CW, 1k2 and 9k6 BPSK, AX25 FSK, and AO40 standard 400bit/s BPSK

The Student Oxygen Measurement Project (SOMP) is a cubesat developed by students of the Technische Universit�t Dresden, Germany, organized in the Students� Research Group for Spacecraft Engineering in Dresden (STARD). SOMP will be a standard sized single CubeSat with one payload side and five sides with two solar cells each.

http://phpweb.tu-dresden.de/stard/SOMP/?lang�
http://tinyurl.com/SOMP-AMSAT-UK-Posting

BEESAT-2/3 (Berlin Experimental and Educational Satellite)
435.950 MHz, 4k8 GMSK (both satellites)

BEESAT-2 is a cubesat-sized vehicle carries a technology experiment using gyros and sensors for precise orientation.

BEESat-3 is another cubesat-sized vehicle that will test high-speed data links (up to 1MB/s).

http://www.raumfahrttechnik.tu-berlin.de/beesat/

The above cubesat missions and the scientific/commercial missions are also documented on Mineo Wakita's (JE9PEL) web page at:
http://www.ne.jp/asahi/hamradio/je9pel/ossisomp.htm

April 20 KOUROU Vega Launch

Estonia�s first CubeSat ESTCube-1, amateur radio callsign ES5E/S, is planning to launch from Kourou in the Caribbean at 02:06:31 UT, April 20, 2013 on an ESA VEGA rocket.

Built by students at the University of Tartu ESTCube-1 the main mission of the satellite is to test electric solar wind sail technology, a novel space propulsion technology that could revolutionalize transportation within the solar system. It will deploy a 10 meter conductive electrodynamic tether and the force interacting with the tether will be measured.

The IARU Amateur Satellite Frequency Coordination Panel have published these frequencies for ESTCube-1:

- 437.250 MHz � CW beacon, callsign ES5E/S
- 437.505 MHz � 9600 bps AX.25 telemetry, callsign ES5E-11

More information and a video has been posted at:
http://amsat-uk.org/?p774

April 25 on CZ-2D from China's Jiuquan Space Center

TAMSAT reports the TURKSAT-3USAT, the first communication nanosatellite mission of ITU, Istanbul Technical University, Istanbul, Turkey is expected to launch in the May 2013 timeframe aboard China's Chang Zheng-2D rocket. Also aboard this launch will be Ecuador's NEE 01 Pegaso 1U cubesat.

TURKSAT-3USAT is a three unit CubeSat developed to provide SSB/CW communications in a 680 km Low Earth Orbit. It will fly a V/U linear transponder developed by TAMSAT, the Turkish Amateur Satellite Technologies Organisation.

- Uplink center frequency   145.965 MHz
  (145.940-145.990 MHz bandwidth)
  Receive sensitivity -120 dBm

- Downlink center frequency 435.225 MHz
  (435.200-435.250 MHz bandwidth)
  Output power 30 dBm (1W)

- CW beacon on 437.225 MHz

Additional information can be accessed on-line at:
http://www.tamsat.org.tr/tr/turksat-3usat-is-almost-ready/
http://www.uk.amsat.org/?p670

[ANS thanks AMSAT-UK and Mineo Wakita, JE9PEL for the above information]

ARISS School Contacts This Week

Katy, Texas

An International Space Station school contact was held with participants at Thornton Middle School, Katy, TX on March 25. The contact was direct between NA1SS and KF5NZD.

Thornton Middle School students, due to their economic backgrounds, have limited opportunities for enrichment activities beyond those that can be implemented in the classroom. Many of its students and families believe that opportunities in high paying STEM careers are beyond the reach of Thornton students, and that, "other kids have all the luck." This ARISS contact helped dispel these perceptions and will demonstrate to the students and families that Thornton students are capable of complex problem solving, and that they are capable of learning "Rocket Science" material.

Quebec, Canada

An International Space Station school contact was held with participants at Des Cardinaux School, Sainte-Rose, Laval, Quebec, Canada on March 26. The contact was a telebridge between NA1SS and K6DUE.

This school is located in the Sainte-Rose, Laval. The school is a French primary school which includes preschool students in the second year of the third cycle. It has approximately 580 students. The students spoke with Col. Chris Hadfield, Canada's first commander of the ISS.

Planned Contacts Next Week

+ Stratford Academy, Macon, GA, telebridge via W6SRJ on April 3 at 12:47 UTC.

+ 820 Chris Hadfield Royal Canadian Air Cadet Squadron, Milton, Ontario, Canada, telebridge via LU8YY on April 6 at 20:25 UTC.

ARISS is requesting listener reports for these contacts. Due to issues with the Kenwood radio that are not fully understood at present, the Ericsson radio is going to be used for this contact. ARISS thanks everyone in advance for their assistance.

The total number of ARISS ISS to earth school events now is at 805.

[ANS thanks ARISS for the above information]

Satellite Shorts From All Over

+ Look for Paul, 2E1EUB operating portable/mobile on all satellites from Scotland as 2M1EUB/P starting on April 4 for 7 days. Paul has posted additional information on his callsign lookup page at: http://www.qrz.com/ for the callsign 2M1EUB.

+ Special Event in Mexico - FMRE, with the help of Grupo DXXE, will activate a unique prefix for the first time: 4 A 8 DMR (DMR ��a Mundial del Radioaficionado). This station will be active from April 18 to 21, 2013 on all bands from 6 meters to 160 in all modes including EME and amateur radio satellites from different Grid Locators throughout Mexico. (WIANEWS - March 31 2013)

+ Bob, W7LRD (grid CN87) reported a successful contact with Boris, UA0QJ (grid PP42) via FO-29 on March 26. The range between the two stations is 6268 km. Both stations were stretching the footprint with low elevations at both ends of the contact.

+ Watch a video of WD9EWK working FO-29 from the Scottsdale, Arizona Hamfest on Saturday, March 9. 2013. Patrick used two FT-817ND rigs, one for the uplink transmitter, the second to receive the downlink on a handheld ELK 2M/70cm antenna. The video is posted at: http://www.youtube.com/watch?feature�ayer_embedded&v�hR7Doby0E

+ The TAPR Forum at the Hamvention plans to have a presentation by Chris Testa, KD2BMH, on his handheld Software Defined Radio (SDR) transceiver. His low powered 144 and 440-MHz radio operates in a variety of digital modes, as well as AM, FM, and SSB. For a preview of the topic see: http://tinyurl.com/KD2BMH-SDR-Handheld The TAPR Forum will be on Friday from 9:15-11:00 AM in Room 1. (TAPR PSR #121 WINTER 2013)

+ James W. Cutler, KF6RFX, Assistant Professor, Department of Aerospace Engineering at the University of Michigan (developers of the successful RAX cubesat mission) invite amateur satellite operators to participate in the Ground Station Survey. The engineering team is collecting information on global ground station availability to improve satellite communication capabilities. Their goal is to survey existing and under utilized ground antennas to improve satellite communication opportunities. To participate go to: http://gs.engin.umich.edu/gs_survey/

+ NASA posted a video about the CubeSat Launch Initiative which provides new opportunities for Science, Technology, Engineering and Mathematics by helping people design, launch and collect data: http://www.youtube.com/watch?feature�ayer_embedded&v�8k0RRmOKk

+ The CQ Magazine Newsroom at http://cqnewsroom.blogspot.com/ has posted several news items of amateur radio in space:
  o AMSAT Preparing for Two Launch Opportunities
  o Smartphone-based Ham Satellite Now in Orbit
  o Hams Take Part in ISS "Dead Zone" Experiment
  o AMSAT Website Hacked, Taken Offline
  o AMSAT Receives Matching Fund Challenge for Fox Contributions

o 6-Meter Beacon from Antarctica? (also plans for satellite ops)

+ In the April, 2013 QST "World Above 50MHz" column (page 94) Roger, VE1SKY says he uses his VHF and UHF gear on AO-7, FO-29, and VO-52 while waiting for the next band opening. Roger is quoted, "This is a good way to make use of your gear and a challenging activity in its own right." [Ed. note] - This could work the other way around: ... while you are waiting for the next satellite pass use your VHF and UHF station to check if the bands are open ... further use of your gear as well.

+ Enjoy shopping in the ham radio shops in Akihabara, Tokyo, Japan in this video by Marcin Kielce, SQ7BCE. Although the commentary is in Polish it none-the-less provides a good idea of the range of equipment available and the prices in Japan. To convert the prices shown to UK Pounds Sterling divide by 142 or to get the US dollar price divide by 94. Watch it on Southgate at: http://tinyurl.com/Southgate-Tokyo-Shopping.

[ANS thanks everyone for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

Primary and secondary school students are eligible for membership at one-half the standard yearly rate. Post-secondary school students enrolled in at least half time status shall be eligible for the student rate for a maximum of 6 post-secondary years in this status. Contact Martha at the AMSAT Office for additional student membership information. And with that please keep in mind that the best number is 73. Why? 73 is the 21st prime number. Its mirror (37) is the 12th and its mirror (21) is the product of multiplying, 7 and 3. ... In binary, 73 is a palindrome, 1001001 which backwards is 1001001. In Morse Code it is also a palindrome `--...  ...--`

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM

From -8636714049886397365
X-Google-Thread: a4a23d5f63,669f788ee7f8094d,start

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X-Google-Attributes: gida4a23d5f63,public,usenet
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        Sun, 07 Apr 2013 06:39:01 -0700 (PDT)
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85.12.40.139.MISMATCH!xlned.com!feeder7.xlned.com!npeer.de.kpn-eurorings.net!
npeer-ng0.de.kpn-eurorings.net!news.n-ix.net!news.bawue.net!
storethat.news.telefonica.de!telefonica.de!weretis.net!feeder4.news.weretis.net!
usenet.blueworldhosting.com!news.glorb.com!news-out.readnews.com!
transit4.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: SWPC.Webmaster@noaa.gov
Newsgroups:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.shor
twave,rec.radio.info
Subject: Weekly Highlights of Solar and Geomagnetic Activity, 25 - 31 March 2013
Followup-To:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.shor
twave
Date: Mon, 1 Apr 2013 11:30:10 EDT
Organization: NOAA Space Weather Prediction Center
Lines: 65
Approved: RRI Admin <rec-radio-info-request@panix.com>
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X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump

:Product: Weekly Highlights and Forecasts
:Issued: 2013 Apr 01 0149 UTC
# Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center
# Product description and SWPC contact on the Web
# http://www.swpc.noaa.gov/weekly.html
#
#                 Weekly Highlights and Forecasts
#
```

Highlights of Solar and Geomagnetic Activity
25 - 31 March 2013

Solar activity was very low. Region 1710 (S21, L=201, class/area Cao/070 on 29 Mar) produced the largest event of the period with a B8 flare at 30/1024 UTC. Other activity included a B4 x-ray event observed at 30/1322 UTC from Region 1708 (N11, L=190, class/area Dao/090 on 29 Mar) with an associated Type II radio sweep (estimated shock speed of 814 km/s). No Earth-directed CMEs were observed during the period.

No proton events were observed at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit was at high levels for the majority of the period with the exception of 27 and 29 March due to effects from coronal hole high speed stream (CH HSS) activity.

Geomagnetic field activity was at quiet levels on 25-26 March. Quiet to active conditions were observed on 27-28 March due to effects from a favorably positioned CH HSS. Solar wind speed gradually increased from initial values of approximately 400 km/s to end-of-day values of approximately 500 km/s. The interplanetary magnetic field (IMF) Bt values ranged from 1 nT to 11 nT while the Bz component of the IMF ranged from +7 nT to -11 nT. A further increase to unsettled to minor storm conditions was observed on 29-30 March due to effects from a second CH HSS. During that period, solar wind speed remained fairly steady averaging about 550 km/s. The IMF Bt values ranged from a high of 8 nT to a low of 1 nT while the Bz component of the IMF ranged from +5 nT to - 7 nT. The field returned to quiet levels midday on 30 March and remained quiet through the end of the period.

Forecast of Solar and Geomagnetic Activity
01 April - 27 April 2013

Solar activity is expected to be very low to low throughout the period. There is a slight chance for M-class activity from 01 - 13 April while Region 1711 (S17, L=159, class/area Cki/420 on 31 Mar) is on the disk.

No proton events are expected at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to be at high levels through 04 April and again from 25 April through the end of the period due to CH HSS effects. The remainder of the period is expected to be at normal to moderate levels.

Geomagnetic field activity is expected to begin the period at quiet levels. Quiet to unsettled conditions are expected from 03-07 April due to weak CH HSS effects. A return to mostly quiet conditions is expected on 08-22 April. Quiet to unsettled conditions with a chance for active periods are possible on 23-26 April due to recurrent CH HSS effects. The remainder of the period is expected to be at quiet levels.

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not-for-mail
From: Chris Steyaert <observations@rmob.org>
Newsgroups: rec.radio.amateur.space,sci.astro.amateur
Subject: Radio Meteor Obs. Bull. March 2013
Date: Sat, 06 Apr 2013 12:29:42 +0200
Message-ID: <36uvl8p94q5eqfc01narbl50n2t4qv1tcp@4ax.com>
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Lines: 14
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Radio Meteor Observation Bulletin No. 236 of March 2013 (80 K) is available now as

    http://www.rmob.org/rmobtext/rmob1303.txt

More information and the visual presentation of the hourly forward scatter counts can be found on

    http://www.rmob.org

    Chris

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border-1.ams.xsnews.nl!plix.pl!newsfeed2.plix.pl!217.153.128.51.MISMATCH!
nf1.ipartners.pl!ipartners.pl!news.nask.pl!news.nask.org.pl!news.unit0.net!
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robomod!not-for-mail
From: SWPC.Webmaster@noaa.gov
Newsgroups:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.shor
twave,rec.radio.info
Subject: Weekly Highlights of Solar and Geomagnetic Activity, 01 - 07 April 2013
Followup-To:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.shor
twave
Date: Mon, 8 Apr 2013 11:30:34 EDT
Organization: NOAA Space Weather Prediction Center
Lines: 73
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <20130408153001.A6EC933C8C@panix2.panix.com>
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X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Mon, 8 Apr 2013 15:30:34 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Bytes: 5859
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:Product: Weekly Highlights and Forecasts
:Issued: 2013 Apr 08 0354 UTC
# Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center
# Product description and SWPC contact on the Web
# http://www.swpc.noaa.gov/weekly.html
#
#                 Weekly Highlights and Forecasts
```

#

Highlights of Solar and Geomagnetic Activity
01 - 07 April 2013

Solar activity began the period at very low levels on 01-02 April. By 03 April, solar activity increased to low levels and continued at low levels through 04 April due to several low level C-class flares from Regions 1708 (N11, L=190, class/area Dao/090 on 29 March), 1711 (S19, L=158, class/area Cko/580 on 04 April), and 1713 (N10, L=175, class/area Dai/130 on 06 April). By 05 April, solar activity reached moderate levels with an isolated M2 flare at 05/1748 UTC from Region 1719 (N08, L=076, class/area Dsi/150 on 07 April). Earlier on 05 April, a long duration C2 flare was observed at 05/0650 UTC, also from Region 1719 as it began to rotate onto the east limb. An associated coronal mass ejection (CME) was observed off the east limb in SOHO/LASCO C2 imagery beginning at 05/0712 UTC, but was not Earth-directed. By 06-07 April, solar activity returned to low levels with the majority of the C-class flares from Regions 1718 (N20, L=109, class/area Dai/140 on 07 April) and 1719. No Earth-directed CMEs were observed during the reporting period.

No proton events were observed at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit was at high levels on 01-05 April and decreased to moderate levels by 06-07 April. The maximum weekly flux value of 5166 pfu was observed at 02/1735 UTC.

Geomagnetic field activity was at quiet levels with isolated active periods at high latitudes mid-day on 01 and 07 April. Solar wind speed began the period decreasing from approximately 480 km/s to a low near 250 km/s by late on 05 April while the total field strength slowly increased from 2 nT to 6 nT. By Early on 06 April, solar wind speed started to increase to 340-370 km/s while total field strength increased to 5-7 nT. Solar wind speed was relatively constant near the 330-350 km/s range through the end of the reporting period. Phi angle was mostly negative (towards) through approximately 07/1500 UTC when a change to a more positive (away) sector occurred.

Forecast of Solar and Geomagnetic Activity
08 April - 04 May 2013

Solar activity is expected to be at very low to low levels with a chance for M-class flaring from 08-19 April as Regions 1713, 1718, and 1719 continue to transit across the visible disk. From 20 April until the end of the forecast period, very low to low levels are expected.

No proton events are expected at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to be at normal to moderate levels with a chance for high levels on 24 April-02 May due to recurrent coronal hole high speed stream (CH HSS) effects.

Geomagnetic field activity is expected to be quiet to unsettled on 08-09 April due to weak CH HSS effects. Mostly quiet conditions will prevail until another CH HSS moves into geoeffective position on 23 April. Quiet to unsettle conditions with a chance for isolated active periods are expected on 23 April with quiet to unsettled levels on 24 April. Another CH HSS is expected to become geoeffective on 25-26 April causing unsettled to active conditions with minor storm periods possible. Conditions are expected to return to mostly quiet levels by 27 April through the end of the forecast period.

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rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-097 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Mon, 8 Apr 2013 15:38:56 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 466
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X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
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X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
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AMSAT NEWS SERVICE
ANS-097

The AMSAT News Service bulletins are a free, weekly news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS publishes news related to Amateur Radio in Space including reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

The news feed on http://www.amsat.org publishes news of Amateur Radio in Space as soon as our volunteers can post it.

Please send any amateur satellite news or reports to:
ans-editor at amsat.org.

In this edition:

* AMSAT-NA Working on Coordination Issues with Experimental Satellites
* AMSAT YouTube Channel
* 2013 AMSAT Field Day Rules Posted On-Line
* ARRL Seeks Comments on 5 and 10 GHz National Band Plans
* Final IARU-R1 Vienna 2013 Papers Released
* First Satellite Contact Between Cuba and Ireland on FO-29
* NASA Seeks Academic Partners For Smallsat Technology Collaboration
* Upcoming ARISS Contacts

SB SAT @ AMSAT $ANS-097.01
ANS-076 AMSAT News Service Weekly Bulletins

AMSAT News Service Bulletin 097.01

From AMSAT HQ SILVER SPRING, MD.
April 7, 2013
To All RADIO AMATEURS
BID: $ANS-097.01

```
*****************************************************************
* Volunteers are needed to help at the AMSAT booth at Dayton.   *
* Steve Belter N9IP, is looking for volunteers to help man the  *
* AMSAT booth during the 2013 Hamvention. If you are willing    *
* to help at the Hamvention, please send an e-mail by April 30  *
* to Steve Belter, n9ip@amsat.org.                              *
*                                                               *
* Monitor the 'AMSAT at Dayton Hamvention 2013' link on the new *
* AMSAT Web Site http://www.amsat.org for the latest AMSAT at   *
* Dayton news and developments                                  *
*****************************************************************
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AMSAT-NA Working on Coordination Issues with Experimental Satellites

Over the past several months events have caused the Federal Communications Commission's (FCC) to more closely evaluate whether many of the small satellite projects proposed for launch should continue to be operated as stations in the Amateur-Satellite Service or instead be licensed as experimental stations. Based on the FCC's review, they determined that many do not really fit as Amateur projects and instead are requiring that the satellite developers obtain experimental licenses while still allowing them to operate in bands allocated to the Amateur-Satellite Service.

This has generated concern by the International Amateur Radio Union (IARU) with regard to whether it is appropriate for their Satellite Advisory Panel to take on the duty of coordinating what the FCC now views as non-amateur satellites.

The IARU Satellite Adviser and his panel will coordinate frequencies for satellites to be licensed as experimental on an adhoc basis. The IARU Satellite Adviser is working closely with the FCC to prioritize the coordination of experimental satellites manifested on launches for the next few month. Satellites licensed as amateur will not be affected and will be coordinated as before. The IARU is urging administrations to take series steps to find alternative allocations for experimental satellites and prioritize their participation of preparation for agneda item at WRC-18 if not at WRC-15. "AMSAT groups around the world are urged to work with their national societies and regulators to resolve the situation", the IARU Satellite Adviser said.

AMSAT-NA is working with the ARRL to investigate long-term solutions to this situation while also addressing the short-term need for satellites already in the pipeline nearing launch.

AMSAT-NA recognizes the significant positive impact that the university cubesat programs have provided to the amateur radio satellite community, including:

- Affordable launch opportunities as NASA and other government policies encourage development of university satellite programs

- Encouraging students and staff to embrace amateur radio through obtaining amateur radio licensees and establishing amateur radio ground stations

- Providing the potential for more amateur radio communications satellites as the Fox-1 design is made operational, allowing both experimental payloads and amateur radio operations to be supported through a robust and dependable RF design

AMSAT-NA is committed to continue working with the FCC, IARU and ARRL to develop plans and processes that will address the needs and concerns of the small satellite community both short and long term.

[ANS thanks AMSAT President Barry Baines, WD4ASW, and
Hans van de Groenendaal, ZS6AKV, for the above information]

AMSAT YouTube Channel

AMSAT-NA is pleased to announce a dedicated YouTube channel for videos on and about amateur satellite operations. These will include demonstration videos as well as presentations at the AMSAT-NA Dayton Hamvention Forum and yearly General Membership Meeting and Symposium. It also links to the AMSAT-UK and AMSAT-DL channels for additional views and perspectives. The AMSAT-NA channel may be reached through the www.amsat.org web site, or directly via www.youtube.com/AMSATNA

[ANS thanks Alan, W4SCA, for the above information]

2013 AMSAT Field Day Rules Posted On-Line

AMSAT Director Contests and Awards, Bruce Paige, KK5DO reminds you that time of year is once again approaching - Field Day!

Each year the American Radio Relay League (ARRL) sponsors Field Day as an emergency preparedness exercise. This year Field Day is June 22-23, 2013.

The Radio Amateur Satellite Corporation (AMSAT) promotes its own version of Field Day for operation via the amateur satellites, held concurrently with the ARRL event.

With SO-50 being the only active FM satellite, Field Day this year will be challenging. If you are considering ONLY the FM voice satellites for your primary AMSAT Field Day focus: Don't, unless you are simply hoping to make one contact for the ARRL rules bonus points.

The congestion on FM LEO satellites was so intense in prior years that we must continue to limit their use to one-QSO-per-FM-satellite. This includes the International Space Station if it is operational. You will be allowed one QSO if the ISS is operating Voice. You will also be allowed one digital QSO with the ISS or any other digital, non-store-and-forward, packet satellite (if operational).

If you have worked the satellites on Field Day in recent years, you may have noticed a lot of good contacts can be made on the linear transponder satellites including VUsat OSCAR 52, Fuji OSCAR 29, and AMSAT OSCAR 7. During Field Day the transponders come alive like 20 meters on a weekend. The transponders on these satellites will support multiple simultaneous SSB or CW contacts.

The AMSAT Field Day 2013 event is open to all Amateur Radio operators. Amateurs are to use the exchange as specified in ARRL rules for Field Day. The AMSAT competition is to encourage the use of all amateur satellites, both analog and digital.

For the complete listing of the AMSAT Field Day Rules please refer to the documents posted on-line at:

http://www.amsatnet.com/2013fd.docx
http://www.amsatnet.com/2013fd.pdf

[ANS thanks AMSAT Director Contests and Awards, Bruce Paige, KK5DO for the above information]

ARRL Seeks Comments on 5 and 10 GHz National Band Plans

Chairman, ARRL UHF/Microwave Band Plan Committee, Rick Roderick, K5UR reports that a the draft documents of the 5 and 10 GHz band plans has been released for review.

The Committee, charted by the ARRL Board of Directors, has prepared draft band plans for 5 centimeters (5.650-5.925 GHz) and 3 centimeters (10-10.500 GHz).

Amateur Satellite allocations in the draft band plans include:
+ Amateur Satellite; Up-Link Only 5650.000 - 5670.000 MHz
+ Amateur Satellite; Down-Link Only 5830.000 - 5850.000 MHz
+ Space, Earth & Telecommand Stations 10450.000 - 10500.000 MHz

The band plan committee is requesting user comments via e-mail to microwave-band-plan@arrl.org by April 30, 2013.

The ARRL announcement, including links to the PDF copies of the proposed band plan documents can be accessed on-line at:
http://tinyurl.com/ARRL-5-10GHZ-BandPlans (www.arrl.org)

[ANS thanks the ARRL UHF/Microwave Band Plan Committee for the above information]

Final IARU-R1 Vienna 2013 Papers Released

AMSAT-UK_Bevelled_LogoThe final set of VHF/UHF/uW papers for the IARU Region 1 Interim meeting in Vienna, April 20-21, have been released.

They include a number of papers related to Amateur-Satellite Service allocations:
* VIE13_C5_03 Increased Amateur-Satellite Service 144MHz Usage
* VIE13_C5_05 Recommendations for DATV Transmission
* VIE13_C5_24 Region 1 Satellite Coordinator Report
* VIE13_C5_27 New Narrow-Band working frequencies in the 2300-2450 MHz band
* VIE13_C5_32 2400MHz Amateur Satellites

Download the papers here:
http://ukamsat.files.wordpress.com/2013/04/2013_vienna_documents_final.pdf

Discussion on the papers can be found on the RSGB C5 Yahoo Group at http://uk.groups.yahoo.com/group/ukc5discussion/

Article originally published at:
http://amsat-uk.org/2013/04/02/final-iaru-r1-vienna-2013-papers-released/

[ANS thanks AMSAT-UK for the above information]

First Satellite Contact Between Cuba and Ireland on FO-29

Congratulations to Hector Martinez, CO6CBF and Joe Murphy, EI5EV for completing the first satellite contact between Cuba and Ireland on April 3, 2013 on FO-29.

The distance between CO6CBF and EI5EV is 6955.1 km. Both stations had a 66 second window within the FO-29 footprint. Hector wrote, "Doppler is always in play. We did the calculations based on the great feature implemented on SatPC32 V12.8b using the option of seeing the frequency you are at the satellite receiver. This was our common reference point. I was very satisfied when I heard Joe exactly on the frequency I was expecting!"

Hector operated from on top of a tall building which improved his horizon visibility toward Europe. He used a Yaesu FT-817ND transceiver, 30 watt power amplifier, and a homebrew Arrow with a homebrew mast mounted amplifier. Everything was powered by two 12 volt, 7 amp gel cell batteries.

FO-29 is at apogee which has increased the size of its footprint and improved chances for satellite DX contacts. Another example is Bob, W7LRD (grid CN87) reported a successful contact with Boris, UA0QJ (grid PP42) via FO-29 on March 26. The range between the two stations is 6268 km.

Hector would like to set up schedules with satellite operators in the FO-29 footprint. Please e-mail him at co6cbf[at]frcuba.co.cu.

[ANS thanks Hector Martinez, CO6CBF for the above information]

NASA Seeks Academic Partners For Smallsat Technology Collaboration

[Credit: This article was first published on the Microcom Space Newsfeed on April 2. This article can be accessed at: http://tinyurl.com/Microcom-NASA-Collaboration (spacenewsfeed.co.uk)]

NASA is seeking small spacecraft technology project proposals from U.S. colleges and universities that would like to collaborate with agency researchers.

Small spacecraft, or smallsats, represent a growing field of space research and operations in which universities often have led the way in technology development. Smallsats, some of which are as small as a four-inch cube, are not expected to replace conventional spacecraft, but sometimes can provide an alternative to larger, more costly spacecraft. Smallsats can serve as platforms for rapid technology testing or specialized scientific research and exploration not otherwise possible. Smallsats also can be developed relatively quickly and inexpensively, and can share a ride to orbit with larger spacecraft.

"This new opportunity will engage university students and graduate researchers in advancing technology of value to NASA and the nation, and help strengthen our high-tech work force," said Andrew Petro, program executive for the Small Spacecraft Technology Program at NASA Headquarters in Washington. "There is a vibrant small spacecraft community emerging within America's universities and NASA is taking steps to increase our collaboration with that community. The universities will benefit from the deep experience NASA has in space research and technology, while NASA will benefit from fresh ideas and cost-conscious innovation at the universities."

NASA expects to competitively select approximately 10 proposals. Each team will form proposal partnerships with researchers from any of NASA's field centers. Awards for each project will include as much as $100,000 ($150,000 for teams of more than one school). Proposals submitted in response to this NASA cooperative agreement notice are due June 5.

In addition, NASA will fund the time for NASA employees to work with each selected team. Project funding is for one year with the potential to continue for a second year. Proposed projects could include anything from laboratory work to advance a particular spacecraft technology to flight testing of a new smallsat. For example, projects might focus on a technology area such as propulsion, power or communications, or on a smallsat capability, such as formation flight or satellite rendezvous.

The Small Spacecraft Technology Program is part of NASA's Space Technology Mission Directorate, which is innovating, developing, testing and flying hardware for use in NASA's future missions.

For additional news see:
http://www.spaceref.com/news/viewsr.html?pid=43721

[ANS thanks the Microcom Space Newsfeed for the above information]

Upcoming ARISS Contacts

An International Space Station school contact has been planned with participants at Sir George Simpson Jr. High, Albert, AB, Canada on 09 April. The event is scheduled to begin at approximately 20:00 UTC. The duration of the contact is approximately 9 minutes and 30 seconds. The contact will be a telebridge between OR4ISS and IK1SLD. The contact should be audible over portions of Italy. Interested parties are invited to listen in on the 145.80 MHz downlink. The contact is expected to be conducted in English and French.

Sir George Simpson Public School is a junior high located in St. Albert, Alberta. Currently, with approximately 540 students enrolled in a variety of programs.

An International Space Station school contact has been planned with participants at Innalik School, Inukjuak, Nunavut, Canada on 12 April. The event is scheduled to begin at approximately 17:30 UTC. The duration of the contact is approximately 9 minutes and 30 seconds. The contact will be a telebridge between OR4ISS and IK1SLD. The contact should be audible over portions of Italy. Interested parties are invited to listen in on the 145.80 MHz downlink. The contact is expected to be conducted in English, French, and Inuktitut.

Inukjuak is a remote, fly-in Inuit community located on the Hudson Bay in Northern Quebec. Its population is approximately 1600. The Inuit of Inukjuak still partake in many cultural practices, for example; constructing sleds or harpoons, sewing traditional garments, training dogsled teams, hunting, fishing and berry picking. However, they also have a window into the modern world and are current on fashion trends, popular music, and breakout phenomena like "Gangnam Style". The primary language in the school and in the village is Inuktitut; English and French are secondary languages.

ARISS is an international educational outreach program partnering the participating space agencies, NASA, Russian Space Agency, ESA, CNES, JAXA, and CSA, with the AMSAT and IARU organizations from participating countries.

ARISS offers an opportunity for students to experience the excitement of Amateur Radio by talking directly with crew-members on-board the International Space Station. Teachers, parents and communities see, first hand, how Amateur Radio and crew-members on ISS can energize youngsters' interest in science, technology, and learning. Further information on the ARISS program is available on the website http://www.ariss.org/ (graciously hosted by the Radio Amateurs of Canada).

[ANS thanks David, AA4KN, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

Primary and secondary school students are eligible for membership at one-half the standard yearly rate. Post-secondary school students enrolled in at least half time status shall be eligible for the stu-

dent rate for a maximum of 6 post-secondary years in this status.
Contact Martha at the AMSAT Office for additional student membership information.

73,
This week's ANS Editor,
Lee McLamb, KU4OS

```
From -4033019459252264449
X-Google-Thread: a4a23d5f63,6764ce83ca4cd10b,start
X-Google-Attributes: gida4a23d5f63,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
X-Received: by 10.180.96.225 with SMTP id dv1mr75790wib.6.1366079708640;
        Mon, 15 Apr 2013 19:35:08 -0700 (PDT)
Path: hg5ni6162wib.1!nntp.google.com!feeder1.cambriumusenet.nl!feed.tweaknews.nl!
194.109.133.81.MISMATCH!newsfeed.xs4all.nl!newsfeed2.news.xs4all.nl!xs4all!
border4.nntp.ams.giganews.com!border2.nntp.ams.giganews.com!
border3.nntp.ams.giganews.com!border1.nntp.ams.giganews.com!nntp.giganews.com!
news.teledata-fn.de!weretis.net!feeder1.news.weretis.net!news.imp.ch!
newsreader4.netcologne.de!news.netcologne.de!novso.com!news.he.net!
news.snarked.org!newsfeed.news.ucla.edu!usenet.stanford.edu!panix!rri.panix.com!
robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-098 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Mon, 8 Apr 2013 15:39:00 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 2345
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <003701ce3490$3714d450$a53e7cf0$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
X-Trace: reader1.panix.com 1365449940 18347 166.84.1.6 (8 Apr 2013 19:39:00 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Mon, 8 Apr 2013 19:39:00 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
DKIM-Signature: v=1; a=rsa-sha256; c=relaxed/relaxed; d=comcast.net;
```

```
     s=q20121106; t=1365449838;
     bh=SLX9PLXTVB6MvOBONX8dt7ygJdlGb+RJbwpn5pNGWL4=;
     h=Received:Received:From:To:Subject:Date:Message-ID:MIME-Version:
      Content-Type;
     b=orPIvA1kzoa2HZzOCYM1wsSyj7nq9vdjmfsNquJWXjc6F8ncXGL3hU176C92WSV4B
      SIyUIdLcdwV6gSN5cB0vP1FtcFi7oChz50kH23XFF5w8c9pq4CbbD8V3U4DLnKkfqj
      oWpmbgkY++wczwVhO4qMsEx7dr4MrSOZCFhH3Zrcfe1MiU2QUUJofNwx/cQeKJWRFi
      Dfnegup7IhkAOvwwUFQ6UKlc1v4akm4jUEIwKwIATiw6804LpeGdJp+s2juCloN8rv
      x8J2keVA6Q0IZYNwiARvNPILk0jfJDsS9f9y8Ar4PAA2s3SKWxJ6GKy6EsxgrTMm8d
      wfJz7cUltWdDA==
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
Content-Language: en-us
```

This report is organized into four (4) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - deborbited/returned satellites

SB SAT @ AMSAT W8ISS $WSR-098.S1
WSR 098 Part 1 04/08/2013

AMSAT NEWS SERVICE BULLETIN 098.S1
FROM AMSAT HQ SILVER SPRING, MD, April 08, 2013
TO ALL RADIO AMATEURS
BID: $WSR-098.S1

PW-Sat
Catalog Number: 38083
Launch Date: Febrauary 13, 2012 1000z
Launch Site: Kourou, French Guiana

Status: On Orbit

Uplink: 435.020 MHz FM
Downlink: 145.900 MHz DSB

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=132
[02112013]
=====
DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational
Current Mode: Science Mode - Beacon ONLY

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink: 435.530 to 435.570 MHz

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=68
[02112013]
=====
VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05, 2005 0444z
Launch site: Satish Dhawan Space Centre, India

Status: Operational
Current Mode: U/v - Dutch Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.9360 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=30

To know what transponder is switched on please listen for the beacon that is active. Each transponder has a different beacon.
[02112013]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002 1700z
Launch site: Baikonur, Kazakhstan

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4
Hz. The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute
timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset
the 10 minute timer.
[02112013]

=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Operational
Current Mode: V/u (Mode JA)

Voice/CW (Mode JA)
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
145.870 MHz FM
145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage:

```
http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's
CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/
fo29cwts.htm
[02112013]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974
Launch site: Vandenberg AFB, California, USA

Status: Operational

Current Mode: Alternating between Mode A and B every 24 hours

Uplink:   145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink:  29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons:   29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php
[02112013]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998 0640z (ZARYA module)
Launch sites: Baikonur, Kazakhstan
              Kourou, French Guiana
              Uchinoura Space Center, Japan
              Kennedy Space Center, Titusville, Florida, USA

Status: Operational

Current Active Modes: FM Repeater - OFF
                      Voice -       V/v
                      BBS -         V/v
                      2m APRS -     V/v
                      2m Digi -     V/v
                      70cm APRS -   ?
                      70cm Digi -   ?
                      SSTV -        V/v
```

Expedition 35 Crew (March 2013 - September 2013):

Commander:	Chris Hadfield	KC5RNJ/VA3OOG
Flight Engineer:	Tom Marshburn	KE5HOC
Flight Engineer:	Roman Romanenko	
Flight Engineer:	Aleksandr Misurkin	
Flight Engineer:	Pavell Vladimirovich	RV3BS
Flight Engineer:	Christopher Cassidy	KF5KDR

Available Modes and Frequencies:

Digital/APRS:

Worldwide 2m packet uplink:	145.825 MHz FM 1k2
Worldwide 2m packet downlink:	145.825 Mhz FM 1k2
Worldwide 70cm packet uplink:	437.550 Mhz FM 1k2
Worldwide 70cm packet downlink:	437.550 Mhz FM 1k2

Voice:

Region 1 voice uplink:	145.200 MHz FM
Region 2/3 voice uplink:	144.490 MHz FM
Worldwide downlink:	145.800 MHz FM

Crossband Repeater:

Repeater Uplinks:	1269.650 MHz FM 437.800 MHz FM 145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink:	145.800 MHz FM 437.800 MHz FM (Kenwood)

SSTV Robot 36:

Downlink:	145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:

Belgian:	OR4ISS
German:	DP0ISS
Russian:	RS0ISS RZ3DZR
United States:	NA1SS
2m Packet Mailbox:	RS0ISS-11
2m Digipeater alias:	ARISS
70cm Packet Mailbox:	RS0ISS-1
70cm Digipeater callsign:	RS0ISS
70cm Digipeater alias:	ARISS

Official ARISS Webpage:	http://www.rac.ca/ariss
ISS Fan Club Webpage:	http://www.issfanclub.com
APRS tracking page:	http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time line is NOT translated from Russian and posted.
[04082013]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-098.S2
WSR 098 Part 2 04/08/2013

AMSAT NEWS SERVICE BULLETIN 098.S2
FROM AMSAT HQ SILVER SPRING, MD, April 08, 2013
TO ALL RADIO AMATEURS
BID: $WSR-098.S2

STRaND-1
Catalog Number:
Launch Date: February 25, 2013 12:31z
Launch Site: Satish Dhawan Space Centre, India

Status: Operational

Uplink:
Downlink:437.568MHz 9k6 FSK

Beacon: None(?)

Callsign:

URL: http://www.sstl.co.uk/Missions/STRaND-1--Launched-2013
[03042013]
=====
Fitsat-1
Catalog number: 38853
Launch Date: October 04, 2012
Launch site: Kibo Japanese Experiment Module, International Space Station

Status: Operational

```
Uplink:
Downlink(s): 437.445MHz 1k2 AFSK
             5840.00 MHz 115k2 data
             LED CW (200w pulses)
```

Beacon(s): 437.250 MHz CW

Callsign: NIWAKA

URL: http://carpcomm.com/satellite/fitsat1
[10292012]
=====
TechEdSat

```
Catalog number: 38854
Launch date: October 04, 2012
Launch site: Kibo Japanese Experiment Module, International Space
Station

Uplink(s):
Downlink(s): 437.465 1k2 AFSK

Beacon(s):

Callsign:

URL:http://www.techedsat.com/
[10152012]
=====
We Wish
Catalog number: 38856
Launch date: October 04,2012
Launch Site: Kibo Japanese Experiment Module, International Space
Station

Uplink(s):
Downlink(s): 437.505MHz 1k2 AFSK
             437.505MHz SSTV

Beacon(s): 437.505MHz CW

Callsign: JQ1ZIJ

URL:
[10152012]
=====
F-1
Catalog number: 38855
Launch Date: October 04, 2012
Launch Site: Kibo Japanese Experiment Module, International Space
Station

Uplink(s):
Downlink(s): 145.980MHz 1k2 AFSK
             437.485MHz FM moduled CW

Baecon(s):

Callsign: XV1VN

URL: http://fspace.edu.vn/
[10152012]
=====
Aeneas
Catalog Number: 38760
Launch Date: September 13, 2012 2139z
Launch Site: Wallops Island, Virginia, USA
```

```
Status: On Orbit

Uplink: WiFi 2425MHz
Downlink:
WiFi: 2425MHz
Spread Spectrum: Somewhere in the 70cm band

Beacon: 437.600MHz 1k2 ax25 every 10 seconds

Callsign:

URL:
[10012012]
=====
CSSWE (Colorado Student Space Weather Experiment)
Catalog Number: 38761
Launch Date: September 12, 2012 2139z
Launch Site: Wallops Island, Virginia, USA

Status: On Orbit

Uplink:
Downlink:       437.345MHz 9k6 with ax.25

Beacon:

Callsign:

URL:
[10012012]
=====
CP5 (Polysat)
Catalog Number: 38763
Launch Date: September 12, 2012 2139z
Launch Site: Wallops Island, Virginia, USA

Status: On Orbit

Uplink:
Downlink:       437.405MHz AFSK on LSB ax.25 over NRZI at 1k2 baud,
every 2
                minutes, begins 3.5 hours after first turn-on

Beacon:

Callsign:

URL:
[10012012]
=====
CXBN (Cosmic X-Ray Background Nanosatellite)
Catalog Number: 38762
```

```
Launch Date: September 12, 2012 2139z
Launch Site: Wallops Island, Virginia, USA

Status: On Orbit

Uplink:
Downlink:       437.525MHz GFSK ax.25

Beacon:

Callsign:

URL:
[10012012]
=====
Proiteres
Catalog Number: 38756
Launch Date: September 09, 2012 2139z
Launch Site: Satish Dhawan Space Centre, India

Status: On Orbit

Uplink:
Downlink: 437.485MHz FM/AFSK

Beacon:

Callsign: JL3YZK

URL:
[10012012]
=====
RS-40 MiR (Yubileiny-2)
Catalog Number: 38735
Launch Date: July 28, 2012
Launch Site: Plesetsk Missile and Space Complex, Russia

Status: On Orbit

Uplink:
Downlink(s):    435.265 MHz
                435.365 MHz

Beacon:

Callsign:

URL:
[08272012]
=====
HORYU-II
Catalog number: 38340
Launch Date: May 17, 2012 1639z
```

Status: On Orbit

Uplink: 145.??? MHz
Downlink: 437.375 MHz CW/AX25/FSK

Beacon: 437.375 MHz CW

Callsign: JG6YBW

URL:

IARU Coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=216
[10012012]
=====
XaTcobeo
Catalog Number: 38082
Launch Date: Februaury 13, 2012 1000z
Launch Site: Kourou, French Guiana

Status: Operational

Uplink:
Downlink: 437.365 MHz FFSK with AX.25

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=135
[100162012]
=====
UniCubeSat
Catalog Number: 38085(?)
Launch Date: Februaury 13, 2012 1000z
Launch Site: Kourou, French Guiana

Status: Operational

Uplink:
Downlink: 437.305 MHz 9k6 bps GMSK

Beacon:

Callsign:

URL:
http://www.gaussteam.com/index.php?option=com_content&view=article&id=
96:unicu

```
besat&catid=36:unicubesat&Itemid=183

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=133
[10012012]
=====
Robusta
Catalog Number: 38083(?)
Launch Date: Febrauary 13, 2012 1000z
Launch Site: Kourou, French Guiana

Status: On Orbit

Uplink:
Downlink: 437.325 MHz 1k2 FM telemetry (data every 3 min, 20 sec.
burst)

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=122
[10012012]
=====
MO-72 MaSat-1
Catalog Number: 38081
Launch Date: Febrauary 13, 2012 1000z
Launch Site: Kourou, French Guiana

Status: Operational

Uplink:
Downlink: 437.345 MHz GFSK 625/1250 bps
          437.345 MHz CW

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=126
[10012012]
=====
Goliat
Catalog Number: 38084(?)
Launch Date: Febrauary 13, 2012 1000z
Launch Site: Kourou, French Guiana
```

```
Status: Operational

Uplink:
Downlink: 437.485 MHz 1k2 AFSK

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=98
[10012012]
=====
E-St@r
Catalog Number: 38079
Launch Date: Febrauary 13, 2012 1000z
Launch Site: Kourou, French Guiana

Status: On Orbit

Uplink:
Downlink: 437.445 MHz 1k2 bps AFSK

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=130
[10012012]
=====
ALMASat-1
Catalog Number: 38078
Launch Date: Febrauary 13, 2012 1000z
Launch Site: Kourou, French Guiana

Status: On Orbit

Uplink:
Downlink:  437.465 MHz 1k2 bps FSK
          2407.850 MHz

Beacon:

Callsign:

URL:

IARU coordination page:
```

```
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=39
[10012012]
=====
RS-39 Chibis-M
Catalog Number: 38051
Launch Date: October 30, 2011 10:11:00 UTC
Launch site: Tyuratam (Baikonur Cosmodrome), Kazakhstan

Status: Operational

Uplink:
Downlink:

Beacon: 435.315 MHz CW
        435.215 MHz CW

Callsign:

URL:

IARU coordination status page:
[07302012]
=====
JUGNU
Catalog Number: 37839
Launch Date: October 12, 2011 05:30:00 UTC
Launch site: Satish Dhawan Space Centre, India

Status: On Orbit

Uplink:   145.??? MHz 1k2 (mode?)
Downlink: 437.505 MHz 9k6 (mode?)

Beacon: 437.275 MHz 15 wpm (?) CW

Callsign:

URL: http://www.iitk.ac.in/me/jugnu/index.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=160
[07092012]
=====
SRMSAT
Catalog Number: 37841
Launch Date: October 12, 2011 05:30:00 UTC
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Uplink:   145.900 MHz 1k  AX.25 (speed?)
Downlink: 437.500 MHz 2k4 AX.25
```

Beacon: 437.425 MHz 12 wpm CW

Callsign:

URL: http://srmsat.in/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=181
[01282013]
=====
HRBE (E1P Explorer 1 [Prime] CubeSat (E1P-U2))
Catalog Number: 37855
Launch Date: October 28, 2011
Launch site: Vandenberg Air Force Base, California, USA

Status: On Orbit

Uplink: 437.305 MHz (???)
Downlink: 437.505 MHz AX.25 (SSB?)

Beacon:

Callsign:

URL: http://ssel.montana.edu/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=116
[01122012]
=====
M-Cubed
Catalog Number: 37855
Launch Date: October 28, 2011
Launch site: Vandenberg Air Force Base, California, USA

Status: On Orbit

Uplink:
Downlink: 437.485 MHz AX.25

Beacon:

Callsign:

URL: http://umcubed.org/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=215
[01122012]
=====
RAX-2
Catalog Number: 37853
Launch Date: October 28, 2011

Launch site: Vandenberg Air Force Base, California, USA

Status: Operational

Uplink:
Downlink: 437.345MHz 9k6 GMSK

Beacon:

Callsign:

URL: http://rax.engin.umich.edu//

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=221
[03232012]
=====
AO-71 AubieSat-1
Catalog Number: 37854
Launch Date: October 28, 2011
Launch site: Vandenberg Air Force Base, California, USA

Status: On Orbit

Uplink:
Downlink: 437.475 MHz 1k2 AX.25

Beacon: 437.475 MHz CW

Callsign: KI4NQO

URL: http://www.space.auburn.edu/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=148
[12262011]
=====
O/OREOS
Catalog Number: 37224
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: On Orbit

Uplink:
Downlink: 437.035 MHZ AX.25

Beacon:

Callsign:

URL: http://www.ooreos.org/

```
IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=146
[02092011]
=====
Rax-1 Radio Aurora Explorer
Catalog Number: 37223
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: On Orbit

Uplink:
Downlink: 437.505 MHz 9k6 GMSK

Beacon:

Callsign: RAX-1

URL: http://rax.engin.umich.edu/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=165
[02092011]
=====
FO-69 Fastrac-1 Sara Lily
Catalog Number: 37227
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: Operational

Uplink 1: 145.980 MHz 1k2 baud
Uplink 2: 145.825 MHz 1k2 baud
Downlink: 437.345 MHz 1k2 and 9k6 baud

Beacon:   437.435 MHz 1k2 AX.25

Callsign: Fast1

URL: http://fastrac.ae.utexas.edu/index.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=83
[07052011]
=====
FO-70 Fastrac-2 Emma
Catalog Number: 37380
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: Operational

Uplink 1: 435.025 MHz 1k2 baud
Uplink 2: 437.435 MHz 9k6 baud
Downlink: 145.825 MHz 1k2 and 9k6 baud

Beacon:   145.825 MHz 1k2 AX.25

Callsign: Fast2

URL: http://fastrac.ae.utexas.edu/index.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=84
[12162011]
=====
StudSat
Catalog Number: 36796
Launch Date: July 12, 2010 0352z
Launch site: Satish Dhawan Space Centre, India

Status: On Orbit

Uplink:   437.505MHz, 9600bps FSK
Downlink: 437.505MHz, 9600bps FSK
Beacon  : 437.505MHz,   20bps ASK

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=164
[02092011]
=====
TIsat-1
Catalog Number: 36799
Launch Date: July 12, 2010 0352z
Launch site: Satish Dhawan Space Centre, India

Status: On orbit

Callsign: HB9DE

Uplink:   145.980MHz FM, AFSK
Downlink: 437.305MHz FM, AFSK
Beacon:   437.305MHz CW

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=118
[02092011]
=====
SwissCube
Catalog Number: 35932
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Callsign: HB9EG
```

```
Beacon(100mw): 437.5050MHz CW
Beacon(1w):    437.5050MHz FSK 1k2bps

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=109
[02092011]
=====
UWE-2
Catalog Number: 35934
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: In Orbit

Beacon(500mw): 437.3850 MHz AFSK 1k2bps
               437.3850 MHz FSK 9k6bps

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=110
[02092011]
=====
ITUpsAT1
Catalog Number: 35935
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Beacon(100mw): 437.325MHz CW
Beacon(1w): 437.325MHz 19k2bps

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=113
[02092011]
=====
BEESAT
Catalog Number: 35933
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Callsign: DP0BEE

Beacon(100mw): 436.000MHz CW
Beacon(500mw): 436.000MHz GMSK 4k8bps
Beacon(500mw): 436.000MHz GMSK 9k6bp
[02092011]
=====
SOHLA-1 (ASTRO TECH.)
Catalog Number: 33496
Launch Date: January 23, 2009 0354z
```

Launch site: Tanegashima Space Center, Japan

Status: Operational

Proposed Frequencies and Modes:
Downlink: 437.505 MHz AFSK/CW
Beacon: 437.505 MHz AFSK/CW

Callsign:

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=101
[02092011]
=====
KAGAYAKI (Solan Co.)
Catalog Number: 33495
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: In Orbit

Downlink: 437.375 MHZ   FSK9k6/CW
Beacon: 437.375 MHz   FSK9k6/CW

IARU coordination status page:

AMSAT-NA webpage:

[02092011]
=====
STARS (Kagawa Univ.) (Twin Satellites)
Catalog Number: 33498
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational ?

Downlinks: 437.485 MHz FM/CW
           437.465 MHz FM/CW
Beacons: 437.305 MHz FM/CW
           437.275 MHz FM/CW

Callsigns: JR5YBN
           JR5YBO

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=99

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=121&retURL
=/satellites/status.php
[02092011]
=====

```
KKS-1 (Tokyo MCIT)
Catalog Number: 33499
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational

Downlink:  437.455 MHz AFSK/CW
Beacon:    437.385 MHz AFSK/CW

Callsign: JQ1YYY

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=107

AMSAT-NA webapge:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=120&retURL
=/satellites/status.php
[20092011]
=====
PRISM (Tokyo Univ.)
Catalog Number: 33493
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational

Uplink:   145.xxx MHz AFSK 1k2
Downlink: 437.425 MHz AFSK 1k2
Beacon:   437.250 MHz CW

Callsign: JQ1YCX

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=97

Read terms and conditions of operations at the PRISM web page to find
out how
to properly operate on the satellite and to get the uplink frequency.
It
has
been asked that the uplink frequency not be given out untik you have
read and
understood the terms of usage.

URL:
http://www.space.t.u-tokyo.ac.jp/prism/en/HAMservice.html
[10282012]
=====
RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number: 32953
Launch Date: May 23, 2008 1520z
Launch site: Plesetsk Missile and Space Complex, Russia
```

Status: Operational

Curent Modes: Telemetry
Audio
Images

Downlinks: 435.315 MHz
435.215 MHz

AMSAT-NA website:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=115&retURL=/satellites/status.php

Official website:
http://www.npopm.com/?cid=leoca&caid=43
[02092011]
=====
CanX-2
Catalog number: 32790
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational in range of ground station only

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=46
[02092011]
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Downlink: 437.425 MHz 1k2 baud packet

For the latest project status update please visit the AAUSAT-II web page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=60
[02092011]
=====
CO-65 CUTE-1.7+APD II
Catalog number: 32785

Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Downlink: 437.475 MHz 9k6 Packet
Uplink: 1267.600 Mhz

Telemetry Beacon:
Downlink: 437.2750 MHz CW

For the latest project status update please visit the Cute-1.7+APD II web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=78

Command Station blog website:
http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=112&retURL
=/satellites/status.php
[03232012]
=====
Compass-1
Catalog number: 32787
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Current Mode: dependant on last received command

Uplink: 145.980 MHz FM
Downlink: 437.275 Mhz CW
          437.405 MHz Packet

For the latest project status update please visit the Compass 1 web page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=52

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=114&retURL
=/satellites/status.php
[06162011]
=====
CO-66 Seeds II
Catalog number: 32791
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Downlink: 437.485 MHz

Callsign: JQ1YGU

For the latest project status update please visit the Seeds 2 web
page: http://cubesat.aero.cst.nihon-u.ac.jp/english/seeds_2_e.html

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=36

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=113&retURL
=/satellites/status.php
[073092011]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007 0702z
Launch site: Baikonur, Kazakhstan

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=94&retURL=
/satellites/status.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=72
[02092011]
=====
CP3
Catalog Number: 31129
Launch Date: April 17,2007 0702z
Launch site: Baikonur, Kazakhstan

Status: Operational

Current Mode: /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=74
[02092011]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005 0652z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon: 437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/xivpicte.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=37
[02092011]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: ?????

Current Mode: /u

Beacon: 436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=96&retURL
=/satellites/status.php

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[02092011]
=====
QuakeSat
Catalog Number: 27845
Launch Date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

```
Status: Telemetry only

Current Mode: 9600 baud data packet

Mode U packet
Downlink: 436.675 MHz 9k6 BPS

Quakesat webpage:
http://www.quakefinder.com/services/quakesat-ssite/
[02252011]
=====
CO-55 Cute-1.7+APD II
Catalog Number: 27844
Launch date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational

Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=69&retURL
=/satellites/status.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=78
[02092011]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001 0240z
Launch site: Kodiak Launch Complex, Alaska, USA

Status: Operational

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink:        144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[10292012]
=====
```

RS-22 RADIO SPORT 22 (MOZHAYETS 4)
Catalog number: 27939
Launch Date: September 27, 2003 0612z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational - 70cm cw only

Current Mode: /u

CW Beacon - 435.352 MHz
            145.818 MHz

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=76&retURL=/satellites/status.php
[02092011]
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990
Launch site: Kourou, French Guiana

Status: CW Beacon only

Uplinks: 145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink: 437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[02092011]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984
Launch site: Vandenburg AFB, California, USA

Status: Operational ?

Current Mode: /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon: 435.025 MHz
Mode-S Beacon: 2401.500 MHz

```
Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[07052011]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998 0640z (ZARYA module)
Launch sites: Baikonur, Kazakhstan
              Kourou, French Guiana
              Uchinoura Space Center, Japan
              Kennedy Space Center, Titusville, Florida, USA

Status: Operational

Current Active Modes: FM Repeater - OFF
                      Voice -       V/v
                      BBS -         V/v
                      2m APRS -     V/v
                      2m Digi -     V/v
                      70cm APRS -   ?
                      70cm Digi -   ?
                      SSTV -        V/v


Expedition 35 Crew (March 2013 - September 2013):
Commander:                Chris Hadfield       KC5RNJ/VA3OOG
Flight Engineer:          Tom Marshburn        KE5HOC
Flight Engineer:          Roman Romanenko
Flight Engineer:          Aleksandr Misurkin
Flight Engineer:          Pavell Vladimirovich RV3BS
Flight Engineer:          Christopher Cassidy  KF5KDR


Available Modes and Frequencies:
Digital/APRS:
Worldwide 2m packet uplink:     145.825 MHz FM 1k2
Worldwide 2m packet downlink:   145.825 Mhz FM 1k2
Worldwide 70cm packet uplink:   437.550 Mhz FM 1k2
Worldwide 70cm packet downlink: 437.550 Mhz FM 1k2

Voice:
Region 1 voice uplink:          145.200 MHz FM
Region 2/3 voice uplink:        144.490 MHz FM
Worldwide downlink:             145.800 MHz FM

Crossband Repeater:
Repeater Uplinks:              1269.650 MHz FM
                                437.800 MHz FM
                                145.990 MHz FM - 67.0 PL (Kenwood)
```

Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
2m Packet Mailbox: RS0ISS-11
2m Digipeater alias: ARISS
70cm Packet Mailbox: RS0ISS-1
70cm Digipeater callsign: RS0ISS
70cm Digipeater alias: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time line is NOT translated from Russian and posted.
[04082013]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-098.S3
WSR 098 Part 3 03/08/2013

AMSAT NEWS SERVICE BULLETIN 098.S3
FROM AMSAT HQ SILVER SPRING, MD, April 08, 2013
TO ALL RADIO AMATEURS
BID: $WSR-098.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

NANOSAIL-D
Catalog Number: 37361
Ejection Date: January 17, 2011

Status: Non - Operational

Downlink: 437.270 MHz AX.25

URL: http://nanosaild.engr.scu.edu/dashboard.htm

```
IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=115
[07302012]
=====
HO-68 HOPE-1 (CAS-1) (XW-1)
Catalog Number: 36122
Launch Date: December 15, 2009 0231z
Launch site: Taiyuan Space Center, PRC

Status: Telemetry only

Callsign:
Broadcast:    BJ1SA-11
BBS:     BJ1SA-12

Uplinks:   145.8250 MHz FM, PL 67.0 Hz.
           145.9250 - 145.9750 MHz SSB/CW
           145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
           435.7650 - 435.7150 MHz SSB/CW
           435.6750 MHz AFSK 1200 BPS

Beacon:    435.7900 MHz CW

Mode and Antenna Polarization:
V: LHCP 2.0dBi max
U: RHCP 3.0dBi max

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=108

For more information about XW-1 (CAS-1):
http://
[04302012]
=====
SO-67 SumbandilaSat
Catalog Number: 35870
Launch Date: September 17, 2009 1555z
Launch site: Baikonur, Kazakhstan

Status: Non - Operational

Callsign: ZS0SUM

Uplink:   145.875MHz FM tone 233.6 Hz
Downlink: 435.345MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

For more information about SO-67:
http://www.amsatsa.org.za/
```

```
IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=88
[01272012]
=====
CP4
Catalog Number: 31132
Launch Date: April 17, 2007

Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon:    437.325 MHz CW

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=79
[09062010]
=====
LIBERTAD-1
Catalog Number: 31128
Launch Date: April 17, 2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink:   145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=76
[09062010]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: Non-Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder:  145.825 Mhz FM

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=51
[09062010]
```

```
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency:  437.305
                             2407.250

Official Website: http://www.ncube.no

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=24
[09062010]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink:        437.250 MHz FM 67Hz CTCSS
Voice Downlink:     2401.835 MHz FM
Packet Up/Downlink:  437.250 MHz 9k6 packet
Packet Downlink     2401.835 MHz 38k4 packet

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=54
[09062010]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non-Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=53
[09062010]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004 0745z
Launch site: Baikonur, Kazakhstan

Status: Non - Operational

Current Mode(s):
```

Voice repeater: V/u
Uplink: 145.880 MHz FM
Downlink: 435.150 MHz FM

Telemetry: Recovery efforts
Downlink: 435.150MHz 9k6

Analog voice downlink: 435.300 MHz FM
                           435.150 MHz FM
                          2401.200 Mhz FM
Analog voice uplink: 145.860 MHZ FM
                           145.880 MHz USB
                           145.880 MHz FM
                           145.920 MHz FM
                           145.920 MHz FM - 67 Hz PL tone burst
                          1268.705 MHz FM
Digital Downlinks: 435.150 MHz FM 38k4 PBP, 1 watt output
                           435.150 MHz FM 9k6 Pacsat Broadcast
Protocol
                          2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Pacsat Broadcast
Protocol
                          1268.703 mhz FM 9k6 Pacsat Broadcast
Protocol
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=19
[12062011]

=====
CANX-1
Catalog Number: 27847
Launch Date: June 30, 2003

Status: Non-Operational

Downlink: 437.8800 MHz AFSK 1k2bps
[06052009]

=====

DTUSAT
Catalog Number: 27842
Launch Date: June 30, 2003

Status: Non-Operational

Current Mode: 2k4 AFSK Packet last reported

Downlink: 437.475MHz

Officail webpage: http://dtusat1.dtusat.dtu.dk/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=101&retURL=satellites/all_oscars.php
[02212009]

=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)

Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]

=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Telemetry only

Uplinks: 145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[03302009]

```
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink:   145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS:                SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink:   145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational
```

Uplinks

V-band: 145.840 - 145.990 MHz CW/LSB
U-band: 435.550 - 435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks

S2-band: 2401.225 - 2401.475 MHz CW/USB
K-band: 24048.010 - 24048.060 MHz CW/USB
Beacon: 2401.323 MHz
24048.035 MHz

P3-D Telemetry Beacons (IHU)

BEACON	General Beacon(GB)	Middle Beacon(MB)	Engineering Beacon(EB)
2 m	none	145.898 MHz	none
70cm	435.438 MHz	435.588 MHz	435.838 MHz
13cm(1)	2400.188 MHz	2400.338 MHz	2400.588 MHz
13cm(2)	2401.173 MHz	2401.323 MHz	2401.573 MHz
3cm	10450.975 MHz	10451.125 MHz	10451.375 MHz
1.5cm	24047.885 MHz	24048.035 MHz	24048.285 MHz

[07162007]

=====

OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]

=====

UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]

=====

```
SO-35 SUNSAT
Catalog Number: 25636
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater:         436.250 MHz

Uplinks: Mode B Repeater:  145.825 MHz
Mode J Digipeater:         145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Non-Operational

Current Modes:
Telemetry : /u

Downlink: 435.225 MHz FM (9600-baud FSK)
```

```
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign:       4XTECH-12

More information of GO-32 can be found at:
http://asri.technion.ac.il/techsat/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=14&retURL
=/satellites/status.php
[07172010]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink:   145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
MO-30 UNAMSAT-2
Catalog Number: 24305
Launch Date: September 5, 1996

Status: Non-operational

Downlink:       435.1380 MHz AFSK 1200 BPS
Downlink:       435.2060 MHz AFSK 1200 BPS
Uplink:         145.8150 MHz AFSK 1200 BPS
Uplink:         145.8350 MHz AFSK 1200 BPS
Uplink:         145.8550 MHz AFSK 1200 BPS
Uplink:         145.8750 MHz AFSK 1200 BPS
[06042009]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Non-operational

Downlink: 429.950
```

Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012009]
=====
AO-27 AMRAD
Catalog number: 22825
Launch Date: September 26, 1993 0140z
Launch site: Kourou, French Guiana

Status: Recovery efforts in progress

Current Mode: V/u

Uplink: 145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[12032012]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993 0140z

Status: PSK carrier only

Current Mode:

Uplinks: 145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828

```
Launch date: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
AO-24 ARSENE
Catalog Number: 22654
Launch Date: May 13, 1993

Status: Non-operational

Uplink:    435.0625 MHz FM 1k2bps AFSK
           435.1125 MHz FM 1k2bps AFSK
           435.1375 MHz FM 1k2bps AFSK
Downlink:  145.9750 MHz FM 1k2bps AFSK
          2446.5025 MHz FM 1k2bps AFSK

Beacon:    2446.4700 MHz CW

Broadcast callsign:
BBS:
[12162009]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
```

```
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
```

```
[05012006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: non-operational

Current Mode:  V/u

Uplink:         145.900 MHz FM 1200-baud Manchester FSK (reserved)
                145.920 MHz FM VOICE
                145.940 MHz FM 1200-baud Manchester FSK (reserved)
                145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink:       437.026 MHz USB VOICE
                (1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[07242009]
=====
UO-15 UoSAT-4
Catalog Number: 20438
Launch Date: January 22, 1990

Status: Non-operational

Uplink: ?
Downlink: 435.1250MHz (?)
          435.1200MHz (?)
[06042009]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
```

```
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon:   145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink  29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
```

```
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
Beacons:   29.450 MHz
          435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon 1:  29.352 MHz (intermittent)
Beacon 2:  29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991
```

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB

Beacon: 145.860 MHz

Robot: 145.908 MHz
[05232004]

=====

RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)

* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at}
amsat.org
NNNN
/EX

```
From 5179031313969569322
X-Google-Thread: 8f86f75953,d20816c549fd0c30,start
X-Google-Attributes: gid8f86f75953,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
X-Received: by 10.15.44.193 with SMTP id z41mr11069270eev.1.1366254157068;
        Wed, 17 Apr 2013 20:02:37 -0700 (PDT)
Path: hg5ni15503wib.1!nntp.google.com!feeder1.cambriumusenet.nl!feed.tweaknews.nl!
85.12.40.130.MISMATCH!xlned.com!feeder1.xlned.com!border2.nntp.ams.giganews.com!
border3.nntp.ams.giganews.com!border1.nntp.ams.giganews.com!nntp.giganews.com!
news.nobody.at!de-l.enfer-du-nord.net!feeder1.enfer-du-nord.net!
news.linkpendium.com!news.linkpendium.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-105 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Sat, 13 Apr 2013 14:44:33 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 2641
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <002801ce3876$9dc20e40$d9462ac0$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
```

```
Mime-Version: 1.0
X-Trace: reader1.panix.com 1365878673 27477 166.84.1.6 (13 Apr 2013 18:44:33 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sat, 13 Apr 2013 18:44:33 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
DKIM-Signature: v=1; a=rsa-sha256; c=relaxed/relaxed; d=comcast.net;
     s=q20121106; t=1365878655;
     bh=f0fUbSKvPuDtuPjVJttu5D06qGtBtdBUY1AbrsgeCSk=;
     h=Received:Received:From:To:Subject:Date:Message-ID:MIME-Version:
      Content-Type;
     b=qlK06n6MdET+2bgF1cQWUVcSMowcJvyevPj6Qtuq7OuY2Z+Ki50TMyRBoRfUAFhVO
      7OhC0K+1ewCzI6qRRN3EfCZcTHFfTaY3/0/6++Ee0vclXX+wLrSnn96u5KCMiU4J+u
      Su1Rl5ZhS1nSIIphCtV3mnsQAwE+mjb0DhzaIGnzx6t8G+ES4DS9NLQCIgL8qYJvY+
      E5Xw8gsxmCP7JdXzULxNLh6VK3fwOzK2ukZLDHJnonioVF6GUi1jE7gk8QHK9/OjYP
      XT8vYY1S93/VnLnPCxUrlFFnK5KFEKcB7jd/XuWM656TeZzUFgTBKs/+KYxrAdMeId
      wxJ9Ko+VOTYQA==
Bytes: 62068
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
Content-Language: en-us
```

This report is organized into four (4) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - deborbited/returned satellites

SB SAT @ AMSAT W8ISS $WSR-105.S1
WSR 105 Part 1 04/15/2013

AMSAT NEWS SERVICE BULLETIN 105.S1
FROM AMSAT HQ SILVER SPRING, MD, April 15, 2013
TO ALL RADIO AMATEURS
BID: $WSR-105.S1

PW-Sat
Catalog Number: 38083
Launch Date: Febrauary 13, 2012 1000z
Launch Site: Kourou, French Guiana

Status: On Orbit

Uplink: 435.020 MHz FM
Downlink: 145.900 MHz DSB

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=132
[02112013]
=====
DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational
Current Mode: Science Mode - Beacon ONLY

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink: 435.530 to 435.570 MHz

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=68
[02112013]
=====
VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05, 2005 0444z
Launch site: Satish Dhawan Space Centre, India

Status: Operational
Current Mode: U/v - Dutch Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.9360 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=30

To know what transponder is switched on please listen for the beacon that is active. Each transponder has a different beacon.
[02112013]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002 1700z
Launch site: Baikonur, Kazakhstan

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz. The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10 minute timer.
[02112013]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Operational
Current Mode: V/u (Mode JA)

Voice/CW (Mode JA)
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage:
http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts.htm
[02112013]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974
Launch site: Vandenberg AFB, California, USA

Status: Operational

Current Mode: Alternating between Mode A and B every 24 hours

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php
[02112013]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544

Launch date: November 20, 1998 0640z (ZARYA module)
Launch sites: Baikonur, Kazakhstan
Kourou, French Guiana
Uchinoura Space Center, Japan
Kennedy Space Center, Titusville, Florida, USA

Status: Operational

Current Active Modes: FM Repeater - OFF
Voice - V/v
BBS - V/v
2m APRS - V/v
2m Digi - V/v
70cm APRS - ?
70cm Digi - ?
SSTV - V/v

Expedition 35 Crew (March 2013 - September 2013):

Commander:	Chris Hadfield	KC5RNJ/VA3OOG
Flight Engineer:	Tom Marshburn	KE5HOC
Flight Engineer:	Roman Romanenko	
Flight Engineer:	Aleksandr Misurkin	
Flight Engineer:	Pavell Vladimirovich	RV3BS
Flight Engineer:	Christopher Cassidy	KF5KDR

Available Modes and Frequencies:
Digital/APRS:
Worldwide 2m packet uplink: 145.825 MHz FM 1k2
Worldwide 2m packet downlink: 145.825 Mhz FM 1k2
Worldwide 70cm packet uplink: 437.550 Mhz FM 1k2
Worldwide 70cm packet downlink: 437.550 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
2m Packet Mailbox: RS0ISS-11
2m Digipeater alias: ARISS
70cm Packet Mailbox: RS0ISS-1
70cm Digipeater callsign: RS0ISS
70cm Digipeater alias: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time line is NOT translated from Russian and posted.
[04082013]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-105.S2
WSR 105 Part 2 04/15/2013

AMSAT NEWS SERVICE BULLETIN 105.S2
FROM AMSAT HQ SILVER SPRING, MD, April 15, 2013
TO ALL RADIO AMATEURS
BID: $WSR-105.S2

STRaND-1
Catalog Number:
Launch Date: February 25, 2013 12:31z
Launch Site: Satish Dhawan Space Centre, India

Status: Operational

Uplink:
Downlink:437.568MHz 9k6 FSK

Beacon: None(?)

Callsign:

URL: http://www.sstl.co.uk/Missions/STRaND-1--Launched-2013
[03042013]

=====
Fitsat-1
Catalog number: 38853
Launch Date: October 04, 2012
Launch site: Kibo Japanese Experiment Module, International Space

```
Station

Status: Operational

Uplink:
Downlink(s): 437.445MHz 1k2 AFSK
            5840.00 MHz 115k2 data
            LED CW (200w pulses)

Beacon(s): 437.250 MHz CW

Callsign:  NIWAKA

URL: http://carpcomm.com/satellite/fitsat1
[10292012]
=====
TechEdSat
Catalog number: 38854
Launch date: October 04, 2012
Launch site: Kibo Japanese Experiment Module, International Space
Station

Uplink(s):
Downlink(s): 437.465 1k2 AFSK

Beacon(s):

Callsign:

URL:http://www.techedsat.com/
[10152012]
=====
We Wish
Catalog number: 38856
Launch date: October 04,2012
Launch Site: Kibo Japanese Experiment Module, International Space
Station

Uplink(s):
Downlink(s): 437.505MHz 1k2 AFSK
             437.505MHz SSTV

Beacon(s): 437.505MHz CW

Callsign: JQ1ZIJ

URL:
[10152012]
=====
F-1
Catalog number: 38855
Launch Date: October 04, 2012
Launch Site: Kibo Japanese Experiment Module, International Space
```

```
Station

Uplink(s):
Downlink(s): 145.980MHz 1k2 AFSK
             437.485MHz FM moduled CW

Baecon(s):

Callsign: XV1VN

URL: http://fspace.edu.vn/
[10152012]
=====
Aeneas
Catalog Number: 38760
Launch Date: September 13, 2012 2139z
Launch Site: Wallops Island, Virginia, USA

Status: On Orbit

Uplink: WiFi 2425MHz
Downlink:
WiFi: 2425MHz
Spread Spectrum: Somewhere in the 70cm band

Beacon: 437.600MHz 1k2 ax25 every 10 seconds

Callsign:

URL:
[10012012]
=====
CSSWE (Colorado Student Space Weather Experiment)
Catalog Number: 38761
Launch Date: September 12, 2012 2139z
Launch Site: Wallops Island, Virginia, USA

Status: On Orbit

Uplink:
Downlink:       437.345MHz 9k6 with ax.25

Beacon:

Callsign:

URL:
[10012012]
=====
CP5 (Polysat)
Catalog Number: 38763
Launch Date: September 12, 2012 2139z
Launch Site: Wallops Island, Virginia, USA
```

```
Status: On Orbit

Uplink:
Downlink:       437.405MHz AFSK on LSB ax.25 over NRZI at 1k2 baud,
every 2
                minutes, begins 3.5 hours after first turn-on

Beacon:

Callsign:

URL:
[10012012]
=====
CXBN (Cosmic X-Ray Background Nanosatellite)
Catalog Number: 38762
Launch Date: September 12, 2012 2139z
Launch Site: Wallops Island, Virginia, USA

Status: On Orbit

Uplink:
Downlink:       437.525MHz GFSK ax.25

Beacon:

Callsign:

URL:
[10012012]
=====
Proiteres
Catalog Number: 38756
Launch Date: September 09, 2012 2139z
Launch Site: Satish Dhawan Space Centre, India

Status: On Orbit

Uplink:
Downlink: 437.485MHz FM/AFSK

Beacon:

Callsign: JL3YZK

URL:
[10012012]
=====
RS-40 MiR (Yubileiny-2)
Catalog Number: 38735
Launch Date: July 28, 2012
Launch Site: Plesetsk Missile and Space Complex, Russia
```

Status: On Orbit

Uplink:
Downlink(s):   435.265 MHz
435.365 MHz

Beacon:

Callsign:

URL:
[08272012]
=====
HORYU-II
Catalog number: 38340
Launch Date: May 17, 2012 1639z

Status: On Orbit

Uplink: 145.??? MHz
Downlink: 437.375 MHz CW/AX25/FSK

Beacon: 437.375 MHz CW

Callsign: JG6YBW

URL:

IARU Coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=216
[10012012]
=====
XaTcobeo
Catalog Number: 38082
Launch Date: Febrauary 13, 2012 1000z
Launch Site: Kourou, French Guiana

Status: Operational

Uplink:
Downlink: 437.365 MHz FFSK with AX.25

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=135
[100162012]
=====

```
UniCubeSat
Catalog Number: 38085(?)
Launch Date: Febrauary 13, 2012 1000z
Launch Site: Kourou, French Guiana

Status: Operational

Uplink:
Downlink: 437.305 MHz 9k6 bps GMSK

Beacon:

Callsign:

URL:
http://www.gausssteam.com/index.php?option=com_content&view=article&id=
96:unicu
besat&catid=36:unicubesat&Itemid=183

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=133
[10012012]
=====
Robusta
Catalog Number: 38083(?)
Launch Date: Febrauary 13, 2012 1000z
Launch Site: Kourou, French Guiana

Status: On Orbit

Uplink:
Downlink: 437.325 MHz 1k2 FM telemetry (data every 3 min, 20 sec.
burst)

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=122
[10012012]
=====
MO-72 MaSat-1
Catalog Number: 38081
Launch Date: Febrauary 13, 2012 1000z
Launch Site: Kourou, French Guiana

Status: Operational

Uplink:
Downlink: 437.345 MHz GFSK 625/1250 bps
```

```
          437.345 MHz CW

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=126
[10012012]
=====
Goliat
Catalog Number: 38084(?)
Launch Date: Febrauary 13, 2012 1000z
Launch Site: Kourou, French Guiana

Status: Operational

Uplink:
Downlink: 437.485 MHz 1k2 AFSK

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=98
[10012012]
=====
E-St@r
Catalog Number: 38079
Launch Date: Febrauary 13, 2012 1000z
Launch Site: Kourou, French Guiana

Status: On Orbit

Uplink:
Downlink: 437.445 MHz 1k2 bps AFSK

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=130
[10012012]
=====
ALMASat-1
```

```
Catalog Number: 38078
Launch Date: Febrauary 13, 2012 1000z
Launch Site: Kourou, French Guiana

Status: On Orbit

Uplink:
Downlink:  437.465 MHz 1k2 bps FSK
          2407.850 MHz

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=39
[10012012]
=====
RS-39 Chibis-M
Catalog Number: 38051
Launch Date: October 30, 2011 10:11:00 UTC
Launch site: Tyuratam (Baikonur Cosmodrome), Kazakhstan

Status: Operational

Uplink:
Downlink:

Beacon: 435.315 MHz CW
        435.215 MHz CW

Callsign:

URL:

IARU coordination status page:
[07302012]
=====
JUGNU
Catalog Number: 37839
Launch Date: October 12, 2011 05:30:00 UTC
Launch site: Satish Dhawan Space Centre, India

Status: On Orbit

Uplink:   145.??? MHz 1k2 (mode?)
Downlink: 437.505 MHz 9k6 (mode?)

Beacon: 437.275 MHz 15 wpm (?) CW

Callsign:
```

```
URL: http://www.iitk.ac.in/me/jugnu/index.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=160
[07092012]
=====
SRMSAT
Catalog Number: 37841
Launch Date: October 12, 2011 05:30:00 UTC
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Uplink:   145.900 MHz 1k  AX.25 (speed?)
Downlink: 437.500 MHz 2k4 AX.25

Beacon: 437.425 MHz 12 wpm CW

Callsign:

URL: http://srmsat.in/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=181
[01282013]
=====
HRBE (E1P Explorer 1 [Prime] CubeSat (E1P-U2))
Catalog Number: 37855
Launch Date: October 28, 2011
Launch site: Vandenberg Air Force Base, California, USA

Status: On Orbit

Uplink:   437.305 MHz (???)
Downlink: 437.505 MHz AX.25 (SSB?)

Beacon:

Callsign:

URL: http://ssel.montana.edu/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=116
[01122012]
=====
M-Cubed
Catalog Number: 37855
Launch Date: October 28, 2011
Launch site: Vandenberg Air Force Base, California, USA

Status: On Orbit
```

Uplink:
Downlink: 437.485 MHz AX.25

Beacon:

Callsign:

URL: http://umcubed.org/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=215
[01122012]
=====
RAX-2
Catalog Number: 37853
Launch Date: October 28, 2011
Launch site: Vandenberg Air Force Base, California, USA

Status: Operational

Uplink:
Downlink: 437.345MHz 9k6 GMSK

Beacon:

Callsign:

URL: http://rax.engin.umich.edu//

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=221
[03232012]
=====
AO-71 AubieSat-1
Catalog Number: 37854
Launch Date: October 28, 2011
Launch site: Vandenberg Air Force Base, California, USA

Status: On Orbit

Uplink:
Downlink: 437.475 MHz 1k2 AX.25

Beacon: 437.475 MHz CW

Callsign: KI4NQO

URL: http://www.space.auburn.edu/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=148
[12262011]

```
=====
O/OREOS
Catalog Number: 37224
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: On Orbit

Uplink:
Downlink: 437.035 MHZ AX.25

Beacon:

Callsign:

URL: http://www.ooreos.org/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=146
[02092011]
=====
Rax-1 Radio Aurora Explorer
Catalog Number: 37223
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: On Orbit

Uplink:
Downlink: 437.505 MHz 9k6 GMSK

Beacon:

Callsign: RAX-1

URL: http://rax.engin.umich.edu/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=165
[02092011]
=====
FO-69 Fastrac-1 Sara Lily
Catalog Number: 37227
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: Operational

Uplink 1: 145.980 MHz 1k2 baud
Uplink 2: 145.825 MHz 1k2 baud
Downlink: 437.345 MHz 1k2 and 9k6 baud

Beacon:   437.435 MHz 1k2 AX.25
```

```
Callsign: Fast1

URL: http://fastrac.ae.utexas.edu/index.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=83
[07052011]
=====
FO-70 Fastrac-2 Emma
Catalog Number: 37380
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: Operational

Uplink 1: 435.025 MHz 1k2 baud
Uplink 2: 437.435 MHz 9k6 baud
Downlink: 145.825 MHz 1k2 and 9k6 baud

Beacon:   145.825 MHz 1k2 AX.25

Callsign: Fast2

URL: http://fastrac.ae.utexas.edu/index.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=84
[12162011]
=====
StudSat
Catalog Number: 36796
Launch Date: July 12, 2010 0352z
Launch site: Satish Dhawan Space Centre, India

Status: On Orbit

Uplink:   437.505MHz, 9600bps FSK
Downlink: 437.505MHz, 9600bps FSK
Beacon  : 437.505MHz,   20bps ASK

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=164
[02092011]
=====
TIsat-1
Catalog Number: 36799
Launch Date: July 12, 2010 0352z
Launch site: Satish Dhawan Space Centre, India

Status: On orbit

Callsign: HB9DE
```

```
Uplink:   145.980MHz FM, AFSK
Downlink: 437.305MHz FM, AFSK
Beacon:   437.305MHz CW

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=118
[02092011]
=====
SwissCube
Catalog Number: 35932
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Callsign: HB9EG

Beacon(100mw): 437.5050MHz CW
Beacon(1w):    437.5050MHz FSK 1k2bps

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=109
[02092011]
=====
UWE-2
Catalog Number: 35934
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: In Orbit

Beacon(500mw): 437.3850 MHz AFSK 1k2bps
               437.3850 MHz FSK 9k6bps

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=110
[02092011]
=====
ITUpsAT1
Catalog Number: 35935
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Beacon(100mw): 437.325MHz CW
Beacon(1w): 437.325MHz 19k2bps

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=113
[02092011]
=====
BEESAT
Catalog Number: 35933
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Callsign: DP0BEE

Beacon(100mw): 436.000MHz CW
Beacon(500mw): 436.000MHz GMSK 4k8bps
Beacon(500mw): 436.000MHz GMSK 9k6bp
[02092011]
=====
SOHLA-1 (ASTRO TECH.)
Catalog Number: 33496
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational

Proposed Frequencies and Modes:
Downlink: 437.505 MHz AFSK/CW
Beacon:   437.505 MHz AFSK/CW

Callsign:

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=101
[02092011]
=====
KAGAYAKI (Solan Co.)
Catalog Number: 33495
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: In Orbit

Downlink: 437.375 MHZ    FSK9k6/CW
Beacon:   437.375 MHz    FSK9k6/CW

IARU coordination status page:

AMSAT-NA webpage:

[02092011]
=====
STARS (Kagawa Univ.) (Twin Satellites)
Catalog Number: 33498
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational ?
```

```
Downlinks: 437.485 MHz FM/CW
           437.465 MHz FM/CW
Beacons:   437.305 MHz FM/CW
           437.275 MHz FM/CW

Callsigns: JR5YBN
           JR5YBO

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=99

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=121&retURL
=/satellites/status.php
[02092011]
=====
KKS-1 (Tokyo MCIT)
Catalog Number: 33499
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational

Downlink:  437.455 MHz AFSK/CW
Beacon:    437.385 MHz AFSK/CW

Callsign: JQ1YYY

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=107

AMSAT-NA webapge:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=120&retURL
=/satellites/status.php
[20092011]
=====
PRISM (Tokyo Univ.)
Catalog Number: 33493
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational

Uplink:   145.xxx MHz AFSK 1k2
Downlink: 437.425 MHz AFSK 1k2
Beacon:   437.250 MHz CW

Callsign: JQ1YCX

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=97
```

Read terms and conditions of operations at the PRISM web page to find out how to properly operate on the satellite and to get the uplink frequency. It has been asked that the uplink frequency not be given out untik you have read and understood the terms of usage.

URL:
http://www.space.t.u-tokyo.ac.jp/prism/en/HAMservice.html
[10282012]
=====
RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number: 32953
Launch Date: May 23, 2008 1520z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational

Curent Modes: Telemetry
Audio
Images

Downlinks: 435.315 MHz
435.215 MHz

AMSAT-NA website:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=115&retURL=/satellites/status.php

Official website:
http://www.npopm.com/?cid=leoca&caid=43
[02092011]
=====
CanX-2
Catalog number: 32790
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational in range of ground station only

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=46
[02092011]
=====
AAUSAT-II
Catalog number: 32788

Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Downlink: 437.425 MHz 1k2 baud packet

For the latest project status update please visit the AAUSAT-II web page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=60
[02092011]

=====
CO-65 CUTE-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Downlink: 437.475 MHz 9k6 Packet
Uplink: 1267.600 Mhz

Telemetry Beacon:
Downlink: 437.2750 MHz CW

For the latest project status update please visit the Cute-1.7+APD II web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=78

Command Station blog website:
http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=112&retURL=/satellites/status.php
[03232012]

=====
Compass-1
Catalog number: 32787
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Current Mode: dependant on last received command

Uplink: 145.980 MHz FM
Downlink: 437.275 Mhz CW

          437.405 MHz Packet

For the latest project status update please visit the Compass 1 web page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=52

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=114&retURL=/satellites/status.php
[06162011]
=====
CO-66 Seeds II
Catalog number: 32791
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Downlink: 437.485 MHz

Callsign: JQ1YGU

For the latest project status update please visit the Seeds 2 web page: http://cubesat.aero.cst.nihon-u.ac.jp/english/seeds_2_e.html

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=36

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=113&retURL=/satellites/status.php
[073092011]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007 0702z
Launch site: Baikonur, Kazakhstan

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=94&retURL=

```
/satellites/status.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=72
[02092011]
=====
CP3
Catalog Number: 31129
Launch Date: April 17,2007 0702z
Launch site: Baikonur, Kazakhstan

Status: Operational

Current Mode:  /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=74
[02092011]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005 0652z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon:             437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/xivpicte.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=37
[02092011]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: ?????

Current Mode: /u
```

```
Beacon:     436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=96&retURL
=/satellites/status.php

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[02092011]
=====
QuakeSat
Catalog Number: 27845
Launch Date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Telemetry only

Current Mode: 9600 baud data packet

Mode U packet
Downlink: 436.675 MHz 9k6 BPS

Quakesat webpage:
http://www.quakefinder.com/services/quakesat-ssite/
[02252011]
=====
CO-55 Cute-1.7+APD II
Catalog Number: 27844
Launch date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational

Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=69&retURL
=/satellites/status.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=78
[02092011]
=====
NO-44 PCSAT
```

```
Catalog number: 26931
Launch Date: September 30, 2001 0240z
Launch site: Kodiak Launch Complex, Alaska, USA

Status: Operational

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink:        144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[10292012]
=====
RS-22 RADIO SPORT 22 (MOZHAYETS 4)
Catalog number: 27939
Launch Date: September 27, 2003 0612z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational - 70cm cw only

Current Mode:  /u

CW Beacon - 435.352 MHz
            145.818 MHz

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=76&retURL
=/satellites/status.php
[02092011]
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990
Launch site: Kourou, French Guiana

Status: CW Beacon only

Uplinks:          145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink:      437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12
```

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[02092011]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984
Launch site: Vandenburg AFB, California, USA

Status: Operational ?

Current Mode: /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon: 435.025 MHz
Mode-S Beacon: 2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[07052011]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998 0640z (ZARYA module)
Launch sites: Baikonur, Kazakhstan
              Kourou, French Guiana
              Uchinoura Space Center, Japan
              Kennedy Space Center, Titusville, Florida, USA

Status: Operational

Current Active Modes: FM Repeater - OFF
                      Voice -   V/v
                      BBS -   V/v
                      2m APRS -   V/v
                      2m Digi -   V/v
                      70cm APRS -   ?
                      70cm Digi -   ?
                      SSTV -   V/v

Expedition 35 Crew (March 2013 - September 2013):
Commander: Chris Hadfield   KC5RNJ/VA3OOG
Flight Engineer: Tom Marshburn   KE5HOC
Flight Engineer: Roman Romanenko
Flight Engineer: Aleksandr Misurkin
Flight Engineer: Pavell Vladimirovich RV3BS
Flight Engineer: Christopher Cassidy KF5KDR

```
Available Modes and Frequencies:
Digital/APRS:
Worldwide 2m packet uplink:     145.825 MHz FM 1k2
Worldwide 2m packet downlink:   145.825 Mhz FM 1k2
Worldwide 70cm packet uplink:   437.550 Mhz FM 1k2
Worldwide 70cm packet downlink: 437.550 Mhz FM 1k2

Voice:
Region 1 voice uplink:          145.200 MHz FM
Region 2/3 voice uplink:        144.490 MHz FM
Worldwide downlink:             145.800 MHz FM

Crossband Repeater:
Repeater Uplinks:              1269.650 MHz FM
                                437.800 MHz FM
                                145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink:              145.800 MHz FM
                                437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink:                       145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian:                        OR4ISS
German:                         DP0ISS
Russian:                        RS0ISS
                                RZ3DZR
United States:                  NA1SS
2m Packet Mailbox:              RS0ISS-11
2m Digipeater alias:            ARISS
70cm Packet Mailbox:            RS0ISS-1
70cm Digipeater callsign:       RS0ISS
70cm Digipeater alias:          ARISS

Official ARISS Webpage:    http://www.rac.ca/ariss
ISS Fan Club Webpage:      http://www.issfanclub.com
APRS tracking page:        http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[04082013]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-105.S3
WSR 105 Part 3 03/15/2013
```

```
AMSAT NEWS SERVICE BULLETIN 105.S3
FROM AMSAT HQ SILVER SPRING, MD, April 15, 2013
TO ALL RADIO AMATEURS
BID: $WSR-105.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

NANOSAIL-D
Catalog Number: 37361
Ejection Date: January 17, 2011

Status: Non - Operational

Downlink: 437.270 MHz AX.25

URL: http://nanosaild.engr.scu.edu/dashboard.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=115
[07302012]
=====
HO-68 HOPE-1 (CAS-1) (XW-1)
Catalog Number: 36122
Launch Date: December 15, 2009 0231z
Launch site: Taiyuan Space Center, PRC

Status: Telemetry only

Callsign:
Broadcast:    BJ1SA-11
BBS:     BJ1SA-12

Uplinks:   145.8250 MHz FM, PL 67.0 Hz.
           145.9250 - 145.9750 MHz SSB/CW
           145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
           435.7650 - 435.7150 MHz SSB/CW
           435.6750 MHz AFSK 1200 BPS

Beacon:    435.7900 MHz CW

Mode and Antenna Polarization:
V: LHCP 2.0dBi max
U: RHCP 3.0dBi max

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=108

For more information about XW-1 (CAS-1):
http://
[04302012]
=====
SO-67 SumbandilaSat
```

```
Catalog Number: 35870
Launch Date: September 17, 2009 1555z
Launch site: Baikonur, Kazakhstan

Status: Non - Operational

Callsign: ZS0SUM

Uplink:   145.875MHz FM tone 233.6 Hz
Downlink: 435.345MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

For more information about SO-67:
http://www.amsatsa.org.za/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=88
[01272012]
=====
CP4
Catalog Number: 31132
Launch Date: April 17, 2007

Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon:    437.325 MHz CW

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=79
[09062010]
=====
LIBERTAD-1
Catalog Number: 31128
Launch Date: April 17, 2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink:   145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25

IARU coordination status page:
```

```
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=76
[09062010]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: Non-Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder:  145.825 Mhz FM

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=51
[09062010]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency:  437.305
                             2407.250

Official Website: http://www.ncube.no

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=24
[09062010]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink:        437.250 MHz FM 67Hz CTCSS
Voice Downlink:     2401.835 MHz FM
Packet Up/Downlink:  437.250 MHz 9k6 packet
Packet Downlink     2401.835 MHz 38k4 packet

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=54
[09062010]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005
```

Status: Non-Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=53
[09062010]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004 0745z
Launch site: Baikonur, Kazakhstan

Status: Non - Operational

Current Mode(s):
Voice repeater: V/u
Uplink: 145.880 MHz FM
Downlink: 435.150 MHz FM

Telemetry: Recovery efforts
Downlink: 435.150MHz 9k6

```
Analog voice downlink:     435.300 MHz FM
                           435.150 MHz FM
                          2401.200 Mhz FM
Analog voice uplink:       145.860 MHZ FM
                           145.880 MHz USB
                           145.880 MHz FM
                           145.920 MHz FM
                           145.920 MHz FM - 67 Hz PL tone burst
                          1268.705 MHz FM
Digital Downlinks:         435.150 MHz FM 38k4 PBP, 1 watt output
                           435.150 MHz FM 9k6 Pacsat Broadcast
Protocol
                          2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:            145.860 MHz FM 9k6 Pacsat Broadcast
Protocol
                          1268.703 mhz FM 9k6 Pacsat Broadcast
Protocol
Beacon:                    435.150 MHz
```

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11

BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=19
[12062011]
=====
CANX-1
Catalog Number: 27847
Launch Date: June 30, 2003

Status: Non-Operational

Downlink: 437.8800 MHz AFSK 1k2bps
[06052009]
=====
DTUSAT
Catalog Number: 27842
Launch Date: June 30, 2003

Status: Non-Operational

Current Mode: 2k4 AFSK Packet last reported

Downlink: 437.475MHz

Officail webpage: http://dtusat1.dtusat.dtu.dk/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=101&retURL
=satellites/all_oscars.php
[02212009]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)

Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Telemetry only

Uplinks: 145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[03302009]

=====

NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]

=====

SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]

=====

SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

```
Uplink:   145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
V-band:   145.840 -  145.990 MHz CW/LSB
U-band:   435.550 -  435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks
---------
S2-band:  2401.225 -  2401.475 MHz CW/USB
K-band:  24048.010 - 24048.060 MHz CW/USB
Beacon:   2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)
----------------------------
BEACON   General Beacon(GB)  Middle Beacon(MB)  Engineering Beacon(EB)
2 m                   none        145.898 MHz                    none
70cm           435.438 MHz        435.588 MHz             435.838 MHz
13cm(1)       2400.188 MHz       2400.338 MHz            2400.588 MHz
13cm(2)       2401.173 MHz       2401.323 MHz            2401.573 MHz
3cm          10450.975 MHz      10451.125 MHz           10451.375 MHz
1.5cm        24047.885 MHz      24048.035 MHz           24048.285 MHz
[07162007]
=====
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
=====
UO-36 UoSAT-12
```

Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]

=====
SO-35 SUNSAT
Catalog Number: 25636
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]

=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]

=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Non-Operational

Current Modes:
Telemetry : /u

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks: 145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://asri.technion.ac.il/techsat/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=14&retURL
=/satellites/status.php
[07172010]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink: 145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
MO-30 UNAMSAT-2
Catalog Number: 24305
Launch Date: September 5, 1996

```
Status: Non-operational

Downlink:       435.1380 MHz AFSK 1200 BPS
Downlink:       435.2060 MHz AFSK 1200 BPS
Uplink:         145.8150 MHz AFSK 1200 BPS
Uplink:         145.8350 MHz AFSK 1200 BPS
Uplink:         145.8550 MHz AFSK 1200 BPS
Uplink:         145.8750 MHz AFSK 1200 BPS
[06042009]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Non-operational

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign:       POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012009]
=====
AO-27 AMRAD
Catalog number: 22825
Launch Date: September 26, 1993 0140z
Launch site: Kourou, French Guiana

Status: Recovery efforts in progress

Current Mode: V/u

Uplink:   145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[12032012]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993 0140z

Status: PSK carrier only

Current Mode:
```

```
Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
AO-24 ARSENE
Catalog Number: 22654
Launch Date: May 13, 1993

Status: Non-operational

Uplink:    435.0625 MHz FM 1k2bps AFSK
           435.1125 MHz FM 1k2bps AFSK
           435.1375 MHz FM 1k2bps AFSK
Downlink:  145.9750 MHz FM 1k2bps AFSK
          2446.5025 MHz FM 1k2bps AFSK

Beacon:    2446.4700 MHz CW

Broadcast callsign:
BBS:
[12162009]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
```

```
Downlink: 435.170 MHz FM

Broadcast Callsign: HL01-11
BBS: HL01-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
[05012006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: non-operational

Current Mode:  V/u

Uplink:         145.900 MHz FM 1200-baud Manchester FSK (reserved)
                145.920 MHz FM VOICE
                145.940 MHz FM 1200-baud Manchester FSK (reserved)
                145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink:       437.026 MHz USB VOICE
                (1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[07242009]
=====
UO-15 UoSAT-4
Catalog Number: 20438
Launch Date: January 22, 1990

Status: Non-operational
```

```
Uplink: ?
Downlink: 435.1250MHz (?)
          435.1200MHz (?)
[06042009]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon:   145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
```

```
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink  29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
Beacons:   29.450 MHz
          435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
```

Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB

Beacon 1: 29.352 MHz (intermittent)
Beacon 2: 29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB

Beacon: 145.860 MHz

Robot: 145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-105.S4
WSR 105 Part 4 04/15/2013

AMSAT NEWS SERVICE BULLETIN 105.S4
FROM AMSAT HQ SILVER SPRING, MD, April 15, 2013
TO ALL RADIO AMATEURS
BID: $WSR-105.S4

THE FOLLOWING SATELLITES HAVE RE-ENTERED OR HAVE BEEN RETURNED SAFELY:

```
HAWKSAT 1
Catalog number: 35004
Launch Date: May 19, 2009 2355z
Launch site: Wallops Island, Virginia, USA

Status: re-entered
Re-entry date: September 04, 2012

Downlink: 437.345 MHz ?

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=105
[02112013]
=====
ARISSat-1
Catalog number: 37772
Launch date: August 03, 2011 1843z
Launch site: International Space Station

Status: Re-entered January 05, 2012

Callsign: RS01S

Current Mode(s):
Linear Transponder: U/v
Uplink:      435.758 to 435.742 MHz CW/LSB
Downlink:    145.922 to 145.938 MHz CW/USB

FM Telemetry/SSTV/Messages/ID:
Downlink:    145.950 MHz FM

Telemetry/Beacon:
Downlink:    145.939 MHz CW1
             145.919 MHz CW2
             145.920 MHz 1k BPSK USB
             145.920 MHz 400b BPSK USB


Official Webpage:http://www.amsat.org/amsat-new/ARISSat/ARISSat.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/informal_detail.php?serialnum=89
[01052012]
=====
CP-6
Catalog Number: 35003
Launch Date: May 19, 2009 2355z
Launch site: Wallops Island, Virginia, USA

Status: Re-enetered October 06, 2011

Downlink: 437.365 MHz 1k2 AFSK
```

```
IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=121
[01282013]
=====
Pharmasat
Catalog Number: 35002
Launch Date: May 19, 2009 2355z
Launch site: Wallops Island, Virginia, USA

Status: Re-entered August 14, 2012

Downlink: 437.465 MHz 1k2 AFSK

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=94
[01282013]
=====
ANUSAT
Catalog Number: 34808
Launch Date: April 20, 2009 0115z
Launch Site: Satish Dhawan Space Centre, India

Status: Re-entered
Re-entery date : April 18, 2012


Downlink:  435.000 MHz
Uplink:    145.800 MHz

Telemetry: 137.400 MHz
[02112013]
=====
CAERUS (Mayflower)
Catalog Number: 37252
Launch Date: December 08, 2010 15:43:00 UTC
Launch site: Kennedy Space Center, Titusville, Florida, USA

Status: Re-entered December 22, 2010

Uplink:
Downlink: 437.600 MHz 1k2 AX.25

Beacon:   437.600 MHz CW

Callsign: KJ6FIX

URL:
http://www2.isi.edu/research/prj-serc/prj-serc_projects/prj-serc_proje
cts-8.htm

IARU coordination status page:
```

```
[01282013]
=====
Cinema
Catalog Number: 36764
Launch Date: September 13, 2012 2139z
Launch Site: Wallops Island, Virginia, USA

Status: Ren-entered
Re-entry date: Spetember 10, 2010

Uplink:
Downlink:
Engineering:    2400 - 2450MHz
Telemetery:     2200 - 2300MHz

Beacon:

Callsign:

URL:
[02112013]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Re-entered
Re-entered: October 25, 2009

Uplink:  1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=56
[09062010]
=====
BEVO-1 (DRAGONSAT-1)
Catalog Number: 35690
Launch Date: May 19, 2009

Status: Re-entered
Re-entered:

Downlink: 437.325 MHz 9k6 GMSK
          437.325 MHz CW 20wpm

IARU coordination status page:
```

```
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=117
[07312009]
=====
AggieSat2 (DRAGONSAT-2)
Catalog Number: 35690
Launch Date: May 19, 2009

Status: Re-entered
Re-entered:

Downlink: 436.250 MHz 9k6 FHSS
[11112009]
=====
Pollux
Catalog Number: 35693
Launch Date: July 31, 2009

Status: Re-entered
Re-entered:

Callsign: POLLUX-1

Downlink: 145.825MHz 1k2 AX.25

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=139
[09062010]
=====
Castor (ANDE-2)
Catalog Number: 35694
Launch Date: July 31, 2009

Status: Re-entered
Re-entered:

Callsign: KD4HBO-1

Downlink: 145.825 MHz 1k2 AX.25

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=144
[09062010]
=====
NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: July 28, 2008

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO
```

```
Website: http://eng.usna.navy.mil/~bruninga/fcal.html

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=59
[01012009]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink:      145.825 Mhz FM APRS AX25
APRS Uplink:        145.825 MHz FM APRS AX25
Voice/PSK31 Uplink:  28.120 MHz

Packet to Voice ID: RAFT
[06112007]
=====
GENESAT-1
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Re-Entered
Re-entered date: August 8, 2010

Current Mode: /u

Callsign: KE7EGC

Telemetry Beacon Downlink: 437.0695 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[08082010]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Re-Entered
Re-entered: June 18, 2008
```

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon: 437.2750 MHz CW

Callsign: JR8YJT
[01012009]
=====
SO-43 Starshine 3
Catalog Number: 26929
Launch Date: September 30, 2001

Status: Re-Entered
Re-entered: January 21, 2003

Beacon: 145.825Mhz
[02212009]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at}
amsat.org
NNNN
/EX

____
Via the ANS mailing list courtesy of AMSAT-NA
http://amsat.org/mailman/listinfo/ans

```
From -2077373794570765893
X-Google-Thread: a4a23d5f63,bc261626a7dc325d,start
X-Google-Attributes: gida4a23d5f63,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII
X-Received: by 10.224.10.6 with SMTP id n6mr2988380qan.4.1366254195718;
        Wed, 17 Apr 2013 20:03:15 -0700 (PDT)
MIME-Version: 1.0
Path: ef9ni3204qab.0!nntp.google.com!border1.nntp.dca.giganews.com!
border4.nntp.dca.giganews.com!border2.nntp.dca.giganews.com!
border2.nntp.ams.giganews.com!nntp.giganews.com!news.nobody.at!de-l.enfer-du-
nord.net!feeder2.enfer-du-nord.net!news.linkpendium.com!news.linkpendium.com!
panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-104 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sat, 13 Apr 2013 22:24:25 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 830
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <002901ce38b7$22dc8110$68958330$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
X-Trace: reader1.panix.com 1365906265 16415 166.84.1.6 (14 Apr 2013 02:24:25 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 14 Apr 2013 02:24:25 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
```

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X-RRI-Info-1: Send submissions to            rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
DKIM-Signature: v=1; a=rsa-sha256; c=relaxed/relaxed; d=comcast.net;
     s=q20121106; t=1365906246;
     bh=of2jT1w6RVbEO/d85HXjQZ4MBdjc+BcSIT6fnVXtXfU=;
     h=Received:Received:From:To:Subject:Date:Message-ID:MIME-Version:
      Content-Type;
     b=aJ01lEOsI1xvcKDGbj27iodxC+slRpJs4GJTazfiGB5XVf25Nr2RYIn+H/qjqs5Zl
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      DIyEbA6jN4Bbg==
Bytes: 36573
Content-Language: en-us
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AMSAT NEWS SERVICE
ANS-104

The AMSAT News Service bulletins are a free, weekly news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS publishes news related to Amateur Radio in Space including reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

The news feed on http://www.amsat.org publishes news of Amateur Radio in Space as soon as our volunteers can post it.

Please send any amateur satellite news or reports to:
ans-editor at amsat.org.

In this edition:

* AMSAT-NA Board of Directors Nominations Solicited
* 7330.6 km Contact Made Via FO-29
* GS3PYE/p Satellite Operation Planned From Inner Herbrides Islands
* STEREO Space Weather Beacons Now Using AMSAT-DL Turbo Code
* AMSAT Awards
* Applications for Teachers Institute, ETP Grants Due in May
* Ken Pulfer, VE3PU, SK
* Cubesat Launches This Week
* April 17 Antares Launch Includes Three PhoneSat Cubesats
* PhoneSat Tracking Help Requested

* STRaND-1 signal reports requested
* Merritt Island High School Mission Selected for NASA Cubesat Launch Initiative
* ARISS News
* Schedule of AMSAT Activities at Dayton Hamvention
* Satellite Shorts From All Over

SB SAT @ AMSAT $ANS-104.01
ANS-104 AMSAT News Service Weekly Bulletins

AMSAT News Service Bulletin 104.01
>From AMSAT HQ SILVER SPRING, MD.
DATE April 14, 2013
To All RADIO AMATEURS
BID: $ANS-104.01

```
*****************************************************************
* Volunteers are needed to help at the AMSAT booth at Dayton.   *
* Steve Belter N9IP, is looking for volunteers to help man the  *
* AMSAT booth during the 2013 Hamvention. If you are willing    *
* to help at the Hamvention, please send an e-mail by April 30  *
* to Steve Belter, n9ip@amsat.org.                              *
*                                                               *
* Monitor the 'AMSAT at Dayton Hamvention 2013' link on the new *
* AMSAT Web Site http://www.amsat.org for the latest AMSAT at   *
* Dayton news and developments                                  *
*****************************************************************
```

AMSAT-NA Board of Directors Nominations Solicited

It is time to submit nominations for the upcoming open seats on the AMSAT-NA Board of Directors. A nomination requires either one Member Society or five current individual members in good standing to nominate an AMSAT member for the position. Four director's terms expire this year: Barry Baines, WD4ASW, Alan Biddle, WA4SCA, Drew Glasbrenner, K04MA, and Tony Monteiro, AA2TX.

In addition to traditional submission of written nominations, which remains unchanged and is the preferred method, nominations may be made by electronic means. These include e-mail, FAX, or electronic image of a petition. Electronic petitions should be sent to MARTHA@AMSAT.ORG or faxed to 301-608-3410. Written nominations, consisting of names, calls and individual signatures should be mailed to: AMSAT-NA, 850 Sligo Ave #600, Silver Spring, MD, 20910. No matter what means is used, petitions MUST arrive no later than June 15th at the AMSAT-NA office. If the nomination is a traditional written nomination, no other action is required. If it is other than this, i.e. electronic, a verifying traditional written petition MUST be received at the AMSAT-NA office at the above address within 7 days following the close of nominations on June 15th. ELECTRONIC SUBMISSIONS WITHOUT THIS SECOND, WRITTEN VERIFICATION ARE NOT VALID

UNDER THE EXISTING AMSAT-NA BYLAWS.

[ANS thanks Alan, WA4SCA, AMSAT Corporate Secretary for the above information]

7330.6 km Contact Made Via FO-29

On Monday 8 April 2013 at 1338z, David, EA4SG (grid IN80cp, Spain) and Hector, CO6CBF (grid EL92sd, Cuba) completed a SSB contact via FO-29, successfully. On the AMSAT-BB Hector reported "We had just a 88 seconds window. I was operating portable from on top of a tall building as before. Satellites are always fascinating! Thanks very much to David for this great contact and new grid!"

Based on QRZ.com, the distance between the two stations is 7330.6 km.

[ANS thanks Hector, CO6CBF for the above information]

GS3PYE/p Satellite Operation Planned From Inner Herbrides Islands

Members of the Camb-Hams will once again activate the Isle of Mull (IOSA NH15, SCOTIA CN10, WLOTA 2485), Inner Hebrides, as GS3PYE/p between May 10-16. The Camb-Hams have been activating the Scottish Isles each year since 2008.

Look for thirteen operators to be active on all bands and many modes from 160-2 meters as well as 472 kHz. The HF bands will be covered by five simultaneous stations, while 6m, 4m and 2m stations will have a great take-off towards the UK and Europ from the island's south-east coast in IO76 square.

They will have an antenna elevation system for 2m EME activity and will also be on many of the VHF/UHF satellite passes. WSPR beacons will be operating on most of the inactive bands to help find the best propagation. Contest operations will take place in 70 MHz CW on May 12th and 432 MHz UKAC on May 14th. The group will be active on the major social networks before, during and after the trip.

You can check on progress or interact with the operators via their blog at <dx.camb-hams.com> or through Twitter <twitter.com/g3pye>, Facebook <facebook.com/CambHams> and YouTube <youtube.com/CambHams>. Previous trips have generated some great audio and video recordings of the GS3PYE/P signal from around the world. Check their previous blogs and their YouTube channel and see if you can post a better recording.

Please E-mail <skeds-2013@camb-hams.com> to arrange skeds on the more challenging bands and modes. VHF and EME skeds will also be made via ON4KST and N0UK's EME Chat. All links are available via <dx.camb-hams.com>.

[ANS thanks Ohio/Penn DX Bulletin No. 1107 for the above information]

STEREO Space Weather Beacons Now Using AMSAT-DL Turbo Code

On 2nd April 2013, the two NASA STEREO space-based observatories switched to Turbo Codes to transmit their real-time space weather data permanently. A network of four ground stations, located at the IUZ in Bochum/Germany, CNES in Toulouse/France, NICT in Koganei/Japan and amateur radio station DL0SHF in Kiel-Ronne/Germany receives this data, and uses turbo-decoding software written by AMSAT-DL.

The Bochum station is run by AMSAT-DL e.V. and IUZ Bochum Observatory, with the support of the Federal Ministry of Economics and Technology and DLR.

Said Doug Biesecker, NOAA Space Weather Prediction Center:

"Thanks to the wonderful work of our colleagues running the station in Bochum and the support of DLR, we can now be sure of receiving real-time data from the NASA/STEREO satellite throughout the life of the mission. The STEREO data has proven to provide significant benefits to space weather forecasting and is used by NOAA on a daily basis to ensure the best possible forecasts. Space weather increasingly threatens the technological infrastructure of our modern world, with demonstrated impacts on global positioning, power grids, and high frequency communication systems."

The switch to Turbo Codes has improved reception capabilities of the ground stations by about 2 dB, which is a very welcome improvement giving the increasing distances - 269 and 286 million kilometers respectively - that need to be covered.

The original AMSAT-DL posting can be accessed at:
http://tinyurl.com/c6pbz7x

[ANS thanks AMSAT-DL for the above information]

AMSAT Awards

Awards have been very slow this year. Might be due to the lack of satellites.

+ The following have entered into the Satellite Communicators Club for making their first satellite QSO.

Christopher Friesen, VE4CWF
Michael Haman, KB7SNQ
Ron Rappel, W1RPR

+ The following have earned the AMSAT Communications Achievement Award.

Glyn Dodwell, GM4CFS, #554

+ The following have earned the South Africa Satellite Communications Achievement Award.

Glyn Dodwell, GM4CFS, #US184

+ The following have earned the AMSAT Century Club Award. This award is not that easy to earn.

Wyatt Dirks, AC0RA, #42

Until the amsat.org website is fully restored, you can see all the awards at my website. http://http://www.amsatnet.com/

[ANS thanks Bruce Paige, KK5DO for the above information]

Applications for Teachers Institute, ETP Grants Due by May 15

Attention, teachers who are thinking about using Amateur Radio and wireless technology in their classrooms to help facilitate hands-on learning opportunities. The ARRL's Education & Technology Program
(ETP) offers two programs that can help make this happen, but the application deadlines are fast approaching: The deadline for the 2013 Teachers Institute on Wireless Technology (TI) is May 15, while the deadline for equipment and resource grants was May 1.

Teachers Institute on Wireless Technology

Seats are still available for the two introductory Teachers Institute (TI-1) sessions offered this summer, one at ARRL Headquarters in Newington, Connecticut (July 8-11) and one in Rocklin, California (July 15-18). These four-day intensive professional development seminars provide training and resources for introducing basic electronics, the science of radio, space technology and satellite communications, weather science, microcontroller fundamentals and basic robotics into classroom instruction. The curriculum is designed for motivated teachers who want to learn more about wireless technology and share that knowledge with their students. Resources, travel, and room and board expenses are provided by donations to the Education & Technology Program Fund.

The ETP is also offering an advanced Teachers Institute (TI-2) session that focuses on the basic electronics behind sensor technology. Teachers will receive instruction in the use of a selection of sensors (such as temperature, pressure, position and humidity), analog-to-digital conversion techniques, the microcontroller programming involved in accessing the sensors and the use of radio (packet radio-like data links) that connect the sensor outputs to the user. Participants will also explore numerous deployment systems that they might use in their classrooms, including land and water robots, buoys, balloons and satellites. This four-day professional development workshop is sponsored by Dayton Amateur Radio Association and is held in Dayton, Ohio (July 22-25).

The deadline for both the TI-1 (Connecticut and California) and TI-2 (Ohio) sessions is May 15. Apply now!
http://www.arrl.org/teachers-institute-application

Equipment and Resource Grants

ETP grants for school radio stations are awarded to schools that provide a plan for using Amateur Radio as part of an enrichment program and/or as part of in-classroom learning. Find more information, as well as applications for a School Station Grant or for a Progress Grant, on the ETP Grants web page
http://www.arrl.org/etp-grants.
The deadline for applications was May 1.

If you would like to learn more about how teachers are using Amateur Radio to engage students in the classroom, visit ARRL's Classroom Activities page.
http://www.arrl.org/classroom-activities

[ANS thanks Debra Johnson, K1DMJ and The ARRL for the above information]

Ken Pulfer, VE3PU, SK

Avid ARISS supporter, Ken Pulfer, VE3PU, has become a Silent Key.

Those of you that have been involved with ARISS from the beginning know that Ken was one of the ARISS pioneers. Ken was a member of the first cadre of ARISS delegates and was integral in leading the startup of ARISS.

Ken’s intimate knowledge of the space agencies, resulting from his background as a Senior Executive in the Canadian Space Agency, was crucial in helping ARISS formulate the strategies needed to garner support across our international space agency partners. Also, his in-depth understanding of amateur radio policy and connections into the ITU were important factors in helping the ARISS team prepare themselves to develop and operate the unique, multi-national amateur radio platform on ISS that is ARISS. He was a key contributor in guiding the ARISS team in frequency coordination, licensing and callsign strategy. He also was integral in developing ARISS’ terms of reference, our policy for assigning delegates, and he led the effort to nominate and elect our first set of officers. I, for one, will certainly miss Ken’s leadership and guidance. He helped the ARISS program grow from infancy to the strong, international Educational Outreach program that it is now.

I note that even just a few weeks ago Rosalie White, K1STO and I solicited Ken’s guidance on some ITU matters that our ARISS international team were addressing. In all matters, Ken was a “Gentleman’s Gentleman”---the “best of the best. ” His presence and support will be sorely missed by me. And by all in the ARISS community.

On behalf of the ARISS team, I want to extend our condolences to all Ken Pulfer’s family and friends. May Ken Rest in Peace.

[ANS thanks Frank H. Bauer, KA3HDO for the above information]

Cubesat Launches This Week

April 19 BAIKONUR Soyuz-2-1b

A Soyuz-2-1b from the Baikonur launch facility, in Kazakhstan on April 19, 2013 will include three cubesat missions:

Satellite	Downlink	Mode
OSSI-1	145.980/437.525	CW/1200bps
SOMP	437.485	1200, 9600bps BPSK
BEESAT-2/3	435.950	4800bps GMSK
Bion-M1	Biological research satellites	
AIST	Measurement of the Earth's geomagnetic field	
Dove-2	Commercial technology demonstration mission	

OSSI-1

145.980 MHz CW, 437.525 MHz 1k2

OSSI-1, the Open Source Satellite Initiative satellite is a cubesat developed by Hojun Song DS1SBO. In addition to the radio beacons OSSI-1 also carries a 44 watt LED optical beacon to flash Morse Code messages to observers on Earth.

The development of the satellite has been documented on the Open Source Satellite Initiative Blog http://opensat.cc/blog/ and the Wiki http://opensat.cc/wiki/
http://www.youtube.com/watch?v�OL0zSY6cg

SOMP

Downlink on 437.485 MHz including CW, 1k2 and 9k6 BPSK, AX25 FSK, and AO40 standard 400bit/s BPSK

The Student Oxygen Measurement Project (SOMP) is a cubesat developed by students of the Technische Universität Dresden, Germany, organized in the Students' Research Group for Spacecraft Engineering in Dresden (STARD). SOMP will be a standard sized single CubeSat with one payload side and five sides with two solar cells each.

http://phpweb.tu-dresden.de/stard/SOMP/?lang�
http://tinyurl.com/SOMP-AMSAT-UK-Posting

BEESAT-2/3 (Berlin Experimental and Educational Satellite)
435.950 MHz, 4k8 GMSK (both satellites)

BEESAT-2 is a cubesat-sized vehicle carries a technology experiment using gyros and sensors for precise orientation.

BEESat-3 is another cubesat-sized vehicle that will test high-speed data links (up to 1MB/s).

http://www.raumfahrttechnik.tu-berlin.de/beesat/

The above cubesat missions and the scientific/commercial missions are also documented on Mineo Wakita's (JE9PEL) web page at:
http://www.ne.jp/asahi/hamradio/je9pel/ossisomp.htm

April 20 KOUROU Vega Launch

Estonia's first CubeSat ESTCube-1, amateur radio callsign ES5E/S, is planning to launch from Kourou in the Caribbean at 02:06:31 UT, April 20, 2013 on an ESA VEGA rocket.

Built by students at the University of Tartu ESTCube-1 the main mission of the satellite is to test electric solar wind sail technology, a novel space propulsion technology that could revolutionalize transportation within the solar system. It will deploy a 10 meter conductive electrodynamic tether and the force interacting with the tether will be measured.

The IARU Amateur Satellite Frequency Coordination Panel have published these frequencies for ESTCube-1:

+ 437.250 MHz - CW beacon, callsign ES5E/S
+ 437.505 MHz - 9600 bps AX.25 telemetry, callsign ES5E-11

More information and a video has been posted at:
http://amsat-uk.org/?p774

[ANS thanks AMSAT-UK and Mineo Wakita, JE9PEL for the above information]

April 17 Antares Launch Includes Three PhoneSat Cubesats

Three PhoneSat cubesats will be aboard the Orbital Sciences Corporation Antares(TM) rocket from NASA's Wallops Flight Facility (WFF) in eastern Virginia scheduled for April 17 at approximately 5:00 p.m. (EDT).

Phonesat carries an amateur radio payload on 437.425 MHz, was chosen as one of the winners in the Aerospace category for the Popular Science magazine "Best of What's New 2012" awards. The PhoneSat is a technology demonstration mission consisting of three 1U CubeSats intended to prove that a smartphone can be used to perform many of the functions required of a spacecraft bus.

The satellite is built around the Nexus smartphone which will be running the Android operating system and will be enclosed in a standard 1U cubesat structure. The main function of the phone is to act as the Onboard Computer, but the mission will also utilize the phone's SD card for data storage, 5MP camera for Earth Observation, and 3-axis accelerometer and 3-axis magnetometer for attitude determination.

One of the nanosatellites, powered by the HTC Nexus One smartphone, will send back pictures of Earth. The other two, running on the Samsung Nexus S, will have two-way S-band radio allowing them to be controlled from Earth.

With a short lifetime of only about one week, the satellites have no solar cells and operate on battery only.

An article on SpaceRef.com describes the Antares test flight, dubbed the A-ONE mission, as the first of two missions Orbital is scheduled to conduct in 2013 under its Commercial Orbital Transportation Services (COTS) Space Act Agreement with NASA. Following a successful A-ONE launch, Orbital will carry out a full flight demonstration of its new Antares/Cygnus cargo delivery system to the International Space Station (ISS) around mid-year. In addition, the company is also scheduled to launch the first of eight operational cargo resupply missions to the ISS in 2013 under the Commercial Resupply Services (CRS) contract with NASA. All COTS and CRS flights will originate from NASA's WFF, which is geographically well suited for ISS missions and can also accommodate launches of scientific, defense and commercial satellites to other orbits. The Antares medium-class launch system will provide a major increase in the payload launch capability that Orbital can provide to NASA, the U.S. Air Force and other customers. (Reference: http://spaceref.com/news/viewpr.html?pid@502)

The Antares launch includes the commercial DOVE-1 satellite, a technology development experiment. The satellite had requested IARU coordination for a 1 watt transmitter on 145.825 MHz to downlink a 1200 baud AFSK AX.25 beacon with telemetry and health data. The IARU reported in January that DOVE-1 will no longer be using frequencies in the amateur radio bands based on information posted on the IARU satellite coordination web page for this mission. (Reference: ANS-027 - http://amsat.org/pipermail/ans/2013/000688.html)

See related news at:
http://tinyurl.com/bvwksba
http://amsat-uk.org/?p544 (phonesat)

[ANS thanks SpaceRef, AMSAT-UK, and Oribital Sciences for the above information]

PhoneSat Tracking Help Requested

The very first PhoneSat’s will be launching aboard the Antares on
April 17th at 1700 EDT (launch window to April 19th possibly further). We have manifested 2x PhoneSat 1.0 and 1x PhoneSat 2.0 Beta The orbit is very low (270km x 300km 51.6deg) and they will only be up there for 2 weeks! The phonesat team is looking for as many people as possible to help with tracking their satellites. All three satellites will be transmitting on 437.425MHz and TLE’s + more info
can be found at www.phonesat.org

You can report your received telemetry packets on this web page also.

[ANS thanks Samudra N3RDX for the above information]

STRaND-1 signal reports requested

Dr Chris Bridges from the Surrey Space Centre has advised that the amateur radio beacon on their STRaND-1 CubeSat, the first UK CubeSat became intermittent over the Easter weekend. STRaND-1, was launched on February 25 at 1231 UT on the PSLV-C20 rocket from the Indian Space Research Organisation (ISRO) Satish Dhawan space centre. Both Mike Rupprecht DK3WN and Nader Omer ST2NH have reported that no signals have been heard since Sunday.

Radio amateurs are asked to listen for STRaND-1 transmitting a 9k6 bps AX.25 signal around 437.568 MHz (+/- Doppler) over the next few days. Please report any positive results to
C.P.Bridges[at]surrey.ac.uk

STRaND-1
http://amsat-uk.org/satellites/strand-1/

STRaND-1 telemetry beacon
http://amsat-uk.org/satellites/stran…d-1-telemetry/

STRaND-1 videos
http://amsat-uk.org/satellites/strand-1/strand-1-videos/

[ANS thanks AMSAT-UK for the above information]

Merritt Island High School Mission Selected for NASA Cubesat Launch Initiative

Information Week published news of the Merritt Island High School team who developed StangSat.

The fourth round of selections in NASA’s CubeSat Launch
Initiative
also included a team of high school students at the Merritt Island High School in Brevard County, Florida. They plan to build a cubesat containing two accelerometers to measure the amount of vibration in the Poly Picosatellite Orbital Deployer, or P-POD case that holds the cubesats during launch and then deploys them.

The high school is partnering with students at California Polytechnic State University in San Luis Obispo. The Cal-Poly CubeSat, dubbed CP9, is actually two cubes that contain accelerometers, plus a radio to transmit data back to Earth for the high school students to analyze. The Merritt Island High School cubesat, named StangSat, will stream data to the CP9 in real time during the launch using Wi-Fi.

“We’re going to be demonstrating that wireless transmissions inside the P-POD aren’t going to harm the launch,” said Adam Darley, a senior at Cal-Poly who is serving as the CP9 project manager. “If we can demonstrate that, then it will act as a platform to being able to stream information without a radio link.”

The Merritt Island High School Cubesat team has more information and photos posted on their Facebook page.

[ANS thanks Information News for the above information]

ARISS News

Successful Contacts

+ 820 Chris Hadfield Royal Canadian Air Cadet Squadron, Milton, Ontario on 06 April 2013.

A successful ARISS Contact was made with participants at 820 Chris Hadfield Royal Canadian Air Cadet Squadron, Milton, Ontario on 06 Apr. The event began at approximately 20:25 UTC. The contact was be a telebridge between NA1SS and LU8YY. The contact was audible over portions of South America, and was conducted in English.

The Royal Canadian Air Cadet program is a national organization sponsored by the Canadian Forces and its civilian counterpart, the Air Cadet League. The aim of the program is to develop in youth the attributes of good citizenship and leadership, promote physical fitness and stimulate interest in the air activities of the Canadian Forces. Cadet membership is open to all boys and girls ages 12-18 and is administered by specially trained Canadian Forces reserve members. There is no cost to join and uniforms are provided. 820 Chris Hadfield Royal Canadian Air Cadet Squadron is proudly named after Commander C Hadfield who was a member at the unit in his youth.

+ Sir George Simpson Jr. High, Albert, AB, Canada on 09 April 2013

A successful ARISS Contact was made with participants at Sir George Simpson Jr. High, Albert, AB, Canada on 09 April. The event began at approximately 20:00 UTC. The duration of the contact was approximately 9 minutes and 30 seconds. The contact was a telebridge between OR4ISS and IK1SLD and was audible over portions of Italy. The contact was conducted in English and French.

Sir George Simpson Public School is a junior high located in St. Albert, Alberta. Currently, they have approximately 540 students enrolled in a variety of programs.

The school houses several programs: English, French Immersion, Academic Challenge, Learning Assistance, Opportunity, Knowledge and Employability, and Behaviour Improvement.

While learning in their respective programs, all students are invited to rally around their school motto: "Spirit, Growth, Success" in both thought and action.

Simpson offers many extracurricular activities such as Social Justice, Cheerleading, Art Club and their SABLE high altitude balloon club.

+ Innalik School, Inukjuak, Nunavut, Canada on 12 April 2013

A successful ARISS Contact was made with participants at Innalik School, Inukjuak, Nunavut, Canada on 12 April. The event began at approximately 17:30 UTC. The duration of the contact was approximately 9 minutes and 30 seconds. The contact was a telebridge between OR4ISS and IK1SLD, and was audible over portions of Italy. The contact is was conducted in English, French, and Inuktitut.

Inukjuak is a remote, fly-in Inuit community located on the Hudson Bay in Northern Quebec. Its population is approximately 1,600. The Inuit of Inukjuak still partake in many cultural practices, for example; constructing sleds or harpoons, sewing traditional garments, training dogsled teams, hunting, fishing and berry picking. However, they also have a window into the modern world and are current on fashion trends, popular music, and breakout phenomena like "Gangnam Style". The primary language in the school and in the village is Inuktitut; English and French are secondary languages.

ARISS Contacts Scheduled for the coming Week

+John McCrae High School, Nepean, Ontario, Canada, telebridge via IK1SLD Contact is a go for: Wed 2013-04-17 18:05:02 UTC 28 deg

+Gray Mountain Primary School, Whitehorse, Yukon, Canada, telebridge via IK1SLD Contact is a go for: Sat 2013-04-20 18:47:50 UTC 32 deg

ARISS is requesting listener reports for the above contacts. These contacts should be audible over portions of Italy and Europe.
Due to issues with the Kenwood radio that are not fully understood at present, the Ericsson radio is going to be used for these contacts. ARISS thanks everyone in advance for their assistance.
Due to continuing Space X operations, the above times are subject to last minute changes or cancellations.

+Here you will find a listing of all scheduled school contacts, and questions, other ISS related websites, IRLP and Echolink websites, and instructions for any contact that may be streamed live.
http://www.amsat.org/amsat/ariss/news/arissnews.rtf

[ANS thanks David, AA4KN, Charlie, AJ9N ans ARISS for the above information]

Schedule of AMSAT Activities at Dayton Hamvention

AMSAT Hamvention activities and displays are planned to take place at the new booth location (444-446 and 433-435) in the Ball Arena, and outside in the Satellite Demonstration Area just outside the Ball Arena entrance.

2013 theme for AMSAT at Dayton is "AMSAT - A View to the Future."

Here are the daily AMSAT activities for on-site and off-site events at the 2013 Hamvention!

Thursday 16 May 2013

+ 11:00 AM - 5:00 PM
  AMSAT Booth Setup at Ball Arena (contact Steve Belter, N9IP, n9ip at amsat.org if you can help during this time).

+ 6:30 PM - 10:00 PM
  The third Annual AMSAT "Dinner at Tickets" party will be held at Tickets Pub & Eatery in Fairborn, OH. Check out the 'AMSAT at Dayton Hamvention 2013' link to the page 'AMSAT Dayton Social Events' on the new Web Site: http://www.amsat.org.

Friday 17 May 2013

+ 9:00 AM - 6:00 PM at the AMSAT Booth
  AMSAT Booth open for membership renewals, books, new items and information.

+ 6:30 PM - 10:30 PM AMSAT/TAPR Banquet at Dayton 2013
  AMSAT/TAPR Banquet on Friday night, May 18 is one of the main AMSAT activities during the 2013 Hamvention at Dayton. See the bulletin below for details!

Saturday 18 May 2013

+ 9:00 AM - 5:00 PM at the AMSAT Booth
  AMSAT Booth open for membership renewals, books, new items and information.

+ 11:15 AM - 1:30 PM The AMSAT Forum
  Get the latest information about what is going on with AMSAT and its projects. The AMSAT Forum will be held in Forum Room 5. See the bulletin below for details!

Sunday 19 May 2013

+ 9:00 AM - 1:00PM at the AMSAT Booth
  AMSAT Booth open for membership renewals, books, new items and information.

+ 1:00PM - 3:00PM at the AMSAT Booth
  Take down and storage of the AMSAT Booth. (contact Steve Belter, N9IP, n9ip at amsat.org if you can help during this time).

Demos Daily on Friday, Saturday, and Sunday for All Available Passes

AMSAT is encouraging everyone attending the 2013 Dayton Hamvention to come by the Satellite Demonstration Area just outside of the Ball Area entrance and make a contact using the amateur satellites. There will be AMSAT volunteers to explain how to make the contacts and during actual satellite passes will complete as many actual contacts as possible. Satellite pass times will be posted in the satellite demonstration area and at the AMSAT booth.

[ANS thanks AMSAT's 2013 Dayton Committee for the above information]

Satellite Shorts From All Over

+ Happy Birthday Peter Brown VK4PJ

AMSAT Life Member Number 1130, Peter Brown, VK4PJ celebrated his 100th birthday April 13. Peter who didn't become a ham until "later" in life at near age 50, joined AMSAT in 1979. Congratulations, Peter.

+ Congratulations to George Carr, WA5KBH for attaining 531 grids confirmed on his Satellite VUCC Award! VUCC daily updates posted at: http://www.arrl.org/vucc-standings

+ Interview about Moon-bounce

A video of what appears to be a radio interview about Moon-bounce/EME has been posted on YouTube

The interview is not in English but the moon bounce signals can be heard from 4:20 into the video.

Watch Radio amateur EME Moon Bounce - http://tinyurl.com/cu5y8ov

[ANS thanks Southgate Amateur Radio News for the above information]

+ AMSAT YouTube Channel

AMSAT-NA is pleased to announce a dedicated YouTube channel for videos on and about amateur satellite operations. These will include demonstration videos as well as presentations at the AMSAT-NA Dayton Hamvention Forum and yearly General Membership Meeting and Symposium. It also links to the AMSAT-UK and AMSAT-DL channels for additional views and perspectives. The AMSAT-NA channel may be reached through the www.amsat.org web site, or directly via www.youtube.com/AMSATNA

[ANS thanks Alan, W4SCA, for the above information]

+ Check out page 13 of the May 2013 QST ... there is a nice photo and write up of Bill Tynan, W3XO, receiving the Barry Goldwater Award from the Radio Club of America.

The ARRL posted the initial announcement at:
http://tinyurl.com/Bill-Tynan-W3XO (www.arrl.org)

The AMSAT News Service announcement can be found at:
http://amsat.org/pipermail/ans/2012/000651.html

[ANS thanks JoAnne K9JKM, and the ARRL for the above information]

+ Preparations are underway aboard the ISS for a Russian Segment (RS) Extravehicular Activity (EVA) #32 scheduled for April 19. Status reports indicate that rechargeable battery packs, helmet lights, the pistol grip tool are being prepared to support the EVA. These activities usually require the amateur radio equipment to be turned off, affecting school contact and the 145.825 MHz packet radio operations.

[ANS thanks JoAnne K9JKM for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

Primary and secondary school students are eligible for membership at one-half the standard yearly rate. Post-secondary school students enrolled in at least half time status shall be eligible for the student rate for a maximum of 6 post-secondary years in this status. Contact Martha at the AMSAT Office for additional student membership information.

73,
This week's ANS Editor,
EMike McCardel, KC8YLD

```
From -8653209432620547872
X-Google-Thread: 8f86f75953,ffebad2f8fa86c68,start
X-Google-Attributes: gid8f86f75953,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
X-Received: by 10.180.182.229 with SMTP id eh5mr7010010wic.1.1366276066540;
        Thu, 18 Apr 2013 02:07:46 -0700 (PDT)
MIME-Version: 1.0
Path: p18ni80110wiv.0!nntp.google.com!feeder1.cambriumusenet.nl!feed.tweaknews.nl!
194.109.133.83.MISMATCH!newsfeed.xs4all.nl!newsfeed4.news.xs4all.nl!xs4all!
border4.nntp.ams.giganews.com!border2.nntp.ams.giganews.com!nntp.giganews.com!
news.meeh.mikalv.net!gandalf.srv.welterde.de!news.albasani.net!
usenet.blueworldhosting.com!news.glorb.com!news-out.readnews.com!
transit4.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: SWPC.Webmaster@noaa.gov
Newsgroups:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.shor
twave,rec.radio.info
Subject: Weekly Highlights of Solar and Geomagnetic Activity, 08 - 14 April 2013
Followup-To:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.shor
twave
Date: Mon, 15 Apr 2013 11:30:06 EDT
Organization: NOAA Space Weather Prediction Center
Lines: 82
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <20130415153001.CE97633C54@panix2.panix.com>
NNTP-Posting-Host: panix6.panix.com
X-Trace: reader1.panix.com 1366039806 8074 166.84.1.6 (15 Apr 2013 15:30:06 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Mon, 15 Apr 2013 15:30:06 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
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:Product: Weekly Highlights and Forecasts
:Issued: 2013 Apr 15 0630 UTC

Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center
Product description and SWPC contact on the Web
http://www.swpc.noaa.gov/weekly.html
#
Weekly Highlights and Forecasts
#

Highlights of Solar and Geomagnetic Activity
08 - 14 April 2013

Solar activity was at very low to high levels during the period. The period began at low levels that persisted until early on 11 April. At 11/0716 UTC, solar activity reached high levels as Region 1719 (N11, L=077, class/area Eki/290 on 12 April) produced an M6/3b flare with Type II (estimated speed 1370 km/s) and Type IV radio sweeps, a Tenflare (470 sfu), and an associated asymmetric full halo coronal mass ejection (CME) with an estimated plane-of-sky speed of 1142 km/s. On 12 April, solar activity reached moderate levels as Region 1718 (N21, L=109, class/area Dkc/510) produced an M3 flare at 12/2038 UTC. Solar activity decreased to low levels on 13 April with a further decrease to very low levels on 14 April as the majority of the regions on the visible disk decreased in either area or complexity.

Greater than 10 MeV and greater than 100 MeV proton events were observed during the period associated with the 11 April M6/3b flare. The greater than 10 MeV proton event began at 11/1055 UTC, reached a peak flux of 114 pfu at 11/1645 UTC, and ended at 12/2210 UTC. The greater than 100 MeV proton event began at 11/0940 UTC, reached a peak flux of 2 pfu at 11/1400 UTC, and ended at 11/1955 UTC.

The greater than 2 MeV electron flux at geosynchronous orbit was normal to moderate levels through the period.

Geomagnetic field activity was at quiet levels until late on 13 April when a geomagnetic shock was observed in ACE/SWEPAM data associated with the 11 April CME. At 13/2215 UTC, the total field (Bt) increased from 4 nT to 10 - 13 nT, while the solar wind speed increased from approximately 365 km/s to 480 km/s. An associated geomagnetic sudden impulse was observed in the Boulder magnetometer (29 nT) at 13/2255 UTC. This produced an unsettled period to end the UTC day on 13 April. By 14 April, the geomagnetic field continued to be under the influence of the 11 April CME. Total field was variable between 4 and 14 nT while the Bz component of the interplanetary magnetic field was mostly positive between 1 - 12 nT with brief southward deflections to a maximum of -7 nT. Solar wind speed reached a maximum of 558 km/s at 14/0443 UTC before slowly decreasing to end the period near 460 km/s. The geomagnetic field responded with quiet to unsettled conditions on 14 April with a brief period of active to minor storm conditions mid-day at high latitudes.

Forecast of Solar and Geomagnetic Activity
15 April - 11 May 2013

Solar activity is expected to be at very low to low levels with a chance for an M-class flare from 15 April to 18 April when Regions 1718 and 1719 depart the visible disk. Very low to low levels are expected from 19 April to 28 April. From 29 April to 11 May, solar activity is expected to be at very low to low levels with a chance for M-class flaring as Regions 1718 and 1719 return to the visible disk.

No proton events are expected at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to be at moderate to high levels on 16 - 18 April due to CME effects. Moderate to high levels are expected again on 25 April - 02 May due to coronal hole high speed stream (CH HSS) effects. Normal to moderate levels are expected for the rest of the period.

Geomagnetic field activity is expected to be quiet to unsettled on 15 April due to residual effects from the 11 April CME. Mostly quiet conditions are expected from 16 - 22 April. On 23 April, a recurrent CH HSS is expected to move into geoeffective position causing unsettled to active conditions with continuing quiet to unsettled conditions on 24 April. From 25 - 26 April, another recurrent CH HSS is expected to become geoeffective causing unsettled to active conditions. From 27 April until the end of the forecast period, mostly quiet conditions are expected to prevail.

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From -387342978600340994
X-Google-Thread: 10e8ad,3386dade0bcd990d,start
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
X-Received: by 10.180.106.232 with SMTP id gx8mr9392133wib.2.1366492119638;
        Sat, 20 Apr 2013 14:08:39 -0700 (PDT)
MIME-Version: 1.0
Path: hg5ni4608wib.1!nntp.google.com!goblin1!goblin.stu.neva.ru!
nntp.club.cc.cmu.edu!micro-heart-of-gold.mit.edu!bloom-beacon.mit.edu!panix!
rram.panix.com!robomod!not-for-mail
From: Paul W. Schleck <pschleck@oasis.novia.net>"
Newsgroups: rec.radio.amateur.moderated,rec.radio.amateur.space
Subject: 30 Years Ago: Astronaut W5LFL to Communicate on 2 Meters from Space
Shuttle
Date: Sat, 20 Apr 2013 17:08:38 EDT
Organization: Novia Internetworking, http://www.novia.net/
Lines: 46
Approved: RRAM Approval Key <rram-approval-key@panix.com>
Message-ID: <5172dbf0$0$81745$540ea2cf@novia.net>
NNTP-Posting-Host: panix6.panix.com
X-Trace: reader1.panix.com 1366492119 26064 166.84.1.6 (20 Apr 2013 21:08:39 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sat, 20 Apr 2013 21:08:39 +0000 (UTC)
```

X-RRAM-Policy: http://www.panix.com/~rram/usenet/rram/index.html
X-RRAM-Info-1: Send submissions to   rec-radio-amateur-moderated@panix.com
X-RRAM-Info-2: Send technical complaints to   rec-radio-amateur-moderated-request@panix.com
X-RRAM-Info-3: Send complaints about policy to rec-radio-amateur-moderated-request@panix.com
X-RRAM-Info-4: GnuPG 1.4.5 Public Key at http://www.panix.com/~rram/gpg.html
X-Comment-1: The moderators do not necessarily agree or disagree with this article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
User-Agent: nn/6.7.3
X-Auth: PGPMoose V2.0 PGP rec.radio.amateur.moderated

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 =MxJ6

-----BEGIN PGP SIGNED MESSAGE-----
Hash: SHA1

This is from a web-site that is replaying Usenet, including
net.ham-radio, from 30 years ago (currently early 1983). The site is:

  http://www.olduse.net

If you prefer to use your own newsreader, the site also supports an NNTP
connection at:

  nntp.olduse.net:119

>From: ad7i <utzoo!decvax!harpo!floyd!vax135!ariel!lime!houxe!hogpc!houxq!houxp!ad7i>
>Subject: ARRL 30: 2 Metre Shuttle Communications
>Newsgroups: net.ham-radio
>Date: Wed Apr 20 08:13:13 1983

qst de ad7i
holmdel, new jersey, u.s.a.
hr arrl bulletin nr 30 from arrl headquarters
newington ct april 18, 1983
to all radio amateurs bt

astronaut owen garriott, w5lfl, will operate an amateur radio station
aboard the next space shuttle mission, scheduled for september 1983.
on april 16, nasa officially approved a joint arrl/amsat proposal to

include an amateur station aboard the sts 9/spacelab flight. the joint arrl/amsat proposal calls for arrl to furnish the special amateur radio equipment for use on the shuttle, and to organize and coach amateurs in procedures for rapid and efficient communications with the shuttle. this operation, which will be on 2 meter fm, will mark the first time in the history of space exploration that the general public will be able to communicate directly with an astronaut in orbit. details will be forthcoming in qst ar

```
-----BEGIN PGP SIGNATURE-----
Version: GnuPG v2.0.19 (FreeBSD)

iEYEARECAAYFAlFy27AACgkQ6Pj0az779o5i+ACgjIp/pbDfSuvJvWzEnPQlNgWr
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=pnLO
-----END PGP SIGNATURE-----
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X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
X-Received: by 10.180.182.6 with SMTP id ea6mr13239076wic.4.1366858213067;
        Wed, 24 Apr 2013 19:50:13 -0700 (PDT)
MIME-Version: 1.0
Path: hg5ni24011wib.1!nntp.google.com!feeder1.cambriumusenet.nl!
82.197.223.108.MISMATCH!feeder2.cambriumusenet.nl!feeder3.cambriumusenet.nl!
feed.tweaknews.nl!85.12.40.130.MISMATCH!xlned.com!feeder1.xlned.com!
news.astraweb.com!border2.a.newsrouter.astraweb.com!newsfeed10.multikabel.net!
multikabel.net!newsfeed20.multikabel.net!border3.nntp.ams.giganews.com!
border1.nntp.ams.giganews.com!nntp.giganews.com!rt.uk.eu.org!news.glorb.com!
news.linkpendium.com!news.linkpendium.com!panix!rram.panix.com!robomod!not-for-
mail
From: Patty Winter <patty1@wintertime.com>
Newsgroups: rec.radio.amateur.moderated,rec.radio.amateur.space
Subject: Re: 30 Years Ago: Astronaut W5LFL to Communicate on 2 Meters from Space
Shuttle
Date: Sat, 20 Apr 2013 20:10:33 EDT
Organization: Sonic.Net
Lines: 31
Approved: RRAM Approval Key <rram-approval-key@panix.com>
Message-ID: <51732e72$0$52817$742ec2ed@news.sonic.net>
References: <5172dbf0$0$81745$540ea2cf@novia.net>
NNTP-Posting-Host: panix6.panix.com
X-Trace: reader1.panix.com 1366503033 12629 166.84.1.6 (21 Apr 2013 00:10:33 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 21 Apr 2013 00:10:33 +0000 (UTC)
X-RRAM-Policy: http://www.panix.com/~rram/usenet/rram/index.html
X-RRAM-Info-1: Send submissions to             rec-radio-amateur-
moderated@panix.com
X-RRAM-Info-2: Send technical complaints to    rec-radio-amateur-moderated-
```

```
request@panix.com
X-RRAM-Info-3: Send complaints about policy to rec-radio-amateur-moderated-
request@panix.com
X-RRAM-Info-4: GnuPG 1.4.5 Public Key at http://www.panix.com/~rram/gpg.html
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
X-Newsreader: trn 4.0-test76 (Apr 2, 2001)
Old-NNTP-Posting-Date: 21 Apr 2013 00:10:26 GMT
Old-NNTP-Posting-Host: 1a7bcb68.news.sonic.net
Old-X-Complaints-To: abuse@sonic.net
X-Auth: PGPMoose V2.0 PGP rec.radio.amateur.moderated
 iJwEAQECAAYFAlFzLnkACgkQSO8RITXCfvvPxAP+OLuVcAi0Rgj8TxPZsQFkZ1Ai
 RdXMTl1oLdCEBC/EF3xFG3zlNI3VDirvAyzlSCf4cX3eap2+GSkXE2W9ydf8Ybqo
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 =SB9P
Bytes: 3149
```

In article <5172dbf0$0$81745$540ea2cf@novia.net>,
Paul W. Schleck <pschleck@oasis.novia.net> wrote:

>
>This is from a web-site that is replaying Usenet, including
>net.ham-radio, from 30 years ago (currently early 1983). The site is:
>
> http://www.olduse.net
>
>
>>From: ad7i
>>Subject: ARRL 30: 2 Metre Shuttle Communications
>>Newsgroups: net.ham-radio
>>Date: Wed Apr 20 08:13:13 1983
>
>
>hr arrl bulletin nr 30 from arrl headquarters
>newington ct april 18, 1983
>
>astronaut owen garriott, w5lfl, will operate an amateur radio station
>aboard the next space shuttle mission, scheduled for september 1983.

Here's a photo I took of him as he was about to board the astronaut van.
Turns out that yelling "73, Owen!" can get a ham's attention even at a
moment like this when his mind is on a million other things. ;-)

http://www.wintertime.com/OH/sts9-walkout.jpg

Patty

```
From -5434921405220717O2
X-Google-Thread: 8f86f75953,3e05e1bfb023b39e,start
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X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII
X-Received: by 10.180.75.137 with SMTP id c9mr203240wiw.0.1366858419528;
        Wed, 24 Apr 2013 19:53:39 -0700 (PDT)
MIME-Version: 1.0
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82.197.223.103.MISMATCH!feeder3.cambriumusenet.nl!feed.tweaknews.nl!
85.12.40.131.MISMATCH!xlned.com!feeder3.xlned.com!feed.xsnews.nl!
border-1.ams.xsnews.nl!border3.nntp.ams.giganews.com!
border1.nntp.ams.giganews.com!nntp.giganews.com!rt.uk.eu.org!news.glorb.com!news-
out.readnews.com!transit4.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-111 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sat, 20 Apr 2013 21:45:45 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 603
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000101ce3e31$9ea4e790$dbeeb6b0$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
X-Trace: reader1.panix.com 1366508745 11677 166.84.1.6 (21 Apr 2013 01:45:45 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 21 Apr 2013 01:45:45 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
DKIM-Signature: v=1; a=rsa-sha256; c=relaxed/relaxed; d=comcast.net;
     s=q20121106; t=1366508725;
     bh=GkJrH0E4fgcuAwy1Ji4sLdlix9lAJSwiBY1z8l0kHlQ=;
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      Content-Type;
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Bytes: 27937
Content-Language: en-us

AMSAT NEWS SERVICE
ANS-111

The AMSAT News Service bulletins are a free, weekly news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS publishes news related to Amateur Radio in Space including reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

The news feed on http://www.amsat.org publishes news of Amateur Radio in Space as soon as our volunteers can post it.

Please send any amateur satellite news or reports to:
ans-editor at amsat.org.

In this edition:

* April 19 Soyuz-2-1B Launch Plans Cubesat Deployment on April 21
* April 21 Antares Launch to Orbit Three PhoneSat Cubesats
* April 25 China CZ-2D to Launch TURKSAT-3USAT Linear Transponder
* May 3 Vega Launch from Kourou to Orbit ESTCube-1 CubeSat
* AMSAT-NA Board of Directors Nominations Solicited
* ARISS School Contacts
* Order AMSAT/TAPR Dayton Banquet Tickets in the AMSAT Store
* Registration for the SA AMSAT Space Symposium is Now Open
* Inspiration and Success: The Story Behind N1LF's 1st Satellite QSO
* RockOn 2013 University Rocket Science Workshop
* Satellite Shorts From All Over

SB SAT @ AMSAT $ANS-111.01
ANS-111 AMSAT News Service Weekly Bulletins

AMSAT News Service Bulletin 111.01
>From AMSAT HQ SILVER SPRING, MD.
April 21, 2013
To All RADIO AMATEURS
BID: $ANS-111.01

```
*****************************************************************
* Volunteers are needed to help at the AMSAT booth at Dayton.   *
* Steve Belter N9IP, is looking for volunteers to help man the  *
* AMSAT booth during the 2013 Hamvention. If you are willing    *
* to help at the Hamvention, please send an e-mail by April 30  *
* to Steve Belter, n9ip@amsat.org.                              *
*                                                               *
* Monitor the 'AMSAT at Dayton Hamvention 2013' link on the new *
* AMSAT Web Site http://www.amsat.org for the latest AMSAT at   *
```

* Dayton news and developments *
****

April 19 Soyuz-2-1B Launch Plans Cubesat Deployment on April 21

A Soyuz-2-1b from the Baikonur launch facility, in Kazakhstan on April 19, 2013 now has four cubesat missions using amateur radio frequencies and three commercial and science missions on-orbit:

Satellite	Downlink	Mode	
OSSI-1	145.980/437.525	CW/1200bps	(Amateur Band)
SOMP	437.485	1200, 9600bps BPSK	(Amateur Band)
BEESAT-2/3	435.950	4800bps GMSK/Mobitex	(Amateur Band)
Bion-M1	Biological research satellites		
AIST	Measurement of the Earth's geomagnetic field 435 MHz downlink/145 MHz command & control uplink		
Dove-2	Commercial technology demonstration mission 450 MHz band downlink		

Additional information and photos can be viewed on the AMSAT-UK web:
http://amsat-uk.org/2013/04/17/soyuz-cubesat-launch/

This page includes additional information on the planned deployment of the cubesats from the P-POD canisters: "Unusually the CubeSats will not be deployed straight after launch. All four CubeSats: OSSI-1, BEESAT-3, SOMP, and BEESAT-2 will be deployed around 10:45 UTC on Sunday, April 21. Until then orbital maneuvers will be carried out to achieve a circular orbit at 575 km altitude."

OSSI-1 Deployed on April 19

145.980 MHz CW, 437.525 MHz 1k2

OSSI-1, the Open Source Satellite Initiative satellite is a cubesat developed by Hojun Song DS1SBO. In addition to the radio beacons OSSI-1 also carries a 44 watt LED optical beacon to flash Morse Code messages to observers on Earth.

The development of the satellite has been documented on the Open Source Satellite Initiative Blog http://opensat.cc/blog/ and the Wiki http://opensat.cc/wiki/
http://www.youtube.com/watch?v�OL0zSY6cg
AMSAT-UK coverage can be read at:
http://amsat-uk.org/2013/04/19/ossi-1-amateur-radio-cubesat-launched/

BEESAT 3, BEESAT 2, SOMP, AIST and Dove-2 are expected to be separated from BION M1 in two batches on Sunday, April 21.

SOMP

Downlink on 437.485 MHz including CW, 1k2 and 9k6 BPSK, AX25 FSK, and AO40 standard 400bit/s BPSK

The Student Oxygen Measurement Project (SOMP) is a cubesat developed by students of the Technische Universit�t Dresden, Germany, organized in the Students� Research Group for Spacecraft Engineering in Dresden (STARD). SOMP will be a standard sized single CubeSat with one payload side and five sides with two solar cells each.

http://phpweb.tu-dresden.de/stard/SOMP/?lang�
http://tinyurl.com/SOMP-AMSAT-UK-Posting

BEESAT-2/3 (Berlin Experimental and Educational Satellite)
435.950 MHz, 4k8 GMSK (both satellites)

BEESAT-2 is a cubesat-sized vehicle carries a technology experiment using gyros and sensors for precise orientation.

BEESat-3 is another cubesat-sized vehicle that will test high-speed data links (up to 1MB/s).

http://www.raumfahrttechnik.tu-berlin.de/beesat/

The above cubesat missions and the scientific/commercial missions are also documented on Mineo Wakita's (JE9PEL) web page at:
http://www.ne.jp/asahi/hamradio/je9pel/ossisomp.htm

[ANS thanks AMSAT-UK and Mineo Wakita, JE9PEL for the above information]

April 21 Antares Launch to Orbit Three PhoneSat Cubesats

Three PhoneSat cubesats are now on-orbit following the launch of the Orbital Sciences Corporation Antares(TM) rocket from NASA�s Wallops Flight Facility (WFF) in eastern Virginia. The originally scheduled April 17 launch attempt was scrubbed. April 21 is the next planned launch attempt.

All three of the Phonesat cubesats carries an amateur radio payload on 437.425 MHz. Each cubesat will transmit during individual time slots. All three satellites transmit using AFSK (1200 bps) modulation, AX.25 packet coding and have vertical linear polarization. The two PhoneSat 1.0 satellites, Graham and Bell, transmit with a periodicity of respectively 28 seconds and 30 seconds. The PhoneSat 2.0 beta satellite, Alexander, transmit with a periodicity of 25 seconds.

The PhoneSat web at http://www.phonesat.org/ provides access to the

"Dashboard" allowing you to track the location of our satellites in real time. Detailed information on the downlink packet telemetry format can be found on this page. The callsign will be KJ6KRW.

The orbit is very low (270km x 300km, 51.6deg) and the cubesats are expected to only remain on-orbit for two weeks. The satellites are battery powered with no additional charging from solar cells.

The Dove-2 commercial satellite is believed to use 2420.0 MHz for its downlink.

[ANS thanks the PhoneSat Team for the above information]

April 25 China CZ-2D to Launch TURKSAT-3USAT Linear Transponder

TAMSAT reports the TURKSAT-3USAT, the first communication nanosatellite mission of ITU, Istanbul Technical University, Istanbul, Turkey is expected to launch on April 25 aboard China's Chang Zheng-2D rocket. Also aboard this launch will be Ecuador's NEE 01 Pegaso 1U cubesat and Argentina's CubeBug-1 satellite.

TURKSAT-3USAT is a three unit CubeSat developed to provide SSB/CW communications in a 680 km Low Earth Orbit. It will fly a V/U linear transponder developed by TAMSAT, the Turkish Amateur Satellite Technologies Organisation.

+ Uplink center frequency   145.965 MHz
  (145.940-145.990 MHz bandwidth)
  Receive sensitivity -120 dBm

+ Downlink center frequency 435.225 MHz
  (435.200-435.250 MHz bandwidth)
  Output power 30 dBm (1W)

+ CW beacon on 437.225 MHz

Additional information can be accessed on-line at:
http://www.tamsat.org.tr/tr/turksat-3usat-is-almost-ready/
http://www.uk.amsat.org/?p670

CUBEBUG-1 Heading for Orbit Includes Amateur Radio Digipeater
----
CubeBug-1 is the first technology demonstration mission for a new CubeSat platform design (mechanics, hardware and software) intended to be released as Open Source and Open Hardware for its use in Amateur projects, University projects and research labs.

The project is sponsored by the Argentina Ministry of Science, Technology and Productive Innovation.

Payloads on this first mission include:

+ An ARM based on-board computer
+ A nano-reaction wheel with its driver circuit
+ A low resolution camera
+ All based on COTS components

CubeBug-1 is a 2U CubeSat and the team are planning to use half duplex communications on 437.445 MHz with 9k6 GMSK data. Telemetry information is at http://1.cubebug.org/coms/telemetry

After the technology demonstration part of the mission is over, the satellite will enter a mode that will include services to the Amateur radio community, including a Digipeater, science data downloads from the payload (including images if possible).

Watch a CubeBug-1 video at http://vimeo.com/56055215

CubeBug-1 website http://1.cubebug.org/

Follow CubeBug-1 on Twitter @CubeBug1

[ANS thanks AMSAT-UK, the CubeBug Team and TAMSAT for the above information]

May 3 Vega Launch from Kourou to Orbit ESTCube-1 CubeSat

Estonia�s first CubeSat ESTCube-1, amateur radio callsign ES5E/S, is planned to launch from the ESA Spaceport in Kourou in the Caribbean on May 3, 2013 aboard an ESA VEGA rocket.

Built by students at the University of Tartu ESTCube-1 the main mission of the satellite is to test electric solar wind sail technology, a novel space propulsion technology that could revolutionalize transportation within the solar system. It will deploy a 10 meter conductive electrodynamic tether and the force interacting with the tether will be measured.

The IARU Amateur Satellite Frequency Coordination Panel have published these frequencies for ESTCube-1:

+ 437.250 MHz � CW beacon, callsign ES5E/S
+ 437.505 MHz � 9600 bps AX.25 telemetry, callsign ES5E-11

More information and a video has been posted at:
http://amsat-uk.org/?p774

Additional news of the launch is posted at:

http://tinyurl.com/April-Vega-Launch (Space-Travel.com)

[ANS thanks AMSAT-UK and the University of Tartu ESTCube-1 Team for the above information]

AMSAT-NA Board of Directors Nominations Solicited

It is time to submit nominations for the upcoming open seats on the AMSAT-NA Board of Directors. A nomination requires either one Member Society or five current individual members in good standing to nominate an AMSAT member for the position. Four director's terms expire this year: Barry Baines, WD4ASW, Alan Biddle, WA4SCA, Drew Glasbrenner, K04MA, and Tony Monteiro, AA2TX.

In addition to traditional submission of written nominations, which remains unchanged and is the preferred method, nominations may be made by electronic means. These include e-mail, FAX, or electronic image of a petition. Electronic petitions should be sent to MARTHA at AMSAT.ORG or faxed to 301-608-3410. Written nominations, consisting of names, calls and individual signatures should be mailed to: AMSAT-NA, 850 Sligo Ave #600, Silver Spring, MD, 20910. No matter what means is used, petitions MUST arrive no later than June 15th at the AMSAT-NA office. If the nomination is a traditional written nomination, no other action is required. If it is other than this, i.e. electronic, a verifying traditional written petition MUST be received at the AMSAT-NA office at the above address within 7 days following the close of nominations on June 15th. ELECTRONIC SUBMISSIONS WITHOUT THIS SECOND, WRITTEN VERIFICATION ARE NOT VALID UNDER THE EXISTING AMSAT-NA BYLAWS.

[ANS thanks Alan, WA4SCA, AMSAT Corporate Secretary for the above information]

ARISS School Contacts

John McCrae High School, Nepean, Ontario, Canada

The International Space Station school contact with participants at John McCrae High School, Nepean, Ontario, Canada on 17 April was successful. The contact was completed via telebridge between OR4ISS and IK1SLD.

John McCrae Secondary school is named after the Canadian poet and doctor who during World War I, wrote the famous war memorial poem "In Flanders Fields". With this heritage in mind the school hosts large community Remembrance Day ceremonies every November 11 and celebrates community works of art in the "Red Poppy" gallery. John McCrae students consistently rank among the best academic performers in the province, gaining post secondary acceptance across North America and winning many entrance scholarships.

Gray Mountain Primary School, Whitehorse, Yukon, Canada

The International Space Station school contact with participants at Gray Mountain Primary School, Whitehorse, Yukon, Canada on 23 April was successful. The contact was completed via telebridge with IK1SLD.

The incredible opportunity to speak with the ISS and Chris Hadfield has sparked a frenzy of space related themes and ideas throughout the school and inspired the community. The small school has been transformed into a space education station with student-created learning displays and artwork throughout. The kids have been reading and writing using space to inspire imaginations and incorporating space exploration into math and science lessons. A local artist is coming to build a life size Soyuz spacecraft out of recycled materials with the Grade 2s and 3s.

Upcoming School Contacts This Week:

- Bates College Museum of Art, Lewiston, ME, telebridge via IK1SLD on Tuesday, April 23 at 14:38:47 UTC.

- Maani Ulujuk Ilinniarvik (MUI), Rankin Inlet, Nunavut, Canada, telebridge via IK1SLD on Thursday, April 25 at 14:34:36 UTC.

- Istituto d'Istruzione Superiore Euclide, Bari, Italy, telebridge via IZ7RTN on Saturday, April 27 at 11:17:19 UTC.

ARISS is requesting listener reports for the above contacts. Due to issues with the Kenwood radio that are not fully understood at present, the Ericsson radio is going to be used for these contacts. ARISS thanks everyone in advance for their assistance.

[ANS thanks ARISS for the above information]

Order AMSAT/TAPR Dayton Banquet Tickets in the AMSAT Store

AMSAT Hotel News

Per Martha at the AMSAT Office, the entire block of AMSAT rooms for Hamvention 2013 are now taken, and no more will be available.

Friday Evening AMSAT/TAPR Banquet at Dayton

Tickets for the dinner are $30 each, and must be purchased from the AMSAT Store at http://store.amsat.org/catalog/ by Tuesday, May 14.

The dinner will be held at:

The Kohler Presidential Banquet Center
4548 Presidential Way
Kettering, OH 45429

Doors open at 1830 for a cash bar with buffet dinner served at 1915.

Seating is limited to the number of meals we reserve with the Kohler caterers, based on the number of tickets sold by the deadline. Tickets will not be sold at Dayton, but tickets purchased online may be collected at the AMSAT booth (444-446 and 433-435).

Join us for a fun evening with good food, great company, and an outstanding speaker.

This year's speaker will be Bruce Perens, K6BP, with a humorous history of technology evangelism: "The Evangelist's Dilemma: Driving New Ideas With Nothing But Words." As you can imagine, when you're promoting new ideas, there are things that inevitably go wrong. Bruce will pull examples from his history with Open Source, No-Code, Software Freedom, Codec2, and Open Hardware, and he'll introduce a few of the new battle grounds.

[ANS thanks AMSAT's 2013 Dayton Committee for the above information]

Registration for the SA AMSAT Space Symposium is Now Open

SA AMSAT will hold its annual space symposium in Pretoria at the Innovation Hub on Saturday 18 May 2012. The keynote speaker will be McLean Sibanda, the CEO of the Innovation Hub with the subject "Innovation is everyone's business". The agenda is packed with interesting presentations and demonstrations. The symposium is sponsored by Telkom.

Make your booking now to benefit from the early registration package. Full details and the registration form are available on http://www.amsatsa.org.za/SpceSymp2013.htm.

SARL and SA AMSAT members enjoy preferential rates. The registration fee includes a CD of all the papers as well as refreshments and a light lunch.

[ANS thanks the SARL News in English for April 13, 2013 for the above information]

Inspiration and Success: The Story Behind N1LF's 1st Satellite QSO

Les Rayburn, N1LF sent a message to the amsat-bb on April 14 which describes his ham radio journey to his first amateur satellite contact via FO-29.

Les wrote:
I've been a ham well over 40 years, since my childhood. Back then, I could barely afford the Heathkit transmitter, Halicrafters receiver, knife switch, and longwire antenna that made up my shack.

My elmer used to let me borrow his copy of QST and I'd dream about all the great adventures that I'd have "someday" in ham radio. Being a child of the Space Age, key among them were anything related to the New Frontier.

EME (Moonbounce), Meteor Scatter, and satellites all seemed like the stuff of science fiction---and I longed to experience them all. But they were exotic, and required equipment far beyond my reach. I resolved to accomplish them all someday and added them to a sort of ham radio "bucket list" that I hoped to accomplish before my ham career was over.

Five years ago, shortly after getting started in weak signal VHF work, I checked off the first item on that list. Working meteor scatter contacts with the aid of WSJT software, and during a Perseid shower, even using SSB. What a thrill to make contacts off the ionized gasses of those tiny rocks. Thanks Joe Taylor!

Tonight, I managed to check off a second. I worked Art, K4YYL on FO-29, a Japanese amateur satellite!

My journey to the "birds" started about a month ago when I joined AMSAT, determined that 2013 was going to be "the year" when I finally got active on satellites. I purchased a copy of SATPC32 software, because I knew that it could control my IC-910H--hopefully making it easier to get active.

After listening to a few passes on both the FM and the SSB/CW birds, I decided to try my luck on the less-crowded FO-29. A brief CQ was quickly answered by Art. I adjusted the tuning knob just a bit to correct for the Doppler effect, and voila! there he was clear as a bell.

We had a brief QSO of perhaps ten minutes or so, and then we signed. I was quickly called by K4FEG near Memphis in EM55---who just wanted to welcome me to the birds!

Man, what a thrill! And it wasn't tough at all.

I'm using a 7 element 432 antenna tilted up to 15 degrees (fixed) and a 6 element 2 Meter beam tilted up to about 10 degrees (fixed) both inside my crowded attic. The SSB Electronics pre-amp helps a ton on 432, and the 1/2" hardline makes sure that I don't lose too much signal. So far, I've been able to copy the birds down to about 2 degrees above the horizon using this setup.

Now to attempt that EME contact! I've got a 12 element Yagi just waiting to deploy in the driveway once the weather warms a bit. Hoping to use WSJT to work one of the monster stations on EME. All this in a deed-restricted HOA neighborhood.

I wasted 35+ years on HF----man, all the fun really is in the World Above 50 MHz! Thanks for helping to make a boy's dreams come true at age 51!

[ANS thanks and congratulates Les Rayburn, N1LF for the above information]

RockOn 2013 University Rocket Science Workshop

U.S. university and community college faculty and students are invited to a weeklong workshop to learn how to build and launch a scientific experiment into space. NASA's Wallops Flight Facility in Virginia is hosting the RockOn 2013 workshop June 15-20, 2013, in partnership with the Colorado and Virginia Space Grant Consortia. Workshop participants must be U.S. citizens. The registration dead line for the workshop is May 1, 2013.

The hands-on workshop teaches participants to build experiments that fly on sounding rockets. During the week, participants will work together in teams of three to construct and integrate a sounding rocket payload from a kit. On the fifth day of the workshop, the experiments will fly on a sounding rocket expected to reach an altitude of more than 70 miles.

Each experiment will provide valuable scientific data, analyzed as part of the student-led science and engineering research. The program engages faculty and students in science, technology, engineering and mathematics skills critical to NASA's future engineering, scientific and technical missions.

For more information about RockOn and to register online, visit:
http://spacegrant.colorado.edu/national-programs/rockon-2013-home

Questions about the workshop or the registration process should be directed to Chris Koehler by email at koehler@colorado.edu or by telephone at 303-492-3141.

[ANS thanks the NASA Education Express Message -- April 18, 2013 for the above information]

Satellite Shorts From All Over

+ A web-based Software Defined Radio for the 5, 7 and 14 MHz bands is now available on the new RSGB website. The "Web SDR receiver" link can be found under the "MyRSGB" drop-down menu. Also on the new site are "Live DX Cluster" and "Live solar data" pages under the "News" drop-down menu. See: http://www.rsgb.org/

+ The Florida Today newspaper published a story about the Merritt Island High School CubeSat project called StangSat. See: http://amsat-uk.org/2013/04/11/merritt-island-high-students-cubesat/

+ Video from the CanSat Leader Training Program is posted at: http://www.youtube.com/watch?v�K3dLrUmEQ&feature�ayer_embedded CanSats are tiny satellites, built to fit in the same space as a soda-can. UNISEC is running a training program in Japan later this year, to train people on how to build and teach building of these ingenious devices. See: http://www.unisec.jp/flash/index-e.html (via Southgate)

+ NASA has posted videos celebrating Earth Month and specifically Earth Day (April 22) from ISS imagery: http://www.youtube.com/watch?feature�ayer_embedded&v�Q0Hene1LY Another Earth Month video from satellite imagery is posted at: http://www.youtube.com/watch?v�c8Ozis-mo&feature�ayer_embedded

+ The Goddard Space Flight Center posted the best views of Earth from space in the last year, including true color satellite images, Earth science data visualizations, time lapses from the International Space Station, and computer models: http://www.youtube.com/watch?feature�ayer_embedded&v�kOSMf-LpY

+ Two UrtheCast cameras - one medium-resolution still camera and one high-resolution video camera are planned for launch on the Progress 53P cargo supply mission on October 16, 2013. The cameras will be installed on the Zvezda Service Module of the Russian segment of the ISS, during its crew spacewalks. Soon after installation, Earth imagery and video will begin transmitting to ground stations across the globe via an existing high-speed downlink from the ISS, then streamed to the web. Read the full story at: http://spaceref.com/news/viewpr.html?pid@490

[ANS thanks everyone for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

Primary and secondary school students are eligible for membership at one-half the standard yearly rate. Post-secondary school students enrolled in at least half time status shall be eligible for the student rate for a maximum of 6 post-secondary years in this status. Contact Martha at the AMSAT Office for additional student membership information. And with that please keep in mind that the integral of (1/cabin)d(cabin) is a natural log cabin, of course!

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM

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From -8346511649422567677
X-Google-Thread: 107ada,509ebaed33fe01b4,start
X-Google-NewGroupId: yes
X-Google-Thread: 11480d,509ebaed33fe01b4,start
X-Google-NewGroupId: yes
X-Google-Thread: 10e8ad,509ebaed33fe01b4,start
X-Google-NewGroupId: yes
X-Google-Thread: 114aac,509ebaed33fe01b4,start
X-Google-NewGroupId: yes
X-Google-Thread: 10b9c8,509ebaed33fe01b4,start
X-Google-NewGroupId: yes
X-Google-Attributes:
gida3e752f117,gid7221ecd0f7,gid8f86f75953,gid9e586c3d78,gida4a23d5f63,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
X-Received: by 10.180.189.44 with SMTP id gf12mr9006466wic.1.1366644608063;
        Mon, 22 Apr 2013 08:30:08 -0700 (PDT)
MIME-Version: 1.0
Path: p18ni12787wiv.0!nntp.google.com!proxad.net!feeder1-2.proxad.net!
news.glorb.com!news-out.readnews.com!transit4.readnews.com!panix!rri.panix.com!
robomod!not-for-mail
From: SWPC.Webmaster@noaa.gov
Newsgroups:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.shortwave,rec.radio.info
Subject: Weekly Highlights of Solar and Geomagnetic Activity, 15 - 21 April 2013
Followup-To:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.shor
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twave
Date: Mon, 22 Apr 2013 11:30:07 EDT
Organization: NOAA Space Weather Prediction Center
Lines: 78
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <20130422153001.83B1033C7E@panix2.panix.com>
NNTP-Posting-Host: panix6.panix.com
X-Trace: reader1.panix.com 1366644607 26898 166.84.1.6 (22 Apr 2013 15:30:07 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Mon, 22 Apr 2013 15:30:07 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
```

```
:Product: Weekly Highlights and Forecasts
:Issued: 2013 Apr 22 0431 UTC
# Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center
# Product description and SWPC contact on the Web
# http://www.swpc.noaa.gov/weekly.html
#
#                Weekly Highlights and Forecasts
#
```

Highlights of Solar and Geomagnetic Activity
15 - 21 April 2013

Solar activity was at low levels during the period. The first half of the period (15 - 18 April) was dominated with mostly low-level C-class activity from Regions 1719 (N11, L=077, class/area Eki/290 on 12 April) and 1723 (S18, L=001, class/area Dai/200 on 17 April). The largest event during this time frame was a long duration C6 at 18/1823 UTC from Region 1719. Associated with the event was a Type II signature with an estimated plane-of-sky speed of 1273 km/s and a coronal mass ejection (CME) observed off the west limb. The remainder of the period (19 - 21 April) witnessed the rapid emergence on the disk of Region 1726 (N12, L=326, class/area Ekc/260 on 21 April). During this time frame, Region 1726 produced a total of 20 C-class flares. The largest flare was a C4/Sf at 21/1838 UTC. At the time of this report, Region 1726 was continuing its growth phase and maintaining its complex beta-gamma-delta magnetic configuration.

No proton events were observed at geosynchronous orbit. However, the greater than 10 MeV proton flux increased slightly above background levels beginning at about 21/1005 UTC and peaked at about 3 pfu at 21/1640 UTC. The enhancement was likely triggered by activity beyond the west limb from old Region 1719 (N11, L=077).

The greater than 2 MeV electron flux at geosynchronous orbit was at normal to moderate levels.

Geomagnetic field activity was at predominately quiet levels with an isolated unsettled reading observed during the period 15/1800 - 2100 UTC. The period began under the waning influence of a weak CME. Solar wind speeds were at mostly nominal levels, beginning the period near 450 km/s and exhibited a steady decline to end the period at about 285 km/s. Total interplanetary magnetic field (IMF) readings ranged from a high of 12 nT early on 15 April, declined to 4 nT by early on 16 April and varied between 4 - 6 nT for the remainder of the period. The Bz component of the IMF ranged from +11 nT early on 15 April and declined to about +5 nT by midday on 15 April. Through the remainder of the period, Bz did not vary much beyond +/-4 nT. The Phi angle was in a negative (toward) orientation through early on 16 April and switched to a predominately positive (away) orientation through about 20/1900 UTC when it became variable through the remainder of the period.

Forecast of Solar and Geomagnetic Activity
22 April - 18 May 2013

Solar activity is expected to be at predominately low levels through the outlook period. A chance for M-class activity and a slight chance for x-class activity exists due to active regions that currently populate the visible disk and active regions due to rotate onto the disk throughout the outlook period.

A slight chance for a 10 MeV proton event at geosynchronous orbit is possible due to active regions that currently populate the visible disk and active regions due to rotate onto the disk throughout the outlook period..

The greater than 2 MeV electron flux at geosynchronous orbit is expected to be at moderate to high levels from 24 April - 02 May in the wake of a coronal hole high speed stream (CH HSS). Normal to moderate levels will predominate from 03 - 18 May.

Geomagnetic field activity is expected to be at quiet to unsettled levels on 22 April in response to a possible glancing blow from the 18 April CME. Mostly unsettled to active levels with isolated minor storm periods are possible from 23 - 26 April due to recurrent (CH HSS) effects. Predominately quiet levels are expected from 27 April - 18 May.

From -1266903174697250692
X-Google-Thread: 10e8ad,d4363bea7f9c76ed,start
X-Google-NewGroupId: yes
X-Google-Thread: 10b9c8,d4363bea7f9c76ed,start

```
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,gida4a23d5f63,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
X-Received: by 10.68.197.196 with SMTP id iw4mr4369598pbc.7.1366675051913;
        Mon, 22 Apr 2013 16:57:31 -0700 (PDT)
Path: ln4ni229pbb.0!nntp.google.com!newsfeed2.dallas1.level3.net!news.level3.com!
panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-112 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Mon, 22 Apr 2013 19:57:30 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 2344
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <002901ce3fb4$d30b4f40$7921edc0$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
X-Trace: reader1.panix.com 1366675051 14834 166.84.1.6 (22 Apr 2013 23:57:31 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Mon, 22 Apr 2013 23:57:31 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to            rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
DKIM-Signature: v=1; a=rsa-sha256; c=relaxed/relaxed; d=comcast.net;
     s=q20121106; t=1366675031;
     bh=lEm2jPOjq+aeunPnRkEA+ftcBO2tgFtafFjqL/B8KGA=;
     h=Received:Received:From:To:Subject:Date:Message-ID:MIME-Version:
      Content-Type;
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      fq7+bGgvwr0w5drEHmaHDqIA/Cllm4Twd6FV3jtfH1mM7SsyOvV/JuJFgOG/hxUvxQ
      tRUmRaiEV8Tu/TK92Gl3u5tr65dTtqQJOaIWxRxevFXGs1FSVapJx7Kge4ujDjTWfL
      ALZ8o7K2YDw1Q==
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
Content-Language: en-us
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This report is organized into three (3) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites

SB SAT @ AMSAT W8ISS $WSR-112.S1
WSR 112 Part 1 04/22/2013

AMSAT NEWS SERVICE BULLETIN 112.S1
FROM AMSAT HQ SILVER SPRING, MD, April 22, 2013
TO ALL RADIO AMATEURS
BID: $WSR-112.S1

PW-Sat
Catalog Number: 38083
Launch Date: Febrauary 13, 2012 1000z
Launch Site: Kourou, French Guiana

Status: On Orbit

Uplink: 435.020 MHz FM
Downlink: 145.900 MHz DSB

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=132
[02112013]
=====
DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational
Current Mode: Science Mode - Beacon ONLY

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink: 435.530 to 435.570 MHz

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=68
[02112013]
=====
VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05, 2005 0444z
Launch site: Satish Dhawan Space Centre, India

```
Status: Operational
Current Mode: U/v - Dutch Transponder

Frequencies:
Indian Transponder:
Uplink:   435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink:   435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW


Indian Beacon:  145.9360 MHZ CW
Dutch Beacon:   145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=30

To know what transponder is switched on please listen for the beacon
that is active. Each transponder has a different beacon.
[02112013]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002 1700z
Launch site: Baikonur, Kazakhstan

Status: Operational

Current Mode: V/u

Uplink:   145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4
Hz. The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute
   timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the re-
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   peater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset
   the 10 minute timer.
[02112013]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Operational
Current Mode: V/u (Mode JA)

Voice/CW (Mode JA)
Uplink:   145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon:   435.795 MHz

Digital Mode JD
Uplinks:  145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage:
http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's
CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/
fo29cwts.htm
[02112013]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974
Launch site: Vandenberg AFB, California, USA

Status: Operational

Current Mode: Alternating between Mode A and B every 24 hours
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```
Uplink:   145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink:  29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons:   29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php
[02112013]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998 0640z (ZARYA module)
Launch sites: Baikonur, Kazakhstan
              Kourou, French Guiana
              Uchinoura Space Center, Japan
              Kennedy Space Center, Titusville, Florida, USA

Status: Operational

Current Active Modes: FM Repeater - OFF
                      Voice -       V/v
                      BBS -         V/v
                      2m APRS -     V/v
                      2m Digi -     V/v
                      70cm APRS -   ?
                      70cm Digi -   ?
                      SSTV -        V/v


Expedition 35 Crew (March 2013 - September 2013):
Commander:                Chris Hadfield       KC5RNJ/VA3OOG
Flight Engineer:          Tom Marshburn        KE5HOC
Flight Engineer:          Roman Romanenko
Flight Engineer:          Aleksandr Misurkin
Flight Engineer:          Pavell Vladimirovich RV3BS
Flight Engineer:          Christopher Cassidy  KF5KDR


Available Modes and Frequencies:
Digital/APRS:
Worldwide 2m packet uplink:     145.825 MHz FM 1k2
Worldwide 2m packet downlink:   145.825 Mhz FM 1k2
Worldwide 70cm packet uplink:   437.550 Mhz FM 1k2
Worldwide 70cm packet downlink: 437.550 Mhz FM 1k2

Voice:
Region 1 voice uplink:          145.200 MHz FM
Region 2/3 voice uplink:        144.490 MHz FM
```

Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
2m Packet Mailbox: RS0ISS-11
2m Digipeater alias: ARISS
70cm Packet Mailbox: RS0ISS-1
70cm Digipeater callsign: RS0ISS
70cm Digipeater alias: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[04082013]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-112.S2
WSR 112 Part 2 04/22/2013

AMSAT NEWS SERVICE BULLETIN 112.S2
FROM AMSAT HQ SILVER SPRING, MD, April 22, 2013
TO ALL RADIO AMATEURS
BID: $WSR-112.S2

STRaND-1
Catalog Number:
Launch Date: February 25, 2013 12:31z
Launch Site: Satish Dhawan Space Centre, India

```
Status: Operational

Uplink:
Downlink:437.568MHz 9k6 FSK

Beacon: None(?)

Callsign:

URL: http://www.sstl.co.uk/Missions/STRaND-1--Launched-2013
[03042013]
=====
Fitsat-1
Catalog number: 38853
Launch Date: October 04, 2012
Launch site: Kibo Japanese Experiment Module, International Space
Station

Status: Operational

Uplink:
Downlink(s): 437.445MHz 1k2 AFSK
            5840.00 MHz 115k2 data
            LED CW (200w pulses)

Beacon(s): 437.250 MHz CW

Callsign:  NIWAKA

URL: http://carpcomm.com/satellite/fitsat1
[10292012]
=====
TechEdSat
Catalog number: 38854
Launch date: October 04, 2012
Launch site: Kibo Japanese Experiment Module, International Space
Station

Uplink(s):
Downlink(s): 437.465 1k2 AFSK

Beacon(s):

Callsign:

URL:http://www.techedsat.com/
[10152012]
=====
We Wish
Catalog number: 38856
Launch date: October 04,2012
Launch Site: Kibo Japanese Experiment Module, International Space
Station
```

```
Uplink(s):
Downlink(s): 437.505MHz 1k2 AFSK
             437.505MHz SSTV

Beacon(s): 437.505MHz CW

Callsign: JQ1ZIJ

URL:
[10152012]
=====
F-1
Catalog number: 38855
Launch Date: October 04, 2012
Launch Site: Kibo Japanese Experiment Module, International Space
Station

Uplink(s):
Downlink(s): 145.980MHz 1k2 AFSK
             437.485MHz FM moduled CW

Baecon(s):

Callsign: XV1VN

URL: http://fspace.edu.vn/
[10152012]
=====
Aeneas
Catalog Number: 38760
Launch Date: September 13, 2012 2139z
Launch Site: Wallops Island, Virginia, USA

Status: On Orbit

Uplink: WiFi 2425MHz
Downlink:
WiFi: 2425MHz
Spread Spectrum: Somewhere in the 70cm band

Beacon: 437.600MHz 1k2 ax25 every 10 seconds

Callsign:

URL:
[10012012]
=====
CSSWE (Colorado Student Space Weather Experiment)
Catalog Number: 38761
Launch Date: September 12, 2012 2139z
Launch Site: Wallops Island, Virginia, USA
```

```
Status: On Orbit

Uplink:
Downlink:       437.345MHz 9k6 with ax.25

Beacon:

Callsign:

URL:
[10012012]
=====
CP5 (Polysat)
Catalog Number: 38763
Launch Date: September 12, 2012 2139z
Launch Site: Wallops Island, Virginia, USA

Status: On Orbit

Uplink:
Downlink:       437.405MHz AFSK on LSB ax.25 over NRZI at 1k2 baud,
every 2
                minutes, begins 3.5 hours after first turn-on

Beacon:

Callsign:

URL:
[10012012]
=====
CXBN (Cosmic X-Ray Background Nanosatellite)
Catalog Number: 38762
Launch Date: September 12, 2012 2139z
Launch Site: Wallops Island, Virginia, USA

Status: On Orbit

Uplink:
Downlink:       437.525MHz GFSK ax.25

Beacon:

Callsign:

URL:
[10012012]
=====
Proiteres
Catalog Number: 38756
Launch Date: September 09, 2012 2139z
Launch Site: Satish Dhawan Space Centre, India
```

```
Status: On Orbit

Uplink:
Downlink: 437.485MHz FM/AFSK

Beacon:

Callsign: JL3YZK

URL:
[10012012]
=====
RS-40 MiR (Yubileiny-2)
Catalog Number: 38735
Launch Date: July 28, 2012
Launch Site: Plesetsk Missile and Space Complex, Russia

Status: On Orbit

Uplink:
Downlink(s):    435.265 MHz
                435.365 MHz

Beacon:

Callsign:

URL:
[08272012]
=====
HORYU-II
Catalog number: 38340
Launch Date: May 17, 2012 1639z

Status: On Orbit

Uplink:   145.??? MHz
Downlink: 437.375 MHz CW/AX25/FSK

Beacon: 437.375 MHz CW

Callsign: JG6YBW

URL:

IARU Coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=216
[10012012]
=====
XaTcobeo
Catalog Number: 38082
Launch Date: Febrauary 13, 2012 1000z
Launch Site: Kourou, French Guiana
```

Status: Operational

Uplink:
Downlink: 437.365 MHz FFSK with AX.25

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=135
[100162012]
=====
UniCubeSat
Catalog Number: 38085(?)
Launch Date: Febrauary 13, 2012 1000z
Launch Site: Kourou, French Guiana

Status: Operational

Uplink:
Downlink: 437.305 MHz 9k6 bps GMSK

Beacon:

Callsign:

URL:
http://www.gaussteam.com/index.php?option=com_content&view=article&id=
96:unicu
besat&catid=36:unicubesat&Itemid=183

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=133
[10012012]
=====
Robusta
Catalog Number: 38083(?)
Launch Date: Febrauary 13, 2012 1000z
Launch Site: Kourou, French Guiana

Status: On Orbit

Uplink:
Downlink: 437.325 MHz 1k2 FM telemetry (data every 3 min, 20 sec.
burst)

Beacon:

Callsign:

```
URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=122
[10012012]
=====
MO-72 MaSat-1
Catalog Number: 38081
Launch Date: Febrauary 13, 2012 1000z
Launch Site: Kourou, French Guiana

Status: Operational

Uplink:
Downlink: 437.345 MHz GFSK 625/1250 bps
          437.345 MHz CW

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=126
[10012012]
=====
Goliat
Catalog Number: 38084(?)
Launch Date: Febrauary 13, 2012 1000z
Launch Site: Kourou, French Guiana

Status: Operational

Uplink:
Downlink: 437.485 MHz 1k2 AFSK

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=98
[10012012]
=====
E-St@r
Catalog Number: 38079
Launch Date: Febrauary 13, 2012 1000z
Launch Site: Kourou, French Guiana
```

Status: On Orbit

Uplink:
Downlink: 437.445 MHz 1k2 bps AFSK

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=130
[10012012]
=====
ALMASat-1
Catalog Number: 38078
Launch Date: Febrauary 13, 2012 1000z
Launch Site: Kourou, French Guiana

Status: On Orbit

Uplink:
Downlink: 437.465 MHz 1k2 bps FSK
          2407.850 MHz

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=39
[10012012]
=====
RS-39 Chibis-M
Catalog Number: 38051
Launch Date: October 30, 2011 10:11:00 UTC
Launch site: Tyuratam (Baikonur Cosmodrome), Kazakhstan

Status: Operational

Uplink:
Downlink:

Beacon: 435.315 MHz CW
        435.215 MHz CW

Callsign:

URL:

```
IARU coordination status page:
[07302012]
=====
JUGNU
Catalog Number: 37839
Launch Date: October 12, 2011 05:30:00 UTC
Launch site: Satish Dhawan Space Centre, India

Status: On Orbit

Uplink:   145.??? MHz 1k2 (mode?)
Downlink: 437.505 MHz 9k6 (mode?)

Beacon: 437.275 MHz 15 wpm (?) CW

Callsign:

URL: http://www.iitk.ac.in/me/jugnu/index.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=160
[07092012]
=====
SRMSAT
Catalog Number: 37841
Launch Date: October 12, 2011 05:30:00 UTC
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Uplink:   145.900 MHz 1k  AX.25 (speed?)
Downlink: 437.500 MHz 2k4 AX.25

Beacon: 437.425 MHz 12 wpm CW

Callsign:

URL: http://srmsat.in/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=181
[01282013]
=====
HRBE (E1P Explorer 1 [Prime] CubeSat (E1P-U2))
Catalog Number: 37855
Launch Date: October 28, 2011
Launch site: Vandenberg Air Force Base, California, USA

Status: On Orbit

Uplink:   437.305 MHz (???)
Downlink: 437.505 MHz AX.25 (SSB?)
```

Beacon:

Callsign:

URL: http://ssel.montana.edu/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=116
[01122012]
=====
M-Cubed
Catalog Number: 37855
Launch Date: October 28, 2011
Launch site: Vandenberg Air Force Base, California, USA

Status: On Orbit

Uplink:
Downlink: 437.485 MHz AX.25

Beacon:

Callsign:

URL: http://umcubed.org/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=215
[01122012]
=====
RAX-2
Catalog Number: 37853
Launch Date: October 28, 2011
Launch site: Vandenberg Air Force Base, California, USA

Status: Operational

Uplink:
Downlink: 437.345MHz 9k6 GMSK

Beacon:

Callsign:

URL: http://rax.engin.umich.edu//

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=221
[03232012]
=====
AO-71 AubieSat-1
Catalog Number: 37854
Launch Date: October 28, 2011

Launch site: Vandenberg Air Force Base, California, USA

Status: On Orbit

Uplink:
Downlink: 437.475 MHz 1k2 AX.25

Beacon: 437.475 MHz CW

Callsign: KI4NQO

URL: http://www.space.auburn.edu/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=148
[12262011]
=====
O/OREOS
Catalog Number: 37224
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: On Orbit

Uplink:
Downlink: 437.035 MHZ AX.25

Beacon:

Callsign:

URL: http://www.ooreos.org/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=146
[02092011]
=====
Rax-1 Radio Aurora Explorer
Catalog Number: 37223
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: On Orbit

Uplink:
Downlink: 437.505 MHz 9k6 GMSK

Beacon:

Callsign: RAX-1

URL: http://rax.engin.umich.edu/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=165
[02092011]
=====
FO-69 Fastrac-1 Sara Lily
Catalog Number: 37227
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: Operational

Uplink 1: 145.980 MHz 1k2 baud
Uplink 2: 145.825 MHz 1k2 baud
Downlink: 437.345 MHz 1k2 and 9k6 baud

Beacon: 437.435 MHz 1k2 AX.25

Callsign: Fast1

URL: http://fastrac.ae.utexas.edu/index.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=83
[07052011]
=====
FO-70 Fastrac-2 Emma
Catalog Number: 37380
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: Operational

Uplink 1: 435.025 MHz 1k2 baud
Uplink 2: 437.435 MHz 9k6 baud
Downlink: 145.825 MHz 1k2 and 9k6 baud

Beacon: 145.825 MHz 1k2 AX.25

Callsign: Fast2

URL: http://fastrac.ae.utexas.edu/index.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=84
[12162011]
=====
StudSat
Catalog Number: 36796
Launch Date: July 12, 2010 0352z
Launch site: Satish Dhawan Space Centre, India

Status: On Orbit

```
Uplink:   437.505MHz, 9600bps FSK
Downlink: 437.505MHz, 9600bps FSK
Beacon  : 437.505MHz,   20bps ASK

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=164
[02092011]
=====
TIsat-1
Catalog Number: 36799
Launch Date: July 12, 2010 0352z
Launch site: Satish Dhawan Space Centre, India

Status: On orbit

Callsign: HB9DE

Uplink:   145.980MHz FM, AFSK
Downlink: 437.305MHz FM, AFSK
Beacon:   437.305MHz CW

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=118
[02092011]
=====
SwissCube
Catalog Number: 35932
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Callsign: HB9EG

Beacon(100mw): 437.5050MHz CW
Beacon(1w):    437.5050MHz FSK 1k2bps

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=109
[02092011]
=====
UWE-2
Catalog Number: 35934
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: In Orbit

Beacon(500mw): 437.3850 MHz AFSK 1k2bps
               437.3850 MHz FSK 9k6bps

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=110
```

```
[02092011]
=====
ITUpsAT1
Catalog Number: 35935
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Beacon(100mw): 437.325MHz CW
Beacon(1w): 437.325MHz 19k2bps

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=113
[02092011]
=====
BEESAT
Catalog Number: 35933
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Callsign: DP0BEE

Beacon(100mw): 436.000MHz CW
Beacon(500mw): 436.000MHz GMSK 4k8bps
Beacon(500mw): 436.000MHz GMSK 9k6bp
[02092011]
=====
SOHLA-1 (ASTRO TECH.)
Catalog Number: 33496
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational

Proposed Frequencies and Modes:
Downlink: 437.505 MHz AFSK/CW
Beacon:   437.505 MHz AFSK/CW

Callsign:

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=101
[02092011]
=====
KAGAYAKI (Solan Co.)
Catalog Number: 33495
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: In Orbit
```

```
Downlink: 437.375 MHZ    FSK9k6/CW
Beacon:   437.375 MHz    FSK9k6/CW

IARU coordination status page:

AMSAT-NA webpage:

[02092011]
=====
STARS (Kagawa Univ.) (Twin Satellites)
Catalog Number: 33498
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational ?

Downlinks: 437.485 MHz FM/CW
           437.465 MHz FM/CW
Beacons:   437.305 MHz FM/CW
           437.275 MHz FM/CW

Callsigns: JR5YBN
           JR5YBO

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=99

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=121&retURL
=/satellites/status.php
[02092011]
=====
KKS-1 (Tokyo MCIT)
Catalog Number: 33499
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational

Downlink:  437.455 MHz AFSK/CW
Beacon:    437.385 MHz AFSK/CW

Callsign: JQ1YYY

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=107

AMSAT-NA webapge:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=120&retURL
=/satellites/status.php
[20092011]
=====
```

PRISM (Tokyo Univ.)
Catalog Number: 33493
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational

Uplink: 145.xxx MHz AFSK 1k2
Downlink: 437.425 MHz AFSK 1k2
Beacon: 437.250 MHz CW

Callsign: JQ1YCX

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=97

Read terms and conditions of operations at the PRISM web page to find
out how
to properly operate on the satellite and to get the uplink frequency.
It
has
been asked that the uplink frequency not be given out untik you have
read and
understood the terms of usage.

URL:
http://www.space.t.u-tokyo.ac.jp/prism/en/HAMservice.html
[10282012]
=====
RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number: 32953
Launch Date: May 23, 2008 1520z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational

Curent Modes: Telemetry
              Audio
              Images

Downlinks: 435.315 MHz
           435.215 MHz

AMSAT-NA website:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=115&ret
URL=/satellites/status.php

Official website:
http://www.npopm.com/?cid=leoca&caid=43
[02092011]
=====
CanX-2
Catalog number: 32790

Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational in range of ground station only

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=46
[02092011]
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Downlink: 437.425 MHz 1k2 baud packet

For the latest project status update please visit the AAUSAT-II web page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=60
[02092011]
=====
CO-65 CUTE-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Downlink: 437.475 MHz 9k6 Packet
Uplink: 1267.600 Mhz

Telemetry Beacon:
Downlink: 437.2750 MHz CW

For the latest project status update please visit the Cute-1.7+APD II web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=78

Command Station blog website:
http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=112&retURL
=/satellites/status.php
[03232012]
=====
Compass-1
Catalog number: 32787
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Current Mode: dependant on last received command

Uplink: 145.980 MHz FM
Downlink: 437.275 Mhz CW
          437.405 MHz Packet

For the latest project status update please visit the Compass 1 web
page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=52

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=114&retURL
=/satellites/status.php
[06162011]
=====
CO-66 Seeds II
Catalog number: 32791
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Downlink: 437.485 MHz

Callsign: JQ1YGU

For the latest project status update please visit the Seeds 2 web
page: http://cubesat.aero.cst.nihon-u.ac.jp/english/seeds_2_e.html

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=36

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=113&retURL
=/satellites/status.php
[073092011]
=====
CAPE-1
Catalog Number: 31130

Launch Date: April 17,2007 0702z
Launch site: Baikonur, Kazakhstan

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=94&retURL=
/satellites/status.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=72
[02092011]
=====
CP3
Catalog Number: 31129
Launch Date: April 17,2007 0702z
Launch site: Baikonur, Kazakhstan

Status: Operational

Current Mode: /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=74
[02092011]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005 0652z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon: 437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/xivpicte.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=37
[02092011]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: ?????

Current Mode: /u

Beacon: 436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=96&retURL
=/satellites/status.php

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[02092011]
=====
QuakeSat
Catalog Number: 27845
Launch Date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Telemetry only

Current Mode: 9600 baud data packet

Mode U packet
Downlink: 436.675 MHz 9k6 BPS

Quakesat webpage:
http://www.quakefinder.com/services/quakesat-ssite/
[02252011]
=====
CO-55 Cute-1.7+APD II
Catalog Number: 27844
Launch date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational

Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only

```
Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=69&retURL
=/satellites/status.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=78
[02092011]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001 0240z
Launch site: Kodiak Launch Complex, Alaska, USA

Status: Operational

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink:        144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[10292012]
=====
RS-22 RADIO SPORT 22 (MOZHAYETS 4)
Catalog number: 27939
Launch Date: September 27, 2003 0612z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational - 70cm cw only

Current Mode:  /u

CW Beacon - 435.352 MHz
            145.818 MHz

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=76&retURL
=/satellites/status.php
[02092011]
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990
```

Launch site: Kourou, French Guiana

Status: CW Beacon only

Uplinks: 145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink: 437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[02092011]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984
Launch site: Vandenburg AFB, California, USA

Status: Operational ?

Current Mode: /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon: 435.025 MHz
Mode-S Beacon: 2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[07052011]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998 0640z (ZARYA module)
Launch sites: Baikonur, Kazakhstan
              Kourou, French Guiana
              Uchinoura Space Center, Japan
              Kennedy Space Center, Titusville, Florida, USA

Status: Operational

Current Active Modes: FM Repeater - OFF
                      Voice -   V/v

BBS - V/v
2m APRS - V/v
2m Digi - V/v
70cm APRS - ?
70cm Digi - ?
SSTV - V/v

Expedition 35 Crew (March 2013 - September 2013):

Commander:	Chris Hadfield	KC5RNJ/VA3OOG
Flight Engineer:	Tom Marshburn	KE5HOC
Flight Engineer:	Roman Romanenko	
Flight Engineer:	Aleksandr Misurkin	
Flight Engineer:	Pavell Vladimirovich	RV3BS
Flight Engineer:	Christopher Cassidy	KF5KDR

Available Modes and Frequencies:
Digital/APRS:
Worldwide 2m packet uplink: 145.825 MHz FM 1k2
Worldwide 2m packet downlink: 145.825 Mhz FM 1k2
Worldwide 70cm packet uplink: 437.550 Mhz FM 1k2
Worldwide 70cm packet downlink: 437.550 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
2m Packet Mailbox: RS0ISS-11
2m Digipeater alias: ARISS
70cm Packet Mailbox: RS0ISS-1
70cm Digipeater callsign: RS0ISS

70cm Digipeater alias: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[04082013]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-112.S3
WSR 112 Part 3 03/22/2013

AMSAT NEWS SERVICE BULLETIN 112.S3
FROM AMSAT HQ SILVER SPRING, MD, April 22, 2013
TO ALL RADIO AMATEURS
BID: $WSR-112.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

NANOSAIL-D
Catalog Number: 37361
Ejection Date: January 17, 2011

Status: Non - Operational

Downlink: 437.270 MHz AX.25

URL: http://nanosaild.engr.scu.edu/dashboard.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=115
[07302012]
=====
HO-68 HOPE-1 (CAS-1) (XW-1)
Catalog Number: 36122
Launch Date: December 15, 2009 0231z
Launch site: Taiyuan Space Center, PRC

Status: Telemetry only

Callsign:
Broadcast: BJ1SA-11
BBS: BJ1SA-12

Uplinks: 145.8250 MHz FM, PL 67.0 Hz.
           145.9250 - 145.9750 MHz SSB/CW
           145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
           435.7650 - 435.7150 MHz SSB/CW

435.6750 MHz AFSK 1200 BPS

Beacon: 435.7900 MHz CW

Mode and Antenna Polarization:
V: LHCP 2.0dBi max
U: RHCP 3.0dBi max

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=108

For more information about XW-1 (CAS-1):
http://
[04302012]
=====
SO-67 SumbandilaSat
Catalog Number: 35870
Launch Date: September 17, 2009 1555z
Launch site: Baikonur, Kazakhstan

Status: Non - Operational

Callsign: ZS0SUM

Uplink: 145.875MHz FM tone 233.6 Hz
Downlink: 435.345MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

For more information about SO-67:
http://www.amsatsa.org.za/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=88
[01272012]
=====
CP4
Catalog Number: 31132
Launch Date: April 17, 2007

Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon: 437.325 MHz CW

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=79
[09062010]
=====

```
LIBERTAD-1
Catalog Number: 31128
Launch Date: April 17, 2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink:   145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=76
[09062010]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: Non-Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder:  145.825 Mhz FM

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=51
[09062010]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency:  437.305
                             2407.250

Official Website: http://www.ncube.no

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=24
[09062010]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005
```

```
Status: Non-operational

Voice Uplink:        437.250 MHz FM 67Hz CTCSS
Voice Downlink:     2401.835 MHz FM
Packet Up/Downlink:  437.250 MHz 9k6 packet
Packet Downlink     2401.835 MHz 38k4 packet

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=54
[09062010]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non-Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=53
[09062010]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004 0745z
Launch site: Baikonur, Kazakhstan

Status: Non - Operational

Current Mode(s):
Voice repeater: V/u
Uplink:      145.880 MHz FM
Downlink:    435.150 MHz FM

Telemetry: Recovery efforts
Downlink:    435.150MHz 9k6


Analog voice downlink:     435.300 MHz FM
                           435.150 MHz FM
                          2401.200 Mhz FM
Analog voice uplink:       145.860 MHZ FM
                           145.880 MHz USB
                           145.880 MHz FM
                           145.920 MHz FM
                           145.920 MHz FM - 67 Hz PL tone burst
                          1268.705 MHz FM
Digital Downlinks:         435.150 MHz FM 38k4 PBP, 1 watt output
                           435.150 MHz FM 9k6 Pacsat Broadcast
Protocol
```

```
                           2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:             145.860 MHz FM 9k6 Pacsat Broadcast
Protocol
                           1268.703 mhz FM 9k6 Pacsat Broadcast
Protocol
Beacon:                     435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=19
[12062011]
=====
CANX-1
Catalog Number: 27847
Launch Date: June 30, 2003

Status: Non-Operational

Downlink: 437.8800 MHz AFSK 1k2bps
[06052009]
=====
DTUSAT
Catalog Number: 27842
Launch Date: June 30, 2003

Status: Non-Operational

Current Mode: 2k4 AFSK Packet last reported

Downlink: 437.475MHz

Officail webpage: http://dtusat1.dtusat.dtu.dk/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=101&retURL
=satellites/all_oscars.php
[02212009]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002
```

```
Status: Non-operational.

Uplink:   435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)

Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Telemetry only

Uplinks:   145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink:  437.325 MHz

Broadcast callsign: MYSAT3-11
BBS:                MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial land and weather imaging payloads offers FM and FSK
Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as
a collaborative effort between the Malaysian government and Surrey
Satellite Technology Ltd.
[03302009]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink:   145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000
```

```
Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS:                SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink:   145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
V-band:   145.840 -  145.990 MHz CW/LSB
U-band:   435.550 -  435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks
---------
S2-band:  2401.225 -  2401.475 MHz CW/USB
K-band:  24048.010 - 24048.060 MHz CW/USB
Beacon:   2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)
----------------------------
BEACON   General Beacon(GB)  Middle Beacon(MB)  Engineering Beacon(EB)
2 m                    none        145.898 MHz                    none
70cm            435.438 MHz        435.588 MHz             435.838 MHz
13cm(1)        2400.188 MHz       2400.338 MHz            2400.588 MHz
```

13cm(2)	2401.173 MHz	2401.323 MHz	2401.573 MHz
3cm	10450.975 MHz	10451.125 MHz	10451.375 MHz
1.5cm	24047.885 MHz	24048.035 MHz	24048.285 MHz

[07162007]
=====
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: 25636
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz
145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

```
Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Non-Operational

Current Modes:
Telemetry : /u

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign:       4XTECH-12

More information of GO-32 can be found at:
http://asri.technion.ac.il/techsat/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=14&retURL
=/satellites/status.php
[07172010]
=====
TO-31 TMSAT-1
```

```
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink:   145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
MO-30 UNAMSAT-2
Catalog Number: 24305
Launch Date: September 5, 1996

Status: Non-operational

Downlink:       435.1380 MHz AFSK 1200 BPS
Downlink:       435.2060 MHz AFSK 1200 BPS
Uplink:         145.8150 MHz AFSK 1200 BPS
Uplink:         145.8350 MHz AFSK 1200 BPS
Uplink:         145.8550 MHz AFSK 1200 BPS
Uplink:         145.8750 MHz AFSK 1200 BPS
[06042009]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Non-operational

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign:       POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012009]
=====
AO-27 AMRAD
Catalog number: 22825
Launch Date: September 26, 1993 0140z
Launch site: Kourou, French Guiana

Status: Recovery efforts in progress

Current Mode: V/u

Uplink:   145.850 MHz FM
```

```
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[12032012]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993 0140z

Status: PSK carrier only

Current Mode:

Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
AO-24 ARSENE
Catalog Number: 22654
Launch Date: May 13, 1993

Status: Non-operational

Uplink:    435.0625 MHz FM 1k2bps AFSK
           435.1125 MHz FM 1k2bps AFSK
           435.1375 MHz FM 1k2bps AFSK
```

```
Downlink:  145.9750 MHz FM 1k2bps AFSK
          2446.5025 MHz FM 1k2bps AFSK

Beacon:    2446.4700 MHz CW

Broadcast callsign:
BBS:
[12162009]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HL01-11
BBS: HL01-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25
```

```
Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
[05012006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: non-operational

Current Mode:  V/u

Uplink:         145.900 MHz FM 1200-baud Manchester FSK (reserved)
                145.920 MHz FM VOICE
                145.940 MHz FM 1200-baud Manchester FSK (reserved)
                145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink:       437.026 MHz USB VOICE
                (1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]
```

```
Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[07242009]
=====
UO-15 UoSAT-4
Catalog Number: 20438
Launch Date: January 22, 1990

Status: Non-operational

Uplink: ?
Downlink: 435.1250MHz (?)
          435.1200MHz (?)
[06042009]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon:   145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink  29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
Beacons:   29.450 MHz
          435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational
```

```
Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon 1:  29.352 MHz (intermittent)
Beacon 2:  29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink:     21.260 to 21.300 MHz CW/USB
Downlink:  145.860 to 145.900 MHz CW/USB

Beacon:    145.860 MHz

Robot:     145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink:   21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB
```

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

- AMSAT News Service (ANS)
- General satellite discussion (AMSAT-BB)
- Orbit data (KEPS)
- Manned space missions (SAREX)
- District of Columbia area (AMSAT-DC)
- New England area (AMSAT-NE)
- AMSAT Educational Liaison mailing list (AMSAT-EDU)
- AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis

Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at}amsat.org
NNNN
/EX

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From -7454344654229384271
X-Google-Thread: 10e8ad,5eb359a1226676f8,start
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        Mon, 29 Apr 2013 08:30:11 -0700 (PDT)
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news.linkpendium.com!news.linkpendium.com!panix!rri.panix.com!robomod!not-for-mail
From: SWPC.Webmaster@noaa.gov
Newsgroups:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.shor
twave,rec.radio.info
Subject: Weekly Highlights of Solar and Geomagnetic Activity, 22 - 28 April 2013
Followup-To:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.shor
twave
Date: Mon, 29 Apr 2013 11:30:11 EDT
Organization: NOAA Space Weather Prediction Center
Lines: 79
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <20130429153002.B1CFE33C8E@panix2.panix.com>
NNTP-Posting-Host: panix6.panix.com
X-Trace: reader1.panix.com 1367249411 24915 166.84.1.6 (29 Apr 2013 15:30:11 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Mon, 29 Apr 2013 15:30:11 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
```

:Product: Weekly Highlights and Forecasts
:Issued: 2013 Apr 29 0434 UTC

Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center
Product description and SWPC contact on the Web
http://www.swpc.noaa.gov/weekly.html
#
Weekly Highlights and Forecasts
#

Highlights of Solar and Geomagnetic Activity
22 - 28 April 2013

Solar activity was at low to moderate levels during the period. The period began at very low levels, but quickly rose to moderate levels as an impulsive M1 flare and associated Type IV radio sweep occurred at 22/1029 UTC from Region 1726 (N13, L=331, class/area Fkc/1000 on 25 Apr). An associated coronal mass ejection (CME) was observed in LASCO C2 imagery off the west limb at 21/1036 UTC, but was only partially Earth-directed and did not result in noticeable impacts. Activity returned to low levels following the M1 flare, but remained fairly active throughout the period, producing over 60 C-class flares. The most active region was Region 1726, which produced over 33 C-class flares on its own. As soon as Region 1726 rotated off the visible disk on 25 Apr, Region 1731 (N09, L=187, class/area Dkc/420 on 28 Apr) emerged and quickly became the area of interest, producing a total of 12 C-class flares. Region 1733 (S17, L=254, class/area Cso/30 on 28 Apr) produced a C4/1n flare associated with Type II (576 km/s) and Type IV radio emissions at the end of the forecast period, and had an associated potentially Earth-directed CME. Further analysis is pending.

No proton events were observed at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit was normal to moderate levels from 22 Apr to 26 Apr. Flux values increased to high levels on 27 Apr, reaching a max of 2920 pfu at 27/1625 UTC, and remained at moderate to high levels until late on 28 Apr as a result of effects from coronal hole high speed stream (CH HSS) activity.

Geomagnetic field activity was at quiet to unsettled levels on 22-23 Apr. Activity increased to unsettled to active levels on 24 Apr due to effects from a favorably positioned CH HSS. Solar wind speeds increased to near 430 km/s, the total interplanetary magnetic field (IMF) reached a maximum 23.4 nT, and the Bz component dropped to -18.9 nT. Solar wind speed continued to increase on 25 Apr to the 500 km/s range, total fields decreased to approximately 5 nT, and the Bz component of the IMF was variable between +/- 3 nT. The ionosphere responded with a short-lived G1 (Minor) geomagnetic storm early on 26 Apr, but conditions quickly returned to unsettled levels for the remainder of the day. Quiet levels returned by 27 Apr and remained there through the end of the period as CH HSS effects diminished.

Forecast of Solar and Geomagnetic Activity
29 April - 25 May 2013

Solar activity is expected to be low with a chance for M-class flares through 07 May as Region 1731 remains on the visible disk. Activity is expected to decrease to very low to low levels through 08 May. Activity will likely increase to low with M-class flares likely when we see Region 1726 return on 09 May. Region 1731 returns on 20 May, keeping levels low with M-class flares likely through the end of the forecast period.

No proton events are expected at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to be at moderate to high levels through 02 May due to CH HSS effects. Values should decrease to normal to moderate levels from 03 May through 21 May. Another increase to moderate to high levels in response to recurrent CH HSS effects is expected from 22-25 May.

Geomagnetic field activity is expected to be mostly quiet through 20 May. Conditions should increase to unsettled to active with isolated periods of minor storming possible from 21-23 in response to recurrent CH HSS effects. Mostly quiet levels should return on 24 and 25 May.

```
From -7321184437802559576
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        Sun, 05 May 2013 10:42:49 -0700 (PDT)
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border2.nntp.ams2.giganews.com!border4.nntp.ams.giganews.com!
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border6.a.newsrouter.astraweb.com!not-for-mail
From: Chris Steyaert <observations@rmob.org>
Newsgroups: rec.radio.amateur.space,sci.astro.amateur
Subject: Radio Meteor Obs. Bull. April 2013 Lyrids
Date: Sun, 05 May 2013 19:42:49 +0200
Message-ID: <if6do854b94770rdnkpl222f117rtvlohs@4ax.com>
X-Newsreader: Forte Agent 5.00/32.1171
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Radio Meteor Observation Bulletin No. 237 of April 2013 (80 K) is available now as

http://www.rmob.org/rmobtext/rmob1304.txt

More information and the visual presentation of the hourly forward scatter counts can be found on

http://www.rmob.org

Chris

From 2919276079271038357
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Mon, 06 May 2013 08:31:03 -0700 (PDT)
MIME-Version: 1.0
Path: ln4ni1493pbb.0!nntp.google.com!npeer03.iad.highwinds-media.com!news.highwinds-media.com!feed-me.highwinds-media.com!news.glorb.com!news-out.readnews.com!transit4.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: SWPC.Webmaster@noaa.gov
Newsgroups: rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.shortwave,rec.radio.info
Subject: Weekly Highlights of Solar and Geomagnetic Activity, 29 April - 05 May 2013
Followup-To: rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.shortwave
Date: Mon, 6 May 2013 11:31:03 EDT
Organization: NOAA Space Weather Prediction Center
Lines: 63
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <20130506153001.76C8C33C8E@panix2.panix.com>
NNTP-Posting-Host: panix6.panix.com
X-Trace: reader1.panix.com 1367854263 27250 166.84.1.6 (6 May 2013 15:31:03 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Mon, 6 May 2013 15:31:03 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this article.
X-Comment-2: Moderators do not verify the accuracy of posted information.

```
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
X-Received-Bytes: 4776

:Product: Weekly Highlights and Forecasts
:Issued: 2013 May 06 0122 UTC
# Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center
# Product description and SWPC contact on the Web
# http://www.swpc.noaa.gov/weekly.html
#
#                 Weekly Highlights and Forecasts
#
```

Highlights of Solar and Geomagnetic Activity
29 April - 05 May 2013

Solar activity reached high levels this week when Region 1739 (N13, L=75, class/area=Dac/150 on 03 May) appeared on the east limb and unleashed an M5/Sf flare on 03 May at 1732Z. The flare was accompaned by Type II (1297 km/s) and Type IV radio emissions. A coronal mass ejection (CME) was subsequently observed in LASCO/C2 coronagraph imagery at 03/1748Z and also in STEREO-A and B COR2 imagery. Region 1739 was also responsible for an M1/Sf flare at 05/1756Z. The most prolific active region of the week was, by far, Region 1731 (N09, L=187, class/area=Dkc/420 on 28 Apr) with 17 C-class and two M-class flares to its credit. By 30 Apr, Region 1731 had developed beta-gamma-delta magnetic characteristics which it mainteined through 03 May. During this period it produced an M1/1n flare at 02/0510Z and a long duration M1/2n flare at 03/1655Z. The 02 May event was associated with a tenflare (159 sfu), a Type II emission (703 km/s), and a CME first seen in LASCO/C2 imagery at 02/0524Z. The majority of the ejecta was directed north of the ecliptic, but output from the WSA-Enlil model suggested a possible scrape from the CME on 06 May. The 03 May event was not associated with a CME.

No proton events were observed at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit was at high levels on 29-30 Apr and 03-04 May.

Geomagnetic field activity reached ensettled to active levels beginning late on 30 Apr and lasting through 02 May. This activity was in response to the presence of a recurrent negative polarity coronal hole high speed stream. On 01 May, activity reached major storm levels at high latitudes. Activity returned to quiet levels early on 02 May. Conditions were quiet, with the exception of one unsettled period during the latter half of 05 May with the arrival of a corotating interaction region in advance of a positive polarity recurrent coronal hole high speed stream.

Forecast of Solar and Geomagnetic Activity

06 May - 01 June 2013

Solar activity is expected to be at low levels with a chance for an isolated moderate or greater event for the extent of the outlook period.

No proton events are expected at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to be high on 8-10 May and again on 24-31 May in response to recurrent coronal hole high speed streams.

Geomagnetic field activity is expected to be quiet to unsettled for the majority of the outlook period. Active levels are possible on 21-23 May in response to a recurrent coronal hole high speed stream.

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From -7911834849208187272
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Path: y6ni33857qax.0!nntp.google.com!newsfeed2.dallas1.level3.net!news.level3.com!
panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-132 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sat, 11 May 2013 21:27:12 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 776
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <003401ce4eaf$cc055d30$64101790$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
X-Trace: reader1.panix.com 1368322033 27026 166.84.1.6 (12 May 2013 01:27:13 GMT)
X-Complaints-To: abuse@panix.com
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X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
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AMSAT NEWS SERVICE
ANS-132

The AMSAT News Service bulletins are a free, weekly news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS publishes news related to Amateur Radio in Space including reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

The news feed on http://www.amsat.org publishes news of Amateur Radio in Space as soon as our volunteers can post it.

Please send any amateur satellite news or reports to:
ans-editor at amsat.org.

In this edition:

* AMSAT is Going to the Dayton Hamvention This Week
* AMSAT Engineering Will Show Fox-1 System Software Running on IHU
* AMSAT V/U/WX Receive Preamps at Dayton for Display and Sales
* New Fox-1 CubeSat Model to Debut at Hamvention 2013
* Updated AMSAT LVB Tracker to be Shown at Dayton
* "Dayton Only" Special Deals
* Signals Received From Estonia's ESTCube-1 CubeSat
* AMSAT-NA Board of Directors Nominations Solicited
* ARISS School Contacts
* Museum Ships Weekend Special Event Station KK5W Satellite Ops
* Additional 2M Downlink Allocation Proposed for Amateur Satellites?
* HAMSAT VO-52 Celebrates 8th Year On Orbit
* SA AMSAT Space Symposium Coming to Pretoria on May 18
* 1000th Session of the Houston AMSAT Net Invites You to Check In
* NASA TV to Cover Soyuz Landing May 13
* Satellite Shorts From All Over

SB SAT @ AMSAT $ANS-132.01
ANS-132 AMSAT News Service Weekly Bulletins

AMSAT News Service Bulletin 111.01
>From AMSAT HQ SILVER SPRING, MD.
May 12, 2013
To All RADIO AMATEURS
BID: $ANS-132.01

```
**************************************************************
* Volunteers are still needed to help at the AMSAT booth at  *
* Dayton. We have about 20 people who have stepped forward,  *
* but we could use a few more. If you are willing to spend a *
* couple of hours on Friday, Saturday, or Sunday to help at  *
* the Hamvention, please send an e-mail NOW to Steve Belter, *
* n9ip@amsat.org. If you've volunteered, but not heard back  *
* from Steve, please send him another note. Thank you!       *
*                                                            *
* Monitor the 'AMSAT at Dayton Hamvention 2013' link on the  *
* new AMSAT Web Site http://www.amsat.org for the latest     *
* AMSAT at Dayton news and developments.                     *
**************************************************************
```

AMSAT is Going to the Dayton Hamvention This Week

This is the week - May 16 through May 19 - for the really big show near Dayton, Ohio at the 2013 Hamvention.

AMSAT Hamvention activities and displays are planned to take place at the new booth location (444-446 and 433-435) in the Ball Arena, and outside in the Satellite Demonstration Area just outside the Ball Arena entrance.

2013 theme for AMSAT at Dayton is "AMSAT - A View to the Future."

If you have not yet made your reservations for the AMSAT/TAPR Banquet, please make them by Tuesday, May 14, 1800 EDT. Because of the requirement that the caterer have a final count, no more reservations will be accepted afterwards, either on the AMSAT Store or at Dayton. This is a great opportunity to mingle with your fellow techies, as well as hear a fascinating speaker!

Here are the daily AMSAT activities for on-site and off-site events at the 2013 Hamvention!

Thursday 16 May 2013

+ 11:00 AM - 5:00 PM
  AMSAT Booth Setup at Ball Arena (contact Steve Belter, N9IP,

n9ip at amsat.org if you can help during this time).

- 6:30 PM - 10:00 PM
  The third Annual AMSAT "Dinner at Tickets" party will be held at Tickets Pub & Eatery in Fairborn, OH. Check out the 'AMSAT at Dayton Hamvention 2013' link to the page 'AMSAT Dayton Social Events' on the new Web Site: http://www.amsat.org.

Friday 17 May 2013

- 9:00 AM - 6:00 PM at the AMSAT Booth
  AMSAT Booth open for membership renewals, books, new items and information. You may pick up your tickets at the AMSAT boot for the Friday Night AMSAT/TAPR Banquet during this time.

- 6:30 PM - 10:30 PM AMSAT/TAPR Banquet at Dayton 2013
  AMSAT/TAPR Banquet on Friday night, May 17 is one of the main AMSAT activities during the 2013 Hamvention at Dayton. The speaker this year will be Bruce Perens, K6BP, with a humorous history of technology evangelism: "The Evangelist's Dilemma: Driving New Ideas With Nothing But Words."

Saturday 18 May 2013

- 9:00 AM - 5:00 PM at the AMSAT Booth
  AMSAT Booth open for membership renewals, books, new items and information. Note the bulletin below for the AMSAT Store Dayton Deals!

- 11:15 AM - 1:30 PM The AMSAT Forum
  Get the latest information about what is going on with AMSAT and its projects. The AMSAT Forum will be held in Forum Room 5. See the bulletin below for details!

Sunday 19 May 2013

- 9:00 AM - 1:00PM at the AMSAT Booth
  AMSAT Booth open for membership renewals, books, new items and information.

- 1:00PM - 3:00PM at the AMSAT Booth
  Take down and storage of the AMSAT Booth. (contact Steve Belter, N9IP, n9ip at amsat.org if you can help during this time).

Demos Daily on Friday, Saturday, and Sunday for All Available Passes

AMSAT is encouraging everyone attending the 2013 Dayton Hamvention to come by the Satellite Demonstration Area just outside of the Ball Arena entrance and make a contact using the amateur satellites. There will be AMSAT volunteers to explain how to make the contacts and during actual satellite passes will complete as many actual contacts as possible. Satellite pass times will be posted in the satellite demonstration area and at the AMSAT booth.

[ANS thanks AMSAT's 2013 Dayton Committee for the above information]

AMSAT Engineering Will Show Fox-1 System Software Running on IHU

AMSAT Vice President Engineering, Tony Monteiro, AA2TX reported that the software development team successfully brought up the Fox-1 system software on the Internal Housekeeping Unit (IHU.) The IHU is the brains of the Fox-1 satellite and it has a 32-bit, STM32L microprocessor.

Tony says the operating IHU card will be shown at the Dayton Hamvention next week in the AMSAT booth. The engineering team welcomes everyone to stop by and have a look.

ANS thanks AMSAT Vice President Engineering, Tony Monteiro, AA2TX for the above information]

AMSAT V/U/WX Receive Preamps at Dayton for Display and Sales

AMSAT will have a supply of the popular V/U/WX receive preamplifiers at Dayton for display and sales.

Ready to operate--not a kit! Fully assembled, tested, and installed in a metal enclosure with female BNC connectors on input and output. It is based on the MAR 7 device, and covers 100 MHz to 500 MHz. This includes the137 MHz WX, 2M, and 70cm satellite bands.

Operates from +9-15V DC (a fresh 9V battery works great!). Perfect for portable operations using dual band hand-held Yagis like the ARROW, Cheap Yagi, etc. Just put it inline on the correct receive band for operations in either mode U/V or V/U. You won't believe what you've been missing!

Includes low power (about 5W) protection diode on the input for accidental transmissions into the input. This preamp is not RF switched. It must be protected from inadvertent repeated or high power transmission RF using a relay or diplexer.

Full details and schematic can be found in the November/December 2012 AMSAT Journal article by Mark Spencer, WA8SME, or downloaded from the item in the Hardware section of the AMSAT Store:

http://store.amsat.org/catalog/

The assembled and tested kit is priced at $50 USD.

Proceeds from the sale of this item will help fund the AMSAT Fox Family of satellites!

This equipment was developed as part of the ARRL Education and Technology Program.

[ANS thanks Alan Biddle, WA4SCA for the above information]

New Fox-1 CubeSat Model to Debut at Hamvention 2013

Through the dedicated work of Stefan Wagener, VE4NSA, AMSAT-NA will debut its new 1:1 scale cardboard model of the Fox-1 CubeSat at Hamvention 2013.

We will have a complete display at the AMSAT booth. It is life size, and based on the latest Fox-1 engineering drawings for highest fidelity in design and appearance.

The model is printed in color on heavy stock paper, including all components. The instructions are carefully prepared to allow for easy assembly requiring scissors, glue etc. Depending on experience, assembly will take approximately 10+ hours.

The complete model will be a perfect addition to any satellite operator's shack, and a chance to show visitors what is being done by AMSAT today. We will have finished models at the AMSAT booth for a recommended donation of $25. All proceeds will go to supporting the Fox Project.

See http://ww2.amsat.org/?p=503 for a photo of the model.

[ANS thanks Alan Biddle, WA4SCA for the above information]

Updated AMSAT LVB Tracker to be Shown at Dayton

AMSAT has sold the popular G6LVB Tracker for several years. This year we will have a new version which replaces the amber LCD display with an OLED (Organic Light Emitting Diode) display. The new display offers a high visibility contrast with a wide angle of view. It will be available in blue, green and amber.

LVB Trackers will be available with the recommended serial (RS-232) I/O. The recommended minimum donation will remain $200. An FTDI USB/

Serial module is available as an option for an additional $25. A picture showing the old and new displays may be found at:
http://ww2.amsat.org/?p=484

Current LVB Tracker owners may update their own units. The OLED displays used are manufactured by Newhaven, NHD-0216KZW series, and are available from Mouser and other online parts suppliers. The OLED displays have less depth so the PEM fasteners need to be shortened for correct fit and viewing thru the front of the case. The LVB Tracker firmware will also require updating. Current owners may send their LVB Tracker to WB8CXO for retrofit if they don't wish to do the modifications themselves. Upgrading existing trackers will be $50 + shipping. Contact WB8CXO@AMSAT.ORG for details.

AMSAT would like to acknowledge the many contributors to this effort. Mike Young, WB8CXO who has supported the Tracker and whose initiative was essential to this development. John Drago, W8FAA modified the LVB Tracker firmware to support the OLED display. Ken Baker from Ridge Machine manufactured the PEM fastener cutting jig. Steve Belter, N9IP,

Mark Hammond, N8MH and John Papay, K8YSE did beta testing. And finally Gould Smith, WA4SXM, LVB Tracker project manager for his continuous guidance and support.

[ANS thanks Alan Biddle, WA4SCA for the above information]

"Dayton Only" Special Deals

As usual, during the Hamvention AMSAT will have a number of special items and packages available at the booth. These will range from new design shirts and hats, to tracking hardware and software, to Elk antennas.

Many of the shirts and trinkets are only available at Dayton. When they are gone, they are gone! Be sure to stop by the booth early while we have a full range of sizes.

Here are some of the bargains announced for Dayton Hamvention 2013:

+ SATPC32 - $40 (normally $45 for members)
+ AMSAT TOTE BAG - $5.00 (Free for new and renewing members and for
  those who buy a LVB Tracker Box.)
+ AMSAT LICENSE PLATE HOLDER - $5.00 (Free for new and renewing
  members)

These items are only available at Dayton:
+ LVB TRACKER BOX - $200
+ ELK ANTENNA - $125

The full shopping list, including publications, software, hardware, apparel, and sustaining memberships are posted on the AMSAT On-Line Store at: http://ww2.amsat.org/?page_id=296

Please do not contact the AMSAT office requesting Dayton-only specials. Our regular offerings remain available at the AMSAT Store: http://store.amsat.org/catalog/

[ANS thanks Alan Biddle, WA4SCA for the above information]

Signals Received From Estonia's ESTCube-1 CubeSat

Estonia's first CubeSat ESTCube-1, amateur radio callsign ES5E/S, was successfully launched from the ESA Spaceport in Kourou in French Guiana on May 7, 2013 aboard an ESA VEGA rocket.

Built by students at the University of Tartu ESTCube-1 the main mission of the satellite is to test electric solar wind sail technology, a novel space propulsion technology that could revolutionalize transportation within the solar system. It will deploy a 10 meter conductive electrodynamic tether and the force interacting with the tether will be measured.

Information about the satellite is posted at:
http://www.estcube.eu/en/

The IARU Amateur Satellite Frequency Coordination Panel have published these frequencies for ESTCube-1:

+ 437.250 MHz - CW beacon, callsign ES5E/S
+ 437.505 MHz - 9600 bps AX.25 telemetry, callsign ES5E-11
+ See http://www.estcube.eu/en/radio-details for additional news.
+ A beacon decoder can also be found on a link from this page.

The AMSAT-UK web shows additional photos and a description of the mission for ESTCube-1 at:
http://amsat-uk.org/2013/05/06/estcube-1-estonias-first-cubesat-2/

The ESTCube-1 Team has begun posting updates on their facebook page:
https://www.facebook.com/estcube

Here is a google maps page that tracks ESTCube-1:
http://tinyurl.com/ESTCube-Tracker (lizard-tail.com)

ESTCube-1 keplerian elements are included in the AMSAT.ORG elements set sent out this week via the keps@amsat.org e-mail list.

After deployment from the VEGA upper stage reception reports of ESTCube-1 reception reports from amateur radio stations worldwide were posted:

- Ib, OZ1MY received the signal, noting, "Using the preliminary TLEs I heard ESTCube-1 beacon at 0908 UTC May 7. The received frequency is approximately 2 KHz higher than published."

- Nader, ST2NH reported, "EstCube-1 Beacon heard over Africa strong and clear."

- Ken, GW1FKY reported, "Monday 7th May 2013 - Time here in Wales, UK 1235hrs UTC. Hearing ESTcube-1 very well with just my Elk antenna and a Kenwood TS-2000.

- Jean-Pierre, F5YG wrote, "On orbit number 4, good signal but only small pieces of text as there is a lot of time between CW frames.

- Hector, CO6CBF said, "ESTCube-1 was heard in EL92sd with a great signal. I was running a FUNcube Dongle with SDR-Radio V2.0 and ELK antenna with a homebrew preamplifier.

Approximately 12 hours after launch the ESTCube-1 team posted a status that received telemetry packets indicate the satellite had charged its batteries completely.

[ANS thanks AMSAT-UK and the University of Tartu ESTCube-1 Team for the above information]

AMSAT-NA Board of Directors Nominations Solicited

It is time to submit nominations for the upcoming open seats on the AMSAT-NA Board of Directors. A nomination requires either one Member Society or five current individual members in good standing to nominate an AMSAT member for the position. Four director's terms expire this year: Barry Baines, WD4ASW, Alan Biddle, WA4SCA, Drew Glasbrenner, K04MA, and Tony Monteiro, AA2TX.

In addition to traditional submission of written nominations, which remains unchanged and is the preferred method, nominations may be made by electronic means. These include e-mail, FAX, or electronic image of a petition. Electronic petitions should be sent to MARTHA at AMSAT.ORG or faxed to 301-608-3410.

Written nominations, consisting of names, calls and individual signatures should be mailed to:

AMSAT-NA
850 Sligo Ave #600
Silver Spring, MD, 20910

No matter what means is used, petitions MUST arrive no later than June 15th at the AMSAT-NA office. If the nomination is a traditional written nomination, no other action is required. If it is other than this, i.e. electronic, a verifying traditional written petition MUST be received at the AMSAT-NA office at the above address within 7 days following the close of nominations on June 15th.

ELECTRONIC SUBMISSIONS WITHOUT THIS SECOND, WRITTEN VERIFICATION ARE NOT VALID UNDER THE EXISTING AMSAT-NA BYLAWS.

[ANS thanks the AMSAT Office for the above information]

ARISS School Contacts

Gary, Indiana

An International Space Station school contact was susscessful with participants at The Gary Literacy Coalition, Inc, Gary, IN on May 8. This was a direct contact between NA1SS and KC9JQN.

The Gary Literacy Coalition, Inc. serves as the primary literacy collaborative in the City of Gary and neighboring communities. GLC supports, promotes, enhances, and coordinates the accessibility of literacy opportunities, thus making Gary, "A Reading City."

GLC has maintained a close partnership with the Gary Community School Corporation (GCSC). The GLC/GCSC partnership allows the operation of the "Learning Partner" Mentoring Project. This mentoring initiative is a motivational endeavor offering an arm of support to 4th, 5th and 6th grade students enrolled in the GCSC gender academies; Dr. Bernard C. Watson Academy for Boys and Frankie Woods-McCullough Academy for Girls. The GCSC is an urban public school district challenged to expand and enhance educational experiences for the approximately 10,000 students that it serves. A large percentage of these students reside in single-parent homes and/or low -income families.

Royal Canadian Mounted Police HQ, Yellowknife, NWT, Canada

The contact with the Yellowknife R.C.M.P. Headquarters, Yellowknife, NWT, Canada, via a telebridge connection with K6DUE that had been scheduled for Saturday, May 11 was postponed due to an unplanned EVA to investigate an ammonia leak. At press time this contact has been rescheduled for a telebridge via K6DUE on Sunday, May 12.

ARISS is requesting listener reports for the above contacts. Due to issues with the Kenwood radio that are not fully understood at present, the Ericsson radio is going to be used for these contacts. ARISS thanks everyone in advance for their assistance.

[ANS thanks the ARISS Team for the above information]

Museum Ships Weekend Special Event Station KK5W Satellite Ops

The Brazos Valley Amateur Radio Club (BVARC) will be participating in the Museum Ships Weekend Event on June 1-2, 2013 from Pelican Island (IOTA NA-143) near Galveston, Texas.

It is expected that amateur radio operators will activate amateur radio stations on over 80 ships worldwide during the event. The BVARC operation from Seawolf Park will activate both the submarine USS Cavalla and the destroyer escort USS Stewart.

BVARC plans a full 2-day operation on the HF bands. Operation on OSCAR satellites is planned for daytime passes on Saturday, June 1. The BVARC satellite team will consist of AMSAT members Andy MacAllister, W5ACM, Allen Mattis, N5AFV, Charlie Keng, K5ENG, and Carl Hacker, WC5WM.

During MSWE 2012 a number of museum ships operated on OSCAR satellites and the KK5W satellite team worked the USS Nautilus, the USS New Jersey, and the Lightship Overfalls. We encourage any interested satellite operators to volunteer to operate on the OSCAR satellites if you live near a participating museum ship. Join in and be part of this worldwide event.

If you hear KK5W on during MSWE 2013 give us a call. QSL with SASE to KK5W, Brazos Valley Amateur Radio Club, PO BOX 2997, Sugar Land, TX 77487-2997.

Additional information is posted on these web pages:

+ http://www.nj2bb.org/museum/index
+ http://www.bvarcmswe.org

[ANS thanks Allen Mattis, N5AFV for the above information]

Additional 2M Downlink Allocation Proposed for Amateur Satellites?

AMSAT-UK reports that an increased allocation for amateur satellite downlink on the 2 meter band has been proposed. In the minutes from the IARU Region 1 Interim meeting held in Vienna, April 20-21, the papers related to the Amateur Satellite Service included:

+ VIE13_C5_03 Increased Amateur-Satellite Service 144MHz Usage
+ VIE13_C5_05 Recommendations for DATV Transmission
+ VIE13_C5_24 Region 1 Satellite Coordinator Report
+ VIE13_C5_27 New Narrow-Band working frequencies in the
              2300-2450 MHz band
+ VIE13_C5_32 2400MHz Amateur Satellites

The VIE13_C5_03 which proposed the use of 144.000-144.035 MHz for satellite SSB/CW downlinks was modified to accommodate some CW contests, the proposal was reduced from 35 to 25kHz
(i.e. 144.000-144.025 MHz).

The minutes record that Graham Shirville, G3VZV presented the paper on the increasing use of 2m by satellites and the desire to use the under-utilized bottom of the 2m band 144.000-144.035, which had originally been harmonized for EME activity. "EME has subsequently moved to frequencies further up the band," Shirville said.

An IARU Region 1 representative noted that if the other IARU Region 2 and Region 3 are also willing to go for 144.000 and 144.025, then IARU Region 1 will support this proposal. IARU Region 2 Conference is in Cancun, Mexico in September 2013.

Additional details of the proposal and links to the Vienna C5 meeting minutes and papers are posted on the AMSAT-UK web at:
http://tinyurl.com/FrequencyProposal (www.amsat-uk.org)

In the show "Amateur Radio Today" for May 5, 2013 Murray Niman G6JYB was interviewed about the IARU Region 1 Vienna conference and discussed the proposal to permit amateur radio satellite linear transponders operate in the very bottom section of the 144 MHz band.

The show, hosted by Hans van de Groenendaal ZS6AKV, provides a preview of the Dayton Hamvention, Murray Niman who represented the SARL (and RSGB) at the IARU Vienna Conference. The interview with Murray Niman G6JYB starts 34 minutes into the show.

Listen to Amateur Radio Today May 5, 2013 at:
http://www.amateurradio.org.za/ARTODAY5MAY2013pod.MP3 (lo-res)
http://www.amateurradio.org.za/ARTODAY5MAY2013.MP3 (hi-res)

AMSAT-NA President Barry Baines, WD4ASW notes that the AMSAT-NA Board of Directors is studying the IARU Region 1 proposal but has as yet not reached a decision on whether to support it or not. He further noted that EME operators and other weak signal people need to be canvassed before the Board is willing to reach a decision.

Barry observed, "The inclusion of this news item in ANS is meant to encourage conversation/discussion and is not meant to suggest implicit endorsement by AMSAT-NA. AMSAT members and others who wish to comment on the proposal are encouraged to send their feedback to the AMSAT Board of Directors' mailbox at BOD at AMSAT.org."

[ANS thanks AMSAT-UK and the AMSAT-NA Board of Directors for the above information]

HAMSAT VO-52 Celebrates 8th Year On Orbit

Mani, VU2WMY, Secretary & Station-In-Charge Upagrah Amateur Radio Club VU2URC at India's ISRO Satellite Centre noted this week:

"It gives us great and immense pleasure to say that 'HAMSAT VO-52' completes eight fruitful years in orbit contributing to the wonderful cause of 'Amateur Radio Satellite Communication'.

The overall health parameters are excellent and we do hope that transponder(s) on-board 'HAMSAT VO-52' would continue to render good services for many more years to come.

On this joyous occasion, on behalf of everyone here in ISRO/India and on my personal behalf, I thank each and every user, contributors and well wishers for this great achievement.

Special thanks to Guru VU2GUR, Nitin VU3TYG, Partha VU2GPS, Sunil VU2UKR, Bob W7LRD, Trevor M5AKA and others for sending in their reports and suggestions for the possible HAMSAT 2."

[ANS thanks Mani, VU2WMY for the above information]

SA AMSAT Space Symposium Coming to Pretoria on May 18

The 2013 SA AMSAT Space Symposium will be held at the Innovation Hub in Pretoria on Saturday 18 May. Full details can be found on-line at: http://www.amsatsa.org.za.

Some of the program topics announced this week include:

+ Eddie Leighton, ZS6BNE, will take delegates on a historical journey in his presentation "living the dreams of our space pioneers", speaking of OSCAR-7, the oldest amateur satellite still operating.

+ Deon Coetzee, ZR1DE, will share his experiences developing a 14 MHz receiver to receive signals from the soon to be launched ZACube satellite.

+ Frik Wolff, ZS6FZ will have a presentation on antenna control.

SA AMSAT says, "The programme is packed with interesting papers to cater for all levels of interest and experiences. All attendees will receive a CD with all the presentations and other interesting material.

[ANS thanks SA AMSAT and the SARL News for the above information]

1000th Session of the Houston AMSAT Net Invites You to Check In

The Houston AMSAT net is on the air live on Tuesday evenings at 8:00 PM (Wednesday 0100 UTC) on the 145.47 W5RPT FM Repeater PL 123.0. The net can also be heard on Echolink on the AMSAT conference.

All interested satellite operators are invited to tune in on Tuesday, May 21 for 1000th consecutive session of the net. A special feature of the 1000th net will include AMSAT officers and other guests calling into the net.

If you are on the Echolink AMSAT conference you also count as being checked into the net.

[ANS thanks Andy W5ACM, Net Control of the Houston AMSAT Net for the above information]

NASA TV to Cover Soyuz Landing May 13

NASA Television will provide live coverage May 12-14 as three crew members aboard the International Space Station end five months in orbit and return to Earth for a scheduled landing May 13.

Expedition 35 Commander Chris Hadfield of the Canadian Space Agency, Tom Marshburn of NASA and Roman Romanenko of the Russian Federal Space Agency (Roscosmos) will undock their Soyuz TMA-07M spacecraft from the station at 7:08 p.m. EDT (UTC-4) May 13, heading for a landing on the steppe of Kazakhstan southeast of Dzhezkazgan at 10:31 p.m. EDT.

NASA TV's full coverage schedule is as follows (all times EDT):

Sunday, May 12:
3:40 p.m. -- Expedition 35/36 change of command ceremony

Monday, May 13:
3:30 p.m. -- Farewells and hatch closure (hatch closure scheduled

             at 3:50 p.m.)
6:45 p.m. -- Undocking (undocking scheduled at 7:08 p.m.)
9:15 p.m. -- Deorbit burn and landing (deorbit burn scheduled at
             9:37 p.m., landing scheduled at 10:31 p.m.)
Midnight -- Video file of hatch closure, undocking and landing
             activities

Tuesday, May 14:
Noon -- Video file of post-landing activities and interviews

For NASA TV schedule and video streaming information, visit:
http://www.nasa.gov/ntv

[ANS thanks NASA for the above information]

Satellite Shorts From All Over

+ We receive occasional inquiries about the error message shown when attempting to access the prior AMSAT.ORG web pages. These prior web pages are down and are being replaced with a new AMSAT web presence.

  You need to delete any old bookmarks pointing to http://www.amsat.org/amsat-new. The URL http://www.amsat.org should be manually entered into your browser. This will bring you to the new AMSAT web page currently under development. There is only basic information posted on this site at present but will expand in the future.

+ Members of the Camb-Hams are now active from the Isle of Mull (IOSA NH15, SCOTIA CN10, WLOTA 2485), Inner Hebrides, as GS3PYE/p until May 16. Look for 13 operators to be active on all bands and many modes from 160-2 meters as well as 472 kHz. The HF bands will be covered by 5 simultaneous stations, while 6m, 4m and 2m stations will have a great take-off towards the UK and Europe. They will have an antenna elevation system for 2m EME activity and will also be on many of the VHF/UHF satellite passes.

+ Singing in Space: Russia's space agency Roscosmos said this week it has reached an agreement with US-based Space Adventures Ltd. company to proceed with the plans to put British singer Sarah Brightman on a space flight to the International Space Station in October 2015. A final decision on Brightman's journey to the ISS has not been made as it has to be coordinated between Roscosmos and NASA, fitting the demanding schedule of visiting flights to the orbital station. (SpaceDaily.com)

+ The 2013 Central States VHF Society Conference will be held near Chicago at the Elk Grove Village, IL, Holiday Inn from Thursday July 25 until Sunday July 28. Refer to the conference web at:

http://www.csvhfs.org/2013conference/agenda.html for additional information on the technical program, family activities, and a tour of FermiLab.

+ If you can't make it to the Hamvention you can watch the event on the W5KUB.com world wide webcast. The live broadcast begins on Wednesday May 15 at 8:00 AM Central time for the 550 Mile drive from Memphis to Dayton live. The broadcast will be up on Thursday to show various vendors setting up. Then the show will feature Hamvention coverage Friday through Sunday. As in the past, W5KUB will be giving out thousands of dollars of ham prizes to their viewers. Join in on the fun at W5KUB.Com. When you login to the web chat room you are registered for the prize drawings.

+ In this video Canadian astronaut Chris Hadfield explains how to steer the ISS:
  http://www.youtube.com/watch?feature=player_embedded&v=IZHw4UKFiHQ

+ In case you wondered why there was never a station broadcasting on UHF TV channel 37 find out why in the Universe Today story, "The Curious Channel 37 - Must-see TV For Radio Astronomy".
  http://tinyurl.com/channel37 (UniverseToday.com)

[ANS thanks everyone for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

Primary and secondary school students are eligible for membership at one-half the standard yearly rate. Post-secondary school students enrolled in at least half time status shall be eligible for the student rate for a maximum of 6 post-secondary years in this status. Contact Martha at the AMSAT Office for additional student membership information. And with that please keep in mind to never trust an atom ... they make up everything!

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM

From 9158949682450505950

X-Google-Language: ENGLISH,ASCII-7-bit
X-Received: by 10.224.217.195 with SMTP id hn3mr19091861qab.5.1368459008539;
        Mon, 13 May 2013 08:30:08 -0700 (PDT)
MIME-Version: 1.0
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From: SWPC.Webmaster@noaa.gov
Newsgroups: rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.shortwave,rec.radio.info
Subject: Weekly Highlights of Solar and Geomagnetic Activity, 06 - 12 May 2013
Followup-To: rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.shortwave
Date: Mon, 13 May 2013 11:30:07 EDT
Organization: NOAA Space Weather Prediction Center
Lines: 66
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <20130513153001.2742133CC9@panix2.panix.com>
NNTP-Posting-Host: panix6.panix.com
X-Trace: reader1.panix.com 1368459008 5179 166.84.1.6 (13 May 2013 15:30:08 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Mon, 13 May 2013 15:30:08 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to   rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to   rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump

:Product: Weekly Highlights and Forecasts
:Issued: 2013 May 13 0755 UTC
Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center
Product description and SWPC contact on the Web
# http://www.swpc.noaa.gov/weekly.html
#
Weekly Highlights and Forecasts
#
Highlights of Solar and Geomagnetic Activity
06 - 12 May 2013

Solar activity was low for the first half of the week, and moderate for the second. After a slow start with only low-level C-class flares from the regions on the disk, activity jumped up to moderate levels on 10 May when Region 1745 (N14, L=336, class/area=Ekc/600 on 12 May) unleashed an M3.9 flare at 0057Z shortly after rotating around the east limb. Later that same day, Region 1745 produced an M1.3 flare at 1256Z. Region 1745 and 1744 (N05, L=259, class/area=Dai/190 on 12 May) were the most productive regions on the disk during the week, with 10 C-flares each to their credit. Region 1744 was responsible for the largest C-class flare of the week, a C9.0 at 09/2316, immediately preceding the beginning of moderate activity. The 11th was relatively quiet; the largest flare was a C8.0 from Region 1746 (S27, L=337, class/area=Dhi/270 on 12 May) shortly after it emerged on the disk. However, there was a 16 degree filament eruption centered near N39W50 which began at 11/2230Z. The resulting CME was visible in LASCO/C2 coronagraph imagery by 12/0000Z. WSA-Enlil output suggested this CME may brush past Earth late on the 14th or early on the 15th. Moderate activity returned on 12 April with two M-class events, an M1.9 at 2032Z and an M1.2 at 2244Z, from a newly emerged region beyond the east limb.

No proton events were observed at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit was at normal to moderate levels all week.

Geomagnetic field activity was at quiet to unsettled levels all week. A positive polarity recurrent coronal hole high speed stream brought unsettled conditions for the first three days of the week. The remainder of the week saw quiet geomagnetic conditions.

Forecast of Solar and Geomagnetic Activity
13 May - 08 June 2013

Solar activity is expected to be at low levels with moderate activity likely and a chance for high activity levels throughout the forecast period.

No proton events are expected at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to be at high levels begiining on 24 May and lasting through 31 May in response to a recurrent coronal hole high speed stream. Normal to moderate levels are expected for the balance of the period.

Geomagnetic field activity is expected to be at quiet to unsettled levels through the period with the exception of 15-16, 21-23. amd 28-29 May. Unsettled to active levels are expected on 15-16 May with the arrival of a glancing blow from the CME observed on 12 May. Conditions are expected to be unsettled to active on 21-23 May, and 28-29 May with in response to recurrent coronal hole high speed stream. Another high speed stream may bring unsettled conditions on 2-4 June.

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X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
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X-Comment-3: Acceptance does not convey approval of any external references.
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X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
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Ham Radio Now

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HamRadioNow: hamShack Switch - Birth of a Product

Posted: 14 May 2013 09:16 AM PDT
www.HamRadioNow.tv

HamRadioNow – Episode 77: hamShack Switch–Birth of a Product

If your ham shack is a little more elaborate than ours, you probably have a rat's nest of cables. Maybe you've graduated from unplugging and re-plugging to manual switchboxes or maybe a patch panel to change configuration of your audio, keying, antennas and other station input/output. hamShack Switch (they drop the leading capital.... not a typo) is a new product, frrom a new company, that aims to help you clean that up. Your shack computer will control their switchbox and let you easily reroute all those peripherals, either locally or remotely.

Jack Ritter W0UCE started the new company after a lifetime in the telcom industry, and in addition to pitching the product, tells us about launching a new product in the Amateur Radio market.

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Newsgroups:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.shor
twave,rec.radio.info
Subject: Weekly Highlights of Solar and Geomagnetic Activity, 13 - 19 May 2013
Followup-To:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.shor
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X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
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:Product: Weekly Highlights and Forecasts
:Issued: 2013 May 20 0139 UTC
# Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center
# Product description and SWPC contact on the Web
# http://www.swpc.noaa.gov/weekly.html
#
#                Weekly Highlights and Forecasts
#
Highlights of Solar and Geomagnetic Activity
13 - 19 May 2013
```

Solar activity reached high levels during the week, in fact the highest levels of activity since 2013 began. Between 13 and 14 May, newly-numbered Region 1748 (N11, L=296, class/area=Eki/310) produced an X2/1n flare at 13/1605Z and an X3/2b flare at 14/0111Z. Both events produced several radio emissions. Three Tenflares were observed at 14/0115Z (640 sfu), 14/0141Z (190 sfu), and 14/0203Z (370 sfu). A Type-II radio sweep was observed at 14/0107Z with an estimated velocity of 1514 km/s, in conjunction with a Type-IV radio sweep at 14/0113Z. SDO/AIA 193A showed a flare on the East limb at N12 from 14/0009-0154 and 14/0206-0224Z. A dimming and wave was observed over the east hemisphere and North Pole. Two distinct halo coronal mass ejections (CMEs) were subsequently observed on LASCO imagery. The first appeard in C2 coronagraph imagery at 14/0125Z and grew to a full HALO CME by 14/0224Z. The second event appeared at 14/0200Z with loop edge over the East and expanded to a partial HALO 280 degrees in width.

Solar activity remained at high levels on 15 May. Region 1748 grew to a Dki/beta-gamma-delta and produced an X1/2n flare at 15/0148Z associated with a Type II radio sweep (estimated shock speed 501 km/s), a Type IV radio sweep, a 440 sfu Tenflare; and a fast, assymetric halo CME. The CME speed was observed in LASCO C2 coronagraph imagery at 15/0148Z and expanded to a full HALO CME by 15/0248Z. SDO/AIA 193/211/304 showed the flare at 15/0124-0212Z which produced a faint dimming in the Northeast and North direction and a wave over the East hemisphere. The CME had and earthward component and its western flank reached Earth on 18 May at 0112Z.

Activity declined to moderate levels on 16 May with a single M1 flare from Region 1748 at 16/2153Z. Moderate levels continued through 17 May when Region 1748 produced an M3/2b flare at 17/0857Z. Type II (376 km/s) and Type IV radio bursts, as well as a 420 sfu Tenflare, were observed with this event. At 17/0912Z, LASCO/C2 coronagraph imagery observed a CME erupting from the east limb. It grew to a full halo CME by 17/0948Z and was estimated to be moving at approximately 1498 km/s. The CME reached Earth on 19 May at 2221Z.

The remainder of the week was dominated by low levels of activity as Region 1748 shrank to less than half its largest extent. The largest flare of the latter part of the week was a C9 observed on the east limb at 19/1750Z. The other regions on the visible disk throughout the week were relatively inactive, producing only low-level C-class activity.

A 10 MeV proton flux greater than 10 pfu at geosynchronous orbit event began at 15/1325Z, reached a maximum flux of 41 pfu at 17/1720Z, and ended at 18/1445Z. The 10 MeV flux remains enhanced at the time of this report. The event was attributed to the X1/2n flare at 15/0148Z.

The greater than 2 MeV electron flux at geosynchronous orbit was at normal to moderate levels all week.

Geomagnetic field activity ranged from quiet to minor storm levels with the arrival of two CMEs during the week. The first CME, which was observed leaving the sun on 15 May, passed the ACE spacecraft at 18/0023Z and arrived at Earth at 18/0112Z with a 31nT sudden impulse. Activity reached minor storm levels by 18/0300Z and remained there through the end of the 0300-0600Z synoptic period. Activity then dropped to active, unsettled, then quiet levels during the subsequent periods. The following evening, active levels were observed during the 0000-0300Z synoptic period.

The second CME, which left the sun on 17 May, passed the ACE spacecraft at 19/2221Z and arrived at Earth at 19/2306Z with a 29nT sudden impulse. Activity increased to active levels during the 2100-0000Z synoptic period.

Forecast of Solar and Geomagnetic Activity
20 May - 15 June 2013

Solar activity is expected to be low to moderate throughout the forecast period. High levels of activity are possible through 25 May and again after 7 June associated with Region 1748.

There is a chance for proton events at geosynchronous orbit, particularly through 25 May and again after 7 June associated with

Region 1748.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to be at high levels from 24-31 May associated with a recurrent coronal hole high speed stream.

Geomagnetic field activity is expected to reach minor to major storm levels on 20 May in response to the 17 May coronal mass ejection. In the absence of any Earth-directed coronal mass ejections, the remainder of the forecast period is expected to be characterized by quiet to unsettled levels of activity with the possible exception of 28 May, when another geoeffective coronal hole high speed stream becomes geoeffective and brings active levels.

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From: SWPC.Webmaster@noaa.gov
Newsgroups:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.shor
twave,rec.radio.info
Subject: Weekly Highlights of Solar and Geomagnetic Activity, 15 - 21 October 2012
Followup-To:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.shor
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Date: Mon, 22 Oct 2012 11:30:07 EDT
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X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
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X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Bytes: 5012

:Product: Weekly Highlights and Forecasts
:Issued: 2012 Oct 22 0609 UTC
# Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center
# Product description and SWPC contact on the Web
# http://www.swpc.noaa.gov/weekly.html
#
#                 Weekly Highlights and Forecasts
#
```

Highlights of Solar and Geomagnetic Activity
15 - 21 October 2012

Solar activity ranged from low to high levels. Activity was low during 15 - 19 October due to mostly low-level C-class flares. The largest flare of this interval was a C7 at 17/0802 UTC from Region

1596 (N07, L=150, class/area Eho/460 on 21 October) which displayed a beta-gamma magnetic configuration during most of its transit. Activity increased to high levels on 20 October due to an impulsive M9 x-ray flare at 20/1814 UTC from Region 1598 (S12, L=113, class/area Dhi/270 on 21 October) as it crossed the east limb. The M9 flare was associated with a Type II radio sweep (estimated shock speed 516 km/s) and a non-Earth-directed coronal mass ejection (CME). Activity decreased to moderate levels on 21 October due to an M1/Sf flare at 21/2003 UTC from Region 1598, which was also associated with a non-Earth-directed CME.

No proton events were observed at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit was at high levels during most of the period.

Geomagnetic field activity was at unsettled levels early on 15 October, then decreased to quiet levels for the rest of the period.

Forecast of Solar and Geomagnetic Activity
22 October - 17 November 2012

Solar activity is expected to be at low to moderate levels during 22 October - 02 November with M-class flare activity likely from Region 1598. Activity is expected to decrease to low levels during 03 - 17 November. However, there will be a chance for M-class flare activity beginning 15 November as (old) Region 1598 returns to the visible disk.

No proton events are expected at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to be at mostly high levels during 22 - 24 October. A decrease to normal to moderate flux levels is expected during 25 October - 04 November. An increase to mostly high flux levels is expected during 05 - 17 November.

Geomagnetic field activity is expected to be at quiet to unsettled levels during 22 - 23 October with a slight chance for active levels due to a coronal hole high-speed stream (CH HSS). Quiet levels are expected during 24 October - 07 November. An increase to unsettled levels is expected on 08 November due to a solar sector boundary passage followed by a co-rotating interaction region in advance of a CH HSS. A further increase to active to minor storm levels is expected on 09 November due to the onset of a CH HSS. Activity is expected to decrease to quiet to active levels on 10 November as CH HSS effects subside. A further decrease to quiet levels is expected during 11 - 17 November.

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rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.shor
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Subject: Weekly Highlights of Solar and Geomagnetic Activity, 22 - 28 October 2012
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rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.shor
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X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
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X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump

:Product: Weekly Highlights and Forecasts
:Issued: 2012 Oct 29 0547 UTC
# Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center
# Product description and SWPC contact on the Web
# http://www.swpc.noaa.gov/weekly.html
#
#                Weekly Highlights and Forecasts
#
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Highlights of Solar and Geomagnetic Activity
22 - 28 October 2012

Solar activity ranged from low to high levels. Activity was high during 22 - 23 October due to two major flares from Region 1598 (S11, L=113, class/area Dki/420 on 23 October). The first was an impulsive M5/1f at 22/1851 UTC and the second was an impulsive X1 at 23/0317 UTC associated with a Type II radio sweep and a 620 sfu

Tenflare. Region 1598 displayed a delta magnetic configuration within its trailer spots during 23 - 27 October. It showed gradual trailer spot decay beginning 24 October. Activity dropped to low levels during 24 - 28 with low-level C-class flares, most of which were from Regions 1598 and 1594 (S26, L=200, class/area Dao/090 on 16 October). Two Earth-directed coronal mass ejections (CMEs) occurred on 27 October. The CMEs were closely spaced in time and appeared to be associated with a B9/Sf flare at 27/1235 UTC from Region 1598.

No proton events were observed at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit was at high levels during most of the period with moderate levels observed on 27 October.

Geomagnetic field activity was at quiet levels throughout the period.

Forecast of Solar and Geomagnetic Activity
29 October - 24 November 2012

Solar activity is expected to be low during the period with a slight chance for M-class flares during 29 October - 02 November and 15 - 24 November.

No proton events are expected at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to be at normal to moderate levels during 29 October - 04 November. High flux levels are expected during 05 - 24 November.

Geomagnetic field activity is expected to be at quiet levels during 29 - 30 October. An increase to quiet to unsettled levels is expected late on 31 October, with a chance for active levels, due to the arrival of the CMEs observed on 27 October. A further increase to active levels is expected on 01 November, with a chance for minor storm periods, as CME effects continue. Field activity is expected to decrease to unsetttled to active levels on 02 November as CME effects gradually subside and a coronal hole high-speed stream (CH HSS) begins to disturb the field. Activity is expected to decrease to quiet to unsettled levels on 03 November as CH HSS effects subside. Quiet conditions are expected during 04 - 07 November. An increase to unsettled levels is predicted for 08 November, due to a solar sector boundary crossing followed by a co-rotating interaction region in advance of a CH HSS. A further increase to active levels is expected on 09 November, with a chance for minor storm periods, due to a CH HSS. Activity is expected to decrease to quiet to active levels on 10 November as CH HSS effects subside. Quiet levels are expected during 11 - 24 November.

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Complaints-To: groups-abuse@google.com
Injection-Info: glegroupsg2000goo.googlegroups.com; posting-host=188.190.125.66;
 posting-account=lpvsOQoAAADrItjCNLUGUA4f5NKzjLsd
NNTP-Posting-Host: 188.190.125.66
User-Agent: G2/1.0
MIME-Version: 1.0
Message-ID: <2854e3a3-2337-4120-b604-da38ef203f4f@googlegroups.com>
Subject: cock hungry college girls
From: Iran <tamarmadgecay@gmail.com>
Injection-Date: Tue, 30 Oct 2012 16:16:52 +0000
Content-Type: text/plain; charset=ISO-8859-1


cock hungry college girls http://www.google.com/search?
hl=en&q=cock+hungry+college+girls+site:gmquckbor972.blogspot.com&btnI=I%27m+Feelin
g+Lucky


From -6535954192559362062
X-Google-Thread: 8f86f75953,b7e8efbc20d3fbd9,start
X-Google-Attributes: gid8f86f75953,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
Received: by 10.224.193.72 with SMTP id dt8mr18842063qab.7.1351690764199;
        Wed, 31 Oct 2012 06:39:24 -0700 (PDT)
Received: by 10.52.96.71 with SMTP id dq7mr6637537vdb.11.1351690764136; Wed,
 31 Oct 2012 06:39:24 -0700 (PDT)
Path: gf5ni7629245qab.0!nntp.google.com!c7no747305qap.0!postnews.google.com!
glegroupsg2000goo.googlegroups.com!not-for-mail
Newsgroups: rec.radio.amateur.space
Date: Wed, 31 Oct 2012 06:39:23 -0700 (PDT)
Complaints-To: groups-abuse@google.com
Injection-Info: glegroupsg2000goo.googlegroups.com; posting-host=188.190.124.69;
 posting-account=lpvsOQoAAADrItjCNLUGUA4f5NKzjLsd
NNTP-Posting-Host: 188.190.124.69
User-Agent: G2/1.0
MIME-Version: 1.0
Message-ID: <0477b602-aded-488a-a5aa-db8c01dca0a2@googlegroups.com>
Subject: audrey savannah foursome
From: Iran <tamarmadgecay@gmail.com>
```

```
Injection-Date: Wed, 31 Oct 2012 13:39:24 +0000
Content-Type: text/plain; charset=ISO-8859-1
```

audrey savannah foursome http://www.google.com/search?hl=en&q=audrey+savannah+foursome+site:vladlenaivfun.blogspot.com&btnI=I%27m+Feeling+Lucky

```
From 2237591322747624399
X-Google-Thread: 8f86f75953,5e20cd5695524907,start
X-Google-Attributes: gid8f86f75953,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
Received: by 10.216.135.75 with SMTP id t53mr485822wei.0.1352366068013;
        Thu, 08 Nov 2012 01:14:28 -0800 (PST)
MIME-Version: 1.0
From: rram@panix.com (rec.radio.amateur.moderated Admin)
Newsgroups:
rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.rad
io.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amat
eur.space,rec.radio.info
Subject: Crossposting Permitted to rec.radio.amateur.moderated
Supersedes: <radio/ham-radio/moderated/crossposting-1-1350280801@panix.com>
Followup-To: poster
Date: 1 Nov 2012 02:00:02 -0400
Organization: rec.radio.amateur.moderated Moderation Team
Lines: 47
Approved: RRI Admin <rec-radio-info-request@panix.com>
Distribution: world
Expires: 19 Nov 2012 01:00:00 -0000
Message-ID: <radio/ham-radio/moderated/crossposting-1-1351749600@panix.com>
Reply-To: rec-radio-amateur-moderated-request@panix.com
(rec.radio.amateur.moderated Admin)
NNTP-Posting-Host: panix2.panix.com
X-Trace: reader1.panix.com 1351749602 726 166.84.1.2 (1 Nov 2012 06:00:02 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Thu, 1 Nov 2012 06:00:02 +0000 (UTC)
Summary: Short reminder for unmoderated newsgroups that crossposting is permitted
Keywords: FAQ, ham, amateur, radio, moderated, unmoderated, crossposting,
permitted
Path: q13ni188641wii.0!nntp.google.com!feeder1.cambriumusenet.nl!
feed.tweaknews.nl!85.12.40.130.MISMATCH!xlned.com!feeder1.xlned.com!
newsfeed.xs4all.nl!newsfeed6.news.xs4all.nl!xs4all!border4.nntp.ams.giganews.com!
border2.nntp.ams.giganews.com!border2.nntp.dca.giganews.com!
border3.nntp.dca.giganews.com!border1.nntp.dca.giganews.com!nntp.giganews.com!
news.mccarragher.com!news.grnet.gr!goblin1!goblin.stu.neva.ru!feeds.phibee-
telecom.net!ecngs!feeder2.ecngs.de!proxad.net!feeder1-1.proxad.net!
198.186.194.247.MISMATCH!news-out.readnews.com!transit3.readnews.com!panix!
panix2.panix.com!not-for-mail

Posted-By: auto-faq 3.3.2 beta (PGPMoose V2.0, Perl 5.005)
Archive-name: radio/ham-radio/moderated/crossposting
```

Revision: 1.2 2011/11/02 04:08:53
Posting-Frequency: posted twice monthly
URL: http://www.panix.com/~rram/usenet/rram/index.html

Changes followed by "|".

After a 30-day public discussion and feedback period to gauge reader opinions in March of 2009:

http://groups.google.com/group/rec.radio.amateur.moderated/browse_thread/thread/d7d337db35f23326

the rec.radio.amateur.moderated Moderation Team had decided to consider |
amending its charter, and permit limited simultaneous crossposting to
rec.radio.amateur.moderated and one other unmoderated
amateur-radio-related discussion newsgroup. After a successful trial |
period (90 days, through early July 2009), we decided to adopt this |
change permanently. |

Approved rec.radio.amateur.* newsgroups are those that are currently listed in the latest version of the "List of Big Eight Newsgroups" which is crossposted monthly to news.announce.newgroups, news.groups, and news.lists.misc.

Approved alt.radio.amateur.* and alt.ham-radio.* newsgroups are those that have been created consistent with the suggestions in "So You Want to Create an Alt Newsgroup" at:

http://www.faqs.org/faqs/alt-creation-guide/

Approved regional hierarchy newsgroups are those that contain either "radio.amateur" or "ham-radio" in their names, including uk.radio.amateur and aus.radio.amateur.misc.

We will make every reasonable effort to keep our list of approved newsgroups up-to-date. In case we have overlooked any, and a submission is rejected in error as a result, the rejected submitter can E-mail us at our administrative contact address (in the signature at the bottom of this article, and the default Reply-To for the rejection message) requesting that it be added, and that the article be approved. We may still choose to reject articles crossposted to any alt.* newsgroup with an inappropriate name, including obscene language, embedded name-calling, or encouragement of unlawful conduct.

Please direct any comments, questions, or criticisms to rec-radio-amateur-moderated-request@panix.com.

From -7284541062587600l5
X-Google-Thread: 8f86f75953,b034498507408754,start
X-Google-Attributes: gid8f86f75953,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII

```
Received: by 10.180.105.41 with SMTP id gj9mr5429208wib.3.1352365918873;
        Thu, 08 Nov 2012 01:11:58 -0800 (PST)
MIME-Version: 1.0
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-309 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sat, 3 Nov 2012 22:22:15 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 638
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <001c01cdba33$2b2313f0$81693bd0$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
X-Trace: reader1.panix.com 1351995736 18067 166.84.1.6 (4 Nov 2012 02:22:16 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 4 Nov 2012 02:22:16 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Path: q13ni188593wii.0!nntp.google.com!feeder3.cambriumusenet.nl!
feeder1.cambriumusenet.nl!feed.tweaknews.nl!194.109.133.84.MISMATCH!
newsfeed.xs4all.nl!newsfeed5.news.xs4all.nl!xs4all!newspeer1.nac.net!
border4.nntp.dca.giganews.com!border2.nntp.dca.giganews.com!
border3.nntp.dca.giganews.com!border1.nntp.dca.giganews.com!nntp.giganews.com!
news.mccarragher.com!news.grnet.gr!goblin3!goblin1!goblin.stu.neva.ru!
news.glorb.com!news-out.readnews.com!transit4.readnews.com!panix!rri.panix.com!
robomod!not-for-mail
Content-Language: en-us
```

AMSAT NEWS SERVICE
ANS-309

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor at amsat.org

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SB SAT @ AMSAT $ANS-309.01
ANS-309 AMSAT News Service Weekly Bulletins

AMSAT News Service Bulletin 309.01
>From AMSAT HQ SILVER SPRING, MD.
November 4, 2012
To All RADIO AMATEURS
BID: $ANS-309.01

President's Update Given at AMSAT-NA Annual Meeting in Orlando

AMSAT President Barry Baines, WD4ASW gave a presentation to members at the 30th Space Symposium and Annual General Meeting in Orlando, Florida on Saturday, October 27.

Barry noted the significant strides AMSAT has accomplished in the area of education outreach reflected by the appointment of Mark Hammond, N8MH, as AMSAT's VP-Educational Relations. Over the past year Mark has been developing a team to enhance our capabilities in this area and worked with the ARRL to develop new approaches to STEM education that will translate into future opportunities in space.

Barry provided a summary of additional accomplishments for 2012:

+ Fox selection by NASA for an ELaNa Launch based on our STEM educational activities.

+ The Fox-1 project is on schedule planning for launch in the 2nd half of 2013.

+ The Engineering Team has developed a capable and motivated staff.

+ Evolving partnerships for future launch opportunities are under way.

+ AMSAT has continued to deal with ITAR issues. The publication of the Fox design in the Symposium Proceedings book opens the path to placing the work in the public domain which is expected to relieve many ITAR issues going forward.

+ Appointment of Frank Bauer, KA3HDO as VP-Human Spaceflight will allow AMSAT to develop additional opportunity in this area.

+ Implementation of the new ARISS school selection process.

+ Re-establishment of the AMSAT store on-line.

+ Steps are being taken to revive the AMSAT Journal. Appointment of JoAnne Maenpaa, K9JKM as the new Editor.

+ ANS is a world-class distributor of information about amateur radio in space. One new ANS Editor has joined the weekly rotation with openings for additional volunteers.

Many details of AMSAT's future partnerships for launch opportunities will be published in the AMSAT Journal. A link to the President's Report will be added to our http://www.amsat.org web page.

[ANS thanks AMSAT President Barry Baines, WD4ASW for the above information]

Update on AO-27 Recovery Work

AO-27 Command Station Michael Wyrick, N3UC provides updates on the team's attempts to recover the satellite on their web page. They are working to return AO-27's FM repeater back to service after it stopped responding on October 5.

In early October AO-27 was restored back to running on its primary Bootloader. Control operators were able to turn on the Transmitter for a short time on several occasions. Also required were multiple recoveries the stuck AFSK modem which was one of the initial symptoms of the problems.

During recovery efforts AO-27 crashed once again on October 16. The command team once again recovered to the bootloader state, recovered from another occurrence of the AFSK modem problem and once again performed another software upload.

On October 18 the transmitter was left ON in an attempt to discharge the batteries with the hope that faults could be cleared. Once the battery was recharged last week the high-level EOS software aboard AO-27 ran for a few seconds before locking up. The team was able to reset it back to the bootloader. Dumps indicate it is locking up while fetching telemetry from the hardware. Michael, N3UC, wrote, "It does not look like there will be a quick resolution to this crash."

ATTENTION OPERATORS: To prevent interfering with the command team's recovery efforts, if you can't hear AO-27 in Analog mode, please don't transmit to it.

The latest AO-27 news is posted on its webpage:
http://www.ao27.org/AO27/index.shtml

Mode V/U (J) FM Voice Repeater Frequencies

Uplink 145.8500 MHz FM
Downlink 436.7950 MHz FM

[ANS thanks AO-27 Command Station Michael Wyrick, N3UC for the above information]

Successful ARISS School Contacts

Japan

Meikei High School in Tsukuba, Japan participated in an Amateur Radio on the International Space Station (ARISS) contact on Tuesday, October 23. Students from the science club, who are studying orbital mechanics and amateur radio satellite communications, used their own radio station, JJ1YAF to make the call to on-orbit astronaut Akihiko Hoshide, KE5DNI, an alumnus of the school. The contact was conducted in Japanese. Approximately 60 people were in attendance and media coverage included 4 newspapers as well as the Japan Broadcasting Corporation, NHK.

Massachusetts

On Friday, October 26, students from East Falmouth Elementary School in East Falmouth, Massachusetts took part in a successful Amateur Radio on the International Space Station (ARISS) contact with Sunita Williams, KD5PLB. Students asked 18 questions concerning what it is like to live in space and the experiments conducted on the Space Station. The contact was integrated into science lessons about the solar system, global climate changes on Earth and the advances in science and technology generated by space exploration. Over 100 students and guests were in attendance and reporters from two newspapers were present. Video of the event is posted at:
http://tinyurl.com/ARISS-Falmouth (YouTube)

Three Successful ARISS Contacts on October 30

South Florida Science Museum (SFSM), West Palm Beach, Florida had a successful Amateur Radio on the International Space Station (ARISS) contact on Tuesday, October 30. SFSM and the West Palm Beach Amateur

Radio Club, WPBARC, which maintains a radio station within the museum, worked with area teachers to provide educational content to students emphasizing NASA, the ISS and amateur radio. Read the details of the wide media coverage of this event as reported in ANS-302:
http://amsat.org/pipermail/ans/2012/000661.html

An Amateur Radio on the International Space Station (ARISS) contact was successful with the Southern Tier Catholic and Archbishop Walsh Academy, Olean, New York on Tuesday, October 30 via telebridge station IK1SLD in Italy. The contact was part of a comprehensive education curriculum which will pique students' interest in Science, Technology, Engineering and Mathematics (STEM).

Cumberland Elementary School, West Lafayette, Indiana had a successful Amateur Radio on the International Space Station (ARISS) on Tuesday, October 30. The contact was integrated into a curriculum covering topics on space research, robotics and engineering. Other activities planned include night sky observations, model rocketry and electrical circuit projects.

[ANS thanks Carol, KB3LKI, and the Amateur Radio on the International Space Station (ARISS) Status Report for the above information]

Flabob Airport Preparatory Academy ARISS Contact Wins PR Award

As Clint Bradford, K6LCS of Jurupa Valley said, "It was 13 months of planning for 10 minutes of conversation, but, oh!, what a conversation!"

"'LIVE! � from outer space!' Students speak to an astronaut in the orbiting International Space Station" was the special event on April 19, 2012 that earned an award for Karen and Clint Bradford in annual competition by the Public Relations Society of America. The event was planned for the 120 students of Flabob Airport Preparatory Academy and more than 80 parents, community leaders, media representatives and interested persons.

Clint initiated the event because of his hobby in ham radio and volunteer position with NASA through Amateur Radio on the International Space Station (ARISS): He provides school technical support for students in North America to talk to astronauts aboard the orbiting space station. NASA's "Teaching from Space" program is available to any school that applies, but the typical wait-time from application to event is three years.

He approached Kathy Rohm, vice president and director of community relations at Flabob Airport Preparatory Academy, which is supported by the Tom Wathen Center. She was enthusiastic to sponsor the literally out-of-this-world, once-in-a-lifetime special event to inspire students. More than 2,900 emails flew between Clint, Kathy, NASA, Flabob staffer Nina Bentham and ARISS volunteers to produce the event.

NASA-Houston flight director Phil Engelauf, who grew up in Rubidoux and whose mother, Beverly, still lives here, was invited to the event.

His duties prevented him from attending, but he sent warm regards to the students in a special message that is posted at the event's Web site - http://iss-flabob.com (on the blog).

The event went according to plan, except for a momentary glitch with audio quality, despite having tested the system for three days preceding the event. Clint quickly figured out a solution, although he later said that he was only 90 seconds from NASA terminating the call if he had not succeeded.

"When we looked around the hangar at the conclusion of the contact, hearing the students' whoops of happiness, we saw more than a few adults wiping at their eyes � us included," Karen said. "We felt intensely rewarded to think how our students may feel throughout their lives when they look up in the sky and remember the thrilling day when Flight Engineer Don Pettit answered their questions."

Student Brittany Cain had asked, "Besides missing your family and friends, what is the biggest adjustment you have made for this mission?" The assembled group laughed when Pettit replied he missed not being able to take a bath for six months!

The mission of Flabob Airport Preparatory Academy is to use aviation as a tool to motivate students to achieve their personal, academic, and career goals.

Current statistics reveal that American students severely lag behind their foreign peers: In a study of 31 countries, the Organization for Economic Cooperation and Development ranked Americans 21st in science and 25th in math. Consequently, President Obama launched the Educate to Innovate Campaign in 2009 to unite teachers, parents, businesses and students toward excellence in STEM (science, technology, engineering and math) studies.

Karen is a current member and past president of PRSA's California Inland Empire Chapter. There are more than 80 local members.

[ANS thanks the Public Relations Society of America and Clint Bradford, K6LCS for the above information]

Hurricane Damage Delays First Cuba National Satellite Meeting

The first National Meeting of Cuba's new �Grupo de Radioaficionados para Operaciones Satelitales�, GROS which was scheduled for November 8-11 has been delayed due to the severe impact caused by Hurricane Sandy last week to the eastern provinces of Cuba. Raydel Espinet CM2ESP reports the meeting will now be delayed to January, 2013.

The Meeting location at Camag�ey did not receive any damage but the provinces of "Santiago de Cuba", "Holgu�n" and "Guant�namo" were badly affected and many houses, schools and factories loss their roofs or were damaged by fallen trees. Several ham radio operators lost their houses.

Most of the state resources are now been prioritized to assist to the people of this three provinces that lost their houses. Under this circumstances we were asked to reschedule the National Meeting and the Coordination Board agreed with the request as a solidarity to our colleagues.

Many other activities the National Amateur Radio Federation (F.R.C.) had scheduled were also postponed included its National Council.

We are working on possible dates not sooner than January. We sorry for all of the inconvenience and the G.R.O.S. Coordination Board (Grupo de Radioaficionados para Operaciones Satelitales) will announce the new date when possible.

We still have great hopes with this First Meeting and during this extra months we will work harder to improve our work and make it better.

When the meeting convenes there are plans for a special callsign T47G, which will be active every day on HF and satellites, in the grid FL11. There are 4 conferences, 4 workshops, 1 exposition and as many demonstrations as passes currently scheduled.

In the meantime the G.R.O.S VHF FM Net devoted entirely to the Amateur Radio Satellites continues to meet on 145.550 MHz. The net will be on the air every Friday from 19:00 to 20:00 local time in Havana. CM2ESP is the Net Control Station.

They are looking forward to hear about Hector�s (CO6CBF) experience and stories about his participation in the AMSAT Symposium in Orlando during this First Meeting. The Group also wants to thanks to Patrick, WD9EWK, and all the people at AMSAT for their very important support to Hector. We want to send a big congrats to Hector too.

[ANS thanks GROS Coordinator Raydel Abreu Espinet, CM2ESP for the above information]

Special Symposium Visitor Hector Martinez, CO6CBF Back Home

Hector Martinez, CO6CBF traveled from Cuba to the AMSAT Symposium in Orlando last week. AMSAT had extended an invitation for Hector to attend and to make a presentation. Thanks to the work done by Patrick Stoddard, WD9EWK/VA7EWK, Hector was able to obtain a visa to come to the United States for the Symposium.

Patrick, WD9EWK posted an update, "On my way home from the airport, I called Hector. He made it home OK, and is now in the process of clearing the gear he brought back from Florida through the processes of Cuban Customs and the Cuban communications ministry. This is normal, and he was confident he could get everything cleared without incident. Hector also said he hopes to be able to post a message to thank everyone that helped make his trip to Florida possible."

Patrick says he incurred expenses related to bringing Hector to the Symposium totaling $2413.30. Upon returning home he found he has received contributions totaling $1960.00 for the "Hector fund". He wrote, "If there are other contributions in the mail, I will add that to my spreadsheet and post an update later. I don't think I will need any other contributions toward this effort. THANK YOU ALL!"

Video of Hector's presentation at the Symposium, "Working Satellites With a Homebrew Setup, Cuban Style" is posted on-line at:
http://www.youtube.com/watch?v�cmIubIBQ4

Hector, CO6CBF wrote, "It was a wonderful trip! Thanks very much to everyone who helped to come true this wonderful dream. I will never forget your help, solidarity and good wishes on this long process. I really appreciate it! My special thanks to the AMSAT Board of Directors and to Patrick WD9EWK who did an exceptional job on this process. The amateur radio by satellites is more than interchange gird locators; the AMSAT community is like a big family. Thanks very much again."

[ANS thanks Patrick Stoddard, WD9EWK/VA7EWK and Hector, CO6CBF for the above information]

F-1 Amateur Radio CubeSat Update

News posted on the AMSAT-UK web reports Thu Trong Vu XV9AA has provided this update on F-1:

The attempts to recover the CubeSat are now focusing on reception of the backup UHF FM channel 437.485 MHz (+/-10 kHz Doppler shift).

This FM beacon should transmit Morse Code for 20 seconds every minute during daylight.

The team would appreciate any reports of the beacon which can be sent to Thu Trong Vu XV9AA at thuvt@fpt.edu.vn

November 2, 2012, FSpace laboratory, FPT University issued an official report stating that no signal is heard from F-1 CubeSat after its deployment to space from the International Space Station (ISS) a month ago. However, the project team confirms that they are working to troubleshoot the problem.

According to Thu Trong Vu XV9AA, Project Manager, �As soon as F-1 was deployed from the ISS, FSpace�s ground station in Hanoi and other amateur radio stations around the world have been listening on F-1� frequencies 145.980 MHz and 437.485 MHz but so far nothing heard except for a few uncertain reports of a weak signal during the first few days.

Preliminary analysis points to failure of the satellite�s power supply subsystem as the cause of the problem. At the moment FSpace team together with US partner NanoRacks are collecting information, analyzing different scenarios that could happen to the satellite in orbit and experimenting with the Engineering Model (an identical backup unit) of F-1 CubeSat in the laboratory to determine the problem. The team is also planning to send uplink commands to the satellite in an effort to restart the onboard microcontroller. However, the chance of recovery is slim, the team acknowledged.

Currently, F-1 CubeSat is orbiting the Earth at an average altitude of 400km (perigee 390 km, apogee 410 km) and being tracked by NORAD as object #38855. Its altitude decreases with time due to friction with the atmosphere (atmospheric drag) and summarized in the following table. According to orbital analysis, the satellite has an orbital lifetime of about 5 months (until March 2013) before descending low and burn up completely in the atmosphere.

F-1�s mission goals are to �survive� the space environment, taking

photos of the Earth and communicating with the ground control station at a speed of 1200 bit per second. Mr Thu said: �Although we haven�t heard from F-1, during the course of the project team members have learned valuable knowledge and gained practical experience in developing a pico-satellite. This is an important stepping stone for us to move forward in the long journey to the stars�.

F-1 frequencies:

+ 145.980 MHz: main channel, 1.0W RF output, FM, AFSK 1200bps, one telemetry packet every 30 seconds, operates in the dark by default (but can be commanded later to operate in sunlight as well)

+ 437.485 MHz: backup channel, 0.2W RF output, FM, PWM CW beacon, each beacon transmission lasts about 20 seconds then 60 seconds delay, only operates in sunlight

More information and guide to download F-1 telemetry decoder can be found at http://fspace.edu.vn/?page_id'. Decoded data can be submitted to us via the telemetry decoder or by sending directly to: thuvt at fpt.edu.vn. Audio recordings are highly appreciated.

Read the full article at: http://www.uk.amsat.org/?p280 - and - http://www.uk.amsat.org/?p322

[ANS thanks AMSAT-UK and the F-1 CubeSat Team for the above information]

2013 CanSat Competition Applications Due November 30

Applications currently are being accepted for the 2013 CanSat Competition.

This annual competition is open to university and college students from the United States, Canada, Mexico and other countries. Teams of three to 10 students must design, build and launch a sensor payload called a CanSat. Each CanSat is slightly larger than a soda can and must be built according to the specifications released by the competition organizing committee.

All teams entering the CanSat competition are required to have a faculty adviser. The faculty adviser will oversee and be responsible for the conduct of the team at all times during the competition. The advisor is strongly encouraged to accompany the team to the competition.

Applications are due Nov. 30, 2012.

For more information about the competition and to download the application, visit http://www.cansatcompetition.com/.

Questions about this competition should be directed to: questions@juno.nrl.navy.mil.

[ANS thanks NASA Education Express for the above information]

NASA Offers Spot The Space Station Service Via Text or E-mail

WASHINGTON -- On the 12th anniversary of crews continuously living and working aboard the International Space Station, NASA announced Friday a new service to help people see the orbiting laboratory when it passes overhead. "Spot the Station" will send an email or text message to those who sign up for the service a few hours before they will be able to see the space station.

"It's really remarkable to see the space station fly overhead and to realize humans built an orbital complex that can be spotted from Earth by almost anyone looking up at just the right moment," said William Gerstenmaier, NASA's associate administrator for human exploration and operations. "We're accomplishing science on the space station that is helping to improve life on Earth and paving the way for future exploration of deep space."

When the space station is visible -- typically at dawn and dusk -- it is the brightest object in the night sky, other than the moon. On a clear night, the station is visible as a fast moving point of light, similar in size and brightness to the planet Venus. "Spot the Station" users will have the options to receive alerts about morning, evening or both types of sightings.

The International Space Station's trajectory passes over more than 90 percent of Earth's population. The service is designed to only notify users of passes that are high enough in the sky to be easily visible over trees, buildings and other objects on the horizon. NASA's Johnson Space Center calculates the sighting information several times a week for more than 4,600 locations worldwide, all of which are available on "Spot the Station."

Nov. 2 marks 12 years of continuous human habitation of the space station.

To sign up for "Spot the Station," visit:
http://spotthestation.nasa.gov

For information about the International Space Station and a full list of sightings, visit: http://www.nasa.gov/station

ANS thanks NASA for the above information]

Satellite Shorts From All Over

+ Jan Poppeliers, ON7UX has put together a short video compilation of the AMSAT-UK Colloquium held in Guildford September 14-16: http://tinyurl.com/Colloquium-ON7UX (Southgate). Video of all of the Colloquium presentations can be found at: http://www.uk.amsat.org/?page_id953

+ Video of the launch of the Progress 49 cargo craft headed for the

ISS can be viewed on-line at:
http://www.youtube.com/watch?feature�ayer_embedded&v�tD7pg4htU
This flight took advantage of the new abbreviated four-orbit rendezvous with the ISS. This flight was slated to bring a new VHF amateur radio handheld to the ISS. Due to crew scheduling the new radio is not planned to be activated until early 2013.

+ Update your keps! Russian Mission Control said the orbit of the International Space Station (ISS) was raised on Thursday by one kilometer to avoid a possible collision with US Iridium-33 satellite debris. The maneuver to adjust the station's orbit lasted about seven minutes. The orbital readjustment was made using the thrusters of Russia's Progress- M-16M spacecraft, docked with the station.

+ A report on Space-Travel.com says "Japan Plans to Launch New Carrier Rocket in 2013." JAXA announced the Epsilon carrier rocket to replace their M-5 Rocket. Epsilon's goal is to have an inexpensive rocket to launch compact low-cost satellites into orbit. Read the full story posted at: http://tinyurl.com/Japan-Epsilon.

+ South Korea sets new window for rocket launch. South Korea said Monday it would make another atempt to send a satellite into space sometime during a November 9-24 window from the Naro Space Centre on the south coast next month after a scheduled rocket launch last week was cancelled because of a technical glitch. Read the full posted at: http://tinyurl.com/SK-Launch-Delay

+ Enjoy a video that will take you from the Big Bang to our current human state in 90 seconds at: http://tinyurl.com/Life-in-90-seconds (UniverseToday.com)

+ NASA TV posted a video segment filmed from an altitude of 254 statute miles using external cameras on the ISS as it captured views of Hurricane Sandy on October 29, 2012 as it barreled toward a landfall along the New Jersey coastline:
http://tinyurl.com/ISS-Sandy (YouTube)

+ A timelapse video of NASA GOES-13 weather satellite photos of Sandy can be viewed at: http://tinyurl.com/goes13-Sandy (YouTube)

+ Prior to a successful splash down of the first commercial cargo delivery to the ISS, SpaceX posted a video of Dragon's departure. The frames are speeded up 15X to show the entire departure sequence from the ISS: http://tinyurl.com/SpaceX-Departure (YouTube)

+ 13-14 November - total solar eclipse in a narrow band of the Earth�s surface, running across northern Australia and into the South Pacific and across the international dateline. The eclipse peaks at 22:11 UT. Observers in all of Australia, New Zealand, and parts of southern Chile will see a partial solar eclipse (with proper solar filters, of course). Details posted at:
http://eclipse.gsfc.nasa.gov/SEplot/SEplot2001/SE2012Nov13T.GIF

+ The next Hudson Valley Satcom net date is Thursday, November 8 at 9 PM EST (UTC-5) on the 146.97 MHz MBARC Repeater (PL 100). An echolink connection is available on the N2EYH-L node. More information at: http://www.hvsatcom.org. (Stu, WA2BSS)

[ANS thanks everyone for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

Primary and secondary school students are eligible for membership at one-half the standard yearly rate. Post-secondary school students enrolled in at least half time status shall be eligible for the student rate for a maximum of 6 post-secondary years in this status. Contact Martha at the AMSAT Office for additional student membership information. And with that, please keep in mind that Sgr-A*, the 26,000 light-year distant black hole in the middle of our Milky Way galaxy, is consuming a gas cloud so large that it will take a decade, 2010 to 2020, to complete the encounter. Currently the dust in the cloud is approximately twice as hot as the surface temperature on Earth. The hydrogen gas in the cloud is twice as hot as the surface of the sun. A year from now temperatures in the cloud will become detectable to radio and X-ray telescopes on Earth as well as orbiting satellites such as NASA's Chandra X-ray Observatory.

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM

```
From -5801764192913987546
X-Google-Thread: 107ada,eb2cb031d3fe09b5,start
X-Google-NewGroupId: yes
X-Google-Thread: 10e8ad,eb2cb031d3fe09b5,start
X-Google-NewGroupId: yes
X-Google-Thread: 10b9c8,eb2cb031d3fe09b5,start
X-Google-NewGroupId: yes
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gida3e752f117,gid8f86f75953,gida4a23d5f63,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Received: by 10.66.74.72 with SMTP id r8mr3699002pav.32.1352133008157;
```

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        Mon, 05 Nov 2012 08:30:08 -0800 (PST)
MIME-Version: 1.0
Path: 6ni63701pbd.1!nntp.google.com!border1.nntp.dca.giganews.com!
border4.nntp.dca.giganews.com!border2.nntp.dca.giganews.com!nntp.giganews.com!
news-out.readnews.com!transit3.readnews.com!panix!rri.panix.com!robomod!not-for-
mail
From: SWPC.Webmaster@noaa.gov
Newsgroups:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.shor
twave,rec.radio.info
Subject: Weekly Highlights of Solar and Geomagnetic Activity, 29 October - 04
November 2012
Followup-To:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.shor
twave
Date: Mon, 5 Nov 2012 11:30:07 EST
Organization: NOAA Space Weather Prediction Center
Lines: 65
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <20121105163001.592DB33C53@panix2.panix.com>
NNTP-Posting-Host: panix6.panix.com
X-Trace: reader1.panix.com 1352133007 22677 166.84.1.6 (5 Nov 2012 16:30:07 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Mon, 5 Nov 2012 16:30:07 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to            rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Bytes: 4774
```

```
:Product: Weekly Highlights and Forecasts
:Issued: 2012 Nov 05 0312 UTC
# Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center
# Product description and SWPC contact on the Web
# http://www.swpc.noaa.gov/weekly.html
#
#                Weekly Highlights and Forecasts
#
```

Highlights of Solar and Geomagnetic Activity
29 October - 04 November 2012

Solar activity was at very low to low levels. The largest flares of the period were a pair of C1 flares from Regions 1596 (N07, L=150, class/area Eho/460 on 21 October) and 1598 (S12, L=111, class/area Dki/420 on 23 October) at 0507 UTC and 1139 UTC on 31 October, respectively. Other activity of note was a 24 degree long filament eruption centered at S32E07 that occurred from 0640-0855 UTC on 30 October. No Earth-directed coronal mass ejections (CMEs) were observed during the reporting period.

No proton events were observed at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit was at moderate levels on 29-30 October and again on 01 November. High levels were reached on 31 October. Normal background levels were observed from 02-04 November.

Geomagnetic field activity was at quiet to active levels with major to severe storm periods observed at high latitudes. The period began with quiet conditions until a sudden increase in solar wind speed at the ACE spacecraft from 290 - 360 km/s occurred at approximately 31/1445 UTC. A sudden impulse (13 nT) was observed at the Boulder magnetometer at 1539 UTC on 31 October. This initial activity was due to a pair of CMEs resulting from filament eruptions on 27 and 28 October. The geomagnetic field responded with a unsettled period during the 1500-1800 UTC period on 31 October. At approximatly 31/2348 UTC, the total magnetic field (Bt) increased from 9 to 15 nT while the Bz component rotated to a southward (negative) component for approximately 20 hours (maximum deflection of 11 nT). The geomagnetic field responded with quiet to active levels with major to severe storm periods observed at high latitudes on 01 November. By 02 November through the rest of the reporting period, quiet conditions prevailed.

Forecast of Solar and Geomagnetic Activity
05 November - 01 December 2012

Solar activity is expected to be very low to low until 08 November.
>From 08-21 November, a chance for M-class flares exist as old Region 1594 (S27, L=199) rotates across the visible disk. From 22 November until the end of the forecast period, very low to low levels are expected.

No proton events are expected at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to be at high levels from 09-24 November. Normal to moderate levels are expected from 25 November through 01 December.

Geomagnetic field activity is expected to be quiet to unsettled through the forecast period. Unsettled conditions with a chance for active periods are expected from 08-11 November and again on 13 November due to activity from a recurrent coronal hole high speed stream.

From -7069905066482283922
X-Google-Thread: 10e8ad,c1b0748aadd18727,start

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X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Received: by 10.66.84.202 with SMTP id b10mr2063522paz.43.1352317399475;
        Wed, 07 Nov 2012 11:43:19 -0800 (PST)
Path: s9ni86029pbb.0!nntp.google.com!news.glorb.com!feeder.erje.net!
eu.feeder.erje.net!newsfeed1.swip.net!news.astraweb.com!
border6.a.newsrouter.astraweb.com!not-for-mail
From: Chris Steyaert <observations@rmob.org>
Newsgroups: rec.radio.amateur.space,sci.astro.amateur
Subject: Radio Meteor Obs. Bull. October 2012  Draconids Orionids
Date: Wed, 07 Nov 2012 20:43:18 +0100
Message-ID: <beel98phknqpuhfloedrk8hi6282t8k1m8@4ax.com>
X-Newsreader: Forte Agent 5.00/32.1171
MIME-Version: 1.0
Lines: 14
Organization: Unlimited download news at news.astraweb.com
NNTP-Posting-Host: 4e3d79d6.news.astraweb.com
X-Trace: DXC=R1B;l=?><6i<^_jE4S2b@oL?
0kYOcDh@jPP>KJ6f>k\nnH_Jn0K;:=kMQibbaWeA[nb3<D_UX>L;iagHeeT9P6:l\M>bjUe?
i;m^KK[I`G7Vgb
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Radio Meteor Observation Bulletin No. 231 of October 2012 (81 K) is available
now as

     http://www.rmob.org/rmobtext/rmob1210.txt


More information and the visual presentation of the hourly forward scatter
counts can be found on

     http://www.rmob.org


     Chris




From -5442836952988597857
X-Google-Thread: 10e8ad,9719895829ec968b,start
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII
Received: by 10.66.89.164 with SMTP id bp4mr4276618pab.14.1352465342049;
        Fri, 09 Nov 2012 04:49:02 -0800 (PST)
MIME-Version: 1.0
Path: s9ni1439pbb.0!nntp.google.com!news.glorb.com!de-l.enfer-du-nord.net!
feeder1.enfer-du-nord.net!usenet-fr.net!proxad.net!feeder1-2.proxad.net!
193.252.117.184.MISMATCH!feeder.news.orange.fr!not-for-mail
From: me <me@me.com>
Subject: control
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Message-ID: <45181447@aioe.org>
Date: Fri, 09 Nov 2012 13:49:01 +0100
Newsgroups: rec.radio.amateur.space
X-Antivirus: avast! (VPS 121108-1, 08/11/2012), Outbound message
X-Antivirus-Status: Clean
Lines: 28
Organization: les newsgroups par Orange
NNTP-Posting-Date: 09 Nov 2012 13:49:01 CET
NNTP-Posting-Host: 90.0.32.135
X-Trace: 1352465341 reader.news.orange.fr 21259 90.0.32.135:15524
X-Complaints-To: abuse@orange.fr

Hi everyone.

everybody should applicate this type of guidelines
�These are people that
had good water,� said John Fenton, a barrel-chested farmer and chairman of
the Pavillion Area Concerned Citizens group. �And it changed when there was
this rush to come in here and develop the area when they didn�t understand
the geology.�
Mr. Fenton said he thought he had dodged a bullet until about
three years ago, when his tap water began occasionally fizzing and smelling
like petroleum. And even though Encana is giving him drinking water, Mr.
Fenton said he and his family still bathe in dirty water.
In the meantime,
the state has offered to provide cisterns for local residents, using $750,000
allocated by the Wyoming Legislature this year. Under the plan, people here
would still have to pay a fee to have their water hauled from the nearby
community of Pavillion, at a cost that could run more than $150 per month.

In the meantime, the state has offered to provide cisterns for local
residents, using $750,000 allocated by the Wyoming Legislature this year.
Under the plan, people here would still have to pay a fee to have their water
hauled from the nearby community of Pavillion, at a cost that could run more
than $150 per month.
;
how do you describe the storm customizing?

Before debating about the storm , this site seems appropriate http://
en.wikipedia.org/wiki/Water_quality
ciao

From 2917075253551028828
X-Google-Thread: 10e8ad,9851e5dc1e30398b,start
X-Google-NewGroupId: yes
X-Google-Thread: 10b9c8,9851e5dc1e30398b,start
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X-Google-Attributes: gid8f86f75953,gida4a23d5f63,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Received: by 10.66.78.161 with SMTP id c1mr8440223pax.16.1352737879808;
        Mon, 12 Nov 2012 08:31:19 -0800 (PST)
MIME-Version: 1.0

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border4.nntp.dca.giganews.com!border2.nntp.dca.giganews.com!nntp.giganews.com!
nx02.iad01.newshosting.com!newshosting.com!news-out.readnews.com!
transit4.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: SWPC.Webmaster@noaa.gov
Newsgroups:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.shor
twave,rec.radio.info
Subject: Weekly Highlights of Solar and Geomagnetic Activity, 05 - 11 November
2012
Followup-To:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.shor
twave
Date: Mon, 12 Nov 2012 11:31:19 EST
Organization: NOAA Space Weather Prediction Center
Lines: 96
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <20121112163111.BB2C433C9D@panix2.panix.com>
NNTP-Posting-Host: panix6.panix.com
X-Trace: reader1.panix.com 1352737879 4320 166.84.1.6 (12 Nov 2012 16:31:19 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Mon, 12 Nov 2012 16:31:19 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to            rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Bytes: 6920
```

```
:Product: Weekly Highlights and Forecasts
:Issued: 2012 Nov 12 0405 UTC
# Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center
# Product description and SWPC contact on the Web
# http://www.swpc.noaa.gov/weekly.html
#
#                 Weekly Highlights and Forecasts
#
```

Highlights of Solar and Geomagnetic Activity
05 - 11 November 2012

Solar activity ranged from very low to moderate levels. On 05 November, low levels were observed due to a C2 X-ray flare from a unnumbered region around the southeast limb at 05/1839 UTC. Solar activity remained at very low levels until 08 November when a long duration M1 flare was observed at 08/0223 UTC from Region 1611 (N13, L=240, class/area Eso/270 on 09 November). Associated with this event was a Type II radio sweep (784 km/s) and a non-geoeffective coronal mass ejection (CME) off the East limb. Also on 08 November, a full halo backsided CME was observed in SOHO/LASCO imagery from old Region 1598 (S12, L=111). By 09 November, solar activity returned to low levels with a single C1 flare from Region 1604 (N08, L=322, class/area Bx0/010 on 03 November) at 09/0151 UTC. Also on 09 November, a 12 degree long filament, centered near S16E03, erupted at approximately 09/1230 UTC which resulted in an Earth-directed CME first observed in SOHO/LASCO C2 imagery at 09/1524 UTC. By 10 November, multiple low level C-flares were observed including a long duration C2 flare from Region 1608 (S20, L=286, class/area Hrx/020 on 06 November) at 10/0504 UTC. An Earth-directed CME was observed in association with this C2 flare in STEREO A COR2 imagery at 10/0539 UTC and SOHO/LASCO C3 imagery at 10/1054 UTC. By 11 November, solar activity increased to moderate levels due to an M1 flare from Region 1614 (N15, L=193, class/area Dso/110 on 11 November) at 11/0233 UTC with an associated Type II radio sweep (659 km/s).

An enhancement of the greater than 10 MeV proton flux at geosynchronous orbit was observed beginning at approximately 08/1400 UTC likely associated with flare activity and the associated CME from old Region 1598. A peak enhancement of 2.4 pfu was observed at 09/0420 UTC and remained slightly enhanced through the end of the reporting period. No event thresholds were exceeded.

The greater than 2 MeV electron flux at geosynchronous orbit was at normal background levels throughout the reporting period.

Geomagnetic field activity was at quiet levels until 07 November when a coronal hole high speed stream (CH HSS) moved into geoeffective position. At 06/2119 UTC, the phi component of the interplanetary magnetic field changed from positive to negative with corresponding increases in density, temperature, and speed in ACE spacecraft data indicating a solar sector boundary crossing followed by a co-rotating interaction region and CH HSS. Solar wind speed increased from approximately 300 km/s to a peak of near 525 km/s by 07/1538 UTC. Total field (Bt) reached a maximum of 14 nT at 07/0031 UTC with a maximum deflection of the Bz component southward to -12 nT at 07/0039 UTC. The geomagnetic field responded with quiet to active periods on 07 November. By 08 November, conditions returned to quiet levels and remained that way through the end of the reporting period.

Forecast of Solar and Geomagnetic Activity
12 November - 08 December 2012

Solar activity is expected to be low with a chance for M-class flares through 24 November when Region 1614 is due to rotate off the west limb. Very low to low conditions are expected from 12 November until 27 November. On 28 November, and through the end of the forecast period, very low to low conditions with a chance for M-class activity is expected with the return of old Region 1598.

There is a slight chance for a greater than 10 MeV proton event from 28 November through the end of the reporting period due possible flare activity from old Region 1598.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to be at normal levels on 12 November. Moderate to high levels are expected from 13-24 November due to CME activity and recurrence. Normal levels are expected from 25 November through 03 December. Moderate to high levels are expected from 04-06 December due to CH HSS activity. By 07 December through the end of the forecast period, normal levels are expected.

Geomagnetic field activity is expected to be unsettled to active with a chance for minor storm periods starting around mid-day on 12 November and continuing through 13 November as the 09 and 10 November CMEs are expected to become geoeffective. Unsettled levels are expected on 14 November as CME activity wanes. Mostly quiet conditions are expected from 15-18 November. Quiet to unsettled conditions are possible on 19 November due to a possible solar sector boundary crossing. From 20 November through 02 December, mostly quiet conditions are expected. On 03-04 December, a recurrent CH HSS is expected to become geoeffective causing quiet to unsettled with isolated active conditions. A return to mostly quiet conditions is expected from 05 December through the end of the forecast period.

```
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X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
Received: by 10.224.186.20 with SMTP id cq20mr366297qab.8.1352962803714;
        Wed, 14 Nov 2012 23:00:03 -0800 (PST)
MIME-Version: 1.0
Path: gf5ni60396171qab.0!nntp.google.com!newsfeed2.dallas1.level3.net!
news.level3.com!panix!panix2.panix.com!not-for-mail
From: rram@panix.com (rec.radio.amateur.moderated Admin)
Newsgroups:
rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.rad
io.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amat
eur.space,rec.radio.info
Subject: Crossposting Permitted to rec.radio.amateur.moderated
Supersedes: <radio/ham-radio/moderated/crossposting-1-1351749600@panix.com>
Followup-To: poster
Date: 15 Nov 2012 02:00:02 -0500
Organization: rec.radio.amateur.moderated Moderation Team
Lines: 47
Approved: RRI Admin <rec-radio-info-request@panix.com>
Distribution: world
Expires: 03 Dec 2012 02:00:00 -0000
Message-ID: <radio/ham-radio/moderated/crossposting-1-1352962800@panix.com>
Reply-To: rec-radio-amateur-moderated-request@panix.com
```

(rec.radio.amateur.moderated Admin)
NNTP-Posting-Host: panix2.panix.com
X-Trace: reader1.panix.com 1352962802 18766 166.84.1.2 (15 Nov 2012 07:00:02 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Thu, 15 Nov 2012 07:00:02 +0000 (UTC)
Summary: Short reminder for unmoderated newsgroups that crossposting is permitted
Keywords: FAQ, ham, amateur, radio, moderated, unmoderated, crossposting, permitted

Posted-By: auto-faq 3.3.2 beta (PGPMoose V2.0, Perl 5.005)
Archive-name: radio/ham-radio/moderated/crossposting
Revision: 1.2 2011/11/02 04:08:53
Posting-Frequency: posted twice monthly
URL: http://www.panix.com/~rram/usenet/rram/index.html

Changes followed by "|".

After a 30-day public discussion and feedback period to gauge reader opinions in March of 2009:

http://groups.google.com/group/rec.radio.amateur.moderated/browse_thread/thread/d7d337db35f23326

the rec.radio.amateur.moderated Moderation Team had decided to consider |
amending its charter, and permit limited simultaneous crossposting to
rec.radio.amateur.moderated and one other unmoderated
amateur-radio-related discussion newsgroup. After a successful trial |
period (90 days, through early July 2009), we decided to adopt this |
change permanently. |

Approved rec.radio.amateur.* newsgroups are those that are currently listed in the latest version of the "List of Big Eight Newsgroups" which is crossposted monthly to news.announce.newgroups, news.groups, and news.lists.misc.

Approved alt.radio.amateur.* and alt.ham-radio.* newsgroups are those that have been created consistent with the suggestions in "So You Want to Create an Alt Newsgroup" at:

http://www.faqs.org/faqs/alt-creation-guide/

Approved regional hierarchy newsgroups are those that contain either "radio.amateur" or "ham-radio" in their names, including uk.radio.amateur and aus.radio.amateur.misc.

We will make every reasonable effort to keep our list of approved newsgroups up-to-date. In case we have overlooked any, and a submission is rejected in error as a result, the rejected submitter can E-mail us at our administrative contact address (in the signature at the bottom of this article, and the default Reply-To for the rejection message) requesting that it be added, and that the article be approved. We may still choose to reject articles crossposted to any alt.* newsgroup with an inappropriate name, including obscene language, embedded

name-calling, or encouragement of unlawful conduct.

Please direct any comments, questions, or criticisms to
rec-radio-amateur-moderated-request@panix.com.

```
From -7941581292630722542
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From: SWPC.Webmaster@noaa.gov
Newsgroups:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.shor
twave,rec.radio.info
Subject: Weekly Highlights of Solar and Geomagnetic Activity, 12 - 18 November
2012
Followup-To:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.shor
twave
Date: Mon, 19 Nov 2012 11:30:11 EST
Organization: NOAA Space Weather Prediction Center
Lines: 90
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X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
X-Received-Bytes: 6439
Bytes: 6591
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```
:Product: Weekly Highlights and Forecasts
:Issued: 2012 Nov 19 0648 UTC
# Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center
```

Product description and SWPC contact on the Web
http://www.swpc.noaa.gov/weekly.html
#
Weekly Highlights and Forecasts
#

Highlights of Solar and Geomagnetic Activity
12 - 18 November 2012

Solar activity ranged from low to high. On 12 November, moderate levels were observed due to a M2 X-ray flare from Region 1613 (S22, L=210, class/area Dso/170 on 12 November) and associated Type II radio sweep (645 km/s) at 12/2328 UTC. Solar activity increased to high levels on 13 November due to a M6 X-ray flare, also from Region 1613, and associated Type II radio sweep (1193 km/s) at 13/0204 UTC. This region also produced two M2 X-ray flares and an associated 10 cm burst of 220 sfu at 13/2052 UTC, but showed signs it was decreasing in areal coverage. Region 1613 continued its M-class flare activity into 14 November, producing a M1 X-ray flare, but continued to slowly decrease in area. A return to low levels was observed from 15 to 18 November. A C8 flare from Region 1618 (N08, L=136, class/area Eai/90 on 18 November) occurred at 16/1539 UTC with an associated Type II radio sweep (511 km/s) and a non-earth directed coronal mass ejections (CME). A long duration C1 flare from Region 1613 also occurred on 16 November with an associated 24 degree filament eruption centered near S39E22. Another filament eruption was observed from the East limb, as seen in SDO/AIA 304 imagery, but analysis of SOHO/LASCO C2 suggested these eruptions would not be geoeffective. While there were many new CMEs observed over the 7 day period, none were determined to be earth-directed and have had little to no observable impacts.

No greater than 10 MeV proton events were observed at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit was at normal background levels on 12 and 13 November, but reached moderate levels on 14, 15, and 16 November. The week ended with high levels for 17 and 18 November with the maximum value reaching 3160 pfu.

Geomagnetic field activity ranged from quiet to major storm levels. The week started off at quiet to unsettled levels, but by late 12 November to early 13 November, the effects from the two CMEs from 09 and 10 November were being felt. ACE data indicated a shock arrival at 12/2216 UTC and a sudden impulse was observed on earth at 12/2316 UTC (16 nT, as measured by the Boulder USGS magnetometer). The maximum southward component of Bz reached -19.5 nT at 12/2338 UTC, the total IMF reached 22.8 nT at 13/0053 UTC. The solar wind speed, as measured by the ACE spacecraft, reached a peak speed of 504 km/s at 13/0111 UTC. The geomagnetic field responded with unsettled to active levels throughout the day on 13 November, but increased to major storm levels early on 14 November. The increase in activity was caused by prolonged period of negative Bz attributed to a combination of lingering CME effects and a solar sector boundary crossing that occurred at approximately 14/0245 UTC, followed by a negative polarity coronal hole high speed stream (CH HSS). Activity returned to quiet to unsettled levels for the remainder of the week (15 - 18 November).

Forecast of Solar and Geomagnetic Activity
19 November - 15 December 2012

Solar activity is expected to be low with a chance for M-class flares through 27 November when Region 1618 is due to rotate off the west limb. Very low to low conditions are expected from 28 November through 05 December. From 06 December to the end of the period, low conditions are expected with a chance for M-class activity with the return of Region 1613.

No greater than 10 MeV proton events are expected at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to remain at moderate to high levels through 24 November. Normal levels are expected to return from 25 November through 03 December. Moderate to high levels are expected from 04-06 December due to coronal hole high speed stream (CH HSS) activity. Normal levels are again expected to return from 07 December through 13 December. From 14 December to the end of the period, expect moderate to high levels to return with CH HSS activity once again.

Geomagnetic field activity is expected to be mostly quiet through 02 December. Unsettled levels are likely on 03 and 04 December due to a possible solar sector boundary crossing (SSBC) followed by a CH HSS. Mostly quiet levels return from 05 December through the end of the period, except for a chance for unsettled activity on 11 December due to a possible SSBC/CH HSS.

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From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-330 AMSAT News Service Weekly Bulletins
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Date: Sat, 24 Nov 2012 21:37:53 EST
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Approved: RRI Admin <rec-radio-info-request@panix.com>

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X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
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AMSAT NEWS SERVICE
ANS-330

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor at amsat.org

In this edition:

* Fox-1 CubeSat Design Published in Proceedings and Web
* 2012 AMSAT Symposium Proceedings Available in the AMSAT Store
* PhoneSat CubeSat to Launch from Wallops in December
* N0D Special Event Station Celebrating The End of the World
* Successful ARISS School Contacts This Week
* Three Astronaut Hams Return Safely From ISS
* Call for Papers for IAA Conference: University Satellite Missions
* Satellite Shorts From All Over

SB SAT @ AMSAT $ANS-330.01
ANS-330 AMSAT News Service Weekly Bulletins

AMSAT News Service Bulletin 330.01
>From AMSAT HQ SILVER SPRING, MD.
November 25, 2012
To All RADIO AMATEURS

BID: $ANS-330.01

Fox-1 CubeSat Design Published in Proceedings and Web

During the 2012 Symposium AMSAT Vice-President Engineering, Tony Monteiro, AA2TX and the Fox Engineering team presented the latest status on the design, development, and construction of the Fox-1A satellite project. This is the 1U cubesat which is slated as the FM repeater transponder to replace AO-51.

The Proceedings of the AMSAT-NA 30th Symposium and AMSAT-NA Annual Meeting, October 26-28 in Orlando, Florida have been put in the on-line AMSAT Store. Please visit the store at:
http://store.amsat.org/catalog/

The proceedings contains over 30 articles on subjects ranging from current satellite operations to detailed updates on the Fox Project.

AMSAT's Fox web page at http://www.amsat.org/amsat-new/fox/ now has been refreshed with the latest information from the Symposium:

+ Fox-1 Mechanical design and component integration diagrams

+ Fox-1 Thermal Design

+ Fox-1 Radiation Environment

+ Preliminary screenshot view of Fox-1 Telemetry Program

Fox-1A's design goals include:

+ Fox-1 is designed to operate in sunlight without batteries once the battery system fails. This applies lessons learned from AO-51 and ARISSat-1 operations.

+ In case of IHU computer failure Fox-1 will continue to operate its FM repeater in a basic, 'zombie sat' mode, so that the repeater remains on-the-air.

+ Fox-1 is designed as the immediate replacement for AO-51. Its U/V (Mode B) transponder will make it even easier to work with modest equipment.

+ From the ground user's perspective, the same FM amateur radio equipment used for AO-51 may be used for Fox-1.

AMSAT's Fox-1 project timeline is based on targeting a launch in the second half of 2013. NASA will determine on which flight each of the Project ELaNa CubeSats fly.

Watch for news in the AMSAT Journal for details of AMSAT's partnership with universities, the National Science Foundation, and NASA in seeking grants for getting the first and future Fox generation satellites into orbit.

[ANS thanks the Fox Team for the above information]

2012 AMSAT Symposium Proceedings Available in the AMSAT Store

The Proceedings of the AMSAT-NA 30th Symposium and AMSAT-NA Annual Meeting, October 26-28 in Orlando, Florida have been put in the online AMSAT Store. Please visit the store at:
http://store.amsat.org/catalog/

The proceedings contains over 30 articles on subjects ranging from current satellite operations to updates on the Fox Project.

If you could not make the meeting, this is a great source of the latest information.

Price is $25 + $12 Shipping for USA. See the details on the store web page and order your copy today!

[ANS thanks Martha at the AMSAT Office for the above information]

PhoneSat CubeSat to Launch from Wallops in December

The PhoneSat cubesat is planned for launch aboard a new commercial rocket from Orbital Sciences Corp. Orbital's initial flight of the Antares-110 vehicle will carry PhoneSat into low earth orbit around December 17. The vehicle will be launched from a new launch pad LA-0A at Wallops Island, where the former Conestoga launch pad was located.

Phonesat carries an amateur radio payload on 437.425 MHz, has been chosen as one of the winners in the Aerospace category for the Popular Science magazine "Best of What's New 2012" awards.

PhoneSat is a technology demonstration mission consisting of three 1U CubeSats intended to prove that a smartphone can be used to perform many of the functions required of a spacecraft bus.

The satellite is built around the Nexus smartphone which will be running the Android operating system and will be enclosed in a standard 1U cubesat structure. The main function of the phone is to act as the

Onboard Computer, but the mission will also utilize the phone's SD card for data storage, 5MP camera for Earth Observation, and 3-axis accelerometer and 3-axis magnetometer for attitude determination.

One of the nanosatellites, powered by the HTC Nexus One smartphone, will send back pictures of Earth. The other two, running on the Samsung Nexus S, will have two-way S-band radio allowing them to be controlled from Earth.

With a short lifetime of only about one week, the satellites have no solar cells and operate on battery only.

More information about the Antares vehcicle can be found at:
http://www.orbital.com/Antares/

A video of the Popular Science award for PhoneSat in the "Best of What's New 2012" awards can be viewed at:
http://tinyurl.com/PhoneSatNews (YouTube)

NASA Ames web page of the PhoneSat project can be found at:
http://tinyurl.com/PhoneSat-NASA (nasa.gov)

AMSAT-UK posted news of PhoneSat at:
http://www.uk.amsat.org/?p=11544

[ANS thanks NASA, Gunter's Space Page, and AMSAT-UK for the above information]

N0D Special Event Station Celebrating The End of the World

That's right, the end is finally near. According to one of the three Mayan Calendars, the End of the world will occur on Dec 21, 2012. To celebrate this literally once in a lifetime event, Special Event Station N0D (Now Zero Days) will be activated for three days during and after(?) the end of the world. December 20 is a celebration of the end of the world. December 21, the day of destruction, we will be on the air as long as possible. December 22nd, that is a little iffy right now.

N0D will be activated on the satellites by Allen Mattis, N5AFV, on December 20, 2012, on December 21, 2012 unless the day of destruction makes that impossible, and on December 22, 2012 if the world survives.

More information is available on the Official N0D website:
http://www.nowzerodays.com
You can also e-mail the N0D team at N0D.Doomsday@gmail.com

Amateur radio stations around the crumbling globe are invited to contact N0D, who will be operating from a secret undisclosed location. QSL with SASE to the address in QRZ. If Doomsday actually does happen,

we regret that a QSL will not be possible so hold on to your SASE until the 22nd at least. Check out the website for a preview of the N0D QSL card.

You can celebrate Doomsday by contacting N0D directly on the air. Amateurs can also become an official Doomsday station by registering on the website. You will be given a registration number and the authority to identify yourself as "Official Doomsday Station" followed by your Doomsday number.

Official N0D Doomsday apparel will be available soon; T-shirts, Caps and buttons.

Official Doomsday stations will receive the Doomsday Station Certificate. Stations contacting at least 10 Official Doomsday Stations during the event will be recognized on the web site.

It is not entirely clear exactly how it will happen. Will it be a cataclysmic shift in the earth's magnetic field, Global Warming on steroids, earthquakes, volcanoes floods, global thermonuclear war, Meteor collision, the 10 plagues of Egypt, UFO invasion. who knows? There are scientists, soothsayers and philosophers on both sides of the question. Either way it will be an event worth remembering ... or maybe there will be no one left to remember it?

Check the website for the latest updates: http://www.nowzerodays.com

[ANS thanks Allen Mattis, N5AFV for the above information]

Successful ARISS School Contacts This Week

Italy

An Amateur Radio on the International Space Station (ARISS) contact was held with Liceo scientifico Giacinto De Sivo - Fondazione Villaggio dei Ragazzi in Maddaloni, Italy on Tuesday, November 20. Amateur Radio station IK1SLD in Italy provided the radio link. The contact is incorporated into lessons focused on the developments in astronomy from a scientific, philosophical, and literary point of view.

India

An Amateur Radio on the International Space Station (ARISS) contact was held between Sunita Williams, KD5PLB on the ISS and students visiting the GujaratScience City (GSC) in Ahmedabad, Gujarat, India on Wednesday, November 14 via telebridge station IK1SLD in Italy.

The children got in 15 questions about daily life on the ISS before losing the radio connection. GSC has high-tech exhibitions covering space exploration and communications; the contact was part of a special outreach program of the GSC, organized to provide students with hands-on activities related to the ISS. The displays and activities provide children with the motivation and inspiration for a career and future in space science and research. The Times of India covered the event. See:
http://timesofindia.indiatimes.com/city/ahmedabad/Excited-kids-go-on-space-talk-with-Sunita/articleshow/17250710.cms

Video of this event can be viewed on-line at:
http://tinyurl.com/ARISS-Contact-India (Southgate)

Florida

On November 16, Florida's Flagler Palm Coast Amateur Radio Club (FPCARC) connected with Astronaut Sunita Williams, KD5PLB via an Amateur Radio on the International Space Station (ARISS) contact. Indian Trails Middle School hosted the event, but students from other area schools also participated.

Former NASA astronaut Winston Scott gave a presentation to the students. All schools in the district were able to participate in the event through live internet streaming. Media representatives were present and articles have been posted.

FlaglerLive.com has a story:
http://flaglerlive.com/46845/ham-radio-iss/

For the Palm Coast Observer article, see:
http://www.palmcoastobserver.com/news/palm-coast/Neighborhood/111720125718/Students-get-visit-from-astronaut-talk-to-space-st

Indiana

Cumberland Elementary School participated in an ARISS contact on October 30. Students had the opportunity to question Indiana native Kevin Ford, KF5GPP about ISS life. The contact video is now available. See:
http://cumberland-iss.weebly.com

[ANS thanks Carol Jackson, KB3LKI and the 2012-11-19 ARISS Status Report for the above information]

Three Astronaut Hams Return Safely From ISS

Expedition 33 Commander Sunita Williams, KD5PLB of NASA and Flight Engineers Akihiko Hoshide, KE5DNI of Japan Aerospace Exploration Agency and Yuri Malenchenko, RK3DUP of Roscosmos rode their Soyuz TMA-05M spacecraft to a safe landingin a remote area near the town of Arkalyk, Kazakhstan on November. 19, 2012. Williams, Hoshide and Malenchenko returned from four months onboard the International Space Station.

NASA ISS Ham Radio Project Engineer Kenneth Ransom, N5VHO summarized Amateur Radio on the International Space Station (ARISS) successes for Williams, Malenchenko and Hashide noting 39 contacts with schools. Of these contacts 14 were via telebridge, while 25 took place directly between the school and the ISS via Amateur Radio.

During Expedition 32 Sunita added 22 to her previous record of 33 school events which puts her on top for the most career schools talked to from orbit. Malenchenko made two contacts, one with the Ukraine and another with Russia, while Hashide completed 15, including four with his native Japan, as well as with the US, Germany, Australia, Poland and Italy.

Photos and additional news of the Soyuz landing are on-line at:
http://spaceref.com/news/viewsr.html?pid=42645
http://spaceref.com/news/viewsr.html?pid=42643
http://tinyurl.com/NovSoyuzLanding (Space-Travel.com)

Expedition 34 is crewed by NASA astronaut Kevin Ford, KF5GPP, and Russian cosmonauts Evgeny Tarelkin and Oleg Novitskiy.

Sunita Williams recorded an extensive tour of the orbital laboratory including scenes of each of the station's modules and research facilities with a running narrative of the work that has taken place and which is ongoing aboard the orbital outpost.

Get your ISS tour at: http://tinyurl.com/ISS-Guided-Tour (YouTube)

[ANS thanks, ARISS, ARRL, SpaceRef.com and Space-Travel.com for the above information]

Call for Papers for IAA Conference: University Satellite Missions

The 2nd IAA Conference on University Satellites Missions and Cubesat Winter Workshop will be held in Rome, Italy from February 3-9, 2013 under the main sponsorship of IAA, GAUSS Srl, ESA, ASI, Italian Air Force, Sapienza University of Roma, Morehead State University (Kentucky), Von Karman Institute, FILAS, BCC Roma.

The Conference has the goal to provide the international space community with a forum for presentations and discussions in the area of

University Satellites. Particular emphasis will be given to the theme, "Innovative aspects related to science and engineering for university satellites". Three days will be completely dedicated to the Cubesat community.

Some of the proposed topics are:

Space Environment, Remote sensing and Earth observation, Innovative solutions for university satellite subsystems, Launch opportunities, Space Debris, Ground Segment and Stations Network, New Perspectives for Cubesats, Cubesats Future Payloads and Experiments, Satellite Orbit and Attitude Determination and Control, Micro-propulsion Subsystems, University Platform for biomedical research in Space, Formation Flying, Cubesat In-Orbit Experience, Cubesats Scientific Missions and applications" activities.

The preliminary program, logistics, and registration information, exhibition stand information may be found on the symposium website at http://www.gaussteam.com in the events section.

Abstract Submission Deadline: December 17, 2012
Acceptance Notification*: December 22, 2012
Paper Submission Deadline*: January 25, 2013

[ANS thanks Filippo Graziani, G.A.U.S.S. President and IAA member, Conference Chair for the above information]

Satellite Shorts From All Over

+ Video of ARISS contact from the National Scouting Museum Jamboree on the Air (JOTA) event in Irving, Texas on October 20 with Sunita Williams, KD5PLB on the ISS can be viewed at: http://vimeo.com/53281390

+ NASA's Pete Worden presentation at the Canadian Space Summit on the topic of Small Satellites for Science and Other Uses and as an example: Earth Observation, promises and challenges has been posted by SpaceRef.com at: http://tinyurl.com/SpaceRefSmallSatellites

+ Andy Foad, G0FTD has made a collection of RF calculations available in a spreadsheet. This can be downloaded from: https://sites.google.com/site/g0ftdradio/home/rf-spreadsheets

+ How about the concept of private/commercial CubeSat missions to Mars? See the exploremars.org posting at: http://tinyurl.com/CubeSatsToMars

+ The Van Allen Probes Mission, part of NASA's Living With a Star program, studies the physical dynamics of Earth's radiation belts and space weather. A video of this mission, including classroom activities about space weather is posted by Johns Hopkins University Applied Physics Laboratory: http://vanallenprobes.jhuapl.edu/ (Bill, W3XO)

[ANS thanks everyone for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

Primary and secondary school students are eligible for membership at one-half the standard yearly rate. Post-secondary school students enrolled in at least half time status shall be eligible for the student rate for a maximum of 6 post-secondary years in this status. Contact Martha at the AMSAT Office for additional student membership information. And with that, please keep in mind the ham who's son pestered his parents for a trip to the zoo. Finally his mother talked his reluctant father into taking him. "So how was it?" his mother asked when they returned home. "Great," the son replied. "Did you and your father have a good time?" asked his mother. "Yeah, Daddy really liked it," exclaimed the son excitedly, "especially when one of the animals came home at 30 to 1!"

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM

```
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2012
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X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump

:Product: Weekly Highlights and Forecasts
:Issued: 2012 Nov 26 0613 UTC
# Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center
# Product description and SWPC contact on the Web
# http://www.swpc.noaa.gov/weekly.html
#
#                 Weekly Highlights and Forecasts
#
```

Highlights of Solar and Geomagnetic Activity
19 - 25 November 2012

Solar activity ranged from very low to moderate levels. The summary period started out at low levels but changed on day two as Region 1618 (N08, L=135, class/area Ekc/450 millionths on 23 November) and Region 1612 (N09, L=228, class/area Hsx/100 millionths on 12 November) both produced M-class x-ray events. Region 1612 produced an M1 solar flare at 20/1241 UTC with multiple discrete radio frequency bursts. Around the same time, h-alpha imagery indicated multiple filament channel eruptions. LASCO C2/C3 imagery supported a partially Earth directed CME. Region 1618 followed this event with an M1/Sn solar flare at 20/1928 UTC. Associated with this flare were several discrete radio frequency bursts. LASCO C2/C3 imagery indicated a CME, however further analysis indicated that this would not be Earth directed. On 21 November, Region 1618 continued to produce M-class solar flares, with an M1/1n solar flare at 21/0656 UTC and an M3 x-ray event at 21/1530 UTC. Both of these events had Type II and Type IV radio sweeps associated with them. Imagery once again supported another Earth directed CME. Later on 21 November, a large filament erupted off the north-east limb. Location and imagery suggested this CME would not be Earth directed. Activity declined to very low levels on 22 November. Region 1618 remained a magnetically complex region during this time, however simplification in the leader spots was observed. Low levels prevailed throughout the summary period with Region 1618 producing the occasional C-class events. On 23 November, a large filament eruption was observed in the southwest quadrant of the solar disk. The associated CME was determined to have an Earth directed component. Towards the end of the summary period, Region 1620 (S13, L=92, class/area Hax/090 millionths on 23 November) started to evolve and produce C-class activity. At the end of the period, Region 1620 was magnetically classified as a beta-gamma.

No proton events were observed at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit was high levels on 19, 22 and 23 November. The remaining days were at normal to moderate levels.

Geomagnetic field activity was at quiet to active levels. The summary period began at quiet levels with solar wind speed, as measured by the ACE spacecraft, hovering around 400 km/s. On 20 November, an increase in solar wind speed to around 460 km/s was observed, with sustained periods of the negative Bz component of the (Interplanetary Magnetic Field) IMF. This observed change in the solar wind parameters help drive unsettled to active levels late on 20 November and early into 21 November. Predominantly quiet levels prevailed until late on 23 November when solar wind observations indicated the arrival of a CME. At the ACE spacecraft, solar wind speeds increased from 320km/s - 420 km/s with Bt of the IMF increasing to around 17 nT. As the CME arrived at Earth, an increase to active levels was observed. As CME effects continued on to 24 November, active to quiet levels were observed with isolated minor to major storm periods observed at high latitudes. As CME effects waned, quiet level prevailed from late on 24 November throughout the rest of the summary period. Initial analysis and data suggested this was the CME from 20 November, however as the CME progressed, data suggested the incoming CMEs might have merged into this one event.

Forecast of Solar and Geomagnetic Activity
26 November - 22 December 2012

Solar activity is expected to be at low levels with a chance for

M-class flares from 26 November - 01 December as Regions 1620 and 1618 evolve and rotate off the visible disk. A decrease to low levels is forecast from 02 - 04 December. An increase to low levels with a slight chance for M-class flares is expected for the remainder of the period as Regions 1612, 1618, and 1620 return.

No proton events are expected at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to be at normal to moderate levels from 26 November - 05 December, 08- 11 December, and 19-22 December. High levels are expected at all other times due to coronal hole high speed stream activity.

Geomagnetic field activity is expected to be at quiet to active levels. The forecast period is expected to begin at predominantly quiet levels. On 27 - 29 November, an increase to quiet to active levels is expected as the CME from 23 November is expected to become geoeffective. From 30 November through 05 December, quiet to unsettled levels are expected in response to multiple coronal hole high speed streams. A return to quiet levels is expected from 06-10 December. Another increase to quiet to unsettled levels is expected on 11-15 December due to recurrent coronal hole high speed streams. A return to quiet levels is expected for the remainder of the period.

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From -1279185812050986769
X-Google-Thread: fc2a5,93acdcd32739922e,start
X-Google-NewGroupId: yes
X-Google-Thread: 10e8ad,93acdcd32739922e,start
X-Google-NewGroupId: yes
X-Google-Attributes: gid241b302a50,gid8f86f75953,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Received: by 10.68.217.69 with SMTP id ow5mr815357pbc.0.1354345202967;
        Fri, 30 Nov 2012 23:00:02 -0800 (PST)
MIME-Version: 1.0
Path: s9ni21158pbb.0!nntp.google.com!npeer03.iad.highwinds-media.com!
news.highwinds-media.com!feed-me.highwinds-media.com!news.glorb.com!news-
out.readnews.com!transit3.readnews.com!panix!panix2.panix.com!not-for-mail
From: rram@panix.com (rec.radio.amateur.moderated Admin)
Newsgroups:
rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.rad
io.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amat
eur.space,rec.radio.info
Subject: Crossposting Permitted to rec.radio.amateur.moderated
Supersedes: <radio/ham-radio/moderated/crossposting-1-1352962800@panix.com>
Followup-To: poster
Date: 1 Dec 2012 02:00:02 -0500
Organization: rec.radio.amateur.moderated Moderation Team
Lines: 47
Approved: RRI Admin <rec-radio-info-request@panix.com>
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Distribution: world
Expires: 19 Dec 2012 02:00:00 -0000
Message-ID: <radio/ham-radio/moderated/crossposting-1-1354345200@panix.com>
Reply-To: rec-radio-amateur-moderated-request@panix.com
(rec.radio.amateur.moderated Admin)
NNTP-Posting-Host: panix2.panix.com
X-Trace: reader1.panix.com 1354345202 3537 166.84.1.2 (1 Dec 2012 07:00:02 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sat, 1 Dec 2012 07:00:02 +0000 (UTC)
Summary: Short reminder for unmoderated newsgroups that crossposting is permitted
Keywords: FAQ, ham, amateur, radio, moderated, unmoderated, crossposting,
permitted
X-Received-Bytes: 3836

Posted-By: auto-faq 3.3.2 beta (PGPMoose V2.0, Perl 5.005)
Archive-name: radio/ham-radio/moderated/crossposting
Revision: 1.2 2011/11/02 04:08:53
Posting-Frequency: posted twice monthly
URL: http://www.panix.com/~rram/usenet/rram/index.html

Changes followed by "|".

After a 30-day public discussion and feedback period to gauge reader opinions in March of 2009:

http://groups.google.com/group/rec.radio.amateur.moderated/browse_thread/thread/d7d337db35f23326

the rec.radio.amateur.moderated Moderation Team had decided to consider |
amending its charter, and permit limited simultaneous crossposting to
rec.radio.amateur.moderated and one other unmoderated
amateur-radio-related discussion newsgroup. After a successful trial |
period (90 days, through early July 2009), we decided to adopt this |
change permanently. |

Approved rec.radio.amateur.* newsgroups are those that are currently listed in the latest version of the "List of Big Eight Newsgroups" which is crossposted monthly to news.announce.newgroups, news.groups, and news.lists.misc.

Approved alt.radio.amateur.* and alt.ham-radio.* newsgroups are those that have been created consistent with the suggestions in "So You Want to Create an Alt Newsgroup" at:

  http://www.faqs.org/faqs/alt-creation-guide/

Approved regional hierarchy newsgroups are those that contain either "radio.amateur" or "ham-radio" in their names, including uk.radio.amateur and aus.radio.amateur.misc.

We will make every reasonable effort to keep our list of approved newsgroups up-to-date. In case we have overlooked any, and a submission is rejected in error as a result, the rejected submitter can E-mail us at our administrative contact address (in the signature at the bottom of this article, and the default Reply-To for the rejection message) requesting that it be added, and that the article be approved. We may still choose to reject articles crossposted to any alt.* newsgroup with an inappropriate name, including obscene language, embedded name-calling, or encouragement of unlawful conduct.

Please direct any comments, questions, or criticisms to rec-radio-amateur-moderated-request@panix.com.

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From -2754562019637251474
X-Google-Thread: 10e8ad,a3c71e1a01d68ad1,start
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Received: by 10.216.202.66 with SMTP id c44mr549422weo.5.1354552208940;
        Mon, 03 Dec 2012 08:30:08 -0800 (PST)
MIME-Version: 1.0
Path: ha8ni128158wib.1!nntp.google.com!proxad.net!feeder1-2.proxad.net!
news.glorb.com!usenet.stanford.edu!panix!rri.panix.com!robomod!not-for-mail
From: SWPC.Webmaster@noaa.gov
Newsgroups:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.shor
twave,rec.radio.info
Subject: Weekly Highlights of Solar and Geomagnetic Activity, 26 November - 02
December 2012
Followup-To:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.shor
twave
Date: Mon, 3 Dec 2012 11:30:07 EST
Organization: NOAA Space Weather Prediction Center
Lines: 77
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <20121203163001.AA24133C99@panix2.panix.com>
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X-Trace: reader1.panix.com 1354552207 49 166.84.1.6 (3 Dec 2012 16:30:07 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Mon, 3 Dec 2012 16:30:07 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
```

:Product: Weekly Highlights and Forecasts
:Issued: 2012 Dec 03 1338 UTC

```
# Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center
# Product description and SWPC contact on the Web
# http://www.swpc.noaa.gov/weekly.html
#
#                Weekly Highlights and Forecasts
#
```

Highlights of Solar and Geomagnetic Activity
26 November - 02 December 2012

Solar activity reached moderate levels this week with a total of three M-class events, two of which came from Region 1620 (S12, L=97, class/area=Ekc/420 on 28 November). This region appeared on 20 November and remained relatively small and stable for the first six days. On 26 November, it more than quadrupled in size (to 240 mil) and almost doubled in spot count (to 23). The following day it produced the first of two M-class events, an M1/Sf on 27/2126 UTC. By this time it had evolved to a beta-gamma-delta magnetic configuration which it would maintain for the following two days. The rapid growth continued and Region 1620 reached 420 mils on 28 November when it produced an M2/1f event at 2136 UTC. Following this second M-class event, the region began to decay and produced only occasional C-class events until it crossed the west limb on 01 December.

The remaining M-class flare was attributed to Region 1618 (N08, L=135, class/area=Ekc/450 on 23 November). This region produced three M-class flares in the week prior. This week it only managed to produce one, an M1/Sf on 27 November at 1557 UTC. By this time it had shrunk to 170 millionths but retained its beta-gamma-delta magnetic configuration. It rotated around the west limb the next day.

The largest region on the disk this week was Region 1623 (N09, L=340, class/area=Eko/450 on 28 November). It produced a C5/Sf flare on 29/1205 UTC and four other C-flares as its magnetic complexity increased to a beta-gamma configuration. It retained this complexity for the next three days but failed to produce any more C-flares. Nearby, Region 1625 (N15, L=338, class/area=Dso/230 on 29 November) managed to produce six unremarkable C-flares on its first day. The remaining regions during the week were relatively quiescent.

No proton events were observed at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit was at normal to moderate levels all week.

Geomagnetic field activity was quiet all week with the exception of two unsettled periods. The first was during the 00-03 synoptic period on 26 November most likely associated with a CME that erupted on 23 November. A weak interplanetary shock was observed at the ACE spacecraft at 26/0437 UTC followed by an 8nT sudden impulse at the Boulder magnetometer at 26/0514 UTC. Conditions quickly returned to quiet levels. The second unsettled period was early on 02 December associated with co-rotating interaction region.

Forecast of Solar and Geomagnetic Activity
03 December - 29 December 2012

Solar activity is expected to be at low levels with a chance of isolated M-class flares through the entire forecast period (03-29 December).

No proton events are expected at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to be at normal levels except during 14-21 December following the onset of a coronal hole high speed stream on 11 December and sustained by another stream which is expected to become geoeffective on 14 December.

Geomagnetic field activity is expected to be at quiet levels for the majority of the forecast period. Unsettled to potentially active levels are expected on 11-12, 14, and 29 December associated with recurrent high speed solar wind streams.

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From 196067045298306362
```

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From 196067045298306362
X-Google-Thread: 10e8ad,9063b7348329c29c,start
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Received: by 10.68.251.136 with SMTP id zk8mr687607pbc.1.1354826017147;
        Thu, 06 Dec 2012 12:33:37 -0800 (PST)
Path: s9ni30384pbb.0!nntp.google.com!npeer02.iad.highwinds-media.com!
news.highwinds-media.com!feed-me.highwinds-media.com!nntp.club.cc.cmu.edu!
feeder.erje.net!eu.feeder.erje.net!goblin1!goblin.stu.neva.ru!news.astraweb.com!
border6.a.newsrouter.astraweb.com!not-for-mail
From: Chris Steyaert <observations@rmob.org>
Newsgroups: rec.radio.amateur.space,sci.astro.amateur
Subject: Radio Meteor Obs. Bull. November 2012
Date: Thu, 06 Dec 2012 21:33:36 +0100
Message-ID: <t802c8t1h0f9m0lf0t3jhe10uhl0rgu1o6@4ax.com>
X-Newsreader: Forte Agent 5.00/32.1171
MIME-Version: 1.0
Lines: 14
Organization: Unlimited download news at news.astraweb.com
NNTP-Posting-Host: 3089a1ac.news.astraweb.com
X-Trace: DXC=7geZMP6lU^6RI=Qc=OLNJ2L?0kYOcDh@:V?
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Radio Meteor Observation Bulletin No. 232 of November 2012 (79 K) is available now as

http://www.rmob.org/rmobtext/rmob1211.txt

More information and the visual presentation of the hourly forward scatter counts can be found on

http://www.rmob.org

Chris

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From 7582411630568033143
X-Google-Thread: 10e8ad,4a09b2aa99ea8894,start
X-Google-NewGroupId: yes
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        Sun, 09 Dec 2012 07:52:27 -0800 (PST)
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news.highwinds-media.com!feed-me.highwinds-media.com!nx02.iad01.newshosting.com!
newshosting.com!news-out.readnews.com!transit3.readnews.com!panix!rri.panix.com!
robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-344 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sun, 9 Dec 2012 10:52:27 EST
Organization: The Radio Amateur Satellite Corporation
Lines: 501
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <001201cdd625$2aaf2db0$800d8910$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
X-Trace: reader1.panix.com 1355068347 2717 166.84.1.6 (9 Dec 2012 15:52:27 GMT)
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NNTP-Posting-Date: Sun, 9 Dec 2012 15:52:27 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
DKIM-Signature: v=1; a=rsa-sha256; c=relaxed/relaxed; d=comcast.net;
     s=q20121106; t=1355068337;
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X-Received-Bytes: 19975
Content-Language: en-us
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AMSAT NEWS SERVICE
ANS-344

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:

* FITSAT-1 Flashing LED Experiment Scheduled for December 12-13
* V/U/Wx Receive Only Amplifier Available Through AMSAT Store
* AMSAT Office Closed December 6 thru 11
* CO6CBF and EA4CYQ Work Transatlantic via FO-29
* VE to ES DX via AO-7 Mode B
* U.S ARISS Proposal is Live Online
* California K6RPT-12 144.390 FM APRS Balloon Crosses Atlantic
* K6RPT-12 Balloon Lands (ANS Deadline Update!)
* FreeDV Ham Radio Digital Voice Software
* N0D � Special Event Station for the End of the World
* AMSAT SKN ON OSCAR 2013 IN MEMORY OF W1BIH/PJ9JT
* SkyCube
* Space Station to reposition for science
* Amateur Radio High Altitude Ballooning -- Mission Announcements
* Jose Luis Pe�a Sanchez EC4TR Seeks North American Contacts
* More Cubesat News

SB SAT @ AMSAT $ANS-344.01
ANS-344 AMSAT News Service Weekly Bulletins

AMSAT News Service Bulletin 344.01
>From AMSAT HQ SILVER SPRING, MD.
December 9, 2012
To All RADIO AMATEURS
BID: $ANS-344.01

FITSAT-1 Flashing LED Experiment Scheduled for December 12-13

On the 26th of November the first experiment of the flashing LEDs on the FITSAT-1 satellite took place. The LEDs were successfully observed in Kurashiki, Japan and Daejeon, Korea.

On December 7 Takushi Tanaka, JA6AVG updated the FITSAT-1 web page with this information, "As Christmas Eve is full moon, we [will] start flashing LEDs between 12-13 December."

The FITSAT-1 web page can be found at:
http://www.fit.ac.jp/~tanaka/fitsat.shtml

For the USA

12 December 2012
06:14:30 - 06:16:30 UTC

For Europe

13 December 2012
22:10:30 - 22:14:30 UTC

Please note that the schedule is subject to change. Binoculars may be necessary to ensure success in viewing the flashing LEDs. Additional prediction and tracking tools can be accessed at:
http://www.satflare.com/track.php?q�tsat#MAP

[ANS thanks Takushi Tanaka, JA6AVG for the above information]

V/U/Wx receive Amplifier available through AMSAT store

AMSAT-NA is pleased to announce an inexpensive, broadband VHF/UHF/WX satellite receive-only preamplifier.

Key features:

Ready to operate--not a kit! Fully assembled, tested, and installed in a metal enclosure with female BNC connectors on input and output.

It is based on the MAR 7 device, and covers 100 MHz to 500 MHz. This includes the137 MHz WX, 2M, and 70cm satellite bands.

Operates from +9-15V DC (a fresh 9V battery works great!). Perfect for portable operations using dual band hand-held Yagis like the ARROW, Cheap Yagi, etc. Just put it inline on the correct receive band for operations in either mode U/V or V/U. You won't believe what you've been missing!

Includes low power (about 5W) protection diode on the input for accidental transmissions into the input. (This preamp is not RF switched. It must be protected from inadvertent repeated or high power transmission RF using a relay or diplexer.)

Full details and schematic can be found in the November/December 2012 AMSAT Journal article by Mark Spencer, WA8SME, or downloaded from the item in the Hardware section of the AMSAT Store:

http://store.amsat.org/catalog/

The assembled and tested kit is priced at $50 USD plus shipping.

Proceeds from the sale of this item will help fund the AMSAT Fox Family of satellites!

This equipment was developed as part of the ARRL Education and Technology Program.

[ANS thanks Mark Hammond, N8MH for the above information]

AMSAT Office Closed December 6 thru 11

Martha reports that she will be out of the office beginning Thursday, December 6th, and the office will remain closed on 7th, 10th and 11th.

[ANS thanks Martha for the above information]

CO6CBF and EA4CYQ Work Transatlantic via FO-29

On the morning of December 4, CO6CBF Hector Martinez in EL92sd, worked EA4CYQ Juan Antonio in IM78cx.

Hector reported on the AMSAT-BB
"I had looked for intercontinental contacts before but it had been very hard for me. Now, running my new donated satellite gear I am able to work FO-29 until 0 degree in any direction. It was my third attempt and was successful!

Cubans cannot operate on AO-7 mode B due to a 432MHz restriction in our country, so we have only a few chances on FO-29 every five months when the satellite is getting close to apogee. Juan Antonio and I had a two minutes window and we had enough time to interchange reports, grids and greetings.

The contact is included in John Papay's recording of the pass: http://www.papays.com/sat/FO-29_04Dec2012_140930z.mp3

Thanks very much to Juan Antonio EA4CYQ for the great contact and to John K8YSE for look for us and record the contact!

Right Now, FO-29 has a big footprint in the morning passes. Please, if you are into the footprint and want to try a long contact, just drop me an email directly. I will try until have a contact with you."

[ANS thanks Hector for the above information]

VE to ES DX via AO-7 Mode B

Randy Morden, VE6RGU, reported on the AMSAT-BB December 6,
"I was quite surprised (Tuesday) to work Neil Viskov, ES6DO in Estonia just before 18:00Z on AO-7 mode B.

I was listening to that pass with the hopes of working a few UK stations I heard a few days ago, and was just about to shut the rig down at the end of the pass, when I heard a CW station calling CQ. At first I though it was an Irish station with an EI prefix, but two dits turned out to be three - ES rather than EI! With less than one minute to make the contact on that pass, it all worked out with a new grid and new DX in my log, and Neil's first VE QSO. Many thanks Neil!"

[ANS thanks Randy for the above information]

U.S ARISS Proposal is Live Online

NASA is now accepting proposals from U.S. schools, museums, science centers and community youth organizations, individually or working together, to host an Amateur Radio on the International Space Station contact between May 1, 2013 and November 1, 2013.

To maximize these radio contact opportunities, NASA is looking for organizations that will draw large numbers of participants and integrate the contact into a well-developed education plan. Radio contacts are approximately 10 minutes in length. Proposals are due

January 28, 2013.

The NASA ARISS page is live! Spread the word. U.S organizations can now access the planning guide and proposal form online at: http://www.nasa.gov/education/tfs/ariss. Dates and times of the on-line information sessions are also on the website.

Interested parties should visit the website to obtain complete information including how the technology works, what is expected of the host organization and how to submit the proposal form.

[ANS thanks Trinesha M. Dixon, Teaching From Space Education Specialist at the NASA Johnson Space Center for the above information]

California K6RPT-12 144.390 FM APRS Balloon Crosses Atlantic

Amateur radio stations from the UK to the Azores were listening for the transatlantic balloon K6RPT-12 on 144.390 MHz FM.

As of Tuesday 2230 UT no reports of the balloon had been received since it left radio range of Newfoundland at 0350 UT. The last APRS reports indicated it was starting to drift south and slow down. When it left the USA it was traveling at over 300 km an hour, however, it may well have slowed considerably since then possibly to as little as 90 kmh.

The payload is designed for over 60 hours of flight.

The K6RPT-12 144.390 MHz APRS balloon successfully crossed the Atllantic and landed in Morocco on Wednesday morning.

After its epic journey across the Atlantic the APRS signals were picked up by Spanish stations. It was last heard at 2012-12-05 09:22:31z descending rapidly, indicating that the balloon had burst.

The last recorded position was 34�25.75' N 3�58.96' W. It is believed there are less than 150 radio amateurs in Morocco and no known APRS stations, so the balloon may never be recovered.

See the K6RPT-12 APRS Track at
http://aprs.fi/#!call�2FK6RPT-12&timerange`4800

California Near Space Project
http://www.californianearspaceproject.com/

Twitter http://twitter.com/k6rpt

[ANS thanks Southgate, the California Near Space Project and JoAnne Maenpaa for the above information]

FreeDV Ham Radio Digital Voice Software

FreeDV is an application for Windows and Linux that allows any HF SSB radio to be used for digital voice mode wita bandwidth of just 1.1 kHz. Speech is compressed down to 1400 bit/s then modulated onto a 1100 Hz wide QPSK signal which is sent to the Mic input of a SSB radio. On receive, the signal is received by the SSB radio, then demodulated and decoded by FreeDV.

Features:
+ Codec 2 voice coder and FDMDV modem
+ 50 baud 14 QPSK voice data
+ 1 Center BPSK carrier with 2x power for fast and robust synchronization.
+ 1.125 kHz spectrum bandwidth (half SSB) with 75 Hz carrier spacing
+ 1400 bit/s data rate with 1375 bit/s open source Codec 2 voice coding and 25 bit/s text for call sign ID
+ No interleaving in time or FEC philosophy resulting in low latency, fast synchronization and quick recovery from fades.
+ 44.1 or 48kHz sample rate sound card compatible

FreeDV, the new HF digital audio program for Radio Amateurs:
http://www.youtube.com/watch?v�yn0NEcNHs&feature�ayer_embedded

Watch when it's switched to analog SSB. The SSB bandwidth is about 3 times that of the digital audio. Also note the diagonal black streaks across the waterfall display. That's fading, probably from two reflections arriving out of phase. The ID on the bottom is coming in during the silent periods between words.

This software is Open Source, and uses Codec2. This Codec was presented by Bruce Robertson, VE9QRP at the 2012 AMSAT Space Symposium in Orlando, Florida.

See http://freedv.org/

[ANS thanks Southgate and FreeDV for the above information]

N0D � Special Event Station for the End of the World
Expands to the Final Frontier!

Houston, Texas December 4, 2012: According to one of the three Mayan Calendars, the End of the world will occur on Dec 21, 2012. To celebrate this literally once in a lifetime event, Special Event Station N0D (Now Zero Days) will be activated for the period December 15, 2012 through December 20, 2012. December 21, the day of destruction, we will be on the air as long as possible. December 22nd is a little iffy right now.

After all, it is the end of the world, so why not include the Final Frontier? In celebration, experienced satellite operators Allen Mattis, N5AFV, and Andy MacAllister, W5ACM, who are members of the N0D team, will be working available satellite passes beginning December 15th, 2012, through the end of the world and possibly beyond until December 22nd. The team will be using the Official Doomsday call sign, N0D.

In addition, the South Texas Balloon Launch Team will launch the Doomsday Balloon, BLT-32 To the End of the World and Float, to prepare the world for its demise! The launch is scheduled for Saturday Dec 15th at 4 PM from Covey Trails Airport in Fulshear, Texas. BLT-32 is designed as a �floater� with hopes that it will reach Europe before the end of the world. APRS telemetry and beacons on the balloon will also be using the Official Doomsday call sign, N0D. Details about the Doomsday balloon are available at http://www.w5acm.net/b32.html.

N0D will also be active on the HF bands throughout the event. Further information is available at www.nowzerodays.com. You may register on the website to become an official Doomsday station. Over 575 stations have already done so. QSL information for N0D is with SASE via KK5W but better wait untill after Doomsday, if we are still around.

NO Backup Date � It�s all or NOTHING!

[ANS thanks Allen N5AFV for the above information]

AMSAT SKN ON OSCAR 2013 IN MEMORY OF W1BIH/PJ9JT

You are cordially invited to participate in Straight Key Night on OSCAR 2013, conducted by AMSAT for all radio amateurs throughout the world. This year's event is dedicated to the memory of John Thompson, W1BIH/PJ9JT, who passed away in 2012, aged 96. Although known primarily as an HF DXer and contester, John was also active on OSCAR, mostly on CW.

As always, SKN on OSCAR is simple and informal. Just operate CW through one or more satellites on 1 January 2013 (0000 to 2400 UTC), using a straight hand key. There is no need to send in a log, but all participants are encouraged to nominate someone they worked for Best Fist. Your nominee need not have the best fist of anyone you heard, only of those you worked. Send your nomination to w2rs at amsat.org. A list of those nominated will appear in ANS in early February.

[ANS thanks Ray Soifer for the above information]

Watch and Listen for the Geminid Meteor Shower This Week

The Geminid Meteor Shower is the grand finale of astronomical events in 2012 and is usually the most reliable and prolific of the annual meteor showers.

This year we are in for a special treat as the Moon will be absent when the Geminids are at their peak on the evening of the 12th/13th of December. This means that the sky should be at its darkest when the shower is expected, and many more of the fainter meteors will be visible.

Meteor pings can be heard via internet streaming as the Air Force Space Surveillance Radar, scanning the skies above Texas, creates the "radar fence". When a meteor or satellite passes over the facility--ping!--there is an echo. This live audio feed can be found at: http://spaceweatherradio.com/

[ANS thanks UniverseToday.com and SpaceWeatherRadio.com for the above information]

SkyCube: The Satellite
http://www.southernstars.com/skycube/satellite.html

SkyCube: a day in the life
http://tinyurl.com/a8xro6z

SkyCube uses Kickstarter for Funding
http://www.uk.amsat.org/?p�55

[ANS thanks Southgate ARC for the above information]

Space Station to reposition for science

The International Space Station will reposition itself for a better view of the sun, the first-ever attitude change for scientific reasons alone, officials say.

http://tinyurl.com/bsw4wg2

[ANS thanks Space Travel for the above information]

AMATEUR RADIO HIGH ALTITUDE BALLOONING -- MISSION ANNOUNCEMENTS

http://arhab.org/hab_launch_list.php

[ANS thanks AMATEUR RADIO HIGH ALTITUDE BALLOONING for the above information]

Jose Luis Pe�a Sanchez EC4TR Seeks North American Contacts from IN80er in Spain

Luis, EC4TR, is looking for North American stations with whom to set up satellite schedules. His grid in IN80er. Email him at his qrz.com email address if you would like to contact him. FO-29 is over 1300km high during morning passes over the Atlantic now. AO-7 is always around 1450km and is in Mode B on odd days during December.

[ANS thanks John Papay K8YSE for the above information]

More CubeSat News

The UK Space Agency will be running a free CubeSat Community Workshop at Milton Keynes on January 22 that will include discussion of plans for UKube-2.

See http://www.uk.amsat.org/?p782

Also on the AMSAT-UK site:

Pictures released of UKube-1 CubeSat

http://www.uk.amsat.org/?p786

Australian Radio Ham�s Spacecraft Missions
http://www.uk.amsat.org/?p745

[ANS thanks Trevor M5AKA for the above information]

/EX

Please share you copy with an educator near you.

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

Primary and secondary school students are eligible for membership at one-half the standard yearly rate. Post-secondary school students enrolled in at least half time status shall be eligible for the student rate for a maximum of 6 post-secondary years in this status. Contact Martha at the AMSAT Office for additional student membership information.

73,
This week's ANS Editor,
E.Mike McCardel, KC8YLD
kc8yld at amsat dot org

```
From -8714935823275523872
X-Google-Thread: 10e8ad,a70dcf278c682f2a,start
X-Google-NewGroupId: yes
X-Google-Thread: 10b9c8,a70dcf278c682f2a,start
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,gida4a23d5f63,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Received: by 10.66.77.34 with SMTP id p2mr3508696paw.30.1355157010504;
        Mon, 10 Dec 2012 08:30:10 -0800 (PST)
MIME-Version: 1.0
Path: 6ni37706pbd.1!nntp.google.com!news.glorb.com!news-out.readnews.com!
transit3.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: SWPC.Webmaster@noaa.gov
Newsgroups:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.shor
```

```
twave,rec.radio.info
Subject: Weekly Highlights of Solar and Geomagnetic Activity, 03 - 09 December
2012
Followup-To:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.shor
twave
Date: Mon, 10 Dec 2012 11:30:10 EST
Organization: NOAA Space Weather Prediction Center
Lines: 52
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <20121210163001.7722A33C52@panix2.panix.com>
NNTP-Posting-Host: panix6.panix.com
X-Trace: reader1.panix.com 1355157010 16099 166.84.1.6 (10 Dec 2012 16:30:10 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Mon, 10 Dec 2012 16:30:10 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump

:Product: Weekly Highlights and Forecasts
:Issued: 2012 Dec 10 1124 UTC
# Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center
# Product description and SWPC contact on the Web
# http://www.swpc.noaa.gov/weekly.html
#
#                Weekly Highlights and Forecasts
#
```

Highlights of Solar and Geomagnetic Activity
03 - 09 December 2012

Solar activity reached low levels this week with a total of four C-class events, the largest of which was a C3 event at 2121 UTC that came from region 1621 (N16,L=19, clas/area Axx/10 on 07 December. This region appeared on 24 November as an Alpha class region and slowly grew in size (to 130 mil), becoming a Beta class region which it maintained for 8 days. The region began to decay and produced the C-class event after it crossed the western limb on 07 December.

No proton events were observed at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit was at normal levels all week.

Geomagnetic field activity was quiet all week. Solar wind speed measured 260 km/s - 350 km/s on average with a peak of 459 km/s on

04 December due to the arrival of a coronal hole high speed stream. The maximum southward component of Bz reached -10.9 nT at 04/0440 UTC, the total IMF reached 13.0 nT at 03/1958 UTC. There were no CMEs with a significant earthward component during this week.

Forecast of Solar and Geomagnetic Activity
10 December - 05 January 2013

Solar activity is expected to be at low levels with a chance of isolated M-class flares through the entire forecast period (10 December 2012 - 05 January 2013).

No proton events are expected at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to be at normal levels except during 14-21 December following the onset of a coronal hole high speed stream on 14 December and sustained by another stream which is expected to become geoeffective on 15 December.

Geomagnetic field activity is expected to be at quiet levels for the majority of the forecast period. An isolated period of unsettled levels is expected on 17 December with elevated ambient background solar wind speeds and again on 29 December associated with a recurrent solar sector boundary crossing.

```
From 102427179679152046
X-Google-Thread: fcc6e,cdb6072909f952a8,start
X-Google-NewGroupId: yes
X-Google-Thread: 108122,cdb6072909f952a8,start
X-Google-NewGroupId: yes
X-Google-Thread: 107ada,cdb6072909f952a8,start
X-Google-NewGroupId: yes
X-Google-Thread: 10e8ad,cdb6072909f952a8,start
X-Google-NewGroupId: yes
X-Google-Attributes:
gid4baf9708d4,gidd7f5508063,gida3e752f117,gid8f86f75953,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Received: by 10.66.84.100 with SMTP id x4mr2279518pay.43.1355554804513;
        Fri, 14 Dec 2012 23:00:04 -0800 (PST)
MIME-Version: 1.0
Path: s9ni46023pbb.0!nntp.google.com!news.glorb.com!news-out.readnews.com!
transit3.readnews.com!panix!panix2.panix.com!not-for-mail
From: rram@panix.com (rec.radio.amateur.moderated Admin)
Newsgroups:
rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.rad
io.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amat
eur.space,rec.radio.info
Subject: Crossposting Permitted to rec.radio.amateur.moderated
Supersedes: <radio/ham-radio/moderated/crossposting-1-1354345200@panix.com>
Followup-To: poster
```

Date: 15 Dec 2012 02:00:03 -0500
Organization: rec.radio.amateur.moderated Moderation Team
Lines: 47
Approved: RRI Admin <rec-radio-info-request@panix.com>
Distribution: world
Expires: 02 Jan 2013 02:00:02 -0000
Message-ID: <radio/ham-radio/moderated/crossposting-1-1355554802@panix.com>
Reply-To: rec-radio-amateur-moderated-request@panix.com
(rec.radio.amateur.moderated Admin)
NNTP-Posting-Host: panix2.panix.com
X-Trace: reader1.panix.com 1355554804 10273 166.84.1.2 (15 Dec 2012 07:00:04 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sat, 15 Dec 2012 07:00:04 +0000 (UTC)
Summary: Short reminder for unmoderated newsgroups that crossposting is permitted
Keywords: FAQ, ham, amateur, radio, moderated, unmoderated, crossposting,
permitted

Posted-By: auto-faq 3.3.2 beta (PGPMoose V2.0, Perl 5.005)
Archive-name: radio/ham-radio/moderated/crossposting
Revision: 1.2 2011/11/02 04:08:53
Posting-Frequency: posted twice monthly
URL: http://www.panix.com/~rram/usenet/rram/index.html

Changes followed by "|".

After a 30-day public discussion and feedback period to gauge reader opinions in March of 2009:

http://groups.google.com/group/rec.radio.amateur.moderated/browse_thread/thread/d7d337db35f23326

the rec.radio.amateur.moderated Moderation Team had decided to consider |
amending its charter, and permit limited simultaneous crossposting to
rec.radio.amateur.moderated and one other unmoderated
amateur-radio-related discussion newsgroup. After a successful trial |
period (90 days, through early July 2009), we decided to adopt this |
change permanently. |

Approved rec.radio.amateur.* newsgroups are those that are currently listed in the latest version of the "List of Big Eight Newsgroups" which is crossposted monthly to news.announce.newgroups, news.groups, and news.lists.misc.

Approved alt.radio.amateur.* and alt.ham-radio.* newsgroups are those that have been created consistent with the suggestions in "So You Want to Create an Alt Newsgroup" at:

  http://www.faqs.org/faqs/alt-creation-guide/

Approved regional hierarchy newsgroups are those that contain either "radio.amateur" or "ham-radio" in their names, including uk.radio.amateur and aus.radio.amateur.misc.

We will make every reasonable effort to keep our list of approved newsgroups up-to-date. In case we have overlooked any, and a submission is rejected in error as a result, the rejected submitter can E-mail us at our administrative contact address (in the signature at the bottom of this article, and the default Reply-To for the rejection message) requesting that it be added, and that the article be approved. We may still choose to reject articles crossposted to any alt.* newsgroup with an inappropriate name, including obscene language, embedded name-calling, or encouragement of unlawful conduct.

Please direct any comments, questions, or criticisms to
rec-radio-amateur-moderated-request@panix.com.

```
From 8718776241632380214
X-Google-Language: ENGLISH,ASCII-7-bit
Received: by 10.224.207.66 with SMTP id fx2mr5555051qab.7.1355624918242;
        Sat, 15 Dec 2012 18:28:38 -0800 (PST)
Path: k2ni430qap.0!nntp.google.com!newsfeed2.dallas1.level3.net!news.level3.com!
panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-351 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sat, 15 Dec 2012 21:28:37 EST
Organization: The Radio Amateur Satellite Corporation
Lines: 602
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <001001cddb35$04f30f00$0ed92d00$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
X-Trace: reader1.panix.com 1355624917 26712 166.84.1.6 (16 Dec 2012 02:28:37 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 16 Dec 2012 02:28:37 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
DKIM-Signature: v=1; a=rsa-sha256; c=relaxed/relaxed; d=comcast.net;
     s=q20121106; t=1355624900;
     bh=7W49UXbA0TPDNik9v9OIhSz1Mh/z9/n7W/H0tBFqFow=;
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      Content-Type;
     b=qjtWwNjLsdxWVjAOIsfSquleGCfTfc2Va8OHyaXF6+RsmXD41gy3KgkZXrXlqpqIK
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```

PHYH4QRVoAgqekuD/3SSyD1mX92HkjHOmmgZPE+qMNBDo6GIlukRaC4mi8cw46XjHA
HEjatqv8VDMGdACShSaoVxAjXfzhzLq/xFFShyj+dMvKSpDggG5W38u9kvdW9IJAhY
9sR93/UjN8oTiOcVhYe4szNAVfyNR6dI58i5xJD8XATG6CtSkm5e1LHbXFp3mdVHS8
gMIhgINuJROvA==

Content-Type: text/plain;
charset="us-ascii"
Content-Transfer-Encoding: 7bit
Content-Language: en-us

AMSAT NEWS SERVICE
ANS-351

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor at amsat.org

In this edition:

* Kline School "Out of This World Experience" Raises $6500 for AMSAT Fox
* AMSAT Submits a Second NASA ELaNa Proposal
* AMSAT SKN ON OSCAR 2013 In Memory of W1BIH/PJ9JT
* FITSAT-1 LED Beacon Seen From Space
* QST October 2012 SatCat Interface for FT-817 For Sale at ARRL
* V/U/Wx Receive Pre-Amplifier Available Through AMSAT Store
* WA8SME Receives YASME Foundation Excellence Award
* NASA TV Coverage Set for December 19 Soyuz Space Station Crew Launch
* Receive Satellite Pass Predictions via Your APRS Radio
* Carrier Detected on LO-19 Beacon Frequency
* December 17 Lunar Impact Final Experiment for GRAIL Probes
* Satellite Shorts From All Over

SB SAT @ AMSAT $ANS-351.01
ANS-351 AMSAT News Service Weekly Bulletins

AMSAT News Service Bulletin 351.01
>From AMSAT HQ SILVER SPRING, MD.
December 16, 2012
To All RADIO AMATEURS
BID: $ANS-351.01

Kline School "Out of This World Experience" Raises $6500 for AMSAT Fox

Kline School had the distinction of being invited to contact Commander Kevin Ford aboard the International Space Station on Thursday, December 6 via an ARISS contact.

During this live event, students had the opportunity to have their questions answered by an astronaut living in space. In preparation for the ARISS contact, students engaged in NASA class lessons on Building the ISS and What Life is Like Aboard the ISS. They studied experiments and tasks taking place on the ISS to help formulate expedition related questions. Students also learned about the forms and sources of energy that help to sustain the station.

Teachers at Kline School wrote, "We think of the ARISS contact as the real world application of our students' studies of science, technology, engineering and math (STEM)".

Reaching beyond content, students launched a Spell-A-Thon and raised $6,500 dollars to purchase six-sets of solar panels to help AMSAT fly Fox-1, an amateur radio satellite. The solar panels will provide power to the satellite while in space. Students are proud of their AMSAT membership, too.

ARISS is a cooperative venture of the National Aeronautics and Space Administration (NASA), the American Radio Relay League (ARRL), the Radio Amateur Satellite Corporation (AMSAT), and other worldwide amateur radio groups and international space agencies. These ARISS partners organize scheduled 10-minute interactive contacts via amateur radio with the help of experienced amateur radio volunteers.

More information and a photo will be published in an upcoming issue of the AMSAT Journal.

For more information about Kline School's ISS contact and related events visit: http://www.klineschool.com
https://www.facebook.com/pages/Kline-School/153838291839

[ANS thanks the Kline School for the above information]

AMSAT Submits a Second NASA ELaNa Proposal

The official name of the project is "RadFxSat" and it is a joint project with the Institute for Space and Defense Electronics (ISDE) at Vanderbilt University. AMSAT is providing the satellite bus (Fox-1B) and ISDE is providing the experiment payload. The primary mission is to advance the state of the art in understanding the effects of space radiation on electronic components.

This is the first AMSAT satellite with science as the primary mission. This is very exciting as it potentially opens up new launch opportunities. Since the data downlink and power required by the experiment are modest, we expect to be able to operate the science payload and the ham radio transponder simultaneously.

The satellite hardware design is the same as Fox-1 but there will be substantial AMSAT work in systems engineering, project management, software development, satellite construction and testing.

We requested a launch in the 2nd half of 2014 to a 650 km sun-synchronous orbit which is the same as we requested for Fox-1. As in our previous proposal, we also noted that the mission requirements can be met over a wide range of orbits. The key elements are the need for a high enough apogee to provide significant exposure to space radiation and a minimum 10 year orbit lifetime.

While there can be no guarantee that our proposal will be accepted by NASA, we believe that in its 241 pages (!) we have made a strong case.

NASA is expected to announce the accepted proposals at the end of January 2013.

[ANS thanks AMSAT Vice-President Engineering Tony Monteiro, AA2TX for the above information]

AMSAT SKN ON OSCAR 2013 In Memory of W1BIH/PJ9JT

You are cordially invited to participate in Straight Key Night on OSCAR 2013, conducted by AMSAT for all radio amateurs throughout the world. This year's event is dedicated to the memory of John Thompson, W1BIH/PJ9JT, who passed away in 2012, aged 96. Although known primarily as an HF DXer and contester, John was also active on OSCAR, mostly on CW.

As always, SKN on OSCAR is simple and informal. Just operate CW through one or more satellites on 1 January 2013 (0000 to 2400 UTC), using a straight hand key. There is no need to send in a log, but all participants are encouraged to nominate someone they worked for Best Fist. Your nominee need not have the best fist of anyone you heard, only of those you worked. Send your nomination to w2rs at amsat.org. A list of those nominated will appear in ANS and the AMSAT Journal.

[ANS thanks Ray Soifer for the above information]

FITSAT-1 LED Beacon Seen From Space

A test of the FITSAT-1 LED optical beacon that took place on December 11 GMT over Japan was successful.

FITSAT-1 flashed the optical beacon over the USA on December 12 and on December 13 over the British Isles and Europe. No reports of optical detection were received from the USA or Europe.

In a clear night sky with no moon the FITSAT-1 optical beacon is visible using binoculars.

The latest FITSAT-1 satellite news is posted at:
http://www.fit.ac.jp/~tanaka/fitsat.shtml

A photo of the visible beacon is posted at:
http://www.jinkou-eisei.jp/FITSAT/images/121212_watanabe.jpg
http://www.jinkou-eisei.jp/FITSAT/images/121211_m.jpg

FITSAT-1 is a CubeSat developed by students at the Fukuoka Institute of Technology (FIT) in Japan. As well as the optical LED experiment the satellite carries an amateur radio payloads: a CW beacon on 437.250 MHz, a telemetry beacon on 437.445 MHz and a high-speed data downlink on 5840.0 MHz.

[ANS thanks the FITSAT-1 team for the above information]

QST October 2012 SatCat Interface for FT-817 For Sale at ARRL

The satellite computer aided tuning interface described in October, 2012 QST (pp. 40-43) for use with SatPC32 and the Yaesu FT-817 radio is being offered for sale by the ARRL Education & Technology Program (ETP).

The interface was developed by Mark Spencer, WA8SME, as part of resource development for the ARRL ETP and is priced to recover cost plus a small increment toward development as well as a cost share donation to AMSAT. The interface is fully described in the article published in October 2012 QST on pp. 40-43.

You may order the board and programmed PIC for a cost of $20; to order the full kit including all of the parts, the cost is $35.

To order please send the following either by mail or email as follows:

+ Your name and shipping address
+ Phone number and email address
+ Item you are requesting
+ Enclose a check for the appropriate amount, payable to ARRL

ETP, sent to attention of ARRL Education Services

Send orders to:

ARRL Education Services, ATTN: Amy Strickland
225 Main Street
Newington, CT 06111

Please contact Amy in ARRL Education Services at astrickland@arrl.org with any questions about ordering.

Please contact Mark Spencer at mspencer@arrl.org with questions about the interface design and specifications.

[ANS thanks Mark Spencer, WA8SME for the above information]

V/U/Wx Receive Pre-Amplifier Available Through AMSAT Store

AMSAT-NA is pleased to announce an inexpensive, broadband VHF/UHF/WX satellite receive-only preamplifier.

Key features:

Ready to operate--not a kit! Fully assembled, tested, and installed in a metal enclosure with female BNC connectors on input and output.

It is based on the MAR 7 device, and covers 100 MHz to 500 MHz. This includes the137 MHz WX, 2M, and 70cm satellite bands.

Operates from +9-15V DC (a fresh 9V battery works great!). Perfect for portable operations using dual band hand-held Yagis like the ARROW, Cheap Yagi, etc. Just put it inline on the correct receive band for operations in either mode U/V or V/U. You won't believe what you've been missing!

Includes low power (about 5W) protection diode on the input for accidental transmissions into the input. (This preamp is not RF switched. It must be protected from inadvertent repeated or high power transmission RF using a relay or diplexer.)

Full details and schematic can be found in the November/December 2012 AMSAT Journal article by Mark Spencer, WA8SME, or downloaded from the item in the Hardware section of the AMSAT Store:

http://store.amsat.org/catalog/

The assembled and tested kit is priced at $50 USD plus shipping.

Proceeds from the sale of this item will help fund the AMSAT Fox

Family of satellites!

This equipment was developed as part of the ARRL Education and Technology Program.

[ANS thanks Mark Hammond, N8MH for the above information]

WA8SME Receives YASME Foundation Excellence Award

Mark Spencer, WA8SME, has received the Excellence Award from the YASME Foundation (yasme.org). The following is an excerpt from the OPDX Bulletin 1090, December 10, 2012:

> "The Yasme Excellence Award is awarded to individuals who through their own service, creativity, effort and dedication have made a significant contribution to amateur radio. The contribution may be in recognition of technical, operating or organizational achievement, as all three are necessary for amateur radio to grow and prosper. The Yasme Excellence Award is in the form of a cash grant and an individually-engraved crystal globe."

The Board of Directors of The Yasme Foundation announced the award:

> Mark Spencer, WA8SME, for his instrumental work in the ARRL Teachers Institute and other training efforts, development of PIC microcontroller projects and books for amateurs, and work with leaders in student and scientific teams applying amateur radio to scientific projects and experiments.

AMSAT congratulates to Mark Spencer WA8SME, recipient of the YASME Foundation Excellence Award

[ANS thanks John Papay, K8YSE and YASME Foundation for the above information]

NASA TV Coverage Set for December 19 Soyuz Space Station Crew Launch

NASA Television will provide live coverage of the December 19 launch and docking of the next crew members to the International Space Station. Two of the crew members have their amateur radio license.

Tom Marshburn, KE5HOC of NASA, Roman Romanenko of the Russian Federal Space Agency (Roscosmos) and Chris Hadfield, KC5RNJ/VA3OOG of the Canadian Space Agency are scheduled to launch to the space station in their Soyuz TMA-07M spacecraft at 6:12 a.m. CST (6:12 p.m. Baikonur time) Wednesday, Dec. 19, from the Baikonur Cosmodrome in Kazakhstan. NASA TV launch coverage will begin at 5 a.m. and include video of that day's activities leading to the crew boarding its spacecraft.

The trio will dock the Soyuz spacecraft to the station's Rassvet module at 8:10 a.m. Friday, Dec. 21. NASA TV coverage of docking begins at 7:30 a.m. About three hours later, hatches will open between the Soyuz and the station. Marshburn, Romanenko and Hadfield will be greeted by Expedition 34 Commander Kevin Ford of NASA and flight engineers Oleg Novitskiy and Evgeny Tarelkin of Roscosmos, who have been living and working on the orbiting laboratory since late October. NASA TV's hatch opening coverage begins at 10:15 a.m.

Marshburn, Romanenko and Hadfield will remain aboard the station until

May 2013. Ford, Novitskiy and Tarelkin will return to Earth March 15, leaving Hadfield as the first Canadian commander of the space station.

The full schedule of the Soyuz prelaunch, launch and docking coverage includes (all times Central USA which is UTC-6):

Friday, Dec. 14
1 p.m. -- Video file of Expedition 34/35 crew activities in Baikonur, Kazakhstan

Monday, Dec. 17
11 a.m. -- Video file of Expedition 34/35 spacecraft encapsulation, rocket mating and rollout in Baikonur, Kazakhstan

Tuesday, Dec. 18
11 a.m. -- Video file of Expedition 34/35 Russian State Commission meeting and final pre-launch crew news conference in Baikonur, Kazakhstan

Wednesday, Dec. 19
5 a.m. -- Expedition 34/35 launch coverage (launch at 6:12 a.m.; includes video of the crew's pre-launch activities at 5:15 a.m.)
9 a.m. -- Video file of Expedition 34/35 pre-launch, launch and post-launch interviews

Friday Dec. 21
7:30 a.m. -- Expedition 34/35 docking coverage; docking at 8:10 a.m. followed by the post-docking news conference from Mission Control in Korolev, Russia
10:15 a.m. - Expedition 34/35 hatch opening and welcoming ceremony (hatch opening at 10:45 a.m.)
1 p.m. -- Video file of Expedition 34/35 docking, hatch opening and welcoming

For NASA TV streaming video, schedule and downlink information, visit:
http://www.nasa.gov/ntv

[ANS thanks NASA for the above information]

Receive Satellite Pass Predictions via Your APRS Radio

The KJ4ERJ satserver will send live tracking data to your APRS radio anywhere, anytime.

1. Just send an APRS message to "ISS" (without the quotes) from any APRS radio (on the national APRS channel).

2. If you are in range of the global APRS network (an IGate nearby) the satserver will respond with the time to AOS and the direction of AOS, max elevation and LOS.

3. This also works for other satellites. For example, send a message to "FO29" (without the quotes) and get its prediciton for your location.

4. The satserver will use the last APRS position you have transmitted.

5. To actually work APRS via ISS, you will have to QSY to the ISS channel 145.825 and change your path to via ARISS for the pass (instead of the usual WIDE2-2 for terrestrial APRS).

Example of the the types of responses as collected by APRS.FI messages page are posted at:
http://aprs.fi/?c=message&limit=25&call=ISS

For a full description, see: http://aprsisce.wikidot.com/doc:satsrv

[ANS thanks Bob Bruninga, WB4APR for the above information]

Carrier Detected on LO-19 Beacon Frequency

Mark Hammond, N8MH reports that LO-19, non-operational for amateur radio use, is still transmitting a very weak continuous carrier on its former 437.1250 MHz CW Mode U TLM beacon frequency.

He wrote, "This weekend I listened again for LO-19. I could always hear a very weak continuous carrier (actually, first saw it using audio FFT software). Yesterday (12/9/12) on a high 50-ish degree elevation pass, it was there. It's right on frequency, right on time with AOS/LOS, the Doppler correction from SatPC32 is right on target. The bird was in daylight, but I expect its batteries are still good so I bet you can hear it in eclipse as well. You might have fun listening for it, as a weak signal source. If you can hear LO-19's carrier, your system is pretty up to snuff. Or, use some audio spectrum software and you can "see" the carrier even if you can't hear it on your speaker."

Additional LO-19 reception reports are confirmed by WA8SME, K8YSE, and OZ1MY.

[ANS thanks Mark Hammond, N8MH for the above information]

December 17 Lunar Impact Final Experiment for GRAIL Probes

Twin lunar-orbiting NASA spacecraft that have allowed scientists to learn more about the internal structure and composition of the moon are being prepared for their controlled descent and impact on a mountain near the moon's north pole at about 2:28 p.m. PST (5:28 p.m. EST) Monday, Dec. 17.

The mountain where the two spacecraft will make contact is located near a crater named Goldschmidt. Both spacecraft have been flying in formation around the moon since Jan. 1, 2012. The first probe will go down, at 2:28:40 p.m. The second probe will about 20 seconds later.

Both spacecraft will hit the surface at 3,760 mph (1.7 kilometers per second). No imagery of the impact is expected because the region will be in shadow at the time.

The probes will conduct one final experiment before their mission ends. They will fire their main engines until their propellant tanks are empty to determine precisely the amount of fuel remaining in their tanks. This will help NASA engineers validate fuel consumption computer models to improve predictions of fuel needs for future missions.

Because the exact amount of fuel remaining aboard each spacecraft is unknown, mission navigators and engineers designed the depletion burn to allow the probes to descend gradually for several hours and skim the surface of the moon until the elevated terrain of the target mountain gets in their way.

For more information about GRAIL, visit: http://www.nasa.gov/grail
SpaceRef.com posted this news at:
http://spaceref.com/news/viewpr.html?pid=39537

A video simulation of the impact is posted at:
http://www.youtube.com/watch?feature=player_embedded&v=U2OKpf7fo_w

[ANS thanks SpaceRef.com for the above information]

Satellite Shorts From All Over

+ The NASA Small Spacecraft Technology Program open solicitation from for the Flight Opportunities Program extended the proposal submission deadline to January 17, 2013 for the next selection of projects to fly on parabolic aircraft flights, high altitude balloon flights, and suborbital flights. No funding is provided for project or payload development, the flight opportunity is provided at no cost to the research team. For more information please see: https://flightopportunities.nasa.gov/afo
  An article providing examples of recent flight testing is posted at: http://tinyurl.com/NASA-FlightTest (nasa.gov) - Via N8PK

+ Flex has an interesting article on using two rigs for full duplex operations using SATPC32:
  http://support.flexradio.com/Downloads.aspx?fr=1
  Look for: A Full-Duplex VHF-UHF Satellite System using FLEX radios (via WA4SCA)

+ A recording of the December 9 AMSAT-UK 80M and 40M nets has been posted at: http://www.ham-radio.ch/kits/sdr-radio.com/mp3/

+ Luci, 9A1Z, is looking to work North America on AO-7 Mode B on CW. If you are interested in working him, please send an email to his qrz.com address for a sked. He is in JN86. (via K8YSE)

+ Photos of the new Russian Multi-purpose Laboratory Module (MLM) or "Nauka" for the International Space Station can be seen at:.
  http://www.spaceref.com/news/viewnews.html?id=1691
  The Nauka MLM is a modified version of Functional Cargo Block (FGB-2). It will dock at the Zvezda Service Module's nadir (earth facing) port and will replace the current PIRS module. PIRS will be allowed to renter Earth's atmosphere. Launch is planned for 2013 or 2014. Nauka will serve as Russia's primary research module but will also have stowage and crew work areas.

+ Last week the Smithsonian issued the following statement regarding the passing of a unique ISS crewmember: "It is with sadness that we announce the death of Nefertiti, the "Spidernaut." This morning (Dec 3), before museum hours, a member of the Insect Zoo staff discovered Neffi had died of natural causes. Neffi lived for 10 months. She traveled over 40 million miles while living onboard the International Space Station earlier this year as part of a student-initiated experiment sponsored by NASA. After returning to Earth, Nefertiti went to the Smithsonian National Museum of Natural History's Insect Zoo to live out the remainder of her life.
  (via AmericanSpace.org)

+ The next Hudson Valley Satcom net will be Thursday, December 20 at 8 PM EST (UTC-5) on the 146.97 MHz MBARC Repeater (PL 100). An echolink connection is available on the N2EYH-L node. More information at: http://www.hvsatcom.org. (Stu, WA2BSS)

+ The W5KUB live webcasts are preparing for a December 29 "D-Star Live" show on http://W5KUB.com between 1000-1600 Central US time (UTC-6). Tom says there will be lots of good stuff and special guests. You will be able to ask questions of the experts. The latest news of all W5KUB broadcasts can be found on their Facebook page: https://www.facebook.com/groups/w5kub/ .

+ UniverseToday.com posted a 19 minute video of the Overview Effect showing how the view from space has altered our whole Earth perspective: http://tinyurl.com/Perspective-Video (UniverseToday.com)

+ NASA released a video and images showing the Earth at night taken by a new sensor aboard the NASA-NOAA Suomi National Polar-orbiting Partnership (NPP) satellite:
http://www.nasa.gov/mission_pages/NPP/news/earth-at-night.html

+ The National Air and Space Museum Webcast Archive has several videos available at: http://airandspace.si.edu/webcasts/archive.cfm

+ The NASA Voyager 1 probe has been spotted by the SETI Institute's Allen Telescope Array (ATA) on 8419.62 MHz. The signal processing used to detect this radio signal from the outer edge of our solar system is quite educational, although the site does plug a commercial product not associated with AMSAT:
http://baudline.blogspot.com.es/2012/11/setiquest-voyager-1-redux.html

+ The "Comet Quest" game for iPhone and iPad from NASA's Jet Propulsion Laboratory can be downloaded from the iTunes Apps store at: http://bit.ly/xXhjI7. The game mimics the real Rosetta mission, and enables you to control the spacecraft, drop a lander on a comet's nucleus, then observe and record events. Players must avoid hazards and successfully transmit data to Earth, earning points for each accomplishment.

+ You and the kids can talk to Santa on the radio. Santa Claus will be appearing on 3.916 MHz. There are still a few opportunities to to tell Santa how good you've been and which rig would delight you. All net times are 2030 Central US time UTC-6)
Monday, December 17
Wednesday, December 19
Friday, December 21
Saturday, December 22
Sunday, December 23
Monday, December 24

[ANS thanks everyone for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

Primary and secondary school students are eligible for membership at one-half the standard yearly rate. Post-secondary school students enrolled in at least half time status shall be eligible for the student rate for a maximum of 6 post-secondary years in this status. Contact Martha at the AMSAT Office for additional student membership information. And with that, please keep in mind the interstellar gas cloud that comprises Sagittarius B contains a billion billion billion (yes, that's three orders of billion) liters of alcohol. If you are doing your mathematics homework please remember to not drink and derive.

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM
K9JKM at amsat dot org

```
From -6954686129743342217
X-Google-Thread: 107ada,91c73a1c5262d9a7,start
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me.highwinds-media.com!news.glorb.com!news-out.readnews.com!transit3.readnews.com!
panix!rri.panix.com!robomod!not-for-mail
From: SWPC.Webmaster@noaa.gov
Newsgroups:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.shor
twave,rec.radio.info
Subject: Weekly Highlights of Solar and Geomagnetic Activity, 10 - 16 December
2012
Followup-To:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.shor
twave
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Date: Mon, 17 Dec 2012 11:30:06 EST
Organization: NOAA Space Weather Prediction Center
Lines: 57
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <20121217163001.CE73433C52@panix2.panix.com>
NNTP-Posting-Host: panix6.panix.com
X-Trace: reader1.panix.com 1355761806 7344 166.84.1.6 (17 Dec 2012 16:30:06 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Mon, 17 Dec 2012 16:30:06 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
X-Received-Bytes: 4353
Bytes: 4352
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:Product: Weekly Highlights and Forecasts
:Issued: 2012 Dec 17 1124 UTC
# Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center
# Product description and SWPC contact on the Web
# http://www.swpc.noaa.gov/weekly.html
#
#                Weekly Highlights and Forecasts
#
```

Highlights of Solar and Geomagnetic Activity
10 - 16 December 2012

Solar activity was low. The largest flare of the period came from Region 1629 (N11, L=240, class/area=Dai/170 on 14 December), a C5/Sf 12/0727Z. Region 1630 (N19, L=253, class/area=Cai/90 on 11 December), also produced a C5 flare on 10/0558Z. The remainder of the period was dominated by infrequent, low-level C-class activity. No earth-directed coronal mass ejections were observed during the week.

A 10 MeV proton enhancement at geosynchronous orbit was observed on 14-15 December. 10 MeV particle flux was slightly elevated beginning around 14/0900Z. An eruption from the beyond the west limb, in the southern hemisphere, was visible in STEREO-A EUVI imagery beginning around 14/1200Z. 10 MeV flux began climbing more steeply around 14/2245Z, reaching a peak of 9.36 pfu at 15/0155Z, just below the S1 threshold of 10 pfu. Flux returned to normal levels over the course of the next two days.

The greater than 2 MeV electron flux at geosynchronous orbit was at normal levels throughout the week.

Geomagnetic field activity quiet all week. Solar wind speed at the ACE spacecraft ranged from around 270 km/s to the near 470 km/s while Bz was never less than -8 nT. A very weak shock was observed at the ACE spacecraft at 14/1852Z, and at GOES by 14/1946Z. Isolated unsettled to minor storm levels were subsequently observed at high latitudes mid-day on 15 and 16 December.

Forecast of Solar and Geomagnetic Activity
17 December - 12 January 2013

Solar activity is expected to be low with a slight chance for moderate activity through the forecast period.

No proton events are expected at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to be at background levels except during 19-21 December when a high speed stream is expected to bring the flux to high levels.

Geomagnetic field activity is expected to begin the forecast period at unsettled levels with a slight chance for an active period on 17-18 December as a recurrent coronal hole high speed stream becomes geoeffective. The remainder of the forecast period is expected to be generally quiet barring any geoeffective coronal mass ejections.

```
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94.232.116.11.MISMATCH!feed.xsnews.nl!border-1.ams.xsnews.nl!
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From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-358  AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sun, 23 Dec 2012 00:21:56 EST
Organization: The Radio Amateur Satellite Corporation
Lines: 264
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Reply-To: ans-editor@amsat.org
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X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
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Content-Language: en-us
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AMSAT NEWS SERVICE
ANS-358

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:

* AMSAT Receives $25,000 Matching Funds Challenge

* AMSAT SKN ON OSCAR 2013 In Memory of W1BIH/PJ9JT
* AMSAT-UK Introduce Electronic (PDF) Membership
* Track Santa with NORAD and AGI on December 24
* Satellite Shorts From All Over

SB SAT @ AMSAT $ANS-358.01
ANS-358 AMSAT News Service Weekly Bulletins

AMSAT News Service Bulletin 358.01
From AMSAT HQ SILVER SPRING, MD.
December 23, 2012
To All RADIO AMATEURS
BID: $ANS-358.01

AMSAT Receives $25,000 Matching Funds Challenge

AMSAT President Barry Baines, WD4ASW says that we have received a matching funds challenge! An anonymous donor will match up to $25,000.00 for Fox. Now is the time to take advantage of this opportunity to double your donation.

Barry wrote, "We end 2012 with significant progress made on the development of Fox-1. A formal proposal to launch Fox-1B was submitted to the NASA ELaNA (Education Launch of Nanosatellites) program on November 19, 2012. NASA is expected to announce in late January or early February 2013 those projects that have been selected. This is our second ELaNA submission, and we believe the merits of this proposal are even stronger than our original Fox-1 proposal."

Fox-1B will incorporate the flight spare of Fox-1 and is a joint project with the Institute for Space and Defense Electronics (ISDE) at Vanderbilt University. The official project name is "RadFXSat" and the ISDE payload is designed to advance the art of understanding the effects of space radiation on electronic components.

We have requested a launch in the second half of 2014 and a 650 km sun-synchronous orbit that is the same as we requested for Fox-1. As AMSAT VP-Engineering Tony Monteiro, AA2TX points out, "Fox-1B is AMSAT's first satellite with science as its PRIMARY mission. This is very exciting as it potentially opens up new opportunities for free launches. Of course, the satellite also carries a ham radio FM transponder and we expect to be able to operate the transponder and science payload simultaneously." There is significant work to be done in systems engineering, software development, satellite construction and testing to prepare Fox-1B for launch.

During the 30th Annual AMSAT Space Symposium, Tony and the Fox Engineering team gave a number of presentations on the development of Fox-1 with extensive documentation of Fox-1 placed in the Proceedings in order to make this material 'public domain' and thus be able to present it openly. We still expect a launch opportunity in the second half of 2013. To continue these projects, we need the extra resources offered by the matching gift. We hope we can count on your commitment and generosity at this time of giving.

There are several ways you can double your donation to keep Amateur Radio in Space:

Members have received a form in the mail to fill out and return. Please do so today!

Go the AMSAT Store and make a donation

Donate via a PayPal donation sent to martha@amsat.org or click on our PayPal widget at http://www.amsat.org.

Your generous contribution to AMSAT to support AMSAT and Project Fox now will help ensure that our common dream of keeping amateur radio in space will, indeed, become a reality.

[ANS thanks the AMSAT Office for the above information]

AMSAT SKN ON OSCAR 2013 In Memory of W1BIH/PJ9JT

You are cordially invited to participate in Straight Key Night on OSCAR 2013, conducted by AMSAT for all radio amateurs throughout the world. This year's event is dedicated to the memory of John Thompson, W1BIH/PJ9JT, who passed away in 2012, aged 96. Although known primarily as an HF DXer and contester, John was also active on OSCAR, mostly on CW.

As always, SKN on OSCAR is simple and informal. Just operate CW through one or more satellites on 1 January 2013 (0000 to 2400 UTC), using a straight hand key. There is no need to send in a log, but all participants are encouraged to nominate someone they worked for Best Fist. Your nominee need not have the best fist of anyone you heard, only of those you worked. Send your nomination to w2rs at amsat.org. A list of those nominated will appear in ANS and the AMSAT Journal.

[ANS thanks Ray Soifer, W2RS, for the above information]

AMSAT-UK Introduce Electronic (PDF) Membership

AMSAT-UK is pleased to announce that they can now offer Electronic

E-membership at
a reduced rate.

AMSAT-UK initially produced a short bulletin called OSCAR News to give members
advice on amateur satellite communications. Since those early days OSCAR News
has grown in size and the print quality has improved beyond recognition. Today,
OSCAR News is produced as a high-quality quarterly colour A4 magazine consisting
of up to 40 pages of news, information and comment about amateur radio space
communications.

The new E-membership will provide OSCAR News as a downloadable PDF file and
members will have the freedom to read it on their Tablets or Smartphones
anytime, anyplace, anywhere.

An additional advantage is that the PDF should be available for download about
1-2 weeks before the paper copy is posted.

E-membership should be especially beneficial to Overseas members who have
suffered from high postal charges and long delivery times.

The AMSAT-UK membership year runs from January 1 to December 31. Why not take
the opportunity to renew your 2013 membership as an E-member.

Renew your AMSAT-UK membership as an E-member here
http://shop.amsat.org.uk/shop/category_8/Existing-Members-Renewal.html

Join as a new E-member here
http://shop.amsat.org.uk/shop/category_9/Join-Amsat-UK.html

E-members can download their copies of OSCAR News from
http://www.amsatuk.me.uk/on

[ANS thanks AMSAT-UK for the above information]

Track Santa with NORAD and AGI on December 24

'Tis the season for Santa tracking at www.noradsanta.org. The highly popular
NORAD Tracks Santa website will once again follow Santa's annual

journey around the world, updating every three to four minutes and showing new movies captured by NORAD's special Santa Cams about once an hour.

A long-time supporter of the program, AGI provided NORAD the 2D and 3D Santa trackers this year. The fun starts at 2.a.m. EST (0700 UTC) on December 24, when website visitors can watch Santa make preparations for his flight. Then at 6 a.m. EST, actual tracking begins. So, fire up the computer, grab your family and friends this December 24 and spend the day tracking Santa at the NORAD Tracks Santa Web site.

Happy Santa tracking!

[ANS thanks AGI for the above information]

Satellite Shorts From All Over

+ Congratulations to Ken Holland, KC9TTR for attaining his ARRL VUCC Satellite Award #236. Ken thanks all the operators who helped him achieve this, especially portable operators in grids away from home.

+ On December 9 the Breeze-M upper stage of Russia's Proton heavy lift rocket failed, placing Yamal 402 telecommunications satellite into a too-low orbit. News from Russia indicates the satellite was rescued by raising its orbit over four firings of its own engine fuel reserves.

+ The ISS orbit was increased by almost 2.5 kilometers in a test of the station's new emergency debris avoidance system. The new system, known as the Pre-Determined Debris Avoidance Maneuver (PDAM), addresses the situation where dangerous debris is detected with little advance warning, down to as little as three hours from the approach. The emergency avoidance maneuver was performed by the engines aboard the Russian Progress freighter docked at the station. The engines can be fired as little as 140 minutes before a dangerous debris approach.

+ Watch a youtube video as Canadian Space Agency Astronaut Chris Hadfield trains in the Soyuz Simulator:
http://www.youtube.com/watch?feature=player_embedded&v=qL1dfdE_RFI
There are good interior views of the Soyuz.

+ NASA released a 64-frame movie of asteroid Toutatis generated
  from data by Goldstone's Solar System Radar on Dec. 12 and 13:
  http://www.youtube.com/watch?feature=player_embedded&v=d7SroliSXuY

[ANS thanks everyone for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

Primary and secondary school students are eligible for membership at one-half the standard yearly rate. Post-secondary school students enrolled in at least half time status shall be eligible for the student rate for a maximum of 6 post-secondary years in this status. Contact Martha at the AMSAT Office for additional student membership information.

73,
This week's ANS Editor,
Lee McLamb, KU4OS
ku4os at amsat dot org

____
Via the ANS mailing list courtesy of AMSAT-NA
http://amsat.org/mailman/listinfo/ans

From -3957389788163736117
X-Google-Thread: 8f86f75953,30f67e1d305e0b75,start
X-Google-Attributes: gid8f86f75953,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
X-Received: by 10.180.74.74 with SMTP id r10mr9884276wiv.3.1356839182504;
        Sat, 29 Dec 2012 19:46:22 -0800 (PST)
MIME-Version: 1.0
Path: i11ni337397wiw.0!nntp.google.com!feeder3.cambriumusenet.nl!
82.197.223.108.MISMATCH!feeder2.cambriumusenet.nl!feeder1.cambriumusenet.nl!
feed.tweaknews.nl!216.40.29.245.MISMATCH!novia!border4.nntp.dca.giganews.com!
border2.nntp.dca.giganews.com!nntp.giganews.com!newsgate.cuhk.edu.hk!
news.netfront.net!ctu-peer!ctu-gate!news.nctu.edu.tw!usenet.stanford.edu!panix!
rri.panix.com!robomod!not-for-mail
From: SWPC.Webmaster@noaa.gov
Newsgroups:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.shortwave,rec.radio.info
Subject: Weekly Highlights of Solar and Geomagnetic Activity, 17 - 23 December

```
2012
Followup-To:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.shor
twave
Date: Mon, 24 Dec 2012 11:30:05 EST
Organization: NOAA Space Weather Prediction Center
Lines: 54
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <20121224163001.CCA8333C53@panix2.panix.com>
NNTP-Posting-Host: panix6.panix.com
X-Trace: reader1.panix.com 1356366605 796 166.84.1.6 (24 Dec 2012 16:30:05 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Mon, 24 Dec 2012 16:30:05 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Bytes: 4313
```

```
:Product: Weekly Highlights and Forecasts
:Issued: 2012 Dec 24 1306 UTC
# Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center
# Product description and SWPC contact on the Web
# http://www.swpc.noaa.gov/weekly.html
#
#                 Weekly Highlights and Forecasts
#
```

Highlights of Solar and Geomagnetic Activity
17 - 23 December 2012

Solar activity was low. Only C1/Sf level flares were observed. Region 1633 (S07, L=111, class/area=Eki/340 on 17 December) was the most productive, with eight C1 flares to its credit. Six of these occurred in the last two days of the week. While it was the largest region on the disk at the beginning of the week, it ended tied with Region 1635 (N09, L=64, class/area=Ehi/250 on 21 December) with an area of 200 microhemispheres. Both Regins 1633 and 1635 ended the period with beta-gamma magnetic configurations. No earth-directed CMEs were observed.

No proton events were observed at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit was at background levels all week.

Geomagnetic field activity was at predominantly quiet levels all week. There were two exceptions. A positive polarity, southern hemisphere recurrent coronal hole high speed stream brought unsettled conditions and the only active period of the week on 17 December. At high latitudes, a single major storm period was observed. Later in the week, another positive polarity coronal hole high speed stream, this time in the northern hemisphere, brought a single unsettled period on 20 December. Activity reached minor storm levels at high latitudes. During both high speed streams, solar wind speed reached the low 500 km/s range while the southward component of the interplanetary magnetic field dipped to approximately -6 nT.

Forecast of Solar and Geomagnetic Activity
24 December - 19 January 2013

Solar activity is expected to be at predominantly low levels during the forecast period, with a slight chance for an M-class event.

No proton events are expected at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to be at background levels throughout the period.

Geomagnetic field activity is expected to be at predominantly quiet levels with the exception of 29-30 December and 13 January when recurrent coronal hole high speed streams are expected to bring unsettled conditions.

```
From 1638276526625281627
X-Google-Thread: a4a23d5f63,88e583ff50622957,start
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X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII
X-Received: by 10.224.207.66 with SMTP id fx2mr20485403qab.7.1356873389697;
        Sun, 30 Dec 2012 05:16:29 -0800 (PST)
MIME-Version: 1.0
Path: k2ni4083qap.0!nntp.google.com!newsfeed2.dallas1.level3.net!news.level3.com!
panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-365 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sun, 30 Dec 2012 08:16:29 EST
Organization: The Radio Amateur Satellite Corporation
Lines: 447
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000701cde68f$925f8de0$b71ea9a0$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
X-Trace: reader1.panix.com 1356873389 5575 166.84.1.6 (30 Dec 2012 13:16:29 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 30 Dec 2012 13:16:29 +0000 (UTC)
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X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
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X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
DKIM-Signature: v=1; a=rsa-sha256; c=relaxed/relaxed; d=comcast.net;
     s=q20121106; t=1356873376;
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      crpxg/cZbWhsg==
Content-Language: en-us
```

AMSAT NEWS SERVICE
ANS-365

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:

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* Free CubeSat Workshop in Milton Keynes, England
* SA AMSAT SPACE SYMPOSIUM - CALL FOR PAPERS
* New Satellite Launch Vehicle To Carry CubeSat Swarm in 2013
* UKube-1 Signs up for Launch and Completes Thermal Vacuum Testing
* Dooms Day Press Release, N0D – Special Event Station
* Reminder -- AMSAT Receives $25,000 Matching Funds Challenge
* Satellite Shorts From All Over

SB SAT @ AMSAT $ANS-365.01
ANS-365 AMSAT News Service Weekly Bulletins

AMSAT News Service Bulletin 365.01
>From AMSAT HQ SILVER SPRING, MD.
December 30, 2012
To All RADIO AMATEURS
BID: $ANS-365.01

Satellites Removed From Munitions List

Space Export Control Reform Passes House and Senate

by SpaceMart.com Staff Writers
Washington DC (SPX) Dec 27, 2012

Legislation reforming space-related export control has passed the House and the Senate and is expected to be signed by the President. The legislation is included in the National Defense Authorization Act for Fiscal Year 2013, under Sec. 1261, Removal of Satellites and Related Items from the United States Munitions List (USML).

The legislation contains restrictions, including prohibitions specific to China, North Korea, and any country that is a state sponsor of terrorism.

The passage of this legislation is significant and brings with it the promise that U.S. universities will be better supported in their mission to prepare the workforce needed to design and deploy the space systems of the future and enable the U.S. to remain a leader in space.

Current law had resulted in unintended, adverse impact on U.S. universities, from classroom teaching to student-built CubeSats. Dr. Frederick Tarantino, USRA President, said, "This new legislation strengthens U.S. national security and helps restore the crucial role of university research and education."

The legislation is consistent with the recommendation by the Departments of Defense and State, which, in consultation with the Department of Commerce and intelligence community, concluded in the Section 1248 Report that "Current law forces the U.S. government to continue to protect commonly available satellites and related items on the USML, thus impeding the U.S. ability to work with partners and putting U.S. manufacturers at a disadvantage, but providing no noticeable benefit to national security."

This action by the Congress follows years of effort by USRA's 105-member-university Council of Institutions to inform members of Congress and Administration officials on how appropriate reform will strengthen our national security, better enable U.S. research innovation, and support U.S. workforce development.

USRA joined with industry, including the Satellite Industry Association and the Commercial Spaceflight Federation, in strongly endorsing the Safeguarding United States Satellite Leadership and Security Act of 2012, sponsored by Sen. Michael Bennet (CO).

USRA also worked with the American Association of Universities (AAU) in bringing to the attention of the Congress and the Administration the chilling effect of current space export control on U.S. universities and U.S. students and the critical need for reform.

Professor Scott Pace, a USRA Trustee and Director of the Space Policy Institute of The George Washington University, said, "This is a long overdue change that restores accountability to the Executive Branch while maintaining Congressional oversight. Both sides of the aisle are to be congratulated for this successful outcome."

This report was orginally posted at SpaceMart.com:
http://tinyurl.com/Space-Export-Reform

[ANS thanks SpaceMart.com for the above information]

AMSAT SKN ON OSCAR 2013 In Memory of W1BIH/PJ9JT

You are cordially invited to participate in Straight Key Night on OSCAR 2013, conducted by AMSAT for all radio amateurs throughout the world. This year's event is dedicated to the memory of John Thompson, W1BIH/PJ9JT, who passed away in 2012, aged 96. Although known primarily as an HF DXer and contester, John was also active on OSCAR, mostly on CW.

As always, SKN on OSCAR is simple and informal. Just operate CW through one or more satellites on 1 January 2013 (0000 to 2400 UTC), using a straight hand key. There is no need to send in a log, but all participants are encouraged to nominate someone they worked for Best Fist. Your nominee need not have the best fist of anyone you heard, only of those you worked. Send your nomination to w2rs at amsat.org. A list of those nominated will appear in ANS and the AMSAT Journal.

[ANS thanks Ray Soifer, W2RS for the above information]

Activation of Mawson in Antarctica

Leaving soon on board the ice breaker Aurora Australis for the Australian Antarctic Territory station at Mawson is Craig Hayhow VK6JJJ, who will become VK0JJJ.

He lands on February the 10th, planning to soon after install the 6m beacon VK0RTM and test the propagation on that band.

The main HF rig is a FlexRadio Flex-5000A coupled to an amplifier and feeding a terminated sloping triangle antenna.

On 6m it will be at 400 watts from Mawson thanks to a power amplifier from Steve Gregory VK3ZAZ, who is also the QSL manager, and radiated by a 5-element yagi.

The amateur satellites on 2m and 70cm are to be accessed using a crossed duo-bander.

During the next 12 months Craig VK0JJJ is in Antarctica to work and amateur radio is his leisure time activity.

[ANS thanks Jim Linton VK3PC and the Southgate ARC for the above information]

Free CubeSat Workshop in Milton Keynes, England

The UK Space Agency will be running a free CubeSat Community Workshop at Milton Keynes on January 22 that will include discussion on plans for UKube-2.

Registration for the workshop is now open. This is a free event and is open to all, hosted by the Open University, Milton Keynes, on 22 January 2013. Please note that space is limited and places will be allocated on a first come, first serve basis.

The event will be an opportunity for the UK Space Agency to provide the cubesat community with an update on its pilot cubesat mission UKube-1, due for launch in early 2013, and to discuss the overall philosophy and timing for the proposed UKube-2 programme. Attendees will have the opportunity to provide input on the future direction of a proposed rolling national programme of cubesat missions.

Parallel breakout sessions will be held as detailed in the downloadable programme. These themes have been selected in response to the common issues raised by members of the community. The findings from each session will feed into a concluding discussion in which follow up actions will be identified.

A copy of the workshop program can be found on-line at:
http://tinyurl.com/UK-Cubesat-Workshop (bis.gov.uk)

UK Space Agency
http://www.bis.gov.uk/ukspaceagency

[ANS thanks Southgate for the above information]

SA AMSAT SPACE SYMPOSIUM - CALL FOR PAPERS

The 2013 SA AMSAT Space Symposium will be held on Saturday, 18 May 2013 at the Innovation Hub in Pretoria. This is the first call for papers. The theme of the symposium is "Satellites - the new Amateur Radio Frontier". If you are planning to present a paper, send a brief outline to saamsat@sarl.org.za by 31 January 2013. For full details and the various deadline dates visit http://www.amsatsa.org.za.

[ANS thanks AMSAT-SA for the above information]

New Satellite Launch Vehicle To Carry CubeSat Swarm in 2013

A report on the AMSAT-UK web says 2013 should see the first flight of a new satellite launch vehicle.
(See: http://www.uk.amsat.org/?p014)

Super Strypi, also known as SPARK (Space-borne Payload Assist Rocket - Kauai), has been developed by Sandia National Laboratories, the University of Hawaii and Aerojet. The rocket is based on an enlarged version of Sandia's Strypi sounding rocket.

The all solid fueled vehicle uses a GEM-46 (LEO-46) motor of Delta-2H heritage as first stage. A Orbus-7S (LEO-7) motor acts as second stage

and a Star-30BP (Spark-30) or an Orbus-1 (LEO-1) as third stage. It is spin and fin stabilized during fist stage burn and has attitude control for the two upper stages. The low cost rocket will be launched from a rail launcher and can put a payload of 250 kg into a 400 km sun-synchronous orbit.

The Super Strypi vehicle will be launched from a rail-launcher at Barking Sands, Kauai (Pacific Missile Range Facility) towards the end of 2013.

Super Strypi will be carrying a swarm of CubeSats, the Edison Demonstration of Smallsat Networks (EDSN). The CubeSats are an unusual size of 10 by 10 by 15 cm (1.5U) and weigh 2 kg. The EDSN swarm will demonstrate distributed, multipoint space weather measurement and are expected to operate for at least 60 days and have an orbit life-time of up to 4 years.

ORS Project - Super Strypi

http://www.govsupport.us/ORSSSEA/Documents/DEA.pdf

Operationally Responsive Space (ORS) Project - Super Strypi
http://www.govsupport.us/orsssea/

Gunter's Space Page 2013 http://space.skyrocket.de/doc_chr/lau2013.htm

[ANS thanks AMSAT-UK for the above information]

UKube-1 Signs up for Launch and Completes Thermal Vacuum Testing

AMSAT-UK published a report that UKube-1, the UK Space Agency's (UKSA) first satellite, has 'booked' its journey into space on a Russian Soyuz-2 rocket. The launch from Baikonur in Kazakhstan is expected to take place in March 2013. UKube-1 has also completed Thermal Vacuum Testing to verify the spacecraft operation in a simulated space environment.

UKube-1 will carry a set of AMSAT-UK FUNcube boards to provide a 435/145 MHz linear transponder and a 145.915 MHz BPSK telemetry beacon for educational outreach.

Payloads in UKube-1 include: the first GPS device aimed at measuring plasmaspheric space weather; a camera that will take images of the Earth, and test the effect of radiation on space hardware, using a new generation of imaging sensor; an experiment to demonstrate the feasibility of using cosmic radiation to improve the security of communications satellites and to flight test lower cost electronic systems; an advanced mission interface computer to enable serious number crunching on tiny spacecraft; a high rate S-Band transmitter and patch antenna; a payload made up of 5 experiments that UK students and the public can interact with. There is also an outreach payload that allows school children to interact with the spacecraft.

Read the full story, including photos on the AMSAT-UK web:
http://www.uk.amsat.org/?p977

[ANS thanks the AMSAT-UK for the above information]

Dooms Day Press Release

N0D – Special Event Station for the End of the World
Successful OSCAR Satellite Operation!

Houston, Texas December 27, 2012: The N0D team had a very successful operation celebrating the Mayan Calendar End of the World which some expected would occur on Dec 21, 2012. In celebration, experienced satellite operators Allen Mattis, N5AFV, and Andy MacAllister, W5ACM, operated special event station N0D on the available satellite passes from December 15th, 2012, through December 22nd, 2012.

A total of 142 satellite contacts were made, and 29 US states, Canada, Mexico, Cuba, Puerto Rico and Brazil were worked. A total of 53 contacts were made on FM satellite SO-50. On the linear satellites AO-07, FO-29 and VO-52 a total of 89 contacts were made using both SSB and CW. It was especially nice to work Paulo, PV8DX, and Hector, CO6CBF, with CW. A contact was also made with Mexican special event station 4A0MAYA also celebrating the Mayan Calendar event. The N0D team thanks the OSCAR satellite community for their patience and understanding during occasional periods of congestion on the satellites related to the N0D operation.

As part of the special event, the South Texas Balloon Launch Team launched the Doomsday Balloon, BLT-32 “To the End of the World and Float”, to prepare the world for its demise! The launch occurred at 2310 UTC on Saturday Dec 15th from Covey Trails Airport in Fulshear, Texas. BLT-32 was designed as a “floater” with hopes that it would reach Europe. The balloon floated eastward for 450 miles and burst at an elevation of approximately 106,000 feet when the rising sun on the morning of Dec 16 th warmed the balloon causing the helium to expand. The balloon came down approximately 15 miles NNW of Pascagoula, MS and efforts have been successful to recover the instrument package.

N0D was also very active on the HF bands throughout the event and over 2,500 amateur radio contacts were made. All 50 US States and 54 DXCC countries were worked on the HF bands. N0D QSLs are available via KK5W (SASE required).

[ANS thanks Allen Mattis, N5AFV, for the above information]

Reminder -- AMSAT Receives $25,000 Matching Funds Challenge
This was announced in last week's ANS-258.

Now is the time to take advantage of this opportunity to double your donation.

There are several ways you can double your donation to keep Amateur Radio in Space:

- Members have received a form in the mail to fill out and return.

Please do so today!

- Go the AMSAT Store and make a donation

- Donate via a PayPal donation sent to martha@amsat.org or click on our PayPal widget at http://www.amsat.org.

Your generous contribution to AMSAT to support AMSAT and Project Fox now will help ensure that our common dream of keeping amateur radio in space will, indeed, become a reality.

[ANS thanks the AMSAT Office for the above information]

Satellite Shorts From All Over

- Listen for Wyatt, AC0RA operating mobile via satellites as he is on the road between Texas and Iowa this coming week.

- Hudson Valley Satellite Nets
  The next Hudson Valley Satellite Net, #156, will be Thursday January 3rd 2013 at 8PM EST On the KC2DAA Repeater 146.970 -600KHz 100 Hz PL Echolink: N2EYH-L Node Number 429079 (Echolink is only active for the duration of the net)
  Subsequent nets for January will be held January 17th and 31st.
  More information at: http://www.hvsatcom.org
  (Stu, WA2BSS)

- The SDR-Radio V2 software preview has been released. It includes support for FCD and FCR Pro+.
  See: http://v2.sdr-radio.com/Previews.aspx

- In Series Five Episode Twenty-Six of the ICQ Amateur / Ham Radio Podcasts Martin M1MRB reviews the Raspberry Pi for Amateur Radio.
  http://tinyurl.com/ICQ-Podcasts-Pi

- NASA has just released two free beautiful interactive ebooks, one about the discoveries of the Hubble Space Telescope, and another about the upcoming replacement for the Hubble, the James Webb Space Telescope. Each book features not just text, but galleries of images, videos, and interactive features that help explain the science and technology of each telescope. More details are at:
  http://www.oneminuteastronomer.com/7184/free-nasa-ebook/

- Lectures on CubeSat Technology and Applications that will be held at von Karman Institute (Brussels, Belgium) on 29 Jan - 1 Feb 2013. There will be close to 20 lectures given by the worldwide experts of the field.Participation is limited to 100 persons. Please register at:

https://www.vki.ac.be/index.php?option�m_mad4joomla&jid�Itemid356

+ Photos showing the arrival of NASA'S TDRS-K Satellite the Kennedy Space Center have been posted at: http://www.americaspace.org/?p(778 TDRS-K is being prepared for a January launch atop a United Launch Alliance Atlas V rocket.

+ Photos of the Orion spacecraft crew cabin under construction at the Operations and Checkout Building (O & C) at the Kennedy Space Center are posted at: http://tinyurl.com/Orion-at-KSC (UniverseToday.com)

[ANS thanks the AMSAT-UK for the above information]

+ A multi-purpose portable satellite station
  Ivo Klinkert PA1IVO describes his relatively simple setup to work amateur radio low-earth orbit satellites.
  This is an expansion of his talk at the AMSAT-UK Colloquium that he re-wrote and had translated for the March 2012 AMSAT-DL Journal
  Read Ivo's article at
  http://ivok.home.xs4all.nl/pa1ivo/portable_satellite_setup.html

[ANS thanks Southgate ARC for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

Primary and secondary school students are eligible for membership at one-half the standard yearly rate. Post-secondary school students enrolled in at least half time status shall be eligible for the student rate for a maximum of 6 post-secondary years in this status. Contact Martha at the AMSAT Office for additional student membership information.

73,
This week's ANS Editor,
E.Mike McCardel, KC8YLD
kc8yld at amsat dot org

From 8216399893654814030
X-Google-Thread: 8f86f75953,adba36606a7b9673,start
X-Google-Attributes: gid8f86f75953,public,usenet
X-Google-NewGroupId: yes

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X-Google-Language: ENGLISH,ASCII-7-bit
X-Received: by 10.66.82.137 with SMTP id i9mr9116274pay.41.1357371038849;
        Fri, 04 Jan 2013 23:30:38 -0800 (PST)
MIME-Version: 1.0
From: SWPC.Webmaster@noaa.gov
Newsgroups:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.shor
twave,rec.radio.info
Subject: Weekly Highlights of Solar and Geomagnetic Activity, 24 - 30 December
2012
Followup-To:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.shor
twave
Date: Mon, 31 Dec 2012 11:30:07 EST
Organization: NOAA Space Weather Prediction Center
Lines: 57
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <20121231163001.81F1033C8C@panix2.panix.com>
NNTP-Posting-Host: panix6.panix.com
X-Trace: reader1.panix.com 1356971407 25502 166.84.1.6 (31 Dec 2012 16:30:07 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Mon, 31 Dec 2012 16:30:07 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to            rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Path: s9ni83763pbb.0!nntp.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!news.mccarragher.com!news.grnet.gr!de-l.enfer-du-nord.net!
feeder2.enfer-du-nord.net!news.glorb.com!news-out.readnews.com!
transit3.readnews.com!panix!rri.panix.com!robomod!not-for-mail
Bytes: 4496
```

```
:Product: Weekly Highlights and Forecasts
:Issued: 2012 Dec 31 1342 UTC
# Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center
# Product description and SWPC contact on the Web
# http://www.swpc.noaa.gov/weekly.html
#
#                 Weekly Highlights and Forecasts
#
```

Highlights of Solar and Geomagnetic Activity
24 - 30 December 2012

Solar activity was low. Region 1635 (N11, L=63, class/area=Dac/270 on 25 December) was the most active region this period, producing twelve C-class flares. The largest of these was a C4/Sf at 1304 UTC on 25 December. Although Region 1635 periodically exhibited beta-gamma magnetic characteristics during its lifetime, it exited the visible disk as a simple spotless plage region. Region 1633 (S07, L=113, class/area=Eai/100 on 24 December) produced a C1 at 2226 UTC on 24 December along with numerous low-level B-class flares throughout the period. Region 1638 (N12, L=310, class/area=Hsx/150 on 29 December) produced a single C1/Sf flare at 1933 UTC on 29 December. A 10 degree filament erupted near N08E20 around 1939 UTC on 27 December. While the bulk of the ejecta from this event was directed north of the ecliptic, a weak impact is expected at earth on 01 January.

No proton events were observed at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit was at normal levels all week.

Geomagnetic field activity was quiet. Solar wind speed at the ACE spacecraft ranged from around 250 km/s to around 350 km/s throughout most of the period. There was a slight increase to about 490 km/s towards the end of the week as the effects from a coronal hole high speed stream (CH HSS) were felt for about a 24 hour period. They have since settled back down to appproximately 400 km/s as the effects of the CH HSS begin to wane. The interplanetary magnetic field total field ranged from around 1 - 8 nT while the Bz component ranged from around +5 nT to -5 nT.

Forecast of Solar and Geomagnetic Activity
31 December - 26 January 2013

Solar activity is expected to be at low levels with a chance of isolated M-class flares throughout the period (31 December - 26 January).

No proton events are expected at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to be at background levels throughout the period.

Geomagnetic field activity is expected to be predominately quiet with a chance for unsettled conditions on 01-02, and 10 January with positive polarity coronal hole high speed streams.

```
From -4976276357142983254
X-Google-Thread: a4a23d5f63,bfd154f58c86fc67,start
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X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
X-Received: by 10.224.198.196 with SMTP id ep4mr28045969qab.3.1357371034909;
        Fri, 04 Jan 2013 23:30:34 -0800 (PST)
MIME-Version: 1.0
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From: rram@panix.com (rec.radio.amateur.moderated Admin)
Newsgroups:
rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.info
Subject: Crossposting Permitted to rec.radio.amateur.moderated
Supersedes: <radio/ham-radio/moderated/crossposting-1-1355554802@panix.com>
Followup-To: poster
Date: 1 Jan 2013 02:00:03 -0500
Organization: rec.radio.amateur.moderated Moderation Team
Lines: 47
Approved: RRI Admin <rec-radio-info-request@panix.com>
Distribution: world
Expires: 19 Jan 2013 02:00:01 -0000
Message-ID: <radio/ham-radio/moderated/crossposting-1-1357023601@panix.com>
Reply-To: rec-radio-amateur-moderated-request@panix.com
(rec.radio.amateur.moderated Admin)
NNTP-Posting-Host: panix2.panix.com
X-Trace: reader1.panix.com 1357023603 5734 166.84.1.2 (1 Jan 2013 07:00:03 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Tue, 1 Jan 2013 07:00:03 +0000 (UTC)
Summary: Short reminder for unmoderated newsgroups that crossposting is permitted
Keywords: FAQ, ham, amateur, radio, moderated, unmoderated, crossposting, permitted
Path: k2ni5383qap.0!nntp.google.com!npeer03.iad.highwinds-media.com!
news.highwinds-media.com!feed-me.highwinds-media.com!
border3.nntp.dca.giganews.com!border1.nntp.dca.giganews.com!nntp.giganews.com!
news.mccarragher.com!news.grnet.gr!de-l.enfer-du-nord.net!feeder2.enfer-du-
nord.net!news.glorb.com!news-out.readnews.com!transit3.readnews.com!panix!
panix2.panix.com!not-for-mail
Bytes: 3966
X-Received-Bytes: 4014

Posted-By: auto-faq 3.3.2 beta (PGPMoose V2.0, Perl 5.005)
Archive-name: radio/ham-radio/moderated/crossposting
Revision: 1.2 2011/11/02 04:08:53
Posting-Frequency: posted twice monthly
URL: http://www.panix.com/~rram/usenet/rram/index.html

Changes followed by "|".

After a 30-day public discussion and feedback period to gauge reader
opinions in March of 2009:

http://groups.google.com/group/rec.radio.amateur.moderated/browse_thread/thread/d7d337db35f23326

the rec.radio.amateur.moderated Moderation Team had decided to consider |
amending its charter, and permit limited simultaneous crossposting to
rec.radio.amateur.moderated and one other unmoderated
amateur-radio-related discussion newsgroup. After a successful trial |
period (90 days, through early July 2009), we decided to adopt this |
change permanently. |

Approved rec.radio.amateur.* newsgroups are those that are currently listed in the latest version of the "List of Big Eight Newsgroups" which is crossposted monthly to news.announce.newgroups, news.groups, and news.lists.misc.

Approved alt.radio.amateur.* and alt.ham-radio.* newsgroups are those that have been created consistent with the suggestions in "So You Want to Create an Alt Newsgroup" at:

  http://www.faqs.org/faqs/alt-creation-guide/

Approved regional hierarchy newsgroups are those that contain either "radio.amateur" or "ham-radio" in their names, including uk.radio.amateur and aus.radio.amateur.misc.

We will make every reasonable effort to keep our list of approved newsgroups up-to-date. In case we have overlooked any, and a submission is rejected in error as a result, the rejected submitter can E-mail us at our administrative contact address (in the signature at the bottom of this article, and the default Reply-To for the rejection message) requesting that it be added, and that the article be approved. We may still choose to reject articles crossposted to any alt.* newsgroup with an inappropriate name, including obscene language, embedded name-calling, or encouragement of unlawful conduct.

Please direct any comments, questions, or criticisms to rec-radio-amateur-moderated-request@panix.com.

```
From -5463697645818303231
X-Google-Thread: 8f86f75953,101b223152d17c70,start
X-Google-Attributes: gid8f86f75953,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
X-Received: by 10.66.89.135 with SMTP id bo7mr12848495pab.16.1357876602889;
        Thu, 10 Jan 2013 19:56:42 -0800 (PST)
Path: 6ni100654pbd.1!nntp.google.com!npeer02.iad.highwinds-media.com!
news.highwinds-media.com!feed-me.highwinds-media.com!
border3.nntp.dca.giganews.com!border1.nntp.dca.giganews.com!nntp.giganews.com!nrc-
news.nrc.ca!newsfeed.news.ucla.edu!usenet.stanford.edu!panix!rri.panix.com!
robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-006 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sat, 5 Jan 2013 22:14:40 EST
Organization: The Radio Amateur Satellite Corporation
Lines: 433
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000901cdebbb$f2220560$d6661020$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
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Mime-Version: 1.0
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NNTP-Posting-Date: Sun, 6 Jan 2013 03:14:40 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
DKIM-Signature: v=1; a=rsa-sha256; c=relaxed/relaxed; d=comcast.net;
     s=q20121106; t=1357442072;
     bh=qgQL1t5Pqd335uKtRZrCfGZmxAqgQgE8hWdhQ4qe4BU=;
     h=Received:Received:From:To:Subject:Date:Message-ID:MIME-Version:
      Content-Type;
     b=Kt5ypbx5a5qAqoNPV8tV79zs08g0RXSeGJ/vjYX/d0oD5XKJARYe0JLdioJ+BdedR
      aZHAJL8ybGtkvUK3GGpY+DwQQCXhuGtEexG5TfWkNbsI5wwNN8FEEFRRNYIQzirU+F
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      rMrFEjkJ7IFjA==
Bytes: 19148
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Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
Content-Language: en-us
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AMSAT NEWS SERVICE
ANS-006

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor at amsat.org

In this edition:

* Reminder -- AMSAT Receives $25,000 Matching Funds Challenge
* SKN on OSCAR 2013 Best Fist Nominations Due
* Proposal Window for U.S. ARISS Contacts Open until January 28
* AMSAT Awards
* PhoneSat CubeSat Now Rescheduled for February Launch from Wallops
* TAPR DCC Videos Available Online

* STRaND-1 CubeSat Filmed by BBC Stargazing Live
* Help Wanted: AMSAT News Service Rotating Editor Positions Available
* First 24 GHz Contact Between USA and Japan
* Kline School Posts AMSAT Announcement

SB SAT @ AMSAT $ANS-006.01
ANS-006 AMSAT News Service Weekly Bulletins

AMSAT News Service Bulletin 006.01
>From AMSAT HQ SILVER SPRING, MD.
January 6, 2013
To All RADIO AMATEURS
BID: $ANS-006.01

Reminder -- AMSAT Receives $25,000 Matching Funds Challenge

Now is the time to take advantage of this opportunity to double your donation.

There are several ways you can double your donation to keep Amateur Radio in Space:

+ Members have received a form in the mail to fill out and return. Please do so today!

+ Go the AMSAT Store and make a donation

+ Donate via a PayPal donation sent to martha at amsat.org or click on our PayPal widget at http://www.amsat.org.

Your generous contribution to AMSAT to support AMSAT and Project Fox now will help ensure that our common dream of keeping amateur radio in space will, indeed, become a reality.

Fox-1A's design goals include:

+ Fox-1 includes a U/V (mode B) FM analog transponder. It's 2 meter downlink should be even easier to hear than AO-51.

+ Fox-1 is being designed so you can work it with just a dual-band HT and an "arrow" antenna.

+ The telemetry data from Fox-1 will be sent on the voice downlink in the frequencies below the audible band as low-speed FSK with forward error correction.

+ Fox-1 will provide an on-orbit test of a new high speed digital data mode for use on future missions.

+ A free telemetry decode program, FoxTLM, will be available to decode and display the low-speed telemetry and the high speed data downlink.

+ Fox-1 is designed to host a significant science payload to support future science missions that help us to get a free launch. This capability is fully utilized in our second ELaNa proposal to fly Fox-1B.

+ Fox-1 is designed to keep the FM transponder active using it solar cells in the event of on-orbit battery charging problems.

[ANS thanks the AMSAT Office for the above information]

SKN on OSCAR 2013 Best Fist Nominations Due

Many thanks to all who participated in AMSAT's Straight Key Night on OSCAR 2013. If you have not already done so, please take a moment to nominate someone you worked for Best Fist. Remember, your nominee need not have the best fist of those you heard, only of those you worked. Send your nomination to w2rs at amsat.org.

This year's event is dedicated to the memory of John Thompson, W1BIH/PJ9JT, who passed away in 2012, aged 96. Although known primarily as an HF DXer and contester, John was also active on OSCAR, mostly on CW.

Those nominated will be recognized in an ANS bulletin in early February, and in The AMSAT Journal.

[ANS thanks Ray Soifer, W2RS for the above information]

Proposal Window for U.S. ARISS Contacts Open until January 28

NASA's Teaching from Space program says their application window for schools and suitable public venues in the United States is open until January 28, 2013.

To be considered for an ARISS contact with crew members aboard the International Space Station the application process consists of submission of an educational proposal describing incorporation of science, technology, engineering and math (STEM) subjects into the curriculum.

The ARISS program is a cooperative venture of NASA, ARRL and AMSAT and other international space agencies that organizes scheduled contacts via Amateur Radio between astronauts and cosmonauts aboard the ISS and classrooms and communities.

One of the ARISS partners, the American Radio Relay League (ARRL), posted information of the proposal process on their web at:
http://www.arrl.org/ariss-proposal-requirements

The NASA Teaching From Space web site has all of the instructions and links to downloadable forms posted at:
http://tinyurl.com/NASA-TFS-JanuaryWindow (nasa.gov)

Proposals accepted during January are for ARISS contacts that would take place in the U.S. between June 2013 and November 2013.

A variety of public forums considered for ARISS contacts include:

+ School assemblies
+ Science museums
+ Scout camporees and jamborees and space camps
+ Large group audiences where students, teachers, parents, and communities learn about space and space technologies and Amateur Radio.

[ANS thanks NASA Teaching From Space, ARRL, and ARISS for the above information]

AMSAT Awards

AMSAT Director Contests and Awards, Bruce Paige, KK5DO says congratulations are in order for our latest AMSAT Awards recipients:

The following have entered into the Satellite Communicators Club for making their first satellite QSO.

+ Joseph Fouquet, N5JF
+ Mark Gearis, KG4JAG

The following have earned the AMSAT Communications Achievement Award.

+ Costantino Montella, IK8YSS, #551
+ Joseph Fouquet, N5JF, #552
+ Anthony Sirianni, KD8OEE, #553

The following have earned the South Africa Satellite Communications Achievement Award.

+ Costantino Montella, IK8YSS, #US180

+ Arnel Nebrida, DU2XXA, #US181
+ Anthony Sirianni, KD8OEE, #US182
+ Mark Gearis, KG4JAG, #US183

To see all the awards visit http://www.amsat.org. Bruce says this will finish up the AMSAT Awards for 2012. Get on the air and earn your AMSAT Award during 2013!

[ANS thanks AMSAT Director Contests and Awards, Bruce Paige, KK5DO for the above information]

PhoneSat CubeSat Now Rescheduled for February Launch from Wallops

The PhoneSat cubesat, originally planned for a December 2012 launch, now looks like it will fly aboard a new commercial rocket from Orbital Sciences Corp. Orbital's initial flight of the Antares-110 vehicle will carry PhoneSat into low earth orbit. The vehicle will be launched from a new launch pad LA-0A at Wallops Island, where the former Conestoga launch pad was located.

Phonesat carries an amateur radio payload on 437.425 MHz, has been chosen as one of the winners in the Aerospace category for the Popular Science magazine "Best of What's New 2012" awards.

PhoneSat is a technology demonstration mission consisting of three 1U CubeSats intended to prove that a smartphone can be used to perform many of the functions required of a spacecraft bus.

The satellite is built around the Nexus smartphone which will be running the Android operating system and will be enclosed in a standard 1U cubesat structure. The main function of the phone is to act as the Onboard Computer, but the mission will also utilize the phone's SD card for data storage, 5MP camera for Earth Observation, and 3-axis accelerometer and 3-axis magnetometer for attitude determination.

One of the nanosatellites, powered by the HTC Nexus One smartphone, will send back pictures of Earth. The other two, running on the Samsung Nexus S, will have two-way S-band radio allowing them to be controlled from Earth.

With a short lifetime of only about one week, the satellites have no solar cells and operate on battery only.

Also planned for this launch is the commercial DOVE-1 satellite for a technology demonstration nanosatellite based on the triple CubeSat form factor. It's mission consists of:

+ Build a low-cost imaging satellite with non-space, COTS components.
+ Show that a bus constrained to the 3U cubesat form factor can via-

bly host a small camera payload.
+ Demonstrate the ability to design, produce and operate satellites on short schedules and low cost.

Dove-1 plans to transmit its telemetry and image data to the ground on a proposed frequency of 145.825 MHz in the amateur radio band although this is a commercial mission.

[ANS thanks NASA, Gunter's Space Page, and AMSAT-UK for the above information]

TAPR DCC Videos Available Online

Gary Pearce, KN4AQ, says HamRadioNow (http://arvideonews.com/hrn/) recorded all of the 2012 Atlanta ARRL & TAPR Digital Communications Conference. The videos are posted in this link above.

The HamRadioNow netcasts appear in newest to oldest order on the web page. Scroll down to find these episodes from the 2012 DCC:

+ Episode 33 is a talk with TAPR President Steve Bible, N7HPR, about what TAPR is today (and what it's been), the DCC.

+ Episode 34 is Steve again with his lead-off talk on the ARISSat project's user survey.

+ Episode 35 has Scotty Cowling, WA2DFI, and Jeremy McDermond, NH6Z, reviewing this year's hardware and software updates to HPSDR - High Performance Software Defined Radio.

+ Episode 36 is more than a primer on SDR and FlexRadio's new 6000 series by FlexRadio's Stephen Hicks, N5AC.

+ Episode 37 has NW Digital Radio's Bryan Hoyer, K7UDR, and John Hays, K7VE, updating a pair of old ideas: a packet-hailing channel and AMPRNet44.

+ Episode 38 features Hessu Hannikainen OH7LZB, developer of the APRS.FI website describing development of an open-source server for the APRS-IS network that distributes APRS data worldwide.

Episode 44, added on December 27 is a video from the DCC presenting the design of a Handheld SDR by Chris Testa, KD2MBH.

TAPR says the DCC videos will also be viewable on the YouTube TAPR Digital Videos Channel:
http://www.youtube.com/user/TAPRDigitalVideo

[ANS thanks Gary Pearce, KN4AQ and TAPR for the above information]

STRaND-1 CubeSat Filmed by BBC Stargazing Live

AMSAT-UK reports on http://www.uk.amsat.org/?p=12039 about the BBC filming at the Surrey Space Centre (SSC) and Surrey Satellite Technology Limited (SSTL) for an item on the STRaND-1 CubeSat mission for the "Stargazing Live" program to be broadcast January 8-10.

Volunteers from the SSC and SSTL built STRaND-1 in their spare time.

The STRaND-1 spacecraft will carry an Amateur Radio AX.25 packet radio payload on 437.575 MHz. It will be the UK's first "PhoneSat" carrying a Nexus Android Smartphone that will run a number of Space Apps. In addition it will have both a Resistojet and a Pulsed Plasma Thruster (PPT) module.

The 'STRaND Data' App, one of the Space Apps that will run on the Smartphone was a spin-off of the work done by the AMSAT-UK FUNcube team. This App will collect satellite telemetry from within the satellite and display it graphically on the Nexus One Display. The display is observed by an on-board camera and the images transmitted to earth on Amateur Radio frequencies.

Pictures taken during the BBC filming can be seen at
https://www.facebook.com/pages/Surrey-Space-Centre/147861435274871

STRaND-1 on Facebook https://www.facebook.com/nanosats

[ANS thanks AMSAT-UK for the above information]

Help Wanted: AMSAT News Service Rotating Editor Positions Available

The AMSAT News Service (ANS) is responsible for researching, writing, editing, and publishing the weekly amateur satellite news bulletins.

With the addition of a couple of volunteers this would generally involve taking a turn about every 3 to 4 weeks.

At present we a looking for interested satellite enthusiasts to join the ANS editorial team. Professional writing/editing experience is NOT a requirement. Your interest and enthusiasm in following and reporting on amateur radio in space will get you started! The ANS Editor team helps each other by rounding up items of interest. Plus we receive submitted items for publication ... so you won't be left all alone!

If you can commit to working on the bulletins for a week on a rotating basis please reply via e-mail to AMSAT News Service Editor Lee McLamb, KU4OS via ku4os at amsat.org.

[ANS thanks AMSAT Vice-President User Services, Gould Smith, WA4SXM for the above information]

First 24 GHz Contact Between USA and Japan

Al, W5LUA and Shichirou, JA6CZD made the first 24 GHz EME contact between the USA and Japan on January 2 at 1430Z. The two stations had about an hour of common window where each had 15 to 20 degrees of elevation.

JA6CZD uses a 2.4 M offset fed dish with a 22 watt SSPA. W5LUA uses a 2.4M offset fed dish and a TWT mounted on the feed support providing 100 watts at the feed. JA6CZD sent Al a 559 signal report and Al gave Shichirou a 449 report.

Both stations use linear polarity and must compensate for the 70 degrees of spatial offset between their locations. JA6CZD was used horizontal and Al used vertical polarization. The noise figure at both stations was under 2 dB.

Al measured his Doppler Shift with his return echoes at 51 KHz at the start of the contact. The mutual Doppler Shift placed both at about 24048.108 MHz based on a center frequency of 24048.100 MHz. This shifted down in frequency as the schedule took place.

W5LUA was GPS locked and JA6CZD uses an OCXO and a Rubidium standard to control frequency.

[ANS thanks Al Ward, W5LUA for the above information]

Kline School Posts AMSAT Announcement

The Kline School "Out of This World Experience" Raises $6500 for AMSAT Fox story, originally announced in the ANS-351 bulletins, now has some photos to accompany this event.
(See: http://amsat.org/pipermail/ans/2012/000675.html)

In conjunction with Kline School's ARISS contact on December 6 the students launched a Spell-A-Thon and raised $6,500 dollars for solar panels on Fox-1.

Kline School posted coverage of AMSAT's write-up at:
https://sites.google.com/a/klineschool.com/return-to-space/highlights
https://www.facebook.com/pages/Kline-School/153838291839
(plus you get a preview of page 5 of the January/February 2013 AMSAT Journal under production.)

[ANS thanks Kline School and The AMSAT Journal for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

Primary and secondary school students are eligible for membership at one-half the standard yearly rate. Post-secondary school students enrolled in at least half time status shall be eligible for the student rate for a maximum of 6 post-secondary years in this status. Contact Martha at the AMSAT Office for additional student membership information. And with that, please keep in mind when Christmas was over Rudolph had a chance to do something he had wanted to do for a long time. He made an appointment with a plastic surgeon because he was so sensitive about his looks. However, it wasn't his glowing proboscis that he wanted changed. He was proud of his nose and the help he had given Santa because of it. No, he was sensitive about his long ears which were much more prominent than the ears of the average reindeer. So one week after Christmas, he underwent reconstructive surgery, and since that time, January 1st has been celebrated as ... New Ears Day.

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM

```
From 8327875220975566127
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From: Chris Steyaert <observations@rmob.org>
Newsgroups: rec.radio.amateur.space,sci.astro.amateur
Subject: Radio Meteor Obs. Bull. December 2012  Geminids
Date: Sun, 06 Jan 2013 20:24:06 +0100
Message-ID: <dpjje8t45ufjkehsm7dr6utqcfhel30go9@4ax.com>
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Radio Meteor Observation Bulletin No. 233 of December 2012 (81 K) is available
now as

     http://www.rmob.org/rmobtext/rmob1212.txt


More information and the visual presentation of the hourly forward scatter
counts can be found on

     http://www.rmob.org


     Chris




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Newsgroups: rec.radio.amateur.space
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Complaints-To: groups-abuse@google.com
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Subject: Man who reloaded Filipino shooter's gun charged
From: Iran <tamarmadgecay@gmail.com>
Injection-Date: Mon, 07 Jan 2013 14:20:35 +0000
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Man who reloaded Filipino shooter's gun charged http://adf.ly/2836760/
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Newsgroups:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.shor
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Subject: Weekly Highlights of Solar and Geomagnetic Activity, 31 December - 06
January 2013
Followup-To:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.shor
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Date: Mon, 7 Jan 2013 11:30:09 EST
Organization: NOAA Space Weather Prediction Center
Lines: 71
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X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
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article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
X-Received-Bytes: 5238
Bytes: 5558

:Product: Weekly Highlights and Forecasts
:Issued: 2013 Jan 07 0251 UTC
# Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center
# Product description and SWPC contact on the Web
# http://www.swpc.noaa.gov/weekly.html
#
#                 Weekly Highlights and Forecasts
#
```

Highlights of Solar and Geomagnetic Activity
31 December - 06 January 2013

Solar activity ranged from very low to moderate. The summary period began on 31 December with very low levels. Low levels were observed on 01 January due to a single C1/Sf flare at 01/0906Z from Region 1640 (N28. L=323, class area Eho/360 on 06 January). A return to very low levels existed on 02 January. Low levels returned on 03 January due to a single C1 event from Region 1640. 04 January witnessed numerous C-class events, the largest a C2 long duration event (LDE) from Region 1652 (N20, L=187, class area Dao/120 on 06 January) that began at 04/2346Z, peaked at 05/0018Z and ended at 05/0119Z. Associated with this event was a 170 sfu Tenflare. Earlier on 04 January, Region 1639 (S16, L=311, class/area Dao/090 on 28 December) produced a C1 LDE that began at 04/0822Z, peaked at 04/0918 Z and ended at 04/1034Z. Associated with this event was a coronal mass ejection (CME), first observed in STEREO A COR2 imagery off the SE limb at 04/0924Z. Activity increased to moderate levels due an impulsive M1 event observed at 05/0931Z from Region 1652. A return to low levels was observed on 06 January. The largest event on the 6th was a C3 event at 06/0303Z from Region 1653 (N09, L=185, class/area Cso/030 on 06 January). By the end of the summary period, a total of 14 spotted regions populated the visible disk.

No proton events were observed at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit was at normal levels.

Geomagnetic field activity was quiet. Solar wind speed, measured at the ACE spacecraft, ranged from a high of about 480 km/s at the beginning of the period to a low of near 275 km/s late on 05 January. The interplanetary magnetic field (IMF) Bt ranged between 1 to 9 nT while the Bz component of the IMF varied between +7 to -6 nT. Phi angle was observed to be in a positive (away) orientation for a majority of the period. Intervals of negative (towards) orientation occured between 31/0000Z to 02/0445Z and again from about 06/1300Z through the end of the summary period.

Forecast of Solar and Geomagnetic Activity
07 January - 02 February 2013

Solar activity is expected to be at low levels with a chance for M-class activity through 18 January when active Regions 1650 (S29, L=194), 1652 (N20, L=187) and 1653 (N09, L=185) rotate off the disk. Very low to low levels are expected to persist through 21 January. >From 22 Janaury through the end of the outlook period, low levels are expected with a chance for M-class activity as old Region 1640 (N28, L=323) is due to return.

No proton events are expected at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to be at normal to moderate levels through the outlook period.

Geomagnetic field activity is expected to be at quiet to unsettled levels on 07 - 08 January due to the influence of a geoeffective CH HSS coupled with possible glancing blow effects from the 04 January CME. With the exception of 13 January, 20 - 21 January and 26 January when recurrent CH HSS are expected to become geoeffective, quiet conditions are expected to persist through the outlook period.

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From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-013  AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Mon, 14 Jan 2013 11:04:32 EST
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Lines: 247
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X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
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X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
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AMSAT NEWS SERVICE
ANS-013

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:

* AMSAT Store Sells Out of Initial Supply of Broadband Preamps
* FITSAT-1 LED Schedules
* NASA Announces Student Internships for Summer
* Upcoming ARISS Contact Schedule

SB SAT @ AMSAT $ANS-013.01
ANS-013 AMSAT News Service Weekly Bulletins

AMSAT News Service Bulletin 013.01
From AMSAT HQ SILVER SPRING, MD.
Januray 3, 2013
To All RADIO AMATEURS
BID: $ANS-013.01

AMSAT Store Sells Out of Initial Supply of Broadband Preamps

The initial run of broadband preamps have been sold. We expect to have more available relatively soon. The first few will be used to cover existing orders.
When they are available for purchase, they will be on the AMSAT store, and announcements will be made though AMSAT media. Thanks to all who have ordered them, and by doing so supported AMSAT operations!

[ANS thanks Alan, WA4SCA, for the above information]

FITSAT-1 LED Schedules

Flashing LED plan was based on the weather:

14th Jan.	04:57:30 - 04:59:30 UTC	North Italy	(10Hz Green)
14th Jan.	11:03:30 - 11:05:30 UTC	Central USA	(10Hz Green)
15th Jan.	22:27:30 - 22:29:30 UTC	Wulmuqi China	(10Hz Green)
17th Jan.	20:22:30 - 20:24:30 UTC	Central India	(10Hz Green)
19th Jan.	03:19:30 - 03:21:30 UTC	North Italy	(10Hz Green)

The magnitude of flashing NIWAKA has been observed to be approximately 7 to 8.
The light is faint.

The following web sites have additional FITSAT-1 information

http://www.fit.ac.jp/~tanaka/fitsat.shtml
http://www.jinkou-eisei.jp/FITSAT/index.html
http://www.ne.jp/asahi/hamradio/je9pel/fitsatle.htm

[ANS thanks Mineo, JE9PEL, for the above information]

NASA Announces Student Internships for Summer

College Level Internships

NASA says they are accepting applications for college level summer internship positions among several NASA field centers. "But don't wait until the deadline," advises NASA mentor and fellow AMSAT member, Pat Kilroy, N8PK. "The opportunities to work on a CubeSat team, for example, are exciting but pretty competitive."

It is thought that students who know the "AMSAT way" and who have an Amateur Radio license and some hands on experience have a distinct advantage in the midst of such competition. "That worked for me," said Pat.

Students can view opportunities and apply for them in one place. To start, the prospective student should go to:

https://intern.nasa.gov/

then click the Student Opportunities tab then select Internships, which will bring you to the OSSI:NIFS page describing the overall internship program.

Using the Search Opportunities tab from there, scroll down to the bottom for the "Enter keywords" box and enter "cubesat" without the quotes to view the variety of different opportunities in this field.

Pat Kilroy will be the lead mentor for two of the opportunities described. The first, under the title of "CubeSat Engineering Design Team Project," applicants are called to develop a CubeSat spacecraft bus (i.e., the solar panel and battery charging, power regulation and distribution "EPS" subsystem, the RF communications "COM" subsystem, the command and data handling/processing avionics "C&DH" subsystem, the attitude determination and control "ADAC" subsystem, and the mechanical structures "MECH" subsystem) and one instrument (i.e., a camera/telescope payload). Hardware and software skills will be well represented. The team will need a student Systems Engineer as well. Each intern will consult with a NASA engineer in their area of specialty throughout the summer.

In the second, under the title "PICetSat Module Development," one or two student interns are called to perform any of a number of tasks, including one to develop a "dual-use" ground station for CubeSats and high-altitude balloon and sounding rocket experiments. This task will involve satellite and balloon tracking, RF systems, test equipment and antennas and antenna control automation.

Additional details are available on the OSSI:NIFS site including how to contact the lead mentor for technical questions, and the procedure on how to apply for one of these Goddard Greenbelt positions as well as many others.

High School Internship Applications at NASA

The application process for high school students to apply for a summer internship can be found on the same OSSI:NIFS Web site as given above for the summer at one of many locations around the country. As noted in the opportunity description already mentioned, up to two local high school seniors will be selected to participate on the CubeSat team in Greenbelt.

[ANS thanks NASA for the above information.]

Upcoming ARISS Contact Schedule

Saint Rose Elementary School, Saint John, New Brunswick, Canada, direct via VE9LC contact is a go for: Thu 2013-01-17 13:40:24 UTC 60 deg

All dates and times listed follow International Standard ISO 8061 date and time format YYYY-MM-DD HH:MM:SS

Note, all times are approximate. It is recommended that you do your own orbital prediction or start listening about 10 minutes before the listed time.

Total number of ARISS ISS to earth school events is 786.
Each school counts as 1 event.

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US Hams, don�t forget that there is a new process for US school proposals. For US schools to have an ARISS contact, they must fill out a proposal, submit it to NASA, and see if they are approved or not. Once a school is approved and put on the list, an ARISS mentor will be assigned to assist the school.

NASA will have two open windows a year for schools to submit a proposal.You must go through NASA to get the proposal material. Contact Teaching From Space, a NASA Education office, at JSC-TFS-ARISS@mail.nasa.gov or by calling them at (281) 244-2320.

The following US states and entities have never had an ARISS contact: Arkansas, Connecticut, Delaware, Kansas, Louisiana, North Dakota, Rhode Island, South Dakota, Vermont, West Virginia, Wyoming, American Samoa, Guam, Northern Marianas Islands, and the Virgin Islands.

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QSL information may be found at:
http://www.arrl.org/frequently-asked-questions
http://www.rac.ca/ariss/oindex.htm#QSL's

ISS callsigns: DP�ISS, NA1SS, OR4ISS, RS�ISS

[ANS thanks Charlie, AJ9N, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

Primary and secondary school students are eligible for membership at one-half the standard yearly rate. Post-secondary school students enrolled in at least half time status shall be eligible for the student rate for a maximum of 6 post-secondary years in this status. Contact Martha at the AMSAT Office for additional student membership information.

73,
This week's ANS Editor,
Lee McLamb, KU4OS

```
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twave,rec.radio.info
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X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
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:Product: Weekly Highlights and Forecasts
:Issued: 2013 Jan 14 0326 UTC
# Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center
# Product description and SWPC contact on the Web
# http://www.swpc.noaa.gov/weekly.html
#
#                Weekly Highlights and Forecasts
#
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Highlights of Solar and Geomagnetic Activity
07 - 13 January 2013

Solar activity was at low to moderate levels. Low levels were observed on 07-10 January and again on 12 January. Moderate levels were observed on 11 and 13 January. At the beginning of the period, there were 12 numbered regions on the visible disk. Most of the regions were relatively stable producing low level C-class flares. The most magnetically complex spot group was Region 1652 (N17, L=184, class/area Fkc/320 on 07 January); a Fkc/BG spot group. By early 08 January, Region 1654 (N08, L=151, class/area Fki/1100 on 11 January) rotated around the NE limb. Both Regions 1652 and 1654 were responsible for the majority of the C-class activity that occurred through the rest of the period. By 11 January, moderate levels were reached as Region 1654 produced two M-class flares; an M1 at 11/0911 UTC with associated Type II (537 km/s) and Type IV radio bursts and an M1/1f at 11/1507 UTC. Other activity on 11 January included a 174 sfu Tenflare associated with a C1 flare from Region 1654 at 11/1846 UTC. Low levels returned on 12 January. By 13 January, moderate levels returned as Region 1652 produced two M-class flares; an M1 at 13/0050 UTC and another M1 at 13/0838 UTC with associated Type II (649 km/s) and Type IV radio sweeps as well as an Earth-directed CME. First seen in STEREO-A COR2 imagery at 13/0909 UTC (estimated speed of 371 km/s), the ejecta appeared in SOHO/LASCO imagery as a faint halo beginning at 13/1236 UTC.

No proton events were observed at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit was at normal levels.

Geomagnetic field activity was quiet for the majority of the period through late on 13 January. The solar wind speed, measured at the ACE spacecraft, ranged from 272 km/s to 375 km/s while the Bz component of the interplanetary magnetic field (IMF) did not vary much beyond +/- 5 nT. By late on 10 January, the phi angle changed from predominantly negative (towards) to positive (away) indicative of a solar sector boundary crossing. By mid day on 13 January, solar wind speed began to increase from approximately 400 km/s to 510 km/s. An increase in temperature and total field strength (10 nT) was observed as a positive polarity coronal hole high speed stream became geoeffective. Unsettled periods were observed from 13/1800-2400 UTC.

Forecast of Solar and Geomagnetic Activity
14 January - 09 February 2013

Solar activity is expected to be at low to moderate levels until Region 1654 rotates around the west limb on 20 January. Very low to low levels are expected until Regions 1652 and 1654 return beginning on 31 January. A chance for M-class flares exists from 31 January through the end of the forecast period.

No proton events are expected at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to be at normal to moderate levels throughout the forecast period with possible high levels on 15-16 January and again on 19-20 January due to coronal hole high speed stream and CME effects.

Geomagnetic field activity is expected to be quiet to active on 14 January due to continued coronal hole high speed stream effects. Quiet levels are expected through mid-day on 17 January. By mid to late 17 January, a CME is expected to become geoeffective causing unsettled to active periods through 18 January. Conditions are expected to return to quiet levels by 19 January and continue until 09 February when a coronal hole high speed stream is expected to return.

```
From 5218250695011498204
X-Google-Thread: a4a23d5f63,d538867e6c6741c9,start
X-Google-Attributes: gida4a23d5f63,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
X-Received: by 10.224.72.199 with SMTP id n7mr55049220qaj.5.1358233203648;
        Mon, 14 Jan 2013 23:00:03 -0800 (PST)
MIME-Version: 1.0
Path: k2ni68qap.0!nntp.google.com!newsfeed2.dallas1.level3.net!news.level3.com!
panix!panix2.panix.com!not-for-mail
From: rram@panix.com (rec.radio.amateur.moderated Admin)
Newsgroups:
rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.rad
io.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amat
eur.space,rec.radio.info
Subject: Crossposting Permitted to rec.radio.amateur.moderated
Supersedes: <radio/ham-radio/moderated/crossposting-1-1357023601@panix.com>
Followup-To: poster
Date: 15 Jan 2013 02:00:02 -0500
Organization: rec.radio.amateur.moderated Moderation Team
Lines: 47
Approved: RRI Admin <rec-radio-info-request@panix.com>
Distribution: world
Expires: 02 Feb 2013 02:00:01 -0000
```

Message-ID: <radio/ham-radio/moderated/crossposting-1-1358233201@panix.com>
Reply-To: rec-radio-amateur-moderated-request@panix.com
(rec.radio.amateur.moderated Admin)
NNTP-Posting-Host: panix2.panix.com
X-Trace: reader1.panix.com 1358233203 18412 166.84.1.2 (15 Jan 2013 07:00:03 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Tue, 15 Jan 2013 07:00:03 +0000 (UTC)
Summary: Short reminder for unmoderated newsgroups that crossposting is permitted
Keywords: FAQ, ham, amateur, radio, moderated, unmoderated, crossposting, permitted

Posted-By: auto-faq 3.3.2 beta (PGPMoose V2.0, Perl 5.005)
Archive-name: radio/ham-radio/moderated/crossposting
Revision: 1.2 2011/11/02 04:08:53
Posting-Frequency: posted twice monthly
URL: http://www.panix.com/~rram/usenet/rram/index.html

Changes followed by "|".

After a 30-day public discussion and feedback period to gauge reader opinions in March of 2009:

http://groups.google.com/group/rec.radio.amateur.moderated/browse_thread/thread/d7d337db35f23326

the rec.radio.amateur.moderated Moderation Team had decided to consider |
amending its charter, and permit limited simultaneous crossposting to
rec.radio.amateur.moderated and one other unmoderated
amateur-radio-related discussion newsgroup. After a successful trial |
period (90 days, through early July 2009), we decided to adopt this |
change permanently. |

Approved rec.radio.amateur.* newsgroups are those that are currently listed in the latest version of the "List of Big Eight Newsgroups" which is crossposted monthly to news.announce.newgroups, news.groups, and news.lists.misc.

Approved alt.radio.amateur.* and alt.ham-radio.* newsgroups are those that have been created consistent with the suggestions in "So You Want to Create an Alt Newsgroup" at:

  http://www.faqs.org/faqs/alt-creation-guide/

Approved regional hierarchy newsgroups are those that contain either "radio.amateur" or "ham-radio" in their names, including uk.radio.amateur and aus.radio.amateur.misc.

We will make every reasonable effort to keep our list of approved newsgroups up-to-date. In case we have overlooked any, and a submission is rejected in error as a result, the rejected submitter can E-mail us at our administrative contact address (in the signature at the bottom of this article, and the default Reply-To for the rejection message) requesting that it be added, and that the article be approved. We may still choose to reject articles crossposted to any alt.* newsgroup with an inappropriate name, including obscene language, embedded name-calling, or encouragement of unlawful conduct.

Please direct any comments, questions, or criticisms to rec-radio-amateur-moderated-request@panix.com.

```
From 6779791530560145502
X-Google-Thread: 8f86f75953,f05e31485df9661f,start
X-Google-Attributes: gid8f86f75953,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
X-Received: by 10.181.12.35 with SMTP id en3mr982185wid.2.1359079623731;
        Thu, 24 Jan 2013 18:07:03 -0800 (PST)
MIME-Version: 1.0
Path: i11ni18214wiw.0!nntp.google.com!feeder1.cambriumusenet.nl!feed.tweaknews.nl!
85.12.40.131.MISMATCH!xlned.com!feeder3.xlned.com!npeer.de.kpn-eurorings.net!
npeer-ng0.de.kpn-eurorings.net!news.bawue.net!storethat.news.telefonica.de!
telefonica.de!news-2.dfn.de!news.dfn.de!goblin1!goblin.stu.neva.ru!news2.euro.net!
209.197.12.246.MISMATCH!nx02.iad01.newshosting.com!newshosting.com!news-
out.readnews.com!transit3.readnews.com!panix!rram.panix.com!robomod!not-for-mail
From: Paul W. Schleck <pschleck@oasis.novia.net>"
Newsgroups:
rec.radio.amateur.moderated,rec.radio.amateur.space,rec.radio.amateur.digital.misc
Subject: 30 Years Ago: AMSAT/VITA Agreement to Develop PACSAT
Date: Fri, 18 Jan 2013 20:24:19 EST
Organization: Novia Internetworking, http://www.novia.net/
Lines: 75
Approved: RRAM Approval Key <rram-approval-key@panix.com>
Message-ID: <50f98425$0$61560$540ea2cf@novia.net>
NNTP-Posting-Host: panix6.panix.com
X-Trace: reader1.panix.com 1358558660 3983 166.84.1.6 (19 Jan 2013 01:24:20 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sat, 19 Jan 2013 01:24:20 +0000 (UTC)
X-RRAM-Policy: http://www.panix.com/~rram/usenet/rram/index.html
X-RRAM-Info-1: Send submissions to             rec-radio-amateur-
moderated@panix.com
X-RRAM-Info-2: Send technical complaints to    rec-radio-amateur-moderated-
request@panix.com
X-RRAM-Info-3: Send complaints about policy to rec-radio-amateur-moderated-
request@panix.com
X-RRAM-Info-4: GnuPG 1.4.5 Public Key at http://www.panix.com/~rram/gpg.html
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
User-Agent: nn/6.7.3
X-Auth: PGPMoose V2.0 PGP rec.radio.amateur.moderated
 iJwEAQECAAYFAlD59cMACgkQSO8RITXCfvtK6gP/Wyl055U7xPmp7hUJaNoH6HSh
```

 eLY2Zno6x0ZPQ8W4y/bVUMnNyQdyeMTl0mpaHReX+fan7OAgJ53CWnauRAUnf4tU
 IKYjwjvMdW0ByubU3MtyhcpbeeX6odPClvYht6FZtkuXT2w4yx0pW+88AfRh2RnH
 AZRBDkeYiTxOv02Mdgc=
 =9CIc

-----BEGIN PGP SIGNED MESSAGE-----
Hash: SHA1

This is from a web-site that is replaying Usenet, including net.ham-radio, from 30 years ago (currently early 1983). The site is:

  http://www.olduse.net

If you prefer to use your own newsreader, the site also supports an NNTP connection at:

  nntp.olduse.net:119

>From: karn <utzoo!decvax!harpo!eagle!karn>
>Subject: Amsat/Vita agreement
>Newsgroups: net.ham-radio, net.space
>Date: Mon Jan 17 21:11:48 1983

Jan 14,1983 -- The Radio Amateur Satellite Corp. (AMSAT) and the Volunteers In Technical Assistance (VITA) {note -- pronounce as VI-TAH as in the word vital} have today announced their intent to pursue a joint effort to develop a low-cost packet radio satellite system called PACSAT.

VITA, headquartered in Rosslyn, VA, is a private, nonprofit organization that supports people working on technical problems in developing countries with technical information provided by thousands of volunteer scientists, engineers and technologists. The information and assistance VITA provides is aimed at helping local people in developing countries to select and implement technologies appropriate to their local situations.

VITA Director Henry Norman and VITA Project Coordinator Dr. Gary Garriott (WA9FMQ) today announced that VITA has just awarded AMSAT a $15,000 Design Definition Grant to support development of PACSAT as a reliable low-cost digital satellite system to meet requirements for communications of technical information on renewable energy resources to and from their many field locations. AMSAT's role in this joint activity will be to provide hardware suitable for demonstration programs and to provide technical assistance in developing a low-cost system. Part of this effort will involve adapting solar power, amateur radio and personal computer technology for use in the field, far removed from any technical support.

AMSAT's PACSAT project manager Den Connors (KD2S) indicated that this grant will support initial PACSAT design definition activities which are being coordinated by AMSAT with work being done in some 15 locations around the world.

It is also of interest to note that WA9FMQ is a cousin of NASA astronaut Dr. Owen Garriott, W5LFL who may be amateur radio's first "space mobile" by operating from the Space Shuttle if a proposal submitted by AMSAT and ARRL is approved by NASA.

AMSAT
850 Sligo Ave.
Silver Spring, MD 20910

VITA
1815 North Lynn St.
Rosslyn VA 22209

```
-----BEGIN PGP SIGNATURE-----
Version: GnuPG v2.0.19 (FreeBSD)

iEYEARECAAYFAlD5g9cACgkQ6Pj0az779o5hIQCg0U+d+ll9294kray0pw219Bu2
+MIAnjK7ADXiG/flSjyBKVW+pxcNanFX
=bRuX
-----END PGP SIGNATURE-----
```

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From 234933347883857148
X-Google-Thread: 8f86f75953,3fb5c9b2f98c3c56,start
X-Google-Attributes: gid8f86f75953,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII
X-Received: by 10.181.12.35 with SMTP id en3mr983829wid.2.1359079803859;
        Thu, 24 Jan 2013 18:10:03 -0800 (PST)
MIME-Version: 1.0
Path: i11ni18222wiw.0!nntp.google.com!feeder1.cambriumusenet.nl!
82.197.223.108.MISMATCH!feeder2.cambriumusenet.nl!feed.tweaknews.nl!
85.12.40.130.MISMATCH!xlned.com!feeder1.xlned.com!npeer.de.kpn-eurorings.net!
npeer-ng0.de.kpn-eurorings.net!news.bawue.net!storethat.news.telefonica.de!
telefonica.de!weretis.net!feeder4.news.weretis.net!news.glorb.com!news-
out.readnews.com!transit3.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-020 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sun, 20 Jan 2013 08:41:03 EST
Organization: The Radio Amateur Satellite Corporation
Lines: 572
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000e01cdf713$c5d8c710$518a5530$@net>
Reply-To: ans-editor@amsat.org
```

```
NNTP-Posting-Host: panix6.panix.com
X-Trace: reader1.panix.com 1358689263 7183 166.84.1.6 (20 Jan 2013 13:41:03 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 20 Jan 2013 13:41:03 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
DKIM-Signature: v=1; a=rsa-sha256; c=relaxed/relaxed; d=comcast.net;
     s=q20121106; t=1358689255;
     bh=9puHbGyryPWOmjlzTLW/9R1B2FR5gwqq5l+yzxlstKE=;
     h=Received:Received:From:To:Subject:Date:Message-ID:MIME-Version:
      Content-Type;
     b=rFgE7KjxXtBCExy9nN4zDlo2bbK4qusn6pACjMVl0tlTkgfiTITh00ugmCjeiZl0N
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      fyBBAn5+sdotodol3FpT3GXaSeQHOUYIxBBnYTY8uzn6NFecjmAJOp7icFmTHtboQH
      itwRWpLWdW83v5yYLJyMjmQfFEPX/RUY/mrz2NXXn85mGiUSZBSYabPLBa+rf1Y7CS
      41JwoRDzFI4pA==
Content-Language: en-us
```

AMSAT NEWS SERVICE
ANS-020

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:

* SKN on OSCAR 2013 Best Fist Nominations Due
* AMSAT-DC Workshop on Portable Satellite Ground Stations
* WIA Reports Australian Given an AMSAT Accolade
* WA8SME Preamps Back in Stock - ARRL SatCat for FT-817 Kit on Sale
* ARISS News, Successful Contacts, Proposal Window Closes Jan 28
* NASA Announces Student Internships for Summer
* Unilever Buys 22 Flights On XCOR Lynx Suborbiter For AXE Campaign
* Satellite Shorts From All Over
* European student codes reach ISS

SB SAT @ AMSAT $ANS-020.01
ANS-020 AMSAT News Service Weekly Bulletins

AMSAT News Service Bulletin 020.01
>From AMSAT HQ SILVER SPRING, MD.
DATE, 2012
To All RADIO AMATEURS
BID: $ANS-020.01

SKN on OSCAR 2013 Best Fist Nominations Due

Many thanks to all who participated in AMSAT's Straight Key Night on OSCAR 2013. If you have not already done so, please take a moment to nominate someone you worked for Best Fist. Remember, your nominee need not have the best fist of those you heard, only of those you worked. Send your nomination to w2rs at amsat.org.

This year's event is dedicated to the memory of John Thompson, W1BIH/PJ9JT, who passed away in 2012, aged 96. Although known primarily as an HF DXer and contester, John was also active on OSCAR, mostly on CW.

Those nominated will be recognized in an ANS bulletin in early February, and in The AMSAT Journal.

[ANS thanks Ray Soifer, W2RS for the above information]

AMSAT-DC Workshop on Portable Satellite Ground Stations

The AMSAT-DC Group is planning for a Spring Workshop 2013, to take place on Saturday, March 23, at the NASA Goddard Space Flight Center in Greenbelt, Maryland. It will be a nearly all-day event.

This is a workshop for those who wish to learn more about satellite operations and develop their own portable ground station. Participants will bring their wares to assemble, show, and explain to others that which will feature one or more of the following:

+ One's own laptop computer, with appropriate software installed, such as for satellite tracking, SDR receiver control, antenna control (optional), audio recording, time stamp track, and any of many other apps.

+ The FUNcube Dongle Pro receiver or equivalent. We will emphasize receiving only, and not the transmit side at this particular time.

+ One or more antennas for 146 MHz and 436 MHz, Arrow, Elk, or homebrew on a camera tripod, small mast, homebrew PVC, or handheld.

+ Everything, or almost everything, ought to be designed to be powered from a regulated 12-volt DC source of your choosing. A table will be provided with a shared 120VAC wall outlet within about 50 feet.

Volunteers are invited to join the planning committee (contact Pat at n8pk@amsat.org.) Registration information will be announced by February 15 via the AMSAT News Service (ANS), and on the AMSAT Calendar of Events under http://www.amsat.org

The workshop cost is expected to be low (for incidental items) or free to AMSAT members. Any non-US citizen who would like to attend must contact Pat by February 15 at the latest.

To volunteer or ask questions contact Pat at n8pk@amsat.org.

Links for antenna ideas:
http://arrowantennas.com/
http://www.elkantennas.com/
http://www.g6lvb.com/homebrewarrow.htm
http://www.amsat.org/amsat-new/information/faqs/crow/index.php
http://www.amsat.org/amsat-new/echo/Az_El_Pos.pdf
http://www.wa5vjb.com/references/Cheap%20Antennas-LEOs.pdf
http://www.amsat.org/amsat-new/tools/downloads/iROTOR.pdf
http://www.arrl.org/shop/The-ARRL-Satellite-Handbook/
http://ac6v.com/antprojects.htm

Links for software ideas:
http://www.amsat.org/amsat-new/tools/software.php
http://www.amsat.org/amsat-new/tools/
http://www.moetronix.com/spectravue.htm
http://www.amsat.org/amsat-new/information/faqs/resguide.pdf
http://sdrsharp.com/

Links for receiver ideas:
http://www.funcubedongle.com/
http://www.amsat.org/amsat/intro/sats_faq.html
http://tinyurl.com/cdo9tyo (Spectravue Configuration)
http://sdrsharp.com/

AMSAT-DC
http://patkilroy.com/amsat-dc/

[ANS thanks Pat Kilroy, N8PK, AMSAT Area Coordinator, Maryland-DC for the above information]

WIA Reports Australian Given an AMSAT Accolade

It was a very humble Tony Hutchison VK5ZAI who received an award from AMSAT North America for the voluntary work he has done for the Amateur Radio on the International Space Station (ARISS) program.

In accepting the award, Tony VK5ZAI said it was a very nice honour which made him feel humble.

"I look at it as a combined effort for all those that have helped over the last 20 years because I couldn't have done it alone," he said.

In praise of ARISS, Tony VK5ZAI said, "They're a great group to work with and he has made many friends through it and amateur radio."

He is the Australian ARISS Coordinator and a Telebridge Earth Station involved in many contacts between the ISS and schools.

The Channel 7 Today Tonight show interviewed Tony VK5ZAI in early 2012, when he gave some great insights as to how Amateur Radio can provide support for NASA, as well as raise public awareness through the ARISS schools program.

The segment has been posted to YouTube and NOW features as a prelude to many Australian school contacts with the ISS.
http://www.youtube.com/watch?feature�ayer_embedded&v�soo_oaNkw

AMSAT's Award Citation to Tony stated, "For your support and leadership to ARISS as the key coordinator and mentor of all the ARISS schools in Australia. AMSAT also commends you for your sustained support as the premier ARISS telebridge station operator. Your efforts and can-do spirit are an inspiration to us all."

[ANS thanks the Wireless Institute of Australia and AMSAT-NA for the above information]

WA8SME Preamps Back in Stock - ARRL SatCat for FT-817 Kit on Sale

One of the AMSAT Store guys, Alan Biddle, WA4SCA reports the initial run of broadband preamps were sold out. This week Alan wrote, "The AMSAT Store now has the popular broadband preamps back in stock. They can be found on the top page at: http://store.amsat.org/catalog/ Thanks to all who have ordered them, and by doing so supported AMSAT operations!"

The QST October 2012 SatCat Interface for FT-817 is now on sale by the ARRL. The satellite computer aided tuning interface described in October, 2012 QST (pp. 40-43) for use with SatPC32 and the Yaesu

FT-817 radio is being offered for sale by the ARRL Education & Technology Program (ETP).

The interface was developed by Mark Spencer, WA8SME, as part of resource development for the ARRL ETP and is priced to recover cost plus a small increment toward development as well as a cost share donation to AMSAT.

For more details of the kit, and to place your order go to:
http://www.arrl.org/news/ft-817-satellite-interface-available-as-a-kit

[ANS thanks Alan Biddle, WA4SCA and the ARRL for the above information]

ARISS News

Recent succesful ARISS contacts include

Ecole Les Muriers, Saint Maur Des Fosses, France on 07 Jan.

The contact was direct between OR4ISS and F6KMX/p.
Saint-Maur-des-Fossés is a small city (77,000 people) located at about 15 km South-East of PARIS, separated from the capital by the large Vincennes Forest, and located on the top of a loop formed by the river Marne. The name of the city is inspired from the Chateau of Saint Maur, which was frequently visited by the queen Marie de Medicis in the 16th Century. The school Les Muriers is educating about 500 children in 17 classrooms, aged from 8 to 11 and preparing their access to Middle school. The children's of a classroom of 22 (CM2/ 5th grade) developed with their teacher, the dream of a direct contact, via ham radio, with an astronaut of the ISS. This year, the children are studying the life in space, working on the comprehension of the Space Station and are participating to science and ham-radio activities organized by the Radio-club station of St-Maur (F6KMX).

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Missoula Family YMCA, Missoula, MT on 08 Jan.

Missoula Family YMCA hosted an ARISS contact January 8, 2013 at 16:14 UTC at Target Range School in Missoula, Montana. It was conducted in English and was direct between NA1SS and W7PX. Students talked to the crew aboard the ISS with the assistance of the Hellgate Amateur Radio Club and asked a pool of questions generated from the student winners of an essay contest. The students represent grades 3 - 9 and attend the following Missoula county schools; Target Range, Loyola, St. Josesph's, Russell, Hellgate Elementary, Lowell and Chief Charlo. The Missoula Family YMCA has been committed to incorporating academic programs to help students figure out their place in the world. We think of the ARISS contact as the real world application of our students' studies of science, technology, engineering and math (STEM). Our participation in the ARISS event can help us achieve this goal and continue to excite the interest in our youth and to promote NASA STEM activities. Missoula is located along the Clark Fork and Bitterroot rivers in Western Montana and at the convergence of five mountain ranges. Thus is often described as being the "Hub of Five Valleys". The 2010 Census put the population of Missoula at 66,788 and has been the second largest city in Montana. The city is also home to four high schools, five middle schools, sixteen elementary schools, two private schools and The University of Montana.

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An International Space Station school contact was completed by Royal Canadian Air Cadets- Newfoundland Cadet Detachment, St. John's, Newfoundland, Canada on 12 Jan. The contact was conducted in English and was direct between NA1SS and VO1BZM.

In preparation for the upcoming ARISS Contact Event, the cadets of 515 Air Cadets along with the local Air Cadet Squadrons focused on the aerospace portion of their training program. The Squadron's training staff added in extra classes in this subject area including lessons focused around various Canadian Astronauts to help familiarize the cadets with Chris Hadfield's career and background. We also encouraged the cadets in the squadrons to check out Col Hadfield's Facebook page and Twitter feed along with looking at various websites with lots of information about the International Space Station. We have canvassed the cadets over the last few weeks to develop the questions they will get to ask and in the coming weeks. They conducted a practice run through with those selected to ask questions. Everyone involved in this event was very enthusiastic and enjoyed the opportunity of participating in this as once in a life time learning event.

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An International Space Station school contact was successful with participants at Saint Rose Elementary School, Saint John, New Brunswick, Canada on 17 Jan. The contact was direct between NA1SS and VE9LC and was conducted in English.

Students in grades three to five from Saint Rose School excitedly prepared for their upcoming communication with International Space Station Canadian Commander, Chris Hadfield. In preparation for this educational event, they took part in a Saint John Astronomy Club presentation by Kurt Nason. A kick-off assembly with special guest Greg D'Entremont in Novemeber. At this assembly, SRS students met their ten Barnhill Memorial School partners who will be asking Commander Hadfield student created questions. In the month of December, each class worked on space projects linked to curriculum outcomes. Some classroom projects linked to the K-2 curriculum, You and Your World, while some students in grades 3-5 worked on Science connections individually, in small group, or as a class. Event day saw some of the projects highlighted. Their final lead-up event of the 2012 calendar year was December 17th when students enjoyed a presentation by UNBSJ Space Studies Professor, Phil Backman. The "Saint Rose School Space Walk" took place on January 9th. Students walked from classroom to classroom to observe projects, ask questionsof project creators, and selected the projects highlighted on eventday. The week culminated with the Science East Planetarium in the gymnasium that all students visited throughout the day for class presentations.

A video of the contact can be found at

http://tinyurl.com/a5fv8qk

The video is under “LifeStyle”,
Then, within LifeStyle, select “Misc.”
The title is “Students talk to Space Station”.

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NASA Teaching from Space is currently accepting proposals for ARISS contacts to be scheduled May-November 2013. Find details on requirements and submitting a proposal below. The current proposal window closes January 28.

US Hams, don’t forget that there is a new process for US school proposals. For US schools to have an ARISS contact, they must fill out a proposal, submit it to NASA, and see if they are approved or not. Once a school is approved and put on the list, an ARISS mentor will be assigned to assist the school.

NASA will have two open windows a year for schools to submit a proposal.You must go through NASA to get the proposal material. Contact Teaching From Space, a NASA Education office, at JSC-TFS-ARISS@mail.nasa.gov or by calling them at (281) 244-2320.

The following US states and entities have never had an ARISS contact: Arkansas, Connecticut, Delaware, Kansas, Louisiana, North Dakota, Rhode Island, South Dakota, Vermont, West Virginia, Wyoming, American Samoa, Guam, Northern Marianas Islands, and the Virgin Islands.

[ANS thanks ARISS and the ARRL for the above information]

NASA Announces Student Internships for Summer

College Level Internships

NASA says they are accepting applications for college level summer internship positions among several NASA field centers. "But don't wait until the deadline," advises NASA mentor and fellow AMSAT member, Pat Kilroy, N8PK. "The opportunities to work on a CubeSat team, for example, are exciting but pretty competitive."

It is thought that students who know the "AMSAT way" and who have an Amateur Radio license and some hands on experience have a distinct advantage in the midst of such competition.

"That worked for me," said Pat.

Students can view opportunities and apply for them in one place. To start, the prospective student should go to:

https://intern.nasa.gov/

then click the Student Opportunities tab then select Internships, which will bring you to the OSSI:NIFS page describing the overall internship program.

Using the Search Opportunities tab from there, scroll down to the bottom for the "Enter keywords" box and enter "cubesat" without the quotes to view the variety of different opportunities in this field.

Pat Kilroy will be the lead mentor for two of the opportunities described. The first, under the title of "CubeSat Engineering Design Team Project," applicants are called to develop a CubeSat spacecraft bus (i.e., the solar panel and battery charging, power regulation and distribution "EPS" subsystem, the RF communications "COM" subsystem, the command and data handling/processing avionics "C&DH" subsystem, the attitude determination and control "ADAC" subsystem, and the mechanical structures "MECH" subsystem) and one instrument (i.e., a camera/telescope payload). Hardware and software skills will be well represented. The team will need a student Systems Engineer as well. Each intern will consult with a NASA engineer in their area of specialty throughout the summer.

In the second, under the title "PICetSat Module Development," one or two student interns are called to perform any of a number of tasks, including one to develop a "dual-use" ground station for CubeSats and high-altitude balloon and sounding rocket experiments. This task will involve satellite and balloon tracking, RF systems, test equipment and antennas and antenna control automation.

Additional details are available on the OSSI:NIFS site including how to contact the lead mentor for technical questions, and the procedure on how to apply for one of these Goddard Greenbelt positions as well as many others.

High School Internship Applications at NASA

The application process for high school students to apply for a summer internship can be found on the same OSSI:NIFS Web site as given above for the summer at one of many locations around the country. As noted in the opportunity description already mentioned, up to two local high school seniors will be selected to participate on the CubeSat team in Greenbelt.

[ANS thanks NASA for the above information.]

Unilever Buys 22 Flights On XCOR Lynx Suborbiter For AXE Campaign

by Staff Writers

Mojave CA (SPX) Jan 15, 2013

Commercial spaceflight is entering the main stream and looking (and smelling) quite good! United Kingdom-based Unilever Group, and Space Expedition Corporation (SXC) announced a 22 flight purchase on XCOR Aerospace's Lynx Mark II suborbital spacecraft for Unilever's space-themed AXEApollo campaign for the AXE brand of men's cologne, body spray, shower gels and other personal care products.

Unilever will award the first flight to a lucky winner selected from a drawing just after the Super Bowl on February 3rd, and the 21 other winners will come from a year long, 60 country promotional campaign.

That larger campaign includes a 100+ person December 2013 space camp for early stage winners in Orlando called the AXE Apollo Space Academy (A.A.S.A.).

The campaign also includes legendary Apollo astronaut Buzz Aldrin and a 30 second Super Bowl advertisement. For a chance to win, register at www.AXEApollo.com.

"When a global brand leader like Unilever makes a significant commitment to a product like our Lynx, it is a clear sign that commercial spaceflight has entered the main stream of worldwide commerce and truly is the Next Big Thing," stated Andrew Nelson, Chief Operating Officer of XCOR Aerospace, "Expect to keep seeing more good news from SXC as they ramp up in 2013!"

[ANS thanks space-travel.com for the above information]

European student codes reach ISS

European finalists.
Operating droids in space was no obstacle for a German-Italian alliance to reach the finish line of the Zero Robotics tournament.

The European winners commanded mini-robots to dodge virtual dust clouds and rendezvous with disabled satellites, all in the weightlessness of the International Space Station.

This year's competition gave over 130 high-school students from across Europe the opportunity to operate droids in space by coding software.

Six alliances made of teams from Italy, Germany, Spain and Portugal witnessed how their computer codes worked in the Space Station from ESA's ESTEC space research and technology centre in the Netherlands

The RetroSpheres space game involved two mini-robots racing through a course using the least amount of fuel. During the three-minute programmed dance, the volleyball-sized spheres moved using 12 squirts of compressed gas.

Competitors could collect extra fuel from decommissioned satellites and deorbit the satellites for extra points while navigating through their opponent's dust clouds.

"It is really special to see what these students have created and get to operate their algorithms in space," said NASA's Kevin Ford on the Station. The astronaut, together with crewmate Tom Marshburn, set up the matches from Japan's Kibo laboratory.

The team with the most fuel left over in the European finals was the BEER alliance - the Brotherhood of Esteemed European Researchers. German and Italian high-school students developed the software that calculated the winning path for their robot in an exciting final game that demonstrated Newton's laws of motion.

Robotic future
The challenge to control these robots remotely began in the United States, where an adventurous professor from the Massachusetts Institute of Technology found inspiration from the Star Wars saga. The mini-spacecraft have been used on the Station since 2006 to try out manoeuvres.

ESA astronaut Andre Kuipers, who ran the competition from the Station last year, hosted the event from ESTEC. "Europe is embarking on robotic-related missions. Robots are and will be of great help in space," he noted.

Spacecraft fuel consumption - carbon dioxide in this case - was a programming issue for the students. "Most of us knew nothing about computer science before this competition. Teamwork and creative strategies helped us to succeed," explained Jaime Sevilla, one of the Spanish players.

Teachers were pleased to see their pupils learn to communicate with each other, gaining technical knowledge and boosting their enthusiasm.

[ANS thanks Space Daily for the above information]

Satellite Shorts From All Over

+ Tom, K8TL reports a successful December 27 contact with Jari OH2FQV via FO-29. At 7170 km distance this may be a new distance record for this satellite. Tom noted was about a minute between AOS and LOS between the two stations.

+ Luis, EC4TR reports a successful contact between Spain and Brazil with Paulo, PV8DX via AO-7 mode B on January 11.

+ AMSAT-India invites interested satellite operators to view the A-I President's Message and 2012 Accomplishments in a presentation at: http://amsatindia.org/reports/AI-2012.pdf (via Nitin, VU3TYG)

+ The latest TAPR PSR Digital Journal for Autumn 2012 is now available at: http://www.tapr.org/psr/psr120.pdf

+ Ivo Klinkert, PA1IVO, has posted his article, "A Multi-purpose Portable Setup," on his web at:
http://ivok.home.xs4all.nl/pa1ivo/portable_satellite_setup.html
The article already appeared in the March 2012 issue of the AMSAT-DL

Journal and later in two issues of OSCAR NEWS (July and September 2012), but the on-line version includes more images.

+ In Series Five, Episode Twenty-Six, of the ICQ Amateur/Ham Radio Podcast Martin M1MRB reviews the Raspberry Pi Linux-based single board computer's uses for Amateur Radio:
http://tinyurl.com/ICQ-Podcasts-Pi

+ Here is a WebSDR receiver, located in Playa de Muchavista - Campello (Alicante - Spain), operated by EA5CV & EA5DOM which allows you to tune two microwave bands: 10.3 GHz and 2320 MHz:
http://maxiplaya.dyndns.org:8901/ (via Michel, F6HTJ)

+ Soyuz rockets will be taking Americans to ISS
http://tinyurl.com/baabs67 (via Space Daily)

+ China to launch 20 spacecrafts in 2013
http://tinyurl.com/al62yml (via Space Daily)

[ANS thanks everyone for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the

President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

Primary and secondary school students are eligible for membership at one-half the standard yearly rate. Post-secondary school students enrolled in at least half time status shall be eligible for the student rate for a maximum of 6 post-secondary years in this status. Contact Martha at the AMSAT Office for additional student membership information.

73,
This week's ANS Editor,
EMike McCardel, KC8YLD

```
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X-Google-Attributes: gid8f86f75953,public,usenet
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X-Received: by 10.49.87.9 with SMTP id t9mr3229649qez.16.1358699694687; Sun,
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Date: Sun, 20 Jan 2013 08:34:54 -0800 (PST)
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Hot chick gets fucked after partying all night   http://t.co/xo00uUbA

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Newsgroups:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.shor
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Subject: Weekly Highlights of Solar and Geomagnetic Activity, 14 - 20 January 2013
Followup-To:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.shor
twave
Date: Mon, 21 Jan 2013 11:30:11 EST
Organization: NOAA Space Weather Prediction Center
Lines: 81
Approved: RRI Admin <rec-radio-info-request@panix.com>
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X-Trace: reader1.panix.com 1358785812 11524 166.84.1.6 (21 Jan 2013 16:30:12 GMT)
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X-RRI-Info-1: Send submissions to            rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
```

```
:Product: Weekly Highlights and Forecasts
:Issued: 2013 Jan 21 0520 UTC
# Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center
# Product description and SWPC contact on the Web
# http://www.swpc.noaa.gov/weekly.html
#
#                 Weekly Highlights and Forecasts
#
```

Highlights of Solar and Geomagnetic Activity
14 - 20 January 2013

Solar activity was predominantly at low levels with very low levels observed on 17 January. The largest flares of the period were a C6/Sf flare at 14/0122 UTC from Region 1652 (N17, L=184, class/area Fkc/320 on 07 January) and a C5/Sf flare at 18/1707 UTC from Region

1654 (N08, L=151, class/area Fki/1100 on 11 January). The C5 flare had an associated Type II radio sweep (1695 km/s). On 16 January, a long duration C2 flare was observed from Region 1650 (S30, L=193, class/area Eho/250 on 07 January) which had decayed to plage by the time of the event. A partial halo, coronal mass ejection (CME), with the majority of the ejecta off the SW limb, was first seen in SOHO/LASCO C2 imagery at 16/1900 UTC (estimated plane-of-sky speed of 728 km/s). This event was likely associated with a filament eruption near Region 1650.

A greater than 10 MeV proton enhancement was observed at geosynchronous orbit beginning late on 16 January, peaked at 2 pfu at 17/1415 UTC, and declined to background levels by approximately 18/0600 UTC.

The greater than 2 MeV electron flux at geosynchronous orbit was at moderate levels on 14-16 January and again on 19-20 January. High levels were observed on 17-18 January in response to a shock arrival from the 13 January CME.

Geomagnetic field activity ranged from quiet to active levels. The period began under the influence of a positive polarity coronal hole high speed stream (CH HSS). Solar wind speeds increased from approximately 480 km/s to 590 km/s early on 14 January, but started to decrease by late on 14 January. The geomagnetic field responded with quiet to unsettled levels with an isolated minor storm period observed at high latitudes. As solar wind speeds continued to decrease to around 400 km/s by early on 16 January, mostly quiet conditions were observed. By 17 January, total field values (Bt) increased to 16 nT while the Bz component of the interplanetary magnetic field switched from maximum values of approximately +10 nT to -14 nT indicative of the arrival of 13 January CME. The geomagnetic field responded with quiet to active levels with periods of active to minor storm levels at high latitudes. By mid-day on 18 January, total field had decreased to around 7 nT as the CME effects waned. By 19 January, a small shock was observed in ACE data at approximately 19/1647 UTC. A corresponding sudden impulse was observed in the Boulder magnetometer (21 nT) at 19/1733 UTC. The shock arrival was consistent with the arrival of a glancing blow from the 16 January CME. Only quiet to unsettled conditions were observed from 18-20 January with periods of minor storming on 20 January at high latitudes.

Forecast of Solar and Geomagnetic Activity
21 January - 16 February 2013

Solar activity is expected to be at very low to low levels until 30 January. A chance for M-class flares exists from 31 January through 15 February when Regions 1652 and 1654 return to the visible disk. By 16 February, very low to low levels are expected.

No proton events are expected at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to be at normal to moderate levels through 23 January. A chance for an increase to high levels on 24-25 January is expected due to CH HSS activity. A return to low normal levels is expected from 26 January through 09 February. Moderate to high levels are expected from 10-12 February due to activity from another CH HSS. Normal levels are expected again by 13 February through the end of the forecast period.

Geomagnetic field activity is expected to be mostly quiet through the forecast period with unsettled periods expected on 23 January and 9-10 February due to CH HSS effects.

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Newsgroups: rec.radio.amateur.space
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Injection-Date: Tue, 22 Jan 2013 15:27:05 +0000
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Woman Sucking her man   http://t.co/A6GfzkR0

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From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-027 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sat, 26 Jan 2013 21:03:27 EST
Organization: The Radio Amateur Satellite Corporation
Lines: 413
Approved: RRI Admin <rec-radio-info-request@panix.com>
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X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
DKIM-Signature: v=1; a=rsa-sha256; c=relaxed/relaxed; d=comcast.net;
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AMSAT NEWS SERVICE
ANS-027

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor at amsat.org

In this edition:

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* Open Source Satellite OSSI CubeSat Launch in April 2013
* IARU Satellite Coordination Board Says DOVE-1 Will Not Use 145.825
* Vote for Your Favorite Photos From Japan's PRISM Satellite
* February 14 PSLV-C20 Launch Planned by India
* Surrey Satellite Selected to Evaluate Small Satellites for GPS
* NASA History Program Office Summer 2013 Internships
* Satellite Shorts From All Over

SB SAT @ AMSAT $ANS-027.01
ANS-027 AMSAT News Service Weekly Bulletins

AMSAT News Service Bulletin 027.01
>From AMSAT HQ SILVER SPRING, MD.
January 27, 2013
To All RADIO AMATEURS
BID: $ANS-027.01

AMSAT-NA Website Outage

On or about 20 January 2013, AMSAT-NA's main web site www.amsat.org was compromised by an attacker, with the contents of the supporting database, including non-public information, posted on other publicly available web sites.

It is likely that the attacker gained enough access to the site to post arbitrary and possibly illegal content, so out of an abundance of caution the main site was shut down.

Neither the AMSAT store nor the Fox project web site were affected by this breach. The AMSAT Store is still open for business, and can be reached directly at http://store.amsat.org/catalog/

Mail services remain operational.

The main site was developed roughly 10 years ago by a AMSAT volunteers under a more benign Internet threat environment. The team that built that site is no longer associated with AMSAT, so work has been underway over the last several months to move to a modern, maintainable, secure infrastructure. This recent breach will accelerate that activity.

In the interim, www.amsat.org will have limited content.

[ANS thanks AMSAT's User Services Team for the above information]

K6GSJ Donates OSCAR-1 Historical Artifacts to ARRL Archives

The February 2013 QST Magazine carries a story on page 71 noting the donation of OSCAR-1 historical artifacts to the ARRL Historical Collections. Lance Ginner, K6GSJ, one of OSCAR-1's builders, donated documents, test data, reception reports, and media to preserve the pioneering work of Project OSCAR.

The archive also contains a vintage OSCAR Locator and the QST Cover Plaque Award presented to Edgar Hilton, W6VKP for his article on locating OSCAR.

The article notes the work by ARRL Museum Volunteer Custodians Michael Marinaro, WN1M, and Jonathan Allen, K2KKH, to catalog and preserve these materials for future historians.

Visitors to the ARRL Laboratory's Vintage Equipment Exhibit in Newington, CT can see and hear an operational prototype of OSCAR-1 transmitting its "HI" beacon on 145.080 MHz.

[ANS thanks the ARRL for the above information]

Open Source Satellite OSSI CubeSat Launch in April 2013

OSSI-1, the Open Source Satellite Initiative satellite, developed by Hojun Song DS1SBO, is planned to launch in the 2nd quarter of 2013 into a 575 km 63� inclination orbit on a Soyuz-2-1b rocket from the Baikonur launch facility in Kazakhstan. The 1U cubesat is 100% based on COTS components. The main payload, the Bion-M1 satellite, anticipates a planned launch date of April, 2013.

Reports say OSSI-1 will have a beacon in the 145 MHz band, a data communications transceiver in the 435 MHz band although actual operating frequencies have yet to be published. The data communications transceiver is reported to be using an open protocol, details have not been released yet.

OSSI-1 also carries a 44 watt LED optical beacon to flash Morse Code messages to observers on Earth.

The development of the satellite has been documented on the Open Source Satellite Initiative Blog http://opensat.cc/blog/ and the Wiki http://opensat.cc/wiki/

Other cubesats on this launch will include:

+ SOMP - downlink on 437.485 MHz including CW, 1k2 and 9k6 BPSK, AX25 FSK, and AO40 standard 400bit/s BPSK.

+ BEESAT 2 - 4k8 GMSK on 435.950 MHz

+ BEESAT 3 - 4k8 GMSK on 435.950 MHz

+ Dove-2 - Commercial technology demonstration mission.

+ Bion-M1 - Research satellite collaboration between NASA and the Russian Institute of Biomedical Problems. The mission will launch an unmanned automated spacecraft carrying a biological payload into Low Earth Orbit (LEO). The rodents on the Bion-M1 spacecraft will be exposed to spaceflight conditions for approximately one month.

AMSAT-UK published photos and additional news at:
http://www.uk.amsat.org/?p231

[ANS thanks AMSAT-UK for the above information]

IARU Satellite Coordination Board Says DOVE-1 Will Not Use 145.825

Dove-1, a technology development experiment to be launched to Low Earth Orbit on the inaugural launch of Antares in February, 2013 from Wallops Island, Virginia will no longer be using frequencies in the amateur radio bands based on information posted on the IARU satellite coordination web page for this mission.

The satellite had requested IARU coordination for a 1 watt transmitter on 145.825 MHz to downlink a 1200 baud AFSK AX.25 beacon with telemetry and health data.

The Wallops Launch also includes the PhoneSat cubesats into a planned 280 x 270km orbit at 51.6 deg inclination. Due to the extremely low orbit these satellites will reenter the Earth's atmosphere after approximately 2 weeks.

(See ANS-006 at http://amsat.org/pipermail/ans/2013/000681.html for details of the PhoneSat mission.)

IARU Amateur Satellite Frequency Coordination web page can be found at: http://www.amsat.org.uk/iaru/

[ANS thanks the IARU Satellite Frequency Coordination Board for the above information]

Vote for Your Favorite Photos From Japan's PRISM Satellite

PRISM, a nano-satellite developed by Intelligent Space Systems Laboratory, was launched on January 23rd 2009. It's mission is to take pictures of the Earth from outer space. 35 photos taken by PRISM�s Wide Angle Camera have been selected by the PRISM team and posted at: http://www.smaster.jp/Sheet.aspx?SheetIDr633

Please take a look at the pictures and vote for your favorites. Enter your choices in the check-box above each photo - multiple selections are allowed.

PRISM also carries an orbital store-and-forward message box open for use by amateur radio operators. In PRISM's HAM Service FM packets uplinked are stored and available for download on future passes.

Downlink Frequency: 437.425 MHz FM, AFSK 1200, AX.25, UI Frames
Beacon Freequency: 437.250 MHz
Call Sign: JQ1YZW

Full details of Amateur Radio access to PRISM is documented at:
http://www.space.t.u-tokyo.ac.jp/prism/en/HAMservice_info.aspx
http://www.space.t.u-tokyo.ac.jp/prism/en/HAMservice_rule.aspx

You will find a pull-down menu at the bottom of this web page. Use the pull-down arrow to access "Agree" then click on the web page button also labeled "Agree". This will bring you to another web page revealing uplink frequency and message formats.

[ANS thanks Professor Nakasuka of the University of Tokyo and the PRISM Team for the above information]

February 14 PSLV-C20 Launch Planned by India

India's "The Hindu" newspaper reports that the Indian Space Research Organisation (ISRO) has slated its first launch of the year PSLV-CA (PSLV-C20) for February 14. This launch includes the SARAL ocean study spacecraft and satellites carrying amateur radio payloads.

The payload includes:

- SARAL - Ka-band radar altimeter operating at 35.75 GHz.
  See: http://smsc.cnes.fr/SARAL/

- NEOSSat Search for near-Earth asteroids and space debris.

- Sapphire � Canadian Department of National Defence first dedicated military satellite.

+ CanX-3a, BRITE (BRIght-star Target Explorer) � small satellite designed to make photometric observations of bright stars in order to study their variability.

+ TUGSat-1 - S-Band for telemetry downlinks and will have a 145 MHz CW beacon.

+ AAUSat 3 � 1U cubesat developed and constructed by students from Department of Electronic Systems at Aalborg University Denmark, testbed for a pair of AIS receivers. The IARU Amateur Radio coordinated frequency is 437.425 MHz using Viterbi and Reed Solomon encoding.

+ Max Valier � Small satellite to encourage student experimentation. IARU Amateur Radio coordinated frequencies are 145.860 MHz and 145.960 MHz.

Full details and links to the satellite team web pages are posted on the AMSAT-UK web at: http://www.uk.amsat.org/?p180

Read the Hindu article at: http://tinyurl.com/TheHindu-PSLV
(www.thehindu.com)

Zarya Launches and Orbital Operations Calendar
http://www.zarya.info/Calendar.php

[ANS thanks AMSAT-UK for the above information]

NASA History Program Office Summer 2013 Internships

The NASA History Program Office is seeking undergraduate and graduate students for summer 2013 internships. The History Program Office maintains archival materials to answer research questions from NASA personnel, journalists, scholars, students at all levels and others from around the world. The division also edits and publishes several books and monographs each year. It maintains a large number of websites on NASA history.

Students of all majors are welcome to apply. While detailed prior knowledge of the aeronautics and space fields is not necessary, a keen interest and some basic familiarity with these topics are needed. Strong research, writing and editing skills are essential. Experience with computers, especially hypertext markup language, or HTML, formatting, is a plus.

Intern projects are flexible. Typical projects include handling a variety of information requests, editing historical manuscripts, doing research and writing biographical sketches, updating and creating websites, and identifying and captioning photos.

Applications for summer 2013 internships are due Feb. 4, 2013.

For more information, visit http://history.nasa.gov/interncall.htm.

If you have questions about this opportunity, please contact Bill Barry at bill.barry@nasa.gov.

[ANS thanks NASA Education Express Message of Jan. 24, 2013 for the above information]

Surrey Satellite Selected to Evaluate Small Satellites for GPS

An article posted on the GPS Daily website says the US Air Force Research Laboratory (AFRL) has selected Surrey Satellite Technology US LLC (SST-US) to investigate cost reduction and augmentation of the current GPS constellation through the application of the small satellite approach. (Full article at: http://tinyurl.com/Surrey-GPS)

SST-US will examine how constellations of smaller satellites could improve the overall system performance and resilience, including ways to deliver high-power signals and alternative architectures for rapid commanding that could provide system capability improvement.

Small satellites have become the focus of many institutional programs in recent years, as they have become ever more capable and demonstrated their importance.

[ANS thanks GPSDaily.Com for the above information]

Satellite Shorts From All Over

+ Free NASA Calendar in PDF format with imagery from the ISS is posted at: http://www.nasa.gov/pdf/716960main_iss_calendar_2013.pdf

+ An animation showing UKube-1 CubeSat on-orbit and its payload is posted at: http://www.uk.amsat.org/?p334. UKube-1 is slated to launch in the 2nd/3rd quarter of 2013 on a Soyuz-2 along with TechDemoSat-1. UKube-1 will carry a set of AMSAT-UK FUNcube boards to provide an amateur radio 435/145 MHz linear transponder and a 1200 bps BPSK beacon for educational outreach.

+ Tom Doyle, W9KE has released 'Satellite Explorer', a Windows 8

app that runs on Intel based tablets, laptops and desktops as well as Windows RT tablets like the Microsoft Surface. It is available in the Windows Store - search for 'Satellite Explorer'. The app is free but if you find it of value please contribute something to your favorite AMSAT project. Watch a preview at:
https://www.youtube.com/watch?v�-jPjpDoYs
(W9KE)

+ The 2013 SA AMSAT Space Symposium will be held at the Innovation Hub in Pretoria on 18 May 2013. The theme of the conference is "Space - a challenging Amateur Radio frontier". If you are planning to submit a paper please send in a brief synopsis of the proposed paper by 31 January to saamsat@intekom.co.za. For more information visit www.amsatsa.org.za.

+ Enjoy an excerpt from "An Astronaut's Guide to Space Etiquette" at:
  http://www.space-travel.com/reports/An_Astronauts_Guide_999.html
  Scroll down about halfway down the page. (Space-Travel.com)

+ AMSAT-NA congratulates Martha Saragovitz on her 35th anniversary as our office manager in Silver Spring, Maryland. Please send her your greetings and congratulations to martha@amsat.org!

+ Professor Sir Martin Sweeting G3YJO appeared on Monday's BBC Radio 4 show For All Mankind in which Chris Riley examined the enduring legacy of the Apollo moon missions. In the interview Martin G3YJO mentions the first UOSAT's (OSCAR-9 and 11). You can hear him at 08:52 into the recording which is at: http://www.bbc.co.uk/programmes/b01pcqkk It is understood the recording will be available until January 28.

+ The Australian Geographic website features an article on Australia�s first amateur satellite, Australis-OSCAR-5 which was launched on 23 January 1970. See: http://tinyurl.com/Australia-AO5 (www.australiangeographic.com.au)

+ SpaceMart.com posted an article, "Phoenix Rising: New Video Shows Advances in Satellite Repurposing Program" at: http://tinyurl.com/DARPA-Phoenix (SpaceMart.com) DARPA's Phoenix program plans to repurpose retired satellites while they remain in orbit. The article contains a link to an HD video simulation posted by DARPA.

+ Thursday, January 31 at 8PM Eastern (UTC-5) will be the last Hudson Valley Satcom Net until further notice. The radio link is via the MBARC Repeater on 146.970 MHz and on Echolink on the N2EYH-L node. (Stu, WA2BSS)

[ANS thanks everyone for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

Primary and secondary school students are eligible for membership at one-half the standard yearly rate. Post-secondary school students enrolled in at least half time status shall be eligible for the student rate for a maximum of 6 post-secondary years in this status. Contact Martha at the AMSAT Office for additional student membership information. And with that, please keep in mind the young ham who was practicing the violin in the living room while his father was trying to read in the den. The family dog was lying in the den, and as the screeching sounds of little Harold's violin reached his ears, he began to howl loudly. The father listened to the dog and the violin as long as he could. Then he jumped up, slammed his paper to the floor and yelled above the noise, "For Pete's sake, can't you play something the dog doesn't know?!"

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM

```
From -3905143292972679269
X-Google-Thread: 10e8ad,dfb5551d26d194e9,start
X-Google-NewGroupId: yes
X-Google-Thread: 10b9c8,dfb5551d26d194e9,start
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,gida4a23d5f63,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
X-Received: by 10.180.89.133 with SMTP id bo5mr664397wib.6.1359252980999;
        Sat, 26 Jan 2013 18:16:20 -0800 (PST)
Path: o9ni22161wio.1!nntp.google.com!feeder1.cambriumusenet.nl!feed.tweaknews.nl!
81.171.88.15.MISMATCH!eweka.nl!lightspeed.eweka.nl!69.16.177.246.MISMATCH!
cyclone03.ams2.highwinds-media.com!voer-me.highwinds-media.com!
npeer03.iad.highwinds-media.com!news.highwinds-media.com!feed-me.highwinds-
media.com!nx01.iad01.newshosting.com!newshosting.com!novia!news-out.readnews.com!
transit3.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-028 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Sat, 26 Jan 2013 21:16:20 EST
Organization: The Radio Amateur Satellite Corporation
Lines: 2618
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <002c01cdfc33$fd0160b0$f7042210$@net>
```

```
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
X-Trace: reader1.panix.com 1359252980 14066 166.84.1.6 (27 Jan 2013 02:16:20 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 27 Jan 2013 02:16:20 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
DKIM-Signature: v=1; a=rsa-sha256; c=relaxed/relaxed; d=comcast.net;
     s=q20121106; t=1359252965;
     bh=qCnZPebbpaeQaASaL/ODXYUdnhpd97vgze0eUgq9E2I=;
     h=Received:Received:From:To:Subject:Date:Message-ID:MIME-Version:
      Content-Type;
     b=sY5J8wwxS1QnceTweO7jUEXpRYLjvdStyEq/4SKKlxv70mx6CYUaKl9rXJAihIKl7
      JAZ8beGJZShj7SOOreoC9UgYI6iA/enofawzXrMyIZY9KRS5QnMvbwPm+6BAk1PIw6
      B2CVCRhtSZuxbcf4ykLzMMfHcMRVr4oPC20kHfG9f9VdlNaRUaBmcgJ3rQJZY2KsVP
      jGfuXuByfAUPbWrb+BNOP1GzFsReMV7zU84QIzjl5h7ydx7/NDiVLle99chUkl3T1I
      zUF/fRC9X78sgCQZ0L/b1gvAfiVP0wSflTiYpf++Q3GXXU3pVlHwlORkAqtTkj4kaW
      dAHMamRkcirkg==
X-Received-Bytes: 61493
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
Content-Language: en-us
```

This report is organized into four (4) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - deorbited/returned satellites

SB SAT @ AMSAT W8ISS $WSR-028.S1
WSR 028 Part 1 01/28/2013

AMSAT NEWS SERVICE BULLETIN 028.S1
FROM AMSAT HQ SILVER SPRING, MD, January 28, 2013
TO ALL RADIO AMATEURS
BID: $WSR-028.S1

PW-Sat
Catalog Number: 38083
Launch Date: Febrauary 13, 2012 1000z
Launch Site: Kourou, French Guiana

Status: On Orbit

Uplink: 435.020 MHz FM
Downlink: 145.900 MHz DSB

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=132
[01282013]
=====
DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational
Current Mode: Science Mode - Beacon ONLY

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink: 435.530 to 435.570 MHz

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=68
[01282013]
=====
VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05, 2005 0444z
Launch site: Satish Dhawan Space Centre, India

Status: Operational
Current Mode: U/v - Dutch Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.9360 MHZ CW

Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=30

To know what transponder is switched on please listen for the beacon that is active. Each transponder has a different beacon.
[01282013]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002 1700z
Launch site: Baikonur, Kazakhstan

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz. The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10 minute timer.
[01282013]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Operational
Current Mode: V/u (Mode JA)

Voice/CW (Mode JA)
Uplink: 145.90 to 146.00 MHz CW/LSB

Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage:
http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's
CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/
fo29cwts.htm
[01282013]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974
Launch site: Vandenberg AFB, California, USA

Status: Operational

Current Mode: Alternating between Mode A and B every 24 hours

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php
[01282013]
=====

INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998 0640z (ZARYA module)
Launch sites: Baikonur, Kazakhstan
Kourou, French Guiana
Uchinoura Space Center, Japan
Kennedy Space Center, Titusville, Florida, USA

Status: Operational

Current Active Modes:

FM Repeater -	OFF
Voice -	V/v
BBS -	V/v
2m APRS -	V/v
2m Digi -	V/v
70cm APRS -	?
70cm Digi -	?
SSTV -	V/v

Expedition 34 Crew (November 2012 - March 2013):

Commander:	Kevin Ford	KF5GPP
Flight Engineer:	Oleg Novitskiy	
Flight Engineer:	Evgeny Tarelkin	
Flight Engineer:	Roman Romanenko	
Flight Engineer:	Chris Hadfield	KC5RNJ/VA3OOG
Flight Engineer:	Tom Marshburn	KE5HOC

Available Modes and Frequencies:
Digital/APRS:
Worldwide 2m packet uplink: 145.825 MHz FM 1k2
Worldwide 2m packet downlink: 145.825 Mhz FM 1k2
Worldwide 70cm packet uplink: 437.550 Mhz FM 1k2
Worldwide 70cm packet downlink: 437.550 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear

U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
2m Packet Mailbox: RS0ISS-11
2m Digipeater alias: ARISS
70cm Packet Mailbox: RS0ISS-1
70cm Digipeater callsign: RS0ISS
70cm Digipeater alias: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time line is NOT translated from Russian and posted.
[01282013]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-028.S2
WSR 028 Part 2 01/28/2013

AMSAT NEWS SERVICE BULLETIN 028.S2
FROM AMSAT HQ SILVER SPRING, MD, January 28, 2013
TO ALL RADIO AMATEURS
BID: $WSR-028.S2

Fitsat-1
Catalog number: 38853
Launch Date: October 04, 2012
Launch site: Kibo Japanese Experiment Module, International Space Station

Status: Operational

Uplink:
Downlink(s): 437.445MHz 1k2 AFSK
5840.00 MHz 115k2 data
LED CW (200w pulses)

Beacon(s): 437.250 MHz CW

Callsign: NIWAKA

URL: http://carpcomm.com/satellite/fitsat1
[10292012]

```
=====
TechEdSat
Catalog number: 38854
Launch date: October 04, 2012
Launch site: Kibo Japanese Experiment Module, International Space
Station

Uplink(s):
Downlink(s): 437.465 1k2 AFSK

Beacon(s):

Callsign:

URL:http://www.techedsat.com/
[10152012]
=====
We Wish
Catalog number: 38856
Launch date: October 04,2012
Launch Site: Kibo Japanese Experiment Module, International Space
Station

Uplink(s):
Downlink(s): 437.505MHz 1k2 AFSK
             437.505MHz SSTV

Beacon(s): 437.505MHz CW

Callsign: JQ1ZIJ

URL:
[10152012]
=====
F-1
Catalog number: 38855
Launch Date: October 04, 2012
Launch Site: Kibo Japanese Experiment Module, International Space
Station

Uplink(s):
Downlink(s): 145.980MHz 1k2 AFSK
             437.485MHz FM moduled CW

Baecon(s):

Callsign: XV1VN

URL: http://fspace.edu.vn/
[10152012]
=====
Aeneas
Catalog Number: 38760
```

```
Launch Date: September 13, 2012 2139z
Launch Site: Wallops Island, Virginia, USA

Status: On Orbit

Uplink: WiFi 2425MHz
Downlink:
WiFi: 2425MHz
Spread Spectrum: Somewhere in the 70cm band

Beacon: 437.600MHz 1k2 ax25 every 10 seconds

Callsign:

URL:
[10012012]
=====
Cinema
Catalog Number: 36764
Launch Date: September 13, 2012 2139z
Launch Site: Wallops Island, Virginia, USA

Status: On Orbit

Uplink:
Downlink:
Engineering:    2400 - 2450MHz
Telemetery:     2200 - 2300MHz

Beacon:

Callsign:

URL:
[10012012]
=====
CSSWE (Colorado Student Space Weather Experiment)
Catalog Number: 38761
Launch Date: September 12, 2012 2139z
Launch Site: Wallops Island, Virginia, USA

Status: On Orbit

Uplink:
Downlink:       437.345MHz 9k6 with ax.25

Beacon:

Callsign:

URL:
[10012012]
=====
CP5 (Polysat)
Catalog Number: 38763
Launch Date: September 12, 2012 2139z
Launch Site: Wallops Island, Virginia, USA

Status: On Orbit

Uplink:
Downlink:       437.405MHz AFSK on LSB ax.25 over NRZI at 1k2 baud,
every 2
                minutes, begins 3.5 hours after first turn-on

Beacon:

Callsign:

URL:
[10012012]
=====
CXBN (Cosmic X-Ray Background Nanosatellite)
Catalog Number: 38762
Launch Date: September 12, 2012 2139z
Launch Site: Wallops Island, Virginia, USA

Status: On Orbit

Uplink:
Downlink:       437.525MHz GFSK ax.25

Beacon:

Callsign:

URL:
[10012012]
=====
Proiteres
Catalog Number: 38756
Launch Date: September 09, 2012 2139z
Launch Site: Satish Dhawan Space Centre, India

Status: On Orbit

Uplink:
Downlink: 437.485MHz FM/AFSK

Beacon:

Callsign: JL3YZK

URL:
[10012012]
=====
RS-40 MiR (Yubileiny-2)
Catalog Number: 38735
Launch Date: July 28, 2012
Launch Site: Plesetsk Missile and Space Complex, Russia

Status: On Orbit

Uplink:
Downlink(s):    435.265 MHz
                435.365 MHz

Beacon:

Callsign:

URL:
[08272012]
=====
HORYU-II
Catalog number: 38340
Launch Date: May 17, 2012 1639z

Status: On Orbit

Uplink:   145.??? MHz
Downlink: 437.375 MHz CW/AX25/FSK

Beacon: 437.375 MHz CW

Callsign: JG6YBW

URL:

IARU Coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=216
[10012012]
=====
XaTcobeo
Catalog Number: 38082
Launch Date: Febrauary 13, 2012 1000z
Launch Site: Kourou, French Guiana

Status: Operational

Uplink:
Downlink: 437.365 MHz FFSK with AX.25

Beacon:

Callsign:

URL:
```

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=135
[100162012]
=====
UniCubeSat
Catalog Number: 38085(?)
Launch Date: Febrauary 13, 2012 1000z
Launch Site: Kourou, French Guiana

Status: Operational

Uplink:
Downlink: 437.305 MHz 9k6 bps GMSK

Beacon:

Callsign:

URL:
http://www.gaussteam.com/index.php?option=com_content&view=article&id=
96:unicu
besat&catid=36:unicubesat&Itemid=183

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=133
[10012012]
=====
Robusta
Catalog Number: 38083(?)
Launch Date: Febrauary 13, 2012 1000z
Launch Site: Kourou, French Guiana

Status: On Orbit

Uplink:
Downlink: 437.325 MHz 1k2 FM telemetry (data every 3 min, 20 sec.
burst)

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=122
[10012012]
=====
MO-72 MaSat-1
Catalog Number: 38081
Launch Date: Febrauary 13, 2012 1000z
Launch Site: Kourou, French Guiana

Status: Operational

Uplink:
Downlink: 437.345 MHz GFSK 625/1250 bps
          437.345 MHz CW

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=126
[10012012]
=====
Goliat
Catalog Number: 38084(?)
Launch Date: Febrauary 13, 2012 1000z
Launch Site: Kourou, French Guiana

Status: Operational

Uplink:
Downlink: 437.485 MHz 1k2 AFSK

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=98
[10012012]
=====
E-St@r
Catalog Number: 38079
Launch Date: Febrauary 13, 2012 1000z
Launch Site: Kourou, French Guiana

Status: On Orbit

Uplink:
Downlink: 437.445 MHz 1k2 bps AFSK

Beacon:

Callsign:

URL:

IARU coordination page:

```
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=130
[10012012]
=====
ALMASat-1
Catalog Number: 38078
Launch Date: Febrauary 13, 2012 1000z
Launch Site: Kourou, French Guiana

Status: On Orbit

Uplink:
Downlink:  437.465 MHz 1k2 bps FSK
          2407.850 MHz

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=39
[10012012]
=====
RS-39 Chibis-M
Catalog Number: 38051
Launch Date: October 30, 2011 10:11:00 UTC
Launch site: Tyuratam (Baikonur Cosmodrome), Kazakhstan

Status: Operational

Uplink:
Downlink:

Beacon: 435.315 MHz CW
        435.215 MHz CW

Callsign:

URL:

IARU coordination status page:
[07302012]
=====
JUGNU
Catalog Number: 37839
Launch Date: October 12, 2011 05:30:00 UTC
Launch site: Satish Dhawan Space Centre, India

Status: On Orbit

Uplink:   145.??? MHz 1k2 (mode?)
Downlink: 437.505 MHz 9k6 (mode?)
```

```
Beacon: 437.275 MHz 15 wpm (?) CW

Callsign:

URL: http://www.iitk.ac.in/me/jugnu/index.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=160
[07092012]
=====
SRMSAT
Catalog Number: 37841
Launch Date: October 12, 2011 05:30:00 UTC
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Uplink:   145.900 MHz 1k  AX.25 (speed?)
Downlink: 437.500 MHz 2k4 AX.25

Beacon: 437.425 MHz 12 wpm CW

Callsign:

URL: http://srmsat.in/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=181
[01282013]
=====
HRBE (E1P Explorer 1 [Prime] CubeSat (E1P-U2))
Catalog Number: 37855
Launch Date: October 28, 2011
Launch site: Vandenberg Air Force Base, California, USA

Status: On Orbit

Uplink:   437.305 MHz (???)
Downlink: 437.505 MHz AX.25 (SSB?)

Beacon:

Callsign:

URL: http://ssel.montana.edu/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=116
[01122012]
=====
M-Cubed
Catalog Number: 37855
```

Launch Date: October 28, 2011
Launch site: Vandenberg Air Force Base, California, USA

Status: On Orbit

Uplink:
Downlink: 437.485 MHz AX.25

Beacon:

Callsign:

URL: http://umcubed.org/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=215
[01122012]
=====
RAX-2
Catalog Number: 37853
Launch Date: October 28, 2011
Launch site: Vandenberg Air Force Base, California, USA

Status: Operational

Uplink:
Downlink: 437.345MHz 9k6 GMSK

Beacon:

Callsign:

URL: http://rax.engin.umich.edu//

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=221
[03232012]
=====
AO-71 AubieSat-1
Catalog Number: 37854
Launch Date: October 28, 2011
Launch site: Vandenberg Air Force Base, California, USA

Status: On Orbit

Uplink:
Downlink: 437.475 MHz 1k2 AX.25

Beacon: 437.475 MHz CW

Callsign: KI4NQO

URL: http://www.space.auburn.edu/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=148
[12262011]
=====
O/OREOS
Catalog Number: 37224
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: On Orbit

Uplink:
Downlink: 437.035 MHZ AX.25

Beacon:

Callsign:

URL: http://www.ooreos.org/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=146
[02092011]
=====
Rax-1 Radio Aurora Explorer
Catalog Number: 37223
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: On Orbit

Uplink:
Downlink: 437.505 MHz 9k6 GMSK

Beacon:

Callsign: RAX-1

URL: http://rax.engin.umich.edu/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=165
[02092011]
=====
FO-69 Fastrac-1 Sara Lily
Catalog Number: 37227
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: Operational

Uplink 1: 145.980 MHz 1k2 baud

```
Uplink 2: 145.825 MHz 1k2 baud
Downlink: 437.345 MHz 1k2 and 9k6 baud

Beacon:   437.435 MHz 1k2 AX.25

Callsign: Fast1

URL: http://fastrac.ae.utexas.edu/index.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=83
[07052011]
=====
FO-70 Fastrac-2 Emma
Catalog Number: 37380
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: Operational

Uplink 1: 435.025 MHz 1k2 baud
Uplink 2: 437.435 MHz 9k6 baud
Downlink: 145.825 MHz 1k2 and 9k6 baud

Beacon:   145.825 MHz 1k2 AX.25

Callsign: Fast2

URL: http://fastrac.ae.utexas.edu/index.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=84
[12162011]
=====
StudSat
Catalog Number: 36796
Launch Date: July 12, 2010 0352z
Launch site: Satish Dhawan Space Centre, India

Status: On Orbit

Uplink:   437.505MHz, 9600bps FSK
Downlink: 437.505MHz, 9600bps FSK
Beacon  : 437.505MHz,   20bps ASK

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=164
[02092011]
=====
TIsat-1
Catalog Number: 36799
Launch Date: July 12, 2010 0352z
Launch site: Satish Dhawan Space Centre, India
```

```
Status: On orbit

Callsign: HB9DE

Uplink:   145.980MHz FM, AFSK
Downlink: 437.305MHz FM, AFSK
Beacon:   437.305MHz CW

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=118
[02092011]
=====
SwissCube
Catalog Number: 35932
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Callsign: HB9EG

Beacon(100mw): 437.5050MHz CW
Beacon(1w):    437.5050MHz FSK 1k2bps

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=109
[02092011]
=====
UWE-2
Catalog Number: 35934
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: In Orbit

Beacon(500mw): 437.3850 MHz AFSK 1k2bps
               437.3850 MHz FSK 9k6bps

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=110
[02092011]
=====
ITUpsAT1
Catalog Number: 35935
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Beacon(100mw): 437.325MHz CW
Beacon(1w): 437.325MHz 19k2bps
```

```
IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=113
[02092011]
=====
BEESAT
Catalog Number: 35933
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Callsign: DP0BEE

Beacon(100mw): 436.000MHz CW
Beacon(500mw): 436.000MHz GMSK 4k8bps
Beacon(500mw): 436.000MHz GMSK 9k6bp
[02092011]
=====
HAWKSAT 1
Catalog number: 35004
Launch Date: May 19, 2009 2355z
Launch site: Wallops Island, Virginia, USA

Status: operational

Downlink: 437.345 MHz ?

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=105
[07302012]
=====
ANUSAT
Catalog Number: 34808
Launch Date: April 20, 2009 0115z
Launch Site: Satish Dhawan Space Centre, India

Status: ?

Downlink:  435.000 MHz
Uplink:    145.800 MHz

Telemetry: 137.400 MHz
[02092011]
=====
SOHLA-1 (ASTRO TECH.)
Catalog Number: 33496
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational

Proposed Frequencies and Modes:
Downlink: 437.505 MHz AFSK/CW
```

```
Beacon:   437.505 MHz AFSK/CW

Callsign:

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=101
[02092011]
=====
KAGAYAKI (Solan Co.)
Catalog Number: 33495
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: In Orbit

Downlink: 437.375 MHZ    FSK9k6/CW
Beacon:   437.375 MHz    FSK9k6/CW

IARU coordination status page:

AMSAT-NA webpage:

[02092011]
=====
STARS (Kagawa Univ.) (Twin Satellites)
Catalog Number: 33498
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational ?

Downlinks: 437.485 MHz FM/CW
           437.465 MHz FM/CW
Beacons:   437.305 MHz FM/CW
           437.275 MHz FM/CW

Callsigns: JR5YBN
           JR5YBO

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=99

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=121&retURL
=/satellites/status.php
[02092011]
=====
KKS-1 (Tokyo MCIT)
Catalog Number: 33499
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational
```

```
Downlink:  437.455 MHz AFSK/CW
Beacon:    437.385 MHz AFSK/CW

Callsign: JQ1YYY

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=107

AMSAT-NA webapge:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=120&retURL
=/satellites/status.php
[20092011]
=====
PRISM (Tokyo Univ.)
Catalog Number: 33493
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational

Uplink:   145.xxx MHz AFSK 1k2
Downlink: 437.425 MHz AFSK 1k2
Beacon:   437.250 MHz CW

Callsign: JQ1YCX

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=97

Read terms and conditions of operations at the PRISM web page to find
out how
to properly operate on the satellite and to get the uplink frequency.
It
has
been asked that the uplink frequency not be given out untik you have
read and
understood the terms of usage.

URL:
http://www.space.t.u-tokyo.ac.jp/prism/en/HAMservice.html
[10282012]
=====
RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number: 32953
Launch Date: May 23, 2008 1520z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational

Curent Modes: Telemetry
              Audio
              Images
```

Downlinks: 435.315 MHz
           435.215 MHz

AMSAT-NA website:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=115&retURL=/satellites/status.php

Official website:
http://www.npopm.com/?cid=leoca&caid=43
[02092011]
=====
CanX-2
Catalog number: 32790
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational in range of ground station only

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=46
[02092011]
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Downlink: 437.425 MHz 1k2 baud packet

For the latest project status update please visit the AAUSAT-II web page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=60
[02092011]
=====
CO-65 CUTE-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Downlink: 437.475 MHz 9k6 Packet

Uplink: 1267.600 Mhz

Telemetry Beacon:
Downlink: 437.2750 MHz CW

For the latest project status update please visit the Cute-1.7+APD II
web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=78

Command Station blog website:
http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=112&retURL
=/satellites/status.php
[03232012]
=====
Compass-1
Catalog number: 32787
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Current Mode: dependant on last received command

Uplink: 145.980 MHz FM
Downlink: 437.275 Mhz CW
          437.405 MHz Packet

For the latest project status update please visit the Compass 1 web
page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=52

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=114&retURL
=/satellites/status.php
[06162011]
=====
CO-66 Seeds II
Catalog number: 32791
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Downlink: 437.485 MHz

Callsign: JQ1YGU

For the latest project status update please visit the Seeds 2 web
page: http://cubesat.aero.cst.nihon-u.ac.jp/english/seeds_2_e.html

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=36

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=113&retURL
=/satellites/status.php
[073092011]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007 0702z
Launch site: Baikonur, Kazakhstan

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=94&retURL=
/satellites/status.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=72
[02092011]
=====
CP3
Catalog Number: 31129
Launch Date: April 17,2007 0702z
Launch site: Baikonur, Kazakhstan

Status: Operational

Current Mode: /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=74
[02092011]
=====
CO-58 CubeSat XI-V
Catalog number: 28895

Launch Date: October 27, 2005 0652z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon: 437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/xivpicte.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=37
[02092011]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: ?????

Current Mode: /u

Beacon: 436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=96&retURL
=/satellites/status.php

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[02092011]
=====
QuakeSat
Catalog Number: 27845
Launch Date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Telemetry only

Current Mode: 9600 baud data packet

Mode U packet
Downlink: 436.675 MHz 9k6 BPS

```
Quakesat webpage:
http://www.quakefinder.com/services/quakesat-ssite/
[02252011]
=====
CO-55 Cute-1.7+APD II
Catalog Number: 27844
Launch date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational

Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=69&retURL
=/satellites/status.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=78
[02092011]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001 0240z
Launch site: Kodiak Launch Complex, Alaska, USA

Status: Operational

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink:        144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[10292012]
=====
RS-22 RADIO SPORT 22 (MOZHAYETS 4)
Catalog number: 27939
Launch Date: September 27, 2003 0612z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational - 70cm cw only
```

Current Mode: /u

CW Beacon - 435.352 MHz
145.818 MHz

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=76&retURL
=/satellites/status.php
[02092011]
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990
Launch site: Kourou, French Guiana

Status: CW Beacon only

Uplinks: 145.840 MHz 1200-baud Manchester FSK
145.860 MHz 1200-baud Manchester FSK
145.880 MHz 1200-baud Manchester FSK
145.900 MHz 1200-baud Manchester FSK

CW downlink: 437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[02092011]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984
Launch site: Vandenburg AFB, California, USA

Status: Operational ?

Current Mode: /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon: 435.025 MHz
Mode-S Beacon: 2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm

```
[07052011]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998 0640z (ZARYA module)
Launch sites: Baikonur, Kazakhstan
              Kourou, French Guiana
              Uchinoura Space Center, Japan
              Kennedy Space Center, Titusville, Florida, USA

Status: Operational

Current Active Modes: FM Repeater - OFF
                      Voice -       V/v
                      BBS -         V/v
                      2m APRS -     V/v
                      2m Digi -     V/v
                      70cm APRS -   ?
                      70cm Digi -   ?
                      SSTV -        V/v


Expedition 34 Crew (November 2012 - March 2013):
Commander:                Kevin Ford          KF5GPP
Flight Engineer:          Oleg Novitskiy
Flight Engineer:          Evgeny Tarelkin
Flight Engineer:          Roman Romanenko
Flight Engineer:          Chris Hadfield      KC5RNJ/VA3OOG
Flight Engineer:          Tom Marshburn       KE5HOC


Available Modes and Frequencies:
Digital/APRS:
Worldwide 2m packet uplink:     145.825 MHz FM 1k2
Worldwide 2m packet downlink:   145.825 Mhz FM 1k2
Worldwide 70cm packet uplink:   437.550 Mhz FM 1k2
Worldwide 70cm packet downlink: 437.550 Mhz FM 1k2

Voice:
Region 1 voice uplink:          145.200 MHz FM
Region 2/3 voice uplink:        144.490 MHz FM
Worldwide downlink:             145.800 MHz FM

Crossband Repeater:
Repeater Uplinks:              1269.650 MHz FM
                                437.800 MHz FM
                                145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink:              145.800 MHz FM
                                437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink:                       145.800 MHz FM
```

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
2m Packet Mailbox: RS0ISS-11
2m Digipeater alias: ARISS
70cm Packet Mailbox: RS0ISS-1
70cm Digipeater callsign: RS0ISS
70cm Digipeater alias: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[12242012]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-028.S3
WSR 028 Part 3 01/21/2013

AMSAT NEWS SERVICE BULLETIN 028.S3
FROM AMSAT HQ SILVER SPRING, MD, January 21, 2013
TO ALL RADIO AMATEURS
BID: $WSR-028.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

NANOSAIL-D
Catalog Number: 37361
Ejection Date: January 17, 2011

Status: Non - Operational

Downlink: 437.270 MHz AX.25

URL: http://nanosaild.engr.scu.edu/dashboard.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=115
[07302012]
=====
HO-68 HOPE-1 (CAS-1) (XW-1)
Catalog Number: 36122

```
Launch Date: December 15, 2009 0231z
Launch site: Taiyuan Space Center, PRC

Status: Telemetry only

Callsign:
Broadcast:    BJ1SA-11
BBS:     BJ1SA-12

Uplinks:   145.8250 MHz FM, PL 67.0 Hz.
           145.9250 - 145.9750 MHz SSB/CW
           145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
           435.7650 - 435.7150 MHz SSB/CW
           435.6750 MHz AFSK 1200 BPS

Beacon:    435.7900 MHz CW

Mode and Antenna Polarization:
V: LHCP 2.0dBi max
U: RHCP 3.0dBi max

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=108

For more information about XW-1 (CAS-1):
http://
[04302012]
=====
SO-67 SumbandilaSat
Catalog Number: 35870
Launch Date: September 17, 2009 1555z
Launch site: Baikonur, Kazakhstan

Status: Non - Operational

Callsign: ZS0SUM

Uplink:   145.875MHz FM tone 233.6 Hz
Downlink: 435.345MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

For more information about SO-67:
http://www.amsatsa.org.za/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=88
[01272012]
=====
CP4
```

```
Catalog Number: 31132
Launch Date: April 17, 2007

Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon:    437.325 MHz CW

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=79
[09062010]
=====
LIBERTAD-1
Catalog Number: 31128
Launch Date: April 17, 2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink:   145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=76
[09062010]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: Non-Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder:  145.825 Mhz FM

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=51
[09062010]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?
```

```
Proposed Callsign: TBA
Proposed Transmit Frequency:  437.305
                             2407.250

Official Website: http://www.ncube.no

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=24
[09062010]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink:         437.250 MHz FM 67Hz CTCSS
Voice Downlink:      2401.835 MHz FM
Packet Up/Downlink:   437.250 MHz 9k6 packet
Packet Downlink      2401.835 MHz 38k4 packet

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=54
[09062010]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non-Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=53
[09062010]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004 0745z
Launch site: Baikonur, Kazakhstan

Status: Non - Operational

Current Mode(s):
Voice repeater: V/u
Uplink:      145.880 MHz FM
Downlink:    435.150 MHz FM

Telemetry: Recovery efforts
Downlink:    435.150MHz 9k6
```

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.860 MHZ FM
145.880 MHz USB
145.880 MHz FM
145.920 MHz FM
145.920 MHz FM - 67 Hz PL tone burst
1268.705 MHz FM
Digital Downlinks: 435.150 MHz FM 38k4 PBP, 1 watt output
435.150 MHz FM 9k6 Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Pacsat Broadcast Protocol
1268.703 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=19
[12062011]
=====
CANX-1
Catalog Number: 27847
Launch Date: June 30, 2003

Status: Non-Operational

Downlink: 437.8800 MHz AFSK 1k2bps
[06052009]
=====
DTUSAT
Catalog Number: 27842
Launch Date: June 30, 2003

Status: Non-Operational

Current Mode: 2k4 AFSK Packet last reported

Downlink: 437.475MHz

Officail webpage: http://dtusat1.dtusat.dtu.dk/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=101&retURL
=satellites/all_oscars.php
[02212009]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)

Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Telemetry only

Uplinks: 145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial land and weather imaging payloads offers FM and FSK
Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as
a collaborative effort between the Malaysian government and Surrey
Satellite Technology Ltd.
[03302009]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

```
Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink:   145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS:                SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink:   145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
V-band:   145.840 -  145.990 MHz CW/LSB
U-band:   435.550 -  435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB
```

Downlinks

S2-band: 2401.225 - 2401.475 MHz CW/USB
K-band: 24048.010 - 24048.060 MHz CW/USB
Beacon: 2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)

BEACON	General Beacon(GB)	Middle Beacon(MB)	Engineering Beacon(EB)
2 m	none	145.898 MHz	none
70cm	435.438 MHz	435.588 MHz	435.838 MHz
13cm(1)	2400.188 MHz	2400.338 MHz	2400.588 MHz
13cm(2)	2401.173 MHz	2401.323 MHz	2401.573 MHz
3cm	10450.975 MHz	10451.125 MHz	10451.375 MHz
1.5cm	24047.885 MHz	24048.035 MHz	24048.285 MHz

[07162007]

=====

OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]

=====

UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]

=====

SO-35 SUNSAT
Catalog Number: 25636
Launch date:February 23, 1999

Status: Non-Operational

```
Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater:         436.250 MHz

Uplinks: Mode B Repeater:  145.825 MHz
Mode J Digipeater:         145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Non-Operational

Current Modes:
Telemetry : /u

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
```

         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://asri.technion.ac.il/techsat/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=14&retURL
=/satellites/status.php
[07172010]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink: 145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
MO-30 UNAMSAT-2
Catalog Number: 24305
Launch Date: September 5, 1996

Status: Non-operational

Downlink: 435.1380 MHz AFSK 1200 BPS
Downlink: 435.2060 MHz AFSK 1200 BPS
Uplink: 145.8150 MHz AFSK 1200 BPS
Uplink: 145.8350 MHz AFSK 1200 BPS
Uplink: 145.8550 MHz AFSK 1200 BPS
Uplink: 145.8750 MHz AFSK 1200 BPS
[06042009]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Non-operational

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html

```
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012009]
=====
AO-27 AMRAD
Catalog number: 22825
Launch Date: September 26, 1993 0140z
Launch site: Kourou, French Guiana

Status: Recovery efforts in progress

Current Mode: V/u

Uplink:   145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[12032012]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993 0140z

Status: PSK carrier only

Current Mode:

Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM
```

```
Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
AO-24 ARSENE
Catalog Number: 22654
Launch Date: May 13, 1993

Status: Non-operational

Uplink:    435.0625 MHz FM 1k2bps AFSK
           435.1125 MHz FM 1k2bps AFSK
           435.1375 MHz FM 1k2bps AFSK
Downlink:  145.9750 MHz FM 1k2bps AFSK
          2446.5025 MHz FM 1k2bps AFSK

Beacon:    2446.4700 MHz CW

Broadcast callsign:
BBS:
[12162009]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991
```

```
Status: Non-Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
[05012006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990
```

```
Status: non-operational

Current Mode:  V/u

Uplink:         145.900 MHz FM 1200-baud Manchester FSK (reserved)
                145.920 MHz FM VOICE
                145.940 MHz FM 1200-baud Manchester FSK (reserved)
                145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink:       437.026 MHz USB VOICE
                (1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[07242009]
=====
UO-15 UoSAT-4
Catalog Number: 20438
Launch Date: January 22, 1990

Status: Non-operational

Uplink: ?
Downlink: 435.1250MHz (?)
          435.1200MHz (?)
[06042009]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
```

Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink: 145.8500 MHz MFSK 1200 BPS
Uplink: 145.8700 MHz MFSK 1200 BPS
Uplink: 145.8900 MHz MFSK 1200 BPS
Uplink: 145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon: 145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.8500 - 145.9000 MHz SSB/CW
Downlink 29.4000 - 29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

```
Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
Beacons:   29.450 MHz
          435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon 1:  29.352 MHz (intermittent)
Beacon 2:  29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink:     21.260 to 21.300 MHz CW/USB
Downlink:  145.860 to 145.900 MHz CW/USB
```

```
Beacon:    145.860 MHz

Robot:     145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink:   21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon:   29.408 MHz

Robot:    29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-028.S4
WSR 028 Part 4 01/07/2013

AMSAT NEWS SERVICE BULLETIN 028.S4
FROM AMSAT HQ SILVER SPRING, MD, January 07, 2013
TO ALL RADIO AMATEURS
BID: $WSR-028.S4

THE FOLLOWING SATELLITES HAVE RE-ENTERED OR HAVE BEEN RETURNED SAFELY:

ARISSat-1
Catalog number: 37772
Launch date: August 03, 2011 1843z
Launch site: International Space Station

Status: Re-entered January 05, 2012

Callsign: RS01S

Current Mode(s):
Linear Transponder: U/v
Uplink:      435.758 to 435.742 MHz CW/LSB
Downlink:    145.922 to 145.938 MHz CW/USB

FM Telemetry/SSTV/Messages/ID:
Downlink:    145.950 MHz FM

Telemetry/Beacon:
Downlink:    145.939 MHz CW1
             145.919 MHz CW2
             145.920 MHz 1k BPSK USB
             145.920 MHz 400b BPSK USB
```

```
Official Webpage:http://www.amsat.org/amsat-new/ARISSat/ARISSat.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/informal_detail.php?serialnum=89
[01052012]
=====
CP-6
Catalog Number: 35003
Launch Date: May 19, 2009 2355z
Launch site: Wallops Island, Virginia, USA

Status: Re-enetered October 06, 2011

Downlink: 437.365 MHz 1k2 AFSK

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=121
[01282013]
=====
Pharmasat
Catalog Number: 35002
Launch Date: May 19, 2009 2355z
Launch site: Wallops Island, Virginia, USA

Status: Re-entered August 14, 2012

Downlink: 437.465 MHz 1k2 AFSK

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=94
[01282013]
=====
CAERUS (Mayflower)
Catalog Number: 37252
Launch Date: December 08, 2010 15:43:00 UTC
Launch site: Kennedy Space Center, Titusville, Florida, USA

Status: Re-entered December 22, 2010

Uplink:
Downlink: 437.600 MHz 1k2 AX.25

Beacon:   437.600 MHz CW

Callsign: KJ6FIX

URL:
http://www2.isi.edu/research/prj-serc/prj-serc_projects/prj-serc_proje
cts-8.htm

IARU coordination status page:
```

```
[01282013]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Re-entered
Re-entered: October 25, 2009

Uplink:  1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=56
[09062010]
=====
BEVO-1 (DRAGONSAT-1)
Catalog Number: 35690
Launch Date: May 19, 2009

Status: Re-entered
Re-entered:

Downlink: 437.325 MHz 9k6 GMSK
          437.325 MHz CW 20wpm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=117
[07312009]
=====
AggieSat2 (DRAGONSAT-2)
Catalog Number: 35690
Launch Date: May 19, 2009

Status: Re-entered
Re-entered:

Downlink: 436.250 MHz 9k6 FHSS
[11112009]
=====
Pollux
Catalog Number: 35693
Launch Date: July 31, 2009

Status: Re-entered
Re-entered:
```

Callsign: POLLUX-1

Downlink: 145.825MHz 1k2 AX.25

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=139
[09062010]
=====
Castor (ANDE-2)
Catalog Number: 35694
Launch Date: July 31, 2009

Status: Re-entered
Re-entered:

Callsign: KD4HBO-1

Downlink: 145.825 MHz 1k2 AX.25

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=144
[09062010]
=====
NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: July 28, 2008

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=59
[01012009]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661

```
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink:      145.825 Mhz FM APRS AX25
APRS Uplink:        145.825 MHz FM APRS AX25
Voice/PSK31 Uplink:  28.120 MHz

Packet to Voice ID: RAFT
[06112007]
=====
GENESAT-1
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Re-Entered
Re-entered date: August 8, 2010

Current Mode: /u

Callsign: KE7EGC

Telemetry Beacon Downlink: 437.0695 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[08082010]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Re-Entered
Re-entered: June 18, 2008

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon:             437.2750 MHz CW

Callsign: JR8YJT
[01012009]
=====
SO-43 Starshine 3
Catalog Number: 26929
Launch Date: September 30, 2001

Status: Re-Entered
Re-entered: January 21, 2003

Beacon: 145.825Mhz
[02212009]
NNNN
/EX
```

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live
radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz.
Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30
UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

- AMSAT News Service (ANS)
- General satellite discussion (AMSAT-BB)
- Orbit data (KEPS)
- Manned space missions (SAREX)
- District of Columbia area (AMSAT-DC)
- New England area (AMSAT-NE)
- AMSAT Educational Liaison mailing list (AMSAT-EDU)
- AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the
President's Club. Members of the President's Club, as sustaining
donors to AMSAT Project Funds, will be eligible to receive additional
benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to
the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis
Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at}amsat.org
NNNN
/EX

```
From -331403977621084091
X-Google-Thread: a4a23d5f63,6982f681f6b0e1d2,start
X-Google-Attributes: gida4a23d5f63,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
X-Received: by 10.180.8.4 with SMTP id n4mr60987wia.0.1359687840531;
        Thu, 31 Jan 2013 19:04:00 -0800 (PST)
MIME-Version: 1.0
Path: bp2ni9379wib.1!nntp.google.com!feeder1.cambriumusenet.nl!feed.tweaknews.nl!
85.12.40.130.MISMATCH!xlned.com!feeder1.xlned.com!border2.nntp.ams.giganews.com!
usenetcore.com!newsfeed.xs4all.nl!newsfeed2.news.xs4all.nl!xs4all!
newspeer1.nac.net!border4.nntp.dca.giganews.com!border2.nntp.dca.giganews.com!
nntp.giganews.com!newsfeed.news.ucla.edu!news.snarked.org!news.linkpendium.com!
news.linkpendium.com!panix!rri.panix.com!robomod!not-for-mail
From: SWPC.Webmaster@noaa.gov
Newsgroups:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.shor
twave,rec.radio.info
Subject: Weekly Highlights of Solar and Geomagnetic Activity, 21 - 27 January 2013
Followup-To:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.shor
twave
Date: Mon, 28 Jan 2013 11:30:11 EST
Organization: NOAA Space Weather Prediction Center
Lines: 68
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <20130128163001.D82A133C53@panix2.panix.com>
NNTP-Posting-Host: panix6.panix.com
X-Trace: reader1.panix.com 1359390610 22378 166.84.1.6 (28 Jan 2013 16:30:10 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Mon, 28 Jan 2013 16:30:10 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Bytes: 5326

:Product: Weekly Highlights and Forecasts
:Issued: 2013 Jan 28 0352 UTC
# Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center
# Product description and SWPC contact on the Web
# http://www.swpc.noaa.gov/weekly.html
```

#
Weekly Highlights and Forecasts
#

Highlights of Solar and Geomagnetic Activity
21 - 27 January 2013

Solar activity has been at very low levels for the past week. At the beginning of the summary period, Region 1654 (N08, L=151 Class/Area Fki/1100 on 11 Jan) rotated off the west limb without producing any major activity. Region 1660 (N13, L=065 Class/area Dao/220 on 25 Jan) was the only other region of magnetic complexity on the visible disk. However, very little activity was attributed to Region 1660. The remaining regions on the disk remained stable and quiet. A couple of non-Earth directed CMEs were observed during the period. On 23 January, a large filament eruption was observed off the northeast quadrant of the visible disk. LASCO C2/C3 and STEREO A/B COR2 imagery supported an associated CME with this event. SWPC forecaster analysis and WSA-Enlil models runs indicated this event was Earth directed, however very little affects would be observed upon arrival.

No proton events were observed at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit was normal to moderate levels during the summary period.

Geomagnetic field activity was at mostly quiet levels from 21 -25 January. On 26 January, solar wind measurements from the ACE spacecraft indicated the arrival of a coronal hole high speed stream (CH HSS), preceded by a co-rotating interaction region (CIR). The ACE measurements showed and small increase in solar wind density, followed by an increase in solar wind speed, accompanied by an enhancement in the total interplanetary magnetic field. In response to these changes, quiet to active levels were observed. As effects from the CH HSS waned, a return to quiet levels was observed on 27 January. An instrument on the ACE spacecraft called the EPAM, used to monitor energetic protons and electrons in the solar wind, indicated the possible arrival of the 23 January CME late on 26 January. Due to the arrival of the CH HSS, it was hard to discern which effects can be attributed to the CH HSS and which can be attributed to the CME.

Forecast of Solar and Geomagnetic Activity
28 January - 23 February 2013

Solar activity is expected to be very low levels with the possibility of C-class events for the entire forecast period. Even though several of the returning regions show magnetic complexity, very little data has indicated increases in activity while these regions rotate around the far side of the disk.

No proton events are expected at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to be normal to high levels on 28-30 January and 11-12 February in response to CH HSS effects. Normal to moderate levels are expected for the remainder of the period.

Geomagnetic field activity is expected to be at mostly quiet levels for the entire forecast period, except for 09-10 February and 22-23 February. Quiet to active levels are expected on these days in response to CH HSS effects.

```
From 5690779220180672286
X-Google-Thread: 10e8ad,e1f3ac67ec4eb511,start
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
X-Received: by 10.66.76.201 with SMTP id m9mr1252784paw.33.1359624737267;
        Thu, 31 Jan 2013 01:32:17 -0800 (PST)
MIME-Version: 1.0
Path: s9ni27431pbb.0!nntp.google.com!news.glorb.com!feeder.erje.net!
eu.feeder.erje.net!newsfeed.straub-nv.de!proxad.net!feeder1-2.proxad.net!
193.252.117.184.MISMATCH!feeder.news.orange.fr!not-for-mail
Date: Thu, 31 Jan 2013 10:32:16 +0100
Message-ID: <23442442@news.orange.fr>
From: Anthasue <anthasue@yahoo.fr>
User-Agent: AppleWebKit/533.4
Subject: cation
Newsgroups: rec.radio.amateur.space
X-Antivirus: avast! (VPS 120716-1, 16/07/2012), Outbound message
X-Antivirus-Status: Clean
Lines: 11
Organization: les newsgroups par Orange
NNTP-Posting-Date: 31 Jan 2013 10:32:16 CET
NNTP-Posting-Host: 90.0.124.253
X-Trace: 1359624736 reader.news.orange.fr 9011 90.0.124.253:4232
X-Complaints-To: abuse@orange.fr
Content-Type: text/plain; charset=iso-8859-1
```

Hiya

When studying the electron, it should be interesting to detail the double bond of the material in an efficient way;

As a consequence, it should be interesting to detail the condensation of the material with collaborative contributions when evaluating the electron and the particular case of the material biomolecules;

But After analyzing the electron and the particular case of the material chemical structure, I guess that we may describe the molecular structure of the material with collaborative contributions

:-)

```
From 9277064448144440321
X-Google-Thread: 8f86f75953,7d26b4c7b4001ac5,start
X-Google-Attributes: gid8f86f75953,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
X-Received: by 10.180.19.132 with SMTP id f4mr744678wie.2.1359856951261;
        Sat, 02 Feb 2013 18:02:31 -0800 (PST)
MIME-Version: 1.0
Path: bp2ni13206wib.1!nntp.google.com!feeder1.cambriumusenet.nl!feed.tweaknews.nl!
194.109.133.87.MISMATCH!newsfeed.xs4all.nl!newsfeed1.news.xs4all.nl!xs4all!
newspeer1.nac.net!newspump.sol.net!newsfeed.hal-mli.net!feeder1.hal-mli.net!
news.nobody.at!news.glorb.com!news-out.readnews.com!transit3.readnews.com!panix!
panix2.panix.com!not-for-mail
From: rram@panix.com (rec.radio.amateur.moderated Admin)
Newsgroups:
rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.rad
io.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amat
eur.space,rec.radio.info
Subject: Crossposting Permitted to rec.radio.amateur.moderated
Supersedes: <radio/ham-radio/moderated/crossposting-1-1358233201@panix.com>
Followup-To: poster
Date: 1 Feb 2013 02:00:02 -0500
Organization: rec.radio.amateur.moderated Moderation Team
Lines: 47
Approved: RRI Admin <rec-radio-info-request@panix.com>
Distribution: world
Expires: 19 Feb 2013 02:00:00 -0000
Message-ID: <radio/ham-radio/moderated/crossposting-1-1359702000@panix.com>
Reply-To: rec-radio-amateur-moderated-request@panix.com
(rec.radio.amateur.moderated Admin)
NNTP-Posting-Host: panix2.panix.com
X-Trace: reader1.panix.com 1359702002 23515 166.84.1.2 (1 Feb 2013 07:00:02 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Fri, 1 Feb 2013 07:00:02 +0000 (UTC)
Summary: Short reminder for unmoderated newsgroups that crossposting is permitted
Keywords: FAQ, ham, amateur, radio, moderated, unmoderated, crossposting,
permitted

Posted-By: auto-faq 3.3.2 beta (PGPMoose V2.0, Perl 5.005)
Archive-name: radio/ham-radio/moderated/crossposting
Revision: 1.2 2011/11/02 04:08:53
Posting-Frequency: posted twice monthly
URL: http://www.panix.com/~rram/usenet/rram/index.html

Changes followed by "|".

After a 30-day public discussion and feedback period to gauge reader
opinions in March of 2009:

http://groups.google.com/group/rec.radio.amateur.moderated/browse_thread/thread/
d7d337db35f23326

the rec.radio.amateur.moderated Moderation Team had decided to consider       |
```

amending its charter, and permit limited simultaneous crossposting to
rec.radio.amateur.moderated and one other unmoderated
amateur-radio-related discussion newsgroup. After a successful trial |
period (90 days, through early July 2009), we decided to adopt this |
change permanently. |

Approved rec.radio.amateur.* newsgroups are those that are currently listed in the latest version of the "List of Big Eight Newsgroups" which is crossposted monthly to news.announce.newgroups, news.groups, and news.lists.misc.

Approved alt.radio.amateur.* and alt.ham-radio.* newsgroups are those that have been created consistent with the suggestions in "So You Want to Create an Alt Newsgroup" at:

  http://www.faqs.org/faqs/alt-creation-guide/

Approved regional hierarchy newsgroups are those that contain either "radio.amateur" or "ham-radio" in their names, including uk.radio.amateur and aus.radio.amateur.misc.

We will make every reasonable effort to keep our list of approved newsgroups up-to-date. In case we have overlooked any, and a submission is rejected in error as a result, the rejected submitter can E-mail us at our administrative contact address (in the signature at the bottom of this article, and the default Reply-To for the rejection message) requesting that it be added, and that the article be approved. We may still choose to reject articles crossposted to any alt.* newsgroup with an inappropriate name, including obscene language, embedded name-calling, or encouragement of unlawful conduct.

Please direct any comments, questions, or criticisms to rec-radio-amateur-moderated-request@panix.com.

From -6199823033593386205
X-Google-Thread: 10e8ad,30287b42ff05a4d9,start
X-Google-NewGroupId: yes
X-Google-Thread: 10b9c8,30287b42ff05a4d9,start
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,gida4a23d5f63,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
X-Received: by 10.66.80.41 with SMTP id o9mr1943537pax.4.1359833251282;
        Sat, 02 Feb 2013 11:27:31 -0800 (PST)
Path: s9ni31752pbb.0!nntp.google.com!news.glorb.com!news.linkpendium.com!
news.linkpendium.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-035 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Sat, 2 Feb 2013 14:27:29 EST
Organization: The Radio Amateur Satellite Corporation
Lines: 2372

```
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <002b01ce017b$05ce3b90$116ab2b0$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
X-Trace: reader1.panix.com 1359833250 23637 166.84.1.6 (2 Feb 2013 19:27:30 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sat, 2 Feb 2013 19:27:30 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
DKIM-Signature: v=1; a=rsa-sha256; c=relaxed/relaxed; d=comcast.net;
     s=q20121106; t=1359833234;
     bh=4H+XWHrPX3S1ZQVof4UJiUAnjXMvdkYukVfAtzj/Tbo=;
     h=Received:Received:From:To:Subject:Date:Message-ID:MIME-Version:
      Content-Type;
     b=WztOvMmdw+Boy+P3xgJkc0yrtLz8KEkTLfsEtnOuAV7tNHGtA60Lhcf07DdRe79/E
      RGSq2NdlOvrhco39la6bUaZ7vcVAW+PKhFbbDv+xG9Wn5tFNIORWsnI+vsKWSAwgnr
      uOniPv9UNRTcD4QxdNh7uTaD1GUmbBiPvxf402zEhazBjph9iKXEN+V95Wv6e8CJYh
      aD1ee7gJg2vBnmbPM6LHK5kAs2gOVv8Q3FYx0unIOhnPR3Om7ASV3ZP+lm1AT92wnP
      5dqjQzLAugUDz5OIJSmAb3FT/VR24J4cu3SlR6SpTnhnLr3aFX3aGdh/kk6NLw3x2o
      eR0UQeeXGxP7w==
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
Content-Language: en-us
```

This report is organized into three (3) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites

SB SAT @ AMSAT W8ISS $WSR-035.S1
WSR 035 Part 1 02/04/2013

AMSAT NEWS SERVICE BULLETIN 035.S1
FROM AMSAT HQ SILVER SPRING, MD, February 04, 2013
TO ALL RADIO AMATEURS
BID: $WSR-035.S1

PW-Sat
Catalog Number: 38083
Launch Date: Febrauary 13, 2012 1000z
Launch Site: Kourou, French Guiana

Status: On Orbit

Uplink: 435.020 MHz FM
Downlink: 145.900 MHz DSB

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=132
[01282013]
=====
DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational
Current Mode: Science Mode - Beacon ONLY

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink: 435.530 to 435.570 MHz

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=68
[01282013]
=====
VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05, 2005 0444z
Launch site: Satish Dhawan Space Centre, India

Status: Operational
Current Mode: U/v - Dutch Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.9360 MHZ CW

Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=30

To know what transponder is switched on please listen for the beacon that is active. Each transponder has a different beacon.
[01282013]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002 1700z
Launch site: Baikonur, Kazakhstan

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz. The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10 minute timer.
[01282013]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Operational
Current Mode: V/u (Mode JA)

Voice/CW (Mode JA)
Uplink: 145.90 to 146.00 MHz CW/LSB

Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
145.870 MHz FM
145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage:
http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's
CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/
fo29cwts.htm
[01282013]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974
Launch site: Vandenberg AFB, California, USA

Status: Operational

Current Mode: Alternating between Mode A and B every 24 hours

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz CW
145.972 MHz CW
435.100 MHz CW
2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php
[01282013]
=====

INTERNATIONAL SPACE STATION (ISS) - ARISS

Catalog number: 25544
Launch date: November 20, 1998 0640z (ZARYA module)
Launch sites: Baikonur, Kazakhstan
Kourou, French Guiana
Uchinoura Space Center, Japan
Kennedy Space Center, Titusville, Florida, USA

Status: Operational

Current Active Modes:

FM Repeater -	OFF
Voice -	V/v
BBS -	V/v
2m APRS -	V/v
2m Digi -	V/v
70cm APRS -	?
70cm Digi -	?
SSTV -	V/v

Expedition 34 Crew (November 2012 - March 2013):

Commander:	Kevin Ford	KF5GPP
Flight Engineer:	Oleg Novitskiy	
Flight Engineer:	Evgeny Tarelkin	
Flight Engineer:	Roman Romanenko	
Flight Engineer:	Chris Hadfield	KC5RNJ/VA3OOG
Flight Engineer:	Tom Marshburn	KE5HOC

Available Modes and Frequencies:
Digital/APRS:
Worldwide 2m packet uplink: 145.825 MHz FM 1k2
Worldwide 2m packet downlink: 145.825 Mhz FM 1k2
Worldwide 70cm packet uplink: 437.550 Mhz FM 1k2
Worldwide 70cm packet downlink: 437.550 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear

U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
2m Packet Mailbox: RS0ISS-11
2m Digipeater alias: ARISS
70cm Packet Mailbox: RS0ISS-1
70cm Digipeater callsign: RS0ISS
70cm Digipeater alias: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time line is NOT translated from Russian and posted.
[01282013]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-035.S2
WSR 035 Part 2 02/04/2013

AMSAT NEWS SERVICE BULLETIN 035.S2
FROM AMSAT HQ SILVER SPRING, MD, February 04, 2013
TO ALL RADIO AMATEURS
BID: $WSR-035.S2

Fitsat-1
Catalog number: 38853
Launch Date: October 04, 2012
Launch site: Kibo Japanese Experiment Module, International Space Station

Status: Operational

Uplink:
Downlink(s): 437.445MHz 1k2 AFSK
5840.00 MHz 115k2 data
LED CW (200w pulses)

Beacon(s): 437.250 MHz CW

Callsign: NIWAKA

URL: http://carpcomm.com/satellite/fitsat1
[10292012]

```
=====
TechEdSat
Catalog number: 38854
Launch date: October 04, 2012
Launch site: Kibo Japanese Experiment Module, International Space
Station

Uplink(s):
Downlink(s): 437.465 1k2 AFSK

Beacon(s):

Callsign:

URL:http://www.techedsat.com/
[10152012]
=====
We Wish
Catalog number: 38856
Launch date: October 04,2012
Launch Site: Kibo Japanese Experiment Module, International Space
Station

Uplink(s):
Downlink(s): 437.505MHz 1k2 AFSK
             437.505MHz SSTV

Beacon(s): 437.505MHz CW

Callsign: JQ1ZIJ

URL:
[10152012]
=====
F-1
Catalog number: 38855
Launch Date: October 04, 2012
Launch Site: Kibo Japanese Experiment Module, International Space
Station

Uplink(s):
Downlink(s): 145.980MHz 1k2 AFSK
             437.485MHz FM moduled CW

Baecon(s):

Callsign: XV1VN

URL: http://fspace.edu.vn/
[10152012]
=====
Aeneas
Catalog Number: 38760
```

Launch Date: September 13, 2012 2139z
Launch Site: Wallops Island, Virginia, USA

Status: On Orbit

Uplink: WiFi 2425MHz
Downlink:
WiFi: 2425MHz
Spread Spectrum: Somewhere in the 70cm band

Beacon: 437.600MHz 1k2 ax25 every 10 seconds

Callsign:

URL:
[10012012]
=====
Cinema
Catalog Number: 36764
Launch Date: September 13, 2012 2139z
Launch Site: Wallops Island, Virginia, USA

Status: On Orbit

Uplink:
Downlink:
Engineering: 2400 - 2450MHz
Telemetery: 2200 - 2300MHz

Beacon:

Callsign:

URL:
[10012012]
=====
CSSWE (Colorado Student Space Weather Experiment)
Catalog Number: 38761
Launch Date: September 12, 2012 2139z
Launch Site: Wallops Island, Virginia, USA

Status: On Orbit

Uplink:
Downlink: 437.345MHz 9k6 with ax.25

Beacon:

Callsign:

URL:
[10012012]
=====

CP5 (Polysat)
Catalog Number: 38763
Launch Date: September 12, 2012 2139z
Launch Site: Wallops Island, Virginia, USA

Status: On Orbit

Uplink:
Downlink: 437.405MHz AFSK on LSB ax.25 over NRZI at 1k2 baud, every 2
                minutes, begins 3.5 hours after first turn-on

Beacon:

Callsign:

URL:
[10012012]
=====
CXBN (Cosmic X-Ray Background Nanosatellite)
Catalog Number: 38762
Launch Date: September 12, 2012 2139z
Launch Site: Wallops Island, Virginia, USA

Status: On Orbit

Uplink:
Downlink: 437.525MHz GFSK ax.25

Beacon:

Callsign:

URL:
[10012012]
=====
Proiteres
Catalog Number: 38756
Launch Date: September 09, 2012 2139z
Launch Site: Satish Dhawan Space Centre, India

Status: On Orbit

Uplink:
Downlink: 437.485MHz FM/AFSK

Beacon:

Callsign: JL3YZK

URL:
[10012012]
=====

```
RS-40 MiR (Yubileiny-2)
Catalog Number: 38735
Launch Date: July 28, 2012
Launch Site: Plesetsk Missile and Space Complex, Russia

Status: On Orbit

Uplink:
Downlink(s):    435.265 MHz
                435.365 MHz

Beacon:

Callsign:

URL:
[08272012]
=====
HORYU-II
Catalog number: 38340
Launch Date: May 17, 2012 1639z

Status: On Orbit

Uplink:   145.??? MHz
Downlink: 437.375 MHz CW/AX25/FSK

Beacon: 437.375 MHz CW

Callsign: JG6YBW

URL:

IARU Coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=216
[10012012]
=====
XaTcobeo
Catalog Number: 38082
Launch Date: Febrauary 13, 2012 1000z
Launch Site: Kourou, French Guiana

Status: Operational

Uplink:
Downlink: 437.365 MHz FFSK with AX.25

Beacon:

Callsign:

URL:
```

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=135
[100162012]
=====
UniCubeSat
Catalog Number: 38085(?)
Launch Date: Febrauary 13, 2012 1000z
Launch Site: Kourou, French Guiana

Status: Operational

Uplink:
Downlink: 437.305 MHz 9k6 bps GMSK

Beacon:

Callsign:

URL:
http://www.gaussteam.com/index.php?option=com_content&view=article&id=
96:unicu
besat&catid=36:unicubesat&Itemid=183

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=133
[10012012]
=====
Robusta
Catalog Number: 38083(?)
Launch Date: Febrauary 13, 2012 1000z
Launch Site: Kourou, French Guiana

Status: On Orbit

Uplink:
Downlink: 437.325 MHz 1k2 FM telemetry (data every 3 min, 20 sec.
burst)

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=122
[10012012]
=====
MO-72 MaSat-1
Catalog Number: 38081
Launch Date: Febrauary 13, 2012 1000z
Launch Site: Kourou, French Guiana

```
Status: Operational

Uplink:
Downlink: 437.345 MHz GFSK 625/1250 bps
          437.345 MHz CW

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=126
[10012012]
=====
Goliat
Catalog Number: 38084(?)
Launch Date: Febrauary 13, 2012 1000z
Launch Site: Kourou, French Guiana

Status: Operational

Uplink:
Downlink: 437.485 MHz 1k2 AFSK

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=98
[10012012]
=====
E-St@r
Catalog Number: 38079
Launch Date: Febrauary 13, 2012 1000z
Launch Site: Kourou, French Guiana

Status: On Orbit

Uplink:
Downlink: 437.445 MHz 1k2 bps AFSK

Beacon:

Callsign:

URL:

IARU coordination page:
```

http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=130
[10012012]
=====
ALMASat-1
Catalog Number: 38078
Launch Date: Febrauary 13, 2012 1000z
Launch Site: Kourou, French Guiana

Status: On Orbit

Uplink:
Downlink: 437.465 MHz 1k2 bps FSK
          2407.850 MHz

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=39
[10012012]
=====
RS-39 Chibis-M
Catalog Number: 38051
Launch Date: October 30, 2011 10:11:00 UTC
Launch site: Tyuratam (Baikonur Cosmodrome), Kazakhstan

Status: Operational

Uplink:
Downlink:

Beacon: 435.315 MHz CW
        435.215 MHz CW

Callsign:

URL:

IARU coordination status page:
[07302012]
=====
JUGNU
Catalog Number: 37839
Launch Date: October 12, 2011 05:30:00 UTC
Launch site: Satish Dhawan Space Centre, India

Status: On Orbit

Uplink: 145.??? MHz 1k2 (mode?)
Downlink: 437.505 MHz 9k6 (mode?)

```
Beacon: 437.275 MHz 15 wpm (?) CW

Callsign:

URL: http://www.iitk.ac.in/me/jugnu/index.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=160
[07092012]
=====
SRMSAT
Catalog Number: 37841
Launch Date: October 12, 2011 05:30:00 UTC
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Uplink:   145.900 MHz 1k  AX.25 (speed?)
Downlink: 437.500 MHz 2k4 AX.25

Beacon: 437.425 MHz 12 wpm CW

Callsign:

URL: http://srmsat.in/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=181
[01282013]
=====
HRBE (E1P Explorer 1 [Prime] CubeSat (E1P-U2))
Catalog Number: 37855
Launch Date: October 28, 2011
Launch site: Vandenberg Air Force Base, California, USA

Status: On Orbit

Uplink:   437.305 MHz (???)
Downlink: 437.505 MHz AX.25 (SSB?)

Beacon:

Callsign:

URL: http://ssel.montana.edu/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=116
[01122012]
=====
M-Cubed
Catalog Number: 37855
```

Launch Date: October 28, 2011
Launch site: Vandenberg Air Force Base, California, USA

Status: On Orbit

Uplink:
Downlink: 437.485 MHz AX.25

Beacon:

Callsign:

URL: http://umcubed.org/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=215
[01122012]
=====
RAX-2
Catalog Number: 37853
Launch Date: October 28, 2011
Launch site: Vandenberg Air Force Base, California, USA

Status: Operational

Uplink:
Downlink: 437.345MHz 9k6 GMSK

Beacon:

Callsign:

URL: http://rax.engin.umich.edu//

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=221
[03232012]
=====
AO-71 AubieSat-1
Catalog Number: 37854
Launch Date: October 28, 2011
Launch site: Vandenberg Air Force Base, California, USA

Status: On Orbit

Uplink:
Downlink: 437.475 MHz 1k2 AX.25

Beacon: 437.475 MHz CW

Callsign: KI4NQO

URL: http://www.space.auburn.edu/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=148
[12262011]
=====
O/OREOS
Catalog Number: 37224
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: On Orbit

Uplink:
Downlink: 437.035 MHZ AX.25

Beacon:

Callsign:

URL: http://www.ooreos.org/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=146
[02092011]
=====
Rax-1 Radio Aurora Explorer
Catalog Number: 37223
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: On Orbit

Uplink:
Downlink: 437.505 MHz 9k6 GMSK

Beacon:

Callsign: RAX-1

URL: http://rax.engin.umich.edu/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=165
[02092011]
=====
FO-69 Fastrac-1 Sara Lily
Catalog Number: 37227
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: Operational

Uplink 1: 145.980 MHz 1k2 baud

```
Uplink 2: 145.825 MHz 1k2 baud
Downlink: 437.345 MHz 1k2 and 9k6 baud

Beacon:   437.435 MHz 1k2 AX.25

Callsign: Fast1

URL: http://fastrac.ae.utexas.edu/index.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=83
[07052011]
=====
FO-70 Fastrac-2 Emma
Catalog Number: 37380
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: Operational

Uplink 1: 435.025 MHz 1k2 baud
Uplink 2: 437.435 MHz 9k6 baud
Downlink: 145.825 MHz 1k2 and 9k6 baud

Beacon:   145.825 MHz 1k2 AX.25

Callsign: Fast2

URL: http://fastrac.ae.utexas.edu/index.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=84
[12162011]
=====
StudSat
Catalog Number: 36796
Launch Date: July 12, 2010 0352z
Launch site: Satish Dhawan Space Centre, India

Status: On Orbit

Uplink:   437.505MHz, 9600bps FSK
Downlink: 437.505MHz, 9600bps FSK
Beacon  : 437.505MHz,   20bps ASK

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=164
[02092011]
=====
TIsat-1
Catalog Number: 36799
Launch Date: July 12, 2010 0352z
Launch site: Satish Dhawan Space Centre, India
```

```
Status: On orbit

Callsign: HB9DE

Uplink:   145.980MHz FM, AFSK
Downlink: 437.305MHz FM, AFSK
Beacon:   437.305MHz CW

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=118
[02092011]
=====
SwissCube
Catalog Number: 35932
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Callsign: HB9EG

Beacon(100mw): 437.5050MHz CW
Beacon(1w):    437.5050MHz FSK 1k2bps

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=109
[02092011]
=====
UWE-2
Catalog Number: 35934
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: In Orbit

Beacon(500mw): 437.3850 MHz AFSK 1k2bps
               437.3850 MHz FSK 9k6bps

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=110
[02092011]
=====
ITUpsAT1
Catalog Number: 35935
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Beacon(100mw): 437.325MHz CW
Beacon(1w): 437.325MHz 19k2bps
```

```
IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=113
[02092011]
=====
BEESAT
Catalog Number: 35933
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Callsign: DP0BEE

Beacon(100mw): 436.000MHz CW
Beacon(500mw): 436.000MHz GMSK 4k8bps
Beacon(500mw): 436.000MHz GMSK 9k6bp
[02092011]
=====
HAWKSAT 1
Catalog number: 35004
Launch Date: May 19, 2009 2355z
Launch site: Wallops Island, Virginia, USA

Status: operational

Downlink: 437.345 MHz ?

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=105
[07302012]
=====
ANUSAT
Catalog Number: 34808
Launch Date: April 20, 2009 0115z
Launch Site: Satish Dhawan Space Centre, India

Status: ?

Downlink:  435.000 MHz
Uplink:    145.800 MHz

Telemetry: 137.400 MHz
[02092011]
=====
SOHLA-1 (ASTRO TECH.)
Catalog Number: 33496
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational

Proposed Frequencies and Modes:
Downlink: 437.505 MHz AFSK/CW
```

```
Beacon:   437.505 MHz AFSK/CW

Callsign:

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=101
[02092011]
=====
KAGAYAKI (Solan Co.)
Catalog Number: 33495
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: In Orbit

Downlink: 437.375 MHZ    FSK9k6/CW
Beacon:   437.375 MHz    FSK9k6/CW

IARU coordination status page:

AMSAT-NA webpage:

[02092011]
=====
STARS (Kagawa Univ.) (Twin Satellites)
Catalog Number: 33498
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational ?

Downlinks: 437.485 MHz FM/CW
           437.465 MHz FM/CW
Beacons:   437.305 MHz FM/CW
           437.275 MHz FM/CW

Callsigns: JR5YBN
           JR5YBO

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=99

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=121&retURL
=/satellites/status.php
[02092011]
=====
KKS-1 (Tokyo MCIT)
Catalog Number: 33499
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational
```

Downlink: 437.455 MHz AFSK/CW
Beacon: 437.385 MHz AFSK/CW

Callsign: JQ1YYY

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=107

AMSAT-NA webapge:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=120&retURL
=/satellites/status.php
[20092011]
=====
PRISM (Tokyo Univ.)
Catalog Number: 33493
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational

Uplink: 145.xxx MHz AFSK 1k2
Downlink: 437.425 MHz AFSK 1k2
Beacon: 437.250 MHz CW

Callsign: JQ1YCX

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=97

Read terms and conditions of operations at the PRISM web page to find
out how
to properly operate on the satellite and to get the uplink frequency.
It
has
been asked that the uplink frequency not be given out untik you have
read and
understood the terms of usage.

URL:
http://www.space.t.u-tokyo.ac.jp/prism/en/HAMservice.html
[10282012]
=====
RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number: 32953
Launch Date: May 23, 2008 1520z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational

Curent Modes: Telemetry
              Audio
              Images

Downlinks: 435.315 MHz
435.215 MHz

AMSAT-NA website:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=115&retURL=/satellites/status.php

Official website:
http://www.npopm.com/?cid=leoca&caid=43
[02092011]
=====
CanX-2
Catalog number: 32790
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational in range of ground station only

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=46
[02092011]
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Downlink: 437.425 MHz 1k2 baud packet

For the latest project status update please visit the AAUSAT-II web page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=60
[02092011]
=====
CO-65 CUTE-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Downlink: 437.475 MHz 9k6 Packet

Uplink: 1267.600 Mhz

Telemetry Beacon:
Downlink: 437.2750 MHz CW

For the latest project status update please visit the Cute-1.7+APD II web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=78

Command Station blog website:
http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=112&retURL=/satellites/status.php
[03232012]
=====
Compass-1
Catalog number: 32787
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Current Mode: dependant on last received command

Uplink: 145.980 MHz FM
Downlink: 437.275 Mhz CW
          437.405 MHz Packet

For the latest project status update please visit the Compass 1 web page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=52

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=114&retURL=/satellites/status.php
[06162011]
=====
CO-66 Seeds II
Catalog number: 32791
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Downlink: 437.485 MHz

Callsign: JQ1YGU

For the latest project status update please visit the Seeds 2 web page: http://cubesat.aero.cst.nihon-u.ac.jp/english/seeds_2_e.html

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=36

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=113&retURL=/satellites/status.php
[073092011]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007 0702z
Launch site: Baikonur, Kazakhstan

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=94&retURL=/satellites/status.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=72
[02092011]
=====
CP3
Catalog Number: 31129
Launch Date: April 17,2007 0702z
Launch site: Baikonur, Kazakhstan

Status: Operational

Current Mode: /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=74
[02092011]
=====
CO-58 CubeSat XI-V
Catalog number: 28895

Launch Date: October 27, 2005 0652z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon: 437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/xivpicte.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=37
[02092011]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: ?????

Current Mode: /u

Beacon: 436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=96&retURL=/satellites/status.php

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[02092011]
=====
QuakeSat
Catalog Number: 27845
Launch Date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Telemetry only

Current Mode: 9600 baud data packet

Mode U packet
Downlink: 436.675 MHz 9k6 BPS

Quakesat webpage:
http://www.quakefinder.com/services/quakesat-ssite/
[02252011]
=====
CO-55 Cute-1.7+APD II
Catalog Number: 27844
Launch date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational

Current Mode: CW downlink worldwide
AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=69&retURL=/satellites/status.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=78
[02092011]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001 0240z
Launch site: Kodiak Launch Complex, Alaska, USA

Status: Operational

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[10292012]
=====
RS-22 RADIO SPORT 22 (MOZHAYETS 4)
Catalog number: 27939
Launch Date: September 27, 2003 0612z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational - 70cm cw only

Current Mode: /u

CW Beacon - 435.352 MHz
            145.818 MHz

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=76&retURL=/satellites/status.php
[02092011]
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990
Launch site: Kourou, French Guiana

Status: CW Beacon only

Uplinks: 145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink: 437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[02092011]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984
Launch site: Vandenburg AFB, California, USA

Status: Operational ?

Current Mode: /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon: 435.025 MHz
Mode-S Beacon: 2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm

```
[07052011]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998 0640z (ZARYA module)
Launch sites: Baikonur, Kazakhstan
              Kourou, French Guiana
              Uchinoura Space Center, Japan
              Kennedy Space Center, Titusville, Florida, USA

Status: Operational

Current Active Modes: FM Repeater - OFF
                      Voice -       V/v
                      BBS -         V/v
                      2m APRS -     V/v
                      2m Digi -     V/v
                      70cm APRS -   ?
                      70cm Digi -   ?
                      SSTV -        V/v


Expedition 34 Crew (November 2012 - March 2013):
Commander:                Kevin Ford          KF5GPP
Flight Engineer:          Oleg Novitskiy
Flight Engineer:          Evgeny Tarelkin
Flight Engineer:          Roman Romanenko
Flight Engineer:          Chris Hadfield      KC5RNJ/VA3OOG
Flight Engineer:          Tom Marshburn       KE5HOC


Available Modes and Frequencies:
Digital/APRS:
Worldwide 2m packet uplink:     145.825 MHz FM 1k2
Worldwide 2m packet downlink:   145.825 Mhz FM 1k2
Worldwide 70cm packet uplink:   437.550 Mhz FM 1k2
Worldwide 70cm packet downlink: 437.550 Mhz FM 1k2

Voice:
Region 1 voice uplink:          145.200 MHz FM
Region 2/3 voice uplink:        144.490 MHz FM
Worldwide downlink:             145.800 MHz FM

Crossband Repeater:
Repeater Uplinks:              1269.650 MHz FM
                                437.800 MHz FM
                                145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink:              145.800 MHz FM
                                437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink:                       145.800 MHz FM
```

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
2m Packet Mailbox: RS0ISS-11
2m Digipeater alias: ARISS
70cm Packet Mailbox: RS0ISS-1
70cm Digipeater callsign: RS0ISS
70cm Digipeater alias: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[12242012]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-035.S3
WSR 035 Part 3 02/04/2013

AMSAT NEWS SERVICE BULLETIN 035.S3
FROM AMSAT HQ SILVER SPRING, MD, February 04, 2013
TO ALL RADIO AMATEURS
BID: $WSR-035.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

NANOSAIL-D
Catalog Number: 37361
Ejection Date: January 17, 2011

Status: Non - Operational

Downlink: 437.270 MHz AX.25

URL: http://nanosaild.engr.scu.edu/dashboard.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=115
[07302012]
=====
HO-68 HOPE-1 (CAS-1) (XW-1)
Catalog Number: 36122

```
Launch Date: December 15, 2009 0231z
Launch site: Taiyuan Space Center, PRC

Status: Telemetry only

Callsign:
Broadcast:    BJ1SA-11
BBS:     BJ1SA-12

Uplinks:   145.8250 MHz FM, PL 67.0 Hz.
           145.9250 - 145.9750 MHz SSB/CW
           145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
           435.7650 - 435.7150 MHz SSB/CW
           435.6750 MHz AFSK 1200 BPS

Beacon:    435.7900 MHz CW

Mode and Antenna Polarization:
V: LHCP 2.0dBi max
U: RHCP 3.0dBi max

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=108

For more information about XW-1 (CAS-1):
http://
[04302012]
=====
SO-67 SumbandilaSat
Catalog Number: 35870
Launch Date: September 17, 2009 1555z
Launch site: Baikonur, Kazakhstan

Status: Non - Operational

Callsign: ZS0SUM

Uplink:   145.875MHz FM tone 233.6 Hz
Downlink: 435.345MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

For more information about SO-67:
http://www.amsatsa.org.za/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=88
[01272012]
=====
CP4
```

```
Catalog Number: 31132
Launch Date: April 17, 2007

Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon:    437.325 MHz CW

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=79
[09062010]
=====
LIBERTAD-1
Catalog Number: 31128
Launch Date: April 17, 2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink:   145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=76
[09062010]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: Non-Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder:  145.825 Mhz FM

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=51
[09062010]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?
```

```
Proposed Callsign: TBA
Proposed Transmit Frequency:  437.305
                             2407.250

Official Website: http://www.ncube.no

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=24
[09062010]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink:        437.250 MHz FM 67Hz CTCSS
Voice Downlink:     2401.835 MHz FM
Packet Up/Downlink:  437.250 MHz 9k6 packet
Packet Downlink     2401.835 MHz 38k4 packet

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=54
[09062010]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non-Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=53
[09062010]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004 0745z
Launch site: Baikonur, Kazakhstan

Status: Non - Operational

Current Mode(s):
Voice repeater: V/u
Uplink:      145.880 MHz FM
Downlink:    435.150 MHz FM

Telemetry: Recovery efforts
Downlink:    435.150MHz 9k6
```

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.860 MHZ FM
145.880 MHz USB
145.880 MHz FM
145.920 MHz FM
145.920 MHz FM - 67 Hz PL tone burst
1268.705 MHz FM
Digital Downlinks: 435.150 MHz FM 38k4 PBP, 1 watt output
435.150 MHz FM 9k6 Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Pacsat Broadcast Protocol
1268.703 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=19
[12062011]
=====
CANX-1
Catalog Number: 27847
Launch Date: June 30, 2003

Status: Non-Operational

Downlink: 437.8800 MHz AFSK 1k2bps
[06052009]
=====
DTUSAT
Catalog Number: 27842
Launch Date: June 30, 2003

Status: Non-Operational

Current Mode: 2k4 AFSK Packet last reported

Downlink: 437.475MHz

Officail webpage: http://dtusat1.dtusat.dtu.dk/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=101&retURL=satellites/all_oscars.php
[02212009]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)

Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Telemetry only

Uplinks: 145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[03302009]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

```
Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink:   145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS:                SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink:   145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
V-band:   145.840 -  145.990 MHz CW/LSB
U-band:   435.550 -  435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB
```

Downlinks

S2-band: 2401.225 - 2401.475 MHz CW/USB
K-band: 24048.010 - 24048.060 MHz CW/USB
Beacon: 2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)

BEACON	General Beacon(GB)	Middle Beacon(MB)	Engineering Beacon(EB)
2 m	none	145.898 MHz	none
70cm	435.438 MHz	435.588 MHz	435.838 MHz
13cm(1)	2400.188 MHz	2400.338 MHz	2400.588 MHz
13cm(2)	2401.173 MHz	2401.323 MHz	2401.573 MHz
3cm	10450.975 MHz	10451.125 MHz	10451.375 MHz
1.5cm	24047.885 MHz	24048.035 MHz	24048.285 MHz

[07162007]
=====
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: 25636
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz
145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Non-Operational

Current Modes:
Telemetry : /u

Downlink: 435.225 MHz FM (9600-baud FSK)
435.325 Mhz - Not Available - temperature problems
Uplinks: 145.850 FM
145.890 FM
145.930 FM
1269.700 FM
1269.800 FM

```
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign:       4XTECH-12

More information of GO-32 can be found at:
http://asri.technion.ac.il/techsat/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=14&retURL
=/satellites/status.php
[07172010]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink:   145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
MO-30 UNAMSAT-2
Catalog Number: 24305
Launch Date: September 5, 1996

Status: Non-operational

Downlink:       435.1380 MHz AFSK 1200 BPS
Downlink:       435.2060 MHz AFSK 1200 BPS
Uplink:         145.8150 MHz AFSK 1200 BPS
Uplink:         145.8350 MHz AFSK 1200 BPS
Uplink:         145.8550 MHz AFSK 1200 BPS
Uplink:         145.8750 MHz AFSK 1200 BPS
[06042009]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Non-operational

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign:       POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
```

POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012009]
=====
AO-27 AMRAD
Catalog number: 22825
Launch Date: September 26, 1993 0140z
Launch site: Kourou, French Guiana

Status: Recovery efforts in progress

Current Mode: V/u

Uplink: 145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[12032012]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993 0140z

Status: PSK carrier only

Current Mode:

Uplinks: 145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

```
Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
AO-24 ARSENE
Catalog Number: 22654
Launch Date: May 13, 1993

Status: Non-operational

Uplink:    435.0625 MHz FM 1k2bps AFSK
           435.1125 MHz FM 1k2bps AFSK
           435.1375 MHz FM 1k2bps AFSK
Downlink:  145.9750 MHz FM 1k2bps AFSK
          2446.5025 MHz FM 1k2bps AFSK

Beacon:    2446.4700 MHz CW

Broadcast callsign:
BBS:
[12162009]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991
```

```
Status: Non-Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
[05012006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990
```

```
Status: non-operational

Current Mode:  V/u

Uplink:         145.900 MHz FM 1200-baud Manchester FSK (reserved)
                145.920 MHz FM VOICE
                145.940 MHz FM 1200-baud Manchester FSK (reserved)
                145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink:       437.026 MHz USB VOICE
                (1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[07242009]
=====
UO-15 UoSAT-4
Catalog Number: 20438
Launch Date: January 22, 1990

Status: Non-operational

Uplink: ?
Downlink: 435.1250MHz (?)
          435.1200MHz (?)
[06042009]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
```

Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink: 145.8500 MHz MFSK 1200 BPS
Uplink: 145.8700 MHz MFSK 1200 BPS
Uplink: 145.8900 MHz MFSK 1200 BPS
Uplink: 145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon: 145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.8500 - 145.9000 MHz SSB/CW
Downlink 29.4000 - 29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

```
Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
Beacons:   29.450 MHz
          435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon 1:  29.352 MHz (intermittent)
Beacon 2:  29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink:     21.260 to 21.300 MHz CW/USB
Downlink:  145.860 to 145.900 MHz CW/USB
```

Beacon: 145.860 MHz

Robot: 145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at}
amsat.org
NNNN
/EX

```
From -4646675808384500420
X-Google-Thread: 8f86f75953,6a8b97530a5530cb,start
X-Google-Attributes: gid8f86f75953,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
X-Received: by 10.180.92.202 with SMTP id co10mr2391770wib.1.1360549314430;
        Sun, 10 Feb 2013 18:21:54 -0800 (PST)
Path: g1ni3825wig.0!nntp.google.com!feeder1.cambriumusenet.nl!
82.197.223.108.MISMATCH!feeder2.cambriumusenet.nl!feed.tweaknews.nl!
194.109.133.86.MISMATCH!newsfeed.xs4all.nl!newsfeed3.news.xs4all.nl!xs4all!
border4.nntp.ams.giganews.com!border2.nntp.ams.giganews.com!
border3.nntp.ams.giganews.com!border1.nntp.ams.giganews.com!nntp.giganews.com!
newsreader4.netcologne.de!news.netcologne.de!newsfeed.hal-mli.net!feeder3.hal-
mli.net!newsfeed.hal-mli.net!feeder2.hal-mli.net!npeer02.iad.highwinds-media.com!
news.highwinds-media.com!feed-me.highwinds-media.com!post01.iad.highwinds-
media.com!newsfe11.iad.POSTED!not-for-mail
From: "Icom" <yelkao@charter.net>
Newsgroups: rec.radio.amateur.space
Subject: Recommendations for tracking software
Lines: 4
MIME-Version: 1.0
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Windows Mail 6.0.6002.18197
X-MimeOLE: Produced By Microsoft MimeOLE V6.0.6002.18463
Message-ID: <nJyPs.74630$uU.70948@newsfe11.iad>
NNTP-Posting-Host: omliaelaapaincjkjpcjjkdkfkfebcfa
X-Complaints-To: abuse@charter.net
X-Trace:
```

```
eejhibdhlgmdmkeomiekkgkdbfcmcjelpbodpddjbhdlhnmkimiificpmedgphmmmkgkpejoliidmcnmng
inpapbbfgcoekkaajhiflhgknpogdc
NNTP-Posting-Date: Sun, 03 Feb 2013 19:17:39 UTC
Date: Sun, 3 Feb 2013 13:17:16 -0600
X-Received-Bytes: 999
Content-Type: text/plain;
     format=flowed;
     charset="iso-8859-1";
     reply-type=original
Content-Transfer-Encoding: 7bit
```

What's out there? What is the cost? Are there any shareware/freeware
programs that will run on Vista?
B

```
From 6147067717797996724
X-Google-Thread: a4a23d5f63,8b287f07ae0c4f0,start
X-Google-Attributes: gida4a23d5f63,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
X-Received: by 10.224.110.68 with SMTP id m4mr11694534qap.2.1359995408567;
        Mon, 04 Feb 2013 08:30:08 -0800 (PST)
MIME-Version: 1.0
Path: k2ni7243qap.0!nntp.google.com!newsfeed2.dallas1.level3.net!news.level3.com!
panix!rri.panix.com!robomod!not-for-mail
From: SWPC.Webmaster@noaa.gov
Newsgroups:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.shor
twave,rec.radio.info
Subject: Weekly Highlights of Solar and Geomagnetic Activity, 28 January - 03
February 2013
Followup-To:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.shor
twave
Date: Mon, 4 Feb 2013 11:30:08 EST
Organization: NOAA Space Weather Prediction Center
Lines: 68
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <20130204163001.F0F1C33C6F@panix2.panix.com>
NNTP-Posting-Host: panix6.panix.com
X-Trace: reader1.panix.com 1359995408 16048 166.84.1.6 (4 Feb 2013 16:30:08 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Mon, 4 Feb 2013 16:30:08 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
```

```
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump

:Product: Weekly Highlights and Forecasts
:Issued: 2013 Feb 04 0832 UTC
# Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center
# Product description and SWPC contact on the Web
# http://www.swpc.noaa.gov/weekly.html
#
#                Weekly Highlights and Forecasts
#
```

Highlights of Solar and Geomagnetic Activity
28 January - 03 February 2013

Solar activity was at very low to low levels for the past week. The largest flares of the period were a C8/Sn flare at 03/0610 UTC from region 1667 (N22, L=197, class/area Dsi/160 on 03 February) and two C2/Sf flares at 02/1958 UTC and 03/0224 UTC, also from region 1667. An asymmetric, partial-halo Coronal Mass Ejection (CME) was observed in SOHO/LASCO C2 coronagraph imagery around 31/0800 UTC with an estimated plane-of-sky speed of 550 km/s. The event appeared to orginate from a filament eruption on the southeast limb. No further earth-directed CMEs were observed.

No proton events were observed at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit was at normal to moderate levels. Moderate levels were observed on 29-31 January and again on 02-03 February.

Geomagnetic field activity was quiet to unsettled except for a short period of active to minor storm levels at high latitudes on 02 February. Solar wind speeds began the period at about 430 km/s and gradually decreased to around 300 km/s by 30/2300 UTC. By 01/2115 UTC, an increase in solar wind speed and temperature was observed indicative of a negative polarity coronal hole high speed stream. Total field (Bt) increased from 4 nT to 11 nT while the Bz component of the interplanetary magnetic field varied between +/- 9 nT. The geomagnetic field responded with quiet to unsettled conditions through 02 February with periods of active to minor storming at high latitudes. By 03 February, solar wind speeds were in decline as effects from the coronal hole high speed stream began to wane. The geomagnetic field was quiet on 03 February. Solar wind speeds ended the period at approximately 400 km/s. At 03/1130 UTC, the lower energy particle flux reported by the EPAM instrument aboard the ACE spacecraft rose sharply and then leveled off while some of the lower energy channels declined. This was likely indicative of the passage of the 31 January CME, however there was no clear shock signature associated with it.

Forecast of Solar and Geomagnetic Activity
04 February - 02 March 2013

Solar activity is expected to be at very low to low levels with a slight chance for M-class flares until region 1667 rotates around the west limb on 14 February. Very low to low levels are expected for the rest of the forecast period, barring significant active region emergence or development.

No proton events are expected at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to be at normal to moderate levels throughout the forecast period with possible high levels on 06-07, 11-12, and 24-25 Februrary due to coronal hole high speed stream effects.

The geomagnetic field is expected to be quiet to unsettled with a chance for active periods on 09-10, 22-23 February, and again 01-02 March due to recurrent coronal hole high speed stream activity. Otherwise, mostly quiet conditions are expected.

```
From -1533914059637342480
X-Google-Thread: 8f86f75953,72f3cafbd014e588,start
X-Google-Attributes: gid8f86f75953,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
X-Received: by 10.180.82.1 with SMTP id e1mr1750687wiy.1.1360469413255;
        Sat, 09 Feb 2013 20:10:13 -0800 (PST)
Path: g1ni1986wig.0!nntp.google.com!feeder1.cambriumusenet.nl!
82.197.223.103.MISMATCH!feeder3.cambriumusenet.nl!feed.tweaknews.nl!
194.109.133.86.MISMATCH!newsfeed.xs4all.nl!newsfeed3.news.xs4all.nl!xs4all!
newspeer1.nac.net!border4.nntp.dca.giganews.com!border2.nntp.dca.giganews.com!
border3.nntp.dca.giganews.com!border1.nntp.dca.giganews.com!nntp.giganews.com!nrc-
news.nrc.ca!goblin1!goblin.stu.neva.ru!news.astraweb.com!
border6.a.newsrouter.astraweb.com!not-for-mail
From: Chris Steyaert <observations@rmob.org>
Newsgroups: rec.radio.amateur.space,sci.astro.amateur
Subject: Radio Meteor Obs. Bull. January 2013 Quadrantids
Date: Tue, 05 Feb 2013 19:54:54 +0100
Message-ID: <mal2h89ampsff6ge7f029idg4lgg8kf2m4@4ax.com>
X-Newsreader: Forte Agent 5.00/32.1171
MIME-Version: 1.0
Lines: 14
Organization: Unlimited download news at news.astraweb.com
NNTP-Posting-Host: 701087e2.news.astraweb.com
X-Trace: DXC=0]I1c]V1b@ZA<6n_>>]9G[L?
0kYOcDh@ZGUjHgFPC;WVZAZ=D>[AYTWBZ<AX`0A\JSb3<D_UX>L;YagHeeT9P6:\16EdC3jY0I[nAdPMNi
cI:^
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
```

Radio Meteor Observation Bulletin No. 234 of January 2013 (82 K) is available now as

    http://www.rmob.org/rmobtext/rmob1301.txt

More information and the visual presentation of the hourly forward scatter
counts can be found on

    http://www.rmob.org

    Chris

From 4877143296316585265
X-Google-Thread: 8f86f75953,6a8b97530a5530cb
X-Google-Attributes: gid8f86f75953,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
X-Received: by 10.180.79.102 with SMTP id i6mr1742262wix.4.1360469421706;
        Sat, 09 Feb 2013 20:10:21 -0800 (PST)
Path: g1ni1986wig.0!nntp.google.com!feeder1.cambriumusenet.nl!
82.197.223.103.MISMATCH!feeder3.cambriumusenet.nl!feed.tweaknews.nl!
194.109.133.86.MISMATCH!newsfeed.xs4all.nl!newsfeed3.news.xs4all.nl!xs4all!
newspeer1.nac.net!border4.nntp.dca.giganews.com!border2.nntp.dca.giganews.com!
border3.nntp.dca.giganews.com!border1.nntp.dca.giganews.com!nntp.giganews.com!nrc-
news.nrc.ca!goblin2!goblin.stu.neva.ru!feeder.erje.net!eu.feeder.erje.net!eternal-
september.org!feeder.eternal-september.org!.POSTED!not-for-mail
From: Alan WA4SCA <WA4SCA@YAHOO.COM>
Newsgroups: rec.radio.amateur.space
Subject: Re: Recommendations for tracking software
Date: Tue, 05 Feb 2013 16:27:21 -0600
Organization: AMSAT-NA
Lines: 15
Message-ID: <vd13h8hqms9kqnkdf37lc552snoum2k7dm@4ax.com>
References: <nJyPs.74630$uU.70948@newsfe11.iad>
Reply-To: ALANBIDDLE70@YAHOO.COM
Mime-Version: 1.0
Injection-Info: mx05.eternal-september.org; posting-
host="12c9d9392db452c4601b31477279d3ad";
    logging-data="20052"; mail-complaints-to="abuse@eternal-september.org";
    posting-account="U2FsdGVkX18grZlIF65FUavByVmFW2OHOObzRpLohnA="
X-Newsreader: Forte Agent 6.00/32.1186
Cancel-Lock: sha1:Rt4CebmzxIi6eMHX3DaGSHchDog=
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

It would help a bit if you would tell us what your planned usage is.
For instance, just visualization, or control of radios and antennas?
If you are going to control equipment, take a look at SATPC32:

http://www.dk1tb.de/indexeng.htm

You can download a fully functional demo, with a minor nag. If you like it, you can register it, and the money goes to funding the various AMSAT organizations. It does require you to edit a few configuration files, but the operation is solid.

--
Alan
WA4SCA

```
From 3402018411633849310
X-Google-Thread: 10e8ad,79caeb1cd023b8c6,start
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII
Received: by 10.204.129.15 with SMTP id m15mr1748315bks.2.1332631988798;
        Sat, 24 Mar 2012 16:33:08 -0700 (PDT)
MIME-Version: 1.0
Path: h15ni45480bkw.0!nntp.google.com!news1.google.com!news.glorb.com!news-
out.readnews.com!transit3.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-083 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Sat, 24 Mar 2012 19:33:08 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 2061
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <001601cd0a16$7174ca10$545e5e30$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
X-Trace: reader1.panix.com 1332631988 26915 166.84.1.6 (24 Mar 2012 23:33:08 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sat, 24 Mar 2012 23:33:08 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
```

This report is organized into three (3) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites

SB SAT @ AMSAT W8ISS $WSR-083.S1
WSR 083 Part 1 03/23/2012

AMSAT NEWS SERVICE BULLETIN 083.S1
FROM AMSAT HQ SILVER SPRING, MD, March 23, 2012
TO ALL RADIO AMATEURS
BID: $WSR-083.S1

PW-Sat
Catalog Number:
Launch Date: February 13, 2012
Launch Site: Kourou, French Guiana

Status: On Orbit

Uplink: 435.020 MHz FM
Downlink: 145.900 MHz DSB

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum2
[03162012]
��DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational
Current Mode: Science Mode - Beacon ONLY

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink: 435.530 to 435.570 MHz

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnumh
[02092011]
��VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05, 2005 0444z
Launch site: Satish Dhawan Space Centre, India

Status: Operational
Current Mode: U/v - Dutch Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.9360 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum0

To know what transponder is switched on please listen for the beacon
that is active. Each transponder has a different beacon.
[03232012]
��SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002 1700z
Launch site: Baikonur, Kazakhstan

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4
Hz. The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute
   timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset
   the 10 minute timer.
[02092011]

��FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Operational
Current Mode: V/u (Mode JA)

Voice/CW (Mode JA)
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage:
http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
�retURL�atellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's
CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts.htm
[01122012]
��AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993 0140z
Launch site: Kourou, French Guiana

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[02092011]
��AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974
Launch site: Vandenberg AFB, California, USA

Status: Operational

Current Mode: Alternating between Mode A and B every 24 hours

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz CW
145.972 MHz CW
435.100 MHz CW
2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
[02092011]
��INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998 0640z (ZARYA module)
Launch sites: Baikonur, Kazakhstan
Kourou, French Guiana
Uchinoura Space Center, Japan
Kennedy Space Center, Titusville, Florida, USA

Status: Operational

Current Active Modes: FM Repeater - OFF
Voice - V/v
BBS - OFF
2m APRS - ON
70cm Digi - ON
SSTV - OFF

Expedition 30 Crew (November 2011 - March 2012):

Commander:	Dan Burbank	KC5ZSX
Flight Engineer:	Anton Shkaplerov	
Flight Engineer:	Anatoly Ivanishin	
Flight Engineer:	Oleg Kononenko	RN3DX
Flight Engineer:	Andr� Kuipers	PI9ISS
Flight Engineer:	Don Pettit	KD5MDT

```
Available Modes and Frequencies:
Digital/APRS:
Worldwide 2m packet uplink:     145.825 MHz FM 1k2
Worldwide 2m packet downlink:   145.825 Mhz FM 1k2
Worldwide 70cm packet downlink: 437.550 Mhz FM 1k2
Worldwide 70cm packet downlink: 437.550 Mhz FM 1k2

Voice:
Region 1 voice uplink:          145.200 MHz FM
Region 2/3 voice uplink:        144.490 MHz FM
Worldwide downlink:             145.800 MHz FM

Crossband Repeater:
Repeater Uplinks:              1269.650 MHz FM
                                437.800 MHz FM
                                145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink:              145.800 MHz FM
                                437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink:                       145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian:                        OR4ISS
German:                         DP0ISS
Russian:                        RS0ISS
                                RZ3DZR
United States:                  NA1SS
2m Packet Mailbox:              RS0ISS-11
2m Digipeater alias:            ARISS
70cm Packet Mailbox:            RS0ISS-1
70cm Digipeater callsign:       RS0ISS
70cm Digipeater alias:          ARISS


Official ARISS Webpage:         http://www.rac.ca/ariss
ISS Fan Club Webpage:           http://www.issfanclub.com
APRS tracking page:             http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[12262011]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-083.S2
```

WSR 083 Part 2 03/23/2012

AMSAT NEWS SERVICE BULLETIN 083.S2
FROM AMSAT HQ SILVER SPRING, MD, March 23, 2012
TO ALL RADIO AMATEURS
BID: $WSR-083.S2

XaTcobeo
Catalog Number: 38082
Launch Date: Febrauary 13, 2012
Launch Site: Kourou, French Guiana

Status: Operational

Uplink:
Downlink: 437.365 MHz FFSK with AX.25

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum5
[03162012]
��UniCubeSat
Catalog Number:
Launch Date: Febrauary 13, 2012
Launch Site: Kourou, French Guiana

Status: Operational

Uplink:
Downlink: 437.305 MHz 9k6 bps FSK

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum3
[03162012]
��Robusta
Catalog Number:
Launch Date: Febrauary 13, 2012
Launch Site: Kourou, French Guiana

Status: On Orbit

Uplink:

Downlink: 437.325 MHz 1k2 FM telemetry (data every 1 min, 20 sec. burst)

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum2
[02142012]
��MO-72 MaSat-1
Catalog Number: 38081
Launch Date: Febrauary 13, 2012
Launch Site: Kourou, French Guiana

Status: Operational

Uplink:
Downlink: 437.345 MHz GFSK 625/1250 bps
          437.345 MHz CW

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum6
[03232012]
��Goliat
Catalog Number: 38085
Launch Date: Febrauary 13, 2012
Launch Site: Kourou, French Guiana

Status: Operational

Uplink:
Downlink: 437.485 MHz 1k2 AFSK

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum�
[03162012]
��E-Star
Catalog Number: 38079
Launch Date: Febrauary 13, 2012

Launch Site: Kourou, French Guiana

Status: On Orbit

Uplink:
Downlink: 437.445 MHz 1k2 bps AFSK

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum0
[03232012]
��ALMASat1
Catalog Number: 38078
Launch Date: Febrauary 13, 2012
Launch Site: Kourou, French Guiana

Status: On Orbit

Uplink:
Downlink: 437.465 MHz 1k2 bps FSK
          2407.850 MHz

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum9
[02212012]
��RS-39 Chibis-M
Catalog Number: 37841
Launch Date: October 30, 2011 10:11:00 UTC
Launch site: Tyuratam (Baikonur Cosmodrome), Kazakhstan

Status: Operational

Uplink:
Downlink:

Beacon: 435.315 MHz CW
        435.215 MHz CW

Callsign:

URL:

IARU coordination status page:
[01122012]
��JUNGU
Catalog Number: 37841
Launch Date: October 12, 2011 05:30:00 UTC
Launch site: Satish Dhawan Space Centre, India

Status: On Orbit

Uplink: 145.??? MHz 1k2 (mode?)
Downlink: 437.505 MHz 9k6 (mode?)

Beacon: 437.275 MHz 15 wpm (?) CW

Callsign:

URL: http://www.iitk.ac.in/me/jugnu/index.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum0
[01122012]
��SRMSAT
Catalog Number: 37839
Launch Date: October 12, 2011 05:30:00 UTC
Launch site: Satish Dhawan Space Centre, India

Status: On Orbit

Uplink: 145.900 MHz 1k AX.25 (speed?)
Downlink: 437.500 MHz 2k4 AX.25

Beacon: 437.425 MHz 12 wpm CW

Callsign:

URL: http://srmsat.in/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum1
[01122012]
��HRBE (E1P Explorer 1 [Prime] CubeSat (E1P-U2))
Catalog Number: 37855
Launch Date: October 28, 2011
Launch site: Vandenberg Air Force Base, California, USA

Status: On Orbit

Uplink: 437.305 MHz (???)
Downlink: 437.505 MHz AX.25 (SSB?)

Beacon:

Callsign:

URL: http://ssel.montana.edu/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum6
[01122012]
��M-Cubed
Catalog Number: 37855
Launch Date: October 28, 2011
Launch site: Vandenberg Air Force Base, California, USA

Status: On Orbit

Uplink:
Downlink: 437.485 MHz AX.25

Beacon:

Callsign:

URL: http://umcubed.org/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum!5
[01122012]
��RAX-2
Catalog Number: 37853
Launch Date: October 28, 2011
Launch site: Vandenberg Air Force Base, California, USA

Status: Operational

Uplink:
Downlink: 437.345MHz 9k6 GMSK

Beacon:

Callsign:

URL: http://rax.engin.umich.edu//

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum"1
[03232012]
��AO-71 AubieSat-1
Catalog Number: 37854
Launch Date: October 28, 2011
Launch site: Vandenberg Air Force Base, California, USA

Status: On Orbit

Uplink:
Downlink: 437.475 MHz 1k2 AX.25

Beacon: 437.475 MHz CW

Callsign: KI4NQO

URL: http://www.space.auburn.edu/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum8
[12262011]
��O/OREOS
Catalog Number: 37224
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: On Orbit

Uplink:
Downlink: 437.035 MHZ AX.25

Beacon:

Callsign:

URL: http://www.ooreos.org/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum6
[02092011]
��Rax-1 Radio Aurora Explorer
Catalog Number: 37223
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: On Orbit

Uplink:
Downlink: 437.505 MHz 9k6 GMSK

Beacon:

Callsign: RAX-1

URL: http://rax.engin.umich.edu/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum5
[02092011]
��FO-69 Fastrac-1 Sara Lily
Catalog Number: 37227
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: Operational

Uplink 1: 145.980 MHz 1k2 baud
Uplink 2: 145.825 MHz 1k2 baud
Downlink: 437.345 MHz 1k2 and 9k6 baud

Beacon: 437.435 MHz 1k2 AX.25

Callsign: Fast1

URL: http://fastrac.ae.utexas.edu/index.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum�
[07052011]
��FO-70 Fastrac-2 Emma
Catalog Number: 37380
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: Operational

Uplink 1: 435.025 MHz 1k2 baud
Uplink 2: 437.435 MHz 9k6 baud
Downlink: 145.825 MHz 1k2 and 9k6 baud

Beacon: 145.825 MHz 1k2 AX.25

Callsign: Fast2

URL: http://fastrac.ae.utexas.edu/index.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum�
[12162011]
��StudSat
Catalog Number: 36796
Launch Date: July 12, 2010 0352z
Launch site: Satish Dhawan Space Centre, India

Status: On Orbit

Uplink: 437.505MHz, 9600bps FSK
Downlink: 437.505MHz, 9600bps FSK
Beacon : 437.505MHz,   20bps ASK

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum4
[02092011]
��TIsat-1
Catalog Number: 36799
Launch Date: July 12, 2010 0352z
Launch site: Satish Dhawan Space Centre, India

Status: On orbit

Callsign: HB9DE

Uplink: 145.980MHz FM, AFSK
Downlink: 437.305MHz FM, AFSK
Beacon: 437.305MHz CW

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum8
[02092011]
��SwissCube
Catalog Number: 35932
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Callsign: HB9EG

Beacon(100mw): 437.5050MHz CW
Beacon(1w):   437.5050MHz FSK 1k2bps

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum9
[02092011]
��UWE-2
Catalog Number: 35934
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: In Orbit

Beacon(500mw): 437.3850 MHz AFSK 1k2bps
               437.3850 MHz FSK 9k6bps

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum0
[02092011]
��ITUpsAT1
Catalog Number: 35935
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Beacon(100mw): 437.325MHz CW
Beacon(1w): 437.325MHz 19k2bps

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum3
[02092011]

��BEESAT
Catalog Number: 35933
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Callsign: DP0BEE

Beacon(100mw): 436.000MHz CW
Beacon(500mw): 436.000MHz GMSK 4k8bps
Beacon(500mw): 436.000MHz GMSK 9k6bp
[02092011]
��CP-6
Catalog Number: 35004
Launch Date: May 19, 2009 2355z
Launch site: Wallops Island, Virginia, USA

Status: Operational

Downlink: 437.365 MHz 1k2 AFSK

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum1
[01122012]
��HAWKSAT 1
Catalog number: 35003
Launch Date: May 19, 2009 2355z
Launch site: Wallops Island, Virginia, USA

Status: operational

Downlink: 437.345 MHz ?

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum5
[01122012]
��Pharmasat
Catalog Number: 35002
Launch Date: May 19, 2009 2355z
Launch site: Wallops Island, Virginia, USA

Status: Operational

Downlink: 437.465 MHz 1k2 AFSK

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum�
[02092011]
��ANUSAT
Catalog Number: 34808
Launch Date: April 20, 2009 0115z
Launch Site: Satish Dhawan Space Centre, India

Status: ?

Downlink: 435.000 MHz
Uplink: 145.800 MHz

Telemetry: 137.400 MHz
[02092011]
��SOHLA-1 (ASTRO TECH.)
Catalog Number: 33496
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational

Proposed Frequencies and Modes:
Downlink: 437.505 MHz AFSK/CW
Beacon: 437.505 MHz AFSK/CW

Callsign:

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum1
[02092011]
��KAGAYAKI (Solan Co.)
Catalog Number: 33495
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: In Orbit

Downlink: 437.375 MHZ   FSK9k6/CW
Beacon: 437.375 MHz   FSK9k6/CW

IARU coordination status page:

AMSAT-NA webpage:

[02092011]
��STARS (Kagawa Univ.) (Twin Satellites)
Catalog Number: 33498
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational ?

Downlinks: 437.485 MHz FM/CW
           437.465 MHz FM/CW
Beacons: 437.305 MHz FM/CW
           437.275 MHz FM/CW

Callsigns: JR5YBN
           JR5YBO

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum�

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID1&retURL
�atellites/status.php
[02092011]
��KKS-1 (Tokyo MCIT)
Catalog Number: 33499
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational

Downlink: 437.455 MHz AFSK/CW
Beacon: 437.385 MHz AFSK/CW

Callsign: JQ1YYY

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum7

AMSAT-NA webapge:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID0&retURL
�atellites/status.php
[20092011]
��PRISM (Tokyo Univ.)
Catalog Number: 33493
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational ?

Downlink: 437.425 MHz AFSK/GMSK/CW
Beacon: 437.250 MHz AFSK/GMSK/CW

Callsign: JQ1YCX

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum�

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID9&retURL
�atellites/status.php
[02092011]
��RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number: 32953
Launch Date: May 23, 2008 1520z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational

Curent Modes: Telemetry
Audio
Images

Downlinks: 435.315 MHz
435.215 MHz

AMSAT-NA website:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID5&ret
URL�atellites/status.php

Official website:
http://www.npopm.com/?cid�oca&caidC
[02092011]
��CanX-2
Catalog number: 32790
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational in range of ground station only

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web
page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnumF
[02092011]
��AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Downlink: 437.425 MHz 1k2 baud packet

For the latest project status update please visit the AAUSAT-II web
page:
http://www.aausatii.aau.dk/homepage/index.php?language�&page�me

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum`
[02092011]
��CO-65 CUTE-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Downlink: 437.475 MHz 9k6 Packet

Uplink: 1267.600 Mhz

Telemetry Beacon:
Downlink: 437.2750 MHz CW

For the latest project status update please visit the Cute-1.7+APD II
web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnumx

Command Station blog website:
http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID2&retURL
�atellites/status.php
[03232012]
��Compass-1
Catalog number: 32787
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Current Mode: dependant on last received command

Uplink: 145.980 MHz FM
Downlink: 437.275 Mhz CW
          437.405 MHz Packet

For the latest project status update please visit the Compass 1 web
page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnumR

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID4&retURL
�atellites/status.php
[06162011]
��CO-66 Seeds II
Catalog number:
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Downlink: 437.485 MHz

Callsign: JQ1YGU

For the latest project status update please visit the Seeds 2 web

page: http://cubesat.aero.cst.nihon-u.ac.jp/english/seeds_2_e.html

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum6

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID3&retURL
�atellites/status.php
[02092011]
��CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007 0702z
Launch site: Baikonur, Kazakhstan

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID�&retURL
/satellites/status.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnumr
[02092011]
��CP3
Catalog Number: 31129
Launch Date: April 17,2007 0702z
Launch site: Baikonur, Kazakhstan

Status: Operational

Current Mode: /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnumt
[02092011]
��CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005 0652z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon: 437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/xivpicte.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum7
[02092011]
��CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: ?????

Current Mode: /u

Beacon: 436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID�&retURL
�atellites/status.php

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[02092011]
��QuakeSat
Catalog Number: 27845
Launch Date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Telemetry only

Current Mode: 9600 baud data packet

Mode U packet
Downlink: 436.675 MHz 9k6 BPS

Quakesat webpage:
http://www.quakefinder.com/services/quakesat-ssite/
[02252011]
��CO-55 Cute-1.7+APD II
Catalog Number: 27844
Launch date: June 30, 2003 1415z

Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational

Current Mode: CW downlink worldwide
AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satIDi&retURL
�atellites/status.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnumx
[02092011]
��NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001 0240z
Launch site: Kodiak Launch Complex, Alaska, USA

Status: Telemetry only

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[02092011]
��RS-22 RADIO SPORT 22 (MOZHAYETS 4)
Catalog number: 27939
Launch Date: September 27, 2003 0612z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational - 70cm cw only

Current Mode: /u

CW Beacon - 435.352 MHz
145.818 MHz

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satIDv&retURL
�atellites/status.php
[02092011]

��LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990
Launch site: Kourou, French Guiana

Status: CW Beacon only

Uplinks: 145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink: 437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[02092011]
��UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984
Launch site: Vandenburg AFB, California, USA

Status: Operational ?

Current Mode: /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon: 435.025 MHz
Mode-S Beacon: 2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[07052011]
��INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998 0640z (ZARYA module)
Launch sites: Baikonur, Kazakhstan
              Kourou, French Guiana
              Uchinoura Space Center, Japan
              Kennedy Space Center, Titusville, Florida, USA

Status: Operational

Current Active Modes: FM Repeater - OFF

Voice - V/v
BBS - OFF
2m APRS - ON
70cm Digi - ON
SSTV - OFF

Expedition 30 Crew (November 2011 - April 2012):
Commander: Dan Burbank KC5ZSX
Flight Engineer: Anton Shkaplerov
Flight Engineer: Anatoly Ivanishin
Flight Engineer: Oleg Kononenko RN3DX
Flight Engineer: Andr� Kuipers PI9ISS
Flight Engineer: Don Pettit KD5MDT

Available Modes and Frequencies:
Digital/APRS:
Worldwide 2m packet uplink: 145.825 MHz FM 1k2
Worldwide 2m packet downlink: 145.825 Mhz FM 1k2
Worldwide 70cm packet downlink: 437.550 Mhz FM 1k2
Worldwide 70cm packet downlink: 437.550 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
2m Packet Mailbox: RS0ISS-11
2m Digipeater alias: ARISS
70cm Packet Mailbox: RS0ISS-1
70cm Digipeater callsign: RS0ISS
70cm Digipeater alias: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[12262011]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-083.S3
WSR 083 Part 3 03/23/2012

AMSAT NEWS SERVICE BULLETIN 083.S3
FROM AMSAT HQ SILVER SPRING, MD, March 23, 2012
TO ALL RADIO AMATEURS
BID: $WSR-083.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

NANOSAIL-D
Catalog Number: 37361(?)
Ejection Date: January 17, 2011

Status: On orbit

Downlink: 437.270 MHz AX.25

URL: http://nanosaild.engr.scu.edu/dashboard.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum5
[01052012]
��HO-68 HOPE-1 (CAS-1)(XW-1)
Catalog Number: 36122
Launch Date: December 15, 2009 0231z
Launch site: Taiyuan Space Center, PRC

Status: Non - Operational

Callsign:
Broadcast: BJ1SA-11
BBS: BJ1SA-12

```
Uplinks:   145.8250 MHz FM, PL 67.0 Hz.
           145.9250 - 145.9750 MHz SSB/CW
           145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
           435.7650 - 435.7150 MHz SSB/CW
           435.6750 MHz AFSK 1200 BPS
```

Beacon: 435.7900 MHz CW

Mode and Antenna Polarization:
V: LHCP 2.0dBi max
U: RHCP 3.0dBi max

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum8

For more information about XW-1 (CAS-1):
http://
[01122012]
��SO-67 SumbandilaSat
Catalog Number: 35870
Launch Date: September 17, 2009 1555z
Launch site: Baikonur, Kazakhstan

Status: Non - Operational

Callsign: ZS0SUM

Uplink: 145.875MHz FM tone 233.6 Hz
Downlink: 435.345MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

For more information about SO-67:
http://www.amsatsa.org.za/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum�
[01272012]
��CP4
Catalog Number: 31132
Launch Date: April 17, 2007

Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon: 437.325 MHz CW

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnumy
[09062010]
��LIBERTAD-1
Catalog Number: 31128
Launch Date: April 17, 2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink: 145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnumv
[09062010]
��PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: Non-Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder: 145.825 Mhz FM

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnumQ
[09062010]
��NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
                             2407.250

Official Website: http://www.ncube.no

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum$
[09062010]
��XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 MHz FM 67Hz CTCSS
Voice Downlink: 2401.835 MHz FM
Packet Up/Downlink: 437.250 MHz 9k6 packet
Packet Downlink   2401.835 MHz 38k4 packet

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnumT
[09062010]
��UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non-Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnumS
[09062010]
��AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004 0745z
Launch site: Baikonur, Kazakhstan

Status: Non - Operational

Current Mode(s):
Voice repeater: V/u
Uplink: 145.880 MHz FM
Downlink: 435.150 MHz FM

Telemetry: Recovery efforts
Downlink: 435.150MHz 9k6

Analog voice downlink:	435.300 MHz FM
	435.150 MHz FM
	2401.200 Mhz FM
Analog voice uplink:	145.860 MHZ FM
	145.880 MHz USB
	145.880 MHz FM
	145.920 MHz FM
	145.920 MHz FM - 67 Hz PL tone burst
	1268.705 MHz FM
Digital Downlinks:	435.150 MHz FM 38k4 PBP, 1 watt output
	435.150 MHz FM 9k6 Pacsat Broadcast Protocol
	2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:	145.860 MHz FM 9k6 Pacsat Broadcast Protocol
	1268.703 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon:	435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear

S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum
[12062011]
��CANX-1
Catalog Number: 27847
Launch Date: June 30, 2003

Status: Non-Operational

Downlink: 437.8800 MHz AFSK 1k2bps
[06052009]
��DTUSAT
Catalog Number: 27842
Launch Date: June 30, 2003

Status: Non-Operational

Current Mode: 2k4 AFSK Packet last reported

Downlink: 437.475MHz

Officail webpage: http://dtusat1.dtusat.dtu.dk/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID1&retURL
�tellites/all_oscars.php
[02212009]
��AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)

Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
��MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Telemetry only

Uplinks: 145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[03302009]
��NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
��SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
��SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz

```
Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
��AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
V-band:   145.840 -  145.990 MHz CW/LSB
U-band:   435.550 -  435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks
---------
S2-band:  2401.225 -  2401.475 MHz CW/USB
K-band:  24048.010 - 24048.060 MHz CW/USB
Beacon:   2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)
----------------------------
BEACON   General Beacon(GB)  Middle Beacon(MB)  Engineering Beacon(EB)
2 m                   none        145.898 MHz                    none
70cm           435.438 MHz        435.588 MHz             435.838 MHz
13cm(1)       2400.188 MHz       2400.338 MHz            2400.588 MHz
13cm(2)       2401.173 MHz       2401.323 MHz            2401.573 MHz
3cm          10450.975 MHz      10451.125 MHz           10451.375 MHz
1.5cm        24047.885 MHz      24048.035 MHz           24048.285 MHz
[07162007]
��OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
��UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink:    145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
```

437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
��SO-35 SUNSAT
Catalog Number: 25636
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
��PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
��SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
��GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Non-Operational

Current Modes:
Telemetry : /u

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks: 145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://asri.technion.ac.il/techsat/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID&retURL
�atellites/status.php
[07172010]
��TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink: 145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
��MO-30 UNAMSAT-2
Catalog Number: 24305
Launch Date: September 5, 1996

Status: Non-operational

Downlink: 435.1380 MHz AFSK 1200 BPS
Downlink: 435.2060 MHz AFSK 1200 BPS
Uplink: 145.8150 MHz AFSK 1200 BPS
Uplink: 145.8350 MHz AFSK 1200 BPS
Uplink: 145.8550 MHz AFSK 1200 BPS
Uplink: 145.8750 MHz AFSK 1200 BPS
[06042009]
��PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

```
Status: Non-operational

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign:       POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012009]
��IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
��KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
��AO-24 ARSENE
Catalog Number: 22654
Launch Date: May 13, 1993

Status: Non-operational

Uplink:    435.0625 MHz FM 1k2bps AFSK
           435.1125 MHz FM 1k2bps AFSK
```

435.1375 MHz FM 1k2bps AFSK
Downlink: 145.9750 MHz FM 1k2bps AFSK
2446.5025 MHz FM 1k2bps AFSK

Beacon: 2446.4700 MHz CW

Broadcast callsign:
BBS:
[12162009]
��KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HL01-11
BBS: HL01-12
[01222007]
��UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink: 145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
��AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink: 435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
��FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons: 435.795 MHz CW
435.910 MHz AX25

Voice Transponder:
Uplink: 145.900 to 146.000 MHz CW/LSB

Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks: 145.850 MHz
145.870 MHz
145.890 MHz
145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
��WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
��DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink: 145.825 MHz FM 1200 Baud AFSK
Beacon: 2401.220 MHz
[05012006]
��AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: non-operational

Current Mode: V/u

Uplink: 145.900 MHz FM 1200-baud Manchester FSK (reserved)
145.920 MHz FM VOICE
145.940 MHz FM 1200-baud Manchester FSK (reserved)
145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink: 437.026 MHz USB VOICE
(1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC 437.050 MHz RHCP
PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11

```
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[07242009]
��UO-15 UoSAT-4
Catalog Number: 20438
Launch Date: January 22, 1990

Status: Non-operational

Uplink: ?
Downlink: 435.1250MHz (?)
          435.1200MHz (?)
[06042009]
��UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
��FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
��AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon:   145.810 MHz (unmodulated carrier)
```

```
W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
��AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink  29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
��AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
Beacons:   29.450 MHz
          435.100 MHz
[01312008]
��AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
��OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
```

��RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB

Beacon 1: 29.352 MHz (intermittent)
Beacon 2: 29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
��RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB

Beacon: 145.860 MHz

Robot: 145.908 MHz
[05232004]
��RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:

AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at} amsat.org
NNNN
/EX

```
From 2508983871226501873
X-Google-Thread: 10e8ad,5361b948dcfeec4,start
X-Google-NewGroupId: yes
X-Google-Thread: 10b9c8,5361b948dcfeec4,start
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,gida4a23d5f63,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Received: by 10.68.227.230 with SMTP id sd6mr7132784pbc.8.1332772675188;
        Mon, 26 Mar 2012 07:37:55 -0700 (PDT)
```

```
Path: z9ni3957pbe.0!nntp.google.com!news1.google.com!newsfeed2.dallas1.level3.net!
news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-085 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Mon, 26 Mar 2012 10:37:54 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 489
Approved: RRI Admin <rec-radio-info-request@panix.com>
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Mime-Version: 1.0
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X-Complaints-To: abuse@panix.com
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X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
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Content-Transfer-Encoding: 7bit
Content-Language: en-us
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AMSAT NEWS SERVICE
ANS-085

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

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*******************************************************************
* Volunteers are needed to help at the AMSAT booth at Dayton. Gould  *
* WA4SXM, is looking for volunteers to help man the AMSAT booth dur- *
* ing the 2012 Hamvention. People are needed all 3 days for 2 hour   *
* shifts. Please send the days and times you are available to help   *
* as well as how many shifts you are willing to work via e-mail to   *
* wa4sxm at amsat.org.                                               *
* Monitor http://www.amsat.org/amsat-new/hamvention/2012/Dayton.php  *
```

* for the latest AMSAT at Dayton news and developments *
****

In this edition:
* AMSAT-NA BOD Nominations Due
* ARISS Mentor Introduction at Dayton 2012
* NASA'S GRAIL MOONKAM Returns First Student-selected Lunar Images
* Satellite Operation Planned for UK Olympic Special Event Station
* Masat-1 Experiment Required Silent Mode for a Short Period of Time
* HAMSAT VO-52 User Reports Requested
* Satellite Shorts From All Over
* 2012 AMSAT-NA Symposium Update
* New Feature For SatPC32 Adjusts Doppler From Satellite Point of View
* ARISS Status Report - 19 March 2012

SB SAT @ AMSAT $ANS-085.01
ANS-085 AMSAT News Service Weekly Bulletins

AMSAT News Service Bulletin 085.01
From AMSAT HQ SILVER SPRING, MD.
March 25, 2012
To All RADIO AMATEURS
BID: $ANS-085.01

AMSAT-NA Board of Directors Nominations

It is time to submit nominations for the upcoming open seats on the AMSAT-NA Board of Directors. A valid nomination requires either one current Member Society, or five current individual members in good standing, to nominate an AMSAT-NA member for the position.

Three directors have terms expiring this year: Tom Clark, K3IO; Lou McFadin, W5DID; and Gould Smith, WA4SXM. The three nominees receiving the highest number of votes will be seated as regular board members with two year terms. The two nominees receiving the next highest number of votes will be seated as alternates for one year.

Written nominations, consisting of names, calls and individual signatures, should be mailed to: AMSAT-NA, 850 Sligo Ave #600, Silver Spring, MD, 20910. They must be received no later than June 15th. No other action is required.

Nominations may also be made by electronic means including e-mail, FAX, or electronic image of a petition. Electronic petitions should be sent to MARTHA@AMSAT.ORG or faxed to 301-608-3410, and also must be received by June 15th. If using any electronic submission, there is a second, verifying step:

> ELECTRONIC SUBMISSIONS WITHOUT THIS SECOND, WRITTEN VERIFICATION ARE NOT VALID UNDER THE EXISTING AMSAT-NA BYLAWS. A verifying traditional written petition MUST be received at the AMSAT-NA

office at the above address within 7 days following the close of nominations.

[ANS Thanks AMSAT Secretary Alan Biddle, WA4SCA for the above information]

ARISS Mentor Introduction at Dayton 2012

AMSAT and ARRL are teaming up during the 2012 Hamvention to recruit new ARISS (Amateur Radio on the International Space Station) mentors. Friday and

Saturday (May 18 & 19) at 4pm in the ARRL stage area AMSAT will explain the need for additional ARISS mentors and the requirements and responsibilities needed to help provide a reliable conversation between astronauts and selected schools or groups. We encourage anyone interested in helping make future school contacts with the ISS successful to please attend.

[ANS Thanks the ARISS Team for the above information]

NASA'S GRAIL MOONKAM Returns First Student-selected Lunar Images

WASHINGTON -- One of two NASA spacecraft orbiting the moon has beamed back the first student-requested pictures of the lunar surface from its onboard camera. Fourth grade students from the Emily Dickinson Elementary School in Bozeman, Mont., received the honor of making the first image selections by winning a nationwide competition to rename the two spacecraft.

The image was taken by the MoonKam, or Moon Knowledge Acquired by Middle school students. Previously named Gravity Recovery And Interior Laboratory (GRAIL) A and B, the twin spacecraft are now called Ebb and Flow. Both washing-machine-sized orbiters carry a small MoonKAM camera. Over 60 student-requested images were taken aboard the Ebb spacecraft from March 15-17 and downlinked to Earth on March 20.

"MoonKAM is based on the premise that if your average picture is worth a thousand words, then a picture from lunar orbit may be worth a classroom full of engineering and science degrees," said Maria Zuber, GRAIL mission principal investigator from the Massachusetts Institute of Technology in Cambridge, Mass. "Through MoonKAM, we have an opportunity to reach out to the next generation of scientists and engineers. It is great to see things off to such a positive start."

GRAIL is NASA's first planetary mission to carry instruments fully dedicated to education and public outreach. Students will select target areas on the lunar surface and request images to study from the GRAIL MoonKAM Mission Operations Center in San Diego.

The MoonKAM program is led by Sally Ride, America's first woman in space, and her team at Sally Ride Science in collaboration with undergraduate students at the University of California in San Diego.
More than 2,700 schools spanning 52 countries are using the MoonKAM cameras.

"What might seem like just a cool activity for these kids may very well have a profound impact on their futures," Ride said. "The students really are excited about MoonKAM, and that translates into an excitement about science and engineering."

Launched in September 2011, Ebb and Flow will answer longstanding questions about the moon and give scientists a better understanding of how Earth and other rocky planets in the solar system formed.

NASA's Jet Propulsion Laboratory in Pasadena, Calif., manages the GRAIL mission for NASA's Science Mission Directorate in Washington.
GRAIL is part of the Discovery Program managed at NASA's Marshall Space Flight Center in Huntsville, Ala. Lockheed Martin Space Systems in Denver built the spacecraft.

To view the student-requested images, visit:

http://images.moonkam.ucsd.edu

For more information about MoonKAM, visit:

https://moonkam.ucsd.edu

For more information about GRAIL, visit:

http://www.nasa.gov/grail

[ANS Thanks Michael Williams, K9QHO for the above information]

Satellite Operation Planned for UK Olympic Special Event Station

This week John Warburton, G4IRN announced The Radio Society of Great Britain will activate two special event call-signs to celebrate the London 2012 Olympic and Paralympic Games:

+ 2012L (Two Oscar One Two Lima) from London, England 2012W (Two Oscar
+ One Two Wales) from Barry, Wales.

The London station, 2012L will be active through the duration of the Games, located at the historic Eltham Palace, south-east London on 160m-2m, all modes. More information on the web site:
http://www.2012L.com

The Welsh station 2012W will also be active on all bands from 160m to 23cms and all modes including SSTV and satellite from Whitmore Bay, Barry Island, Vale of Glamorgan, Wales. More information on web site:
http://www.2012W.com.

2012L and 2012W go on the air on 27th July 2012.

[ANS thanks The Radio Society of Great Britain and Southgate News for the above information]

Masat-1 Experiment Required Silent Mode for a Short Period of Time

Masat-1 (MO-72) recently has been switched to a 'silent mode' on March 16, March 21, and March 22 to perform long term, sensitive electromagnetic measurements which require the switching off the satellite's transmitter. In silent mode, all RF transmission from the satellite is turned off, while the satellite receiver makes the required measurements. After these experiments regular telemetry transmission resumed operation.

MO-72 Call sign: HA5MASAT
TX frequency: 437.345 MHz
Modulation: CW (120 char/min.), 2-GFSK (625 and 1250 bit/s) TX
power: 100 and 400 mW

Soundcard software to capture and decode the GFSK telemetry can be downloaded from: http://cubesat.bme.hu/en/radioamatoroknek/
The latest keplerian elements are also available on this site.

[ANS thanks the Masat-1 Team and AMSAT-UK for the above information]

HAMSAT VO-52 User Reports Requested

AMSAT-India Secretary Nitin, VU3TYG says the user feedback form (in Word format) requested by VO-52 controllers has been posted on the web for download from:
http://www.amsatindia.org/reports/VO-52-Feedback.doc

HAMSAT VO-52 controllers at ISRO thanked amateur radio operators for the reports received after VO-52 was reactived with the Dutch Transponder. They are in the process of documenting anomaly analysis and

Transponder 2 Switch ON' report containing the feedback from users.

Reports are requested to be sent in the Word format as attachments to e-mail sent to: tprangan@istrac.org and copied to wmy@isac.gov.in.

[ANS thanks AMSAT-India Secretary Nitin, VU3TYG and Mani, VU2WMY at India ISRO Satellite Centre for the above information]

Satellite Shorts From All Over

+ AMSAT to facilitate student satellite contacts at Dayton. All students attending the 2012 Dayton Hamvention are encouraged to come by the Satellite Demonstration Area just outside of the Ball Arena entrance and make a contact using the amateur satellites. There will be AMSAT volunteers there to explain how to make the contacts and during actual satellite passes will try to get as many students as possible to complete contacts. There are lists of satellite pass times in the satellite demonstration area and at the AMSAT booth (BA444-BA449). (Gould, WA4SXM)

+ NASA released a new narrated animation depicting the planned 2014 launch of the Orion spacecraft on the Exploration Flight Test-1 (EFT-1) mission to a 3600 mile altitude orbit:
http://tinyurl.com/OrionOrbitTest (YouTube)
Full article at: http://tinyurl.com/OrionArticle (UniverseToday)

+ Paul, 2E1EUB says his next mobile satellite operations as 2M1EUB from his van will be starting March 24 for 7 days from the east coast of Scotland. Main operations are planned for AO-7 Mode A/B and other satellites as available. Paul will post his latest information on amsat-bb and also on the lookup at QRZ.com for 2M1EUB.

+ The Project Blue Horizon 6 high-altitude transatlantic balloon flight took off on Friday, March 23 at 2300 EST (0300 Saturday UT) from Owego, NY transmitting on 7.1023 and 10.1466 MHz CW with the N2XE call sign and 144.390 MHz FM APRS using the KD2AUD call sign. Please send reports via e-mail to pbh18.data@gmail.com or manually enter received data points at http://www.projectbluehorizon.com/
More information is available on their web page.

+ Congratulations to Rick Walter, WB3CSY, for earning VUCC Satellite certificate #228 with 165 confirmed grids. Rick wrote, "I would like to thank the many satellite operators who continually take time to stop during their travels and give us rare grids. It would be much more difficult to obtain this prestigious award without their help."

+ The next Hudson Valley Satcom Net is Thursday March 29, 8:00PM EDT (UTC-4) on the 146.97 MHz Mt. Beacon ARC Repeater and also on the N2EYH-L Echolink Node. More information at: http://www.hvsatcom.org and http://www.wr2abb.org/ (Stu, WA2BSS)

+ Watch the BBC video of UKube-1, planned to launch in 2013: http://www.bbc.co.uk/news/uk-scotland-glasgow-west-17439236 UKube-1 will carry a set of AMSAT-UK FUNcube boards that will provide a 435/145 MHz linear transponder for SSB/CW amateur radio communications. See also: http://www.uk.amsat.org/5933

+ John, K8YSE reported that Yuri, UT1FG/MM, who has been so active on the birds may be off the air for a short time. He is navigating the St. Lawrence Seaway and has been too busy to operate on the satellites. There are many inspection requirements for a ship coming into the Great Lakes and his duties are such that he does not have much free time. He will be in Montreal shortly. All of his equipment is working fine. Yuri will be operating as time permits.

+ The Winter 2012 TAPR Packet Status Register Journal now available for download: http://www.tapr.org/psr/psr117.pdf. You can download previous editions from http://www.tapr.org/psr.html. This quarterly Journal is full of Technical, Non-Technical and User Digital information and articles.

+ Watch a video of time lapse images from the ISS showing how stars appear from space: http://vimeo.com/ajrclips/starsfromspace. A jaw dropping flight of the ISS over the aurora can be viewed at: http://tinyurl.com/AuroraGreatLakes

+ USAF and Lockheed have Satellite Problems Too: http://tinyurl.com/milsat-rescue
At least their problems had a happy ending.

+ New Echolink Net. Saturday evenings at 8pm Eastern. The NET is titled "SATCHAT". Check in at the AMSAT Conference on Echolink and join the conversations about satellites, ask questions and hear what other people in the country are doing for satellite activity. It is hosted by Vince Waelti, K9TSU. Stop by and add your experiences to the group.

[ANS thanks everyone for the above information]

Symposium 2012 Monday Trip to the Kennedy Space Center

Those attending the 2012 AMSAT Symposium and interested in a Monday Trip (Oct 29) to the Kennedy Space Center please contact Martha via email: martha at amsat.org.

The trip will include a round trip bus from the hotel and entrance to the Space Center. The cost will be about $100. This is a wonderful experience for those that haven't been and for those that have been multiple times. We need to get an idea of how many will participate to select the correct bus.

[ANS Thanks Gould, WA4SXM for the above information]

New Feature For SatPC32 Adjusts Doppler From Satellite Point of View

Erich, DK1TB has added a new feature into SatPC32 V12.8b which will allow adjustment for doppler shift between two separate stations so each will appear to be on the same frequency. From a ground station point of view each station will see a different doppler shift unless they are located physically near each other. What is desired is that both stations will appear on the same frequency from the satellite receiver's point of view.

The whole idea of doppler correction is to be at a constant frequency within the satellite receiver passband. To do that you have to adjust your uplink frequency constantly. And you have to adjust your downlink frequency to continue to hear yourself or someone else using full doppler correction.

Erich has now added the option of seeing the frequency you are on at the satellite receiver. This is a common frame of reference so if you tell someone you'll be on 435.845 at the satellite, they can be on that same frequency even though your terrestrial dial frequencies will be much different. Just adjust your receiver or use the up/down buttons in SatPC32 to set your frequency shown in the "Sat" window. That frequency will remain constant as your uplink and downlink are controlled by SatPC32.

Staying at a constant frequency at the satellite allows many stations to share the bird without drifting into each other. And being able to know exactly where you are in the passband without doing the calculation in your head gives you more time to concentrate on making a successful QSO.

This feature is implemented by loading a patch file for SatPC32, V12.8b which can be found in the "downloads" link at:
http://www.dk1tb.de - Scroll down to Section 7, Patches.

Erich, DK1TB donates the proceeds from the sale of SatPC32 to AMSAT. When you purchase this software you are helping AMSAT.

You can download the software from the SatPC32 website at:
http://www.dk1tb.de/ A CD-ROM with the software is available from the AMSAT Store: http://www.amsat-na.com/store/item.php?id=100017
To activate the downloaded version of the program, you can purchase a registration code via the AMSAT online store or by calling the AMSAT office. See: http://www.amsat-na.com/store/item.php?id=100020

[ANS thanks John Papay, K8YSE for the above information]

(ARISS) Status Report March 19, 2012

1. Upcoming School Contacts

Centre de Formation de la Base Airienne de Payerne, Switzerland had an Amateur Radio on the International Space Station (ARISS) contact was on Wednesday, March 21 at 08:39 UTC. The contact was held in the museum "Clin d'Ailes", located on the Payerne Swiss Airforce Base that has on display military aeronautics exhibits from the second half of the 20th century. Mr. Claude Nicollier, HB9CN, who is the first Swiss astronaut and president of the Museum Foundation, attended the event. The Clin d'Ailes Swiss Air Force Museum Ham Radio Club, holding callsigns HB4FR and HB9SPACE, set up its radio for the contact. Students launched a stratospheric balloon equipped with video and photo cameras and sensors and beacons two weeks prior to the event. After the ARISS contact, they presented the videos, photos and the analysis of the recorded sensor data.

Salem Elementary School in Apex, North conducted an ARISS contact on Wednesday, March 21 at 14:09 UTC via station VK5ZAI in Australia. This contact is part of a comprehensive education plan which will pique students' interest in Science, Technology, Engineering and Math (STEM).

2. Liberty Junior High Radios Don Pettit on ISS

Students attending Liberty Junior High School in Burbank, Illinois experienced a very successful Amateur Radio on the International Space Station (ARISS) contact on Wednesday, March 14. Over 800 students, teachers and guests were present as students put their questions to astronaut Don Pettit, KD5MDT on ISS. The ARISS contact highlighted the school's comprehensive education plan covering Science, Technology, Engineering and Math (STEM) subject matter. Other activities students participated in included investigating thermal properties of different materials, building models of the ISS and exploring the cast distances of space and the effect of distance and radio waves.

3. Belgium Contact Successful

An Amateur Radio on the International Space Station (ARISS) contact was held on Friday, March 16 between Middenschool de Regenboog Bree in Bree, Belgium and on-orbit astronaut Andri Kuipers, PI9ISS. A newly licensed 14 year girl operated the radio during the event while students had all 15 of their prepared questions answered. The contact was carried out as part of a curriculum covering the micro-gravity environment, history of manned spaceflight, commercial spaceflight and the construction of the

ISS.

4. Leone Acciaiuoli Students Question ISS Astronaut

On Sunday, March 18, Dan Burbank, KC5ZSX fielded ten questions from youth attending the Istituto Tecnologico Statale Trasporti e Logistica "Leone Acciaiuoli" in Ortona, Italy via an ARISS contact. Approximately 200 people were in attendance, including representatives from two television stations. AMSAT-Italia also provided coverage, streaming video on the Internet. The contact complemented science courses taught at the school such as Navigation, Astronomy, Mathematics, Physics and Satellite Communications and was a featured activity during the International Day of Planetaria.

5. ARISS-U.S. Schools Selected

The NASA Teaching From Space office received 27 U.S. proposals for ARISS contacts that will be scheduled during the second half of this year. The U.S. Selection Committee reviewed the proposals and selected 18 schools for these contacts. The schools will be notified of their status early this week.

[ANS thanks Carol, KB3LKI, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

Primary and secondary school students are eligible for membership at one-half the standard yearly rate. Post-secondary school students enrolled in at least half time status shall be eligible for the student rate for a maximum of 6 post-secondary years in this status. Contact Martha at the AMSAT Office for additional student membership information.

73,
This week's ANS Editor,
Dee Interdonato, NB2F

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X-Google-Thread: 107ada,f630f5c150926240,start
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X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump

:Product: Weekly Highlights and Forecasts
:Issued: 2012 Mar 26 1340 UTC
# Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center
# Product description and SWPC contact on the Web
# http://www.swpc.noaa.gov/weekly.html
#
#                Weekly Highlights and Forecasts
#
```

Highlights of Solar and Geomagnetic Activity
19 - 25 March 2012

Solar activity has been at low to moderate levels for the past seven days. The largest event of the period was a M1 x-ray event on 23 March at 1940 UTC from Region 1445 (S24, L=026, class/area Fho/280 on 25 March). Region 1445 rotated onto the southeast limb of the solar disk late on 23 March and has since dominated in solar activity, producing multiple C-class x-ray events. Region 1444 (N19, L=067, class/area Cao/060 on 25 March) emerged on 23 March and has also been active, producing multiple C-class x-ray events. Both Regions, 1445 and 1444, produced CMEs on 25 March, however very little effect is expected here at Earth. The remaining regions on the solar disk remained rather quiet and stable.

No proton events were observed at geosynchronous orbit during the summary period.

The greater than 2 MeV electron flux at geosynchronous orbit was at predominantly high levels for the duration of the summary period. However, on 23 and 25 March, moderate levels were observed.

The geomagnetic field ranged from quiet to active levels with an isolated period at minor storm levels at high latitudes. On 19 March, predominantly quiet levels were observed with an isolated active period measured early in the day, in response to the arrival of a CME from 15 March. Quiet conditions prevailed from 20 March to late on 22 March, when a solar sector boundary (SSB) crossing was measured by the ACE spacecraft. Following the SSB, quiet to unsettled levels were seen from 22 - 23 March. On 24 March, active levels with an isolated minor storm period was observed as a small coronal hole high speed stream (CH HSS) moved into a geoeffective position. This CH HSS was short lived with measurements by the ACE spacecraft indicating a quick rise in solar wind speeds to around 500 km/s followed by a quick decrease to nominal background levels. On 25 March, activity returned to quiet levels.

Note: There is a gap in data from the GOES 15 spacecraft from late on 21 March through mid 23 March. This gap can be seen in the GOES 15 x-ray plot.

Forecast of Solar and Geomagnetic Activity
26 March - 21 April 2012

Solar activity is expected to be at low to moderate levels. Predominantly low levels are expected from 26 - 28 March, when old Region 1429 rotates back onto the northeast limb. M-class flare probabilities are expected to increase from 28 March - 11 April as old Region 1429 progresses across the solar disk. A return to low levels is expected to prevail for the remainder of the period, 12 - 21 April.

No proton events are forecast from 26 - 30 March. An increase to a slight chance for proton events is forecast from 31 March - 11 April as old Region 1429 populates the visible disk. A return to background proton flux levels is expected from 12 April - 21 April.

Electrons, greater than 2 MeV, are expected to be at normal to moderate levels from 26 - 28 March. From 29 March - 03 April, moderate to high levels are expected. From 04 - 13 April, a return to normal to moderate levels is expected. Moderate to high levels are expected from 14 - 18 April. A return to normal levels is expected for the remainder of the period.

The geomagnetic field is expected to be at mostly quiet levels from 26 - 27 March. Quiet to active levels are expected from 28 -29 March in response to the effects of a CH HSS. Predominantly quiet levels are expected from 30 March - 12 April. An increase to quiet to active levels is expected from 13 - 14 April in response to a CH HSS. Quiet levels are expected to prevail for the remainder of the period.

```
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news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-090 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Sat, 31 Mar 2012 09:28:44 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 2060
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X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
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article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
```

This report is organized into three (3) parts.
Part 1 (S1) - operational analog amateur satellites

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Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites

SB SAT @ AMSAT W8ISS $WSR-090.S1
WSR 090 Part 1 03/30/2012

AMSAT NEWS SERVICE BULLETIN 090.S1
FROM AMSAT HQ SILVER SPRING, MD, March 30, 2012
TO ALL RADIO AMATEURS
BID: $WSR-090.S1

PW-Sat
Catalog Number:
Launch Date: Febrauary 13, 2012
Launch Site: Kourou, French Guiana

Status: On Orbit

Uplink:   435.020 MHz FM
Downlink: 145.900 MHz DSB

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum2
[03162012]
��DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational
Current Mode: Science Mode - Beacon ONLY

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink:   435.530 to 435.570 MHz

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnumh
[02092011]
��VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05, 2005 0444z
Launch site: Satish Dhawan Space Centre, India
```

Status: Operational
Current Mode: U/v - Dutch Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.9360 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum0

To know what transponder is switched on please listen for the beacon that is active. Each transponder has a different beacon.
[03232012]
��SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002 1700z
Launch site: Baikonur, Kazakhstan

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz. The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on and off within the 10 Minute window.

3) Sending the 74.4 tone again within the 10 minute window will reset
the 10 minute timer.
[02092011]
��FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Operational
Current Mode: V/u (Mode JA)

Voice/CW (Mode JA)
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
145.870 MHz FM
145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage:
http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
�retURL�atellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's
CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/
fo29cwts.htm
[01122012]
��AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993 0140z
Launch site: Kourou, French Guiana

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM
Downlink: 436.797 MHz FM

```
Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[02092011]
��AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974
Launch site: Vandenberg AFB, California, USA

Status: Operational

Current Mode: Alternating between Mode A and B every 24 hours

Uplink:   145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink:  29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons:   29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
[02092011]
��INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998 0640z (ZARYA module)
Launch sites: Baikonur, Kazakhstan
              Kourou, French Guiana
              Uchinoura Space Center, Japan
              Kennedy Space Center, Titusville, Florida, USA

Status: Operational

Current Active Modes: FM Repeater - OFF
                      Voice -       V/v
                      BBS -         OFF
                      2m APRS -     ON
                      70cm Digi -   ON
                      SSTV -        OFF


Expedition 30/31 Crew (November 2011 - July 2012 ):
Commander:                Dan Burbank         KC5ZSX
Flight Engineer:          Anton Shkaplerov
Flight Engineer:          Anatoly Ivanishin
```

Flight Engineer:	Oleg Kononenko	RN3DX
Flight Engineer:	Andr� Kuipers	PI9ISS
Flight Engineer:	Don Pettit	KD5MDT

Available Modes and Frequencies:

Digital/APRS:

Worldwide 2m packet uplink:	145.825 MHz FM 1k2
Worldwide 2m packet downlink:	145.825 Mhz FM 1k2
Worldwide 70cm packet downlink:	437.550 Mhz FM 1k2
Worldwide 70cm packet downlink:	437.550 Mhz FM 1k2

Voice:

Region 1 voice uplink:	145.200 MHz FM
Region 2/3 voice uplink:	144.490 MHz FM
Worldwide downlink:	145.800 MHz FM

Crossband Repeater:

Repeater Uplinks:	1269.650 MHz FM 437.800 MHz FM 145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink:	145.800 MHz FM 437.800 MHz FM (Kenwood)

SSTV Robot 36:

Downlink:	145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:

Belgian:	OR4ISS
German:	DP0ISS
Russian:	RS0ISS RZ3DZR
United States:	NA1SS
2m Packet Mailbox:	RS0ISS-11
2m Digipeater alias:	ARISS
70cm Packet Mailbox:	RS0ISS-1
70cm Digipeater callsign:	RS0ISS
70cm Digipeater alias:	ARISS

Official ARISS Webpage:	http://www.rac.ca/ariss
ISS Fan Club Webpage:	http://www.issfanclub.com
APRS tracking page:	http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time line is NOT translated from Russian and posted.
[03302012]
NNNN

/EX

SB SAT @ AMSAT W8ISS $WSR-090.S2
WSR 090 Part 2 03/30/2012

AMSAT NEWS SERVICE BULLETIN 090.S2
FROM AMSAT HQ SILVER SPRING, MD, March 30, 2012
TO ALL RADIO AMATEURS
BID: $WSR-090.S2

XaTcobeo
Catalog Number: 38082
Launch Date: Febrauary 13, 2012
Launch Site: Kourou, French Guiana

Status: Operational

Uplink:
Downlink: 437.365 MHz FFSK with AX.25

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum5
[03162012]
��UniCubeSat
Catalog Number:
Launch Date: Febrauary 13, 2012
Launch Site: Kourou, French Guiana

Status: Operational

Uplink:
Downlink: 437.305 MHz 9k6 bps FSK

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum3
[03162012]
��Robusta
Catalog Number:
Launch Date: Febrauary 13, 2012
Launch Site: Kourou, French Guiana

Status: On Orbit

Uplink:
Downlink: 437.325 MHz 1k2 FM telemetry (data every 1 min, 20 sec. burst)

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum2
[02142012]
��MO-72 MaSat-1
Catalog Number: 38081
Launch Date: Febrauary 13, 2012
Launch Site: Kourou, French Guiana

Status: Operational

Uplink:
Downlink: 437.345 MHz GFSK 625/1250 bps
          437.345 MHz CW

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum6
[03232012]
��Goliat
Catalog Number: 38085
Launch Date: Febrauary 13, 2012
Launch Site: Kourou, French Guiana

Status: Operational

Uplink:
Downlink: 437.485 MHz 1k2 AFSK

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum�
[03162012]

��E-Star
Catalog Number: 38079
Launch Date: Febrauary 13, 2012
Launch Site: Kourou, French Guiana

Status: On Orbit

Uplink:
Downlink: 437.445 MHz 1k2 bps AFSK

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum0
[03232012]
��ALMASat1
Catalog Number: 38078
Launch Date: Febrauary 13, 2012
Launch Site: Kourou, French Guiana

Status: On Orbit

Uplink:
Downlink: 437.465 MHz 1k2 bps FSK
          2407.850 MHz

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum9
[02212012]
��RS-39 Chibis-M
Catalog Number: 37841
Launch Date: October 30, 2011 10:11:00 UTC
Launch site: Tyuratam (Baikonur Cosmodrome), Kazakhstan

Status: Operational

Uplink:
Downlink:

Beacon: 435.315 MHz CW
        435.215 MHz CW

Callsign:

URL:

IARU coordination status page:
[01122012]
��JUNGU
Catalog Number: 37841
Launch Date: October 12, 2011 05:30:00 UTC
Launch site: Satish Dhawan Space Centre, India

Status: On Orbit

Uplink: 145.??? MHz 1k2 (mode?)
Downlink: 437.505 MHz 9k6 (mode?)

Beacon: 437.275 MHz 15 wpm (?) CW

Callsign:

URL: http://www.iitk.ac.in/me/jugnu/index.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum0
[01122012]
��SRMSAT
Catalog Number: 37839
Launch Date: October 12, 2011 05:30:00 UTC
Launch site: Satish Dhawan Space Centre, India

Status: On Orbit

Uplink: 145.900 MHz 1k AX.25 (speed?)
Downlink: 437.500 MHz 2k4 AX.25

Beacon: 437.425 MHz 12 wpm CW

Callsign:

URL: http://srmsat.in/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum1
[01122012]
��HRBE (E1P Explorer 1 [Prime] CubeSat (E1P-U2))
Catalog Number: 37855
Launch Date: October 28, 2011
Launch site: Vandenberg Air Force Base, California, USA

Status: On Orbit

Uplink: 437.305 MHz (???)
Downlink: 437.505 MHz AX.25 (SSB?)

Beacon:

Callsign:

URL: http://ssel.montana.edu/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum6
[01122012]
��M-Cubed
Catalog Number: 37855
Launch Date: October 28, 2011
Launch site: Vandenberg Air Force Base, California, USA

Status: On Orbit

Uplink:
Downlink: 437.485 MHz AX.25

Beacon:

Callsign:

URL: http://umcubed.org/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum!5
[01122012]
��RAX-2
Catalog Number: 37853
Launch Date: October 28, 2011
Launch site: Vandenberg Air Force Base, California, USA

Status: Operational

Uplink:
Downlink: 437.345MHz 9k6 GMSK

Beacon:

Callsign:

URL: http://rax.engin.umich.edu//

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum"1
[03232012]
��AO-71 AubieSat-1
Catalog Number: 37854
Launch Date: October 28, 2011
Launch site: Vandenberg Air Force Base, California, USA

Status: On Orbit

Uplink:
Downlink: 437.475 MHz 1k2 AX.25

Beacon: 437.475 MHz CW

Callsign: KI4NQO

URL: http://www.space.auburn.edu/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum8
[12262011]
��O/OREOS
Catalog Number: 37224
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: On Orbit

Uplink:
Downlink: 437.035 MHZ AX.25

Beacon:

Callsign:

URL: http://www.ooreos.org/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum6
[02092011]
��Rax-1 Radio Aurora Explorer
Catalog Number: 37223
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: On Orbit

Uplink:
Downlink: 437.505 MHz 9k6 GMSK

Beacon:

Callsign: RAX-1

URL: http://rax.engin.umich.edu/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum5
[02092011]
��FO-69 Fastrac-1 Sara Lily
Catalog Number: 37227

Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: Operational

Uplink 1: 145.980 MHz 1k2 baud
Uplink 2: 145.825 MHz 1k2 baud
Downlink: 437.345 MHz 1k2 and 9k6 baud

Beacon: 437.435 MHz 1k2 AX.25

Callsign: Fast1

URL: http://fastrac.ae.utexas.edu/index.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum�
[07052011]
��FO-70 Fastrac-2 Emma
Catalog Number: 37380
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: Operational

Uplink 1: 435.025 MHz 1k2 baud
Uplink 2: 437.435 MHz 9k6 baud
Downlink: 145.825 MHz 1k2 and 9k6 baud

Beacon: 145.825 MHz 1k2 AX.25

Callsign: Fast2

URL: http://fastrac.ae.utexas.edu/index.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum�
[12162011]
��StudSat
Catalog Number: 36796
Launch Date: July 12, 2010 0352z
Launch site: Satish Dhawan Space Centre, India

Status: On Orbit

Uplink: 437.505MHz, 9600bps FSK
Downlink: 437.505MHz, 9600bps FSK
Beacon : 437.505MHz,   20bps ASK

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum4
[02092011]
��TIsat-1

Catalog Number: 36799
Launch Date: July 12, 2010 0352z
Launch site: Satish Dhawan Space Centre, India

Status: On orbit

Callsign: HB9DE

Uplink: 145.980MHz FM, AFSK
Downlink: 437.305MHz FM, AFSK
Beacon: 437.305MHz CW

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum8
[02092011]
��SwissCube
Catalog Number: 35932
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Callsign: HB9EG

Beacon(100mw): 437.5050MHz CW
Beacon(1w):   437.5050MHz FSK 1k2bps

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum9
[02092011]
��UWE-2
Catalog Number: 35934
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: In Orbit

Beacon(500mw): 437.3850 MHz AFSK 1k2bps
               437.3850 MHz FSK 9k6bps

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum0
[02092011]
��ITUpsAT1
Catalog Number: 35935
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Beacon(100mw): 437.325MHz CW
Beacon(1w): 437.325MHz 19k2bps

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum3
[02092011]
��BEESAT
Catalog Number: 35933
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Callsign: DP0BEE

Beacon(100mw): 436.000MHz CW
Beacon(500mw): 436.000MHz GMSK 4k8bps
Beacon(500mw): 436.000MHz GMSK 9k6bp
[02092011]
��CP-6
Catalog Number: 35004
Launch Date: May 19, 2009 2355z
Launch site: Wallops Island, Virginia, USA

Status: Operational

Downlink: 437.365 MHz 1k2 AFSK

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum1
[01122012]
��HAWKSAT 1
Catalog number: 35003
Launch Date: May 19, 2009 2355z
Launch site: Wallops Island, Virginia, USA

Status: operational

Downlink: 437.345 MHz ?

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum5
[01122012]
��Pharmasat
Catalog Number: 35002
Launch Date: May 19, 2009 2355z
Launch site: Wallops Island, Virginia, USA

Status: Operational

Downlink: 437.465 MHz 1k2 AFSK

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum�
[02092011]
��ANUSAT

Catalog Number: 34808
Launch Date: April 20, 2009 0115z
Launch Site: Satish Dhawan Space Centre, India

Status: ?

Downlink: 435.000 MHz
Uplink: 145.800 MHz

Telemetry: 137.400 MHz
[02092011]
��SOHLA-1 (ASTRO TECH.)
Catalog Number: 33496
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational

Proposed Frequencies and Modes:
Downlink: 437.505 MHz AFSK/CW
Beacon: 437.505 MHz AFSK/CW

Callsign:

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum1
[02092011]
��KAGAYAKI (Solan Co.)
Catalog Number: 33495
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: In Orbit

Downlink: 437.375 MHZ   FSK9k6/CW
Beacon: 437.375 MHz   FSK9k6/CW

IARU coordination status page:

AMSAT-NA webpage:

[02092011]
��STARS (Kagawa Univ.) (Twin Satellites)
Catalog Number: 33498
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational ?

Downlinks: 437.485 MHz FM/CW
           437.465 MHz FM/CW
Beacons: 437.305 MHz FM/CW
           437.275 MHz FM/CW

Callsigns: JR5YBN
           JR5YBO

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum�

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID1&retURL
�atellites/status.php
[02092011]
��KKS-1 (Tokyo MCIT)
Catalog Number: 33499
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational

Downlink: 437.455 MHz AFSK/CW
Beacon: 437.385 MHz AFSK/CW

Callsign: JQ1YYY

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum7

AMSAT-NA webapge:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID0&retURL
�atellites/status.php
[20092011]
��PRISM (Tokyo Univ.)
Catalog Number: 33493
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational ?

Downlink: 437.425 MHz AFSK/GMSK/CW
Beacon: 437.250 MHz AFSK/GMSK/CW

Callsign: JQ1YCX

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum�

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID9&retURL
�atellites/status.php
[02092011]
��RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number: 32953
Launch Date: May 23, 2008 1520z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational

Curent Modes: Telemetry
Audio
Images

Downlinks: 435.315 MHz
435.215 MHz

AMSAT-NA website:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID5&ret
URL�atellites/status.php

Official website:
http://www.npopm.com/?cid�oca&caidC
[02092011]
��CanX-2
Catalog number: 32790
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational in range of ground station only

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web
page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnumF
[02092011]
��AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Downlink: 437.425 MHz 1k2 baud packet

For the latest project status update please visit the AAUSAT-II web
page:
http://www.aausatii.aau.dk/homepage/index.php?language�&page�me

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum`
[02092011]
��CO-65 CUTE-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Downlink: 437.475 MHz 9k6 Packet
Uplink: 1267.600 Mhz

Telemetry Beacon:
Downlink: 437.2750 MHz CW

For the latest project status update please visit the Cute-1.7+APD II web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnumx

Command Station blog website:
http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID2&retURL
�atellites/status.php
[03232012]
��Compass-1
Catalog number: 32787
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Current Mode: dependant on last received command

Uplink: 145.980 MHz FM
Downlink: 437.275 Mhz CW
437.405 MHz Packet

For the latest project status update please visit the Compass 1 web page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnumR

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID4&retURL
�atellites/status.php
[06162011]
��CO-66 Seeds II
Catalog number:
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Downlink: 437.485 MHz

Callsign: JQ1YGU

For the latest project status update please visit the Seeds 2 web page: http://cubesat.aero.cst.nihon-u.ac.jp/english/seeds_2_e.html

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum6

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID3&retURL
�atellites/status.php
[02092011]
��CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007 0702z
Launch site: Baikonur, Kazakhstan

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID�&retURL
/satellites/status.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnumr
[02092011]
��CP3
Catalog Number: 31129
Launch Date: April 17,2007 0702z
Launch site: Baikonur, Kazakhstan

Status: Operational

Current Mode: /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnumt
[02092011]
��CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005 0652z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon: 437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/xivpicte.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum7
[02092011]
��CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: ?????

Current Mode: /u

Beacon: 436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID�&retURL
�atellites/status.php

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[02092011]
��QuakeSat
Catalog Number: 27845
Launch Date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Telemetry only

Current Mode: 9600 baud data packet

Mode U packet
Downlink: 436.675 MHz 9k6 BPS

Quakesat webpage:
http://www.quakefinder.com/services/quakesat-ssite/
[02252011]

��CO-55 Cute-1.7+APD II
Catalog Number: 27844
Launch date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational

Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satIDi&retURL
�atellites/status.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnumx
[02092011]
��NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001 0240z
Launch site: Kodiak Launch Complex, Alaska, USA

Status: Telemetry only

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[02092011]
��RS-22 RADIO SPORT 22 (MOZHAYETS 4)
Catalog number: 27939
Launch Date: September 27, 2003 0612z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational - 70cm cw only

Current Mode: /u

CW Beacon - 435.352 MHz
            145.818 MHz

AMSAT-NA webpage:

http://www.amsat.org/amsat-new/satellites/satInfo.php?satIDv&retURL
�atellites/status.php
[02092011]
��LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990
Launch site: Kourou, French Guiana

Status: CW Beacon only

Uplinks: 145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink: 437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[02092011]
��UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984
Launch site: Vandenburg AFB, California, USA

Status: Operational ?

Current Mode: /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon: 435.025 MHz
Mode-S Beacon: 2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[07052011]
��INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998 0640z (ZARYA module)
Launch sites: Baikonur, Kazakhstan
              Kourou, French Guiana
              Uchinoura Space Center, Japan
              Kennedy Space Center, Titusville, Florida, USA

Status: Operational

Current Active Modes:

FM Repeater -	OFF
Voice -	V/v
BBS -	OFF
2m APRS -	ON
70cm Digi -	ON
SSTV -	OFF

Expedition 30 Crew (November 2011 - July 2012):

Commander:	Dan Burbank	KC5ZSX
Flight Engineer:	Anton Shkaplerov	
Flight Engineer:	Anatoly Ivanishin	
Flight Engineer:	Oleg Kononenko	RN3DX
Flight Engineer:	Andr� Kuipers	PI9ISS
Flight Engineer:	Don Pettit	KD5MDT

Available Modes and Frequencies:

Digital/APRS:

Worldwide 2m packet uplink:	145.825 MHz FM 1k2
Worldwide 2m packet downlink:	145.825 Mhz FM 1k2
Worldwide 70cm packet downlink:	437.550 Mhz FM 1k2
Worldwide 70cm packet downlink:	437.550 Mhz FM 1k2

Voice:

Region 1 voice uplink:	145.200 MHz FM
Region 2/3 voice uplink:	144.490 MHz FM
Worldwide downlink:	145.800 MHz FM

Crossband Repeater:

Repeater Uplinks:	1269.650 MHz FM 437.800 MHz FM 145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink:	145.800 MHz FM 437.800 MHz FM (Kenwood)

SSTV Robot 36:

Downlink:	145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:

Belgian:	OR4ISS
German:	DP0ISS
Russian:	RS0ISS RZ3DZR
United States:	NA1SS
2m Packet Mailbox:	RS0ISS-11
2m Digipeater alias:	ARISS

70cm Packet Mailbox: RS0ISS-1
70cm Digipeater callsign: RS0ISS
70cm Digipeater alias: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[03302012]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-090.S3
WSR 090 Part 3 03/30/2012

AMSAT NEWS SERVICE BULLETIN 090.S3
FROM AMSAT HQ SILVER SPRING, MD, March 30, 2012
TO ALL RADIO AMATEURS
BID: $WSR-090.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

NANOSAIL-D
Catalog Number: 37361(?)
Ejection Date: January 17, 2011

Status: On orbit

Downlink: 437.270 MHz AX.25

URL: http://nanosaild.engr.scu.edu/dashboard.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum5
[01052012]
��HO-68 HOPE-1 (CAS-1)(XW-1)
Catalog Number: 36122
Launch Date: December 15, 2009 0231z
Launch site: Taiyuan Space Center, PRC

Status: Non - Operational

Callsign:
Broadcast: BJ1SA-11
BBS: BJ1SA-12

Uplinks: 145.8250 MHz FM, PL 67.0 Hz.
           145.9250 - 145.9750 MHz SSB/CW
           145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM

435.7650 - 435.7150 MHz SSB/CW
435.6750 MHz AFSK 1200 BPS

Beacon: 435.7900 MHz CW

Mode and Antenna Polarization:
V: LHCP 2.0dBi max
U: RHCP 3.0dBi max

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum8

For more information about XW-1 (CAS-1):
http://
[01122012]
��SO-67 SumbandilaSat
Catalog Number: 35870
Launch Date: September 17, 2009 1555z
Launch site: Baikonur, Kazakhstan

Status: Non - Operational

Callsign: ZS0SUM

Uplink: 145.875MHz FM tone 233.6 Hz
Downlink: 435.345MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

For more information about SO-67:
http://www.amsatsa.org.za/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum�
[01272012]
��CP4
Catalog Number: 31132
Launch Date: April 17, 2007

Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon: 437.325 MHz CW

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnumy
[09062010]
��LIBERTAD-1
Catalog Number: 31128

Launch Date: April 17, 2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink: 145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnumv
[09062010]
��PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: Non-Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder: 145.825 Mhz FM

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnumQ
[09062010]
��NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
2407.250

Official Website: http://www.ncube.no

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum$
[09062010]
��XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 MHz FM 67Hz CTCSS
Voice Downlink: 2401.835 MHz FM

Packet Up/Downlink: 437.250 MHz 9k6 packet
Packet Downlink   2401.835 MHz 38k4 packet

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnumT
[09062010]
��UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non-Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnumS
[09062010]
��AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004 0745z
Launch site: Baikonur, Kazakhstan

Status: Non - Operational

Current Mode(s):
Voice repeater: V/u
Uplink: 145.880 MHz FM
Downlink: 435.150 MHz FM

Telemetry: Recovery efforts
Downlink: 435.150MHz 9k6

```
Analog voice downlink:     435.300 MHz FM
                           435.150 MHz FM
                          2401.200 Mhz FM
Analog voice uplink:       145.860 MHZ FM
                           145.880 MHz USB
                           145.880 MHz FM
                           145.920 MHz FM
                           145.920 MHz FM - 67 Hz PL tone burst
                          1268.705 MHz FM
Digital Downlinks:         435.150 MHz FM 38k4 PBP, 1 watt output
                           435.150 MHz FM 9k6 Pacsat Broadcast Protocol
                          2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:            145.860 MHz FM 9k6 Pacsat Broadcast Protocol
                          1268.703 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon:                    435.150 MHz
```

Mode and Antenna Polarization:
T: Linear
V: Linear

U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum
[12062011]
��CANX-1
Catalog Number: 27847
Launch Date: June 30, 2003

Status: Non-Operational

Downlink: 437.8800 MHz AFSK 1k2bps
[06052009]
��DTUSAT
Catalog Number: 27842
Launch Date: June 30, 2003

Status: Non-Operational

Current Mode: 2k4 AFSK Packet last reported

Downlink: 437.475MHz

Officail webpage: http://dtusat1.dtusat.dtu.dk/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID1&retURL
�tellites/all_oscars.php
[02212009]
��AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)

Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
��MO-46 TIUNGSAT-1
Catalog number: 26548

Launch date: September 26, 2000

Status: Telemetry only

Uplinks: 145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[03302009]
��NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
��SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
��SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

```
Uplink:   145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
��AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
V-band:   145.840 -  145.990 MHz CW/LSB
U-band:   435.550 -  435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks
---------
S2-band:  2401.225 -  2401.475 MHz CW/USB
K-band:  24048.010 - 24048.060 MHz CW/USB
Beacon:   2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)
----------------------------
BEACON   General Beacon(GB)  Middle Beacon(MB)  Engineering Beacon(EB)
2 m                   none        145.898 MHz                    none
70cm           435.438 MHz        435.588 MHz             435.838 MHz
13cm(1)       2400.188 MHz       2400.338 MHz            2400.588 MHz
13cm(2)       2401.173 MHz       2401.323 MHz            2401.573 MHz
3cm          10450.975 MHz      10451.125 MHz           10451.375 MHz
1.5cm        24047.885 MHz      24048.035 MHz           24048.285 MHz
[07162007]
��OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
��UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown
```

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
��SO-35 SUNSAT
Catalog Number: 25636
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
��PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
��SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
��GO-32 Gurwin TechSat-1B

Catalog number: 25397
Launch Date: July 10, 1998

Status: Non-Operational

Current Modes:
Telemetry : /u

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks: 145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://asri.technion.ac.il/techsat/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID&retURL
�atellites/status.php
[07172010]
��TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink: 145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
��MO-30 UNAMSAT-2
Catalog Number: 24305
Launch Date: September 5, 1996

Status: Non-operational

Downlink: 435.1380 MHz AFSK 1200 BPS
Downlink: 435.2060 MHz AFSK 1200 BPS
Uplink: 145.8150 MHz AFSK 1200 BPS
Uplink: 145.8350 MHz AFSK 1200 BPS
Uplink: 145.8550 MHz AFSK 1200 BPS
Uplink: 145.8750 MHz AFSK 1200 BPS
[06042009]
��PO-28 POSAT-1

Catalog number: 22829
Launch Date: September 25, 1993

Status: Non-operational

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012009]
��IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks: 145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
��KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
��AO-24 ARSENE
Catalog Number: 22654
Launch Date: May 13, 1993

Status: Non-operational

Uplink: 435.0625 MHz FM 1k2bps AFSK
           435.1125 MHz FM 1k2bps AFSK
           435.1375 MHz FM 1k2bps AFSK
Downlink: 145.9750 MHz FM 1k2bps AFSK
          2446.5025 MHz FM 1k2bps AFSK

Beacon: 2446.4700 MHz CW

Broadcast callsign:
BBS:
[12162009]
��KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HL01-11
BBS: HL01-12
[01222007]
��UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink: 145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
��AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink: 435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
��FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons: 435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink: 145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks: 145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
��WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
��DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink: 145.825 MHz FM 1200 Baud AFSK
Beacon: 2401.220 MHz
[05012006]
��AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: non-operational

Current Mode: V/u

Uplink: 145.900 MHz FM 1200-baud Manchester FSK (reserved)
                145.920 MHz FM VOICE
                145.940 MHz FM 1200-baud Manchester FSK (reserved)
                145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink: 437.026 MHz USB VOICE
                (1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC 437.050 MHz RHCP
   PSK 437.026 MHz LHCP

V: Linear

Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[07242009]
��UO-15 UoSAT-4
Catalog Number: 20438
Launch Date: January 22, 1990

Status: Non-operational

Uplink: ?
Downlink: 435.1250MHz (?)
          435.1200MHz (?)
[06042009]
��UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink: 145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
��FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink: 145.8500 MHz MFSK 1200 BPS
Uplink: 145.8700 MHz MFSK 1200 BPS
Uplink: 145.8900 MHz MFSK 1200 BPS
Uplink: 145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
��AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB

Downlink: 145.975 to 145.825 MHz CW/USB

Beacon: 145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
��AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.8500 - 145.9000 MHz SSB/CW
Downlink 29.4000 - 29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
��AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink: 29.4500 - 29.5500 MHz SSB/CW
Beacons: 29.450 MHz
435.100 MHz
[01312008]
��AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
29.4500 MHz CW
[01152007]
��OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink: 145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
��RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB

Beacon 1: 29.352 MHz (intermittent)
Beacon 2: 29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
��RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB

Beacon: 145.860 MHz

Robot: 145.908 MHz
[05232004]
��RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:

http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at}
amsat.org
NNNN
/EX

```
From 1972939090610424006
X-Google-Thread: 10e8ad,6e839f723e686665,start
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII
Received: by 10.68.129.169 with SMTP id nx9mr3177429pbb.2.1333245217044;
        Sat, 31 Mar 2012 18:53:37 -0700 (PDT)
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Path: r9ni4726pbh.0!nntp.google.com!news1.google.com!news2.google.com!
npeer02.iad.highwinds-media.com!news.highwinds-media.com!feed-me.highwinds-
media.com!nx02.iad01.newshosting.com!newshosting.com!news-out.readnews.com!
transit3.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-092 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sat, 31 Mar 2012 21:53:36 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 538
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <002401cd0faa$39c2ff30$ad48fd90$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
X-Trace: reader1.panix.com 1333245216 672 166.84.1.6 (1 Apr 2012 01:53:36 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 1 Apr 2012 01:53:36 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to            rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
X-Received-Bytes: 26820
Content-Language: en-us
```

AMSAT NEWS SERVICE
ANS-092

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

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* Satellite Shorts From All Over

SB SAT @ AMSAT $ANS-092.01
ANS-092 AMSAT News Service Weekly Bulletins

AMSAT News Service Bulletin 092.01
>From AMSAT HQ SILVER SPRING, MD.
April 1, 2012
To All RADIO AMATEURS
BID: $ANS-092.01

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* Volunteers are needed to help at the AMSAT booth at Dayton. Gould *
* WA4SXM, is looking for volunteers to help man the AMSAT booth dur- *
* ing the 2012 Hamvention. People are needed all 3 days for 2 hour *
* shifts. Please send the days and times you are available to help *
* as well as how many shifts you are willing to work via e-mail to *
* wa4sxm at amsat.org. *
* Monitor http://www.amsat.org/amsat-new/hamvention/2012/Dayton.php *
* for the latest AMSAT at Dayton news and developments *
****

AMSAT Theme at Dayton 2012: Running with Fox

The 2012 Dayton Hamvention will be held this year on 18 - 20 May 2012. As has been the case for the many years Hamvention will be at the Hara Arena Complex on the north side of Dayton. AMSAT will occupy the same booths (444-449) in Ball Arena, right across from the ARRL area and just inside the door from the Satellite Demonstration area.

The AMSAT theme for 2012 is "Running with Fox". We will have multiple exhibits of the new AMSAT satellite on display.

Visit AMSAT's Dayton Hamvention page for all details on activities:
http://www.amsat.org/amsat-new/hamvention/2012/Dayton.php

Some of the activities will include:

+ Life size Fox models will be on display as well as diagrams of the modules inside the 10cm square satellite.

+ Operational prototype of ARISSat-1 on display.

+ AMSAT Thursday Night Get-together at the Tickets Pub & Eatery.

+ The sixth annual AMSAT/TAPR Banquet will be Friday night May 18 at the Kohler Banquet Center. The price for the Banquet is $30. Seating is limited and reservations are required. Follow the links on AMSAT's Dayton page.

+ The AMSAT Forum will be on Saturday May 19.

AMSAT/TAPR Friday Night Banquet

AMSAT/TAPR Banquet on Friday night, May 18 is one of the main AMSAT activities during the 2012 Hamvention at Dayton.

AMSAT is pleased to announce that Howard Long, G6LVB will be the featured speaker for the evening event. Howard will be talking about his FUNcube Dongle, the 64 - 1700 MHz Software Defined Receiver. This innovative USB device is the size of a thumbdrive and has an SMA antenna socket. Multiple SDR control and display software programs can be used with the FUNcube Dongle.

Banquet tickets will not be sold at the AMSAT booth during the Hamvention so reservations must be made through the AMSAT Store:
http://www.amsat-na.com/store/item.php?id0158
Tickets are $30 apiece.

ARISS Mentor Introduction at Dayton 2012

AMSAT and ARRL are teaming up during the 2012 Hamvention to recruit new ARISS (Amateur Radio on the International Space Station) Technical Mentors and Ground Station Operators.

Friday and Saturday (May 18 & 19) at 4pm in the ARRL stage area AMSAT Vice President for Educational Relations Mark Hammond N8MH will explain the need for additional ARISS Technical Mentors and Ground Station Operators and the requirements and responsibilities needed to help provide a reliable conversation between astronauts and selected schools or groups.

Technical Mentors serve as an advising and coordinating liaison between NASA, the school or group making the ARISS contact, and the Ground Station Operators, who set up the satellite station at the contact location. We encourage anyone interested in helping make future school contacts with the ISS successful to please attend.

AMSAT to Facilitate Student Satellite Contacts

AMSAT is encouraging all students attending the 2012 Dayton Hamvention to come by the Satellite Demonstration Area just outside of the Ball Area entrance and make a contact using the amateur satellites. There will be AMSAT volunteers there to explain how to make the contacts and during actual satellite passes will try to get as many students as possible to complete actual contacts. There are lists of satellite pass times in the satellite demonstration area and at the AMSAT booth.

[ANS thanks Gould Smith, WA4SXM for the above information]

AMSAT-NA Board of Directors Nominations

It is time to submit nominations for the upcoming open seats on the AMSAT-NA Board of Directors. A valid nomination requires either one current Member Society, or five current individual members in good standing, to nominate an AMSAT-NA member for the position.

Three directors and two alternate directors have terms expiring this year. The director seats open for election are held by Tom Clark, K3IO; Lou McFadin, W5DID; and Gould Smith, WA4SXM. The alternate director seats open for election are held by Mark Hammond, N8MH and Patrick Stoddard, WD9EWK.

The three nominees receiving the highest number of votes will be seated as regular board members with two year terms. The two nominees receiving the next highest number of votes will be seated as alternate directors for one year.

Written nominations, consisting of names, calls and individual signatures, should be mailed to: AMSAT-NA, 850 Sligo Ave #600, Silver Spring, MD, 20910. They must be received no later than June 15th. No other action is required.

Nominations may also be made by electronic means including e-mail, FAX, or electronic image of a petition. Electronic petitions should be sent to MARTHA@AMSAT.ORG or faxed to 301-608-3410, and also must be received by June 15th. If using any electronic submission, there is a second, verifying step:

> ELECTRONIC SUBMISSIONS WITHOUT THIS SECOND, WRITTEN VERIFICATION ARE NOT VALID UNDER THE EXISTING AMSAT-NA BYLAWS. A verifying traditional written petition MUST be received at the AMSAT-NA office at the above address within 7 days following the close of nominations.

[ANS Thanks AMSAT Secretary Alan Biddle, WA4SCA for the above information]

QB50 CubeSat Proposal Deadline Extended to April 30

QB50 is a network 50 CubeSats in a 'string-of-pearls' configuration that will be launched together in the first half of 2015 by a single rocket, a Shtil-2.1, from Murmansk, Northern Russia into a circular 320 km altitude, 79 degree inclination orbit. (https://www.qb50.eu) The mission lifetime of individual CubeSats is estimated to be about three months.

The von Karman Institute for Fluid Dynamics in Brussels, Belgium is accepting CubeSat proposals from interested University and Research teams until April 30. The selection of 50 CubeSats for the exploration of the lower thermosphere, re-entry research and in-orbit demonstration of new technologies and miniaturized science sensors will be made by the Selection Committee in early June. Proposing teams will be individually notified of their selection/non-selection shortly thereafter.

The 50 CubeSats will comprise an on-orbit network of:

+ About 40 atmospheric 2U CubeSats
+ About 10 2U or 3U CubeSats for In-Orbit Demonstration of science and technology payloads.

All 40 atmospheric 2U CubeSats and most of the 10 2U and 3U CubeSats for In-Orbit Demonstration will carry a set of standardized sensors for multi-point, in-situ, long-duration measurements of key parameters and constituents in the largely unexplored lower thermosphere and ionosphere. Once requirements for the standardized sensor package and network/communication requirements have been met the CubeSat team may use remaining on-board space or electronic capability to conduct their own additional research.

QB50 will also study the re-entry process by measuring a number of key parameters during re-entry, e.g. CubeSat on-board temperature and deceleration.

A single CubeSat is simply too small to also carry sensors for significant scientific research. Hence, for the universities the main objective of developing, launching and operating a CubeSat is educational. However, when combining a large number of CubeSats with identical sensors launched at the same time into a network, in addition to the educational value, fundamental scientific questions can be addressed which are inaccessible otherwise.

Networks of CubeSats have been under discussion in the CubeSat community for several years, but so far no university, institution or space agency has taken the initiative to set up and coordinate such a powerful network. The QB50 network can still fully achieve its mission objectives even if a few CubeSats fail.

Typically, a university builds a CubeSat and launches it into low Earth orbit. It also builds or already has available a ground station to track the CubeSat and enable uplink/downlink telecommunications.

The period in a low-Earth orbit (about 600 km altitude) is about 90 minutes, but the duration of a satellite pass over the ground station is approximately 10 minutes in the best case to no coverage at all for most of the 16 daily orbits. When supporting only one satellite project the ground station is not in operation 97% of the time. If a mission critical emergency occurs aboard the CubeSat it can be only addressed on single orbits within range of the dedicated ground station.

An international network, the Global Educational Network for Satellite Operations (GENSO), under development may well be set up in time for QB50. It would eventually comprise more than 100 ground stations in different parts of the world, providing a vastly improved uplink and downlink capability for all CubeSats. The international QB50 network in orbit would be the first major user of the international GENSO network on the ground. In case GENSO is not set up in time for QB50, CubeSat teams are encouraged to set up a subset ground station network comprising any number of ground stations.

The QB50 homepage can be accessed at: https://www.qb50.eu

[ANS thanks the QB50 Project for the above information]

SpaceDaily Posts Article Detailing RAX-2 CubeSat Scientific Success

An article posted on SpaceDaily.com gives additional details of the successful RAX-2 CubeSat scientific success. In their Solar Science section, "Researchers take first-ever measurement of auroral turbulence using a nanosatellite radar receiver", is an article further explaining the scientific discovery. Read the full article on-line at: http://tinyurl.com/UniverseToday-RAX2

[Menlo Park CA (SPX) Mar 26, 2012] - Researchers from SRI International and the University of Michigan have taken the first-ever measurement of naturally occurring auroral turbulence recorded using a nanosatellite radar receiver. The research was done with support from the National Science Foundation (NSF) and NASA's Educational Launch of Nanosatellites (ELaNa) Initiative.

The distinctive radar echoes recorded on March 8 were taken with the Radio Aurora Explorer (RAX) CubeSat. The RAX nanosatellite measured turbulence over Fairbanks, Alaska that was a direct result of a geomagnetic storm triggered by the largest solar flare in the past five years.

The Earth's high latitude ionosphere, a region of the upper atmosphere associated with solar-driven aurora or "northern lights," becomes highly unstable when large currents flow during geomagnetic storms. RAX was specifically designed by SRI and the University of Michigan to measure this auroral turbulence from an orbital vantage point inaccessible to traditional ground-based radars.

"The RAX radar echo discovery has convincingly proved that miniature satellites, beyond their role as teaching tools, can provide high caliber measurements for fundamental space weather research," said Therese Moretto Jorgensen, Ph.D., Geospace program director in the Division of Atmospheric and Geospace Sciences at the National

Science Foundation.

The project's mission was to use small satellites called CubeSats to remotely explore formation of charged particle filaments created in response to intense electrical currents in space.

These plasma structures, a form of turbulence called field-aligned irregularities (FAIs), can distort communication and navigation signals such as global positioning systems (GPS). During the recent solar flare, RAX measured FAI echoes using the Poker Flat Incoherent Scatter Radar (PFISR), an NSF research radar operated by SRI.

"The recently collected radar echoes allow us to determine the root cause and to possibly predict future disturbances in the auroral ionosphere - disturbances that can severely compromise communication and GPS satellites," said Hasan Bahcivan, Ph.D., a research physicist in SRI's Center for Geospace Studies, and principal investigator of the RAX mission.

A team of University of Michigan students under the direction of James Cutler, Ph.D., an assistant professor in the Aerospace Engineering Department, designed, built, and operated the satellite and gathered the radar echo data.

RAX was the first CubeSat to be selected as part of an NSF program to use small satellites for space weather and atmospheric research. The RAX CubeSat is a three liter satellite weighing three kilograms. It was launched by NASA on October 28, 2011, and has since completed 18 experiments.

[ANS thanks SpaceDaily.com for the above information]

NASA Credits Increasing CubeSat Capability in O/OREOS Mission Success

Launched in November, 2011 NASA's Organism/Organic Exposure to Orbital Stresses (O/OREOS) nanosatellite has successfully carried microorganisms to a high-inclination, low-Earth orbit and monitored the effects of the space environment on their growth and metabolism.

Two populations of the microbe Bacillus subtilis into space. One set of microbes was a naturally occurring strain, and the second was a radiation-resistant mutant strain. The microorganisms were part of the Space Environment Survivability of Live Organisms (SESLO) project, which characterized the growth, activity, health and ability of microorganisms to adapt to the stresses of the space environment including exposure to a total dose rate of radiation nearly 15 times greater than that experienced in the orbit of the International Space Station.

In space, bacterial spores successfully germinated and grew after 14 days in orbit and again after 97 days. In microgravity, the cells generally grew and metabolized more slowly than their counterparts on Earth. Interestingly, the microorganisms grown at 97 days of exposure showed no significant difference in their growth parameters than those grown at 14 days. The study provides insight into how living organisms cope with life beyond our planet.

O/OREOS also carried another set of experiments: the Space Environment Viability of Organics (SEVO), which monitored the stability and changes in four classes of organic molecules during spaceflight.

"The full success of the O/OREOS mission demonstrates convincingly that cubesats can be cost-effective platforms for performing science research and conducting technology demonstrations," said Mary Voytek, senior scientist of NASA's Astrobiology Program at NASA Headquarters, in a statement from NASA.

"The capabilities of cubesats are growing steadily, making them good candidates to operate precursor experiments for missions on larger satellites, the International Space Station, lunar surface exposure facilities, and planetary exploration."

The full story can be accessed on SpaceDaily.com at:
http://tinyurl.com/NASA-OREOS

ARISS Contacts Receive Media Coverage

Media coverage of recent ARISS contacts can viewed on-line. The ARISS contact on March 21 with students at Salem Elementary in Apex, North Carolina had the opportunity to question of astronaut Don Pettit KD5MDT 241 miles (388 km) up and on the other side of the Earth aboard the International Space Station. Tony Hutchison, VK5ZAI provided the telebridge link to the ISS amateur radio station NA1SS.

Local television coverage on WRAL-TV and a report of the contact can viewed on-line at:
http://www.wral.com/weather/blogpost/10904028/

News 14 Channel coverage of the Apex ARISS contact is at:
http://tinyurl.com/news14-ARISS

The News Observer article can be read at:
http://tinyurl.com/newsobserver-ARISS

Listen to an interview with some of the students:
http://www.wcpss.net/podcast/2012_march22_salem/index.mp3

Also on March 21 the Swiss Air Force Museum Clin d'Ailes, located on the Swiss Airforce Base in Payerne, Switzerland, established an ARISS contact with ESA astronaut Andr� Kuipers, PI9ISS, aboard the International Space Station.

Astronaut Andr� Kuipers operated with the ISS callsign OR4ISS. This was a direct contact performed by the Amateur radio Club station HB9SPACE, located in the museum. Two videos of this event can be viewed on-line at:
http://www.20min.ch/ro/videotv/?vid$4405&cid0
http://www.20min.ch/ro/videotv/?vid$4395&cid0

Southgate ARC provides detailed coverage of the HB9SPACE event at:
http://tinyurl.com/HB9SPACE-ARISS - and -
http://www.uk.amsat.org/6095

[ANS thanks ARISS, AMSAT-UK and Southgate ARC for the above information]

Satellite Shorts From All Over

+ The ESA�s Education Office has maintained frequent contacts with the student teams to follow the progress of their satellite operations after the February 13 launch of the Vega rocket delivering seven ESA-sponsored CubeSats into low Earth orbit. The status of the CubeSats is posted at:
  http://www.esa.int/SPECIALS/Education/SEM2KRGY50H_0.html
  Photos posted at:
  http://www.esa.int/SPECIALS/Education/SEM2KRGY50H_1.html

+ Call for Papers - Central States VHF Society 46th Annual Conference, Cedar Rapids, Iowa, July 26-28, 2012. If you would like to contribute a paper, presentation, or poster, please contact Rod Blocksome, K0DAS, CSVHF Conference Program Chairman as soon as possible with the title and a short description. You can reach Rod at k0das@arrl.net or at his callbook address. Their web page for authors can be found at:
  http://www.csvhfs.org/2012conference/index.html#

+ The ARISS International monthly teleconference was held on Tuesday, March 20. The HamTV discussion covered the meetings that ESA and NASA are engaging in to ensure coordination of the project. Minutes have been posted: http://ariss.rac.ca/arisstel2012-03-20.htm

+ TAMSAT Project Coordinator, Levent Sasmazel, WW2L posted good news about TAMSAT, Association of Amateur Satellite Technologies in Turkey completion of the Internal Housekeeping Unit processor of their satellite. Photos and a full description are posted on the AMSAT-UK web at: http://www.uk.amsat.org/6085

+ The WebSDR receiver is located at the Astronomical Observatory Department of �Stefan cel Mare� University in Suceava, Romania has added coverage of 437.470 � 437.515 MHz to enable reception of the Romanian amateur radio CubeSat Goliat. The original WebSDR receiver at this site provides coverage of the 3.5 MHz band. Tune in at: http://sdr.opt.ro:8901/ More information about the Goliat CubeSat is posted at: http://www.goliat.ro/

+ Light your fire. AMSAT-UK posted news about the STRaND-1 smart phone amateur radio CubeSat Plasma Propulsion Thruster. This system will be the first propulsive technology to provide very precise attitude control and pointing. Read the full article at: http://www.uk.amsat.org/6039

+ The BBC TV Newsnight show covered Clyde Space and UKube-1 in a recent airing. UKube-1 is a 3U CubeSat being designed and produced by Clyde Space for the UK Space Agency. UKube-1 is the UK�s first CubeSat and will fly a total of 6 independent payloads. UKube-1 will carry a set of AMSAT-UK FUNcube boards providing a 435/145 MHz linear transponder and BPSK telemetry beacon. Watch the BBC episode at: http://www.uk.amsat.org/5983

+ Know when to duck ... NASA Jet Propulsion Labs has an on-line tool (with web, telnet, and e-mail interfaces) called the HORIZONS system which can be used to generate ephemerides for solar-system bodies. The Near-Earth Object Human Space Flight Accessible Targets Study (NHATS) and the HORIZONS system will allow prediction of the passage of Near Earth Asteroids. (These are scientific tools but offer a significant learning opportunity for citizen scientists.) Check out http://neo.jpl.nasa.gov/nhats/ - and - http://neo.jpl.nasa.gov/cgi-bin/nhats
  HORIZONS access is at: http://ssd.jpl.nasa.gov/?horizons

+ Echolink SATCHAT net control Vince Waelti, K9TSU announced the new schedule of the on-line net. SATCHAT will meet on the AMSAT Server on Echolink 1900-2030 hours CDT (UTC-5) on the first, third, and fifth Saturdays of each month. A few upcoming dates for the net: April 7, April 21, May 5, May 19, June 2, June 16. All interested amateur radio operators are invited to check in.

+ Watch the launch of ESA's ATV Edoardo Amaldi on an Ariane 5 rocket from Europe's Spaceport in Kourou, French Guiana, on March 23: http://www.spaceref.com/news/viewpr.html?pid6517

+ Check out this linked image. All those tiny points of light aren't stars; they're entire galaxies, seen by the European Southern Observatory's VISTA survey telescope located at the Paranal Observatory in Chile. ESO's UltraVISTA survey revealed over 200,000 distant galaxies: http://tinyurl.com/VISTA-galaxies (UniverseToday.com)

+ Using state-of-the-art deep sea sonar, a team says they have found the Apollo 11 engines lying 14,000 feet below the surface. Plans to attempt to raise one or more of them from the ocean floor are under study. It is unkown yet what condition these engines might be in because they hit the ocean at high velocity and have been in salt water for more than 40 years. A short article is posted at: http://nasawatch.com/archives/2012/03/jeff-bezos-to-a.html

+ Yuri's (VE3/UT1FG/MM) ship was the first foreign ship to dock in Toronto for the 2012 shipping season. The event is celebrated in a ceremony and the captain is crowned with a 150 year old Beaver Hat on the ship. Yuri should be in Thunder Bay on April 1st. He expects to be there for several days. The next destination is Puerto Rico. Watch on YouTube: http://tinyurl.com/UT1FG-TorontoHat (via John, K8YSE)

[ANS thanks everyone for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

Primary and secondary school students are eligible for membership at one-half the standard yearly rate. Post-secondary school students enrolled in at least half time status shall be eligible for the student rate for a maximum of 6 post-secondary years in this status. Contact Martha at the AMSAT Office for additional student membership information. And with that please keep in mind the ham who produced a theatrical performance about puns. Reviews said it was a play on words.

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM

```
From 1617031906298987929
X-Google-Thread: fcc6e,9e4e0546575f0f9f,start
X-Google-NewGroupId: yes
X-Google-Thread: 11480d,9e4e0546575f0f9f,start
X-Google-NewGroupId: yes
X-Google-Thread: 108122,9e4e0546575f0f9f,start
X-Google-NewGroupId: yes
X-Google-Thread: 10bf43,9e4e0546575f0f9f,start
X-Google-NewGroupId: yes
X-Google-Thread: 10e8ad,9e4e0546575f0f9f,start
```

```
X-Google-NewGroupId: yes
X-Google-Thread: 10b9c8,9e4e0546575f0f9f,start
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X-Google-Attributes:
gid4baf9708d4,gid7221ecd0f7,gidd7f5508063,gide721ae2bf6,gid8f86f75953,gida4a23d5f6
3,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Received: by 10.68.232.169 with SMTP id tp9mr3472585pbc.6.1333260004406;
        Sat, 31 Mar 2012 23:00:04 -0700 (PDT)
MIME-Version: 1.0
Path: r9ni5351pbh.0!nntp.google.com!news2.google.com!news.glorb.com!news-
out.readnews.com!transit3.readnews.com!panix!panix2.panix.com!not-for-mail
From: rram@panix.com (rec.radio.amateur.moderated Admin)
Newsgroups:
rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.rad
io.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amat
eur.space,rec.radio.info
Subject: Crossposting Permitted to rec.radio.amateur.moderated
Supersedes: <radio/ham-radio/moderated/crossposting-1-1330585201@panix.com>
Followup-To: poster
Date: 1 Apr 2012 02:00:02 -0400
Organization: rec.radio.amateur.moderated Moderation Team
Lines: 47
Approved: RRI Admin <rec-radio-info-request@panix.com>
Distribution: world
Expires: 04 May 2012 02:00:01 -0000
Message-ID: <radio/ham-radio/moderated/crossposting-1-1333260001@panix.com>
Reply-To: rec-radio-amateur-moderated-request@panix.com
(rec.radio.amateur.moderated Admin)
NNTP-Posting-Host: panix2.panix.com
X-Trace: reader1.panix.com 1333260002 12393 166.84.1.2 (1 Apr 2012 06:00:02 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 1 Apr 2012 06:00:02 +0000 (UTC)
Summary: Short reminder for unmoderated newsgroups that crossposting is permitted
Keywords: FAQ, ham, amateur, radio, moderated, unmoderated, crossposting,
permitted

Posted-By: auto-faq 3.3.2 beta (PGPMoose V2.0, Perl 5.005)
Archive-name: radio/ham-radio/moderated/crossposting
Revision: 1.2 2011/11/02 04:08:53
Posting-Frequency: posted monthly
URL: http://www.panix.com/~rram/usenet/rram/index.html

Changes followed by "|".

After a 30-day public discussion and feedback period to gauge reader
opinions in March of 2009:

http://groups.google.com/group/rec.radio.amateur.moderated/browse_thread/thread/
d7d337db35f23326

the rec.radio.amateur.moderated Moderation Team had decided to consider       |
amending its charter, and permit limited simultaneous crossposting to
```

```
rec.radio.amateur.moderated and one other unmoderated
amateur-radio-related discussion newsgroup.  After a successful trial        |
period (90 days, through early July 2009), we decided to adopt this          |
change permanently.                                                          |
```

Approved rec.radio.amateur.* newsgroups are those that are currently listed in the latest version of the "List of Big Eight Newsgroups" which is crossposted monthly to news.announce.newgroups, news.groups, and news.lists.misc.

Approved alt.radio.amateur.* and alt.ham-radio.* newsgroups are those that have been created consistent with the suggestions in "So You Want to Create an Alt Newsgroup" at:

  http://www.faqs.org/faqs/alt-creation-guide/

Approved regional hierarchy newsgroups are those that contain either "radio.amateur" or "ham-radio" in their names, including uk.radio.amateur and aus.radio.amateur.misc.

We will make every reasonable effort to keep our list of approved newsgroups up-to-date. In case we have overlooked any, and a submission is rejected in error as a result, the rejected submitter can E-mail us at our administrative contact address (in the signature at the bottom of this article, and the default Reply-To for the rejection message) requesting that it be added, and that the article be approved. We may still choose to reject articles crossposted to any alt.* newsgroup with an inappropriate name, including obscene language, embedded name-calling, or encouragement of unlawful conduct.

Please direct any comments, questions, or criticisms to rec-radio-amateur-moderated-request@panix.com.

```
From 3580884634267326975
X-Google-Thread: 107ada,d3564133b180d316,start
X-Google-NewGroupId: yes
X-Google-Thread: 11480d,d3564133b180d316,start
X-Google-NewGroupId: yes
X-Google-Thread: 10e8ad,d3564133b180d316,start
X-Google-NewGroupId: yes
X-Google-Thread: 114aac,d3564133b180d316,start
X-Google-NewGroupId: yes
X-Google-Thread: 10b9c8,d3564133b180d316,start
X-Google-NewGroupId: yes
X-Google-Attributes:
gida3e752f117,gid7221ecd0f7,gid8f86f75953,gid9e586c3d78,gida4a23d5f63,domainid0,pu
blic,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Received: by 10.68.202.168 with SMTP id kj8mr6583122pbc.1.1333380610257;
        Mon, 02 Apr 2012 08:30:10 -0700 (PDT)
MIME-Version: 1.0
Path: r9ni10446pbh.0!nntp.google.com!news1.google.com!news.glorb.com!news-
```

out.readnews.com!transit3.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: SWPC.Webmaster@noaa.gov
Newsgroups:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.shortwave,rec.radio.info
Subject: Weekly Highlights of Solar and Geomagnetic Activity, 26 March - 01 April 2012
Followup-To:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.shortwave
Date: Mon, 2 Apr 2012 11:30:09 EDT
Organization: NOAA Space Weather Prediction Center
Lines: 68
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <20120402153001.5A19433C6F@panix2.panix.com>
NNTP-Posting-Host: panix6.panix.com
X-Trace: reader1.panix.com 1333380609 22985 166.84.1.6 (2 Apr 2012 15:30:09 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Mon, 2 Apr 2012 15:30:09 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to   rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to   rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump

:Product: Weekly Highlights and Forecasts
:Issued: 2012 Apr 02 1304 UTC
Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center
Product description and SWPC contact on the Web
# http://www.swpc.noaa.gov/weekly.html
#
Weekly Highlights and Forecasts
#
Highlights of Solar and Geomagnetic Activity
26 March - 01 April 2012

Solar activity was at mostly low levels during the period. Region 1451 (N17, L=306, class/area Cro/20 on 30 March), which is thought to be old Region 1429, produced a C7 x-ray event on 29 March, the largest event of the period. No other significant flares or associated CMEs occurred.

No proton events were observed at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit ranged between normal and moderate levels off and on throughout the period.

Geomagnetic field activity began the period at quiet levels on 26 March and the first half of 27 March. Beginning around 0900 UTC on 27 March, conditions increased to unsettled levels over the next 12 hours, as the result of a sustained period of southward Bz near -13nT. Shortly prior to 1800 UTC, a transition in polarity (SSBC) was observed at the onset of weak Coronal Hole (CH) high speed stream, with the NOAA planetary network of ground magnetometers recording active levels over the next 9 hours so, ending at 0600 UTC on 28 March. Individual high latitude stations recorded minor storm levels simultaneously. From midday 28 March through the end of the period on 01 April, geomagnetic activity remained at quiet levels.

Forecast of Solar and Geomagnetic Activity
02 April - 28 April 2012

Solar activity is expected to be at very low to low levels throughout the period with a slight chance for M-class flare activity.

No proton events are expected at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to be at normal to moderate levels from 02 April through 13 April. Flux values are forecast to increase to high levels on 14 April and persist through 18 April, as the result of CH high speed stream effects. Flux values are expected to return to normal and moderate levels on 19 April, and remain so through the duration of the period.

Geomagnetic field activity is expected to begin the period at mostly quiet conditions and remain so through 03 April. On 04 April, quiet to unsettled conditions are expected as a small positive polarity CH is expected to move into a favorable position for a day or so. Predominately quiet conditions are expected again from 05 -10 April. On 11 April, high speed stream effects from recurrent negative polarity CH are forecast to bring unsettled and active conditions at mid latitudes and possible minor storm levels at high latitudes. This activity is expected to persist for 3 to 4 days. From 15 April through 23 April, conditions are expected to return to predominately quiet levels. A recurrent positive polarity CH is anticipated on 24 - 25 April, and is expected to increase activity to unsettled conditions. Mostly quiet geomagnetic conditions are expected from 26 April through the end of the period.

```
From -3707980607420555550
X-Google-Thread: 10e8ad,d7caa36ed5c3f512,start
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
```

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Received: by 10.68.235.4 with SMTP id ui4mr10002550pbc.3.1333473623031;
        Tue, 03 Apr 2012 10:20:23 -0700 (PDT)
Path: r9ni14462pbh.0!nntp.google.com!news1.google.com!volia.net!news2.volia.net!
feed-A.news.volia.net!newsfeed.utanet.at!newsfeed1.swip.net!news.astraweb.com!
border6.a.newsrouter.astraweb.com!not-for-mail
From: Chris Steyaert <observations@rmob.org>
Newsgroups: rec.radio.amateur.space,sci.astro.amateur
Subject: Radio Meteor Obs. Bull. March 2012
Date: Tue, 03 Apr 2012 19:20:21 +0200
Message-ID: <d9cmn7h1b3jubh1aetpre0r49qm76uvrrn@4ax.com>
X-Newsreader: Forte Agent 5.00/32.1171
MIME-Version: 1.0
Lines: 14
Organization: Unlimited download news at news.astraweb.com
NNTP-Posting-Host: deb1117a.news.astraweb.com
X-Trace: DXC=DU^<ngQBgiG0O6dPiicVTIL?
0kYOcDh@J\;EUAhjO1]Mj]0;i98`0UN;H2[Dh2O0^JeM7IG_Q>@oOi_=YE6RTP=OOk5<V]A<_KKI;179Yd
ImhD
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
```

Radio Meteor Observation Bulletin No. 224 of March 2012 (87 K) is available now as

http://www.rmob.org/rmobtext/rmob1203.txt

More information and the visual presentation of the hourly forward scatter counts can be found on

http://www.rmob.org

Chris

```
From -2878776399494760111
X-Google-Thread: 107ada,8abe4ef521589756,start
X-Google-NewGroupId: yes
X-Google-Thread: 11480d,8abe4ef521589756,start
X-Google-NewGroupId: yes
X-Google-Thread: 10e8ad,8abe4ef521589756,start
X-Google-NewGroupId: yes
X-Google-Thread: 114aac,8abe4ef521589756,start
X-Google-NewGroupId: yes
X-Google-Thread: 10b9c8,8abe4ef521589756,start
X-Google-NewGroupId: yes
X-Google-Attributes:
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blic,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Received: by 10.68.227.230 with SMTP id sd6mr7423129pbc.8.1333985407986;
```

```
        Mon, 09 Apr 2012 08:30:07 -0700 (PDT)
MIME-Version: 1.0
Path: r9ni36958pbh.0!nntp.google.com!news1.google.com!
newsfeed2.dallas1.level3.net!news.level3.com!panix!rri.panix.com!robomod!not-for-
mail
From: SWPC.Webmaster@noaa.gov
Newsgroups:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.shor
twave,rec.radio.info
Subject: Weekly Highlights of Solar and Geomagnetic Activity, 02 - 08 April 2012
Followup-To:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.shor
twave
Date: Mon, 9 Apr 2012 11:30:05 EDT
Organization: NOAA Space Weather Prediction Center
Lines: 63
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <20120409153001.6AE5E33C94@panix2.panix.com>
NNTP-Posting-Host: panix6.panix.com
X-Trace: reader1.panix.com 1333985405 11844 166.84.1.6 (9 Apr 2012 15:30:05 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Mon, 9 Apr 2012 15:30:05 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
```

```
:Product: Weekly Highlights and Forecasts
:Issued: 2012 Apr 09 1221 UTC
# Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center
# Product description and SWPC contact on the Web
# http://www.swpc.noaa.gov/weekly.html
#
#                Weekly Highlights and Forecasts
#
```

Highlights of Solar and Geomagnetic Activity
02 - 08 April 2012

Solar activity was at very low to low levels. Region 1450 (N16, L=324, class/area Esi/180 on 06 April) produced 4 C-class flares including a C1/Sf at 2110 UTC on 05 April with associated Type II (360 km/s) and Type IV radio sweeps along with a partial halo coronal mass ejection (CME) first seen in SOHO/LASCO C2 imagery at 05/2125 UTC. Region 1450 also produced several C-class flares from 04 to 05 April; the largest, a C3/1f at 1624 UTC on 05 April. Region 1452 (N18, L=285, class/area Dsi/040 on 04 April) was also responsible for a C2 flare that occurred at 1708 UTC on 07 April. Two filament eruptions were observed. The first was a filament eruption near N26E14 first observed in SOHO/LASCO C2 imagery beginning at 0224 UTC on 02 April. The CME was partially Earth-directed; however the majority of the ejecta were northerly. The second filament eruption occurred between 1825 - 1900 UTC on 07 April in the northwest quadrant near Region 1451 (N17, L=306, class/area Cro/020 on 30 March). The associated CME had an approximate plane of sky speed of 690 km/s with the majority of the ejecta directed southwest of the Earth.

No proton events were observed at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit ranged between normal and moderate levels.

Geomagnetic field activity was quiet to unsettled during the period, with the sole exception of a single active period between 09-12 UTC on 05 April as the result of sustained southward Bz.

Forecast of Solar and Geomagnetic Activity
09 April - 05 May 2012

Solar activity is expected to be at very low to low levels throughout the period.

No proton events are expected at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to be at normal to moderate levels from 09-13 April. Flux values are forecast to increase to high levels from 14-18 April, due to CH high speed stream effects. Values should decrease to normal/moderate levels again for 19 April through 05 May.

Geomagnetic field activity is expected to begin the period at quiet to unsettled levels, and remain so from 09 April through 15 April, due to the combination of two anticipated CME arrivals from filament eruptions as well as anticipated CH effects. Conditions are expected to recover to mostly quiet levels from 16-22 April, before increasing to unsettled levels on 23-24 April. This increase is forecast as the result of an expected recurrent negative polarity coronal hole. Mostly quiet levels are anticipated from 25 April through the end of the period on 05 May.

```
From -13229664789023617
X-Google-Thread: 10e8ad,44886d01e9d75963,start
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII
Received: by 10.68.233.69 with SMTP id tu5mr182455pbc.6.1333993954858;
        Mon, 09 Apr 2012 10:52:34 -0700 (PDT)
```

MIME-Version: 1.0
Path: r9ni37330pbh.0!nntp.google.com!news2.google.com!news1.google.com!newsfeed2.dallas1.level3.net!news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-099 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Mon, 9 Apr 2012 13:52:34 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 378
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000001cd1679$85a77310$90f65930$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
X-Trace: reader1.panix.com 1333993954 5769 166.84.1.6 (9 Apr 2012 17:52:34 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Mon, 9 Apr 2012 17:52:34 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to   rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to   rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us

AMSAT NEWS SERVICE
ANS-099

ANS is a free, weekly, news and information service of AMSAT North
America,
The
Radio Amateur Satellite Corporation. ANS reports on the activities of a
worldwide group of Amateur Radio operators who share an active interest
in
designing, building, launching and communicating through analog and
digital
Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

```
*********************************************************************
* Volunteers are needed to help at the AMSAT booth at Dayton. Gould  *
* WA4SXM, is looking for volunteers to help man the AMSAT booth dur- *
* ing the 2012 Hamvention. People are needed all 3 days for 2 hour   *
* shifts. Please send the days and times you are available to help   *
* as well as how many shifts you are willing to work via e-mail to   *
* wa4sxm at amsat.org.                                               *
* Monitor http://www.amsat.org/amsat-new/hamvention/2012/Dayton.php  *
* for the latest AMSAT at Dayton news and developments               *
**********************************************************************
```

In this edition:

* Fox-1 Project Educational Goals Align With NASA ELaNa Requirements
* AMSAT-NA Board of Directors Nominations
* EPFL Announces Nanosat Ion Drive - To The Moon on 100 mL of Fuel
* European ATV-3 Edoardo Amaldi Arrives at ISS & Performs Reboost
* California Students Contact ISS Astronaut
* Satellite Shorts From All Over

SB SAT @ AMSAT $ANS-099.01
ANS-099 AMSAT News Service Weekly Bulletins

AMSAT News Service Bulletin 099.01
From AMSAT HQ SILVER SPRING, MD.
April 8, 2012
To All RADIO AMATEURS
BID: $ANS-099.01

Fox-1 Project Educational Goals Align With NASA ELaNa Requirements

Project ELaNa, NASA's "Educational Launch of NanoSat" managed by the Launch Services Program at the Kennedy Space Center, announced on February 10 that the AMSAT Fox-1 cubesat has been selected to join the program. AMSAT will work with NASA in a collaborative agreement where NASA will cover the integration and launch costs of satellites deemed to have merit in support of their strategic and educational goals.

In an article published in the AMSAT Journal, AMSAT Vice-President of Engineering, Tony Monteiro, AA2TX noted that meeting NASA's educational goals for Science, Technology, Engineering, and Math (STEM) was the cornerstone in the successful acceptance of Fox-1 into the ELaNa project.

Fox-1 continues AMSAT's long record of success as an all-volunteer organization providing access to space communications for students in a curriculum setting as well the private citizen.

The Fox-1 communication package provides a learning and techological stepping-stone using commonly available amateur radio equipment. Students gain first-hand experience in setting up and operating equipment, orbital prediction, communication to distant places, and growth in overall space literacy. In the classroom, Fox-1 will allow schools, teachers, and students to actively participate in space technology with a unique experimental hands-on learning approach that includes communicating through a satellite in orbit.

All of the Fox-1 experiment and telemetry data will be collected and stored on our internet server and made publicly available for use in the classroom and shared with the CubeSat community.

In addition to mentoring university student cubesat mission teams, AMSAT satellites have also hosted university experiments aboard our spacecraft. In addition to the communications package, Fox-1 will host an experimental payload developed as a capstone project at Penn State University. The Penn State project will have impact on future CubeSat systems as the students design, construct, and orbit an attitude experiment based on a 3-axis micro-electro-mechanical gyroscope.

Fox-1 Project Reviews

The Fox-1 Team participated in a Merit Review and Feasibility Review with a panel including education and industry experts at the Doctorate level, a developer of 29 satellites, and directors of research.

The results of the Fox-1 Merit Review found:

+ AMSAT "nailed" the NASA education requirements of the NASA Education Strategic Coordination Framework and the NASA Education Implementation Framework. In fact, AMSAT has a history of space education that pre-dates most university programs.

+ The Fox-1 program will be accessible to an entire classroom or school with only the teacher or outside volunteer requiring an amateur radio license.

+ The archive of telemetry data collected during actual space flight will prove valuable in future educational projects that have yet to be imagined.

The results of the Fox-1 Feasibility Review found:

+ While AMSAT relies on an all-volunteer development team the tremendous depth and experience of the Fox-1 team far exceeds the capability of a typical CubeSat team. AMSAT has developed its satellites this way for 40 years and has never missed a launch.

+ AMSAT does not rely on critical technology for flight and leverages our experience from prior successful missions:

  o Fox-1 is designed to operate in sunlight without batteries once the battery system fails. This applies lessons learned from AO-51 and ARISSat-1 operations.

  o In case of IHU failure Fox-1 will continue to operate its FM repeater in a basic, 'zombie sat' mode, so that the repeater remains on-the-air.

- o Fox-1 is designed as the immediate replacement for AO-51. Its U/V (Mode B) transponder will make it even easier to work with modest equipment.

- o From the ground user's perspective, the same FM amateur radio equipment used for AO-51 may be used for Fox-1.

AMSAT's Fox-1 project timeline is based on targeting a launch in the second half of 2013. NASA will determine on which flight each of the Project ELaNa CubeSats fly. They have updated their CubeSat Launch Initiative web page including AMSAT's participation at:
http://www.nasa.gov/directorates/heo/home/CubeSats_initiative.html

[ANS thanks the Fox-1 Team for the above information]

AMSAT-NA Board of Directors Nominations

It is time to submit nominations for the upcoming open seats on the AMSAT-NA Board of Directors. A valid nomination requires either one current Member Society, or five current individual members in good standing, to nominate an AMSAT-NA member for the position.

Three directors and two alternate directors have terms expiring this year. The director seats open for election are held by Tom Clark, K3IO; Lou McFadin, W5DID; and Gould Smith, WA4SXM. The alternate director seats open for election are held by Mark Hammond, N8MH and Patrick Stoddard, WD9EWK.

The three nominees receiving the highest number of votes will be seated as regular board members with two year terms. The two nominees receiving the next highest number of votes will be seated as alternate directors for one year.

Written nominations, consisting of names, calls and individual signatures, should be mailed to: AMSAT-NA, 850 Sligo Ave #600, Silver Spring, MD, 20910. They must be received no later than June 15th. No other action is required.

Nominations may also be made by electronic means including e-mail, FAX, or electronic image of a petition. Electronic petitions should be sent to MARTHA@AMSAT.ORG or faxed to 301-608-3410, and also must be received by June 15th. If using any electronic submission, there is a second, verifying step:

> ELECTRONIC SUBMISSIONS WITHOUT THIS SECOND, WRITTEN VERIFICATION ARE NOT VALID UNDER THE EXISTING AMSAT-NA BYLAWS. A verifying traditional written petition MUST be received at the AMSAT-NA office at the above address within 7 days following the close of nominations.

[ANS Thanks AMSAT Secretary Alan Biddle, WA4SCA for the above information]

EPFL Announces Nanosat Ion Drive - To The Moon on 100 mL of Fuel

An article posted on space-travel.com reported the EPFL University in Switzerland announced the first prototype of a new, ultra-compact motor that will allow small satellites to journey beyond Earth's orbit. (See: http://tinyurl.com/EPFL-IonMotor)

EPFL said the MicroThrust ion motor will be capable of reaching the Moon using just a tenth of a liter of fuel. The complete thruster weighs just a few hundred grams and is specifically designed to propel small (1-100 kg) satellites, which it enables to change orbit around the Earth and even voyage to more distant destinations - functions typically possible only for large, expensive spacecraft.

Instead of a combustible fuel, the new mini motor runs on an "ionic" liquid, in this case the chemical compound EMI-BF4, which is used as a solvent and an electrolyte. It is composed of electrically charged molecules (like ordinary table salt) called ions, except that this compound is liquid at room temperature. The ions are extracted from the liquid and then ejected by means of an electric field to generate thrust. This is the principle behind the ionic motor: fuel is not burned, it is expelled.

After six months of acceleration, the microsatellite's speed increases from 24,000 km/h, its launch speed, to 42,000 km/h. The acceleration is only about a tenth of a millimeter per square second, which translates into 0-100 km/h in 77 hours. But in space, where there is no friction to impede motion, gentle but steady acceleration is the way to go.

"We calculated that in order to reach lunar orbit, a 1-kg nanosatellite with our motor would travel for about six months and consume 100 milliliters of fuel," explains Muriel Richard, a scientist in EPFL's Swiss Space Center.

A video about the MicroThrust has been posted at:
http://www.youtube.com/watch?feature�ayer_embedded&v�lSI_l5g4M

[ANS thanks Space-Travel.com for the above information]

European ATV-3 Edoardo Amaldi Arrives at ISS & Performs Reboost

After a successful launch on March 23, the heaviest cargo ship ever has arrived and docked to the International Space Station. The 20-ton European ATV-3 cargo ship, named "Edoardo Amaldi" after the Italian physicist and spaceflight pioneer, made a "smooth and gentle" docking on March 28. It delivered 7 tons of food, drinking water, clothing, oxygen, spare parts and fuel for the 6-member ISS crew.

A video of the docking with ISS can be viewed at:
http://www.youtube.com/watch?feature�ayer_embedded&v�rM-1F4jdo

On Saturday, March 31 the ATV reboosted the space station's orbit to 389.8 km. The ATV's thrusters ran for 351 seconds, increasing ISS velocity by 1.0 m/s and boosting average altitude by 1.73 km. This is a standard test performed as soon as possible after docking.

The successful test burn means that ATV is ready for a series of larger planned reboosts (the first expected on 5 April) and to conduct debris avoidance manoeuvres when necessary.

Read more on-line at:
http://tinyurl.com/ISS-ATVBoost1 (space-travel.com)
http://tinyurl.com/ISS-ATVBoost2 (space-travel.com)

An article posted on spaceflightnow.com on April 2 reports that the huge cargo freighters, weighing more than 20 tons fully loaded, will stop flying in 2014 when the fifth resupply craft delivers equipment to the International Space Station. ESA member states decided to discontinue the program after briefly considering redesigning the throw away cargo craft to return hardware in a hardened re-entry capsule.
Read the full article on-line at:
http://spaceflightnow.com/news/n1204/02atvfuture/

The ESA published a new video on their youtube channel showing ESA astronaut Andr� Kuipers and cosmonaut Oleg Kononenko opening the hatch to the ATV and begin unloading the cargo. See:
http://www.youtube.com/watch?feature�ayer_embedded&v�RrisDldqM

[ANS thanks Space-Travel.com and SpaceFlightNow.com for the above information]

California Students Contact ISS Astronaut

The amateur radio club at California Polytechnic State University, San Luis Obispo, California arranged for an Amateur Radio on the International Space Station (ARISS) contact for elementary school students, 4H-club members and Scouts on Tuesday, March 27. The connection was made by telebridge station AH6NM in Hawaii.

Approximately 150 students were in attendance. Local news station KSBY and the Cal Poly newspaper Mustang Daily covered the event; NASA-TV replayed the contact audio on March 28. The ARISS event complemented the science fair held to get students interested in Science, Technology, Engineering and Mathematics (STEM). To view the article, see:
http://mustangdaily.net/radio-club-makes-contact-with-international-space-station/

and the news clip:
http://www.ksby.com/videos/cal-poly-connects-with-outer-space/

[ANS thanks Carol, KB3LKI, for the above information]

Satellite Shorts From All Over

+ Education and Technology Program Director Mark Spencer, WA8SME will try to activate W1AW on AO-27 on April 10 for the 1830Z pass. Fastest QSL is via his callbook address.

+ The 50 MHz and Up Group has issued the first call for papers for the 2012 Microwave Update Conference to be held October 18-21 in Santa Clara, California. For more information on submitting papers as well as all other aspects of the conference please go to: http://www.microwaveupdate.org

+ The International Space Station Benefits for Humanity brochure is a collection of in-depth descriptions about benefits from research on the space station. The benefits outlined serve as examples of the space station's potential as a ground breaking scientific research facility. This collection was developed collaboratively by the members of the Canadian Space Agency, European Space Agency, Japan Aerospace Exploration Agency, NASA and the Russian Federal Space Agency. To view the brochure, visit http://tinyurl.com/NASA-Brochure (nasa.gov)

+ A NASA Educator's Guide about Rockets is available on-line at: http://tinyurl.com/NASAForEducators (nasa.gov)

+ Bob, WB4APR noted a need for an Australian Amateur Astronomer and HAM operator in Canberra on 4-6 June 2012. Assistance is needed to support a science team of students from the USA to observe the last transit of Venus this century in Canberra. We want a local Australian Ham to be there to see if we can use ham radio and the speed of light to share observations with our sister team in Japan (and any other observation sites). Interested individuals for this historic event, contact WB4APR@amsat.org

+ Tom Medlin, W5KUB, known for his live webcasts from the Dayton Hamvention and Huntsville Hamfest will also broadcast from the Memphis FreeFest on Saturday, April 14 between 0900-1500 CDT (UTC-5). Tom says, "This is a small hamfest but we will have a few prize drawings during the broadcast. All you need to enter the drawing is to be in our chatroom when the drawings are announced." The internet video feed and the chatroom can be found at: http://w5kub.com. This page streams previously recorded video from Dayton when live broadcasts are not airing.

+ The next Hudson Valley Satcom net date is Thursday, April 12 at 8:00 PM EDT (UTC -4) on the 146.970 MHz repeater, and also on the N2EYH-L Echolink node. More info: http://www.hvsatcom.org/ (via Stu, WA2BSS)

[ANS thanks everyone for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

Primary and secondary school students are eligible for membership at one-half the standard yearly rate. Post-secondary school students enrolled in at least half time status shall be eligible for the student rate for a maximum of 6 post-secondary years in this status. Contact Martha at the AMSAT Office for additional student membership information.

73,
This week's ANS Editor,
Lee McLamb, KU4OS

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From -684130046008788104
X-Google-Thread: 10e8ad,ac938406c8e30141,start
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,domainid0,public,usenet
X-Google-Language: ENGLISH,CP1252
Received: by 10.68.125.233 with SMTP id mt9mr9645480pbb.5.1334040515936;
        Mon, 09 Apr 2012 23:48:35 -0700 (PDT)
Path: r9ni39334pbh.0!nntp.google.com!news1.google.com!postnews.google.com!
glegroupsg2000goo.googlegroups.com!not-for-mail
From: jeremydale.thomposon@gmail.com
Newsgroups: rec.radio.amateur.space
Subject: Join the Australasia Satellite Forum 2012
Date: Mon, 9 Apr 2012 23:48:35 -0700 (PDT)
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Organization: http://groups.google.com
Lines: 31
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Mime-Version: 1.0
X-Trace: posting.google.com 1334040515 18152 127.0.0.1 (10 Apr 2012 06:48:35 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Tue, 10 Apr 2012 06:48:35 +0000 (UTC)
Complaints-To: groups-abuse@google.com
Injection-Info: glegroupsg2000goo.googlegroups.com; posting-host=114.198.128.110;
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User-Agent: G2/1.0
Content-Type: text/plain; charset=windows-1252
Content-Transfer-Encoding: quoted-printable

16 April 2012=20

The Heritage Room Westin Hotel, Sydney=20

The annual Australasia Satellite Forum will once again draw satellite leade=
rs from the Australasian region to Sydney for the one-day satellite forum. =
The forum will promote dialogue between world and domestic leaders in the s=
atellite industry and encourage players in the industry to address, discuss=
 and debate issues, latest technologies and demand in the Australasian regi=
on.=20

NewSat=92s CEO, Adrian Ballintine, will join other satellite operators on t=
he Supply v Demand =96 Shaping Australasia=92s satellite footprint panel, d=
iscussing=20

=96 NBN impact on commercial business=20

=96 Industry consolidation and new operators=20

=96 Future investment in Australasia by operators and service providers=20

=96 Drivers and challenges HDTV/ IPTV/ FTA/ OTT=20

=96 Mobility=20

NewSat=92s CTO, David Ball, will moderate The role and capabilities of firs=
t responder communications in disaster zones Q&A.=20

NewSat=92s executive team will be attending the forum. If you would like to=
 meet with Adrian, David or the team, send an email at events@newsat.com or=
 call +61 3 9674 4688.


From 4142945995843711267
X-Google-Thread: 10e8ad,5b0af890954345e,start
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,domainid0,public,usenet
X-Google-Language: ENGLISH,CP1252
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        Wed, 11 Apr 2012 23:41:11 -0700 (PDT)
Path: r9ni46808pbh.0!nntp.google.com!news1.google.com!postnews.google.com!
glegroupsg2000goo.googlegroups.com!not-for-mail
From: jeremydale.thomposon@gmail.com
Newsgroups: rec.radio.amateur.space
Subject: NewSat provides Ka-Band Capacity Across the Globe
Date: Wed, 11 Apr 2012 23:41:10 -0700 (PDT)
Organization: http://groups.google.com
Lines: 24
Message-ID: <23352851.66.1334212870672.JavaMail.geo-discussion-forums@pbckz3>
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Mime-Version: 1.0
X-Trace: posting.google.com 1334212871 318 127.0.0.1 (12 Apr 2012 06:41:11 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Thu, 12 Apr 2012 06:41:11 +0000 (UTC)
Complaints-To: groups-abuse@google.com
Injection-Info: glegroupsg2000goo.googlegroups.com; posting-host=114.198.128.110;
 posting-account=GXKRXgkAAADmZG-uae2nxmlbXVWtbeC2
User-Agent: G2/1.0
Content-Type: text/plain; charset=windows-1252
Content-Transfer-Encoding: quoted-printable

Ka-band is the next generation of satellite technology. It delivers high in=
tensity spot beams, enabling faster speeds and more cost-effective end-user=
 solutions. As Ku-band supplemented C-band in the =9190s, Ka-band is the lo=
gical successor of Ku-band in the future and will evolve into the delivery =
mechanism of choice for emerging markets and high demand regions throughout=
 the world.=20

=95 Higher bandwidths and speeds =96 =93more bits per hertz=94=20

=95 Smaller end-user antennas, enabling mobility and rapid deployment=20

=95 More cost-effective terminal equipment=20

=95 Higher frequencies, enabling frequency re-use=20

=95 More efficient support of high bandwidth applications for demanding mil=
itary, resources and government environments=20

=95 Less congested than Ku- and C-band=20

Learn more about how NewSat's Global Satellite Solutions can help your indu=
stry:=20

http://www.newsat.com/Solutions/solutions.html


From -5622964110869541765
X-Google-Thread: 10e8ad,9056254520c17a6f,start
X-Google-NewGroupId: yes
X-Google-Thread: 10b9c8,9056254520c17a6f,start
```

```
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,gida4a23d5f63,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII
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        Sat, 14 Apr 2012 18:14:16 -0700 (PDT)
MIME-Version: 1.0
Path: r9ni57219pbh.0!nntp.google.com!news2.google.com!
newsfeed2.dallas1.level3.net!news.level3.com!panix!rri.panix.com!robomod!not-for-
mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-106 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sat, 14 Apr 2012 21:14:16 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 678
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <001901cd1aa5$0e12ede0$2a38c9a0$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
X-Trace: reader1.panix.com 1334452456 17114 166.84.1.6 (15 Apr 2012 01:14:16 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 15 Apr 2012 01:14:16 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
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AMSAT NEWS SERVICE
ANS-106

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

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**********************************************************************
* Volunteers are needed to help at the AMSAT booth at Dayton. Gould  *
* WA4SXM, is looking for volunteers to help man the AMSAT booth dur- *
* ing the 2012 Hamvention. People are needed all 3 days for 2 hour   *
* shifts. Please send the days and times you are available to help   *
* as well as how many shifts you are willing to work via e-mail to   *
* wa4sxm at amsat.org.                                               *
* Monitor http://www.amsat.org/amsat-new/hamvention/2012/Dayton.php  *
* for the latest AMSAT at Dayton news and developments               *
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In this edition:
- New Features at the AMSAT Booth at Dayton 2012
- Silent Key: Dee Interdonato, NB2F
- April 19 California Flabob Airport ARISS Contact
- UT1FG/MM and K8YSE Enjoy Eyeball QSO Aboard Ship
- NASA-TV Plans Coverage of April 17 Washington DC Shuttle Fly Over
- Mexico Satellite Activation for IARU Celebrating 50 Years in Space
- Satellite Beacon Mission Suggested for Asteroid Apophis
- Russia to Build Nuclear Space Engine by 2017
- India's Atharva Satellite Ground-Station Inauguration
- CubeSat TURKSAT-3USAT in the Press
- Cuba Satellite Group (GROS) Hosts Country-wide Events
- Satellite Shorts From All Over

SB SAT @ AMSAT $ANS-106.01
ANS-099 AMSAT News Service Weekly Bulletins

AMSAT News Service Bulletin 106.01
>From AMSAT HQ SILVER SPRING, MD.
April 15, 2012
To All RADIO AMATEURS
BID: $ANS-106.01

New Features at the AMSAT Booth at Dayton 2012

The 2012 Dayton Hamvention, sponsored by the Dayton Amateur Radio Association will be held this year on May 18-20, 2012. AMSAT will occupy the same booths (444-449) in Ball Arena, right across from the ARRL area and just inside the door from the Satellite Demonstration area. Plan to visit all of the AMSAT activities!

The AMSAT booth will feature AMSAT Engineering, new publications, new apparel, amateur satellite hardware and software. The AMSAT Forum will be on Saturday May 19.

All of the latest AMSAT at Dayton information is posted on-line at:
http://www.amsat.org/amsat-new/hamvention/2012/Dayton.php

Engineering

We will have an engineering model of the 1U Cubesat Fox, the operational ARISSat prototype, Fox telemetry display and the Penn State student experiment for Fox.

New Publications

2012 Getting Started with Amateur Satellites
2012 Laminated Frequency Card

New Apparel

White golf shirt with AMSAT Fox logo
White baseball cap with AMSAT Fox logo
Tee shirt with Fox satellite design and Fox logo

Hardware

ELK Antennas and optional covers
LVB Tracker boxes

Software

Latest version of SatPC32

If you renew your AMSAT membership at the AMSAT booth you will receive an AMSAT insulated stainless steel coffee mug.

AMSAT Hotel

The cutoff date to book a room with the AMSAT group is April 20. The hotel is the Country Inn and the cost of the room (with 2 Queen Beds) is $99. If you are interested in staying with the AMSAT at Dayton, please call Martha at the AMSAT Office at 301-589-6062.

AMSAT/TAPR Friday Night Banquet

AMSAT/TAPR Banquet on Friday night, May 18 is one of the main AMSAT activities during the 2012 Hamvention at Dayton.

AMSAT is pleased to announce that Howard Long, G6LVB will be the featured speaker for the evening event. Howard will be talking about his FUNcube Dongle, the 64 - 1700 MHz Software Defined Receiver. This innovative USB device is the size of a thumbdrive and has an SMA antenna socket. Multiple SDR control and display software programs can be used with the FUNcube Dongle.

Banquet tickets will not be sold at the AMSAT booth during the Hamvention so reservations must be made through the AMSAT Store:
http://www.amsat-na.com/store/item.php?id0158
Tickets are $30 apiece.

ARISS Mentor Introduction at Dayton 2012

AMSAT and ARRL are teaming up during the 2012 Hamvention to recruit new ARISS (Amateur Radio on the International Space Station) Technical Mentors and Ground Station Operators.

Friday and Saturday (May 18 & 19) at 4pm in the ARRL stage area

AMSAT Vice President for Educational Relations Mark Hammond N8MH will explain the need for additional ARISS Technical Mentors and Ground Station Operators and the requirements and responsibilities needed to help provide a reliable conversation between astronauts and selected schools or groups.

Technical Mentors serve as an advising and coordinating liaison between NASA, the school or group making the ARISS contact, and the Ground Station Operators, who set up the satellite station at the contact location. We encourage anyone interested in helping make future school contacts with the ISS successful to please attend.

AMSAT to Facilitate Student Satellite Contacts

AMSAT is encouraging all students attending the 2012 Dayton Hamvention to come by the Satellite Demonstration Area just outside of the Ball Area entrance and make a contact using the amateur satellites. There will be AMSAT volunteers there to explain how to make the contacts and during actual satellite passes will try to get as many students as possible to complete actual contacts. There are lists of satellite pass times in the satellite demonstration area and at the AMSAT booth.

[ANS thanks Gould Smith, WA4SXM for the above information]

Silent Key: Dee Interdonato, NB2F

AMSAT has received the sad news of the passing of Dee Interdonato, NB2F on April 8, 2012. Dee was one of the editors of the AMSAT News Service and an AMSAT New Jersey Area Coordinator. He was the main point of contact for many amateurs as he covered most of the New Jersey hamfests on behalf of AMSAT. Dee was one of the mainstay volunteers for AMSAT at the Dayton Hamvention for years. He also gave satellite presentations for the clubs in New Jersey. Dee helped where ever he could, often behind the scenes. He worked on QSL duties for SAREX, ARISS, and ARISSat-1 missions so many of you have likely received a card from him.

Dee was a well known and respected mentor for amateur satellite opertors, helping them understand the technical details and make successful radio contacts via satellites.

Dee's other amateur radio activities in Northern New Jersey included the Bergen Amateur Radio Association, Bergen County CERT, AMSAT, and he was the treasurer of the Bergen County FM Association. Dee, and his wife Ginny, N2EYN always participated in the Dayton Hamvention and AMSAT Symposiums.

Dee was the principal trumpet player for the Rutherford Community Band and a member of the Waldwick and Westwood Community Bands. He was also an avid hunter and a member of the Association of New Jersey Rifle and Pistol Clubs.

Before retiring he was the supervisor of the Radio Shop of the Port Authority of NY/NJ.

The funeral was held on Friday, April 13 in his hometown of Lodi, New Jersey. In lieu of flowers memorial contributions may be made to the Vietnam Veterans of America, 8719 Colesville Rd., Suite 100, Silver Spring, Maryland 20910 or AMSAT, 850 Sligo Road, Suite 600, Silver Spring, MD 20910.

Dee Interdonato, NB2F obituary:
http://tinyurl.com/NB2F-Obituary (santangelofuneralhome.com)

Guestbook for Dee Interdonato, NB2F
http://tinyurl.com/NB2F-Guestbook (santangelofuneralhome.com)

[ANS thanks the AMSAT Office for the above information]

April 19 California Flabob Airport ARISS Contact

ARISS technical support volunteer, Clint Bradford, K6LCS said this week that "It's a Go!" for students at the The Tom Wathen Center at the historic Flabob Airport in Jurupa Valley (Riverside County), California, for an amateur radio call from the International Space Station on Thursday morning, April 19, 2012 at 10:03AM PDT (UTC-7). The link will be via telebridge contact via IK1SLD providing the radio link to space and then connecting via phone lines with the students.

The Tom Wathen Center was chosen for this Amateur Radio on the International Space Station (ARISS) contact during an open application process in the Fall of 2011. The 10-minute live question-and-answer session will take place in Flabob�s Hanger 16A conference center, and is free to the public.

To prepare for the ARISS contact, Flabob students are studying the history and mission of space station and mission control, rocket fabrication, astronaut selection and training, and mission control and station operations along with radio technology and communication topics.

An amateur radio station is operational onboard the International Space Station. Most astronauts have amateur radio licenses and operate the onboard station to contact radio amateur ground stations in their free time. Per an agreement with multiple space agencies involved with building the ISS, ARISS prepares and implements educational contacts for students - more than 120 in 2011 alone. Amateur radio operators on the ground volunteer their radio station, expertise and time to make the conversations between the students and astronauts happen. The ARISS international working group is supported by the national radio amateur societies AMSAT-NA and the American Radio Relay League (ARRL).

This ARISS contact is one in a series with educational organizations in the U.S. and abroad to improve teaching and learning in science, technology, engineering and mathematics. It is an integral component of Teaching From Space, a NASA Education office. The office promotes learning opportunities and builds partnerships with the education community using the unique environment of human spaceflight.

Clint published all of the details on the Flabob Project Web site: http://www.iss-flabob.com.

The City of Jurupa Valley will declare the week of April 15-21 'Space Week' at their April 19, 2012 regular city council meeting acknowledging the efforts of the students at The Tom Wathen Center's Flabob Airport Preparatory Academy, who have spent months learning about space exploration while preparing for their amateur radio contact with the ISS.

[ANS thanks Clint Bradford, K6LCS for the above information]

UT1FG/MM and K8YSE Enjoy Eyeball QSO Aboard Ship

John Papay, K8YSE had a unique experience on Easter Sunday, April 8 when he got the opportunity for an eyeball QSO with Captain Yuri Bodrov, UT1FG/MM aboard the MV Barnacle traveling from Thunder Bay, Ontario, Canada on Lake Superior en route to Puerto Rico via the Great Lakes and St. Lawrence Seaway.

Yuri has been activating wet grids as UT1FG/MM operating this year from the MV Barnacle as he sails the seas between Europe, South America, the Caribbean, and North America. Last year Yuri captained the MV Mottler on a similar sea voyage when many first met him operating on the air via the amateur radio satellites. He is the Captain of the state-of-the-art seagoing vessel with 10,000 horsepower plant.

John had an idea that he could drive from his QTH to watch as the MV Barnacle passed through the Welland Canal connecting Lake Erie and Lake Ontario. The ship would have to pass through eight locks which might put John and Yuri within shouting distance.

On Saturday night John and Yuri chatted on 144.200 sideband as the MV Barnacle sailed from the Detroit River and across Lake Erie en route toward Lake Ontario. Yuri estimated his arrival at the Welland Canal would be around 0800. John hit the road from his QTH at about 0315 Sunday morning, passed customs to enter Canada and then drove to the Lake Erie entrance to the Canal.

Sunday morning John met up with Kevin, VE3RCN/VA3OR in Port Colborne, Ontario. Radio contact was established with Yuri on 146.520 MHz. The ship came in sight along the Lake Erie shore. John and Kevin were within waving distance. As the MV Barnacle entered Lock 8 the shore party was close enough to talk with Yuri aboard the ship.

As the ship cleared the lock John and Kevin lost contact for a short time. They were able to catch up with Yuri at the next lock. As the new Canal Pilot was boarding ship John got an invitation to come aboard. John boarded as the ship lowered to the dock level. He told what happened next, "A minute later I was on the bridge with Captain Yuri UT1FG. Finally I was able to meet a guy that I've been working on the satellites in hundreds of water grids since April 2009!"

A tour of the ship included a visit to Yuri's cabin, one level below the bridge. His quarters are quite nice and private. This is where he operates with his IC706, manually tuning the radio and doing a great job at that! The power supply from HP1CQ sat on the table in the corner and a computer running Orbitron is on the other side.

Yuri now has an ELK antenna installed (thanks to the efforts of Rick, WA4NVM). It is mounted on a manually rotatable mast that goes up from the bridge, starboard side, directly above his cabin. The ELK is tilted up at 15 degrees and was just installed on the way back from Thunder Bay. A CJU antenna is mounted on the crossboom next to the ELK. A vertical for 2 meters is on a separate mast above those antennas. Until this season Yuri only used the 2 meter vertical for transmit and receive. The CJU improved things greatly and the ELK takes it to a new level. Yuri plans to install SatPC32 when he has more free time on the open sea; passing through the St. Lawrence Seaway keeps him and his crew very busy.

John said he sailed with Yuri until Lock 2 where it was time to get back ashore. Kevin, VE3RCN/VA3OR and his XYL Donna, VE3WIZ were waiting and gave John a ride back to his car, 30 miles away in Port Colborne.

John wrote, "I want to thank Kevin VA3OR/VE3RCN and his wife Donna, VE3WIZ, for spending their Easter Sunday hosting my visit to the Canal. I'm sure they had better things to do but they decided to take me all around and make my visit a memorable one. I hope they enjoyed the day as much as I did." And a big thanks to Master Yuri Bodrov and his crew for their hospitality. It was an experience that very few will ever have."

Yuri plans to work the water grids on the way south to San Juan, Puerto Rico where he is due on April 20. The next port-of-call for Yuri and the crew of MV Barnacle is yet to be determined. Yuri will be the Captain until the end of May, 2012. If you work Yuri on the air QSL via his manager UX0FY (on qrz.com).

[ANS thanks John Papay, K8YSE for the above information]

NASA-TV Plans Coverage of April 17 Washington DC Shuttle Fly Over

NASA's 747 Shuttle Carrier Aircraft (SCA) with space shuttle Discovery mounted atop will fly approximately 1,500 feet above various parts of the Washington, D.C. metropolitan area on Tuesday, April 17.

The flight, in cooperation with the Federal Aviation Administration, is scheduled to occur between 10 and 11 a.m. EDT (UTC-4). NASA Television and the agency's web site will provide live coverage. NASA TV is streamed on the web at: http://www.nasa.gov/ntv.

The exact route and timing of the flight depend on weather and operational constraints. However, the aircraft is expected to fly near a variety of landmarks in the metropolitan area, including the National Mall, Reagan National Airport, National Harbor and the Smithsonian's Udvar-Hazy Center. When the flyover is complete, the SCA will land at Dulles International Airport.

Discovery completed 39 missions, spent 365 days in space, orbited the Earth 5,830 times, and traveled 148,221,675 miles. NASA will transfer Discovery to the National Air and Space Museum to begin its new mission to commemorate past achievements in space and to educate and inspire future generations of explorers.

For more information about NASA's transfer of space shuttles to museums, visit: http://www.nasa.gov/transition

A NASA YouTube video shows the flight of the Shuttle Carrier Aircraft:
http://www.youtube.com/watch?feature�ayer_embedded&v�jbcnqCmXk

Following the event NASA Goddard Space Flight Center in Maryland will publish a photo slideshow on the Goddard homepage: http://www.nasa.gov/goddard and on Goddard's Flickr page: http://www.flickr.com/groups/discoverygoddard/.

[ANS thanks NASA and Perry Klein, W3PK for the above information]

Mexico Satellite Activation for IARU Celebrating 50 Years in Space

Members of the Grupo DXXE in Mexico will use the special call 6H6IARU on 160-6 meter and via satellite from different grids between April 13 to April 18. This station marks the founding of the International Amateur Radio Union (IARU) 87 years ago and the "World Amateur Radio Day" on April 18.

This year's World Amateur Radio Day has the motto "Celebrating 50 Years in Space" with the first launches of amateur radio satellites OSCAR 1 on December 12, 1961, and OSCAR 2 on June 2, 1962.

QSOs with 6H6IARU count for the IARU Region 2 award, several FMRE awards and the DXXE award. QSL via N7RO, LoTW.
See also: http://www.dxxe.org

[ANS thanks DXNL 1775 DX Newsletter for April 11, 2012 for the above information]

Satellite Beacon Mission Suggested for Asteroid Apophis

This week UniverseToday.com carried an article about a Russian mission proposal to send a satellite with a radio beacon to asteroid 99942 Apophis to better determine its trajectory and find out how big of a threat it might be to Earth in passes the asteroid will make in 2036 and 2068.

Apophis is approximately 270 meters (885 ft) in diameter, the size of two-and-a-half football fields.

Apophis is expected to make a record-setting � but harmless � close approach to Earth on Friday, April 13, 2029 when it comes no closer than 29,450 km from Earth (18,300 miles). The Russian Academy of Sciences said, "From the technical point of view, the mission could be started for implementation around 2015".

Read the full story at:
http://tinyurl.com/Apophis-Beacon (UniverseToday.com)

[ANS thanks UniverseToday.com for the above information]

Russia to Build Nuclear Space Engine by 2017

In contrast to last week's ANS news item about Switzerland's EPFL University's MicroThrust ion motor which will be capable of reaching the Moon using just a tenth of a liter of fuel, a news report published on Space-Travel.com this week says a Russian Megawatt-class nuclear propulsion system for long-range manned spacecraft is under development.

Russian space officials believe that nuclear engines for interplanetary spaceships are a very promising area, as solar power is too weak to be used as a power source at distances beyond Earth's orbit.

The megawatt power system may be the power plant producing the high energy required for an ion thrust system capable of powering manned spacecraft to the moon, Mars, and interplanetary destinations.

NASA started a program to develop a nuclear propulsion system in 2003, and spent several hundred million dollars on the project before cutting funding.

Read the full story at:
http://tinyurl.com/Megawatt-Engine (space-travel.com)

[ANS thanks Space-Travel.com for the above information]

India's Atharva Satellite Ground-Station Inauguration

The Atharva College of Engineering, University of Mumbai in India has inaugurated the Atharva Satellite Ground-Station. Currently, they are associated with the Indian Institute of Technology, Bombay for the communication, telemetry and data acquisition of their Pratham student satellite project.

The primary aim of the Atharva Satellite Ground-Station team at the is to establish a center for the development of wireless technology and satellite communication in Mumbai. During the journey of the last three and half years, we have grown from fundamental research phase to the current phase where we have achieved full operational status.

During the formal inauguration on March 15, 2012 VU2MUE used VO-52 to communicate over a distance of 850 Miles with VU2YEP located in Delhi, the Indian Capital.

The Atharva Satellite Ground-Station Team has an objective of providing communication and telemetry services for the various satellite projects undertaken by the student satellite teams around the globe.

Student blog posted at: http://acegroundstation.blogspot.com/
Photos posted at: http://tinyurl.com/Atharva-Symposium
APRS Location: http://aprs.fi/#!call�2FAtharva&timerange600

[ANS thanks the Atharva Satellite Ground-Station Team for the above information]

CubeSat TURKSAT-3USAT in the Press

The AMSAT-UK web has a story about the Ankara based Amateur Satellite Technology Association (TAMSAT) which has received more press coverage for their new CubeSat TURKSAT-3USAT. The 3USAT is expected to launch near the end of 2012. (See: http://www.uk.amsat.org/6288)

IARU coordinated frequencies are:

+ Transponder uplink: 145.940-145.990 MHz
+ Transponder downlink: 435.200-435.250 MHz
+ CW beacon: 437.250 MHz

This cubesat is a three unit CubeSat developed for SSB/CW communications in low earth orbit. The VHF/UHF transponder and all other subsystems, except the stabilization, are doubled for redundancy. Where possible, both COTS systems and in-house development is employed.

The energy is provided using lithium polymer batteries together with super capacitors. Satellite stabilization is accomplished using passive magnetic attitude control system with hysteresis rods. The satellite is to include a de-orbiting system which will make it re-enter the atmosphere following completion of its life time.

Read the newspaper story in Google English at:
http://tinyurl.com/3USAT-PressStory

[ANS thanks AMSAT-UK for the above information]

Cuba Satellite Group (GROS) Hosts Country-wide Events

Raydel, CM2ESP reported April 13-14 was a busy weekend for Cuba's recently founded "Grupo de Radioaficionados para Operaciones Satelitales" (GROS). The events were coordinated in commemoration of the first human manned spaceflight by Yuri Gagarin the April 12, 1961, the inaugural launch of NASA's Space Shuttle on the same day of 1981 and the celebration of the 87th Anniversary of the founding of the International Amateur Radio Union, IARU, on April 18, 1925. This year the IARU theme for "World Amateur Radio Day" on April 18 is "Celebrating 50 Years in Space" with the first launches of amateur radio satellites OSCAR 1 on December 12, 1961, and OSCAR 2 on June 2, 1962.

On Friday night Hector CO6CBF hosted a talk about amateur radio satellite on Cuba's Pico San Juan 2m repeater. He gave a presentation about GROS, a brief history of amateur radio satellites, and a talk about current operational satellites. Additional topics included station requirements and equipment and operating practices. Arnaldo

Coro, CO2KK, Cuba's second ham in perform a satellite QSO and Cuba's first in conduct a EME QSO was a special guest.

On Saturday morning Pavel CO7WT gave a talk at Camag�ey City Amateur Radio Club. His presentation also included information about GROS, satellite status, equipment and operating techniques, orbital mechanics, and a discussed how to set up a APRS/Beacon Packet station using the ISS digipeater.

[ANS thanks Raidel Abreu Espinet, CM2ESP for the above information]

Satellite Shorts From All Over

+ AMSAT's Fox-1 Paypal donation widget went over the $6000 mark on Saturday, April 14! Thank you for your generous support.

+ The NASA SkyWatch 2.0 Java applet shows when visible ISS passes worldwide are happening. The applet runs in your browser window.
  1. http://spaceflight.nasa.gov/realdata/sightings/
  2. Click Start Applet (some systems may require Java upgrade)
  3. When Skywatch starts click on your continent.
  4. Then click on nearby city. Use the buttons to select how you want your data reported.

+ The SA AMSAT Space Symposium will be held at the University of KwaZulu-Natal on Saturday 12 May. The theme of the symposium is 50 years of amateur satellites celebrating the launch of OSCAR 1 fifty years ago. The full program and registration details are at: http://www.amsatsa.org.za/SpaceSymposium2012.htm

+ It is time to submit nominations for the upcoming open seats on the AMSAT-NA Board of Directors. Three directors and two alternate directors have terms expiring this year. The director seats open for election are held by Tom Clark, K3IO; Lou McFadin, W5DID; and Gould Smith, WA4SXM. The alternate director seats open for election are held by Mark Hammond, N8MH and Patrick Stoddard, WD9EWK. The AMSAT front page news at http://www.amsat.org has the instructions to submit your nominations.

+ The Ararat Shrine Hambash in Kansas City, Missouri will be on Saturday, April 21, 2012. Appearing again at this year's Hambash will be Hams in Space, the team of Randy Schulze - KD�HKD, Eddy Paul - KY�F, and Jeremy Widner, K�PDX, formerly known as the KC Amateur Radio Satellite Team. They've dusted off and revised their informative and entertaining presentation on how to work the FM Amateur Radio Satellites for the 2012 Season. The Hambash will be held at 5100 Ararat Drive, Kansas City, Missouri 64129. More information: http://www.hambash.com. http://HamsInSpace.com explains how you can schedule the Hams in Space Team to provide their informative and entertaining presentation to your amateur radio group.

+ As the ISS orbited 240 miles (386 km) above Volgograd, the Expedition 30 crew captured a photo of Moscow at night. Check it out at: http://www.universetoday.com/94503/moscow-at-night/

+ The night lights of Ireland and England are visible in this photo from the ISS: http://www.spaceref.com/news/viewsr.html?pid@545

+ While we're looking out of the window on the ISS ... Soyuz and Progress spacecraft are still lit by the setting sun as the International Space Station flies over Europe at night: http://www.spaceref.com/news/viewsr.html?pid@557

+ NASA Goddard Space Flight Center posted a movie captured by the STEREO spacecraft showing coronal mass ejections slamming into Mercury. In this movie the Sun is just to the left of the field of view and the Earth would be millions of miles to the right. Mercury is the bright object moving from right to left against the background of stars near the center of the images. Watch the rough weather on the first rock from the sun at: http://www.flickr.com/photos/gsfc/6915235340/

+ Enjoy a photo tour of the cockpit of the space shuttle Endeavour on the SpaceFlightNow web at: http://spaceflightnow.com/shuttle/sts134/poweron/

+ Keep Spaceport Gagarin in mind for future vacation plans. Russia is building the facility as a part of entertainment resort Vazuza and Yauza Park, being built in Smolensk region, 200 kilometers from Moscow. It will host museums, entertainment facilities, exhibitions and tours for Russian and foreign guests, especially children. More details at: http://tinyurl.com/Spaceport-Gagarin

+ Southgate ARC site has a news item about a 2007 Japan-Broadcasting Corporation TV report about amateur radio Moonbounce (EME) 8N1EME Big Dish operation. Watch the EME contacts at: http://tinyurl.com/8N1EME-NHK (Southgate)

+ Visit the AMSAT-UK web at http://www.uk.amsat.org/6432 for links to download the free April, 2012 issue of SatMagazine. The student built Hiscock Radiation Belt Explorer (HRBE) amateur radio CubeSat formerly known as Explorer-1 [PRIME] is featured on page 10.

+ Eric Knaps, ON4HF posted NOAA APT satellite pictures that he received with his FunCube dongle at: https://picasaweb.google.com/ON4HF.Eric/NOAAWeatherPictures

[ANS thanks everyone for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

Primary and secondary school students are eligible for membership at one-half the standard yearly rate. Post-secondary school students enrolled in at least half time status shall be eligible for the student rate for a maximum of 6 post-secondary years in this status. Contact Martha at the AMSAT Office for additional student membership information. And with that please keep in mind the memory of ANS Editor Dee Interdonato, NB2F who became a Silent Key this week. This was Dee's week for the bulletins. Take a moment and wish him 73 and offer thanks for all Dee did for AMSAT.

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM

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border3.nntp.dca.giganews.com!border1.nntp.dca.giganews.com!nntp.giganews.com!
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not-for-mail
From: SWPC.Webmaster@noaa.gov
Newsgroups:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.shor
twave,rec.radio.info
Subject: Weekly Highlights of Solar and Geomagnetic Activity, 09 - 15 April 2012
Followup-To:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.shor
twave
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Lines: 83
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <20120416153002.0270C33C94@panix2.panix.com>
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X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Mon, 16 Apr 2012 15:30:06 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
X-Received-Bytes: 5979
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:Product: Weekly Highlights and Forecasts
:Issued: 2012 Apr 16 1335 UTC
# Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center
# Product description and SWPC contact on the Web
# http://www.swpc.noaa.gov/weekly.html
#
#                Weekly Highlights and Forecasts
#
```

Highlights of Solar and Geomagnetic Activity
09 - 15 April 2012

Solar activity was at very low to low levels. Low levels were observed on 09 April and 15 April. Region 1450 (N16, L=324, class/area Esi/180 on 06 April) produced a C2 flare at 09/0122 UTC while Region 1451 (N17, L=306, class/area Cro/020 on 30 March) produced a C3 flare at 09/1244 UTC. Associated with the C3 flare was a Type II Radio Sweep (478 km/s) and a CME first observed in SOHO/LASCO C2 imagery at 09/1325 UTC off the west limb with an estimated plane of sky speed of 767 km/s. Solar activity was at very low levels until 15 April when two low level C-class flares were observed just around the north east limb at 15/0140 UTC and 15/0234 UTC respectively. A faint partial halo CME was also observed beginning at 15/1000 UTC in SOHO/LASCO C2 imagery with the majority of the ejecta directed off the northeast limb. The CME was associated with a B9/Sf flare that occurred at 15/0908 UTC from Region 1459 (S16, L=96, class/area Dai/80 on 15 April). None of the CMEs are expected to be geoeffective.

No proton events were observed at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit was at normal levels on 12 April. Moderate levels were reached on 09, 10 &amp; 11 April and again on 13 April. High levels were reached on 14 &amp; 15 April.

Geomagnetic field activity was at quiet to minor storm conditions with a period of major storming observed at high latitudes. The summary period started with mostly quiet conditions until 12 April. At approximately 12/0300 UTC, solar wind speed began to show a slow rise while the total field (Bt) component of the interplanetary magnetic field (IMF) increased to around 10 nT as a coronal hole high speed stream was moving into a geoeffective position. Solar wind speeds gradually increased to approximately 655 km/s by 13/0848 UTC. The geomagnetic field responded with quiet to active periods on 12 April and active to minor storm periods with an isolated major storm period through mid-day 13 April. By noon on 13 April, solar wind speeds were elevated still around 616 km/s, however the total field had decreased to around 3 nT. Solar wind speed slowly decreased to around 430 km/s by the end of the period. The geomagnetic field was at mostly quiet levels with isolated unsettled to active periods from late on 13 April through the end of the summary period.

Forecast of Solar and Geomagnetic Activity
16 April - 12 May 2012

Solar activity is expected to be very low to low levels with the slight chance for M-class flares during the period.

No proton events are expected at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to begin the period at high levels, and remain so through 18 April. Conditions are forecast to decrease to normal to moderate levels through 10 May, before increasing to high levels again on 11 and 12 May.

Geomagnetic field activity is expected to begin the period at mostly quiet levels and remain so through 19 April. Quiet to unsettled conditions are forecast due to a solar sector boundary crossing (SSBC) anticipated on 20 April, before returning to mostly quiet conditions on 21 and 22 April. Unsettled to active levels are forecast on 23 and 24 April from an expected recurrent coronal hole (CH). Mostly quiet levels are expected to return 25 April through 01 May. Should see unsettled to active conditions on 02, 03, &amp; 04 May as the ambient background solar winds speeds should increase along with more possible southward Bz. Quiet conditions should return 5-8 May, before the return of high speed solar wind from a large negative polarity CH on 9, 10, 11 May, which is forecast to produce unsettled to active conditions and a possible isolated minor storm in the night sector. 12 May should see a return to mostly quiet levels to round out the period.

```
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transit4.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-113 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sat, 21 Apr 2012 21:09:15 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 686
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Message-ID: <000d01cd2024$85d4ce00$917e6a00$@net>
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NNTP-Posting-Date: Sun, 22 Apr 2012 01:09:15 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Type: text/plain;
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Content-Transfer-Encoding: 7bit
Content-Language: en-us
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AMSAT NEWS SERVICE
ANS-113

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

****
* Volunteers are needed to help at the AMSAT booth at Dayton. Gould *
* WA4SXM, is looking for volunteers to help man the AMSAT booth dur- *
* ing the 2012 Hamvention. People are needed all 3 days for 2 hour   *
* shifts. Please send the days and times you are available to help   *
* as well as how many shifts you are willing to work via e-mail to   *
* wa4sxm at amsat.org.   *
* Monitor http://www.amsat.org/amsat-new/hamvention/2012/Dayton.php *
* for the latest AMSAT at Dayton news and developments   *
****

In this edition:
* Schedule of AMSAT Activities at Dayton Hamvention
* May 15 Deadline to Apply for ARRL TI-2 Space in the Classroom Institute
* Five CubeSats in Preparation for July Launch to ISS
* Naval Postgraduate School Develops Multi-CubeSat Deployment System
* Successful ARISS School Contacts with California, Ecuador, and Japan
* Two Months to Field Day - AMSAT FD Rules Posted
* FAA CARSR Radar May Impose Amateur Operating Restrictions on 23cm
* AMSAT-UK on Satellites for World Amateur Radio Day
* UK Will Restrict Use of Amateur Satellite Frequencies During Olympics
* Silent Key - Greg Butler, KI4OTG
* Satellite Shorts From All Over

SB SAT @ AMSAT $ANS-113.01
ANS-113 AMSAT News Service Weekly Bulletins

AMSAT News Service Bulletin 113.01
>From AMSAT HQ SILVER SPRING, MD.
April 22, 2012
To All RADIO AMATEURS
BID: $ANS-113.01

Schedule of AMSAT Activities at Dayton Hamvention

Here are the daily AMSAT activities at the 2012 Hamvention!

Thursday 17 May 2012

+ 10:00 AM - 5:00 PM
  AMSAT Booth Setup at Ball Arena (contact Gould Smith, WA4SXM,
  wa4sxm@amsat.org if you can help during this time).

+ 6:30 PM - 10:00 PM
  The third Annual AMSAT "Dinner at Tickets" party will be held at
  Tickets Pub & Eatery in Fairborn, OH. Food can be ordered from

the menu and drinks (beer, wine, sodas and iced tea) are available at the bar. Directions and coordinates are on the AMSAT Web site. Bring some friends and have a great time the night before Hamvention. Tasty selection of Greek and American food and great company!

Demos Daily on Friday, Saturday, and Sunday for All Available Passes

AMSAT is encouraging all students attending the 2012 Dayton Hamvention to come by the Satellite Demonstration Area just outside of the Ball Area entrance and make a contact using the amateur satellites. There will be AMSAT volunteers there to explain how to make the contacts and during actual satellite passes will try to get as many students as possible to complete actual contacts. There are lists of satellite pass times in the satellite demonstration area and at the AMSAT booth.

Friday 18 May 2012

- 9:00 AM - 6:00 PM at the AMSAT Booth
  AMSAT Booth open for membership renewals, books, new items and information. Outdoor satellite demonstrations right outide the Ball Arena entrance. Engineering area with Fox and ARISSat-1 satellite prototype displays.

- 4:00 PM at the ARRL Stage
  AMSAT and ARRL are teaming up during the 2012 Hamvention to recruit new ARISS (Amateur Radio on the International Space Station) Technical Mentors and Ground Station Operators.
  Friday and Saturday (May 18 & 19) at 4pm in the ARRL stage area AMSAT Vice President for Educational Relations Mark Hammond N8MH will explain the need for additional ARISS Technical Mentors and Ground Station Operators and the requirements and responsibilities needed to help provide a reliable conversation between astronauts and selected schools or groups.

- 6:30 PM - 10:30 PM AMSAT/TAPR Banquet at Dayton 2012
  AMSAT/TAPR Banquet on Friday night, May 18 is one of the main AMSAT activities during the 2012 Hamvention at Dayton.

  AMSAT is pleased to announce that Howard Long, G6LVB will be the featured speaker for the evening event. Howard will be talking about his FUNcube Dongle, the 64 - 1700 MHz Software Defined Receiver.

  Banquet tickets will not be sold at the AMSAT booth during the Hamvention so reservations must be made through the AMSAT Store:
  http://www.amsat-na.com/store/item.php?id=100158
  Tickets are $30 apiece.

Saturday 19 May 2012

- 9:00 AM - 6:00 PM at the AMSAT Booth

AMSAT Booth open for membership renewals, books, new items and information. Outdoor satellite demonstrations right outide the Ball Arena entrance. Engineering area with Fox and ARISSat-1 satellite prototype displays.

- 11:15 AM - 1:30 PM The AMSAT Forum
  Get the latest information about what is going on with AMSAT and its projects. The AMSAT Forum will be held in Forum Room 5.

- 4:00 PM at the ARRL Stage
  AMSAT Vice President for Educational Relations Mark Hammond N8MH will explain the need for additional ARISS Technical Mentors and Ground Station Operators and the requirements and responsibilities needed to help provide a reliable conversation between astronauts and selected schools or groups.

Sunday 20 May 2012

- 9:00 AM - 1:00PM at the AMSAT Booth
  AMSAT Booth open for membership renewals, books, new items and information. Outdoor satellite demonstrations right outide the Ball Arena entrance. Engineering area with Fox and ARISSat-1 satellite prototype displays.

- 1:00PM - 5:00PM at the AMSAT Booth
  Take down and storage of the AMSAT Booth. (contact Gould Smith, WA4SXM, wa4sxm@amsat.org if you can help during this time).

[ANS thanks Gould Smith, WA4SXM for the above information]

May 15 Deadline to Apply for ARRL TI-2 Space in the Classroom Institute

The ARRL Education & Technology Program (ETP) is offering an advanced Teachers Institute (TI-2) session that focuses on space in the classroom. This four-day professional development workshop is sponsored by the Dayton Amateur Radio Association and is held in their location in Dayton, Ohio (July 9-12).

The TI-2 Space curriculum focuses on the nuts and bolts of setting up and operating a satellite ground station. This serves as excellent preparation for a scheduled contact with the ISS through the Amateur Radio on the International Space Station (ARISS) program. But it also provides instruction for continued use of satellites and other man made space assets to explore naturally generated signals, space and a variety of topics.

Thanks to generous assistance from Yaesu USA and Ham Radio Outlet, participants will receive a full ground station that is configured for satellite communications, as well as training on how to set it up and use it to make Amateur Radio contacts and download telemetry data.

To be considered for a seat in TI-2 Space, participants must possess at least a Technician class license at the time off application. ARRL membership is required. Priority for attending the TI-2 Space session will be given to teachers who have developed an educational proposal accepted for participation in the ARISS Program.

This session has a class limit of 8 participants, so apply early! The deadline for the TI-2 Space in the Classroom sessions of the Teachers Institute is May 15.

Full details are posted on the ARRL web at:
http://www.arrl.org/ti-2-space-in-the-classroom

[ANS thanks the ARRL for the above information]

Five CubeSats in Preparation for July Launch to ISS

Five CubeSat teams continue work on preparations for a launch to the International Space Station in the July 18-21, 2012 time frame. These CubeSats will be launched from Tanegashima, Japan aboard the JAXA HTV-3 ISS resupply mission. The CubeSats will be loaded into the J-SSOD deployer on the Japanese Experiment Module, also known as Kibo. They will be deployed with the Kibo robotic arm planned for September, 2012 timeframe.

The five CubeSats include:
+ Raiko
+ We Wish
+ FITSat 1
+ F-1 Vietnam Student CubeSat
+ TechEdSat

RAIKO - Wakayama University, Japan

http://www.astro.mech.tohoku.ac.jp/RAIKO/ (Japanese)

This 2U CubeSat includes experiments for:
+ Earth photography with a fish-eye lens camera
+ Photo tracking during deployment from ISS to measure relative motion.
+ Experimental star sensor
+ Membrane deployment experiment for de-orbit
+ High speed data communication experiment by Ku-band communication equipment:
  o Orbit determination experiment by Doppler frequency measurement of Ku-band beacon.

  - Mobile ground station and global cooperation for reception

FITSAT-1 - Fukuoka Institute of Technology, Japan

http://www.fit.ac.jp/~tanaka/fitsat.shtml

The main mission of this 1U CubeSat will be a demonstration of high speed data transfer from a satellite. A second experiment aboard the satellite involves an attempt at visual tracking from the ground of the high-output LED flash to investigate the possibility of optical communication with satellites. The light from this flash will be received by the ground station equipped with a telescope with photomultiplier linked to a parabolic antenna tracking the 5.8GHz downlink.

Frequencies announced for FITSAT-1:
CW Beacon 437.250 MHz,
FM Data   437.445 MHz,
High speed data 5840.00 MHz.

WE WISH - Meisei Electric Co., Ltd., Japan

http://www.meisei.co.jp/news/2011/0617_622.html

The WE WISH mission plans to investigate the monitoring the global environment from space with the use of an upper atmosphere measurement experiment. This includes GPS technology, and technical proof of concept of a micro infra-red camera. The team has the additional goal of contributing to local technical education through the use of CubeSat ground data acquisition.

F-1 Vietnam Student CubeSat

Vietnamese students in Hanoi plan to orbit the country's first satellite, their amateur radio CubeSat F-1 with the callsign XV1VN. The satellite will carry a low resolution C328 camera and two Yaesu VX-3R transceivers using 145.980 and 437.485 MHz.

- VX-3R1, 437.485 MHz FM downlink:
  - Solar cell power only, operates in sunlight only
  - Output power: max 0.3W, half-wave dipole antenna
  - Morse code beacon (10 chars) using PWM CW every 30 seconds

- VX-3R2, 145.980 MHz FM downlink:
  - Rechargeable battery, operates in dark and sunlight
  - Output power: max 1.0W, half-wave dipole antenna
  - AFSK 1200bps, half duplex, one AX.25 packet every 30 seconds

If the The F-1 web page at: http://fspace.edu.vn is not available the latest news and photos have been posted on the AMSAT-UK web: http://www.uk.amsat.org/5025

TechEdSat - San Jose State University

http://ncasst.org/techedsat.html
http://www.uk.amsat.org/5018

TechEdSat is a 1U CubeSat built by San Jose State University in partnership with NASA Ames Research Center and AAC Microtec. It's mission is to evaluate Space Plug-and-play Avionics (SPA) designed in Sweden by AAC Microtec, and to perform a communications experiment utilizing the Iridium and Orbcomm satellite phone network.

Student hands-on learning opportunities were presented during the International Space Apps Challenge on April 21-22. For this challenge, space hackers implemented a fault-tolerant command and control system, utilizing both the OrbComm and Iridium modems as uplink and downlink. Ground segment of the software includes the ability for a laptop, Apple or Android phone to issue commands to the spacecraft over Iridium/Orbcomm. The students will also be challenged with designing the capability for relaying data received from the spacecraft automatically to Twitter.

TechEdSat has received IARU frequency coordination for its downlink on 437.465 MHz.

[ANS thanks the CubeSat teams, AMSAT-UK, and Mineo Wakita JE9PEL for the above information]

Naval Postgraduate School Develops Multi-CubeSat Deployment System

The Space Systems Academic Group (SSAG) at the US Naval Postgraduate School has developed the NPS CubeSat Launcher or NPSCuL (pronounced NPS-cool). This is an auxiliary payload platform to allow multiple CubeSats to be launched aboard rockets as secondary payload meaning the rocket would be able to carry satellites in onboard space that would otherwise be unused.

NPSCuL can accommodate up to 24 CubeSats in a single ESPA-class [Secondary Payload Adapter] payload volume. Upon reaching the desired orbit spring-loaded doors will release the satellites one-by-one.

First flight is planned for August 2012 which will carry 11 CubeSats for the Operationally Unique Technologies Satellite (OUTSat). This will enable NPS researchers to get one of their own CubeSats into space. The NPS STARE CubeSat is part of a collaborative effort between NPS and the Lawrence Livermore National Laboratory (LLNL) on a proof-of-concept mission to observe other satellites and help deter mine threats posed by space debris.

The NPS has published a press release available on-line at:
http://tinyurl.com/CubeSat-NPSCuL (www.nps.edu).

The AMSAT-UK web also provided coverage of this story at:

http://www.uk.amsat.org/6375

[ANS thanks the US Naval Postgraduate School for the above information]

Successful ARISS School Contacts with California, Ecuador, and Japan

Academia Cotopaxi in Quito, Ecuador

On Friday, April 13, an ARISS) contact was held between students from Academia Cotopaxi in Quito, Ecuador and on-orbit astronaut Don Pettit, KD5MDT via station IK1SLD in Italy. Cotopaxi, an international American school with students in grades pre-K to 12, has a strong relationship with Ecuador's astronaut, Ronnie Nader, and the Ecuadorian Civilian Space Agency (EXA). It utilized several NASA resources in its curriculum covering space, technology and radio. Approximately 500 students and visitors were present for the event.

Saitama Scout Council Japan

Scouts from the Troop 2nd & 3rd Iruma Group, Saitama Scout Council, Scout Association of Japan participated in an ARISS contact on Saturday, April 14. An audience of 70 people, including one magazine representative, turned out for the contact and listened as the Scouts had their questions about living on the ISS answered by on-orbit astronaut Dan Burbank, KC5ZSX. The Scouts have their own radio club, JQ1YWJ and many of the Scouts have been attending amateur radio classes to become licensed.

Flabob Airport Preparatory Academy California

The Flabob Airport Preparatory Academy in Riverside, California had a successful ARISS contact on Thursday, April 19. The telebridge sta tion IK1SLD in Italy provided the radio connection with the ISS. The ARISS contact complemented a comprehensive education plan to pique students' interest in Science, Technology, Engineering and Math (STEM).

After the event, ARISS mentor Clint Bradford, K6LCS declared, "SUCCESS at Flabob Airport this morning! Flight engineer Pettit answered all seventeen of our questions - from fifteen students." There were 211 in the audience, including 120 Flabob students, media, city council members, Gordon West and Don Arnold, and other dignitaries, AND a lot of parents, too!

Media coverage of the Flabob ARISS contact included California's sixth largest daily newspaper, The Press-Enterprise, sent a reporter, videographer, and photographer, the Bob Heil & Gordon West mediacast, Ham Nation, sent a videographer - and the contact will be on an episode of their webcast in the next couple of weeks. Newspaper coverage included the editor and publisher of The Riverside County Record. Clint was interviewed on PBS radio affiliate KVCR. The Inland Empire Television Network videotaped the entire event.

The Press-Enterprise is the region's major newspaper. Links to their video, article, and photographs are posted on ISS-Flabob site blog at: http://www.iss-flabob.com/ISS-Flabob/Blog/Blog.html

Clint invites you to check out http://www.iss-flabob.com since this site created for the ARISS event also offers links and publications on amateur radio, our space programs, ARISS, AMSAT, ARRL, ham radio licensing - and MORE - on the MORE INFO page.

[ANS thanks Carol Jackson, KB3LKI and the Amateur Radio on the International Space Station (ARISS) Status Report for April 16, 2012 and Clint Bradford, K6LCS for the above information]

Two Months to Field Day - AMSAT FD Rules Posted

AMSAT Director Contests and Awards, Bruce Paige, KK5DO reminds you that time of year is once again approaching - Field Day!

Each year the American Radio Relay League (ARRL) sponsors Field Day as an emergency preparedness exercise. The event takes place during a 24-hour period on the fourth weekend of June. For 2012 the event takes place during a 27-hour period between 1800 UTC on Saturday, June 23, 2012 and 2100 UTC on Sunday June 24, 2012. Those who set up prior to 1800 UTC on June 23 can operate only 24 hours.

The Radio Amateur Satellite Corporation (AMSAT) promotes its own version of Field Day for operation via the amateur satellites, held concurrently with the ARRL event.

With the loss of AO-51 and SO-67 field day this year is going to be most challenging. If you are considering ONLY the FM voice satellites like AMRAD-OSCAR-27 or SaudiSat-Oscar-50 for your primary AMSAT Field Day focus: Don't, unless you are simply hoping to make one contact for the ARRL rules bonus points.

The congestion on FM LEO satellites was so intense in prior years that we must continue to limit their use to one-QSO-per-FM-satellite. This includes the International Space Station. You will be allowed one QSO if the ISS is operating Voice. You will also be allowed one digital QSO with the ISS or any other digital, non-store-and-forward, packet satellite (if operational).

If you have worked the satellites on Field Day in recent years, you may have noticed a lot of good contacts can be made on some of the less-populated, low-earth-orbit satellites like VUSat OSCAR-52,Fuji-

OSCAR 29 (may or may not be operational), AMSAT-OSCAR 7. During Field Day the transponders come alive like 20 meters on a weekend. The good news is that the transponders on these satellites will support multiple simultaneous contacts. The bad news is that you can't use FM, just low duty cycle modes like SSB and CW.

The AMSAT Field Day 2012 event is open to all Amateur Radio operators. Amateurs are to use the exchange as specified in ARRL rules for Field Day. The AMSAT competition is to encourage the use of all amateur satellites, both analog and digital.

For the complete listing of the AMSAT Field Day Rules please refer to the documents posted on-line at:
http://www.amsatnet.com/fd2012.doc
http://www.amsatnet.com/fd2012.pdf
Links are also accessible from http://www.amsat.org front page.

[ANS thanks AMSAT Director Contests and Awards, Bruce Paige, KK5DO for the above information]

FAA CARSR Radar May Impose Amateur Operating Restrictions on 23cm

An ARRL bulletin this week noted that the Federal Aviation Administration (FAA) is deploying a new generation of Common Air Route Surveillance Radar (CARSR) that has some implications for the use of the 1240-1300 MHz (23 cm) band by amateurs.

The Amateur Service allocation in this band is on a secondary basis, with aeronautical radionavigation and several other services primary in the United States Table of Frequency Allocations. The FCC rules require that amateur stations operating in the 23 cm band may not cause harmful interference to stations in the radionavigation-satellite service, the aeronautical radionavigation service, the Earth exploration-satellite service or the space research service.

One case of harmful interference in Southern California has been reported. CARSRs are being installed in several dozen locations throughout the country and will use various frequencies in the 1240-1350 MHz range with an occupied bandwidth of about 3 MHz. In the vicinity of the radars, amateur operation may be precluded in a portion of the 23 cm band. The ARRL is in contact with FAA engineers. The ARRL said they anticipate that the constraints on amateur use of the band will be limited to those necessary to protect aviation safety, which of course cannot be compromised.

The bulletin is posted on the ARRL web at:
http://www.arrl.org/news/amateurs-must-protect-new-radars-in-23-cm-band

[ANS thanks the ARRL for the above information]

AMSAT-UK on Satellites for World Amateur Radio Day

Members of AMSAT-UK operated on the amateur radio satellites from the RSGB National Radio Centre at Bletchley Park to celebrate World Amateur Radio Day (WARD) on Wednesday, April 18, 2012.

World Amateur Radio Day commemorates the founding of the International Amateur Radio Union (IARU) on April 18, 1925. This year's theme was "Amateur Radio Satellites: Celebrating 50 Years in Space" in remembrance of the launching of OSCAR 1 on December 12, 1961 and the launch of OSCAR 2 on June 2, 1962.

Those taking part in the event were Jim G3WGM, Dave G4DPZ, Trevor M5AKA, Ciaran M0XTD, Matthew SWL, Clive G3CWV, Carlos G0AKI and Elaine G4LFM. The satellites worked during the day included FO-29 and AO-7 and contacts were made with stations across Europe using the 144 and 430 MHz bands.

The equipment used comprised a Kenwood TS-2000 with WiMo X quads for 144 and 430 MHz, with pre amps and polarisation switches.

Read the rest of this article, along with links to photos and video on-line on the AMSAT-UK web: http://www.uk.amsat.org/6516

[ANS thanks AMSAT-UK for the above information]

UK Will Restrict Use of Amateur Satellite Frequencies During Olympics

Trevor, M5AKA has filed the following notice on the AMSAT-UK web. The Olympic and Paralympic Games will be using almost half of the 430 MHz amateur radio allocation as well as segments of 2.3 GHz and 3.4 GHz during the period June 28 to September 23.

The impact on the Amateur-satellite Service 435-438 MHz allocation has been restricted to 436.25-437.25 MHz. It is understood that the equipment being used in the 430 MHz band will include handheld FM rigs at the hotels, the routes to the venues and the venues themselves.

The UK communications regulator Ofcom has provided details of the areas that need to be protected from RF within the designated frequency ranges. Follow the link to the AMSAT-UK web provided below for the details of the region affected by the restrictions.

Ofcom say the use of radio by Amateurs in the designated areas could cause interference to Games applications; it is also possible that higher power transmissions from outside these areas could cause interference. Consequently, to avoid the risk of interference to Games applications, Ofcom request that Amateurs do not operate within the frequency ranges identified in the areas defined in Annexes A and B, and that Amateurs ensure that any signals that could be received in these areas are negligible. This indicates that the specified frequency ranges should be avoided for a considerable distance outside the designated zones. Clearly a well equipped station on a good site 75 km from the edge of a zone could still put a signal into that area.

Full story on AMSAT-UK web at: http://www.uk.amsat.org/6574

[ANS thanks Trevor, M5AKA and AMSAT-UK for the above information]

Silent Key - Greg Butler, KI4OTG

AMSAT has received the sad news of the passing of satellite operator Greg Butler, KI4OTG of Memphis, Tennessee. Greg had a a heart attack on April 18 and did not survive it. He just turned 48 in February. He is survived by his 18 year old son

Rick Tillman, WA4NVM noted, "Greg was one of the truly nice guys, always polite and there to help. It's been our great pleasure and privilege to know and work with him in the Memphis ham community. He will truly be missed. God bless your soul faithful servant,"

John Papay, K8YSE recalled, "Greg was one of the most courteous operators that I've known. He was active on the birds and enjoyed working new grids. Greg was a gentlemen. We will miss hearing his voice on the birds."

[ANS thanks Rick Tillman, WA4NVM and John Papay, K8YSE for the above information]

Satellite Shorts From All Over

+ It is time to submit nominations for the upcoming open seats on the AMSAT-NA Board of Directors. Three directors and two alternate directors have terms expiring this year. The director seats open for election are held by Tom Clark, K3IO; Lou McFadin, W5DID; and Gould Smith, WA4SXM. The alternate director seats open for election are held by Mark Hammond, N8MH and Patrick Stoddard, WD9EWK. The AMSAT front page news at http://www.amsat.org has the instructions to submit your nominations.

+ The 2012 AMSAT Annual Meeting and Symposium will be held at the Holiday Inn, Orlando (Florida) Airport on October 26-28, 2012. Watch for the Call for Papers and more details as they become available. If you are interested in a Monday Trip (October 29) to the Kennedy Space Center please contact Martha via email: martha at amsat.org. The trip will include a round trip bus from the hotel and entrance to the Space Center. The cost will be about $100. This is a wonderful experience for those that haven't been and for those that have been multiple times. We need to get an idea of how many will participate to select the correct bus.

+ If you worked KP4FD as members of the Puerto Rico Field Day Group celebrated the IARU "World Amateur Radio Day" on April 18 you can receive an electronic certificate by sending a request via WP3GW. The group will also provide confirmations will be via eQSL and LoTW.

+ The next Hudson Valley Satcom net date is Thursday, April 26 at 8:00 PM EDT (UTC -4) on the 146.970 MHz repeater, and also on the N2EYH-L Echolink node. More info: http://www.hvsatcom.org/ (via Stu, WA2BSS)

+ Technical papers are solicited for presentation at the 31st Annual ARRL and TAPR Digital Communications Conference on September 21-23, 2012 in Atlanta, Georgia. Please send papers to: Maty Weinberg, ARRL, 225 Main St., Newington, CT 06111 or via e-mail to: maty@arrl.org.

+ UniverseToday posted a collection of photos of the Shuttle Discovery final flight aboard NASA's 747 Shuttle Carrier Aircraft during its Washington DC overflight and delivery to the Smithsonian Udvar-Hazy Center in Chantilly, Virginia. See:
http://www.universetoday.com/94660/discovery-does-dulles-dc/
Video of the event is posted at: http://tinyurl.com/April17-Discovery
Photos and a video of Discovery's departure from the Kennedy Space Center in Florida are posted at: http://tinyurl.com/Florida-Discovery
NASA Goddard Center photos of the flight over Washington DC are at:
http://www.flickr.com/groups/discoverygoddard/
A time-lapse photo panorama of Discovery's take-off from Florida:
http://spaceflightnow.com/shuttle/sts133/images/pano_full.jpg

+ See how the moon appears to the crew aboard the ISS:
http://www.universetoday.com/wp-content/uploads/2012/04/moon-iss.jpg

+ Students at Drexel University need mentoring in setting up a ground station. If you can help please contact Nick Pugh, K5QXJ via e-mail at quadpugh@bellsouth.net and he will put you in touch with the professor leading the cubesat program.

+ Painstakingly assembled from over 150,000 digital photos taken over the course of eight months, this stunning time-lapse video of aurora-filled Arctic skies is the latest creation by photo/ video artist Ole C. Salomonsen. Take a moment, turn up the sound, sit back and enjoy the show! Play this too much and the XYL is going to wonder what you're up to in the shack:
http://tinyurl.com/Celestial-Lights (universetoday.com)

[ANS thanks everyone for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

Primary and secondary school students are eligible for membership at one-half the standard yearly rate. Post-secondary school students enrolled in at least half time status shall be eligible for the student rate for a maximum of 6 post-secondary years in this status. Contact Martha at the AMSAT Office for additional student membership information. And with that please keep in mind how fast we are going as the Earth orbits the sun at an average speed close to 30 km per second. The Sun travels at a speed of 250 km per second, but it still takes 230 million years for it to complete a single revolution of the galaxy.

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM

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X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
```

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:Product: Weekly Highlights and Forecasts
:Issued: 2012 Apr 23 1405 UTC
# Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center
# Product description and SWPC contact on the Web
# http://www.swpc.noaa.gov/weekly.html
#
#                 Weekly Highlights and Forecasts
#
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Highlights of Solar and Geomagnetic Activity
16 - 22 April 2012

Solar activity was at low to moderate levels. Moderate levels were reached on 16 April with an M1.7 flare from Region 1461 (N13, L=070, class/area Hsx/090 on 18 April) that occurred at 1745 UTC. Low levels were observed from 17-22 April. On 18 April, Region 1463 (S26, L=160, class/area Cso/100 on 20 April) produced a C8.9/Sf flare at 1239 UTC with an associated coronal mass ejection (CME) and a C5.3 flare with an associated Type II (est. 621 km/s) and Type IV radio sweeps. On 19 April, a C7.0 flare occurred at 1126 UTC with an associated Type II and Type IV radio sweeps and a non-geoeffective CME off the west limb. This event was likely from old Region 1455 (N06, L=206, class/area Fsi/200 on 16 April). Region 1462 (S25, L=141, class/area Dho/410 on 20 April) produced a C1.8 flare at 1515 UTC with an associated CME on 19 April as well. Only low level C-class flares were observed for the rest of the summary period.

No proton events were observed at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit was at high levels on 16 and 17 April. Moderate levels were observed on 18,19, and 21 April while normal levels were observed on 20 and 22 April.

Geomagnetic field activity was mostly quiet, with brief intermittent periods of unsettled and active levels on several days due to nighttime effects and southward Bz. A solar sector boundary crossing was observed on 20 April, and a weak glancing blow CME occurred on 21 April, again producing unsettled to active periods briefly.

Forecast of Solar and Geomagnetic Activity
23 April - 19 May 2012

Solar activity is expected to be at very low to low levels with the slight chance for M-class flares during the period.

No proton events are expected at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to be at normal to moderate levels from the beginning of the period on 23 April, and persist through 10 May. Flux values are forecast to increase to high levels from 11-14 May due to a coronal hole (CH) high speed stream. From 15 May through the end of the period on the 19th, values are expected to return to moderate or lower levels.

Geomagnetic field activity is expected to begin the period at unsettled and active levels, as the result of a few weak CMEs along with effects from a negative polarity CH. Conditions should settle to mostly quiet levels from 26 April through 08 May, before increasing to active levels with the chance for a minor storm on 09-11 May. Mostly active conditions are expected 14-15 May. The increases in activity are expected from a pair of negative polarity coronal holes. Mostly quiet levels are expected in between the two features on 12 and 13 May, and again from 16-19 May to close out the period.

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From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-115 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Wed, 25 Apr 2012 20:14:00 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 2057
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000101cd2341$711636a0$5342a3e0$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
X-Trace: reader1.panix.com 1335399240 42 166.84.1.6 (26 Apr 2012 00:14:00 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Thu, 26 Apr 2012 00:14:00 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to            rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
```

This report is organized into three (3) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites

SB SAT @ AMSAT W8ISS $WSR-115.S1
WSR 115 Part 1 04/24/2012

AMSAT NEWS SERVICE BULLETIN 115.S1
FROM AMSAT HQ SILVER SPRING, MD, April 24, 2012
TO ALL RADIO AMATEURS
BID: $WSR-115.S1

PW-Sat
Catalog Number:
Launch Date: Febrauary 13, 2012
Launch Site: Kourou, French Guiana

Status: On Orbit

Uplink: 435.020 MHz FM
Downlink: 145.900 MHz DSB

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum2
[03162012]
��DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational
Current Mode: Science Mode - Beacon ONLY

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink: 435.530 to 435.570 MHz

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnumh
[02092011]
��VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05, 2005 0444z
Launch site: Satish Dhawan Space Centre, India

Status: Operational
Current Mode: U/v - Dutch Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.9360 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum0

To know what transponder is switched on please listen for the beacon
that is active. Each transponder has a different beacon.
[03232012]
��SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002 1700z
Launch site: Baikonur, Kazakhstan

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4
Hz. The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10 minute timer.
[02092011]
��FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Operational
Current Mode: V/u (Mode JA)

Voice/CW (Mode JA)
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD

Uplinks: 145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage:
http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
�retURL�atellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's
CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/
fo29cwts.htm
[01122012]
��AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993 0140z
Launch site: Kourou, French Guiana

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[02092011]
��AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974
Launch site: Vandenberg AFB, California, USA

Status: Operational

Current Mode: Alternating between Mode A and B every 24 hours

Uplink: 145.850 to 145.950 MHz CW/USB Mode A

432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz CW
145.972 MHz CW
435.100 MHz CW
2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php
[04242012]
��INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998 0640z (ZARYA module)
Launch sites: Baikonur, Kazakhstan
Kourou, French Guiana
Uchinoura Space Center, Japan
Kennedy Space Center, Titusville, Florida, USA

Status: Operational

Current Active Modes: FM Repeater - OFF
Voice - V/v
BBS - OFF
2m APRS - ON
70cm Digi - ON
SSTV - OFF

Expedition 30/31 Crew (November 2011 - July 2012):

Commander:	Dan Burbank	KC5ZSX
Flight Engineer:	Anton Shkaplerov	
Flight Engineer:	Anatoly Ivanishin	
Flight Engineer:	Oleg Kononenko	RN3DX
Flight Engineer:	Andr� Kuipers	PI9ISS
Flight Engineer:	Don Pettit	KD5MDT

Available Modes and Frequencies:
Digital/APRS:
Worldwide 2m packet uplink: 145.825 MHz FM 1k2
Worldwide 2m packet downlink: 145.825 Mhz FM 1k2
Worldwide 70cm packet downlink: 437.550 Mhz FM 1k2
Worldwide 70cm packet downlink: 437.550 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM

437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
2m Packet Mailbox: RS0ISS-11
2m Digipeater alias: ARISS
70cm Packet Mailbox: RS0ISS-1
70cm Digipeater callsign: RS0ISS
70cm Digipeater alias: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[03302012]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-115.S2
WSR 115 Part 2 04/24/2012

AMSAT NEWS SERVICE BULLETIN 115.S2
FROM AMSAT HQ SILVER SPRING, MD, April 24, 2012
TO ALL RADIO AMATEURS
BID: $WSR-115.S2

XaTcobeo
Catalog Number: 38082
Launch Date: Febrauary 13, 2012
Launch Site: Kourou, French Guiana

Status: Operational

Uplink:
Downlink: 437.365 MHz FFSK with AX.25

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum5
[03162012]
��UniCubeSat
Catalog Number:
Launch Date: Febrauary 13, 2012
Launch Site: Kourou, French Guiana

Status: Operational

Uplink:
Downlink: 437.305 MHz 9k6 bps FSK

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum3
[03162012]
��Robusta
Catalog Number:
Launch Date: Febrauary 13, 2012
Launch Site: Kourou, French Guiana

Status: On Orbit

Uplink:
Downlink: 437.325 MHz 1k2 FM telemetry (data every 1 min, 20 sec. burst)

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum2
[02142012]
��MO-72 MaSat-1
Catalog Number: 38081
Launch Date: Febrauary 13, 2012
Launch Site: Kourou, French Guiana

Status: Operational

Uplink:
Downlink: 437.345 MHz GFSK 625/1250 bps
          437.345 MHz CW

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum6
[03232012]
��Goliat
Catalog Number: 38085
Launch Date: Febrauary 13, 2012
Launch Site: Kourou, French Guiana

Status: Operational

Uplink:
Downlink: 437.485 MHz 1k2 AFSK

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum�
[03162012]
��E-Star
Catalog Number: 38079
Launch Date: Febrauary 13, 2012
Launch Site: Kourou, French Guiana

Status: On Orbit

Uplink:
Downlink: 437.445 MHz 1k2 bps AFSK

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum0
[03232012]

��ALMASat1
Catalog Number: 38078
Launch Date: Februauary 13, 2012
Launch Site: Kourou, French Guiana

Status: On Orbit

Uplink:
Downlink: 437.465 MHz 1k2 bps FSK
2407.850 MHz

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum9
[02212012]
��RS-39 Chibis-M
Catalog Number: 37841
Launch Date: October 30, 2011 10:11:00 UTC
Launch site: Tyuratam (Baikonur Cosmodrome), Kazakhstan

Status: Operational

Uplink:
Downlink:

Beacon: 435.315 MHz CW
435.215 MHz CW

Callsign:

URL:

IARU coordination status page:
[01122012]
��JUNGU
Catalog Number: 37841
Launch Date: October 12, 2011 05:30:00 UTC
Launch site: Satish Dhawan Space Centre, India

Status: On Orbit

Uplink: 145.??? MHz 1k2 (mode?)
Downlink: 437.505 MHz 9k6 (mode?)

Beacon: 437.275 MHz 15 wpm (?) CW

Callsign:

URL: http://www.iitk.ac.in/me/jugnu/index.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum0
[01122012]
��SRMSAT
Catalog Number: 37839
Launch Date: October 12, 2011 05:30:00 UTC
Launch site: Satish Dhawan Space Centre, India

Status: On Orbit

Uplink: 145.900 MHz 1k AX.25 (speed?)
Downlink: 437.500 MHz 2k4 AX.25

Beacon: 437.425 MHz 12 wpm CW

Callsign:

URL: http://srmsat.in/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum1
[01122012]
��HRBE (E1P Explorer 1 [Prime] CubeSat (E1P-U2))
Catalog Number: 37855
Launch Date: October 28, 2011
Launch site: Vandenberg Air Force Base, California, USA

Status: On Orbit

Uplink: 437.305 MHz (???)
Downlink: 437.505 MHz AX.25 (SSB?)

Beacon:

Callsign:

URL: http://ssel.montana.edu/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum6
[01122012]
��M-Cubed
Catalog Number: 37855
Launch Date: October 28, 2011
Launch site: Vandenberg Air Force Base, California, USA

Status: On Orbit

Uplink:
Downlink: 437.485 MHz AX.25

Beacon:

Callsign:

URL: http://umcubed.org/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum!5
[01122012]
��RAX-2
Catalog Number: 37853
Launch Date: October 28, 2011
Launch site: Vandenberg Air Force Base, California, USA

Status: Operational

Uplink:
Downlink: 437.345MHz 9k6 GMSK

Beacon:

Callsign:

URL: http://rax.engin.umich.edu//

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum"1
[03232012]
��AO-71 AubieSat-1
Catalog Number: 37854
Launch Date: October 28, 2011
Launch site: Vandenberg Air Force Base, California, USA

Status: On Orbit

Uplink:
Downlink: 437.475 MHz 1k2 AX.25

Beacon: 437.475 MHz CW

Callsign: KI4NQO

URL: http://www.space.auburn.edu/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum8
[12262011]
��O/OREOS
Catalog Number: 37224
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: On Orbit

Uplink:
Downlink: 437.035 MHZ AX.25

Beacon:

Callsign:

URL: http://www.ooreos.org/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum6
[02092011]
��Rax-1 Radio Aurora Explorer
Catalog Number: 37223
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: On Orbit

Uplink:
Downlink: 437.505 MHz 9k6 GMSK

Beacon:

Callsign: RAX-1

URL: http://rax.engin.umich.edu/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum5
[02092011]
��FO-69 Fastrac-1 Sara Lily
Catalog Number: 37227
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: Operational

Uplink 1: 145.980 MHz 1k2 baud
Uplink 2: 145.825 MHz 1k2 baud
Downlink: 437.345 MHz 1k2 and 9k6 baud

Beacon: 437.435 MHz 1k2 AX.25

Callsign: Fast1

URL: http://fastrac.ae.utexas.edu/index.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum�
[07052011]
��FO-70 Fastrac-2 Emma

Catalog Number: 37380
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: Operational

Uplink 1: 435.025 MHz 1k2 baud
Uplink 2: 437.435 MHz 9k6 baud
Downlink: 145.825 MHz 1k2 and 9k6 baud

Beacon: 145.825 MHz 1k2 AX.25

Callsign: Fast2

URL: http://fastrac.ae.utexas.edu/index.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum�
[12162011]
��StudSat
Catalog Number: 36796
Launch Date: July 12, 2010 0352z
Launch site: Satish Dhawan Space Centre, India

Status: On Orbit

Uplink: 437.505MHz, 9600bps FSK
Downlink: 437.505MHz, 9600bps FSK
Beacon : 437.505MHz,   20bps ASK

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum4
[02092011]
��TIsat-1
Catalog Number: 36799
Launch Date: July 12, 2010 0352z
Launch site: Satish Dhawan Space Centre, India

Status: On orbit

Callsign: HB9DE

Uplink: 145.980MHz FM, AFSK
Downlink: 437.305MHz FM, AFSK
Beacon: 437.305MHz CW

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum8
[02092011]
��SwissCube
Catalog Number: 35932
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Callsign: HB9EG

Beacon(100mw): 437.5050MHz CW
Beacon(1w):   437.5050MHz FSK 1k2bps

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum9
[02092011]
��UWE-2
Catalog Number: 35934
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: In Orbit

Beacon(500mw): 437.3850 MHz AFSK 1k2bps
               437.3850 MHz FSK 9k6bps

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum0
[02092011]
��ITUpsAT1
Catalog Number: 35935
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Beacon(100mw): 437.325MHz CW
Beacon(1w): 437.325MHz 19k2bps

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum3
[02092011]
��BEESAT
Catalog Number: 35933
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Callsign: DP0BEE

Beacon(100mw): 436.000MHz CW
Beacon(500mw): 436.000MHz GMSK 4k8bps
Beacon(500mw): 436.000MHz GMSK 9k6bp
[02092011]
��CP-6
Catalog Number: 35004
Launch Date: May 19, 2009 2355z

Launch site: Wallops Island, Virginia, USA

Status: Operational

Downlink: 437.365 MHz 1k2 AFSK

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum1
[01122012]
��HAWKSAT 1
Catalog number: 35003
Launch Date: May 19, 2009 2355z
Launch site: Wallops Island, Virginia, USA

Status: operational

Downlink: 437.345 MHz ?

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum5
[01122012]
��Pharmasat
Catalog Number: 35002
Launch Date: May 19, 2009 2355z
Launch site: Wallops Island, Virginia, USA

Status: Operational

Downlink: 437.465 MHz 1k2 AFSK

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum�
[02092011]
��ANUSAT
Catalog Number: 34808
Launch Date: April 20, 2009 0115z
Launch Site: Satish Dhawan Space Centre, India

Status: ?

Downlink: 435.000 MHz
Uplink: 145.800 MHz

Telemetry: 137.400 MHz
[02092011]
��SOHLA-1 (ASTRO TECH.)
Catalog Number: 33496
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational

Proposed Frequencies and Modes:

Downlink: 437.505 MHz AFSK/CW
Beacon: 437.505 MHz AFSK/CW

Callsign:

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum1
[02092011]
��KAGAYAKI (Solan Co.)
Catalog Number: 33495
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: In Orbit

Downlink: 437.375 MHZ   FSK9k6/CW
Beacon: 437.375 MHz   FSK9k6/CW

IARU coordination status page:

AMSAT-NA webpage:

[02092011]
��STARS (Kagawa Univ.) (Twin Satellites)
Catalog Number: 33498
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational ?

Downlinks: 437.485 MHz FM/CW
           437.465 MHz FM/CW
Beacons: 437.305 MHz FM/CW
           437.275 MHz FM/CW

Callsigns: JR5YBN
           JR5YBO

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum�

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID1&retURL
�atellites/status.php
[02092011]
��KKS-1 (Tokyo MCIT)
Catalog Number: 33499
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational

Downlink: 437.455 MHz AFSK/CW

Beacon: 437.385 MHz AFSK/CW

Callsign: JQ1YYY

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum7

AMSAT-NA webapge:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID0&retURL
�atellites/status.php
[20092011]
��PRISM (Tokyo Univ.)
Catalog Number: 33493
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational ?

Downlink: 437.425 MHz AFSK/GMSK/CW
Beacon: 437.250 MHz AFSK/GMSK/CW

Callsign: JQ1YCX

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum�

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID9&retURL
�atellites/status.php
[02092011]
��RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number: 32953
Launch Date: May 23, 2008 1520z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational

Curent Modes: Telemetry
              Audio
              Images

Downlinks: 435.315 MHz
           435.215 MHz

AMSAT-NA website:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID5&ret
URL�atellites/status.php

Official website:
http://www.npopm.com/?cid�oca&caidC
[02092011]
��CanX-2
Catalog number: 32790

Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational in range of ground station only

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnumF
[02092011]
��AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Downlink: 437.425 MHz 1k2 baud packet

For the latest project status update please visit the AAUSAT-II web page:
http://www.aausatii.aau.dk/homepage/index.php?language�&page�me

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum`
[02092011]
��CO-65 CUTE-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Downlink: 437.475 MHz 9k6 Packet
Uplink: 1267.600 Mhz

Telemetry Beacon:
Downlink: 437.2750 MHz CW

For the latest project status update please visit the Cute-1.7+APD II web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnumx

Command Station blog website:
http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID2&retURL

```
�atellites/status.php
[03232012]
��Compass-1
Catalog number: 32787
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Current Mode: dependant on last received command

Uplink:   145.980 MHz FM
Downlink: 437.275 Mhz CW
          437.405 MHz Packet

For the latest project status update please visit the Compass 1 web
page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnumR

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID4&retURL
�atellites/status.php
[06162011]
��CO-66 Seeds II
Catalog number:
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Downlink: 437.485 MHz

Callsign: JQ1YGU

For the latest project status update please visit the Seeds 2 web
page: http://cubesat.aero.cst.nihon-u.ac.jp/english/seeds_2_e.html

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum6

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID3&retURL
�atellites/status.php
[02092011]
��CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007 0702z
Launch site: Baikonur, Kazakhstan

Status: Intermittent
```

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID�&retURL
/satellites/status.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnumr
[02092011]
��CP3
Catalog Number: 31129
Launch Date: April 17,2007 0702z
Launch site: Baikonur, Kazakhstan

Status: Operational

Current Mode: /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnumt
[02092011]
��CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005 0652z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon: 437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/xivpicte.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum7
[02092011]
��CO-57 CubeSat XI-IV

Catalog number: 27848
Launch date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: ?????

Current Mode: /u

Beacon: 436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID�&retURL
�atellites/status.php

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[02092011]
��QuakeSat
Catalog Number: 27845
Launch Date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Telemetry only

Current Mode: 9600 baud data packet

Mode U packet
Downlink: 436.675 MHz 9k6 BPS

Quakesat webpage:
http://www.quakefinder.com/services/quakesat-ssite/
[02252011]
��CO-55 Cute-1.7+APD II
Catalog Number: 27844
Launch date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational

Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satIDi&retURL
�atellites/status.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnumx
[02092011]
��NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001 0240z
Launch site: Kodiak Launch Complex, Alaska, USA

Status: Telemetry only

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[02092011]
��RS-22 RADIO SPORT 22 (MOZHAYETS 4)
Catalog number: 27939
Launch Date: September 27, 2003 0612z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational - 70cm cw only

Current Mode: /u

CW Beacon - 435.352 MHz
            145.818 MHz

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satIDv&retURL
�atellites/status.php
[02092011]
��LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990
Launch site: Kourou, French Guiana

Status: CW Beacon only

Uplinks: 145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink: 437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[02092011]
��UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984
Launch site: Vandenburg AFB, California, USA

Status: Operational ?

Current Mode: /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon: 435.025 MHz
Mode-S Beacon: 2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[07052011]
��INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998 0640z (ZARYA module)
Launch sites: Baikonur, Kazakhstan
Kourou, French Guiana
Uchinoura Space Center, Japan
Kennedy Space Center, Titusville, Florida, USA

Status: Operational

Current Active Modes: FM Repeater - OFF
Voice - V/v
BBS - OFF
2m APRS - ON
70cm Digi - ON
SSTV - OFF

Expedition 30 Crew (November 2011 - July 2012):

Commander:	Dan Burbank	KC5ZSX
Flight Engineer:	Anton Shkaplerov	
Flight Engineer:	Anatoly Ivanishin	
Flight Engineer:	Oleg Kononenko	RN3DX
Flight Engineer:	Andr� Kuipers	PI9ISS
Flight Engineer:	Don Pettit	KD5MDT

Available Modes and Frequencies:
Digital/APRS:
Worldwide 2m packet uplink: 145.825 MHz FM 1k2
Worldwide 2m packet downlink: 145.825 Mhz FM 1k2
Worldwide 70cm packet downlink: 437.550 Mhz FM 1k2
Worldwide 70cm packet downlink: 437.550 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
2m Packet Mailbox: RS0ISS-11
2m Digipeater alias: ARISS
70cm Packet Mailbox: RS0ISS-1
70cm Digipeater callsign: RS0ISS
70cm Digipeater alias: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time line is NOT translated from Russian and posted.
[03302012]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-115.S3
WSR 115 Part 3 04/24/2012

AMSAT NEWS SERVICE BULLETIN 115.S3

FROM AMSAT HQ SILVER SPRING, MD, April 24, 2012
TO ALL RADIO AMATEURS
BID: $WSR-115.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

NANOSAIL-D
Catalog Number: 37361(?)
Ejection Date: January 17, 2011

Status: On orbit

Downlink: 437.270 MHz AX.25

URL: http://nanosaild.engr.scu.edu/dashboard.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum5
[01052012]
��HO-68 HOPE-1 (CAS-1)(XW-1)
Catalog Number: 36122
Launch Date: December 15, 2009 0231z
Launch site: Taiyuan Space Center, PRC

Status: Non - Operational

Callsign:
Broadcast: BJ1SA-11
BBS: BJ1SA-12

Uplinks: 145.8250 MHz FM, PL 67.0 Hz.
145.9250 - 145.9750 MHz SSB/CW
145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
435.7650 - 435.7150 MHz SSB/CW
435.6750 MHz AFSK 1200 BPS

Beacon: 435.7900 MHz CW

Mode and Antenna Polarization:
V: LHCP 2.0dBi max
U: RHCP 3.0dBi max

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum8

For more information about XW-1 (CAS-1):
http://
[01122012]
��SO-67 SumbandilaSat
Catalog Number: 35870
Launch Date: September 17, 2009 1555z
Launch site: Baikonur, Kazakhstan

Status: Non - Operational

Callsign: ZS0SUM

Uplink: 145.875MHz FM tone 233.6 Hz
Downlink: 435.345MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

For more information about SO-67:
http://www.amsatsa.org.za/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum�
[01272012]
��CP4
Catalog Number: 31132
Launch Date: April 17, 2007

Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon: 437.325 MHz CW

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnumy
[09062010]
��LIBERTAD-1
Catalog Number: 31128
Launch Date: April 17, 2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink: 145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnumv
[09062010]
��PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: Non-Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder: 145.825 Mhz FM

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnumQ
[09062010]
��NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
2407.250

Official Website: http://www.ncube.no

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum$
[09062010]
��XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 MHz FM 67Hz CTCSS
Voice Downlink: 2401.835 MHz FM
Packet Up/Downlink: 437.250 MHz 9k6 packet
Packet Downlink   2401.835 MHz 38k4 packet

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnumT
[09062010]
��UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non-Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnumS
[09062010]
��AO-51 ECHO

Catalog number: 28375
Launch date: June 29, 2004 0745z
Launch site: Baikonur, Kazakhstan

Status: Non - Operational

Current Mode(s):
Voice repeater: V/u
Uplink: 145.880 MHz FM
Downlink: 435.150 MHz FM

Telemetry: Recovery efforts
Downlink: 435.150MHz 9k6

```
Analog voice downlink:     435.300 MHz FM
                           435.150 MHz FM
                          2401.200 Mhz FM
Analog voice uplink:       145.860 MHZ FM
                           145.880 MHz USB
                           145.880 MHz FM
                           145.920 MHz FM
                           145.920 MHz FM - 67 Hz PL tone burst
                          1268.705 MHz FM
Digital Downlinks:         435.150 MHz FM 38k4 PBP, 1 watt output
                           435.150 MHz FM 9k6 Pacsat Broadcast Protocol
                          2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:            145.860 MHz FM 9k6 Pacsat Broadcast Protocol
                          1268.703 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon:                    435.150 MHz
```

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum
[12062011]
��CANX-1
Catalog Number: 27847
Launch Date: June 30, 2003

Status: Non-Operational

Downlink: 437.8800 MHz AFSK 1k2bps
[06052009]
��DTUSAT
Catalog Number: 27842
Launch Date: June 30, 2003

Status: Non-Operational

Current Mode: 2k4 AFSK Packet last reported

Downlink: 437.475MHz

Officail webpage: http://dtusat1.dtusat.dtu.dk/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID1&retURL
�tellites/all_oscars.php
[02212009]
��AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)

Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
��MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Telemetry only

Uplinks: 145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[03302009]

��NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
��SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
��SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
��AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks

V-band: 145.840 - 145.990 MHz CW/LSB
U-band: 435.550 - 435.800 MHz CW/LSB

L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks

S2-band: 2401.225 - 2401.475 MHz CW/USB
K-band: 24048.010 - 24048.060 MHz CW/USB
Beacon: 2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)

BEACON	General Beacon(GB)	Middle Beacon(MB)	Engineering Beacon(EB)
2 m	none	145.898 MHz	none
70cm	435.438 MHz	435.588 MHz	435.838 MHz
13cm(1)	2400.188 MHz	2400.338 MHz	2400.588 MHz
13cm(2)	2401.173 MHz	2401.323 MHz	2401.573 MHz
3cm	10450.975 MHz	10451.125 MHz	10451.375 MHz
1.5cm	24047.885 MHz	24048.035 MHz	24048.285 MHz

[07162007]
��OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
��UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
��SO-35 SUNSAT
Catalog Number: 25636
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz

Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
��PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
��SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
��GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Non-Operational

Current Modes:
Telemetry : /u

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks: 145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://asri.technion.ac.il/techsat/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID&retURL
�atellites/status.php
[07172010]
��TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink: 145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
��MO-30 UNAMSAT-2
Catalog Number: 24305
Launch Date: September 5, 1996

Status: Non-operational

Downlink: 435.1380 MHz AFSK 1200 BPS
Downlink: 435.2060 MHz AFSK 1200 BPS
Uplink: 145.8150 MHz AFSK 1200 BPS
Uplink: 145.8350 MHz AFSK 1200 BPS
Uplink: 145.8550 MHz AFSK 1200 BPS
Uplink: 145.8750 MHz AFSK 1200 BPS
[06042009]
��PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Non-operational

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012009]
��IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

```
Status: PSK carrier only

Current Mode:

Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
��KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
��AO-24 ARSENE
Catalog Number: 22654
Launch Date: May 13, 1993

Status: Non-operational

Uplink:    435.0625 MHz FM 1k2bps AFSK
           435.1125 MHz FM 1k2bps AFSK
           435.1375 MHz FM 1k2bps AFSK
Downlink:  145.9750 MHz FM 1k2bps AFSK
          2446.5025 MHz FM 1k2bps AFSK

Beacon:    2446.4700 MHz CW

Broadcast callsign:
BBS:
[12162009]
��KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
```

```
Downlink: 435.170 MHz FM

Broadcast Callsign: HL01-11
BBS: HL01-12
[01222007]
��UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
��AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
��FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
��WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990
```

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
��DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink: 145.825 MHz FM 1200 Baud AFSK
Beacon: 2401.220 MHz
[05012006]
��AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: non-operational

Current Mode: V/u

Uplink: 145.900 MHz FM 1200-baud Manchester FSK (reserved)
145.920 MHz FM VOICE
145.940 MHz FM 1200-baud Manchester FSK (reserved)
145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink: 437.026 MHz USB VOICE
(1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC 437.050 MHz RHCP
PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[07242009]
��UO-15 UoSAT-4
Catalog Number: 20438
Launch Date: January 22, 1990

Status: Non-operational

Uplink: ?
Downlink: 435.1250MHz (?)
435.1200MHz (?)
[06042009]
��UO-14 UoSAT-3
Catalog number: 20437

Launch date: January 22, 1990

Status: Non-operational

Uplink: 145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
��FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink: 145.8500 MHz MFSK 1200 BPS
Uplink: 145.8700 MHz MFSK 1200 BPS
Uplink: 145.8900 MHz MFSK 1200 BPS
Uplink: 145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
��AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon: 145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
��AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.8500 - 145.9000 MHz SSB/CW
Downlink 29.4000 - 29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
��AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink: 29.4500 - 29.5500 MHz SSB/CW
Beacons: 29.450 MHz
          435.100 MHz
[01312008]
��AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
��OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink: 145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
��RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB

Beacon 1: 29.352 MHz (intermittent)
Beacon 2: 29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
��RS-13 RADIO SPORT RS-13
Catalog number: 21089

Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB

Beacon: 145.860 MHz

Robot: 145.908 MHz
[05232004]
��RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
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ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

- AMSAT News Service (ANS)
- General satellite discussion (AMSAT-BB)
- Orbit data (KEPS)
- Manned space missions (SAREX)
- District of Columbia area (AMSAT-DC)
- New England area (AMSAT-NE)

* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at} amsat.org
NNNN
/EX

```
From -2896302561619133984
X-Google-Thread: 10e8ad,fa0a5e1477307977,start
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII
Received: by 10.68.131.71 with SMTP id ok7mr1194216pbb.8.1335710031226;
        Sun, 29 Apr 2012 07:33:51 -0700 (PDT)
MIME-Version: 1.0
Path: r9ni112289pbh.0!nntp.google.com!news2.google.com!
newsfeed2.dallas1.level3.net!news.level3.com!panix!rri.panix.com!robomod!not-for-
mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-120 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sun, 29 Apr 2012 10:33:50 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 469
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000901cd2615$13574eb0$3a05ec10$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
X-Trace: reader1.panix.com 1335710030 22746 166.84.1.6 (29 Apr 2012 14:33:50 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 29 Apr 2012 14:33:50 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
```

X-RRI-Info-1: Send submissions to   rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to   rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us

AMSAT NEWS SERVICE
ANS-120

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

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**********************************************************************
* Volunteers are needed to help at the AMSAT booth at Dayton. Gould  *
* WA4SXM, is looking for volunteers to help man the AMSAT booth dur- *
* ing the 2012 Hamvention. People are needed all 3 days for 2 hour   *
* shifts. Please send the days and times you are available to help   *
* as well as how many shifts you are willing to work via e-mail to   *
* wa4sxm at amsat.org.                                               *
* Monitor http://www.amsat.org/amsat-new/hamvention/2012/Dayton.php  *
* for the latest AMSAT at Dayton news and developments               *
**********************************************************************
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In this edition:
* Reservations Required - 2012 AMSAT/TAPR Banquet at Dayton
* AMSAT-NA Board of Directors Nominations
* AMSAT 2012 Symposium First Call for Papers
* Japan to Launch Student High-Voltage Satellite Horyu-2 in May 2012
* Satellite Export Controls - Progress Report
* New Proposal Cycle for ARISS-US Contacts
* Satellite Shorts From All Over

SB SAT @ AMSAT $ANS-120.01

ANS-120 AMSAT News Service Weekly Bulletins

AMSAT News Service Bulletin 120.01
From AMSAT HQ SILVER SPRING, MD.
April 29, 2012
To All RADIO AMATEURS
BID: $ANS-120.01

Reservations Required - 2012 AMSAT/TAPR Banquet at Dayton

The sixth annual joint AMSAT/TAPR Banquet will be held Friday evening, May 18, 2012 during the Dayton Hamvention.

The Banquet will be at the:

Kohler Presidental Banquet Center
4572 Presidential Way
Kettering, OH 45429
(just south of Dayton).

Reservations are required and must be made by Monday, 14 May 2012. Seating is limited, so make your reservations early. The price for the Banquet is $30 per person. Reserved tickets may be picked up at the AMSAT booth at Hamvention on Friday, or at the door.

You may make reservations for the 2012 AMSAT/TAPR Banquet online in the AMSAT Store: http://www.amsat-na.com/store/item.php?id0158

AMSAT Presidents Club Gold members should let Martha know if they are planning to attend the banquet. For additional information contact Martha at the AMSAT office (martha@amsat.org).

Banquet Schedule

+ 6:30 PM: Doors open and Cash bar is available with Beer, Wine, Liquor and soft drinks.

+ 7:15 PM: Buffet Dinner service begins. The Center has a justly deserved reputation for good food and service.

+ 8:15 PM: Presentation by Howard Long, G6LVB
  Howard will be talking about his FUNcube Dongle, the 64 - 1700 MHz Software Defined Receiver. This innovative USB device is the size of a thumbdrive and has an SMA antenna socket. Multiple SDR control and display software programs can be used with the FUNcube Dongle.

[ANS thanks Gould Smith, WA4SXM for the above information]

AMSAT-NA Board of Directors Nominations

It is time to submit nominations for the upcoming open seats on the AMSAT-NA Board of Directors. A valid nomination requires either one current Member Society, or five current individual members in good standing, to nominate an AMSAT-NA member for the position.

Three directors and two alternate directors have terms expiring this year. The director seats open for election are held by Tom Clark, K3IO; Lou McFadin, W5DID; and Gould Smith, WA4SXM. The alternate director seats open for election are held by Mark Hammond, N8MH and Patrick Stoddard, WD9EWK.

The three nominees receiving the highest number of votes will be seated as regular board members with two year terms. The two nominees receiving the next highest number of votes will be seated as alternate directors for one year.

Written nominations, consisting of names, calls and individual signatures, should be mailed to: AMSAT-NA, 850 Sligo Ave #600, Silver Spring, MD, 20910. They must be received no later than June 15th. No other action is required.

Nominations may also be made by electronic means including e-mail, FAX, or electronic image of a petition. Electronic petitions should be sent to MARTHA@AMSAT.ORG or faxed to 301-608-3410, and also must be received by June 15th. If using any electronic submission, there is a second, verifying step:

> ELECTRONIC SUBMISSIONS WITHOUT THIS SECOND, WRITTEN VERIFICATION ARE NOT VALID UNDER THE EXISTING AMSAT-NA BYLAWS. A verifying traditional written petition MUST be received at the AMSAT-NA office at the above address within 7 days following the close of nominations.

[ANS Thanks AMSAT Secretary Alan Biddle, WA4SCA for the above information]

AMSAT 2012 Symposium First Call for Papers

This is the first call for papers for the 2012 AMSAT Annual Meeting and Space Symposium to be held in Orlando, Florida on the weekend of October 26-28, 2012 at the Holiday Inn, Orlando Airport Hotel.

Proposals for papers, symposium presentations and poster presentations are invited on any topic of interest to the amateur satellite community:

+ Papers for publication in the Proceedings

+ Symposium Presentations

+ Poster Presentations

+ Equipment and Operating Demonstrations

We request a tentative title of your presentation as soon as possible, with final copy to be submitted by October 1 for inclusion in the printed proceedings.

Abstracts and papers should be sent to Dan Schultz, N8FGV, at n8fgv@amsat.org.

The Symposium weekend will feature:

+ Space Symposium with Amateur Satellite Presentations

+ Operating Techniques, News, & Plans from the Amateur Satellite World

+ Board of Directors Meeting open to AMSAT members

+ Meet Board Members and Officers

+ Annual General Membership Meeting

+ Annual Banquet�Keynote Speaker and Door Prizes

If you are interested in a Monday Trip (October 29) to the Kennedy Space Center please contact Martha via email: martha at amsat.org.

The trip will include a round trip bus from the hotel and entrance to the Space Center. The cost will be about $100. This is a wonderful experience for those that haven't been and for those that have been multiple times. We need to get an idea of how many will participate to select the correct bus.

[ANS thanks Dan Schultz, N8FGV for the above information]

Japan to Launch Student High-Voltage Satellite Horyu-2 in May 2012

HORYU-2, an amateur radio satellite built by students at the Kyushu Institute of Technology (KIT) in Japan will launch aboard a Japanese H-IIA rocket planned for May 17 at 1639-1642 UT.

This Cubesat includes several experiments:
+ 300 volt power generation in LEO
+ COTS technology demonstration of surface potential measurement

+ Orbital debris observation
+ Earth photography

The satellite downlink will be 437.375 MHz using 1200bps FSK and CW.

300 volt power generation in LEO

Power generation in space in practice is limited to 160 volt generation with 120 volt transmission aboard the ISS due to electrostatic potential of the solar array with respect to its platform. High power generation will require heavier cables or increased loss due to resistances. Future high power generation in LEO will require 300-400 volts. The HORYU-2 mission, 300V power generation in space without any discharge, is the first space environment test of the new technology.

COTS technology demonstration of surface potential measurement

A contact surface potential meter developed by TREK, Inc. for terrestrial commercial application will be flown. This is a high impedance meter which will not affect the charge state of the object being tested. As HORYU-2 passes through the aurora zone, differential charges may develop between the insulator surface and the satellite chassis. The potential meter will measure the potential of the insulator that is the same material to be used for SCM. The two measurements are compared to validate against each other.

Orbital debris observation

This experiment will detect micro-debris impact on the surface of HORYU-2. The debris sensor consists of many conductive thin wired laid down in parallel in the area of 8�8 cm. Upon impact, some of the lines are cut and the resistance becomes infinite.

Earth photography

A small CMOS camera, developed by the University of Surrey, called the Surrey Camera Payload (SCAMP) will take pictures in JPEG format at 640 � 480 pixels. From 700km altitude, one pixel will correspond to 1.6km.

More information is available on the web:
Horyu website in Google English: http://tinyurl.com/HoryuSatellite
http://www.uk.amsat.org/6638
http://www.uk.amsat.org/4279

[ANS thanks the Horyu-2 team and AMSAT-UK for the above information]

Satellite Export Controls - Progress Report

Since the inception of The International Traffic in Arms Regulations (ITAR) in 1999, all US-built satellites have been subject to the US Munitions List, including amateur radio, education and university satellite projects. The Directorate of Defense Trade Controls (DDTC) under the Department of State (DoS) manages ITAR. ITAR has curtailed AMSAT's collaboration with foreign nationals on Amateur Radio Satellite projects, as well as with universities that have foreign students enrolled as any technical exchanges concerning satellite technology with non-US citizens brought the potential for Federal prosecution.

On November 1, 2011, Congressman Howard L. Berman (D-CA) introduced H.R. 3288: "Safeguarding United States Satellite Leadership and Security Act." In summary, this act would authorize the President to remove commercial satellites and related components from the United States Munitions List. However, while AMSAT was pleased to see this draft bill, there were concerns that "commercial satellites" could be interpreted as not including amateur radio and education satellites.

Consequently, earlier this year AMSAT President Barry Baines, WD4ASW appointed AMSAT NY Area Coordinator Peter Portanova, WB2OQQ as AMSAT's Congressional Liaison to establish relationships that would put AMSAT on the radar regarding H.R. 3288 to ensure that amateur radio and education satellites would be included in the final bill. Peter's appointment was based in part on his success in leading a delegation to meet with Congressman Peter King on H.R. 607 in 2011 that resulted in the amendment of that bill to protect the amateur and amateur satellite frequencies that were being considered for auction. Peter was clearly qualified to lead AMSAT's efforts to ensure that amateur radio and education satellites would be included in such a bill. Peter notes, "What we accomplished on 607 validates that 'grass roots' efforts can be successful". Over the past few months, AMSAT, under Peter's guidance has taken steps to meet with key personnel involved in the legislative process in Washington to make them aware of AMSAT, the importance of amateur radio satellites in the development of education outreach and potential for emergency communications. All of these meetings have been successful in building awareness of the need to have amateur radio satellites (as well as education satellites) removed from the US Munitions List and placed under the Department of Commerce Control List.

While H.R. 3288 has been referred to the House Committee on Foreign Affairs, this initiative was being held up pending a joint report from the Department of Defense (DoD) and Department of State (DoS) required by Section 1248 of the FY2010 Defense Authorization Act wherein Congress directed DoD to assess whether national security would be negatively impacted by moving satellites from the US Munitions List (USML) to the Commerce Control List (CCL). Clearly, the politicians were awaiting this report before deciding whether to support H.R. 3288.

On April 18, 2012 the long awaited "1248" report was released by DoD and DoS: "Risk Assessment of United States Space Export Control Policy," that addresses the risks associated with removing satellites and related components from the United States Munitions List (USML).

The report identifies several satellite types, and related items, that are not purely defense-related and should not be designated as defense articles on the USML or controlled under the International Traffic in Arms Regulations (ITAR).

The Departments recommended that the following items are more appropriately designated as dual-use items on the Commerce Control List (CCL) and controlled under the Export Administration Regulations (EAR):

(1) Satellites that do not contain technologies unique to military applications or critical for maintaining a military edge;
(2) Communications satellites (COMSATs) that do not contain classified components;
(3) Remote sensing satellites with performance parameters below certain thresholds; and
(4) Systems, subsystems, parts and components associated with those satellites.

>From AMSAT's perspective, this is certainly good news for the satellite industry from both a commercial and amateur radio/education perspective. In particular, placement of amateur radio satellites under EAR would remove the most onerous impacts of ITAR, allowing for example, free exchange of technical information with foreign nationals, allowing collaboration on satellite projects. Actual export of hardware, however, would be controlled by the Department of Commerce. That said, it is too early to draw any conclusions as a 180-day review process has now begun. If the recommendations of the "1248 Report" are accepted, it could pave the way for H.R. 3288 or a bill drafted in response to the "1248 recommendations" to move forward. However, given the tendency of Congress to put off major decisions from May onward pending Fall elections, AMSAT President Barry Baines, WD4ASW believes that it is likely, based on the current Congress and other factors, very little will occur within the 112th Congress. In Barry's words, "We are pleased with our initiatives to this point; however these activities are still a work in progress." The AMSAT Board, along with AMSAT's Congressional Liaison, will stay focused on these activities and report to the membership as information becomes available.

The 44 page "Department of Defense/Department of State Report to Congress Section 1248 of the National Defense Authorization Act for Fiscal Year 2010 (Public Law 111 - 84): RISK ASSESSMENT OF UNITED STATES SPACE EXPORT CONTROL POLICY" is available on-line in PDF format at: http://tinyurl.com/DoD-1248-Report

Bloomberg Business Week article on ITAR:
http://tinyurl.com/BusinessWeek-ITAR (www.businessweek.com)

(ANS thanks AMSAT President Barry Baines, WD4ASW and AMSAT Congressional Liaison Peter Portanova, WB2OQQ for this report.)

New Proposal Cycle for ARISS-US Contacts

NASA Teaching From Space (TFS) office has announced a new proposal cycle for ARISS-US contacts. Proposals may be submitted in the time period between April 23 through July 2, 2012 for contacts that will be scheduled beginning in January 2013.

Informational sessions will be held to answer any questions concerning the proposal process. To attend a session or to have questions answered, contact TFS at JSC-TFS-ARISS@mail.nasa.gov or call 281-244-1919.

For more information, see the TFS Web site:
http://tinyurl.com/ARISS-Proposal-Cycle (www.nasa.gov)

If you represent an education organization, formal or informal, and you are located in the United States or its territories, you can submit a proposal.

If you are located outside of the U.S., you will need to contact the ARISS representative for your region:

+ Europe, Africa, and the Middle East: Francesco De Paolis, IK0WGF school.selection.manager@amsat.it.

+ Russia: Valeriy Agabekov, N2WW/UA6HZ n2ww@arrl.net.

+ Japan and all countries in Southeast Asia and Pacific Oceania: Keigo Komuro, JA1KAB iaru-r3@jarl.or.jp.

+ Canada and all other countries: Maurice-Andr� Vigneault, VE3VIG ve3vig@amsat.org.

[ANS thanks the NASA Teaching From Space Office for the above information]

Satellite Shorts From All Over

+ The ARISS International Team monthly teleconference was held on Tuesday, April 17. World Amateur Radio Day and the HamTV status were discussed. Minutes have been posted to the ARISS site:

http://ariss.rac.ca/arisstel2012-04-17.htm

+ A video segment of the successful ARISS contact with Flabob Airport will be aired on the Bob Heil & Gordon West "Ham Nation" show on May 1, 2012 at 1800 PDT (UTC-7). Tune in at: http://www.twit.tv/hn

+ ESA�s mysteriously silent Envisat Earth observing satellite has been observed and imaged by another satellite in space. France�s space agency (CNES) pulled off an on-orbit coup, using their high-resolution Pleiades satellite to take a picture of Envisat from about 100 km. See the satellite-to-satellite view at: http://tinyurl.com/Envisat-Photo (www.universetoday.com)

+ For the last 1000 days the Infrared Array Camera (IRAC), aboard NASA's Spitzer Space Telescope, has been operating continuously to probe the universe from its most distant regions to our local solar neighborhood. To commemorate 1000 days of infrared wonders, the program is releasing a gallery of the 10 best IRAC images: http://www.cfa.harvard.edu/news/2012/pr201211_images.html

+ In celebration of the 22nd anniversary of the NASA/ESA Hubble Space Telescope this month, episode 54 of the Hubblecast gives a slideshow of some of the best images from over two decades in orbit, set to special music: http://www.spacetelescope.org/videos/archive/category/hubblecast/

+ JD1/OG, OGASAWARA ISLAND, AS-031
  Makoto,JI5RPT, is working from Chichijima Islands (IOTA AS-031) signing JD1BLY in CW/SSB/digital modes on 80-6m and via satellite also from April 29 until May 5. QSL via homecall.
  See: http://www.ji5rpt.com/jd1 and http://twitter.com/jd1bly
  (via DXNL DX Newsletter 1777 - Apr 25, 2012)

[ANS thanks everyone for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

Primary and secondary school students are eligible for membership at one-half the standard yearly rate. Post-secondary school students enrolled in at least half time status shall be eligible for the student rate for a maximum of 6 post-secondary years in this status. Contact Martha at the AMSAT Office for additional student membership information.

73,

This week's ANS Editor,
Lee McLamb, KU4OS

```
From 4688945308396675921
X-Google-Thread: 107ada,4d8bf82625b6809,start
X-Google-NewGroupId: yes
X-Google-Thread: 11480d,4d8bf82625b6809,start
X-Google-NewGroupId: yes
X-Google-Thread: 10e8ad,4d8bf82625b6809,start
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X-Google-Thread: 114aac,4d8bf82625b6809,start
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X-Google-NewGroupId: yes
X-Google-Attributes:
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blic,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Received: by 10.204.141.4 with SMTP id k4mr2281109bku.6.1335799808295;
        Mon, 30 Apr 2012 08:30:08 -0700 (PDT)
MIME-Version: 1.0
Path: h15ni183195bkw.0!nntp.google.com!news1.google.com!
border1.nntp.dca.giganews.com!nntp.giganews.com!news-out.readnews.com!
transit3.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: SWPC.Webmaster@noaa.gov
Newsgroups:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.shor
twave,rec.radio.info
Subject: Weekly Highlights of Solar and Geomagnetic Activity, 23 - 29 April 2012
Followup-To:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.shor
twave
Date: Mon, 30 Apr 2012 11:30:07 EDT
Organization: NOAA Space Weather Prediction Center
Lines: 85
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <20120430153001.F290D33C57@panix2.panix.com>
NNTP-Posting-Host: panix6.panix.com
X-Trace: reader1.panix.com 1335799807 14214 166.84.1.6 (30 Apr 2012 15:30:07 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Mon, 30 Apr 2012 15:30:07 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
```

X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump

```
:Product: Weekly Highlights and Forecasts
:Issued: 2012 Apr 30 0310 UTC
# Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center
# Product description and SWPC contact on the Web
# http://www.swpc.noaa.gov/weekly.html
#
#                Weekly Highlights and Forecasts
#
```

Highlights of Solar and Geomagnetic Activity
23 - 29 April 2012

Solar activity was moderate because one M1/1N flare occurred on 27 April at 0821Z. Region 1466 (N12, L=40, class/area=Dso/190) produced this, six C-class x-ray flares, and 13 optical flares throughout the week. The remainder of the flare activity was confined to C-class events. Region 1465 (S18, L=55, class/area=Dki/400) the most prolific and the most magnetically complex of the 14 regions on the disk, exhibiting beta-gamma-delta characteristics on 24 and 27 April. The largest region was Region 1460 (N16, L=109, class/area=Dkc/490) which reached its maximum coverage on 21 April. Solar activity was not confined to flares, several CMEs were observed during the period.

On 23 April, A C2/Sf flare was observed from Region 1461 (N10, L=75, plage) at 1747Z, accompanied by a Type II radio burst (1605 km/s). A Halo-CME was subsequently observed in SOHO/LASCO coronagraph imagery at 1848Z (C2) and 1906Z (C3). Plane of sky measurements suggested a speed in the 400 to 500 km/s range. The next day, a non-earth-directed CME emerged from the east limb after a C3 flare at 0745Z from Region 1467 (N12, L=331,class/area=Dso/50). A Type II radio sweep (estimated shock velocity of 1029 km/s) announced the departure of this CME. CME production continued onWednesday when Region 1460 produced a C1 x-ray flare/CME at 25/2242Z and Region 1465 followed with a C1 x-ray flare/CME at 26/1723Z. Several non-earth-directed CMEs were observed emerging from the SW limb on 26-27 April. They all originated from old Region 1462 (S25, L=139, class/area=Dho/300) which rotated off the visible disk on the 24th. A16 degree filament eruption was observed in SDO/AIA 304 imagery at 28/1045Z. During the eruption, the SE to NW oriented filament was centered near S32W33. LASCO/C2 imagery captured a subsequent slow-moving, non-earth-directed CME emerging from the SW limb at 28/1224Z. GONG H-alpha and SDO/AIA 304 imagery depicted a filament eruption along a six degree long channel centered near N06E36, just to the SE of Region 1467. This eruption occurred between 28/1800 - 2000Z with several CMEs observed during the period.

No proton events were observed at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit reached high levels on 25 April and remained at mostly high levels through the rest of the period.

Geomagnetic field activity ranged from quiet to major storm levels during the week. On 23/0200Z, data from the ACE spacecraft indicated the arrival of a CME from 19 April. Solar wind speed increased from 350 to 400 km/s and the total IMF approached 18 nT. The Boulder magnetometer recorded a 31 nT sudden impulse at 23/0325Z. Active to minor storm levels followed. IMF Bz at the ACE spacecraft lurked in the -10 to -15 nt range for 12 hours beginning around 23/16Z. By 24 April, activity reached major storm levles at mid latitudes during the 00-03Z period as effects from the CME were compounded by the arrival of a coronal hole high speed stream (CH HSS) around 0200Z. On the 25th, activity at high latitudes reached severe storm levels during the 06-09Z synoptic period. The high speed stream peaked near 777 km/s on the 25th around 19Z then began a steady decline. Geomagnetic field activity subsided to unsettled levels on 27 April and quiet levels on 28-29 April. Late on the 27th, a slight bump in the wind speed at ACE suggested the arrival of the remnants of the CME from 23 April, however the geomagnetic field response was muted.

Forecast of Solar and Geomagnetic Activity
30 April - 26 May 2012

Solar activity is expected to be low with a chance for moderate events through the forecast period.

No proton events are expected at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to be at high levles 30 April, 11-14 May and 23-26 May.

Geomagnetic field activity is expected to be quiet with the exception of active periods on 9-11 May and 20-23 May associated with recurrent coronal hole high speed streams.

```
From 3162873817203108023
X-Google-Thread: fc2a5,ad27de51c42ab7b0,start
X-Google-NewGroupId: yes
X-Google-Thread: 10e8ad,ad27de51c42ab7b0,start
X-Google-NewGroupId: yes
X-Google-Attributes: gid241b302a50,gid8f86f75953,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Received: by 10.204.141.4 with SMTP id k4mr2499818bku.6.1335852004400;
        Mon, 30 Apr 2012 23:00:04 -0700 (PDT)
MIME-Version: 1.0
Path: h15ni185483bkw.0!nntp.google.com!news2.google.com!npeer02.iad.highwinds-
media.com!news.highwinds-media.com!feed-me.highwinds-media.com!
border3.nntp.dca.giganews.com!border1.nntp.dca.giganews.com!nntp.giganews.com!
nx02.iad01.newshosting.com!newshosting.com!news-out.readnews.com!
transit3.readnews.com!panix!panix2.panix.com!not-for-mail
From: rram@panix.com (rec.radio.amateur.moderated Admin)
```

Newsgroups:
rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.info
Subject: Crossposting Permitted to rec.radio.amateur.moderated
Supersedes: <radio/ham-radio/moderated/crossposting-1-1333260001@panix.com>
Followup-To: poster
Date: 1 May 2012 02:00:01 -0400
Organization: rec.radio.amateur.moderated Moderation Team
Lines: 47
Approved: RRI Admin <rec-radio-info-request@panix.com>
Distribution: world
Expires: 03 Jun 2012 02:00:00 -0000
Message-ID: <radio/ham-radio/moderated/crossposting-1-1335852000@panix.com>
Reply-To: rec-radio-amateur-moderated-request@panix.com
(rec.radio.amateur.moderated Admin)
NNTP-Posting-Host: panix2.panix.com
X-Trace: reader1.panix.com 1335852002 9531 166.84.1.2 (1 May 2012 06:00:02 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Tue, 1 May 2012 06:00:02 +0000 (UTC)
Summary: Short reminder for unmoderated newsgroups that crossposting is permitted
Keywords: FAQ, ham, amateur, radio, moderated, unmoderated, crossposting,
permitted
X-Received-Bytes: 3691

Posted-By: auto-faq 3.3.2 beta (PGPMoose V2.0, Perl 5.005)
Archive-name: radio/ham-radio/moderated/crossposting
Revision: 1.2 2011/11/02 04:08:53
Posting-Frequency: posted monthly
URL: http://www.panix.com/~rram/usenet/rram/index.html

Changes followed by "|".

After a 30-day public discussion and feedback period to gauge reader
opinions in March of 2009:

http://groups.google.com/group/rec.radio.amateur.moderated/browse_thread/thread/d7d337db35f23326

the rec.radio.amateur.moderated Moderation Team had decided to consider |
amending its charter, and permit limited simultaneous crossposting to
rec.radio.amateur.moderated and one other unmoderated
amateur-radio-related discussion newsgroup. After a successful trial |
period (90 days, through early July 2009), we decided to adopt this |
change permanently. |

Approved rec.radio.amateur.* newsgroups are those that are currently
listed in the latest version of the "List of Big Eight Newsgroups" which
is crossposted monthly to news.announce.newgroups, news.groups, and
news.lists.misc.

Approved alt.radio.amateur.* and alt.ham-radio.* newsgroups are those
that have been created consistent with the suggestions in "So You Want

to Create an Alt Newsgroup" at:

http://www.faqs.org/faqs/alt-creation-guide/

Approved regional hierarchy newsgroups are those that contain either "radio.amateur" or "ham-radio" in their names, including uk.radio.amateur and aus.radio.amateur.misc.

We will make every reasonable effort to keep our list of approved newsgroups up-to-date. In case we have overlooked any, and a submission is rejected in error as a result, the rejected submitter can E-mail us at our administrative contact address (in the signature at the bottom of this article, and the default Reply-To for the rejection message) requesting that it be added, and that the article be approved. We may still choose to reject articles crossposted to any alt.* newsgroup with an inappropriate name, including obscene language, embedded name-calling, or encouragement of unlawful conduct.

Please direct any comments, questions, or criticisms to rec-radio-amateur-moderated-request@panix.com.

```
From 6764236096191858183
X-Google-Thread: 10e8ad,58275fb6a2ae6f26,start
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII
Received: by 10.204.157.134 with SMTP id b6mr1777000bkx.5.1335879780975;
        Tue, 01 May 2012 06:43:00 -0700 (PDT)
MIME-Version: 1.0
Path: h15ni186693bkw.0!nntp.google.com!news1.google.com!news.glorb.com!news-
out.readnews.com!news-xxxfer.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-121 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Tue, 1 May 2012 09:43:00 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 2057
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <001501cd27a0$49d3f290$dd7bd7b0$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
X-Trace: reader1.panix.com 1335879780 22241 166.84.1.6 (1 May 2012 13:43:00 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Tue, 1 May 2012 13:43:00 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
```

X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us

This report is organized into three (3) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites

SB SAT @ AMSAT W8ISS $WSR-121.S1
WSR 121 Part 1 04/30/2012

AMSAT NEWS SERVICE BULLETIN 121.S1
FROM AMSAT HQ SILVER SPRING, MD, April 30, 2012
TO ALL RADIO AMATEURS
BID: $WSR-121.S1

PW-Sat
Catalog Number:
Launch Date: Febrauary 13, 2012
Launch Site: Kourou, French Guiana

Status: On Orbit

Uplink: 435.020 MHz FM
Downlink: 145.900 MHz DSB

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum2
[03162012]
��DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational
Current Mode: Science Mode - Beacon ONLY

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink: 435.530 to 435.570 MHz

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnumh
[02092011]
��VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05, 2005 0444z
Launch site: Satish Dhawan Space Centre, India

Status: Operational
Current Mode: U/v - Dutch Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.9360 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum0

To know what transponder is switched on please listen for the beacon that is active. Each transponder has a different beacon.
[03232012]
��SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002 1700z
Launch site: Baikonur, Kazakhstan

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml

(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz. The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10 minute timer.
[02092011]
��FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Operational
Current Mode: V/u (Mode JA)

Voice/CW (Mode JA)
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage:
http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
�retURL�atellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts.htm
[01122012]
��AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993 0140z
Launch site: Kourou, French Guiana

```
Status: Operational

Current Mode: V/u

Uplink:   145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[02092011]
��AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974
Launch site: Vandenberg AFB, California, USA

Status: Operational

Current Mode: Alternating between Mode A and B every 24 hours

Uplink:   145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink:  29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons:   29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php
[04242012]
��INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998 0640z (ZARYA module)
Launch sites: Baikonur, Kazakhstan
              Kourou, French Guiana
              Uchinoura Space Center, Japan
              Kennedy Space Center, Titusville, Florida, USA

Status: Operational

Current Active Modes: FM Repeater - OFF
                      Voice -       V/v
                      BBS -         OFF
                      2m APRS -     ON
                      70cm Digi -   ON
                      SSTV -        OFF
```

Expedition 31 Crew (April 2012 - July 2012):
Commander: Oleg Kononenko RN3DX
Flight Engineer: Andr� Kuipers PI9ISS
Flight Engineer: Don Pettit KD5MDT
Flight Engineer:
Flight Engineer:
Flight Engineer:

Available Modes and Frequencies:
Digital/APRS:
Worldwide 2m packet uplink: 145.825 MHz FM 1k2
Worldwide 2m packet downlink: 145.825 Mhz FM 1k2
Worldwide 70cm packet downlink: 437.550 Mhz FM 1k2
Worldwide 70cm packet downlink: 437.550 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
2m Packet Mailbox: RS0ISS-11
2m Digipeater alias: ARISS
70cm Packet Mailbox: RS0ISS-1
70cm Digipeater callsign: RS0ISS
70cm Digipeater alias: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[04302012]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-121.S2
WSR 121 Part 2 04/30/2012

AMSAT NEWS SERVICE BULLETIN 121.S2
FROM AMSAT HQ SILVER SPRING, MD, April 30, 2012
TO ALL RADIO AMATEURS
BID: $WSR-121.S2

XaTcobeo
Catalog Number: 38082
Launch Date: Febrauary 13, 2012
Launch Site: Kourou, French Guiana

Status: Operational

Uplink:
Downlink: 437.365 MHz FFSK with AX.25

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum5
[03162012]
��UniCubeSat
Catalog Number:
Launch Date: Febrauary 13, 2012
Launch Site: Kourou, French Guiana

Status: Operational

Uplink:
Downlink: 437.305 MHz 9k6 bps FSK

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum3
[03162012]

��Robusta
Catalog Number:
Launch Date: Febrauary 13, 2012
Launch Site: Kourou, French Guiana

Status: On Orbit

Uplink:
Downlink: 437.325 MHz 1k2 FM telemetry (data every 1 min, 20 sec. burst)

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum2
[02142012]
��MO-72 MaSat-1
Catalog Number: 38081
Launch Date: Febrauary 13, 2012
Launch Site: Kourou, French Guiana

Status: Operational

Uplink:
Downlink: 437.345 MHz GFSK 625/1250 bps
          437.345 MHz CW

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum6
[03232012]
��Goliat
Catalog Number: 38085
Launch Date: Febrauary 13, 2012
Launch Site: Kourou, French Guiana

Status: Operational

Uplink:
Downlink: 437.485 MHz 1k2 AFSK

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum�
[03162012]
��E-Star
Catalog Number: 38079
Launch Date: Febrauary 13, 2012
Launch Site: Kourou, French Guiana

Status: On Orbit

Uplink:
Downlink: 437.445 MHz 1k2 bps AFSK

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum0
[03232012]
��ALMASat1
Catalog Number: 38078
Launch Date: Febrauary 13, 2012
Launch Site: Kourou, French Guiana

Status: On Orbit

Uplink:
Downlink: 437.465 MHz 1k2 bps FSK
          2407.850 MHz

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum9
[02212012]
��RS-39 Chibis-M
Catalog Number: 37841
Launch Date: October 30, 2011 10:11:00 UTC
Launch site: Tyuratam (Baikonur Cosmodrome), Kazakhstan

Status: Operational

Uplink:
Downlink:

Beacon: 435.315 MHz CW
        435.215 MHz CW

Callsign:

URL:

IARU coordination status page:
[01122012]
��JUNGU
Catalog Number: 37841
Launch Date: October 12, 2011 05:30:00 UTC
Launch site: Satish Dhawan Space Centre, India

Status: On Orbit

Uplink: 145.??? MHz 1k2 (mode?)
Downlink: 437.505 MHz 9k6 (mode?)

Beacon: 437.275 MHz 15 wpm (?) CW

Callsign:

URL: http://www.iitk.ac.in/me/jugnu/index.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum0
[01122012]
��SRMSAT
Catalog Number: 37839
Launch Date: October 12, 2011 05:30:00 UTC
Launch site: Satish Dhawan Space Centre, India

Status: On Orbit

Uplink: 145.900 MHz 1k AX.25 (speed?)
Downlink: 437.500 MHz 2k4 AX.25

Beacon: 437.425 MHz 12 wpm CW

Callsign:

URL: http://srmsat.in/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum1
[01122012]
��HRBE (E1P Explorer 1 [Prime] CubeSat (E1P-U2))
Catalog Number: 37855
Launch Date: October 28, 2011
Launch site: Vandenberg Air Force Base, California, USA

Status: On Orbit

Uplink: 437.305 MHz (???)
Downlink: 437.505 MHz AX.25 (SSB?)

Beacon:

Callsign:

URL: http://ssel.montana.edu/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum6
[01122012]
��M-Cubed
Catalog Number: 37855
Launch Date: October 28, 2011
Launch site: Vandenberg Air Force Base, California, USA

Status: On Orbit

Uplink:
Downlink: 437.485 MHz AX.25

Beacon:

Callsign:

URL: http://umcubed.org/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum!5
[01122012]
��RAX-2
Catalog Number: 37853
Launch Date: October 28, 2011
Launch site: Vandenberg Air Force Base, California, USA

Status: Operational

Uplink:
Downlink: 437.345MHz 9k6 GMSK

Beacon:

Callsign:

URL: http://rax.engin.umich.edu//

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum"1
[03232012]
��AO-71 AubieSat-1

Catalog Number: 37854
Launch Date: October 28, 2011
Launch site: Vandenberg Air Force Base, California, USA

Status: On Orbit

Uplink:
Downlink: 437.475 MHz 1k2 AX.25

Beacon: 437.475 MHz CW

Callsign: KI4NQO

URL: http://www.space.auburn.edu/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum8
[12262011]
��O/OREOS
Catalog Number: 37224
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: On Orbit

Uplink:
Downlink: 437.035 MHZ AX.25

Beacon:

Callsign:

URL: http://www.ooreos.org/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum6
[02092011]
��Rax-1 Radio Aurora Explorer
Catalog Number: 37223
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: On Orbit

Uplink:
Downlink: 437.505 MHz 9k6 GMSK

Beacon:

Callsign: RAX-1

URL: http://rax.engin.umich.edu/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum5
[02092011]
��FO-69 Fastrac-1 Sara Lily
Catalog Number: 37227
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: Operational

Uplink 1: 145.980 MHz 1k2 baud
Uplink 2: 145.825 MHz 1k2 baud
Downlink: 437.345 MHz 1k2 and 9k6 baud

Beacon: 437.435 MHz 1k2 AX.25

Callsign: Fast1

URL: http://fastrac.ae.utexas.edu/index.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum�
[07052011]
��FO-70 Fastrac-2 Emma
Catalog Number: 37380
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: Operational

Uplink 1: 435.025 MHz 1k2 baud
Uplink 2: 437.435 MHz 9k6 baud
Downlink: 145.825 MHz 1k2 and 9k6 baud

Beacon: 145.825 MHz 1k2 AX.25

Callsign: Fast2

URL: http://fastrac.ae.utexas.edu/index.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum�
[12162011]
��StudSat
Catalog Number: 36796
Launch Date: July 12, 2010 0352z
Launch site: Satish Dhawan Space Centre, India

Status: On Orbit

Uplink: 437.505MHz, 9600bps FSK
Downlink: 437.505MHz, 9600bps FSK
Beacon : 437.505MHz,   20bps ASK

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum4
[02092011]
��TIsat-1
Catalog Number: 36799
Launch Date: July 12, 2010 0352z
Launch site: Satish Dhawan Space Centre, India

Status: On orbit

Callsign: HB9DE

Uplink: 145.980MHz FM, AFSK
Downlink: 437.305MHz FM, AFSK
Beacon: 437.305MHz CW

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum8
[02092011]
��SwissCube
Catalog Number: 35932
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Callsign: HB9EG

Beacon(100mw): 437.5050MHz CW
Beacon(1w):   437.5050MHz FSK 1k2bps

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum9
[02092011]
��UWE-2
Catalog Number: 35934
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: In Orbit

Beacon(500mw): 437.3850 MHz AFSK 1k2bps
               437.3850 MHz FSK 9k6bps

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum0
[02092011]
��ITUpsAT1
Catalog Number: 35935
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Beacon(100mw): 437.325MHz CW
Beacon(1w): 437.325MHz 19k2bps

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum3
[02092011]
��BEESAT
Catalog Number: 35933
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Callsign: DP0BEE

Beacon(100mw): 436.000MHz CW
Beacon(500mw): 436.000MHz GMSK 4k8bps
Beacon(500mw): 436.000MHz GMSK 9k6bp
[02092011]
��CP-6
Catalog Number: 35004
Launch Date: May 19, 2009 2355z
Launch site: Wallops Island, Virginia, USA

Status: Operational

Downlink: 437.365 MHz 1k2 AFSK

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum1
[01122012]
��HAWKSAT 1
Catalog number: 35003
Launch Date: May 19, 2009 2355z
Launch site: Wallops Island, Virginia, USA

Status: operational

Downlink: 437.345 MHz ?

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum5
[01122012]
��Pharmasat
Catalog Number: 35002
Launch Date: May 19, 2009 2355z
Launch site: Wallops Island, Virginia, USA

Status: Operational

Downlink: 437.465 MHz 1k2 AFSK

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum�
[02092011]
��ANUSAT
Catalog Number: 34808
Launch Date: April 20, 2009 0115z
Launch Site: Satish Dhawan Space Centre, India

Status: ?

Downlink: 435.000 MHz
Uplink: 145.800 MHz

Telemetry: 137.400 MHz
[02092011]
��SOHLA-1 (ASTRO TECH.)
Catalog Number: 33496
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational

Proposed Frequencies and Modes:
Downlink: 437.505 MHz AFSK/CW
Beacon: 437.505 MHz AFSK/CW

Callsign:

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum1
[02092011]
��KAGAYAKI (Solan Co.)
Catalog Number: 33495
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: In Orbit

Downlink: 437.375 MHZ   FSK9k6/CW
Beacon: 437.375 MHz   FSK9k6/CW

IARU coordination status page:

AMSAT-NA webpage:

[02092011]
��STARS (Kagawa Univ.) (Twin Satellites)
Catalog Number: 33498
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational ?

Downlinks: 437.485 MHz FM/CW
           437.465 MHz FM/CW
Beacons: 437.305 MHz FM/CW
           437.275 MHz FM/CW

Callsigns: JR5YBN
           JR5YBO

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum�

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID1&retURL
�atellites/status.php
[02092011]
��KKS-1 (Tokyo MCIT)
Catalog Number: 33499
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational

Downlink: 437.455 MHz AFSK/CW
Beacon: 437.385 MHz AFSK/CW

Callsign: JQ1YYY

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum7

AMSAT-NA webapge:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID0&retURL
�atellites/status.php
[20092011]
��PRISM (Tokyo Univ.)
Catalog Number: 33493
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational ?

Downlink: 437.425 MHz AFSK/GMSK/CW
Beacon: 437.250 MHz AFSK/GMSK/CW

Callsign: JQ1YCX

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum�

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID9&retURL
�atellites/status.php

```
[02092011]
��RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number: 32953
Launch Date: May 23, 2008 1520z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational

Curent Modes: Telemetry
              Audio
              Images

Downlinks: 435.315 MHz
           435.215 MHz

AMSAT-NA website:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID5&ret
URL�atellites/status.php

Official website:
http://www.npopm.com/?cid�oca&caidC
[02092011]
��CanX-2
Catalog number: 32790
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational in range of ground station only

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web
page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnumF
[02092011]
��AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Downlink: 437.425 MHz 1k2 baud packet

For the latest project status update please visit the AAUSAT-II web
page:
http://www.aausatii.aau.dk/homepage/index.php?language�&page�me

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum`
[02092011]
```

��CO-65 CUTE-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Downlink: 437.475 MHz 9k6 Packet
Uplink: 1267.600 Mhz

Telemetry Beacon:
Downlink: 437.2750 MHz CW

For the latest project status update please visit the Cute-1.7+APD II web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnumx

Command Station blog website:
http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID2&retURL
�atellites/status.php
[03232012]
��Compass-1
Catalog number: 32787
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Current Mode: dependant on last received command

Uplink: 145.980 MHz FM
Downlink: 437.275 Mhz CW
          437.405 MHz Packet

For the latest project status update please visit the Compass 1 web page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnumR

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID4&retURL
�atellites/status.php
[06162011]
��CO-66 Seeds II
Catalog number:
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Downlink: 437.485 MHz

Callsign: JQ1YGU

For the latest project status update please visit the Seeds 2 web
page: http://cubesat.aero.cst.nihon-u.ac.jp/english/seeds_2_e.html

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum6

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID3&retURL
�atellites/status.php
[02092011]
��CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007 0702z
Launch site: Baikonur, Kazakhstan

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID�&retURL
/satellites/status.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnumr
[02092011]
��CP3
Catalog Number: 31129
Launch Date: April 17,2007 0702z
Launch site: Baikonur, Kazakhstan

Status: Operational

Current Mode: /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnumt

[02092011]
��CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005 0652z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon: 437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/xivpicte.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum7
[02092011]
��CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: ?????

Current Mode: /u

Beacon: 436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID�&retURL
�atellites/status.php

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[02092011]
��QuakeSat
Catalog Number: 27845
Launch Date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Telemetry only

Current Mode: 9600 baud data packet

Mode U packet

Downlink: 436.675 MHz 9k6 BPS

Quakesat webpage:
http://www.quakefinder.com/services/quakesat-ssite/
[02252011]
��CO-55 Cute-1.7+APD II
Catalog Number: 27844
Launch date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational

```
Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only
```

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satIDi&retURL
�atellites/status.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnumx
[02092011]
��NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001 0240z
Launch site: Kodiak Launch Complex, Alaska, USA

Status: Telemetry only

Current Mode: V/v

```
General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink:        144.390 Mhz 1200 Baud
```

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[02092011]
��RS-22 RADIO SPORT 22 (MOZHAYETS 4)
Catalog number: 27939
Launch Date: September 27, 2003 0612z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational - 70cm cw only

Current Mode: /u

CW Beacon - 435.352 MHz
145.818 MHz

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satIDv&retURL
�atellites/status.php
[02092011]
��LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990
Launch site: Kourou, French Guiana

Status: CW Beacon only

Uplinks: 145.840 MHz 1200-baud Manchester FSK
145.860 MHz 1200-baud Manchester FSK
145.880 MHz 1200-baud Manchester FSK
145.900 MHz 1200-baud Manchester FSK

CW downlink: 437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[02092011]
��UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984
Launch site: Vandenburg AFB, California, USA

Status: Operational ?

Current Mode: /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon: 435.025 MHz
Mode-S Beacon: 2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[07052011]
��INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998 0640z (ZARYA module)

Launch sites: Baikonur, Kazakhstan
Kourou, French Guiana
Uchinoura Space Center, Japan
Kennedy Space Center, Titusville, Florida, USA

Status: Operational

Current Active Modes: FM Repeater - OFF
Voice - V/v
BBS - OFF
2m APRS - ON
70cm Digi - ON
SSTV - OFF

Expedition 30 Crew (November 2011 - July 2012):
Commander: Oleg Kononenko RN3DX
Flight Engineer: Andr� Kuipers PI9ISS
Flight Engineer: Don Pettit KD5MDT
Flight Engineer:
Flight Engineer:
Flight Engineer:

Available Modes and Frequencies:
Digital/APRS:
Worldwide 2m packet uplink: 145.825 MHz FM 1k2
Worldwide 2m packet downlink: 145.825 Mhz FM 1k2
Worldwide 70cm packet downlink: 437.550 Mhz FM 1k2
Worldwide 70cm packet downlink: 437.550 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS

Russian: RS0ISS
RZ3DZR
United States: NA1SS
2m Packet Mailbox: RS0ISS-11
2m Digipeater alias: ARISS
70cm Packet Mailbox: RS0ISS-1
70cm Digipeater callsign: RS0ISS
70cm Digipeater alias: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time line is NOT translated from Russian and posted.
[04302012]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-121.S3
WSR 121 Part 3 04/30/2012

AMSAT NEWS SERVICE BULLETIN 121.S3
FROM AMSAT HQ SILVER SPRING, MD, April 30, 2012
TO ALL RADIO AMATEURS
BID: $WSR-121.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

NANOSAIL-D
Catalog Number: 37361(?)
Ejection Date: January 17, 2011

Status: Non - Operational

Downlink: 437.270 MHz AX.25

URL: http://nanosaild.engr.scu.edu/dashboard.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum5
[04302012]
��HO-68 HOPE-1 (CAS-1)(XW-1)
Catalog Number: 36122
Launch Date: December 15, 2009 0231z
Launch site: Taiyuan Space Center, PRC

Status: Telemetry only

Callsign:
Broadcast: BJ1SA-11
BBS: BJ1SA-12

Uplinks: 145.8250 MHz FM, PL 67.0 Hz.
           145.9250 - 145.9750 MHz SSB/CW
           145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
           435.7650 - 435.7150 MHz SSB/CW
           435.6750 MHz AFSK 1200 BPS

Beacon: 435.7900 MHz CW

Mode and Antenna Polarization:
V: LHCP 2.0dBi max
U: RHCP 3.0dBi max

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum8

For more information about XW-1 (CAS-1):
http://
[04302012]
��SO-67 SumbandilaSat
Catalog Number: 35870
Launch Date: September 17, 2009 1555z
Launch site: Baikonur, Kazakhstan

Status: Non - Operational

Callsign: ZS0SUM

Uplink: 145.875MHz FM tone 233.6 Hz
Downlink: 435.345MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

For more information about SO-67:
http://www.amsatsa.org.za/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum�
[01272012]
��CP4
Catalog Number: 31132
Launch Date: April 17, 2007

Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon: 437.325 MHz CW

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnumy
[09062010]
��LIBERTAD-1
Catalog Number: 31128
Launch Date: April 17, 2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink: 145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnumv
[09062010]
��PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: Non-Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder: 145.825 Mhz FM

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnumQ
[09062010]
��NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
                             2407.250

Official Website: http://www.ncube.no

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum$
[09062010]
��XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

```
Status: Non-operational

Voice Uplink:         437.250 MHz FM 67Hz CTCSS
Voice Downlink:      2401.835 MHz FM
Packet Up/Downlink:   437.250 MHz 9k6 packet
Packet Downlink      2401.835 MHz 38k4 packet

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnumT
[09062010]
��UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non-Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnumS
[09062010]
��AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004 0745z
Launch site: Baikonur, Kazakhstan

Status: Non - Operational

Current Mode(s):
Voice repeater: V/u
Uplink:      145.880 MHz FM
Downlink:    435.150 MHz FM

Telemetry: Recovery efforts
Downlink:    435.150MHz 9k6


Analog voice downlink:     435.300 MHz FM
                           435.150 MHz FM
                          2401.200 Mhz FM
Analog voice uplink:       145.860 MHZ FM
                           145.880 MHz USB
                           145.880 MHz FM
                           145.920 MHz FM
                           145.920 MHz FM - 67 Hz PL tone burst
                          1268.705 MHz FM
Digital Downlinks:         435.150 MHz FM 38k4 PBP, 1 watt output
                           435.150 MHz FM 9k6 Pacsat Broadcast Protocol
                          2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:            145.860 MHz FM 9k6 Pacsat Broadcast Protocol
                          1268.703 mhz FM 9k6 Pacsat Broadcast Protocol
```

Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum
[12062011]
��CANX-1
Catalog Number: 27847
Launch Date: June 30, 2003

Status: Non-Operational

Downlink: 437.8800 MHz AFSK 1k2bps
[06052009]
��DTUSAT
Catalog Number: 27842
Launch Date: June 30, 2003

Status: Non-Operational

Current Mode: 2k4 AFSK Packet last reported

Downlink: 437.475MHz

Officail webpage: http://dtusat1.dtusat.dtu.dk/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID1&retURL
�tellites/all_oscars.php
[02212009]
��AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)

Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
��MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Telemetry only

Uplinks: 145.850 MHz
145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[03302009]
��NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
��SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
��SO-41 SAUDISAT-1A

Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
��AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks

V-band: 145.840 - 145.990 MHz CW/LSB
U-band: 435.550 - 435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks

S2-band: 2401.225 - 2401.475 MHz CW/USB
K-band: 24048.010 - 24048.060 MHz CW/USB
Beacon: 2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)

BEACON	General Beacon(GB)	Middle Beacon(MB)	Engineering Beacon(EB)
2 m	none	145.898 MHz	none
70cm	435.438 MHz	435.588 MHz	435.838 MHz
13cm(1)	2400.188 MHz	2400.338 MHz	2400.588 MHz
13cm(2)	2401.173 MHz	2401.323 MHz	2401.573 MHz
3cm	10450.975 MHz	10451.125 MHz	10451.375 MHz
1.5cm	24047.885 MHz	24048.035 MHz	24048.285 MHz

[07162007]
��OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]

��UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
��SO-35 SUNSAT
Catalog Number: 25636
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
��PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
��SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
��GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Non-Operational

Current Modes:
Telemetry : /u

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks: 145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://asri.technion.ac.il/techsat/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID&retURL
�atellites/status.php
[07172010]
��TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink: 145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
��MO-30 UNAMSAT-2
Catalog Number: 24305
Launch Date: September 5, 1996

Status: Non-operational

Downlink: 435.1380 MHz AFSK 1200 BPS
Downlink: 435.2060 MHz AFSK 1200 BPS
Uplink: 145.8150 MHz AFSK 1200 BPS

Uplink: 145.8350 MHz AFSK 1200 BPS
Uplink: 145.8550 MHz AFSK 1200 BPS
Uplink: 145.8750 MHz AFSK 1200 BPS
[06042009]
��PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Non-operational

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012009]
��IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks: 145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
��KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]

��AO-24 ARSENE
Catalog Number: 22654
Launch Date: May 13, 1993

Status: Non-operational

Uplink: 435.0625 MHz FM 1k2bps AFSK
435.1125 MHz FM 1k2bps AFSK
435.1375 MHz FM 1k2bps AFSK
Downlink: 145.9750 MHz FM 1k2bps AFSK
2446.5025 MHz FM 1k2bps AFSK

Beacon: 2446.4700 MHz CW

Broadcast callsign:
BBS:
[12162009]
��KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HL01-11
BBS: HL01-12
[01222007]
��UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink: 145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
��AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink: 435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
��FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons: 435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink: 145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks: 145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
��WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
��DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink: 145.825 MHz FM 1200 Baud AFSK
Beacon: 2401.220 MHz
[05012006]
��AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: non-operational

Current Mode: V/u

Uplink: 145.900 MHz FM 1200-baud Manchester FSK (reserved)
                145.920 MHz FM VOICE
                145.940 MHz FM 1200-baud Manchester FSK (reserved)
                145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink: 437.026 MHz USB VOICE
                (1200-baud PSK - MBL Telemetry Only)

```
Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[07242009]
��UO-15 UoSAT-4
Catalog Number: 20438
Launch Date: January 22, 1990

Status: Non-operational

Uplink: ?
Downlink: 435.1250MHz (?)
          435.1200MHz (?)
[06042009]
��UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
��FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
��AO-10 OSCAR 10
Catalog number: 14129
```

Launch Date: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon: 145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
��AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.8500 - 145.9000 MHz SSB/CW
Downlink 29.4000 - 29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
��AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink: 29.4500 - 29.5500 MHz SSB/CW
Beacons: 29.450 MHz
          435.100 MHz
[01312008]
��AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
��OSCAR III

Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink: 145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
��RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB

Beacon 1: 29.352 MHz (intermittent)
Beacon 2: 29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
��RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB

Beacon: 145.860 MHz

Robot: 145.908 MHz
[05232004]
��RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz.

Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at}amsat.org
NNNN
/EX

From 6036891793892391049
X-Google-Thread: 10e8ad,c77fb3a55389ef2f,start

```
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Received: by 10.204.149.210 with SMTP id u18mr1210006bkv.1.1336237387621;
        Sat, 05 May 2012 10:03:07 -0700 (PDT)
Path: h15ni202274bkw.0!nntp.google.com!news2.google.com!goblin1!
goblin.stu.neva.ru!news.astraweb.com!border6.a.newsrouter.astraweb.com!not-for-
mail
From: Chris Steyaert <observations@rmob.org>
Newsgroups: rec.radio.amateur.space,sci.astro.amateur
Subject: Radio Meteor Obs. Bull. April 2012  Lyrids
Date: Sat, 05 May 2012 19:03:06 +0200
Message-ID: <49naq7ht9nj1b57a3lqoi36af8t65i2amt@4ax.com>
X-Newsreader: Forte Agent 5.00/32.1171
MIME-Version: 1.0
Lines: 14
Organization: Unlimited download news at news.astraweb.com
NNTP-Posting-Host: ec59eeee.news.astraweb.com
X-Trace: DXC=GDkUHGODHll92gaK\0;3cnL?0kYOcDh@j?
dW0mSH4AajbE6Eg`kT^W`WUle4P=fWAbb3<D_UX>L;iX<`3P5ZY[ZjL7fMiKl23i`Qdl5[iOm1Pf
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
```

Radio Meteor Observation Bulletin No. 225 of April 2012 (89 K) is available now as

http://www.rmob.org/rmobtext/rmob1204.txt

More information and the visual presentation of the hourly forward scatter counts can be found on

http://www.rmob.org

Chris

```
From -2565874447855451649
X-Google-Thread: 10e8ad,9b4a693658448c4a,start
X-Google-NewGroupId: yes
X-Google-Thread: 10b9c8,9b4a693658448c4a,start
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,gida4a23d5f63,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII
Received: by 10.68.223.40 with SMTP id qr8mr9621551pbc.0.1336267723003;
        Sat, 05 May 2012 18:28:43 -0700 (PDT)
MIME-Version: 1.0
Path: pr3ni8832pbb.0!nntp.google.com!news2.google.com!news1.google.com!
news.glorb.com!news-out.readnews.com!transit3.readnews.com!panix!rri.panix.com!
robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
```

Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-127 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sat, 5 May 2012 21:28:42 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 591
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <001901cd2b27$8ec5a990$ac50fcb0$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
X-Trace: reader1.panix.com 1336267722 14086 166.84.1.6 (6 May 2012 01:28:42 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 6 May 2012 01:28:42 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to   rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to   rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us

AMSAT NEWS SERVICE
ANS-127

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor at amsat.org

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**********************************************************************
* Volunteers are needed to help at the AMSAT booth at Dayton. Gould  *
* WA4SXM, is looking for volunteers to help man the AMSAT booth dur- *
* ing the 2012 Hamvention. People are needed all 3 days for 2 hour   *
* shifts. Please send the days and times you are available to help   *
* as well as how many shifts you are willing to work via e-mail to   *
* wa4sxm at amsat.org.                                               *
* Monitor http://www.amsat.org/amsat-new/hamvention/2012/Dayton.php  *
* for the latest AMSAT at Dayton news and developments               *
**********************************************************************
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In this edition:
* 2012 AMSAT Forum at Dayton - Saturday May 19
* Fox-1 Satellite Project Team Completes Preliminary Design Review
* AMSAT Awards

* Satellite Operations Planned for Worldwide Museum Ships Weekend
* Changes to the IARU Satellite Advisor Region 1
* New Frequencies for AMSAT-UK FUNcube-1
* Delfi-C3 (DO-64) Celebrates 4 Years On-Orbit
* Ecuador NEE-01 Pegasus Cubesat Plans Classroom Access to Satellite
* Satellite Shorts From All Over

SB SAT @ AMSAT $ANS-127.01
ANS-127 AMSAT News Service Weekly Bulletins

AMSAT News Service Bulletin 127.01
>From AMSAT HQ SILVER SPRING, MD.
May 6, 2012
To All RADIO AMATEURS
BID: $ANS-127.01

2012 AMSAT Forum at Dayton - Saturday May 19

The AMSAT Forum at the 2012 Dayton Hamvention will be on Saturday morning May 19 from 11:15 to 13:30 in Forum Room 5. The moderator will be Alan Biddle, WA4SCA

The speakers will be:

Barry Baines, WD4ASW; AMSAT Status Report

Barry, AMSAT President, will highlight recent activities within AMSAT, and discuss some of the challenges and accomplishments of the organization.

Mark Hammond, N8MH; AMSAT Educational Relationships

Mark, AMSAT VP of Educational Relationships, will discuss his education activities.

Gould Smith, WA4SXM; ARISSat-1 Operation in Space

Gould, AMSAT Project Manager for ARISSat-1, will talk about its operation aboard the ISS, the deployment and operations this past fall and winter.

Tony Monteiro, AA2TX; Project Fox - AMSAT's First CubeSat

Tony, AMSAT Engineering VP, will discuss the design and status of Project-FOX.

Howard Long, G6LVB; "FUN in Space for All!"

Howard, AMSAT-UK Committee, will discuss the FUNcube project which will enable amateurs and students to have FUN in space. For amateurs, the spacecraft will carry conventional UHF to VHF linear transponders. For students of all ages, the same spacecraft will provide strong telemetry transmissions which they can easily receive at schools in support of science, technology, engineering, and math subjects (STEM).

[ANS thanks Gould Smith, WA4SXM and Alan Biddle, WA4SCA for the above information]

Fox-1 Satellite Project Team Completes Preliminary Design Review

The Fox Project completed its Preliminary Design Review (PDR) over three nights, 24-26 April 2012. Mechanical, RF, control, power, and related issues were reviewed. The current status was evaluated, and the needed development for various systems was refined. AMSAT Engineering Vice President Tony Monteiro, AA2TX, characterized the review as very productive.

Help Wanted Fox-1 Satellite

AMSAT is in need of an experienced RF designer for our Fox-1 satellite. Due to ITAR restrictions, you must be a US citizen or permanent resident. If interested please send an email with your phone number to Tony Monteiro - AA2TX@amsat.org

Fox-1 Targets Launch in 2013

Project ELaNa, NASA's "Educational Launch of NanoSat" managed by the Launch Services Program at the Kennedy Space Center, announced on February 10 that the AMSAT Fox-1 cubesat has been selected to join the program. AMSAT is working with NASA in a collaborative agreement where NASA will cover the integration and launch costs. Fox-1 was selected to join the NASA ELaNa program on merit in support of NASA strategic and educational goals.

AMSAT's Fox-1 project timeline is based on targeting a launch in the second half of 2013. NASA will determine on which flight each of the Project ELaNa CubeSats are launched.

Highlights of the Fox-1 design include:

+ Fox-1 is designed as the immediate replacement for AO-51. Its U/V FM transponder with a VHF downlink will be easier to hear with small antennas.

+ The same radio equipment used for AO-51 (HT + handheld beam) can be used for Fox-1.

+ Fox-1 sends telemetry in a sub-audible band on the downlink allowing simultaneous voice contacts with telemetry decode. AMSAT will provide free sound-card PC software.

+ Includes science experiment using MEMS gyros being developed by Penn State students.

Find more details of AMSAT Fox-1 Project on-line at:
http://www.amsat.org/amsat-new/fox/

Donate to the Fox-1 Project Fund on-line at http://www.amsat.org; scroll down halfway to the PayPal donation widget - or at the AMSAT Store http://www.amsat-na.com/store/categories.php

NASA's Cubesat Launch Initiative web page can be found at:
http://www.nasa.gov/directorates/heo/home/CubeSats_initiative.html

[ANS thanks AMSAT Engineering Vice-President Tony Monteiro, AA2TX and Alan Biddle, WA4SCA for the above information]

AMSAT Awards

AMSAT Director Contests and Awards, Bruce Paige, KK5DO says congratulations are in order for our latest AMSAT Awards recipients.

The following have entered into the Satellite Communicators Club for making their first satellite QSO.
+ Brent Ocken, KJ6MRG
+ Elizabeth Royer, KB3WSW

The following have earned the AMSAT Communications Achievement Award.
Hector Luis Martinez Sis, CO6CBF, #547
+ Marcelo Teruel, IK0USO #549

The following have earned the South Africa Satellite Communications Achievement Award.
+ Hector Luis Martinez Sis, CO6CBF, #US178

The following have earned their Robert W. Barbee, Jr. W4AMI Award
+ Tom Deeble, KA6SIP #77
+ Clayton Coleman, W5PFG #78

To see all the awards visit http://www.amsat.org.

[ANS thanks Bruce Paige, KK5DO for the above information]

Satellite Operations Planned for Worldwide Museum Ships Weekend

Museum Ships Weekend Coming Up June 2-3, 2012

by Allen F. Mattis, N5AFV, n5afv@amsat.org

The worldwide Museum Ships Weekend Event (MSWE) will be held for two days, June 2-3, 2012. Last year 83 ships in 13 countries around the world participated in the event. Amateur radio operators make special event contacts from these museum ships on all amateur radio bands with most of the contacts taking place on the HF bands. In the past several years only two or three museum ships in North America have made satellite contacts during the event.

This year a number of Houston area AMSAT members, W5ACM, N5AFV and WC5WM, will participate with the Brazos Valley Amateur Radio Club (BVARC) operating club station KK5W from Seawolf Park on Pelican Island in Galveston, Texas. Seawolf Park is home to two Second World War vintage museum ships - the destroyer escort USS Stewart (DE-238) and the submarine USS Cavalla (SS-244). As a result, a contact with KK5W counts for two ships. Amateur radio operators who make contacts with 15 or more ships qualify for a handsome certificate.

The BVARC KK5W station plans to operate the afternoon passes of AO-27 and FO-29 on Saturday June 2nd and hope other AMSAT members will be operating from other ships. This will be their fifth year participating in the MSWE and hope to make their first MSWE satellite contact with another museum ship this year.

If any AMSAT members are interested in this event they may visit the MSWE website: http://www.nj2bb.org/museum/index.html to find out if any museum ships near them are participating.

[ANS thanks Allen Mattis, N5AFV for the above information]

Changes to the IARU Satellite Advisor Region 1

The International Amateur Radio Union (IARU) Satellite Advisor's Advisory Panel assists builders and prospective builders of satellites that will operate on frequencies allocated by the ITU to the Amateur Service. This panel provides frequency coordination, a comprehensive set of standards guidelines, and international forums.

The IARU Satellite Adviser is Hans van de Groenendaal, ZS6AKV. This week AMSAT-DL President Peter G�lzow, DB2OS recommended to the IARU Satellite Adviser that Mike Rupprecht takes over membership of the advisory panel from Norbert Nothoff. Hans agreed to appoint Mike, DK3WN as a panel member. He thanked Norbert, DF5DP for his support as a member of the Advisory panel for many years and is looking forward to working with Mike.

Mike Rupprecht, DK3WN will help with the IARU Satellite Frequency Coordination process in Region 1 and in particular in Germany. Mike is very active and well known on the satellite bands and Internet boards, and he has particularly profound knowledge of all cubesat operations. He is also very well known in the community of cubesat operators, including excellent communication connections with those groups.

Mike Rupprecht, DK3WN will support Norbert Nothoff, DF5DP and take over the coordination process of satellite projects from him, which includes correspondence with the coordination group and the satellite operators.

Norbert Nothoff, DF5DP will continue to stay in charge of anything which is related to government issues (government and office liaison, laws, bylaws, and regulations of satellite operations) in Germany.

The following serve on the IARU Satellite Advisor's Advisory Panel:

IARU Satellite Advisor
Hans van de Groenendaal, ZS6AKV

Region 1
Graham Shirville, G3VZV
Mike Rupprecht, DK3WN

Region 2
Lee McLamb, KU4OS
Art Feller, W4ART

Region 3
Shizuo Endo, JE1MUI

Special Advisors
Ray Soifer, W2RS
Jan King, VK4GEY/W3GEY

The IARU Satellite page can be found at:
http://www.iaru.org/satellite/

The status of all satellites requesting coordination and those which have already received coordination can be found at:
http://www.amsat.org.uk/iaru/

[ANS thanks AMSAT-DL President Peter G�lzow, DB2OS for the above information]

New Frequencies for AMSAT-UK FUNcube-1

This DNEPR-1 launch in October 2012 could carry around 10 amateur radio satellites including FUNcube-1 into space. As a result the International Amateur Radio Union (IARU) satellite advisory panel have had to carefully coordinate the planned operating frequencies in order to minimize the risk of interference between FUNcube-1 and other payloads on the same launch.

The IARU Amateur Satellite Frequency Coordination Panel have now confirmed the following frequencies for FUNcube-1 (these frequencies replace those previously announced)

FUNcube-1 New Frequencies

Inverting linear transponder
Uplink   435.150 � 435.130 MHz (replacing 435.080 - 435.060 MHz)
Downlink   145.950 � 145.970 MHz (replacing 145.960 - 145.980 MHz)

Telemetry: 145.935 MHz BPSK   (replacing 145.955 MHz)

UKube-1

Uplink   435.060 - 435.040 MHz
Downlink 145.940 - 145.960 MHz

Telemetry 145.840 MHz
FUNcube sub system beacon 145.925 MHz
S Band downlink 2401.500 MHz
myPocketQub 437.425 - 437.525 MHz

Delfi-n3Xt

Inverting linear transponder:
Uplink   435.530 - 435.570 MHz
Downlink   145.880 - 145.920 MHz

Telemetry 145.870 MHz and 145.930 MHz
High Speed 2405.00 MHz

Also on this launch two additional satellites Triton-1 and Triton-2 will include two similar secondary amateur radio payloads, being two single channel mode U/V (435-145MHz) FM to DSB transponders. After their three month science mission is complete plans are to have the satellite continue in the Amateur Satellite Service for as long as possible.

Triton-1

Main Downlink   145.815 MHz (FM to DSB transponders similar to AO-16)
Backup Downlink 145.860 MHz
The UHF uplink frequencies will be announced by the project team

once the satellite becomes available for amateur operations.

Triton-2

Main Downlink   145.860 MHz FM to DSB transponder
Backup Downlink 145.815 MHz
S-band downlink 2408.00 MHz FM to FM transponder
The UHF uplink frequencies will be announced by the project team
once the satellite becomes available for amateur operations.

The IARU Satellite Coordination data for all of the satellites can be found at: http://www.amsat.org.uk/iaru/

Gunter's Space Page (September 2012) lists the proposed manifest for the DNEPR-1 launch: http://space.skyrocket.de/doc_chr/lau2012.htm

[ANS thanks AMSAT-UK and the IARU Satellite Advisory Panel for the above information]

Delfi-C3 (DO-64) Celebrates 4 Years On-Orbit

The Technical University of Delft in the Netherlands celebrated the fourth anniversary on-orbit of their student-developed, and -built Delfi-C3 3U Cubesat. Launched on April 28, 2008 aboard PSLV-C9 it was also designated DO-64 by AMSAT.

Delfi-C3 the first nano-satellite project from the Delfi program of TU Delft. The program gives students the opportunity to gain practical experience, but the university would also develop with new technology. A small satellite is a relatively inexpensive test platform for new technology of Dutch aerospace companies including thin-film solar cells of Dutch Space solar and autonomous wireless sensors.

This satellite also invited amateur radio participation to receive its telemetry downlink using ordinary equipment used by amateur satellite operators. The Delfi-C3 team provides the RASCAL software to decode and forward the data to TU Delft. The software can be downloaded at: http://tinyurl.com/DelfiC3-RASCAL (www.delfispace.nl).
The satellite continues to transmit telemetry for stations who wish to experiment using the BPSK decoder:

+ Primary telemetry downlink: 145.870 MHz 1200 Baud BPSK AX.25 400mW
+ Backup telemetry downlink: 145.930 MHz 1200 Baud BPSK AX.25 400mW
+ The 435 MHz up/145 MHz down linear transponder is out of service.

Delfi-C3 pioneer Jeroen Rotteveel said "It is great to see that our satellite is still performing, especially when you consider that it is an experimental satellite built by students. From this one small satellite project a complete nanosatellite program has been set up.

A spin-off company, ISIS, focusing on providing components for small satellites was created."

Future satellite development at TU Delft includes:

Delfi-n3Xt

Delfi-n3Xt will fly an active attitude control system controlling the satellite's orientation of Delfi-n3Xt with a system of sensors so that the solar panels maintain optimum sun pointing. It will test a new type of engine for small satellites.

Delfi-n3Xt, equipped with a linear transponder will be launched in September, 2012 aboard a Russian Dnepr rocket along with dozens of other small satellites which include UKube 1, FUNcube 1, which all will carry an amateur radio linear transponder. Triton 1, and Triton 2 satellites on this launch will feature FM-to-DSB and FM-to-FM transponders.

QB50

After Delfi-n3Xt, TU Delft will work on two nano satellites to fly as part of the 50 Cubesat constellation in the QB50 project. QB50 is a European collaborative mission with fifty scattered satellites in orbit around the Earth performing measurements on the upper layer of the atmosphere.

OLFAR

This project will develop a radio-telescope based on a swarm of nano satellites in orbit around the moon measuring signals from deep space. OLFAR (Orbiting Low Frequency Antenna for Radioastronomy) is an important milestone from which Delfi-C3 was the first step.

Find more information about the TU Delft satellites at:
http://www.delfispace.nl
http://www.isispace.nl

[ANS thanks TU Delft, the Delfi-C3 Team, and AMSAT-UK for the above information]

Ecuador NEE-01 Pegasus Cubesat Plans Classroom Access to Satellite

Ecuador's first satellite NEE-01 Pegasus is slated to launch in October 2012 on the same DNEPR rocket as the AMSAT-UK FUNcube-1, UKube-1, Delfi-n3Xt, Triton-1, and Triton-2, along with several additional cubesats.

One of the satellite's objectives is to serve as a space platform for elementary education. The satellite will send two signals that will be received and decoded by the EXA�s HERMES-A ground station in Guayaquil and then uploaded live to the Internet using Twitter and Facebook.

The first signal will contain text book questions and the second will contain an image related to the question. If the students are able to answer the question correctly they will be granted access to the video camera onboard the spacecraft and will be able to see earth from space as the astronauts see it in their space missions.

More advanced students will have access to the pure radio signal so they can try decoding it by themselves. The EXA will provide them with the appropriate support software free of charge.

There is an onboard camera to send live video from space from a 3 watt TV transmitter in the 902 MHz band along with a beacon that will send an ID and Ecuador�s national anthem.

The cubesat will help monitoring near-earth objects from orbit using its onboard 720p HD video camera and will also help in the catalog and control of orbital debris (space junk), this new mission will turn the NEE-01 in to the first online, real time orbital video sentry for the planet, as the satellite has the capability to stream its video signal directly to the Internet.

Additional NEE-01 Pegasus Cubesat mission goals include:

+ Technological demonstration/Education
+ Test of real time video transmission
+ Test of Thermal/Radiation shield
+ Test of multiphase solar array
+ Test of passive antenna deployment
+ Test of carbon nanotubes thermal control system

AMSAT-UK posted news and photos of NEE-01 Pegasus at:
http://www.uk.amsat.org/6932

[ANS thanks AMSAT-UK for the above information]

Satellite Shorts From All Over

+ It is time to submit nominations for the upcoming open seats on the AMSAT-NA Board of Directors. Three directors and two alternate directors have terms expiring this year. The director seats open for election are held by Tom Clark, K3IO; Lou McFadin, W5DID; and Gould Smith, WA4SXM. The alternate director seats open for election are held by Mark Hammond, N8MH and Patrick Stoddard, WD9EWK. The AMSAT front page news at http://www.amsat.org has the instructions to submit your nominations.

+ The 2012 AMSAT Annual Meeting and Symposium will be held at the Holiday Inn, Orlando (Florida) Airport on October 26-28, 2012. The First Call for Papers has been issued. The Symposium Team requests a tentative title of your presentation as soon as possible, with final copy to be submitted by October 1 for inclusion in the printed proceedings. Abstracts and papers should be sent to Dan Schultz, N8FGV, at n8fgv@amsat.org. Watch for the latest 2012 Symposium information to be posted on the AMSAT web at: http://www.amsat.org/amsat-new/symposium/2012/index.php

+ The CQ Magazine News Room (http://www.cqnewsroom.blogspot.com/) has posted stories covering amateur satellite developments:
  o Japan Plans 5 Amateur Satellite Launches
  o Multi-Cubesat Launcher Built by Naval Postgraduate School
  o ANS Co-Editor Dee Interdonato, NB2F, Silent Key
  o Hams on 23 Centimeters Must Protect New FAA Radars

+ The ARISS contact with Flight Engineer Don Pettit and students at Flabob Airport in Jurupa Valley CA US that occurred on April 19 was featured on this week's episode of the Bob Heil & Gordon West "Ham Nation" video podcast. The ARISS project is the top story at about the 4-minute mark: http://twit.tv/show/ham-nation/46 Video filmed during the contact has also been posted on the Flabob site: http://www.iss-flabob.com (via Clint K6LCS)

+ OMG Space (http://visual.ly/omg-space?view�ue) was made by Margot Trudell as graphic design thesis project at Toronto�s OCAD University. The page displays the Sun, all the planets and all the distances separting them to scale. The quickest way to navigate our solar system is to click on the planet names on the bottom of the screen. You can also scroll up and down manually ... if only to see how long it takes you to not get anywhere - this is to scale, the distances are vast. (UniverseToday.com)

+ The next Hudson Valley Satcom net date is Thursday, May 10 at 8:00 PM EDT (UTC -4) on the 146.970 MHz repeater, and also on the N2EYH-L Echolink node. More info: http://www.hvsatcom.org/ (via Stu, WA2BSS)

+ Vince Waelti, K9TSU, Net Manager of the Satchat net on the AMSAT EchoLink server invites all radio amateurs to check-in when the net meets on the 1st and 3rd Saturday of the month 1900-2030 CDT (UTC-5). Vince says the new format of the net will be a roundtable format.

+ Congratulations to Al, W5LUA for working into state number 34 on 2304 MHz via a good tropo opening. Al worked North Carolina on April 28. That's really an amazing accomplishment. (via NP4Z on the moon-net list)

+ Check out Markarian's Chain. There are well over 100 galaxies in this image: http://tinyurl.com/Markarian-Chain (UniverseToday.com)

[ANS thanks everyone for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

Primary and secondary school students are eligible for membership at one-half the standard yearly rate. Post-secondary school students enrolled in at least half time status shall be eligible for the student rate for a maximum of 6 post-secondary years in this status. Contact Martha at the AMSAT Office for additional student membership information. And with that please keep in mind the implicit curve equation produces the heart shape: (x^2 + y^2 - 1)^3 - x^2 * y^3 � The web computation engine at: http://tinyurl.com/Equation-Engine (wolframalpha.com) will plot it for you. You may need to click the 'compute' orange button to the right of the equation.

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM

```
From 7756702816599733129
X-Google-Thread: 107ada,447343f2d8e038e6,start
X-Google-NewGroupId: yes
X-Google-Thread: 11480d,447343f2d8e038e6,start
X-Google-NewGroupId: yes
X-Google-Thread: 10e8ad,447343f2d8e038e6,start
X-Google-NewGroupId: yes
X-Google-Thread: 114aac,447343f2d8e038e6,start
X-Google-NewGroupId: yes
X-Google-Thread: 10b9c8,447343f2d8e038e6,start
X-Google-NewGroupId: yes
X-Google-Attributes:
gida3e752f117,gid7221ecd0f7,gid8f86f75953,gid9e586c3d78,gida4a23d5f63,domainid0,pu
blic,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Received: by 10.68.230.98 with SMTP id sx2mr13440583pbc.1.1336404607448;
        Mon, 07 May 2012 08:30:07 -0700 (PDT)
```

```
MIME-Version: 1.0
Path: pr3ni14830pbb.0!nntp.google.com!news1.google.com!npeer01.iad.highwinds-
media.com!news.highwinds-media.com!feed-me.highwinds-media.com!
border3.nntp.dca.giganews.com!border1.nntp.dca.giganews.com!nntp.giganews.com!
newsfeed.news.ucla.edu!usenet.stanford.edu!panix!rri.panix.com!robomod!not-for-
mail
From: SWPC.Webmaster@noaa.gov
Newsgroups:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.shor
twave,rec.radio.info
Subject: Weekly Highlights of Solar and Geomagnetic Activity, 30 April - 06 May
2012
Followup-To:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.shor
twave
Date: Mon, 7 May 2012 11:30:05 EDT
Organization: NOAA Space Weather Prediction Center
Lines: 69
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <20120507153001.9A07A33C57@panix2.panix.com>
NNTP-Posting-Host: panix6.panix.com
X-Trace: reader1.panix.com 1336404605 20388 166.84.1.6 (7 May 2012 15:30:05 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Mon, 7 May 2012 15:30:05 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to            rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
X-Received-Bytes: 5140
```

```
:Product: Weekly Highlights and Forecasts
:Issued: 2012 May 07 1445 UTC
# Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center
# Product description and SWPC contact on the Web
# http://www.swpc.noaa.gov/weekly.html
#
#                 Weekly Highlights and Forecasts
#
```

Highlights of Solar and Geomagnetic Activity
30 April - 06 May 2012

Solar activity was moderate. The week was dominated by low level C-class x-ray activity from Regions 1469 (S23, L=335, class/area Eso/140 on 02 May) and 1471 (S21, L=276, class/area=Eho/320 on 02 May) until 05 May. Then, Region 1476 (N10, L=188, class/are=Fhi/760 on 06 May) rotated onto the visible disk and produced three impulsive M-class flares in approximately 12 hours. The largest of these was an M1/Sn at 05/1323Z. Only one M1/1n flare was observed the following day, also from Region 1476, at 06/1747Z.

Several coronal mass ejections (CMEs) were observed during the period, although only three were deemed to be potentially earth-directed. The first of the three occurred on 04 May and was observed in STEREO-Ahead COR2 coronagraph imagery around 0309Z. The second was associated with a C1 flare from Region 1469 at 04/2356Z. The third was associated with a long duration C2/Sf flare from Region 1470 (S15, L=286, class/area=Cro/30 on 05 May) at 05/0639Z and evidence of the eruption was observed in SDO AIA imagery at 05/0600 UTC. No significant radio emissions were observed with any of the CMEs.

No proton events were observed at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit was at high levels (&gt;1000 pfu) for the first three days (30 April-02 May). After a return to normal backround levels on 03-04 May, flux reached moderate levels on 05 and 06 May.

Geomagnetic field activity was at predominantly quiet levels all week. Unsettled levels occurred late on 02 May into early 03 May associated with a prolonged period of negative Bz and again late on 03 May in response to a solar sector boundary change. Solar wind speed measured at the ACE spacecraft ranged from 300-400 km/s throughout the week.

Forecast of Solar and Geomagnetic Activity
07 May - 02 June 2012

Solar activity is expected to be low to moderate as Region 1476 makes its way across the visible solar disk.

No proton events are expected at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to reach high levels on 11-14 May and again on 23-29 May in response to recurrent coronal hole high speed wind streams.

Geomagnetic field activity is expected to begin at unsettled levels for 07-08 May in response to a solar sector boundary crossing and CME arrival. The arrival of a recurrent coronal hole high speed stream will bring active levels on 09-11 May. After a brief return to quiet levels, unsettled conditions are expected in response to another coronal hole high speed stream on 14-15 May. Mostly quiet levels are then forecast until 19 May when unsettled to active conditions are expected to accompany the arrival of a coronal hole high speed stream. Active levels will persisit through 23 May followed by a return to quiet conditions through the end of the period.

From -138629285091483763
X-Google-Thread: 10e8ad,b9d25b54e5024615,start
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII
Received: by 10.68.191.225 with SMTP id hb1mr3135207pbc.5.1336485212563;
        Tue, 08 May 2012 06:53:32 -0700 (PDT)
MIME-Version: 1.0
Path: pr3ni2550pbb.0!nntp.google.com!news2.google.com!news.glorb.com!news-out.readnews.com!news-xxxfer.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-128 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Tue, 8 May 2012 09:53:31 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 2265
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000b01cd2d21$ebc3a290$c34ae7b0$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
X-Trace: reader1.panix.com 1336485211 3627 166.84.1.6 (8 May 2012 13:53:31 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Tue, 8 May 2012 13:53:31 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to   rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to   rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us

This report is organized into four (4) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - deorbited/returned satellites

SB SAT @ AMSAT W8ISS $WSR-128.S1
WSR 128 Part 1 05/07/2012

AMSAT NEWS SERVICE BULLETIN 128.S1
FROM AMSAT HQ SILVER SPRING, MD, May 07, 2012
TO ALL RADIO AMATEURS
BID: $WSR-128.S1

PW-Sat
Catalog Number:
Launch Date: Febrauary 13, 2012
Launch Site: Kourou, French Guiana

Status: On Orbit

Uplink: 435.020 MHz FM
Downlink: 145.900 MHz DSB

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum2
[03162012]
��DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational
Current Mode: Science Mode - Beacon ONLY

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink: 435.530 to 435.570 MHz

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnumh
[02092011]
��VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05, 2005 0444z
Launch site: Satish Dhawan Space Centre, India

Status: Operational
Current Mode: U/v - Dutch Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.9360 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum0

To know what transponder is switched on please listen for the beacon that is active. Each transponder has a different beacon.
[03232012]
��SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002 1700z
Launch site: Baikonur, Kazakhstan

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz. The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10 minute timer.
[02092011]
��FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Operational
Current Mode: V/u (Mode JA)

Voice/CW (Mode JA)

Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage:
http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
�retURL�atellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's
CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/
fo29cwts.htm
[01122012]
��AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993 0140z
Launch site: Kourou, French Guiana

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[02092011]
��AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974
Launch site: Vandenberg AFB, California, USA

Status: Operational

Current Mode: Alternating between Mode A and B every 24 hours

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php
[04242012]
��INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998 0640z (ZARYA module)
Launch sites: Baikonur, Kazakhstan
              Kourou, French Guiana
              Uchinoura Space Center, Japan
              Kennedy Space Center, Titusville, Florida, USA

Status: Operational

Current Active Modes: FM Repeater - OFF
                      Voice -   V/v
                      BBS -   OFF
                      2m APRS -   ON
                      70cm Digi -   ON
                      SSTV -   OFF

Expedition 31 Crew (April 2012 - July 2012):
Commander: Oleg Kononenko   RN3DX
Flight Engineer: Andr� Kuipers   PI9ISS
Flight Engineer: Don Pettit   KD5MDT
Flight Engineer:
Flight Engineer:
Flight Engineer:

Available Modes and Frequencies:
Digital/APRS:
Worldwide 2m packet uplink: 145.825 MHz FM 1k2
Worldwide 2m packet downlink: 145.825 Mhz FM 1k2
Worldwide 70cm packet downlink: 437.550 Mhz FM 1k2
Worldwide 70cm packet downlink: 437.550 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM

Region 2/3 voice uplink:	144.490 MHz FM
Worldwide downlink:	145.800 MHz FM

Crossband Repeater:

Repeater Uplinks:	1269.650 MHz FM
	437.800 MHz FM
	145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink:	145.800 MHz FM
	437.800 MHz FM (Kenwood)

SSTV Robot 36:

Downlink:	145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:

Belgian:	OR4ISS
German:	DP0ISS
Russian:	RS0ISS RZ3DZR
United States:	NA1SS
2m Packet Mailbox:	RS0ISS-11
2m Digipeater alias:	ARISS
70cm Packet Mailbox:	RS0ISS-1
70cm Digipeater callsign:	RS0ISS
70cm Digipeater alias:	ARISS

Official ARISS Webpage:	http://www.rac.ca/ariss
ISS Fan Club Webpage:	http://www.issfanclub.com
APRS tracking page:	http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[04302012]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-128.S2
WSR 128 Part 2 05/07/2012

AMSAT NEWS SERVICE BULLETIN 128.S2
FROM AMSAT HQ SILVER SPRING, MD, May 07, 2012
TO ALL RADIO AMATEURS
BID: $WSR-128.S2

XaTcobeo
Catalog Number: 38082
Launch Date: Febrauary 13, 2012
Launch Site: Kourou, French Guiana

Status: Operational

Uplink:
Downlink: 437.365 MHz FFSK with AX.25

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum5
[03162012]
��UniCubeSat
Catalog Number:
Launch Date: Febrauary 13, 2012
Launch Site: Kourou, French Guiana

Status: Operational

Uplink:
Downlink: 437.305 MHz 9k6 bps FSK

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum3
[03162012]
��Robusta
Catalog Number:
Launch Date: Febrauary 13, 2012
Launch Site: Kourou, French Guiana

Status: On Orbit

Uplink:
Downlink: 437.325 MHz 1k2 FM telemetry (data every 1 min, 20 sec. burst)

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum2
[02142012]

��MO-72 MaSat-1
Catalog Number: 38081
Launch Date: Febrauary 13, 2012
Launch Site: Kourou, French Guiana

Status: Operational

Uplink:
Downlink: 437.345 MHz GFSK 625/1250 bps
437.345 MHz CW

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum6
[03232012]
��Goliat
Catalog Number: 38085
Launch Date: Febrauary 13, 2012
Launch Site: Kourou, French Guiana

Status: Operational

Uplink:
Downlink: 437.485 MHz 1k2 AFSK

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum�
[03162012]
��E-Star
Catalog Number: 38079
Launch Date: Febrauary 13, 2012
Launch Site: Kourou, French Guiana

Status: On Orbit

Uplink:
Downlink: 437.445 MHz 1k2 bps AFSK

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum0
[03232012]
��ALMASat1
Catalog Number: 38078
Launch Date: Febrauary 13, 2012
Launch Site: Kourou, French Guiana

Status: On Orbit

Uplink:
Downlink: 437.465 MHz 1k2 bps FSK
          2407.850 MHz

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum9
[02212012]
��RS-39 Chibis-M
Catalog Number: 37841
Launch Date: October 30, 2011 10:11:00 UTC
Launch site: Tyuratam (Baikonur Cosmodrome), Kazakhstan

Status: Operational

Uplink:
Downlink:

Beacon: 435.315 MHz CW
        435.215 MHz CW

Callsign:

URL:

IARU coordination status page:
[01122012]
��JUNGU
Catalog Number: 37841
Launch Date: October 12, 2011 05:30:00 UTC
Launch site: Satish Dhawan Space Centre, India

Status: On Orbit

Uplink: 145.??? MHz 1k2 (mode?)
Downlink: 437.505 MHz 9k6 (mode?)

Beacon: 437.275 MHz 15 wpm (?) CW

Callsign:

URL: http://www.iitk.ac.in/me/jugnu/index.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum0
[01122012]
��SRMSAT
Catalog Number: 37839
Launch Date: October 12, 2011 05:30:00 UTC
Launch site: Satish Dhawan Space Centre, India

Status: On Orbit

Uplink: 145.900 MHz 1k AX.25 (speed?)
Downlink: 437.500 MHz 2k4 AX.25

Beacon: 437.425 MHz 12 wpm CW

Callsign:

URL: http://srmsat.in/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum1
[01122012]
��HRBE (E1P Explorer 1 [Prime] CubeSat (E1P-U2))
Catalog Number: 37855
Launch Date: October 28, 2011
Launch site: Vandenberg Air Force Base, California, USA

Status: On Orbit

Uplink: 437.305 MHz (???)
Downlink: 437.505 MHz AX.25 (SSB?)

Beacon:

Callsign:

URL: http://ssel.montana.edu/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum6
[01122012]
��M-Cubed
Catalog Number: 37855
Launch Date: October 28, 2011
Launch site: Vandenberg Air Force Base, California, USA

Status: On Orbit

Uplink:
Downlink: 437.485 MHz AX.25

Beacon:

Callsign:

URL: http://umcubed.org/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum!5
[01122012]
��RAX-2
Catalog Number: 37853
Launch Date: October 28, 2011
Launch site: Vandenberg Air Force Base, California, USA

Status: Operational

Uplink:
Downlink: 437.345MHz 9k6 GMSK

Beacon:

Callsign:

URL: http://rax.engin.umich.edu//

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum"1
[03232012]
��AO-71 AubieSat-1
Catalog Number: 37854
Launch Date: October 28, 2011
Launch site: Vandenberg Air Force Base, California, USA

Status: On Orbit

Uplink:
Downlink: 437.475 MHz 1k2 AX.25

Beacon: 437.475 MHz CW

Callsign: KI4NQO

URL: http://www.space.auburn.edu/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum8
[12262011]
��O/OREOS

Catalog Number: 37224
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: On Orbit

Uplink:
Downlink: 437.035 MHZ AX.25

Beacon:

Callsign:

URL: http://www.ooreos.org/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum6
[02092011]
��Rax-1 Radio Aurora Explorer
Catalog Number: 37223
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: On Orbit

Uplink:
Downlink: 437.505 MHz 9k6 GMSK

Beacon:

Callsign: RAX-1

URL: http://rax.engin.umich.edu/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum5
[02092011]
��FO-69 Fastrac-1 Sara Lily
Catalog Number: 37227
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: Operational

Uplink 1: 145.980 MHz 1k2 baud
Uplink 2: 145.825 MHz 1k2 baud
Downlink: 437.345 MHz 1k2 and 9k6 baud

Beacon: 437.435 MHz 1k2 AX.25

Callsign: Fast1

URL: http://fastrac.ae.utexas.edu/index.php

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IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum�
[07052011]
��FO-70 Fastrac-2 Emma
Catalog Number: 37380
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: Operational

Uplink 1: 435.025 MHz 1k2 baud
Uplink 2: 437.435 MHz 9k6 baud
Downlink: 145.825 MHz 1k2 and 9k6 baud

Beacon:   145.825 MHz 1k2 AX.25

Callsign: Fast2

URL: http://fastrac.ae.utexas.edu/index.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum�
[12162011]
��StudSat
Catalog Number: 36796
Launch Date: July 12, 2010 0352z
Launch site: Satish Dhawan Space Centre, India

Status: On Orbit

Uplink:   437.505MHz, 9600bps FSK
Downlink: 437.505MHz, 9600bps FSK
Beacon  : 437.505MHz,   20bps ASK

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum4
[02092011]
��TIsat-1
Catalog Number: 36799
Launch Date: July 12, 2010 0352z
Launch site: Satish Dhawan Space Centre, India

Status: On orbit

Callsign: HB9DE

Uplink:   145.980MHz FM, AFSK
Downlink: 437.305MHz FM, AFSK
Beacon:   437.305MHz CW

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum8
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[02092011]
��SwissCube
Catalog Number: 35932
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Callsign: HB9EG

Beacon(100mw): 437.5050MHz CW
Beacon(1w):   437.5050MHz FSK 1k2bps

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum9
[02092011]
��UWE-2
Catalog Number: 35934
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: In Orbit

Beacon(500mw): 437.3850 MHz AFSK 1k2bps
437.3850 MHz FSK 9k6bps

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum0
[02092011]
��ITUpsAT1
Catalog Number: 35935
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Beacon(100mw): 437.325MHz CW
Beacon(1w): 437.325MHz 19k2bps

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum3
[02092011]
��BEESAT
Catalog Number: 35933
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Callsign: DP0BEE

Beacon(100mw): 436.000MHz CW
Beacon(500mw): 436.000MHz GMSK 4k8bps

Beacon(500mw): 436.000MHz GMSK 9k6bp
[02092011]
��CP-6
Catalog Number: 35004
Launch Date: May 19, 2009 2355z
Launch site: Wallops Island, Virginia, USA

Status: Operational

Downlink: 437.365 MHz 1k2 AFSK

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum1
[01122012]
��HAWKSAT 1
Catalog number: 35003
Launch Date: May 19, 2009 2355z
Launch site: Wallops Island, Virginia, USA

Status: operational

Downlink: 437.345 MHz ?

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum5
[01122012]
��Pharmasat
Catalog Number: 35002
Launch Date: May 19, 2009 2355z
Launch site: Wallops Island, Virginia, USA

Status: Operational

Downlink: 437.465 MHz 1k2 AFSK

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum�
[02092011]
��ANUSAT
Catalog Number: 34808
Launch Date: April 20, 2009 0115z
Launch Site: Satish Dhawan Space Centre, India

Status: ?

Downlink: 435.000 MHz
Uplink: 145.800 MHz

Telemetry: 137.400 MHz
[02092011]
��SOHLA-1 (ASTRO TECH.)
Catalog Number: 33496
Launch Date: January 23, 2009 0354z

Launch site: Tanegashima Space Center, Japan

Status: Operational

Proposed Frequencies and Modes:
Downlink: 437.505 MHz AFSK/CW
Beacon: 437.505 MHz AFSK/CW

Callsign:

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum1
[02092011]
��KAGAYAKI (Solan Co.)
Catalog Number: 33495
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: In Orbit

Downlink: 437.375 MHZ   FSK9k6/CW
Beacon: 437.375 MHz   FSK9k6/CW

IARU coordination status page:

AMSAT-NA webpage:

[02092011]
��STARS (Kagawa Univ.) (Twin Satellites)
Catalog Number: 33498
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational ?

Downlinks: 437.485 MHz FM/CW
           437.465 MHz FM/CW
Beacons: 437.305 MHz FM/CW
           437.275 MHz FM/CW

Callsigns: JR5YBN
           JR5YBO

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum�

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID1&retURL
�atellites/status.php
[02092011]
��KKS-1 (Tokyo MCIT)
Catalog Number: 33499
Launch Date: January 23, 2009 0354z

Launch site: Tanegashima Space Center, Japan

Status: Operational

Downlink: 437.455 MHz AFSK/CW
Beacon: 437.385 MHz AFSK/CW

Callsign: JQ1YYY

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum7

AMSAT-NA webapge:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID0&retURL
�atellites/status.php
[20092011]
��PRISM (Tokyo Univ.)
Catalog Number: 33493
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational ?

Downlink: 437.425 MHz AFSK/GMSK/CW
Beacon: 437.250 MHz AFSK/GMSK/CW

Callsign: JQ1YCX

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum�

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID9&retURL
�atellites/status.php
[02092011]
��RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number: 32953
Launch Date: May 23, 2008 1520z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational

Curent Modes: Telemetry
              Audio
              Images

Downlinks: 435.315 MHz
           435.215 MHz

AMSAT-NA website:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID5&ret
URL�atellites/status.php

Official website:
http://www.npopm.com/?cid�oca&caidC
[02092011]
��CanX-2
Catalog number: 32790
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational in range of ground station only

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnumF
[02092011]
��AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Downlink: 437.425 MHz 1k2 baud packet

For the latest project status update please visit the AAUSAT-II web page:
http://www.aausatii.aau.dk/homepage/index.php?language�&page�me

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum`
[02092011]
��CO-65 CUTE-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Downlink: 437.475 MHz 9k6 Packet
Uplink: 1267.600 Mhz

Telemetry Beacon:
Downlink: 437.2750 MHz CW

For the latest project status update please visit the Cute-1.7+APD II web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnumx

Command Station blog website:
http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID2&retURL
�atellites/status.php
[03232012]
��Compass-1
Catalog number: 32787
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Current Mode: dependant on last received command

Uplink: 145.980 MHz FM
Downlink: 437.275 Mhz CW
          437.405 MHz Packet

For the latest project status update please visit the Compass 1 web
page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnumR

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID4&retURL
�atellites/status.php
[06162011]
��CO-66 Seeds II
Catalog number:
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Downlink: 437.485 MHz

Callsign: JQ1YGU

For the latest project status update please visit the Seeds 2 web
page: http://cubesat.aero.cst.nihon-u.ac.jp/english/seeds_2_e.html

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum6

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID3&retURL
�atellites/status.php
[02092011]
��CAPE-1
Catalog Number: 31130

Launch Date: April 17,2007 0702z
Launch site: Baikonur, Kazakhstan

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID�&retURL
/satellites/status.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnumr
[02092011]
��CP3
Catalog Number: 31129
Launch Date: April 17,2007 0702z
Launch site: Baikonur, Kazakhstan

Status: Operational

Current Mode: /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnumt
[02092011]
��CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005 0652z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon: 437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/xivpicte.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum7
[02092011]
��CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: ?????

Current Mode: /u

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Beacon:     436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS
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Callsign: JQ1YGW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID�&retURL
�atellites/status.php

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[02092011]
��QuakeSat
Catalog Number: 27845
Launch Date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Telemetry only

Current Mode: 9600 baud data packet

Mode U packet
Downlink: 436.675 MHz 9k6 BPS

Quakesat webpage:
http://www.quakefinder.com/services/quakesat-ssite/
[02252011]
��CO-55 Cute-1.7+APD II
Catalog Number: 27844
Launch date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational

```
Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only
```

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon

Downlink: 436.8375 MHz CW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satIDi&retURL
�atellites/status.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnumx
[02092011]
��NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001 0240z
Launch site: Kodiak Launch Complex, Alaska, USA

Status: Telemetry only

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[02092011]
��RS-22 RADIO SPORT 22 (MOZHAYETS 4)
Catalog number: 27939
Launch Date: September 27, 2003 0612z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational - 70cm cw only

Current Mode: /u

CW Beacon - 435.352 MHz
            145.818 MHz

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satIDv&retURL
�atellites/status.php
[02092011]
��LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990
Launch site: Kourou, French Guiana

Status: CW Beacon only

Uplinks: 145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink: 437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[02092011]
��UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984
Launch site: Vandenburg AFB, California, USA

Status: Operational ?

Current Mode: /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon: 435.025 MHz
Mode-S Beacon: 2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[07052011]
��INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998 0640z (ZARYA module)
Launch sites: Baikonur, Kazakhstan
Kourou, French Guiana
Uchinoura Space Center, Japan
Kennedy Space Center, Titusville, Florida, USA

Status: Operational

Current Active Modes: FM Repeater - OFF
Voice -   V/v
BBS -   OFF
2m APRS -   ON
70cm Digi -   ON
SSTV -   OFF

Expedition 30 Crew (November 2011 - July 2012):

Commander:	Oleg Kononenko	RN3DX
Flight Engineer:	Andr� Kuipers	PI9ISS
Flight Engineer:	Don Pettit	KD5MDT

Flight Engineer:
Flight Engineer:
Flight Engineer:

Available Modes and Frequencies:
Digital/APRS:
Worldwide 2m packet uplink: 145.825 MHz FM 1k2
Worldwide 2m packet downlink: 145.825 Mhz FM 1k2
Worldwide 70cm packet downlink: 437.550 Mhz FM 1k2
Worldwide 70cm packet downlink: 437.550 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
2m Packet Mailbox: RS0ISS-11
2m Digipeater alias: ARISS
70cm Packet Mailbox: RS0ISS-1
70cm Digipeater callsign: RS0ISS
70cm Digipeater alias: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[04302012]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-128.S3
WSR 128 Part 3 05/07/2012

AMSAT NEWS SERVICE BULLETIN 128.S3
FROM AMSAT HQ SILVER SPRING, MD, May 07, 2012
TO ALL RADIO AMATEURS
BID: $WSR-128.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

NANOSAIL-D
Catalog Number: 37361(?)
Ejection Date: January 17, 2011

Status: Non - Operational

Downlink: 437.270 MHz AX.25

URL: http://nanosaild.engr.scu.edu/dashboard.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum5
[04302012]
��HO-68 HOPE-1 (CAS-1)(XW-1)
Catalog Number: 36122
Launch Date: December 15, 2009 0231z
Launch site: Taiyuan Space Center, PRC

Status: Telemetry only

Callsign:
Broadcast: BJ1SA-11
BBS: BJ1SA-12

Uplinks: 145.8250 MHz FM, PL 67.0 Hz.
145.9250 - 145.9750 MHz SSB/CW
145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
435.7650 - 435.7150 MHz SSB/CW
435.6750 MHz AFSK 1200 BPS

Beacon: 435.7900 MHz CW

Mode and Antenna Polarization:
V: LHCP 2.0dBi max
U: RHCP 3.0dBi max

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum8

For more information about XW-1 (CAS-1):
http://

[04302012]
��SO-67 SumbandilaSat
Catalog Number: 35870
Launch Date: September 17, 2009 1555z
Launch site: Baikonur, Kazakhstan

Status: Non - Operational

Callsign: ZS0SUM

Uplink: 145.875MHz FM tone 233.6 Hz
Downlink: 435.345MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

For more information about SO-67:
http://www.amsatsa.org.za/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum�
[01272012]
��CP4
Catalog Number: 31132
Launch Date: April 17, 2007

Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon: 437.325 MHz CW

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnumy
[09062010]
��LIBERTAD-1
Catalog Number: 31128
Launch Date: April 17, 2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink: 145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25

IARU coordination status page:

http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnumv
[09062010]
��PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: Non-Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder: 145.825 Mhz FM

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnumQ
[09062010]
��NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
                             2407.250

Official Website: http://www.ncube.no

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum$
[09062010]
��XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 MHz FM 67Hz CTCSS
Voice Downlink: 2401.835 MHz FM
Packet Up/Downlink: 437.250 MHz 9k6 packet
Packet Downlink   2401.835 MHz 38k4 packet

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnumT
[09062010]
��UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non-Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnumS
[09062010]
��AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004 0745z
Launch site: Baikonur, Kazakhstan

Status: Non - Operational

Current Mode(s):
Voice repeater: V/u
Uplink: 145.880 MHz FM
Downlink: 435.150 MHz FM

Telemetry: Recovery efforts
Downlink: 435.150MHz 9k6

Analog voice downlink:	435.300 MHz FM
	435.150 MHz FM
	2401.200 Mhz FM
Analog voice uplink:	145.860 MHZ FM
	145.880 MHz USB
	145.880 MHz FM
	145.920 MHz FM
	145.920 MHz FM - 67 Hz PL tone burst
	1268.705 MHz FM
Digital Downlinks:	435.150 MHz FM 38k4 PBP, 1 watt output
	435.150 MHz FM 9k6 Pacsat Broadcast Protocol
	2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:	145.860 MHz FM 9k6 Pacsat Broadcast Protocol
	1268.703 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon:	435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum
[12062011]
��CANX-1

Catalog Number: 27847
Launch Date: June 30, 2003

Status: Non-Operational

Downlink: 437.8800 MHz AFSK 1k2bps
[06052009]
��DTUSAT
Catalog Number: 27842
Launch Date: June 30, 2003

Status: Non-Operational

Current Mode: 2k4 AFSK Packet last reported

Downlink: 437.475MHz

Officail webpage: http://dtusat1.dtusat.dtu.dk/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID1&retURL
�tellites/all_oscars.php
[02212009]
��AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)

Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
��MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Telemetry only

Uplinks: 145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial land and weather imaging payloads offers FM and FSK
Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[03302009]
��NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
��SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
��SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
��AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks

V-band: 145.840 - 145.990 MHz CW/LSB
U-band: 435.550 - 435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks

S2-band: 2401.225 - 2401.475 MHz CW/USB
K-band: 24048.010 - 24048.060 MHz CW/USB
Beacon: 2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)

BEACON	General Beacon(GB)	Middle Beacon(MB)	Engineering Beacon(EB)
2 m	none	145.898 MHz	none
70cm	435.438 MHz	435.588 MHz	435.838 MHz
13cm(1)	2400.188 MHz	2400.338 MHz	2400.588 MHz
13cm(2)	2401.173 MHz	2401.323 MHz	2401.573 MHz
3cm	10450.975 MHz	10451.125 MHz	10451.375 MHz
1.5cm	24047.885 MHz	24048.035 MHz	24048.285 MHz

[07162007]
��OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
��UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
��SO-35 SUNSAT
Catalog Number: 25636

Launch date:February 23, 1999

Status: Non-Operational

```
Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater:         436.250 MHz

Uplinks: Mode B Repeater:  145.825 MHz
Mode J Digipeater:         145.825 MHz
                           145.900 MHz
```

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
��PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
��SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
��GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Non-Operational

Current Modes:
Telemetry : /u

```
Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign:       4XTECH-12

More information of GO-32 can be found at:
http://asri.technion.ac.il/techsat/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID&retURL
�atellites/status.php
[07172010]
��TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink:   145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
��MO-30 UNAMSAT-2
Catalog Number: 24305
Launch Date: September 5, 1996

Status: Non-operational

Downlink:       435.1380 MHz AFSK 1200 BPS
Downlink:       435.2060 MHz AFSK 1200 BPS
Uplink:         145.8150 MHz AFSK 1200 BPS
Uplink:         145.8350 MHz AFSK 1200 BPS
Uplink:         145.8550 MHz AFSK 1200 BPS
Uplink:         145.8750 MHz AFSK 1200 BPS
[06042009]
��PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Non-operational

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign:       POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
```

[01012009]
��IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks: 145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
��KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
��AO-24 ARSENE
Catalog Number: 22654
Launch Date: May 13, 1993

Status: Non-operational

Uplink: 435.0625 MHz FM 1k2bps AFSK
           435.1125 MHz FM 1k2bps AFSK
           435.1375 MHz FM 1k2bps AFSK
Downlink: 145.9750 MHz FM 1k2bps AFSK
          2446.5025 MHz FM 1k2bps AFSK

Beacon: 2446.4700 MHz CW

Broadcast callsign:
BBS:
[12162009]
��KO-23 KITSAT
Catalog number: 22077

Launch date: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HL01-11
BBS: HL01-12
[01222007]
��UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink: 145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
��AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink: 435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
��FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons: 435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink: 145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks: 145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html

[01152007]
��WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
��DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink: 145.825 MHz FM 1200 Baud AFSK
Beacon: 2401.220 MHz
[05012006]
��AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: non-operational

Current Mode: V/u

Uplink: 145.900 MHz FM 1200-baud Manchester FSK (reserved)
                145.920 MHz FM VOICE
                145.940 MHz FM 1200-baud Manchester FSK (reserved)
                145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink: 437.026 MHz USB VOICE
                (1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC 437.050 MHz RHCP
   PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[07242009]
��UO-15 UoSAT-4
Catalog Number: 20438
Launch Date: January 22, 1990

Status: Non-operational

Uplink: ?

Downlink: 435.1250MHz (?)
          435.1200MHz (?)
[06042009]
��UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink: 145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
��FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink: 145.8500 MHz MFSK 1200 BPS
Uplink: 145.8700 MHz MFSK 1200 BPS
Uplink: 145.8900 MHz MFSK 1200 BPS
Uplink: 145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
��AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon: 145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
��AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational

```
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink  29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
��AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
Beacons:   29.450 MHz
          435.100 MHz
[01312008]
��AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
��OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
��RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon 1:  29.352 MHz (intermittent)
Beacon 2:  29.398 MHz
```

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
��RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB

Beacon: 145.860 MHz

Robot: 145.908 MHz
[05232004]
��RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-128.S4
WSR 128 Part 4 05/07/2012

AMSAT NEWS SERVICE BULLETIN 128.S4
FROM AMSAT HQ SILVER SPRING, MD, May 07, 2012
TO ALL RADIO AMATEURS
BID: $WSR-128.S4

THE FOLLOWING SATELLITES HAVE RE-ENTERED OR HAVE BEEN RETURNED SAFELY:

ARISSat-1
Catalog number: 37772
Launch date: August 03, 2011 1843z
Launch site: International Space Station

Status: Re-entered January 05, 2012

Callsign: RS01S

Current Mode(s):
Linear Transponder: U/v

Uplink: 435.758 to 435.742 MHz CW/LSB
Downlink: 145.922 to 145.938 MHz CW/USB

FM Telemetry/SSTV/Messages/ID:
Downlink: 145.950 MHz FM

Telemetry/Beacon:
Downlink: 145.939 MHz CW1
             145.919 MHz CW2
             145.920 MHz 1k BPSK USB
             145.920 MHz 400b BPSK USB

Official Webpage:http://www.amsat.org/amsat-new/ARISSat/ARISSat.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/informal_detail.php?serialnum�
[01052012]
��CAERUS
Catalog Number:
Launch Date: December 08, 2010 15:43:00 UTC
Launch site: Kennedy Space Center, Titusville, Florida, USA

Status: Re-entered December 22, 2010

Uplink:
Downlink: 437.600 MHz 1k2 AX.25

Beacon: 437.600 MHz CW

Callsign: KJ6FIX

URL:
http://www2.isi.edu/research/prj-serc/prj-serc_projects/prj-serc_projects
-8.
htm

IARU coordination status page:

[11102011]
��CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Re-entered
Re-entered: October 25, 2009

Uplink: 1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnumV
[09062010]
��BEVO-1 (DRAGONSAT-1)
Catalog Number: 35690
Launch Date: May 19, 2009

Status: Re-entered
Re-entered:

Downlink: 437.325 MHz 9k6 GMSK
437.325 MHz CW 20wpm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum7
[07312009]
��AggieSat2 (DRAGONSAT-2)
Catalog Number: 35690
Launch Date: May 19, 2009

Status: Re-entered
Re-entered:

Downlink: 436.250 MHz 9k6 FHSS
[11112009]
��Pollux
Catalog Number: 35693
Launch Date: July 31, 2009

Status: Re-entered
Re-entered:

Callsign: POLLUX-1

Downlink: 145.825MHz 1k2 AX.25

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum9
[09062010]
��Castor (ANDE-2)
Catalog Number: 35694
Launch Date: July 31, 2009

Status: Re-entered
Re-entered:

Callsign: KD4HBO-1

Downlink: 145.825 MHz 1k2 AX.25

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum4
[09062010]
��NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: July 28, 2008

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnumY
[01012009]
��NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
��NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink: 145.825 Mhz FM APRS AX25
APRS Uplink: 145.825 MHz FM APRS AX25
Voice/PSK31 Uplink: 28.120 MHz

Packet to Voice ID: RAFT
[06112007]
��GENESAT-1
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Re-Entered
Re-entered date: August 8, 2010

Current Mode: /u

Callsign: KE7EGC

Telemetry Beacon Downlink: 437.0695 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[08082010]
��HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Re-Entered
Re-entered: June 18, 2008

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon: 437.2750 MHz CW

Callsign: JR8YJT
[01012009]
��SO-43 Starshine 3
Catalog Number: 26929
Launch Date: September 30, 2001

Status: Re-Entered
Re-entered: January 21, 2003

Beacon: 145.825Mhz
[02212009]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)

* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at}
amsat.org
NNNN
/EX

From -3775482139448178985
X-Google-Thread: 10e8ad,9af73dcf8d1ea195,start
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Received: by 10.68.219.66 with SMTP id pm2mr3858563pbc.8.1336918116035;
        Sun, 13 May 2012 07:08:36 -0700 (PDT)
Path: pr3ni21323pbb.0!nntp.google.com!news2.google.com!news.glorb.com!
news.linkpendium.com!news.linkpendium.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-134 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sun, 13 May 2012 10:08:34 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 440
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000901cd3111$de1537f0$9a3fa7d0$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
X-Trace: reader1.panix.com 1336918114 12149 166.84.1.6 (13 May 2012 14:08:34 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 13 May 2012 14:08:34 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to   rec-radio-info@panix.com

X-RRI-Info-2: Send technical complaints to   rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Type: text/plain;
charset="us-ascii"
Content-Transfer-Encoding: 7bit
Content-Language: en-us

AMSAT NEWS SERVICE
ANS-134

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor at amsat.org

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**********************************************************************
* Volunteers are needed to help at the AMSAT booth at Dayton. Gould  *
* WA4SXM, is looking for volunteers to help man the AMSAT booth dur- *
* ing the 2012 Hamvention. People are needed all 3 days for 2 hour   *
* shifts. Please send the days and times you are available to help   *
* as well as how many shifts you are willing to work via e-mail to   *
* wa4sxm at amsat.org.                                               *
* Monitor http://www.amsat.org/amsat-new/hamvention/2012/Dayton.php  *
* for the latest AMSAT at Dayton news and developments               *
**********************************************************************
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In this edition:
* 14 May Reservation Deadline for AMSAT/TAPR Banquet at Dayton
* AMSAT Theme at Dayton 2012: Running with Fox
* TAPR Forum at Dayton Hamvention
* Vietnam F-1 Cubesat Team Completed Successful Communication Test
* 15 May Deadline to Apply for ARRL TI-2 Space in the Classroom Institute
* NASA TV to Broadcast Three Hams Launch From Baikonur
* Satellite Shorts From All Over
* ARISS Status - 7 May 2012

SB SAT @ AMSAT $ANS-134.01
ANS-120 AMSAT News Service Weekly Bulletins

AMSAT News Service Bulletin 134.01
From AMSAT HQ SILVER SPRING, MD.

May 13, 2012
To All RADIO AMATEURS
BID: $ANS-134.01

14 May Reservation Deadline for AMSAT/TAPR Banquet at Dayton

The sixth annual joint AMSAT/TAPR Banquet will be held Friday evening, May 18, 2012 during the Dayton Hamvention.

The Banquet will be at the:

Kohler Presidential Banquet Center
4572 Presidential Way
Kettering, OH 45429
(just south of Dayton).

Reservations are required and must be made by Monday, 14 May 2012. Seating is limited, so make your reservations early.

The price for the Banquet is $30 per person. Reserved tickets may be picked up at the AMSAT booth at Hamvention on Friday, or at the door.

You may make reservations for the 2012 AMSAT/TAPR Banquet online in the AMSAT Store. AMSAT Presidents Club Gold members should let Martha know if they are planning to attend the banquet.

For additional information contact Martha at the AMSAT office (martha at amsat.org).

Banquet Schedule

+ 6:30 PM: Doors open and Cash bar is available with Beer, Wine, Liquor and soft drinks.

+ 7:15 PM: Buffet Dinner service begins. The Center has a justly deserved reputation for good food and service.

+ 8:15 PM: Presentation by Howard Long, G6LVB
  Howard will be talking about his FUNcube Dongle, the 64 - 1700 MHz Software Defined Receiver. This innovative USB device is the size of a thumbdrive and has an SMA antenna socket. Multiple SDR control and display software programs can be used with the FUNcube Dongle.

[ANS thanks Gould Smith, WA4SXM for the above information]

AMSAT Theme at Dayton 2012: Running with Fox

The 2012 Dayton Hamvention will be held this year on 18 - 20 May 2012. As has been the case for the many years Hamvention will be at the Hara Arena Complex on the north side of Dayton. AMSAT will occupy the same booths (444-449) in Ball Arena, right across from the ARRL area and just inside the door from the Satellite Demonstration area.

The AMSAT theme for 2012 is "Running with Fox". We will have multiple exhibits of the new AMSAT satellite on display.

Visit AMSAT's Dayton Hamvention page for all details on activities:
http://www.amsat.org/amsat-new/hamvention/2012/Dayton.php

Some of the activities will include:

- Life size Fox models will be on display as well as diagrams of the modules inside the 10cm square satellite.

- Operational prototype of ARISSat-1 on display.

- AMSAT Thursday Night Get-together at the Tickets Pub & Eatery.

- The sixth annual AMSAT/TAPR Banquet will be Friday night May 18 at the Kohler Banquet Center. The price for the Banquet is $30. Seating is limited and reservations are required. Follow the links on AMSAT's Dayton page.

- The AMSAT Forum will be on Saturday May 19.

AMSAT/TAPR Friday Night Banquet

AMSAT/TAPR Banquet on Friday night, May 18 is one of the main AMSAT activities during the 2012 Hamvention at Dayton.

AMSAT is pleased to announce that Howard Long, G6LVB will be the featured speaker for the evening event. Howard will be talking about his FUNcube Dongle, the 64 - 1700 MHz Software Defined Receiver. This innovative USB device is the size of a thumbdrive and has an SMA antenna socket. Multiple SDR control and display software programs can be used with the FUNcube Dongle.

Banquet tickets will not be sold at the AMSAT booth during the Hamvention so reservations must be made through the AMSAT Store:
http://www.amsat-na.com/store/item.php?id=100158
Tickets are $30 apiece.

ARISS Mentor Introduction at Dayton 2012

AMSAT and ARRL are teaming up during the 2012 Hamvention to recruit new ARISS (Amateur Radio on the International Space Station) Technical Mentors and Ground Station Operators.

Friday and Saturday (May 18 & 19) at 4pm in the ARRL stage area

AMSAT Vice President for Educational Relations Mark Hammond N8MH will explain the need for additional ARISS Technical Mentors and Ground Station Operators and the requirements and responsibilities needed to help provide a reliable conversation between astronauts and selected schools or groups.

Technical Mentors serve as an advising and coordinating liaison between NASA, the school or group making the ARISS contact, and the Ground Station Operators, who set up the satellite station at the contact location. We encourage anyone interested in helping make future school contacts with the ISS successful to please attend.

AMSAT to Facilitate Student Satellite Contacts

AMSAT is encouraging all students attending the 2012 Dayton Hamvention to come by the Satellite Demonstration Area just outside of the Ball Area entrance and make a contact using the amateur satellites. There will be AMSAT volunteers there to explain how to make the contacts and during actual satellite passes will try to get as many students as possible to complete actual contacts. There are lists of satellite pass times in the satellite demonstration area and at the AMSAT booth.

[ANS thanks Gould Smith, WA4SXM for the above information]

TAPR Forum at Dayton Hamvention

TAPR will be found in booths 455-459 in the Ball Arena of the Hara Arena at the Dayton Hamvention. They will be near AMSAT who will be found in booths 444-449 in the Ball Arena.

TAPR will feature several SDR projects which are gaining interest quickly in the amateur radio community. Details of TAPR projects and the group's plans for Dayton can be found in the PSR Digital Journal. The Spring 2012 edition is now available for download from:
http://www.tapr.org/psr/psr118.pdf

The TAPR Forum gets underway in Room 1 of the Hara Arena at 9:15AM on Friday and runs until 11:15 AM. The TAPR Forum speakers include:

+ Introduction and TAPR Update by Steve Bible, N7HPR

+ Beyond openHPSDR: Hermes and the Future by Scotty Cowling, WA2DFI. Hermes is the latest addition to the openHPSDR stable of boards.

+ Embedded DSP for PCless SDR" by Lyle Johnson, KK7P. Self contained radios have been standard since the mid-1920s. Why should SDRs be different? For many applications especially portable operation not having to lug a PC around, or try and read its screen in bright ambient light, or depend on a laptop's battery charge level can be decided benefits. Advances in DSP technology allow self contained, highly portable SDRs that provide many hours of operation on small, internal battery packs.

+ Time and Frequency Update by John Ackermann, N8UR. After some down time, the TAPR T&F project list is moving forward. This presentation will discuss the new TADD2 Mini frequency divider that is now shipping, and will give a glimpse of new products in the pipeline.

+ CODEC 2 by David Rowe, VK5DGR. Codec2 is an open source low bit rate speech codec designed for communications quality speech at 2400bit/s and below. Applications include low bandwidth HF/VHF digital radio and VOIP trunking. Codec 2operating at 2000 bit/s can send 32 phone calls using the bandwidth required for one 64 kbit/s uncompressed phone call. It fills a gap in open source, free as in speech voice codecs beneath 5000 bit/s and is released under the GNU Lesser General Public License (LGPL).

[ANS thanks TAPR President Steven Bible, N7HPR and Stan Horzepa, WA1LOU for the above information]

Vietnam F-1 Cubesat Team Completed Successful Communication Test

Hanoi based FSpace team completed another important milestone in preparation for the July 18 launch when they successfully performed a long range communication test of F-1 CubeSat with a ground station at a distance of 50km. The team carried the little satellite to top of Tam Dao mountain in Vietnam (about 1300m high). A communication link of 50km with the ground station at the FPT building in Hanoi was established. Despite of heavy fog and high humidity (which was very bad for radio communication) the ground station successfully sent uplink commands to F-1 and the satellite responded correctly, reporting its status and taking some photos.

F-1 is one of five CubeSat teams preparing for a launch to the International Space Station in the July 18-21, 2012 time frame. These CubeSats will be launched from Tanegashima, Japan aboard the JAXA HTV-3 ISS resupply mission. The CubeSats will be loaded into the J-SSOD deployer on the Japanese Experiment Module, also known as Kibo. They will be deployed with the Kibo robotic arm planned for September, 2012 timeframe.

Other cubesats on this flight include:
+ HTV 3 (Kounotori 3)
+ Raiko
+ We Wish
+ FITSat 1
+ TechEdSat

The F-1 Cubesat team posted photos at: http://fspace.edu.vn/?p=557.

[ANS thanks the F-1 Cubesat Team for the above information]

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15 May Deadline to Apply for ARRL TI-2 Space in the Classroom Institute

The ARRL Education & Technology Program (ETP) is offering an advanced Teachers Institute (TI-2) session that focuses on space in the classroom. This four-day professional development workshop is sponsored by the Dayton Amateur Radio Association and is held in their location in Dayton, Ohio (July 9-12).

The TI-2 Space curriculum focuses on the nuts and bolts of setting up and operating a satellite ground station. This serves as excellent preparation for a scheduled contact with the ISS through the Amateur Radio on the International Space Station (ARISS) program. But it also provides instruction for continued use of satellites and other man made space assets to explore naturally generated signals, space and a variety of topics.

Thanks to generous assistance from Yaesu USA and Ham Radio Outlet, participants will receive a full ground station that is configured for satellite communications, as well as training on how to set it up and use it to make Amateur Radio contacts and download telemetry data.

To be considered for a seat in TI-2 Space, participants must possess at least a Technician class license at the time off application. ARRL membership is required. Priority for attending the TI-2 Space session will be given to teachers who have developed an educational proposal accepted for participation in the ARISS Program.

This session has a class limit of 8 participants, so apply early! The deadline for the TI-2 Space in the Classroom sessions of the Teachers Institute is May 15. This deadline is this week ... hurry!

Full details are posted on the ARRL web at:
http://www.arrl.org/ti-2-space-in-the-classroom

[ANS thanks the ARRL for the above information]

NASA TV to Broadcast Three Hams Launch From Baikonur

The next mission to the International Space Station will have three crew members who are licensed amateur radio operators. The crew consists of NASA Flight Engineer Joseph Acaba, KE5DAR, and two Russian crewmates, Soyuz Commander Gennady Padalka, RN3DT, and Flight Engineer Sergei Revin, RN3BS.

NASA will televise the launch and docking of the next mission to the ISS, scheduled for May 14, with live NASA TV coverage of the Soyuz TMA-04M spacecraft launch from the Baikonur Cosmodrome in Kazakhstan. Coverage begins at 9 PM CDT on Monday, May 14 (0200 UTC May 15), with the launch scheduled for 10:01 PM CDT (0301 UTC).

The trio will arrive at the station May 16, joining Expedition 31 Commander Oleg Kononenko, RN3DX, of the Russian Federal Space Agency, Flight Engineer Don Pettit, KD5MDT, of NASA and Flight Engineer Andrei Kuipers, PI9ISS, of the European Space Agency, who have been aboard the ISS since December 2011. Padalka, Acaba and Revin will transition to the Expedition 32 crew in July and return to Earth in mid-September.

NASA TV Schedule

+ Monday, May 14 - 9 PM CDT (0200 UTC May 15)
  Soyuz TMA-04M launch coverage (launch scheduled at 10:01 PM [0301 UTC]), including video of the crew's pre-launch activities and launch replays.

+ Tuesday, May 15 - 12 AM CDT (0500 UTC)
  Video file of Soyuz TMA-04M pre-launch, launch video and post-launch interviews.

+ Wednesday, May 16 - 11 PM CDT (0400 UTC)
  Soyuz TMA-04M docking coverage (docking scheduled at 11:38 PM [0438 UTC]), followed by a post-docking news conference from Mission Control in Korolev, Russia.

+ Thursday, May 17 - 2 AM CDT (0700 UTC)
  Soyuz TMA-04M hatch opening and welcoming ceremony (hatch opening scheduled at 2:20 AM [0720 UTC]).
  4 AM CDT (0900 UTC) - Video file of Soyuz TMA-04M docking, hatch opening and welcoming ceremony.

You can watch live online on the NASA TV Public and Media channels, streamed live on the internet at http://www.nasa.gov/ntv or on your television set if your local provider carries the NASA TV channel in your area.

[ANS thanks the ARRL and NASA for the above information]

Satellite Shorts From All Over

- AMSAT-UK posted a video made by Alexandru Csete OZ9AEC demonstrating the interference caused by FM emissions on the FO-29 linear transponder. Alexandru used the AMSAT-UK FUNcube Dongle and Gqrx SDR software to receive and record the signal. The video is posted at: http://www.uk.amsat.org/7260

- Doug McArthur, VK3UM announced a software update to the VK3UM EMR Calculator program. The EMR (Electro Magnetic Radiation) software Version 7.00 has been revamped and enhanced for improved ease of use. It includes many examples, references and a Help file. It covers ARPNSA (Australian), FCC, and CEU Radio Frequency Emission Standards. It may also be configured for any other requirement outside the above Standards i.e. Russian Federation. Doug has several other programs such as his EME Calculator available for download on his website at: http://www.vk3um.com/

- Hams like science, so enjoy these scientific music videos in the shack. The Symphony of Science is a musical project of John D Boswell, designed to deliver scientific knowledge and philosophy in musical form. See: http://symphonyofscience.com/

- In his latest Science Off the Sphere video from the ISS, astronaut Don Pettit, allows us to 'see' sound waves in space. Watch and learn on-line at: http://www.physicscentral.com/explore/sots/

[ANS thanks everyone for the above information]

ARISS Status - 7 May 2012

1. ARISS - Virginia Contact Successful

On Wednesday, May 2, the Mariners' Museum in Newport News, Virginia experienced a successful Amateur Radio on the International Space Station (ARISS) contact with Don Pettit, KD5MDT via telebridge station IK1SLD in Italy. Groups in Virginia, Louisiana, New York, and Michigan were video conferenced together for the event. Approximately 350 students at the four locations got in seventeen questions before ISS went over the horizon. The contact highlighted a comprehensive Science, Technology, Engineering and Mathematics (STEM) education plan.

2. Ham Nation Features Flabob Contact

The ARISS contact with Astronaut Don Pettit and Flabob Airport Preparatory Academy students in Jurupa Valley, California that occurred on April 19, 2012, was featured on the May 1 episode (#46) of the Bob Heil & Gordon West "Ham Nation" video podcast. The video is now available on TwiT TV and Flabob sites.
Ham Nation: http://twit.tv/hn

Flabob site: http://www.iss-flabob.com

3. Astronaut Training Status

An introductory/basic operations session is planned for Alexander Gerst, KF5ONO on Wednesday, May 9. Gerst is scheduled to fly with Expedition 40 in May 2014.

[ANS thanks Carol, KB3LKI, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

Primary and secondary school students are eligible for membership at one-half the standard yearly rate. Post-secondary school students enrolled in at least half time status shall be eligible for the student rate for a maximum of 6 post-secondary years in this status. Contact Martha at the AMSAT Office for additional student membership information.

73,
This week's ANS Editor,
Lee McLamb, KU4OS

```
From -2962087656278109549
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X-Google-Language: ENGLISH,ASCII-7-bit
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        Mon, 14 May 2012 08:30:08 -0700 (PDT)
MIME-Version: 1.0
Path: pr3ni25344pbb.0!nntp.google.com!news2.google.com!
newsfeed2.dallas1.level3.net!news.level3.com!panix!rri.panix.com!robomod!not-for-
mail
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From: SWPC.Webmaster@noaa.gov
Newsgroups:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.shortwave,rec.radio.info
Subject: Weekly Highlights of Solar and Geomagnetic Activity, 07 - 13 May 2012
Followup-To:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.shortwave
Date: Mon, 14 May 2012 11:30:06 EDT
Organization: NOAA Space Weather Prediction Center
Lines: 95
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <20120514153001.3793533C57@panix2.panix.com>
NNTP-Posting-Host: panix6.panix.com
X-Trace: reader1.panix.com 1337009406 5750 166.84.1.6 (14 May 2012 15:30:06 GMT)
X-Complaints-To: abuse@panix.com
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X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to   rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to   rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump

:Product: Weekly Highlights and Forecasts
:Issued: 2012 May 14 1333 UTC
Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center
Product description and SWPC contact on the Web
# http://www.swpc.noaa.gov/weekly.html
#
Weekly Highlights and Forecasts
#
Highlights of Solar and Geomagnetic Activity
07 - 13 May 2012

Solar activity ranged from low to moderate levels. Region 1476 (N10, L=180, class/area=Fkc/1050 on 09 May) was responsible for almost all x-ray flare activity during the week. It produced a total of 55 C-class flares, 6 M-class flares, and 69 optical flares. Region 1476 began the week as an Fkc type group with a beta-gamma magnetic configuration. By the 8th, it had grown in extent (17 degrees), spot count (35), and complexity (beta-gamma-delta) and produced an M1/1F flare at 1308 UTC. It reached its maximum areal coverage of 1050 millionths on the 9th when it produced an M4/1n at 1232 UTC, an M1/1b at 1408 UTC, and another M4 at 2105 UTC. The maximum extent and spot count (20 degrees, 50 spots) followed on the 10th when Region 1476 produced the largest of the flares, an M5/2b at 0418 UTC. The flare was accompanied by a three minute 10cm burst (690 sfu) at 10/0417 UTC and a Type IV emission at 10/0402 UTC, followed by a weak earth-directed Coronal Mass Ejection (CME). Later that day, Region 1476 produced an M1 at 2026 UTC, the last M-class event of the week. The region then began a slow but steady decline in areal coverage, longitudinal extent and spot count, although it sustained its beta-gamma-delta magnetic configuration.

Earlier in the week, the only M-class event not produced by Region 1476 was an M1/1n flare observed from Region 1471 (S21, L=276, class/area=Eho/320 on 02 May) at 07/1431 UTC. This flare was also accompanied by a 10cm burst (230 sfu) at 10/1415 UTC and a Type IV emission at 07/1409 UTC. STEREO-Ahead imagery suggested an earth-directed CME. The following day, two more potentially earth-directed, weak CMEs were observed in STEREO-A COR2 imagery.

Region 1477 (S24, L=140, class/area Dso/150 on 09 May) was split to form new Region 1478 (S24, L=135, class/area=Hsx/090 on 10 May) on 10 May. Similarly, Region 1479 (N15, L=105, class/area Dso/130 on 12 May) was split to form new Region 1482 (N14, L=100, class/area=Dso/080 on 13 May). Both of these divisions resulted from careful analysis of magnetogram data. After the split, Region 1477 became an Hsx type group with L=144, and Region 1479 became an Hxs type group near L=109.

No proton events were observed at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit was at high levels on the 10th through the 13th, and at moderate levels for the remainder.

Geomagnetic field activity ranged from quiet to active conditions with minor to major storm periods observed at high latitudes. The week began with quiet conditions on 7th and the majority of the 8th. Around 08/0400 UTC, a solar sector boundary crossing from positive to negative was observed at the ACE spacecraft. By midday, the solar wind speed at ACE began to rise, marking the arrival of a coronal hole high speed stream (CH-HSS). Significant southward Bz began around 1730 UTC and reached a minimum of -13 nT late on the 8th before beginning a gradual return to neutral conditions late on the 10th. The geomagnetic field responded with active conditions from the last synoptic period on the 8th through the 9th. Minor to major storm levels were observed at high latitudes on the 9th. Activity subsided to mostly unsettled levels on the 10th, followed by mostly quiet conditions on the 11-12 May. The solar wind speed at ACE remained above 500 km/s until around 13/0000 UTC. Conditions were mostly unsettled on the 13th. Although there were a number of CMEs identified as potentially earth-directed, there was no definitive indication of CME arrival reflected in the ACE data suggesting the transient signatures were obliterated in the high speed stream.

Forecast of Solar and Geomagnetic Activity
14 May - 09 June 2012

Solar activity is expected to be at low to moderate levels throughout the period, with moderate activity most likely with the return of Old Region 1476 on 31 May.

No proton events are expected at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to be at normal levels except on 14 May, 23-29 May, and 06-09 June. The high levels are expected in response to the presence of recurrent coronal hole high speed streams.

Geomagnetic field activity is expected to be quiet to unsettled with occasional active periods. The unsettled to active periods are associated with the geoeffective periods of recurrent CH-HSSs on 14 May, 21-23 May, and 05-08 June. Unsettled to occasionally active conditions are also expected on 14 May with the anticipated arrival of a CME from 12 May.

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From -3781458056464681352
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X-Google-NewGroupId: yes
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nx02.iad01.newshosting.com!newshosting.com!news-out.readnews.com!
transit3.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-141 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sat, 19 May 2012 21:55:28 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 446
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X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
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X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
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AMSAT NEWS SERVICE
ANS-141

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor at amsat.org

In this edition:
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* CubeSat Article in Time Magazine
* Promising Future of CubeSat Missions in UK Metro Newspaper
* Satellite Shorts From All Over

SB SAT @ AMSAT $ANS-141.01
ANS-141 AMSAT News Service Weekly Bulletins

AMSAT News Service Bulletin 141.01
>From AMSAT HQ SILVER SPRING, MD.
May 20, 2012
To All RADIO AMATEURS
BID: $ANS-141.01

AMSAT Satellite Education Focus at Dayton

This weekend marked the annual Dayton Hamvention. AMSAT was present and active inside at the booth in the Ball Arena of the Hara Center and outside at the Satellite Demonstration area. AMSAT Vice President for Educational Relations Mark Hammond, N8MH said, "This year, we had a focus on trying to get youth and first time operators ON THE AIR!" The Satellite Demonstration area gave students, educators, and first time hams the opportunity to come to the microphone and make a satellite contact. Between passes equipment and experienced operators were available for discussions and answers to questions. Differences in operating techniques between FM and linear satellites were demonstrated. Also differing levels of equipment ranging between very simple and portable stations to a full station with computer control were operating.

Dayton also gave AMSAT and ARRL the opportunity to recruit new ARISS (Amateur Radio on the International Space Station) Technical Mentors and Ground Station Operators. Mark, N8MH took advantage of the ARRL Stage on Friday and Saturday to explain the roles of ARISS Technical Mentors who serve as an advising and coordinating liaison between NASA, the school or group making the ARISS contact, and the Ground Station Operators, who set up the satellite station at the contact location.

The AMSAT Forum at Dayton, moderated by Alan Biddle, WA4SCA also included Mark's presentation on the current and future education work. He described specific needs, especially in area of writing K-12 lesson plans (in science and math) using amateur satellite telemetry. Educators who are satellite operators should contact him directly at n8mh@amsat.org and are encouraged to join the AMSAT-EDU mailing list to learn how they can help with our educational outreach.
(See: http://www.amsat.org/mailman/listinfo to join AMSAT-EDU.)

AMSAT's university level mentorship of CubeSat development projects was presented by Alex Harvilchuck, N3NP as he discussed CubeSats at Pennsylvania State University-Erie.

Also, at the AMSAT Forum, AMSAT Engineering VP, Tony Monteiro, AA2TX discussed Project Fox - AMSAT's First CubeSat which was accepted for launch by Project ELaNa, NASA's "Educational Launch of NanoSat". Fox-1 was selected to join the NASA ELaNa program on merit in support of NASA strategic and educational goals. The "Running With Fox" theme at the AMSAT booth featured a model of the Fox-1 cubesat.

[ANS thanks Gould Smith, WA4SXM, and Mark Hammond, N8MH for the
 above information]

Reminder - One Month to Field Day - AMSAT FD Rules On-Line

AMSAT Director Contests and Awards, Bruce Paige, KK5DO reminds you that time of year is once again approaching - Field Day!

Each year the American Radio Relay League (ARRL) sponsors Field Day as an emergency preparedness exercise. The event takes place during a 24-hour period on the fourth weekend of June. For 2012 the event takes place during a 27-hour period between 1800 UTC on Saturday, June 23, 2012 and 2100 UTC on Sunday June 24, 2012. Those who set up prior to 1800 UTC on June 23 can operate only 24 hours.

The Radio Amateur Satellite Corporation (AMSAT) promotes its own version of Field Day for operation via the amateur satellites, held concurrently with the ARRL event.

With the loss of AO-51 and SO-6ay this y ear is going to be most challenging. If you are considering ONLY the FM voice satellites like AMRAD-OSCAR-27 or SaudiSat-Oscar-50 for your primary AMSAT Field Day focus: Don't, unless you are simply hoping to make one contact for the ARRL rules bonus points.

The congestion on FM LEO satellites was so intense in prior years that we must continue to limit their use to one-QSO-per-FM-satellite. This includes the International Space Station. You will be allowed one QSO if the ISS is operating Voice. You will also be allowed one digital QSO with the ISS or any other digital, non-store-and-forward, packet satellite (if operational).

If you have worked the satellites on Field Day in recent years, you may have noticed a lot of good contacts can be made on some of the less-populated, low-earth-orbit satellites like VUSat OSCAR-52,Fuji-OSCAR 29 (may or may not be operational), AMSAT-OSCAR 7. During Field Day the transponders come alive like 20 meters on a weekend. The good news is that the transponders on these satellites will support multiple simultaneous contacts. The bad news is that you can't use FM, just low duty cycle modes like SSB and CW.

The AMSAT Field Day 2012 event is open to all Amateur Radio operators. Amateurs are to use the exchange as specified in ARRL rules for Field Day. The AMSAT competition is to encourage the use of all amateur satellites, both analog and digital.

For the complete listing of the AMSAT Field Day Rules please refer to the documents posted on-line at:
http://www.amsatnet.com/fd2012.doc
http://www.amsatnet.com/fd2012.pdf
Links are also accessible from http://www.amsat.org front page.

[ANS thanks AMSAT Director Contests and Awards, Bruce Paige, KK5DO for the above information]

Japan Amateur Radio CubeSat Launch May 17 - Telemetry on 437.375 MHz

The May 17 launch from Japan of the H-IIA rocket delivered a JAXA climate observation satellite SHIZUKU (GCOM-W) and a South Korean earth observation mission KOMPSAT-3 into orbit also launched an amateur radio satellite HORYU-2, built by students at the Kyushu

Institute of Technology (KIT).

The HORYU-2 Cubesat includes several experiments:
+ 300 volt power generation in LEO
+ COTS technology demonstration of surface potential measurement
+ Orbital debris observation
+ Earth photography

The satellite callsign is JG6YBW and radio amateurs are asked to listen for the 437.375 MHz telemetry downlink. The CW data is composed of an 11 character callsign "JG6YBW HORYU" followed by 15 characters of telemetry data. Details of the telemetry format are available via a link on the AMSAT-UK web, see:
http://www.uk.amsat.org/7404

More information is available on the web:
Horyu website in Google English: http://tinyurl.com/HoryuSatellite
http://www.uk.amsat.org/6638
http://www.uk.amsat.org/4279
http://www.uk.amsat.org/7404
http://www.uk.amsat.org/7540 (showing Horyu-2 separation on-orbit)

Initial TLE set can be found on-line at:
http://kitsat.ele.kyutech.ac.jp/Documents/ground_station/TLE.txt

The 437.375 MHz telemetry downlink also transmits 1200 bps AX.25 packet radio. There is a monthly competition for those who send data received from the telemetry to the KIT server, via the HORYU-2 telemetry analysis software which can be downloaded from:
http://kitsat.ele.kyutech.ac.jp/Documents/information_launch_english.html

Day 1 Initial Reception Reports

The CW signal from HORYU-2 was copied in South America by LW2DTZ on 437.375 MHz on May 17 on a 10 degree elevation pass using 7 element yagi antenna. A strong downlink CW beacon signal was heard in Sudan by ST2NH. GW1FKY reported a strong signal was heard in Wales, UK. JE9PEL captured downlink telemetry from Japan.

[ANS thanks the Horyu-2 team and AMSAT-UK for the above information]

Three Hams Arrive at ISS & Prepare for SpaceX Dragon Arrival

The three crew members who are licensed amateur radio operators were successfully launched on Monday aboard a Russian Soyuz TMA-04M space craft from the Baikonur Cosmodrome in Kazakhstan and have arrived at the International Space Station. The three ham crew consists of NASA Flight Engineer Joseph Acaba, KE5DAR, and two Russian crewmates, Soyuz Commander Gennady Padalka, RN3DT, and Flight Engineer Sergei Revin, RN3BS.

Their arrival brings the crew roster up to six as they join Expedition 31 Commander Oleg Kononenko, RN3DX, of the Russian Federal Space Agency, Flight Engineer Don Pettit, KD5MDT, of NASA and Flight Engineer Andrei Kuipers, PI9ISS, of the European Space Agency, who have been aboard the ISS since December 2011.

NASA reported on the events after arrival of the crew in their ISS On-Orbit Status report posted at: http://tinyurl.com/ISS-On-Orbit
The NASA ISS daily status report for May 18 notes that Joe, KE5DAR also powered on the ham radio station in the Russian Service Module.
A NASA video report of the ISS crew activities can be viewed at:
http://www.youtube.com/watch?feature=player_embedded&v=bA9PXqX_L4Y

The new crew members will begin preparations for the arrival of an unmanned Dragon cargo ship built by SpaceX. Originally scheduled for launch on May 19, a faulty check valve on an engine caused an abort. SpaceX is replacing the failed valve. The next launch attempt is at present planned for Tuesday, May 22 at 3:44 AM EDT (UTC-4).

Dragon will deliver about 1150 pounds of food, clothing and other low-priority items. The capsule then will be repacked with around 1455 pounds of trash and no-longer-needed components and detached from the space station on May 31. SpaceX plans to guide the craft back to Earth for a parachute descent to a Pacific Ocean splashdown to complete the test flight. If the test flight goes well, SpaceX hopes to begin routine cargo delivery missions in August, 2012.

The Dragon capsule will also deliver 15 student experiments from the Student Spaceflight Experiments Program (SSEP). See:
http://www.space-travel.com/reports/Space_Station_Here_We_Come_999.html

Soon after Dragon a Russian Progress vehicle will arrive. In July a Japanese HTV cargo ship will arrive. The crew will also be managing over 215 scientific investigations affecting over 400 scientists on the ground.

An on-line Expedition 31 Mission Status page can be found at:
http://spaceflightnow.com/station/exp31/status.html
For additional details of the Soyuz launch see:
http://spaceflightnow.com/station/exp31/120514launch/
Archived video of the Soyuz launch can be viewed on-line at:
http://www.universetoday.com/95174/expedition-31-blasts-off/

[ANS thanks SpaceFlightNow.com and UniverseToday.com for the above information]

CubeSat Article in Time Magazine

In an article titled, "How a Pocket-Size Satellite Could Find Another Earth", Time Magazine reports that unlike the massive NASA Kepler probe the next mission to search for new planets will be a tiny CubeSat called ExoplanetSat.

Time says: What makes ExoplanetSat even more un-NASA-like is that it began as a class project - although admittedly, the class was at MIT. It was a design-and-build course, which the university's engineering students have to take in order to graduate. In a recent semester, the class was co-taught by Sara Seager [KB1WTW] an astrophysicist who has done groundbreaking research studying how the atmospheres of planets orbiting distant stars might look like from earthly telescopes. Seager recruited five science undergrads to join her engineers, on the theory that out in the real world, they'd eventually have to work with engineers anyway.

The group is developing a prototype ExoplanetSat capable of monitoring a single, bright, sun-like star for two years. Planned to launch late 2012 or 2013 it is hoped it will open the gates for ExoplanetSat interest and funding. Once the funding doors are opened, then the fleet of ExoplanetSats can be launched. The fleet may contain as many as a hundred of these small satellites, each focused on its own star.

In a 2011 visit to Cambridge, UK, Sara said "The reason why we're excited is because we think that this is a really huge thing. Hundreds and thousands of years from now, people will look back and ask, what are the significant accomplishments of our society in the early twenty-first century? One of them will be that we were the first to discover other worlds and other worlds that might be like Earth. When you think back four hundred years, what do you remember? You think about Christopher Columbus and Lewis and Clark. It's the exploration-finding things that were new to our culture. And that's why we're excited."

Read the Times Magazine article at
http://www.time.com/time/health/article/0,8599,2114158,00.html

MIT paper on ExoplanetSat
http://dspace.mit.edu/openaccess-disseminate/1721.1/61644

AMSAT-UK article at: http://www.uk.amsat.org/7348

[ANS thanks AMSAT-UK for the above information]

Promising Future of CubeSat Missions in UK Metro Newspaper

The May 14, 2012 edition of the Metro newspaper carried a story by Ben Gilliland, "The next space age: Cuberty", on pages 26-27 about CubeSats. Among those mentioned is the UK amateur radio Android smartphone CubeSat STRaND-1 which is being built by volunteers at the Surrey Space Centre (SSC).

The online edition of the Metro newspaper can be read at:
http://e-edition.metro.co.uk/2012/05/14/
You will be prompted for an email address but anything that looks like an email address will keep the prompt happy and you can then read the newspaper.

Ben Gilliland's article is also available on the CosmOnline website at: http://www.cosmonline.co.uk/blog/2012/05/14/next-space-age-cuberty

See also: http://www.uk.amsat.org/7395

[ANS thanks Trevor, M5AKA and AMSAT-UK for the above information]

Satellite Shorts From All Over

+ It is time to submit nominations for the upcoming open seats on the AMSAT-NA Board of Directors. Three directors and two alternate directors have terms expiring this year. The director seats open for election are held by Tom Clark, K3IO; Lou McFadin, W5DID; and Gould Smith, WA4SXM. The alternate director seats open for election are held by Mark Hammond, N8MH and Patrick Stoddard, WD9EWK. The AMSAT front page news at http://www.amsat.org has the instructions to submit your nominations.

+ The 2012 AMSAT Annual Meeting and Symposium will be held at the Holiday Inn, Orlando (Florida) Airport on October 26-28, 2012. The First Call for Papers has been issued. The Symposium Team requests a tentative title of your presentation as soon as possible, with final copy to be submitted by October 1 for inclusion in the printed proceedings. Abstracts and papers should be sent to Dan Schultz, N8FGV, at n8fgv at amsat.org. Watch for the latest 2012 Symposium information to be posted on the AMSAT web at: http://www.amsat.org/amsat-new/symposium/2012/index.php

+ While the AMSAT on-line store is closed due to technical issues you can place an order through the AMSAT office. The hours are 10:00 AM - 6:00 PM EDT. Our phone number is 301-589-6062. Martha is looking forward to hearing from you!

+ Clint Bradford, K6LCS and Rich Arland K7SZ collaborated on an article, "Learning Curve - Working the Birds" which was just published in the May, 2012 Dayton Special issue of CQ magazine.

+ The future plans of the QB50 network of 50 CubeSats in a 'string-of-pearls' configuration that will be launched together in the first half of 2015 by a single rocket has caught the attention of the press. The UK Daily Mail published an article how the network of 50 satellites aims to find out what happens INSIDE the northern lights and hopefully 'forecast' solar weather.
See: http://tinyurl.com/UKMail-QB50

+ A Video showing a time lapse view of Earth's Northern Hemisphere from Russia's Electro-L Weather Satellite is posted at:
http://www.spaceref.com/news/viewsr.html?pid=40807

+ Two videos, one of the Aalto-1, about Finland's first satellite project, showing their new groundstation and an animation of the mission is posted on the AMSAT-UK web at:
http://www.uk.amsat.org/7371

+ Though likely no operation on amateur radio satellites at this time, the re-planned TX5, Clipperton Island DXpedition has a plan to utilize satellites. The Cordell Expeditions is pleased to announce a DXpedition to Clipperton Island in early 2013. The team of 24 will sail from San Diego on February 19, 2013, and will be active from Clipperton for 10 days starting around March 1. They will be active on all bands and all modes, and will use DXA, the satellite-linked system that displays near-real-time log data on any Web browser. They state, "We invite your participation in this project, as a team member, supporter, or callsign in our log!"
Clipperton Island Web page: http://www.cordell.org/CI/index.html
Details of DXA satellite program: http://www.cordell.org/DXA/
The DXA program is also planned to be used on a Cordell Expeditions trip to VK0H, Heard Island in early 2014.
(via Ohio/Penn DX Bulletin #1062, and #1062.2)

+ 51 years ago on May 5, 1961, NASA launched the Mercury-Redstone 3 rocket carrying Alan B. Shepard, Jr. aboard the Freedom 7 capsule. Shepard successfully became America's first man in space, making a brief but historic suborbital test flight that propelled American astronauts into the space race of the 1960s. NASA has compiled a video from from photographs taken by a film camera mounted to the Freedom 7 spacecraft. Compare the view in 1961 with the latest generation of space video we routinely receive from the ISS. Watch at: http://www.universetoday.com/95016/the-view-from-freedom-7/

+ Tom Doyle, W9KE posted a video demonstrating a feature he hoped to turn into a SatPC32 Add-On. It provides a "Look Down" perspective as if you were a passenger aboard the satellite. The video is HD and looks best viewed full screen in 720p. Watch it at:
http://www.youtube.com/watch?v=g1K1sIw_F8Y

+ Check out the view of the Big Dipper from 290 million km away taken by NASA's Juno spacecraft en route to Jupiter:
http://tinyurl.com/Juno-Big-Dipper (UniverseToday.com)

[ANS thanks everyone for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

Primary and secondary school students are eligible for membership at one-half the standard yearly rate. Post-secondary school students enrolled in at least half time status shall be eligible for the student rate for a maximum of 6 post-secondary years in this status. Contact Martha at the AMSAT Office for additional student membership information. And with that please keep in mind if you were to take all of the water on Earth, all of the fresh water, sea water, ground water, water vapor and water inside our bodies, take all of it and somehow collect it into a single, giant sphere of liquid, it would make a ball 860 miles (1,385 km) in diameter, only about as wide edge-to-edge as the distance between Salt Lake City to Topeka, Kansas. That's it.

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM

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Newsgroups:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.shor
twave,rec.radio.info
Subject: Weekly Highlights of Solar and Geomagnetic Activity, 14 - 20 May 2012
Followup-To:
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rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.shortwave
Date: Mon, 21 May 2012 15:30:05 EDT
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Lines: 87
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X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Mon, 21 May 2012 19:30:06 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump

```
:Product: Weekly Highlights and Forecasts
:Issued: 2012 May 21 1636 UTC
# Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center
# Product description and SWPC contact on the Web
# http://www.swpc.noaa.gov/weekly.html
#
#                 Weekly Highlights and Forecasts
#
```

Highlights of Solar and Geomagnetic Activity
14 - 20 May 2012

Solar activity ranged from very low to moderate levels. Region 1476 (N09, L=180, class/area Fkc/1050 on 09 May) continued to be the major contributor of x-ray flare activity throughout the week. It produced 13 C-class flares and an M-flare. Region 1476 began the week as an Fko type group with a beta-gamma configuration. As it rotated off the west limb on 17 May, the region produced an M5/1f flare at 17/0147 UTC. This event was accompanied by a 22 minute 10cm Radio Burst (600 sfu) at 17/0142 UTC, Type II (645 km/s) and Type IV radio sweeps, and a partial halo CME. The CME was first observed by the SOHO/LASCO C3 spacecraft beginning at 17/0206 UTC with an estimated plane-of-sky speed of approximately 1200 km/s. The majority of the ejecta was directed off the west limb. Region 1476 continued to produce C-class flares as it rotated off the visible disk on 18 May. A filament eruption produced a CME that was observed in STEREO A COR 2 imagery (plane-of-sky speed approximately 482 km/s) beginning at 18/0709 UTC on 18 May. The ejecta was slightly north of the ecliptic plane, however a glancing blow is possible from that event.

A greater than 10 MeV and greater than 100 MeV proton event at geosynchronous orbit was observed associated with the 17 May M5 flare. The greater than 10 MeV proton event began at 17/0210 UTC and reached a peak flux of 255 pfu at 17/0430 UTC, ended at 18/1620UTC. The greater than 10 MeV proton event crossed the 100 pfu threshold (S2) at 17/0245 UTC and fell below 100 pfu at 17/0945 UTC. The greater than 100 MeV proton event began at 17/0200 UTC and reached a maximum of 20 pfu at 17/0230 UTC, ended at 17/1725 UTC.

The greater than 2 MeV electron flux at geosynchronous orbit was at moderate to high levels from 14 through 16 May. Moderate levels were observed from 17 through 20 May.

Geomagnetic field activity ranged from quiet to active levels. Quiet levels were observed on 15, 17, and 19 May. Quiet to unsettled levels were observed on 14 and 18 May. Quiet to unsettled levels with isolated active periods were observed on 16 and 20 May. On 16 May, an extended period of the southward Bz component of the interplanetary magnetic field caused an isolated active level during the 16/2100 - 2400 UTC period. At approximately 20/0136 UTC, the ACE satellite ovserved an interplanetary shock passage with a corresponding weak sudden impulse observed in the Boulder magnetometer (15 nT) at 20/0215 UTC. The shock passage was likely associated with the 17 May CME. The geomagnetic field responded with an isolated active period during the 20/0300 - 0600 UTC period.

Forecast of Solar and Geomagnetic Activity
21 May - 16 June 2012

Solar activity is expected to be at very low to low levels with a slight chance for M-class flares through 31 May and again from 14 June through the end of the forecast period. Low to moderate levels are expected from 31 May through 13 June due to the return of old Region 1476.

A chance for a greater than 10 MeV proton event at geosynchronous orbit exists from 31 May through 13 June due to the return of old Region 1476.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to be at normal levels on 21 - 23 May, 30 May - 05 June, and again on 13 - 16 June. High levels are expected on 24 - 29 May and again on 06 - 12 June. High levels are in response to recurrent coronal hole high speed wind streams.

Geomagnetic field activity is expected to be quiet to active on 22 - 23 May as the arrival of the 18 May CME as well as a coronal hole high speed stream become geoeffective. Quiet to active conditions are also expected on 06 - 09 June as another recurrent coronal hole high speed stream moves into geoeffective position. Mostly quiet to unsettled conditons are expected for the remainder of the forecast period.

```
From 7934433467316262050
X-Google-Thread: 10e8ad,46234cc9f0f282a3,start
X-Google-NewGroupId: yes
X-Google-Thread: 10b9c8,46234cc9f0f282a3,start
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,gida4a23d5f63,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII
Received: by 10.204.149.210 with SMTP id u18mr4162564bkv.1.1337864855861;
        Thu, 24 May 2012 06:07:35 -0700 (PDT)
MIME-Version: 1.0
Path: e27ni53565bkw.0!nntp.google.com!news1.google.com!
border1.nntp.dca.giganews.com!border4.nntp.dca.giganews.com!
border2.nntp.dca.giganews.com!nntp.giganews.com!nx02.iad01.newshosting.com!
newshosting.com!news-out.readnews.com!transit3.readnews.com!panix!rri.panix.com!
robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-142 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Thu, 24 May 2012 09:06:09 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 2075
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000c01cd39ad$e782b200$b6881600$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
X-Trace: reader1.panix.com 1337864769 23940 166.84.1.6 (24 May 2012 13:06:09 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Thu, 24 May 2012 13:06:09 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
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X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
```

This report is organized into three (3) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites

SB SAT @ AMSAT W8ISS $WSR-142.S1
WSR 142 Part 1 05/21/2012

AMSAT NEWS SERVICE BULLETIN 142.S1
FROM AMSAT HQ SILVER SPRING, MD, May 21, 2012
TO ALL RADIO AMATEURS
BID: $WSR-142.S1

PW-Sat
Catalog Number:
Launch Date: Febrauary 13, 2012
Launch Site: Kourou, French Guiana

Status: On Orbit

Uplink: 435.020 MHz FM
Downlink: 145.900 MHz DSB

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum2
[03162012]
��DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational
Current Mode: Science Mode - Beacon ONLY

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink: 435.530 to 435.570 MHz

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnumh
[02092011]
��VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05, 2005 0444z
Launch site: Satish Dhawan Space Centre, India

Status: Operational
Current Mode: U/v - Dutch Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.9360 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum0

To know what transponder is switched on please listen for the beacon that is active. Each transponder has a different beacon.
[03232012]
��SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002 1700z
Launch site: Baikonur, Kazakhstan

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz. The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10 minute timer.
[02092011]

��FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Operational
Current Mode: V/u (Mode JA)

Voice/CW (Mode JA)
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage:
http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
�retURL�atellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's
CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/
fo29cwts.htm
[01122012]
��AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993 0140z
Launch site: Kourou, French Guiana

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[02092011]
��AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974
Launch site: Vandenberg AFB, California, USA

Status: Operational

Current Mode: Alternating between Mode A and B every 24 hours

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php
[04242012]
��INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998 0640z (ZARYA module)
Launch sites: Baikonur, Kazakhstan
              Kourou, French Guiana
              Uchinoura Space Center, Japan
              Kennedy Space Center, Titusville, Florida, USA

Status: Operational

Current Active Modes: FM Repeater - OFF
                      Voice -   V/v
                      BBS -   OFF
                      2m APRS -   ON
                      70cm Digi -   ON
                      SSTV -   OFF

Expedition 31 Crew (April 2012 - July 2012):

Commander:	Oleg Kononenko	RN3DX
Flight Engineer:	Andr� Kuipers	PI9ISS
Flight Engineer:	Don Pettit	KD5MDT
Flight Engineer:	Joe Acaba	KE5DAR
Flight Engineer:	Gennady Padalka	RN3DT
Flight Engineer:	Sergei Revin	RN3BS

Available Modes and Frequencies:

Digital/APRS:
Worldwide 2m packet uplink: 145.825 MHz FM 1k2
Worldwide 2m packet downlink: 145.825 Mhz FM 1k2
Worldwide 70cm packet downlink: 437.550 Mhz FM 1k2
Worldwide 70cm packet downlink: 437.550 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
2m Packet Mailbox: RS0ISS-11
2m Digipeater alias: ARISS
70cm Packet Mailbox: RS0ISS-1
70cm Digipeater callsign: RS0ISS
70cm Digipeater alias: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time line is NOT translated from Russian and posted.
[05152012]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-142.S2
WSR 142 Part 2 05/21/2012

AMSAT NEWS SERVICE BULLETIN 142.S2

FROM AMSAT HQ SILVER SPRING, MD, May 21, 2012
TO ALL RADIO AMATEURS
BID: $WSR-142.S2

HORYU-II
Catalog number:
Launch Date: May 17, 2012

Status; On Orbit

Uplink: 145.??? MHz
Downlink: 437.375 MHz CW/AX25/FSK

Beacon: 437.375 MHz CW

Callsign: JG6YBW

URL:

IARU Coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum!6
[05212012]
��XaTcobeo
Catalog Number: 38082
Launch Date: Febrauary 13, 2012
Launch Site: Kourou, French Guiana

Status: Operational

Uplink:
Downlink: 437.365 MHz FFSK with AX.25

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum5
[03162012]
��UniCubeSat
Catalog Number:
Launch Date: Febrauary 13, 2012
Launch Site: Kourou, French Guiana

Status: Operational

Uplink:
Downlink: 437.305 MHz 9k6 bps FSK

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum3
[03162012]
��Robusta
Catalog Number:
Launch Date: Febrauary 13, 2012
Launch Site: Kourou, French Guiana

Status: On Orbit

Uplink:
Downlink: 437.325 MHz 1k2 FM telemetry (data every 1 min, 20 sec. burst)

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum2
[02142012]
��MO-72 MaSat-1
Catalog Number: 38081
Launch Date: Febrauary 13, 2012
Launch Site: Kourou, French Guiana

Status: Operational

Uplink:
Downlink: 437.345 MHz GFSK 625/1250 bps
          437.345 MHz CW

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum6
[03232012]
��Goliat
Catalog Number: 38085
Launch Date: Febrauary 13, 2012
Launch Site: Kourou, French Guiana

Status: Operational

Uplink:
Downlink: 437.485 MHz 1k2 AFSK

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum�
[03162012]
��E-Star
Catalog Number: 38079
Launch Date: Febrauary 13, 2012
Launch Site: Kourou, French Guiana

Status: On Orbit

Uplink:
Downlink: 437.445 MHz 1k2 bps AFSK

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum0
[03232012]
��ALMASat1
Catalog Number: 38078
Launch Date: Febrauary 13, 2012
Launch Site: Kourou, French Guiana

Status: On Orbit

Uplink:
Downlink: 437.465 MHz 1k2 bps FSK
2407.850 MHz

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum9
[02212012]
��RS-39 Chibis-M
Catalog Number: 37841

Launch Date: October 30, 2011 10:11:00 UTC
Launch site: Tyuratam (Baikonur Cosmodrome), Kazakhstan

Status: Operational

Uplink:
Downlink:

Beacon: 435.315 MHz CW
435.215 MHz CW

Callsign:

URL:

IARU coordination status page:
[01122012]
��JUNGU
Catalog Number: 37841
Launch Date: October 12, 2011 05:30:00 UTC
Launch site: Satish Dhawan Space Centre, India

Status: On Orbit

Uplink: 145.??? MHz 1k2 (mode?)
Downlink: 437.505 MHz 9k6 (mode?)

Beacon: 437.275 MHz 15 wpm (?) CW

Callsign:

URL: http://www.iitk.ac.in/me/jugnu/index.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum0
[01122012]
��SRMSAT
Catalog Number: 37839
Launch Date: October 12, 2011 05:30:00 UTC
Launch site: Satish Dhawan Space Centre, India

Status: On Orbit

Uplink: 145.900 MHz 1k AX.25 (speed?)
Downlink: 437.500 MHz 2k4 AX.25

Beacon: 437.425 MHz 12 wpm CW

Callsign:

URL: http://srmsat.in/

IARU coordination status page:

http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum1
[01122012]
��HRBE (E1P Explorer 1 [Prime] CubeSat (E1P-U2))
Catalog Number: 37855
Launch Date: October 28, 2011
Launch site: Vandenberg Air Force Base, California, USA

Status: On Orbit

Uplink: 437.305 MHz (???)
Downlink: 437.505 MHz AX.25 (SSB?)

Beacon:

Callsign:

URL: http://ssel.montana.edu/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum6
[01122012]
��M-Cubed
Catalog Number: 37855
Launch Date: October 28, 2011
Launch site: Vandenberg Air Force Base, California, USA

Status: On Orbit

Uplink:
Downlink: 437.485 MHz AX.25

Beacon:

Callsign:

URL: http://umcubed.org/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum!5
[01122012]
��RAX-2
Catalog Number: 37853
Launch Date: October 28, 2011
Launch site: Vandenberg Air Force Base, California, USA

Status: Operational

Uplink:
Downlink: 437.345MHz 9k6 GMSK

Beacon:

Callsign:

URL: http://rax.engin.umich.edu//

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum"1
[03232012]
��AO-71 AubieSat-1
Catalog Number: 37854
Launch Date: October 28, 2011
Launch site: Vandenberg Air Force Base, California, USA

Status: On Orbit

Uplink:
Downlink: 437.475 MHz 1k2 AX.25

Beacon: 437.475 MHz CW

Callsign: KI4NQO

URL: http://www.space.auburn.edu/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum8
[12262011]
��O/OREOS
Catalog Number: 37224
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: On Orbit

Uplink:
Downlink: 437.035 MHZ AX.25

Beacon:

Callsign:

URL: http://www.ooreos.org/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum6
[02092011]
��Rax-1 Radio Aurora Explorer
Catalog Number: 37223
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: On Orbit

Uplink:
Downlink: 437.505 MHz 9k6 GMSK

Beacon:

Callsign: RAX-1

URL: http://rax.engin.umich.edu/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum5
[02092011]
��FO-69 Fastrac-1 Sara Lily
Catalog Number: 37227
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: Operational

Uplink 1: 145.980 MHz 1k2 baud
Uplink 2: 145.825 MHz 1k2 baud
Downlink: 437.345 MHz 1k2 and 9k6 baud

Beacon: 437.435 MHz 1k2 AX.25

Callsign: Fast1

URL: http://fastrac.ae.utexas.edu/index.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum�
[07052011]
��FO-70 Fastrac-2 Emma
Catalog Number: 37380
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: Operational

Uplink 1: 435.025 MHz 1k2 baud
Uplink 2: 437.435 MHz 9k6 baud
Downlink: 145.825 MHz 1k2 and 9k6 baud

Beacon: 145.825 MHz 1k2 AX.25

Callsign: Fast2

URL: http://fastrac.ae.utexas.edu/index.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum�
[12162011]
��StudSat
Catalog Number: 36796
Launch Date: July 12, 2010 0352z

Launch site: Satish Dhawan Space Centre, India

Status: On Orbit

Uplink: 437.505MHz, 9600bps FSK
Downlink: 437.505MHz, 9600bps FSK
Beacon : 437.505MHz,   20bps ASK

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum4
[02092011]
��TIsat-1
Catalog Number: 36799
Launch Date: July 12, 2010 0352z
Launch site: Satish Dhawan Space Centre, India

Status: On orbit

Callsign: HB9DE

Uplink: 145.980MHz FM, AFSK
Downlink: 437.305MHz FM, AFSK
Beacon: 437.305MHz CW

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum8
[02092011]
��SwissCube
Catalog Number: 35932
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Callsign: HB9EG

Beacon(100mw): 437.5050MHz CW
Beacon(1w):   437.5050MHz FSK 1k2bps

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum9
[02092011]
��UWE-2
Catalog Number: 35934
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: In Orbit

Beacon(500mw): 437.3850 MHz AFSK 1k2bps
437.3850 MHz FSK 9k6bps

IARU coordination status page:

http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum0
[02092011]
��ITUpsAT1
Catalog Number: 35935
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Beacon(100mw): 437.325MHz CW
Beacon(1w): 437.325MHz 19k2bps

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum3
[02092011]
��BEESAT
Catalog Number: 35933
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Callsign: DP0BEE

Beacon(100mw): 436.000MHz CW
Beacon(500mw): 436.000MHz GMSK 4k8bps
Beacon(500mw): 436.000MHz GMSK 9k6bp
[02092011]
��CP-6
Catalog Number: 35004
Launch Date: May 19, 2009 2355z
Launch site: Wallops Island, Virginia, USA

Status: Operational

Downlink: 437.365 MHz 1k2 AFSK

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum1
[01122012]
��HAWKSAT 1
Catalog number: 35003
Launch Date: May 19, 2009 2355z
Launch site: Wallops Island, Virginia, USA

Status: operational

Downlink: 437.345 MHz ?

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum5
[01122012]
��Pharmasat

Catalog Number: 35002
Launch Date: May 19, 2009 2355z
Launch site: Wallops Island, Virginia, USA

Status: Operational

Downlink: 437.465 MHz 1k2 AFSK

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum�
[02092011]
��ANUSAT
Catalog Number: 34808
Launch Date: April 20, 2009 0115z
Launch Site: Satish Dhawan Space Centre, India

Status: ?

Downlink: 435.000 MHz
Uplink: 145.800 MHz

Telemetry: 137.400 MHz
[02092011]
��SOHLA-1 (ASTRO TECH.)
Catalog Number: 33496
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational

Proposed Frequencies and Modes:
Downlink: 437.505 MHz AFSK/CW
Beacon: 437.505 MHz AFSK/CW

Callsign:

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum1
[02092011]
��KAGAYAKI (Solan Co.)
Catalog Number: 33495
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: In Orbit

Downlink: 437.375 MHZ   FSK9k6/CW
Beacon: 437.375 MHz   FSK9k6/CW

IARU coordination status page:

AMSAT-NA webpage:

```
[02092011]
��STARS (Kagawa Univ.) (Twin Satellites)
Catalog Number: 33498
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational ?

Downlinks: 437.485 MHz FM/CW
           437.465 MHz FM/CW
Beacons:   437.305 MHz FM/CW
           437.275 MHz FM/CW

Callsigns: JR5YBN
           JR5YBO

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum�

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID1&retURL
�atellites/status.php
[02092011]
��KKS-1 (Tokyo MCIT)
Catalog Number: 33499
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational

Downlink:  437.455 MHz AFSK/CW
Beacon:    437.385 MHz AFSK/CW

Callsign: JQ1YYY

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum7

AMSAT-NA webapge:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID0&retURL
�atellites/status.php
[20092011]
��PRISM (Tokyo Univ.)
Catalog Number: 33493
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational ?

Downlink: 437.425 MHz AFSK/GMSK/CW
Beacon:   437.250 MHz AFSK/GMSK/CW

Callsign: JQ1YCX
```

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum�

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID9&retURL
�atellites/status.php
[02092011]
��RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number: 32953
Launch Date: May 23, 2008 1520z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational

Curent Modes: Telemetry
Audio
Images

Downlinks: 435.315 MHz
435.215 MHz

AMSAT-NA website:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID5&ret
URL�atellites/status.php

Official website:
http://www.npopm.com/?cid�oca&caidC
[02092011]
��CanX-2
Catalog number: 32790
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational in range of ground station only

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web
page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnumF
[02092011]
��AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Downlink: 437.425 MHz 1k2 baud packet

For the latest project status update please visit the AAUSAT-II web
page:
http://www.aausatii.aau.dk/homepage/index.php?language�&page�me

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum`
[02092011]
��CO-65 CUTE-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Downlink: 437.475 MHz 9k6 Packet
Uplink: 1267.600 Mhz

Telemetry Beacon:
Downlink: 437.2750 MHz CW

For the latest project status update please visit the Cute-1.7+APD II
web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnumx

Command Station blog website:
http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID2&retURL
�atellites/status.php
[03232012]
��Compass-1
Catalog number: 32787
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Current Mode: dependant on last received command

Uplink: 145.980 MHz FM
Downlink: 437.275 Mhz CW
          437.405 MHz Packet

For the latest project status update please visit the Compass 1 web
page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnumR

AMSAT-NA webpage:

http://www.amsat.org/amsat-new/satellites/satInfo.php?satID4&retURL
�atellites/status.php
[06162011]
��CO-66 Seeds II
Catalog number:
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Downlink: 437.485 MHz

Callsign: JQ1YGU

For the latest project status update please visit the Seeds 2 web
page: http://cubesat.aero.cst.nihon-u.ac.jp/english/seeds_2_e.html

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum6

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID3&retURL
�atellites/status.php
[02092011]
��CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007 0702z
Launch site: Baikonur, Kazakhstan

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID�&retURL
/satellites/status.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnumr
[02092011]
��CP3
Catalog Number: 31129
Launch Date: April 17,2007 0702z
Launch site: Baikonur, Kazakhstan

Status: Operational

Current Mode: /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnumt
[02092011]
��CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005 0652z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon: 437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/xivpicte.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum7
[02092011]
��CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: ?????

Current Mode: /u

Beacon: 436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID�&retURL
�atellites/status.php

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[02092011]
��QuakeSat
Catalog Number: 27845
Launch Date: June 30, 2003 1415z

Launch site: Plesetsk Missile and Space Complex, Russia

Status: Telemetry only

Current Mode: 9600 baud data packet

Mode U packet
Downlink: 436.675 MHz 9k6 BPS

Quakesat webpage:
http://www.quakefinder.com/services/quakesat-ssite/
[02252011]
��CO-55 Cute-1.7+APD II
Catalog Number: 27844
Launch date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational

Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satIDi&retURL
�atellites/status.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnumx
[02092011]
��NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001 0240z
Launch site: Kodiak Launch Complex, Alaska, USA

Status: Telemetry only

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[02092011]
��RS-22 RADIO SPORT 22 (MOZHAYETS 4)

Catalog number: 27939
Launch Date: September 27, 2003 0612z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational - 70cm cw only

Current Mode: /u

CW Beacon - 435.352 MHz
145.818 MHz

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satIDv&retURL
�atellites/status.php
[02092011]
��LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990
Launch site: Kourou, French Guiana

Status: CW Beacon only

Uplinks: 145.840 MHz 1200-baud Manchester FSK
145.860 MHz 1200-baud Manchester FSK
145.880 MHz 1200-baud Manchester FSK
145.900 MHz 1200-baud Manchester FSK

CW downlink: 437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[02092011]
��UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984
Launch site: Vandenburg AFB, California, USA

Status: Operational ?

Current Mode: /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon: 435.025 MHz
Mode-S Beacon: 2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[07052011]

��INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998 0640z (ZARYA module)
Launch sites: Baikonur, Kazakhstan
Kourou, French Guiana
Uchinoura Space Center, Japan
Kennedy Space Center, Titusville, Florida, USA

Status: Operational

Current Active Modes: FM Repeater - OFF
Voice - V/v
BBS - OFF
2m APRS - ON
70cm Digi - ON
SSTV - OFF

Expedition 31 Crew (April 2012 - July 2012):

Commander:	Oleg Kononenko	RN3DX
Flight Engineer:	Andr� Kuipers	PI9ISS
Flight Engineer:	Don Pettit	KD5MDT
Flight Engineer:	Joe Acaba	KE5DAR
Flight Engineer:	Gennady Padalka	RN3DT
Flight Engineer:	Sergei Revin	RN3BS

Available Modes and Frequencies:
Digital/APRS:

Worldwide 2m packet uplink:	145.825 MHz FM 1k2
Worldwide 2m packet downlink:	145.825 Mhz FM 1k2
Worldwide 70cm packet downlink:	437.550 Mhz FM 1k2
Worldwide 70cm packet downlink:	437.550 Mhz FM 1k2

Voice:

Region 1 voice uplink:	145.200 MHz FM
Region 2/3 voice uplink:	144.490 MHz FM
Worldwide downlink:	145.800 MHz FM

Crossband Repeater:

Repeater Uplinks:	1269.650 MHz FM 437.800 MHz FM 145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink:	145.800 MHz FM 437.800 MHz FM (Kenwood)

SSTV Robot 36:

Downlink:	145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
2m Packet Mailbox: RS0ISS-11
2m Digipeater alias: ARISS
70cm Packet Mailbox: RS0ISS-1
70cm Digipeater callsign: RS0ISS
70cm Digipeater alias: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[05152012]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-142.S3
WSR 142 Part 3 05/21/2012

AMSAT NEWS SERVICE BULLETIN 142.S3
FROM AMSAT HQ SILVER SPRING, MD, May 21, 2012
TO ALL RADIO AMATEURS
BID: $WSR-142.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

NANOSAIL-D
Catalog Number: 37361(?)
Ejection Date: January 17, 2011

Status: Non - Operational

Downlink: 437.270 MHz AX.25

URL: http://nanosaild.engr.scu.edu/dashboard.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum5
[04302012]
��HO-68 HOPE-1 (CAS-1)(XW-1)
Catalog Number: 36122
Launch Date: December 15, 2009 0231z

Launch site: Taiyuan Space Center, PRC

Status: Telemetry only

Callsign:
Broadcast: BJ1SA-11
BBS: BJ1SA-12

Uplinks: 145.8250 MHz FM, PL 67.0 Hz.
           145.9250 - 145.9750 MHz SSB/CW
           145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
           435.7650 - 435.7150 MHz SSB/CW
           435.6750 MHz AFSK 1200 BPS

Beacon: 435.7900 MHz CW

Mode and Antenna Polarization:
V: LHCP 2.0dBi max
U: RHCP 3.0dBi max

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum8

For more information about XW-1 (CAS-1):
http://
[04302012]
��SO-67 SumbandilaSat
Catalog Number: 35870
Launch Date: September 17, 2009 1555z
Launch site: Baikonur, Kazakhstan

Status: Non - Operational

Callsign: ZS0SUM

Uplink: 145.875MHz FM tone 233.6 Hz
Downlink: 435.345MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

For more information about SO-67:
http://www.amsatsa.org.za/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum�
[01272012]
��CP4
Catalog Number: 31132
Launch Date: April 17, 2007

Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon: 437.325 MHz CW

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnumy
[09062010]
��LIBERTAD-1
Catalog Number: 31128
Launch Date: April 17, 2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink: 145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnumv
[09062010]
��PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: Non-Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder: 145.825 Mhz FM

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnumQ
[09062010]
��NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
                              2407.250

Official Website: http://www.ncube.no

```
IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum$
[09062010]
��XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink:        437.250 MHz FM 67Hz CTCSS
Voice Downlink:     2401.835 MHz FM
Packet Up/Downlink:  437.250 MHz 9k6 packet
Packet Downlink     2401.835 MHz 38k4 packet

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnumT
[09062010]
��UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non-Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnumS
[09062010]
��AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004 0745z
Launch site: Baikonur, Kazakhstan

Status: Non - Operational

Current Mode(s):
Voice repeater: V/u
Uplink:      145.880 MHz FM
Downlink:    435.150 MHz FM

Telemetry: Recovery efforts
Downlink:    435.150MHz 9k6


Analog voice downlink:     435.300 MHz FM
                           435.150 MHz FM
                          2401.200 Mhz FM
Analog voice uplink:       145.860 MHZ FM
                           145.880 MHz USB
                           145.880 MHz FM
                           145.920 MHz FM
```

145.920 MHz FM - 67 Hz PL tone burst
1268.705 MHz FM
Digital Downlinks: 435.150 MHz FM 38k4 PBP, 1 watt output
435.150 MHz FM 9k6 Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Pacsat Broadcast Protocol
1268.703 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum
[12062011]
��CANX-1
Catalog Number: 27847
Launch Date: June 30, 2003

Status: Non-Operational

Downlink: 437.8800 MHz AFSK 1k2bps
[06052009]
��DTUSAT
Catalog Number: 27842
Launch Date: June 30, 2003

Status: Non-Operational

Current Mode: 2k4 AFSK Packet last reported

Downlink: 437.475MHz

Officail webpage: http://dtusat1.dtusat.dtu.dk/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID1&retURL
�tellites/all_oscars.php
[02212009]
��AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

```
Status: Non-operational.

Uplink:   435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)

Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
��MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Telemetry only

Uplinks:   145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink:  437.325 MHz

Broadcast callsign: MYSAT3-11
BBS:                MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial land and weather imaging payloads offers FM and FSK
Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as
a collaborative effort between the Malaysian government and Surrey
Satellite Technology Ltd.
[03302009]
��NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink:   145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
��SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz
```

Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
��SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
��AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks

V-band: 145.840 - 145.990 MHz CW/LSB
U-band: 435.550 - 435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks

S2-band: 2401.225 - 2401.475 MHz CW/USB
K-band: 24048.010 - 24048.060 MHz CW/USB
Beacon: 2401.323 MHz
24048.035 MHz

P3-D Telemetry Beacons (IHU)

BEACON	General Beacon(GB)	Middle Beacon(MB)	Engineering Beacon(EB)
2 m	none	145.898 MHz	none
70cm	435.438 MHz	435.588 MHz	435.838 MHz
13cm(1)	2400.188 MHz	2400.338 MHz	2400.588 MHz
13cm(2)	2401.173 MHz	2401.323 MHz	2401.573 MHz
3cm	10450.975 MHz	10451.125 MHz	10451.375 MHz
1.5cm	24047.885 MHz	24048.035 MHz	24048.285 MHz

[07162007]
��OO-38 OPAL
Catalog Number: 26063

Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
��UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
��SO-35 SUNSAT
Catalog Number: 25636
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
��PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
��SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
��GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Non-Operational

Current Modes:
Telemetry : /u

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks: 145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://asri.technion.ac.il/techsat/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID&retURL
�atellites/status.php
[07172010]
��TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink: 145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
��MO-30 UNAMSAT-2
Catalog Number: 24305

Launch Date: September 5, 1996

Status: Non-operational

Downlink: 435.1380 MHz AFSK 1200 BPS
Downlink: 435.2060 MHz AFSK 1200 BPS
Uplink: 145.8150 MHz AFSK 1200 BPS
Uplink: 145.8350 MHz AFSK 1200 BPS
Uplink: 145.8550 MHz AFSK 1200 BPS
Uplink: 145.8750 MHz AFSK 1200 BPS
[06042009]
��PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Non-operational

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012009]
��IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks: 145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
��KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
��AO-24 ARSENE
Catalog Number: 22654
Launch Date: May 13, 1993

Status: Non-operational

Uplink: 435.0625 MHz FM 1k2bps AFSK
           435.1125 MHz FM 1k2bps AFSK
           435.1375 MHz FM 1k2bps AFSK
Downlink: 145.9750 MHz FM 1k2bps AFSK
          2446.5025 MHz FM 1k2bps AFSK

Beacon: 2446.4700 MHz CW

Broadcast callsign:
BBS:
[12162009]
��KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HL01-11
BBS: HL01-12
[01222007]
��UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink: 145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
��AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink: 435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
��FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons: 435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink: 145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks: 145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
��WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
��DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink: 145.825 MHz FM 1200 Baud AFSK
Beacon: 2401.220 MHz
[05012006]
��AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: non-operational

Current Mode: V/u

Uplink: 145.900 MHz FM 1200-baud Manchester FSK (reserved)

145.920 MHz FM VOICE
145.940 MHz FM 1200-baud Manchester FSK (reserved)
145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink: 437.026 MHz USB VOICE
(1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC 437.050 MHz RHCP
PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[07242009]
��UO-15 UoSAT-4
Catalog Number: 20438
Launch Date: January 22, 1990

Status: Non-operational

Uplink: ?
Downlink: 435.1250MHz (?)
435.1200MHz (?)
[06042009]
��UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink: 145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
��FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink: 145.8500 MHz MFSK 1200 BPS
Uplink: 145.8700 MHz MFSK 1200 BPS
Uplink: 145.8900 MHz MFSK 1200 BPS
Uplink: 145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
��AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon: 145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
��AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.8500 - 145.9000 MHz SSB/CW
Downlink 29.4000 - 29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
��AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink: 29.4500 - 29.5500 MHz SSB/CW
Beacons: 29.450 MHz
          435.100 MHz
[01312008]
��AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
��OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink: 145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
��RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB

Beacon 1: 29.352 MHz (intermittent)
Beacon 2: 29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
��RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB

Beacon: 145.860 MHz

Robot: 145.908 MHz
[05232004]
��RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at}amsat.org
NNNN

/EX

```
From -8088303794780659591
X-Google-Thread: 10e8ad,f531ec6855d41b72,start
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Received: by 10.68.241.7 with SMTP id we7mr10532116pbc.4.1337951426339;
        Fri, 25 May 2012 06:10:26 -0700 (PDT)
Path: pr3ni47335pbb.0!nntp.google.com!news2.google.com!postnews.google.com!
kw17g2000pbb.googlegroups.com!not-for-mail
From: devi <satyamsivam9030@gmail.com>
Newsgroups: rec.radio.amateur.space
Subject: TOP INTERVIEW QUESTIONS & HOT PHOTOS & VIDEOS
Date: Fri, 25 May 2012 06:10:25 -0700 (PDT)
Organization: http://groups.google.com
Lines: 96
Message-ID: <b011cd87-5eb0-4a6f-a8ee-38b2f65a4e18@kw17g2000pbb.googlegroups.com>
NNTP-Posting-Host: 117.199.245.119
Mime-Version: 1.0
X-Trace: posting.google.com 1337951426 25221 127.0.0.1 (25 May 2012 13:10:26 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Fri, 25 May 2012 13:10:26 +0000 (UTC)
Complaints-To: groups-abuse@google.com
Injection-Info: kw17g2000pbb.googlegroups.com; posting-host=117.199.245.119;
posting-account=xYWSigoAAADp0Q2VAMlANM4syM5q3uRr
User-Agent: G2/1.0
X-HTTP-UserAgent: Mozilla/5.0 (Windows NT 5.1; rv:12.0) Gecko/20100101 Firefox/
12.0,gzip(gfe)
Content-Type: text/plain; charset=ISO-8859-1




ALL INTERVIEW QUESTIONS& STUDY MATERIAL
          http://newdotnetinterviewquestions.blogspot.in/

TOP DATING TIPS TO ENCOURAGE WOMEN FOR DATING
           http://datingsitesdatingtips.blogspot.in/


             FOR  LATEST MOVIE UPDATED LINKS
  NAGARJUNA DAMARUKAM MOVIE STILLS
http://actressgallery-kalyani.blogspot.in/2012/05/damarukam-movie-stills.html
ALLU ARJUN JULAYI MOVIE LATEST STILLS
http://actressgallery-kalyani.blogspot.in/2012/05/julayi-movie-stills.html
              SUDIGADU MOVIE LATEST STILLS
http://actressgallery-kalyani.blogspot.in/2012/05/sudigadu-movie-stills.html
                   MR 7 MOVIE FILM GALLERY
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http://actressgallery-kalyani.blogspot.in/2012/05/mr7-movie-stills.html
ALL THE BEST MOVIE STILLS
http://actressgallery-kalyani.blogspot.in/2012/05/all-best-movie-stills.html
Midatha Telugu movie Hot Namitha Stills
http://actressgallery-kalyani.blogspot.com/2012/05/midatha-movie-stills.html
OKA COLLEGE LOVE STORY MOVIE STILLS
http://actressgallery-kalyani.blogspot.in/2012/05/oka-college-love-story-movie-stills.html
KATRINA KAIF LATEST UNSEENED PHOTOS
http://actressgallery-kalyani.blogspot.com/2012/05/katrina-kaif-latest-pics.html
TAMIL ACTRESS ARUNDHATI HOT STILLS
http://actressgallery-kalyani.blogspot.com/2012/05/arundhati-tamil-actress.html
THANDHAVAM MOVIE STILLS
http://actressgallery-kalyani.blogspot.com/2012/05/thandavam-movie-stills.html
KHO KHO LATEST MOVIE SPICY STILLS
http://actressgallery-kalyani.blogspot.com/2012/05/kho-kho-movie-stills.html
Oh My Love Movie Latest Photo Gallery
http://actressgallery-kalyani.blogspot.com/2012/04/oh-my-love-movie-stills.html
Oka Romantic Crime katha Movie stills
http://actressgallery-kalyani.blogspot.in/2012/04/oka-romantic-crime-katha-movie-stills.html
DARUVU MOVIE LATEST HOT STILLS
http://actressgallery-kalyani.blogspot.com/2012/03/daruvu-movie-stills.html
Pavan Kalyan,Shruthi Hasan Gabbar Singh Movie Photos
http://actressgallery-kalyani.blogspot.in/2012/04/gabbar-singh-movie-stills.html
Good Morning Latest Movie Stills
http://actressgallery-kalyani.blogspot.com/2012/04/good-morning-movie-stills.html
EEGA MOVIE LATEST STILLS
http://actressgallery-kalyani.blogspot.com/2012/04/eega-movie-stills.html
Mem Vayasuku Vacham Latest Hot Stills
http://actressgallery-kalyani.blogspot.com/2012/04/mem-vayasuku-vacham-stills.html
DAMMU MOVIE LATEST STILLS
http://actressgallery-kalyani.blogspot.in/2012/04/dammu-movie-stills.html
ILEANA LATEST HOT PHOTOSHOOT
http://actressgallery-kalyani.blogspot.in/2012/01/ileana-latest-stills.html
ACTREEESS SUPRIYA SHAILJA LATEST STILLS
http://actressgallery-kalyani.blogspot.in/2012/02/supriya-shailja-stills.html
SHEELA LATEST HOT STILLS
http://actressgallery-kalyani.blogspot.com/2012/01/sheela-latest-stills.html
KATRINA KAIF ITEM SONG STILLS
http://actressgallery-kalyani.blogspot.com/2012/01/katrina-kaif-item-song-stills.html
RITU KAUR LATEST PHOTO STILLS
http://actressgallery-kalyani.blogspot.com/2012/01/ritu-kaur-stills.html
SHRUTI HASSAN HOT IN 3 MOVIE
http://actressgallery-kalyani.blogspot.com/2011/11/shruti-hassan-in-3-movie.html
HOT KATRINA KAIF PHOTOS
http://actressgallery-kalyani.blogspot.com/2011/09/katrina-kaif.html

HOT LINKS FOR YOUTH ONLY
SHRUTHI HASSAN HALF SAREE STILLS
http://actressimages-9.blogspot.in/2012/05/shruti-hassan-half-saree-stills.html

TAMANNA HOT NAVEL PHOTOS
http://actressimages-9.blogspot.in/2012/05/tamanna-navel-photos.html
TRISHA LATEST HOT STILLS
http://actressgallery9.blogspot.in/2012/05/trisha.html
MONIKA LATEST HOT HD STLLS
http://actressgallery9.blogspot.in/2012/05/monika-stills.html
MALLIKA KAPOOR HOT SIZZLING STILLS
http://actressimages-9.blogspot.in/2012/05/mallika-kapoor.html
Richa Panai Stills
http://actressimages-9.blogspot.com/2012/04/richa-panai-stills.html
MADHAVI LATHA LATEST HOT STILLS
http://actressimages-9.blogspot.in/2012/04/madhavi-latha-stills.html
KRITI KHARBANDA HOT PHOTOSHOOT
http://actressimages-9.blogspot.in/2012/03/kriti-kharbanda.html
NEELAM UPADHYAY HOT PHOTOSHOOT
http://actressimages-9.blogspot.in/2012/03/neelam-upadhyay.html
SAMANTHA LATEST HOT ROMANTIC STILLS
http://actressimages-9.blogspot.in/2012/03/samantha-latest-stills.html
NAYANTHARA HOT WALLPAPERS
http://actressimages-9.blogspot.in/2012/01/nayanthara.html
ANU SMRUTHI LATEST HOT STILLS
http://actressimages-9.blogspot.in/2012/02/anu-smirthi-stills.html
AISHWARYA RAI LATEST HOT PICS
http://actressimages-9.blogspot.in/2012/01/aishwarya-rai.html

```
From 3474702957296613367
X-Google-Thread: 107ada,8582f3cfec646f1b,start
X-Google-NewGroupId: yes
X-Google-Thread: 11480d,8582f3cfec646f1b,start
X-Google-NewGroupId: yes
X-Google-Thread: 10e8ad,8582f3cfec646f1b,start
X-Google-NewGroupId: yes
X-Google-Attributes:
gida3e752f117,gid7221ecd0f7,gid8f86f75953,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Received: by 10.68.220.230 with SMTP id pz6mr7011361pbc.3.1338219007436;
        Mon, 28 May 2012 08:30:07 -0700 (PDT)
MIME-Version: 1.0
Path: pr3ni58971pbb.0!nntp.google.com!news1.google.com!npeer02.iad.highwinds-
media.com!news.highwinds-media.com!feed-me.highwinds-media.com!
nx02.iad01.newshosting.com!newshosting.com!news-out.readnews.com!
transit3.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: SWPC.Webmaster@noaa.gov
Newsgroups:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.shor
twave,rec.radio.info
Subject: Weekly Highlights of Solar and Geomagnetic Activity, 21 - 27 May 2012
Followup-To:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.shor
```

```
twave
Date: Mon, 28 May 2012 11:30:05 EDT
Organization: NOAA Space Weather Prediction Center
Lines: 68
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <20120528153001.7690833C6F@panix2.panix.com>
NNTP-Posting-Host: panix6.panix.com
X-Trace: reader1.panix.com 1338219005 22357 166.84.1.6 (28 May 2012 15:30:05 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Mon, 28 May 2012 15:30:05 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
X-Received-Bytes: 4933
```

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:Product: Weekly Highlights and Forecasts
:Issued: 2012 May 28 1305 UTC
# Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center
# Product description and SWPC contact on the Web
# http://www.swpc.noaa.gov/weekly.html
#
#                 Weekly Highlights and Forecasts
#
```

Highlights of Solar and Geomagnetic Activity
21 - 27 May 2012

Solar activity was very low to low during the period. An impressive CME was observed from a region beyond the west limb late on 26 May. Associated with this non-Earth-directed CME were Type II (estimated shock velocity 751 km/s) and Type IV radio sweeps as well as a greater than 10 MeV proton event at geosynchronous orbit. There were five regions numbered during the period with Region 1492 (S14, L=281, class/area Eao/190, on 27 May) being one of the largest and most active. This region produced six C-class flares, including a long duration C3/Sf flare at 27/0552Z associated with a non-Earth-directed CME observed off the southeast limb in LASCO C2/C3 imagery.

A greater than 10 MeV proton event was observed at geosynchronous orbit on 27 May. The event began at 27/0535 UTC, reached a peak of 14 pfu at 27/1045 UTC, and ended at 27/1235 UTC. This event was associated with the CME observed beyond the west limb.

The greater than 2 MeV electron flux at geosynchronous orbit reached high levels during 24 - 27 May.

Geomagnetic field activity ranged from quiet to minor storm levels during the period. Mostly quiet levels occurred on 21 May. Activity increased to quiet to active levels on 22 May. A further increase to quiet to minor storm levels occurred on 23 May. Activity decreased to quiet to unsettled levels during 24 - 25 May with brief active to minor storm periods at high latitudes. Mostly quiet levels occurred during 26 - 27 May. The increased activity during 22 - 25 May was associated with a recurrent coronal hole high-speed stream (CH HSS). ACE solar wind data indicated a co-rotating interaction region (CIR) on 22 May in advance of the CH HSS. Associated with the CIR were increased IMF Bt (peak 14 nT) and intermittent periods of southward IMF Bz (maximum deflections to -11 nT). The CH HSS commenced on 23 May as wind speeds increased to around 700 km/s. The CH HSS began to gradually subside on 24 May.

Forecast of Solar and Geomagnetic Activity
28 May - 23 June 2012

Solar activity is expected to be at very low to low levels during the period with a chance for M-class activity during 30 May through 13 June due to the return of old Region 1476 (N10, L=180, class/area Fkc/1050 on 09 May).

A chance for a greater than 10 MeV proton event at geosynchronous orbit exists from 30 May through 13 June due to the return of old Region 1476.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to reach high levels during 28 - 29 May, 06 - 12 June, and 20 - 23 June in response to recurrent CH HSS effects. Normal to moderate levels are expected during the rest of the period.

Geomagnetic field activity is expected to be at quiet to unsettled levels during most of the period. There is a chance for isolated active periods during 4 - 5 June and again during 18 - 19 June due to recurrent CH HSS effects.

```
From 8424702669037282532
X-Google-Thread: fcc6e,73346c2b0727dd7c,start
X-Google-NewGroupId: yes
X-Google-Thread: 11480d,73346c2b0727dd7c,start
X-Google-NewGroupId: yes
X-Google-Thread: 108122,73346c2b0727dd7c,start
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X-Google-Thread: fc2a5,73346c2b0727dd7c,start
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X-Google-NewGroupId: yes
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```
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X-Google-NewGroupId: yes
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gid4baf9708d4,gid7221ecd0f7,gidd7f5508063,gid241b302a50,gide721ae2bf6,gid8f86f7595
3,gida4a23d5f63,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Received: by 10.68.201.132 with SMTP id ka4mr2192943pbc.8.1338530405285;
        Thu, 31 May 2012 23:00:05 -0700 (PDT)
MIME-Version: 1.0
Path: l9ni6413pbj.0!nntp.google.com!news1.google.com!
border1.nntp.dca.giganews.com!nntp.giganews.com!novia!news.glorb.com!news-
out.readnews.com!transit4.readnews.com!panix!panix2.panix.com!not-for-mail
From: rram@panix.com (rec.radio.amateur.moderated Admin)
Newsgroups:
rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.rad
io.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amat
eur.space,rec.radio.info
Subject: Crossposting Permitted to rec.radio.amateur.moderated
Supersedes: <radio/ham-radio/moderated/crossposting-1-1335852000@panix.com>
Followup-To: poster
Date: 1 Jun 2012 02:00:03 -0400
Organization: rec.radio.amateur.moderated Moderation Team
Lines: 47
Approved: RRI Admin <rec-radio-info-request@panix.com>
Distribution: world
Expires: 04 Jul 2012 02:00:01 -0000
Message-ID: <radio/ham-radio/moderated/crossposting-1-1338530401@panix.com>
Reply-To: rec-radio-amateur-moderated-request@panix.com
(rec.radio.amateur.moderated Admin)
NNTP-Posting-Host: panix2.panix.com
X-Trace: reader1.panix.com 1338530403 9000 166.84.1.2 (1 Jun 2012 06:00:03 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Fri, 1 Jun 2012 06:00:03 +0000 (UTC)
Summary: Short reminder for unmoderated newsgroups that crossposting is permitted
Keywords: FAQ, ham, amateur, radio, moderated, unmoderated, crossposting,
permitted

Posted-By: auto-faq 3.3.2 beta (PGPMoose V2.0, Perl 5.005)
Archive-name: radio/ham-radio/moderated/crossposting
Revision: 1.2 2011/11/02 04:08:53
Posting-Frequency: posted monthly
URL: http://www.panix.com/~rram/usenet/rram/index.html
```

Changes followed by "|".

After a 30-day public discussion and feedback period to gauge reader opinions in March of 2009:

http://groups.google.com/group/rec.radio.amateur.moderated/browse_thread/thread/d7d337db35f23326

the rec.radio.amateur.moderated Moderation Team had decided to consider |
amending its charter, and permit limited simultaneous crossposting to

rec.radio.amateur.moderated and one other unmoderated
amateur-radio-related discussion newsgroup. After a successful trial |
period (90 days, through early July 2009), we decided to adopt this |
change permanently. |

Approved rec.radio.amateur.* newsgroups are those that are currently listed in the latest version of the "List of Big Eight Newsgroups" which is crossposted monthly to news.announce.newgroups, news.groups, and news.lists.misc.

Approved alt.radio.amateur.* and alt.ham-radio.* newsgroups are those that have been created consistent with the suggestions in "So You Want to Create an Alt Newsgroup" at:

  http://www.faqs.org/faqs/alt-creation-guide/

Approved regional hierarchy newsgroups are those that contain either "radio.amateur" or "ham-radio" in their names, including uk.radio.amateur and aus.radio.amateur.misc.

We will make every reasonable effort to keep our list of approved newsgroups up-to-date. In case we have overlooked any, and a submission is rejected in error as a result, the rejected submitter can E-mail us at our administrative contact address (in the signature at the bottom of this article, and the default Reply-To for the rejection message) requesting that it be added, and that the article be approved. We may still choose to reject articles crossposted to any alt.* newsgroup with an inappropriate name, including obscene language, embedded name-calling, or encouragement of unlawful conduct.

Please direct any comments, questions, or criticisms to rec-radio-amateur-moderated-request@panix.com.

From -1511366264571109068
X-Google-Thread: 10e8ad,b65c82ca8a2ec28,start
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Received: by 10.68.234.38 with SMTP id ub6mr7204716pbc.2.1338686200071;
        Sat, 02 Jun 2012 18:16:40 -0700 (PDT)
Path: l9ni13174pbj.0!nntp.google.com!news1.google.com!news2.google.com!newsfeed2.dallas1.level3.net!news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-155 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sat, 2 Jun 2012 21:16:39 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 568
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <001a01cd4126$7e274d40$7a75e7c0$@net>

Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
X-Trace: reader1.panix.com 1338686199 3626 166.84.1.6 (3 Jun 2012 01:16:39 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 3 Jun 2012 01:16:39 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to   rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to   rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
Content-Language: en-us

AMSAT NEWS SERVICE
ANS-155

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor at amsat.org

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*****************************************************************
* Nominating petitions for the election of upcoming open seats on *
* the AMSAT-NA Board of Directors must be received at the AMSAT   *
* Office by June 15, 2012. The details of the nominating process  *
* are posted on the AMSAT front page news at http://www.amsat.org *
*****************************************************************
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In this edition:
* STEM Education Identified as Critical for Continued Rides to Space
* AMSAT-NA Board of Directors Nominations
* AMSAT-UK Colloquium 2012 Second Call for Speakers
* Successful ARISS Contact as Northland Preparatory Academy Calls ISS
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* 13cm Band Rules Expanded to Allow MedRadio Adjacent to Satellites
* Funding Availability Key to Final Acceptance in QB50 Project
* AMSAT at Ham-Com, 8-9 June, Plano, TX, Special Event K5P
* Satellite Shorts From All Over

SB SAT @ AMSAT $ANS-155.01
ANS-155 AMSAT News Service Weekly Bulletins

AMSAT News Service Bulletin 155.01
>From AMSAT HQ SILVER SPRING, MD.
June 3, 2012
To All RADIO AMATEURS
BID: $ANS-155.01

STEM Education Identified as Critical for Continued Rides to Space

The AMSAT Forum at the 2012 Dayton Hamvention featured news of the educational opportunities for AMSAT to contribute to the innovation in attracting and retaining students in science, technology, engineering and mathematics, or STEM, disciplines. Educators have identified STEM programs as a priority in strengthening the Nation's future workforce.

"Education is important to us", said AMSAT Vice-President Educational Relations Mark Hammond N8MH, "It's a part of our mission and vision." Mark noted several key points of AMSAT's support for STEM education:

+ AMSAT is a non-profit volunteer organization which designs, builds and operates experimental satellites and promotes space education.

+ AMSAT works in partnership with government, industry, educational institutions and fellow amateur radio societies.

+ AMSAT encourages technical and scientific innovation, and promotes the training and development of skilled satellite and ground system designers and operators.

As evidenced by this year's acceptance of AMSAT's Project Fox cubesat in the NASA "Educational Launch of NanoSat", the ELaNa program, we were selected on our merit in support of NASA strategic and educational goals. Education is quickly becoming critical for our ride to space.

The recently formed Educational Partnership between AMSAT and ARRL, including NASA is looking for help. We need to develop an education program on the ground starting now. We have resources already available for STEM education in both the K-12 classroom and at the University level while our satellite builders work on the next flight.

For example, the huge collection of telemetry data collected during the recent ARISSat-1 flight is available on our FTP server. This data presents an opportunity for the utilization of satellite data in the classroom (through plotting, graphing, analyzing).

An immediate need is for volunteers to collect and organize existing STEM related lesson plans and ideas from the web, useful to K-12 educators and relevant to amateur radio and satellite. Critical steps such as this will allow ARISSat-1 telemetry data to be used in the classroom. Similar lesson plans and ideas can be used for educational purposes in future satellite missions, such as Fox-1 and Fox-2.

To support this effort specific tasks have been identified and now volunteers are needed to support:

+ Educators: We need lesson plans/ideas related to satellites and amateur radio. ARISSat-1 telemetry data needs to be used in the classroom!
+ Educators: sign up for ARRL Teacher's Institute program!
+ Web content person for AMSAT's education web pages.
  o Also to maintain a calendar of amateur radio youth events.
+ Archivist/publicist of satellite educational activities (photos, stories for AMSAT Journal, press, videos).
+ Mentors and ground station operators (with equipment!) for ARISS contacts.
+ Look for opportunities to engage youth, and document it (photos, articles, AMSAT Journal, press).

To volunteer contact Mark directly at n8mh at amsat.org. The AMSAT-EDU mailing list is the place to exchange education project ideas and to learn how to help with our educational outreach. Information on how to join the AMSAT-EDU list can be found on the AMSAT web at: http://www.amsat.org/mailman/listinfo

AMSAT's vision is to deploy satellite systems with the goal of providing wide area and continuous coverage. AMSAT will continue active participation in human space missions and support a stream of LEO satellites developed in cooperation with the educational community and other amateur satellite groups. This is a path to getting Fox-1 in orbit, and our future Fox-2, ARISSat-2, -3, -?

Again, the key contact is AMSAT Vice-President Educational Relations Mark Hammond N8MH - n8mh at amsat.org.

[ANS thanks Mark Hammond, N8MH for the above information]

AMSAT-NA Board of Directors Nominations

It is time to submit nominations for the upcoming open seats on the AMSAT-NA Board of Directors. A valid nomination requires either one current Member Society, or five current individual members in good standing, to nominate an AMSAT-NA member for the position.

Three directors and two alternate directors have terms expiring this year. The director seats open for election are held by Tom Clark, K3IO; Lou McFadin, W5DID; and Gould Smith, WA4SXM. The alternate director seats open for election are held by Mark Hammond, N8MH and Patrick Stoddard, WD9EWK.

The three nominees receiving the highest number of votes will be seated as regular board members with two year terms. The two nominees receiving the next highest number of votes will be seated as alternate directors for one year.

Written nominations, consisting of names, calls and individual signatures, should be mailed to: AMSAT-NA, 850 Sligo Ave #600, Silver Spring, MD, 20910. They must be received no later than June 15th. No other action is required.

Nominations may also be made by electronic means including e-mail, FAX, or electronic image of a petition. Electronic petitions should be sent to MARTHA@AMSAT.ORG or faxed to 301-608-3410, and also must be received by June 15th. If using any electronic submission, there is a second, verifying step:

> ELECTRONIC SUBMISSIONS WITHOUT THIS SECOND, WRITTEN VERIFICATION ARE NOT VALID UNDER THE EXISTING AMSAT-NA BYLAWS. A verifying traditional written petition MUST be received at the AMSAT-NA office at the above address within 7 days following the close of nominations.

[ANS Thanks AMSAT Secretary Alan Biddle, WA4SCA for the above information]

AMSAT-UK Colloquium 2012 Second Call for Speakers

This is the second call for speakers for the AMSAT-UK International Space Colloquium 2012 which, due to the Olympic & Paralympic Games, will be held the weekend of September 15-16, 2012 at the Holiday Inn, Guildford, GU2 7XZ, United Kingdom.

AMSAT-UK has posted details of the 2012 Colloquium at:
http://www.uk.amsat.org/colloquium/twelve

AMSAT-UK invites speakers, to cover topics about micro-satellites, CubeSats, nano-sats, space and associated activities, for this event.

They are also invited to submit papers for subsequent publishing on the AMSAT-UK web site. We normally prefer authors to present talks themselves rather than having someone else give them in the authors' absence. We also welcome "unpresented" papers for the web site.

We appreciate that it is not always possible to give a firm indication of attendance at this stage but expressions of interest would be appreciated.

Submissions should be sent *ONLY* to G4DPZ, via the following routes:

+ e-mail: david dot johnson at blackpepper dot co dot uk
+ Postal address at http://www.qrz.com/db/G4DPZ

AMSAT-UK also invite anyone with requests for Program Topics to submit them as soon as possible to G4DPZ. Invitations for any papers on specific subjects will be included in the future call. Likewise if anyone knows of a good speaker, please send contact and other information to G4DPZ.

AMSAT-UK http://www.uk.amsat.org/

[ANS thanks Dave Johnson, G4DPZ and AMSAT-UK for the above information]

Successful ARISS Contact as Northland Preparatory Academy Calls ISS

On Thursday, May 24, students from Northland Preparatory Academy in Flagstaff, Arizona participated in an Amateur Radio on the International Space Station (ARISS) contact with Joe Acaba, KE5DAR on the ISS.

Approximately 550 students, staff and administrators, as well as Dr. Jeffrey Hall, director of the Lowell Observatory, and the mayor were in attendance. The contact complemented a Science, Technology, Engineering and Math (STEM) curriculum. Video of the event, including Dr. Hall's presentation, has been posted on-line.
See: http://spacescienceteaching.blogspot.com/

The Arizona Daily Sun ran an article on the event which may be found here: http://tinyurl.com/ISS-AZDailySun (azdailysun.com)

[ANS thanks Carol, KB3LKI, and the ARISS Status Report for the Week of May 29, 2012 for the above information]

Multiple CubeSats Autonomously Docking May Build Large Satellites

This week AMSAT-UK, SpaceRef.com, and SSTL have announced plans to develop the 'STRaND-2' mission at the University of Surrey and Sur-ey Satellite Technology Limited (SSTL). This mission will test a novel in-orbit docking system based upon XBOX Kinect technology that could change the way space assets are built, maintained and decommissioned.

STRaND-2 (Surrey Training, Research and Nanosatellite Demonstrator) programme, following on from the smartphone-powered STRaND-1 satellite that is near completion. Similar in design to STRaND-1, the identical twin STRaND-2 satellites will each be a 3 unit Cubesat. Components from the XBOX Kinect games controller to scan the local area and provide the satellites with spatial awareness on all three axes.

SSTL says on their web site, "The STRaND-2 twins will be separated after launch. After the initial phase of system checks, the two satellites will be commanded to perform the docking procedure and, when in close proximity, the Kinect-based docking system will provide the satellites with 3D spatial awareness to align and dock. Other applications for STRaND-2 include the safe removal of space debris and spacecraft maintenance, with a low cost "snap-on" nanosatellite providing backup power, propulsion or additional on-board computing capability."

SSTL Project Lead Shaun Kenyon says, "We were really impressed by what MIT had done flying an autonomous model helicopter that used Kinect and asked ourselves: Why has no-one used this in space? Once you can launch low cost nanosatellites that dock together, the possibilities are endless, like space building blocks."

Dr. Chris Bridges, Surrey Space Centre Project Lead says, "It may seem far-fetched, but our low cost nanosatellites could dock to build large and sophisticated modular structures such as space telescopes. Unlike today's big space missions, these could be reconfigured as mission objectives change, and upgraded in-orbit with the latest available technologies."

Referenced web sites:
http://www.uk.amsat.org/7851
http://www.spaceref.com/news/viewpr.html?pid=37215
http://tinyurl.com/Strand2-News (www.sstl.co.uk)

[ANS thanks AMSAT-UK, SpaceRef.com, and SSTL for the above information]

LVB Tracker Boxes in Stock at the AMSAT Office

Martha says she now has LVB Tracker boxes in stock at the AMSAT Office.   The cost is $200 plus $20 shipping.

The AMSAT Store Website is currently down due to technical issues so you can place your order via these routes:

- Call Martha at the AMSAT Office (301-589-6062) 10:00 AM-6:00 PM EDT
- Fax - 301-608-3410
- Mail - AMSAT, 850 Sligo Ave #600, Silver Spring MD 20910

The LVB Tracker is a rotator interface designed to to be used as an interface between tracking software and the Yaesu 4500/5500 series of Az/El rotators.

Here's why you want one:

- Several physical interface options including RS-232, USB and TCP/IP over 10/100 Ethernet (tested by not implemented)

- Uses standard EasyComm and Yaesu GS-232 protocols

- Cross-platform compatibility - Windows, Linux, BSD, Mac

- Compatible with existing real-time prediction programs such as SatPC32 and Nova

- Open source

- Integrated firmware programmer for easy installation and upgrade

Watch a demo of the LVB Track Interface with Yaesu G-5500 rotator at: http://www.youtube.com/watch?v=7ePw-ReMRwA (does not use the AMSAT enclosure)

[ANS thanks Martha at the AMSAT Ofice for the above information]

13cm Band Rules Expanded to Allow MedRadio Adjacent to Satellites

The ARRL is reporting in a First Report and Order and a Further Notice of Proposed Rulemaking (ET 08-59) released on May 24, the FCC decided to expand the Part 95 Personal Radio Service rules to allow medical devices to operate on a secondary basis in the 2360-2400 MHz band. International amateur satellite operations are allocated between 2400-2450 MHz, adjacent to the new devices.

The new allocation is Medical Body Area Networks (MBAN) which provide a way for health care facilities to monitor their patients via wireless networks. Because use of these frequencies will be on a secondary basis, MBAN stations will not be allowed to cause interference to, and must accept interference from, primary services, including radio amateurs who operate on a terrestrial primary basis in the 2390-2395 MHz and 2395-2400 MHz bands.

The ARRL has posted their full analysis and report at:
http://tinyurl.com/13cm-Medical-Allocation (arrl.org)

[ANS thanks the ARRL for the above information]

Funding Availability Key to Final Acceptance in QB50 Project

The QB50 Project, funded by the European Commission, plans to orbit 50 CubeSats separated by a few hundred kilometers and carrying identical sensors to study Earth's lower layers of the thermosphere/ionosphere and study effects of satellite re-entry. All 50 CubeSats will be launched out of Murmansk, Russia, into a circular orbit with 79 degree inclination at 320 km altitude in the first half of 2015. Full details are published at: https://www.qb50.eu.

The project is run by an international consortium under the leadership of the von Karman Institute (VKI) near Brussels. The Call for Proposals for CubeSats carrying the standard sensor package which may also include additional experiments closed on April 30, 2012. VKI reports the response to this Call resulted in proposals for 70 CubeSats from 38 countries in the following categories:

+ 53 standard 2U CubeSats for atmospheric science.

+ 7 proposals for In-Orbit-Demonstration (IOD) 3U CubeSats for testing new technologies or minitaurised science sensors which also include the standard science sensors.

+ 5 proposals for IOD 3U CubeSats which do not include the standard science sensors.

+ 1 proposal for IOD 2U CubeSats which also include the standard science sensors.

+ 4 proposals for IOD 2U CubeSats which do not include the standard science sensors.

+ 2 proposals for interdisciplinary science.

VKI, with the help of external reviewers, is now in the process of evaluating the 70 proposals, aimed towards a selection of 50 CubeSats to be flown on QB50.

VKI wrote in the 31 May 2012 issue of the QB50 Newsletter, "The availability of funding for developing a CubeSat will be a critical issue in the selection process. At this stage, it is not known which proposals will actually be able to obtain the required funding. The final selection of 50 CubeSats can only be made once the availability of funding is established. CubeSat teams who submitted a proposal should now contact their national funding agencies and/or industrial sponsors to obtain the funding. The process of securing this funding should be completed by 1 October 2012 with the signing of a 'Contractual Agreement' between the university and VKI."

In the coming months, VKI will support the CubeSat teams in their efforts to obtain the funding, e.g. by sending a 'Letter of Support'. It is not expected that all 70 CubeSat teams will be able to sign the Contractual Agreement by 1 October, therefore, the de facto down-selection from 70 to 50 CubeSats will be made based on securing the funding by each team.

In some cases, funding agencies will only be able to provide a part of the funding. Teams who only received approval for part of the funding should consider the possibility of collaboration with another team that also received only a part of the requested funding.

[ANS thanks The QB50 Project and von Karman Institute for the above information]

AMSAT at Ham-Com, 8-9 June, Plano, TX, Special Event K5P

AMSAT will have an AMSAT Booth, Satellite Demonstrations, and two Satellite Talks at Ham-Com in Plano, TX, on 8-9 June 2012. The talks will be given by Douglas Quagliana, KA2UPW/5, and Keith Pugh, W5IU.

This year there will be a Special Event activity (sponsored by the Plano Amateur Radio Klub) associated with Ham-Com and the call sign will be K5P. AMSAT's Satellite Demonstrations will be conducted using K5P as part of the Special Event. Additional details about Ham-Com are available at: http://www.hamcom.org/

If you attend Ham-Com, drop by and see us. In addition, if you can spare an hour or two, we could use the help in the AMSAT Booth and doing the Demos.

We plan to work as many of the following Satellite Passes as possible:

Ham-Com 2012 Demos

Grid EM13pb

Min El = 10 deg

Time Zone UTC

```
 WinAos   QTH: -96.7/33.1   T#: 12577   Sat.: 7 [Standard]
 ---------------------------------------------------------
     Day     Object       AOS (U) LOS Period maxEl   AZ
 ----------------------------------------------------------
 08.06.2012  VO-52        13:53 14:00    07   39  031 - 172
 08.06.2012  VO-52        15:30 15:34    04   14  319 - 259
 08.06.2012  HO-68        15:41 15:54    13   48  029 - 176
 08.06.2012  HO-68        17:29 17:40    11   28  350 - 238
 08.06.2012  FO-29        18:43 18:56    13   64  020 - 184
 08.06.2012  AO-27        18:44 18:51    07   22  118 - 018
 08.06.2012  SO-50        20:08 20:15    07   19  008 - 100
 08.06.2012  AO-27        20:23 20:32    09   35  196 - 331
 08.06.2012  FO-29        20:30 20:38    08   18  332 - 248
 08.06.2012  SO-50        21:48 21:56    08   43  317 - 174

 WinAos   QTH: -96.7/33.1   T#: 12578   Sat.: 7 [Standard]
 ----------------------------------------------------------
     Day     Object       AOS (U) LOS Period maxEl   AZ
 ----------------------------------------------------------
 09.06.2012  VO-52        14:10 14:17    07   66  019 - 184
 09.06.2012  AO-07        14:11 14:19    08   16  336 - 268
 09.06.2012  HO-68        15:24 15:36    12   35  034 - 164
 09.06.2012  HO-68        17:12 17:24    12   36  355 - 227
 09.06.2012  FO-29        17:50 17:59    09   23  048 - 148
 09.06.2012  AO-27        18:18 18:22    04   12  084 - 036
 09.06.2012  FO-29        19:34 19:46    12   51  359 - 213
 09.06.2012  AO-27        19:54 20:04    10   66  174 - 343
 09.06.2012  SO-50        20:36 20:44    08   47  345 - 134
 09.06.2012  AO-07        21:21 21:30    09   17  091 - 015
```

Come see us or talk to the AMSAT Team!

[ANS thanks Keith Pugh, W5IU for the above information]

Satellite Shorts From All Over

+ Venus will pass in front of the sun on 6 June 2012. Bob Bruninga, WB4APR will be in Japan to observe the event. He has created a web page, "The 2012 Transit of Venus using HAM Radio" including a list of selected calling frequencies, see: http://aprs.org/VenusTransit2012.html

+ The 2012 AMSAT Annual Meeting and Symposium will be held at the Holiday Inn, Orlando (Florida) Airport on October 26-28, 2012. The First Call for Papers has been issued. The Symposium Team requests a tentative title of your presentation as soon as possible, with final copy to be submitted by October 1 for inclusion in the printed proceedings. Abstracts and papers should be sent to Dan Schultz, N8FGV, at n8fgv@amsat.org. Watch for the latest 2012 Symposium information to be posted on the AMSAT web at: http://www.amsat.org/amsat-new/symposium/2012/index.php

+ The UK Space Agency has released a YouTube video celebrating the UK's 50 years in space: http://tinyurl.com/UK-50-In-Space (Southgate)

+ Eric Knaps, ON4HF built an arrow antenna for working the FM satellites. Photos posted at: https://picasaweb.google.com/ON4HF.Eric/PortableSatAntenna

+ ESA astronaut Andre Kuipers published a photo gallery during the arrival and docking at the ISS of the SpaceX Dragon resupply ship. See: http://tinyurl.com/Dragon-Photo-Gallery (UniverseToday.com)

+ A 50 minute interview with Neil Armstrong made this year is now available. The video is split into 4 parts which can be seen at: http://thebottomline.cpaaustralia.com.au/ (Trevor, M5AKA)

+ The May 20 annular eclipse was photographed by NASA's Lunar Reconnaissance Orbiter as it turned its camera to look back home. Images of the Earth with the Moon's fuzzy shadow are posted on-line at: http://tinyurl.com/LROC-Eclipse (UniverseToday.com) For eclipse photos from Earth check out: http://www.universetoday.com/95469/annular-eclipse-redux/

+ There are two new Hamvention 2012 music videos on YouTube produced by Joe Eisenberg, K0NEB. One is called Hamvention 2012 "Band On The Run" and the other is titled Hamvention 2012 "Gimme Dat Ding." To find them just put the word joehusker into the search YouTube search line.

[ANS thanks everyone for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

Primary and secondary school students are eligible for membership at one-half the standard yearly rate. Post-secondary school students enrolled in at least half time status shall be eligible for the student rate for a maximum of 6 post-secondary years in this status. Contact Martha at the AMSAT Office for additional student membership information. And with that please keep in mind the tidal forces of the Moon (and the Sun) don't only act on the oceans, they act on the land as well. If you stand on the equator, the land beneath you will go up and down by as much as 21 inches (55 centimeters) over the course of a day.

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM

```
From -6152951165162332476
X-Google-Thread: 107ada,191895322ebd1983,start
X-Google-NewGroupId: yes
X-Google-Thread: 11480d,191895322ebd1983,start
X-Google-NewGroupId: yes
X-Google-Thread: 10e8ad,191895322ebd1983,start
X-Google-NewGroupId: yes
X-Google-Attributes:
gida3e752f117,gid7221ecd0f7,gid8f86f75953,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Received: by 10.68.241.71 with SMTP id wg7mr276509pbc.8.1338823808258;
        Mon, 04 Jun 2012 08:30:08 -0700 (PDT)
MIME-Version: 1.0
Path: l9ni20552pbj.0!nntp.google.com!news1.google.com!
border1.nntp.dca.giganews.com!nntp.giganews.com!novia!news.glorb.com!news-
out.readnews.com!news-xxxfer.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: SWPC.Webmaster@noaa.gov
Newsgroups:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.shor
twave,rec.radio.info
Subject: Weekly Highlights of Solar and Geomagnetic Activity, 28 May - 03 June
2012
Followup-To:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.shor
twave
Date: Mon, 4 Jun 2012 11:30:07 EDT
Organization: NOAA Space Weather Prediction Center
Lines: 68
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <20120604153001.92E1333C8E@panix2.panix.com>
NNTP-Posting-Host: panix6.panix.com
X-Trace: reader1.panix.com 1338823807 25477 166.84.1.6 (4 Jun 2012 15:30:07 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Mon, 4 Jun 2012 15:30:07 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to            rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
```

X-Moderation-2: See http://www.algebra.com/~ichudov/stump

```
:Product: Weekly Highlights and Forecasts
:Issued: 2012 Jun 04 1310 UTC
# Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center
# Product description and SWPC contact on the Web
# http://www.swpc.noaa.gov/weekly.html
#
#                 Weekly Highlights and Forecasts
#
```

Highlights of Solar and Geomagnetic Activity
28 May - 03 June 2012

Solar activity was at very low to moderate levels during the period. Very low levels were observed from 28 - 29 May. An increase to low levels was observed from 30 May - 02 June as Region 1493 (N15, L=209, class/area Dso/170 01 June) and Region 1496 (N16, L=199 class/area Cso/120 on 01 June) rotated onto the visible disk. Another increase to moderate levels was observed on 03 June as Region 1496 produced an M3 x-ray flare at 03/1755 UTC. Associated with this event were both a Type II radio sweep (estimated shock speed of 1077 km/s) signature and CME supporting imagery from the LASCO C2 imager. After analysis, this CME was determined to not be Earth directed. Region 1493 was the most active region during the period producing 8 C-class x-ray events.

No proton events were observed at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit was at high levels on 28 - 29 May and then decreased to moderate to normal levels for the remainder of the period.

Geomagnetic field activity was at quiet to minor storm levels during the period. Quiet conditions were observed from 28 - 29 May. Late on 29 May, solar wind speeds, as measured by the ACE spacecraft, increased from 350 km/s to around 450 km/s. Solar wind speeds remained elevated till late on 31 May. In conjunction with these elevated solar winds, quiet to unsettled levels were observed from 30 - 31 May with isolated active and minor storm levels at high latitudes. A return to quiet levels was observed from 01 - 02 June. Late on 02 June, an isolated active period was observed due to prolonged negative IMF Bz measured by the ACE spacecraft. On 03 June, an increase from quiet to minor storm levels with major storm periods observed at high latitudes was observed. This increase in activity was associated with a continuation of sustained negative IMF Bz from 02 June.

Forecast of Solar and Geomagnetic Activity
04 June - 30 June 2012

Solar activity is expected to be at low levels with a chance for M-class activity from 04 - 15 June.

No proton events are expected at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to be at normal to moderate levels during 04 - 05 June, 13 - 19 June, and 26 - 30 June. High levels are expected during 06 - 12 June, and 20 - 25 June.

Geomagnetic field activity is expected to be at active levels with a chance for minor storm levels on 04 - 05 June as a coronal hole high speed stream (CH HSS) becomes geoeffective. Quiet to active levels are expected on 06 June as CH HSS effects persist. A decrease to quiet to unsettled levels is expected on 07 - 08 June as the CH HSS wanes. Predominantly quiet levels are expected from 09 - 17 June. Quiet to active levels are expected from 18 - 20 June as another CH HSS becomes geoeffective. A return to mostly quiet levels is expected for the remainder of the period.

```
From 3109231284365863404
X-Google-Thread: 10e8ad,1f3dc1e253a68273,start
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Received: by 10.205.134.138 with SMTP id ic10mr4242145bkc.8.1339009467818;
        Wed, 06 Jun 2012 12:04:27 -0700 (PDT)
Path: e27ni20952bkw.0!nntp.google.com!news1.google.com!goblin2!goblin1!
goblin.stu.neva.ru!uio.no!newsfeed1.swip.net!news.astraweb.com!
border6.a.newsrouter.astraweb.com!not-for-mail
From: Chris Steyaert <observations@rmob.org>
Newsgroups: rec.radio.amateur.space,sci.astro.amateur
Subject: Radio Meteor Obs. Bull. May 2012  eta Aquarids
Date: Wed, 06 Jun 2012 21:04:27 +0200
Message-ID: <vbavs75dr329d9v63hijaadpuvm2de8f93@4ax.com>
X-Newsreader: Forte Agent 5.00/32.1171
MIME-Version: 1.0
Lines: 13
Organization: Unlimited download news at news.astraweb.com
NNTP-Posting-Host: a6ef7a8c.news.astraweb.com
X-Trace: DXC=TS2S;e8GF4afj0fd2JZgghL?
0kYOcDh@jgP=YS3P0dAf^F4j3MkdoLoBRCQV\K7kn`b3<D_UX>L;iX<`3P5ZY[ZjR]jSh]SG^NdhgEmXHH
mAYi
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
```

Radio Meteor Observation Bulletin No. 226 of May 2012 (85K) is available now as

http://www.rmob.org/rmobtext/rmob1205.txt

More information and the visual presentation of the hourly forward scatter counts can be found on

http://www.rmob.org

Chris

```
From 168223118987280576
X-Google-Thread: 10e8ad,e59453e24d161dca,start
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Received: by 10.205.122.65 with SMTP id gf1mr1074061bkc.2.1339121367928;
        Thu, 07 Jun 2012 19:09:27 -0700 (PDT)
Path: e27ni25769bkw.0!nntp.google.com!news2.google.com!
border1.nntp.dca.giganews.com!nntp.giganews.com!newsgate.cuhk.edu.hk!
news.netfront.net!not-for-mail
From: mark morgan <konstans@hotmail.com>
Newsgroups: rec.radio.amateur.space
Subject: get kelp
Date: Thu, 07 Jun 2012 22:12:15 -0400
Organization: Netfront http://www.netfront.net/
Lines: 6
Message-ID: <jqrmsl$6ct$1@adenine.netfront.net>
References: <1fj330fv2eidx$.11ryxtynumcyb.dlg@40tude.net>
NNTP-Posting-Host: 69.35.76.55
Mime-Version: 1.0
X-Trace: adenine.netfront.net 1339121367 6557 69.35.76.55 (8 Jun 2012 02:09:27
GMT)
X-Complaints-To: news@netfront.net
NNTP-Posting-Date: Fri, 8 Jun 2012 02:09:27 +0000 (UTC)
User-Agent: Mozilla/5.0 (Windows NT 5.1; rv:12.0) Gecko/20120429 Firefox/12.0
SeaMonkey/2.9.1
In-Reply-To: <1fj330fv2eidx$.11ryxtynumcyb.dlg@40tude.net>
Content-Type: text/plain; charset=Big5
Content-Transfer-Encoding: 7bit
```

Gary Sokolisch wrote:
> 2600

stalk somewhere else

--- Posted via news://freenews.netfront.net/ - Complaints to news@netfront.net ---

```
From -7416921831696868716
X-Google-Thread: 10e8ad,24eed60d24c9f05e,start
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Received: by 10.68.196.232 with SMTP id ip8mr4016998pbc.6.1339290262628;
        Sat, 09 Jun 2012 18:04:22 -0700 (PDT)
Path: l9ni35575pbj.0!nntp.google.com!news1.google.com!
```

```
border1.nntp.dca.giganews.com!nntp.giganews.com!novia!news-out.readnews.com!
transit4.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-162 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sat, 9 Jun 2012 21:04:22 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 502
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <003701cd46a4$ef05d490$cd117db0$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
X-Trace: reader1.panix.com 1339290262 28719 166.84.1.6 (10 Jun 2012 01:04:22 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 10 Jun 2012 01:04:22 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
Content-Language: en-us
```

AMSAT NEWS SERVICE
ANS-162

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor at amsat.org

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*******************************************************************
* Nominating petitions for the election of upcoming open seats on *
* the AMSAT-NA Board of Directors must be received at the AMSAT   *
* Office by June 15, 2012. The details of the nominating process  *
* are posted on the AMSAT front page news at http://www.amsat.org *
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In this edition:

- Status of ISS Ham Radio Operations
- AMSAT-NA Board of Directors Nominations Due This Friday, June 15
- AMSAT 2012 Symposium Announcement and Second Call for Papers
- SA AMSAT Update Reports That SumbandilaSat Recovery Work Continues
- Amateur Radio Reports Requested for AubieSat-1
- ARRL 9 cm Band Plan Updated
- LVB Tracker Boxes in Stock at the AMSAT Office
- 13 Original Colonies Special Event Includes Satellite Operations
- Field Day - Two Weeks and Counting
- Satellite Shorts From All Over

SB SAT @ AMSAT $ANS-162.01
ANS-155 AMSAT News Service Weekly Bulletins

AMSAT News Service Bulletin 162.01
>From AMSAT HQ SILVER SPRING, MD.
June 10, 2012
To All RADIO AMATEURS
BID: $ANS-162.01

Status of ISS Ham Radio Operations

ISS Amateur Radio Project Engineer Kenneth Ransom, N5VHO reports the ARISS digipeater has changed frequency from 145.825 MHz (up/down) to 437.550 MHz (up/down). The same digi alias ARISS is still used.

This change was started with the docking of the ESA Automated Transfer Vehicle (ATV). The ATV is an expendable, unmanned resupply spacecraft delivering propellant, water, air, payloads and experimental supplies to the International Space Station (ISS).

Packet operations were moved to the Columbus Module UHF radio when the Kenwood D700 radio was recently powered off due to needing an additional air purifier to support the ATV. Normally the air purifier is located in the ATV but recent power support issues related to the ATV and ISS necessitated the system be relocated to the Service Module. The purifier is now using the power outlet that the Kenwood radio normally uses. The Russian team has agreed to briefly power the purifier off for the scheduled ARISS school events but then will re-activate the purifier right afterwards. This appears to be a long term impact as ATV is currently scheduled to depart from ISS in September.

[ANS thanks Kenneth Ransom, N5VHO for the above information]

AMSAT-NA Board of Directors Nominations Due This Friday, June 15

It is time to submit nominations for the upcoming open seats on the AMSAT-NA Board of Directors. A valid nomination requires either one current Member Society, or five current individual members in good standing, to nominate an AMSAT-NA member for the position.

Three directors and two alternate directors have terms expiring this year. The director seats open for election are held by Tom Clark, K3IO; Lou McFadin, W5DID; and Gould Smith, WA4SXM. The alternate director seats open for election are held by Mark Hammond, N8MH and Patrick Stoddard, WD9EWK.

The three nominees receiving the highest number of votes will be seated as regular board members with two year terms. The two nominees receiving the next highest number of votes will be seated as alternate directors for one year.

Written nominations, consisting of names, calls and individual signatures, should be mailed to: AMSAT-NA, 850 Sligo Ave #600, Silver Spring, MD, 20910. They must be received no later than June 15th. No other action is required.

Nominations may also be made by electronic means including e-mail, FAX, or electronic image of a petition. Electronic petitions should be sent to MARTHA@AMSAT.ORG or faxed to 301-608-3410, and also must be received by June 15th. If using any electronic submission, there is a second, verifying step:

> ELECTRONIC SUBMISSIONS WITHOUT THIS SECOND, WRITTEN VERIFICATION ARE NOT VALID UNDER THE EXISTING AMSAT-NA BYLAWS. A verifying traditional written petition MUST be received at the AMSAT-NA office at the above address within 7 days following the close of nominations.

[ANS Thanks AMSAT Secretary Alan Biddle, WA4SCA for the above information]

AMSAT 2012 Symposium Announcement and Second Call for Papers

This is the second call for papers for the 2012 AMSAT Annual Meeting and Space Symposium to be held in Orlando, Florida on the weekend of October 26-28, 2012 at the Holiday Inn, Orlando Airport Hotel.

Proposals for papers, symposium presentations and poster presentations are invited on any topic of interest to the amateur satellite community:

+ Papers for publication in the Proceedings

+ Symposium Presentations

+ Poster Presentations

+ Equipment and Operating Demonstrations

We request a tentative title of your presentation as soon as possible, with final copy to be submitted by October 1 for inclusion in the printed proceedings.

Abstracts and papers should be sent to Dan Schultz, N8FGV, at n8fgv at amsat.org.

The Symposium weekend will feature:

+ Space Symposium with Amateur Satellite Presentations

+ Operating Techniques, News, & Plans from the Amateur Satellite World

+ Board of Directors Meeting open to AMSAT members

+ Meet Board Members and Officers

+ Annual General Membership Meeting

+ Annual Banquet-Keynote Speaker and Door Prizes

If you are interested in a Monday Trip (October 29) to the Kennedy Space Center please contact Martha via email: martha at amsat.org.

The trip will include a round trip bus from the hotel and entrance to the Space Center. The cost will be about $100. This is a wonderful experience for those that haven't been and for those that have been multiple times. We need to get an idea of how many will participate to select the correct bus.

Watch the AMSAT Symposium web pages for the latest updates:
http://www.amsat.org/amsat-new/symposium/2012/index.php

[ANS thanks Dan Schultz, N8FGV for the above information]

SA AMSAT Update Reports That SumbandilaSat Recovery Work Continues

SA AMSAT posted a report on their web (http://www.amsatsa.org.za/) there is still a recovery opportunity for SumbandilaSat.

The team at SunSpace are still incrementally reading back the program code from the nine power modules in an effort to determine the extent of the corruption. With SumbandilaSat going through eclipses, the satellite is not as much available as the team would like. SumbandilaSat's batteries failed which means that the satellite is only active when the solar panels are illuminated.

"We need the information to confirm that the changes we made to stop repeated corruption were effective." Johann Lochner ZR6CBC who spends considerable of his free time on recovery of SumbandilaSat said. "It is our aim to ultimately reprogram one of the power modules to automatically switch the amateur radio transponder on and off."

Because of the shorter illumination of the solar panels in the Southern hemisphere and most likely poor orientation of the satellite with respect to the sun, progress is much slower than originally anticipated. "Where we had three passes to work with in January we currently have one", Johann said.

In early June 2011 for an unknown reason (but probably related to a major radiation event on 7 June) the primary controller on the power distribution unit (PDU) powering the On-Board Computer (OBC) stopped responding to commands from the ground station.

It later appeared that the battery had failed and nothing was heard from the satellite for some time. The ground stations at SANSA Space operations at Hartbeeshoek and the Electronic Systems Laboratory at Stellenbosch University are receiving telemetry when the satellite's solar panels are illuminated by the sun.

Johann said with SumbandilaSat responding when it is in full sunlight the team is confident that some operations will be restored even to the point where it may be possible to do some imaging and have the amateur radio transponder back in operation.

[ANS thanks SA AMSAT for the above information]

Amateur Radio Reports Requested for AubieSat-1

John Klingelhoeffer, WB4LNM, AubieSat-1 Technical Mentor at Auburn University is requesting telemetry reception reports from amateur satellite operators after a new operating mode is commanded aboard the satellite.

AubieSat-1 was launched from Vandenberg AFB, California in October, 2011. The cubesat is an undergraduate built satellite developed by Auburn University. Over the weekend of June 9-11 the AubieSat-1 controllers changed the transmission mode of the satellite to increase the quantity of telemetry. The increased telemetry rate will provide data to indicate how well solar cell protection is working. It should also provide additional onboard housekeeping information.

AubieSat-1 transmits with a power of about 800 milliwatts on a frequency of 437.475 MHz. The beacon signal, along with telemetry, is sent using A1A continuous wave Morse code at 20 words per minute. Additional telemetry from the onboard science experiment will use CW transmissions up to 60 WPM.

Please post your reception reports on the AMSAT-BB.

An example of receiving the AubieSat-1 downlink can be found on the DK3WN SatBlog: http://www.dk3wn.info/p/?p=23582

[ANS thanks John Klingelhoeffer, WB4LNM for the above information]

ARRL 9 cm Band Plan Updated

Outside of ITU Region 1, the Amateur Satellite Service has a 9cm band allocation of 3.400 GHz - 3.410 GHz on a non-interfering basis. No current satellites are active on this frequency range at present. The new band plan reserves allocations for EME and amateur satellite operation.

The detailed graphic of the 9 cm band plan and accompanying article is posted on the ARRL web at:
http://www.arrl.org/news/arrl-board-of-directors-approves-9-cm-band-plan

In ARRL Bulletin 14 ARLB014, released on June 5 the report reads:

The ARRL Board of Directors has unanimously voted to approve the 9 cm band plan, as presented by the ARRL UHF/Microwave Band Plan Committee. Earlier this year, the committee asked radio amateurs for comments on a proposed 9 cm band plan, explaining that the purpose of these band plans is to share information about how the amateur bands are being used and to suggest compatible frequency ranges for various types of application. The committee also recognized that local conditions or needs may necessitate deviations from a band plan, and that regional frequency coordinating bodies may recommend alternatives for use in their respective regions.

The new 9 cm band plan includes the following notations:

* This band plan includes all other emission modes authorized in the 9 cm amateur band whose necessary bandwidth does not exceed the suggested bandwidths listed.

* Weak Signal Terrestrial legacy users are encouraged to move to 3400.3-3401.0 MHz, as time and resources permit.

* Broadband segments may be used for any combination of high-speed

data (e.g. 802.11 protocols), Amateur Television and other high-bandwidth activities. Division into channels and/or separation of uses within these segments may be done regionally, based on need and usage.

* Per ITU RR 5.149 from WRC-07, these band segments are also used for Radio Astronomy. Amateur use of these frequencies should be first coordinated with the National Science Foundation.

[ANS thanks the ARRL for the above information]

LVB Tracker Boxes in Stock at the AMSAT Office

Martha says she now has LVB Tracker boxes in stock at the AMSAT Office. The cost is $200 plus $20 shipping.

The AMSAT Store Website is currently down due to technical issues so you can place your order via these routes:

+ Call Martha at the AMSAT Office (301-589-6062) 10:00 AM-6:00 PM EDT
+ Fax - 301-608-3410
+ Mail - AMSAT, 850 Sligo Ave #600, Silver Spring MD 20910

The LVB Tracker is a rotator interface designed to to be used as an interface between tracking software and the Yaesu 4500/5500 series of Az/El rotators.

Here's why you want one:

+ Several physical interface options including RS-232, USB and TCP/IP over 10/100 Ethernet (tested by not implemented)

+ Uses standard EasyComm and Yaesu GS-232 protocols

+ Cross-platform compatibility - Windows, Linux, BSD, Mac

+ Compatible with existing real-time prediction programs such as SatPC32 and Nova

+ Open source

+ Integrated firmware programmer for easy installation and upgrade

Watch a demo of the LVB Track Interface with Yaesu G-5500 rotator at: http://www.youtube.com/watch?v=7ePw-ReMRwA (does not use the AMSAT enclosure)

[ANS thanks Martha at the AMSAT Ofice for the above information]

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13 Original Colonies Special Event Includes Satellite Operations

The 2012 13 Colonies Special Event stations will operate from July 1 through July 5. Operators will be on the satellites again this year for the special event.

Recognizing that the 4th comes in the middle of the week (Wednesday) and that some operators will be going to their work on the 2nd, 3rd and 5th, we will add a BONUS DAY on Saturday, 30 June 2012. Stations will operate from 09:00 AM Eastern (1300Z) right through until the 5th. Keep in mind that there may be fewer operators available on the work days so, PLEASE BE PATIENT!

Please send your QSL requests directly to each operator.

STATE	SE CALL	STATION & OPERATOR	
NY	K2A	WB2OQQ	Pete
VA	K2B	NL7VX	Steve
RI	K2C	N1MIW	Larry
CT	K2D	WA8SME	Mark
DE	K2E	KB2M	Jeff (SSB Birds)
DE	K2E	W3FIS	Paul (FM Birds)
MD	K2F	WA3SWJ	Bruce
GA	K2G	N3TL	Tim
MA	K2H	KB1PVH	Dave
NJ	K2I	KB2M	Jeff (Here when not in DE)
NC	K2J	W4MPS	Marc
NH	K2K	NE1H	Bob
SC	K2L	K4YYL	Art
PA	K2M	KB3WSW	Elizabeth

Link to the satellite page with the list of operators and additional information: http://www.13colonies.info/Satellites.htm

The main page with all the time and date information is:
http://www.13colonies.info/

[ANS thanks Dave, KB1PVH for the above information]

Field Day - Two Weeks and Counting

AMSAT Director Contests and Awards, Bruce Paige, KK5DO reminds you that Field Day is now only TWO WEEKS away!

Each year the American Radio Relay League (ARRL) sponsors Field Day as an emergency preparedness exercise. The event takes place during a 24-hour period on the fourth weekend of June. For 2012 the event takes place during a 27-hour period between 1800 UTC on Saturday, June 23, 2012 and 2100 UTC on Sunday June 24, 2012. Those who set up prior to 1800 UTC on June 23 can operate only 24 hours.

The Radio Amateur Satellite Corporation (AMSAT) promotes its own version of Field Day for operation via the amateur satellites, held concurrently with the ARRL event.

The AMSAT Field Day 2012 event is open to all Amateur Radio operators. Amateurs are to use the exchange as specified in ARRL rules for Field Day. The AMSAT competition is to encourage the use of all amateur satellites, both analog and digital.

For the complete listing of the AMSAT Field Day Rules, along with discussion of selecting the satellites to operate, please refer to the documents posted on-line at:
http://www.amsatnet.com/fd2012.doc
http://www.amsatnet.com/fd2012.pdf
Links are also accessible from http://www.amsat.org front page.

[ANS thanks AMSAT Director Contests and Awards, Bruce Paige, KK5DO for the above information]

Satellite Shorts From All Over

+ Congratulations to Jerry Brown, K5OE upon reaching his VUCC award upgrade to 1,008 grids. Jerry said his contacts ranged from 2003 on AO-40 to new grids can be attributed to "modern" rovers, including ND9M, WD9EWK, and W5PFG to new grids are credited to Yuri, UT1FG/MM.

+ Congratulations to Bob Johnson, W7LRD for earning Satellite Worked All States #326. Congratulations to Ron Oldham, N8RO for earning Satellite Worked All States #328.

+ Congratulations to Al Ward, W5LUA and Charles Hoover, K0VXM for completing a Florida (EL98) to Texas (EM13) contact on 10 GHz on June 5. This spanned a distance of 1,606.63 km, or998.357 miles (report via Dave, KB0PE)

+ Watch a NASA promotional video about the Educational Launch of Nanosatellites (ELaNa) program. A copy is posted on the AMSAT-UK web at: http://www.uk.amsat.org/8001. AMSAT's Fox-1 cubesat is a participant of this program.

+ Ib, OZ1MY noted AO-7 is once again entering eclipse periods. AO-7 will awaken in either Mode-A or Mode-B randomly upon entering the sunlit portion of its orbit. It is only operational while in sunlight. Watch, and update the status of AO-7 on the OSCAR Status page at: http://oscar.dcarr.org/

+ Follow the links at http://www.uk.amsat.org/7990 to download your free copy of SatMagazine. The June issue features the STRaND-2 nanosats on pages 25 and 26; Additionally on page 71 there is a picture of the satellite OSCAR-5 that was built by radio amateurs at the University of Melbourne, Australia.

+ AMSAT received the sad news of the passing of Chris Heijzelaar, PA5RWE. He was a very active satellite operator. Condolences can be left at: http://www.het-bar.net (via Andre, PE1RDW)

+ The ARRL posted the video of the Dayton 2012 presentation by AMSAT Vice-President Educational Relations Mark Hammond, N8MH describing the different roles and opportunities for Technical Mentors and Ground Station operators to play in an ARISS contact with the International Space Station. Watch on-line at:
http://www.youtube.com/watch?feature=player_embedded&v=7z-4moV8_Xs

+ While the AMSAT on-line store is closed due to technical issues you can place an order through the AMSAT office. The hours are 10:00 AM - 6:00 PM EDT. The phone number is 301-589-6062. Martha is looking forward to hearing from you!

[ANS thanks everyone for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

Primary and secondary school students are eligible for membership at one-half the standard yearly rate. Post-secondary school students enrolled in at least half time status shall be eligible for the student rate for a maximum of 6 post-secondary years in this status. Contact Martha at the AMSAT Office for additional student membership information. And with that please keep in mind when a mechanical engineer, a chemical engineer and a computer engineer were carpooling to work when the car broke down. The mechanical engineer speculated it might be a problem with the engine. The chemical engineer thought they should check the fluids. The computer engineer suggested they all get out of the car and get back in again, then see if it restarts.

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM

```
From -523032920643380238
X-Google-Thread: a4a23d5f63,15a03c7dc64b0463,start
X-Google-Attributes: gida4a23d5f63,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
Received: by 10.204.149.210 with SMTP id u18mr426048bkv.1.1339696399127;
        Thu, 14 Jun 2012 10:53:19 -0700 (PDT)
MIME-Version: 1.0
Path: e27ni48123bkw.0!nntp.google.com!news1.google.com!news3.google.com!
news4.google.com!feeder3.cambriumusenet.nl!feed.tweaknews.nl!
195.62.100.242.MISMATCH!newsfeed.kamp.net!newsfeed.kamp.net!newsfeed.straub-nv.de!
feed.xsnews.nl!border-1.ams.xsnews.nl!newspump.sol.net!
newsfeed3.dallas1.level3.net!newsfeed2.dallas1.level3.net!news.level3.com!panix!
rri.panix.com!robomod!not-for-mail
From: SWPC.Webmaster@noaa.gov
Newsgroups:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.shor
twave,rec.radio.info
Subject: Weekly Highlights of Solar and Geomagnetic Activity, 04 - 10 June 2012
Followup-To:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.shor
twave
Date: Mon, 11 Jun 2012 11:30:06 EDT
Organization: NOAA Space Weather Prediction Center
Lines: 75
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <20120611153001.79C6A33C93@panix2.panix.com>
NNTP-Posting-Host: panix6.panix.com
X-Trace: reader1.panix.com 1339428606 125 166.84.1.6 (11 Jun 2012 15:30:06 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Mon, 11 Jun 2012 15:30:06 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
```

```
:Product: Weekly Highlights and Forecasts
:Issued: 2012 Jun 11 0626 UTC
# Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center
# Product description and SWPC contact on the Web
# http://www.swpc.noaa.gov/weekly.html
#
#                Weekly Highlights and Forecasts
#
```

Highlights of Solar and Geomagnetic Activity
04 - 10 June 2012

Solar activity was at low to moderate levels during the period. Low levels were observed at the beginning of the period with Region 1499 (N16, L=184 class/area Cao/060 on 09 June) responsible for a majority of the C-class x-ray activity. An increase to moderate levels was observed on 06 June as Region 1494 (S18, L=199 class/area Cso/160 on 06 June) produced an M2/1b x-ray flare at 2006 UTC. Associated with this event were both Type II (estimated shock speed of 1148 km/s) and Type IV radio sweep signatures. Location of Region 1494 on 06 June and LASCO imagery suggested part of this coronal mass ejction (CME) would be Earth directed. From 07-08 June, solar activity returned to low levels. From 09-10 June, a return to moderate levels was observed as new Region 1504 (S18, L=89 class/area Dai/120 on 10 June) dominated the visible disk in total area and solar activity producing three M-class x-ray events. The three M-class events that Region 1504 was responsible for were an optically uncorrelated M1 event at 09/1132 UTC, the second event was another M1/Sf at 09/1653 UTC, and finally another optically uncorrelated M1 event on 10/0645 UTC.

No proton events were observed at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit was at normal to high flux levels during the period. The period started at normal background levels from 04-05 June, then at high levels for the remainder of the period.

Geomagnetic field activity was at quiet to active levels with isolated major storm periods observed at high latitudes. For a majority of the summary period, Earth was under the influence of a favorable positioned coronal hole high speed stream (CH HSS). Early on 04 June, solar wind speeds, as measured by the ACE spacecraft, hovered around 350 km/s. Around midday on 04 June, solar wind speeds increased to almost 650 km/s as a CH HSS arrived. This increase in solar wind speeds helped drive the geomagnetic field from quiet to active levels with isolated major storm periods observed at high latitudes through 05 June. Predominantly quiet to unsettled levels prevailed from 06-09 June as effects from the CH HSS waned. A return to quiet levels was observed on 10 June as solar wind speeds returned to normal background levels. On 08 and 10 June, small changes were observed in data from the ACE spacecraft indicating the possible arrival of a weak, partially Earth-directed CMEs, however very little if any correlating activity was attributed to these arrivals.

Forecast of Solar and Geomagnetic Activity

11 June - 07 July 2012

Solar activity is expected to be at low to moderate levels from 11 June - 21 June as Region 1504 rotates across the solar disk. A return to predominantly low levels is expected for the remainder of the period.

No proton events are expected at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to be at high levels from 11-12 June, 20-25 June and then from 03 July through the end the period. Normal to background levels are expected for all other time periods.

Geomagnetic field activity is expected to be at predominantly quiet levels from 11-17 June, 21-30 June and 04 July through the end of the period. From 18-19 June and 01-03 July, quiet to active levels are expected due to the CH HSS effects.

```
From -8461787059874293602
X-Google-Thread: a4a23d5f63,4dc2a60584d0d643,start
X-Google-Attributes: gida4a23d5f63,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII
Received: by 10.205.122.65 with SMTP id gf1mr464795bkc.2.1339701977173;
        Thu, 14 Jun 2012 12:26:17 -0700 (PDT)
MIME-Version: 1.0
Path: e27ni48400bkw.0!nntp.google.com!news1.google.com!news2.google.com!
news.glorb.com!news-out.readnews.com!transit4.readnews.com!panix!rri.panix.com!
robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-163 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Tue, 12 Jun 2012 09:36:33 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 2078
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <001301cd48a0$598c8140$0ca583c0$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
X-Trace: reader1.panix.com 1339508193 14607 166.84.1.6 (12 Jun 2012 13:36:33 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Tue, 12 Jun 2012 13:36:33 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
```

X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us

This report is organized into three (3) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites

SB SAT @ AMSAT W8ISS $WSR-163.S1
WSR 163 Part 1 06/11/2012

AMSAT NEWS SERVICE BULLETIN 163.S1
FROM AMSAT HQ SILVER SPRING, MD, June 11, 2012
TO ALL RADIO AMATEURS
BID: $WSR-163.S1

PW-Sat
Catalog Number:
Launch Date: Febrauary 13, 2012
Launch Site: Kourou, French Guiana

Status: On Orbit

Uplink: 435.020 MHz FM
Downlink: 145.900 MHz DSB

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum2
[03162012]
��DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational
Current Mode: Science Mode - Beacon ONLY

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink: 435.530 to 435.570 MHz

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnumh
[02092011]
��VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05, 2005 0444z
Launch site: Satish Dhawan Space Centre, India

Status: Operational
Current Mode: U/v - Dutch Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.9360 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum0

To know what transponder is switched on please listen for the beacon that is active. Each transponder has a different beacon.
[03232012]
��SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002 1700z
Launch site: Baikonur, Kazakhstan

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml

(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz. The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10 minute timer.
[02092011]
��FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Operational
Current Mode: V/u (Mode JA)

Voice/CW (Mode JA)
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage:
http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
�retURL�atellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts.htm
[01122012]
��AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993 0140z
Launch site: Kourou, French Guiana

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[02092011]
��AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974
Launch site: Vandenberg AFB, California, USA

Status: Operational

Current Mode: Alternating between Mode A and B every 24 hours

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php
[04242012]
��INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998 0640z (ZARYA module)
Launch sites: Baikonur, Kazakhstan
              Kourou, French Guiana
              Uchinoura Space Center, Japan
              Kennedy Space Center, Titusville, Florida, USA

Status: Operational

Current Active Modes: FM Repeater - OFF
                      Voice -   V/v
                      BBS -   OFF
                      2m APRS -   OFF
                      70cm APRS -   ON
                      70cm Digi -   ON
                      SSTV -   OFF

Expedition 31 Crew (April 2012 - July 2012):

Commander:	Oleg Kononenko	RN3DX
Flight Engineer:	Andr� Kuipers	PI9ISS
Flight Engineer:	Don Pettit	KD5MDT
Flight Engineer:	Joe Acaba	KE5DAR
Flight Engineer:	Gennady Padalka	RN3DT
Flight Engineer:	Sergei Revin	RN3BS

Available Modes and Frequencies:

Digital/APRS:

Worldwide 2m packet uplink:	145.825 MHz FM 1k2
Worldwide 2m packet downlink:	145.825 Mhz FM 1k2
Worldwide 70cm packet downlink:	437.550 Mhz FM 1k2
Worldwide 70cm packet downlink:	437.550 Mhz FM 1k2

Voice:

Region 1 voice uplink:	145.200 MHz FM
Region 2/3 voice uplink:	144.490 MHz FM
Worldwide downlink:	145.800 MHz FM

Crossband Repeater:

Repeater Uplinks:	1269.650 MHz FM 437.800 MHz FM 145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink:	145.800 MHz FM 437.800 MHz FM (Kenwood)

SSTV Robot 36:

Downlink:	145.800 MHz FM

Mode and Antenna Polarization:

V: Linear

U: Linear

Callsigns:

Belgian:	OR4ISS
German:	DP0ISS
Russian:	RS0ISS RZ3DZR
United States:	NA1SS
2m Packet Mailbox:	RS0ISS-11
2m Digipeater alias:	ARISS
70cm Packet Mailbox:	RS0ISS-1
70cm Digipeater callsign:	RS0ISS
70cm Digipeater alias:	ARISS

Official ARISS Webpage:	http://www.rac.ca/ariss
ISS Fan Club Webpage:	http://www.issfanclub.com
APRS tracking page:	http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[06112012]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-163.S2
WSR 163 Part 2 06/11/2012

AMSAT NEWS SERVICE BULLETIN 163.S2
FROM AMSAT HQ SILVER SPRING, MD, June 11, 2012
TO ALL RADIO AMATEURS
BID: $WSR-163.S2

HORYU-II
Catalog number: 38340
Launch Date: May 17, 2012

Status; On Orbit

Uplink: 145.??? MHz
Downlink: 437.375 MHz CW/AX25/FSK

Beacon: 437.375 MHz CW

Callsign: JG6YBW

URL:

IARU Coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum!6
[05282012]
��XaTcobeo
Catalog Number: 38082
Launch Date: Febrauary 13, 2012
Launch Site: Kourou, French Guiana

Status: Operational

Uplink:
Downlink: 437.365 MHz FFSK with AX.25

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum5
[03162012]

��UniCubeSat
Catalog Number:
Launch Date: Febrauary 13, 2012
Launch Site: Kourou, French Guiana

Status: Operational

Uplink:
Downlink: 437.305 MHz 9k6 bps FSK

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum3
[03162012]
��Robusta
Catalog Number:
Launch Date: Febrauary 13, 2012
Launch Site: Kourou, French Guiana

Status: On Orbit

Uplink:
Downlink: 437.325 MHz 1k2 FM telemetry (data every 1 min, 20 sec. burst)

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum2
[02142012]
��MO-72 MaSat-1
Catalog Number: 38081
Launch Date: Febrauary 13, 2012
Launch Site: Kourou, French Guiana

Status: Operational

Uplink:
Downlink: 437.345 MHz GFSK 625/1250 bps
          437.345 MHz CW

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum6
[03232012]
��Goliat
Catalog Number: 38085
Launch Date: Febrauary 13, 2012
Launch Site: Kourou, French Guiana

Status: Operational

Uplink:
Downlink: 437.485 MHz 1k2 AFSK

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum�
[03162012]
��E-Star
Catalog Number: 38079
Launch Date: Febrauary 13, 2012
Launch Site: Kourou, French Guiana

Status: On Orbit

Uplink:
Downlink: 437.445 MHz 1k2 bps AFSK

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum0
[03232012]
��ALMASat1
Catalog Number: 38078
Launch Date: Febrauary 13, 2012
Launch Site: Kourou, French Guiana

Status: On Orbit

Uplink:
Downlink: 437.465 MHz 1k2 bps FSK
          2407.850 MHz

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum9
[02212012]
��RS-39 Chibis-M
Catalog Number: 37841
Launch Date: October 30, 2011 10:11:00 UTC
Launch site: Tyuratam (Baikonur Cosmodrome), Kazakhstan

Status: Operational

Uplink:
Downlink:

Beacon: 435.315 MHz CW
        435.215 MHz CW

Callsign:

URL:

IARU coordination status page:
[01122012]
��JUNGU
Catalog Number: 37841
Launch Date: October 12, 2011 05:30:00 UTC
Launch site: Satish Dhawan Space Centre, India

Status: On Orbit

Uplink: 145.??? MHz 1k2 (mode?)
Downlink: 437.505 MHz 9k6 (mode?)

Beacon: 437.275 MHz 15 wpm (?) CW

Callsign:

URL: http://www.iitk.ac.in/me/jugnu/index.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum0
[01122012]
��SRMSAT
Catalog Number: 37839
Launch Date: October 12, 2011 05:30:00 UTC
Launch site: Satish Dhawan Space Centre, India

Status: On Orbit

Uplink: 145.900 MHz 1k AX.25 (speed?)
Downlink: 437.500 MHz 2k4 AX.25

Beacon: 437.425 MHz 12 wpm CW

Callsign:

URL: http://srmsat.in/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum1
[01122012]
��HRBE (E1P Explorer 1 [Prime] CubeSat (E1P-U2))
Catalog Number: 37855
Launch Date: October 28, 2011
Launch site: Vandenberg Air Force Base, California, USA

Status: On Orbit

Uplink: 437.305 MHz (???)
Downlink: 437.505 MHz AX.25 (SSB?)

Beacon:

Callsign:

URL: http://ssel.montana.edu/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum6
[01122012]
��M-Cubed
Catalog Number: 37855
Launch Date: October 28, 2011
Launch site: Vandenberg Air Force Base, California, USA

Status: On Orbit

Uplink:
Downlink: 437.485 MHz AX.25

Beacon:

Callsign:

URL: http://umcubed.org/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum!5
[01122012]
��RAX-2

Catalog Number: 37853
Launch Date: October 28, 2011
Launch site: Vandenberg Air Force Base, California, USA

Status: Operational

Uplink:
Downlink: 437.345MHz 9k6 GMSK

Beacon:

Callsign:

URL: http://rax.engin.umich.edu//

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum"1
[03232012]
��AO-71 AubieSat-1
Catalog Number: 37854
Launch Date: October 28, 2011
Launch site: Vandenberg Air Force Base, California, USA

Status: On Orbit

Uplink:
Downlink: 437.475 MHz 1k2 AX.25

Beacon: 437.475 MHz CW

Callsign: KI4NQO

URL: http://www.space.auburn.edu/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum8
[12262011]
��O/OREOS
Catalog Number: 37224
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: On Orbit

Uplink:
Downlink: 437.035 MHZ AX.25

Beacon:

Callsign:

URL: http://www.ooreos.org/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum6
[02092011]
��Rax-1 Radio Aurora Explorer
Catalog Number: 37223
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: On Orbit

Uplink:
Downlink: 437.505 MHz 9k6 GMSK

Beacon:

Callsign: RAX-1

URL: http://rax.engin.umich.edu/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum5
[02092011]
��FO-69 Fastrac-1 Sara Lily
Catalog Number: 37227
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: Operational

Uplink 1: 145.980 MHz 1k2 baud
Uplink 2: 145.825 MHz 1k2 baud
Downlink: 437.345 MHz 1k2 and 9k6 baud

Beacon: 437.435 MHz 1k2 AX.25

Callsign: Fast1

URL: http://fastrac.ae.utexas.edu/index.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum�
[07052011]
��FO-70 Fastrac-2 Emma
Catalog Number: 37380
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: Operational

Uplink 1: 435.025 MHz 1k2 baud
Uplink 2: 437.435 MHz 9k6 baud
Downlink: 145.825 MHz 1k2 and 9k6 baud

Beacon: 145.825 MHz 1k2 AX.25

Callsign: Fast2

URL: http://fastrac.ae.utexas.edu/index.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum�
[12162011]
��StudSat
Catalog Number: 36796
Launch Date: July 12, 2010 0352z
Launch site: Satish Dhawan Space Centre, India

Status: On Orbit

Uplink: 437.505MHz, 9600bps FSK
Downlink: 437.505MHz, 9600bps FSK
Beacon : 437.505MHz,   20bps ASK

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum4
[02092011]
��TIsat-1
Catalog Number: 36799
Launch Date: July 12, 2010 0352z
Launch site: Satish Dhawan Space Centre, India

Status: On orbit

Callsign: HB9DE

Uplink: 145.980MHz FM, AFSK
Downlink: 437.305MHz FM, AFSK
Beacon: 437.305MHz CW

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum8
[02092011]
��SwissCube
Catalog Number: 35932
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Callsign: HB9EG

Beacon(100mw): 437.5050MHz CW
Beacon(1w):   437.5050MHz FSK 1k2bps

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum9

[02092011]
��UWE-2
Catalog Number: 35934
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: In Orbit

Beacon(500mw): 437.3850 MHz AFSK 1k2bps
               437.3850 MHz FSK 9k6bps

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum0
[02092011]
��ITUpsAT1
Catalog Number: 35935
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Beacon(100mw): 437.325MHz CW
Beacon(1w): 437.325MHz 19k2bps

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum3
[02092011]
��BEESAT
Catalog Number: 35933
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Callsign: DP0BEE

Beacon(100mw): 436.000MHz CW
Beacon(500mw): 436.000MHz GMSK 4k8bps
Beacon(500mw): 436.000MHz GMSK 9k6bp
[02092011]
��CP-6
Catalog Number: 35004
Launch Date: May 19, 2009 2355z
Launch site: Wallops Island, Virginia, USA

Status: Operational

Downlink: 437.365 MHz 1k2 AFSK

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum1
[01122012]
��HAWKSAT 1

Catalog number: 35003
Launch Date: May 19, 2009 2355z
Launch site: Wallops Island, Virginia, USA

Status: operational

Downlink: 437.345 MHz ?

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum5
[01122012]
��Pharmasat
Catalog Number: 35002
Launch Date: May 19, 2009 2355z
Launch site: Wallops Island, Virginia, USA

Status: Operational

Downlink: 437.465 MHz 1k2 AFSK

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum�
[02092011]
��ANUSAT
Catalog Number: 34808
Launch Date: April 20, 2009 0115z
Launch Site: Satish Dhawan Space Centre, India

Status: ?

Downlink: 435.000 MHz
Uplink: 145.800 MHz

Telemetry: 137.400 MHz
[02092011]
��SOHLA-1 (ASTRO TECH.)
Catalog Number: 33496
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational

Proposed Frequencies and Modes:
Downlink: 437.505 MHz AFSK/CW
Beacon: 437.505 MHz AFSK/CW

Callsign:

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum1
[02092011]
��KAGAYAKI (Solan Co.)
Catalog Number: 33495

Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: In Orbit

Downlink: 437.375 MHZ   FSK9k6/CW
Beacon: 437.375 MHz   FSK9k6/CW

IARU coordination status page:

AMSAT-NA webpage:

[02092011]
��STARS (Kagawa Univ.) (Twin Satellites)
Catalog Number: 33498
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational ?

Downlinks: 437.485 MHz FM/CW
           437.465 MHz FM/CW
Beacons: 437.305 MHz FM/CW
           437.275 MHz FM/CW

Callsigns: JR5YBN
           JR5YBO

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum�

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID1&retURL
�atellites/status.php
[02092011]
��KKS-1 (Tokyo MCIT)
Catalog Number: 33499
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational

Downlink: 437.455 MHz AFSK/CW
Beacon: 437.385 MHz AFSK/CW

Callsign: JQ1YYY

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum7

AMSAT-NA webapge:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID0&retURL
�atellites/status.php

[20092011]
��PRISM (Tokyo Univ.)
Catalog Number: 33493
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational ?

Downlink: 437.425 MHz AFSK/GMSK/CW
Beacon: 437.250 MHz AFSK/GMSK/CW

Callsign: JQ1YCX

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum�

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID9&retURL
�atellites/status.php
[02092011]
��RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number: 32953
Launch Date: May 23, 2008 1520z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational

Curent Modes: Telemetry
              Audio
              Images

Downlinks: 435.315 MHz
           435.215 MHz

AMSAT-NA website:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID5&ret
URL�atellites/status.php

Official website:
http://www.npopm.com/?cid�oca&caidC
[02092011]
��CanX-2
Catalog number: 32790
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational in range of ground station only

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web
page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnumF
[02092011]
��AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Downlink: 437.425 MHz 1k2 baud packet

For the latest project status update please visit the AAUSAT-II web page:
http://www.aausatii.aau.dk/homepage/index.php?language�&page�me

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum`
[02092011]
��CO-65 CUTE-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Downlink: 437.475 MHz 9k6 Packet
Uplink: 1267.600 Mhz

Telemetry Beacon:
Downlink: 437.2750 MHz CW

For the latest project status update please visit the Cute-1.7+APD II web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnumx

Command Station blog website:
http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID2&retURL
�atellites/status.php
[03232012]
��Compass-1
Catalog number: 32787
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Current Mode: dependant on last received command

Uplink: 145.980 MHz FM
Downlink: 437.275 Mhz CW
          437.405 MHz Packet

For the latest project status update please visit the Compass 1 web
page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnumR

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID4&retURL
�atellites/status.php
[06162011]
��CO-66 Seeds II
Catalog number:
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Downlink: 437.485 MHz

Callsign: JQ1YGU

For the latest project status update please visit the Seeds 2 web
page: http://cubesat.aero.cst.nihon-u.ac.jp/english/seeds_2_e.html

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum6

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID3&retURL
�atellites/status.php
[02092011]
��CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007 0702z
Launch site: Baikonur, Kazakhstan

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.

AMSAT-NA webpage:

http://www.amsat.org/amsat-new/satellites/satInfo.php?satID�&retURL
/satellites/status.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnumr
[02092011]
��CP3
Catalog Number: 31129
Launch Date: April 17,2007 0702z
Launch site: Baikonur, Kazakhstan

Status: Operational

Current Mode: /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnumt
[02092011]
��CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005 0652z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon: 437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/xivpicte.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum7
[02092011]
��CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: ?????

Current Mode: /u

Beacon: 436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID�&retURL
�atellites/status.php

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[02092011]
��QuakeSat
Catalog Number: 27845
Launch Date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Telemetry only

Current Mode: 9600 baud data packet

Mode U packet
Downlink: 436.675 MHz 9k6 BPS

Quakesat webpage:
http://www.quakefinder.com/services/quakesat-ssite/
[02252011]
��CO-55 Cute-1.7+APD II
Catalog Number: 27844
Launch date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational

Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satIDi&retURL
�atellites/status.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnumx
[02092011]
��NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001 0240z
Launch site: Kodiak Launch Complex, Alaska, USA

Status: Telemetry only

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[02092011]
��RS-22 RADIO SPORT 22 (MOZHAYETS 4)
Catalog number: 27939
Launch Date: September 27, 2003 0612z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational - 70cm cw only

Current Mode: /u

CW Beacon - 435.352 MHz
            145.818 MHz

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satIDv&retURL
�atellites/status.php
[02092011]
��LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990
Launch site: Kourou, French Guiana

Status: CW Beacon only

Uplinks: 145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink: 437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[02092011]
��UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984
Launch site: Vandenburg AFB, California, USA

Status: Operational ?

Current Mode: /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon: 435.025 MHz
Mode-S Beacon: 2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[07052011]
��INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998 0640z (ZARYA module)
Launch sites: Baikonur, Kazakhstan
Kourou, French Guiana
Uchinoura Space Center, Japan
Kennedy Space Center, Titusville, Florida, USA

Status: Operational

Current Active Modes: FM Repeater - OFF
Voice - V/v
BBS - OFF
2m APRS - OFF
70cm APRS - ON
70cm Digi - ON
SSTV - OFF

Expedition 31 Crew (April 2012 - July 2012):

Commander:	Oleg Kononenko	RN3DX
Flight Engineer:	Andr� Kuipers	PI9ISS
Flight Engineer:	Don Pettit	KD5MDT
Flight Engineer:	Joe Acaba	KE5DAR
Flight Engineer:	Gennady Padalka	RN3DT
Flight Engineer:	Sergei Revin	RN3BS

Available Modes and Frequencies:
Digital/APRS:
Worldwide 2m packet uplink: 145.825 MHz FM 1k2
Worldwide 2m packet downlink: 145.825 Mhz FM 1k2
Worldwide 70cm packet downlink: 437.550 Mhz FM 1k2
Worldwide 70cm packet downlink: 437.550 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM

Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
2m Packet Mailbox: RS0ISS-11
2m Digipeater alias: ARISS
70cm Packet Mailbox: RS0ISS-1
70cm Digipeater callsign: RS0ISS
70cm Digipeater alias: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[06112012]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-163.S3
WSR 163 Part 3 06/11/2012

AMSAT NEWS SERVICE BULLETIN 163.S3
FROM AMSAT HQ SILVER SPRING, MD, June 11, 2012
TO ALL RADIO AMATEURS
BID: $WSR-163.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

NANOSAIL-D
Catalog Number: 37361(?)
Ejection Date: January 17, 2011

Status: Non - Operational

Downlink: 437.270 MHz AX.25

URL: http://nanosaild.engr.scu.edu/dashboard.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum5
[04302012]
��HO-68 HOPE-1 (CAS-1)(XW-1)
Catalog Number: 36122
Launch Date: December 15, 2009 0231z
Launch site: Taiyuan Space Center, PRC

Status: Telemetry only

Callsign:
Broadcast: BJ1SA-11
BBS: BJ1SA-12

Uplinks: 145.8250 MHz FM, PL 67.0 Hz.
           145.9250 - 145.9750 MHz SSB/CW
           145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
           435.7650 - 435.7150 MHz SSB/CW
           435.6750 MHz AFSK 1200 BPS

Beacon: 435.7900 MHz CW

Mode and Antenna Polarization:
V: LHCP 2.0dBi max
U: RHCP 3.0dBi max

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum8

For more information about XW-1 (CAS-1):
http://
[04302012]
��SO-67 SumbandilaSat
Catalog Number: 35870
Launch Date: September 17, 2009 1555z
Launch site: Baikonur, Kazakhstan

Status: Non - Operational

Callsign: ZS0SUM

Uplink: 145.875MHz FM tone 233.6 Hz
Downlink: 435.345MHz FM

Mode and Antenna Polarization:

V: Linear
U: Linear

For more information about SO-67:
http://www.amsatsa.org.za/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum�
[01272012]
��CP4
Catalog Number: 31132
Launch Date: April 17, 2007

Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon: 437.325 MHz CW

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnumy
[09062010]
��LIBERTAD-1
Catalog Number: 31128
Launch Date: April 17, 2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink: 145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnumv
[09062010]
��PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: Non-Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder: 145.825 Mhz FM

IARU coordination status page:

http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnumQ
[09062010]
��NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
                              2407.250

Official Website: http://www.ncube.no

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum$
[09062010]
��XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 MHz FM 67Hz CTCSS
Voice Downlink: 2401.835 MHz FM
Packet Up/Downlink: 437.250 MHz 9k6 packet
Packet Downlink   2401.835 MHz 38k4 packet

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnumT
[09062010]
��UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non-Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnumS
[09062010]
��AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004 0745z
Launch site: Baikonur, Kazakhstan

Status: Non - Operational

Current Mode(s):
Voice repeater: V/u
Uplink: 145.880 MHz FM

Downlink: 435.150 MHz FM

Telemetry: Recovery efforts
Downlink: 435.150MHz 9k6

Analog voice downlink: 435.300 MHz FM
                           435.150 MHz FM
                          2401.200 Mhz FM
Analog voice uplink: 145.860 MHZ FM
                           145.880 MHz USB
                           145.880 MHz FM
                           145.920 MHz FM
                           145.920 MHz FM - 67 Hz PL tone burst
                          1268.705 MHz FM
Digital Downlinks: 435.150 MHz FM 38k4 PBP, 1 watt output
                           435.150 MHz FM 9k6 Pacsat Broadcast Protocol
                          2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Pacsat Broadcast Protocol
                          1268.703 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum
[12062011]
��CANX-1
Catalog Number: 27847
Launch Date: June 30, 2003

Status: Non-Operational

Downlink: 437.8800 MHz AFSK 1k2bps
[06052009]
��DTUSAT
Catalog Number: 27842
Launch Date: June 30, 2003

Status: Non-Operational

Current Mode: 2k4 AFSK Packet last reported

```
Downlink: 437.475MHz

Officail webpage: http://dtusat1.dtusat.dtu.dk/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID1&retURL
�tellites/all_oscars.php
[02212009]
��AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink:   435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)

Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
��MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Telemetry only

Uplinks:   145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink:  437.325 MHz

Broadcast callsign: MYSAT3-11
BBS:                MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial land and weather imaging payloads offers FM and FSK
Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as
a collaborative effort between the Malaysian government and Surrey
Satellite Technology Ltd.
[03302009]
��NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink:   145.945 MHz UI Digipeater
Digi Callsign: KE6QMD
```

Everyone is welcome to use the digipeating/APRS features of Sapphire,
as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
��SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
��SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
��AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks

V-band: 145.840 - 145.990 MHz CW/LSB
U-band: 435.550 - 435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks

S2-band: 2401.225 - 2401.475 MHz CW/USB
K-band: 24048.010 - 24048.060 MHz CW/USB
Beacon: 2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)

BEACON	General Beacon(GB)	Middle Beacon(MB)	Engineering Beacon(EB)
2 m	none	145.898 MHz	none
70cm	435.438 MHz	435.588 MHz	435.838 MHz
13cm(1)	2400.188 MHz	2400.338 MHz	2400.588 MHz
13cm(2)	2401.173 MHz	2401.323 MHz	2401.573 MHz
3cm	10450.975 MHz	10451.125 MHz	10451.375 MHz
1.5cm	24047.885 MHz	24048.035 MHz	24048.285 MHz

[07162007]
��OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
��UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
��SO-35 SUNSAT
Catalog Number: 25636
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]

��PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
��SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
��GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Non-Operational

Current Modes:
Telemetry : /u

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks: 145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://asri.technion.ac.il/techsat/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID&retURL
�atellites/status.php
[07172010]
��TO-31 TMSAT-1

```
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink:   145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
��MO-30 UNAMSAT-2
Catalog Number: 24305
Launch Date: September 5, 1996

Status: Non-operational

Downlink:       435.1380 MHz AFSK 1200 BPS
Downlink:       435.2060 MHz AFSK 1200 BPS
Uplink:         145.8150 MHz AFSK 1200 BPS
Uplink:         145.8350 MHz AFSK 1200 BPS
Uplink:         145.8550 MHz AFSK 1200 BPS
Uplink:         145.8750 MHz AFSK 1200 BPS
[06042009]
��PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Non-operational

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign:       POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012009]
��IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud
```

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
��KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
��AO-24 ARSENE
Catalog Number: 22654
Launch Date: May 13, 1993

Status: Non-operational

Uplink: 435.0625 MHz FM 1k2bps AFSK
           435.1125 MHz FM 1k2bps AFSK
           435.1375 MHz FM 1k2bps AFSK
Downlink: 145.9750 MHz FM 1k2bps AFSK
          2446.5025 MHz FM 1k2bps AFSK

Beacon: 2446.4700 MHz CW

Broadcast callsign:
BBS:
[12162009]
��KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HL01-11
BBS: HL01-12
[01222007]
��UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink: 145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
��AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink: 435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
��FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons: 435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink: 145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks: 145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
��WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
��DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink: 145.825 MHz FM 1200 Baud AFSK
Beacon: 2401.220 MHz
[05012006]
��AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: non-operational

Current Mode: V/u

Uplink: 145.900 MHz FM 1200-baud Manchester FSK (reserved)
145.920 MHz FM VOICE
145.940 MHz FM 1200-baud Manchester FSK (reserved)
145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink: 437.026 MHz USB VOICE
(1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC 437.050 MHz RHCP
PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[07242009]
��UO-15 UoSAT-4
Catalog Number: 20438
Launch Date: January 22, 1990

Status: Non-operational

Uplink: ?
Downlink: 435.1250MHz (?)
435.1200MHz (?)
[06042009]
��UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink: 145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
��FO-12 Fuji-OSCAR 12
Catalog Number: 16909

```
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
��AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon:   145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
��AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink  29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
��AO-6 AMSAT-OSCAR 6
```

```
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
Beacons:   29.450 MHz
          435.100 MHz
[01312008]
��AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
��OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
��RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon 1:  29.352 MHz (intermittent)
Beacon 2:  29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
��RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink:     21.260 to 21.300 MHz CW/USB
Downlink:  145.860 to 145.900 MHz CW/USB

Beacon:    145.860 MHz
```

Robot: 145.908 MHz
[05232004]
��RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the

President's Club. Members of the President's Club, as sustaining
donors to AMSAT Project Funds, will be eligible to receive additional
benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to
the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis
Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at}
amsat.org
NNNN
/EX

```
From -6072005503093051176
X-Google-Thread: 107ada,ccec1c0f23640ce,start
X-Google-NewGroupId: yes
X-Google-Thread: 10e8ad,ccec1c0f23640ce,start
X-Google-NewGroupId: yes
X-Google-Attributes: gida3e752f117,gid8f86f75953,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Received: by 10.68.196.232 with SMTP id ip8mr15641121pbc.6.1340033409232;
        Mon, 18 Jun 2012 08:30:09 -0700 (PDT)
MIME-Version: 1.0
Path: l9ni65290pbj.0!nntp.google.com!news1.google.com!news2.google.com!
newsfeed2.dallas1.level3.net!news.level3.com!panix!rri.panix.com!robomod!not-for-
mail
From: SWPC.Webmaster@noaa.gov
Newsgroups:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.shor
twave,rec.radio.info
Subject: Weekly Highlights of Solar and Geomagnetic Activity, 11 - 17 June 2012
Followup-To:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.shor
twave
Date: Mon, 18 Jun 2012 11:30:07 EDT
Organization: NOAA Space Weather Prediction Center
Lines: 81
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <20120618153001.D341433C91@panix2.panix.com>
NNTP-Posting-Host: panix6.panix.com
X-Trace: reader1.panix.com 1340033407 16305 166.84.1.6 (18 Jun 2012 15:30:07 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Mon, 18 Jun 2012 15:30:07 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
```

X-Comment-1: The moderators do not necessarily agree or disagree with this article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump

```
:Product: Weekly Highlights and Forecasts
:Issued: 2012 Jun 18 1335 UTC
# Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center
# Product description and SWPC contact on the Web
# http://www.swpc.noaa.gov/weekly.html
#
#                Weekly Highlights and Forecasts
#
```

Highlights of Solar and Geomagnetic Activity
11 - 17 June 2012

Solar activity was at low to moderate levels. Low levels were observed on 11 - 12 June due to numerous weak C-class flares from Regions 1499 (N16, L=184, class/area Cao/060 on 09 June), 1504 (S17, L=087, class/area Ekc/750 on 16 June), 1506 (N11, L=076, class/area Hax/100 on 12 June) and 1507 (S26, L=111, class/area Dso/130 on 16 June). Activity increased to moderate levels on 13 and 14 June due to M-class flaring from Region 1504. At 13/1317 UTC, a long duration M1/1n was observed with associated Type IV and 10 cm (260 sfu) radio signatures. On 14 June, another long duration M1/1n was observed at 14/1435 UTC with associated Type IV and 10 cm (1400 sfu) radio signatures. CME signatures were detected with both of the events. Solar activity decayed to low levels on 15 - 17 June with numerous C3 or smaller x-ray events observed from Region 1504.

A greater than 10 MeV proton event at geosynchronous orbit was observed during the period. The event began at 16/1955 UTC, reached a maximum of 14 pfu at 16/2020 UTC and ended at 16/2255 UTC. This weak event was most likely associated with the 14 June M1 x-ray flare.

The greater than 2 MeV electron flux at geosynchronous orbit was at high levels on 11 June and moderate levels on 12 - 17 June.

Geomagnetic field activity ranged from quiet to major storm levels. Quiet to unsettled levels were prevalent from 11 June through late on 16 June with a brief period of minor storm conditions late on 11 June to early on 12 June due to a sustained period of southward interplanetary magnetic field (IMF) Bz. At 16/2022 UTC, field conditions increased to active levels and further increased to minor to major storm conditions through 17/1500 UTC and decayed to active levels through the remainder of the period. This increase in activity was a result of combined effects from the 13 and 14 June CMEs. On 16 June, three separate sudden impulses were observed at the Boulder magnetometer; 16/0957 UTC (28 nT), 16/2019 UTC (28 nT) and 16/2115 UTC (25 nT). ACE data indicated three shock arrivals at 16/0900 UTC, 16/1931 UTC and 16/2031 UTC. Solar wind speed increased from about 350 km/s to 425 km/s with the first shock, and further increased to around 560 km/s with the second and third shocks. With each successive shock, total IMF field strength reached 10 nT, 17 nT and 34 nT respectively. A magnetopause crossing was also observed by the GOES-15 satellite from around 16/2200 UTC - 16/2300 UTC.

Forecast of Solar and Geomagnetic Activity
18 June - 14 July 2012

Solar activity is expected to be at low to moderate levels through 21 June when Region 1504 will rotate around the west limb. Mostly low levels are expected through 25 June. Low to moderate levels are possible from 26 June - 14 July due to the return of old Regions 1494 (S16, L=198) and 1496 (N17, L=204) on 26 June and the return of old Region 1504 (S17, L=087) on 04 July.

No proton events are expected at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to be at high levels on 18 - 25 June, normal to moderate levels on 26 June - 03 July and return to high levels on 04 - 14 July.

Geomagnetic field activity is expected to be at unsettled to active levels with isolated minor storm periods on 18 June due to continued effects from the 13 and 14 June CMEs. Quiet to unsettled levels with isolated active periods are possible on 19 - 20 June due to effects from a recurrent coronal hole high speed stream (CH HSS). Mostly quiet conditions are expected from 21 - 26 June. A return to quiet to unsettled levels with isolated active periods are possible on 27 - 30 June with isolated minor storm periods on 01 - 05 July due to a pair of recurrent CH HSS. Mostly quiet conditions are expected on 10 - 14 July.

From -4599497314670841459
X-Google-Thread: 10e8ad,8f9e1f3331f88a81,start
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII
Received: by 10.68.238.65 with SMTP id vi1mr16873383pbc.7.1340061110795;
        Mon, 18 Jun 2012 16:11:50 -0700 (PDT)
MIME-Version: 1.0
Path: l9ni66522pbj.0!nntp.google.com!news2.google.com!newsfeed2.dallas1.level3.net!news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-169 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space

Date: Mon, 18 Jun 2012 19:11:50 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 296
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <002b01cd4da7$c0045900$400d0b00$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
X-Trace: reader1.panix.com 1340061110 18135 166.84.1.6 (18 Jun 2012 23:11:50 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Mon, 18 Jun 2012 23:11:50 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to   rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to   rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us

AMSAT NEWS SERVICE
ANS-169

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In this edition:
* AMSAT 2012 Symposium Weekend Schedule Posted
* Candidates for the AMSAT-NA Board of Directors
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SB SAT @ AMSAT $ANS-169.01
ANS-169 AMSAT News Service Weekly Bulletins

AMSAT News Service Bulletin 169.01
From AMSAT HQ SILVER SPRING, MD.
June 17, 2012
To All RADIO AMATEURS
BID: $ANS-169.01

AMSAT 2012 Symposium Weekend Schedule Posted

The 2012 AMSAT Annual Meeting and Space Symposium will be held in Orlando, Florida on the weekend of October 26-28, 2012 at the Holiday Inn, Orlando Airport Hotel.

The Symposium weekend will feature:

+ Space Symposium with Amateur Satellite Presentations
+ Operating Techniques, News, & Plans from the Amateur Satellite World
+ Board of Directors Meeting open to AMSAT members
+ Meet Board Members and Officers
+ Annual General Membership Meeting
+ Annual Banquet�Keynote Speaker and Door Prizes

To help you plan your trip to Orlando the 2012 Symposium Committee has posted a high-level schedule of the weekend's events.

Preliminary 2012 Symposium Schedule

Thursday 25 October 2012

AMSAT Board of Directors Meeting 8am - 9pm

Friday 26 October 2012

AMSAT Board of Directors Meeting 8am - Noon
Trips to SkyCraft 9am - Noon
AMSAT Symposium 1pm - 5pm

Saturday 27 October 2012

Symposium 8am - 3pm
AMSAT General Meeting 3:30pm
AMSAT Banquet 6:30pm - 10pm

Sunday 28 October 2012

7:30am AMSAT Area Coordinator's Breakfast
Local trip of Interest TBD

Monday 29 October 2012

Special trip to Kennedy Space Center 8am-6pm
Contact Martha if interested

Watch the AMSAT Symposium Web Pages for the latest information:

http://www.amsat.org/amsat-new/symposium/2012/index.php

[ANS thanks the 2012 Symposium Committee for the above information]

Candidates for the AMSAT-NA Board of Directors

There are six candidates running for the AMSAT-NA Board of Directors. Three of the candidates are current members of the Board whose term expires this year. Ballots will be mailed to the membership by July 15th, and must be received at the AMSAT-NA Silver Spring, MD office no later than the close of business on September 15th, 2012.

Tom Clark, K3IO *
Steve Coy, K8UD
Mark Hammond, N8MH
Lou McFadin, W5DID *
Gould Smith, WA4SXM *
Patrick E. Stoddard, WD9EWK

* Incumbent

[ANS thanks Alan, WA4SCA, for the above information]

Viet Nam F-1 CubeSat Team Invites You to Send Your Name to Space

The latest news from the F-1 CubeSat Team, posted on their website blog (http://fspace.edu.vn/) and on the AMSAT-UK web with additional photos (http://www.uk.amsat.org/8215) reports that the satellite's flight safety review is complete and the FSpace team together with their partner NanoRacks LLC has satisfied the technical requirements and standards set by the launch vehicle provider.

F-1 CubeSat is ready for its scheduled launch in July 21, 2012 from Japan. If everything goes according to plan, the F-1 CubeSat will be delivered to Japan by the end of June. Then along with four other CubeSats (RAIKO, WE-WISH, FITSAT-1 and TechEdSat) F-1 will be loaded onboard HTV-3 �Kounotori� transfer vehicle for integration with the JAXA HII-B launch vehicle.

These CubeSats will remain aboard the ISS until September, 2012 when Japanese astronaut and radio amateur Akihiko Hoshide KE5DNI should deploy it into space from the ISS using the Kibo robot arm.

F-1 carries two Yaesu VX-3R transceivers using 145.980 and 437.485 MHz.

The FSpace team are offering the public a chance to send their name/callsign and a message into space onboard the F-1 CubeSat. You will also be presented with a certificate!
See this link: http://fspace.edu.vn/?page_id1

[ANS thanks the FSpace Team and AMSAT-UK for the above information]

1st Interplanetary CubeSat Workshop Video and Presentations Available

Video and presentations from the 1st Interplanetary CubeSat Workshop, held in and around MIT and Boston on May 29-30 are available for downloading. See: http://icubesat.wordpress.com/program/ Copies and videos of all the presentations, posters and ancillary sessions can be found by clicking on their titles.

Please note that this conference was an open conference and did not wish to discuss information restricted by ITAR. U.S. citizens and permanent residents were responsible for ensuring that technical data presented was not restricted by ITAR and that ITAR controlled information was not discussed with non-U.S. citizens.

[ANS thanks the iCubeSat Workshop for the above information]

Credit Card Sized Raspberry Pi Computer Board Runs Ham Radio Software

AMSAT-UK and AMSAT-NA member Dave Johnson, G4DPZ, has been using the Raspberry Pi to run amateur radio satellite software.

The �22 ($35) Model B Raspberry Pi is a credit-card sized ARM-based computer board that plugs into a TV and a keyboard. Based around the 700 MHz ARM11 processor the board has 256 MB SDRAM, two USB ports, Ethernet with composite and HDMI video outputs. Low-level peripherals are GPIO pins, SPI, I�C, I�S and UART.

It was developed in Cambridgeshire by a UK registered charity, the Raspberry Pi Foundation, which exists to promote the study of computer science and related topics, especially at school level, and to put the fun back into learning computing.

Dave�s Raspberry Pi runs Debian Squeeze with Xwindows and is accessed using VNC over his shack network.

The first amateur radio application he got running was the GPredict satellite tracking software, thanks go to Alex Csete OZ9AEC for making such a portable implementation. Dave found the sofware and updates of the Keplerian Two Line Elements from the Internet worked perfectly.

More information about the Raspberry Pi can be found at:
http://www.raspberrypi.org/

GPredict free real-time satellite tracking and orbit prediction software can be found at: http://gpredict.oz9aec.net/

See also AMSAT-UK (http://www.uk.amsat.org/8019) for photos and additional information about the Raspberry Pi.

[ANS thanks AMSAT-UK for the above information]

Satellite Shorts From All Over

+ The 13 Colonies Special Event operation needs a satellite operator from the state of Massachusetts. If you can help please contact the coordinator Dave Webb, KB1PVH [kb1pvh at gmail.com]

+ Nick Pugh, K5QXJ posted a video recorded during an AubieSat-1 pass after its recent on-orbit reconfiguration. See:
http://www.youtube.com/watch?v�M1z7C6l-0

+ Plan Ahead! To celebrate Venezuelan Navy Day, members of the Grupo DX Caracas will be active as YW5B from La Blanquilla Island between July 11-16. Activity will be on 160-2 meters using CW, SSB, Satellites,
FM and the Digital modes. (Ohio/Penn DX Bulletin No. 1065)

+ The next Hudson Valley Satcom net date is Thursday June 21, 8PM EDT (UTC-4 UTC) on the 146.97 MHz MBARC Repeater (PL 100). The echolink connection has been experiencing problems so you are invited to send and e-mail to N2OXV at arrl.net to make sure that the N2EYH-L EchoLink node is available if you plan to join via this route. (Stu, WA2BSS)

+ A video of the AMSAT-UK FunCube Dongle receiving the HORYU-2 Satellite is posted at: http://www.uk.amsat.org/?p�16. You will also find links describing the satellite and a link to software for telemetry decoding.

+ VE7BQH has just updated his 2m and 6m antenna comparison tables and provided additional information on each antenna. The changes are explained by him along with links to both text and spreadsheet versions of the tables: http://www.bigskyspaces.com/w7gj/6mTable.htm

[ANS thanks everyone for the above information]

ARISS Status - 11 June 2012

Amateur Radio on the International Space Station (ARISS) Status Report
June 11, 2012

1. Japanese Contact Successful

On Wednesday, June 6, students attending Kawatinagano Higashi Junior High School in Kawatinagano, Osaka, Japan took part in an Amateur Radio on the International Space Station (ARISS) contact with Andr� Kuipers, PI9ISS on ISS. At the beginning of the contact the school was experiencing a power blackout, but recovered in time so that all children were able to ask their questions. The event supplemented lessons about space and the ISS.

2. Astronaut Training Status

Astronaut Jeannette Epps took and passed her amateur radio license exam last week and was given the callsign KF5QNU. She is not assigned to any future ISS expedition crews at this time.

[ANS thanks Carol, KB3LKI, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

Primary and secondary school students are eligible for membership at one-half the standard yearly rate. Post-secondary school students enrolled in at least half time status shall be eligible for the student rate for a maximum of 6 post-secondary years in this status. Contact Martha at the AMSAT Office for additional student membership information.

73,
This week's ANS Editor,
Lee McLamb, KU4OS

From 8820070320285662548
X-Google-Thread: 10e8ad,3aafa085f15d8d2e,start
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII
Received: by 10.68.238.65 with SMTP id vi1mr2449714pbc.7.1340349500884;
        Fri, 22 Jun 2012 00:18:20 -0700 (PDT)
MIME-Version: 1.0
Path: l9ni6030pbj.0!nntp.google.com!news1.google.com!goblin2!goblin.stu.neva.ru!aioe.org!.POSTED!not-for-mail
From: peter <peterswanson44@yahoo.com>
Newsgroups: rec.radio.amateur.space
Subject: thanks to storm
Date: Fri, 22 Jun 2012 09:18:20 +0200
Organization: SFSU
Lines: 56
Message-ID: <2859028@news.colorado.edu>
NNTP-Posting-Host: pm0KQ1Hue9U6WhBV+8/bGw.user.speranza.aioe.org
X-Complaints-To: abuse@aioe.org
User-Agent: XanaNews/1.18.1.6
X-Antivirus-Status: Clean
X-Notice: Filtered by postfilter v. 0.8.2
X-Antivirus: avast! (VPS 120621-1, 21/06/2012), Outbound message
Content-Transfer-Encoding: 8bit

Dear all,

it might be necessary to develop the recovery of the weather in an efficient
way after analyzing the storm;
Subsequently, it should be necessary to determine the flow control of the weather
in a
smart way before evaluating the storm as well as the concept of the weather
monitoring;
To move forward, you should understand what follows:
 Encana has maintained that water in the
 area is naturally poor and that its operations did not cause the problems �
fracking had also occurred before the company purchased the gas field.
Moreover, the energy industry has steadfastly pointed out that there has
never been any conclusive link between fracking and water contamination.
 In
 the meantime, the state has offered to provide cisterns for local residents,
 using $750,000 allocated by the Wyoming Legislature this year. Under the
plan, people here would still have to pay a fee to have their water hauled
from the nearby community of Pavillion, at a cost that could run more than
$150 per month.
 Mr. Hock said it should have come as no surprise that the
E.P.A.�s two monitoring wells showed high levels of methane and benzene
because they were drilled deep into a natural gas field.
 Encana has
maintained that water in the area is naturally poor and that its operations

did not cause the problems � fracking had also occurred before the company
purchased the gas field. Moreover, the energy industry has steadfastly
pointed out that there has never been any conclusive link between fracking
and water contamination.
For the last few years, a small group of farmers
and landowners scattered across this rural Wyoming basin have complained that
their water wells have been contaminated with chemicals from a controversial
drilling technique known as hydraulic fracturing, or fracking.
After an
outcry from Wyoming�s governor, Matt Mead, and the energy industry that the
federal report was premature and inconclusive, more testing was conducted by
the United States Geological Survey and is being processed. The E.P.A. is
also in the midst of collecting additional water samples for study.
Mr.
Fenton said he thought he had dodged a bullet until about three years ago,
when his tap water began occasionally fizzing and smelling like petroleum.
And even though Encana is giving him drinking water, Mr. Fenton said he and
his family still bathe in dirty water.

After discussing about the storm , this site seems appropriate:
http://www.youtube.com/watch%3Fv%3D0CkEObS0J4g
http://www.youtube.com/watch%3Fv%3D0CkEObS0J4g
http://www.youtube.com/watch%3Fv%3DDcsA1nOaNQQ
http://www.youtube.com/watch%3Fv%3DDcsA1nOaNQQ
http://www.youtube.com/watch%3Fv%3DKCF49AQbgcI
http://www.youtube.com/watch%3Fv%3DKCF49AQbgcI
http://beffrey2.yuku.com/forums/71/General-Weather-Discussion%3Fpage%3D2
http://beffrey2.yuku.com/forums/71/General-Weather-Discussion%3Fpage%3D3
http://tehescmarts.edu.glogster.com/why-the-weather/
http://www.americantowns.com/tx/whitney/videos

Best regards

From -7619871787470206154
X-Google-Thread: 10e8ad,cfdaea008ac661d3,start
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII
Received: by 10.68.227.67 with SMTP id ry3mr6409569pbc.8.1340543176240;
        Sun, 24 Jun 2012 06:06:16 -0700 (PDT)
MIME-Version: 1.0
Path: l9ni14500pbj.0!nntp.google.com!news2.google.com!
newsfeed2.dallas1.level3.net!news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-176 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sun, 24 Jun 2012 09:06:15 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 340
Approved: RRI Admin <rec-radio-info-request@panix.com>

Message-ID: <001501cd520a$1eeab020$5cc01060$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
X-Trace: reader1.panix.com 1340543175 7671 166.84.1.6 (24 Jun 2012 13:06:15 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 24 Jun 2012 13:06:15 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to   rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to   rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us

AMSAT NEWS SERVICE
ANS-176

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* Reminder to Submit Your AMSAT Field Day Satellite Summary Sheet
* Video Posted From ARISS Contact with 8N3KN in Japan
* Celebrating 10th Anniversary of OSCAR 7's Return To Life
* AO-7 DX Opportunities
* ARISS Contact Planned as NASA Hosts Future Female Explorers
* Winner of HORYU-2 Receiving Competition
* ARISS Status - 21 May 2012

SB SAT @ AMSAT $ANS-176.01
ANS-176 AMSAT News Service Weekly Bulletins

AMSAT News Service Bulletin 176.01
From AMSAT HQ SILVER SPRING, MD.
June 24, 2012
To All RADIO AMATEURS

BID: $ANS-176.01

Reminder to Submit Your AMSAT Field Day Satellite Summary Sheet

By the time you are reading this bulletin the 2012 Field Day may be already complete for you. The AMSAT Field Day Rules document (available in PDF and MS-Word format) are linked on the front page of the home page at http://www.amsat.org.

The Field Day Rules document contains the Satellite Summary Sheet for submitting your entry. This sheet should be used for submission of the AMSAT Field Day competition and be received by AMSAT Director of Awards, Bruce Paige, KK5DO (email or postal mail) by 11:59 P.M. CDT, Monday, July 09, 2012. The preferred method for submitting your log is via e-mail to kk5do@amsat.org or kk5do@arrl.net.

You may also use the postal service but give plenty of time for your results to arrive by the submission date. Add photographs or other interesting information that can be used in an article for the Journal.

You will receive an email back (within one or two days) from Bruce when he receives your email submission. If you do not receive a confirmation message, then he has not received your submission. Try sending it again or send it to the other email address.

If mailing your submission, the address is:

Bruce Paige, KK5DO
Director of Awards and Contests
PO Box 310
Alief, TX 77411-0310.

Certificates will be awarded to the first-place emergency power/portable station at the AMSAT General Meeting and Space Symposium in the fall of 2012. Certificates will also be awarded to the second and third place portable/emergency operation in addition to the first-place home station running on emergency power. A station submitting high, award-winning scores will be requested to send in dupe sheets for analog contacts and message listings for digital downloads.

[ANS thanks Bruce Paige, KK5DO for the above information]

Video Posted From ARISS Contact with 8N3KN in Japan

On Wednesday, June 6, students attending Kawachinagano Eastside Junior High school, Osaka prefecture, Japantook part in an Amateur Radio on the International Space Station (ARISS) contact with Andr� Kuipers, PI9ISS on ISS.

At the beginning of the contact the school was experiencing a power blackout, but recovered in time so that all children were able to ask their questions. The event supplemented lessons about space and the ISS.

Video of this contact is now available on YouTube:
http://www.youtube.com/watch?v�rEDpqcct4&feature�ayer_embedded

[ANS thanks ARISS for the above information]

Celebrating 10th Anniversary of OSCAR 7's Return To Life

An article posted on the AMSAT-UK web this week reminds us of the 10th anniversary of the auspicious discovery by Pat Gowen, G3IOR on June 21, 2002 when he first noticed a beacon sending slow 8-10 wpm CW on 145.973.8 MHz. It sounded like old OSCAR satellite telemetry, it had the familiar HI HI followed by a string of numbers in groups of three. After monitoring by many radio amateurs it turned out to be OSCAR-7, and it seemed to have come back from the dead.

Pat posted a message on the amsat-bb bulletin board, "I have just come across something most remarkable this Friday 21st June evening ... It sounded VERY familiar ... Could any veteran keen observers (who might look for it) ..." Pat's original message announcing his discovery can still be read in the amsat-bb archives, see:
http://www.amsat.org/amsat/archive/amsat-bb/200206/msg00525.html

It is believed that in 1981 the batteries failed short-circuit, however, in 2002 they became open-circuit enabling the satellite to run again from the solar panels. Since that day OSCAR 7 has been operational when in sunlight and provided radio amateurs with many long distance (DX) SSB/CW contacts.

Remember when working OSCAR 7 use the least uplink power possible to minimize your downlink power usage, and maximize the number of simultaneous contacts supported in the passband.

A BBC News report Radio ham finds lost satellite about the reception of OSCAR 7 by Dave Rowan G4CUO can be seen at:
http://news.bbc.co.uk/1/hi/england/2149381.stm

A collection of photos by Dick Daniels W4PUJ taken during the construction, test and launch of the AMSAT-OSCAR 7 spacecraft in 1973 and 1974 can be viewed at:
http://n4hy.smugmug.com/AMSAT/AMSAT-Oscar-7

Be sure to view the full AMSAT-UK article containing photos and additional links on-line at: http://www.uk.amsat.org/8524

The satellite alternates between Mode A and B with random changes between modes when AO-7 powers up re-entering the sunlit portion of its orbit. Monitor the Live OSCAR Satellite Status Page on-line at http://oscar.dcarr.org/ for postings of latest operating mode.

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
432.125 to 432.175 MHz CW/LSB Mode B

Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz CW
145.972 MHz CW
435.100 MHz CW
2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

[ANS thanks AMSAT-UK and AMSAT-NA for the above information]

AO-7 DX Opportunities

Paul Robinson, 2E1EUB will be operating mobile 2M1EUB as he tours around Scotland between June 26 through approximately July 9. He plans operations from grid squares IO77, IO87, and IO86 with additional coverage if time permits. He will be active from any spots along the road that he can access the satellites. Activity will be on 160 and 80 meters, 2 meters SSB and on satellites including AO-7. Satellite AO-7. Check out QRZ.com under 2M1EUB for more info.

Bill Dzurilla, NZ5N is now active as OM3BD from Slovakia, grid locator JN88mf this summer and is active on AO-7. Any North American stations in range are invited to email Bill for skeds:
billdz.geo@yahoo.com

Bill wrote, "It seems that the orbits have somehow shifted and my windows to North America are a bit longer this year, and from my hill I can hear the bird to -2 degrees."

[ANS thanks Paul Robinson 2E1EUB/2M1EUB and Bill Dzurilla, NZ5N/OM3BD for the above information]

ARISS Contact Planned as NASA Hosts Future Female Explorers

A press release from NASA Headquarters, Washington, DC notes that this week eighty-four female high school students from 29 states will plan a simulated mission to Mars and experience life as an engineer or scientist when NASA's Johnson Space Center in Houston hosts two events focused on science, technology, engineering and mathematics (STEM) in June and July.

The Women in STEM High School Aerospace Scholars project, or WISH, is sponsoring two six-day summer camps for rising high school seniors. The young women will work in teams with female NASA mentors to develop mission plans for launching to Mars, living and working there, and integrating the many components necessary for a successful planetary mission. They will work within the confines of a fictitious budget and build several small mockups of vehicles to demonstrate a successful launch and landing of the Mars spacecraft.

"WISH gives some of our brightest future innovators a chance to experience some of the exciting challenges that NASA engineers and scientists face on a daily basis," said Johnson Deputy Director and four-time space shuttle astronaut Ellen Ochoa. "It shows the young women that there are a variety of opportunities for them in technical fields."

Young women participating June 24-29 will hear a first-hand account of life in space from NASA astronaut Shannon Walker. Participants July 8-13 will have a chance to speak with a current space station astronaut via ham radio as part of the Amateur Radio on the International Space Station program, a NASA educational initiative that facilitates direct links between students and astronauts.

The young women were selected based on completion of interactive, online lessons focused on space exploration and mapped to national education standards, academic merits and geographic diversity. The WISH program encourages young women to pursue science, technology, engineering and mathematics degrees and exposes them to the real-world applications of STEM careers at NASA. This program is in its second year. It began as a NASA accompaniment to the White House Council on Women and Girls.

The NASA Press release can be viewed on-line at:
http://www.nasa.gov/home/hqnews/2012/jun/HQ_12-209_WISH.html

[ANS thanks NASA for the above information]

Winner of HORYU-2 Receiving Competition

Built by students at the Kyushu Institute of Technology (KIT) the amateur radio satellite HORYU-2 was launched on May 17 at 1639 UT.

Radio amateurs from around the world sent in telemetry and the winner with the most points has been announced as Yoshitomo Iji JA6PL.

The top three places were:

1st place: JA6PL (91 points)
2nd place: ZL2BX (36 points)
3rd place: JF1EUY (35 points)

The satellite�s callsign is JG6YBW and the CW telemetry beacon frequency is 437.375 MHz (+/- Doppler shift).

The free KIT HORYU-2 telemetry software can be downloaded from
http://kitsat.ele.kyutech.ac.jp/Documents/information_launch_english.html

KIT HORYU Blog in Google English http://tinyurl.com/HORYU-Blog
Japanese HORYU website in Google English:
   http://tinyurl.com/HoryuSatellite
English language version of HORYU website:
   http://kitsat.ele.kyutech.ac.jp/index_e_new.html
Further information on HORYU-2 is at:
   http://www.uk.amsat.org/7404
HORYU-2 online WebSDR receiver http://sdr.opt.ro:8901/
KIT HORYU-2 Facebook Group
   https://www.facebook.com/groups/277436165678985/
HORYU-2 CW Telemetry Decoder by DK3WN
   http://tinyurl.com/SatSoftwareDK3WN/

[ANS thanks the HORYU-2 Team and AMSAT-UK for the above information]

ARISS Status - 18 June 2012

1. Successful ARISS Contacts Held

ESA-ESTEC arranged for an ARISS contact that was held on Tuesday, June 12 at the Ruimtevaart Museum in Lelystad, the Netherlands with students that had taken part in Andr� Kuipers' Mission: Spaceship Earth competition. Through this program, Kuipers gave assignments to Dutch school children and the winners of the competition were invited to the event. Kuipers chatted with students and answered their questions about space. ARISS delegate Bertus H�sken, PE1KEH attended the event and presented ARISS activities to the audience. Telebridge station W6SRJ in California handled the radio connection.
To view video of the event, see:
http://www.ruimteschipaarde.nl/ruimtelog/Winnaars-Missie-2-leggen-radioconta

ct-met-Andr-Kuipers/186

Students from St. Anne's Primary School in Strathfield South, NSW, Australia spoke with Joe Acaba, KE5DAR on the ISS through an Amateur Radio on the International Space Station (ARISS) contact on Wednesday, June 13 via telebridge station LU8YY in Argentina. Approximately 150 people attended the event. The contact was integrated into the space curriculum across all grades and was held along with the school's science fair.

2. Astronaut Training Status

Barry Wilmore took part in an ARISS introductory class on Monday, June 11.Wilmore is slated to fly with Expedition 41 in September 2014.

[ANS thanks Carol, KB3LKI, for the above information]

/EX

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Primary and secondary school students are eligible for membership at one-half the standard yearly rate. Post-secondary school students enrolled in at least half time status shall be eligible for the student rate for a maximum of 6 post-secondary years in this status. Contact Martha at the AMSAT Office for additional student membership information.

73,
This week's ANS Editor,
Lee McLamb, KU4OS
ku4os at amsat dot org

```
From 7859445965822813646
X-Google-Thread: 107ada,ef14c8c999d44714,start
X-Google-NewGroupId: yes
X-Google-Thread: 11480d,ef14c8c999d44714,start
X-Google-NewGroupId: yes
X-Google-Thread: 10e8ad,ef14c8c999d44714,start
X-Google-NewGroupId: yes
X-Google-Thread: 114aac,ef14c8c999d44714,start
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X-Google-Thread: 10b9c8,ef14c8c999d44714,start
```

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X-Google-Attributes:
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blic,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Received: by 10.68.219.170 with SMTP id pp10mr13605345pbc.1.1340638207548;
        Mon, 25 Jun 2012 08:30:07 -0700 (PDT)
MIME-Version: 1.0
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newsfeed2.dallas1.level3.net!news.level3.com!panix!rri.panix.com!robomod!not-for-
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From: SWPC.Webmaster@noaa.gov
Newsgroups:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.shor
twave,rec.radio.info
Subject: Weekly Highlights of Solar and Geomagnetic Activity, 18 - 24 June 2012
Followup-To:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.shor
twave
Date: Mon, 25 Jun 2012 11:30:06 EDT
Organization: NOAA Space Weather Prediction Center
Lines: 60
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NNTP-Posting-Date: Mon, 25 Jun 2012 15:30:06 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump

:Product: Weekly Highlights and Forecasts
:Issued: 2012 Jun 25 1246 UTC
# Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center
# Product description and SWPC contact on the Web
# http://www.swpc.noaa.gov/weekly.html
#
#                Weekly Highlights and Forecasts
#
Highlights of Solar and Geomagnetic Activity
18 - 24 June 2012

Solar activity ranged from very low to low during the period. The
largest x-ray event was a C3 flare, produced by Region 1504 (S17,
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L=087, class/area Ekc/750 on 16 June) at 20/1628 UTC. Two new active regions were numbered during the period, Region 1510 (S16, L=019, class/area Cro/10 on 19 June) and Region 1511 (N15, L=357, class/area Cro/30 on 23 June). Neither of these new regions produced a flare event. No Earth directed CMEs were observed during the period.

No proton events were observed at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit was at high levels throughout the period.

Geomagnetic field activity ranged from quiet to minor storm levels during the period. Early on 18 June, minor storm levels were observed as the result of residual effects from the 13 and 14 June CMEs. Conditions recovered to quiet levels later on the 18th and remained so for the rest of the period.

Forecast of Solar and Geomagnetic Activity
25 June - 21 July 2012

Solar activity is expected to begin the period at very low to low levels and remain so until around 03 July. Beginning on 04 July, a chance for M-class flares will exist when old Region 1504 (S17, L=087) is expected to return.

No proton events are expected at geosynchronous orbit, though a slight chance may exist when Region 1504 returns.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to begin the period at normal to moderate levels, and remain so through 02 July. Flux values are expected to increase to high levels on 3-8 July due to recurrent coronal hole high speed stream effects. Normal to moderate levels are expected to return from 9 July through the remainder of the period.

Geomagnetic field activity is expected to begin the period at mostly quiet levels and remain so through 28 June. On 29 June, a possible Co-rotating Interaction Region is forecast to produce mostly unsettled levels with a chance for active conditions prior to the onset of a coronal hole (CH) high speed stream. CH effects are expected to produce unsettled to active levels with a chance for minor storm periods on 30 June through 03 July. On 04-05 July, quiet to unsettled levels are expected as the CH effects wane. Mostly quiet conditions with isolated unsettled periods are forecast from 06 July through the end of the period.

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X-Google-Attributes: gid8f86f75953,domainid0,public,usenet

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X-Google-Language: ENGLISH,ASCII
Received: by 10.68.196.232 with SMTP id ip8mr6806673pbc.6.1341107287162;
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MIME-Version: 1.0
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news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-183 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sat, 30 Jun 2012 21:48:06 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 609
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X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
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X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
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AMSAT NEWS SERVICE
ANS-183

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor at amsat.org

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*******************************************************************
* Remember to send in your 2012 AMSAT Field Day Satellite Summary *
*   Sheet to kk5do@amsat.org or kk5do@arrl.net by July 9, 2012    *
* Field Day Rules and Sheets are linked at http://www.amsat.org.  *
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In this edition:

* AMSAT Journal In the Mail
* Call For Articles - Author's Guide to the AMSAT Journal
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* Canada Scouts ARISS Contact Successful
* CQ Magazine Worked All Zones - Satellite Award
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* Soyuz to Fly 3 Hams Up, 3 Hams Staying, 3 Hams Coming Home
* KiwiSAT Hoping for Launch mid-2013
* Five CubeSats Ready for July 21 JAXA HTV-3 Launch
* AMSAT News Podcasts Available to Download and Listen
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SB SAT @ AMSAT $ANS-183.01
ANS-183 AMSAT News Service Weekly Bulletins

AMSAT News Service Bulletin 183.01
>From AMSAT HQ SILVER SPRING, MD.
July 1, 2012
To All RADIO AMATEURS
BID: $ANS-183.01

AMSAT Journal In the Mail

AMSAT Journal Editor Ed Long, WA4SWJ said this week the next issue of the Journal is at the print shop and will be in the mail soon.

With this issue we note that Ed is retiring as the Journal editor. Doug Loughmiller, W5BL will take over the reins of the Journal. Ed, thank-you for your years of hard work on the Journal! Doug, we look forward to working with you!

There has been a delay in publishing the Journal. AMSAT President Barry Baines, WD4ASW noted, "The reasons for not getting the Journal published on time is not due to the transition of editors, but due to lack of materials for publication. Please read the associated call for articles news item in this ANS ... and send Doug your materials!"

Here are some of the features of the upcoming Journal:

+ Satellite Export Controls - Progress Report

+ FUNcube Project Update

+ Spotlight on VUSAT OSCAR 52 (VO-52)

+ 2011 AMSAT BoD Meeting, Symposium & General Meeting
  AMSAT Board of Directors Meeting Minutes, San Jose, CA

+ AMSAT Activities at the 2012 Greater Houston Hamfest

+ Museum Ships Weekend 2012 - A Record Breaking Year

+ Updates of AMSAT's on-going development of launch opportunities including Fox-1 aiming for early 2013.

  o AMSAT co-development and acceptance into three satellite programs in the NASA Edison small satellite flight demonstration mission.

  o AMSAT partnership with Auburn University and The University of Alabama on a National Science Foundation (NSF) grant application.

Keep an eye on your mailbox for your next issue of the AMSAT Journal!

[ANS thanks Ed Long, WA4SWJ; and Barry Baines, WD4ASW for the above information]

Call For Articles - Author's Guide to the AMSAT Journal

You are invited to share your amateur radio in space ideas and experiences with fellow satellite operators.

The AMSAT Journal, a bi-monthly publication of AMSAT-North America, brings you the latest information in satellite mission planning, satellite-related hardware design and construction, satellite-related software design and implementation, and amateur radio earth station construction.

AMSAT Journal Editor Doug Loughmiller, W5BL noted, "Publishing a quality publication is hard work, much like building a satellite itself, it requires a team working together to insure that the publication reaches the membership in a timely manner which contains informative and useful content. In my view the Journal should address a number of topics on a regular basis. I would like to enlist the services of individuals who would be willing to serve as a column coordinators for each of the topics", including:

+ Organizational news
+ Spacecraft Engineering Topics
+ Spacecraft Operational Topics (Command and Control, mission analysis etc.)
+ Spacecraft Utilization (What's on the birds, what are we learning?)
+ Hands-On Projects for ground station applications
+ Educational News
+ Amateur Radio Astronomy
+ EME
+ High Altitude Balloon Flights

+ General Space Science Topics.

Your articles are especially welcome. Simply type out your ideas on your computer and send them in. Your article will be "cleaned up" and formatted for you during the editorial processing of the AMSAT Journal. Send your article to the AMSAT Journal e-mail box via: journal@amsat.org.

There is no need to do any special formatting on your submission because the final layout format is driven by the magazine's type setting software. All you need to include is:

+ Your text in MS-Word or plain text format

+ Graphics in as high pixel resolution possible saved in separate files (jpg, gif, tiff).

An MS-Word file with embedded graphics is the most difficult format to typeset. Separate text and graphics files work the best.

If you have any questions, or need some help feel free to contact the editor at the AMSAT Journal at journal@amsat.org.

The AMSAT Journal is looking forward to hearing from you soon!

[ANS thanks Ed Long, WA4SWJ; Doug Loughmiller, W5BL; and Barry Baines, WD4ASW for the above information]

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13 Original Colonies Special Event Includes Satellite Operations

The 2012 13 Colonies Special Event has been operating since July 1 but there is still time to work them since they plan to be on the air through July 5. Operators will be on the satellites again this year for the special event.

Recognizing that the 4th comes in the middle of the week (Wednesday) please keep in mind that there may be fewer operators available on the work days so, PLEASE BE PATIENT!

Please send your QSL requests directly to each operator.

STATE	SE CALL	STATION & OPERATOR	
NY	K2A	WB2OQQ	Pete
VA	K2B	NL7VX	Steve
RI	K2C	N1MIW	Larry
CT	K2D	WA8SME	Mark
DE	K2E	KB2M	Jeff (SSB Birds)
DE	K2E	W3FIS	Paul (FM Birds)

MD	K2F	WA3SWJ	Bruce
GA	K2G	N3TL	Tim
MA	K2H	KB1PVH	Dave
NJ	K2I	KB2M	Jeff (Here when not in DE)
NC	K2J	W4MPS	Marc
NH	K2K	NE1H	Bob
SC	K2L	K4YYL	Art
PA	K2M	KB3WSW	Elizabeth

Link to the satellite page with the list of operators and additional information: http://www.13colonies.info/Satellites.htm

The main page with all the time and date information is:
http://www.13colonies.info/

[ANS thanks Dave, KB1PVH for the above information]

Canada Scouts ARISS Contact Successful

On Saturday, June 23, Scouts Canada, Nova Scotia Council in Dartmouth, Canada called on-orbit astronaut Andr� Kuipers, PI9ISS during an Amateur Radio on the International Space Station (ARISS) contact via telebridge station VK5ZAI in Australia.

The contact was held as part of a space event with Scouts of various ages in conjunction with groups earning their Science Badge awards. Over 150 were in attendance. The contact was Webcast and the presentation was captured for retransmission by Aliant IPTV Atlantic during July/August and for development of an edited CD for distribution to interested parties.

There was excellent media coverage including 3 television stations and two newspapers. A 20 minute radio interview was held with "The Rick Howe Show" on Friday, June 22 on Amateur Radio - ARISS and Field Day Operations. In addition, an article is being prepared for periodicals: Royal Astronomical Society, Halifax Public Libraries, Radio Amateurs of Canada.

[ANS thanks the ARISS Status Report for June 25, 2012 for the above information]

CQ Magazine Worked All Zones - Satellite Award

Sponsored by CQ Magazine, the Worked All Zones award program is one of the longest running in Ham Radio, having its start prior to WWII.

CQ Magazine explains the details of this award on their website:

The WAZ program, while it involves the use of "DX Entities", does not rely on any particular "Entity's" status as a country. The WAZ award is geographically focused, which is where it's challenge lies. The CQ Worked All Zones (WAZ) Award and its variations are issued to any licensed amateur station presenting proof of contact with the appropriate number of CQ zones of the world. (The CQ Zones map and additional zone information is posted on the CQ web site.)

The Worked All Zones - Satellite award has been available for contacts made since January 1, 1989. While opportunities to contact many of the DX zones were more numerous when HEO satellites were active, your confirmed contacts back to 1989 would qualify you to apply for this award now.

The Satellite WAZ Award requires that the applicant submit QSL cards from at least 25 zones. The Satellite Award requires that the applicant submit QSL cards from at least 25 zones. Endorsement stickers are issued at the 30, 35, 36, 37, 38, 39 and 40 zone levels. The Satellite Award is not band specific, you may apply QSO's from multiple bands. The Satellite WAZ certificate will indicate the number of zones that are confirmed when the applicant first applies for the award.

Applications and Cards for this award must be submitted to the WAZ Award Manager, Floyd Gerald, N5FG (n5fg@cq-amateur-radio.com)

You can find all of the details of the CQ Magazine Worked All Zone Award on-line at: http://tinyurl.com/CQ-WAZ-Award (CQ Web Site).

[ANS thanks CQ Magazine WAZ Award Manager Floyd Gerald, N5FG for the above information]

Chinese Amateur Satellite Group Shows CAS-2 Satellite Model

This year the Chinese Amateur Satellite Group (CAMSAT) was a special guest in the AMSAT-DL booth at the HamRadio Fair in Friedrichshafen � HamRadio 2012.

CAMSAT had a model of their next amateur radio satellite, CAS-2 which is planned as the next generation after their first CAS-1 (aka XW-1, HO-68) satellite. HO-68 carried a linear transponder and proved very popular with radio amateurs world-wide.

The May 20 announcement came to light that CAMSAT and students at the Qian Youth Aerospace Academy are now working on the next satellite CAS-2. The announcement indicates that two separate CAS-2 satellite structures are being built � A1 and A2.

The launch of CAS-2 is planned for 2014 into a 1000 km orbit with an inclination of 12 degrees. This orbit means it may not be receivable in those countries at high latitudes.

It is understood that most of the room in CAS-2 will be taken up by the primary (non-amateur) payload and it has only been possible to fit a single channel FM amateur transponder in the satellite.

Further information in Google English can be seen at:
http://tinyurl.com/CAMSAT-CAS-2-Satellite

A photo on the AMSAT-UK web (http://www.uk.amsat.org/8665) shows Fan Shaomin, BA1EO with the CAS-2 model.

A group picture taken at Ham Radio 2012 in Friedrichshafen and a picture of the engraved glass plaque that CAMSAT presented to AMSAT-DL can be seen on the AMSAT Deutschland Facebook page.

[ANS thanks CAMSAT, AMSAT-DL, and AMSAT-UK for the above information]

Soyuz to Fly 3 Hams Up, 3 Hams Staying, 3 Hams Coming Home

Three Expedition 32 crew members to the International Space Station are scheduled to launch aboard the Soyuz TMA-05M from the Baikonur Space Center in Kazakhstan on July 15.

The Expedition 32 crew members are NASA astronaut Suni Williams KD5PLB, cosmonaut Yury Malenchenko RK3DUP and Japanese astronaut Aki Hoshide KE5DNI. The trio has been passing tests at the Gagarin Cosmonaut Training Center in Star City, outside of Moscow.

They will join Expedition 31's NASA astronaut Joe Acaba KE5DAR and cosmonauts Gennady Padalka RN3DT and Sergei Revin RN3BS on board the orbiting outpost.

Meanwhile, fellow Expedition 31 members cosmonaut Oleg Kononenko RN3DX and NASA's Don Pettit KD5MDT and Andre Kuipers PI9ISS returned to Earth on July 1.

A back-up ISS crew was also confirmed on Friday. It includes Canadian astronaut Chris Hadfield KC5RNJ/VA3OOG, NASA astronaut Tom Marshburn KE5HOC and cosmonaut Roman Romanenko (no call at this time).

[ANS thanks SpaceDaily.com for the above information]

KiwiSAT Hoping for Launch mid-2013

News from New Zealand, received via AMSAT-UK reports the development of the amateur radio satellite KiwiSAT is completed and it is now ready for a LEO launch. See: http://www.uk.amsat.org/8686.

KiwiSat carries a 435 or 1268 MHz to 145 MHz linear transponder for SSB/CW operation:

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+ Transmit Power: 2 Watts PEP.
+ Beacon frequency: 145.885 MHz
+ Uplink: (U-Band)  435.265 to  435.235 MHZ LSB or
+ Uplink: (L-Band) 1268.880 to 1268.850 MHz LSB
+ Down link: 145.850 to 145.880 MHz USB
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The KiwiSAT website says the team have been in discussion with ISC Kosmatras for a DNEPR launch. They hope the satellite will be launched mid-2013. On June 18, 2012, the KiwiSAT team released a status update which can be read at http://www.kiwisat.org/status.html

In addition to the transponder KiwiSAT also carries an Attitude Determination And Control (ADAC) experiment developed by students at Massey University.

See also:
KiwiSAT http://www.kiwisat.org/
AMSAT-ZL http://www.amsat-zl.org.nz/

[ANS thanks the KiwiSat Team, AMSAT-ZL, and AMSAT-UK for the above information]

Five CubeSats Ready for July 21 JAXA HTV-3 Launch

Viet Nam's F-1 CubeSat team announced on June 23 they have passed flight safety review and are cleared to be included in JAXA HTV-3 mission to the ISS. F-1 arrived at Japan's Tsukuba Space Center where it and four companion CubeSats (RAIKO, WE WISH, FITSAT-1 and TechEdSat) will be integrated with the J-SSOD small satellite deployer before leaving for the Tanegashima launch pad.

After arriving at the ISS aboard the JAXA HTV-3 ISS resupply mission, the J-SSOD deployer will be integrated to the Japanese Experiment Module, also known as Kibo. They will be deployed with the Kibo robotic arm planned for the September, 2012 timeframe.

The five CubeSats on this mission include:

+ Raiko
+ We Wish
+ FITSat 1
+ F-1 Vietnam Student CubeSat
+ TechEdSat

RAIKO - Wakayama University, Japan

http://www.astro.mech.tohoku.ac.jp/RAIKO/ (Japanese)

This 2U CubeSat includes experiments for:

+ Earth photography with a fish-eye lens camera
+ Photo tracking during deployment from ISS to measure relative motion.
+ Experimental star sensor
+ Membrane deployment experiment for de-orbit
+ High speed data communication experiment by Ku-band communication equipment:
  - Orbit determination experiment by Doppler frequency measurement of Ku-band beacon.
  - Mobile ground station and global cooperation for reception

FITSAT-1 - Fukuoka Institute of Technology, Japan

http://www.fit.ac.jp/~tanaka/fitsat.shtml

The main mission of this 1U CubeSat will be a demonstration of high speed data transfer from a satellite. A second experiment aboard the satellite involves an attempt at visual tracking from the ground of the high-output LED flash to investigate the possibility of optical communication with satellites. The light from this flash will be received by the ground station equipped with a telescope with photomultiplier linked to a parabolic antenna tracking the 5.8GHz downlink.

Frequencies announced for FITSAT-1:
CW Beacon 437.250 MHz,
FM Data   437.445 MHz,
High speed data 5840.00 MHz.

WE WISH - Meisei Electric Co., Ltd., Japan

http://www.meisei.co.jp/news/2011/0617_622.html

The WE WISH mission is to investigate monitoring of the global environment from space with the use of an upper atmosphere measurement experiment. This includes GPS technology, and technical proof of concept of a micro infra-red camera.

F-1 Vietnam Student CubeSat

Vietnamese students in Hanoi plan to orbit the country's first satellite, their amateur radio CubeSat F-1 with the callsign XV1VN. The satellite will carry a low resolution C328 camera and two Yaesu VX-3R transceivers using 145.980 and 437.485 MHz.

- VX-3R1, 437.485 MHz FM downlink:
  - Solar cell power only, operates in sunlight only
  - Output power: max 0.3W, half-wave dipole antenna
  - Morse code beacon (10 chars) using PWM CW every 30 seconds

- VX-3R2, 145.980 MHz FM downlink:
  - Rechargeable battery, operates in dark and sunlight
  - Output power: max 1.0W, half-wave dipole antenna
  - AFSK 1200bps, half duplex, one AX.25 packet every 30 seconds

TechEdSat - San Jose State University

http://ncasst.org/techedsat.html
http://www.uk.amsat.org/5018

TechEdSat is a 1U CubeSat built by San Jose State University in partnership with NASA Ames Research Center and AAC Microtec. It's mission is to evaluate Space Plug-and-play Avionics (SPA) designed in Sweden by AAC Microtec, and to perform a communications experiment utilizing the Iridium and Orbcomm satellite phone network.

TechEdSat has received IARU frequency coordination for its downlink on 437.465 MHz.

[ANS thanks the CubeSat teams, AMSAT-UK, and Mineo Wakita JE9PEL for the above information]

AMSAT News Podcasts Available to Download and Listen

The Houston AMSAT Net, hosted by Andy W5ACM, meets every Tuesday evening at 8PM Central Time (UTC-5). They read the ANS bulletins and any late breaking amateur satellite news that has come out since the weekend ANS news cycle.

The net is streamed live on the AMSAT Echolink Node and via an MP3 stream. The audio is also available as a podcast from the current net including an archive of past net podcasts.

Bruce KK5DO web page at http://www.amsatnet.com/ has the links to the podcasts (and live streaming information). Click on the "Listen to Live or Past Nets" link on the left side of the web page to find the links to the podcasts.

If you go to the iTunes store and search podcasts there for either kk5do, amsat or houston amsat net, you will find the same podcast able to be streamed right to your iPhone/iPad/iPod. Also, if you have an iPhone and you have downloaded the Echolink app, you can listen to the net live on Tuesdays at 8PM Central.

[ANS thanks Andy, W5ACM and Bruce, KK5DO for the above information]

Satellite Shorts From All Over

- Amateur Radio Club K4BFT received good media coverage at Field Day this year operating near the Alabama Space and Rocket Center. Their satellite station has several shots in the article in the link below, including SatPC32. There were 3 local TV stations and 1 local newspaper that visited the Satellite Station this year. See: http://photos.al.com/huntsville-times/2012/06/ham_field_day_9.html (via Tim, N8DEU)

- Hams like big antennas no matter what the operating mode. You'll enjoy the two videos "Moonbounce Swiss Style" when Sam Jewell G4DDK and John Worsnop G4BAO were shown round the HB9Q amateur radio moonbounce (EME) shack by Alex Artieda HB9DRI. Watch it at: http://www.southgatearc.org/news/june2012/moonbounce_swiss_style.htm

- Listen to some dramatic music, watch a fast-paced video and see a few animated high-fives in the SpaceX video and the latest views of Dragon crew capsule: http://www.youtube.com/watch?feature�ayer_embedded&v�n8044mkvc

- The latest updates to the CQ Newsroom has news of the STRaND-2 satellite program and the ARISS volunteer initiative, along with amateur radio news. You can read this online at: http://cqnewsroom.blogspot.com/

- The Antenna Column by Kent Britain, WA5VJB in the Spring, 2012 issue of CQ VHF Magazine (http://www.cq-vhf.com) discusses "Herringbone Log Periodics plus Another AMSAT LEO Antenna." Select the link 'Click here for a look inside!' and you will find the link to a preview version of the magazine article.

- Paul, 2M1EUB is making mobile satellite DX contacts from Scotland. He reports being to work K3SZH on FO-29. He plans to be on the air from Scotland until around July 8-9.

- Wyatt, AC0RA worked Bill OM3BD/NZ5N in Slovakia on AO-7 at a distance of over 7800 kms. Bill wrote, "The QSO was remarkably easy, we talked to each other for over a minute with strong sigs. I was expecting maybe 15 seconds of a signal way down in the noise, but this was no sweat at all, and it was just our first attempt. This suggests that significantly longer distances are possible. The AO-7 orbit seems a bit different this summer, my North America windows are longer and extend deeper into the USA."

+ NASA/JPL posted an amazing video highlighting the incredible engineering feat it will be to land the Curiosity Rover onto the surface of Mars. Watch it at:
http://www.youtube.com/watch?v�_Af_o9Q9s&feature�ayer_embedded

+ NASA Goddard Space Flight Center in Greenbelt, Maryland, invites you to try out their new, on-line game, called �Build it Yourself: Satellite!� This is a Flash-based game, a learning tool for students and adults that plays in your browser window. See:
http://www.jwst.nasa.gov/build.html

+ ARISS International Team meeting was held on Tuesday, June 19. Minutes have been posted: http://ariss.rac.ca/arisstel2012-06-19.htm

+ Plan Ahead! To celebrate Venezuelan Navy Day, members of the Grupo DX Caracas will be active as YW5B from La Blanquilla Island between July 11-16. Activity will be on 160-2 meters using CW, SSB, Satellites, FM and the Digital modes. (Ohio/Penn DX Bulletin No. 1065)

+ The next Hudson Valley Satcom net dates are on Thurs day July 5 and July 19 at 8PM EDT (UTC-4 UTC) on the 146.97 MHz MBARC Repeater (PL 100). The echolink connection has been experiencing problems so you are invited to send an e-mail to N2OXV at arrl.net to make sure that the N2EYH-L EchoLink node is available if you plan to join via this route. (Stu, WA2BSS)

[ANS thanks everyone for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

Primary and secondary school students are eligible for membership at one-half the standard yearly rate. Post-secondary school students enrolled in at least half time status shall be eligible for the student rate for a maximum of 6 post-secondary years in this status. Contact Martha at the AMSAT Office for additional student membership information. And with that please keep in mind the time a neutron goes into a cafe and asks the waiter, "How much for lunch?" The waiter replies, "For you, no charge." Just outside, two atoms are walking down the street and they run in to each other. One says to the other, "Are you all right?" "No, I lost an electron!" "Are you sure?" "Yeah, I'm positive!"

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM

```
From 7032774854920988984
X-Google-Thread: fcc6e,3149997ec72f0797,start
X-Google-NewGroupId: yes
X-Google-Thread: 108122,3149997ec72f0797,start
X-Google-NewGroupId: yes
X-Google-Thread: 107ada,3149997ec72f0797,start
X-Google-NewGroupId: yes
X-Google-Thread: 10e8ad,3149997ec72f0797,start
X-Google-NewGroupId: yes
X-Google-Attributes:
gid4baf9708d4,gidd7f5508063,gida3e752f117,gid8f86f75953,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Received: by 10.68.223.73 with SMTP id qs9mr1106715pbc.7.1341122404887;
        Sat, 30 Jun 2012 23:00:04 -0700 (PDT)
MIME-Version: 1.0
Path: l9ni4964pbj.0!nntp.google.com!news2.google.com!npeer03.iad.highwinds-
media.com!news.highwinds-media.com!feed-me.highwinds-media.com!
border3.nntp.dca.giganews.com!border1.nntp.dca.giganews.com!
border4.nntp.dca.giganews.com!border2.nntp.dca.giganews.com!nntp.giganews.com!
news-out.readnews.com!transit3.readnews.com!panix!panix2.panix.com!not-for-mail
From: rram@panix.com (rec.radio.amateur.moderated Admin)
Newsgroups:
rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.rad
io.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amat
eur.space,rec.radio.info
Subject: Crossposting Permitted to rec.radio.amateur.moderated
Supersedes: <radio/ham-radio/moderated/crossposting-1-1338530401@panix.com>
Followup-To: poster
Date: 1 Jul 2012 02:00:04 -0400
Organization: rec.radio.amateur.moderated Moderation Team
Lines: 47
Approved: RRI Admin <rec-radio-info-request@panix.com>
Distribution: world
Expires: 03 Aug 2012 02:00:02 -0000
Message-ID: <radio/ham-radio/moderated/crossposting-1-1341122402@panix.com>
Reply-To: rec-radio-amateur-moderated-request@panix.com
(rec.radio.amateur.moderated Admin)
NNTP-Posting-Host: panix2.panix.com
X-Trace: reader1.panix.com 1341122404 5369 166.84.1.2 (1 Jul 2012 06:00:04 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 1 Jul 2012 06:00:04 +0000 (UTC)
Summary: Short reminder for unmoderated newsgroups that crossposting is permitted
Keywords: FAQ, ham, amateur, radio, moderated, unmoderated, crossposting,
permitted
X-Received-Bytes: 3708
```

Posted-By: auto-faq 3.3.2 beta (PGPMoose V2.0, Perl 5.005)
Archive-name: radio/ham-radio/moderated/crossposting
Revision: 1.2 2011/11/02 04:08:53
Posting-Frequency: posted monthly
URL: http://www.panix.com/~rram/usenet/rram/index.html

Changes followed by "|".

After a 30-day public discussion and feedback period to gauge reader opinions in March of 2009:

http://groups.google.com/group/rec.radio.amateur.moderated/browse_thread/thread/d7d337db35f23326

the rec.radio.amateur.moderated Moderation Team had decided to consider |
amending its charter, and permit limited simultaneous crossposting to
rec.radio.amateur.moderated and one other unmoderated
amateur-radio-related discussion newsgroup. After a successful trial |
period (90 days, through early July 2009), we decided to adopt this |
change permanently. |

Approved rec.radio.amateur.* newsgroups are those that are currently listed in the latest version of the "List of Big Eight Newsgroups" which is crossposted monthly to news.announce.newgroups, news.groups, and news.lists.misc.

Approved alt.radio.amateur.* and alt.ham-radio.* newsgroups are those that have been created consistent with the suggestions in "So You Want to Create an Alt Newsgroup" at:

  http://www.faqs.org/faqs/alt-creation-guide/

Approved regional hierarchy newsgroups are those that contain either "radio.amateur" or "ham-radio" in their names, including uk.radio.amateur and aus.radio.amateur.misc.

We will make every reasonable effort to keep our list of approved newsgroups up-to-date. In case we have overlooked any, and a submission is rejected in error as a result, the rejected submitter can E-mail us at our administrative contact address (in the signature at the bottom of this article, and the default Reply-To for the rejection message) requesting that it be added, and that the article be approved. We may still choose to reject articles crossposted to any alt.* newsgroup with an inappropriate name, including obscene language, embedded name-calling, or encouragement of unlawful conduct.

Please direct any comments, questions, or criticisms to rec-radio-amateur-moderated-request@panix.com.

From -7316812953646859403
X-Google-Thread: 107ada,2c3018a960c3b09e,start

```
X-Google-NewGroupId: yes
X-Google-Thread: 10e8ad,2c3018a960c3b09e,start
X-Google-NewGroupId: yes
X-Google-Thread: 10b9c8,2c3018a960c3b09e,start
X-Google-NewGroupId: yes
X-Google-Attributes:
gida3e752f117,gid8f86f75953,gida4a23d5f63,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Received: by 10.68.219.170 with SMTP id pp10mr10940744pbc.1.1341243009394;
        Mon, 02 Jul 2012 08:30:09 -0700 (PDT)
MIME-Version: 1.0
Path: l9ni10139pbj.0!nntp.google.com!news1.google.com!news2.google.com!
newsfeed2.dallas1.level3.net!news.level3.com!panix!rri.panix.com!robomod!not-for-
mail
From: SWPC.Webmaster@noaa.gov
Newsgroups:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.shor
twave,rec.radio.info
Subject: Weekly Highlights of Solar and Geomagnetic Activity, 25 June - 01 July
2012
Followup-To:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.shor
twave
Date: Mon, 2 Jul 2012 11:30:08 EDT
Organization: NOAA Space Weather Prediction Center
Lines: 67
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <20120702153001.F257633C91@panix2.panix.com>
NNTP-Posting-Host: panix6.panix.com
X-Trace: reader1.panix.com 1341243008 14105 166.84.1.6 (2 Jul 2012 15:30:08 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Mon, 2 Jul 2012 15:30:08 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump

:Product: Weekly Highlights and Forecasts
:Issued: 2012 Jul 02 1331 UTC
# Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center
# Product description and SWPC contact on the Web
# http://www.swpc.noaa.gov/weekly.html
#
#                 Weekly Highlights and Forecasts
#
Highlights of Solar and Geomagnetic Activity
```

25 June - 01 July 2012

Solar activity was low to moderate during the week. The first three days of the period were marked by low level C-class x-ray flares, the largest of which was a C4/Sf from Region 1512 (S16, L=264, class/area Dki/290 on 29 June) on 28 June at 0452Z. Region 1512 was soon overshadowed by Region 1513 (N16, L=218, class/area Dao/120 on 01 July), which produced an impulsive M2/1b flare on 28 June at 1612Z. Subsequently, Region 1513 produced at least one impulsive M-class event each day for the remainder of the week, the largest of which was an M2.8/Sb on 01 July at 1918Z. While Region 1513 was the most prolific flare producer of the regions on the disk, it was dwarfed in area by Region 1515 (S17, L=204, class/area Ekc/850 on 01 July). Region 1515 appeared on the disk on 27 June and by 01 July had quadrupled in area. Both Regions 1513 and 1515 ended the week with beta-gamma magnetic characteristics. There were several CMEs observed during the week, however none were determined to be geoeffective.

No proton events were observed at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit began the period at high levels before decreasing to moderate levels early on 25 June. Moderate levels continued throughout the week, increasing to high levels on 01 July at 1320Z.

Geomagnetic field activity ranged from quiet to active levels, with isolated minor to major storm levels observed at high latitudes late in the period. The geomagnetic field was at mostly quiet levels from 25-29 June. By 2100Z on 29 June, the phi angle at the ACE spacecraft switched from positive to negative polarity, indicating the arrival of the corotating interaction region. Solar wind speed at the ACE spacecraft, which had ranged between 350-500 km/s during the week, increased to 700 km/s by 30/1800Z as a coronal hole high speed stream (CH-HSS) became geoeffective. Concurrently, the Bz component of the interplanetary magnetic field turned southward, eventually dipping to -10 to -12 nT while Bt reached 14nT before decreasing to 7 nT by mid-day on 30 June. The geomagnetic field responded with unsettled to active levels for the remainder of the period. Minor to major storm levels were observed at high latitudes during 30 June-01 July.

Forecast of Solar and Geomagnetic Activity
02 July - 28 July 2012

Solar activity is expected to be at low to moderate levels, with more M-class events from Regions 1513 and 1515 likely through 09 - 10 July.

No proton events are expected at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to be at high levels through 08 July and from 17-21 July.

Geomagnetic field activity is expected to begin at unsettled to
active levels, decreasing to mostly quiet to unsettled levels after
03 July until another CH-HSS becomes geoeffective on 27 - 28 July.

```
From 419806029979223381
X-Google-Thread: 10e8ad,7f9430b6418b5ad1,start
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Received: by 10.68.227.67 with SMTP id ry3mr3374319pbc.8.1341332630602;
        Tue, 03 Jul 2012 09:23:50 -0700 (PDT)
Path: l9ni10735pbj.0!nntp.google.com!news1.google.com!news.glorb.com!news-
out.readnews.com!news-xxxfer.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-184 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Tue, 3 Jul 2012 12:23:49 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 2401
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <003101cd5937$8131cb90$839562b0$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
X-Trace: reader1.panix.com 1341332629 6015 166.84.1.6 (3 Jul 2012 16:23:49 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Tue, 3 Jul 2012 16:23:49 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
Content-Language: en-us
```

This report is organized into four (4) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - deborbited/returned satellites

SB SAT @ AMSAT W8ISS $WSR-184.S1
WSR 184 Part 1 07/02/2012

AMSAT NEWS SERVICE BULLETIN 184.S1
FROM AMSAT HQ SILVER SPRING, MD, July 02, 2012
TO ALL RADIO AMATEURS
BID: $WSR-184.S1

PW-Sat
Catalog Number:
Launch Date: Febrauary 13, 2012
Launch Site: Kourou, French Guiana

Status: On Orbit

Uplink: 435.020 MHz FM
Downlink: 145.900 MHz DSB

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=132
[03162012]
=====
DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational
Current Mode: Science Mode - Beacon ONLY

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink: 435.530 to 435.570 MHz

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=68
[02092011]
=====
VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05, 2005 0444z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Current Mode: U/v - Dutch Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.9360 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=30

To know what transponder is switched on please listen for the beacon that is active. Each transponder has a different beacon.
[03232012]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002 1700z
Launch site: Baikonur, Kazakhstan

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz. The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on and off within the 10 Minute window.

3) Sending the 74.4 tone again within the 10 minute window will reset the 10 minute timer.
[02092011]

=====

FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Operational
Current Mode: V/u (Mode JA)

Voice/CW (Mode JA)
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage:
http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts.htm
[01122012]

=====

AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993 0140z
Launch site: Kourou, French Guiana

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM

Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[02092011]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974
Launch site: Vandenberg AFB, California, USA

Status: Operational

Current Mode: Alternating between Mode A and B every 24 hours

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php
[04242012]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998 0640z (ZARYA module)
Launch sites: Baikonur, Kazakhstan
              Kourou, French Guiana
              Uchinoura Space Center, Japan
              Kennedy Space Center, Titusville, Florida, USA

Status: Operational

Current Active Modes: FM Repeater - OFF
                      Voice -   V/v
                      BBS -   U/u
                      2m APRS -   OFF
                      70cm APRS -   ON
                      70cm Digi -   ON
                      SSTV -   OFF

Expedition 32 Crew (July 2012 - November 2012):
Commander: Gennady Padalka   RN3DT

Flight Engineer: Joe Acaba KE5DAR
Flight Engineer: Sergei Revin RN3BS
Flight Engineer:
Flight Engineer:
Flight Engineer:

Available Modes and Frequencies:
Digital/APRS:
Worldwide 2m packet uplink: 145.825 MHz FM 1k2
Worldwide 2m packet downlink: 145.825 Mhz FM 1k2
Worldwide 70cm packet downlink: 437.550 Mhz FM 1k2
Worldwide 70cm packet downlink: 437.550 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
2m Packet Mailbox: RS0ISS-11
2m Digipeater alias: ARISS
70cm Packet Mailbox: RS0ISS-1
70cm Digipeater callsign: RS0ISS
70cm Digipeater alias: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time line is NOT translated from Russian and posted.

[07022012]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-184.S2
WSR 184 Part 2 07/02/2012

AMSAT NEWS SERVICE BULLETIN 184.S2
FROM AMSAT HQ SILVER SPRING, MD, July 02, 2012
TO ALL RADIO AMATEURS
BID: $WSR-184.S2

HORYU-II
Catalog number: 38340
Launch Date: May 17, 2012

Status; On Orbit

Uplink: 145.??? MHz
Downlink: 437.375 MHz CW/AX25/FSK

Beacon: 437.375 MHz CW

Callsign: JG6YBW

URL:

IARU Coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=216
[05282012]
=====
XaTcobeo
Catalog Number: 38082
Launch Date: Febrauary 13, 2012
Launch Site: Kourou, French Guiana

Status: Operational

Uplink:
Downlink: 437.365 MHz FFSK with AX.25

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=135
[03162012]
=====
UniCubeSat
Catalog Number:

```
Launch Date: Febrauary 13, 2012
Launch Site: Kourou, French Guiana

Status: Operational

Uplink:
Downlink: 437.305 MHz 9k6 bps FSK

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=133
[03162012]
=====
Robusta
Catalog Number:
Launch Date: Febrauary 13, 2012
Launch Site: Kourou, French Guiana

Status: On Orbit

Uplink:
Downlink: 437.325 MHz 1k2 FM telemetry (data every 1 min, 20 sec. burst)

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=122
[02142012]
=====
MO-72 MaSat-1
Catalog Number: 38081
Launch Date: Febrauary 13, 2012
Launch Site: Kourou, French Guiana

Status: Operational

Uplink:
Downlink: 437.345 MHz GFSK 625/1250 bps
          437.345 MHz CW

Beacon:

Callsign:
```

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=126
[03232012]
=====
Goliat
Catalog Number: 38085
Launch Date: Febrauary 13, 2012
Launch Site: Kourou, French Guiana

Status: Operational

Uplink:
Downlink: 437.485 MHz 1k2 AFSK

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=98
[03162012]
=====
E-Star
Catalog Number: 38079
Launch Date: Febrauary 13, 2012
Launch Site: Kourou, French Guiana

Status: On Orbit

Uplink:
Downlink: 437.445 MHz 1k2 bps AFSK

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=130
[03232012]
=====
ALMASat1
Catalog Number: 38078
Launch Date: Febrauary 13, 2012
Launch Site: Kourou, French Guiana

Status: On Orbit

```
Uplink:
Downlink:  437.465 MHz 1k2 bps FSK
          2407.850 MHz

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=39
[02212012]
=====
RS-39 Chibis-M
Catalog Number: 37841
Launch Date: October 30, 2011 10:11:00 UTC
Launch site: Tyuratam (Baikonur Cosmodrome), Kazakhstan

Status: Operational

Uplink:
Downlink:

Beacon: 435.315 MHz CW
        435.215 MHz CW

Callsign:

URL:

IARU coordination status page:
[01122012]
=====
JUNGU
Catalog Number: 37841
Launch Date: October 12, 2011 05:30:00 UTC
Launch site: Satish Dhawan Space Centre, India

Status: On Orbit

Uplink:   145.??? MHz 1k2 (mode?)
Downlink: 437.505 MHz 9k6 (mode?)

Beacon: 437.275 MHz 15 wpm (?) CW

Callsign:

URL: http://www.iitk.ac.in/me/jugnu/index.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=160
[01122012]
```

```
=====
SRMSAT
Catalog Number: 37839
Launch Date: October 12, 2011 05:30:00 UTC
Launch site: Satish Dhawan Space Centre, India

Status: On Orbit

Uplink:   145.900 MHz 1k  AX.25 (speed?)
Downlink: 437.500 MHz 2k4 AX.25

Beacon: 437.425 MHz 12 wpm CW

Callsign:

URL: http://srmsat.in/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=181
[01122012]
=====
HRBE (E1P Explorer 1 [Prime] CubeSat (E1P-U2))
Catalog Number: 37855
Launch Date: October 28, 2011
Launch site: Vandenberg Air Force Base, California, USA

Status: On Orbit

Uplink:   437.305 MHz (???)
Downlink: 437.505 MHz AX.25 (SSB?)

Beacon:

Callsign:

URL: http://ssel.montana.edu/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=116
[01122012]
=====
M-Cubed
Catalog Number: 37855
Launch Date: October 28, 2011
Launch site: Vandenberg Air Force Base, California, USA

Status: On Orbit

Uplink:
Downlink: 437.485 MHz AX.25

Beacon:
```

Callsign:

URL: http://umcubed.org/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=215
[01122012]
=====
RAX-2
Catalog Number: 37853
Launch Date: October 28, 2011
Launch site: Vandenberg Air Force Base, California, USA

Status: Operational

Uplink:
Downlink: 437.345MHz 9k6 GMSK

Beacon:

Callsign:

URL: http://rax.engin.umich.edu//

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=221
[03232012]
=====
AO-71 AubieSat-1
Catalog Number: 37854
Launch Date: October 28, 2011
Launch site: Vandenberg Air Force Base, California, USA

Status: On Orbit

Uplink:
Downlink: 437.475 MHz 1k2 AX.25

Beacon: 437.475 MHz CW

Callsign: KI4NQO

URL: http://www.space.auburn.edu/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=148
[12262011]
=====
O/OREOS
Catalog Number: 37224
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: On Orbit

Uplink:
Downlink: 437.035 MHZ AX.25

Beacon:

Callsign:

URL: http://www.ooreos.org/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=146
[02092011]
=====
Rax-1 Radio Aurora Explorer
Catalog Number: 37223
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: On Orbit

Uplink:
Downlink: 437.505 MHz 9k6 GMSK

Beacon:

Callsign: RAX-1

URL: http://rax.engin.umich.edu/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=165
[02092011]
=====
FO-69 Fastrac-1 Sara Lily
Catalog Number: 37227
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: Operational

Uplink 1: 145.980 MHz 1k2 baud
Uplink 2: 145.825 MHz 1k2 baud
Downlink: 437.345 MHz 1k2 and 9k6 baud

Beacon: 437.435 MHz 1k2 AX.25

Callsign: Fast1

URL: http://fastrac.ae.utexas.edu/index.php

IARU coordination status page:

```
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=83
[07052011]
=====
FO-70 Fastrac-2 Emma
Catalog Number: 37380
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: Operational

Uplink 1: 435.025 MHz 1k2 baud
Uplink 2: 437.435 MHz 9k6 baud
Downlink: 145.825 MHz 1k2 and 9k6 baud

Beacon:   145.825 MHz 1k2 AX.25

Callsign: Fast2

URL: http://fastrac.ae.utexas.edu/index.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=84
[12162011]
=====
StudSat
Catalog Number: 36796
Launch Date: July 12, 2010 0352z
Launch site: Satish Dhawan Space Centre, India

Status: On Orbit

Uplink:   437.505MHz, 9600bps FSK
Downlink: 437.505MHz, 9600bps FSK
Beacon  : 437.505MHz,   20bps ASK

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=164
[02092011]
=====
TIsat-1
Catalog Number: 36799
Launch Date: July 12, 2010 0352z
Launch site: Satish Dhawan Space Centre, India

Status: On orbit

Callsign: HB9DE

Uplink:   145.980MHz FM, AFSK
Downlink: 437.305MHz FM, AFSK
Beacon:   437.305MHz CW

IARU coordination status page:
```

```
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=118
[02092011]
=====
SwissCube
Catalog Number: 35932
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Callsign: HB9EG

Beacon(100mw): 437.5050MHz CW
Beacon(1w):    437.5050MHz FSK 1k2bps

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=109
[02092011]
=====
UWE-2
Catalog Number: 35934
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: In Orbit

Beacon(500mw): 437.3850 MHz AFSK 1k2bps
               437.3850 MHz FSK 9k6bps

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=110
[02092011]
=====
ITUpsAT1
Catalog Number: 35935
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Beacon(100mw): 437.325MHz CW
Beacon(1w): 437.325MHz 19k2bps

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=113
[02092011]
=====
BEESAT
Catalog Number: 35933
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational
```

Callsign: DP0BEE

Beacon(100mw): 436.000MHz CW
Beacon(500mw): 436.000MHz GMSK 4k8bps
Beacon(500mw): 436.000MHz GMSK 9k6bp
[02092011]
=====
CP-6
Catalog Number: 35004
Launch Date: May 19, 2009 2355z
Launch site: Wallops Island, Virginia, USA

Status: Operational

Downlink: 437.365 MHz 1k2 AFSK

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=121
[01122012]
=====
HAWKSAT 1
Catalog number: 35003
Launch Date: May 19, 2009 2355z
Launch site: Wallops Island, Virginia, USA

Status: operational

Downlink: 437.345 MHz ?

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=105
[01122012]
=====
Pharmasat
Catalog Number: 35002
Launch Date: May 19, 2009 2355z
Launch site: Wallops Island, Virginia, USA

Status: Operational

Downlink: 437.465 MHz 1k2 AFSK

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=94
[02092011]
=====
ANUSAT
Catalog Number: 34808
Launch Date: April 20, 2009 0115z
Launch Site: Satish Dhawan Space Centre, India

Status: ?

```
Downlink:  435.000 MHz
Uplink:    145.800 MHz

Telemetry: 137.400 MHz
[02092011]
=====
SOHLA-1 (ASTRO TECH.)
Catalog Number: 33496
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational

Proposed Frequencies and Modes:
Downlink: 437.505 MHz AFSK/CW
Beacon:   437.505 MHz AFSK/CW

Callsign:

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=101
[02092011]
=====
KAGAYAKI (Solan Co.)
Catalog Number: 33495
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: In Orbit

Downlink: 437.375 MHZ    FSK9k6/CW
Beacon:   437.375 MHz    FSK9k6/CW

IARU coordination status page:

AMSAT-NA webpage:

[02092011]
=====
STARS (Kagawa Univ.) (Twin Satellites)
Catalog Number: 33498
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational ?

Downlinks: 437.485 MHz FM/CW
           437.465 MHz FM/CW
Beacons:   437.305 MHz FM/CW
           437.275 MHz FM/CW

Callsigns: JR5YBN
```

JR5YBO

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=99

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=121&retURL
=/satellites/status.php
[02092011]
=====
KKS-1 (Tokyo MCIT)
Catalog Number: 33499
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational

Downlink: 437.455 MHz AFSK/CW
Beacon: 437.385 MHz AFSK/CW

Callsign: JQ1YYY

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=107

AMSAT-NA webapge:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=120&retURL
=/satellites/status.php
[20092011]
=====
PRISM (Tokyo Univ.)
Catalog Number: 33493
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational ?

Downlink: 437.425 MHz AFSK/GMSK/CW
Beacon: 437.250 MHz AFSK/GMSK/CW

Callsign: JQ1YCX

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=97

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=119&retURL
=/satellites/status.php
[02092011]
=====
RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number: 32953
Launch Date: May 23, 2008 1520z

Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational

Curent Modes: Telemetry
Audio
Images

Downlinks: 435.315 MHz
435.215 MHz

AMSAT-NA website:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=115&retURL=/satellites/status.php

Official website:
http://www.npopm.com/?cid=leoca&caid=43
[02092011]
=====
CanX-2
Catalog number: 32790
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational in range of ground station only

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=46
[02092011]
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Downlink: 437.425 MHz 1k2 baud packet

For the latest project status update please visit the AAUSAT-II web page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=60
[02092011]
=====
CO-65 CUTE-1.7+APD II

Catalog number: 32785
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Downlink: 437.475 MHz 9k6 Packet
Uplink: 1267.600 Mhz

Telemetry Beacon:
Downlink: 437.2750 MHz CW

For the latest project status update please visit the Cute-1.7+APD II web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=78

Command Station blog website:
http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=112&retURL=/satellites/status.php
[03232012]
=====
Compass-1
Catalog number: 32787
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Current Mode: dependant on last received command

Uplink: 145.980 MHz FM
Downlink: 437.275 Mhz CW
          437.405 MHz Packet

For the latest project status update please visit the Compass 1 web page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=52

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=114&retURL=/satellites/status.php
[06162011]
=====
CO-66 Seeds II
Catalog number:
Launch Date: April 28, 2008 0354z

Launch site: Satish Dhawan Space Centre, India

Status: Operational

Downlink: 437.485 MHz

Callsign: JQ1YGU

For the latest project status update please visit the Seeds 2 web page: http://cubesat.aero.cst.nihon-u.ac.jp/english/seeds_2_e.html

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=36

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=113&retURL=/satellites/status.php
[02092011]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007 0702z
Launch site: Baikonur, Kazakhstan

Status: Intermittent

Current Mode: /u

```
TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon:    435.245 MHz CW
```

Callsign: K5USL

TLM and CW interchange every 30 seconds.

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=94&retURL=/satellites/status.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=72
[02092011]
=====
CP3
Catalog Number: 31129
Launch Date: April 17,2007 0702z
Launch site: Baikonur, Kazakhstan

Status: Operational

Current Mode: /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=74
[02092011]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005 0652z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon: 437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/xivpicte.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=37
[02092011]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: ?????

Current Mode: /u

Beacon: 436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=96&retURL
=/satellites/status.php

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[02092011]
=====
QuakeSat
Catalog Number: 27845
Launch Date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

```
Status: Telemetry only

Current Mode: 9600 baud data packet

Mode U packet
Downlink: 436.675 MHz 9k6 BPS

Quakesat webpage:
http://www.quakefinder.com/services/quakesat-ssite/
[02252011]
=====
CO-55 Cute-1.7+APD II
Catalog Number: 27844
Launch date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational

Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=69&retURL
=/satellites/status.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=78
[02092011]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001 0240z
Launch site: Kodiak Launch Complex, Alaska, USA

Status: Telemetry only

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink:        144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[02092011]
```

```
=====
RS-22 RADIO SPORT 22 (MOZHAYETS 4)
Catalog number: 27939
Launch Date: September 27, 2003 0612z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational - 70cm cw only

Current Mode:  /u

CW Beacon - 435.352 MHz
            145.818 MHz

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=76&retURL
=/satellites/status.php
[02092011]
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990
Launch site: Kourou, French Guiana

Status: CW Beacon only

Uplinks:          145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink:      437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[02092011]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984
Launch site: Vandenburg AFB, California, USA

Status: Operational ?

Current Mode:  /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon:          435.025 MHz
Mode-S Beacon:     2401.500 MHz
```

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[07052011]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998 0640z (ZARYA module)
Launch sites: Baikonur, Kazakhstan
Kourou, French Guiana
Uchinoura Space Center, Japan
Kennedy Space Center, Titusville, Florida, USA

Status: Operational

Current Active Modes: FM Repeater - OFF
Voice - V/v
BBS - U/u
2m APRS - OFF
70cm APRS - ON
70cm Digi - ON
SSTV - OFF

Expedition 32 Crew (July 2012 - November 2012):

Commander:	Gennady Padalka	RN3DT
Flight Engineer:	Joe Acaba	KE5DAR
Flight Engineer:	Sergei Revin	RN3BS
Flight Engineer:		
Flight Engineer:		
Flight Engineer:		

Available Modes and Frequencies:
Digital/APRS:
Worldwide 2m packet uplink: 145.825 MHz FM 1k2
Worldwide 2m packet downlink: 145.825 Mhz FM 1k2
Worldwide 70cm packet downlink: 437.550 Mhz FM 1k2
Worldwide 70cm packet downlink: 437.550 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM

145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
2m Packet Mailbox: RS0ISS-11
2m Digipeater alias: ARISS
70cm Packet Mailbox: RS0ISS-1
70cm Digipeater callsign: RS0ISS
70cm Digipeater alias: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time line is NOT translated from Russian and posted.
[07022012]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-184.S3
WSR 184 Part 3 07/02/2012

AMSAT NEWS SERVICE BULLETIN 184.S3
FROM AMSAT HQ SILVER SPRING, MD, July 02, 2012
TO ALL RADIO AMATEURS
BID: $WSR-184.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

NANOSAIL-D
Catalog Number: 37361(?)
Ejection Date: January 17, 2011

Status: Non - Operational

Downlink: 437.270 MHz AX.25

URL: http://nanosaild.engr.scu.edu/dashboard.htm

```
IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=115
[04302012]
=====
HO-68 HOPE-1 (CAS-1)(XW-1)
Catalog Number: 36122
Launch Date: December 15, 2009 0231z
Launch site: Taiyuan Space Center, PRC

Status: Telemetry only

Callsign:
Broadcast:    BJ1SA-11
BBS:     BJ1SA-12

Uplinks:   145.8250 MHz FM, PL 67.0 Hz.
           145.9250 - 145.9750 MHz SSB/CW
           145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
           435.7650 - 435.7150 MHz SSB/CW
           435.6750 MHz AFSK 1200 BPS

Beacon:    435.7900 MHz CW

Mode and Antenna Polarization:
V: LHCP 2.0dBi max
U: RHCP 3.0dBi max

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=108

For more information about XW-1 (CAS-1):
http://
[04302012]
=====
SO-67 SumbandilaSat
Catalog Number: 35870
Launch Date: September 17, 2009 1555z
Launch site: Baikonur, Kazakhstan

Status: Non - Operational

Callsign: ZS0SUM

Uplink:   145.875MHz FM tone 233.6 Hz
Downlink: 435.345MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

For more information about SO-67:
```

```
http://www.amsatsa.org.za/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=88
[01272012]
=====
CP4
Catalog Number: 31132
Launch Date: April 17, 2007

Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon:    437.325 MHz CW

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=79
[09062010]
=====
LIBERTAD-1
Catalog Number: 31128
Launch Date: April 17, 2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink:   145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=76
[09062010]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: Non-Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder:  145.825 Mhz FM

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=51
```

```
[09062010]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency:  437.305
                             2407.250

Official Website: http://www.ncube.no

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=24
[09062010]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink:        437.250 MHz FM 67Hz CTCSS
Voice Downlink:     2401.835 MHz FM
Packet Up/Downlink:  437.250 MHz 9k6 packet
Packet Downlink     2401.835 MHz 38k4 packet

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=54
[09062010]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non-Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=53
[09062010]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004 0745z
Launch site: Baikonur, Kazakhstan

Status: Non - Operational
```

Current Mode(s):
Voice repeater: V/u
Uplink: 145.880 MHz FM
Downlink: 435.150 MHz FM

Telemetry: Recovery efforts
Downlink: 435.150MHz 9k6

Analog voice downlink: 435.300 MHz FM
                           435.150 MHz FM
                          2401.200 Mhz FM
Analog voice uplink: 145.860 MHZ FM
                           145.880 MHz USB
                           145.880 MHz FM
                           145.920 MHz FM
                           145.920 MHz FM - 67 Hz PL tone burst
                          1268.705 MHz FM
Digital Downlinks: 435.150 MHz FM 38k4 PBP, 1 watt output
                           435.150 MHz FM 9k6 Pacsat Broadcast Protocol
                          2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Pacsat Broadcast Protocol
                          1268.703 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=19
[12062011]
=====
CANX-1
Catalog Number: 27847
Launch Date: June 30, 2003

Status: Non-Operational

Downlink: 437.8800 MHz AFSK 1k2bps
[06052009]
=====
DTUSAT
Catalog Number: 27842

Launch Date: June 30, 2003

Status: Non-Operational

Current Mode: 2k4 AFSK Packet last reported

Downlink: 437.475MHz

Officail webpage: http://dtusat1.dtusat.dtu.dk/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=101&retURL
=satellites/all_oscars.php
[02212009]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)

Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Telemetry only

Uplinks: 145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[03302009]
=====
NO-45 SAPPHIRE

Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks

V-band: 145.840 - 145.990 MHz CW/LSB
U-band: 435.550 - 435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks

S2-band: 2401.225 - 2401.475 MHz CW/USB
K-band: 24048.010 - 24048.060 MHz CW/USB
Beacon: 2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)

BEACON	General Beacon(GB)	Middle Beacon(MB)	Engineering Beacon(EB)
2 m	none	145.898 MHz	none
70cm	435.438 MHz	435.588 MHz	435.838 MHz
13cm(1)	2400.188 MHz	2400.338 MHz	2400.588 MHz
13cm(2)	2401.173 MHz	2401.323 MHz	2401.573 MHz
3cm	10450.975 MHz	10451.125 MHz	10451.375 MHz
1.5cm	24047.885 MHz	24048.035 MHz	24048.285 MHz

[07162007]

OO-38 OPAL

Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]

UO-36 UoSAT-12

Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]

SO-35 SUNSAT

Catalog Number: 25636

```
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater:         436.250 MHz

Uplinks: Mode B Repeater:  145.825 MHz
Mode J Digipeater:         145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Non-Operational

Current Modes:
Telemetry : /u

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
```

```
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign:       4XTECH-12

More information of GO-32 can be found at:
http://asri.technion.ac.il/techsat/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=14&retURL
=/satellites/status.php
[07172010]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink:   145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
MO-30 UNAMSAT-2
Catalog Number: 24305
Launch Date: September 5, 1996

Status: Non-operational

Downlink:       435.1380 MHz AFSK 1200 BPS
Downlink:       435.2060 MHz AFSK 1200 BPS
Uplink:         145.8150 MHz AFSK 1200 BPS
Uplink:         145.8350 MHz AFSK 1200 BPS
Uplink:         145.8550 MHz AFSK 1200 BPS
Uplink:         145.8750 MHz AFSK 1200 BPS
[06042009]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Non-operational

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage
```

```
Broadcast callsign: POSAT1-11
BBS callsign:       POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012009]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
AO-24 ARSENE
Catalog Number: 22654
Launch Date: May 13, 1993

Status: Non-operational

Uplink:    435.0625 MHz FM 1k2bps AFSK
           435.1125 MHz FM 1k2bps AFSK
           435.1375 MHz FM 1k2bps AFSK
Downlink:  145.9750 MHz FM 1k2bps AFSK
```

```
          2446.5025 MHz FM 1k2bps AFSK

Beacon:    2446.4700 MHz CW

Broadcast callsign:
BBS:
[12162009]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HL01-11
BBS: HL01-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25
```

Voice Transponder:
Uplink: 145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks: 145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink: 145.825 MHz FM 1200 Baud AFSK
Beacon: 2401.220 MHz
[05012006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: non-operational

Current Mode: V/u

Uplink: 145.900 MHz FM 1200-baud Manchester FSK (reserved)
                145.920 MHz FM VOICE
                145.940 MHz FM 1200-baud Manchester FSK (reserved)
                145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink: 437.026 MHz USB VOICE
                (1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:

```
U: RC  437.050 MHz RHCP
   PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[07242009]
=====
UO-15 UoSAT-4
Catalog Number: 20438
Launch Date: January 22, 1990

Status: Non-operational

Uplink: ?
Downlink: 435.1250MHz (?)
          435.1200MHz (?)
[06042009]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
```

```
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon:   145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink  29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
Beacons:   29.450 MHz
          435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational
```

```
Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon 1:  29.352 MHz (intermittent)
Beacon 2:  29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink:     21.260 to 21.300 MHz CW/USB
Downlink:  145.860 to 145.900 MHz CW/USB

Beacon:    145.860 MHz

Robot:     145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink:   21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon:   29.408 MHz
```

```
Robot:    29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-184.S4
WSR 184 Part 4 07/02/2012

AMSAT NEWS SERVICE BULLETIN 184.S4
FROM AMSAT HQ SILVER SPRING, MD, July 02, 2012
TO ALL RADIO AMATEURS
BID: $WSR-184.S4

THE FOLLOWING SATELLITES HAVE RE-ENTERED OR HAVE BEEN RETURNED SAFELY:

ARISSat-1
Catalog number: 37772
Launch date: August 03, 2011 1843z
Launch site: International Space Station

Status: Re-entered January 05, 2012

Callsign: RS01S

Current Mode(s):
Linear Transponder: U/v
Uplink:      435.758 to 435.742 MHz CW/LSB
Downlink:    145.922 to 145.938 MHz CW/USB

FM Telemetry/SSTV/Messages/ID:
Downlink:    145.950 MHz FM

Telemetry/Beacon:
Downlink:    145.939 MHz CW1
             145.919 MHz CW2
             145.920 MHz 1k BPSK USB
             145.920 MHz 400b BPSK USB


Official Webpage:http://www.amsat.org/amsat-new/ARISSat/ARISSat.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/informal_detail.php?serialnum=89
[01052012]
=====
CAERUS
Catalog Number:
Launch Date: December 08, 2010 15:43:00 UTC
Launch site: Kennedy Space Center, Titusville, Florida, USA

Status: Re-entered December 22, 2010
```

Uplink:
Downlink: 437.600 MHz 1k2 AX.25

Beacon: 437.600 MHz CW

Callsign: KJ6FIX

URL:
http://www2.isi.edu/research/prj-serc/prj-serc_projects/prj-serc_projects-8.htm

IARU coordination status page:

[11102011]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Re-entered
Re-entered: October 25, 2009

Uplink: 1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=56
[09062010]
=====
BEVO-1 (DRAGONSAT-1)
Catalog Number: 35690
Launch Date: May 19, 2009

Status: Re-entered
Re-entered:

Downlink: 437.325 MHz 9k6 GMSK
          437.325 MHz CW 20wpm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=117
[07312009]
=====
AggieSat2 (DRAGONSAT-2)
Catalog Number: 35690
Launch Date: May 19, 2009

Status: Re-entered
Re-entered:

Downlink: 436.250 MHz 9k6 FHSS
[11112009]
=====
Pollux
Catalog Number: 35693
Launch Date: July 31, 2009

Status: Re-entered
Re-entered:

Callsign: POLLUX-1

Downlink: 145.825MHz 1k2 AX.25

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=139
[09062010]
=====
Castor (ANDE-2)
Catalog Number: 35694
Launch Date: July 31, 2009

Status: Re-entered
Re-entered:

Callsign: KD4HBO-1

Downlink: 145.825 MHz 1k2 AX.25

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=144
[09062010]
=====
NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: July 28, 2008

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=59
[01012009]
=====

```
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink:      145.825 Mhz FM APRS AX25
APRS Uplink:        145.825 MHz FM APRS AX25
Voice/PSK31 Uplink:  28.120 MHz

Packet to Voice ID: RAFT
[06112007]
=====
GENESAT-1
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Re-Entered
Re-entered date: August 8, 2010

Current Mode: /u

Callsign: KE7EGC

Telemetry Beacon Downlink: 437.0695 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[08082010]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Re-Entered
Re-entered: June 18, 2008

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon:             437.2750 MHz CW

Callsign: JR8YJT
[01012009]
=====
```

SO-43 Starshine 3
Catalog Number: 26929
Launch Date: September 30, 2001

Status: Re-Entered
Re-entered: January 21, 2003

Beacon: 145.825Mhz
[02212009]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to
the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis
Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at}
amsat.org
NNNN
/EX

```
From -5596552169850476715
X-Google-Thread: 10e8ad,84f077f3ff0b2e22,start
X-Google-NewGroupId: yes
X-Google-Thread: 113975,84f077f3ff0b2e22,start
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,gidaddc8bf063,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Received: by 10.68.220.230 with SMTP id pz6mr10684781pbc.3.1341515087042;
        Thu, 05 Jul 2012 12:04:47 -0700 (PDT)
Path: l9ni10941pbj.0!nntp.google.com!news2.google.com!goblin1!goblin.stu.neva.ru!
news.astraweb.com!border6.a.newsrouter.astraweb.com!not-for-mail
From: Chris Steyaert <observations@rmob.org>
Newsgroups: rec.radio.amateur.space,sci.astro.amateur
Subject: Radio Meteor Obs. Bull. June 2012  daytime streams
Date: Thu, 05 Jul 2012 21:04:45 +0200
Message-ID: <29pbv75l0q3td4hinfu6l669pk0iklo56j@4ax.com>
X-Newsreader: Forte Agent 5.00/32.1171
MIME-Version: 1.0
Lines: 13
Organization: Unlimited download news at news.astraweb.com
NNTP-Posting-Host: 530e81d0.news.astraweb.com
X-Trace: DXC=[RdaDAnCVB_JRMXARX<CETL?0kYOcDh@ZoAn`Q5_PNLRJm6;HPh;W?]L2jF:
\3KF9]b3<D_UX>L;YX<`3P5ZY[ZZLBYN]^n5P`PKS3ZWV`\V[S
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
```

Radio Meteor Observation Bulletin No. 227 of June 2012 (85K) is available now as

http://www.rmob.org/rmobtext/rmob1206.txt

More information and the visual presentation of the hourly forward scatter
counts can be found on

http://www.rmob.org

Chris

```
From 5443465367832974112
X-Google-Thread: fcc6e,532bb725482474cf,start
X-Google-NewGroupId: yes
X-Google-Thread: 11480d,532bb725482474cf,start
X-Google-NewGroupId: yes
X-Google-Thread: fc2a5,532bb725482474cf,start
X-Google-NewGroupId: yes
X-Google-Thread: 107ada,532bb725482474cf,start
X-Google-NewGroupId: yes
X-Google-Thread: 10bf43,532bb725482474cf,start
X-Google-NewGroupId: yes
X-Google-Thread: 10e8ad,532bb725482474cf,start
X-Google-NewGroupId: yes
X-Google-Thread: 10b9c8,532bb725482474cf,start
X-Google-NewGroupId: yes
X-Google-Attributes:
gid4baf9708d4,gid7221ecd0f7,gid241b302a50,gida3e752f117,gide721ae2bf6,gid8f86f7595
3,gida4a23d5f63,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Received: by 10.68.212.98 with SMTP id nj2mr4921661pbc.8.1325401204759;
        Sat, 31 Dec 2011 23:00:04 -0800 (PST)
MIME-Version: 1.0
Path: lh20ni91635pbb.0!nntp.google.com!news1.google.com!
border1.nntp.dca.giganews.com!nntp.giganews.com!novia!nx02.iad01.newshosting.com!
newshosting.com!news-out.readnews.com!transit3.readnews.com!panix!
panix2.panix.com!not-for-mail
From: rram@panix.com (rec.radio.amateur.moderated Admin)
Newsgroups:
rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.rad
io.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amat
eur.space,rec.radio.info
Subject: Crossposting Permitted to rec.radio.amateur.moderated
Supersedes: <radio/ham-radio/moderated/crossposting-1-1322722801@panix.com>
Followup-To: poster
Date: 1 Jan 2012 02:00:02 -0500
Organization: rec.radio.amateur.moderated Moderation Team
Lines: 47
Approved: RRI Admin <rec-radio-info-request@panix.com>
Distribution: world
Expires: 03 Feb 2012 02:00:01 -0000
Message-ID: <radio/ham-radio/moderated/crossposting-1-1325401201@panix.com>
Reply-To: rec-radio-amateur-moderated-request@panix.com
(rec.radio.amateur.moderated Admin)
NNTP-Posting-Host: panix2.panix.com
X-Trace: reader1.panix.com 1325401203 3412 166.84.1.2 (1 Jan 2012 07:00:03 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 1 Jan 2012 07:00:03 +0000 (UTC)
Summary: Short reminder for unmoderated newsgroups that crossposting is permitted
Keywords: FAQ, ham, amateur, radio, moderated, unmoderated, crossposting,
permitted

Posted-By: auto-faq 3.3.2 beta (PGPMoose V2.0, Perl 5.005)
Archive-name: radio/ham-radio/moderated/crossposting
```

Revision: 1.2 2011/11/02 04:08:53
Posting-Frequency: posted monthly
URL: http://www.panix.com/~rram/usenet/rram/index.html

Changes followed by "|".

After a 30-day public discussion and feedback period to gauge reader opinions in March of 2009:

http://groups.google.com/group/rec.radio.amateur.moderated/browse_thread/thread/d7d337db35f23326

the rec.radio.amateur.moderated Moderation Team had decided to consider |
amending its charter, and permit limited simultaneous crossposting to
rec.radio.amateur.moderated and one other unmoderated
amateur-radio-related discussion newsgroup. After a successful trial |
period (90 days, through early July 2009), we decided to adopt this |
change permanently. |

Approved rec.radio.amateur.* newsgroups are those that are currently listed in the latest version of the "List of Big Eight Newsgroups" which is crossposted monthly to news.announce.newgroups, news.groups, and news.lists.misc.

Approved alt.radio.amateur.* and alt.ham-radio.* newsgroups are those that have been created consistent with the suggestions in "So You Want to Create an Alt Newsgroup" at:

http://www.faqs.org/faqs/alt-creation-guide/

Approved regional hierarchy newsgroups are those that contain either "radio.amateur" or "ham-radio" in their names, including uk.radio.amateur and aus.radio.amateur.misc.

We will make every reasonable effort to keep our list of approved newsgroups up-to-date. In case we have overlooked any, and a submission is rejected in error as a result, the rejected submitter can E-mail us at our administrative contact address (in the signature at the bottom of this article, and the default Reply-To for the rejection message) requesting that it be added, and that the article be approved. We may still choose to reject articles crossposted to any alt.* newsgroup with an inappropriate name, including obscene language, embedded name-calling, or encouragement of unlawful conduct.

Please direct any comments, questions, or criticisms to rec-radio-amateur-moderated-request@panix.com.

From 8536932141772621113
X-Google-Thread: 10e8ad,37442de37b4b418c,start
X-Google-NewGroupId: yes
X-Google-Thread: 10b9c8,37442de37b4b418c,start
X-Google-NewGroupId: yes

```
X-Google-Attributes: gid8f86f75953,gida4a23d5f63,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII
Received: by 10.68.212.98 with SMTP id nj2mr5672130pbc.8.1325435707075;
        Sun, 01 Jan 2012 08:35:07 -0800 (PST)
MIME-Version: 1.0
Path: lh20ni95563pbb.0!nntp.google.com!news1.google.com!npeer02.iad.highwinds-
media.com!news.highwinds-media.com!feed-me.highwinds-media.com!
nx02.iad01.newshosting.com!newshosting.com!news-out.readnews.com!
transit3.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-001 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sun, 1 Jan 2012 11:33:22 EST
Organization: The Radio Amateur Satellite Corporation
Lines: 482
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000601ccc8a3$0e280530$2a780f90$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
X-Trace: reader1.panix.com 1325435602 15415 166.84.1.6 (1 Jan 2012 16:33:22 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 1 Jan 2012 16:33:22 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
```

AMSAT NEWS SERVICE
ANS-001

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

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* Chicken Little Contest Update

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- FO-29 Recovery and Testing Continues
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- DIY Video
- ARISS Status

SB SAT @ AMSAT $ANS-001.01
ANS-001 AMSAT News Service Weekly Bulletins

AMSAT News Service Bulletin 001.01
>From AMSAT HQ SILVER SPRING, MD.
January, 1, 2012
To All RADIO AMATEURS
BID: $ANS-001.01

A Note About the New AMSAT News Service Format

The ANS news bulletins have traditionally been sent out using a packet header format on each item. In the year 2012 we are no longer sure how many VHF-UHF PBBS systems remain active that are re-distributing ANS bulletins via RF-based AX.25. Perhaps the packet header is no longer a requirement for each individual news item.

ANS plans to continue to distribute the bulletins in our traditional plain-ascii format so this is not changing. Previous inquiries have indicated a very strong preference for the plain-ascii format.

In this bulletin you will observe we have preserved the e-mail style of plain ascii text, 70 character lines. We preserved packet compatibility by placing a single packet-header at the top of the news and a single /EX at the end of the entire news. If this still goes out by packet SB SAT @ AMSAT $ANS-001.01 should still be able to be processed, received, and read.

Happy New Year from the AMSAT News Service crew!

ARISSat-1 altitude is rapidly decreasing

On Tuesday, 27 Dec 2011, ARISSat-1 was losing about 4.1 km (~2.5 miles) a day in altitude, by Friday 30 Dec 2011 the decay was 5.9 km (3.6 miles) per day. This rate will continue to increase over the next days and ultimately result in the satellite burning up in the atmosphere.

Telemetry reports haven't shown a large increase in temperatures yet, please collect and report these values during each illumination period. There have been a number of people that continue to update their calculations on when the satellite will re-enter. Dates range from 30 Dec to 16 Jan.

The fall rate dh/dt is increasing dramatically. Be sure to do daily updates of the ARISSat-1/RadioSkaf-B Keps from Celestrak.com. The ARISSat-1 orbit changes daily while the satellite continues to lose altitude.

Roland, PY4ZBZ from Brazil has updated graphs of height and fall rate on his Web site: http://www.qsl.net/py4zbz/arissat.htm#r

Now that ARISSat-1 is in its last days, the Chicken Little Contest web site has been updated to include the individual submissions in each category nearest its likely reentry time. See:

http://www.amsat.org/amsat-new/ARISSat/ARISSatContest

You can see how you are doing compared to the competition! It appears that the submissions are sufficiently spread out that we will be able to determine unique winners in each category. However, you can help with this by keeping the telemetry submissions coming. Space Command does not maintain precise Tracking and Impact Prediction (TIP) for minor spacecraft.

A small satellite is considered to have reentered when three consecutive tracking stations fail to acquire it, which leaves a considerable window.

While the formal last telemetry contest is only open to submission through the telemetry programs, keep listening and note the time and place where you hear it last. After it has been confirmed to have reentered, the last reception including voice and CW, may help narrow that window unless transmissions cease significantly before reentry.

[ANS thanks Gould, WA4SXM and Alan, WA4SCA for this information]

OSCAR-11 REPORT   29 December 2011

This report covers the period from 01 September to 28 December 2011. The satellite has continued to operate in a very predictable way since the last report, and no changes have been observed. During this time the satellite has been heard reliably during its ten-day transmission periods. Excellent signals have been reported from stations located around the world, and good copy obtained from decoded telemetry frames.

The easiest way to check whether OSCAR-11 is operational is to look at the General Satellite Status website http://oscar.dcarr.org/index.php. You can also calculate the operating schedule from the last switch-off time, which was 28 December 2011 at 15:00 UTC (approx), using 10.35 days off followed by 10.35 days on.

Reception reports have been received from Gustavo LW2DTZ, Bob KI0G, Rolf HB9TSO and Francesco IT9JRU. Many thanks to all and those who posted to the status website.

The satellite is currently in eclipse during all evening passes over the UK, resulting in lower signal strengths at these times. Owing to the gradual precession of the orbit, the season for eclipses of the evening passes is longer this year compared with the winter last year.

The on-board clock continues to gain, 28 seconds during the current reporting period, and 112 seconds since regular transmissions were resumed at the end of August 2010. There is however a large accumulated error of 308.54303 days slow. This was caused mainly by the clock stopping during eclipses, when there was also an unknown drain on the power supply. The units of the least significant digit correspond approximately to seconds (0.86 seconds actually).

The VHF beacon frequency is 145.826 MHz. AFSK FM ASCII Telemetry. The satellite is operating in the default mode, with a cycle time of 20.7 days. 10.35 days on followed by
10.35 days off.

At the present time, while OSCAR-11 is operating in a predictable way, I no longer need direct reports or files by e-mail. However, could all listeners continue to enter their reports on the general satellite status website. This is a very convenient and easy to use facility, which shows the current status of all the amateur satellites, and is of use to everyone. Reports around the expected times of switch-on and switch-off are of special interest, especially for times 12:00 - 18:00 and 22:00 - 07:00 UTC, when the satellite is out-of-range in the UK. The URL is http://oscar.dcarr.org/index.php

A longer version of this report report is available on my website, and new listeners to OSCAR-11 should read this for further information. The URL is www.g3cwv.co.uk/oscar11.htm . This page contains a links to the longer report, a short audio clip to help you identify the satellite and a file of the last telemetry received. The website also contains an archive of news & telemetry data which is updated from time to time, and details about using a soundcard or hardware demodulators for data capture. There is also software for capturing data, and decoding ASCII telemetry.

If you place this bulletin on a terrestrial packet network, please use the bulletin identifier $BID:U2RPT157.CWV, to prevent duplication.

[ANS thanks Clive G3CWV for the above information]

Highlights of ARISS International Delegates Annual Meeting

The ARISS International Delegates Annual Meeting was held at the NASA Johnson Space Center in Houston, TX on October 28-29, 2011.

The ARISS Team meeting was opened with a welcome by Susan White, lead of Johnson Space Center Education Office. The main objective of the NASA Education Office is to promote STEM (science, techno- logy, engineering, and math) activities. Susan said NASA greatly appreciates the efforts the ARISS team puts into promoting STEM, and applauds the fine educational outcomes garnered by ARISS. She said NASA is focusing heavily on two new things for Fiscal Year 2012 (October 1, 2011 to September 30, 2012):

+ Continue to make the very best use of its resources, including resource help from outside of NASA -- such as from ARISS.

+ The other focus is professional development promoting the STEM initiative.

ARISS Delegates submitted their status report for their region prior to the meeting. These have been posted at:
http://www.amsat.org/amsat/ariss/Meetings/2011_Houston/Presentations/

Highlights of the presentations include:

+ ARISS �ducation. ARISS will continue with its support of the School Contacts.

+ Summary of the ARISSat-1/KEDR mission.

+ Hardware proposal regarding the installation of a new Kenwood D710 radio in the Columbus module.

+ Hardware proposal for new power supply for ISS-Ham operations in the Columbus module.

+ Ongoing work with ARISS-Europe, AMSAT-Italy, ESA, and Kayser-Italia for implementation of the HAMTV - Digital ATV with S-band downlink from the Columbus Module. S-band ATV equipment would be required at schools for use in video ARISS contacts.

More details about the meeting along with photographs of the meeting are included in the next AMSAT Journal which will be mailed to all AMSAT members.

[ANS thanks ARISS for the above information]

NO-44 PCSAT Recovery Attempt in Progress

NO-44 PCSAT-1 has remained semi-operational in sunlight since its battery had failed years ago. The satellite shuts down due to low power from the solar cells in eclipse. On many passes a poor sun angle provides only enough power for it to digipeat only 1 or 2 packets via 145.825 MHz AX.25. A few times a year PCSAT's orbit has it in 24-hour sunlight for a few days. One of these full-sun periods is occuring now.

Bob Bruninga, WB4APR, control station for the US Naval Academy Satellite Lab, the "owners" of PCSAT, is attempting to recover PCSAT by uplinking commands. Due to the poor sun angle on the solar cells just one single packet from a user other than the control station during a pass will easily kill that pass's chance of recovery.

Bob says they only get a few packet chances per pass for recovery. He needs for the stations with beacons on 145.825 MHz to please turn off your beacon - it competes with the slim power budget that the control station is attempting to utilize.

This past week, European control station Mike Rupprecht, DK3WN managed to recover PCSAT for a short period before low voltage reset the satellite again.

Please do not attempt to digipeat via PCSAT on 145.825 MHz while the satellite recovery effort is underway. Bob says it will take the right sun angle, at the right time to ensure success.

It is OK for ground stations to access the ARISS packet system on the ISS, also on 145.825 MHz when PCSAT is not in range.

[ANS thanks Bob Bruninga, WB4APR for the above information]

FO-29 Recovery and Testing Continues

The FO-29 Command Team reported that their December 23 test operation was successful. They were able to gain control of the satellite and copy its telemetry beacon while it was over Japan.

FO-29 stopped operating when it entered eclipse. An example of the telemetry copied during testing has been posted as a sound file at:
http://www.ne.jp/asahi/m-arai/gkz/sound/FO29-111223142200-142544z.mp3

A tentative FO-29 operation schedule for early January, 2012 is:

Jan 1 04:43 UTC
Jan 3 04:37 UTC

Jan 4 05:28 UTC

The transponder is expected to operate until eclipse. Stations in East Asia, Australia/New Zealand and southern South America will be able to attempt to use FO-29.

[ANS thanks Mineo Wakita, JE9PEL and Masa Arai, JN1GKZ for the above information]

University of Rome UniCubeSat GG Qualified for Vega Maiden Flight

The AMSAT-UK web carried the news that a seventh University Cubesat has passed its Final Acceptance Review at ESA and has been added to the manifest of the maiden Vega Launch.

The January 2012 inaugural launch of the ESA Vega rocket from the ESA spaceport at Kourou in the Caribbean will carry the amateur radio microsatellite ALMASat-1 and now CubeSats. The orbit is planned for 1450 by 300 km at an inclination of 69.5 degrees.

There were slots for up to nine CubeSats on the Vega launch. This week it was announced that UniCubeSat GG (Universit� di Roma �La Sapienza�, Italy) will be the seventh cubesat aboard this launch.

The UNICubeSat mission goal is the in situ measurement of atmospheric density, which is made possible by the low perigee altitude of the VEGA Maiden flight orbit. All of the UNICubeSat key components, such as solar arrays, batteries, communications and on board data handling are developed on the heritage of the four UNISAT satellites, designed, built and launched by the GAUSS team at the Scuola di Ingegneria Aerospaziale in the last decade. The SPIV ground station, located in Roma, will be the main ground station for the UNICubeSat mission.

The previously announced six cubesats on the maiden Vega Launch included:

- Xatcobeo (collaboration of the University of Vigo and INTA, Spain)
- Robusta (University of Montpellier 2, France)
- E-St@r (Politecnico di Torino, Italy)
- Goliat (University of Bucharest, Romania)
- PW-Sat (Warsaw University of Technology, Poland)
- MaSat-1 (Budapest University of Technology & Economics, Hungary)

As well as the CubeSats Vega will also carry the Amateur Radio microsatellite ALMASat-1.

The full story can be read on-line: http://tinyurl.com/csgkqwz
(www.uk.amsat.org)

ESA CubeSats delivered for first Vega flight news web page:
http://www.esa.int/esaMI/Education/SEM3L0WWVUG_0.html

ESA Education - CubeSats
http://www.esa.int/esaMI/Education/SEM3N03MDAF_0.html

A picture of ALMASat-1 and the six CubeSats is posted at AMSAT-UK:
http://tinyurl.com/c8o73zw (uk.amsat.org)

The IARU amateur satellite frequency coordination pages hosted by AMAT-UK list the frequencies of the amateur radio satellites:
http://www.amsat.org.uk/iaru/

Mineo Wakita, JE9PEL provides complete coverage of the Vega launch on his 'ESA CubeSats Update' web pages. You'll find an overview of each of the satellite missions, frequencies, modulation/protocols, and links to the developers home web pages posted at:
http://www.ne.jp/asahi/hamradio/je9pel/esa9cubf.htm

[ANS thanks ESA, AMSAT-UK, for the above information]

The DIY Magic of Amateur Radio released

A new promotional video has been released to attract Hackers, Makers and Innovators to ham radio.

The video features well known hacker and maker Diana Eng KC2UHB along with Ham Nation's Bob Heil K9EID and ISS Astronaut Doug Wheelock KF5BOC. It follows some of the innovative, imaginative and fun ways "hams" use radio technology in new and creative ways and points out that amateur radio clubs are similar to hacker groups.

Watch The DIY Magic of Amateur Radio in HD
"http://www.youtube.com/embed/vlDwVhx7miQ?feature�ayer_embedded"
frameborder�" allowfullscreen></iframe>

[ANS thanks ARRL for the above information]

ARISS Status

1. Upcoming School Contact

An Amateur Radio on the International Space Station (ARISS) contact has been scheduled for the Historical Museum of Gdansk in Gdansk, Poland on Saturday, December 31 at 14:04 UTC. This year the museum celebrates the 400th anniversary of the birth of astronomer Johannes Hevelius. On display are exhibitions which represent Hevelius' achievements and research instruments. Other presentations showcase modern space exploration. Students from several Gdansk schools will participate in the ARISS contact.

2. Rome Contact Successful

On Monday, December 19, students from Teodoro Mommsen Middle School in Rome, Italy spoke with Astronaut Dan Burbank, KC5ZSX via an Amateur Radio on the International Space Station (ARISS) contact. Telebridge station LU1CGB in Buenos Aires, Argentina handled the radio link. Nearly 80 students attended the event and listened as Burbank fielded sixteen questions about living in a micro-gravity environment. The school, located in the "Appio-Latino" district in the south of Rome, has an enrollment of 800 students, ages 11 - 13. To view contact video, see: http://www.livestream.com/amsat_italia/video?clipId�a_47be5d99-fe7a-4b1a-967c-e58fabbb97aa

3. ARISS Sets New Events Record

The ARISS contact held with Kobe, Japan was number 121 for 2011 and equals the most number of events done in a calendar year (set in 2009). The Teodoro Mommsen Middle School contact held on Monday, December 19 was number 122 and set a new record for the number of events conducted in a single calendar year.

4. ARISS International Teleconference Held

The monthly ARISS International Team teleconference was held on Tuesday, December 20. It was announced that Rosalie White will step down as the U.S. representative and chairman of the ARISS-International Educational Outreach and School Selection Committee. She will be replaced by Frank Bauer. The ARISS status on filing with the ITU (International Telecommunication Union) was given and an update on the HamTV project, which may include a video beacon, was also provided. Minutes have been posted. See: http://ariss.rac.ca/arisstel2011-12-20.htm

5. Amateur Radio Newsline on ARISS

Amateur Radio Newsline posted a few items related to ARISS in its December 23 report #1793 under the heading "Ham Radio in Space." The first story is about new crew members Don Pettit, KD5MDT, Oleg Kononenko, RN3DX and Andre Kuipers, PI9ISS flying to the ISS this past week. The second story gives a new prediction of when ARISSat will re-enter Earth's atmosphere. "Three Astro-Hams Headed to the ISS" and "ARISSat-1 Mission May End December 31" may be viewed at: ftp://ftp.arnewsline.org/quincy/News/news.txt

6. ARRL QST Covers ARISS News

The American Radio Relay League (ARRL) January 2012 QST coverage of

ARISS items are:

"It Seems to Us," written each month by CEO Dave Sumner, K1ZZ, is titled this month "The Year Ahead" and covers what's expected for 2012. Dave lists World Amateur Radio Day on April 18, 2012, when this year's theme will be "Amateur Radio Satellites: Celebrating 50 Years in Space." Dave says we'll celebrate the launch of the first OSCAR satellite that "was followed by an even greater thrill in 1983 when radio amateurs the world over spoke with Owen Garriott, W5LFL, as he orbited the Earth aboard STS-9."

The "Media Hits" column mentions the ARISS school, Holy Family Catholic School, in Grand Junction, CO. A good newspaper story ran in the Grand Junction Sentinel when reporters attended a demonstration put on by students of on-the-air amateur radio moonbounce operations.

The "In Brief" column listed the crew members, including Dan Burbank, KC5ZSX, who had joined the crew on the ISS.

[ANS thanks Carol, KB3LKI, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

It has been another year of information and news gathering for us at ANS.   Please keep the timely information you provide coming on a regular basis. It is with great hope for the upcoming year in AMSAT that we at ANS, Joanne, Lee & Dee, wish you all a healthy and safe New Year.

73,
This week's ANS Editor,
Dee Interdonato, NB2F

```
From 3938361758472296350
X-Google-Thread: 8f86f75953,c3e3572857f05e48,start
X-Google-Attributes: gid8f86f75953,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
Received: by 10.68.190.99 with SMTP id gp3mr9689760pbc.1.1325493092765;
        Mon, 02 Jan 2012 00:31:32 -0800 (PST)
MIME-Version: 1.0
Path: lh20ni101366pbb.0!nntp.google.com!news1.google.com!goblin1!goblin3!
goblin.stu.neva.ru!newsfeed2.funet.fi!newsfeeds.funet.fi!feeder1.news.elisa.fi!
```

uutiset.elisa.fi!7564ea0f!not-for-mail
From: 202@nic.invalid (Mika)
Newsgroups: rec.radio.amateur.space
Subject: Where are 2 line elements?
Reply-To: mika@nic.invalid
Message-ID: <4f016a2f.189078@news.nic.fi>
X-Newsreader: Forte Free Agent 1.21/32.243
Lines: 10
Date: Mon, 02 Jan 2012 08:29:41 GMT
NNTP-Posting-Host: 91.152.227.243
X-Complaints-To: newsmaster@saunalahti.com
X-Trace: uutiset.elisa.fi 1325492973 91.152.227.243 (Mon, 02 Jan 2012 10:29:33 EET)
NNTP-Posting-Date: Mon, 02 Jan 2012 10:29:33 EET
Organization: Elisa Customer

Returned here after being QRT for over 10 years and noticed 2 line element sets for ham satellites
seem to be missing? I assume there are still some ham satellites? Maybe not the easy-to-work mode A
satellites in low orbit, though...

73 Mika

From 4835137735785807031
X-Google-Thread: 10e8ad,c3e3572857f05e48
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Received: by 10.204.129.78 with SMTP id n14mr1797271bks.5.1325498247826;
        Mon, 02 Jan 2012 01:57:27 -0800 (PST)
Path: cj8ni24220bkb.0!nntp.google.com!news1.google.com!goblin1!goblin.stu.neva.ru!feed.xsnews.nl!border-3.ams.xsnews.nl!newsfeed.xs4all.nl!newsfeed6.news.xs4all.nl!xs4all!post.news.xs4all.nl!not-for-mail
Newsgroups: rec.radio.amateur.space
From: Rob <nomail@example.com>
Subject: Re: Where are 2 line elements?
References: <4f016a2f.189078@news.nic.fi>
User-Agent: slrn/pre0.9.9-111 (Linux)
Mime-Version: 1.0
Message-ID: <slrnjg2voj.f42.nomail@xs8.xs4all.nl>
Date: 02 Jan 2012 09:55:31 GMT
Lines: 13
NNTP-Posting-Host: 2001:888:0:1::888
X-Trace: 1325498131 news.xs4all.nl 6848 [2001:888:0:1::888]:49497
X-Complaints-To: abuse@xs4all.nl
Content-Type: text/plain; charset=us-ascii

```
Content-Transfer-Encoding: 7bit

Mika <202@nic.invalid> wrote:
>
> Returned here after being QRT for over 10 years and noticed 2 line element sets
for ham satellites
> seem to be missing?  I assume there are still some ham satellites? Maybe not the
easy-to-work mode A
> satellites in low orbit, though...

Missing from where?
You can still get them at www.celestrak.com

There have been some problems because some government people thought
those elements would be abused by "the terrorists" and it seemed like
they would no longer be available, but apparently something was worked
out to still make them available to us.


From 5993454666538956071
X-Google-Thread: 10e8ad,c3e3572857f05e48
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Received: by 10.68.212.98 with SMTP id nj2mr7738576pbc.8.1325520945004;
        Mon, 02 Jan 2012 08:15:45 -0800 (PST)
MIME-Version: 1.0
Path: lh20ni103839pbb.0!nntp.google.com!news2.google.com!news.glorb.com!news-
xfer.nntp.sonic.net!posts.news.sonic.net!nnrp1.nntp.sonic.net!not-for-mail
Newsgroups: rec.radio.amateur.space
Subject: Re: Where are 2 line elements?
References: <4f016a2f.189078@news.nic.fi>
From: Patty Winter <patty1@wintertime.com>
X-Newsreader: trn 4.0-test76 (Apr 2, 2001)
Date: 02 Jan 2012 16:13:57 GMT
Lines: 8
Message-ID: <4f01d7c5$0$1678$742ec2ed@news.sonic.net>
Organization: Sonic.Net
NNTP-Posting-Date: 02 Jan 2012 16:13:57 GMT
NNTP-Posting-Host: d86f219b.news.sonic.net
X-Trace:
DXC=gAF:NaW;kQOf0DaHf``=>Em4K\QM1CV^@1OYf0H`?;XAYMTk@@nLF8M49JS04A7<JBMZ;c^a<RNYLH
5I[4hlS>]F
X-Complaints-To: abuse@sonic.net

Mika, if you've been away for that long, you may not realize
that heavens-above.com offers ready-to-use pass information
for ham satellites as well as other types.


73,
Patty N6BIS
```

```
From -8746758098253844973
X-Google-Thread: 10e8ad,c3e3572857f05e48
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Received: by 10.68.190.99 with SMTP id gp3mr11214689pbc.1.1325550906626;
        Mon, 02 Jan 2012 16:35:06 -0800 (PST)
Path: lh20ni107098pbb.0!nntp.google.com!news1.google.com!news2.google.com!
news.glorb.com!feeder.erje.net!eternal-september.org!feeder.eternal-september.org!
mx04.eternal-september.org!.POSTED!not-for-mail
From: Alan WA4SCA <WA4SCA@YAHOO.COM>
Newsgroups: rec.radio.amateur.space
Subject: Re: Where are 2 line elements?
Date: Mon, 02 Jan 2012 18:32:57 -0600
Organization: AMSAT-NA
Lines: 16
Message-ID: <31j4g7hft4ea64os5ha9klrb51po061ufq@4ax.com>
References: <4f016a2f.189078@news.nic.fi>
Reply-To: ALANBIDDLE70@YAHOO.COM
Mime-Version: 1.0
Injection-Info: mx04.eternal-september.org; posting-host="mYnsUO6xX/FCYOXNo9/yXQ";
     logging-data="11328"; mail-complaints-to="abuse@eternal-september.org";
     posting-account="U2FsdGVkX18NdFRUQ7YZAgOOmisU6ioYZD9Ld5Yl3Bs="
X-Newsreader: Forte Agent 6.00/32.1186
Cancel-Lock: sha1:g3mYKsDJCjZa3BM84Sogc428SNc=
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
```

Mika,

Keps are still pretty much where they were, but are available in many more places now. Go to WWW.AMSAT.ORG and look around on the left side of the page. There is also good information on the status of particular satellites. You will find that many things have changed in a decade, including the type and number of satellites flying and planned.

Welcome back!

--
Alan
WA4SCA

```
From -1801172959992811380
X-Google-Thread: 10e8ad,c3e3572857f05e48
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
```

```
Received: by 10.205.139.10 with SMTP id iu10mr923568bkc.4.1325624483898;
        Tue, 03 Jan 2012 13:01:23 -0800 (PST)
MIME-Version: 1.0
Path: cj8ni36868bkb.0!nntp.google.com!news2.google.com!goblin3!goblin.stu.neva.ru!
newsfeed2.funet.fi!newsfeeds.funet.fi!feeder1.news.elisa.fi!uutiset.elisa.fi!
7564ea0f!not-for-mail
From: 202@nic.invalid (Mika)
Newsgroups: rec.radio.amateur.space
Subject: Re: Where are 2 line elements?
Reply-To: mika@nic.invalid
Message-ID: <4f036bf8.31521653@news.nic.fi>
References: <4f016a2f.189078@news.nic.fi>
<31j4g7hft4ea64os5ha9klrb51po061ufq@4ax.com>
X-Newsreader: Forte Free Agent 1.21/32.243
Lines: 30
Date: Tue, 03 Jan 2012 21:01:23 GMT
NNTP-Posting-Host: 91.152.227.243
X-Complaints-To: newsmaster@saunalahti.com
X-Trace: uutiset.elisa.fi 1325624483 91.152.227.243 (Tue, 03 Jan 2012 23:01:23
EET)
NNTP-Posting-Date: Tue, 03 Jan 2012 23:01:23 EET
Organization: Elisa Customer
```

On Mon, 02 Jan 2012 18:32:57 -0600, Alan WA4SCA <WA4SCA@YAHOO.COM> wrote:

>Mika,
>
>Keps are still pretty much where they were, but are available in many
>more places now. Go to WWW.AMSAT.ORG and look around on the left side
>of the page. There is also good information on the status of
>particular satellites. You will find that many things have changed in
>a decade, including the type and number of satellites flying and
>planned.
>
>Welcome back!
>
>
>
>--
>Alan
>WA4SCA

Thanks to all of you for answers. Have now bookmarked many good www sites.

Back in the 1990's I used to get my 2 line element updates by 2m VHF packet radio. 1200 baud if I
remember correctly. World has changed a lot since then ;)

73 Mika OH1NZQ

```
From -8405512603446909786
X-Google-Thread: 10e8ad,c3e3572857f05e48
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Received: by 10.68.73.229 with SMTP id o5mr36460291pbv.7.1325626330806;
        Tue, 03 Jan 2012 13:32:10 -0800 (PST)
Path: lh20ni116787pbb.0!nntp.google.com!news1.google.com!news.glorb.com!
feeder.erje.net!newsfeed.xs4all.nl!newsfeed5.news.xs4all.nl!xs4all!
newsgate.cistron.nl!newsgate.news.xs4all.nl!post.news.xs4all.nl!not-for-mail
Newsgroups: rec.radio.amateur.space
From: Rob <nomail@example.com>
Subject: Re: Where are 2 line elements?
References: <4f016a2f.189078@news.nic.fi>
 <31j4g7hft4ea64os5ha9klrb51po061ufq@4ax.com>
 <4f036bf8.31521653@news.nic.fi>
User-Agent: slrn/pre0.9.9-111 (Linux)
Mime-Version: 1.0
Message-ID: <slrnjg6suq.c37.nomail@xs8.xs4all.nl>
Date: 03 Jan 2012 21:32:10 GMT
Lines: 8
NNTP-Posting-Host: 2001:888:0:1::888
X-Trace: 1325626330 news.xs4all.nl 6859 [2001:888:0:1::888]:34716
X-Complaints-To: abuse@xs4all.nl
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Mika <202@nic.invalid> wrote:
> Thanks to all of you for answers. Have now bookmarked many good www sites.
>
>  Back in the 1990's I used to get my 2 line element updates by 2m VHF packet
radio. 1200 baud if I
> remember correctly.  World has changed a lot since then ;)

Maybe you have left packet (like most of us), but the weekly kepler
elements are still being distributed there...


From -8620662571802585598
X-Google-Thread: 11480d,372abeec2478643,start
X-Google-NewGroupId: yes
X-Google-Thread: 10e8ad,372abeec2478643,start
X-Google-NewGroupId: yes
X-Google-Attributes: gid7221ecd0f7,gid8f86f75953,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Received: by 10.68.75.170 with SMTP id d10mr36886411pbw.6.1325644207664;
        Tue, 03 Jan 2012 18:30:07 -0800 (PST)
MIME-Version: 1.0
Path: lh20ni119079pbb.0!nntp.google.com!news2.google.com!news.glorb.com!news-
out.readnews.com!transit4.readnews.com!panix!rri.panix.com!robomod!not-for-mail
```

```
From: SWPC.Webmaster@noaa.gov
Newsgroups:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.info
Subject: Weekly Highlights of Solar and Geomagnetic Activity, 26 December - 01
January 2012
Followup-To: rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space
Date: Tue, 3 Jan 2012 21:30:06 EST
Organization: NOAA Space Weather Prediction Center
Lines: 52
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <20120104023001.C5B3B33C93@panix2.panix.com>
NNTP-Posting-Host: panix6.panix.com
X-Trace: reader1.panix.com 1325644206 26348 166.84.1.6 (4 Jan 2012 02:30:06 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Wed, 4 Jan 2012 02:30:06 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump

:Product: Weekly Highlights and Forecasts
:Issued: 2012 Jan 03 2308 UTC
# Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center
# Product description and SWPC contact on the Web
# http://www.swpc.noaa.gov/weekly.html
#
#                 Weekly Highlights and Forecasts
#
```

Highlights of Solar and Geomagnetic Activity
26 December - 01 January 2012

Solar activity was at low to moderate levels. Activity was moderate on 26 December due to M-class flares from Region 1387 (S21, L = 227, class/area Dki/290 on 27 December), the largest being a M2/Sf event at 26/2030 UTC. Activity decreased to low levels during 27 - 28 December with most of the frequent C-class flares from Regions 1387 and 1389 (S23, L = 087, class/area Ekc/500 on 30 December). Activity returned to moderate levels during 29 - 31 December due to M-class flares from Region 1389. Activity decreased to low levels on 01 January with most of the flare activity from Region 1389.

No proton events were observed at geosynchronous orbit during the period. However, a greater than 10 MeV proton flux enhancement occurred during 25 - 26 December (peak flux 3 pfu at 26/0135 UTC) associated with a M4/1n flare at 25/1816 UTC from Region 1387.

The greater than 2 MeV electron flux at geosynchronous orbit was at normal levels.

The geomagnetic field was at quiet levels during 26 - 28 December. Activity increased to quiet to unsettled levels on 29 December due to weak CME passages associated with filament eruptions observed on 25 and 26 December. Field activity decreased to mostly quiet levels during 31 December - 01 January.

Forecast of Solar and Geomagnetic Activity
04 January - 30 January 2012

Solar activity is expected to be at low levels with a slight chance for isolated M-class activity.

No proton events are expected at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to be at normal to moderate levels during 04 - 07 January. Normal flux levels are expected during 08 - 30 January.

The geomagnetic field is expected to be at quiet to unsettled levels during 04 - 06 January due to recurrent coronal hole high-speed stream effects. Predominantly quiet conditions are expected during 07 - 30 January.

```
From -6736935815277811172
X-Google-Thread: 10e8ad,f1a5b70ba7f6a8fe,start
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Received: by 10.68.190.99 with SMTP id gp3mr6988947pbc.1.1325951082798;
        Sat, 07 Jan 2012 07:44:42 -0800 (PST)
Path: lh20ni152931pbb.0!nntp.google.com!news1.google.com!goblin2!
goblin.stu.neva.ru!newsfeed1.swip.net!news.astraweb.com!
border6.a.newsrouter.astraweb.com!not-for-mail
From: Chris Steyaert <observations@rmob.org>
Newsgroups: rec.radio.amateur.space,sci.astro.amateur
Subject: Radio Meteor Obs. Bull. December 2011  Geminids Ursids
Date: Sat, 07 Jan 2012 16:44:41 +0100
Message-ID: <c1qgg7dl5223u38kjnsph2ln5i4lcbmvik@4ax.com>
X-Newsreader: Forte Agent 5.00/32.1171
MIME-Version: 1.0
Lines: 14
Organization: Unlimited download news at news.astraweb.com
NNTP-Posting-Host: d347d0d2.news.astraweb.com
X-Trace: DXC=`BXa2ToZ6<D7dZd0V0aUXKL?0kYOcDh@JGlC3e7HBLMKQU;
[N@GUILI=3bK=jANH;@b3<D_UX>L;IX<`3P5ZY[ZJn<]1]79RU_H0JU3I96Ac6D
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
```

Radio Meteor Observation Bulletin No. 221 of December 2011 (104 K) is available now as

http://www.rmob.org/rmobtext/rmob1112.txt

More information and the visual presentation of the hourly forward scatter counts can be found on

http://www.rmob.org

Chris

```
From -5942396822248033233
X-Google-Thread: 10e8ad,c3e3572857f05e48
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Received: by 10.68.213.99 with SMTP id nr3mr9594690pbc.2.1326075117248;
        Sun, 08 Jan 2012 18:11:57 -0800 (PST)
Path: lh20ni158281pbb.0!nntp.google.com!news1.google.com!
border1.nntp.dca.giganews.com!nntp.giganews.com!nx02.iad01.newshosting.com!
newshosting.com!post01.iad!news.suddenlink.net!not-for-mail
From: "Glenn" <aa5pk@hotmail.com>
Newsgroups: rec.radio.amateur.space
References: <4f016a2f.189078@news.nic.fi>
<31j4g7hft4ea64os5ha9klrb51po061ufq@4ax.com> <4f036bf8.31521653@news.nic.fi>
<je81i8$nfn$1@speranza.aioe.org>
In-Reply-To: <je81i8$nfn$1@speranza.aioe.org>
Subject: Re: Where are 2 line elements?
Date: Sun, 8 Jan 2012 20:11:53 -0600
MIME-Version: 1.0
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Windows Mail 6.0.6002.18197
X-MimeOLE: Produced By Microsoft MimeOLE V6.0.6002.18463
Lines: 7
Message-ID: <4f0a4cec$0$19341$bbae4d71@news.suddenlink.net>
NNTP-Posting-Host: 74.194.86.151
X-Complaints-To: abuse@suddenlink.net
Content-Type: text/plain;
     format=flowed;
     charset="iso-8859-1";
     reply-type=response
Content-Transfer-Encoding: 7bit
```

"Hils" <hils@saynotospam.net> wrote in message
news:je81i8$nfn$1@speranza.aioe.org...

> One of the things I now wish I'd done is make some audio recordings of
> the convoys of RS series lighting up as they passed over Europe. Those

> sats were fun.

Some of these recordings may bring back memories" http://www.dd1us.de/
spacesounds%202.html

```
From -8960830357572832450
X-Google-Thread: 10e8ad,6de5b8728364ed56,start
X-Google-NewGroupId: yes
X-Google-Thread: 114aac,6de5b8728364ed56,start
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,gid9e586c3d78,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Received: by 10.204.156.205 with SMTP id y13mr1415121bkw.3.1326234609258;
        Tue, 10 Jan 2012 14:30:09 -0800 (PST)
MIME-Version: 1.0
Path: cj8ni80156bkb.0!nntp.google.com!news2.google.com!news1.google.com!
newsfeed2.dallas1.level3.net!news.level3.com!panix!rri.panix.com!robomod!not-for-
mail
From: SWPC.Webmaster@noaa.gov
Newsgroups:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.shor
twave,rec.radio.info
Subject: Weekly Highlights of Solar and Geomagnetic Activity, 02 - 08 January 2012
Followup-To:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.shor
twave
Date: Tue, 10 Jan 2012 17:30:06 EST
Organization: NOAA Space Weather Prediction Center
Lines: 56
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <20120110223001.78C2333C52@panix2.panix.com>
NNTP-Posting-Host: panix6.panix.com
X-Trace: reader1.panix.com 1326234606 14773 166.84.1.6 (10 Jan 2012 22:30:06 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Tue, 10 Jan 2012 22:30:06 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump

:Product: Weekly Highlights and Forecasts
:Issued: 2012 Jan 10 1730 UTC
# Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center
# Product description and SWPC contact on the Web
# http://www.swpc.noaa.gov/weekly.html
#
#                 Weekly Highlights and Forecasts
#
```

Highlights of Solar and Geomagnetic Activity
02 - 08 January 2012

Solar activity was low during most of the period with occasional low-level C-class flares. A long-duration C2 x-ray event was observed at 02/1524 UTC from just beyond the west limb. Associated with this event was a greater than 10 MeV proton flux enhancement at geosynchronous orbit (see below). Region 1390 (N08, L=122, class/area Dao/210 on 06 January) produced a C1 x-ray event at 05/0722 UTC with an associated Type II radio signature (695 km/s shock velocity). There were no Earth-directed CMEs observed during the period.

No proton events were observed at geosynchronous orbit. However, a greater than 10 MeV proton flux enhancement began late on 02 January and ended late on 03 January (peak flux 1 pfu at 03/0550 UTC). The enhancement was associated with the long-duration C2 x-ray event mentioned above.

The greater than 2 MeV electron flux at geosynchronous orbit was at normal levels.

Geomagnetic field activity was at quiet to unsettled levels during the period. Brief minor storm periods occurred at high latitudes on 05 January associated with the onset of a coronal hole high-speed stream (CH HSS).

Forecast of Solar and Geomagnetic Activity
11 January - 06 February 2012

Solar activity is expected to be at low levels during the period with a slight chance for isolated M-class flare activity.

No proton events are expected at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to be at normal levels during the period with a chance for moderate levels during 14 - 16 January and again on 30 January - 01 February.

Geomagnetic field activity is expected to be at quiet levels during 10 January. An increase to quiet to unsettled levels is expected on 11 - 12 January and 16 January due to recurrent CH HSS effects. Quiet conditions are expected during 17 - 27 January. An increase to quiet to unsettled levels is expected on 28 - 29 January due to another CH HSS. Quiet levels are expected from 30 January - 06 February.

```
From -4417041676782676405
X-Google-Thread: 10e8ad,c3e3572857f05e48
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Received: by 10.68.73.229 with SMTP id o5mr7475805pbv.7.1326715762471;
        Mon, 16 Jan 2012 04:09:22 -0800 (PST)
Path: lh20ni188466pbb.0!nntp.google.com!news1.google.com!news2.google.com!
Xl.tags.giganews.com!border1.nntp.dca.giganews.com!nntp.giganews.com!
local2.nntp.dca.giganews.com!nntp.bright.net!news.bright.net.POSTED!not-for-mail
NNTP-Posting-Date: Mon, 16 Jan 2012 06:09:19 -0600
Date: Mon, 16 Jan 2012 12:09:19 +0000
From: Scott <acepilotREMOVE@bloomer.net>
User-Agent: Mozilla/5.0 (Windows NT 5.0; rv:7.0.1) Gecko/20110929 Thunderbird/
7.0.1
MIME-Version: 1.0
Newsgroups: rec.radio.amateur.space
Subject: Re: Where are 2 line elements?
References: <4f016a2f.189078@news.nic.fi>
<31j4g7hft4ea64os5ha9klrb51po061ufq@4ax.com> <4f036bf8.31521653@news.nic.fi>
<je81i8$nfn$1@speranza.aioe.org> <4f0a4cec$0$19341$bbae4d71@news.suddenlink.net>
<jevm3t$r4j$1@speranza.aioe.org>
In-Reply-To: <jevm3t$r4j$1@speranza.aioe.org>
Message-ID: <BJ-dneYUPvvyjonSnZ2dnUVZ_i2dnZ2d@bright.net>
Lines: 8
X-Usenet-Provider: http://www.giganews.com
NNTP-Posting-Host: 64.33.199.218
X-Trace: sv3-nIfH7saunVqtoEZ4mOr3dU5Omm0/
RwAKo1gnzshHTevQRWfyZ+TrXZLleyYbo59q0zL6NYLC0Gq4NdM!5TI72kPtO7WyR0TJ/
5R2kZJzVcaqIfYnjeyeZnliRmtAZDTgJK2jMMRJIWUVp1yMKk/IIrWy3xi1!TZX3mB+ung==
X-Abuse-and-DMCA-Info: Please be sure to forward a copy of ALL headers
X-Abuse-and-DMCA-Info: Otherwise we will be unable to process your complaint
properly
X-Postfilter: 1.3.40
X-Original-Bytes: 1492
Content-Type: text/plain; charset=ISO-8859-1; format=flowed
Content-Transfer-Encoding: 7bit
```

On 1-15-2012 23:05, Hils wrote:

>
> Anyone fancy building a new mode A satellite (with a PSK
> engineering/science beacon)? :-)

I prefer mode K. Had a lot of fun with the old RS12 bird! :)

```
From 3909184305981311787
X-Google-Thread: 10e8ad,92cb228445127fc1,start
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,domainid0,public,usenet
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X-Google-Language: ENGLISH,ASCII
Received: by 10.68.197.100 with SMTP id it4mr824899pbc.2.1326724848346;
        Mon, 16 Jan 2012 06:40:48 -0800 (PST)
MIME-Version: 1.0
Path: lh20ni188872pbb.0!nntp.google.com!news1.google.com!
newsfeed2.dallas1.level3.net!news.level3.com!panix!rri.panix.com!robomod!not-for-
mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-015 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Mon, 16 Jan 2012 09:40:47 EST
Organization: The Radio Amateur Satellite Corporation
Lines: 293
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000c01ccd45c$d1b128f0$75137ad0$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
X-Trace: reader1.panix.com 1326724847 4164 166.84.1.6 (16 Jan 2012 14:40:47 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Mon, 16 Jan 2012 14:40:47 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
```

AMSAT NEWS SERVICE
ANS-015

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* Cambodia DXpedition Possibly Active Via Satellite
* The CHIBIS-M research satellite to launch to the ISS/MKC
* Hams in Space Team Will Be Presenting at the North Kansas City Hamfest
* Push for Dedicated CubeSat Research Radio Spectrum
* Check Your Keps: ISS Performs Debris Avoidance Maneuver

* Sounds From Space Website Looking for Additional Sounds
* ARISS Status Report - 9 January 2012

SB SAT @ AMSAT $ANS-015.01
ANS-015 AMSAT News Service Weekly Bulletins

AMSAT News Service Bulletin 015.01
  From AMSAT HQ SILVER SPRING, MD.
January 15, 2012
To All RADIO AMATEURS
BID: $ANS-015.01

Cambodia DXpedition Possibly Active Via Satellite

The DARC DX Newsletter DXNL 1762 dated January 11, 2012 reports that a Japanese group visiting Sihanoukville, Cambodia between January 14 to January 22 plans to operate on CW, SSB and digital modes on 160 M to 6 M and maybe alss via satellites.

The oerators are Masumi,JA3AVO (XU7AVO), Takeo,JA3BZO (XU7AEN), Tsuguya,JA3UJR (XU7UJR), Kunio,JA1CJA/JH3LSS (XU7CJA), Shozo,JA3HJI (XU7HJI pending) and Tatsuo,JA3ARJ (XU7ARJ pending). QSLs via home-calls.

[ANS thanks the DARC DX Newsletter DXNL 1762 for the above information]

The CHIBIS-M research satellite to launch to the ISS/MKC

On 25/26 January the CHIBIS-M satellite is scheduled to by launch to the ISS as part of the Progress mission.

This experiment provides a comprehensive study of physical processes in atmospheric lightning discharges. Delivery of the microsatellite in its working orbit at an altitude of 500 km will be done with a THC "Progress M-13M" after the completion of the flight of the truck in the station. According to the developers of the term of active existence of the spacecraft, "Chibis-M" will be at least one year.

It follows a long tradition of magnetosphere studies dating back to Sputnik-3, which (you will recall) nearly beat Van Allen to the detection of the eponymous Belts.

There will be a CW telemetry downlink of control/housekeeping data to the Kolibri-2000 standard on a frequency around 435 MHz.

It appears the plan is to raise the Progress orbit after undocking, followed by deploying the satellite.

Addtional information as available in Russian at the following URL:
http://chibis.cosmos.ru/index.php?id74

[ANS thanks Andy, G0SFJ, and Drew, KO4MA, for the above information]

Hams in Space Team Will Be Presenting at the North Kansas City Hamfest

The North Kansas City Hamfest is just around the corner on Saturday. January 21st!

One of the Guest Speakers at the Hamfest will be the Hams in Space Amateur Radio Satellite Team from Kansas City. Their presentation is scheduled for 10:00 AM.

Weather permitting; the team hopes to provide a live hands on demonstration of working an FM Amateur Radio Satellite in the parking lot of the event site. The time of the hands on demo will be based on the availability and timing of a satellite pass which will be determined closer to the event date.

January 21, 2012
Third Annual North Kansas City HAMFEST
One block east of North Oak & I-29
Hillside Christian Church
900 NE Vivian Road
Kansas City, Missouri
Watch the Hamfest Web Site for Time and Date Details
http://www.northkchamfest.com

For more information about Hams in Space, go to http://hamsinspace.com or http://kd0hkd.com/satellites

[ANS thanks Randy, KD0HKD, for the above information]

Push for Dedicated CubeSat Research Radio Spectrum

SmallSat, CubeSat, and NanoSatellite developers are seeking spectrum allocation, outside of the 435 to 437 MHz amateur satellite band dedicated to their specific bandwidth, data rate, and mission requirements.

Wouter Jan Ubbels at the Dutch space development company, ISIS - Innovative Solutions In Space B.V. plans a presentation on this topic at the European CubeSat Workshop in Brussels later this month.

ISIS notes that experimental, proof-of-concept demonstration missions find it increasingly more difficult to find spectrum in todays crowded bands. Obtaining commercial or research space frequency allocations is beyond the budgetary capability of many of these missions.

Some satellite developers may be able to adapt their communication requirements in order to operate in the amateur radio spectrum. In order to fully meet mission requirements on other projects a more suitable spectrum is quickly becoming a potential long term show stopper for the emerging nanosatellite market.

ISIS says they plan to attend the World Radio Conference, WRC, this month as part of the Dutch national delegation to to make use of the opportunity to informally sound the various opinions on this matter and investigate potential possibilities for creating a future proof solution ensuring the spectral needs of the community are met. This is potentially in line with discussions already going on in ITU study group WP7B. Potentially these plans for frequency allocation will be included in a future WRC.

[ANS thanks Wouter Jan Ubbels and ISIS for the above information]

Check Your Keps: ISS Performs Debris Avoidance Maneuver

UniverseToday reports that the ISS needed to perform a maneuver on Friday, January 13 to avoid debris from the 2009 collision between an inactive Russian Cosmos 2251 satellite and a commercial Iridium satellite.

U.S. Space Command recommended the space station perform a debris avoidance maneuver on Friday, January 13, 2012 to move out of harms' way and dodge a possible collision with the piece of space junk, said to be about 10 centimeters in diameter. The thrusters on the Zvezda service module fired at 1610 UTC on Friday to raise the orbit of the ISS.

Without the maneuver, the object would have made two close approaches to the station on consecutive orbits on Friday, passing within the "pizza box" shaped region around the station, measuring 0.75 kilometers above and below the station and 25 kilometers on each side (2,460 feet above and below and 15.6 by 15.6 miles).

A higher orbit for the ISS means that AOS will occur at a slightly later time than those predicted in existing Keplerian Elements. Users are encourage to update their tracking elements to maintain tracking accuracy.

[ANS thanks UniverseToday.com for the above information]

Sounds From Space Website Looking for Additional Sounds

Matthias, DD1US, would like to draw your attention to a collection of audio recordings, the "Sounds From Space" collection on his website at http://www.dd1us.de. This features a collection which has also a section dedicated to recordings of amateur radio satellite signals.

Please have a look at it. The idea is to give older radio amateurs the chance, to listen to signals of satellites which are already gone and the might have worked in the past, and to younger people interested in ham radio, to get them more excited in satellite communication.

In spite of the fact that the collection now has close to 1000 recordings he is still missing recordings from some amateur radio satellites. If anyone of you would be willing to contribute recordings to these satellite he would highly appreciate it. He has and always will give full credit to the source of the recordings. Please have a look in your older tapes and recordings!

Here is a list of the most wanted missing satellites:

Amsat Oscar 8
RS-1
RS-2
ISKRA-1
RS-3
RS-4
RS-5
RS-6
RS-8
ISKRA-3
Fuji-OSCAR-12
UOSAT OSCAR 15
WEBER OSCAR 18
UOSAT OSCAR 22
POSAT OSCAR 28
TMSAT OSCAR 31
PANSAT OSCAR 34
UOSAT OSCAR 36
ASUSAT OSCAR 37
WEBER OSCAR 39
SAUDI OSCAR 42
STARSHINE OSCAR 43
MYSAT OSCAR 46
KAGAYAKI (SORUNSAT-1)

ANUSAT
BEVO-1
WASEDA-SAT2
StudSAT

[ANS thanks Matthias, DD1US and The Sounds From Space website for the above information]

ARISS Status Report - 9 January 2012

1. Poland Contact Successful

A successful Amateur Radio on the International Space Station (ARISS) contact was held on Monday, January 2 between Zesp�l Szk�l nr 2 in Zuromin, Poland and Dan Burbank, KC5ZSX on the ISS. Students asked questions to learn what an ordinary day on the ISS is like. Over 300 students and guests gathered for the event including several distinguished visitors: Head of Zuromin District, Mayor of Zuromin City, Head of Education Department Municipal Office of the City of Zuromin, Headmaster of junior grammar school in Biezun, Headmaster of Polish secondary school in Zuromin, Headmaster of ZS nr 2 in Zuromin and Headmaster of SSP in Kliczewo. Another 140 people watched streaming video of the event on the internet. The contact highlighted the curriculum at the school covering modeling, telecommunications and robotics.

2. New Proposal Cycle for ARISS-US Contacts

NASA Teaching From Space (TFS) office is accepting proposals for ARISS-U.S. contacts to be held in the July 15, 2012 - January 15, 2013 time frame. The deadline for submitting proposals is January 30, 2012. The last informational session will be held on Wednesday, January 11 at 3 pm CST to answer any questions concerning the proposal process. To attend the session or to have questions answered, contact TFS at JSC-TFS-ARISS@mail.nasa.gov or call 281-244-1919.

For more information, see the TFS Web site:
http://www.nasa.gov/audience/foreducators/teachingfromspace/students/ariss.html

[ANS thanks Carol, KB3LKI, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the

President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Lee McLamb, KU4OS

```
From -8150040917223626423
X-Google-Thread: 10e8ad,c3e3572857f05e48
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Received: by 10.68.197.37 with SMTP id ir5mr4495425pbc.5.1326800438967;
        Tue, 17 Jan 2012 03:40:38 -0800 (PST)
Path: lh20ni192122pbb.0!nntp.google.com!news2.google.com!Xl.tags.giganews.com!
border1.nntp.dca.giganews.com!nntp.giganews.com!local2.nntp.dca.giganews.com!
nntp.bright.net!news.bright.net.POSTED!not-for-mail
NNTP-Posting-Date: Tue, 17 Jan 2012 05:40:38 -0600
Date: Tue, 17 Jan 2012 11:40:37 +0000
From: Scott <acepilotREMOVE@bloomer.net>
User-Agent: Mozilla/5.0 (Windows NT 5.0; rv:7.0.1) Gecko/20110929 Thunderbird/
7.0.1
MIME-Version: 1.0
Newsgroups: rec.radio.amateur.space
Subject: Re: Where are 2 line elements?
References: <4f016a2f.189078@news.nic.fi>
<31j4g7hft4ea64os5ha9klrb51po061ufq@4ax.com> <4f036bf8.31521653@news.nic.fi>
<je81i8$nfn$1@speranza.aioe.org> <4f0a4cec$0$19341$bbae4d71@news.suddenlink.net>
<jevm3t$r4j$1@speranza.aioe.org> <BJ-dneYUPvvyjonSnZ2dnUVZ_i2dnZ2d@bright.net>
<jf1ng7$f60$1@speranza.aioe.org>
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pIdH6bkhHHk8Xwd76FTC0eIKHkmRh+WLChqnZb1dUo4GTMftEftninWMK6KtlgC1pXoiKrekTFYt!
Wx4Mh/5sUg==
X-Abuse-and-DMCA-Info: Please be sure to forward a copy of ALL headers
X-Abuse-and-DMCA-Info: Otherwise we will be unable to process your complaint
properly
X-Postfilter: 1.3.40
X-Original-Bytes: 2140
Content-Type: text/plain; charset=ISO-8859-1; format=flowed
Content-Transfer-Encoding: 7bit
```

On 1-16-2012 17:41, Hils wrote:
> On 2012-01-16 12:09, Scott wrote:

>> On 1-15-2012 23:05, Hils wrote:
>>
>>>
>>> Anyone fancy building a new mode A satellite (with a PSK
>>> engineering/science beacon)? :-)
>>
>> I prefer mode K. Had a lot of fun with the old RS12 bird! :)
>
> Could have two piggybacked, like RS12/13. Perhaps with a shared command
> system and science module.

That would be very cool. I miss the ease of working those RS birds. I
used my Kenwood TS-520S as uplink on 15M and my Kenwood TS-690S for
downlink on 10M (stock, no preamp). Had a homebrew highpass filter on
the 690S to keep from overloading from the 520S during TX. Antennas
were simple dipoles for each band. Doesn't get any easier than that! :)

Scott

From -4378506824600528744
X-Google-Thread: 10e8ad,c3e3572857f05e48
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Received: by 10.68.190.99 with SMTP id gp3mr11769326pbc.1.1326838011388;
        Tue, 17 Jan 2012 14:06:51 -0800 (PST)
Path: lh20ni193727pbb.0!nntp.google.com!news1.google.com!news.glorb.com!feeder.erje.net!eternal-september.org!feeder.eternal-september.org!mx04.eternal-september.org!.POSTED!not-for-mail
From: Alan WA4SCA <WA4SCA@YAHOO.COM>
Newsgroups: rec.radio.amateur.space
Subject: Re: Where are 2 line elements?
Date: Tue, 17 Jan 2012 16:06:50 -0600
Organization: AMSAT-NA
Lines: 10
Message-ID: <11sbh7pdr2hts15g8tr0kv2jfggnmvtkvv@4ax.com>
References: <4f016a2f.189078@news.nic.fi>
<31j4g7hft4ea64os5ha9klrb51po061ufq@4ax.com> <4f036bf8.31521653@news.nic.fi>
<je81i8$nfn$1@speranza.aioe.org> <4f0a4cec$0$19341$bbae4d71@news.suddenlink.net>
<jevm3t$r4j$1@speranza.aioe.org> <BJ-dneYUPvvyjonSnZ2dnUVZ_i2dnZ2d@bright.net>
<jf1ng7$f60$1@speranza.aioe.org> <kMmdne_S4Myrw4jSnZ2dnUVZ_vudnZ2d@bright.net>
Reply-To: ALANBIDDLE70@YAHOO.COM
Mime-Version: 1.0
Injection-Info: mx04.eternal-september.org; posting-host="mYnsUO6xX/FCYOXNo9/yXQ";
     logging-data="27321"; mail-complaints-to="abuse@eternal-september.org";
     posting-account="U2FsdGVkX19Fuw1ZloO/gsqBvhnFz1uKP7Y+yZ3gYa0="
X-Newsreader: Forte Agent 6.00/32.1186
Cancel-Lock: sha1:r0Adk5LHlnsbq5HZPf1jNL2R51w=
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

They were fun, and easy. Unfortunately the days of cheap launches of satellites is about done. These days, the direction is for CubeSats, which are 4" on a side. It is possible to contemplate deploying an efficient 10 meter antenna from a 4" cube, but be certain to be far enough away from the project engineer so that he can't choke you.

--
Alan
WA4SCA

```
From -7577086223810862294
X-Google-Thread: 107ada,625bd993f2d04cd2,start
X-Google-NewGroupId: yes
X-Google-Thread: 10e8ad,625bd993f2d04cd2,start
X-Google-NewGroupId: yes
X-Google-Thread: 10b9c8,625bd993f2d04cd2,start
X-Google-NewGroupId: yes
X-Google-Attributes:
gida3e752f117,gid8f86f75953,gida4a23d5f63,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Received: by 10.68.189.202 with SMTP id gk10mr11808868pbc.4.1326839409462;
        Tue, 17 Jan 2012 14:30:09 -0800 (PST)
MIME-Version: 1.0
Path: lh20ni193793pbb.0!nntp.google.com!news2.google.com!
newsfeed2.dallas1.level3.net!news.level3.com!panix!rri.panix.com!robomod!not-for-
mail
From: SWPC.Webmaster@noaa.gov
Newsgroups:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.shor
twave,rec.radio.info
Subject: Weekly Highlights of Solar and Geomagnetic Activity, 09 - 15 January 2012
Followup-To:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.shor
twave
Date: Tue, 17 Jan 2012 17:30:08 EST
Organization: NOAA Space Weather Prediction Center
Lines: 57
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <20120117223001.92D6033C52@panix2.panix.com>
NNTP-Posting-Host: panix6.panix.com
X-Trace: reader1.panix.com 1326839408 772 166.84.1.6 (17 Jan 2012 22:30:08 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Tue, 17 Jan 2012 22:30:08 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to            rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
```

```
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump

:Product: Weekly Highlights and Forecasts
:Issued: 2012 Jan 17 1552 UTC
# Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center
# Product description and SWPC contact on the Web
# http://www.swpc.noaa.gov/weekly.html
#
#                 Weekly Highlights and Forecasts
#
```

Highlights of Solar and Geomagnetic Activity
09 - 15 January 2012

Solar activity was at low to moderate levels. Activity was low during 09 - 13 January. Moderate levels were reached on 14 January due to an M1 flare at 14/1318 UTC from new Region 1401 (N17, L = 218, class/area Dai/200 on 15 January). Activity returned to low levels on 15 January. There were no Earth-directed CMEs during the period.

No proton events were observed at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit was at normal to moderate levels during 09 - 12 January. Predominately normal levels were observed during 13 - 15 January.

Geomagnetic field activity was at mostly quiet levels during 09 - 12 January. Activity increased to quiet to unsettled levels on 13 January due to a coronal hole high-speed stream (CH HSS). Field activity decreased to quiet levels on 14 - 15 January.

Forecast of Solar and Geomagnetic Activity
18 January - 13 February 2012

Solar activity is expected to be at low levels with a chance for isolated M-class activity from Region 1401, 1402 (N27, L=215, class/area Dho/270 on 15 January) and old Region 1389 (S23, L=087), which is expected to return to the visible disk on 21 January.

No proton events are expected at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to be at normal flux levels during 18 January - 03 February. Normal to moderate levels are expected from 04 - 07 February following a CH HSS. Normal levels are expected for the remainder of the period.

Geomagnetic field activity is expected to be quiet on 18 January. Conditions are expected to be at quiet to unsettled levels with a chance for isolated active periods on 19 - 20 January due to a CME observed early on 16 January. Mostly quiet conditions are expected to return from 21 January - 01 February. Quiet to unsettled conditions are expected from 02 - 04 February due to a recurrent CH HSS. Predominately quiet conditions are expected from 05 - 08 February. A second CH HSS is expected to become geoeffective on 09 February bringing quiet to unsettled conditions. Mostly quiet conditions are expected on 10 - 11 February before becoming quiet to unsettled for the duration of the period due to a third CH HSS.

```
From 5534393223668806886
X-Google-Thread: 10e8ad,c3e3572857f05e48
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Received: by 10.68.190.99 with SMTP id gp3mr14342438pbc.1.1326912987303;
        Wed, 18 Jan 2012 10:56:27 -0800 (PST)
MIME-Version: 1.0
Path: lh20ni196960pbb.0!nntp.google.com!news1.google.com!eweka.nl!feeder.eweka.nl!
194.134.4.91.MISMATCH!news2.euro.net!goblin1!goblin3!goblin.stu.neva.ru!
newsfeed2.funet.fi!newsfeeds.funet.fi!feeder1.news.elisa.fi!uutiset.elisa.fi!
7564ea0f!not-for-mail
From: 202@nic.invalid (Mika)
Newsgroups: rec.radio.amateur.space
Subject: Re: Where are 2 line elements?
Reply-To: mika@nic.invalid
Message-ID: <4f1714ea.12210129@news.nic.fi>
References: <4f016a2f.189078@news.nic.fi>
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<jf1ng7$f60$1@speranza.aioe.org> <kMmdne_S4Myrw4jSnZ2dnUVZ_vudnZ2d@bright.net>
X-Newsreader: Forte Free Agent 1.21/32.243
Lines: 34
Date: Wed, 18 Jan 2012 18:56:41 GMT
NNTP-Posting-Host: 91.152.227.243
X-Complaints-To: newsmaster@saunalahti.com
X-Trace: uutiset.elisa.fi 1326912986 91.152.227.243 (Wed, 18 Jan 2012 20:56:26
EET)
NNTP-Posting-Date: Wed, 18 Jan 2012 20:56:26 EET
Organization: Elisa Customer
```

On Tue, 17 Jan 2012 11:40:37 +0000, Scott <acepilotREMOVE@bloomer.net> wrote:

```
>On 1-16-2012 17:41, Hils wrote:
>> On 2012-01-16 12:09, Scott wrote:
>>> On 1-15-2012 23:05, Hils wrote:
>>>
>>>>
>>>> Anyone fancy building a new mode A satellite (with a PSK
>>>> engineering/science beacon)? :-)
>>>
```

>>> I prefer mode K. Had a lot of fun with the old RS12 bird! :)
>>
>> Could have two piggybacked, like RS12/13. Perhaps with a shared command
>> system and science module.
>
>That would be very cool. I miss the ease of working those RS birds. I
>used my Kenwood TS-520S as uplink on 15M and my Kenwood TS-690S for
>downlink on 10M (stock, no preamp). Had a homebrew highpass filter on
>the 690S to keep from overloading from the 520S during TX. Antennas
>were simple dipoles for each band. Doesn't get any easier than that! :)
>
>Scott

I used a 5 watt 2m FM rig for uplink, connecting key to PTT line of microphone.
Antenna just 1/4
wavelenght vertical. RS-10 and RS-12 had very sensitive receivers...

Listening to my CW signal 10m downlink, could not tell that I was using 2m FM
radio.
Disadvantage was that I could tune my transmitting frequency in 25 kHz steps
only ;)

Mika

From -9039692041210139631
X-Google-Thread: 10e8ad,2f2078ddfdaa35a9,start
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII
Received: by 10.204.136.212 with SMTP id s20mr357172bkt.5.1327243922471;
        Sun, 22 Jan 2012 06:52:02 -0800 (PST)
MIME-Version: 1.0
Path: cj8ni126373bkb.0!nntp.google.com!news2.google.com!news.glorb.com!news-out.readnews.com!news-xxxfer.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-022 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sun, 22 Jan 2012 09:52:01 EST
Organization: The Radio Amateur Satellite Corporation
Lines: 578
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000f01ccd915$5ce05c90$16a115b0$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
X-Trace: reader1.panix.com 1327243922 19770 166.84.1.6 (22 Jan 2012 14:52:02 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 22 Jan 2012 14:52:02 +0000 (UTC)

```
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to            rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
```

AMSAT NEWS SERVICE
ANS-022

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:
- Fox-1: Solar Panel Campaign
- Amateur Radio Help Needed for RS-39 Deployment on January 24
- SKN on OSCAR 2012 Best Fist Nominations Due
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- Winners in the ARISSat-1/KEDR Chicken Little Contest
- Winners of the ARISSat-1/KEDR Grab the Last Telemetry Contest
- ARISS Status Report - 9 January 2012

SB SAT @ AMSAT $ANS-022.01
ANS-015 AMSAT News Service Weekly Bulletins

AMSAT News Service Bulletin 022.01
From AMSAT HQ SILVER SPRING, MD.
January 22, 2012
To All RADIO AMATEURS
BID: $ANS-022.01

Fox-1: Solar Panel Campaign

As AMSAT embarks on the Fox-1 Project, here is an opportunity to literally put your callsign on the Fox hardware. AMSAT is looking for major donations to help underwrite the cost of solar cells/ panels, one of the more significant expenses of the project. These solar cells are needed for the flight unit as well as for the a flight spare. As Fox-1 will have solar cells on all six sides of the spacecraft and given the relatively small surface area avail- able on each side (at most 4" by 4" per side), AMSAT will invest in high efficiency solar cells to gain as much power as possible to operate the spacecraft.

Complete details on how you can donate are posted on the web:
http://www.amsat.org - the top news item.

AMSAT President Barry Baines, WD4ASW, said, "We highlighted at the recent 2011 Symposium that AMSAT is actively developing Fox-1, a new spacecraft that is designed to replace AO-51. Fox-1 development now takes on a great sense of urgency."

AMSAT Vice-President of Engineering, Tony Monteiro, AA2TX says, "Fox-1 will advance single-channel FM repeater satellite operation beyond the experience of AO-51. It will advance AMSAT to the next generation of AO-51 class satellites."

Fox-1 is designed for longer operational life with these features:

+ Fox-1 is designed to operate in sunlight without batteries once the battery system fails. This applies lessons learned from AO-51 and ARISSat-1 operations.

+ In case of IHU failure Fox-1 will continue to operate its FM repeater in a basic, 'zombie sat' mode, so that the repeater remains on-the-air.

+ Fox-1 is designed as the immediate replacement for AO-51. Its U/V (Mode B) transponder will make it even easier to work with modest equipment.

+ From the ground user's perspective, the same FM amateur radio equipment used for AO-51 may be used for Fox-1.

+ Extending the design, Fox-2 will benefit from the development work of Fox-1 by adding more sophisticated power management and Software Defined Transponder (SDX) communications systems.

Barry concluded, "AMSAT's ability to provide a replacement spacecraft and get it launched is dependent upon the active support of donors who wish to see Fox-1 fly."

Several opportunities to make your donation to keep amateur radio in space include:

+ Return the form sent with the letter to reply with your donation

for the Fox-1 Project.
- All donations over $40 will receive a Fox pin.
- Donations of $120 or more qualify you for AMSAT President's Club

+ Call Martha at the AMSAT Office +1-888-FB AMSAT (1-888-322-6728)
+ Paypal donation widget on the main page at: http://www.amsat.org
+ Paypal donation widget for Project Fox at:
  http://www.amsat.org/amsat-new/fox/
+ You can also go to the Paypal site and send your donation to
  martha@amsat.org.
+ The AMSAT Store: http://www.amsat-na.com/store/categories.php

Project Fox web site provide a good overview of the technical progress of the new satellite: http://www.amsat.org/amsat-new/fox/

[ANS thanks AMSAT President Barry Baines, WD4ASW, and AMSAT's Project Fox Engineering team for the above information]

Amateur Radio Help Needed for RS-39 Deployment on January 24

The Chibis-M satellite,RS-39 is planned to be deployed from the Progress M-13M cargo ship into a 500 km orbit on January 24 at approximately 23:00-23:59 UTC.

RS-39 has CW beacons on 435.315 and 435.215 MHz that can be received directly by radio amateurs and schools for educational outreach purposes. Telemetry will be transmitted on these downlink frequencies. The RS-39 Morse Code telemetry format is available as an MS-Word document from: http://tinyurl.com/RS-39-Morse-Code-Telemetry

The RS-39 team is requesting support from amateur radio operators for any reception reports of Chibis-M. Special attention is needed during the first orbits as these are outside the range of control stations. Each report will be confirmed by special QSL card.

The Space Research Institute of the Russian Academy of Sciences (RAS) will activate an e-mail address for radio amateurs around to send reception reports. The http://chibis.cosmos.ru/ link is in Russian at present. (http://tinyurl.com/RS-39-Chibis-M is available in google English.)

Chibis-M arrived at the ISS on November 2, 2011 aboard the Progress M-13M cargo craft. It has been studying Terrestrial Gamma Ray Flashes which are hypothesized to be produced by beams of very energetic electrons, accelerated in the intense electric fields generated by large thunderstorm systems.

On January 23, 2012 Progress M-13M will undock from the ISS. Progress will then perform two orbital maneuvers to raise its orbit to 500 km. On January 24 Chibis-M will separate from the Progress cargo craft.

RS-39 also carries receivers listening between 0.1 - 40 kHz and 26-48 MHz for a space weather experiment.

Additional information can be found on these links:
http://www.uk.amsat.org/3910
http://www.energia.ru/en/iss/researches/geophis/19.html

[ANS thanks Trevor, M5AKA and AMSAT-UK for the above information]

SKN on OSCAR 2012 Best Fist Nominations Due

Many thanks to all who participated in AMSAT's Straight Key Night on OSCAR 2012. If you have not already done so, please take a moment to nominate someone you worked for Best Fist. Remember, your nominee need not have the best fist of those you heard, only of those you worked. Send your nomination to w2rs@amsat.org.

This year's event is dedicated to the memory of Don Brown, W1JSM, who passed away in 2011, aged 90. Don was a longtime, enthusiastic VHF/UHF and satellite operator, and one of our most frequent Best Fist winners.

Those nominated will be recognized in an ANS bulletin in early February, and in The AMSAT Journal.

[ANS thanks Ray Soifer, W2RS for the above information]

University of Liege Students Provide Update on OUFTI-1 D-Star Cubesat

The OUFTI-1 Newsletter, published by students at the University of Liege, Belgium reports they plan to have their D-Star transponder cubesat launched toward the end of 2012. The satellite will have uplinks in the 145 MHz band and downlinks on 435.015 and 435.045 MHz.

Subsystem status reports are written up on the following:

+ The components of the Attitude Control System were ordered and received. Two sets of one permanent magnet and four hysteretic rods are waiting for integration of engineering and flight models.

+ The Electrical Power Supply subsystem has its main functionalities implemented and tested. Some secondary functions, such as USB battery charger, are still to be implemented.

+ The antenna deployment mechanism subsystem was tested at Centre Spatial de Li�ge (CSL) last June. The tests were performed under vacuum at low (-60�C) and high (+60�C) temperatures. The tests proved the correct functioning of the system but it was also noticed that the deployment of the antennas could be blocked by a remaining part of the retention wire. This problem is currently being investigated in order to improve the design and guarantee the deployment.

+ The Communication subsystem is complete. Regarding the radio-frequency part (mainly amplifiers), some tests were performed on the receiver circuit and showed that improvements were needed. The transmitter circuit will be designed by Audric Hay (HELMO-Gramme). He will also integrate and test the whole subsystem.

+ The On-Board Computer software was coded and tested. This year, Alexei Dick (HEPL-INPRES) will develop a mode for pre-flight tests of the satellite.

+ Thermal Analysis showed that the system could not keep batteries above 0�C. The thermal control system was complemented with polymer insulators. Testing in June at CSL demonstrated this new solution worked.

+ The vibrational behavior of OUFTI-1 during launch was studied thanks to a detailed finite-element model. Gilles Bodson (HELMO-Gramme) will keep this model up-to-date and perform tests on the engineering model.

+ The Ground Station hardware is operational at the Montefiore Institute. The station is regularly used for satellite tracking. Alain Collette (HELMO-Gramme) will develop the Mission Control Software.

The OUFTI-1 team is planning for a launch towards the end of 2012. Opportunities have been identified and discussions are ongoing with a launch provider.

[ANS thanks the OUFTI-1 Newsletter for the above information]

More University Cubesat Projects Rolling Out

Japan: ITF-1 (YUI) CubeSat

Students at the University of Tsukuba are working on the ITF-1 (YUI) CubeSat project that is planned to be launched on a H-IIA rocket in 2013. The orbit will be 400 km by 350 km with an inclination of 65 degrees.

The formal name ITF-1 comes from the initial letter of the university slogan "Imagine The Future". The satellite also has a popular name YUI which means "bond" in Japanese, it came from the project's concept� "Creating the Worldwide Human Community".

The 435MHz satellite beacon will send telemetry by a Morse Code audio tone on an FM transmitter running 300 milliwats output. It should be possible to receive it using simple equipment such as a handheld transceiver or scanner. Telemetry information will be first compressed into binary data and then cut into 5 bits and converted into 10 - 15 Morse code messages.

Reception reports will be acknowledged with a certificate and the telemetry will be made available on the web.

The UTF-1 Project Manager is Ayano Okamura and you can read her blog:
http://tinyurl.com/ITF-1-ProjectManagerBlog

The Chief Tech blog by Asai Eisuke is at:
http://tinyurl.com/ITF-1-TechBlog

ITF-1 website in Google English http://tinyurl.com/CubeSat-ITF-1
AMSAT-UK posted this news at: http://www.uk.amsat.org/3809

Spain: Xatcobeo

Students at the University of Vigo in Spain have built Xatcobeo a CubeSat that carries a Software Defined Radio (SDR) and a solar panel deployment mechanism. A launch on an ESA Vega rocket in February is planned.

The IARU Amateur Satellite Coordination Panel pages report that it carries three payloads:

+ SRAD: a Software Defined Radio. The aim is to test under space conditions a reconfigurable radio. Different modulation schemes will be selected depending on the link conditions.

+ RDS: an ionizing radiation dosimeter. This dosimeter will take measurements of ionizing radiation in a typical LEO orbit for amateur satellites, thus increasing our knwoledge about radiation conditions in this environment.

+ PDM: a solar panel deployment mechanism to be tested in-flight.

Xatcobeo plans to use FFSK with AX.25 on UHF. These frequencies have been coordinated - Simplex 437.365 MHz and SSR downlink on 145.940 MHz.

Further info available at http://www.xatcobeo.com/ and a video at:
http://www.youtube.com/watch?feature�ayer_embedded&v�UmLhA7ioE

Pakistan: ICUBE-1 CubeSat

Students at the Institute of Space Technology (IST) built Pakistan's first CubeSat ICUBE-1. Like a number of new CubeSats its communications subsystem is capable of acting as an "AO-16 mode" FM to DSB transponder.

The IARU amateur satellite frequency coordination panel pages say that the VHF downlink will operate as a 1k2 BPSK beacon but has the capability of being configured as an FM-DSB transponder. A downlink on 145.947 MHz and an uplink on 435.060 MHz have been coordinated.

It is planned to have an imaging payload with a small low resolution CMOS sensor. The camera will be mounted on the Z+ face of the ICUBE and can take continental scale images.

ICUBE-1 is scheduled to be launched by Interorbital Systems.

ICUBE http://www.icube.org.pk/
Student Satellite Project http://www.ist.edu.pk/student_satellite.html
Institute of Space Technology (IST) http://www.ist.edu.pk/

[ANS thanks the student cubesat teams and AMSAT-UK for the above information]

NASA Launches STEM connector Website

The new STEMconnector website launched on Nov. 30, 2011. This new website serves as a national gateway to "who is doing what" in science, technology, engineering and mathematics, or STEM.

STEMConnector is a nationwide collaboration of companies, nonprofit associations and professional societies, STEM-related research and policy organizations, and academic institutions concerned about the plight of STEM education in the United States.

STEMConnector is designed to link "all things STEM" by constructing a comprehensive website that provides connections to national, state and local STEM entities and their own content through a variety of search tools.

Visit the new site to find state-by-state information, a blog, events and resources related to STEM: http://www.stemconnector.org/

[ANS thanks NASA Education Express for the above information]

Satellite Shorts From All Over

+ Bob McGwier N4HY has made available an extensive collection of amateur radio satellite pictures available for download. The pictures range from the early 1960?s with OSCAR's 1, 2, 3, etc. to the more recent Eagle and SuitSat: http://n4hy.smugmug.com/AMSAT

+ AMSAT Director of Awards, Bruce Paige, KK5DO wrote, "If you remember the photos a few weeks ago KC9ROI braving the cold to work ARISSat-1, I thought that was pretty neat and I had to get a Satellite Communicators Club Certificate to him and what better way than at one of his club meetings. I sent the certificate out the next day for a meeting they had Saturday, January 14. They framed the certificate and presented it to him." Photos posted on the club website, see: http://www.n9xh.org/

+ The 15th Annual Southeastern VHF Society Conference to be held in Charlotte, NC. on April 20-21, 2012. Papers and presentations are solicited on both the technical and operational aspects of VHF, UHF and Microwave weak signal amateur radio. The deadline for the submission of papers and presentations is February 17, 2012. The technical program is being handled by Robin Midgett, K4IDC. Send all questions & comments to Robin via: K4IDC at comcast dot net. Also refer to SEVHFS web pages at: http://www.svhfs.org/

+ VE7DAO/VA7ISS posted a video recorded during the final days of ARISSat-1/KEDR: http://tinyurl.com/ve7dao

+ The FUNcube amateur radio satellite project is featured on the website of Electronics Weekly: http://tinyurl.com/6twqvny

+ A visualization of the launch and deployment of 50 Cubesats in the QB50 project can be seen at: http://www.youtube.com/watch?v�s7nKVhjs4

+ The European Southern Observatory posted a video of a zoom sequence beginning at Earth, past the stars in our galaxy, and on to the center of the Milky Way galaxy in the constellation of Sagittarius: http://www.youtube.com/watch?v�HUNvEKUY8

+ Clint Bradford, K6LCS has been granted permission to reprint the QST article, "A 2 meter and 70 cm Portable Tape Measure Beam" by John Portune, W6NBC: http://www.work-sat.com/Work-Sat/Antennas_files/W6NBC-Beam.pdf

  Clint also has permission to reprint, "QRP to the ISS" by Doug Cook, KD5PDN, which appeared in the February, 2012 issue of QST. Doug walks the reader through building a simple tape measure beam, and how to successfully work the ISS with it and a handheld radio: http://www.work-sat.com/Work-Sat/Sat_Skeds_files/QRP-ISS_2.pdf

+ Congratulations to Ted, K7TRK on receiving VUCC Award #226. Ted commented, "My thanks to all who contributed with contacts and cards. Most of the blame goes to John, K8YSE, who got me started on the venture and to Loren, K7CWQ for continuing encouragement and advice."

+ A video by Doug Cook, KD5PDN, showing how to set up a Yaesu VX-8R for ISS APRS packet data sending and receiving and other aspects to make a digital contact with the International Space Station can be viewed at:
  http://www.youtube.com/watch?feature�ayer_embedded&v�S3EqRooN8

Winners in the ARISSat-1/KEDR Chicken Little Contest

The Chicken Little Contest received 77 entries from 17 different countries, and all continents except Antarctica. Based on comments sent along with the submissions, a wide variety of techniques were used. These ranged from detailed calculations, to comparisons with past satellites, to guesses based on birthdays.

The winners in each category are:

+ Kindergarten through grade 8: Cora Haefner, KK4ECV, Fort A.P. Hill, VA, USA

+ High School, grades 9 through 12: Cameron, Lancashire, UK

+ Adult: Thomas Frey, HB9SKA, Birr, Switzerland

Cora, KK4ECV and Thomas, HB9SKA were both within 15 hours of the best data we have from Space Track: approximately 0700 on 4 January 2012, in the South Atlantic.

All three winners have received an appropriate Chicken Little Certificate, and the congratulations of the ARISSat-1/KEDR Team. Thanks go to all those who entered, and especially educators who worked with students.

[ANS thanks the Alan Biddle, WA4SCA and the ARISSat-1/KEDR Team for the above information]

Winners of the ARISSat-1/KEDR Grab the Last Telemetry Contest

Thanks to the dedication of stations around the world, a nearly steady stream of digital telemetry reports were received in the final days from ARISSat-1/KEDR:

31 Dec -- 1125
01 Jan -- 1537
02 Jan -- 1541
03 Jan -- 1048
04 Jan -- 107

Many other reports were received from stations copying the voice, SSTV, and telemetry transmissions, as well as some contacts through the transponder.

The final digital data received was copied by both JA8TCH, Mori Seiji, Sapporo City, Japan, and JA0CAW, Tetsurou Satou, Niigata City, Japan. It was received at 06:02:14, 4 January, 2012, less than an hour before the estimated point of loss in the South Atlantic. Their data, combined with the submissions of many others, constitutes the most comprehensive coverage of the reentry of any amateur satellite. JA8TCH and JA0CAW will receive a certificate for their achievement. They and all who submitted telemetry throughout the ARISSat-1/KEDR mission have the thanks of the entire team.

[ANS thanks the Alan Biddle, WA4SCA and the ARISSat-1/KEDR Team
 for the above information]

Amateur Radio on the International Space Station (ARISS) Status Report
January 16, 2012

1.   Upcoming School Contact

Vrije Technische Scholen (VTS), located in Sint-Niklaas, Belgium has completed (ARISS) contact on Wednesday, January 18 at 09:47 UTC. VTS is a technical and professional secondary school for students ages 12 - 18. Lesson plans associated with this contact have been adapted for the different age and skill levels of the students and cover electricity, mechanics, antennas and space.

2.   Burbank Participates in ARISS Contact with Descartes High School

Descartes High School in Montigny-Le-Bretonneux, France participated in an Amateur Radio on the International Space Station (ARISS) contact with Dan Burbank, KC5ZSX on Monday, January 9. Burbank talked about how astronauts from different cultures get along on the ISS and fielded questions about the various experiments performed onboard the Space Station. About three hundred students and visitors were present for the event, including Astronaut Leopold Eyharts who exchanged greetings with Burbank. Presentations were given before the contact and a Question and Answer session followed. The ARISS contact was a featured activity for students who have been studying life and work on the ISS and through collaboration with the town's amateur radio club, have also been learning about radio and wireless technology. NASA has posted video of

the event on its Web site. See:
http://www.nasa.gov/multimedia/videogallery/index.html?media_id84835
0
1

3. Belgian Students Radio Andre Kuipers

On Friday, January 13, an Amateur Radio on the International Space Station (ARISS) contact was held between students from Atheneum Borgloon in Belgium and Astronaut Andre Kuipers, PI9ISS on the ISS. The radio connection was provided by telebridge station K6DUE in Greenbelt, Maryland. The ARISS event highlighted a science curriculum covering the history of space travel, the solar system and the ISS. Other activities included space workshops and a field trip to the Eurospace Center in Transinne. Approximately 100 people tied into the contact through streaming video on the internet.

4. ARISS Contact Article in Canadian Magazine

The January/February 2012 issue of the Canadian Amateur Magazine (TCA) has a great article on an ARISS contact held in Thetford Mines, Qu�bec on November 14, 2011. The contact was arranged by a fourteen year old at the school. The story, written by ARISS Delegate Maurice-Andr� Vigneault, VE3VIG, is titled, "Quebec Youth Masters ISS Contact." A photo and the table of contents may be viewed at:
http://www.rac.ca/tca/

5. KPARC ARISS Presentation

ARISS volunteer Dave Jordan, AA4KN gave a talk on the ARISS program during the Sun City, Florida Kings Point Amateur Radio Club (KPARC) monthly meeting on January 9. His presentation covered basic operations of the ARISS organization, a brief history of ARISS beginning with SAREX and a section discussing the ARISSat-1 mission during which he showed released photos and others that illustrated the assembly, testing and general development efforts that took place in the Orlando lab. In concluding his talk, Jordan suggested that the club members form a group to meet with local schools and encourage them to submit proposals for future ARISS contacts. Some photos from the presentation are available here: http://www.kparc.org/archive/aa4kn.htm

6. Astronaut Training Status

Astronaut Alexander Gerst is interested in earning his amateur radio license and will be participating in training sessions in February. He is scheduled to fly with Expedition 40 in May 2014.

[ANS thanks Carol, KB3LKI, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors

to AMSAT Project Funds, will be eligible to receive additional benefits.
Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Dee Interdonato, NB2F
Nb2f at amsat dot org

```
From -5034812249999369420
X-Google-Thread: 10e8ad,c3e3572857f05e48
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Received: by 10.68.213.68 with SMTP id nq4mr5089212pbc.2.1327318714818;
        Mon, 23 Jan 2012 03:38:34 -0800 (PST)
Path: lh20ni214712pbb.0!nntp.google.com!news2.google.com!news1.google.com!
Xl.tags.giganews.com!border1.nntp.dca.giganews.com!nntp.giganews.com!
local2.nntp.dca.giganews.com!nntp.bright.net!news.bright.net.POSTED!not-for-mail
NNTP-Posting-Date: Mon, 23 Jan 2012 05:38:26 -0600
Date: Mon, 23 Jan 2012 11:38:26 +0000
From: Scott <acepilotREMOVE@bloomer.net>
User-Agent: Mozilla/5.0 (Windows NT 5.0; rv:7.0.1) Gecko/20110929 Thunderbird/
7.0.1
MIME-Version: 1.0
Newsgroups: rec.radio.amateur.space
Subject: Re: Where are 2 line elements?
References: <4f016a2f.189078@news.nic.fi>
<31j4g7hft4ea64os5ha9klrb51po061ufq@4ax.com> <4f036bf8.31521653@news.nic.fi>
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<jevm3t$r4j$1@speranza.aioe.org> <BJ-dneYUPvvyjonSnZ2dnUVZ_i2dnZ2d@bright.net>
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<11sbh7pdr2hts15g8tr0kv2jfggnmvtkvv@4ax.com> <jf7g7k$og3$1@speranza.aioe.org>
<50roh75hvt2t1gdrgqbbgsmbak4qen8nbc@4ax.com> <jfic7g$5ko$1@speranza.aioe.org>
In-Reply-To: <jfic7g$5ko$1@speranza.aioe.org>
Message-ID: <s_CdnU4mCfMv24DSnZ2dnUVZ_qmdnZ2d@bright.net>
Lines: 13
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NNTP-Posting-Host: 64.33.199.218
X-Trace: sv3-
UZeSxFRTHBSVufBoFKSfqmRD4JeRSgt3HAuvombHfvV7HehFSZaAX5sMsGCsFFZxAFwgW8H8Y9ScC0K!
XbE0AqzD0pvzl6kOfmfPpyJsarIjg9ZyxDQh+l9fl8CpFBfRb7EeO1LhZ85qvFpf7NxkF7nFwIIe!
uOFTtN1zag==
X-Abuse-and-DMCA-Info: Please be sure to forward a copy of ALL headers
X-Abuse-and-DMCA-Info: Otherwise we will be unable to process your complaint
properly
X-Postfilter: 1.3.40
X-Original-Bytes: 2147
Content-Type: text/plain; charset=ISO-8859-1; format=flowed
Content-Transfer-Encoding: 7bit
```

On 1-23-2012 01:13, Hils wrote:

>
> Well, that explains the decisive shift to nanosats. A review of some
> recent cubesats isn't exactly inspiring. I could be wrong, but I suspect
> that an analysis of launch and deployment successes and mission
> accomplishments wouldn't look too good by comparison with the earlier
> generations of larger sats. Those of us who worked through or heard
> Oscars 9,10,11,13 and the RS-xx birds may have seen the golden age.

I agree with that 100%...we did see the golden age. Doesn't look too
good for SSB in the future :(

```
From -7854448228129632268
X-Google-Thread: 107ada,e3782fa0894b86d8,start
X-Google-NewGroupId: yes
X-Google-Thread: 10e8ad,e3782fa0894b86d8,start
X-Google-NewGroupId: yes
X-Google-Thread: 10b9c8,e3782fa0894b86d8,start
X-Google-NewGroupId: yes
X-Google-Attributes:
gida3e752f117,gid8f86f75953,gida4a23d5f63,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Received: by 10.68.75.170 with SMTP id d10mr3067862pbw.6.1327444382157;
        Tue, 24 Jan 2012 14:33:02 -0800 (PST)
MIME-Version: 1.0
Path: lh20ni220160pbb.0!nntp.google.com!news2.google.com!news1.google.com!
newsfeed2.dallas1.level3.net!news.level3.com!panix!rri.panix.com!robomod!not-for-
mail
From: SWPC.Webmaster@noaa.gov
Newsgroups:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.shor
twave,rec.radio.info
Subject: Weekly Highlights of Solar and Geomagnetic Activity, 16 - 22 January 2012
Followup-To:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.shor
twave
Date: Tue, 24 Jan 2012 17:33:01 EST
Organization: NOAA Space Weather Prediction Center
Lines: 71
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <20120124223001.E47EC33C52@panix2.panix.com>
NNTP-Posting-Host: panix6.panix.com
X-Trace: reader1.panix.com 1327444381 28782 166.84.1.6 (24 Jan 2012 22:33:01 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Tue, 24 Jan 2012 22:33:01 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
```

X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump

```
:Product: Weekly Highlights and Forecasts
:Issued: 2012 Jan 24 2144 UTC
# Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center
# Product description and SWPC contact on the Web
# http://www.swpc.noaa.gov/weekly.html
#
#                Weekly Highlights and Forecasts
#
```

Highlights of Solar and Geomagnetic Activity
16 - 22 January 2012

Solar activity reached moderate levels as Regions 1401 (N18, L=213, class/area Eki/540 on 19 January) and 1402 (N28, L=214, class/area Eko/630 on 17 January) both produced M-class events. Region 1401 produced an M1/1n on 17/0453Z and an M1/1n on 18/1912Z. Region 1402 followed with an M3/2n on 19/1605Z. The 19 January event was associated with and Type IV radio emission and a full halo CME. Type II emissions were detected on 19/1252Z and 19/1933Z with speeds of 933 km/s and 694 km/s respectively. Partial halo CMEs were also observed on 16 and 18 January. Activity decreased to very low levels late on 19 January. Isolated low-level C-class flares were observed on 20 - 22 January. Plage Region 1396 (N27, L=287, class/area Dao/110 on 17 January) produced a C1 flare at 20/2112Z associated with a Type II radio sweep (945 km/s) and a non-Earth-directed CME. Region 1402 produced a long-duration C1 flare at 20/2333Z associated with a weak Type IV radio sweep.

An enhancement of the greater than 10 MeV proton flux at geosynchronous orbit began around 20/0800Z and continued through the end of the period.

The greater than 2 MeV electron flux at geosynchronous orbit was at normal to moderate levels the entire period.

Geomagnetic field conditions ranged from quiet to unsettled levels, with a brief excursion into active-major storm levels at high latitudes on 22 January. Field conditions were predominately quiet from 17-21 January. On 22 January, an interplanetary shock passed the ACE spacecraft at approximately 22/0514Z, likely indicating the arrival of the full-halo CME observed on 19 January in LASCO imagery. This was followed by a geomagnetic sudden impulse (SI) at 22/0614Z (31 nT observed by the boulder magnetometer). Field activity increased to unsettled to major storm levels at high latitudes following the SI.

Forecast of Solar and Geomagnetic Activity
25 January - 20 February 2012

Solar activity is expected to be low with M-class flares likely until Regions 1401 and 1402 depart on 28 January. Predominantly quiet levels are expected for the remained of the period.

Protons greater than than 10 MeV are expected to remain above event threshold from 25 - 26 January. A return to background levels is expected for the remainer of the period.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to be at normal to moderate levels the entire period.

The geomagnetic field is expected to be at active to minor storm levels on 25 January as effects from the CME from 23 January wane. Quiet levels are expected on 26 January. Quiet to unsettled levels are expected on 27 January as a coronal hole high speed stream (CH HSS) becomes geoeffecitve. A return to quiet levels is expected until 02 - 03 February, with quiet to unsettled levels expected as another CH HSS becomes geoeffective. Predominantly quiet levels are expected from 04-08 February. Another CH HSS is expected to become geoeffective with quiet to unsettled levels expected from 09-10 February. Predominantly quiet levels are expected for the remainder of the period.

```
From 6253257404774305755
X-Google-Thread: 10e8ad,c3e3572857f05e48
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Received: by 10.68.75.170 with SMTP id d10mr4284847pbw.6.1327486224463;
        Wed, 25 Jan 2012 02:10:24 -0800 (PST)
Path: lh20ni221970pbb.0!nntp.google.com!news2.google.com!eweka.nl!feeder.eweka.nl!
62.179.104.142.MISMATCH!amsnews11.chello.com!newsfeed.xs4all.nl!
newsfeed6.news.xs4all.nl!xs4all!post.news.xs4all.nl!not-for-mail
Newsgroups: rec.radio.amateur.space
From: Rob <nomail@example.com>
Subject: Re: Where are 2 line elements?
References: <4f016a2f.189078@news.nic.fi>
 <31j4g7hft4ea64os5ha9klrb51po061ufq@4ax.com>
 <4f036bf8.31521653@news.nic.fi> <je81i8$nfn$1@speranza.aioe.org>
 <4f0a4cec$0$19341$bbae4d71@news.suddenlink.net>
 <jevm3t$r4j$1@speranza.aioe.org>
 <BJ-dneYUPvvyjonSnZ2dnUVZ_i2dnZ2d@bright.net>
 <jf1ng7$f60$1@speranza.aioe.org>
 <kMmdne_S4Myrw4jSnZ2dnUVZ_vudnZ2d@bright.net>
 <11sbh7pdr2hts15g8tr0kv2jfggnmvtkvv@4ax.com>
 <jf7g7k$og3$1@speranza.aioe.org>
 <50roh75hvt2t1gdrgqbbgsmbak4qen8nbc@4ax.com>
 <jfic7g$5ko$1@speranza.aioe.org>
 <s_CdnU4mCfMv24DSnZ2dnUVZ_qmdnZ2d@bright.net>
 <jfne92$ccd$1@speranza.aioe.org>
```

User-Agent: slrn/pre0.9.9-111 (Linux)
Mime-Version: 1.0
Message-ID: <slrnjhvl8f.c32.nomail@xs8.xs4all.nl>
Date: 25 Jan 2012 10:10:23 GMT
Lines: 23
NNTP-Posting-Host: 2001:888:0:1::888
X-Trace: 1327486223 news.xs4all.nl 6881 [2001:888:0:1::888]:56390
X-Complaints-To: abuse@xs4all.nl
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Hils <hils@saynotospam.net> wrote:
> During the early 1980s, much home tracking of circular orbits was done
> using a map of the world with rotating transparent cursors on which were
> printed a satellite's track from predicted equatorial crossing times.
> Computer satellite tracking was first done using a roughly circular
> model, later a model based on Kepler's equations with corrections for
> gravity and drag. (The now-ubiquitous SGP4 model wasn't published until
> 1988.)

> James Miller became something of a legend with his articles on things as
> diverse as tracking software (anyone remember plan-10?), adding the sun

The tracking software used by the vast majority of amateurs in the
early days was not by James Miller but by Tom Clark, W3IWI.

When my google searches are correct, this program, "BASIC Orbits",
was published in 1981. It used kepler elements.

I used this program for quite some time on 8-bit microcomputers of
those days, first to calculate AO-10 passes and later modified it a
lot to control my antennas during passes of PACSAT-class satellites.
(LEO sats that you wanted to track automatically because there already
was so much to do during the pass)

From -7226597071545446200
X-Google-Thread: 10e8ad,c3e3572857f05e48
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Received: by 10.68.190.99 with SMTP id gp3mr274296pbc.1.1327513454748;
        Wed, 25 Jan 2012 09:44:14 -0800 (PST)
Path: lh20ni223130pbb.0!nntp.google.com!news1.google.com!eweka.nl!feeder.eweka.nl!
194.109.133.85.MISMATCH!newsfeed.xs4all.nl!newsfeed6.news.xs4all.nl!xs4all!
post.news.xs4all.nl!not-for-mail
Newsgroups: rec.radio.amateur.space
From: Rob <nomail@example.com>
Subject: Re: Where are 2 line elements?
References: <4f016a2f.189078@news.nic.fi>
 <31j4g7hft4ea64os5ha9klrb51po061ufq@4ax.com>
 <4f036bf8.31521653@news.nic.fi> <je81i8$nfn$1@speranza.aioe.org>
 <4f0a4cec$0$19341$bbae4d71@news.suddenlink.net>

```
 <jevm3t$r4j$1@speranza.aioe.org>
 <BJ-dneYUPvvyjonSnZ2dnUVZ_i2dnZ2d@bright.net>
 <jf1ng7$f60$1@speranza.aioe.org>
 <kMmdne_S4Myrw4jSnZ2dnUVZ_vudnZ2d@bright.net>
 <11sbh7pdr2hts15g8tr0kv2jfggnmvtkvv@4ax.com>
 <jf7g7k$og3$1@speranza.aioe.org>
 <50roh75hvt2t1gdrgqbbgsmbak4qen8nbc@4ax.com>
 <jfic7g$5ko$1@speranza.aioe.org>
 <s_CdnU4mCfMv24DSnZ2dnUVZ_qmdnZ2d@bright.net>
 <jfne92$ccd$1@speranza.aioe.org> <slrnjhvl8f.c32.nomail@xs8.xs4all.nl>
 <jfp1k1$kj4$1@speranza.aioe.org>
User-Agent: slrn/pre0.9.9-111 (Linux)
Mime-Version: 1.0
Message-ID: <slrnji0fqm.mot.nomail@xs8.xs4all.nl>
Date: 25 Jan 2012 17:43:50 GMT
Lines: 41
NNTP-Posting-Host: 2001:888:0:1::888
X-Trace: 1327513430 news.xs4all.nl 6862 [2001:888:0:1::888]:54454
X-Complaints-To: abuse@xs4all.nl
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
```

Hils <hils@saynotospam.net> wrote:

> It would be kind of neat to be able to combine the interesting satellites of the 1980s and early 1990s with today's whizzy home PCs, broadband and internet. CubeSats are better than nothing, but they're not the same.

The problem with internet is that any communication that you can do via amateur satellites can now be easier and more efficiently done via internet.

In the PACSAT days it was really cool to have a flying fileserver where you could upload files of about 0-100KB size (up to maybe 400KB) and then later download them at any other location around the globe. It was used to share small documents and pictures between amateurs around the globe, and to forward messages between terrestrial packet BBSes in parallel to the existing 300 baud packet network on 20m.
There was no real alternative to transferring data like that, except by telephone modem on international calls. The broad public had not yet seen e-mail and worldwide networks.

You needed to setup a quite specialized station (AZ/EL steerable yagis on 2m and 70cm, preferably with automatic control, computer with special software for up- and downloading, special modem, etc) and then you could upload such a file in one or multiple passes of the LEO sat and all the others in the footprint could receive it on the downlink, also often taking several passes for a larger file to be completed.

It was fun. I still have all the files I received that way stored on a 250 MB harddisk.

Today, I can transfer such a file to anywhere in the world in .1 second.

That has taken much of the fun out of doing it via amateur satellite, and certainly the incentive for any newcomer to spend all the effort and money required to do this.

You need to consider that change in global communication whenever you suggest a new experiment in amateur satellites that is all alike it was 25 years ago. Just like 25 years ago many of us had a 2m portable and carried it around at hamfests or even when shopping in the city, being able to communicate with others while not being at home and using the telephone. Today, everyone can do that with their GSM.

```
From -4547908562190614884
X-Google-Thread: 10e8ad,b4a9d74d8bc15752,start
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Received: by 10.205.129.8 with SMTP id hg8mr1090221bkc.6.1327803916522;
        Sat, 28 Jan 2012 18:25:16 -0800 (PST)
Path: cj8ni150782bkb.0!nntp.google.com!news1.google.com!news2.google.com!
newsfeed2.dallas1.level3.net!news.level3.com!panix!rri.panix.com!robomod!not-for-
mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-029 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sat, 28 Jan 2012 21:25:16 EST
Organization: The Radio Amateur Satellite Corporation
Lines: 466
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <002201ccde2d$388b7560$a9a26020$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
X-Trace: reader1.panix.com 1327803916 11484 166.84.1.6 (29 Jan 2012 02:25:16 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 29 Jan 2012 02:25:16 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Type: text/plain;charset="us-ascii"
Content-Transfer-Encoding: 7bit
Content-Language: en-us
```

AMSAT NEWS SERVICE

ANS-029

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:

* January 30 Announcement Date for NASA ELaNa CubeSat Launch Initiative
* ARISSat-1/KEDR Legacy Lives on in the DK3WN SatBlog
* Fifty Years: OSCAR-1 Celebration Continues
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* Opportunity for Citizen Scientists: Globe At Night Project
* Last Call for SKN on OSCAR 2012 Best Fist Nominations
* SumbandilaSat SO67 Reported Beyond Repair
* Satellite Shorts From All Over

SB SAT @ AMSAT $ANS-029.01
ANS-029 AMSAT News Service Weekly Bulletins

AMSAT News Service Bulletin 029.01
>From AMSAT HQ SILVER SPRING, MD.
January 29, 2012
To All RADIO AMATEURS
BID: $ANS-029.01

January 30 Announcement Date for NASA ELaNa CubeSat Launch Initiative

AMSAT-NA is waiting to hear whether our proposal to include the Fox-1 cubesat in NASA's "Educational Launch of NanoSat" (ELaNa) program has been accepted. NASA selects projects that they deem to have merit in support of their strategic and educational goals. Projects that are selected will be able to enter into a collaboration agreement where NASA will cover the integration and launch costs of the satellite.

AMSAT, working with ARRL, highlighted the educational merit of the project including the incorporation of Fox-1 into the ARRL Teacher Institute seminars. ARRL also provided a letter of support for the project that was a key component of our proposal.

The Clay Center for Science and Technology at the Dexter and Southfield schools in Brookline, MA, also provided a letter of support that was an important part of our proposal. The Clay Center noted that they use AMSAT satellites such as ARISSat-1 in their educational activities for K-12 students and that they look forward to making use of Fox-1.

The completed proposal, at 159 total pages, required a significant effort that was all done by volunteers. NASA will select from all of the submissions and announce the winning projects by January 30, 2012.

[ANS thanks the Fox-1 Project Team for the above information]

ARISSat-1/KEDR Legacy Lives on in the DK3WN SatBlog

Tune your browser to http://www.dk3wn.info/p/?p=25476 to enjoy a unique ARISSat-1 sound archive on-line.

Thanks to Mike Rupprecht, DK3WN, ARISSat-1's identifier message, "Hi this is ARISSat-1 Amateur Radio Satellite RS01S", has been recorded and archived on the web. The DK3WN SatBlog has posted the ID, the female voice spoken telemetry, male voice spoken telemetry.

Also, 25 audio files of the messages by children of countries around the world transmitted by ARISSat-1 along with the translated sentence are included. The "secret word" appears in the last of the message of each country.

ARISSat-1's international greetings are in Japanese, Bengali, Flemish, Chinese, Dutch, Spanish (Spain), Spanish (South America), Spanish (Puerto Rico), Afrikaans, Portuguese, French, English (UK), English (Canada), English (USA), German, Swedish, Catalonian, Nepalese, Russian, and Hebrew. The message is displayed in its native tongue and an English translation.

[ANS thanks Mike Rupprecht, DK3WN and Mineo Wakita, JE9PEL for the above information]

Fifty Years: OSCAR-1 Celebration Continues

The ARRL has posted a new, highly informative article on how the world's first Amateur Radio satellite, OSCAR-1, came to be designed, built and launched.

The ARRL's Space Communication web page has an English translation of, "OSCAR-1 Launched 50 Years Ago", written by Andreas Bilsing, DL2LUX. This article was first published in the German magazine Funkamateur. It is reprinted with their permission. OSCAR-1 was launched just over 50 years ago, on December 12, 1961.

See the ARRL Space Communication web page at:
http://www.arrl.org/space-communication

A direct link the the article in English is:
http://www.arrl.org/files/file/Technology/Bilsing.pdf

Andreas lives in Leipzig, Germany. He is a member of AMSAT-DL and has written articles in the AMSAT-DL Journal and Funkamateur. He also wrote the first German Summits on the Air (SOTA) manual. His other interests include home brewing, qrp, digimodes and satellites.

Licensed since 1975 at age 16 he has held prior calls of DM4MTG, DM2FAG, Y26AG, and Y23AM. He holds degrees in energy process engineering and automation which is applies to his work in an engineering company as project manager in natural gas, responsible for instrumentation of gas plants, pipelines and underground gas storage.

Andreas says the view from his shack includes Leipzig's St. Thomas church where the famous composer J. S. Bach worked.

The AMSAT 2011 Space Symposium in San Jose, California featured Lance Ginner, K6GSJ, one of the OSCAR-1 developers as our banquet speaker. Lance's talk can be viewed at: http://youtu.be/EWSCCZY1FgQ.

MilSatMagazine.com mentions OSCAR-1 in an article about early U.S. Recon Satellites in the October 2011 issue:
http://www.milsatmagazine.com/2011/MSM_Oct_2011.pdf
OSCAR-1 rode to orbit with the Discoverer-36 satellite.

A copy of the OSCAR 1 slides used at AMSAT's display during Space Day at the National Air and Space Museum in Washington, D.C. can be downloaded from AMSAT-NA at:
http://tinyurl.com/OSCAR-1-Presentation (pdf ~5MB)

[ANS thanks the ARRL, AMSAT, Andreas Bilsing DL2LUX and amsat-bb for the above information]

Chibis-M RS-39 Deployed - Signals Heard Intermittently

The Chibis-M satellite, RS-39, was deployed from the Progress M-13M cargo ship into a 500 km orbit on January 24, as planned. RS-39 has CW beacons on 435.315 and 435.215 MHz.

The RS-39 team requested support from amateur radio operators for any initial reception reports of Chibis-M as its first orbits were outside of the range of the satellite's control stations. Reception reports are being received by e-mail to: amateur-rs39@chibis.cosmos.ru. Each report will be confirmed by a special QSL card.

Shortly after RS-39 was deployed reception reports posted on amsat-bb said strong signals initially were heard in India (VU3TYG, VU2WMY), United States (KB1PVH), Australia (VK5DG), Argentina (LU4EOU), and central Europe (Jakub Hruska).

Nitin, VU3TYG posted a short video of receiving RS-39 at his QTH: http://www.youtube.com/watch?v=l4db7uToltI

On later orbits VKFAK reported the telemetry showed a drop in voltage aboard RS-39 to 2.8 volts in USUN telemetry field. At this time a report from VU2WMY said the CW signal was only heard briefly at AOS. RS-39 was not heard on a morning pass on January 25 over North Amerca from a report by W1MSG.

Google translation of http://chibis.cosmos.ru/ reports that the control station switched off RS-39 after initial testing was completed on the fourth orbit to save battery power. When testing resumes plans included calibration of the magnetometer, calibration of solar sensors, and testing the three-axis attitude determination algorithm using the magnetometer and sun sensor. Later postings from the control station show they are switching RS-39 on and off at various times.

Mike Rupprecht DK3WN has made available software to decode the RS-39 telemetry. A description of the program is posted by AMSAT-UK at: http://www.uk.amsat.org/4029. This page includes links to download the software. Mike has created telemetry decoder software for several satellites. These can be found DK3WN satellite software page: http://tinyurl.com/DK3WN-Sat-Software (in Google English).

Amateur stations tracking RS-39 reported that elements associated International launch number 11062C, catalog 38051 correlated with RS-39. Other stations reported success using the tracking elements for the Progress M-13M cargo ship, however the orbits between RS-39 and Progress were beginning to separate.

Web tracking of Chibis-M, RS-39 can found at this page: http://chibis.cosmos.ru/cyclogr/prepare1/google/index.html

Keplerian elements can be found by clicking the two small gears icon in the upper left corner of the map; then select Satellites from the menu that pops up; then select RS-39.

A video from Roscosmos showing the RS-39 deploymnet from the Progress M-13M cargo ship an be found here: http://www.roscosmos.ru/main.php?id=216

[ANS thanks the reporting stations for their signal reports and the above information]

VEGA Preparations Proceeding Toward February 9 Launch

Space-Travel.com published an article reporting that final checkout of Europe's new Vega launcher has been completed marking another milestone towards its February 9 maiden flight from Europe's Spaceport in Kourou, French Guiana.

All four stages have undergone final acceptance, including the testing of the avionics, guidance, telemetry, propulsion, separation pyrotechnics and safety systems. These steps culminated on 13 January with Vega's 'synthesis control checks', where all systems were put into launch mode for the vehicle's final acceptance. This included pressurizing the AVUM propulsion systems that actuate the thruster valves. The rocket's elements were switched on from the control bench to simulate the launch countdown. The onboard software then took over and simulated the different stages of a flight. The interfaces between the vehicle and the control bench were also tested. The test review confirmed that everything ran as expected and that the launcher is ready for flight.

Vega is designed to launch payload masses ranging from 300 kg to 2500 kg, depending on the type and altitude of the orbit required by the customers. The benchmark is for 1500 kg into a 700 km altitude polar orbit.

http://www.esa.int/SPECIALS/Vega/
http://tinyurl.com/vega-update (space-travel.com)

+ Xatcobeo (a collaboration of the University of Vigo and INTA, Spain) to demonstrate software-defined radio and solar panel deployment.

+ Robusta (University of Montpellier 2, France) to test and evaluate radiation effects (low dose rate) on bipolar transistor electronic components.

+ e-st@r (Politecnico di Torino, Italy) to demonstration of an active 3-axis Attitude Determination and Control system including an inertial measurement unit.

+ Goliat (University of Bucharest, Romania) to provide imaging of the Earth surface using a digital camera and in-situ measurement of radiation dose and micrometeoroid flux.

+ PW-Sat (Warsaw University of Technology, Poland) to test a deployable atmospheric drag augmentation device for de-orbiting CubeSats.

PW-Sat carries an FM to DSB amateur radio transponder with an FM input on 435.020 MHz and DSB output on 145.900 MHz.

+ MaSat-1 (Budapest University of Technology and Economics): to demonstrate various spacecraft avionics, including a power conditioning system, transceiver and on-board data handling.

+ UniCubeSat GG - (University of Rome): The UNICubeSat mission goal is the in situ measurement of atmospheric density. Downlink frequencies are 437.305 MHz or 437.345 MHz 9k6 FSK.

ESA CubeSats delivered for first Vega flight news web page:
http://www.esa.int/esaMI/Education/SEM3L0WWVUG_0.html

ESA Education - CubeSats
http://www.esa.int/esaMI/Education/SEM3N03MDAF_0.html

A picture of ALMASat-1 and the six CubeSats is posted at AMSAT-UK:
http://tinyurl.com/c8o73zw (uk.amsat.org)

Mineo Wakita, JE9PEL provides complete coverage of the Vega launch on his 'ESA CubeSats Update' web pages. You'll find an overview of each of the satellite missions, frequencies, modulation/protocols, and links to the developers home web pages posted at:
http://www.ne.jp/asahi/hamradio/je9pel/esa9cubf.htm

[ANS thanks Space-Travel.com, ESA, JE9PEL for the above information]

Opportunity for Citizen Scientists: Globe At Night Project

The GLOBE at Night program is an international campaign to raise public awareness of the impact of light pollution by inviting citizen scientists to measure their night sky brightness and to submit their observations to a website from a computer or smart phone.

The GLOBE at Night campaign has run for two weeks each winter/spring for the last six years. People in 115 countries have contributed 66,000 measurements, making GLOBE at Night one of the most successful light pollution awareness campaigns.

See http://www.globeatnight.org/ for details.

In 2012 there remain three opportunities to participate in GLOBE at Night: February 12-21, March 13-22, April 11-20.

This project consists of five Easy Star-Hunting Steps:

1) Find your latitude and longitude.
2) Find Orion, Leo or Crux by going outside more than an hour

after sunset (about 8-10pm local time).
3) Match your nighttime sky to one of our magnitude charts.
4) Report your observation.
5) Compare your observation to thousands around the world.

Teacher Activity Packets and Family Activity Packets are available from the website.

[ANS thanks the Globe At Night project for the above information]

Last Call for SKN on OSCAR 2012 Best Fist Nominations

Many thanks to all who participated in AMSAT's Straight Key Night on OSCAR 2012. If you have not already done so, please take a moment to nominate someone you worked for Best Fist. Remember, your nominee need not have the best fist of those you heard, only of those you worked. Send your nomination to w2rs@amsat.org.

This year's event is dedicated to the memory of Don Brown, W1JSM, who passed away in 2011, aged 90. Don was a longtime, enthusiastic VHF/UHF and satellite operator, and one of our most frequent Best Fist winners.

Those nominated will be recognized in an ANS bulletin in early February, and in The AMSAT Journal.

[ANS thanks Ray Soifer, W2RS for the above information]

SumbandilaSat SO67 Reported Beyond Repair

The Southern Africa SA AMSAT web page (http://www.amsatsa.org.za/) lists the current status of SumbandilaSat SO67 as, "No service all activities suspended; Beacon is not operational."

AMSAT-UK has published the news from South African Defence Web pages (http://www.defenceweb.co.za) in an article titled, "SumbandilaSat beyond repair", South Africa's second satellite, SumbandilaSat, is no longer fulfilling its main purpose due to technical problems and is essentially beyond repair, its maker SunSpace says.

SunSpace, told defenceWeb that although contact can still be made with the satellite, it cannot capture images and is thus "not fulfilling its main purpose".

He said that chances of repairing the satellite are virtually zero and that SunSpace has moved on to other projects.

SumbandilaSat was damaged during a solar storm in the June last year. The power supply to SumbandilaSat's onboard computer stopped working and the satellite stopped sending back images.

According to DefenceWeb, South Africa's Department of Science and Technology (DST) is planning to launch a constellation of satellites similar to SumbandilaSat in the next 10 to 15 years. One of these will be SumbandilaSat 2, which will be larger and more reliable than its predecessor. Funding for SumbandilaSat 2 will be sought during the next financial year, starting April 1. Development will take about four years. The image processing methods and mission control systems pioneered on SumbandilaSat will be used on future satellites.

The news item at AMSAT-UK can be found at:
http://www.uk.amsat.org/4076
The news at DefenceWeb can be found at:
http://tinyurl.com/defenceweb (defenceweb.co.za)
Southern Africa SA-AMSAT web page at:
http://www.amsatsa.org.za/

[ANS thanks SA-AMSAT, AMSAT-UK, and DefenceWeb.co.za for the above information]

Satellite Shorts From All Over

+ Patrick WD9EWK/VA7EWK has posted videos of his station and operating tips about working the non-FM satellites with two radios.
  VO-52 with Yaesu FT-817ND transmitter, as my Kenwood TH-F6A receiver, Elk Antennas handheld 2m/70cm log periodic for antenna:
  http://www.youtube.com/watch?v=gpLw3stcxWY
  http://www.youtube.com/watch?v=4Og1P2fjmTs
  http://www.youtube.com/watch?v=K10RiIEyjfE
  AO-27 pass: http://www.youtube.com/watch?v=a0IdEPsajkU
  FO-29 pass: http://www.youtube.com/watch?v=OP80fVF9Lek

+ Watch a time-lapse video taken from the ISS as it passed above central Africa, Madagascar and the southern Indian Ocean. The night time flyover shows numerous lightning storms and the thin band of our atmosphere, with a layer of airglow above, set against a stunning backdrop of the Milky Way and a barely-visible Comet Lovejoy,
  http://www.youtube.com/watch?feature=player_embedded&v=GxH3Pnknhps

+ Richard Garriot has released a documentary of his trip to space.
  See the trailer at http://firstrunfeatures.com/intheaters.html
  His web site is http://firstrunfeatures.com/manonamission/

+ The article on the FUNcube satellite has now appeared in the printed publication Electronics Weekly (Jan. 25-31). For details

of how to download a PDF of the article see:
http://www.uk.amsat.org/4006

+ The ARISS monthly teleconference was held on Tuesday, January 17. Topics of discussion included the ITU notification of ARISS frequencies, an update on the Columbus module and a status report on ARISSat-1. Minutes have been posted:
http://ariss.rac.ca/arisstel2012-01-17.htm

+ Yuri, UT1FG/MM, has been reported on the DX boards (Jan. 11-Jan. 18) to be back at sea, traveling across the Atlantic Ocean activating "Wet Grids". This may be a chance to work him via satellite if you find him within range.

+ Students working on the Aalto-1 CubeSat have released a 4 minute video showing a visualization of the launch and deployment of the satellite, see: http://www.uk.amsat.org/3883

[ANS thanks everyone for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office. And with that, please keep in mind the planet Neptune was discovered more than 150 years ago in 1846, and since then it still has to complete an orbit around the Sun, as one Neptune year equals to 165 Earth years.

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM

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From -2310976545495493326
X-Google-Thread: 10e8ad,77825dd28801531e,start
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,domainid0,public,usenet
X-Google-Language: ENGLISH,UTF8
Received: by 10.68.135.231 with SMTP id pv7mr13498936pbb.8.1328006415278;
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cd5g2000vbb.googlegroups.com!not-for-mail
From: tbwork tbwork <tbwork008@gmail.com>
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Newsgroups: rec.radio.amateur.space
Subject: Updated List 2012 Solutions Manuals, Instructor Manuals & Test Banks
 Collection. Largest Collection Over The Net !!!
Date: Tue, 31 Jan 2012 02:38:16 -0800 (PST)
Organization: http://groups.google.com
Lines: 4571
Message-ID: <63b31f12-f267-42fd-9cbb-ba687b768896@cd5g2000vbb.googlegroups.com>
NNTP-Posting-Host: 79.134.145.206
Mime-Version: 1.0
X-Trace: posting.google.com 1328006414 22717 127.0.0.1 (31 Jan 2012 10:40:14 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Tue, 31 Jan 2012 10:40:14 +0000 (UTC)
Complaints-To: groups-abuse@google.com
Injection-Info: cd5g2000vbb.googlegroups.com; posting-host=79.134.145.206;
posting-account=po3qZAoAAABAoQrzdbrWgDYQi32q5YVf
User-Agent: G2/1.0
X-Google-Web-Client: true
X-Google-Header-Order: HUALESNKRC
X-HTTP-UserAgent: Mozilla/5.0 (Windows NT 6.1; rv:9.0.1) Gecko/20100101 Firefox/
9.0.1,gzip(gfe)
Content-Type: text/plain; charset=UTF-8
Content-Transfer-Encoding: quoted-printable
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We would like to inform you that we have updated our list with the following new titles.
You can contact us directly at tbwork.ads(at)gmail.com .

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The Legal Environment of Business; Text and Cases; Ethical_Regulatory_Global_and Corporate Issues, 8th Edition 2012, Cross.Miller, Instructor Manual & Solutions Manual

The Legal Environment of Business; Text and Cases; Ethical_Regulatory_Global_and Corporate Issues, 8th Edition 2012, Cross.Miller, Test Bank

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The Management of Technology and Innovation; A Strategic Approach, 2nd Edition 2011, White.Bruton, Test Bank

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The Media of Mass Communication, 10th Edition 2011, John Vivian, Test Bank

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The Musician's Guide to Aural Skills, 1st Edition, Phillips.Clendinning.Marvin, Instructor Manual

The Norton Anthology of African American Literature, 2nd Edition, Gates.McKay.Madison, Instructor Manual

The Personality Puzzle, 5th Edition, Funder, Instructor Manual

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Frieden.Lake.Schultz, Test Bank

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Tignor.Adelman.Aron.Brown.Elman.Kotkin.Liu.Marchand.Pittman.Prakash.Shaw.Ts=
in,
Instructor Manual

Worlds Together_Worlds Apart, 2nd Edition,
Tignor.Adelman.Aron.Brown.Elman.Kotkin.Liu.Marchand.Pittman.Prakash.Shaw.Ts=
in,
Test Bank

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Instructor Manual

Worlds Together_Worlds Apart, 3rd Edition, Tignor.Adelman.Aron.Brown,
Test Bank

You May Ask Yourself; An Introduction to Thinking Like a Sociologist,
1st Edition, Dalton Conley, Instructor Manual

You May Ask Yourself; An Introduction to Thinking Like a Sociologist,
1st Edition, Dalton Conley, Test Bank

You May Ask Yourself; An Introduction to Thinking Like a Sociologist,
2nd Edition, Dalton Conley, Test Bank

=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D

Contact Us At :
tbwork.ads(at)gmail.com .

```
From -5712219234481233108
X-Google-Thread: a4a23d5f63,1d18c359568ca90c,start
X-Google-Attributes: gida4a23d5f63,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
Received: by 10.68.135.231 with SMTP id pv7mr15399236pbb.8.1328063412362;
        Tue, 31 Jan 2012 18:30:12 -0800 (PST)
MIME-Version: 1.0
Path: lh20ni246919pbb.0!nntp.google.com!news1.google.com!news2.google.com!
news.glorb.com!news-out.readnews.com!news-xxxfer.readnews.com!panix!rri.panix.com!
robomod!not-for-mail
From: SWPC.Webmaster@noaa.gov
Newsgroups:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.shor
twave,rec.radio.info
```

Subject: Weekly Highlights of Solar and Geomagnetic Activity, 23 - 29 January 2012
Followup-To:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.shortwave
Date: Tue, 31 Jan 2012 21:30:11 EST
Organization: NOAA Space Weather Prediction Center
Lines: 101
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <20120201023002.576D233C94@panix2.panix.com>
NNTP-Posting-Host: panix6.panix.com
X-Trace: reader1.panix.com 1328063411 3505 166.84.1.6 (1 Feb 2012 02:30:11 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Wed, 1 Feb 2012 02:30:11 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to   rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to   rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump

:Product: Weekly Highlights and Forecasts
:Issued: 2012 Jan 31 2314 UTC
Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center
Product description and SWPC contact on the Web
# http://www.swpc.noaa.gov/weekly.html
#
Weekly Highlights and Forecasts
#
Highlights of Solar and Geomagnetic Activity
23 - 29 January 2012

Solar activity ranged from low to high levels. Region 1402 (N28, L=214, class/area=Eko/630 on 17 January) produced a long duration M8/2b flare at 23/0359 UTC. Multiple radio emissions from 25 MHz to 15.4 GHz, including a 5100 sfu Tenflare, and a Type IV sweep were also observed. Finally, an approximately 1600 km/s asymmetric full-halo coronal mass ejection (CME) was seen in SOHO/LASCO C2 imagery beginning at 23/0412 UTC. Activity returned to low levels as Region 1402 made its way across the visible solar disk producing occasional low to mid level C-class flares. On 27 January, Region 1402 moved to N29W71 before producing an X1/1f flare at 27/1837 UTC. Radio phenomena, including a Type II (1523 km/s) and a Type IV radio sweep with an 810 sfu Tenflare accompanied this flare. An asymmetric halo CME was later observed in LASCO C2 coronagraph imagery with an estimated plane-of-sky speed near 2000 km/s. Region 1402 rotated off the west limb on 28 January. Region 1402&rsquo;s counterpart, Region 1401 (N18, L=213, class/area=Eki/540 on 19 January) was the second largest and most magnetically complex (beta-gamma) region on the disk during the period. Region 1401 was only responsible for a couple of low level C-class flares during the period. Region 1401 decayed to spotless plage on 26 January.

Energetic proton flux levels reached strong levels during the period as two proton events energized the Earth&#39;s magnetosphere. The first event began minutes after the M8/2b flare on 23 January. The 10 MeV proton flux crossed the 10 pfu event threshold at 23/0530 UTC. The 10 MeV protons increased steadily to a peak flux of 6310 pfu at 24/1530 UTC, following the arrival of the interplanetary shock. This 10 MeV proton event ended at 27/1025 UTC when the enhancement dropped below the 10 pfu level. This 10 MeV proton event was the largest enhancement since Oct 29, 2003 (29,526 pfu) and the 11th largest since January, 1975. Also with this event, the 100 MeV proton flux exceeded the 1 pfu threshold. The 100 MeV flux began at 23/0445 UTC, increased to a peak of 2 pfu at 23/0750 UTC, then steadily declined until it dropped below the 1 pfu threshold at 23/2050 UTC. The second event began on 27 January, after the X1.7/1f flare. The 10 MeV proton flux crossed the 10 pfu event threshold at 27/1905 UTC. The 10 MeV protons increased steadily to a peak flux of 796 pfu at 28/0205 UTC. The 10 MeV proton event was still in progress at the time of this report. The associated 100 MeV event began at 27/1900 UTC, reached a maximum of 11 pfu at 27/2140 UTC and ended on 28/2120 UTC.

The greater than 2 MeV electron flux at geosynchronous orbit began at background levels, but increased to moderate levels late on 23 January. Values increased to high levels on 27-28 January, before decreasing to moderate levels through the end of the period.

Geomagnetic field activity ranged from quiet to minor storm levels at mid-latitudes and briefly reached severe storm conditions at high latitudes. The magnetic field was mostly quiet on 23 January with an isolated minor storm observed at high latitudes from waning effects from a CME. On 24-25 January, activity increased to isolated minor storms at low latitudes and severe storms at high latitudes, due to the arrival of a CME, associated with the 23 January M8/2b flare. An interplanetary shock was observed at the ACE spacecraft at 24/1431 UTC followed by a 37 nT increase in total field, as measured by the ACE spacecraft, at 24/1439 UTC. A corresponding sudden impulse was observed in the Boulder magnetometer with a 22 nT deviation at 24/1504 UTC. Solar wind speed, as measured by the SOHO spacecraft, was approximately 750 km/s at the time of the shock passage before decreasing to approximately 650 km/s. The geomagnetic field decreased to predominantly quiet levels for the remainder of the period.

Forecast of Solar and Geomagnetic Activity
01 February - 27 February 2012

Solar activity is expected to be at very low to low levels from 01-09 February until old Regions 1401 and 1402 are due to return. Solar activity is expected to increase to low levels with a chance for M-class flares and a slight chance for X-class flares for the remainder of the period.

The greater than 10 MeV proton flux at geosynchronous orbit is expected to remain elevated from 01-02 February but below the 10 pfu threshold values. A return to background levels is expected from 03-08 February. On 09 February, old Regions 1401 and 1402 are due to return to the visible disk. From 09 February until the end of the forecast period, there will be a slight chance for a proton event.

The greater than 2 MeV electrons at geosynchronous orbit are expected to be at normal to moderate levels for the entire forecast period.

The geomagnetic field is expected to be at predominantly quiet levels for the entire period. Quiet to unsettled levels are expected on days 03-04 February, 09 February, 12 February, and 23 February. This increased activity can be attributed to multiple, recurrent coronal hole, high speed wind streams.

```
From -8330490190975139607
X-Google-Thread: fcc6e,2b43f2dcee09cfa9,start
X-Google-NewGroupId: yes
X-Google-Thread: 11480d,2b43f2dcee09cfa9,start
X-Google-NewGroupId: yes
X-Google-Thread: 108122,2b43f2dcee09cfa9,start
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X-Google-Thread: fc2a5,2b43f2dcee09cfa9,start
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6,gid8f86f75953,gida4a23d5f63,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
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        Tue, 31 Jan 2012 23:00:05 -0800 (PST)
MIME-Version: 1.0
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out.readnews.com!transit3.readnews.com!panix!panix2.panix.com!not-for-mail
From: rram@panix.com (rec.radio.amateur.moderated Admin)
Newsgroups:
rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.rad
io.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amat
eur.space,rec.radio.info
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Subject: Crossposting Permitted to rec.radio.amateur.moderated
Supersedes: <radio/ham-radio/moderated/crossposting-1-1325401201@panix.com>
Followup-To: poster
Date: 1 Feb 2012 02:00:03 -0500
Organization: rec.radio.amateur.moderated Moderation Team
Lines: 47
Approved: RRI Admin <rec-radio-info-request@panix.com>
Distribution: world
Expires: 05 Mar 2012 02:00:01 -0000
Message-ID: <radio/ham-radio/moderated/crossposting-1-1328079601@panix.com>
Reply-To: rec-radio-amateur-moderated-request@panix.com
(rec.radio.amateur.moderated Admin)
NNTP-Posting-Host: panix2.panix.com
X-Trace: reader1.panix.com 1328079603 23963 166.84.1.2 (1 Feb 2012 07:00:03 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Wed, 1 Feb 2012 07:00:03 +0000 (UTC)
Summary: Short reminder for unmoderated newsgroups that crossposting is permitted
Keywords: FAQ, ham, amateur, radio, moderated, unmoderated, crossposting,
permitted

Posted-By: auto-faq 3.3.2 beta (PGPMoose V2.0, Perl 5.005)
Archive-name: radio/ham-radio/moderated/crossposting
Revision: 1.2 2011/11/02 04:08:53
Posting-Frequency: posted monthly
URL: http://www.panix.com/~rram/usenet/rram/index.html

Changes followed by "|".

After a 30-day public discussion and feedback period to gauge reader
opinions in March of 2009:

http://groups.google.com/group/rec.radio.amateur.moderated/browse_thread/thread/
d7d337db35f23326

the rec.radio.amateur.moderated Moderation Team had decided to consider |
amending its charter, and permit limited simultaneous crossposting to
rec.radio.amateur.moderated and one other unmoderated
amateur-radio-related discussion newsgroup. After a successful trial |
period (90 days, through early July 2009), we decided to adopt this |
change permanently. |

Approved rec.radio.amateur.* newsgroups are those that are currently
listed in the latest version of the "List of Big Eight Newsgroups" which
is crossposted monthly to news.announce.newgroups, news.groups, and
news.lists.misc.

Approved alt.radio.amateur.* and alt.ham-radio.* newsgroups are those
that have been created consistent with the suggestions in "So You Want
to Create an Alt Newsgroup" at:

http://www.faqs.org/faqs/alt-creation-guide/

Approved regional hierarchy newsgroups are those that contain either

"radio.amateur" or "ham-radio" in their names, including
uk.radio.amateur and aus.radio.amateur.misc.

We will make every reasonable effort to keep our list of approved newsgroups up-to-date. In case we have overlooked any, and a submission is rejected in error as a result, the rejected submitter can E-mail us at our administrative contact address (in the signature at the bottom of this article, and the default Reply-To for the rejection message) requesting that it be added, and that the article be approved. We may still choose to reject articles crossposted to any alt.* newsgroup with an inappropriate name, including obscene language, embedded name-calling, or encouragement of unlawful conduct.

Please direct any comments, questions, or criticisms to
rec-radio-amateur-moderated-request@panix.com.

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From -8214473642209603324
X-Google-Thread: 10e8ad,8b9e8b75f0d86977,start
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X-Google-Attributes: gid8f86f75953,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Received: by 10.68.189.72 with SMTP id gg8mr7453457pbc.4.1328373862315;
        Sat, 04 Feb 2012 08:44:22 -0800 (PST)
Path: lh20ni260086pbb.0!nntp.google.com!news2.google.com!goblin1!goblin2!
goblin.stu.neva.ru!newsfeed1.swip.net!news.astraweb.com!
border6.a.newsrouter.astraweb.com!not-for-mail
From: Chris Steyaert <observations@rmob.org>
Newsgroups: rec.radio.amateur.space,sci.astro.amateur
Subject: Radio Meteor Obs. Bull. January 2012 Quadrantids
Date: Sat, 04 Feb 2012 17:44:21 +0100
Message-ID: <a1oqi79tki60dlj3k6p5bgtcsvnqndtie0@4ax.com>
X-Newsreader: Forte Agent 5.00/32.1171
MIME-Version: 1.0
Lines: 14
Organization: Unlimited download news at news.astraweb.com
NNTP-Posting-Host: 11739456.news.astraweb.com
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Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
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Radio Meteor Observation Bulletin No. 222 of January 2012 (92 K) is available now as

http://www.rmob.org/rmobtext/rmob1201.txt

More information and the visual presentation of the hourly forward scatter counts can be found on

http://www.rmob.org

Chris

```
From 2259068097100455098
X-Google-Thread: 10e8ad,1b47bbc2c5c03886,start
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X-Google-Attributes: gid8f86f75953,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Received: by 10.68.189.72 with SMTP id gg8mr9278802pbc.4.1328461998268;
        Sun, 05 Feb 2012 09:13:18 -0800 (PST)
Path: lh20ni263841pbb.0!nntp.google.com!news2.google.com!
newsfeed2.dallas1.level3.net!news.level3.com!panix!rri.panix.com!robomod!not-for-
mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-036 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sun, 5 Feb 2012 12:13:17 EST
Organization: The Radio Amateur Satellite Corporation
Lines: 455
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000f01cce429$6aad8310$40088930$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
X-Trace: reader1.panix.com 1328461997 29411 166.84.1.6 (5 Feb 2012 17:13:17 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 5 Feb 2012 17:13:17 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
Content-Language: en-us
```

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ANS-036

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating

through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

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SB SAT @ AMSAT $ANS-036.01
ANS-036 AMSAT News Service Weekly Bulletins

AMSAT News Service Bulletin 036.01
From AMSAT HQ SILVER SPRING, MD.
February 5, 2012
To All RADIO AMATEURS
BID: $ANS-036.01

Vega Launch on February 13 With Eight Amateur Band Cubesats

Vega is scheduled to launch on Monday, February 13, at 1000 UTC with eight student built amateur radio satellites. The launcher will first deploy the main payload, the LARES the Laser relativity Spacecraft and will then make an additional firing of the final OVUM stage before deploying the secondary cubesat payloads.

The planned timing for these deployments are as follows:

= T0+ 4245.30secs first PPOD, with (in order of ejection) XatCobeo, e-st@r, and Goliat
= T0+ 4255.30secs second PPOD, with (in order of ejection) Robusta, MaSat-1 and PW-Sat
= T0+ 4265.30secs third PPOD, with UniCubeSat only
(These Cubesats will not deploy their antennas until >1800 seconds after they leave their PODS.)

= T0+ 4275.30secs AlmaSat-1 - it is not known how soon this spacecraft will start transmitting after deployment

Frequencies for the satellites on the Vega Launch are:

+ ALMASat-1 - University of Bologna, Italy 437.465 MHz 1200 bps FSK and 2407.850 MHz

- Xatcobeo (a collaboration of the University of Vigo and INTA, Spain) to demonstrate software-defined radio and solar panel deployment. 437.365 MHz FFSK with AX.25 and 145.940 MHz SSR

- Robusta (University of Montpellier 2, France) to test and evaluate radiation effects (low dose rate) on bipolar transistor electronic components. 437.325 MHz 1200 bps FM telemetry with one data burst of 20 seconds every 3 minutes.

- e-st@r (Politecnico di Torino, Italy) to demonstration of an active 3-axis Attitude Determination and Control system including an inertial measurement unit. 437.445 MHz 1200 bps AFSK.

- Goliat (University of Bucharest, Romania) to provide imaging of the Earth surface using a digital camera and in-situ measurement of radiation dose and micrometeoroid flux. 437.485 MHz 1200 bps AFSK.

- PW-Sat (Warsaw University of Technology, Poland) to test a deployable atmospheric drag augmentation device for de-orbiting CubeSats. PW-Sat carries an FM to DSB amateur radio transponder with an FM input on 435.020 MHz and DSB output on 145.900 MHz. There are 5 modes of operation:
    - Receive only - no downlink
    - CW Beacon CW - On-Off Keying (OOK) CW 12 WPM 435.020 MHz
    - BPSK Beacon - BPSK 1200 bps AX25 (1 frame on 20 sec) 435.020 MHz
    - Control communication mode. Downlink BPSK 1200 bps AX25 435.020 MHz
    - Voice Repeater mode (aka "AO-16 mode) - uplink 435.020 MHz FM and downlink 145.900 MHz DSB

- MaSat-1 (Budapest University of Technology and Economics): to demonstrate various spacecraft avionics, including a power conditioning system, transceiver and on-board data handling. 437.345 MHz GFSK 625/1250 bps, CW. See the related article in these bulletins describing the downloadable GFSK demodulator software.

- UniCubeSat GG - (University of Rome): The UNICubeSat mission goal is the in situ measurement of atmospheric density. Downlink frequencies are 437.305 MHz or 437.345 MHz 9k6 FSK.

Mineo Wakita, JE9PEL provides complete coverage of the Vega launch on his 'ESA CubeSats Update' web pages. You'll find an overview of each of the satellite missions, frequencies, modulation/protocols, and links to the developers home web pages posted at:
http://www.ne.jp/asahi/hamradio/je9pel/esa9cubf.htm

AMSAT-UK covers the Vega launch at:
http://www.uk.amsat.org/4180

An ESA time-lapse showing the full assembly of the first Vega launcher at the launch pad at the ESA Spaceport in Kourou is posted at:
http://www.youtube.com/watch?feature=player_embedded&v=YaUMSLU0aig

The university cubesat teams have requested reception reports. All observers are being encouraged to join the CubeSat IRC chat channel to pass on their news and comments in realtime. You will need an IRC client such as ChatZilla or mIRC to join the cubesat chat. Use the irc.freenode.net server. Then join the #cubesat channel. Many users set their chat nickname to "name_callsign".

[ANS thanks the cubesat teams, Mineo Wakita, JE9PEL, and AMSAT-UK for the above information]

SKN On OSCAR 2012 Best Fist Winners

Many thanks to all who participated in AMSAT's Straight Key Night on OSCAR 2012, held in memory of Don Brown, W1JSM. Activity was down this year, owing largely to there being only two satellites available for use: AMSAT-OSCAR 7 -- which remained in Mode A throughout the event -- and VUSAT-OSCAR 52.

Eight participants each received at least one Best Fist nomination: AA5PK, N4ZQ, N6EV, WA6ARA, WB2SIH, WB4LHD, WB8TGY, and WC7V.

Congratulations to 2012's Best Fist winners, and we'll see you in 2013!

[ANS thanks Ray Soifer, W2RS for the above information]

Remembering Mr. Smith - SuitSat-1 February 3, 2006

February 3 marks the sixth anniversary of the first ARISS satellite, SuitSat-1, which captured the imagination of students, radio amateurs, and people all around the world.

During a scheduled EVA outside the International Space Station, Valery Tokarev and Bill McArthur, KC5ACR deployed a retired Russian Orlan spacesuit with a radio transmitter and battery stuffed inside and antenna mounted on its helmet. The deployment took place just after 23:05 UTC on February 3, 2006. Transmissions were soon heard on 145.990 MHz.

SuitSat-1, also known as Mr. Smith, Ivan Ivanovich, RadioSkaf, Radio Sputnik and AMSAT-OSCAR 54, was an idea proposed by the ARISS-Russia team as a commemorative gesture celebrating the 175th anniversary of the Moscow State Technical University.

SuitSat-1 was programmed to continuously transmit recorded voice messages in several languages from students around the world. The signal began transmission approximately 15 minutes after SuitSat-1 was jettisoned. The downlink signal was noted to be weaker than expected, possibly due to a mechanical problem with the antenna.

SuitSat-1 re-entered the Earth's atmosphere on September 7, 2006, at 16:00 UTC about 1400 km south-southwest of Western Australia.

SuitSat-2 was planned following the public relations success of the first suit. Originally, it was to have solar cells strapped to the outside of the suit to provide charge for internal batteries and extend its life during orbit. When the Orlan suit planned to be used for this mission was no longer available, SuitSat-2 was redesigned into a satellite built into a deployable spaceframe with the solar cells and cameras for Slow Scan Television (SSTV) mounted on the outside of the box. The spacecraft was named ARISSat-1/KEDR which recently completed its successful mission.

[ANS thanks the ARISS and AMSAT archives for the above information]

New Version HamSatDroid App is Available

Dave Johnson, G4DPZ announced a new version of the free HamSatDroid app now available on the Android Market.

Upates to the app include:

+ tracking algorithm uses Dave's SGP4 implementation, as GENSO.
+ plot three orbits ahead on the map
+ plot the footprint
+ take keps from Celestrak

Dave says, "Thanks to the feedback we've had from the existing users, I've got quite a few more changes in development. Opinions are sought about making a small charge and paying the income into satellite building funds and supporting a server which might be introduced to improve functionality of the app."

See the HamSatDroid web page at:
https://sites.google.com/site/hamsatdroid/

Dave is the FUNcube Data Warehouse Developer and is also an AMSAT-NA Life Member and AMSAT-UK Committee Member.

[ANS thanks Dave Johnson, G4DPZ for the above information]

Budapest University Masat-1 Telemetry Decoder Software Released

Dr. Bandi Gschwindt HA5WH, Project Director of the Masat-1 CubeSat, the first Hungarian satellite, built in Hungary by students at the Budapest University of Technology and Economics, reports that their satellite is expected to be launched on the Vega maiden flight on February 9 with a planned deployment window between 10:00-13:00 UTC.

Masat-1's website is at: http://cubesat.bme.hu/?lang=en

The students are looking for hams to help with the reception of telemetry data on 437.345 MHz at 625/1250 bps baud rate GFSK, especially in the first two weeks after launch. The satellite's callsign is HA5MASAT.

The Masat-1 amateur radio webpage is at:
http://cubesat.bme.hu/radioamatoroknek/?lang=en
You can register on that page.

The Masat-1 Ground Station Client Software was prepared to process the 437.345 MHz GFSK 625/1250 bps transmission received from the satellite. The software provides the following functions:

+ Audio demodulation
+ Packet decoding
+ Packet data visualization
+ Frequency waterfall plot to aid radio tuning

Download the software and a test WAV file from:
http://cubesat.bme.hu/en/foldi-allomas/kliens-szoftver/

Planned orbit will be 300x1500 km, inclination 70deg. Launch will be by ESA from Kourou. A video showing Masat-1's elliptical orbit is posted online at: http://www.uk.amsat.org/4119

[ANS thanks Dr. Bandi Gschwindt, HA5WH and Perry Klein, W3PK for the above information]

February Arizona Centennial Special Event Plans Satellite Operation

The Central Arizona DX Association (CADXA) is very pleased to announce their special event operation in celebration of the Arizona Centennial during the week of February 13-19th, 2012.

K7UGA Satellite Operation

Using the callsign of the late Senior Senator, Barry M. Goldwater, K7UGA, CADXA members will be operating from stations located throughout Arizona during that week. Special operating locations from Tucson, Prescott and Phoenix will be on the air celebrating the 100th anniversary on Tuesday, February 14, 2012. They will be on all amateur bands (160-2 meters) and will be using CW, SSB, RTTY, PSK31 and Satellite modes.

Arizona's AMSAT Field Ops coordinator Patrick Stoddard, WD9EWK/VA7EWK announced satellite operations using the K7UGA callsign:

+ Watch for announcements on amsat-bb for the specific passes WD9EWK plans to operate using the K7UGA callsign on February 14.

+ Patrick plans to use the K7UGA call sign for his on-air satellite demonstrations from the Yuma, Arizona Hamfest on February 17-18, 2012. More information about this is on AMSAT's online calendar of events:
  http://www.amsat.org/amsat-new/fieldops/eventDetail.php?eID=629

+ Also refer to http://www.qrz.com/db/k7uga for additional info.

All K7UGA QSL requests go to Bob Davies - K7BHM (qrz.com) with an SASE. Additional information is posted on the CADXA Web site at:
http://www.cadxa.org

Thunderbird Amateur Radio Club W7A Satellite Operation

Rick Tejera, K7TEJ says the Thunderbird Amateur Radio Club will be operating a special event station for the Arizona Centennial as well the weekend of Feb 11-12, 2012. Rick plans to operating on as many FM satellite passes as possible during the event using the W7A call.

[ANS thanks Patrick Stoddard, WD9EWK/VA7EWK and Rick Tejera, K7TEJ for the above information]

Can It Already Be That Time of Year For Field Day Planning?

AMSAT Director Contests and Awards, Bruce Paige, KK5DO reminds you that time of year is once again approaching - Field Day!

Each year the American Radio Relay League (ARRL) sponsors Field Day as an emergency preparedness exercise. The event takes place during a 24-hour period on the fourth weekend of June. For 2012 the event takes place during a 27-hour period between 1800 UTC on Saturday, June 23, 2012 and 2100 UTC on Sunday June 24, 2012. Those who set up prior to 1800 UTC on June 23 can operate only 24 hours.

The Radio Amateur Satellite Corporation (AMSAT) promotes its own version of Field Day for operation via the amateur satellites, held concurrently with the ARRL event.

With the loss of AO-51 and SO-67 field day this year is going to be most challenging. If you are considering ONLY the FM voice satellites like AMRAD-OSCAR-27 or SaudiSat-Oscar-50 for your primary AMSAT Field Day focus: Don't, unless you are simply hoping to make one contact for the ARRL rules bonus points.

The congestion on FM LEO satellites was so intense in prior years that we must continue to limit their use to one-QSO-per-FM-satellite. This includes the International Space Station. You will be allowed one QSO if the ISS is operating Voice. You will also be allowed one digital QSO with the ISS or any other digital, non-store-and-forward, packet satellite (if operational).

If you have worked the satellites on Field Day in recent years, you may have noticed a lot of good contacts can be made on some of the less-populated, low-earth-orbit satellites like VUSat OSCAR-52,Fuji-OSCAR 29 (may or may not be operational), AMSAT-OSCAR 7. During Field Day the transponders come alive like 20 meters on a weekend. The good news is that the transponders on these satellites will support multiple simultaneous contacts. The bad news is that you can't use FM, just low dutycycle modes like SSB and CW.

The AMSAT Field Day 2012 event is open to all Amateur Radio operators. Amateurs are to use the exchange as specified in ARRL rules for Field Day. The AMSAT competition is to encourage the use of all amateur satellites, both analog and digital.

For the complete listing of the AMSAT Field Day Rules please refer to the documents posted on-line at:
http://www.amsatnet.com/fd2012.doc
http://www.amsatnet.com/fd2012.pdf

[ANS thanks AMSAT Director Contests and Awards, Bruce Paige, KK5DO
for the above information]

NASA Extends Deadline for Student Summer Internships

College Level Internships Deadline Extended

NASA says they will continue accepting applications for college level summer internship positions among several NASA Centers around the country until March 16, 2012.

Students can view opportunities and apply for them all in one place.
To start, the prospective student should go to:
http://intern.nasa.gov/ then Student Opportunities tab then select

Internships which will bring you to the OSSI:SOLAR page describing the program.

Using the Search Tab on the OSSI:SOLAR page selecting Goddard in Maryland, Internship, Summer 2012, Engineering - Electrical Eng., or Engineering - Computer Eng., and a keyword search using "PICetSat" reveals an opportunity titled "PICetSat Module Development." which will develop a high-altitude balloon experiment module and related ground station components. This internship is open for Junior, Senior, and Masters level students. A description of this particular internship opportunity can be found at:
http://simsat.net/Internship-PICetSatModuleDevelopment-PKilroy.pdf
as sponsored by Pat Kilroy, N8PK, an AMSAT member and engineer at NASA in Greenbelt, Maryland.

High School Level Internships Applications Now Open

On February 1, NASA opened the application process for high school students to apply for a summer internship. The application page is at: https://education.gsfc.nasa-telophase.com/ The deadline for high school student applications is March 2, 2012.

Click on "Browse Available Projects" for students in the greater Maryland/DC/Northern Virginia area. An opportunity exists for a high school student/intern to also participate on the SimSat high-altitude balloon experiment sponsored by Pat Kilroy, N8PK. The direct link for this internship is:
http://tinyurl.com/NASA-PICetSat-Internship

The application process must be completed at the NASA intern web site. Students do not specify a specific internship program when they submit an application. The NASA Education community will determine which internship programs you are eligible for according to the information you provide in your application.

[ANS thanks NASA for the above information]

Successful ARISS Contact with El Dorado County Students

On Tuesday, January 24, on-orbit astronaut Dan Burbank, KC5ZSX participated in an ARISS contact with students from El Dorado County in Placerville, California.

The students, who came from several schools within the county, were able to get answers to many of their questions about space. Approximately 250 people were in attendance and another 160 watched as the contact was streamed over the internet. The radio connection was provided by telebridge station W6SRJ in California. The station, located on the campus of Santa Rosa Junior College (SRJC), hosted another 15

observers. In addition, the college sent a reporter and photographer from its newspaper, The Oak Leaf, to cover the event. The ARISS contact was part of a comprehensive education plan used to pique students' interest in Science, Technology, Engineering and Mathematics (STEM). More on the event, including video and photos may be found on the El Dorado County Web site.
See: http://general.edcoe.org/nasaqa/default.html

[ANS thanks Carol, KB3LKI, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Lee McLamb, KU4OS

```
From 1976520680503691526
X-Google-Thread: 107ada,a122b085a591b141,start
X-Google-NewGroupId: yes
X-Google-Thread: 10e8ad,a122b085a591b141,start
X-Google-NewGroupId: yes
X-Google-Thread: 10b9c8,a122b085a591b141,start
X-Google-NewGroupId: yes
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X-Google-Language: ENGLISH,ASCII-7-bit
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From: SWPC.Webmaster@noaa.gov
Newsgroups:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.shor
twave,rec.radio.info
Subject: Weekly Highlights of Solar and Geomagnetic Activity, 30 January - 05
February 2012
Followup-To:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.shor
twave
Date: Tue, 7 Feb 2012 18:00:15 EST
Organization: NOAA Space Weather Prediction Center
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X-Complaints-To: abuse@panix.com
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X-RRI-Info-2: Send technical complaints to   rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump

:Product: Weekly Highlights and Forecasts
:Issued: 2012 Feb 07 2148 UTC
Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center
Product description and SWPC contact on the Web
# http://www.swpc.noaa.gov/weekly.html
#
Weekly Highlights and Forecasts
#
Highlights of Solar and Geomagnetic Activity
30 January - 05 February 2012

Solar activity ranged from very low to low levels throughout the period with two C-class flares observed. Region 1410 (N18, L=056, class/area Cso/240 on 01 February) produced a C1 event at 0440Z on 30 January. The second event was also a C1 flare, at 0441Z on 01 February from Region 1408 (N06, L=132, Class/area Hax/120 on 21 January). Low level B-class activity dominated the remainder of the period. As the summary period ended, there were only three spotted regions on the visible disk, with Regions 1413 (N08, L=062, class/area Csi/100) and 1410 the most pronounced.

The greater than 10 MeV proton event which began at 27/1905Z and reached a maximum of 796 pfu on 28/0205Z, dropped below the 10 pfu threshold and ended at 31/0635Z.

The greater than 2 MeV electron flux at geosynchronous orbit reached high levels on 30 January at 1635Z. Predominantly background levels prevailed with moderate levels observed from 03 - 04 February.

The geomagnetic field was at predominantly quiet to unsettled levels during the past week. The geomagnetic field was quiet, until the arrival of a glancing blow from the asymmetric halo CME that occurred in association with the X1/1f flare on 27 January. The transient passage was observed by the ACE spacecraft at 30/1554Z with a solar wind speed increase from around 320 km/s to near 430 km/s. A weak sudden impulse measuring 8 nT was observed by the Boulder magnetometer at 30/1624Z. The field increased to unsettled levels following the shock but returned to quiet levels by 31/0000Z. Quiet conditions prevailed on 31 January. On 01 February, a coronal hole high speed stream became geoeffective with unsettled to minor storm levels observed at high latitudes and predominantly quiet levels observed at mid latitudes from 01 February through the end of the summary period on 05 February.

Forecast of Solar and Geomagnetic Activity
08 February - 05 March 2012

Solar activity is expected to be at very low to low levels until 10 February, when old Region 1402 (N28, L=214) returns. An increase to low levels with a chance for M-class activity is expected as old Region 1402 transits the visible disk. A decrease to very low to levels is expected to prevail for the remainder of the period.

Energetic proton flux at geosynchronous orbit is expected to remain near background levels until old Region 1402 returns on 10 February. A slight chance exists for a proton event from 10 -24 February, as old Region 1402 transits the solar disk. A return to background levels is expected for the remainder of the period.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to be at normal to moderate levels throughout the period.

The geomagnetic field is expected to remain at mostly quiet to unsettled levels through the forecast period. There is potential for active periods with isolated minor storm periods at high latitudes on 09-10 February, on 23 February, and again on 02-03 March, due to effects from coronal hole high speed wind streams.

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From -7321265418056961600
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X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Received: by 10.68.226.10 with SMTP id ro10mr1435897pbc.6.1328795571752;
        Thu, 09 Feb 2012 05:52:51 -0800 (PST)
Path: wr5ni5055pbc.0!nntp.google.com!news1.google.com!postnews.google.com!
vh10g2000pbc.googlegroups.com!not-for-mail
From: anand <anandmurali678@gmail.com>
Newsgroups: rec.radio.amateur.space
Subject: apply me
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User-Agent: G2/1.0
X-Google-Web-Client: true
X-Google-Header-Order: HUALENKRC
X-HTTP-UserAgent: Mozilla/5.0 (Windows NT 6.1; rv:10.0) Gecko/20100101 Firefox/
10.0,gzip(gfe)
Content-Type: text/plain; charset=ISO-8859-1

http://123maza.com/46/lucky959/



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transit3.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-043 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Mon, 13 Feb 2012 11:25:30 EST
Organization: The Radio Amateur Satellite Corporation
Lines: 546
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Message-ID: <001701ccea6c$14648000$3d2d8000$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
X-Trace: reader1.panix.com 1329150330 28890 166.84.1.6 (13 Feb 2012 16:25:30 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Mon, 13 Feb 2012 16:25:30 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
```

X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
Content-Language: en-us

AMSAT NEWS SERVICE
ANS-043

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

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SB SAT @ AMSAT $ANS-043.01
ANS-043 AMSAT News Service Weekly Bulletins

AMSAT News Service Bulletin 043.01
  From AMSAT HQ SILVER SPRING, MD.
February 12, 2012
To All RADIO AMATEURS
BID: $ANS-043.01

AMSAT Fox-1 Cubesat Selected for NASA ELaNa Launch Collaboration

Project ELaNa, NASA's "Educational Launch of NanoSat" managed by the Launch Services Program at the Kennedy Space Center, announced on February 10 that the AMSAT Fox-1 cubesat has been selected to join the program.

NASA will work with AMSAT in a collaborative agreement where NASA will cover the integration and launch costs of satellites deemed to have merit in support of their strategic and educational goals.

AMSAT teamed with the ARRL to write and deliver the 159 page educational proposal to NASA. Letters documenting the importance of AMSAT's satellites in the education programs at the ARRL and also at the Clay Center for Science and Technology at the Dexter and Southfield schools in Brookline, MA, were important parts of our proposal.

AMSAT President Barry Baines, WD4ASW said, "The ELaNA Launch opportunity marks AMSAT's return to space after the conclusion of the successful ARISSat-1/KEDR flight. We need to get the flight Fox-1, along with an operational flight backup satellite, built, integrat- ed, tested, and delivered. Our ability to provide a spacecraft and get it launched is dependent upon the active support of our donors who wish to see Fox-1 fly."

AMSAT Vice-President of Engineering, Tony Monteiro, AA2TX noted this will provide a launch opportunity for AMSAT's next generation of FM repeater satellites with features and operation beyond the experience of AO-51. AMSAT's Fox-1 Engineering Team is making progress developing the advanced satellite that will provide these features:

+ Fox-1 is designed to operate in sunlight without batteries once the battery system fails. This applies lessons learned from AO-51 and ARISSat-1 operations.

+ In case of IHU failure Fox-1 will continue to operate its FM repeater in a basic, 'zombie sat' mode, so that the repeater remains on-the-air.

+ Fox-1 is designed as the immediate replacement for AO-51. Its U/V (Mode B) transponder will make it even easier to work with modest equipment.

+ From the ground user's perspective, the same FM amateur radio equipment used for AO-51 may be used for Fox-1.

+ Extending the design, Fox-2 will benefit from the development work of Fox-1 by adding more sophisticated power management and Software Defined Transponder (SDX) communications systems.

The Fox-1 Project presents an opportunity to literally put your callsign on the Fox hardware. AMSAT is looking for major donations to help underwrite the cost of solar cells/panels, one of the more significant expenses of the project.

These solar cells are needed for the flight unit as well as for the a flight spare. As Fox-1 will have solar cells on all six sides of the spacecraft and given the relatively small surface area available on each side (at most 4" by 4" per side), AMSAT needs to invest in high efficiency solar cells to gain as much power as possible to operate the spacecraft.

Several opportunities to make your donation to keep amateur radio in space include:

+ Return the form sent with the letter to reply with your donation for the Fox-1 Project.
  - All donations over $40 will receive a Fox pin.
  - Donations of $120 or more qualify you for AMSAT President's Club

+ Call Martha at the AMSAT Office +1-888-FB AMSAT (1-888-322-6728)
+ Paypal donation widget on the main page at: http://www.amsat.org
+ Paypal donation widget for Project Fox at: http://www.amsat.org/amsat-new/fox/
+ You can also go to the Paypal site and send your donation to martha@amsat.org.
+ The AMSAT Store: http://www.amsat-na.com/store/categories.php

Project Fox web site provide a good overview of the technical progress of the new satellite: http://www.amsat.org/amsat-new/fox/

[ANS thanks AMSAT President Barry Baines, WD4ASW, AMSAT Vice-President of Engineering, Tony Monteiro, AA2TX and AMSAT's Project Fox Engineering team for the above information]

ESA Vega Launch Includes 8 Amateur Band Satellites

Vega is scheduled to launch on February 13, at 1000 UTC with eight student built amateur radio satellites. Internet video streaming of the launch will be available at:
http://www.videocorner.tv/index.htm

The launcher will first deploy the main payload LARES, the Laser relativity Spacecraft and will then make an additional firing of the final OVUM stage before deploying the secondary cubesat payloads. The planned timing for these deployments, in order of ejection, are as follows:

= T0+ 4245.30secs 1st PPOD, with XatCobeo, e-st@r, and Goliat.
= T0+ 4255.30secs 2nd PPOD, with Robusta, MaSat-1 and PW-Sat.
= T0+ 4265.30secs 3rd PPOD, with UniCubeSat.
= T0+ 4275.30secs AlmaSat-1.

The Cubesats will not deploy their antennas until >1800 seconds after they leave their PODS.It is not known how soon AlmaSat-1 will start transmitting after deployment.

Vega Launch Cubesat Amateur Band Frequencies:
+ AlmaSat-1 437.465 MHz 1200 bps FSK, 2407.850 MHz
+ E-St@r 437.445 MHz 1200 bps AFSK
+ Goliat 437.485 MHz 1200 bpx AFSK
+ MaSat-1   437.345 MHz GFSK 625/1250 bps, CW
+ PW-Sat 435.020 MHz FM uplink, 145.990 MHz DSB downlink
+ Robusta   437.325 MHz 1200 bps FM telemetry

+ UniCubeSat 437.305 MHz 9600 bps FSK
+ XaTcobeo   437.365 MHz FFSK with AX.25

Links to the home pages of the satellite teams are included on the http://www.amsat.org page. Extensive coverage of the launch and the satellites can also be found on the AMSAT-UK web:
http://www.uk.amsat.org/

An ESA video of all of the satellites aboard the Vega Maiden Flight can be viewed on YouTube at: http://tinyurl.com/ESA-Vega-Cubesats

The university cubesat teams welcome reception reports. All observ- ers are invited to submit reports via amsat-bb and to also join the CubeSat Internet Relay Chat channel to pass on their news and com- ments in realtime. You will need an IRC client such as the ChatZilla addon for FireFox or mIRC to join the cubesat chat:

1. Connect to the irc.freenode.net server.
2. Once connected to the server the /join #cubesat command will bring you into the channel.
3. Many users set their chat nickname to "name_callsign".

ChatZilla AddOn for Firefox:
https://addons.mozilla.org/en-US/firefox/addon/chatzilla/

mIRC
http://www.mirc.com/

[ANS thanks the CubeSat Teams for the above information]

ARISS Contact to Celebrate 50th Anniversary John Glenn Over Perth

On the 20th of February 1962 a Mercury-Atlas 6 spacecraft called "Friendship 7" was launched. In the hot-seat was Astronaut, John Glenn. The objective was to place a man into earth orbit, observe his reactions to the space environment and safely return him to earth to a point where he could be readily found.

During the first orbit of three, the spacecraft came into radio range of the Muchea Tracking Station where the first Australian space radio contact was made by Gerry O'Connor who spoke with John Glenn as he passed overhead.

One of the questions that was posed for this flight was "Can you see the cities of Earth from space?" To help answer that question, the people of the City of Perth all turned their lights on as John Glenn flew over. The answer to the question was a resounding "YES!", and Perth was nicknamed "The City of Light".

Fifty years later on February 20, 2012 young people from Western Australia will have the chance to ask a question of an astronaut or cosmonaut currently residing on the International Space Station.
There will be a live radio and video connection to the space station at the Northbridge Piazza in Perth, Western Australia. Ten lucky winners of the student competition, selected from primary and secon- dary schools, will get to ask questions, and receive their answers in real time as the space station flies overhead.

>From a technical perspective, ARISS will configure a direct amateur radio link between the ISS and ham operator, Dick Flagg, AH6NM, in Honolulu. In Perth, members of the Hills Amateur Radio Group will provide a phone link between AH6NM and Northbridge Piazza so the students can converse with the astronaut. Tony Hutchison, VK5ZAI, ARISS Mentor for Australia is conducting the behind the scenes preparation.

The event begins at 17:00PM Perth time (0900 UTC) on February 20. The currently scheduled contact time is approximately at 10:22 UTC, subject to last minute change depending upon events aboard the ISS or orbit changes.

In addition to the ARISS contact, web-streaming and other space activities such as a radio telescope, optical telescopes, museum exhibitions, an address by the Lord Mayor of Perth, a video message from John Glenn and a presentation by the Western Australia Chief Scientist are planned.

The press release of the City of Lights ARISS event, issued by the Government of Western Australia can be read on=line at:
http://tinyurl.com/WA-PressRelease

Web pages with more information of the event can be found at:
http://harg.org.au/ariss/
http://museum.wa.gov.au/city-lights

[ANS thanks Richard, G4TUT and David Jordan, AA4KN, ARISS Public Relations, Australia ARISS Coordinator Tony Hutchison, VK5ZAI for the above information]

Open Mission Control Software for CubeSat Project Teams

CubeSat developers may be interested in learning more about the Open Mission Control software, an open source, open access software for monitoring and controlling small spacecraft. The software is designed to provide an application and framework that can be adapted quickly and easily to support a variety of spacecraft including CubeSats, myPocketQubs and NanoLab experiments, and sounding rocket and high altitude balloon experiments. The team include students, space professionals, educators and enthusiasts from around the world, all working together to build a great mission control application for small spacecraft projects.

The Open Mission Control framework consists of the application and graphical user interface which contain the basic structure of the program, and the Open Mission Control toolbox, which provides a number of ready to use functions typically required for mission control applicationa.

The Open Mission Control application and graphical user interface can be adapted to a project quickly and easily, by populating them with elements from the Open Mission Control toolbox and other stan- dard library elements. This approach allows also users with limited programming experience to create sophisticated mission control software by building on a solid basic implementation.
Use and verification.

Designed to work with any spacecraft project, the first flight mis- sion that is expected to use Open Mission Control is myPocketQub 442. myPocketQub 442 was selected to fly as a pocket spacecraft attached to UKube-1, the first United Kingdom Space Agency CubeSat. It is expected to be the first mission controlled by Open Mission Control and to demonstrate and verify various use cases:

+ The first use case is for professional monitoring, command and control of a real spacecraft.

+ The second use case involves schools and universities using Open Mission Control to upload their virtual payloads for their Open-Space365 projects, monitor their experiments as they run and download the data for analysis.

+ The third use case involves the use of Open Mission Control as monitoring software for the various scientific and engineering sub-payloads that will fly on myPocketQub 442. The students conducting these experiments will use Open Mission Control to access and store the data from these payload experiments for analysis and research.

+ The fourth use case is communication with engineering models of the real spacecraft which will be made available on the Internet. These engineering models are duplicates of the flight hardware and allow Open Mission Control to command and monitor them and their sub-payloads in real time and to simulate different critical mission phases under real conditions.

Additional information and links are available on the Open Mission Control webpage at: http://openmissioncontrol.wordpress.com/

[ANS thanks the Open Mission Control Team for the above information]

NASA astronaut Janice Voss, KC5BTK Passes

NASA astronaut Janice Voss passed away from cancer overnight. One of only six women who have flown in space five times, Voss' career was highlighted by her work and dedication to scientific payloads and exploration. Janice supported SAREX during her flights on the Space Shuttle. She was a phone-in speaker during one of AMSAT's multi-media Dayton Forum presentations with Roy Neal as MC. Janice held the call sign KC5BTK.

Voss began her career with NASA in 1973 while a student at Purdue University. She returned to NASA in 1977 to work as an instructor, teaching entry guidance and navigation to space shuttle crews. After completing her doctorate in 1987, she worked within the aerospace industry until she was selected as an astronaut in 1990.

Voss' first spaceflight mission was STS-57 in 1993, the first flight of the Spacehab module. She next flew on STS-63 in 1995, a mission to the Mir space station, and third flight of Spacehab. She also flew as a payload commander on STS-83 in 1997 with the Microgravity Science Laboratory, but the mission was cut short due to problems with one of the orbiter's three fuel power generation units. Voss, the crew and MSL flew again as the STS-94 MSL-1 Spacelab mission, focused on materials and combustion science research in microgravity.

Her last mission was STS-99 in 2000, a flight to the International Space Station as part of the Shuttle Radar Topography Mission which mapped more than 47 million square miles of the Earth's land surface.
In total, Voss spent more than 49 days in space.

Peggy Whitson, chief of the Astronaut Office said, "By improving the way scientists are able to analyze their data, and establishing the experimental methods and hardware necessary to perform these unique experiments, Janice and her crew ensured that our space station would be the site of discoveries that we haven't even imagined."

For Voss' complete biography, please visit:
http://www.jsc.nasa.gov/Bios/htmlbios/voss-jan.html

[ANS thanks Frank Bauer, KA3HDO and SpaceRef.com for the above information]

SumbandilaSat SO-67 Amateur Transponder Recovery Work in Progress

It would appear that prior reports on the demise of South Africa's SumbandilaSat were 'greatly exagerated' (with apologies to author Mark Twain).

A report on the Southern African AMSAT website says partial recovery is possible for Amateur Radio Operation to possibly resume in March 2012.

"We have not given up on our efforts to get SumbandilaSat working again even if it is only partially", said Johan Lochner ZR1CBC who is spending much time on the recovery process and many nights burning the midnight oil working on new and more intelligent algorithms.
He and his colleagues are making every effort to get the satellite working again.

SumbandilaSat experienced a corruption in the programme memory of one of the power switches. This is the interface unit which controls a robust orientation control implementation system which is using output from the magnetic sensors to point the solar panels towards the sun in a safe mode scenario when for example communications with the ground segment was not possible for a few days.

The corruption of the program memory prevented the magnetic interface unit from automatically switching on after power-up and thus preventing access to measurements taken by the magnetometer.

Johann said, "As a result of the malfunction of the magnetic control unit the satellite started to slowly point away from the sun with intermittent sun eclipses. When there was no power flowing from the solar cells the batteries drained and we could not in a safe way communicate with the satellite, so we backed off. Once we determined this pattern we stopped communicating with the satellite when we did not see sufficient charge on the batteries. At other times we had good communication when could diagnose what was going on. During good communication windows that could last 2 or 3 days we tried to diagnose the exact nature of the problem in the same way as we had done before and we started to implement a fix. The particular power switch that failed was already the redundant one so we were in a worse state than before."

SumbandilaSat controllers implemented automated ground segment software to make contact with the satellite from both SANSA Space Operations and the Electronic Systems labs at SU. The objective was to contact the satellite automatically and to try to implement the recovery procedure and also notify the team if any contact was made.

Johann continued, "By mid-November 2011 we again made contact with SumbandilaSat and set in place a planned recovery procedure. Within 3-4 days we came to the conclusion that the main battery had failed. Earlier the intermittent contact was because the battery could not be fully charged and that satellite power bus was too low for the processors and transmitter to function. We surmised that during the month that we had no contact that the battery must have gone open circuit. With the battery no longer on the power bus, the voltage on the bus would rise to 28.5 volts and supply enough current to support operations when SumbandilaSat was in full sunlight."

The SumbandilaSat concludes, "We are determined to get this working and to maintain the scientific value of the satellite as much as possible. Johann's focus is now on getting the amateur radio trans- ponder working, which with the loss of AO-51 will be a great asset to amateur radio satellite activity. By the end of February we hope to achieve this!"

Uplink: 145.875 MHz (no tone required)
Downlink: 435.345 MHz

See: http://www.amsatsa.org.za/SumbandilaSat.htm for full coverage of this news.

[ANS thanks SA AMSAT and Johan Lochner, ZR1CBC for the above information]

AMSAT Notes:

AMSAT Fox Project Flyer

Patrick Stoddard, WD9EWK has put together a nice 4 page pdf description of the Fox project. This is available directly from this URL: http://www.amsat.org/amsat-new/fox/AMSAT_Fox-20120206.pdf or the link can be found midway down the Fox page on the AMSAT Web site.
More detailed information about the Fox project can be found in the Fox area of the AMSAT Web site.

AMSAT Annual Meeting dates set

The 2012 AMSAT Annual Meeting and Symposium will be held Oct 26-28,2011 at the Holiday Inn Orlando Airport. More details as they become available.

AMSAT at Dayton 2012

The AMSAT Dayton team is busy preparing for the AMSAT presence at this years Hamvention - May 18-20, 2012. Same booth spaces next the the ARRL area, outdoor satellite demonstration area and it looks like the AMSAT Forum will be Saturday morning. Additional information and web site area soon.

[ANS Thanks Gould, WA2SXM, for this information]

Amateur Radio on the International Space Station (ARISS) Status Report

February 6, 2012

1. Upcoming School Contacts

An Amateur Radio on the International Space Station (ARISS) contact was successful for Inuksuk High School, Iqaluit, Nunavut, Canada on Wednesday, February 8 at 15:18 UTC via telebridge station AH6NM in Hawaii. The school has formed a space club through which students are learning about the ISS via videos, the internet and guest speakers. They are learning how to track the ISS and are completing space-related projects. Radio usage and protocol have been discussed. First Air and the Makivik Corporation are the sponsors that ensure ARISS contacts are supported in the remote areas of Northern Canada.

Soumuta Elementary School, located in Kagoshima, Japan scheduled for an Amateur Radio on the International Space Station (ARISS) contact on Saturday, February 11 at 10:33 UTC was successful. The school was established in 1972 and has a current enrollment of 479 students. Students are learning about the mission of the ISS and will experience amateur radio concepts through their contact.

2. Polish Students Experience Successful ARISS Contact

On Saturday, February 4, students attending the Zespol Szkol nr 8 in Walbrzych, Poland participated in an Amateur Radio on the International Space Station (ARISS) contact with Don Pettit, KD5MDT on the ISS. Radio station W6SRJ in California provided the telebridge connection. Greetings were exchanged and students were able to get through all the space-related questions they had prepared. The contact was integrated into a curriculum covering electronics, microprocessor systems and English and drew interest from the school's robotics and amateur radio clubs. Contact audio was fed into EchoLink and IRLP (Internet Radio Linking Project). Representatives from radio and television stations provided media coverage.

3. ARISS-U.S. to Review Proposals Submitted

The NASA Teaching From Space office received over 100 inquiries about the U.S. proposal process for ARISS contacts that will be scheduled during the July 2012 - January 2013 time frame. Twenty-three schools met the January 30 deadline and submitted proposals. The next step is for the U.S. Selection Committee to review the proposals and select the U.S. schools in about one month. Another window of opportunity for U.S. schools and organizations to submit proposals will open later in the year.

4. AMSAT News Service on ARISS

The February 5 AMSAT (Radio Amateur Satellite Corporation) News Service bulletin (ANS-036) included an item about the successful amateur radio satellite, SuitSat, titled, "Remembering Mr. Smith - SuitSat-1 February 3, 2006." Another piece covered the recent ARISS contact with El Dorado County students. To view the articles, see:

http://amsat.org/pipermail/ans/2012/000589.html

5. Amateur Radio Newsline Covers ARISS

On February 3, Amateur Radio Newsline posted the winners of the ARISSat Chicken Little Contest in its report #1799. To read, "Ham Radio in Space: Winners of ARISSat-1 Chicken Little Contest Announced," see:
ftp://ftp.arnewsline.org/quincy/News/news.txt

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Dee Interdonato, NB2F

```
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From: SWPC.Webmaster@noaa.gov
Newsgroups:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.shor
twave,rec.radio.info
Subject: Weekly Highlights of Solar and Geomagnetic Activity, 06 - 12 February
2012
Followup-To:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.shor
twave
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X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
```

```
:Product: Weekly Highlights and Forecasts
:Issued: 2012 Feb 14 2216 UTC
# Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center
# Product description and SWPC contact on the Web
# http://www.swpc.noaa.gov/weekly.html
#
#                 Weekly Highlights and Forecasts
#
```

Highlights of Solar and Geomagnetic Activity
06 - 12 February 2012

Solar activity began the week at moderate levels due to an M1/Sf flare produced by Region 1410 (N18, L=056, class/area Cso/240 on 01 February) at 06/2000 UTC. Activity levels decreased to very low to low levels for the remainder of the week. Noteworthy events include a long duration C7 limb event from Region 1410 at 07/2219 UTC, and a CME associated with a filament eruption at 10/1154 UTC. Region 1410 produced a long duration C7 limb event at 07/2219 UTC.

No proton events were observed at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit started the period at normal background levels, increased to moderate levels on 07 February, and reached high levels on 08-09 February. The electron flux returned to moderate levels for the remainder of the period.

The geomagnetic field was at mostly quiet levels for the majority of the period. There were a few periods of unsettled to active conditions at mid-latitudes with active to minor storm conditions at high latitudes, early in the week on 7 and 8 February. This activity was associated with solar wind speeds between 450-500 km/s and periods of southward Bz. Mid-day on 09 February, unsettled to active periods were observed at high latitudes due to the arrival of a co-rotating interaction region followed by a weak coronal hole high speed stream. From late on 09 February until the end of the period, mostly quiet conditions prevailed.

Forecast of Solar and Geomagnetic Activity
15 February - 12 March 2012

Solar activity is expected to be low with a slight chance of M-class activity until Region 1419 rotates off the visible disk on 26 February. Very low to low levels are expected to prevail for the remainder of the period.

No proton events are expected at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to be at low to moderate levels.

Geomagnetic field activity is expected to be at mostly quiet levels throughout the period, with the exception of any currently unanticipated future CME events. Increased field activity due to recurrent disturbances is expected on 18-19 February, 23 February, 2-3 March, and 7 March.

** Attention** Beginning Monday, March 12, 2012, the Weekly bulletin will now be issued and available on the SWPC web page every Monday morning by 1500 UTC.

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Newsgroups: rec.radio.amateur.space
Subject: hai dear darling this is special gift for u da
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Organization: http://groups.google.com
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NNTP-Posting-Date: Wed, 15 Feb 2012 07:43:17 +0000 (UTC)
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X-Google-Language: ENGLISH,ASCII
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MIME-Version: 1.0
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transit3.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-045 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Wed, 15 Feb 2012 08:59:27 EST
Organization: The Radio Amateur Satellite Corporation
Lines: 2269
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NNTP-Posting-Date: Wed, 15 Feb 2012 13:58:40 +0000 (UTC)
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X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
```

This report is organized into four (4) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - deborbited/returned satellites

SB SAT @ AMSAT W8ISS $WSR-045.S1
WSR 045 Part 1 02/14/2012

AMSAT NEWS SERVICE BULLETIN 045.S1
FROM AMSAT HQ SILVER SPRING, MD, February 14, 2012
TO ALL RADIO AMATEURS
BID: $WSR-045.S1

DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational
Current Mode: Science Mode - Beacon ONLY

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink: 435.530 to 435.570 MHz

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnumh
[02092011]
��VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05, 2005 0444z
Launch site: Satish Dhawan Space Centre, India

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.9360 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum0

To know what transponder is switched on please listen for the beacon that is active. Each transponder has a different beacon.
[02092011]
��SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002 1700z
Launch site: Baikonur, Kazakhstan

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz. The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10 minute timer.
[02092011]
��FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Operational
Current Mode: V/u (Mode JA)

Voice/CW (Mode JA)
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS

Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage:
http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
�retURL�atellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts.htm
[01122012]
��AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993 0140z
Launch site: Kourou, French Guiana

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[02092011]
��AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974
Launch site: Vandenberg AFB, California, USA

Status: Operational

Current Mode: Alternating between Mode A and B every 24 hours

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz CW

145.972 MHz CW
435.100 MHz CW
2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
[02092011]
��INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998 0640z (ZARYA module)
Launch sites: Baikonur, Kazakhstan
Kourou, French Guiana
Uchinoura Space Center, Japan
Kennedy Space Center, Titusville, Florida, USA

Status: Operational

Current Active Modes: FM Repeater - OFF
Voice - V/v
BBS - OFF
2m APRS - ON
70cm Digi - ON
SSTV - OFF

Expedition 30 Crew (November 2011 - March 2012):

Commander:	Dan Burbank	KC5ZSX
Flight Engineer:	Anton Shkaplerov	
Flight Engineer:	Anatoly Ivanishin	
Flight Engineer:	Oleg Kononenko	RN3DX
Flight Engineer:	Andr� Kuipers	PI9ISS
Flight Engineer:	Don Pettit	KD5MDT

Available Modes and Frequencies:
Digital/APRS:
Worldwide 2m packet uplink: 145.825 MHz FM 1k2
Worldwide 2m packet downlink: 145.825 Mhz FM 1k2
Worldwide 70cm packet downlink: 437.550 Mhz FM 1k2
Worldwide 70cm packet downlink: 437.550 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)

Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
2m Packet Mailbox: RS0ISS-11
2m Digipeater alias: ARISS
70cm Packet Mailbox: RS0ISS-1
70cm Digipeater callsign: RS0ISS
70cm Digipeater alias: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time line is NOT translated from Russian and posted.
[12262011]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-045.S2
WSR 045 Part 2 02/14/2012

AMSAT NEWS SERVICE BULLETIN 045.S2
FROM AMSAT HQ SILVER SPRING, MD, February 14, 2012
TO ALL RADIO AMATEURS
BID: $WSR-045.S2

XaTcobeo
Catalog Number:
Launch Date: Febrauary 13, 2012
Launch Site: Kourou, French Guiana

Status: On Orbit

Uplink:
Downlink: 437.365 MHz FFSK with AX.25

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum5
[02142012]
��UniCubeSat
Catalog Number:
Launch Date: Febrauary 13, 2012
Launch Site: Kourou, French Guiana

Status: On Orbit

Uplink:
Downlink: 437.305 MHz 9k6 bps FSK

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum3
[02142012]
��Robusta
Catalog Number:
Launch Date: Febrauary 13, 2012
Launch Site: Kourou, French Guiana

Status: On Orbit

Uplink:
Downlink: 437.325 MHz 1k2 FM telemetry (data every 1 min, 20 sec. burst)

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum2
[02142012]
��PW-Sat
Catalog Number:
Launch Date: Febrauary 13, 2012
Launch Site: Kourou, French Guiana

Status: On Orbit

Uplink: 435.020 MHz FM
Downlink: 145.900 MHz DSB

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum2
[02142012]
��MaSat-1
Catalog Number:
Launch Date: Febrauary 13, 2012
Launch Site: Kourou, French Guiana

Status: On Orbit

Uplink:
Downlink: 437.345 MHz GFSK 625/1250 bps
          437.345 MHz CW

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum6
[02142012]
��Goliat
Catalog Number:
Launch Date: Febrauary 13, 2012
Launch Site: Kourou, French Guiana

Status: On Orbit

Uplink:
Downlink: 437.485 MHz 1k2 AFSK

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum�
[02142012]
��E-St@r
Catalog Number:

Launch Date: Febrauary 13, 2012
Launch Site: Kourou, French Guiana

Status: On Orbit

Uplink:
Downlink: 437.445 MHz 1k2 bps AFSK

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum0
[02142012]
��ALMASat-1
Catalog Number:
Launch Date: Febrauary 13, 2012
Launch Site: Kourou, French Guiana

Status: On Orbit

Uplink:
Downlink: 437.465 MHz 1k2 bps FSK
          2407.850 MHz

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum9
[02142012]
��RS-39 Chibis-M
Catalog Number: 37841
Launch Date: October 30, 2011 10:11:00 UTC
Launch site: Tyuratam (Baikonur Cosmodrome), Kazakhstan

Status: Operational

Uplink:
Downlink:

Beacon: 435.315 MHz CW
        435.215 MHz CW

Callsign:

URL:

IARU coordination status page:
[01122012]
��JUNGU
Catalog Number: 37841
Launch Date: October 12, 2011 05:30:00 UTC
Launch site: Satish Dhawan Space Centre, India

Status: On Orbit

Uplink: 145.??? MHz 1k2 (mode?)
Downlink: 437.505 MHz 9k6 (mode?)

Beacon: 437.275 MHz 15 wpm (?) CW

Callsign:

URL: http://www.iitk.ac.in/me/jugnu/index.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum0
[01122012]
��SRMSAT
Catalog Number: 37839
Launch Date: October 12, 2011 05:30:00 UTC
Launch site: Satish Dhawan Space Centre, India

Status: On Orbit

Uplink: 145.900 MHz 1k AX.25 (speed?)
Downlink: 437.500 MHz 2k4 AX.25

Beacon: 437.425 MHz 12 wpm CW

Callsign:

URL: http://srmsat.in/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum1
[01122012]
��HRBE (E1P Explorer 1 [Prime] CubeSat (E1P-U2))
Catalog Number: 37855
Launch Date: October 28, 2011
Launch site: Vandenberg Air Force Base, California, USA

Status: On Orbit

Uplink: 437.305 MHz (???)
Downlink: 437.505 MHz AX.25 (SSB?)

Beacon:

Callsign:

URL: http://ssel.montana.edu/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum6
[01122012]
��M-Cubed
Catalog Number: 37855
Launch Date: October 28, 2011
Launch site: Vandenberg Air Force Base, California, USA

Status: On Orbit

Uplink:
Downlink: 437.485 MHz AX.25

Beacon:

Callsign:

URL: http://umcubed.org/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum!5
[01122012]
��RAX-2
Catalog Number: 37853
Launch Date: October 28, 2011
Launch site: Vandenberg Air Force Base, California, USA

Status: On Orbit

Uplink:
Downlink: 437.345MHz 9k6 GMSK

Beacon:

Callsign:

URL: http://rax.engin.umich.edu//

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum"1
[12262011]
��AO-71 AubieSat-1
Catalog Number: 37854
Launch Date: October 28, 2011
Launch site: Vandenberg Air Force Base, California, USA

Status: On Orbit

Uplink:

Downlink: 437.475 MHz 1k2 AX.25

Beacon: 437.475 MHz CW

Callsign: KI4NQO

URL: http://www.space.auburn.edu/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum8
[12262011]
��O/OREOS
Catalog Number: 37224
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: On Orbit

Uplink:
Downlink: 437.035 MHZ AX.25

Beacon:

Callsign:

URL: http://www.ooreos.org/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum6
[02092011]
��Rax-1 Radio Aurora Explorer
Catalog Number: 37223
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: On Orbit

Uplink:
Downlink: 437.505 MHz 9k6 GMSK

Beacon:

Callsign: RAX-1

URL: http://rax.engin.umich.edu/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum5
[02092011]
��FO-69 Fastrac-1 Sara Lily
Catalog Number: 37227
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: Operational

Uplink 1: 145.980 MHz 1k2 baud
Uplink 2: 145.825 MHz 1k2 baud
Downlink: 437.345 MHz 1k2 and 9k6 baud

Beacon: 437.435 MHz 1k2 AX.25

Callsign: Fast1

URL: http://fastrac.ae.utexas.edu/index.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum�
[07052011]
��FO-70 Fastrac-2 Emma
Catalog Number: 37380
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: Operational

Uplink 1: 435.025 MHz 1k2 baud
Uplink 2: 437.435 MHz 9k6 baud
Downlink: 145.825 MHz 1k2 and 9k6 baud

Beacon: 145.825 MHz 1k2 AX.25

Callsign: Fast2

URL: http://fastrac.ae.utexas.edu/index.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum�
[12162011]
��StudSat
Catalog Number: 36796
Launch Date: July 12, 2010 0352z
Launch site: Satish Dhawan Space Centre, India

Status: On Orbit

Uplink: 437.505MHz, 9600bps FSK
Downlink: 437.505MHz, 9600bps FSK
Beacon : 437.505MHz,   20bps ASK

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum4
[02092011]
��TIsat-1
Catalog Number: 36799
Launch Date: July 12, 2010 0352z

Launch site: Satish Dhawan Space Centre, India

Status: On orbit

Callsign: HB9DE

Uplink: 145.980MHz FM, AFSK
Downlink: 437.305MHz FM, AFSK
Beacon: 437.305MHz CW

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum8
[02092011]
��SwissCube
Catalog Number: 35932
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Callsign: HB9EG

Beacon(100mw): 437.5050MHz CW
Beacon(1w):   437.5050MHz FSK 1k2bps

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum9
[02092011]
��UWE-2
Catalog Number: 35934
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: In Orbit

Beacon(500mw): 437.3850 MHz AFSK 1k2bps
               437.3850 MHz FSK 9k6bps

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum0
[02092011]
��ITUpsAT1
Catalog Number: 35935
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Beacon(100mw): 437.325MHz CW
Beacon(1w): 437.325MHz 19k2bps

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum3

[02092011]
��BEESAT
Catalog Number: 35933
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Callsign: DP0BEE

Beacon(100mw): 436.000MHz CW
Beacon(500mw): 436.000MHz GMSK 4k8bps
Beacon(500mw): 436.000MHz GMSK 9k6bp
[02092011]
��CP-6
Catalog Number: 35004
Launch Date: May 19, 2009 2355z
Launch site: Wallops Island, Virginia, USA

Status: Operational

Downlink: 437.365 MHz 1k2 AFSK

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum1
[01122012]
��HAWKSAT 1
Catalog number: 35003
Launch Date: May 19, 2009 2355z
Launch site: Wallops Island, Virginia, USA

Status: operational

Downlink: 437.345 MHz ?

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum5
[01122012]
��Pharmasat
Catalog Number: 35002
Launch Date: May 19, 2009 2355z
Launch site: Wallops Island, Virginia, USA

Status: Operational

Downlink: 437.465 MHz 1k2 AFSK

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum�
[02092011]
��ANUSAT
Catalog Number: 34808
Launch Date: April 20, 2009 0115z

Launch Site: Satish Dhawan Space Centre, India

Status: ?

Downlink: 435.000 MHz
Uplink: 145.800 MHz

Telemetry: 137.400 MHz
[02092011]
��SOHLA-1 (ASTRO TECH.)
Catalog Number: 33496
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational

Proposed Frequencies and Modes:
Downlink: 437.505 MHz AFSK/CW
Beacon: 437.505 MHz AFSK/CW

Callsign:

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum1
[02092011]
��KAGAYAKI (Solan Co.)
Catalog Number: 33495
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: In Orbit

Downlink: 437.375 MHZ   FSK9k6/CW
Beacon: 437.375 MHz   FSK9k6/CW

IARU coordination status page:

AMSAT-NA webpage:

[02092011]
��STARS (Kagawa Univ.) (Twin Satellites)
Catalog Number: 33498
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational ?

Downlinks: 437.485 MHz FM/CW
           437.465 MHz FM/CW
Beacons: 437.305 MHz FM/CW
           437.275 MHz FM/CW

Callsigns: JR5YBN

JR5YBO

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum�

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID1&retURL
�atellites/status.php
[02092011]
��KKS-1 (Tokyo MCIT)
Catalog Number: 33499
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational

Downlink: 437.455 MHz AFSK/CW
Beacon: 437.385 MHz AFSK/CW

Callsign: JQ1YYY

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum7

AMSAT-NA webapge:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID0&retURL
�atellites/status.php
[20092011]
��PRISM (Tokyo Univ.)
Catalog Number: 33493
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational ?

Downlink: 437.425 MHz AFSK/GMSK/CW
Beacon: 437.250 MHz AFSK/GMSK/CW

Callsign: JQ1YCX

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum�

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID9&retURL
�atellites/status.php
[02092011]
��RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number: 32953
Launch Date: May 23, 2008 1520z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational

Curent Modes: Telemetry
Audio
Images

Downlinks: 435.315 MHz
435.215 MHz

AMSAT-NA website:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID5&ret
URL�atellites/status.php

Official website:
http://www.npopm.com/?cid�oca&caidC
[02092011]
��CanX-2
Catalog number: 32790
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational in range of ground station only

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnumF
[02092011]
��AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Downlink: 437.425 MHz 1k2 baud packet

For the latest project status update please visit the AAUSAT-II web page:
http://www.aausatii.aau.dk/homepage/index.php?language�&page�me

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum`
[02092011]
��CO-65 CUTE-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational ?

Downlink: 437.475 MHz 9k6 Packet
Uplink: 1267.600 Mhz

Telemetry Beacon:
Downlink: 437.2750 MHz CW

For the latest project status update please visit the Cute-1.7+APD II
web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnumx

Command Station blog website:
http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID2&retURL
�atellites/status.php
[07052011]
��Compass-1
Catalog number: 32787
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Current Mode: dependant on last received command

Uplink: 145.980 MHz FM
Downlink: 437.275 Mhz CW
          437.405 MHz Packet

For the latest project status update please visit the Compass 1 web
page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnumR

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID4&retURL
�atellites/status.php
[06162011]
��CO-66 Seeds II
Catalog number:
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Downlink: 437.485 MHz

Callsign: JQ1YGU

For the latest project status update please visit the Seeds 2 web
page: http://cubesat.aero.cst.nihon-u.ac.jp/english/seeds_2_e.html

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum6

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID3&retURL
�atellites/status.php
[02092011]
��CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007 0702z
Launch site: Baikonur, Kazakhstan

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID�&retURL
/satellites/status.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnumr
[02092011]
��CP3
Catalog Number: 31129
Launch Date: April 17,2007 0702z
Launch site: Baikonur, Kazakhstan

Status: Operational

Current Mode: /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnumt
[02092011]
��CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005 0652z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon: 437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/xivpicte.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum7
[02092011]
��CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: ?????

Current Mode: /u

Beacon: 436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID�&retURL
�atellites/status.php

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[02092011]
��QuakeSat
Catalog Number: 27845
Launch Date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Telemetry only

Current Mode: 9600 baud data packet

Mode U packet
Downlink: 436.675 MHz 9k6 BPS

Quakesat webpage:
http://www.quakefinder.com/services/quakesat-ssite/
[02252011]
��CO-55 Cute-1.7+APD II
Catalog Number: 27844

Launch date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational

Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satIDi&retURL
�atellites/status.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnumx
[02092011]
��NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001 0240z
Launch site: Kodiak Launch Complex, Alaska, USA

Status: Telemetry only

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[02092011]
��RS-22 RADIO SPORT 22 (MOZHAYETS 4)
Catalog number: 27939
Launch Date: September 27, 2003 0612z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational - 70cm cw only

Current Mode: /u

CW Beacon - 435.352 MHz
            145.818 MHz

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satIDv&retURL
�atellites/status.php

```
[02092011]
��LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990
Launch site: Kourou, French Guiana

Status: CW Beacon only

Uplinks:          145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink:      437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[02092011]
��UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984
Launch site: Vandenburg AFB, California, USA

Status: Operational ?

Current Mode:  /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon:          435.025 MHz
Mode-S Beacon:     2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[07052011]
��INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998 0640z (ZARYA module)
Launch sites: Baikonur, Kazakhstan
              Kourou, French Guiana
              Uchinoura Space Center, Japan
              Kennedy Space Center, Titusville, Florida, USA

Status: Operational
```

Current Active Modes: FM Repeater - OFF
Voice - V/v
BBS - OFF
2m APRS - ON
70cm Digi - ON
SSTV - OFF

Expedition 30 Crew (November 2011 - March 2012):

Commander:	Dan Burbank	KC5ZSX
Flight Engineer:	Anton Shkaplerov	
Flight Engineer:	Anatoly Ivanishin	
Flight Engineer:	Oleg Kononenko	RN3DX
Flight Engineer:	Andr� Kuipers	PI9ISS
Flight Engineer:	Don Pettit	KD5MDT

Available Modes and Frequencies:
Digital/APRS:
Worldwide 2m packet uplink: 145.825 MHz FM 1k2
Worldwide 2m packet downlink: 145.825 Mhz FM 1k2
Worldwide 70cm packet downlink: 437.550 Mhz FM 1k2
Worldwide 70cm packet downlink: 437.550 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
2m Packet Mailbox: RS0ISS-11
2m Digipeater alias: ARISS
70cm Packet Mailbox: RS0ISS-1
70cm Digipeater callsign: RS0ISS

70cm Digipeater alias: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[12262011]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-045.S3
WSR 045 Part 3 02/14/2012

AMSAT NEWS SERVICE BULLETIN 045.S3
FROM AMSAT HQ SILVER SPRING, MD, February 14, 2012
TO ALL RADIO AMATEURS
BID: $WSR-045.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

NANOSAIL-D
Catalog Number: 37361(?)
Ejection Date: January 17, 2011

Status: On orbit

Downlink: 437.270 MHz AX.25

URL: http://nanosaild.engr.scu.edu/dashboard.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum5
[01052012]
��HO-68 HOPE-1 (CAS-1)(XW-1)
Catalog Number: 36122
Launch Date: December 15, 2009 0231z
Launch site: Taiyuan Space Center, PRC

Status: Non - Operational

Callsign:
Broadcast: BJ1SA-11
BBS: BJ1SA-12

```
Uplinks:   145.8250 MHz FM, PL 67.0 Hz.
           145.9250 - 145.9750 MHz SSB/CW
           145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
           435.7650 - 435.7150 MHz SSB/CW
           435.6750 MHz AFSK 1200 BPS
```

Beacon: 435.7900 MHz CW

Mode and Antenna Polarization:
V: LHCP 2.0dBi max
U: RHCP 3.0dBi max

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum8

For more information about XW-1 (CAS-1):
http://
[01122012]
��SO-67 SumbandilaSat
Catalog Number: 35870
Launch Date: September 17, 2009 1555z
Launch site: Baikonur, Kazakhstan

Status: Non - Operational

Callsign: ZS0SUM

Uplink: 145.875MHz FM tone 233.6 Hz
Downlink: 435.345MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

For more information about SO-67:
http://www.amsatsa.org.za/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum�
[01272012]
��CP4
Catalog Number: 31132
Launch Date: April 17, 2007

Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon: 437.325 MHz CW

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnumy
[09062010]
��LIBERTAD-1
Catalog Number: 31128
Launch Date: April 17, 2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink: 145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnumv
[09062010]
��PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: Non-Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder: 145.825 Mhz FM

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnumQ
[09062010]
��NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
                             2407.250

Official Website: http://www.ncube.no

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum$
[09062010]
��XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 MHz FM 67Hz CTCSS
Voice Downlink: 2401.835 MHz FM
Packet Up/Downlink: 437.250 MHz 9k6 packet
Packet Downlink   2401.835 MHz 38k4 packet

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnumT
[09062010]
��UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non-Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnumS
[09062010]
��AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004 0745z
Launch site: Baikonur, Kazakhstan

Status: Non - Operational

Current Mode(s):
Voice repeater: V/u
Uplink: 145.880 MHz FM
Downlink: 435.150 MHz FM

Telemetry: Recovery efforts
Downlink: 435.150MHz 9k6

Analog voice downlink:	435.300 MHz FM
	435.150 MHz FM
	2401.200 Mhz FM
Analog voice uplink:	145.860 MHZ FM
	145.880 MHz USB
	145.880 MHz FM
	145.920 MHz FM
	145.920 MHz FM - 67 Hz PL tone burst
	1268.705 MHz FM
Digital Downlinks:	435.150 MHz FM 38k4 PBP, 1 watt output
	435.150 MHz FM 9k6 Pacsat Broadcast Protocol
	2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:	145.860 MHz FM 9k6 Pacsat Broadcast Protocol
	1268.703 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon:	435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP

L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum
[12062011]
��CANX-1
Catalog Number: 27847
Launch Date: June 30, 2003

Status: Non-Operational

Downlink: 437.8800 MHz AFSK 1k2bps
[06052009]
��DTUSAT
Catalog Number: 27842
Launch Date: June 30, 2003

Status: Non-Operational

Current Mode: 2k4 AFSK Packet last reported

Downlink: 437.475MHz

Officail webpage: http://dtusat1.dtusat.dtu.dk/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID1&retURL
�tellites/all_oscars.php
[02212009]
��AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)

Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
��MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Telemetry only

Uplinks: 145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[03302009]
��NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
��SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
��SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
��AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks

V-band: 145.840 - 145.990 MHz CW/LSB
U-band: 435.550 - 435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks

S2-band: 2401.225 - 2401.475 MHz CW/USB
K-band: 24048.010 - 24048.060 MHz CW/USB
Beacon: 2401.323 MHz
24048.035 MHz

P3-D Telemetry Beacons (IHU)

BEACON	General Beacon(GB)	Middle Beacon(MB)	Engineering Beacon(EB)
2 m	none	145.898 MHz	none
70cm	435.438 MHz	435.588 MHz	435.838 MHz
13cm(1)	2400.188 MHz	2400.338 MHz	2400.588 MHz
13cm(2)	2401.173 MHz	2401.323 MHz	2401.573 MHz
3cm	10450.975 MHz	10451.125 MHz	10451.375 MHz
1.5cm	24047.885 MHz	24048.035 MHz	24048.285 MHz

[07162007]
��OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
��UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)

Downlinks: 437.025 MHz
437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
��SO-35 SUNSAT
Catalog Number: 25636
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz
145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
��PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
��SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
��GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Non-Operational

Current Modes:
Telemetry : /u

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks: 145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://asri.technion.ac.il/techsat/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID&retURL
�atellites/status.php
[07172010]
��TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink: 145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
��MO-30 UNAMSAT-2
Catalog Number: 24305
Launch Date: September 5, 1996

Status: Non-operational

Downlink: 435.1380 MHz AFSK 1200 BPS
Downlink: 435.2060 MHz AFSK 1200 BPS
Uplink: 145.8150 MHz AFSK 1200 BPS
Uplink: 145.8350 MHz AFSK 1200 BPS
Uplink: 145.8550 MHz AFSK 1200 BPS
Uplink: 145.8750 MHz AFSK 1200 BPS
[06042009]
��PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Non-operational

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012009]
��IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks: 145.875 MHz FM 1200-baud
145.900 MHz FM 1200-baud
145.925 MHz FM 1200-baud
145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
��KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
��AO-24 ARSENE
Catalog Number: 22654
Launch Date: May 13, 1993

Status: Non-operational

Uplink: 435.0625 MHz FM 1k2bps AFSK

435.1125 MHz FM 1k2bps AFSK
435.1375 MHz FM 1k2bps AFSK
Downlink: 145.9750 MHz FM 1k2bps AFSK
2446.5025 MHz FM 1k2bps AFSK

Beacon: 2446.4700 MHz CW

Broadcast callsign:
BBS:
[12162009]
��KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HL01-11
BBS: HL01-12
[01222007]
��UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink: 145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
��AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink: 435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
��FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons: 435.795 MHz CW
435.910 MHz AX25

Voice Transponder:

Uplink: 145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks: 145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
��WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
��DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink: 145.825 MHz FM 1200 Baud AFSK
Beacon: 2401.220 MHz
[05012006]
��AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: non-operational

Current Mode: V/u

Uplink: 145.900 MHz FM 1200-baud Manchester FSK (reserved)
                145.920 MHz FM VOICE
                145.940 MHz FM 1200-baud Manchester FSK (reserved)
                145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink: 437.026 MHz USB VOICE
                (1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC 437.050 MHz RHCP
   PSK 437.026 MHz LHCP
V: Linear

```
Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[07242009]
��UO-15 UoSAT-4
Catalog Number: 20438
Launch Date: January 22, 1990

Status: Non-operational

Uplink: ?
Downlink: 435.1250MHz (?)
          435.1200MHz (?)
[06042009]
��UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
��FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
��AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB
```

Beacon: 145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
��AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.8500 - 145.9000 MHz SSB/CW
Downlink 29.4000 - 29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
��AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink: 29.4500 - 29.5500 MHz SSB/CW
Beacons: 29.450 MHz
          435.100 MHz
[01312008]
��AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
��OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink: 145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW

[01012007]
��RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB

Beacon 1: 29.352 MHz (intermittent)
Beacon 2: 29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
��RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB

Beacon: 145.860 MHz

Robot: 145.908 MHz
[05232004]
��RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-045.S4
WSR 045 Part 4 02/14/2012

AMSAT NEWS SERVICE BULLETIN 045.S4
FROM AMSAT HQ SILVER SPRING, MD, February 14, 2012
TO ALL RADIO AMATEURS
BID: $WSR-045.S4

THE FOLLOWING SATELLITES HAVE RE-ENTERED OR HAVE BEEN RETURNED SAFELY:

ARISSat-1
Catalog number: 37772
Launch date: August 03, 2011 1843z
Launch site: International Space Station

Status: Re-entered January 05, 2012

Callsign: RS01S

Current Mode(s):
Linear Transponder: U/v
Uplink: 435.758 to 435.742 MHz CW/LSB
Downlink: 145.922 to 145.938 MHz CW/USB

FM Telemetry/SSTV/Messages/ID:
Downlink: 145.950 MHz FM

Telemetry/Beacon:
Downlink: 145.939 MHz CW1
             145.919 MHz CW2
             145.920 MHz 1k BPSK USB
             145.920 MHz 400b BPSK USB

Official Webpage:http://www.amsat.org/amsat-new/ARISSat/ARISSat.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/informal_detail.php?serialnum�
[01052012]
��CAERUS
Catalog Number:
Launch Date: December 08, 2010 15:43:00 UTC
Launch site: Kennedy Space Center, Titusville, Florida, USA

Status: Re-entered December 22, 2010

Uplink:
Downlink: 437.600 MHz 1k2 AX.25

Beacon: 437.600 MHz CW

Callsign: KJ6FIX

URL:
http://www2.isi.edu/research/prj-serc/prj-serc_projects/prj-serc_projects
-8.
htm

IARU coordination status page:

[11102011]
��CO-56 CUTE-1.7 + APD

Catalog number: 28941
Launch date: February 21, 2006

Status: Re-entered
Re-entered: October 25, 2009

Uplink: 1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnumV
[09062010]
��BEVO-1 (DRAGONSAT-1)
Catalog Number: 35690
Launch Date: May 19, 2009

Status: Re-entered
Re-entered:

Downlink: 437.325 MHz 9k6 GMSK
          437.325 MHz CW 20wpm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum7
[07312009]
��AggieSat2 (DRAGONSAT-2)
Catalog Number: 35690
Launch Date: May 19, 2009

Status: Re-entered
Re-entered:

Downlink: 436.250 MHz 9k6 FHSS
[11112009]
��Pollux
Catalog Number: 35693
Launch Date: July 31, 2009

Status: Re-entered
Re-entered:

Callsign: POLLUX-1

Downlink: 145.825MHz 1k2 AX.25

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum9

[09062010]
��Castor (ANDE-2)
Catalog Number: 35694
Launch Date: July 31, 2009

Status: Re-entered
Re-entered:

Callsign: KD4HBO-1

Downlink: 145.825 MHz 1k2 AX.25

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum4
[09062010]
��NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: July 28, 2008

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnumY
[01012009]
��NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
��NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

```
Main Downlink:      145.825 Mhz FM APRS AX25
APRS Uplink:        145.825 MHz FM APRS AX25
Voice/PSK31 Uplink:  28.120 MHz
```

Packet to Voice ID: RAFT
[06112007]

��GENESAT-1
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Re-Entered
Re-entered date: August 8, 2010

Current Mode: /u

Callsign: KE7EGC

Telemetry Beacon Downlink: 437.0695 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[08082010]
��HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Re-Entered
Re-entered: June 18, 2008

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon: 437.2750 MHz CW

Callsign: JR8YJT
[01012009]
��SO-43 Starshine 3
Catalog Number: 26929
Launch Date: September 30, 2001

Status: Re-Entered
Re-entered: January 21, 2003

Beacon: 145.825Mhz
[02212009]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at} amsat.org
NNNN
/EX

From -8664042270263518670
X-Google-Thread: 10e8ad,2f43c7fb096eed07,start
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Received: by 10.68.226.10 with SMTP id ro10mr8351465pbc.6.1329539438378;
        Fri, 17 Feb 2012 20:30:38 -0800 (PST)
Path: wr5ni38233pbc.0!nntp.google.com!news1.google.com!postnews.google.com!tc8g2000pbc.googlegroups.com!not-for-mail
From: jincy biju <jincybijupeter2007@gmail.com>
Newsgroups: rec.radio.amateur.space
Subject: LEARN the fun way!
Date: Fri, 17 Feb 2012 20:24:50 -0800 (PST)

```
Organization: http://groups.google.com
Lines: 4
Message-ID: <d107cd5e-47b9-4f17-815d-7b2b227314c8@tc8g2000pbc.googlegroups.com>
NNTP-Posting-Host: 14.99.217.215
Mime-Version: 1.0
X-Trace: posting.google.com 1329539434 18177 127.0.0.1 (18 Feb 2012 04:30:34 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Sat, 18 Feb 2012 04:30:34 +0000 (UTC)
Complaints-To: groups-abuse@google.com
Injection-Info: tc8g2000pbc.googlegroups.com; posting-host=14.99.217.215; posting-
account=aGfMDAoAAABqGb7tYzsDhsa6tBfJFslT
User-Agent: G2/1.0
X-Google-Web-Client: true
X-Google-Header-Order: HUALENKRC
X-HTTP-UserAgent: Mozilla/5.0 (Windows NT 6.1; rv:9.0) Gecko/20100101 Firefox/
9.0,gzip(gfe)
Content-Type: text/plain; charset=ISO-8859-1

"we learn a little by listening,
         more by seeing,
             most and the best by experiencing.
http://123maza.com/46/coral846/


From -1557161511855803752
X-Google-Thread: 10e8ad,10e5520368c6dee0,start
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Received: by 10.68.74.201 with SMTP id w9mr10726236pbv.0.1329618329300;
        Sat, 18 Feb 2012 18:25:29 -0800 (PST)
Path: wr5ni41906pbc.0!nntp.google.com!news1.google.com!
border1.nntp.dca.giganews.com!nntp.giganews.com!novia!news-out.readnews.com!
transit3.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-050 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sat, 18 Feb 2012 21:25:28 EST
Organization: The Radio Amateur Satellite Corporation
Lines: 511
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <002101cceead$b7658b60$2630a220$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
X-Trace: reader1.panix.com 1329618328 6644 166.84.1.6 (19 Feb 2012 02:25:28 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 19 Feb 2012 02:25:28 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
```

```
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
Content-Language: en-us
```

AMSAT NEWS SERVICE
ANS-050

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

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* Dick Daniels (W4PUJ) - SK, 1932 - 2012
* AMSAT Awards Announcement & New Postal Rates Notice
* AMSAT Preparations for Dayton Hamvention 2012
* Vega Launch Success - Cubesats Heard
* MASAT-1 Designated MagyarSat-OSCAR-72 (MO-72)
* Satellite Shorts From All Over

SB SAT @ AMSAT $ANS-050.01
ANS-050 AMSAT News Service Weekly Bulletins

AMSAT News Service Bulletin 050.01
>From AMSAT HQ SILVER SPRING, MD.
February 19, 2012
To All RADIO AMATEURS
BID: $ANS-050.01

NASA Press Release for 3rd Round of Cubesat Space Mission Candidates

On February 14, 2012 NASA issued a press release officially listing AMSAT-NA and all of the other 32 small satellites selected to fly in 2013 and 2014 as auxiliary payloads.

The proposed CubeSats come from universities across the country, the Radio Amateur Satellite Corporation, NASA field centers and Department of Defense organizations.

After launch, the satellites will conduct technology demonstrations, educational research or science missions. The selected spacecraft are eligible for flight after final negotiations and an opportunity for flight becomes available. The satellites come from the following organizations:

-- Air Force Institute of Technology, Wright-Patterson AFB, Ohio
-- Air Force Research Lab, Wright-Patterson AFB
-- California Polytechnic State University, San Luis Obispo
-- Cornell University, Ithaca, N.Y.
-- Massachusetts Institute of Technology, Cambridge
-- Montana State University, Bozeman
-- Naval Postgraduate School, Monterey, Calif. (2 CubeSats)
-- NASA's Ames Research Center, Moffett Field, Calif.
-- NASA's Goddard Space Flight Center, Greenbelt, Md.
-- NASA's Jet Propulsion Laboratory, in partnership with the
    California Institute of Technology, Pasadena (2 CubeSats)
-- NASA's Kennedy Space Center, Cape Canaveral, Fla.
-- The Radio Amateur Satellite Corporation, Silver Spring, Md.
-- Saint Louis University, St. Louis
-- Salish Kootenai College, Pablo, Mont.
-- Space and Missile Defense Command, Huntsville, Ala. (2 CubeSats)
-- Taylor University, Upland, Ind.
-- University of Alabama, Huntsville
-- University of California, Berkeley
-- University of Colorado, Boulder (2 CubeSats)
-- University of Hawaii, Manoa (3 CubeSats)
-- University of Illinois, Urbana (2 CubeSats)
-- University of Michigan, Ann Arbor
-- University of North Dakota, Grand Forks, N.D.
-- University of Texas, Austin
-- US Air Force Academy, Colorado Springs, Colo.
-- Virginia Tech University, Blacksburg

Thirty-two CubeSat missions have been selected for launch in the previous two rounds of the CubeSat Launch Initiative. Eight CubeSat missions have been launched (including five selected via the CubeSat Launch Initiative) to date via the agency's Launch Services Program Educational Launch of Nanosatellite, or ELaNa, program.

The full text of the NASA Press Release can be read on-line at:
http://www.nasa.gov/home/hqnews/2012/feb/HQ_12-050_CubeSats.html

SpaceDaily.com published a related story at:
http://tinyurl.com/Cubesats

For additional information on NASA's CubeSat Launch Initiative program, visit: http://go.usa.gov/Qbf

Please make your donation to AMSAT's Fox-1 Fund at:
http://www.amsat.org

[ANS thanks NASA for the above information]

Dick Daniels (W4PUJ) - SK, 1932 - 2012

By Jan A. King W3GEY/VK4GEY

One of AMSAT's most important, admired and well loved members, Dick Daniels, W4PUJ, ex WA4DGU, died on February 14, 2012. He lost his battle with lung cancer, diagnosed only at Christmas time 2011. Dick achieved so much working for AMSAT that it is virtually impossible to enumerate his individual accomplishments. And we cannot overestimate the importance of his sustained support. Dick was many things to us but, among them he was our record keeper, photographic recorder, and the de facto AMSAT historian. So, his loss also represents the loss of many memories of the things we did and the places we've gone as an organization, which simply can't be recorded or kept except in a mind. So, our loss is huge! The records of our earlier spacecraft developments, starting with Australis-OSCAR-5 and continuing to present, amount to over 6,000 individual (non-duplicate) 35 mm slides. These have since been digitized. These were all kept and maintained by him. Many of the photos were his own.

Dick was born in Cincinnati, Ohio on May 19, 1932. He received a BBA degree from the University of Cincinnati in Business Management in 1956 and an MBA from the University of Pennsylvania Wharton Graduate School in 1957. He joined NASA HQ in 1961 where he remained until his retirement in 1994. Dick became a licensed radio amateur in 1959. He was involved with the formation of AMSAT in 1970 and served on the AMSAT Board of Directors from 1992 to 2003.

Dick was one of the initial AMSAT members and was Life Member 11. His first major contribution to amateur radio was his work to obtain permission from the NASA Administrator (then James Fletcher) and the NOAA Administrator (then Jack Townsend) for the launch of Australis-OSCAR-5. It was Dick who pushed our AMSAT letter proposal for the launch of AO-5 through the NASA and NOAA systems. Dick was also heavily involved in our efforts to license AO5 with the FCC. That was a much bigger deal back in 1970 than it is today. Few will appreciate the resistance we had within the system from the TIROS project office at NASA/GSFC and what had to be done to overcome it. Few will also remember the support we had from places we didn't expect, but, with Dick's help and all of us pushing - we were in "business" - the "business" of building satellites for free.

Dick became AMSAT-NA's primary mechanical designer and technician, having helped design and then assemble just about every spacecraft structure we launched starting with AMSAT-OSCAR-6. At the beginning of the Phase-3 era it became clear that AMSAT needed to go into the propulsion business if we were going to get to higher orbits and Dick took on the role of chief propulsion expert, in addition to his mechanical technician duties. Dick and I installed the Thiokol solid propellant kick motor into the ill-fated Phase-3A satellite once it arrived in French Guiana and it was Dick, working with MBB who loaded the bi-propellant fuels (UDMH or AZ-50 and N2O4) on-board AO-10, AO-13 and AO-40 (all very dangerous compounds). Even though the rocket motor each time was pure German technology, Dick was the one we all trusted to handle the exacting task of propellant loading. He also developed, assembled and tested all of the PFAs (propellant flow assembly) units that controlled the fuel flow and pressurization of each of the propulsion systems. He also contributed significantly to their design details. The utilization of real, high performance propulsion systems on small satellites is still something no other small satellite organization other than AMSAT has successfully achieved. Few have even attempted to follow in our footsteps. We've had our difficulties with rocket motors (and what organization that has tried to use them has not?) but, at least AO-13 was perfect. No professional organization has ever done much better than the performance of that propulsion system. And, in large measure, the success of that system can be credited to Dick Daniels. The other P3 satellites, at least had partially successful motor firings, except for Phase-3A which was lost due to a launch vehicle failure, hence we never had a chance to fire our solid rocket motor.

Dick constructed the AO-6 2M/10M repeater (or transponder) designed by Perry Klein (W3PK) and Karl Meinzer (DJ4ZC). He also constructed the follow-on unit flown on AO-7. He assembled major portions of the receiver units forming both the command system and packet communications system developed by Tom Clark (W3IWI) for the four Microsat spacecraft launched in 1990. Dick assembled so much hardware that if you were to look at each individual sub-assembly that he built or worked on - as they exist in our master photo set - and you viewed each slide for 10 seconds, it would take over an hour to view all of them! That is a lot of space flight hardware.

Dick loved space flight, he loved the challenge represented by the amateur satellite program and he loved working with our many friends around the world. Together we accomplished something that will take years before others reproduce. More importantly, with Dick's huge support we actually created a new industry. Few lives can claim to have done that. The Small Satellite Industry is very alive and well and, as a sector of all space commerce it is now the fastest growing area. If Dick had not made his contributions, AMSAT would have had a very different history but, because of him and others who worked so hard to get things started, AMSAT is at the root of all of today's small satellite technology. This is a fact, not wishful thinking.

Dick also loved nature and the outdoors. We spent many happy times hiking in the mountains of Virginia, using the "famous" Daniels "cabin" as a base camp. We had great times chasing butterflies and watching sea turtles in French Guiana. Dick has a wonderful family and even though AMSAT took a significant fraction of his free time his daughter Kathy and his son Robert are proud of his accomplishments. Like all AMSAT "widows" Jackie supported Dicks "hobby" with enthusiasm and never complained about her time alone when Dick was integrating AMSAT spacecraft on the night shift (sometimes at home and sometimes with me at the AMSAT lab). His family will miss him terribly as he was not just an average father and husband.

Dick spent a lot of time working on the gantry level of many launch vehicles, installing AMSAT spacecraft on Delta and Ariane launchers and, as a NASA-HQ employee, he built more space flight hardware in his basement than anyone working for NASA in Washington, D.C. ever even saw in a lifetime. He loved life and he made his count. And he made a huge difference to the outcome of our hobby and our belief in what an individual can do in space.

So, we've lost someone that meant a lot to us all and someone who will be impossible to replace. History may repeat itself but, it will be a long time before someone like Dick Daniels, with his unique set of skills comes our way again. So, W4PUJ is SK. This is a sad day for amateur radio and to the small satellite space community and even more for those of us who loved him.

Dick, you made a difference and it will be a long time still before others reach where you have been. What you did wasn't just worthwhile - IT WAS FANTASTIC! I'll never forget our time working together! It was an amazing hobby, really! An amazing LIFE!

Jan A. King, W3GEY/VK4GEY

A memorial service will be held for Dick Daniels, W4PUJ on Saturday, February 25 at 1:00PM at Little Falls Presbyterian Church, 6025 Little Falls Rd, Arlington VA 22207. In lieu of flowers, the family suggests a contribution to: Capital Caring, 950 N Glebe Rd #500, Arlington VA 22203. This is the organization that provided hospice care for Dick. Donations in memory of Dick can also be made on-line:
http://www.capitalcaring.org/donate-online

E-mail messages of condolence sent to martha@amsat.org will be given to Dick's family.

For those planning to attend Dick Daniels Memorial Service from out of the Washington DC area, a block of rooms has been reserved by the family. Reservations must be made by Tuesday at 4:00 PM EST. Go to:
http://tinyurl.com/Daniels-AMSAT (Holiday Inn)

[ANS thanks Jan King, W3GEY/VK4GEY for the above information]

AMSAT Awards Announcement & New Postal Rates Notice

AMSAT Director Contests and Awards, Bruce Paige, KK5DO says congratulations are in order for our latest AMSAT Awards recipients.

The following have entered into the Satellite Communicators Club for making their first satellite QSO:

+ Ben Jacobs, KC9ROI

The following have earned the AMSAT Communications Achievement Award:

+ Hector Luis Martinez Sis, CO6CBF, #547
+ I Made Sudarsana SE, YB9AY, #548

The following have earned the South Africa Satellite Communications Achievement Award:

+ Hector Luis Martinez Sis, CO6CBF, #US178

The following have earned their Robert W. Barbee, Jr. W4AMI Award:

+ Hector Luis Martinez Sis, CO6CBF #76
+ Jim Adams, K0BAM upgrade to 2,000

The following have earned their Robert W. Barbee, Jr. W4AMI 5000 Award:

+ Mariusz Kocot SQ9MES, #29

To see all the awards visit http://www.amsat.org or http://www.amsatnet.com

Postage Rate Increase Drives New Cost of Awards:

The AMSAT Awards web page (http://www.amsat.org/amsat-new/awards/) will be updated with the new postage rate information. Please note that new U.S. Postage rates in effect January, 2012 now require envelopes with stiffeners in them (as AMSAT Awards are packaged) to be sent as first class small packages. Postage is now $2.00 within the U.S. and $5.00 for overseas.

[ANS thanks AMSAT Director Contests and Awards, Bruce Paige, KK5DO for the above information]

AMSAT Preparations for Dayton Hamvention 2012

AMSAT Vice-President of User Services, Gould Smith, WA4SXM says that planning is underway and the AMSAT Dayton team is busy preparing for our presence at the Hamvention, May 18-20, 2012.

AMSAT will be found in the same booths (444-449) in Ball Arena, right across from the ARRL area and just inside the door from the Satellite Demonstration area. Plan to visit all of the AMSAT activities!

+ AMSAT satellite prototypes
+ AMSAT Thursday Night Get-together
+ AMSAT Forum planned for Saturday morning
+ AMSAT/TAPR Banquet

AMSAT reserves a block of hotel rooms with priority given for those volunteering to work in the AMSAT booth for multiple 2 hour shifts during the Hamvention. More information will be released when this is finalized.

Additional information via ANS and the AMSAT web site Dayton area will be updated soon. Keep an eye on:
http://www.amsat.org/amsat-new/hamvention/2012/Dayton.php

[ANS thanks Gould Smith, WA4SXM for the above information]

Vega Launch Success - Cubesats Heard

The European Space Agency Vega first flight was launched successfully on Monday, February 13 at 1000 UTC from the ESA Spaceport at Kourou in French Guiana. A YouTube video playback of the launch can be seen at: http://tinyurl.com/Vega-Launch

Following the launch signals had been reported from AlmaSat-1, Goliat, Masat-1, PW-Sat, UniCubeSat and XaTcobeo by amateur radio operators around the world.

Details of the satellite radio frequency and modulation type have been published on the web, see:
http://www.amsat.org
http://www.uk.amsat.org/4657
http://www.ne.jp/asahi/hamradio/je9pel/esa9cubf.htm

The Cubesats have received IARU Coordination for operation on the following frequencies:

+ AlmaSat-1 437.465 MHz 1200 bps FSK, 2407.850 MHz
- E-St@r   437.445 MHz 1200 bps AFSK (no reception report)
+ Goliat   437.485 MHz 1200 bpx AFSK
+ Masat-1 437.345 MHz 625/1250 bps GFSK, CW
+ PW-Sat   145.900 MHz 1200 bps BPSK AX25, CW
- Robusta 437.325 MHz 1200 bps FM (no reception report)
+ UniCubeSat 437.305 MHz 9600 bps FSK

+ XaTcobeo 437.365 MHz FFSK with AX.25

AMSAT-Francophone has posted a windows and linux version of a telemetry decoder for the French student ROBUSTA amateur satellite at:
http://www.amsat-f.org/site/spip.php?article24

When PW-Sat has finished its primary scientific mission it will be reconfigured as a 435/145 MHz FM to DSB transponder for general amateur radio communications. The FM to Double Sideband transponder was first pioneered by amateurs on the satellite AO-16.

The Masat-1 satellite team have made available software to decode their 437.345 MHz GFSK telemetry data via a PC sound card. The software can be downloaded from:
http://cubesat.bme.hu/en/foldi-allomas/kliens-szoftver/

XaTcobeo got a mention on Spanish TV news, see:
http://www.youtube.com/watch?v=mdVt8P1gzfY (in Spanish)

[ANS thanks the Vega Cubesat Teams, AMSAT-UK, and radio amateurs worldwide for the above information]

MASAT-1 Designated MagyarSat-OSCAR-72 (MO-72)

OSCAR Number Administrator Bill Tynan, W3XO reports, "Congratulations on the successful launch of the MaSat-1 Cubesat that the team at Budapest University of Technology and Economics have been responsible for designing, building and testing. Since you have met all of the requirements for being issued an OSCAR number, including coordination through IARU and requesting an OSCAR number, I, under authority vested in me by the President of AMSAT-NA, do hereby name MaSat-1 as MagyarSat-OSCAR-72 or MO-72."

Bill concludes, "I, and all at AMSAT-NA wish MagyarSat-OSCAR-72 great success in fulfilling all of its mission objectives."

[ANS thanks OSCAR Number Administrator Bill Tynan, W3XO for the above information]

Satellite Shorts From All Over

+ Congratulations to John Papay K8YSE for reaching 1006 confirmed grids for his satellite VUCC award!

+ Joseph Armbruster, KJ4JIO is working on an analysis of ARISSat-1

keplerian element data. He has posted his initial graphic plots of the data at: http://tinyurl.com/KJ4JIO-Analysis
Joe plans to extend this analysis in the future to include correlation of orbit with temperature, eclipses, etc.

+ ARISS news is available on Twitter. The ARISS twitter account ARISS_status has just surpassed the 1000 followers mark.
  See: http://twitter.com/ARISS_status

+ Special John Glenn ARISS Contact with Perth, Australia to celebrate the 50th Anniversary of "The City of Lights" will carried live via internet streaming, Monday, February 20 at 10:23 UTC:

  - EchoLink *AMSAT* (101377) and *JK1ZRW* (277208) servers
  - IRLP Node 9010 Discovery Reflector

+ AMSAT-DL received a certificate of appreciation from Japan's UNITEC-1 flight to Venus together with AKATSUKI (Venus Climate Orbiter): http://tinyurl.com/UNITEC-Award (amsat.org).

+ Reminder that the QSL Manager for the K7UGA Barry Goldwater Special Event stations sponsored by CADXA is Bob Davies, K7BHM (qrz.com) with an SASE. A video showing K7UGA satellite operation has been posted by Patrick WD9EWK at:
  http://www.youtube.com/watch?v=790OQThYtX0

+ Yuri, UT1FG/MM has been making satellite contacts in range of North America. John, K8YSE has prepared an excellent "working Yuri" primer for those trying to make a contact with UT1FG/MM:
  http://www.papays.com/sat/general.html (scroll down about 1/4 way down the web page).

+ AMSAT Keeper of the Keps, Ray Hoad, WA5QGD says that SumbandilaSat (SO-67, Cat# 35870) has been added back into the Keplerian Element set distribution in light of published plans of recovery of SO-67 for amateur radio operation.

+ The 2012 AMSAT Space Symposium and Annual Meeting dates have been set for Oct 26-28, 2012 at the Holiday Inn Orlando Airport. More details as they become available.

+ NASA and the American Physical Society have entered into a partnership to share unique videos from the International Space Station with students, educators and science fans around the world. NASA astronaut Don Pettit will use everyday objects from Earth to demonstrate physics through the "Science off the Sphere" video series. Watch the first video at http://www.physicscentral.com/explore/sots/ (NASA Education Express)

+ Astronaut Nicole Stott posted an image of Egypt on her Twitter account: http://tinyurl.com/pyramids-from-ISS. If you can spot the Great Pyramids at Giza in this small image, you've pretty good eyesight! Click the image for a larger version of the image if can't find them. (UniverseToday.com)

+ DX News Reports say that Gabon, TR, will be activated by Sebastien, F4EIH, who will be in Gabon for at least three years starting on 1 February. He plans to operate SSB, PSK31 and JT65 on the HF and VHF (EME and Satellite) bands. (425 DX News)

+ Enjoy the view out the window aboard the ISS as you fly over the US East Coast at night: http://tinyurl.com/ISS-Over-EastCoast. At the end of the video you can click on the icons to fly over other places. (UniverseToday.com)

+ Cornell/JA/MIT are organizing the 1st Interplanetary CubeSat Workshop. The conference will be held at the end of May this year at MIT. Abstracts are now being accepted for technical talks. The event website describing keynote speakers, program details and other information can be accessed at: http://www.iCubeSat.org

+ Historical Note: 26 years ago on February 19, 1986 the Mir Space Station was launched. It was assembled in orbit from 1986 to 1996. It was deorbited on March 21, 2001.

[ANS thanks everyone for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office. And, with that, please keep in mind the size of the universe: Light from the sun takes 8 minutes to reach you. When you look at the Andromeda galaxy the light you are seeing took 2.3 million years to reach you. If the sun were the size of a dot on an ordinary-sized letter 'i', then the nearest star would be 10 miles away.

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM
K9JKM at amsat dot org

From 4930273444277871529
X-Google-Thread: 10e8ad,165fba4e3ef60168,start
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit

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        Tue, 21 Feb 2012 16:30:09 -0800 (PST)
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newsfeed2.dallas1.level3.net!news.level3.com!panix!rri.panix.com!robomod!not-for-
mail
From: SWPC.Webmaster@noaa.gov
Newsgroups:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.shor
twave,rec.radio.info
Subject: Weekly Highlights of Solar and Geomagnetic Activity, 13 - 19 February
2012
Followup-To:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.shor
twave
Date: Tue, 21 Feb 2012 19:30:08 EST
Organization: NOAA Space Weather Prediction Center
Lines: 67
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <20120222003002.1A02933C4A@panix2.panix.com>
NNTP-Posting-Host: panix6.panix.com
X-Trace: reader1.panix.com 1329870609 9896 166.84.1.6 (22 Feb 2012 00:30:09 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Wed, 22 Feb 2012 00:30:09 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
```

```
:Product: Weekly Highlights and Forecasts
:Issued: 2012 Feb 21 2202 UTC
# Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center
# Product description and SWPC contact on the Web
# http://www.swpc.noaa.gov/weekly.html
#
#                Weekly Highlights and Forecasts
#
```

Highlights of Solar and Geomagnetic Activity
13 - 19 February 2012

Solar activity was very low to low all week. The largest flare of the entire period was a C1 on 19 February at 0851 UTC from Region 1422 (N15, L=177, class/area = Dai/60 on 19 February). B-class flares dominated the rest of the summary period.

No proton events were observed at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit was at normal to moderate levels during the summary period.

Geomagnetic activity began on 13 February with quiet to unsettled conditions at mid latitudes and active to minor storm levels at high latitudes, associated with a small coronal hole high speed stream (CH HSS). 14 February saw a brief return to quiet conditions. The respite was short-lived, however, when a slow CME observed on 10 February finally arrived at Earth on 15 February. Active to minor storm levels were observed at mid latitudes throughout the day, while high latitude activity peaked at major storm levels. The remainder of the week was quiet until late on 18 February when a co-rotating interaction region preceded a geoeffective CH HSS. Unsettled to active conditions with isolated minor storm periods were observed during 19 February due to CH HSS effects.

Forecast of Solar and Geomagnetic Activity
22 February - 19 March 2012

Solar activity is expected to be at low levels throughout the forecast period.

No proton events are expected at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to be at high levels to begin the period due to effects from a recurrent CH HSS. Normal to moderate levels are expected to prevail from 23 February - 19 March.

Geomagnetic field activity is expected to be mostly quiet on 22 February. Quiet to unsettled conditions are expected on 23 - 25 February due to the onset of a recurrent CH HSS. A return to mostly quiet levels is expected on 26 February through 01 March. A CH HSS is expected to become geoeffective on 02 - 03 March, thus increasing activity to quiet to unsettled levels. Predominately quiet conditions are expected from 04 - 06 March before another CH HSS provides unsettled conditions on 07 March. Conditions are expected to return to mostly quiet levels from 08 March - 10 March, before another recurrent CH HSS is expected to become geoeffective on 11 March, with unsettled conditions expected for the day. A return to mostly quiet conditions is forecast from 12 - 16 March, before another CH HSS is expected to produce quiet to unsettled conditions with a chance for isolated active to minor storm levels at high latitudes for the remainder of the period.

** Attention ** Beginnning Monday, March 12, 2012, the Weekly bulletin will now be issued and available on the SWPC web page every Monday morning by 1500 UTC.

From -1527459103170476325

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X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,domainid0,public,usenet
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Received: by 10.68.218.166 with SMTP id ph6mr9742401pbc.5.1330373242365;
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news.highwinds-media.com!feed-me.highwinds-media.com!nx02.iad01.newshosting.com!
newshosting.com!news-out.readnews.com!transit3.readnews.com!panix!rri.panix.com!
robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-057 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Mon, 27 Feb 2012 15:07:21 EST
Organization: The Radio Amateur Satellite Corporation
Lines: 434
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <002101ccf58b$66245c60$326d1520$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
X-Trace: reader1.panix.com 1330373242 8329 166.84.1.6 (27 Feb 2012 20:07:22 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Mon, 27 Feb 2012 20:07:22 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
X-Received-Bytes: 19825
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
Content-Language: en-us
```

AMSAT NEWS SERVICE
ANS-057

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

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- Satellite DX: XF1AA on Isabel Island
- Volunteers Needed for AMSAT at Timonium, MD on March 31
- ARISS Status Report - 20 February 2012

SB SAT @ AMSAT $ANS-057.01
ANS-057 AMSAT News Service Weekly Bulletins

AMSAT News Service Bulletin 036.01
From AMSAT HQ SILVER SPRING, MD.
February 5, 2012
To All RADIO AMATEURS
BID: $ANS-036.01

AMSAT Theme at Dayton 2012: Running with Fox

The 2012 Dayton Hamvention will be held this year on 18 - 20 May 2012. As has been the case for the many years Hamvention will be at the Hara Arena Complex on the north side of Dayton. AMSAT will occupy the same booths (444-449) in Ball Arena, right across from the ARRL area and just inside the door from the Satellite Demonstration area.

The AMSAT theme for 2012 is "Running with Fox". We will have multipe exhibits of the new AMSAT satellite on display.

Visit AMSAT's Dayton Hamvention page for all details on activities:
http://www.amsat.org/amsat-new/hamvention/2012/Dayton.php

Some of the activities will include:

+ Life size Fox models will be on display as well as diagrams of the modules inside the 10cm square satellite.

+ Operational prototype of ARISSat-1 on display.

+ AMSAT Thursday Night Get-together at the Tickets Pub & Eatery.

+ The sixth annual AMSAT/TAPR Banquet will be Friday night May 18 at the Kohler Banquet Center. The price for the Banquet is $30. Seating is limited and reservations are required. Follow the links on AMSAT's Dayton page.

+ The AMSAT Forum will be on Saturday May 19.

AMSAT has a limited block of rooms reserved at the Country Inn & Suites in Fairborn, OH. Please contact Martha at the AMSAT office for room price and availability during Hamvention. Priority for rooms will be given to those volunteering to work in the AMSAT booth for multiple 2 hour shifts during Hamvention. The hotel web page is: http://www.amsat.org/amsat-new/hamvention/2012/Hotel.php

The phone number for the AMSAT office is 301-589-6062. Other hotels in the immediate area of the Country inn & Suites include the Fairfield Inn, Ramada Inn, Hampton Inn, Fairborn Holiday Inn, Red Roof Inn and the Homewood Suites if additional accommodations are needed.

Further information on Hamvention 2012, including advance ticket sales and motel accommodations, can be found at http://www.hamvention.org.

ARISS School Events Now Number Over 700

ARISS Operation Team Mentor Charlie Sufana, AJ9N reports that the total number of ARISS ISS-to-Earth school events is now at 701. ARISS offers an opportunity for students to experience the excitement of Amateur Radio by talking directly with crewmembers on-board the International Space Station.

Teachers, parents and communities see, first hand, how Amateur Radio and crew members on ISS can energize youngsters' interest in science, technology, and learning.

ARISS is an international educational outreach program partnering the participating space agencies, NASA, Russian Space Agency, ESA, CNES, JAXA, and CSA, with the AMSAT and IARU organizations from participating countries. Further information on the ARISS program is available on the website http://www.ariss.org/ (graciously hosted by the Radio Amateurs of Canada).

The 700th school event was with The Academy@Shawnee City in Louisville, Kentucky via a telebridge contact with ON4ISS on February 14. ARISS says the special John Glenn event to commemorate the 50th anniversary of Perth, City of Lights was successful on February 20. This marked event number 701.

Planned school contacts for this coming week include:

+ ESA-ESTEC, Noordwijk, Netherlands, telebridge via IK1SLD. The schools that are involved are: American school of The Hague, International School of Amsterdam, and The British School in the Netherlands on Monday, February 27 at 12:45:29 UTC.

+ Parkside Elementary, Atlanta, GA, telebridge via K6DUE on Friday, March 3 at 16:42:29 UTC.

- 5th Geniko Lykeio Katerinis, Katerini, Greece, direct via SX2ISS on Friday, March 3 at 17:03:52 UTC.

Each contact may have multiple schools sharing the same time slot.
A list of all of the ARISS School Events can be found at:
http://tinyurl.com/ARISS-Events

[ANS thanks ARISS Operation Team Mentor Charlie Sufana, AJ9N for the above information]

ESA Reports Vega Cubesat Success

The ESA provided a summary of the success of the cubesats launched on the Vega mission on February 13. The web report said, "Shortly after the seven ESA student CubeSats started their adventure in space on board the Vega launcher yesterday, the university teams and radio amateurs all around the world pointed their 'ears' towards space and started to receive the first signs of life from the tiny spacecraft."

- The Spanish XaTcobeo CubeSat was heard a couple of hours after launch (13 February 2012, 11:00 CET) during its first pass over the University of Vigo's ground station, and its signal was also tracked by many radio amateurs. The first data received show that the satellite's batteries are properly charged and that telemetry and telecommand systems work well, representing a very promising start for the mission.

- The Hungarian team received the first signals from Masat-1 from a radio amateur in Florida less than two hours after launch, and by many others shortly after. A couple of hours later the team's ground station in Budapest gathered the first 'official' satellite data which confirmed that the spacecraft is in perfect shape.

- PW-Sat, the Polish student CubeSat, was also heard loud and clear only a few hours after the launch. The signals have been heard both by the team's ground station and by several radio amateurs from the UK, India, Germany and the Netherlands.

- The Italian UniCubeSat-GG team heard the first signals from the satellite, although they have not been decoded yet, shortly after launch, first from a Kentucky (US) ground station and then from the dedicated Rome ground station.

- Initially weak signals were reported from the Italian e-st@r. On February 15 the e-st@r team reported signals from their CubeSat heard by their control ground station and other ham radio stations.

+ Weak signals have been received so far from the Romanian Goliat and the French Robusta CubeSats. These teams currently believe that their spacecraft may not have yet achieved a stable orientation after separation and sufficient battery charge level in order for their communication systems and antennas to transmit properly to the ground station. The situation will evolve in the course of the next several days, and further attempts to establish good communications links with those satellites will continue.

A joint effort from all CubeSat teams and radio amateurs from the AMSAT network has now started, in order to be able to clearly detect the satellites.

The full ESA report can be found on-line at:
http://www.esa.int/SPECIALS/Education/SEMR2ZYXHYG_0.html

[ANS thanks the ESA for the above information]

MASAT-1 (MO-72) Team Releases Software and Web Page Updates

The MASAT-1 team said this week that updated client software for telemetry reception and decoding is available on their web at:
http://cubesat.bme.hu/en/radioamatoroknek/kliens-szoftver/

Some of the upgrades include:
+ The "Offline" label removed, the status of the automatic packet reporting is displayed.

+ Battery voltage constant (on the EPS panel) updated.

+ User selection between 626/1250 bps decoding.

+ The waterfall display shows tracks for the 0, CW and 1. The decoder has been reported to be most successful if tuning is set upward by 50-100 Hz from the tuning indicators. User experiences are invited to be sent to mezei@cubesat.bme.hu.

The automated received packet upload from the client software has been updated to accept ham@cubesat.bme.hu or a@a.a as mail address for those not wishing to send their actual address. Users can change the e-mail address by editing the registration.txt file in the program folder of the software package.

A statistics web page reporting on the numbers of packets forwarded by amateur radio operators has been added:
http://cubesat.bme.hu/en/radioamatoroknek/veteli-statisztika/
The site has successfully received over 50000 packets from around the world. The latest updates to the web and client software should address initial concerns that 'no packets' have been received.

The MASAT-1 team thanks amateur radio operators for your outstanding support. The MASAT-1 Important News for Radio Amateurs page is at: http://cubesat.bme.hu/en/2012/02/19/fontos-hirek-radioamatoroknek/

The MASAT-1 mission home page is: http://cubesat.bme.hu

[ANS thanks the MASAT-1 Team for the above information]

Dedicated CubeSat Radio Spectrum Discussed at WRC-12

AMSAT-UK reports on their web that the recently concluded WRC-12 conference agreed to a resolution by the SmallSat, CubeSat, and NanoSatellite community for dedicated spectrum allocation outside of the 435 to 437 MHz amateur satellite band.

Wouter Jan Ubbels, PE4WJ with the Dutch space development company ISIS says he was able to introduce a resolution at WRC-12 submitted by a number of countries, led by the Netherlands to propose an agenda item for WRC-2015 to conduct studies to identify the spectrum needs of nano-and picosatellites, and furthermore to study the associated regulatory constraints.

After the discussions at WRC-12, the resolution received partial acceptance to begin study of the regulatory aspects for WRC-2018.

Wouter concluded, "This is very good news, and could mean that the ITU notification process for nano-and picosatellites can become greatly simplified in the future. We first of all would like to thank all the supporting administrations for their support and would like to invite the community to, through their administrations, participate in the studies, so that the outcome will be as much as possible line with the needs of the community. We will continue to work on this subject and keep you updated through these lists and at the various small / nano / picosatellite conferences and workshops."

The full news item can be viewed on the AMSAT-UK web at: http://www.uk.amsat.org/4950

[ANS thanks Wouter Jan Ubbels, PE4WJ and AMSAT-UK for the above information]

Arizona Centennial Event K7UGA Station Reports 122 Satellite QSOs

Arizona AMSAT Area Coordinator, Patrick Stoddard, WD9EWK/VA7EWK and Tom Kramer, NQ7R provided the satellite contacts for the K7UGA special-event station. K7UGA was sponsored by the Central Arizona DX Association in its commemoration of the Arizona statehood centennial.

Patrick reported, "Between Tom NQ7R and myself, we made 122 satellite contacts. Tom worked his passes from his home in Casa Grande AZ (grid DM42). For passes I worked at the start of the week through Thursday afternoon, I operated from DM43 in the Phoenix area. For the passes I worked Friday and Saturday, I was at the Yuma Hamfest. On Sunday morning, I parked next to the Yuma Territorial Prison State Historic Park overlooking the Colorado River. Both Yuma sites are in grid DM22."

Patrick posted videos of his K7UGA operation:

+ SO-50 pass on Friday (17 February) morning at 1751 UTC:
  http://www.youtube.com/watch?v=BKaIKgjuSMM

+ AO-27 pass on Friday afternoon at 2032 UTC:
  http://www.youtube.com/watch?v=AIA_VANTdpQ

+ AO-27 pass on Saturday (18 February) afternoon at 2004 UTC:
  http://www.youtube.com/watch?v=YiXTjgD5nD8

+ VO-52 pass on Sunday (19 February) morning at 1538 UTC:
  http://www.youtube.com/watch?v=l0AAB3A7Xy4

The K7UGA page on QRZ.com states that all QSL card requests be sent with SASE to: K7BHM, 1623 N. Los Altos Ct., Chandler, AZ 85224-8357.

[ANS thanks Arizona AMSAT Area Coordinator, Patrick Stoddard, WD9EWK/VA7EWK for the above information]

AA5UK Announces Plans for Hawaii Satellite Operation

Adrian Engele, AA5UK says he will be traveling to Hawaii between March 21 and April 4. This is primarily a vacation trip for sightseeing and scuba diving but satellite operation is also planned.

He will try to get on the satellites as often as his schedule permits within vacation activities. His primary focus will be on FO-29, VO-52 and AO-7 Mode B passes. SO-50 and AO-27 may be attempted if conditions permit.

+ March 21 - Fly from Chicago to Honolulu and Hilo.
+ March 22-25 - Operation from south of Hilo.
+ March 26 - April 1 - Kailua-Kona, Big Island in Hawaii.
+ April 2 - April 4: Oahu, Waikiki beach.

Adrian invites you to stay tuned via AMSAT-BB and his Twitter feed @AA5UK for latest schedule information. He will also update his page on QRZ.com in the coming weeks with additional information.

[ANS thanks Adrian Engele, AA5UK for the above information]

Satellite DX: XF1AA on Isabel Island

The OPDX Bulletin 1050 is reporting that a team of 10 operators, from the Aguas-Calientes Amateur Radio Club will activate Isabel Island, grid DL71, using the callsign XF1AA. The planned dates are March 16th through the 21st.

Ismael, XE1AY, is one of the operators and is active on the satellites. If you should hear Ismael on the birds, please give him the airtime to work as many as he can. Good luck with the operation!

[ANS thanks John Papay, K8YSE for the above information]

Volunteers Needed for AMSAT at Timonium, MD on March 31

Pat Kilroy, N8PK says that volunteers are needed to staff the AMSAT display and for satellite operating demonstrations at the Greater Baltimore Hamboree and Computerfest on Saturday, March 31 in Timonium, Maryland. This event is one of the largest Amateur Radio and technology shows on the East Coast.

In addition to the AMSAT display and satellite demonstrations Pat is planning to show the FUNcube Dongle and present show'n'tell talks for visitors to the AMSAT booth.

Please contact Pat soon by e-mail (pat@patkilroy.com) if you can help!

For more info about the hamfest visit: http://www.gbhc.org/

[ANS thanks Pat Kilroy, N8PK for the above information

ARISS Status Report - 20 February 2012

1. Kochi Youth Radio ISS Astronaut

Kochi Gakuen Kochi Junior High School in Kochi, Japan experienced a successful Amateur Radio on the International Space Station (ARISS) contact on Monday, February 13. Students asked Dan Burbank, KC5ZSX, 11 questions about living in space. The contact was integrated into the science curriculum. Media coverage included three television stations and three newspapers.

2. Astronaut Dan Burbank Speaks with Louisville Students

On Tuesday, February 14, youth attending The Academy @ Shawnee participated in an Amateur Radio on the International Space Station (ARISS) contact with on-orbit astronaut Dan Burbank, KC5ZSX via telebridge station ON4ISS in Belgium. The contact took place at the Challenger Learning Center in Louisville, Kentucky with the assistance of the Louisville Astronomical Society. Approximately 40 people were in attendance and listened as Burbank chatted with students about experiments on board the ISS and the effect space has on the human body, among other topics. The Academy, an inner city high school of 500 students, has been designated as the Aerospace Magnet School for Jefferson County Public Schools. The contact was part of a comprehensive education plan to pique students' interest in Science, Technology, Engineering and Math.

3. Astronaut Training Status

Astronaut Alexander Gerst passed his amateur radio license exam on February 13 and is waiting for his callsign to be assigned. He is scheduled to fly with Expedition 40 in May 2014.

An introductory session is planned for Gregory Wiseman, KF5LKT (Expedition 40, May 2014) on Monday, February 27 and a preflight session is scheduled for Expedition 32 astronauts Sunita Williams, KD5PLB and Akihiko Hoshide, KE5DNI on Monday, March 5. Williams and Hoshide will fly later this year.

[ANS thanks Carol, KB3LKI, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Lee McLamb, KU4OS

```
From 8966066662045440535
X-Google-Thread: 107ada,91a2660844c47036,start
X-Google-NewGroupId: yes
X-Google-Thread: 10e8ad,91a2660844c47036,start
X-Google-NewGroupId: yes
X-Google-Thread: 10b9c8,91a2660844c47036,start
X-Google-NewGroupId: yes
X-Google-Attributes:
gida3e752f117,gid8f86f75953,gida4a23d5f63,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Received: by 10.68.218.166 with SMTP id ph6mr13731485pbc.5.1330461009193;
        Tue, 28 Feb 2012 12:30:09 -0800 (PST)
MIME-Version: 1.0
Path: h9ni20195pbe.0!nntp.google.com!news2.google.com!news1.google.com!
newsfeed2.dallas1.level3.net!newsfeed3.dallas1.level3.net!news.level3.com!bloom-
beacon.mit.edu!panix!rri.panix.com!robomod!not-for-mail
From: SWPC.Webmaster@noaa.gov
Newsgroups:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.shor
twave,rec.radio.info
Subject: Weekly Highlights of Solar and Geomagnetic Activity, 20 - 26 February
2012
Followup-To:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.shor
twave
Date: Tue, 28 Feb 2012 15:30:06 EST
Organization: NOAA Space Weather Prediction Center
Lines: 66
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <20120228203002.3BDD933C52@panix2.panix.com>
NNTP-Posting-Host: panix6.panix.com
X-Trace: reader1.panix.com 1330461006 18372 166.84.1.6 (28 Feb 2012 20:30:06 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Tue, 28 Feb 2012 20:30:06 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump

:Product: Weekly Highlights and Forecasts
:Issued: 2012 Feb 28 1652 UTC
# Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center
# Product description and SWPC contact on the Web
# http://www.swpc.noaa.gov/weekly.html
```

#
Weekly Highlights and Forecasts
#

Highlights of Solar and Geomagnetic Activity
20 - 26 February 2012

Solar activity was at very low to low levels. Regions 1421 (N18, L=133, class/area = Cro/30 on 20 February) and 1422 (N15, L=177, class/area = Dsi/330 on 21 February) each produced isolated C-class activity, the largest a C4 at 20/0509 UTC from Region 1421. The most significant event of the period was a filament eruption from the northeast quadrant early on 24 February associated with an Earth-directed coronal mass ejection (CME).

No proton events were observed at geosynchronous orbit. An enhancement of the greater than 10 MeV proton flux at geosynchronous orbit began around 25/0300Z and continued through the remainder of the period (peak flux of 4.6 pfu at 26/0055 UTC). The enhancement was associated with the filament eruption observed on 24 February.

The greater than 2 MeV electron flux at geosynchronous orbit increased from normal to high levels during 20 - 22 February due to effects from a coronal hole high speed stream (CH HSS). Fluxes decreased to mostly moderate levels during 23 - 26 February.

Geomagnetic field activity was at unsettled to active levels with minor to major storm periods at high latitudes due to CH HSS effects. Activity decreased to quiet to unsettled levels on 21 February as CH HSS effects subsided. Quiet to unsettled levels were observed on 22 February with active periods at high latitudes due to the onset of another CH HSS. Activity dropped to mostly quiet levels on 23 February as CH HSS effects subsided. Mostly quiet to unsettled levels occurred during the remainder of the period (24 - 26 February) with the exception of isolated active to major storm levels at high latitudes on 25 February. A Sudden Impulse (19 nT) was observed on 26 February marking the arrival of the 24 February CME.

Forecast of Solar and Geomagnetic Activity
29 February - 26 March 2012

Solar activity is expected to be very low to low during the forecast period.

No proton events are expected at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to be at normal to moderate levels from 29 February - 17 March. Flux is expected to increase to moderate to high levels on 18 - 19 March due to effects from a recurrent CH HSS. Predominately normal to moderate levels are expected for the remainder of the period.

Geomagnetic field activity is expected to begin with quiet to unsettled levels on 29 February as effects from the 24 February CME subside. Predominately quiet levels are expected during the forecast period. However, unsettled conditions are likely on 02, 05 - 07 and 11 March due to weak CH HSS effects and unsettled to active conditions are expected on 17 - 20 March due to a more prominent recurrent negative polarity CH HSS.

```
From -5968273728990188446
X-Google-Thread: fcc6e,efeb620093afb0b1,start
X-Google-NewGroupId: yes
X-Google-Thread: 107ada,efeb620093afb0b1,start
X-Google-NewGroupId: yes
X-Google-Thread: 10bf43,efeb620093afb0b1,start
X-Google-NewGroupId: yes
X-Google-Thread: 10e8ad,efeb620093afb0b1,start
X-Google-NewGroupId: yes
X-Google-Thread: 10b9c8,efeb620093afb0b1,start
X-Google-NewGroupId: yes
X-Google-Attributes:
gid4baf9708d4,gida3e752f117,gide721ae2bf6,gid8f86f75953,gida4a23d5f63,domainid0,pu
blic,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Received: by 10.68.129.105 with SMTP id nv9mr4839269pbb.3.1330585204070;
        Wed, 29 Feb 2012 23:00:04 -0800 (PST)
MIME-Version: 1.0
Path: h9ni25780pbe.0!nntp.google.com!news2.google.com!
newsfeed2.dallas1.level3.net!news.level3.com!bloom-beacon.mit.edu!panix!
panix2.panix.com!not-for-mail
From: rram@panix.com (rec.radio.amateur.moderated Admin)
Newsgroups:
rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.rad
io.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amat
eur.space,rec.radio.info
Subject: Crossposting Permitted to rec.radio.amateur.moderated
Supersedes: <radio/ham-radio/moderated/crossposting-1-1328079601@panix.com>
Followup-To: poster
Date: 1 Mar 2012 02:00:02 -0500
Organization: rec.radio.amateur.moderated Moderation Team
Lines: 47
Approved: RRI Admin <rec-radio-info-request@panix.com>
Distribution: world
Expires: 03 Apr 2012 03:00:01 -0000
Message-ID: <radio/ham-radio/moderated/crossposting-1-1330585201@panix.com>
Reply-To: rec-radio-amateur-moderated-request@panix.com
(rec.radio.amateur.moderated Admin)
NNTP-Posting-Host: panix2.panix.com
X-Trace: reader1.panix.com 1330585203 28637 166.84.1.2 (1 Mar 2012 07:00:03 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Thu, 1 Mar 2012 07:00:03 +0000 (UTC)
Summary: Short reminder for unmoderated newsgroups that crossposting is permitted
```

Keywords: FAQ, ham, amateur, radio, moderated, unmoderated, crossposting, permitted

Posted-By: auto-faq 3.3.2 beta (PGPMoose V2.0, Perl 5.005)
Archive-name: radio/ham-radio/moderated/crossposting
Revision: 1.2 2011/11/02 04:08:53
Posting-Frequency: posted monthly
URL: http://www.panix.com/~rram/usenet/rram/index.html

Changes followed by "|".

After a 30-day public discussion and feedback period to gauge reader opinions in March of 2009:

http://groups.google.com/group/rec.radio.amateur.moderated/browse_thread/thread/d7d337db35f23326

the rec.radio.amateur.moderated Moderation Team had decided to consider |
amending its charter, and permit limited simultaneous crossposting to
rec.radio.amateur.moderated and one other unmoderated
amateur-radio-related discussion newsgroup. After a successful trial |
period (90 days, through early July 2009), we decided to adopt this |
change permanently. |

Approved rec.radio.amateur.* newsgroups are those that are currently listed in the latest version of the "List of Big Eight Newsgroups" which is crossposted monthly to news.announce.newgroups, news.groups, and news.lists.misc.

Approved alt.radio.amateur.* and alt.ham-radio.* newsgroups are those that have been created consistent with the suggestions in "So You Want to Create an Alt Newsgroup" at:

http://www.faqs.org/faqs/alt-creation-guide/

Approved regional hierarchy newsgroups are those that contain either "radio.amateur" or "ham-radio" in their names, including uk.radio.amateur and aus.radio.amateur.misc.

We will make every reasonable effort to keep our list of approved newsgroups up-to-date. In case we have overlooked any, and a submission is rejected in error as a result, the rejected submitter can E-mail us at our administrative contact address (in the signature at the bottom of this article, and the default Reply-To for the rejection message) requesting that it be added, and that the article be approved. We may still choose to reject articles crossposted to any alt.* newsgroup with an inappropriate name, including obscene language, embedded name-calling, or encouragement of unlawful conduct.

Please direct any comments, questions, or criticisms to rec-radio-amateur-moderated-request@panix.com.

```
From -3469706264738195069
X-Google-Thread: 10e8ad,751b3bb5dccef2f3,start
X-Google-NewGroupId: yes
X-Google-Thread: 10b9c8,751b3bb5dccef2f3,start
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,gida4a23d5f63,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII
Received: by 10.68.201.129 with SMTP id ka1mr4184880pbc.6.1330874568357;
        Sun, 04 Mar 2012 07:22:48 -0800 (PST)
MIME-Version: 1.0
Path: h9ni38668pbe.0!nntp.google.com!news1.google.com!
newsfeed2.dallas1.level3.net!news.level3.com!bloom-beacon.mit.edu!panix!
rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-064 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sun, 4 Mar 2012 10:22:47 EST
Organization: The Radio Amateur Satellite Corporation
Lines: 543
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000601ccfa1a$a27df840$e779e8c0$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
X-Trace: reader1.panix.com 1330874567 9862 166.84.1.6 (4 Mar 2012 15:22:47 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 4 Mar 2012 15:22:47 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to            rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
```

AMSAT NEWS SERVICE
ANS-064

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:

* AMSAT Plans at Dayton 2012
* W4PUJ, Dick Daniels Memorial Video Posted
* COMPASS-1 Satellite End of Mission
* VO-52 Not Heard
* Satellite Special Events Announced
* Coverage of Next Cubesats on AMSAT-UK Web
* April 18 World Amateur Radio Day 2012 - 50 Years in Space
* ARISS Status Report February 27, 2012

SB SAT @ AMSAT $ANS-064.01
ANS-064 AMSAT News Service Weekly Bulletins

AMSAT News Service Bulletin 064.01
>From AMSAT HQ SILVER SPRING, MD.
March 4, 2012
To All RADIO AMATEURS
BID: $ANS-064.01

AMSAT Theme at Dayton 2012: Running with Fox

The 2012 Dayton Hamvention will be held this year on 18 - 20 May 2012. As has been the case for the many years Hamvention will be at the Hara Arena Complex on the north side of Dayton. AMSAT will occupy the same booths (444-449) in Ball Arena, right across from the ARRL area and just inside the door from the Satellite Demonstration area.

The AMSAT theme for 2012 is "Running with Fox". We will have multiple exhibits of the new AMSAT satellite on display.

Visit AMSAT's Dayton Hamvention page for all details on activities:
http://www.amsat.org/amsat-new/hamvention/2012/Dayton.php

Some of the activities will include:

+ Life size Fox models will be on display as well as diagrams of the modules inside the 10cm square satellite.

+ Operational prototype of ARISSat-1 on display.

+ AMSAT Thursday Night Get-together at the Tickets Pub & Eatery.

+ The sixth annual AMSAT/TAPR Banquet will be Friday night May 18 at the Kohler Banquet Center. The price for the Banquet is $30. Seating is limited and reservations are required. Follow the links on AMSAT's Dayton page.

+ The AMSAT Forum will be on Saturday May 19.

AMSAT has a limited block of rooms reserved at the Country Inn & Suites in Fairborn, OH. Please contact Martha at the AMSAT office for room price and availability during Hamvention. Priority for rooms will be given to those volunteering to work in the AMSAT booth for multiple 2

hour shifts during Hamvention. The hotel web page is:
http://www.amsat.org/amsat-new/hamvention/2012/Hotel.php

The phone number for the AMSAT office is 301-589-6062. Other hotels in the immediate area of the Country inn & Suites include the Fair- field Inn, Ramada Inn, Hampton Inn, Fairborn Holiday Inn, Red Roof Inn and the Homewood Suites if additional accommodations are needed.

Further information on Hamvention 2012, including advance ticket sales and motel accommodations, can be found at http://www.hamvention.org.

Dick Daniels, W4PUJ Memorial Service Video Posted

Bob McGwier, N4HY has posted a video of the February 25 memorial service attended by family, friends, and colleagues for AMSAT's Dick Daniels, W4PUJ who passed away on February 14, 2012:

http://youtu.be/pGhn1eC52Wo

AMSAT President Barry Baines, WD4ASW read excerpts from the obituary written by Jan King, W3GEY/VK4GEY and included personal comments of his experience knowing Dick and working with him. The text of Dick's obituary is posted on the AMSAT web at:
http://tinyurl.com/W4PUJ-Obituary.

Barry observed in his comments at the memorial service that NASA announced AMSAT Fox-1 satellite's acceptance into their ELaNa launch program on February 14, the day Dick passed away. Dick's legacy for amateur radio in space will continue.

Bob recalled, "Dick was always supportive and helpful to me and like all who knew him, understand the size of our loss. Dick was the epitome of solidarity, always honoring his obligations, with a big sense of responsibility with no obvious sense of entitlement to anyone's thanks. Dick was always seemingly asking himself 'what have I done for you lately?' We've lost the irreplaceable."

Eric Rosenberg, W3DQ wrote of his memories of Dick, "He was a great guy, wonderful to work with, both professionally and within AMSAT.
He was treasure trove of information and defined corporate knowledge and memory. His collection of Oscar 10 telemetry on those hard sectored disks was legendary around here, but not as much as his pool table, upon which many of the early satellites were put together."

Bob, N4HY took a collection of photographs with his phone camera which has added to his online album:
http://n4hy.smugmug.com/AMSAT/Dick-Daniels-W4PUJ-Memorial

[ANS thanks Bob McGwier, N4HY, Eric Rosenberg, W3DQ, Jan King W3GEY/

VK4GEY, and AMSAT President Barry Baines, WD4ASW for the above information]

COMPASS-1 Satellite End of Mission

The COMPASS-1 CubeSat was designed and built by students from the Aachen University of Applied Sciences in Aachen, Germany. It has been in orbit since its launch from India on April 28, 2008.

This week Mike Rupprecht, DK3WN reported on his DK3WN SatBlog that on Saturday, February 25 a single beacon was received. COMPASS-1 underwent a complete restart and the thresholds for heater and battery voltages were set to new levels. Battery temperatures tracked with the received telemetry data have shown some very cold spikes. This may be affecting operation of the satellite.

On March 3, Mike received the following message from Professor Dr. Bernd Dachwald, Faculty of Aerospace Engineering FH Aachen at the University of Applied Sciences:

> Dear supporters and friends of our COMPASS-1 mission,
>
> First, let me thank you very much for your support in trying to save the life of our COMPASS-1 satellite during the last days, but also during the last years of "routine" operations.
>
> It seems that our mission now comes to an end. The projected lifetime of COMPASS-1 was half a year. The tiny guy has outperformed this value by a factor of more than seven. April 28th would have been its 4th birthday and if it was a human, it would now be about 500 years old (Cubesat-years are short).
>
> So, if you have more important things to do (and I guess so), we cannot expect you to continue your efforts in saving its live. With your support, you have made things possible that we would never have been able to achieve with our own resources and I appreciate your support very much.
>
> So, COMPASS-1, rest in peace. (Nevertheless, if you still want to try to awake it from the dead, feel free to do so.)
>
> I hope that we will soon be able to build and launch COMPASS-2 and that you will be still available, all over the world, as a ground station to command and fly our new bird. We will keep you informed.
>
> Cheers and thanks for all,
> Bernd

Operators may periodically listen for the COMPASS-1 CW beacon on 437.275 MHz CW beacon every 3 minutes. Any reports are very appreciated.

The DK3WN SatBlog tracked monitoring and attempts at recovery over the past week:

+ On Sunday, February 26 no signals were heard from COMPASS-1
+ On Monday, February 27 no signals were heard; Several attempts to reset the satellite were unsuccessful.
+ On Tuesday, February 28 first report received after nothing heard for two days. Decoded telemetry showed the satellite had reset. Control stations reset voltage and heater thresholds to conserve power:

```
  Power Level             Critical Battery Capacity
  Heater Active           Battery Heater ON
  Power Safe Counter      0       <� Counters reset to 0
  Emergency Mode Counter  0
  Battery Voltage         2.82 V
  Battery Current         0.00 mA
  Battery Temperature     0 �C    <��attery temperature
COLD!
```

  The usual operational threshold is for the heater to be on if the temperature inside goes under 10 deg. The batteries are weak and this has caused COMPASS-1 crash.

+ On Wednesday, February 29 Alan, ZL2BX could command COMPASS at 19:25 UTC - all thresholds commands were accepted. COMPASS went into eclipse at 19:45 and into sunlight at 20:17 UTC. DK3WN set the thresholds at 20:20 UTC and got an confirmation beep for all commands. COMPASS is now in Emergency Mode and the beacon interval is 8 minutes. The heater is OFF which will help improve the voltage problem. Since all counters are zero it is assumed that COMPASS resets in every eclipse. Not sure if the threshold values are kept after reset during eclipse.

```
  Power Level             Critical Battery Capacity
  Heater Active           Battery Heater OFF <�Command worked!
  Power Safe Counter      0       <� Counters still reset to 0
  Emergency Mode Counter  0
  Battery Voltage         2.82 V
  Battery Current         0.00 mA
  Battery Temperature     3 �C    <��attery warming up
```

  (refer to: http://www.dk3wn.info/p/?p&334)

Please continue to monitor 437.275 MHz for the COMPASS-1 CW beacon. Current status can be read on-line on the DK3WN SatBlog at: http://www.dk3wn.info

Mike has written telemetry decoders for several satellites, including COMPASS-1. These may be found at: http://www.dk3wn.info/software.shtml

[ANS thanks Mike Rupprecht, DK3WN for the above information]

VO-52 Not Heard

Reports have been posted that India's VO-52 HAMSAT satellite, launched on May 5, 2005 from India, has not been heard during expected passes since February 28.

Summaries from stations monitoring for VO-52 cam be viewed at:
http://oscar.dcarr.org/

AMSAT INDIA Secretary Nitin, VU3TYG, posted on February 29 their last known status, "We are aware of the current situation. Myself and Mani, VU2WMY tried listening to the beacon and work thru the satellite during the 04:05 UTC pass over India but nothing was heard."

Nitin will post further updates when more news is available from ISRO. Amateur satellite operators are encouraged to post VO-52 status on http://oscar.dcarr.org/ Status Page.

[ANS thanks AMSAT INDIA Secretary Nitin, VU3TYG for the above information]

Satellite Special Events Announced

TP8 - France March 9-11

The Council of Europe Radio Amateur Club (CERAC - TP2CE) will be active as TP8CE between March 9-11 to celebrate the 40th anniversary of the European Youth Center. Operations planned on all HF bands and modes, and possibly the satellites. QSL via F5LGF. An online log search will be available at: http://ewwa.free.fr

6H - Mexico April 13-18

Members of the Grupo DXXE will activate the special event callsign 6H6IARU between April 13-18 to celebrate the 87th anniversary of the founding of the International Amateur Radio Union (IARU), and to celebrate "World Amateur Radio Day" on April 18th.

This year's theme for the "World Amateur Radio Day" is Amateur Radio Satellites: "Celebrating 50 Years in Space" in remembrance the launch of OSCAR 1 on December 12, 1961, and the launch of OSCAR 2 on June 2, 1962.

Operations will be on all bands between 160-6 meters, as well as the amateur radio satellites from different Grid Locators throughout Mexico. QSOs with this station are valid for the IARU Region 2 award, the various FMRE awards and the DXXE award <www.dxxe.org>. QSL via N7RO or LoTW.

[ANS thanks Ohio/Penn DX Bulletin No. 1051 for the above information]

Coverage of Next Cubesats on AMSAT-UK Web

AMSAT-UK has compiled a series of very informative web page reports about upcoming Cubesat launches. Read up on the next flock of birds slated for launch. Follow the links to photos, satellite videos, and additional technical data on the AMSAT-UK web.

Antares Launch Slip Delays Dove-1 Satellite
http://www.uk.amsat.org/5061

The 3U amateur radio satellite Dove-1 (145.825 MHz AX.25 FM) was originally planned to launch on the Antares launcher on February 28 but reports indicate it may be Fall before it is launched.

Space.com reports that on February 21 Orbital Sciences Corporation announced a further slip and the launch of Antares could now be delayed until as late as September. Read the space.com report at:
http://tinyurl.com/Antares-Delay (space.com)

The new Dove-1 (DO-17 was the original Dove satellite) will transmit on 145.825 MHz 1200 bps AFSK AX.25 FM downlink with telemetry data, including temp/power supply/current/RSSI/solar vector/acceleration, approximately every 30 seconds. The beacon can transmit at up to 1 watt and will use a quarter wave monopole antenna cut from a tape measure.

It also has a 2.4 GHz half-duplex, spread spectrum radio with patch antenna that will be used for main payload downlink and telecommand uplink. The data rate will be 115 kbps.

The planned orbit is 280 by 270 km at 51.6 deg inclination which will give Dove-1 a lifetime of about 2 weeks before re-entry.

Vietnam Student CubeSat F-1
http://www.uk.amsat.org/5025

Vietnamese students have produced a video about their amateur radio CubeSat F-1, callsign XV1VN. The F-1 is an educational CubeSat to be launched in the summer of 2012. It will carry a low resolution C328 camera with 640�480 resolution and two Yaesu VX-3R transceivers using 145.980 and 437.485 MHz.

oVX-3R1
-Frequency: 437.485MHz, FM Narrow
-Power supply: directly from solar cells, only operates in sunlight
-Output power: max 0.3W, half-wave dipole antenna -Modulation scheme: Morse code beacon (10 chars) using PWM CW -Beacon interval: every 30 seconds (configurable)

oVX-3R2
-Frequency: 145.980MHz , FM Narrow
-Power supply: rechargeable battery, operates in the dark by default but can be commanded to operate in sunlight as well -Output power: max 1.0W, half-wave dipole antenna -Modulation scheme: AFSK 1200bps, half duplex -Telemetry interval: one AX.25 packet every 30 seconds

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TechEdSat to use 'SatPhone'
http://www.uk.amsat.org/5018

TechEdSat will be deployed from the International Space Station (ISS). It is a 1U CubeSat that will demonstrate Plug and Play power architecture and two way communication via the satellite phone/data networks Iridium and Orbcomm.

There will be a 437MHz beacon transmitting 1 watt to 1/4 wave monopole. Commanding is via the commercial networks and there is a 2 week watchdog timer to stop the beacon in the event of no commands being received.

TechEdSat will be launched along with Raiko, FITSat-1, We-Wish and F-1 to the ISS aboard HTV-3, currently planned to launch July 18, 2012. >From there, it will be deployed into Low Earth Orbit using the JAXA J-SSOD deployer, from the Japanese Experiment Module (JEM also known as Kibo).

Wiki - TechEdSat http://en.wikipedia.org/wiki/TechEdSat
Kibo Robot Arm http://kibo.jaxa.jp/en/about/kibo/rms/

FITSAT-1 CubeSat to use 5.8 GHz and Optical Comms
http://www.uk.amsat.org/2037

The Amateur Radio CubeSat FITSAT-1 plans to transmit 115.2 kbps digital data in the Amateur Satellite Service 5.8 GHz band and will also carry an Optical Communications experiment.

FITSAT-1 (aka NIWAKA) is a 1U CubeSat (10*10*10cm) that should be be deployed from the International Space Station by robot arm in late 2012. It will generate about 2W RF output using a 16W DC input.

The main mission will be to demonstrate high speed data transfer from a satellite, it can transmit a VGA-size (640�480 pixel) JPEG photograph in only 5 to 6 seconds.

The second mission is to determine if a satellite can be made to appear as an "artificial star" using high-output LEDs in flash mode.
The light from this flash will be received by the ground station, which has a telescope with photo-multiplier linked to a 5.8GHz parabola antenna. This is a basic experiment to investigate the possibility of optical communication with satellites.

A UHF AX25 1k2baud transceiver will be carried for telemetry and telecommand purposes and a UHF CW beacon will also be provided. It will be deployed along with the satellites RAIKO and WEWISH into a 350x350km 51.6deg inclination orbit.

The following downlink frequencies have been coordinated by the IARU Satellite Frequency Coordination Panel: CW 437.250 MHz, FM 437.445 MHz, High speed data 5840.00 MHz.

Euroluna OZ9LUNA CubeSat Launch Update

http://www.uk.amsat.org/5153

Euroluna are a Danish amateur team participating in the $30 million Google Lunar X PRIZE contest to be the first privately funded team to land and drive a rover on the Moon. The President of Euroluna, Palle Haastrup OZ1HIA gives an update on the Romit1 CubeSat and plans for Romit2 and Romit3.

Romit1 is a 2U CubeSat that is planned to launch on the Interorbital Systems Neptune 9 rocket. After deployment Romit-1 will stabilize itself prior starting its engine to power itself into a higher orbit.
If everything goes well it should, after a year, be out in a 700 km orbit, having started in a 310 km orbit.

It is hoped that radio amateurs across the world will assist the team in retrieving the data sent down, for example, they can gather images from the six cameras. The downlink frequency is 437.505 MHz at 1200bps.

The group are currently looking for a launch opportunity for Romit2 as well as Romit3 that is planned to reach the Moon.

[ANS thanks AMSAT-UK for the above information]

April 18 World Amateur Radio Day 2012 - 50 Years in Space

Every year on April 18 the IARU celebrates World Amateur Radio Day to note its anniversary starting in 1925.

This year's theme for the World Amateur Radio Day 2012 is Amateur Radio Satellites: "Celebrating 50 Years in Space" in remembrance the launch of OSCAR 1 on December 12, 1961, and the launch of OSCAR 2 on June 2, 1962.

The AMSAT News Service would like to publicize the events your group is planning for April 18, 2012. Just send the information to JoAnne, K9JKM (k9jkm@amsat.org) and we'll get the news out.

[ANS thanks the IARU for the above information]

Amateur Radio on the International Space Station (ARISS) Status Report

February 27, 2012

1. Upcoming School Contacts

An Amateur Radio on the International Space Station (ARISS) contact was successful for Parkside Elementary School in Atlanta, Georgia on Friday, March 2 at 16:42 UTC via station K6DUE in Greenbelt, Maryland. The ARISS contact is part of a comprehensive education plan which will pique students' interest in Science, Technology, Engineering and Math (STEM). An article about this contact appears on the NASA Talk Web site where ideas are shared about the contact and lesson plans. Contact audio may be available on NASA-TV.
http://nasatalk.com/component/resource/article/bylines/164-nasa-and-stem-resources-for-k-4/1722-parkside-elementary-school-to-connect-to-iss.html

The 5th Geniko Lykeio Katerinis in Katerini, Greece has been completed for their Amateur Radio on the International Space Station (ARISS) contact on Friday, March 2 at 17:03 UTC. This activity has been integrated into the school curriculum covering astronomy and ham radio issues. Special attention has been given to the ISS regarding its role in humanity and science, its orbit, and the everyday life of the astronaut. ISS courses were based on ESA's education tool, "ISS Education Kit."

2. ARISS Contact Featured at John Glenn Event

On Monday, February 20, an ARISS contact was held during the John Glenn Event at the State Records Office of Western Australia in Perth, via telebridge station AH6NM in Hawaii. The contact was held in celebration of the 50th anniversary of John Glenn's orbit of the Earth, when the population of Perth turned on its lights and Glenn observed the city was visible from space, leading to Perth's nickname, "City of Lights." The event opened with a pre-recorded video address given by Senator Glenn.

Speeches from Australia's leading scientists were also given, followed by the ARISS contact with Dan Burbank, KC5ZSX on the ISS. The event was streamed live on the internet and was covered by television stations and ABC (Australian Broadcasting Corporation) Radio.

3.   Italian Students Experience ARISS Contact

An Amateur Radio on the International Space Station (ARISS) contact was held between 1� Circolo Didattico Nicola Fornelli located in Bitonto, Italy and on-orbit astronaut Don Pettit, KD5MDT on Friday, February 24. The students had all their questions addressed concerning what it takes to become an astronaut and what it is like to live on the ISS. The contact highlighted their studies covering life in space, communications, space conquests and research, artificial satellites and the ISS. Approximately 300 people turned out for the event, including Italian Air Force officers and media representatives.

4.   ARISS International Team Teleconference Held

The monthly ARISS International Team teleconference was held on Tuesday, February 21. Topics of discussion included a World Radiocommunication Conference 2012 (WRC-12) abstract concerning Nano and Pico satellites, the status of Ham TV and an update on the replacement VHF Ericsson. Minutes have been posted: http://ariss.rac.ca/arisstel2012-02-21.htm

5.   Astronaut Training Status

Astronaut Alexander Gerst, who passed his amateur radio license exam on February 13, has been given the callsign KF5ONO. He is scheduled to fly with Expedition 40 in May 2014.

An introductory session is planned for Gregory Wiseman, KF5LKT (Expedition 40, May 2014) on Monday, February 27 and a preflight session is scheduled for Expedition 32 astronauts Sunita Williams, KD5PLB and Akihiko Hoshide, KE5DNI on Monday, March 5. Williams and Hoshide will fly later this year.

[ANS thanks Carol, KB3LKI, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Dee Interdonato, NB2F
nb2f at AMSAT dot org

```
From 2943338949913178134
X-Google-Thread: 10e8ad,4b4df74dc0f771a5,start
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Received: by 10.68.220.229 with SMTP id pz5mr3849839pbc.5.1330972328877;
        Mon, 05 Mar 2012 10:32:08 -0800 (PST)
Path: h9ni42950pbe.0!nntp.google.com!news2.google.com!goblin2!goblin1!
goblin.stu.neva.ru!news.astraweb.com!border6.a.newsrouter.astraweb.com!not-for-
mail
From: Chris Steyaert <observations@rmob.org>
Newsgroups: rec.radio.amateur.space,sci.astro.amateur
Subject: Radio Meteor Obs. Bull. February 2012
Date: Mon, 05 Mar 2012 19:32:04 +0100
Message-ID: <rj1al7lo8jtbjj4tepscmm4815itiv95n8@4ax.com>
X-Newsreader: Forte Agent 5.00/32.1171
MIME-Version: 1.0
Lines: 14
Organization: Unlimited download news at news.astraweb.com
NNTP-Posting-Host: 108e53bc.news.astraweb.com
X-Trace: DXC=o\cHIG^jWk6fB5aLm@JgR<L?
0kYOcDh@:MIPGNlI[_G10PO7jSba5O:VDlMZ9=:3j3b3<D_UX>L;9X<`3P5ZY[Z:DhMN6TS@R25S[7D[gh
Q15:
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
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Radio Meteor Observation Bulletin No. 223 of February 2012 (94 K) is available now as

http://www.rmob.org/rmobtext/rmob1202.txt

More information and the visual presentation of the hourly forward scatter counts can be found on

http://www.rmob.org

Chris

```
From -2839249708085786677
X-Google-Thread: 107ada,b4c97fffc41bfeb5,start
X-Google-NewGroupId: yes
X-Google-Thread: 11480d,b4c97fffc41bfeb5,start
X-Google-NewGroupId: yes
X-Google-Thread: 10e8ad,b4c97fffc41bfeb5,start
X-Google-NewGroupId: yes
X-Google-Thread: 114aac,b4c97fffc41bfeb5,start
X-Google-NewGroupId: yes
```

```
X-Google-Thread: 10b9c8,b4c97fffc41bfeb5,start
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blic,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Received: by 10.68.201.129 with SMTP id ka1mr10871873pbc.6.1331051409689;
        Tue, 06 Mar 2012 08:30:09 -0800 (PST)
MIME-Version: 1.0
Path: h9ni46450pbe.0!nntp.google.com!news2.google.com!news1.google.com!
newsfeed2.dallas1.level3.net!news.level3.com!panix!rri.panix.com!robomod!not-for-
mail
From: SWPC.Webmaster@noaa.gov
Newsgroups:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.shor
twave,rec.radio.info
Subject: Weekly Highlights of Solar and Geomagnetic Activity, 27 February - 04
March 2012
Followup-To:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.shor
twave
Date: Tue, 6 Mar 2012 11:30:07 EST
Organization: NOAA Space Weather Prediction Center
Lines: 79
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <20120306163001.D99C533C6F@panix2.panix.com>
NNTP-Posting-Host: panix6.panix.com
X-Trace: reader1.panix.com 1331051407 13883 166.84.1.6 (6 Mar 2012 16:30:07 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Tue, 6 Mar 2012 16:30:07 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump

:Product: Weekly Highlights and Forecasts
:Issued: 2012 Mar 06 1552 UTC
# Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center
# Product description and SWPC contact on the Web
# http://www.swpc.noaa.gov/weekly.html
#
#                 Weekly Highlights and Forecasts
#
Highlights of Solar and Geomagnetic Activity
27 February - 04 March 2012
```

Solar activity ranged from very low to moderate levels. Activity was at very low to low levels during 27 February - 01 March with occasional B-class and isolated C-class flares. Activity increased to moderate levels on 02 March due to an M3/Sf flare at 02/1746 UTC from Region 1429 (N18, L=300, class/area Dkc/700 on 04 March). Activity decreased to low levels on 03 March with occasional low-level C-class flares from Region 1429. Activity returned to moderate levels on 04 March due to a long duration M2/1n flare at 04/1052 UTC from Region 1429. Region 1429 rotated into view on 03 March and quickly became recognized as a large, magnetically complex spot group with a reverse-polarity, beta-gamma-delta magnetic configuration.

No proton events were observed at geosynchronous orbit, however, the greater than 10 MeV proton flux was enhanced due to the long duration M2 flare observed on 04 March.

The greater than 2 MeV electron flux at geosynchronous orbit was at normal to moderate levels during 27 February - 01 March. Flux levels increased to normal to high levels during 02 - 04 March.

Geomagnetic field activity was at quiet to minor storm levels during 27 - 28 February due to a CME passage associated with the filament eruption/asymmetric halo-CME observed on 24 February. Activity decreased to quiet levels on 29 February. Quiet to unsettled levels occurred during 01 - 04 March with active to minor storm periods observed at high latitudes due to weakly-enhanced solar wind speeds combined with sustained periods of weak southward IMF (Negative Bz).

Forecast of Solar and Geomagnetic Activity
07 March - 02 April 2012

Solar activity is expected to be at moderate to high levels from 07 - 16 March. Activity is expected to decrease to low levels during 17 - 28 March after Region 1429 rotates around the west limb. Probabilities for moderate to high activity will increase once again on 29 March with the return of Region 1429.

There is a chance for isolated proton events at geosynchronous orbit while Region 1429 remains on the disk through 16 March.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to be at normal to moderate levels from 07 - 17 March. Flux is expected to increase to moderate to high levels on 18 - 19 March due to effects from a recurrent coronal hole high speed stream (CH HSS). Normal to moderate levels are expected to return from 20 - 28 March followed by moderate to high levels on 30 March - 01 April due to a second recurrent CH HSS. Normal to moderate levels are expected for the remainder of the period.

Geomagnetic field activity is expected to be active with a chance for minor storm levels on 07 March due to the combined arrival of CMEs observed on 04 and 05 March. Activity is expected to be at quiet to unsettled levels on 08 March as the effects from those CMEs subside. Mostly quiet conditions are expected during 09 - 10 March. Quiet to unsettled levels are expected on 11 - 13 March due to weak CH HSS effects. Activity is expected to decrease to quiet levels during 14 - 16 March. Activity is expected to increase to unsettled to active levels during 17 - 20 March due to a recurrent negative polarity CH HSS. Mostly quiet conditions are expected from 21 - 27 March followed by an increase to quiet to unsettled levels on 28 - 31 March due to another recurrent CH HSS. Predominantly quiet conditions are expected for the remainder of the period.

Attention Beginning Monday March 12, 2012, the Weekly Bulletin will now be issued and available on the SWPC web page every Monday morning by 1500 UTC.

```
From 2253008687113841195
X-Google-Thread: 10e8ad,5e2074181ed25a33,start
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        Fri, 09 Mar 2012 07:47:16 -0800 (PST)
MIME-Version: 1.0
Path: h9ni6714pbe.0!nntp.google.com!news2.google.com!
border1.nntp.dca.giganews.com!nntp.giganews.com!nx02.iad01.newshosting.com!
newshosting.com!news-out.readnews.com!transit3.readnews.com!panix!rri.panix.com!
robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-069 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Fri, 9 Mar 2012 10:47:16 EST
Organization: The Radio Amateur Satellite Corporation
Lines: 2060
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <001401ccfe0b$dee9c760$9cbd5620$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
X-Trace: reader1.panix.com 1331308036 20573 166.84.1.6 (9 Mar 2012 15:47:16 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Fri, 9 Mar 2012 15:47:16 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
```

X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us

This report is organized into three (3) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites

SB SAT @ AMSAT W8ISS $WSR-069.S1
WSR 069 Part 1 03/09/2012

AMSAT NEWS SERVICE BULLETIN 069.S1
FROM AMSAT HQ SILVER SPRING, MD, March 09, 2012
TO ALL RADIO AMATEURS
BID: $WSR-069.S1

DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational
Current Mode: Science Mode - Beacon ONLY

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink: 435.530 to 435.570 MHz

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnumh
[02092011]
��VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05, 2005 0444z
Launch site: Satish Dhawan Space Centre, India

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.9360 MHZ CW

Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum0

To know what transponder is switched on please listen for the beacon that is active. Each transponder has a different beacon.
[02092011]
��SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002 1700z
Launch site: Baikonur, Kazakhstan

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz. The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10 minute timer.

[02092011]
��FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Operational
Current Mode: V/u (Mode JA)

Voice/CW (Mode JA)
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage:
http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
�retURL�atellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's
CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/
fo29cwts.htm
[01122012]
��AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993 0140z
Launch site: Kourou, French Guiana

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[02092011]
��AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974
Launch site: Vandenberg AFB, California, USA

Status: Operational

Current Mode: Alternating between Mode A and B every 24 hours

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
[02092011]
��INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998 0640z (ZARYA module)
Launch sites: Baikonur, Kazakhstan
              Kourou, French Guiana
              Uchinoura Space Center, Japan
              Kennedy Space Center, Titusville, Florida, USA

Status: Operational

Current Active Modes: FM Repeater - OFF
                      Voice -   V/v
                      BBS -   OFF
                      2m APRS -   ON
                      70cm Digi -   ON
                      SSTV -   OFF

Expedition 30 Crew (November 2011 - March 2012):
Commander: Dan Burbank   KC5ZSX
Flight Engineer: Anton Shkaplerov
Flight Engineer: Anatoly Ivanishin
Flight Engineer: Oleg Kononenko   RN3DX
Flight Engineer: Andr� Kuipers   PI9ISS
Flight Engineer: Don Pettit   KD5MDT

Available Modes and Frequencies:
Digital/APRS:
Worldwide 2m packet uplink: 145.825 MHz FM 1k2
Worldwide 2m packet downlink: 145.825 Mhz FM 1k2
Worldwide 70cm packet downlink: 437.550 Mhz FM 1k2
Worldwide 70cm packet downlink: 437.550 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM

Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
2m Packet Mailbox: RS0ISS-11
2m Digipeater alias: ARISS
70cm Packet Mailbox: RS0ISS-1
70cm Digipeater callsign: RS0ISS
70cm Digipeater alias: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[12262011]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-069.S2
WSR 069 Part 2 03/09/2012

AMSAT NEWS SERVICE BULLETIN 069.S2
FROM AMSAT HQ SILVER SPRING, MD, March 09, 2012
TO ALL RADIO AMATEURS
BID: $WSR-069.S2

XaTcobeo
Catalog Number: 38082
Launch Date: Februaury 13, 2012
Launch Site: Kourou, French Guiana

Status: On Orbit

Uplink:
Downlink: 437.365 MHz FFSK with AX.25

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum5
[03012012]
��UniCubeSat
Catalog Number:
Launch Date: Febrauary 13, 2012
Launch Site: Kourou, French Guiana

Status: On Orbit

Uplink:
Downlink: 437.305 MHz 9k6 bps FSK

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum3
[02142012]
��Robusta
Catalog Number:
Launch Date: Febrauary 13, 2012
Launch Site: Kourou, French Guiana

Status: On Orbit

Uplink:
Downlink: 437.325 MHz 1k2 FM telemetry (data every 1 min, 20 sec. burst)

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum2
[02142012]

```
��PW-Sat
Catalog Number:
Launch Date: Febrauary 13, 2012
Launch Site: Kourou, French Guiana

Status: On Orbit

Uplink:   435.020 MHz FM
Downlink: 145.900 MHz DSB

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum2
[02142012]
��MO-72 MaSat-1
Catalog Number: 38079
Launch Date: Febrauary 13, 2012
Launch Site: Kourou, French Guiana

Status: On Orbit

Uplink:
Downlink: 437.345 MHz GFSK 625/1250 bps
          437.345 MHz CW

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum6
[03012012]
��Goliat
Catalog Number: 38085
Launch Date: Febrauary 13, 2012
Launch Site: Kourou, French Guiana

Status: On Orbit

Uplink:
Downlink: 437.485 MHz 1k2 AFSK

Beacon:

Callsign:
```

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum�
[03012012]
��E-St@r
Catalog Number:
Launch Date: Febrauary 13, 2012
Launch Site: Kourou, French Guiana

Status: On Orbit

Uplink:
Downlink: 437.445 MHz 1k2 bps AFSK

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum0
[02142012]
��ALMASat1
Catalog Number: 38078
Launch Date: Febrauary 13, 2012
Launch Site: Kourou, French Guiana

Status: On Orbit

Uplink:
Downlink: 437.465 MHz 1k2 bps FSK
          2407.850 MHz

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum9
[02212012]
��RS-39 Chibis-M
Catalog Number: 37841
Launch Date: October 30, 2011 10:11:00 UTC
Launch site: Tyuratam (Baikonur Cosmodrome), Kazakhstan

Status: Operational

Uplink:
Downlink:

Beacon: 435.315 MHz CW
        435.215 MHz CW

Callsign:

URL:

IARU coordination status page:
[01122012]
��JUNGU
Catalog Number: 37841
Launch Date: October 12, 2011 05:30:00 UTC
Launch site: Satish Dhawan Space Centre, India

Status: On Orbit

Uplink: 145.??? MHz 1k2 (mode?)
Downlink: 437.505 MHz 9k6 (mode?)

Beacon: 437.275 MHz 15 wpm (?) CW

Callsign:

URL: http://www.iitk.ac.in/me/jugnu/index.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum0
[01122012]
��SRMSAT
Catalog Number: 37839
Launch Date: October 12, 2011 05:30:00 UTC
Launch site: Satish Dhawan Space Centre, India

Status: On Orbit

Uplink: 145.900 MHz 1k AX.25 (speed?)
Downlink: 437.500 MHz 2k4 AX.25

Beacon: 437.425 MHz 12 wpm CW

Callsign:

URL: http://srmsat.in/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum1
[01122012]
��HRBE (E1P Explorer 1 [Prime] CubeSat (E1P-U2))
Catalog Number: 37855
Launch Date: October 28, 2011
Launch site: Vandenberg Air Force Base, California, USA

Status: On Orbit

Uplink: 437.305 MHz (???)
Downlink: 437.505 MHz AX.25 (SSB?)

Beacon:

Callsign:

URL: http://ssel.montana.edu/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum6
[01122012]
��M-Cubed
Catalog Number: 37855
Launch Date: October 28, 2011
Launch site: Vandenberg Air Force Base, California, USA

Status: On Orbit

Uplink:
Downlink: 437.485 MHz AX.25

Beacon:

Callsign:

URL: http://umcubed.org/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum!5
[01122012]
��RAX-2
Catalog Number: 37853
Launch Date: October 28, 2011
Launch site: Vandenberg Air Force Base, California, USA

Status: On Orbit

Uplink:
Downlink: 437.345MHz 9k6 GMSK

Beacon:

Callsign:

URL: http://rax.engin.umich.edu//

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum"1
[12262011]
��AO-71 AubieSat-1

Catalog Number: 37854
Launch Date: October 28, 2011
Launch site: Vandenberg Air Force Base, California, USA

Status: On Orbit

Uplink:
Downlink: 437.475 MHz 1k2 AX.25

Beacon: 437.475 MHz CW

Callsign: KI4NQO

URL: http://www.space.auburn.edu/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum8
[12262011]
��O/OREOS
Catalog Number: 37224
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: On Orbit

Uplink:
Downlink: 437.035 MHZ AX.25

Beacon:

Callsign:

URL: http://www.ooreos.org/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum6
[02092011]
��Rax-1 Radio Aurora Explorer
Catalog Number: 37223
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: On Orbit

Uplink:
Downlink: 437.505 MHz 9k6 GMSK

Beacon:

Callsign: RAX-1

URL: http://rax.engin.umich.edu/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum5
[02092011]
��FO-69 Fastrac-1 Sara Lily
Catalog Number: 37227
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: Operational

Uplink 1: 145.980 MHz 1k2 baud
Uplink 2: 145.825 MHz 1k2 baud
Downlink: 437.345 MHz 1k2 and 9k6 baud

Beacon: 437.435 MHz 1k2 AX.25

Callsign: Fast1

URL: http://fastrac.ae.utexas.edu/index.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum�
[07052011]
��FO-70 Fastrac-2 Emma
Catalog Number: 37380
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: Operational

Uplink 1: 435.025 MHz 1k2 baud
Uplink 2: 437.435 MHz 9k6 baud
Downlink: 145.825 MHz 1k2 and 9k6 baud

Beacon: 145.825 MHz 1k2 AX.25

Callsign: Fast2

URL: http://fastrac.ae.utexas.edu/index.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum�
[12162011]
��StudSat
Catalog Number: 36796
Launch Date: July 12, 2010 0352z
Launch site: Satish Dhawan Space Centre, India

Status: On Orbit

Uplink: 437.505MHz, 9600bps FSK
Downlink: 437.505MHz, 9600bps FSK
Beacon : 437.505MHz,   20bps ASK

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum4
[02092011]
��TIsat-1
Catalog Number: 36799
Launch Date: July 12, 2010 0352z
Launch site: Satish Dhawan Space Centre, India

Status: On orbit

Callsign: HB9DE

Uplink: 145.980MHz FM, AFSK
Downlink: 437.305MHz FM, AFSK
Beacon: 437.305MHz CW

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum8
[02092011]
��SwissCube
Catalog Number: 35932
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Callsign: HB9EG

Beacon(100mw): 437.5050MHz CW
Beacon(1w):   437.5050MHz FSK 1k2bps

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum9
[02092011]
��UWE-2
Catalog Number: 35934
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: In Orbit

Beacon(500mw): 437.3850 MHz AFSK 1k2bps
               437.3850 MHz FSK 9k6bps

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum0
[02092011]
��ITUpsAT1
Catalog Number: 35935
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Beacon(100mw): 437.325MHz CW
Beacon(1w): 437.325MHz 19k2bps

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum3
[02092011]
��BEESAT
Catalog Number: 35933
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Callsign: DP0BEE

Beacon(100mw): 436.000MHz CW
Beacon(500mw): 436.000MHz GMSK 4k8bps
Beacon(500mw): 436.000MHz GMSK 9k6bp
[02092011]
��CP-6
Catalog Number: 35004
Launch Date: May 19, 2009 2355z
Launch site: Wallops Island, Virginia, USA

Status: Operational

Downlink: 437.365 MHz 1k2 AFSK

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum1
[01122012]
��HAWKSAT 1
Catalog number: 35003
Launch Date: May 19, 2009 2355z
Launch site: Wallops Island, Virginia, USA

Status: operational

Downlink: 437.345 MHz ?

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum5
[01122012]
��Pharmasat
Catalog Number: 35002
Launch Date: May 19, 2009 2355z
Launch site: Wallops Island, Virginia, USA

Status: Operational

Downlink: 437.465 MHz 1k2 AFSK

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum�
[02092011]
��ANUSAT
Catalog Number: 34808
Launch Date: April 20, 2009 0115z
Launch Site: Satish Dhawan Space Centre, India

Status: ?

Downlink: 435.000 MHz
Uplink: 145.800 MHz

Telemetry: 137.400 MHz
[02092011]
��SOHLA-1 (ASTRO TECH.)
Catalog Number: 33496
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational

Proposed Frequencies and Modes:
Downlink: 437.505 MHz AFSK/CW
Beacon: 437.505 MHz AFSK/CW

Callsign:

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum1
[02092011]
��KAGAYAKI (Solan Co.)
Catalog Number: 33495
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: In Orbit

Downlink: 437.375 MHZ   FSK9k6/CW
Beacon: 437.375 MHz   FSK9k6/CW

IARU coordination status page:

AMSAT-NA webpage:

[02092011]
��STARS (Kagawa Univ.) (Twin Satellites)
Catalog Number: 33498
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational ?

Downlinks: 437.485 MHz FM/CW
437.465 MHz FM/CW
Beacons: 437.305 MHz FM/CW
437.275 MHz FM/CW

Callsigns: JR5YBN
JR5YBO

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum�

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID1&retURL
�atellites/status.php
[02092011]
��KKS-1 (Tokyo MCIT)
Catalog Number: 33499
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational

Downlink: 437.455 MHz AFSK/CW
Beacon: 437.385 MHz AFSK/CW

Callsign: JQ1YYY

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum7

AMSAT-NA webapge:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID0&retURL
�atellites/status.php
[20092011]
��PRISM (Tokyo Univ.)
Catalog Number: 33493
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational ?

Downlink: 437.425 MHz AFSK/GMSK/CW
Beacon: 437.250 MHz AFSK/GMSK/CW

Callsign: JQ1YCX

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum�

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID9&retURL
�atellites/status.php

[02092011]
��RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number: 32953
Launch Date: May 23, 2008 1520z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational

Curent Modes: Telemetry
Audio
Images

Downlinks: 435.315 MHz
435.215 MHz

AMSAT-NA website:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID5&ret
URL�atellites/status.php

Official website:
http://www.npopm.com/?cid�oca&caidC
[02092011]
��CanX-2
Catalog number: 32790
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational in range of ground station only

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web
page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnumF
[02092011]
��AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Downlink: 437.425 MHz 1k2 baud packet

For the latest project status update please visit the AAUSAT-II web
page:
http://www.aausatii.aau.dk/homepage/index.php?language�&page�me

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum`
[02092011]

��CO-65 CUTE-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational ?

Downlink: 437.475 MHz 9k6 Packet
Uplink: 1267.600 Mhz

Telemetry Beacon:
Downlink: 437.2750 MHz CW

For the latest project status update please visit the Cute-1.7+APD II web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnumx

Command Station blog website:
http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID2&retURL
�atellites/status.php
[07052011]
��Compass-1
Catalog number: 32787
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Current Mode: dependant on last received command

Uplink: 145.980 MHz FM
Downlink: 437.275 Mhz CW
          437.405 MHz Packet

For the latest project status update please visit the Compass 1 web page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnumR

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID4&retURL
�atellites/status.php
[06162011]
��CO-66 Seeds II
Catalog number:
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Downlink: 437.485 MHz

Callsign: JQ1YGU

For the latest project status update please visit the Seeds 2 web page: http://cubesat.aero.cst.nihon-u.ac.jp/english/seeds_2_e.html

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum6

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID3&retURL
�atellites/status.php
[02092011]
��CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007 0702z
Launch site: Baikonur, Kazakhstan

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID�&retURL
/satellites/status.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnumr
[02092011]
��CP3
Catalog Number: 31129
Launch Date: April 17,2007 0702z
Launch site: Baikonur, Kazakhstan

Status: Operational

Current Mode: /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnumt

[02092011]
��CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005 0652z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon: 437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/xivpicte.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum7
[02092011]
��CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: ?????

Current Mode: /u

Beacon: 436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID�&retURL
�atellites/status.php

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[02092011]
��QuakeSat
Catalog Number: 27845
Launch Date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Telemetry only

Current Mode: 9600 baud data packet

Mode U packet

Downlink: 436.675 MHz 9k6 BPS

Quakesat webpage:
http://www.quakefinder.com/services/quakesat-ssite/
[02252011]
��CO-55 Cute-1.7+APD II
Catalog Number: 27844
Launch date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational

Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satIDi&retURL
�atellites/status.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnumx
[02092011]
��NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001 0240z
Launch site: Kodiak Launch Complex, Alaska, USA

Status: Telemetry only

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[02092011]
��RS-22 RADIO SPORT 22 (MOZHAYETS 4)
Catalog number: 27939
Launch Date: September 27, 2003 0612z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational - 70cm cw only

Current Mode: /u

CW Beacon - 435.352 MHz
145.818 MHz

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satIDv&retURL
�atellites/status.php
[02092011]
��LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990
Launch site: Kourou, French Guiana

Status: CW Beacon only

Uplinks: 145.840 MHz 1200-baud Manchester FSK
145.860 MHz 1200-baud Manchester FSK
145.880 MHz 1200-baud Manchester FSK
145.900 MHz 1200-baud Manchester FSK

CW downlink: 437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[02092011]
��UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984
Launch site: Vandenburg AFB, California, USA

Status: Operational ?

Current Mode: /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon: 435.025 MHz
Mode-S Beacon: 2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[07052011]
��INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998 0640z (ZARYA module)

Launch sites: Baikonur, Kazakhstan
Kourou, French Guiana
Uchinoura Space Center, Japan
Kennedy Space Center, Titusville, Florida, USA

Status: Operational

Current Active Modes: FM Repeater - OFF
Voice - V/v
BBS - OFF
2m APRS - ON
70cm Digi - ON
SSTV - OFF

Expedition 30 Crew (November 2011 - March 2012):

Commander:	Dan Burbank	KC5ZSX
Flight Engineer:	Anton Shkaplerov	
Flight Engineer:	Anatoly Ivanishin	
Flight Engineer:	Oleg Kononenko	RN3DX
Flight Engineer:	Andr� Kuipers	PI9ISS
Flight Engineer:	Don Pettit	KD5MDT

Available Modes and Frequencies:
Digital/APRS:
Worldwide 2m packet uplink: 145.825 MHz FM 1k2
Worldwide 2m packet downlink: 145.825 Mhz FM 1k2
Worldwide 70cm packet downlink: 437.550 Mhz FM 1k2
Worldwide 70cm packet downlink: 437.550 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS

Russian: RS0ISS
RZ3DZR
United States: NA1SS
2m Packet Mailbox: RS0ISS-11
2m Digipeater alias: ARISS
70cm Packet Mailbox: RS0ISS-1
70cm Digipeater callsign: RS0ISS
70cm Digipeater alias: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[12262011]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-069.S3
WSR 069 Part 3 03/09/2012

AMSAT NEWS SERVICE BULLETIN 069.S3
FROM AMSAT HQ SILVER SPRING, MD, March 09, 2012
TO ALL RADIO AMATEURS
BID: $WSR-069.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

NANOSAIL-D
Catalog Number: 37361(?)
Ejection Date: January 17, 2011

Status: On orbit

Downlink: 437.270 MHz AX.25

URL: http://nanosaild.engr.scu.edu/dashboard.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum5
[01052012]
��HO-68 HOPE-1 (CAS-1)(XW-1)
Catalog Number: 36122
Launch Date: December 15, 2009 0231z
Launch site: Taiyuan Space Center, PRC

Status: Non - Operational

Callsign:
Broadcast: BJ1SA-11
BBS: BJ1SA-12

Uplinks: 145.8250 MHz FM, PL 67.0 Hz.
           145.9250 - 145.9750 MHz SSB/CW
           145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
           435.7650 - 435.7150 MHz SSB/CW
           435.6750 MHz AFSK 1200 BPS

Beacon: 435.7900 MHz CW

Mode and Antenna Polarization:
V: LHCP 2.0dBi max
U: RHCP 3.0dBi max

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum8

For more information about XW-1 (CAS-1):
http://
[01122012]
��SO-67 SumbandilaSat
Catalog Number: 35870
Launch Date: September 17, 2009 1555z
Launch site: Baikonur, Kazakhstan

Status: Non - Operational

Callsign: ZS0SUM

Uplink: 145.875MHz FM tone 233.6 Hz
Downlink: 435.345MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

For more information about SO-67:
http://www.amsatsa.org.za/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum�
[01272012]
��CP4
Catalog Number: 31132
Launch Date: April 17, 2007

Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon: 437.325 MHz CW

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnumy
[09062010]
��LIBERTAD-1
Catalog Number: 31128
Launch Date: April 17, 2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink: 145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnumv
[09062010]
��PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: Non-Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder: 145.825 Mhz FM

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnumQ
[09062010]
��NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
                             2407.250

Official Website: http://www.ncube.no

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum$
[09062010]
��XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

```
Status: Non-operational

Voice Uplink:         437.250 MHz FM 67Hz CTCSS
Voice Downlink:      2401.835 MHz FM
Packet Up/Downlink:   437.250 MHz 9k6 packet
Packet Downlink      2401.835 MHz 38k4 packet

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnumT
[09062010]
��UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non-Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnumS
[09062010]
��AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004 0745z
Launch site: Baikonur, Kazakhstan

Status: Non - Operational

Current Mode(s):
Voice repeater: V/u
Uplink:      145.880 MHz FM
Downlink:    435.150 MHz FM

Telemetry: Recovery efforts
Downlink:    435.150MHz 9k6


Analog voice downlink:     435.300 MHz FM
                           435.150 MHz FM
                          2401.200 Mhz FM
Analog voice uplink:       145.860 MHZ FM
                           145.880 MHz USB
                           145.880 MHz FM
                           145.920 MHz FM
                           145.920 MHz FM - 67 Hz PL tone burst
                          1268.705 MHz FM
Digital Downlinks:         435.150 MHz FM 38k4 PBP, 1 watt output
                           435.150 MHz FM 9k6 Pacsat Broadcast Protocol
                          2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:            145.860 MHz FM 9k6 Pacsat Broadcast Protocol
                          1268.703 mhz FM 9k6 Pacsat Broadcast Protocol
```

Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum
[12062011]
��CANX-1
Catalog Number: 27847
Launch Date: June 30, 2003

Status: Non-Operational

Downlink: 437.8800 MHz AFSK 1k2bps
[06052009]
��DTUSAT
Catalog Number: 27842
Launch Date: June 30, 2003

Status: Non-Operational

Current Mode: 2k4 AFSK Packet last reported

Downlink: 437.475MHz

Officail webpage: http://dtusat1.dtusat.dtu.dk/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID1&retURL
�tellites/all_oscars.php
[02212009]
��AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)

Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
��MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Telemetry only

Uplinks: 145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[03302009]
��NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
��SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
��SO-41 SAUDISAT-1A

Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
��AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks

V-band: 145.840 - 145.990 MHz CW/LSB
U-band: 435.550 - 435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks

S2-band: 2401.225 - 2401.475 MHz CW/USB
K-band: 24048.010 - 24048.060 MHz CW/USB
Beacon: 2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)

BEACON	General Beacon(GB)	Middle Beacon(MB)	Engineering Beacon(EB)
2 m	none	145.898 MHz	none
70cm	435.438 MHz	435.588 MHz	435.838 MHz
13cm(1)	2400.188 MHz	2400.338 MHz	2400.588 MHz
13cm(2)	2401.173 MHz	2401.323 MHz	2401.573 MHz
3cm	10450.975 MHz	10451.125 MHz	10451.375 MHz
1.5cm	24047.885 MHz	24048.035 MHz	24048.285 MHz

[07162007]
��OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]

��UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
��SO-35 SUNSAT
Catalog Number: 25636
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
��PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
��SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and the image and transponder recovery efforts have been unsuccessful.

```
For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
��GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Non-Operational

Current Modes:
Telemetry : /u

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign:       4XTECH-12

More information of GO-32 can be found at:
http://asri.technion.ac.il/techsat/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID&retURL
�atellites/status.php
[07172010]
��TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink:   145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
��MO-30 UNAMSAT-2
Catalog Number: 24305
Launch Date: September 5, 1996

Status: Non-operational

Downlink:       435.1380 MHz AFSK 1200 BPS
Downlink:       435.2060 MHz AFSK 1200 BPS
Uplink:         145.8150 MHz AFSK 1200 BPS
```

Uplink: 145.8350 MHz AFSK 1200 BPS
Uplink: 145.8550 MHz AFSK 1200 BPS
Uplink: 145.8750 MHz AFSK 1200 BPS
[06042009]
��PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Non-operational

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012009]
��IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks: 145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
��KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]

```
��AO-24 ARSENE
Catalog Number: 22654
Launch Date: May 13, 1993

Status: Non-operational

Uplink:    435.0625 MHz FM 1k2bps AFSK
           435.1125 MHz FM 1k2bps AFSK
           435.1375 MHz FM 1k2bps AFSK
Downlink:  145.9750 MHz FM 1k2bps AFSK
          2446.5025 MHz FM 1k2bps AFSK

Beacon:    2446.4700 MHz CW

Broadcast callsign:
BBS:
[12162009]
��KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]
��UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
��AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
��FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990
```

Status: Non-Operational

Beacons: 435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink: 145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks: 145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
��WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
��DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink: 145.825 MHz FM 1200 Baud AFSK
Beacon: 2401.220 MHz
[05012006]
��AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: non-operational

Current Mode: V/u

Uplink: 145.900 MHz FM 1200-baud Manchester FSK (reserved)
                145.920 MHz FM VOICE
                145.940 MHz FM 1200-baud Manchester FSK (reserved)
                145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink: 437.026 MHz USB VOICE
                (1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC 437.050 MHz RHCP
   PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[07242009]
��UO-15 UoSAT-4
Catalog Number: 20438
Launch Date: January 22, 1990

Status: Non-operational

Uplink: ?
Downlink: 435.1250MHz (?)
          435.1200MHz (?)
[06042009]
��UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink: 145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
��FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink: 145.8500 MHz MFSK 1200 BPS
Uplink: 145.8700 MHz MFSK 1200 BPS
Uplink: 145.8900 MHz MFSK 1200 BPS
Uplink: 145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
��AO-10 OSCAR 10
Catalog number: 14129

Launch Date: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon: 145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
��AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.8500 - 145.9000 MHz SSB/CW
Downlink 29.4000 - 29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
��AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink: 29.4500 - 29.5500 MHz SSB/CW
Beacons: 29.450 MHz
          435.100 MHz
[01312008]
��AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
��OSCAR III

Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink: 145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
��RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB

Beacon 1: 29.352 MHz (intermittent)
Beacon 2: 29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
��RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB

Beacon: 145.860 MHz

Robot: 145.908 MHz
[05232004]
��RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz.

Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at}
amsat.org
NNNN
/EX

From 5153130606423321837
X-Google-Thread: 10e8ad,2584a5fd2315343b,start

```
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII
Received: by 10.68.135.231 with SMTP id pv7mr6919656pbb.8.1331432453296;
        Sat, 10 Mar 2012 18:20:53 -0800 (PST)
MIME-Version: 1.0
Path: h9ni12188pbe.0!nntp.google.com!news1.google.com!npeer02.iad.highwinds-
media.com!news.highwinds-media.com!feed-me.highwinds-media.com!
nx01.iad01.newshosting.com!newshosting.com!news-out.readnews.com!
transit3.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-071 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sat, 10 Mar 2012 21:20:52 EST
Organization: The Radio Amateur Satellite Corporation
Lines: 610
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <001301ccff2d$8f3750c0$ada5f240$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
X-Trace: reader1.panix.com 1331432452 27126 166.84.1.6 (11 Mar 2012 02:20:52 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 11 Mar 2012 02:20:52 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
X-Received-Bytes: 28572
Content-language: en-us
```

AMSAT NEWS SERVICE
ANS-071

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

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SB SAT @ AMSAT $ANS-071.01
ANS-071 AMSAT News Service Weekly Bulletins

AMSAT News Service Bulletin 071.01
>From AMSAT HQ SILVER SPRING, MD.
March 11, 2012
To All RADIO AMATEURS
BID: $ANS-071.01

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* Volunteers are needed to help at the AMSAT booth at Dayton. Gould  *
* WA4SXM, is looking for volunteers to help man the AMSAT booth dur- *
* ing the 2012 Hamvention. People are needed all 3 days for 2 hour   *
* shifts. Please send the days and times you are available to help   *
* as well as how many shifts you are willing to work via e-mail to   *
* wa4sxm at amsat.org.                                               *
* Monitor http://www.amsat.org/amsat-new/hamvention/2012/Dayton.php  *
* for the latest AMSAT at Dayton news and developments               *
**********************************************************************
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Howard Long, G6LVB featured speaker at the 2012 AMSAT/TAPR Banquet

TAMSAT/TAPR Banquet on Friday night, May 18 is one of the main AMSAT activities during the 2012 Hamvention at Dayton.

AMSAT is pleased to announce that Howard Long, G6LVB will be the featured speaker for the evening event. Howard will be talking about his FUNcube Dongle, the 64 - 1700 MHz Software Defined Receiver. This innovative USB device is the size of a thumbdrive and has an SMA antenna socket. Multiple SDR control and display software programs can be used with the FUNcube Dongle.

Banquet tickets will not be sold at the AMSAT booth during the Hamvention so reservations must be made through the AMSAT Store:
http://www.amsat-na.com/store/item.php?id0158
Tickets are $30 apiece.

[ANS thanks Gould Smith, WA4SXM for the above information]

AMSAT-NA Receives US Space Command Authorization for Keps Distribution

AMSAT's Keeper of the Keps, Ray Hoad, WA5QGD wrote, "I am pleased to announce that AMSAT's request to re-distribute AFSPC Keplerian elements from SpaceTrack has been approved for the period April 1, 2012 to April 1, 2013. Our USSTRATCOM ODR (Orbital Data Request) to distribute the KEPs was approved on March 1, 2012. We are "good to go" for another year."

Thanks to the US Air Force Space Command, Perry Klein, W3PK and Paul Williamson, KB5MU for their help in this process.

[ANS thanks Ray Hoad, WA5QGD for the above information]

AMSAT-UK Announces Colloquium 2012 & Issues First Call for Speakers

The AMSAT-UK International Space Colloquium will be held on September 14-16, 2012.

The colloquium attracts an international audience from across Europe as well as North America and the Middle East. Attendees range from the builders of the CubeSats and Nanosats, those who communicate through them and beginners who wish to find out more about this fascinating branch of the hobby.

It provides a rare opportunity to chat with satellite designers and builders, discussions frequently continue until the early hours of the morning.

A Gala dinner is held on the Saturday evening along with the fund raising auction.

AMSAT-UK invite speakers, about amateur radio space and associated activities, for this event. They are also invited to submit papers for the �Proceedings� document which will be published at the same time but printed papers are not mandatory. We normally prefer authors to present talks themselves rather than having someone else give them in the authors� absence. We also welcome �unpresented� papers for the Proceedings document.

FIRST CALL FOR SPEAKERS

This is the first call for speakers for the AMSAT-UK International Space Colloquium 2012 which, due to the Olympic & Paralympic Games, will be held this year on the weekend of September 15-16, 2012 at the Holiday Inn, Guildford, GU2 7XZ, United Kingdom.

This Colloquium will take place a few weeks before the planned launch of AMSAT-UK�s FUNcube-1 satellite carrying a 435/145 MHz linear transponder for SSB/CW communications.

AMSAT-UK invites speakers, to cover topics about micro-satellites, CubeSats, Nanosats, space and associated activities, for this event.

They are also invited to submit papers for subsequent publishing on the AMSAT-UK web site. We normally prefer authors to present talks themselves rather than having someone else give them in the authors� absence. We also welcome �unpresented� papers for the web site.

We appreciate that it is not always possible to give a firm indication of attendance at this stage but expressions of interest would be appreciated.

Submissions should be sent *ONLY* to G4DPZ, via the following routes:

e-mail: david dot johnson at blackpepper dot co dot uk

Postal address at http://www.qrz.com/db/G4DPZ

AMSAT-UK also invite anyone with requests for Program Topics to submit them as soon as possible to G4DPZ. Invitations for any papers on specific subjects will be included in the future call. Likewise if anyone knows of a good speaker, please send contact and other information to G4DPZ.

[ANS thanks Dave Johnson, G4DPZ and AMSAT-UK for the above information]

New Satellite Group Formed in Cuba

Hector Martinez, CO6CBF reports that the Cuban Amateur Radio Federation (FRC) has created its first official Satellite Group.

Hector said that himself, Raydel CM2ESP, and Pavel CO7WT worked to form the group and made the request to the FRC headquarters. The request was approved on March 3, 2012. The official name is Grupo de Radioaficionados para Operaciones Satelitales (GROS).

The principal mission is to promote amateur radio by satellites in Cuba and motivate Cuban hams to operate on the satellites.

Grupo de Radioaficionados para Operaciones Satelitales is planning their first meeting in Havana City, Cuba.

[ANS thanks Hector Martinez, CO6CBF for the above information]

India VO-52 Satellite Recovery in Progress

Mani, VU2WMY, Secretary & Station-In-Charge at the Upagrah Amateur Radio Club VU2URC in India reported that on March 6 the ISRO Satellite Centre recovered operation and control of HAMSAT VO-52. This satellite had been heard during expected passes since February 28.

Mani wrote, "I can share at this moment is 'HAMSAT VO-52' is in 'Excellent Health' after recovery operations. Right now, it is under observation. The decision in regards to switching 'ON' the transponder is pending clearance from ISRO. This decision expected soon. The user community will be informed well in advance about the transponder switching."

ISRO Announces Plan to Turn on Dutch Transponder

On March 8, Mani, VU2WMY, reported that news had been received from Mr. T. Parimalarangan, HAMSAT VO-52 Operations Director at ISTRAC/ISRO that, "After 'In-Orbit Maintenance Operations' the decision to turn 'ON' Transponder No 2 i.e. The Dutch Transponder made by William Leijenaar PE1RAH on March 8 during orbit # 37006 over India."

Dutch Transponder Activation on Hold for One Week

Unfortunately, we are sorry to inform that the 'Expert Committee' overseeing the VO-52 (HAMSAT) performance has advised to extend the 'Observation Period' by an other week.

Hence, the decision to switch on the transponder # 2 is now put 'ON HOLD' till further notice. Inconvenience caused to the users is regretted.

This latest decision is just only a postponement and nothing to worry about the health of the spacecraft. We re-assure you all that VO-52 is very strong and in a 'Perfect Health' condition.

Once the Dutch transponder is switched on it will use the following frequencies:

Uplink frequency: 435.250 MHz
Downlink frequency: 145.900 MHz
Beacon: CW at 145.859330 MHz (145.86 MHz)
Output level of Beacon Carrier: 18 dBm

ISRO invites a 'Critical Comparative Signal Report' between the Indian and Dutch transponder would be of great help for further evaluations and necessary actions for the maintenance the transponder in good and healthy condition for better services and also, the inputs would be very valuable to the respective transponder designers. Please send your feedback to tprangan@istrac.org.

Summaries from stations monitoring for VO-52 can be entered and viewed on the Live OSCAR Satellite Status Page: http://oscar.dcarr.org/

[ANS thanks Mani, VU2WMY, Secretary & Station-In-Charge at the Upagrah Amateur Radio Club for the above information]

March 17 for AMSAT-LU Balloon Test Flight of LUSEX Satellite Systems

AMSAT-Argentina announced they are planning to test systems of the LU Satellite EXperiment (LUSEX) satellite during a high altitude balloon flight up to 100,000 feet. This is scheduled for March 17 at 1500 UTC. Direct reception of the balloon flight is estimated to extend to 400 miles from the City of Junin, west of Buenos Aires, Argentina. (See http://www.amsat.org.ar/junincubr.jpg for estimated coverage map.)

The payload will feature several radio and telemetry experiments:

+ Crossband FM Repeater
  Uplink   435.950 MHz FM (123 Hz tone)
  Downlink 145.950 MHz FM

+ SSTV Downlink 145.950 MHz FM
  ROBOT-36 in real time, showing the view from the balloon every 5 minutes during ascent/descent, longer interval at high altitude. Video will also be recorded and recovered at the end of the flight.

+ APRS Data
  APRS 1200 baud packet on 144.930 MHz, and 145.950 MHz.

+ Telemetry Downlink 145.950 MHz
  If the crossband repeater is in use a warning bip at 40 seconds will indicate telemetry is coming, which is sent if the repeater is not in use. If the repeater continues to be busy then 2 bips will indicate APRS packets will be sent.

  CW telemetry (modulated FM on 145.950 MHz) will be sent every 5 minutes with the following sequence: CQ LU7AA, sequence number, external and internal temperatures �C and battery voltage.

+ User Telecommand Experiment
  The 435.950 up / 145.950 down crossband repeater will accept user DTMF command to return a signal report. Sending B* on the uplink will return S5 (average signal strength) or P10 (S9+10 signal

strength) modulated CW tones on the 145.950 MHz FM downlink.

APRS trajectory will update every minute, including speed, height, external and internal temperatures and 7.2v battery voltage. This can be monitored directly on 144.930 MHz for stations in range. It will also display at: http://aprs.fi/?call�7aa-11 . The APRS symbol will display as a balloon during ascent, and as a glider during parachute descent. The AMSAT-LU APRS Igate LU7AA-10 on 144.930 and 430.930 MHz will be active. Maps for UI-View APRS tracking can downloaded from http://www.amsat.org.ar.

Stations making a contact via the balloon payload may qualify for a certificate. See http://www.amsat.org.ar/certsat.html for details.

AMSAT-LU thanks the members of Radio Clubs of Junin, QRM Belgrano, APRS Group, Don Bosco Ramos Mejia School, gliders Clubs of Zarate, Junin and Ca�uelas, and the twelve Amsat-LU members development team. Reports from radio amateurs during previous flights are appreciated and they look forward to your reports during the March 17 flight.

Photos and reports of prior flights can be viewed on-line at:
http://www.amsat.org.ar/lu4aao/experimento_globo_y_parapente.htm

The LU Satellite EXperiment web page is at: http://lusex.org.ar

[ANS thanks AMSAT-LU for the above information]

KB8VCO and W8ZCF ARISSat-1 SSTV Contact Featured in the Press

The Cincinnati (Ohio) Press web featured a story about the successful SSTV contact via ARISSat-1 between Farrell Winder, W8ZCF and his son, Jeff Winder, KB8VCO.

The Winders teamed together and after many, many tries were successful in sending and receiving a picture of Farrell Winder's automobile license plate.

The Winders used two computers, two radios, and two rotatable outside antennas on towers to aim and to pinpoint the satellite antenna. Conditions were challenging as the satellite was traveling at 18,000 MPH at an altitude of 225 miles, which provided a window of opportunity of only up to about nine minutes while its footprint was passing within range of Cincinnati.

The successful end result was a lot of hard-earned fun and excitement to work with very small signals from �outer space� and overcome the setback caused by the missing antenna on ARISSat-1.

The picture the Winders sent and received is apparently one of the only complete pictures sent and received. Two other operators tried a similar undertaking, but received just portions of pictures.

Since ARISSat-1 had no propulsion system to sustain altitude it entered the Earth's atmosphere on Jan. 4, 2012 and disintegrated.

The story can be read on-line at:
http://tinyurl.com/ARISSat-Cincinnati

[ANS thanks Farrell Winder, W8ZCF and Jeff Winder, KB8VCO for the above information]

Echolink Satellite Nets Launched

New Echolink SAT-CHAT Net

Vince Waelti, K9TSU has established a new, open net, the "Sat-Chat" on the *AMSAT* server on EchoLink. This net meets at 1900 Central US Time (UTC-5) every Saturday evening. Everyone is invited to check in. Also links to -L and -R systems for on-air repeater coverage are welcome. Vince can be reached at k9tsu(at)hotmail(dot)com if you have any questions.

Hudson Valley SatCom Net on Echolink

Stu Ballinger, WA2BSS says the next Hudson Valley SatCom net will meet on-air (146.97 MHz. Mt. Beacon Repeater) and on the Echolink node N2EYH-L on March 15 at 2000 Eastern US time (UTC-4).

Houston AMSAT Net on Echolink

The Houston AMSAT Net meets on the Echolink *AMSAT* server every Tuesday evening at 2000 Central US Time (UTC-5). Checkin to the net is taken via Echolink if you are not in radio range of Houston.

[ANS thanks Vince Waelti, K9TSU; Stu Ballinger, WA2BSS; and Bruce Paige, KK5DO for the above information]

Satellite Shorts From All Over

+ Watch the CQ Magazine Newsroom (http://www.cqnewsroom.blogspot.com/) for more coverage of amateur radio in space. Recent coverage on CQ's Newsroom blog included:
  NASA to Launch Fox-1 Cubesat
  http://tinyurl.com/CQBlog-Fox (cqnewsroom.blogspot.com)

Vega Rocket Launches Nine Satellites
http://tinyurl.com/CQBlog-Vega (cqnewsroom.blogspot.com)

+ Watch AMSAT's Lou McFadin, W5DID interview on HamRadioNow by Gary Pearce, KN4AQ on Southgate ARC's web: http://tinyurl.com/LouMcFadin Lou describes the features of the ARISSat-1 satellite, using the operational model at the AMSAT booth at the Orlando HamCation.

+ Paul, 2E1EUB says his next mobile satellite operations as 2M1EUB from his van will be starting March 24 for 7 days from the east coast of Scotland. Main operations are planned for AO-7 Mode A/B and other satellites as available. Paul will post his latest information on amsat-bb and also on the lookup at QRZ.com for 2M1EUB.

+ This is a reminder to consider making your donation to help AMSAT-UK build the FUNcube Project, an amateur radio satellite that features a 435 to 145 MHz Linear Transponder for SSB/CW operation. the Virgin Giving charity donation website http://tinyurl.com/funcubegiving/
A donation link is also at http://www.uk.amsat.org/.

+ DQ0STRATEX is a special event call on the occasion of the stratospheric balloon project (StratexB) planned for March 2012 by the local DARC clubs Duelmen (N28) and Luedinghausen (N29). They plan to fly an amateur radio load, consisting of an APRS beacon operating on 144.800 MHz and a FM speech beacon operating on 430.375 MHz to the stratosphere on March 24 around 1600 UTC from the airport at Borkenberge near Luedinghausen. Hams from the German Aerospace Center (DLR) in Bremen will also fly an experimental ADS-B receiver. DQ0STRATEX plans to be active on all bands and all modes between now and January 31, 2013.

+ If you ever wondered if the astronauts on the ISS could see you shining a light at them you'll get your answer here. On March 4, about 65 amateur astronomers were in position at the Lazano Observatory in Springbranch Texas (near San Antonio). They turned on searchlights and waited as the ISS was set to make an appearance in the sky. Astronaut Don Pettit, KD5MDT had no trouble seeing the flashes. Watch the video at: http://tinyurl.com/ISS-Flash (UniverseToday.com)

+ NASA invites you watch the 2012 Exploring Space Lectures held at the National Air and Space Museum in Washington, D.C. live on the web:

Big Bang for the Buck: Cosmology from WMAP
March 22, 2012, at 8 p.m. EDT (UTC-4)
http://www.nasm.si.edu/events/eventDetail.cfm?eventID725.

The Little Satellite That Could
April 11, 2012, at 8 p.m. EDT (UTC-4)
http://www.nasm.si.edu/events/eventDetail.cfm?eventID726.

Gamma Ray Bursts and the Birth of Black Holes

May 16, 2012, at 8 p.m. EDT (UTC-4)
http://www.nasm.si.edu/events/eventDetail.cfm?eventID727.

Seeking Planets Like Earth
June 5, 2012, at 8 p.m. EDT (UTC-4)
http://www.nasm.si.edu/events/eventDetail.cfm?eventID728.

+ NASA announces the release of the ISSLive! app for iPhone, iPad and Andoid. This innovative, interactive app provides a novel way to learn about the International Space Station while on the go.

The ISS Live! app delivers live streaming data from the International Space Station. Users can take a virtual 3-D tour of the Mission Control Center and the space station, and view mission control console displays with real-time data. Interactive educational lessons using the data, as well as crew and science timelines with individual crew member, social media and international science experiment details are also available via the app.

To learn more and find links to download the ISSLive! app, visit http://spacestationlive.jsc.nasa.gov where you will find the icons for the iPhone App Store and the Android Market. (iPad and iPhone are trademarks of Apple Inc., registered in the U.S. and other countries. Android is a registered trademark of Google Inc.
- NASA Education Express Message -- March 8, 2012

+ Here is an interesting video with the caption, "Is this the best video footage ever of photos taken from the International Space Station? ISS astronaut and Expedition 29 commander Mike Fossum seems to think so." Fly over the earth at:
http://www.universetoday.com/93828/the-best-iss-video-ever-you-decide/
The video is a series of time lapse photos of Earth at night as seen from the ISS.

+ The 16th Annual SVHFS Conference will be held in Charlotte, North Carolina April 20-21. In addition to the technical activities the conference will feature a keynote address by ARRL President, Kay Craigie, N3KN at lunch on Saturday. The banquet speaker will be 1993 Nobel Prize in Physics laureate Dr. Joe Taylor, K1JT. See http://www.svhfs.org/ for more details and to register.

+ March 13-22 marks the next GLOBE at Night sky survey for students and citizen scientists. Information how to participate, sky charts, and software applications can be found at:
http://www.globeatnight.org.

+ Although the New Space Fence radar is still 5 years away from full operation Lockheed Martin has posted a cool video of the prototype at http://tinyurl.com/SpaceFence (youtube). UniverseToday has posted an article with more details and associated links at:
http://tinyurl.com/UniverseTodayRadar (UniverseToday.com).

+ Check out the article written by a teenage ham, "How to Work the

Amateur FM Satellites" by Vince Waelti, K9TSU, posted at: http://www.eham.net/articles/27718. Congratulations Vince on your publication.

[ANS thanks everyone for the above information]

Amateur Radio on the International Space Station (ARISS) Status Report
March 5, 2012

1.School Contacts

Dilworth Elementary School in San Jose, California had an Amateur Radio on the International Space Station (ARISS) contact on Monday, March 5 at 18:33 UTC. The ARISS contact is part of a comprehensive education plan which will pique students' interest in Science Technology, Engineering and Math (STEM).

An Amateur Radio on the International Space Station (ARISS) contact was held with ESA ESTEC in Noordwijk, Netherlands on Tuesday, March 6 at 13:11 UTC via station ON4ISS in Belgium. The radio activity is part of an educational program around Andr� Kuipers' mission Spaceship Earth which targets children who are 10-14 years of age. Part of this program consists of mission assignments Kuipers gives to Dutch school children. The winners of each challenge will be invited to the radio contact. Other activities include lessons and experiments.

2. ESA Awards ARISS Contact to Winners of Competition

Students from three schools, the American School of the Hague, the International School of Amsterdam and the British School in the Netherlands, took part in an Amateur Radio on the International Space Station (ARISS) contact on Monday, February 27 via station IK1SLD in Italy.

This ARISS contact with astronaut Andr� Kuipers was offered as a prize by the European Space Agency (ESA) to those schools who submitted the best suggestions for experiments or demonstrations that could be performed in microgravity on board the ISS using common everyday items. The youth were given lessons on radio signals and communications which involved local radio ham experts.

3. Atlanta, Georgia Youth Radio ISS Astronaut

On Friday, March 2, an Amateur Radio on the International Space Station (ARISS) contact was held between astronaut Don Pettit, KD5MDT on the ISS and Parkside Elementary School in Atlanta, Georgia. The radio link was provided by station K6DUE in Greenbelt, Maryland. Questions were asked concerning the education and training needed to become an

astronaut and about how space affects one's appetite and sleep. The contact was part of a comprehensive education plan using NASA related activities to pique students' interest in Science, Technology, Engineering and Math (STEM). Audio was carried live on the NASA TV hour. East Atlanta Patch posted an article on the contact.
http://eastatlanta.patch.com/articles/parkside-elementary-to-international-space-station-over#video-9240102

4. Pettit Chats with Greek Students via ARISS

Students attending the 5th Geniko Lykeio Katerinis in Katerini, Greece experienced a successful Amateur Radio on the International Space Station (ARISS) contact on Friday, March 2. The youth spoke with Don Pettit about the experiments onboard the ISS and asked how he communicates with his family during his mission. The contact complemented lessons covering astronomy and amateur radio with special attention given to the ISS regarding its role in humanity and science, its orbit and the every day life of the astronaut. ISS courses were based on ESA's education tool "ISS Education Kit." Five hundred were in attendance and another hundred connected to the internet to view the streaming video. Media coverage included two television stations.

5. Amateur Radio Newsline Covers ARISS

On March 2, Amateur Radio Newsline report #1803 carried an article about the recent ARISS contact held during the John Glenn Event in Perth, Australia. The event celebrated the 50th anniversary of John Glenn's orbit of the Earth, when the population of Perth turned on its lights and Glenn observed the city was visible from space, leading to Perth's nickname, "City of Lights." To view, "Ham Radio in Space: Amateur Radio Celebrates John Glenn over Perth Australia," see: http://www.arnewsline.org/storage/scripts/nsln1803.txt

[ANS thanks Carol, KB3LKI, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

Primary and secondary school students are eligible for membership at one-half the standard yearly rate. Post-secondary school students enrolled in at least half time status shall be eligible for the student rate for a maximum of 6 post-secondary years in this status. Contact Martha at the AMSAT Office for additional student membership information.

And, with that please keep in mind that the Sun accounts for 99.8%
of the Solar System's mass. 1,300,000 Earths could fit inside of the
Sun. Jupiter is as big as the Sun's core. 1,300 Earth's could fit
inside of Jupiter.

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM

```
From -8343533597623326087
X-Google-Thread: 107ada,6362cbbe2cdb2518,start
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Newsgroups:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.shor
twave,rec.radio.info
Subject: Weekly Highlights of Solar and Geomagnetic Activity, 05 - 11 March 2012
Followup-To:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.shor
twave
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Organization: NOAA Space Weather Prediction Center
Lines: 93
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <20120313193001.8E4A233C93@panix2.panix.com>
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X-Trace: reader1.panix.com 1331667014 4135 166.84.1.6 (13 Mar 2012 19:30:14 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Tue, 13 Mar 2012 19:30:14 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
```

X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump

```
:Product: Weekly Highlights and Forecasts
:Issued: 2012 Mar 13 1539 UTC
# Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center
# Product description and SWPC contact on the Web
# http://www.swpc.noaa.gov/weekly.html
#
#                Weekly Highlights and Forecasts
#
```

Highlights of Solar and Geomagnetic Activity
05 - 11 March 2012

Solar activity ranged from low to high levels during the period. Activity was at high levels during 05 - 07 and 09 - 10 March due mostly to a series of long-duration major flares from Region 1429 (N18, L=301, class/area Dkc/1270 on 07 March) which included an X1/2b at 05/0409Z, an X5/3b at 07/0024Z, an M6 at 09/0353Z, and an M8 at 10/1744Z. All four flares were associated with Earth-directed CMEs. Region 1429 was large and magnetically complex during the period, exhibiting a beta-gamma-delta configuration with multiple deltas. It appeared to slowly decay during 09 - 10 March, but retained much of its magnetic complexity. Region 1430 (N20, L=315, class/area Dai/200 on 07 March) produced an X1/Sf at 07/0114Z during a period of rapid development. Region 1430 appeared to be in a gradual decay phase during 08 - 10 March.

The period began with a greater than 10 MeV proton enhancement in progress. This increase from normal backgrounds was associated with a long-duration M2/1n flare that occurred prior to the period and sourced from Region 1429. The flux enhancement continued until the onset of greater than 100 MeV and greater than 10 MeV events early on 07 March associated with the X5/3b flare at 07/0024Z. The greater than 100 MeV event began at 07/0405Z, reached a maximum of 69 pfu at 07/1525Z, and ended at 10/1650Z. Also, a greater than 10 MeV event began at 07/0510Z, reached a maximum of 6530 pfu at 08/1115Z, and was in progress at the close of the period.

The greater than 2 MeV electron flux at geosynchronous orbit was at normal to high levels during 05 - 06 March. Flux readings were unreliable during 07 - 09 March due to proton contamination. Fluxes were at moderate to high levels on 10 and 11 March.

Geomagnetic field activity was at quiet to severe storm levels during the period. Quiet to unsettled levels occurred during 05 - 06 March with brief minor storm periods observed at high latitudes. Activity increased to unsettled to major storm levels on 07 March following a geomagnetic sudden impulse (SI) at 07/0427Z. The SI measured 20 nT at the Boulder magnetometer. This enhanced activity was due to a CME arrival associated with the X1/2b flare on 05 March. Quiet to minor storm levels occurred on 08 March, with major storm periods at high latitudes, as another CME, associated with the X5/3b on 07 March, impacted the geomagnetic field with an SI, as measured by the Boulder magnetometer of 59 nT, at 08/1105Z. Activity increased to quiet to severe storm levels on 09 March due to sustained southward IMF Bz combined with increased IMF Bt as CME effects persisted. Activity decreased to quiet to minor storm levels with major storm periods at high latitudes on 10 March as CME effects gradually subsided. A return to quiet levels was observed on 11 March.

Forecast of Solar and Geomagnetic Activity
14 March - 09 April 2012

Solar activity is expected to be at low levels during 14 - 16 March with a chance for M-class activity from Region 1429. Activity is expected to decrease to predominantly background levels during 17 - 27 March, following the departure of Region 1429 on 15 March. An increase to low levels with a slight chance for M-class activity is expected from 28 March through the end of forecast period, as Region 1430 returns on 28 March and Region 1429 returns on 29 March.

A chance exists for another proton event from 14 - 16 March, as Region 1429, rotates off the visible disk. No events are expected until Region 1429 returns on 29 March, when a slight chance for another event from this proton producing region exists through the end of the forecast period.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to be at moderate to high levels during 14 - 19 March and 29 March - 03 April. Normal to moderate flux levels are expected during 20-28 March and 04 - 07 April.

Geomagnetic field activity is expected to be at predominantly quiet levels from 14 - 16 March. Activity is expected to increase to quiet to active levels during 17 - 18 March due to recurrent coronal hole high-speed stream effects. Activity is expected to decrease to mostly quiet levels during 19 - 27 March. Quiet to unsettled levels are expected during 28 - 31 March as another coronal hole high speed stream becomes geoeffective. A return to quiet levels is expected from 01- 02 April. Another increase to quiet to unsettled levels is expected on 03 - 04 April as a coronal hole high speed stream becomes geoeffective. A return to predominantly quiet levels is expected to prevail for the remainder of the period.

```
From 6671865544158095569
X-Google-Thread: 10e8ad,5b08250f3e7a9760,start
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII
```

```
Received: by 10.68.129.169 with SMTP id nx9mr11378159pbb.2.1332080139987;
        Sun, 18 Mar 2012 07:15:39 -0700 (PDT)
MIME-Version: 1.0
Path: h9ni45704pbe.0!nntp.google.com!news2.google.com!npeer02.iad.highwinds-
media.com!news.highwinds-media.com!feed-me.highwinds-media.com!
nx02.iad01.newshosting.com!newshosting.com!news-out.readnews.com!
transit3.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-078 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sun, 18 Mar 2012 10:15:39 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 496
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000d01cd0511$92a6f2d0$b7f4d870$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
X-Trace: reader1.panix.com 1332080139 11322 166.84.1.6 (18 Mar 2012 14:15:39 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 18 Mar 2012 14:15:39 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
X-Received-Bytes: 22156
Content-Language: en-us
```

AMSAT NEWS SERVICE
ANS-078

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

```
**********************************************************************
* Volunteers are needed to help at the AMSAT booth at Dayton. Gould  *
* WA4SXM, is looking for volunteers to help man the AMSAT booth dur- *
* ing the 2012 Hamvention. People are needed all 3 days for 2 hour   *
* shifts. Please send the days and times you are available to help   *
* as well as how many shifts you are willing to work via e-mail to   *
* wa4sxm at amsat.org.                                               *
* Monitor http://www.amsat.org/amsat-new/hamvention/2012/Dayton.php  *
* for the latest AMSAT at Dayton news and developments               *
**********************************************************************
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In this edition:

* IARU Announces New Amateur Satellite Frequency Coordination Form
* Watch for Packets from US Naval Academy Ice Goat 1 Buoy
* India HAMSAT VO-52 Recovery Successful
* International Effort at Sea Gets UT1FG/MM Back on Satellites
* Open Source CubeSat Space Protocol Flight Test Aboard GOMX-1
* RAX-2 Amateur Radio Cubesat Scientific Successful
* Satellite Shorts From All Over
* ARISS Status Report - 12 March 2012

SB SAT @ AMSAT $ANS-078.01
ANS-078 AMSAT News Service Weekly Bulletins

AMSAT News Service Bulletin 078.01
From AMSAT HQ SILVER SPRING, MD.
March 18, 2012
To All RADIO AMATEURS
BID: $ANS-078.01

IARU Announces New Amateur Satellite Frequency Coordination Form

Frequency coordination for amateur radio satellites is provided by the International Amateur Radio Union (IARU) through its Satellite Advisor, an official appointed by the IARU Administrative Council, its top policymaking body. This post is currently held by Hans van de Groenendaal, ZS6AKV.

Hans describes his role, "The IARU Satellite Advisor is assisted by an Advisory Panel of qualified amateurs from all three IARU Regions. The panel meets regularly via Skype to consider amateur satellite frequency coordination requests for satellites planned for operation on frequencies in the amateur service. The panel members often provide advice and assist satellite builders with the selection of the best possible frequencies to meet the objectives of their mission."

The Amateur Satellite Frequency Coordination request form has been updated (Version 27) and is available for download from: http://www.iaru.org/satellite.

On the IARU web satellite page there are also available a number of guideline documents which will assist satellite builders, including a document on the ITU requirements for Amateur Radio Satellites.

The list of amateur radio satellites coordinated by the IARU is posted on-line at: http://www.amsat.org.uk/iaru

[ANS thanks Hans van de Groenendaal, ZS6AKV for the above information]

Watch for Packets from US Naval Academy Ice Goat 1 Buoy

This month a group of Oceanography and Aeronautical engineering students from the US Naval Academy, led by Lt. Commander John Woods, a military instructor in oceanography, deployed a buoy rigged to monitor weather in the harsh conditions of the arctic. They delivered the "Ice Goat 1," buoy to the northern part of Alaska traveling by plane, then helicopter and finally snowmobile to the arctic ice off of the coast of Point Barrow, Alaska. Once the ice melts the bouy will begin its sea voyage.

Ice Goat 1 also carries an APRS beacon operating on 145.825 MHz. The position packets can be relayed via the ISS digipeater. However, the ISS only rises 1.5 degrees above the horizon at arctic latitudes. Reports of direct reception of the 145.825 MHz beacon are sought from any lucky Alaskan, and perhaps eventually Pacific Northwest amateur radio stations (depending on ocean current) who may be in range. Please send reports of reception to: wb4apr@amsat.org.

This week, W3ADO, the US Naval Academy Amateur Radio Club has posted a notice via the ISS digipeater:

```
W3ADO]APRS,RS0ISS-3*,qAR,N4XS-3::BLN1 :APRS Arctic Buoy in Barrow
Alaska. Watch for pkts!
```

The science mission of this buoy will broadcast webcam images and measure a variety of environmental parameters including air temperature, barometric pressure, and possibly under ice acoustics. As the buoy collects information about the surrounding parameters all data will be compiled on an internal data logger and transmitted back to USNA using an Iridium satellite data link.

[ANS thanks Bob Bruninga, WB4APR for the above information]

India HAMSAT VO-52 Recovery Successful

A report received from the ISRO Satellite Centre at Bangalore, India on March 14 says the HAMSAT VO-52 is back on the air. Mani, VU2WMY wrote, "The commands to 'Turn On' the PE1RAH Dutch transponder was successfully sent during 14:00 UT 35 deg ascending node pass over Bangalore, India. The commands were successfully received, acknowledged and confirmed by telemetry. The beacon signal was heard loud and strong here at Bangalore."

Stations in Europe and North America reported good signals from VO-52 immediately after the transponder was activated. The beacon was heard with two-way contacts completed through the transponder.

The HAMSAT team requests detailed initial reports be sent to::
tprangan@istrac.org and a copy to wmy@isac.gov.in
would be greatly appreciated.

HAMSAT VO-52 frequencies are:

Uplink: 435.2250 - 435.2750 MHz SSB/CW
Downlink: 145.9250 - 145.8750 MHz SSB/CW
Beacon: 145.8600 MHz CW

The CW beacon is sending: HI HI HI THIS IS VU SAT WITH THE DUTCH MODE UV TRANSPONDER MADE BY WILLIAM LEIJENAAR 73 DE PE1RAH

Upon successful recovery of VO-52 Mani, VU2WMY sent the following message on behalf of the HAMSAT team:

> I take this opportunity to sincerely thank each and every user and well wishers, who have been following and monitoring closely all those events and activities that followed since the interruption on 28th February 2012.
>
> Thanks for all those encouraging and supporting expressions!
>
> The initial telemetry reports indicated all the crucial and critical parameters to be normal and satisfactory and we do hope 'HAMSAT VO-52' would be available with much stronger power. The overall spacecraft health is in 'Excellent Condition' and all that we need to do is to monitor the transponder parameters.
>
> 14:05 UT on 14 March was a moment of great satisfaction and joy to all of us here in bringing 'HAMSAT VO-52'back to life. It also gives us great pleasure to note that 'HAMSAT VO-52'from India/ISRO has a earned a name in the history of 'Amateur Radio Satellites'.
>
> On behalf of everyone, I take this opportunity to sincerely thank particularly, Mr. Parimalarangan-Operations Director for his hard work and great efforts besides his exemplary technical competence and skills exhibited in recovering back 'HAMSAT VO-52'.
>
> Also my sincere thanks to Mission Director Mr. R. Suresh and the entire 'HAMSAT VO-52' Mission Management and Project teams for all

> the support, encouragement and recognition provided to 'Amateur Radio World'.
>
> My Good wishes to VO-52 and the transponders on-board for a 'Healthy and Long Life'. My Good wishes & greetings, once again to William, PE1RAH.

[ANS thanks Mani, VU2WMY, Secretary & Station-In-Charge of the Upagrah Amateur Radio Club VU2URC at the ISRO Satellite Centre for the above information]

International Effort at Sea Gets UT1FG/MM Back on Satellites

This week John Papays, K8YSE shared an international amateur radio goodwill success story in getting Captain Yuri Bodrov, UT1FG/MM back on the air after a power supply failure at sea.

UT1FG/MM was enroute aboard his cargo ship from a Pacific port in Nicaragua bound for Montreal Canada via the Panama Canal and into the Gulf of Mexico. Yuri, an avid 6 meter and satellite operator, reported that his 12 volt power supply had failed shortly after leaving port.

John wrote, "The bad news was relayed amongst those of us who had been following Yuri and working him in wet grids as he traveled. Brainstorming started with ideas tossed around via emails. One idea was to buy a power supply and ship it Fedex to Yuri's agent in Panama and hope it got there in time. But Yuri felt that there would not be enough time for that to happen. We only had a few days."

Searching with Google and QRZ achieved contact with Captain Manolis Joannou, HP1CQ, also a sea captain and president of the Panama Canal Amateur Radio Association. Manolis was able to find a power supply that could operate off the 220 VAC ship mains and provide 12 volts to Yuri's IC-706 radio.

Captain Manolis made his way via a motor launch to Yuri's ship and hand delivered the new power supply. The two Captains spent an hour together before parting. Yuri was back on the air, working satellites from the Gulf of Mexico.

For a full story, complete with photos visit:
http://www.papays.com/sat/power/ut1fgpanama.html

[ANS thanks John Papays, K8YSE for the above information]

Open Source CubeSat Space Protocol Flight Test Aboard GOMX-1

Cubesat Space Protocol (CSP) is a small network-layer delivery protocol designed for Cubesats. The idea was developed by a group of students from Aalborg University in 2008. The protocol is based on a 32-bit header containing both transport and network-layer information. Its implementation is designed for, but not limited to, embedded systems such as the 8-bit AVR microprocessor and the 32-bit ARM and AVR from Atmel. The implementation is written in GNU C and is currently ported to run on FreeRTOS or POSIX operating systems like Linux and BSD.

GOMX-1, a 2U CubeSat designed and built by more than 15 students at Denmark's Aalborg University is expected to launch in late 2012 into a near sun syncronous orbit on a DNEPR rocket from Yasny in Russia with a number of other amateur radio satellites.

The GOMX-1 mission will qualify a number of satellite subsystems in space, providing extensive in-flight data. A camera payload will take color images of the Earth and an experimental Software Defined Radio receiver will be carried and its performance characterized. The mission will also test the use of the open source Cubesat Space Protocol for a complete mission including the space link.

GOMX-1 plans to use GMSK telemetry with selectable 1k2/2k4/4k8/9k6 rates on UHF with approx 28dBm power to a deployed antenna.

For more information refer to these web pages:

GOMX-1 web page: http://gomspace.com/

Cubesat Space Protocol: http://code.google.com/p/cubesat-space-protocol

Gunter's Space Page provides a calendar of planned launches for 2012:
http://space.skyrocket.de/doc_chr/lau2012.htm

[ANS thanks the GOMX-1 Team at Aalborg University for the above information]

RAX-2 Amateur Radio Cubesat Scientific Success

The University of Michigan RAX-2 amateur radio cubesat has achieved success in detecting the communication-disrupting anomaly in the upper atmosphere it was designed for.

On March 9, Matt Bennett KF6RTB reported on behalf of the RAX-2 team, "This is unbelievable!! After more than three years of hard work and dedication by my team and professor at Michigan, our chief scientist confirmed today that the RAX-2 spacecraft we designed, built, and launched into space has detected the communication-disrupting anomaly in the upper atmosphere that we've been looking for!"

The primary objective of the mission is to use the onboard radar receiver in conjunction with a powerful radar station in Alaska to study the formation of a plasma anomaly known for causing the scintillation of radio signals in the UHF and higher bands. This effect is known to inhibit our space radar tracking capabilities and ground-space communications. Studying this anomaly in this bi-static radar configuration (ground based transmitter, space-base receiver) will provide scientists with a better understanding of these anomalies that has not been achievable with ground radars alone.

Mark concludes, "The RAX Team would like to acknowledge and say thank you to the amateur radio satellite community for all of their support on this mission. We've really enjoyed interacting with fellow operators while collecting and analyzing telemetry. We've also learned a great deal about satellite operations from each other."

RAX-2: 437.345 MHz, 9600 bps GMSK http://rax.engin.umich.edu/

Mission Science Operations http://rax.sri.com/

RAX on Facebook http://www.facebook.com/RadioAuroraExplorer

[ANS thanks Mark Bennett KF6RTB and the RAX-2 team for the above information]

Satellite Shorts From All Over

+ A team of 10 operators, from the Aguas-Calientes Amateur Radio Club will activate Isabel Island, grid DL71, using the callsign XF1AA. The planned dates are March 16-21. Ismael, XE1AY, is one of the operators and is active on the satellites. If you should hear Ismael on the birds, please give him the air time to work as many as he can. (OPDX Bulletin 1050 & K8YSE)

+ Magyar OSCAR-72 (MO-72) has made the very first Hungarian photographs from space. Please visit: http://tinyurl.com/MO72-FirstPhotos (cubesat.bme.hu)

+ Mark Hammond, N8MH is hosting an AMSAT table at the RARSFEST in Raleigh, NC on Saturday, April 7. Mark is looking for volunteers to assist. If you can help with this AMSAT publicity effort contact Mark at marklhammond@gmail.com.

+ Plan ahead for August: EMike McCardel, KC8YLD is looking for volunteers for the AMSAT presence at the Ohio State ARRL Convention which will be held Saturday August 4, 2012 in conjunction with Voice of Aladdin's Columbus Hamfest. Plans are being formed for a display table, satellite demos, and a speaker is needed for a satellite forum. If you are interested in helping out or would like to propose a forum talk please contact EMike at: kc8yld@amsat.org

+ Paul, 2E1EUB says his next mobile satellite operations as 2M1EUB from his van will be starting March 24 for 7 days from the east coast of Scotland. Main operations are planned for AO-7 Mode A/B and other satellites as available. Paul will post his latest information on amsat-bb and also on the lookup at QRZ.com for 2M1EUB.

+ Also Paul, 2E1EUB will be guest speaker at the Telford and District Amateur Radio Society (TDARS) on Wednesday, March 21, where he will give a talk about amateur radio satellites. In 2011 Paul was awarded the prestigious Louis Varney Cup for Advances in Space Communication, which was presented to him at the Telford Hamfest. More information is posted on Southgate: http://tinyurl.com/Telford-Talk

+ ISS astronaut Don Pettit, KD5MDT demonstrates physics in space in several videos posted on the 'Science off the Sphere' web pages. This is a partnership between NASA and the American Physical Society. Watch at: http://www.physicscentral.com/sots

+ Enjoy a flight over the northern lights aboard the ISS when you watch the video at: http://tinyurl.com/ISS-FlyOverAurora (SpaceDaily.com)

+ Central States VHF Society Conference is planned for July 26-29 in Cedar Rapids, Iowa. A conference hotel rate of $93 per night is being arranged. More information will become available as the web page at http://www.csvhfs.org/ is updated.

+ The 50 MHz and Up Group is hosting this year's Microwave Update Conference from October 18 to 21 in Santa Clara, CA. Check their web at: http://www.microwaveupdate.org for more info as it becomes available. Abstracts for papers, or requests for more information can be sent by e-mail to: mud2012papers at gmail dot com

+ Congratulations to Rick Tejera, K7TEJ on earning VUCC Satellite Award #227! Rick says, "Thanks to all who worked me over the past two years to get me here."

[ANS thanks everyone for the above information]

ARISS Status Report - 12 March 2012

1. Upcoming School Contacts

An ARISS contact has been scheduled for Istituto Tecnologico Statale Trasporti e Logistica �Leone Acciaiuoli�, Ortona, Italy on Sunday, March 18 at 11:31 UTC.
The Ortona Maritime Institute �Leone Acciaiuoli� (I.T.N) is a technical high school that prepares the student for a career as a merchant ship officer or to continue his university studies in the field of engineering disciplines. Among the subjects taught at the school are navigation, astronomy, celestial navigation, satellite navigation, telecommunications (including satellite telecommunications), mathematics and physics. Since 1991, the Institute has taken part in the "International Day of Planetaria� which provides an opportunity for educating the public in the areas of planetaria, science and technology. On this day, the public is able to visit the Planetarium, laboratories, astronomical telescope and other astronomical equipment. The ARISS contact will be held as part of the day�s activities.

2. California Students Radio Dan Burbank on Space Station

On Monday, March 5, Dilworth Elementary School in San Jose, California participated in an Amateur Radio on the International Space Station (ARISS) contact with Dan Burbank, KC5ZSX. Burbank fielded 19 questions put to him by the students about the challenges encountered while living in space. The contact took place during the NASA Destination Station exhibit at The Tech Museum located nearby and complemented lessons on Science Technology, Engineering and Math (STEM).

3. Astronaut Andr� Kuipers Answers Children�s Questions via ARISS

An Amateur Radio on the International Space Station (ARISS) contact was held between Andr� Kuipers and school children at the Space Expo in Noordwijk, Netherlands on Tuesday, March 6 via station ON4ISS in Belgium. The radio activity was part of an educational program around Kuipers� mission Spaceship Earth which targets youth who are 10-14 years of age. Part of this program consists of mission assignments that Kuipers gives to Dutch schoolchildren. The winners of each challenge were invited to the radio contact. Other activities included lessons and experiments.

4. Hams who Experimented with ARISSat Make the News

Farrell and Jeff Winder, the father and son who helped in the development of SuitSat-1, made the news recently when they used ARISSat�s transponder and after several tries, successfully sent and received a picture of Farrell Winder's automobile license plate. Community Press posted the story, �Father, son team up in 'outer space'.� See:
http://communitypress.cincinnati.com/apps/pbcs.dll/article?AID�2/20120301/NEWS/303010057/

[ANS thanks Carol, KB3LKI, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

Primary and secondary school students are eligible for membership at one-half the standard yearly rate. Post-secondary school students enrolled in at least half time status shall be eligible for the student rate for a maximum of 6 post-secondary years in this status. Contact Martha at the AMSAT Office for additional student membership information.

73,
This week's ANS Editor,
Lee McLamb, KU4OS

```
From -2493921795354652674
X-Google-Thread: 10e8ad,2a72c00fa8977746,start
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Received: by 10.68.125.233 with SMTP id mt9mr12180668pbb.5.1332160619808;
        Mon, 19 Mar 2012 05:36:59 -0700 (PDT)
Path: kz5ni6000pbc.0!nntp.google.com!news2.google.com!goblin2!goblin.stu.neva.ru!
aioe.org!.POSTED!not-for-mail
From: "Codenut" <becka@eastlink.ca>
Newsgroups: rec.radio.amateur.space
Subject: Using the pcsats
Date: Mon, 19 Mar 2012 09:36:53 -0300
Organization: Aioe.org NNTP Server
Lines: 8
Message-ID: <jk7997$9ua$1@speranza.aioe.org>
NNTP-Posting-Host: iqQ5QZd90hb9+YokajeHIA.user.speranza.aioe.org
Mime-Version: 1.0
X-Complaints-To: abuse@aioe.org
X-Notice: Filtered by postfilter v. 0.8.2
X-Newsreader: Microsoft Windows Mail 6.0.6002.18197
X-Priority: 3
X-MSMail-Priority: Normal
X-MIMEOLE: Produced By Microsoft MimeOLE V6.0.6002.18463
Content-Type: text/plain;
     format=flowed;
     charset="iso-8859-1";
     reply-type=original
Content-Transfer-Encoding: 7bit

What do I need for equipment to work the PCsats.

I am working on an SSB downlink currently on 70cm.

Cheers,

Alan
VY2WU


From 702624124180679601
X-Google-Thread: 107ada,38906ab9d9dc6663,start
X-Google-NewGroupId: yes
X-Google-Thread: 10e8ad,38906ab9d9dc6663,start
X-Google-NewGroupId: yes
X-Google-Thread: 114aac,38906ab9d9dc6663,start
X-Google-NewGroupId: yes
X-Google-Attributes:
gida3e752f117,gid8f86f75953,gid9e586c3d78,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
```

```
Received: by 10.68.235.4 with SMTP id ui4mr14506069pbc.3.1332171009534;
        Mon, 19 Mar 2012 08:30:09 -0700 (PDT)
MIME-Version: 1.0
Path: kz5ni6895pbc.0!nntp.google.com!news2.google.com!news.glorb.com!news-
out.readnews.com!transit3.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: SWPC.Webmaster@noaa.gov
Newsgroups:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.shor
twave,rec.radio.info
Subject: Weekly Highlights of Solar and Geomagnetic Activity, 12 - 18 March 2012
Followup-To:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.shor
twave
Date: Mon, 19 Mar 2012 11:30:06 EDT
Organization: NOAA Space Weather Prediction Center
Lines: 121
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <20120319153001.1A88B33C6F@panix2.panix.com>
NNTP-Posting-Host: panix6.panix.com
X-Trace: reader1.panix.com 1332171006 25112 166.84.1.6 (19 Mar 2012 15:30:06 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Mon, 19 Mar 2012 15:30:06 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
```

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:Product: Weekly Highlights and Forecasts
:Issued: 2012 Mar 19 1253 UTC
# Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center
# Product description and SWPC contact on the Web
# http://www.swpc.noaa.gov/weekly.html
#
#                Weekly Highlights and Forecasts
#
```

Highlights of Solar and Geomagnetic Activity
12 - 18 March 2012

Solar activity was at low to high levels during the period. Region 1429 (N17, L = 299, class/area Dkc/1270 on 07 March) produced the largest event of the period, an M7/1b x-ray flare at 13/1741 UTC. Associated with this event, were a 1400 sfu Tenflare, a Type II and a Type IV radio sweep, with an estimated shock velocity of 1366 km/s, and finally an asymmetric full-halo CME, visible in both LASCO C2 and C3 imagery. Plane-of-sky speed, as measured from LASCO imagery was 1375 km/s. The CME associated with this event was forecast to become geoeffective. As Region 1429 approached the west limb, finally rotating off on 16 March, Region 1432 (N14, L = 223, class/area Esi/100 on 15 March) became active and produced two M-class events. The largest was an M2/1n x-ray event at 14/1521 UTC. A faint CME, visible in LASCO C2 imagery, was observed with a plane-of-sky speed of 392 km/s. On 15 March, a second M-class event, an M1/1f x-ray event at 15/0752 UTC, was also observed. A Type II radio sweep with an estimated shock velocity of 468 km/s was associated with this event. Both CME&rsquo;s associated with the solar flares from Region 1432 were expected to arrive at Earth, but with such slow speeds and a coronal hole high speed stream (CH HSS) preceding them, very little effects were forecast. Finally, Region 1434 (S22, L = 205, class/area on 11 March) produced an M1/Sf x-ray event at 17/2039 UTC. Another Type II radio sweep with an estimated shock velocity of 1140 km/s was associated with this event. However, the associated CME with this event was not expected to become geoeffective. Aside from the M-class x-ray events, multiple C-class events were observed during the period. Many of the solar regions remained active as they evolved around the disk, but Region 1435 (S25, L = 220, class/area Dao/150 on 18 March) showed rapid growth towards the end of the summary period.

Two separate greater than 10 MeV proton events were observed during the summary period. The period began with the greater than 10 MeV proton flux above the 10 pfu threshold. This event was associated with the X5/3b x-ray flare observed on 07/0024 UTC. This event began on 07/0510 UTC, reached a maximum flux of 6530 pfu on 08/1115 UTC, and dropped below the 10 pfu threshold at 12/2050 UTC. The second event, began on 13 March and was associated the M7/1b x-ray event, mentioned earlier, from old Region 1429 (N18, L = 299). This greater than 10 MeV proton event began at 13/1810 UTC, reached a maximum flux of 469 pfu on 13/2045 UTC, and dropped below the 10 pfu threshold on 15/0620 UTC. A greater than 100 MeV proton event was also associated with the M7/1b x-ray event. This event began at 13/1810 UTC, reached a maximum flux of 1 pfu at 13/1905 UTC, and dropped below the 1 pfu threshold at 13/2255 UTC.

The greater than 2 MeV electron flux at geosynchronous orbit was at moderate to high levels for the entire summary period.

The geomagnetic field ranged from quiet to major storm periods with isolated severe storm periods observed at high latitudes. The summary period began at quiet levels, however midday on 12 March, a shock was observed by the ACE spacecraft with a Sudden Impulse of 96 nT, later observed by the Boulder magnetometer. This activity was due to the arrival of a CME associated with the 10 March M8 x-ray event from Region 1429. Measurements by the ACE spacecraft showed the solar wind speed increased from around 450 km/s to 775 km/s. The Interplanetary Magnetic Field (IMF) also increased from around 6 nT to 28 nT. As the effects of the CME continued, periods of major storms were observed with isolated sever storm levels at high latitudes from 12/0900-1500 UTC. From 13-14 March, quiet to active levels were recorded as effects from this CME event waned. On 15

March, another CME arrival was observed with another shock recorded by the ACE spacecraft, followed by a Sudden Impulse of 27 nT measured at the Boulder magnetometer. Solar wind measurements, as recorded by the ACE spacecraft, showed wind speeds around 800 km/s following the shock. Once again, quiet to major storms were observed at mid latitudes with isolated periods at sever storm levels at high latitudes. For the remainder of the summary period, 16-18 March, solar wind speeds remained elevated, well above 500 km/s, in response to a CH HSS behind the CME arrival on 15 March. The combined effects of the CME and CH HSS produced quiet to active levels at mid latitudes with continued minor to major storm periods observed at high latitudes.

Forecast of Solar and Geomagnetic Activity
19 March - 14 April 2012

Solar activity is expected to remain at low levels from 19 -26 March. On March 27, and then March 28, old Region 1430 (N22, L = 318) and Region 1429 (N18, L = 299) are expected to return, respectively. Even though these regions are on the far side of the solar disk, imagery supports that they are still active and producing CMEs. An increase to low to moderate levels is expected from 28 March - 11 April as both regions populate to front side of the solar disk. A return to predominantly low levels is expected to prevail for the remainder of the forecast period.

No proton events are forecast from 19 - 29 March. An increase to a slight chance for proton events is forecast from 30 March - 11 April as old Region 1429 populates the visible disk. A return to background proton flux levels is expected from 12 April - 14 April.

Electrons, greater than 2 MeV, are expected to be at high levels from 18-25 March. A decrease to normal to moderate levels is expected from 26 - 28 March. From 29 March - 03 April, a return to moderate to high levels is forecast. From 04 April, through the end of the forecast period, 14 April, a return to normal to moderate levels is expected.

The geomagnetic field is expected to be at quiet to active levels on 19-20 March, in response to the arrival and lingering effects of a CME. Predominantly quiet levels are expected to prevail from 21-27 March. On 28 - 31 March, a CH HSS is expected to become geoeffective with quiet to active conditions expected. Quiet conditions are expected from 01 - 02 April. From 03 - 04 April, quiet to unsettled conditions are expected as another CH HSS moves into a geoeffective position. Predominantly quiet levels are expected to continue from 05 - 12 April. From 13-14 April, a CH HSS is expected to become geoeffective.

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X-Google-Attributes: gid8f86f75953,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Received: by 10.68.241.162 with SMTP id wj2mr17154583pbc.2.1341698824003;
        Sat, 07 Jul 2012 15:07:04 -0700 (PDT)
MIME-Version: 1.0
Path: l9ni11086pbj.0!nntp.google.com!news2.google.com!news3.google.com!proxad.net!
feeder1-2.proxad.net!193.252.117.184.MISMATCH!feeder.news.orange.fr!not-for-mail
From: <boris@yahoo.com>
Newsgroups: rec.radio.amateur.space
Subject: maintenance ?
Date: Sun, 08 Jul 2012 00:07:03 +0200
Message-ID: <89752995@news.synserver.de>
X-Antivirus: avast! (VPS 120707-1, 07/07/2012), Outbound message
X-Antivirus-Status: Clean
Lines: 5
Organization: les newsgroups par Orange
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NNTP-Posting-Host: 81.251.75.20
X-Trace: 1341698823 reader.news.orange.fr 6153 81.251.75.20:11940
X-Complaints-To: abuse@orange.fr

oops,

it should be helpful to troubleshoot the data analysis of the weather in a
smart way
:-)


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X-Google-NewGroupId: yes
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news.glorb.com!news-out.readnews.com!news-xxxfer.readnews.com!panix!rri.panix.com!
robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-190 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sun, 8 Jul 2012 10:43:52 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 371
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000901cd5d18$0e8aad20$2ba00760$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
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X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 8 Jul 2012 14:43:51 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to   rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to   rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us

AMSAT NEWS SERVICE
ANS-190

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:
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* Italian HF Special Event Commemorates Apollo Space Program
* Listen for ARRL TI-2: Space in the Classroom Satellite Contacts
* University of Florida SwampSat CubeSat Plans for December 2012 Launch
* Satellite Presentation at University of Missouri on July 20
* Near Space Balloon Flight Ham AK4JG Named Newsline Young Ham of the Year
* ARISS Status - 2 July 2012

SB SAT @ AMSAT $ANS-190.01
ANS-190 AMSAT News Service Weekly Bulletins

AMSAT News Service Bulletin 190.01
  From AMSAT HQ SILVER SPRING, MD.
July 8, 2012
To All RADIO AMATEURS
BID: $ANS-190.01

New AO7 Distance Record Set Twice This Week

On July 2 at 0955Z Bill Dzurilla, NZ5N operating from Slovakia as OM3BD (grid JN88) reported a successful contact via AO-7 Mode B with Wyatt Dirks, AC0RA (grid EN31). The GPS-measured distance between grids JN88 and EN31 is 7849 km. Bill wrote, "Wyatt did all the hard work by waking up at 0300 his time, driving to a hill an hour away from his home, setting up his station, and working me before sunrise. It appears that an even longer distance is attainable, and Wyatt is looking for a suitable place from which we can try before I leave Slovakia in mid-July."

Prior distance records set via AO-7 included:
+ PY5LF and ZS6BB 7630 km
+ PS8RF and ZS2BK 7694 km
+ K3SZH and PY2OV 7738 km
+ ZS6BB and EA6SA 7766 km
+ PY5LF and K3SZH 7843 km
+ OM3BD and AC0RA 7849 km (July 2 record with AC0RA in grid EN31)
+ OM3BD and AC0RA 7903 km (July 4 record with AC0RA in grid EN41)

On July 4, Wyatt, AC0RA woke up early and this time drove 150 miles to EN41 and set up his portable station. A contact, lasting 30 seconds, with OM3BD extended the distance record to 7903.55 km.

The theoretical maximum range of AO-7 is estimated at 7907 km.

Recordings, pictures, and further info at
http://qsl.net/nz5n/AO7record.htm.

[ANS thanks and congratulates Bill Dzurilla, OM3BD/NZ5N and
Wyatt Dirks, AC0RA for the above information]

Italian HF Special Event Commemorates Apollo Space Program

ARI, the Associazione Radioamatori Italiani, and their club station IQ1TW announced a special operating award "Apollo Space Program - >From the Earth to the Moon" for contacts between July 1 - July 31, 2012. This is to commemorate and keep alive the memory of the space program which has revolutionized the life of mankind.

To qualify for the award you need to have confirmed contacts with the ARI Headquarters Station IQ1TW and any three stations from this list: IZ1UMD, IZ1RFU, IZ1XBB, IZ1WVX, IZ1LBH, IK1WGZ, IZ1RGY, IZ2SMV, I1MXI.

On July 20, the anniversary of the first moon landing, a confirmed contact with IQ1TW (without the necessity of the other 3 contacts) will qualify you for the award.

The special event stations will operate with 200 watts using dipole and vertical antennas.

Full details, including a list of the planned HF operating frequencies and modes, log and confirmation information, rules, and application instructions are posted on the ARI web pages: http://aritortona.xoom.it/

[ANS thanks Associazione Radioamatori Italiani and the DXNL Bulletin #1786 -Jun 27, 2012 - for the above information]

Listen for ARRL TI-2: Space in the Classroom Satellite Contacts

The ARRL Teachers Institute - Space in the Classroom is this coming week - July 9-12. The Institute will meet in Dayton, Ohio and is sponsored by the Dayton Amateur Radio Association. Additional support from ARRL ETP donors and Yaesu make this program possible.

The TI-2 Space curriculum focuses on the nuts and bolts of setting up and operating a satellite ground station. This serves as excellent preparation for a scheduled contact with the ISS through the Amateur Radio on the International Space Station (ARISS) program. But it also provides instruction for continued use of satellites and other man made space assets to explore naturally generated signals, space and a variety of topics.

The course is 4 days: the first half will be setting up and learning to operate the ground station, the second half will be practice making satellite contacts and instruction in using space borne assets in the classroom. Participants will receive all the equipment necessary to set up a basic satellite ground station.

Matt Severin, N8MS will be instructing the Teachers' Institute. He will have 8 teachers learning how to set up and operate ground stations. They plan to operate from about 1200 to 2000 UTC each day, give or take a few hours. Our primary amateur radio satellites will be AO27, SO50, FO29, and VO52. They will try to capture data and telemetry from the many cubesats currently operating. Amateur satellite operators are invited to take a moment to say hello and work a few of the teachers in Matt's group.

Full details of the ARRL TI-2: Space in the Classroom program can be found on-line: http://www.arrl.org/ti-2-space-in-the-classroom

[ANS thanks the ARRL and Matt Severin, N8MS for the above information]

University of Florida SwampSat CubeSat Plans for December 2012 Launch

A cubesat called SwampSat, built by students at the University of Florida, was recently unveiled. They also demonstrated the operational satellite to Florida's Lieutenant Governor.

SwapSat is planning on a ride to orbit on the SpaceX Falcon 9 rocket into a 450 km orbit with an inclination of 45 degrees in the December 2012 timeframe.

The SwampSat downlink will transmit 1 watt of RF on 437.385 MHz, 1200 bps AX25 packet radio. The University of Florida video of SwampSat can be viewed at:
http://www.youtube.com/watch?v�5ij3Vyjwg&feature�ayer_embedded

For more information see also:
http://www.amsat-uk.org/?p�17
http://www.amsat-uk.org/?p�64

UF shows off its small satellite:
http://www.gainesville.com/article/20120406/articles/120409715

Gator Amateur Radio Club http://www.gatorradio.org/
University of Florida Small Satellite Design Club (SSDC)
http://www.ufsmallsat.com/

[ANS thanks the University of Florida and AMSAT-UK for the above information]

Satellite Presentation at University of Missouri on July 20

Attention amateur radio operators near Kansas City, Missouri!

On July 20, the Hams in Space Team will be giving their Satellite Presentation at the University of Missouri, Kansas City's Communiversity. Communiversity is the University's Community Education Program available to anyone from the community who wishes to attend.

Randy Schulze, KD�HKD wrote, "We're preparing this presentation to be enjoyed not only by Licensed Hams but also to members of the general community as a means of putting Amateur Radio's best foot forward, through information about at least one of the fun and amazing things that can be done with Ham Radio! If you plan to attend this presentation, please register early. If the anticipated attendance exceeds the capacity of the presently scheduled class room, the University may be able to make arrangements to move the presentation to a larger class room."

The University of Missouri Kansas City Communivarsity Web Site is: http://www.umkc.edu/commu. You will find all of the registration information there.

Randy concluded, "So spread the word to your friends; Hams and Non-Hams alike! Register to attend the Hams In Space Presentation at the University of Missouri, Kansas City, Communiversity, and help put Amateur Radio's Best Foot Forward while at the same time supporting an Outstanding Community Service!"

The class schedule is:
7:00 PM, Friday, July 20, 2012
Communiversity; University of Missouri, Kansas City
Flarsheim Hall, Room 260,
5110 Rockhill Road
Kansas City, Missouri
http://www.umkc.edu/commu/

The Hams in Space web page can be found at:
http://hamsinspace.com

[ANS thanks Randy Schulze, KD�HKD for the above information]

Near Space Balloon Flight Ham AK4JG Named Newsline Young Ham of the Year

ERIN KING, AK4JG, NAMED 2012 AMATEUR RADIO NEWSLINE� "YOUNG HAM OF THE YEAR"

(Santa Clarita, California) - Erin King, AK4JG, a 17-year-old from Columbus, Georgia, who re-founded her high school's radio club and then lofted a ham radio-carrying balloon to over 90,000 feet, recovered the flight data and used it to produce a truly striking video of that flight, has been named as recipient of the 2012 Amateur Radio Newsline Young Ham of the Year Award.

Erin is the daughter of Paul, K4ETY, and Patricia King. She has two siblings: Brandon, age 16 and Rachel, age 15. Erin became a licensed radio amateur in 2009 and now holds an Extra Class license. She is a member of the ARRL, the Columbus Amateur Radio Club, and the Russell County Radio Club. She enjoys operating on local VHF and UHF repeaters as well as phone and digital modes on the High Frequency amateur radio bands. She is looking forward to mastering Morse Code as her next amateur radio challenge.

Erin became interested in amateur radio after joining a club at her high school dealing with robotics and then ham radio-equipped high-altitude balloon launches. This school group has participated in FIRST Robotics competitions, and Erin has twice been Team Lead for

Programming. The club also launches several high-altitude balloon missions each year, in a program called DREAMS. They have flown various scientific experiments as part of these missions, in addition to planning, building, and integrating radios, Global Positioning System (GPS) units and TNCs to track and recover the balloons. To facilitate these activities, the group's sponsor, Luther Richardson, KI4AOJ, has encouraged the students to obtain their amateur radio licenses.

A subset of this group, including Erin, has participated in the Massachusetts Institute of Technology's (MIT's) "InvenTeam" competition, designing and building a portable lightning detector and early warning system. In addition, Erin re-started the Columbus High School Radio Club and served as its president for the past two years. The club was active in the 1950s and '60s, and Erin's great-grandfather (the original K4ETY) was one of its mentors at that time. The new club obtained the callsign W4CHS (Columbus High School) and has been active on the air.

Erin's involvement with amateur radio and FIRST Robotics has helped fuel her interest in science and engineering. Last year, she applied for early admission to both Georgia Tech and MIT; she was accepted to both and will be attending MIT this fall.

Inside the shiny tube which contained Erin's MIT acceptance letter was a note suggesting that the students "hack" their tubes, meaning to do something cool with them, in a long-standing tradition of MIT hacks or stunts. Erin chose to send her tube to near-space.

Drawing on her ballooning experience, Erin planned, built, integrated, and tested a complete new tracking setup to fit into the very small shipping tube. The payload consisted of two GPS units, two custom-made antennas, one Argent Data OpenTracker+ kit (which Erin built), one handheld radio, and a fellow ham's Byonics Pocket Tracker, a self-contained 100-milliwatt tracker/radio combination in an Altoids� tin. Erin also talked her mother into letting her use mom's brand new GoPro Hero HD video camera.

With the assistance of a group of hams from the Columbus Amateur Radio club, Erin launched her balloon from Lumpkin, GA. A couple of hours later, she and the tracking team successfully recovered it, along with the complete HD video record of the flight. Erin took this video, as well as other photos and videos taken of the launch activities, and compiled it into an 8-minute presentation, complete with background music. She posted it to YouTube, and put a link to it on the MIT hack-the-tube site. According to YouTube statistics, Erin's video has been viewed thus far in excess of 82,500 times. (see <http://tinyurl.com/ak4jg-space-video>).

This past May, Erin was invited to participate in no less than three forums and sessions at the 2012 Dayton Hamvention. These included the 25th anniversary "Youth Forum," the "Ham Radio Town Meeting" and an "ARRL Expo" presentation where her video was screened.

AWARD CEREMONY

The 2012 Amateur Radio Newsline� "Young Ham of the Year Award" will be presented on Saturday, August 18th at the Huntsville Hamfest in Huntsville, Alabama. As the 2012 "Young Ham of the Year," Erin will receive -- courtesy of Yaesu USA -- an expense-paid trip to the Huntsville Hamfest, along with a gift of Yaesu brand ham radio equipment. CQ magazine will treat her to an expense-paid week at Spacecamp Huntsville, and will present Erin with a variety of CQ products. Amateur Radio Newsline� will provide Erin with a commemorative plaque at the award ceremony. Once again, the cost of year's plaque has been underwritten by Dave Bell (W6AQ), President of DBA Entertainment Inc., Hollywood, California. Heil Sound Ltd. will also be presenting Erin with a ham radio-related gift.

[ANS thanks Amateur Radio Newsline for the above information]

ARISS Status - 2 July 2012

1. Virginia Contact to be Rescheduled

The ARISS contact that was scheduled with the Virginia Air and Space Center in Hampton, Virginia on Tuesday, June 26 was not successful due to ground station issues. ARISS will try to reschedule this event for the week of July 23.

2. ARISS Contact Featured at STEM Conference

On Thursday, June 28, an Amateur Radio on the International Space Station (ARISS) contact was held between Expedition 30/31 crewmember Andr� Kuipers and students attending the STEM Solutions Youth Summit which was part of the U.S. News STEM Solutions 2012 conference in Dallas, Texas. Telebridge station K6DUE in Maryland provided the radio hookup. The contact, a highlight of the event, provided youth the opportunity to ask Kuipers about life and work in space. Leland Melvin, Associate Administrator for Education, and Charlie Bolden, NASA Administrator, attended the conference.

[ANS thanks Carol, KB3LKI, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

Primary and secondary school students are eligible for membership at one-half the standard yearly rate. Post-secondary school students enrolled in at least half time status shall be eligible for the student rate for a maximum of 6 post-secondary years in this status. Contact Martha at the AMSAT Office for additional student membership information.

73,
This week's ANS Editor,
Lee McLamb, KU4OS

```
From 7200301169071158000
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Newsgroups:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.shor
twave,rec.radio.info
Subject: Weekly Highlights of Solar and Geomagnetic Activity, 02 - 08 July 2012
Followup-To:
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NNTP-Posting-Date: Mon, 9 Jul 2012 15:30:11 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
```

```
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
```

```
:Product: Weekly Highlights and Forecasts
:Issued: 2012 Jul 09 1449 UTC
# Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center
# Product description and SWPC contact on the Web
# http://www.swpc.noaa.gov/weekly.html
#
#                 Weekly Highlights and Forecasts
#
```

Highlights of Solar and Geomagnetic Activity
02 - 08 July 2012

Solar activity ranged from low to high during the period. There were five major solar events, beginning on the 2nd of July. Region 1515 (S18, L=206, class/area=Fhc/900) was responsible for all of them. After a lackluster performance in the week prior (5 C-class x-ray events), it began this week with three M-class x-ray flares. The largest flare, an M5/2b at 2/1052UTC, brought activity to high levels for the first time since May 17th. The flare was accompanied by a Type II radio sweep (1063 km/s) and a 380 sfu Tenflare. A CME was subsequently observed in LASCO C3 coronagraph imagery at approximately 2/1254UTC, with most of the ejecta directed south of the ecliptic plane. The CME was also visible in STEREO-A and B COR2 coronagraph imagery.

Activity dipped to low levels on the 3rd when no M flares were observed. However, Region 1515 developed a beta-gamma-delta magnetic configuration that day. Activity returned to high levels the following day when Region 1515 unleashed an M5/2b flare at 4/0955UTC. Later in the day (04/2209UTC), it produced an M4 x-ray event accompanied by a 12,000 sfu 245 MHz burst, a Type II sweep (no speed estimate available), and a 220 sfu Tenflare. Of the seven M-class events that day, Region 1515 was responsible for six of them. The remaining M-flare, an M1/2n at 04/1639UTC, was produced by Region 1513 (N16, L=218, class/area=Dso/240). This event was accompanied by a 200 sfu Tenflare, and Type II radio (807 km/s) and Type IV radio emissions. A CME was captured by STEREO-B COR2 imagery at 04/1754UTC and STEREO-A COR2 coronagraph imagery at 04/1854UTC, and appeared to have an earth-directed component, consistent with Region 1513s geoeffective position.

High activity levels continued through the 5th and 6th of July as Region 1515 grew to its peak, covering 900 millionths of the solar disk and containing 60 spots. July 5th saw Region 1515 produce an M6.1/1b flare at 05/1144UTC accompanied by a 290 sfu Tenflare. The following day, this region produced the largest flare of the week, an X1 x-ray event at 06/2308UTC. Although no optical flare was reported, the event was accompanied by a 520 sfu Tenflare, a Type II sweep (1771 km/s), and a Type IV sweep. A CME was subsequently observed in LASCO C3 coronagraph imagery at 06/2324UTC.

Activity dropped to moderate levels on the 7th as Region 1515s magnetic complexity, area and spot count decreased to beta-gamma, 780 millionths, and 43 spots respectively. A new region, Region 1520 (S15, L=86, class/area=Fhc/1070), was numbered as it rotated on to the east limb. It produced an M1 x-ray flare at 7/0728UTC.

High activity levels returned on the 8th, when Region 1515 produced an M6/1n at 08/1632UTC. The event was accompaned by a 640 sfu Tenflare, Type II (2271 km/s) and Type IV radio sweeps. LASCO C2 coronagraph imagery first indicated a CME at 08/1648UTC, with most of the ejecta directed southwest.

Two proton events were observed at geosynchronous orbit during the week. A 10 MeV greater than 10 pfu event began at 07/0400UTC, peaked at 07/0745UTC (25 pfu), and ended at 07/2110UTC. This event was associated with the X1 x-ray flare observed at 06/2308UTC described above. Both 10 and 100 MeV protons were elevated again on the 8th of July following the M6/1n flare described above. Neither the 10 nor the 100 MeV protons had crossed their flux thresholds (10 pfu and 1 pfu) by the end of this report, ending the period at 6 pfu and 4 pfu, respectively.

The greater than 2 MeV electron flux at geosynchronous orbit were at high levels from July 2nd through the 6th, and at moderate levels on the 7th and 8th.

Geomagnetic field activity began the week at active levels for the first three synoptic periods (02/00-02/09UTC), then decreased to quiet to unsettled levels until the 5th, when one active period (05/12-05/15UTC) was observed. The unsettled to active periods were attributed to the presence of a coronal hole high speed solar wind stream. Solar wind speed at the ACE spacecraft was between 650-700km/s on the 2nd, decreasing to around 500 km/s on the 5th, with the Bz-component of the interplanetary magnetic field between 0 and -5 nT for much of the period. Activity for the remainder of the week was at quiet to unsettled levels with the exception of the 21-24UTC period on the 6th associated with a prologned period of negative Bz, and the 21-24UTC period on the 8th. Analysis of data from the ACE spacecraft suggest the activity on the 8th was associated with the arrival of the CME associated with the M1/2n flare on July 4th described above. Wind speed at ACE jumped from 400 to 472 km/s around 08/1500UTC and the Bz component of the solar wind began a smooth rotation from +10 to -9 nT over the course of the next nine hours.

Forecast of Solar and Geomagnetic Activity
09 July - 04 August 2012

Solar activity is expected to be at moderate levels with a chance for high activity until Region 1520 reaches the west limb on 19 July. Low levels of activity are expected from 20-23 July, until old Regions 1515 and 1513 return on 23 and 24 July respectively. Moderate levels of activity, with a chance for high levels, are then expected through the end of the period.

There is a chance for proton events as Region 1520 moves into a favorable position beginning on the 13th of July though the 19th.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to be at high levels from 28 July through 01 August associated with coronal hole high speed stream effects.

Geomagnetic field activity is expected to begin at unsettled to active levels with CME passage, decreasing to mostly quiet levels from 10 July through 26 July. Activity is expected to increase to unsettled to active levels from 27 July through 2 July with the arrival of a coronal hole high speed stream. Activity is expected to then decrease to mostly quiet to unsettled levels through the end of the period.

```
From 7472568010162228848
X-Google-Thread: 10e8ad,153bd84ce914aade,start
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII
Received: by 10.204.128.207 with SMTP id l15mr1025667bks.4.1342321043015;
        Sat, 14 Jul 2012 19:57:23 -0700 (PDT)
MIME-Version: 1.0
Path: m12ni380bkm.0!nntp.google.com!news1.google.com!npeer02.iad.highwinds-
media.com!news.highwinds-media.com!feed-me.highwinds-media.com!
nx02.iad01.newshosting.com!newshosting.com!news-out.readnews.com!
transit3.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-197 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sat, 14 Jul 2012 22:57:22 EDT
Organization: The Radio Amateur Satellite Corporation
```

Lines: 559
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <001f01cd6235$85fd4850$91f7d8f0$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
X-Trace: reader1.panix.com 1342321042 29100 166.84.1.6 (15 Jul 2012 02:57:22 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 15 Jul 2012 02:57:22 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
X-Received-Bytes: 23696
Content-Language: en-us

AMSAT NEWS SERVICE
ANS-197

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

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SB SAT @ AMSAT $ANS-197.01
ANS-197 AMSAT News Service Weekly Bulletins

AMSAT News Service Bulletin 197.01
>From AMSAT HQ SILVER SPRING, MD.
July 15, 2012

To All RADIO AMATEURS
BID: $ANS-197.01

2012 AMSAT Space Symposium & Annual General Meeting Comes to Orlando

AMSAT announces the 2012 AMSAT Space Symposium will be held on Friday, October 26th through Sunday, October 28th. The Symposium weekend will feature:

+ Space Symposium with Amateur Satellite Presentations

+ Operating Techniques, News, & Plans from the Amateur Satellite World

+ Board of Directors Meeting open to AMSAT members

+ Meet Board Members and Officers

+ Annual General Membership Meeting

+ Annual Banquet-Keynote Speaker and Door Prizes

CALL FOR PAPERS

This is the second call for papers for the 2012 AMSAT Annual Meeting and Space Symposium to be held in Orlando, Florida on the weekend of October 26-28, 2012 at the Holiday Inn, Orlando Airport Hotel.

Proposals for papers, symposium presentations and poster presentations are invited on any topic of interest to the amateur satellite community:

+ Papers for publication in the Proceedings

+ Symposium Presentations

+ Poster Presentations

+ Equipment and Operating Demonstrations

We request a tentative title of your presentation as soon as possible, with final copy to be submitted by October 1 for inclusion in the printed proceedings.

Abstracts and papers should be sent to Dan Schultz, N8FGV, at n8fgv at amsat.org.

SYMPOSIUM SCHEDULE

To help you plan your trip to Orlando the 2012 Symposium Committee has posted a high-level schedule of the weekend's events.

Preliminary 2012 Symposium Schedule

Thursday 25 October 2012

AMSAT Board of Directors Meeting 8am - 9pm

Friday 26 October 2012

AMSAT Board of Directors Meeting 8am - Noon
Trips to SkyCraft 9am - Noon
AMSAT Symposium 1pm - 5pm

Saturday 27 October 2012

Symposium 8am - 3pm
AMSAT General Meeting 3:30pm
AMSAT Banquet 6:30pm - 10pm

Sunday 28 October 2012

7:30am AMSAT Area Coordinator's Breakfast
Local trip of Interest TBD

Monday 29 October 2012

Special trip to Kennedy Space Center 8am-6pm
The trip will include a round trip bus from the hotel and entrance to the Space Center. The cost will be about $100. This is a wonderful experience for those that haven't been and for those that have been multiple times. We need to get an idea of how many will participate to select the correct bus. Contact Martha if interested

Watch the AMSAT Symposium Web Pages for the latest information:
http://www.amsat.org/amsat-new/symposium/2012/index.php

[ANS thanks the 2012 Symposium Committee and 2012 Syposium Proceedings Editor Dan Schultz, N8FGV for the above information]

AMSAT-UK Monitoring UK Space Agency Reform of the Outer Space Act

A posting on the UK Space Agency Web Site, announced, "Reform of the Outer Space Act 1986: Consultation". Graham Shirville, G3VZV commented, "Whilst they only relate to UK legislation, both the Consultation Document and the Impact Assessment Document cover a lot of interesting ground, technical, legal and statistical. Well worth a review in my opinion. These proposals make the Space Act more 'cubesat friendly'"

Both of these documents can be accessed on the UK Space Agency web:
http://tinyurl.com/UK-Space-Act (www.bis.gov.uk)

The AMSAT-UK web summarizes the scope of the new Consultation:

This is in response to the Government Growth Review published in March 2011, in which the Government set out its wish to reform the Outer Space Act 1986 by introducing an upper limit on liability for UK operators.

The Outer Space Act covers all UK satellites irrespective of size, from tiny low cost educational CubeSats up to large commercial �500 million satellites.

The key aspects of the consultation are the proposals to waive the capped liability and insurance requirement for in-orbit operation of any satellite that meets the criteria of a CubeSat and to remove the requirement for unlimited indemnity from satellite operators.

The existing Outer Space Act imposes heavy additional costs (>�50,000 per annum) on those wishing to launch small educational CubeSats. The additional costs act as a major deterrent and to-date no such UK CubeSat has been launched.

Graham concludes, "Rest assured that AMSAT-UK will be responding!" More news will be posted as available. The UK Space Agency says that responses are due by August 31, 2012.

[ANS thanks Graham Shirville, G3VZV and AMSAT-UK for the above information]

Successful ARISS School Contacts Reported

Nunavik Youth Connect With ISS

On July 4, youth attending the Cirqiniq Summer Camp in Kuujjuaq, Quebec (Nunavik), Canada spoke with on-orbit astronaut Joe Acaba, KE5DAR via an ARISS contact. Telebridge station K6DUE in Greenbelt, Maryland provided the radio connection.

The contact was held in conjunction with a circus camp being offered to youth, ages 13 to 17, in Nunavik that was led by a group of instructors affiliated with Cirque du Soleil�. The campers learned tight-wire walking, aerial acrobatics and juggling among other skills and ended the session with a parade and community show. This year's theme was "Planets and the Universe." Local media covered the event.

STEM High School Aerospace Scholars, Houston, TX Connect With ISS

An ARISS school contact with participants at Women in STEM High School Aerospace Scholars, Houston, TX was successfully completed on July 10. The contact was a telebridge between NA1SS and W6SRJ.

The group of high school juniors were participating in a summer program called WISH, an acronym for Women in STEM High School Aerospace Scholars. The students were selected from responses to a national invitation to attend multiple robust lessons for six days at Johnson Space Center in Houston. The young women attended briefings, and engaged in competitive hands-on engineering activities related to space exploration and research.

The ARISS contact was incorporated into the learning activities early in the week while learning about space communication and wireless technology.

A video of the contact has been posted on-line:
http://www.youtube.com/watch?v�M-2qegJWo&feature�ayer_embedded

The NASA Press release about the Women in STEM High School Aerospace Scholars program can be viewed on-line at:
http://www.nasa.gov/home/hqnews/2012/jun/HQ_12-209_WISH.html

[ANS thanks the ARISS Status Report and NASA for the above information]

Cuba to Alaska Contact Successful via FO-29

Hector Martinez, CO6CBF in Cuba reported a successful satellite contact Dale Pelzer, KL7R in Alaska via the FO-29 satellite. Cuban amateurs cannot operate on AO-7 mode B so FO-29 is their only opportunity for long range contacts.

Hector says the first 10 attempts via SSB were unsuccessful. Dale drove around 4 miles from his home to a nearby hill, many times very late at night. On Sunday, July 8 at 1920 UTC the two stations finally connected via CW.

Dale's equipment includes a Yaesu FT-817 (only 5W semi-duplex) and ARROW antenna with preamplifier. Hector's equipment is mostly a homebrew setup, 10 elements yagi on 2m and 18 elements yagi for 70cm with a homebrew preamplifier.

Hector will continue to look for new grids and long-range contacts via satellite. He invites interested stations to contact him via e-mail: co6cbf@frcuba.co.cu

[ANS thanks and congratulates Hector Martinez CO6CBF and Dale Pelzer KL7R for the above information]

Official Opening of the RSGB National Radio Centre

Wednesday, July 11, saw the official opening of the RSGB's National Radio Centre (NRC) at Bletchley Park in Milton Keynes.

The opening and unveiling of the plaque was undertaken by Mr. Ed Vaizey, MP. Mr Vaizey is the Minister for Culture, Communications and the Creative Industries and, as such, has overall responsibility for OFCOM. He stated that he fully supported the aim of the Centre in being able to enthuse and inspire children to become the engineers of the future.

Attendees included many of the sponsors together with Iain Standen, the Chief Executive of the Bletchley Park Trust plus, from overseas, Dave Sumner K1ZZ, CEO of the ARRL and Ole Garpestad, LA2RR IARU Vice-President.

AMSAT-UK have supported the creation of this valuable educational outreach resource at Bletchley Park and have arranged for the provision and installation of a set of fully steerable VHF and UHF satellite antenna arrays. It is hoped that it may be possible to use the NRC as the FUNcube-1 Mission Control Centre during the Launch and Early Operations Phase (LEOP) of the mission later this year.

National Radio Centre http://www.nationalradiocentre.com/

Pictures of opening http://www.uk.amsat.org/8841

[ANS thanks Trevor, M5AKA; RSGB, and AMSAT-UK for the above information]

NASA TV to Cover Three Hams Docking at ISS

NASA Flight Engineer Sunita Williams, KD5PLB, along with Russian cosmonaut Yuri Malenchenko, RK3DUP, and Japan Aerospace Exploration Agency astronaut Akihiko Hoshide, KE5DNI were launched aboard a Soyuz TMA-05M spacecraft from the Baikonur Cosmodrome in Kazakhstan at 0240 UTC, July 15.

The three ham crew will arrive at the ISS on July 16, joining NASA Flight Engineer Joe Acaba, KE5DAR, and two Russian cosmonauts: Expedition 32 Commander Gennady Padalka, RN3DT, and Flight Engineer Sergei Revin, RN3BS.

NASA TV�s scheduled coverage of the docking is as follows:

Monday, July 16

11:15 PM CDT (0415 UTC, July 17) -- Expedition 32/33 Soyuz TMA-05M docking coverage begins (docking at 11:38 PM [0438 UTC, July 17]), followed by post-docking news conference from Mission Control in Korolev, Russia.

Tuesday, July 17

2:00 AM CDT (0700 UTC) -- Expedition 32/33 Soyuz TMA-05M hatch opening and welcoming ceremony coverage begins (ceremony scheduled for 2:25 AM [0725 UTC]).

NASA TV can be viewed on-line at: http://www.nasa.gov/ntv

[ANS thanks NASA for the above information]

Five CubeSats Ready for July 21 JAXA HTV-3 Launch

Five cubesats are scheduled to be launched on July 21 aboard the JAXA HTV-3 supply mission to the ISS. The satellites have been integrated with the J-SSOD small satellite deployer. The J-SSOD deployer will be integrated to the Japanese Experiment Module, also known as Kibo. They will be deployed with the Kibo robotic arm planned for the September, 2012 timeframe.

The five CubeSats on this mission include:

- Raiko
  http://www.astro.mech.tohoku.ac.jp/RAIKO/ (Japanese)
  2U cubesat, photography, Ku-band beacon

- We Wish
  http://www.meisei.co.jp/news/2011/0617_622.html
  Infrared camera for environmental studies

- FITSat 1
  http://www.fit.ac.jp/~tanaka/fitsat.shtml
  High-speed data test, high power LED visual tracking
  CW Beacon 437.250 MHz,
  FM Data   437.445 MHz,
  High speed data 5840.00 MHz.

- F-1 Vietnam Student CubeSat

On-board camera for earth observation mission
VX-3R1, 437.485 MHz FM downlink:

- Solar cell power only, operates in sunlight only
- Output power: max 0.3W, half-wave dipole antenna
- Morse code beacon (10 chars) using PWM CW every 30 seconds

VX-3R2, 145.980 MHz FM downlink:

- Rechargeable battery, operates in dark and sunlight
- Output power: max 1.0W, half-wave dipole antenna
- AFSK 1200bps, half duplex, one AX.25 packet every 30 seconds

+ TechEdSat
  http://ncasst.org/techedsat.html
  http://www.uk.amsat.org/5018
  Downlink on 437.465 MHz

[ANS thanks the CubeSat teams, AMSAT-UK, and Mineo Wakita JE9PEL for the above information]

HORYU-2 Telemetry Resumes Operation

On Tuesday, July 3, the amateur radio satellite HORYU-2 (call sign JG6YBW) recovered from a problem with stuck telemetry on its 437.375 MHz telemetry downlink. The HORYU-2 Blog indicates the team are now attempting to take pictures using the on-board camera. Read the KIT HORYU Blog in Google English: http://tinyurl.com/HORYU-Blog

The free KIT HORYU-2 telemetry software can be downloaded from
http://kitsat.ele.kyutech.ac.jp/Documents/information_launch_english.html

A HORYU-2 online WebSDR receiver can be found at:
http://sdr.opt.ro:8901/

HORYU-2 CW Telemetry Decoder by DK3WN:
http://tinyurl.com/SatSoftwareDK3WN/

HORYU-2, built by students from the Kyushu Institute of Technology, was launched by JAXA from Tanegashima Space Center on May 18 with the Observation Mission �SHIZUKU� (GCOM-W1). The SHIZUKU observation

images acquired by AMSR2 have been released. See:
http://www.jaxa.jp/press/2012/07/20120704_shizuku_e.html

[ANS thanks the HORYU-2 Team for the above information]

50th Anniversary of Telstar-1

Recently amateur radio satellite operators have commemorated the 50th anniversary of the launch of the first two amateur radio satellites: OSCAR-1 on December 12, 1961 and OSCAR-2 on June 2, 1962. Amateur radio was in space just four years after Sputnik-1, the first satellite was put in orbit.

This past week, fifty years ago, on July 10, 1962 the first commercial communications satellite, Telstar-1, was launched. Two days into its mission, it relayed the world's first transatlantic television signal, from Andover Earth Station, Maine, to the Pleumeur-Bodou Telecom Center, Brittany, France.

The satellite was spin-stabilized to maintain its desired orientation in space. Power to its onboard equipment was provided by a solar array, in conjunction with a battery back-up system. During the course of its operational lifespan, Telstar 1 facilitated over 400 telephone, telegraph, facsimile and television transmissions. It operated until November 1962, when its on-board electronics failed due to the effects of radiation.

SpaceMart.com has published an article of Telstar's 50th anniversary:
http://tinyurl.com/Telstar-50th (www.spacemart.com)

[ANS thanks AMSAT, Project OSCAR, and SpaceMart.com for the above information]

Satellite Shorts From All Over

+ Look in the August 2012 issue of QST magazine for a satellite article, "Backpacking With Satellites", on page 65 by David Palmer, KB5WIA. Dave covers lots of portable satellite operating advice, portable equipment selection, trek planning, and includes several interesting photos.

+ Listen for Patrick, WD9EWK/VA7EWK on VO-52 at 0200 UTC July 17 during his on-air satellite demonstration at the Tri-City Amateur Radio Association meeting in Goodyear, Arizona. Additional demonstration opportunities that evening may occur on SO-50 at 0300 UTC and one more VO-52 pass at 0335 UTC. All demonstration plans are dependent on the weather. Patrick will try to update the AMSAT-BB with the demonstration plans on Monday afternoon, as well as his Twitter feed @WD9EWK (use http://twitter.com/wd9ewk if you aren't on Twitter directly to view this feed).

+ Listen for David, XE3DX operating on SO-50 and AO-27 between July 16 - 20 from EK48, EK49, EK69, EL50, EL51, EL61 and EL60 in Campeche, Yucatan and Quintana Roo States in Mexico. He can be reached via e-mail at xe3dx@amsat.org

+ Listen for Norm, N3YKF operating from Peru. His trip begins on July 22. He says he has received the customs documents to bring amateur radio equipment. He plans to drive the Panamerica Sur from Lima to Nazca, Peru, activating grid squares along the way.

+ Watch a video on the Vimeo site "Grand Finale 2010-11", by McLean Fahnestock showing all 135 launches of the space shuttle program at once: http://vimeo.com/27505192

+ To help you sound like the smartest ham on the band here are three videos that explain CERN's discovery of a Higgs-like particle:

  o Minute Physics: http://www.youtube.com/watch?v�h5mTxRQcg
  o BBC http://www.youtube.com/watch?v�QpeqE_wLg
  o Physicist Michio Kaku on CNN:
      http://www.youtube.com/watch?v�VT-MlRq6o
  o What�s a Higgs Boson, Anyway? on UniverseToday.com:
      http://www.universetoday.com/96122/whats-a-higgs-boson-anyway/

+ The free publication SatMagazine includes an article covering advances in CubeSat technology. "Advances In CubeSats Enable New Apps" by Erik Mumm starts on page 56. Download the July/August 2012 SatMagazine at http://www.satmagazine.com/2012/SM_JulAug2012.pdf

+ In the quiet, peaceful setting of a storage bay in the northwest corner of NASA's cavernous Vehicle Assembly Building at the Kennedy Space Center Spaceflight Now photographer Walter Scriptunas II used the tranquil opportunity to shoot this gallery that captures the space shuttle Atlantis in exquisite detail:
  http://spaceflightnow.com/shuttle/sts135/120703gallery/

+ When you play NASA's "Rocket Science 101!", you will select your favorite NASA mission and build a rocket to send the spacecraft into orbit. Rocket Science 101 is available online at:
  http://go.nasa.gov/Mn28Nt

+ Enjoy a 5 minute video commemorating the 50th anniversary of NASA's John F. Kennedy Space Center:
  http://www.youtube.com/watch?feature�ayer_embedded&v�GEU5irS8o

+ Jason Brand VK2FJAB, age 10, was interviewed for the morning "Today" show on Channel 9 in Australia. He talks about amateur radio and his Do-It-Yourself space projects. Watch it at:
  http://www.uk.amsat.org/8821

+ One of the interior decorating features often selected for the well-equipped-shack includes a copy of the Electromagnetic Radiation Spectrum Poster. Unihedron, a manufacturer of portable tools for physics and astronomy, offers you a link to download a personal PDF copy of the poster or purchase a full-size printed copy at:
  http://unihedron.com/projects/spectrum/moreinfo.php

+ This image from the French Pleiades satellite shows the island of Mont Saint Michel and its surrounding bay in northwest France. The photo was captured on May 3 at an altitude of about 700 km. See: http://www.spaceref.com/news/viewsr.html?pidA338

+ Sometime this summer, Austrian skydiver Felix Baumgartner will leap from the edge of space, attempting to not only break the sound barrier with his body, but also break the record for the longest freefall from nearly 37km altitude. View a video simulation at:
http://www.youtube.com/watch?feature�ayer_embedded&v�qnQq86fkY

+ The next Hudson Valley Satcom net date will be on Thursday July 19 at 8PM EDT (UTC-4 UTC) on the 146.97 MHz MBARC Repeater (PL 100). This net is also available on echolink on the N2EYH-L node if you would like to join via this route. (Stu, WA2BSS)

[ANS thanks everyone for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

Primary and secondary school students are eligible for membership at one-half the standard yearly rate. Post-secondary school students enrolled in at least half time status shall be eligible for the student rate for a maximum of 6 post-secondary years in this status. Contact Martha at the AMSAT Office for additional student membership information. And with that, please keep in mind the discussion during Field Day setup when one ham was admiring the new tent being erected at an operating position. The owner remarked on the great deal he got on the purchase of the tent getting it at half price. The ham said, "Yes, it is a great deal!" The owner noted it was the year of his discount tent. (Apologies to Richard The Third and Willy Shakespeare.)

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM
K9JKM at amsat dot org

```
From -2112292333036285218
X-Google-Thread: a4a23d5f63,df807f85e24baf30,start
X-Google-Attributes: gida4a23d5f63,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
Received: by 10.66.76.8 with SMTP id g8mr94300paw.23.1343094704165;
        Mon, 23 Jul 2012 18:51:44 -0700 (PDT)
Received: by 10.66.72.165 with SMTP id e5mr93583pav.4.1343094704138;
        Mon, 23 Jul 2012 18:51:44 -0700 (PDT)
MIME-Version: 1.0
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p10ni43789516pbh.1!nntp.google.com!border1.nntp.dca.giganews.com!
border4.nntp.dca.giganews.com!border2.nntp.dca.giganews.com!nntp.giganews.com!ctu-
peer!ctu-gate!news.nctu.edu.tw!usenet.stanford.edu!panix!rri.panix.com!robomod!
not-for-mail
From: SWPC.Webmaster@noaa.gov
Newsgroups:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.shor
twave,rec.radio.info
Subject: Weekly Highlights of Solar and Geomagnetic Activity, 09 - 15 July 2012
Followup-To:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.shor
twave
Date: Mon, 16 Jul 2012 11:30:10 EDT
Organization: NOAA Space Weather Prediction Center
Lines: 97
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <20120716153002.D70E233C6F@panix2.panix.com>
NNTP-Posting-Host: panix6.panix.com
X-Trace: reader1.panix.com 1342452610 12069 166.84.1.6 (16 Jul 2012 15:30:10 GMT)
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NNTP-Posting-Date: Mon, 16 Jul 2012 15:30:10 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Bytes: 6937

:Product: Weekly Highlights and Forecasts
:Issued: 2012 Jul 16 1434 UTC
# Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center
# Product description and SWPC contact on the Web
# http://www.swpc.noaa.gov/weekly.html
#
#                Weekly Highlights and Forecasts
#
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Highlights of Solar and Geomagnetic Activity
09 - 15 July 2012

Solar activity ranged from low to high levels due to activity from a complex of closely spaced regions in the southern hemisphere. These spotted groups were made up of Regions 1519 (S15, L=107, class/area Hsx/120 on 05 July), 1520 (S16, L=86, class/area Fkc/1460 on 12 July), and 1521 (S21, L=96, class/area Eki/300 on 12 July). Region 1520 grew into a large Fkc spot group with a Beta-Gamma-Delta magnetic configuration with over 1300 millionths in area by 09 July and continued to remain large and magnetically complex as it rotated across the visible disk. Region 1520 produced M1 flares at 09/2307 UTC and 10/0514 UTC, an M2/1f flare at 10/0627 UTC, and a long duration X1/2b flare at 12/1649 UTC. Associated with the X1/2b flare were Type II (1268 km/s) and Type IV radio emissions along with an 800 sfu Tenflare and a geoeffective CME with an estimated plane-of-sky speed of 1453 km/s. Region 1521 produced an M1/1f flare at 14/0458 UTC. Region 1521 continued to grow through the period into an Eki spot group with 300 millionths of area and a Beta-gamma magnetic classification.

A greater than 10 MeV proton event at geosynchronous orbit began at 09/0130 UTC, reached a maximum of 19 pfu at 09/0430 UTC and ended at 09/1445 UTC. This event was likely associated with the 08 July M6/1n flare at 08/1632 UTC from Region 1515 (S18, L=206, class/area Fhc/900 on 06 July). A second greater than 10 MeV proton event began at 12/1835 UTC, reached a maximum of 96 pfu at 12/2225 UTC, and ended at 15/0200 UTC. This event was associated with the X1/2b flare at 12/1649 UTC from Region 1520.

The greater than 2 MeV electron flux at geosynchronous orbit was at moderate levels on 09 and 15 July, but reached high levels 10 through 14 July.

Geomagnetic field activity was at unsettled to minor storm levels, on 09 July, with high latitude major storm intervals due to residual CME effects likely associated with the 04 July M1 event. July 10 began with an isolated period of active levels and decreased to quiet to unsettled levels for the remainder of the day. On 11 and 12 July, activity was mostly quiet to unsettled with an isolated active period with high latitude intervals of minor to major storm levels. Quiet conditions were observed from 13 July till late on 14 July when a CME associated with the 12 July X1/2b flare arrived. At 14/1728 UTC, a shock was observed at the ACE spacecraft followed by a sudden impulse (27 nT) at the Boulder magnetometer at 14/1811 UTC. Solar wind speed at the ACE spacecraft increased from approximately 350 km/s to 630 km/s while the Bz component of the interplanetary magnetic field (IMF) went south to around -12 nT. At around 15/0600 UTC, solar wind speed was around 600 km/s while the IMF Bz went south around -16 nT and stayed steadily southward through the end of the period. The geomagnetic field responded with active to major storm levels while minor to severe storm conditions were observed at high latitudes through the end of the summary period.

Forecast of Solar and Geomagnetic Activity
16 July - 11 August 2012

Solar activity is expected to be at low to moderate levels through 18 July when Region 1520 is due to rotate off the West limb. Very low to low conditions are expected from 19 July through 20 July. Low to moderate conditions are expected from 21 July through the end of the period as old Regions 1515 and 1520 are due to return on 21 July and 01 August respectively.

There is a slight chance for a greater than 10 MeV proton event at geosynchronous orbit until Region 1520 departs the visible disk on 18 July and again from 21 July through 11 August as old Regions 1515 and 1520 return.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to be at normal to moderate levels from 16 - 22 July, 24 - 27 July, and 03 - 11 August. High levels are expected on 23 July and again on 28 July - 02 August due to recurrent coronal hole effects.

Geomagnetic field activity is expected to begin the period with minor to major storm periods due to the continued influence of the 12 July CME. Conditions will gradually return to quiet to active levels by the end of the day on 16 July. Mostly quiet to unsettled conditions are expected from17 - 21 July. On 22 - 23 July a coronal hole high speed stream is expected to become geoeffective causing mostly unsettled conditions. Quiet to unsettled conditions will prevail from 24 - 26 July. On 27 July, a co-rotating interaction region followed by a recurrent coronal hole high speed stream is expected to become geoeffective. Active to minor storm conditions are expected on 27 July while unsettled to active conditions are expected on 28 - 29 July. Conditions are expected to return to quiet to unsettled levels on 30 July through the end of the forecast period.

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out.readnews.com!transit3.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-204 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sat, 21 Jul 2012 21:14:48 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 362
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Reply-To: ans-editor@amsat.org
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X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Bytes: 15312
Content-Language: en-us
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AMSAT NEWS SERVICE
ANS-204

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* UK Olympics Special Events Satellite Operations Commence This Week
* AMSAT Board of Directors 2012 Ballots in the Mail
* AMSAT Commemorative Shirt Available for the Symposium
* AMSAT and ARISS Support Moon Day 2012 at Dallas Love Field Air Museum
* Three Hams Arrive + Three Hams Aboard �ix Hams Aboard ISS
* NASA JPL Explore Mars: Curiosity 3-D Interactive Experience

* Satellite Shorts From All Over
* ARISS Status - 16 July 2012

SB SAT @ AMSAT $ANS-204.01
ANS-204 AMSAT News Service Weekly Bulletins

AMSAT News Service Bulletin 204.01
From AMSAT HQ SILVER SPRING, MD.
July 22, 2012
To All RADIO AMATEURS
BID: $ANS-204.01

UK Olympics Special Events Satellite Operations Commence This Week

With the "London 2012 Olympics" official opening taking place during the next week, this is a reminder of the previously posted information about the "Amateur Radio Flagship Event Stations" that will be operating beginning Wednesday July 25 until the Games close on September 9.

The London station 2012L (two-oscar-one-two-London) and the station in Wales (two-oscar-one-two-Wales) will be operating on amateur HF and VHF/UHF bands during the event.

The Barry Amateur Radio Society in Wales, subject to operator availability and suitable passes, will endeavor to make contacts via the amateur radio satellites as well of course as the HF bands.

The London has a restriction imposed on VHF/UHF activation which will limit personal operations on the satellites. Outside the restricted zone however there maybe other amateur radio operators who may be active, not as "flagship stations" but using a personal or club call sign under a notice of variation.

Barry Amateur Radio Society in Wales looks forward to making as many contacts as possible for this rare opportunity. We take this as an opportunity to wish all those participating in the Olympic Games and amateur radio operators world wide "Good Luck".

[ANS thanks Ken Eaton, GW1FKY and the Barry Amateur Radio Society, Wales, UK for the above information]

AMSAT Board of Directors 2012 Ballots in the Mail

Ballots for the 2012 AMSAT-NA Board of Directors election have been mailed to all members. Also included is biographical information about each of the candidates.

Select no more than three of the six listed candidates (in alphabetitcal order):

+ Tom Clark, K3IO
+ Steve Coy, K8UD
+ Mark Hammond, N8MH
+ Lou McFadin, W5DID
+ Gould Smith, WA4SXM
+ Patrick E. Stoddard, WD9EWK

The 3 candidates receiving the most votes will become directors serving 2 year terms. The 2 receiving the next highest number of votes will be seated as alternates for 1 year terms.

You must mail your ballot back to be received at the AMSAT-NA Office no later than the close of business on September 15, 2012:

AMSAT
850 Sligo Avenue, #600
Silver Spring, MD 20910

[ANS thanks AMSAT Corporate Secretary Alan Biddle, WA4SCA for the above information]

AMSAT Commemorative Shirt Available for the Symposium

AMSAT offers you the chance to have the coolest ham shirt of the year as we announce the special commemorative shirt for the 2012 Symposium. The polo shirt is ultramarine blue, silk touch 5-ounce 65/35 poly/cotton pique fabric (ask the XYL what this means) in men's and ladies' styles.

The men's shirt is available in sizes XS to 6X, with a pocket on the left side:
+ XS - XL ... $20
+ 2X - 3X ... $23
+ 4X - 6X ... $28

The ladies' shirt is available in sizes XS to 6X, no pocket:
+ XS - XL ... $18
+ 2X - 3X ... $21
+ 4X - 6X ... $26

The Symposium logo (AMSAT Fox) is embroidered on the left side of the men's and ladies' shirts. You can optionally add up to 2 lines of your callsign/name embroidered on the right side of the shirt for $5 per shirt.

Shirts must be ordered by mail with the order form sent with the

AMSAT ballots.

[ANS thanks the AMSAT Office for the above information]

AMSAT and ARISS Support Moon Day 2012 at Dallas Love Field Air Museum

Moon Day 2012 was held on July 21 at the Frontiers of Flight Museum at Love Field in Dallas, Texas to commemorate Neil Armstrong's walk on the moon. The event featured space exhibits, demonstrations and other space activities. AMSAT and ARISS were represented as they showed amateur radio satellites including a model of the Fox-1 satellite. This was an opportunity to promote the ARISS program also.

The purpose of Moon Day is to celebrate this astounding achievement of humankind by bringing together local and national organizations into one place where the public can walk and talk with the people and the groups who are on the frontlines of space exploration, along with space and astronomy advocates, hobbyists, and educators.

More information about the event was posted at:
http://nightsky.jpl.nasa.gov/event-view.cfm?Event_ID7613

The Frontiers of Flight Museum web page can be found at:
http://www.flightmuseum.com/

You can re-live the Apollo 11 launch on July 16, 1969 with this video:
http://www.youtube.com/watch?v�AN2WsDVt8&feature�ayer_embedded

[ANS thanks AMSAT and ARISS for the above information]

Three Hams Arrive + Three Hams Aboard �ix Hams Aboard ISS

Three hams arrived at the International Space Station on July 17 when the Soyuz TMA-05M spacecraft docked and the hatches opened on the 37th anniversary of the Apollo-Soyuz docking.

Expedition 32 crew members NASA astronaut Suni Williams KD5PLB, cosmonaut Yury Malenchenko RK3DUP and Japanese astronaut Aki Hoshide KE5DNI joined with Expedition 31's NASA astronaut Joe Acaba KE5DAR and cosmonauts Gennady Padalka RN3DT and Sergei Revin RN3BS to bring the crew complement up to six.

Video of the hatch opening, welcome aboard, and the press conference from the ISS have been posted at: http://tinyurl.com/Soyuz-Arrival

(UniverseToday.com)

Padalka, Acaba and Revin will be on board until September 17th, and the newest crew will stay until November 12, 2012.

[ANS thanks NASA and UniverseToday.com for the above information]

NASA JPL Explore Mars: Curiosity 3-D Interactive Experience

NASA's Jet Propulsion Laboratory in Pasadena, California invites you to prepare for the arrival of the Mars Science Laboratory rover Curiosity on August 6. JPL has developed a new 3-D interactive experience which will allow you to follow along with Curiosity's discoveries on Mars.

The beta version of "Explore Mars: Curiosity", a new 3-D interactive experience can be found at: http://mars.jpl.nasa.gov/msl/participate/

When you first access this site you will be asked to download the Unity application which loads seamlessly with your web browser. Once started you will receive high-resolution terrain maps of Gale Crater, Curiosity's landing site, collected from Mars orbiters. A 3-D "virtual rover" version of Curiosity will follow the path of the real rover as it makes discoveries.

JPL advises interested Mars fans to download the Unity game environment and test drive the rover early to reduce potential download delays as global interest peaks during the August landing events.

Also available on the JPL Mars Science Laboratory web site is the Mars Rover Landing immersive experience for the Xbox 360. You will able to take control of your own spacecraft using Kinect and face the extreme challenges of landing a rover on Mars. More details are available on the web site.

MarsDaily.com has a related article: http://tinyurl.com/MarsDaily

[ANS thanks NASA JPL and MarsDaily.com for the above information]

Satellite Shorts From All Over

+ Listen for special event station N8M operating from the Henry Ford/ Greenfield Village (Detroit) Maker Faire July 28-29. They will be operating on all bands, all modes including satellite and 6 meters. Satellite operation will be active on all modes on as many passes as possible. QSL info can be located on the Ford Amateur Radio League website: http://www.k8utt.org/index.htm (via John, N8NWA)

+ Listen for Canadian special event station CG3B operating from FN03 on the satellites. The special event commemorates 200 years of friendship between Canada and the US (after the War of 1812). More information is posted on the callsign page on QRZ.com. You can QSL via VE3FOI and your QSL will be mailed to you a special issue 1812 Canadian stamp. The event is sponsored by the Niagara Peninsula Amateur Radio Club (via John, K8YSE)

+ The ARRL posted audio and video of the July 12 interview with ARRL News Editor S. Khrystyne Keane K1SFA and Astronaut Don Pettit, KD5MDT. The video and transcript is posted at: http://www.arrl.org/news/astronaut-don-pettit-kd5mdt-chats-with-arrl

+ The August QST Magazine features activities by amateur satellite operators. On page 20 you will find coverage of the SSTV contact via ARISSat-1 by Farrell Winder, W8ZCF, and Jeff Winder, KB8VCO. On page 63 "Long Haul Radio" discusses amateur radio operation from an 18-wheeler including mention of packet via ISS by John McLendon, AB8JL. Bob Bruninga, WB4APR, well known to satellite operators has an article on page 41, "Rethinking Electrical Power for the Ham."

+ As a friendly reminder, we are approaching the deadline for article submissions for the next issue of the AMSAT Journal. Please finish your articles and submit them to journal@amsat.org by July 23.

+ Watch the inspirational video, "The Audacity to Dream" on-line at: http://www.universetoday.com/96289/the-audacity-to-dream/ The description reads, "Making its debut at the TEDxISU (International Space University) event on July 6, the video above is an inspirational call-to-arms for anyone who's ever looked to the stars and dreamed of a day when the sky was, in fact, not the limit.

+ A new schedule was uploaded to AO-27 on July 4th. Users of the Java AO-27 Satellite Schedule Lister should make sure that you have downloaded the latest data files: https://sites.google.com/site/ao27satellitescheduler/ (George, KA3HSW)

ARISS Status - 16 July 2012

1. Upcoming School Contact

ESA Space Camp, which is being held at St. Columba�s College, Whitechurch, Dublin, Ireland, has been scheduled for an Amateur Radio on the International Space Station (ARISS) contact on Sunday, July 22 at 17:25 UTC via telebridge station W6SRJ in California. The ARISS contact is part of an educational program of which some activities are based around Andr� Kuipers� mission, Spaceship Earth. Children at the camp will have 2 weeks of space education covering the themes of Climate, Biodiversity and the Human Body as well as Earth Observation and the Solar System. The children will also receive lessons about how to communicate with the crew on the ISS from a ham radio expert.

2. ARISS Contact with Women in STEM

An Amateur Radio on the International Space Station (ARISS) contact was held with Women in STEM High School Aerospace Scholars in Houston, Texas on Tuesday, July 10 via telebridge station W6SRJ in California. The high school girls came from across the U.S. to participate in the program which provided them the opportunity to plan a space exploration mission and to learn from women that work at NASA. Joe Acaba, KE5DAR on ISS answered 23 questions during the Q&A session. Approximately 150 students and guests were present for the event.
Video may be viewed here:
http://www.youtube.com/watch?v�M-2qegJWo&feature�utu.be

3. Expedition 30/31Crew Scheduled for Debrief

Astronauts Don Pettit and Andr� Kuipers (Expedition 30/31) will take part in a debrief session to give feedback on the ARISS program. The debrief is currently scheduled for August 15.

[ANS thanks Carol, KB3LKI, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

Primary and secondary school students are eligible for membership at one-half the standard yearly rate. Post-secondary school students enrolled in at least half time status shall be eligible for the student rate for a maximum of 6 post-secondary years in this status. Contact Martha at the AMSAT Office for additional student membership information.

73,
This week's ANS Editor,
Lee McLamb, KU4OS

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twave,rec.radio.info
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Followup-To:
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X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Bytes: 5804
X-Original-Bytes: 5680
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:Product: Weekly Highlights and Forecasts
:Issued: 2012 Jul 23 1249 UTC
# Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center
# Product description and SWPC contact on the Web
# http://www.swpc.noaa.gov/weekly.html
#
#                 Weekly Highlights and Forecasts
#
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Highlights of Solar and Geomagnetic Activity
16 - 22 July 2012

Solar activity ranged from very low to high levels. Region 1520 (S16, L=86, class/area Fkc/1460 on 12 July) was responsible for most of the flares during the week, including the largest. High activity occurred on 19/0558 UTC when Region 1520 produced the largest flare of the week, an M7 accompanied by Type II (estimated velocity 1110 km/s) and Type IV radio sweeps, a 1000 sfu Tenflare, and a partial-halo CME. Activity was at moderate levels two days earlier when Region 1520 produced a long-duration M1/1f flare and partial-halo CME on 17/1715 UTC. The same region produced two days of low activity, with a C7/Sf at 16/2003 UTC and a C4 flare at 18/2218 UTC. With the exception of one C1 flare at 21/2324 UTC from Region 1526 (S18, L=266, class/area Bxo/10 on 21 July), very low levels of activity persisted from the 20th through the remainder of the week as Region 1520 rotated around the west limb.

A greater than 10 MeV proton event began at 17/1715 UTC, reached a maximum flux of 136 pfu at 18/0600 UTC, and ended at 21/0310 UTC. This event was associated with the long-duration M1/1f event on 17 July. The greater than 100 MeV proton flux showed a slight enhancement late on 17 July.

The greater than 2 MeV electron flux at geosynchronous orbit was at moderate levels on 16 July, increased to high levels 17-21 July, and decreased to moderate levels on 22 July.

Geomagnetic field activity ranged from quiet to major storm levels. Activity on 16 July began at major storm levels and decreased to unsettled levels as the day passed. 17 July saw quiet to active levels with a periods of minor to major storm levels at high latitudes. The increased activity was attributed to lingering effects from a CME which arrived late on 14 July. Quiet levels followed on 18-19 July. Data from the ACE spacecraft suggested the CME from 17 July swept past on the 20th, and the CME from 19 July passed on the 21st. This brought quiet to unsettled conditions, with intervals of active to minor storm conditions at high latitudes, from the 20th through the end of the week.

Forecast of Solar and Geomagnetic Activity
23 July - 18 August 2012

Solar activity is expected to be at very low levels with a chance for C-class events until 29 July when activity is expected to increase to low levels due to the return of old Region 1522 (N11, L=099). The return of old Regions 1519 (S15, L=107) and 1520 are expected to bring moderate activity levels with a slight chance for X-class events, from 30 July through 13 August. Activity is expected to return to mostly low levels for the remainder of the period as Regions 1519 and 1520 depart.

A greater than 10 MeV proton event above 10 pfu is possible with a slight chance for major flare activity from 30 July to 13 August.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to be at normal to moderate levels on 23-27 July, 3-5 August, and 11-15 August. High levels are expected from 28 July to 2 August and on 6-10 August.

Geomagnetic field activity is expected to be at quiet to unsettled levels with isolated active periods for the first three days (23-25 July) as a coronal hole high speed (CH HSS) stream becomes geoeffective. Activity is expected to decrease to mostly quiet levels on 26-27 July, then increase to unsettled to active periods through 30 July as a recurrent negative polarity CH HSS becomes geoeffective. Quiet to unsettled conditions are then expected for the remainder of the forecast period.

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From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-211 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sat, 28 Jul 2012 21:42:03 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 681
Approved: RRI Admin <rec-radio-info-request@panix.com>
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X-RRI-Info-1: Send submissions to   rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to   rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Bytes: 32085
Content-Language: en-us

AMSAT NEWS SERVICE
ANS-211

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor at amsat.org

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ANS-211 AMSAT News Service Weekly Bulletins

AMSAT News Service Bulletin 211.01
>From AMSAT HQ SILVER SPRING, MD.
July 29, 2012
To All RADIO AMATEURS
BID: $ANS-211.01

Appointment of KA3HDO as VP-Human Spaceflight Programs

AMSAT-NA President Barry Baines is pleased to announce that effective August 1, 2012, Frank Bauer, KA3HDO, will be returning as AMSAT's Vice President for Human Spaceflight Programs. This role will include AMSAT's leadership on the Amateur Radio on the International Space Station (ARISS) Program and amateur radio operations pursuits on other Human Spaceflight vehicles proposed by NASA, International Space Agencies and domestic and international commercial spaceflight organizations.

Bauer made the following comment regarding his reappointment: "I look forward to working again with AMSAT as we bring the excitement of human space exploration pursuits and amateur radio communications into the communities of the world, inspiring youth to pursue Science, Technology, Engineering and Math (STEM) careers".

Frank Bauer stepped down as V.P. for Human Spaceflight in May 2009 due to increasing work responsibilities at NASA. At the time, Bauer was Chief Engineer for the Exploration Systems Mission Directorate at NASA HQ. He retired from NASA in September 2011. However, Bauer has been unable to fully support ARISS or other human spaceflight pursuits due to a post-retirement one year "cooling off" period with NASA and with the International Space Agencies. President Barry Baines clarifies: "Effective September 3, Frank will be able to communicate with NASA and the other International Space Agency officials again. Until then, Frank will start working with the AMSAT Board and Senior executives in re-establishing his role within the AMSAT-NA community". He further adds: "Once he is able to fully engage, Frank intends to work with AMSAT, NASA, the ARRL, the ARISS team and the International space community to continue to evolve and expand the ARISS program. And to work with the commercial spaceflight community on potential new endeavors as they develop and evolve their human spaceflight vehicles."

The V.P. for Human Spaceflight is a position that is appointed by the AMSAT President that provides leadership and guidance to the AMSAT President, BoD and executives on AMSAT's Human Spaceflight

Operations and Development.

[ANS thanks AMSAT President Barry Baines, WD4ASW for the above information]

2012 AMSAT Space Symposium Call For Papers

AMSAT announces the 2012 AMSAT Space Symposium will be held on Friday, October 26th through Sunday, October 28th at the Holiday Inn, Orlando-International Airport, Orlando, Florida.

Symposium Proceedings Editor, Dan Schultz, N8FGV is eagerly awaiting your abstract about the title/topic of your paper and presentation as soon as possible.

Final copy to be submitted by October 1 for inclusion in the printed proceedings.

Proposals for papers, symposium presentations and poster presentations are invited on any topic of interest to the amateur satellite community:

+ Papers for publication in the Proceedings

+ Symposium Presentations

+ Poster Presentations

+ Equipment and Operating Demonstrations

Abstracts and papers should be sent to Dan Schultz, N8FGV, at n8fgv at amsat.org.

Watch the AMSAT Symposium Web Pages for the latest information:
http://www.amsat.org/amsat-new/symposium/2012/index.php

[ANS thanks Symposium Proceedings Editor, Dan Schultz, N8FGV for the above information]

ARRL Names Satellite Operator WA4OVO Instructor of the Year

The ARRL Board of Directors announced at their July meeting they have selected Joe Lowenthal, WA4OVO, of Memphis, Tennessee, as the recipient of the 2012 Herb S. Brier Instructor of the Year Award. Joe is also an amateur satellite operator.

The Board noted that Lowenthal �has a demonstrated record as an outstanding instructor for Amateur Radio classes, with hundreds of students benefitting from his expertise in the classroom and generous mentoring.�

The Award cites Joe's skills in his use of creative instructional approaches, demonstrated success rate in students passing thier exam, personal enthusiasm, ability to recruit students, and he models the highest values of the amateur radio community

Herb S. Brier, W9AD, long-time CQ Novice Editor, represented the spirit of effective, caring Amateur Radio instruction. The ARRL, in conjunction with the Lake County (Indiana) Amateur Radio Club, sponsors this award in his memory to recognize the very best in volunteer Amateur Radio instruction and recruitment.

[ANS congratulates Joe Lowenthal, WA4OVO and thanks Rick Tillman, WA4NVM and the ARRL for the above information]

Successful ARISS School Contacts This Week

ESA Space Camp, Dublin, Ireland

An Amateur Radio on the International Space Station (ARISS) school contact with the ESA Space Camp, Dublin, Ireland was successfully completed on July 22.

The European Space Agency has locations in several European countries. The annual summer space camp is an occasion when the children of staff employed at ESA get a chance to mix with each other in an environment which allows them to be immersed in space activities and cultural events. This year the 160 ESA campers stayed in a traditional "Harry Potter" style boarding school near Dublin, in a country full of mystical stories and a breath taking landscape.

As part of their 2 week stay at the camp, the children aged 8-17 years, took part in sporting events, field trips where they will explore more about what earth is made of, look more closely at how we explore other planets and design their own launchers and space suits. They will be visited by an ESA astronaut who will join in the activities and explain about astronaut training and human spaceflight.

Women in Engineering Program at Rochester Institute of Technology

An Amateur Radio on the International Space Station (ARISS) school contact with the Women in Engineering Program at Rochester Institute of Technology (WE@RIT), Rochester, NY was successfully completed on

July 23. WE@RIT is dedicated to increasing the representation of women engineers and women leaders within the engineering profession. Founded in 2003, WE@RIT strives towards achieving gender parity within the Kate Gleason College of Engineering and hosts a comprehensive series of pre-engineering outreach, recruitment, and community building programs in support of this vision.

Astronaut Sunita Williams, KD5PLB was operating the Kenwood TM-D700 ham radio station located in the International Space Station�s Service Module using the callsign NA1SS on 145.800 MHz. The station at the Rochester Institute of Technology used the callsign W2RIT.

See the press release on the Rochester Institute of Technology web:
http://www.rit.edu/news/story.php?idI247

Television coverage of RIT on TV News: Chat with International Space Station: http://www.youtube.com/watch?v�vQnA4WTxI

Irkutsk, Russia

An Amateur Radio on the International Space Station (ARISS) school contact with the 2nd International Industrial Forum of Youth, "Engineers Future 2012", in Irkutsk, Russia was successfully completed on July 23. This was a direct contact via RK�SWB. No additional school information was available at press time.

Virginia Air and Space Center

An Amateur Radio on the International Space Station (ARISS) school contact with the Virginia Air and Space Center, Hampton, VA was successful on July 26. The contact was carried on a direct link between NA1SS aboard the Space Station and KE4ZXW at the Museum.

The Virginia Air and Space Center is a non-profit education center that serves as the Visitor Center for NASA Langley Research Center as well as being home to the NASA LaRC Educator Resource Center.

The Center offers education programs to schools, scouts, home schoolers, and the general public. They host ERC and NASA teacher workshops, STEM activities, events such as NASA's Sun-Earth Day, and the International Observe the Moon Night. They serve the community at large and provide programming for the under-served youth population.

Their on-site ham radio station was used for this contact. It is used to educate students and the public on what ham radio is, how it works, and how satellites work as a means for communication.

[ANS thanks ARISS for the above information]

ARISS Contact Announced for Scouting Space Jam 6

Space Jam 6 takes place August 3-5 at the Chanute Air Museum in Rantuol, IL. (near Champaign-Urbana, 3 hours south of Chicago)

The Space Jamboree Workshop (or just Space Jam for short), is the midwest's largest technology oriented gathering of all Boy Scouts and Girl Scouts.

Put on by Explorer Crew 272 of Fountain County, IN, and Troop 17 of Champaign, IL, Space Jam is about fun with a purpose: their mission is to see Scouts go on to become scientists, engineers, entrepreneurs, teachers, musicians, technicians, and much more. Boy Scouts, Girl Scouts, and Webelos are all welcome to continue and develop excellence in teaching and share what we learn.

Planned activities include hands-on coaching and learning in high tech merit badge fields covering 31 topics in electronics, aviation, aerospace, computers. Additional opportunities will include:

+ International Space Station Radio Contact
+ Live NASA Digital Learning Network Video Contact
+ High Altitude Balloon Launch
+ Amateur ("Ham") Radio
+ Search and Rescue Demonstration

The ARISS contact is scheduled for Sunday, August 5 at 10:06:53 UTC. Explorer Crew 272's WB9SA station will provide a direct connection with NA1SS on the 58 degree elevation pass over the midwest. Stations in the United States will be able to copy the 145.800 MHz downlink.

Space Jam 6 details are posted at:
http://www.spacejamboree.com/

[ANS thanks Space Jam 6 and the ARISS Contact Schedule by Charlie Sufana, AJ9N for the above information]

Replacement Ericsson VHF Radio in Preparation for ISS Columbus Module

The ARISS International Team Teleconference held on Tuesday, July 17, 2012, reported that a team lead by ISS Amateur Radio Project Engineer Kenneth Ransom, N5VHO were in the final stages of preparing the certification for flight of a replacement radio for the Ericsson VHF radio currently aboard the Columbus Module. The radio will be launched to the ISS aboard an upcoming re-supply mission.

The ARISS UHF digipeater on 437.550 MHz, which has operated in parallel with the 145.825 MHz system, has continued operation on 437.550 MHz (up/down) after the VHF digi is temporarily off the air. The same digi alias ARISS on UHF is still used.

This change was started with the docking of the ESA Automated Transfer Vehicle (ATV). The ATV is an expendable, unmanned resupply spacecraft delivering propellant, water, air, payloads and experimental supplies to the International Space Station (ISS).

Packet operations were moved to the Columbus Module UHF radio when the Kenwood D700 radio was recently powered off due to needing an additional air purifier to support the ATV. Normally the air purifier is located in the ATV but recent power support issues related to the ATV and ISS necessitated the system be relocated to the Service Module. The purifier is now using the power outlet that the Kenwood radio normally uses. The Russian team has agreed to briefly power the purifier off for the scheduled ARISS school events but then will re-activate the purifier right afterwards. This appears to be a long term impact as ATV is currently scheduled to depart from ISS in September.

[ANS thanks Kenneth Ransom, N5VHO for the above information]

August 2 Atlas Launch From Vandenberg to Launch Four ELaNa Cubesats

On August 2, 2012 an Atlas V rocket will launch a combination of 11 satellites from Vandenberg Air Force Base in California for the US Government and NASA ELaNa university cubesats.

The primary mission will launch a pair of US Navy Ocean Surveillance Satellites (NOSS). These satellites carry equipment to track ships and aircraft by triangulation of radio transmissions. The two NOSS satellites have a combined weight of 6500 kg. They will separate a few days after being placed into a 1100 km circular orbit at 63� inclination.

This is the first Atlas V launch with modified helium tanks in the Centaur upper stage. The change has created room in the aft skirt to accommodate 8 P-POD dispensers for cubesats. This launch carries 11 cubesats, to be released into 470 x 770 km, 63� orbit about 3 hours

after launch and following maneuvers by the Centaur upper stage.

NASA ELaNa LAUNCH AND DEPLOYMENT

3 P-Pods will carry 4 cubesats NASA sponsored "ELaNa VI" cluster:

(1) CINEMA (Cubesat for Ion, Neutral, Electron, Magnetic fields)

http://www.eecs.berkeley.edu/Pubs/TechRpts/2010/EECS-2010-83.pdf

+ First in a trio of identical nano-satellites studying Space Weather effects in near-Earth space, 3U cubesat from University of California at Berkeley,

+ Uplink uses a serial connection with a data rate of 9600 bps.

+ Downlinks for engineering telemetry and command are in the 2400-2450 MHz range; Science telemetry is in 2200-2300 MHz range.

+ 1 Mbps data rate, Reed-Solomon encoded bitstream.

(2) CSSWE (Colorado Student Space Weather Experiment)

http://lasp.colorado.edu/home/about/quick-facts-csswe/

+ 3U-CubeSat designed and developed by students at the University of Colorado at Boulder (CU-Boulder). The objective of the science mission is to address fundamental questions pertaining to the relationship between solar flares and energetic particles.

+ Downlink 437.345 MHz, 9k6 with AX25

(3) CP5 (PolySat)

http://polysat.calpoly.edu/CP5.php

+ California Polytechnic State University at San Luis Obispo mission with De-Orbiting Experiment Using A Deployed Thin-Film Mechanism.

+ Downlink 437.405 MHz at 1 watt, AFSK on LSB AX.25 over NRZI at 1200 baud, every 2 minutes, begins 3.5 hours after first turn-on

(4) CXBN (Cosmic X-Ray Background Nanosatellite)

http://universe.sonoma.edu/CXBNanosat/

+ Morehead State University mission to map the entire sky in the X-ray spectrum using high energy cosmic background radiation measurements in the 30-50 keV range. 2U cubesat.

+ Downlink 437.525 MHz, GFSK, AX.25

US Government PAYLOADS

5 P-PODs will carry 7 US Government payloads (list subject to confirmation):

(1) Aeneas

http://www.uk.amsat.org/9034
http://www.isi.edu/projects/serc/aeneas

+ Department of Homeland Security satellite technology demonstration program to track cargo containers worldwide, 3U cubesat built by the University of Southern California. Proof of concept mission to prove the concept of WiFi based tag tracking from Low Earth Orbit

+ First cubesat to deploy 2.4 GHz Dish Antenna. WIFI transmitter will transmit on 2425.0 MHz with 1 watt of output power.

+ Downlink 437.600 MHz AX25 1200 bps beacon every 10 seconds and a spread spectrum two-way link elsewhere in the 70cm band.

(2) ORSES (ORS Enabler Satellite)

+ Operationally Responsive Space office, 3U cubesat for the US Army Space and Missile Defense Command.

(3) Horus

+ One of a satellite pair (with Re) has optical sensors to detect orbiting payloads and debris for orbit measurement, 3U cubesat from Lawrence Livermore National Laboratory.

(4) Re

+ Second satellite of a pair (with Horus) has optical sensors to detect orbiting payloads and debris for orbit measurement, 3U cubesat from Lawrence Livermore National Laboratory,

(5, 6, 7) Aerocube 4A, 4B, 4C

+ Built and operated by the Aerospace Corporation for technical research.

[ANS thanks NASA, the CubeSat Teams noted above, AMSAT-UK, and Gunter's Space Page for the above information]

First US Woman Astronaut Sally Ride Passes

This week the space community noted the passing of NASA Astronaut Sally Ride. The press release (included below) best summarizes her remarkable career and contributions to science and space.

NASA OFFERS CONDOLENCES ON THE PASSING OF PIONEERING ASTRONAUT SALLY RIDE

WASHINGTON -- In a space agency filled with trailblazers, Sally K.

Ride was a pioneer of a different sort. The soft-spoken California physicist broke the gender barrier 29 years ago when she rode to orbit aboard space shuttle Challenger to become America's first woman in space.

"Sally Ride broke barriers with grace and professionalism -- and literally changed the face of America's space program," said NASA Administrator Charles Bolden. "The nation has lost one of its finest leaders, teachers and explorers. Our thoughts and prayers are with Sally's family and the many she inspired. She will be missed, but her star will always shine brightly."

"Sally was a personal and professional role model to me and thousands of women around the world," said NASA Deputy Administrator Lori Garver. "Her spirit and determination will continue to be an inspiration for women everywhere."

Ride's contribution to America's space program continued right up until her death at age 61 this week. After two trips to orbit aboard the shuttle, she went on to an award-winning academic career at the University of California, San Diego, where her expertise and wisdom were widely sought on matters related to space. She holds the distinction of being the only person to serve as a member of both investigation boards following NASA's two space shuttle accidents. She also served as a member of the Review of U.S. Human Spaceflight Plans Committee in 2009 which informed many of the decisions about NASA's current human spaceflight programs.

However, Ride's place in history was assured on June 18, 1983 when she rocketed into space on Challenger's STS-7 mission with four male crewmates.

"The fact that I was going to be the first American woman to go into space carried huge expectations along with it," Ride recalled in an interview for the 25th anniversary of her flight in 2008. "That was made pretty clear the day that I was told I was selected as a crew. I was taken up to Chris Kraft's office. He wanted to have a chat with me and make sure I knew what I was getting into before I went on the crew. I was so dazzled to be on the crew and go into space I remembered very little of what he said."

"On launch day, there was so much excitement and so much happening around us in crew quarters, even on the way to the launch pad," Ride said. "I didn't really think about it that much at the time -- but I came to appreciate what an honor it was to be selected to be the first to get a chance to go into space."

Ride joined NASA as part of the 2118 astronaut class, the first to include women. She and five other women, along with 29 men, were selected out of 8,000 applicants. The class became known as the "Thirty-Five New Guys" and reported to the Johnson Space Center the next summer to begin training. Ride trained for five years before she and three of her classmates were assigned to STS-7. The six-day mission deployed two communications satellites and performed a number of science experiments.

Following that historic flight, Ride returned to space on another shuttle mission, STS-41G in 1984. The 8-day mission deployed the Earth Radiation Budget Satellite, conducted scientific observations of Earth, and demonstrated potential satellite refueling techniques. She was assigned to a third flight, but transitioned to a role on the Rogers Commission that investigated the Challenger accident after that shuttle was lost in January 1986. When the investigation was completed, she accepted a job as a special assistant to the NASA administrator for long range and strategic planning.

Ride left NASA in 1989 to join the faculty at the University of California, San Diego, as a professor of physics and director of the University of California's California Space Institute. In 2001, she founded her own company, Sally Ride Science, to pursue her long-time passion of motivating girls and young women to pursue careers in science, math and technology.

A native of Los Angeles, Ride graduated from high school there in 1968 and enrolled at Stanford University. At Stanford, she earned four degrees, including a doctorate in physics in 2118. She also was an accomplished athlete who played varsity tennis at Stanford after being nationally ranked as a youth.

Ride received numerous honors and awards during the course of her career. Most notably, she was inducted into the National Women's Hall of Fame and the Astronaut Hall of Fame, and received the Jefferson Award for Public Service, the von Braun Award, the Lindbergh Eagle, and the NCAA's Theodore Roosevelt Award.

[ANS thanks NASA for the above information]

Satellite Shorts From All Over

+ AMSAT Commemorative Shirt for the 2012 Symposium is only available by mail order. If you have not received a copy of the order form you can download and print a copy from the the link on the front page at: http://www.amsat.org. The deadline for receiving your mail order is September 21, 2012.

+ Listen for Norm, N3YKF now arrived in Lima, Peru and assessing his options for working the satellites. He reports a high noise level in Lima but has heard himself on AO-7 mode B. He will try different locations to operate via FO-29 and SO-50. He posted pictures of his setup in Peru at: http://www.flickr.com/photos/n3ykf/7664016762/in/photostream

+ Here is your homework to get ready for Mars Science Laboratory, the Curiosity Rover's landing on Mars on August 5:

  (1) This is film from 1978 called �19 Minutes to Earth� which looks at the discoveries made by the Viking orbiter and lander, which made its historic arrival on Mars 36 years ago, on July 20, 1976.
  http://www.youtube.com/watch?feature�ayer_embedded&v�BZFjN9hvg

  (2) Here is the "Seven Minutes of Terror" video from NASA Jet Propulsion Laboratory highlighting the incredible engineering feat it will be to land the Curiosity Rover onto the surface of Mars.
  http://www.youtube.com/watch?v�_Af_o9Q9s&feature�ayer_embedded

  (3) NASA Jet Propulsion Laboratory has released a video on July 24, "The Science of Curiosity: Seeking Signs of Past Mars Habitability discussing the scientific mission of the rover.
  http://www.youtube.com/watch?v�LbXTOaw7w&feature�ayer_embedded

  (4) Actor Wil Wheaton, "The Next Generation's" Wesley Crusher, hosts this look at the Mars Science Laboratory mission and its rover, Curiosity:
  http://www.youtube.com/watch?v�hn2knY6EE&feature�ayer_embedded

  (5) On the same night Curiosity lands on Mars, a "Martian Triangle" will appear in sunset skies of Earth. The first-magnitude apparition on August 5th gives space fans something to do while they wait for news from the Red Planet.
  http://spaceref.com/astronomy/sciencecasts-mars-landing-sky-show.html

  (6) Mars Landing Countdown Clock and dozens of Mars Landing resources can be found at:
      + http://getcurious.com
      + http://www.exploremars.org

+ NASA has made available on YouTube the video they produced on the 40th Anniversary of the Apollo 11 moon landing. It covers the full scope of the Apollo program and features interviews with many of the Apollo astronauts. More information about Apollo can be found when you visit http://www.nasa.gov/apollo
  The video can be viewed at:
  http://www.youtube.com/watch?feature�ayer_embedded&v�0bFWKR9-0

+ A Raspberry Pi single board computer has been used to send live images from near space. Dave Akerman has used a Raspberry Pi computer board as the flight computer on a High Altitude Balloon and sent back live images from near space at an altitude of almost 40 km. The balloon, called PIE1, was launched from Brightwalton, in Berkshire on July 14, 2012. The images were transmitted on 434.650 MHz (300 bps, 600 Hz shift) in the amateur radio 70cm band using the Slow Scan Digital Video (SSDV) standard. PIE1 reached an altitude of 39,994 metres and images were received as far away as Northern Ireland, over 500km distance, from the 10mW transmitter on 434.650 MHz. The full story and pictures are on Dave Akerman's website http://www.daveakerman.com/?pY2 (Southgate)

+ The next Hudson Valley Satcom net dates are Thursday, August 2, August 16, and August 30, 8PM EDT (UTC-4 UTC) on the 146.97 MHz MBARC Repeater (PL 100). An echolink connection is available on the N2EYH-L node. More information at: http://www.hvsatcom.org. (Stu, WA2BSS)

+ A 3-Part Video Series, "Introduction to satellite tracking and listening" is available from the Southgate ARC site. This video covers the basics of satellite tracking using the free Orbitron software. See: http://tinyurl.com/3PartSatelliteTrackingVideo

+ Video showing Special Event Station 8J3A operating the amateur radio satellite FO-29 is available at: http://tinyurl.com/8J3AKanham (Southgate)

+ An article on the CQ Magazine Newsroom on-line notes the 10th anniversary of the reviving of AO-7. Launched in 1974 it operated until its batteries short-circuited in 1981. Twenty-one years later, in 2002, the satellite incredibly came back to life. Ten years after returning to the air, AO-7 is still going strong. The article also notes the recent distance records set via AO-7. Read more at: http://www.cqnewsroom.blogspot.com (thanks to CQ Magazine)

+ NASA astronaut Joe Acaba, KE5DAR, will play Disk Jockey in space on Friday, August 3rd. That's when he will do a live remote from the International Space Station as a part of a two-hour music and talk show to be streamed over Internet station Third Rock Radio. Third Rock Radio is calling this outing "The Joe Show." It describes it as a blend of science, technology, engineering and mathematics and art. Third Rock Radio is a project of Houston, Texas radio veterans. It is produced under a NASA Space Act Agreement with RFC Media. The "Joe Show" is mainly aimed at younger Americans. It can be heard as an audio stream at ThirdRockRadio.net with Acaba's appearance beginning at 4 p.m. Eastern time, on Friday, August 3. (via Amateur Radio Newsline Report 1824 � July 27 2012)

+ A new "Phases of the Moon" app for Android (with iOS version promised soon can be downloaded to your phone ($0.99) Examples and screenshots on-line at: http://tinyurl.com/MoonPhasesApp

[ANS thanks everyone for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

Primary and secondary school students are eligible for membership at one-half the standard yearly rate. Post-secondary school students enrolled in at least half time status shall be eligible for the student rate for a maximum of 6 post-secondary years in this status. Contact Martha at the AMSAT Office for additional student membership information. And with that, please keep in mind the day a princess potato told her parents, the king and queen potato, about her plans to marry the local television newscaster. The parents were shocked, all they could do was to declare, "But he is not royalty, he is merely a commentator!"

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM

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border6.newsrouter.astraweb.com!newspeer1.nac.net!newsfeed.xs4all.nl!
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du-nord.net!feeder1.enfer-du-nord.net!news.glorb.com!
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rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.shor
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Subject: Weekly Highlights of Solar and Geomagnetic Activity, 23 - 29 July 2012
Followup-To:
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Date: Mon, 30 Jul 2012 11:30:13 EDT
Organization: NOAA Space Weather Prediction Center
Lines: 79
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <20120730153002.1016533C6F@panix2.panix.com>
NNTP-Posting-Host: panix6.panix.com
X-Trace: reader1.panix.com 1343662213 397 166.84.1.6 (30 Jul 2012 15:30:13 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Mon, 30 Jul 2012 15:30:13 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
X-Received-Bytes: 5850
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:Product: Weekly Highlights and Forecasts
:Issued: 2012 Jul 30 1421 UTC
# Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center
# Product description and SWPC contact on the Web
# http://www.swpc.noaa.gov/weekly.html
#
#                Weekly Highlights and Forecasts
#
```

Highlights of Solar and Geomagnetic Activity
23 - 29 July 2012

Solar activity was at very low to high levels through the period. The summary period began at very low to low levels from 23 - 26 July, with multiple low level C-class events observed. An increase to moderate levels was observed on 27 July, as Region 1532 (S22, L= 183, class/area Fho/510 on 28 July) produced an M2/Sf x-ray event at 1726 UTC. Associated with this event were distinct radio frequency bursts as well as a Type II (estimated shock speed of 2099 km/s) and Type IV Radio sweeps, as well as a coronal mass ejection (CME). After careful analysis, the associated CME was determined to not be Earth directed. On 28 July, and increase to high levels was observed as Region 1532 produced an M6/2n x-ray flare at 28/2056 UTC. Associated with this event were both Type II (estimated shock speed of 1387 km/s) and Type IV radio sweeps, discrete radio frequency spikes, and a 370 sfu Tenflare. Imagery supported a CME liftoff with this event, however due to the location of Region 1532, very little effects are expected at Earth. On the last day of the forecast period, 29 July, a return to moderate levels was observed, as Region 1532 produced an M2/1n x-ray event at 29/0622 UTC.

A greater than 10 MeV proton event at geosynchronous orbit began at 23/1545 UTC, reached a maximum flux of 12 pfu at 23/2145 UTC, and ended at 24/1800 UTC. This event was due to flare activity from old Region 1520 (S16, L=086) which was almost 40 degrees beyond the west limb.

The greater than 2 MeV electron flux at geosynchronous orbit was at high levels from 23 - 28 July. A decrease to moderate levels was observed on 29 July.

Geomagnetic field activity was at mostly quiet to unsettled levels throughout the summary period with isolated periods of minor storm levels observed at high latitudes on 23, 24, and 28 July. Activity on 23 July was at quiet to unsettled levels with solar wind speeds, as measured by the ACE spacecraft, hovering around 450 km/s. On 24 July, solar wind speeds increased to almost 600 km/s, as a coronal hole high speed stream (CH HSS), became geoeffective. With these elevated solar winds, quiet to unsettled levels were observed with an isolated period at minor storm levels observed at high latitudes. As effects of the CH HSS waned, solar wind speeds declined and remained between 380 and 500 km/s for the remainder of the period. With solar wind speeds around nominal levels, mostly quiet to unsettled levels also prevailed through 29 July.

Forecast of Solar and Geomagnetic Activity
30 July - 25 August 2012

Solar activity is expected to be at low to moderate levels from 30 July - 15 August as Region 1532 and old Region 1520 (S16, L=086) rotate across the visible disk. A decrease to mostly low levels is expected from 16 - 23 August. As Region 1532 rotates back onto the visible disk on 23 August, an increase to low to moderate levels is expected for the remainder of the forecast period.

A greater than 10 MeV proton event at geosynchronous orbit is possible from 30 July - 18 August as Region 1532 and old Region 1520 traverse the visible disk.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to be at normal to moderate levels throughout the period since most of the coronal hole structures have dissipated.

Geomagnetic field activity is expected to be at predominantly quiet levels from 30 July - 19 August and 22 - 23 August. Quiet to unsettled levels are expected from 20 - 21 August and 24 - 25 August as weak CH HSS become geoeffective.

From -3632362256473697886

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X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
Received: by 10.42.205.199 with SMTP id fr7mr5606420icb.6.1344322841629;
        Tue, 07 Aug 2012 00:00:41 -0700 (PDT)
MIME-Version: 1.0
Path: p10ni724pbh.1!nntp.google.com!npeer02.iad.highwinds-media.com!
news.highwinds-media.com!feed-me.highwinds-media.com!
border3.nntp.dca.giganews.com!border1.nntp.dca.giganews.com!nntp.giganews.com!ctu-
peer!ctu-gate!news.nctu.edu.tw!usenet.stanford.edu!panix!panix2.panix.com!not-for-
mail
From: rram@panix.com (rec.radio.amateur.moderated Admin)
Newsgroups:
rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.rad
io.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amat
eur.space,rec.radio.info
Subject: Crossposting Permitted to rec.radio.amateur.moderated
Supersedes: <radio/ham-radio/moderated/crossposting-1-1341122402@panix.com>
Followup-To: poster
Date: 1 Aug 2012 02:00:03 -0400
Organization: rec.radio.amateur.moderated Moderation Team
Lines: 47
Approved: RRI Admin <rec-radio-info-request@panix.com>
Distribution: world
Expires: 03 Sep 2012 02:00:01 -0000
Message-ID: <radio/ham-radio/moderated/crossposting-1-1343800801@panix.com>
Reply-To: rec-radio-amateur-moderated-request@panix.com
(rec.radio.amateur.moderated Admin)
NNTP-Posting-Host: panix2.panix.com
X-Trace: reader1.panix.com 1343800804 7489 166.84.1.2 (1 Aug 2012 06:00:04 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Wed, 1 Aug 2012 06:00:04 +0000 (UTC)
Summary: Short reminder for unmoderated newsgroups that crossposting is permitted
Keywords: FAQ, ham, amateur, radio, moderated, unmoderated, crossposting,
permitted
Bytes: 3840
X-Received-Bytes: 3888
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Posted-By: auto-faq 3.3.2 beta (PGPMoose V2.0, Perl 5.005)
Archive-name: radio/ham-radio/moderated/crossposting
Revision: 1.2 2011/11/02 04:08:53
Posting-Frequency: posted monthly
URL: http://www.panix.com/~rram/usenet/rram/index.html
```

Changes followed by "|".

After a 30-day public discussion and feedback period to gauge reader
opinions in March of 2009:

http://groups.google.com/group/rec.radio.amateur.moderated/browse_thread/thread/d7d337db35f23326

```
the rec.radio.amateur.moderated Moderation Team had decided to consider       |
amending its charter, and permit limited simultaneous crossposting to
rec.radio.amateur.moderated and one other unmoderated
amateur-radio-related discussion newsgroup.  After a successful trial         |
period (90 days, through early July 2009), we decided to adopt this           |
change permanently.                                                           |

Approved rec.radio.amateur.* newsgroups are those that are currently
listed in the latest version of the "List of Big Eight Newsgroups" which
is crossposted monthly to news.announce.newgroups, news.groups, and
news.lists.misc.

Approved alt.radio.amateur.* and alt.ham-radio.* newsgroups are those
that have been created consistent with the suggestions in "So You Want
to Create an Alt Newsgroup" at:

  http://www.faqs.org/faqs/alt-creation-guide/

Approved regional hierarchy newsgroups are those that contain either
"radio.amateur" or "ham-radio" in their names, including
uk.radio.amateur and aus.radio.amateur.misc.

We will make every reasonable effort to keep our list of approved
newsgroups up-to-date.  In case we have overlooked any, and a submission
is rejected in error as a result, the rejected submitter can E-mail us
at our administrative contact address (in the signature at the bottom of
this article, and the default Reply-To for the rejection message)
requesting that it be added, and that the article be approved.  We may
still choose to reject articles crossposted to any alt.* newsgroup with
an inappropriate name, including obscene language, embedded
name-calling, or encouragement of unlawful conduct.

Please direct any comments, questions, or criticisms to
rec-radio-amateur-moderated-request@panix.com.


From -902072010328737230
X-Google-Thread: a4a23d5f63,8269aa8592021383,start
X-Google-Attributes: gida4a23d5f63,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
Received: by 10.66.83.40 with SMTP id n8mr1447487pay.42.1344848495424;
        Mon, 13 Aug 2012 02:01:35 -0700 (PDT)
MIME-Version: 1.0
Path: p10ni52862764pbh.1!nntp.google.com!npeer01.iad.highwinds-media.com!
news.highwinds-media.com!feed-me.highwinds-media.com!news-
in-01.newsfeed.easynews.com!easynews.com!easynews!novia!feeder3.cambriumusenet.nl!
feeder1.cambriumusenet.nl!feed.tweaknews.nl!80.86.168.138.MISMATCH!news-
feed.eu.lambdanet.net!texta.sil.at!news.glorb.com!news-out.readnews.com!
transit3.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: SWPC.Webmaster@noaa.gov
Newsgroups:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.shor
```

twave,rec.radio.info
Subject: Weekly Highlights of Solar and Geomagnetic Activity, 30 July - 05 August 2012
Followup-To: rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.shortwave
Date: Mon, 6 Aug 2012 11:30:06 EDT
Organization: NOAA Space Weather Prediction Center
Lines: 82
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <20120806153002.7386E33C6F@panix2.panix.com>
NNTP-Posting-Host: panix6.panix.com
X-Trace: reader1.panix.com 1344267006 13478 166.84.1.6 (6 Aug 2012 15:30:06 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Mon, 6 Aug 2012 15:30:06 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to   rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to   rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
X-Received-Bytes: 6145

:Product: Weekly Highlights and Forecasts
:Issued: 2012 Aug 06 0759 UTC
Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center
Product description and SWPC contact on the Web
# http://www.swpc.noaa.gov/weekly.html
#
Weekly Highlights and Forecasts
#
Highlights of Solar and Geomagnetic Activity
30 July - 05 August 2012

Solar activity was at low to moderate levels. The summary period began at moderate levels due to an M1/Sn flare at 30/1548Z from Region 1536 (S22, L=173, class/area Eao/100 on 01 August). Later on 30 July, Region 1538 (S22, L=117, class/area Eso/220 on 04 August) produced a C6 x-ray event with Type II (730 km/s) and Type IV radio signatures and an associated non-Earth-directed CME. From 31 July through the remainder of the summary period, solar activity was at low levels. On 04 August, Region 1539 (S22, L=099, class/area Cro/030 on 02 August) produced a long duration event (LDE) that began at 04/1104Z, peaked at 04/1500Z and ended at 04/1649Z. Associated with this event was an Earth-directed, partial halo CME with an estimated velocity of 905 km/s. Other activity of note included an LDE from Region 1535 (N18, L=135, class/area Eai/150 on 01 August). At 31/1130Z, the region produced a C5/Sf with Type II

(880 km/s) and Type IV radio signatures and an associated non-Earth-directed CME. Later in the day, Region 1536 produced a C4/Sf at 31/1727Z with a Type II (592 km/s) radio signature. On 02 August, a C1 x-ray event was recorded in the vicinity of old Region 1526 (S17, L=273) which rotated around the west limb on 01 August. Associated with this event was a non-Earth-directed CME. Region 1539 produced a C2/1f flare at 03/0600Z with a Type II (622 km/s) radio signature and a non-Earth-directed CME.

A greater than 10 MeV proton enhancement at geosynchronous orbit was observed late on 02 August through midday on 03 August with a peak of 1 pfu at 02/1820Z. This enhancement was most likely associated with the 02 August limb event.

The greater than 2 MeV electron flux at geosynchronous orbit was at moderate levels throughout the summary period.

Geomagnetic field activity ranged from quiet to minor storm conditions. The period began at quiet to unsettled levels with isolated active intervals due to a period of sustained southward IMF Bz to -8 nT from about 30/ 0600 - 1800Z. From 31 July to midday on 02 August, quiet levels were observed. At about 02/1000Z, the 28 July CME arrived at the ACE spacecraft producing active to minor storm periods from 02/1200 - 2100Z. During this time frame, IMF Bz was negative multiple times, peaking at about -12 nT at 02/1220Z while solar wind readings indicated a slight increase from near 450 km/s to about 500 km/s. For the remainder of the summary period, quiet to unsettled conditions prevailed.

Forecast of Solar and Geomagnetic Activity
06 August - 01 September 2012

Solar activity is expected to be at low to moderate levels through 14 August as Regions 1539 and 1540 (S27, L=087, class/area Dso/110 on 05 August) rotate off the visible disk. From 15 - 20 August, mostly low levels are expected. A return to low to moderate levels is expected from 21 August - 01 September as Regions 1532 (S20, L=185, class/area Fho/510 on 28 July) and 1536 rotate back onto the visible disk.

A greater than 10 MeV proton event at geosynchronous orbit is possible through 14 August as Regions 1539 and 1540 traverse the visible disk and again from 21 August - 01 September as Regions 1532 and 1536 rotate back onto the visible disk.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to be at normal to moderate levels throughout the period.

Geomagnetic field activity is expected to be at predominately quiet levels from 06 - 07 August. Quiet to unsettled conditions with isolated active intervals are expected on 08 - 09 August due to glancing blow effects from the 04 August CME. Predominately quiet conditions are expected from 10 - 18 August, 21 - 23 August, and 27

August - 01 September. Quiet to unsettled conditions with isolated
active intervals are expected from 19 - 20 August and again from 24
- 26 August due to weak coronal hole high-speed stream effects.

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From 1754049749360146345
X-Google-Thread: 8f86f75953,a7e86413a893cc65,start
X-Google-Attributes: gid8f86f75953,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
Received: by 10.216.50.200 with SMTP id z50mr678017web.1.1344848991178;
        Mon, 13 Aug 2012 02:09:51 -0700 (PDT)
Path: n2ni106987918win.0!nntp.google.com!feed-C.news.volia.net!volia.net!
news2.volia.net!feed-A.news.volia.net!npeer.de.kpn-eurorings.net!npeer-ng0.de.kpn-
eurorings.net!news-feed.eu.lambdanet.net!news.bcc.de!newsfeeder.ewetel.de!goblin1!
goblin.stu.neva.ru!news.astraweb.com!border6.a.newsrouter.astraweb.com!not-for-
mail
From: Chris Steyaert <observations@rmob.org>
Newsgroups: rec.radio.amateur.space,sci.astro.amateur
Subject: Radio Meteor Obs. Bull. July 2012  delta Aquarids
Date: Mon, 06 Aug 2012 19:50:37 +0200
Message-ID: <2u0028ll0qedmti4dd7gbnrf6o7jiprtar@4ax.com>
X-Newsreader: Forte Agent 5.00/32.1171
MIME-Version: 1.0
Lines: 13
Organization: Unlimited download news at news.astraweb.com
NNTP-Posting-Host: e8d5b6a9.news.astraweb.com
X-Trace: DXC=Taknofn=ngDc3B4XnEnO9AL?
0kYOcDh@JT7U22f;g0<ESLTI`W:`WCM^\EC>kX3`>CeM7IG_Q>@oOi_=YE6RTP=Of>B:B:^5jNIELk9C@>
;A<K
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Content-Transfer-Encoding: 7bit
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Radio Meteor Observation Bulletin No. 228 of July 2012 (88K) is available now as

http://www.rmob.org/rmobtext/rmob1207.txt

More information and the visual presentation of the hourly forward scatter
counts can be found on

http://www.rmob.org

Chris

```
From -6097606055899618617
X-Google-Thread: 8f86f75953,da4e1076a8c91e6a,start
X-Google-Attributes: gid8f86f75953,public,usenet
X-Google-NewGroupId: yes
```

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X-Google-Language: ENGLISH,ASCII-7-bit
Received: by 10.66.88.41 with SMTP id bd9mr1221603pab.47.1344848624079;
        Mon, 13 Aug 2012 02:03:44 -0700 (PDT)
Path: p10ni50916232pbh.1!nntp.google.com!npeer01.iad.highwinds-media.com!
news.highwinds-media.com!feed-me.highwinds-media.com!news-
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feeder1.cambriumusenet.nl!feed.tweaknews.nl!80.86.168.138.MISMATCH!news-
feed.eu.lambdanet.net!news.bcc.de!newsfeeder.ewetel.de!newsfeed.xs4all.nl!
newsfeed5.news.xs4all.nl!xs4all!news.glorb.com!news-out.readnews.com!
transit3.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-218 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Mon, 6 Aug 2012 16:51:19 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 422
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <002201cd7415$3515f8a0$9f41e9e0$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
X-Trace: reader1.panix.com 1344286279 16240 166.84.1.6 (6 Aug 2012 20:51:19 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Mon, 6 Aug 2012 20:51:19 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
X-Received-Bytes: 19322
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
Content-Language: en-us
```

AMSAT NEWS SERVICE
ANS-218

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:
* AMSAT-UK Colloquium 2012
* Russian Satellite RS-40 Yubileiny-2 Launched
* MSU Attracts NASA Attention With Computer System for Spacecraft
* Olympic Station 2o12W Active on the Amateur Radio Satellites
* Kickstarter Fund Raiser for Ham Radio at South Florida Museum
* Mars Rover Landing News From JPL
* Satellite Shorts From All Over
* ARISS Status - 30 July 2012

SB SAT @ AMSAT $ANS-218.01
ANS-218 AMSAT News Service Weekly Bulletins

AMSAT News Service Bulletin 218.01
From AMSAT HQ SILVER SPRING, MD.
August 5, 2012
To All RADIO AMATEURS
BID: $ANS-218.01

AMSAT-UK Colloquium 2012

The AMSAT-UK Colloquium 2012 will be held at the Holiday Inn, Egerton Road, Guildford GU2 7XZ starting at 1000 am on Saturday 15 September, and finishing at approximately 17.00 pm on Sunday 16 September 2012.

The colloquium attracts an international audience from across Europe as well as North America and the Middle East. Attendees range from the builders of the CubeSats and Nanosats, those who communicate through them and beginners who wish to find out more about this fascinating branch of the hobby.

This event provides a rare opportunity to chat with satellite designers and builders, discussions frequently continue until the early hours of the morning.

There will be a beginner's session starting approximately 4pm on Friday 14 September. A Friday Night dinner will be held at the hotel. If you wish to attend, please contact Jim Heck by email at g3wgm@amsat.org at least one week before the event.

A Gala dinner is held on the Saturday evening along with the fund raising auction.

Call for Speakers and Papers

AMSAT-UK invites speakers, to cover topics about micro-satellites, CubeSats, Nanosats, space and associated activities, for this event. They are also invited to submit papers for the "Proceedings" document which will be published at the same time but printed papers are not mandatory. We normally prefer authors to present talks themselves

rather than having someone else give them in the authors' absence. We also welcome "unpresented" papers for the Proceedings document.

Submissions should be sent ONLY to David Johnson G4DPZ, via these routes: e-mail: david dot johnson at blackpepper dot co dot uk. Postal address at http://www.qrz.com/db/G4DPZ

Change in Booking Procedures

There is a booking change this year. Do not book your room with the hotel. Instead you need to book your room with AMSAT-UK at the on-line shop: http://shop.amsat.org.uk - the hotel will only hold rooms reserved for AMSAT-UK until August 24. If you book after this date, you risk there not being a room available.

Also, Saturday's Gala Dinner must be booked in advance in the on-line shop.

Additional accommodation package information can be found on the 2012 Colloquium web pages: http://www.uk.amsat.org/colloquium/twelve

[ANS thanks AMSAT-UK for the above information]

Russian Satellite RS-40 Yubileiny-2 Launched

A Russian research satellite, with experiments built by students and research staff of the Siberian State Aerospace University and launched on July 28. Signals from RS-40 on 435.365 MHz were first reported by Maik Hermenau on the AMSAT-DL mailing list.

Jan, PE0SAT published information about RS-40 on his web page. While the new satellite uses amateur 70cm downlinks it does not appear to include an amateur radio mission. Details of the downlink signalling protocol have not been made available.

Yubileiny-2 mission aboard this 65 kilograms satellite includes testing advanced technological solutions to be incorporated into future missions:

+ Contoured heat pipes
+ New technological enhancements for onboard radio equipment.
+ Small-sized attitude control elements including magnetic torquers.
+ Testing optical properties of solar concentrators using an experimental solar panel module.
+ Compact navigation receiver using the GLONASS and GPS technology.

Siberian State Aerospace University student built components and experiments include:

+ Earth sensing technology with a camera observing the earth surface.
+ Small WeB-camera to continuously observe the satellite's deployment mechanisms and monitor the performance of satellite components, structures and instruments made of advanced composite materials.

Jan, PE0SAT reports that the signals he received from RS-40 switch between two downlink frequencies:

+ Signals were first copied on 435.265 MHz FM,
+ Then switched to 435.365 MHz FM.
+ After about six minutes the received waterfall patern changed and there where only signals on 435.365 MHz FM

Jan posted details of the received signals at:
http://www.pe0sat.vgnet.nl/2012/i-received-data-from-rs-40/
He includes 2-line orbital elements as well as audio samples and screenshots of the received signals on this page.

First signal reports from RS-40 are documented at:
http://www.pe0sat.vgnet.nl/2012/first-signals-from-rs-40/

[ANS thanks Jan, PE0SAT for the above information]

MSU Attracts NASA Attention With Computer System for Space

Evelyn Boswell for MSU News Service
Bozeman MT (SPX) Jul 30, 2012
http://tinyurl.com/MSU-Experiment (www.spacemart.com)

Two Montana State University graduate students who are building a radiation-proof computer system for use in space have received an extra boost from NASA. Justin Hogan and Raymond Weber recently learned that their project with faculty member Brock LaMeres was one of 14 selected by NASA for development and demonstration on commercial launch vehicles in 2013 or 2014.

The Montana State University cubesat, William A. Hiscock Radiation Belt Explorer, has been orbiting the Earth since Oct. 28, 2011.

MSU's computer system is designed to lay on top of a reprogrammable hardware fabric, LaMeres said. If the system works the way it's designed, it will detect radiation and high-energy particles. If radiation strikes - or looks like it will strike - an active circuit, the computer system can shut down the active circuit and use one of the abundant spare circuits. As a result, astronauts may be able to get by with less shielding than they currently carry into space to protect their computers. They should also be able to work without stopping to fix computer malfunctions.

NASA launched a flight test of their computer aboard a rocket on June 21 from Wallops Island. The rocket soared 73 miles above the Atlantic Ocean, exposing the experiments to zero-gravity and the radiation found in 11 miles of space. Within 15 minutes of launch, the rocket splashed down about two miles from Wallops Island. A commercial fishing boat retrieved the experiments and returned them to the students for analysis.

Hogan and Weber are wrapping up their work on their radiation-tolerant, reconfigurable computer system so it will it into a cube approximately four inches on each side. The cube will head to the Columbia Scientific Balloon Facility at Fort Sumner, N.M. to be launched in early September as part of the High Altitude Student Platform (HASP) program through NASA and the Louisiana Space Consortium. The high-altitude balloon is expected to carry the computer system 22 miles above Earth and stay aloft for 15 to 20 hours.

Read the full article at the link above.

[ANS thanks Montana State University and SpaceMart.com for the above information]

Olympic Station 2o12W Active on the Amateur Radio Satellites

Olympic Flagship Special Event Station 2 Oscar 12 Whiskey (2o12W) has been active on the amateur radio satellites working stations in the USA and across Europe.

The 2o12W satellite station has been operated by Ken Eaton, GW1FKY a member of the Barry Amateur Radio Club and AMSAT-UK.

The satellite equipment comprises a Kenwood TS2000 feeding a 5 element dual-band "Elk" antenna mounted on a rotator on the portable cabin about 2.5 meters (8 feet) above the ground.

Ken says the station is located on the promenade and the many electrical amusements in the Fairground generate considerable interference on the VHF/UHF bands which has made reception difficult.

The station 2o12W is planned to be on-the-air until September.

For photos and more information see:
http://www.uk.amsat.org/9322
http://www.2o12w.com/

[ANS thanks AMSAT-UK for the above information]

Kickstarter Fund Raiser for Ham Radio at South Florida Museum

The West Palm Beach Amateur Radio Group has built and operates a permanent Amateur Radio exhibit at the South Florida Science Museum in West Palm Beach Florida.

Both the Museum and the amateur radio group are non-profit entities. The museum gave the space for the exhibit but everything from the carpet on the floor, the paint on the walls, the overhead lighting, the electrical wiring and up has been donated and supplied by club members and limited supporters.

Presently the amateur radio facilities are on the very modest side. They operate on loaned radios and wire antennas. The club says, "We get hundreds of youngsters visiting our exhibit every week, only a handful get to experience that 'Lasting Moment of First Excitement' due to our limited facilities."

The club has started an on-line pledge drive using Kickstarter to mmet their goal of more modern radio and put up a tower next to the building with an antenna on it that will be high enough to get over the substation next door.

They also need to add exhibits that explain how basic radio, electronics and antennas work for building the level of excitement.

Visit the West Palm Beach Amateur Radio Group's "Lasting Moment of First Excitement" Kickstarter Project page at:
http://www.kickstarter.com/projects/997251641/lasting-moments-of-first-excitement

The club web pages are at: http://www.wpbarc.com - and -
Facebook page at www.facebook.com/WestPalmBeachAmateurRadioGroupInc

[ANS thanks Tom Loughney, AJ4XM for the above information]

Mars Rover Landing News From JPL

If you have an iPad or an iPhone with a camera, here's a chance to create personalized photos with a high-resolution 3D model of the Curiosity rover.

Download Spacecraft 3D from the Apple Apps Store. It's free! (Android version to be out in a few weeks).

Print a couple of copies of the paper "Targets" before landing night.

Place the Target where you want the rover to appear.

Compose the desired photo, then tap the "Gear" icon and press the Photo button to take snapshots of the rovers with old and new friends on landing night.

Send your pictures to: jplpublic@jpl.nasa.gov We'll put together a collection of photos after the landing.

Other free Curiosity software to play with:

Xbox - Mars Rover Landing

Try your own skills on landing Curiosity through this Xbox game

Downloadable through the Xbox menu system or at:
http://marketplace.xbox.com/en-US/Product/Mars-Rover-Landing/66acd000-77fe-1000-9115-d80258480836

Eyes on the Solar System: Curiosity Edition

Experience Curiosity as it lands at Gale Crater
http://eyes.jpl.nasa.gov(viewable in any web browser)

Be A Martian Mobile Phone Apps - Mars on the go!
Participate as a Citizen Scientist on the Mars Science Lab mission
iPhone: http://mars.jpl.nasa.gov/mobile/beam/iphone/
Android:http://mars.jpl.nasa.gov/mobile/beam/android/
Windows: http://mars.jpl.nasa.gov/mobile/beam/windowsphone/

Explore Mars on the Web!
This 3D interactive experience lets you explore Mars with Curiosity
Curiosity's Journey: http://mars.jpl.nasa.gov/explore/curiosity
Free Drive: http://mars.jpl.nasa.gov/explore/freedrive/
Gale Crater: http://mars.jpl.nasa.gov/explore/galecrater/
Learn the Rover: http://mars.jpl.nasa.gov/explore/learnaboutrover/

[ANS thanks Jan, WB6VRN, for the above information]

Satellite Shorts From All Over

+ Congratulations to Ted Doty, AA5CK on earning his Satellite Worked All States Award #332. Ted wrote, "I want to express my thanks and appreciation to all of our great Satellite Ops, working from home and portable, to make this award and others a possibility.

+ Remembering this week, that August 2, 1971 was the date when the Apollo 15 lunar module Falcon left the Moon in first televised lunar liftoff: http://en.wikipedia.org/wiki/Apollo_Lunar_Module#Media includes videos.

+ An English language NHK TV news story covers the amateur radio CubeSat FITSAT-1 (NIWAKA) which launched to the International Space Station (ISS) on July 21: http://tinyurl.com/FitsatOnNHK (Southgate)

+ Listen for Nikolai, VE3NKL operating portable from Newfoundland on a vacation trip. He will be on SO-50 and AO-27 time permitting. He is active in grid squares GN09 and GN19. He posts details on his callsign lookup web page at QRZ.com. (via K4FEG)

+ Listen for Norm, N3YKF operating satellites with a portable station he brought with him during his vacation in Peru.

[ANS thanks everyone for the above information]

ARISS Status - 30 July 2012

1. Upcoming School Contact

Space Jam 6, which will be held at the Octave Chanute Aerospace Museum in Rantoul, Illinois, comleted an Amateur Radio on the International Space Station (ARISS) contact on Sunday, August 5 at 10:06 UTC.

The Space Jamboree Workshop is the Midwest's largest technology oriented gathering of Boy Scouts and Girl Scouts. The theme this year is "The History of Aviation." Subjects that will be taught and merit badges that may be earned include the following: Space Exploration, Radio, Aviation, Electronics, Robotics, Soil/Water Conservation, Environmental Science, Energy, Metalwork, Computers, Geology, Nuclear Science, Engineering and Inventing. The Jamboree is working with the University of Illinois, Purdue, and DePauw Universities (high altitude balloon launches, FIRST Robotics, Nuclear Engineering) to help Scouts plan for the future.

2. Girls from WE@RIT Camp Speak with Sunita Williams in Space

Fifth and sixth grade girls attending the "Everyday Engineering" camp at Kate Gleason College, sponsored by the Women in Engineering @ Rochester Institute of Technology (WE@RIT) in New York took part in an Amateur Radio on the International Space Station (ARISS) contact on Monday, July 23. The girls talked with on-orbit astronaut Sunita Williams, KD5PLB who currently holds the record for longest space flight by a woman. The contact highlighted camp activities that focus on engineering-based themes to teach the engineering design process through hands-on build and design activities. This year's camp

theme is "World in Motion." Also attending the contact were students from the grade 7-9 camp (held two weeks ago), the students attending this week's RoboCamp, and the Lil' Kids on Campus Space Week kids. To view video of the contact, see:
http://www.youtube.com/watch?v=bdlpcw_VD4M

3. Virginia Air and Space Center Contact Successful

On Thursday, July 26, Sunita Williams, KD5PLB held an Amateur Radio on the International Space Station (ARISS) contact with youth volunteers from the Virginia Air and Space Center in Hampton, Virginia. The volunteers give tours, provide demonstrations to the public and support the center in its efforts to educate the public. The center has its own amateur radio exhibit and during these summer months, it also welcomes NASA exhibits Destination Station, the Orion Test Vehicle and the Mars Science Laboratory.

[ANS thanks Carol, KB3LKI, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

Primary and secondary school students are eligible for membership at one-half the standard yearly rate. Post-secondary school students enrolled in at least half time status shall be eligible for the student rate for a maximum of 6 post-secondary years in this status. Contact Martha at the AMSAT Office for additional student membership information.

73,
This week's ANS Editor,
Lee McLamb, KU4OS

```
From 4628195608314402258
X-Google-Thread: 8f86f75953,c6eeeec2381dc477,start
X-Google-Attributes: gid8f86f75953,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
Received: by 10.66.88.168 with SMTP id bh8mr285245pab.10.1344571831565;
        Thu, 09 Aug 2012 21:10:31 -0700 (PDT)
MIME-Version: 1.0
Path: p10ni26892555pbh.1!nntp.google.com!border1.nntp.dca.giganews.com!
border4.nntp.dca.giganews.com!border2.nntp.dca.giganews.com!
border2.nntp.ams.giganews.com!nntp.giganews.com!feeder3.cambriumusenet.nl!
```

```
feed.tweaknews.nl!94.232.116.12.MISMATCH!feed.xsnews.nl!border-2.ams.xsnews.nl!
news.panservice.it!de-l.enfer-du-nord.net!feeder1.enfer-du-nord.net!usenet-fr.net!
fdn.fr!feeder.news.orange.fr!not-for-mail
Organization: lr.ca
Newsgroups: rec.radio.amateur.space
From: <sergio@tiscali.net>
Subject: flow control
Message-ID: <252260434@aioe.org>
Date: Tue, 07 Aug 2012 11:40:50 +0200
X-Antivirus: avast! (VPS 120806-1, 06/08/2012), Outbound message
X-Antivirus-Status: Clean
Lines: 5
NNTP-Posting-Date: 07 Aug 2012 11:40:50 CEST
NNTP-Posting-Host: 92.145.24.252
X-Trace: 1344332450 reader.news.orange.fr 6218 92.145.24.252:6775
X-Complaints-To: abuse@orange.fr
Bytes: 962
Content-Type: text/plain; charset=iso-8859-1

Hello,

maybe this link might be of use http://www.artpainters.net when evaluating
the line
;-)


From -3809255159364279819
X-Google-Thread: 8f86f75953,c6eeeec2381dc477
X-Google-Attributes: gid8f86f75953,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
Received: by 10.236.185.194 with SMTP id u42mr11075699yhm.29.1344999137589;
        Tue, 14 Aug 2012 19:52:17 -0700 (PDT)
Path: c6ni115630874qas.0!nntp.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nrc-news.nrc.ca!News.Dal.Ca!news.litech.org!news.glorb.com!
news.netfront.net!not-for-mail
From: mark morgan <konstans@hotmail.com>
Newsgroups: rec.radio.amateur.space
Subject: get kelp
Date: Thu, 09 Aug 2012 20:16:26 -0400
Organization: Netfront http://www.netfront.net/
Lines: 8
Message-ID: <k01jqk$eut$1@adenine.netfront.net>
References: <252260434@aioe.org>
NNTP-Posting-Host: 8.35.101.146
Mime-Version: 1.0
X-Trace: adenine.netfront.net 1344557718 15325 8.35.101.146 (10 Aug 2012 00:15:18
GMT)
X-Complaints-To: news@netfront.net
NNTP-Posting-Date: Fri, 10 Aug 2012 00:15:18 +0000 (UTC)
User-Agent: Mozilla/5.0 (Windows NT 5.1; rv:14.0) Gecko/20120715 Firefox/14.0.1
SeaMonkey/2.11
In-Reply-To: <252260434@aioe.org>
```

```
Bytes: 1129
Content-Type: text/plain; charset=ISO-8859-1; format=flowed
Content-Transfer-Encoding: 7bit

sergio@tiscali.net wrote:
> Hello,
>
> maybe this link might be of use http://www.artpa
can the spam


--- Posted via news://freenews.netfront.net/ - Complaints to news@netfront.net ---
```

```
From 932965288186096823
X-Google-Thread: 10e8ad,ba293028f53ee861,start
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII
Received: by 10.68.191.137 with SMTP id gy9mr736163pbc.0.1344733603398;
        Sat, 11 Aug 2012 18:06:43 -0700 (PDT)
MIME-Version: 1.0
Path: g9ni42095125pbo.0!nntp.google.com!news.glorb.com!news-out.readnews.com!
transit4.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-225 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sat, 11 Aug 2012 21:06:42 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 590
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <001901cd7826$b7c8c150$275a43f0$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
X-Trace: reader1.panix.com 1344733602 25114 166.84.1.6 (12 Aug 2012 01:06:42 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 12 Aug 2012 01:06:42 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us

AMSAT NEWS SERVICE
ANS-225
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ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor at amsat.org

In this edition:

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* Hotel Information for the 2012 AMSAT Symposium in Orlando
* Dr. Mark Hammond N8MH to speak at Space Colloquium
* Successful ARISS Contacts With Scouting Space Jam 6
* Postponed ELaNa Launch From Vandenberg Scheduled for August 14
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* Welcome to Gale Crater - Mars Science Laboratory Curiosity Lands
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* Raytheon Building the New Space Fence Radar
* There's an App For That - ID Visible Satellite Flyovers
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SB SAT @ AMSAT $ANS-225.01
ANS-225 AMSAT News Service Weekly Bulletins

AMSAT News Service Bulletin 225.01
>From AMSAT HQ SILVER SPRING, MD.
August 12, 2012
To All RADIO AMATEURS
BID: $ANS-225.01

Return Your AMSAT-NA Board of Directors Ballots by September 15

AMSAT Corporate Secretary, Alan Biddle, WA4SCA said, "By now, all members in good standing of AMSAT-NA should have received their ballots, including the position biographies by the candidates. We have a full slate of candidates this year. Remember, this is one of your best opportunities to make your views on the path of our organization known."

Additional information for those interested can be found in the minutes of the 2011 Board Meeting which appear in the current issue of the AMSAT Journal.

Select no more than three of the six listed candidates (in alphabetical order):

+ Tom Clark, K3IO
+ Steve Coy, K8UD
+ Mark Hammond, N8MH
+ Lou McFadin, W5DID
+ Gould Smith, WA4SXM
+ Patrick E. Stoddard, WD9EWK

The 3 candidates receiving the most votes will become directors serving 2 year terms. The 2 receiving the next highest number of votes will be seated as alternates for 1 year terms.

You must mail your ballot back to be received at the AMSAT-NA Office no later than the close of business on September 15, 2012:

AMSAT
850 Sligo Avenue, #600
Silver Spring, MD 20910

[ANS thanks AMSAT Corporate Secretary, Alan Biddle, WA4SCA for the above information]

Hotel Information for the 2012 AMSAT Symposium in Orlando

The 2012 AMSAT Space Symposium and Annual Meeting will be held in Orlando, Florida on October 26 - 28, 2012. Information about the Symposium is posted as it becomes available at:
http://www.amsat.org/amsat-new/symposium/2012/index.php

The Symposium Hotel is the Holiday Inn at Orlando-International Airport is located one mile from the Orlando International Airport (MCO). The AMSAT discount rate is $99 + taxes per night. The reservation block code used when calling the hotel directly is AMT.

The hotel telephone number is 407-851-6400. The Symposium Committee recommends you make reservations by calling the hotel directly rather than through the Web. Cutoff date for reservations is Oct 6, 2012. The direct link to the hotel web page is:
http://www.holidayinn.com/hotels/us/en/orlando/mcoap/hoteldetail

The hotel offers free Internet connection and free airport shuttle. When you arrive at the Orlando Airport call 407-709-5310 to request the shuttle.

The Orlando International Airport (MCO) is the closest to the Symposium and is served by most major air carriers. The hotel address is: 5750 T.G. Lee Blvd � Orlando, FL 32822. A map link is included on the hotel web page.

Watch for announcement from the Symposium Committee soon about the opening of registration. The cost of the Symposium is:

+ Symposium Registration including Proceedings
  - o Through September 23, 2012: $ 45.00
  - o Starting September 24, 2012: $ 50.00
  - o At the Door: $ 55.00

+ Saturday Evening Banquet $ 45.00

+ Sunday Morning Area Coordinators� Breakfast $ 15.00

+ Monday (Oct 29) bus trip to KSC and entrance ticket $ 100.00

[ANS thanks the 2012 Symposium Committee for the above information]

Dr. Mark Hammond N8MH to speak at Space Colloquium

The 27th AMSAT-UK International Space Colloquium will be held on the weekend of 15-16 September at the Holiday Inn Hotel, Guildford, GU2 7XZ, England close to the University of Surrey.

The full presentation schedule is being finalized and will be published shortly but, in the meantime we can confirm that it will be a truly international event. Among the many notable speakers will be Dr. Mark Hammond, N8MH from North Carolina. Mark is AMSAT-VP for Educational Relations and will be giving two presentations.

The first will include updates on significant AMSAT-NA developments, including information about activities related to International Traffic in Arms Regulations (ITAR) matters. He will also provide a general and technical update about the Fox family of CubeSats.

The second presentation will address the challenges presented by the current trend of justifying satellite construction and launches through STEM (Science, Technology, Engineering and Math) education. Specific hurdles faced by radio amateur satellite organizations will be highlighted. Progress made by AMSAT-NA through educational partnerships with the ARRL, NASA, and ARISS will be discussed.

The weekend event is open to all. It attracts an international audience that ranges from those involved in building and operating Amateur Radio satellites to beginners who wish to find out more about this fascinating branch of the hobby.

Tour Feature: SSTL Kepler Building

Colloquium attendees will have an opportunity to visit the satellite facilities in the new Surrey Satellite Technology Limited (SSTL) Kepler Building. The tour will include exclusive access to inspect the new SSTL clean room and integration facilities at the recently opened Kepler Building. If you have visited their previous facilities at the university campus, during previous Colloquia, you will be amazed by what is happening now.

There will be presentations by experts from AMSAT-SA, AMSAT-NA and AMSAT-DL on their current spacecraft projects. Also planned are CubeSat presentations on UKube-1, Strand-1 and, of course the FUNcube-1 project. We will be including an exclusive roundup of a number of new live and potential spacecraft projects that are under investigation and/or development. Additionally a number of presentations are planned covering new communications techniques and similar futuristic topics.

You'll be able to participate all the usual networking opportunities, the gala dinner and auction/raffle, plus the opportunity to operate the sophisticated groundstation in the GB4FUN mobile demonstration module.

All accommodation will be at the Holiday Inn hotel. Please note that the hotel will only hold our reserved rooms until 3 weeks prior to the event, ie until August 24. If you book after this date, you risk there not being a room available. Bookings for Fri/Sun nights, or ones made after this date cannot be guaranteed. Rooms and Saturday�s Gala Dinner must be booked in advance in the AMSAT-UK shop.
For booking see: http://www.uk.amsat.org/colloquium/twelve

AMSAT-UK posted an article at: http://www.uk.amsat.org/9388
This page also contains the links which will allow you to find registration information for the Colloquium.

[ANS thanks AMSAT-UK for the above information]

Successful ARISS Contacts With Scouting Space Jam 6

Scouts attending Space Jam 6, which was held at the Octave Chanute Aerospace Museum in Rantoul, Illinois, participated in an ARISS contact with ISS astronaut Akihiko Hoshide, KE5DNI on Sunday, August 5. Hoshide was able to answer 22 space-related questions posed by the scouts before losing the radio connection. Space Jam focused on "The History of Aviation" this year and offered lessons on Space Exploration, Radio, Aviation, Electronics and Robotics among other STEM topics. Approximately 1000 scouts, leaders and parents turned out for Space Jam 6 this year.

Ken Holland, KC9TTR recorded the downlink from the contact and posted the audio at: http://www.youtube.com/watch?v�13COaiGaQ

[ANS thanks the Amateur Radio on the International Space Station

(ARISS) Status Report by Carol Jackson, KB3LKI for the above information]

Postponed ELaNa Launch From Vandenberg Scheduled for August 14

The August 2, 2012 Atlas V rocket launch with a combination of 11 satellites from Vandenberg Air Force Base in California for the US Government and NASA ELaNa university cubesats was scrubbed due to a range instrumentation problem. This launch is now scheduled to lift off from Vandenberg on August 14.

The primary mission will launch a pair of US Navy Ocean Surveillance Satellites (NOSS). These satellites carry equipment to track ships and aircraft by triangulation of radio transmissions. The two NOSS satellites have a combined weight of 6500 kg. They will separate a few days after being placed into a 1100 km circular orbit at 63� inclination.

This is the first Atlas V launch with modified helium tanks in the Centaur upper stage. The change has created room in the aft skirt to accommodate 8 P-POD dispensers for cubesats. This launch carries 11 cubesats, to be released into 470 x 770 km, 63� orbit about 3 hours after launch and following maneuvers by the Centaur upper stage.

The ELaNa Cubesats aboard are:
- CINEMA (Cubesat for Ion, Neutral, Electron, Magnetic fields)
  - Downlinks for engineering telemetry and command are in the 2400-2450 MHz range; Science telemetry is in 2200-2300 MHz range.

- CSSWE (Colorado Student Space Weather Experiment)
  - Downlink 437.345 MHz, 9k6 with AX25

- CP5 (PolySat)
  - Downlink 437.405 MHz at 1 watt, AFSK on LSB AX.25 over NRZI at 1200 baud, every 2 minutes, begins 3.5 hours after first turn-on.

- CXBN (Cosmic X-Ray Background Nanosatellite)
  - Downlink 437.525 MHz, GFSK, AX.25

The US Government Satellites aboard are:
- Aeneas
  - First cubesat to deploy 2.4 GHz Dish Antenna. WIFI transmitter will transmit on 2425.0 MHz with 1 watt of output power.
  - Downlink 437.600 MHz AX25 1200 bps beacon every 10 seconds and spread spectrum two-way link elsewhere in the 70cm band.
- ORSES (ORS Enabler Satellite)
- Horus

+ Re
+ Aerocube 4A, 4B, 4C

Please refer to the prior bulletin for mission summaries and satellite team web pages: http://amsat.org/pipermail/ans/2012/000637.html

A detailed article of the launch can be found on-line at:
http://www.americaspace.org/?p#568

[ANS thanks NASA, the CubeSat Teams noted above, AMSAT-UK, and Gunter's Space Page for the above information]

ESA Announces New Educational Cubesat Initiative

AMSAT-UK has received notice that the European Space Agency's Education Office is inviting the CubeSat community to send their notifications of interest for a new initiative involving the development of educational picosatellites and the provision of deployers and launch services. The call closes on 7 September 2012.

Following the successful launch of seven CubeSats on Vega�s maiden flight in early 2012, ESA has decided to pursue further educational CubeSat-related activities.

In order to gather valuable information that will help better define the terms of its initiative, ESA�s Education and Knowledge Management Office needs to get an overview of the level of interest both from educational CubeSat developers and from commercial suppliers that are eligible to participate in the programme.

Call 1: Educational CubeSat development

This call for Notification of Interest is open to institutions from ESA Member States and Cooperating States which intend to develop CubeSats for educational purposes.

Teams interested in participating are invited to send their Notification of Interest to cubesats@esa.int

The email subject should be: �CubeSat opportunity � Name of the proposed CubeSat project� and should be sent before 12:00 CEST
7 September 2012.

Further information at:
http://www.esa.int/SPECIALS/Education/SEMRLXSX55H_0.html

ESA � Towards a new educational CubeSat initiative
http://www.uk.amsat.org/9515

[ANS thanks AMSAT-UK for the above information]

Welcome to Gale Crater - Mars Science Laboratory Curiosity Lands

With Curiosity now safely on the surface of the Red Planet after its August 6 entry, descent and landing in Gale Crater, NASA's Mars Science Laboratory began its planned primary one-Martian-year (98-week) mission of discovery and exploration.

Re-live the entry, descent and landing at Jet Propulsion Labs:
http://www.youtube.com/watch?feature�ayer_embedded&v�ZY2JuuhZA

The Curiosity Mars Descent Imager (MARDI) captured the rover's descent to the surface. The instrument shot 4 frame per second video from heat shield separation to the arrival on the ground. The last few seconds show the dust being kicked up as the flying skycrane approached the surface:
http://www.youtube.com/watch?feature�ayer_embedded&v�GMDXy-Y1I

Watch the arrival on Mars in an exciting movie trailer format:
http://www.universetoday.com/96646/curiositys-awesome-landing-trailer/

This week the rover checked its health and determined its location, orientation and tilt on the surface of Mars. All initial spacecraft activities appear to have been completely nominal. The JPL control team next commenced with firing all of Curiosity's pyrotechnic devices for releasing post-landing deployments.

Spring-loaded deployments, such as removal of dust covers from the Hazard-Avoidance cameras (Hazcams) occurred shortly after landing enabling Curiosity to acquire images with its front and rear Hazcams.

Additional post-landing checkout activity included testing of the UHF telecommunications system and rover motor controller assembly. Approximately five megabytes of data were successfully relayed back to Earth from NASA's Mars Odyssey spacecraft during the first day.

Curiosity landed facing east-southeast within Gale Crater, with a heading of 112.7 degrees (plus or minus five degrees), and a few degrees of tilt.

The latest official mission information, photos, and video is always posted at: http://www.jpl.nasa.gov/msl/ - and -
http://solarsystem.nasa.gov/news/msl_landing.cfm

Finally, Curiosity Rover vehicle tires have tread patterns that imprint the acronym JPL in Morse Code in the dusty soil of the Mars surface. See the report on the ARRL web at:
http://tinyurl.com/MorseOnMars (www.arrl.org)

[ANS thanks NASA and JPL for the above information]

Pioneer of Radio Astronomy Sir Bernard Lovell Dies

The BBC reports pioneering astronomer and physicist Sir Bernard Lovell has died aged 98. He was the founder of University of Manchester's Jodrell Bank Observatory. Jodrell Bank is dominated by the iconic 76m (249ft) Lovell Radio Telescope, was completed in 1957. he telescope and his other contributions to radio astronomy led to him being knighted in 1961. He continued to come in to work at the Observatory until quite recently when ill health intervened.

The structure remains the third largest steerable telescope in the world and plays a key role in global research on pulsating stars, testing extreme physics theories including Einstein's general theory of relativity.

The BBC posted the news at:
http://www.bbc.co.uk/news/uk-england-19164236

[ANS thanks the BBC for the above information]

Raytheon Building the New Space Fence Radar

The Air Force expects to deploy its $3.5 billion space fence system by 2017 to improve its space debris tracking ten-fold. As many as 200,000 pieces of orbital debris can be tracked with the S-band radars.

Lockheed Martin competed with Raytheon for the contract mandating a scalable, solid-state S-band radar with a wavelength frequency capable of detecting objects far smaller than the half-century-old Air Force Surveillance System the new system will replace.

Lockheed Martin demonstrates their prototype space fence in a video:
http://www.youtube.com/watch?v�JdN90vT04&feature�ayer_embedded

Raytheon won the contract which they describe as multiphase acquisition program, leading to the delivery of up to three, globally positioned, S-band radars operating in the U.S. Space Surveillance Network. Raytheon posted information on-line at:
http://tinyurl.com/RaytheonSpaceFence (raytheon.com)

Amateurs can listen to meteor pings detected by the present genera-

tion of the Air Force Space Surveillance Radar in Texas at:
http://spaceweatherradio.com/

[ANS thanks CNET, Raytheon, and Lockheed Martin for the above information]

There's an App For That - ID Visible Satellite Flyovers

WhatSat - Satellite Explorer helps you identify and learn about satellites that you see passing overhead in the night sky. It can also be used as a satellite spotting aid. The satellite catalog includes 150 or so of the brightest orbiting objects as identified by NORAD. For each satellite listed there is a description and an image (when available).

The first mode of operation allows you display a list of currently visible satellites if you see one passing overhead. The app shows you a ground track of the satellite to give you some idea where and how far away it actually is.

The second mode of operation gives you a list of what is visible with a visibility indicator, azimuth, and elevation to help you find satellites. This includes a map view of the ground tracks.

WhatSat requires cell service or WiFi to access the server that does satellite flyby calculations.

Read more information at:
https://play.google.com/store/apps/details?id�m.finchconsulting.whatsat

Editor's Note: This is not an AMSAT-NA product but is mentioned due to its applicability and potential interest to our readers with no endorsement implied.

[ANS thanks SpaceWeather.com for the above information]

Satellite Shorts From All Over

+ The AMSAT-NA On-line Store at http://store.amsat.org/ will be re-opening on August 13, 2012.

+ A QSL card is now available for AubieSat-1 / AO-71 reception. Operators desiring a confirmation of receipt for AO-71 are invited to send their signal reports to:

Dr. J-M Wersinger, KI4YAU
Allison Laboratories Room 210
Auburn University, AL 36849

Please note the date and time of receipt on your request (or your QSL card), as well as any other pertinent receiving information or conditions. Copies of the content of the CW signals you copied are requested, but not required. Any other questions regarding AubieSat-1 may be emailed to: jm.wersinger <at> gmail.com

+ JPL Infographics, a newly launched website and resource database from NASA's Jet Propulsion Laboratory, is inviting space aficionados and graphic wizards to take on a visual challenge by grabbing NASA data and transforming them into a scientific work of art. The website provides extensive collections of NASA science and mission data, graphics and space images that members of the public can download and use to create their own infographics - creative illustrations of complex data. Users can then upload their infographics, have them reviewed by JPL experts, and share their creations in a public gallery on the JPL website:
  http://www.jpl.nasa.gov/infographics/

+ KP2, U.S. Virgin Islands has been reported to be active on the linear satellites. (On the Birds!). Wyatt, AC0RA, reports that he made a QSO on August 2nd with Rich, KP2CT, from St. Thomas on FO-29 for his first satellite contact. Rich will initially focus on operating via FO-29.

+ Listen for Jerry Brown, K5OE using his UK call M0GOE as he operates on the FM satellites during a family holiday next week from IO82 and IO81/82 border (Sunday thru Thursday), and IO72 (Wednesday, 15 Aug 2012, 1400z - 1630z). If he can get to the border between IO71/72 he will try that, but there might not be enough time. Nova Scotia, Quebec, and W1/2/3 should be in range to the west.

+ Jeff, KB2M says all the requested 13 Colonies special event QSL cards for his satellite operations from K2I (NJ), and K2E (DE) are in the mail. If anyone else who worked us wants a card please send a SASE to KB2M, at his address listed at QRZ.com.

+ New Stunning ISS Time-lapse: Earth Illuminated shows aurora, lightning, our Milky Way Galaxy, city lights and other sights as seen from orbit:
  http://www.youtube.com/watch?v�UfMq-b0Uo&feature�ayer_embedded

+ The Sloan Digital Sky Survey III (SDSS-III) has released the largest three-dimensional map of massive galaxies and distant black holes ever created, and it pinpoints the locations and distances of over a million galaxies. It covers a total volume equivalent to that of a cube four billion light-years on a side. A video released with the map takes viewers on an animated flight through the Universe as seen by SDSS. There are close to 400,000 galaxies

in the animation:
http://www.youtube.com/watch?feature�ayer_embedded&vLBltePDZw

+ AMSAT Commemorative Shirt for the 2012 Symposium is only available by mail order. If you have not received a copy of the order form you can download and print a copy from the the link on the front page at: http://www.amsat.org. The deadline for receiving your mail order is September 21, 2012.

+ The next Hudson Valley Satcom net dates are Thursday, August 16, August 30, 8 PM EDT (UTC-4 UTC) on the 146.97 MHz MBARC Repeater (PL 100). An echolink connection is available on the N2EYH-L node. More information at: http://www.hvsatcom.org. (Stu, WA2BSS)

+ The Carpcomm Space Communication Network invites amateur satellite operators to participate and share cubesat information. Read more of their mission at: http://carpcomm.com/

+ Tom W5KUB says the webcasts on http://w5kub.com from the Huntsville Hamfest will go live Friday morning August 17 for the drive from Memphis to Huntsville. The Huntsville hamfest is August 18-19 with internet webcast streaming for the entire event.

[ANS thanks everyone for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

Primary and secondary school students are eligible for membership at one-half the standard yearly rate. Post-secondary school students enrolled in at least half time status shall be eligible for the student rate for a maximum of 6 post-secondary years in this status. Contact Martha at the AMSAT Office for additional student membership information. And with that, please keep in mind like Earth, Mars has four seasons because the planet tilts on its axis. The seasons vary in length because of Mars' eccentric orbit around the sun. In the northern hemisphere, spring is the longest season at seven months. Summer and fall are both about six months long. Winter is only four months long. On average, the temperature on Mars is about minus 80 degrees F (minus 60 degrees C). In winter, near the poles temperatures can get down to minus 195 degrees F (minus 125 degrees C). A summer day on Mars may get up to 70 degrees F (20 degrees C) near the equator, but at night the temperature can plummet to about minus 100 degrees F (minus 73 C).

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM

```
From -1405844909453088374
X-Google-Thread: 107ada,ae10fd87d155d3ef,start
X-Google-NewGroupId: yes
X-Google-Thread: 10e8ad,ae10fd87d155d3ef,start
X-Google-NewGroupId: yes
X-Google-Thread: 10b9c8,ae10fd87d155d3ef,start
X-Google-NewGroupId: yes
X-Google-Attributes:
gida3e752f117,gid8f86f75953,gida4a23d5f63,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Received: by 10.66.86.72 with SMTP id n8mr1414421paz.24.1344871808287;
        Mon, 13 Aug 2012 08:30:08 -0700 (PDT)
Received: by 10.224.176.203 with SMTP id bf11mr3934059qab.4.1344871808116;
        Mon, 13 Aug 2012 08:30:08 -0700 (PDT)
MIME-Version: 1.0
Path: c10ni110021pbw.0!nntp.google.com!news1.google.com!u3no11843243qai.0!news-
out.google.com!c6ni94266997qas.0!nntp.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!news-out.readnews.com!transit3.readnews.com!panix!rri.panix.com!
robomod!not-for-mail
From: SWPC.Webmaster@noaa.gov
Newsgroups:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.shor
twave,rec.radio.info
Subject: Weekly Highlights of Solar and Geomagnetic Activity, 06 - 12 August 2012
Followup-To:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.shor
twave
Date: Mon, 13 Aug 2012 11:30:07 EDT
Organization: NOAA Space Weather Prediction Center
Lines: 60
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <20120813153002.2A8E733C6F@panix2.panix.com>
NNTP-Posting-Host: panix6.panix.com
X-Trace: reader1.panix.com 1344871807 12430 166.84.1.6 (13 Aug 2012 15:30:07 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Mon, 13 Aug 2012 15:30:07 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
```

```
X-Moderation-2: See http://www.algebra.com/~ichudov/stump

:Product: Weekly Highlights and Forecasts
:Issued: 2012 Aug 13 0759 UTC
# Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center
# Product description and SWPC contact on the Web
# http://www.swpc.noaa.gov/weekly.html
#
#                 Weekly Highlights and Forecasts
#
```

Highlights of Solar and Geomagnetic Activity
06 - 12 August 2012

Solar activity was at very low to moderate levels. The summary period began at moderate levels due to an M1 x-ray event at 06/0438 UTC from Region 1542 (S14, L=030, class/area 190/Dai on 09 August). Associated with this event were both Type II (estimated shock speed of 552 km/s) and Type IV radio sweeps and a non-Earth-directed CME. Activity levels decreased to low from 07 - 10 August with only low-level C-class solar flares observed. On 11 August, an increase to moderate levels was observed as Region 1540 (S27, L=087, class/area 110/Dso on 05 August) produced a long duration M1/2n flare at 11/1220 UTC. The CME associated with this event was determined to not be Earth directed. A return to very low levels was observed on 12 August.

No proton events were observed at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit was at normal levels during most of the period.

Geomagnetic field activity was at quiet to active levels. Predominantly quiet to unsettled levels prevailed from 06 - 09 August as solar winds speeds, as measured by the ACE spacecraft, varied from 275 - 450 km/s. An isolated active period was observed during 08/0000 - 0300 UTC in response to slightly elevated solar wind speeds and extended periods of negative IMF Bz. Field activity decreased to predominantly quiet levels during 10 - 12 August.

Forecast of Solar and Geomagnetic Activity
13 August - 08 September 2012

Solar activity is expected to be at predominantly low levels from 13 - 21 August. An increase to low to moderate levels is expected from 22 August - 05 September as an active sunspot region complex returns to the visible disk. A return to low levels is expected from 06 - 08 September.

No proton events are expected at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to be at normal to moderate levels through 15 August. An increase to moderate to high flux levels is expected during 16 - 24

August. Normal to moderate flux levels are expected during 25 August - 08 September.

Geomagnetic field activity is expected to be at predominantly quiet levels during 15 - 18 August, 21 - 23 August, and 27 August - 08 September. Quiet to unsettled levels are expected during 13 - 14 August, 19 - 20 August, and 24 - 26 August due to recurrent coronal hole high-speed streams.

```
From -3007084619229832286
X-Google-Thread: 8f86f75953,2e400760ca6f7a5a,start
X-Google-Attributes: gid8f86f75953,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
Received: by 10.66.77.39 with SMTP id p7mr812152paw.0.1345237568560;
        Fri, 17 Aug 2012 14:06:08 -0700 (PDT)
Path: g9ni90863350pbo.0!nntp.google.com!border1.nntp.dca.giganews.com!
border4.nntp.dca.giganews.com!border2.nntp.dca.giganews.com!nntp.giganews.com!
novia!news-peer1!btnet!zen.net.uk!hamilton.zen.co.uk!xlned.com!feeder3.xlned.com!
news.astraweb.com!border2.a.newsrouter.astraweb.com!multikabel.net!
newsfeed10.multikabel.net!feed.xsnews.nl!border-1.ams.xsnews.nl!plix.pl!
newsfeed2.plix.pl!wsisiz.edu.pl!newsfeed2.atman.pl!newsfeed.atman.pl!
news.supermedia.pl!news.nask.pl!news.nask.org.pl!news.unit0.net!feeder.erje.net!
news2.arglkargh.de!news.glorb.com!postnews.google.com!
m10g2000pby.googlegroups.com!not-for-mail
From: Samarth Mahajan <samrules9@gmail.com>
Newsgroups: rec.radio.amateur.space
Subject: Why US needs to fund NASA
Date: Tue, 14 Aug 2012 06:26:54 -0700 (PDT)
Organization: http://groups.google.com
Lines: 15
Message-ID: <32311bf0-334e-4dea-8fae-5fed3775e9f4@m10g2000pby.googlegroups.com>
NNTP-Posting-Host: 203.110.243.21
Mime-Version: 1.0
X-Trace: posting.google.com 1344950925 4214 127.0.0.1 (14 Aug 2012 13:28:45 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Tue, 14 Aug 2012 13:28:45 +0000 (UTC)
Complaints-To: groups-abuse@google.com
Injection-Info: m10g2000pby.googlegroups.com; posting-host=203.110.243.21;
posting-account=FyI1eAoAAAD16FA4BohJM-sHU7Y0yv49
User-Agent: G2/1.0
X-HTTP-UserAgent: Mozilla/5.0 (Windows NT 6.0) AppleWebKit/537.1 (KHTML, like
 Gecko) Chrome/21.0.1180.75 Safari/537.1,gzip(gfe)
Bytes: 1921
Content-Type: text/plain; charset=ISO-8859-1
```

Hey everyone!

Being a space enthusiast you must be wanting US to invest more in NASA. For that reason only we've submitted a design for one propaganda competition which can be found here :

https://www.facebook.com/photo.php?fbid=355464011194888&set=a.353934151347874.82545.302069013201055&type=1&relevant_count=1
:

By liking/sharing this you will be helping NASA. So please click on the photo's link and do the necessary to see a brighter space age in the future.

Regards,
Samarth Mahajan

```
From 554250400770866501
X-Google-Thread: a4a23d5f63,5dfd3e71bccf5885,start
X-Google-Attributes: gida4a23d5f63,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
Received: by 10.180.24.135 with SMTP id u7mr625561wif.3.1345237654280;
        Fri, 17 Aug 2012 14:07:34 -0700 (PDT)
MIME-Version: 1.0
Path: n2ni181726861win.0!nntp.google.com!feeder1.cambriumusenet.nl!
feed.tweaknews.nl!94.232.116.13.MISMATCH!border-3.ams.xsnews.nl!
border4.nntp.ams.giganews.com!border2.nntp.ams.giganews.com!nntp.giganews.com!
feed.xsnews.nl!border-1.ams.xsnews.nl!plix.pl!newsfeed2.plix.pl!wsisiz.edu.pl!
newsfeed2.atman.pl!newsfeed.atman.pl!goblin2!goblin.stu.neva.ru!ecngs!
feeder2.ecngs.de!news.linkpendium.com!news.linkpendium.com!panix!panix2.panix.com!
not-for-mail
From: rram@panix.com (rec.radio.amateur.moderated Admin)
Newsgroups:
rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.rad
io.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amat
eur.space,rec.radio.info
Subject: Crossposting Permitted to rec.radio.amateur.moderated
Supersedes: <radio/ham-radio/moderated/crossposting-1-1343800801@panix.com>
Followup-To: poster
Date: 15 Aug 2012 02:00:03 -0400
Organization: rec.radio.amateur.moderated Moderation Team
Lines: 47
Approved: RRI Admin <rec-radio-info-request@panix.com>
Distribution: world
Expires: 17 Sep 2012 02:00:01 -0000
Message-ID: <radio/ham-radio/moderated/crossposting-1-1345010401@panix.com>
Reply-To: rec-radio-amateur-moderated-request@panix.com
(rec.radio.amateur.moderated Admin)
NNTP-Posting-Host: panix2.panix.com
X-Trace: reader1.panix.com 1345010403 12083 166.84.1.2 (15 Aug 2012 06:00:03 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Wed, 15 Aug 2012 06:00:03 +0000 (UTC)
Summary: Short reminder for unmoderated newsgroups that crossposting is permitted
Keywords: FAQ, ham, amateur, radio, moderated, unmoderated, crossposting,
permitted
```

Bytes: 3773

Posted-By: auto-faq 3.3.2 beta (PGPMoose V2.0, Perl 5.005)
Archive-name: radio/ham-radio/moderated/crossposting
Revision: 1.2 2011/11/02 04:08:53
Posting-Frequency: posted twice monthly
URL: http://www.panix.com/~rram/usenet/rram/index.html

Changes followed by "|".

After a 30-day public discussion and feedback period to gauge reader opinions in March of 2009:

http://groups.google.com/group/rec.radio.amateur.moderated/browse_thread/thread/d7d337db35f23326

the rec.radio.amateur.moderated Moderation Team had decided to consider |
amending its charter, and permit limited simultaneous crossposting to
rec.radio.amateur.moderated and one other unmoderated
amateur-radio-related discussion newsgroup. After a successful trial |
period (90 days, through early July 2009), we decided to adopt this |
change permanently. |

Approved rec.radio.amateur.* newsgroups are those that are currently listed in the latest version of the "List of Big Eight Newsgroups" which is crossposted monthly to news.announce.newgroups, news.groups, and news.lists.misc.

Approved alt.radio.amateur.* and alt.ham-radio.* newsgroups are those that have been created consistent with the suggestions in "So You Want to Create an Alt Newsgroup" at:

http://www.faqs.org/faqs/alt-creation-guide/

Approved regional hierarchy newsgroups are those that contain either "radio.amateur" or "ham-radio" in their names, including uk.radio.amateur and aus.radio.amateur.misc.

We will make every reasonable effort to keep our list of approved newsgroups up-to-date. In case we have overlooked any, and a submission is rejected in error as a result, the rejected submitter can E-mail us at our administrative contact address (in the signature at the bottom of this article, and the default Reply-To for the rejection message) requesting that it be added, and that the article be approved. We may still choose to reject articles crossposted to any alt.* newsgroup with an inappropriate name, including obscene language, embedded name-calling, or encouragement of unlawful conduct.

Please direct any comments, questions, or criticisms to rec-radio-amateur-moderated-request@panix.com.

From 7146588098404251316

```
X-Google-Thread: 107ada,293762f00748222,start
X-Google-NewGroupId: yes
X-Google-Thread: 10e8ad,293762f00748222,start
X-Google-NewGroupId: yes
X-Google-Attributes: gida3e752f117,gid8f86f75953,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Received: by 10.66.85.98 with SMTP id g2mr1712261paz.37.1345476609764;
        Mon, 20 Aug 2012 08:30:09 -0700 (PDT)
MIME-Version: 1.0
Path: p10ni113242052pbh.1!nntp.google.com!news.glorb.com!news-out.readnews.com!
transit4.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: SWPC.Webmaster@noaa.gov
Newsgroups:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.shor
twave,rec.radio.info
Subject: Weekly Highlights of Solar and Geomagnetic Activity, 13 - 19 August 2012
Followup-To:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.shor
twave
Date: Mon, 20 Aug 2012 11:30:09 EDT
Organization: NOAA Space Weather Prediction Center
Lines: 71
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <20120820153001.E17F333C7E@panix2.panix.com>
NNTP-Posting-Host: panix6.panix.com
X-Trace: reader1.panix.com 1345476609 7614 166.84.1.6 (20 Aug 2012 15:30:09 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Mon, 20 Aug 2012 15:30:09 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
```

```
:Product: Weekly Highlights and Forecasts
:Issued: 2012 Aug 20 0630 UTC
# Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center
# Product description and SWPC contact on the Web
# http://www.swpc.noaa.gov/weekly.html
#
#                Weekly Highlights and Forecasts
#
```

Highlights of Solar and Geomagnetic Activity
13 - 19 August 2012

Solar activity has been at very low to high levels. Two active sunspot regions dominated the summary period. Region 1543 (N21, L=21, class/area Hhx/360 on 16 August) was the most active region from 13-16 August, producing multiple C-class solar flares. Many of these events were associated with discrete radio frequency bursts, Type II and Type IV radio sweeps, suggesting CME liftoff. Due to the location of Region 1543, many of the CME&rsquo;s were Earth-directed but very little effects were forecast upon arrival at Earth. Region 1543 decayed from a beta-gamma to a simple beta group during the summary period. On 17 August, from around the east limb, multiple M-class solar flares were observed, including an M2.4 x-ray event at 17/1319 UTC as well as an M1 x-ray event at 17/1720 UTC. On18 August, five more M-class solar flares were observed, the largest being an M5/Sf x-ray flare at 18/0102 UTC with an associated 120 sfu Tenflare. As the day progressed, Region 1548 (N20, L=232, class/area Cso/120 on 18 August) was numbered and determined to be the active region responsible for all of the M-class events. From 16-18 August, multiple CME&rsquo;s were observed in LASCO C2 imagery, all appeared to originate from Region 1548. Due to the location around the east limb, none of these CME&rsquo;s were forecast to arrive at Earth.

No proton events were observed at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit was at normal to moderate levels during the period

Geomagnetic field activity was at predominantly quiet to active levels throughout the summary period. Quiet to unsettled levels prevailed from 13-16 August as solar wind speeds, as measured by the ACE spacecraft, remained at nominal background levels. An increase to quiet to unsettled levels with isolated active periods were observed from 17-19 August. Weak CME effects were observed on 17 August and late on 18 August, measurements from the ACE spacecraft indicated a solar sector boundary (SSB) crossing. Following the SSB, coronal hole effects were observed on 19 August with solar wind speeds, increasing from below 400 km/s to almost 600 km/s

Forecast of Solar and Geomagnetic Activity
20 August - 15 September 2012

Solar activity is expected to be at low levels with a slight chance for more M-class events from 20-31 August as Region 1548 continues to evolve and rotate across the disk. A return to predominantly low levels is expected to prevail from 01-15 September.

No proton events are expected at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to be normal levels from 20-21 August. An increase to high flux levels is expected from 22-26 August. A return to normal - background levels is expected to prevail for the remainder of the period.

Geomagnetic field activity is expected to be at mostly quiet levels with a few brief periods of quiet to unsettled levels due to recurrent coronal hole high speed stream effects. From 20 - 22 August, 25-25 August, 08-09 September, and 15 September quiet to unsettled levels are expected. For the remainder of the forecast period, mostly quiet levels are expected to prevail.

```
From 5156939706588795665
X-Google-Thread: 10e8ad,fc4c5474830355da,start
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII
Received: by 10.66.78.106 with SMTP id a10mr280095pax.14.1345737004260;
        Thu, 23 Aug 2012 08:50:04 -0700 (PDT)
MIME-Version: 1.0
Path: t10ni33608764pbh.0!nntp.google.com!npeer02.iad.highwinds-media.com!
news.highwinds-media.com!feed-me.highwinds-media.com!nx01.iad01.newshosting.com!
newshosting.com!news-out.readnews.com!transit3.readnews.com!panix!rri.panix.com!
robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-232 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Thu, 23 Aug 2012 11:50:03 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 264
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <002501cd8146$f26b6230$d7422690$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
X-Trace: reader1.panix.com 1345737003 26085 166.84.1.6 (23 Aug 2012 15:50:03 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Thu, 23 Aug 2012 15:50:03 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
X-Received-Bytes: 11745
Content-Language: en-us
```

AMSAT NEWS SERVICE
ANS-232

ANS is a free, weekly, news and information service of AMSAT North
America,
The

Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* NASA Announcement of the Next CubeSat Launch Initiative
* National Scouting Museum Announces JOTA Contest for ISS Contact
* VQ9JC Activates Diego Garcia on Satellites
* AMSAT at the ARRL New England Convention
* Satellite Shorts From All Over
* ARISS Status - 13 August 2012

SB SAT @ AMSAT $ANS-232.01
ANS-232 AMSAT News Service Weekly Bulletins

AMSAT News Service Bulletin 232.01
From AMSAT HQ SILVER SPRING, MD.
August 19, 2012
To All RADIO AMATEURS
BID: $ANS-232.01

NASA Announcement of the Next CubeSat Launch Initiative

On February 14, 2012 NASA announced that the AMSAT-NA Fox-1 Cubesat was selected as one of 33 small satellites to fly as auxiliary payloads aboard rockets planned to launch in 2013 and 2014 during their third round of CubeSat Space Mission Candidates.

NASA released the next Announcement of Cubesat Launch Initiative document on August 10, 2012. The CubeSat Launch initiative (CSLI) provides opportunities for small satellite payloads to fly on rockets planned for upcoming launches. These CubeSats are flown as auxiliary payloads on previously planned missions. The NASA document can be accessed on-line at:

http://tinyurl.com/NASA-CubeSat-Initiative-PDF (www.nasa.gov).

Electronic Proposals may be received until the close date on November 12, 2012 at 4:30 P.M. EST via email to jason.c.crusan@nasa.gov.

Proposed CubeSat investigations must be consistent with NASA's Strategic Plan and the NASA education vision and goals. The research must address aspects of science, exploration, technology development, education or operations.

NASA will enter into a collaborative agreement with the selected Cubesat development teams to provide integration and other services as necessary to complete the launch activity. CubeSat developers are responsible for the development cost of their satellite.

The CubeSat Launch Initiative is open to NASA centers, U.S. not-for-profit organizations, and accredited U.S. educational organizations. Participation in the CubeSat Launch Initiative will be contingent upon selection by NASA and negotiation of an appropriate Agreement between NASA and the Collaborator.

More information of the NASA CubeSat Launch initiative (CSLI) can be accessed on the web at:
http://www.nasa.gov/directorates/heo/home/CubeSats_initiative.html

[ANS thanks Jason Crusan at NASA for the above information]

National Scouting Museum Announces JOTA Contest for ISS Contact

On October 20, 2012, the National Scouting Museum in Irving, Texas (a suburb of Dallas) will contact an astronaut on the International Space Station via amateur radio, during the 55th Jamboree On-The-Air (JOTA).

The National Scouting Museum says they expect as many as 25 participants will be selected in a competition to speak via amateur radio with an astronaut in space. The competition is open to all currently registered Cub Scouts, Boy Scouts, Varsity Scouts, Sea Scouts, and Venturers who submit the following:

1) Answer the following question: Why should we continue space exploration? in 100 words or less.

2) Indicate if you have any experience with amateur radio or STEM (science, technology, engineering, math) subjects, as well as if you have earned the Astronomy academic belt loop and pin for Cub Scouts, the Space Exploration and/or the Astronomy merit badges, and any other special interests and training related to amateur radio, STEM, or space.

Scouts must send their response by e-mail to nsmuseum@scouting.org before 11:59 p.m., Friday, September 15, 2012 for their chance to be selected to participate in this once-in-a-lifetime opportunity.

Scouts who enter should be capable of getting to Irving, Texas for JOTA but that should mean most of Texas, Oklahoma, western Louisiana, and Arkansas.

[ANS thanks Tom Schuessler, N5HYP, Scout Radio Coordinator, Irving Amateur Radio Club for the above information]

VQ9JC Activates Diego Garcia on Satellites

A news item in the Ohio/Penn DX Bulletin No. 1074, dated August 13, 2012, reports Jim Clary, VQ9JC/ND9M, is back on Diego Garcia until mid-November, 2012. Jim operates through the LEO satellites with an FT-857 (TX) and FT-817 (RX) for duplex comms. His satellite antenna is a 5-element Elk log periodic.

The ham shack building on Diego Garcia is closed for maintenance. Jim operates Field Day style from two recreational parks on the island. His HF antennas are hung from trees and he needs to bring all of his amateur radio gear with him including the radio, power supply, antennas, power and coax cables, keyer, laptop, and tools) with him in two backpacks. Jim's HF rig is an FT-897D (barefoot at 100W) and single-band dipoles. Most operating will be on CW, with SSB on occasion. Since his two operating spots are outside in public areas, Jim has to set up the station and then break it down each day, which further limits his operating time to 1230-1615z on most days. QSL via ND9M.

All VQ9JC HF operating is from the island, so contacts are valid for DXCC and other awards. Satellite operating is from both the island as well as the ship Jim works on. All QSOs made from the ship will be clearly identified as '/MM' or 'maritime mobile', and the QSLs will indicate that as well.

On his return voyage home from Diego Garcia to the United States last year Jim operated shipboard providing maritime mobile satellite contacts from rare ocean grids. No information is available yet about his return voyage plans for this trip.

[ANS thanks Ohio/Penn DX Bulletin No. 1074 for the above information]

AMSAT at the ARRL New England Convention

AMSAT will be at the ARRL New England Convention 24-26 August 2012. The convention will be held at Holiday Inn in Boxborough, Massachusetts. Ernie Bauer, N1AEW, is leading the booth manning efforts. A forum session will also be held from 1000 to noon on Saturday, 25 August, which will include talks by AMSAT

President Barry Baines, WD4ASW and VP Engineering Tony Monterio, AA2TX.

[ANS thanks Ernie, N1AEW, for the above informaion]

Satellite Shorts From All Over

- Check out the "Eclectic Technology" column on page 44 of the August 2012 QST Magazine, by Steve Ford, WB8IMY for an article about the Fox-1 satellite (and brief mention of AMSAT's accomplishments in developing small satellites.

- Some may wish to investigate the free Ham Radio Toolbar for your web browser by John, G0DPC at: http://www.haminfobar.co.uk/ John says he provides a completely free download, with no hidden catches.

- You can see the images sent back from Japan's HORYU-2 amateur satellite at: http://www.uk.amsat.org/9548 This link also provides latest mission information and telemetry capture/decoding tools. The satellite's callsign is JG6YBW and it transmits on 437.375 MHz.

- In a 20 minute video Korean artist Hojun Song and Donghee Park describes the Open Source Satellite Initiative amateur radio CubeSat OSSI-1. This satellite plans to launch on a Soyuz-2-1b rocket from the Baikonur launch facility in Kazakhstan along with the Bion-M1 and Dove-2 satellites in December, 2012 with an orbit of 575 km by 290 km and 64.9 degrees inclination. It has a beacon in the 145 MHz band and a data communications transceiver in the 435 MHz band. Also aboard is a 44 watt LED array to flash Morse Code messages to observers on Earth. Watch at: http://www.uk.amsat.org/9600

- This video report will update you with the Mars post-landing check out and preparations for the rover mission:

https://www.youtube.com/watch?feature�ayer_embedded&v�odK2g6aok

And, get a personal perspective of the mission from Mark Rober, one of Curiosity's 3000 developers:

http://www.youtube.com/watch?feature�ayer_embedded&v�KogFDM3Zg

[ANS thanks everyone for the above information]

ARISS Status - 13 August 2012

1. Missed Contact with Canada Science and Technology Museum

Canada Science and Technology Museum Summer Day Camps had been scheduled
for
an
ARISS contact on Thursday, August 9 via station IK1SLD in Italy. The
contact
was unsuccessful. ARISS is investigating the reason for the failure.

2. Expedition 30/31 Scheduled for Debrief

Astronauts Don Pettit and Andr� Kuipers (Expedition 30/31) will take
part in
an
ISS Ham debrief session to give feedback on the ARISS program. The
debrief
is
scheduled for August 15.

[ANS thanks Carol, KB3LKI, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the
President's Club. Members of the President's Club, as sustaining
donors to AMSAT Project Funds, will be eligible to receive additional
benefits. Application forms are available from the AMSAT Office.

Primary and secondary school students are eligible for membership
at one-half the standard yearly rate. Post-secondary school students
enrolled in at least half time status shall be eligible for the student
rate
for a maximum of 6 post-secondary years in this status.
Contact Martha at the AMSAT Office for additional student membership
information.

73,
This week's ANS Editor,
Lee McLamb, KU4OS

```
From 6924845019385005931
X-Google-Thread: 10e8ad,7040ff8cb680cf47,start
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
```

```
Received: by 10.66.80.166 with SMTP id s6mr328500pax.30.1345737209395;
        Thu, 23 Aug 2012 08:53:29 -0700 (PDT)
Path: a8ni15574965pbd.1!nntp.google.com!news.glorb.com!news-out.readnews.com!
transit3.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-233 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Thu, 23 Aug 2012 11:53:28 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 2199
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <002401cd8146$b327b470$19771d50$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
X-Trace: reader1.panix.com 1345737208 18999 166.84.1.6 (23 Aug 2012 15:53:28 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Thu, 23 Aug 2012 15:53:28 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
Content-Language: en-us
```

This report is organized into three (3) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites

SB SAT @ AMSAT W8ISS $WSR-233.S1
WSR 233 Part 1 08/21/2012

AMSAT NEWS SERVICE BULLETIN 233.S1
FROM AMSAT HQ SILVER SPRING, MD, August 21, 2012
TO ALL RADIO AMATEURS
BID: $WSR-233.S1

PW-Sat
Catalog Number: 38083 (?)
Launch Date: Febrauary 13, 2012
Launch Site: Kourou, French Guiana

Status: On Orbit

Uplink: 435.020 MHz FM
Downlink: 145.900 MHz DSB

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=132
[07162012]

=====
DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational
Current Mode: Science Mode - Beacon ONLY

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink: 435.530 to 435.570 MHz

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=68
[02092011]

=====
VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05, 2005 0444z
Launch site: Satish Dhawan Space Centre, India

Status: Operational
Current Mode: U/v - Dutch Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.9360 MHZ CW

```
Dutch Beacon:   145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=30

To know what transponder is switched on please listen for the beacon
that is active. Each transponder has a different beacon.
[03232012]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002 1700z
Launch site: Baikonur, Kazakhstan

Status: Operational

Current Mode: V/u

Uplink:   145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4
Hz. The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute
   timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the re-
   peater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset
   the 10 minute timer.
[02092011]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Operational
Current Mode: V/u (Mode JA)

Voice/CW (Mode JA)
Uplink:   145.90 to 146.00 MHz CW/LSB
```

Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage:
http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's
CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/
fo29cwts.htm
[01122012]
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993 0140z
Launch site: Kourou, French Guiana

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[02092011]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974
Launch site: Vandenberg AFB, California, USA

```
Status: Operational

Current Mode: Alternating between Mode A and B every 24 hours

Uplink:   145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink:  29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons:   29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php
[04242012]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998 0640z (ZARYA module)
Launch sites: Baikonur, Kazakhstan
              Kourou, French Guiana
              Uchinoura Space Center, Japan
              Kennedy Space Center, Titusville, Florida, USA

Status: Operational

Current Active Modes: FM Repeater - OFF
                      Voice -       V/v
                      BBS -         OFF
                      2m APRS -     OFF
                      70cm APRS -   ON
                      70cm Digi -   ON
                      SSTV -        OFF


Expedition 32 Crew (July 2012 - November 2012 ):
Commander:                Gennady Padalka     RN3DT
Flight Engineer:          Joe Acaba           KE5DAR
Flight Engineer:          Sergei Revin        RN3BS
Flight Engineer:          Sunita Williams     KD5PLB
Flight Engineer:          Yuri Malenchenko    RK3DUP
Flight Engineer:          Akihiko Hoshide     KE5DNI


Available Modes and Frequencies:
Digital/APRS:
Worldwide 2m packet uplink:     145.825 MHz FM 1k2
Worldwide 2m packet downlink:   145.825 Mhz FM 1k2
Worldwide 70cm packet uplink:   437.550 Mhz FM 1k2
Worldwide 70cm packet downlink: 437.550 Mhz FM 1k2
```

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
2m Packet Mailbox: RS0ISS-11
2m Digipeater alias: ARISS
70cm Packet Mailbox: RS0ISS-1
70cm Digipeater callsign: RS0ISS
70cm Digipeater alias: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[08062012]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-233.S2
WSR 233 Part 2 08/21/2012

AMSAT NEWS SERVICE BULLETIN 233.S2
FROM AMSAT HQ SILVER SPRING, MD, August 21, 2012
TO ALL RADIO AMATEURS
BID: $WSR-233.S2

RS-40 MiR (Yubileiny-2)

```
Catalog Number: 38733
Launch Date: July 28, 2012

Status: On Orbit

Uplink:
Downlink(s):    435.265 MHz
                435.365 MHz

Beacon:

Callsign:

URL:
[07302012]
=====
HORYU-II
Catalog number: 38340
Launch Date: May 17, 2012

Status: On Orbit

Uplink:   145.??? MHz
Downlink: 437.375 MHz CW/AX25/FSK

Beacon: 437.375 MHz CW

Callsign: JG6YBW

URL:

IARU Coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=216
[05282012]
=====
XaTcobeo
Catalog Number: 38082
Launch Date: Febrauary 13, 2012
Launch Site: Kourou, French Guiana

Status: Operational

Uplink:
Downlink: 437.365 MHz FFSK with AX.25

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=135
```

```
[03162012]
=====
UniCubeSat
Catalog Number:
Launch Date: Febrauary 13, 2012
Launch Site: Kourou, French Guiana

Status: Operational

Uplink:
Downlink: 437.305 MHz 9k6 bps FSK

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=133
[03162012]
=====
Robusta
Catalog Number:
Launch Date: Febrauary 13, 2012
Launch Site: Kourou, French Guiana

Status: On Orbit

Uplink:
Downlink: 437.325 MHz 1k2 FM telemetry (data every 1 min, 20 sec. burst)

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=122
[02142012]
=====
MO-72 MaSat-1
Catalog Number: 38081
Launch Date: Febrauary 13, 2012
Launch Site: Kourou, French Guiana

Status: Operational

Uplink:
Downlink: 437.345 MHz GFSK 625/1250 bps
          437.345 MHz CW
```

```
Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=126
[03232012]
=====
Goliat
Catalog Number: 38085
Launch Date: Febrauary 13, 2012
Launch Site: Kourou, French Guiana

Status: Operational

Uplink:
Downlink: 437.485 MHz 1k2 AFSK

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=98
[03162012]
=====
E-St@r
Catalog Number: 38079
Launch Date: Febrauary 13, 2012
Launch Site: Kourou, French Guiana

Status: On Orbit

Uplink:
Downlink: 437.445 MHz 1k2 bps AFSK

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=130
[07302012]
=====
ALMASat-1
Catalog Number: 38078
Launch Date: Febrauary 13, 2012
```

Launch Site: Kourou, French Guiana

Status: On Orbit

Uplink:
Downlink: 437.465 MHz 1k2 bps FSK
          2407.850 MHz

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=39
[02212012]
=====
RS-39 Chibis-M
Catalog Number: 38051
Launch Date: October 30, 2011 10:11:00 UTC
Launch site: Tyuratam (Baikonur Cosmodrome), Kazakhstan

Status: Operational

Uplink:
Downlink:

Beacon: 435.315 MHz CW
        435.215 MHz CW

Callsign:

URL:

IARU coordination status page:
[07302012]
=====
JUGNU
Catalog Number: 37839
Launch Date: October 12, 2011 05:30:00 UTC
Launch site: Satish Dhawan Space Centre, India

Status: On Orbit

Uplink: 145.??? MHz 1k2 (mode?)
Downlink: 437.505 MHz 9k6 (mode?)

Beacon: 437.275 MHz 15 wpm (?) CW

Callsign:

URL: http://www.iitk.ac.in/me/jugnu/index.htm

```
IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=160
[07092012]
=====
SRMSAT
Catalog Number: 37841
Launch Date: October 12, 2011 05:30:00 UTC
Launch site: Satish Dhawan Space Centre, India

Status: On Orbit

Uplink:   145.900 MHz 1k  AX.25 (speed?)
Downlink: 437.500 MHz 2k4 AX.25

Beacon: 437.425 MHz 12 wpm CW

Callsign:

URL: http://srmsat.in/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=181
[07092012]
=====
HRBE (E1P Explorer 1 [Prime] CubeSat (E1P-U2))
Catalog Number: 37855
Launch Date: October 28, 2011
Launch site: Vandenberg Air Force Base, California, USA

Status: On Orbit

Uplink:   437.305 MHz (???)
Downlink: 437.505 MHz AX.25 (SSB?)

Beacon:

Callsign:

URL: http://ssel.montana.edu/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=116
[01122012]
=====
M-Cubed
Catalog Number: 37855
Launch Date: October 28, 2011
Launch site: Vandenberg Air Force Base, California, USA

Status: On Orbit

Uplink:
```

Downlink: 437.485 MHz AX.25

Beacon:

Callsign:

URL: http://umcubed.org/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=215
[01122012]
=====
RAX-2
Catalog Number: 37853
Launch Date: October 28, 2011
Launch site: Vandenberg Air Force Base, California, USA

Status: Operational

Uplink:
Downlink: 437.345MHz 9k6 GMSK

Beacon:

Callsign:

URL: http://rax.engin.umich.edu//

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=221
[03232012]
=====
AO-71 AubieSat-1
Catalog Number: 37854
Launch Date: October 28, 2011
Launch site: Vandenberg Air Force Base, California, USA

Status: On Orbit

Uplink:
Downlink: 437.475 MHz 1k2 AX.25

Beacon: 437.475 MHz CW

Callsign: KI4NQO

URL: http://www.space.auburn.edu/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=148
[12262011]
=====
O/OREOS

Catalog Number: 37224
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: On Orbit

Uplink:
Downlink: 437.035 MHZ AX.25

Beacon:

Callsign:

URL: http://www.ooreos.org/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=146
[02092011]
=====
Rax-1 Radio Aurora Explorer
Catalog Number: 37223
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: On Orbit

Uplink:
Downlink: 437.505 MHz 9k6 GMSK

Beacon:

Callsign: RAX-1

URL: http://rax.engin.umich.edu/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=165
[02092011]
=====
FO-69 Fastrac-1 Sara Lily
Catalog Number: 37227
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: Operational

Uplink 1: 145.980 MHz 1k2 baud
Uplink 2: 145.825 MHz 1k2 baud
Downlink: 437.345 MHz 1k2 and 9k6 baud

Beacon: 437.435 MHz 1k2 AX.25

Callsign: Fast1

```
URL: http://fastrac.ae.utexas.edu/index.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=83
[07052011]
=====
FO-70 Fastrac-2 Emma
Catalog Number: 37380
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: Operational

Uplink 1: 435.025 MHz 1k2 baud
Uplink 2: 437.435 MHz 9k6 baud
Downlink: 145.825 MHz 1k2 and 9k6 baud

Beacon:   145.825 MHz 1k2 AX.25

Callsign: Fast2

URL: http://fastrac.ae.utexas.edu/index.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=84
[12162011]
=====
StudSat
Catalog Number: 36796
Launch Date: July 12, 2010 0352z
Launch site: Satish Dhawan Space Centre, India

Status: On Orbit

Uplink:   437.505MHz, 9600bps FSK
Downlink: 437.505MHz, 9600bps FSK
Beacon  : 437.505MHz,   20bps ASK

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=164
[02092011]
=====
TIsat-1
Catalog Number: 36799
Launch Date: July 12, 2010 0352z
Launch site: Satish Dhawan Space Centre, India

Status: On orbit

Callsign: HB9DE

Uplink:   145.980MHz FM, AFSK
```

```
Downlink: 437.305MHz FM, AFSK
Beacon:   437.305MHz CW

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=118
[02092011]
=====
SwissCube
Catalog Number: 35932
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Callsign: HB9EG

Beacon(100mw): 437.5050MHz CW
Beacon(1w):    437.5050MHz FSK 1k2bps

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=109
[02092011]
=====
UWE-2
Catalog Number: 35934
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: In Orbit

Beacon(500mw): 437.3850 MHz AFSK 1k2bps
               437.3850 MHz FSK 9k6bps

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=110
[02092011]
=====
ITUpsAT1
Catalog Number: 35935
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Beacon(100mw): 437.325MHz CW
Beacon(1w): 437.325MHz 19k2bps

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=113
[02092011]
=====
BEESAT
Catalog Number: 35933
```

Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Callsign: DP0BEE

Beacon(100mw): 436.000MHz CW
Beacon(500mw): 436.000MHz GMSK 4k8bps
Beacon(500mw): 436.000MHz GMSK 9k6bp
[02092011]
=====
CP-6
Catalog Number: 35003
Launch Date: May 19, 2009 2355z
Launch site: Wallops Island, Virginia, USA

Status: Operational

Downlink: 437.365 MHz 1k2 AFSK

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=121
[07302012]
=====
HAWKSAT 1
Catalog number: 35004
Launch Date: May 19, 2009 2355z
Launch site: Wallops Island, Virginia, USA

Status: operational

Downlink: 437.345 MHz ?

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=105
[07302012]
=====
Pharmasat
Catalog Number: 35002
Launch Date: May 19, 2009 2355z
Launch site: Wallops Island, Virginia, USA

Status: Operational

Downlink: 437.465 MHz 1k2 AFSK

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=94
[02092011]
=====
ANUSAT
Catalog Number: 34808

```
Launch Date: April 20, 2009 0115z
Launch Site: Satish Dhawan Space Centre, India

Status: ?

Downlink:  435.000 MHz
Uplink:    145.800 MHz

Telemetry: 137.400 MHz
[02092011]
=====
SOHLA-1 (ASTRO TECH.)
Catalog Number: 33496
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational

Proposed Frequencies and Modes:
Downlink: 437.505 MHz AFSK/CW
Beacon:   437.505 MHz AFSK/CW

Callsign:

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=101
[02092011]
=====
KAGAYAKI (Solan Co.)
Catalog Number: 33495
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: In Orbit

Downlink: 437.375 MHZ    FSK9k6/CW
Beacon:   437.375 MHz    FSK9k6/CW

IARU coordination status page:

AMSAT-NA webpage:

[02092011]
=====
STARS (Kagawa Univ.) (Twin Satellites)
Catalog Number: 33498
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational ?

Downlinks: 437.485 MHz FM/CW
           437.465 MHz FM/CW
```

```
Beacons:   437.305 MHz FM/CW
           437.275 MHz FM/CW

Callsigns: JR5YBN
           JR5YBO

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=99

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=121&retURL
=/satellites/status.php
[02092011]
=====
KKS-1 (Tokyo MCIT)
Catalog Number: 33499
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational

Downlink:  437.455 MHz AFSK/CW
Beacon:    437.385 MHz AFSK/CW

Callsign: JQ1YYY

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=107

AMSAT-NA webapge:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=120&retURL
=/satellites/status.php
[20092011]
=====
PRISM (Tokyo Univ.)
Catalog Number: 33493
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational ?

Downlink: 437.425 MHz AFSK/GMSK/CW
Beacon:   437.250 MHz AFSK/GMSK/CW

Callsign: JQ1YCX

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=97

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=119&retURL
=/satellites/status.php
[02092011]
```

=====
RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number: 32953
Launch Date: May 23, 2008 1520z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational

Curent Modes: Telemetry
              Audio
              Images

Downlinks: 435.315 MHz
           435.215 MHz

AMSAT-NA website:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=115&retURL=/satellites/status.php

Official website:
http://www.npopm.com/?cid=leoca&caid=43
[02092011]
=====
CanX-2
Catalog number: 32790
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational in range of ground station only

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=46
[02092011]
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Downlink: 437.425 MHz 1k2 baud packet

For the latest project status update please visit the AAUSAT-II web page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:

```
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=60
[02092011]
=====
CO-65 CUTE-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Downlink:  437.475 MHz 9k6 Packet
Uplink:   1267.600 Mhz

Telemetry Beacon:
Downlink: 437.2750 MHz CW

For the latest project status update please visit the Cute-1.7+APD II
web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=78

Command Station blog website:
http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=112&retURL
=/satellites/status.php
[03232012]
=====
Compass-1
Catalog number: 32787
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Current Mode: dependant on last received command

Uplink:   145.980 MHz FM
Downlink: 437.275 Mhz CW
          437.405 MHz Packet

For the latest project status update please visit the Compass 1 web
page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=52

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=114&retURL
=/satellites/status.php
[06162011]
```

```
=====
CO-66 Seeds II
Catalog number: 32791
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Downlink: 437.485 MHz

Callsign: JQ1YGU

For the latest project status update please visit the Seeds 2 web
page: http://cubesat.aero.cst.nihon-u.ac.jp/english/seeds_2_e.html

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=36

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=113&retURL
=/satellites/status.php
[073092011]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007 0702z
Launch site: Baikonur, Kazakhstan

Status: Intermittent

Current Mode:  /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon:    435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=94&retURL=
/satellites/status.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=72
[02092011]
=====
CP3
Catalog Number: 31129
Launch Date: April 17,2007 0702z
Launch site: Baikonur, Kazakhstan

Status: Operational
```

Current Mode: /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=74
[02092011]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005 0652z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon: 437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/xivpicte.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=37
[02092011]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: ?????

Current Mode: /u

Beacon: 436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=96&retURL
=/satellites/status.php

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[02092011]
=====

QuakeSat
Catalog Number: 27845
Launch Date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Telemetry only

Current Mode: 9600 baud data packet

Mode U packet
Downlink: 436.675 MHz 9k6 BPS

Quakesat webpage:
http://www.quakefinder.com/services/quakesat-ssite/
[02252011]
=====
CO-55 Cute-1.7+APD II
Catalog Number: 27844
Launch date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational

Current Mode: CW downlink worldwide
AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=69&retURL
=/satellites/status.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=78
[02092011]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001 0240z
Launch site: Kodiak Launch Complex, Alaska, USA

Status: Telemetry only

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

```
aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[02092011]
=====
RS-22 RADIO SPORT 22 (MOZHAYETS 4)
Catalog number: 27939
Launch Date: September 27, 2003 0612z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational - 70cm cw only

Current Mode:  /u

CW Beacon - 435.352 MHz
            145.818 MHz

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=76&retURL
=/satellites/status.php
[02092011]
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990
Launch site: Kourou, French Guiana

Status: CW Beacon only

Uplinks:          145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink:      437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[02092011]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984
Launch site: Vandenburg AFB, California, USA

Status: Operational ?

Current Mode:  /v
```

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon: 435.025 MHz
Mode-S Beacon: 2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[07052011]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998 0640z (ZARYA module)
Launch sites: Baikonur, Kazakhstan
Kourou, French Guiana
Uchinoura Space Center, Japan
Kennedy Space Center, Titusville, Florida, USA

Status: Operational

Current Active Modes: FM Repeater - OFF
Voice - V/v
BBS - U/u
2m APRS - OFF
70cm APRS - ON
70cm Digi - ON
SSTV - OFF

Expedition 32 Crew (July 2012 - November 2012):

Commander:	Gennady Padalka	RN3DT
Flight Engineer:	Joe Acaba	KE5DAR
Flight Engineer:	Sergei Revin	RN3BS
Flight Engineer:	Sunita Williams	KD5PLB
Flight Engineer:	Yuri Malenchenko	RK3DUP
Flight Engineer:	Akihiko Hoshide	KE5DNI

Available Modes and Frequencies:
Digital/APRS:
Worldwide 2m packet uplink: 145.825 MHz FM 1k2
Worldwide 2m packet downlink: 145.825 Mhz FM 1k2
Worldwide 70cm packet uplink: 437.550 Mhz FM 1k2
Worldwide 70cm packet downlink: 437.550 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
2m Packet Mailbox: RS0ISS-11
2m Digipeater alias: ARISS
70cm Packet Mailbox: RS0ISS-1
70cm Digipeater callsign: RS0ISS
70cm Digipeater alias: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[08062012]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-233.S3
WSR 233 Part 3 08/21/2012

AMSAT NEWS SERVICE BULLETIN 233.S3
FROM AMSAT HQ SILVER SPRING, MD, August 21, 2012
TO ALL RADIO AMATEURS
BID: $WSR-233.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

NANOSAIL-D
Catalog Number: 37361
Ejection Date: January 17, 2011

Status: Non - Operational

```
Downlink: 437.270 MHz AX.25

URL: http://nanosaild.engr.scu.edu/dashboard.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=115
[07302012]
=====
HO-68 HOPE-1 (CAS-1) (XW-1)
Catalog Number: 36122
Launch Date: December 15, 2009 0231z
Launch site: Taiyuan Space Center, PRC

Status: Telemetry only

Callsign:
Broadcast:    BJ1SA-11
BBS:     BJ1SA-12

Uplinks:   145.8250 MHz FM, PL 67.0 Hz.
           145.9250 - 145.9750 MHz SSB/CW
           145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
           435.7650 - 435.7150 MHz SSB/CW
           435.6750 MHz AFSK 1200 BPS

Beacon:    435.7900 MHz CW

Mode and Antenna Polarization:
V: LHCP 2.0dBi max
U: RHCP 3.0dBi max

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=108

For more information about XW-1 (CAS-1):
http://
[04302012]
=====
SO-67 SumbandilaSat
Catalog Number: 35870
Launch Date: September 17, 2009 1555z
Launch site: Baikonur, Kazakhstan

Status: Non - Operational

Callsign: ZS0SUM

Uplink:   145.875MHz FM tone 233.6 Hz
Downlink: 435.345MHz FM

Mode and Antenna Polarization:
```

```
V: Linear
U: Linear

For more information about SO-67:
http://www.amsatsa.org.za/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=88
[01272012]
=====
CP4
Catalog Number: 31132
Launch Date: April 17, 2007

Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon:    437.325 MHz CW

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=79
[09062010]
=====
LIBERTAD-1
Catalog Number: 31128
Launch Date: April 17, 2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink:   145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=76
[09062010]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: Non-Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
```

```
Voice Recorder:  145.825 Mhz FM

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=51
[09062010]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency:  437.305
                             2407.250

Official Website: http://www.ncube.no

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=24
[09062010]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink:         437.250 MHz FM 67Hz CTCSS
Voice Downlink:      2401.835 MHz FM
Packet Up/Downlink:   437.250 MHz 9k6 packet
Packet Downlink      2401.835 MHz 38k4 packet

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=54
[09062010]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non-Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=53
[09062010]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004 0745z
```

Launch site: Baikonur, Kazakhstan

Status: Non - Operational

Current Mode(s):
Voice repeater: V/u
Uplink: 145.880 MHz FM
Downlink: 435.150 MHz FM

Telemetry: Recovery efforts
Downlink: 435.150MHz 9k6

```
Analog voice downlink:     435.300 MHz FM
                           435.150 MHz FM
                          2401.200 Mhz FM
Analog voice uplink:       145.860 MHZ FM
                           145.880 MHz USB
                           145.880 MHz FM
                           145.920 MHz FM
                           145.920 MHz FM - 67 Hz PL tone burst
                          1268.705 MHz FM
Digital Downlinks:         435.150 MHz FM 38k4 PBP, 1 watt output
                           435.150 MHz FM 9k6 Pacsat Broadcast Protocol
                          2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:            145.860 MHz FM 9k6 Pacsat Broadcast Protocol
                          1268.703 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon:                    435.150 MHz
```

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=19
[12062011]
=====
CANX-1
Catalog Number: 27847
Launch Date: June 30, 2003

Status: Non-Operational

Downlink: 437.8800 MHz AFSK 1k2bps

```
[06052009]
=====
DTUSAT
Catalog Number: 27842
Launch Date: June 30, 2003

Status: Non-Operational

Current Mode: 2k4 AFSK Packet last reported

Downlink: 437.475MHz

Officail webpage: http://dtusat1.dtusat.dtu.dk/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=101&retURL
=satellites/all_oscars.php
[02212009]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink:   435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)

Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Telemetry only

Uplinks:   145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink:  437.325 MHz

Broadcast callsign: MYSAT3-11
BBS:                MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial land and weather imaging payloads offers FM and FSK
Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as
a collaborative effort between the Malaysian government and Surrey
```

```
Satellite Technology Ltd.
[03302009]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink:   145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS:                SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink:   145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000
```

Status: Non-Operational

Uplinks

V-band: 145.840 - 145.990 MHz CW/LSB
U-band: 435.550 - 435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks

S2-band: 2401.225 - 2401.475 MHz CW/USB
K-band: 24048.010 - 24048.060 MHz CW/USB
Beacon: 2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)

BEACON	General Beacon(GB)	Middle Beacon(MB)	Engineering Beacon(EB)
2 m	none	145.898 MHz	none
70cm	435.438 MHz	435.588 MHz	435.838 MHz
13cm(1)	2400.188 MHz	2400.338 MHz	2400.588 MHz
13cm(2)	2401.173 MHz	2401.323 MHz	2401.573 MHz
3cm	10450.975 MHz	10451.125 MHz	10451.375 MHz
1.5cm	24047.885 MHz	24048.035 MHz	24048.285 MHz

[07162007]

=====

OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]

=====

UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip

[01222007]
=====
SO-35 SUNSAT
Catalog Number: 25636
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Non-Operational

Current Modes:
Telemetry : /u

```
Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign:       4XTECH-12

More information of GO-32 can be found at:
http://asri.technion.ac.il/techsat/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=14&retURL
=/satellites/status.php
[07172010]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink:   145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
MO-30 UNAMSAT-2
Catalog Number: 24305
Launch Date: September 5, 1996

Status: Non-operational

Downlink:       435.1380 MHz AFSK 1200 BPS
Downlink:       435.2060 MHz AFSK 1200 BPS
Uplink:         145.8150 MHz AFSK 1200 BPS
Uplink:         145.8350 MHz AFSK 1200 BPS
Uplink:         145.8550 MHz AFSK 1200 BPS
Uplink:         145.8750 MHz AFSK 1200 BPS
[06042009]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Non-operational
```

```
Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign:       POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012009]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
AO-24 ARSENE
Catalog Number: 22654
Launch Date: May 13, 1993

Status: Non-operational
```

```
Uplink:    435.0625 MHz FM 1k2bps AFSK
           435.1125 MHz FM 1k2bps AFSK
           435.1375 MHz FM 1k2bps AFSK
Downlink:  145.9750 MHz FM 1k2bps AFSK
          2446.5025 MHz FM 1k2bps AFSK

Beacon:    2446.4700 MHz CW

Broadcast callsign:
BBS:
[12162009]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HL01-11
BBS: HL01-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational
```

```
Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
[05012006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: non-operational

Current Mode:  V/u

Uplink:         145.900 MHz FM 1200-baud Manchester FSK (reserved)
                145.920 MHz FM VOICE
                145.940 MHz FM 1200-baud Manchester FSK (reserved)
                145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink:       437.026 MHz USB VOICE
                (1200-baud PSK - MBL Telemetry Only)
```

```
Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[07242009]
=====
UO-15 UoSAT-4
Catalog Number: 20438
Launch Date: January 22, 1990

Status: Non-operational

Uplink: ?
Downlink: 435.1250MHz (?)
          435.1200MHz (?)
[06042009]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS
```

```
Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon:   145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink  29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
Beacons:   29.450 MHz
          435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
```

Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink: 145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB

Beacon 1: 29.352 MHz (intermittent)
Beacon 2: 29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB

Beacon: 145.860 MHz

Robot: 145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis

Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at}
amsat.org
NNNN
/EX

```
From 1232476495328927685
X-Google-Thread: 10e8ad,fb4f3ac4acca8974,start
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII
Received: by 10.66.76.169 with SMTP id l9mr156647paw.47.1345945579696;
        Sat, 25 Aug 2012 18:46:19 -0700 (PDT)
MIME-Version: 1.0
Path: a8ni49268921pbd.1!nntp.google.com!news.glorb.com!news-out.readnews.com!
transit3.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-239 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sat, 25 Aug 2012 21:46:19 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 530
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <001f01cd832c$91f5b0d0$b5e11270$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
X-Trace: reader1.panix.com 1345945579 26394 166.84.1.6 (26 Aug 2012 01:46:19 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 26 Aug 2012 01:46:19 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
```

AMSAT NEWS SERVICE
ANS-239

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an

active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor at amsat.org

****
* Reminder: Ballots for the AMSAT-NA Board of Directors Election *
* are due by mail by the close of business on September 15, 2012 *
****

In this edition:

* AMSAT 2012 Space Symposium On-Line Registration Opens
* AMSAT 2012 Space Symposium Second Call for Papers
* Rooms Still Available for AMSAT-UK Colloquium
* Successful ARISS Contacts With Australia and Japan
* South Africa University CubeSat With HF Beacon to Launch in November
* Mars Landing Received Signals Recording Posted On-Line
* Check Your Keps - ISS Orbit Successfully Readjusted
* Help Wanted: AMSAT News Service Rotating Editor Positions Available
* NASA Announces SpaceX Cargo Missions to ISS Begin in October
* Satellite Shorts From All Over

SB SAT @ AMSAT $ANS-239.01
ANS-239 AMSAT News Service Weekly Bulletins

AMSAT News Service Bulletin 239.01
>From AMSAT HQ SILVER SPRING, MD.
August 26, 2012
To All RADIO AMATEURS
BID: $ANS-239.01

AMSAT 2012 Space Symposium On-Line Registration Opens

AMSAT announces that the registration for the 2012 AMSAT Space Symposium, to be held on Friday, October 26th through Sunday, October 28th is now open on-line. A mail-in option is also available those preferring this approach.

See the AMSAT Web Store to complete your on-line registration:
http://store.amsat.org/catalog/ - then click on the "AMSAT 2012 Symposium" item in the top left box on your web browser.

Downloadable paper registration forms in MS-Word format and PDF format are available on the 2012 Symposium page:
http://www.amsat.org/amsat-new/symposium/2012/index.php

Prices for the Symposium are:

+ Symposium Registration including Proceedings
  o Through September 23, 2012: $ 45.00
  o Starting September 24, 2012: $ 50.00
  o At the Door: $ 55.00

+ Saturday Evening Banquet $ 45.00

+ Sunday Morning Area Coordinators� Breakfast $ 15.00

+ Monday (Oct 29) bus trip to KSC and entrance ticket $ 100.00

The Symposium weekend will feature:

+ Space Symposium with Amateur Satellite Presentations
+ Operating Techniques, News, & Plans from the Amateur Satellite World
+ Board of Directors Meeting open to AMSAT members
+ Meet Board Members and Officers
+ Annual General Membership Meeting
+ Annual Banquet-Keynote Speaker and Door Prizes

The Symposium Hotel is the Holiday Inn at Orlando-International Airport is located one mile from the Orlando International Airport (MCO). The AMSAT discount rate is $99 + taxes per night. The reservation block code used when calling the hotel directly is AMT.

The hotel telephone number is 407-851-6400. The Symposium Committee recommends you make reservations by calling the hotel directly rather than through the Web. Cutoff date for reservations is Oct 6, 2012. The direct link to the hotel web page is:
http://www.holidayinn.com/hotels/us/en/orlando/mcoap/hoteldetail

The hotel offers free Internet connection and free airport shuttle. When you arrive at the Orlando Airport call 407-709-5310 to request the shuttle.

The Orlando International Airport (MCO) is the closest to the Symposium and is served by most major air carriers. The hotel address is: 5750 T.G. Lee Blvd � Orlando, FL 32822. A map link is included on the hotel web page.

[ANS thanks the 2012 Symposium Committee for the above information]

AMSAT 2012 Space Symposium Second Call for Papers

Symposium Proceedings Editor, Dan Schultz, N8FGV issued the second Call For Papers for the 2012 AMSAT Annual Meeting and Space Symposium to be held in Orlando, Florida on the weekend of October 26-28, 2012.

Proposals for papers, symposium presentations and poster presentations are invited on any topic of interest to the amateur satellite community:

+ Papers for publication in the Proceedings

+ Symposium Presentations

+ Poster Presentations

+ Equipment and Operating Demonstrations

Dan requests a tentative title of your presentation as soon as possible, with final copy to be submitted by October 1 for inclusion in the printed proceedings. Abstracts and papers should be sent to Dan Schultz, N8FGV, at n8fgv@amsat.org

The Symposium Committee still has prime slots available on the speaker's schedule. The AMSAT Symposium depends on YOU to make it happen, without speakers there is no Symposium.

Please consider doing a presentation, even if you have never done so in the past. We are especially interested in papers and presentations involving our educational partnerships with K-12 and university level classrooms. Education is quickly becoming critical for our future rides to space.

[ANS thanks 2012 Symposium Proceedings Editor Dan Schultz, N8FGV for the above information]

Rooms Still Available for AMSAT-UK Colloquium

AMSAT-UK Hon Sec Jim List, G3WGM says, "There are still rooms available at the hotel at which the AMSAT-UK Colloquium will be held on September 14, 15 and 16. The location of the Colloquium is at the Holiday Inn, Guildford, Surry, UK. TO BE SURE OF A ROOM AT THE HOTEL YOU SHOULD BOOK AS SOON AS POSSIBLE TO AVOID DISSAPPOINTMENT!"

The Colloquium is a truly international event and will include:

+ New this year will be guided tours of the new SSTL satellite construction facility, the Kepler Building, including a view of the clean rooms. This facility has been open less than a year, and is hugely impressive! Numbers on the tours are limited and strictly first come first served basis. Detailed timings to follow.

+ Presentations by experts from AMSAT-SA, AMSAT-NA and AMSAT-DL on their current spacecraft projects.

+ CubeSat presentations on UKube-1, STRaND-1, STRaND-2 and, of course the FUNcube-1 project.

+ We will be including an exclusive roundup of a number of new live and potential spacecraft projects that are under investigation and/or development.

+ Additionally a number of presentations are planned covering new communications techniques and similar futuristic topics.

+ Plus all the usual networking opportunities, the gala dinner and auction/raffle, plus the opportunity to operate the sophisticated groundstation in the GB4FUN mobile demonstration module.

Exclusive New Product Launch at AMSAT-UK Colloquium

AMSAT-UK are delighted to announce that Howard Long, G6LVB, will be present at the Colloquium this year and will be launching a new "FUN-cube Dongle PRO-PLUS" during his presentation.

Full technical details have been embargoed until his talk and we are not permitted to steal his thunder by releasing further details of this new product in advance. Attendees at the Colloquium will therefore be the first to learn about Howard's latest development which will further advance the applications for SDR devices.

Further details are at: http://www.uk.amsat.org/9565#more-9565 - and at - http://www.uk.amsat.org/colloquium/twelve.

You can book online using PayPal or Credit Card at:
http://shop.amsat.org.uk/shop/catalog/browse

[ANS thanks AMSAT-UK Hon Sec Jim List, G3WGM and Trevor, M5AKA for the above information]

Successful ARISS Contacts With Australia and Japan

An ARISS contact was held with students at the Kangaroo Inn Area School in Kangaroo Inn, South Australia on Tuesday, August 14 via station W6SRJ in California. ISS astronaut Sunita Williams, KD5PLB participated in the session, answering over 20 questions posed by the students. Nearly 90 visitors attended the event, including local politician Mitch Williams and his wife, the ABC (Australian Broadcasting Corporation) radio network, WIN 8 regional TV and representatives from three newspapers. The contact complemented a science curriculum covering space and space exploration.

On Thursday, August 16, an ARISS contact was held between students attending Wada Elementary School in Nagawa Town, Japan and Akihiko Hoshide, KE5DNI, aboard the Space Station, which highlighted a comprehensive education plan covering space, astronomy and radio communications. The event drew an audience of approximately 120 students and guests and garnered extensive media coverage including six television stations and five newspapers.

US East Coast ARISS Contact September 1

An ARISS contact with the National Electronics Museum, Linthicum, Maryland is planned for Saturday, September 1 at 15:09:11 UTC. This 42� elevation pass with a direct contact via K3CUJ should be heard along the US East Coast on the 145.800 MHz downlink.

[ANS thanks Carol Jackson, KB3LKI, and Charlie Sufana, AJ9N for the above information]

South Africa University CubeSat With HF Beacon to Launch in November

South African Radio League, SARL News reports that a new CubeSat designed and built by students at the Cape Peninsular University of Technology in Bellville will be launched towards the end of November.

Known by its engineering name ZACube-1, the satellite will be shipped in the next few weeks to Holland where it will be integrated with two other CubeSats in the launch carrier before being shipped for integrating with the DNEPR rocket, joining up to 18 other amateur radio satellites on this launch. (See: http://www.uk.amsat.org/7717)

ZACube-1 carries a HF transmitter operating on 14.099 MHz which will be used for characterization of Hermanus Magnetic Observatory�s Dual Auroral Radar Network antenna at SANAE base in Antarctica.

Also aboard ZACube-1 will be a small camera and a telemetry transmitter. Monitor this link at SARL for the audio of an interview with the satellite's project leader:
http://www.amateurradio.org.za/Amateur%20Radio%20TODAY.htm
SA AMSAT has also posted detailed news at:
http://tinyurl.com/ZACube

The IARU Amateur Satellite Frequency Coordination Panel list these frequencies:
+ Beacon   14.099 MHz
+ Uplink   145.860 MHz
+ Downlink 437.345 MHz.

[ANS thanks SA AMSAT, SARL, and AMSAT-UK for the above information]

Mars Landing Received Signals Recording Posted On-Line

An interesting article posted at UniverseToday.com tells more of the technical details of the Entry, Descent, Landing (EDL) phase when the Curiosity Mars Rover landed on Mars. The article also provides a link to the X-band radio signals received during landing.

With a 14 minute radio delay because of the distance between Earth and Mars, how did the JPL team know what was happening on Mars?

UniverseToday describes the signaling process between Mars and Earth: (http://tinyurl.com/MarsEDLTones - universetoday.com)

The Mars Science Lander sent out different tones for each event that happened, and 128 distinct tones indicated when steps in the process were activated; one sound indicated the parachute deployed, while another signaled that the vehicle was in powered flight, and still another that the Sky Crane had been activated. These sounds were a series of basic, special individual radio tones.

They were simple tones, transmitted in X-band, comparable to semaphore codes, rather than full telemetry. The Deep Space Network listened for these direct-to-Earth transmissions. However, Earth went out of view of the spacecraft, "setting" below the Martian horizon, partway through the descent, so the X-band tones were not available for confirming the final steps in descent and landing. By then, the bent-pipe relay of telemetry via the Odyssey spacecraft had begun.

Also listening was the Mars Express spacecraft. It recorded about 20 minutes of the rover�s transmissions and tones. ESA engineers have now put together an audio reproduction, compressing the 20 minutes into about 19 seconds of audio that humans can hear that are a "faithful reproduction of the �sound� of the NASA mission�s arrival at Mars
and its seven-minute plunge to the Red Planet�s surface," the European Space Agency team wrote. You can listen to the audio on this link: http://blogs.esa.int/mex/files/2012/08/Audio_MELACOM_B_MSL_EDL.mp3

[ANS thanks UniverseToday.com for the above information]

Check Your Keps - ISS Orbit Successfully Readjusted

Space-Travel.com reported on August 22that Europe's ATV-3 unmanned supply spacecraft has raised the International Space Station's orbit to about 261 miles.

The successful orbital readjustment follows a failed attempt August 15 when the ATV-3's engines shut down prematurely because of an increase in temperature on one of the units, leaving the ISS short of its intended orbital height, RIA Novosti reported.

The orbit adjustment Wednesday was done in two stages, with the ATV-3 engines firing for 348 seconds to lift the orbit to 257 miles followed by another burn four hours later that brought the space station to its final altitude.

The maneuver was to prepare for the return to earth of Russia's Soyuz TMA-04M manned spacecraft on September 17 and the docking of the Soyuz TMA-06M manned spacecraft with the ISS on October 15.

Original news item published at:
http://tinyurl.com/ISS-Reboost (www.space-travel.com)

[ANS thanks Spece-Travel.com for the above information]

Help Wanted: AMSAT News Service Rotating Editor Positions Available

The AMSAT News Service (ANS) is responsible for researching, writing, editing, and publishing the weekly amateur satellite news bulletins.

After the passing of Dee, NB2F, we currently have a two editors who take a turn weekly to publish the bulletins. With the addition of a volunteer, or two, this would generally involve taking a turn about every 3 to 4 weeks.

At present we a looking for interested satellite enthusiasts to join the ANS editorial team. Professional writing/editing experience is NOT a requirement. Your interest and enthusiasm in following and reporting on amateur radio in space will get you started! The ANS Editor team helps each other by rounding up items of interest. Plus we receive submitted items for publication ... so you won't be left all alone!

If you can commit to working on the bulletins for a week on a rotating basis please reply via e-mail to AMSAT News Service Editor JoAnne Maenpaa, K9JKM via k9jkm@amsat.org.

[ANS thanks AMSAT Vice-President User Services, Gould Smith, WA4SXM for the above information]

NASA Announces SpaceX Cargo Missions to ISS Begin in October

CAPE CANAVERAL, Fla. - NASA Administrator Charles Bolden announced Thursday [August 23, 2012] new milestones in the nation's commercial space initiatives from the agency's Kennedy Space Center in Florida. The latest advances made by NASA's commercial space partners pave the way for the first contracted flight of cargo to the International Space Station (ISS) this fall and mark progress toward a launch of astronauts from U.S. soil in the next 5 years.

Bolden announced Space Exploration Technologies (SpaceX) has completed its Space Act Agreement with NASA for Commercial Orbital Transportation Services (COTS). SpaceX is scheduled to launch the first of its 12 contracted cargo flights to the space station from Cape Canaveral in October, under NASA's Commercial Resupply Services Program.

Through the COTS program, NASA provides investments to stimulate the American commercial space industry. As part of its COTS partnership, SpaceX became the first commercial company to resupply the space station in May, successfully launching its Falcon 9 rocket and Dragon spacecraft to the orbiting complex. During the historic mission, the Dragon was captured by astronauts using the station's robot arm, unloaded and safely returned to Earth carrying experiments conducted aboard ISS. Later this winter, Orbital Sciences Corp. plans to carry out its first test flight under COTS.

The full NASA press release can be found on-line at:
http://www.nasa.gov/exploration/commercial/crew-cargo-milestones.html

[ANS thanks NASA for the above information]

Satellite Shorts From All Over

- AMSAT joins all of the spacefaring people of Earth in remembering a hero for mankind on the passing on August 25 of Neil Armstrong, the first man to walk on the Moon. Armstrong was 82.

- AMSAT has received the sad news of the passing QST Managing Editor Joel P. Kleinman, N1BKE, of Meriden, Connecticut. Joel died from injuries received during a house fire. He was 64. Kleinman was responsible for the coordination, organization, control and completion of all aspects of QST's editorial content each month. Kleinman's wife Jayne survived the fire, but is currently in the intensive care unit of a local hospital. The ARRL is collecting condolence messages to forward on to Joel's family. If you would like send a message, please email it to: news@arrl.org.

- Members of the Grupo DX Caracas announced their YW5B DXpedition to La Blanquilla Island (SA-037) between August 21-27. Activity will be on 160-2 meters using CW, SSB, FM, Satellites and the Digital modes. QSL Manager is DM4TI with instructions on his QRZ.com page. (Ohio/Penn DX Bulletin No. 1075)

+ A video about the amateur radio F-1 CubeSat that is due to be deployed from the International Space Station in September by Japanese astronaut Akihiko Hoshide KE5DNI using the ISS Kibo robot arm can be viewed on the AMSAT-UK web at:
  http://www.uk.amsat.org/9746
  It was broadcast on the Vietnamese TV station VTC2 and features interviews with Thu Trong Vu XV9AA, Hong Thai Pham and Pham Quang Hung along with a graphics clip showing the proposed deployment of the CubeSat. Part of the interview is held on the roof of the FPT university and shows the antenna array that will be used to command the F-1 CubeSat.

+ Scouts from all over the United States came to this year's Space Jam 6 sponsored by Crew 272 and Troop 17 where a ARISS contact with the ISS was held. Scouts talked with Japanese (JAXA) Astronaut Akihiko Hoshide KE5DNI using the WB9SA Satellite Communications Ham Radio Station on August 5, 2012. Watch on-line at:
  http://tinyurl.com/SpaceJam6-ARISS-Contact (www.southgatearc.org)

+ Photos from Mars keep coming in. An HD quality video of Curiosity's descent was assembled from full-resolution 1600�1200 frames from the MARDI descent imager. It also shows the best views yet of the heat shield impact on the surface of Mars:

https://www.youtube.com/watch?feature�ayer_embedded&v�X5GRPnd4U

+ Add this to your wish list - a personal Unmanned Aerial Vehicle (UAV) is now available. The drone in this video one uses a 2.4 GHz WiFi connection to an iPhone or iPad:
  http://www.youtube.com/watch?feature�ayer_embedded&v�vGvaNnMJM
  http://tinyurl.com/Personal-UAV (Southgate ARC)

+ Watch a video by KB3TQO posted on Southgate that shows a simple way to launch amateur radio antennas into the trees, really high. He demonstrates his homemade, bicycle pump powered, air cannon at:
  http://www.southgatearc.org/news/august2012/antenna_cannon_video.htm

+ The team from Mars Express put this great video together which shows what Mars looks like from above, during an elliptical orbit. They created it using 600 individual still images captured by the Visual Monitoring Camera (VMC), and it shows the view from a visiting spacecraft�s slow descent from high above the planet, then speeds up during closest approach, and then slows down again as the orbital distance increases. Orbit Mars via your browser at:
  http://www.youtube.com/watch?feature�ayer_embedded&v�6EmDQcsy0

+ The next Hudson Valley Satcom net date is Thursday, August 30, at 8 PM EDT (UTC-4 UTC) on the 146.97 MHz MBARC Repeater (PL 100). An echolink connection is available on the N2EYH-L node. More information at: http://www.hvsatcom.org. (Stu, WA2BSS)

+ NASA announced that for its 50th anniversary celebration it will be opening its gates for �virtual tours� through a partnership with Google Maps and its Street View feature. With over 6,000 panoramic images of the space center you are only a click away at: http://tinyurl.com/SpaceCenterStreetView (maps.google.com)

+ Do you want to live on Mars time? There�s an App for that now. Read the article at http://tinyurl.com/MarsTimeApp to decide which one is right for you. (UniverseToday)

+ Photos showing the deployment of the small Russian Sfera satellite from the Space Station by Russian cosmonaut Gennady Padalka, RN3DT, Expedition 32 commander, during this week's EVA can be seen at: http://www.onorbit.com/node/4890.

[ANS thanks everyone for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

Primary and secondary school students are eligible for membership at one-half the standard yearly rate. Post-secondary school students enrolled in at least half time status shall be eligible for the student rate for a maximum of 6 post-secondary years in this status. Contact Martha at the AMSAT Office for additional student membership information. And with that, please keep in mind the August 16 - 17 temperatures measured by NASA�s Curiosity rover reported that ground temperature ranged between minus 131.8� F to +37� F; air temperature

in Gale Crater ranged between minus 103� F and +28� F. That�s what

being 50% farther from the sun than Earth will do for you.

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM

From 28453817268515415
X-Google-Thread: 107ada,7a7473777ff0b63c,start
X-Google-NewGroupId: yes
X-Google-Thread: 10e8ad,7a7473777ff0b63c,start

```
X-Google-NewGroupId: yes
X-Google-Thread: 10b9c8,7a7473777ff0b63c,start
X-Google-NewGroupId: yes
X-Google-Attributes:
gida3e752f117,gid8f86f75953,gida4a23d5f63,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Received: by 10.66.83.40 with SMTP id n8mr1663707pay.42.1346081407126;
        Mon, 27 Aug 2012 08:30:07 -0700 (PDT)
MIME-Version: 1.0
Path: a8ni70994597pbd.1!nntp.google.com!news.glorb.com!usenet.stanford.edu!panix!
rri.panix.com!robomod!not-for-mail
From: SWPC.Webmaster@noaa.gov
Newsgroups:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.shor
twave,rec.radio.info
Subject: Weekly Highlights of Solar and Geomagnetic Activity, 20 - 26 August 2012
Followup-To:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.shor
twave
Date: Mon, 27 Aug 2012 11:30:06 EDT
Organization: NOAA Space Weather Prediction Center
Lines: 60
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <20120827153001.A649033C94@panix2.panix.com>
NNTP-Posting-Host: panix6.panix.com
X-Trace: reader1.panix.com 1346081406 17330 166.84.1.6 (27 Aug 2012 15:30:06 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Mon, 27 Aug 2012 15:30:06 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
```

```
:Product: Weekly Highlights and Forecasts
:Issued: 2012 Aug 27 0630 UTC
# Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center
# Product description and SWPC contact on the Web
# http://www.swpc.noaa.gov/weekly.html
#
#                 Weekly Highlights and Forecasts
#
```

Highlights of Solar and Geomagnetic Activity
20 - 26 August 2012

Solar activity was very low until 25 and 26 August. The largest flare of the reporting period was a C1/Sf at 25/0236 UTC from Region

1554 (N16, L=215, class/area Dsi/170 on 25 August). No coronal mass ejections observed during the reporting period were Earth-directed.

No proton events were observed at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit was at high levels from 21 - 24 August. Moderate levels were observed 20 August and again from 25 - 26 August.

Geomagnetic field activity was mostly quiet to unsettled with an isolated active period mid-day on 26 August. At the beginning of the period, solar wind speed, measured at the ACE spacecraft, indicated the presence of a coronal hole high speed stream (CH HSS). Solar wind decreased steadily from approximately 600 km/s to 400 km/s by early on 22 August. Quiet to unsettled conditions were observed on 20 - 21 August. By mid-day on 24 August, the phi angle changed from a positive to negative orientation indicating a solar sector boundary crossing. Solar wind speed began to increase early on 25 August from approximately 400 km/s to 610 km/s as another CH HSS moved into geoeffective position. Solar wind speed increased once more mid-day on 26 August and ended the period around 700 km/s. Conditions were quiet on 22 August. Conditions remained at quiet to unsettled levels from 23 August until mid-day on 26 August as an isolated active period was observed.

Forecast of Solar and Geomagnetic Activity
27 August - 22 September 2012

Solar activity is expected to be at very low to low levels with a slight chance for M-class activity through the forecast period.

No proton events are expected at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to be at high levels on 29 - 30 August, 09 - 10 September, 16 - 17 September, and again on 22 September due to effects from coronal hole high speed streams.

Geomagnetic field activity is expected to be mostly quiet to unsettled until 15 September as a recurrent coronal hole high speed stream moves into a geoeffective position. Unsettled to active conditions are expected on 15 - 16 September. Conditions are expected to be mostly quiet to unsettled again from 17 September through 21 September. Another recurrent coronal hole high speed stream is expected to become geoeffective on 22 September causing unsettled to active conditions.

From -6424952412684911598
X-Google-Thread: 8f86f75953,6bf2c6bc8217dd3c,start
X-Google-Attributes: gid8f86f75953,public,usenet
X-Google-NewGroupId: yes

```
X-Google-Language: ENGLISH,ASCII-7-bit
Received: by 10.181.11.234 with SMTP id el10mr1082775wid.2.1346985942132;
        Thu, 06 Sep 2012 19:45:42 -0700 (PDT)
Path: q11ni6462825wiw.1!nntp.google.com!feeder3.cambriumusenet.nl!
216.196.110.142.MISMATCH!border3.nntp.ams.giganews.com!
border1.nntp.ams.giganews.com!nntp.giganews.com!newsreader4.netcologne.de!
news.netcologne.de!feeder1.cambriumusenet.nl!feed.tweaknews.nl!
81.171.88.15.MISMATCH!eweka.nl!lightspeed.eweka.nl!69.16.177.242.MISMATCH!
cyclone02.ams2.highwinds-media.com!voer-me.highwinds-media.com!
npeer02.iad.highwinds-media.com!news.highwinds-media.com!feed-me.highwinds-
media.com!nx02.iad01.newshosting.com!newshosting.com!news-out.readnews.com!
transit3.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-240 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Thu, 30 Aug 2012 21:45:18 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 2203
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <002d01cd8719$8b1713d0$a1453b70$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
X-Trace: reader1.panix.com 1346377519 24093 166.84.1.6 (31 Aug 2012 01:45:19 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Fri, 31 Aug 2012 01:45:19 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
X-Received-Bytes: 52946
Bytes: 53299
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
Content-Language: en-us
```

This report is organized into three (3) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites

SB SAT @ AMSAT W8ISS $WSR-240.S1
WSR 240 Part 1 08/27/2012

AMSAT NEWS SERVICE BULLETIN 240.S1
FROM AMSAT HQ SILVER SPRING, MD, August 27, 2012
TO ALL RADIO AMATEURS
BID: $WSR-240.S1

PW-Sat
Catalog Number: 38083 (?)
Launch Date: February 13, 2012
Launch Site: Kourou, French Guiana

Status: On Orbit

Uplink: 435.020 MHz FM
Downlink: 145.900 MHz DSB

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=132
[07162012]
=====
DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational
Current Mode: Science Mode - Beacon ONLY

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink: 435.530 to 435.570 MHz

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=68
[02092011]
=====
VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05, 2005 0444z
Launch site: Satish Dhawan Space Centre, India

Status: Operational
Current Mode: U/v - Dutch Transponder

Frequencies:

Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.9360 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=30

To know what transponder is switched on please listen for the beacon that is active. Each transponder has a different beacon.
[03232012]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002 1700z
Launch site: Baikonur, Kazakhstan

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz. The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10 minute timer.
[02092011]

=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Operational
Current Mode: V/u (Mode JA)

Voice/CW (Mode JA)
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage:
http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's
CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/
fo29cwts.htm
[01122012]
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993 0140z
Launch site: Kourou, French Guiana

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:

V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[02092011]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974
Launch site: Vandenberg AFB, California, USA

Status: Operational

Current Mode: Alternating between Mode A and B every 24 hours

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz CW
145.972 MHz CW
435.100 MHz CW
2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php
[04242012]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998 0640z (ZARYA module)
Launch sites: Baikonur, Kazakhstan
Kourou, French Guiana
Uchinoura Space Center, Japan
Kennedy Space Center, Titusville, Florida, USA

Status: Operational

Current Active Modes: FM Repeater - OFF
Voice - V/v
BBS - OFF
2m APRS - OFF
70cm APRS - ON
70cm Digi - ON
SSTV - OFF

Expedition 32 Crew (July 2012 - November 2012):

Commander:	Gennady Padalka	RN3DT
Flight Engineer:	Joe Acaba	KE5DAR
Flight Engineer:	Sergei Revin	RN3BS
Flight Engineer:	Sunita Williams	KD5PLB

Flight Engineer:	Yuri Malenchenko	RK3DUP
Flight Engineer:	Akihiko Hoshide	KE5DNI

Available Modes and Frequencies:

Digital/APRS:

Worldwide 2m packet uplink:	145.825 MHz FM 1k2
Worldwide 2m packet downlink:	145.825 Mhz FM 1k2
Worldwide 70cm packet uplink:	437.550 Mhz FM 1k2
Worldwide 70cm packet downlink:	437.550 Mhz FM 1k2

Voice:

Region 1 voice uplink:	145.200 MHz FM
Region 2/3 voice uplink:	144.490 MHz FM
Worldwide downlink:	145.800 MHz FM

Crossband Repeater:

Repeater Uplinks:	1269.650 MHz FM
	437.800 MHz FM
	145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink:	145.800 MHz FM
	437.800 MHz FM (Kenwood)

SSTV Robot 36:

Downlink:	145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:

Belgian:	OR4ISS
German:	DP0ISS
Russian:	RS0ISS
	RZ3DZR
United States:	NA1SS
2m Packet Mailbox:	RS0ISS-11
2m Digipeater alias:	ARISS
70cm Packet Mailbox:	RS0ISS-1
70cm Digipeater callsign:	RS0ISS
70cm Digipeater alias:	ARISS

Official ARISS Webpage:	http://www.rac.ca/ariss
ISS Fan Club Webpage:	http://www.issfanclub.com
APRS tracking page:	http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time line is NOT translated from Russian and posted.
[08062012]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-240.S2
WSR 240 Part 2 08/27/2012

AMSAT NEWS SERVICE BULLETIN 240.S2
FROM AMSAT HQ SILVER SPRING, MD, August 27, 2012
TO ALL RADIO AMATEURS
BID: $WSR-240.S2

RS-40 MiR (Yubileiny-2)
Catalog Number: 38735
Launch Date: July 28, 2012

Status: On Orbit

Uplink:
Downlink(s):   435.265 MHz
                435.365 MHz

Beacon:

Callsign:

URL:
[08272012]
=====
HORYU-II
Catalog number: 38340
Launch Date: May 17, 2012

Status: On Orbit

Uplink: 145.??? MHz
Downlink: 437.375 MHz CW/AX25/FSK

Beacon: 437.375 MHz CW

Callsign: JG6YBW

URL:

IARU Coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=216
[05282012]
=====
XaTcobeo
Catalog Number: 38082
Launch Date: Febrauary 13, 2012
Launch Site: Kourou, French Guiana

Status: Operational

Uplink:

Downlink: 437.365 MHz FFSK with AX.25

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=135
[03162012]
=====
UniCubeSat
Catalog Number: 38085(?)
Launch Date: Febrauary 13, 2012
Launch Site: Kourou, French Guiana

Status: Operational

Uplink:
Downlink: 437.305 MHz 9k6 bps GMSK

Beacon:

Callsign:

URL:
http://www.gaussteam.com/index.php?option=com_content&view=article&id=96:uni
cu
besat&catid=36:unicubesat&Itemid=183

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=133
[08272012]
=====
Robusta
Catalog Number: 38083(?)
Launch Date: Febrauary 13, 2012
Launch Site: Kourou, French Guiana

Status: On Orbit

Uplink:
Downlink: 437.325 MHz 1k2 FM telemetry (data every 3 min, 20 sec. burst)

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=122

```
[08272012]
=====
MO-72 MaSat-1
Catalog Number: 38081
Launch Date: Febrauary 13, 2012
Launch Site: Kourou, French Guiana

Status: Operational

Uplink:
Downlink: 437.345 MHz GFSK 625/1250 bps
          437.345 MHz CW

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=126
[03232012]
=====
Goliat
Catalog Number: 38084(?)
Launch Date: Febrauary 13, 2012
Launch Site: Kourou, French Guiana

Status: Operational

Uplink:
Downlink: 437.485 MHz 1k2 AFSK

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=98
[08272012]
=====
E-St@r
Catalog Number: 38079
Launch Date: Febrauary 13, 2012
Launch Site: Kourou, French Guiana

Status: On Orbit

Uplink:
Downlink: 437.445 MHz 1k2 bps AFSK
```

```
Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=130
[07302012]
=====
ALMASat-1
Catalog Number: 38078
Launch Date: Febrauary 13, 2012
Launch Site: Kourou, French Guiana

Status: On Orbit

Uplink:
Downlink:  437.465 MHz 1k2 bps FSK
          2407.850 MHz

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=39
[02212012]
=====
RS-39 Chibis-M
Catalog Number: 38051
Launch Date: October 30, 2011 10:11:00 UTC
Launch site: Tyuratam (Baikonur Cosmodrome), Kazakhstan

Status: Operational

Uplink:
Downlink:

Beacon: 435.315 MHz CW
        435.215 MHz CW

Callsign:

URL:

IARU coordination status page:
[07302012]
=====
JUGNU
Catalog Number: 37839
```

```
Launch Date: October 12, 2011 05:30:00 UTC
Launch site: Satish Dhawan Space Centre, India

Status: On Orbit

Uplink:   145.??? MHz 1k2 (mode?)
Downlink: 437.505 MHz 9k6 (mode?)

Beacon: 437.275 MHz 15 wpm (?) CW

Callsign:

URL: http://www.iitk.ac.in/me/jugnu/index.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=160
[07092012]
=====
SRMSAT
Catalog Number: 37841
Launch Date: October 12, 2011 05:30:00 UTC
Launch site: Satish Dhawan Space Centre, India

Status: On Orbit

Uplink:   145.900 MHz 1k  AX.25 (speed?)
Downlink: 437.500 MHz 2k4 AX.25

Beacon: 437.425 MHz 12 wpm CW

Callsign:

URL: http://srmsat.in/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=181
[07092012]
=====
HRBE (E1P Explorer 1 [Prime] CubeSat (E1P-U2))
Catalog Number: 37855
Launch Date: October 28, 2011
Launch site: Vandenberg Air Force Base, California, USA

Status: On Orbit

Uplink:   437.305 MHz (???)
Downlink: 437.505 MHz AX.25 (SSB?)

Beacon:

Callsign:

URL: http://ssel.montana.edu/
```

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=116
[01122012]
=====
M-Cubed
Catalog Number: 37855
Launch Date: October 28, 2011
Launch site: Vandenberg Air Force Base, California, USA

Status: On Orbit

Uplink:
Downlink: 437.485 MHz AX.25

Beacon:

Callsign:

URL: http://umcubed.org/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=215
[01122012]
=====
RAX-2
Catalog Number: 37853
Launch Date: October 28, 2011
Launch site: Vandenberg Air Force Base, California, USA

Status: Operational

Uplink:
Downlink: 437.345MHz 9k6 GMSK

Beacon:

Callsign:

URL: http://rax.engin.umich.edu//

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=221
[03232012]
=====
AO-71 AubieSat-1
Catalog Number: 37854
Launch Date: October 28, 2011
Launch site: Vandenberg Air Force Base, California, USA

Status: On Orbit

Uplink:

Downlink: 437.475 MHz 1k2 AX.25

Beacon: 437.475 MHz CW

Callsign: KI4NQO

URL: http://www.space.auburn.edu/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=148
[12262011]
=====
O/OREOS
Catalog Number: 37224
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: On Orbit

Uplink:
Downlink: 437.035 MHZ AX.25

Beacon:

Callsign:

URL: http://www.ooreos.org/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=146
[02092011]
=====
Rax-1 Radio Aurora Explorer
Catalog Number: 37223
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: On Orbit

Uplink:
Downlink: 437.505 MHz 9k6 GMSK

Beacon:

Callsign: RAX-1

URL: http://rax.engin.umich.edu/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=165
[02092011]
=====
FO-69 Fastrac-1 Sara Lily

```
Catalog Number: 37227
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: Operational

Uplink 1: 145.980 MHz 1k2 baud
Uplink 2: 145.825 MHz 1k2 baud
Downlink: 437.345 MHz 1k2 and 9k6 baud

Beacon:   437.435 MHz 1k2 AX.25

Callsign: Fast1

URL: http://fastrac.ae.utexas.edu/index.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=83
[07052011]
=====
FO-70 Fastrac-2 Emma
Catalog Number: 37380
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: Operational

Uplink 1: 435.025 MHz 1k2 baud
Uplink 2: 437.435 MHz 9k6 baud
Downlink: 145.825 MHz 1k2 and 9k6 baud

Beacon:   145.825 MHz 1k2 AX.25

Callsign: Fast2

URL: http://fastrac.ae.utexas.edu/index.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=84
[12162011]
=====
StudSat
Catalog Number: 36796
Launch Date: July 12, 2010 0352z
Launch site: Satish Dhawan Space Centre, India

Status: On Orbit

Uplink:   437.505MHz, 9600bps FSK
Downlink: 437.505MHz, 9600bps FSK
Beacon  : 437.505MHz,   20bps ASK

IARU coordination status page:
```

```
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=164
[02092011]
=====
TIsat-1
Catalog Number: 36799
Launch Date: July 12, 2010 0352z
Launch site: Satish Dhawan Space Centre, India

Status: On orbit

Callsign: HB9DE

Uplink:   145.980MHz FM, AFSK
Downlink: 437.305MHz FM, AFSK
Beacon:   437.305MHz CW

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=118
[02092011]
=====
SwissCube
Catalog Number: 35932
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Callsign: HB9EG

Beacon(100mw): 437.5050MHz CW
Beacon(1w):    437.5050MHz FSK 1k2bps

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=109
[02092011]
=====
UWE-2
Catalog Number: 35934
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: In Orbit

Beacon(500mw): 437.3850 MHz AFSK 1k2bps
               437.3850 MHz FSK 9k6bps

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=110
[02092011]
=====
ITUpsAT1
Catalog Number: 35935
Launch Date: September 23, 2009 0621z
```

Launch site: Satish Dhawan Space Centre, India

Status: Operational

Beacon(100mw): 437.325MHz CW
Beacon(1w): 437.325MHz 19k2bps

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=113
[02092011]
=====
BEESAT
Catalog Number: 35933
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Callsign: DP0BEE

Beacon(100mw): 436.000MHz CW
Beacon(500mw): 436.000MHz GMSK 4k8bps
Beacon(500mw): 436.000MHz GMSK 9k6bp
[02092011]
=====
CP-6
Catalog Number: 35003
Launch Date: May 19, 2009 2355z
Launch site: Wallops Island, Virginia, USA

Status: Operational

Downlink: 437.365 MHz 1k2 AFSK

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=121
[07302012]
=====
HAWKSAT 1
Catalog number: 35004
Launch Date: May 19, 2009 2355z
Launch site: Wallops Island, Virginia, USA

Status: operational

Downlink: 437.345 MHz ?

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=105
[07302012]
=====
Pharmasat
Catalog Number: 35002

```
Launch Date: May 19, 2009 2355z
Launch site: Wallops Island, Virginia, USA

Status: Operational

Downlink: 437.465 MHz 1k2 AFSK

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=94
[02092011]
=====
ANUSAT
Catalog Number: 34808
Launch Date: April 20, 2009 0115z
Launch Site: Satish Dhawan Space Centre, India

Status: ?

Downlink:  435.000 MHz
Uplink:    145.800 MHz

Telemetry: 137.400 MHz
[02092011]
=====
SOHLA-1 (ASTRO TECH.)
Catalog Number: 33496
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational

Proposed Frequencies and Modes:
Downlink: 437.505 MHz AFSK/CW
Beacon:   437.505 MHz AFSK/CW

Callsign:

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=101
[02092011]
=====
KAGAYAKI (Solan Co.)
Catalog Number: 33495
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: In Orbit

Downlink: 437.375 MHZ    FSK9k6/CW
Beacon:   437.375 MHz    FSK9k6/CW

IARU coordination status page:
```

```
AMSAT-NA webpage:

[02092011]
=====
STARS (Kagawa Univ.) (Twin Satellites)
Catalog Number: 33498
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational ?

Downlinks: 437.485 MHz FM/CW
           437.465 MHz FM/CW
Beacons:   437.305 MHz FM/CW
           437.275 MHz FM/CW

Callsigns: JR5YBN
           JR5YBO

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=99

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=121&retURL
=/satellites/status.php
[02092011]
=====
KKS-1 (Tokyo MCIT)
Catalog Number: 33499
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational

Downlink:  437.455 MHz AFSK/CW
Beacon:    437.385 MHz AFSK/CW

Callsign: JQ1YYY

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=107

AMSAT-NA webapge:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=120&retURL
=/satellites/status.php
[20092011]
=====
PRISM (Tokyo Univ.)
Catalog Number: 33493
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational ?
```

```
Downlink: 437.425 MHz AFSK/GMSK/CW
Beacon:   437.250 MHz AFSK/GMSK/CW

Callsign: JQ1YCX

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=97

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=119&retURL
=/satellites/status.php
[02092011]
=====
RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number: 32953
Launch Date: May 23, 2008 1520z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational

Curent Modes: Telemetry
              Audio
              Images

Downlinks: 435.315 MHz
           435.215 MHz

AMSAT-NA website:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=115&ret
URL=/satellites/status.php

Official website:
http://www.npopm.com/?cid=leoca&caid=43
[02092011]
=====
CanX-2
Catalog number: 32790
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational in range of ground station only

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web
page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=46
[02092011]
=====
AAUSAT-II
```

Catalog number: 32788
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Downlink: 437.425 MHz 1k2 baud packet

For the latest project status update please visit the AAUSAT-II web page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=60
[02092011]
=====
CO-65 CUTE-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Downlink: 437.475 MHz 9k6 Packet
Uplink: 1267.600 Mhz

Telemetry Beacon:
Downlink: 437.2750 MHz CW

For the latest project status update please visit the Cute-1.7+APD II web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=78

Command Station blog website:
http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=112&retURL=/satellites/status.php
[03232012]
=====
Compass-1
Catalog number: 32787
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Current Mode: dependant on last received command

Uplink: 145.980 MHz FM

Downlink: 437.275 Mhz CW
437.405 MHz Packet

For the latest project status update please visit the Compass 1 web page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=52

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=114&retURL=/satellites/status.php
[06162011]
=====
CO-66 Seeds II
Catalog number: 32791
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Downlink: 437.485 MHz

Callsign: JQ1YGU

For the latest project status update please visit the Seeds 2 web page: http://cubesat.aero.cst.nihon-u.ac.jp/english/seeds_2_e.html

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=36

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=113&retURL=/satellites/status.php
[073092011]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007 0702z
Launch site: Baikonur, Kazakhstan

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.

AMSAT-NA webpage:

```
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=94&retURL=
/satellites/status.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=72
[02092011]
=====
CP3
Catalog Number: 31129
Launch Date: April 17,2007 0702z
Launch site: Baikonur, Kazakhstan

Status: Operational

Current Mode:  /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=74
[02092011]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005 0652z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon:             437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/xivpicte.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=37
[02092011]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: ?????

Current Mode: /u
```

```
Beacon:     436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=96&retURL
=/satellites/status.php

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[02092011]
=====
QuakeSat
Catalog Number: 27845
Launch Date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Telemetry only

Current Mode: 9600 baud data packet

Mode U packet
Downlink: 436.675 MHz 9k6 BPS

Quakesat webpage:
http://www.quakefinder.com/services/quakesat-ssite/
[02252011]
=====
CO-55 Cute-1.7+APD II
Catalog Number: 27844
Launch date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational

Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=69&retURL
=/satellites/status.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=78
[02092011]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001 0240z
Launch site: Kodiak Launch Complex, Alaska, USA

Status: Telemetry only

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink:        144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[02092011]
=====
RS-22 RADIO SPORT 22 (MOZHAYETS 4)
Catalog number: 27939
Launch Date: September 27, 2003 0612z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational - 70cm cw only

Current Mode:  /u

CW Beacon - 435.352 MHz
            145.818 MHz

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=76&retURL
=/satellites/status.php
[02092011]
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990
Launch site: Kourou, French Guiana

Status: CW Beacon only

Uplinks:          145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink:      437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12
```

```
General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[02092011]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984
Launch site: Vandenburg AFB, California, USA

Status: Operational ?

Current Mode:  /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon:           435.025 MHz
Mode-S Beacon:     2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[07052011]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998 0640z (ZARYA module)
Launch sites: Baikonur, Kazakhstan
              Kourou, French Guiana
              Uchinoura Space Center, Japan
              Kennedy Space Center, Titusville, Florida, USA

Status: Operational

Current Active Modes: FM Repeater - OFF
                      Voice -       V/v
                      BBS -         U/u
                      2m APRS -     OFF
                      70cm APRS -   ON
                      70cm Digi -   ON
                      SSTV -        OFF


Expedition 32 Crew (July 2012 - November 2012 ):
Commander:                Gennady Padalka     RN3DT
Flight Engineer:          Joe Acaba           KE5DAR
Flight Engineer:          Sergei Revin        RN3BS
Flight Engineer:          Sunita Williams     KD5PLB
Flight Engineer:          Yuri Malenchenko    RK3DUP
Flight Engineer:          Akihiko Hoshide     KE5DNI
```

```
Available Modes and Frequencies:
Digital/APRS:
Worldwide 2m packet uplink:     145.825 MHz FM 1k2
Worldwide 2m packet downlink:   145.825 Mhz FM 1k2
Worldwide 70cm packet uplink:   437.550 Mhz FM 1k2
Worldwide 70cm packet downlink: 437.550 Mhz FM 1k2

Voice:
Region 1 voice uplink:          145.200 MHz FM
Region 2/3 voice uplink:        144.490 MHz FM
Worldwide downlink:             145.800 MHz FM

Crossband Repeater:
Repeater Uplinks:              1269.650 MHz FM
                                437.800 MHz FM
                                145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink:              145.800 MHz FM
                                437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink:                       145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian:                        OR4ISS
German:                         DP0ISS
Russian:                        RS0ISS
                                RZ3DZR
United States:                  NA1SS
2m Packet Mailbox:              RS0ISS-11
2m Digipeater alias:            ARISS
70cm Packet Mailbox:            RS0ISS-1
70cm Digipeater callsign:       RS0ISS
70cm Digipeater alias:          ARISS

Official ARISS Webpage:    http://www.rac.ca/ariss
ISS Fan Club Webpage:      http://www.issfanclub.com
APRS tracking page:        http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[08062012]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-240.S3
WSR 240 Part 3 08/27/2012
```

AMSAT NEWS SERVICE BULLETIN 240.S3
FROM AMSAT HQ SILVER SPRING, MD, August 27, 2012
TO ALL RADIO AMATEURS
BID: $WSR-240.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

NANOSAIL-D
Catalog Number: 37361
Ejection Date: January 17, 2011

Status: Non - Operational

Downlink: 437.270 MHz AX.25

URL: http://nanosaild.engr.scu.edu/dashboard.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=115
[07302012]
=====
HO-68 HOPE-1 (CAS-1) (XW-1)
Catalog Number: 36122
Launch Date: December 15, 2009 0231z
Launch site: Taiyuan Space Center, PRC

Status: Telemetry only

Callsign:
Broadcast: BJ1SA-11
BBS: BJ1SA-12

Uplinks: 145.8250 MHz FM, PL 67.0 Hz.
           145.9250 - 145.9750 MHz SSB/CW
           145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
           435.7650 - 435.7150 MHz SSB/CW
           435.6750 MHz AFSK 1200 BPS

Beacon: 435.7900 MHz CW

Mode and Antenna Polarization:
V: LHCP 2.0dBi max
U: RHCP 3.0dBi max

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=108

For more information about XW-1 (CAS-1):
http://
[04302012]
=====

```
SO-67 SumbandilaSat
Catalog Number: 35870
Launch Date: September 17, 2009 1555z
Launch site: Baikonur, Kazakhstan

Status: Non - Operational

Callsign: ZS0SUM

Uplink:   145.875MHz FM tone 233.6 Hz
Downlink: 435.345MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

For more information about SO-67:
http://www.amsatsa.org.za/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=88
[01272012]
=====
CP4
Catalog Number: 31132
Launch Date: April 17, 2007

Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon:    437.325 MHz CW

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=79
[09062010]
=====
LIBERTAD-1
Catalog Number: 31128
Launch Date: April 17, 2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink:   145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
```

```
IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=76
[09062010]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: Non-Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder:  145.825 Mhz FM

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=51
[09062010]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency:  437.305
                             2407.250

Official Website: http://www.ncube.no

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=24
[09062010]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink:         437.250 MHz FM 67Hz CTCSS
Voice Downlink:      2401.835 MHz FM
Packet Up/Downlink:  437.250 MHz 9k6 packet
Packet Downlink      2401.835 MHz 38k4 packet

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=54
[09062010]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005
```

Status: Non-Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=53
[09062010]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004 0745z
Launch site: Baikonur, Kazakhstan

Status: Non - Operational

Current Mode(s):
Voice repeater: V/u
Uplink: 145.880 MHz FM
Downlink: 435.150 MHz FM

Telemetry: Recovery efforts
Downlink: 435.150MHz 9k6

Analog voice downlink:	435.300 MHz FM
	435.150 MHz FM
	2401.200 Mhz FM
Analog voice uplink:	145.860 MHZ FM
	145.880 MHz USB
	145.880 MHz FM
	145.920 MHz FM
	145.920 MHz FM - 67 Hz PL tone burst
	1268.705 MHz FM
Digital Downlinks:	435.150 MHz FM 38k4 PBP, 1 watt output
	435.150 MHz FM 9k6 Pacsat Broadcast Protocol
	2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:	145.860 MHz FM 9k6 Pacsat Broadcast Protocol
	1268.703 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon:	435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=19
[12062011]
=====
CANX-1
Catalog Number: 27847
Launch Date: June 30, 2003

Status: Non-Operational

Downlink: 437.8800 MHz AFSK 1k2bps
[06052009]
=====
DTUSAT
Catalog Number: 27842
Launch Date: June 30, 2003

Status: Non-Operational

Current Mode: 2k4 AFSK Packet last reported

Downlink: 437.475MHz

Officail webpage: http://dtusat1.dtusat.dtu.dk/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=101&retURL
=satellites/all_oscars.php
[02212009]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)

Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Telemetry only

```
Uplinks:   145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink:  437.325 MHz

Broadcast callsign: MYSAT3-11
BBS:                MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial land and weather imaging payloads offers FM and FSK
Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as
a collaborative effort between the Malaysian government and Surrey
Satellite Technology Ltd.
[03302009]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink:   145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS:                SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink:   145.850 MHz
```

```
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
V-band:   145.840 -  145.990 MHz CW/LSB
U-band:   435.550 -  435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks
---------
S2-band:  2401.225 -  2401.475 MHz CW/USB
K-band:  24048.010 - 24048.060 MHz CW/USB
Beacon:   2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)
----------------------------
BEACON   General Beacon(GB)  Middle Beacon(MB)  Engineering Beacon(EB)
2 m                    none        145.898 MHz                    none
70cm           435.438 MHz         435.588 MHz             435.838 MHz
13cm(1)       2400.188 MHz        2400.338 MHz            2400.588 MHz
13cm(2)       2401.173 MHz        2401.323 MHz            2401.573 MHz
3cm          10450.975 MHz       10451.125 MHz           10451.375 MHz
1.5cm        24047.885 MHz       24048.035 MHz           24048.285 MHz
[07162007]
=====
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999
```

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: 25636
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and the image and transponder recovery efforts have been unsuccessful.

```
For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Non-Operational

Current Modes:
Telemetry : /u

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign:       4XTECH-12

More information of GO-32 can be found at:
http://asri.technion.ac.il/techsat/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=14&retURL
=/satellites/status.php
[07172010]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink:   145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
MO-30 UNAMSAT-2
Catalog Number: 24305
Launch Date: September 5, 1996

Status: Non-operational
```

```
Downlink:       435.1380 MHz AFSK 1200 BPS
Downlink:       435.2060 MHz AFSK 1200 BPS
Uplink:         145.8150 MHz AFSK 1200 BPS
Uplink:         145.8350 MHz AFSK 1200 BPS
Uplink:         145.8550 MHz AFSK 1200 BPS
Uplink:         145.8750 MHz AFSK 1200 BPS
[06042009]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Non-operational

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign:       POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012009]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational
```

```
Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
AO-24 ARSENE
Catalog Number: 22654
Launch Date: May 13, 1993

Status: Non-operational

Uplink:    435.0625 MHz FM 1k2bps AFSK
           435.1125 MHz FM 1k2bps AFSK
           435.1375 MHz FM 1k2bps AFSK
Downlink:  145.9750 MHz FM 1k2bps AFSK
          2446.5025 MHz FM 1k2bps AFSK

Beacon:    2446.4700 MHz CW

Broadcast callsign:
BBS:
[12162009]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
```

```
Launch Date: January 29, 1991

Status: Non-Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
[05012006]
=====
AO-16 PACSAT
Catalog number: 20439
```

Launch Date: January 22, 1990

Status: non-operational

Current Mode: V/u

Uplink: 145.900 MHz FM 1200-baud Manchester FSK (reserved)
                145.920 MHz FM VOICE
                145.940 MHz FM 1200-baud Manchester FSK (reserved)
                145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink: 437.026 MHz USB VOICE
                (1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC 437.050 MHz RHCP
   PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[07242009]
=====
UO-15 UoSAT-4
Catalog Number: 20438
Launch Date: January 22, 1990

Status: Non-operational

Uplink: ?
Downlink: 435.1250MHz (?)
          435.1200MHz (?)
[06042009]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink: 145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

```
Mode V/U (J) Linear Transponder (Inverting):
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon:   145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink  29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
```

```
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
Beacons:   29.450 MHz
          435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon 1:  29.352 MHz (intermittent)
Beacon 2:  29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink:     21.260 to 21.300 MHz CW/USB
```

Downlink: 145.860 to 145.900 MHz CW/USB

Beacon: 145.860 MHz

Robot: 145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

- AMSAT News Service (ANS)
- General satellite discussion (AMSAT-BB)
- Orbit data (KEPS)
- Manned space missions (SAREX)
- District of Columbia area (AMSAT-DC)
- New England area (AMSAT-NE)
- AMSAT Educational Liaison mailing list (AMSAT-EDU)
- AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at} amsat.org
NNNN
/EX

```
From -3915550220990821179
X-Google-Thread: 8f86f75953,685d91c1b6c9268b,start
X-Google-Attributes: gid8f86f75953,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
Received: by 10.224.42.68 with SMTP id r4mr4723980qae.4.1347166086097;
        Sat, 08 Sep 2012 21:48:06 -0700 (PDT)
MIME-Version: 1.0
Path: da15ni24490381qab.0!nntp.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!ctu-peer!ctu-gate!news.nctu.edu.tw!usenet.stanford.edu!panix!
panix2.panix.com!not-for-mail
From: rram@panix.com (rec.radio.amateur.moderated Admin)
Newsgroups:
rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.rad
io.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amat
eur.space,rec.radio.info
Subject: Crossposting Permitted to rec.radio.amateur.moderated
Supersedes: <radio/ham-radio/moderated/crossposting-1-1345010401@panix.com>
Followup-To: poster
Date: 1 Sep 2012 02:00:02 -0400
Organization: rec.radio.amateur.moderated Moderation Team
Lines: 47
Approved: RRI Admin <rec-radio-info-request@panix.com>
Distribution: world
Expires: 19 Sep 2012 02:00:01 -0000
Message-ID: <radio/ham-radio/moderated/crossposting-1-1346479201@panix.com>
Reply-To: rec-radio-amateur-moderated-request@panix.com
(rec.radio.amateur.moderated Admin)
NNTP-Posting-Host: panix2.panix.com
```

X-Trace: reader1.panix.com 1346479203 23990 166.84.1.2 (1 Sep 2012 06:00:03 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sat, 1 Sep 2012 06:00:03 +0000 (UTC)
Summary: Short reminder for unmoderated newsgroups that crossposting is permitted
Keywords: FAQ, ham, amateur, radio, moderated, unmoderated, crossposting, permitted
Bytes: 3851

Posted-By: auto-faq 3.3.2 beta (PGPMoose V2.0, Perl 5.005)
Archive-name: radio/ham-radio/moderated/crossposting
Revision: 1.2 2011/11/02 04:08:53
Posting-Frequency: posted twice monthly
URL: http://www.panix.com/~rram/usenet/rram/index.html

Changes followed by "|".

After a 30-day public discussion and feedback period to gauge reader opinions in March of 2009:

http://groups.google.com/group/rec.radio.amateur.moderated/browse_thread/thread/d7d337db35f23326

the rec.radio.amateur.moderated Moderation Team had decided to consider |
amending its charter, and permit limited simultaneous crossposting to
rec.radio.amateur.moderated and one other unmoderated
amateur-radio-related discussion newsgroup. After a successful trial |
period (90 days, through early July 2009), we decided to adopt this |
change permanently. |

Approved rec.radio.amateur.* newsgroups are those that are currently listed in the latest version of the "List of Big Eight Newsgroups" which is crossposted monthly to news.announce.newgroups, news.groups, and news.lists.misc.

Approved alt.radio.amateur.* and alt.ham-radio.* newsgroups are those that have been created consistent with the suggestions in "So You Want to Create an Alt Newsgroup" at:

  http://www.faqs.org/faqs/alt-creation-guide/

Approved regional hierarchy newsgroups are those that contain either "radio.amateur" or "ham-radio" in their names, including uk.radio.amateur and aus.radio.amateur.misc.

We will make every reasonable effort to keep our list of approved newsgroups up-to-date. In case we have overlooked any, and a submission is rejected in error as a result, the rejected submitter can E-mail us at our administrative contact address (in the signature at the bottom of this article, and the default Reply-To for the rejection message) requesting that it be added, and that the article be approved. We may still choose to reject articles crossposted to any alt.* newsgroup with an inappropriate name, including obscene language, embedded name-calling, or encouragement of unlawful conduct.

Please direct any comments, questions, or criticisms to
rec-radio-amateur-moderated-request@panix.com.

```
From 7672233296745433597
X-Google-Thread: 8f86f75953,521fbaa31074f6b8,start
X-Google-Attributes: gid8f86f75953,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII
Received: by 10.224.111.8 with SMTP id q8mr4800876qap.3.1347173761267;
        Sat, 08 Sep 2012 23:56:01 -0700 (PDT)
MIME-Version: 1.0
Path: da15ni27657580qab.0!nntp.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!ctu-peer!news.nctu.edu.tw!goblin1!goblin.stu.neva.ru!
news.glorb.com!news-out.readnews.com!transit3.readnews.com!panix!rri.panix.com!
robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-246 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sun, 2 Sep 2012 10:25:55 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 464
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000f01cd8916$d5ef0670$81cd1350$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
X-Trace: reader1.panix.com 1346595955 20649 166.84.1.6 (2 Sep 2012 14:25:55 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 2 Sep 2012 14:25:55 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Bytes: 20390
Content-Language: en-us
```

AMSAT NEWS SERVICE
ANS-246

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor at amsat.org

In this edition:
* Board of Directors Ballots Due by September 15
* IARU International Amateur Radio Satellite Forum
* Atlas V Launch From Vandenberg Re-scheduled to September 13
* Rooms Still Available for AMSAT-UK Colloquium
* Smartphone and Kinect Satellite Presentations at AMSAT-UK Colloquium
* TAPR Digital Communications Conference in Atlanta September 21 - 23
* NASA Issues Request for Information - Nano Satellite Launch Challenges
* Satellite Shorts From All Over
* ARISS Status - 27 August 2012

SB SAT @ AMSAT $ANS-246.01
ANS-246 AMSAT News Service Weekly Bulletins

AMSAT News Service Bulletin 246.01
From AMSAT HQ SILVER SPRING, MD.
September 2, 2012
To All RADIO AMATEURS
BID: $ANS-246.01

Board of Directors Ballots Due by September 15

AMSAT Corporate Secretary Alan Biddle, WA4SCA reminds all AMSAT-NA members, "Your ballots for the 2012 Board of Directors election need to be received at AMSAT-NA headquarters by September 15th, 2012. This is one of your best opportunities to make your views on the path of our organization known."

Ballots for the 2012 AMSAT-NA Board of Directors election have been mailed to all members. Also included is biographical information about each of the candidates.

Select no more than three of the six listed candidates (in alphabetical order):

+ Tom Clark, K3IO
+ Steve Coy, K8UD
+ Mark Hammond, N8MH
+ Lou McFadin, W5DID
+ Gould Smith, WA4SXM
+ Patrick E. Stoddard, WD9EWK

The 3 candidates receiving the most votes will become directors serving 2 year terms. The 2 receiving the next highest number of votes will be seated as alternates for 1 year terms.

You must mail your ballot back to be received at the AMSAT-NA Office no later than the close of business on September 15, 2012:

AMSAT
850 Sligo Avenue, #600
Silver Spring, MD 20910

[ANS thanks AMSAT Corporate Secretary Alan Biddle, WA4SCA for the above information]

IARU International Amateur Radio Satellite Forum

The IARU International Amateur Radio Satellite Forum will this year be held in conjunction with the AMSAT-UK Colloquium which takes place in Guildford, England on the weekend of September 15-16.

(See: http://www.uk.amsat.org/9862)

The forum, chaired by IARU Amateur Satellite Advisor Hans van de Groenendaal ZS6AKV, takes place on Saturday, September 15 at 1700 BST (1600 UT).

On the Agenda is a report on the activities of the IARU Satellite Adviser and his Advisory Panel.

Colloquium information: http://www.uk.amsat.org/colloquium/twelve

IARU Amateur Radio Satellite Frequency Coordination:
http://www.iaru.org/satellite/

[ANS thanks AMSAT-UK for the above information]

Atlas V Launch From Vandenberg Re-scheduled to September 13

The Atlas V NROL-36 launch from Vandenberg Air Force Base in California, originally planned for August has been now re-scheduled for September 13. This date was selected as one of the first available for launch range operations.

This launch will be carrying a pair of ocean surveillance satellites to locate ships at sea. Also aboard this flight at four cubesats as part of ELaNa IV mission and seven cubesats for government missions.

The ELaNa Cubesats aboard are:
+ CINEMA (Cubesat for Ion, Neutral, Electron, Magnetic fields)

  - Downlinks for engineering telemetry and command are in the 2400-2450 MHz range; Science telemetry is in 2200-2300 MHz range.

- CSSWE (Colorado Student Space Weather Experiment)
  - Downlink 437.345 MHz, 9k6 with AX25

- CP5 (PolySat)
  - Downlink 437.405 MHz at 1 watt, AFSK on LSB AX.25 over NRZI at 1200 baud, every 2 minutes, begins 3.5 hours after first turn-on.

- CXBN (Cosmic X-Ray Background Nanosatellite)
  - Downlink 437.525 MHz, GFSK, AX.25

The US Government Satellites aboard are:
- Aeneas
  - First cubesat to deploy 2.4 GHz Dish Antenna. WIFI transmitter will transmit on 2425.0 MHz with 1 watt of output power.
  - Downlink 437.600 MHz AX25 1200 bps beacon every 10 seconds and spread spectrum two-way link elsewhere in the 70cm band.
- ORSES (ORS Enabler Satellite)
- Horus
- Re
- Aerocube 4A, 4B, 4C
  - Testing deployable solar panels.
  - Technology demonstration of �parachute-like� devices to deorbit satellites.
  - Testing closed-loop attitude control system based around a three-axis gyroscope.

A discussion of the launch re-scheduling can be found on-line at:
http://www.nasaspaceflight.com/2012/08/uatlas-v-launch-nrol-36-vandenberg/

Please refer to the prior bulletin for mission summaries and satellite team web pages: http://amsat.org/pipermail/ans/2012/000637.html

A detailed article of the launch can be found on-line at:
http://www.americaspace.org/?p#568

[ANS thanks NASA, the CubeSat Teams noted above, AMSAT-UK, Gunter's Space Page and nasaspaceflightnow.com for the above information]

Rooms Still Available for AMSAT-UK Colloquium

AMSAT-UK Hon Sec Jim Heck, G3WGM says, "There are still rooms available at the hotel at which the AMSAT-UK Colloquium will be held on September 14, 15 and 16. The location of the Colloquium is at the Holiday Inn, Guildford, Surry, UK. TO BE SURE OF A ROOM AT THE HOTEL

YOU SHOULD BOOK AS SOON AS POSSIBLE TO AVOID DISSAPPOINTMENT!"

This week, Dave Johnson, G4DPZ announced on behalf of the AMSAT-UK Committee that the program for the Colloquium is now posted on-line at: http://tinyurl.com/amsat2012

AMSAT-UK is pleased to welcome senior representatives from AMSAT-NA, AMSAT-DL and AMSAT-SA who will be giving status updates on their respective development programs.

There will be an update on the FUNcube project as well as some real-time demos of the Engineering model.

There are some other surprises in the programme, so please take a look.

Details of the Colloquium itself can be found at:
http://www.uk.amsat.org/colloquium/twelve

Exclusive New Product Launch at AMSAT-UK Colloquium

AMSAT-UK are delighted to announce that Howard Long, G6LVB, will be present at the Colloquium this year and will be launching a new "FUNcube Dongle PRO-PLUS" during his presentation.

Full technical details have been embargoed until his talk and we are not permitted to steal his thunder by releasing further details of this new product in advance. Attendees at the Colloquium will therefore be the first to learn about Howard's latest development which will further advance the applications for SDR devices.

Further details are at: http://www.uk.amsat.org/9565#more-9565 - and at - http://www.uk.amsat.org/colloquium/twelve.

You can book online using PayPal or Credit Card at:
http://shop.amsat.org.uk/shop/catalog/browse

[ANS thanks AMSAT-UK Hon Sec Jim Heck, G3WGM,
Dave, G4DPZ and Trevor, M5AKA for
the above information]

Smartphone and Kinect Satellite Presentations at AMSAT-UK Colloquium

Dr Chris Bridges recently appeared on the nationwide TV channel Sky News discussing why space is cool. On September 15-16 he will be giving two presentations to the AMSAT-UK International Space Colloquium at the Holiday Inn, Guildford, GU2 7XZ, UK. For the details of the Colloquium see: http://www.uk.amsat.org/colloquium/twelve

Chris will cover the Nexus Android Smartphone amateur radio satellite STRaND-1 which will carry both a Resistojet and a Pulsed Plasma Thruster (PPT) module and STRaND-2 which will use Microsoft Xbox Kinect controller technology.

STRaND stands for Surrey Training, Research and Nanosatellite Demonstration and the programme is intended to be a long-term arrangement between the space company SSTL and academic researchers at the Surrey Space Centre (SSC), with STRaND-1 the first of a long line of STRaND nanosatellites.

The dual STRaND-2 cubesats will test a novel in-orbit docking system based upon XBOX Kinect technology that could change the way space assets are built, maintained and decommissioned. The identical twin STRaND-2 satellites will each be a 3 unit Cubesat. Components from the XBOX Kinect games controller to scan the local area and provide the satellites with spatial awareness on all three axes.

SSTL says on their web site, "The STRaND-2 twins will be separated after launch. After the initial phase of system checks, the two satellites will be commanded to perform the docking procedure and, when in close proximity, the Kinect-based docking system will provide the satellites with 3D spatial awareness to align and dock. Other applications for STRaND-2 include the safe removal of space debris and spacecraft maintenance, with a low cost "snap-on" nanosatellite providing backup power, propulsion or additional on-board computing capability."

SSTL Project Lead Shaun Kenyon says, "We were really impressed by what MIT had done flying an autonomous model helicopter that used Kinect and asked ourselves: Why has no-one used this in space? Once you can launch low cost nanosatellites that dock together, the possibilities are endless, like space building blocks."

Dr. Chris Bridges, Surrey Space Centre Project Lead says, "It may seem far-fetched, but our low cost nanosatellites could dock to build large and sophisticated modular structures such as space telescopes. Unlike today's big space missions, these could be reconfigured as mission objectives change, and upgraded in-orbit with the latest available technologies."

The SSTL employees involved with the STRaND programme are volunteers. It is a condition of the programme that volunteers from SSTL and SSC use their own, free time for STRaND activities (such as lunches and breaks). The project has no budget for staff so is entirely dependent on volunteers.

For further information see http://www.uk.amsat.org/?p�46

[ANS thanks AMSAT-UK for the above information]

TAPR Digital Communications Conference in Atlanta September 21 - 23

The ARRL/TAPR Digital Communications Conference is an international forum for radio amateurs to meet, publish their work, and present new ideas and techniques. Presenters and attendees will have the opportunity to exchange ideas and learn about recent hardware and software advances, theories, experimental results, and practical applications.

Topics include, but are not limited to: Software Defined Radio, digital voice (D-Star, P25, WinDRM, FDMDV, G4GUO), digital satellite communications, Global Position System, precision timing, Automatic Position Reporting System, Digital Signal Processing, HF digital modes, spread spectrum,

This week TAPR published the schedules for the technical and introductory sessions: http://www.tapr.org/pdf/DCC_2012_Schedule.pdf

The DCC Saturday Night Banquet Speaker & Topic will be Bdale Garbee, KB0G talking about the "Sharing the Joy of Making"

The DCC Sunday Morning Seminar will be a hands-on tutorial using Gnuradio to design and implement software defined radios on your laptop presented by Tom Rondeau, KB3UKZ, the leader of the Gnuradio project.

All of the seminar information and registration can be accessed at: http://www.tapr.org/dcc.html

[ANS thanks ARRL and TAPR for the above information]

NASA Issues Request for Information - Nano Satellite Launch Challenge

On August 10, 2012 NASA published a Request for Information (RFI), titled, "Centennial Challenges Nano Satellite Launch Initiative". The full text of this RFI is available on the US General Services Administration web at: http://tinyurl.com/NASA-NanoSatellite-RFI

Centennial Challenges is a program of prize competitions to stimulate innovation in technologies of interest and value to NASA and the nation.

In 2010 NASA announced a Nano-Satellite Launch (NSL) Challenge to encourage development of safe, low-cost, small-payload delivery systems for frequent access to low Earth orbit (LEO) through innovations in propulsion and other technologies as well as operations and management for broader applications in future launch systems that could result in a commercial capability for dedicated launches of small satellites at a cost comparable to secondary payload launches. To assist in formulation of the Nano-Satellite Launch Challenge, NASA is seeking additional information on the nano-satellite market and on approaches to address the market needs.

There are currently several existing launch vehicles and new launch vehicle programs that could provide ride-sharing opportunities for nano-satellite.

This NASA Nano Satellite Launch Challenge focuses on:

+ Launch vehicle design dedicated to providing greater payload design flexibility for cubesats and other small payloads, more frequent access to space at costs comparable or less than existing or proposed ride-share launch options.

+ Tradeoff designs for a payload market for a very low cost vehicle but with less orbital accuracy or lower reliability?

+ How frequently should the vehicle launch?

+ Initially the Challenge competition would be for one year and a $3M prize purse would be divided between all successful competitors.

+ A second phase of the competition would require successful competitors to deliver payloads to LEO at least ten times within a one-year period using a launch system sized to deliver up to 10Kg to LEO.

  o A total prize purse of $6M would be offered for at least 10 successful payload deliveries to LEO orbit: 1st Place receiving $3M for most deliveries; 2nd place, $2M for next most deliveries; and 3rd place, $1M for next most deliveries.

Responses must be submitted in electronic form no later than September 10, 2012 to Dr. Larry Cooper, Centennial Challenges Program, NASA Headquarters, 300 E Street, SW, Washington, DC 20546-0001.
E-mail address: larry.p.cooper at nasa.gov.

For general information on the NASA Centennial Challenges Program see: http://www.nasa.gov/challenges.

[ANS thanks NASA for the above information]

Satellite Shorts From All Over

+ The AMSAT News Service Bulletins are translated into French by Jean-Claude Aveni, TK5GH, and published on the AMSAT-Francophone web page at: http://www.amsat-f.org/site/index.php

+ Check out the unveiling of the new ICOM IC-7100 HF/50/144/430 MHz transceiver at the Ham Fair 2012 in Tokyo:
http://www.youtube.com/watch?v�rd6nQKV9s&feature�are

+ Korean artist Hojun Song traveled to Malm� in Sweden to give this keynote presentation about his innovative amateur radio CubeSat OSSI-1 to the Media Evolution Conference on August 23. OSSI-1 has a beacon in the 145 MHz band and a data communications transceiver in the 435 MHz band. It carries a 44 watt LED array to flash Morse Code messages to observers on Earth. Watch the video at:
http://www.uk.amsat.org/9921 - and - http://www.uk.amsat.org/9600

+ Enjoy Hubble's Hidden Treasures selected from an archive of more than 700,000 raw images. More than 3,000 submissions which include some of Hubble's incredible celestial treasures are revealed at:
http://www.spacetelescope.org/projects/hiddentreasures/

+ Danish photographer Hans Nyberg has an interactive, scrollable panorama for Apollo 11:
http://www.panoramas.dk/moon/apollo-11-the-first-man-on-moon.html

[ANS thanks everyone for the above information]

ARISS Status - 27 August 2012

1. Upcoming School Contacts

The Iruma Junior Ham Club in Iruma, Japan will participate in an ARISS (Amateur Radio on the International Space Station) contact on Sunday, September 2 at 08:32 UTC. The club members recently received their amateur radio licenses and are learning about satellite orbits and space. They look forward to speaking with Astronaut Akihiko Hoshide on the ISS.

2. Students Make Connection with Akihiko Hoshide on ISS

Students from Institute for Education on Space, Wakayama University in Wakayama, Japan spoke with on-orbit Astronaut Akihiko Hoshide, KE5DNI via an ARISS contact on Sunday, August 26. The contact highlighted science lessons about space, satellites and radio waves.

3. ARISS International Team Meeting Held

The monthly ARISS International Team meeting was held on Tuesday, August 21. The team discussed whether ARISS supporters should be recognized on the ARISS website and a status was given on the HamTV project and on the new Ericsson VHF radio which is scheduled to launch later this year. Minutes have been posted:

http://ariss.rac.ca/arisstel2012-08-21.htm

4. Astronaut Training Status

Gregory Wiseman, KF5LKT is scheduled for a basic operations training session in September. Wiseman is slated to fly with the Expedition 40 crew in May 2014.

[ANS thanks Carol, KB3LKI, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

Primary and secondary school students are eligible for membership at one-half the standard yearly rate. Post-secondary school students enrolled in at least half time status shall be eligible for the student rate for a maximum of 6 post-secondary years in this status. Contact Martha at the AMSAT Office for additional student membership information.

73,
This week's ANS Editor,
Lee McLamb, KU4OS

```
From -6022353961228519820
X-Google-Thread: 8f86f75953,2331f9b1cca9a622,start
X-Google-Attributes: gid8f86f75953,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
Received: by 10.14.203.7 with SMTP id e7mr3621380eeo.4.1346984690754;
        Thu, 06 Sep 2012 19:24:50 -0700 (PDT)
MIME-Version: 1.0
Path: ed8ni6229573wib.0!nntp.google.com!feeder2.cambriumusenet.nl!
feed.tweaknews.nl!216.196.110.146.MISMATCH!border3.nntp.ams.giganews.com!
border1.nntp.ams.giganews.com!nntp.giganews.com!usenetcore.com!newsfeed.xs4all.nl!
newsfeed5.news.xs4all.nl!xs4all!newspeer1.nac.net!news.mi.ras.ru!goblin2!goblin1!
goblin.stu.neva.ru!news.glorb.com!npeer01.iad.highwinds-media.com!news.highwinds-
media.com!feed-me.highwinds-media.com!nx01.iad01.newshosting.com!newshosting.com!
novia!news-out.readnews.com!transit4.readnews.com!panix!rri.panix.com!robomod!not-
for-mail
From: SWPC.Webmaster@noaa.gov
Newsgroups:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.shor
```

```
twave,rec.radio.info
Subject: Weekly Highlights of Solar and Geomagnetic Activity, 27 August - 02
September 2012
Followup-To:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.shor
twave
Date: Mon, 3 Sep 2012 11:30:08 EDT
Organization: NOAA Space Weather Prediction Center
Lines: 66
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <20120903153001.C453F33C7E@panix2.panix.com>
NNTP-Posting-Host: panix6.panix.com
X-Trace: reader1.panix.com 1346686208 6885 166.84.1.6 (3 Sep 2012 15:30:08 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Mon, 3 Sep 2012 15:30:08 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
X-Received-Bytes: 4602
Bytes: 5069
```

```
:Product: Weekly Highlights and Forecasts
:Issued: 2012 Sep 03 1342 UTC
# Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center
# Product description and SWPC contact on the Web
# http://www.swpc.noaa.gov/weekly.html
#
#                Weekly Highlights and Forecasts
#
```

Highlights of Solar and Geomagnetic Activity
27 August - 02 September 2012

Solar activity was very low 27 and 28 August. Moderate activity was observed on 30 August as Region 1563 (S25, L=078, class/area Dso/70 on 01 September) produced the largest flare of the period, an M1 at 30/1211 UTC. Solar activity was at low levels for the remainder of the period. A C8/2f flare associated with a filament eruption in the southeast quadrant of the solar disk occurred at 31/2043 UTC. An associated CME was observed on SOHO/LASCO and STEREO A/B coronagraphs with a possible Earth-directed trajectory. Two other CMEs were observed on 02 September in STEREO A COR2 imagery beginning at 02/0409 UTC and 02/1109 UTC with potential Earth-directed components.

A greater than 10 MeV proton event (category S1-Minor) associated with the filament eruption on 31 August, began at 01/1335 UTC, reached a maximum of 60 pfu at 02/0850 UTC, and is currently above threshold.

The greater than 2 MeV electron flux at geosynchronous orbit was at moderate levels on 27 August. Levels increased to high from 28 through 31 August. Moderate levels were observed for the remainder of the period.

Geomagnetic field activity was mostly quiet from 27 August through 01 September. Activity increased on 02 September with unsettled to active conditions observed due to an extended period of negative Bz.

Forecast of Solar and Geomagnetic Activity
03 September - 29 September 2012

Solar activity is expected to be at very low to low levels with a slight chance for M-class activity through the forecast period.

The greater than 10 MeV proton event currently in progress is expected to remain above the 10 pfu threshold 03-04 September with a additional enhancements possible with CME arrivals.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to be at moderate or lower levels from 03-16 September, 21-23 September, and 27-29 September. High levels are forecast 17-20 September and 24-26 September due to coronal hole (CH) effects.

Geomagnetic field activity is expected to be as high as minor storm (G1) conditions on 03 September with anticipated effects from the 31 August CME. Residual elevated conditions ranging from unsettled to minor storm levels are expected to persist from 03-06 September due to continued transient activity in conjunction with possible CH effects. Mostly quiet conditions are expected from 08 September through 29 September with the exception of two CH periods; 14-16 September and 20-23 September, which should see unsettled to active periods.

```
From -6026430831110399195
X-Google-Thread: 8f86f75953,6cf26e6fe68efea4,start
X-Google-Attributes: gid8f86f75953,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
Received: by 10.68.232.1 with SMTP id tk1mr1737768pbc.7.1347409298989;
        Tue, 11 Sep 2012 17:21:38 -0700 (PDT)
Path: t10ni10690099pbh.0!nntp.google.com!npeer01.iad.highwinds-media.com!
news.highwinds-media.com!feed-me.highwinds-media.com!
```

```
border3.nntp.dca.giganews.com!border1.nntp.dca.giganews.com!
border4.nntp.dca.giganews.com!border2.nntp.dca.giganews.com!nntp.giganews.com!
newsgate.cuhk.edu.hk!goblin1!goblin.stu.neva.ru!news.astraweb.com!
border6.a.newsrouter.astraweb.com!not-for-mail
From: Chris Steyaert <observations@rmob.org>
Newsgroups: rec.radio.amateur.space,sci.astro.amateur
Subject: Radio Meteor Obs. Bull. August 2012  Perseids
Date: Wed, 05 Sep 2012 23:50:02 +0200
Message-ID: <s5if48hg81fke6ojbbpc4nhoovbsh64qi3@4ax.com>
X-Newsreader: Forte Agent 5.00/32.1171
MIME-Version: 1.0
Lines: 14
Organization: Unlimited download news at news.astraweb.com
NNTP-Posting-Host: 2f3e5b24.news.astraweb.com
X-Trace: DXC=FdT[GRnlokgF1iA^=`ZUjbL?
0kYOcDh@j5M1C8_YGNIfS4Tg:Xl5=MnE^\]9WgUBRob3<D_UX>L;iX<`3P5ZY[Zj_OcGLYMn[OnWZCWS9I
L:af
Bytes: 1154
X-Received-Bytes: 1262
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Radio Meteor Observation Bulletin No. 229 of August 2012 (75K) is available now
as

     http://www.rmob.org/rmobtext/rmob1208.txt


More information and the visual presentation of the hourly forward scatter
counts can be found on

     http://www.rmob.org


     Chris




From 8602012694976177310
X-Google-Thread: a4a23d5f63,a0cdca2976fa72be,start
X-Google-Attributes: gida4a23d5f63,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
Received: by 10.224.28.15 with SMTP id k15mr2226467qac.8.1347174149565;
        Sun, 09 Sep 2012 00:02:29 -0700 (PDT)
Path: da15ni27657581qab.0!nntp.google.com!border1.nntp.dca.giganews.com!
border4.nntp.dca.giganews.com!border2.nntp.dca.giganews.com!nntp.giganews.com!
news.snarked.org!newsfeed.news.ucla.edu!usenet.stanford.edu!panix!rri.panix.com!
robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-247 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
```

```
Date: Fri, 7 Sep 2012 16:00:22 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 2421
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <001601cd8d32$ad7fd690$087f83b0$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
X-Trace: reader1.panix.com 1347048023 13929 166.84.1.6 (7 Sep 2012 20:00:23 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Fri, 7 Sep 2012 20:00:23 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Bytes: 57401
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
Content-Language: en-us
```

This report is organized into four (4) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - deorbited/returned satellites

SB SAT @ AMSAT W8ISS $WSR-247.S1
WSR 247 Part 1 09/03/2012

AMSAT NEWS SERVICE BULLETIN 247.S1
FROM AMSAT HQ SILVER SPRING, MD, September 03, 2012
TO ALL RADIO AMATEURS
BID: $WSR-247.S1

PW-Sat
Catalog Number: 38083 (?)
Launch Date: Febrauary 13, 2012
Launch Site: Kourou, French Guiana

Status: On Orbit

Uplink: 435.020 MHz FM
Downlink: 145.900 MHz DSB

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=132
[07162012]
=====
DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational
Current Mode: Science Mode - Beacon ONLY

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink: 435.530 to 435.570 MHz

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=68
[02092011]
=====
VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05, 2005 0444z
Launch site: Satish Dhawan Space Centre, India

Status: Operational
Current Mode: U/v - Dutch Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.9360 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=30

To know what transponder is switched on please listen for the beacon that is active. Each transponder has a different beacon.
[03232012]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002 1700z
Launch site: Baikonur, Kazakhstan

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz. The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10 minute timer.
[02092011]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Operational
Current Mode: V/u (Mode JA)

Voice/CW (Mode JA)
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
          145.870 MHz FM

```
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage:
http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's
CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/
fo29cwts.htm
[01122012]
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993 0140z
Launch site: Kourou, French Guiana

Status: Operational

Current Mode: V/u

Uplink:   145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[02092011]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974
Launch site: Vandenberg AFB, California, USA

Status: Operational

Current Mode: Alternating between Mode A and B every 24 hours

Uplink:   145.850 to 145.950 MHz CW/USB Mode A
```

432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz CW
145.972 MHz CW
435.100 MHz CW
2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php
[04242012]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998 0640z (ZARYA module)
Launch sites: Baikonur, Kazakhstan
Kourou, French Guiana
Uchinoura Space Center, Japan
Kennedy Space Center, Titusville, Florida, USA

Status: Operational

Current Active Modes: FM Repeater - OFF
Voice - V/v
BBS - OFF
2m APRS - OFF
70cm APRS - ON
70cm Digi - ON
SSTV - OFF

Expedition 32 Crew (July 2012 - November 2012):

Commander:	Gennady Padalka	RN3DT
Flight Engineer:	Joe Acaba	KE5DAR
Flight Engineer:	Sergei Revin	RN3BS
Flight Engineer:	Sunita Williams	KD5PLB
Flight Engineer:	Yuri Malenchenko	RK3DUP
Flight Engineer:	Akihiko Hoshide	KE5DNI

Available Modes and Frequencies:
Digital/APRS:
Worldwide 2m packet uplink: 145.825 MHz FM 1k2
Worldwide 2m packet downlink: 145.825 Mhz FM 1k2
Worldwide 70cm packet uplink: 437.550 Mhz FM 1k2
Worldwide 70cm packet downlink: 437.550 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
2m Packet Mailbox: RS0ISS-11
2m Digipeater alias: ARISS
70cm Packet Mailbox: RS0ISS-1
70cm Digipeater callsign: RS0ISS
70cm Digipeater alias: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[08062012]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-247.S2
WSR 247 Part 2 09/03/2012

AMSAT NEWS SERVICE BULLETIN 247.S2
FROM AMSAT HQ SILVER SPRING, MD, September 03, 2012
TO ALL RADIO AMATEURS
BID: $WSR-247.S2

RS-40 MiR (Yubileiny-2)
Catalog Number: 38735
Launch Date: July 28, 2012

Status: On Orbit

Uplink:

```
Downlink(s):    435.265 MHz
                435.365 MHz

Beacon:

Callsign:

URL:
[08272012]
=====
HORYU-II
Catalog number: 38340
Launch Date: May 17, 2012

Status: On Orbit

Uplink:   145.??? MHz
Downlink: 437.375 MHz CW/AX25/FSK

Beacon: 437.375 MHz CW

Callsign: JG6YBW

URL:

IARU Coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=216
[05282012]
=====
XaTcobeo
Catalog Number: 38082
Launch Date: Febrauary 13, 2012
Launch Site: Kourou, French Guiana

Status: Operational

Uplink:
Downlink: 437.365 MHz FFSK with AX.25

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=135
[03162012]
=====
UniCubeSat
Catalog Number: 38085(?)
Launch Date: Febrauary 13, 2012
Launch Site: Kourou, French Guiana
```

```
Status: Operational

Uplink:
Downlink: 437.305 MHz 9k6 bps GMSK

Beacon:

Callsign:

URL:
http://www.gaussteam.com/index.php?option=com_content&view=article&id=96:uni
cu
besat&catid=36:unicubesat&Itemid=183

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=133
[08272012]
=====
Robusta
Catalog Number: 38083(?)
Launch Date: Febrauary 13, 2012
Launch Site: Kourou, French Guiana

Status: On Orbit

Uplink:
Downlink: 437.325 MHz 1k2 FM telemetry (data every 3 min, 20 sec. burst)

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=122
[08272012]
=====
MO-72 MaSat-1
Catalog Number: 38081
Launch Date: Febrauary 13, 2012
Launch Site: Kourou, French Guiana

Status: Operational

Uplink:
Downlink: 437.345 MHz GFSK 625/1250 bps
          437.345 MHz CW

Beacon:

Callsign:
```

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=126
[03232012]
=====
Goliat
Catalog Number: 38084(?)
Launch Date: Febrauary 13, 2012
Launch Site: Kourou, French Guiana

Status: Operational

Uplink:
Downlink: 437.485 MHz 1k2 AFSK

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=98
[08272012]
=====
E-St@r
Catalog Number: 38079
Launch Date: Febrauary 13, 2012
Launch Site: Kourou, French Guiana

Status: On Orbit

Uplink:
Downlink: 437.445 MHz 1k2 bps AFSK

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=130
[07302012]
=====
ALMASat-1
Catalog Number: 38078
Launch Date: Febrauary 13, 2012
Launch Site: Kourou, French Guiana

Status: On Orbit

```
Uplink:
Downlink:  437.465 MHz 1k2 bps FSK
          2407.850 MHz

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=39
[02212012]
=====
RS-39 Chibis-M
Catalog Number: 38051
Launch Date: October 30, 2011 10:11:00 UTC
Launch site: Tyuratam (Baikonur Cosmodrome), Kazakhstan

Status: Operational

Uplink:
Downlink:

Beacon: 435.315 MHz CW
        435.215 MHz CW

Callsign:

URL:

IARU coordination status page:
[07302012]
=====
JUGNU
Catalog Number: 37839
Launch Date: October 12, 2011 05:30:00 UTC
Launch site: Satish Dhawan Space Centre, India

Status: On Orbit

Uplink:   145.??? MHz 1k2 (mode?)
Downlink: 437.505 MHz 9k6 (mode?)

Beacon: 437.275 MHz 15 wpm (?) CW

Callsign:

URL: http://www.iitk.ac.in/me/jugnu/index.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=160
```

```
[07092012]
=====
SRMSAT
Catalog Number: 37841
Launch Date: October 12, 2011 05:30:00 UTC
Launch site: Satish Dhawan Space Centre, India

Status: On Orbit

Uplink:   145.900 MHz 1k  AX.25 (speed?)
Downlink: 437.500 MHz 2k4 AX.25

Beacon: 437.425 MHz 12 wpm CW

Callsign:

URL: http://srmsat.in/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=181
[07092012]
=====
HRBE (E1P Explorer 1 [Prime] CubeSat (E1P-U2))
Catalog Number: 37855
Launch Date: October 28, 2011
Launch site: Vandenberg Air Force Base, California, USA

Status: On Orbit

Uplink:   437.305 MHz (???)
Downlink: 437.505 MHz AX.25 (SSB?)

Beacon:

Callsign:

URL: http://ssel.montana.edu/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=116
[01122012]
=====
M-Cubed
Catalog Number: 37855
Launch Date: October 28, 2011
Launch site: Vandenberg Air Force Base, California, USA

Status: On Orbit

Uplink:
Downlink: 437.485 MHz AX.25

Beacon:
```

Callsign:

URL: http://umcubed.org/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=215
[01122012]
=====
RAX-2
Catalog Number: 37853
Launch Date: October 28, 2011
Launch site: Vandenberg Air Force Base, California, USA

Status: Operational

Uplink:
Downlink: 437.345MHz 9k6 GMSK

Beacon:

Callsign:

URL: http://rax.engin.umich.edu//

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=221
[03232012]
=====
AO-71 AubieSat-1
Catalog Number: 37854
Launch Date: October 28, 2011
Launch site: Vandenberg Air Force Base, California, USA

Status: On Orbit

Uplink:
Downlink: 437.475 MHz 1k2 AX.25

Beacon: 437.475 MHz CW

Callsign: KI4NQO

URL: http://www.space.auburn.edu/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=148
[12262011]
=====
O/OREOS
Catalog Number: 37224
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: On Orbit

Uplink:
Downlink: 437.035 MHZ AX.25

Beacon:

Callsign:

URL: http://www.ooreos.org/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=146
[02092011]

=====

Rax-1 Radio Aurora Explorer
Catalog Number: 37223
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: On Orbit

Uplink:
Downlink: 437.505 MHz 9k6 GMSK

Beacon:

Callsign: RAX-1

URL: http://rax.engin.umich.edu/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=165
[02092011]

=====

FO-69 Fastrac-1 Sara Lily
Catalog Number: 37227
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: Operational

Uplink 1: 145.980 MHz 1k2 baud
Uplink 2: 145.825 MHz 1k2 baud
Downlink: 437.345 MHz 1k2 and 9k6 baud

Beacon: 437.435 MHz 1k2 AX.25

Callsign: Fast1

URL: http://fastrac.ae.utexas.edu/index.php

```
IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=83
[07052011]
=====
FO-70 Fastrac-2 Emma
Catalog Number: 37380
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: Operational

Uplink 1: 435.025 MHz 1k2 baud
Uplink 2: 437.435 MHz 9k6 baud
Downlink: 145.825 MHz 1k2 and 9k6 baud

Beacon:   145.825 MHz 1k2 AX.25

Callsign: Fast2

URL: http://fastrac.ae.utexas.edu/index.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=84
[12162011]
=====
StudSat
Catalog Number: 36796
Launch Date: July 12, 2010 0352z
Launch site: Satish Dhawan Space Centre, India

Status: On Orbit

Uplink:   437.505MHz, 9600bps FSK
Downlink: 437.505MHz, 9600bps FSK
Beacon  : 437.505MHz,   20bps ASK

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=164
[02092011]
=====
TIsat-1
Catalog Number: 36799
Launch Date: July 12, 2010 0352z
Launch site: Satish Dhawan Space Centre, India

Status: On orbit

Callsign: HB9DE

Uplink:   145.980MHz FM, AFSK
Downlink: 437.305MHz FM, AFSK
Beacon:   437.305MHz CW
```

```
IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=118
[02092011]
=====
SwissCube
Catalog Number: 35932
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Callsign: HB9EG

Beacon(100mw): 437.5050MHz CW
Beacon(1w):    437.5050MHz FSK 1k2bps

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=109
[02092011]
=====
UWE-2
Catalog Number: 35934
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: In Orbit

Beacon(500mw): 437.3850 MHz AFSK 1k2bps
               437.3850 MHz FSK 9k6bps

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=110
[02092011]
=====
ITUpsAT1
Catalog Number: 35935
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Beacon(100mw): 437.325MHz CW
Beacon(1w): 437.325MHz 19k2bps

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=113
[02092011]
=====
BEESAT
Catalog Number: 35933
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India
```

```
Status: Operational

Callsign: DP0BEE

Beacon(100mw): 436.000MHz CW
Beacon(500mw): 436.000MHz GMSK 4k8bps
Beacon(500mw): 436.000MHz GMSK 9k6bp
[02092011]
=====
CP-6
Catalog Number: 35003
Launch Date: May 19, 2009 2355z
Launch site: Wallops Island, Virginia, USA

Status: Operational

Downlink: 437.365 MHz 1k2 AFSK

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=121
[07302012]
=====
HAWKSAT 1
Catalog number: 35004
Launch Date: May 19, 2009 2355z
Launch site: Wallops Island, Virginia, USA

Status: operational

Downlink: 437.345 MHz ?

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=105
[07302012]
=====
Pharmasat
Catalog Number: 35002
Launch Date: May 19, 2009 2355z
Launch site: Wallops Island, Virginia, USA

Status: Operational

Downlink: 437.465 MHz 1k2 AFSK

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=94
[02092011]
=====
ANUSAT
Catalog Number: 34808
Launch Date: April 20, 2009 0115z
Launch Site: Satish Dhawan Space Centre, India
```

```
Status: ?

Downlink:  435.000 MHz
Uplink:    145.800 MHz

Telemetry: 137.400 MHz
[02092011]
=====
SOHLA-1 (ASTRO TECH.)
Catalog Number: 33496
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational

Proposed Frequencies and Modes:
Downlink: 437.505 MHz AFSK/CW
Beacon:   437.505 MHz AFSK/CW

Callsign:

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=101
[02092011]
=====
KAGAYAKI (Solan Co.)
Catalog Number: 33495
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: In Orbit

Downlink: 437.375 MHZ    FSK9k6/CW
Beacon:   437.375 MHz    FSK9k6/CW

IARU coordination status page:

AMSAT-NA webpage:

[02092011]
=====
STARS (Kagawa Univ.) (Twin Satellites)
Catalog Number: 33498
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational ?

Downlinks: 437.485 MHz FM/CW
           437.465 MHz FM/CW
Beacons:   437.305 MHz FM/CW
           437.275 MHz FM/CW
```

```
Callsigns: JR5YBN
           JR5YBO

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=99

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=121&retURL
=/satellites/status.php
[02092011]
=====
KKS-1 (Tokyo MCIT)
Catalog Number: 33499
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational

Downlink:  437.455 MHz AFSK/CW
Beacon:    437.385 MHz AFSK/CW

Callsign: JQ1YYY

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=107

AMSAT-NA webapge:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=120&retURL
=/satellites/status.php
[20092011]
=====
PRISM (Tokyo Univ.)
Catalog Number: 33493
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational ?

Downlink: 437.425 MHz AFSK/GMSK/CW
Beacon:   437.250 MHz AFSK/GMSK/CW

Callsign: JQ1YCX

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=97

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=119&retURL
=/satellites/status.php
[02092011]
=====
RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number: 32953
```

Launch Date: May 23, 2008 1520z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational

Curent Modes: Telemetry
              Audio
              Images

Downlinks: 435.315 MHz
           435.215 MHz

AMSAT-NA website:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=115&retURL=/satellites/status.php

Official website:
http://www.npopm.com/?cid=leoca&caid=43
[02092011]
=====
CanX-2
Catalog number: 32790
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational in range of ground station only

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=46
[02092011]
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Downlink: 437.425 MHz 1k2 baud packet

For the latest project status update please visit the AAUSAT-II web page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=60
[02092011]
=====

```
CO-65 CUTE-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Downlink:  437.475 MHz 9k6 Packet
Uplink:   1267.600 Mhz

Telemetry Beacon:
Downlink: 437.2750 MHz CW

For the latest project status update please visit the Cute-1.7+APD II
web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=78

Command Station blog website:
http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=112&retURL
=/satellites/status.php
[03232012]
=====
Compass-1
Catalog number: 32787
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Current Mode: dependant on last received command

Uplink:   145.980 MHz FM
Downlink: 437.275 Mhz CW
          437.405 MHz Packet

For the latest project status update please visit the Compass 1 web
page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=52

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=114&retURL
=/satellites/status.php
[06162011]
=====
CO-66 Seeds II
Catalog number: 32791
```

Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Downlink: 437.485 MHz

Callsign: JQ1YGU

For the latest project status update please visit the Seeds 2 web page: http://cubesat.aero.cst.nihon-u.ac.jp/english/seeds_2_e.html

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=36

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=113&retURL=/satellites/status.php
[073092011]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007 0702z
Launch site: Baikonur, Kazakhstan

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=94&retURL=/satellites/status.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=72
[02092011]
=====
CP3
Catalog Number: 31129
Launch Date: April 17,2007 0702z
Launch site: Baikonur, Kazakhstan

Status: Operational

Current Mode: /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=74
[02092011]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005 0652z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon: 437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/xivpicte.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=37
[02092011]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: ?????

Current Mode: /u

Beacon: 436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=96&retURL
=/satellites/status.php

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[02092011]
=====
QuakeSat
Catalog Number: 27845
Launch Date: June 30, 2003 1415z

Launch site: Plesetsk Missile and Space Complex, Russia

Status: Telemetry only

Current Mode: 9600 baud data packet

Mode U packet
Downlink: 436.675 MHz 9k6 BPS

Quakesat webpage:
http://www.quakefinder.com/services/quakesat-ssite/
[02252011]
=====
CO-55 Cute-1.7+APD II
Catalog Number: 27844
Launch date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational

```
Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only
```

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=69&retURL
=/satellites/status.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=78
[02092011]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001 0240z
Launch site: Kodiak Launch Complex, Alaska, USA

Status: Telemetry only

Current Mode: V/v

```
General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink:        144.390 Mhz 1200 Baud
```

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/

```
[02092011]
=====
RS-22 RADIO SPORT 22 (MOZHAYETS 4)
Catalog number: 27939
Launch Date: September 27, 2003 0612z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational - 70cm cw only

Current Mode:  /u

CW Beacon - 435.352 MHz
            145.818 MHz

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=76&retURL
=/satellites/status.php
[02092011]
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990
Launch site: Kourou, French Guiana

Status: CW Beacon only

Uplinks:          145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink:      437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[02092011]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984
Launch site: Vandenburg AFB, California, USA

Status: Operational ?

Current Mode:  /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon:          435.025 MHz
```

Mode-S Beacon: 2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[07052011]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998 0640z (ZARYA module)
Launch sites: Baikonur, Kazakhstan
Kourou, French Guiana
Uchinoura Space Center, Japan
Kennedy Space Center, Titusville, Florida, USA

Status: Operational

Current Active Modes: FM Repeater - OFF
Voice - V/v
BBS - U/u
2m APRS - OFF
70cm APRS - ON
70cm Digi - ON
SSTV - OFF

Expedition 32 Crew (July 2012 - November 2012):

Commander:	Gennady Padalka	RN3DT
Flight Engineer:	Joe Acaba	KE5DAR
Flight Engineer:	Sergei Revin	RN3BS
Flight Engineer:	Sunita Williams	KD5PLB
Flight Engineer:	Yuri Malenchenko	RK3DUP
Flight Engineer:	Akihiko Hoshide	KE5DNI

Available Modes and Frequencies:
Digital/APRS:
Worldwide 2m packet uplink: 145.825 MHz FM 1k2
Worldwide 2m packet downlink: 145.825 Mhz FM 1k2
Worldwide 70cm packet uplink: 437.550 Mhz FM 1k2
Worldwide 70cm packet downlink: 437.550 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM

437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
2m Packet Mailbox: RS0ISS-11
2m Digipeater alias: ARISS
70cm Packet Mailbox: RS0ISS-1
70cm Digipeater callsign: RS0ISS
70cm Digipeater alias: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[08062012]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-247.S3
WSR 247 Part 3 09/03/2012

AMSAT NEWS SERVICE BULLETIN 247.S3
FROM AMSAT HQ SILVER SPRING, MD, September 03, 2012
TO ALL RADIO AMATEURS
BID: $WSR-247.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

NANOSAIL-D
Catalog Number: 37361
Ejection Date: January 17, 2011

Status: Non - Operational

Downlink: 437.270 MHz AX.25

```
URL: http://nanosaild.engr.scu.edu/dashboard.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=115
[07302012]
=====
HO-68 HOPE-1 (CAS-1) (XW-1)
Catalog Number: 36122
Launch Date: December 15, 2009 0231z
Launch site: Taiyuan Space Center, PRC

Status: Telemetry only

Callsign:
Broadcast:    BJ1SA-11
BBS:     BJ1SA-12

Uplinks:   145.8250 MHz FM, PL 67.0 Hz.
           145.9250 - 145.9750 MHz SSB/CW
           145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
           435.7650 - 435.7150 MHz SSB/CW
           435.6750 MHz AFSK 1200 BPS

Beacon:    435.7900 MHz CW

Mode and Antenna Polarization:
V: LHCP 2.0dBi max
U: RHCP 3.0dBi max

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=108

For more information about XW-1 (CAS-1):
http://
[04302012]
=====
SO-67 SumbandilaSat
Catalog Number: 35870
Launch Date: September 17, 2009 1555z
Launch site: Baikonur, Kazakhstan

Status: Non - Operational

Callsign: ZS0SUM

Uplink:   145.875MHz FM tone 233.6 Hz
Downlink: 435.345MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear
```

For more information about SO-67:
http://www.amsatsa.org.za/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=88
[01272012]
=====
CP4
Catalog Number: 31132
Launch Date: April 17, 2007

Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon: 437.325 MHz CW

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=79
[09062010]
=====
LIBERTAD-1
Catalog Number: 31128
Launch Date: April 17, 2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink: 145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=76
[09062010]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: Non-Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder: 145.825 Mhz FM

IARU coordination status page:

http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=51
[09062010]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
                             2407.250

Official Website: http://www.ncube.no

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=24
[09062010]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 MHz FM 67Hz CTCSS
Voice Downlink: 2401.835 MHz FM
Packet Up/Downlink: 437.250 MHz 9k6 packet
Packet Downlink   2401.835 MHz 38k4 packet

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=54
[09062010]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non-Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=53
[09062010]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004 0745z
Launch site: Baikonur, Kazakhstan

Status: Non - Operational

Current Mode(s):
Voice repeater: V/u
Uplink: 145.880 MHz FM
Downlink: 435.150 MHz FM

Telemetry: Recovery efforts
Downlink: 435.150MHz 9k6

Analog voice downlink:	435.300 MHz FM
	435.150 MHz FM
	2401.200 Mhz FM
Analog voice uplink:	145.860 MHZ FM
	145.880 MHz USB
	145.880 MHz FM
	145.920 MHz FM
	145.920 MHz FM - 67 Hz PL tone burst
	1268.705 MHz FM
Digital Downlinks:	435.150 MHz FM 38k4 PBP, 1 watt output
	435.150 MHz FM 9k6 Pacsat Broadcast Protocol
	2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:	145.860 MHz FM 9k6 Pacsat Broadcast Protocol
	1268.703 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon:	435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=19
[12062011]
=====
CANX-1
Catalog Number: 27847
Launch Date: June 30, 2003

Status: Non-Operational

Downlink: 437.8800 MHz AFSK 1k2bps
[06052009]
=====
DTUSAT

```
Catalog Number: 27842
Launch Date: June 30, 2003

Status: Non-Operational

Current Mode: 2k4 AFSK Packet last reported

Downlink: 437.475MHz

Officail webpage: http://dtusat1.dtusat.dtu.dk/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=101&retURL
=satellites/all_oscars.php
[02212009]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink:   435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)

Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Telemetry only

Uplinks:   145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink:  437.325 MHz

Broadcast callsign: MYSAT3-11
BBS:                MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial land and weather imaging payloads offers FM and FSK
Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as
a collaborative effort between the Malaysian government and Surrey
Satellite Technology Ltd.
[03302009]
=====
```

NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]

=====

SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]

=====

SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]

=====

AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks

V-band: 145.840 - 145.990 MHz CW/LSB
U-band: 435.550 - 435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks

S2-band: 2401.225 - 2401.475 MHz CW/USB
K-band: 24048.010 - 24048.060 MHz CW/USB
Beacon: 2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)

BEACON	General Beacon(GB)	Middle Beacon(MB)	Engineering Beacon(EB)
2 m	none	145.898 MHz	none
70cm	435.438 MHz	435.588 MHz	435.838 MHz
13cm(1)	2400.188 MHz	2400.338 MHz	2400.588 MHz
13cm(2)	2401.173 MHz	2401.323 MHz	2401.573 MHz
3cm	10450.975 MHz	10451.125 MHz	10451.375 MHz
1.5cm	24047.885 MHz	24048.035 MHz	24048.285 MHz

[07162007]

=====
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]

=====
UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]

=====
SO-35 SUNSAT

Catalog Number: 25636
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Non-Operational

Current Modes:
Telemetry : /u

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems

```
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign:       4XTECH-12

More information of GO-32 can be found at:
http://asri.technion.ac.il/techsat/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=14&retURL
=/satellites/status.php
[07172010]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink:   145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
MO-30 UNAMSAT-2
Catalog Number: 24305
Launch Date: September 5, 1996

Status: Non-operational

Downlink:       435.1380 MHz AFSK 1200 BPS
Downlink:       435.2060 MHz AFSK 1200 BPS
Uplink:         145.8150 MHz AFSK 1200 BPS
Uplink:         145.8350 MHz AFSK 1200 BPS
Uplink:         145.8550 MHz AFSK 1200 BPS
Uplink:         145.8750 MHz AFSK 1200 BPS
[06042009]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Non-operational

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage
```

```
Broadcast callsign: POSAT1-11
BBS callsign:       POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012009]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
AO-24 ARSENE
Catalog Number: 22654
Launch Date: May 13, 1993

Status: Non-operational

Uplink:    435.0625 MHz FM 1k2bps AFSK
           435.1125 MHz FM 1k2bps AFSK
           435.1375 MHz FM 1k2bps AFSK
```

```
Downlink:  145.9750 MHz FM 1k2bps AFSK
          2446.5025 MHz FM 1k2bps AFSK

Beacon:    2446.4700 MHz CW

Broadcast callsign:
BBS:
[12162009]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25
```

```
Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
[05012006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: non-operational

Current Mode:  V/u

Uplink:         145.900 MHz FM 1200-baud Manchester FSK (reserved)
                145.920 MHz FM VOICE
                145.940 MHz FM 1200-baud Manchester FSK (reserved)
                145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink:       437.026 MHz USB VOICE
                (1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]
```

```
Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[07242009]
=====
UO-15 UoSAT-4
Catalog Number: 20438
Launch Date: January 22, 1990

Status: Non-operational

Uplink: ?
Downlink: 435.1250MHz (?)
          435.1200MHz (?)
[06042009]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon:   145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink  29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
Beacons:   29.450 MHz
          435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational
```

```
Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon 1:  29.352 MHz (intermittent)
Beacon 2:  29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink:     21.260 to 21.300 MHz CW/USB
Downlink:  145.860 to 145.900 MHz CW/USB

Beacon:    145.860 MHz

Robot:     145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink:   21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB
```

```
Beacon:   29.408 MHz

Robot:    29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-247.S4
WSR 247 Part 4 09/03/2012

AMSAT NEWS SERVICE BULLETIN 247.S4
FROM AMSAT HQ SILVER SPRING, MD, September 03, 2012
TO ALL RADIO AMATEURS
BID: $WSR-247.S4

THE FOLLOWING SATELLITES HAVE RE-ENTERED OR HAVE BEEN RETURNED SAFELY:

ARISSat-1
Catalog number: 37772
Launch date: August 03, 2011 1843z
Launch site: International Space Station

Status: Re-entered January 05, 2012

Callsign: RS01S

Current Mode(s):
Linear Transponder: U/v
Uplink:      435.758 to 435.742 MHz CW/LSB
Downlink:    145.922 to 145.938 MHz CW/USB

FM Telemetry/SSTV/Messages/ID:
Downlink:    145.950 MHz FM

Telemetry/Beacon:
Downlink:    145.939 MHz CW1
             145.919 MHz CW2
             145.920 MHz 1k BPSK USB
             145.920 MHz 400b BPSK USB


Official Webpage:http://www.amsat.org/amsat-new/ARISSat/ARISSat.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/informal_detail.php?serialnum=89
[01052012]
=====
CAERUS
Catalog Number:
Launch Date: December 08, 2010 15:43:00 UTC
Launch site: Kennedy Space Center, Titusville, Florida, USA

Status: Re-entered December 22, 2010
```

Uplink:
Downlink: 437.600 MHz 1k2 AX.25

Beacon: 437.600 MHz CW

Callsign: KJ6FIX

URL:
http://www2.isi.edu/research/prj-serc/prj-serc_projects/prj-serc_projects-8.htm

IARU coordination status page:

[11102011]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Re-entered
Re-entered: October 25, 2009

Uplink: 1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=56
[09062010]
=====
BEVO-1 (DRAGONSAT-1)
Catalog Number: 35690
Launch Date: May 19, 2009

Status: Re-entered
Re-entered:

Downlink: 437.325 MHz 9k6 GMSK
          437.325 MHz CW 20wpm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=117
[07312009]
=====
AggieSat2 (DRAGONSAT-2)
Catalog Number: 35690
Launch Date: May 19, 2009

```
Status: Re-entered
Re-entered:

Downlink: 436.250 MHz 9k6 FHSS
[11112009]
=====
Pollux
Catalog Number: 35693
Launch Date: July 31, 2009

Status: Re-entered
Re-entered:

Callsign: POLLUX-1

Downlink: 145.825MHz 1k2 AX.25

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=139
[09062010]
=====
Castor (ANDE-2)
Catalog Number: 35694
Launch Date: July 31, 2009

Status: Re-entered
Re-entered:

Callsign: KD4HBO-1

Downlink: 145.825 MHz 1k2 AX.25

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=144
[09062010]
=====
NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: July 28, 2008

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=59
[01012009]
```

```
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink:      145.825 Mhz FM APRS AX25
APRS Uplink:        145.825 MHz FM APRS AX25
Voice/PSK31 Uplink:  28.120 MHz

Packet to Voice ID: RAFT
[06112007]
=====
GENESAT-1
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Re-Entered
Re-entered date: August 8, 2010

Current Mode: /u

Callsign: KE7EGC

Telemetry Beacon Downlink: 437.0695 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[08082010]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Re-Entered
Re-entered: June 18, 2008

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon:             437.2750 MHz CW

Callsign: JR8YJT
[01012009]
```

=====
SO-43 Starshine 3
Catalog Number: 26929
Launch Date: September 30, 2001

Status: Re-Entered
Re-entered: January 21, 2003

Beacon: 145.825Mhz
[02212009]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at} amsat.org
NNNN
/EX

```
From 36667115085248524
X-Google-Thread: 8f86f75953,9c08fb162058988,start
X-Google-Attributes: gid8f86f75953,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII
Received: by 10.180.82.226 with SMTP id l2mr5537988wiy.1.1347644677789;
        Fri, 14 Sep 2012 10:44:37 -0700 (PDT)
MIME-Version: 1.0
Path: q11ni64866152wiw.1!nntp.google.com!feeder1.cambriumusenet.nl!
feed.tweaknews.nl!193.141.40.65.MISMATCH!npeer.de.kpn-eurorings.net!npeer-
ng0.de.kpn-eurorings.net!border2.nntp.ams2.giganews.com!
border4.nntp.ams.giganews.com!border2.nntp.ams.giganews.com!nntp.giganews.com!
news.panservice.it!de-l.enfer-du-nord.net!feeder1.enfer-du-nord.net!
news.glorb.com!news-out.readnews.com!transit3.readnews.com!panix!rri.panix.com!
robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-253 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sat, 8 Sep 2012 21:37:04 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 585
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <002201cd8e2b$991af0f0$cb50d2d0$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
X-Trace: reader1.panix.com 1347154624 21290 166.84.1.6 (9 Sep 2012 01:37:04 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 9 Sep 2012 01:37:04 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
```

Bytes: 26086
Content-Language: en-us

AMSAT NEWS SERVICE
ANS-253

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor at amsat.org

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* Reminder: Ballots for the AMSAT-NA Board of Directors Election  *
* are due by mail by the close of business on Sepetember 15, 2012 *
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In this edition:

- AMSAT President Barry Baines, WD4ASW TV Interview on HAMRADIONOW.tv
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- AMSAT Store Grand Reopening
- Successful ARISS Contacts With Germany, Japan, and Maryland
- September 9 Launch From India Planned for Japan PROITERES Satellite
- Help Wanted: AMSAT News Service Rotating Editor Positions Available
- Satellite Shorts From All Over

SB SAT @ AMSAT $ANS-253.01
ANS-253 AMSAT News Service Weekly Bulletins

AMSAT News Service Bulletin 253.01
>From AMSAT HQ SILVER SPRING, MD.
September 9, 2012
To All RADIO AMATEURS
BID: $ANS-253.01

AMSAT President Barry Baines, WD4ASW TV Interview on HAMRADIONOW.tv

Gary Pearce, KN4AQ, producer and host of the HAMRADIONOW.tv webcasts interviewed AMSAT President Barry Baines, WD4ASW at the Shelby North Carolina Hamfest. Barry's interview provides an in-depth update on

AMSAT activities and plans.

As Gary says, "So there's a lot going on at AMSAT. Exciting stuff like commanding a remote-control vehicle with instructions relayed through the ISS (think Mars Curiosity Rover)". As Barry said, "This isn't your grandfather's AMSAT anymore".

Barry discussed AMSAT's exciting projects including:

+ Project Fox Cubesat development
+ AMSAT selection for NASA's ELaNa launch program
+ AMSAT development of missions meeting STEM educational goals
+ AMSAT-ARRL-ARISS teamwork
+ Future opportunities in space
+ How you can join and help

Watch the 60 minute interview at HAMRADIONOW.tv, Episode 19:
http://arvideonews.com/hrn/HRN_Episode_0019.html

While you are on the Amateur Radio Video News website please "click the pig" if you can donate to this amateur radio video series.

[ANS thanks Gary Pearce, KN4AQ and Amateur Radio Video News for the above information]

Board of Directors Ballots Due by September 15

If your ballot for the 2012 AMSAT Board of Directors election has not hit the mail yet you gotta do it today!

AMSAT Corporate Secretary Alan Biddle, WA4SCA reminds all AMSAT-NA members, "Your ballots for the 2012 Board of Directors election need to be received at AMSAT-NA headquarters by September 15th, 2012. This is one of your best opportunities to make your views on the path of our organization known."

Ballots for the 2012 AMSAT-NA Board of Directors election have been mailed to all members. Also included is biographical information about each of the candidates.

Select no more than three of the six listed candidates (in alphabetical order):

+ Tom Clark, K3IO
+ Steve Coy, K8UD
+ Mark Hammond, N8MH
+ Lou McFadin, W5DID
+ Gould Smith, WA4SXM
+ Patrick E. Stoddard, WD9EWK

The 3 candidates receiving the most votes will become directors serving 2 year terms. The 2 receiving the next highest number of votes will be seated as alternates for 1 year terms.

You must mail your ballot back to be received at the AMSAT-NA Office no later than the close of business on September 15, 2012:

AMSAT
850 Sligo Avenue, #600
Silver Spring, MD 20910

[ANS thanks AMSAT Corporate Secretary Alan Biddle, WA4SCA for the above information]

Register On-line for the AMSAT 2012 Space Symposium

AMSAT announces that the registration for the 2012 AMSAT Space Symposium, to be held on Friday, October 26th through Sunday, October 28th is now open on-line. A mail-in option is also available those preferring this approach.

See the AMSAT Web Store to complete your on-line registration:
http://store.amsat.org/catalog/index.php?cPath'

Downloadable paper registration forms in MS-Word format and PDF format are available on the 2012 Symposium page:
http://www.amsat.org/amsat-new/symposium/2012/index.php

Prices for the Symposium are:
+ Symposium Registration including Proceedings
  o Through September 23, 2012: $ 45.00
  o Starting September 24, 2012: $ 50.00
  o At the Door: $ 55.00

+ Saturday Evening Banquet $ 45.00

+ Sunday Morning Area Coordinators� Breakfast $ 15.00

+ Monday (Oct 29) bus trip to KSC and entrance ticket $ 100.00

The Symposium weekend will feature:

+ Space Symposium with Amateur Satellite Presentations
+ Operating Techniques, News, & Plans from the Amateur Satellite World
+ Board of Directors Meeting open to AMSAT members
+ Meet Board Members and Officers
+ Annual General Membership Meeting
+ Annual Banquet-Keynote Speaker and Door Prizes

The Symposium Hotel is the Holiday Inn at Orlando-International Airport is located one mile from the Orlando International Airport (MCO). The AMSAT discount rate is $99 + taxes per night. The reservation block code used when calling the hotel directly is AMT.

The hotel telephone number is 407-851-6400. The Symposium Committee recommends you make reservations by calling the hotel directly rather than through the Web. Cutoff date for reservations is Oct 6, 2012. The direct link to the hotel web page is:
http://www.holidayinn.com/hotels/us/en/orlando/mcoap/hoteldetail

The hotel offers free Internet connection and free airport shuttle. When you arrive at the Orlando Airport call 407-709-5310 to request the shuttle.

The Orlando International Airport (MCO) is the closest to the Symposium and is served by most major air carriers. The hotel address is: 5750 T.G. Lee Blvd � Orlando, FL 32822. A map link is included on the hotel web page.

[ANS thanks the 2012 Symposium Committee for the above information]

Final Call - AMSAT 2012 Space Symposium Papers Due October 1

Symposium Proceedings Editor, Dan Schultz, N8FGV reminds authors the final copy of your paper for the 2012 Space Symposium is due by October 1, 2012. Dan requests a tentative title of your presentation as soon as possible, with final copy to be by October 1 for inclusion in the printed proceedings. Abstracts and papers should be sent to Dan Schultz, N8FGV, at n8fgv at amsat.org

Proposals for papers, symposium presentations and poster presentations are invited on any topic of interest to the amateur satellite community:

+ Papers for publication in the Proceedings

+ Symposium Presentations

+ Poster Presentations

+ Equipment and Operating Demonstrations

The Symposium Committee still has prime slots available on the speaker's schedule. The AMSAT Symposium depends on YOU to make it happen, without speakers there is no Symposium.

Please consider doing a presentation, even if you have never done so in the past. We are especially interested in papers and presentations involving our educational partnerships with K-12 and university level classrooms. Education is quickly becoming critical for our future rides to space.

[ANS thanks 2012 Symposium Proceedings Editor Dan Schultz, N8FGV for the above information]

Israeli Students Developing Duchifat-1 145.825 MHz APRS CubeSat

The SpaceDuchifat-1 is an experimental and educational CubeSat developed and built by young Israeli students at the Space Laboratory of the Herzliya Science Centre (HSC). The project is directed by Dr. Ana Heller with support from the Herzliya city municipality and the Israeli Amateur Radio Club.

The CubeSat will carry an APRS digipeater operating on 145.825 MHz and a UHF/VHF 1200 bps BPSK transceiver that can provide a CW beacon and an FM to DSB transponder.

The main mission of the satellite is to transmit real-time information via radio amateur packets from a Low Earth Orbit (LEO) using the Automatic Position Reporting System (APRS) protocol. Duchifat-1 will allow remote traveler�s to access the satellite for worldwide position/status reporting and messaging even in the case of using simple handheld or mobile radios with Omni-directional whip antennas.

Due to the lack of APRS digipeating coverage on the 145.825 MHz frequency remote travelers, ships at sea, and stations in many parts of the world are presently unable to use the APRS system. The Duchifat-1 satellite will augment the existing worldwide terrestrial Amateur Radio APRS by adding LEO satellite coverage along with the International Space Station APRS digipeater.

Real-time position reporting uses the Global Positioning System (GPS) of the groundstation and will allow transmission of a wide variety of data including short text messages and telemetry data. The reports will be combined with a computer and mapping software to display the data superimposed on maps at a HSC Ground Station.

No launch or orbit details are presently available.

Further information at http://www.madaim.org.il/hsl/php/index-en.php

[ANS thanks HSL Space Laboratory at the Herzliya Science Center in Israel for the above information]

Astronaut EVA Activity Delays ISS CubeSat Deployment Schedule

A critical EVA was conducted at the International Space Station on Wednesday, September 5 by Astronauts Sunita Williams (KD5PLB) and Akihiko Hoshide (KE5DNI) to complete the installation of a spare power unit on the station's truss, which caused problems during an August 30 spacewalk.

During the August 30 EVA Williams and Hoside spent 8 hours and 17 minutes in space, but failed to install a new Main Bus Switching Unit (MBSU) on the station's s-zero truss as they had difficulties driving the bolts to secure the equipment. The MBSU is a heavy component that is used to relay power from the station's solar arrays to its systems.

This additional EVA activity drove schedule changes in which JAXA announced that the deployment of five CubeSats from the ISS planned for September 10 has been postponed. A new deployment date has not yet been announced.

Four of the CubeSats carry Amateur Radio payloads, they are F-1, FITSAT-1, WE-WISH and TechEdSat. Please refer to ANS-197 for the detailed list of CubeSat radio frequencies and operating modes:
http://amsat.org/pipermail/ans/2012/000634.html

The CubeSats are mounted in a JEM-Small Satellite Orbital Deployer (J-SSOD). In one pod are FITSAT-1, TechEdSat and F-1 and in the second pod is WeWish and a scientific 2U CubeSat RAIKO. Japanese astronaut Akihiko Hoshide KE5DNI will use the ISS Kibo robot arm to deploy the pods as demonstrated in this YouTube video:
http://www.youtube.com/watch?feature�ayer_embedded&v�uewuyv0wM

ELaNa Cubesats to Launch From Vandenberg September 13 - Thursday!

The Atlas V NROL-36 launch from Vandenberg Air Force Base in California, originally planned for August is now ready for launch on September 13. Liftoff is planned during a period between 1:45 and 4:15 p.m. local PDT (4:45-7:15 p.m. EDT; 2045-2315 GMT).

This launch will be carrying a pair of ocean surveillance satellites to locate ships at sea. Also aboard this flight at four cubesats as part of ELaNa IV mission and seven cubesats for government missions.

The ELaNa Cubesats aboard are:
+ CINEMA (Cubesat for Ion, Neutral, Electron, Magnetic fields)
   o Downlinks for engineering telemetry and command are in the 2400-2450 MHz range; Science telemetry is in 2200-2300 MHz

range.

+ CSSWE (Colorado Student Space Weather Experiment)
  o Downlink 437.345 MHz, 9k6 with AX25

+ CP5 (PolySat)
  o Downlink 437.405 MHz at 1 watt, AFSK on LSB AX.25 over NRZI at 1200 baud, every 2 minutes, begins 3.5 hours after first turn-on.

+ CXBN (Cosmic X-Ray Background Nanosatellite)
  o Downlink 437.525 MHz, GFSK, AX.25

The US Government Satellites aboard are:
+ Aeneas
  o First cubesat to deploy 2.4 GHz Dish Antenna. WIFI transmitter will transmit on 2425.0 MHz with 1 watt of output power.
  o Downlink 437.600 MHz AX25 1200 bps beacon every 10 seconds and spread spectrum two-way link elsewhere in the 70cm band.
  o Will test a 20-inch mesh antenna to track electronic tags on shipping containers in the open ocean.
+ ORSES (ORS Enabler Satellite)
+ Horus
+ Re
  o Will be used for the optical tracking of space debris
+ Aerocube 4A, 4B, 4C
  o Testing deployable solar panels.
  o Technology demonstration of �parachute-like� devices to deorbit satellites.
  o Testing closed-loop attitude control system based around a three-axis gyroscope.

A discussion of the launch re-scheduling can be found on-line at:
http://www.nasaspaceflight.com/2012/08/uatlas-v-launch-nrol-36-vandenberg/

Please refer to the prior bulletin for mission summaries and satellite team web pages: http://amsat.org/pipermail/ans/2012/000637.html

A detailed article of the launch can be found on-line at:
http://www.americaspace.org/?p#568

[ANS thanks NASA, the CubeSat Teams noted above, AMSAT-UK, Gunter's Space Page and nasaspaceflightnow.com for the above information]

AMSAT Store Grand Reopening

The AMSAT Store is fully open for business after being updated. All the usual AMSAT software, hardware, and clothing are available, as is the registration for the AMSAT 2012 Symposium and activities:

http://store.amsat.org/catalog/index.php?cPath'

Please stop by, even if you are just looking:
http://store.amsat.org/catalog/

You can also find a link to the AMSAT Store from the main web page at: http://www.amsat.org. It is the bottom button on the list on the left side of the main page.

If you don't find what you are looking for here, contact Martha at the main office:

+ E-mail at martha@amsat.org
+ From the US call toll free at (888) 322-6728
+ From all other locations call (301) 589-6062
+ Fax (301) 608-3410
+ Regular mail: AMSAT, 850 Sligo Ave. Suite 600, Silver Spring, MD 20910

[ANS thanks Alan Biddle, WA4SCA for tha above information]

Successful ARISS Contacts With Germany, Japan, and Maryland

Astronaut Akihiko Hoshide, KE5DNI participated in two ARISS (Amateur Radio on the International Space Station) contacts over the past week. He spoke with students attending Megina Gymnasium Mayen in Mayen, Germany on Friday, August 31 and with youth from the Iruma Junior Ham Club in Iruma, Japan on Sunday, September 2.

Sunita Williams, KD5PLB picked up a third ARISS contact with the National Electronics Museum in Linthicum, Maryland on Saturday, September 1. The radio contacts were integrated into comprehensive science and math lessons.

[ANS thanks Carol Jackson, KB3LKI, for the above information]

September 9 Launch From India Planned for Japan PROITERES Satellite

The Japanese amateur radio satellite PROITERES is planned to launch Sunday, September 9 at 0421 UT from the Indian Space Research Organisation (ISRO) Satish Dhawan space centre. The satellites SPOT6 and mRESINS will be on the same launch into a 695 km � 695 km, 98.2� inclination orbit.

PROITERES was built by a team of students and faculty members of

Osaka Institute of Technology (OIT) and the spacecraft aims to demonstrate powered flight using a Pulsed Plasma Thruster (PPT) engine. Its amateur radio callsign is JL3YZK.

PROITERES stands for PRoject of OIT Electric-Rocket-Engine Onboard Small Space Ship and will transmit on 437.485 MHz FM/AFSK. The spacecraft carries a camera and the two CPU�s run the Linux operating system.

PROITERES, Osaka Institute of Technology, Japan
Launch :   9 Sep 2012 4:21UTC (9:51IST)
Vehicle: PSLV-CA with SPOT6 and mRESINS
Site   :   Satish Dhawan Space Centre, Sriharikota, India
           30cm^3, 10kg, 10W, 437.485MHz FM/AFSK

The PROITERES Google English website contains the most up-to-date information see http://tinyurl.com/PROITERES-Satellite

There is also an English language website at
http://www.oit.ac.jp/elc/~satellit/ImageProiteres.html

A video showing ISRO launch prepartion for PROITERES can be found at:
http://www.uk.amsat.org/10201

[ANS thanks Mineo Wakita, JE9PEL and AMSAT-UK for the above information]

Help Wanted: AMSAT News Service Rotating Editor Positions Available

The AMSAT News Service (ANS) is responsible for researching, writing, editing, and publishing the weekly amateur satellite news bulletins.

After the passing of Dee, NB2F, we currently have a two editors who take a turn weekly to publish the bulletins. With the addition of a volunteer, or two, this would generally involve taking a turn about every 3 to 4 weeks.

At present we a looking for interested satellite enthusiasts to join the ANS editorial team. Professional writing/editing experience is NOT a requirement. Your interest and enthusiasm in following and reporting on amateur radio in space will get you started! The ANS Editor team helps each other by rounding up items of interest. Plus we receive submitted items for publication ... so you won't be left all alone!

If you can commit to working on the bulletins for a week on a rotating basis please reply via e-mail to AMSAT News Service Editor JoAnne Maenpaa, K9JKM via k9jkm at amsat.org.

[ANS thanks AMSAT Vice-President User Services, Gould Smith, WA4SXM for the above information]

Satellite Shorts From All Over

+ Listen for Tom Deeble, KA6SIP operating on FO-29, SO-50, and AO-27 satellites from the north shore of Kauai in the Hawaiian Islands. Tom is running a dual FT-817 setup with an Arrow antenna and ARR 440 preamp. Since this is a family trip he will try to operate on satellites in his spare time. He will be on Kauai until Friday, September 14.

+ Plan ahead! Scouting's Jamboree on the Air is coming up the weekend of October 20. If you know of local scout groups latch on to them and hopefully let's make the satellites come alive with Scout to Scout contacts. It may end up being the high point for many of the Scouts involved with JOTA. (Tom Schuessler, N5HYP)

+ Congratulations Bob Bruninga, WB4APR as the ARRL announced him as the winner of the August QST Cover Plaque award. Bob's article is �Rethinking Electrical Power for the Ham.� The QST Cover Plaque award is given to the author or authors of the best article in each issue of QST Magazine and is determined by a vote of ARRL members. (ARRL)

+ Enjoy a simulated flyover of the most intriguing landmarks on giant asteroid Vesta, as seen by NASA's Dawn spacecraft: http://www.youtube.com/watch?feature�ayer_embedded&v�vz6J8cnc8

+ Congratulations to Hector, CO6CBF on his successful amateur radio and satellite demonstration in the town's central park at Aguada de Pasajeros, Cuba. Hector reports 21 stations were worked on 3 satellite passes. He was also able to demonstrate receiving the contact between the ISS and K3CUJ at the National Electronics Museum inLinthicum, MD. His gear includes a mobile 2m FM radio with a homebrew 70cm/2m down converter for receive, a 2M Kenwood TK-270 HT for transmit. He operates with the HT in one hand and his homebrew Arrow Antenna with a homebrew preamplifier in the other hand.

+ Earth-Mars-Earth Radio Message Received by Curiosity Controllers Utilizing the radio relay capability of the Mars Science Laboratory Curiosity Rover on the surface of Mars, an international network of telecommunications relay orbiters around Mars and NASA's Deep Space Network (DSN) voice playback of NASA Administrator Charles Bolden's message to JPL's Mars mission crew was played for the team on August, 27, 2012. The video and audio of the relayed message are available at: http://www.nasa.gov/mission_pages/msl/news/bolden20120827.html

+ AMSAT Commemorative Shirt for the 2012 Symposium is only available by mail order. If you have not received a copy of the order form you can download and print a copy from the the link on the front page at: http://www.amsat.org. The deadline for receiving your mail order is September 21, 2012.

+ The next Hudson Valley Satcom net dates are Thursday, September 13, and September 27, 8 PM EDT (UTC-4 UTC) on the 146.97 MHz MBARC Repeater (PL 100). An echolink connection is available on the N2EYH-L node. More information at: http://www.hvsatcom.org. (Stu, WA2BSS)

+ YouTube Space Lab Live Broadcast of Space Experiments: NASA has partnered with Space Adventures and YouTube on a global competition that challenged 14-18 year old students to design a science experiment to be performed in space. The winning experiments were conducted aboard the International Space Station, or ISS, and the results will be revealed live on YouTube. Of the 2,000 experiment ideas received from students in over 80 countries, only two were chosen to fly to space. The live broadcast can be seen on September 13, 2012, at 10:30 a.m. EDT (UTC-4), at: http://www.youtube.com/spacelab.

+ NASA's Digital Learning Network, or DLN, is hosting a special event on September 17, 2012, at 1 p.m. EDT to commemorate the departure of space shuttle Endeavour. Watch the live webstream from NASA's Kennedy Space Center in Florida as space shuttle Endeavour continues her journey on the back of the Shuttle Carrier Aircraft, a modified 747, to its final destination at the California Science Center in the heart of Los Angeles. For more information and to watch the webcast online, visit the DLN web site at: http://dln.nasa.gov

[ANS thanks everyone for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

Primary and secondary school students are eligible for membership at one-half the standard yearly rate. Post-secondary school students enrolled in at least half time status shall be eligible for the student rate for a maximum of 6 post-secondary years in this status. Contact Martha at the AMSAT Office for additional student membership information. And with that, please keep in mind if you give a man a fish, he will eat today ... Promise a man a million fish, he will contribute heap big wampum to your tribal election campaign fund.

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM

```
From 7818961054447585480
X-Google-Thread: 10e8ad,56ba4c6a4deb1134,start
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news.glorb.com!news-out.readnews.com!transit3.readnews.com!panix!rri.panix.com!
robomod!not-for-mail
From: SWPC.Webmaster@noaa.gov
Newsgroups:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.shor
twave,rec.radio.info
Subject: Weekly Highlights of Solar and Geomagnetic Activity, 03 - 09 September
2012
Followup-To:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.shor
twave
Date: Mon, 10 Sep 2012 11:30:09 EDT
Organization: NOAA Space Weather Prediction Center
Lines: 69
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <20120910153001.94FB033C7E@panix2.panix.com>
NNTP-Posting-Host: panix6.panix.com
X-Trace: reader1.panix.com 1347291009 24030 166.84.1.6 (10 Sep 2012 15:30:09 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Mon, 10 Sep 2012 15:30:09 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
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:Product: Weekly Highlights and Forecasts
:Issued: 2012 Sep 10 1418 UTC
Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center
Product description and SWPC contact on the Web
# http://www.swpc.noaa.gov/weekly.html

#
Weekly Highlights and Forecasts
#
Highlights of Solar and Geomagnetic Activity
03 - 09 September 2012

Three M1 flares this week brought solar activity to moderate levels. Region 1560 (N03, L=128, class/area=Eki/350 on 03 September) was the largest and most magnetically complex (beta-gamma-delta) of the week. It produced the first M-flare on September 6th at 0413Z before rotating around the west limb the next day. Region 1564 (S14, L=68, class/area=Esi/270 on 05 September) followed with a long-duration M1 event on September 8th at 1759Z and another on September 9th at 2236Z. None of the M1 flares were accompanied by significant radio emissions, or coronal mass ejections (CMEs).

The week began with the end of an energetic particle event. The 10 MeV proton flux was above the 10 pfu threshold on September 3rd and fell below on the 4th at 0625Z after reaching a maximum of 59 pfu three days earlier. Later, a coronal mass ejection from beyond the west limb was observed on September 8th, first visible in SOHO/LASCO C2 coronagraph imagery at 1000Z. The event that produced the CME was also believed to be responsible for a 10 MeV proton enhancement which began around 1200Z. The peak 10 MeV flux during the enhancement was 1 pfu.

The greater than 2 MeV electron flux at geosynchronous orbit was at moderate levels on September 7th and 8th and at high levels on September 9th. The remainder of the week was at background levels.

Geomagnetic activity was propelled to major storm levels this week by the arrival of three CMEs. The first arrived at 03/1214Z when a sudden impulse of 28 nT was observed at the Boulder magnetometer. The disturbed geomagnetic field reached minor storm levels (Kp=5, G1) by 03/1312Z, and major storm levels (Kp=6, G2) by 03/1500Z. Conditions decreased to active levels for two periods before rising again to minor storm levels at 04/0000Z. The geomagnetic field returned to quiet to active levels until September 5th when two CMEs observed on September 2nd arrived simultaneously. An interplanetary shock was observed at the ACE spacecraft at 04/2203Z. The subsequent arrival at earth caused the magnetic field to jump to major storm levels by 05/0144Z. Kp indices then decreased one level each synoptic period until reaching Kp=2 by 05/15Z. On both September 3rd and 5th, the College, AK magnetometer recorded a period of severe storm (K=7,G3) levels. A solar sector boundary change brought active conditions for one period on the 6th, but the remainder of the week was mostly quiet.

Forecast of Solar and Geomagnetic Activity
10 September - 06 October 2012

Solar activity is expected to be low with a chance for moderate activity through the forecast period.

No proton events are expected at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit is
expected to be at high levels on 10-11, 18-20 and 24-27 September.

Geomagnetic field activity is expected to be mostly quiet to
unsettled. Active conditions are possible on 14-16 and 19-22
September, and again on 03-05 October associated with coronal hole
high speed streams.

```
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X-Google-Language: ENGLISH,ASCII-7-bit
Received: by 10.216.0.67 with SMTP id 45mr249209wea.4.1347688803523;
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feeder1-1.proxad.net!198.186.190.251.MISMATCH!news-out.readnews.com!
transit4.readnews.com!panix!panix2.panix.com!not-for-mail
From: rram@panix.com (rec.radio.amateur.moderated Admin)
Newsgroups:
rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.rad
io.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amat
eur.space,rec.radio.info
Subject: Crossposting Permitted to rec.radio.amateur.moderated
Supersedes: <radio/ham-radio/moderated/crossposting-1-1346479201@panix.com>
Followup-To: poster
Date: 15 Sep 2012 02:00:02 -0400
Organization: rec.radio.amateur.moderated Moderation Team
Lines: 47
Approved: RRI Admin <rec-radio-info-request@panix.com>
Distribution: world
Expires: 03 Oct 2012 02:00:01 -0000
Message-ID: <radio/ham-radio/moderated/crossposting-1-1347688801@panix.com>
Reply-To: rec-radio-amateur-moderated-request@panix.com
(rec.radio.amateur.moderated Admin)
NNTP-Posting-Host: panix2.panix.com
X-Trace: reader1.panix.com 1347688803 19386 166.84.1.2 (15 Sep 2012 06:00:03 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sat, 15 Sep 2012 06:00:03 +0000 (UTC)
Summary: Short reminder for unmoderated newsgroups that crossposting is permitted
Keywords: FAQ, ham, amateur, radio, moderated, unmoderated, crossposting,
permitted

Posted-By: auto-faq 3.3.2 beta (PGPMoose V2.0, Perl 5.005)
Archive-name: radio/ham-radio/moderated/crossposting
```

Revision: 1.2 2011/11/02 04:08:53
Posting-Frequency: posted twice monthly
URL: http://www.panix.com/~rram/usenet/rram/index.html

Changes followed by "|".

After a 30-day public discussion and feedback period to gauge reader opinions in March of 2009:

http://groups.google.com/group/rec.radio.amateur.moderated/browse_thread/thread/d7d337db35f23326

the rec.radio.amateur.moderated Moderation Team had decided to consider |
amending its charter, and permit limited simultaneous crossposting to
rec.radio.amateur.moderated and one other unmoderated
amateur-radio-related discussion newsgroup. After a successful trial |
period (90 days, through early July 2009), we decided to adopt this |
change permanently. |

Approved rec.radio.amateur.* newsgroups are those that are currently listed in the latest version of the "List of Big Eight Newsgroups" which is crossposted monthly to news.announce.newgroups, news.groups, and news.lists.misc.

Approved alt.radio.amateur.* and alt.ham-radio.* newsgroups are those that have been created consistent with the suggestions in "So You Want to Create an Alt Newsgroup" at:

http://www.faqs.org/faqs/alt-creation-guide/

Approved regional hierarchy newsgroups are those that contain either "radio.amateur" or "ham-radio" in their names, including uk.radio.amateur and aus.radio.amateur.misc.

We will make every reasonable effort to keep our list of approved newsgroups up-to-date. In case we have overlooked any, and a submission is rejected in error as a result, the rejected submitter can E-mail us at our administrative contact address (in the signature at the bottom of this article, and the default Reply-To for the rejection message) requesting that it be added, and that the article be approved. We may still choose to reject articles crossposted to any alt.* newsgroup with an inappropriate name, including obscene language, embedded name-calling, or encouragement of unlawful conduct.

Please direct any comments, questions, or criticisms to rec-radio-amateur-moderated-request@panix.com.

From 1526273762765813591
X-Google-Thread: 8f86f75953,6426f65e3f240018,start
X-Google-Attributes: gid8f86f75953,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit

```
Received: by 10.216.241.9 with SMTP id f9mr215059wer.5.1348191053962;
        Thu, 20 Sep 2012 18:30:53 -0700 (PDT)
Path: q11ni3625826wiw.1!nntp.google.com!feeder1.cambriumusenet.nl!
feeder2.cambriumusenet.nl!feed.tweaknews.nl!193.141.40.65.MISMATCH!npeer.de.kpn-
eurorings.net!npeer-ng0.de.kpn-eurorings.net!border2.nntp.ams2.giganews.com!
border1.nntp.ams2.giganews.com!border3.nntp.ams.giganews.com!
border1.nntp.ams.giganews.com!nntp.giganews.com!newsreader4.netcologne.de!
news.netcologne.de!news.glorb.com!news-out.readnews.com!transit4.readnews.com!
panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-260 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sun, 16 Sep 2012 08:42:12 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 521
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000901cd9408$acd9b350$068d19f0$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
X-Trace: reader1.panix.com 1347799332 9808 166.84.1.6 (16 Sep 2012 12:42:12 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 16 Sep 2012 12:42:12 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Bytes: 22669
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
Content-Language: en-us
```

AMSAT NEWS SERVICE
ANS-260

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:
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SB SAT @ AMSAT $ANS-260.01
ANS-260 AMSAT News Service Weekly Bulletins

AMSAT News Service Bulletin 260.01
From AMSAT HQ SILVER SPRING, MD.
September 16, 2012
To All RADIO AMATEURS
BID: $ANS-260.01

Cubesats Deployed From Vandenberg Atlas V Launch

The Atlas V NROL-36 launch from Vandenberg Air Force Base in California, originally planned for August, successfully launched on 13 September at 2139 UTC.

This launch carried a satellite for the National Reconnaissance Office. Also aboard this flight at four cubesats as part of ELaNa IV mission and seven cubesats for government missions.

Several hours after launch Justin Foley, KI6EPH, announced via the #Cubesat IRC Channel that all eight P-PODS had successfully deployed.

The ELaNa Cubesats aboard are:
+ CINEMA (Cubesat for Ion, Neutral, Electron, Magnetic fields)
   o Downlinks for engineering telemetry and command are in the 2400-2450 MHz range; Science telemetry is in 2200-2300 MHz range.

+ CSSWE (Colorado Student Space Weather Experiment)
   o Downlink 437.345 MHz, 9k6 with AX25

+ CP5 (PolySat)
   o Downlink 437.405 MHz at 1 watt, AFSK on LSB AX.25 over NRZI at 1200 baud, every 2 minutes, begins 3.5 hours after first turn-on.

+ CXBN (Cosmic X-Ray Background Nanosatellite)
   o Downlink 437.525 MHz, GFSK, AX.25

The US Government Satellites aboard are:
- Aeneas
  - First cubesat to deploy 2.4 GHz Dish Antenna. WIFI transmitter will transmit on 2425.0 MHz with 1 watt of output power.
  - Downlink 437.600 MHz AX25 1200 bps beacon every 10 seconds and spread spectrum two-way link elsewhere in the 70cm band.
- ORSES (ORS Enabler Satellite)
- Horus
- Re
- Aerocube 4A, 4B, 4C
  - Testing deployable solar panels.
  - Technology demonstration of "parachute-like" devices to deorbit satellites.
  - Testing closed-loop attitude control system based around a three-axis gyroscope.

Please refer to the prior bulletin for mission summaries and satellite team web pages: http://amsat.org/pipermail/ans/2012/000637.html

A detailed article of the launch can be found on-line at:
http://www.americaspace.org/?p=23568

[ANS thanks NASA, the CubeSat Teams noted above, AMSAT-UK, Gunter's Space Page and nasaspaceflightnow.com for the above information]

2012 AMSAT Space Symposium & Annual General Meeting Comes to Orlando

AMSAT announces the 2012 AMSAT Space Symposium will be held on Friday, October 26th through Sunday, October 28th. The Symposium weekend will feature:

- Space Symposium with Amateur Satellite Presentations
- Operating Techniques, News, & Plans from the Amateur Satellite World
- Board of Directors Meeting open to AMSAT members
- Meet Board Members and Officers
- Annual General Membership Meeting
- Annual Banquet-Keynote Speaker and Door Prizes

See the AMSAT Web Store to complete your on-line registration:
http://store.amsat.org/catalog/index.php?cPath=27

Downloadable paper registration forms in MS-Word format and PDF format are available on the 2012 Symposium page:
http://www.amsat.org/amsat-new/symposium/2012/index.php

Prices for the Symposium are:
- Symposium Registration including Proceedings
  - Through September 23, 2012: $ 45.00
  - Starting September 24, 2012: $ 50.00

o At the Door: $ 55.00

+ Saturday Evening Banquet $ 45.00

+ Sunday Morning Area Coordinators' Breakfast $ 15.00

+ Monday (Oct 29) bus trip to KSC and entrance ticket $ 100.00

The Symposium Hotel is the Holiday Inn at Orlando-International Airport is located one mile from the Orlando International Airport (MCO). The AMSAT discount rate is $99 + taxes per night. The reservation block code used when calling the hotel directly is AMT.

The hotel telephone number is 407-851-6400. The Symposium Committee recommends you make reservations by calling the hotel directly rather than through the Web. Cutoff date for reservations is Oct 6, 2012. The direct link to the hotel web page is:
http://www.holidayinn.com/hotels/us/en/orlando/mcoap/hoteldetail

The hotel offers free Internet connection and free airport shuttle. When you arrive at the Orlando Airport call 407-709-5310 to request the shuttle.

The Orlando International Airport (MCO) is the closest to the Symposium and is served by most major air carriers. The hotel address is: 5750 T.G. Lee Blvd - Orlando, FL 32822. A map link is included on the hotel web page.

[ANS thanks the 2012 Symposium Committee for the above information]

2012 Symposium Banquet Speaker - Astronaut Dr. Samuel T. Durrance

The featured speaker for the AMSAT 2012 Saturday Evening Banquet on October 27 will be Dr. Samuel T. Durrance, NASA Astronaut/Payload Specialist and Professor of Physics and Space Sciences at the Florida Institute of Technology.

Biography

Samuel T. Durrance was born in Tallahassee, Florida, but considers Tampa, Florida his hometown.

He received a Bachelor of Science degree and a Master of Science degree in physics (with honors), at California State University, Los Angeles, 1972 and 1974, respectively, and a doctorate in astro-geophysics at the University of Colorado at Boulder in 1980.

Dr. Durrance has been involved in space exploration, scientific research and education for over 30 years. He has logged over 615 hours in space as a payload specialist and member of the crew of Space Shuttle Columbia for the STS-35/Astro-1 and Space Shuttle Endeavour for the STS-67/Astro-2 missions.

He played several key roles in the design, construction, integration, and operation of the Hopkins Ultraviolet Telescope and NASA's Astro Observatory. He conducted research and directed graduate students at the Johns Hopkins University for 16 years.

He has designed and built spectrometers, detectors, and imaging systems, and made numerous spacecraft and ground-based astronomical observations. He conceived and directed a program to develop adaptive-optics instrumentation for ground based astronomy.

He led the team that designed and built the Adaptive Optics Coronagraph, which led to the discovery of the first cool brown dwarf, Gliese 229 b, orbiting a nearby star. He also co-discovered a telltale signature of planet formation in the dust disk surrounding the star beta Pictoris.

Starting in 2001, Durrance was the executive director of the Florida Space Research Institute (FSRI) created by the State of Florida in 2000. FSRI was located at NASA's Kennedy Space Center in support of the State's Space Life Sciences Laboratory. Durrance guided FSRI from its start up phase to a successful research and education organization.

Since 2006, he has been a professor of physics and space sciences at the Florida Institute of Technology. At Florida Tech he is developing an interdisciplinary research program and undergraduate degree program in astrobiology. His long-term goal at Florida Tech is to create a climate where students and faculty can regularly participate in space-based research programs. His research interests include the origin and evolution of the solar system, the search for planets around other stars, planetary astronomy, atmospheric physics, nuclear physics, adaptive optics, spacecraft operations, and the origin of life.

He has published over 70 technical papers on planetary astronomy, adaptive optics, atmospheric physics, nuclear physics, and spacecraft operations.

[ANS thanks the 2012 Symposium Committee for the above information]

2012 AMSAT Symposium Schedule

To help you plan your trip to Orlando the 2012 Symposium Committee has posted a high-level schedule of the weekend's events.

Preliminary 2012 Symposium Schedule

Thursday 25 October 2012

AMSAT Board of Directors Meeting 8am - 9pm

Friday 26 October 2012

AMSAT Board of Directors Meeting 8am - Noon
Trips to SkyCraft 9am - Noon
AMSAT Symposium 1pm - 5pm

Saturday 27 October 2012

Symposium 8am - 3pm
AMSAT General Meeting 3:30pm
AMSAT Banquet 6:30pm - 10pm

Sunday 28 October 2012

7:30am AMSAT Area Coordinator's Breakfast
Local trip of Interest TBD

Monday 29 October 2012

Special trip to Kennedy Space Center 8am-6pm
The trip will include a round trip bus from the hotel and entrance to the Space Center. The cost will be about $100. This is a wonderful experience for those that haven't been and for those that have been multiple times. We need to get an idea of how many will participate to select the correct bus. Contact Martha if interested

Watch the AMSAT Symposium Web Pages for the latest information:
http://www.amsat.org/amsat-new/symposium/2012/index.php

[ANS thanks the 2012 Symposium Committee for the above information]

AMSAT-NA Board of Directions Election Results

As a result of the 2012 board of directors election, Tom Clark, K3IO, Lou McFadin, W5DID, and Gould Smith, WA4SXM, will serve on the board for two years. The first alternate is Mark Hammond, N8MH and the second alternate is Patrick Stoddard, WD9EWK. The final results of the voting with 700 ballots cast are as follows;

Tom Clark, K3IO	514
Lou McFadin, W5DID	449
Gould Smith, WA4SXM	393
Mark Hammond, N9MH	309
Patrick Stoddard, WD9EWK	213

Steve Coy, K8UD 162

[ANS thanks Alan, WA4SCA, and Martha for the above information]

DynaCube CubeSat Under Development in South Africa

A news item on the South African Radio League reports on their September 9 amateur radio newscast that 20 interns at the Denel Dynamics Engineering Academy of Learning are designing and building the DynaCube CubeSat as part of their internship training. The interns are students who have completed their engineering degree, masters or PhD.

During the first year they spend half their time in the Academy and the other half in their designated departments. "The programme is aimed at exposing interns to a complete product development cycle", said Grant Wilson who leads the Academy. "Designing and building a CubeSat and developing a ground station to manage the satellite is an ideal project to achieve this."

The 20 strong Intern Project Team was split into three separate teams, each responsible for certain aspects of the project. Team Ground Zero is responsible for the ground station and radio frequency (RF) link components. Team Virtuoso is responsible for the cube structure and on-board computer; and Team Frodo is responsible for the payload, Attitude Control and Determination System (ADCS), and the launch.

More information about DynaCube on the SA AMSAT web at:
http://www.amasatsa.org.za

[ANS thanks SARL and SA AMSAT for the above information]

Japan's PROITERES Launched - Signals Received

The PROITERES satellite, built by a team of students and faculty members of Osaka Institute of Technology (OIT) was successfully launched aboard India's PSLV C21 rocket on September 9.

The purpose of the mission is to demonstrate powered flight using a Pulsed Plasma Thruster (PPT) engine. Its amateur radio callsign is JL3YZK.

PROITERES stands for PRoject of OIT Electric-Rocket-Engine Onboard Small Space Ship and will transmit on 437.485 MHz FM/AFSK. The spacecraft carries a camera and the two CPU's run the Linux operating system. Amateur radio operators around the world reported copying the downlink signal shortly after launch.

[ANS thanks Mineo Wakita, JE9PEL for the above information]

AMSAT Store Grand Reopening

The AMSAT Store is fully open for business after being updated. All the usual AMSAT software, hardware, and clothing are available, as is the registration for the AMSAT 2012 Symposium and activities:
http://store.amsat.org/catalog/index.php?cPath=27

Please stop by, even if you are just looking:
http://store.amsat.org/catalog/

You can also find a link to the AMSAT Store from the main web page at: http://www.amsat.org. It is the bottom button on the list on the left side of the main page.

If you don't find what you are looking for here, contact Martha at the main office:

+ E-mail at martha at amsat.org
+ From the US call toll free at (888) 322-6728
+ From all other locations call (301) 589-6062
+ Fax (301) 608-3410
+ Regular mail: AMSAT, 850 Sligo Ave. Suite 600, Silver Spring, MD 20910

[ANS thanks Alan Biddle, WA4SCA for tha above information]

Five CubeSats to be Deployed From ISS on September 27

Five cubesats launched on July 21 and now aboard the ISS have been integrated with the J-SSOD small satellite deployer on the the Japanese Experiment Module, also known as Kibo. They will be deployed with the Kibo robotic arm planned September 27, 2012. Deployment of these satellites was delayed last week due to crew EVA activities.

The five CubeSats on this mission include:

+ Raiko
   http://www.astro.mech.tohoku.ac.jp/RAIKO/ (Japanese)
   2U cubesat, photography, Ku-band beacon

+ We Wish

http://www.meisei.co.jp/news/2011/0617_622.html
Infrared camera for environmental studies

+ FITSat 1
  http://www.fit.ac.jp/~tanaka/fitsat.shtml
  High-speed data test, high power LED visual tracking
  CW Beacon 437.250 MHz,
  FM Data   437.445 MHz,
  High speed data 5840.00 MHz.

+ F-1 Vietnam Student CubeSat
  On-board camera for earth observation mission
  VX-3R1, 437.485 MHz FM downlink:
  - Solar cell power only, operates in sunlight only
  - Output power: max 0.3W, half-wave dipole antenna
  - Morse code beacon (10 chars) using PWM CW every 30 seconds

  VX-3R2, 145.980 MHz FM downlink:
  - Rechargeable battery, operates in dark and sunlight
  - Output power: max 1.0W, half-wave dipole antenna
  - AFSK 1200bps, half duplex, one AX.25 packet every 30 seconds

+ TechEdSat
  http://ncasst.org/techedsat.html
  http://www.uk.amsat.org/5018
  Downlink on 437.465 MHz

[ANS thanks the CubeSat teams, and Mineo Wakita JE9PEL for the above information]

Satellite Shorts From All Over

+ California amateurs may be interested in observing the flyover on the morning of September 20, 2012, of space shuttle Endeavour. It is scheduled to perform a low-level flyover of northern California, passing near NASA's Ames Research Center and various landmarks in multiple cities, including San Francisco and Sacramento en route to its permanent home at the California Science Center in Los Angeles. Endeavour is mounted atop NASA's modified 747 Shuttle Carrier Aircraft (SCA). Additional details are posted at:
  http://spaceref.com/news/viewpr.html?pid=38476

+ Keith Cowing from SpaceRef.com interviewed Flight Engineer Astronaut Suni Williams on the International Space Station:
  http://www.youtube.com/watch?feature=player_embedded&v=T_D_o9UxpTE

+ Science minded hams might want to investigate CosmoQuest, home to several citizen science projects. You will find the opportunity to join Vesta Mappers - Explore the surface of Vesta, one of the largest asteroids in our Solar System. Or join Moon Mappers - to identify craters and other interesting phenomena in actual images of the moon. The Ice Investigators project will have you looking for asteroids and transient space objects to help to direct the New Horizons spacecraft. Visit http://cosmoquest.org/ for more information.

+ This article discusses how CubeSats have captured the attention of space agencies and universities world-wide due to the significant amount of science that can now be packed aboard. Read up at: http://thespacereview.com/article/2155/1

+ The next Hudson Valley Satcom net date is Thursday, September 27, 8 PM EDT (UTC-4 UTC) on the 146.97 MHz MBARC Repeater (PL 100). An echolink connection is available on the N2EYH-L node. More information at: http://www.hvsatcom.org. (Stu, WA2BSS)

[ANS thanks everyone for the above information]

ARISS Status - 10 September 2012

1. German Students Delighted with ARISS Contact

An Amateur Radio on the International Space Station (ARISS) contact was held between on-orbit astronaut Sunita Williams, KD5PLB and students at the Gymnasium Michelstadt in Michelstadt, Germany on Friday, September 7. Williams was able to answer 14 questions posed by the students during the ISS pass. Over 1600 students, teachers, and VIP's were in attendance, as well as representatives from radio, television and newspapers. Positive feedback was received from the school, including the following: "Older colleagues compared the feeling to watching the moon landing in TV. Our Kids were electrified and already now we can see an increased interest in sciences and extracurricular activities. We are planning to continue this topic and have further projects in this field." Video has been posted.
See: http://www.youtube.com/watch?v=4xmL6wSPWzE

2. Girls' School Speaks with ISS Astronaut

On Sunday, September 9, Tara Anglican School in North Parramatta, New South Wales, Australia spoke with Astronaut Sunita Williams, KD5PLB via an Amateur Radio on the International Space Station (ARISS) contact. The radio connection was provided by telebridge station ON4ISS in Belgium. The contact was integrated into the school's science and space curriculum. Tara Anglican, a girls K-12 school, was selected by Oxford University as the Australian school to participate in the Global Jet Watch Program which links astronomers at Oxford University with students from four high schools around the world in Australia, Chile, South Africa and India in order to carry out cutting edge research. Oxford University installed a research grade 20 inch RC Optical telescope, together with custom designed instrumentation and an observatory with a 4.5 metre dome on Tara's grounds for use by the students. The school also formed a partnership with the Astronomical Society of New South Wales (ASNSW) through which students are mentored in complex astronomy projects by experienced amateur astronomers.

[ANS thanks Carol, KB3LKI, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

Primary and secondary school students are eligible for membership at one-half the standard yearly rate. Post-secondary school students enrolled in at least half time status shall be eligible for the student rate for a maximum of 6 post-secondary years in this status. Contact Martha at the AMSAT Office for additional student membership information.

73,
This week's ANS Editor,
Lee McLamb, KU4OS

```
From 3948769051810115823
X-Google-Thread: 8f86f75953,fc4f15293ff18b48,start
X-Google-Attributes: gid8f86f75953,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
Received: by 10.14.210.133 with SMTP id u5mr2529731eeo.2.1348190848401;
        Thu, 20 Sep 2012 18:27:28 -0700 (PDT)
MIME-Version: 1.0
Path: q11ni3569955wiw.1!nntp.google.com!feeder1.cambriumusenet.nl!
feeder2.cambriumusenet.nl!feed.tweaknews.nl!85.12.40.130.MISMATCH!xlned.com!
feeder1.xlned.com!border2.nntp.ams.giganews.com!border3.nntp.ams.giganews.com!
border1.nntp.ams.giganews.com!nntp.giganews.com!newsreader4.netcologne.de!
news.netcologne.de!newsfeed.straub-nv.de!news.glorb.com!news-xxxfer.readnews.com!
news-out.readnews.com!transit4.readnews.com!panix!rri.panix.com!robomod!not-for-
mail
From: SWPC.Webmaster@noaa.gov
Newsgroups:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.shor
twave,rec.radio.info
```

Subject: Weekly Highlights of Solar and Geomagnetic Activity, 10 - 16 September 2012
Followup-To: rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.shortwave
Date: Mon, 17 Sep 2012 11:30:08 EDT
Organization: NOAA Space Weather Prediction Center
Lines: 51
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <20120917153001.887E633C93@panix2.panix.com>
NNTP-Posting-Host: panix6.panix.com
X-Trace: reader1.panix.com 1347895808 13567 166.84.1.6 (17 Sep 2012 15:30:08 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Mon, 17 Sep 2012 15:30:08 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to   rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to   rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Bytes: 4173

:Product: Weekly Highlights and Forecasts
:Issued: 2012 Sep 17 1309 UTC
Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center
Product description and SWPC contact on the Web
# http://www.swpc.noaa.gov/weekly.html
#
Weekly Highlights and Forecasts
#
Highlights of Solar and Geomagnetic Activity
10 - 16 September 2012

Solar activity was at low levels during the first half of the of the summary period, and ended the week at very low levels. Region 1569 (S12, L=296, class/area=Eac/210 on 14 September) was the largest and most magnetically complex region of the period, yet only yielded four C-class flares. The largest of these was a C3/Sf flare that occurred at 11/0111Z. A filament eruption occurred near N22W20 at approximately 13/0640Z. The associated CME had an estimated speed of 536 km/s, but had little to no impact on Earth. A Type II Radio Sweep occurred at approximately 15/2259Z, had an estimated speed of 681 km/s, and was associated with a non-Earth directed CME near the north west limb.

No proton events were observed at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit was at high levels on 10 and 12 September. Moderate levels were observed on 11 September and again from 13 - 16 September.

The geomagnetic field was at quiet levels throughout the period with two isolated unsettled periods on 12 September and 15 September due to extended periods of negative Bz. A solar sector boundary crossing was also observed at approximately 16/1800Z.

Forecast of Solar and Geomagnetic Activity
17 September - 13 October 2012

Solar activity is expected to be at very low to low levels with a chance for moderate activity throughout the forecast period.

No proton events are expected at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to be at high levels on 18-20 and 24-27 September, then again from 07-09 October.

Geomagnetic field activity is expected to be quiet to unsettled with active conditions possible on 19-22 September, 03-05, 09-10, and 12-13 October. The active conditions are mainly associated with coronal hole high speed streams.

```
From 535175020966689354
X-Google-Thread: 10e8ad,738ebfb815f93862,start
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Received: by 10.66.81.202 with SMTP id c10mr861462pay.40.1348205716980;
        Thu, 20 Sep 2012 22:35:16 -0700 (PDT)
Path: a8ni459613pbd.1!nntp.google.com!npeer02.iad.highwinds-media.com!
news.highwinds-media.com!feed-me.highwinds-media.com!post01.iad.highwinds-
media.com!fed03.iad.POSTED!not-for-mail
From: Yanko Yankov <samy_b1@shell4you.net>
User-Agent: Mozilla/5.0 (Windows NT 6.1; WOW64; rv:15.0) Gecko/20120907
Thunderbird/15.0.1
MIME-Version: 1.0
Newsgroups: rec.radio.amateur.space
Subject: test
Lines: 5
Message-ID: <o0T6s.1$T44.0@fed03.iad>
X-Complaints-To: abuse(at)newshosting.com
NNTP-Posting-Date: Fri, 21 Sep 2012 05:35:16 UTC
Organization: Newshosting.com - Highest quality at a great price!
www.newshosting.com
Date: Fri, 21 Sep 2012 00:32:06 -0500
X-Received-Bytes: 722
Content-Type: text/plain; charset=ISO-8859-1; format=flowed
Content-Transfer-Encoding: 7bit
```

This is a test

Please, ignore

NX9G

```
From -5134341302294188425
X-Google-Thread: 10e8ad,be6e231b57ec1fb2,start
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII
Received: by 10.66.77.41 with SMTP id p9mr1584184paw.8.1348373868632;
        Sat, 22 Sep 2012 21:17:48 -0700 (PDT)
MIME-Version: 1.0
Path: a8ni13426451pbd.1!nntp.google.com!news.glorb.com!news-out.readnews.com!
transit3.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-267 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sun, 23 Sep 2012 00:17:48 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 671
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <001c01cd992e$26118480$72348d80$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
X-Trace: reader1.panix.com 1348373868 28830 166.84.1.6 (23 Sep 2012 04:17:48 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 23 Sep 2012 04:17:48 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
```

AMSAT NEWS SERVICE
ANS-267

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor at amsat.org

In this edition:

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SB SAT @ AMSAT $ANS-267.01
ANS-267 AMSAT News Service Weekly Bulletins

AMSAT News Service Bulletin 267.01
>From AMSAT HQ SILVER SPRING, MD.
September 23, 2012
To All RADIO AMATEURS
BID: $ANS-267.01

September 23 Last Day for Reduced Symposium Registration Rate

AMSAT announces the 2012 AMSAT Space Symposium will be held on Friday, October 26th through Sunday, October 28th.

See the AMSAT Web Store to complete your on-line registration:
http://store.amsat.org/catalog/index.php?cPath'

Symposium Registration including Proceedings

o Through September 23, 2012:	$ 45.00
o Starting September 24, 2012:	$ 50.00
o At the Door:	$ 55.00

Downloadable paper registration forms in MS-Word format and PDF format are available on the 2012 Symposium page:
http://www.amsat.org/amsat-new/symposium/2012/index.php

The Symposium Hotel is the Holiday Inn at Orlando-International Airport is located one mile from the Orlando International Airport (MCO). The AMSAT discount rate is $99 + taxes per night. The reservation block code used when calling the hotel directly is AMT.

The hotel telephone number is 407-851-6400. The Symposium Committee recommends you make reservations by calling the hotel directly rather than through the Web. Cutoff date for reservations is Oct 6, 2012. The direct link to the hotel web page is:
http://www.holidayinn.com/hotels/us/en/orlando/mcoap/hoteldetail

The Symposium Schedule web page has been updated with links to find more information about the planned activities. See:
http://www.amsat.org/amsat-new/symposium/2012/SymposiumSchedule.php

[ANS thanks the 2012 Symposium Committee for the above information]

2012 Barry Goldwater Amateur Radio Award to Bill Tynan, W3XO

The Radio Club of America announced this week that William A. Tynan, W3XO, is the recipient of its 2012 Barry Goldwater Amateur Radio Award. The award recognizes Bill's lifelong service to the public through amateur radio. It will be presented at the club's annual awards banquet in New York on November 16th. ARRL CEO David Sumner, K1ZZ, like Bill a club Fellow, will be the keynote speaker.

Bill, one of AMSAT's charter members, is a past President and Chairman of the Board. For many years, he conducted QST's monthly column, "The World Above 50 MHz." He is also a past President of the Central States VHF Society. Bill played a key role in the origination of amateur radio from the Space Shuttle and the International Space Station.

The Radio Club of America, founded in 1909, is the world's oldest radio communications association. For more information, see:
http://www.radioclubofamerica.org.

Congratulations, Bill!

[ANS thanks Ray Soifer, W2RS for the above information]

AMSAT Awards

AMSAT Director Contests and Awards, Bruce Paige, KK5DO says congratulations are in order for our latest AMSAT Awards recipients.

The following have entered into the Satellite Communicators Club for making their first satellite QSO.
+ Steven Holland, KC9TTQ
+ Ron Reiter, KD8SEV

+ Dan Kowell, AL7RS
+ Michael Mustachia, KF5PHA
+ Randy Morden, VE6RGU
+ Glyn Dodwell, GM4CFS

The following have earned the AMSAT Communications Achievement Award.
+ Kenneth Holland, KC9TTR, #550

The following have earned the South Africa Satellite Communications Achievement Award.
+ Kenneth Holland, KC9TTR, #US179

The following have earned their Robert W. Barbee, Jr. W4AMI Award
+ Theo Doty, AA5CK, #79

To see all the awards visit http://www.amsat.org.

[ANS thanks Bruce Paige, KK5DO for the above information]

Silent Key: John Beanland, G3BVU

AMSAT has received the sad news on the passing of John Beanland, G3BVU. John was an avid AMSAT member and helped man the AMSAT booth at the Boxboro Hamfest over the years. His friends remember John to be outgoing and enthusiastic about amateur radio in space. AMSAT President Barry Baines, WD4ASW noted, "AMSAT has lost a good friend and enthusiastic member."

Charles "John" Beanland, born in Witney, England was 85 years old passed away on September 21, 2012 after a long illness. John enlisted in the UK Navy during WWII. He was first licensed as G3BVU in 1947. He worked for Post Office in Engineering and English Electrical Valve where he worked on Guided Weapons. He later joined Texas Instruments and finally Microwave Associates, UK where he developed VHF solid state power amplifiers all while attending and receiving BS degrees in Electrical Engineering, Radio and Telecommunications.

Microwave Associates transferred him from the UK to Burlington, MA in 1963. In 1966 he joined the MITRE Corporation in Bedford, MA as a Member of the Technical Staff working on microwave systems and Over The Horizon Radar (OTHR) HF direction finding systems until his retirement in 1993. During that time he received his Masters Degree in Electrical Engineering from Northeastern University. In 1972 he acquired Spectrum International, specializing in antennas, filters, VHF transverters and satellite tracking systems which he operated until his passing. He later received his US call sign, AA1YE and taught Amateur Radio licensing courses and HF radio propagation at local radio clubs.

John was married to Dorothy Beanland for over 57 years. They have 3 children and 3 grandchildren. He resided in West Acton, MA. A wake will be held on Monday, September 24th from 5-8 PM at the Acton Funeral Home on Rt. 111 in Acton, MA. A burial service will be held at the Church of the Good Shepherd in Acton, MA at 10 AM, Tuesday, September 25th followed by burial in Acton, MA.

[ANS thanks Joe Reisert, W1JR and Barry Baines, WD4ASW for the above information]

Official Statement of the AMSAT-DL BoD About P3E & P5

Dear All,

The following News will appear as an Editorial in our up-coming AMSAT-DL Journal.

Because of the importance of the contents the AMSAT-DL BOD and Project Leaders decided to give this information to all team members who are currently or who were directly or indirectly involved in the past ... We want to make sure that our members get it from us and not from any rumours on the net ... Thanks.

While the decision of DLR is hitting us hard, this is not yet the end. I recently had some interesting meetings in China and if we can't do Rocket Science in DL, we have to look for other countries.

But please read below ... We hope you will support us also in future and if you want to re-join, you are also much welcome. AMSAT needs YOU!! If we missed someone from the members, please forward this e-mail.

Best wishes
Peter DB2OS
Hartmut DL1YDD
Michael DD5ER

DLR rejects P5-/Mascot-2 project

Dear Members and Friends of AMSAT-DL, discussions with the German Ministry of Economics and the German space agency DLR spanned more than 5 years. Amongst others, we met with State Secretary for Space and Aerospace Hinze, DLR chairman Prof. W�rner and the DLR Program Board. In 2009 AMSAT-DL, in collaboration with the DLR Institute for Space Systems in Bremen, conducted two complex Concurrent Engineering studies.

They were jointly presented to the DLR program board in K�ln-Porz in 2010.

The final documentation confirmed the feasibility of the P5 project, both to the Moon and to Mars.

In October and November 2011 another two P5 meetings with DLR chairman Prof. W�rner, Ministry MinDirig Engelhard, representatives of DLR IRS Bremen and AMSAT-DL BOD took place. Topics were feasibility and financing model.

It turned out that the ministry had a different perception of the (DLR-) payloads.

DLR was asked to reconsider their payloads. Both AMSAT-DL BOD and IRS Bremen left the meetings with positive feelings.

Then it turned out that, since completion of the 2009 joint study, the P5 scientific appeal is apparently no longer attractive. Therefore it was jointly searched for modifications to regain a payload appeal that was attested in 2009. AMSAT-DL proposed landing part of the payload on Mars moon Deimos or Phobos. Our calculations showed that this is feasible with reasonable effort. The landing would be a particularly unique feature of the P5 mission.

After repeated enquiries we received a letter from DLR at end of June where they stated that "the DLR Program Board comes to the conclusion, that pursuit of the P5 idea is infeasible and also financially infeasible."

We repeatedly approached the DLR Program Board since then. The assertion was that any P5 mission will not fly with DLR: the scientific attraction was, compared with the current Mars missions, insufficient.

The primary reason for this is that the P5 MARS orbit is limited due to the low-cost character of the mission. From this orbit no attractive science is possible. Obviously our P5 mission is now compared with regular missions which cost hundreds of millions of Euro.

This rejection has a wide impact on AMSAT-DL. Activities of all involved persons, including in the P3-E project, was shaped for years by the P5 mission.

It was assumed that P3-E was to be launched as part of the P5 mission. This path is obstructed now.

We maintain our contacts with the various launching agencies able to launch P3-E into an appropriate orbit. The tremendous launching costs kept us from more concrete talks so far. Just recently good contact with AMSAT China (CAMSAT) was established. China has suitable launchers to bring payloads into GTO. Moreover, China has discovered that amateur radio is a means of motivating young people to technical university studies.

Furthermore we are very actively exploiting a potential shared ride of an amateur radio payload on a new geostationary satellite. We have already submitted a formal project proposal. The satellite will be visible from Europe.

No antenna tracking will be necessary. The big advantage of this project is that due to the operational requirements of the primary payload, our launching and commissioning is tied to the not too far future.

The 20m dish antenna at Bochum observatory was originally refurbished and upgraded for the P5 mission and is presently used for Deep Space Mission and amateur radio purposes. The automatic reception of the STEREO probes and data transfer to NASA will continue. In collaboration with NASA and AMSAT-DL the modulation scheme will be changed to use Turbo coding. Both hardware and software is currently being designed by AMSAT-DL and will be used by the partner STEREO receiving stations worldwide. Our funding application is already approved. The project funding runs until the end of 2015.

The AMSAT-DL Marburg Lab will be preserved at least in medium term to be able to do work on P3-E and, should the situation arise, on the transponder of the mentioned geostationary satellite.

We pursue a near-term meeting with all P5 project team members to identify ways for a project continuation. The necessary procedures should be coordinated then.

Although we regret the DLR refusal of the P5 project (particularly because some DLR payload will not fly in any foreseeable time frame), and although it places serious challenges to AMSAT-DL, this is not the cancellation of a HEO amateur radio satellite. We will aggressively follow up all potential possibilities. We hope to be able to report positively at the AMSAT-DL AGM in autumn.

Since the Marburg University's withdrawal from the ZEL, the surrounding conditions have changed significantly, again. However, we will do everything we can do to get an amateur satellite launched into HEO.

We do trust in our volunteers and members.

The AMSAT-DL BOD:
Peter Guelzow, DB2OS
Hartmut Paesler, DL1YDD
Michael R. Lengruesser, DD5ER

Editors Note: A video of the AMSAT-DL update given by Peter Guelzow, DB2OS at the 2012 AMSAT-UK Colloquium can be viewed at:

- Go to http://www.batc.tv/
- Click on "Film Archive"
- Select "AMSAT 2012" in the Category box and click on Select Category
- Select "04 - AMSAT-DL" in the Stream box and click

on Select Stream
- Click the play button on the video player window

[ANS thanks Peter Guelzow, DB2OS; Hartmut Paesler, DL1YDD; Michael R. Lengruesser, DD5ER; and AMSAT-DL for the above information]

CubeSat Deployment From ISS Set for September 27

Five cubesats launched on July 21 and now aboard the ISS have been integrated with the J-SSOD small satellite deployer on the the Japanese Experiment Module, also known as Kibo. They will be deployed with the Kibo robotic arm planned September 27, 2012.

First, 15:10-15:20 UTC: WE-WISH, RAIKO by Astronaut Akihiko Hoshide
Second, 16:30-16:40 UTC: TechEdSat, NanoRack/F-1, FITSAT-1 by JAXA GS

Satellite	Downlink	Beacon	Mode
FITSAT-1	437.445, 5.84GHz	437.250	FM,CW
WE WISH	437.505	437.505	SSTV,CW
RAIKO	2.2GHz, 13GHz	13GHz	38.4 - 500kbps
TechEdSat	437.465	437.465	CW
F-1	145.980	437.485	1200bps AFSK,FM,CW

Also, refer to the previous ANS bulletin on this topic at:
http://amsat.org/pipermail/ans/2012/000650.html

[ANS thanks Mineo Wakita, JE9PEL for the above information]

Dedicated University CubeSat Downlinks on the Table for ITU WRC-18

IARU Secretary Rod Stafford, W6ROD, reports that the IARU Administrative Council will meet in the next 45 days to address the agenda items for the 2015 World Radiocommunication Conference (WRC-15).

Planning for the dedicated spectrum for university research cubesats will begin for WRC-15 but the actual allocation of frequencies may not occur until the 2018 World Radiocommunication Conference.

In an article posted on the ARRL web, Stafford noted, �A lot of radio amateurs are aware of the increasing use of amateur spectrum by small satellites, mainly by universities. It is becoming an increasingly difficult situation to accommodate the number of small, non-commercial satellites within the amateur bands. These education-based satellites do not really fit within the definition of the Amateur Radio Service, but have been accommodated there. These small satellites are categorized as nanosatellites (weighing between 1-10 kg) and picosatellites (weighing less than 1 kg). The ITU is trying to deal with this issue in an orderly manner and a �preliminary� WRC-18 agenda item is to consider whether these satellite operations can be accommodated in an already crowded radio spectrum. As these issues develop, the IARU will keep its Member-Societies, such as the ARRL, aware of developments.� with an eye to building the best strategy to deal with those agenda items in a way that is most favorable to the Amateur Radio Service."

Read the full article, including many other IARU agenda items at:
http://www.arrl.org/news/looking-ahead-to-wrc-15

[ANS thanks the ARRL for the above information]

BUAA-SAT 435/145 MHz FM Amateur Radio Satellite Planned for 2014

BUAA-SAT is a university micro-satellite project developed by the students of Beihang University (Beijing University of Aeronautics and Astronautics). It carries an amateur radio 435/145 MHz FM voice transponder

The satellite has a mass of 30kg, dimensions of 30cm*30cm*50cm and aims to go into a 600-800 km Sun Synchronous Orbit (SSO) from Taiyuan in late 2014.

The primary missions are:
- To study the application of COTS components used in the onboard electronic system
- To demonstrate the coilable mast deployment mechanism
- To carry out imaging using three CMOS cameras

Moreover, it provides a 27dBm U/V FM voice transponder for the use of radio hams world-wide as well as a 20dBm CW beacon and a 27dBm AX.25 beacon also in the 145 MHz band.

BUAA-SAT website http://sat.buaa.edu.cn/
BUAA-SAT Group in Google English http://tinyurl.com/BUAA-SAT-Group

AMSAT-UK also posted an article and photos at:
http://www.uk.amsat.org/10387

[ANS thanks Southgate ARC and AMSAT-UK for the above information]

ARISS Rolls on With Successful School Contacts

News from the Amateur Radio on the International Space Station (ARISS) Status Report - September 17, 2012

Maroochydore, Queensland, Australia

Students attending Maroochydore State School in Maroochydore, Queensland, Australia participated in an Amateur Radio on the International Space Station (ARISS) contact on Wednesday, September 12 via telebridge station VK4KHZ in Australia. Akihiko Hoshide, KE5DNI answered 14 questions of the students before the ISS went over the horizon.

Approximately 40 students and guests were in attendance and the contact received coverage by radio, television and newspapers. The contact was integrated into a comprehensive space curriculum, with lessons focused on the Venus Transit, the Juno mission and the Curiosity mission.

Dorado, Puerto Rico

An ARISS contact was held between Joe Acaba, KE5DAR on the ISS and Marcelino Canino Canino Middle School in Dorado, Puerto Rico on Wednesday, September 12 via telebridge station K6DUE in Greenbelt, Maryland. The session was conducted in Spanish, with all 16 questions answered. The students are involved in a Microsatellite Hardware program through which they design, build, launch, track and retrieve their microsatellites with the assistance of many local amateur radio operators.

Sindelfingen, Germany

On Thursday, September 13, Sunita Williams, KD5PLB spoke with students at the Gymnasium Unterrieden in Sindelfingen, Germany through an ARISS contact and answered their space-related questions. One hundred people showed up for the event, including 4 media outlets. The audio was broadcasted via 2 amateur radio relays. The contact was integrated into several other amateur radio activities which included the students preparing for entry level amateur radio licenses and building a satellite receiving station. Video has been posted:
http://www.youtube.com/watch?v�uOnhrsOvg

NASA Goddard Space Flight Center in Greenbelt, Maryland

A second ARISS contact that Akihiko Hoshide, KE5DNI took part in last week was with children at the NASA Goddard Space Flight Center in Greenbelt, Maryland on Thursday, September 13. The students had 21 questions answered during the ISS pass, and as the coordinating person at Goddard had previously asked another astronaut for answers to the questions, the remaining students still received "official" answers to their questions. Nearly 100 people were in attendance, with 4 media cameras recording the event. Prince George's County Community TV reported on the event. See:

http://tinyurl.com/9q939u3

Oak Hill, Florida

On Thursday, September 13, an ARISS contact was held between children at the Burns Sci-Tech Charter School in Oak Hill, Florida and Sunita Williams KD5PLB on the ISS. Daytona Beach Amateur Radio Association supported the school in this endeavor. The contact was integrated into lessons on radio waves, electricity, communications, geography and languages.

Kolo, Poland

Zesp�l Szk�l Technicznych w Kole, Kolo, Poland participated in an Amateur Radio on the International Space Station (ARISS) contact on Wednesday, September 19. Besides learning about space, amateur radio and satellite tracking in the classroom, students are also attending lectures on astronautics, engineering and astronomy. They are involved with related hands-on activities and competitions, with the winners receiving the opportunity to question the ISS astronaut. In addition, the school is forming astronomy and amateur radio clubs for the youth. The event was broadcast live on:
http://live.arisspolska.info/

San Diego, California

An Amateur Radio on the International Space Station (ARISS) contact was completed with Sunset Hills Elementary School in San Diego, California on Thursday, September 20 at 17:24 UTC. Students are learning about the radio and space through age-appropriate hands-on activities. NASA education Web site materials are being used and guest speakers from the local Amateur Radio club will give a presentation to the students.

LaFayette, Georgia

Lafayette Middle School, La Fayette, Georgia completed an Amateur Radio on the International Space Station (ARISS) contact on Friday, September 21. The school used the ARISS contact to promote the areas of Science, Technology, Engineering, and Mathematics within its entire system. It arranged for Skype interviews with guests for the ARISS event: Dr. Rob Suggs and Dr. Bill Cooke of Marshall Space Flight Center in Huntsville, Alabama; Cristi Whitworth, Educational Director for Pisgah Astronomical Research Institute; and Dr. June Scobee Rodgers, Founding Chair of the Challenger Center at the University of Tennessee at Chattanooga.

[ANS thanks Carol Jackson, KB3LKI for the above information]

NASA Offers Opportunity to Use Communications Testbed on ISS

The SCAN testbed is a communications, navigation and networking demonstration platform based on the STRS. The experimental platform began its initial checkout activities on the space station August 13 and will operate for as long as three years.

NASA is announcing opportunities for academia, industry and government agencies to develop and carry out research and technology demonstrations on the International Space Station using the newly installed Space Communications and Navigation (SCAN) testbed.

There are two announcements of opportunity. The SCAN Testbed Experiment Opportunity invites industry and other government agencies to enter into Space Act Agreements with NASA to use the space station's SCAN platform.

The SCAN Testbed Cooperative Agreement Notice invites academia to develop proposals to use the orbiting laboratory's SCAN testbed research capabilities. NASA expects the first demonstrations by late 2013 or early 2014.

These opportunities will allow researchers to develop new software according to the Space Telecommunications Radio Standard (STRS) architecture for radios and reconfigure how radios communicate in space.

Experiments will provide waveforms and software components to the STRS waveform repository and enable future hardware platforms to use common reusable software modules. These new capabilities could enable greater scientific return from future NASA missions.

Details and specifications are available from NASA:
http://tinyurl.com/SCAN-Testbed (nasa.gov)
http://spaceflightsystems.grc.nasa.gov/SOPO/SCO/SCaNTestbed/Candidate/

[ANS thanks NASA and Space-Travel.com for the above information]

Satellite Shorts From All Over

+ AMSAT's Keeper of the Keps, Ray Hoad, WA5QGD reports that the ELaNa cubesats launched 9/17/2012 have been added to this week's KEPs: AENEAS - Cat #38760; CSSWE - Cat #38761; CP5 - Cat #38763

+ Photos and a video of the Atlas launch from Vandenberg can be viewed at: http://spaceflightnow.com/atlas/av033/ This launch carried satellites for the National Reconnaissance Office. Also aboard this flight at four cubesats as part of ELaNa IV mission and seven cubesats for government missions.

+ A photo of the Soyuz TMA-04M spacecraft as it lands with Expedition 32 Commander Gennady Padalka of Russia, NASA Flight Engineer Joe Acaba and Russian Flight Engineer Sergie Revin in a remote area near the town of Arkalyk, Kazakhstan, on September 17 can be seen at: http://spaceref.com/news/viewsr.html?pidB064

+ NASA Explorer Schools is offering students in grades 4-12 an opportunity to ask questions of Bob Cabana, astronaut and Director of NASA's Kennedy Space Center. Join the video chat on Sept. 25, 2012, from 1-1:45 p.m. EDT to ask Cabana questions about his education, astronaut training, living and working in space and the future of space exploration. Students do not need to be in a school participating in the NASA Explorer Schools project in order to ask questions during this video chat. Submit questions during the chat through a chat window, or send them to:
NASA-Explorer-Schools@mail.nasa.gov.
To learn more about NES, visit http://www/explorerschools.nasa.gov.
For more information and to view the video chat, visit:
http://tinyurl.com/explorer-chat (nasa.gov)

+ NASA has announced their "Space Place Prime," the new NASA magazine for iPad. This free, brand new app gathers some of the best and most recent Web offerings from NASA. It taps engrossing articles from The Space Place website, enlightening NASA videos and daily images such as the Astronomy Picture of the Day and the NASA Earth Observatory Image of the Day. For more information about the new magazine, visit http://spaceplace.nasa.gov/ios/. (iPad is a registered trademarks of Apple Inc.)

+ The Houston AMSAT Net meets every Wednesday at 0100z (this is Tuesday evening in North America) on Echolink - Conference *AMSAT* .
The MP3 audio is also streamed http://www.amsatnet.com. After the net a Podcast is available at:
http://www.amsatnet.com/podcast.xml or iTunes

+ The next Hudson Valley Satcom net date is Thursday, September 27, 8 PM EDT (UTC-4 UTC) on the 146.97 MHz MBARC Repeater (PL 100). An echolink connection is available on the N2EYH-L node. More information at: http://www.hvsatcom.org. (Stu, WA2BSS)

+ The Canadian Space Agency announced that a British Columbia artisan-made organic cereal is one of 12 Canadian foods to accompany Canadian Astronaut and Mission 35 Commander Chris Hadfield on the December space mission to the International Space Station where he will live and work for six months as part of the crew. We wonder how many students will ask how the crew is enjoying their cereal described at: http://spaceref.com/news/viewpr.html?pid8629

+ How would you like to be famous? If you know any scientific, math, or electronics puns send them to k9jkm@amsat.org. The winners will occasionally be included in the ANS bulletins.

[ANS thanks everyone for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

Primary and secondary school students are eligible for membership at one-half the standard yearly rate. Post-secondary school students enrolled in at least half time status shall be eligible for the student rate for a maximum of 6 post-secondary years in this status. Contact Martha at the AMSAT Office for additional student membership information. And with that, please keep in mind that programming today is a race between software engineers striving to build bigger and better idiot-proof programs, and the Universe trying to produce bigger and better idiots. So far, the Universe is winning.

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM

From -7377612112332667861
X-Google-Thread: a4a23d5f63,52a5f6070a04d239,start
X-Google-Attributes: gida4a23d5f63,public,usenet
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X-Google-Language: ENGLISH,ASCII-7-bit
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        Sat, 29 Sep 2012 11:27:53 -0700 (PDT)
MIME-Version: 1.0
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From: SWPC.Webmaster@noaa.gov
Newsgroups:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.shortwave,rec.radio.info
Subject: Weekly Highlights of Solar and Geomagnetic Activity, 17 - 23 September 2012
Followup-To:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.shortwave

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Date: Mon, 24 Sep 2012 11:30:07 EDT
Organization: NOAA Space Weather Prediction Center
Lines: 64
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <20120924153001.6FB9A33C53@panix2.panix.com>
NNTP-Posting-Host: panix6.panix.com
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NNTP-Posting-Date: Mon, 24 Sep 2012 15:30:08 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
X-Received-Bytes: 4698
```

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:Product: Weekly Highlights and Forecasts
:Issued: 2012 Sep 24 1239 UTC
# Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center
# Product description and SWPC contact on the Web
# http://www.swpc.noaa.gov/weekly.html
#
#                Weekly Highlights and Forecasts
#
```

Highlights of Solar and Geomagnetic Activity
17 - 23 September 2012

Solar activity reached low levels this week. C-class x-ray flares were observed on 17-20 and 23 September. The largest, a C2/Sf, was recorded from Region 1576 (S21, L=180, class/area Dso/70 on 20 September) at 19/1512 UTC. The remainder included a C2 flare from Region 1575 (N08, L=181, class/area Eko/320 on 22 September) at 17/1406 UTC, a C1 at 18/1009Z, and a C1 from Region 1574 (S22, L=302, class/area Cao/40 on 20 September) at 20/1139 UTC, and a long-duration C1 from beyond the east limb at 23/1556 UTC. The long-duration C-flare was associated with a vivid CME in LASCO C2 imagery. Estimated plane-of-sky speed was around 600 km/s.

No proton events were observed at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit reached moderate levels each day of the week except the 20th when it remained at background levels.

The geomagnetic field ranged from quiet to active levels during the week, with minor storm levels observed at high latitudes on all but the first and last days. The week began with the geomagnetic field at quiet to unsettled levels. Geomagnetic field activity increased to active levels late on the 19th when a corotating interaction region (CIR) became geoeffective. A coronal hole high speed stream followed on the 20th bringing mostly quiet to unsettled conditions. Between the 19th and the 20th, the solar sector changed from positive to negative, consistent with the geoeffective coronal hole polarity. Solar wind speed at the ACE spacecraft fluctuated between 600 and 400 km/s between the 20th and 21st, before beginning a slow decline late on the 21st. Solar wind speed by the end of the week had dropped to about 350 km/s. The Bz component of the interplanetary magnetic field reached its maximum of approximately -11 nT late on the 19th with the arrival of the CIR.

Forecast of Solar and Geomagnetic Activity
24 September - 20 October 2012

Solar activity is expected to be at low levels with an increasing chance for moderate activity during the first two weeks of the period as active regions rotate onto the visible disk.

A slight chance for a proton event exists due to potential activity associated with returning regions from 24 September through 08 October.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to be at high levels on 8-9 October and again on 17-18 October.

Geomagnetic field activity is expected to remain mostly at quiet to unsettled levels except for 3-5 October, 09-10 October, and 16-17 October when recurrent coronal hole high speed streams are expected to bring a chance for active levels.

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        Sun, 30 Sep 2012 08:54:21 -0700 (PDT)
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rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-274 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sun, 30 Sep 2012 11:54:20 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 351
Approved: RRI Admin <rec-radio-info-request@panix.com>
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X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 30 Sep 2012 15:54:20 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to            rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
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AMSAT NEWS SERVICE
ANS-274

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:
* Satellite Operation from the USS IOWA for Scouting JOTA
* AMSAT 2012 Space Symposium Papers Due October 1
* AMSAT 2012 Field Day Results
* Silent Key: Michael Owen, VK3KI
* UKube-1 Amateur Radio CubeSat Books a Ride on Soyuz-2
* ARISS Status - 24 September 2012

SB SAT @ AMSAT $ANS-274.01
ANS-274 AMSAT News Service Weekly Bulletins

AMSAT News Service Bulletin 274.01
  From AMSAT HQ SILVER SPRING, MD.
September 30, 2012
To All RADIO AMATEURS
BID: $ANS-274.01

Satellite Operation from the USS IOWA for Scouting JOTA

Jim Jerzycke, KQ6EA says he will be operating for the BSA JOTA event from the USS IOWA in San Pedro, California on 20 October from 1600 UTC to 2300 UTC. The callsign will be NI6BB on FO-29, AO-27, and AO-7.

Jim will concentrate mostly on the linear birds but conditions permitting he will also try to make FM contacts. Pass predictions also show a couple of good ISS passes so operation will depend on its operating mode at that time.

The Jamboree-on-the-Air, or JOTA, is an annual Scouting event that uses amateur radio to link Scouts around the world, around the nation, and in your own community. For more information about JOTA see: http://www.scouting.org/jota.aspx

[ANS thanks Jim Jerzycke, KQ6EA for the above information]

AMSAT 2012 Space Symposium Papers Due October 1

Symposium Proceedings Editor, Dan Schultz, N8FGV reminds authors the final copy of your paper for the 2012 Space Symposium is due by October 1, 2012. Dan requests a tentative title of your presentation as soon as possible, with final copy to be by October 1 for inclusion in the printed proceedings. Abstracts and papers should be sent to Dan Schultz, N8FGV, at n8fgv at amsat.org

Proposals for papers, symposium presentations and poster presentations are invited on any topic of interest to the amateur satellite community:

+ Papers for publication in the Proceedings

+ Symposium Presentations

+ Poster Presentations

+ Equipment and Operating Demonstrations

The Symposium Committee still has prime slots available on the speaker's schedule. The AMSAT Symposium depends on YOU to make it happen, without speakers there is no Symposium.

Please consider doing a presentation, even if you have never done so in the past. We are especially interested in papers and presentations involving our educational partnerships with K-12 and university level classrooms. Education is quickly becoming critical for our future rides to space.

Additionally registration for the 2012 AMSAT Space Symposium, to be held on Friday, October 26th through Sunday, October 28th is now open on-line. A mail-in option is also available those preferring this approach.

See the AMSAT Web Store to complete your on-line registration:
http://store.amsat.org/catalog/index.php?cPath'

Downloadable paper registration forms in MS-Word format and PDF format are available on the 2012 Symposium page:
http://www.amsat.org/amsat-new/symposium/2012/index.php

[ANS thanks 2012 Symposium Proceedings Editor Dan Schultz, N8FGV for the above information]

AMSAT 2012 Field Day Results

AMSAT Director Contests and Awards, Bruce Paige, KK5DO has released the results of the 2012 AMSAT Field Day. Bruce wrote, "Field day this year had some unexpected results. The full story with photos will be in an issue of the AMSAT Journal. This was one of the closest field day ever for the top 4 spots."

2012 Field Day Standings - in the event of a tie, the calls are alphabetical.

Rank	Call	Class	Score	
1	K6MMM	3A	58	First
2	W5MSQ	2A	53	Second
3	W6YX	3F	52	Third
4	K4BFT	4A	50	Fourth
5	K6AA	3A	29	
6	K4JJ	4A	16	
7	WC5C	4F	15	
8	W5IU	4A	13	
9	WI9MRC	4A	8	
10	CO6CBF	1E	7	
11	K8UNS	4A	7	
12	WD9EWK	1B	6	
13	K2IRT	3A	4	
14	K5DX	1A	4	
15	KK5W	5A	2	
16	K9MOT	1A	2	
17	VE3RAM	2A	1	
18	VE9EMM	2A	1	
19	W4EM	3A	1	

[ANS thanks AMSAT Director Contests and Awards, Bruce Paige, KK5DO for the above information]

Silent Key: Michael Owen, VK3KI

AMSAT has received the sad news of the passing of IARU Region 3 Chairman Michael Owen, VK3KI, on September 22. He was also President of the Wireless Institute of Australia (WIA).

Owen's first notable contributions to amateur radio started at the 1979 World Administrative Radio Conference. WARC-79 is memorable primarily because it's where the Amateur Radio Service gained the bands at 10, 18 and 24 MHz. He also drafted the resolution to exempt the Amateur-Satellite Service from coordination procedures that otherwise would have bogged us down in endless paperwork and great expense. He was a member of the IARU team who handled the rewrite of Article 25, the rules that apply specifically to the Amateur and Amateur-Satellite Services.

Owen is survived by his wife Nan, and two daughters. Funeral services were held on September 28 at St Andrews Anglican Church in Brighton, Victoria, Australia.

[ANS thanks the Wireless Institute of Australia, the IARU, and the ARRL for the above information]

UKube-1 Amateur Radio CubeSat Books a Ride on Soyuz-2

AMSAT-UK published this news on their web:
http://www.uk.amsat.org/10497

UKube-1 - the UK Space Agency's first CubeSat mission - has 'booked' its journey into space on a Russian Soyuz-2 rocket. The launch from the Baikonur Cosmodrone in Kazakhstan is expected to take place in March 2013.

UKube-1 carries an amateur radio 435/145 MHz linear transponder built by members of AMSAT-UK.

The UK Space Agency have issued the following press release:

The UKube-1 nanosatellite is a collaboration between the UK Space Agency, industry and academia. It will allow the UK to fly educational packages, test new technologies and carry out new space research quickly and efficiently. It is envisaged as the pilot for a full national CubeSat programme.

Dr David Williams, Chief Executive of the UK Space Agency, said, "UKube-1 is almost ready to fly; the platform is nearly complete, 4 of the missions 5 payloads are mission-ready and we have now secured a launch with Roscosmos. We are eagerly awaiting the start of the innovative experiments that this small but mighty satellite will perform once in orbit around our planet."

The winning UKube-1 payloads from the UK Space Agency's payload competition include the first GPS device aimed at measuring plasmaspheric space weather; a camera that will take images of the Earth and test the effect of radiation on space hardware, using a new generation of imaging sensor; an experiment to demonstrate the feasibility of using cosmic radiation to improve the security of communications satellites and to flight test lower cost electronic systems; and a payload made up of 5 experiments that UK students and the public can interact with.

As well as providing a fantastic opportunity for innovative UK companies and UK academics to collaborate on a national space project, UKube-1 is also useful for training the next generation of space engineers and will include a tiny radio transmitter for science education, and a materials science experiment from which school students can receive data. The system, funded by volunteer members and friends of AMSAT-UK, is called FUNcube and will be integrated with UKube-1 as part of the programme.

[ANS thanks AMSAT-UK for the above information]

ARISS Status - 24 September 2012

1. Successful Contacts Held

Students from Zesp�l Szk�l Technicznych w Kole in Kolo, Poland participated in an Amateur Radio on the International Space Station (ARISS) contact with Akihiko Hoshide, KE5DNI, aboard the ISS on Wednesday, September 19. Hoshide answered all 18 questions posed by the students during the overhead pass, which included topics on astronaut training, education, and skills and abilities needed on the ISS.
Video of the event may be viewed here:
http://www.livestream.com/arisspolska/video?clipId�a_4a1f475f-d1a4-
4e4c-baf5-a91a80d0c243&utm_source�library&utm_medium�-thumb
(line wrap)

An Amateur Radio on the International Space Station (ARISS) contact was held between Sunset Hills Elementary School in San Diego, California and Akihiko Hoshide, KE5DNI on the ISS on Thursday, September 20. Students were able to have 13 questions answered about living on the ISS. Three television stations and other media covered the event.
Video may be viewed at:
http://www.ustream.tv/recorded/25558153

CBS has an article on its website:
http://www.cbs8.com/story/19605202/local-students-aim-high-and-connect-with-space-station (line wrap)

and the North County Times ran a story:
http://www.nctimes.com/news/local/poway/rancho-penasquitos-international-space-station-chat-gives-students-higher-education/article_d02abc57-5246-50d0-9f17-4cbc11532c9a.html

On Friday, September 21, Lafayette Middle School, La Fayette, Georgia took part in an Amateur Radio on the International Space Station (ARISS) contact with Sunita Williams, KD5PLB. The gymnasium was filled with students, guests and VIPs who listened as the school's Rambler Radio Club members spoke with the astronaut. The school hopes the ARISS contact will help get the students interested in the areas of Science, Technology, Engineering, and Mathematics. WRCB TV covered the event. See:
http://www.wrcbtv.com/story/19610751/iss-and-lafayette-middle-students-make-contact (line wrap)

2. ARISS International Team Meeting Held

The ARISS International Team monthly teleconference was held on Tuesday, September 18. Topics of discussion included a status on HamTV, as well as an update on the new VHF Ericsson which is expected to launch to the ISS later this year.
Minutes have been posted.
See: http://ariss.rac.ca/arisstel2012-09-18.htm

3. ARISS Status on Social Media

ARISS currently has 1480 followers on Twitter:
http://twitter.com/ARISS_status

And as a reminder, ARISS news may also be found on Facebook. See:
http://www.facebook.com/pages/Amateur-Radio-on-the-International-Space-Station-ARISS/153679794647788

4. ARRL Articles on ARISS

On September 20, the American Radio Relay League (ARRL) carried a story written by ARISS member Dave Jordan about "Teach-In Day," an annual event in Seminole County, Florida which provides opportunities for interested parties to visit schools and teach the children about their area of expertise. The Lake Monroe Amateur Radio Society visited English Estates School and talked about amateur radio, amateur satellites, the ISS and ARISS and the role of amateur radios during emergencies. English Estates participated in its own ARISS contact in May 2011. To view, "The 2011 English Estates Teach-In," see: http://www.arrl.org/the-2011-english-estates-teach-in

5. Stonepark Intermediate Announces Upcoming Contact

Stonepark Intermediate School in Charlottetown, PEI, Canada is preparing for an ARISS contact with Canadian astronaut Chris Hadfield, KC5RNJ/VA3OOG, who is scheduled to join the ISS Expedition 34 crew in December of this year. Sue Geddes, a teacher-librarian at Stonepark, was interviewed about the upcoming event:
http://www.cbc.ca/islandmorning/episodes/2012/09/20/stonepark-
space---canadian-astronaut-chris-hadfield/ (line wrap)
The school has also posted information about the contact on its Web site. See:
http://stonepark.wordpress.com/ariss-international-space-station-communic
ati
on/

6. South Florida Science Museum Holds Essay Contest for ARISS Contact

The South Florida Science Museum held an essay contest for students in the Palm Beach County School District to select fifteen K-12 students to participate in an ARISS contact in October. Deadline for submissions was September 24. For more information, see:
http://www.sfsm.org/index.cfm?fuseaction�ws.details&ArticleIdd&re
turnTomain

[ANS thanks Carol, KB3LKI, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

Primary and secondary school students are eligible for membership at one-half the standard yearly rate. Post-secondary school students enrolled in at least half time status shall be eligible for the student rate for a maximum of 6 post-secondary years in this status. Contact Martha at the AMSAT Office for additional student membership information.

73,
This week's ANS Editor,
Lee McLamb, KU4OS

```
From 2369565969344908569
X-Google-Thread: a4a23d5f63,306386444ccba5bd,start
X-Google-Attributes: gida4a23d5f63,public,usenet
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news.level3.com!panix!panix2.panix.com!not-for-mail
From: rram@panix.com (rec.radio.amateur.moderated Admin)
Newsgroups:
rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.rad
io.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amat
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(rec.radio.amateur.moderated Admin)
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NNTP-Posting-Date: Mon, 1 Oct 2012 06:00:03 +0000 (UTC)
Summary: Short reminder for unmoderated newsgroups that crossposting is permitted
Keywords: FAQ, ham, amateur, radio, moderated, unmoderated, crossposting,
permitted

Posted-By: auto-faq 3.3.2 beta (PGPMoose V2.0, Perl 5.005)
Archive-name: radio/ham-radio/moderated/crossposting
Revision: 1.2 2011/11/02 04:08:53
Posting-Frequency: posted twice monthly
URL: http://www.panix.com/~rram/usenet/rram/index.html
```

Changes followed by "|".

After a 30-day public discussion and feedback period to gauge reader
opinions in March of 2009:

http://groups.google.com/group/rec.radio.amateur.moderated/browse_thread/thread/d7d337db35f23326

the rec.radio.amateur.moderated Moderation Team had decided to consider |
amending its charter, and permit limited simultaneous crossposting to
rec.radio.amateur.moderated and one other unmoderated

amateur-radio-related discussion newsgroup. After a successful trial |
period (90 days, through early July 2009), we decided to adopt this |
change permanently. |

Approved rec.radio.amateur.* newsgroups are those that are currently listed in the latest version of the "List of Big Eight Newsgroups" which is crossposted monthly to news.announce.newgroups, news.groups, and news.lists.misc.

Approved alt.radio.amateur.* and alt.ham-radio.* newsgroups are those that have been created consistent with the suggestions in "So You Want to Create an Alt Newsgroup" at:

  http://www.faqs.org/faqs/alt-creation-guide/

Approved regional hierarchy newsgroups are those that contain either "radio.amateur" or "ham-radio" in their names, including uk.radio.amateur and aus.radio.amateur.misc.

We will make every reasonable effort to keep our list of approved newsgroups up-to-date. In case we have overlooked any, and a submission is rejected in error as a result, the rejected submitter can E-mail us at our administrative contact address (in the signature at the bottom of this article, and the default Reply-To for the rejection message) requesting that it be added, and that the article be approved. We may still choose to reject articles crossposted to any alt.* newsgroup with an inappropriate name, including obscene language, embedded name-calling, or encouragement of unlawful conduct.

Please direct any comments, questions, or criticisms to rec-radio-amateur-moderated-request@panix.com.

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X-Google-Language: ENGLISH,ASCII-7-bit
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From: SWPC.Webmaster@noaa.gov
Newsgroups:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.shor
twave,rec.radio.info
Subject: Weekly Highlights of Solar and Geomagnetic Activity, 24 - 30 September
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```
2012
Followup-To:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.shortwave
Date: Mon, 1 Oct 2012 11:30:07 EDT
Organization: NOAA Space Weather Prediction Center
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X-Trace: reader1.panix.com 1349105407 28788 166.84.1.6 (1 Oct 2012 15:30:07 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Mon, 1 Oct 2012 15:30:07 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to            rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
```

```
:Product: Weekly Highlights and Forecasts
:Issued: 2012 Oct 01 1415 UTC
# Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center
# Product description and SWPC contact on the Web
# http://www.swpc.noaa.gov/weekly.html
#
#                 Weekly Highlights and Forecasts
#
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Highlights of Solar and Geomagnetic Activity
24 - 30 September 2012

After a relatively unspectacular start, solar activity reached moderate levels this week. The first four days saw only occasional C-class flares. Regions 1575 (N08, L=181, class/area=Eko/320 on 22 Sep) and 1577 (N08, L=162, class/area=Dai/100 on 23 Sep) were the most prolific regions, producing 11 and 9 C-class events, respectively. One of the events from Region 1577, a C3/1f flare at 27/2357 UTC, was associated with a filament eruption northwest of, and adjacent to the region. The CME was subsequently visible in LASCO C2 imagery at 28/0018 UTC and LASCO C3 imagery 12 minutes later. Radial velocity of the ejecta was estimated to be 872 km/s. By midday on the 28th, x-ray background began rising, signaling an increase in activity as Region 1583 began to grow rapidly. By 30 September at 0433 UTC, Region 1583 (N12, L=187, class/area=Dso/90 on 30 Sep) had produced an M1 flare. Later that day, Region 1575 produced the second largest flare of the week, a C9/Sf at 30/2339 UTC.

A 10 MeV integrated proton flux greater than 10 pfu event occurred in conjunction with the C3 flare mentioned above. Proton flux crossed the 10 pfu threshold on 28/0300 UTC, peaked at 28 pfu at 28/0445 UTC, and ended at 28/1040 UTC.

The greater than 2 MeV electron flux at geosynchronous orbit reached moderate levels each day of the week.

Geomagnetic field activity was quiet until the end of the week when it reached active levels. The CME from 28 September described above reached earth on the 30th. Two separate interplanetary shocks (IPS) were observed at the ACE spacecraft. The first was at 30/1025 UTC, followed by a 15nT geomagnetic sudden impulse (SI) observed at the Boulder magnetometer at 30/1138 UTC. A second IPS was observed at the ACE spacecraft at 30/2213 UTC followed by a 35nT SI at the Boulder magnetometer at 30/2307 UTC. The first sudden impulse was followed by unsettled conditions; the second, by active conditions. The Bz component of the interplanetary magnetic field reached -15 at 30/2225 UTC and continues to hover between -15 and -20 nT at the time of this report.

Forecast of Solar and Geomagnetic Activity
01 October - 27 October 2012

Solar activity is expected to be at low levels, with a chance for moderate activity, particularly for the first two days of the forecast period and again in mid-October.

No proton events are expected at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to be at background levels except for 7-9 October in association with a recurrent coronal hole.

Geomagnetic field activity is expected to begin the period ranging from minor to strong (G1-G3) levels due to the CME from 28 September. Conditions should quickly return to mostly quiet and for the period be generally quiet levels with the possible exceptions of 3-5 October and 15-17 October when coronal hole high speed streams are expected to be geoeffective.

```
From 4219793903429940221
X-Google-Thread: 10e8ad,ba245ff91cae28fc,start
X-Google-NewGroupId: yes
X-Google-Thread: 10b9c8,ba245ff91cae28fc,start
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,gida4a23d5f63,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Received: by 10.66.72.134 with SMTP id d6mr456911pav.20.1349271819981;
        Wed, 03 Oct 2012 06:43:39 -0700 (PDT)
Path: g9ni18721pbh.1!nntp.google.com!news.glorb.com!news-out.readnews.com!
```

```
transit4.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-275 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Wed, 3 Oct 2012 09:43:38 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 2525
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000c01cda16c$5cc55ab0$16501010$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
X-Trace: reader1.panix.com 1349271819 21095 166.84.1.6 (3 Oct 2012 13:43:39 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Wed, 3 Oct 2012 13:43:39 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
Content-Language: en-us
```

This report is organized into four (4) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - deborbited/returned satellites

SB SAT @ AMSAT W8ISS $WSR-275.S1
WSR 275 Part 1 10/01/2012

AMSAT NEWS SERVICE BULLETIN 275.S1
FROM AMSAT HQ SILVER SPRING, MD, October 01, 2012
TO ALL RADIO AMATEURS
BID: $WSR-275.S1

PW-Sat
Catalog Number: 38083 (?)
Launch Date: Febrauary 13, 2012 1000z
Launch Site: Kourou, French Guiana

Status: On Orbit

Uplink: 435.020 MHz FM
Downlink: 145.900 MHz DSB

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=132
[10012012]
=====
DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational
Current Mode: Science Mode - Beacon ONLY

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink: 435.530 to 435.570 MHz

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=68
[02092011]
=====
VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05, 2005 0444z
Launch site: Satish Dhawan Space Centre, India

Status: Operational
Current Mode: U/v - Dutch Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.9360 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=30

To know what transponder is switched on please listen for the beacon
that is active. Each transponder has a different beacon.
[03232012]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002 1700z
Launch site: Baikonur, Kazakhstan

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4
Hz. The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute
   timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset
   the 10 minute timer.
[02092011]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Operational
Current Mode: V/u (Mode JA)

Voice/CW (Mode JA)
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

```
Digital Mode JD
Uplinks:  145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage:
http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's
CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/
fo29cwts.htm
[01122012]
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993 0140z
Launch site: Kourou, French Guiana

Status: Operational

Current Mode: V/u

Uplink:   145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[02092011]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974
Launch site: Vandenberg AFB, California, USA

Status: Operational
```

Current Mode: Alternating between Mode A and B every 24 hours

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz CW
145.972 MHz CW
435.100 MHz CW
2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php
[04242012]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998 0640z (ZARYA module)
Launch sites: Baikonur, Kazakhstan
Kourou, French Guiana
Uchinoura Space Center, Japan
Kennedy Space Center, Titusville, Florida, USA

Status: Operational

Current Active Modes: FM Repeater - OFF
Voice - V/v
BBS - OFF
2m APRS - ON
2m Digi - ON
70cm APRS - ?
70cm Digi - ?
SSTV - OFF

Expedition 33 Crew (July 2012 - November 2012):
Commander: Sunita Williams KD5PLB
Flight Engineer: Yuri Malenchenko RK3DUP
Flight Engineer: Akihiko Hoshide KE5DNI

Available Modes and Frequencies:
Digital/APRS:
Worldwide 2m packet uplink: 145.825 MHz FM 1k2
Worldwide 2m packet downlink: 145.825 Mhz FM 1k2
Worldwide 70cm packet uplink: 437.550 Mhz FM 1k2
Worldwide 70cm packet downlink: 437.550 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM

Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
2m Packet Mailbox: RS0ISS-11
2m Digipeater alias: ARISS
70cm Packet Mailbox: RS0ISS-1
70cm Digipeater callsign: RS0ISS
70cm Digipeater alias: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[10012012]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-275.S2
WSR 275 Part 2 10/01/2012

AMSAT NEWS SERVICE BULLETIN 275.S2
FROM AMSAT HQ SILVER SPRING, MD, October 01, 2012
TO ALL RADIO AMATEURS
BID: $WSR-275.S2

Aeneas
Catalog Number: 38760
Launch Date: September 13, 2012 2139z
Launch Site: Wallops Island, Virginia, USA

```
Status: On Orbit

Uplink: WiFi 2425MHz
Downlink:
WiFi: 2425MHz
Spread Spectrum: Somewhere in the 70cm band

Beacon: 437.600MHz 1k2 ax25 every 10 seconds

Callsign:

URL:
[10012012]
=====
Cinema
Catalog Number: 36764
Launch Date: September 13, 2012 2139z
Launch Site: Wallops Island, Virginia, USA

Status: On Orbit

Uplink:
Downlink:
Engineering:    2400 - 2450MHz
Telemetery:     2200 - 2300MHz

Beacon:

Callsign:

URL:
[10012012]
=====
CSSWE (Colorado Student Space Weather Experiment)
Catalog Number: 38761
Launch Date: September 12, 2012 2139z
Launch Site: Wallops Island, Virginia, USA

Status: On Orbit

Uplink:
Downlink:       437.345MHz 9k6 with ax.25

Beacon:

Callsign:

URL:
[10012012]
=====
CP5 (Polysat)
Catalog Number: 38763
Launch Date: September 12, 2012 2139z
```

Launch Site: Wallops Island, Virginia, USA

Status: On Orbit

Uplink:
Downlink: 437.405MHz AFSK on LSB ax.25 over NRZI at 1k2 baud,
every 2
                minutes, begins 3.5 hours after first turn-on

Beacon:

Callsign:

URL:
[10012012]
=====
CXBN (Cosmic X-Ray Background Nanosatellite)
Catalog Number: 38762
Launch Date: September 12, 2012 2139z
Launch Site: Wallops Island, Virginia, USA

Status: On Orbit

Uplink:
Downlink: 437.525MHz GFSK ax.25

Beacon:

Callsign:

URL:
[10012012]
=====
Proiteres
Catalog Number: 38756
Launch Date: September 09, 2012 2139z
Launch Site: Satish Dhawan Space Centre, India

Status: On Orbit

Uplink:
Downlink: 437.485MHz FM/AFSK

Beacon:

Callsign: JL3YZK

URL:
[10012012]
=====
RS-40 MiR (Yubileiny-2)
Catalog Number: 38735
Launch Date: July 28, 2012

Status: On Orbit

Uplink:
Downlink(s):   435.265 MHz
                435.365 MHz

Beacon:

Callsign:

URL:
[08272012]
=====
HORYU-II
Catalog number: 38340
Launch Date: May 17, 2012 1639z

Status: On Orbit

Uplink: 145.??? MHz
Downlink: 437.375 MHz CW/AX25/FSK

Beacon: 437.375 MHz CW

Callsign: JG6YBW

URL:

IARU Coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=216
[10012012]
=====
XaTcobeo
Catalog Number: 38082
Launch Date: Febrauary 13, 2012 1000z
Launch Site: Kourou, French Guiana

Status: Operational

Uplink:
Downlink: 437.365 MHz FFSK with AX.25

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=135
[100162012]
=====

```
UniCubeSat
Catalog Number: 38085(?)
Launch Date: Febrauary 13, 2012 1000z
Launch Site: Kourou, French Guiana

Status: Operational

Uplink:
Downlink: 437.305 MHz 9k6 bps GMSK

Beacon:

Callsign:

URL:
http://www.gausssteam.com/index.php?option=com_content&view=article&id=96:uni
cu
besat&catid=36:unicubesat&Itemid=183

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=133
[10012012]
=====
Robusta
Catalog Number: 38083(?)
Launch Date: Febrauary 13, 2012 1000z
Launch Site: Kourou, French Guiana

Status: On Orbit

Uplink:
Downlink: 437.325 MHz 1k2 FM telemetry (data every 3 min, 20 sec. burst)

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=122
[10012012]
=====
MO-72 MaSat-1
Catalog Number: 38081
Launch Date: Febrauary 13, 2012 1000z
Launch Site: Kourou, French Guiana

Status: Operational

Uplink:
Downlink: 437.345 MHz GFSK 625/1250 bps
          437.345 MHz CW
```

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=126
[10012012]
=====
Goliat
Catalog Number: 38084(?)
Launch Date: Febrauary 13, 2012 1000z
Launch Site: Kourou, French Guiana

Status: Operational

Uplink:
Downlink: 437.485 MHz 1k2 AFSK

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=98
[10012012]
=====
E-St@r
Catalog Number: 38079
Launch Date: Febrauary 13, 2012 1000z
Launch Site: Kourou, French Guiana

Status: On Orbit

Uplink:
Downlink: 437.445 MHz 1k2 bps AFSK

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=130
[10012012]
=====
ALMASat-1
Catalog Number: 38078

Launch Date: Febrauary 13, 2012 1000z
Launch Site: Kourou, French Guiana

Status: On Orbit

Uplink:
Downlink: 437.465 MHz 1k2 bps FSK
          2407.850 MHz

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=39
[10012012]
=====
RS-39 Chibis-M
Catalog Number: 38051
Launch Date: October 30, 2011 10:11:00 UTC
Launch site: Tyuratam (Baikonur Cosmodrome), Kazakhstan

Status: Operational

Uplink:
Downlink:

Beacon: 435.315 MHz CW
        435.215 MHz CW

Callsign:

URL:

IARU coordination status page:
[07302012]
=====
JUGNU
Catalog Number: 37839
Launch Date: October 12, 2011 05:30:00 UTC
Launch site: Satish Dhawan Space Centre, India

Status: On Orbit

Uplink: 145.??? MHz 1k2 (mode?)
Downlink: 437.505 MHz 9k6 (mode?)

Beacon: 437.275 MHz 15 wpm (?) CW

Callsign:

```
URL: http://www.iitk.ac.in/me/jugnu/index.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=160
[07092012]
=====
SRMSAT
Catalog Number: 37841
Launch Date: October 12, 2011 05:30:00 UTC
Launch site: Satish Dhawan Space Centre, India

Status: On Orbit

Uplink:   145.900 MHz 1k  AX.25 (speed?)
Downlink: 437.500 MHz 2k4 AX.25

Beacon: 437.425 MHz 12 wpm CW

Callsign:

URL: http://srmsat.in/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=181
[07092012]
=====
HRBE (E1P Explorer 1 [Prime] CubeSat (E1P-U2))
Catalog Number: 37855
Launch Date: October 28, 2011
Launch site: Vandenberg Air Force Base, California, USA

Status: On Orbit

Uplink:   437.305 MHz (???)
Downlink: 437.505 MHz AX.25 (SSB?)

Beacon:

Callsign:

URL: http://ssel.montana.edu/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=116
[01122012]
=====
M-Cubed
Catalog Number: 37855
Launch Date: October 28, 2011
Launch site: Vandenberg Air Force Base, California, USA

Status: On Orbit
```

Uplink:
Downlink: 437.485 MHz AX.25

Beacon:

Callsign:

URL: http://umcubed.org/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=215
[01122012]
=====
RAX-2
Catalog Number: 37853
Launch Date: October 28, 2011
Launch site: Vandenberg Air Force Base, California, USA

Status: Operational

Uplink:
Downlink: 437.345MHz 9k6 GMSK

Beacon:

Callsign:

URL: http://rax.engin.umich.edu//

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=221
[03232012]
=====
AO-71 AubieSat-1
Catalog Number: 37854
Launch Date: October 28, 2011
Launch site: Vandenberg Air Force Base, California, USA

Status: On Orbit

Uplink:
Downlink: 437.475 MHz 1k2 AX.25

Beacon: 437.475 MHz CW

Callsign: KI4NQO

URL: http://www.space.auburn.edu/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=148
[12262011]
=====

```
O/OREOS
Catalog Number: 37224
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: On Orbit

Uplink:
Downlink: 437.035 MHZ AX.25

Beacon:

Callsign:

URL: http://www.ooreos.org/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=146
[02092011]
=====
Rax-1 Radio Aurora Explorer
Catalog Number: 37223
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: On Orbit

Uplink:
Downlink: 437.505 MHz 9k6 GMSK

Beacon:

Callsign: RAX-1

URL: http://rax.engin.umich.edu/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=165
[02092011]
=====
FO-69 Fastrac-1 Sara Lily
Catalog Number: 37227
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: Operational

Uplink 1: 145.980 MHz 1k2 baud
Uplink 2: 145.825 MHz 1k2 baud
Downlink: 437.345 MHz 1k2 and 9k6 baud

Beacon:   437.435 MHz 1k2 AX.25
```

```
Callsign: Fast1

URL: http://fastrac.ae.utexas.edu/index.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=83
[07052011]
=====
FO-70 Fastrac-2 Emma
Catalog Number: 37380
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: Operational

Uplink 1: 435.025 MHz 1k2 baud
Uplink 2: 437.435 MHz 9k6 baud
Downlink: 145.825 MHz 1k2 and 9k6 baud

Beacon:   145.825 MHz 1k2 AX.25

Callsign: Fast2

URL: http://fastrac.ae.utexas.edu/index.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=84
[12162011]
=====
StudSat
Catalog Number: 36796
Launch Date: July 12, 2010 0352z
Launch site: Satish Dhawan Space Centre, India

Status: On Orbit

Uplink:   437.505MHz, 9600bps FSK
Downlink: 437.505MHz, 9600bps FSK
Beacon  : 437.505MHz,   20bps ASK

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=164
[02092011]
=====
TIsat-1
Catalog Number: 36799
Launch Date: July 12, 2010 0352z
Launch site: Satish Dhawan Space Centre, India

Status: On orbit

Callsign: HB9DE
```

```
Uplink:   145.980MHz FM, AFSK
Downlink: 437.305MHz FM, AFSK
Beacon:   437.305MHz CW

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=118
[02092011]
=====
SwissCube
Catalog Number: 35932
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Callsign: HB9EG

Beacon(100mw): 437.5050MHz CW
Beacon(1w):    437.5050MHz FSK 1k2bps

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=109
[02092011]
=====
UWE-2
Catalog Number: 35934
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: In Orbit

Beacon(500mw): 437.3850 MHz AFSK 1k2bps
               437.3850 MHz FSK 9k6bps

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=110
[02092011]
=====
ITUpsAT1
Catalog Number: 35935
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Beacon(100mw): 437.325MHz CW
Beacon(1w): 437.325MHz 19k2bps

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=113
[02092011]
=====
BEESAT
```

```
Catalog Number: 35933
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Callsign: DP0BEE

Beacon(100mw): 436.000MHz CW
Beacon(500mw): 436.000MHz GMSK 4k8bps
Beacon(500mw): 436.000MHz GMSK 9k6bp
[02092011]
=====
CP-6
Catalog Number: 35003
Launch Date: May 19, 2009 2355z
Launch site: Wallops Island, Virginia, USA

Status: Operational

Downlink: 437.365 MHz 1k2 AFSK

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=121
[07302012]
=====
HAWKSAT 1
Catalog number: 35004
Launch Date: May 19, 2009 2355z
Launch site: Wallops Island, Virginia, USA

Status: operational

Downlink: 437.345 MHz ?

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=105
[07302012]
=====
Pharmasat
Catalog Number: 35002
Launch Date: May 19, 2009 2355z
Launch site: Wallops Island, Virginia, USA

Status: Operational

Downlink: 437.465 MHz 1k2 AFSK

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=94
[02092011]
=====
ANUSAT
```

```
Catalog Number: 34808
Launch Date: April 20, 2009 0115z
Launch Site: Satish Dhawan Space Centre, India

Status: ?

Downlink:  435.000 MHz
Uplink:    145.800 MHz

Telemetry: 137.400 MHz
[02092011]
=====
SOHLA-1 (ASTRO TECH.)
Catalog Number: 33496
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational

Proposed Frequencies and Modes:
Downlink: 437.505 MHz AFSK/CW
Beacon:   437.505 MHz AFSK/CW

Callsign:

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=101
[02092011]
=====
KAGAYAKI (Solan Co.)
Catalog Number: 33495
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: In Orbit

Downlink: 437.375 MHZ    FSK9k6/CW
Beacon:   437.375 MHz    FSK9k6/CW

IARU coordination status page:

AMSAT-NA webpage:

[02092011]
=====
STARS (Kagawa Univ.) (Twin Satellites)
Catalog Number: 33498
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational ?

Downlinks: 437.485 MHz FM/CW
```

437.465 MHz FM/CW
Beacons: 437.305 MHz FM/CW
437.275 MHz FM/CW

Callsigns: JR5YBN
JR5YBO

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=99

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=121&retURL
=/satellites/status.php
[02092011]
=====
KKS-1 (Tokyo MCIT)
Catalog Number: 33499
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational

Downlink: 437.455 MHz AFSK/CW
Beacon: 437.385 MHz AFSK/CW

Callsign: JQ1YYY

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=107

AMSAT-NA webapge:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=120&retURL
=/satellites/status.php
[20092011]
=====
PRISM (Tokyo Univ.)
Catalog Number: 33493
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational ?

Downlink: 437.425 MHz AFSK/GMSK/CW
Beacon: 437.250 MHz AFSK/GMSK/CW

Callsign: JQ1YCX

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=97

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=119&retURL
=/satellites/status.php

```
[02092011]
=====
RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number: 32953
Launch Date: May 23, 2008 1520z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational

Curent Modes: Telemetry
              Audio
              Images

Downlinks: 435.315 MHz
           435.215 MHz

AMSAT-NA website:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=115&ret
URL=/satellites/status.php

Official website:
http://www.npopm.com/?cid=leoca&caid=43
[02092011]
=====
CanX-2
Catalog number: 32790
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational in range of ground station only

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web
page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=46
[02092011]
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Downlink: 437.425 MHz 1k2 baud packet

For the latest project status update please visit the AAUSAT-II web
page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home
```

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=60
[02092011]
=====
CO-65 CUTE-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Downlink: 437.475 MHz 9k6 Packet
Uplink: 1267.600 Mhz

Telemetry Beacon:
Downlink: 437.2750 MHz CW

For the latest project status update please visit the Cute-1.7+APD II
web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=78

Command Station blog website:
http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=112&retURL
=/satellites/status.php
[03232012]
=====
Compass-1
Catalog number: 32787
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Current Mode: dependant on last received command

Uplink: 145.980 MHz FM
Downlink: 437.275 Mhz CW
          437.405 MHz Packet

For the latest project status update please visit the Compass 1 web
page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=52

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=114&retURL
=/satellites/status.php

```
[06162011]
=====
CO-66 Seeds II
Catalog number: 32791
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Downlink: 437.485 MHz

Callsign: JQ1YGU

For the latest project status update please visit the Seeds 2 web
page: http://cubesat.aero.cst.nihon-u.ac.jp/english/seeds_2_e.html

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=36

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=113&retURL
=/satellites/status.php
[073092011]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007 0702z
Launch site: Baikonur, Kazakhstan

Status: Intermittent

Current Mode:  /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon:    435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=94&retURL=
/satellites/status.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=72
[02092011]
=====
CP3
Catalog Number: 31129
Launch Date: April 17,2007 0702z
Launch site: Baikonur, Kazakhstan
```

Status: Operational

Current Mode: /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=74
[02092011]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005 0652z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon: 437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/xivpicte.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=37
[02092011]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: ?????

Current Mode: /u

Beacon: 436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=96&retURL
=/satellites/status.php

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[02092011]

```
=====
QuakeSat
Catalog Number: 27845
Launch Date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Telemetry only

Current Mode: 9600 baud data packet

Mode U packet
Downlink: 436.675 MHz 9k6 BPS

Quakesat webpage:
http://www.quakefinder.com/services/quakesat-ssite/
[02252011]
=====
CO-55 Cute-1.7+APD II
Catalog Number: 27844
Launch date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational

Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=69&retURL
=/satellites/status.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=78
[02092011]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001 0240z
Launch site: Kodiak Launch Complex, Alaska, USA

Status: Telemetry only

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink:        144.390 Mhz 1200 Baud
```

```
PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[02092011]
=====
RS-22 RADIO SPORT 22 (MOZHAYETS 4)
Catalog number: 27939
Launch Date: September 27, 2003 0612z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational - 70cm cw only

Current Mode:  /u

CW Beacon - 435.352 MHz
            145.818 MHz

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=76&retURL
=/satellites/status.php
[02092011]
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990
Launch site: Kourou, French Guiana

Status: CW Beacon only

Uplinks:          145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink:      437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[02092011]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984
Launch site: Vandenburg AFB, California, USA

Status: Operational ?
```

```
Current Mode:  /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon:          435.025 MHz
Mode-S Beacon:     2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[07052011]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998 0640z (ZARYA module)
Launch sites: Baikonur, Kazakhstan
              Kourou, French Guiana
              Uchinoura Space Center, Japan
              Kennedy Space Center, Titusville, Florida, USA

Status: Operational

Current Active Modes: FM Repeater - OFF
                      Voice -       V/v
                      BBS -         U/u
                      2m APRS -     ON
                      2m Digi -     ON
                      70cm APRS -   ?
                      70cm Digi -   ?
                      SSTV -        OFF


Expedition 33 Crew (July 2012 - November 2012 ):
Commander:                Sunita Williams     KD5PLB
Flight Engineer:          Yuri Malenchenko    RK3DUP
Flight Engineer:          Akihiko Hoshide     KE5DNI


Available Modes and Frequencies:
Digital/APRS:
Worldwide 2m packet uplink:     145.825 MHz FM 1k2
Worldwide 2m packet downlink:   145.825 Mhz FM 1k2
Worldwide 70cm packet uplink:   437.550 Mhz FM 1k2
Worldwide 70cm packet downlink: 437.550 Mhz FM 1k2

Voice:
Region 1 voice uplink:          145.200 MHz FM
Region 2/3 voice uplink:        144.490 MHz FM
Worldwide downlink:             145.800 MHz FM

Crossband Repeater:
```

Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
2m Packet Mailbox: RS0ISS-11
2m Digipeater alias: ARISS
70cm Packet Mailbox: RS0ISS-1
70cm Digipeater callsign: RS0ISS
70cm Digipeater alias: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[09102012]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-275.S3
WSR 275 Part 3 10/01/2012

AMSAT NEWS SERVICE BULLETIN 275.S3
FROM AMSAT HQ SILVER SPRING, MD, October 01, 2012
TO ALL RADIO AMATEURS
BID: $WSR-275.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

NANOSAIL-D
Catalog Number: 37361
Ejection Date: January 17, 2011

Status: Non - Operational

Downlink: 437.270 MHz AX.25

```
URL: http://nanosaild.engr.scu.edu/dashboard.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=115
[07302012]
=====
HO-68 HOPE-1 (CAS-1) (XW-1)
Catalog Number: 36122
Launch Date: December 15, 2009 0231z
Launch site: Taiyuan Space Center, PRC

Status: Telemetry only

Callsign:
Broadcast:    BJ1SA-11
BBS:     BJ1SA-12

Uplinks:   145.8250 MHz FM, PL 67.0 Hz.
           145.9250 - 145.9750 MHz SSB/CW
           145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
           435.7650 - 435.7150 MHz SSB/CW
           435.6750 MHz AFSK 1200 BPS

Beacon:    435.7900 MHz CW

Mode and Antenna Polarization:
V: LHCP 2.0dBi max
U: RHCP 3.0dBi max

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=108

For more information about XW-1 (CAS-1):
http://
[04302012]
=====
SO-67 SumbandilaSat
Catalog Number: 35870
Launch Date: September 17, 2009 1555z
Launch site: Baikonur, Kazakhstan

Status: Non - Operational

Callsign: ZS0SUM

Uplink:   145.875MHz FM tone 233.6 Hz
Downlink: 435.345MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear
```

```
For more information about SO-67:
http://www.amsatsa.org.za/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=88
[01272012]
=====
CP4
Catalog Number: 31132
Launch Date: April 17, 2007

Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon:    437.325 MHz CW

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=79
[09062010]
=====
LIBERTAD-1
Catalog Number: 31128
Launch Date: April 17, 2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink:   145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=76
[09062010]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: Non-Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder:  145.825 Mhz FM
```

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=51
[09062010]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
                             2407.250

Official Website: http://www.ncube.no

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=24
[09062010]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

```
Voice Uplink:        437.250 MHz FM 67Hz CTCSS
Voice Downlink:     2401.835 MHz FM
Packet Up/Downlink:  437.250 MHz 9k6 packet
Packet Downlink     2401.835 MHz 38k4 packet
```

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=54
[09062010]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non-Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=53
[09062010]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004 0745z
Launch site: Baikonur, Kazakhstan

```
Status: Non - Operational

Current Mode(s):
Voice repeater: V/u
Uplink:      145.880 MHz FM
Downlink:    435.150 MHz FM

Telemetry: Recovery efforts
Downlink:    435.150MHz 9k6


Analog voice downlink:     435.300 MHz FM
                           435.150 MHz FM
                          2401.200 Mhz FM
Analog voice uplink:       145.860 MHZ FM
                           145.880 MHz USB
                           145.880 MHz FM
                           145.920 MHz FM
                           145.920 MHz FM - 67 Hz PL tone burst
                          1268.705 MHz FM
Digital Downlinks:         435.150 MHz FM 38k4 PBP, 1 watt output
                           435.150 MHz FM 9k6 Pacsat Broadcast Protocol
                          2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:            145.860 MHz FM 9k6 Pacsat Broadcast Protocol
                          1268.703 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon:                    435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=19
[12062011]
=====
CANX-1
Catalog Number: 27847
Launch Date: June 30, 2003

Status: Non-Operational

Downlink: 437.8800 MHz AFSK 1k2bps
[06052009]
=====
```

DTUSAT
Catalog Number: 27842
Launch Date: June 30, 2003

Status: Non-Operational

Current Mode: 2k4 AFSK Packet last reported

Downlink: 437.475MHz

Officail webpage: http://dtusat1.dtusat.dtu.dk/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=101&retURL=satellites/all_oscars.php
[02212009]

=====

AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)

Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]

=====

MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Telemetry only

Uplinks: 145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[03302009]

```
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink:   145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS:                SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink:   145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational
```

Uplinks

V-band: 145.840 - 145.990 MHz CW/LSB
U-band: 435.550 - 435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks

S2-band: 2401.225 - 2401.475 MHz CW/USB
K-band: 24048.010 - 24048.060 MHz CW/USB
Beacon: 2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)

BEACON	General Beacon(GB)	Middle Beacon(MB)	Engineering Beacon(EB)
2 m	none	145.898 MHz	none
70cm	435.438 MHz	435.588 MHz	435.838 MHz
13cm(1)	2400.188 MHz	2400.338 MHz	2400.588 MHz
13cm(2)	2401.173 MHz	2401.323 MHz	2401.573 MHz
3cm	10450.975 MHz	10451.125 MHz	10451.375 MHz
1.5cm	24047.885 MHz	24048.035 MHz	24048.285 MHz

[07162007]
=====
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====

SO-35 SUNSAT
Catalog Number: 25636
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Non-Operational

Current Modes:
Telemetry : /u

Downlink: 435.225 MHz FM (9600-baud FSK)

```
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign:       4XTECH-12

More information of GO-32 can be found at:
http://asri.technion.ac.il/techsat/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=14&retURL
=/satellites/status.php
[07172010]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink:   145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
MO-30 UNAMSAT-2
Catalog Number: 24305
Launch Date: September 5, 1996

Status: Non-operational

Downlink:       435.1380 MHz AFSK 1200 BPS
Downlink:       435.2060 MHz AFSK 1200 BPS
Uplink:         145.8150 MHz AFSK 1200 BPS
Uplink:         145.8350 MHz AFSK 1200 BPS
Uplink:         145.8550 MHz AFSK 1200 BPS
Uplink:         145.8750 MHz AFSK 1200 BPS
[06042009]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Non-operational

Downlink: 429.950
```

```
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign:       POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012009]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
AO-24 ARSENE
Catalog Number: 22654
Launch Date: May 13, 1993

Status: Non-operational

Uplink:    435.0625 MHz FM 1k2bps AFSK
           435.1125 MHz FM 1k2bps AFSK
           435.1375 MHz FM 1k2bps AFSK
Downlink:  145.9750 MHz FM 1k2bps AFSK
          2446.5025 MHz FM 1k2bps AFSK

Beacon:    2446.4700 MHz CW

Broadcast callsign:
BBS:
[12162009]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HL01-11
BBS: HL01-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
```

```
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
[05012006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: non-operational

Current Mode:  V/u

Uplink:         145.900 MHz FM 1200-baud Manchester FSK (reserved)
                145.920 MHz FM VOICE
                145.940 MHz FM 1200-baud Manchester FSK (reserved)
                145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink:       437.026 MHz USB VOICE
                (1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]
```

```
Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[07242009]
=====
UO-15 UoSAT-4
Catalog Number: 20438
Launch Date: January 22, 1990

Status: Non-operational

Uplink: ?
Downlink: 435.1250MHz (?)
          435.1200MHz (?)
[06042009]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
```

```
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon:   145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink  29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
Beacons:   29.450 MHz
          435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970
```

```
Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon 1:  29.352 MHz (intermittent)
Beacon 2:  29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink:     21.260 to 21.300 MHz CW/USB
Downlink:  145.860 to 145.900 MHz CW/USB

Beacon:    145.860 MHz

Robot:     145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink:   21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB
```

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-275.S4
WSR 275 Part 4 10/01/2012

AMSAT NEWS SERVICE BULLETIN 275.S4
FROM AMSAT HQ SILVER SPRING, MD, October 01, 2012
TO ALL RADIO AMATEURS
BID: $WSR-275.S4

THE FOLLOWING SATELLITES HAVE RE-ENTERED OR HAVE BEEN RETURNED SAFELY:

ARISSat-1
Catalog number: 37772
Launch date: August 03, 2011 1843z
Launch site: International Space Station

Status: Re-entered January 05, 2012

Callsign: RS01S

Current Mode(s):
Linear Transponder: U/v
Uplink: 435.758 to 435.742 MHz CW/LSB
Downlink: 145.922 to 145.938 MHz CW/USB

FM Telemetry/SSTV/Messages/ID:
Downlink: 145.950 MHz FM

Telemetry/Beacon:
Downlink: 145.939 MHz CW1
145.919 MHz CW2
145.920 MHz 1k BPSK USB
145.920 MHz 400b BPSK USB

Official Webpage:http://www.amsat.org/amsat-new/ARISSat/ARISSat.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/informal_detail.php?serialnum=89
[01052012]
=====
CAERUS
Catalog Number:
Launch Date: December 08, 2010 15:43:00 UTC
Launch site: Kennedy Space Center, Titusville, Florida, USA

Status: Re-entered December 22, 2010

Uplink:
Downlink: 437.600 MHz 1k2 AX.25

Beacon: 437.600 MHz CW

Callsign: KJ6FIX

URL:
http://www2.isi.edu/research/prj-serc/prj-serc_projects/prj-serc_projects-8.htm

IARU coordination status page:

[11102011]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Re-entered
Re-entered: October 25, 2009

Uplink: 1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=56
[09062010]
=====
BEVO-1 (DRAGONSAT-1)
Catalog Number: 35690
Launch Date: May 19, 2009

Status: Re-entered
Re-entered:

Downlink: 437.325 MHz 9k6 GMSK
437.325 MHz CW 20wpm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=117
[07312009]
=====
AggieSat2 (DRAGONSAT-2)
Catalog Number: 35690

Launch Date: May 19, 2009

Status: Re-entered
Re-entered:

Downlink: 436.250 MHz 9k6 FHSS
[11112009]
=====
Pollux
Catalog Number: 35693
Launch Date: July 31, 2009

Status: Re-entered
Re-entered:

Callsign: POLLUX-1

Downlink: 145.825MHz 1k2 AX.25

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=139
[09062010]
=====
Castor (ANDE-2)
Catalog Number: 35694
Launch Date: July 31, 2009

Status: Re-entered
Re-entered:

Callsign: KD4HBO-1

Downlink: 145.825 MHz 1k2 AX.25

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=144
[09062010]
=====
NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: July 28, 2008

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=59

```
[01012009]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink:      145.825 Mhz FM APRS AX25
APRS Uplink:        145.825 MHz FM APRS AX25
Voice/PSK31 Uplink:  28.120 MHz

Packet to Voice ID: RAFT
[06112007]
=====
GENESAT-1
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Re-Entered
Re-entered date: August 8, 2010

Current Mode: /u

Callsign: KE7EGC

Telemetry Beacon Downlink: 437.0695 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[08082010]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Re-Entered
Re-entered: June 18, 2008

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon:             437.2750 MHz CW

Callsign: JR8YJT
```

[01012009]
=====
SO-43 Starshine 3
Catalog Number: 26929
Launch Date: September 30, 2001

Status: Re-Entered
Re-entered: January 21, 2003

Beacon: 145.825Mhz
[02212009]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at}
amsat.org
NNNN
/EX

```
From 8045905900204317901
X-Google-Thread: 10e8ad,650166581128cfc0,start
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Received: by 10.66.89.162 with SMTP id bp2mr2830464pab.4.1349515107239;
        Sat, 06 Oct 2012 02:18:27 -0700 (PDT)
Path: t10ni23618107pbh.0!nntp.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!goblin2!goblin1!goblin.stu.neva.ru!news.astraweb.com!
border6.a.newsrouter.astraweb.com!not-for-mail
From: Chris Steyaert <observations@rmob.org>
Newsgroups: rec.radio.amateur.space,sci.astro.amateur
Subject: Radio Meteor Obs. Bull. September 2012
Date: Sat, 06 Oct 2012 11:18:26 +0200
Message-ID: <4ktv68hlufus71bhdu26tbt0svvmr3ndp3@4ax.com>
X-Newsreader: Forte Agent 5.00/32.1171
MIME-Version: 1.0
Lines: 14
Organization: Unlimited download news at news.astraweb.com
NNTP-Posting-Host: f3771ad5.news.astraweb.com
X-Trace: DXC=cL0FmHiTkU]WIOATn\8amXL?0kYOcDh@Z\?i=>1V9b7Q=`CGFDfdLbT?6Wn>h?
2\`VeM7IG_Q>@o_i_=YE6RTP=_7cBl`XO\LF\f]SnHX1egjZ
Bytes: 1130
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
```

Radio Meteor Observation Bulletin No. 230 of September 2012 (76 K) is available now as

http://www.rmob.org/rmobtext/rmob1209.txt

More information and the visual presentation of the hourly forward scatter counts can be found on

http://www.rmob.org

Chris

```
From -7372061543518326823
X-Google-Thread: 10e8ad,117f24f8159346d,start
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII
Received: by 10.68.211.233 with SMTP id nf9mr3772889pbc.2.1349574071519;
        Sat, 06 Oct 2012 18:41:11 -0700 (PDT)
MIME-Version: 1.0
Path: t10ni23619571pbh.0!nntp.google.com!npeer02.iad.highwinds-media.com!
news.highwinds-media.com!feed-me.highwinds-media.com!
border3.nntp.dca.giganews.com!border1.nntp.dca.giganews.com!nntp.giganews.com!
novia!news-out.readnews.com!transit3.readnews.com!panix!rri.panix.com!robomod!not-
for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-281 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sat, 6 Oct 2012 21:41:10 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 565
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <001c01cda42c$ccb82970$66287c50$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
X-Trace: reader1.panix.com 1349574071 13207 166.84.1.6 (7 Oct 2012 01:41:11 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 7 Oct 2012 01:41:11 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Bytes: 26063
X-Received-Bytes: 26112
Content-Language: en-us
```

AMSAT NEWS SERVICE
ANS-281

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating

through analog and digital Amateur Radio satellites.

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ans-editor at amsat.org

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* Register Today for the 2012 AMSAT Space Symposium in Orlando
* 2012 AMSAT Symposium Schedule
* Five CubeSats Deployed From ISS Now on-Orbit - Signals Received
* AO-27 Reported Down
* PACIFICON 2012 Will Feature ARISS Contact and Satellite Demo Station
* ARISS Successful School Contacts
* US Naval Academy PSAT Features PSK-31 and APRS Transponders
* Cuba Satellite Group Launches Satellite Net in Havana
* FUNcube Dongle Filtered Preamp Available at AMSAT-UK On-line Store
* Satellite Shorts From All Over

SB SAT @ AMSAT $ANS-281.01
ANS-281 AMSAT News Service Weekly Bulletins

AMSAT News Service Bulletin 281.01
>From AMSAT HQ SILVER SPRING, MD.
October 7, 2012
To All RADIO AMATEURS
BID: $ANS-281.01

Register Today for the 2012 AMSAT Space Symposium in Orlando

This is a reminder that the 2012 AMSAT Space Symposium will be held
on Friday, October 26th through Sunday, October 28th at the Holiday
Inn Hotel at Orlando-International Airport.

See the AMSAT Web Store to complete your on-line registration:
http://store.amsat.org/catalog/index.php?cPath'

Symposium Registration including Proceedings
   o Starting September 24, 2012: $ 50.00
   o At the Door: $ 55.00

Downloadable paper registration forms in MS-Word format and
PDF format are available on the 2012 Symposium page:
http://www.amsat.org/amsat-new/symposium/2012/index.php

The Symposium Schedule web page has been updated with links to find
more information about the planned activities. See:
http://www.amsat.org/amsat-new/symposium/2012/SymposiumSchedule.php

[ANS thanks the 2012 Symposium Committee for the above information]

2012 AMSAT Symposium Schedule

To help you plan your trip to Orlando the 2012 Symposium Committee has posted a high-level schedule of the weekend's events.

Preliminary 2012 Symposium Schedule

Thursday 25 October 2012

AMSAT Board of Directors Meeting 8am - 9pm

Friday 26 October 2012

AMSAT Board of Directors Meeting 8am - Noon
Trips to SkyCraft 9am - Noon
AMSAT Symposium 1pm - 5pm

Saturday 27 October 2012

Symposium 8am - 3pm
AMSAT General Meeting 3:30pm
AMSAT Banquet 6:30pm - 10pm

+ The featured speaker for the AMSAT 2012 Saturday Evening Banquet will be Dr. Samuel T. Durrance, NASA Astronaut/Payload Specialist and Professor of Physics and Space Sciences at the Florida Institute of Technology.

Sunday 28 October 2012

7:30am AMSAT Area Coordinator's Breakfast
Local trip of Interest TBD

Monday 29 October 2012

Special trip to Kennedy Space Center 8am-6pm
The trip will include a round trip bus from the hotel and entrance to the Space Center. The cost will be about $100. This is a wonderful experience for those that haven't been and for those that have been multiple times. We need to get an idea of how many will participate to select the correct bus. Contact Martha if interested

Watch the AMSAT Symposium Web Pages for the latest information:
http://www.amsat.org/amsat-new/symposium/2012/index.php

[ANS thanks the 2012 Symposium Committee for the above information]

Five CubeSats Deployed From ISS Now on-Orbit - Signals Received

Five cubesats launched on July 21 and loaded aboard the ISS were integrated with the J-SSOD small satellite deployer on the the Japanese Experiment Module, also known as Kibo. They were deployed with the Kibo robotic arm on October 4, 2012. The orbit for these CubeSats will be very close to the orbit of the ISS.

NanoRack posted a photo of the deployment at: pic.twitter.com/wZAX5qZL
(Click on the image to view the full-sized photograph)
SpaceRef posted an article and several more photographs on-line at:
http://spaceref.com/news/viewsr.html?pidB238

+ First Deployment by Astronaut Akihiko Hoshide
  o WE-WISH - Telemetry downlink on 437.505 MHz
  o RAIKO - non-amateur radio Ku-band beacon

+ Second Deployment by JAXA GS
  o TechEdSat - Telemetry downlink on 437.465 MHz.
  o NanoRack/F-1 -
    > 145.980 MHz: main channel, 1.0W RF output, FM, AFSK 1200bps,
    > one telemetry packet every 30 seconds, operates in the dark
    > by default (but can be commanded later to operate in sunlight)
    > 437.485 MHz: backup channel, 0.2W RF output, FM, PWM CW beacon,
    > each beacon transmission lasts about 20 seconds then 60 seconds
    > delay, only operates in sunlight

  o FITSAT-1
    > CW Beacon 437.250 MHz,
    > FM Data   437.445 MHz,
    > High speed data 5840.00 MHz

FITSAT-1 Heard With Strong Signals

Signal reports from PY5LF, OH3UW, DK3WN, VU3TYG, G6LVB (using a FUNcube Dongle Pro+ and 7" wire antenna), GW1FKY, F5YG, JE9PEL, JN1GKZ, ST2NH, and others via the amsat-bb list.

FITSAT-1 transmits its beacon frequency 437.250 MHz. This is the same frequency as the PRISM satellite of Tokyo Univ. FITSAT CW will transmit, "HI DE NIWAKA JAPAN" with its telemetry data. To receive a FITSAT-1 QSL card please send your signal report and your postal address to: fitsat1@hotmail.co.jp and also cc to tanaka@fit.ac.jp.
A photo of the QSL card is shown at:
http://www.fit.ac.jp/~tanaka/fitsat.shtml
This web page will also be updated with information about the status of the LED experiment.

HB9FFH has made a telemetry decoder for FITSAT-1, available at:
http://carpcomm.com/satellite/fitsat1

FITSAT students have also developed a similar program for windows:
http://turing.cs.fit.ac.jp/~fitsat/CWFM/FITSAT_CW_Analyzer1.zip

TechEdSat Heard With Weak Signals

Signal reports received from PY5LF, DK3WN, and JE9PEL indicate that TechEdSat was received with weak signals on its 437.465 MHz downlink. Mark Allard, KD6CWM, President of the NASA-Ames Research Center Amateur Radio Club reports their OSCAR/ARISS satellite station, NA6MF, will be supporting TechEdSat as one of the monitoring stations for the TechEdSat Amateur Radio beacon.

TechEdSat transmits a custom beacon packet. Details can be found at: http://www.techedsat.com/. Packets acquired from TechEdSat can also be submitted to the website for decoding by the TechEdSat team. Use the 'Packet Submission' link found at the top of the web page.

WE WISH SSTV Picture Received

PY4ZBZ and JE1CVL received the SSTV picture on 437.505 MHz.
JE9PEL provided a translation of the image that is a sentence of "JQ1ZIJ MEISEI ARC 2012". A photo of the received picture is at:
http://www.ne.jp/asahi/hamradio/je9pel/21005wis.png

A photo of the SSTV picture received by PY4ZBZ is posted at:
http://www.qsl.net/py4zbz/satelite.htm#ww

Viet Nam F-1 Not Heard

Viet Nam's F-1 satellite was scheduled to begin telemetry transmissions 30 minutes after deployment by sending a beacon alternating on its main and backup channels. At press time no signal reports have been received from this satellite.

More information and guide to download F-1 telemetry decoder can be found at http://fspace.edu.vn/?page_id'. Decoded data can be submitted via the telemetry decoder or by sending directly to the ground station: thuvt@fpt.edu.vn. Audio recordings are highly appreciated.

[ANS thanks the CubeSat Teams; Vu Trong Thu, XV9AA; Mark Allard, KD6CWM; and Takushi Tanaka, JA6AVG for the above information]

AO-27 Reported Down

AO-27 user reports this week reported that the satellite was not operational. The end-of-transmit cycle AFSK packet telemetry beacon was reported to become stuck on a single tone. No downlink signal was received from AO-27 on later passes.

The latest AO-27 news is posted on its webpage:
http://www.ao27.org/AO27/index.shtml

In summary, as of October 6 control operators had recovered AO-27 to running on the primary Bootloader and were able to turn on the transmitter for a short time. They continue working on uploading the software.

```
Mode V/U (J) FM Voice Repeater Frequencies
------------------------------------------
Uplink:   145.8500 MHz FM
Downlink  436.7950 MHz FM
```

[ANS thanks James, N3UCC and Michael, N3UC for the above information]

PACIFICON 2012 Will Feature ARISS Contact and Satellite Demo Station

An Amateur Radio on the International Space Station (ARISS) contact has been planned with youth participants at PACIFICON 2012, Santa Clara, CA on 13 October. The event is scheduled to begin at approximately 18:57 UTC or 11:57 PDT. The contact will be a telebridge between NA1SS (the ISS) and IK1SLD (in Italy). The contact should be audible over Europe and the Mediterranean. Interested parties are invited to listen in on the 145.80 MHz downlink. The contact is expected to be conducted in English.

PACIFICON 2012, a premiere wireless event, will be held October 12, 13, and 14, 2012 and will host the 2012 American Radio Relay League (ARRL) National Convention and Exposition.

Over 2,500 amateur radio enthusiasts are expected to attend. The 2012 PACIFICON Youth program includes a "Youth Lounge" and forums throughout the convention weekend; the Youth program is positioned in the middle of the exhibit hall and provides STEM educational activities which include hands on radio operation, electronics kit building orbital mathematics, CubeSat satellite design, and popular radio transmitter T-Hunts.

A scheduled ARISS radio contact and a presentation by NASA astronaut, Dr. Lee M. Morin KF5DDB, will highlight the Youth Lounge activities. Free admission is provided to Girl Scouts, Boy Scouts, Camp Fire Girls, Brownie, Cub Scouts, Explorer Scouts, 4-H members, and to all youth 17 and under. The Youth Forum will include young Amateur radio enthusiasts Andrea Hartlege KG4IUM, former ARRL South Eastern Division Vice Director and Katie Stensrud K7KTI, a young Amateur from Nevada, and many amateur radio educational resources from the ARRL & AMSAT.

PACIFICON 2012 will include numerous amateur radio operations including the convention FCC Special Event Station W6P; the ARRL's W1AW/6; additional stations will be operated remotely from the convention site as well as one portable satellite earth station and one fully automated satellite earth demonstration station. PACIFICON 2012 will offer over 120 educational forums and programs, including a forum hosted by AMSAT on Amateur Satellite Communications, approximately sixteen indoor on-the-air exhibits, and eight outdoor on-the-air exhibits will be hosted.

For more information, please review the PACIFICON 2012 web site at: http://www.pacificon.org/ or, contact Joe Spier, Associate Director for Education, AMSAT-NA, at k6wao@amsat.org

[ANS thanks Joe Spier, K6WAO and Mark Hammond, N8MH for the above information]

ARISS Successful School Contacts

Turkey

Izmir SEV Primary School, located in Turkey, had an Amateur Radio on the International Space Station (ARISS) contact on October 5 via telebridge station K6DUE in Greenbelt, Maryland.

The school participates in the Partner School Science Program, which is a program under Global Friendship Through Space Education, a California-based non-profit organization that promotes friendship among young people from different countries and cultures through the study of space-related science and technology. Students communicate about space-related projects via e-mail, collaborate on research on NASA's distance-learning Web site, and videoconference between NASA and partner schools. First Lego League Robotic Teams and Destination Imagination Teams have been a part of school activities annually since 2005. Invitations to attend this event have been extended to several VIPs including the minister of transportation, the president of the board of education, the director of education, the mayor of Izmir and the governor of Izmir.

Maryland

An Amateur Radio on the International Space Station (ARISS) contact was held between students at the Waxter Young Women's Academy in Laurel, Maryland and Akihiko Hoshide, KE5DNI aboard the ISS on September 24. Telebridge station LU8YY in Argentina handled the radio connection. The girls were able to have all 13 of their questions answered with enough time left to thank Hoshide for participating. Phone lines throughout the center were made available so that other students could listen in as well. The ARISS contact was part of a comprehensive education plan used to interest students in Science, Technology, Engineering and Math (STEM).

Nova Scotia

On September 26, Sacred Heart School of Halifax in Nova Scotia, Canada participated in an Amateur Radio on the International Space Station (ARISS) contact with on-orbit astronaut Sunita Williams, KD5PLB. Telebridge station LU8YY in Argentina connected with Williams, but the international phone line, which was to connect Argentina to Halifax, went down and could not be brought up until after the ISS had passed overhead. Williams agreed to try the contact again on the next pass. Ninety minutes later, the audience of 250 got what they had been waiting for - a successful contact! The students got in 17 questions, and one student was wished a Happy Birthday by the ISS commander.

Video of LaFayette Middle School ISS contact

When Jody Carter was 8 years old, his father tried unsuccessfully to contact the space shuttle via ham radio. Thirty years later, the second time was the charm. The Times Free Press reports that just after 11 a.m. Friday, Sept. 21, Carter, who's now a math and science teacher at LaFayette Middle School, radioed Sunita "Suni" Williams KD5PLB, commander of the International Space Station. Read the full story and watch the video at:
http://tinyurl.com/Lafayette-ISS

[ANS thanks Carol Jackson, KB3LKI for the above information]

US Naval Academy PSAT Features PSK-31 and APRS Transponders

The US Naval Academy in Annapolis, Maryland is developing a new student satellite, ParkinsonSAT, or PSAT which is a two way APRS communications transponder for relaying remote telemetry, sensor and user data from remote environmental experiments or other data sources back to experimenters via a global network of internet linked volunteer ground stations. The data transponder also includes all telemetry, command and control for a complete cubesat.

PSAT is a 1.5 unit cubesat so that two PSATs can be launched from the same P-Pod launcher. The design uses four deployable solar arrays which are stowed down the sides. Half of the 1.5 unit PSAT is available for auxiliary payloads or experiments. Details of the PSAT project are available on-line at: http://www.aprs.org/psat.html

PSAT will fly a PSK-31 transponder with a 10 meter uplink and a 2M FM downlink. PSK-31 will allow up to 30 simultaneous users:
http://aprs.org/psat/PSK31-DESIGN-NOTES.html

Bob Bruninga, WB4APR noted, "PSK-31 is the ideal AMSAT FM transponder for a cubesat. With an FM downlink, anyone can receive it with an HT and a laptop with PSK-31 software. And anyone with a 10m PSK-31 uplink can transmit to it. And since the downlink is FM, everyone tuned in SEES THE SAME WATERFALL and sees EXACTLY where they are in the downlink. A small uplink doppler adjustment can keep each station locked to his chosen channel in the passband. Everyone can talk to everyone if they want, or go one-on-one too."

The SSB uplink and UHF FM downlink transponder fits on a smaller than 3"x3" circuit board being developed by Mirek Kasal at Brno University. Launch of PSAT is planned in 2015. The 3"x3" transponder may also be adaptable for other missions.

[ANS thanks Bob Bruninga, WB4APR for the above information]

Cuba Satellite Group Launches Satellite Net in Havana

Raydel Abreu Espinet, CM2ESP reported this week that the Cuban Satellite Group named Grupo de Radioaficionados para Operaciones Satelitales (GROS) has started a VHF FM Net devoted entirely to the Amateur Radio Satellites on 145.550 MHz. CM2ESP is the Net Control Station. The net will be on the air every Friday from 19:00 to 20:00 local time in Havana.

The net is in range for the Havana Province (capital of Cuba), with coverage also to the surrounding provinces of Mayabeque and Artemisa. The net is divided in three sections: News; A Technical Topic; and Question and Answer Session.

The Cuban Satellite Group named Grupo de Radioaficionados para Operaciones Satelitales (GROS) will continue promoting and creating new activities to increase the presence of Cuban Amateur Radio Stations on the satellites and the activation of new grids. Several demonstrations and workshops are currently being scheduled.

[ANS thanks GROS Coordinator Raydel Abreu Espinet, CM2ESP for the above information]

FUNcube Dongle Filtered Preamp Available at AMSAT-UK On-line Store

David Bowman, G0MRF, a member of the AMSAT-UK FUNcube team, has designed and manufactured a 2m Filtered Preamp for use with the FUNcube dongle or any 2m receiver. This is now available for purchase through the AMSAT-UK web shop.

Two versions of the preamp are available. The first is a kit form including all the components required to build the preamp yourself. The second is a prebuilt version. The stock on the prebuilt version is very limited. Both kit and prebuilt versions are on sale for �47 plus postage and packing.

More information is available on the AMSAT-UK web site. Look under the "Projects" section at http://www.uk.amsat.org to read the construction notes as well as the measurement report carried out on the preamp.

The AMSAT-UK web shop is at http://shop.amsat.org.uk and the premps appear under the "Hardware" category in the catalogue.

A video demonstration of the FUNcube Dongle Pro+ LF/MF/HF/VHF/UHF Software Defined Radio is posted at: http://www.amsat-uk.org/

[ANS thanks Ciaran Morgan, M0XTD of AMSAT-UK for the above information]

Satellite Shorts From All Over

+ AMSAT Director Contests and Awards, Bruce Paige, KK5DO says a correction needs to be made to the AMSAT Field Day Results he sent last week:

Rank	Call	Class	Score	
7	WC9C	4E	15	should be corrected to:
7	WC5C	4F	15	

  An article, photos, and the results will be published in an upcoming edition of the AMSAT Journal.

+ The traditional e-mail format of the AMSAT News Service Bulletins is being expanded so that news of Amateur Radio in Space is more accessible on mobile devices:
  AMSAT News Service Archives: http://amsat.org/pipermail/ans/
  AMSAT-NA on Facebook: http://www.facebook.com/groups/7828379515/
  ANS Bulletins will be posted at: http://www.hamradiotoday.com/
  (HamRadioToday is an excellent forum of amateur radio topics.)
  ANS Bulletins will be posted at: http://www.qrz.com/
  The bulletins will continue to be sent via the ANS List and the AMSAT-BB in e-mail format.

+ Watch a video by the Minute Physics folks explaining why the sky is dark at night:
  http://www.youtube.com/watch?feature�ayer_embedded&v�J4M7tyLRE

- Astronomy Now and Spaceflight Now have created an interactive iPad guide to the Curiosity rover mission: http://tinyurl.com/8peyrz8 (itunes.apple.com)

- Canadian Special Event Station will be signing CG3X until October 28 to commemorate the 50th anniversary of the first Canadian satellite "Alouette". QSL via VE3JPP. (DX Newsletter DXNL 1800 - Oct 3, 2012)

- Hams like science so get a peek at the eXtreme Deep Field, or XDF, a photo was assembled by combining 10 years of NASA Hubble Space Telescope photographs taken of a patch of sky at the center of the original Hubble Ultra Deep Field. That's right, a 10 year time exposure: http://tinyurl.com/Hubble-XDF (SpaceDaily.com) Also see the article at: http://spaceref.com/news/viewpr.html?pid8692

- Cool, new postage stamps for your QSL activities featuring America's diverse landscapes on photos taken from ultra lights to satellites are on the Earthscapes stamps. Details of the stamp plus where to find first-day issues can be found in the article at: http://spaceref.com/news/viewpr.html?pid8738

- Doug, VK3UM reports updates have been made for his EME Calculation software. New versions are available from Doug's website at http://www.vk3um.com for:
  - EMECalc Ver 8.07 (28th Sep 12)
  - EME Planner Ver 1.71. (21st Sep 12)
  - EMR Calculator Ver 7.03 (22nd Sep 12)

- Flex Radio has posted a guide to using SATPC32 with the Flex 5000 VU5K transverter. Along with the SATPC32-specific details, there is information of use to satellite operators in general. See: http://support.flex-radio.com/Downloads.aspx?id@4 (via Alan, WA4SCA)

- The Houston AMSAT Net meets every Wednesday at 0100z (this is Tuesday evening in North America) on Echolink - Conference *AMSAT* . The MP3 audio is also streamed http://www.amsatnet.com. After the net a Podcast is available at: http://www.amsatnet.com/podcast.xml or iTunes

- The next Hudson Valley Satcom net dates are Thursday, October 11 and October 25 at 8 PM EDT (UTC-4 UTC) on the 146.97 MHz MBARC Repeater (PL 100). An echolink connection is available on the N2EYH-L node. More information at: http://www.hvsatcom.org. (Stu, WA2BSS)

- The 2012 Great World Wide Star Count is a citizen science project running between October 5 to October 19. You are invited to make night star observations from your QTH and report your results online. To learn more of this project and to participate see: http://www.windows2universe.org/citizen_science/starcount/index.html

[ANS thanks everyone for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

Primary and secondary school students are eligible for membership at one-half the standard yearly rate. Post-secondary school students enrolled in at least half time status shall be eligible for the student rate for a maximum of 6 post-secondary years in this status. Contact Martha at the AMSAT Office for additional student membership information. And with that, please keep in mind that the light from the sun, arriving now is 30,000 years old. The energy in the sunlight we see today started out in the core of the Sun 30,000 years ago. It spent most of this time passing through the dense atoms that make the core and just 8 minutes to reach us once it had left the Sun.

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM

```
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X-Google-Thread: 10e8ad,60e53531ad8c6955,start
X-Google-NewGroupId: yes
X-Google-Attributes: gida3e752f117,gid8f86f75953,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
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news.linkpendium.com!panix!rri.panix.com!robomod!not-for-mail
From: SWPC.Webmaster@noaa.gov
Newsgroups:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.shor
twave,rec.radio.info
Subject: Weekly Highlights of Solar and Geomagnetic Activity, 01 - 07 October 2012
Followup-To:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.shor
twave
Date: Mon, 8 Oct 2012 11:30:09 EDT
Organization: NOAA Space Weather Prediction Center
Lines: 67
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NNTP-Posting-Date: Mon, 8 Oct 2012 15:30:09 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to            rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
```

```
:Product: Weekly Highlights and Forecasts
:Issued: 2012 Oct 08 0351 UTC
# Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center
# Product description and SWPC contact on the Web
# http://www.swpc.noaa.gov/weekly.html
#
#                 Weekly Highlights and Forecasts
#
```

Highlights of Solar and Geomagnetic Activity
01 - 07 October 2012

Solar activity was low. The largest flares of the week, both C4s, were attributed to Region 1575 (N08, L=181, class/area=Eko/320 on 22 Sep) at 01/0147Z and again at 01/1313Z as it rotated beyond the west limb. The remainder of the week was characterized by x-ray flares in the mid-to-upper B class and low C class range. An exceptionally long duration B7 flare (7hr 29min) from Region 1584 (S23, L=70, class/area=Dso/40 on 01 Oct) peaked at 05/0730Z and was associated with an earth-directed CME. The CME was observed in SOHO/LASCO C3 imagery at 05/0730Z and had an estimated speed of approximately 590 km/s. It was expected to reach earth late on 08 October. Another CME was observed later in the week when a 30 degree long filament, centered near S65W15, erupted on 07 October. SDO imagery first observed movement along the filament channel at approximately 06/2000Z with ejecta visible off the SW limb at about 07/0700Z. LASCO C2 imagery observed a partial-halo CME lifting off the SW limb first visible at 07/0812Z. Subsequent WSA-Enlil model output indicated a possible weak, earth-directed component of this CME.

No proton events were observed at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit was at normal levels throughout the week.

Geomagnetic field activity began the week at severe storm levels after an earth-directed CME from 27 September arrived late on 30 September. Severe storm levels were observed for the 01/00-03Z synoptic period, decreasing in the subsequent periods to major storm levels for 01/03-06Z, and then active levels for the 01/06-09Z period. The remainder of the week saw quiet geomagnetic conditions with the exception of the first synoptic period on 03 October which was unsettled.

Forecast of Solar and Geomagnetic Activity
08 October - 03 November 2012

Solar activity is expected to be at generally low levels with a chance for an M-class event, particularly during 12-26 October when Old Region 1583 (N12, L=187, class/area=Dso/90) returns.

No proton events are expected at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to be at high levels on 11-13 October as a result of a coronal hole high speed stream. Flux for the remainder of the forecast period is expected to be at background levels.

Geomagnetic field activity is expected to begin at quiet to unsettled levels, increasing to active to minor storm levels late on 08 October with the arrival of the earth-directed CME from 05 October. Minor storm levels are expected to continue through 09 October. Then geomagentic field activity is expected to decrease to unsettled to active levels for 10-11 October under the influence of a coronal hole high speed stream. Quiet conditions return on 12-14 October before subsequent coronal hole high speed streams bring unsettled to active conditions on 15-17 October.

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mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-288 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sun, 14 Oct 2012 10:14:44 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 387
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X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 14 Oct 2012 14:14:45 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to            rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
```

AMSAT NEWS SERVICE
ANS-288

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

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SB SAT @ AMSAT $ANS-288.01
ANS-288 AMSAT News Service Weekly Bulletins

AMSAT News Service Bulletin 288.01
From AMSAT HQ SILVER SPRING, MD.
October 14, 2012
To All RADIO AMATEURS
BID: $ANS-288.01

2012 AMSAT Space Symposium in Orlando Just Weeks Away

This is a reminder that the 2012 AMSAT Space Symposium will be held on Friday, October 26th through Sunday, October 28th at the Holiday Inn Hotel at Orlando-International Airport.

See the AMSAT Web Store to complete your on-line registration:
http://store.amsat.org/catalog/index.php?cPath'

Symposium Registration including Proceedings

o Starting September 24, 2012:	$ 50.00
o At the Door:	$ 55.00

Downloadable paper registration forms in MS-Word format and PDF format are available on the 2012 Symposium page:
http://www.amsat.org/amsat-new/symposium/2012/index.php

The Symposium Schedule web page has been updated with links to find more information about the planned activities. See:
http://www.amsat.org/amsat-new/symposium/2012/SymposiumSchedule.php

IMPORTANT message for all those planning to attend the special tour to the Orlando Science Museum during the AMSAT Space Symposium in Orlando, FL on Sunday, Oct. 28, 2012.

For those planning to attend the special Star Wars Exhibit, you must contact Martha at AMSAT, to pay for your ticket in advance. Martha can be reached at 888-322-6728 or 301-589-6062).This must be done no later than Thursday, October 17 to reserve your spot for the tour.

Please note that the following trip schedule has been updated from the current schedule posted at www.amsat.org.

[ANS thanks the 2012 Symposium Committee for the above information]

Symposium Trip to the Orlando Science Center - Sunday, 28 October 2012

Trip schedule:

Leave the hotel at 9:00am (transportation is provided)
Arrive at OSC at 9:45am (non-members parking: $5/vehicle)

Special backstage tour at 10:00am (should last 45 min. - our AMSAT liaison will meet us in lobby)

>From 10:45am until 11:30am - visit the various Center exhibits

Those who pre-paid for the Star Wars Exhibit enter the exhibit as a group at

11:30am (tkts cost $27/person - PRE-PAYMENT IS REQUIRED - SEE NOTE BELOW

View Exhibit from 11:30am until 1:00pm

Lunch at local restaurant from 1:15pm to 2:15pm

Leave restaurant at 2:15pm

Arrive back by 3:00pm

NOTE:

Star Wars Exhibit:
http://www.osc.org/index.php?option�m_content&view�tegory&layout
blog&id7&Itemid1

The Star Wars Exhibit is a limited engagement feature and is expected to draw large crowds. In order to guarantee our visit stays on schedule, the Center has arranged for AMSAT to enter the exhibit as a single group at 11:30am.

If you choose to visit this exhibit, you MUST contact Martha at AMSAT, and pay for your ticket in advance. Martha can be reached at 888-322-6728 or 301-589-6062). This must be done no later than Thursday, October 17 to reserve your spot for the tour. Otherwise, you will not be guaranteed a spot in the 11:30 tour with the rest of the members. Total cost per person will be $27.00. Please note that this fee also covers general admission to OSC and all exhibits, including the IMAX theater. When you arrive the tickets will be with your tour guide.

Those that choose not to attend the Star Wars Exhibit may have the opportunity of attending a feature in the IMAX Theater, providing the show times coincide with our time schedule during the visit. Admission to the IMAX Theater is covered under your initial admission fee. Admission fee to OSC will be $17.00 for those not attending the Star Wars Exhibit and will be paid at the door.

For those managing afternoon plane departures, transportation back to the hotel will be provided by AMSAT volunteers at 11:30am, but only if needed.

[ANS thanks the 2012 Symposium Committee for the above information]

National Scouting Museum to Celebrate JOTA With ARISS Contact

The weekend of October 20-21, 2012 is Scouting's 55th Jamboree-on-the-Air (JOTA). JOTA is a World Scouting event that bridges Scouts all over the world via amateur radio.

The official hours are from Saturday at 00:00 hours local time to Sunday 24:00. JOTA is not a contest but idea is to contact as many stations as possible during the weekend. So you will hear Scouting stations calling "CQ Jamboree," or answering the calls. All amateur radio operators are invited to participate. An even better idea is to invite Scouts to your station or club to take part in JOTA.

JOTA will be the main event at the National Scouting Museum. Numerous amateur radio stations will be set up throughout the Museum, allowing for both local and global communication by various modes.

There will also be many other fun and educational activities; such as hidden transmitter hunts, electronic project assembly, solar telescopes, demonstrations of satellite communications, and much more throughout the day

The JOTA at the National Scouting Museum, Irving, Texas ARISS contact time has now been confirmed. Contact will begin at 18:30:30Z via telebridge station VK6MJ in Australia. If you cannot join us at the Museum, you are invited to listen in to the contact via the 146.88 Dallas Amateur Radio Club repeater, via the Echolink "AMSAT" conference bridge or on UStream via URL:
http://www.ustream.tv/channel/dallasjota.

Lets light up the birds this JOTA weekend with Scout to Scout contacts. Find a club or scouting organization near you that is running a JOTA station and ask them if you can participate. Many of them have never experienced a satellite radio contact and you will hook 'em.

For a list of BSA registered JOTA stations, please check out the growing list at http://www.scouting.org/jota/registered_stations.aspx and find one in your area. You can download the full spreadsheet there as well which has contact information for the local organizer who have registered their events. Outside the US contact your local Scouting agency and find out how you can participate.

JOTA is a great way to get out of the ham shack and demonstrate the thrill of Amateur Radio Satellites to an eager audience.

Boy Scouts of America JOTA Page:
http://www.scouting.org/jota.aspx

World Scouting Organization JOTA Page:
http://www.scout.org/en/information_events/events/jota

ARRL JOTA Page:
http://www.arrl.org/jamboree-on-the-air-jota

National Scouting Museum JOTA Page:
http://bsamuseum.org/Programs/JOTA%202012.aspx

[ANS thanks the Boy Scouts of America, the National Museum of Scouting, the World Scouting Organization, and the ARRL for the above information]

Interorbital Offers Low Cost Launch to LEO for 40kg of CubeSats

The October, 2012 issue of the on-line SatMagazine published an article discussing Interorbital Systems' preparations to launch their Neptune 5 and Neptune 7 rockets. Interorbital, based in Mojave, California, develops and manufactures low-cost, state-of-the-art orbital launch vehicles and satellites for private, commercial, governmental, academic, arts, and military applications.

They also have available the $8,000 Personal Satellite Kit and Launch Program for universities, private citizens, military, and government entities throughout the world to develop TubeSats. There are details of the TubeSat and CubeSat kits on their web page. See:
http://www.interorbital.com/

Two flights of the Neptune 5 launch system are planned to accommodate the 9 CubeSats and 23 TubeSats. Interorbital's Neptune 7 launch has already booked 10 CubeSats and 10 TubeSats to be delivered to low Earth orbit.

The Neptune 7 capable of lifting approximately 40kg to LEO - or 30 small TubeSats and CubeSats per launch. The first launch is sold out and the second is rapidly closing.

Read all of Interorbital's Article, "A Builder's Guide To Inexpensive Space Access" By Randa Relich Milliron, CEO, Interorbital Systems on page 60 of the October, 2012 SatMagazine which can be downloaded for free at: http://www.satmagazine.com/2012/SM_Oct2012.pdf

Also in this issue of SatMagazine are articles about the Aeneas CubeSat, Satellite Networks For Education, and the Firefly CubeSat.

AMSAT-UK has links to SatMagazine at: http://www.uk.amsat.org/?p009

[ANS thanks AMSAT-UK, SatMagazine, and Interorbital Systems for the above information]

Viet Nam F-1 Satellite Team Requests Hams Continue to Listen

An article published on the AMSAT-UK web reports that the FSpace team of young engineers and students at the FPT University in Viet Nam are requesting Amateur Radio operators continue to listen for their F-1

CubeSat, callsign XV1VN which was deployed from the International Space Station on October 4 but not heard on Earth.

Team Lead, Thu Trong Vu XV9AA provided this update on October 7, "So far the team has received several mixed reports about F-1 status, there is no definite conclusion yet. We will continue to collect information and analyze the situation, this afternoon we will hold a team meeting to discuss different situations that may happen with the little satellite up there. Please continue to help us listening for F-1 on 437.485 in daylight and 145.980 in the dark, thank you!"

F-1 was expected to begin transmitting beacon alternatively on its main and backup channels 30 minutes after deployment.

F-1 frequencies:

+ 145.980 MHz: main channel, 1.0W RF output, FM, AFSK 1200bps, one telemetry packet every 30 seconds, operates in the dark by default (but can be commanded later to operate in sunlight as well)

+ 437.485 MHz: backup channel, 0.2W RF output, FM, PWM CW beacon, each beacon transmission lasts about 20 seconds then 60 seconds delay, only operates in sunlight

More information and guide to download F-1 telemetry decoder can be found at http://fspace.edu.vn/?page_id'. Decoded data can be submitted to us via the telemetry decoder or by sending directly to: thuvt@fpt.edu.vn. Audio recordings are highly appreciated.

Read the full article at: http://www.uk.amsat.org/?p480

[ANS thanks AMSAT-UK and the F-1 CubeSat Team for the above information]

RSGB, AMSAT-UK, and BATC Publish Joint Response to British OFCOM

RSGB, AMSAT-UK, and BATC have provided a joint Amateur Radio response to a July, 2012 Ofcom consultation document calling for input regarding, "VHF Spectrum Release in the range 143 MHz to 156 MHz".

The response notes the, "unprecedented opportunity for VHF innovation and growth based on an allocation to amateur radio at 146 - 148 MHz within the UK for digital TV, audio, and other evolving spectrum efficient data applications."

Also included in the response is a call to, "Provide for the increasing use of the existing 144-146 MHz allocation for amateur satellite activities by the CubeSat and similar spacecraft being developed by UK University student teams in collaboration with radio amateurs.

It was noted that spectrum allocation at 146 - 148 MHz would allow for, "Use of equipment harmonised for amateur use in ITU Regions 2 and 3 where 146-148 MHz is already a ITU Primary allocation to the Amateur service."

The Amateur Radio response also notes this allocation to the Amateur service provides, "Room for highly innovative infrastructure-free narrowband DATV and other new applications that we have not been able to deploy in restricted secondary bands such as 70 MHz or 423 MHz, 1296 MHz.

The full document is available on-line at the RSGB Web:
http://tinyurl.com/Amateur-Joint-Response

[ANS thanks AMSAT-UK, RSGB, and BATC for the above information]

ARISS Status - 9 October 2012

1. Izmir, Turkey School Hosts ARISS Contact

On Friday, October 5, students from Izmir SEV Primary School in Turkey participated in an Amateur Radio on the International Space Station (ARISS) contact with astronaut Sunita Williams, KD5PLB via station K6DUE in Greenbelt, Maryland. Williams answered all 20 questions posed to her during the event which drew an audience of over 800 students and was heard all over Turkey. The contact highlighted a science curriculum which included other NASA activities such as First Lego League Robotic Teams and Destination Imagination Teams.

2. Sunita Williams Chats with Malaysian Students

Sekolah Kebangsaan students in Putrajaya, Malaysia spoke with Sunita Williams, KD5PLB aboard the ISS through an Amateur Radio on the International Space Station (ARISS) contact on Sunday, October 7. The school was invited to participate in the contact by the National Space Agency Satellite Ground Station, 9M2RPN, in conjunction with the "Prime Minister's National Space Challenge Trophy 2012," an annual event since 2007 when the Malaysian astronaut, Dr. Sheikh Muszaphar Shukor, flew to the ISS.

3. ARISS Educator Interviewed

Gladys Mu�oz, a teacher at the Marcelino Canino Canino Middle School in Puerto Rico, was interviewed for a blog by Mr. Anthony Salcito, vice president for education Microsoft Worldwide Enterprises. This

took place during her stay in Lima, Peru for Microsoft's Latin America Forum for Innovative Education where she presented a summary of some of her school's aerospace education projects. The school participated in its own ARISS contact on September 12, 2012. See:
http://www.youtube.com/watch?v�e3Vzn35-Y&list�G_FV4WjnZqtm6sux2g069Q&index�feature�pp_video

4. Astronaut Training Status

Luca Parmitano, KF5KDP has been scheduled for a preflight session on October 17. He is slated to fly with the Expedition 36 crew in May 2013.

[ANS thanks Carol, KB3LKI, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

Primary and secondary school students are eligible for membership at one-half the standard yearly rate. Post-secondary school students enrolled in at least half time status shall be eligible for the student rate for a maximum of 6 post-secondary years in this status. Contact Martha at the AMSAT Office for additional student membership information.

73,
This week's ANS Editor,
Lee McLamb, KU4OS
ku4os at amsat dot org

```
From 5878823828845826488
X-Google-Thread: fcc6e,40fc788d7e06631d,start
X-Google-NewGroupId: yes
X-Google-Thread: 108122,40fc788d7e06631d,start
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gid4baf9708d4,gidd7f5508063,gida3e752f117,gid8f86f75953,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Received: by 10.66.75.164 with SMTP id d4mr2594282paw.10.1350280804945;
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MIME-Version: 1.0
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transit3.readnews.com!panix!panix2.panix.com!not-for-mail
From: rram@panix.com (rec.radio.amateur.moderated Admin)
Newsgroups:
rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.info
Subject: Crossposting Permitted to rec.radio.amateur.moderated
Supersedes: <radio/ham-radio/moderated/crossposting-1-1349071201@panix.com>
Followup-To: poster
Date: 15 Oct 2012 02:00:03 -0400
Organization: rec.radio.amateur.moderated Moderation Team
Lines: 47
Approved: RRI Admin <rec-radio-info-request@panix.com>
Distribution: world
Expires: 02 Nov 2012 02:00:01 -0000
Message-ID: <radio/ham-radio/moderated/crossposting-1-1350280801@panix.com>
Reply-To: rec-radio-amateur-moderated-request@panix.com
(rec.radio.amateur.moderated Admin)
NNTP-Posting-Host: panix2.panix.com
X-Trace: reader1.panix.com 1350280803 1038 166.84.1.2 (15 Oct 2012 06:00:03 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Mon, 15 Oct 2012 06:00:03 +0000 (UTC)
Summary: Short reminder for unmoderated newsgroups that crossposting is permitted
Keywords: FAQ, ham, amateur, radio, moderated, unmoderated, crossposting, permitted

Posted-By: auto-faq 3.3.2 beta (PGPMoose V2.0, Perl 5.005)
Archive-name: radio/ham-radio/moderated/crossposting
Revision: 1.2 2011/11/02 04:08:53
Posting-Frequency: posted twice monthly
URL: http://www.panix.com/~rram/usenet/rram/index.html

Changes followed by "|".

After a 30-day public discussion and feedback period to gauge reader opinions in March of 2009:

http://groups.google.com/group/rec.radio.amateur.moderated/browse_thread/thread/d7d337db35f23326

the rec.radio.amateur.moderated Moderation Team had decided to consider |
amending its charter, and permit limited simultaneous crossposting to
rec.radio.amateur.moderated and one other unmoderated
amateur-radio-related discussion newsgroup. After a successful trial |
period (90 days, through early July 2009), we decided to adopt this |
change permanently. |

Approved rec.radio.amateur.* newsgroups are those that are currently listed in the latest version of the "List of Big Eight Newsgroups" which is crossposted monthly to news.announce.newgroups, news.groups, and news.lists.misc.

Approved alt.radio.amateur.* and alt.ham-radio.* newsgroups are those that have been created consistent with the suggestions in "So You Want to Create an Alt Newsgroup" at:

  http://www.faqs.org/faqs/alt-creation-guide/

Approved regional hierarchy newsgroups are those that contain either "radio.amateur" or "ham-radio" in their names, including uk.radio.amateur and aus.radio.amateur.misc.

We will make every reasonable effort to keep our list of approved newsgroups up-to-date. In case we have overlooked any, and a submission is rejected in error as a result, the rejected submitter can E-mail us at our administrative contact address (in the signature at the bottom of this article, and the default Reply-To for the rejection message) requesting that it be added, and that the article be approved. We may still choose to reject articles crossposted to any alt.* newsgroup with an inappropriate name, including obscene language, embedded name-calling, or encouragement of unlawful conduct.

Please direct any comments, questions, or criticisms to rec-radio-amateur-moderated-request@panix.com.

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X-Google-NewGroupId: yes
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        Mon, 15 Oct 2012 08:30:09 -0700 (PDT)
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Path: s9ni9399pbb.0!nntp.google.com!news.glorb.com!border3.nntp.dca.giganews.com!
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transit3.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: SWPC.Webmaster@noaa.gov
Newsgroups:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.shor
twave,rec.radio.info
Subject: Weekly Highlights of Solar and Geomagnetic Activity, 08 - 14 October 2012
Followup-To:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.shor
twave
Date: Mon, 15 Oct 2012 11:30:08 EDT
Organization: NOAA Space Weather Prediction Center
Lines: 85
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <20121015153002.58B1D33C99@panix2.panix.com>
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NNTP-Posting-Date: Mon, 15 Oct 2012 15:30:08 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to            rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
```

```
:Product: Weekly Highlights and Forecasts
:Issued: 2012 Oct 15 1356 UTC
# Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center
# Product description and SWPC contact on the Web
# http://www.swpc.noaa.gov/weekly.html
#
#                Weekly Highlights and Forecasts
#
```

Highlights of Solar and Geomagnetic Activity
08 - 14 October 2012

Solar activity was moderate. Three low level M-class x-ray flares occurred in the first three days of the week. At 08/1117 UTC, an M2 was observed off the east limb. This was followed by two M1 flares from the same vicinity on 09/2331 UTC and 10/0504 UTC. The remainder of the week was characterized by C-class activity, primarily from Region 1589 (N13, L=266, class/area=Dkc/280 on 12 October). This region was first numbered on 09 October as it rotated into view as a Cao/B type group. It grew to its maximum area and produced the largest C-class flare of the week, a C9/1f on 12/0820 UTC, in addition to three other C1 flares. Magnetic complexity increased as the region became an Ekc/BGD on 13 October while it&#39;s areal extent began to decrease. By the 14th, the area had diminished to 240 millionths and the region was classified as an Eac/BG. The week ended with five regions on the visible solar disk with 1589 remaining the largest among them. Region 1591 (N07, L=230, class/area Dsi/220 on 14 October) was numbered on the 12th. By the 14th, it had become the most productive, responsible for five of the six C-class events that day, the largest of which was a C3 at 14/2159 UTC. There were no Earth-directed CMEs during the period.

No proton events were observed at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit was at low levels on 08 October, then reached high levels every day for the remainder of the week.

Geomagnetic field activity reached major storm levels on the 8th and 9th of October with the arrival of an Earth-directed CME that occured on 05 October. An interplanetary shock was observed at the ACE spacecraft at 08/0445 UTC. A sudden impulse of 21 nT at the Boulder magnetometer followed at 08/0515 UTC. By 08/0556 UTC the Kp index had reached active levels. Minor then major storm levels were subsequently observed at 08/0718 UTC and 08/0834 UTC respectively. The major storm conditions persisted through 08/1200 UTC, after which conditions returned to mostly active levels. Major storms were again observed during the first two synoptic periods on 09 October, followed by a minor storm period and an active period. Late on the 9th, a coronal hole high speed stream became geoeffective bringing geomagnetic activity to minor storm level for the final period of the day. Solar wind speed at the ACE spacecraft rose from about 380 km/s to near 560 km/s during the latter half of the day. The geomagnetic field activity then declined and, with the exception of one active period on the 12th, remained at quiet to unsettled levels. By the 13th, another coronal hole high speed stream became geoeffective. It was preceded by a corotating interaction region and a solar sector boundary change. This led to active conditions by 13/0450 UTC and minor storm conditons by 13/0819 UTC. Minor storm levels persisted until 13/2100 UTC before briefly decreasing to unsettled levels for the final period of the 13th. The 14th began with minor storm conditions, after which activity ranged from quiet to active levels.

Forecast of Solar and Geomagnetic Activity
15 October - 10 November 2012

Solar activity is expected to be at low levels with a slight chance for moderate activity through 21 October when Region 1589 rotates around the west limb. Generally low levels of activity are then expected to persist through 03 November, after which there is a slight chance for moderate activity as old Region 1589 returns.

No proton events are expected at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to be at high levels from 13 October through 18 October and again from 05-10 November. Recurrent coronal hole high speed streams are responsible for both periods of high flux.

Geomagnetic field activity is expected to be at quiet levels for the majority of the period. The two exceptions are 15-19 October and 08-10 November when recurrent coronal hole high speed streams are expected to bring active levels with a slight chance for minor storm levels.

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X-Google-NewGroupId: yes
```

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X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,gida4a23d5f63,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Received: by 10.66.72.134 with SMTP id d6mr5452311pav.20.1350612417576;
        Thu, 18 Oct 2012 19:06:57 -0700 (PDT)
Path: 6ni5489pbd.1!nntp.google.com!news.glorb.com!news-out.readnews.com!
transit4.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-289 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Thu, 18 Oct 2012 22:06:56 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 2376
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <006701cdad9d$ad2164d0$07642e70$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
X-Trace: reader1.panix.com 1350612416 26222 166.84.1.6 (19 Oct 2012 02:06:56 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Fri, 19 Oct 2012 02:06:56 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
Content-Language: en-us
```

This report is organized into three (3) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites

SB SAT @ AMSAT W8ISS $WSR-289.S1
WSR 289 Part 1 10/15/2012

AMSAT NEWS SERVICE BULLETIN 289.S1
FROM AMSAT HQ SILVER SPRING, MD, October 15, 2012
TO ALL RADIO AMATEURS
BID: $WSR-289.S1

PW-Sat

Catalog Number: 38083 (?)
Launch Date: February 13, 2012 1000z
Launch Site: Kourou, French Guiana

Status: On Orbit

Uplink: 435.020 MHz FM
Downlink: 145.900 MHz DSB

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=132
[10012012]
=====
DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational
Current Mode: Science Mode - Beacon ONLY

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink: 435.530 to 435.570 MHz

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=68
[02092011]
=====
VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05, 2005 0444z
Launch site: Satish Dhawan Space Centre, India

Status: Operational
Current Mode: U/v - Dutch Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW

Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.9360 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=30

To know what transponder is switched on please listen for the beacon that is active. Each transponder has a different beacon.
[03232012]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002 1700z
Launch site: Baikonur, Kazakhstan

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz. The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10 minute timer.
[02092011]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Operational

Current Mode: V/u (Mode JA)

Voice/CW (Mode JA)
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage:
http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's
CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/
fo29cwts.htm
[01122012]
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993 0140z
Launch site: Kourou, French Guiana

Status: Software Reload

Current Mode: V/u

Uplink: 145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[10152012]
=====

AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974
Launch site: Vandenberg AFB, California, USA

Status: Operational

Current Mode: Alternating between Mode A and B every 24 hours

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz CW
145.972 MHz CW
435.100 MHz CW
2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php
[04242012]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998 0640z (ZARYA module)
Launch sites: Baikonur, Kazakhstan
Kourou, French Guiana
Uchinoura Space Center, Japan
Kennedy Space Center, Titusville, Florida, USA

Status: Operational

Current Active Modes: FM Repeater - OFF
Voice - V/v
BBS - OFF
2m APRS - ON
2m Digi - ON
70cm APRS - ?
70cm Digi - ?
SSTV - OFF

Expedition 33 Crew (July 2012 - November 2012):

Commander:	Sunita Williams	KD5PLB
Flight Engineer:	Yuri Malenchenko	RK3DUP
Flight Engineer:	Akihiko Hoshide	KE5DNI

Available Modes and Frequencies:
Digital/APRS:
Worldwide 2m packet uplink: 145.825 MHz FM 1k2
Worldwide 2m packet downlink: 145.825 Mhz FM 1k2

Worldwide 70cm packet uplink: 437.550 Mhz FM 1k2
Worldwide 70cm packet downlink: 437.550 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
                                437.800 MHz FM
                                145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
                                437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
                                RZ3DZR
United States: NA1SS
2m Packet Mailbox: RS0ISS-11
2m Digipeater alias: ARISS
70cm Packet Mailbox: RS0ISS-1
70cm Digipeater callsign: RS0ISS
70cm Digipeater alias: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[10012012]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-289.S2
WSR 289 Part 2 10/15/2012

AMSAT NEWS SERVICE BULLETIN 289.S2
FROM AMSAT HQ SILVER SPRING, MD, October 15, 2012
TO ALL RADIO AMATEURS
BID: $WSR-289.S2

Fitsat-1
Catalog number: 38853
Launch Date: October 04, 2012
Launch site: Kibo Japanese Experiment Module, International Space Station

Status:

Uplink:
Downlink(s): 437.445MHz 1k2 AFSK
            5840.00 MHz 115k2 data
            LED CW (200w pulses)

Beacon(s): 437.250 MHz CW

Callsign: NIWAKA

URL: http://carpcomm.com/satellite/fitsat1
[10152012]
=====
TechEdSat 38854
Catalog number:
Launch date: October 04, 2012
Launch site: Kibo Japanese Experiment Module, International Space Station

Uplink(s):
Downlink(s): 437.465 1k2 AFSK

Beacon(s):

Callsign:

URL:http://www.techedsat.com/
[10152012]
=====
We Wish
Catalog number: 38856
Launch date: October 04,2012
Launch Site: Kibo Japanese Experiment Module, International Space Station

Uplink(s):
Downlink(s): 437.505MHz 1k2 AFSK
             437.505MHz SSTV

Beacon(s): 437.505MHz CW

Callsign: JQ1ZIJ

URL:
[10152012]

```
=====
F-1
Catalog number: 38855
Launch Date: October 04, 2012
Launch Site: Kibo Japanese Experiment Module, International Space
Station

Uplink(s):
Downlink(s): 145.980MHz 1k2 AFSK
             437.485MHz FM moduled CW

Baecon(s):

Callsign: XV1VN

URL: http://fspace.edu.vn/
[10152012]
=====
Aeneas
Catalog Number: 38760
Launch Date: September 13, 2012 2139z
Launch Site: Wallops Island, Virginia, USA

Status: On Orbit

Uplink: WiFi 2425MHz
Downlink:
WiFi: 2425MHz
Spread Spectrum: Somewhere in the 70cm band

Beacon: 437.600MHz 1k2 ax25 every 10 seconds

Callsign:

URL:
[10012012]
=====
Cinema
Catalog Number: 36764
Launch Date: September 13, 2012 2139z
Launch Site: Wallops Island, Virginia, USA

Status: On Orbit

Uplink:
Downlink:
Engineering:    2400 - 2450MHz
Telemetery:     2200 - 2300MHz

Beacon:

Callsign:
```

```
URL:
[10012012]
=====
CSSWE (Colorado Student Space Weather Experiment)
Catalog Number: 38761
Launch Date: September 12, 2012 2139z
Launch Site: Wallops Island, Virginia, USA

Status: On Orbit

Uplink:
Downlink:       437.345MHz 9k6 with ax.25

Beacon:

Callsign:

URL:
[10012012]
=====
CP5 (Polysat)
Catalog Number: 38763
Launch Date: September 12, 2012 2139z
Launch Site: Wallops Island, Virginia, USA

Status: On Orbit

Uplink:
Downlink:       437.405MHz AFSK on LSB ax.25 over NRZI at 1k2 baud,
every 2
                minutes, begins 3.5 hours after first turn-on

Beacon:

Callsign:

URL:
[10012012]
=====
CXBN (Cosmic X-Ray Background Nanosatellite)
Catalog Number: 38762
Launch Date: September 12, 2012 2139z
Launch Site: Wallops Island, Virginia, USA

Status: On Orbit

Uplink:
Downlink:       437.525MHz GFSK ax.25

Beacon:

Callsign:
```

```
URL:
[10012012]
=====
Proiteres
Catalog Number: 38756
Launch Date: September 09, 2012 2139z
Launch Site: Satish Dhawan Space Centre, India

Status: On Orbit

Uplink:
Downlink: 437.485MHz FM/AFSK

Beacon:

Callsign: JL3YZK

URL:
[10012012]
=====
RS-40 MiR (Yubileiny-2)
Catalog Number: 38735
Launch Date: July 28, 2012

Status: On Orbit

Uplink:
Downlink(s):    435.265 MHz
                435.365 MHz

Beacon:

Callsign:

URL:
[08272012]
=====
HORYU-II
Catalog number: 38340
Launch Date: May 17, 2012 1639z

Status: On Orbit

Uplink:   145.??? MHz
Downlink: 437.375 MHz CW/AX25/FSK

Beacon: 437.375 MHz CW

Callsign: JG6YBW

URL:

IARU Coordination page:
```

```
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=216
[10012012]
=====
XaTcobeo
Catalog Number: 38082
Launch Date: Febrauary 13, 2012 1000z
Launch Site: Kourou, French Guiana

Status: Operational

Uplink:
Downlink: 437.365 MHz FFSK with AX.25

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=135
[100162012]
=====
UniCubeSat
Catalog Number: 38085(?)
Launch Date: Febrauary 13, 2012 1000z
Launch Site: Kourou, French Guiana

Status: Operational

Uplink:
Downlink: 437.305 MHz 9k6 bps GMSK

Beacon:

Callsign:

URL:
http://www.gaussteam.com/index.php?option=com_content&view=article&id=96:uni
cu
besat&catid=36:unicubesat&Itemid=183

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=133
[10012012]
=====
Robusta
Catalog Number: 38083(?)
Launch Date: Febrauary 13, 2012 1000z
Launch Site: Kourou, French Guiana

Status: On Orbit
```

Uplink:
Downlink: 437.325 MHz 1k2 FM telemetry (data every 3 min, 20 sec. burst)

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=122
[10012012]
=====
MO-72 MaSat-1
Catalog Number: 38081
Launch Date: Febrauary 13, 2012 1000z
Launch Site: Kourou, French Guiana

Status: Operational

```
Uplink:
Downlink: 437.345 MHz GFSK 625/1250 bps
          437.345 MHz CW
```

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=126
[10012012]
=====
Goliat
Catalog Number: 38084(?)
Launch Date: Febrauary 13, 2012 1000z
Launch Site: Kourou, French Guiana

Status: Operational

Uplink:
Downlink: 437.485 MHz 1k2 AFSK

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=98
[10012012]

```
=====
E-St@r
Catalog Number: 38079
Launch Date: Febrauary 13, 2012 1000z
Launch Site: Kourou, French Guiana

Status: On Orbit

Uplink:
Downlink: 437.445 MHz 1k2 bps AFSK

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=130
[10012012]
=====
ALMASat-1
Catalog Number: 38078
Launch Date: Febrauary 13, 2012 1000z
Launch Site: Kourou, French Guiana

Status: On Orbit

Uplink:
Downlink:  437.465 MHz 1k2 bps FSK
          2407.850 MHz

Beacon:

Callsign:

URL:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=39
[10012012]
=====
RS-39 Chibis-M
Catalog Number: 38051
Launch Date: October 30, 2011 10:11:00 UTC
Launch site: Tyuratam (Baikonur Cosmodrome), Kazakhstan

Status: Operational

Uplink:
Downlink:

Beacon: 435.315 MHz CW
```

```
        435.215 MHz CW

Callsign:

URL:

IARU coordination status page:
[07302012]
=====
JUGNU
Catalog Number: 37839
Launch Date: October 12, 2011 05:30:00 UTC
Launch site: Satish Dhawan Space Centre, India

Status: On Orbit

Uplink:   145.??? MHz 1k2 (mode?)
Downlink: 437.505 MHz 9k6 (mode?)

Beacon: 437.275 MHz 15 wpm (?) CW

Callsign:

URL: http://www.iitk.ac.in/me/jugnu/index.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=160
[07092012]
=====
SRMSAT
Catalog Number: 37841
Launch Date: October 12, 2011 05:30:00 UTC
Launch site: Satish Dhawan Space Centre, India

Status: On Orbit

Uplink:   145.900 MHz 1k  AX.25 (speed?)
Downlink: 437.500 MHz 2k4 AX.25

Beacon: 437.425 MHz 12 wpm CW

Callsign:

URL: http://srmsat.in/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=181
[07092012]
=====
HRBE (E1P Explorer 1 [Prime] CubeSat (E1P-U2))
Catalog Number: 37855
Launch Date: October 28, 2011
Launch site: Vandenberg Air Force Base, California, USA
```

Status: On Orbit

Uplink: 437.305 MHz (???)
Downlink: 437.505 MHz AX.25 (SSB?)

Beacon:

Callsign:

URL: http://ssel.montana.edu/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=116
[01122012]
=====
M-Cubed
Catalog Number: 37855
Launch Date: October 28, 2011
Launch site: Vandenberg Air Force Base, California, USA

Status: On Orbit

Uplink:
Downlink: 437.485 MHz AX.25

Beacon:

Callsign:

URL: http://umcubed.org/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=215
[01122012]
=====
RAX-2
Catalog Number: 37853
Launch Date: October 28, 2011
Launch site: Vandenberg Air Force Base, California, USA

Status: Operational

Uplink:
Downlink: 437.345MHz 9k6 GMSK

Beacon:

Callsign:

URL: http://rax.engin.umich.edu//

IARU coordination status page:

http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=221
[03232012]
=====
AO-71 AubieSat-1
Catalog Number: 37854
Launch Date: October 28, 2011
Launch site: Vandenberg Air Force Base, California, USA

Status: On Orbit

Uplink:
Downlink: 437.475 MHz 1k2 AX.25

Beacon: 437.475 MHz CW

Callsign: KI4NQO

URL: http://www.space.auburn.edu/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=148
[12262011]
=====
O/OREOS
Catalog Number: 37224
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: On Orbit

Uplink:
Downlink: 437.035 MHZ AX.25

Beacon:

Callsign:

URL: http://www.ooreos.org/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=146
[02092011]
=====
Rax-1 Radio Aurora Explorer
Catalog Number: 37223
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: On Orbit

Uplink:
Downlink: 437.505 MHz 9k6 GMSK

Beacon:

Callsign: RAX-1

URL: http://rax.engin.umich.edu/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=165
[02092011]
=====
FO-69 Fastrac-1 Sara Lily
Catalog Number: 37227
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: Operational

Uplink 1: 145.980 MHz 1k2 baud
Uplink 2: 145.825 MHz 1k2 baud
Downlink: 437.345 MHz 1k2 and 9k6 baud

Beacon: 437.435 MHz 1k2 AX.25

Callsign: Fast1

URL: http://fastrac.ae.utexas.edu/index.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=83
[07052011]
=====
FO-70 Fastrac-2 Emma
Catalog Number: 37380
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: Operational

Uplink 1: 435.025 MHz 1k2 baud
Uplink 2: 437.435 MHz 9k6 baud
Downlink: 145.825 MHz 1k2 and 9k6 baud

Beacon: 145.825 MHz 1k2 AX.25

Callsign: Fast2

URL: http://fastrac.ae.utexas.edu/index.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=84
[12162011]
=====
StudSat

```
Catalog Number: 36796
Launch Date: July 12, 2010 0352z
Launch site: Satish Dhawan Space Centre, India

Status: On Orbit

Uplink:   437.505MHz, 9600bps FSK
Downlink: 437.505MHz, 9600bps FSK
Beacon  : 437.505MHz,   20bps ASK

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=164
[02092011]
=====
TIsat-1
Catalog Number: 36799
Launch Date: July 12, 2010 0352z
Launch site: Satish Dhawan Space Centre, India

Status: On orbit

Callsign: HB9DE

Uplink:   145.980MHz FM, AFSK
Downlink: 437.305MHz FM, AFSK
Beacon:   437.305MHz CW

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=118
[02092011]
=====
SwissCube
Catalog Number: 35932
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Callsign: HB9EG

Beacon(100mw): 437.5050MHz CW
Beacon(1w):    437.5050MHz FSK 1k2bps

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=109
[02092011]
=====
UWE-2
Catalog Number: 35934
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: In Orbit
```

```
Beacon(500mw): 437.3850 MHz AFSK 1k2bps
               437.3850 MHz FSK 9k6bps

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=110
[02092011]
=====
ITUpsAT1
Catalog Number: 35935
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Beacon(100mw): 437.325MHz CW
Beacon(1w): 437.325MHz 19k2bps

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=113
[02092011]
=====
BEESAT
Catalog Number: 35933
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Callsign: DP0BEE

Beacon(100mw): 436.000MHz CW
Beacon(500mw): 436.000MHz GMSK 4k8bps
Beacon(500mw): 436.000MHz GMSK 9k6bp
[02092011]
=====
CP-6
Catalog Number: 35003
Launch Date: May 19, 2009 2355z
Launch site: Wallops Island, Virginia, USA

Status: Operational

Downlink: 437.365 MHz 1k2 AFSK

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=121
[07302012]
=====
HAWKSAT 1
Catalog number: 35004
Launch Date: May 19, 2009 2355z
Launch site: Wallops Island, Virginia, USA
```

Status: operational

Downlink: 437.345 MHz ?

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=105
[07302012]
=====
Pharmasat
Catalog Number: 35002
Launch Date: May 19, 2009 2355z
Launch site: Wallops Island, Virginia, USA

Status: Operational

Downlink: 437.465 MHz 1k2 AFSK

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=94
[02092011]
=====
ANUSAT
Catalog Number: 34808
Launch Date: April 20, 2009 0115z
Launch Site: Satish Dhawan Space Centre, India

Status: ?

Downlink: 435.000 MHz
Uplink: 145.800 MHz

Telemetry: 137.400 MHz
[02092011]
=====
SOHLA-1 (ASTRO TECH.)
Catalog Number: 33496
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational

Proposed Frequencies and Modes:
Downlink: 437.505 MHz AFSK/CW
Beacon: 437.505 MHz AFSK/CW

Callsign:

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=101
[02092011]
=====
KAGAYAKI (Solan Co.)

```
Catalog Number: 33495
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: In Orbit

Downlink: 437.375 MHZ    FSK9k6/CW
Beacon:   437.375 MHz    FSK9k6/CW

IARU coordination status page:

AMSAT-NA webpage:

[02092011]
=====
STARS (Kagawa Univ.) (Twin Satellites)
Catalog Number: 33498
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational ?

Downlinks: 437.485 MHz FM/CW
           437.465 MHz FM/CW
Beacons:   437.305 MHz FM/CW
           437.275 MHz FM/CW

Callsigns: JR5YBN
           JR5YBO

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=99

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=121&retURL
=/satellites/status.php
[02092011]
=====
KKS-1 (Tokyo MCIT)
Catalog Number: 33499
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational

Downlink:  437.455 MHz AFSK/CW
Beacon:    437.385 MHz AFSK/CW

Callsign: JQ1YYY

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=107
```

AMSAT-NA webapge:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=120&retURL=/satellites/status.php
[20092011]
=====
PRISM (Tokyo Univ.)
Catalog Number: 33493
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational ?

Downlink: 437.425 MHz AFSK/GMSK/CW
Beacon: 437.250 MHz AFSK/GMSK/CW

Callsign: JQ1YCX

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=97

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=119&retURL=/satellites/status.php
[02092011]
=====
RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number: 32953
Launch Date: May 23, 2008 1520z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational

Curent Modes: Telemetry
Audio
Images

Downlinks: 435.315 MHz
435.215 MHz

AMSAT-NA website:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=115&retURL=/satellites/status.php

Official website:
http://www.npopm.com/?cid=leoca&caid=43
[02092011]
=====
CanX-2
Catalog number: 32790
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational in range of ground station only

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web
page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=46
[02092011]
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Downlink: 437.425 MHz 1k2 baud packet

For the latest project status update please visit the AAUSAT-II web
page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=60
[02092011]
=====
CO-65 CUTE-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Downlink: 437.475 MHz 9k6 Packet
Uplink: 1267.600 Mhz

Telemetry Beacon:
Downlink: 437.2750 MHz CW

For the latest project status update please visit the Cute-1.7+APD II
web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=78

Command Station blog website:
http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=112&retURL
=/satellites/status.php
[03232012]

```
=====
Compass-1
Catalog number: 32787
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Current Mode: dependant on last received command

Uplink:   145.980 MHz FM
Downlink: 437.275 Mhz CW
          437.405 MHz Packet

For the latest project status update please visit the Compass 1 web
page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=52

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=114&retURL
=/satellites/status.php
[06162011]
=====
CO-66 Seeds II
Catalog number: 32791
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Downlink: 437.485 MHz

Callsign: JQ1YGU

For the latest project status update please visit the Seeds 2 web
page: http://cubesat.aero.cst.nihon-u.ac.jp/english/seeds_2_e.html

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=36

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=113&retURL
=/satellites/status.php
[073092011]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007 0702z
Launch site: Baikonur, Kazakhstan

Status: Intermittent
```

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=94&retURL=
/satellites/status.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=72
[02092011]
=====
CP3
Catalog Number: 31129
Launch Date: April 17,2007 0702z
Launch site: Baikonur, Kazakhstan

Status: Operational

Current Mode: /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=74
[02092011]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005 0652z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon: 437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/xivpicte.htm

IARU coordination status page:

```
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=37
[02092011]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: ?????

Current Mode: /u

Beacon:     436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=96&retURL
=/satellites/status.php

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[02092011]
=====
QuakeSat
Catalog Number: 27845
Launch Date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Telemetry only

Current Mode: 9600 baud data packet

Mode U packet
Downlink: 436.675 MHz 9k6 BPS

Quakesat webpage:
http://www.quakefinder.com/services/quakesat-ssite/
[02252011]
=====
CO-55 Cute-1.7+APD II
Catalog Number: 27844
Launch date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational

Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS
```

```
Mode U TLM Beacon
Downlink: 436.8375 MHz CW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=69&retURL
=/satellites/status.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=78
[02092011]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001 0240z
Launch site: Kodiak Launch Complex, Alaska, USA

Status: Telemetry only

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink:        144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[02092011]
=====
RS-22 RADIO SPORT 22 (MOZHAYETS 4)
Catalog number: 27939
Launch Date: September 27, 2003 0612z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational - 70cm cw only

Current Mode:  /u

CW Beacon - 435.352 MHz
            145.818 MHz

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=76&retURL
=/satellites/status.php
[02092011]
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990
Launch site: Kourou, French Guiana

Status: CW Beacon only
```

```
Uplinks:          145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink:      437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[02092011]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984
Launch site: Vandenburg AFB, California, USA

Status: Operational ?

Current Mode:  /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon:          435.025 MHz
Mode-S Beacon:     2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[07052011]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998 0640z (ZARYA module)
Launch sites: Baikonur, Kazakhstan
              Kourou, French Guiana
              Uchinoura Space Center, Japan
              Kennedy Space Center, Titusville, Florida, USA

Status: Operational

Current Active Modes: FM Repeater - OFF
                      Voice -       V/v
                      BBS -         U/u
                      2m APRS -     ON
                      2m Digi -     ON
                      70cm APRS -   ?
```

70cm Digi - ?
SSTV - OFF

Expedition 33 Crew (July 2012 - November 2012):

Commander:	Sunita Williams	KD5PLB
Flight Engineer:	Yuri Malenchenko	RK3DUP
Flight Engineer:	Akihiko Hoshide	KE5DNI

Available Modes and Frequencies:
Digital/APRS:
Worldwide 2m packet uplink: 145.825 MHz FM 1k2
Worldwide 2m packet downlink: 145.825 Mhz FM 1k2
Worldwide 70cm packet uplink: 437.550 Mhz FM 1k2
Worldwide 70cm packet downlink: 437.550 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
2m Packet Mailbox: RS0ISS-11
2m Digipeater alias: ARISS
70cm Packet Mailbox: RS0ISS-1
70cm Digipeater callsign: RS0ISS
70cm Digipeater alias: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines

Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[09102012]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-289.S3
WSR 289 Part 3 10/15/2012

AMSAT NEWS SERVICE BULLETIN 289.S3
FROM AMSAT HQ SILVER SPRING, MD, October 15, 2012
TO ALL RADIO AMATEURS
BID: $WSR-289.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

NANOSAIL-D
Catalog Number: 37361
Ejection Date: January 17, 2011

Status: Non - Operational

Downlink: 437.270 MHz AX.25

URL: http://nanosaild.engr.scu.edu/dashboard.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=115
[07302012]
=====
HO-68 HOPE-1 (CAS-1) (XW-1)
Catalog Number: 36122
Launch Date: December 15, 2009 0231z
Launch site: Taiyuan Space Center, PRC

Status: Telemetry only

Callsign:
Broadcast: BJ1SA-11
BBS: BJ1SA-12

Uplinks: 145.8250 MHz FM, PL 67.0 Hz.
           145.9250 - 145.9750 MHz SSB/CW
           145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
           435.7650 - 435.7150 MHz SSB/CW
           435.6750 MHz AFSK 1200 BPS

Beacon: 435.7900 MHz CW

Mode and Antenna Polarization:
V: LHCP 2.0dBi max
U: RHCP 3.0dBi max

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=108

For more information about XW-1 (CAS-1):
http://
[04302012]
=====
SO-67 SumbandilaSat
Catalog Number: 35870
Launch Date: September 17, 2009 1555z
Launch site: Baikonur, Kazakhstan

Status: Non - Operational

Callsign: ZS0SUM

Uplink: 145.875MHz FM tone 233.6 Hz
Downlink: 435.345MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

For more information about SO-67:
http://www.amsatsa.org.za/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=88
[01272012]
=====
CP4
Catalog Number: 31132
Launch Date: April 17, 2007

Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon: 437.325 MHz CW

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=79
[09062010]
=====
LIBERTAD-1
Catalog Number: 31128
Launch Date: April 17, 2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

```
Callsign: 5K3L

Uplink:   145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=76
[09062010]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: Non-Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder:  145.825 Mhz FM

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=51
[09062010]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency:  437.305
                             2407.250

Official Website: http://www.ncube.no

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=24
[09062010]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink:         437.250 MHz FM 67Hz CTCSS
Voice Downlink:      2401.835 MHz FM
Packet Up/Downlink:   437.250 MHz 9k6 packet
Packet Downlink      2401.835 MHz 38k4 packet
```

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=54
[09062010]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non-Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=53
[09062010]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004 0745z
Launch site: Baikonur, Kazakhstan

Status: Non - Operational

Current Mode(s):
Voice repeater: V/u
Uplink: 145.880 MHz FM
Downlink: 435.150 MHz FM

Telemetry: Recovery efforts
Downlink: 435.150MHz 9k6

Analog voice downlink:	435.300 MHz FM
	435.150 MHz FM
	2401.200 Mhz FM
Analog voice uplink:	145.860 MHZ FM
	145.880 MHz USB
	145.880 MHz FM
	145.920 MHz FM
	145.920 MHz FM - 67 Hz PL tone burst
	1268.705 MHz FM
Digital Downlinks:	435.150 MHz FM 38k4 PBP, 1 watt output
	435.150 MHz FM 9k6 Pacsat Broadcast Protocol
	2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:	145.860 MHz FM 9k6 Pacsat Broadcast Protocol
	1268.703 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon:	435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear

U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=19
[12062011]
=====
CANX-1
Catalog Number: 27847
Launch Date: June 30, 2003

Status: Non-Operational

Downlink: 437.8800 MHz AFSK 1k2bps
[06052009]
=====
DTUSAT
Catalog Number: 27842
Launch Date: June 30, 2003

Status: Non-Operational

Current Mode: 2k4 AFSK Packet last reported

Downlink: 437.475MHz

Officail webpage: http://dtusat1.dtusat.dtu.dk/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=101&retURL
=satellites/all_oscars.php
[02212009]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)

Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de

[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Telemetry only

Uplinks: 145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[03302009]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]

```
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink:   145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
V-band:   145.840 -  145.990 MHz CW/LSB
U-band:   435.550 -  435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks
---------
S2-band:  2401.225 -  2401.475 MHz CW/USB
K-band:  24048.010 - 24048.060 MHz CW/USB
Beacon:   2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)
----------------------------
BEACON   General Beacon(GB)  Middle Beacon(MB)  Engineering Beacon(EB)
2 m                   none        145.898 MHz                    none
70cm           435.438 MHz        435.588 MHz             435.838 MHz
13cm(1)       2400.188 MHz       2400.338 MHz            2400.588 MHz
13cm(2)       2401.173 MHz       2401.323 MHz            2401.573 MHz
3cm          10450.975 MHz      10451.125 MHz           10451.375 MHz
1.5cm        24047.885 MHz      24048.035 MHz           24048.285 MHz
[07162007]
=====
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational
```

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: 25636
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509

Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Non-Operational

Current Modes:
Telemetry : /u

```
Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM
```

```
Broadcast Callsign: 4XTECH-11
BBS Callsign:       4XTECH-12
```

More information of GO-32 can be found at:
http://asri.technion.ac.il/techsat/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=14&retURL
=/satellites/status.php
[07172010]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

```
Uplink:   145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK
```

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12

```
[05012006]
=====
MO-30 UNAMSAT-2
Catalog Number: 24305
Launch Date: September 5, 1996

Status: Non-operational

Downlink:       435.1380 MHz AFSK 1200 BPS
Downlink:       435.2060 MHz AFSK 1200 BPS
Uplink:         145.8150 MHz AFSK 1200 BPS
Uplink:         145.8350 MHz AFSK 1200 BPS
Uplink:         145.8550 MHz AFSK 1200 BPS
Uplink:         145.8750 MHz AFSK 1200 BPS
[06042009]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Non-operational

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign:       POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012009]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
```

```
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
AO-24 ARSENE
Catalog Number: 22654
Launch Date: May 13, 1993

Status: Non-operational

Uplink:    435.0625 MHz FM 1k2bps AFSK
           435.1125 MHz FM 1k2bps AFSK
           435.1375 MHz FM 1k2bps AFSK
Downlink:  145.9750 MHz FM 1k2bps AFSK
          2446.5025 MHz FM 1k2bps AFSK

Beacon:    2446.4700 MHz CW

Broadcast callsign:
BBS:
[12162009]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
```

```
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990
```

Status: Non-operational.

Downlink: 145.825 MHz FM 1200 Baud AFSK
Beacon: 2401.220 MHz
[05012006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: non-operational

Current Mode: V/u

Uplink: 145.900 MHz FM 1200-baud Manchester FSK (reserved)
                145.920 MHz FM VOICE
                145.940 MHz FM 1200-baud Manchester FSK (reserved)
                145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink: 437.026 MHz USB VOICE
                (1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC 437.050 MHz RHCP
   PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[07242009]
=====
UO-15 UoSAT-4
Catalog Number: 20438
Launch Date: January 22, 1990

Status: Non-operational

Uplink: ?
Downlink: 435.1250MHz (?)
          435.1200MHz (?)
[06042009]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink: 145.975 MHz FM

```
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon:   145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
```

```
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink  29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
Beacons:   29.450 MHz
          435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon 1:  29.352 MHz (intermittent)
Beacon 2:  29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
```

=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB

Beacon: 145.860 MHz

Robot: 145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)

* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at}
amsat.org
NNNN
/EX

From -3778622020930423420
X-Google-Thread: 10e8ad,88a3dd5c7b3cb079,start
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Received: by 10.66.81.200 with SMTP id c8mr1697099pay.1.1350783030950;
        Sat, 20 Oct 2012 18:30:30 -0700 (PDT)
Path: s9ni27603pbb.0!nntp.google.com!news.glorb.com!news.alt.net!news-out.readnews.com!transit4.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-295 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sat, 20 Oct 2012 21:30:30 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 599
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <002001cdaf2a$f3bdc580$db395080$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0

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X-Trace: reader1.panix.com 1350783030 8168 166.84.1.6 (21 Oct 2012 01:30:30 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 21 Oct 2012 01:30:30 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
Content-Language: en-us
```

AMSAT NEWS SERVICE
ANS-295

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor at amsat.org

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SB SAT @ AMSAT $ANS-295.01
ANS-295 AMSAT News Service Weekly Bulletins

AMSAT News Service Bulletin 295.01
>From AMSAT HQ SILVER SPRING, MD.
October 21, 2012

To All RADIO AMATEURS
BID: $ANS-295.01

Special Symposium Visitor Hector Martinez, CO6CBF

Hector Martinez, CO6CBF will travel from Cuba to the AMSAT Symposium in Orlando next week. AMSAT extended an invitation for Hector to attend and to make a presentation. Thanks to the work done by Patrick Stoddard, WD9EWK/VA7EWK, Hector has been able to obtain a visa to come to the United States for the Symposium.

Once the invitation was extended, Hector had to approach both governments and file applications to get a Cuban passport and travel permit and a US visa. All expenses for his trip must be guaranteed by someone outside Cuba. Patrick took on that task personally on behalf of AMSAT, even signing legally-binding documents for the Cuban government to that end. Patrick has covered expenses out of his personal funds since no AMSAT funds are available. Patrick would appreciate donations to cover the expenses via his callbook address.

AMSAT looks forward to welcoming Hector, CO6CBF at the Symposium!

[ANS thanks Patrick Stoddard, WD9EWK/VA7EWK and the 2012 Symposium Committee for the above information]

2012 AMSAT Space Symposium Begins This Week in Orlando

This bulletin is a reminder that the time of the 2012 AMSAT Space Symposium is quickly approaching. The Symposium will be held on Friday, October 26th through Sunday, October 28th in Orlando, Florida at the Holiday Inn at Orlando-International Airport.

The Symposium weekend will feature:

+ Space Symposium with Amateur Satellite Presentations
+ Operating Techniques, News, & Plans from the Amateur Satellite World
+ Board of Directors Meeting open to AMSAT members
+ Meet Board Members and Officers
+ Annual General Membership Meeting
+ Annual Banquet-Keynote Speaker and Door Prizes

Symposium Registration including Proceedings

o Starting September 24, 2012:	$ 50.00
o At the Door:	$ 55.00
o Saturday Evening Banquet	$ 45.00

- Sunday Morning Area Coordinators' Breakfast $ 15.00
- Sunday Trip to the Orlando Science Museum - the preregistration for the Star Wars Exhibit has closed; however, access to the rest of the exhibits remains available. Refer to the Museum link on the Symposium Schedule page for tour details.
- Monday (Oct 29) bus trip to KSC and entrance ticket $ 100.00

See the AMSAT Web Store to complete your on-line registration:
http://store.amsat.org/catalog/index.php?cPath=27

Downloadable paper registration forms in MS-Word format and PDF format are available on the 2012 Symposium page:
http://www.amsat.org/amsat-new/symposium/2012/index.php

The hotel offers free Internet connection and free airport shuttle. When you arrive at the Orlando Airport call 407-709-5310 to request the shuttle.

The Orlando International Airport (MCO) is the closest to the Symposium and is served by most major air carriers. The hotel address is: 5750 T.G. Lee Blvd - Orlando, FL 32822. A map link is included on the hotel web page:
http://www.holidayinn.com/hotels/us/en/orlando/mcoap/hoteldetail

Dr. Samuel T. Durrance, NASA Astronaut at the Saturday Evening Banquet

The featured speaker for the AMSAT 2012 Saturday Evening Banquet on October 27 will be Dr. Samuel T. Durrance, NASA Astronaut/Payload Specialist and Professor of Physics and Space Sciences at the Florida Institute of Technology. For all the details see:
http://www.amsat.org/amsat-new/symposium/2012/BanquetSpeaker.php

2012 AMSAT Symposium Schedule

To help you plan your trip to Orlando the 2012 Symposium Committee has posted a high-level schedule of the weekend's events.

Thursday 25 October 2012

AMSAT Board of Directors Meeting	8am - 9pm

Friday 26 October 2012

AMSAT Board of Directors Meeting	8am - Noon
Trips to SkyCraft	9am - Noon
AMSAT Symposium	1pm - 5pm

Saturday 27 October 2012

Symposium	8am - 3pm
AMSAT Annual General Meeting	3:30pm
AMSAT Banquet	6:30pm - 10pm

Sunday 28 October 2012

AMSAT Area Coordinator's Breakfast 7:30am
Trip to the Orlando Science Center 9:00am

Monday 29 October 2012
Special trip to Kennedy Space Center 8am-6pm

The AMSAT Symposium Web Schedule Pages include links for details of the activities:
http://www.amsat.org/amsat-new/symposium/2012/SymposiumSchedule.php

[ANS thanks the 2012 Symposium Committee for the above information]

Symposium Speaker and Presentation List is Taking Shape

The Symposium Team is working on finalizing the presentations which are slated to begin at 1:00PM on Friday afternoon, October 26 and run through Saturday, October 27 at 3:00PM.

You will hear from AMSAT's experts on topics including:

- AMSAT Project Fox
  - Program Overview
  - Mechanical and Thermal Design
  - FoxTLM software
  - Linux software build environment for Fox
  - Fox radiation mitigation
  - The Fox Sniffer

- Overview of the ARISSat-1 Mission

- AMSAT and Education
  - CubeSat Program Space@VT
  - Recent Progress of UCF's CubeSat Program
  - High School Students Building Satellites
  - AMSAT at PACIFICON 2012

- Special Presentation by Hector Martinez CO6CBF Working Satellites with a homebrew setup, Cuban Style

- Future Missions
  - Demonstration of MAREA--the Mars-lander ARISS Robotics Exploration Activity
  - FUNcube from AMSAT-UK
  - FUNcube Dongle
  - NASA's Open Source General Mission Analysis Tool

- Advanced Technology
  - Future of CubeSat Communications: Transitioning Away from Amateur Radio Frequencies for High-Speed

- o Applying the Codec2 Low-Bitrate Voice Codec to Amateur Satellite Operations

[ANS thanks the 2012 Symposium Committee for the above information]

Successful ARISS Contacts With Youth

Luxembourg

Students from St. George's International School in Luxembourg participated in a Q&A session with Sunita Williams, KD5PLB on Monday, October 8 via an Amateur Radio on the International Space Station (ARISS) contact.

The radio connection was handled by telebridge station W6SRJ in California. Approximately 700 students, teachers and guests were in attendance - 200 in the gym watched live and another 500 in classrooms watched a "live stream" of the contact.

The audience included several VIPs: the UK Ambassador Alice Walpole, the Head Teacher Heather Duxbury and the Deputy Head Teachers (Kath Griffiths and Mark Stenton) of both primary and secondary sections. Guest speakers gave talks on satellites as well as the NASA "Moon Buggie" project. The contact was one of the educational activities the students from both sections took part in to learn about electricity, astronomy and physics.

Italy

On Tuesday, October 9, Liceo Statale Adelaide Cairoli in Pavia, Italy took part in its Amateur Radio on the International Space Station (ARISS) contact via station W6SRJ in California. On-orbit astronaut Sunita Williams, KD5PLB, was able to answer 18 questions during the contact as nearly 1100 students gathered for the event.

The school uses amateur radio as a teaching tool and its radio club provides students the opportunity to speak with other amateurs all over the world using different languages. This ARISS contact was used to focus on technology, science and foreign languages. The video may be viewed here: http://livestre.am/4aJ08

Successful PACIFICON ISS contact

An Amateur Radio on the International Space Station (ARISS) contact was held with youth attending the American Radio Relay League (ARRL) Pacific Division annual convention, PACIFICON in Santa Clara, California on Saturday, October 13.

Telebridge station IK1SLD in Italy provided the radio connection.

Astronaut Akihiko Hoshide, KE5DNI, on the ISS participated in the contact which was the featured event of the PACIFICON Youth Program that emphasized hands-on radio operation, electronics kit building, orbital mathematics and CubeSat satellite design, among other STEM activities.

Fellow astronaut Dr. Lee Morin gave a presentation at the event and exchanged greetings with Hoshide at the end of the ISS pass.

An audience of approximately 150 was present for the contact; 2500 attended the convention.

[ANS thanks Carol Jackson, KB3LKI for the above information]

AO-27 Recovery Work Still in Progress

AO-27 Command Station Michael Wyrick, N3UC reported on the team's to recover the satellite and return its FM repeater back to service after it stopped responding on October 5.

The next day AO-27 was restored back to running on its primary Bootloader. Control operators were able to turn on the Transmitter for a short time. The command team downloaded the memory dump between October 8-12 to try to determine the cause of the failure. This was slowed due to interference. Please, if you can't hear the bird in Analog mode, please don't transmit to it.

On October 14 the command team recovered from the AFSK modem problem which was one of the initial symptoms of the problems. They were able to upload the entire kernel. As of October 15 they finished uploading the high level code to AO-27. The TOPR schedule will be on digital for the entire pass until the command team collects enough telemetry and finishes the on-orbit checkout.

AO-27 crashed once again on October 16. The command team once again recovered to the bootloader state, recovered from another occurrence of the AFSK modem problem and once again is attempting another software upload.

ATTENTION OPERATORS: To prevent interfering with the command team's recovery efforts, if you can't hear AO-27 in Analog mode, please don't transmit to it.

The latest AO-27 news is posted on its webpage:
http://www.ao27.org/AO27/index.shtml

Mode V/U (J) FM Voice Repeater Frequencies

Uplink	145.8500 MHz	FM
Downlink	436.7950 MHz	FM

[ANS thanks AO-27 Command Station Michael Wyrick, N3UC for the above information]

JA0CAW Receives 5840.0 MHz Downlink From FITSAT-1

Tetsurou Satou, JA0CAW, successfully received the 5840.0 MHz downlink from FITSAT-1 while it orbited over Japan. FITSAT-1, was one of five CubeSats deployed from the International Space Station on October 4.

He used a 38cm dish with a down-converter to an IF of 1284 MHz, a BGA2717 LNA and the AMSAT-UK FUNCube Dongle SDR with HDSDR software.

Visit the AMSAT-UK web to view the JA0CAW posted:
http://www.uk.amsat.org/?p=11100

[ANS thanks Tetsurou Satou, JA0CAW for the above information]

CAMSAT Announces New Details of CAS-2 Amateur Satellite Mission

First announced at the Friedrichshafen Ham Radio 2012 event, the Chinese Amateur Satellite Group (CAMSAT) has made additional information available on the new CAS-2 satellite under development. The latest news has been posted by AMSAT-UK:
http://www.uk.amsat.org/?p=11108

CAMSAT is building two micro-satellites CAS-2A1 and CAS-2A2 to be combined into a binary star system for amateur radio communication and education.

There will be a radio link between two satellites when the satellites are in suitable positions in their orbits, so that the amateur radio communication coverage can be extended. Both spacecraft are 25kg 270x270x250mm and are planning to launch from Taiyuan into a sun synchronous, 1000km apogee, 99.5 degree orbit.

Missions of CAS-2A1 satellite:
+ 145 MHz CW telemetry beacon 100mW
+ 145 MHz AX.25 digital telemetry beacon 500mW
+ 145 MHz FM voice beacon 500mW
+ 435/145 MHz mode Linear transponder 50 kHz 500mW
+ 1260/2400 MHz Linear transponder 200 kHz 320mW

+ 435/145 MHz APRS repeater

Missions of CAS-2A2 satellite:
+ 435 MHz CW telemetry beacon 100mW
+ 435 MHz AX.25 digital telemetry beacon 500mW
+ 2400 MHz CW telemetry beacon 200mW
+ 10450 MHz CW telemetry beacon 200mW
+ 145/435 MHz Linear transponder 500mW

[ANS thanks CAMSAT and AMSAT-UK for the above information]

AMSAT-LU Recovers Stratospheric Balloon

AMSAT-LU launched their LUSEX high altitude balloon from La Pampa, Argentina on May 19, 2012. The payload included a UHF to VHF (4w) subtone activated repeater, APRS lu7aa-11, Robot-36 live SSTV, CW, 40/20m CW tlm beacon and two video cameras. Over 200 stations made contacts through the repeater during the 4 hour flight that reached 34,000 meters, 111,548 feet.

Initially thought lost during descent the payload was recovered on October 6 from a muddy, flooded and isolated area by 4x4 Adventure Group. Video and sound taken by two on board TV Cameras spanned 6 hours. They can be viewed at: http://tinyurl.com/AMSAT-LU

Details of the LUSEX Experiment, part of Amsat-LU development and field tests of AMSAT Argentina's planned LUSEX satellite are posted at: http://www.lusex.org.ar. See http://www.amsat.org.ar/rescate.jpg for additional photos.

Pending approval and flight authorization by Argentina Federal Aviation Authorities AMSAT-LU plans another balloon flight during the November-December timeframe.

AMSAT-UK posted a related story at: http://www.uk.amsat.org/?p=11094 with videos and photos from the flight.

[ANS thanks AMSAT Argentina for the above information]

NASA Announcement of (Suborbital) Flight Opportunities #6 Now Open

While AMSAT generally seeks orbital flight opportunities, this NASA announcement for access to flights on parabolic flights, suborbital Reusable Launch Vehicles (sRLV), and high-altitude balloons may be of interest to our allied university groups.

The National Aeronautics and Space Administration (NASA) Dryden Flight Research Center has released a solicitation entitled "NASA Announcement of Flight Opportunities (AFO) for Payloads Maturing Crosscutting Technologies that Advance Multiple Future Space Missions to Flight Readiness Status."

These NASA flight opportunities are for payloads that seek to gather information required for the design, development and refinement of new technologies. For instance, such information could concern how certain fluids phenomena behave, how thermal transport changes, or how human physiology is altered under microgravity.

The full document and program details are posted on NASA's NSPIRES (NASA Solicitation and Proposal Integrated Proposal and Review System): http://tinyurl.com/NASA-nspires and then select the "Announcement of Flight Opportunities (AFO) - #6" link.

Applications are due on or before 11:59 PM Eastern Time December 21, 2012, and selections will be announced in a target timeframe of February 2013.

[ANS thanks NASA for the above information]

NASA History Program Office Spring and Summer 2013 Internships

The NASA History Program Office is seeking undergraduate and graduate students for spring and summer 2013 internships. The History Program Office maintains archival materials to answer research questions from NASA personnel, journalists, scholars, students at all levels and others from around the world. The division also edits and publishes several books and monographs each year. It maintains a large number of websites on NASA history.

Students of all majors are welcome to apply. While detailed prior knowledge of the aeronautics and space fields is not necessary, a keen interest and some basic familiarity with these topics are needed. Strong research, writing and editing skills are essential. Experience with computers, especially hypertext markup language, or HTML, formatting, is a plus.

Intern projects are flexible. Typical projects include handling a variety of information requests, editing historical manuscripts, doing research and writing biographical sketches, updating and creating websites, and identifying and captioning photos.

Applications for spring 2013 internships are due Oct. 30, 2012. Summer 2013 internship applications are due Feb. 4, 2013.

For more information, visit http://history.nasa.gov/interncall.htm.

If you have questions about this opportunity, please contact Bill Barry at bill.barry@nasa.gov.

[ANS thanks NASA Education Express Message -- Oct. 18, 2012 for the above information]

Iran Capable of Launching Satellites Weighing Below 10kg

An article appearing on SpaceDaily.com says that, "MICROSAT BLITZ Iran capable of launching nano-satellites weighing below 10 kg: official", by Staff Writers Tehran (XNA) Oct 19, 2012

Source: http://tinyurl.com/SpaceDaily-Iran (SpaceDaily.com)

Iran Space Agency (ISA) Director Hamid Fazeli said the Islamic republic has the capability to launch nano-satellites weighing below 10 kg into space, Tehran Times daily reported Thursday.

Some of Asian countries and an Austrian university have announced readiness to set their satellites into orbit using Iranian space shuttles, Fazeli was quoted as saying.

He said Iran is among a handful of countries in the world that are capable of developing satellite-related technologies.

In February, Iran launched an observation satellite into orbit. The spacecraft, named Navid (Herald), weighed 50 kg and could take pictures in low attitudes of about 250 km to 375 km from the earth.

Iran, a founding member of the United Nations Committee on the Peaceful Uses of Outer Space, launched its first domestically-made data-processing satellite, the Omid (Hope), into space in 2009.

[ANS thanks SpaceDaily.com for the above information]

Satellite Shorts From All Over

+ ISS orbital reboost planned. The thrusters of the Russian Zvezda service module are planned to be fired for 19 seconds on Wednesday to raise the station's average orbit altitude by one kilometer to 436 km (270.9 miles). The reboost is in preparation for the docking of the Soyuz TMA-06M manned spacecraft with Russian cosmonauts Oleg Novitsky and Yevgeny Tarelkin, and NASA astronaut Kevin Ford planed to be launched on October 25.

+ On Wednesday, October 10 it was announced in Moscow that UK private spacefarer Sarah Brightman had passed the required mental and physical examinations to fly into space. In 2013 she will undertake six months of training at Star City in Moscow in preparation for her mission to the International Space Station. Read the entire post at: http://www.uk.amsat.org/?p=11034

+ Bob McGwier, N4HY says that the Hume Center for National Security and Technology, and the Bradley Department of Electrical and Computer Engineering at Virginia Tech, are seeking applicants for junior and mid-level research staff members to support a growing body of research programs in signals intelligence, military communications, and electronic warfare. Details are posted at: http://listings.jobs.vt.edu/applicants/Central?quickFind=196236

+ In HamRadioNow.tv, Episode 27, Gary Pierce, KN4AQ interviewed Bill Brown, WB8ELK, who sends balloons carrying ham radio to the edge of space, and David Stephenson KJ4OKJ who launches rockets with NASA. Watch the podcast: http://arvideonews.com/hrn/HRN_Episode_0027.html Additional programs can be found at: http://HamRadioNow.tv

+ Learn some Finnish as you watch a video from Kauto, OH2LFM with OH2AUE demonstrating a P3E transponder at SRAL summer camp: http://tinyurl.com/OH-transponder

+ Watch a video (http://www.uk.amsat.org/?p=11061) by students from the Univeristy of Manitoba showing what is involved in assembling a Nanosatellite. T-Sat1 will use the 145 and 437 MHz amateur radio bands.

+ Lots of good VHF information plus the Updated VE7BQH VHF Antenna Comparison Tables is found at: http://www.bigskyspaces.com/w7gj/

+ In celebration of Britain's contributions to space discovery and exploration, Royal Mail is issuing a set of six special stamps to mark the 50th anniversary of Britain's first launch into the final frontier. Read the details posted at: http://spaceref.com/news/viewpr.html?pid=38911

+ Ride along with Endeavour in Los Angeles on its way to museum duty in a time lapse compilation by photographer/cinematographer Matthew Givot: http://vimeo.com/51621640

+ The next Hudson Valley Satcom net date is Thursday, October 25 at 8 PM EDT (UTC-4 UTC) on the 146.97 MHz MBARC Repeater (PL 100). An echolink connection is available on the N2EYH-L node. More information at: http://www.hvsatcom.org. (Stu, WA2BSS)

[ANS thanks everyone for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

Primary and secondary school students are eligible for membership at one-half the standard yearly rate. Post-secondary school students enrolled in at least half time status shall be eligible for the student rate for a maximum of 6 post-secondary years in this status. Contact Martha at the AMSAT Office for additional student membership information. And with that, please keep in mind the tale of the ham who went to his dentist to see why his dentures kept decaying rapidly. The dentist looked at the hams's dentures and remarked, "This is very odd. They look like something's been eating them. Is there anything different that you've been eating lately?" The ham said, "Well, my wife has been making a lot of eggs Benedict recently with hollandaise sauce." "Ah!" exclaimed the dentist, "That's it. I know just what you need. I'm going to order you some new dentures with plates made out of chrome." "Chrome?" exclaimed the ham incredulously, "Why Chrome?" The dentist replied, "Because, there's no plates like chrome for the hollandaise."

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM

```
From -3090193180723665709
X-Google-Thread: 107ada,18e17074d8d9d1f8,start
X-Google-NewGroupId: yes
X-Google-Thread: 11480d,18e17074d8d9d1f8,start
X-Google-NewGroupId: yes
X-Google-Thread: 10e8ad,18e17074d8d9d1f8,start
X-Google-NewGroupId: yes
X-Google-Thread: 10b9c8,18e17074d8d9d1f8,start
X-Google-NewGroupId: yes
X-Google-Attributes:
gida3e752f117,gid7221ecd0f7,gid8f86f75953,gida4a23d5f63,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Received: by 10.68.20.225 with SMTP id q1mr121045pbe.22.1315949425008;
        Tue, 13 Sep 2011 14:30:25 -0700 (PDT)
MIME-Version: 1.0
Path: m9ni5631pbd.0!nntp.google.com!news1.google.com!newsfeed2.dallas1.level3.net!
```

```
news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: SWPC.Webmaster@noaa.gov
Newsgroups:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.info
Subject: Weekly Highlights of Solar and Geomagnetic Activity, 05 - 11 September
2011
Followup-To: rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space
Date: Tue, 13 Sep 2011 17:30:24 EDT
Organization: NOAA Space Weather Prediction Center
Lines: 125
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <20110913213002.2EDB533C51@panix2.panix.com>
NNTP-Posting-Host: panix6.panix.com
X-Trace: reader1.panix.com 1315949424 2154 166.84.1.6 (13 Sep 2011 21:30:24 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Tue, 13 Sep 2011 21:30:24 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to            rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Xref: news1.google.com rec.radio.amateur.misc:4886 rec.radio.amateur.dx:896
rec.radio.amateur.space:412 rec.radio.info:2276

:Product: Weekly Highlights and Forecasts
:Issued: 2011 Sep 13 1952 UTC
# Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center
# Product description and SWPC contact on the Web
# http://www.swpc.noaa.gov/weekly.html
#
#                 Weekly Highlights and Forecasts
#
```

Highlights of Solar and Geomagnetic Activity
05 - 11 September 2011

During the period, solar activity ranged from low to high levels due to a total of 7 M-class and 2 X-class events. The sharp increase in activity from the previous period originated from two regions; Region 1286 (N20, L=304, class/area Dso/080 on 03 September) and Region 1283 (N14, L=226, class/area Dai/230 on 07 September).

The period began at moderate levels due to two M1 x-ray events observed originating from Region 1286 at 05/0428 UTC and 05/0758 UTC respectively.

Solar activity increased to high levels on 06 September. Region 1283 produced an M5/1b flare at 06/0150 UTC and an X2/2b at 06/2220 UTC.

The M5 flare had associated Types II and IV radio sweeps and an Earth-directed full-halo CME. The CME had an estimated speed of approximately 450 km/s, based upon STEREO-A COR2 data, with the bulk of the ejecta directed north of the ecliptic plane. The X2 flare was associated with Types II and IV radio sweeps, a 740 sfu Tenflare and an Earth-directed halo CME. The CME had an estimated speed of around 800 km/s, based on STEREO-A COR2 images, with the bulk of mass directed north of the ecliptic plane. 07 September saw high levels again as Region 1283 produced more major activity. Another major event was observed near the end of the 7th when Region 1283 produced an X1/3b at 07/2238 UTC with associated weak Types II and IV radio sweeps, a 1300 sfu Tenflare, and a non-Earth-directed CME. High activity levels persisted on 08 September when Region 1283 produced an M6/1n at 08/1546 UTC associated with a weak Type IV radio sweep.

Solar activity decayed to moderate levels on 09 September when Region 1283 produced two M-class flares. The first was an M2/1n at 09/0609 UTC with an associated Type II radio sweep (estimated velocity 717 km/sec) and a non-geoeffective CME. The second was an M1/1f at 09/1249 UTC. On 10 September, a significant filament eruption centered near N10W48 occurred around 10/0300 UTC. Associated with this eruption was a partial-halo CME (plane-of-sky speed of 620 km/s). As it neared the west limb, Region 1283 produced an M1/Sn at 10/0740 UTC with an associated limb-event CME. On 11 September, solar activity further decreased to low levels. A long duration C6/Sf flare was observed at 11/0851 UTC from Region 1283 as it rotated around the west limb.

There were no proton events observed at geosynchronous orbit. However, two separate enhancements, both in the 10 MeV and 100 MeV energy levels, were observed in the wake of the M5 event early on 06 September and the X2 event late on the 6th. The first enhancement saw a peak of 2.4 pfu at 06/1410 UTC at 10 MeVs and 0.15 pfu at 06/0850 UTC at 100 MeVs. The second enhancement saw a peak of 8.8 pfu at 07/0715 UTC at 10 MeVs and 0.4 pfu at 07/0410 UTC at 100 MeVs. Protons at all energy levels declined to background levels by 08/1800 UTC.

The greater than 2 MeV electron flux at geosynchronous orbit was at moderate levels on 05 - 06 September, reached high levels on 07 - 09 September and declined to normal levels on the 10th. Moderate levels were observed again on 11 September.

The geomagnetic field ranged from quiet to severe storm levels. The period began with mostly quiet conditions from 05 September through midday on 09 September. Brief periods of active to minor storm conditions were observed at high latitudes on 06 September due to extended periods of southward Bz. Midday on 09 September, two sudden impulses (SI) were observed at 09/1243 UTC and 09/1250 UTC (16nT and 28nT respectively, as measured by the Boulder USGS magnetometer). At 09/1150 UTC, ACE data indicated an interplanetary shock arrival preceding the Boulder SIs. Bt reached up to 24nT, Bz dropped to -23nT, density spiked up to 35p/cc, wind speeds peaked at 602km/s, and temperature increased. As a result, geomagnetic activity levels increased to active to isolated high latitude severe storm levels. Activity was due to combined CME effects associated with 06 - 07 September major flare activity. The storm conditions persisted through 10 September. Late on 10 September, solar wind speed increased to around 620 km/s while the total IMF field (Bt) dropped to around 4nT indicating a likely transition into a negative polarity coronal hole high speed stream (CH HSS). Mostly quiet to unsettled levels were seen on 11 September with an isolated minor storm period at high latitudes.

Forecast of Solar and Geomagnetic Activity
14 September - 10 October 2011

Solar activity is expected to be at low to moderate levels through 10 October. A slight chance for an X-class event is possible on 18 September through 07 October as old Regions 1286 (N20, L=304) and 1283 (N14, L=226) rotate back on to the visible disk. Chances for major activity will further increase on 24 September through 01 October when both regions are on the visible disk. Activity is expected to decrease to low to moderate levels from 08 October through the remainder of the period.

No proton events are expected at geosynchronous orbit through 17 September and again from 08 - 10 October. There is a slight chance for a proton enhancement from 18 September through 07 October due to potential flare activity from Regions 1283 and 1286.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to be at high levels from 14 - 17 September and normal to moderate levels 18 - 25 September. High levels are expected on 26 - 27 September due to effects from a geoeffective CH HSS. Normal to moderate levels are expected from 28 September - 01 October. High levels are expected again on 02 - 03 October due to another CH HSS. Normal to moderate levels are expected from 04 - 09 October followed by another period of high levels on 10 October due to a third CH HSS.

The geomagnetic field is expected to be mostly quiet through the period. Unsettled conditions are possible on 18 - 19 and 24 - 25 September due to recurrent CH HSS rotating into a geoeffective position. Unsettled conditions with isolated active periods possible are expected on 30 September as a positive polarity CH HSS becomes geoeffective. Unsettled conditions will continue into 01 October. Mostly quiet condtions are expected from 02 through 07 October until another recurrent CH HSS becomes geoeffective. Mostly unsettled conditions are then expected from 08 - 10 October with isolated active periods possible on 09 October.

From 4489690302805666005
X-Google-Thread: 10e8ad,2d3b4739da35caef,start

```
X-Google-NewGroupId: yes
X-Google-Thread: 10b9c8,2d3b4739da35caef,start
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,gida4a23d5f63,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Received: by 10.68.1.39 with SMTP id 7mr109024pbj.11.1316017398037;
        Wed, 14 Sep 2011 09:23:18 -0700 (PDT)
Path: m9ni6214pbd.0!nntp.google.com!news1.google.com!news2.google.com!
news.glorb.com!news-out.readnews.com!news-xxxfer.readnews.com!panix!rri.panix.com!
robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-257 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Wed, 14 Sep 2011 12:23:17 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 2094
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <002401cc72fa$92283200$b6789600$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
X-Trace: reader1.panix.com 1316017397 26435 166.84.1.6 (14 Sep 2011 16:23:17 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Wed, 14 Sep 2011 16:23:17 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Xref: news1.google.com rec.radio.amateur.space:413 rec.radio.info:2281
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
Content-Language: en-us
```

This report is organized into four (4) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - deborbited/returned satellites

SB SAT @ AMSAT W8ISS $WSR-257.S1
WSR 257 Part 1 09/14/2011

AMSAT NEWS SERVICE BULLETIN 257.S1
FROM AMSAT HQ SILVER SPRING, MD, September 14, 2011

TO ALL RADIO AMATEURS
BID: $WSR-257.S1

ARISSat-1 (Radioskaf-b) (Kedr)
Catalog number: 37772
Launch date: August 03, 2011 1843z
Launch site: International Space Station

Status: Operational

Callsign: RS01S

Current Mode(s):
Linear Transponder: U/v
Uplink: 435.758 to 435.742 MHz CW/LSB
Downlink: 145.922 to 145.938 MHz CW/USB

FM Telemetry/SSTV/Messages/ID:
Downlink: 145.950 MHz FM

Telemetry/Beacon:
Downlink: 145.939 MHz CW1
             145.919 MHz CW2
             145.920 MHz 1k BPSK USB
             145.920 MHz 400b BPSK USB

Official Webpage:http://www.amsat.org/amsat-new/ARISSat/ARISSat.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/informal_detail.php?serialnum=89
[08112011]
=====
SO-67 SumbandilaSat
Catalog Number: 35870
Launch Date: September 17, 2009 1555z
Launch site: Baikonur, Kazakhstan

Status: By schedule

Callsign: ZS0SUM

Uplink: 145.875MHz FM tone 233.6 Hz
Downlink: 435.345MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

For more information about SO-67:
http://www.amsatsa.org.za/

IARU coordination status page:

http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=88
[02092011]
=====
DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational
Current Mode: Science Mode - Beacon ONLY

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink: 435.530 to 435.570 MHz

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=68
[02092011]
=====
VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05, 2005 0444z
Launch site: Satish Dhawan Space Centre, India

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.9360 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=30

To know what transponder is switched on please listen for the beacon

that is active. Each transponder has a different beacon.
[02092011]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004 0745z
Launch site: Baikonur, Kazakhstan

Status: Semi-operational - IHU crash each eclipse

Current Mode(s):
Voice repeater: V/u
Uplink: 145.880 MHz FM
Downlink: 435.150 MHz FM

Telemetry: Recovery efforts
Downlink: 435.150MHz 9k6

Analog voice downlink:	435.300 MHz FM
	435.150 MHz FM
	2401.200 Mhz FM
Analog voice uplink:	145.860 MHZ FM
	145.880 MHz USB
	145.880 MHz FM
	145.920 MHz FM
	145.920 MHz FM - 67 Hz PL tone burst
	1268.705 MHz FM
Digital Downlinks:	435.150 MHz FM 38k4 PBP, 1 watt output
	435.150 MHz FM 9k6 Pacsat Broadcast Protocol
	2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:	145.860 MHz FM 9k6 Pacsat Broadcast Protocol
	1268.703 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon:	435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=19
[06162011]
=====
SO-50 SAUDISAT-1C

Catalog number: 27607
Launch date: December 20, 2002 1700z
Launch site: Baikonur, Kazakhstan

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz. The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10 minute timer.
[02092011]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Operational
Current Mode: V/u (Mode JA)

Voice/CW (Mode JA)
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:

```
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage:
http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's
CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/
fo29cwts.htm
[06232011]
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993 0140z
Launch site: Kourou, French Guiana

Status: Operational

Current Mode: V/u

Uplink:   145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[02092011]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974
Launch site: Vandenberg AFB, California, USA

Status: Operational

Current Mode: Alternating between Mode A and B every 24 hours

Uplink:   145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink:  29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons:   29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW

Official Webpage:
```

http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
[02092011]
=====

INTERNATIONAL SPACE STATION (ISS) - ARISS

Catalog number: 25544
Launch date: November 20, 1998 0640z (ZARYA module)
Launch sites: Baikonur, Kazakhstan
Kourou, French Guiana
Uchinoura Space Center, Japan
Kennedy Space Center, Titusville, Florida, USA

Status: Operational

Current Active Modes: FM Repeater - OFF
Voice - V/v
BBS - OFF
APRS - OFF
SSTV - OFF

Expedition 28 Crew (May - September 2011):

Commander:	Andrey Borisenko	
Flight Engineer:	Ron Garan	KF5GPO
Flight Engineer:	Alexander Samokutyaev	
Flight Engineer:	Satoshi Furukawa	
Flight Engineer:	Sergey Volkov	KE5DAW
Flight Engineer:	Micheal Fossum	KF5AQG

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:

V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[07282011]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-257.S2
WSR 257 Part 2 09/14/2011

AMSAT NEWS SERVICE BULLETIN 257.S2
FROM AMSAT HQ SILVER SPRING, MD, September 14, 2011
TO ALL RADIO AMATEURS
BID: $WSR-257.S2

O/OREOS
Catalog Number: 37224
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: On Orbit

Uplink:
Downlink: 437.035 MHZ AX.25

Beacon:

Callsign:

URL: http://www.ooreos.org/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=146
[02092011]

=====
Rax-1 Radio Aurora Explorer
Catalog Number: 37223

```
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: On Orbit

Uplink:
Downlink: 437.505 MHz 9k6 GMSK

Beacon:

Callsign: RAX-1

URL: http://rax.engin.umich.edu/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=165
[02092011]
=====
FO-69 Fastrac-1 Sara Lily
Catalog Number: 37227
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: Operational

Uplink 1: 145.980 MHz 1k2 baud
Uplink 2: 145.825 MHz 1k2 baud
Downlink: 437.345 MHz 1k2 and 8k6 baud

Beacon:   437.435 MHz 1k2 AX.25

Callsign: Fast1

URL: http://fastrac.ae.utexas.edu/index.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=83
[07052011]
=====
FO-70 Fastrac-2 Emma
Catalog Number: 37380
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: Operational

Uplink 1: 435.025 MHz 1k2 baud
Uplink 2: 437.435 MHz 9k6 baud
Downlink: 145.825 MHz

Beacon:   145.825 MHz 1k2 AX.25

Callsign: Fast2
```

```
URL: http://fastrac.ae.utexas.edu/index.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=84
[07052011]
=====
StudSat
Catalog Number: 36796
Launch Date: July 12, 2010 0352z
Launch site: Satish Dhawan Space Centre, India

Status: On Orbit

Uplink:   437.505MHz, 9600bps FSK
Downlink: 437.505MHz, 9600bps FSK
Beacon  : 437.505MHz,   20bps ASK

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=164
[02092011]
=====
TIsat-1
Catalog Number: 36799
Launch Date: July 12, 2010 0352z
Launch site: Satish Dhawan Space Centre, India

Status: On orbit

Callsign: HB9DE

Uplink:   145.980MHz FM, AFSK
Downlink: 437.305MHz FM, AFSK
Beacon:   437.305MHz CW

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=118
[02092011]
=====
HO-68 HOPE-1 (CAS-1)(XW-1)
Catalog Number: 36122
Launch Date: December 15, 2009 0231z
Launch site: Taiyuan Space Center, PRC

Status: Beacon only

Callsign:
Broadcast:    BJ1SA-11
BBS:     BJ1SA-12

Uplinks:   145.8250 MHz FM, PL 67.0 Hz.
           145.9250 - 145.9750 MHz SSB/CW
           145.8250 MHz AFSK 1200 BPS
```

```
Downlinks: 435.6750 MHz FM
           435.7650 - 435.7150 MHz SSB/CW
           435.6750 MHz AFSK 1200 BPS

Beacon:    435.7900 MHz CW

Mode and Antenna Polarization:
V: LHCP 2.0dBi max
U: RHCP 3.0dBi max

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=108

For more information about XW-1 (CAS-1):
http://
[08112011]
=====
SwissCube
Catalog Number: 35932
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Callsign: HB9EG

Beacon(100mw): 437.5050MHz CW
Beacon(1w):    437.5050MHz FSK 1k2bps

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=109
[02092011]
=====
UWE-2
Catalog Number: 35934
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: In Orbit

Beacon(500mw): 437.3850 MHz AFSK 1k2bps
               437.3850 MHz FSK 9k6bps

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=110
[02092011]
=====
ITUpsAT1
Catalog Number: 35935
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational
```

Beacon(100mw): 437.325MHz CW
Beacon(1w): 437.325MHz 19k2bps

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=113
[02092011]
=====
BEESAT
Catalog Number: 35933
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Callsign: DP0BEE

Beacon(100mw): 436.000MHz CW
Beacon(500mw): 436.000MHz GMSK 4k8bps
Beacon(500mw): 436.000MHz GMSK 9k6bp
[02092011]
=====
CP-6
Catalog Number: 35003
Launch Date: May 19, 2009 2355z
Launch site: Wallops Island, Virginia, USA

Status: Operational

Downlink: 437.365 MHz 1k2 AFSK

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=121
[02092011]
=====
HAWKSAT 1
Catalog number: 35004
Launch Date: May 19, 2009 2355z
Launch site: Wallops Island, Virginia, USA

Status: operational

Downlink: 437.345 MHz ?

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=105
[02092011]
=====
Pharmasat
Catalog Number: 35002
Launch Date: May 19, 2009 2355z
Launch site: Wallops Island, Virginia, USA

```
Status: Operational

Downlink: 437.465 MHz 1k2 AFSK

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=94
[02092011]
=====
ANUSAT
Catalog Number: 34808
Launch Date: April 20, 2009 0115z
Launch Site: Satish Dhawan Space Centre, India

Status: ?

Downlink:  435.000 MHz
Uplink:    145.800 MHz

Telemetry: 137.400 MHz
[02092011]
=====
SOHLA-1 (ASTRO TECH.)
Catalog Number: 33496
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational

Proposed Frequencies and Modes:
Downlink: 437.505 MHz AFSK/CW
Beacon:   437.505 MHz AFSK/CW

Callsign:

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=101
[02092011]
=====
KAGAYAKI (Solan Co.)
Catalog Number: 33495
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: In Orbit

Downlink: 437.375 MHZ    FSK9k6/CW
Beacon:   437.375 MHz    FSK9k6/CW

IARU coordination status page:

AMSAT-NA webpage:

[02092011]
```

```
=====
STARS (Kagawa Univ.) (Twin Satellites)
Catalog Number: 33498
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational ?

Downlinks: 437.485 MHz FM/CW
           437.465 MHz FM/CW
Beacons:   437.305 MHz FM/CW
           437.275 MHz FM/CW

Callsigns: JR5YBN
           JR5YBO

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=99

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=121&retURL
=/satellites/status.php
[02092011]
=====
KKS-1 (Tokyo MCIT)
Catalog Number: 33499
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational

Downlink:  437.455 MHz AFSK/CW
Beacon:    437.385 MHz AFSK/CW

Callsign: JQ1YYY

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=107

AMSAT-NA webapge:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=120&retURL
=/satellites/status.php
[20092011]
=====
PRISM (Tokyo Univ.)
Catalog Number: 33493
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational ?

Downlink: 437.425 MHz AFSK/GMSK/CW
Beacon:   437.250 MHz AFSK/GMSK/CW
```

Callsign: JQ1YCX

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=97

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=119&retURL=/satellites/status.php
[02092011]
=====
RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number: 32953
Launch Date: May 23, 2008 1520z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational

Curent Modes: Telemetry
Audio
Images

Downlinks: 435.315 MHz
435.215 MHz

AMSAT-NA website:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=115&retURL=/satellites/status.php

Official website:
http://www.npopm.com/?cid=leoca&caid=43
[02092011]
=====
CanX-2
Catalog number: 32790
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational in range of ground station only

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=46
[02092011]
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Downlink: 437.425 MHz 1k2 baud packet

For the latest project status update please visit the AAUSAT-II web page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=60
[02092011]
=====
CO-65 CUTE-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational ?

Downlink: 437.475 MHz 9k6 Packet
Uplink: 1267.600 Mhz

Telemetry Beacon:
Downlink: 437.2750 MHz CW

For the latest project status update please visit the Cute-1.7+APD II web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=78

Command Station blog website:
http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=112&retURL=/satellites/status.php
[07052011]
=====
Compass-1
Catalog number: 32787
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Current Mode: dependant on last received command

Uplink: 145.980 MHz FM
Downlink: 437.275 Mhz CW
          437.405 MHz Packet

For the latest project status update please visit the Compass 1 web page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=52

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=114&retURL=/satellites/status.php
[06162011]
=====
CO-66 Seeds II
Catalog number:
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Downlink: 437.485 MHz

Callsign: JQ1YGU

For the latest project status update please visit the Seeds 2 web page: http://cubesat.aero.cst.nihon-u.ac.jp/english/seeds_2_e.html

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=36

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=113&retURL=/satellites/status.php
[02092011]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007 0702z
Launch site: Baikonur, Kazakhstan

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=94&retURL=/satellites/status.php

```
IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=72
[02092011]
=====
CP3
Catalog Number: 31129
Launch Date: April 17,2007 0702z
Launch site: Baikonur, Kazakhstan

Status: Operational

Current Mode:  /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=74
[02092011]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005 0652z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon:             437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/xivpicte.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=37
[02092011]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: ?????

Current Mode: /u

Beacon:     436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS
```

Callsign: JQ1YGW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=96&retURL
=/satellites/status.php

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[02092011]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004 0745z
Launch site: Baikonur, Kazakhstan

Status: Semi-operational - IHU crash each eclipse

Current Mode(s):
Voice repeater: V/u
Uplink: 145.880 MHz FM
Downlink: 435.150 MHz FM

Telemetry: Recovery efforts
Downlink: 435.150MHz 9k6

Analog voice downlink:	435.300 MHz FM
	435.150 MHz FM
	2401.200 Mhz FM
Analog voice uplink:	145.860 MHZ FM
	145.880 MHz USB
	145.880 MHz FM
	145.920 MHz FM
	145.920 MHz FM - 67 Hz PL tone burst
	1268.700 MHz FM
Digital Downlinks:	435.150 MHz FM 38k4 PBP, 1 watt output
	435.150 MHz FM 9k6 Pacsat Broadcast Protocol
	2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:	145.860 MHz FM 9k6 Pacsat Broadcast Protocol
	1268.708 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon:	435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=19
[06162011]
=====
QuakeSat
Catalog Number: 27845
Launch Date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Telemetry only

Current Mode: 9600 baud data packet

Mode U packet
Downlink: 436.675 MHz 9k6 BPS

Quakesat webpage:
http://www.quakefinder.com/services/quakesat-ssite/
[02252011]
=====
CO-55 Cute-1.7+APD II
Catalog Number: 27844
Launch date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational

Current Mode: CW downlink worldwide
AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=69&retURL
=/satellites/status.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=78
[02092011]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001 0240z
Launch site: Kodiak Launch Complex, Alaska, USA

Status: Telemetry only

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[02092011]
=====
RS-22 RADIO SPORT 22 (MOZHAYETS 4)
Catalog number: 27939
Launch Date: September 27, 2003 0612z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational - 70cm cw only

Current Mode: /u

CW Beacon - 435.352 MHz
            145.818 MHz

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=76&retURL
=/satellites/status.php
[02092011]
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990
Launch site: Kourou, French Guiana

Status: CW Beacon only

Uplinks: 145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink: 437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[02092011]
=====
UO-11 OSCAR-11
Catalog number: 14781

Launch Date: March 1, 1984
Launch site: Vandenburg AFB, California, USA

Status: Operational ?

Current Mode: /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon: 435.025 MHz
Mode-S Beacon: 2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[07052011]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998 0640z (ZARYA module)
Launch sites: Baikonur, Kazakhstan
              Kourou, French Guiana
              Uchinoura Space Center, Japan
              Kennedy Space Center, Titusville, Florida, USA

Status: Operational

Current Active Modes: FM Repeater - OFF
                      Voice -   V/v
                      BBS -   OFF
                      APRS -   OFF
                      SSTV -   OFF

Expedition 28 Crew (May - September 2011):
Commander: Andrey Borisenko
Flight Engineer: Ron Garan   KF5GPO
Flight Engineer: Alexander Samokutyaev
Flight Engineer: Satoshi Furukawa
Flight Engineer: Sergey Volkov   KE5DAW
Flight Engineer: Micheal Fossum   KF5AQG

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM

Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[07282011]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-257.S3
WSR 257 Part 3 09/14/2011

AMSAT NEWS SERVICE BULLETIN 257.S3
FROM AMSAT HQ SILVER SPRING, MD, September 14, 2011
TO ALL RADIO AMATEURS
BID: $WSR-257.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

NANOSAIL-D
Catalog Number:
Ejection Date: January 17, 2011

Status: On orbit

Downlink: 437.270 MHz AX.25

```
URL: http://nanosaild.engr.scu.edu/dashboard.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=115
[01272011]
=====
CP4
Catalog Number: 31132
Launch Date: April 17, 2007

Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon:    437.325 MHz CW

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=79
[09062010]
=====
LIBERTAD-1
Catalog Number: 31128
Launch Date: April 17, 2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink:   145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=76
[09062010]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: Non-Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder:  145.825 Mhz FM

IARU coordination status page:
```

```
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=51
[09062010]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency:  437.305
                             2407.250

Official Website: http://www.ncube.no

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=24
[09062010]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink:        437.250 MHz FM 67Hz CTCSS
Voice Downlink:     2401.835 MHz FM
Packet Up/Downlink:  437.250 MHz 9k6 packet
Packet Downlink     2401.835 MHz 38k4 packet

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=54
[09062010]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non-Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=53
[09062010]
=====
CANX-1
Catalog Number: 27847
Launch Date: June 30, 2003

Status: Non-Operational
```

```
Downlink: 437.8800 MHz AFSK 1k2bps
[06052009]
=====
DTUSAT
Catalog Number: 27842
Launch Date: June 30, 2003

Status: Non-Operational

Current Mode: 2k4 AFSK Packet last reported

Downlink: 437.475MHz

Officail webpage: http://dtusat1.dtusat.dtu.dk/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=101&retURL
=satellites/all_oscars.php
[02212009]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink:   435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)

Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Telemetry only

Uplinks:   145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink:  437.325 MHz

Broadcast callsign: MYSAT3-11
BBS:                MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial land and weather imaging payloads offers FM and FSK
Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as
```

a collaborative effort between the Malaysian government and Surrey
Satellite Technology Ltd.
[03302009]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

```
Status: Non-Operational

Uplinks
-------
V-band:   145.840 -  145.990 MHz CW/LSB
U-band:   435.550 -  435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks
---------
S2-band:  2401.225 -  2401.475 MHz CW/USB
K-band:  24048.010 - 24048.060 MHz CW/USB
Beacon:   2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)
----------------------------
BEACON   General Beacon(GB)  Middle Beacon(MB)  Engineering Beacon(EB)
2 m                    none        145.898 MHz                    none
70cm            435.438 MHz        435.588 MHz             435.838 MHz
13cm(1)        2400.188 MHz       2400.338 MHz            2400.588 MHz
13cm(2)        2401.173 MHz       2401.323 MHz            2401.573 MHz
3cm           10450.975 MHz      10451.125 MHz           10451.375 MHz
1.5cm         24047.885 MHz      24048.035 MHz           24048.285 MHz
[07162007]
=====
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink:    145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site at the following URL:
```

ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: 25636
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Non-Operational

Current Modes:

Telemetry : /u

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks: 145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://asri.technion.ac.il/techsat/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=14&retURL
=/satellites/status.php
[07172010]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink: 145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
MO-30 UNAMSAT-2
Catalog Number: 24305
Launch Date: September 5, 1996

Status: Non-operational

Downlink: 435.1380 MHz AFSK 1200 BPS
Downlink: 435.2060 MHz AFSK 1200 BPS
Uplink: 145.8150 MHz AFSK 1200 BPS
Uplink: 145.8350 MHz AFSK 1200 BPS
Uplink: 145.8550 MHz AFSK 1200 BPS
Uplink: 145.8750 MHz AFSK 1200 BPS
[06042009]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

```
Status: Non-operational

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign:       POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012009]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
AO-24 ARSENE
Catalog Number: 22654
Launch Date: May 13, 1993

Status: Non-operational
```

```
Uplink:    435.0625 MHz FM 1k2bps AFSK
           435.1125 MHz FM 1k2bps AFSK
           435.1375 MHz FM 1k2bps AFSK
Downlink:  145.9750 MHz FM 1k2bps AFSK
          2446.5025 MHz FM 1k2bps AFSK

Beacon:    2446.4700 MHz CW

Broadcast callsign:
BBS:
[12162009]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HL01-11
BBS: HL01-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990
```

```
Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
[05012006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: non-operational

Current Mode:  V/u

Uplink:         145.900 MHz FM 1200-baud Manchester FSK (reserved)
                145.920 MHz FM VOICE
                145.940 MHz FM 1200-baud Manchester FSK (reserved)
                145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink:       437.026 MHz USB VOICE
```

(1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC 437.050 MHz RHCP
   PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[07242009]
=====
UO-15 UoSAT-4
Catalog Number: 20438
Launch Date: January 22, 1990

Status: Non-operational

Uplink: ?
Downlink: 435.1250MHz (?)
          435.1200MHz (?)
[06042009]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink: 145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink: 145.8500 MHz MFSK 1200 BPS
Uplink: 145.8700 MHz MFSK 1200 BPS
Uplink: 145.8900 MHz MFSK 1200 BPS
Uplink: 145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon: 145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.8500 - 145.9000 MHz SSB/CW
Downlink 29.4000 - 29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink: 29.4500 - 29.5500 MHz SSB/CW
Beacons: 29.450 MHz
          435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5

```
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon 1:  29.352 MHz (intermittent)
Beacon 2:  29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink:     21.260 to 21.300 MHz CW/USB
Downlink:  145.860 to 145.900 MHz CW/USB

Beacon:    145.860 MHz

Robot:     145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational
```

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-257.S4
WSR 257 Part 4 09/14/2011

AMSAT NEWS SERVICE BULLETIN 257.S4
FROM AMSAT HQ SILVER SPRING, MD, September 14, 2011
TO ALL RADIO AMATEURS
BID: $WSR-257.S4

THE FOLLOWING SATELLITES HAVE RE-ENTERED OR HAVE BEEN RETURNED SAFELY:

CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Re-entered
Re-entered: October 25, 2009

Uplink: 1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=56
[09062010]
=====
BEVO-1 (DRAGONSAT-1)
Catalog Number: 35690
Launch Date: May 19, 2009

Status: Re-entered
Re-entered:

Downlink: 437.325 MHz 9k6 GMSK
          437.325 MHz CW 20wpm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=117

```
[07312009]
=====
AggieSat2 (DRAGONSAT-2)
Catalog Number: 35690
Launch Date: May 19, 2009

Status: Re-entered
Re-entered:

Downlink: 436.250 MHz 9k6 FHSS
[11112009]
=====
Pollux
Catalog Number: 35693
Launch Date: July 31, 2009

Status: Re-entered
Re-entered:

Callsign: POLLUX-1

Downlink: 145.825MHz 1k2 AX.25

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=139
[09062010]
=====
Castor (ANDE-2)
Catalog Number: 35694
Launch Date: July 31, 2009

Status: Re-entered
Re-entered:

Callsign: KD4HBO-1

Downlink: 145.825 MHz 1k2 AX.25

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=144
[09062010]
=====
NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: July 28, 2008

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO
```

Website: http://eng.usna.navy.mil/~bruninga/fcal.html

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=59
[01012009]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink: 145.825 Mhz FM APRS AX25
APRS Uplink: 145.825 MHz FM APRS AX25
Voice/PSK31 Uplink: 28.120 MHz

Packet to Voice ID: RAFT
[06112007]
=====
GENESAT-1
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Re-Entered
Re-entered date: August 8, 2010

Current Mode: /u

Callsign: KE7EGC

Telemetry Beacon Downlink: 437.0695 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[08082010]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Re-Entered
Re-entered: June 18, 2008

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon: 437.2750 MHz CW

Callsign: JR8YJT
[01012009]
=====
SO-43 Starshine 3
Catalog Number: 26929
Launch Date: September 30, 2001

Status: Re-Entered
Re-entered: January 21, 2003

Beacon: 145.825Mhz
[02212009]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the

President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at}
amsat.org
NNNN
/EX

```
From -6777461552582955800
X-Google-Thread: 10e8ad,d0c5e12a879039c9,start
X-Google-NewGroupId: yes
X-Google-Thread: 10b9c8,d0c5e12a879039c9,start
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,gida4a23d5f63,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Received: by 10.68.13.100 with SMTP id g4mr1134808pbc.25.1316352912826;
        Sun, 18 Sep 2011 06:35:12 -0700 (PDT)
Path: m9ni8943pbd.0!nntp.google.com!news1.google.com!newsfeed2.dallas1.level3.net!
news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-261 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sun, 18 Sep 2011 09:35:12 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 437
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000901cc7607$bff38d00$3fdaa700$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
X-Trace: reader1.panix.com 1316352912 15379 166.84.1.6 (18 Sep 2011 13:35:12 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 18 Sep 2011 13:35:12 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
```

X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Xref: news1.google.com rec.radio.amateur.space:414 rec.radio.info:2294
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
Content-Language: en-us

AMSAT NEWS SERVICE
ANS-261

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* BOD Election Results
* 2011 AMSAT Space Symposium Papers Deadline Approaches
* Get Ready for Scouting's JOTA on October 15-16
* Amateur Satellite Presentations Scheduled for Alaska and California
* Registration Open for 2011 AMSAT Space Symposium 4-6 November 2011
* NASA STEM Education Via Massively Multiplayer Online Game
* Satellite Shorts From All Over
* ARISS Status - 12 September 2011

SB SAT @ AMSAT $ANS-261.01
BOD Election Results

AMSAT News Service Bulletin 261.01
  From AMSAT HQ SILVER SPRING, MD.
September 18, 2011
To All RADIO AMATEURS
BID: $ANS-261.01

The 2011 AMSAT-NA Board of Directors election has been completed with the following results:

Barry Baines, WD4ASW- 576
Tony Monteiro, AA2TX - 560
Alan Biddle, WA4SCA - 516
Drew Glasbrenner, KO4MA - 418
Mark Hammond, N8MH - 319 First Alternate
Patrick Stoddard, WD9EWK - 275 Second Alternate
Steve Coy, K8UD - 229

***** A total of 751 ballots were received *****

In accordance with the Bylaws of AMSAT-NA those receiving the four highest number of votes are elected as regular members of the Board of Directors for the next 2 years. The alternates will serve for one year until the next election.

[ANS thanks AMSAT HQ Office the above information]

/EX

SB SAT @ AMSAT $ANS-261.02
2011 AMSAT Space Symposium Papers Deadline Approaches

AMSAT News Service Bulletin 261.02
From AMSAT HQ SILVER SPRING, MD.
September 18, 2011
To All RADIO AMATEURS
BID: $ANS-261.02

Your papers for the 2011 AMSAT Space Symposium are due by October 1 for inclusion in the printed proceedings. Yes, that's just a couple of weeks from now!

Papers, symposium presentations and poster presentations are invited on any topic of interest to the amateur satellite community.

The Symposium will be held on Friday, November 4th through Sunday, November 6th in San Jose, CA.

Papers should be sent to Dan Schultz, N8FGV, at:
n8fgv@amsat.org.

[ANS thanks Dan Schultz, N8FGV for the above information]

/EX

SB SAT @ AMSAT $ANS-261.03
Get Ready for Scouting's JOTA on October 15-16

AMSAT News Service Bulletin 261.03
From AMSAT HQ SILVER SPRING, MD.
September 18, 2011
To All RADIO AMATEURS
BID: $ANS-261.03

Get Ready for Scouting's JOTA on October 15-16

Scouting's Jamboree on the Air event is coming up on October 15-16. During this annual event Scouts and Guides all over the world speak to each other over amateur radio contacts. Scouting experiences are exchanged and ideas are shared, via the radio waves.

The event starts at 00.00 hours local time on the Saturday and concludes 48 hours later at 24.00 hours local time on the Sunday. Each station can choose its own operating hours within this period.

Each year during JOTA about half-a-million Scouts and Guides "get together" over the airwaves. Modern communication technology offers Scouts the exciting opportunity to make friends in other countries.

Most Scouts take advantage of the local volunteer efforts of amateur radio operators in their area. This is where you can volunteer your station for scouting participation. You may also help by answering calls on the air from scouts.

AMSAT encourages our members to take advantage of JOTA to provide amateur satellite demonstrations.

The World Scouting Organization in Switzerland posted JOTA information on their web: http://tinyurl.com/3rfp2cn (www.scout.org)

Also, visit the World Scouting Radio Library at:
http://tinyurl.com/5sz7tf5 (www.scout.org)

The Boy Scouts of America has several resources on-line for amateur radio stations participating in JOTA:
http://tinyurl.com/6d93qb7 (Boy Scouts of America www.scouting.org)

[ANS thanks the Scouting Movement for the above information]

/EX

SB SAT @ AMSAT $ANS-261.04
Amateur Satellite Presentations Scheduled for Alaska and California

AMSAT News Service Bulletin 261.04
From AMSAT HQ SILVER SPRING, MD.
September 18, 2011
To All RADIO AMATEURS
BID: $ANS-261.04

This weekend AMSAT area coordinator Clint Bradford, K6LCS, is presenting his 'Working Amateur Satellites With Your HT' session at the Anchorage Amateur Radio Club annual hamfest.

After this look for Clint back on warmer turf in California where he is scheduled for TWO 'Working Amateur Satellites With Your HT' sessions at PACIFICON 2011 in Santa Clara on Saturday, October 15.

Clint wrote, "We had a great time last year - with a full conference room and several passes that we worked. I'll be making my presentation from 11AM-noon and 1-2PM. We have tentative passes of AO-27, AO-51, and ARISSat-1 (hopefully!) - Watch for posters near the check-in area for exact times."

Download Clint's tutorial and programming charts from:
http://www.work-sat.com . Clint always encourages pre-presentation inquiries. Send email to Clint at clintbradford.com- or call him at 909-241-7666. See you in Santa Clara! PACIFICON's Web site is http://www.pacificon.org .

[ANS thanks Clint Bradford, K6LCS for the above information]

/EX

SB SAT @ AMSAT $ANS-261.05
Registration Open for 2011 AMSAT Space Symposium 4-6 November 2011

AMSAT News Service Bulletin 261.05
From AMSAT HQ SILVER SPRING, MD.
September 18, 2011
To All RADIO AMATEURS
BID: $ANS-261.05

AMSAT announces the 2011 AMSAT Space Symposium will be held on Friday, November 4th through Sunday, November 6th in San Jose, CA. Our annual gathering will feature:

+ Space Symposium with Amateur Satellite Presentations
+ Operating Techniques, News, & Plans from the Amateur Satellite World
+ Board of Directors Meeting open to AMSAT members (Nov. 3-4)
+ Meet Board Members and Officers
+ Annual General Membership Meeting
+ Annual Banquet-Keynote Speaker and Door Prizes

The 2011 Symposium hotel and registration web pages are now available on the AMSAT web site. You may register for the Symposium and Annual Banquet at the AMSAT Store:
http://www.amsat-na.com/store/SymposiumReg.php

Visit the Symposium and Annual General Meeting web page for details and the latest information:
http://www.amsat.org/amsat-new/symposium/2011/index.php

Symposium Registration including a copy of the Proceedings is:
+ $45 per person until September 19, 2011
+ $50 per person starting September 20, 2011
+ $55 per person at the door

The Saturday evening banquet is $45 per person. The Sunday morning Area Coordinator's Breakfast is $15 per person.

The hotel selected is the Wyndham San Jose, close to the airport. The AMSAT discount rate is $79.00+taxes per night. The reservation block code when calling the hotel directly is "AMSAT". The hotel telephone number is 408-453-6200. If you are making reservations on-line use

1031FSJAM for the group code. The direct link to the hotel web page is: http://www.wyndham.com/hotels/SJCAP/main.wnt

If you are planning to book a room on dates other than November 2, 3, 4, 5, you will have to call the hotel directly and ask for *in-house reservations*. You can get the $79 rate 3 days before and 3 days after the above dates but you cannot book the room on their website. Any problems, give Martha a call at the AMSAT Office: 301-589-6062.

[ANS thanks the 2011 Symposium Committee for the above information]

/EX

SB SAT @ AMSAT $ANS-261.06
NASA STEM Education Via Massively Multiplayer Online Game

AMSAT News Service Bulletin 261.06
From AMSAT HQ SILVER SPRING, MD.
September 18, 2011
To All RADIO AMATEURS
BID: $ANS-261.06

The NASA Learning Technologies (LT) project supports the development of projects that deliver NASA content through innovative applications of technologies to enhance education in the areas of science, technology, engineering and mathematics (STEM). Research and development are at the core of the LT mission. LT seeks to enhance formal and informal education in STEM fields with the goal of increasing the number of students in those fields of study and is currently investigating the development of a NASA-based massively multiplayer online educational game (MMO).

Quoting the Learning Technologies Project, "There is increasing recognition that these synthetic environments can serve as powerful "hands-on" tools for teaching a range of complex subjects. Virtual worlds with scientifically accurate simulations could permit learners to tinker with chemical reactions in living cells, practice operating and repairing expensive equipment, and experience microgravity, making it easier to grasp complex concepts and transfer this understanding quickly to practical problems. MMOs help players develop and exercise a skill set closely matching the thinking, planning, learning, and technical skills increasingly in demand by employers. These skills include strategic thinking, interpretative analysis, problem solving, plan formulation and execution, team-building and cooperation, and adaptation to rapid change."

The first learning game environment, Moonbase Alpha, a game scenario with both single-player and multiplayer options is set on a hypothetical lunar outpost in a 3-D immersive setting. Players step into the role of an exploration crewmember and deal with realistic mission challenges and choices. Timelines in the much anticipated Astronaut:

Moon, Mars and Beyond MMO will be set even farther in the exciting future (2035+), but you can already explore our own near-future moon missions thanks to the NASA Learning Technologies and Innovative Partnerships Programs.

NASA's Learning Technologies web site can be accessed at:
http://ipp.gsfc.nasa.gov/mmo/
You will find the link to the already released Moonbase Alpha game at this site, along with information about the development of the new Astronaut: Moon, Mars and Beyond massively multiplayer online educational game.

[ANS thanks Space.com for the above information]

/EX

SB SAT @ AMSAT $ANS-261.07
Satellite Shorts From All Over

AMSAT News Service Bulletin 261.07
From AMSAT HQ SILVER SPRING, MD.
September 18, 2011
To All RADIO AMATEURS
BID: $ANS-261.07

+ Although the astronauts now use digital cameras the Hasselblad camera was the film camera standard for much of the space program's history. An astronaut's photography manual provided by Hasselblad for NASA astronauts can be downloaded at: http://tinyurl.com/4dupx8s (www.hasselblad.com). This is a 40 page color PDF file really solid photography guide, with great information on lenses, exposure settings, and camera technique. Any photographer could get some use out of it. But if you happen to be up in space, you'll have everything you need to get that perfect shot. (UniverseToday.com)

+ Congratulations to Tom Schuessler N5HYP for a successful Radio Merit Badge class and amateur radio satellite demo at the National Scouting Museum. The Boy Scout station K2BSA/5 had contacts with K8YSE, KX9X, WA4HFN, NE5BO, ND9M, K4FEG, KT3L, N9AMW, AA0SV, K5OE, N8MS, N2VYT and VE2RCN via AO-51. K2BSA/5 will again be active on October 15th for JOTA.

+ NASA Grail mission to the moon should downlink on 2280.6 MHz and 2279.511 MHz. X-Band Doppler ranging beacons are on 8451.5995 MHz and 8451.7995 MHz.

+ George Carr, WA5KBH has received the logs and cards from Hector, CO6CBF and is ready to perform his QSL manager duties. Please send your cards to his callbook address and include a SASE. Contacts from CO6CBF home grid of EL92 and his recent trip to EL91/FL01 are being processed. Hector has his 100th QSL in LoTW and is expectedto become the first atellite VUCC from Cuba. (WA5KBH)

+ Congratulations to AMSAT member, Zack Beougher, KD8KSN (EN80) for being honored as ARRL Great Lakes' Division, Young Radio Amateur of the Year. This is great honor for Zack, and it speaks well for the future of AMSAT, having such a fine young man in our midst! (E. Michael McCardel, KC8YLD Ohio Section Affiliated Club Coordinator, ARRL)

+ Jens, DL7VTX, is apparently operating portable in EA8. He was worked on AO-51 this week. No info on how long he might be there, but if you are on the East Coast and need EA8, listen for him. (John, K8YSE)

+ Bob, W7LRD, reported good DX via AO-7 on September 14 from Seattle, Washington (grid CN87wk). Bob worked OH5LK in KP30on for a distance of 7692km.

[ANS thanks everyone for the above information]

/EX

SB SAT @ AMSAT $ANS-261.08
ARISS Status - 12 September 2011

AMSAT News Service Bulletin 261.08
From AMSAT HQ SILVER SPRING, MD.
September 18, 2011
To All RADIO AMATEURS
BID: $ANS-261.08

Amateur Radio on the International Space Station (ARISS) Status Report September 12, 2011

1. Kobe Science Museum Contact Successful

An Amateur Radio on the International Space Station (ARISS) contact was held between youth visiting the Kobe Science Museum in Kobe-city, Japan and ISS Astronaut Satoshi Furukawa, KE5DAW on Monday, September 5. Children were interested in how astronauts prepare for their missions and how life in space differs from that on Earth. Approximately 90 people were present for the event and media coverage included at least two newspapers and one television station. The contact highlighted lessons covering the ISS, space and regional and global environments.

2. Pine Tree Middle School Students Radio Mike Fossum

On Friday, September 9, Pine Tree Middle School in Longview, Texas participated in an Amateur Radio on the International Space Station (ARISS) contact. Mike Fossum, KF5AQG answered over 20 questions posed to him by the students about what it is like to live in space and the experiments currently being conducted on the ISS. The contact was incorporated into a science curriculum which covered space, ecosystems and the contributions of scientists to society.

3. U.S. Schools Selected for ARISS Contacts

The ARISS-U.S. proposal selection committee met at the end of August and chose ARISS proposals for contacts to be held in the January - June 2012 timeframe. Five primary schools as well as several alternate schools were selected. The schools were notified of their status and ARISS mentors are currently being assigned to assist the schools in preparing for their contacts.

4. ARISS Member Gives ARISSat Interview

On September 6, Steve Bible, N7HPR appeared on Ham Nation to talk about ARISSat-1 and AMSAT. The interview, episode 16, may be viewed on TWiT.TV. See: http://twit.tv/show/ham-nation/16

5. Amateur Radio Newsline on ISS Crew

On September 9, the Amateur Radio Newsline Report 1778 included two ARISS items under "Ham Radio in Space." The first story gives a short status on ARISSat-1and the second item talks about how the ISS crew may be affected by the failed launch of Progress 44 in August. To view "ARISSat-1 Celebrates its First Month Onorbit" and "ISS Could be Vacated if Russian Launch Vehicle Problem not Resolved Quickly," see: ftp://ftp.arnewsline.org/quincy/News/news.txt

6. Astronaut Training Status

Four simulated ARISS contacts are scheduled for September 21 between the following schools and astronauts:

Euro Space Center, Belgium at 13:20 UTC - Chris Hadfield, KC5RNJ/VA3OOG
Manhattan Challenger Learning Center (CLC) at 14:05 UTC - Kevin Ford, KF5GPP
CLC of Indianapolis at 14:30 UTC - Tom Marshburn, KE5HOC
CLC of Alaska at 15:50 UTC- Chris Cassidy, KF5KDR

These training sessions are terrestrial-based amateur radio contacts using ARISS equivalent equipment. The sessions will prepare the astronauts for participation in ARISS contacts during their upcoming missions on the ISS.

7. ARRL Article on ISS Astronauts

The American Radio Relay League (ARRL) ran a story in its September

8 ARRL Letter about NASA's need to hire more astronauts. The story went on to talk about the possibility of abandoning the ISS if the Russians do not resolve the issues associated with the Progress 44 launch. See:
http://www.arrl.org/news/report-calls-on-nasa-to-hire-more-astronauts

[ANS thanks Carol, KB3LKI, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Dee Interdonato, NB2F

From 6462461345120877244
X-Google-Thread: 107ada,6d20ca8c804056d5,start
X-Google-NewGroupId: yes
X-Google-Thread: 11480d,6d20ca8c804056d5,start
X-Google-NewGroupId: yes
X-Google-Thread: 10e8ad,6d20ca8c804056d5,start
X-Google-NewGroupId: yes
X-Google-Thread: 10b9c8,6d20ca8c804056d5,start
X-Google-NewGroupId: yes
X-Google-Attributes:
gida3e752f117,gid7221ecd0f7,gid8f86f75953,gida4a23d5f63,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Received: by 10.68.21.67 with SMTP id t3mr97494pbe.26.1316554210568;
        Tue, 20 Sep 2011 14:30:10 -0700 (PDT)
MIME-Version: 1.0
Path: lh7ni1368pbb.0!nntp.google.com!news1.google.com!news2.google.com!
newsfeed2.dallas1.level3.net!news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: SWPC.Webmaster@noaa.gov
Newsgroups:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.info
Subject: Weekly Highlights of Solar and Geomagnetic Activity, 12 - 18 September 2011
Followup-To: rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space
Date: Tue, 20 Sep 2011 17:30:07 EDT
Organization: NOAA Space Weather Prediction Center
Lines: 96
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <20110920213001.998CB33C78@panix2.panix.com>
NNTP-Posting-Host: panix6.panix.com

```
X-Trace: reader1.panix.com 1316554207 18636 166.84.1.6 (20 Sep 2011 21:30:07 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Tue, 20 Sep 2011 21:30:07 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Xref: news1.google.com rec.radio.amateur.misc:4926 rec.radio.amateur.dx:904
rec.radio.amateur.space:415 rec.radio.info:2301
```

```
:Product: Weekly Highlights and Forecasts
:Issued: 2011 Sep 20 2026 UTC
# Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center
# Product description and SWPC contact on the Web
# http://www.swpc.noaa.gov/weekly.html
#
#                Weekly Highlights and Forecasts
#
```

Highlights of Solar and Geomagnetic Activity
12 - 18 September 2011

Although by September 15th there were 11 numbered regions on the visible solar disk, solar activity was low. Region 1289 (N23, L=129, class/area, Dho/450 on 10 September) was the largest region but only managed to produce low level C-flare activity. Region 1297 (S18, L=151, class/area, Dao/60 on 16 September), numbered on the 14 September, was the most active region during the period. The region produced 12 flares, including a C9/1F on 14 September at 2051 UTC, before decaying to plage late on the 17 September. Regions 1295 (N22, L=060, class/area, Dhc/300 on 18 September) and 1290 (S15, L=139, class/area, Dsi/070 on 12 September) also produced C9 flares; a long duration C9 at 12/2054 UTC and a C9/Sf at 16/1136 UTC respectively. The remaining regions produced only low to mid level C-class activity.

The only earth-directed coronal mass ejection (CME) of the week was linked to an eruption on the 13 September in the vicinity of Region 1289 (N24W25). The full halo CME was observed in SOHO / LASCO C2 imagery at 14/0000Z with an estimated plane-of-sky speed of 428 km/s which was later refined to approximately 600 km/s using STEREO COR2 imagery.

No proton events were observed at geosynchronous orbit.

The geomagnetic field ranged from quiet to active levels at mid latitudes and briefly reached severe storm levels at high latitudes.

The week began with unsettled to active levels at middle latitudes with active to major storm conditions at higher latitudes as the geomagnetic field continued to be influenced by a geoeffective coronal hole high speed stream (CH HSS). Disturbed conditions continued until mid day on the 13 September. By 14 September, the geomagnetic field had returned to quiet levels as the effects of the high speed stream waned. Quiet conditions persisted until 17 September when the CME from 13 September arrived at earth. The CME passage was first observed at the ACE spacecraft at 17/0256 UTC followed by a 21 nT sudden impulse at the Boulder magnetometer. The geomagnetic field reacted with unsettled to active conditions at mid latitudes and periods of major to severe storm levels at high latitudes. Mostly quiet conditions returned by 18 September with two active periods observed mid-day at high latitudes.

The greater than 2 MeV electron flux at geosynchronous orbit reached high levels 12-17 September.

Forecast of Solar and Geomagnetic Activity
21 September - 17 October 2011

Solar activity is expected to be at low to moderate levels from 21 - 23 September. On 24 September - 08 October, activity is expected to increase to moderate levels with a slight chance for major flare activity as old Region 1283 (N14, L=226) rotates onto the visible disk. Solar activity is expected to return to predominantly low to moderate levels for the remainder of the period.

No proton events are expected at geosynchronous orbit until 23 September. There is a slight chance for a proton enhancement from 24 September until 08 October as old Region 1283 returns to the visible disk. No proton events are expected from 09 October until the end of the period.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to be at mostly normal to moderate levels. High levels are expected on 26 - 28 September and again on 02-03, 11-13 October due to influences from coronal hole high speed streams.

Geomagnetic field activity is expected to be mostly from 21 - 25 of September. Unsettled conditions are expected on 25 and 27 September due to CH HSS activity. On 30 September to October 01, a recurrent CH-HSS is expected to bring unsettled to occasionally active periods of geomagnetic activity. Mostly quiet conditions are expected again until 08 October when another recurrent CH HSS is expected to become geoeffective. Unsettled to Active conditions are expected with minor storm periods possible at high latitudes until 11 October. Mostly quiet conditions are expected from 12 October through the end of the period.

```
From 8447394397607762880
X-Google-Thread: 10e8ad,69040fbe07800826,start
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Received: by 10.68.8.135 with SMTP id r7mr1985619pba.8.1316703857369;
        Thu, 22 Sep 2011 08:04:17 -0700 (PDT)
Path: lh7ni2613pbb.0!nntp.google.com!news1.google.com!news.glorb.com!
feeder.erje.net!feeder.news-service.com!aioe.org!.POSTED!not-for-mail
From: kc9bzc <kc9bzc@yahoo.com>
Newsgroups: rec.radio.amateur.space
Subject: satellites
Date: Thu, 22 Sep 2011 15:04:13 +0000 (UTC)
Organization: Aioe.org NNTP Server
Lines: 7
Message-ID: <j5fipd$ure$1@speranza.aioe.org>
NNTP-Posting-Host: CcVl+botdw8ksUtHt5TYCQ.user.speranza.aioe.org
Mime-Version: 1.0
X-Complaints-To: abuse@aioe.org
User-Agent: Pan/0.132 (Waxed in Black)
X-Notice: Filtered by postfilter v. 0.8.2
Xref: news1.google.com rec.radio.amateur.space:416
Content-Type: text/plain; charset=UTF-8
Content-Transfer-Encoding: 8bit
```

As i am new to this, and I did some research and found most are dead.
So what up there is working and on what freq's?

any Help is welcome

Bill

```
From 685411332292128559
X-Google-Thread: 10e8ad,69040fbe07800826
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Received: by 10.68.50.133 with SMTP id c5mr2041814pbo.2.1316704489795;
        Thu, 22 Sep 2011 08:14:49 -0700 (PDT)
Path: lh7ni2618pbb.0!nntp.google.com!news1.google.com!news.glorb.com!
feeder.erje.net!newsfeed.xs4all.nl!newsfeed5.news.xs4all.nl!xs4all!
post.news.xs4all.nl!not-for-mail
```

```
Newsgroups: rec.radio.amateur.space
From: Rob <nomail@example.com>
Subject: Re: satellites
References: <j5fipd$ure$1@speranza.aioe.org>
User-Agent: slrn/pre0.9.9-111 (Linux)
Mime-Version: 1.0
Message-ID: <slrnj7mk79.vor.nomail@xs8.xs4all.nl>
Date: 22 Sep 2011 15:14:49 GMT
Lines: 9
NNTP-Posting-Host: 2001:888:0:1::888
X-Trace: 1316704489 news.xs4all.nl 2534 [2001:888:0:1::888]:34144
X-Complaints-To: abuse@xs4all.nl
Xref: news1.google.com rec.radio.amateur.space:417
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

kc9bzc <kc9bzc@yahoo.com> wrote:
>
> As i am new to this, and I did some research and found most are dead.
> So what up there is working and on what freq's?
>
> any Help is welcome

Did you read the weekly bulletin on this newsgroup?
It extensively list the operating status of all satellites.


From -8128488185343370406
X-Google-Thread: 10e8ad,69040fbe07800826
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Received: by 10.68.11.199 with SMTP id s7mr3006670pbb.5.1316722090486;
        Thu, 22 Sep 2011 13:08:10 -0700 (PDT)
Path: lh7ni2760pbb.0!nntp.google.com!news1.google.com!news.glorb.com!
feeder.erje.net!feeder.news-service.com!aioe.org!.POSTED!not-for-mail
From: kc9bzc <kc9bzc@yahoo.com>
Newsgroups: rec.radio.amateur.space
Subject: Re: satellites
Date: Thu, 22 Sep 2011 20:08:05 +0000 (UTC)
Organization: Aioe.org NNTP Server
Lines: 14
Message-ID: <j5g4j5$m3d$1@speranza.aioe.org>
References: <j5fipd$ure$1@speranza.aioe.org>
     <slrnj7mk79.vor.nomail@xs8.xs4all.nl>
NNTP-Posting-Host: CcVl+botdw8ksUtHt5TYCQ.user.speranza.aioe.org
Mime-Version: 1.0
X-Complaints-To: abuse@aioe.org
User-Agent: Pan/0.132 (Waxed in Black)
X-Notice: Filtered by postfilter v. 0.8.2
Xref: news1.google.com rec.radio.amateur.space:418
Content-Type: text/plain; charset=UTF-8
Content-Transfer-Encoding: 8bit
```

```
On Thu, 22 Sep 2011 15:14:49 +0000, Rob wrote:

> kc9bzc <kc9bzc@yahoo.com> wrote:
>>
>> As i am new to this, and I did some research and found most are dead.
>> So what up there is working and on what freq's?
>>
>> any Help is welcome
>
> Did you read the weekly bulletin on this newsgroup? It extensively list
> the operating status of all satellites.

Yes I did but not much help, is there a database of sat and freq's to
download?


From 5688090556440308780
X-Google-Thread: 10e8ad,69040fbe07800826
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Received: by 10.68.38.134 with SMTP id g6mr3168483pbk.6.1316723613967;
        Thu, 22 Sep 2011 13:33:33 -0700 (PDT)
MIME-Version: 1.0
Path: lh7ni2771pbb.0!nntp.google.com!news1.google.com!news.glorb.com!news-
xfer.nntp.sonic.net!posts.news.sonic.net!nnrp1.nntp.sonic.net!not-for-mail
Newsgroups: rec.radio.amateur.space
Subject: Re: satellites
References: <j5fipd$ure$1@speranza.aioe.org> <slrnj7mk79.vor.nomail@xs8.xs4all.nl>
<j5g4j5$m3d$1@speranza.aioe.org>
From: Patty Winter <patty1@wintertime.com>
X-Newsreader: trn 4.0-test76 (Apr 2, 2001)
Date: 22 Sep 2011 20:33:33 GMT
Lines: 22
Message-ID: <4e7b9b9d$0$1672$742ec2ed@news.sonic.net>
Organization: Sonic.Net
NNTP-Posting-Date: 22 Sep 2011 20:33:33 GMT
NNTP-Posting-Host: ce966d6d.news.sonic.net
X-Trace: DXC=f2`m0?
a[@JF`T2eLD9TPWCm4K\QM1CV^@1OYf0H`?;XAMm0DS=WaR;G49JS04A7<JB1ZZNce^7omNlSEnIE:kVgK
X-Complaints-To: abuse@sonic.net
Xref: news1.google.com rec.radio.amateur.space:419


In article <j5g4j5$m3d$1@speranza.aioe.org>, kc9bzc  <kc9bzc@yahoo.com> wrote:
>On Thu, 22 Sep 2011 15:14:49 +0000, Rob wrote:
>
>> Did you read the weekly bulletin on this newsgroup? It extensively list
>> the operating status of all satellites.
>
>Yes I did but not much help, is there a database of sat and freq's to
>download?
```

I don't know about a downloadable file, but did you look at the
satellite status page on AMSAT's website?

http://www.amsat.org/amsat-new/satellites/status.php

The nice thing about the weekly updates is that they zero in on
the operational birds, and they have all the uplink/downlink info
in one place.

Patty N6BIS

```
From 4288243894046909870
X-Google-Thread: 10e8ad,69040fbe07800826
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Received: by 10.68.50.133 with SMTP id c5mr4751703pbo.2.1316744308694;
        Thu, 22 Sep 2011 19:18:28 -0700 (PDT)
Path: lh7ni2941pbb.0!nntp.google.com!news1.google.com!npeer02.iad.highwinds-
media.com!news.highwinds-media.com!feed-me.highwinds-media.com!post02.iad!
news.suddenlink.net!not-for-mail
From: "Glenn" <aa5pk@hotmail.com>
Newsgroups: rec.radio.amateur.space
References: <j5fipd$ure$1@speranza.aioe.org>
In-Reply-To: <j5fipd$ure$1@speranza.aioe.org>
Subject: Re: satellites
Date: Thu, 22 Sep 2011 21:18:25 -0500
MIME-Version: 1.0
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Windows Mail 6.0.6002.18197
X-MimeOLE: Produced By Microsoft MimeOLE V6.0.6002.18463
Lines: 13
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NNTP-Posting-Host: 75.111.240.73
X-Complaints-To: abuse@suddenlink.net
Xref: news1.google.com rec.radio.amateur.space:420
Content-Type: text/plain;
     format=flowed;
     charset="UTF-8";
     reply-type=original
Content-Transfer-Encoding: 7bit
```

"kc9bzc" <kc9bzc@yahoo.com> wrote in message
news:j5fipd$ure$1@speranza.aioe.org...

>
> As i am new to this, and I did some research and found most are dead.
> So what up there is working and on what freq's?
>

> any Help is welcome
>
> Bill

You might find this site useful also: http://oscar.dcarr.org/index.php

73
Glenn AA5PK

From 9217573272339980074
X-Google-Thread: a4a23d5f63,81fb4d08a684e823,start
X-Google-Attributes: gida4a23d5f63,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news4.google.com!news1.google.com!npeer03.iad.highwinds-media.com!news.highwinds-media.com!feed-me.highwinds-media.com!nx02.iad01.newshosting.com!newshosting.com!news-out.readnews.com!transit3.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-268 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sun, 25 Sep 2011 10:20:52 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 396
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <001c01cc7b21$ee542190$cafc64b0$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
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Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1316960452 19148 166.84.1.6 (25 Sep 2011 14:20:52 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 25 Sep 2011 14:20:52 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to   rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to   rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news1.google.com rec.radio.amateur.space:561 rec.radio.info:2704

AMSAT NEWS SERVICE
ANS-268

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:

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SB SAT @ AMSAT $ANS-268.01
Invitation to Participate in the ARISSat-1/KEDR Operations Survey

AMSAT News Service Bulletin 268.01
>From AMSAT HQ SILVER SPRING, MD.
September 25, 2011
To All RADIO AMATEURS
BID: $ANS-268.01

Steven Bible, N7HPR says that the ARISSat-1 Team has put together a survey on ARISSat-1 operations. Please take a few minutes to answer the questions at https://www.surveymonkey.com/s/arissat1-operation. The survey results will be posted to the Official ARISSat-1 website: http://www.arissat1.org.

Meanwhile, Alan Biddle says the ARISSat-1/KEDR Team is still looking for entries in the Chicken Little Contest. This involves your prognostications/calculations/guesses/darts-in-the-calendar submissions for when ARRISSat-1/KEDR makes its final orbit. We have a fair number of submissions from all over the world from adults, but very few from students. If you know of one who might be interested, encourage them to enter. The details are here:
http://www.amsat.org/amsat-new/ARISSat/ARISSatContest

While it is not going to receive the coverage of UARS, the closest submissions in each category will be recognized. Right now, the deadline is the 15th of October, though since ARISSat-1 is "floating like a butterfly" that MIGHT get extended.

/EX

SB SAT @ AMSAT $ANS-268.02
Frank Bauer, KA3HDO Retires From NASA After 36 Years

AMSAT News Service Bulletin 268.02
>From AMSAT HQ SILVER SPRING, MD.
September 25, 2011
To All RADIO AMATEURS
BID: $ANS-268.02

After an illustrious 36 year career with NASA, Frank Bauer, KA3HDO, has retired from the agency.

In his farewell note to his colleagues, Bauer said that for someone who dreamed about space exploration as a very young child and started at NASA when the Apollo program was in its twilight, it has been truly a pleasure to spend over 3 decades developing and operating systems as part of the NASA team. Bauer said that he has had what he called a phenomenal time contributing to countless Human and Robotic spacflight missions, flight tests, technology experiments, pioneering systems, studies, formulations and on-orbit operations activities as well as numerous agency-level, U.S. Government and international strategies and initiatives.

In addition to his job with NASA, KA3HDO, had a parallel volunteer career as one of the leaders of the manned Amateur Radio in Space program. Among his many achievements was taking manned ham radio operations on-orbit from the now retired space shuttles under the SAREX operation over to the International Space Station and into the ARISS program.

Bauer, who stepped down from ARISS and AMSAT duties in March of 2009, had served as ARISS Program Leader and ARISS International Working Group Chair. Since 1991, he had also held the title of AMSAT Vice President for Human Spaceflight Programs.

In May of 2009 Bauer was presented with the ARRL President's Award for his many contributions to ham radio's part of mans exploration of space.

[ANS thanks the Amateur Radio Newsline Report 1780 - September 23 2011
 for the above information]

/EX

SB SAT @ AMSAT $ANS-268.03
AO-51 to support 54th Jamboree On The Air October 15-16, 2011

AMSAT News Service Bulletin 268.03
>From AMSAT HQ SILVER SPRING, MD.
September 25, 2011

To All RADIO AMATEURS
BID: $ANS-268.03

The AO-51 Command Team is happy to announce support of the Scouting Jamboree On The Air (JOTA) during the weekend Oct. 15-16, 2011. The AO-51 satellite will remain in its current configuration, with an understanding that contacts involving Scouts will be given first priority during this period.

The current operating mode of AO-51 is as follows:

Uplink: 145.880 MHz FM (No PL tone)
Downlink: 435.150 MHz FM

The World Scouting Organization in Switzerland posted JOTA information on their web: http://tinyurl.com/3rfp2cn (www.scout.org) and
http://scout.org/information_events/events/jota/the_54th_jota_2011

Also, visit the World Scouting Radio Library at:
http://tinyurl.com/5sz7tf5 (www.scout.org)

The Boy Scouts of America has several resources on-line for amateur radio stations participating in JOTA: http://tinyurl.com/6d93qb7
(Boy Scouts of America www.scouting.org)

[ANS thanks the Scouting Movement and AO-51 Command Team for the above information]

/EX

SB SAT @ AMSAT $ANS-268.04
Symposium Reminders!

AMSAT News Service Bulletin 268.04
>From AMSAT HQ SILVER SPRING, MD.
September 25, 2011
To All RADIO AMATEURS
BID: $ANS-268.04

2011 AMSAT Space Symposium Papers Deadline Approaches

Your papers for the 2011 AMSAT Space Symposium are due by October 1 for inclusion in the printed proceedings. Yes, that's just a couple of weeks from now! Papers should be sent to Dan Schultz, N8FGV, at: n8fgv@amsat.org.

Symposium Registration is Now Open

The 2011 AMSAT Space Symposium will be held on Friday, November 4th through Sunday, November 6th in San Jose, CA. Our annual gathering will feature:

+ Space Symposium with Amateur Satellite Presentations
+ Operating Techniques, News, & Plans from the Amateur Satellite World
+ Board of Directors Meeting open to AMSAT members (Nov. 3-4)
+ Meet Board Members and Officers
+ Annual General Membership Meeting
+ Annual Banquet-Keynote Speaker and Door Prizes

The 2011 Symposium hotel and registration web pages are now available on the AMSAT web site. You may register for the Symposium and Annual Banquet at the AMSAT Store:
http://www.amsat-na.com/store/SymposiumReg.php

Visit the Symposium and Annual General Meeting web page for details and the latest information:
http://www.amsat.org/amsat-new/symposium/2011/index.php

Symposium Registration including a copy of the Proceedings is:
+ $50 per person starting September 20, 2011
+ $55 per person at the door

The Saturday evening banquet is $45 per person. The Sunday morning Area Coordinator's Breakfast is $15 per person.

Hotel information for the Wyndham San Jose is posted at:
http://www.amsat.org/amsat-new/symposium/2011/Hotel.php

Martha at the AMSAT Office (Phone: 301-589-6062) is available to be of assistance with any hotel questions or problems with your registration.

[ANS thanks the 2011 Symposium Committee for the above information]

/EX

SB SAT @ AMSAT $ANS-268.05
Portable Satellite Operations Qualify for Reverse-VUCC Award

AMSAT News Service Bulletin 268.05
>From AMSAT HQ SILVER SPRING, MD.
September 25, 2011
To All RADIO AMATEURS
BID: $ANS-268.05

The Central States VHF Society has updated their website to reflect applications for VUCC-r, Reverse VUCC.

This award is given to those who have operated via satellites in more than 100 grids away from their home grid.

The rules require that applicants submit proof of contacts made from these away from home grids. So if you work someone signing "portable" (meaning they are operating away from home), please remember to in-

clude your grid as well as the grid they were operating from on your QSL. You can read all the details on-line at:
http://www.csvhfs.org/vuccdesc.html

There are now four operators who have achieved VUCC-r distinction:
N7SFI-200 grids, N5AFV-109 grids, ND9M-325 grids, and KD4ZGW-100 grids.

[ANS thanks John, K8YSE and CSVHFS for the above information]

/EX

SB SAT @ AMSAT $ANS-268.06
Mobile Satellite Operation From Island of Skye On-The-Air Now

AMSAT News Service Bulletin 268.06
>From AMSAT HQ SILVER SPRING, MD.
September 25, 2011
To All RADIO AMATEURS
BID: $ANS-268.06

Paul, 2E1EUB will be active on satellites as 2M1EUB, depending on the weather, from the Island of Skye in western Scotland beginning on September 24 for one week. This will be from grid IO67vj.

During Paul's second week of mobile satellite operations he plans to operate from the eastern side of Scotland.

Paul advises that mobile/portable internet coverage is spotty in these locations but he will attempt access occasionally. He has posted more informaion on his 2M1EUB information at http://www.qrz.com

[ANS thanks Paul, 2E1EUB for the above information]

/EX

SB SAT @ AMSAT $ANS-268.07
AMSAT Member N8MS in Newspaper Feature With Students

AMSAT News Service Bulletin 268.07
>From AMSAT HQ SILVER SPRING, MD.
September 25, 2011
To All RADIO AMATEURS
BID: $ANS-268.07

Matt Severin, N8MS, principal of Dowagiac Middle School in Michigan, took some of his students outside to track and listen to the satellite ARISSat-1 on Tuesday, September 13.

Two years earlier, Severin, then principal of Sister Lakes Elementary School, had a picture taken of the students and submitted it to be flown on ARISSat.

On Tuesday, the students were able to track the satellite, listen to greetings in several languages and receive telemetry as well as SSTV (Slow Scan Television) images with a goal to promote STEM (Science, Technology, Engineering and Math). The Daily News posted a story on this activity: http://tinyurl.com/3z39yst (www.dowagiacnews.com)

Matt is also an instructor in the ARRL Teacher Institute and has helped several other educators bring STEM education, based on amateur radio and satellites, into their classroom.

Student submissions for ARISSat were stored on a memory chip that was attached to ARISSat-1 and are flying along with the craft as it orbits the Earth. The student projects and photos can all be viewed ARISS Europe web site at: http://www.ariss-eu.org/arissat-1.htm

[ANS thanks the ARISS Status Report and Carol, KB3LKI for the above information]

/EX

SB SAT @ AMSAT $ANS-268.08
Special Event NW2C 911 Portable Satellite Station Video Posted

AMSAT News Service Bulletin 268.08
>From AMSAT HQ SILVER SPRING, MD.
September 25, 2011
To All RADIO AMATEURS
BID: $ANS-268.08

Pete, WB2OQQ operated a portable satellite station on September 11 using the call NW2C, at Historic Fort Totten, located in Bayside New York, only a few miles from ground zero. Fort Totten was one of many placed used in recovery and healing during 911.

Pete operated all available FM satellite passes that day. For those that made a confirmed satellite contact and wish to receive a Certificate of Confirmation, visit: http://www.nw2c.org/911.html.

A video tribute is posted at: http://vimeo.com/29077529

[ANS thanks Pete, WB2OQQ for the above information]

/EX

SB SAT @ AMSAT $ANS-268.09
Satellite Shorts From All Over

AMSAT News Service Bulletin 268.09
>From AMSAT HQ SILVER SPRING, MD.
September 25, 2011

To All RADIO AMATEURS
BID: $ANS-268.09

+ Videos and slides from the Summer CubeSat Developers' Workshop, held August 6-7 at the 25th Annual AIAA/USU Conference on Small Satellites, are now available for download: http://tinyurl.com/3sgnrn3 (AMSAT-UK)

+ The well publicized re-entry of the UARS satellite may have already occurred at press time. An interesting video simulation of the re-entry can be viewed at: http://www.youtube.com/watch?v=5laK2JopaVE&feature=player_embedded

+ An interesting article about three recently declassified American spy satellites can be read at: http://spaceflightnow.com/news/n1109/19nrodeclassified/

+ The NASA Education Express Message for September 22, 2011 reports that registration is open for the Team America Rocketry Challenge 2012. This a national model rocket competition for U.S. students in grades 7-12. Teams of three to 10 students are challenged to design, build and fly a model rocket that will climb to 800 feet with a payload of two raw eggs and stay aloft for 43 to 47 seconds. The payload must then return to earth unbroken. Cash prizes are awarded to the top finishers. NASA invites top teams to participate in their Student Launch Initiative, an advanced rocketry program. Participation is limited to the first 1,000 teams who register by November 30, 2011. For more information, visit: http://www.rocketcontest.org/

+ The dates for the next Hudson Valley Satcom nets are September 29, October 13, and October 27 at 8:00 PM Eastern Daylight Time (UTC - 4). You can tune in via the 146.970 MHz Mt. Beacon repeater, PL 100.0 or via EchoLink on the N2EYH-L node. More info is available at: http://www.hvsatcom.org (Stu, WA2BSS)

+ A new video from NASA's Dawn spacecraft takes you on a flyover journey above the surface of the giant asteroid Vesta. The data obtained by Dawn's framing camera, used to produce the visualizations, will help scientists determine the processes that formed Vesta's striking features. It will also help Dawn mission fans all over the world visualize this mysterious world, which is the second most massive object in the main asteroid belt. The video and article is posted at: http://tinyurl.com/3tn932m (science.nasa.gov)

+ NASA has made historic and interesting sounds and sound bites from space missions available for download as ringtones or on your computer for events, errors, alarms and notifications. These are available in both MP3 and M4R (iPhone) files. To listen to and download the sounds, visit: http://www.nasa.gov/connect/sounds
  The NASA App for Android allows users to easily preview and set the sounds as ringtones can be found at: https://market.android.com/details?id=gov.nasa

+ Radio-Electronics.com provides concise guides, information, tutorials and data about radio frequency, RF, technology and RF design on their Radio Frequency, RF, Technology and Design pages at: http://www.radio-electronics.com/info/rf-technology-design

[ANS thanks everyone for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office. And with that, please keep in mind the ham who discovered that a positive attitude may not solve all his problems, but it certainly annoyed enough people to make it worth his effort.

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM

```
From -1014861663955578657
X-Google-Thread: 107ada,c72c3b7ea65dba37,start
X-Google-NewGroupId: yes
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MIME-Version: 1.0
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citadel.nobulus.com!newsfeed.ision.net!newsfeed2.easynews.net!ision!
newsfeed1.dallas1.level3.net!newsfeed2.dallas1.level3.net!news.level3.com!panix!
rri.panix.com!robomod!not-for-mail
From: SWPC.Webmaster@noaa.gov
Newsgroups:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.info
Subject: Weekly Highlights of Solar and Geomagnetic Activity, 19 - 25 September
2011
Followup-To: rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space
Date: Tue, 27 Sep 2011 21:30:06 EDT
Organization: NOAA Space Weather Prediction Center
Lines: 80
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X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Xref: news1.google.com rec.radio.amateur.misc:4955 rec.radio.amateur.dx:913
rec.radio.amateur.space:422 rec.radio.info:2323
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```
:Product: Weekly Highlights and Forecasts
:Issued: 2011 Sep 27 2159 UTC
# Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center
# Product description and SWPC contact on the Web
# http://www.swpc.noaa.gov/weekly.html
#
#                 Weekly Highlights and Forecasts
#
```

Highlights of Solar and Geomagnetic Activity
19 - 25 September 2011

Solar activity ranged from low to high levels during the period. Activity was low during 19 - 20 September with C-class flares from Regions 1295 (N22, L = 057, class/area Ekc/550 on 23 September), 1296 (N26, L = 040, class/area Dai/130 on 15 September), and 1301 (N19, L = 330, class/area Eso/210 on 21 September). Activity increased to moderate levels on 21 September due to an M1 x-ray flare at 21/1223Z. A further increase to high levels occurred on 22 September with an X1/2n flare at 22/1101Z from Region 1302 (N12, L = 282, class/area Fkc/1300 on 24 September) as it rotated into view. The X1 was associated with Types II/IV radio sweeps, a Tenflare, and a non-Earth-directed CME. Activity decreased to moderate levels on 23 September with low-level M-class flares from Regions 1295 and 1302. Activity returned to high levels on 24 September with three major flares from Region 1302: an X1/2b at 24/0940Z associated with Types II/IV radio sweeps, a Tenflare, and a halo-CME; an M7/1f at 24/1320Z, with a much faster partial halo CME that appears to overtake the previous CME; and an M5 at 24/2036Z. Finally, an M3 flare from Region 1302 at 24/1921Z had an associated Type II sweep, Tenflare, and partial-halo CME (estimated P.O.S. speed 632 km/s). Activity decreased to high levels on 25 September with Region 1302 and 1303 (S28, L = 034, class/area Cso/070 on 25 September) both producing multiple M-class events.

A greater than 10 MeV proton event at geosynchronous orbit began at 23/2255Z in response to the X1 flare on 22 September and was in progress at the close of the summary period.

The greater than 2 MeV electron flux at geosynchronous orbit was at normal to moderate levels during 19 - 21 September. Fluxes decreased to normal levels during 22 - 25 September.

Geomagnetic activity was at quiet levels during most of the period.

Forecast of Solar and Geomagnetic Activity
28 September - 24 October 2011

Solar activity is expected to be at moderate to high levels with more major flare activity from Region 1302 until it crosses the west limb on 03 October. Activity is expected to decrease to low levels during 04 - 19 October.On 20 October, activity is expected to increase to low - moderate levels with the return of Region 1302 for the remainder of the forecast period.

There will be a chance for another proton flare from Region 1302 until it departs the visible disk on 04 October. No proton events are expected at geosynchronous orbit for the remainder of the period.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to be at normal to moderate levels during 28 September - 03 October. An increase to normal to high flux levels is expected during 04 - 05 October due to CH HSS effects. Normal to moderate fluxes are expected during 06 - 10 October as CH HSS effects subside. Fluxes are expected to rise to normal to high levels from 11 - 15 October due to CH HSS effects. 1A return to normal to moderate background levels is expected from 16 - 24 October.

Geomagnetic activity is expected to be at unsettled to active levels on 28 September as CME effects subside. A decrease to quiet levels is expected on 29 - 30 September. Activity is expected to increase to quiet to unsettled levels during 01-02 October due to a coronal hole high-speed stream (CH HSS). A return to quiet levels is expected during 02 - 07 October. Activity is expected to increase to quiet to active levels during 08 - 11 October as another CH HSS disturbs the field. A return to predominantly quiet levels is expected for the remainder of the period.

From 1930755121047668711
X-Google-Thread: fcc6e,183c79f29a35678c,start
X-Google-NewGroupId: yes
X-Google-Thread: 11480d,183c79f29a35678c,start

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X-Google-Thread: fc2a5,183c79f29a35678c,start
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gid4baf9708d4,gid7221ecd0f7,gidd7f5508063,gid241b302a50,gida3e752f117,gide721ae2bf
6,gid8f86f75953,domainid0,public,usenet
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Received: by 10.68.11.199 with SMTP id s7mr50554430pbb.5.1317448806566;
        Fri, 30 Sep 2011 23:00:06 -0700 (PDT)
MIME-Version: 1.0
Path: lh7ni8832pbb.0!nntp.google.com!news1.google.com!news2.google.com!
news.glorb.com!news-out.readnews.com!transit3.readnews.com!panix!panix2.panix.com!
not-for-mail
From: rram@panix.com (rec.radio.amateur.moderated Admin)
Newsgroups:
rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.rad
io.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amat
eur.space,rec.radio.info
Subject: Crossposting Permitted to rec.radio.amateur.moderated
Supersedes: <radio/ham-radio/moderated/crossposting-1-1314856800@panix.com>
Followup-To: poster
Date: 1 Oct 2011 02:00:02 -0400
Organization: rec.radio.amateur.moderated Moderation Team
Lines: 47
Approved: RRI Admin <rec-radio-info-request@panix.com>
Distribution: world
Expires: 03 Nov 2011 02:00:00 -0000
Message-ID: <radio/ham-radio/moderated/crossposting-1-1317448801@panix.com>
Reply-To: rec-radio-amateur-moderated-request@panix.com
(rec.radio.amateur.moderated Admin)
NNTP-Posting-Host: panix2.panix.com
X-Trace: reader1.panix.com 1317448802 16808 166.84.1.2 (1 Oct 2011 06:00:02 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sat, 1 Oct 2011 06:00:02 +0000 (UTC)
Summary: Short reminder for unmoderated newsgroups that crossposting is permitted
Keywords: FAQ, ham, amateur, radio, moderated, unmoderated, crossposting,
permitted
Xref: news1.google.com rec.radio.amateur.antenna:16311 rec.radio.amateur.dx:917
rec.radio.amateur.equipment:1720 rec.radio.amateur.homebrew:3140
rec.radio.amateur.misc:4972 rec.radio.amateur.policy:14923
rec.radio.amateur.space:423 rec.radio.info:2335

Posted-By: auto-faq 3.3.2 beta (PGPMoose V2.0, Perl 5.005)
Archive-name: radio/ham-radio/moderated/crossposting
Revision: 1.1 2009/04/12 19:42:04
```

Posting-Frequency: posted monthly
URL: http://www.panix.com/~rram/usenet/rram/index.html

Changes followed by "|".

After a 30-day public discussion and feedback period to gauge reader opinions in March of 2009:

http://groups.google.com/group/rec.radio.amateur.moderated/browse_thread/thread/d7d337db35f23326

the rec.radio.amateur.moderated Moderation Team has decided to consider amending its charter, and permit limited simultaneous crossposting to rec.radio.amateur.moderated and one other unmoderated amateur-radio-related discussion newsgroup. We are currently trying this on a temporary basis (90 days, through early July 2009), and adopt it permanently if successful.

Approved rec.radio.amateur.* newsgroups are those that are currently listed in the latest version of the "List of Big Eight Newsgroups" which is crossposted monthly to news.announce.newgroups, news.groups, and news.lists.misc.

Approved alt.radio.amateur.* and alt.ham-radio.* newsgroups are those that have been created consistent with the suggestions in "So You Want to Create an Alt Newsgroup" at:

  http://www.faqs.org/faqs/alt-creation-guide/

Approved regional hierarchy newsgroups are those that contain either "radio.amateur" or "ham-radio" in their names, including uk.radio.amateur and aus.radio.amateur.misc.

We will make every reasonable effort to keep our list of approved newsgroups up-to-date. In case we have overlooked any, and a submission is rejected in error as a result, the rejected submitter can E-mail us at our administrative contact address (in the signature at the bottom of this article, and the default Reply-To for the rejection message) requesting that it be added, and that the article be approved. We may still choose to reject articles crossposted to any alt.* newsgroup with an inappropriate name, including obscene language, embedded name-calling, or encouragement of unlawful conduct.

Please direct any comments, questions, or criticisms to rec-radio-amateur-moderated-request@panix.com.

From 6722265153518534375
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mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-275 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sun, 2 Oct 2011 10:10:41 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 313
Approved: RRI Admin <rec-radio-info-request@panix.com>
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X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Xref: news1.google.com rec.radio.amateur.space:424 rec.radio.info:2342
Content-Type: text/plain;
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Content-Transfer-Encoding: 7bit
Content-Language: en-us
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AMSAT NEWS SERVICE
ANS-275

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
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* OSCAR 1 Prototype Will Be Operating at the 2011 Symposium
* Auburn University AubieSat-1 Scheduled for Launch from Vandenberg
* K6LCS Satellite Presentation at the Anchorage Hamfest
* ARISS Status - 26 September 2011

SB SAT @ AMSAT $ANS-275.01
Lance Ginner, K6GSJ 2011 AMSAT Symposium Banquet Speaker

AMSAT News Service Bulletin 275.01
From AMSAT HQ SILVER SPRING, MD.
October 2, 2011
To All RADIO AMATEURS
BID: $ANS-275.01

AMSAT is privileged to have Lance Ginner, K6GSJ as our banquet speaker. As AMSAT and the amateur radio community celebrate the 50th anniversary of the launch of OSCAR 1 (placed in orbit on 12 DEC 61), we look forward to Lance's remarks about how OSCAR 1 was developed and the impact of amateur radio satellites on his professional career. We will hear about the personal, technical, political, and security issues regarding the early OSCARs.

First licensed in 1954 at the age of 16, Lance started his amateur career as a novice (KN6GSJ) and quickly upgraded to become K6GSJ, the same general class license he holds today. Following his graduation from college in 1959, he joined Lockheed Missiles and Space Division in Sunnyvale, CA.

While at Lockheed, Lance became involved with Chuck Towns, K6LFH and others in Project Oscar and helped build OSCAR 1 (Launched on 12 DEC 61) and OSCAR 2 (Launched on 2 JUN 62) and test and integrate those spacecraft to the Discoverer host vehicle. OSCAR 1 became one of the first free flying 'secondary payloads' to be flown into space.

Lance's involvement with amateur radio spacecraft continued with his work with OSCAR 3, OSCAR 4, OSCAR 5 (the first for the newly formed Radio Amateur Satellite Corporation in 1970), OSCAR 6, OSCAR 7, and OSCAR 8.

Lance's involvement with the early OSCAR satellites continued with AMSAT, working with Jan King, W3GEY (AMSAT VP-Engineering), Perry Klein, W3PK (AMSAT's first President), and Dick Daniels, W4PUJ (AMSAT Propulsion).

You are invited to read more of Lance's career as one of Amateur Radio in Space pioneers on the 2011 Symposium web page:
http://www.amsat.org/amsat-new/symposium/2011/BanquetSpeaker.php

[ANS thanks the 2011 Symposium Committee for the above information]

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SB SAT @ AMSAT $ANS-275.02
OSCAR 1 Prototype Will Be Operating at the 2011 Symposium

AMSAT News Service Bulletin 275.02
  From AMSAT HQ SILVER SPRING, MD.
October 2, 2011
To All RADIO AMATEURS
BID: $ANS-275.02

The AMSAT 2011 AMSAT Space Symposium will be held on Friday, November 4th through Sunday, November 6th at the Windham Hotel in San Jose, California. This year's Symposium coincides the celebration of the 50th anniversary of OSCAR 1.

Symposium Banquet Speaker and OSCAR 1 developer Lance Ginner, K6GSJ provided Bob Allison, WB1GCM of ARRL's Technical Lab and his team with technical advice to help getting the satellite operational again. Bob will also be at the Symposium and will give a brief talk on the refurbishment process.

The refurbished OSCAR-1 was on display at the ARRL exhibit area at the 2011 Dayton Hamvention. We look forward to having the OSCAR 1 prototype on display during the AMSAT Symposium as well as hear the CW transmissions (now managed by a PIC controller) in the 145 MHz band.

Additionally, the AMSAT News Service will re-run the weekly Project OSCAR Newsletters to commemorate the 50th anniversary of OSCAR 1. During the November/December 2011 time frame you will be able to share the excitement of the launch campaign that started it all 50 years ago.

Watch for the re-publication of the Project OSCAR Newsletters in the AMSAT Journal. The Newsletters were hand-typed back in 1961. Thanks to Don Ferguson, KD6IRE for scanning the original documents announcing OSCAR 1.

[ANS thanks the 2011 Symposium Committee for the above information]

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SB SAT @ AMSAT $ANS-275.03
Auburn University AubieSat-1 Scheduled for Launch from Vandenberg

AMSAT News Service Bulletin 275.03
  From AMSAT HQ SILVER SPRING, MD.
October 2, 2011
To All RADIO AMATEURS
BID: $ANS-275.03

JM Wersinger, PhD, KI4YAU, Professor Emeritus and Director of Auburn

University Student Space Program in Alabama wrote this week, "We fervently request your assistance in receiving transmissions from an upcoming satellite, AubieSat-1, immediately after its launch from Vandenberg AFB, California, 25 October 2011 at 9:52 UTC. AubieSat-1 (AS-1) is an undergraduate - built CubeSat satellite developed by Auburn University.

AS-1 is designed to transmit with a power of about 800 milliwatts on a frequency of 437.475 MHz, plus or minus Doppler correction. The beacon signal, along with telemetry, will be sent using A1A continuous wave Morse code at 20 words per minute. Additional telemetry from the on board science experiment will use CW transmissions up to 60 WPM.

Based on the pre-launch orbital data provided by NASA, AS-1 will activate after deployment at 12:21 UTC, 25 October 2011. At that time, the sub-satellite point will be at 34.52 S latitude and 1.52 W longitude over the South Atlantic Ocean. Our predictions are that the first flights over the contiguous United States will begin as shown in the following table:

Orbit	AOS	Elevation	LOS	General Locale
3	15:54 UTC	>50 deg	16:01 UTC	New York
4	17:28 UTC	>26 deg	17:35 UTC	Texas
5	19:07 UTC	>48 deg	19:14 UTC	California

This information will be updated should there be launch scrubs or performance changes in the launch, and additional information will be available upon request for specific locations. Reception reports with data contents are welcomed to the following email addresses:
wersijp at auburn dot edu and tam0013 at auburn dot edu

An internet Echolink conference group is also planned to begin one-half hour prior to launch and continue until about 30 minutes after confirmation of the first receipt of signals from the satellite. Information on the conference groups title will be distributed nearer to the launch for interested stations.

Please email wersijp at auburn dot edu if you require additional information and can assist in the reception and tracking
of AubieSat-1.

Long-time AMSAT Member John Klingelhoeffer, WB4LNM serves as the Technical Advisor in Auburn University's Student Space Program.

[ANS thanks Professor Wersinger, KI4YAU at Auburn University for the above information].

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SB SAT @ AMSAT $ANS-275.04
K6LCS Satellite Presentation at the Anchorage Hamfest

AMSAT News Service Bulletin 275.04
From AMSAT HQ SILVER SPRING, MD.
October 2, 2011
To All RADIO AMATEURS
BID: $ANS-275.04

Craig Bledsoe, KL4E of the Anchorage Amateur Radio Club (AARC) noted their September 17 Hamfest featured a first ever remotely-delivered keynote presentation by Clint Bradford, K6LCS.

In order to facilitate this full-duplex two-way video Skype conference between Clint's studio in Riverside, California and the Anchorage Hamfest a team of hams assembled the technology to make this happen.

Led by Rich Gillin, AL4S, and Eric Thompson, N6SPP, the team installed an AT&T active remote phased-array WiMax antenna at the hamfest and aimed it towards the AT&T Alascom headquarters on Government Hill many miles away. The resultant broadband signal enabled Clint to present over a hundred PowerPoint slides through a laptop computer and projection system while his audio was delivered via a Skype connection. Two way internet video streaming allowed the audience to see Clint and he was able to see the crowd at the Hamfest.

Clint delivered a fascinating look across the spectrum of amateur satellite operations. From the earliest days of the first OSCAR satellites first launched over a half-century ago to the organization of AMSAT and today's comprehensive international efforts to get the latest amateur technologies into outer space, his presentation covered it all.

Clint also taught the basics, showing step-by-step how a beginning ham can use a simple handheld radio and antenna to work the satellites with great success.

In addition to all of the on-line satellite discussions, the AARC also conducted real-life satellite QSOs from the hamfest before and after Clint's presentation. Using AO-27, SO-50, and AO51 the host operators N6SPP and KL4E worked over a dozen amateur satellite stations in three countries. Then a number of guest operators who were attending the Hamfest got on board as well. Several visiting hams made their first satellite QSOs that day - and they were thrilled!

All-in-all everyone had a great time at the Anchorage Amateur Radio Club Hamfest, and many visitors said that they thoroughly enjoyed Clint's presentation.

Clint's satellite pages can be found at: http://www.work-sat.com

[ANS thanks Craig Bledsoe, KL4E of the Anchorage Amateur Radio Club for the above information]

/EX

SB SAT @ AMSAT $ANS-275.05
ARISS Status - 26 September 2011

AMSAT News Service Bulletin 275.05
From AMSAT HQ SILVER SPRING, MD.
October 2, 2011
To All RADIO AMATEURS
BID: $ANS-275.05

1. First ARISS Contact for Louisiana

On Thursday, September 22, the first Amateur Radio on the International Space Station (ARISS) contact to be held in Louisiana took place between students attending Kiroli Elementary School in West Monroe and Satoshi Furukawa, KE5DAW on the ISS. Approximately 500 students were on hand for the event. Representatives from the school board, the American Radio Relay League (ARRL) and the media were also present. The contact was a featured activity held in conjunction with a well developed education plan covering space and communications. The University of Louisiana at Monroe (ULM) will open its observatory in an upcoming month to Kiroli Elementary to allow students to view various celestial bodies and events, as well as the planets and stars within our solar system. Contact information and links to articles, video and audio may be found on this Web site:
http://www.cs.ulm.edu/~pdw/KiroliARISS/

2. ARISS International Team Teleconference Held

The ARISS monthly teleconference was held on Tuesday, September 20. Among the agenda items discussed were the upcoming Houston face-to-face meeting and the HamTV project that ESA plans to support through a contract with Kayser-Italia. The Project Selection and Use committee will discuss HamTV and a second Kenwood radio for the Columbus module once the proposals are submitted. Minutes have been posted.
See: http://www.rac.ca/ariss/arisstel2011-09-20.htm

3. Astronaut Training Status

Three simulated ARISS contacts were held on Wednesday, September 21. Chris Hadfield, KC5RNJ/VA3OOG spoke with youth at the Euro Space Camp in Belgium. Kevin Ford, KF5GPP contacted the Manhattan Challenger Learning Center (CLC) and Tom Marshburn, KE5HOC answered questions from students at the CLC of Indianapolis. The training sessions were terrestrial-based amateur radio contacts using ARISS equivalent equipment that will prepare the astronauts for participation in ARISS contacts during their upcoming missions on the ISS. Ford is slated to launch with Expedition 33 in September 2012 and Hadfield and Marshburn are scheduled to fly with Expedition 34 in November 2012.

4. EE Times - ARISSat Blog

On September 17, a new entry was made to the EE (Electronic Engineering) Times "Chips in Space" blog about amateur radio satellite ARISSat-1. This week the blog covers the project's lessons learned. See:
http://eetimes.com/electronics-blogs/other/4227392/Chips-in-Space--
Lessons-learned--Part-1

5. World Radio Magazine Covers ARISSat-1

The World Radio Magazine October 2011 issue featured an article about ARISSat-1.

To view the story, "Amateur Satellites: A Bumpy Ride for ARISSat-1 on its Way to
Space," see: http://www.worldradiomagazine.com/

[ANS thanks Carol, KB3LKI, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Lee McLamb, KU4OS

From 1435376304486506577
X-Google-Thread: 107ada,3e92f79be0587516,start
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From: SWPC.Webmaster@noaa.gov
Newsgroups:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.info
Subject: Weekly Highlights of Solar and Geomagnetic Activity, 26 September - 02 October 2011
Followup-To: rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space

Date: Tue, 4 Oct 2011 21:30:05 EDT
Organization: NOAA Space Weather Prediction Center
Lines: 88
Approved: RRI Admin <rec-radio-info-request@panix.com>
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X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to   rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to   rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Xref: g2news2.google.com rec.radio.amateur.misc:6928 rec.radio.amateur.dx:1166 rec.radio.amateur.space:590 rec.radio.info:2816

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:Product: Weekly Highlights and Forecasts
:Issued: 2011 Oct 04 2337 UTC
# Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center
# Product description and SWPC contact on the Web
# http://www.swpc.noaa.gov/weekly.html
#
#                Weekly Highlights and Forecasts
#
```

Highlights of Solar and Geomagnetic Activity
26 September - 02 October 2011

Solar activity ranged from low to moderate levels during the period. Activity was moderate on 26 September with Region 1302 (N12, L=282, class/area Fkc/1300 on 24 September) producing a M4/1b event at 26/0508 UTC and a M2/2b event at 26/1443 UTC. Solar activity decreased to low levels on 27 September before increasing again to moderate levels on 28 September when Region 1302 produced a M1/1n event at 28/1328 UTC with an associated Tenflare (320 sfu). Another decrease to low levels occurred on 29 September before levels increased once again to moderate levels on 30 September through 02 October. Region 1305 (N12, L-249, class/area Dsi/190 on 2 October) produced a M1/1f event at 30/1906 UTC. Associated with this event was a Type II radio sweep with an estimated speed of 690 km/s as well as a 260 sfu Tenflare. Despite limited STEREO data, a slower CME is believed to be potentially geoeffective from this event. Region 1305 produced a M1/1n event at 01/0959 UTC, and produced a possible earth directed CME, with an associated Type II radio sweep (estimated speed of 850 km/s), Type IV radio sweep, and a 180 sfu Tenflare. On 02 October, Region 1305 produced a M3/1n event at 02/0050 UTC that was associated with an Earth directed CME visible in STEREO imagery with an estimated speed of 532 km/s. Finally, Region 1302 produced a M1/Sf event at 02/1723 UTC.

A greater than 10 MeV proton event at geosynchronous orbit began at 23/2255 UTC in response to an X1 flare on 22 September, reached a maximum of 35 pfu at 26/1155 UTC, and ended at 27/0430 UTC. Fluxes returned to background levels for the remainder of the period.

The greater than 2 MeV electron flux at geosynchronous orbit was at normal to moderate levels from 26 to 29 September. Fluxes increased to high levels on 30 September, returned to normal to moderate levels on 01 October, and back to high levels on 02 October.

Geomagnetic activity ranged from quiet to severe storm levels during the period. Increased activity on 26 - 28 September was due to effects of an expected CME from 24 September. Increased activity early on 29 September was due to nighttime sub-storms. Increased activity on 01 - 02 October was due to a solar sector boundary crossing (SSBC) prior to the onset of high speed stream (HSS) effects from a favorably positioned coronal hole (CH).

Forecast of Solar and Geomagnetic Activity
05 October - 31 October 2011

Solar activity is expected to be at low to moderate levels during 05 - 15 October with a slight chance for M-class flare activity from Region 1305 until it crosses the west limb on 07 October, and the return of old Region 1295 (N24, L=57) on 08 October. A decrease to low levels is expected during 16 - 17 October after Region 1295 rotates off the west limb. During 18 - 25 October, activity is expected to increase to low to moderate levels with a slight chance for major flare activity as old Region 1302 rotates back onto the visible disk. Activity is expected to return to low levels for the remainder of the forecast period (26 - 31 October) after old Region 1302 rotates off the west limb.

No proton events are expected at geosynchronous orbit from 05 - 17 October. There is a slight chance for a proton enhancement from 18 - 27 October due to the return of old Region 1302. No proton events are expected during 25 - 31 October.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to be at mostly normal to moderate levels. High levels are expected during 9 - 14 and 28 - 31 October due to influences from coronal hole high speed streams.

Geomagnetic field activity is expected to be mostly unsettled on 05 October due to a CME arrival. Activity is expected to increase to active levels on 06 October due to continued CME effects. Activity is expected to decrease to mostly unsettled levels during 07 - 09 October as effects from the CME subside and a negative polarity coronal hole moves into a geoeffective position. Activity is expected to continue to decrease to mostly quiet levels during 10 -

27 October. During 28 - 30 October, activity is expected to return to mostly unsettled levels due to a positive polarity coronal hole. Finally, activity is expected to decrease to mostly quiet levels on 31 October.

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From 3757128793150189966
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X-Google-Language: ENGLISH,ASCII-7-bit
Received: by 10.68.38.38 with SMTP id d6mr8655451pbk.4.1317976325147;
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border6.a.newsrouter.astraweb.com!not-for-mail
From: Chris Steyaert <observations@rmob.org>
Newsgroups: rec.radio.amateur.space,sci.astro.amateur
Subject: Radio Meteor Obs. Bull. September 2011
Date: Fri, 07 Oct 2011 10:32:03 +0200
Message-ID: <g6et8715m6tf3pn0irsod1vn9ehod74skm@4ax.com>
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Radio Meteor Observation Bulletin No. 218 of September 2011 (83 K) is available now as

http://www.rmob.org/rmobtext/rmob1109.txt

More information and the visual presentation of the hourly forward scatter counts can be found on

http://www.rmob.org

Chris

From 1787195402692907321

```
X-Google-Thread: 10e8ad,bf5a8af647679e52,start
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Received: by 10.68.21.229 with SMTP id y5mr15386595pbe.1.1318082123797;
        Sat, 08 Oct 2011 06:55:23 -0700 (PDT)
Path: lh7ni14329pbb.0!nntp.google.com!news1.google.com!postnews.google.com!
v18g2000pri.googlegroups.com!not-for-mail
From: devi <satyamsivam9030@gmail.com>
Newsgroups: rec.radio.amateur.space
Subject: FOR ONLY HOT GUYS SEE THIS
Date: Sat, 8 Oct 2011 06:53:42 -0700 (PDT)
Organization: http://groups.google.com
Lines: 62
Message-ID: <d1adce93-80a6-4a26-80ca-0e421c8b49dc@v18g2000pri.googlegroups.com>
NNTP-Posting-Host: 117.199.251.125
Mime-Version: 1.0
X-Trace: posting.google.com 1318082123 24861 127.0.0.1 (8 Oct 2011 13:55:23 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Sat, 8 Oct 2011 13:55:23 +0000 (UTC)
Complaints-To: groups-abuse@google.com
Injection-Info: v18g2000pri.googlegroups.com; posting-host=117.199.251.125;
posting-account=xYWSigoAAADp0Q2VAMlANM4syM5q3uRr
User-Agent: G2/1.0
X-Google-Web-Client: true
X-Google-Header-Order: HUALESNKRC
X-HTTP-UserAgent: Mozilla/5.0 (Windows; U; Windows NT 5.1; en-US; rv:1.9.2.23)
 Gecko/20110920 Firefox/3.6.23,gzip(gfe)
Xref: news1.google.com rec.radio.amateur.space:427
Content-Type: text/plain; charset=ISO-8859-1

                  FOR GOOD JOBS SITES TO YOU
                http://goodjobssites.blogspot.com/

                    7TH SENSE MOVIE STILLS
http://actressgallery-kalyani.blogspot.com/2011/10/7th-sense-movie-stills.html
                   MOGUDU MOVIE STILLS
http://actressgallery-kalyani.blogspot.com/2011/09/mogudu-movie-stills.html
              HANSIKA MATOWNI LATEST HOT STILLS
http://actressgallery-kalyani.blogspot.com/2011/09/hansika-motwani.html
                KAJAL AGARWAL HOT PHOTOS
http://actressgallery-kalyani.blogspot.com/2011/09/kajal-agarwal.html
               TAMANNA SIRUTHAI HOT MOVIE STILLS
http://actressgallery-kalyani.blogspot.com/2011/09/siruthai-movie-stills.html
             SNEHA HOT GOA MOVIE STILLS
http://actressgallery-kalyani.blogspot.com/2011/09/goa-movie-stills.html
              HOT KATRINA KAIF PHOTOS
http://actressgallery-kalyani.blogspot.com/2011/09/katrina-kaif.html
           AISHWARYA RAI HOT HQ PHOTO STILLS
http://actressgallery-kalyani.blogspot.com/2011/09/aishwarya-rai.html
           ASIN HOT PHOTO GALLERY
http://actressgallery-kalyani.blogspot.com/2011/09/asin.html
```

```
              FOR ONLY HOT GUYS SEE THIS
                  PRIYAMANI HOT PHOTOS
http://hotactress-kalyani.blogspot.com/2011/09/priyamani-hot.html
             KAJAL AGARWAL LATEST HOT WITHOUT TOP
http://hotactress-kalyani.blogspot.com/2011/08/kajal-agarwal-hot-photos.html
          TAMANNA HOT PHOTOS
http://hotactress-kalyani.blogspot.com/2011/08/tamanna-hot.html
           PRANITHA LATEST HOT PHOTOS
http://hotactress-kalyani.blogspot.com/2011/09/pranitha-hot.html
            HOT KATRINAKAIF WALLPAPERS
http://hotactress-kalyani.blogspot.com/2011/08/katrina-kaif-hot.html
           SAMANTHA HOT WALLPAPERS
http://hotactress-kalyani.blogspot.com/2011/09/samantha-hot.html
             HOT MALLU ACTRESS BHAMA
http://hotactress-kalyani.blogspot.com/2011/09/bhama-hot.html
             TOLLYWOOD HOT ACTRESSES
http://hotactress-kalyani.blogspot.com/2011/08/hot-actrsess.html
            SONAKSHI SINHA HOT PHOTOS
http://hotactress-kalyani.blogspot.com/2011/09/sonakshi-sinha-hot.html
          PRIYANKA CHOPRA LATEST HOT PHOTOS
http://hotactress-kalyani.blogspot.com/2011/08/priyanka-chopra-hot.html

                  LATEST    AMISHA PATEL HOT PICS
http://hotactress-kalyani.blogspot.com/2011/08/amisha-patel-hot.html
               TAPSEE DIFFERENT STILLS
http://hotactress-kalyani.blogspot.com/2011/08/tapsee-hot.html
             PRIYAMANI HOT PHOTOS
http://hotactress-kalyani.blogspot.com/2011/09/priyamani-hot.html

    KATRINA KAIF HOT IMAGES
http://hotactress-katrina.blogspot.com/2011/08/katrina-kaif-hot.html
           TOP 15 HOT BOLLYWOOD KISSES
http://hotactress-katrina.blogspot.com/2011/08/bollywood-kisses.html
                  KAJAL AGARWAL HOT PICS
http://hotactress-katrina.blogspot.com/2011/09/kajal-agarwal.html
```

```
From 6844019947469787294
X-Google-Thread: a4a23d5f63,3c40e95fc46a488d,start
X-Google-Attributes: gida4a23d5f63,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news1.google.com!npeer01.iad.highwinds-media.com!
news.highwinds-media.com!feed-me.highwinds-media.com!news.glorb.com!news-
out.readnews.com!news-xxxfer.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: SWPC.Webmaster@noaa.gov
Newsgroups:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.info
```

```
Subject: Weekly Highlights of Solar and Geomagnetic Activity, 03 - 09 October 2011
Followup-To: rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space
Date: Tue, 11 Oct 2011 17:30:06 EDT
Organization: NOAA Space Weather Prediction Center
Lines: 60
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <20111011213001.7A84033C94@panix2.panix.com>
NNTP-Posting-Host: panix6.panix.com
X-Trace: reader1.panix.com 1318368606 6370 166.84.1.6 (11 Oct 2011 21:30:06 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Tue, 11 Oct 2011 21:30:06 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to            rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Xref: g2news2.google.com rec.radio.amateur.misc:6951 rec.radio.amateur.dx:1178
rec.radio.amateur.space:593 rec.radio.info:2838
```

```
:Product: Weekly Highlights and Forecasts
:Issued: 2011 Oct 11 1854 UTC
# Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center
# Product description and SWPC contact on the Web
# http://www.swpc.noaa.gov/weekly.html
#
#                 Weekly Highlights and Forecasts
#
```

Highlights of Solar and Geomagnetic Activity
03 - 09 October 2011

Solar activity was low. Isolated to occasional C-class flares occurred on each day of the period. Regions 1302 (N13, L=280, class/area Fkc/1070 on 28 September), 1305 (N12, L=248, class/area Chi/250 on 03 October), and 1313 (S15, L=117, class/area Dai/180 on 06 October) were the principal flare producers during the period. The largest flare of the period was a C9/Sf at 05/1242 UTC from Region 1313. No earth-directed CMEs were observed during the period.

No proton events were observed at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit reached high levels during 03 - 05 October. Normal to moderate levels were observed during 06 - 09 October.

Geomagnetic field activity was at quiet to unsettled levels during 03 - 04 October. Activity increased to quiet to minor storm levels on 05 October following a geomagnetic sudden impulse at 05/0742 UTC

(19 nT, Boulder USGS magnetometer), with major storm levels observed at high latitudes, due to multiple CME passages at Earth. Activity decreased to quiet to unsettled levels during 06 - 08 October. An increase to quiet to (briefly) active levels occurred on 09 October associated with a solar sector boundary change.

Forecast of Solar and Geomagnetic Activity
12 October - 07 November 2011

Solar activity is expected to be at very low to low levels during 12 - 17 October, with a slight chance for moderate levels. An increase to low levels is expected during 18 - 23 October, with a chance for moderate levels and a slight chance for high levels; due to the returns of old Regions 1302 and 1305 on 18 October and 20 October, respectively.

No proton events are expected at geosynchronous orbit. There will be a slight chance for a proton event at geosynchronous orbit during 18 - 31 October due to the return of old Region 1302.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to be at normal to moderate levels during 12 - 27 October. Flux levels are expected to increase to moderate to high levels during 28 October - 01 November in response to coronal hole high-speed stream (CH HSS) effects. Flux levels are expected to decrease to normal to moderate levels during 02 - 07 November.

Geomagnetic field activity is expected to be at quiet levels during most of the period. However, quiet to unsettled levels are expected during 15 - 17 October, 28 - 30 October, and 03 - 05 November due to CH HSS effects.

From -4199256104505851624
X-Google-Thread: 10e8ad,d3a0f0f372a35f2c,start
X-Google-NewGroupId: yes
X-Google-Thread: 10b9c8,d3a0f0f372a35f2c,start
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,gida4a23d5f63,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Received: by 10.68.8.229 with SMTP id u5mr17894416pba.0.1318689373988;
        Sat, 15 Oct 2011 07:36:13 -0700 (PDT)
Path: d5ni11409pbc.0!nntp.google.com!news2.google.com!news.glorb.com!news-out.readnews.com!news-xxxfer.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-287 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Sat, 15 Oct 2011 10:36:13 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 2093
Approved: RRI Admin <rec-radio-info-request@panix.com>

```
Message-ID: <001001cc8b3f$b1a17210$14e45630$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
X-Trace: reader1.panix.com 1318689373 6414 166.84.1.6 (15 Oct 2011 14:36:13 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sat, 15 Oct 2011 14:36:13 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Xref: news2.google.com rec.radio.amateur.space:306 rec.radio.info:1861
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
Content-Language: en-us
```

This report is organized into four (4) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - deborbited/returned satellites

SB SAT @ AMSAT W8ISS $WSR-287.S1
WSR 287 Part 1 10/14/2011

AMSAT NEWS SERVICE BULLETIN 287.S1
FROM AMSAT HQ SILVER SPRING, MD, October 14, 2011
TO ALL RADIO AMATEURS
BID: $WSR-287.S1

ARISSat-1 (Radioskaf-b) (Kedr)
Catalog number: 37772
Launch date: August 03, 2011 1843z
Launch site: International Space Station

Status: Operational

Callsign: RS01S

Current Mode(s):
Linear Transponder: U/v
Uplink: 435.758 to 435.742 MHz CW/LSB
Downlink: 145.922 to 145.938 MHz CW/USB

FM Telemetry/SSTV/Messages/ID:

Downlink: 145.950 MHz FM

Telemetry/Beacon:
Downlink: 145.939 MHz CW1
             145.919 MHz CW2
             145.920 MHz 1k BPSK USB
             145.920 MHz 400b BPSK USB

Official Webpage:http://www.amsat.org/amsat-new/ARISSat/ARISSat.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/informal_detail.php?serialnum=89
[08112011]
=====
SO-67 SumbandilaSat
Catalog Number: 35870
Launch Date: September 17, 2009 1555z
Launch site: Baikonur, Kazakhstan

Status: Recovery

Callsign: ZS0SUM

Uplink: 145.875MHz FM tone 233.6 Hz
Downlink: 435.345MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

For more information about SO-67:
http://www.amsatsa.org.za/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=88
[09292011]
=====
DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational
Current Mode: Science Mode - Beacon ONLY

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink: 435.530 to 435.570 MHz

Delfi-C3 web page: http://www.delfic3.nl/

```
IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=68
[02092011]
=====
VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05, 2005 0444z
Launch site: Satish Dhawan Space Centre, India

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink:   435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink:   435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW


Indian Beacon:  145.9360 MHZ CW
Dutch Beacon:   145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=30

To know what transponder is switched on please listen for the beacon
that is active. Each transponder has a different beacon.
[02092011]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004 0745z
Launch site: Baikonur, Kazakhstan

Status: Semi-operational - IHU crash each eclipse

Current Mode(s):
Voice repeater: V/u
Uplink:     145.880 MHz FM
Downlink:   435.150 MHz FM

Telemetry: Recovery efforts
Downlink:   435.150MHz 9k6
```

```
Analog voice downlink:     435.300 MHz FM
                           435.150 MHz FM
                          2401.200 Mhz FM
Analog voice uplink:       145.860 MHZ FM
                           145.880 MHz USB
                           145.880 MHz FM
                           145.920 MHz FM
                           145.920 MHz FM - 67 Hz PL tone burst
                          1268.705 MHz FM
Digital Downlinks:         435.150 MHz FM 38k4 PBP, 1 watt output
                           435.150 MHz FM 9k6 Pacsat Broadcast Protocol
                          2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:            145.860 MHz FM 9k6 Pacsat Broadcast Protocol
                          1268.703 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon:                    435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=19
[06162011]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002 1700z
Launch site: Baikonur, Kazakhstan

Status: Operational

Current Mode: V/u

Uplink:   145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)
```

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz. The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10 minute timer.
[02092011]
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993 0140z
Launch site: Kourou, French Guiana

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[02092011]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974
Launch site: Vandenberg AFB, California, USA

Status: Operational

Current Mode: Alternating between Mode A and B every 24 hours

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/

```
[02092011]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998 0640z (ZARYA module)
Launch sites: Baikonur, Kazakhstan
              Kourou, French Guiana
              Uchinoura Space Center, Japan
              Kennedy Space Center, Titusville, Florida, USA

Status: Operational

Current Active Modes: FM Repeater - OFF
                      Voice -       V/v
                      BBS -         OFF
                      APRS -        OFF
                      SSTV -        OFF


Expedition 29 Crew (May - September 2011):
Commander:                Micheal Fossum        KF5AQG
Flight Engineer:          Sergey Volkov         KE5DAW
Flight Engineer:          Satoshi Furukawa
Flight Engineer:
Flight Engineer:
Flight Engineer:


Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink:   145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink:     145.200 MHz FM
Region 2/3 voice uplink:   144.490 MHz FM
Worldwide downlink:        145.800 MHz FM

Crossband Repeater:
Repeater Uplinks:         1269.650 MHz FM
                           437.800 MHz FM
                           145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink:         145.800 MHz FM
                           437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink:                  145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
```

Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[09222011]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-287.S2
WSR 287 Part 2 10/14/2011

AMSAT NEWS SERVICE BULLETIN 287.S2
FROM AMSAT HQ SILVER SPRING, MD, October 14, 2011
TO ALL RADIO AMATEURS
BID: $WSR-287.S2

O/OREOS
Catalog Number: 37224
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: On Orbit

Uplink:
Downlink: 437.035 MHZ AX.25

Beacon:

Callsign:

URL: http://www.ooreos.org/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=146
[02092011]
=====
Rax-1 Radio Aurora Explorer
Catalog Number: 37223
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: On Orbit

Uplink:
Downlink: 437.505 MHz 9k6 GMSK

Beacon:

Callsign: RAX-1

URL: http://rax.engin.umich.edu/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=165
[02092011]
=====
FO-69 Fastrac-1 Sara Lily
Catalog Number: 37227
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: Operational

Uplink 1: 145.980 MHz 1k2 baud
Uplink 2: 145.825 MHz 1k2 baud
Downlink: 437.345 MHz 1k2 and 8k6 baud

Beacon: 437.435 MHz 1k2 AX.25

Callsign: Fast1

URL: http://fastrac.ae.utexas.edu/index.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=83
[07052011]
=====
FO-70 Fastrac-2 Emma
Catalog Number: 37380
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: Operational

Uplink 1: 435.025 MHz 1k2 baud
Uplink 2: 437.435 MHz 9k6 baud
Downlink: 145.825 MHz

Beacon: 145.825 MHz 1k2 AX.25

Callsign: Fast2

URL: http://fastrac.ae.utexas.edu/index.php

IARU coordination status page:

```
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=84
[07052011]
=====
StudSat
Catalog Number: 36796
Launch Date: July 12, 2010 0352z
Launch site: Satish Dhawan Space Centre, India

Status: On Orbit

Uplink:   437.505MHz, 9600bps FSK
Downlink: 437.505MHz, 9600bps FSK
Beacon  : 437.505MHz,   20bps ASK

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=164
[02092011]
=====
TIsat-1
Catalog Number: 36799
Launch Date: July 12, 2010 0352z
Launch site: Satish Dhawan Space Centre, India

Status: On orbit

Callsign: HB9DE

Uplink:   145.980MHz FM, AFSK
Downlink: 437.305MHz FM, AFSK
Beacon:   437.305MHz CW

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=118
[02092011]
=====
HO-68 HOPE-1 (CAS-1)(XW-1)
Catalog Number: 36122
Launch Date: December 15, 2009 0231z
Launch site: Taiyuan Space Center, PRC

Status: Beacon only

Callsign:
Broadcast:    BJ1SA-11
BBS:     BJ1SA-12

Uplinks:   145.8250 MHz FM, PL 67.0 Hz.
           145.9250 - 145.9750 MHz SSB/CW
           145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
           435.7650 - 435.7150 MHz SSB/CW
           435.6750 MHz AFSK 1200 BPS
```

```
Beacon:    435.7900 MHz CW

Mode and Antenna Polarization:
V: LHCP 2.0dBi max
U: RHCP 3.0dBi max

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=108

For more information about XW-1 (CAS-1):
http://
[08112011]
=====
SwissCube
Catalog Number: 35932
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Callsign: HB9EG

Beacon(100mw): 437.5050MHz CW
Beacon(1w):    437.5050MHz FSK 1k2bps

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=109
[02092011]
=====
UWE-2
Catalog Number: 35934
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: In Orbit

Beacon(500mw): 437.3850 MHz AFSK 1k2bps
               437.3850 MHz FSK 9k6bps

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=110
[02092011]
=====
ITUpsAT1
Catalog Number: 35935
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Beacon(100mw): 437.325MHz CW
Beacon(1w): 437.325MHz 19k2bps
```

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=113
[02092011]
=====
BEESAT
Catalog Number: 35933
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Callsign: DP0BEE

Beacon(100mw): 436.000MHz CW
Beacon(500mw): 436.000MHz GMSK 4k8bps
Beacon(500mw): 436.000MHz GMSK 9k6bp
[02092011]
=====
CP-6
Catalog Number: 35003
Launch Date: May 19, 2009 2355z
Launch site: Wallops Island, Virginia, USA

Status: Operational

Downlink: 437.365 MHz 1k2 AFSK

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=121
[02092011]
=====
HAWKSAT 1
Catalog number: 35004
Launch Date: May 19, 2009 2355z
Launch site: Wallops Island, Virginia, USA

Status: operational

Downlink: 437.345 MHz ?

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=105
[02092011]
=====
Pharmasat
Catalog Number: 35002
Launch Date: May 19, 2009 2355z
Launch site: Wallops Island, Virginia, USA

Status: Operational

Downlink: 437.465 MHz 1k2 AFSK

```
IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=94
[02092011]
=====
ANUSAT
Catalog Number: 34808
Launch Date: April 20, 2009 0115z
Launch Site: Satish Dhawan Space Centre, India

Status: ?

Downlink:  435.000 MHz
Uplink:    145.800 MHz

Telemetry: 137.400 MHz
[02092011]
=====
SOHLA-1 (ASTRO TECH.)
Catalog Number: 33496
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational

Proposed Frequencies and Modes:
Downlink: 437.505 MHz AFSK/CW
Beacon:   437.505 MHz AFSK/CW

Callsign:

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=101
[02092011]
=====
KAGAYAKI (Solan Co.)
Catalog Number: 33495
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: In Orbit

Downlink: 437.375 MHZ    FSK9k6/CW
Beacon:   437.375 MHz    FSK9k6/CW

IARU coordination status page:

AMSAT-NA webpage:

[02092011]
=====
STARS (Kagawa Univ.) (Twin Satellites)
Catalog Number: 33498
Launch Date: January 23, 2009 0354z
```

Launch site: Tanegashima Space Center, Japan

Status: Operational ?

Downlinks: 437.485 MHz FM/CW
           437.465 MHz FM/CW
Beacons: 437.305 MHz FM/CW
           437.275 MHz FM/CW

Callsigns: JR5YBN
           JR5YBO

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=99

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=121&retURL
=/satellites/status.php
[02092011]
=====
KKS-1 (Tokyo MCIT)
Catalog Number: 33499
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational

Downlink: 437.455 MHz AFSK/CW
Beacon: 437.385 MHz AFSK/CW

Callsign: JQ1YYY

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=107

AMSAT-NA webapge:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=120&retURL
=/satellites/status.php
[20092011]
=====
PRISM (Tokyo Univ.)
Catalog Number: 33493
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational ?

Downlink: 437.425 MHz AFSK/GMSK/CW
Beacon: 437.250 MHz AFSK/GMSK/CW

Callsign: JQ1YCX

IARU coordination status page:

http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=97

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=119&retURL
=/satellites/status.php
[02092011]
=====
RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number: 32953
Launch Date: May 23, 2008 1520z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational

```
Curent Modes: Telemetry
              Audio
              Images

Downlinks: 435.315 MHz
           435.215 MHz
```

AMSAT-NA website:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=115&ret
URL=/satellites/status.php

Official website:
http://www.npopm.com/?cid=leoca&caid=43
[02092011]
=====
CanX-2
Catalog number: 32790
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational in range of ground station only

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=46
[02092011]
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Downlink: 437.425 MHz 1k2 baud packet

For the latest project status update please visit the AAUSAT-II web page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=60
[02092011]
=====
CO-65 CUTE-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational ?

Downlink: 437.475 MHz 9k6 Packet
Uplink: 1267.600 Mhz

Telemetry Beacon:
Downlink: 437.2750 MHz CW

For the latest project status update please visit the Cute-1.7+APD II web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=78

Command Station blog website:
http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=112&retURL=/satellites/status.php
[07052011]
=====
Compass-1
Catalog number: 32787
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Current Mode: dependant on last received command

Uplink: 145.980 MHz FM
Downlink: 437.275 Mhz CW
          437.405 MHz Packet

For the latest project status update please visit the Compass 1 web page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:

http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=52

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=114&retURL
=/satellites/status.php
[06162011]
=====
CO-66 Seeds II
Catalog number:
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Downlink: 437.485 MHz

Callsign: JQ1YGU

For the latest project status update please visit the Seeds 2 web
page: http://cubesat.aero.cst.nihon-u.ac.jp/english/seeds_2_e.html

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=36

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=113&retURL
=/satellites/status.php
[02092011]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007 0702z
Launch site: Baikonur, Kazakhstan

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=94&retURL=
/satellites/status.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=72
[02092011]
=====

CP3
Catalog Number: 31129
Launch Date: April 17,2007 0702z
Launch site: Baikonur, Kazakhstan

Status: Operational

Current Mode: /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=74
[02092011]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005 0652z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon: 437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/xivpicte.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=37
[02092011]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: ?????

Current Mode: /u

Beacon: 436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

AMSAT-NA webpage:

http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=96&retURL
=/satellites/status.php

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[02092011]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004 0745z
Launch site: Baikonur, Kazakhstan

Status: Semi-operational - IHU crash each eclipse

Current Mode(s):
Voice repeater: V/u
Uplink: 145.880 MHz FM
Downlink: 435.150 MHz FM

Telemetry: Recovery efforts
Downlink: 435.150MHz 9k6

Analog voice downlink:	435.300 MHz FM
	435.150 MHz FM
	2401.200 Mhz FM
Analog voice uplink:	145.860 MHZ FM
	145.880 MHz USB
	145.880 MHz FM
	145.920 MHz FM
	145.920 MHz FM - 67 Hz PL tone burst
	1268.700 MHz FM
Digital Downlinks:	435.150 MHz FM 38k4 PBP, 1 watt output
	435.150 MHz FM 9k6 Pacsat Broadcast Protocol
	2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:	145.860 MHz FM 9k6 Pacsat Broadcast Protocol
	1268.708 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon:	435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=19

```
[06162011]
=====
QuakeSat
Catalog Number: 27845
Launch Date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Telemetry only

Current Mode: 9600 baud data packet

Mode U packet
Downlink: 436.675 MHz 9k6 BPS

Quakesat webpage:
http://www.quakefinder.com/services/quakesat-ssite/
[02252011]
=====
CO-55 Cute-1.7+APD II
Catalog Number: 27844
Launch date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational

Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=69&retURL
=/satellites/status.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=78
[02092011]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001 0240z
Launch site: Kodiak Launch Complex, Alaska, USA

Status: Telemetry only

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink:        144.390 Mhz 1200 Baud
```

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[02092011]
=====
RS-22 RADIO SPORT 22 (MOZHAYETS 4)
Catalog number: 27939
Launch Date: September 27, 2003 0612z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational - 70cm cw only

Current Mode: /u

CW Beacon - 435.352 MHz
            145.818 MHz

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=76&retURL=/satellites/status.php
[02092011]
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990
Launch site: Kourou, French Guiana

Status: CW Beacon only

Uplinks: 145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink: 437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[02092011]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984
Launch site: Vandenburg AFB, California, USA

Status: Operational ?

Current Mode: /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon: 435.025 MHz
Mode-S Beacon: 2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[07052011]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998 0640z (ZARYA module)
Launch sites: Baikonur, Kazakhstan
Kourou, French Guiana
Uchinoura Space Center, Japan
Kennedy Space Center, Titusville, Florida, USA

Status: Operational

Current Active Modes:	FM Repeater -	OFF
	Voice -	V/v
	BBS -	OFF
	APRS -	OFF
	SSTV -	OFF

Expedition 29 Crew (May - September 2011):

Commander:	Micheal Fossum	KF5AQG
Flight Engineer:	Sergey Volkov	KE5DAW
Flight Engineer:	Satoshi Furukawa	
Flight Engineer:		
Flight Engineer:		
Flight Engineer:		

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM

437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[09222011]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-287.S3
WSR 287 Part 3 10/14/2011

AMSAT NEWS SERVICE BULLETIN 287.S3
FROM AMSAT HQ SILVER SPRING, MD, October 14, 2011
TO ALL RADIO AMATEURS
BID: $WSR-287.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

NANOSAIL-D
Catalog Number:
Ejection Date: January 17, 2011

Status: On orbit

Downlink: 437.270 MHz AX.25

URL: http://nanosaild.engr.scu.edu/dashboard.htm

IARU coordination status page:

```
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=115
[01272011]
=====
CP4
Catalog Number: 31132
Launch Date: April 17, 2007

Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon:    437.325 MHz CW

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=79
[09062010]
=====
LIBERTAD-1
Catalog Number: 31128
Launch Date: April 17, 2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink:   145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=76
[09062010]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: Non-Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder:  145.825 Mhz FM

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=51
[09062010]
=====
NCUBE-2
```

Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
2407.250

Official Website: http://www.ncube.no

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=24
[09062010]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 MHz FM 67Hz CTCSS
Voice Downlink: 2401.835 MHz FM
Packet Up/Downlink: 437.250 MHz 9k6 packet
Packet Downlink 2401.835 MHz 38k4 packet

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=54
[09062010]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non-Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=53
[09062010]
=====
CANX-1
Catalog Number: 27847
Launch Date: June 30, 2003

Status: Non-Operational

Downlink: 437.8800 MHz AFSK 1k2bps
[06052009]
=====
DTUSAT

Catalog Number: 27842
Launch Date: June 30, 2003

Status: Non-Operational

Current Mode: 2k4 AFSK Packet last reported

Downlink: 437.475MHz

Officail webpage: http://dtusat1.dtusat.dtu.dk/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=101&retURL=satellites/all_oscars.php
[02212009]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)

Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Telemetry only

Uplinks: 145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[03302009]
=====

NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks

V-band: 145.840 - 145.990 MHz CW/LSB
U-band: 435.550 - 435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks

S2-band: 2401.225 - 2401.475 MHz CW/USB
K-band: 24048.010 - 24048.060 MHz CW/USB
Beacon: 2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)

BEACON	General Beacon(GB)	Middle Beacon(MB)	Engineering Beacon(EB)
2 m	none	145.898 MHz	none
70cm	435.438 MHz	435.588 MHz	435.838 MHz
13cm(1)	2400.188 MHz	2400.338 MHz	2400.588 MHz
13cm(2)	2401.173 MHz	2401.323 MHz	2401.573 MHz
3cm	10450.975 MHz	10451.125 MHz	10451.375 MHz
1.5cm	24047.885 MHz	24048.035 MHz	24048.285 MHz

[07162007]
=====
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT

Catalog Number: 25636
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]

=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]

=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]

=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Non-Operational

Current Modes:
Telemetry : /u

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems

Uplinks: 145.850 FM
145.890 FM
145.930 FM
1269.700 FM
1269.800 FM
1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://asri.technion.ac.il/techsat/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=14&retURL
=/satellites/status.php
[07172010]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink: 145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
MO-30 UNAMSAT-2
Catalog Number: 24305
Launch Date: September 5, 1996

Status: Non-operational

Downlink: 435.1380 MHz AFSK 1200 BPS
Downlink: 435.2060 MHz AFSK 1200 BPS
Uplink: 145.8150 MHz AFSK 1200 BPS
Uplink: 145.8350 MHz AFSK 1200 BPS
Uplink: 145.8550 MHz AFSK 1200 BPS
Uplink: 145.8750 MHz AFSK 1200 BPS
[06042009]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Operational
Current Mode: V/u (Mode JA)

Voice/CW (Mode JA)

```
Uplink:   145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon:   435.795 MHz

Digital Mode JD
Uplinks:  145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage:
http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's
CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/
fo29cwts.htm
[10142011]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Non-operational

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign:       POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012009]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only
```

```
Current Mode:

Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
AO-24 ARSENE
Catalog Number: 22654
Launch Date: May 13, 1993

Status: Non-operational

Uplink:    435.0625 MHz FM 1k2bps AFSK
           435.1125 MHz FM 1k2bps AFSK
           435.1375 MHz FM 1k2bps AFSK
Downlink:  145.9750 MHz FM 1k2bps AFSK
          2446.5025 MHz FM 1k2bps AFSK

Beacon:    2446.4700 MHz CW

Broadcast callsign:
BBS:
[12162009]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational
```

```
Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HL01-11
BBS: HL01-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
```

[01152007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink: 145.825 MHz FM 1200 Baud AFSK
Beacon: 2401.220 MHz
[05012006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: non-operational

Current Mode: V/u

Uplink: 145.900 MHz FM 1200-baud Manchester FSK (reserved)
                145.920 MHz FM VOICE
                145.940 MHz FM 1200-baud Manchester FSK (reserved)
                145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink: 437.026 MHz USB VOICE
                (1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC 437.050 MHz RHCP
   PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[07242009]
=====
UO-15 UoSAT-4
Catalog Number: 20438
Launch Date: January 22, 1990

```
Status: Non-operational

Uplink: ?
Downlink: 435.1250MHz (?)
          435.1200MHz (?)
[06042009]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon:   145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
```

```
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink  29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
Beacons:   29.450 MHz
          435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
```

```
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon 1:  29.352 MHz (intermittent)
Beacon 2:  29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink:     21.260 to 21.300 MHz CW/USB
Downlink:  145.860 to 145.900 MHz CW/USB

Beacon:    145.860 MHz

Robot:     145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink:   21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon:   29.408 MHz

Robot:    29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-287.S4
WSR 287 Part 4 10/14/2011

AMSAT NEWS SERVICE BULLETIN 287.S4
FROM AMSAT HQ SILVER SPRING, MD, October 14, 2011
TO ALL RADIO AMATEURS
BID: $WSR-287.S4
```

```
THE FOLLOWING SATELLITES HAVE RE-ENTERED OR HAVE BEEN RETURNED SAFELY:

CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Re-entered
Re-entered: October 25, 2009

Uplink:  1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=56
[09062010]
=====
BEVO-1 (DRAGONSAT-1)
Catalog Number: 35690
Launch Date: May 19, 2009

Status: Re-entered
Re-entered:

Downlink: 437.325 MHz 9k6 GMSK
          437.325 MHz CW 20wpm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=117
[07312009]
=====
AggieSat2 (DRAGONSAT-2)
Catalog Number: 35690
Launch Date: May 19, 2009

Status: Re-entered
Re-entered:

Downlink: 436.250 MHz 9k6 FHSS
[11112009]
=====
Pollux
Catalog Number: 35693
Launch Date: July 31, 2009

Status: Re-entered
Re-entered:
```

Callsign: POLLUX-1

Downlink: 145.825MHz 1k2 AX.25

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=139
[09062010]
=====
Castor (ANDE-2)
Catalog Number: 35694
Launch Date: July 31, 2009

Status: Re-entered
Re-entered:

Callsign: KD4HBO-1

Downlink: 145.825 MHz 1k2 AX.25

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=144
[09062010]
=====
NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: July 28, 2008

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=59
[01012009]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661

```
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink:      145.825 Mhz FM APRS AX25
APRS Uplink:        145.825 MHz FM APRS AX25
Voice/PSK31 Uplink:  28.120 MHz

Packet to Voice ID: RAFT
[06112007]
=====
GENESAT-1
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Re-Entered
Re-entered date: August 8, 2010

Current Mode: /u

Callsign: KE7EGC

Telemetry Beacon Downlink: 437.0695 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[08082010]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Re-Entered
Re-entered: June 18, 2008

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon:             437.2750 MHz CW

Callsign: JR8YJT
[01012009]
=====
SO-43 Starshine 3
Catalog Number: 26929
Launch Date: September 30, 2001

Status: Re-Entered
Re-entered: January 21, 2003

Beacon: 145.825Mhz
[02212009]
NNNN
/EX
```

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at} amsat.org
NNNN
/EX

From 5766709097335511731

```
X-Google-Thread: 10e8ad,4d3ad53d0a682c88,start
X-Google-NewGroupId: yes
X-Google-Thread: 10b9c8,4d3ad53d0a682c88,start
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,gida4a23d5f63,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII
Received: by 10.68.38.38 with SMTP id d6mr19564127pbk.4.1318727165918;
        Sat, 15 Oct 2011 18:06:05 -0700 (PDT)
MIME-Version: 1.0
Path: d5ni13731pbc.0!nntp.google.com!news2.google.com!news1.google.com!
newsfeed2.dallas1.level3.net!news.level3.com!panix!rri.panix.com!robomod!not-for-
mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-289 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sat, 15 Oct 2011 21:06:05 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 551
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000401cc8b9f$c223d190$466b74b0$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
X-Trace: reader1.panix.com 1318727165 19509 166.84.1.6 (16 Oct 2011 01:06:05 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 16 Oct 2011 01:06:05 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to            rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Xref: news2.google.com rec.radio.amateur.space:307 rec.radio.info:1863
Content-Language: en-us
```

AMSAT NEWS SERVICE
ANS-289

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:

* It's Time to Finalize Your Symposium Reservations
* Tentative Schedule of Symposium Events
* SSTL Celebrates 30th Anniversary of UoSAT-1
* IARU Spectrum Futures Committee Addresses Amateur Satellite Allocations
* Amateur Satellites Featured in Astronautical Congress Meeting
* AubieSat-1 Vandenberg Launch Rescheduled to October 27
* Successful Launch for JUNGU and SRMSat From India
* NASA Announces Two Contests For Students
* Satellite Shorts From All Over

SB SAT @ AMSAT $ANS-289.01
It's Time to Finalize Your Symposium Reservations

AMSAT News Service Bulletin 289.01
>From AMSAT HQ SILVER SPRING, MD.
October 16, 2011
To All RADIO AMATEURS
BID: $ANS-289.01

AMSAT's 2011 Space Symposium is quickly approaching. It will be held on Friday, November 4th through Sunday, November 6th in San Jose, CA.

This year commemorates the 50th anniversary of the launch of OSCAR 1. Many events are planned to celebrate our 50 years of keeping amateur radio in space. The original OSCAR 1 prototype has been refurbished by the ARRL Lab. It will be on display and transmitting. Our Banquet Speaker is Lance Ginner, K6GSJ who was on the OSCAR 1 development team.

Our annual gathering will also feature:

+ Space Symposium with Amateur Satellite Presentations
+ Operating Techniques, News, & Plans from the Amateur Satellite World
+ Board of Directors Meeting open to AMSAT members (Nov. 3-4)
+ Meet Board Members and Officers
+ Annual General Membership Meeting
+ Annual Banquet-Keynote Speaker and Door Prizes

The 2011 Symposium hotel and registration web pages are now available on the AMSAT web site. You may register for the Symposium and Annual Banquet at the AMSAT Store:
http://www.amsat-na.com/store/SymposiumReg.php

Visit the Symposium and Annual General Meeting web page for details and the latest information:
http://www.amsat.org/amsat-new/symposium/2011/index.php

Symposium Registration including a copy of the Proceedings is:
+ $50 per person starting September 20, 2011
+ $55 per person at the door

The Saturday evening banquet is $45 per person. The Sunday morning Area Coordinator's Breakfast is $15 per person.

The hotel selected is the Wyndham San Jose, close to the airport. The AMSAT discount rate is $79.00+taxes per night. The reservation block code when calling the hotel directly is "AMSAT". The hotel telephone number is 408-453-6200. If you are making reservations on-line use 1031FSJAM for the group code. The direct link to the hotel web page is: http://www.wyndham.com/hotels/SJCAP/main.wnt

The cutoff date for the special AMSAT group rate at the Wyndham Hotel for room reservations to October 24.

If you are planning to book a room on dates other than November 2, 3, 4, 5, you will have to call the hotel directly and ask for *in-house reservations*. You can get the $79 rate 3 days before and 3 days after the above dates but you cannot book the room on their website. Any problems, give Martha a call at the AMSAT Office: 301-589-6062.

[ANS thanks the 2011 Symposium Committee for the above information]

/EX

SB SAT @ AMSAT $ANS-289.02
Tentative Schedule of Symposium Events

AMSAT News Service Bulletin 289.02
>From AMSAT HQ SILVER SPRING, MD.
October 16, 2011
To All RADIO AMATEURS
BID: $ANS-289.02

Thursday, November 3

AMSAT Board of Directors Meeting open to all AMSAT members

Friday, November 4

Symposium Registration Desk Open
AMSAT Board of Directors Meeting (Friday morning)
1300 - 1700 Symposium Opening and Technical Presentations

Saturday, November 5

0730   Symposium Registration Desk Open
0800 - 1200 Technical Presentations
1200 - 1300 Lunch Break on your own
1300 - 1530 Technical Presentations
1530 - 1700 Annual General Meeting
1700 - 1800 Break
1800 - 1900 Attitude Adjustment with Cash Bar

1900 - 2100 Banquet and Keynote Speaker and Door Prize Drawing

Sunday, November 6

0730   Area Coordinators Field Ops Breakfast
0945   Meet for Sunday Tour Tech Museum of Innovation in San Jose.
See the latest Tour information at:
http://www.amsat.org/amsat-new/symposium/2011/SymposiumSchedule.php

[ANS thanks the 2011 Symposium Committee for the above information]

/EX

SB SAT @ AMSAT $ANS-289.03
SSTL Celebrates 30th Anniversary of UoSAT-1

AMSAT News Service Bulletin 289.03
>From AMSAT HQ SILVER SPRING, MD.
October 16, 2011
To All RADIO AMATEURS
BID: $ANS-289.03

Surrey Satellite Technology Limited (SSTL) celebrated the 30th anniversary of the launch of Surrey's first satellite, UoSAT-1. Launched into orbit on 6th October 1981, UoSAT-1 was designed and built by a team from the University of Surrey led by SSTL founder Sir Martin Sweeting, G3YJO.

UoSAT-1 was also known as UoSAT-OSCAR 9. It was a scientific and educational low-Earth orbit satellite containing many experiments and beacons but no amateur transponders. UO-9 was fully operational until it re-entered October 13, 1989 from a decaying orbit after nine years of service.

UO-9's mission scored several firsts for technology which would be incorporated into future amateur satllite missions including:

+ The first on-board computer (IHU - Integrated Housekeeping Unit)
+ Battery and attitude management
+ Remote control, and experiments
+ First S-band beacon
+ It carried a CCD camera, a Digitalker speech synthesizer, and transmitted telemetry data on a 145.826 MHz beacon at 1200 baud using asynchronous AFSK.

Amateur Satellite Operators are also familiar with later SSTL UO-Sat developments:

+ UoSAT-2 was designated as UO-11 which can still be heard operating on 145.825 MHz with a beacon transmitting 1200 baud using asynchronous

  AFSK.

+ UoSAT-3 was designated as UO-14 (no longer operational) and featured an FM Voice Repeater with 145.9750 MHz uplink and 435.0700 MHz downlink.

More history can be found in an interesting article posted on the SpaceDaily.com website: http://tinyurl.com/3urdd9o

Read the SSTL Press Release at:
http://www.sstl.co.uk/news-and-events?story99

[ANS thanks SSTL for the above information]

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SB SAT @ AMSAT $ANS-289.04
IARU Spectrum Futures Committee Addresses Amateur Satellite Allocations

AMSAT News Service Bulletin 289.04
>From AMSAT HQ SILVER SPRING, MD.
October 16, 2011
To All RADIO AMATEURS
BID: $ANS-289.04

The September, 2011 ARRL Spectrum Defense Matters newletter discusses the formation of the IARU Spectrum Futures Committee to develop strategies for retaining access to bands above 148 MHz for the amateur and amateur-satellite services globally.

There are no Global Primary Amateur and Amateur Satellite Service allocations between 146 MHz and 24 GHz. Access to spectrum suitable for weak signal work in the 146-3500 MHz region is crucial for the Amateur Satellite Service.

Read the ARRL Spectrum Defense Matters newletter (PDF) on-line at:
http://tinyurl.com/5sre5pv (arrl.org)

[ANS thanks the ARRL for the above information]

/EX

SB SAT @ AMSAT $ANS-289.05
Amateur Satellites Featured in Astronautical Congress Meeting

AMSAT News Service Bulletin 289.05
>From AMSAT HQ SILVER SPRING, MD.
October 16, 2011
To All RADIO AMATEURS
BID: $ANS-289.05

The 62nd International Astronautical Congress held in Cape Town, South Africa featured amateur radio satellites in various sessions.

The data collected by SumbandilaSat, S0-67, provides useful information for selecting future ground station locations for minimum interference. The study by Dr Jakobus van Zyl and Johann Lochner, ZE6CBC, both engineers at SunSpace, covered a global geographical survey of received signal�s strength in the VHF band. This data will give an indication of frequencies to use for command and telemetry communication at existing ground stations.

The Cape Peninsular University of Technology unveiled it's first CubeSat during the conference. This satellite will include a beacon operating in the 20 meter amateur band on 14.099 MHz. The main mission will be to support the Hermanus Magnetic Observatory science payload for operations in Antarctica. The downlink will be used for optimising the SuperDarn HF radar system operated by the National Space Agency. It is also expected to provideinteresting antenna characterization opportunities for radio amateurs. No launch date has been set at present.

More information can be found on the South Africa AMSAT web page:
http://www.amsatsa.org.za/

An article written by Hans van de Groenendaal, ZS6AKV, about the new HF CubeSat mission can be read at: http://tinyurl.com/68hzgou

[ANS thanks SARL and SA-AMSAT for the above information]

/EX

SB SAT @ AMSAT $ANS-289.06
AubieSat-1 Vandenberg Launch Rescheduled to October 27

AMSAT News Service Bulletin 289.06
>From AMSAT HQ SILVER SPRING, MD.
October 16, 2011
To All RADIO AMATEURS
BID: $ANS-289.06

The launch of Auburn University's AubieSat-1 satellite has been rescheduled to October 27, 2011 due to problems found during the system integration of the primary mission. A hydraulic system leak was detected and the cause was found to be a small crack in a hydraulic tube. A replacement tube was manufactured, installed, and retested. Also, a flexible fabric collar connecting two engine system exhaust ducts was found to be damaged following pressurized leak testing. The damaged fabric collar is being removed and replaced.

AubieSat-1 is designed to transmit with a power of about 800 milliwatts on a frequency of 437.475 MHz, plus or minus Doppler correction. The beacon signal, along with telemetry, will be sent using A1A continuous wave Morse code at 20 words per minute. Additional telemetry from the on board science experiment will use CW transmissions up to

60 WPM.

An internet Echolink conference group is also planned to begin one-half hour prior to launch and continue until about 30 minutes after confirmation of the first receipt of signals from the satellite. Information on the conference groups title will be distributed nearer to the launch for interested stations.

Long-time AMSAT Member John Klingelhoeffer, WB4LNM serves as the Technical Advisor in Auburn University's Student Space Program.

[ANS thanks Dominic Hildebrandt at Auburn University for the above information].

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SB SAT @ AMSAT $ANS-289.07
Successful Launch for JUNGU and SRMSat From India

AMSAT News Service Bulletin 289.07
>From AMSAT HQ SILVER SPRING, MD.
October 16, 2011
To All RADIO AMATEURS
BID: $ANS-289.07

University satellites 'Jugnu' and 'SRMSat' using amateur frequencies were successfully launched by PSLV C-18 from Satish Dhawan Space Centre Shriharikota, India on October 12.

The Jugnu team is requesting CW Beacon signal Reports along with the plain decoded morse message. The Jugnu reports can be sent to the following mail IDs:
wmy@isac.gov.in
shantag@iitk.ac.in

After launch the JUNGU beacon was first received by Shamai 4Z1WS from Israel. The decoded CW text message by indicated the nominal performance of the spacecraft.

Jugnu Frequency: CW Beacon - 437.275 MHz (17dbm)

After launch the SRMSat beacon was first received in New Zealand by Ian Ashley, ZL1AOX who reported weak but copyable signals.

The SRMSat reports can be sent to:
sanjaynekkanti@gmail.com
kc2yqj@arrl.org

SRMSAT Frequency: CW Beacon - 437.425 MHz (10dbm)
SRMSat Keps file: http://dinesh.cyanam.net/dl/SRMSAT_TLEs.txt

The CW Telemetry and decoding details for SRMSAT are as below:

Character 6: Satellite Mode
1. P - Sensing Mode
2. X - Communication Mode
3. C - Normal Mode
4. Z - Detumbling Mode

Character 7: Magnetometer Status
1. C - On
2. P - Off
3. X - Error
4. Z - Ready

Character 8: GPS Status

Character 9: Payload Status

Character 10: Temperature Status
1. C - < 0 degree celcius
2. P - 0 to 10 degree celcius
3. X - 10 to 20 degree celcius
4. Z - 20 to 30 degree celcius
5. 6 - 30 to 40 degrees celcius
6. 4 - Above 40 degrees celcius

Character 11: Battery Status
1. C - Less than 7 V
2. P - >7V and <7.3V
3. X - >7.3V and <7.6V
4. Z - >7.6V and <7.9V
5. 6 - >7.9V and <8.1V
6. 4 - >8.1V

[ANS thanks Dinesh Cyanam, KC2YQJ, and Mani, VU2WMY for the above information]

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SB SAT @ AMSAT $ANS-289.08
NASA Announces Two Contests For Students

AMSAT News Service Bulletin 289.08
>From AMSAT HQ SILVER SPRING, MD.
October 16, 2011
To All RADIO AMATEURS
BID: $ANS-289.08

GRAIL Spacecraft Naming Contest

The Gravity Recovery And Interior Laboratory mission to the moon, also known as GRAIL uses two twin spacecraft orbiting the moon at very precise distances to create a gravity map of the moon. Accurate knowledge of the moon's gravity could also be used to help

choose future landing sites on the moon.

Now that they're on their way to the moon, the two robotic spacecraft, currently dubbed GRAIL-A and GRAIL-B, need real names, ones that capture the spirit and excitement of lunar exploration. And NASA is looking for students to help with the naming duties.

U. S. students in grades K-12 are eligible. Entries should include the chosen names for the spacecraft, along with an explanation of why those names should be selected. Justification can be any length, from a short paragraph to a 500-word essay.

Entries are due Nov. 11, 2011. All entries must be submitted by teachers. For more information about the GRAIL mission and to submit entries via the online entry form visit: http://solarsystem.nasa.gov/grail/namingcontest.cfm.

If you have questions about the GRAIL Naming Contest, please email: grailcontest@jpl.nasa.gov.

Your Experiment, What Will You Do Contest

NASA has created a contest for kids from anywhere on the planet to have their idea for a science experiment performed by astronauts on the International Space Station, with it live-streamed back to Earth.

YouTube SpaceLab is an open competition inviting 14 � 18 year olds to come up with an idea for a science experiment for space. You don�t have to actually do the experiment, you just have to make a 2-minute video of yourself explaining it.

The tagline for this contest is �Your experiment, 250 miles above the Earth, for the whole world to see,� and this should be a really fun and engaging world-wide contest that is sure to generate a lot of interest. Students in two age categories, 14-16 years old and 17-18 years old, either alone or in groups of up to three, may submit a YouTube video describing their experiment to: http://YouTube.com/SpaceLab. More information about the contest is available at this link, too.

Deadline is Dec. 7. The panel of judges is a veritable Who�s Who of space mover and shakers, including Dr. Stephen Hawking, Bertrand Piccard, Professor Colin Pillinger, Peter Diamandis, Guy Lalibert�, Richard Garriott, astronauts Leland Melvin, Chris Hadfield, and Bill Gerstenmaier from NASA.

There are some other great prizes, too. Six regional finalists will gather in Washington, D.C., in March 2012 to experience a ZERO-G flight and receive other prizes. From them, two global winners, one from each age group, will be announced and later have their experiments performed 250 miles above Earth and live streamed on YouTube. Additionally, the global winners will get to choose a unique space experience as a prize: either a trip to Tanegashima Island, Japan, to watch their experiment blast off in a rocket bound for the ISS, or once they are 18 years old, a one-of-a-kind astronaut training experience in Star City, Russia, the training center for Russian cosmonauts.

The remaining four regional winners will also receive a trip to the U.S., a ZERO-G flight, and a Lenovo IdeaPad laptop. The contest is sponsored by YouTube and Lenovo, in cooperation with Space Adventures and space agencies NASA, ESA, and JAXA.

More details can be found on-line in these videos:
http://www.youtube.com/SpaceLab
http://www.youtube.com/watch?feature�ayer_embedded&v�9k63Be35c

[ANS thanks the NASA Education Express Message for the above information]

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SB SAT @ AMSAT $ANS-289.09
Satellite Shorts From All Over

AMSAT News Service Bulletin 289.09
>From AMSAT HQ SILVER SPRING, MD.
October 16, 2011
To All RADIO AMATEURS
BID: $ANS-289.09

+ Congratulations are in order for John, K8YSE upon reaching the 1000th grid worked via satellite.

+ Tom, W9KE has written a program which looks for satellite passes where communications between two different grid locations is possible. Tom invites interested testers to download the program from http://www.tomdoyle.org/simplesat/simplesat.html It is a zip file. Un-Zip the files into a folder and run the SimpleSat.exe file. No install is required and the three files it will create are stored in the same folder as the SimpleSat.exe program. It does nothing to the registry. It downloads sat data from the net so use a computer connected to the net when you run the program. Contact Tom directly at tomdoyle1948@gmail.com with any questions or comments.

+ An interesting umbrella shaped antenna was successfully deployed this week from the new Navy experimental TacSat 4 communications satellite launched on-board a Minotaur rocket on September 27 from the Alaska Kodiak launch complex. A photo of the experimental antenna and a video of the launch can be viewed at: http://spaceflightnow.com/minotaur/tacsat4/111008update/

+ Zac Manchester, a graduate student in Aerospace Engineering at Cornell University developed, fingernail-sized satellites which may be deployed for earth-orbit missions and could someday travel to Saturn. As they flutter down through its atmosphere, they will collect data about chemistry, radiation and particle impacts. Each Sprite contains a 10mw transmitter. KickSat is a CubeSat designed to carry hundreds or even thousands of Sprites into space and deploy them in low Earth orbit. Donors who sponsor a sprite will get to name it and specify the text that it will transmit on a frequency between 433 and 436 MHz. A group or club can also sponsor a fleet of Sprites together. Full details can be found at: http://www.kicksat.org (Kickstarter.com)

+ SA AMSAT has issued the first call for papers for the 2012 Space Symposium to be held in Durban on Saturday 12 May 2012, at the University of KwaZulu-Natal. If you would like to present a paper, please send a brief synopsis to reach SA AMSAT by no later than 31 January 2012. The theme will be 50 years of OSCAR, celebrating the launch of the first amateur radio satellite on 12 December 1961.

+ During Opportunity rover�s three-year trek across 20 km (13 miles) of Meridiani Planum on Mars, rover planners captured a horizon photograph at the end of each drive using the unique vantage point of the rover itself. 309 images taken during the journey appear in this video. A sound track was generated using the rover's accelerometer data - rough sounds are rocky terrain, and traversing sandy terrain is quieter. Take your ride across Mars at: http://tinyurl.com/666b9gy (UniverseToday.com)

+ Watch a video of the flight of the custom-built 26 ft. Qu8k (pronounced �Quake�) rocket on September 30, 2011 from the Black Rock Desert in Nevada. It reached an altitude of 121,000 feet (36,880 meter) in 92 seconds, at speeds of 2,185 mph: http://tinyurl.com/3stmloo (UniverseToday.com)

+ If you read an interesting scientfic paper discussing how our Earth would appear to other solar systems searching for exoplanets you'll be able to steer the the conversation to something more interesting than the state of the other fellow's gallbladder on 75 meters. Bone up at: http://arxiv.org/PS_cache/arxiv/pdf/1110/1110.1340v1.pdf

[ANS thanks everyone for the above information]

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In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office. And with that, please keep in mind, "That's the third electric shock I've gotten today!" Tom said, revoltedly. That was an old joke but he didn't know any current puns. He didn't know watt made him say that. At which point, he'd have to send that telegram again, Tom said, remorsefully. Then he was out of here, walking home after deciding he wouldn't let a flat tire get him

down, Tom said without despair ... makes you wonder wire we
continuing?

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM

From 1439679344803076917
X-Google-Thread: 10e8ad,b98ed51652beaccc,start
X-Google-NewGroupId: yes
X-Google-Thread: 10b9c8,b98ed51652beaccc,start
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,gida4a23d5f63,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Received: by 10.68.22.230 with SMTP id h6mr799814pbf.4.1318973408205;
        Tue, 18 Oct 2011 14:30:08 -0700 (PDT)
MIME-Version: 1.0
Path: d5ni28954pbc.0!nntp.google.com!news2.google.com!news.glorb.com!news-out.readnews.com!news-xxxfer.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: SWPC.Webmaster@noaa.gov
Newsgroups:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.info
Subject: Weekly Highlights of Solar and Geomagnetic Activity, 10 - 16 October 2011
Followup-To: rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space
Date: Tue, 18 Oct 2011 17:30:06 EDT
Organization: NOAA Space Weather Prediction Center
Lines: 66
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <20111018213002.3BEEF33C8E@panix2.panix.com>
NNTP-Posting-Host: panix6.panix.com
X-Trace: reader1.panix.com 1318973406 22537 166.84.1.6 (18 Oct 2011 21:30:06 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Tue, 18 Oct 2011 21:30:06 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to   rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to   rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Xref: news2.google.com rec.radio.amateur.misc:2395 rec.radio.amateur.dx:684
rec.radio.amateur.space:308 rec.radio.info:1868

:Product: Weekly Highlights and Forecasts
:Issued: 2011 Oct 18 1802 UTC
Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center

Product description and SWPC contact on the Web
http://www.swpc.noaa.gov/weekly.html
#
Weekly Highlights and Forecasts
#

Highlights of Solar and Geomagnetic Activity
10 - 16 October 2011

Solar activity was low. Activity for the period consisted of numerous C-class flares. The primary contributors were Region 1319 (N11, L=051, class/area Eki/280 on 16 October) and 1314 (N25, L=056, class/area Cho/370 on 12 October). The background solar flux levels and sunspot numbers stayed elevated throughout the week due to the number of active regions on the disk, but most of these were stable and were not flare productive.

No proton events were observed at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit was at background levels throughout the period.

The geomagnetic field was mostly quiet during the week. A brief substorm interval was observed at high latitudes early on 12 October. There was a modest increase to quiet to unsettled levels with some isolated active periods at high latitudes on 15-16 October. Solar wind observations from the ACE spacecraft indicated an increase in solar wind velocity on 15-16 October which had signatures consistent with a coronal hole driven high speed solar wind stream.

Forecast of Solar and Geomagnetic Activity
19 October - 14 November 2011

Solar activity is expected to be predominantly low with a chance for an isolated M-class event for 19 October - 01 November due to the number of active regions as well as the return of old Region 1302 (N12, L=280, class/area Fkc/1300 on 24 September), which produced two X-class flares and numerious M-class flares during its previous disk transit. Though initially very active, old Region 1302 decayed and became much less flare productive by the time it exited the solar disk on 05 October. As of the issue date of this report (18 October) old Region 1302 was just beginning to rotate onto the solar disk and appears to be a likely source for occasional C-class flares and may pose a slight threat for M-class flares. Solar activity is expected to decline to very low to low levels for the remainder of the interval from 02-14 November. As always during this time of the cycle there is also a chance for unexpected flux emergence which could elevate solar activity levels.

No proton events are expected at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to be at background levels for most of the outlook interval with the exception of 28 October - 01 November when an increase to high levels is expected due to recurrence.

Geomagnetic field activity is expected to be quiet for 19-27 October, generally unsettled for 28-30 October, quiet for 31 October - 02 November, unsettled for 03-05 November, quiet for 06-10 November, unsettled for 11-13 November, and quiet for 14 November. The increases to unsettled levels are expected due to recurrence from coronal hole driven high speed solar wind streams.

```
From -2085878072276492408
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X-Google-NewGroupId: yes
X-Google-Thread: 11480d,592abef17032eb8c,start
X-Google-NewGroupId: yes
X-Google-Thread: 10e8ad,592abef17032eb8c,start
X-Google-NewGroupId: yes
X-Google-Attributes:
gida3e752f117,gid7221ecd0f7,gid8f86f75953,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Received: by 10.68.35.68 with SMTP id f4mr35214558pbj.5.1319578207376;
        Tue, 25 Oct 2011 14:30:07 -0700 (PDT)
MIME-Version: 1.0
Path: p6ni1527pbn.0!nntp.google.com!news1.google.com!news.glorb.com!news-
out.readnews.com!transit3.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: SWPC.Webmaster@noaa.gov
Newsgroups:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.info
Subject: Weekly Highlights of Solar and Geomagnetic Activity, 17 - 23 October 2011
Followup-To: rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space
Date: Tue, 25 Oct 2011 17:30:06 EDT
Organization: NOAA Space Weather Prediction Center
Lines: 79
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <20111025213001.1D89D33C8E@panix2.panix.com>
NNTP-Posting-Host: panix6.panix.com
X-Trace: reader1.panix.com 1319578206 12057 166.84.1.6 (25 Oct 2011 21:30:06 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Tue, 25 Oct 2011 21:30:06 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Xref: news1.google.com rec.radio.amateur.misc:5054 rec.radio.amateur.dx:945
```

rec.radio.amateur.space:432 rec.radio.info:2410

```
:Product: Weekly Highlights and Forecasts
:Issued: 2011 Oct 25 1916 UTC
# Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center
# Product description and SWPC contact on the Web
# http://www.swpc.noaa.gov/weekly.html
#
#                 Weekly Highlights and Forecasts
#
```

Highlights of Solar and Geomagnetic Activity
17 - 23 October 2011

Solar activity was low to moderate. Early in the period, solar activity was at low levels with a majority of the C-class activity from Regions 1319 (N=10, L=051, class/area Eki/420 on 17 October) and 1324 (N11, L=305, class/area Ekc/360 on 20 October). Low level C-class activity was observed until early on 20 October when an M1 x-ray event occurred at 20/0325Z from an area on the west limb. This event most likely originated from Region 1318 (N20, L=096, class/area Dso/50 on 13 October). M-class activity continued during 21 and 22 October with an M1 x-ray event at 21/1300Z from Region 1319 and a M1/Sf long duration flare at 22/1110Z from Region 1314 (N25, L=058, class/area Cho/370 on 12 October). The 21 October M-flare had associated Type II (789 km/s) and Type IV radio sweeps, but no Earth-directed CME was detected. The 22 October M-flare had an associated CME with a mostly northward directed component with an approximate plane-of-sky speed of 600 km/s measured in STEREO A COR2. LASCO C2 and C3 imagery observed a partial halo CME with a maximum plane-of-sky speed of 1000 km/s in its northernmost edge. A large filament eruption was also observed in SDO/AIA imagery in the Northwest quadrant of the solar disk starting at 22/0058Z. An associated CME was observed with a slight Earth-directed component with an approximate speed of 500 km/s. Activity returned to low levels on the last day of the period.

The greater than 100 MeV proton flux at geosynchronous orbit remained below threshold levels the entire period. A greater than 10 MeV proton event began at 23/1500Z in response to the M1/Sf long-duration flare observed midday on 22 October. The event peaked at 13pfu at 23/1535Z and ended at 23/1605Z.

The greater than 2 MeV electron flux at geosynchronous orbit was at normal levels the entire period.

The geomagnetic field was mostly quiet during the summary period. On the last day of the summary period, a weak shock passage was observed in the ACE solar wind data at 23/2320Z, but the geomagnetic field remained quiet. A glancing blow from a CME associated with an M1 x-ray event observed near the NW limb at 20/0325Z was the suspected source of the shock.

Forecast of Solar and Geomagnetic Activity

26 October - 21 November 2011

Solar activity is expected to be at predominantly low levels during the forecast period. There will be a slight chance for M-class activity during 26 October - 03 November. M-class activity increases from a slight chance to a chance during 04 - 17 November, with a slight chance for X-class activity from 04 - 17 November, due to the return of old active Regions 1314 (N29, L=056) and 1319 (N12, L=052).

No proton events are expected at geosynchronous orbit during the forecast period.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to be at normal to moderate levels during 26 - 29 October, with an increase to moderate to high levels during 30 October - 01 November. Mostly normal levels are expected during 02 - 21 November.

Quiet to active levels are forecast for 26 October as effects from the 22 October CME arrival subside. The field is expected to return to mostly quiet levels by 27 October. Quiet to unsettled levels are expected during 28 - 29 October as a coronal hole high-speed stream (CH HSS) disturbs the field. A return to mostly quiet levels is expected during 31 October - 02 November. From 03 - 05 November, quiet to unsettled levels are expected as another recurrent CH HSS affects the field. Mostly quiet levels are expected during 06 - 21 November.

```
From -4883924754188302827
X-Google-Thread: 10e8ad,3af51e8e13ecc998,start
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Received: by 10.68.27.132 with SMTP id t4mr14132901pbg.3.1319640374161;
        Wed, 26 Oct 2011 07:46:14 -0700 (PDT)
Path: p6ni4204pbn.0!nntp.google.com!news1.google.com!news2.google.com!
npeer02.iad.highwinds-media.com!news.highwinds-media.com!feed-me.highwinds-
media.com!nx01.iad01.newshosting.com!newshosting.com!news-out.readnews.com!
transit3.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-296 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Wed, 26 Oct 2011 10:46:13 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 469
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <001901cc93ed$fc506080$f4f12180$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
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X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Wed, 26 Oct 2011 14:46:13 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to   rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to   rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Xref: news1.google.com rec.radio.amateur.space:433 rec.radio.info:2413
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Content-Transfer-Encoding: 7bit
Content-Language: en-us

AMSAT NEWS SERVICE
ANS-296

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* AMSAT Symposium Weekend Quickly Approaching
* FO-29 Eclipse Undervoltage Stops Operation
* 4C1JPG Satellite Operation From 2011 Pan-American Games
* FP DXpedition Plans Satellite Operation
* AubieSat-1 Launch Includes Four Additional Satellites
* Prospero to be reactivated on 137.560 MHz
* SatPC32 Version 12.8b Available
* ARISS Status - 17 October 2011

SB SAT @ AMSAT $ANS-296.01
AMSAT Symposium Weekend Quickly Approaching

AMSAT News Service Bulletin 296.01
From AMSAT HQ SILVER SPRING, MD.
October 23, 2011
To All RADIO AMATEURS
BID: $ANS-296.01

Time is quickly approaching for the upcoming AMSAT Symposium to be held November 4-6. This year's Symposium marks the 50th anniversary of the launch of the first amateur radio satellite into space. The Symposium is being held in San Jose, CA which is the home of Project OSCAR, the organization that built amateur radio's first satellite. As part of our commemoration, the ARRL is bringing an OSCAR 1 prototype which has been refurbished to help highlight this significant milestone. Our banquet speaker, Lance Ginner, K6GSJ was a member of the team that built OSCAR 1; he subsequently was involved with a number of follow-on amateur radio satellite projects. Lance's presentation promises to be a fascinating look at the early days of amateur radio in space as well as perhaps some lessons learned.

Along with recognizing this significant milestone, the Symposium is an excellent opportunity to learn about the success of ARISSat-1 as well as AMSAT's latest project, Fox and the steps that we're taking to continue to keep amateur radio in space. There are some excellent presentations scheduled that will cover the gamut from satellite engineering to satellite operations to education outreach.
This year's "Proceedings of the AMSAT-NA Space Symposium and Annual Meeting", which is provided to every Symposium attendee contains 21 papers and is over 250 pages in length. While not all papers will be presented, there are also several presentations scheduled to be presented where the material was not finished in time for publication.

Along with the outstanding materials presented, Symposium offers a great opportunity to meet the AMSAT leadership (the Board of Directors members as well as Senior Officers), other satellite enthusiasts, and interact with our volunteers who are involved with our engineering projects. Symposium is both a presentation/educational opportunity as well as a social event.

If you haven't yet registered for this year's Symposium, please consider joining us. Details on the Symposium and registering can be found at: http://www.amsat.org/amsat-new/symposium/2011/index.php

Please note that deadline for taking advantage of the block or rooms that AMSAT has reserved expires on October 24, so time is indeed running out for making your arrangements. The last time that AMSAT held a Symposium in California was in 2006; this may be the best chance for AMSAT members and others living on the West Coast to participate in a Symposium and have direct interaction with the AMSAT leadership for some time. Hopefully, those of you living in the Bay Area will take full advantage of this opportunity. Alan Bowker, WA6DNR and his team have done a great job preparing for an outstanding weekend in San Jose.

See ya in San Jose!

Barry Baines, WD4ASW
President-AMSAT

[ANS thanks Barry, WD4ASW, for the above information]

/EX

SB SAT @ AMSAT $ANS-296.02
FO-29 Eclipse Undervoltage Stops Operation

AMSAT News Service Bulletin 296.02
  From AMSAT HQ SILVER SPRING, MD.
October 23, 2011
To All RADIO AMATEURS
BID: $ANS-296.02

Information has been received that the FO-29 analog repeater is currently off the air. The eclipse periods have increased to the point exceeding 27% shadowing which causes an undervoltage fault to shut down the satellite.

The FO-29 control station sent commands to reactivate the satellite during daytime passes over Japan between October 8-10. Also at the present time the control station was experiencing computer hardware problems which slowed progress.

[ANS thanks Mineo, JE9PEL, for the above information]

/EX

SB SAT @ AMSAT $ANS-296.03
4C1JPG Satellite Operation From 2011 Pan-American Games

AMSAT News Service Bulletin 296.03
  From AMSAT HQ SILVER SPRING, MD.
October 23, 2011
To All RADIO AMATEURS
BID: $ANS-296.03

Members of the "Radio Experimentadores de Occidente" radio club XE1TD will use the special Mexican call 4C1JPG during the 2011 Pan-American Games, currently taking place in Guadalajara. 4C1JPG ("Juegos Panamericanos Guadalajara", the Spanish translation of the event in that Mexican city) will be on 160m through 6m, as well as the satelltes through 30 October 2011.

QSL cards will be available, as well as electronic confirmations in both LOTW and eQSL. More information about 4C1JPG, including the Mexican address of the 4C1JPG QSL manager, is available at:

http://www.qrz.com/db/4C1JPG

QSL via LoTW, by the Bureau or direct to XE1GZU: Luis Zepeda Hernandez, P.O. Box 5-273, Guadalajara, Jalisco 45042, Mexico.

[ANS thanks Ohio/Penn DX Bulletin #1032 for the above information]

/EX

SB SAT @ AMSAT $ANS-296.04
FP DXpedition Plans Satellite Operation

AMSAT News Service Bulletin 296.04
From AMSAT HQ SILVER SPRING, MD.
October 23, 2011
To All RADIO AMATEURS
BID: $ANS-296.04

FP - Eric, KV1J and Jack, KV1E will be active as FP/KV1J and FP/KV1E from Miquelon Island (NA-032) from 25 October to 1 November. Plans are to operate SSB and RTTY, with some CW and PSK31, on 160-10 meters, plus 6m "if indications of openings". FP/KV1J will take part in the CQ WW DX SSB Contest (SOAB HP). QSL via home calls,direct or bureau, and LoTW, Information on satellite activity and and other details can be found at www.kv1j.com/fp/october11.html for AO-51 (if available), AO-27, SO-50, SO-67, and HO-68. All FM mode, V/U.

ANS thanks 425 DX NEWS DX Newsletter for the above information]

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SB SAT @ AMSAT $ANS-296.05
AubieSat-1 Launch Includes Four Additional Satellites

AMSAT News Service Bulletin 296.05
From AMSAT HQ SILVER SPRING, MD.
October 23, 2011
To All RADIO AMATEURS
BID: $ANS-296.05

The launch of Auburn University's AubieSat-1 satellite has been rescheduled to 28 October 2011 due to problems found during the system integration of the primary mission. A hydraulic system leak was detected and the cause was found to be a small crack in a hydraulic tube. A replacement tube was manufactured, installed, and retested. Also, a flexible fabric collar connecting two engine system exhaust ducts was found to be damaged following pressurized leak testing. The damaged fabric collar is being removed and replaced.

EXPENDABLE LAUNCH VEHICLE STATUS
Spacecraft: NPP (NPOESS Preparatory Project)
Launch Vehicle: Delta II 7920
Launch Site: Vandenberg Air Force Base, Calif.
Launch Date: Oct. 28, 2011
Launch Window: 2:48:01 a.m. - 2:57:11 a.m. PDT (9 min., 10 sec.)
Orbital Altitude: 512 miles

Note: This is the launch vehicle for AubieSat-1 and 4 other
      microsatellites

Satellite: AubieSat-1
Downlink Freq: 437.475 MHz
EIRP: .708W
Modulation Scheme: Interrupted Continuous Wave (IWC)
Protocol: Morse Code
Baud Rate: 20wpm

Satellite: DICE
Downlink Freq: 465 MHz
EIRP: -4.51dBW
Modulation Scheme: OQPSK
Protocol: CCSDS
Baud Rate: Modulation data rate 1.5 megabit,
Actual Tx bit rate 3.0 megabit

Satellite: RAX-2
Downlink Freq: 437.345 MHz
Modulation Scheme: GMSK
Baud Rate: 9600

Satellite: M-Cubed (1)
Downlink Freq: 437.485MHz
EIRP: < 1W
Modulation Scheme: FSK
Protocol: AX.25
Baud Rate: 9600

Satellite: Explorer-1[PRIME] Flight Unit 2
Downlink Freq: 437.505 MHz
EIRP: -0.7dBW
Modulation Scheme: Non-Coherent FSK
Protocol: KISS Custom
Baud Rate: 1200

Additional spacecraft information can be found on the satellite websites listed below:
M-Cubed:
http://umcubed.org/
DICE:
http://www.sdl.usu.edu/programs/dice
Explorer-1[PRIME]
http://ssel.montana.edu/e1p/
RAX-2:
http://rax.engin.umich.edu/
AubieSat-1:
http://space.auburn.edu/

AubieSat-1 is designed to transmit with a power of about 800 milliwatts on a frequency of 437.475 MHz, plus or minus Doppler correction. The beacon signal, along with telemetry, will be sent using A1A continuous wave Morse code at 20 words per minute. Additional telemetry from the on board science experiment will use CW transmissions up to 60 WPM.

An internet Echolink conference group is also planned to begin one-half hour prior to launch and continue until about 30 minutes after confirmation of the first receipt of signals from the satellite. Information on the conference groups title will be distributed nearer to the launch for interested stations.

Auburn's famous battle cry, "War Eagle," will be heard from space October 28 when it is transmitted to earth from a student-built satellite known as"AubieSat-1." Auburn University's web page includes a video about their mission:
http://ocm.auburn.edu/featured_story/aubiesat.html

Long-time AMSAT Member John Klingelhoeffer, WB4LNM serves as the Technical Advisor in Auburn University's Student Space Program.

[ANS thanks the AubieSat-1 Team for the above information]

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SB SAT @ AMSAT $ANS-296.06
Prospero to be reactivated on 137.560 MHz

AMSAT News Service Bulletin 296.06
From AMSAT HQ SILVER SPRING, MD.
October 23, 2011
To All RADIO AMATEURS
BID: $ANS-296.06

Attempts are being made to reactivate Prospero, the United Kingdom's first satellite launched on a UK-built rocket, Black Arrow, on October 28, 197 and it is hoped Amateur Radio operators will be able to hear the signals.

Roger Duthie M0RJA provides details of tests to be carried out over the next two weeks:

Some of you may have heard that a team in the UK are trying to recontact an old British launched satellite for the anniversary of its launch (28th October 1971).

We've been given a licence to transmit and will be testing our reengineered ground-segment in the next fortnight. The passes we are going to concentrate on will be as far out west as possible, as to minimise QRM from Europe. Earth is a lot more EM noisy than it was in 1971.

If anyone wants to try and tune in to the downlink, you can help ID any response we get from the old bird. To avoid interference the downlink is only planned to be active when the satellite is in range of the United Kingdom. The passes are summarised here:

https://public.sheet.zoho.com/public/rjaduthie/prospero-passes-in-the-next-fortnight

There are other passes, though these are the ones which are out west. We'll see how we do.

Roger J A Duthie M0RJA
Email: rjad at mssl.ucl.ac.uk

Prospero real-time oribtal tracking page
http://www.vk3ukf.com/Space/GadgetSatProspero.htm

Audio recordings of the 0.3 watt phase modulated signal with 2048 bit/s PCM from
Prospero on 137.560 MHz can be heard on the Sounds from Space site of Matthias Bopp DD1US: http://www.dd1us.de/spacesounds%204.html

Experiments on the Prospero satellite
http://www.uk.amsat.org/2011/09/08/experiments-on-the-prospero-satellite/

Plan to revive 1970s UK satellite on 137.560 MHz
http://www.uk.amsat.org/2011/09/05/1970s-uk-satellite-to-be-revived/

[ANS thanks Roger, M0RJA, for the above information]

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SB SAT @ AMSAT $ANS-296.07
SatPC32 Version 12.8b Available

AMSAT News Service Bulletin 296.07
From AMSAT HQ SILVER SPRING, MD.
October 23, 2011
To All RADIO AMATEURS
BID: $ANS-296.07

SatPC32 version 12.8b is available for download at
http://www.dk1tb.de/downloadeng.htm

The main SatPC32 program window now displays more information such as the date of the Keplerian elements file in use.

Before upgrading your SatPC32 installation, be sure to use the new program (in the ZIP file) to backup your user configuration. The upgrade erases all previous user configurations, but the new program will restore your configurations after upgrading.

The download is a demo version that requires users to enter their lat/lon each time the program is started. To make the program fully

functional, enter your existing registration code or purchase a registration code from the AMSAT web site:
http://www.amsat-na.com/store/category.php?c=Software

DK1TB, the author of SatPC32 has donated the software to AMSAT.
All sales of SatPC32 are used to support AMSAT.

Here are the changes described in the What's New file:

1. SatPC32, SatPC32ISS, Wisat32 and SuM now support rotor control of the M2 RC-2800 rotor system.

2. The CAT control functions of SatPC32, SatPC32ISS and Wisat32 have been expanded. The programs now provide CAT control of the new Icom transceiver IC-9100.

3. The main windows of SatPC32 and SatPC32ISS have been slightly changed to make them clearer. With window size W3 the world map can be stretched (only SatPC32).

4. The accuracy of the rotor positions can now be adjusted for the particular rotor controller. SatPC32 therefore can output the rotor positions with 0, 1 or 2 decimals. Corrections of the antenna positions can automatically be saved. In previous versions that had to be done manually.

5. The tool 'DataBackup' has been added. The tool allows users to save the SatPC32 program data via mouse click and to restore them if necessary. After the program has been configured for the user's equipment the settings should be saved with 'DataBackup'. If problems occur later, the program can easily restore the working configuration.

6. The rotor interfaces IF-100, FODTrack, RifPC and KCT require the kernel driver IOPort.SYS to be installed. Since it is a 32-bit driver it will not work on 64-bit Windows systems. On such systems the driver can cause error messages.To prevent such messages the driver can now optionally be deactivated.

7. SuM now outputs a DDE string with azimuth and elevation, that can be evaluated by client programs. Some demo files show how to program and configure the client.

[ANS thanks Wayne Estes W9AE for the above information]

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SB SAT @ AMSAT $ANS-296.08
ARISS Status - 17 October 2011

AMSAT News Service Bulletin 296.08
From AMSAT HQ SILVER SPRING, MD.
October 23, 2011

To All RADIO AMATEURS
BID: $ANS-296.08

1. Italian Students Hook Up with Astronaut Mike Fossum via ARISS

Students from Istituto Superiore "G. Curcio," Ispica, Italy participated in an Amateur Radio on the International Space Station (ARISS) contact on Friday, October 14 via telebridge station W6SRJ in California. Mike Fossum, KF5AQG answered 14 questions posed to him by the youth. He talked about what it is like to live in space, the problems encountered while working in microgravity and the experiments being conducted on the Space Station. The contact was integrated into the science curriculum covering astronomy.

2. Amateur Radio Club Contacts ISS

On Saturday, October 15, an Amateur Radio on the International Space Station (ARISS) contact was held between the Amateur Radio Morioka Club located in Morioka, Japan and Satoshi Furukawa, KE5DAW on the ISS. Seventeen students were able to ask questions of the astronaut during the radio connection. Student participants were those who went through difficult times after the tsunami devastation on March 11.

3. Astronaut Participates in JOTA

Astronaut Mike Fossum, KF5AQG participated in the Jamboree on the Air (JOTA) event. Fossum, a scoutmaster, spoke with scouts from several states on Saturday, October 15.

4. Amateur Radio Newsline Covers McFadin Interview

On October 14, the Amateur Radio Newsline Report 1783 included a story about an interview with Lou McFadin, W5DID in which he talks about his work at NASA, amateur radio and ham radio experiments in space. "Names in the News: Lew McFadin W5DID Interviewed by DX-Coffee" may be viewed here:
ftp://ftp.arnewsline.org/quincy/News/news.txt

5. Astronaut Training Status

Two astronaut training sessions are planned for October 18. Dan Burbank, KC5ZSX will take part in a refresher course and Joe Acaba, KE5DAR is scheduled for a preflight session. Burbank is slated to fly with Expedition 29 in November 2011 and Acaba plans to fly with Expedition 31 in March 2012.

[ANS thanks Carol, KB3LKI, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms areavailable from the AMSAT Office.

73,
This week's ANS Editor,
Lee McLamb, KU4OS

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From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-303 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sun, 30 Oct 2011 10:16:51 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 693
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000e01cc970e$894d69b0$9be83d10$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
X-Trace: reader1.panix.com 1319984211 1854 166.84.1.6 (30 Oct 2011 14:16:51 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 30 Oct 2011 14:16:51 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
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AMSAT NEWS SERVICE
ANS-303

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In this edition:
* AMSAT Symposium This Weekend
* Symposium Registration & Banquet Reservations Deadline
* AMSAT Awards Announcement
* Speaker and Presentation List Added to AMSAT Symposium Schedule
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* NASA ELaNa III Cubesat Launch Orbits Cubesats
* Satellite Shorts From All Over
* SatPC32 Version 12.8b Available
* ARISS Status - 24 October 2011

SB SAT @ AMSAT $ANS-303.01
AMSAT Symposium Next Weekend

AMSAT News Service Bulletin 303.01
>From AMSAT HQ SILVER SPRING, MD.
October 30, 2011
To All RADIO AMATEURS
BID: $ANS-303.01

This year's Symposium marks the 50th anniversary of the launch of the first amateur radio satellite into space. The Symposium is being held in San Jose, CA on November 4 thru November 6 which is the home of Project OSCAR, the organization that built amateur radio's first satellite. As part of our commemoration, the ARRL is bringing an OSCAR 1 prototype which has been refurbished to help highlight this significant milestone. Our banquet speaker, Lance Ginner, K6GSJ was a member of the team that built OSCAR 1; he subsequently was involved with a number of follow-on amateur radio satellite projects. Lance's presentation promises to be a fascinating look at the early days of amateur radio in space as well as perhaps some lessons learned.

The Symposium is an excellent opportunity to learn about the success of ARISSat-1 as well as AMSAT's latest project, Fox and the steps that we're taking to continue to keep amateur radio in space. There are some excellent presentations scheduled that will cover the gamut from satellite engineering to satellite operations to education outreach.
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If you haven't yet registered for this year's Symposium, please consider joining us. Details on the Symposium and registering can be found at:
http://www.amsat.org/amsat-new/symposium/2011/index.php
The last time that AMSAT held a Symposium in California was in 2006; this may be the best chance for AMSAT members and others living on the West Coast to participate in a Symposium and have direct interaction with the AMSAT leadership for some time.   Hopefully, those of you living in the Bay Area will take full advantage of this opportunity. Alan Bowker, WA6DNR and his team have done a great job preparing for an outstanding weekend in San Jose.

See ya in San Jose!

Barry Baines, WD4ASW
President-AMSAT

[ANS thanks Barry, WD4ASW, for the above information]

/EX

SB SAT @ AMSAT $ANS-303.02
Symposium Registration & Banquet Reservations Deadline

AMSAT News Service Bulletin 303.02
>From AMSAT HQ SILVER SPRING, MD.
October 30, 2011
To All RADIO AMATEURS
BID: $ANS-303.02

This is a reminder that on Monday October 31, 2011, the on-line registration for the 2011 AMSAT Space Symposium and Annual Meeting will close. Also, a count is needed for the Annual Banquet. If you are planning to attend the meeting and/or attend the Banquet, please register as soon as possible. After Monday, you will need to register at the hotel.

[ANS thanks AMSAT HQ for the above information]

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SB SAT @ AMSAT $ANS-303.03
AMSAT Awards Announcement

AMSAT News Service Bulletin 303.03
>From AMSAT HQ SILVER SPRING, MD.
October 30, 2011
To All RADIO AMATEURS
BID: $ANS-303.03

AMSAT Director of Contests and Awards, Bruce Paige, KK5DO says that congratulations are in order for the latest AMSAT Awards recipients:

The following have entered into the Satellite Communicators Club for making their first satellite QSO:

Stephen Licht, WF2S
Jay Hitchcock, KI6WZU
Costantino Montella, IK8YSS
Jackson Wilson, KF5LOQ

The following have earned the AMSAT Communications Achievement Award:

Clayton Coleman, W5PFG #542
Csaba-Zoltan Kertesz, YO6PIB #543
Yanko Yankov, NX9G #544
Jackson Wilson, KF5LOQ #545

The following have earned the South Africa Satellite Communications Achievement Award:

Clayton Coleman, W5PFG #US171
Csaba-Zoltan Kertesz, YO6PIB #US172
Yanko Yankov, NX9G #US173
Jackson Wilson, KF5LOQ #US174

The following have earned their Robert W. Barbee, Jr. W4AMI Award:

Branko Martincic, 9A3ST #74

The following have earned their Robert W. Barbee, Jr. W4AMI 5000 Award:

Gale McDaniel, KB0RZB #28

To see all the awards visit http://www.amsat.org.

[ANS thanks Bruce Paige, KK5DO for the above information]

/EX

SB SAT @ AMSAT $ANS-303.04
Speaker and Presentation List Added to AMSAT Symposium Schedule

AMSAT News Service Bulletin 303.04
>From AMSAT HQ SILVER SPRING, MD.
October 30, 2011
To All RADIO AMATEURS
BID: $ANS-303.04

AMSAT's 2011 Space Symposium is quickly approaching. It will be held on Friday, November 4th through Sunday, November 6th in San Jose, CA.

This year commemorates the 50th anniversary of the launch of OSCAR 1. Many events are planned to celebrate our 50 years of keeping amateur radio in space. The original OSCAR 1 prototype has been refurbished by the ARRL Lab. It will be on display and transmitting. Our Banquet Speaker is Lance Ginner, K6GSJ who was on the OSCAR 1 development team.

The 2011 Symposium Schedule has been posted and includes:

Thursday, November 3
0800 - 1200 AMSAT Board of Directors Meeting open to all AMSAT members
1300 - 1800 AMSAT Board of Directors Meeting open to all AMSAT members
1930 - 2200 AMSAT Board of Directors Meeting open to all AMSAT members

Friday, November 4
Symposium Registration Desk Open
0900 - 1200 AMSAT Board of Directors Meeting (Friday morning)
1:00 PM Introduction and Opening of presentations:
+ Bryan Klofas, KF6ZEO "Frequency Allocation for Government-funded CubeSats:NSF Paves the Way"
+ Bob Davis, KF4KSS "Orbital Elements and Magnetic Tumble in Excel"
+ Nick Pugh, K5QXJ "How to Light the Candle"
+ Michael Safyan, KJ6MVL "AMSAT Ames PhoneSat"
+ David Palmer, KB5WIA "A Satellite-Portable Backpacking Trip to Rare California Grid Square CM79
+ Hans van de Groenendaal, ZS6AKV "SA AMSAT CuveSat Project

'KLETSKous'"
+ Hans van de Groenendaal, ZS6AKV "Turning University CubeSats into amateur radio satellites"
+ Jan King, VK4GEY/W3GEY "Australis-OSCAR-5

Saturday, November 5
0730 Symposium Registration Desk Open
8:00 AM Introduction and Opening of presentations:
+ Lou McFadin, W5DID "Fabrication, Integration and Testing of ARISSat-1"
+ Gould Smith, WA4SXM "ARISSat-1 in Flight"
+ Douglas Quagliana, KA2UPW/5 "Decoding Satellite Telemetry form ARISSat-1"
+ Steven Bible, N7HPR "ARISSat-1 Operational Survey"
+ Gould Smith, WA4SXM "ARISSat-1 Post Mortem"
+ Tony Monteiro, AA2TX "Space Radiation and Fox Program"
+ Barry Baines, WD4ASW "The Importance of Educational Outreach for AMSAT"
+ Tony Monteiro, AA2TX "AMSAT Fox-1 Systems Overview"
+ Bob Davis, KF4KSS "Fox 1 Thermal Design"
+ Bob Davis, KF4KSS "Fox 1 Mechanical Design"
+ Alexander J Harvilchuck, N3NP "2010-2011 AMSAT NextGen Program Satellite Report"
+ Sawson Taheri, KG6NUB "OSCAR Zero from a Satellite Operator's Perspective"
+ AMSAT Annual Meeting

1700 - 1800 Break
1800 - 1900 Attitude Adjustment with Cash Bar
1900 - 2100 Banquet and Keynote Speaker and Door Prize Drawing

Sunday, November 6
0730 Area Coordinators Field Ops Breakfast
0900 IARU Meeting
1015 Meet for Sunday Tour Tech Museum of Innovation in San Jose.

Our annual gathering will also feature:

+ Space Symposium with Amateur Satellite Presentations
+ Operating Techniques, News, & Plans from the Amateur Satellite World
+ Board of Directors Meeting open to AMSAT members (Nov. 3-4)
+ Meet Board Members and Officers
+ Annual General Membership Meeting
+ Annual Banquet-Keynote Speaker and Door Prizes

The 2011 Symposium hotel and registration web pages are now available on the AMSAT web site. You may register for the Symposium and Annual Banquet at the AMSAT Store:
http://www.amsat-na.com/store/SymposiumReg.php

Visit the Symposium and Annual General Meeting web page for details and the latest information:
http://www.amsat.org/amsat-new/symposium/2011/index.php

[ANS thanks the 2011 Symposium Committee for the above information]

/EX

SB SAT @ AMSAT $ANS-303.05
PW-Sat to Launch in January

AMSAT News Service Bulletin 303.05
>From AMSAT HQ SILVER SPRING, MD.
October 30, 2011
To All RADIO AMATEURS
BID: $ANS-303.05

This week AMSAT-UK web site carried the announcement that PW-Sat, a 1U CubeSat to be launched on the first VEGA flight in January,will carry a 145 to 435 MHz Amateur Radio transponder.

The single channel transponder will operate in a similar way to AO-16.

The uplink on 145.900 MHz will be FM and the downlink on 435.020MHz will use the BPSK telemetry beacon transmitter to produce Double Sideband (DSB) that can be received on an SSB radio.

PW-Sat will be launched into a 300 by 1450km 69.5 degree orbit and may be expected to have a lifetime of about 2 years before re-entry. It was built by students of Warsaw University of Technology in cooperation with the Space Research Centre and will be Poland's first satellite.

The development and construction of this satellite, students worked with two research groups - Astronautical Students (Faculty MEiL)and Space Engineering Student (Faculty EITI). Tutor from the beginning of the project was prof. Assoc. inz. Piotr Wolanski, MEiL department.

The main objective of the project is education of students in the preparation, construction and use of artificial satellites. Specific objectives are:

+ Testing the system to develop flexible solar generation.

+ Study the deacceleration of a satellite, which will increase the resistance and its rapid descent from orbit.

+ Testing of satellite communication system including the Technical University of Warsaw, Gdynia Maritime Academy and the Centre for Astronomy them. Nicolaus Copernicus Academy of Sciences.

PW-Sat has five modes of operation:

1. Receive only mode - no downlink
2. Beacon CW mode - Downlink On-Off Keying (OOK) CW (1kHz) 12 WPM on 435.020 MHz
3. Beacon BPSK mode - Downlink BPSK (3 kHz) 1200 bps AX25 (1 frame on 20 sec) on 435.020 MHz
4. Control communication mode. Downlink BPSK (3 kHz) 1200 bps AX25 on 435.020 MHz
5. Voice Repeater mode (aka 'AO16' mode) - Uplink145.900MHz FM(15 kHz) Downlink 435.020MHz DSB (3 kHz)

For more information on PW-Sat in Google English see
http://tinyurl.com/CubeSatPW-Sat

IARU Amateur satellite frequency co-ordination panel pages
hosted by AMSAT-UK http://www.amsat.org.uk/iaru/

The AMSAT-UK article can be found on their web site at:
http://www.uk.amsat.org/2011/10/21/pw-sat-to-launch-in-january

[ANS thanks AMSAT-UK for the above information]

/EX

SB SAT @ AMSAT $ANS-303.06
NASA ELaNa III Cubesat Launch Orbits Cubesats

AMSAT News Service Bulletin 303.06
>From AMSAT HQ SILVER SPRING, MD.
October 30, 2011
To All RADIO AMATEURS
BID: $ANS-303.06

NASA launched five small research satellites, or CubeSats, for four universities on October 28 from Vandenberg AFB. This will be the 3rd installment of the Educational Launch of Nanosatellite (ELaNa) missions. The CubeSats are manifested as auxiliary payloads on the Delta II launch vehicle for NASA's NPOESS Preparatory Project (NPP) mission.

The ELaNa III Cubesat Launch included RAX-2, MCubed, E1P,and AubieSat are all trackable by most OSCAR stations. As of press time signals from Aubiesat-1, E1P and RAX-2 had been received.

A video with live commentary describing the computer graphics of the NPP Second Stage Burn 3 and CubeSats Deployment:
http://www.youtube.com/watch?feature=player_embedded&v=FFLmERzduUY

The ElaNa CubeSat Media Briefing with Roland Coelho, WH7BE can be viewed at:

http://www.youtube.com/watch?v=UcjM2GhMD-E&feature=player_embedded

The initial keps:
http://gs.engin.umich.edu/predictions/tle_elana3.txt.

AubieSat-1 is designed to transmit with a power of about 800 milliwatts on a frequency of 437.475 MHz, plus or minus Doppler correction. The beacon signal, along with telemetry, will be sent using A1A continuous wave Morse code at 20 words per minute. Additional telemetry from the on board science experiment will use CW transmissions up to 60 WPM.

AubieSat-1 Telemetry Format

For all transmissions, arbitrary digits represent digits in base 10, capital R denotes a decimal point, and FFFF is in hexadecimal.

```
Basic Beacon  20wpm    (for 20 sec total)
Every 1 min (Unless AS-1 is in outreach mode)

HI HI DE KI4NQO AUBIESAT 1 VB 3R68 SK (Beacon includes battery
voltage)

Outreach Beacon        20 wpm   (for 75 sec total)
Every 5 min  (Only when AS-1 is placed in outreach mode)

HI HI DE KI4NQO AUBIESAT 1BT  (Initialize transmission)
FFFF BT                       (Minutes since deployment)
01 VB 3R68 TB 39R2 BT         (Battery voltage and temperature)
02 P1 3R68 P2 3R68 BT         (Solar Panels 1 & 2 Max Power)
EOT DE KI4NQO 73 SK           (End of Transmission)
```

AubieSat-1 Pass Report Form

Help the AubieSat-1 Team! Please fill out the following form and email a copy to aubiesat1data@gmail.com

Name / Call sign of HAM operator reporting:
Time and date of pass (UTC):

Your Geographical Location:
(City, State, Country)

Your Latitude and Longitude:

Signal fading cycle time: (For one complete rotation in seconds)

Copy of Transmission Received:
(Please post a verbatim copy here of any transmission from AS-1
that you receive including these telemetry values if copied:)
+ Minutes Since Deployment
+ Battery Voltage (VB)
+ Battery Temperature (TB)

+ Solar Panel 1 Max Power (P1)
+ Solar Panel 2 Max Power (P2)

Notes/Observations:

Please direct any questions to: aubiesat1@gmail.com
Thank you for your assistance!

Frequency and Modulation Summary of the CubeSat Launch:

Satellite: AubieSat-1
Downlink Freq: 437.475 MHz
EIRP: .708W
Modulation Scheme: Interrupted Continuous Wave (IWC)
Protocol: Morse Code
Baud Rate: 20wpm
http://space.auburn.edu/

Satellite: RAX-2
Downlink Freq: 437.345 MHz
Modulation Scheme: GMSK
Baud Rate: 9600
http://rax.engin.umich.edu/

Satellite: M-Cubed
Downlink Freq: 437.485MHz
EIRP: < 1W
Modulation Scheme: FSK
Protocol: AX.25
Baud Rate: 9600
http://umcubed.org/

Satellite: Explorer-1[PRIME] Flight Unit 2
Downlink Freq: 437.505 MHz
EIRP: -0.7dBW
Modulation Scheme: Non-Coherent FSK
Protocol: KISS Custom
Baud Rate: 1200
http://ssel.montana.edu/e1p/

DICE (non-amateur payload):
http://www.sdl.usu.edu/programs/dice
Explorer-1[PRIME]

[ANS thanks the AubieSat-1 Team at Auburn University for the above information]

/EX

SB SAT @ AMSAT $ANS-303.07
Satellite Shorts From All Over

AMSAT News Service Bulletin 303.07
>From AMSAT HQ SILVER SPRING, MD.
October 30, 2011
To All RADIO AMATEURS
BID: $ANS-303.07

+ Congratulations to Steve Belter, N9IP on attaining his ARRL Satellite VHF/UHF Century Club (VUCC) certificate #223.

+ The ARISS store at http://www.cafepress.com/ariss has been updated with new products.

+ What did the three astronauts do on the ISS this past week? You can watch the video update from NASA on the research and activities on the International Space Station for October 17-21, 2011, including updates on the upcoming Progress and Soyuz launches at: http://www.youtube.com/watch?feature=player_embedded&v=yAYqf5E6qIY

+ Watch the video of the October 21 debut lift off of a Russian Soyuz rocket from the edge of the Amazon jungle at the Guiana Space Center in French Guiana as it successfully carried the first two Galileo In-Orbit Validation satellites to space: http://www.youtube.com/watch?feature=player_embedded&v=c750fdZR6Mg

+ Roland Zurmely, PY4ZBZ, copied the full spectrum of signals from ARISSat with an SDR-IQ (and homemade VHF/HFconverter) and Spectra-Vue. The frequencies listed are the transmitted by satellite, and Doppler effectis clearly visible in the received signals, with higher frequencies at the beginning and lower at the end of the pass. The noise generated by linear transponder and the return of the transmission that I did in the UHF uplink are clearly visible. The CW-2 signal close to the 1kBPSK telemetry signalcan also be seen, as well as FM transmissions, switching between voice and SSTV. Please see: http://www.qsl.net/py4zbz/arissat.htm#o

[ANS thanks everyone for the above information]

/EX

SB SAT @ AMSAT $ANS-303.08
SatPC32 Version 12.8b Available

AMSAT News Service Bulletin 303.08
>From AMSAT HQ SILVER SPRING, MD.
October 30, 2011
To All RADIO AMATEURS
BID: $ANS-303.08

SatPC32 version 12.8b is available for download at
http://www.dk1tb.de/downloadeng.htm

The main SatPC32 program window now displays more information such as the date of the Keplerian elements file in use.

Before upgrading your SatPC32 installation, be sure to use the new program (in the ZIP file) to backup your user configuration. The upgrade erases all previous user configurations, but the new program will restore your configurations after upgrading.

The download is a demo version that requires users to enter their lat/lon each time the program is started. To make the program fully functional, enter your existing registration code or purchase a registration code from the AMSAT web site:
http://www.amsat-na.com/store/category.php?c=Software

DK1TB, the author of SatPC32 has donated the software to AMSAT. All sales of SatPC32 are used to support AMSAT.

Here are the changes described in the What's New file:

1. SatPC32, SatPC32ISS, Wisat32 and SuM now support rotor control of the
M2 RC-2800 rotor system.

2. The CAT control functions of SatPC32, SatPC32ISS and Wisat32 have been expanded. The programs now provide CAT control of the new Icom transceiver IC-9100.

3. The main windows of SatPC32 and SatPC32ISS have been slightly changed to make them clearer. With window size W3 the world map can be stretched (only SatPC32).

4. The accuracy of the rotor positions can now be adjusted for the particular rotor controller. SatPC32 therefore can output the rotor positions with 0, 1 or 2 decimals. Corrections of the antenna positions can automatically be saved. In previous versions that had to be done manually.

5. The tool 'DataBackup' has been added. The tool allows users to save the SatPC32 program data via mouse click and to restore them if necessary. After the program has been configured for the user's equipment the settings should be saved with 'DataBackup'. If problems occur later, the program can easily restore the working configuration.

6. The rotor interfaces IF-100, FODTrack, RifPC and KCT require the kerneldriver IOPort.SYS to be installed. Since it is a 32-bit driver it will not work on 64-bit Windows systems. On such systems the driver can cause error messages.To prevent such messages the driver can now optionally be deactivated.

7. SuM now outputs a DDE string with azimuth and elevation, that can be evaluated by client programs. Some demo files show how to program and configure the client.

[ANS thanks Wayne Estes W9AE for the above information]

/EX

SB SAT @ AMSAT $ANS-303.09
ARISS Status - 24 October 2011

AMSAT News Service Bulletin 303.09
>From AMSAT HQ SILVER SPRING, MD.
October 30, 2011
To All RADIO AMATEURS
BID: $ANS-303.09

1. Upcoming School Contacts

Cherry Creek School District, Centennial, Colorado for an Amateur Radio on the International Space Station (ARISS) contact on Thursday, October 27 at 17:09 UTC via telebridge station IK1SLD in Italy was successful. A radio technology curriculum will be provided to students in the gifted and talented program, "Inside Out" to get them interested in amateur radio. The class will cover topics from radio propagation to UTC time and space. A guest speaker will talk about meteor scatter as well. Lesson plan objectives are to understand: measuring systems, general awareness of time on the body, orbits, science experiments, intervals, sleep, and communications.

An Amateur Radio on the International Space Station (ARISS) contact was scheduled for Space Laboratory, Herzliya Science Centre, Herzliya, Israel on Friday, October 28 at 11:25 UTC. The contact was successful and will be incorporated into lessons covering the space environment, orbital mechanics, satellite design and radio communications.

2. ARISS Contact with Seiryo Elementary

Seiryo Elementary School, Seto, Aichi, Japan experienced a successful Amateur Radio on the International Space Station (ARISS) contact on Tuesday, October 18.
The contact highlighted a science curriculum covering electricity, space and technology.

3. ZST Students Contact ISS

On Friday, October 21, an Amateur Radio on the International Space Station (ARISS) contact was held between students attending Zespol Szkol Technicznych in Rybnicka, Slask, Poland and on-orbit astronaut Mike Fossum, KF5AQG. Approximately 65 students, teachers, parents, guests and media attended the event and listened as Fossum fielded 19 questions posed by the students. The SP9PKS radio club members worked with the youth to prepare them for the contact. Lesson plans included the construction of radio equipment and contacts via LEO (Low Earth Orbit) satellites. Two newspapers and four broadcast radio stations covered the contact: Dziennik Zachodni and Wiadomoci Powiatowe newspapers, Radio Zet, Radio Zote Przeboje, Tok FM, Antyradio, and local station Radio Fest.

4. ARISS International Team Meeting, October 28-29

The ARISS International Face-to-Face Meeting will be held this Friday and Saturday, October 28 and 29 at the Space Center Houston in Houston, Texas. The team will come together to share regional reports as well as status reports from the program's other committees including education, operations and hardware.

5. ARISS International Team Teleconference Held

The monthly ARISS International teleconference was held on Tuesday, October 18. The upcoming face-to-face meeting was discussed, among other topics. Minutes have been posted:
http://www.rac.ca/ariss/arisstel2011-10-18.htm

6. Astronaut Training Status

On October 18 Dan Burbank, KC5ZSX was given an ARISS refresher course to prepare him for his upcoming flight with Expedition 29 in November. Joe Acaba, KE5DAR participated in a preflight session the same day. He plans to fly with Expedition 31 in March 2012.

7. ARISS Recognized by NASA Associate Administrator for Education

In a recent communication of FY2011 accomplishments to the NASA education community, NASA Associate Administrator for Education Leland Melvin highlighted the accomplishments of ARISS:

"10,743 curious students and 778 motivated educators participated in direct communication with International Space Station (ISS) crews via the Amateur Radio on the International Space Station (ARISS), sparking their interest in STEM."

[ANS thanks Carol, KB3LKI, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to

receive additional benefits. Application forms are available
from the AMSAT Office.

73,
This week's ANS Editor,
Dee Interdonato, NB2F

```
From 8381587048762555200
X-Google-Thread: 108122,a295e19141f79b04,start
X-Google-NewGroupId: yes
X-Google-Thread: fc2a5,a295e19141f79b04,start
X-Google-NewGroupId: yes
X-Google-Thread: 107ada,a295e19141f79b04,start
X-Google-NewGroupId: yes
X-Google-Thread: 10bf43,a295e19141f79b04,start
X-Google-NewGroupId: yes
X-Google-Thread: 10e8ad,a295e19141f79b04,start
X-Google-NewGroupId: yes
X-Google-Thread: 10b9c8,a295e19141f79b04,start
X-Google-NewGroupId: yes
X-Google-Attributes:
gidd7f5508063,gid241b302a50,gida3e752f117,gide721ae2bf6,gid8f86f75953,gida4a23d5f6
3,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Received: by 10.204.140.144 with SMTP id i16mr1084872bku.0.1320127204346;
        Mon, 31 Oct 2011 23:00:04 -0700 (PDT)
MIME-Version: 1.0
Path: l23ni40159bkv.0!nntp.google.com!news2.google.com!news.glorb.com!news-
out.readnews.com!transit3.readnews.com!panix!panix2.panix.com!not-for-mail
From: rram@panix.com (rec.radio.amateur.moderated Admin)
Newsgroups:
rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.rad
io.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amat
eur.space,rec.radio.info
Subject: Crossposting Permitted to rec.radio.amateur.moderated
Supersedes: <radio/ham-radio/moderated/crossposting-1-1317448801@panix.com>
Followup-To: poster
Date: 1 Nov 2011 02:00:03 -0400
Organization: rec.radio.amateur.moderated Moderation Team
Lines: 47
Approved: RRI Admin <rec-radio-info-request@panix.com>
Distribution: world
Expires: 04 Dec 2011 01:00:01 -0000
Message-ID: <radio/ham-radio/moderated/crossposting-1-1320127201@panix.com>
Reply-To: rec-radio-amateur-moderated-request@panix.com
(rec.radio.amateur.moderated Admin)
NNTP-Posting-Host: panix2.panix.com
X-Trace: reader1.panix.com 1320127203 8352 166.84.1.2 (1 Nov 2011 06:00:03 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Tue, 1 Nov 2011 06:00:03 +0000 (UTC)
```

Summary: Short reminder for unmoderated newsgroups that crossposting is permitted
Keywords: FAQ, ham, amateur, radio, moderated, unmoderated, crossposting, permitted
Xref: news2.google.com rec.radio.amateur.antenna:10055 rec.radio.amateur.dx:699 rec.radio.amateur.equipment:1081 rec.radio.amateur.homebrew:1898 rec.radio.amateur.misc:2449 rec.radio.amateur.policy:9697 rec.radio.amateur.space:312 rec.radio.info:1908

Posted-By: auto-faq 3.3.2 beta (PGPMoose V2.0, Perl 5.005)
Archive-name: radio/ham-radio/moderated/crossposting
Revision: 1.1 2009/04/12 19:42:04
Posting-Frequency: posted monthly
URL: http://www.panix.com/~rram/usenet/rram/index.html

Changes followed by "|".

After a 30-day public discussion and feedback period to gauge reader opinions in March of 2009:

http://groups.google.com/group/rec.radio.amateur.moderated/browse_thread/thread/d7d337db35f23326

the rec.radio.amateur.moderated Moderation Team has decided to consider amending its charter, and permit limited simultaneous crossposting to rec.radio.amateur.moderated and one other unmoderated amateur-radio-related discussion newsgroup. We are currently trying this on a temporary basis (90 days, through early July 2009), and adopt it permanently if successful.

Approved rec.radio.amateur.* newsgroups are those that are currently listed in the latest version of the "List of Big Eight Newsgroups" which is crossposted monthly to news.announce.newgroups, news.groups, and news.lists.misc.

Approved alt.radio.amateur.* and alt.ham-radio.* newsgroups are those that have been created consistent with the suggestions in "So You Want to Create an Alt Newsgroup" at:

http://www.faqs.org/faqs/alt-creation-guide/

Approved regional hierarchy newsgroups are those that contain either "radio.amateur" or "ham-radio" in their names, including uk.radio.amateur and aus.radio.amateur.misc.

We will make every reasonable effort to keep our list of approved newsgroups up-to-date. In case we have overlooked any, and a submission is rejected in error as a result, the rejected submitter can E-mail us at our administrative contact address (in the signature at the bottom of this article, and the default Reply-To for the rejection message) requesting that it be added, and that the article be approved. We may still choose to reject articles crossposted to any alt.* newsgroup with an inappropriate name, including obscene language, embedded name-calling, or encouragement of unlawful conduct.

Please direct any comments, questions, or criticisms to
rec-radio-amateur-moderated-request@panix.com.

```
From 6344680128878485766
X-Google-Thread: 107ada,ff21ea21b890ab5a,start
X-Google-NewGroupId: yes
X-Google-Thread: 11480d,ff21ea21b890ab5a,start
X-Google-NewGroupId: yes
X-Google-Thread: 10e8ad,ff21ea21b890ab5a,start
X-Google-NewGroupId: yes
X-Google-Thread: 10b9c8,ff21ea21b890ab5a,start
X-Google-NewGroupId: yes
X-Google-Attributes:
gida3e752f117,gid7221ecd0f7,gid8f86f75953,gida4a23d5f63,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Received: by 10.68.35.68 with SMTP id f4mr1640209pbj.5.1320183011862;
        Tue, 01 Nov 2011 14:30:11 -0700 (PDT)
MIME-Version: 1.0
Path: p6ni58016pbn.0!nntp.google.com!news2.google.com!news4.google.com!
news1.google.com!newsfeed2.dallas1.level3.net!news.level3.com!panix!rri.panix.com!
robomod!not-for-mail
From: SWPC.Webmaster@noaa.gov
Newsgroups:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.info
Subject: Weekly Highlights of Solar and Geomagnetic Activity, 24 - 30 October 2011
Followup-To: rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space
Date: Tue, 1 Nov 2011 17:30:08 EDT
Organization: NOAA Space Weather Prediction Center
Lines: 80
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <20111101213001.CC46533C8E@panix2.panix.com>
NNTP-Posting-Host: panix6.panix.com
X-Trace: reader1.panix.com 1320183008 10732 166.84.1.6 (1 Nov 2011 21:30:08 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Tue, 1 Nov 2011 21:30:08 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Xref: news2.google.com rec.radio.amateur.misc:2450 rec.radio.amateur.dx:700
rec.radio.amateur.space:313 rec.radio.info:1912
```

:Product: Weekly Highlights and Forecasts
:Issued: 2011 Nov 01 2020 UTC

```
# Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center
# Product description and SWPC contact on the Web
# http://www.swpc.noaa.gov/weekly.html
#
#                Weekly Highlights and Forecasts
#
```

Highlights of Solar and Geomagnetic Activity

24 - 30 October 2011

Solar activity has been at very low to low levels. Very low levels were observed on 24 October while low levels dominated the remainder of the summary period. Despite the large size and magnetic complexity (Beta-Gamma) of Region 1330 (N08, L=249, class/area, Eko/560 on 24 October), the region only managed three low level C-flares on 25 and 30 October. Region 1324 (N11, L=305, class/area, Ekc/360 on 20 October) was the largest producer of low level C-class activity with a total of five flares; the largest of the period, a C3 that occurred at 29/1452 UTC. Four relatively slow-moving CMEs were observed in association with disappearing solar filaments beginning at 22/0058 UTC, 26/0800 UTC, and 28/0218 UTC, and finally 28/1652 UTC, observed in SOHO/LASCO imagery. The first event became geoeffective late on 24 October while a glancing blow from the second event arrived early on the 30 October, and third CME is not expected to be geoeffective. The final CME is expected to arrive sometime on 31 October.

No proton events were observed at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit was at normal levels the entire period.

The geomagnetic field ranged from quiet to severe storm levels. The period began with solar wind speeds, as measured by the ACE Spacecraft, steady near 300 km/s with the total interplanetary magnetic field (IMF Bt) around 6 nT. The geomagnetic field was quiet during these periods. By late on 24 October, an interplanetary shock was observed in ACE data at 24/1748 UTC in association with the CME from 22/0058 UTC. A Sudden Impulse (SI) was observed at the Boulder magnetometer of 13 nT at 24/1832 UTC. Solar wind velocities increased from a steady 350 km/s to about 525 km/s. The IMF Bt increased to above 20 nT from about 24/2000 UTC through 25/1300 UTC and gradually decreased to about 8 nT by late on 25 October. The Bz component of the IMF reached southward values of -20 nT from about 24/2000 UTC through 25/0000 UTC. The geomagnetic field from 24/1800 UTC - 25/1200 UTC responded with active to major storm periods with an isolated severe storm period observed from 24/2100-2400 UTC. By 26 October, solar wind speed declined to around 400 km/s with the IMF Bt around 7 nT. Solar wind speed continued to decline to approximately 300 km/s by the end of the period. The geomagnetic field was mostly quiet the rest of the period.

Forecast of Solar and Geomagnetic Activity

02 November - 28 November 2011

Solar activity is expected to be at predominately low to moderate levels from 02 November - 15 November as Regions 1338 (S12, L=119, class/area Dao/120 on 01 November) and 1339 (N22, L=117, class/area Dao/180 on 01 November) rotate further onto the visible solar disk. A return to mostly low levels is expected for the remainder of the period.

No proton events are expected at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to be at normal to moderate levels throughout the period.

The geomagnetic field is expected to be generally unsettled on 02 November as the effects of a CME wane. Predominantly quiet conditions are expected from 03-04 November. An increase to unsettled to active conditions is expected from 05-07 November as the combined effects of a coronal hole high speed stream (CH HSS) and another CME are expected. A return to quiet levels is expected from 08-10 November. Another small increase to unsettled conditions is expected from 11-13 November, as another CH HSS becomes geoeffective. A return to predominantly quiet levels is expected from 14 - 25 November. Quiet to unsettled levels are expected for the remainder of the period, as another CH HSS becomes geoeffective.

```
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X-Google-Language: ENGLISH,ASCII
Received: by 10.43.48.202 with SMTP id ux10mr31904071icb.6.1320542069420;
        Sat, 05 Nov 2011 18:14:29 -0700 (PDT)
MIME-Version: 1.0
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newsfeed2.dallas1.level3.net!news.level3.com!bloom-beacon.mit.edu!panix!
rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-310 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sat, 5 Nov 2011 21:14:28 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 378
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <001001cc9c21$69ec9d30$3dc5d790$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
X-Trace: reader1.panix.com 1320542068 15670 166.84.1.6 (6 Nov 2011 01:14:28 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 6 Nov 2011 01:14:28 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
```

X-RRI-Info-1: Send submissions to rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Xref: news1.google.com rec.radio.amateur.space:437 rec.radio.info:2446
Content-Language: en-us

AMSAT NEWS SERVICE
ANS-310

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:

* AMSAT Board of Directors Names Senior Officers for 2011-2012
* Project OSCAR and AMSAT Commemorate 50th Anniversary of OSCAR 1
* ARISSat-1/KEDR Team Challenge to Catch the Last ARISSat-1 Telemetry
* Asteroid Ping Experiment November 8 For Suitably Equipped Stations
* Montana State University Explorer-1 Prime Cubesat Featured in Press
* Satellite Shorts From All Over

SB SAT @ AMSAT $ANS-310.01
AMSAT Board of Directors Names Senior Officers for 2011-2012

AMSAT News Service Bulletin 310.01
>From AMSAT HQ SILVER SPRING, MD.
November 6, 2011
To All RADIO AMATEURS
BID: $ANS-310.01

Election of AMSAT's Senior Officers was one of the first orders of business to be settled once the AMSAT Board of Directors meeting opened on November 3, prior to the start of the 2011 AMSAT Space Symposium held in San Jose, California.

The following positions were voted upon and filled:

Barry Baines, WD4ASW	President
Drew Glasbrenner, KO4MA	Vice-President Operations

Gould Smith, WA4SXM	Vice President User Services
Tony Monteiro, AA2TX	Vice-President Engineering
Alan Biddle, WA4SCA	Secretary
Keith Baker, KB1SF/VA3KSF	Treasurer
Martha Saragovitz	Manager

The following Senior Officer positions remained open at this time awaiting appointments:
Executive Vice President
Vice-President Human Spaceflight
Vice-President Marketing

The AMSAT Board of Directors elected on September 15 include:
Barry Baines, WD4ASW
Alan Biddle, WA4SCA
Dr. Thomas A. Clark, K3IO
Drew Glasbrenner, KO4MA
Lou McFadin, W5DID
Tony Monteiro, AA2TX
Gould Smith, WA4SXM
Mark Hammond, N8MH (First Alternate)
Patrick Stoddard, WD9EWK (Second Alternate)

Other items on the Board of Directors agenda included:

+ Reports from the President, Secretary, and Treasurer
+ Budget approval for 2012
+ Technical Issues to be addressed included:
  o Regulatory Issues Affecting AMSAT (ITAR and HR607)
  o ARISSat-1
  o Project Fox
  o ARISS and ARISS-International
  o AMSAT Lab Update/Storage
  o Operations Team Report
  o User Services Report

Details of these reports will be presented in upcoming ANS bulletins and in The AMSAT Journal.

[ANS thanks the AMSAT Board of Directors for the above information]

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SB SAT @ AMSAT $ANS-310.02
Project OSCAR and AMSAT Commemorate 50th Anniversary of OSCAR 1

AMSAT News Service Bulletin 310.02
>From AMSAT HQ SILVER SPRING, MD.
November 6, 2011
To All RADIO AMATEURS
BID: $ANS-310.02

The AMSAT 2011 AMSAT Space Symposium coincides with the celebration of the 50th anniversary of OSCAR 1.

Bob Allison, WB1GCM of ARRL's Technical Lab led the effort to refurbish the OSCAR 1 prototype on display at ARRL headquarters. With the help of Symposium Banquet Speaker and OSCAR 1 developer Lance Ginner, K6GSJ, Bob and his team got OSCAR 1 operational again.

The refurbished OSCAR-1 was on display at the ARRL exhibit area at the 2011 Dayton Hamvention. The OSCAR 1 prototype was again on display during the AMSAT Symposium where everyone was able to once again hear the CW transmissions (now managed by a PIC controller) in the 145 MHz band.

Additionally, the AMSAT News Service will re-run the weekly Project OSCAR Newsletters to commemorate the 50th anniversary of OSCAR 1. During the November/December 2011 time frame you will be able to share the excitement of the launch campaign that started it all 50 years ago.

Watch for the re-publication of the Project OSCAR Newsletters in the AMSAT Journal. The Newsletters were hand-typed back in 1961. Thanks to Don Ferguson, KD6IRE for scanning the original documents announcing OSCAR 1.

[ANS thanks Project OSCAR and the 2011 Symposium Committee for the above information]

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SB SAT @ AMSAT $ANS-310.03
ARISSat-1/KEDR Team Challenge to Catch the Last ARISSat-1 Telemetry

AMSAT News Service Bulletin 310.03
>From AMSAT HQ SILVER SPRING, MD.
November 6, 2011
To All RADIO AMATEURS
BID: $ANS-310.03

Now that the submissions are complete for the Chicken Little Contest AMSAT is announcing a new contest to "Catch the Last ARISSat-1 Telemetry."

With luck, we will have real time data to go along with the final reentry. While telemetry sent by e-mail is valuable and requested, this contest will be judged solely on data sent through the official ARISSatTLM programs directly to the Internet telemetry server.

How do you enter? Simple. Just submit ARISSat-1 telemetry over the Internet using either ARISSatTLM telemetry program. You can use the

PC version or the MAC version of ARISSatTLM and you are automatically eligible.

Are there separate categories for entrants? No.

How is the winner determined? The call, or name, in the last block of data received by telemetry server wins.

How will the winner be announced? Via the usual AMSAT News Service, and on the Chicken Little Contest site.
(see: http://www.amsat.org/amsat-new/ARISSat/ARISSatContest)

If ARISSat-1 fails sometime before reentry, does it count? Yes! Engineering data is essential input for future projects!

What do I get if I win? A certificate in PDF format suitable for framing, and the gratitude of the ARISSat-1/KEDR team.

In short, just keeps those telemetry blocks flowing!

Remember: you can see the latest ARISSat-1 telemetry at
http://www.arissattlm.org/live

[ANS thanks the ARISSat-1/KEDR Team for the above information]

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SB SAT @ AMSAT $ANS-310.04
Asteroid Ping Experiment November 8 For Suitably Equipped Stations

AMSAT News Service Bulletin 310.04
>From AMSAT HQ SILVER SPRING, MD.
November 6, 2011
To All RADIO AMATEURS
BID: $ANS-310.04

On Tuesday, November 8, at 6:28 p.m. EST, an asteroid the size of an aircraft carrier will soar past our planet at a distance closer than the Moon� and NASA scientists will be watching! Suitably equipped amateur stations may enjoy looking over their shoulder ...

The 400 meter diameter near-Earth asteroid 2005 YU55 will be making a 0.85 lunar distance flyby of Earth on November 8. Michael Busch at the UCLA Department of Earth and Space Sciences notes this may an opportunity for amateur satellite operators to observe the fly-by.

UCLA will be conducting an extensive campaign of radar observations with the Arecibo Observatory, the Deep Space Network Goldstone facility, and the Green Bank Telescope and the Very Long Baseline Array.

Because YU55 will be so close to Earth, its radar echo will be detectable with even small antennas (~1 m^2). YU55's echo will be a slowly drifting signal with a bandwidth of ~1 Hz within a few kHz of 2380 MHz or 8560 MHz.

This will present amateur radio operators an opportunity to receive the radar reflections off of the asteroid because of the big dish, big signals originating from Arecibo and Goldstone.

On November 8, 2011, 19:15 - 19:30 UTC, Arecibo will be transmitting a continuous wave tuned to put the asteroid's echo at a constant 2380.000000 MHz at the Green Bank Telescope. Observers elsewhere on Earth will see the echo within 2 kHz of 2380 MHz, Doppler-shifted by the Earth's rotation. It will be slowly drifting in frequency and have a bandwidth of ~0.6 Hz.

On November 9, 2011, 01:30 - 02:00 UTC, the Goldstone Deep Space Network facility will be be transmitting a continuous wave tuned to put the asteroid's echo a constant 8560.000000 MHz at a second antenna at the Goldstone site. Other observers may see the echo shifted by as much as 6 kHz, and it will have a bandwidth of ~2 Hz.

Initial information can be found on-line at:
http://echo.jpl.nasa.gov/asteroids/2005YU55/2005YU55_planning.html

UniverseToday posted an article about this event at:
http://tinyurl.com/438kznj

[ANS thanks Michael Busch, UCLA Department of Earth and Space Sciences for the above information]

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SB SAT @ AMSAT $ANS-310.05
Montana State University Explorer-1 Prime Cubesat Featured in Press

AMSAT News Service Bulletin 310.05
>From AMSAT HQ SILVER SPRING, MD.
November 6, 2011
To All RADIO AMATEURS
BID: $ANS-310.05

Space-Travel.com posted a story about Montana State University's Explorer-1 Prime Cubesat launched on October 28 from Vandenberg AFB in California. (see: http://tinyurl.com/6h7opyf for their full report)

Montana State University now has a satellite in space. Shortly before 4 a.m. Mountain time on October 28, a student-built satellite called Explorer-1 [Prime] roared into the sky on a NASA rocket.

Within three hours of launch, ham radio operators in France, England and The Netherlands had reported hearing from the satellite. A few minutes later, the satellite was heading over the North Pole toward Alaska.

Approximately 125 students designed, built and tested the satellite over the past five years. The satellite, sponsored by the Montana Space Grant Consortium, was MSU's first satellite to make it into orbit. A previous satellite, called MEROPE, rode onboard a Russian rocket that crashed in 2006. A twin to Explorer-1 [Prime] was launched in March this year, but it failed to reach orbit because of an anomaly with the TAURUS-XL rocket that carried it.

But when NASA's satellite separated from the rocket Friday morning, the students started cheering. Half an hour later, when the Explorer-1 [Prime] sprang from its container and entered orbit, no one held back.

MSU's satellite was one of six university-built satellites onboard the Delta II rocket. All six are aluminum cubes weighing no more than 2.2 pounds and measuring about four inches per side. That standardized size allows university-built satellites, called "CubeSats," to fit into an enclosed container called a P-POD.

The Explorer-1 [Prime] will circle the Earth every 90 minutes in an 283 to 503 mile elliptical orbit.

MSU built the Explorer-1 [Prime] to replicate the scientific mission of the Explorer-1 mission which was launched on Jan. 31, 1958, and detected the existence of a band of energetic charged particles held in place by the Earth's magnetic field.

The band was named the Van Allen Radiation Belt after the late James Van Allen, who directed the design and creation of instruments on Explorer-1.

Satellite: Explorer-1[PRIME] Flight Unit 2
Downlink Freq: 437.505 MHz
EIRP: -0.7dBW
Modulation Scheme: Non-Coherent FSK
Protocol: KISS Custom
Baud Rate: 1200
http://ssel.montana.edu/e1p/

[ANS thanks Space-Travel.com for the above information]

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SB SAT @ AMSAT $ANS-310.06
Satellite Shorts From All Over

AMSAT News Service Bulletin 310.06
>From AMSAT HQ SILVER SPRING, MD.
November 6, 2011
To All RADIO AMATEURS
BID: $ANS-310.06

+ ARISS School Contacts this week from the ISS will present additional opportunities to directly copy the downlink from orbit on 145.800 MHZ:

  Rehabilitationszentrum f�r Kinder und Jugendliche, Affoltern am Albis, Switzerland, direct via HB9TSO on Wed 2011-11-09 14:21:11 UTC 75 deg

  Donald P. Sutherland School, Nassau, New York, direct via N2SQU on Thu 2011-11-10 19:35:18 UTC 58 deg (via AJ9N)

+ A nice on-line satellite activity logger can be found at: http://dxworld.com/satlog.html (via WA4HFN)

+ The original TV news reports about the United Kingdom's first Amateur Radio satellites, UOSAT-1 (OSCAR-9) and UOSAT-2 (OSCAR-11), can now be seen on the web. In 'Talking Satellite', made Feb. 15, 1983, Martin Sweeting G3YJO talks about OSCAR-9 and it's speech synthesizer. In 'British Satellite', made February 7, 1984, Martin Sweeting G3YJO talks about OSCAR-11 due to be launched the following month. Links to both videos are posted on the Southgate ARC News website: http://tinyurl.com/64lvghw

+ A TV news report first broadcast Aug. 4, 1985 shows a contact between RSGB HQ in Potters Bar and Astronaut Tony England W0ORE in the Challenger shuttle on mission STS 51-F. Tony W0ORE was running a Motorola model MX-340 handheld 2-meter transceiver and a Robot Research model 1200C slow-scan television scan converter with an antenna fitted on the inside of one of Challengers windows. RSGB General Manager David Evans G3OUF was among those at the Society's station GB3RS. It is believed the voice contact was carried out on 145.550 MHz FM and the RSGB HQ team acheived a first with a two-way exchange of Slow Scan TV (SSTV) pictures. A link to the video is is posted on the Southgate ARC site at: http://tinyurl.com/673f4k8

+ Amateur Radio Satellite activity and instruction video by the Hams in Space Team at Bennett Spring State Park, Missouri is posted at: http://www.youtube.com/watch?feature�ayer_embedded&v�CgiljwQgQ The Hams in Space web page is at: http://hamsinspace.com/

+ Watch the laws of physics in action as the International Space Station is boosted into a higher orbit. While Expedition 29 Commander Mike Fossum and Flight Engineers Satoshi Furukawa and Sergei Volkov float freely the acceleration of the orbiting complex is evident. See: http://tinyurl.com/6gg996y (nasa.gov)

+ A 500+ page free book is available for download from the NASA Archives. "Read You Loud and Clear! ... The Story of NASA's Spaceflight Tracking and Data Network", by Sunny Tsiao can be found at: http://tinyurl.com/655t765 (nasa.gov)

+ The next Hudson Valley Satcom net is November 10 at 8PM EST (UTC-5). You can tune in via the 146.970 MHz Mt. Beacon repeater, PL 100.0 or via EchoLink on the N2EYH-L node. More info is available at: http://www.hvsatcom.org (Stu, WA2BSS)

[ANS thanks everyone for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office. And with that, please keep in mind the ham who was taken to the emergency room after accidentally swallowing a handful of coins. When the doctor asked the nurse about the patient's condition, the reply was, "No change yet!"

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM

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From 1656239855075697204
X-Google-Thread: 10e8ad,d119680eaebe19cd,start
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        Sun, 06 Nov 2011 03:23:00 -0800 (PST)
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news.astraweb.com!border5.a.newsrouter.astraweb.com!not-for-mail
From: Chris Steyaert <observations@rmob.org>
Newsgroups: rec.radio.amateur.space,sci.astro.amateur
Subject: Radio Meteor Obs. Bull. October 2011  Draconids  Orionids
Date: Sun, 06 Nov 2011 12:22:48 +0100
Message-ID: <kercb75nc19n614s51ge0ap8a6l6vn1p11@4ax.com>
X-Newsreader: Forte Agent 5.00/32.1171
MIME-Version: 1.0
Lines: 14
Organization: Unlimited download news at news.astraweb.com
NNTP-Posting-Host: 88765d4f.news.astraweb.com
X-Trace: DXC=W4LDUhaco[cfj0fd2JZgghL?
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Content-Transfer-Encoding: 7bit
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Radio Meteor Observation Bulletin No. 219 of October 2011 (89 K) is available now as

http://www.rmob.org/rmobtext/rmob1110.txt

More information and the visual presentation of the hourly forward scatter counts can be found on

http://www.rmob.org

Chris

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X-Google-Thread: 10b9c8,3927144196bab10b,start
X-Google-NewGroupId: yes
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X-Google-Language: ENGLISH,ASCII-7-bit
Received: by 10.68.73.233 with SMTP id o9mr76767pbv.8.1320791406554;
        Tue, 08 Nov 2011 14:30:06 -0800 (PST)
MIME-Version: 1.0
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usenet.stanford.edu!panix!rri.panix.com!robomod!not-for-mail
From: SWPC.Webmaster@noaa.gov
Newsgroups:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.info
Subject: Weekly Highlights of Solar and Geomagnetic Activity, 31 October - 06
November 2011
Followup-To: rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space
Date: Tue, 8 Nov 2011 17:30:05 EST
Organization: NOAA Space Weather Prediction Center
Lines: 84
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <20111108223001.6936033C8E@panix2.panix.com>
NNTP-Posting-Host: panix6.panix.com
X-Trace: reader1.panix.com 1320791405 26183 166.84.1.6 (8 Nov 2011 22:30:05 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Tue, 8 Nov 2011 22:30:05 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
```

```
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Xref: news1.google.com rec.radio.amateur.misc:5117 rec.radio.amateur.dx:960
rec.radio.amateur.space:439 rec.radio.info:2458

:Product: Weekly Highlights and Forecasts
:Issued: 2011 Nov 08 2040 UTC
# Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center
# Product description and SWPC contact on the Web
# http://www.swpc.noaa.gov/weekly.html
#
#                 Weekly Highlights and Forecasts
#
```

Highlights of Solar and Geomagnetic Activity
31 October - 06 November 2011

Solar activity was low to high. Activity began at moderate levels on 31 October with two M1 flares. The first, which was associated with a coronal mass ejection (CME), occurred at 31/1508 UTC and the second was a long duration flare at 31/1808 UTC, both from regions that had not yet rotated onto the visible disk. Low level activity occurred on 01 November from newly visible Regions 1338 (S14, L=121, class/area Ehi/375 on 03 November) and 1339 (N19, L=102, class/area Fkc/1540 on 04 November). Moderate level activity returned on 02 November due to an M4/Sn long duration flare at 02/2201 UTC from Region 1339. On 03 November, activity increased to high levels when beta-gamma-delta magnetic configuration Region 1339 produced an X1/2b flare at 03/2027 UTC associated with a 620 sfu Tenflare. In addition, the Region produced two M-class flares, an M2/Sf at 03/1111 UTC and an M2/1n at 03/2336 UTC. Activity returned to moderate levels for the remainder of the period with Region 1339 producing six M-class events between 04 - 06 November, the largest flare being an M3/1f at 05/0334 UTC.

A greater than 10 MeV proton enhancement began at about 04/0100 UTC, peaked at 3.6 pfu at 04/0905 UTC and decayed to background levels by midday on 05 November. The source of this enhancement was unknown. Proton flux gradually returned to background levels during the remainder of the period.

The greater than 2 MeV electron flux at geosynchronous orbit was at normal levels on 31 October - 02 November and normal to moderate levels 03 - 06 November.

The geomagnetic field ranged from quiet to severe storm levels. On 31 October, an active period was observed near the time solar wind speed at ACE peaked at 450 km/s due to the effects of a favorably positioned coronal hole high speed stream (CH HSS). On 01 November at approximately 0817 UTC, a shock arrival was observed at the ACE spacecraft and a sudden impulse (SI) of 18 nT was observed on the Boulder magnetometer at 01/0907 UTC. This transient passage brought geomagnetic activity up to severe storm levels at high latitudes and active to minor storm levels at mid latitudes. Persistent effects from the coronal transient carried over into 02 November with quiet to active levels and minor to major storm periods at high latitudes. Quiet activity prevailed on 03 - 06 November.

Forecast of Solar and Geomagnetic Activity
09 November - 05 December 2011

Solar activity is expected to be at predominately low levels through the period. M-class activity is likely from 07 - 14 November with a slight chance for X-class activity all due to the complex nature of Region 1339. M-class probabilities decrease to a slight chance from 15 - 23 November, with a less than 10 percent chance for X-class activity after Region 1339 departs the visible disk on 14 November. Region 1339 is projected to return on 24 November, raising M-class probabilities for the remainder of the period.

A slight chance for a proton event exists from 07 - 14 November due to the complex nature of Region 1339. Proton event probabilities decrease after Region 1339 departs the visible disk on 14 November. Probabilities will increase slightly on 24 November when Region 1339 is projected to return if it remains as magnetically complex as it is this rotation.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to be at normal to moderate levels throughout the entire forecast period.

The geomagnetic field is expected to be generally quiet levels for the majority of the period. Quiet to unsettled levels are expected from 11 - 12 November due to a small, recurrent CH HSS and a weak CME observed on 08 November in association with a disappearing filament. Mostly quiet conditions are expected from 13 - 25 November. Quiet to unsettled conditions are expected on 26 - 27 November due to a recurrent CH HSS followed by a return to quiet levels for the remainder of the period.

```
From 7653034198339148555
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X-Google-Language: ENGLISH,ASCII-7-bit
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robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-314 AMSAT Weekly Satellite Report
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Date: Thu, 10 Nov 2011 10:58:56 EST
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Lines: 2236
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X-RRI-Info-1: Send submissions to   rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to   rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Xref: news1.google.com rec.radio.amateur.space:440 rec.radio.info:2463
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
Content-Language: en-us

This report is organized into four (4) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - deborbited/returned satellites

SB SAT @ AMSAT W8ISS $WSR-314.S1
WSR 314 Part 1 11/10/2011

AMSAT NEWS SERVICE BULLETIN 314.S1
FROM AMSAT HQ SILVER SPRING, MD, November 10, 2011
TO ALL RADIO AMATEURS
BID: $WSR-314.S1

ARISSat-1 (Radioskaf-b) (Kedr)
Catalog number: 37772
Launch date: August 03, 2011 1843z
Launch site: International Space Station

Status: Operational

Callsign: RS01S

Current Mode(s):

Linear Transponder: U/v
Uplink: 435.758 to 435.742 MHz CW/LSB
Downlink: 145.922 to 145.938 MHz CW/USB

FM Telemetry/SSTV/Messages/ID:
Downlink: 145.950 MHz FM

Telemetry/Beacon:
Downlink: 145.939 MHz CW1
             145.919 MHz CW2
             145.920 MHz 1k BPSK USB
             145.920 MHz 400b BPSK USB

Official Webpage:http://www.amsat.org/amsat-new/ARISSat/ARISSat.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/informal_detail.php?serialnum=89
[08112011]
=====
SO-67 SumbandilaSat
Catalog Number: 35870
Launch Date: September 17, 2009 1555z
Launch site: Baikonur, Kazakhstan

Status: Recovery

Callsign: ZS0SUM

Uplink: 145.875MHz FM tone 233.6 Hz
Downlink: 435.345MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

For more information about SO-67:
http://www.amsatsa.org.za/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=88
[09292011]
=====
DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational
Current Mode: Science Mode - Beacon ONLY

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink: 435.530 to 435.570 MHz

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=68
[02092011]
=====
VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05, 2005 0444z
Launch site: Satish Dhawan Space Centre, India

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.9360 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=30

To know what transponder is switched on please listen for the beacon
that is active. Each transponder has a different beacon.
[02092011]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004 0745z
Launch site: Baikonur, Kazakhstan

Status: Semi-operational - IHU crash each eclipse

Current Mode(s):
Voice repeater: V/u
Uplink: 145.880 MHz FM

Downlink: 435.150 MHz FM

Telemetry: Recovery efforts
Downlink: 435.150MHz 9k6

```
Analog voice downlink:     435.300 MHz FM
                           435.150 MHz FM
                          2401.200 Mhz FM
Analog voice uplink:       145.860 MHZ FM
                           145.880 MHz USB
                           145.880 MHz FM
                           145.920 MHz FM
                           145.920 MHz FM - 67 Hz PL tone burst
                          1268.705 MHz FM
Digital Downlinks:         435.150 MHz FM 38k4 PBP, 1 watt output
                           435.150 MHz FM 9k6 Pacsat Broadcast Protocol
                          2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:            145.860 MHz FM 9k6 Pacsat Broadcast Protocol
                          1268.703 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon:                    435.150 MHz
```

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=19
[06162011]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002 1700z
Launch site: Baikonur, Kazakhstan

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear

```
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4
Hz. The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute
   timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the re-
   peater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset
   the 10 minute timer.
[02092011]
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993 0140z
Launch site: Kourou, French Guiana

Status: Operational

Current Mode: V/u

Uplink:   145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[02092011]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974
Launch site: Vandenberg AFB, California, USA

Status: Operational

Current Mode: Alternating between Mode A and B every 24 hours

Uplink:   145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink:  29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons:   29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW
```

```
Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
[02092011]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998 0640z (ZARYA module)
Launch sites: Baikonur, Kazakhstan
              Kourou, French Guiana
              Uchinoura Space Center, Japan
              Kennedy Space Center, Titusville, Florida, USA

Status: Operational

Current Active Modes: FM Repeater - OFF
                      Voice -       V/v
                      BBS -         OFF
                      APRS -        OFF
                      SSTV -        OFF


Expedition 29 Crew (May - September 2011):
Commander:                Micheal Fossum        KF5AQG
Flight Engineer:          Sergey Volkov         KE5DAW
Flight Engineer:          Satoshi Furukawa
Flight Engineer:
Flight Engineer:
Flight Engineer:


Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink:   145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink:     145.200 MHz FM
Region 2/3 voice uplink:   144.490 MHz FM
Worldwide downlink:        145.800 MHz FM

Crossband Repeater:
Repeater Uplinks:         1269.650 MHz FM
                           437.800 MHz FM
                           145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink:         145.800 MHz FM
                           437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink:                  145.800 MHz FM
```

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[09222011]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-314.S2
WSR 314 Part 2 11/10/2011

AMSAT NEWS SERVICE BULLETIN 314.S2
FROM AMSAT HQ SILVER SPRING, MD, November 10, 2011
TO ALL RADIO AMATEURS
BID: $WSR-314.S2

JUNGU
Catalog Number:
Launch Date: October 12, 2011 05:30:00 UTC
Launch site: Satish Dhawan Space Centre, India

Status: On Orbit

Uplink: 145.??? MHz 1k2 (mode?)
Downlink: 437.505 MHz 9k6 (mode?)

Beacon: 437.275 MHz 15 wpm (?) CW

Callsign:

URL: http://www.iitk.ac.in/me/jugnu/index.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=160
[11102011]
=====
SRMSAT

Catalog Number:
Launch Date: October 12, 2011 05:30:00 UTC
Launch site: Satish Dhawan Space Centre, India

Status: On Orbit

Uplink: 145.900 MHz 1k AX.25 (speed?)
Downlink: 437.500 MHz 2k4 AX.25

Beacon: 437.425 MHz 12 wpm CW

Callsign:

URL: http://srmsat.in/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=181
[11102011]
=====
E1P Explorer 1 [Prime] CubeSat (E1P-U2)
Catalog Number:
Launch Date: October 28, 2011
Launch site: Vandenberg Air Force Base, California, USA

Status: On Orbit

Uplink: 437.305 MHz (???)
Downlink: 437.505 MHz AX.25 (SSB?)

Beacon:

Callsign:

URL: http://ssel.montana.edu/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=116
[11102011]
=====
M-Cubed
Catalog Number:
Launch Date: October 28, 2011
Launch site: Vandenberg Air Force Base, California, USA

Status: On Orbit

Uplink:
Downlink: 437.485 MHz AX.25

Beacon:

Callsign:

URL: http://umcubed.org/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=215
[11102011]
=====
RAX-2
Catalog Number:
Launch Date: October 28, 2011
Launch site: Vandenberg Air Force Base, California, USA

Status: On Orbit

Uplink:
Downlink: 437.345MHz 9k6 GMSK

Beacon:

Callsign:

URL: http://rax.engin.umich.edu//

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=221
[11102011]
=====
FO-71 AubieSat-1
Catalog Number:
Launch Date: October 28, 2011
Launch site: Vandenberg Air Force Base, California, USA

Status: On Orbit

Uplink:
Downlink: 437.475 MHz 1k2 AX.25

Beacon: 437.475 MHz CW

Callsign: KI4NQO

URL: http://www.space.auburn.edu/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=148
[11102011]
=====
O/OREOS
Catalog Number: 37224
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: On Orbit

```
Uplink:
Downlink: 437.035 MHZ AX.25

Beacon:

Callsign:

URL: http://www.ooreos.org/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=146
[02092011]
=====
Rax-1 Radio Aurora Explorer
Catalog Number: 37223
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: On Orbit

Uplink:
Downlink: 437.505 MHz 9k6 GMSK

Beacon:

Callsign: RAX-1

URL: http://rax.engin.umich.edu/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=165
[02092011]
=====
FO-69 Fastrac-1 Sara Lily
Catalog Number: 37227
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: Operational

Uplink 1: 145.980 MHz 1k2 baud
Uplink 2: 145.825 MHz 1k2 baud
Downlink: 437.345 MHz 1k2 and 8k6 baud

Beacon:   437.435 MHz 1k2 AX.25

Callsign: Fast1

URL: http://fastrac.ae.utexas.edu/index.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=83
[07052011]
```

```
=====
FO-70 Fastrac-2 Emma
Catalog Number: 37380
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: Operational

Uplink 1: 435.025 MHz 1k2 baud
Uplink 2: 437.435 MHz 9k6 baud
Downlink: 145.825 MHz

Beacon:   145.825 MHz 1k2 AX.25

Callsign: Fast2

URL: http://fastrac.ae.utexas.edu/index.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=84
[07052011]
=====
StudSat
Catalog Number: 36796
Launch Date: July 12, 2010 0352z
Launch site: Satish Dhawan Space Centre, India

Status: On Orbit

Uplink:   437.505MHz, 9600bps FSK
Downlink: 437.505MHz, 9600bps FSK
Beacon  : 437.505MHz,   20bps ASK

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=164
[02092011]
=====
TIsat-1
Catalog Number: 36799
Launch Date: July 12, 2010 0352z
Launch site: Satish Dhawan Space Centre, India

Status: On orbit

Callsign: HB9DE

Uplink:   145.980MHz FM, AFSK
Downlink: 437.305MHz FM, AFSK
Beacon:   437.305MHz CW

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=118
[02092011]
```

=====
HO-68 HOPE-1 (CAS-1)(XW-1)
Catalog Number: 36122
Launch Date: December 15, 2009 0231z
Launch site: Taiyuan Space Center, PRC

Status: Beacon only

Callsign:
Broadcast: BJ1SA-11
BBS: BJ1SA-12

Uplinks: 145.8250 MHz FM, PL 67.0 Hz.
           145.9250 - 145.9750 MHz SSB/CW
           145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
           435.7650 - 435.7150 MHz SSB/CW
           435.6750 MHz AFSK 1200 BPS

Beacon: 435.7900 MHz CW

Mode and Antenna Polarization:
V: LHCP 2.0dBi max
U: RHCP 3.0dBi max

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=108

For more information about XW-1 (CAS-1):
http://
[08112011]
=====
SwissCube
Catalog Number: 35932
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Callsign: HB9EG

Beacon(100mw): 437.5050MHz CW
Beacon(1w):   437.5050MHz FSK 1k2bps

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=109
[02092011]
=====
UWE-2
Catalog Number: 35934
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

```
Status: In Orbit

Beacon(500mw): 437.3850 MHz AFSK 1k2bps
               437.3850 MHz FSK 9k6bps

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=110
[02092011]
=====
ITUpsAT1
Catalog Number: 35935
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Beacon(100mw): 437.325MHz CW
Beacon(1w): 437.325MHz 19k2bps

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=113
[02092011]
=====
BEESAT
Catalog Number: 35933
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Callsign: DP0BEE

Beacon(100mw): 436.000MHz CW
Beacon(500mw): 436.000MHz GMSK 4k8bps
Beacon(500mw): 436.000MHz GMSK 9k6bp
[02092011]
=====
CP-6
Catalog Number: 35003
Launch Date: May 19, 2009 2355z
Launch site: Wallops Island, Virginia, USA

Status: Operational

Downlink: 437.365 MHz 1k2 AFSK

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=121
[02092011]
=====
HAWKSAT 1
Catalog number: 35004
Launch Date: May 19, 2009 2355z
Launch site: Wallops Island, Virginia, USA

Status: operational

Downlink: 437.345 MHz ?

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=105
[02092011]
=====
Pharmasat
Catalog Number: 35002
Launch Date: May 19, 2009 2355z
Launch site: Wallops Island, Virginia, USA

Status: Operational

Downlink: 437.465 MHz 1k2 AFSK

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=94
[02092011]
=====
ANUSAT
Catalog Number: 34808
Launch Date: April 20, 2009 0115z
Launch Site: Satish Dhawan Space Centre, India

Status: ?

Downlink:  435.000 MHz
Uplink:    145.800 MHz

Telemetry: 137.400 MHz
[02092011]
=====
SOHLA-1 (ASTRO TECH.)
Catalog Number: 33496
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational

Proposed Frequencies and Modes:
Downlink: 437.505 MHz AFSK/CW
Beacon:   437.505 MHz AFSK/CW

Callsign:

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=101
[02092011]
=====
KAGAYAKI (Solan Co.)
Catalog Number: 33495
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: In Orbit

Downlink: 437.375 MHZ    FSK9k6/CW
Beacon:   437.375 MHz    FSK9k6/CW

IARU coordination status page:

AMSAT-NA webpage:

[02092011]
=====
STARS (Kagawa Univ.) (Twin Satellites)
Catalog Number: 33498
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational ?

Downlinks: 437.485 MHz FM/CW
           437.465 MHz FM/CW
Beacons:   437.305 MHz FM/CW
           437.275 MHz FM/CW

Callsigns: JR5YBN
           JR5YBO

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=99

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=121&retURL
=/satellites/status.php
[02092011]
=====
KKS-1 (Tokyo MCIT)
Catalog Number: 33499
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational

Downlink:  437.455 MHz AFSK/CW
Beacon:    437.385 MHz AFSK/CW

Callsign: JQ1YYY

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=107
```

```
AMSAT-NA webapge:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=120&retURL
=/satellites/status.php
[20092011]
=====
PRISM (Tokyo Univ.)
Catalog Number: 33493
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational ?

Downlink: 437.425 MHz AFSK/GMSK/CW
Beacon:   437.250 MHz AFSK/GMSK/CW

Callsign: JQ1YCX

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=97

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=119&retURL
=/satellites/status.php
[02092011]
=====
RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number: 32953
Launch Date: May 23, 2008 1520z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational

Curent Modes: Telemetry
              Audio
              Images

Downlinks: 435.315 MHz
           435.215 MHz

AMSAT-NA website:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=115&ret
URL=/satellites/status.php

Official website:
http://www.npopm.com/?cid=leoca&caid=43
[02092011]
=====
CanX-2
Catalog number: 32790
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India
```

Status: Operational in range of ground station only

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=46
[02092011]
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Downlink: 437.425 MHz 1k2 baud packet

For the latest project status update please visit the AAUSAT-II web page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=60
[02092011]
=====
CO-65 CUTE-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational ?

Downlink: 437.475 MHz 9k6 Packet
Uplink: 1267.600 Mhz

Telemetry Beacon:
Downlink: 437.2750 MHz CW

For the latest project status update please visit the Cute-1.7+APD II web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=78

Command Station blog website:
http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=112&retURL=/satellites/status.php

[07052011]
=====
Compass-1
Catalog number: 32787
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Current Mode: dependant on last received command

Uplink: 145.980 MHz FM
Downlink: 437.275 Mhz CW
437.405 MHz Packet

For the latest project status update please visit the Compass 1 web page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=52

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=114&retURL=/satellites/status.php
[06162011]
=====
CO-66 Seeds II
Catalog number:
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Downlink: 437.485 MHz

Callsign: JQ1YGU

For the latest project status update please visit the Seeds 2 web page: http://cubesat.aero.cst.nihon-u.ac.jp/english/seeds_2_e.html

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=36

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=113&retURL=/satellites/status.php
[02092011]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007 0702z
Launch site: Baikonur, Kazakhstan

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=94&retURL=
/satellites/status.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=72
[02092011]
=====
CP3
Catalog Number: 31129
Launch Date: April 17,2007 0702z
Launch site: Baikonur, Kazakhstan

Status: Operational

Current Mode: /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=74
[02092011]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005 0652z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon: 437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/xivpicte.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=37
[02092011]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: ?????

Current Mode: /u

Beacon: 436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=96&retURL
=/satellites/status.php

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[02092011]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004 0745z
Launch site: Baikonur, Kazakhstan

Status: Semi-operational - IHU crash each eclipse

Current Mode(s):
Voice repeater: V/u
Uplink: 145.880 MHz FM
Downlink: 435.150 MHz FM

Telemetry: Recovery efforts
Downlink: 435.150MHz 9k6

Analog voice downlink: 435.300 MHz FM
                           435.150 MHz FM
                          2401.200 Mhz FM
Analog voice uplink: 145.860 MHZ FM
                           145.880 MHz USB
                           145.880 MHz FM
                           145.920 MHz FM
                           145.920 MHz FM - 67 Hz PL tone burst
                          1268.700 MHz FM
Digital Downlinks: 435.150 MHz FM 38k4 PBP, 1 watt output
                           435.150 MHz FM 9k6 Pacsat Broadcast Protocol
                          2401.200 MHz FM 38k4 bps, AX.25

Digital Uplink: 145.860 MHz FM 9k6 Pacsat Broadcast Protocol
1268.708 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=19
[06162011]
=====
QuakeSat
Catalog Number: 27845
Launch Date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Telemetry only

Current Mode: 9600 baud data packet

Mode U packet
Downlink: 436.675 MHz 9k6 BPS

Quakesat webpage:
http://www.quakefinder.com/services/quakesat-ssite/
[02252011]
=====
CO-55 Cute-1.7+APD II
Catalog Number: 27844
Launch date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational

Current Mode: CW downlink worldwide
AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW

```
AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=69&retURL
=/satellites/status.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=78
[02092011]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001 0240z
Launch site: Kodiak Launch Complex, Alaska, USA

Status: Telemetry only

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink:        144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[02092011]
=====
RS-22 RADIO SPORT 22 (MOZHAYETS 4)
Catalog number: 27939
Launch Date: September 27, 2003 0612z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational - 70cm cw only

Current Mode:  /u

CW Beacon - 435.352 MHz
            145.818 MHz

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=76&retURL
=/satellites/status.php
[02092011]
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990
Launch site: Kourou, French Guiana

Status: CW Beacon only

Uplinks:          145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
```

145.900 MHz 1200-baud Manchester FSK

CW downlink: 437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[02092011]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984
Launch site: Vandenburg AFB, California, USA

Status: Operational ?

Current Mode: /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon: 435.025 MHz
Mode-S Beacon: 2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[07052011]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998 0640z (ZARYA module)
Launch sites: Baikonur, Kazakhstan
Kourou, French Guiana
Uchinoura Space Center, Japan
Kennedy Space Center, Titusville, Florida, USA

Status: Operational

Current Active Modes: FM Repeater - OFF
Voice - V/v
BBS - OFF
APRS - OFF
SSTV - OFF

Expedition 29 Crew (May - September 2011):
Commander: Micheal Fossum KF5AQG

```
Flight Engineer:          Sergey Volkov         KE5DAW
Flight Engineer:          Satoshi Furukawa
Flight Engineer:
Flight Engineer:
Flight Engineer:


Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink:   145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink:     145.200 MHz FM
Region 2/3 voice uplink:   144.490 MHz FM
Worldwide downlink:        145.800 MHz FM

Crossband Repeater:
Repeater Uplinks:         1269.650 MHz FM
                           437.800 MHz FM
                           145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink:         145.800 MHz FM
                           437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink:                  145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian:                   OR4ISS
German:                    DP0ISS
Russian:                   RS0ISS
                           RZ3DZR
United States:             NA1SS
Packet Mailbox:            RS0ISS-11
Digipeater callsign:       ARISS

Official ARISS Webpage:    http://www.rac.ca/ariss
ISS Fan Club Webpage:      http://www.issfanclub.com
APRS tracking page:        http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[09222011]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-314.S3
WSR 314 Part 3 11/10/2011
```

AMSAT NEWS SERVICE BULLETIN 314.S3
FROM AMSAT HQ SILVER SPRING, MD, November 10, 2011
TO ALL RADIO AMATEURS
BID: $WSR-314.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

NANOSAIL-D
Catalog Number:
Ejection Date: January 17, 2011

Status: On orbit

Downlink: 437.270 MHz AX.25

URL: http://nanosaild.engr.scu.edu/dashboard.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=115
[01272011]
=====
CP4
Catalog Number: 31132
Launch Date: April 17, 2007

Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon: 437.325 MHz CW

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=79
[09062010]
=====
LIBERTAD-1
Catalog Number: 31128
Launch Date: April 17, 2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink: 145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25

IARU coordination status page:

```
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=76
[09062010]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: Non-Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder:  145.825 Mhz FM

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=51
[09062010]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency:  437.305
                             2407.250

Official Website: http://www.ncube.no

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=24
[09062010]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink:        437.250 MHz FM 67Hz CTCSS
Voice Downlink:     2401.835 MHz FM
Packet Up/Downlink:  437.250 MHz 9k6 packet
Packet Downlink     2401.835 MHz 38k4 packet

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=54
[09062010]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005
```

Status: Non-Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=53
[09062010]
=====
CANX-1
Catalog Number: 27847
Launch Date: June 30, 2003

Status: Non-Operational

Downlink: 437.8800 MHz AFSK 1k2bps
[06052009]
=====
DTUSAT
Catalog Number: 27842
Launch Date: June 30, 2003

Status: Non-Operational

Current Mode: 2k4 AFSK Packet last reported

Downlink: 437.475MHz

Officail webpage: http://dtusat1.dtusat.dtu.dk/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=101&retURL
=satellites/all_oscars.php
[02212009]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)

Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

```
Status: Telemetry only

Uplinks:   145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink:  437.325 MHz

Broadcast callsign: MYSAT3-11
BBS:                MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial land and weather imaging payloads offers FM and FSK
Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as
a collaborative effort between the Malaysian government and Surrey
Satellite Technology Ltd.
[03302009]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink:   145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS:                SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000
```

```
Status: Non-Operational

Uplink:   145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
V-band:   145.840 -  145.990 MHz CW/LSB
U-band:   435.550 -  435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks
---------
S2-band:  2401.225 -  2401.475 MHz CW/USB
K-band:  24048.010 - 24048.060 MHz CW/USB
Beacon:   2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)
----------------------------
BEACON   General Beacon(GB)  Middle Beacon(MB)  Engineering Beacon(EB)
2 m                    none        145.898 MHz                    none
70cm            435.438 MHz        435.588 MHz             435.838 MHz
13cm(1)        2400.188 MHz       2400.338 MHz            2400.588 MHz
13cm(2)        2401.173 MHz       2401.323 MHz            2401.573 MHz
3cm           10450.975 MHz      10451.125 MHz           10451.375 MHz
1.5cm         24047.885 MHz      24048.035 MHz           24048.285 MHz
[07162007]
=====
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
=====
```

UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: 25636
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Non-Operational

Current Modes:
Telemetry : /u

Downlink: 435.225 MHz FM (9600-baud FSK)
435.325 Mhz - Not Available - temperature problems
Uplinks: 145.850 FM
145.890 FM
145.930 FM
1269.700 FM
1269.800 FM
1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://asri.technion.ac.il/techsat/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=14&retURL=/satellites/status.php
[07172010]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink: 145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
MO-30 UNAMSAT-2
Catalog Number: 24305
Launch Date: September 5, 1996

Status: Non-operational

Downlink: 435.1380 MHz AFSK 1200 BPS
Downlink: 435.2060 MHz AFSK 1200 BPS
Uplink: 145.8150 MHz AFSK 1200 BPS
Uplink: 145.8350 MHz AFSK 1200 BPS
Uplink: 145.8550 MHz AFSK 1200 BPS
Uplink: 145.8750 MHz AFSK 1200 BPS
[06042009]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Operational
Current Mode: V/u (Mode JA)

Voice/CW (Mode JA)
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
145.870 MHz FM
145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage:
http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts.htm
[101432011]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Non-operational

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012009]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks: 145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
AO-24 ARSENE
Catalog Number: 22654
Launch Date: May 13, 1993

```
Status: Non-operational

Uplink:    435.0625 MHz FM 1k2bps AFSK
           435.1125 MHz FM 1k2bps AFSK
           435.1375 MHz FM 1k2bps AFSK
Downlink:  145.9750 MHz FM 1k2bps AFSK
          2446.5025 MHz FM 1k2bps AFSK

Beacon:    2446.4700 MHz CW

Broadcast callsign:
BBS:
[12162009]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HL01-11
BBS: HL01-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990
```

Status: Non-Operational

Beacons: 435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink: 145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks: 145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink: 145.825 MHz FM 1200 Baud AFSK
Beacon: 2401.220 MHz
[05012006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: non-operational

Current Mode: V/u

Uplink: 145.900 MHz FM 1200-baud Manchester FSK (reserved)
                145.920 MHz FM VOICE
                145.940 MHz FM 1200-baud Manchester FSK (reserved)
                145.960 MHz FM 1200-baud Manchester FSK (reserved)

```
Downlink:       437.026 MHz USB VOICE
                (1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[07242009]
=====
UO-15 UoSAT-4
Catalog Number: 20438
Launch Date: January 22, 1990

Status: Non-operational

Uplink: ?
Downlink: 435.1250MHz (?)
          435.1200MHz (?)
[06042009]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS
```

```
Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon:   145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink  29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
Beacons:   29.450 MHz
          435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon 1:  29.352 MHz (intermittent)
Beacon 2:  29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink:     21.260 to 21.300 MHz CW/USB
Downlink:  145.860 to 145.900 MHz CW/USB

Beacon:    145.860 MHz

Robot:     145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991
```

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-314.S4
WSR 314 Part 4 11/10/2011

AMSAT NEWS SERVICE BULLETIN 314.S4
FROM AMSAT HQ SILVER SPRING, MD, November 10, 2011
TO ALL RADIO AMATEURS
BID: $WSR-314.S4

THE FOLLOWING SATELLITES HAVE RE-ENTERED OR HAVE BEEN RETURNED SAFELY:

CAERUS
Catalog Number:
Launch Date: December 08, 2010 15:43:00 UTC
Launch site: Kennedy Space Center, Titusville, Florida, USA

Status: Re-entered December 22, 2010

Uplink:
Downlink: 437.600 MHz 1k2 AX.25

Beacon: 437.600 MHz CW

Callsign: KJ6FIX

URL:
http://www2.isi.edu/research/prj-serc/prj-serc_projects/prj-serc_projects-8.htm

IARU coordination status page:

[11102011]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Re-entered
Re-entered: October 25, 2009

Uplink: 1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan?)

```
Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=56
[09062010]
=====
BEVO-1 (DRAGONSAT-1)
Catalog Number: 35690
Launch Date: May 19, 2009

Status: Re-entered
Re-entered:

Downlink: 437.325 MHz 9k6 GMSK
          437.325 MHz CW 20wpm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=117
[07312009]
=====
AggieSat2 (DRAGONSAT-2)
Catalog Number: 35690
Launch Date: May 19, 2009

Status: Re-entered
Re-entered:

Downlink: 436.250 MHz 9k6 FHSS
[11112009]
=====
Pollux
Catalog Number: 35693
Launch Date: July 31, 2009

Status: Re-entered
Re-entered:

Callsign: POLLUX-1

Downlink: 145.825MHz 1k2 AX.25

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=139
[09062010]
=====
Castor (ANDE-2)
Catalog Number: 35694
Launch Date: July 31, 2009
```

```
Status: Re-entered
Re-entered:

Callsign: KD4HBO-1

Downlink: 145.825 MHz 1k2 AX.25

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=144
[09062010]
=====
NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: July 28, 2008

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=59
[01012009]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink:      145.825 Mhz FM APRS AX25
APRS Uplink:        145.825 MHz FM APRS AX25
Voice/PSK31 Uplink:  28.120 MHz

Packet to Voice ID: RAFT
[06112007]
=====
```

GENESAT-1
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Re-Entered
Re-entered date: August 8, 2010

Current Mode: /u

Callsign: KE7EGC

Telemetry Beacon Downlink: 437.0695 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[08082010]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Re-Entered
Re-entered: June 18, 2008

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon: 437.2750 MHz CW

Callsign: JR8YJT
[01012009]
=====
SO-43 Starshine 3
Catalog Number: 26929
Launch Date: September 30, 2001

Status: Re-Entered
Re-entered: January 21, 2003

Beacon: 145.825Mhz
[02212009]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600

Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at}
amsat.org
NNNN
/EX

From 8416162271386557700
X-Google-Thread: 10e8ad,c3e506a7610557b8,start
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Received: by 10.68.0.170 with SMTP id 10mr17750609pbf.2.1321194759297;
        Sun, 13 Nov 2011 06:32:39 -0800 (PST)
Path: h5ni44194pba.0!nntp.google.com!news1.google.com!
newsfeed2.dallas1.level3.net!news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info

```
Subject: ANS-317 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sun, 13 Nov 2011 09:32:38 EST
Organization: The Radio Amateur Satellite Corporation
Lines: 426
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000901cca211$140c5cc0$3c251640$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
X-Trace: reader1.panix.com 1321194758 25176 166.84.1.6 (13 Nov 2011 14:32:38 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 13 Nov 2011 14:32:38 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Xref: news1.google.com rec.radio.amateur.space:441 rec.radio.info:2470
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
Content-Language: en-us
```

AMSAT NEWS SERVICE
ANS-317

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* 2011 AMSAT Symposium Wrap Up
* This Week 50 Years Ago: OSCAR 1 Announcement
* UKube-1 Final Design Approved
* Strong Signals Received From Explorer-1 Prime Cubesat
* ESA Sponsors Students to Attend the European CubeSat Symposium
* Satellite Shorts From All Over
* ARISS Status - 7 November 2011

SB SAT @ AMSAT $ANS-317.01
2011 AMSAT Symposium Wrap Up

AMSAT News Service Bulletin 317.01
From AMSAT HQ SILVER SPRING, MD.
November 13, 2011
To All RADIO AMATEURS
BID: $ANS-317.01

2011 Symposium Proceedings in Stock in AMSAT Store

AMSAT Online Store Manager, Bruce Paige, KK5DO has added the Proceedings of the AMSAT-NA 29th Space Symposium and AMSAT-NA Annual Meeting to the AMSAT online store in the Publications Department:

http://www.amsat-na.com/store/item.php?id=100190

If you were unable to attend the Symposium, this is your chance to get a copy of the Proceedings. Copies are limited and available on a first-come, first-served basis. Cost is $25.00.

Symposium Media Post Processing

Gould Smith, WA4SXM is writing an article for the Journal about the 2011 Symposium. Please email Gould any photos or links to your online image storage to include in the article to wa4sxm@amsat.org.

Dan Schultz, N8FGV is requesting help from someone with professional grade sound editing software who is willing to invest a few hours in a project of importance to AMSAT's historical archives. Please contact Dan if you can help.: n8fgv@amsat.org.

[ANS thanks the 2011 Symposium Committee for the above information]

/EX

SB SAT @ AMSAT $ANS-317.02
This Week 50 Years Ago: OSCAR 1 Announcement

AMSAT News Service Bulletin 317.02
From AMSAT HQ SILVER SPRING, MD.
November 13, 2011
To All RADIO AMATEURS
BID: $ANS-317.02

The AMSAT News Service is re-running the Project OSCAR Newsletters to commemorate the 50th anniversary of OSCAR 1. During the November/ December 2011 time frame you will be able to share the excitement of the launch campaign that started it all 50 years ago.

The Newsletters were hand-typed back in 1961. Thanks to Don Ferguson, KD6IRE for scanning the original documents announcing OSCAR 1.

Project OSCAR Newsletter November 15, 1961 at 1345 PST

First News Release,
U. S. RADIO AMATEURS T0 LAUNCH "PIGGY-BACK" SATELLITE

SUNNYVALE, CALIF. -- A hitch-hiking radio transmitter that will speak to thousands of amateur radio operators throughout the world is scheduled to be launched into space orbit next month, announced the American Radio Relay League.

Weighing only 10 pounds, the satellite has been designed, built and tested by a group of California (Peninsula) radio amateurs organized as the Project Oscar Association of the League.

"OSCAR" stands for Orbital Satellite Carrying Amateur Radio. The radio "ham's" transmitter beacon will be carried into space aboard a scheduled space vehicle and will radiate signals in a world-wide amateur frequency band of 2-meters, radio amateur M. C. Towns, Jr. (Saratoga, Calif.) announced today. Transportation into space will be provided by an Air Force vehicle to be launched 'from Vandenberg Air Force Base, Calif.

Once in orbit, the Air Force vehicle will "kick away" the piggy-back radio amateur satellite, leaving it to follow its own course around the earth. The mother satellite will then continue to perform the experiments for which it was intended. Radio Amateur Towns, the Oscar Association Chairman, stressed that Project Oscar "is a serious, civilian, non-commercial effort to obtain information from outer space, and to introduce radio amateurs and lay scientists to new concepts in outer space communication.

"This miniature radio transmitter will be tracked and observed by radio amateurs and all interested observers throughout the world. "It will serve to instruct the radio amateur in the art of observing and tracking a moving space object. In addition, the mass of data gained from world-wide observations will provide information unobtainable by any other means.

"There are an estimated 300,000 licensed radio amateurs in the world, and the American Radio Relay League hopes a large number of these hobbyists will participate in the forthcoming experiments."

Towns noted that the radio amateur has, in the past, been a pioneer in various fields of radio communication, and that hundreds of U. S. radio amateurs are now engaged in space research and other space activity.

The 10-pound Oscar satellite consists of a low-power beacon transmitter contained in a rectangular metal casing about a foot long. It will send out a continuous Morse code signal of the letters H-I, four dots followed by two dots. Later satellites proposed to be built by the Oscar Association may both receive and transmit amateur signals.

As soon as this transmitter is in orbit, notification will be flashed to radio amateurs throughout the world by the American Radio Relay League, the international organization of radio amateurs which is sponsoring and cooperating in the project. "Radio propagation, Heaviside layer refraction, antenna efficiency and other data can be gathered and correlated from thousands of points over the world's surface," Towns said.

"The cause of good will," Towns continued, "will be served in that radio amateurs, located in virtually every country of the world, would have a common amateur interest in observing and tracking their own satellite, and in exchanging scientific information relative to improved equipment for receiving the satellite signals."

The Oscar transmitter is designed to operate on a frequency of 145 megacycles and can be heard by home experimenters having simple receiving equipment, Towns said. "Cooperation in the forthcoming tests is invited from any interested party," the Oscar Chairman stated, pointing out that support has already been contributed by the Air Force and numerous private concerns interested in furthering communication knowledge, and entirely on a no-cost basis of lending a helping hand to the amateurs in their own project.

The radio amateur satellite idea originated in 1959 with a Los Angeles amateur operator, Don Stoner, who suggested that radio amateurs had the technical know-how to build their own satellite if someone only had the vehicle to carry it into space. He, along with radio amateur Fred Hicks, of Campbell, California, and other radio "hams" kept the idea alive and formed the Project Oscar Association. The idea spread among radio clubs of the Los Angeles and San Francisco area and gathered support from radio amateurs nation-wide, including the radio amateur organization, the American Radio Relay League.

Radio "ham" Nicholas K. Marshall, technical director of the Oscar program, noted that the soon-to-be-launched satellite is but a first step in the overall Oscar concept.

"Later satellites to be built by the Oscar group will perhaps receive and transmit amateur test signals for specific space experiments," he said. Marshall noted that there are approximately 12,000 radio amateurs in the Soviet Union, and that the Oscar Association hopes to receive tracking data from some of them also.

[ANS thanks Don Ferguson, KD6IRE and Project OSCAR for the above information]

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SB SAT @ AMSAT $ANS-317.03
UKube-1 Final Design Approved

AMSAT News Service Bulletin 317.03
From AMSAT HQ SILVER SPRING, MD.
November 13, 2011
To All RADIO AMATEURS
BID: $ANS-317.03

On November 8 AMSAT-UK posted the news that the UK space Agency and Astrium have approved the final design of UKube-1 - the UK's first CubeSat mission. The full story can be read at:
http://www.uk.amsat.org/2011/11/08/ukube-1-final-design-approved/

On November 3-4 a young team of engineers from Clyde Space presented their final design to a team of experts for the Critical Design Review (CDR) - the typical 'gateway' for space missions to proceed into the flight build and implementation phase.

The CDR for Ukube-1 thus marks an important point in the development of the mission, establishing the robustness of the design, the level of technical risk and the schedule/resourcing for the completion of all the tasks to build the flight spacecraft.

At the CDR, the review panel scrutinized the design in detail to ensure it was sufficiently mature for flight. Key areas of focus included the structure and mechanisms, the communications system, the on board software and processing, the attitude control system and power generation.

At the end of the meeting the review board concluded that Ukube-1 had successfully passed CDR.

The next stage is the implementation of the mission that will lead to a launch on a Russian Dneper rocket (ex ICBM converted for small satellite launches) towards the end of 2012.

More on the aims and objectives of Ukube-1 can be found on the UK Space Agency website:
http://www.bis.gov.uk/ukspaceagency/missions/ukube-pilot-programme

The UK Space Agency's pilot programme to design and launch a CubeSat, a miniature cube-shaped satellite that will allow the UK to test cutting-edge new technologies in space. In March 2011 four payloads were finally selected to fly on UKube-1. These will be integrated onto the spacecraft, which measures just 10cm x 10cm x 34cm, by Clyde Space. In addition UKube-1 will fly FunCube, an educational payload provided by AMSAT-UK, with the goal of enthusing and education young people about space, electronics, physics and radio.

[ANS thanks AMSAT-UK for the above information]

/EX

SB SAT @ AMSAT $ANS-317.04
Strong Signals Received From Explorer-1 Prime Cubesat

AMSAT News Service Bulletin 317.04
  From AMSAT HQ SILVER SPRING, MD.
November 13, 2011
To All RADIO AMATEURS
BID: $ANS-317.04

Montana State University built the Explorer-1 [Prime] to replicate the scientific mission of the Explorer-1 mission which was launched on Jan. 31, 1958, and detected the existence of a band of energetic charged particles held in place by the Earth's magnetic field. The band was named the Van Allen Radiation Belt after the late James Van Allen, who directed the design and creation of instruments on the original Explorer-1 satellite.

Satellite: Explorer-1[PRIME] Flight Unit 2
Downlink Freq: 437.505 MHz
EIRP: -0.7dBW
Modulation Scheme: Non-Coherent FSK
Protocol: KISS Custom
Baud Rate: 1200
http://ssel.montana.edu/e1p/

Nader ST2NH added an article to his blog describing how to receive the 437.505 MHz LSB data telemetry from Explorer-1[PRIME].

Nader describes how to set up MiXW and the E-1P Telemetry Decoder software: http://tinyurl.com/cwvuwov (blogspot.com)

This page includes the link to download the E1-P software from Montana State University.

Nader posted his video video showing reception of an E-1P pass at:
http://www.youtube.com/watch?feature=player_embedded&v=7S5CMwFlxeo

ST2NH Blog with all of Nader's articles:
http://st2nh-blogger.blogspot.com/

ST2NH YouTube channel showing several cubesat decoding passes:
http://www.youtube.com/user/st2nh/

Mike Rupprecht's DK3WN SatBlog has an article about his experience in receiving and decoding E1-P, see:
http://www.dk3wn.info/p/?p=23528

[ANS thanks Nader, ST2NH and Mike, DK3WN for the above information]

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SB SAT @ AMSAT $ANS-317.05
ESA Sponsors Students to Attend the European CubeSat Symposium

AMSAT News Service Bulletin 317.05
From AMSAT HQ SILVER SPRING, MD.
November 13, 2011
To All RADIO AMATEURS
BID: $ANS-317.05

As part of the ESA Conference Opportunities for Sponsored Students (ECOSS) Programme, the ESA Education Office is pleased to be able to offer sponsorship to European students interested in attending the European CubeSat Symposium (30 Jan - 1 Feb 2012, Brussels). Highly qualified full-time students from ESA Member or Cooperating States are encouraged to apply for ESA Sponsorship.

Students selected by ESA's Education Office will be reimbursed their conference registration fee and up to a maximum of 300 Euro in travel and accommodation expenses. Sponsorship will be in the form of a single reimbursement after the conference.

Before applying students must visit the conferences page of the ESA Education Portal (www.esa.int/education>Conferences) and:

+ Check their eligibility for the programme under the "Sponsorship Conditions" link.
+ Familiarize themselves with the content of the "How to Apply" link.

To apply, please visit ESA Education registration system:
http://www.joinspace.org

The deadline for sponsorship applications is January 4th 2012.

The deadline for submitting abstracts is postponed to 11 Nov 2011 for students only. Student who submitted abstracts before can also apply for ESA sponsorship.

Check http://www.vki.ac.be/CubeSatSymposium/ for details.

[ANS thanks Graham Shirville, G3VZV for the above information]

/EX

SB SAT @ AMSAT $ANS-317.06
Satellite Shorts From All Over

AMSAT News Service Bulletin 317.06
From AMSAT HQ SILVER SPRING, MD.
November 13, 2011
To All RADIO AMATEURS

BID: $ANS-317.06

+ Symmetricom announced a mass-produced Chip Scale Atomic Clock oscillator which maintans atomic clock accuracy and stability. More information at:
http://www.symmetricom.com/products/quantum-atomic-oscillators/

+ Christophe has produced a handy chart showing the CubeSat UHF downlink frequencies.
http://cubesat.free.fr/IMG//pdf/Cubesat_-_frequence_bande_U.pdf

+ In an effort to help increase interest in satellites, a new award has been created for working five (5) different hams in the EM55 grid. You do not have to be in your home grid to count the stations worked. There are several satellite ready hams in EM55: WA4NVM, WA4HFN, WB4LHD, WA4OVO, KI4OTG, KD4NOQ, KJ4BIX, AJ4KF, W5KUB, N4MGT AA4HV K4FEG. Send your log to WA4NVM or WA4HFN for checking, along with your current mailing address. The award is free and should any donations be sent, they will be forwarded to AMSAT along with your call and name. This award is effective for contacts made beginning on 1 June 2011.

+ The Super Sensitive High Definition TV, or SS-HDTV, camera on the space station can document new and more detailed footage of the dynamic interactions that take place in the area between the Earths' atmosphere and the vacuum of space, known as the cosmic shore. Night photography now shows more detail than previously possible. JAXA and NHK posted a video of a night time ISS pass over Japan:
http://www.youtube.com/watch?v=82vXwLdqNzU&feature=related

[ANS thanks everyone for the above information]

/EX

SB SAT @ AMSAT $ANS-317.07
ARISS Status - 7 November 2011

AMSAT News Service Bulletin 317.07
From AMSAT HQ SILVER SPRING, MD.
November 13, 2011
To All RADIO AMATEURS
BID: $ANS-317.07

1. Swiss Students Speak with Astronaut Aboard ISS

On Monday, October 31, students attending Kantonsschule Zug in Zug, Switzerland connected with Astronaut Mike Fossum, KF5AQG on the ISS via Amateur Radio on the International Space Station (ARISS). An audience of 600 was on hand to witness the contact and watched as 8 students got in 16 questions before the ISS went over the horizon. The contact highlighted lessons on gravity, orbits, the ISS and its flight path, as well as electromagnetic waves and amateur radio. This

ARISS event was held in celebration of the school's 150th anniversary. Media coverage included two television stations and one radio station.

2. Californian Students Radio ISS Astronaut

San Diego, California students from Sundance Elementary School participated in an Amateur Radio on the International Space Station (ARISS) contact on Tuesday, November 1. Astronaut Mike Fossum, KF5AQG answered questions about the ISS mission, space and how space affects the human body. The contact was integrated into lesson plans about radios, radio waves, space and space-related topics. The local ham radio club gave presentations to the youth. Sign On San Diego covered the event in an article:
http://www.signonsandiego.com/news/2011/nov/04/poway-students-connect-astronaut/

[ANS thanks Carol, KB3LKI, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Lee McLamb, KU4OS

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From: SWPC.Webmaster@noaa.gov
Newsgroups:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.info
Subject: Weekly Highlights of Solar and Geomagnetic Activity, 07 - 13 November
```

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2011
Followup-To: rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space
Date: Tue, 15 Nov 2011 17:30:17 EST
Organization: NOAA Space Weather Prediction Center
Lines: 69
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X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Xref: news2.google.com rec.radio.amateur.misc:2511 rec.radio.amateur.dx:712
rec.radio.amateur.space:319 rec.radio.info:1955
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:Product: Weekly Highlights and Forecasts
:Issued: 2011 Nov 15 2044 UTC
# Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center
# Product description and SWPC contact on the Web
# http://www.swpc.noaa.gov/weekly.html
#
#                 Weekly Highlights and Forecasts
#
```

Highlights of Solar and Geomagnetic Activity
07 - 13 November 2011

Solar activity was at low to moderate levels. Activity began at low levels on 07 November, although Regions 1339 (N19E45, L=102, class/area Fkc/1540 on 04 November) and 1338 (S=14, L=121, class/area Ehi/375 on 03 November) both exhibited spot areal coverage growth. Late on 07 November, a filament channel eruption was observed in SDO/AIA imagery beginning around 07/2232Z. LASCO C2 imagery first indicated a CME liftoff from the NW limb at 07/2348Z. Activity remained at low levels on 08 November, as Regions 1339 and 1338 both started to decay and simplify magnetically. On 09 November, activity increased to moderate levels when a long duration M1 flare occurred at 09/1335Z. Associated with this event were a Type II radio sweep with an estimated shock velocity of 750 km/s and an Earth directed full-halo CME, visible in LASCO C2 imagery at 09/1336Z. Activity decreased to low levels on 10 November with the largest event of the day being a C6/1f flare at 10/1831Z. Region 1339 remained the largest region on the disk but continued to decay. On 11 November, activity remained at low levels with Region 1344

(S19, L=101, class/area Dai/200 on 12 November) producing a long duration C4/Sf flare at 11/0705Z with an associated partial-halo CME. The CME had an estimated plane-of-sky speed of 825 km/s, based on SOHO/LASCO C2 images, and appeared to have a slight earth directed component. On 12 November, activity remained at low levels with occasional C-class flares. Regions 1339 and 1338 continued to decay while Region 1344 continued to increase in magnetic complexity, areal coverage, and total spot count before stabilizing on 13 November

No proton events were observed at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit was at normal levels throughout the period.

Geomagnetic field activity ranged from quiet to minor storm levels. The period began under quiet to unsettled conditons on 07 November. Activity increased on 08 November to quiet to unsettled conditions with isolated periods of active to minor storm levels at high latitudes. Mostly quiet levels returned on 09 November and continued through 13 November.

Forecast of Solar and Geomagnetic Activity
16 November - 12 December 2011

Solar activity is expected to be at predominately low levels with a chance for M-class activity through the period. Old Region 1339 (N19, L=102) returns on 27 November bringing an increased probability of M-class activity and a slight chance for an X-class event.

No proton events are expected at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to be at background levels.

Geomagnetic field activity is expected to be quiet for the greater portion of the forecast period. Unsettled conditions are possible on 26-27 November and again on 09-10 December with the return of recurrent coronal hole high speed streams.

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From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-324 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Tue, 22 Nov 2011 10:41:54 EST
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Lines: 459
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X-RRI-Info-1: Send submissions to   rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to   rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
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X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Xref: news1.google.com rec.radio.amateur.space:443 rec.radio.info:2492
Content-Language: en-us

AMSAT NEWS SERVICE
ANS-324

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* Radio Ham Blasts Off to Space Station
* CubeSat Keplerian Elements Under Analysis
* Arizona Centennial Special Event Plans Satellite Operation
* Amateur Radio Assistance Requested: ISS Plasma Thrust Shadow Experiment
* Ultimate HEO: Voyager 2 Completes Switch to Backup Thruster Set
* AMSAT Submits Proposal to NASA for Fox-1 Satellite
* 70cm Amateur Station Active on Packet from ISS Columbus Module
* ARISS Status - 14 November 2011

SB SAT @ AMSAT $ANS-324.01
Radio Ham Blasts Off to Space Station

AMSAT News Service Bulletin 324.01
>From AMSAT HQ SILVER SPRING, MD.
November 20, 2011
To All RADIO AMATEURS
BID: $ANS-324.01

Southgate ARC News web this week carried a story about Radio Amateur Daniel Burbank KC5ZSX aboard the Soyuz launch on November 14.

With him on Soyuz TMA-22 are commander Anton Shkaplerov and engineer Anatoly Ivanishin. They were meant to have launched on September 22, but the flight was delayed after an unmanned Progress cargo ship suffered a third stage malfunction during launch Aug. 24 and failed to reach orbit. The third stage of the cargo craft's rocket is virtually identical to the one used in the manned version.

They docked with the ISS on Wednesday, November 16. All the current ISS crew are Radio Amateurs - Expedition 29 commander Michael Fossum KF5AQG, Sergei Volkov U4MIR and Satoshi Furukawa KE5DAW.

Daniel Burbank KC5ZSX will be the Expedition 30 commander and will become the only Radio Amateur on the ISS when KF5AQG, U4MIR and KE5DAW return to Earth on November 21,

A summary of the mission can be found on-line at:
Space Flight Now - Expedition 29 Status
http://spaceflightnow.com/station/exp29/status.html

[ANS thanks Southgate ARC News for the above information]

/EX

SB SAT @ AMSAT $ANS-324.02
CubeSat Keplerian Elements Under Analysis

AMSAT News Service Bulletin 324.02
>From AMSAT HQ SILVER SPRING, MD.
November 20, 2011
To All RADIO AMATEURS
BID: $ANS-324.02

Ray Hoad, WA5QGD, AMSAT Keeper of the Keps this week answered the question of which Keplerian Elements match each of the cubesats launched on October 28, 2011. Ray commented, "The identification of the satellites continues. Simply put, we don't have enough separation to make a positive identification."

Nico Janssen, PA0DLO, has been analyzing various aspects of the satellite group (grouping, radar cross section, and order of launch from rocket body). He concludes that we need more time and separation to be sure. Nico's best educated guess at this time is as follows:

+ Explorer 1 Prime is Object G, Cat # 37855
+ Aubiesat (AO-71) and M-cubed, are in the same group as Objects
  E and F.
+ The two DICE satellites (commercial, non amateur) are Objects
  C and D.
+ RAX2 is Object B, Cat # 37850.

Nico reminds us that this is a best guess and only time will tell who is who. Thanks Nico for sharing your thoughts with us.

Here are this weeks KEPs for the latest Cubesat flock:

```
OBJECTB
1 37850U 11061B   11314.31682443  .00000489  00000-0  51357-4 0 00169
2 37850 101.7053 249.9601 0255846 255.5306 101.7516 14.77614148001891
OBJECTC
1 37851U 11061C   11317.83772545  .00009599  00000-0  78565-3 0 00253
2 37851 101.7037 255.0640 0254660 246.5170 110.9070 14.77729084002420
OBJECTD
1 37852U 11061D   11318.85323228  .00010618  00000-0  86612-3 0   174
2 37852 101.7048 256.5342 0254778 243.6020 113.8822 14.77773735  2564
OBJECTE
1 37853U 11061E   11317.83714479  .00010430  00000-0  85168-3 0 00441
2 37853 101.6978 255.0557 0254457 246.6876 110.7358 14.77795553002421
OBJECTF
1 37854U 11061F   11318.51214050  .00011655  00000-0  93205-3 0   203
2 37854 101.7001 256.0511 0257496 245.1384 112.2875 14.78001563  2507
OBJECTG
1 37855U 11061G   11318.85081525  .00010458  00000-0  84381-3 0   171
2 37855 101.7008 256.5373 0255959 243.3435 114.1347 14.77981238  2550
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[ANS thanks Ray Hoad, WA5QGD, for the above information]

/EX

SB SAT @ AMSAT $ANS-324.03
Arizona Centennial Special Event Plans Satellite Operation

AMSAT News Service Bulletin 324.03
>From AMSAT HQ SILVER SPRING, MD.
November 20, 2011
To All RADIO AMATEURS
BID: $ANS-324.03

The Central Arizona DX Association (CADXA) is very pleased to announce their special event operation in celebration of the Arizona Centennial during the week of February 13-19th, 2012.

They will be using the callsign of the late Senior Senator,
and Arizona native son, Barry M. Goldwater, K7UGA.

Individual CADXA members will be operating from their home stations located throughout Arizona during that week using the callsign K7UGA.

However, only special operating locations from Tucson, Prescott and Phoenix will be on the air celebrating the 100th anniversary on Tuesday, February 14th, 2012.

Operations will be on all amateur bands (160-2 meters); and will be using CW, SSB, RTTY, PSK31 and Satellite modes.

This CADXA special event operation has proudly received recognition from the 2012 Arizona Centennial Foundation as a sanctioned "Special Event"; and from the Arizona Historical Advisory Commission as an official "Centennial Legacy Project".

All QSL requests go to Bob Davies - K7BHM (qrz.com) with an SASE.

For more details, please go to the CADXA Web site at:
http://www.cadxa.org

[ANS thanks CADXA and Southgate ARC News for the above information]

/EX

SB SAT @ AMSAT $ANS-324.04
Amateur Radio Assistance Requested: ISS Plasma Thrust Shadow Experiment

AMSAT News Service Bulletin 324.04
>From AMSAT HQ SILVER SPRING, MD.
November 20, 2011
To All RADIO AMATEURS
BID: $ANS-324.04

The Central Research Institute of Machine Building (TSNIIMASH) in Russia is conducting a series of space plasma experiments in order to evaluate the shape of previously observed "dead" zone, or shadowing due to the firing of an onboard arcjet plasma source.

Radio Amateurs are invited to participate in the Space plasma experiment "Shadow" onboard International Space Station (ISS). Integration of Electric Thrust onboard a spacecraft poses a certain set of problems including electromagnetic compatibility of ET. One matter of interest is that highly ionized exhaust plumes of ET may scatter RF-signals producing large "dead" zone for communications.

This plasma screening effect should be thoroughly studied before electric thrusters become standard onboard equipment. The investigation will help designers of future electrically propelled spacecraft to minimize the hazard of communication disruption by ET plasma plumes.

The Central Research Institute has proposed an experiment using the worldwide distribution of radio amateurs to receive the VHF packet downlink (145.825 MHz) from a new plasma space experiment on the International Space Station.

The amateur packet radio technology in the SpEx "Shadow" as proposed by astronaut Alexander Kalery, will use the AX25 packets transmitted by "Master Stations" and reported by receiving amateur radio ground stations to track the effect of the plasma shadow.

The SpEx experiment will be enabled on the following schedule:

SpEX Time On	SpEX Time Off
November 25 1650 UTC	November 28 0825 UTC
December 2 1650 UTC	December 5 0825 UTC

The master beacon stations for Europe, Asia, North America, and Australia can be found at:
http://tinyurl.com/84nvl72 (knts.tsniimash.ru)

The main web page for the SpEx project can be found at:
http://knts.tsniimash.ru/Shadow/en/Overview.aspx
This page contains a detailed description of the experiment and instructions for submitting your signal reports.

An example of the SpEx packets received by Mike Rupprecht, DK3WN can be seen at: http://www.dk3wn.info/p/?p#866

[ANS thanks TSNIIMASH for the above information]

/EX

SB SAT @ AMSAT $ANS-324.05
Ultimate HEO: Voyager 2 Completes Switch to Backup Thruster Set

AMSAT News Service Bulletin 324.05
>From AMSAT HQ SILVER SPRING, MD.
November 20, 2011
To All RADIO AMATEURS
BID: $ANS-324.05

This week Space-Travel.com reported that NASA's Voyager 2 has successfully switched to the backup set of thrusters that controls the roll of the spacecraft.

Deep Space Network personnel sent commands to the spacecraft to make the change on Nov. 4 and received confirmation that the switch has been made.

Voyager 1 and Voyager 2 are each equipped with six sets, or pairs, of thrusters to control the pitch, yaw and roll motions of the spacecraft.

These include three pairs of primary thrusters and three backup, or redundant, pairs. Both spacecraft are now using all three sets of their backup thrusters.

Voyager 2 is currently located about 9 billion miles (14 billion kilometers) from Earth in the heliosheath - the outermost layer of the heliosphere where the solar wind, which streams out from the sun, is slowed by the pressure of interstellar gas.

The Voyagers were built by NASA's Jet Propulsion Laboratory in Pasadena, Calif., which continues to operate both spacecraft. JPL is a division of the California Institute of Technology in Pasadena.

The Voyager missions are a part of the NASA Heliophysics System Observatory, sponsored by the Heliophysics Division of the Science Mission Directorate. The original story is published at: http://tinyurl.com/cquqws6 (space-travel.com)

[ANS thanks space-travel.com for the above information]

/EX

SB SAT @ AMSAT $ANS-324.06
AMSAT Submits Proposal to NASA for Fox-1 Satellite

AMSAT News Service Bulletin 324.06
>From AMSAT HQ SILVER SPRING, MD.
November 20, 2011
To All RADIO AMATEURS
BID: $ANS-324.06

On Monday, Nov. 14, AMSAT submitted a proposal to NASA for their CubeSat Launch Initiative, also known as the "Educational Launch of NanoSat" (ELaNa) program. NASA selects projects that they deem to have merit in support of their strategic and educational goals. Projects that are selected will be able to enter into a collaboration agreement where NASA will cover the integration and launch costs of the satellite.

AMSAT, working with ARRL, highlighted the educational merit of the project including the incorporation of Fox-1 into the ARRL Teacher Institute seminars. ARRL also provided a letter of support for the project that was a key component of our proposal.

The Clay Center for Science and Technology at the Dexter and Southfield schools in Brookline MA, also provided a letter of support that was an important part of our proposal. The Clay Center noted that they use AMSAT satellites such as ARISSat-1 in their educational activities for K-12 students and that they look forward to making use of Fox-1.

The completed proposal, at 159 total pages, required a significant effort that was all done by volunteers. NASA will select from all of the submissions and announce the winning projects by January 30, 2012.

[ANS thanks AMSAT Vice-President of Engineering, Tony Monteiro, AA2TX for the above information]

/EX

SB SAT @ AMSAT $ANS-324.07
70cm Amateur Station Active on Packet from ISS Columbus Module

AMSAT News Service Bulletin 324.07
>From AMSAT HQ SILVER SPRING, MD.
November 20, 2011
To All RADIO AMATEURS
BID: $ANS-324.07

The amateur radio station located in the Columbus module is currently operational with the UHF Ericsson transceiver and packet system using the frequency of 437.550 MHz. To utilize the packet system, operators need to set the UNPROTO path to ARISS (the id is RS0ISS) for digi relay or they may connect to the BBS using the callsign RS0ISS-1. The packet beacon is set for 2 minute intervals so it may not appear to be active over many parts of the world but keep listening and mind the Doppler shift (+ or - 10 KHz).

[ANS thanks Kenneth Ransom, N5VHO for the above information]

/EX

SB SAT @ AMSAT $ANS-324.08
ARISS Status - 14 November 2011

AMSAT News Service Bulletin 324.08
>From AMSAT HQ SILVER SPRING, MD.
November 20, 2011
To All RADIO AMATEURS
BID: $ANS-324.08

1.   School Contacts

An Amateur Radio on the International Space Station (ARISS) contact was successful for A.S.J. Memorial High School, Thetford Mines, Qu�bec, Canada on Monday, November 14 at 15:41 UTC. The school formed a space club and students were taught about the ISS, radio equipment and radio protocol.

Johnson Space Center (JSC) Education in Houston, Texas completed a scheduled contact for an Amateur Radio on the International Space Station (ARISS) contact on Tuesday, November 15 at 15:39 UTC via station VK5ZAI in Australia. Interns and co-ops at JSC participating in the contact learned about amateur radio technology. Teaching From Space (TFS), a NASA Education office, will help facilitate the event. TFS promotes learning opportunities and builds partnerships with the education community using the unique environment of space and NASA's human spaceflight program. The students participating in the contact come from the Space Grant Program, the University Research Centers Program, the Undergraduate Student Research Project, and JSC's internal co-op program operated through the JSC Human Resources Department. Each of these programs provides students the opportunity to have hands-on, real-life, career-related experiences that challenge, inspire, and provide practical application that complements and expands upon the students' academic education.

2.   Hospitalized Students Participate in ARISS Contact

On Wednesday, November 9, an Amateur Radio on the International Space Station (ARISS) contact was held between children at the Rehabilitationszentrum f�r Kinder und Jugendliche in Affoltern am Albis, Switzerland and ISS Astronaut Satoshi Furukawa, KE5DAW. The venue of this contact was a hospital school that is attended by children during their rehabilitation.   Furukawa was able to answer 13 questions from 9 students during the event, which was attended by approximately 50 people. The contact had a great impact on the students. For example, one 14 year old, suffering from a cerebral hemorrhage and unable to speak normally, made a tremendous effort to practice his questions for the contact. Through this event, students learned about space, satellites, radio waves and propagation of radio waves.

3.   New York Students Contact ISS

Students attending Donald P. Sutherland School in Nassau, New York took part in a successful Amateur Radio on the International Space Station (ARISS) contact on Thursday, November 10. The children were able to get in all of their questions during the pass, with time for a goodbye to Astronaut Mike Fossum. The contact was integrated into Language Arts, Mathematics and Technology, Science, Social Studies, Music, Art, Physical Education, and Character Education. Web sites such as NASA Kids and the NASA Digital Learning Network were also utilized by teachers and students to prepare for this event. WNYT posted video and a story, "Nassau elementary students talk to an astronaut" at:
http://thegreenbushes.wnyt.com/news/news/93797-nassau-elementary-students-talk-astronaut

4.   ARISS Contact Integrated into EduSat Project

Bari, Italy students attending I.I.S.S. "G. Marconi" School participated in an Amateur Radio on the International Space Station (ARISS) contact on Saturday, November 12 via station IK1SLD in Italy. Astronaut Mike Fossum, KF5AQG fielded 10 questions put to him by the students with enough time left to exchange greetings. Local and regional media covered the event. "G. Marconi" is a scientific high school that specializes in technology. More than 600 students are enrolled at the school and the ARI (Radioamateur Association of Bari) is a part of the ISS "Marconi" body. The Institute participates in the EduSat project, headed by ASI (Italian Space Agency) in collaboration with IMT - Ingegneria Marketing e Tecnologia (Italian SME). The ARISS contact was integrated into the EduSat project through which students are studying aerospace, space telecommunications and satellite subsystems.

5. ARISS Represented at AMSAT Symposium

AMSAT held its annual Space Symposium in San Jose, California on November 4-6. Dave Taylor, W8AAS (AMSAT-NA US Delegate to ARISS-I) reported to the Board of Directors on ARISS activities over the past year. He also presented a paper on "ARISS and Education" at the general meeting, on behalf of the paper's authors: Mark Steiner, K3MS, Rosalie White, K1STO, and Debbie Biggs.

ARISSat-1 was a popular topic, with 5 papers presented about topics including telemetry decoding, operations, and lessons learned. Lou McFadin, W5DID (ARISS hardware lead) talked about the "Fabrication, Integration and Testing of ARRISat-1".

A major thrust of the symposium was education and how AMSAT can (and must) provide a complete educational package for its satellites, both to encourage participation in amateur radio and to obtain affordable launch opportunities. AMSAT President Barry Baines, WD4ASW, made this point repeatedly. A number of papers also addressed education from various angles. Several AMSAT members attending the symposium formed a team to develop educational products targeted directly at national STEM requirements. They plan to have amateur radio and satellite activities that teachers can drop into their curriculum. They hope to have the first few of these available for use while ARISSat-1 is still operational, and then develop more for continuing use to benefit ARISS and future AMSAT satellites.

6. ARRL QST on ARISS

The American Radio Relay League (ARRL) covered ARISS in its December 2011 issue of QST. The "In Brief" column carried a short item about Astronaut Mike Fossum, KF5AQG, operating on the air while on-orbit during JOTA in October.

[ANS thanks Carol, KB3LKI, for the above information]

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In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Dee Interdonato, NB2F

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From 1248425391738512822
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rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.info
Subject: Weekly Highlights of Solar and Geomagnetic Activity, 14 - 20 November
2011
Followup-To: rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space
Date: Tue, 22 Nov 2011 17:30:06 EST
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X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
```

```
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Xref: news1.google.com rec.radio.amateur.misc:5154 rec.radio.amateur.dx:968
rec.radio.amateur.space:444 rec.radio.info:2493

:Product: Weekly Highlights and Forecasts
:Issued: 2011 Nov 22 1901 UTC
# Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center
# Product description and SWPC contact on the Web
# http://www.swpc.noaa.gov/weekly.html
#
#                Weekly Highlights and Forecasts
#
```

Highlights of Solar and Geomagnetic Activity
14 - 20 November 2011

Solar activity has been at low to moderate levels. On November 14 solar activity was at low levels with a C5/Sf flare observed at 14/0930 UTC from Region 1348 (N20, L=088, class/area Dso/120 on 15 November) with an associated Type II radio sweep (estimated shock velocity 610 km/s). Activity increased to moderate levels on November 15 with three M-class flares. Region 1348 produced an M1/Sf flare at 15/0912 UTC and an M1/1f flare at 15/2235 UTC, and Region 1346 (S18, L=339, class/area Dso/140 on 16 November) produced an M1/Sf flare at 15/1243 UTC. From November 16-20, activity returned to low levels with several Type II radio sweeps being reported. The first of these (estimated velocity of 529 km/s) was possibly associated with a C7 flare at 16/1505 UTC from Region 1348. Two Type II radio sweeps occurred on November 17, one (estimated velocity of 456 km/s) associated with a C2 flare at 0133 UTC from Region 1346 and the other (estimated velocity of 558 km/s) associated with a C6/Sf at 0727 UTC from Region 1346. The last Type II radio sweep of the summary period (estimated velocity of 542 km/s) was associated with a C1 flare at 19/0127 UTC from Region 1341 (N18, L=055, class/area Dso/210 on 09 November). Several coronal mass ejections (CMEs) were observed during the period but none were earthward directed.

No proton events were observed at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit was at normal to moderate levels the entire period.

The geomagnetic field was quiet to unsettled. The period began with quiet conditions. Activity levels increased to quiet to unsettled for a brief time on 15 November, but soon returned to quiet levels and remained there for the remainder of the period.

Forecast of Solar and Geomagnetic Activity
23 November - 19 December 2011

Solar activity is expected to be at predominately low levels through the period. There is a slight chance, however, for isolated M-class activity.

No proton events are expected at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to be at normal to moderate levels the entire period.

The geomagnetic field is expected to be generally quiet for most of the outlook period, with the exception of 28 - 29 November when quiet to unsettled levels are expected due to a small, recurrent coronal hole high speed stream.

```
From -5490035135874555213
X-Google-Thread: 10e8ad,cdb1cea440d0f5c4,start
X-Google-NewGroupId: yes
X-Google-Thread: 10b9c8,cdb1cea440d0f5c4,start
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,gida4a23d5f63,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Received: by 10.68.15.41 with SMTP id u9mr4379685pbc.3.1322056620915;
        Wed, 23 Nov 2011 05:57:00 -0800 (PST)
Path: lh20ni9206pbb.0!nntp.google.com!news1.google.com!news2.google.com!
border1.nntp.dca.giganews.com!nntp.giganews.com!nx02.iad01.newshosting.com!
newshosting.com!news-out.readnews.com!transit3.readnews.com!panix!rri.panix.com!
robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-327 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Wed, 23 Nov 2011 08:57:00 EST
Organization: The Radio Amateur Satellite Corporation
Lines: 2236
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000c01cca9e7$ba726360$2f572a20$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
X-Trace: reader1.panix.com 1322056620 17856 166.84.1.6 (23 Nov 2011 13:57:00 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Wed, 23 Nov 2011 13:57:00 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
```

X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Xref: news1.google.com rec.radio.amateur.space:445 rec.radio.info:2496
Content-Type: text/plain;
charset="us-ascii"
Content-Transfer-Encoding: 7bit
Content-Language: en-us

This report is organized into four (4) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - deorbited/returned satellites

SB SAT @ AMSAT W8ISS $WSR-327.S1
WSR 327 Part 1 11/23/2011

AMSAT NEWS SERVICE BULLETIN 327.S1
FROM AMSAT HQ SILVER SPRING, MD, November 23, 2011
TO ALL RADIO AMATEURS
BID: $WSR-327.S1

ARISSat-1 (Radioskaf-b) (Kedr)
Catalog number: 37772
Launch date: August 03, 2011 1843z
Launch site: International Space Station

Status: Operational

Callsign: RS01S

Current Mode(s):
Linear Transponder: U/v
Uplink: 435.758 to 435.742 MHz CW/LSB
Downlink: 145.922 to 145.938 MHz CW/USB

FM Telemetry/SSTV/Messages/ID:
Downlink: 145.950 MHz FM

Telemetry/Beacon:
Downlink: 145.939 MHz CW1
145.919 MHz CW2
145.920 MHz 1k BPSK USB
145.920 MHz 400b BPSK USB

Official Webpage:http://www.amsat.org/amsat-new/ARISSat/ARISSat.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/informal_detail.php?serialnum=89
[08112011]
=====
SO-67 SumbandilaSat

```
Catalog Number: 35870
Launch Date: September 17, 2009 1555z
Launch site: Baikonur, Kazakhstan

Status: Recovery

Callsign: ZS0SUM

Uplink:   145.875MHz FM tone 233.6 Hz
Downlink: 435.345MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

For more information about SO-67:
http://www.amsatsa.org.za/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=88
[09292011]
=====
DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational
Current Mode: Science Mode - Beacon ONLY

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink:   435.530 to 435.570 MHz

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=68
[02092011]
=====
VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05, 2005 0444z
Launch site: Satish Dhawan Space Centre, India

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink:   435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW
```

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.9360 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=30

To know what transponder is switched on please listen for the beacon that is active. Each transponder has a different beacon.
[02092011]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004 0745z
Launch site: Baikonur, Kazakhstan

Status: Semi-operational - IHU crash each eclipse

Current Mode(s):
Voice repeater: V/u
Uplink: 145.880 MHz FM
Downlink: 435.150 MHz FM

Telemetry: Recovery efforts
Downlink: 435.150MHz 9k6

Analog voice downlink:	435.300 MHz FM
	435.150 MHz FM
	2401.200 Mhz FM
Analog voice uplink:	145.860 MHZ FM
	145.880 MHz USB
	145.880 MHz FM
	145.920 MHz FM
	145.920 MHz FM - 67 Hz PL tone burst
	1268.705 MHz FM
Digital Downlinks:	435.150 MHz FM 38k4 PBP, 1 watt output
	435.150 MHz FM 9k6 Pacsat Broadcast Protocol
	2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:	145.860 MHz FM 9k6 Pacsat Broadcast Protocol
	1268.703 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon:	435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=19
[06162011]

=====

SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002 1700z
Launch site: Baikonur, Kazakhstan

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz. The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10 minute timer.

[02092011]

=====

AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993 0140z
Launch site: Kourou, French Guiana

Status: Operational

```
Current Mode: V/u

Uplink:   145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[02092011]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974
Launch site: Vandenberg AFB, California, USA

Status: Operational

Current Mode: Alternating between Mode A and B every 24 hours

Uplink:   145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink:  29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons:   29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
[02092011]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998 0640z (ZARYA module)
Launch sites: Baikonur, Kazakhstan
              Kourou, French Guiana
              Uchinoura Space Center, Japan
              Kennedy Space Center, Titusville, Florida, USA

Status: Operational

Current Active Modes: FM Repeater - OFF
                      Voice -       V/v
                      BBS -         OFF
                      APRS -        OFF
```

SSTV - OFF

Expedition 30 Crew (November 2011 - March 2012):
Commander: Dan Burbank KC5ZSX
Flight Engineer: Anton Shkaplerov
Flight Engineer: Anatoly Ivanishin
Flight Engineer:
Flight Engineer:
Flight Engineer:

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[11232011]

```
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-327.S2
WSR 327 Part 2 11/23/2011

AMSAT NEWS SERVICE BULLETIN 327.S2
FROM AMSAT HQ SILVER SPRING, MD, November 23, 2011
TO ALL RADIO AMATEURS
BID: $WSR-327.S2

JUNGU
Catalog Number:
Launch Date: October 12, 2011 05:30:00 UTC
Launch site: Satish Dhawan Space Centre, India

Status: On Orbit

Uplink:   145.??? MHz 1k2 (mode?)
Downlink: 437.505 MHz 9k6 (mode?)

Beacon: 437.275 MHz 15 wpm (?) CW

Callsign:

URL: http://www.iitk.ac.in/me/jugnu/index.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=160
[11102011]
=====
SRMSAT
Catalog Number:
Launch Date: October 12, 2011 05:30:00 UTC
Launch site: Satish Dhawan Space Centre, India

Status: On Orbit

Uplink:   145.900 MHz 1k  AX.25 (speed?)
Downlink: 437.500 MHz 2k4 AX.25

Beacon: 437.425 MHz 12 wpm CW

Callsign:

URL: http://srmsat.in/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=181
[11102011]
=====
E1P Explorer 1 [Prime] CubeSat (E1P-U2)
Catalog Number:
```

Launch Date: October 28, 2011
Launch site: Vandenberg Air Force Base, California, USA

Status: On Orbit

Uplink: 437.305 MHz (???)
Downlink: 437.505 MHz AX.25 (SSB?)

Beacon:

Callsign:

URL: http://ssel.montana.edu/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=116
[11102011]
=====
M-Cubed
Catalog Number:
Launch Date: October 28, 2011
Launch site: Vandenberg Air Force Base, California, USA

Status: On Orbit

Uplink:
Downlink: 437.485 MHz AX.25

Beacon:

Callsign:

URL: http://umcubed.org/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=215
[11102011]
=====
RAX-2
Catalog Number:
Launch Date: October 28, 2011
Launch site: Vandenberg Air Force Base, California, USA

Status: On Orbit

Uplink:
Downlink: 437.345MHz 9k6 GMSK

Beacon:

Callsign:

URL: http://rax.engin.umich.edu//

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=221
[11102011]
=====
FO-71 AubieSat-1
Catalog Number:
Launch Date: October 28, 2011
Launch site: Vandenberg Air Force Base, California, USA

Status: On Orbit

Uplink:
Downlink: 437.475 MHz 1k2 AX.25

Beacon: 437.475 MHz CW

Callsign: KI4NQO

URL: http://www.space.auburn.edu/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=148
[11102011]
=====
O/OREOS
Catalog Number: 37224
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: On Orbit

Uplink:
Downlink: 437.035 MHZ AX.25

Beacon:

Callsign:

URL: http://www.ooreos.org/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=146
[02092011]
=====
Rax-1 Radio Aurora Explorer
Catalog Number: 37223
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: On Orbit

Uplink:

Downlink: 437.505 MHz 9k6 GMSK

Beacon:

Callsign: RAX-1

URL: http://rax.engin.umich.edu/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=165
[02092011]
=====
FO-69 Fastrac-1 Sara Lily
Catalog Number: 37227
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: Operational

Uplink 1: 145.980 MHz 1k2 baud
Uplink 2: 145.825 MHz 1k2 baud
Downlink: 437.345 MHz 1k2 and 8k6 baud

Beacon: 437.435 MHz 1k2 AX.25

Callsign: Fast1

URL: http://fastrac.ae.utexas.edu/index.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=83
[07052011]
=====
FO-70 Fastrac-2 Emma
Catalog Number: 37380
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: Operational

Uplink 1: 435.025 MHz 1k2 baud
Uplink 2: 437.435 MHz 9k6 baud
Downlink: 145.825 MHz

Beacon: 145.825 MHz 1k2 AX.25

Callsign: Fast2

URL: http://fastrac.ae.utexas.edu/index.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=84
[07052011]

```
=====
StudSat
Catalog Number: 36796
Launch Date: July 12, 2010 0352z
Launch site: Satish Dhawan Space Centre, India

Status: On Orbit

Uplink:   437.505MHz, 9600bps FSK
Downlink: 437.505MHz, 9600bps FSK
Beacon  : 437.505MHz,   20bps ASK

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=164
[02092011]
=====
TIsat-1
Catalog Number: 36799
Launch Date: July 12, 2010 0352z
Launch site: Satish Dhawan Space Centre, India

Status: On orbit

Callsign: HB9DE

Uplink:   145.980MHz FM, AFSK
Downlink: 437.305MHz FM, AFSK
Beacon:   437.305MHz CW

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=118
[02092011]
=====
HO-68 HOPE-1 (CAS-1)(XW-1)
Catalog Number: 36122
Launch Date: December 15, 2009 0231z
Launch site: Taiyuan Space Center, PRC

Status: Beacon only

Callsign:
Broadcast:    BJ1SA-11
BBS:     BJ1SA-12

Uplinks:   145.8250 MHz FM, PL 67.0 Hz.
           145.9250 - 145.9750 MHz SSB/CW
           145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
           435.7650 - 435.7150 MHz SSB/CW
           435.6750 MHz AFSK 1200 BPS

Beacon:    435.7900 MHz CW
```

```
Mode and Antenna Polarization:
V: LHCP 2.0dBi max
U: RHCP 3.0dBi max

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=108

For more information about XW-1 (CAS-1):
http://
[08112011]
=====
SwissCube
Catalog Number: 35932
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Callsign: HB9EG

Beacon(100mw): 437.5050MHz CW
Beacon(1w):    437.5050MHz FSK 1k2bps

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=109
[02092011]
=====
UWE-2
Catalog Number: 35934
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: In Orbit

Beacon(500mw): 437.3850 MHz AFSK 1k2bps
               437.3850 MHz FSK 9k6bps

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=110
[02092011]
=====
ITUpsAT1
Catalog Number: 35935
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Beacon(100mw): 437.325MHz CW
Beacon(1w): 437.325MHz 19k2bps

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=113
```

```
[02092011]
=====
BEESAT
Catalog Number: 35933
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Callsign: DP0BEE

Beacon(100mw): 436.000MHz CW
Beacon(500mw): 436.000MHz GMSK 4k8bps
Beacon(500mw): 436.000MHz GMSK 9k6bp
[02092011]
=====
CP-6
Catalog Number: 35003
Launch Date: May 19, 2009 2355z
Launch site: Wallops Island, Virginia, USA

Status: Operational

Downlink: 437.365 MHz 1k2 AFSK

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=121
[02092011]
=====
HAWKSAT 1
Catalog number: 35004
Launch Date: May 19, 2009 2355z
Launch site: Wallops Island, Virginia, USA

Status: operational

Downlink: 437.345 MHz ?

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=105
[02092011]
=====
Pharmasat
Catalog Number: 35002
Launch Date: May 19, 2009 2355z
Launch site: Wallops Island, Virginia, USA

Status: Operational

Downlink: 437.465 MHz 1k2 AFSK

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=94
```

```
[02092011]
=====
ANUSAT
Catalog Number: 34808
Launch Date: April 20, 2009 0115z
Launch Site: Satish Dhawan Space Centre, India

Status: ?

Downlink:  435.000 MHz
Uplink:    145.800 MHz

Telemetry: 137.400 MHz
[02092011]
=====
SOHLA-1 (ASTRO TECH.)
Catalog Number: 33496
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational

Proposed Frequencies and Modes:
Downlink: 437.505 MHz AFSK/CW
Beacon:   437.505 MHz AFSK/CW

Callsign:

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=101
[02092011]
=====
KAGAYAKI (Solan Co.)
Catalog Number: 33495
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: In Orbit

Downlink: 437.375 MHZ    FSK9k6/CW
Beacon:   437.375 MHz    FSK9k6/CW

IARU coordination status page:

AMSAT-NA webpage:

[02092011]
=====
STARS (Kagawa Univ.) (Twin Satellites)
Catalog Number: 33498
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan
```

Status: Operational ?

Downlinks: 437.485 MHz FM/CW
           437.465 MHz FM/CW
Beacons: 437.305 MHz FM/CW
           437.275 MHz FM/CW

Callsigns: JR5YBN
           JR5YBO

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=99

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=121&retURL
=/satellites/status.php
[02092011]
=====
KKS-1 (Tokyo MCIT)
Catalog Number: 33499
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational

Downlink: 437.455 MHz AFSK/CW
Beacon: 437.385 MHz AFSK/CW

Callsign: JQ1YYY

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=107

AMSAT-NA webapge:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=120&retURL
=/satellites/status.php
[20092011]
=====
PRISM (Tokyo Univ.)
Catalog Number: 33493
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational ?

Downlink: 437.425 MHz AFSK/GMSK/CW
Beacon: 437.250 MHz AFSK/GMSK/CW

Callsign: JQ1YCX

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=97

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=119&retURL=/satellites/status.php
[02092011]
=====
RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number: 32953
Launch Date: May 23, 2008 1520z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational

Curent Modes: Telemetry
              Audio
              Images

Downlinks: 435.315 MHz
           435.215 MHz

AMSAT-NA website:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=115&retURL=/satellites/status.php

Official website:
http://www.npopm.com/?cid=leoca&caid=43
[02092011]
=====
CanX-2
Catalog number: 32790
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational in range of ground station only

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=46
[02092011]
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Downlink: 437.425 MHz 1k2 baud packet

For the latest project status update please visit the AAUSAT-II web

```
page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=60
[02092011]
=====
CO-65 CUTE-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational ?

Downlink:  437.475 MHz 9k6 Packet
Uplink:   1267.600 Mhz

Telemetry Beacon:
Downlink: 437.2750 MHz CW

For the latest project status update please visit the Cute-1.7+APD II
web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=78

Command Station blog website:
http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=112&retURL
=/satellites/status.php
[07052011]
=====
Compass-1
Catalog number: 32787
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Current Mode: dependant on last received command

Uplink:   145.980 MHz FM
Downlink: 437.275 Mhz CW
          437.405 MHz Packet

For the latest project status update please visit the Compass 1 web
page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=52
```

```
AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=114&retURL
=/satellites/status.php
[06162011]
=====
CO-66 Seeds II
Catalog number:
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Downlink: 437.485 MHz

Callsign: JQ1YGU

For the latest project status update please visit the Seeds 2 web
page: http://cubesat.aero.cst.nihon-u.ac.jp/english/seeds_2_e.html

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=36

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=113&retURL
=/satellites/status.php
[02092011]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007 0702z
Launch site: Baikonur, Kazakhstan

Status: Intermittent

Current Mode:  /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon:    435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=94&retURL=
/satellites/status.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=72
[02092011]
=====
CP3
Catalog Number: 31129
```

```
Launch Date: April 17,2007 0702z
Launch site: Baikonur, Kazakhstan

Status: Operational

Current Mode:  /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=74
[02092011]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005 0652z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon:             437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/xivpicte.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=37
[02092011]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: ?????

Current Mode: /u

Beacon:     436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=96&retURL
=/satellites/status.php
```

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[02092011]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004 0745z
Launch site: Baikonur, Kazakhstan

Status: Semi-operational - IHU crash each eclipse

Current Mode(s):
Voice repeater: V/u

```
Uplink:      145.880 MHz FM
Downlink:    435.150 MHz FM
```

Telemetry: Recovery efforts

```
Downlink:    435.150MHz 9k6
```

```
Analog voice downlink:     435.300 MHz FM
                           435.150 MHz FM
                          2401.200 Mhz FM
Analog voice uplink:       145.860 MHZ FM
                           145.880 MHz USB
                           145.880 MHz FM
                           145.920 MHz FM
                           145.920 MHz FM - 67 Hz PL tone burst
                          1268.700 MHz FM
Digital Downlinks:         435.150 MHz FM 38k4 PBP, 1 watt output
                           435.150 MHz FM 9k6 Pacsat Broadcast Protocol
                          2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:            145.860 MHz FM 9k6 Pacsat Broadcast Protocol
                          1268.708 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon:                    435.150 MHz
```

Mode and Antenna Polarization:

```
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear
```

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=19
[06162011]
=====

QuakeSat
Catalog Number: 27845
Launch Date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Telemetry only

Current Mode: 9600 baud data packet

Mode U packet
Downlink: 436.675 MHz 9k6 BPS

Quakesat webpage:
http://www.quakefinder.com/services/quakesat-ssite/
[02252011]
=====
CO-55 Cute-1.7+APD II
Catalog Number: 27844
Launch date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational

```
Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only
```

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=69&retURL
=/satellites/status.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=78
[02092011]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001 0240z
Launch site: Kodiak Launch Complex, Alaska, USA

Status: Telemetry only

Current Mode: V/v

```
General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink:        144.390 Mhz 1200 Baud
```

PCSAT APRS page: http://pcsat.aprs.org

```
aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[02092011]
=====
RS-22 RADIO SPORT 22 (MOZHAYETS 4)
Catalog number: 27939
Launch Date: September 27, 2003 0612z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational - 70cm cw only

Current Mode:  /u

CW Beacon - 435.352 MHz
            145.818 MHz

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=76&retURL
=/satellites/status.php
[02092011]
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990
Launch site: Kourou, French Guiana

Status: CW Beacon only

Uplinks:          145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink:      437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[02092011]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984
Launch site: Vandenburg AFB, California, USA

Status: Operational ?

Current Mode:  /v
```

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon: 435.025 MHz
Mode-S Beacon: 2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[07052011]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998 0640z (ZARYA module)
Launch sites: Baikonur, Kazakhstan
Kourou, French Guiana
Uchinoura Space Center, Japan
Kennedy Space Center, Titusville, Florida, USA

Status: Operational

Current Active Modes: FM Repeater - OFF
Voice - V/v
BBS - OFF
APRS - OFF
SSTV - OFF

Expedition 30 Crew (November 2011 - March 2012):
Commander: Dan Burbank KC5ZSX
Flight Engineer: Anton Shkaplerov
Flight Engineer: Anatoly Ivanishin
Flight Engineer:
Flight Engineer:
Flight Engineer:

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)

Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[11232011]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-327.S3
WSR 327 Part 3 11/23/2011

AMSAT NEWS SERVICE BULLETIN 327.S3
FROM AMSAT HQ SILVER SPRING, MD, November 23, 2011
TO ALL RADIO AMATEURS
BID: $WSR-327.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

NANOSAIL-D
Catalog Number:
Ejection Date: January 17, 2011

Status: On orbit

Downlink: 437.270 MHz AX.25

URL: http://nanosaild.engr.scu.edu/dashboard.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=115
[01272011]

```
=====
CP4
Catalog Number: 31132
Launch Date: April 17, 2007

Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon:    437.325 MHz CW

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=79
[09062010]
=====
LIBERTAD-1
Catalog Number: 31128
Launch Date: April 17, 2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink:   145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=76
[09062010]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: Non-Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder:  145.825 Mhz FM

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=51
[09062010]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005
```

```
Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency:  437.305
                             2407.250

Official Website: http://www.ncube.no

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=24
[09062010]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink:        437.250 MHz FM 67Hz CTCSS
Voice Downlink:     2401.835 MHz FM
Packet Up/Downlink:  437.250 MHz 9k6 packet
Packet Downlink     2401.835 MHz 38k4 packet

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=54
[09062010]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non-Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=53
[09062010]
=====
CANX-1
Catalog Number: 27847
Launch Date: June 30, 2003

Status: Non-Operational

Downlink: 437.8800 MHz AFSK 1k2bps
[06052009]
=====
DTUSAT
Catalog Number: 27842
Launch Date: June 30, 2003
```

Status: Non-Operational

Current Mode: 2k4 AFSK Packet last reported

Downlink: 437.475MHz

Officail webpage: http://dtusat1.dtusat.dtu.dk/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=101&retURL=satellites/all_oscars.php
[02212009]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)

Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Telemetry only

Uplinks: 145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[03302009]
=====
NO-45 SAPPHIRE
Catalog number: 26932

Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks

V-band: 145.840 - 145.990 MHz CW/LSB

U-band: 435.550 - 435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks

S2-band: 2401.225 - 2401.475 MHz CW/USB
K-band: 24048.010 - 24048.060 MHz CW/USB
Beacon: 2401.323 MHz
24048.035 MHz

P3-D Telemetry Beacons (IHU)

BEACON	General Beacon(GB)	Middle Beacon(MB)	Engineering Beacon(EB)
2 m	none	145.898 MHz	none
70cm	435.438 MHz	435.588 MHz	435.838 MHz
13cm(1)	2400.188 MHz	2400.338 MHz	2400.588 MHz
13cm(2)	2401.173 MHz	2401.323 MHz	2401.573 MHz
3cm	10450.975 MHz	10451.125 MHz	10451.375 MHz
1.5cm	24047.885 MHz	24048.035 MHz	24048.285 MHz

[07162007]

=====

OO-38 OPAL

Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]

=====

UO-36 UoSAT-12

Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]

=====

SO-35 SUNSAT

Catalog Number: 25636
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Non-Operational

Current Modes:
Telemetry : /u

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks: 145.850 FM
          145.890 FM

```
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign:       4XTECH-12

More information of GO-32 can be found at:
http://asri.technion.ac.il/techsat/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=14&retURL
=/satellites/status.php
[07172010]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink:   145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
MO-30 UNAMSAT-2
Catalog Number: 24305
Launch Date: September 5, 1996

Status: Non-operational

Downlink:      435.1380 MHz AFSK 1200 BPS
Downlink:      435.2060 MHz AFSK 1200 BPS
Uplink:        145.8150 MHz AFSK 1200 BPS
Uplink:        145.8350 MHz AFSK 1200 BPS
Uplink:        145.8550 MHz AFSK 1200 BPS
Uplink:        145.8750 MHz AFSK 1200 BPS
[06042009]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Operational
Current Mode: V/u (Mode JA)

Voice/CW (Mode JA)
Uplink:   145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
```

Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage:
http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's
CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/
fo29cwts.htm
[101432011]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Non-operational

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012009]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

```
Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
AO-24 ARSENE
Catalog Number: 22654
Launch Date: May 13, 1993

Status: Non-operational

Uplink:    435.0625 MHz FM 1k2bps AFSK
           435.1125 MHz FM 1k2bps AFSK
           435.1375 MHz FM 1k2bps AFSK
Downlink:  145.9750 MHz FM 1k2bps AFSK
          2446.5025 MHz FM 1k2bps AFSK

Beacon:    2446.4700 MHz CW

Broadcast callsign:
BBS:
[12162009]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
```

```
Downlink: 435.170 MHz FM

Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
[05012006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: non-operational

Current Mode:  V/u

Uplink:         145.900 MHz FM 1200-baud Manchester FSK (reserved)
                145.920 MHz FM VOICE
                145.940 MHz FM 1200-baud Manchester FSK (reserved)
                145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink:       437.026 MHz USB VOICE
                (1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[07242009]
=====
UO-15 UoSAT-4
Catalog Number: 20438
Launch Date: January 22, 1990

Status: Non-operational
```

```
Uplink: ?
Downlink: 435.1250MHz (?)
          435.1200MHz (?)
[06042009]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon:   145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
```

```
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink  29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
Beacons:   29.450 MHz
          435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
```

```
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon 1:  29.352 MHz (intermittent)
Beacon 2:  29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink:     21.260 to 21.300 MHz CW/USB
Downlink:  145.860 to 145.900 MHz CW/USB

Beacon:    145.860 MHz

Robot:     145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink:   21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon:   29.408 MHz

Robot:    29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-327.S4
WSR 327 Part 4 11/23/2011

AMSAT NEWS SERVICE BULLETIN 327.S4
FROM AMSAT HQ SILVER SPRING, MD, November 23, 2011
TO ALL RADIO AMATEURS
BID: $WSR-327.S4

THE FOLLOWING SATELLITES HAVE RE-ENTERED OR HAVE BEEN RETURNED SAFELY:
```

CAERUS
Catalog Number:
Launch Date: December 08, 2010 15:43:00 UTC
Launch site: Kennedy Space Center, Titusville, Florida, USA

Status: Re-entered December 22, 2010

Uplink:
Downlink: 437.600 MHz 1k2 AX.25

Beacon: 437.600 MHz CW

Callsign: KJ6FIX

URL:
http://www2.isi.edu/research/prj-serc/prj-serc_projects/prj-serc_projects-8.htm

IARU coordination status page:

[11102011]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Re-entered
Re-entered: October 25, 2009

Uplink: 1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=56
[09062010]
=====
BEVO-1 (DRAGONSAT-1)
Catalog Number: 35690
Launch Date: May 19, 2009

Status: Re-entered
Re-entered:

Downlink: 437.325 MHz 9k6 GMSK
          437.325 MHz CW 20wpm

```
IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=117
[07312009]
=====
AggieSat2 (DRAGONSAT-2)
Catalog Number: 35690
Launch Date: May 19, 2009

Status: Re-entered
Re-entered:

Downlink: 436.250 MHz 9k6 FHSS
[11112009]
=====
Pollux
Catalog Number: 35693
Launch Date: July 31, 2009

Status: Re-entered
Re-entered:

Callsign: POLLUX-1

Downlink: 145.825MHz 1k2 AX.25

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=139
[09062010]
=====
Castor (ANDE-2)
Catalog Number: 35694
Launch Date: July 31, 2009

Status: Re-entered
Re-entered:

Callsign: KD4HBO-1

Downlink: 145.825 MHz 1k2 AX.25

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=144
[09062010]
=====
NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: July 28, 2008

Downlink: 437.385 Mhz APRS AX25
```

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=59
[01012009]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink: 145.825 Mhz FM APRS AX25
APRS Uplink: 145.825 MHz FM APRS AX25
Voice/PSK31 Uplink: 28.120 MHz

Packet to Voice ID: RAFT
[06112007]
=====
GENESAT-1
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Re-Entered
Re-entered date: August 8, 2010

Current Mode: /u

Callsign: KE7EGC

Telemetry Beacon Downlink: 437.0695 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[08082010]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Re-Entered

Re-entered: June 18, 2008

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon: 437.2750 MHz CW

Callsign: JR8YJT
[01012009]
=====
SO-43 Starshine 3
Catalog Number: 26929
Launch Date: September 30, 2001

Status: Re-Entered
Re-entered: January 21, 2003

Beacon: 145.825Mhz
[02212009]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at}
amsat.org
NNNN
/EX

```
From 2540925782340187775
X-Google-Thread: 10e8ad,1c2efe2d26502708,start
X-Google-NewGroupId: yes
X-Google-Thread: 10b9c8,1c2efe2d26502708,start
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,gida4a23d5f63,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII
Received: by 10.68.0.170 with SMTP id 10mr17957350pbf.2.1322358321925;
        Sat, 26 Nov 2011 17:45:21 -0800 (PST)
MIME-Version: 1.0
Path: lh20ni22213pbb.0!nntp.google.com!news1.google.com!
newsfeed2.dallas1.level3.net!news.level3.com!panix!rri.panix.com!robomod!not-for-
mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-331 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sat, 26 Nov 2011 20:45:21 EST
Organization: The Radio Amateur Satellite Corporation
Lines: 544
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <001b01ccaca6$33611210$9a233630$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
X-Trace: reader1.panix.com 1322358321 29937 166.84.1.6 (27 Nov 2011 01:45:21 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 27 Nov 2011 01:45:21 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
```

X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Xref: news1.google.com rec.radio.amateur.space:446 rec.radio.info:2505
Content-Language: en-us

AMSAT NEWS SERVICE
ANS-331

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:

* Longer Eclipse Periods Affecting AO-51 Operation
* Latest AMSAT Project Fox Information Posted
* Watch On-Line: Interviews Recorded at AMSAT 2011 Space Symposium
* This Week 50 Years Ago: OSCAR 1 Announcement for December 1, 1961
* Arizona Centennial K7UGA Announces Expanded Satellite Operation
* Next Proposal Cycle for US Based ARISS School Contacts Opens
* 14 Year-old Co-ordinates ARISS Contact for Her School
* ISS Expedition 29 Astronaut Hams Land Safely
* Satellite Shorts From All Over

SB SAT @ AMSAT $ANS-331.01
Longer Eclipse Periods Affecting AO-51 Operation

AMSAT News Service Bulletin 331.01
>From AMSAT HQ SILVER SPRING, MD.
November 27, 2011
To All RADIO AMATEURS
BID: $ANS-331.01

AO-51 Command Stations report that the seven year old spacecraft is now shutting down its transmitter after losing sunlight on its solar panels during eclipse periods. Two of the six battery cells are now dead. Since July 31, 2010 AO-51 has maintained continuous and stable operations due to careful tuning of its power settings.

The AO-51 Operations Team reported on November 25 that the on-board computer (IHU) crashed between 1815 and 1945Z due to low voltage. This happened after a few days of intermittent and unpredictable operation.

AO-51 Control Operators Mark Hammond, N8MH and Drew Glasbrenner, KO4MA reset the satellite and started the repeater back up around ~2030Z. Satellite operation was set to the following:

Uplink: 145.880, no PL tone required
Downlink: 435.150 at about 300 milliwatts

Drew reported that telemetry data showed the battery voltage was low, around 4.9v, with cell 1 less than 1 volt. The impending third cell failure will likely end continuing operations, particularly if it fails shorted as the others have. At present there remains little margin as the operations team has observed the transmitters cutting off around 4.7 to 4.6 volts prior to the last reset, in eclipse.

Please submit your AO-51 reports to the OSCAR Status Web Page: http://oscar.dcarr.org. The command stations monitor this for changes in the operation. While worldwide participation is good, more reports from US operators are appreciated.

Eclipse periods, which are expected to reach 30 minutes by the end of 2011, are causing AO-51 to shut itself OFF due to low voltage.

Please support AMSAT-NA and the other AMSAT groups around the world, and help us get new satellites into orbit. Projects like Fox, FunCube, P3E, and Kiwisat need your financial support to keep our amateur satellite fleet flying.

You can keep up with the latest AO-51 Command Team news at: http://www.amsat.org/amsat-new/echo/CTNews.php

[ANS thanks the AO-51 Command Team for the above information]

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SB SAT @ AMSAT $ANS-331.02
Latest AMSAT Project Fox Information Posted

AMSAT News Service Bulletin 331.02
>From AMSAT HQ SILVER SPRING, MD.
November 27, 2011
To All RADIO AMATEURS
BID: $ANS-331.02

AMSAT-NA's next generation of satellites, Fox-1 and Fox-2 are under development by the Engineering Team.

Fox-1 will replace the aging AO-51 satellite which has performed as the most popular EasySat, attracting new satellite operators since it can be worked with simple equipment. However, after more than 7 years of service, AO-51 is starting to show its age and needs an affordable replacement.

Why two satellites? The original Fox Engineering Team Study was for a baseline satellite, with several options for enhancements. At that time, AO-51 was functioning well, with no indication that its lifetime would be short enough to impact the Fox Project. With the impending loss of AO-51, it was decided to break the Fox Project up into a quickly deployable baseline FM satellite, Fox-1, and a second more flexible satellite, Fox-2.

Fox-2 will benefit from the development work of the baseline Fox-1, with the additional time being applied to developing its more sophisticated power and Software Defined Transponder (SDX) communications systems.

The Powerpoint presentations on AMSAT's Fox web site provide a good view of the technical progress: http://www.amsat.org/amsat-new/fox/

Project milestones completed this year:

+ Fox-1 project defined - July 2011
+ Concept of Operations (ConOps) - September 2011
+ System Requirements Spec (SRS) - October 2011
+ Experiment Payload Specification - November 2011
+ NASA ELaNa Proposal Submitted - November 2011

Preliminary milestones for 2012 and 2013 are:

+ Baselined Project Plan - January 2012
+ Preliminary Design Review (PDR) - March 2012
+ Engineering prototype - July 2012
+ Critical Design Review (CDR) - August 2012
+ Flight model ready for test - November 2012
+ Launch Readiness Review - January 2013
+ Launch Target - 2nd half of 2013

Also available for download from the AMSAT Project Fox web page are the Powerpoint presentations by members of the AMSAT Engineering Team at the 2011 AMSAT Space Symposium in San Jose:

+ Fox-1 Project Overview
+ Fox-1 Mechanical Design
+ Fox-1 Thermal Design
+ Fox-1 Radiation Environment

If you are interested in more details you may wish to see the papers in the yearly Proceedings of the AMSAT-NA Space Symposium, available from the AMSAT Store:
http://www.amsat-na.com/store/item.php?id0190

[ANS thanks the AMSAT Engineering Team for the above information]

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SB SAT @ AMSAT $ANS-331.03
Watch On-Line: Interviews Recorded at AMSAT 2011 Space Symposium

AMSAT News Service Bulletin 331.03
>From AMSAT HQ SILVER SPRING, MD.
November 27, 2011
To All RADIO AMATEURS
BID: $ANS-331.03

During the 2011 AMSAT Symposium in San Jose a few weeks ago, ARRL Test Engineer Bob Allison, WB1GCM interviewed an number of AMSAT Officers and Lance Ginner of Project OSCAR.

These interviews are now available on You Tube.

+ Barry Baines, WD4ASW
  http://www.youtube.com/watch?v�LBB4imXGk&feature�lated

+ Gould Smith, WA4SXM
  http://www.youtube.com/watch?v�_-2wNmFqc

+ Jan King, VK4GEY
  http://www.youtube.com/watch?v�xe76LEK9Y&feature�lated

+ Keith Baker, KB1SF
  http://www.youtube.com/watch?v�o6U7CPvvo&feature�lated

+ Lance Ginner, K6GSJ - Project OSCAR
  http://www.youtube.com/watch?v�Kc2ZY3LCA&feature�lated

[ANS thanks Gould Smith, WA4SXM for the above information]

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SB SAT @ AMSAT $ANS-331.04
This Week 50 Years Ago: OSCAR 1 Announcement for December 1, 1961

AMSAT News Service Bulletin 331.04
>From AMSAT HQ SILVER SPRING, MD.
November 27, 2011
To All RADIO AMATEURS
BID: $ANS-331.04

The AMSAT News Service is re-running the Project OSCAR Newsletters to commemorate the 50th anniversary of OSCAR 1. During the November/December 2011 time frame you will be able to share the excitement of the launch campaign that started it all 50 years ago.

The Newsletters were hand-typed back in 1961. Thanks to Don Ferguson, KD6IRE for scanning the original documents announcing OSCAR 1.

<Begin Commemorative Message>

OSCAR NEWSLETTER

December 1, 1961

Good News!
The following is quoted from the Department of Defense News Release dated November 15, 1961:

AIR FORCE TO ORBIT SMALL SATELLITE FOR "HAM" OPERATORS' USE

"The Air Force is planning to boost into orbit a small amateur radio satellite so that "ham" operators around the world can contribute to the world's knowledge on the development and operation of space communications systems."

"Known as Project OSCAR - Orbiting Satellite Carrying Amateur Radio - the program is the result of extensive thought and planning on the part of several California amateur operators. They have formed the OSCAR Association to follow through on the project.

"The Air Force Space Systems Division in Los Angeles has agreed to orbit the OSCAR satellite on a space available basis on board a DISCOVERER satellite which will be launched from Vandenberg AFB next month.

"The OSCAR satellite will weigh approximately ten pounds and will be lifted into orbit on the external aft portion of the AGENA Satellite. Sometime after the AGENA has attained orbit the OSCAR satellite will separate from the mother vehicle. Antennae will extend and the transmitter will commence operation. The OSCAR satellite will contain its own battery power system and is anticipated to have a 30-day life in orbit. "The OSCAR satellite is designed to investigate radio propagation phenomena in the two meter (144-146) portion of the radio frequency spectrum."

Simultaneously, a letter from Dr. J. V. Charyk, Under Secretary of the Air Force to the American Radio Relay League, says (in part):

"I am pleased to advise that the Air Force will undertake to place into orbit an Oscar package.....Our Space Systems Division has been instructed to accomplish the Oscar package launching at the earliest feasible date (italics ours) on a non-interference basis to the performance or mission of the launch carrier vehic1e..... Please be assured of the complete cooperation by the Air Force toward successful accomplishment of this amateur experiment."

THIS MEANS THAT THE LAUNCH INTO SPACE OF OSCAR I, THE WORLD'S FIRST AMATEUR RADIO SATELLITE IS IMINENT -- PROBABLY WELL WITHIN THE MONTH! ACTUAL LAUNCH DATE CANNOT BE YET RELEASED FOR SECURITY REASONS. LISTEN TO THE VOICE OF AMERICA BROADCASTS AND THE OFFICIAL ARRL BROADCAST FROM WIAW FOR LAUNCH DATE! ALSO WATCH YOUR LOCAL NEWSPAPER FOR

LAUNCH INFORMATION!

RECENT "UP" AND "AP" OSCAR NEWS DESPATCHES HAVE BEEN FEATURED IN MAJOR NEWSPAPERS, AND IN ADDITION, W6SAI AND K6LFH WERE INTERVIEWED BY VOICE OF AMERICA ON THE NOVEMBER 27TH AMATEUR RADIO PROGRAM WHICH FEATURED THE OSCAR STORY. YOUR COOPERATION IN THIS IMPORTANT, WORLD-WIDE AMATEUR SPACE EXPERIMENT IS URGENTLY REQUIRED. SEE RECENT ISSUES OF QST AND CQ MAGAZINES FOR ARTICLES ON RECEPTION AND TRACKING OF THE OSCAR 145 MC RADIO BEACON. AS THE BEACON HAS NO RECEPTION PACILITIES, QQ NQT MAKE CALLS TO THE BEACON. KEEP YOUR TRANSMITTER CLEAR OF 145 MC! OSCAR I WILL BE IN POLAR ORBIT, THUS PASSING OVER EACH POINT ON EARTH APPROXIMATELY FOUR TIMES PER DAY ON NORTH-TO-SOUTH AND SOUTH-TO-NORTH ORBITS.

THE TIME IS NOW! ARE YOU READY?

NOW THAT WE HAVE RECEIVED ALL NECESSARY PERMISSION AND ASSISTANCE, OSCAR 1 WILL BE ON ITS OWN WHEN IT IS EJECTED FROM THE PARENT VEHICLE. THE OSCAR ASSOCIATION AND THE U. S. AIR FORCE HAVE AT THIS POINT DONE ALL THEY CAN DO TO MAKE THE EXPERIMENT A SUCCESSFUL ONE. THE RESULTS OF THIS EXPERIMENT WILL DEPEND UPON YOU - THE RADIO AMATEUR. YOU MUST CARRY ON FROM THIS POINT! YOUR COOPERATION IN THIS NON-COMMERCIAL, NON-MILITARY SPACE EFFORT WILL BE IN THE BEST TRADITIONS OF AMATEUR RADIO!

GOOD LUCK!

All reception reports of Oscar I should be directed to:
Oscar Association, P. O. Box ---, Sunnyvale, California, USA.
All correct reports will receive a special OSCAR I QSL card, verifying reception of the world's first amateur radio satellite.

<End of Commemorative Message>

[ANS thanks Don Ferguson, KD6IRE and Project OSCAR for the above information]

/EX

SB SAT @ AMSAT $ANS-331.05
Arizona Centennial K7UGA Announces Expanded Satellite Operation

AMSAT News Service Bulletin 331.05
>From AMSAT HQ SILVER SPRING, MD.
November 27, 2011
To All RADIO AMATEURS
BID: $ANS-331.05

The November 20 ANS-324 Bulletins carried the announcement of the Central Arizona DX Association (CADXA) special event operation in celebration of the Arizona Centennial during the week of February 13-19th, 2012.

They will be using the callsign of the late Senior Senator, and Arizona native son, Barry M. Goldwater, K7UGA. Operations will be on all amateur bands (160-2 meters); and will be using CW, SSB, RTTY, PSK31 and Satellite modes.

This week Arizona's AMSAT Field Ops coordinator Patrick Stoddard, WD9EWK/VA7EWK announced expanded satellite operations using the K7UGA callsign:

+ Watch for Patrick's announcements on amsat-bb for the specific passes he plans to operate using the K7UGA callsign on February 14.

+ Patrick plans to use the K7UGA call sign for his on-air satellite demonstrations from the Yuma, Arizona Hamfest on February 17-18, 2012.

+ Patrick posted information about this on AMSAT's online calendar of events:
  http://www.amsat.org/amsat-new/fieldops/eventDetail.php?eIDb9

+ Also refer to http://www.qrz.com/db/k7uga for additional info.

Rick Tejera, K7TEJ says the Thunderbird Amateur Radio Club will be operating a special event station for the Arizona Centennial as well the weekend of Feb 11-12, 2012. Rick plans to operating on as many FM satellite passes as possible during the event using the W7A call.

[ANS thanks Patrick Stoddard, WD9EWK/VA7EWK and Rick Tejera, K7TEJ for the above information]

/EX

SB SAT @ AMSAT $ANS-331.06
Next Proposal Cycle for US Based ARISS School Contacts Opens

AMSAT News Service Bulletin 331.06
>From AMSAT HQ SILVER SPRING, MD.
November 27, 2011
To All RADIO AMATEURS
BID: $ANS-331.06

NASA is now accepting proposals from U.S. schools, museums, science centers and community youth organizations to host an Amateur Radio on the International Space Station, or ARISS, contact between July 15, 2012, and Jan. 15, 2013. To maximize these radio contact opportunities, NASA is looking for organizations that will draw large numbers of participants and integrate the contact into a well-developed education plan. Proposals are due Jan. 30, 2012.

Using amateur radio, students can ask astronauts questions about life in space and other space-related topics. Students fully engage in the ARISS contact by helping set up an amateur radio ground station at the school and then using that station to talk directly with a crew member on the International Space Station for approximately 10 minutes. The technology is easier to acquire than ever before. ARISS has a network of mentors to help you obtain the technology required to host this once in a lifetime opportunity for your students.

Interested parties should contact Teaching From Space, a NASA Education office, to obtain complete information including how the technology works, what is expected of the host organization and how to obtain the proposal/application form by sending an email to JSC-TFS-ARISS@mail.nasa.gov or by calling 281-244-1919.

Additional information can be found at: http://tinyurl.com/6fc2lzn (NASA Teaching From Space)

[ANS thanks the NASA Teaching From Space Office for the above information]

/EX

SB SAT @ AMSAT $ANS-331.07
14 Year-old Co-ordinates ARISS Contact for Her School

AMSAT News Service Bulletin 331.07
>From AMSAT HQ SILVER SPRING, MD.
November 27, 2011
To All RADIO AMATEURS
BID: $ANS-331.07

The Amateur Radio on the International Space Station (ARISS) Status Report for the Week of November 21, 2011 noted that the November 14 A.S.J. Memorial High School in Thetford Mines, Qu�bec, Canada ARISS contact with Astronaut Mike Fossum, KF5AQG on the ISS was a success.

A 14 year-old girl co-ordinated the contact with some help from her father and support from her math teacher. She also acted as radio operator during the event, which was attended by approximately 350 people, including local and regional media.

After the contact, she received a standing ovation from her fellow students and senior provincial members of parliament have asked her, along with her team, to attend the provincial legislature to be recognized for her efforts.

CBC Radio Canada conducted an interview with the student and her teacher. The audio is available at: http://tinyurl.com/cbvqopv (CBC.ca)

[ANS thanks [ANS thanks Carol Jackson, KB3LKI, and the ARISS Status Report for the above information]

/EX

SB SAT @ AMSAT $ANS-331.08
ISS Expedition 29 Astronaut Hams Land Safely

AMSAT News Service Bulletin 331.08
>From AMSAT HQ SILVER SPRING, MD.
November 27, 2011
To All RADIO AMATEURS
BID: $ANS-331.08

Expedition 29 Commander Mike Fossum KF5AQG, Flight Engineers Satoshi Furukawa KE5DAW of the Japan Aerospace Exploration Agency and Sergei Volkov U4MIR of the Russian Federal Space Agency landed their Soyuz spacecraft in Kazakhstan on November 22.

Video cameras on the space station captured the dramatic re-entry of the Soyuz capsule:
http://www.youtube.com/watch?feature�ayer_embedded&v�Ro5XeK4DU

Video footage of the change over ceremony to Expedition 30 and the Soyuz undocking have been posted by UniverseToday.com at:
http://tinyurl.com/7c3ucxw

Dan Burbank, KC5ZSX now leads Expedition 30. Burbank and Flight Engineers Anatoly Ivanishin and Anton Shkaplerov of Russia will continue research and maintenance aboard the station.

The remaining Expedition 30 crew members, NASA astronaut Don Pettit KD5MDT, European Space Agency astronaut Andre Kuipers PI9ISS, and cosmonaut Oleg Kononenko RN3DX, are scheduled to launch Dec. 21 from the Baikonur Cosmodrome and dock with the station on Dec. 23.

[ANS thanks NASA and UniverseToday.com for the above information]

/EX

SB SAT @ AMSAT $ANS-331.09
Satellite Shorts From All Over

AMSAT News Service Bulletin 331.09
>From AMSAT HQ SILVER SPRING, MD.
November 27, 2011
To All RADIO AMATEURS
BID: $ANS-331.09

+ Yuri, UT1FG, will once again be traveling across the Atlantic Ocean and will be active from some "Wet grids" as UT1FG/MM between November 25, 2011, through the end of May 2012. His first trip will be from the Panama Cannal to Huelva, Spain. Yuri is

reportedly a crew member on the ship, so activity will be during his free time. Operations are expected on all amateur radio bands, 160-2 meters, 70 cm, and also including the satellite. His activities will be mainly through the satellite, but also look for him on the HF bands. He will also be active on 6 meters, conditions permitting. QSL via his home callsign, direct (see QRZ.com), by the Bureau or to his QSL Manager UX0FY.
SOURCE: Ohio/Penn DX Bulletin #1037

+ If you are interested in a certificate for ARISSat reception, the directions are at: http://www.arissat1.org. This link will take you directly to the Reception Certificate page:
http://tinyurl.com/42nqk55

+ Don't forget to keep forwarding your received telemetry to be automatically entered into the "Who Will Catch the Last Telemetry From ARISSat-1/KEDR" Contest. Just submit ARISSat-1 telemetry over the Internet using either ARISSatTLM telemetry program. You can use the PC version or the MAC version of ARISSatTLM and you are automatically eligible. Download ARISSatTLM for PC or MAC from the software link on the main ARISSat-1 web page: http://www.arissat1.org/v3/ if you don't already have it.

+ On Tuesday, November 15, the ARISS International Team held its monthly teleconference. A recap was given on the ARISS face-to-face meeting held in October, and status updates were given on HamTV and ARISSat-1. Minutes have been posted.
See: http://ariss.rac.ca/arisstel2011-11-15.htm

+ This video was put together by Astronaut Ron Garan, who returned home on September 16, 2011 after spending about six months in space. He set up a Nikon D3S camera in the Cupola on the space station, took some practice shots, and worked on getting the right settings, then set up the camera to take about 500 pictures at 3-second intervals. Ron posted the results on his blog, "Time Lapse From Space - Literally - The Journey Home at: http://vimeo.com/32430473
(via UniverseToday.com)

+ Martin Bruchanov OK2MNM has made his new book "Image Communication on Short Waves" available free on the web. You can either read it online or download the chapters in PDF format. Image Communication on Short Waves can be found at http://www.sstv-handbook.com/
(via Southgate)

+ The next time you find your QSO on 75 meters stuck on the weather or the state of the other guy's gallbladder try steering the conversation to the design and construction of your own homebrew GPS receiver. Bone up at: http://www.holmea.demon.co.uk/GPS/Main.htm
(via Dan, N8FGV)

[ANS thanks everyone for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office. And, with that, please keep in mind the ham who learned many words in mathematics and geometry have their root in ancient languages. A contemporary of Pythagoras was watching a parrot playing with some twigs. Although birds often play with twigs, leaves and branches, this parrot, to the mathematician's amazement, actually arranged the pieces of wood into a pattern with multiple sides. Then, unfortunately, the bird keeled over, dead. The mathematician was so moved that he named the shape, "Dead parrot." Although - of course - this is why, to this day, we call that shape a polygon.

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM

```
From 5204281489719123459
X-Google-Thread: 107ada,c95603c702ef28bf,start
X-Google-NewGroupId: yes
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X-Google-Language: ENGLISH,ASCII-7-bit
Received: by 10.68.35.131 with SMTP id h3mr873046pbj.1.1322605899959;
        Tue, 29 Nov 2011 14:31:39 -0800 (PST)
MIME-Version: 1.0
Path: lh20ni40025pbb.0!nntp.google.com!news2.google.com!
newsfeed2.dallas1.level3.net!news.level3.com!panix!rri.panix.com!robomod!not-for-
mail
From: SWPC.Webmaster@noaa.gov
Newsgroups:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.info
Subject: Weekly Highlights of Solar and Geomagnetic Activity, 21 - 27 November
2011
Followup-To: rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space
Date: Tue, 29 Nov 2011 17:30:23 EST
Organization: NOAA Space Weather Prediction Center
Lines: 66
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <20111129223007.C79AC33C8E@panix2.panix.com>
NNTP-Posting-Host: panix6.panix.com
X-Trace: reader1.panix.com 1322605823 16673 166.84.1.6 (29 Nov 2011 22:30:23 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Tue, 29 Nov 2011 22:30:23 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
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```
X-RRI-Info-1: Send submissions to            rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Xref: news2.google.com rec.radio.amateur.misc:2540 rec.radio.amateur.dx:721
rec.radio.amateur.space:324 rec.radio.info:1987

:Product: Weekly Highlights and Forecasts
:Issued: 2011 Nov 29 2039 UTC
# Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center
# Product description and SWPC contact on the Web
# http://www.swpc.noaa.gov/weekly.html
#
#                Weekly Highlights and Forecasts
#
```

Highlights of Solar and Geomagnetic Activity
21 - 27 November 2011

Solar activity was low. Region 1356 (N15, L=230, class/area Ehc/400 on 21 November) was the most region significant during the period. Region 1354 (S17, L=268, class/area Dai /220 on 20 November) began the period with a steady decline in area and complexity, ending as a simple Axx group. As Region 1354 declined, Region 1356 grew in spot count and magnetic complexity. It produced seven C-class x-ray flares and ten optical flares on the 22nd, the largest of which was a C4 at 22/0404Z. Several coronal mass ejections (CMEs) were observed throughout the week; however Type II radio emissions were only reported on 23/0847Z (1008 km/s) and 25/2154Z (931 km/s). The sole CME expected to threaten earth was a full halo event on 26/0710Z that originated from a filament eruption near N08W49 accompanied by a long duration C1 flare. The CME was first evident in LASCO C2 imagery at 26/0712Z and also easily seen in STEREO-A COR2 imagery. Its velocity was estimated to be 790 km/s.

A greater than 10 MeV proton flux greater than 10 pfu event began 26/1125Z associated with the filament eruption described in the solar summary. This event was still in progress at the time of this report and reached a maximum of 80 pfu at 27/0125Z.

The greater than 2 MeV electron flux at geosynchronous orbit was at normal to moderate levels the entire period.

Geomagnetic field activity was generally quiet. Brief unsettled to minor storm periods were observed at high latitudes on 22 and 24 November associated with prolonged negative Bz.

Forecast of Solar and Geomagnetic Activity
30 November - 26 December 2011

Solar activity is expected to be at predominately low levels with a chance for isolated M-class activity due to the anticipated return of several active regions.

The current 10MeV proton event in progress is expected to end by prior to the beginning of the outlook period.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to be at normal to moderate levels the entire period.

Geomagnetic field activity is expected to begin the forecast period at unsettled to active levels as a coronal hole high speed stream becomes geoeffective. Conditions should persist for a day or so before calming to mostly quiet levels from 01 December onward. Another coronal hole high speed stream is expected on 09 and 10 December, when activity may again increase to unsettled and active conditions. Mostly quiet conditions are anticipated once again from 11 - 23 December before the next coronal hole high speed stream is forecast to be geoeffective and produce unsettled to active conditions on 23 December. Mostly quiet conditions are forecast from 24 December through the end of the period.

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X-Google-Language: ENGLISH,ASCII-7-bit
Received: by 10.205.127.148 with SMTP id ha20mr989327bkc.6.1322722806069;
        Wed, 30 Nov 2011 23:00:06 -0800 (PST)
MIME-Version: 1.0
Path: y3ni16257bkw.0!nntp.google.com!news1.google.com!
newsfeed2.dallas1.level3.net!news.level3.com!panix!panix2.panix.com!not-for-mail
From: rram@panix.com (rec.radio.amateur.moderated Admin)
Newsgroups:
rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.rad
io.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amat
eur.space,rec.radio.info
Subject: Crossposting Permitted to rec.radio.amateur.moderated
Supersedes: <radio/ham-radio/moderated/crossposting-1-1320127201@panix.com>
Followup-To: poster
Date: 1 Dec 2011 02:00:02 -0500
Organization: rec.radio.amateur.moderated Moderation Team
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Lines: 47
Approved: RRI Admin <rec-radio-info-request@panix.com>
Distribution: world
Expires: 03 Jan 2012 02:00:00 -0000
Message-ID: <radio/ham-radio/moderated/crossposting-1-1322722801@panix.com>
Reply-To: rec-radio-amateur-moderated-request@panix.com
(rec.radio.amateur.moderated Admin)
NNTP-Posting-Host: panix2.panix.com
X-Trace: reader1.panix.com 1322722803 14156 166.84.1.2 (1 Dec 2011 07:00:03 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Thu, 1 Dec 2011 07:00:03 +0000 (UTC)
Summary: Short reminder for unmoderated newsgroups that crossposting is permitted
Keywords: FAQ, ham, amateur, radio, moderated, unmoderated, crossposting,
permitted
Xref: news1.google.com rec.radio.amateur.antenna:16573 rec.radio.amateur.dx:975
rec.radio.amateur.equipment:1757 rec.radio.amateur.homebrew:3256
rec.radio.amateur.misc:5170 rec.radio.amateur.policy:15775
rec.radio.amateur.space:448 rec.radio.info:2512

Posted-By: auto-faq 3.3.2 beta (PGPMoose V2.0, Perl 5.005)
Archive-name: radio/ham-radio/moderated/crossposting
Revision: 1.2 2011/11/02 04:08:53
Posting-Frequency: posted monthly
URL: http://www.panix.com/~rram/usenet/rram/index.html

Changes followed by "|".

After a 30-day public discussion and feedback period to gauge reader
opinions in March of 2009:

http://groups.google.com/group/rec.radio.amateur.moderated/browse_thread/thread/d7d337db35f23326

the rec.radio.amateur.moderated Moderation Team had decided to consider |
amending its charter, and permit limited simultaneous crossposting to
rec.radio.amateur.moderated and one other unmoderated
amateur-radio-related discussion newsgroup. After a successful trial |
period (90 days, through early July 2009), we decided to adopt this |
change permanently. |

Approved rec.radio.amateur.* newsgroups are those that are currently
listed in the latest version of the "List of Big Eight Newsgroups" which
is crossposted monthly to news.announce.newgroups, news.groups, and
news.lists.misc.

Approved alt.radio.amateur.* and alt.ham-radio.* newsgroups are those
that have been created consistent with the suggestions in "So You Want
to Create an Alt Newsgroup" at:

  http://www.faqs.org/faqs/alt-creation-guide/

Approved regional hierarchy newsgroups are those that contain either
"radio.amateur" or "ham-radio" in their names, including

uk.radio.amateur and aus.radio.amateur.misc.

We will make every reasonable effort to keep our list of approved newsgroups up-to-date. In case we have overlooked any, and a submission is rejected in error as a result, the rejected submitter can E-mail us at our administrative contact address (in the signature at the bottom of this article, and the default Reply-To for the rejection message) requesting that it be added, and that the article be approved. We may still choose to reject articles crossposted to any alt.* newsgroup with an inappropriate name, including obscene language, embedded name-calling, or encouragement of unlawful conduct.

Please direct any comments, questions, or criticisms to rec-radio-amateur-moderated-request@panix.com.

```
From -4031979932036090754
X-Google-Thread: 10e8ad,fa689b2f20f81c60,start
X-Google-NewGroupId: yes
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X-Google-Language: ENGLISH,ASCII
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MIME-Version: 1.0
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newsfeed2.dallas1.level3.net!news.level3.com!panix!rri.panix.com!robomod!not-for-
mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-338 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Mon, 5 Dec 2011 15:12:59 EST
Organization: The Radio Amateur Satellite Corporation
Lines: 648
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <002601ccb38a$4102c0e0$c30842a0$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
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X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Mon, 5 Dec 2011 20:12:59 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
```

X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Xref: news1.google.com rec.radio.amateur.space:449 rec.radio.info:2529
Content-Language: en-us

AMSAT NEWS SERVICE
ANS-338

ANS is a free, weekly, news and information service of AMSAT North America,
The
Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in
designing, building, launching and communicating through analog and digital
Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:

* FASTRAC-1 Opened for Digipeating
* AO-51 Remembered
* Donations Needed to Keep AMSAT Project Fox Moving Forward
* ARISSat-1/KEDR Orbit Losing 1.5 KM Per Day
* U.S. Congress Proposes Easing of ITAR Restrictions
* SKN On OSCAR 2012 In Memory Of W1JSM
* This Week 50 Years Ago: OSCAR 1 Announcement for December 5, 1961
* AMSAT-DL Receives Mars Science Laboratory
* Explorer-1 [Prime] Renamed to Honor Former Director
* Satellite Shorts From All Over

SB SAT @ AMSAT $ANS-338.01
FASTRAC-1 Opened for Digipeating

AMSAT News Service Bulletin 338.01
From AMSAT HQ SILVER SPRING, MD.
December 4, 2011
To All RADIO AMATEURS
BID: $ANS-338.01

The FASTRAC satellites have been in operation for more than a year and the team has been able to get a lot of data from them, in great part due to the amazing support from the amateur radio community.

Over the last month the team noticed that one of FASTRAC-1's on board microcontrollers which controls one of the experiments has not been booting up correctly. The team has done everything possible to correct this issue apart from turning it off which can only happen if the batteries fall below an specific charge level. Since the satellites have been power positive throughout this whole year the only way this can happen is if the satellites transmit more often. Given that one of FASTRAC goals has always been to eventually provide a platform for amateur radio enthusiasts to use after the primary mission was over, the team has decided to open up FASTRAC-1 to the amateur radio community with the hope as more people use it to digipeat through the satellite, the battery levels will diminish and cause a hard reset of the microcontrollers on board.

The satellite will be configured so that amateur radio operators can use it beginning on Friday Dec 2 at 1600 UTC. Starting on this date people will be able to digipeat through the satellites. The call sign and frequencies of the satellite are summarized below and an example of digipeating through the satellite is also shown in below. To increase the chances of causing a hard reset, it is requested that as many amateur radio enthusiasts try to digipeat through the satellite on the weekend of Dec 10. If you are successful at digipeating through the satellites or have any problems doing so please let us know at fastracsats@gmail.com, through our Facebook page: (www.facebook.com/fastracsats) or through the forums on our website (http://fastrac.ae.utexas.edu/for_radio_operators/users/phpBB3/index.php).

Frequency Information for FASTRAC-1

- FASTRAC-1 "Sara Lily" Downlink Frequency: 437.345 MHz
- FASTRAC-1 "Sara Lily" Uplink Frequency (1200 or 9600 baud): 145.825MHz
- FASTRAC-1 "Sara Lily" Satellite Call Sign: FAST1

*Example of Digipeating through FAST1 *

```
    - cmd: c CALLSIGN via fast1
    - cmd: KE5DTW>CALLSIGN,FAST1/1: <<C>>:
    - CALLSIGN>KE5DTW,FAST1*/1: <UA>:
    - *** CONNECTED to CALLSIGN VIA FAST1
```

Here the example shows KE5DTW (UT Austin Ground Station) digipeating through FAST1 to connect to CALLSIGN. CALLSIGN represents an arbitrary callsign and should be replaced with the callsign of the station with whom a connection is being attempted. The above example is based on a Kantronics KPC9612+ TNC.

For a PDF version of the announcement please go to the following link:
http://fastrac.ae.utexas.edu/FASTRAC_Digipeating_Announcement.pdf

[ANS thanks Sebastin, KE5FKV, for the above information]

/EX

SB SAT @ AMSAT $ANS-338.02
AO-51 Remembered

AMSAT News Service Bulletin 338.02

From AMSAT HQ SILVER SPRING, MD.
December 4, 2011
To All RADIO AMATEURS
BID: $ANS-338.02

Dozens of messages were posted to the amsat-bb after the news of AO-51's end of mission was received. Many remembered their contacts, several thanked the Operating Team. Many noted thatAO-51 was the satellite that brought them into this part of our hobby.

While too numerous to list them all a sample of the content seems appropriate ...

+ Robin Haighton, VE3FRH, who was AMSAT-NA President when AO-51 was designed and launched wrote, "I was very sorry to hear of the final loss of AO-51 (Echo) as it was the last satellite developed by AMSAT-NA and launched in 2004. As I recall much of the work was carried out by Mark Kanawati, Jim White WD0E, Chuck Green N0ADI (who accompanied the satellite to the Launch site) and Rick Hambly W2GPS. My thanks to all.

  Photo galleries of the people and AO-51 can be found at:
  http://www.amsat.org/amsat-new/echo/integration.php
  http://bach.as.arizona.edu/gallery/main.php?g2_itemIdt51
  http://www.amsat.org/amsat-new/echo/photos.php

+ Control Operator Mark Hammond, N8MH commented, "We essentially got 'a free, bonus overtime' from July 2010 until now. We thought it was about gone back then...check your logs and see just how many QSOs you made on AO-51 from the end of July 2010 until the end of November 2011 (and then check how many overall during the 7.5 years).

  To which Patrick WD9EWK/VA7EWK replied, "I have logged a total of 10931 satellite QSOs. Of those, 4891 (44.7%) were on AO-51's different configurations. Since July 2010, I have logged 2233 satellite QSOs, with 574 of those (25.7%) on AO-51. My last AO-51 QSOs were logged on 13 November.

+ Pete, WB2OQQ wrote, "AO-51, has been one of my best satellite recruiting tools and I will certainly miss her, however she gave us many wonderful years of faithful service, good bye dear friend. It is important to note that the control team managed AO-51 in a manner that I believe extended her life, thank you. We all must continue to support AMSAT's Fox-1 project, and other AMSAT projects I believe thru Amateur Satellites we have found a potential path to excite the children today and continue the STEM initiative.

+ Bob, KC2WYH recalls, "I am a new ham, licensed less than two years, and worked John K8YSE via AO-51 with my little HT and an Arrow maybe six weeks after passing my Tech. A few months later after another test my first QSO signing "slash AG" was again on that bird, with Patrick WD9EWK. Just to "echo" what others have been saying: AO51, R.I.P. And a hearty thank-you to the Control Team for giving us so many many happy and proud hours!

+ Andreas, VK4HHH, AMSAT-VK Member said, "I think thanks are in order for the operations team who provided us with many years of enjoyment on countless AO-51 QSO's. Job well done from start to finish. RIP little satellite. May your solar panels always been shone on Look up and see what your grand-daddy, AO-07, has done and maybe you can draw the inspiration to come back to life in a decade or so.

+ Hector, CO6CBF wrote, "AO-51 has been like a work horse. It is the bird which got me into satellites. Thanks very much to the control team for the great work done.

+ Mani, VU2WMY from AMSAT-India and Secretary & Station-In-Charge of the Upagrah Amateur Radio Club VU2URC at India's ISRO Satellite Centre, Bangalore sent this message, "It is really a sad news. Bidding a farewell to AO-51 with a very heavy heart. Looking at the success, we all at Upagrah Amateur Radio Club VU2URC at ISRO Satellite Centre and AMSAT-India express our heartfelt and sincere thanks, appreciations and compliments to the entire AO-51 (ECHO) team. AO-51 was truly one of the best amateur radio satellites. It was a very favorite for many of our VU hams for its strong signals and ease of operations. 'Thank you AO-51 for your great and fruitful services to the World of Amateur Radio'. We take this opportunity to thank each & every one associated with this great project and wish AMSAT-NA all the success in their future endeavors.

[ANS thanks everyone for the above information]

/EX

SB SAT @ AMSAT $ANS-338.03
Donations Needed to Keep AMSAT Project Fox Moving Forward

AMSAT News Service Bulletin 338.03
  From AMSAT HQ SILVER SPRING, MD.
December 4, 2011
To All RADIO AMATEURS
BID: $ANS-338.03

"Given the sad news on AO-51," AMSAT President Barry Baines, WD4ASW, said, "we highlighted at the recent 2011 Symposium that AMSAT is actively developing Fox-1, a new spacecraft that is designed to replace AO-51. Fox-1 development now takes on a great sense of urgency."

AMSAT Vice-President of Engineering, Tony Monteiro, AA2TX says, "Fox-1 will advance single-channel FM repeater satellite operation beyond the experience of AO-51. It will advance AMSAT to the next generation of AO-51 class satellites."

Fox-1 is designed for longer operational life with these features:

+ Fox-1 is designed to operate in sunlight without batteries once
  the battery system fails. This applies lessons learned from AO-51
  and ARISSat-1 operations.

+ In case of IHU failure Fox-1 will continue to operate its FM
  repeater in a basic, 'zombie sat' mode, so that the repeater
  remains on-the-air.

+ Fox-1 is designed as the immediate replacement for AO-51. Its U/V
  (Mode B) transponder will make it even easier to work with modest
  equipment.

+ From the ground user's perspective, the same FM amateur radio
  equipment used for AO-51 may be used for Fox-1.

+ Extending the design, Fox-2 will benefit from the development work
  of Fox-1 by adding more sophisticated power management and Software
  Defined Transponder (SDX) communications systems.

Barry concluded, "AMSAT's ability to provide a replacement spacecraft and get it launched is dependent upon the active support of donors who wish to see Fox-1 fly."

Several opportunities to make your donation include:

+ Call Martha at the AMSAT Office +1-888-FB AMSAT (1-888-322-6728)
+ Paypal donation widget on the main page at: http://www.amsat.org
+ Paypal donation widget for Project Fox at:
  http://www.amsat.org/amsat-new/fox/
+ The AMSAT Store: http://www.amsat-na.com/store/categories.php

The Powerpoint presentations from the 2011 AMSAT Space Symposium on the Project Fox web site provide a good overview of the technical progress: http://www.amsat.org/amsat-new/fox/

+ Fox-1 Project Overview
+ Fox-1 Mechanical Design
+ Fox-1 Thermal Design
+ Fox-1 Radiation Environment

[ANS thanks AMSAT President Barry Baines, WD4ASW, the AO-51 Operating Team and the Project Fox Engineering team for the above information]

/EX

SB SAT @ AMSAT $ANS-338.04
ARISSat-1/KEDR Orbit Losing 1.5 KM Per Day

AMSAT News Service Bulletin 338.04
From AMSAT HQ SILVER SPRING, MD.
December 4, 2011
To All RADIO AMATEURS
BID: $ANS-338.04

The ARISSat-1/KEDR Operating Team reminds you that if you have been putting off working through the ARISSat-1 repeater, receiving SSTV pictures, or submitting telemetry, the next few weeks will be your last opportunity to be a part of this satellite's history.

Since deployment in August, ARISSat-1 has descended about 60 km,and is currently losing more than 1.5 km per day. The rapid rate is partially the result of the recent solar activity on the atmosphere, significantly increasing the drag.

The predictions by several individuals and groups are all converging toward a reentry in January or February, 2012. Heating will become significant before then. Remember, good telemetry in this period provides invaluable information to the engineering team, to be used in future projects.

The orbit period changes about 30 seconds per day, and that will increase steadily. Be certain to update your tracking program Keps from Space-Track or CelesTrak before each pass. They issue revised versions 3-5 times daily. As the descent continues, this will become even more critical to copying the telemetry beacon, especially unattended.

[ANS thanks the ARISSat-1/KEDR Operating Team for the above information]

/EX

SB SAT @ AMSAT $ANS-338.05
U.S. Congress Proposes Easing of ITAR Restrictions

AMSAT News Service Bulletin 338.05
From AMSAT HQ SILVER SPRING, MD.
December 4, 2011
To All RADIO AMATEURS
BID: $ANS-338.05

In the United States the International Traffic in Arms Regulations (ITAR) law has threatened amateur radio satellite developers with jail terms and heavy fines if they collaborate with overseas amateur satellite projects on projects deemed to be "dual use". The dual use designation is applied to technology for which the Department of Defense and Department of State determines may have military applications even if it is developed for civilian research or application.

This ITAR dual use designation has made AMSAT-NA a "munitions supplier" as defined by the law. It almost completely eliminated AMSAT-NA cooperation and assistance with amateur radio satellite projects in any other country than the USA.

A proposed change in the ITAR law by Congressional bill H.R. 3288 may help ease the Federal Government restrictions on US Hams engaging in collaborative projects with Radio Amateurs in rest of the world.

H.R. 3288: Safeguarding United States Satellite Leadership and Security Act of 2011 sponsored by Rep. Howard Berman is at the first step of the legislative process in Congresss. It proposes to reduce ITAR restrictions on commercial satellite development.

Additional information, including a link to the text of the bill, list of the co-sponsors, and a progress-tracking overview is at:
http://www.govtrack.us/congress/bill.xpd?bill�12-3288

The UniverseToday.com article 'Could We Soon See the End of ITAR�s Chokehold on Space Exploration?' provides a good overview of this vital bill, read it at http://tinyurl.com/6r3nb4m

[ANS thanks UniverseToday.com and govtrack.us for the above information]

/EX

SB SAT @ AMSAT $ANS-338.06
SKN On OSCAR 2012 In Memory Of W1JSM

AMSAT News Service Bulletin 338.06
  From AMSAT HQ SILVER SPRING, MD.
December 4, 2011
To All RADIO AMATEURS
BID: $ANS-338.06

You are cordially invited to participate in Straight Key Night on OSCAR 2012, conducted by AMSAT for all radio amateurs throughout the world. This year's event is dedicated to the memory of Don Brown, W1JSM, who passed away in 2011, aged 90. Don was a longtime, enthusiastic VHF/UHF and satellite operator, and one of our most frequent Best Fist winners.

As always, SKN on OSCAR is simple and informal. Just operate CW through one or more satellites on 1 January 2012 (0000 to 2400 UTC), using a straight hand key.

There is no need to send in a log, but all participants are encouraged to nominate someone they worked for Best Fist. Your nominee need not have the best fist of anyone you heard, only of those you worked. Send your nomination to w2rs@amsat.org. A list of those nominated will appear in ANS in early February.

[ANS thanks Ray Soifer, W2RS for the above information]

/EX

SB SAT @ AMSAT $ANS-338.07
This Week 50 Years Ago: OSCAR 1 Announcement for December 5, 1961

AMSAT News Service Bulletin 338.07
From AMSAT HQ SILVER SPRING, MD.
December 4, 2011
To All RADIO AMATEURS
BID: $ANS-338.07

The AMSAT News Service is re-running the Project OSCAR Newsletters to commemorate the 50th anniversary of OSCAR 1. During the November/ December 2011 time frame you will be able to share the excitement of the launch campaign that started it all 50 years ago.

The Newsletters were hand-typed back in 1961. Thanks to Don Ferguson, KD6IRE for scanning the original documents announcing OSCAR 1.

<Begin Commemorative Message>

OSCAR NEWSLETTER

December 5, 1961

Flash! Air Force to orbit Oscar I satellite! The U. S. Air Force has invited the Oscar satellite aboard a Discoverer vehicle which will be launched on a north-south polar orbit this month! The Oscar Association made this news release on November 15th. A Department of Defense News Release (November 15, 1961) conveys this information, and a letter from Dr. J. V. Charyk, Under Secretary of the Air Force to the American Radio Relay League proffers the formal invitation.

LAUNCH DATE IS VERY CLOSE AT HAND! Listen to the Voice of America News Broadcasts and the official ARRL broadcasts from WIAW. Watch your local newspaper. Launch flash will be carried by Associated Press and United Press news service to local radio and television stations! It is hoped that Oscar 1 will be launched before the Christmas Holidays!

Latest Oscar News:

In last minute preparation for an early launch, the second Oscar I package (serial #2) has been completed, tested and is now ready for launch if needed.

The transmitter, Keyer, Batteries, Turn-on mechanism, antenna, etc. were installed in the flight-version gold plated housing and the completed unit was checked out. All environmental tests were conducted including 50 G's of shock in all planes, 15 G's vibration, 250,000 feet of altitude, heat and cold, etc. All tests were passed with flying colors. Finally, the final thermal striping was applied and the complete package was turned over to the Discoverer project individual who will arrange for its official acceptance.

This new package will be flown by special messenger to Vandenburg AFB (north of Los Angeles) and will be installed on Discoverer XXXVI, replacing the Oscar I (Serial #1) package presently on the vehicle. Serial #1 unit will serve as the spare (standby) package.

Oscar I (Serial #3) is progressing under full steam. Chuck Smallhouse, WAGMGZ, states that this new, improved unit will deliver about 300 milliwatts of r.f. power for the same input power used in the earlier models. In addition, keying characteristics are improved, and the slight keying chirp of #1 and #2 is absent. Serial #3 has already operated for 4 hours at a temperature of 100�C with no ill effects. This unit should be available within a few weeks as a ready-to-launch package!

Last Minute Preparations

Sunday, December 3, 1961 (2000 GMT) saw a "dry run" of the Oscar 1 sideband communications network. The remote tracking stations at various locations checked into the Oscar Communications Center (KBQEZ). Frequencies of 21.410 mc and 14.285 mc were used. WAABY and KANAA served as the east coast liaison point and two practice messages were successfully handled with remote tracking stations. Congratulations to all!

The Official Call of the Oscar 1 Satellite is W6EE. Because the transmitter is unattended, and also because of the extra circuitry required to send the call, a waiver has been obtained from the F.C.C., permitting the satellite to transmit without the use of the call. It is hoped that it will be possible to modify future packages to sign W6EE.

Tom Lott, VEZAGF/W6 (Director of Communications) asks that Orbital data and/or sighting reports for transmission to the Oscar Communications Center should be radioed or phoned into the nearest traffic net (see November, 1961 QST for net director) or to your S.C.M. (see early pages of any QST). The message should be addressed to OSCAR, Box 183, Sunnyvale, California, U. S. A.

Remember! A written back-up message should also be sent via air-mail to the same address. (See September, 1961 QST, pages 18 and 46 for details.) Once again, may we stress that the launch date is very close at hand. You must be prepared now to monitor 145 mc. Notify your amateur friends and pass the word via your local radio club that OSCAR I will soon be launched. Once you hear of the actual launch, 24-hour a day monitoring of the frequency is requested until orbit parameters are established. Frequency of the beacon transmitter is close to 145 mc: actual frequency is dependent upon temperature of the satellite - and other factors, and will be announced as soon as it is determined. Keep watch over plus or minus 50 kilocycles of the center frequency of 145 mc. Notify the Oscar Association of frequency and time of passage as soon as you hear the "bird".

Remember! The USAF and the Oscar Association have now done all that can be done. The rest is up to YOU! This unique experiment can bring added prestige and glory to amateur radio, and strengthen the cause of our great hobby in a time when all available support is sorely needed. YOUR cooperation is urgently requested. Take part in this great adventure into outer space.

<End of Commemorative Message>

[ANS thanks Don Ferguson, KD6IRE and Project OSCAR for the above information]

/EX

SB SAT @ AMSAT $ANS-338.08
AMSAT-DL Receives Mars Science Laboratory

AMSAT News Service Bulletin 338.08
From AMSAT HQ SILVER SPRING, MD.
December 4, 2011
To All RADIO AMATEURS
BID: $ANS-338.08

Radio Amateurs have received signals from the NASA Mars Science Laboratory using the AMSAT-DL amateur radio facility at Bochum in Germany.

Just over 7 hours after launch at 21:45 UTC the X-band telemetry signal from the MSL was received using the Bochum amateur radio facility. The signal, received at a distance of 112,000 km, had a spin-modulation of +/- 3.5 Hz, 2 revolutions / minute.

This is believed to be the first reception of the MSL outside the official NASA Deep Space Network (DSN).

For reception of MSL James Miller, G3RUH remotely reconfigured the Bochum tracking and receiving system. The MSL X-Band telemetry signal was received automatically in Bochum, no-one had to be physically on-site. This shows how flexible and reliable the system at Bochum is, ready for the planned AMSAT-DL P5-A mission to Mars.

James says the Bochum Antenna is used to receive lots of the NASA spacecraft all the time. Stereo-A/B is heard every day, and when they have gone LOS, he checks Grail-A and Grail-B and also Juno.

Reception of MSL required adding its trajectory data to the spacecraft database, and the frequency to the radio control computer. Provided the given frequency is with +/- 40 kHz of the actual frequency, Bochum can lock onto it in 1 sec via an FFT acquisition process. As it happens, the actual frequency was within 8 kHz of the DSN channel center, so finding it was immediate.

Congratulations to the AMSAT-DL team on a remarkable achievement.

Control Software for the Bochum Radio Telescope by James Miller G3RUH: http://www.amsat.org/amsat/articles/g3ruh/126.html

Stereo A/B Spacecraft Telemetry Reception at Bochum by James Miller, G3RUH http://www.amsat.org/amsat/articles/g3ruh/127.html

AMSAT-DL in Google English http://tinyurl.com/AMSAT-DL

[ANS thanks James Miller, G3RUH, AMSAT-DL, and AMSAT-UK for the above information]

/EX

SB SAT @ AMSAT $ANS-338.09
Explorer-1 [Prime] Renamed to Honor Former Director

AMSAT News Service Bulletin 338.09
From AMSAT HQ SILVER SPRING, MD.
December 4, 2011
To All RADIO AMATEURS
BID: $ANS-338.09

BOZEMAN - The Montana State University satellite that has been orbiting the Earth since Oct. 28 has been renamed to honor the late William Hiscock, who was director of the Montana Space Grant Consortium until his death in 2009.

Directors of the MSGC and MSU's Space Science and Engineering Lab announced Friday, Nov. 4, that the satellite originally called Explorer-1 [Prime] will now be called the William A. Hiscock Radiation Belt Explorer. The satellite that involved approximately 125 students over five years will be known more familiarly as The Hiscock Radiation Belt Explorer (HRBE).

Students, staff and faculty who attended the Nov. 4 dedication ceremony also learned that the satellite whose mission is to study the Van Allen Radiation Belts has already passed through an intense band of energetic electrons bombarding Earth's upper atmosphere over Alaska. HRBE sent that information back to students who monitor the satellite from MSU's Space Operations Center. It is Montana's first satellite. It was designed, built and is now operated by MSU students.

The full press release can be viewed on-line at:
http://www.montana.edu/cpa/news/nwview.php?article493

[ANS thanks Montana State University and CQ VHF Magazine for the above information]

/EX

SB SAT @ AMSAT $ANS-338.10
Satellite Shorts From All Over

AMSAT News Service Bulletin 338.10
From AMSAT HQ SILVER SPRING, MD.
December 4, 2011
To All RADIO AMATEURS
BID: $ANS-338.10

+ A link to the annual President's Report from the 2011 AMSAT Symposium and General Meeting has been added to the front page news items at: http://www.amsat.org.

+ In addition to the ARRL interviews at the 2011 Symposium of AMSAT Officers and Lance Ginner from Project OSCAR another interesting interview with Carroll Swain, W7DU has been posted. Carroll is a long time AMSAT Member and is still going strong at 98.5 years young. He is a regular on the AMSAT 20 Meter Net and brings his wife with him to the annual AMSAT Space Symposium each year. Watch at: http://youtu.be/uY3cDl8aQZU (via Keith, W5IU)

+ Additional coverage of AMSAT-DL receiving MSL was published in The Register:
http://www.theregister.co.uk/2011/11/28/radio_hams_curiosity_signals/

+ Astronomers at the Sir Thomas Brisbane Planetarium in Australia made a time-lapse movie of the MSL as it departs Earth on its way to Mars: http://tinyurl.com/d64oezy (UniverseToday.com)

+ Video: Curiosity Rover Launches to Mars has been posted on the UniverseToday site at: http://tinyurl.com/7e48slu

+ To celebrate the 75th Anniversary of the CBC/Radio Canada, Canadian Amateurs may use the following prefixed between December 1-31, 2011:
VG for VA,
VX for VE,
XJ for VO,
XK for VY.

+ Bobby Lacey, KF4GTA posted photos from his opportunity to spend 3 hours inside of Atlantis on November 18:
http://www.dropbox.com/gallery/42374/1/kf4gta-atlantis?h�7bde
He was also present for the shuttle's last launch and landing, STS-135. (via Southgate ARC)

[ANS thanks everyone for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the
President's
Club. Members of the President's Club, as sustaining donors to AMSAT
Project
Funds, will be eligible to receive additional benefits. Application
forms
are
available from the AMSAT Office.

73,
This week's ANS Editor,
Lee McLamb, KU4OS

From 2188418859775375051
X-Google-Thread: 10e8ad,62ec022edec127b8,start
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Received: by 10.213.14.14 with SMTP id e14mr1613978eba.1.1323210609475;
        Tue, 06 Dec 2011 14:30:09 -0800 (PST)
MIME-Version: 1.0
Path: ty4ni12066bkb.0!nntp.google.com!news1.google.com!npeer02.iad.highwinds-
media.com!news.highwinds-media.com!feed-me.highwinds-media.com!news.glorb.com!
news-out.readnews.com!news-xxxfer.readnews.com!panix!rri.panix.com!robomod!not-
for-mail
From: SWPC.Webmaster@noaa.gov
Newsgroups:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.info
Subject: Weekly Highlights of Solar and Geomagnetic Activity, 28 November - 04
December 2011
Followup-To: rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space
Date: Tue, 6 Dec 2011 17:30:07 EST
Organization: NOAA Space Weather Prediction Center
Lines: 69
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <20111206223001.F1F6933C7E@panix2.panix.com>
NNTP-Posting-Host: panix6.panix.com
X-Trace: reader1.panix.com 1323210607 22894 166.84.1.6 (6 Dec 2011 22:30:07 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Tue, 6 Dec 2011 22:30:07 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to   rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to   rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.

```
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Xref: news1.google.com rec.radio.amateur.misc:5193 rec.radio.amateur.dx:980
rec.radio.amateur.space:450 rec.radio.info:2532

:Product: Weekly Highlights and Forecasts
:Issued: 2011 Dec 06 1957 UTC
# Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center
# Product description and SWPC contact on the Web
# http://www.swpc.noaa.gov/weekly.html
#
#                 Weekly Highlights and Forecasts
#
```

Highlights of Solar and Geomagnetic Activity
28 November - 04 December 2011

Solar activity was low all week. On average, seven small and magnetically simple spotted regions were present at any given time during the period. Of these, Region 1363 (S22, Lo=108, class/area=Eki/430 on 04 December) was the most productive, with five C-class flares and 4 optical flares to its credit. It appeared on the disk on 29 November as a small Hsx-alpha group and ended the period as the largest and most magnetically complex (beta-gamma) group on the disk. Despite its size and complexity, Region 1363 did not produce the largest x-ray flare of the week. That honor belongs to Region 1362 (N08, Lo=131, class/area=Eso/220 on 03 December) which produced C4 04/1615Z. The second largest x-ray flare of the period, a C3 from Region 1364 (N18, Lo=105, class/area=Hsx/60 on 30 November) occurred on 30/2028Z. At least one CME was observed each day in coronagraph imagery, mostly attributed to filament eruptions. None of the CMEs had any significant geoeffective component.

The greater than 10 MeV protons at 10 pfu exceeded threshold during the period. The event began at 26/1125Z, reached a maximum flux of 80 pfu at 27/0125Z and ended at 28/0145Z. This event was associated with a filament eruption observed early on 26 November.

The greater than 2 MeV electron flux at geosynchronous orbit was at normal levels 28 November - 01 December and at moderate levels on 27 November and 02 - 03 December.

The geomagnetic field on 27 November was at quiet to unsettled levels, with isolated high latitude active periods. The disturbed conditions were caused by a CIR in advance of a weak CH HSS. Most of 28 November was quiet. A 45 nT Sudden Impulse at the Boulder magnetometer at 28/2154Z signaled the arrival of a CME from 26 November. Unsettled to minor storm periods followed at all latitudes. Quiet to unsettled levels, with isolated high latitude active periods, returned by midday on 29 November and lasted until early on 03 December. The exception was the latter half of 30 November when a solar sector boundary crossing and prolonged southward IMF Bz triggered minor to major storm periods at high latitudes. Active to minor storm conditions were also observed at high latitudes between 03/0900-1500Z with the passage of a transient feature. The field returned to quiet to unsettled levels for the remainder.

Forecast of Solar and Geomagnetic Activity
07 December - 02 January 2012

Solar activity is expected to be at predominately low levels with a chance for isolated M-class activity through the forecast period

No proton events are expected at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to be at normal to moderate levels the entire forecast period

The geomagnetic field is expected to be at mostly quiet to unsettled levels through most of the forecast period. Coronal hole high speed streams are expected to bring active conditions on 14 November and again on 26-29 December.

```
From -11239321075967997
X-Google-Thread: 10e8ad,87dd987aeac00531,start
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Received: by 10.68.21.165 with SMTP id w5mr5742547pbe.7.1323368205163;
        Thu, 08 Dec 2011 10:16:45 -0800 (PST)
MIME-Version: 1.0
Path: lh20ni83991pbb.0!nntp.google.com!news2.google.com!
newsfeed2.dallas1.level3.net!news.level3.com!panix!rri.panix.com!robomod!not-for-
mail
From: "ARRL Education Services" <memberlist@www.arrl.org>
Newsgroups: rec.radio.amateur.moderated,rec.radio.amateur.space,rec.radio.info
Subject: Want to schedule a school contact with the ISS?
Followup-To: rec.radio.amateur.moderated,rec.radio.amateur.space
Date: Thu, 8 Dec 2011 13:16:44 EST
Organization: American Radio Relay League
Lines: 36
Approved: RRAM Approval Key <rram-approval-key@panix.com>, RRI Admin <rec-radio-
info-request@panix.com>
Message-ID: <20111208165220.E7D7824781@bmail.arrl.org>
NNTP-Posting-Host: panix6.panix.com
X-Trace: reader1.panix.com 1323368204 16438 166.84.1.6 (8 Dec 2011 18:16:44 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Thu, 8 Dec 2011 18:16:44 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
```

```
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
X-Security: MIME headers sanitized on oasis
     See http://www.wolfenet.com/~jhardin/procmail-security.html
     for details. $Revision: 1.64 $Date: 1999-02-08 09:03:07-08
X-Security: MIME headers sanitized on panix6.panix.com
     See http://www.wolfenet.com/~jhardin/procmail-security.html
     for details. $Revision: 1.65 $Date: 2011/09/01 12:14:19
X-StripMime: Non-text section removed by stripmime
X-Auth: PGPMoose V2.0 PGP rec.radio.amateur.moderated
 iJwEAQECAAYFAk7g/wwACgkQSO8RITXCfvuJOAQAgI2znuY98+9AcPjHAw8oTqv2
 0xeHsBIOwBbdsAmj1g9wqXhrs+fYiZlVPhRnh3jpUHPLFtcqM1SWO4GrG41Ns4J2
 ANqSv/VIOJPj0+vDt0bN4+YwmhZcc4Ndpm1UVQIFnkjh5ARplqOahzkfmysWY/pp
 aVHXrYPK0PRQHJVvQLc=
 =oIFA
Xref: news2.google.com rec.radio.amateur.moderated:1243
rec.radio.amateur.space:328 rec.radio.info:2016
```

Greetings!

In case you missed the recent announcement, here's the information you'll need if you're thinking about applying for a scheduled Amateur Radio contact with the ISS through the ARISS program. Proposals are currently being accepted for contacts to be scheduled during the 2nd half of 2012. Here's the news story:
www.arrl.org/news/apply-now-to-host-a-real-time-conversation-with-crewmembers-onboard-the-iss.

Read more about the ARISS program at:
http://www.arrl.org/amateur-radio-on-the-international-space-station.

Following is a list of states that have never participated in a contact with the ISS through the ARISS program: Arkansas, Connecticut, Delaware, Kansas, Minnesota, North Dakota, Rhode Island, South Dakota, Vermont, West Virginia, Wyoming, American Samoa, Guam, Northern Marianas Islands, and the Virgin Islands. ARISS would love to receive proposals from schools in these states and territories!

Debra Johnson, K1DMJ

Education Services Manager

ARRL, the national association for Amateur Radio(tm)

225 Main Street

Newington, CT 06111-1494

(860) 594-0296

Fax: (860) 594-0259

djohnson@arrl.org <mailto:djohnson@arrl.org>

```
From -2142211933268207647
X-Google-Thread: 10e8ad,560cbc7a28e37deb,start
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Received: by 10.68.21.165 with SMTP id w5mr5969084pbe.7.1323374412001;
        Thu, 08 Dec 2011 12:00:12 -0800 (PST)
Path: lh20ni84267pbb.0!nntp.google.com!news1.google.com!news.glorb.com!
news.astraweb.com!border6.newsrouter.astraweb.com!not-for-mail
From: Chris Steyaert <observations@rmob.org>
Newsgroups: rec.radio.amateur.space,sci.astro.amateur
Subject: Radio Meteor Obs. Bull. November 2011
Date: Thu, 08 Dec 2011 20:58:08 +0100
Message-ID: <5l52e75jncjti7e83ofiidbreoeslt5dhp@4ax.com>
X-Newsreader: Forte Agent 5.00/32.1171
MIME-Version: 1.0
Lines: 14
Organization: Unlimited download news at news.astraweb.com
NNTP-Posting-Host: 926735eb.news.astraweb.com
X-Trace: DXC=?VeL1?OIF\1YUQJRTa54B1L?0kYOcDh@:TMFn?:<^ia5Q4O[1bkZfi?=I7K^Oo83T?
eM7IG_Q>@o?@AA;KbaaEf:Jkb[InNdCM2C@7EgQEK93?
Xref: news1.google.com rec.radio.amateur.space:452 sci.astro.amateur:43748
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
```

Radio Meteor Observation Bulletin No. 220 of November 2011 (78 K) is available now as

http://www.rmob.org/rmobtext/rmob1110.txt

More information and the visual presentation of the hourly forward scatter counts can be found on

http://www.rmob.org

Chris

```
From 5897791945963201851
X-Google-Thread: 10e8ad,8ea64dad844a1e2b,start
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,domainid0,public,usenet
```

X-Google-Language: ENGLISH,ASCII-7-bit
Received: by 10.68.212.232 with SMTP id nn8mr15005pbc.1.1323375125658;
        Thu, 08 Dec 2011 12:12:05 -0800 (PST)
Path: lh20ni84294pbb.0!nntp.google.com!news2.google.com!news1.google.com!
news.glorb.com!news.astraweb.com!border6.newsrouter.astraweb.com!not-for-mail
From: Chris Steyaert <observations@rmob.org>
Newsgroups: rec.radio.amateur.space,sci.astro.amateur
Subject: Radio Meteor Obs. Bull. November 2011 Correction
Date: Thu, 08 Dec 2011 21:10:50 +0100
Message-ID: <kd62e7ti01mgm10r4epk9olo9f6rpf1pe0@4ax.com>
X-Newsreader: Forte Agent 5.00/32.1171
MIME-Version: 1.0
Lines: 14
Organization: Unlimited download news at news.astraweb.com
NNTP-Posting-Host: d23f8262.news.astraweb.com
X-Trace: DXC=BjHnTYaSA9YeIcSKiG^o_UL?
0kYOcDh@Z=GNSRN<\IhQ];]_6FSc;NRBZ<AX`0A\JSb3<D_UX>L;YagHeeT9P6:\35NF7Da?
b[UBYTBlmLn[C]
Xref: news2.google.com rec.radio.amateur.space:330 sci.astro.amateur:28560
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Radio Meteor Observation Bulletin No. 220 of November 2011 (78 K) is available now as

http://www.rmob.org/rmobtext/rmob1111.txt

More information and the visual presentation of the hourly forward scatter counts can be found on

http://www.rmob.org

Chris

From -8940573765403574178
X-Google-Thread: 10e8ad,470925e95d5b7b01,start
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Received: by 10.68.191.2 with SMTP id gu2mr6866641pbc.0.1323615284933;
        Sun, 11 Dec 2011 06:54:44 -0800 (PST)
Path: lh20ni10567pbb.0!nntp.google.com!news2.google.com!
newsfeed2.dallas1.level3.net!news.level3.com!bloom-beacon.mit.edu!panix!
rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-345 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sun, 11 Dec 2011 09:54:44 EST

```
Organization: The Radio Amateur Satellite Corporation
Lines: 501
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <001501ccb814$cd036430$670a2c90$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
X-Trace: reader1.panix.com 1323615284 21891 166.84.1.6 (11 Dec 2011 14:54:44 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 11 Dec 2011 14:54:44 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
Content-Language: en-us
```

AMSAT NEWS SERVICE
ANS-345

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* Radio Club of America Names AMSAT's Tom Clark K3IO Fellow
* This Week 50 Years Ago: OSCAR 1 Launched December 12, 1961
* AO-27 Scheduler Data Update
* IARU Coordination Request for Kagawa University Tethered Satellite
* ISS Sp-Ex Shadow Beacon Experiment Postponed to May-June 2012
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* Pacific Islands Activation on Satellites
* ARISS UPDATE
* Delfi-n3Xt Satellite Includes Amateur Linear Transponder
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* Mark Hammond, N8MH Appointed AMSAT VP-Educational Outreach

SB SAT @ AMSAT $ANS-345.01
Radio Club of America Names AMSAT's Tom Clark K3IO Fellow

AMSAT News Service Bulletin 345.01
>From AMSAT HQ SILVER SPRING, MD.
December 11, 2011
To All RADIO AMATEURS
BID: $ANS-345.01

Radio Club of America Names AMSAT's Tom Clark K3IO Fellow

At its annual Awards Banquet held this year at the Texas Motor Speedway near Fort Worth November 19th, the Radio Club of America honored AMSAT's Tom Clark, K3IO, by elevating him to the rank of Fellow in that prestigious organization.

The Radio club of America is the oldest radio club in the World, dating back to 1909. Among its members have numbered such notables as Major Edwin H. Armstrong, the inventor of the superheterodyne circuit, the super-regenerative detector and the system of Frequency Modulation still used today for police, fire and most other two-way radio communication as well as broadcasting. Other Radio Club of America members included Fred M. Link, an early two-way radio equipment manufacturer, David Sarnoff of RCA and Senator Barry Goldwater, K7UGA.

Next year's Awards Banquet will revert back to its customary venue, the New York Athletic Club in New York City.

[ANS thanks Bill Tynan, W3XO, AMSAT Life Member No. 10 and Radio Club of America Fellow for the above information]

/EX

SB SAT @ AMSAT $ANS-345.02
This Week 50 Years Ago: OSCAR 1 Launched December 12, 1961

AMSAT News Service Bulletin 345.02
>From AMSAT HQ SILVER SPRING, MD.
December 11, 2011
To All RADIO AMATEURS
BID: $ANS-345.02

This Week 50 Years Ago: OSCAR 1 Launched December 12, 1961

The AMSAT News Service is re-running the Project OSCAR Newsletters to commemorate the 50th anniversary of OSCAR 1. During the November/ December 2011 time frame you will be able to share the excitement of the launch campaign that started it all 50 years ago.

The Newsletters were hand-typed back in 1961. Thanks to Don Ferguson, KD6IRE for scanning the original documents announcing OSCAR 1.

<Begin Commemorative Message>

OSCAR NEWSLETTER

December 12, 1961

OSCAR SATELLITE IN ORBIT
OSCAR SATELLITE IN ORBIT
OSCAR SATELLITE IN ORBIT

At 2041 GMT, 12 December 1961 the Oscar satellite was hurled into orbit by the Discoverer XXXVI launching vehicle from Vandenberg Air Force Base, California. The satellite immediately went into a North-South orbit and was picked up loud and clear by the hams at KC4USB (Marie Byrd Base) at the South Pole a few minutes after launch. The word was quickly relayed back to the Oscar Tracking Station, K6QEZ, by W4ABY. Acquisition was also obtained by hams at Kodiak, Alaska and by KH6UK in Hawaii on the first pass.

Oscar is on a frequency between 144.990 and 145.008 and has tremendous c.w. signal strength on a direct, overhead pass! Tracking reports have begun to flow into the Center. W1AW heard the first pass S9 over the East coast.

The following telegram was received by the Center from the RSGB:
OSCAR HEARD 0055 GMT X KEYING OK X STRENGTH NINE PLUS X DOPPLER SEVEN KC X FURTHER DATA AIR HAIL X.

Orbit is being computed, but insufficient time has elapsed to permit predictions to be made of time Oscar will pass over your area. Listen to W1AW and the Voice of America for orbital predictions. Continuous 24-hour a day monitoring is essential until predictions are established. In fact, this monitoring is urged to check for unpredicted reception at times when the Oscar satellite is theoretically out of range! Our thanks to the Air Force and men of Vandenburgh AFB who helped to make this historic milestone possible!

Actual launch was attended by W6SAI, K6LFH, W6MLZ and W0TSN. Full Oscar story in February QST and CQ and more details in our next news letter!

LISTEN T0 OSCAR! 'SEND ALL REPORTS TO PROJECT OSCAR, BOX ---,
SUNNYVALE, CALIFORNIA, U.S.A.

<End of Commemorative Message>

[ANS thanks Don Ferguson, KD6IRE and Project OSCAR for the above information]

/EX

SB SAT @ AMSAT $ANS-345.03
AO-27 Scheduler Data Update

AMSAT News Service Bulletin 345.03
>From AMSAT HQ SILVER SPRING, MD.
December 11, 2011
To All RADIO AMATEURS
BID: $ANS-345.03

AO-27 Scheduler Data Update

The AO-27 web site remains offline due to connectivity problems. AO-27 Control Station, Mike Wyrick, NU3C provided the latest data files for the Java-based AO-27 Satellite Scheduler website maintained by George Henry, KA3HSW.

George has uploaded them to the AO-27 Satellite Scheduler website so that users of the Java scheduler program can update their files. Simply download them to the same folder that the Scheduler resides in. DO NOT use the "Update Data" option from within the program, as it will try to connect to the AO-27 website, which is still down.

The Java AO-27 Satellite Scheduler website is:
http://sites.google.com/site/ao27satellitescheduler/

[ANS thanks George Henry, KA3HSW for the above information]

/EX

SB SAT @ AMSAT $ANS-345.04
IARU Coordination Request for Kagawa University Tethered Satellite

AMSAT News Service Bulletin 345.04
>From AMSAT HQ SILVER SPRING, MD.
December 11, 2011
To All RADIO AMATEURS
BID: $ANS-345.04

IARU Coordination Request for Kagawa University Tethered Satellite

The IARU Satellite Frequency Coordination pages hosted by AMSAT-UK have posted information regarding a new tethered satellite named STARS-II which will be built by students at Kagawa University in Japan.

STARS-II consists of Mother Satellite (MS) and Daughter Satellite (DS) connected by tether. The mission will include formation flight, tether deployment, attitude control and photographing each other.
1. Mother Satellite deploys tether with Daughter Satellite at end;
2. Daughter Satellite robotically controls attitude of CCD camera;

3. Mother Satellite and Daughter Satellite communicate via Bluetooth.

Proposed frequencies are:

80mW CW beacon
Mother Satellite: 437.245 MHz
Daughter Satellite: 437.255 MHz

800mW AX25 1200bps FM telemetry downlink
Mother Satellite: 437.405MHz
Daughter Satellite: 437.425MHz

Telemetry formats have been published at:
http://stars1.eng.kagawa-u.ac.jp/english/STARS-II_telemetry_format.html

Plans include a launch to a 600-800km sun synchronous orbit in the 2011-2012 timeframe.

An English version of STARS-II web page can be found at:
http://stars1.eng.kagawa-u.ac.jp/english/index.html

The IARU Coordination request can be seen on AMSAT-UK web:
http://www.amsatuk.me.uk/iaru/formal_detail.php?serialnum=170

[ANS thanks Kagawa University and AMSAT-UK for the above information]

/EX

SB SAT @ AMSAT $ANS-345.05
ISS Sp-Ex Shadow Beacon Experiment Postponed to May-June 2012

AMSAT News Service Bulletin 345.05
>From AMSAT HQ SILVER SPRING, MD.
December 11, 2011
To All RADIO AMATEURS
BID: $ANS-345.05

ISS Sp-Ex Shadow Beacon Experiment Postponed to May-June 2012

Word has been received from Russia that the ISS Shadow-Beacon Experiment announced in ANS-324 has been postponed until the May-June 2012 timeframe. This will give time for a new amateur transceiver to be delivered to the ISS by cargo vehicle and give the crew more time to prepare for the experiment. The SpEx website is: http://knts.tsniimash.ru/Shadow/en/

[ANS thanks TSNIIMASH for the above information]

/EX

SB SAT @ AMSAT $ANS-345.06
SKN On OSCAR 2012 In Memory Of W1JSM

AMSAT News Service Bulletin 345.06
>From AMSAT HQ SILVER SPRING, MD.
December 11, 2011
To All RADIO AMATEURS
BID: $ANS-345.06

You are cordially invited to participate in Straight Key Night on OSCAR 2012, conducted by AMSAT for all radio amateurs throughout the world. This year's event is dedicated to the memory of Don Brown, W1JSM, who passed away in 2011, aged 90. Don was a longtime, enthusiastic VHF/UHF and satellite operator, and one of our most frequent Best Fist winners.

As always, SKN on OSCAR is simple and informal. Just operate CW through one or more satellites on 1 January 2012 (0000 to 2400 UTC), using a straight hand key.

There is no need to send in a log, but all participants are encouraged to nominate someone they worked for Best Fist. Your nominee need not have the best fist of anyone you heard, only of those you worked. Send your nomination to w2rs@amsat.org. A list of those nominated will appear in ANS in early February.

[ANS thanks Ray Soifer, W2RS for the above information]

/EX

SB SAT @ AMSAT $ANS-345.07
Pacific Islands Activation on Satellites

AMSAT News Service Bulletin 345.07
>From AMSAT HQ SILVER SPRING, MD.
December 11, 2011
To All RADIO AMATEURS
BID: $ANS-345.07

Pacific Islands Activation on Satellites

The Ohio/Penn DX Bulletin No. 1039 released on December 5, 2011 says that two satellite operations are planned from islands in the Pacific Ocean:

JD1, OGASAWARA. Makoto, JI5RPT, will once again be active as JD1BLY from Chichijima Island (AS-031), Ogasawara, between December 24th and January 2nd, 2012. Activity will be on 80-6 meters, including the satellites, using CW, SSB and the Digital modes (NO 6m EME).
QSL via his home callsign JI5RPT. His log search will be available on his Web site at: http://www.ji5rpt.com/jd1
He will also use Twitter to inform his real-time activities at:

http://twitter.com/jd1bly

KH0, MARIANA ISLANDS. Operators Buchi, JO3FRH and Masa, JE4SMQ will be active as KH0UY and KH0K, respectively, from Saipan, Northern Mariana Islands between January 7-10th, 2012. Activity will be on 80-6 meters, plus the satellites. QSL via their home callsigns, direct or by the Bureau.

[ANS thanks The Ohio/Penn DX Bulletin for the above information]

/EX

SB SAT @ AMSAT $ANS-345.08
ARISS UPDATE

AMSAT News Service Bulletin 345.08
>From AMSAT HQ SILVER SPRING, MD.
December 11, 2011
To All RADIO AMATEURS
BID: $ANS-345.08

1. Upcoming School Contact

Nuvviti School in Ivujivik Nunavik, Quebec, Canada succeeded with Amateur Radio on the International Space Station (ARISS) contact on Monday, December 5 at 18:10 UTC via station WH6PN in Hawaii. Students formed a space club and are learning about the ISS via videos, the internet and guest speakers. They are also learning about correct radio usage and protocol and are working on science-related projects that they will display in the gym. First Air and the Makivik Corporation are sponsors of the contact.

2. New Proposal Cycle for ARISS-US Contacts

NASA Teaching From Space (TFS) office recently announced a new proposal cycle for ARISS-US contacts. The deadline for submitting proposals is January 30, 2012 for contacts to be held in the July 15, 2012 - January 15, 2013 timeframe. TFS has received several inquiries and proposals are already coming in. An informational session will be held on Wednesday, December 7 at 12 PM CST (1800 UTC) to answer any questions concerning the proposal process. To attend the session or to have questions answered, contact TFS at JSC-TFS-ARISS@mail.nasa.gov or call 281-244-1919.
For more information, see the TFS Web site:
http://www.nasa.gov/audience/foreducators/teachingfromspace/students/ariss.html

Also see the ARRL article (includes dates for future information sessions):
http://www.arrl.org/news/apply-now-to-host-a-real-time-conversation-with-crewmembers-onboard-the-iss

3. AMSAT News Service Covers ARISS

On Sunday, December 4, AMSAT (Radio Amateur Satellite Corporation) News Service bulletin (ANS-338) included a status on ARISSat-1. "ARISSat-1/KEDR Orbit Losing 1.5 KM Per Day" may be found at: http://amsat.org/pipermail/ans/2011/000572.html

4. Amateur Radio Newsline Covers ARISS

On December 2, the Amateur Radio Newsline Report 1790 posted a story about ARISSat re-entering Earth's atmosphere. The article, "Ham Radio in Space: ARISSat-1 Approaching Last Days On-Orbit," may be viewed at: ftp://ftp.arnewsline.org/quincy/News/news.txt

[ANS thanks Carol, KB2LBI, for the above information]

/EX

SB SAT @ AMSAT $ANS-345.09
Delfi-n3Xt Satellite Includes Amateur Linear Transponder

AMSAT News Service Bulletin 345.09
>From AMSAT HQ SILVER SPRING, MD.
December 11, 2011
To All RADIO AMATEURS
BID: $ANS-345.09

Delfi-n3Xt Satellite Includes Amateur Linear Transponder

Delft University of Technology in the Netherlands has announced their new 3U Cubesat mission, Delfi-Next mission, or Delfi-n3Xt, scheduled for launch in September, 2012 on-board a Dnepr rocket. Delfi-n3Xt is the successor to the Defli-C3, DO-64 flight launched in 2008.

The good news for amateur radio operators is that Delfi-n3Xt includes a linear transponder service as a return favour since the radio amateur community allows Delfi to use their frequencies.

The Delft frequency coordination request on the IARU page says that the linear transponder uplink and downlink frequencies are the same as those used on the earlier DO-64 mission:

Uplink: 435.570 - 435.530 MHz
Downlink: 145.880 - 145.920 MHz (inverting) 400mW PEP

Using the Delft RASCAL software amateur radio groundstations have been able to receive the telemetry downlink from DO-64 and automatically forward the data to a server at Delft University. This software is JAVA based and runs on multiple platforms. The software and

installation instructions are available from Delft University at:
http://tinyurl.com/cg3qs8j (delfispace.nl)

Scientific, Technological, and Engineering, goals of the Delfi-n3Xt mission include:

+ Hands-on education and training of students
+ On-orbit configurable, high-efficiency transceiver platform
+ Development on the nano-satellite spacecraft bus
+ Attitude control with an on-board micro-propulsion system
+ Onboard experiment on hydrogenated amorphous silicon solar cells
  from the micro-electronics institute DIMES from the TU Delft.
+ Experimental S-band transmitter 2401.500 MHz downlink
+ Single-Point-Of-Failure-free OnBoard Computer (OBC)
+ Robust Command and Data Handling System, with significant less
  Bit-Error-Rate (BER) and more failure tolerance than on Delfi-C3.

The Delfi web pages can be found at:
have a look at: http://www.delfispace.nl/

The IARU Satellite Frequency coordination page can be found at:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=138

[ANS thanks Jan PE0SAT, and the TU-Delft Delfi-n3Xt Team for the above information]

/EX

SB SAT @ AMSAT $ANS-345.10
Doug Loughmiller, W5BL Appointed AMSAT JOURNAL Editor

AMSAT News Service Bulletin 345.10
>From AMSAT HQ SILVER SPRING, MD.
December 11, 2011
To All RADIO AMATEURS
BID: $ANS-345.10

AMSAT President Barry Baines, WD4ASW has announced the appointment of Doug Loughmiller, W5BL as the new editor of the AMSAT Journal effective 1 JAN 12. Doug takes the reins from Ed Long, WA4SWJ who has served as editor for over seven years. Barry noted, "Ed has done a masterful job of producing the Journal, creating a magazine that is well designed and well regarded within the amateur radio community. After such a long stint as editor, Ed has decided that it is time for new blood."

Doug, W5BL is returning to 'active duty' within AMSAT. A former President of AMSAT, Doug brings knowledge of AMSAT and its storied history coupled with a desire to help AMSAT now that he has time to support AMSAT once again. Doug is looking for articles for publication, so feel free to contact him with material for inclusion in the Journal. If you've been active on the satellites, represented AMSAT at hamfests or club meetings, or done some home brewing of satellite equipment, and would like to write an article of your experiences, Doug is anxious to hear from you.

[ANS Thanks WD4ASW, Barry, for the above information]

/EX

SB SAT @ AMSAT $ANS-345.11
Mark Hammond, N8MH Appointed AMSAT VP-Educational Outreach

AMSAT News Service Bulletin 345.11
>From AMSAT HQ SILVER SPRING, MD.
December 11, 2011
To All RADIO AMATEURS
BID: $ANS-345.11

AMSAT President Barry Baines, WD4ASW has announced the appointment of Mark Hammond, N8MH as AMSAT Vice President-Educational Relations. Barry noted, "The subject of educational outreach was well discussed at the 2011 AMSAT Symposium, based upon the paper that I presented as well as other presentations that outlined some of the challenges that AMSAT has experienced in creating a structure for fulfilling our mission component regarding education. Mark has agreed to help AMSAT establish and coordinate an education initiative program and serve as AMSAT's senior point of contact with outside organizations regarding educational outreach."

Given the increasing importance of fulfilling education goals as justification for launch opportunities, this is an increasingly important subject for AMSAT. Mark is aptly suited for this position as he is a professor of biology and the Dean of the College of Arts and Sciences at Campbell University, Buies Creek, NC and is very familiar with the potential for using the amateur radio satellites as a teaching resource and understands the teacher perspective as well.

[ANS Thanks WD4ASW, Barry, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Dee Interdonato, NB2F

From -1568176147695075171

```
X-Google-Thread: 107ada,d401a54ccd42bd92,start
X-Google-NewGroupId: yes
X-Google-Thread: 11480d,d401a54ccd42bd92,start
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X-Google-Language: ENGLISH,ASCII-7-bit
Received: by 10.68.213.71 with SMTP id nq7mr13748382pbc.2.1323815407670;
        Tue, 13 Dec 2011 14:30:07 -0800 (PST)
MIME-Version: 1.0
Path: lh20ni19248pbb.0!nntp.google.com!news1.google.com!news.glorb.com!
news.linkpendium.com!news.linkpendium.com!panix!rri.panix.com!robomod!not-for-mail
From: SWPC.Webmaster@noaa.gov
Newsgroups:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.info
Subject: Weekly Highlights of Solar and Geomagnetic Activity, 05 - 11 December
2011
Followup-To: rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space
Date: Tue, 13 Dec 2011 17:30:06 EST
Organization: NOAA Space Weather Prediction Center
Lines: 68
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <20111213223001.5248933C91@panix2.panix.com>
NNTP-Posting-Host: panix6.panix.com
X-Trace: reader1.panix.com 1323815406 6986 166.84.1.6 (13 Dec 2011 22:30:06 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Tue, 13 Dec 2011 22:30:06 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump

:Product: Weekly Highlights and Forecasts
:Issued: 2011 Dec 13 1738 UTC
# Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center
# Product description and SWPC contact on the Web
# http://www.swpc.noaa.gov/weekly.html
#
#                Weekly Highlights and Forecasts
#
Highlights of Solar and Geomagnetic Activity
05 - 11 December 2011
```

Solar activity was at predominantly low levels for the summary period. From 05 - 06 December, two regions dominated the disk in size and solar flare production, Region 1363 (S21, L=108, class/area=Eki/620 on 05 December) and Region 1362 (N08, L=131, class/area=Eso/220 on 03 December). Both regions produced multiple C-class events with Region 1363 responsible for the largest event of the period, a C6/Sf flare at 05/2325 UTC. From 07 - 10 December, Region 1374 (S17, L=352, class/area=Dso/210 on 11 December) and Region 1375 (N08, L=356, class/area=Cso/140 on 11 December) dominated the disk, each producing several small C-class events. The only days of the summary period with activity at very low levels were 06 and 11 December . Multiple coronal mass ejections (CMEs) were observed throughout the week, however, none of them were geoeffective.

No proton events were observed at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit was at moderate levels from 05 - 09 December. A return to background levels was observed on 10 December.

Geomagnetic activity was at predominantly quiet levels during the summary period. From 05 - 08 December, quiet conditions were observed at all latitudes. On 09 December, an isolated period of active conditions was observed at high latitudes. On 10 December, quiet to unsettled conditions were observed as a coronal hole high speed stream (CH HSS) moved into a geoeffective position. Solar wind speed increased from around 330 km/s to around 500 km/s at the ACE spacecraft and the total IMF rose to around 11 nT. Another isolated period of active conditions was observed at high latitudes on 11 December as a result of the CH HSS effects.

Forecast of Solar and Geomagnetic Activity
14 December - 09 January 2012

Solar activity is expected to be at predominately low levels with a chance for isolated M-class activity from 12 - 22 December. A decrease to predominantly low levels is expected from 23 -24 December as Regions 1374 and 1375 rotate off the disk. An increase to a slight chance for M-class activity is expected on 25 December as Region 1363 returns and remain for the duration of the forecast period.

No proton events are expected at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to be at normal to moderate levels the entire forecast period (14 December - 09 January).

Geomagnetic field activity is expected to be at mostly quiet levels from 14 - 25 December. Quiet to unsettled conditions are expected on 26 - 29 December due to effects from a recurrent CH HSS. A return to quiet levels is expected from 30 December - 04 January followed by an increase to quiet to unsettled levels on 05 - 06 January due to effects from a second recurrent CH HSS. Mostly quiet conditions are expected for the remainder of the period.

```
From -7325258563091653853
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X-Google-Attributes: gid8f86f75953,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Received: by 10.68.212.232 with SMTP id nn8mr9483723pbc.1.1324060921334;
        Fri, 16 Dec 2011 10:42:01 -0800 (PST)
Path: lh20ni30015pbb.0!nntp.google.com!news1.google.com!news2.google.com!
news.glorb.com!news-out.readnews.com!news-xxxfer.readnews.com!panix!rri.panix.com!
robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-350 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Fri, 16 Dec 2011 13:41:59 EST
Organization: The Radio Amateur Satellite Corporation
Lines: 2200
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <001b01ccbc22$559611b0$00c23510$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
X-Trace: reader1.panix.com 1324060919 25834 166.84.1.6 (16 Dec 2011 18:41:59 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Fri, 16 Dec 2011 18:41:59 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
Content-language: en-us
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This report is organized into four (4) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - deborbited/returned satellites

SB SAT @ AMSAT W8ISS $WSR-350.S1
WSR 350 Part 1 12/16/2011

AMSAT NEWS SERVICE BULLETIN 350.S1
FROM AMSAT HQ SILVER SPRING, MD, December 16, 2011
TO ALL RADIO AMATEURS
BID: $WSR-350.S1

ARISSat-1 (Radioskaf-b) (Kedr)
Catalog number: 37772
Launch date: August 03, 2011 1843z
Launch site: International Space Station

Status: Operational

Callsign: RS01S

Current Mode(s):
Linear Transponder: U/v
Uplink: 435.758 to 435.742 MHz CW/LSB
Downlink: 145.922 to 145.938 MHz CW/USB

FM Telemetry/SSTV/Messages/ID:
Downlink: 145.950 MHz FM

Telemetry/Beacon:
Downlink: 145.939 MHz CW1
145.919 MHz CW2
145.920 MHz 1k BPSK USB
145.920 MHz 400b BPSK USB

Official Webpage:http://www.amsat.org/amsat-new/ARISSat/ARISSat.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/informal_detail.php?serialnum=89
[08112011]
=====
SO-67 SumbandilaSat
Catalog Number: 35870
Launch Date: September 17, 2009 1555z
Launch site: Baikonur, Kazakhstan

Status: Recovery

Callsign: ZS0SUM

Uplink: 145.875MHz FM tone 233.6 Hz
Downlink: 435.345MHz FM

Mode and Antenna Polarization:
V: Linear

U: Linear

For more information about SO-67:
http://www.amsatsa.org.za/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=88
[09292011]
=====
DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational
Current Mode: Science Mode - Beacon ONLY

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink: 435.530 to 435.570 MHz

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=68
[02092011]
=====
VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05, 2005 0444z
Launch site: Satish Dhawan Space Centre, India

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.9360 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=30

To know what transponder is switched on please listen for the beacon that is active. Each transponder has a different beacon.
[02092011]

=====

SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002 1700z
Launch site: Baikonur, Kazakhstan

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz. The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10 minute timer.
[02092011]

=====

AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993 0140z
Launch site: Kourou, French Guiana

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

```
Official Webpage: http://www.ao27.org
[02092011]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974
Launch site: Vandenberg AFB, California, USA

Status: Operational

Current Mode: Alternating between Mode A and B every 24 hours

Uplink:   145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink:  29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons:   29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
[02092011]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998 0640z (ZARYA module)
Launch sites: Baikonur, Kazakhstan
              Kourou, French Guiana
              Uchinoura Space Center, Japan
              Kennedy Space Center, Titusville, Florida, USA

Status: Operational

Current Active Modes: FM Repeater - OFF
                      Voice -       V/v
                      BBS -         OFF
                      2m APRS -     ON
                      70cm Digi -   ON
                      SSTV -        OFF


Expedition 30 Crew (November 2011 - March 2012 ):
Commander:                Dan Burbank         KC5ZSX
Flight Engineer:          Anton Shkaplerov
Flight Engineer:          Anatoly Ivanishin
Flight Engineer:
```

Flight Engineer:
Flight Engineer:

Available Modes and Frequencies:
Digital/APRS:
Worldwide 2m packet uplink: 145.825 MHz FM 1k2
Worldwide 2m packet downlink: 145.825 Mhz FM 1k2
Worldwide 70cm packet downlink: 437.550 Mhz FM 1k2
Worldwide 70cm packet downlink: 437.550 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
2m Packet Mailbox: RS0ISS-11
2m Digipeater alias: ARISS
70cm Packet Mailbox: RS0ISS-1
70cm Digipeater callsign: RS0ISS
70cm Digipeater alias: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time line is NOT translated from Russian and posted.
[12062011]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-350.S2
WSR 350 Part 2 12/16/2011

AMSAT NEWS SERVICE BULLETIN 350.S2
FROM AMSAT HQ SILVER SPRING, MD, December 16, 2011
TO ALL RADIO AMATEURS
BID: $WSR-350.S2

JUNGU
Catalog Number:
Launch Date: October 12, 2011 05:30:00 UTC
Launch site: Satish Dhawan Space Centre, India

Status: On Orbit

Uplink: 145.??? MHz 1k2 (mode?)
Downlink: 437.505 MHz 9k6 (mode?)

Beacon: 437.275 MHz 15 wpm (?) CW

Callsign:

URL: http://www.iitk.ac.in/me/jugnu/index.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=160
[11102011]
=====
SRMSAT
Catalog Number:
Launch Date: October 12, 2011 05:30:00 UTC
Launch site: Satish Dhawan Space Centre, India

Status: On Orbit

Uplink: 145.900 MHz 1k AX.25 (speed?)
Downlink: 437.500 MHz 2k4 AX.25

Beacon: 437.425 MHz 12 wpm CW

Callsign:

URL: http://srmsat.in/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=181
[11102011]
=====
E1P Explorer 1 [Prime] CubeSat (E1P-U2)
Catalog Number:
Launch Date: October 28, 2011
Launch site: Vandenberg Air Force Base, California, USA

```
Status: On Orbit

Uplink:   437.305 MHz (???)
Downlink: 437.505 MHz AX.25 (SSB?)

Beacon:

Callsign:

URL: http://ssel.montana.edu/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=116
[11102011]
=====
M-Cubed
Catalog Number:
Launch Date: October 28, 2011
Launch site: Vandenberg Air Force Base, California, USA

Status: On Orbit

Uplink:
Downlink: 437.485 MHz AX.25

Beacon:

Callsign:

URL: http://umcubed.org/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=215
[11102011]
=====
RAX-2
Catalog Number:
Launch Date: October 28, 2011
Launch site: Vandenberg Air Force Base, California, USA

Status: On Orbit

Uplink:
Downlink: 437.345MHz 9k6 GMSK

Beacon:

Callsign:

URL: http://rax.engin.umich.edu//

IARU coordination status page:
```

```
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=221
[11102011]
=====
AO-71 AubieSat-1
Catalog Number:
Launch Date: October 28, 2011
Launch site: Vandenberg Air Force Base, California, USA

Status: On Orbit

Uplink:
Downlink: 437.475 MHz 1k2 AX.25

Beacon: 437.475 MHz CW

Callsign: KI4NQO

URL: http://www.space.auburn.edu/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=148
[11262011]
=====
O/OREOS
Catalog Number: 37224
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: On Orbit

Uplink:
Downlink: 437.035 MHZ AX.25

Beacon:

Callsign:

URL: http://www.ooreos.org/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=146
[02092011]
=====
Rax-1 Radio Aurora Explorer
Catalog Number: 37223
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: On Orbit

Uplink:
Downlink: 437.505 MHz 9k6 GMSK
```

```
Beacon:

Callsign: RAX-1

URL: http://rax.engin.umich.edu/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=165
[02092011]
=====
FO-69 Fastrac-1 Sara Lily
Catalog Number: 37227
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: Operational

Uplink 1: 145.980 MHz 1k2 baud
Uplink 2: 145.825 MHz 1k2 baud
Downlink: 437.345 MHz 1k2 and 9k6 baud

Beacon:   437.435 MHz 1k2 AX.25

Callsign: Fast1

URL: http://fastrac.ae.utexas.edu/index.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=83
[07052011]
=====
FO-70 Fastrac-2 Emma
Catalog Number: 37380
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: Operational

Uplink 1: 435.025 MHz 1k2 baud
Uplink 2: 437.435 MHz 9k6 baud
Downlink: 145.825 MHz 1k2 and 9k6 baud

Beacon:   145.825 MHz 1k2 AX.25

Callsign: Fast2

URL: http://fastrac.ae.utexas.edu/index.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=84
[12162011]
=====
StudSat
```

Catalog Number: 36796
Launch Date: July 12, 2010 0352z
Launch site: Satish Dhawan Space Centre, India

Status: On Orbit

Uplink: 437.505MHz, 9600bps FSK
Downlink: 437.505MHz, 9600bps FSK
Beacon : 437.505MHz,   20bps ASK

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=164
[02092011]
=====
TIsat-1
Catalog Number: 36799
Launch Date: July 12, 2010 0352z
Launch site: Satish Dhawan Space Centre, India

Status: On orbit

Callsign: HB9DE

Uplink: 145.980MHz FM, AFSK
Downlink: 437.305MHz FM, AFSK
Beacon: 437.305MHz CW

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=118
[02092011]
=====
HO-68 HOPE-1 (CAS-1)(XW-1)
Catalog Number: 36122
Launch Date: December 15, 2009 0231z
Launch site: Taiyuan Space Center, PRC

Status: Beacon only

Callsign:
Broadcast: BJ1SA-11
BBS: BJ1SA-12

Uplinks: 145.8250 MHz FM, PL 67.0 Hz.
           145.9250 - 145.9750 MHz SSB/CW
           145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
           435.7650 - 435.7150 MHz SSB/CW
           435.6750 MHz AFSK 1200 BPS

Beacon: 435.7900 MHz CW

Mode and Antenna Polarization:
V: LHCP 2.0dBi max

```
U: RHCP 3.0dBi max

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=108

For more information about XW-1 (CAS-1):
http://
[08112011]
=====
SwissCube
Catalog Number: 35932
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Callsign: HB9EG

Beacon(100mw): 437.5050MHz CW
Beacon(1w):    437.5050MHz FSK 1k2bps

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=109
[02092011]
=====
UWE-2
Catalog Number: 35934
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: In Orbit

Beacon(500mw): 437.3850 MHz AFSK 1k2bps
               437.3850 MHz FSK 9k6bps

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=110
[02092011]
=====
ITUpsAT1
Catalog Number: 35935
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Beacon(100mw): 437.325MHz CW
Beacon(1w): 437.325MHz 19k2bps

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=113
[02092011]
=====
```

BEESAT
Catalog Number: 35933
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Callsign: DP0BEE

Beacon(100mw): 436.000MHz CW
Beacon(500mw): 436.000MHz GMSK 4k8bps
Beacon(500mw): 436.000MHz GMSK 9k6bp
[02092011]
=====
CP-6
Catalog Number: 35003
Launch Date: May 19, 2009 2355z
Launch site: Wallops Island, Virginia, USA

Status: Operational

Downlink: 437.365 MHz 1k2 AFSK

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=121
[02092011]
=====
HAWKSAT 1
Catalog number: 35004
Launch Date: May 19, 2009 2355z
Launch site: Wallops Island, Virginia, USA

Status: operational

Downlink: 437.345 MHz ?

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=105
[02092011]
=====
Pharmasat
Catalog Number: 35002
Launch Date: May 19, 2009 2355z
Launch site: Wallops Island, Virginia, USA

Status: Operational

Downlink: 437.465 MHz 1k2 AFSK

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=94
[02092011]
=====

```
ANUSAT
Catalog Number: 34808
Launch Date: April 20, 2009 0115z
Launch Site: Satish Dhawan Space Centre, India

Status: ?

Downlink:  435.000 MHz
Uplink:    145.800 MHz

Telemetry: 137.400 MHz
[02092011]
=====
SOHLA-1 (ASTRO TECH.)
Catalog Number: 33496
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational

Proposed Frequencies and Modes:
Downlink: 437.505 MHz AFSK/CW
Beacon:   437.505 MHz AFSK/CW

Callsign:

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=101
[02092011]
=====
KAGAYAKI (Solan Co.)
Catalog Number: 33495
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: In Orbit

Downlink: 437.375 MHZ    FSK9k6/CW
Beacon:   437.375 MHz    FSK9k6/CW

IARU coordination status page:

AMSAT-NA webpage:

[02092011]
=====
STARS (Kagawa Univ.) (Twin Satellites)
Catalog Number: 33498
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational ?
```

```
Downlinks: 437.485 MHz FM/CW
           437.465 MHz FM/CW
Beacons:   437.305 MHz FM/CW
           437.275 MHz FM/CW

Callsigns: JR5YBN
           JR5YBO

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=99

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=121&retURL
=/satellites/status.php
[02092011]
=====
KKS-1 (Tokyo MCIT)
Catalog Number: 33499
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational

Downlink:  437.455 MHz AFSK/CW
Beacon:    437.385 MHz AFSK/CW

Callsign: JQ1YYY

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=107

AMSAT-NA webapge:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=120&retURL
=/satellites/status.php
[20092011]
=====
PRISM (Tokyo Univ.)
Catalog Number: 33493
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational ?

Downlink: 437.425 MHz AFSK/GMSK/CW
Beacon:   437.250 MHz AFSK/GMSK/CW

Callsign: JQ1YCX

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=97

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=119&retURL
```

=/satellites/status.php
[02092011]
=====
RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number: 32953
Launch Date: May 23, 2008 1520z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational

Curent Modes: Telemetry
              Audio
              Images

Downlinks: 435.315 MHz
           435.215 MHz

AMSAT-NA website:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=115&retURL=/satellites/status.php

Official website:
http://www.npopm.com/?cid=leoca&caid=43
[02092011]
=====
CanX-2
Catalog number: 32790
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational in range of ground station only

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=46
[02092011]
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Downlink: 437.425 MHz 1k2 baud packet

For the latest project status update please visit the AAUSAT-II web page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

```
IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=60
[02092011]
=====
CO-65 CUTE-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational ?

Downlink:  437.475 MHz 9k6 Packet
Uplink:   1267.600 Mhz

Telemetry Beacon:
Downlink: 437.2750 MHz CW

For the latest project status update please visit the Cute-1.7+APD II
web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=78

Command Station blog website:
http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=112&retURL
=/satellites/status.php
[07052011]
=====
Compass-1
Catalog number: 32787
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Current Mode: dependant on last received command

Uplink:   145.980 MHz FM
Downlink: 437.275 Mhz CW
          437.405 MHz Packet

For the latest project status update please visit the Compass 1 web
page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=52

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=114&retURL
```

=/satellites/status.php
[06162011]
=====
CO-66 Seeds II
Catalog number:
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Downlink: 437.485 MHz

Callsign: JQ1YGU

For the latest project status update please visit the Seeds 2 web page: http://cubesat.aero.cst.nihon-u.ac.jp/english/seeds_2_e.html

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=36

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=113&retURL
=/satellites/status.php
[02092011]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007 0702z
Launch site: Baikonur, Kazakhstan

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=94&retURL=
/satellites/status.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=72
[02092011]
=====
CP3
Catalog Number: 31129
Launch Date: April 17,2007 0702z
Launch site: Baikonur, Kazakhstan

Status: Operational

Current Mode: /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=74
[02092011]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005 0652z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon: 437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/xivpicte.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=37
[02092011]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: ?????

Current Mode: /u

Beacon: 436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=96&retURL
=/satellites/status.php

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

```
[02092011]
=====
QuakeSat
Catalog Number: 27845
Launch Date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Telemetry only

Current Mode: 9600 baud data packet

Mode U packet
Downlink: 436.675 MHz 9k6 BPS

Quakesat webpage:
http://www.quakefinder.com/services/quakesat-ssite/
[02252011]
=====
CO-55 Cute-1.7+APD II
Catalog Number: 27844
Launch date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational

Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=69&retURL
=/satellites/status.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=78
[02092011]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001 0240z
Launch site: Kodiak Launch Complex, Alaska, USA

Status: Telemetry only

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink:        144.390 Mhz 1200 Baud
```

```
PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[02092011]
=====
RS-22 RADIO SPORT 22 (MOZHAYETS 4)
Catalog number: 27939
Launch Date: September 27, 2003 0612z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational - 70cm cw only

Current Mode:  /u

CW Beacon - 435.352 MHz
            145.818 MHz

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=76&retURL
=/satellites/status.php
[02092011]
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990
Launch site: Kourou, French Guiana

Status: CW Beacon only

Uplinks:          145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink:      437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[02092011]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984
Launch site: Vandenburg AFB, California, USA

Status: Operational ?
```

```
Current Mode:  /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon:           435.025 MHz
Mode-S Beacon:     2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[07052011]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998 0640z (ZARYA module)
Launch sites: Baikonur, Kazakhstan
              Kourou, French Guiana
              Uchinoura Space Center, Japan
              Kennedy Space Center, Titusville, Florida, USA

Status: Operational

Current Active Modes: FM Repeater - OFF
                      Voice -       V/v
                      BBS -         OFF
                      2m APRS -     ON
                      70cm Digi -   ON
                      SSTV -        OFF


Expedition 30 Crew (November 2011 - March 2012 ):
Commander:                Dan Burbank         KC5ZSX
Flight Engineer:          Anton Shkaplerov
Flight Engineer:          Anatoly Ivanishin
Flight Engineer:
Flight Engineer:
Flight Engineer:


Available Modes and Frequencies:
Digital/APRS:
Worldwide 2m packet uplink:     145.825 MHz FM 1k2
Worldwide 2m packet downlink:   145.825 Mhz FM 1k2
Worldwide 70cm packet downlink: 437.550 Mhz FM 1k2
Worldwide 70cm packet downlink: 437.550 Mhz FM 1k2

Voice:
Region 1 voice uplink:          145.200 MHz FM
Region 2/3 voice uplink:        144.490 MHz FM
Worldwide downlink:             145.800 MHz FM
```

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
2m Packet Mailbox: RS0ISS-11
2m Digipeater alias: ARISS
70cm Packet Mailbox: RS0ISS-1
70cm Digipeater callsign: RS0ISS
70cm Digipeater alias: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[12062011]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-350.S3
WSR 350 Part 3 12/16/2011

AMSAT NEWS SERVICE BULLETIN 350.S3
FROM AMSAT HQ SILVER SPRING, MD, December 16, 2011
TO ALL RADIO AMATEURS
BID: $WSR-350.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

NANOSAIL-D
Catalog Number:
Ejection Date: January 17, 2011

Status: On orbit

Downlink: 437.270 MHz AX.25

URL: http://nanosaild.engr.scu.edu/dashboard.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=115
[01272011]
=====
CP4
Catalog Number: 31132
Launch Date: April 17, 2007

Status: Non-Operational

Current Mode: /u

```
TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon:    437.325 MHz CW
```

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=79
[09062010]
=====
LIBERTAD-1
Catalog Number: 31128
Launch Date: April 17, 2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

```
Uplink:   145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS
```

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=76
[09062010]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: Non-Operational

Current Mode: V/v

```
Uplink/Downlink: 145.825 Mhz FM
Voice Recorder:  145.825 Mhz FM
```

```
IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=51
[09062010]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency:  437.305
                             2407.250

Official Website: http://www.ncube.no

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=24
[09062010]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink:         437.250 MHz FM 67Hz CTCSS
Voice Downlink:      2401.835 MHz FM
Packet Up/Downlink:   437.250 MHz 9k6 packet
Packet Downlink      2401.835 MHz 38k4 packet

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=54
[09062010]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non-Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=53
[09062010]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004 0745z
Launch site: Baikonur, Kazakhstan
```

Status: Non - Operational

Current Mode(s):
Voice repeater: V/u
Uplink: 145.880 MHz FM
Downlink: 435.150 MHz FM

Telemetry: Recovery efforts
Downlink: 435.150MHz 9k6

Analog voice downlink: 435.300 MHz FM
                           435.150 MHz FM
                          2401.200 Mhz FM
Analog voice uplink: 145.860 MHZ FM
                           145.880 MHz USB
                           145.880 MHz FM
                           145.920 MHz FM
                           145.920 MHz FM - 67 Hz PL tone burst
                          1268.705 MHz FM
Digital Downlinks: 435.150 MHz FM 38k4 PBP, 1 watt output
                           435.150 MHz FM 9k6 Pacsat Broadcast Protocol
                          2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Pacsat Broadcast Protocol
                          1268.703 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=19
[12062011]
=====
CANX-1
Catalog Number: 27847
Launch Date: June 30, 2003

Status: Non-Operational

Downlink: 437.8800 MHz AFSK 1k2bps
[06052009]

```
=====
DTUSAT
Catalog Number: 27842
Launch Date: June 30, 2003

Status: Non-Operational

Current Mode: 2k4 AFSK Packet last reported

Downlink: 437.475MHz

Officail webpage: http://dtusat1.dtusat.dtu.dk/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=101&retURL
=satellites/all_oscars.php
[02212009]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink:   435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)

Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Telemetry only

Uplinks:   145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink:  437.325 MHz

Broadcast callsign: MYSAT3-11
BBS:                MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial land and weather imaging payloads offers FM and FSK
Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as
a collaborative effort between the Malaysian government and Surrey
Satellite Technology Ltd.
```

```
[03302009]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink:   145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS:                SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink:   145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational
```

Uplinks

V-band: 145.840 - 145.990 MHz CW/LSB
U-band: 435.550 - 435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks

S2-band: 2401.225 - 2401.475 MHz CW/USB
K-band: 24048.010 - 24048.060 MHz CW/USB
Beacon: 2401.323 MHz
24048.035 MHz

P3-D Telemetry Beacons (IHU)

BEACON	General Beacon(GB)	Middle Beacon(MB)	Engineering Beacon(EB)
2 m	none	145.898 MHz	none
70cm	435.438 MHz	435.588 MHz	435.838 MHz
13cm(1)	2400.188 MHz	2400.338 MHz	2400.588 MHz
13cm(2)	2401.173 MHz	2401.323 MHz	2401.573 MHz
3cm	10450.975 MHz	10451.125 MHz	10451.375 MHz
1.5cm	24047.885 MHz	24048.035 MHz	24048.285 MHz

[07162007]

=====

OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]

=====

UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]

```
=====
SO-35 SUNSAT
Catalog Number: 25636
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater:         436.250 MHz

Uplinks: Mode B Repeater:  145.825 MHz
Mode J Digipeater:         145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Non-Operational

Current Modes:
Telemetry : /u
```

```
Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign:       4XTECH-12

More information of GO-32 can be found at:
http://asri.technion.ac.il/techsat/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=14&retURL
=/satellites/status.php
[07172010]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink:   145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
MO-30 UNAMSAT-2
Catalog Number: 24305
Launch Date: September 5, 1996

Status: Non-operational

Downlink:       435.1380 MHz AFSK 1200 BPS
Downlink:       435.2060 MHz AFSK 1200 BPS
Uplink:         145.8150 MHz AFSK 1200 BPS
Uplink:         145.8350 MHz AFSK 1200 BPS
Uplink:         145.8550 MHz AFSK 1200 BPS
Uplink:         145.8750 MHz AFSK 1200 BPS
[06042009]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Operational
Current Mode: V/u (Mode JA)
```

Voice/CW (Mode JA)
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage:
http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts.htm
[101432011]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Non-operational

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012009]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

```
Status: PSK carrier only

Current Mode:

Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
AO-24 ARSENE
Catalog Number: 22654
Launch Date: May 13, 1993

Status: Non-operational

Uplink:    435.0625 MHz FM 1k2bps AFSK
           435.1125 MHz FM 1k2bps AFSK
           435.1375 MHz FM 1k2bps AFSK
Downlink:  145.9750 MHz FM 1k2bps AFSK
          2446.5025 MHz FM 1k2bps AFSK

Beacon:    2446.4700 MHz CW

Broadcast callsign:
BBS:
[12162009]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992
```

```
Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz
```

```
More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
[05012006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: non-operational

Current Mode:  V/u

Uplink:         145.900 MHz FM 1200-baud Manchester FSK (reserved)
                145.920 MHz FM VOICE
                145.940 MHz FM 1200-baud Manchester FSK (reserved)
                145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink:       437.026 MHz USB VOICE
                (1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[07242009]
=====
UO-15 UoSAT-4
```

```
Catalog Number: 20438
Launch Date: January 22, 1990

Status: Non-operational

Uplink: ?
Downlink: 435.1250MHz (?)
          435.1200MHz (?)
[06042009]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon:   145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
```

http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.8500 - 145.9000 MHz SSB/CW
Downlink 29.4000 - 29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink: 29.4500 - 29.5500 MHz SSB/CW
Beacons: 29.450 MHz
          435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink: 145.9750 - 146.0250 MHz SSB/CW

```
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon 1:  29.352 MHz (intermittent)
Beacon 2:  29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink:     21.260 to 21.300 MHz CW/USB
Downlink:  145.860 to 145.900 MHz CW/USB

Beacon:    145.860 MHz

Robot:     145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink:   21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon:   29.408 MHz

Robot:    29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-350.S4
WSR 350 Part 4 12/16/2011

AMSAT NEWS SERVICE BULLETIN 350.S4
FROM AMSAT HQ SILVER SPRING, MD, December 16, 2011
```

TO ALL RADIO AMATEURS
BID: $WSR-350.S4

THE FOLLOWING SATELLITES HAVE RE-ENTERED OR HAVE BEEN RETURNED SAFELY:

CAERUS
Catalog Number:
Launch Date: December 08, 2010 15:43:00 UTC
Launch site: Kennedy Space Center, Titusville, Florida, USA

Status: Re-entered December 22, 2010

Uplink:
Downlink: 437.600 MHz 1k2 AX.25

Beacon: 437.600 MHz CW

Callsign: KJ6FIX

URL:
http://www2.isi.edu/research/prj-serc/prj-serc_projects/prj-serc_projects-8.htm

IARU coordination status page:

[11102011]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Re-entered
Re-entered: October 25, 2009

Uplink: 1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=56
[09062010]
=====
BEVO-1 (DRAGONSAT-1)
Catalog Number: 35690
Launch Date: May 19, 2009

Status: Re-entered
Re-entered:

```
Downlink: 437.325 MHz 9k6 GMSK
          437.325 MHz CW 20wpm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=117
[07312009]
=====
AggieSat2 (DRAGONSAT-2)
Catalog Number: 35690
Launch Date: May 19, 2009

Status: Re-entered
Re-entered:

Downlink: 436.250 MHz 9k6 FHSS
[11112009]
=====
Pollux
Catalog Number: 35693
Launch Date: July 31, 2009

Status: Re-entered
Re-entered:

Callsign: POLLUX-1

Downlink: 145.825MHz 1k2 AX.25

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=139
[09062010]
=====
Castor (ANDE-2)
Catalog Number: 35694
Launch Date: July 31, 2009

Status: Re-entered
Re-entered:

Callsign: KD4HBO-1

Downlink: 145.825 MHz 1k2 AX.25

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=144
[09062010]
=====
NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Re-Entered
```

Re-entered: July 28, 2008

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=59
[01012009]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink: 145.825 Mhz FM APRS AX25
APRS Uplink: 145.825 MHz FM APRS AX25
Voice/PSK31 Uplink: 28.120 MHz

Packet to Voice ID: RAFT
[06112007]
=====
GENESAT-1
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Re-Entered
Re-entered date: August 8, 2010

Current Mode: /u

Callsign: KE7EGC

Telemetry Beacon Downlink: 437.0695 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[08082010]
=====
HO-59 HITSat

Catalog number: 29484
Launch date: September 22, 2006

Status: Re-Entered
Re-entered: June 18, 2008

```
Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon:             437.2750 MHz CW
```

Callsign: JR8YJT
[01012009]
=====
SO-43 Starshine 3
Catalog Number: 26929
Launch Date: September 30, 2001

Status: Re-Entered
Re-entered: January 21, 2003

Beacon: 145.825Mhz
[02212009]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

```
Voice: 301-589-6062
       888-322-6728
FAX:   301-608-3410
```

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at}
amsat.org
NNNN
/EX

```
From -1497283760397180874
X-Google-Thread: 10e8ad,c90c0f6ddd872a30,start
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII
Received: by 10.68.74.201 with SMTP id w9mr10356015pbv.0.1324174460869;
        Sat, 17 Dec 2011 18:14:20 -0800 (PST)
MIME-Version: 1.0
Path: lh20ni35019pbb.0!nntp.google.com!news2.google.com!
newsfeed2.dallas1.level3.net!news.level3.com!panix!rri.panix.com!robomod!not-for-
mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-352 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sat, 17 Dec 2011 21:14:19 EST
Organization: The Radio Amateur Satellite Corporation
Lines: 630
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <001901ccbd2a$ba0026f0$2e0074d0$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
X-Trace: reader1.panix.com 1324174460 1044 166.84.1.6 (18 Dec 2011 02:14:20 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 18 Dec 2011 02:14:20 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
```

X-Comment-1: The moderators do not necessarily agree or disagree with this article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us

AMSAT NEWS SERVICE
ANS-352

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:

* Keep Amateur Radio in Space: Project Fox-1 Fundraising Campaign
* ARRL Teachers Institute Plans Satellite Demo on December 20
* AMSAT Awards
* This Week 50 Years Ago: OSCAR 1 in Orbit
* Silent Key: Ignacio Martinez, CE2MH, President of AMSAT-CE
* N1JEZ Adapts AMSAT-UK FUNcube Dongle as SDR Panadaptor
* Soyuz Preparations Continue for Three Ham Crew Launch to ISS
* UNISEC Announces Second Micro/Nano-Satellite Technology Idea Contest
* Satellite Shorts From All Over
* Got CubeSat? ESA January Vega Launch to Fly 6 More

SB SAT @ AMSAT $ANS-352.01
Keep Amateur Radio in Space: Project Fox-1 Fundraising Campaign

AMSAT News Service Bulletin 352.01
>From AMSAT HQ SILVER SPRING, MD.
December 18, 2011
To All RADIO AMATEURS
BID: $ANS-352.01

Letters mailed to all AMSAT members this week kicked off the Project Fox fundraising campaign. "Given the sad news on AO-51," AMSAT President Barry Baines, WD4ASW, said, "we highlighted at the recent 2011 Symposium that AMSAT is actively developing Fox-1, a new spacecraft that is designed to replace AO-51. Fox-1 development now takes on a great sense of urgency."

AMSAT Vice-President of Engineering, Tony Monteiro, AA2TX says, "Fox-1 will advance single-channel FM repeater satellite operation beyond the experience of AO-51. It will advance AMSAT to the next generation of AO-51 class satellites."

Fox-1 is designed for longer operational life with these features:

+ Fox-1 is designed to operate in sunlight without batteries once the battery system fails. This applies lessons learned from AO-51 and ARISSat-1 operations.

+ In case of IHU failure Fox-1 will continue to operate its FM repeater in a basic, 'zombie sat' mode, so that the repeater remains on-the-air.

+ Fox-1 is designed as the immediate replacement for AO-51. Its U/V (Mode B) transponder will make it even easier to work with modest equipment.

+ From the ground user's perspective, the same FM amateur radio equipment used for AO-51 may be used for Fox-1.

+ Extending the design, Fox-2 will benefit from the development work of Fox-1 by adding more sophisticated power management and Software Defined Transponder (SDX) communications systems.

Barry concluded, "AMSAT's ability to provide a replacement spacecraft and get it launched is dependent upon the active support of donors who wish to see Fox-1 fly."

Several opportunities to make your donation to keep amateur radio in space include:

+ Return the form sent with the letter to reply with your donation for the Fox-1 Project.
  - All donations over $40 will receive a Fox pin.
  - Donations of $120 or more qualify you for AMSAT President's Club

+ Call Martha at the AMSAT Office +1-888-FB AMSAT (1-888-322-6728)
+ Paypal donation widget on the main page at: http://www.amsat.org
+ Paypal donation widget for Project Fox at: http://www.amsat.org/amsat-new/fox/
+ You can also go to the Paypal site and send your donation to martha@amsat.org.
+ The AMSAT Store: http://www.amsat-na.com/store/categories.php

On November 15 AMSAT submitted a proposal to NASA for their CubeSat Launch Initiative, also known as the "Educational Launch of NanoSat" (ELaNa) program. NASA selects projects that they deem to have merit in support of their strategic and educational goals. Projects that are selected will be able to enter into a collaboration agreement where NASA will cover the integration and launch costs of the satellite.

AMSAT, working with ARRL, highlighted the educational merit of the project including the incorporation of Fox-1 into the ARRL Teacher Institute seminars. ARRL also provided a letter of support for the project that was a key component of our proposal. NASA will select from all of the submissions and announce the winning projects by January 30, 2012.

The Powerpoint presentations from the 2011 AMSAT Space Symposium on the Project Fox web site provide a good overview of the technical progress: http://www.amsat.org/amsat-new/fox/

+ Fox-1 Project Overview
+ Fox-1 Mechanical Design
+ Fox-1 Thermal Design
+ Fox-1 Radiation Environment

[ANS thanks AMSAT President Barry Baines, WD4ASW, and AMSAT's Project Fox Engineering team for the above information]

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SB SAT @ AMSAT $ANS-352.02
ARRL Teachers Institute Plans Satellite Demo on December 20

AMSAT News Service Bulletin 352.02
>From AMSAT HQ SILVER SPRING, MD.
December 18, 2011
To All RADIO AMATEURS
BID: $ANS-352.02

Satellite operators are invited to listen for ARRL Education and Technology Program Director, Mark Spencer, WA8SME on the afternoon pass of AO-27 (and possibly other satellites) on December 20 as he conducts an operating demonstration from the ARRL Teachers Institute at Mississippi State University. Satellite passes on December 21 are planned as backup operating times.

Mark will be covering topics regarding using space-borne systems in the classroom. He says a major part of that unit is demonstrating ham satellite contacts.

Mark will be using the call W1AW/5 for the pass. If you'd like a QSL for the contact, send an e-mail to him (mspencer@arrl.org) and he will make sure you get one.

Find out more about the ARRL Teachers Institutes on-line at:
http://www.arrl.org/teachers-institute-on-wireless-technology.

[ANS thanks Mark Spencer, WA8SME for the above information]

/EX

SB SAT @ AMSAT $ANS-352.03
AMSAT Awards

AMSAT News Service Bulletin 352.03
>From AMSAT HQ SILVER SPRING, MD.
December 18, 2011
To All RADIO AMATEURS
BID: $ANS-352.03

AMSAT Director Contests and Awards, Bruce Paige, KK5DO says that congratulations are in order for the latest AMSAT Awards recipients.

The following have entered into the Satellite Communicators Club for making their first satellite QSO.
+ Jackson Wilson, KF5LOQ
+ Bill Caton, WD4DHJ
+ Marcelo Teruel, IK0USO
+ Mike Massell, KD0LMB
+ Kelly Bradley, KC5YPU
+ Dmitry Krylov, UA3RAB

The following have earned the AMSAT Communications Achievement Award.
+ Bill Caton, WD4DHJ, #546

The following have earned the AMSAT Sexagesimal Communications Achievement Award.
+ Wyatt Dirks, AC0RA, #162
+ George Carr, WA5KBH, #163

The following have earned the South Africa Satellite Communications Achievement Award.
+ Bill Caton, WD4DHJ, #US175
+ Demitry Krylov, UA3RAB, #US176
+ Marcelo Teruel, IK0USO, #US177

The following have earned their Robert W. Barbee, Jr. W4AMI Award
+ Wyatt Dirks, AC0RA, #75

To see all the awards visit http://www.amsat.org.

Bruce also invites everyone to check into the Houston AMSAT Net on Wednesday 0200z (Tuesday evening in North America) on Echolink - Conference *AMSAT* The net also streams MP3 at: http://www.amsatnet.com And a podcast can be downloaded from http://www.amsatnet.com/podcast.xml or iTunes.

[ANS thanks Bruce Paige, KK5DO for the above information]

/EX

SB SAT @ AMSAT $ANS-352.04
This Week 50 Years Ago: OSCAR 1 in Orbit

AMSAT News Service Bulletin 352.04
>From AMSAT HQ SILVER SPRING, MD.
December 18, 2011
To All RADIO AMATEURS
BID: $ANS-352.04

The AMSAT News Service is re-running the Project OSCAR Newsletters to commemorate the 50th anniversary of OSCAR 1. During the November/December 2011 time frame you will be able to share the excitement of the launch campaign that started it all 50 years ago.

This week is the last installment in the replay of these historic newsletters.

The Newsletters were hand-typed back in 1961. Thanks to Don Ferguson, KD6IRE for scanning the original documents announcing OSCAR 1.

<Begin Commemorative Message>

OSCAR NEWSLETTER

December 21, 1961

As of December 19, 1961 (one week in orbit) the amateur radio satellite Oscar I had completed 104 revolutions about the earth on a North-South-North orbit. Reports are beginning to pour into the Oscar Headquarters. A total of 296 reports from ll foreign countries have been received, with radio messages indicating more are on the way. Mail has been delayed because of the Christmas rush, but it is hoped that future reports will reach us more rapidly. Reports have proven to be consistent and accurate enough for use in generating tracking predictions. Telemetry information provided by the keying rate indicates that Oscar I is running a fever. Recent data establishes the temperature of the package to be l25�F.

The following is a summary of the Oscar 1 satellite:

+ Frequency: Approximately 144.983 Mc. Power Output: 100+ milliwatts
+ HI-rate: Proportional to temperature. (IO HI's in 30 seconds �64�F).
+ Tumble rate: Approximately 20 seconds.
+ Apogee: (Point farthest from the earth) - Approximately 275 miles.
+ Perigee: (Point closest to the earth) - Approximately 150 miles.
+ Orbital Period: Approximately 92 minutes.
+ Total Doppler Shift: Approximately 6.5 kc.(Frequency received-is higher than transmitted when satellite is approaching your station; lower when going away).
+ Transmitter: Transistor crystal oscillator on 72.5 mc., transistor amplifier and "Veri-cap" diode doubler to 145 mc. Keyer consists of transistor multi-vibrator and counters with diode logic. Oscillator is keyed in base circuit.
+ Power Supply: Mercury batteries. Expected life of batteries: 3 to

4 weeks.
+ Antenna: 1/4-wave monopole, about 19 inches long.
+ Dimensions and weight: 12" x 10" x 8". Weight: 10 pounds.

All daytime passes are from North to South: All nighttime passes are from South to North. A preliminary review of a sample of reports for one pass provides some interesting information. The acquisition times and fade-out times correlate closely among all the receiving stations in the same area. Further, the correlations have improved noticeably for the later orbital passes. This emphasizes that operators are gaining experience and that the predictions have been sufficiently accurate to permit early acquisition.

Many amateurs have been surprised at the great range which may be spanned by this beacon, whose output power is about 1/4 that required to light a flash-light bulb. Reports indicate reliable reception up to a distance of about 1400 miles from the satellite path. On an overhead pass, signal reports of 40 decibels above noise level are common!

The Oscar Data Reduction group has reported a few messages indicating 'that the last dot of the letter "I" has been missing. Anybody noticing this who has a tape recording of the "missing dot" is requested to air mail it to the Association as soon as possible.

Reports of the "HI" rate are urgently requested. If the temperature inside the package continues to rise, it is possible that the operating life of Oscar could be cut short by a high temperature failure of some component. The temperature rise does not seem linear, so all reports will be welcome! Also, please monitor the frequency in off-hours to determine if Oscar can be heard by unusual propagation modes at great distances!

Orbital data is being broadcast by W1AW (see QST for schedules) and by the Voice of America "Space-Warn" program on various frequencies (9.525, 11.79, 11.83, and 15.29 mc) at 0330 GMT, Monday through Saturday.

Send all reception reports of Oscar to: Project Oscar Association,
Box ---, Sunnyvale, California, U.S.A.
Thanks for your splendid cooperation and keep up the good work! 73.

<End of Commemorative Message>

[ANS thanks Don Ferguson, KD6IRE and Project OSCAR for the above information]

/EX

SB SAT @ AMSAT $ANS-352.05
Silent Key: Ignacio Martinez, CE2MH, President of AMSAT-CE

AMSAT News Service Bulletin 352.05
>From AMSAT HQ SILVER SPRING, MD.
December 18, 2011
To All RADIO AMATEURS
BID: $ANS-352.05

AMSAT received the sad news that Ignacio Martinez, CE2MH, President of AMSAT-CE passed away suddenly December 9 after a brief illness. He was 73. Ignacio was founder of FEDERACHI, the Chilean Radio Amateur Federation, from where he laid the foundations to create AMSAT-CE.

There he served as President of the Board from its beginnings in 1992 until he passed away. He was the driving force behind the CESAR-1 satellite project to which Tom Clark, K3IO made a great contribution.

Ignacio is survived by his wife Patricia, two daughters and a son. A memorial service took place in Vina del Mar on Sunday, December 11. (Book of Condolences is posted at http://www.amsat.cl/)

[ANS thanks Axel Kruuse, CE3AFC and Oscar Cabello, CE3AFX for the above information]

/EX

SB SAT @ AMSAT $ANS-352.06
N1JEZ Adapts AMSAT-UK FUNcube Dongle as SDR Panadaptor

AMSAT News Service Bulletin 352.06
>From AMSAT HQ SILVER SPRING, MD.
December 18, 2011
To All RADIO AMATEURS
BID: $ANS-352.06

AMSAT member, Mike Seguin, N1JEZ is active on the microwave bands in addition to his amateur satellite activities. Mike is AO-7's control station.

Mike wrote and presented a paper, "A Panadapter for the FT-817" at Microwave Update 2011 where he describes using the AMSAT-UK FUNcube Dongle SDR receiver adapted for use as a panadapter display.

Mike is active on 10 GHz and above, using his FT-817 as the IF rig on 144 and 432 MHz with microwave transverters. The FT-817 having a common 68.33 MHz IF (for VHF and UHF) in its receiver fits within the 64 MHz to 1700 MHz range of the FUNcube dongle.

In his paper Mike describes how to find the location to tap the common IF and an active buffer/isolation amp so as to minimize any interaction with the radio.

A copy of Mike's paper and a link to sources of the PC Boards can

be found on the W1GHZ Small Projects Page:
http://www.w1ghz.org/small_proj/small_proj.htm

Find out more about the FUNcube Dongle at:
http://www.funcubedongle.com/

[ANS thanks Mike Seguin, N1JEZ for the above information]

/EX

SB SAT @ AMSAT $ANS-352.07
Soyuz Preparations Continue for Three Ham Crew Launch to ISS

AMSAT News Service Bulletin 352.07
>From AMSAT HQ SILVER SPRING, MD.
December 18, 2011
To All RADIO AMATEURS
BID: $ANS-352.07

NASA astronaut Don Pettit KD5MDT, Russian cosmonaut Oleg Kononenko RN3DX and Dutch astronaut Andre Kuipers, PI9ISS continue preparations for their planned Soyuz launch to the ISS on on December 21 at 0816 EST (1316 GMT). The SpaceFlightNow web site posted a photo album of the ISS Expedition 30 crew this week during inspections and fit checks in the seats: http://spaceflightnow.com/station/exp30/111209fitcheck/

The European Space Agency has released a video of Andre Kuipers' mission which can be viewed at:
http://spaceflightnow.com/station/exp30/kuipers.html

The Soyuz TMA-03M spacecraft will be encapsulated in the aerodynamic shroud and then mated to its rocket booster next week in preparation for rollout to the launch pad on December 19. After launch the Soyuz will fly a two-day trek to rendezvous with the station for a planned automated docking December 23 at 1020 EST (1520 GMT).

These three hams are headed for a half-year mission aboard the ISS as members of Expeditions 30 and 31.

[ANS thanks SpaceFlightNow.com for the above information]

/EX

SB SAT @ AMSAT $ANS-352.08
UNISEC Announces Second Micro/Nano-Satellite Technology Idea Contest

AMSAT News Service Bulletin 352.08
>From AMSAT HQ SILVER SPRING, MD.
December 18, 2011
To All RADIO AMATEURS
BID: $ANS-352.08

Japan's University Space Engineering Consortium (UNISEC) announced the second Mission Idea Contest for micro/nano-satellite technology sponsored by the University of Tokyo.

The Mission Idea Contest was established in 2011 to provide aerospace engineers, college students, consultants, and anybody interested in space with opportunities to present their creative ideas and gain attention internationally. The primary goal of this contest is to open a door to a new facet of space exploration and exploitation.

The contest has two categories for entry:

+ Mission Idea and Satellite Design which is open for any individual, group or company with suitable space systems expertise and an enthusiasm for micro/nano-satellites.

+ Mission Idea and Business Model which is open for any individual, group or company with suitable business expertise and an enthusiasm for micro/nano-satellites.

+ The abstract deadline is May 1, 2012.

Finalists will be invited to present in Japan at the 4th Nano-satellite symposium in Nagoya, Japan on October 10-13, 2012. Awards will be announced at a later date. Selected papers will be published in a peer-reviewed journal to provide high visibility for winning ideas and the potential for future collaboration and support for missions.

UNISEC has posted information about the contest at:
http://www.spacemic.net/

AMSAT-UK posted the news at:
http://www.uk.amsat.org/2011/12/13/nanosat-mission-idea-contest/

[ANS thanks University Space Engineering Consortium (UNISEC) for the above information]

/EX

SB SAT @ AMSAT $ANS-352.09
Satellite Shorts From All Over

AMSAT News Service Bulletin 352.09
>From AMSAT HQ SILVER SPRING, MD.
December 18, 2011
To All RADIO AMATEURS
BID: $ANS-352.09

+ Playing this link too often may lead to additional coal in your stocking ... hum along as the NOAA Weather Radio voice (ahem) sings "Deck the Halls":

http://www.youtube.com/watch?v�GJbkQulQw&feature�are

+ While you're recovering from the first video watch: "A Ham's Night Before Christmas" at:
http://www.youtube.com/watch?v�9REVC4dtc

+ Trevor, M5AKA says the ARRL has kindly given permission to put some of the OSCAR 1 articles from the February 1962 edition of QST on the AMSAT-UK website. Links are at the bottom of this article:
http://www.uk.amsat.org/2011/12/12/50th-anniversary-of-oscar-1/

+ Eric, F4EJW announced a new website, AAR29/SAT, where he and Remy, F1NNI provide an online log sharing resource for each of the amateur satellites in service. Go to Eric's blog link, then click on the Amateur Radio Satellite AAR29 banner:
http://f4ejw.over-blog.com/

+ XU, CAMBODIA. A group of JA operators plan to be active from Sihanoukville between January 14-22. Operators mentioned are Masumi/JA3AVO (XU7AVO), Takeo/JA3BZO (XU7AEN), Kunio/JA1CJA/JH3LSS (XU7CJA), Tsuguya/JA3UJR (XU7UJR), Shozo/JA3HJI (XU7HJI pending) and Tatsuo/JA3ARJ (XU7ARJ pending). Activity will probably be on 160-6 meters using CW, SSB and Digital modes. Also look for satellite activity on 2m and 70cm. QSL via their home callsigns. (Ohio/Penn DX Bulletin No. 1040, December 12, 2011)

+ You can see more details and hear more of the mission plans of these CubeSats:

Delfi-n3Xt video
http://www.youtube.com/watch?v�4rw_BGtaI&feature�are

University of Montana's Explorer-1[Prime]
http://www.youtube.com/watch?v�STzHXv9lY&feature�are

+ Southgate ARC's web has posted an excellent resource page called, "Working the SSB satellites". There are several links describing the techniques required for SSB operation as compared to operating via the FM satellites: http://tinyurl.com/blul4eb (Southgate)

+ George, KA3HSW reported there was a typo in the Topr.txt file as received from the AO-27 control team: The second line of the file, which defines the transponder "on" period, should read 420, not 240. You can edit the file yourself with your favorite text editor, or download a corrected version of the file from the AO-27 scheduler website: http://sites.google.com/site/ao27satellitescheduler.

+ A Cuban TV news crew filmed Hector, CO6CBF satellite demonstration for high school students and teachers in Cienfuegos City, Cuba. This was broadcast by the national TV in Cuba and now a lot more hams are interested in satellites. Hector posted his TV video at:
http://www.youtube.com/watch?v�-mbrlVQXI&feature�utu.be
XE1SOV posted a video from his end of a contact with CO6CBF at:

http://www.youtube.com/watch?v�i7vRJk28M

+ AMSAT's Keeper of the Keps, Ray Hoad, WA5QGD reports that Space-Track has assigned the following catalog numbers to the satellites launched on October 28:

Cat#	Name
37850	COSMOS 2251 DEB (boaster)
37851	Dice 1
37852	Dice 2
37853	RAX-2
37854	AUBIESAT-1
37855	HRBE (formally EXP1 Prime renamed for William H. Hiscock, HRBE �iscock Radiation Belt Explorer)

+ The UK Tech Podcast, FrequencyCast, has released a short video showing reception in Essex of FM voice and an SSTV image from the amateur radio satellite ARISSat-1. The 145.950 MHz FM signal was recorded at 1055 UT on the November 14, 2011. Watch at: http://www.youtube.com/watch?feature�ayer_embedded&v�Sbj-ga2OA

[ANS thanks everyone for the above information]

/EX

SB SAT @ AMSAT $ANS-352.10
Got CubeSat? ESA January Vega Launch to Fly 6 More

AMSAT News Service Bulletin 352.10
>From AMSAT HQ SILVER SPRING, MD.
December 18, 2011
To All RADIO AMATEURS
BID: $ANS-352.10

The January 12012 inaugural launch of the ESA Vega rocket from the ESA spaceport at Kourou in the Caribbean will carry the amateur radio microsatellite ALMASat-1 and at least 6 CubeSats. The orbit is planned for 1450 by 300 km at an inclination of 69.5 degrees.

There were slots for up to nine CubeSats on the Vega launch. Six, and possibly a seventh, satellites are ready for launch. The six that are ready to fly include:

+ Xatcobeo (a collaboration of the University of Vigo and INTA, Spain) to demonstrate software-defined radio and solar panel deployment.

+ Robusta (University of Montpellier 2, France) to test and evaluate radiation effects (low dose rate) on bipolar transistor electronic components.

+ e-st@r (Politecnico di Torino, Italy) to demonstration of an active 3-axis Attitude Determination and Control system including an inertial measurement unit.

+ Goliat (University of Bucharest, Romania) to provide imaging of the Earth surface using a digital camera and in-situ measurement of radiation dose and micrometeoroid flux.

+ PW-Sat (Warsaw University of Technology, Poland) to test a deployable atmospheric drag augmentation device for de-orbiting CubeSats. PW-Sat carries an FM to DSB amateur radio transponder with an FM input on 435.020 MHz and DSB output on 145.900 MHz.

+ MaSat-1 (Budapest University of Technology and Economics): to demonstrate various spacecraft avionics, including a power conditioning system, transceiver and on-board data handling.

ESA CubeSats delivered for first Vega flight news web page:
http://www.esa.int/esaMI/Education/SEM3L0WWVUG_0.html

ESA Education - CubeSats
http://www.esa.int/esaMI/Education/SEM3N03MDAF_0.html

A picture of ALMASat-1 and the six CubeSats is posted at AMSAT-UK:
http://tinyurl.com/c8o73zw (uk.amsat.org)

The IARU amateur satellite frequency coordination pages hosted by AMAT-UK list the frequencies of the amateur radio satellites:
http://www.amsat.org.uk/iaru/

Mineo Wakita, JE9PEL provides complete coverage of the Vega launch on his 'ESA CubeSats Update' web pages. You'll find an overview of each of the satellite missions, frequencies, modulation/protocols, and links to the developers home web pages posted at:
http://www.ne.jp/asahi/hamradio/je9pel/esa9cubf.htm

[ANS thanks ESA, AMSAT-UK, Southgate ARC News site for the above information]

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In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office. And with that, please keep in mind the size of outer space: If the Earth-Sun distance shrinks to one inch, the nearest star lies 4.3 miles away and the diameter of our galaxy is 100,000 miles at this scale.

73,
This week's ANS Editor,

JoAnne Maenpaa, K9JKM
K9JKM at amsat dot org

```
From 681984185996070155
X-Google-Thread: 107ada,e938668a9fa15f1,start
X-Google-NewGroupId: yes
X-Google-Thread: 11480d,e938668a9fa15f1,start
X-Google-NewGroupId: yes
X-Google-Thread: 10e8ad,e938668a9fa15f1,start
X-Google-NewGroupId: yes
X-Google-Thread: 10b9c8,e938668a9fa15f1,start
X-Google-NewGroupId: yes
X-Google-Attributes:
gida3e752f117,gid7221ecd0f7,gid8f86f75953,gida4a23d5f63,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Received: by 10.68.213.99 with SMTP id nr3mr3031650pbc.2.1324420207336;
        Tue, 20 Dec 2011 14:30:07 -0800 (PST)
MIME-Version: 1.0
Path: lh20ni45675pbb.0!nntp.google.com!news1.google.com!
newsfeed2.dallas1.level3.net!news.level3.com!panix!rri.panix.com!robomod!not-for-
mail
From: SWPC.Webmaster@noaa.gov
Newsgroups:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.info
Subject: Weekly Highlights of Solar and Geomagnetic Activity, 12 - 18 December
2011
Followup-To: rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space
Date: Tue, 20 Dec 2011 17:30:06 EST
Organization: NOAA Space Weather Prediction Center
Lines: 44
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <20111220223001.B5E3333C69@panix2.panix.com>
NNTP-Posting-Host: panix6.panix.com
X-Trace: reader1.panix.com 1324420207 22074 166.84.1.6 (20 Dec 2011 22:30:07 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Tue, 20 Dec 2011 22:30:07 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump

:Product: Weekly Highlights and Forecasts
:Issued: 2011 Dec 20 2011 UTC
# Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center
# Product description and SWPC contact on the Web
# http://www.swpc.noaa.gov/weekly.html
#
#                Weekly Highlights and Forecasts
#
```

Highlights of Solar and Geomagnetic Activity
12 - 18 December 2011

Solar activity was at very low to low levels. Region 1367 (S19, L=076, class/area Cso/030 on 08 December) was the most active region and produced occasional to frequent C-class flares near and beyond the west limb during 13-15 December. Region 1376 (N20, L=306, class/area Dro/020 on 18 December) was also responsible for producing multiple C-class flares during 17-18 December. There were no Earth-directed coronal mass ejections observed during the period.

No proton events were observed at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit was at normal levels.

Geomagnetic field activity was at mostly quiet levels during most of the period, with isolated periods of unsettled levels observed at high latitudes.

Forecast of Solar and Geomagnetic Activity
21 December - 16 January 2012

Solar activity is expected to be at low levels during the period.

No proton events are expected at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to be at normal to moderate levels during the period.

Geomagnetic field activity is expected to be at quiet levels during 21-27 December. Activity is expected to increase to quiet to unsettled levels during 28-29 December and 5-6 January due to recurrent coronal hole high-speed streams. Quiet levels will prevail 30 December - 4 January and 7-16 January.

```
From 5730448658664109488
X-Google-Thread: 10e8ad,dd0bfa88bae07cf2,start
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII
Received: by 10.68.190.71 with SMTP id go7mr17926184pbc.8.1324932616196;
        Mon, 26 Dec 2011 12:50:16 -0800 (PST)
MIME-Version: 1.0
Path: lh20ni67578pbb.0!nntp.google.com!news1.google.com!
newsfeed2.dallas1.level3.net!news.level3.com!panix!rri.panix.com!robomod!not-for-
```

mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-359 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Mon, 26 Dec 2011 15:50:15 EST
Organization: The Radio Amateur Satellite Corporation
Lines: 418
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000a01ccc40f$ecd30e30$c6792a90$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
X-Trace: reader1.panix.com 1324932615 24814 166.84.1.6 (26 Dec 2011 20:50:15 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Mon, 26 Dec 2011 20:50:15 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to   rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to   rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-language: en-us

AMSAT NEWS SERVICE
ANS-359

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* Help AMSAT to Fly Fox-1: Solar Panel Campaign Begins
* SKN On OSCAR 2012 In Memory Of W1JSM
* FO-29 Satellite Recovery in Progress
* AMSAT-India Announces Linear Transponder
* UK Space Agency Ukube-2 CubeSat Mission Concept Studies
* Satellite Shorts From All Over
* ARISS Status - 19 December 2011

SB SAT @ AMSAT $ANS-359.01
Help AMSAT to Fly Fox-1: Solar Panel Campaign Begins

AMSAT News Service Bulletin 359.01
From AMSAT HQ SILVER SPRING, MD.
December 25, 2011
To All RADIO AMATEURS
BID: $ANS-359.01

As AMSAT embarks on the Fox-1 Project, here is an opportunity to literally put your callsign on the Fox hardware. AMSAT is looking for major donations to help underwrite the cost of solar cells/ panels, one of the more significant expenses of the project. These solar cells are needed for the flight unit as well as for the a flight spare. As Fox-1 will have solar cells on all six sides of the spacecraft and given the relatively small surface area available on each side (at most 4" by 4" per side), AMSAT will invest in high efficiency solar cells to gain as much power as possible to operate the spacecraft.

To protect the installed solar panels prior to launch, a lexan cover for each side will be fabricated and mounted to protect the cells. Prior to placement of the flight spacecraft into the 'P-Pod' that will house the cubesats on the launch vehicle, the lexan covers will be removed.

"Friends of Fox" are encouraged to consider several levels of funding support:

1. Donate $1,000 to support purchase of one panel that will cover one side of the spacecraft.

2. Donate $6,500 to support the purchase of six sets of solar panels to cover the entire spacecraft.

Donors who contribute at these levels will have their callsign etched on the lexan cover protecting solar panels of the flight unit and the flight spare. Following the launch of Fox-1, donors will receive the lexan solar panel cover with their callsign for 'their' solar panel mounted on a plaque commemorating their contribution to the Fox-1 project and highlighting the purpose of the lexan cover. A letter of authenticity will be provided attesting to the use of the lexan cover to help protect the solar panels.

Other potential donor levels are also available:

1. Donate $500 for one solar cell (two cells make up a 'panel' on one side of the spacecraft).

2. Donate $250 for one-half of a solar cell (one-quarter of the solar panel for one side of the spacecraft.

Donors contributing at these levels will receive a letter affirming their contribution, including specifying which side of the spacecraft 'their' cells are located.

If you're interested in supporting AMSAT's need to purchase solar cells, please return the Fox-1 fundraisingform sent to members. We expect significant interest so make your donation NOW to take full advantage of this donation opportunity.

Additional donation opportunities may be found at:

+ Call Martha at the AMSAT Office +1-888-FB AMSAT (1-888-322-6728)
+ Paypal donation widget on the main page at: http://www.amsat.org
+ Paypal donation widget for Project Fox at:
    http://www.amsat.org/amsat-new/fox/
+ You can also go to the Paypal site and send your donation to
   martha@amsat.org.
+ The AMSAT Store: http://www.amsat-na.com/store/categories.php

All donations over $40 will receive a Fox pin. Donations of $120 or more qualify you for AMSAT President's Club

[ANS thanks AMSAT President Barry Baines, WD4ASW for the above information]

/EX

SB SAT @ AMSAT $ANS-359.02
SKN On OSCAR 2012 In Memory Of W1JSM

AMSAT News Service Bulletin 359.02
From AMSAT HQ SILVER SPRING, MD.
December 25, 2011
To All RADIO AMATEURS
BID: $ANS-359.02

You are cordially invited to participate in Straight Key Night on OSCAR 2012, conducted by AMSAT for all radio amateurs throughout the world. This year's event is dedicated to the memory of Don Brown, W1JSM, who passed away in 2011, aged 90. Don was a longtime, enthusiastic VHF/UHF and satellite operator, and one of our most frequent Best Fist winners.

As always, SKN on OSCAR is simple and informal. Just operate CW through one or more satellites on 1 January 2012 (0000 to 2400 UTC), using a straight hand key.

There is no need to send in a log, but all participants are encouraged to nominate someone they worked for Best Fist. Your nominee need not have the best fist of anyone you heard, only of those you worked. Send your nomination to w2rs@amsat.org. A list of those nominated will appear in ANS in early February.

[ANS thanks Ray Soifer, W2RS for the above information]

/EX

SB SAT @ AMSAT $ANS-359.03
FO-29 Satellite Recovery in Progress

AMSAT News Service Bulletin 359.03
From AMSAT HQ SILVER SPRING, MD.
December 25, 2011
To All RADIO AMATEURS
BID: $ANS-359.03

The FO-29 Command Team reports from Japan that they have recovered the satellite after it had experienced a shutdown due to longer eclipse periods causing an undervoltage condition.

Ground station operators have placed FO-29 in a temporary, but stable configuration for further testing and recovery operations. They will test FO-29 while it is over Japan between December 23-25.

If no problems occur the Command Team will announce an operating schedule for the satellite for the remainder of 2011 and into the early part of 2012. Please standby for further news and announcements.

[ANS thanks Mineo Wakita, JE9PEL for the above information]

/EX

SB SAT @ AMSAT $ANS-359.04
AMSAT-India Announces Linear Transponder

AMSAT News Service Bulletin 359.04
From AMSAT HQ SILVER SPRING, MD.
December 25, 2011
To All RADIO AMATEURS
BID: $ANS-359.04

AMSAT INDIA had a booth at Hamfest India held on December 10-11. An estimated 900 amateur radio operators and SWLs attended the event.
A copy of their satellite presentation can be downloaded from:
http://amsatindia.org/presentations/HFI-2011/AI-HFI2011.pdf

AMSAT-India gave several presentations at the event, among them was one by Ganesan Namachivayam KJ6LRR in which he described a satellite 435/145 MHz linear transponder with a bandwidth of 50 kHz and capable of 1-3 watts PEP output. AMSAT-India plan to develop a smaller linear transponder for Cubesats.

Ganesan also described a CubeSat communications system comprising a 435 MHz half-duplex narrow-band FM transceiver supporting a data rate of 1200-9600 bps. The transmitter produces 1 watt output and can also operate as a Morse Code beacon.

Other presentations included:
- Real Time Tracking by Mani VU2WMY
- Working with LEO Sats by Dr. Raveendranath VU2RVJ
- Telemetry Decoding by Nitin VU3TYG

[ANS thanks Secretary - AMSAT INDIA Nitin, VU3TYG for the above information]

/EX

SB SAT @ AMSAT $ANS-359.05
UK Space Agency Ukube-2 CubeSat Mission Concept Studies

AMSAT News Service Bulletin 359.05
From AMSAT HQ SILVER SPRING, MD.
December 25, 2011
To All RADIO AMATEURS
BID: $ANS-359.05

With the UK Space Agency Ukube-1 program currently in development with a planned launch in the second half of 2012 an invitation for participation in studies for future cubesat missions has been announced.

The concept can address a scientific theme or be of an in-orbit technology demonstration nature (e.g. formation flying), providing a real impact to the UK. All UK based communities (academic, industrial and other) are invited to submit proposals. Applications can be made individually or in partnership with other organisations, however industry and academia will be funded under the rules stipulated in the scope of funding presented below.

Funding is available up to �35K per proposal; the size of award will depend on the requirements of the proposed project and the applicants' case for support. Proposals should not exceed a grant value of �35K. Funding will be awarded in 2012 and the project cannot exceed 3 months duration. Due to the short nature of these studies and the amount of funding available, we intend funding successful applicants at the onset of the project. It is anticipated the scheme will fund a minimum of 7 proposals; the facility to fund more will depend on the size of awards and will be assessed on a competitive basis as detailed below.

The deadline for submission of proposals is 1st February 2012, 12pm. Further information can be found by following the links posted on the AMSAT-UK web: http://tinyurl.com/7glkm3f (www.uk.amsat.org)

[ANS thanks AMSAT-UK for the above information]

/EX

SB SAT @ AMSAT $ANS-359.06
Satellite Shorts From All Over

AMSAT News Service Bulletin 359.06
From AMSAT HQ SILVER SPRING, MD.
December 25, 2011
To All RADIO AMATEURS
BID: $ANS-359.06

+ The 2012 SA AMSAT Space Symposium will be held at the University of KwaZulu-Natal on 12 May 2012. This is the second call for papers. Authors are invited to submit a brief synopsis of their proposed paper. The deadline is 31 January 2012. Send a synopsis as a word file attachment to saamsat@intekom.co.za. The theme of the conference is "50 Years of Amateur Radio Satellites" celebrating the launch of OSCAR 1 on 12 December 1961.
SA AMSAT: http://www.amsatsa.org.za/

+ YX6, VENEZUELA. Members of the Radio Club of Venezuela plan to be active as YX6AJ from Angel Falls waterfall (the world's tallest - 979m) between January 3-6th, 2012. Operators mentioned are Lino/YY5FRD, Jesus/YY5CHJ, Marcel/YY5CAR, Wilmer/YY5CWM, Alfredo/YV5SSF, Edwin/YV5HUJ, Jose/YV5JF, William/YV5VE, Angel/YV5NEA and possibly one more. Activity will be on CW, SSB, Digital modes and the Satellites. QSL via YV5AJ, by the Bureau or direct. They have posted a promotional video at:

http://www.youtube.com/watch?feature�ayer_embedded&vWlufNJtftk
(Ohio/Penn DX Bulletin No. 1041 for December 19, 2011)

+ The Polish amateur radio satellite PW-SAT built by students at the Warsaw University of Technology was featured on the Internet TV channel, BRITE TV. PW-SAT carries a single channel transponder that will operate in a similar way to the amateur satellite AO-16. The uplink on 435.020 MHz will be FM and the downlink on 145.900 MHz will use the BPSK telemetry beacon transmitter to produce Double Sideband (DSB) that can be received on an SSB radio. Watch at:

http://www.youtube.com/watch?feature�ayer_embedded&vtu7Nqxpkk0

+ The Internet Archive and Textfiles has posted every issue of Wayne Green's 73 Magazine ever published, for free. Read 73 online, or download PDF files here: http://www.archive.org/details/73-magazine

+ A video of the presentation about Amateur Radio Space Communications given by Mario Lorenz DL5MLO to hackers at the Chaos Communication Camp 2011 is now available:

http://www.youtube.com/watch?feature�ayer_embedded&v�_RvzceJo4

+ AMSAT area coordinator Clint Bradford, K6LCS, will be presenting his 'Working Amateur Satellites With Your HT' session at the Gwinnett Amateur Radio Society's TechFest 2012 in Lawrenceville, Georgia on January 14, 2012. ALL are welcome to attend!
  Event Web site: http://tinyurl.com/GARS-2012
  Clint's four-page tutorial and radio programming data can be found at: http://www.work-sat.com

+ Bobby, KF4GTA posted photos of his trip to KSC with access to both Atlantis and Endeavour. The links to his photo pages are:
  http://flic.kr/p/aVsWfM and http://flic.kr/s/aHsjxni8cR

[ANS thanks everyone for the above information]

/EX

SB SAT @ AMSAT $ANS-359.07
ARISS Status - 19 December 2011

AMSAT News Service Bulletin 359.07
From AMSAT HQ SILVER SPRING, MD.
December 25, 2011
To All RADIO AMATEURS
BID: $ANS-359.07

1. Kobe, Japan Contact Successful

On Monday, December 12, an Amateur Radio on the International Space Station (ARISS) contact was held between the Hirano Branch of Kobe Youth Nurturing Council in Kobe-city, Hyogo-pref, Japan and Astronaut Dan Burbank, KC5ZSX on the ISS. The contact highlighted lessons covering the ISS and the environment. An audience of approximately 50 people attended the event. Media coverage included two newspapers.

2. New Proposal Cycle for ARISS-US Contacts

NASA Teaching From Space (TFS) office recently announced a new proposal cycle for ARISS-US contacts. The deadline for submitting proposals is January 30, 2012 for contacts to be held in the July 15, 2012 - January 15, 2013 time frame. The next informational session will be held on

Wednesday, January 11 at 2100 UTC to answer any questions concerning the proposal process. To attend the session or to have questions answered, contact TFS at JSC-TFS-ARISS@mail.nasa.gov or call 281-244-1919.

For more information, visit the TFS Web site: http://www.nasa.gov/audience/foreducators/teachingfromspace/students/ariss.html

3. ARISS-U.S. Proposal Process Makes the News

A NASA Express message which included an item on ARISS contact opportunities for U.S. schools using the proposal process was sent on December 8. The message may be viewed on the NASA blog: http://blogs.nasa.gov/cm/newui/blog/viewpostlist.jsp?blogname�ucationexpress

The NASA Educators Online Network (NEON) posted a link to its ARISS article, "Holiday Ham for NASA." See: http://nasatalk.com/blog/article/bylines/67-dynae-fullwood/1629-holiday-ham-for-nasa.html

The Hartford Hobby Radio Examiner published the story, "Schools can apply for space station radio chats." http://www.examiner.com/hobby-radio-in-hartford/school-applications-welcome-for-space-station-contacts

4. ARISS Status on Social Media

This is a reminder that ARISS news is available on Twitter and Facebook. ARISS has over 200 active users on Facebook and over 800 followers on Twitter. See: http://www.facebook.com/pages/Amateur-Radio-on-the-International-Space-Station-ARISS/153679794647788

and
http://twitter.com/#!/ARISS_status

[ANS thanks Carol, KB3LKI, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the
President's
Club. Members of the President's Club, as sustaining donors to AMSAT
Project
Funds, will be eligible to receive additional benefits. Application
forms
are
available from the AMSAT Office.

73,
This week's ANS Editor,
Lee McLamb, KU4OS

```
From -8031078430913230515
X-Google-Thread: a4a23d5f63,7e2534d19201b190,start
X-Google-Attributes: gida4a23d5f63,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
Received: by 10.68.189.194 with SMTP id gk2mr20605362pbc.3.1325025006429;
        Tue, 27 Dec 2011 14:30:06 -0800 (PST)
MIME-Version: 1.0
Path: lh20ni71525pbb.0!nntp.google.com!news1.google.com!
border1.nntp.dca.giganews.com!nntp.giganews.com!newsfeed.news.ucla.edu!
usenet.stanford.edu!panix!rri.panix.com!robomod!not-for-mail
From: SWPC.Webmaster@noaa.gov
Newsgroups:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.info
Subject: Weekly Highlights of Solar and Geomagnetic Activity, 19 - 25 December
2011
Followup-To: rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space
Date: Tue, 27 Dec 2011 17:30:05 EST
Organization: NOAA Space Weather Prediction Center
Lines: 58
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <20111227223001.D5BAA33C9B@panix2.panix.com>
NNTP-Posting-Host: panix6.panix.com
X-Trace: reader1.panix.com 1325025005 2951 166.84.1.6 (27 Dec 2011 22:30:05 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Tue, 27 Dec 2011 22:30:05 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
```

```
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump

:Product: Weekly Highlights and Forecasts
:Issued: 2011 Dec 27 1952 UTC
# Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center
# Product description and SWPC contact on the Web
# http://www.swpc.noaa.gov/weekly.html
#
#                Weekly Highlights and Forecasts
#
```

Highlights of Solar and Geomagnetic Activity
19 - 25 December 2011

Solar activity was at very low levels on 19 December and increased to low levels from 20-24 December, and finally ending the period (25 December) at moderate levels. Region 1376 (N19, L = 308, class/area Dko/440 on 22 December) was the most active group with frequent B- and C-class flare production until 25 December when new Region 1387 (S22, L = 226, class/area Dai/440 on 22 December) began producing multiple C-class flares and one M-class flare. On 22 December at 0208 UTC, Region 1381 (S18, L = 263, class/area Dai/180 on 22 December) produced a C5/Sf flare associated with weak Types II and IV radio sweeps and a faint CME, determined to be non-geoeffective. Region 1386 (S17, L = 147, class/area Esi/200 on 26 December) produced a C5/Sf flare at 24/0839 UTC. Region 1376 produced a long-duration C4 flare on the west limb at 24/1236 UTC associated with a non-Earth-directed CME. On 25 December at 1816 UTC, Region 1387 produced an M4/1N flare that was accompanied by Type II (1019km/s) and Type IV radio emissions.

A slight proton enhancement was observed at geosynchronous orbit on 25 December and achieved a max flux of 3 pfu at 26/0135 UTC.

The greater than 2 MeV electron flux at geosynchronous orbit was at normal levels.

The geomagnetic field was at predominately quiet levels during most of the period.

Forecast of Solar and Geomagnetic Activity
28 December - 23 January 2012

Solar activity is expected to be at low to moderate levels until 31 December when Region 1387 is forecast to rotate off the disk. Activity is expected to return to low levels with a slight chance for isolated M-class activity for the remainder of the period.

No proton events are expected at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to be at normal to moderate levels during the period.

Geomagnetic field activity is expected to be at active levels from 28-29 December due to CME arrivals. Diminishing effects from said CME&rsquo;s are expected to bring geomagnetic field activity to unsettled levels on 30 December. Mostly quiet conditions are predicted on 31 December, 3-4 and 7-23 January. Activity is expected to be at predominately quiet to unsettled levels 1-2 and 5-6 January due to recurrent coronal hole high speed streams.

```
From 8047541226711170884
X-Google-Thread: 10e8ad,b950b97527cd04ac,start
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Received: by 10.204.10.149 with SMTP id p21mr464779bkp.1.1325332476931;
        Sat, 31 Dec 2011 03:54:36 -0800 (PST)
Path: cj8ni7374bkb.0!nntp.google.com!news1.google.com!postnews.google.com!
p42g2000vbt.googlegroups.com!not-for-mail
From: kwame oleur <mikbaah@gmail.com>
Newsgroups: rec.radio.amateur.space
Subject: twi version of chris brown's i should have kissed you
Date: Sat, 31 Dec 2011 03:52:52 -0800 (PST)
Organization: http://groups.google.com
Lines: 2
Message-ID: <0e79a465-65ab-44ad-af86-063a0369e097@p42g2000vbt.googlegroups.com>
NNTP-Posting-Host: 197.251.184.180
Mime-Version: 1.0
X-Trace: posting.google.com 1325332476 32462 127.0.0.1 (31 Dec 2011 11:54:36 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Sat, 31 Dec 2011 11:54:36 +0000 (UTC)
Complaints-To: groups-abuse@google.com
Injection-Info: p42g2000vbt.googlegroups.com; posting-host=197.251.184.180;
posting-account=z6mumQoAAAB7VLFN-1ehi-qQCWDQ9WL0
User-Agent: G2/1.0
X-Google-Web-Client: true
X-Google-Header-Order: HUALESNKRC
X-HTTP-UserAgent: Mozilla/5.0 (Windows NT 5.1; rv:8.0.1) Gecko/20100101 Firefox/
8.0.1,gzip(gfe)
Content-Type: text/plain; charset=ISO-8859-1
```

http://youtu.be/w_hbkFldAdk

```
From -7135250955346223880
X-Google-Thread: 10e8ad,75a60cc05e57df96,start
```

```
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!postnews.google.com!o10g2000prn.googlegroups.com!not-for-
mail
From: devi <satyamsivam9030@gmail.com>
Newsgroups: rec.radio.amateur.space
Subject: south actress hot photos and videos
Date: Mon, 30 May 2011 01:57:12 -0700 (PDT)
Organization: http://groups.google.com
Lines: 21
Message-ID: <bf60db23-ec0f-4a2c-9d13-c8b39fc32efd@o10g2000prn.googlegroups.com>
NNTP-Posting-Host: 117.199.254.112
Mime-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
X-Trace: posting.google.com 1306745832 8405 127.0.0.1 (30 May 2011 08:57:12 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Mon, 30 May 2011 08:57:12 +0000 (UTC)
Complaints-To: groups-abuse@google.com
Injection-Info: o10g2000prn.googlegroups.com; posting-host=117.199.254.112;
posting-account=xYWSigoAAADp0Q2VAMlANM4syM5q3uRr
User-Agent: G2/1.0
X-Google-Web-Client: true
X-Google-Header-Order: HUALESNKRC
X-HTTP-UserAgent: Mozilla/5.0 (Windows; U; Windows NT 5.1; en-US; rv:1.9.2.17)
 Gecko/20110420 Firefox/3.6.17,gzip(gfe)
Xref: g2news2.google.com rec.radio.amateur.space:527

                    FOR GOOD STUDY MATERIAL
               http://studymaterialforu.blogspot.com



                     KATRINA KAIF IN BEAUTIFUL RED DRESS
http://southactresstou.blogspot.com/2011/05/katrina-kaif_22.html
                        GOOD LOOKING DEEPIKA PADUKONE
http://southactresstou.blogspot.com/2011/05/deepika-padukone_22.html
                  AISHWARYA RAI UNBELIVABLE PHOTO
http://southactresstou.blogspot.com/2011/05/aishwarya-rai.html
                  ANUSKHA IN A BEAUTIFUL SAREE
http://southactresstou.blogspot.com/2011/05/anushka-shetty.html
                       SEXY TAPSEE IN VEERA
http://southactresstou.blogspot.com/2011/05/tapsee.html
              KAJAL IN BEAUTIFUL BLACK SAREE
http://southactresstou.blogspot.com/2011/05/kajal-agarwal.html
             SNEHA SPICY PHOTOS
http://southactresstou.blogspot.com/2011/05/sneha.html
           NAMITHA HOT PHOTS
http://southactresstou.blogspot.com/2011/05/namitha.html




From -6403165805461946686
X-Google-Thread: 10e8ad,986b643c46805dd0,start
```

```
X-Google-NewGroupId: yes
X-Google-Thread: 10b9c8,986b643c46805dd0,start
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,gida4a23d5f63,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx02.iad01.newshosting.com!newshosting.com!news-
out.readnews.com!transit3.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-150 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Mon, 30 May 2011 11:59:02 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 2013
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <001201cc1ee2$6cbe3a30$463aae90$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1306771142 22612 166.84.1.6 (30 May 2011 15:59:02 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Mon, 30 May 2011 15:59:02 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news1.google.com rec.radio.amateur.space:503 rec.radio.info:2385
```

This report is organized into four (4) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - deborbited/returned satellites

SB SAT @ AMSAT W8ISS $WSR-150.S1
WSR 150 Part 1 05/30/2011

AMSAT NEWS SERVICE BULLETIN 150.S1
FROM AMSAT HQ SILVER SPRING, MD, May 30, 2011
TO ALL RADIO AMATEURS
BID: $WSR-150.S1

```
HO-68 HOPE-1 (CAS-1)(XW-1)
Catalog Number: 36122
Launch Date: December 15, 2009 0231z
Launch site: Taiyuan Space Center, PRC

Status: By schedule

Callsign:
Broadcast:    BJ1SA-11
BBS:     BJ1SA-12

Uplinks:   145.8250 MHz FM, PL 67.0 Hz.
           145.9250 - 145.9750 MHz SSB/CW
           145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
           435.7650 - 435.7150 MHz SSB/CW
           435.6750 MHz AFSK 1200 BPS

Beacon:    435.7900 MHz CW

Mode and Antenna Polarization:
V: LHCP 2.0dBi max
U: RHCP 3.0dBi max

IARU coordination page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108

For more information about XW-1 (CAS-1):
http://
[02092011]
=====
SO-67 SumbandilaSat
Catalog Number: 35870
Launch Date: September 17, 2009 1555z
Launch site: Baikonur, Kazakhstan

Status: By schedule

Callsign: ZS0SUM

Uplink:   145.875MHz FM tone 233.6 Hz
Downlink: 435.345MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

For more information about SO-67:
http://www.amsatsa.org.za/
[02092011]
=====
DO-64 Delfi-C3
```

Catalog number: 32789
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational
Current Mode: Science Mode - Beacon ONLY

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink: 435.530 to 435.570 MHz

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68
[02092011]
=====
VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05, 2005 0444z
Launch site: Satish Dhawan Space Centre, India

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.9360 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is active. Each transponder has a different beacon.
[02092011]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004 0745z
Launch site: Baikonur, Kazakhstan

Status: Semi-operational

Current Mode(s):
Voice repeater: V/u
Uplink: 145.880 MHz FM
Downlink: 435.150 MHz FM

Telemetry: By Command ONLY
Downlink: 435.150MHz 9k6

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.860 MHZ FM
145.880 MHz USB
145.880 MHz FM
145.920 MHz FM
145.920 MHz FM - 67 Hz PL tone burst
1268.705 MHz FM
Digital Downlinks: 435.150 MHz FM 38k4 PBP, 1 watt output
435.150 MHz FM 9k6 Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Pacsat Broadcast Protocol
1268.703 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[05162011]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002 1700z
Launch site: Baikonur, Kazakhstan

Status: Operational

Current Mode: V/u

```
Uplink:   145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4
Hz. The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute
   timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the re-
   peater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset
   the 10 minute timer.
[02092011]
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993 0140z
Launch site: Kourou, French Guiana

Status: Operational

Current Mode: V/u

Uplink:   145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[02092011]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974
Launch site: Vandenberg AFB, California, USA

Status: Operational

Current Mode: Alternating between Mode A and B every 24 hours

Uplink:   145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink:  29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
```

145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz CW
145.972 MHz CW
435.100 MHz CW
2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
[02092011]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998 0640z (ZARYA module)
Launch sites: Baikonur, Kazakhstan
Kourou, French Guiana
Uchinoura Space Center, Japan
Kennedy Space Center, Titusville, Florida, USA

Status: Operational

Current Active Modes: FM Repeater - OFF
Voice - V/v
BBS - OFF
APRS - OFF
SSTV - OFF

Expedition 27 Crew:

Commander:	Dmitry Kondratyev	
Flight Engineer:	Catherine Coleman	KC5ZTH
Flight Engineer:	Paolo Nespoli	IZ0JPA
Flight Engineer:	Ron Garan	KF5GPO
Flight Engineer:	Alexander Samokutyaev	
Flight Engineer:	Andrey Borisenko	

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)

Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time line is NOT translated from Russian and posted.
[05162011]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-150.S2
WSR 150 Part 2 05/30/2011

AMSAT NEWS SERVICE BULLETIN 150.S2
FROM AMSAT HQ SILVER SPRING, MD, May 30, 2011
TO ALL RADIO AMATEURS
BID: $WSR-150.S2

O/OREOS
Catalog Number: 37224
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: On Orbit

Uplink:
Downlink: 437.035 MHZ AX.25

Beacon:

Callsign:

URL: http://www.ooreos.org/

```
[02092011]
=====
Rax-1 Radio Aurora Explorer
Catalog Number: 37223
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: On Orbit

Uplink:
Downlink: 437.505 MHz 9k6 GMSK

Beacon:

Callsign: RAX-1

URL: http://rax.engin.umich.edu/
[02092011]
=====
FO-69 Fastrac-1 Sara Lily
Catalog Number: 37227
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: On orbit

Uplink 1: 145.980 MHz 1k2 baud
Uplink 2: 145.825 MHz 1k2 baud
Downlink: 437.345 MHz 1k2 and 8k6 baud

Beacon:   437.435 MHz 1k2 AX.25

Callsign: Fast1

URL: http://fastrac.ae.utexas.edu/index.php
[02092011]
=====
FO-70 Fastrac-2 Emma
Catalog Number: 37380
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: On Orbit

Uplink 1: 435.025 MHz 1k2 baud
Uplink 2: 437.435 MHz 9k6 baud
Downlink: 145.825 MHz

Beacon:   145.825 MHz 1k2 AX.25

Callsign: Fast2

URL: http://fastrac.ae.utexas.edu/index.php
```

```
[02092011]
=====
StudSat
Catalog Number: 36796
Launch Date: July 12, 2010 0352z
Launch site: Satish Dhawan Space Centre, India

Status: On Orbit

Uplink:   437.505MHz, 9600bps FSK
Downlink: 437.505MHz, 9600bps FSK
Beacon  : 437.505MHz,   20bps ASK
[02092011]
=====
TIsat-1
Catalog Number: 36799
Launch Date: July 12, 2010 0352z
Launch site: Satish Dhawan Space Centre, India

Status: On orbit

Callsign: HB9DE

Uplink:   145.980MHz FM, AFSK
Downlink: 437.305MHz FM, AFSK
Beacon:   437.305MHz CW
[02092011]
=====
HO-68 HOPE-1 (CAS-1)(XW-1)
Catalog Number: 36122
Launch Date: December 15, 2009 0231z
Launch site: Taiyuan Space Center, PRC

Status: By schedule

Callsign:
Broadcast:    BJ1SA-11
BBS:         BJ1SA-12

Uplinks:   145.8250 MHz FM, PL 67.0 Hz.
           145.9250 - 145.9750 MHz SSB/CW
           145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
           435.7650 - 435.7150 MHz SSB/CW
           435.6750 MHz AFSK 1200 BPS

Beacon:    435.7900 MHz CW

IARU coordination page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108

For more information about XW-1 (CAS-1):
http://
```

```
[02092011]
=====
SwissCube
Catalog Number: 35932
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Callsign: HB9EG

Beacon(100mw): 437.5050MHz CW
Beacon(1w):    437.5050MHz FSK 1k2bps
[02092011]
=====
UWE-2
Catalog Number: 35934
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: In Orbit

Beacon(500mw): 437.3850 MHz AFSK 1k2bps
               437.3850 MHz FSK 9k6bps
[02092011]
=====
ITUpsAT1
Catalog Number: 35935
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Beacon(100mw): 437.325MHz CW
Beacon(1w): 437.325MHz 19k2bps
[02092011]
=====
BEESAT
Catalog Number: 35933
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Callsign: DP0BEE

Beacon(100mw): 436.000MHz CW
Beacon(500mw): 436.000MHz GMSK 4k8bps
Beacon(500mw): 436.000MHz GMSK 9k6bps
[02092011]
=====
CP-6
Catalog Number: 35003
```

```
Launch Date: May 19, 2009 2355z
Launch site: Wallops Island, Virginia, USA

Status: Operational

Downlink: 437.365 MHz 1k2 AFSK
[02092011]
=====
HAWKSAT 1
Catalog number: 35004
Launch Date: May 19, 2009 2355z
Launch site: Wallops Island, Virginia, USA

Status: operational

Downlink: 437.345 MHz ?
[02092011]
=====
Pharmasat
Catalog Number: 35002
Launch Date: May 19, 2009 2355z
Launch site: Wallops Island, Virginia, USA

Status: Operational

Downlink: 437.465 MHz 1k2 AFSK
[02092011]
=====
ANUSAT
Catalog Number: 34808
Launch Date: April 20, 2009 0115z
Launch Site: Satish Dhawan Space Centre, India

Status: ?

Downlink:  435.000 MHz
Uplink:    145.800 MHz

Telemetry: 137.400 MHz
[02092011]
=====
SOHLA-1 (ASTRO TECH.)
Catalog Number: 33496
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational

Proposed Frequencies and Modes:
Downlink: 437.505 MHz AFSK/CW
Beacon:   437.505 MHz AFSK/CW

Callsign:
```

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=101
[02092011]
=====
KAGAYAKI (Solan Co.)
Catalog Number: 33495
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: In Orbit

Downlink: 437.375 MHZ   FSK9k6/CW
Beacon: 437.375 MHz   FSK9k6/CW

IARU coordination status page:

AMSAT-NA webpage:

[02092011]
=====
STARS (Kagawa Univ.) (Twin Satellites)
Catalog Number: 33498
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational ?

Downlinks: 437.485 MHz FM/CW
           437.465 MHz FM/CW
Beacons: 437.305 MHz FM/CW
           437.275 MHz FM/CW

Callsigns: JR5YBN
           JR5YBO

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=99

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=121&retURL
=/satellites/status.php
[02092011]
=====
KKS-1 (Tokyo MCIT)
Catalog Number: 33499
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational

Downlink: 437.455 MHz AFSK/CW
Beacon: 437.385 MHz AFSK/CW

```
Callsign: JQ1YYY

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=107

AMSAT-NA webapge:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=120&retURL
=/satellites/status.php
[20092011]
=====
PRISM (Tokyo Univ.)
Catalog Number: 33493
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational ?

Downlink: 437.425 MHz AFSK/GMSK/CW
Beacon:   437.250 MHz AFSK/GMSK/CW

Callsign: JQ1YCX

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=97

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=119&retURL
=/satellites/status.php
[02092011]
=====
RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number: 32953
Launch Date: May 23, 2008 1520z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational

Curent Modes: Telemetry
              Audio
              Images

Downlinks: 435.315 MHz
           435.215 MHz

AMSAT-NA website:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=115&ret
URL=/satellites/status.php

Official website:
http://www.npopm.com/?cid=leoca&caid=43
[02092011]
=====
CanX-2
Catalog number: 32790
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational in range of ground station only

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web
page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[02092011]
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Downlink: 437.425 MHz 1k2 baud packet

For the latest project status update please visit the AAUSAT-II web
page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[02092011]
=====
CO-65 CUTE-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Digipeater

Downlink:  437.475 MHz 9k6 Packet
Uplink:   1267.600 Mhz

Telemetry Beacon:
Downlink: 437.2750 MHz CW

For the latest project status update please visit the Cute-1.7+APD II
web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78

Command Station blog website:
```

http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=112&retURL
=/satellites/status.php
[02092011]
=====
Compass-1
Catalog number: 32787
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Current Mode: 4k8 MSK packet

Uplink: 145.980 MHz FM
Downlink: 437.275 Mhz CW
          437.405 MHz Packet

For the latest project status update please visit the Compass 1 web
page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=114&retURL
=/satellites/status.php
[02092011]
=====
CO-66 Seeds II
Catalog number:
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Downlink: 437.485 MHz

Callsign: JQ1YGU

For the latest project status update please visit the Seeds 2 web
page: http://cubesat.aero.cst.nihon-u.ac.jp/english/seeds_2_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=113&retURL
=/satellites/status.php
[02092011]
=====

CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007 0702z
Launch site: Baikonur, Kazakhstan

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=94&retURL=
/satellites/status.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=72
[02092011]
=====
CP3
Catalog Number: 31129
Launch Date: April 17,2007 0702z
Launch site: Baikonur, Kazakhstan

Status: Operational

Current Mode: /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[02092011]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005 0652z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon: 437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:

http://www.ne.jp/asahi/hamradio/je9pel/xivpicte.htm
[02092011]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: ?????

Current Mode: /u

Beacon: 436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=96&retURL=/satellites/status.php

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[02092011]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004 0745z
Launch site: Baikonur, Kazakhstan

Status: Semi-operational

Current Mode(s):
Voice repeater: V/u
Uplink: 145.880 MHz FM
Downlink: 435.150 MHz FM

Telemetry:
Downlink: 435.150MHz 9k6

Analog voice downlink:	435.300 MHz FM
	435.150 MHz FM
	2401.200 Mhz FM
Analog voice uplink:	145.860 MHZ FM
	145.880 MHz USB
	145.880 MHz FM
	145.920 MHz FM
	145.920 MHz FM - 67 Hz PL tone burst
	1268.700 MHz FM
Digital Downlinks:	435.150 MHz FM 38k4 PBP, 1 watt output
	435.150 MHz FM 9k6 Pacsat Broadcast Protocol
	2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:	145.860 MHz FM 9k6 Pacsat Broadcast Protocol

```
                          1268.708 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon:                    435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[05162011]
=====
QuakeSat
Catalog Number: 27845
Launch Date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Telemetry only

Current Mode: 9600 baud data packet

Mode U packet
Downlink: 436.675 MHz 9k6 BPS

Quakesat webpage:
http://www.quakefinder.com/services/quakesat-ssite/
[02252011]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational

Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW

AMSAT-NA webpage:
```

```
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=69&retURL
=/satellites/status.php
[02092011]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001 0240z
Launch site: Kodiak Launch Complex, Alaska, USA

Status: Telemetry only

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink:        144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[02092011]
=====
RS-22 RADIO SPORT 22 (MOZHAYETS 4)
Catalog number: 27939
Launch Date: September 27, 2003 0612z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational - 70cm cw only

Current Mode:  /u

CW Beacon - 435.352 MHz
            145.818 MHz

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=76&retURL
=/satellites/status.php
[02092011]
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990
Launch site: Kourou, French Guiana

Status: CW Beacon only

Uplinks:          145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink:      437.125 MHz
```

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[02092011]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984
Launch site: Vandenburg AFB, California, USA

Status: Operational

Current Mode: /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon: 435.025 MHz
Mode-S Beacon: 2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[02092011]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998 0640z (ZARYA module)
Launch sites: Baikonur, Kazakhstan
              Kourou, French Guiana
              Uchinoura Space Center, Japan
              Kennedy Space Center, Titusville, Florida, USA

Status: Operational

Current Active Modes: FM Repeater - OFF
                      Voice -   V/v
                      BBS -   OFF
                      APRS -   OFF
                      SSTV -   OFF

Expedition 27 Crew:
Commander: Dmitry Kondratyev
Flight Engineer: Catherine Coleman   KC5ZTH
Flight Engineer: Paolo Nespoli   IZ0JPA
Flight Engineer: Ron Garan   KF5GPO
Flight Engineer: Alexander Samokutyaev

Flight Engineer: Andrey Borisenko

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[05162011]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-150.S3
WSR 150 Part 3 05/30/2011

AMSAT NEWS SERVICE BULLETIN 150.S3
FROM AMSAT HQ SILVER SPRING, MD, May 30, 2011
TO ALL RADIO AMATEURS

```
BID: $WSR-150.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

NANOSAIL-D
Catalog Number:
Ejection Date: January 17, 2011

Status: On orbit

Downlink: 437.270 MHz AX.25

URL: http://nanosaild.engr.scu.edu/dashboard.htm
[01272011]
=====
CP4
Catalog Number: 31132
Launch Date: April 17, 2007

Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon:    437.325 MHz CW

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=79
[09062010]
=====
LIBERTAD-1
Catalog Number: 31128
Launch Date: April 17, 2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink:   145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[09062010]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: Non-Operational

Current Mode: V/v
```

```
Uplink/Downlink: 145.825 Mhz FM
Voice Recorder:  145.825 Mhz FM
[09062010]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency:  437.305
                             2407.250

Official Website: http://www.ncube.no
[09062010]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink:        437.250 MHz FM 67Hz CTCSS
Voice Downlink:     2401.835 MHz FM
Packet Up/Downlink:  437.250 MHz 9k6 packet
Packet Downlink     2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[09062010]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non-Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[09062010]
=====
CANX-1
Catalog Number: 27847
Launch Date: June 30, 2003

Status: Non-Operational

Downlink: 437.8800 MHz AFSK 1k2bps
[06052009]
=====
DTUSAT
```

Catalog Number: 27842
Launch Date: June 30, 2003

Status: Non-Operational

Current Mode: 2k4 AFSK Packet last reported

Downlink: 437.475MHz

Officail webpage: http://dtusat1.dtusat.dtu.dk/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=101&retURL
=satellites/all_oscars.php
[02212009]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)

Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Telemetry only

Uplinks: 145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial land and weather imaging payloads offers FM and FSK
Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as
a collaborative effort between the Malaysian government and Surrey
Satellite Technology Ltd.
[03302009]
=====

```
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink:   145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS:                SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink:   145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
```

V-band: 145.840 - 145.990 MHz CW/LSB
U-band: 435.550 - 435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks

S2-band: 2401.225 - 2401.475 MHz CW/USB
K-band: 24048.010 - 24048.060 MHz CW/USB
Beacon: 2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)

BEACON	General Beacon(GB)	Middle Beacon(MB)	Engineering Beacon(EB)
2 m	none	145.898 MHz	none
70cm	435.438 MHz	435.588 MHz	435.838 MHz
13cm(1)	2400.188 MHz	2400.338 MHz	2400.588 MHz
13cm(2)	2401.173 MHz	2401.323 MHz	2401.573 MHz
3cm	10450.975 MHz	10451.125 MHz	10451.375 MHz
1.5cm	24047.885 MHz	24048.035 MHz	24048.285 MHz

[07162007]
=====
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT

Catalog Number: 25636
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Non-Operational

Current Modes:
Telemetry : /u

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems

Uplinks: 145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://asri.technion.ac.il/techsat/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=14&retURL=/satellites/status.php
[07172010]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink: 145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
MO-30 UNAMSAT-2
Catalog Number: 24305
Launch Date: September 5, 1996

Status: Non-operational

Downlink: 435.1380 MHz AFSK 1200 BPS
Downlink: 435.2060 MHz AFSK 1200 BPS
Uplink: 145.8150 MHz AFSK 1200 BPS
Uplink: 145.8350 MHz AFSK 1200 BPS
Uplink: 145.8550 MHz AFSK 1200 BPS
Uplink: 145.8750 MHz AFSK 1200 BPS
[06042009]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Non-operational
Current Mode: V/u (Mode JA)

Voice/CW (Mode JA)

Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage:
http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts.htm
[11062010]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Non-operational

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012009]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

```
Current Mode:

Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
AO-24 ARSENE
Catalog Number: 22654
Launch Date: May 13, 1993

Status: Non-operational

Uplink:    435.0625 MHz FM 1k2bps AFSK
           435.1125 MHz FM 1k2bps AFSK
           435.1375 MHz FM 1k2bps AFSK
Downlink:  145.9750 MHz FM 1k2bps AFSK
          2446.5025 MHz FM 1k2bps AFSK

Beacon:    2446.4700 MHz CW

Broadcast callsign:
BBS:
[12162009]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational
```

```
Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
```

```
[01152007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
[05012006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: non-operational

Current Mode:  V/u

Uplink:         145.900 MHz FM 1200-baud Manchester FSK (reserved)
                145.920 MHz FM VOICE
                145.940 MHz FM 1200-baud Manchester FSK (reserved)
                145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink:       437.026 MHz USB VOICE
                (1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[07242009]
=====
UO-15 UoSAT-4
Catalog Number: 20438
Launch Date: January 22, 1990
```

```
Status: Non-operational

Uplink: ?
Downlink: 435.1250MHz (?)
          435.1200MHz (?)
[06042009]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon:   145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
```

```
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink  435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink  435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:   145.8500 - 145.9000 MHz SSB/CW
Downlink   29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink  29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
Beacons:   29.450 MHz
          435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
```

=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB

Beacon 1: 29.352 MHz (intermittent)
Beacon 2: 29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB

Beacon: 145.860 MHz

Robot: 145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-150.S4
WSR 150 Part 4 05/30/2011

AMSAT NEWS SERVICE BULLETIN 150.S4
FROM AMSAT HQ SILVER SPRING, MD, May 30, 2011
TO ALL RADIO AMATEURS
BID: $WSR-150.S4

```
THE FOLLOWING SATELLITES HAVE RE-ENTERED OR HAVE BEEN RETURNED SAFELY:

CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Re-entered
Re-entered: October 25, 2009

Uplink:  1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=56
[09062010]
=====
BEVO-1 (DRAGONSAT-1)
Catalog Number: 35690
Launch Date: May 19, 2009

Status: Re-entered
Re-entered:

Downlink: 437.325 MHz 9k6 GMSK
          437.325 MHz CW 20wpm
[07312009]
=====
AggieSat2 (DRAGONSAT-2)
Catalog Number: 35690
Launch Date: May 19, 2009

Status: Re-entered
Re-entered:

Downlink: 436.250 MHz 9k6 FHSS
[11112009]
=====
Pollux
Catalog Number: 35693
Launch Date: July 31, 2009

Status: Re-entered
Re-entered:

Callsign: POLLUX-1
```

```
Downlink: 145.825MHz 1k2 AX.25
[09062010]
=====
Castor (ANDE-2)
Catalog Number: 35694
Launch Date: July 31, 2009

Status: Re-entered
Re-entered:

Callsign: KD4HBO-1

Downlink: 145.825 MHz 1k2 AX.25
[09062010]
=====
NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: July 28, 2008

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[01012009]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink:      145.825 Mhz FM APRS AX25
APRS Uplink:        145.825 MHz FM APRS AX25
Voice/PSK31 Uplink:  28.120 MHz

Packet to Voice ID: RAFT
[06112007]
=====
```

GENESAT-1
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Re-Entered
Re-entered date: August 8, 2010

Current Mode: /u

Callsign: KE7EGC

Telemetry Beacon Downlink: 437.0695 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[08082010]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Re-Entered
Re-entered: June 18, 2008

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon: 437.2750 MHz CW

Callsign: JR8YJT
[01012009]
=====
SO-43 Starshine 3
Catalog Number: 26929
Launch Date: September 30, 2001

Status: Re-Entered
Re-entered: January 21, 2003

Beacon: 145.825Mhz
[02212009]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600

Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at}amsat.org
NNNN
/EX

```
From 3679844605964076175
X-Google-Thread: 107ada,93e9fadb32cee6e2,start
X-Google-NewGroupId: yes
X-Google-Thread: 11480d,93e9fadb32cee6e2,start
X-Google-NewGroupId: yes
X-Google-Thread: 10e8ad,93e9fadb32cee6e2,start
X-Google-NewGroupId: yes
X-Google-Thread: 10b9c8,93e9fadb32cee6e2,start
X-Google-NewGroupId: yes
X-Google-Attributes:
gida3e752f117,gid7221ecd0f7,gid8f86f75953,gida4a23d5f63,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
```

Path: g2news1.google.com!news2.google.com!newsfeed2.dallas1.level3.net!
news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: SWPC.Webmaster@noaa.gov
Newsgroups:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.info
Subject: Weekly Highlights of Solar and Geomagnetic Activity, 23 - 29 May 2011
Followup-To: rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space
Date: Tue, 31 May 2011 21:30:09 EDT
Organization: NOAA Space Weather Prediction Center
Lines: 68
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <20110601013001.6F31733C5F@panix2.panix.com>
NNTP-Posting-Host: panix6.panix.com
X-Trace: reader1.panix.com 1306891809 1535 166.84.1.6 (1 Jun 2011 01:30:09 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Wed, 1 Jun 2011 01:30:09 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to   rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to   rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Xref: g2news1.google.com rec.radio.amateur.misc:6256 rec.radio.amateur.dx:996
rec.radio.amateur.space:504 rec.radio.info:2388

```
:Product: Weekly Highlights and Forecasts
:Issued: 2011 May 31 2115 UTC
# Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center
# Product description and SWPC contact on the Web
# http://www.swpc.noaa.gov/weekly.html
#
#                 Weekly Highlights and Forecasts
#
```

Highlights of Solar and Geomagnetic Activity
23 - 29 May 2011

Solar activity was at very low to moderate levels during the period. The period began with very low activity, with a few isolated B-class flares observed. A long-duration B2 flare was observed at 24/2237 UTC from Region 1220 (N13, L=248, class/area Bxo/050 on 23 May). Activity increased to low levels on 25 May, with two C-class flares from Region 1223 (S16, L=115, class/area Dso/050 on 27 May). The first was a C1 flare at 25/2103 UTC, followed by a C1/Sf at 25/2158 UTC. A nine-degree filament eruption was observed between 25/0801-1256 UTC. Activity decreased to very low on 26 May, with three B-class flares, included a B4/Sf at 26/0110 UTC. Activity increased to low levels on 27 May, with five C-class flares, including a C5 flare at 27/1643 UTC from Region 1226 (S21, L=036, class/area Eki/360 on 29 May). Activity increased to moderate levels during 28-29 May. A long-duration M1 /Sf was observed at 28/2150 UTC from Region 1226, as well as an M1/1F observed at 29/1033 UTC. Type II radio emission (554 km/s shock velocity) was associated with this event.

No proton events were observed at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit was at normal to moderate levels during 23 - 28 May. High levels were reached on 29 May.

Geomagnetic field activity was predominantly quiet during 23 - 26 May. Activity increased to quiet to unsettled levels, with active periods at high latitudes, on 27 May. Activity increased to quiet to severe levels during 28-29 May. A co-rotating interaction region, in advance of a coronal hole high-speed stream (CH HSS), occurred during 27- 29 May. A CME was was observed to interact with the field during 28-29 May.

Forecast of Solar and Geomagnetic Activity
01 June - 27 June 2011

Solar activity is expected to be low with a chance for M-class flares through 9 June. Activity is expected to decrease to very low to low levels during 10 - 14 June. Activity is expected to increase to low with a chance for M-class flares.

No proton events are expected at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to be at high levels through 5 June. Normal levels are expected during 9 - 27 June.

Geomagnetic field activity is expected to be at quiet to unsettled levels, with active levels at high latitudes during 1 - 5 June, due to an expected CME and a recurrent CH HSS. Activity is expected to decrease to predominantly quiet levels during 6 - 10 June. Activity is expected to increase to quiet to unsettled levels, with isolated active levels at high latitudes during 11-13 June, due to an expected CH HSS. Quiet to unsettled levels are expected during 14-22 June. Quiet to unsettled levels, with isolated active levels are expected during 23 - 25 June due to a recurrent CH HSS. Actitvity is expected to decrease to mostly quiet during 26 - 27 June.

```
From -6067731918835145940
X-Google-Thread: fcc6e,7ac82effa778818c,start
X-Google-NewGroupId: yes
X-Google-Thread: 11480d,7ac82effa778818c,start
X-Google-NewGroupId: yes
X-Google-Thread: 108122,7ac82effa778818c,start
```

```
X-Google-NewGroupId: yes
X-Google-Thread: fc2a5,7ac82effa778818c,start
X-Google-NewGroupId: yes
X-Google-Thread: 107ada,7ac82effa778818c,start
X-Google-NewGroupId: yes
X-Google-Thread: 10bf43,7ac82effa778818c,start
X-Google-NewGroupId: yes
X-Google-Thread: 10e8ad,7ac82effa778818c,start
X-Google-NewGroupId: yes
X-Google-Thread: 10b9c8,7ac82effa778818c,start
X-Google-NewGroupId: yes
X-Google-Attributes:
gid4baf9708d4,gid7221ecd0f7,gidd7f5508063,gid241b302a50,gida3e752f117,gide721ae2bf
6,gid8f86f75953,gida4a23d5f63,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!news.glorb.com!news-out.readnews.com!
news-xxxfer.readnews.com!panix!panix2.panix.com!not-for-mail
From: rram@panix.com (rec.radio.amateur.moderated Admin)
Newsgroups:
rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.rad
io.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amat
eur.space,rec.radio.info
Subject: Crossposting Permitted to rec.radio.amateur.moderated
Supersedes: <radio/ham-radio/moderated/crossposting-1-1304229601@panix.com>
Followup-To: poster
Date: 1 Jun 2011 02:00:03 -0400
Organization: rec.radio.amateur.moderated Moderation Team
Lines: 47
Approved: RRI Admin <rec-radio-info-request@panix.com>
Distribution: world
Expires: 04 Jul 2011 02:00:01 -0000
Message-ID: <radio/ham-radio/moderated/crossposting-1-1306908001@panix.com>
Reply-To: rec-radio-amateur-moderated-request@panix.com
(rec.radio.amateur.moderated Admin)
NNTP-Posting-Host: panix2.panix.com
X-Trace: reader1.panix.com 1306908004 7683 166.84.1.2 (1 Jun 2011 06:00:04 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Wed, 1 Jun 2011 06:00:04 +0000 (UTC)
Summary: Short reminder for unmoderated newsgroups that crossposting is permitted
Keywords: FAQ, ham, amateur, radio, moderated, unmoderated, crossposting,
permitted
Xref: g2news1.google.com rec.radio.amateur.antenna:21588 rec.radio.amateur.dx:997
rec.radio.amateur.equipment:2611 rec.radio.amateur.homebrew:4465
rec.radio.amateur.misc:6257 rec.radio.amateur.policy:30508
rec.radio.amateur.space:505 rec.radio.info:2389

Posted-By: auto-faq 3.3.2 beta (PGPMoose V2.0, Perl 5.005)
Archive-name: radio/ham-radio/moderated/crossposting
Revision: 1.1 2009/04/12 19:42:04
Posting-Frequency: posted monthly
URL: http://www.panix.com/~rram/usenet/rram/index.html
```

Changes followed by "|".

After a 30-day public discussion and feedback period to gauge reader opinions in March of 2009:

http://groups.google.com/group/rec.radio.amateur.moderated/browse_thread/thread/d7d337db35f23326

the rec.radio.amateur.moderated Moderation Team has decided to consider amending its charter, and permit limited simultaneous crossposting to rec.radio.amateur.moderated and one other unmoderated amateur-radio-related discussion newsgroup. We are currently trying this on a temporary basis (90 days, through early July 2009), and adopt it permanently if successful.

Approved rec.radio.amateur.* newsgroups are those that are currently listed in the latest version of the "List of Big Eight Newsgroups" which is crossposted monthly to news.announce.newgroups, news.groups, and news.lists.misc.

Approved alt.radio.amateur.* and alt.ham-radio.* newsgroups are those that have been created consistent with the suggestions in "So You Want to Create an Alt Newsgroup" at:

  http://www.faqs.org/faqs/alt-creation-guide/

Approved regional hierarchy newsgroups are those that contain either "radio.amateur" or "ham-radio" in their names, including uk.radio.amateur and aus.radio.amateur.misc.

We will make every reasonable effort to keep our list of approved newsgroups up-to-date. In case we have overlooked any, and a submission is rejected in error as a result, the rejected submitter can E-mail us at our administrative contact address (in the signature at the bottom of this article, and the default Reply-To for the rejection message) requesting that it be added, and that the article be approved. We may still choose to reject articles crossposted to any alt.* newsgroup with an inappropriate name, including obscene language, embedded name-calling, or encouragement of unlawful conduct.

Please direct any comments, questions, or criticisms to rec-radio-amateur-moderated-request@panix.com.

From -4220228197888654768
X-Google-Thread: 10e8ad,998d2fb4a44bed27,start
X-Google-NewGroupId: yes
X-Google-Thread: 10b9c8,998d2fb4a44bed27,start
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,gida4a23d5f63,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news1.google.com!news.glorb.com!news-out.readnews.com!news-xxxfer.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>

Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-156 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sat, 4 Jun 2011 21:28:37 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 487
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <001f01cc231f$e03ffcf0$a0bff6d0$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1307237317 6193 166.84.1.6 (5 Jun 2011 01:28:37 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 5 Jun 2011 01:28:37 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to   rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to   rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news2.google.com rec.radio.amateur.space:531 rec.radio.info:2478

AMSAT NEWS SERVICE
ANS-156

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:

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* US Army Supports Student Launch Program

SB SAT @ AMSAT $ANS-156.01
Eclipses Continue to Affect AO-51 Operation

AMSAT News Service Bulletin 156.01
>From AMSAT HQ SILVER SPRING, MD.
June 5, 2011
To All RADIO AMATEURS
BID: $ANS-156.01

Last week's ANS bulletins reported that the AO-51 Command Team had successfully restored the satellite to partial operations. AO-51 at that time required a reload/reboot sequence every time it emerged from eclipse due to the Integrated Housekeeping (IHU) computer crashing from low battery voltage.

This week AMSAT VP-Operations, Drew Glasbrenner, KO4MA said, "AO-51's computer has been running for over 5 hours now. We have left the satellite in repeater mode 145.88/435.15 for the time being, at over 2 watts. We are very surprised by this development to say the least. Without Whole Orbit Data we are flying a bit blind, so would really like to know what the satellite is doing in eclipse. Please send your reports to me or to the amsat-bb. Southern hemisphere observations are most very welcome."

+ Robert, NH7WN reported from Honolulu: "AO51 was alive and well as she came out of eclipse on June 2. I was able to hear myself perfectly on the downlink (145.880 up and 435.150 down)."

+ Brett reported: "Heard on AO-51 today pass over Australia/New Zealand 145.880/435.150 Strong signals. Copied VK1AMG, ZL2BX, VK4VDX."

+ Alan, ZL2BX reported: "AO-51 solid signals in ZL. AOS (0459 UT) about five minutes after it came out of eclipse. Later on June 3, I can finally confirm that AO-51 is loud and clear over ZL in full eclipse. with solid signals from the transponder."

+ Dave, KB5WIA reported from California, "AO-51 was in great shape as it passed south above the Pacific Ocean on June 3. I had a nice S9+ full quieting downlink for the entire pass."

The Command Team has analyzed AO-51 live telemetry when the satellite is in range of a ground station because Whole Orbit Data is lost when the IHU Computer crashes. Drew, KO4MA summarized, "Cell 3 is reporting 0.0 volts, so it's clear it has shorted completely."

Donations for Fox and ARISSat-1 are being collected. If you haven't yet donated, please drop by http://www.amsat.org, or call Martha at the AMSAT Office at 1-888-322-6728 today and help us get Fox in space.

Keep up with the latest AO-51 Control Team News on-line at:
http://www.amsat.org/amsat-new/echo/CTNews.php

[ANS thanks AMSAT-NA VP Operations Drew Glasbrenner, KO4MA for the above information]

/EX

SB SAT @ AMSAT $ANS-156.02
Reminder: The DARA Matching Gift Challenge

AMSAT News Service Bulletin 156.02
>From AMSAT HQ SILVER SPRING, MD.
June 5, 2011
To All RADIO AMATEURS
BID: $ANS-156.02

The Dayton Amateur Radio Association (DARA) has announced a fund raising challenge for AMSAT whereby they will match on a 1:3 basis up to $5,000.00 for donations made in 2011. That is, for every $3.00 that AMSAT raises, DARA will provide $1.00 up to a maximum of $5,000 donated by DARA.

AMSAT kicked off the fundraising campaign at the Hamvention, where donations began count against this goal. Please consider making a donation to AMSAT at Hamvention or anytime this Spring as we strive to meet this goal.

We appreciate DARA's support for AMSAT and see this as an opportunity for donors to increase the impact of their donations by taking advantage of this matching program.

[ANS thanks AMSAT Headquarters for the above information]

/EX

SB SAT @ AMSAT $ANS-156.03
AMSAT-NA Board of Directors Nominations Due by June 15th

AMSAT News Service Bulletin 156.03
>From AMSAT HQ SILVER SPRING, MD.
June 5, 2011
To All RADIO AMATEURS
BID: $ANS-156.03

It is time to submit nominations for the upcoming open seats on the AMSAT-NA Board of Directors. The deadline is June 15th. A valid nomination requires either one Member Society, or five current individual members in good standing, to nominate an AMSAT member for the position.

Four director's terms expire this year:

Barry Baines, WD4ASW
Alan Biddle, WA4SCA
Drew Glasbrenner, KO4MA
Tony Monteiro, AA2TX

The four candidates receiving the highest number of votes will be seated as full Board members for two year terms. The two candidates receiving the next highest number of votes will be seated as alternate Board members for one year terms.

Beginning this year, in addition to traditional submissions of written nominations which remains unchanged and is the preferred method, initial nominations may be made by electronic means.=A0 These include e-mail, FAX, or electronic image of a petition. Electronic petitions should be sent to MARTHA@AMSAT.ORG or faxed to 301-608-3410. Written nominations, consisting of names, calls, and individual signatures, should be mailed to:

AMSAT-NA
850 Sligo Ave #600
Silver Spring, MD, 20910

No matter what method is used, petitions MUST arrive no later than June 15th at the AMSAT-NA office. If the nomination is a traditional written nomination, no other action is required. If it is other than this, i.e. electronic, a verifying traditional written petition MUST be received at the AMSAT-NA office at the above address within 7 days following the close of nominations on June 15th. ELECTRONIC SUBMISSIONS WITHOUT THIS SECOND, WRITTEN VERIFICATION ARE NOT VALID UNDER THE EXISTING AMSAT-NA BYLAWS.

Alan Biddle
WA4SCA
AMSAT Corporate Secretary

[ANS thanks Alan, WA4SCA, for the above information]

/EX

SB SAT @ AMSAT $ANS-156.04
New Satellite Award: 5 in EM55

AMSAT News Service Bulletin 156.04
>From AMSAT HQ SILVER SPRING, MD.
June 5, 2011
To All RADIO AMATEURS
BID: $ANS-156.04

Damon, WA4HFN announced this week, "In an effort to help increase interest in satellites, we have created a new award for working five (5) different hams in the EM55 grid."

You do not have to be in your home grid to count the stations worked. There are several satellite ready hams in EM55. Here is the current list that we know of: WA4NVM, WA4HFN, WB4LHD, WA4OVO, KI4OTG, KD4NOQ, KJ4BIX, AND AJ4KF.

Send your log to WA4NVM or WA4HFN for checking, along with your current mailing address. The award is free and should any donations be sent, they will be forwarded to AMSAT along with your call and name.

This award will be effective 1 June 2011, therefore, all contacts must be on or after this date.

[ANS thanks Damon, WA4HFN for the above information]

/EX

SB SAT @ AMSAT $ANS-156.05
AMSAT-DL Break FUNcube Dongle Distance Record

AMSAT News Service Bulletin 156.05
>From AMSAT HQ SILVER SPRING, MD.
June 5, 2011
To All RADIO AMATEURS
BID: $ANS-156.05

A story first reported on the Southgate ARC news web site reported members of AMSAT-DL have received the Stereo B spacecraft at a distance of 219 million kilometers using an AMSAT-UK FUNcube Dongle Software Defined Radio as the I.F. in combination with a downconverter.

Stereo B transmits in the X band around 8 GHz so could not be received by the FUNcube Dongle directly since that covers 64-1700 MHz. A downconverter was installed at the dish feed and the 1280 MHz output was fed into the FUNcube Dongle SDR.

The frequency of Stereo B varies due to Doppler shift (of the rotating Earth) and was calculated by the tracking software.

Watch Mario Lorenz DL5MLO explain how the record was broken Receiving Stereo B with a FUNcube dongle and the Bochum 20m dish:
http://tinyurl.com/6eukmjv (Southgate)

ANS thanks Southgate ARC news site for the above information]

/EX

SB SAT @ AMSAT $ANS-156.06
Satellite Shorts From All Over

AMSAT News Service Bulletin 156.06
>From AMSAT HQ SILVER SPRING, MD.
June 5, 2011
To All RADIO AMATEURS
BID: $ANS-156.06

+ EE Times published an article, "High-performance FPGAs take flight in microsatellites" featuring the U.K. Space Agency's UKube1 mission. This satellite will also fly a transponder based on AMSAT-UK's FUNcube design. The EE Times article is available on-line at: http://tinyurl.com/6he8n82
A downloadable PDF file of the article can be found at:
http://www.xilinx.com/publications/archives/xcell/Xcell75.pdf

+ Free Book Downloads! National Academies Press offers more than 4,000 titles as free PDF downloads. Begin on their download site at: http://www.nap.edu/ (Tammy Plotner on June 2, 2011 at UniverseToday.com).

+ SO-67 has been reported to be active this past week. Monitor the satellite's schedule usually posted at:
http://www.amsatsa.org.za/

+ The next Hudson Valley Satcom Nets are scheduled for June 9 and June 23, at 8PM EDT (UTC-4) on the 146.970 MHz repeater, (Pl 100), and also on Echolink node N2EYH-L. More info: http://www.hvsatcom.org (Stu, WA2BSS)

+ Angel Santana, WP3GW posted a video on YouTube about his live contact with the ISS this past week:
http://www.youtube.com/watch?v=rdzRWEzKH_M

+ A video based on images captured by the NASA with the Cassini Imaging Science System team has been posted by Chris Abbas of Digital Kitchen: http://vimeo.com/24410924 The UniverseToday story can be found at: http://tinyurl.com/6xyp4ph (UniverseToday.com)

+ NASA reveals the excitement of planetary exploration in over 90 images that can be viewed on their science outreach program called From Earth to the Solar System (FETTSS) web page:
http://www.fromearthtotheuniverse.org/index.php

+ This high definition short is a fascinating document. Narrated by NASA's Dr. Justin Wilkinson, it shows a tour of planet Earth as seen by astronauts, explaining what are the places that they first focus on while in orbit: http://www.youtube.com/watch?v=rj18UQjPpGA
(Clint, K6LCS)

+ Check your ISS Keps! According to Roscosmos, the ISS boosted its orbit by 3.74 km Friday. This will result in a "slippage" of predicted times of approximately 70 seconds per day until the Keps catch up. The AMSAT NASA.ALL Keps will probably not reflect this until next week, so be certain to update from Celstrak or Space Track.

[ANS thanks everyone for the above information]

/EX

SB SAT @ AMSAT $ANS-156.07
2011 AMSAT Field Day Competition

AMSAT News Service Bulletin 156.07
>From AMSAT HQ SILVER SPRING, MD.
June 5, 2011
To All RADIO AMATEURS
BID: $ANS-156.07

AMSAT Director of Awards, Bruce Paige, KK5DO says, "It's that time of year again: Summer and Field Day!"

Each year the American Radio Relay League (ARRL) sponsors Field Day as an emergency preparedness exercise. The event takes place during a 24-hour period on the fourth weekend of June. For 2011 the event takes place during a 27-hour period from 1800 UTC on Saturday June 25, 2011 through 2100 UTC on Sunday June 26, 2011. Those who set up prior to 1800 UTC on June 25 can operate only 24 hours.

The Radio Amateur Satellite Corporation (AMSAT) promotes its own version of Field Day for operation via the amateur satellites, held concurrently with the ARRL event.

Bruce advises, "If you are considering ONLY the FM voice satellites like AMRAD-OSCAR-27, SaudiSat-Oscar-50, or AMSAT-OSCAR-51 for your AMSAT Field Day focus. Don't, unless you are simply hoping to make one contact for the ARRL rules bonus points."

The congestion on FM LEO satellites was so intense in prior years that we must continue to limit their use to one-QSO-per-FM-satellite. This includes the International Space Station. You will be allowed one QSO if the ISS is operating Voice. You will also be allowed one digital QSO with the ISS or any other digital, non-store-and-forward, packet satellite (if operational).

Please refer to these links for the full document of the AMSAT Field Day rules:
http://www.amsat.org/ (link on AMSAT.org front page to PDF file)
And, an alternative site is:
http://www.amsatnet.com/2011fd.doc (MS-Word Doc File)
http://www.amsatnet.com/2011fd.pdf (PDF File)

These documents also cover the message exchange format, scoring requirements, reporting requirements, station classes, etc.

[ANS thanks AMSAT Director of Awards, Bruce Paige, KK5DO for the above information]

/EX

SB SAT @ AMSAT $ANS-156.08
Open Source Hardware List From Dayton TAPR Forum

AMSAT News Service Bulletin 156.08
>From AMSAT HQ SILVER SPRING, MD.
June 5, 2011
To All RADIO AMATEURS
BID: $ANS-156.08

A discussion on the HPSDR-list contained a list from Open Source evangelist Bruce Peren's talk at the TAPR Forum in Dayton which provides supplier sources of relatively inexpensive Open Source" hardware.

Some of the specific hardware projects listed include:

+ OMAP L138. (TI chip with ARM and a DSP both on board)
  http://tinyurl.com/5wb8ocz

+ Papilo FPGA
  http://tinyurl.com/3xnfne8
  Also there is a 32-channel logic analyzer for $50 there.

+ Arduino http://www.arduino.cc/

+ $15 CPLD (you can build things from 74xx series gate equivalent logic): http://tinyurl.com/6h28olw

+ Bus Pirate
  http://tinyurl.com/47as6x9

Subscription information for the HPSDR list can be found at:
http://lists.openhpsdr.org/listinfo.cgi/hpsdr-openhpsdr.org

[ANS thanks George K9TRV and Bruce Perens for the above information]

/EX

SB SAT @ AMSAT $ANS-156.09
US Army Supports Student Launch Program

AMSAT News Service Bulletin 156.09
>From AMSAT HQ SILVER SPRING, MD.
June 5, 2011
To All RADIO AMATEURS
BID: $ANS-156.09

(Editor Note: This item originated on the Space-Travel.com web at http://tinyurl.com/6zsu4ea

White Sands Missile Range NM (SPX) Jun 03, 2011. A scientific rocket screamed skyward at Spaceport America May 20, 2011, as students from all over New Mexico, as well as Texas and Arizona came to see their scientific payloads fly into space during a scientific and educational mission supported by White Sands Missile Range.

The rocket carried 27 experiments from elementary, middle schools, high schools and universities into space before returning to earth, and landing at White Sands Missile Range, or WSMR. Under the New Mexico Space Grant Student Launch Program, students were able to assemble their own scientific payloads to be launched over 65 miles above the earth.

The student payloads, divided into seven different canisters within the rocket were a varied as the students who built them. Crammed into the canisters were cameras, radiation monitoring sensors, and other measurement devices, along with some more advanced systems.

"We had things from roasting green chilies to marshmallows to using a piezo electric board, tesla coils, and a lot of temperature monitors and Geiger counters, a bunch of variety, and a lot of magnetic experiments also," said Bruce Lewis with the space grant office and spaceport office.

The rocket launch represented more than just an educational opportunity for the students, but a cooperative effort between different organizations and companies. Even though the rockets flight began at Spaceport America, a state-run spaceport, it ended its flight on White Sands Missile Range and used range airspace.

"This is White Sands airspace that we're flying in, so White Sand controls that airspace for us. We have a great relationship with White Sands and we had a lot of support from (WSMRs) team," said Pat Hynes, director of the Space Grant Consortium.

The recovery of the rocket, and it's return to the students was conducted by White Sands Missile Range's Army Air. While the rocket was awaiting recovery White Sands Missile Range Chief of Staff Dan Hicks spoke with the students about the future of high technology careers and the kind of opportunities in those fields offered by WSMR and the Army.

"The majority of the workforce consists of engineers and mathematicians and other scientific fields. We've got about 4,000 people on the test center and garrison side that have that type of background. So in order to be specific to what it takes to get a job out at White Sands one of the key things would be to continue your education into college and get a degree," Hicks said.

Hick Also answered questions from the students about spaceflight, how the range operates and the kind of radar systems used to track rockets like the one used in the experiment.

Data collected by these various devices had a variety of applications, with some being educational in nature, giving the students a glimpse of what it means to send something into space, and other experiments having more direct applications to the future of space flight.

"Some of it is great data; some of it is fun data. So you're got both the fun stuff and some things that are collecting real empirical data that NASA may be able to use in the future," Lewis said.

One experiment bridged the gap between the two. An experiment conducted by Aztec High School harvested the physical motion of the rocket in flight and converted it into electricity which was then used to power a small electric oven and roast a green chili. While roasting green chilies isn't critical to the future of space flight, the electricity could have other purposes.

"What we wanted to see is if you could power something in the rocket just using piezo electrics, just using the own forces of the rocket to generate it's own electricity while flying up into space," said Braden Goimarac, from Aztec High School's "Black Ops" science team.

[ANS thanks Space-Travel.com for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office. And with that keep in mind the ham who asked his dog if the name Pavlov rang a bell.

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM

From 4503174126939945067
X-Google-Thread: 107ada,ed9b5cecee59a297,start
X-Google-NewGroupId: yes
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transit3.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: SWPC.Webmaster@noaa.gov
Newsgroups:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.info
Subject: Weekly Highlights of Solar and Geomagnetic Activity, 30 May - 05 June
2011
Followup-To: rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space
Date: Tue, 7 Jun 2011 17:30:09 EDT
Organization: NOAA Space Weather Prediction Center
Lines: 66
Approved: RRI Admin <rec-radio-info-request@panix.com>
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X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Tue, 7 Jun 2011 21:30:10 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Xref: g2news1.google.com rec.radio.amateur.misc:6272 rec.radio.amateur.dx:1001
rec.radio.amateur.space:507 rec.radio.info:2408

:Product: Weekly Highlights and Forecasts
:Issued: 2011 Jun 07 1756 UTC
# Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center
# Product description and SWPC contact on the Web
# http://www.swpc.noaa.gov/weekly.html
#
#                 Weekly Highlights and Forecasts
#
```

Highlights of Solar and Geomagnetic Activity
30 May - 05 June 2011

Solar activity was at low levels during 30 May - 04 June with C-class flares from Regions 1226 (S21, L = 037, class/area Eki/360 on 29 May) and 1227 (S19, L = 022, class/area Dsi/190 on 31 May). A C3/2n flare at 02/0746 UTC from Region 1227 was associated with an Earth-directed partial-halo CME.

No proton events were observed at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit was at high levels from 30 May - 04 June and returned to normal levels on

05 June.

Geomagnetic field activity ranged from quiet to major storm levels during the period. Activity was at quiet to active levels during 30 May - 01 June as CH HSS effects persisted. A CME passage occurred on 01 June which caused a brief period of active levels. Activity decreased to quiet to unsettled levels on 02 June as CH HSS effects subsided. Quiet levels occurred during 03 - 04 June. A geomagnetic sudden impulse (SI) occurred at 04/2045 UTC (54 nT, Boulder USGS magnetometer) associated with the CME observed on 02 June and was followed by active to minor storm conditions on 05 June with major storm conditions observed at high latitudes.

Forecast of Solar and Geomagnetic Activity
08 June - 04 July 2011

Solar activity is expected to be at low levels throughout the period with a chance for an isolated M-class flare from Region 1226 until it departs the west limb on 10 June.

The greater than 10 MeV and 100 MeV proton flux at geosynchronous orbit are expected to be above alert threshold levels through 11 June due to a fast moving halo coronal mass ejection (CME) observed early on 07 June. A return to background levels is expected on 12 June and is expected to stay below threshold for the remainder of the period.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to be at high levels from 08 - 15 June due to the effects from both the 02 June CME and the 07 June CME. Normal to moderate levels are expected to return until 27 June following a recurrent coronal hole high speed stream.

Geomagnetic field activity is expected to be at quiet to unsettled levels during 08 June as coronal hole high speed stream (CH HSS) effects begin to wane. Active to major storm conditions are expected on 09 June due to the effects of the halo CME observed on 07 June. Activity is expected to decrease to unsettled to active levels during 10 - 12 June due to residual effects of the CME and another CH HSS. Activity is expected to decrease to mostly quiet levels on 13 June as CH HSS effects subside. Quiet levels are expected during 14 - 22 June. Quiet to unsettled levels are expected from 23 - 26 June due to another recurrent CH HSS. A return to quiet conditions is expected on 27 June as the effects of the CH HSS subside.

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From: Chris Steyaert <observations@rmob.org>
Newsgroups: rec.radio.amateur.space,sci.astro.amateur
Subject: Radio Meteor Obs. Bull. June 2011 eta Aquarids
Date: Wed, 08 Jun 2011 20:50:00 +0200
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Content-Transfer-Encoding: 7bit
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Xref: g2news1.google.com rec.radio.amateur.space:508 sci.astro.amateur:47175

Radio Meteor Observation Bulletin No. 214 of May 2011 (87 K) is available now as

http://www.rmob.org/rmobtext/rmob1105.txt

More information and the visual presentation of the hourly forward scatter counts can be found on

http://www.rmob.org

Chris

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From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-163 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sun, 12 Jun 2011 09:15:40 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 441

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X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 12 Jun 2011 13:15:40 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news2.google.com rec.radio.amateur.space:534 rec.radio.info:2496
```

AMSAT NEWS SERVICE
ANS-163

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:

* ARISSat-1 Reception Challenge
* Call for Papers
* AMSAT-NA Board of Directors Nominations Due by June 15th
* New Items in AMSAT Store
* OM3BD Looking for North America Satellite Contacts
* Satellite Shorts From All Over
* 2011 AMSAT Field Day Competition
* ARISS Report
* AMSAT Server Upgrade

SB SAT @ AMSAT $ANS-163.01
ARISSat-1 Reception Challenge

AMSAT News Service Bulletin 163.01
>From AMSAT HQ SILVER SPRING, MD.
June 12, 2011
To All RADIO AMATEURS
BID: $ANS-163.01

ARISSat-1 Reception Challenge

ARISSat-1 is scheduled for deployment from the ISS in July. It has a composite VHF downlink that will easily fit into the FUNcube Dongle receive spectrum. The telemetry is 1000 bps BPSK and can, of course, also be received with a normal SSB 2 metre receiver.

The expected signal levels from ARISSat should be similar to those we expect from FUNcube itself (and also eventually from UKube) and the team are keen to discover what will be the minimum and best type of antennas for schools to use with a FCD. Therefore user experience with the ARISSat signals will be very valuable in making this determination.

To encourage everyone to receive ARISSat signals we are offering a FUN reward for listeners!

There are a number of categories for this challenge including:

1. The first FCD user, from each continent, who can post a spectrum recording of the received signal together with evidence of decoding the data using the ARISSat software and of sending it to the ARISSat data warehouse.

2. The first non-FCD user, from each continent, who can provide evidence of having decoded the signals and of sending it to the ARISSat data warehouse.

3. The listener, using a FCD or not, who can demonstrate satisfactory reception of the telemetry in the same ways as described above, using the "smallest" possible receive antenna. The actual closing date for this part of the challenge will be announced later.

4. All other entrants who can demonstrate that they have been having FUN!

Please submit your "entries", including your location, station details (including FCD serial number where applicable), postal address and reports
to g0auk<at>amsat.org.

[ANS thanks AMSAT-UK and the Southgate ARC News Site for the above information]

/EX

SB SAT @ AMSAT $ANS-163.02
Call for papers

AMSAT News Service Bulletin 163.02
>From AMSAT HQ SILVER SPRING, MD.

June 12, 2011
To All RADIO AMATEURS
BID: $ANS-163.02

Technical papers are solicited for presentation at the 30th Annual ARRL and TAPR Digital Communications Conference to be held September 16-18, 2011 in Baltimore, Maryland. These papers will also be published in the Conference Proceedings (you do NOT need to attend the conference to have your paper included in the Proceedings). The submission deadline is July 31, 2011. Please send papers to:

Maty Weinberg
ARRL
225 Main St
Newington, CT 06111

Or... you can make your submission via e-mail to: maty@arrl.org

Papers will be published exactly as submitted and authors will retain all rights.

[ANS thanks Steve, WB8IMY, at the ARRL for the above information]

/EX

SB SAT @ AMSAT $ANS-163.03
AMSAT-NA Board of Directors Nominations Due by June 15th

AMSAT News Service Bulletin 163.03
>From AMSAT HQ SILVER SPRING, MD.
June 12, 2011
To All RADIO AMATEURS
BID: $ANS-163.03

It is time to submit nominations for the upcoming open seats on the AMSAT-NA Board of Directors. The deadline is June 15th. A valid nomination requires either one Member Society, or five current individual members in good standing, to nominate an AMSAT member for the position.

Four director's terms expire this year:

Barry Baines, WD4ASW
Alan Biddle, WA4SCA
Drew Glasbrenner, KO4MA
Tony Monteiro, AA2TX

The four candidates receiving the highest number of votes will be seated as full Board members for two year terms. The two candidates receiving the next highest number of votes will be seated as alternate Board members for one year terms.

Beginning this year, in addition to traditional submissions of written nominations which remains unchanged and is the preferred method, initial nominations may be made by electronic means.� These include e-mail, FAX, or electronic image of a petition. Electronic petitions should be sent to MARTHA@AMSAT.ORG or faxed to 301-608-3410. Written nominations, consisting of names, calls, and individual signatures, should be mailed to:

AMSAT-NA
850 Sligo Ave #600
Silver Spring, MD, 20910

No matter what method is used, petitions MUST arrive no later than June 15th at the AMSAT-NA office. If the nomination is a traditional written nomination, no other action is required. If it is other than this, i.e. electronic, a verifying traditional written petition MUST be received at the AMSAT-NA office at the above address within 7 days following the close of nominations on June 15th. ELECTRONIC SUBMISSIONS WITHOUT THIS SECOND, WRITTEN VERIFICATION ARE NOT VALID UNDER THE EXIST- ING AMSAT-NA

BYLAWS.

Alan Biddle
WA4SCA
AMSAT Corporate Secretary

[ANS thanks Alan, WA4SCA, for the above information]

/EX

SB SAT @ AMSAT $ANS-163.04
New Items in AMSAT Store

AMSAT News Service Bulletin 163.04
>From AMSAT HQ SILVER SPRING, MD.
June 12, 2011
To All RADIO AMATEURS
BID: $ANS-163.04

Hot off the presses, you don't want to miss out on these new additions to the AMSAT online store for 2011.

The latest from Gould, WA4SXM, Getting Started With Amateur Satellites - 2011. Excellent for the beginner to learn the ins and outs of the most popular satellites. Also contains information on ARISSat-1, P3 Express and AMSAT Fox.

There is a new 2011 Frequency chart, updated May, 2011 by Mike, N1JEZ.

Catch a fly ball or keep the sun off your head with the new 2011 Baseball Cap

Show off your support for ARISSat-1 with a handsome red Polo Shirt or gray T-Shirt

Visit the AMSAT online store and see pictures and pricing to your door. http://www.amsat.org click on link in left margin.

73...bruce
(AMSAT online store manager)

[ANS thanks Bruce, KK5DO, for the above information]

/EX

SB SAT @ AMSAT $ANS-163.05
OM3BD Looking for North America Satellite Contacts

AMSAT News Service Bulletin 163.05
>From AMSAT HQ SILVER SPRING, MD.
June 12, 2011
To All RADIO AMATEURS
BID: $ANS-163.05

Bill, NZ5N says he is heading for his annual 7-week trip to Slovakia, grid locator JN88mf. He has been issued a new Slovak callsign OM3BD.

Bill wrote, "I will be active on the satellites. North American stations,
please contact me for OSCAR 7 mode B skeds, if we will have any mutual footprints. Time permitting, there's also a possibility of some portable operations to different grids, and/or satellite expeditions to Austria and Hungary Both are less than 20 miles from my Slovakian QTH."

Bill said last year he was able contact Ohio and Virginia via AO-7 from this location.

[ANS thanks Bill, NZ5N for the above information]

/EX

SB SAT @ AMSAT $ANS-163.06
Satellite Shorts From All Over

AMSAT News Service Bulletin 163.06
>From AMSAT HQ SILVER SPRING, MD.
June 12, 2011
To All RADIO AMATEURS
BID: $ANS-163.06

+ NASA has released photos of Endeavour docked at the International

Space Station (ISS). These are the first ever images taken of a space shuttle while still attached to the orbiting lab complex from the perspective of a crewed Russian Soyuz spacecraft. The photos were captured by Italian astronaut Paolo Nespoli from the Soyuz TMA-20 vehicle as he and two crewmates were departing the ISS for their return trip to Earth. See: http://www.nasa.gov/mission_pages/station/multimedia/e27depart.html

+ NASA's Spirit rover on Mars stopped transmitting in March 2010 when it went silent at the onset of the cold and dark Martian winter. Assembled by Dr. Ken Kremer and Marco Di Lorenzo from publicly-available NASA imagery, these mosaics show Spirit's final resting place: http://spaceflightnow.com/news/n1106/05spirit/

+ NASA Science News posted "A Salute to Spirit" at: http://tinyurl.com/3ce4zp2 (science.nasa.gov)

+ Video of the June 7 Soyuz launch with NASA astronaut Mike Fossum, Russian cosmonaut Sergei Volkov and Japan Aerospace Exploration Agency astronaut Satoshi Furukawa can be viewed at the UniverseToday web site: http://tinyurl.com/6c2gews

+ A new yahoo group dedicated to Digital Amateur Television has been created. The purpose of the group is to share knowledge & experiences using & developing DATV technology for amateur use. You can join the group at: http://groups.yahoo.com/group/DigitalATV/ (Mark, WB9QZB)

+ Copenhagen Suborbital, a group of amateur rocketeers successfully launched the world's first amateur-built rocket made for human space travel. Two videos of the launch can be found at:

http://www.universetoday.com/86306/copenhagen-suborbitals-launch-videos/

+ Send an audio report of your SumbandilaSat contact and you may be one of 3 lucky winners drawn to receive a first day postal cover of the SumbandilaSat. Closing date is 30 June 2011. E-Mail to: saamsat@intekom.co.za (http://www.amsatsa.org.za/)

+ Martha at AMSAT Headquarters says she now has 7 Elk Antennas in stock. The cost is $125 plus shipping. She also has the bag which is $25. If you are interested, please call the AMSAT Office at 301-589-6062. A portion of your purchase price benefits AMSAT.

+ Andy, VK3ASI hopes to operate the FM satellites Oscar 50 and 51 from Spitsbergen next week. Some of the operation may be maritime mobile.

+ The Central States VHF Conference will convene in Irving, TX on July 29 - 30. Most attendees traveling from a good distance will arrive on July 28th and checkout on July 31st. Information will be posted at: http://www.csvhfs.org/

/EX

SB SAT @ AMSAT $ANS-163.07
Reminder-2011 AMSAT Field Day Competition

AMSAT News Service Bulletin 163.07
>From AMSAT HQ SILVER SPRING, MD.
June 12, 2011
To All RADIO AMATEURS
BID: $ANS-163.07

Field Day is June 25 & 26. Annual readiness excersize is a great way to demo Satellite Operations.

AMSAT Director of Awards, Bruce Paige, KK5DO says, "It's that time of year again: Summer and Field Day!"

Each year the American Radio Relay League (ARRL) sponsors Field Day as an emergency preparedness exercise. The event takes place during a 24-hour period on the fourth weekend of June. For 2011 the event takes place during a 27-hour period from 1800 UTC on Saturday June 25, 2011 through 2100 UTC on Sunday June 26, 2011.
Those who set up prior to 1800 UTC on June 25 can operate only 24 hours.

The Radio Amateur Satellite Corporation (AMSAT) promotes its own version of Field Day for operation via the amateur satellites, held concurrently with the ARRL event.

Bruce advises, "If you are considering ONLY the FM voice satellites like AMRAD-OSCAR-27, SaudiSat-Oscar-50, or AMSAT-OSCAR-51 for your AMSAT Field Day focus. Don't, unless you are simply hoping to make one contact for the ARRL rules bonus points."

The congestion on FM LEO satellites was so intense in prior years that we must continue to limit their use to one-QSO-per-FM-satellite. This includes the International Space Station. You will be allowed one QSO if the ISS is operating Voice. You will also be allowed one digital QSO with the ISS or any other digital, non- store-and-forward, packet satellite (if operational).

Please refer to these links for the full document of the AMSAT Field Day rules:
http://www.amsat.org/ (link on AMSAT.org front page to PDF file) And, an alternative site is:
http://www.amsatnet.com/2011fd.doc (MS-Word Doc File)
http://www.amsatnet.com/2011fd.pdf (PDF File)

These documents also cover the message exchange format, scoring requirements, reporting requirements, station classes, etc.

[ANS thanks AMSAT Director of Awards, Bruce Paige, KK5DO for the above information]

/EX

SB SAT @ AMSAT $ANS-163.08
ARISS Report

AMSAT News Service Bulletin 163.08
>From AMSAT HQ SILVER SPRING, MD.
June 12, 2011
To All RADIO AMATEURS
BID: $ANS-163.08

Amateur Radio on the International Space Station (ARISS) Status Report June 6, 2011

1. Amateur Radio Newsline on ARISS

On June 3, the Amateur Radio Newsline Report 1764 included a story on the new ARISS proposal process for U.S. schools. "Ham Radio in Space: New US Only Selection Process Announced for ARISS Contacts" may be found at: ftp://ftp.arnewsline.org/quincy/News/news.txt

2. Astronaut Training Status

An ARISS simulated contact is planned with Kevin Ford, KF5GPP on June 13. Ford is scheduled to fly with Expedition 33 in September 2012.

Don Pettit, KD5MDT and Andr� Kuipers, PI9ISS are scheduled for an ARISS preflight session on June 22. The two astronauts are part of Expedition 30 which will launch in November 2011.

3. ARISS Presentations at Ham-Com 2011

The American Radio Relay League (ARRL) National Convention will be held at the Ham-Com 2011 in Plano, Texas on Friday and Saturday, June 10 - 11. Several ARISS presentations will be given during the event:

ARISSat-1 a Satellite for STEM Education and Fun
Presented by Keith Pugh, W5IU

Amateur Radio on the International Space Station
Presented by Kenneth Ransom, N5VHO

Introduction to Amateur Radio Satellites
Presented by Douglas Quagliana, KA2UPW

For more information, see: http://www.hamcom.org

[ANS thanks Carol Jackson, KB3KLI, for the above information]

/EX

SB SAT @ AMSAT $ANS-163.09
AMSAT Server Upgrade

AMSAT News Service Bulletin 163.09
>From AMSAT HQ SILVER SPRING, MD.
June 12, 2011
To All RADIO AMATEURS
BID: $ANS-163.09

AMSAT Server Upgrade News

AMSAT's network manager Paul Williamson, KB5MU reminded users of the http://www.amsat.org features and news that, "The AMSAT.ORG computer has been upgraded and moved to a new location. Although it still remains on the UCSD campus, the new location required that a new IP address be assigned. The transition should theoretically be seamless, but some users may have trouble until their network's DNS servers take notice of the update."

Unless your network admin has done something unusual, any problems should clear up by themselves within a few days at most.

Please report any ongoing problems to Paul via kb5mu@amsat.org or paul@mustbeart.com if the problem prevents email from getting through to amsat.org.

[ANS thanks Paul Williamson, KB5MU for the above information]

/EX

73,
This week's ANS Editor,
Dee Interdonato, NB2F

```
From 6544767521695876б7
X-Google-Thread: 10e8ad,1f3a631ed738e41,start
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Newsgroups:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.info
Subject: Weekly Highlights of Solar and Geomagnetic Activity, 06 - 12 June 2011
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Organization: NOAA Space Weather Prediction Center
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X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Xref: g2news1.google.com rec.radio.amateur.misc:6290 rec.radio.amateur.dx:1007
rec.radio.amateur.space:510 rec.radio.info:2421
```

```
:Product: Weekly Highlights and Forecasts
:Issued: 2011 Jun 14 1847 UTC
# Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center
# Product description and SWPC contact on the Web
# http://www.swpc.noaa.gov/weekly.html
#
#                 Weekly Highlights and Forecasts
#
```

Highlights of Solar and Geomagnetic Activity
06 - 12 June 2011

Solar activity has been at very low to moderate levels during the period. Activity began at low levels on 06 June, when Region 1226 (S21, L=036, Eki/360 on 29 May) produced two C-class flares, a C1 flare at 06/0135Z and a C1 flare at 06/0950Z. A 12-degree long filament, centered near N25W34, erupted during the period. SDO/AIA 193 imagery revealed material movement along a large filament channel, first visible at 06/0441Z, which continued through about 06/0900Z. Activity increased to moderate levels on 07 June as Region 1226 produced a M2/2N. Associated with this event was a Type II radio sweep, a Type IV Radio Sweep, a Tenflare of 710 sfu, and a full halo asymmetric CME with an estimated plane of sky speed of 1155 km/s. Discrete radio emissions included 1415 MHz - 15400 MHz. Activity decreased to very low levels on 08 June. Activity increased to low levels during 09-10 June as Region 1226 produced two C-class flares, a C1/Sf at 09/0321Z and a C4/Sf at 09/0348Z. Region 1234 (S16, L=245, Bxo/010 on 09 June) also produced a C1 flare at

09/1028. From around the west limb, Region 1226 produced a final C2 flare at 10/1751Z. Activity decreased to very low levels for the remainder of the period.

The 10 MeV proton flux exceeded 10 pfu, beginning at 07 June/0820Z, reaching maximum at 07/1820Z, and ending at 08/1710Z. The maximum 10 MeV flux was 73 pfu. The 100 MeV proton flux exceeded 1 pfu, beginning at 07/0720Z, reaching maximum at 07/1025Z, and ending at 08/0210Z. The maximum 100 MeV flux was 4 pfu.

The greater than 2 MeV electron flux at geosynchronous orbit was at normal to moderate levels during 06-08 June. Fluxes increased to moderate to high levels during 09-10 June. Flux levels decreased to moderate levels during 11-12 June.

The geomagnetic field ranged from quiet to minor storm levels during the period. Activity on 06 June began at unsettled to active levels, with an isolated minor storm at high latitudes, due to the continued effects of a coronal hole high speed stream (CH HSS) and the arrival the 02 June CME. On 07 June, solar wind speeds, as measured by the ACE spacecraft, increased from 380 km/s to around 480 km/s, following a density spike. These characteristic appear to be the arrival of another CH HSS. From 07- 09 June, activity stayed at quiet to active levels with an isolated minor storm period from 08/0000-0300Z as effects of the CH HSS continued. On 10 June, quiet to unsettled levels were observed with an isolated minor storm period at high latitudes as measurements by the ACE spacecraft indicate the likely arrival of the CME from 07 June. Quiet to active levels were observed from 11-12 June, as a solar sector boundary crossing was observed, preceding another CH HSS.

Forecast of Solar and Geomagnetic Activity
15 June - 11 July 2011

Solar activity is expected to be at very low levels with a slight chance for C-class flares during 15-20 June. Activity is expected to increase to low to moderate levels, with a slight chance for M-class flares during 22 June - 04 July, as old Region 1226 returns. Very low to low levels are expected for the remainder of the period.

No proton events are expected at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to be at high levels from 15-18 June. Normal to moderate levels are expected from 19 - 22 June. An increase to high levels from 23 - 27 June is forecast. Normal to moderate levels are expected for the remainder of the period.

The geomagnetic field is expected to decrease to mostly quiet levels during 15-21 June. Activity is expected to increase to quiet to unsettled levels, with isolated active levels on 22 - 25 June, due to a CH HSS. Activity is expected to decrease to predominantly quiet levels from 26 June - 01 July. Activity is expected to increase to quiet to unsettled levels, with isolated active levels from 02 - 03 July, as another CH HSS becomes geoeffective. Activity is expected to decrease to predominantly quiet levels from 04 - 07 July. Activity is expected to increase to quiet to unsettled levels on 08-09 July as a CH HSS moves into a geoeffective position. Predominantly quiet levels are expected for the remainder of the period

```
From 4682972523272889595
X-Google-Thread: a4a23d5f63,beaac81f9bd1f22c,start
X-Google-Attributes: gida4a23d5f63,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!npeer03.iad.highwinds-media.com!
news.highwinds-media.com!feed-me.highwinds-media.com!nx01.iad01.newshosting.com!
209.197.12.246.MISMATCH!nx02.iad01.newshosting.com!newshosting.com!news-
out.readnews.com!transit3.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-170 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sat, 18 Jun 2011 21:34:24 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 558
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000801cc2e20$fc7e5270$f57af750$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1308447264 15814 166.84.1.6 (19 Jun 2011 01:34:24 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 19 Jun 2011 01:34:24 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news1.google.com rec.radio.amateur.space:511 rec.radio.info:2433
```

AMSAT NEWS SERVICE
ANS-170

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:

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* It's Time to Get Ready For ARISSat-1
* ARRISat-1 Team Pointers to Get Ready for SSTV Reception
* North America SO-67 Schedule For Field Day
* Visit the New AMSAT-UK Website
* AMSAT-UK Display at First UK Space Conference
* Satellite Shorts From All Over
* Follow Up to Receiving STEREO-B at 219 Million KM

SB SAT @ AMSAT $ANS-170.01
AMSAT-NA Files Formal Comments on Proposed ITAR Changes

AMSAT News Service Bulletin 170.01
>From AMSAT HQ SILVER SPRING, MD.
June 19, 2011
To All RADIO AMATEURS
BID: $ANS-170.01

AMSAT submitted comments to the U.S. Department of State/Directorate of Defense Trade Controls (DDTC) on June 13, 2011 in response to their proposed rule making on International Traffic in Arms Regulations (ITAR), which would provide clarification on defense services, noting that public domain material is not subject to ITAR.

AMSAT asked DDTC to not only acknowledge that public domain materials are not subject to ITAR, but to expand the scope of how they view how materials are to be placed in the public domain. AMSAT requested that rather than focus on the method of placement of materials in the public domain (e.g. printed publication), the critical criteria should be the intent of the originator to broadly and freely make such material available to anyone who has the ability to access it via appropriate means, including electronic origination and distribution.

The full copy of AMSAT's comments will be published in an upcoming edition of the AMSAT Journal. An electronic copy of AMSAT's comments can be viewed on the AMSAT web at: http://tinyurl.com/3jtbff2

[ANS thanks AMSAT President Barry Baines, WD4ASW for the above Information]

/EX

SB SAT @ AMSAT $ANS-170.02
Announcing AMSAT Project FOX Website

AMSAT News Service Bulletin 170.02
>From AMSAT HQ SILVER SPRING, MD.
June 19, 2011
To All RADIO AMATEURS
BID: $ANS-170.02

Alan Biddle, WA4SCA is pleased to announce that AMSAT's Project FOX website has been updated. Titled, "Introducing FOX, AMSAT-NA's Next Satellite!", this page brings you the highlights of:

+ "Why do we need Fox?"
+ A link to the Project FOX presentation slides from the Dayton AMSAT Forum
+ A Project FOX donation widget
+ FOX Project Status
+ High level project design goals
+ A call for volunteers to join the AMSAT FOX Team

Begin your exploration of the AMSAT FOX project at:
http://www.amsat.org/amsat-new/fox/

Here is a summary of AMSAT Project FOX design goals:

Development Phase: Approved by the Board of Directors. Design in progress.
Projected Launch: 2013.
Space Frame Structure: Standard 1U (One Unit) CubeSat.
Space Frame Size: 10 cm X 10 cm X 10 cm.
Mass: Approximately 1.33 kg, ~ 3 lbs.
Orbit: 600 - 800 km, circular, depending on launcher.
RF: 500 mW EIRP, U/V (Mode B). Deployable antennas.
Transponder: High density Software Defined Transponder (SDX).
Power source: Deployable solar arrays. Lithium Ion or NiCd batteries.
Power mangement: Maximum Power Point Trackers.

[ANS thanks Alan Biddle, WA4SCA for the above information]

/EX

SB SAT @ AMSAT $ANS-170.03
It's Time to Get Ready For ARISSat-1

AMSAT News Service Bulletin 170.03
>From AMSAT HQ SILVER SPRING, MD.
June 19, 2011
To All RADIO AMATEURS
BID: $ANS-170.03

A few weeks remain before the planned July deployment of ARISSat-1 from the ISS. The AMSAT News Service will bring you more details in the coming weeks. Here are some reminders to help you get your station ready for ARISSat-1 operation.

145.950 MHz FM Downlink:

FM transmissions will cycle between a voice ID as RS01S, select telemetry values, 24 international greeting messages in 15 languages and SSTV images. One of the messages will be a conversation between Yuri Gagarin and ground control. See the next news item for pointers to get your station ready to receive the SSTV images.

435 MHz - 145 MHz Linear Transponder:

The linear transponder will operate in Mode U/V (70 cm Up, 2m Down). It is an 16 KHz wide inverting passband and the convention will be to TX LSB on the 435 MHz uplink and RX USB on the 145 MHz downlink. This mode is designed to work with low power transmitters and omni antenna.

145.919 MHz/145.939 MHz CW Beacon:

The CW transmissions will be callsign ID RS01S, select telemetry, and callsigns of people actively involved with the ARISS program.

145.920 MHz SSB BPSK-1000 Telemetry:

The BPSK transmissions will feature a new 1kBPSK protocol developed by Phil Karn, KA9Q to be readable in low signal level conditions. The BPSK data will transmit satellite telemetry.

The ARISSat-1 BPSK-1000 downlink is transmitted in SSB mode on 145.920 MHz. When the CW2 beacon on 145.919 MHz is active this indicates that the BPSK-1000 format is being transmitted. If the CW1 beacon on 145.939 MHz is active this indicates the backup of BPSK-400 format is being transmitted.

Transmitting at 100 mW, both BPSK rates include Forward Error Correction (FEC) and it is expected that modest quarter-wave antennas with low-loss coaxial cable will provide sufficient signal strength for decoding and display by the ARISSatTLM software.

An audio feed from an SSB receiver to the computer's soundcard input is needed. An initial "Receive Only" configuration is easily done consisting of an audio patch cable between your radio and the soundcard. Take the speaker or headphone output from the radio and run it into the line (or mic) input on your PC sound card.

BPSK-1000 sounds like a "shusssch" with a higher pitch than the 400 bps growl. It is difficult to tune by ear. The CW2 beacon is used as a tuning signal for BPSK-1000. The PC and Mac ARISSatTLM software display contains a dotted line that you use to tune your receiver until the CW signal bumps lines up with the dotted line on your PC screen. This will allow you to decode the BPSK-1000 signal and you will also be able to copy the CW2 beacon.

Download the Windows ARISSatTLM free ground station soundcard demodulator and display software:
http://www.arissattlm.org/download/ARISSatTLM_050_Setup.exe

Download the Mac ARISSatTLM software:
http://www.arissattlm.org/download/ARISSATTLM.zip

The ARISSatTLM software user guide is available:
http://tinyurl.com/42uhtyf (amsat.org)

Get your color ARISSat-1 Frequency Guide:
http://tinyurl.com/4t497t2 (amsat.org)

ARISSat-1 Presentation Slides (~1MB)
http://tinyurl.com/4n4pzkm (amsat.org)

[ANS thanks the ARISSat-1 Team for the above information]

/EX

SB SAT @ AMSAT $ANS-170.04
ARRISat-1 Team Pointers to Get Ready for SSTV Reception

AMSAT News Service Bulletin 170.04
>From AMSAT HQ SILVER SPRING, MD.
June 19, 2011
To All RADIO AMATEURS
BID: $ANS-170.04

The ARISSat-1 FM downlink on 145.950 MHz includes live SSTV images as part of the cycling voice ID, select spoken telemetry values, and the international greeting messages. Here are some pointers to help you get your station ready to receive and dis- the SSTV pictures transmitted by ARISSat-1.

One fun feature is that there are four SSTV cameras mounted on the spacecraft. On photos of ARISSat-1 you may have noticed black brackets on the outside of the spacecraft. These hold the mirrors that reflect the light onto the lens of the cameras. The software-defined-transponder will use the image data from the cameras to generate the SSTV downlink.

ARISSat's software will sequentially select a new or stored image from one the four cameras. There are two pre-recorded images as part of the sequence. The camera that took the the picture can be identified by the color of the call sign in the upper left of the SSTV image. The SSTV image will be sent down as FM audio SSTV in Robot 36 format on 145.950 MHz about every 140 seconds.

The RF downlink power on the 145.950 MHz FM downlink will be 250mW which is predicted to provide a link margin around 6 dB on an HT with a 'big whip' when the satellite is at 15 degrees elevation. This should be sufficient to receive SSTV pictures although you may need to orient the whip to line up the antenna polarization.

ARISSat-1 is not stabilized so the antenna orientation is unpredictable and a certain amount of fading will happen. The receiving link margin may be improved with a handheld beam such as an "Arrow", "Elk", or "Cheap Yagi" antenna.
(See: http://www.wa5vjb.com/references/Cheap%20Antennas-LEOs.pdf)

General Overview Radio-to-Soundcard Interface

To view the SSTV downlink from ARISSat-1 you'll need a computer running SSTV software for your soundcard and an audio connection between your radio and the computer.

If you are already on the air with other amateur radio soundcard applications chances are you are ready to receive ARISSat's SSTV downlink with little or no modification to your setup.

The audio from the radio to the computer is the key link. An initial "Receive Only" configuration is easily done consisting of an audio patch cable between your radio and the soundcard. Take the speaker or headphone output from the radio and run it into the line (or mic) input on your PC sound card.

Setting the level is simple also as the MMSSTV software has a bar indicator. Just adjust the sound card gain slider and/or radio volume control so that the SSTV signal is within the center part of the bar. MMSSTV will give you an "overflow" indication if the volume is too high.

If your rig has a 'Line Out' connection this can be run to the soundcard 'Line In'. Using the radio 'Line Out' you won't have to deal with the interaction of the radio's volume control with the soundcard levels. But you will still need to use the soundcard 'Volume Control' to set the 'Line In' levels.

SSTV Software Download Sites

There are many amateur radio SSTV software decoding applications available. One of the easiest to use on Windows computers is the MMSSTV program. This can be downloaded from:
http://mmhamsoft.amateur-radio.ca/pages/mmsstv.php

The Ham Radio Deluxe software package also includes SSTV operation.

SSTV software for the Mac is available at:
http://web.me.com/kd6cji/MacSSTV/MultiScan.html

[ANS thanks the ARISSat-1 Team for the above information]

/EX

SB SAT @ AMSAT $ANS-170.05
North America SO-67 Schedule For Field Day

AMSAT News Service Bulletin 170.05
>From AMSAT HQ SILVER SPRING, MD.
June 19, 2011
To All RADIO AMATEURS
BID: $ANS-170.05

The SO-67 command station has agreed to set the following start times for 15 minute activations over North America for Field Day.

Activations are -planned-, and are dependent on scheduling and battery state:

```
 25 JUN 2011
 -----------
    1835
    2255

  26 JUN 2011
  -----------
    0030
    0200
    0335
    0515
    0645
    1155
    1335
    1510
    1640
    1815
```

Uplink   is 145.875, no tone, and Narrow FM if possible.
Downlink is 435.345, +/- Doppler shift.

Remember both ARRL and AMSAT Field Day rules limit QSOs to one per FM repeater/satellite. Even if you are not submitting a log, please adhere to this procedure.

The above information along with additional Field Day information and links to the FD Rules documents can found on the AMSAT front page at:

http://www.amsat.org.

[ANS thanks AMSAT VP Operations Drew Glasbrenner, KO4MA for the above information]

/EX

SB SAT @ AMSAT $ANS-170.06
Visit the New AMSAT-UK Website

AMSAT News Service Bulletin 170.06
>From AMSAT HQ SILVER SPRING, MD.
June 19, 2011
To All RADIO AMATEURS
BID: $ANS-170.06

AMSAT-UK has a new website developed by Dominic Hawken G6NQO and the new webmaster is Rob Styles M0TFO.

The site features links to the new AMSAT-UK Online shop run by Ciaran Morgan, M0XTD. The online shop carries a range of hardware items/projects and software suitable for Amateur Ratio Satellite activities as well as the ability to join/renew your membership to AMSAT-UK.

Visit the new site at
http://www.uk.amsat.org/

The AMSAT-UK International Colloquium takes place July 30-31. The event is open to all and further information can be found at
http://www.uk.amsat.org/colloquium-2011

AMSAT-UK publishes a color A4 newsletter, OSCAR News, which is full of Amateur Satellite information. Join online at:
http://tinyurl.com/JoinAMSAT-UK

[ANS thanks Trevor, M5AKA for the above information]

/EX

SB SAT @ AMSAT $ANS-170.07
AMSAT-UK Display at First UK Space Conference

AMSAT News Service Bulletin 170.07
>From AMSAT HQ SILVER SPRING, MD.
June 19, 2011
To All RADIO AMATEURS
BID: $ANS-170.07

AMSAT-UK will have a presence at the first ever UK Space Conference taking place at the University of Warwick on July 4-5. This is being organised by the UK Space Agency which was formally commenced in April this year.

AMSAT-UK has been sponsored by a member to have a small stand "booth" in the exhibtion area and will be among some very illustrious company.

AMSAT-UK will be displaying FUNcube models and demonstrating the educational outreach possibilities that we will have with the telemetry and Fitter message download systems when matched with a simple groundstation - the FUNcube dongle.

AMSAT-UK members will also be presenting short papers in the educational and cubesat streams during the event.

Full information of the conference can be read on-line at:
http://tinyurl.com/3hb2y9j (www.intellectuk.org)

[ANS thanks Graham Shirville, G3VZV for the above information]

/EX

SB SAT @ AMSAT $ANS-170.08
Satellite Shorts From All Over

AMSAT News Service Bulletin 170.08
>From AMSAT HQ SILVER SPRING, MD.
June 19, 2011
To All RADIO AMATEURS
BID: $ANS-170.08

+ AMSAT has received the sad news on the passing of Elizabeth Clark, wife of AMSAT Board Member Tom Clark, K3IO. A memorial service in the Washington, DC area will be held in the near future - Martha will post the details when available. A service will be held in about one month in Clinton, South Carolina at the family church where her ashes will be scattered. Donations can be made in Elizabeth's name to: The American Cancer Society, Box 22718, Oklahoma City, OK 73123-1718, The Susan G Komen for the Cure, ATTN: Donor Services, Box 650309, Dallas TX 75265-0309 or the charity of your choice. (Martha at the AMSAT office)

+ The AO-51 Command Team notes that over the last couple of days, we have been seeing some extended operational times after turning AO-51 ON. Your reports from around the world for the next few days will be especially helpful! Information about when it's ON and when it's OFF is of great interest right now and for the next few days. The best place to let everybody know is at: http://oscar.dcarr.org/
(AO-51 Command Station, Mark, N8MH)

+ The AMSAT Office has received notice that the Canadian Postal Strike may affect delivery of AMSAT mailings to Canada. Canada Post has currently suspended operations around the country.

+ Congratulations to the following on earning the new 5 in EM55 Award for working five (5) different hams in the EM55 grid:

CALL	AWARD NUMBER	ISSUE DATE
WA4NVM	1	6/4/2011
WA4HFN	2	6/4/2011
KI4OTG	3	6/4/2011
K8YSE	4	6/4/2011
N9AMW	5	6/5/2011
KB0RZD	6	6/14/2011
W5KUB	7	6/17/2011

You do not have to be in your home grid to count the stations worked. There are several satellite ready hams in EM55. Here is the current known list: WA4NVM, WA4HFN, WB4LHD, WA4OVO, KI4OTG, KD4NOQ, KJ4BIX, AND AJ4KF.

Send your log to WA4NVM or WA4HFN for checking, along with your current mailing address. The award is free and should any donations be sent, they will be forwarded to AMSAT along with your call and name.

This award will be effective 1 June 2011, therefore, all contacts must be on or after this date.

+ Trevor, M5AKA invites you to view these video features on the Southgate ARC web site:
Video of Astronaut Doug Wheelock KF5BOC at Dayton
http://www.southgatearc.org/news/june2011/kf5boc_video.htm

ISS contact with students in Enniskillen can be seen at
http://www.southgatearc.org/news/june2011/college_congratulated.htm

+ Congratulations to AMSAT's Bob McGwier, N4HY on his new postion as the Director of Research Hume Center for National Security and Technology and Research Professor, ECE at Virginia Tech. See: http://tinyurl.com/3cnxop7 (vt.edu)

+ Congratulations to Astronaut Mike Hopkins (Expedition 37) upon passing his amateur radio Technician License exam on June 9. His call sign should be issued soon.

+ The Okaw Valley ARC has a very nice web page devoted to their May 6 ISS contact by the Greenville Elementary School. Video is included: http://ovarc.net/isscontact.htm

+ If you captured any of the Phonesat UHF beacon data during the NASA AMES high altitude balloon flight on June 9 please send it to: mikesafyan@gmail.com

+ Congratulations to Chris, KC0YBM, for achieving his Satellite VUCC Award #215!

+ Paul, 2E1EUB will be operating mobile on AO-7 and other satellites from the Islands of Harris and Lewis, off the west coast of Scotland for about 2 weeks between July 2-11. During this trip Paul will also be mobile in northern Scotland and the Island of Skye. He will also post information on his QRZ.com callsign lookup for 2E1EUB.

+ The next Hudson Valley Satcom Net is scheduled for June 23 at 8PM EDT (UTC-4) on the 146.970 MHz repeater, (Pl 100), and also on Echolink node N2EYH-L. More info: http://www.hvsatcom.org (Stu, WA2BSS)

+ Paul, VP9MU says he has re-activated the AMSAT-BDA (Bermuda) web pages at: http://www.amsat-bda.org The main function of the site is hosting the General Astrodynamics Library and will be hosting additional items in the future.

[ANS thanks everyone for the above information]

/EX

SB SAT @ AMSAT $ANS-170.09
Follow Up to Receiving STEREO-B at 219 Million KM

AMSAT News Service Bulletin 170.09
>From AMSAT HQ SILVER SPRING, MD.
June 19, 2011
To All RADIO AMATEURS
BID: $ANS-170.09

James Miller, G3RUH sent an interesting follow up to the ANS news of AMSAT-DL success in receiving the 8 GHz downlink from the solar observation STEREO-B satellite. A FUNcube dongle and downconverter were used in the the demonstration documented in the videos on the Southgate ARC site (See: http://tinyurl.com/6eukmjv - "AMSAT-DL break FUNcube Dongle distance record).

James wrote, "Actually, the Stereo-A and Stereo-B spacecraft are received (more conventionally) every day, and the data automatically forwarded to NASA. The Bochum Dish, operated by AMSAT-DL is one of four "Partner Stations" downloading the low speed Beacon telemetry for NASA/NOAA. The others are DL0SHF at Kiel, CNES in Toulouse, France, and NICT at Koganei, Japan. And one more station is urgently needed, especially from North America."

There is a comprehensive article about this work at:
http://www.amsat.org/amsat/articles/g3ruh/127.html

Data is transmitted from STEREO in one of two modes; (a) high speed (currently 720 kbps), stored data (up to 1 Gb), intended for the Deep Space Network (DSN) to collect the high resolution science data some 8 hours/day, and (b) a low speed 633 bps continuous real time subset of the solar data intended for collection by smaller ground stations.

AMSAT collects low speed data. The ground stations then forward the data via the Internet to NASA GSFC for processing where it is posted on the web in near real time for all to use, including the various world wide organizations monitoring and predicting Space Weather. The ground network for the low speed data is organized and coordinated by the SWPC in Boulder, Colorado.

The spacecraft transmit 63 watts to a 1.1m dish at 8.4 GHz RHCP, an e.i.r.p. of approximately 85 dBm.

[ANS thanks James, G3RUH for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office. And, with that please keep in mind the ham who figured he had some explaining to do when his young daughter announced, "I'm just like mommy! I put on the Oil of Old Lady lotion you said she uses!"

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM

From -8327981776587071135
X-Google-Thread: a4a23d5f63,2df39df815c327ed,start
X-Google-Attributes: gida4a23d5f63,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!news-out.readnews.com!transit3.readnews.com!panix!rri.panix.com!
robomod!not-for-mail
From: SWPC.Webmaster@noaa.gov
Newsgroups:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.info
Subject: Weekly Highlights of Solar and Geomagnetic Activity, 13 - 19 June 2011
Followup-To: rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space
Date: Tue, 21 Jun 2011 17:30:07 EDT
Organization: NOAA Space Weather Prediction Center
Lines: 95
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <20110621213001.F14A033C5F@panix2.panix.com>
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NNTP-Posting-Date: Tue, 21 Jun 2011 21:30:08 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html

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X-RRI-Info-1: Send submissions to            rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Xref: g2news1.google.com rec.radio.amateur.misc:6305 rec.radio.amateur.dx:1011
rec.radio.amateur.space:512 rec.radio.info:2437
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:Product: Weekly Highlights and Forecasts
:Issued: 2011 Jun 21 1906 UTC
# Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center
# Product description and SWPC contact on the Web
# http://www.swpc.noaa.gov/weekly.html
#
#                Weekly Highlights and Forecasts
#
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Highlights of Solar and Geomagnetic Activity
13 - 19 June 2011

Solar activity ranged from very low to moderate levels during the period. The period began with low levels on 13 June with a C1 x-ray event at 13/0055 UTC from an area on the east limb near N20. A partial halo CME (estimated plane-of-sky speed of 600 km/s) was observed off the southeast limb; first observed in C2 SOHO LASCO imagery at 13/0424 UTC, also observed in C3 imagery at 13/0454 UTC. Activity increased to moderate levels on 14 June when an M1 X-ray event occurred at 14/2147 UTC from Region 1236 (N17, L=166, class/area Ehi/350 on 16 June). A north-south oriented filament channel erupted near the southeast limb between 0609 and1500 UTC on 14 June. A partial halo CME off the east limb was associated with the filament eruption (first seen in STEREO-Behind COR2 imagery at 14/1500 UTC). The plane-of-sky speed was estimated at approximately 750 km/s. Activity decreased to low levels for 15 - 17 June. Two C-class X-ray flares were observed on 15 June: a C2/Sf at 15/1150 UTC from Region 1236, and a C3/1f at 15/1432 UTC from Region 1234 (S16, L=246, class/area Dsi/150 on 19 June). Four C-class events were observed on 16 June. The most significant was a C7/1N at 16/1022 UTC from Region 1236 associated with weak radio emissions in the 2695 MHz to 15.4 GHz range, including a 130 sfu 10cm burst. Two C-class flares were observed on 17 June: C1/Sf X-ray flare on 17/2313 UTC and a C3/Sn X-ray flare at 17/2342 UTC from Region 1234. Activity decreased to very low levels on 18 June. Activity returned to low levels on 19 June as two C-class events were observed. The most significant was a C4 event from Region 1234 at 19/1522 UTC.

The greater than 10 MeV proton flux at geosynchronous orbit was slightly enhanced during 12-18 June (peak 8 pfu at 17/0805 UTC), likely associated with an eruptive prominence on the limb at 10/1828

UTC.

The greater than 2 MeV electron flux at geosynchronous orbit was at normal to moderate levels during the period.

Geomagnetic activity ranged from quiet to minor storm levels during the period. Activity was at quiet to unsettled levels, with an isolated active period at high latitudes on 13-14 June due to a coronal hole high speed stream (CH HSS). Activity was at quiet levels on 15 - 16 June. A geomagnetic sudden impulse (SI) was observed at Boulder at 17/0244 UTC (31 nT) and indicated the arrival of the partial-halo CME observed in C2 SOHO LASCO imagery at 13/0424 UTC. The geomagnetic field was at quiet to unsettled levels, with isolated active and minor storm periods at high latitudes. Activity decreased to quiet levels for 18-19 June.

Forecast of Solar and Geomagnetic Activity
22 June - 18 July 2011

Solar activity is expected to be at low levels, with a slight chance for isolated M-class flares during 22 - 27 June. Activity is expected to decrease to very low to low levels during the rest of the period as Region 1236 departs. Activity is expected to remain very low until 03 July with the return of old Region 1234. Activity is then expected to be low with a chance for isolated M-class activity for the remainder of the forecast period.

No proton events are expected at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to be at normal to moderate levels from 22 - 24 June. An increase to high levels is expected for 25 June - 01 July due to a recurrent CH HSS. A brief return to normal to moderate levels is expected on 02 July and then high levels are expected once again from 03 - 05 July due to another recurrent CH HSS. Normal to moderate levels are expected for the remainder of the period.

Geomagnetic field activity is expected to be mostly quiet on 22 - 23 June. An increase to mostly active conditions is expected on 24 June with a chance for isolated minor to major storm periods due to the combination of the CH HSS and a halo CME observed early on 21 June. Unsettled to active conditions are expected from 25 - 26 June as the effects persist. The geomagnetic field is expected to be quiet to unsettled on 26 - 28 June as the disturbance subsides. Quiet conditions are expected from 29 June - 01 July. An slight increase to quiet to unsettled conditions is expected from 02 - 03 July due to another recurrent CH HSS followed by a return to quiet conditions until 07 July. A third CH HSS is expected to bring unsettled conditions from 08 - 09 July. Predominately quiet conditions are expected until the arrival of a fourth CH HSS due to arrive on 17 July. Quiet to unsettled conditions are expected for the remainder of the period.

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transit3.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-177 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sun, 26 Jun 2011 09:38:21 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 366
Approved: RRI Admin <rec-radio-info-request@panix.com>
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X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news1.google.com rec.radio.amateur.space:513 rec.radio.info:2452
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AMSAT NEWS SERVICE
ANS-177

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* Remember to Send Your AMSAT Field Day Results
* 13 Colonies Special Event on Satellites Again
* July 15 Deadline to File ARISS Contact Proposals
* Istanbul students plan 145/435 MHz satellite
* New Horizons Mission Presents New Opportunity for Citizen Scientists
* Satellite Shorts From All Over
* ARISS Status - 20 June 2011

SB SAT @ AMSAT $ANS-177.01
Remember to Send Your AMSAT Field Day Results

AMSAT News Service Bulletin 177.01
  From AMSAT HQ SILVER SPRING, MD.
June 26, 2011
To All RADIO AMATEURS
BID: $ANS-177.01

AMSAT Director of Awards and Contests, Bruce Paige, KK5DO reminds you to send in your satellite Field Day results. The Satellite Summary Sheet (on pages 3-4 of the AMSAT Field Rules) should be used for submission of the AMSAT Field Day competition.

The Rules and the Satellite Summary Sheet can be downloaded from links at http://www.amsat.org or http://www.amsatnet.com

http://tinyurl.com/3eztlaf (amsat.org)
http://www.amsatnet.com/2011fd.doc
http://www.amsatnet.com/2011fd.pdf

Your entry must be received by KK5DO (email or postal mail) by 11:59 P.M. CDT, Monday, July 11, 2011. The preferred method for submitting your log is via e-mail to kk5do@amsat.org or kk5do@arrl.net.

You may also use the postal service but give plenty of time for your results to arrive by the submission date. Add photographs or other interesting information that can be used an article for the Journal.

You will receive an email back (within one or two days) from Bruce when he receives your email submission. If you do not receive a confirmation message, try sending it again or send it to his other email address.

If mailing your submission, the address is:

  Bruce Paige, KK5DO
  Director of Awards and Contests
  PO Box 310
  Alief, TX 77411-0310.

Certificates will be awarded to the first-place emergency power/

portable station at the AMSAT General Meeting and Space Symposium in November 2011. Certificates will also be awarded to the second and third place portable/emergency operation in addition to the first-place home station running on emergency power. Stations submitting high, award-winning scores will be requested to send in dupe sheets for analog contacts and message listings for digital downloads.

[ANS thanks AMSAT Director of Awards and Contests, Bruce Paige,
KK5DO for the above information]

/EX

SB SAT @ AMSAT $ANS-177.02
13 Colonies Special Event on Satellites Again

AMSAT News Service Bulletin 177.02
From AMSAT HQ SILVER SPRING, MD.
June 26, 2011
To All RADIO AMATEURS
BID: $ANS-177.02

Dave, KB1PVH/K2H says that the Original 13 Colonies Independence Week Special event begins on July 1 and runs until July 5.

We will be on the satellites again this year!

MA- KB1PVH/K2H, Dave
VA- NL7VX/K2B, Steve
PA- KE3LB/K2M, John
SC- K4YYL/K2L, Art
GA- N3TL/K2G, Tim
NC- W4MPS/K2J, Marc
NY- WB2OQQ/K2A, Pete
CT- KA1TCH/K2D, Al
NH- NE1H/K2K, Bob
RI- N1MIW/K2C, Larry
NJ- KB2M/K2I, Jeff (when available)
DE- KB2M/K2E, Jeff (limited time marine mobile)
MD- WA3SWJ/K2F, Bruce

Please limit yourselves to one contact per state, so that others may have a chance.

The 4th of July, 2011 lands on a Monday, which means that you can work us starting Friday through Tuesday. Due to popular demand, we will run the event all 5 days like in 2010. Times will be: 12:01 AM Eastern start on July 1st, (That's one minute after midnight, early Friday morning, July 1st) to 11:59 PM Eastern ending on July 5th (One minute to midnight, late Tuesday night, July 5th).

Hope everyone get a Clean Sweep

Find more information on-line at:
http://www.13colonies.info/

[ANS thanks Dave, KB1PVH/K2H for the above information]

/EX

SB SAT @ AMSAT $ANS-177.03
July 15 Deadline to File ARISS Contact Proposals

AMSAT News Service Bulletin 177.03
From AMSAT HQ SILVER SPRING, MD.
June 26, 2011
To All RADIO AMATEURS
BID: $ANS-177.03

NASA is seeking U.S. formal and informal education institutions and organizations, individually or working together, to host an Amateur Radio on the International Space Station, or ARISS, contact between the dates of Jan. 15 and July 15, 2012.

To maximize these radio contact opportunities, NASA is looking for organizations that will draw large numbers of participants and integrate the contact into a well-developed education plan. The deadline to submit a proposal is July 15, 2011.

During the first six months of 2012, crew members aboard the International Space Station will participate in amateur radio contacts.

ARISS contacts afford education audiences the opportunity to learn firsthand from astronauts what it is like to live and work in space. Due to the nature of human spaceflight, organizations must demonstrate the flexibility to accommodate changes in contact dates and times.

Interested parties should contact Teaching From Space to obtain information related to expectations, content, format, audience, proposal guidelines and forms by sending an e-mail to JSC-TFS-ARISS@mail.nasa.gov or by calling 281-244-2320.

The NASA Teaching From Space web page can be found at:
http://tinyurl.com/6fc2lzn (nasa.gov)

[ANS thanks ARISS and NASA for the above information]

/EX

SB SAT @ AMSAT $ANS-177.04

Istanbul students plan 145/435 MHz satellite

AMSAT News Service Bulletin 177.04
  From AMSAT HQ SILVER SPRING, MD.
June 26, 2011
To All RADIO AMATEURS
BID: $ANS-177.04

Students at Istanbul Technical University are working on a 3U CubeSat that will carry a linear transponder for SSB/CW amateur radio communications.

TURKSAT-3USAT will carry a 50kHz bandwidth 145/435 (V/U) linear transponder, beacon and telemetry downlink. It is hoped to have an early 2012 launch into a Sun Synchronous Orbit (SSO) at around 680km.

Istanbul Technical University's first Communication Satellite
http://tinyurl.com/6hyxh7h

Istanbul Technical University TURKSAT-3USAT
http://tinyurl.com/5vhdnzm

TURKSAT-3USAT on the IARU Satellite Frequency Coordination pages
http://www.amsatuk.me.uk/iaru/formal_detail.php?serialnum!3

[ANS thanks the Southgate ARC news site and Istanbul Technical University for the above information]

/EX

SB SAT @ AMSAT $ANS-177.05
New Horizons Mission Presents New Opportunity for Citizen Scientists

AMSAT News Service Bulletin 177.05
  From AMSAT HQ SILVER SPRING, MD.
June 26, 2011
To All RADIO AMATEURS
BID: $ANS-177.05

The Zooniverse is home to the internet's largest, most popular and most successful citizen science projects. You can find all the details of their projects at http://www.zooniverse.org/

Zooniverse has added a project where Citizen Scientists help choose an additional destination or two for a spacecraft heading to the outer solar system. Ice Hunters will allow the public to help discover a potential new, icy follow-on destination for NASA's New Horizons spacecraft, which is currently en route to make the first flyby of the Pluto system. After it zooms past Pluto, the spacecraft will have the capability to explore other Kuiper Belt Objects. The destination has yet to be chosen. That's where you can help.

With Ice Hunters, the public can help scientists search through deep telescopic images for currently unknown objects in the Kuiper Belt. What's cool is that you'll be searching for Kuiper Belt Objects and potential dwarf planets in much the same way that Clyde Tombaugh found Pluto: comparing images of the same region of the Kuiper Belt and looking for objects that move or vary in brightness.

You can read all the details on-line at: http://www.icehunters.org/

[ANS thanks UniverseToday.com, Zooniverse, and Ice Hunters for the above information]

/EX

SB SAT @ AMSAT $ANS-177.06
Satellite Shorts From All Over

AMSAT News Service Bulletin 177.06
From AMSAT HQ SILVER SPRING, MD.
June 26, 2011
To All RADIO AMATEURS
BID: $ANS-177.06

+ iPhone and iPad users may be interested in the free ESA App to access top news stories, videos, images, facts and figures, ESA's Twitter feeds, Flickr and Facebook links and other information in a convenient mobile package. This is now available free of charge for iPhone and iPad directly from the App Store at Apple.

+ AMSAT-SM has a new website and is active on Facebook and Twitter.
Please visit the new AMSAT-SM (Sweden) website at:
http://www.amsat.se
AMSAT-SM on Twitter: http://twitter.com/#!/amsat_sm
AMSAT-SM on Facebook:
http://www.facebook.com/pages/AMSAT-SM/196154360421894
(Lars SM0TGU)

+ UniverseToday.com posted a video from Phil Plait's Discovery Channel series "Bad Universe" showing the ways the world will end:
http://www.universetoday.com/86680/video-ways-the-world-will-end/

+ A time lapsed video from the Goddard Space Flight Center Scientific Visualization Studio, uses data from the Lunar Reconnaissance Orbiter and compresses one month into 12 seconds and one year into 2.5 minutes.
You'll see how the Moon "wobbles" in its orbit, the changes in libration, and axis tilt, the Moon's phases. Watch it at:

http://www.universetoday.com/86613/one-year-of-the-moon-in-2-5-minutes/

+ Jim List, G3WGM, Hon Sec AMSAT-UK reminds attendees to the AMSAT-UK

Colloquium, Holiday Inn, Guildford, UK 29-30 July that the hotel is getting quite booked up already for the Saturday night. To avoid disappointment, we strongly urge you to book your place asap. Speak to Rachael Cross on +44 (0) 1483 784418. More details, incl prices, at http://www.uk.amsat.org/colloquium-2011

+ Congratulations to Jim, KE4KOL, for achieving Satellite VUCC #207!

+ Congratulations also to Rodney, KC0ZHF for achieving his WAS Satellite Award!

[ANS thanks everyone for the above information]

/EX

SB SAT @ AMSAT $ANS-177.07
ARISS Status - 20 June 2011

AMSAT News Service Bulletin 177.07
From AMSAT HQ SILVER SPRING, MD.
June 26, 2011
To All RADIO AMATEURS
BID: $ANS-177.07

1. Germany Contact to be Rescheduled

The ARISS contact that was scheduled with Hochtaunusschule in Oberursel, Hessen, Germany on Tuesday, June 14 was not successful. The ARISS team is trying to determine what happened and hopes to reschedule the contact sometime in the future.

2. Astronaut Training Status

Astronaut Mike Hopkins (Expedition 37) passed his amateur radio Technician exam on Thursday, June 9. He was issued the call sign KF5LJG.

On Monday, June 13, several astronaut candidates passed their Technician License exams and were issued the following call signs:
Takuya Onishi, KF5LKS
Gregory Wiseman, KF5LKT
Jeremy Hansen, KF5LKU
In addition, Kjell Lindgren, KO5MOS upgraded from Technician to General.

Another round of tests for the latest class of astronauts may be conducted in the near future.

A successful ARISS simulated contact was held between Kevin Ford, KF5GPP and youth from John McCrae Secondary High School, Ottawa,

Canada on Monday, June 13. The training session was a terrestrial-based
amateur radio contact using ARISS equivalent equipment and helped to
prepare Ford for participation in ARISS contacts when he flies with
Expedition 33 in September 2012.

Don Pettit, KD5MDT and Andr� Kuipers, PI9ISS are scheduled for an
ARISS
preflight session on June 22. The two astronauts are part of Expedition
30 which will launch in November 2011.

3. Debrief Session Held with Expedition 26/27 Crew Members

On Wednesday, June 15 ARISS members participated in an ISS Ham debrief
session with Expedition 26/27 crew members Cady Coleman and Paolo
Nespoli.
The astronauts provided good feedback on the ARISS program.

[ANS thanks Carol, KB3LKI, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the
President's
Club. Members of the President's Club, as sustaining donors to AMSAT
Project
Funds, will be eligible to receive additional benefits. Application
forms
are
available from the AMSAT Office.

73,
This week's ANS Editor,
Lee McLamb, KU4OS

From 6421895157636498605
X-Google-Thread: a4a23d5f63,81cb9e555622f172,start
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From: SWPC.Webmaster@noaa.gov
Newsgroups:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.info
Subject: Weekly Highlights of Solar and Geomagnetic Activity, 20 - 26 June 2011
Followup-To: rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space
Date: Tue, 28 Jun 2011 17:30:07 EDT

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Organization: NOAA Space Weather Prediction Center
Lines: 67
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X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Xref: g2news2.google.com rec.radio.amateur.misc:6581 rec.radio.amateur.dx:1065
rec.radio.amateur.space:539 rec.radio.info:2533
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:Product: Weekly Highlights and Forecasts
:Issued: 2011 Jun 28 1707 UTC
# Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center
# Product description and SWPC contact on the Web
# http://www.swpc.noaa.gov/weekly.html
#
#                Weekly Highlights and Forecasts
#
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Highlights of Solar and Geomagnetic Activity
20 - 26 June 2011

Solar activity was very low to low. Region 1236 (N17, L=167, class/area Ehi/350 on 15 June) produced a long-duration C7/Sf at 21/0325 UTC associated with an Earth-directed full-halo coronal mass ejection (CME). Activity was at very low levels during 22 - 26 June with occasional B-class flares from Region 1236 as it gradually decayed.

No proton events were observed at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit was at normal to moderate levels during 20 - 22 June. Fluxes increased to normal to high levels during 23 - 24 June. A further increase to moderate to high levels occurred on 25 - 26 June.

Geomagnetic activity was at quiet to unsettled levels during 20 - 21 June. Activity increased to quiet to active levels during 22 - 23 June, with minor to major storm periods at high latitudes, due to a coronal hole high-speed stream (CH HSS). A CME passage (from the halo-CME observed on 21 June) also occurred early on 23 June with a sudden geomagnetic impulse observed at Boulder at 23/0258 UTC (22 nT). Activity decreased to quiet to unsettled levels during 24 - 26 June as CH HSS effects subsided.

Forecast of Solar and Geomagnetic Activity
29 June - 25 July 2011

Solar activity is expected to be at very low levels until 03 July with the return of old Region 1234 (S16, L=246). Activity is then expected to be low followed by a further increase to low with a chance for isolated M-class activity as old Region 1236 rotates back on the visible disk.

No proton events are expected at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to be at moderate to high levels during 29 June - 01 July. A decrease to normal to moderate levels is expected during 02 - 05 July followed by an increase to moderate to high levels during 06 - 07 July due to a CH HSS. Fluxes are expected to decrease to normal to moderate levels during 08 - 19 July. Fluxes are expected to increase to moderate to high levels during 20 - 23 July following the CH HSS.

Geomagnetic field activity is expected to be at quiet to unsettled levels during 29 - 30 June. A CH HSS is expected to boost activity to quiet to active levels during 01 - 03 July. Mostly quiet levels are forecast for 03 - 07 July as the CH HSS subsides. An increase to quiet to unsettled levels is expected during 08 - 09 July as another CH HSS disturbs the field. Quiet levels are expected from 10 - 16 July. Another recurrent CH HSS is expected to become geoeffective on 17 July bringing quiet to unsettled conditions. A further increase to active levels with a chance for isolated minor storm periods at high latitudes is expected during 19 - 21 July followed by quiet to unsettled levels on 22 July as the effects from the CH HSS subside. Quiet levels are expected from 23 - 25 July.

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From: "ARRL Members Only Web site" <memberlist@www.arrl.org>
Newsgroups: rec.radio.amateur.moderated,rec.radio.amateur.space,oma.general,nebr.misc,rec.radio.info
Subject: Central Nebraska Near Space Program (CNNSP)
Followup-To: rec.radio.amateur.moderated,rec.radio.amateur.space,oma.general,nebr.misc
Date: Wed, 29 Jun 2011 11:14:53 EDT

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Organization: American Radio Relay League
Lines: 27
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X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Wed, 29 Jun 2011 15:14:54 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
X-Auth: PGPMoose V2.0 PGP rec.radio.amateur.moderated
 iJwEAQECAAYFAk4LQW4ACgkQSO8RITXCfvtp0gP+Kw1BjorbAtKRQK8LenPFoxi9
 hWYEZCSAhdgr5Lzi48NjmzoGrAWFkqxHjG+FXam1M50rRf6LE82f6JhXoQGDWEwN
 ul6DDIcOqTaMAJ1q/HiCdj7YYaRf2TqoA2aBVF5gr1vBw5RC3MksfaIKl5nrk1E4
 H/vMGzkceUgfdL2VIUc=
 =A4Hq
Xref: g2news2.google.com rec.radio.amateur.moderated:2418
rec.radio.amateur.space:540 nebr.misc:72 rec.radio.info:2535
```

Before I get to the subject of this email, let me mention that I visited eight Field Day sites over the weekend. I will get some pictures posted for my next monthly report. My travels took me from Kearney to Omaha. Ham radio is doing well in Nebraska. Thanks for the fine work and team spirit at each site.

Roger Hammond, KC0MWM sent me an interesting email about the Central Nebraska Near Space Program field day balloon launch from Grand Island last Saturday (June 25). Roger has a website where he posted many ground and aerial photographs from the "CNNSP-10" flight. The balloon reached an altitude of 89,164 feet.

The URL for the website is: http://www.cnnsp.org . Click on the CNNSP-10 link.

Congratulations, Roger, to you and your group for a truly interesting event!

73, Art K0AIZ

ARRL Nebraska Section
Section Manager: Arthur I Zygielbaum, K0AIZ

```
k0aiz@arrl.org
--------------------------------------------------------------------




From -4551352004685449486
X-Google-Thread: fcc6e,3e9a82fc830b3b37,start
X-Google-NewGroupId: yes
X-Google-Thread: 11480d,3e9a82fc830b3b37,start
X-Google-NewGroupId: yes
X-Google-Thread: 108122,3e9a82fc830b3b37,start
X-Google-NewGroupId: yes
X-Google-Thread: fc2a5,3e9a82fc830b3b37,start
X-Google-NewGroupId: yes
X-Google-Thread: 107ada,3e9a82fc830b3b37,start
X-Google-NewGroupId: yes
X-Google-Thread: 10bf43,3e9a82fc830b3b37,start
X-Google-NewGroupId: yes
X-Google-Thread: 10e8ad,3e9a82fc830b3b37,start
X-Google-NewGroupId: yes
X-Google-Thread: 10b9c8,3e9a82fc830b3b37,start
X-Google-NewGroupId: yes
X-Google-Attributes:
gid4baf9708d4,gid7221ecd0f7,gidd7f5508063,gid241b302a50,gida3e752f117,gide721ae2bf
6,gid8f86f75953,gida4a23d5f63,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news2.google.com!news.glorb.com!news-out.readnews.com!
news-xxxfer.readnews.com!panix!panix2.panix.com!not-for-mail
From: rram@panix.com (rec.radio.amateur.moderated Admin)
Newsgroups:
rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.rad
io.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amat
eur.space,rec.radio.info
Subject: Crossposting Permitted to rec.radio.amateur.moderated
Supersedes: <radio/ham-radio/moderated/crossposting-1-1306908001@panix.com>
Followup-To: poster
Date: 1 Jul 2011 02:00:03 -0400
Organization: rec.radio.amateur.moderated Moderation Team
Lines: 47
Approved: RRI Admin <rec-radio-info-request@panix.com>
Distribution: world
Expires: 03 Aug 2011 02:00:01 -0000
Message-ID: <radio/ham-radio/moderated/crossposting-1-1309500001@panix.com>
Reply-To: rec-radio-amateur-moderated-request@panix.com
(rec.radio.amateur.moderated Admin)
NNTP-Posting-Host: panix2.panix.com
X-Trace: reader1.panix.com 1309500003 22813 166.84.1.2 (1 Jul 2011 06:00:03 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Fri, 1 Jul 2011 06:00:03 +0000 (UTC)
Summary: Short reminder for unmoderated newsgroups that crossposting is permitted
Keywords: FAQ, ham, amateur, radio, moderated, unmoderated, crossposting,
permitted
```

Xref: g2news2.google.com rec.radio.amateur.antenna:23743 rec.radio.amateur.dx:1069 rec.radio.amateur.equipment:2845 rec.radio.amateur.homebrew:4806 rec.radio.amateur.misc:6585 rec.radio.amateur.policy:33908 rec.radio.amateur.space:541 rec.radio.info:2540

Posted-By: auto-faq 3.3.2 beta (PGPMoose V2.0, Perl 5.005)
Archive-name: radio/ham-radio/moderated/crossposting
Revision: 1.1 2009/04/12 19:42:04
Posting-Frequency: posted monthly
URL: http://www.panix.com/~rram/usenet/rram/index.html

Changes followed by "|".

After a 30-day public discussion and feedback period to gauge reader opinions in March of 2009:

http://groups.google.com/group/rec.radio.amateur.moderated/browse_thread/thread/d7d337db35f23326

the rec.radio.amateur.moderated Moderation Team has decided to consider amending its charter, and permit limited simultaneous crossposting to rec.radio.amateur.moderated and one other unmoderated amateur-radio-related discussion newsgroup. We are currently trying this on a temporary basis (90 days, through early July 2009), and adopt it permanently if successful.

Approved rec.radio.amateur.* newsgroups are those that are currently listed in the latest version of the "List of Big Eight Newsgroups" which is crossposted monthly to news.announce.newgroups, news.groups, and news.lists.misc.

Approved alt.radio.amateur.* and alt.ham-radio.* newsgroups are those that have been created consistent with the suggestions in "So You Want to Create an Alt Newsgroup" at:

  http://www.faqs.org/faqs/alt-creation-guide/

Approved regional hierarchy newsgroups are those that contain either "radio.amateur" or "ham-radio" in their names, including uk.radio.amateur and aus.radio.amateur.misc.

We will make every reasonable effort to keep our list of approved newsgroups up-to-date. In case we have overlooked any, and a submission is rejected in error as a result, the rejected submitter can E-mail us at our administrative contact address (in the signature at the bottom of this article, and the default Reply-To for the rejection message) requesting that it be added, and that the article be approved. We may still choose to reject articles crossposted to any alt.* newsgroup with an inappropriate name, including obscene language, embedded name-calling, or encouragement of unlawful conduct.

Please direct any comments, questions, or criticisms to rec-radio-amateur-moderated-request@panix.com.

From -2479684545676199063
X-Google-Thread: a4a23d5f63,78e305978aaaf58e,start
X-Google-Attributes: gida4a23d5f63,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII
Path: g2news1.google.com!news1.google.com!news.glorb.com!news-out.readnews.com!news-xxxfer.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-184 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Mon, 4 Jul 2011 10:09:39 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 348
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <001d01cc3a53$fe06b210$fa141630$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
X-Trace: reader1.panix.com 1309788579 3245 166.84.1.6 (4 Jul 2011 14:09:39 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Mon, 4 Jul 2011 14:09:39 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to   rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to   rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news1.google.com rec.radio.amateur.space:517 rec.radio.info:2474

AMSAT NEWS SERVICE
ANS-184

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* Getting Ready for ARISSat-1/RadioSkaf-V Operation
* Call For Articles - Brief Author's Guide to the AMSAT Journal

- DX & Rare Grids
- Reminder: The DARA Matching Gift Challenge
- Satellite Shorts
- ARISS Report

SB SAT @ AMSAT $ANS-184.01
Getting Ready for ARISSat-1/RadioSkaf-V Operation

AMSAT News Service Bulletin 184.01
From AMSAT HQ SILVER SPRING, MD.
July 3, 2011
To All RADIO AMATEURS
BID: $ANS-184.01

Getting Ready for ARISSat-1/RadioSkaf-V Operation

Here are some reminders to help you get your station ready for ARISSat-1/RadioSkaf-V operation. Your 2-meter FM radio or HT will work well to receive the FM voice messages and SSTV on the 145.950 MHz downlink.

You will need a SSB-capable receiver to copy the BPSK telemetry beacon, the CW beacons, and the linear transponder passband.

Read about the details ...

145.950 MHz FM Downlink:

FM transmissions will cycle between a voice ID as RS01S, select telemetry values, 24 international greeting messages in 15 languages and SSTV images. One of the messages will be a conversation between Yuri Gagarin and ground control.

435 MHz - 145 MHz Linear Transponder:

The linear transponder will operate in Mode U/V (70 cm Up, 2m Down). It is an 16 KHz wide inverting passband and the convention will be to TX LSB on the 435 MHz uplink and RX USB on the 145 MHz downlink. This mode is designed to work with low power transmitters and omni antenna.

145.919 MHz/145.939 MHz CW Beacon:

The CW transmissions will be callsign ID RS01S, select telemetry, and callsigns of people actively involved with the ARISS program.

145.920 MHz SSB BPSK-1000 Telemetry:

The BPSK transmissions will feature a new 1kBPSK protocol developed by Phil Karn, KA9Q to be readable in low signal level conditions. The BPSK data will transmit satellite telemetry.

The ARISSat-1/RadioSkaf-V BPSK-1000 downlink is transmitted in SSB mode on 145.920 MHz. When the CW2 beacon on 145.919 MHz is active this indicates that the BPSK-1000 format is being transmitted. If the CW1 beacon on 145.939 MHz is active this indicates the backup of BPSK-400 format is being transmitted.

Transmitting at 100 mW, both BPSK rates include Forward Error Correction (FEC) and it is expected that modest quarter-wave antennas with low-loss

coaxial cable will provide sufficient signal strength for decoding and display by the ARISSatTLM software.

Download the Windows ARISSatTLM free ground station soundcard demodulator
and display software:
http://www.arissattlm.org/download/ARISSatTLM_050_Setup.exe

Download the Mac ARISSatTLM software:
http://www.arissattlm.org/download/ARISSATTLM.zip

The ARISSatTLM software user guide is available:
http://tinyurl.com/42uhtyf (amsat.org)

Get your color ARISSat-1/RadioSkaf-V Frequency Guide:
http://tinyurl.com/4t497t2 (amsat.org)

ARISSat-1/RadioSkaf-V Presentation Slides (~1MB)
http://tinyurl.com/4n4pzkm
(amsat.org)

[ANS thanks the ARISSat-1/RadioSkaf-V Team for the above information]

/EX

SB SAT @ AMSAT $ANS-184.02
Call For Articles - Brief Author's Guide to the AMSAT Journal

AMSAT News Service Bulletin 184.02
From AMSAT HQ SILVER SPRING, MD.
July 3, 2011
To All RADIO AMATEURS
BID: $ANS-184.02

You are invited to share your amateur radio in space ideas and experiences with fellow satellite operators. The AMSAT Journal, a bi-monthly publication of AMSAT-North America, brings you the latest information in satellite mission planning, satellite- related hardware design and construction, satellite-related software design and implementation, and amateur radio earth station construction.

There are plenty of opportunities for you to share your ideas and experience across all levels. Did you homebrew a successful antenna? Which setup did you use for your first satellite contacts? A brief write-up and photos are appreciated by everyone!

Do you have ideas about future amateur radio space missions? Can you describe unique aspects of a particular orbit and the equip- ment needed

to make it work? Simply type out your ideas on your computer and send them
in. Let the AMSAT Journal editorial team do the clean up and formatting for you.

Its easy to send your article to the AMSAT Journal e-mail box via journal@amsat.org. There is no need to do any special formatting on your

submission because the final layout format is driven by the magazine's typesetting software. All you need to include is:

+ Your text in MS-Word or plain text format Graphics saved in separate
+ files (jpg, gif, tiff)

(Actually, an MS-Word file with embedded graphics is the most difficult format to typeset.)

If you have any questions, or need some help feel free to contact the editors at the AMSAT Journal at journal@amsat.org. One of us will get back to you as soon as we can.

Ed Long, WA4SWJ Editor-in-Chief
Bill Hook, W3QBC Assistant Editor

[ANS thanks the AMSAT Journal for the above information]

/EX

SB SAT @ AMSAT $ANS-184.03
DX & Rare Grids

AMSAT News Service Bulletin 184.03
From AMSAT HQ SILVER SPRING, MD.
July 3, 2011
To All RADIO AMATEURS
BID: $ANS-184.03

+ Listen for Eric W4OTN, Amanda KI4IWS, Robin WA4WPD, Bill KG4CXY on July 29 to August 1 as they activate N4I from Core Banks Barrier Island (IOTA NA-067, USi NC033S, WLOTA 0596), Pamlico County, North Carolina. They will participate in the RSGB IOTA Contest. Outside of the contest they plan to be active 80-10m CW and SSB. Operation on 6m and satellites is being planned as well. QSL W4OTN via the bureau or direct at the address on QRZ.com. (rsgbiota.org)

+ Paul, 2E1EUB will be operating mobile on AO-7 and other satellites from the Islands of Harris and Lewis, off the west coast of Scotland for about 2 weeks between July 2-11. During this trip Paul will also be mobile in northern Scotland and the Island of Skye. He will also post information on his QRZ.com callsign lookup for 2E1EUB.

[ANS thanks Eric, Amanda, Robin, Bill & Paul for the above information]

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SB SAT @ AMSAT $ANS-184.04
Reminder: The DARA Matching Gift Challenge

AMSAT News Service Bulletin 184.04
From AMSAT HQ SILVER SPRING, MD.
July 3, 2011
To All RADIO AMATEURS
BID: $ANS-184.04

The Dayton Amateur Radio Association (DARA) has announced a fund raising challenge for AMSAT whereby they will match on a 1:3 basis up to $5,000.00 for donations made in 2011. That is, for every $3.00 that AMSAT raises, DARA will provide $1.00 up to amaximum of $5,000 donated by DARA.

AMSAT kicked off the fundraising campaign at the Hamvention, where donations began count against this goal. Please consider making a donation to AMSAT at Hamvention or anytime this Spring as we strive to meet this goal.

We appreciate DARA's support for AMSAT and see this as an opportunity for donors to increase the impact of their donations by taking advantage of this matching program.

[ANS thanks AMSAT Headquarters for the above information]

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SB SAT @ AMSAT $ANS-184.05
Satellite Shorts From All Over

AMSAT News Service Bulletin 184.05
From AMSAT HQ SILVER SPRING, MD.
July 3, 2011
To All RADIO AMATEURS
BID: $ANS-184.05

+ The dates for the July Hudson Valley Satcom net are July 7 and July 21 at 8:00 PM Eastern Daylight Time (UTC - 4). You can tune in via the 146.970 MHz Mt. Beacon repeater, PL 100.0 or via EchoLink on the N2EYH-L node. More info is available at: www.hvsatcom.org (Stu, WA2BSS)

+ NASA Jet Propulsion Laboratory posted an 11-minute animation depicting key events of NASA's Mars Science Laboratory mission, which will launch in late 2011 and land a rover, Curiosity, on Mars in August 2012. Watch on-line at: http://tinyurl.com/6bx2g3r (nasa.gov)

+ AMSAT can be found on Facebook at: http://www.facebook.com/home.php?sk�oup_7828379515

+ Luis, LU6QI continues to enjoy success with the fine art and science of stretching the AO-7 footprint. He reports DX contacts with Louis, KD5GM on CW on AO7 Mode B, June 22 for a distance of 7631 km. Luis had a DX contact with Allen, N5AFV, on June 24 via CW on AO7 Mode B for a distance of 7644 km.

+ Nader ST2NH appeared on Ashorooq TV to describe the University of Khartoum Cubesat project - KN-Sat1. The 11 minute interview was in Arabic and can be seen on the Southgate ARC News Website at: http://tinyurl.com/66lab38 (Southgate)

+ John, K8YSE posted Field Day recordings for AO-51, AO-27 and SO-50 on his website: http://www.papays.com/sat

+ AMSAT has received the sad news of the death of Leanore Guimont, KA6UCD, the wife of Dave, WB6LLO. For many years no Symposium would be complete without the Dave and Leanore "jewelry" contest. Our thoughts and prayers go out to Dave. He has requested no cards or email be sent.

[ANS thanks everyone for the above information]

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SB SAT @ AMSAT $ANS-184.06
ARISS Status - 27 June 2011

AMSAT News Service Bulletin 184.06
From AMSAT HQ SILVER SPRING, MD.
July 3, 2011
To All RADIO AMATEURS
BID: $ANS-184.06

Amateur Radio on the International Space Station (ARISS) Status Report June 27, 2011

1. Japanese Contact Successful

On Tuesday, June 21, an Amateur Radio on the International Space Station (ARISS) contact was held between Nankan 4th Elementary School in Tamanagun, Kumamoto, Japan and on-orbit astronaut Satoshi Furukawa, KE5DAW. There was a delay in making contact, but once established, the students got in nine questions. This unique activity supplemented lesson plans about amateur radio technology and the International Space Station mission. An audience of approximately 100 attended the event which was covered by 5 newspapers and 5 television stations, including NHK (Japan Broadcasting Corporation).

2. ARISS International Team Teleconference Held

The monthly ARISS International Team meeting was held on Tuesday, June 21. Topics covered included the upcoming ARISS Face to Face meeting in October and a status on the ARISSat-1 satellite, designated KEDR in Russia. Minutes have been posted:
https://www.rac.ca/ariss/arisstel2011-06-21.htm

3. News of U.S. ARISS Proposal Process Distributed

The NASA EXPRESS message sent on June 16 included an item on ARISS contact opportunities for U.S. schools using the new proposal process. Also made aware of these opportunities were other U.S. education organizations such as Solar System Ambassadors, Space Grant Community, INSPIRE, WISH, Endeavor Fellows and the Museum Alliance.

4. Astronaut Training Status

Don Pettit, KD5MDT, and Andr� Kuipers, PI9ISS, were given an ARISS pre-flight session on June 22. The two astronauts hope to participate in ARISS contacts during their flight with Expedition 30 which will launch in November 2011.

5. ARISS Items in ARRL Letter

The American Radio Relay League (ARRL) ran two ARISS items in its June 23 ARRL Letter. The first story is about the astronauts who recently passed their amateur radio Technician exams and were issued call signs. This piece is titled "NASA Astronauts and Astronaut Candidates Earn Amateur Radio Licenses." The second item is titled "Field Day from Space: International Space Station Could be Active for ARRL Field Day." Both stories may be viewed at:
http://www.arrl.org/arrlletter?issue 11-06-23

6. AMSAT Covers ARISS Proposal

The AMSAT (Radio Amateur Satellite Corporation) News Service June 26 bulletin (ANS-177) included another announcement about the new ARISS proposal process for U.S. schools. "July 15 Deadline to File ARISS Contact Proposals" may be found here:
http://amsat.org/pipermail/ans/2011/000526.html

[ANS thanks Carol, KB3LKI, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Dee Interdonato, NB2F

```
From 7012826139697242086
X-Google-Thread: 8f86f75953,666ed2e3cf94bfb8,start
X-Google-Attributes: gid8f86f75953,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!postnews.google.com!h25g2000prf.googlegroups.com!not-for-
mail
From: devi <satyamsivam9030@gmail.com>
Newsgroups: rec.radio.amateur.space
Subject: ONLY FOR MEN`
Date: Mon, 4 Jul 2011 10:21:53 -0700 (PDT)
Organization: http://groups.google.com
Lines: 23
Message-ID: <49349bf3-29c7-496c-8e1b-b2e389775436@h25g2000prf.googlegroups.com>
NNTP-Posting-Host: 117.199.245.82
Mime-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
X-Trace: posting.google.com 1309800113 31277 127.0.0.1 (4 Jul 2011 17:21:53 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Mon, 4 Jul 2011 17:21:53 +0000 (UTC)
Complaints-To: groups-abuse@google.com
Injection-Info: h25g2000prf.googlegroups.com; posting-host=117.199.245.82;
posting-account=xYWSigoAAADp0Q2VAMlANM4syM5q3uRr
User-Agent: G2/1.0
X-Google-Web-Client: true
X-Google-Header-Order: HUALESNKRC
X-HTTP-UserAgent: Mozilla/5.0 (Windows; U; Windows NT 5.1; en-US; rv:1.9.2.18)
 Gecko/20110614 Firefox/3.6.18,gzip(gfe)
Xref: g2news1.google.com rec.radio.amateur.space:518
```

FOR FAST UPDATED IN TELUGU FILM INDUSTRY
http://allyouwants.blogspot.com/
PRIYAMANI SPICY PHOTOS IN COW GIRL
http://allyouwants.blogspot.com/2011/02/priyamani-spicy-photo-shoot-cow-girl.html
KAJAL HOT PHOTOS IN SAREE
http://allyouwants.blogspot.com/2011/06/kajal-very-spice-pics.html
TAPSEE SISTER HOT STILLS FOR U

http://allyouwants.blogspot.com/2011/06/tapsee-sister-shagun-pannu-hot-photo.html
NAMITHA LATEST HOT PHOTO STILLS
http://allyouwants.blogspot.com/2011/06/namithas-latest-stills-from-her.html
trisha in pothys ad stills exclusive for u
http://allyouwants.blogspot.com/2010/12/trisha-in-pothys-ad-stills.html
NIKITHA HOT PHOTO STILLS
http://allyouwants.blogspot.com/2011/01/nikitha-hot-stills-in-blue-saree.html

FOR GOOD JOBS SITES TO YOU
http://goodjobssites.blogspot.com/

FOR HOT PHOTO&VIDEOS
KATRINA KAIF IN BEAUTIFUL RED DRESS
http://southactresstou.blogspot.com/2011/05/katrina-kaif_22.html
GOOD LOOKING DEEPIKA PADUKONE
http://southactresstou.blogspot.com/2011/05/deepika-padukone_22.html

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```
From -5354373617050161295
X-Google-Thread: a4a23d5f63,64cbcee316d23007,start
X-Google-Attributes: gida4a23d5f63,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!news.glorb.com!news-out.readnews.com!
transit3.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-186 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Tue, 5 Jul 2011 12:38:33 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 2094
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <003301cc3b31$e89c1080$b9d43180$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1309883913 27322 166.84.1.6 (5 Jul 2011 16:38:33 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Tue, 5 Jul 2011 16:38:33 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
```

X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news1.google.com rec.radio.amateur.space:519 rec.radio.info:2476

This report is organized into four (4) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - deborbited/returned satellites

SB SAT @ AMSAT W8ISS $WSR-186.S1
WSR 186 Part 1 07/05/2011

AMSAT NEWS SERVICE BULLETIN 186.S1
FROM AMSAT HQ SILVER SPRING, MD, July 05, 2011
TO ALL RADIO AMATEURS
BID: $WSR-186.S1

HO-68 HOPE-1 (CAS-1)(XW-1)
Catalog Number: 36122
Launch Date: December 15, 2009 0231z
Launch site: Taiyuan Space Center, PRC

Status: By schedule

Callsign:
Broadcast: BJ1SA-11
BBS: BJ1SA-12

```
Uplinks:   145.8250 MHz FM, PL 67.0 Hz.
           145.9250 - 145.9750 MHz SSB/CW
           145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
           435.7650 - 435.7150 MHz SSB/CW
           435.6750 MHz AFSK 1200 BPS

Beacon:    435.7900 MHz CW
```

Mode and Antenna Polarization:
V: LHCP 2.0dBi max
U: RHCP 3.0dBi max

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=108

For more information about XW-1 (CAS-1):
http://
[02092011]
=====
SO-67 SumbandilaSat
Catalog Number: 35870
Launch Date: September 17, 2009 1555z
Launch site: Baikonur, Kazakhstan

```
Status: By schedule

Callsign: ZS0SUM

Uplink:   145.875MHz FM tone 233.6 Hz
Downlink: 435.345MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

For more information about SO-67:
http://www.amsatsa.org.za/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=88
[02092011]
=====
DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational
Current Mode: Science Mode - Beacon ONLY

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink:   435.530 to 435.570 MHz

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=68
[02092011]
=====
VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05, 2005 0444z
Launch site: Satish Dhawan Space Centre, India

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink:   435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink:   435.225 to 435.275 MHz LSB/CW
```

```
Downlink: 145.925 to 145.875 MHz USB/CW


Indian Beacon:  145.9360 MHZ CW
Dutch Beacon:   145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=30

To know what transponder is switched on please listen for the beacon
that is active. Each transponder has a different beacon.
[02092011]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004 0745z
Launch site: Baikonur, Kazakhstan

Status: Semi-operational - IHU crash each eclipse

Current Mode(s):
Voice repeater: V/u
Uplink:      145.880 MHz FM
Downlink:    435.150 MHz FM

Telemetry: Recovery efforts
Downlink:    435.150MHz 9k6


Analog voice downlink:     435.300 MHz FM
                           435.150 MHz FM
                          2401.200 Mhz FM
Analog voice uplink:       145.860 MHZ FM
                           145.880 MHz USB
                           145.880 MHz FM
                           145.920 MHz FM
                           145.920 MHz FM - 67 Hz PL tone burst
                          1268.705 MHz FM
Digital Downlinks:         435.150 MHz FM 38k4 PBP, 1 watt output
                           435.150 MHz FM 9k6 Pacsat Broadcast Protocol
                          2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:            145.860 MHz FM 9k6 Pacsat Broadcast Protocol
                          1268.703 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon:                    435.150 MHz

Mode and Antenna Polarization:
T: Linear
```

V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=19
[06162011]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002 1700z
Launch site: Baikonur, Kazakhstan

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz. The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10 minute timer.
[02092011]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Operational
Current Mode: V/u (Mode JA)

Voice/CW (Mode JA)
Uplink: 145.90 to 146.00 MHz CW/LSB

Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage:
http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's
CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/
fo29cwts.htm
[06232011]
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993 0140z
Launch site: Kourou, French Guiana

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[02092011]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974
Launch site: Vandenberg AFB, California, USA

```
Status: Operational

Current Mode: Alternating between Mode A and B every 24 hours

Uplink:   145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink:  29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons:   29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
[02092011]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998 0640z (ZARYA module)
Launch sites: Baikonur, Kazakhstan
              Kourou, French Guiana
              Uchinoura Space Center, Japan
              Kennedy Space Center, Titusville, Florida, USA

Status: Operational

Current Active Modes: FM Repeater - OFF
                      Voice -       V/v
                      BBS -         OFF
                      APRS -        OFF
                      SSTV -        OFF


Expedition 28 Crew (May - September 2011):
Commander:                Andrey Borisenko
Flight Engineer:          Ron Garan             KF5GPO
Flight Engineer:          Alexander Samokutyaev
Flight Engineer:          Satoshi Furukawa
Flight Engineer:          Sergey Volkov         KE5DAW
Flight Engineer:          Micheal Fossum        KF5AQG


Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink:   145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2
```

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[06162011]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-186.S2
WSR 186 Part 2 07/05/2011

AMSAT NEWS SERVICE BULLETIN 186.S2
FROM AMSAT HQ SILVER SPRING, MD, July 05, 2011
TO ALL RADIO AMATEURS
BID: $WSR-186.S2

O/OREOS
Catalog Number: 37224
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: On Orbit

```
Uplink:
Downlink: 437.035 MHZ AX.25

Beacon:

Callsign:

URL: http://www.ooreos.org/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=146
[02092011]
=====
Rax-1 Radio Aurora Explorer
Catalog Number: 37223
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: On Orbit

Uplink:
Downlink: 437.505 MHz 9k6 GMSK

Beacon:

Callsign: RAX-1

URL: http://rax.engin.umich.edu/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=165
[02092011]
=====
FO-69 Fastrac-1 Sara Lily
Catalog Number: 37227
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: Operational

Uplink 1: 145.980 MHz 1k2 baud
Uplink 2: 145.825 MHz 1k2 baud
Downlink: 437.345 MHz 1k2 and 8k6 baud

Beacon:   437.435 MHz 1k2 AX.25

Callsign: Fast1

URL: http://fastrac.ae.utexas.edu/index.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=83
```

```
[07052011]
=====
FO-70 Fastrac-2 Emma
Catalog Number: 37380
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: Operational

Uplink 1: 435.025 MHz 1k2 baud
Uplink 2: 437.435 MHz 9k6 baud
Downlink: 145.825 MHz

Beacon:   145.825 MHz 1k2 AX.25

Callsign: Fast2

URL: http://fastrac.ae.utexas.edu/index.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=84
[07052011]
=====
StudSat
Catalog Number: 36796
Launch Date: July 12, 2010 0352z
Launch site: Satish Dhawan Space Centre, India

Status: On Orbit

Uplink:   437.505MHz, 9600bps FSK
Downlink: 437.505MHz, 9600bps FSK
Beacon  : 437.505MHz,   20bps ASK

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=164
[02092011]
=====
TIsat-1
Catalog Number: 36799
Launch Date: July 12, 2010 0352z
Launch site: Satish Dhawan Space Centre, India

Status: On orbit

Callsign: HB9DE

Uplink:   145.980MHz FM, AFSK
Downlink: 437.305MHz FM, AFSK
Beacon:   437.305MHz CW

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=118
```

```
[02092011]
=====
HO-68 HOPE-1 (CAS-1)(XW-1)
Catalog Number: 36122
Launch Date: December 15, 2009 0231z
Launch site: Taiyuan Space Center, PRC

Status: By schedule

Callsign:
Broadcast:    BJ1SA-11
BBS:         BJ1SA-12

Uplinks:   145.8250 MHz FM, PL 67.0 Hz.
           145.9250 - 145.9750 MHz SSB/CW
           145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
           435.7650 - 435.7150 MHz SSB/CW
           435.6750 MHz AFSK 1200 BPS

Beacon:    435.7900 MHz CW

IARU coordination page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108

For more information about XW-1 (CAS-1):
http://

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=108
[02092011]
=====
SwissCube
Catalog Number: 35932
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Callsign: HB9EG

Beacon(100mw): 437.5050MHz CW
Beacon(1w):    437.5050MHz FSK 1k2bps

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=109
[02092011]
=====
UWE-2
Catalog Number: 35934
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India
```

```
Status: In Orbit

Beacon(500mw): 437.3850 MHz AFSK 1k2bps
               437.3850 MHz FSK 9k6bps

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=110
[02092011]
=====
ITUpsAT1
Catalog Number: 35935
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Beacon(100mw): 437.325MHz CW
Beacon(1w): 437.325MHz 19k2bps

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=113
[02092011]
=====
BEESAT
Catalog Number: 35933
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Callsign: DP0BEE

Beacon(100mw): 436.000MHz CW
Beacon(500mw): 436.000MHz GMSK 4k8bps
Beacon(500mw): 436.000MHz GMSK 9k6bp
[02092011]
=====
CP-6
Catalog Number: 35003
Launch Date: May 19, 2009 2355z
Launch site: Wallops Island, Virginia, USA

Status: Operational

Downlink: 437.365 MHz 1k2 AFSK

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=121
[02092011]
=====
HAWKSAT 1
Catalog number: 35004
Launch Date: May 19, 2009 2355z
Launch site: Wallops Island, Virginia, USA

Status: operational

Downlink: 437.345 MHz ?

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=105
[02092011]
=====
Pharmasat
Catalog Number: 35002
Launch Date: May 19, 2009 2355z
Launch site: Wallops Island, Virginia, USA

Status: Operational

Downlink: 437.465 MHz 1k2 AFSK

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=94
[02092011]
=====
ANUSAT
Catalog Number: 34808
Launch Date: April 20, 2009 0115z
Launch Site: Satish Dhawan Space Centre, India

Status: ?

Downlink:  435.000 MHz
Uplink:    145.800 MHz

Telemetry: 137.400 MHz
[02092011]
=====
SOHLA-1 (ASTRO TECH.)
Catalog Number: 33496
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational

Proposed Frequencies and Modes:
Downlink: 437.505 MHz AFSK/CW
Beacon:   437.505 MHz AFSK/CW

Callsign:

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=101
[02092011]
=====
KAGAYAKI (Solan Co.)
Catalog Number: 33495
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: In Orbit

Downlink: 437.375 MHZ    FSK9k6/CW
Beacon:   437.375 MHz    FSK9k6/CW

IARU coordination status page:

AMSAT-NA webpage:

[02092011]
=====
STARS (Kagawa Univ.) (Twin Satellites)
Catalog Number: 33498
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational ?

Downlinks: 437.485 MHz FM/CW
           437.465 MHz FM/CW
Beacons:   437.305 MHz FM/CW
           437.275 MHz FM/CW

Callsigns: JR5YBN
           JR5YBO

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=99

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=121&retURL
=/satellites/status.php
[02092011]
=====
KKS-1 (Tokyo MCIT)
Catalog Number: 33499
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational

Downlink:  437.455 MHz AFSK/CW
Beacon:    437.385 MHz AFSK/CW

Callsign: JQ1YYY

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=107
```

```
AMSAT-NA webapge:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=120&retURL
=/satellites/status.php
[20092011]
=====
PRISM (Tokyo Univ.)
Catalog Number: 33493
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational ?

Downlink: 437.425 MHz AFSK/GMSK/CW
Beacon:   437.250 MHz AFSK/GMSK/CW

Callsign: JQ1YCX

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=97

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=119&retURL
=/satellites/status.php
[02092011]
=====
RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number: 32953
Launch Date: May 23, 2008 1520z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational

Curent Modes: Telemetry
              Audio
              Images

Downlinks: 435.315 MHz
           435.215 MHz

AMSAT-NA website:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=115&ret
URL=/satellites/status.php

Official website:
http://www.npopm.com/?cid=leoca&caid=43
[02092011]
=====
CanX-2
Catalog number: 32790
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India
```

Status: Operational in range of ground station only

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=46
[02092011]
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Downlink: 437.425 MHz 1k2 baud packet

For the latest project status update please visit the AAUSAT-II web page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=60
[02092011]
=====
CO-65 CUTE-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational ?

Downlink: 437.475 MHz 9k6 Packet
Uplink: 1267.600 Mhz

Telemetry Beacon:
Downlink: 437.2750 MHz CW

For the latest project status update please visit the Cute-1.7+APD II web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=78

Command Station blog website:
http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=112&retURL=/satellites/status.php

```
[07052011]
=====
Compass-1
Catalog number: 32787
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Current Mode: dependant on last received command

Uplink:   145.980 MHz FM
Downlink: 437.275 Mhz CW
          437.405 MHz Packet

For the latest project status update please visit the Compass 1 web
page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=52

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=114&retURL
=/satellites/status.php
[06162011]
=====
CO-66 Seeds II
Catalog number:
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Downlink: 437.485 MHz

Callsign: JQ1YGU

For the latest project status update please visit the Seeds 2 web
page: http://cubesat.aero.cst.nihon-u.ac.jp/english/seeds_2_e.html

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=36

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=113&retURL
=/satellites/status.php
[02092011]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007 0702z
Launch site: Baikonur, Kazakhstan
```

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=94&retURL=
/satellites/status.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=72
[02092011]
=====
CP3
Catalog Number: 31129
Launch Date: April 17,2007 0702z
Launch site: Baikonur, Kazakhstan

Status: Operational

Current Mode: /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=74
[02092011]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005 0652z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon: 437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/xivpicte.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=37
[02092011]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: ?????

Current Mode: /u

Beacon: 436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=96&retURL
=/satellites/status.php

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[02092011]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004 0745z
Launch site: Baikonur, Kazakhstan

Status: Semi-operational - IHU crash each eclipse

Current Mode(s):
Voice repeater: V/u
Uplink: 145.880 MHz FM
Downlink: 435.150 MHz FM

Telemetry: Recovery efforts
Downlink: 435.150MHz 9k6

Analog voice downlink:	435.300 MHz FM
	435.150 MHz FM
	2401.200 Mhz FM
Analog voice uplink:	145.860 MHZ FM
	145.880 MHz USB
	145.880 MHz FM
	145.920 MHz FM
	145.920 MHz FM - 67 Hz PL tone burst
	1268.700 MHz FM
Digital Downlinks:	435.150 MHz FM 38k4 PBP, 1 watt output
	435.150 MHz FM 9k6 Pacsat Broadcast Protocol
	2401.200 MHz FM 38k4 bps, AX.25

```
Digital Uplink:            145.860 MHz FM 9k6 Pacsat Broadcast Protocol
                          1268.708 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon:                    435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=19
[06162011]
=====
QuakeSat
Catalog Number: 27845
Launch Date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Telemetry only

Current Mode: 9600 baud data packet

Mode U packet
Downlink: 436.675 MHz 9k6 BPS

Quakesat webpage:
http://www.quakefinder.com/services/quakesat-ssite/
[02252011]
=====
CO-55 Cute-1.7+APD II
Catalog Number: 27844
Launch date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational

Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW
```

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=69&retURL
=/satellites/status.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=78
[02092011]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001 0240z
Launch site: Kodiak Launch Complex, Alaska, USA

Status: Telemetry only

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[02092011]
=====
RS-22 RADIO SPORT 22 (MOZHAYETS 4)
Catalog number: 27939
Launch Date: September 27, 2003 0612z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational - 70cm cw only

Current Mode: /u

CW Beacon - 435.352 MHz
            145.818 MHz

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=76&retURL
=/satellites/status.php
[02092011]
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990
Launch site: Kourou, French Guiana

Status: CW Beacon only

Uplinks: 145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK

```
                  145.900 MHz 1200-baud Manchester FSK

CW downlink:      437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[02092011]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984
Launch site: Vandenburg AFB, California, USA

Status: Operational ?

Current Mode:  /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon:          435.025 MHz
Mode-S Beacon:     2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[07052011]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998 0640z (ZARYA module)
Launch sites: Baikonur, Kazakhstan
              Kourou, French Guiana
              Uchinoura Space Center, Japan
              Kennedy Space Center, Titusville, Florida, USA

Status: Operational

Current Active Modes: FM Repeater - OFF
                      Voice -       V/v
                      BBS -         OFF
                      APRS -        OFF
                      SSTV -        OFF


Expedition 28 Crew (May - September 2011):
Commander:                Andrey Borisenko
```

Flight Engineer: Ron Garan KF5GPO
Flight Engineer: Alexander Samokutyaev
Flight Engineer: Satoshi Furukawa
Flight Engineer: Sergey Volkov KE5DAW
Flight Engineer: Micheal Fossum KF5AQG

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[06162011]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-186.S3
WSR 186 Part 3 07/05/2011

AMSAT NEWS SERVICE BULLETIN 186.S3
FROM AMSAT HQ SILVER SPRING, MD, July 05, 2011
TO ALL RADIO AMATEURS
BID: $WSR-186.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

NANOSAIL-D
Catalog Number:
Ejection Date: January 17, 2011

Status: On orbit

Downlink: 437.270 MHz AX.25

URL: http://nanosaild.engr.scu.edu/dashboard.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=115
[01272011]
=====
CP4
Catalog Number: 31132
Launch Date: April 17, 2007

Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon: 437.325 MHz CW

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=79
[09062010]
=====
LIBERTAD-1
Catalog Number: 31128
Launch Date: April 17, 2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink: 145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25

IARU coordination status page:

```
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=76
[09062010]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: Non-Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder:  145.825 Mhz FM

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=51
[09062010]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency:  437.305
                             2407.250

Official Website: http://www.ncube.no

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=24
[09062010]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink:        437.250 MHz FM 67Hz CTCSS
Voice Downlink:     2401.835 MHz FM
Packet Up/Downlink:  437.250 MHz 9k6 packet
Packet Downlink     2401.835 MHz 38k4 packet

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=54
[09062010]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005
```

```
Status: Non-Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=53
[09062010]
=====
CANX-1
Catalog Number: 27847
Launch Date: June 30, 2003

Status: Non-Operational

Downlink: 437.8800 MHz AFSK 1k2bps
[06052009]
=====
DTUSAT
Catalog Number: 27842
Launch Date: June 30, 2003

Status: Non-Operational

Current Mode: 2k4 AFSK Packet last reported

Downlink: 437.475MHz

Officail webpage: http://dtusat1.dtusat.dtu.dk/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=101&retURL
=satellites/all_oscars.php
[02212009]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink:   435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)

Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000
```

Status: Telemetry only

Uplinks: 145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[03302009]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

```
Status: Non-Operational

Uplink:   145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
V-band:   145.840 -  145.990 MHz CW/LSB
U-band:   435.550 -  435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks
---------
S2-band:  2401.225 -  2401.475 MHz CW/USB
K-band:  24048.010 - 24048.060 MHz CW/USB
Beacon:   2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)
----------------------------
BEACON   General Beacon(GB)  Middle Beacon(MB)  Engineering Beacon(EB)
2 m                    none        145.898 MHz                    none
70cm           435.438 MHz        435.588 MHz             435.838 MHz
13cm(1)       2400.188 MHz       2400.338 MHz            2400.588 MHz
13cm(2)       2401.173 MHz       2401.323 MHz            2401.573 MHz
3cm          10450.975 MHz      10451.125 MHz           10451.375 MHz
1.5cm        24047.885 MHz      24048.035 MHz           24048.285 MHz
[07162007]
=====
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink:    145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: 25636
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater:         436.250 MHz

Uplinks: Mode B Repeater:  145.825 MHz
Mode J Digipeater:         145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)
```

```
The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Non-Operational

Current Modes:
Telemetry : /u

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign:       4XTECH-12

More information of GO-32 can be found at:
http://asri.technion.ac.il/techsat/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=14&retURL
=/satellites/status.php
[07172010]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink:   145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
MO-30 UNAMSAT-2
Catalog Number: 24305
Launch Date: September 5, 1996
```

```
Status: Non-operational

Downlink:       435.1380 MHz AFSK 1200 BPS
Downlink:       435.2060 MHz AFSK 1200 BPS
Uplink:         145.8150 MHz AFSK 1200 BPS
Uplink:         145.8350 MHz AFSK 1200 BPS
Uplink:         145.8550 MHz AFSK 1200 BPS
Uplink:         145.8750 MHz AFSK 1200 BPS
[06042009]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Non-operational

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign:       POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012009]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993
```

```
Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
AO-24 ARSENE
Catalog Number: 22654
Launch Date: May 13, 1993

Status: Non-operational

Uplink:    435.0625 MHz FM 1k2bps AFSK
           435.1125 MHz FM 1k2bps AFSK
           435.1375 MHz FM 1k2bps AFSK
Downlink:  145.9750 MHz FM 1k2bps AFSK
          2446.5025 MHz FM 1k2bps AFSK

Beacon:    2446.4700 MHz CW

Broadcast callsign:
BBS:
[12162009]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
```

=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink: 435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons: 435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink: 145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks: 145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink: 145.825 MHz FM 1200 Baud AFSK
Beacon: 2401.220 MHz
[05012006]

```
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: non-operational

Current Mode:  V/u

Uplink:         145.900 MHz FM 1200-baud Manchester FSK (reserved)
                145.920 MHz FM VOICE
                145.940 MHz FM 1200-baud Manchester FSK (reserved)
                145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink:       437.026 MHz USB VOICE
                (1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[07242009]
=====
UO-15 UoSAT-4
Catalog Number: 20438
Launch Date: January 22, 1990

Status: Non-operational

Uplink: ?
Downlink: 435.1250MHz (?)
          435.1200MHz (?)
[06042009]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
```

```
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon:   145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink  29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
```

```
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
Beacons:   29.450 MHz
          435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon 1:  29.352 MHz (intermittent)
Beacon 2:  29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991
```

```
Status: Non-operational

Uplink:     21.260 to 21.300 MHz CW/USB
Downlink:  145.860 to 145.900 MHz CW/USB

Beacon:    145.860 MHz

Robot:     145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink:   21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon:   29.408 MHz

Robot:    29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-186.S4
WSR 186 Part 4 07/05/2011

AMSAT NEWS SERVICE BULLETIN 186.S4
FROM AMSAT HQ SILVER SPRING, MD, July 05, 2011
TO ALL RADIO AMATEURS
BID: $WSR-186.S4

THE FOLLOWING SATELLITES HAVE RE-ENTERED OR HAVE BEEN RETURNED SAFELY:

CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Re-entered
Re-entered: October 25, 2009

Uplink:  1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/

IARU coordination status page:
```

```
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=56
[09062010]
=====
BEVO-1 (DRAGONSAT-1)
Catalog Number: 35690
Launch Date: May 19, 2009

Status: Re-entered
Re-entered:

Downlink: 437.325 MHz 9k6 GMSK
          437.325 MHz CW 20wpm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=117
[07312009]
=====
AggieSat2 (DRAGONSAT-2)
Catalog Number: 35690
Launch Date: May 19, 2009

Status: Re-entered
Re-entered:

Downlink: 436.250 MHz 9k6 FHSS
[11112009]
=====
Pollux
Catalog Number: 35693
Launch Date: July 31, 2009

Status: Re-entered
Re-entered:

Callsign: POLLUX-1

Downlink: 145.825MHz 1k2 AX.25

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=139
[09062010]
=====
Castor (ANDE-2)
Catalog Number: 35694
Launch Date: July 31, 2009

Status: Re-entered
Re-entered:

Callsign: KD4HBO-1

Downlink: 145.825 MHz 1k2 AX.25
```

```
IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=144
[09062010]
=====
NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: July 28, 2008

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=59
[01012009]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink:      145.825 Mhz FM APRS AX25
APRS Uplink:        145.825 MHz FM APRS AX25
Voice/PSK31 Uplink:  28.120 MHz

Packet to Voice ID: RAFT
[06112007]
=====
GENESAT-1
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Re-Entered
Re-entered date: August 8, 2010

Current Mode: /u
```

Callsign: KE7EGC

Telemetry Beacon Downlink: 437.0695 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[08082010]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Re-Entered
Re-entered: June 18, 2008

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon: 437.2750 MHz CW

Callsign: JR8YJT
[01012009]
=====
SO-43 Starshine 3
Catalog Number: 26929
Launch Date: September 30, 2001

Status: Re-Entered
Re-entered: January 21, 2003

Beacon: 145.825Mhz
[02212009]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at}amsat.org
NNNN
/EX

```
From -3966747094313699792
X-Google-Thread: a4a23d5f63,d88e8bd6db873375,start
X-Google-Attributes: gida4a23d5f63,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!news-out.readnews.com!transit3.readnews.com!panix!rri.panix.com!
robomod!not-for-mail
From: SWPC.Webmaster@noaa.gov
Newsgroups:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.info
Subject: Weekly Highlights of Solar and Geomagnetic Activity, 27 June - 03 July
2011
Followup-To: rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space
Date: Tue, 5 Jul 2011 17:30:09 EDT
Organization: NOAA Space Weather Prediction Center
Lines: 67
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <20110705213001.8F19333C4A@panix2.panix.com>
NNTP-Posting-Host: panix6.panix.com
```

```
X-Trace: reader1.panix.com 1309901409 2412 166.84.1.6 (5 Jul 2011 21:30:09 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Tue, 5 Jul 2011 21:30:09 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Xref: g2news1.google.com rec.radio.amateur.misc:6343 rec.radio.amateur.dx:1026
rec.radio.amateur.space:520 rec.radio.info:2477
```

```
:Product: Weekly Highlights and Forecasts
:Issued: 2011 Jul 05 1804 UTC
# Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center
# Product description and SWPC contact on the Web
# http://www.swpc.noaa.gov/weekly.html
#
#                Weekly Highlights and Forecasts
#
```

Highlights of Solar and Geomagnetic Activity
27 June - 03 July 2011

Solar activity was very low for 27 June to 02 July and increased to low levels for 03 July. Region 1236 (N17, L=167, class/area Ehi/350 on 15 June), which rotated around west limb on 26 June, produced most of the activity on 27-28 June. Regions 1242 (N17, L=056, class/area Dso/90 on 29 June), 1243 (N16, L=351, class/area Cao/80 on 02 July), and 1244 (N16, L=024, class/area Dso/60 on 03 July) dominated activity for 29 June - 02 July with occasional B-class flares. Region 1244 became the dominant flare producing region on 03 July with a C2/Sf at 1244 UTC. The region also produced a long duration B9/Sf at 03/0024 UTC which was associated with type II and type IV radio sweeps as well as a partial halo CME centered over the southwest limb.

No proton events were observed at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit was at high levels for 27-30 June but dropped to background levels for 01-03 July.

Geomagnetic field activity was predominantly quiet for 27-30 June. Quiet to active levels were observed on 01 July due to a high speed stream from a coronal hole. Quiet to unsettled levels prevailed for 02-03 July with some isolated active periods at high latitudes as the high speed stream slowly subsided. The high speed stream was weak with peak velocity around 450 km/s; enhanced activity intervals corresponded to somewhat enhanced negative Bz intervals (e.g. around -5 to -7 nT late in the day on 30 June and early in the day on 03 July).

Forecast of Solar and Geomagnetic Activity
06 July - 01 August 2011

Solar activity is expected to be very low to low for most of the outlook interval. There may be an increase in background levels for 10-21 July with the return of old Region 1236 on 10 July which may also increase activity to low levels. There is a chance that new, rapidly emerging flux regions could increase activity to moderate levels at any time during the outlook period.

No proton events are expected at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to be at background levels initially. An increase to high levels is expected around 20 July and lasting through 26 July in response to a recurrent high speed stream. Background levels are expected to return for 26 July - 01 August.

Geomagnetic field activity is expected to be quiet to unsettled for 6-8 July. Quiet levels are expected for 09-19 July. An increase to unsettled with a chance for active periods is expected for 18-21 July in response to a recurrent high speed stream. Quiet levels are expected to prevail for 24 July - 28 July. Another increase to unsettled levels is expected for 29-30 July due to another recurrent high speed stream, with quiet levels returning for 31 July - 01 August.

From 777566787239531798
X-Google-Thread: addc8bf063,b3c449f584cf5e94,start
X-Google-Attributes: gidaddc8bf063,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news3.google.com!feeder1.cambriumusenet.nl!
feed.tweaknews.nl!193.201.147.68.MISMATCH!feeder.news-service.com!
news.astraweb.com!border5.a.newsrouter.astraweb.com!not-for-mail
From: Chris Steyaert <observations@rmob.org>
Newsgroups: rec.radio.amateur.space,sci.astro.amateur
Subject: Radio Meteor Obs. Bull. June 2011 daytime Arietids
Date: Thu, 07 Jul 2011 21:01:11 +0200
Message-ID: <kh0c175s0d4q2mgden58b57curhnptosam@4ax.com>
X-Newsreader: Forte Agent 5.00/32.1171
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Lines: 14
Organization: Unlimited download news at news.astraweb.com
NNTP-Posting-Host: 5af58fec.news.astraweb.com

```
X-Trace: DXC=0]0EL8o7>V=5WGRN4JSiW2L?
0kYOcDh@:h5C[T]=8Rh6;4fK:hd=R`6XfQ@PgXOfm<eM7IG_Q>@o?i_=YE6RTP=?
nk`bIP]<U>3`3Z;F5K^9j2
Xref: g2news1.google.com rec.radio.amateur.space:521 sci.astro.amateur:48130
```

Radio Meteor Observation Bulletin No. 215 of June 2011 (94 K) is available now as

http://www.rmob.org/rmobtext/rmob1106.txt

More information and the visual presentation of the hourly forward scatter counts can be found on

http://www.rmob.org

Chris

```
From -5445362521765876376
X-Google-Thread: 10e8ad,1e11dc8b4d56a3b8,start
X-Google-NewGroupId: yes
X-Google-Thread: 10b9c8,1e11dc8b4d56a3b8,start
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,gida4a23d5f63,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!news.glorb.com!news-out.readnews.com!
news-xxxfer.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-191 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sat, 9 Jul 2011 21:13:50 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 358
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000101cc3e9e$9ba2e2c0$d2e8a840$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1310260431 22490 166.84.1.6 (10 Jul 2011 01:13:51 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 10 Jul 2011 01:13:51 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
```

article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news1.google.com rec.radio.amateur.space:522 rec.radio.info:2492

AMSAT NEWS SERVICE
ANS-191

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:

* ARISSat-1/KEDR Deployment Timeline Driven by ISS Schedules
* AO-51 Operations Update
* AMSAT Awards
* Satellite Beginners Workshop Planned For AMSAT-UK 2011 Colloquium
* Satellite Shorts From All Over
* More University Satellite Missions in Preparation

SB SAT @ AMSAT $ANS-191.01
ARISSat-1/KEDR Deployment Timeline Driven by ISS Schedules

AMSAT News Service Bulletin 191.01
>From AMSAT HQ SILVER SPRING, MD.
July 10, 2011
To All RADIO AMATEURS
BID: $ANS-191.01

ARISSat-1/KEDR Project Manager Gould Smith, WA4SXM provided the latest deployment information to the AMSAT News Service. Gould said he and ARISS Hardware Engineer Lou McFadin, W5DID participated in a teleconference call this week with NASA to review the Roscosmos EVA procedures for the release of ARISSat-1/KEDR during Russian EVA 29.

Gould says the preparation procedures include the battery being charged and assembled into the satellite. Also discussed were the procedures to remove the protective quilts from the solar cells and turning on the safety switches prior to deployment.

As to the date of deployment, Gould summarized, "The deployment date for ARISSat is still soft, a major factor is the shuttle launch. As of July 6 the EVA date is in early August, but the shuttle launch and docking are driving the timeline. During our discussion it was noted that the ARISSat/KEDR deployment is the first task of the EVA, so it will occur fairly soon after the EVA begins. Since we have no firm date or time for the EVA we cannot predict where the satellite will be heard first. We will let everyone know more as we know more."

[ANS thanks ARISSat-1/KEDR Project Manager Gould Smith, WA4SXM for the above information]

/EX

SB SAT @ AMSAT $ANS-191.02
AO-51 Operations Update

AMSAT News Service Bulletin 191.02
>From AMSAT HQ SILVER SPRING, MD.
July 10, 2011
To All RADIO AMATEURS
BID: $ANS-191.02

AMSAT Vice-President of Operations Drew Glasbrenner, KO4MA, provided the latest details in AMSAT's work to keep AO-51 operational for as long as possible.

Drew wrote, "Keeping AO-51 operating requires the US command team routinely restarting the satellite, and tweaking the power settings to find a combination of operating parameters to get it through eclipse. Currently one of the 6 battery cells onboard is shorted, and another is in really poor shape."

Continuing, Drew explains, "The onboard computer was crashing each orbit because of low voltage when the solar cells were no longer receiving illumination and the satellite relies entirely on its internal battery power. Through experimentation the Command Team seems to have found a balance point where it will sometimes go up to two days before crashing."

Each time the computer crashes the Command Team has to restart it using the housekeeping software onboard in ROM. The firmware code has a limited functionality compared to the normal flight software which we would upload from the ground over a few days time. However the eclipses and battery problem were causing a crash before the upload can complete.

Drew concludes, "With lots of luck we will be able to continue to limp along. How long is anyone's guess. I'd encourage you to use AO-51 while it's available, and to financially support new satellite programs like Kiwisat, Funcube, and Fox when you can."

Uplink: 145.880 MHz, no tone.

Downlink: 435.150 MHz
The repeater is open to all when the satellite is operational.

Keep up with the latest AO-51 Control Team News on-line at:
http://www.amsat.org/amsat-new/echo/CTNews.php

[ANS thanks AMSAT-NA VP Operations Drew Glasbrenner, KO4MA for the above information]

/EX

SB SAT @ AMSAT $ANS-191.03
AMSAT Awards

AMSAT News Service Bulletin 191.03
>From AMSAT HQ SILVER SPRING, MD.
July 10, 2011
To All RADIO AMATEURS
BID: $ANS-191.03

AMSAT Director Contests and Awards, Bruce Paige, KK5DO says that congratulations are in order for these satellite operators for having earned these operating awards:

The following have entered into the Satellite Communicators Club for making their first satellite QSO:
+ Robert Sheskin, N3PPH

The following have earned the AMSAT Communications Achievement Award:
+ Claudio Ferrari, IK1YRC #537
+ Berufliches Schulzentrum Elektrotechnik Dresden, DL0IKT (club station) #538
+ Mark Korroch, WB8TGY #539

The following have earned the AMSAT Sexagesimal Award:
+ Mark Korroch, WB8TGY #161

The following have earned the South Africa Satellite Communications Achievement award:
+ Berufliches Schulzentrum Elektrotechnik Dresden, DL0IKT (club station) #US167
+ Mark Korroch, WB8TGY #US168

The following earned upgrades to their basic Robert W. Barbee Jr., W4AMI Award:
+ Gail McDaniel, KB0RZD 2K, 3K, 4K

The following have earned their Robert W. Barbee Jr., W4AMI 5000 Award:
+ Gail McDaniel, KB0RZD #28

To see all the awards visit http://www.amsat.org.

Bruce also reminds you that mere hours remain before the deadline to send in your satellite Field Day results. The Satellite Summary Sheet (on pages 3-4 of the AMSAT Field Rules) should be used for submission of the AMSAT Field Day competition.

The Rules and the Satellite Summary Sheet can be downloaded from links at http://www.amsat.org or http://www.amsatnet.com

http://tinyurl.com/3eztlaf (amsat.org)
http://www.amsatnet.com/2011fd.doc
http://www.amsatnet.com/2011fd.pdf

Your entry must be received by KK5DO (email or postal mail) by 11:59 P.M. CDT, Monday, July 11, 2011. The preferred method for submitting your log is via e-mail to kk5do@amsat.org or kk5do@arrl.net.

You will receive an email back (within one or two days) from Bruce when he receives your email submission. If you do not receive a confirmation message, try sending it again or send it to his other email address.

Certificates will be awarded to the first-place emergency power/ portable station at the AMSAT General Meeting and Space Symposium in November 2011. Certificates will also be awarded to the second and third place portable/emergency operation in addition to the first-place home station running on emergency power. Stations submitting high, award-winning scores will be requested to send in dupe sheets for analog contacts and message listings for digital downloads.

[ANS thanks AMSAT Director of Awards and Contests, Bruce Paige,
  KK5DO for the above information]

/EX

SB SAT @ AMSAT $ANS-191.04
Satellite Beginners Workshop Planned For AMSAT-UK 2011 Colloquium

AMSAT News Service Bulletin 191.04
>From AMSAT HQ SILVER SPRING, MD.
July 10, 2011
To All RADIO AMATEURS
BID: $ANS-191.04

AMSAT-UK will be holding a Satellite Beginner's Workshop at 4pm on Friday afternoon, July 29, to teach newcomers how to get started in the fascinating world of Amateur Radio Space communications.

With some satellites you can communicate using little more than a standard dual-band FM handheld. Others use SSB or CW and permit intercontinental DX communications using the VHF/UHF bands.

The Beginners Workshop will be run by Dave G4DPZ and Carlos G0AKI and takes place at the Holiday Inn, Guildford, GU2 7XZ. Look for the RSGB GB4FUN vehicle in the car park.

The AMSAT-UK International Space Colloquium takes place Saturday/Sunday, July 30/31, details at:
http://www.uk.amsat.org/

Don't forget your camera ...

AMSAT-UK has just launched a new look website http://www.uk.amsat.org/

As part of this new look, we have embarked on a new photo gallery, so if you have any photos related to AMSAT-UK, feel free to upload to our new Gallery, which can be found here:
http://www.uk.amsat.org/Gallery3/

[ANS thanks AMSAT-UK for the above information]

/EX

SB SAT @ AMSAT $ANS-191.05
Satellite Shorts From All Over

AMSAT News Service Bulletin 191.05
>From AMSAT HQ SILVER SPRING, MD.
July 10, 2011
To All RADIO AMATEURS
BID: $ANS-191.05

+ SO-67 has returned to operation after recovery from a cosmic ray upset. Operation over North America has already taken place between July 7-10. Operation over Europe is planned for July 11-17. Operation over Australia, New Zealand, Japan is planned for July 18-31. The latest details are posted at:
http://www.amsatsa.org.za/

+ You can turn your smartphone into an ISS visible pass predictor with the iPhone and Android aps available at:
http://simpleflybys.com .
Web based predictions are also available using the Simple Satellite Tracker at http://spaceweather.com/flybys .

+ UniverseToday has an interesting news item today about United Launch Alliance's launch complex. Take a tour starting at:
http://www.universetoday.com/87156/launch-complex-37b-level-by-level/

+ Goddard Space Flight Center has released a video (with sound) so you can experience first-hand a ride aboard a sounding rocket. Hold on to your tummy and watch at: http://tinyurl.com/3ptsgrh (UniverseToday)

+ Giving practical definition to the informal Q-signal "QLF? - Are you you sending with your left foot?" the Giant Morse Key constructed by 2E0DIT will reappear at ASTROFAIR 2011 Sidmouth, Devon on August 6. For more info see:
http://projects.exeter.ac.uk/nlo/Astronomy_Fair~EN.php
Watch the video at Southgate - http://tinyurl.com/68dase2 to see if your shoe size measures up.

+ UniverseToday posted photos and video of the testing and integration of NASA's Orion Multi Purpose Crew Vehicle:
http://tinyurl.com/6zm4wn8

+ A photo gallery of the Minotaur rocket launch from the Virginia coast is posted at: http://www.spaceflightnow.com/minotaur/ors1/launch/

+ Congratulations to Jeff, WB3JFS for earning his VUCC Satellite Award #217!

+ Stefan HB9ZEM has released a video showing his prototype Amateur Radio satellite Azimuth/Elevation tracker. See:
http://www.southgatearc.org/news/july2011/satellite_tracker_video.htm

+ See what you missed at Friedrichshafen:
http://www.southgatearc.org/news/july2011/friedrichshafen_video.htm

+ The 2nd Issue of The Egyptian Radio Amateur Magazine "CQ EGYPT" JULY 2011 is at: http://erasd.net/CQSUAMATEURRADIOMAGAZIN.aspx

[ANS thanks everyone for the above information]

/EX

SB SAT @ AMSAT $ANS-191.06
More University Satellite Missions in Preparation

AMSAT News Service Bulletin 191.06
>From AMSAT HQ SILVER SPRING, MD.
July 10, 2011
To All RADIO AMATEURS
BID: $ANS-191.06

Italian EduSAT Launch July 21

EduSAT is funded and coordinated by Italian Space Agency with the aim to promote space education among high school students and to support the qualification and scientific careers of young people, as university students, PhD students and young researchers. Another target of this program is to develop a small space mission for low cost scientific experiments and technological tests in orbit.

Edusat is currently slated to launch on a Russian Dnepr-1 on July 21. It is planned that Eduasat will deploy the MyPocketQubs, the two Eagle payloads and the ScoutQub sometime after launch. Its downlink will operate under an Italian Telecommunications Ministry experimental licence on 435.750 MHz.

The Group of Astrodynamics of the "Sapienza" University of Roma (GAUSS) web page is at: http://tinyurl.com/6kov8ow

UNM's Trailblazer CubeSat Planned Launch March 2012

The Configurable Space Microsystems Innovations and Applications Center (Cosmiac) of The University of New Mexico has received notice from NASA that UNM's Trailblazer satellite has been manifested on the Educational Launch of Nanosatellites (ELaNa) IV Mission on a Falcon 9 rocket. This satellite will provide a proof of concept flight for an Air Force Sponsored bus design called Space Plug-and-play Architecture (SPA). The PnP type architecture is a capability that will allow for rapid satellite development and delivery similar to what is currently available in a home computer. The payload includes a variety of space weather projects including a dosimeter, gyro and magnetometer. Plans call for a 325km circular orbit with a 51.6 degree inclination. The IARU has coordinated a downlink frequency of 437.425 MHz.

Watch as Craig Kief, KE5VSH, deputy director of the Configurable Space Microsystems Innovations and Applications Center (COSMIAC) discusses the mission at: http://tinyurl.com/43ps2h2 (Southgate)

[ANS thanks the CubeSat Teams at GAUSS and UNM COSMIAC for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office. And with that please keep in mind the ham who took up playing golf. He brought his XYL with him to the links but after a short while he had to tell her she asked too many questions. The XYL replied, "But I just asked why did you hit that ball into the lake?"

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM

From 8397880155053184686
X-Google-Thread: 107ada,3879455621e506ed,start

```
X-Google-NewGroupId: yes
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X-Google-Thread: 10e8ad,3879455621e506ed,start
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gida3e752f117,gid7221ecd0f7,gid8f86f75953,gida4a23d5f63,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!newsfeed2.dallas1.level3.net!
news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: SWPC.Webmaster@noaa.gov
Newsgroups:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.info
Subject: Weekly Highlights of Solar and Geomagnetic Activity, 04 - 10 July 2011
Followup-To: rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space
Date: Tue, 12 Jul 2011 17:30:14 EDT
Organization: NOAA Space Weather Prediction Center
Lines: 77
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <20110712213001.DEE6233C46@panix2.panix.com>
NNTP-Posting-Host: panix6.panix.com
X-Trace: reader1.panix.com 1310506214 19702 166.84.1.6 (12 Jul 2011 21:30:14 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Tue, 12 Jul 2011 21:30:14 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Xref: g2news1.google.com rec.radio.amateur.misc:6364 rec.radio.amateur.dx:1034
rec.radio.amateur.space:523 rec.radio.info:2496
```

```
:Product: Weekly Highlights and Forecasts
:Issued: 2011 Jul 12 1959 UTC
# Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center
# Product description and SWPC contact on the Web
# http://www.swpc.noaa.gov/weekly.html
#
#                 Weekly Highlights and Forecasts
#
```

Highlights of Solar and Geomagnetic Activity
04 - 10 July 2011

Solar activity was at very low to low levels during the period.
Solar activity began at very low levels through 06 July. On 06 July,

a 23 degree long filament, centered near N25W60, was observed lifting off. An associated CME (573 km/s plane-of-sky speed) was observed, but was not Earth-directed. Low levels returned on 07 July when Region 1243 (N15, L=353, class/area Dai/100 on 06 July) produced a C1/Sf at 07/0242 UTC. Four C-class flares were observed on 08 July, the largest a C3/1n at 08/1331 UTC from Region 1247 (S18, L=269, class/area Dai/040 on 10 July). There was a long duration B4 x-ray event at 09/0028Z UTC from Region 1247. Associated with this event was a filament eruption located near Region 1247 that produced an asymmetric, partial-halo CME first visible on LASCO C2 imagery at 09/0125 UTC. Activity returned to very low levels for the remainder of the period.

No proton events were observed at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit was at normal levels on 04 July. Flux levels increased to moderate on 05 - 06 July and further increased to high levels on 07 - 08 July. The period ended with flux at moderate levels.

Geomagnetic activity ranged from quiet to active levels during the period, with an isolated minor storm period observed early on 05 July due to a nighttime substorm. From 04 - 08 July, activity was primarily at quiet to unsettled levels with isolated active periods observed on 05 and 06 July. An increase to quiet to active levels occurred on 09 - 10 July due to the onset of another CH HSS.

Forecast of Solar and Geomagnetic Activity
13 July - 08 August 2011

Solar activity is expected to be at very low to low levels during the forecast period.

No proton events are expected at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to be at high levels from 12 - 14 July due to enhanced wind speeds from the currently geoeffective CH HSS. Normal levels are expected to return from 15 - 19 July before increasing to moderate to high flux levels again 20 - 27 July after an anticipated period of elevated solar wind speeds associated a second recurrent CH. Flux values should return to normal levels 28 July - 02 August, before another brief period of moderate to high levels on 3 - 4 August. Normal levels are expected to prevail for the remainder of the period.

Geomagnetic field activity is expected to be at quiet to unsettled levels on 13 July due to CH HSS effects. Unsettled to active conditions with the chance for a minor storm is expected to begin on 14 July and persist for a day or two due to the anticipated arrival of the CME from 1103 UTC on 11 July. Mostly quiet conditions should return 16 - 17 July. An increase in activity ranging from quiet to active levels is forecast for 18 - 23 July due to another geoeffective HSS from a recurrent negative polarity CH. Conditions are forecast to be mostly quiet from 24 July - 03 August, with the exception of more CH HSS effects expected 27 - 29 July and 31 July - 02 August. Each of these events should each produce mostly unsettled and possibly even brief active conditions. Mostly quiet conditions are forecast to return on 03 August, before a SSBC from negative to positive polarity is expected on 04 August, when mostly unsettled conditions should occur in advance of yet another CH HSS that is expected to produce mostly unsettled conditions for the remainder of the period.

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X-Google-Thread: 10b9c8,52acd2e354d4a651,start
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X-Google-Attributes: gid8f86f75953,gida4a23d5f63,domainid0,public,usenet
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news.highwinds-media.com!feed-me.highwinds-media.com!nx01.iad01.newshosting.com!
newshosting.com!news-out.readnews.com!transit3.readnews.com!panix!rri.panix.com!
robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-198 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Mon, 18 Jul 2011 10:28:57 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 371
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000401cc4556$ffa37c30$feea7490$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1310999338 7399 166.84.1.6 (18 Jul 2011 14:28:58 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Mon, 18 Jul 2011 14:28:58 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
```

Content-Language: en-us
Xref: g2news1.google.com rec.radio.amateur.space:524 rec.radio.info:2513

AMSAT NEWS SERVICE
ANS-198

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:
* ARISSat-1/KEDR Activation Planned; Deployment Update
* DARA Fund Challenge Reminder
* Special Event Station: Celebrating the Flight of Liberty Bell 7
* Terrestrial APRS Golden Packet Test 24 July 2011
* 2011 AMSAT Symposium and Annual Meeting
* Free Sample Edition of OSCAR News
* Satellite Shorts From All Over
* ARISS Status - 11 July 2011

SB SAT @ AMSAT $ANS-198.01
ARISSat-1/KEDR Activation Planned; Deployment Update

AMSAT News Service Bulletin 198.01
>From AMSAT HQ SILVER SPRING, MD.
July 17, 2011
To All RADIO AMATEURS
BID: $ANS-198.01

ARISSat-1/KEDR Project Manager Gould Smith, WA4SXM said this week the latest status, discussed during the International ARISS teleconference Sergey Samburov, RV3DR announced the ARISSat battery will be charged late July and a test of the system will be conducted on the ISS from 1915 UTC 30 July to about 1200-1400 UTC 31 July.

The standard ARISSat-1/KEDR 2m downlink band plan should be transmitted. Additionally, the FM signal also downlinked on 437.55 MHz. More information as it becomes available.

During the test ARISSat-1 will be in LOW power mode, this means that it will transmit about 40 seconds and then shut down for 2 minutes and then transmit for 40 seconds, etc. The standard ARISSat-1/KEDR 2m downlink band plan should be transmitted. Additionally, the FM signal also downlinked on 437.55 MHz.

As to the date of deployment, Gould summarized, "The deployment date for ARISSat is still subject to change. As of July 14 we are looking at a 3 Aug 2011 date for EVA 29 and the ARISSat-1/KEDR deployment.

The ARISSat/KEDR deployment is the first task of the EVA, so it will occur fairly soon after the EVA begins. We will let everyone know more as we know more."

145.950 MHz FM Downlink:

FM transmissions will cycle between a voice ID as RS01S, select telemetry values, 24 international greeting messages in 15 languages and SSTV images. One of the messages will be a conversation between Yuri Gagarin and ground control. See the next news item for pointers to get your station ready to receive the SSTV images.

435 MHz - 145 MHz Linear Transponder:

The linear transponder will operate in Mode U/V (70 cm Up, 2m Down). It is an 16 KHz wide inverting passband and the convention will be to TX LSB on the 435 MHz uplink and RX USB on the 145 MHz downlink. This mode is designed to work with low power transmitters and omni antenna.

145.919 MHz/145.939 MHz CW Beacon:

The CW transmissions will be callsign ID RS01S, select telemetry, and callsigns of people actively involved with the ARISS program.

145.920 MHz SSB BPSK-1000 Telemetry:

The BPSK transmissions will feature a new 1kBPSK protocol developed by Phil Karn, KA9Q to be readable in low signal level conditions. The BPSK data will transmit satellite telemetry.

The ARISSat-1/KEDR BPSK-1000 downlink is transmitted in SSB mode on 145.920 MHz. When the CW2 beacon on 145.919 MHz is active this indicates that the BPSK-1000 format is being transmitted. If the CW1 beacon on 145.939 MHz is active this indicates the backup of BPSK-400 format is being transmitted.

Transmitting at 100 mW, both BPSK rates include Forward Error Correction (FEC) and it is expected that modest quarter-wave antennas with low-loss coaxial cable will provide sufficient signal strength for decoding and display by the ARISSatTLM software.

Download the Windows ARISSatTLM free ground station soundcard demodulator and display software:
http://www.arissattlm.org/download/ARISSatTLM_050_Setup.exe

Download the Mac ARISSatTLM software:
http://www.arissattlm.org/download/ARISSATTLM.zip

The ARISSatTLM software user guide is available:
http://tinyurl.com/42uhtyf (amsat.org)

Get your color ARISSat-1/KEDR Frequency Guide:

http://tinyurl.com/4t497t2 (amsat.org)

ARISSat-1/KEDR Presentation Slides (~1MB)
http://tinyurl.com/4n4pzkm (amsat.org)

ARISSat-1/KEDR Dayton Presentation Slides
http://tinyurl.com/6zrfmzv (amsat.org)

Follow ARISSat-1/RadioSkaf-V on Twitter:
http://twitter.com/#!/arissat1
In USA you can also text 'follow Arissat1' to 40404 with your cell phone. (leave off the quotes).

[ANS thanks ARISSat-1/KEDR Project Manager Gould Smith, WA4SXM for the above information]

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SB SAT @ AMSAT $ANS-198.02
DARA Fund Challenge Reminder

AMSAT News Service Bulletin 198.02
>From AMSAT HQ SILVER SPRING, MD.
July 17, 2011
To All RADIO AMATEURS
BID: $ANS-198.02

The Dayton Amateur Radio Association (DARA) fund raising challenge for AMSAT continues whereby they will match on a 1:3 basis up to $5,000.00 for donations made in 2011. That is, for every $3.00 that AMSAT raises, DARA will provide $1.00 up to a maximum of $5,000 donated by DARA.

AMSAT kicked off the fundraising campaign at the Hamvention, where donations began count against this goal. Please consider making a donation to AMSAT at Hamvention or anytime this Spring as we strive to meet this goal.

We appreciate DARA's support for AMSAT and see this as an opportunity for donors to increase the impact of their donations by taking advantage of this matching program.

[ANS thanks AMSAT Headquarters for the above information]

/EX

SB SAT @ AMSAT $ANS-198.03
Special Event Station: Celebrating the Flight of Liberty Bell 7

AMSAT News Service Bulletin 198.03
>From AMSAT HQ SILVER SPRING, MD.

July 17, 2011
To All RADIO AMATEURS
BID: $ANS-198.03

The 50th Anniversary of the Flight of the Liberty Bell 7 spacecraft by astronaut Virgil I. "Gus" Grissom will be celebrated by the Hoosier Hills Ham Club. This, by activating special event station W9GUS on Saturday, 23 July 2011.

The station will be located in Spring Mill State Park at the Grissom Memorial near Mitchell Indiana. Operation will be 10 am to 4 pm Central U-S Daylight Savings Time with stations on 40, 20 and possibly 6 meters.

Gus Grissom was one of the original NASA Project Mercury astronauts and a United States Air Force pilot. He was the second American to fly in space and the first astronaut to fly in space twice. Grissom along with fellow astronauts Ed White and Roger Chaffee died during a pre-launch test for the Apollo 1 mission at Cape Canaveral on 27 January 1967 when a spontaneous fire broke out in their command module.

[ANS thanks Amateur Radio NewslineT Report 1770 - July 15 2011
for the above information]

/EX

SB SAT @ AMSAT $ANS-198.04
Terrestrial APRS Golden Packet Test 24 July 2011

AMSAT News Service Bulletin 198.04
>From AMSAT HQ SILVER SPRING, MD.
July 17, 2011
To All RADIO AMATEURS
BID: $ANS-198.04

Bob Bruninga, WB4APR invites you to join in the terrestrial annual APRS Golden Packet attempt on Sunday 24 July Noon to 1600 local time. During this test Bob needs you and your D700 to drive/hike to the top of some of the highest mountains in the USA and set up as a portable APRS digipeater to see if we can link a Golden Packet across thousands of miles.

There is an attempt along the Appalachian Trail from Alabama to Maine and along the Pacific Crest trail from San Diego to Seattle. Good portable stations are needed on many mountain tops!

See these web pages for the details:
EAST COAST: http://www.aprs.org/at-golden-packet.html
WEST COAST: http://aprs.org/pct-golden-packet.html

[ANS thanks Bob Bruninga, WB4APR for the above information]

/EX

SB SAT @ AMSAT $ANS-198.05
2011 AMSAT Symposium and Annual Meeting

AMSAT News Service Bulletin 198.05
>From AMSAT HQ SILVER SPRING, MD.
July 17, 2011
To All RADIO AMATEURS
BID: $ANS-198.05

The 2011 Symposium hotel and registration web pages are now available on the AMSAT web site. The Symposium will be held in San Jose, CA November 4-6. The hotel selected is the Wyndham San Jose, close to the airport. Additional information about the 2011 AMSAT Symposium will be posted on the web site as it becomes available.

[ANS thanks Gould, WA4SXM, for the above information]

/EX

SB SAT @ AMSAT $ANS-198.06
Free Sample Edition of OSCAR News

AMSAT News Service Bulletin 198.06
>From AMSAT HQ SILVER SPRING, MD.
July 17, 2011
To All RADIO AMATEURS
BID: $ANS-198.06

AMSAT-UK have made available a free PDF of the Spring 2011 edition of their newletter OSCAR News.

It contains reports on four UK CubeSat projects currently being developed. News of new South African CubeSats and details of the telemetry on ARISsat-1/KEDR currently scheduled to be deployed from the International Space Station in August.

A printed copy of OSCAR News is posted to members each quarter.

Membership of AMSAT-UK is open to anyone who has an interest in Amateur Radio satellites/space activities, including the ISS. You do not have to have an amateur radio licence to join, many of our members are interested in listening to satellites and decoding the telemetry.

Read the OSCAR News PDF at
http://www.uk.amsat.org/on_193_final.pdf

Join AMSAT-UK at
http://tinyurl.com/JoinAMSAT-UK/

AMSAT-UK Colloquium July 30-31 Guildford
http://www.uk.amsat.org/colloquium-2011/

AMSAT-UK: http://www.uk.amsat.org/

[ANS thanks Trevor, M5AKA for the above information]

/EX

SB SAT @ AMSAT $ANS-198.07
Satellite Shorts From All Over

AMSAT News Service Bulletin 198.07
>From AMSAT HQ SILVER SPRING, MD.
July 17, 2011
To All RADIO AMATEURS
BID: $ANS-198.07

+ SO-67 has returned to operation after recovery from a cosmic ray upset. Operation over Australia, New Zealand, Japan is planned for July 18-31. The latest details are posted at: http://www.amsatsa.org.za/

+ Listen for Eric W4OTN, Amanda KI4IWS, Robin WA4WPD, Bill KG4CXY on July 29 to August 1 as they activate N4I from Core Banks Barrier Island (IOTA NA-067, USi NC033S, WLOTA 0596), Pamlico County, North Carolina. They will participate in the RSGB IOTA Contest. Outside of the contest they plan to be active 80-10m CW and SSB. Operation on 6m and satellites is being planned as well. QSL W4OTN via the bureau or direct at the address on QRZ.com. (rsgbiota.org)

+ The next date for the July Hudson Valley Satcom net is July 21 at 8:00 PM Eastern Daylight Time (UTC - 4). You can tune in via the 146.970 MHz Mt. Beacon repeater, PL 100.0 or via EchoLink on the N2EYH-L node. More info is available at: www.hvsatcom.org (Stu, WA2BSS)

+ Heads up this August 5-7: Be sure to look for W1AW/5 operating on all available satellites from Taos, New Mexico during the 2011 ARRL Rocky Mountain Division Convention. http://www.2011convention.org. More information can also be found on Ollie's AB1JO QRZ page: http://www.qrz.com/db/aj1o/

+ A new free sample edition of RadCom is now available to read on-line or download from the RSGB website. The sample RadCom is available in digital magazine format for reading on-line (Flash plug-in required). For those who would like to save the magazine to their computer, a 24MB PDF version is available: http://www.rsgb.org/sampleRadCom/

+ Dave, KB5WIA plans a grid-expedition to the rare grid squares in California's Lost Coast. If all goes well, he plans to be active from the grid intersection of CM79, CM89, CN70, and CN80 on Sunday August 7th and Monday August 8th. His plans include operating via as many linear and FM bird passes as available. Dave will post more information in his blog at: http://tinyurl.com/6z5xpjx

[ANS thanks everyone for the above information]

/EX

SB SAT @ AMSAT $ANS-198.08
ARISS Status - 11 July 2011

AMSAT News Service Bulletin 198.08
>From AMSAT HQ SILVER SPRING, MD.
July 17, 2011
To All RADIO AMATEURS
BID: $ANS-198.08

1. Japanese Contact Successful

On Friday, July 8, students from the Matsumoto School for the Visually Impaired, Matsumoto, Nagano, Japan participated in an Amateur Radio on the International Space Station (ARISS) contact with on-orbit astronaut Satoshi Furukawa KE5DAW. An audience of approximately 40 people listened as eight students got in one question each before the ISS went over the horizon. Media coverage included 5 newspapers.

The school, founded in 1912, currently has an enrollment of 29 students of all ages, that all have one or more disabilities. By participating in this NASA educational program, students have become more interested in space and international communication.

2. Status of ARISS U.S. Proposal Process

ARISS has received 100 inquiries about the U.S. proposal process for contacts that will be scheduled during the January - July 2012 time frame. Proposals have started to come in and may be submitted until the deadline of July 15, 2011. Another window of opportunity for U.S. schools and organizations to submit proposals will open later in the year.

[ANS thanks Carol, KB3LKI, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,

Lee McLamb, KU4OS

```
From 5765733908477127527
X-Google-Thread: 10e8ad,ea799483360bf9cd,start
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,domainid0,public,usenet
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mail
From: devi <satyamsivam9030@gmail.com>
Newsgroups: rec.radio.amateur.space
Subject: TAMIL ACTRESS HOT PHOTOS & VIDEOS
Date: Tue, 19 Jul 2011 10:46:17 -0700 (PDT)
Organization: http://groups.google.com
Lines: 30
Message-ID: <d67a068e-840c-486d-8cdb-fa931fe5566e@m6g2000prh.googlegroups.com>
NNTP-Posting-Host: 117.199.240.90
Mime-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
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NNTP-Posting-Date: Tue, 19 Jul 2011 18:15:07 +0000 (UTC)
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Injection-Info: m6g2000prh.googlegroups.com; posting-host=117.199.240.90; posting-
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User-Agent: G2/1.0
X-Google-Web-Client: true
X-Google-Header-Order: HUALESNKRC
X-HTTP-UserAgent: Mozilla/5.0 (Windows; U; Windows NT 5.1; en-US; rv:1.9.2.18)
 Gecko/20110614 Firefox/3.6.18,gzip(gfe)
Xref: g2news1.google.com rec.radio.amateur.space:525



                FOR GOOD JOBS SITES TO YOU
                 http://goodjobssites.blogspot.com/

                                FOR HOT PHOTO&VIDEOS

                             KATRINA KAIF RARE PHOTOS
http://southactresstou.blogspot.com/2011/07/katrina-kaif-wallpapers.html
                    TAMANNA HOT SEXY PHOTOS & VIDEOS
http://southactresstou.blogspot.com/2011/07/tamanna-wallpapers.html
                      PRANITHA LATEST BEAUTIFUL PHOTOS
http://southactresstou.blogspot.com/2011/06/about-pranitha-praneetha-is-
beautiful.html
                       KAJAL AGARWAL HOT SEXY PHOTOS
http://southactresstou.blogspot.com/2011/05/kajal-agarwal.html
                     KATRINA KAIF IN BEAUTIFUL RED DRESS
http://southactresstou.blogspot.com/2011/05/katrina-kaif_22.html
```

GOOD LOOKING DEEPIKA PADUKONE
http://southactresstou.blogspot.com/2011/05/deepika-padukone_22.html
AISHWARYA RAI UNBELIVABLE PHOTO
http://southactresstou.blogspot.com/2011/05/aishwarya-rai.html

FOR FAST UPDATES IN TELUGU FILM INDUSTRY
http://allyouwants.blogspot.com

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From -5654188419230255412
X-Google-Thread: 107ada,fc53027c77abd44,start
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X-Google-NewGroupId: yes
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X-Google-NewGroupId: yes
X-Google-Attributes:
gida3e752f117,gid7221ecd0f7,gid8f86f75953,gida4a23d5f63,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news2.google.com!news.glorb.com!news-out.readnews.com!
transit3.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: SWPC.Webmaster@noaa.gov
Newsgroups:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.info
Subject: Weekly Highlights of Solar and Geomagnetic Activity, 11 - 17 July 2011
Followup-To: rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space
Date: Tue, 19 Jul 2011 17:30:07 EDT
Organization: NOAA Space Weather Prediction Center
Lines: 63
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <20110719213001.C27BD33C69@panix2.panix.com>
NNTP-Posting-Host: panix6.panix.com
X-Trace: reader1.panix.com 1311111007 22862 166.84.1.6 (19 Jul 2011 21:30:07 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Tue, 19 Jul 2011 21:30:07 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
```

```
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Xref: g2news2.google.com rec.radio.amateur.misc:6639 rec.radio.amateur.dx:1088
rec.radio.amateur.space:551 rec.radio.info:2593

:Product: Weekly Highlights and Forecasts
:Issued: 2011 Jul 19 1731 UTC
# Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center
# Product description and SWPC contact on the Web
# http://www.swpc.noaa.gov/weekly.html
#
#                 Weekly Highlights and Forecasts
#
```

Highlights of Solar and Geomagnetic Activity
11 - 17 July 2011

Solar activity began the week at low levels for 11-12 July. Region 1249 (S18, L=244, class/area Cso/020 on 11 July) produced a C2/1f flare at 1103 UTC on 11 July which was associated with a type II radio sweep and a small coronal mass ejection. Region 1247 (S18, L=269, class/area Esi/080 on 11 July) produced C1/Sf at 1449 UTC on 12 July. Activity levels declined to very low levels for the remainder of the week from 13-17 July.

No proton events were observed at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit was at moderate levels on 11 July but increased to high levels on 12 July and continued to reach high levels for the remaining days of the reporting period.

Geomagnetic field activity began the week at unsettled levels with some active periods (and some isolated storm periods at high latitude). This initial activity appears to have been caused by a combination of effects from a coronal mass ejection (observed on 09 July) and a high speed stream from a coronal hole. Conditions gradually subsided for 12-14 July as the high speed stream persisted but weakened; typical activity levels were quiet to unsettled with isolated active periods and isolated storm periods at high latitude. Quiet levels prevailed for the remainder of the period from 15-17 July.

Forecast of Solar and Geomagnetic Activity
20 July - 15 August 2011

Solar activity is expected to be very low to low for most of the outlook interval. However, there is a chance that new, rapidly emerging flux regions could increase activity to moderate levels at any time during the outlook period.

No proton events are expected at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to be at background or moderate levels for most of the outlook interval. However, increases to high levels are expected for 21-24 July, 28-30 July, 1-3 July, and 6-9 August in response to recurrent high speed streams.

Geomagnetic field activity is expected to be unsettled with a chance for active periods for 20-22 July due to a favorably positioned coronal hole. Quiet levels are expected to prevail for 23-26 July. An increase to unsettled levels is expected for 27 July to 2 August due to another recurrent coronal hole. Quiet levels are expected for 3 August followed by another increase to unsettled levels for 04-10 August due to recurrence. 11-13 August is expected to be quiet and an increase to unsettled is expected for 14-15 August, again due to recurrence.

```
From 3251447263815120711
X-Google-Thread: 10e8ad,c42886cb16c04f75,start
X-Google-NewGroupId: yes
X-Google-Thread: 10b9c8,c42886cb16c04f75,start
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,gida4a23d5f63,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news2.google.com!npeer03.iad.highwinds-media.com!
news.highwinds-media.com!feed-me.highwinds-media.com!nx02.iad01.newshosting.com!
newshosting.com!novia!news-out.readnews.com!news-xxxfer.readnews.com!panix!
rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-205 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sat, 23 Jul 2011 22:01:38 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 523
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <002001cc49a5$96c13e20$c443ba60$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1311472898 17612 166.84.1.6 (24 Jul 2011 02:01:38 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 24 Jul 2011 02:01:38 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
```

X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news2.google.com rec.radio.amateur.space:552 rec.radio.info:2604

AMSAT NEWS SERVICE
ANS-205

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* EVA for ARISSat-1/KEDR Deployment Planned for August 3
* AMSAT Board of Directors Ballots in the Mail
* Satellite Awards
* AMSAT-UK Colloquium to Activate Station for ARISSat-1/KEDR Test
* 2011 AMSAT Symposium and Annual Meeting
* 2011 AMSAT Space Symposium First Call for Papers
* Satellite Shorts From All Over
* ARRISat-1 PCSAT32 Doppler info
* AMSAT-UK Joins Response to DCMS Spectrum Plan Affecting Satellite Band
* ARISS Status - 18 July 2011

SB SAT @ AMSAT $ANS-205.01
EVA for ARISSat-1/KEDR Deployment Planned for August 3

AMSAT News Service Bulletin 205.01
>From AMSAT HQ SILVER SPRING, MD.
July 24, 2011
To All RADIO AMATEURS
BID: $ANS-205.01

Gould summarized, "As of July 22 we are looking at an August 3, 2011 date for EVA 29 and the ARISSat-1/KEDR deployment, subject to change due to ISS schedules. The preliminary Russian EVA-29 timeline shows the ARISSat-1/KEDR deployment is the first task of the EVA, so it will occur fairly soon after the EVA begins. We will let everyone know more as we know more."

The ARISSat-1/KEDR battery is scheduled to be charged 24 hours beginning 24 July at 09:45 UTC. A test of the satellite inside the ISS is scheduled to run from 1900 UTC on Saturday, July 30 and turned off at 14:30 UTC on July 31.

145.950 MHz FM Downlink

FM transmissions will cycle between a voice ID as RS01S, select telemetry values, 24 international greeting messages in 15 languages and SSTV images. One of the messages will be a conversation between Yuri Gagarin and ground control.

435 MHz - 145 MHz Linear Transponder

The linear transponder will operate in Mode U/V (70 cm Up, 2m Down). It is an 16 KHz wide inverting passband and the convention will be to TX LSB on the 435 MHz uplink and RX USB on the 145 MHz downlink. This mode is designed to work with low power transmitters and omni antenna.

145.919 MHz/145.939 MHz CW Beacons

The CW transmissions will be callsign ID RS01S, select telemetry, and callsigns of people actively involved with the ARISS program.

145.920 MHz SSB BPSK-1000 Telemetry

The BPSK transmissions will feature a new 1kBPSK protocol developed by Phil Karn, KA9Q to be readable in low signal level conditions. The BPSK data will transmit satellite telemetry. When the CW2 beacon on 145.919 MHz is active this indicates that the BPSK-1000 format is being transmitted. If the CW1 beacon on 145.939 MHz is active this the backup of BPSK-400 format is being transmitted.

To find the links to the ARISSatTLM software for Windows and Mac, SSTV software for Windows and Mac, and ARISSat-1/KEDR technical data please go to http://www.amsat.org.

[ANS thanks ARISSat-1/KEDR Project Manager Gould Smith, WA4SXM for the above information]

/EX

SB SAT @ AMSAT $ANS-205.02
AMSAT Board of Directors Ballots in the Mail

AMSAT News Service Bulletin 205.02
>From AMSAT HQ SILVER SPRING, MD.
July 24, 2011
To All RADIO AMATEURS
BID: $ANS-205.02

The AMSAT Office has mailed the 2011 Ballot for the AMSAT Board of Directors. The deadline for the receipt of your ballot in Silver Spring, MD is September 15, 2011.

Four director's terms expire this year:

Barry Baines, WD4ASW
Alan Biddle, WA4SCA
Drew Glasbrenner, KO4MA
Tony Monteiro, AA2TX

The 2011 AMSAT Official Ballot for the Board of Directors includes these nominees (alphabetically by last name):

Barry Baines, WD4ASW
Alan Biddle, WA4SCA
Steve Coy, K8UD
Drew Glasbrenner, KO4MA
Mark Hammond, N8MH
Tony Monteiro, AA2TX
Patrick Stoddard, WD9EWK

The four candidates receiving the highest number of votes will be seated as full Board members for two year terms. The two candidates receiving the next highest number of votes will be seated as alternate Board members for one year terms.

A statement and biographical information from each candidate is included in the ballot mailing for your review. Your vote is important and is one of the privileges of AMSAT membership.

[ANS thanks AMSAT Headquarters for this information]

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SB SAT @ AMSAT $ANS-205.03
Satellite Awards

AMSAT News Service Bulletin 205.03
>From AMSAT HQ SILVER SPRING, MD.
July 24, 2011
To All RADIO AMATEURS
BID: $ANS-205.03

AMSAT Director Contests and Awards, Bruce Paige, KK5DO observed this week, "Normally I am able to wait 4-6 weeks before posting a list of AMSAT awards. However, something must have gotten in the water and in the past few days the awards have sky rocketed."

Bruce noted the effort of Matt, N8MS, at the ARRL Teacher's Institute 2, where 8 ham teachers worked their first satellite contact. They are included in the list below. Congratulations to all!

The following have entered into the Satellite Communicators Club for making their first satellite QSO.
+ Pam Kalafice, KD8MUC
+ George Wheeler, W7LX
+ Thomas Maxwell, AE5QB

+ Jerry Taylor, AC0PF
+ Stephen McClune, KB3FKO
+ Larry Brim, KI6FBT
+ Jackie Smith, KJ4SVQ
+ Larry Kendall, K6NDL
+ Samuel Saladino, NW9T
+ Walter Lemons, AE5IT
+ Stephen Reinen, N8BP
+ Lee Olson, N9LO
+ Thomas Talley, KA9QPG

The following have earned the AMSAT Communications Achievement Award.
+ George Henry, KA3HSW, #540
+ Brandon Rasmussen, K7BBR, #541

The following have earned the South Africa Satellite Communications Achievement award.
+ George Henry, KA3HSW, #US169
+ Brandon Rasmussen, K7BBR, #US170

To see all the awards visit http://www.amsat.org

[ANS thanks AMSAT Director Contests and Awards, Bruce Paige, KK5DO for the above information]

/EX

SB SAT @ AMSAT $ANS-205.04
AMSAT-UK Colloquium to Activate Station for ARISSat-1/KEDR Test

AMSAT News Service Bulletin 205.04
>From AMSAT HQ SILVER SPRING, MD.
July 24, 2011
To All RADIO AMATEURS
BID: $ANS-205.04

The AMSAT-UK International Space Colloquium at the Holiday Inn, Guildford, GU2 7XZ, England will be taking place during the activation of ARISSat-1/KEDR.

Members of AMSAT-UK hope to be active during the ARISSat-1 tests from the GB4FUN communications module situated in the Holiday Inn parking lot. See GB4FUN: http://www.gb4fun.org.uk/

It is intend to use the GB4FUN station equipment to listen to the various ARISSat-1/KEDR signals. In addition they will be experimenting with the use of FUNcube Dongle software defined radios to receive the ARISSat-1/KEDR signals with a variety of different antennas.

The Colloquium is open to all Radio Amateurs and SWL's. Either day passes or full packages comprising overnight accommodation and meals

are available. For futher information see:
http://www.uk.amsat.org/colloquium-2011/

BATC and AMSAT volunteers will be streaming video of the event live, enabling it to be seen around the world.

Clearly a webcast cannot match actually being there, with the opportunity to chat to satellite builders and inspect space hardware, but if you can't get to Guilford then the webcast provides the next best thing.

The webcast will be at http://www.batc.tv

[ANS thanks Trevor, M5AKA for the above information]

/EX

SB SAT @ AMSAT $ANS-205.05
2011 AMSAT Symposium and Annual Meeting

AMSAT News Service Bulletin 205.05
>From AMSAT HQ SILVER SPRING, MD.
July 24, 2011
To All RADIO AMATEURS
BID: $ANS-205.05

AMSAT announces the 2011 AMSAT Space Symposium will be held on Friday, November 4th through Sunday, November 6th in San Jose, CA. This annual gathering will feature:

+ Space Symposium with Amateur Satellite Presentations
+ Operating Techniques, News, & Plans from the Amateur Satellite World
+ Board of Directors Meeting open to AMSAT members (Nov. 3-4)
+ Meet Board Members and Officers
+ Annual General Membership Meeting
+ Annual Banquet-Keynote Speaker and Door Prizes

The 2011 Symposium hotel and registration web pages are now available on the AMSAT web site. You may register for the Symposium and Annual Banquet at the AMSAT Store:
http://www.amsat-na.com/store/SymposiumReg.php

The hotel selected is the Wyndham San Jose, close to the airport. The AMSAT discount rate is $79.00+taxes per night. The reservation block code when calling the hotel directly is "AMSAT". The hotel telephone number is 408-453-6200. If you are making reservations on-line use 1031FSJAM for the group code. The direct link to the hotel web page is: http://www.wyndham.com/hotels/SJCAP/main.wnt

If you are planning to book a room on dates other than November 2, 3, 4, 5, you will have to call the hotel directly and ask for *in-house reservations*. You can get the $79 rate 3 days before and 3 days after the above dates but you cannot book the room on their website. Any problems, give Martha a call at the AMSAT Office: 301-589-6062.

Additional information about the 2011 AMSAT Symposium will be posted on the AMSAT web site as it becomes available.

[ANS thanks the 2011 Symposium Committee for the above information]

/EX

SB SAT @ AMSAT $ANS-205.06
2011 AMSAT Space Symposium First Call for Papers

AMSAT News Service Bulletin 205.06
>From AMSAT HQ SILVER SPRING, MD.
July 24, 2011
To All RADIO AMATEURS
BID: $ANS-205.06

This is the first call for papers for the 2011 AMSAT Space Symposium to be held Friday, November 4th through Sunday, November 6th at the Wyndham San Jose Hotel, San Jose, California.

Proposals for papers, symposium presentations and poster presentations are invited on any topic of interest to the amateur satellite community.

We request a tentative title of your presentation as soon as possible, with final copy submitted by October 1, 2011 for inclusion in the printed proceedings.

Abstracts and papers should be sent to Dan Schultz, N8FGV, at: n8fgv@amsat.org.

[ANS thanks Dan Schultz, N8FGV for the above information]

/EX

SB SAT @ AMSAT $ANS-205.07
ARRISat-1 PCSAT32 Doppler info

AMSAT News Service Bulletin 205.07
>From AMSAT HQ SILVER SPRING, MD.
July 24, 2011
To All RADIO AMATEURS
BID: $ANS-205.07

The deployment of ARRISat-1 is approaching. Here is a collection of data on the various modes for use in configuring SATPC32. Note that you will need to tweak the sideband frequencies slightly to account for rig calibration and other issues, as usual, but these should be close. You can paste these in the DOPPLER.SQF file, but before you do, please read on!

```
ARISSat-1,145918.5,0,USB,,,0,0,BPSK/CW-2
ARISSat-1,145950.0,0,FM,,,0,0,VOICE/SSTV
ARISSat-1,145930.0,435750.0,USB,LSB,REV,0,0,XPDR
ARISSat-1,145938.5,0,USB,,,0,0,CW-1
```

Since ARISSat-1 will be deployed by a gentle push from the ISS by Cosmonauts, the ISS Keps will be good until separate Keps are released by Space Track. One way to handle the transition is to change the Doppler information slightly:

```
ISS,145918.5,0,USB,,,0,0,BPSK/CW-2
ISS,145950.0,0,FM,,,0,0,VOICE/SSTV
ISS,145930.0,435750.0,USB,LSB,REV,0,0,XPDR
ISS,145938.5,0,USB,,,0,0,CW-1
```

Paste the ARISSat-1 data as desired, and also paste the ISS version of the data into the DOPPLER.SQF file after the regular ISS data. For the final test aboard the ISS, and initially after deployment, select ISS tracking, and then select the desired ARRISat-1 frequency data at the end of the list in the CAT window.

After the ISS and ARISSat-1 are far enough apart that independent Keps are available, you can begin using ARISSat-1 as a separate object by adding it to the objects you track in the Satellites menu window. The satellite may be identified as ARISSat-1, but may well have some other designation which will be reported. If it is not ARRISat-1, then change the name in the first group above to that used in the Keps. They must agree exactly for SATPC32 to match the Doppler data with the satellite. (You can also use the AmsatNames.txt file, which is covered in the SATPC32 documentation.) You can then delete the extra ISS data if you wish. They won't hurt anything, but it will clean up the ISS CAT window.

[ANS thanks Alan, WA4SCA, for the above information]

/EX

SB SAT @ AMSAT $ANS-205.08
Satellite Shorts From All Over

AMSAT News Service Bulletin 205.08
>From AMSAT HQ SILVER SPRING, MD.
July 24, 2011
To All RADIO AMATEURS
BID: $ANS-205.08

+ Congratulations to Ron, N8RO for attaining Satellite VUCC # 219!

+ Look for Makoto, JI5RPT to be active as JD1BLY from Chichijima Island (IOTA AS-031) Ogasawara. Operation is planned for 40m to 6m and Satellite CW/SSB/DIGI between August 1-7. QSL via JI5RPT. Web based log will be found at: http://www.ji5rpt.com/jd1/ and you are also invited to monitor Twitter: http://twitter.com/jd1bly (ji5rpt@jarl.com)

+ TP50, FRANCE. The "Council of Europe Radio Amateur Club" (CERAC - TP2CE) will be active as TP50CE during the RSGB IOTA Contest (July 30-31). Activity is to celebrate the 50th anniversary of the European Social Charter. Operations are usually on all HF bands and modes, possibly the satellites. QSL via F5LGF. An online log search will be available at: http://ewwa.free.fr (Ohio/Penn DX Bulletin No. 1019)

+ The Amateur Radio functions of the Tokyo university PRISM satellite have been tested and it is hoped it will be generally available soon. It carries a beacon on 437.250 MHz and a data downlink on 437.425 MHz with a downlink power up to 3 watts.
PRISM Web: http://www.space.t.u-tokyo.ac.jp/prism/en/main.html
Snapshot of decoding screen captured by Mineo Wakita, JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/10716pri.png

+ A 47 minute video of Space Shuttle Atlantis undocking from the International Space Station can be viewed at UniverseToday.com
http://tinyurl.com/448ra22
Additional video can be viewed at:
http://spaceflightnow.com/shuttle/sts135/status.html

+ NASA released the videos taken from the cameras mounted on the solid rocket boosters for Atlantis' launch for the STS-135 mission: http://tinyurl.com/6z3gohl (UniverseToday.com)

+ The schedules for Australasia and Eastern Asia for 18 - 31 July are now on http://www.amsatsa.org.za. The next schedule starts on August 1 with the Americas.

+ The AO-7 footprint continues to be long according to Luis, LU6QI. He reports a successful AO-7 Mode B contact with Drew, KO4MA for a distance of 7062 KM. Luis invites more North American stations to attempt a contact via AO-7 Mode A or B, and FO-29. Contact Luis by e-mail to set up a schedule: lu6quintas@gmail.com

+ Bill OM3BD/NZ5N operating from Grid JN88mf reported good conditions on AO-7. He worked 10 stations, including KD8CAO, WB8TGY, and K8YSE.

[ANS thanks everyone for the above information]

/EX

SB SAT @ AMSAT $ANS-205.09
AMSAT-UK Joins Response to DCMS Spectrum Plan Affecting Satellite Band

AMSAT News Service Bulletin 205.09
>From AMSAT HQ SILVER SPRING, MD.

July 24, 2011
To All RADIO AMATEURS
BID: $ANS-205.09

The UK Department of Culture, Media and Sport (DCMS), a government agency, consultation sought opinion on the release of 500MHz of public sector spectrum by 2020. The full UK Government document may be viewed on-line at:
http://www.culture.gov.uk/images/publications/Spectrum_Release.pdf

A joint response from the RSGB, UK Microwave Group, AMSAT-UK and BATC is among the 31 responses to the DCMS consultation on releasing public sector spectrum.

The response notes that the Amateur Radio and Amateur Satellite services successfully share spectrum with the current public services under consideration for reallocation. In regards to the proposed spectrum under consideration for reallocation the joint Amateur Radio response states that the 435-438 MHz sub-section is the largest active band for international amateur satellites.

RSGB, UK Microwave Group, AMSAT-UK and BATC invite further consulation with the DCMS, "We would caution that any precipitous decision and uncoordinated release would impair a raft of innovative activity that is aligned with many DCMS and other national goals. We therefore look forward to further discussions with DCMS."

The joint RSGB, UK Microwave Group, AMSAT-UK and BATC response can be read at: http://tinyurl.com/3stw6wn (culture.gov.uk)

All of the responses can be read at:
http://www.culture.gov.uk/consultations/8297.aspx

[ANS thanks the Southgate ARC News Site for the above information]

/EX

SB SAT @ AMSAT $ANS-205.10
ARISS Status - 18 July 2011

AMSAT News Service Bulletin 205.10
>From AMSAT HQ SILVER SPRING, MD.
July 24, 2011
To All RADIO AMATEURS
BID: $ANS-205.10

1. Ottawa Contact Successful

On Thursday, July 14, the City of Ottawa Sports Recreation Camp in Ontario, Canada took part in an Amateur Radio on the International Space Station (ARISS) contact. Telebridge station W6SRJ in California provided the connection. One hundred twenty-five students, twelve

counselors and many parents were present for the event and watched as the youth asked 16 questions of ISS crew member Ron Garan, KF5GPO. Global National (Canadian network) aired the story nationally and Your Ottawa Region posted an article on its site:
http://tinyurl.com/427tv88

2. ARISS-U.S. Receives Proposals for Contacts

The NASA Teaching From Space Office received over 100 inquiries about the U.S. proposal process for ARISS contacts that will be scheduled during the January - July 2012 time frame. Twenty-five schools met the July 15 deadline and submitted proposals. The selection process will begin shortly. Another window of opportunity for U.S. schools and organizations to submit proposals will open later in the year.

3. ARRL QST Posts ARISS News

The American Radio Relay League (ARRL) included an ARISS item in its August QST about ARRL at Hamvention, and highlighted Astronaut Doug Wheelock's participation, particularly with the youth activities.

4. AMSAT Provides ARISSat-1 Status

The AMSAT (Radio Amateur Satellite Corporation) News Service July 17 bulletin (ANS-198) included a status on ARISSat-1. The battery will be charged July 27 or 28 and a test will be conducted on the ISS over the weekend of July 30-31. Deployment is scheduled for August 3. "ARISSat-1/KEDR Activation Planned; Deployment Update" may be viewed here: http://amsat.org/pipermail/ans/2011/000532.html

5. Amateur Radio Newsline on ARISSat-1 Deployment

On July 15, the Amateur Radio Newsline Report 1770 included a status on the deployment date of ARISSat-1. The story may be found under the heading "Ham Radio in Space."
See: ftp://ftp.arnewsline.org/quincy/News/news.txt

[ANS thanks Carol, KB3LKI, for the above information]

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In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be Eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Dee Interdonato, NB2F

```
From 2944409613519889705
X-Google-Thread: 107ada,ed3c786b2aa509e2,start
X-Google-NewGroupId: yes
X-Google-Thread: 11480d,ed3c786b2aa509e2,start
X-Google-NewGroupId: yes
X-Google-Thread: 10e8ad,ed3c786b2aa509e2,start
X-Google-NewGroupId: yes
X-Google-Thread: 10b9c8,ed3c786b2aa509e2,start
X-Google-NewGroupId: yes
X-Google-Attributes:
gida3e752f117,gid7221ecd0f7,gid8f86f75953,gida4a23d5f63,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news1.google.com!newsfeed2.dallas1.level3.net!
news.level3.com!bloom-beacon.mit.edu!panix!rri.panix.com!robomod!not-for-mail
From: SWPC.Webmaster@noaa.gov
Newsgroups:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.info
Subject: Weekly Highlights of Solar and Geomagnetic Activity, 18 - 24 July 2011
Followup-To: rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space
Date: Tue, 26 Jul 2011 17:30:06 EDT
Organization: NOAA Space Weather Prediction Center
Lines: 78
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <20110726213002.0FAF133C6F@panix2.panix.com>
NNTP-Posting-Host: panix6.panix.com
X-Trace: reader1.panix.com 1311715806 3588 166.84.1.6 (26 Jul 2011 21:30:06 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Tue, 26 Jul 2011 21:30:06 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Xref: g2news2.google.com rec.radio.amateur.misc:6656 rec.radio.amateur.dx:1093
rec.radio.amateur.space:553 rec.radio.info:2609

:Product: Weekly Highlights and Forecasts
:Issued: 2011 Jul 26 1731 UTC
# Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center
# Product description and SWPC contact on the Web
# http://www.swpc.noaa.gov/weekly.html
#
#                Weekly Highlights and Forecasts
#
Highlights of Solar and Geomagnetic Activity
18 - 24 July 2011
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Solar activity was at very low to low levels during the period. The summary period began at low levels, when Region 1254 (S24, L=136, class/area Cso/110 on 20 July) produced the largest event of the period, a C1/Sf flare at 1028 UTC. On 19 July, solar activity decreased to very low levels and remained at these levels for the rest of the summary period. Even though numerous regions were numbered and tracked during the summary period, all regions either remained stable and quiet, producing low level B-class events, or diminished to spotless plage.

No proton events were observed at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit was at normal to moderate levels from 18-19 July. High levels were observed for the remainder of the period, 20-24 July, in response to a coronal hole high speed stream (CH HSS).

Geomagnetic activity ranged during the period between quiet to minor storm levels, with a few isolated major storms occuring at high latitudes due to coronal hole high-speed stream effects. Early on 18 July, quiet to unsettled levels were observed due to a solar sector boundary crossing (SSBC), as the Earth moved from a positive to a negative polarity region of the IMF. On 19 July, measurements from the ACE spacecraft indicated the onset of another CH HSS while geomagnetic levels also increased to mostly active coniditions at mid latitudes. On 20 July, quiet to active levels were again observed with an isolated major storm period occuring at high latitudes between 0900-1200Z. Conditions on 21 and 22 July were also observed at quiet to unsettled levels on both days. On 22 July, conditions included a major storm period observed at high latitudes. A return to quiet to unsettled levels was observed on 23-24 July, as effects of the CH HSS finally deminished.

Forecast of Solar and Geomagnetic Activity
27 July - 22 August 2011

Solar activity is expected to be at very low to low levels during the forecast period. However, there is a chance that new, rapidly emerging flux regions could increase activity to moderate levels at any time during the outlook period.

No proton events are expected at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to start the period at moderate to normal levels on 27 - 30 July, before increasing to high flux levels on 31 July - 02 August, as the result of elevated solar winds from a CH HSS. Moderate to normal levels are expected from 03-06 August after solar winds subside. A return to moderate to high levels is expected 07-13 August and once again from 16- 22 August as the result of two solar wind speed increases from two more coronal holes.

Geomagnetic activity is expected to be at quiet levels on 25 July. Quiet to unsettled levels are expected from 26 - 27 July as another CH HSS becomes geoeffective. A return to mostly quiet conditions is expected on 28 July. Quiet to unsettled levels are forecast on 29-31 July as a northern polar CH HSS extension moves into a geoeffective position. Afterwards, quiet levels are expected to prevail between 01 and 04 August. Conditions are expected to increase again, ranging from quiet to active levels 04-11 August as another recurrent CH HSS is expected. Mostly quiet conditions should return 12-14 August before the next CH HSS is expected 15-19 August, when unsettled to active conditions return. A brief retreat to mostly quiet levels is expected on 20 August before the period finally ending with mostly unsettled to active conditions as yet another recurrent CH HSS becoming geoeffective 21-22 August.

```
From -2283765445996598079
X-Google-Thread: a4a23d5f63,3cf8c6c08ee5b647,start
X-Google-Attributes: gida4a23d5f63,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news2.google.com!news.glorb.com!news-out.readnews.com!
news-xxxfer.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-209 AMSAT News Service Special Bulletin - ARISSat-1/KEDR
Followup-To: rec.radio.amateur.space
Date: Wed, 27 Jul 2011 20:29:49 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 135
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <003201cc4cbd$71c900b0$555b0210$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1311812989 4456 166.84.1.6 (28 Jul 2011 00:29:49 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Thu, 28 Jul 2011 00:29:49 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
```

Content-Language: en-us
Xref: g2news2.google.com rec.radio.amateur.space:554 rec.radio.info:2611

SB SAT @ AMSAT $ANS-209.01
AMSAT News Service Special Bulletin ANS-209 - ARISSat-1/KEDR

AMSAT News Service Bulletin 209.01
>From AMSAT HQ SILVER SPRING, MD.
July 28, 2011
To All RADIO AMATEURS
BID: $ANS-209.01

ANS-208
In this Special Bulletin:

* Deployment of ARISSat-1/KEDR Satellite Expected August 3
* ARISSat-1/KEDR Test Transmissions Planned From ISS July 30-31

SILVER SPRING, MARYLAND (AMSAT News Service) After a postponed deployment in February from the International Space Station (ISS), the ARISSat-1/KEDR amateur radio satellite is expected to begin its mission on August 3, 2011. This was the word received from Energia official, Sergey Samburov during an ARISS teleconference on July 19. Deployment of the craft is planned during EVA-29.

NASA TV will cover the EVA live starting at 1400 GMT on August 3.
1430: Hatch Open
1446: Egress ARISSat-1 and secure to airlock ladder
1452: Remove solar panel covers
1507: Translate to deploy site, activate PWR, TIMER1 and TIMER2 switches, verify LEDs on, and deploy
(Internet streaming: http://www.nasa.gov/multimedia/nasatv/index.html)

ARISSat-1/KEDR is a satellite designed and built by amateur radio operators to specifically interest students in scientific and technological careers. Through the use of ham radio equipment, students and teachers should be able to access and utilize the satellite from a classroom environment with minimal set up.

ARISSat-1/KEDR is a cooperative effort between AMSAT, ARISS (Amateur Radio on the International Space Station,) RSC-Energia (The Russian Space Agency) and NASA. The design, development and construction of the satellite was done by AMSAT volunteers. Original plans called for the satellite to be housed inside an old Russian spacesuit, but when the suit became unavailable, a spaceframe was developed to house the radio equipment and solar panels. The new satellite was named ARISSat-1/KEDR. Another name for the spacecraft is RadioSkaf-V. The transmitted callsign will be RS01S.

The mission was specifically designed as an education-based satellite. Some of its broadcast features include a voice identification, voice, digital and morse code telemetry, stored image and on-board camera transmissions via Slow Scan TV and digital telemetry from a Russian science experiment that will measure vacuum in earth's lower atmosphere. Other aspects of the mission include CW (Morse code) and voice message contests to interest students in participating along with stored images submitted by students all over the world as part of its payload.

ARISSat-1/KEDR Test Transmissions Planned From ISS July 30-31

Test transmissions from ARISSat-1/KEDR are scheduled to begin four days prior to deployment at 19:15 UTC on July 30 and then continue until 1430 UTC on July 31.

The satellite will be connected to an external antenna mounted on the ISS during testing. During the test ARISSat-1/KEDR will be in LOW power mode, this means that it will transmit about 40 seconds and then shut down for 2 minutes and then transmit for again for 40 seconds.

To listen for ARISSat-1/KEDR signals, FM receivers should be tuned to 145.950 MHz. Even though the satellite will only have an output of 250 mW on 2 meters, a standard FM handy talkie equipped with a quarter-wave whip antenna should be able to receive the voice ID, voice telemetry and greeting messages as the craft passes overhead.

SSTV transmissions may also be demodulated and viewed using a free downloadable program such as MMSSTV that is available at:
http://mmhamsoft.amateur-radio.ca/pages/mmsstv.php.
For Mac users, Multiscan2 is available at:
http://web.me.com/kd6cji/MacSSTV/MultiScan.html.

Those planning to monitor voice broadcasts from ARISSat-1/KEDR during the July 30 - 31 test are requested to make note of the telemetry battery voltage values and UTC time, and then submit their records by e-mail to: julytest@arissat1.org.

Digital telemetry will be sent at 145.920 MHz. Given the low duty cycle of the spacecraft, those planning to receive the digital telemetry are encouraged to record the entire signal band using the FunCube dongle or SDR-IQ receivers. Software for demodulating the BPSK-1000 telemetry is available at http://www.arissattlm.org; the software Quick Start Guide is available on the link on the http://www.amsat.org front page.

After it is deployed from the International Space Station, ARISSat-1/KEDR is expected to be in orbit for a period of up to six months.

More information on the transmission schedule and overall mission of ARISSat-1/KEDR can be found at:

ARISSat-1/KEDR Web site: http://www.arissat1.org
AMSAT Web site: http://www.amsat.org
ARISS Web site: http://www.ariss.org

ARISS Facebook Page: Amateur Radio on the ISS (ARISS)
ARISS Twitter site: @ARISS_status

The Radio Amateur Satellite Corporation (AMSAT) is a non-profit, volunteer organization which designs, builds and operates experimental amateur radio satellites and promotes space education. We work in partnership with government, industry, educational institutions and fellow amateur radio societies. We encourage technical and scientific innovation, and promote the training and development of skilled satellite and ground system designers and operators. Our vision is to deploy satellite systems with the goal of providing wide area and continuous coverage for amateur radio operators worldwide. AMSAT is also an active participant in human space missions and supports satellites developed in cooperation with the educational community and other amateur satellite groups.

Amateur Radio on the International Space Station (ARISS) is a volunteer program which inspires students, worldwide, to pursue careers in science, technology, engineering and math through amateur radio communications opportunities with the International Space Station on-orbit crew. Students learn about life on board the ISS and explore Earth from space through science and math activities. ARISS provides opportunities for the school community (students, teachers, families and local residents) to become more aware of the substantial benefits of human space flight and the exploration and discovery that occur on space flight journeys along with learning about technology and amateur radio.

[ANS thanks the ARISSat-1/KEDR Team for the above information]

/EX

```
From -1996713642717474810
X-Google-Thread: a4a23d5f63,b667b3e39abeadcc,start
X-Google-Attributes: gida4a23d5f63,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!news.glorb.com!news-out.readnews.com!
transit3.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-212 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sat, 30 Jul 2011 22:29:16 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 735
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <001701cc4f28$ec721f50$c5565df0$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
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Content-Type: text/plain;
charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1312079356 3526 166.84.1.6 (31 Jul 2011 02:29:16 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 31 Jul 2011 02:29:16 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to rec-radio-info-request@panix.com
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X-Comment-1: The moderators do not necessarily agree or disagree with this article.
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X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news1.google.com rec.radio.amateur.space:530 rec.radio.info:2544

AMSAT NEWS SERVICE
ANS-212

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:

- ARISSat-1/KEDR On-Air Test Successful; Next: Deployment on August 3
- Radio-to-Soundcard Interface For Access to ARISSat-1/KEDR Bandwidth
- Get Ready for ARISSat-1/KEDR BPSK-1000 Telemetry
- Get Ready for ARISSat-1/KEDR SSTV Reception
- N7HPR Blog in EE Times Magazine Documents ARISSat-1/KEDR Development
- View Student Projects Flying on ARISSat-1
- FUNcube Vibration Testing Videos
- Satellite Shorts From All Over

SB SAT @ AMSAT $ANS-212.01
ARISSat-1/KEDR On-Air Test Successful; Next: Deployment on August 3

AMSAT News Service Bulletin 212.01
>From AMSAT HQ SILVER SPRING, MD.
July 31, 2011
To All RADIO AMATEURS
BID: $ANS-212.01

ARISSat-1/KEDR ON-AIR TEST SUCESSFUL

ARISSat-1/KEDR reception reports from the July 30 - 31 on-air test aboard the International Space Station have been received from amateur radio stations around the world. Africa, South America, parts of Asia were within range of the footprint first. Next Europe and North America will be in range.

Here is a sampling of the signal reports received via amsat-bb:

Johan, ZS1I - in South Africa reported hearing the ARISSat-1/KEDR SSTV signal using a handheld and a rubber duck antenna.

Nader Omer, ST2NH - In Khartoum, Sudan Last pass 22.50 UTC I heard a weak voice before LOS! It sounded like a recorded message. No SSTV or Telemetry.

Mineo Wakita, JE9PEL - In Japan, I heard ARISSat-1/KEDR VOICE and SSTV strong signal, S9 + over 40dB at 23:12-23:22UTC, 30 Jul 2011. The received SSTV picture can be viewed at:
http://www.ne.jp/asahi/hamradio/je9pel/10731ari.png

Masa, JN1GKZ - In Japan, the 0051z pass was also good signal from ARISSat-1/KEDR and ISS. SSTV, voice msg and voice tlm were heard. At 0056z the CW telemetry decoded as:
[bat 29.72v -214ma rf 346ma hi this is ariss at 1 r]
I got SSTV picture from ARISSat-1 at 2140z. The picture is noisy but fine!

Luciano, PY5LF - In Brazil, signal heard a few minutes ago on 145.950. Recorded video of the pass at:
http://www.youtube.com/watch?v=z_-DLZq9gmc

Reports received from Sergey Samburov, RV3DR say that ARISSat-1/KEDR is in 'test mode', using the same setup as was used back in April for the Gagarin Commemoration where the TM-D710 on board the ISS is 'repeating' the ARISSat-1/KEDR output signal on 437.550 MHz

Please report signals heard, location, and equipment by e-mail to:
julytest@arissat1.org.

NEXT: DEPLOYMENT ON AUGUST 3

ARISSat-1/KEDR is now ready for deployment from the International Space Station during EVA 29 on August 3.

NASA TV will cover the EVA live starting at 1400 GMT on August 3.
1430: Hatch Open
1446: Egress ARISSat-1/KEDR and secure to airlock ladder
1452: Remove solar panel covers
1507: Translate to deploy site, activate PWR, TIMER1 and TIMER2 switches, verify LEDs on, and deploy
(Internet streaming: http://www.nasa.gov/multimedia/nasatv/index.html)

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ARISSat-1/KEDR is a cooperative effort between AMSAT, ARISS (Amateur Radio on the International Space Station,) RSC-Energia (The Russian Space Agency) and NASA. The design, development and construction of the satellite was done by AMSAT volunteers. Original plans called for the satellite to be housed inside an old Russian spacesuit, but when the suit became unavailable, a spaceframe was developed to house the radio equipment and solar panels. The new satellite was named ARISSat-1/KEDR. Another name for the spacecraft is RadioSkaf-V. The transmitted callsign will be RS01S.

The mission was specifically designed as an education-based satellite. Some of its broadcast features include a voice identification, voice, digital and morse code telemetry, stored image and on-board camera transmissions via Slow Scan TV and digital telemetry from a Russian science experiment that will measure vacuum in earth's lower atmosphere. Other aspects of the mission include CW (Morse code) and voice message contests to interest students in participating along with stored images submitted by students all over the world as part of its payload.

145.950 MHz FM Downlink

FM transmissions will cycle between a voice ID as RS01S, select telemetry values, 24 international greeting messages in 15 languages and SSTV images. One of the messages will be a conversation between Yuri Gagarin and ground control.

If you successfully receive the SSTV transmissions, you are invited to upload your picture to to the ARISS SSTV Gallery:
http://www.amsat.org/amsat/ariss/SSTV/

435 MHz - 145 MHz Linear Transponder

The linear transponder will operate in Mode U/V (70 cm Up, 2m Down). It is an 16 KHz wide inverting passband and the convention will be to TX LSB on the 435 MHz uplink and RX USB on the 145 MHz downlink. This mode is designed to work with low power transmitters and omni antenna.

145.919 MHz/145.939 MHz CW Beacons

The CW transmissions will be callsign ID RS01S, select telemetry, and callsigns of people actively involved with the ARISS program.

145.920 MHz SSB BPSK-1000 Telemetry

The BPSK transmissions will feature a new 1kBPSK protocol developed by Phil Karn, KA9Q to be readable in low signal level conditions. The BPSK data will transmit satellite telemetry. When the CW2 beacon on 145.919 MHz is active this indicates that the BPSK-1000 format is being transmitted. If the CW1 beacon on 145.939 MHz is active this indicates the backup of BPSK-400 format is being transmitted.

AMSAT needs your telemetry from ARISSat-1/KEDR. Since there are no "Whole Orbit Data" storage mechanisms onboard ARISSat-1/KEDR, your submissions are the only way for AMSAT to collect the spacecraft telemetry and KURSK experiment results.

+ The telemetry may be recorded using the FunCube dongle or SDR-IQ receivers. After decoding the recorded file ARISSat-1/KEDR and Kursk telemetry CSV files (in the ARISSatTLM folder) can be sent as an e-mail attachment to telemetry@arissattlm.org

+ If you are running ARISSatTLM and receiving the signal "live" from ARISSat-1/KEDR, please enable the telemetry forwarding option.

+ The latest telemetry can be seen LIVE on your computer or cell phone at: http://www.arissattlm.org/mobile

TRACK STATUS on OSCAR STATUS PAGE

David Carr, KD5QGR will add ARISSat-1/KEDR to the list of satellites at the popular "Live OSCAR Satellite Status Page" at: http://oscar.dcarr.org/ You are invited to submit your reports on this page.

USEFUL LINKS

Download the Windows and Mac versions of the ARISSatTLM free ground station soundcard demodulator and display software:
http://www.arissattlm.org

The ARISSatTLM software user guide is available:
http://tinyurl.com/42uhtyf (amsat.org)

Get your color ARISSat-1/KEDR Frequency Guide:
http://tinyurl.com/4t497t2 (amsat.org)

ARISSat-1/KEDR Presentation Slides (~1MB)
http://tinyurl.com/4n4pzkm (amsat.org)

ARISSat-1/KEDR Dayton Presentation Slides
http://tinyurl.com/6zrfmzv (amsat.org)

Follow ARISSat-1/KEDR on Twitter:
http://twitter.com/#!/arissat1
In USA you can also text 'follow Arissat1' to 40404 with your cell phone. (leave off the quotes).

More information on the transmission schedule and overall mission of ARISSat-1/KEDR can be found at:

ARISSat-1/KEDR Web site: http://www.arissat1.org
AMSAT Web site: http://www.amsat.org
ARISS Web site: http://www.ariss.org
ARISS Facebook Page: Amateur Radio on the ISS (ARISS)
ARISS Twitter site: @ARISS_status

The Radio Amateur Satellite Corporation (AMSAT) is a non-profit, volunteer organization which designs, builds and operates experimental amateur radio satellites and promotes space education. We work in partnership with government, industry, educational institutions and fellow amateur radio societies. We encourage technical and scientific innovation, and promote the training and development of skilled satellite and ground system designers and operators. Our vision is to deploy satellite systems with the goal of providing wide area and continuous coverage for amateur radio operators worldwide. AMSAT is also an active participant in human space missions and supports satellites developed in cooperation with the educational community and other amateur satellite groups.

Amateur Radio on the International Space Station (ARISS) is a volunteer program which inspires students, worldwide, to pursue careers in science, technology, engineering and math through amateur radio communications opportunities with the International Space Station on-orbit crew. Students learn about life on board the ISS and explore Earth from space through science and math activities. ARISS provides opportunities for the school community (students, teachers, families and local residents) to become more aware of the substantial benefits of human space flight and the exploration and discovery that occur on space flight journeys along with learning about technology and amateur radio.

[ANS thanks the ARISSat-1/KEDR Team for the above information]

/EX

SB SAT @ AMSAT $ANS-212.02
Radio-to-Soundcard Interface For Access to ARISSat-1/KEDR Bandwidth

AMSAT News Service Bulletin 212.02
>From AMSAT HQ SILVER SPRING, MD.
July 31, 2011
To All RADIO AMATEURS
BID: $ANS-212.02

The ARISSat-1/KEDR FM downlink on 145.950 MHz will be audible on all common 2 meter amateur radio receivers with no modification needed to your equipment. A CW/SSB receiver will also receive the CW beacons on 145.919 MHz or 145.939 MHz and the signals on the linear transponder passband between 145.922 to 145.938 MHz.

To take advantage of the full bandwidth of the downlink for SSTV, CW Decoding, BPSK Decoding you'll need to add a few things:

+ You'll need an audio patch cable from your receiver to your computer soundcard audio input. If you are already on the air with other amateur radio soundcard applications then you are ready with the hardware to receive, decode, and display the SSTV, BPSK-1000 or BPSK-400 downlinks.

+ You'll need SSTV software (refer to the SSTV news item)

+ You'll need the ARISSatTLM software to decode the BPSK telemetry. (refer to the ARISSatTLM news item)

The key difference is that the SSTV signal is transmitted on the FM downlink on 145.950 MHz. The BPSK-1000 downlink is transmitted in SSB mode on 145.920 MHz. Depending on your equipment you may need to fabricate an audio patch to the computer soundcard input from both your 2 meter FM radio and 2 meter SSB radio.

An initial "RECEIVE ONLY" configuration is easily done consisting of an audio patch cable between your radio and the soundcard. The ARISSat-1/KEDR team testing the software noted that a minimal set up consisting of an audio cable from the speaker or headphone output from the radio to the line (or mic) input on your PC sound card was successful. If your rig has a 'Line Out' audio connection this can be run to the soundcard 'Line In' connection.

Many amateur radio "digital modes" articles, web pages, and books also discuss the more complex requirements to interface your transmitter to the soundcard and to control the push-to-talk functions. This is NOT required for you to successfully receive, decode, and display the signals you receive from ARISSat-1/KEDR. To join into the all the fun your "RECEIVE ONLY" configuration will just need the audio cable!

[ANS thanks the ARISSat-1/KEDR Team for the above information]

/EX

SB SAT @ AMSAT $ANS-212.03
Get Ready for ARISSat-1/KEDR BPSK-1000 Telemetry

AMSAT News Service Bulletin 212.03
>From AMSAT HQ SILVER SPRING, MD.
July 31, 2011
To All RADIO AMATEURS
BID: $ANS-212.03

The BPSK transmission from ARISSat-1/KEDR will feature a new 1kBPSK protocol developed by Phil Karn, KA9Q to be readable in low signal level conditions. The BPSK data will transmit satellite telemetry and data from the Kursk experiment.

You'll need to take a few steps to get your station set up to receive, decode, and display the BPSK-1000 telemetry data:

1. You need a 2 meter SSB receiver.

2. An audio patch cable between your receiver and computer's soundcard is required.

3. Download the ARISSatTLM ground station soundcard demodulator and display software.

   Windows:
   http://www.arissattlm.org/download/ARISSatTLM_050_Setup.exe

   MAC:
   http://www.arissattlm.org/download/ARISSATTLM.zip

   The ARISSatTLM Software Quick Start Guide is available:
   http://tinyurl.com/42uhtyf (amsat.org)

4. Follow the instructions in the ARISSatTLM Software Quick Start Guide to install the software.

The ARISSatTLM software can decode BPSK signals in two modes:

- Playback and decode a recorded file (even if you do not have a 2 meter SSB receiver you can experiment with the software and test file to learn about telemetry decoding and display!)

- Live, off-the-air capture

Playback and Decode a Recorded File

ARISSatTLM requires the recorded data to be in the WAV format. Compression formats such as MP3 are not suitable and will not decode and display correctly. Although .WAV files are notably large, usually several megabytes, they capture all of the bits of the signal. Compressed file formats sound OK to the human ear but save file space by eliminating bits from the recorded stream. You need to capture and record as many of the downlink bits as possible. An occasional noise burst or momentary fade is handled by the Forward Error Correction capability of the ARISSatTLM software.

Download the BPSK Test File

A link to a BPSK test file suitable for operation with the current release of ARISSatTLM software will be released soon to http://www.arissattlm.org.

NOTE: Some earlier BPSK test recordings that are on the internet will not work because they were created with earlier versions of the satellite's onboard software (the satellite software and ARISSatTLM are a "matched pair").

1. Start the ARISSatTLM program on your computer.

2. Click the start button in the lower left of the Tuning Indicator window.

3. In the ARISSatTLM Version 0.50 Window select:
   File --> Open WAVE file.
   Select the ARISSatTLM test file you previously downloaded.

4. The Tuning Indicator window will show the "CW Bump" at proper location (note the "Put CW signal here" indicator).

5. The Morse Code Decoder will decode and stream the CW message.

6. The ARISSatTLM Telemetry as Text window will decode and display data.

7. The ARISSatTLM window will display the received data as received.

8. The display will stop when the end of file is reached.

Live Off The Air Telemetry Capture and Display

The ARISSat-1 BPSK-1000 downlink is transmitted in SSB mode on 145.920 MHz. When the CW2 beacon on 145.919 MHz is active this indicates that the BPSK-1000 format is being transmitted. If the CW1 beacon on 145.939 MHz is active this indicates the backup of BPSK-400 format is being transmitted.

Transmitting at 100 mW, both BPSK rates include Forward Error Correction (FEC) and it is expected that modest quarter-wave antennas with low-loss coaxial cable will provide sufficient signal strength for decoding and display by the ARISSatTLM software.

BPSK-1000 sounds like a "shusssch" with a higher pitch than the 400 bps growl. It is difficult to tune by ear. The BPSK beacon is centered 1 kHz above the CW2 beacon so that the CW beacon sits in the lower spectral null of the BPSK signal, i.e., in a narrow spot where there's no BPSK signal power.

If you put your receiver in USB mode and tune the CW beacon so it comes out at an audio frequency of 500 Hz, this will automatically center the BPSK signal in a conventional SSB filter extending from 300-2700 Hz. The Tuning Indicator window helps you tune the signal correctly.

Follow the recommendations in the ARISSatTLM Quick Start Guide for tuning and decoding the BPSK telemetry data. Once you are tuned in correctly (and adjust for doppler shift) you will be able to decode the BPSK-1000 signal. You will also be able to copy the CW2 beacon text in the Morse Code Decoder window.

AMSAT needs your telemetry from ARISSat-1/KEDR. Since there are no "Whole Orbit Data" storage mechanisms onboard ARISSat-1/KEDR, your submissions are the only way for AMSAT to collect the spacecraft telemetry and KURSK experiment results.

+ The telemetry may be recorded using the FunCube dongle or SDR-IQ receivers. After decoding the recorded file ARISSat-1/KEDR and Kursk telemetry CSV files (in the ARISSatTLM folder) can be sent as an e-mail attachment to telemetry@arissattlm.org

+ If you are running ARISSatTLM and receiving the signal "live" from ARISSat-1/KEDR, please enable the telemetry forwarding option.

+ The latest telemetry can be seen LIVE on your computer or cell phone at: http://www.arissattlm.org/mobile

[ANS thanks the ARISSat-1/KEDR Team for the above information]

/EX

SB SAT @ AMSAT $ANS-212.04
Get Ready for ARISSat-1/KEDR SSTV Reception

AMSAT News Service Bulletin 212.04
>From AMSAT HQ SILVER SPRING, MD.
July 31, 2011
To All RADIO AMATEURS
BID: $ANS-212.04

The ARISSat-1 FM downlink on 145.950 MHz includes live SSTV images as part of the cycling voice ID, select spoken telemetry values, and the international greeting messages. Here are some pointers to help you get your station ready to receive and display the SSTV pictures transmitted by ARISSat-1.

One fun feature is that there are four SSTV cameras mounted on the spacecraft. On photos of ARISSat-1 you may have noticed black brackets on the outside of the spacecraft. These hold the mirrors that reflect the light onto the lens of the cameras. The software-defined-transponder will use the image data from the cameras to generate the SSTV downlink.

ARISSat's software will sequentially select a new or stored image from one the four cameras. There are two pre-recorded images as part of the sequence. The camera that took the the picture can be identified by the color of the call sign in the upper left of the SSTV image. The SSTV image will be sent down as FM audio SSTV in Robot 36 format on 145.950 MHz about every 140 seconds.

The RF downlink power on the 145.950 MHz FM downlink will be 250mW which is predicted to provide a link margin around 6 dB on an HT with a 'big whip' when the satellite is at 15 degrees elevation. This should be sufficient to receive SSTV pictures although you may need to orient the whip to line up the antenna polarization.

ARISSat-1 is not stabilized so the antenna orientation is unpredictable and a certain amount of fading will happen. The receiving link margin may be improved with a handheld beam such as an "Arrow", "Elk", or "Cheap Yagi" antenna.
(See: http://www.wa5vjb.com/references/Cheap%20Antennas-LEOs.pdf)

See the news bulletin regarding tips and pointers for the audio interface between your radio and your computer's sound card. When running your SSTV software just adjust the sound card audio gain slider and/or radio volume control so that the SSTV signal is within the center part of the bar. MMSSTV will give you an "overflow" indication if the volume is too high.

SSTV Software Download Sites

There are many amateur radio SSTV software decoding applications available. One of the easiest to use on Windows computers is the MMSSTV program. This can be downloaded from:
http://mmhamsoft.amateur-radio.ca/pages/mmsstv.php

The Ham Radio Deluxe software package also includes SSTV operation.

SSTV software for the Mac is available at:
http://web.me.com/kd6cji/MacSSTV/MultiScan.html

If you successfully receive the SSTV transmissions, you are invited to upload your picture to to the ARISS SSTV Gallery:
http://www.amsat.org/amsat/ariss/SSTV/

[ANS thanks the ARISSat-1 Team for the above information]

/EX

SB SAT @ AMSAT $ANS-212.05
N7HPR Blog in EE Times Magazine Documents ARISSat-1/KEDR Development

AMSAT News Service Bulletin 212.05
>From AMSAT HQ SILVER SPRING, MD.
July 31, 2011
To All RADIO AMATEURS
BID: $ANS-212.05

Steve Bible, N7HPR shares his tale of how amateur radio lead to his opportunities in his professional life as an engineer at Microchip Technology, And, as Steve says, "Eventually becoming one of the most interesting projects I've ever worked on."

Steve continues, "Over the next several weeks, this limited-series guest blog will relate the story of how my colleagues and I came to build an amateur satellite, the challenges we ran into while doing so and, hopefully, its successful deployment from the International Space Station."

In this blog, Steve hopes to recount the highlights from that journey and tell you about some of the technical as well as personal trials and tribulations. How does a diverse group of folks, from all walks of life, interests and professions, create an amateur satellite to be deployed on the ISS? Tune in and see!

Follow Steve's Blog on the EE Times website, http://www.eetimes.com, then follow the EE Life -> Blogs link for future installments.

The article can be found on-line at:
http://tinyurl.com/3lddtou (eetimes.com)

[ANS thanks EE Times and Steve Bible, N7HPR for the above information]

/EX

SB SAT @ AMSAT $ANS-212.06
View Student Projects Flying on ARISSat-1/KEDR

AMSAT News Service Bulletin 212.06
>From AMSAT HQ SILVER SPRING, MD.
July 31, 2011
To All RADIO AMATEURS
BID: $ANS-212.06

ARISSat-1/KEDR will carry many education-based features encouraging student interaction. During the development of the satellite, students from around the world were invited to submit images and letters documenting their participation in science activities and projects.

These submissions have been processed and stored on a memory chip that has been attached to ARISSat-1/KEDR and is flying along with the craft as it orbits the Earth. The student projects and photos can all be viewed ARISS Europe web site at:
http://www.ariss-eu.org/arissat-1.htm

[ANS thanks ARISS-Europe for the above information]

/EX

SB SAT @ AMSAT $ANS-212.07
FUNcube Vibration Testing Videos

AMSAT News Service Bulletin 212.07
>From AMSAT HQ SILVER SPRING, MD.
July 31, 2011
To All RADIO AMATEURS
BID: $ANS-212.07

AMSAT-UK has released two videos showing vibration testing of the FUNcube satellite.

This video shows the general layout of the RAL vibration testing facility, and includes interviews with Graham and David at the conclusion of our testing: http://vimeo.com/26951186

This is a short video showing what happens during a 'high sine' test. The test is being performed in the Z axis. Hold your breath!!
http://vimeo.com/26954073

AMSAT-UK photos of the testing can be viewed at:
http://www.uk.amsat.org/archives/funcube-enviromental-testing-at-ral

An additional news article can be read at the Southgate Amateur Radio News site at:
http://www.southgatearc.org/news/july2011/funcube_videos.htm

[ANS thanks Trevor, M5AKA for the above information]

/EX

SB SAT @ AMSAT $ANS-212.08
Satellite Shorts From All Over

AMSAT News Service Bulletin 212.08
>From AMSAT HQ SILVER SPRING, MD.
July 31, 2011
To All RADIO AMATEURS
BID: $ANS-212.08

+ Clint Bradford, K6LCS will be talking about ARISSat-1/KEDR and Working the FM Ham Satellites on August 2 at 6PM PDT during the recording session of the Ham Nation video podcast - the "Bob Heil and Gordon West" show in Leo LaPorte's TWIT.tv network. They'll also remind viewers to support AMSAT and endeavours like ARISSat-1.
  http://twit.tv - click on LIVE 6PM PDT August 2, or
  http://twit.tv/hn - to watch all Ham Nation episodes

+ Clint Bradford, K6LCS, will step out of the recording studio to present his 'Working Amateur Satellites With Your HT' ses-

sion in Perris, CA on August 4 and in Rialto, CA on August 20.
ALL are welcome to attend these club meetings!
Thursday, August 4 - 6:30PM
Lake Perris Event Center - Lot 9
17801 Lake Perris Drive, Perris CA 92571

Saturday, August 20, 2011 - 10:00AM
Rialto Fire Department - Station 201
131 S Willow Avenue, Rialto CA 92376

Attendees should download Clint's four-page tutorial and radio programming data from http://www.work-sat.com
Clint welcomes pre-presentation questions. Call him at 909-1241-7666, or send email to . clint@clintbradford.com

+ Bob, KC2WYH invites you to be on the lookout for the Roseland Amateur Radio Club, K2GQ, operating from the "National Night Out" on Tuesday, August 2nd in Livingston, New Jersey with various ham radio demonstrations. There is a high elevation pass by AO-51 at 2026-Z (4:26 p.m. EDT) within range of the special event.

+ Look for Makoto, JI5RPT to be active as JD1BLY from Chichijima Island (IOTA AS-031) Ogasawara. Operation is planned for 40m to 6m and Satellite CW/SSB/DIGI between August 1-7. QSL via JI5RPT. Web based log will be found at: http://www.ji5rpt.com/jd1/ and you are also invited to monitor Twitter: http://twitter.com/jd1bly (ji5rpt@jarl.com)

+ Heads up this August 5-7: Be sure to look for W1AW/5 operating on all available satellites from Taos, New Mexico during the 2011 ARRL Rocky Mountain Division Convention. http://www.2011convention.org. More information can also be found on Ollie's AB1JO QRZ page: http://www.qrz.com/db/aj1o/

+ Look for John, VA3BL operating from the Trent Severn Waterway in grid FN04 + FN14 in Ontario, Canada, August 1-7 with the arrow and HT. He Will try to be on AO-51, SO- 50 and any other FM satellites that are available.

+ ZB2, GIBRALTAR Astronaut Edmondo,VA3ITA/IW0GVP, will be QRV as ZB2/VA3ITA from the Rock of Gibraltar from Aug 8-11. Activity will take place on CW, SSB, digital modes and via satellites. Edmondo is also willing to make skeds. More information and his e-mail address can be found on QRZ.com. QSL via VA3ITA.
(DXNL 1738 - Jul 27, 2011 DX Newsletter

+ On Saturday July 23, 2011 at 09:45 UTC, ESA Space Camp 2011, San Rossore Park, Pisa, Italy established a direct ARISS (Amateur Radio on the International Space Station) contact with NASA astronaut Michael E. Fossum KF5AQG onboard the International Space Station. Astronaut Fossum operated with the ISS callsign OR4ISS. The ESA Space Camp 2011 operated the contact with ARI "Versilia" club station call sign IQ5VR. The event can seen in an ESA video at:

http://tinyurl.com/3esggh7 (livestream.com)
Additional coverage of the event is provided by Southgate News Site:
http://www.southgatearc.org/news/july2011/ariss_event_success_2307.htm

+ We wish we could have an antenna like this! But this one is in space: A newly-launched Russian radio telescope successfully unfurled a 10-meter dish-shaped reflector overcoming one of the biggest risks on the observatory's ambitious mission to see inside black holes and view other cosmic phenomena. Read about the details at: http://spaceflightnow.com/news/n1107/25spektr/

+ A great 10 minute video is available about Vietnam's Cubesat F-1 http://www.youtube.com/watch?v=iAAWE1PDuAM

+ Jan, ON7UX posted the AMSAT-ON video report about OUFTI-1 the D-STAR CubeSat on YouTube http://www.youtube.com/watch?v=UXmqYy_Q_Wg

+ The August, 2011 On-Line Edition of the WorldRadio Magazine (CQ Publications) mentions Peter's efforts on behalf of AMSAT in regards to HR607. The free magazine is a huge PDF file: http://worldradiomagazine.com/wro_issues/2011/WRO_08_2011.pdf The Satellites column begins on Page 24 of this issue. They also provide good coverage of the other ANS bulletin items we've issued.

+ Information about a CubeSat under development at University of Puerto Rico in Mayaguez (UPRM) can be found on-line in their blog at: http://cubesatuprm.wordpress.com/ A video of the student project is posted at: http://www.youtube.com/watch?v=YN5rM5Dxs-k (Spanish)

+ Photos of satellite operation taken by Dave KB5WIA during his camping trip to Eagle Lake in Lassen National Forest, which is in Northern California and grid CN90 can be viewed at: http://tinyurl.com/3edhgas (kb5wia.blogspot.com)

+ Shamai Opfer 4Z1WS gave a talk on Israel's new 3U CubeSat InKlajn-1 to the AMSAT-UK International Space Colloquium. It is planned to provide telemetry using 1200bps BPSK and 1200bps AFSK with an option of 400bps BPSK and 1200bps MSK. Downlink frequencies of 145.815 MHz and 145.950 MHz have been coordinated by the IARU Satellite Frequency Coordination panel. More news and a video of the ejection tests can be seen at: http://www.southgatearc.org/news/july2011/inklajn_1.htm

+ The next dates for the Hudson Valley Satcom net are August 4, August 18, and September 1 at 8:00 PM Eastern Daylight Time (UTC - 4). You can tune in via the 146.970 MHz Mt. Beacon repeater, PL 100.0 or via EchoLink on the N2EYH-L node. More info is available at: http://www.hvsatcom.org (Stu, WA2BSS)

[ANS thanks everyone for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the

President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office. And with that please keep in mind the ham who made a frantic phone call, "My wife is pregnant and her contractions are only two minutes apart!" "Is this her first child?" the doctor asked. "No!" the ham shouted, "This is her husband!"

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM

From 6192336606495048015
X-Google-Thread: a4a23d5f63,6676acf0c085a8e7,start
X-Google-Attributes: gida4a23d5f63,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!news.glorb.com!news-out.readnews.com!news-xxxfer.readnews.com!panix!panix2.panix.com!not-for-mail
From: rram@panix.com (rec.radio.amateur.moderated Admin)
Newsgroups: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.info
Subject: Crossposting Permitted to rec.radio.amateur.moderated
Supersedes: <radio/ham-radio/moderated/crossposting-1-1309500001@panix.com>
Followup-To: poster
Date: 1 Aug 2011 02:00:03 -0400
Organization: rec.radio.amateur.moderated Moderation Team
Lines: 47
Approved: RRI Admin <rec-radio-info-request@panix.com>
Distribution: world
Expires: 03 Sep 2011 02:00:01 -0000
Message-ID: <radio/ham-radio/moderated/crossposting-1-1312178401@panix.com>
Reply-To: rec-radio-amateur-moderated-request@panix.com (rec.radio.amateur.moderated Admin)
NNTP-Posting-Host: panix2.panix.com
X-Trace: reader1.panix.com 1312178404 17369 166.84.1.2 (1 Aug 2011 06:00:04 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Mon, 1 Aug 2011 06:00:04 +0000 (UTC)
Summary: Short reminder for unmoderated newsgroups that crossposting is permitted
Keywords: FAQ, ham, amateur, radio, moderated, unmoderated, crossposting, permitted
Xref: g2news1.google.com rec.radio.amateur.antenna:22172 rec.radio.amateur.dx:1053 rec.radio.amateur.equipment:2648 rec.radio.amateur.homebrew:4571 rec.radio.amateur.misc:6424 rec.radio.amateur.policy:31529 rec.radio.amateur.space:531 rec.radio.info:2549

Posted-By: auto-faq 3.3.2 beta (PGPMoose V2.0, Perl 5.005)
Archive-name: radio/ham-radio/moderated/crossposting

Revision: 1.1 2009/04/12 19:42:04
Posting-Frequency: posted monthly
URL: http://www.panix.com/~rram/usenet/rram/index.html

Changes followed by "|".

After a 30-day public discussion and feedback period to gauge reader opinions in March of 2009:

http://groups.google.com/group/rec.radio.amateur.moderated/browse_thread/thread/d7d337db35f23326

the rec.radio.amateur.moderated Moderation Team has decided to consider amending its charter, and permit limited simultaneous crossposting to rec.radio.amateur.moderated and one other unmoderated amateur-radio-related discussion newsgroup. We are currently trying this on a temporary basis (90 days, through early July 2009), and adopt it permanently if successful.

Approved rec.radio.amateur.* newsgroups are those that are currently listed in the latest version of the "List of Big Eight Newsgroups" which is crossposted monthly to news.announce.newgroups, news.groups, and news.lists.misc.

Approved alt.radio.amateur.* and alt.ham-radio.* newsgroups are those that have been created consistent with the suggestions in "So You Want to Create an Alt Newsgroup" at:

  http://www.faqs.org/faqs/alt-creation-guide/

Approved regional hierarchy newsgroups are those that contain either "radio.amateur" or "ham-radio" in their names, including uk.radio.amateur and aus.radio.amateur.misc.

We will make every reasonable effort to keep our list of approved newsgroups up-to-date. In case we have overlooked any, and a submission is rejected in error as a result, the rejected submitter can E-mail us at our administrative contact address (in the signature at the bottom of this article, and the default Reply-To for the rejection message) requesting that it be added, and that the article be approved. We may still choose to reject articles crossposted to any alt.* newsgroup with an inappropriate name, including obscene language, embedded name-calling, or encouragement of unlawful conduct.

Please direct any comments, questions, or criticisms to rec-radio-amateur-moderated-request@panix.com.

From -5107736836205893742
X-Google-Thread: a4a23d5f63,5e0cb9daae74f5ae,start
X-Google-Attributes: gida4a23d5f63,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit

```
Path: g2news1.google.com!news1.google.com!newsfeed2.dallas1.level3.net!
news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: SWPC.Webmaster@noaa.gov
Newsgroups:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.info
Subject: Weekly Highlights of Solar and Geomagnetic Activity, 25 - 31 July 2011
Followup-To: rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space
Date: Tue, 2 Aug 2011 17:30:07 EDT
Organization: NOAA Space Weather Prediction Center
Lines: 83
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <20110802213001.DC01533C7D@panix2.panix.com>
NNTP-Posting-Host: panix6.panix.com
X-Trace: reader1.panix.com 1312320607 18723 166.84.1.6 (2 Aug 2011 21:30:07 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Tue, 2 Aug 2011 21:30:07 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Xref: g2news1.google.com rec.radio.amateur.misc:6426 rec.radio.amateur.dx:1054
rec.radio.amateur.space:532 rec.radio.info:2553
```

```
:Product: Weekly Highlights and Forecasts
:Issued: 2011 Aug 02 2058 UTC
# Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center
# Product description and SWPC contact on the Web
# http://www.swpc.noaa.gov/weekly.html
#
#                 Weekly Highlights and Forecasts
#
```

Highlights of Solar and Geomagnetic Activity
25 - 31 July 2011

Solar activity ranged from very low to high levels during the period. The period began with very low activity during 25 July, with B-class flares predominantly from Region 1260 (N19, L=358, class/area Ehi/330 on 30 July). Activity increased to low levels on 26 July with two C-class flares from Region 1260. Activity increased to moderate levels on 27 July due to an M1/1n flare at 27/1607 UTC, as well as frequent to occasional low-level C-class flares, from Region 1260. Activity decreased to low levels during 28 - 29 July with 13 C-class flares on each of those days. The largest during this period was a C6/1f at 29/1640 UTC from Region 1261 (N16, L=330, class/area Eki/350 on 31 July). Activity increased to high levels on 30 July due to an impulsive M9 flare from Region 1261 at 20/0209

UTC. A 180 sfu Tenflare was associated with this flare. Low levels returned on 31 July with several C-class events, the largest of which was a C3/Sn at 31/0254 UTC from Region 1261.

No proton events were observed at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit was at normal to high levels during 25 - 26 July. Flux increased to moderate to high levels during 27 - 29 July. Flux decreased to normal to moderate levels on 30 - 31 July.

Geomagnetic field activity ranged from quiet to minor storm levels during the period. Activity began the period at quiet to unsettled levels, with isolated active to minor storm levels at high latitudes on 25 July, due to a coronal hole high-speed stream (CH HSS). Activity decreased to mostly quiet to unsettled levels on 26 July. Activity decreased to mostly quiet levels during 27 - 29 July. Activity increased to quiet to active levels with an isolated minor storm period at high latitudes during 30 July. Mostly unsettled conditions were observed on 31 July.

Forecast of Solar and Geomagnetic Activity
03 August - 29 August 2011

Solar activity is expected to be at low to moderate levels during 03 - 08 August, with a chance for M-class flares greater than M5 from Region 1261. Activity is expected to decrease to very low to low levels during the rest of the period as Region 1261 departs. A chance for M-class activity increases on 20 August when Region 1261 rotates back around the east limb.

No proton events are expected at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to be at moderate to high levels on 03 - 04 August. Normal to moderate levels are expected during 05 - 07 August. Moderate to high levels are expected during 08 - 13 August due to effects from a recurrent CH HSS. Normal to moderate levels are expected on 14 - 15 August followed by moderate to high levels from 16 - 25 August due to a second CH HSS. Normal to moderate levels are expected for the remainder of the period.

Geomagnetic field activity is expected to be predominantly quiet during 03 - 04 August. A CME observed at approximately 02/0706 UTC on LASCO C3 imagery is expected to arrive late on 04 August and increase activity to unsettled to active levels with a chance for minor storm conditions through the first few periods of 06 August. Major storm periods are possible at high latitudes during this time. Quiet to unsettled conditions are expected for the rest of 06 August through 11 August due to effects from a recurrent CH HSS. Activity is expected to decrease to mostly quiet levels from 12 - 13 August as the CH HSS effects subside. Activity is expected to increase to quiet to unsettled levels from 14 - 22 August, with a chance for active levels on 15 - 17 August due to another recurrent CH HSS. Conditions are expected to decrease to quiet levels until the arrival of a third CH HSS anticipated to become geoeffective on 26 August. Quiet to unsettled conditions with a chance for isolated active periods are expected to prevail for the remainder of the forecast period.

```
From -3714798226998256528
X-Google-Thread: a4a23d5f63,97c18a797cf51808,start
X-Google-Attributes: gida4a23d5f63,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!news.glorb.com!news-out.readnews.com!
transit4.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-219 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sun, 7 Aug 2011 09:04:40 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 434
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000a01cc5502$8bbdf780$a339e680$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1312722280 28264 166.84.1.6 (7 Aug 2011 13:04:40 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 7 Aug 2011 13:04:40 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news1.google.com rec.radio.amateur.space:533 rec.radio.info:2568
```

AMSAT NEWS SERVICE
ANS-219

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:
* AMSAT-NA On-Orbit Again with ARISSat-1
* NASA Education Express Message - ARISSat-1/KEDR Deployment
* ARISSat-1/KEDR Deployed on August 3 - Signals Received
* ARISSat-1/KEDR Reception Report Certificates
* AMSAT-UK Issues ARISSat-1/KEDR BPSK Reception Challenge
* AMSAT History: 40th Anniversary of First Synchronous Satellite Proposal
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SB SAT @ AMSAT $ANS-219.01
AMSAT-NA On-Orbit Again with ARISSat-1

AMSAT News Service Bulletin 219.01
From AMSAT HQ SILVER SPRING, MD.
August 7, 2011
To All RADIO AMATEURS
BID: $ANS-219.01

AMSAT President Barry Baines, WD4ASW, observed, "Welcome to a new era as AMSAT returns to space with ARISSat-1/KEDR. I encourage all hams, SWLs, educators, and experimenters to enjoy the unique opportunity presented by this mission to learn about amateur radio in space, enhance and improve your station, and hone your operating skills as you try out all of this satellite's features."

Barry continues, "ARISSat-1/KEDR marks a new type of satellite which has captured the attention of the national space agencies around the world for the unique educational opportunity we have been able to design, launch, and now operate. By designing an educational mission aligned with NASA's Science, Technology, Engineering, and Mathematics goals amateur radio operators around the world can now enjoy a new satellite in orbit."

ARISSat-1/KEDR Project Manager, Gould Smith, WA4SXM said, "Dozens of amateur radio volunteers, AMSAT, ARRL, NASA, and Energia have teamed up for this successful mission to bring you the most unique and innovative amateur radio satellite mission flying 220 miles above your QTH at 17,500 mph! Congratulations to all who made ARISSat-1 successful!"

Continuing, Gould said, "ARRISat-1/KEDR has been developed, built, and tested by a remarkable team of radio amateurs. As the Project Manager for ARISSat-1/KEDR these past three years I have had the opportunity to work with these creative people to get to where we are now ... IN ORBIT!"

Watch the video of ARISSat-1/KEDR Project Manager Gould Smith WA4SXM's interview on WBIR TV about the new Amateur Radio satelite ARISSat-1 which 'takes distance learning to new heights': http://tinyurl.com/3fc8f9n (Soutgate ARC News)

ARISSat-1 Project Web Page: http://www.arissat1.org
ARISSat-1 Operational News: http://www.amsat.org
How to receive ARISSat-1:
http://www.amsat.org/amsat-new/ARISSat/ARISSatHowTo.php

[ANS thanks AMSAT President Barry Baines, WD4ASW and ARISSat-1/KEDR Project Manager, Gould Smith, WA4SXM for the above information]

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SB SAT @ AMSAT $ANS-219.02
NASA Education Express Message - ARISSat-1/KEDR Deployment

AMSAT News Service Bulletin 219.02
From AMSAT HQ SILVER SPRING, MD.
August 7, 2011
To All RADIO AMATEURS
BID: $ANS-219.02

The NASA Education Office posted news of the ARISSat-1/KEDR deployment in their August 4 Education EXPRESS message. The Express message below was sent to 18,516 EXPRESS subscribers and to 1,285,892 NASA Twitter account subscribers. Using social media services to expand the range for NASA education messages has increased the total audience to approximately 1,304,408 people. (Yes, that's 1.3 million people).

[NASA EXPRESS Message follows]

ARISSat-1 Satellite Launched

A satellite with amateur radio capabilities and a student-designed experiment was released into orbit around Earth on Aug. 3, 2011, during a spacewalk outside the International Space Station. The satellite is transmitting signals containing information that students around the world can access.

ARISSat-1, which stands for Amateur Radio on the International Space Station Satellite-1, contains a student-designed experiment and other equipment that students can use to learn more about space and space exploration. The rectangular spacecraft is covered by six solar panels that will charge the batteries in the satellite for about six months as it orbits Earth. Spoken telemetry values, with data such as temperature and battery life, are intended to promote science and mathematics education by encouraging school children to listen to the satellite, track its progress and plot the changes.

The project website provides free downloadable software that can be used to decode the data. In addition to data, the satellite will transmit 24 pre-recorded greetings in 15 different languages -- French, Spanish, German, English and Chinese, to name a few.

Check out the ARISSat-1 website at http://arissat1.org/ for information on data transmissions, contests and student activities.

Questions about ARISSat-1 should be directed to teachers@arissat1.org.

NASA Education listserv: http://www.nasa.gov/education/express
NASA Twitter: http://twitter.com/nasa
NASA Blogs: http://blogs.nasa.gov/cm/newui/blog/blogs.jsp
NASA Education Express Blog:
http://blogs.nasa.gov/cm/blog/educationexpress

[ANS thanks AMSAT President Barry Baines, WD4ASW for forwarding this news to the AMSAT News Service]

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SB SAT @ AMSAT $ANS-219.03
ARISSat-1/KEDR Deployed on August 3 - Signals Received

AMSAT News Service Bulletin 219.03
From AMSAT HQ SILVER SPRING, MD.
August 7, 2011
To All RADIO AMATEURS
BID: $ANS-219.03

ARISSat-1/KEDR was deployed from the ISS during EVA-29 on Wednesday, August 3 by Cosmonaut/Flight Engineers Sergei Volkov and Alexander Samokutyaev. First reported signals were received by JR8LWY with copy of the telemetry beacon as the satellite passed over Japan.

Full operational capability of ARISSat-1/KEDR was quickly confirmed after initial concern of a missing or damaged 70cm receiver antenna on the satellite.

145.950 MHz FM Downlink - OPERATIONAL

FM transmissions will cycle between a voice ID as RS01S, select telemetry values, 24 international greeting messages in 15 languages and SSTV images. One of the messages will be a conversation between Yuri Gagarin and ground control.

If you successfully receive the SSTV transmissions, you are invited to upload your picture to to the ARISS SSTV Gallery:
http://www.amsat.org/amsat/ariss/SSTV/

435 MHz - 145 MHz Linear Transponder - OPERATIONAL

The linear transponder operates in Mode U/V (70 cm Up, 2m Down). It is an 16 KHz wide inverting passband and the convention will be to TX LSB on the 435 MHz uplink and RX USB on the 145 MHz downlink.

The full status of the 70cm antenna is unknown however reports of contacts and full uplink-downlink operation are being received:

+ Drew, KO4MA reported on August 4, "I was able to hear myself with as little as 1 watt on the 0425Z pass". This equates to an EIRP of as little as 26 watts which can be easily produced by even modest satellite stations. Audio with a picture were posted at: http://www.youtube.com/watch?v=0AFyZNAbOeA

+ John, K8YSE reported completing an unscheduled contact with KD8CAO on August 5 at 1125z. Signals were weak but readable.

+ Masa, JN1GKZ reported from Tokyo receiving his downlink signal during an eclipse pass on August 5, 1233-1240z with a clear and loud downlink though the elevation was less then 5 degrees.

145.919 MHz CW Beacons - OPERATIONAL

The CW transmissions will be callsign ID RS01S, select telemetry, and callsigns of people actively involved with the ARISS program.

145.920 MHz SSB BPSK-1000 Telemetry - OPERATIONAL

AMSAT needs your telemetry from ARISSat-1/KEDR. Since there are no "Whole Orbit Data" storage mechanisms onboard ARISSat-1/KEDR, your submissions are the only way for AMSAT to collect the spacecraft telemetry and KURSK experiment results.

+ Recorded file ARISSat-1/KEDR and Kursk telemetry CSV files (in the ARISSatTLM folder) can be sent as an e-mail attachment to: telemetry@arissattlm.org

+ If you are running ARISSatTLM and receiving the signal "live" from ARISSat-1/KEDR, please enable the telemetry forwarding option.

+ The latest telemetry can be seen LIVE on your computer or cell phone at: http://www.arissattlm.org/mobile

[ANS thanks the ARISSat-1/KEDR Team for the above information]

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SB SAT @ AMSAT $ANS-219.04
ARISSat-1/KEDR Reception Report Certificates

AMSAT News Service Bulletin 219.04

From AMSAT HQ SILVER SPRING, MD.
August 7, 2011
To All RADIO AMATEURS
BID: $ANS-219.04

When you receive the downlink signal from ARISSat-1/KEDR you are invited to send your report to the following e-mail boxes. You will receive a PDF certificate by e-mail.

Students and school groups are especially welcome! We look forward to your report!

Your report must contain the following information:

1) The signal you received:
    a) the secret word*,
    b) an SSTV image, or,
    c) telemetry data

2) Your name or group name

3) The date/time of reception

4) Your e-mail address of where to send your certificate. You will receive a PDF certificate via email.

Here are the e-mail boxes to send your reports:

Secret word* contest to:	secretword@arissat1.org
SSTV image to:	sstvreport@arissat1.org
Telemetry data to:	tlmreport@arissat1.org

(either digital or voice report of the data you received)

Received BPSK telemetry and .CSV files should continue to be sent to: telemetry@arissattlm.org.

* Those who do hear the secret word or call sign please do not put it out to the world. That would ruin the contest for those still waiting for their station to be in range.

You can find the details of the ARISSat-1/KEDR radio frequencies, links to telemetry decoding software and mission details on-line at:
+ http://www.amsat.org
+ http://arissat1.org

ARISSat-1/KEDR can be accessed on these frequencies:
+ 145.950 MHz FM Downlink
+ 435 MHz - 145 MHz Linear Transponder
+ 145.919 MHz CW Beacon
+ 145.920 MHz SSB BPSK-1000 Telemetry

The latest telemetry can be seen LIVE on your computer or cell phone at: http://www.arissattlm.org/mobile

TRACK STATUS on OSCAR STATUS PAGE

David Carr, KD5QGR has added ARISSat-1/KEDR to the list of satellites at the popular "Live OSCAR Satellite Status Page" at: http://oscar.dcarr.org/ You are invited to submit your reports on this page.

[ANS thanks the ARISSat-1/KEDR Team for the above information]

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SB SAT @ AMSAT $ANS-219.05

AMSAT-UK Issues ARISSat-1/KEDR BPSK Reception Challenge

AMSAT News Service Bulletin 219.05
From AMSAT HQ SILVER SPRING, MD.
August 7, 2011
To All RADIO AMATEURS
BID: $ANS-219.05

ARISSat-1 was deployed from the ISS on August 3. It has a composite VHF downlink that will easily fit into the FUNcube Dongle (FCD) receive spectrum. The 145.920 MHz telemetry is 1000 bps BPSK and can, of course, also be received with a normal SSB 2 metre receiver.

The signal levels from ARISSat-1 should be similar to those we expect from the AMSAT-UK FUNcube-1 satellite (and also eventually from UKube-1) and the AMSAT-UK team are keen to discover what will be the minimum and best type of antennas for schools to use with a FUNcube Dongle (FCD) Software Defined Radio (SDR). Therefore user experience with the ARISSat-1 signals will be very valuable in making this determination.

To encourage everyone to receive the 145.920 MHz BPSK ARISSat-1 telemetry signal AMSAT-UK are offering a FUN reward for listeners!

There are a number of categories for this challenge -they include:

+ The first FCD user, from each continent, who can post a spectrum recording of the received signal together with evidence of decoding the data using the ARISSatTLM software and of sending it to the ARISSat data warehouse.

+ The first non-FCD user, from each continent, who can provide evidence of having decoded the signals and of sending it to the ARISSat data warehouse.

+ The listener, using a FCD or not, who can demonstrate satisfactory reception of the telemetry in the same ways as described above, using the "smallest" possible receive antenna. The actual closing date for this part of the challenge will be announced later.

+ All other entrants who can demonstrate that they have been having FUN!

Please submit your "entries", including your location, station details (including FCD serial number where applicable), postal address and reports to: g0auk@amsat.org

[ANS thanks AMSAT-UK and Trevor, M5AKA for the above information]

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SB SAT @ AMSAT $ANS-219.06
AMSAT History: 40th Anniversary of First Synchronous Satellite Proposal

AMSAT News Service Bulletin 219.06
From AMSAT HQ SILVER SPRING, MD.
August 7, 2011
To All RADIO AMATEURS
BID: $ANS-219.06

July 24 marked the 40th anniversary of AMSAT's original SYNCART proposal to NASA, in 1971, to fly a Synchronous Amateur Radio Transponder on NASA's Applications Technology Satellite ATS-G. NASA's response to our proposal appeared to be favorable, but unfortunately NASA cancelled the ATS-G mission.

The SYNCART proposal is on AMSAT-DL's web site at for those who would like to read it. It gives the justification why NASA should fly it for free, listing a number of amateur experiments and applications, most of which would still apply today.

The 1971 WARC on Space Technology was held around the same time (June 7 - July 17, 1971, in Geneva). That's the ITU conference that established the amateur-satellite service and allocated frequencies to it.

Several satellite manufacturers are now advertising that they host payloads aboard their satellite platforms. Think how it would transform amateur radio if we could get SYNCART packages aboard one or more of them!

Read a copy of the original proposal at:
http://www.amsat-dl.org/images/stories/satellites/syncart/sync.pdf

AMSAT-DL article (in German) at:
http://www.amsat-dl.org/index.php/news-mainmenu-97/185-syncart

[ANS thanks AMSAT Past President Perry Klein, W3PK for this information]

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SB SAT @ AMSAT $ANS-219.07

ARISS Status - 1 August 2011

AMSAT News Service Bulletin 219.07
From AMSAT HQ SILVER SPRING, MD.
August 7, 2011
To All RADIO AMATEURS
BID: $ANS-219.07

1. Successful ARISS Contact with United Space School

On Saturday, July 30 a successful Amateur Radio on the International Space Station (ARISS) contact was held between students at United Space School in Seabrook, Texas and Mike Fossum, KF5AQG on the ISS. Station W6SRJ in California provided the connection. The United Space School is a once a year session of high school students that meets in the NASA/Clear Lake Area. Students come from around the world for a two week session, during which they stay with local host families while being mentored by astronauts, engineers, and scientists to design a mission to Mars as their team project. Class sessions are held at the University of Houston at Clear Lake. Students are given lessons on amateur radio and through the ARISS contact they learn firsthand what spaceflight is like. They will use this knowledge in their team project, which they will present to the Houston space community at the end of their session.

2. Astronaut Training Status

Mike Hopkins, KF5LJG is scheduled for an ARISS Basic Ops class on Monday, August 1. Hopkins is slated to fly with Expedition 37 in September 2013.

3. EE Times Runs ARISSat Blog

EE (Electronic Engineering) Times is running a blog called "Chips in Space - The Building of an Amateur Satellite" that will run over the next few weeks describing how the amateur radio satellite, ARISSat-1 was designed and built. The first entry has been posted:
http://www.eetimes.com/electronics-blogs/chips-in-space/4218140/The-Building-of-an-Amateur-Satellite-1

[ANS thanks Carol, KB3LKI, for the above information]

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In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Lee McLamb, KU4OS

```
From -8496560461744956904
X-Google-Thread: 10e8ad,5caa2a6dced6e366,start
X-Google-NewGroupId: yes
X-Google-Thread: 113975,5caa2a6dced6e366,start
X-Google-NewGroupId: yes
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X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news1.google.com!goblin1!goblin.stu.neva.ru!
news.astraweb.com!border5.a.newsrouter.astraweb.com!not-for-mail
From: Chris Steyaert <observations@rmob.org>
Newsgroups: rec.radio.amateur.space,sci.astro.amateur
Subject: Radio Meteor Obs. Bull. July 2011
Date: Sun, 07 Aug 2011 21:47:43 +0200
Message-ID: <urqt371d72g7s213g1eh8t7ejucsd8cejh@4ax.com>
X-Newsreader: Forte Agent 5.00/32.1171
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Lines: 14
Organization: Unlimited download news at news.astraweb.com
NNTP-Posting-Host: 92285494.news.astraweb.com
X-Trace: DXC=;e@42MW6omOjEc;hW[JGKHL?0kYOcDh@J\g_SfFO?
j]Dj]0;i98`0UNjj66j8PkQXEeM7IG_Q>@oOi_=YE6RTP=O7LWjQe`[_5E3j<hbHWVC0O
Xref: g2news2.google.com rec.radio.amateur.space:559 sci.astro.amateur:51360
```

Radio Meteor Observation Bulletin No. 216 of July 2011 (76 K) is available now as

http://www.rmob.org/rmobtext/rmob1107.txt

More information and the visual presentation of the hourly forward scatter counts can be found on

http://www.rmob.org

Chris

```
From -6420717184596086148
X-Google-Thread: 107ada,68c7e48296ec6182,start
X-Google-NewGroupId: yes
X-Google-Thread: 11480d,68c7e48296ec6182,start
X-Google-NewGroupId: yes
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X-Google-NewGroupId: yes
X-Google-Thread: 10b9c8,68c7e48296ec6182,start
X-Google-NewGroupId: yes
X-Google-Attributes:
gida3e752f117,gid7221ecd0f7,gid8f86f75953,gida4a23d5f63,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news1.google.com!npeer03.iad.highwinds-media.com!
news.highwinds-media.com!feed-me.highwinds-media.com!
border3.nntp.dca.giganews.com!border1.nntp.dca.giganews.com!
border4.nntp.dca.giganews.com!border2.nntp.dca.giganews.com!nntp.giganews.com!
news-out.readnews.com!transit3.readnews.com!panix!rri.panix.com!robomod!not-for-
mail
From: SWPC.Webmaster@noaa.gov
Newsgroups:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.info
Subject: Weekly Highlights of Solar and Geomagnetic Activity, 01 - 07 August 2011
Followup-To: rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space
Date: Tue, 9 Aug 2011 21:30:08 EDT
Organization: NOAA Space Weather Prediction Center
Lines: 114
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <20110810013002.7A35B33C8B@panix2.panix.com>
NNTP-Posting-Host: panix6.panix.com
X-Trace: reader1.panix.com 1312939808 10328 166.84.1.6 (10 Aug 2011 01:30:08 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Wed, 10 Aug 2011 01:30:08 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Xref: g2news2.google.com rec.radio.amateur.misc:6713 rec.radio.amateur.dx:1110
rec.radio.amateur.space:560 rec.radio.info:2652

:Product: Weekly Highlights and Forecasts
:Issued: 2011 Aug 09 2323 UTC
# Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center
# Product description and SWPC contact on the Web
# http://www.swpc.noaa.gov/weekly.html
#
#                 Weekly Highlights and Forecasts
#
Highlights of Solar and Geomagnetic Activity
01 - 07 August 2011
```

Solar activity ranged from very low to high levels during the period. The period began with low activity on 31 July - 01 August, with C-class flares predominantly from Regions 1261 (N15, L=332, class/area Dai/380 on 04 August) and Region 1263 (N17, L=301, class/area Ekc/720 on 04 August). Activity increased to moderate levels on 02 August due to a long-duration M1/1n at 02/0619Z from Region 1261, with associated Type IV, Type II (estimated speed of 1067 km/s), and Tenflare (220 sfu) radio emissions. LASCO C3 imagery indicated a full halo coronal mass ejection with this flare. Activity increased to high levels on 03 August with three M-class flares. The largest of these was an M6/2b at 03/1348Z from Region 1261, with associated Type IV, Type II (estimated speed of 812 km/s). A CME was subsequently observed in STEREO-A Cor2 imagery at 03/1409Z. Solar activity remained at high levels on 04 August due to an M9/2b from Region 1261 at 04/0357Z, with associated Type IV, Type II (estimated speed of 750 km/s), and Tenflare (720 sfu). A CME was also associated with the M9 flare with an approximate speed of 2100 km/s in STEREO-A COR-2 imagery. Activity decreased to low levels on 05 - 07 August, with C-class flares predominantly from Regions 1261, 1263, and 1267 (S17, L=243, class/area Bxo/010 on 05 August). A long duration C1 flare was observed at 06/1807Z. Two CMEs were observed by SOHO/LASCO C2 at 06/1036Z and 06/1736Z, but the majority of the ejecta was directed to the west and not geoeffective. Late on 06 August, a recurrent positive polarity CH moved into a potentially geoeffective position.

No proton events were observed at geosynchronous orbit during 31 July - 03 August. The 100 MeV proton flux at geosynchronous orbit exceeded 1 pfu beginning at 04/0510Z, reaching maximum at 04/0740Z, and ending at 04/1110Z. The maximum 100 MeV proton flux was 1.8 pfu. The 10 MeV proton flux at geosynchronous orbit exceeded 10 MeV beginning at 04/0635Z, reaching maximum of 96 pfu at 05/2150Z, and ending at 06/0515Z. The 10 MeV proton flux remained enhanced, but below threshold and trailing towards quiet background on 07 August.

The greater than 2 MeV electron flux at geosynchronous orbit was at normal levels on 31 July. Fluxes increased from normal to moderate levels during 01 - 02 August. Flux values returned to moderate levels on 03 and 04 August. Normal to moderate levels were observed on 05 - 07 August.

Geomagnetic activity was quiet to unsettled, with isolated active levels on 31 July due to a coronal hole high-speed stream (CH HSS). Quiet to unsettled levels were observed on 01 August as the CH HSS subsided. Activity remained quiet on 02 - 03 August. Predominantly quiet levels were observed on 04 August, before the first of three CME shocks was observed transiting ACE at 04/2105Z, followed by a 20 nT sudden impulse observed by Earth based magnetometers at 04/2155Z. A magnetopause crossing was also observed by the GOES 13 and 15 satellites. Quiet to unsettled levels were observed between 04/2100 - 05/1800Z. Two additional shock passages were seen by ACE at 05/1722Z and 05/1834Z, accompanied by a noticeable increase in solar wind density, velocity and magnetic field, which included Bz fluctuation to -20 nT. Activity increased to minor to severe storms during 05/2100 - 06/0600Z due to effects from the CME shock arrivals. Early on 06 August, activity steadily declined from active to quiet levels, before the polarity transitioned to a mostly positive Phi angle and recurrent CH HSS effects began. This triggered an isolated minor storm at high latitudes between 06/1200-1500Z. Otherwise, geomagnetic activity remained mostly quiet for the remainder of 06 August and throughout 07 August.

Forecast of Solar and Geomagnetic Activity
10 August - 05 September 2011

Solar activity is likely to be at Moderate (R1 - Minor) during 10 August, with a chance for M-class flares from Region 1263. Activity is expected to decrease to very low to low levels during 11 - 17 August with the absence of mature spot groups on the disk. Activity is expected to increase to very low to low levels, with a chance for M-class flares from 18 August - 03 September from old regions; 1260 (N19, L=001), 1261 (N15, L=332), and 1263 (N17, L=301). Activity is expected to decrease to very low to low levels 04 - 05 September. However, there is a chance that new, rapidly emerging flux regions could increase activity to moderate or greater levels at any time during the outlook period.

The greater than 10 MeV Proton flux levels at geosynchronous orbit are likely to remain above threshold (S1 - Minor) on 10 August, as an event that is currently in progress carries over early into the period. No proton events are expected at geosychronous after 10 August though the end of the period.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to be at moderate to high levels on 10 and 11 August. Normal to moderate levels are expected 12 - 15 August. Moderate to high levels are expected again 16 - 31 August. Normal to moderate levels are expected 01 - 03 September.

The geomagnetic field is expected to be at quiet to unsettled levels, with a chance for active levels 10 - 11 August, due to a CH HSS. Activity is expected to decrease to predominantly quiet levels during 12 - 15 August. Activity is expected to increase to quiet to unsettled levels, with a chance for active levels 16 - 18 August and again 21 - 22 August due to two recurrent CH High Speed Streams. Activity is expected to decrease to quiet to unsettled levels on 23 August CH HSS effects subside. Quiet levels are expected 23 - 25 August, before increasing to quiet to unsettled levels, with a chance for active levels at high latitudes 26 - 28 August due to another CH HSS. Mostly quiet conditions are again forecast to return from 29 August until 03 September, before another CH HSS ends out the period (04 - 05 September) with unsettled and active conditions.

From -954359933250498305
X-Google-Thread: 107ada,8166ff7cf7358140,start

```
X-Google-NewGroupId: yes
X-Google-Thread: 11480d,8166ff7cf7358140,start
X-Google-NewGroupId: yes
X-Google-Thread: 10e8ad,8166ff7cf7358140,start
X-Google-NewGroupId: yes
X-Google-Thread: 10b9c8,8166ff7cf7358140,start
X-Google-NewGroupId: yes
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news-xxxfer.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: SWPC.Webmaster@noaa.gov
Newsgroups:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.info
Subject: Weekly Highlights of Solar and Geomagnetic Activity, 08 - 14 August 2011
Followup-To: rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space
Date: Tue, 16 Aug 2011 17:30:05 EDT
Organization: NOAA Space Weather Prediction Center
Lines: 84
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <20110816213001.36CB433C7D@panix2.panix.com>
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X-Trace: reader1.panix.com 1313530205 8007 166.84.1.6 (16 Aug 2011 21:30:05 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Tue, 16 Aug 2011 21:30:05 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Xref: g2news1.google.com rec.radio.amateur.misc:6478 rec.radio.amateur.dx:1069
rec.radio.amateur.space:536 rec.radio.info:2587

:Product: Weekly Highlights and Forecasts
:Issued: 2011 Aug 16 1738 UTC
# Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center
# Product description and SWPC contact on the Web
# http://www.swpc.noaa.gov/weekly.html
#
#                 Weekly Highlights and Forecasts
#
```

Highlights of Solar and Geomagnetic Activity
08 - 14 August 2011

Solar activity began the week at moderate levels with an M3/1b flare at 08/1810 UTC from Region 1263 (N17, L=301, class/area Ekc/720 on

04 August). This event was associated with a type II radio sweep and a partial-halo coronal mass ejection which was mostly directed away from the west limb. Region 1263 produced an additional M2/1b flare at 09/0354 UTC. Activity levels increased to high as Region1263 produced an X6/2b flare at 09/0805 UTC which was associated with type II and type IV radio sweeps as well as a full halo CME, which also appeared to be primary travelling away from the west limb.The X6 is the largest x-ray event for cycle 24 so far. Activity levels dropped down to low levels on 10 August as Region 1263 rotated around the west limb. Activity levels further decreased to very low levels on 12 August and remained there through the end of the summary period.

A greater than 10 MeV proton enhancement was observed beginning at 08/1905 UTC in association with the M3 flare from Region 1263. The enhancement peaked at 4 PFU at 08/2000 UTC. Greater than 100 MeV and 10 MeV proton events began on 09 August in association with the X6 flare described previously. The greater than 100 MeV proton event began at 09/0825 UTC, reached a peak of 2.6 PFU at 09/0840 UTC, and dropped below threshold at 09/1035 UTC. The greater than 10 MeV proton event began at 09/0845 UTC, reached a peak of 26 PFU at 09/1210 UTC, and ended at 09/1715 UTC.

The greater than 2 MeV electron flux at geosynchronous orbit reached high levels on 08 August and stayed high through the end of the day on 13 August. The electron flux levels were at normal to moderate levels on 14 August.

Geomagnetic field activity began the week at generally quiet to unsettled levels with isolated active and minor storm periods at the high latitudes. Activity decreased to quiet levels for 11-12 August and then increased slightly to quiet to unsettled levels for 14 August. Solar wind observations from the ACE spacecraft showed a positive polarity coronal hole high speed stream from 08-10 August. Solar wind data also indicated a solar sector boundary on the 13th at about 2000 UTC, followed by the onset of a negative polarity coronal hole high speed stream.

Forecast of Solar and Geomagnetic Activity
17 August - 12 September 2011

Solar activity is expected to be very low to low for 17-23 August. An increase to low to moderate is expected as old Region 1263 returns and transits the disk from 24 August to 06 September. Activity levels are likely to return to low or very low levels for the remainder of the outlook interval from 07-12 September. In addition there continues to be a chance that a new, rapidly emerging flux region could increase activity to moderate or greater levels at any time during the outlook period.

No proton events are expected at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to increase to high levels for 18-23 August. Moderate levels are expected for 24-27 August, followed by a few days for high levels for 28-29 August. Low to moderate levels should prevail for 30 August through 04 September, followed by another increase to high levels for 05-07 September. Normal levels should resume on 08 September and continue through the end of the outlook period.

Geomagnetic field activity is expected to be generally quiet to unsettled for 17-22 August as there may be weak driving from a coronal hole high speed stream (HSS). Quiet levels should prevail for 23-25 August and another increase to quiet to unsettled is expected for 26-28 August from another HSS. Quiet levels are expected to return for 29 August through 02 September. An increase to unsettled with a chance for active periods is expected for 03-05 September due to another recurrent HSS. Quiet levels should predominate for 06-10 September, and another increase to quiet to unsettled from a recurrent HSS is expected for 11-12 September.

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X-Google-Language: ENGLISH,ASCII-7-bit
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From: devi <satyamsivam9030@gmail.com>
Newsgroups: rec.radio.amateur.space
Subject: WORLD BEST SEXY PICS
Date: Thu, 18 Aug 2011 00:54:15 -0700 (PDT)
Organization: http://groups.google.com
Lines: 34
Message-ID: <650c62aa-bc56-46cd-8dea-9456df020cf3@d8g2000prf.googlegroups.com>
NNTP-Posting-Host: 117.199.243.228
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NNTP-Posting-Date: Thu, 18 Aug 2011 07:56:01 +0000 (UTC)
Complaints-To: groups-abuse@google.com
Injection-Info: d8g2000prf.googlegroups.com; posting-host=117.199.243.228;
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Xref: g2news1.google.com rec.radio.amateur.space:537
```

FOR GOOD JOBS SITES TO YOU
http://goodjobssites.blogspot.com/

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                               FOR HOT PHOTO&VIDEOS
  HOT SOUTH ACTRESS IN DIFFERENT DRESSES
http://southactresstou.blogspot.com/2011/08/south-actress.html
            TRISHA HOT BATHROOM PHOTOS
http://hotactress-kalyani.blogspot.com/2011/08/trisha-hot.html
             ANUSHKA SHETTY HOT PHOTOS
http://hotactress-kalyani.blogspot.com/2011/08/anushka-hot.html
           KATRINA KAIF RARE PHOTOS
http://southactresstou.blogspot.com/2011/07/katrina-kaif-wallpapers.html
                           KAJAL LATEST ROMANTIC STILLS
http://southactresstou.blogspot.com/2011/07/kajal-agarwal-in-naperu-shiva.html
                   TAMANNA HOT SEXY PHOTOS & VIDEOS
http://southactresstou.blogspot.com/2011/07/tamanna-wallpapers.html
                     PRANITHA LATEST BEAUTIFUL PHOTOS
http://southactresstou.blogspot.com/2011/06/about-pranitha-praneetha-is-
beautiful.html

                  FOR ONLY HOT GUYS SEE THIS
                     PRIYAMANI HOT PHOTOS
http://hotactress-kalyani.blogspot.com/2011/08/priyamani-hot.html
            ARTHI CHABRIA HOT PHOTOS
http://hotactress-kalyani.blogspot.com/2011/08/aarti-chabria-hot.html
              DIYA MIRZA HOT PHOTOS
http://hotactress-kalyani.blogspot.com/2011/08/diya-mirza-hot.html
           KATRINA KAIF HOT PHOTOS
http://hotactress-kalyani.blogspot.com/2011/08/katrina-kaif-hot.html
            DEEPIKA PADUKONE HOT PHOTOS
http://hotactress-kalyani.blogspot.com/2011/08/deepika-padukone-hot.html
            NAMITHA HOT PHOTOS
http://hotactress-kalyani.blogspot.com/2011/08/namitha-hot-photos.html
         KAJAL AGARWAL HOT PHOTOS
http://hotactress-kalyani.blogspot.com/2011/08/kajal-agarwal-hot-photos.html


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X-Google-Thread: 10b9c8,d32b1d1d3754475f,start
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Path: g2news1.google.com!news2.google.com!npeer03.iad.highwinds-media.com!
news.highwinds-media.com!feed-me.highwinds-media.com!nx02.iad01.newshosting.com!
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From: SWPC.Webmaster@noaa.gov
Newsgroups:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.info
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Subject: Weekly Highlights of Solar and Geomagnetic Activity, 15 - 21 August 2011
Followup-To: rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space
Date: Tue, 23 Aug 2011 21:30:05 EDT
Organization: NOAA Space Weather Prediction Center
Lines: 65
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <20110824013001.4A83133C46@panix2.panix.com>
NNTP-Posting-Host: panix6.panix.com
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X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Wed, 24 Aug 2011 01:30:05 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Xref: g2news1.google.com rec.radio.amateur.misc:6507 rec.radio.amateur.dx:1076
rec.radio.amateur.space:538 rec.radio.info:2605
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:Product: Weekly Highlights and Forecasts
:Issued: 2011 Aug 23 2128 UTC
# Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center
# Product description and SWPC contact on the Web
# http://www.swpc.noaa.gov/weekly.html
#
#                Weekly Highlights and Forecasts
#
```

Highlights of Solar and Geomagnetic Activity
15 - 21 August 2011

Solar activity was at very low to low levels. Activity was at low levels on 15 August, with several C-class flares from Region 1271 (N16, L=059, class/area Ehc/290 on 18 August). Activity decreased to very low levels on 16 August. Activity increased to low levels on 17-18 August, with several C-class flares from both Region 1271 and Region 1272 (S21, L=054, class/area Dao/090 on 21 August). No flares were observed on 19 August. Acitivity increased to low levels during 20-21 August. The largest of these was a C3 flare from Region 1271.

No proton events were observed at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit was at normal to moderate levels during 15-16 August. Fluxes increased to normal to high levels on 17-18 August. Fluxes decreased to moderate levels during 19-20 August. Fluxes ranged from normal to moderate on 21 August.

Geomagnetic field activity was at predominantly quiet to unsettled levels with an isolated period of active to minor storm levels on 15 August due to a coronal hole high-speed stream (CH HSS). Activity decreased to quiet to unsettled levels, with isolated active levels during 16-17 August as the CH HSS subsided. Activity decreased to quiet levels during 18-19 August. Activity increased to quiet to unsettled levels during 20-21 August due to a CH HSS.

Forecast of Solar and Geomagnetic Activity
24 August - 19 September 2011

Solar activity is expected to be at very low to low with a chance for moderate levels during 24 August to 06 September until old Region 1263 (N18, L=315) departs. Activity is expected to decrease to very low to low levels for the rest of the period.

No proton events are expected at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to be at normal to moderate levels through 03 September. Fluxes are expected to increase to moderate to high levels during 04-09 September. Fluxes are expected to decrease to normal to moderate levels during 10-12 September. Fluxes are expected to increase to moderate to high levels during 13-14 September. Fluxes are expected to decrease to normal to moderate levels during 15-19 September.

Geomagnetic field activity is expected to be at quiet levels during 24-26 August. Acitivity is expected to be at quiet to unsettled levels on 27-28 August due to a weak recurrent CH HSS. Activity is expected be decrease to quiet levels during 29 August - 02 September. Activity is expected to increase during 03-05 September due to a recurrent CH HSS. Predominantly quiet levels are expected during 06-10 September. Activity is expected to increase to quiet to active levels during 11-12 September due to a recurrent CH HSS. Predominantly quiet levels are expected for the rest of the period.

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From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-233 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Wed, 24 Aug 2011 16:15:26 EDT

Organization: The Radio Amateur Satellite Corporation
Lines: 501
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <006701cc629a$8867ee60$9937cb20$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
X-Trace: reader1.panix.com 1314216926 7188 166.84.1.6 (24 Aug 2011 20:15:26 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Wed, 24 Aug 2011 20:15:26 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to   rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to   rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news1.google.com rec.radio.amateur.space:539 rec.radio.info:2606

AMSAT NEWS SERVICE
ANS-233

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* AMSAT Symposium Banquet Speaker Announced
* AMSAT Fox to Become Fox-1 and Fox-2
* Worked 5 in EM55 Award List Continues to Grow
* FO-29 Reaches 15th Birthday
* BPSK-1000 Test Files and Downlink SDR Passband Recording Available
* NASA Announces Next Opportunity for CubeSat Space Missions
* Time Running Out On The DARA Matching Gift Challenge
* Satellite Shorts From All Over
* ARISS Status - 15 August 2011

SB SAT @ AMSAT $ANS-233.01
AMSAT Symposium Banquet Speaker Announced

AMSAT News Service Bulletin 233.01
From AMSAT HQ SILVER SPRING, MD.

August 21, 2011
To All RADIO AMATEURS
BID: $ANS-233.01

The Symposium committee is pleased to announce that Lance Ginner, K6GSJ has agreed to be our banquet speaker. 2011 is the 50th anniversary of the first amateur satellite in space (OSCAR 1) and Lance was part of the team that developed that satellite.

We are also pleased to announce that Alan Bowker, WA6DNR has volunteered to take over the reins for the 2011 AMSAT Symposium in San Jose, CA. Alan was kind enough to step in for Herb Sullivan, K6QXB who had to resign this week for personal reasons.

The Symposium and Annual Meeting will be held Nov 4-6 at the Wyndham San Jose Hotel adjacent to the San Jose airport. See the AMSAT Web site for details, reservation form and additional information.

[ANS thanks Gould, WA4SXM, for the above information]

/EX

SB SAT @ AMSAT $ANS-233.02
AMSAT Fox to Become Fox-1 and Fox-2

AMSAT News Service Bulletin 233.02
From AMSAT HQ SILVER SPRING, MD.
August 21, 2011
To All RADIO AMATEURS
BID: $ANS-233.02

The AMSAT Fox CubeSat project is being split into a complementary pair of new CubeSats named Fox-1 and Fox-2.

Fox-1 will address the need to quickly develop and launch a replacement for the ailing AO-51. Fox-1 will include an FM transponder paired with a simple IHU for telemetry and control and fitted to a basic CubeSat space frame. This small and highly focused set of capabilities will significantly reduce the time needed for satellite development and construction allowing for a launch target in the second half of 2013.

The advanced technology, research and development work, started for the original Fox satellite, will be continued and rolled into Fox-2 including the software defined transponder. With Fox-1 addressing the immediate need for an AO-51 replacement, Fox-2 will instead be designed for a linear transponder mission. A linear transponder requires considerably more power so Fox-2 will also include an advanced power system and a cutting-edge space frame with deployable solar panels. Fox-2 will have a launch target in the 2015 time frame.

There are still opportunities for developers interested in working on these satellites especially in the areas of project management, systems engineering, thermal and mechanical design, CNC machining, circuit design, software development, system test and test equipment development.

If interested, please send email to Tony Monteiro, AA2TX@amsat.org

[ANS thanks AMSAT Vice-President of Engineering, Tony Monteiro, AA2TX for the above information]

/EX

SB SAT @ AMSAT $ANS-233.03
Worked 5 in EM55 Award List Continues to Grow

AMSAT News Service Bulletin 233.03
From AMSAT HQ SILVER SPRING, MD.
August 21, 2011
To All RADIO AMATEURS
BID: $ANS-233.03

In an effort to help increase interest in satellites, hams in the Memphis, Tennessee area have created a new award for working five (5) different hams via satellite in the EM55 grid.

You do not have to be in your home grid to count the stations worked. There are several satellite ready hams in EM55. Here is the current list of EM55 based satellite operators that we know of: WA4NVM, WA4HFN, WB4LHD, WA4OVO, KI4OTG, KD4NOQ, KJ4BIX, AJ4KF, N4MGT and W5KUB.

Send your log to WA4NVM or WA4HFN for checking, along with your current mailing address. The award is free and should any donations be sent, they will be forwarded to AMSAT along with your call and name.

This award will be effective 1 June 2011, therefore, all contacts must be on or after this date.

Here is list of the Worked 5 in EM55 awards:

WA4NVM - 1
WA4HFN - 2
KI4OTG - 3
K8YSE - 4
N9AMW - 5
KB0RZD - 6
W5KUB - 7
AJ5C - 8
CO6CBF - 9
WC7V - 10
KB1RVT - 11
AC0RA - 12
K4YYL - 13
KB1PVH - 14
N8RO - 15
KM9U - 16
K4FEG - 17
K7TRK - 18
KF7MYK - 19
KI6YAA - 20
NX9B - 21
KC0YBM - 22
N8MS - 23
W5PFG - 24

[ANS thanks Rick, WA4NVM for the above information]

/EX

SB SAT @ AMSAT $ANS-233.04
FO-29 Reaches 15th Birthday

AMSAT News Service Bulletin 233.04
From AMSAT HQ SILVER SPRING, MD.
August 21, 2011
To All RADIO AMATEURS
BID: $ANS-233.04

Japan's FO-29 satellite passed its 15th birthday on August 17th. Thanks to the careful power system management by the operating team the analog repeater continues to function well.

Recent telemetry received from FO-29 shows:
Operational continuous analog bus voltage: 15 ~ 16.5V
Solar generation current: 1050 ~ 1450mA
Battery Voltage: 16.0 ~ 17.5V
Charging current: 70m ~ 110mA
Transmit Power: 500 ~ 900mW
Assemblies Temperature: 0 ~ 11.5 �
Battery Temperature: 10.5 ~ 11.5 �

The linear transponder can be accessed on these frequencies:

Uplink: 146.000 - 145.900 MHz
Downlink: 435.800 - 435.900 MHz
Beacon: 435.795 MHz

The FO-29 Blog is on-line at:
http://blog.goo.ne.jp/fo-29
A google english translation of the blog can be found at:
http://tinyurl.com/FO29Blog

[ANS thanks T.Oguro, JG1KOE on behalf of the FO-29 Control Team for the above information]

/EX

SB SAT @ AMSAT $ANS-233.05
BPSK-1000 Test Files and Downlink SDR Passband Recording Available

AMSAT News Service Bulletin 233.05
From AMSAT HQ SILVER SPRING, MD.
August 21, 2011
To All RADIO AMATEURS
BID: $ANS-233.05

Even if your station does not have a 2 meter SSB receiver capable of copying the BPSK-1000 telemetry downlinked on 145.920 MHz there are recorded files allowing you to experiment with the ARISSatTLM software and Software Defined Radio (SDR) techniques in an off-line mode.

Download and install ARISSatTLM software from:
http://www.arissattlm.org
The ARISSatTLM Software Quick Start Guide remains available from the link on the AMSAT front page: http://www.amsat.org. This guide describes software installation, real-time signal reception, and playback of recorded BPSK-1000 telemetry files.

AMSAT-DK has made several recordings of the BPSK-1000 beacon with their OZ7SAT station. Start at:
http://www.amsat.dk/oz7sat/sched.php?gs�1kte&sat�ISSAT-1&statusAll
Then select a particular pass and download the recording. The files are about 65 MB each. Their system starts recording about 90 seconds before AOS and continues to a bit after LOS as calculated for their location in Copenhagen. These recordings can be played back using the ARISSatTLM software (Start Sound Card, Open WAV File).

Additionally, the Morse Code Decoder window in the ARISSatTLM software also works on HF. Tune in a CW signal using the Tuning Indicator window. The decoded CW will stream across the Morse Code Decoder Window.

Recording of Full ARISSat-1/KEDR Downlink Passband Available

Mark, N8MH recorded several passes of ARISSat-1 using the Funcube Dongle (FCD) Software Defined Receiver and the HDSDR program. The resulting file from a 10 min pass, recording the whole FCD passband, is about 250MB. Mark posted a file on the AMSAT FTP server at:
http://tinyurl.com/3d87h8l

This file can be played back using the HDSDR software which you can download from: http://www.hdsdr.de/ Mark's recording was made with NO correction for Doppler. About a minute into the recording (click to fast forward, back up, etc. you'll see signals--CW telemetry, the BPSK telemetry, the linear transponder, and the FM voice channel. Move around, change modes, listen, etc. You can back up to a previous spot on the recorded signal at will, just with a click.

Mark noted additional experimental and classroom opportunities, "If the bug really bites you, you can install Virtual Audio Cable (VAC) and have HDSDR use it as the output, and then configure a decoding program (like ARISSatTLM or MMSSTV) to decode telemetry and/or SSTV pics using VAC as the input. It's neat. You can print SSTV without tuning for Doppler on playback. Tuning for the BPSK telemetry will require adjustment for doppler shift."

Steve Belter, N9IP has put together an excellent tutorial on setting and using HDSDR especially with the FCD. Find it in the Yahoo group:
http://uk.groups.yahoo.com/group/funcube/files/User%20Guides/
You can read the on-line discussions using the FUNcube Dongle SDR by joining their yahoo group at:

http://uk.groups.yahoo.com/group/funcube/

Howard, G6LVB, creator of the FUNcube Dongle SDR wrote this week that he has released a new firmware version to correct a bug in the USB streaming code which produced clicking every few seconds for some users. The firmware image is here:
http://www.funcubedongle.com/MyImages/export18i.pro.bin

[ANS thanks the ARISSat-1/KEDR Team for the above information]

/EX

SB SAT @ AMSAT $ANS-233.06
NASA Announces Next Opportunity for CubeSat Space Missions

AMSAT News Service Bulletin 233.06
From AMSAT HQ SILVER SPRING, MD.
August 21, 2011
To All RADIO AMATEURS
BID: $ANS-233.06

NASA is seeking proposals for small satellite payloads to fly on rockets planned to launch between 2012 and 2014. These miniature spacecraft, known as CubeSats, could be auxiliary payload on previously planned missions.

CubeSats are a class of research spacecraft called nanosatellites. The cube-shaped satellites are approximately four inches long, have a volume of about one quart and weigh less than three pounds.

Proposed CubeSat investigations must be consistent with NASA's Strategic Plan and the Education Strategic Coordination Framework. The research should address aspects of science, exploration, technology development, education or operations.

Applicants must submit proposals electronically by 4:30 p.m. EST on Nov. 14, 2011. NASA will select the payloads by Jan. 30, 2012. Selection does not guarantee a launch opportunity. The selected spacecraft will be eligible for flight after final negotiations when a launch opportunity arises. NASA will not provide funding for the development of the small satellites.

NASA recently announced the results from the second round of the CubeSat Launch Initiative. From the first two launch initiatives, 32 payloads made the short-list for launch opportunities in 2011 and 2012. They are eligible for launch pending an appropriate opportunity and final negotiations. The satellites come from 18 states: Alabama, Alaska, California, Colorado, Hawaii, Kentucky, Louisiana, Maryland, Massachusetts, Michigan, Missouri, Montana, New Hampshire, New Mexico, New York, Pennsylvania, Utah and Virginia.

For additional information about NASA's CubeSat Launch Initiative

program, visit:
http://go.nasa.gov/puk9K2
http://go.nasa.gov/CubeSatOp

[ANS thanks NASA Education Express - Aug. 11, 2011 for the above information]

/EX

SB SAT @ AMSAT $ANS-233.07

Time Running Out On The DARA Matching Gift Challenge

AMSAT News Service Bulletin 233.07
From AMSAT HQ SILVER SPRING, MD.
August 21, 2011
To All RADIO AMATEURS
BID: $ANS-233.07

Donate to AMSAT and DARA will contribute matching funds. The Dayton Amateur Radio Association (DARA) fund raising challenge for AMSAT continues until September 1, 2011. DARA will match $1.00 for every $3.00 donated up to $5,000.00.

AMSAT kicked off the fundraising campaign at the Hamvention, where donations began count for the challenge. Please consider making a donation to AMSAT and have your effort multiplied. We appreciate DARA's support for AMSAT!

Your donation will support our "Getting AMSAT Back Into Space" campaign by providing needed funds for AMSAT Project Fox Cubesat which will provide a 2M to 70cm FM transponder matching the performance of AO-51.

+ On-line at the AMSAT Store:
  http://www.amsat-na.com/store/donation.php

+ You may click on the donation widget on our http://www.amsat.org web page.

+ You may call Martha at the AMSAT Office:
  From the US call toll free at: (888) 322-6728
  From all other locations call: (301) 589-6062
  and you can send a fax to: (301) 608-3410

+ You can send donations by postal mail to:
  AMSAT-NA
  850 Sligo Ave #600
  Silver Spring, MD, 20910

[ANS thanks AMSAT Headquarters for the above information]

/EX

SB SAT @ AMSAT $ANS-233.08
Satellite Shorts From All Over

AMSAT News Service Bulletin 233.08
From AMSAT HQ SILVER SPRING, MD.
August 21, 2011
To All RADIO AMATEURS
BID: $ANS-233.08

+ James French, W8ISS, Editor of the Weekly Satellite Report apologizes for problems with his e-mail over the past few weeks which may have prevented a few WSR bulletins from being transmitted by the list. James reports being able to e-mail the bulletin but problems with his ISP have appeared to prevent delivery to the remailer. This week's WSR-231 appears to have been successfully distributed.

+ AMSAT received the sad news that Mark Austin, KB1GVR, became a silent key on August 8. Graveside services were held on August 18 in Ellsworth, Maine. Mark's obituary can be read on-line at: http://tinyurl.com/3bcrkg4 (BangorDailyNews.com)

+ Dove OSCAR 17 video - January 22, 1990, saw the launch of the DOVE Amateur Radio satellite sponsored by AMSAT-Brazil and lead by Dr. Junior Torres DeCastro, PY2BJO. DOVE, an acronym for Digital Orbiting Voice Encoder, carried hardware capable of reproducing digitized speech, or controlling a Votrax speech synthesizer and transmitted AX.25 packet on 145.825 MHz. Watch the video, showing historic still pictures of DOVE: http://tinyurl.com/3o87x4f (Southgate ARC)

+ P-POD grows up: A 6U Canisterized Satellite Dispenser was displayed at the recent Small Satellites conference that will allow larger CubeSats to be deployed. Traditionally much smaller P-POD's (Poly Picosatellite Orbital Deployer) have been used to deploy CubeSats. The 6U CSD standard allows CubeSats up to 12 x 24 x 36 cm weighing 12Kg to be deployed and is shown in a video: http://tinyurl.com/3hjmrmf (Southgate ARC)

+ UniverseToday posted STS-135 Redux: Launch Tribute Video at:

http://www.universetoday.com/88183/sts-135-redux-launch-tribute-video/

+ AMSAT's Keeper of the Keps, Ray Hoad, WA5QGD reported this week that ARISSat-1 has been added to the KEP distribution. The Catalog # is 37772.

+ Christian Diemoz, IX1CKN/HB9EYT/KC2YXI, has published a history of SAREX experiments and operations on the DXCoffee.com website: http://www.dxcoffee.com/eng/2011/08/10/radio-space-beginning-sarex/

+ Video of the Atlas-V launch of the Juno mission to Jupiter has been

posted at:
http://www.universetoday.com/88018/rockin-with-the-juno-launch/

[ANS thanks everyone for the above information]

/EX

SB SAT @ AMSAT $ANS-233.09
ARISS Status - 15 August 2011

AMSAT News Service Bulletin 233.09
From AMSAT HQ SILVER SPRING, MD.
August 21, 2011
To All RADIO AMATEURS
BID: $ANS-233.09

1. Caribbean Youth Radio ISS

On Monday, August 8, children attending the Caribbean Youth Science Forum (CYSF), a regional event sponsored by the National Institute for Higher Education, Research, Science & Technology (NIHERST) and located in Port-of-Spain, Trinidad, West Indies, participated in an Amateur Radio on the International Space Station (ARISS) contact. Telebridge station LU8YY in Argentina provided the radio connection. The youth interacted with Astronaut Satoshi Furukawa, KE5DAW on the ISS, receiving answers to ten of their questions about space. The contact was integrated into the CYSF which included lectures, field trips, projects and debates that promoted science, technology and innovation. The forum hosted 250 students this year from 6 countries. Newsday reported on the contact:
http://www.newsday.co.tt/news/0,145262.html

2. Italian Camp Contacts ISS

A successful Amateur Radio on the International Space Station (ARISS) contact was held between on-orbit astronaut Ron Garan, KF5GPO and the Youth Hostel "La Foresta" in Perugia, Italy on Thursday, August 11 via station K6DUE in Greenbelt, Maryland. Garan fielded 18 questions posed to him by the children. The camp, organized by Panda Adventure in cooperation with ESA /ESRIN, focuses on space education and provides activities such as field researches, experiments, use of technical instruments, and games to explore the Earth and Sky.

3. ARISS-U.S. Reviews Proposals

The NASA Teaching From Space Office received over 100 inquiries about the U.S. proposal process for ARISS contacts that will be scheduled during the January - July 2012 time frame. Twenty-four schools met the July 15 deadline and submitted proposals. The U.S. Selection Committee is currently reviewing the proposals and will select U.S. schools by the end of the month. Another window of opportunity for U.S. schools and organizations to submit proposals will open later in the year.

4. EE Times - ARISSat Blog

The fourth and fifth entries in EE (Electronic Engineering) Times "Chips

in Space" blog covering amateur radio satellite ARISSat-1 have been posted. See:
http://eetimes.com/electronics-blogs/chips-in-space/4218536/Chips-in-Space--SuitSat-2-becomes-ARISSat-1--When-we-lost-our-suit---not-really-

http://eetimes.com/electronics-blogs/other/4218756/Chips-in-Space--Let-s-look-inside-ARISSat-1--part-1-

5. DXCoffee Article on Ham Radio in Space

The Italian site DXCoffee.com printed a story about the history of amateur radio in space. The article covers amateur radio used by Owen Garriott, the Mir station, SAREX and ARISS and includes recent contacts with Doug Wheelock and Paolo Nespoli. "Radio in space: in the Beginning there was SAREX," may be viewed here:
http://www.dxcoffee.com/eng/2011/08/10/radio-space-beginning-sarex/

[ANS thanks Carol, KB3LKI, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Lee McLamb, KU4OS

From -7619993130920427731
X-Google-Thread: a4a23d5f63,9d8151ce566b7769,start
X-Google-Attributes: gida4a23d5f63,public,usenet
X-Google-NewGroupId: yes

X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news1.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!novia!news-out.readnews.com!transit4.readnews.com!panix!
rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-237 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Thu, 25 Aug 2011 21:30:52 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 2094
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <003401cc638f$c352d300$49f87900$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1314322252 27608 166.84.1.6 (26 Aug 2011 01:30:52 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Fri, 26 Aug 2011 01:30:52 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to   rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to   rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news2.google.com rec.radio.amateur.space:565 rec.radio.info:2689

This report is organized into four (4) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - deorbited/returned satellites

SB SAT @ AMSAT W8ISS $WSR-237.S1
WSR 237 Part 1 08/25/2011

AMSAT NEWS SERVICE BULLETIN 237.S1
FROM AMSAT HQ SILVER SPRING, MD, August 25, 2011
TO ALL RADIO AMATEURS
BID: $WSR-237.S1

ARISSat-1 (Radioskaf-b) (Kedr)
Catalog number: 37772
Launch date: August 03, 2011 1843z

Launch site: International Space Station

Status: Operational

Callsign: RS01S

Current Mode(s):
Linear Transponder: U/v
Uplink: 435.758 to 435.742 MHz CW/LSB
Downlink: 145.922 to 145.938 MHz CW/USB

FM Telemetry/SSTV/Messages/ID:
Downlink: 145.950 MHz FM

Telemetry/Beacon:
Downlink: 145.939 MHz CW1
             145.919 MHz CW2
             145.920 MHz 1k BPSK USB
             145.920 MHz 400b BPSK USB

Official Webpage:http://www.amsat.org/amsat-new/ARISSat/ARISSat.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/informal_detail.php?serialnum=89
[08112011]
=====
SO-67 SumbandilaSat
Catalog Number: 35870
Launch Date: September 17, 2009 1555z
Launch site: Baikonur, Kazakhstan

Status: By schedule

Callsign: ZS0SUM

Uplink: 145.875MHz FM tone 233.6 Hz
Downlink: 435.345MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

For more information about SO-67:
http://www.amsatsa.org.za/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=88
[02092011]
=====
DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008 0354z

Launch site: Satish Dhawan Space Centre, India

Status: Operational
Current Mode: Science Mode - Beacon ONLY

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink: 435.530 to 435.570 MHz

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=68
[02092011]
=====
VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05, 2005 0444z
Launch site: Satish Dhawan Space Centre, India

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.9360 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=30

To know what transponder is switched on please listen for the beacon that is active. Each transponder has a different beacon.
[02092011]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004 0745z

Launch site: Baikonur, Kazakhstan

Status: Semi-operational - IHU crash each eclipse

Current Mode(s):
Voice repeater: V/u
Uplink: 145.880 MHz FM
Downlink: 435.150 MHz FM

Telemetry: Recovery efforts
Downlink: 435.150MHz 9k6

Analog voice downlink:	435.300 MHz FM
	435.150 MHz FM
	2401.200 Mhz FM
Analog voice uplink:	145.860 MHZ FM
	145.880 MHz USB
	145.880 MHz FM
	145.920 MHz FM
	145.920 MHz FM - 67 Hz PL tone burst
	1268.705 MHz FM
Digital Downlinks:	435.150 MHz FM 38k4 PBP, 1 watt output
	435.150 MHz FM 9k6 Pacsat Broadcast Protocol
	2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:	145.860 MHz FM 9k6 Pacsat Broadcast Protocol
	1268.703 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon:	435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=19
[06162011]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002 1700z
Launch site: Baikonur, Kazakhstan

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz. The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10 minute timer.
[02092011]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Operational
Current Mode: V/u (Mode JA)

Voice/CW (Mode JA)
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
145.870 MHz FM
145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage:
http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:

```
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's
CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/
fo29cwts.htm
[06232011]
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993 0140z
Launch site: Kourou, French Guiana

Status: Operational

Current Mode: V/u

Uplink:   145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[02092011]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974
Launch site: Vandenberg AFB, California, USA

Status: Operational

Current Mode: Alternating between Mode A and B every 24 hours

Uplink:   145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink:  29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons:   29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
[02092011]
=====
```

INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998 0640z (ZARYA module)
Launch sites: Baikonur, Kazakhstan
Kourou, French Guiana
Uchinoura Space Center, Japan
Kennedy Space Center, Titusville, Florida, USA

Status: Operational

Current Active Modes: FM Repeater - OFF
Voice - V/v
BBS - OFF
APRS - OFF
SSTV - OFF

Expedition 28 Crew (May - September 2011):
Commander: Andrey Borisenko
Flight Engineer: Ron Garan KF5GPO
Flight Engineer: Alexander Samokutyaev
Flight Engineer: Satoshi Furukawa
Flight Engineer: Sergey Volkov KE5DAW
Flight Engineer: Micheal Fossum KF5AQG

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS

Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[07282011]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-237.S2
WSR 237 Part 2 08/25/2011

AMSAT NEWS SERVICE BULLETIN 237.S2
FROM AMSAT HQ SILVER SPRING, MD, August 25, 2011
TO ALL RADIO AMATEURS
BID: $WSR-237.S2

O/OREOS
Catalog Number: 37224
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: On Orbit

Uplink:
Downlink: 437.035 MHZ AX.25

Beacon:

Callsign:

URL: http://www.ooreos.org/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=146
[02092011]
=====
Rax-1 Radio Aurora Explorer
Catalog Number: 37223
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: On Orbit

Uplink:

Downlink: 437.505 MHz 9k6 GMSK

Beacon:

Callsign: RAX-1

URL: http://rax.engin.umich.edu/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=165
[02092011]
=====
FO-69 Fastrac-1 Sara Lily
Catalog Number: 37227
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: Operational

Uplink 1: 145.980 MHz 1k2 baud
Uplink 2: 145.825 MHz 1k2 baud
Downlink: 437.345 MHz 1k2 and 8k6 baud

Beacon: 437.435 MHz 1k2 AX.25

Callsign: Fast1

URL: http://fastrac.ae.utexas.edu/index.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=83
[07052011]
=====
FO-70 Fastrac-2 Emma
Catalog Number: 37380
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: Operational

Uplink 1: 435.025 MHz 1k2 baud
Uplink 2: 437.435 MHz 9k6 baud
Downlink: 145.825 MHz

Beacon: 145.825 MHz 1k2 AX.25

Callsign: Fast2

URL: http://fastrac.ae.utexas.edu/index.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=84
[07052011]

=====
StudSat
Catalog Number: 36796
Launch Date: July 12, 2010 0352z
Launch site: Satish Dhawan Space Centre, India

Status: On Orbit

Uplink: 437.505MHz, 9600bps FSK
Downlink: 437.505MHz, 9600bps FSK
Beacon : 437.505MHz,   20bps ASK

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=164
[02092011]
=====
TIsat-1
Catalog Number: 36799
Launch Date: July 12, 2010 0352z
Launch site: Satish Dhawan Space Centre, India

Status: On orbit

Callsign: HB9DE

Uplink: 145.980MHz FM, AFSK
Downlink: 437.305MHz FM, AFSK
Beacon: 437.305MHz CW

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=118
[02092011]
=====
HO-68 HOPE-1 (CAS-1)(XW-1)
Catalog Number: 36122
Launch Date: December 15, 2009 0231z
Launch site: Taiyuan Space Center, PRC

Status: Beacon only

Callsign:
Broadcast: BJ1SA-11
BBS: BJ1SA-12

Uplinks: 145.8250 MHz FM, PL 67.0 Hz.
           145.9250 - 145.9750 MHz SSB/CW
           145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
           435.7650 - 435.7150 MHz SSB/CW
           435.6750 MHz AFSK 1200 BPS

Beacon: 435.7900 MHz CW

Mode and Antenna Polarization:
V: LHCP 2.0dBi max
U: RHCP 3.0dBi max

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=108

For more information about XW-1 (CAS-1):
http://
[08112011]
=====
SwissCube
Catalog Number: 35932
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Callsign: HB9EG

Beacon(100mw): 437.5050MHz CW
Beacon(1w):   437.5050MHz FSK 1k2bps

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=109
[02092011]
=====
UWE-2
Catalog Number: 35934
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: In Orbit

Beacon(500mw): 437.3850 MHz AFSK 1k2bps
437.3850 MHz FSK 9k6bps

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=110
[02092011]
=====
ITUpsAT1
Catalog Number: 35935
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Beacon(100mw): 437.325MHz CW
Beacon(1w): 437.325MHz 19k2bps

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=113

```
[02092011]
=====
BEESAT
Catalog Number: 35933
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Callsign: DP0BEE

Beacon(100mw): 436.000MHz CW
Beacon(500mw): 436.000MHz GMSK 4k8bps
Beacon(500mw): 436.000MHz GMSK 9k6bp
[02092011]
=====
CP-6
Catalog Number: 35003
Launch Date: May 19, 2009 2355z
Launch site: Wallops Island, Virginia, USA

Status: Operational

Downlink: 437.365 MHz 1k2 AFSK

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=121
[02092011]
=====
HAWKSAT 1
Catalog number: 35004
Launch Date: May 19, 2009 2355z
Launch site: Wallops Island, Virginia, USA

Status: operational

Downlink: 437.345 MHz ?

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=105
[02092011]
=====
Pharmasat
Catalog Number: 35002
Launch Date: May 19, 2009 2355z
Launch site: Wallops Island, Virginia, USA

Status: Operational

Downlink: 437.465 MHz 1k2 AFSK

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=94
```

```
[02092011]
=====
ANUSAT
Catalog Number: 34808
Launch Date: April 20, 2009 0115z
Launch Site: Satish Dhawan Space Centre, India

Status: ?

Downlink:  435.000 MHz
Uplink:    145.800 MHz

Telemetry: 137.400 MHz
[02092011]
=====
SOHLA-1 (ASTRO TECH.)
Catalog Number: 33496
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational

Proposed Frequencies and Modes:
Downlink: 437.505 MHz AFSK/CW
Beacon:   437.505 MHz AFSK/CW

Callsign:

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=101
[02092011]
=====
KAGAYAKI (Solan Co.)
Catalog Number: 33495
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: In Orbit

Downlink: 437.375 MHZ    FSK9k6/CW
Beacon:   437.375 MHz    FSK9k6/CW

IARU coordination status page:

AMSAT-NA webpage:

[02092011]
=====
STARS (Kagawa Univ.) (Twin Satellites)
Catalog Number: 33498
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan
```

Status: Operational ?

Downlinks: 437.485 MHz FM/CW
           437.465 MHz FM/CW
Beacons: 437.305 MHz FM/CW
           437.275 MHz FM/CW

Callsigns: JR5YBN
           JR5YBO

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=99

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=121&retURL
=/satellites/status.php
[02092011]
=====
KKS-1 (Tokyo MCIT)
Catalog Number: 33499
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational

Downlink: 437.455 MHz AFSK/CW
Beacon: 437.385 MHz AFSK/CW

Callsign: JQ1YYY

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=107

AMSAT-NA webapge:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=120&retURL
=/satellites/status.php
[20092011]
=====
PRISM (Tokyo Univ.)
Catalog Number: 33493
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational ?

Downlink: 437.425 MHz AFSK/GMSK/CW
Beacon: 437.250 MHz AFSK/GMSK/CW

Callsign: JQ1YCX

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=97

```
AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=119&retURL
=/satellites/status.php
[02092011]
=====
RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number: 32953
Launch Date: May 23, 2008 1520z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational

Curent Modes: Telemetry
              Audio
              Images

Downlinks: 435.315 MHz
           435.215 MHz

AMSAT-NA website:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=115&ret
URL=/satellites/status.php

Official website:
http://www.npopm.com/?cid=leoca&caid=43
[02092011]
=====
CanX-2
Catalog number: 32790
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational in range of ground station only

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web
page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=46
[02092011]
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Downlink: 437.425 MHz 1k2 baud packet

For the latest project status update please visit the AAUSAT-II web
```

```
page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=60
[02092011]
=====
CO-65 CUTE-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational ?

Downlink:  437.475 MHz 9k6 Packet
Uplink:   1267.600 Mhz

Telemetry Beacon:
Downlink: 437.2750 MHz CW

For the latest project status update please visit the Cute-1.7+APD II
web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=78

Command Station blog website:
http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=112&retURL
=/satellites/status.php
[07052011]
=====
Compass-1
Catalog number: 32787
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Current Mode: dependant on last received command

Uplink:   145.980 MHz FM
Downlink: 437.275 Mhz CW
          437.405 MHz Packet

For the latest project status update please visit the Compass 1 web
page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=52
```

```
AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=114&retURL
=/satellites/status.php
[06162011]
=====
CO-66 Seeds II
Catalog number:
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Downlink: 437.485 MHz

Callsign: JQ1YGU

For the latest project status update please visit the Seeds 2 web
page: http://cubesat.aero.cst.nihon-u.ac.jp/english/seeds_2_e.html

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=36

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=113&retURL
=/satellites/status.php
[02092011]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007 0702z
Launch site: Baikonur, Kazakhstan

Status: Intermittent

Current Mode:  /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon:    435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=94&retURL=
/satellites/status.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=72
[02092011]
=====
CP3
Catalog Number: 31129
```

Launch Date: April 17,2007 0702z
Launch site: Baikonur, Kazakhstan

Status: Operational

Current Mode: /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=74
[02092011]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005 0652z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon: 437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/xivpicte.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=37
[02092011]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: ?????

Current Mode: /u

Beacon: 436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=96&retURL=/satellites/status.php

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[02092011]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004 0745z
Launch site: Baikonur, Kazakhstan

Status: Semi-operational - IHU crash each eclipse

Current Mode(s):
Voice repeater: V/u
Uplink: 145.880 MHz FM
Downlink: 435.150 MHz FM

Telemetry: Recovery efforts
Downlink: 435.150MHz 9k6

```
Analog voice downlink:     435.300 MHz FM
                           435.150 MHz FM
                          2401.200 Mhz FM
Analog voice uplink:       145.860 MHZ FM
                           145.880 MHz USB
                           145.880 MHz FM
                           145.920 MHz FM
                           145.920 MHz FM - 67 Hz PL tone burst
                          1268.700 MHz FM
Digital Downlinks:         435.150 MHz FM 38k4 PBP, 1 watt output
                           435.150 MHz FM 9k6 Pacsat Broadcast Protocol
                          2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:            145.860 MHz FM 9k6 Pacsat Broadcast Protocol
                          1268.708 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon:                    435.150 MHz
```

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=19
[06162011]
=====

QuakeSat
Catalog Number: 27845
Launch Date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Telemetry only

Current Mode: 9600 baud data packet

Mode U packet
Downlink: 436.675 MHz 9k6 BPS

Quakesat webpage:
http://www.quakefinder.com/services/quakesat-ssite/
[02252011]
=====
CO-55 Cute-1.7+APD II
Catalog Number: 27844
Launch date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational

Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=69&retURL
=/satellites/status.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=78
[02092011]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001 0240z
Launch site: Kodiak Launch Complex, Alaska, USA

Status: Telemetry only

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

```
aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[02092011]
=====
RS-22 RADIO SPORT 22 (MOZHAYETS 4)
Catalog number: 27939
Launch Date: September 27, 2003 0612z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational - 70cm cw only

Current Mode:  /u

CW Beacon - 435.352 MHz
            145.818 MHz

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=76&retURL
=/satellites/status.php
[02092011]
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990
Launch site: Kourou, French Guiana

Status: CW Beacon only

Uplinks:          145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink:      437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[02092011]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984
Launch site: Vandenburg AFB, California, USA

Status: Operational ?

Current Mode:  /v
```

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon: 435.025 MHz
Mode-S Beacon: 2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[07052011]

=====

INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998 0640z (ZARYA module)
Launch sites: Baikonur, Kazakhstan
Kourou, French Guiana
Uchinoura Space Center, Japan
Kennedy Space Center, Titusville, Florida, USA

Status: Operational

Current Active Modes: FM Repeater - OFF
Voice - V/v
BBS - OFF
APRS - OFF
SSTV - OFF

Expedition 28 Crew (May - September 2011):

Commander:	Andrey Borisenko	
Flight Engineer:	Ron Garan	KF5GPO
Flight Engineer:	Alexander Samokutyaev	
Flight Engineer:	Satoshi Furukawa	
Flight Engineer:	Sergey Volkov	KE5DAW
Flight Engineer:	Micheal Fossum	KF5AQG

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)

Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[07282011]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-237.S3
WSR 237 Part 3 08/25/2011

AMSAT NEWS SERVICE BULLETIN 237.S3
FROM AMSAT HQ SILVER SPRING, MD, August 25, 2011
TO ALL RADIO AMATEURS
BID: $WSR-237.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

NANOSAIL-D
Catalog Number:
Ejection Date: January 17, 2011

Status: On orbit

Downlink: 437.270 MHz AX.25

URL: http://nanosaild.engr.scu.edu/dashboard.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=115
[01272011]

```
=====
CP4
Catalog Number: 31132
Launch Date: April 17, 2007

Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon:    437.325 MHz CW

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=79
[09062010]
=====
LIBERTAD-1
Catalog Number: 31128
Launch Date: April 17, 2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink:   145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=76
[09062010]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: Non-Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder:  145.825 Mhz FM

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=51
[09062010]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005
```

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
2407.250

Official Website: http://www.ncube.no

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=24
[09062010]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 MHz FM 67Hz CTCSS
Voice Downlink: 2401.835 MHz FM
Packet Up/Downlink: 437.250 MHz 9k6 packet
Packet Downlink 2401.835 MHz 38k4 packet

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=54
[09062010]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non-Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=53
[09062010]
=====
CANX-1
Catalog Number: 27847
Launch Date: June 30, 2003

Status: Non-Operational

Downlink: 437.8800 MHz AFSK 1k2bps
[06052009]
=====
DTUSAT
Catalog Number: 27842
Launch Date: June 30, 2003

```
Status: Non-Operational

Current Mode: 2k4 AFSK Packet last reported

Downlink: 437.475MHz

Officail webpage: http://dtusat1.dtusat.dtu.dk/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=101&retURL
=satellites/all_oscars.php
[02212009]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink:   435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)

Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Telemetry only

Uplinks:   145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink:  437.325 MHz

Broadcast callsign: MYSAT3-11
BBS:                MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial land and weather imaging payloads offers FM and FSK
Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as
a collaborative effort between the Malaysian government and Surrey
Satellite Technology Ltd.
[03302009]
=====
NO-45 SAPPHIRE
Catalog number: 26932
```

```
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink:   145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS:                SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink:   145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
V-band:   145.840 -  145.990 MHz CW/LSB
```

U-band: 435.550 - 435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks

S2-band: 2401.225 - 2401.475 MHz CW/USB
K-band: 24048.010 - 24048.060 MHz CW/USB
Beacon: 2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)

BEACON	General Beacon(GB)	Middle Beacon(MB)	Engineering Beacon(EB)
2 m	none	145.898 MHz	none
70cm	435.438 MHz	435.588 MHz	435.838 MHz
13cm(1)	2400.188 MHz	2400.338 MHz	2400.588 MHz
13cm(2)	2401.173 MHz	2401.323 MHz	2401.573 MHz
3cm	10450.975 MHz	10451.125 MHz	10451.375 MHz
1.5cm	24047.885 MHz	24048.035 MHz	24048.285 MHz

[07162007]

=====
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]

=====
UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]

=====
SO-35 SUNSAT
Catalog Number: 25636
Launch date:February 23, 1999

```
Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater:         436.250 MHz

Uplinks: Mode B Repeater:  145.825 MHz
Mode J Digipeater:         145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Non-Operational

Current Modes:
Telemetry : /u

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
          145.890 FM
```

145.930 FM
1269.700 FM
1269.800 FM
1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://asri.technion.ac.il/techsat/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=14&retURL
=/satellites/status.php
[07172010]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink: 145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
MO-30 UNAMSAT-2
Catalog Number: 24305
Launch Date: September 5, 1996

Status: Non-operational

Downlink: 435.1380 MHz AFSK 1200 BPS
Downlink: 435.2060 MHz AFSK 1200 BPS
Uplink: 145.8150 MHz AFSK 1200 BPS
Uplink: 145.8350 MHz AFSK 1200 BPS
Uplink: 145.8550 MHz AFSK 1200 BPS
Uplink: 145.8750 MHz AFSK 1200 BPS
[06042009]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Non-operational

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11

```
BBS callsign:       POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012009]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
AO-24 ARSENE
Catalog Number: 22654
Launch Date: May 13, 1993

Status: Non-operational

Uplink:    435.0625 MHz FM 1k2bps AFSK
           435.1125 MHz FM 1k2bps AFSK
           435.1375 MHz FM 1k2bps AFSK
Downlink:  145.9750 MHz FM 1k2bps AFSK
          2446.5025 MHz FM 1k2bps AFSK
```

```
Beacon:    2446.4700 MHz CW

Broadcast callsign:
BBS:
[12162009]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HL01-11
BBS: HL01-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
```

```
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
[05012006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: non-operational

Current Mode:  V/u

Uplink:         145.900 MHz FM 1200-baud Manchester FSK (reserved)
                145.920 MHz FM VOICE
                145.940 MHz FM 1200-baud Manchester FSK (reserved)
                145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink:       437.026 MHz USB VOICE
                (1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
```

```
   PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[07242009]
=====
UO-15 UoSAT-4
Catalog Number: 20438
Launch Date: January 22, 1990

Status: Non-operational

Uplink: ?
Downlink: 435.1250MHz (?)
          435.1200MHz (?)
[06042009]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
```

Launch Date: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon: 145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.8500 - 145.9000 MHz SSB/CW
Downlink 29.4000 - 29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink: 29.4500 - 29.5500 MHz SSB/CW
Beacons: 29.450 MHz
          435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW

```
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon 1:  29.352 MHz (intermittent)
Beacon 2:  29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink:     21.260 to 21.300 MHz CW/USB
Downlink:  145.860 to 145.900 MHz CW/USB

Beacon:    145.860 MHz

Robot:     145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink:   21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon:   29.408 MHz
```

Robot: 29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-237.S4
WSR 237 Part 4 08/25/2011

AMSAT NEWS SERVICE BULLETIN 237.S4
FROM AMSAT HQ SILVER SPRING, MD, August 25, 2011
TO ALL RADIO AMATEURS
BID: $WSR-237.S4

THE FOLLOWING SATELLITES HAVE RE-ENTERED OR HAVE BEEN RETURNED SAFELY:

CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Re-entered
Re-entered: October 25, 2009

Uplink: 1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=56
[09062010]
=====
BEVO-1 (DRAGONSAT-1)
Catalog Number: 35690
Launch Date: May 19, 2009

Status: Re-entered
Re-entered:

Downlink: 437.325 MHz 9k6 GMSK
          437.325 MHz CW 20wpm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=117
[07312009]
=====
AggieSat2 (DRAGONSAT-2)
Catalog Number: 35690
Launch Date: May 19, 2009

```
Status: Re-entered
Re-entered:

Downlink: 436.250 MHz 9k6 FHSS
[11112009]
=====
Pollux
Catalog Number: 35693
Launch Date: July 31, 2009

Status: Re-entered
Re-entered:

Callsign: POLLUX-1

Downlink: 145.825MHz 1k2 AX.25

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=139
[09062010]
=====
Castor (ANDE-2)
Catalog Number: 35694
Launch Date: July 31, 2009

Status: Re-entered
Re-entered:

Callsign: KD4HBO-1

Downlink: 145.825 MHz 1k2 AX.25

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=144
[09062010]
=====
NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: July 28, 2008

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=59
[01012009]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink:      145.825 Mhz FM APRS AX25
APRS Uplink:        145.825 MHz FM APRS AX25
Voice/PSK31 Uplink:  28.120 MHz

Packet to Voice ID: RAFT
[06112007]
=====
GENESAT-1
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Re-Entered
Re-entered date: August 8, 2010

Current Mode: /u

Callsign: KE7EGC

Telemetry Beacon Downlink: 437.0695 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[08082010]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Re-Entered
Re-entered: June 18, 2008

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon:             437.2750 MHz CW

Callsign: JR8YJT
[01012009]
=====
```

SO-43 Starshine 3
Catalog Number: 26929
Launch Date: September 30, 2001

Status: Re-Entered
Re-entered: January 21, 2003

Beacon: 145.825Mhz
[02212009]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at} amsat.org
NNNN
/EX

```
From 6481017961070591328
X-Google-Thread: 10e8ad,1393612cd2374699,start
X-Google-NewGroupId: yes
X-Google-Thread: 10b9c8,1393612cd2374699,start
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,gida4a23d5f63,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII
Path: g2news2.google.com!news1.google.com!newsfeed2.dallas1.level3.net!
news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-240 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sat, 27 Aug 2011 21:25:03 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 443
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <001601cc6521$4b3cbe60$e1b63b20$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
X-Trace: reader1.panix.com 1314494703 13120 166.84.1.6 (28 Aug 2011 01:25:03 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 28 Aug 2011 01:25:03 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news2.google.com rec.radio.amateur.space:566 rec.radio.info:2694
```

AMSAT NEWS SERVICE
ANS-240

ANS is a free, weekly, news and information service of AMSAT North

America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:

* AO-51 Operations Update
* Time Running Out On The DARA Matching Gift Challenge
* New ARISSat-1 FM Operating Mode
* Second Call For Papers for the 2011 AMSAT Space Symposium
* Kentucky Space Consortium Announces CubeSat Workshop
* Near-Earth Asteroid Fly-by Receiving Opportunity
* UK Students Develop Cosmic Radiation Experiment
* FCC Issues Experimental License For Imaging Tests on 2M & 70cm
* Satellite Shorts From All Over

SB SAT @ AMSAT $ANS-240.01
AO-51 Operations Update

AMSAT News Service Bulletin 240.01
>From AMSAT HQ SILVER SPRING, MD.
August 28, 2011
To All RADIO AMATEURS
BID: $ANS-240.01

AO-51 Control Station, Mark Hammond, N8MH wrote a status update on this satellite. Mark noted that since the failure of the first cell on the six-cell battery the ground controllers have been limited to simple commands for basic configurations.

Mark said that ground control stations have evolved basic control and management techniques of AO-51 which allow them to set power levels manually, change uplinks/downlinks. Additional features such as telemetry collection/storage, and the BBS are not functional at this time. If the satellite resets during eclipse these basic functions must be restored manually by a ground station.

Ground stations have discovered there is a second cell in the battery showing problems. Mark noted, "We think it will be the next cell to go with the probable result that our limited manual mode of operation probably will no longer be an option, and the mission might be considered over."

AO-51 is currently transmitting on:

Downlink: 435.150 MHz FM (LHCP) and using a
Uplink: 145.880 MHz FM

The power level is just under 1 watt (about 980 mW). Controllers expect to keep this configuration until further notice.

Keep up with the latest AO-51 Control Team News on-line at:
http://www.amsat.org/amsat-new/echo/CTNews.php

The current scenario of AO-51 is one reason we need to keep moving AMSAT and satellite development/building/launching moving forward!! We have learned a lot already with ARISSat-1, and FOX looks promising. AMSAT needs the support of its users now more than ever!

[ANS thanks AO-51 Control Station, Mark Hammond, N8MH for the above information]

/EX

SB SAT @ AMSAT $ANS-240.02
Time Running Out On The DARA Matching Gift Challenge

AMSAT News Service Bulletin 240.02
>From AMSAT HQ SILVER SPRING, MD.
August 28, 2011
To All RADIO AMATEURS
BID: $ANS-240.02

Donate to AMSAT and DARA will contribute matching funds. The Dayton Amateur Radio Association (DARA) fund raising challenge for AMSAT continues until September 1, 2011. DARA will match $1.00 for every $3.00 donated up to $5,000.

Please consider making a donation to AMSAT and have your effort multiplied. We appreciate DARA's support for AMSAT! Your donation will support our "Getting AMSAT Back Into Space" campaign by providing needed funds for AMSAT Project Fox-1 Cubesats which will feature a 2M to 70cm FM transponder matching the performance of AO-51.

You can donate several ways:

+ On-line at the AMSAT Store:
   http://www.amsat-na.com/store/donation.php

+ You may click on the donation widget on our http://www.amsat.org
   web page.

+ You may call Martha at the AMSAT Office:
   From the US call toll free at: (888) 322-6728
   From all other locations call: (301) 589-6062
   and you can send a fax to: (301) 608-3410

+ You can send donations by postal mail to:
   AMSAT-NA

850 Sligo Ave #600
Silver Spring, MD, 20910

[ANS thanks AMSAT Headquarters for the above information]

/EX

SB SAT @ AMSAT $ANS-240.03
New ARISSat-1 FM Operating Mode

AMSAT News Service Bulletin 240.03
>From AMSAT HQ SILVER SPRING, MD.
August 28, 2011
To All RADIO AMATEURS
BID: $ANS-240.03

ARISSat-1/KEDR Project Manager Gould Smith, WA4SXM reported on this week's status of the satellite. Gould noted that while the battery performed as expected during the first week of operation. Lower voltages during eclipse began to show up in the telemetry on 10 Aug 2011. The voltages during eclipse have continued to decline causing the satellite to reset and occasionally go into Emergency power mode.

Gould explained the changes noted on the 145.950 MHz FM downlink that were heard this week:

+ A Male voice for the spoken telemetry means that the female voice files on the SD card could not be read.

+ If no greetings are transmitted this means that these message stored on the SD card could not be read.

+ A short Mission-Elapsed-Time (minutes to hours) has been noted while the satellite was still in a long period of sunlight indicating that satellite must have reset during sunlight.

Reports received on later orbits indicated that the female voiced telemetry and the greetings messages had returned to normal operation once the solar panels had recharged the battery.

After each reset the satellite MET (Mission Elapsed Timer) goes to 000, waits during the 15 minute TX delay, the power management software checks the current voltage and power values and determines what power mode to operate the satellite. The power mode is re-determined at fixed intervals, especially during illuminated periods to provide the most transmitted signals while protecting the battery.

High power mode provides continuous transmission when sunlight is charging the battery. If the satellite has entered low power mode it will transmit for 40 seconds and remain idle for 2 minutes when in eclipse, or when the battery voltage is low.

The ARISSat-1 team is closely monitoring the situation and is pleased with how well the power management software is controlling the battery usage to prolong the lifetime of the battery and the satellite as much as possible.

Please send your BPSK telemetry into the server arissattlm.org.

[ANS thanks ARISSat-1/KEDR Project Manager Gould Smith, WA4SXM for the above information]

/EX

SB SAT @ AMSAT $ANS-240.04
Second Call For Papers for the 2011 AMSAT Space Symposium

AMSAT News Service Bulletin 240.04
>From AMSAT HQ SILVER SPRING, MD.
August 28, 2011
To All RADIO AMATEURS
BID: $ANS-240.04

This is the second call for papers for the 2011 AMSAT Space Symposium to be held Friday, November 4th through Sunday, November 6th at the Wyndham San Jose Hotel, San Jose, California.

Proposals for papers, symposium presentations and poster presentations are invited on any topic of interest to the amateur satellite community.

We request a tentative title of your presentation as soon as possible, with final copy submitted by October 1, 2011 for inclusion in the printed proceedings.

Abstracts and papers should be sent to Dan Schultz, N8FGV, at:
n8fgv@amsat.org.

[ANS thanks Dan Schultz, N8FGV for the above information]

/EX

SB SAT @ AMSAT $ANS-240.05
Kentucky Space Consortium Announces CubeSat Workshop

AMSAT News Service Bulletin 240.05
>From AMSAT HQ SILVER SPRING, MD.
August 28, 2011
To All RADIO AMATEURS
BID: $ANS-240.05

Kentucky Space, a consortium of Kentucky-based colleges and universities and Make Magazine announced the First annual hackerSPACE Workshop focused on CubeSat class satellites to take place in Lexington, Kentucky, November 11-12.

While learning how to design and build your own fully functional orbital spacecraft, you will work with a team of space professionals and engineers led by Radio Amateur Bob Twiggs, W7RMT. Dr. Twiggs is Emeritus professor and former director of the Space Systems Development Lab at Stanford University, now professor at Morehead State University and also with Kentucky Space. He is credited with inventing both the CubeSat and FemtoSat spacecraft, which are now helping to revolutionize space, putting it within reach of more people than ever.

At this hands-on workshop you�ll learn about the design and assembly of small satellites, what kinds of systems are common to all spacecrafts, possible satellite 'apps', the kinds of tests your craft will have to pass before it can be flown, raising funds to support your space project and possible launch opportunities.

Further details at: http://www.kentuckyspace.com/

[ANS thanks Kentucky Space for the above information]

/EX

SB SAT @ AMSAT $ANS-240.06
Near-Earth Asteroid Fly-by Receiving Opportunity

AMSAT News Service Bulletin 240.06
>From AMSAT HQ SILVER SPRING, MD.
August 28, 2011
To All RADIO AMATEURS
BID: $ANS-240.06

The 400 meter diameter near-Earth asteroid 2005 YU55 will be making a 0.85 lunar distance flyby of Earth on November 8. Michael Busch at the UCLA Department of Earth and Space Sciences notes this may an opportunity for amateur satellite operators to observe the fly-by.

UCLA will be conducting an extensive campaign of radar observations with the Arecibo Observatory, the Deep Space Network Goldstone facility, and the Green Bank Telescope and the Very Long Baseline Array.

Because YU55 will be so close to Earth, its radar echo will be detectable with even small antennas (~1 m^2). YU55's echo will be a slowly drifting signal with a bandwidth of ~1 Hz within a few kHz of 2380 MHz or 8560 MHz.

This will present amateur radio operators an opportunity to receive the radar reflections off of the asteroid because of the big dish, big signals originating from Arecibo and Goldstone.

On November 8, 2011, 19:15 - 19:30 UTC, Arecibo will be transmitting a continuous wave tuned to put the asteroid's echo at a constant 2380.000000 MHz at the Green Bank Telescope. Observers elsewhere on Earth will see the echo within 2 kHz of 2380 MHz, Doppler-shifted by the Earth's rotation. It will be slowly drifting in frequency and have a bandwidth of ~0.6 Hz.

On November 9, 2011, 01:30 - 02:00 UTC, the Goldstone Deep Space Network facility will be be transmitting a continuous wave tuned to put the asteroid's echo a constant 8560.000000 MHz at a second antenna at the Goldstone site. Other observers may see the echo shifted by as much as 6 kHz, and it will have a bandwidth of ~2 Hz.

Initial information can be found on-line at:
http://echo.jpl.nasa.gov/asteroids/2005YU55/2005YU55_planning.html
More details will be announced as the fly-by date approaches.

[ANS thanks Michael Busch, UCLA Department of Earth and Space Sciences for the above information]

/EX

SB SAT @ AMSAT $ANS-240.07
UK Students Develop Cosmic Radiation Experiment

AMSAT News Service Bulletin 240.07
>From AMSAT HQ SILVER SPRING, MD.
August 28, 2011
To All RADIO AMATEURS
BID: $ANS-240.07

The Times newspaper reported on an experiment developed by students in Canterbury that will soon fly in space. They have also teamed up with students in Uganda.

Students at the Simon Langton Grammar school, led by Head of Physics, Dr. Becky Parker are developing a Cosmic Radiation experiment (LUCID) that will be part of the TechDemoSat-1 satellite. It is based around a Cosmic Ray detector chip from CERN and the school raised �60,000 to fund the experiment.

The school say that Dr Obote College in Uganda will soon be working with one of the LUCID cosmic ray detectors and Ugandan students will play an equal part with Langton students in collecting and analysing data on cosmic ray activity as part of an international experiment.

As part of the project Dr. Becky Parker is looking for money to install LUCID equipment in schools across the Britsh Isles and Europe providing ground-based data in a way that will involve hundreds of thousands of students.

TechDemoSat-1 (TDS-1) is developed by Surrey Satellite Technology Ltd

(SSTL). The TechDemoSat will function as an �in-orbit test facility�

for the UK Space Agency once launched, qualifying onboard payloads as well as UK satellite software.

At around one meter cubed and a mass of 150kg, TechDemoSat (TDS-1) will carry no less than eight payloads. Additional features proposed for this mission include:

+ An enhanced on board computer giving greater ability to conduct software experiments remotely.

+ A new battery charge regulator and newly qualified cell types on two of the solar panels.

+ A propulsion system will see a smaller tank size trialled with a new high performance resistojet thruster.

+ New sun sensors in the Altitude and Orbital Control System.

+ Standard CANbus interface.

More details can be found on-line at:
http://tinyurl.com/3nvp8zn (sstl.co.uk)

[ANS thanks the Southgate ARC site for the above information]

/EX

SB SAT @ AMSAT $ANS-240.08
FCC Issues Experimental License For Imaging Tests on 2M & 70cm

AMSAT News Service Bulletin 240.08
>From AMSAT HQ SILVER SPRING, MD.
August 28, 2011
To All RADIO AMATEURS
BID: $ANS-240.08

Amateur Radio Newsline Report 1776, dated August 26, 2011, carried a report that the FCC has issued a new experimental license with the call letters WF2XSP to one James Cutler to operate in 144 to 146 MHz and 437 to 439 MHz spectrum. This, for testing an image processing algorithm that will be used on a future space flight mobile, Low Earth Orbit operations ranging from 450 to 820 kilometers in altitude.

The FCC announcement made no other reference to the nature of Cutler's experimentation nor why he requested to do so in the amateur 2 meter and 70 centimeter bands. QRZ.com lists six radio amateurs by the name of James Cutler, but its unknown if any of them are the same James Cutler who has obtained the Experimental License from the FCC.

[ANS thanks Amateur Radio Newsline Report for the above information]

/EX

SB SAT @ AMSAT $ANS-240.09
Satellite Shorts From All Over

AMSAT News Service Bulletin 240.09
>From AMSAT HQ SILVER SPRING, MD.
August 28, 2011
To All RADIO AMATEURS
BID: $ANS-240.09

+ Bryce, KB1LQC has posted a video showing reception of the ARISSat-1 amateur radio satellite using a handheld arrow yagi antenna: http://tinyurl.com/42fbrqe (Southgate ARC)

+ Mario Lorenz, DL5MLO from AMSAT-DL gave a presentation, in English, at the Hacker Space Program track at the Chaos Communication Camp 2011 which ran from August 10-14 at Finowfurt near Berlin, Germany. A video of Mario's presentation, "From OSCAR 1 to Mars and Beyond", can be seen at: http://tinyurl.com/445w7re

+ If a tower falls and no one is near does it still make a sound? Find out when you view a video of the demolition of the 126 meter tower at the Berom�nster national transmission center. The 216 meter tower at this site remains standing as part of protected monument status.

+ NASA STEREO spacecraft captured a billion-tons cloud of solar plasma from a Coronal Mass Ejection event as it engulfed the Earth: http://www.nasa.gov/mission_pages/stereo/news/solarstorm-tracking.html

+ We have software defined radios ... are you ready for a software defined antenna tuner (of sorts)? A series capacitor, parallel inductor T-network radio frequency impedance match written in JAVA that runs on a web page can be tuned at: http://fermi.la.asu.edu/w9cf/tuner/tuner.html

+ NPR has posted a video, "The Astronaut's Guide To Life In Space" at: http://vimeo.com/27738605

+ The dates for the next Hudson Valley Satcom nets are September 1, September 15, and September 29 at 8:00 PM Eastern Daylight Time (UTC - 4). You can tune in via the 146.970 MHz Mt. Beacon repeater, PL 100.0 or via EchoLink on the N2EYH-L node. More info is available at: http://www.hvsatcom.org (Stu, WA2BSS)

[ANS thanks everyone for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the

President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office. And with that please keep in mind the two ham radio brothers called William and Wayne. Will was a CW operator and Wayne was a phone operator. Hams noticed they always went around together. If William went to the CW band, Wayne would be in the shack tuning the phone band. One ham noticed they were so inseparable. It was easy to explain, because where there's a Will there's a Wayne!

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM

```
From -2115703614579461675
X-Google-Thread: 107ada,88a7b95f858cdad7,start
X-Google-NewGroupId: yes
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X-Google-NewGroupId: yes
X-Google-Thread: 10e8ad,88a7b95f858cdad7,start
X-Google-NewGroupId: yes
X-Google-Thread: 10b9c8,88a7b95f858cdad7,start
X-Google-NewGroupId: yes
X-Google-Attributes:
gida3e752f117,gid7221ecd0f7,gid8f86f75953,gida4a23d5f63,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!news.glorb.com!news-out.readnews.com!
transit3.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: SWPC.Webmaster@noaa.gov
Newsgroups:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.info
Subject: Weekly Highlights of Solar and Geomagnetic Activity, 22 - 28 August 2011
Followup-To: rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space
Date: Tue, 30 Aug 2011 17:30:06 EDT
Organization: NOAA Space Weather Prediction Center
Lines: 56
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <20110830213001.E286433C8C@panix2.panix.com>
NNTP-Posting-Host: panix6.panix.com
X-Trace: reader1.panix.com 1314739807 21758 166.84.1.6 (30 Aug 2011 21:30:07 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Tue, 30 Aug 2011 21:30:07 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
```

```
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Xref: g2news1.google.com rec.radio.amateur.misc:6531 rec.radio.amateur.dx:1082
rec.radio.amateur.space:542 rec.radio.info:2624

:Product: Weekly Highlights and Forecasts
:Issued: 2011 Aug 30 1656 UTC
# Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center
# Product description and SWPC contact on the Web
# http://www.swpc.noaa.gov/weekly.html
#
#                 Weekly Highlights and Forecasts
#
```

Highlights of Solar and Geomagnetic Activity
22 - 28 August 2011

Solar activity was at very low to low levels. Region 1271 (N16, L=059, class/area Ehc/290 on 18 August) produced four low-level C-class flares during the period. All other regions on the disk were relatively stable and quiet. There were no Earth-directed CMEs observed during the period.

No proton events were observed at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit was at normal to moderate levels during the entire period.

Geomagnetic field activity was at quiet to unsettled levels on 22 - 25 August due to a weak coronal hole high speed stream (CH HSS). Activity decreased to mostly quiet levels for the remainder of the period.

Forecast of Solar and Geomagnetic Activity
31 August - 26 September 2011

Solar activity is expected to be very low to low throughout the forecast period.

No proton events are expected at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to be at normal to moderate levels from 31 August - 03 September. The flux is expected to increase to moderate to high levels during 04 - 09 September due to CH HSS effects. Normal to moderate flux levels are expected during 10 - 11 September. A return to moderate to high flux levels is expected on 13 - 14 September following a second CH HSS. Normal to moderate levels are expected from 15 - 25 September. Moderate to high flux levels are expected on 26 September due to effects of another CH HSS.

Geomagnetic field activity is expected to be at mostly quiet levels during 31 August - 02 September. Activity is expected to increase to quiet to unsettled levels, with isolated active periods, during 03 - 05 September as a CH HSS disturbs the field. Quiet levels are forecast for 06 - 10 September. An increase to quiet to unsettled levels is expected during 11 - 12 September due to another CH HSS. Predominately quiet levels are expected for the remainder of the period with the exception of 18 - 19 September and 24 - 25 September, when quiet to unsettled levels are expected due to recurrent CH HSS effects.

```
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X-Google-Thread: fc2a5,36dfc1b22cc9389c,start
X-Google-NewGroupId: yes
X-Google-Thread: 107ada,36dfc1b22cc9389c,start
X-Google-NewGroupId: yes
X-Google-Thread: 10bf43,36dfc1b22cc9389c,start
X-Google-NewGroupId: yes
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X-Google-NewGroupId: yes
X-Google-Thread: 10b9c8,36dfc1b22cc9389c,start
X-Google-NewGroupId: yes
X-Google-Attributes:
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6,gid8f86f75953,gida4a23d5f63,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news3.google.com!news1.google.com!news.glorb.com!news-
out.readnews.com!transit3.readnews.com!panix!panix2.panix.com!not-for-mail
From: rram@panix.com (rec.radio.amateur.moderated Admin)
Newsgroups:
rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.rad
io.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amat
eur.space,rec.radio.info
Subject: Crossposting Permitted to rec.radio.amateur.moderated
Supersedes: <radio/ham-radio/moderated/crossposting-1-1312178401@panix.com>
Followup-To: poster
Date: 1 Sep 2011 02:00:02 -0400
Organization: rec.radio.amateur.moderated Moderation Team
Lines: 47
Approved: RRI Admin <rec-radio-info-request@panix.com>
Distribution: world
Expires: 04 Oct 2011 02:00:00 -0000
Message-ID: <radio/ham-radio/moderated/crossposting-1-1314856800@panix.com>
Reply-To: rec-radio-amateur-moderated-request@panix.com
(rec.radio.amateur.moderated Admin)
NNTP-Posting-Host: panix2.panix.com
X-Trace: reader1.panix.com 1314856802 27887 166.84.1.2 (1 Sep 2011 06:00:02 GMT)
```

X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Thu, 1 Sep 2011 06:00:02 +0000 (UTC)
Summary: Short reminder for unmoderated newsgroups that crossposting is permitted
Keywords: FAQ, ham, amateur, radio, moderated, unmoderated, crossposting, permitted
Xref: g2news1.google.com rec.radio.amateur.antenna:22476 rec.radio.amateur.dx:1086 rec.radio.amateur.equipment:2658 rec.radio.amateur.homebrew:4625 rec.radio.amateur.misc:6539 rec.radio.amateur.policy:32336 rec.radio.amateur.space:543 rec.radio.info:2628

Posted-By: auto-faq 3.3.2 beta (PGPMoose V2.0, Perl 5.005)
Archive-name: radio/ham-radio/moderated/crossposting
Revision: 1.1 2009/04/12 19:42:04
Posting-Frequency: posted monthly
URL: http://www.panix.com/~rram/usenet/rram/index.html

Changes followed by "|".

After a 30-day public discussion and feedback period to gauge reader opinions in March of 2009:

http://groups.google.com/group/rec.radio.amateur.moderated/browse_thread/thread/d7d337db35f23326

the rec.radio.amateur.moderated Moderation Team has decided to consider amending its charter, and permit limited simultaneous crossposting to rec.radio.amateur.moderated and one other unmoderated amateur-radio-related discussion newsgroup. We are currently trying this on a temporary basis (90 days, through early July 2009), and adopt it permanently if successful.

Approved rec.radio.amateur.* newsgroups are those that are currently listed in the latest version of the "List of Big Eight Newsgroups" which is crossposted monthly to news.announce.newgroups, news.groups, and news.lists.misc.

Approved alt.radio.amateur.* and alt.ham-radio.* newsgroups are those that have been created consistent with the suggestions in "So You Want to Create an Alt Newsgroup" at:

  http://www.faqs.org/faqs/alt-creation-guide/

Approved regional hierarchy newsgroups are those that contain either "radio.amateur" or "ham-radio" in their names, including uk.radio.amateur and aus.radio.amateur.misc.

We will make every reasonable effort to keep our list of approved newsgroups up-to-date. In case we have overlooked any, and a submission is rejected in error as a result, the rejected submitter can E-mail us at our administrative contact address (in the signature at the bottom of this article, and the default Reply-To for the rejection message) requesting that it be added, and that the article be approved. We may still choose to reject articles crossposted to any alt.* newsgroup with an inappropriate name, including obscene language, embedded name-calling, or encouragement of unlawful conduct.

Please direct any comments, questions, or criticisms to rec-radio-amateur-moderated-request@panix.com.

```
From -1877703958606034684
X-Google-Thread: 10e8ad,af04ff57557c220d,start
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X-Google-Attributes: gid8f86f75953,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!npeer01.iad.highwinds-media.com!
news.highwinds-media.com!feed-me.highwinds-media.com!nx02.iad01.newshosting.com!
newshosting.com!news-out.readnews.com!transit3.readnews.com!panix!rri.panix.com!
robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-247 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sat, 3 Sep 2011 21:07:02 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 526
Approved: RRI Admin <rec-radio-info-request@panix.com>
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Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1315098422 22042 166.84.1.6 (4 Sep 2011 01:07:02 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 4 Sep 2011 01:07:02 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
x-cr-hashedpuzzle: AEQB AcNL AzR1 BEGg BW02 CTlF DpWz D1oM EYhC E3Az FjT7 GyJQ
HqY8 ISsw Kr13
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7;{A49A2A4E-AD48-414E-
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2011 01:06:50
GMT;QQBOAFMALQAyADQANwAgAEEATQBTAEEAVAAgAE4AZQB3AHMAIABTAGUAcgB2AGkAYwBlACAAVwBlAG
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x-cr-puzzleid: {A49A2A4E-AD48-414E-AF83-43054AA9FFD7}
Xref: g2news1.google.com rec.radio.amateur.space:544 rec.radio.info:2637

AMSAT NEWS SERVICE
ANS-247

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:

* Reminder: September 15 Deadline to Return Board of Directors Ballots
* ARISSat-1 LIVE Telemetry Web Page Now Operational
* Merritt Island High School ARISS Contact is Successful
* University of Alabama Students Test CubeSat Via Balloon Launch
* SDR-Radio Software Adds Support for AMSAT-UK FUNcube Dongle SDR
* Two Satellite Presentations Scheduled for California in September
* Satellite Shorts From All Over
* IARU Region 1 Meeting Addresses Interference to 2-Meter Satellite Band
* ESA Successfully Repressurizes Satellite With Solid State Stored Gas
* EduSat Mission to Test PocketQub Satellite Orbital Deployment System

SB SAT @ AMSAT $ANS-247.01
Reminder: September 15 Deadline to Return Board of Directors Ballots

AMSAT News Service Bulletin 247.01
>From AMSAT HQ SILVER SPRING, MD.
September 4, 2011
To All RADIO AMATEURS
BID: $ANS-247.01

Ballots for the AMSAT-North America 2011 Board of Directors election have been mailed to all members. To have your vote count you must return your ballot by mail to:

AMSAT-NA
850 Sligo Ave #600
Silver Spring, MD, 20910

Ballots must arrive at the AMSAT Office by the close of business, September 15, 2011.

Four director's terms expire this year:

Barry Baines, WD4ASW
Alan Biddle, WA4SCA
Drew Glasbrenner, KO4MA

Tony Monteiro, AA2TX

Seven nominations have been received for the open seats. Listed alphabetically they are:

Barry Baines, WD4ASW
Alan Biddle, WA4SCA
Steve Coy, K8UD
Drew Glasbrenner, KO4MA
Mark Hammond, N8MH
Tony Monteiro, AA2TX
Patrick E. Stoddard, WD9EWK

Select no more than four candidates on your ballot. The four candidates receiving the highest number of votes will be seated as full Board members for two year terms. The two candidates receiving the next highest number of votes will be seated as alternate Board members for one year terms.

[ANS thanks the AMSAT Office the above information]

/EX

SB SAT @ AMSAT $ANS-247.02
ARISSat-1 LIVE Telemetry Web Page Now Operational

AMSAT News Service Bulletin 247.02
>From AMSAT HQ SILVER SPRING, MD.
September 4, 2011
To All RADIO AMATEURS
BID: $ANS-247.02

ARISSatTLM software author, Douglas Quagliana, KA2UPW/5 says a new ARISSat-1/KEDR telemetry web page is now available at:

http://www.arissattlm.org/live

The new telemetry page is intended to be viewed on a computer (or large screen computing device). It shows all of the telemetry values that you would see if you were running ARISSatTLM at your station.

The data on this page is updated once a minute when ground stations are within range of ARISSat-1/KEDR and forwarding live telemetry received via ARISSatTLM. Since it depends on stations forwarding telemetry over the Internet, there will occasionally be periods without any updates.

The original ARISSat-1/KEDR telemetry page is still up and running. (see: http://www.arissattlm.org/mobile). The difference is that the "mobile" page is designed to be viewed on a cellphone or other small screen computing device.

Both pages are updated at the same time from the same telemetry. The "live" page just shows more telemetry.

Please keep forwarding in your telemetry over the Internet. Also, if you received any telemetry from ARISSat-1, even if you are forwarding, please email the .CSV file(s) to: [telemetry at arissattlm dot org]. The .CSV files are in the "Telemetry" folder which is in the ARISSatTLM folder on your desktop.

[ANS thanks Douglas Quagliana, KA2UPW/5 for the above information]

/EX

SB SAT @ AMSAT $ANS-247.03
Merritt Island High School ARISS Contact is Successful

AMSAT News Service Bulletin 247.03
>From AMSAT HQ SILVER SPRING, MD.
September 4, 2011
To All RADIO AMATEURS
BID: $ANS-247.03

Now up to 665 ARISS contacts from the ISS to school contacts the International Space Station school contact with Merritt Island High School, Merritt Island, Florida on August 30 added another success.

The contact was a direct link between NA1SS and WB2IHB. "NA1SS, NA1SS, NA1SS, this is WB2IHB in Merritt Island, Florida." Then, a crackle. "I read you loud and clear," said Japanese Astronaut Satoshi Furukawa. Fourteen-year-old Brandon Arena was first in line to ask Furukawa a question. So began the contact. The Florida Today newspaper reported on the event and the enthusiastic student response at:
http://www.floridatoday.com/apps/pbcs.dll/article?AID=2011108310317

The link above includes a video, and photos along with a report of the event that was well received by the students and their parents and teachers.

Merritt Island High is a public high school with a student population of 1500. Sixty of these students are members of the Da Vinci Academy of Aerospace Technology, where these engineering-minded students take part in the "Project Lead the Way" engineering curriculum. Fifteen students were selected from the Academy to engage the astronaut in a question and answer session as the ISS passed over the school.

ARISS is an international educational outreach program partnering the participating space agencies, NASA, Russian Space Agency, ESA, CNES, JAXA, and CSA, with the AMSAT and IARU organizations from participating countries.

ARISS offers an opportunity for students to experience the excitement of Amateur Radio by talking directly with crewmembers on-board the International Space Station. Teachers, parents and communities see, first hand, how Amateur Radio and crewmembers on ISS can energize youngsters' interest in science, technology, and learning.

Further information on the ARISS program is available on the website http://www.ariss.org/ (graciously hosted by the Radio Amateurs of Canada).

[ANS thanks ARISS PR Chairman David Jordan, AA4KN, and Florida Today for the above information]

/EX

SB SAT @ AMSAT $ANS-247.04

University of Alabama Students Test CubeSat Via Balloon Launch

AMSAT News Service Bulletin 247.04
>From AMSAT HQ SILVER SPRING, MD.
September 4, 2011
To All RADIO AMATEURS
BID: $ANS-247.04

The Space Hardware Club at the University of Alabama in Huntsville is student organization. They conceptualize, design, build, test and fly flight hardware for high altitude balloons, the CubeSat platform, and the CanSat competition.

UAHuntsville's Space Hardware Club's 15th BalloonSat mission was completed on August 26. Balloon and payloads were launched from the National Space Science and Technology Center (NSSTC) in Huntsville, Alabama. Payloads included a CubeSat radio test, a 900 MHz radio test, dual APRS tracking package on 2m and 70cm, and neutron detector collecting data for NSSTC.

Their YouTube videos of the launch can be viewed on-line at:
http://tinyurl.com/3dkeqqt (southgatearc.org)

Additional information about the UAHuntsville Space Hardware Club can be found at: http://sites.google.com/site/uahshc/

[ANS thanks Southgate ARC News and the UAHuntsville Space Hardware Club for the above information]

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SB SAT @ AMSAT $ANS-247.05

SDR-Radio Software Adds Support for AMSAT-UK FUNcube Dongle SDR

AMSAT News Service Bulletin 247.05
>From AMSAT HQ SILVER SPRING, MD.

September 4, 2011
To All RADIO AMATEURS
BID: $ANS-247.05

AMSAT-UK's FUNcube is an educational single cubesat project with the goal of enthusing and educating young people about radio, space, physics and electronics. FUNcube will carry a UHF to VHF linear transponder that will have up to 1 watt and which can be used by Radio Amateurs worldwide for SSB and CW communications. Measuring just 10 x 10 x 10 cm, and with a mass of less than 1kg, it will be the smallest ever satellite to carry a linear transponder

It will support the educational Science, Technology, Engineering and Math (STEM) initiatives and provide an additional resource for the GB4FUN Mobile Communications Centre.

The target audience consists of primary and secondary school pupils and FUNcube will feature a 145 MHz telemetry beacon that will provide a strong signal for the pupils to receive.

A simple SDR receiver board (FUNcube Dongle) has been developed to support this mission by providing a simple radio interface to the classroom. The FUNcube Dongle connects to the USB port of a laptop to display telemetry and messages in an interesting way for students.

But, even before FUNcube has been launched amateur satellite operators have discovered that the 64 MHz to 1,700 MHz coverage of this Software Defined Radio receiver can be used for most amateur, along with some weather and commercial satellite reception.

This week, Simon Brown, GD4ELI/HB9DRV, announced he has enhanced his popular SDR-RADIO software to provide support for the AMSAT-UK FUNcube dongle software defined radio. The SDR-RADIO.com software has been upgraded to provide full support for the FUNcube dongle including satellite tracking, Doppler compensation and data for external rotator software via DDE. This free software can be downloaded from
http://www.sdr-radio.com/

For more information on the FUNcube project please visit:
http://www.funcube.org.uk

For the latest news on the FUNcube SDR dongle visit:
http://www.funcubedongle.com/

You can join the FUNcube Yahoo Group at:
http://uk.groups.yahoo.com/group/FUNcube/

[ANS thanks AMSAT-UK, Southgate ARC News, and Simon Brown for the above information]

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SB SAT @ AMSAT $ANS-247.06

Two Satellite Presentations Scheduled for California in September

AMSAT News Service Bulletin 247.06
>From AMSAT HQ SILVER SPRING, MD.
September 4, 2011
To All RADIO AMATEURS
BID: $ANS-247.06

Clint Bradford, K6LCS will have two "How to Work the Amateur FM Satellites With Your HT" presentations in September.

Sonoma County Radio Amateurs General Meeting

Wednesday, September 7, 2011 - 7:00PM
Luther Burbank Art & Garden Center
2050 Yulupa Avenue, Santa Rosa CA 95405

AMSAT area coordinator Clint Bradford, K6LCS, will be presenting his "Working Amateur Satellites With Your HT" session at the September 7, 2011 meeting of the Sonoma County Radio Amateurs. ALL are welcome to attend.

"The Sonoma County club has been serving their region for more than SEVENTY years," writes Clint. "I am really looking forward to meeting the group!"

Clint's in Southern California - but has prepared a custom slideshow for the Sonoma County club, which will be displayed live at the meeting, as Skype handles the session's audio. "I'd much rather be there in person - but this arrangement has worked quite successfully in the past. We'll have a great time!"

Attendees should visit Clint's Web site ahead of time at ... http://www.work-sat.com ... and download the four-page .pdf tutorial. Clint welcomes pre-presentation questions - call him at 909-241-7666 (cell) or send email to clint@clintbradford.com .

ARRL Southwestern Division Convention

Saturday, September 10, 2011 - Noon
Marriott Torrance South Bay: 3635 Fashion Way, Torrance, CA 90503

Clint says, "We have tentative passes of SO-50, ARISSat-1, AO-27, and AO-51 throughout the day Saturday - Watch for the exact times at the check-in table! Clint will be presenting his "Working Satellites With Your HT" at Noon in Suites 9-11.

Additional Presentation Resources

Clint Bradford, K6LCS, has given his "How to Work the FM Ham Satellites With Your HT" presentation more than 60 times the past three years - and knows how to motivate and educate his audiences. He has just created a Web page that describes how others can make THEIR presentations informative, effective, and - most importantly - FUN for audiences ...

http://web.me.com/clintbradford/Work-Sat/Presentations.html

Just written this week, but Clint will be including "tips and techniques" from professional presenters - such as Bill Gates, Steve Jobs, and others - as this Web page grows in the next few weeks.

[ANS thanks Clint Bradford, K6LCS for the above information]

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SB SAT @ AMSAT $ANS-247.07
Satellite Shorts From All Over

AMSAT News Service Bulletin 247.07
>From AMSAT HQ SILVER SPRING, MD.
September 4, 2011
To All RADIO AMATEURS
BID: $ANS-247.07

+ This is a reminder to those who use Twitter about a service called @twisst, which you can use to notify you when the International Space Station is going to be passing overhead in your region. It pulls your location from your profile, and then calculates good viewing times for you to see the station. All you have to do is follow the Twitter account: http://twitter.com/#!/twisst

+ A nice photograph of northwestern Europe at night, as seen from the International Space Station on August 10, 2011 can be viewed at: http://www.universetoday.com/wp-content/uploads/2011/08/from-space.jpg The landscape is dotted with clusters of lights from individual urban areas; visible are London, Paris, Brussels, Milan and Amsterdam, which stand out due to their large light "footprints," while the English Channel is completely dark. To give a sense of scale, the centers of the London and Paris metropolitan areas are approximately 340 kilometers (210 miles) from each other.

+ Read the story at http://tinyurl.com/3etozte (UniverseToday.com) about why the Large Hadron Collider will not destroy the Earth and you'll have something to talk about on 75M if the other guy gets stuck on the weather and the state of his gallbladder.

+ Outgoing space shuttle Program Manager John Shannon has received an assignment to carry out an independent assessment of competing options for eventual manned missions beyond low-Earth orbit. Read the story at: http://spaceflightnow.com/news/n1108/29shannon/

+ EE Times - ARISSat Blog now has the sixth and seventh entries in EE (Electronic Engineering) Times "Chips in Space" blog about ARISSat-1:

Chips in Space: Let's look inside ARISSat-1 (part 2)
http://tinyurl.com/4y2tn8g (eetimes.com)
Chips in Space: Let's look inside ARISSat-1 (Part 3)
http://tinyurl.com/3hffv3v (eetimes.com)

- Edge Of Space Sciences will be flying three high altitude balloons for NOAA on Saturday September 10th at 6:50 AM MDT (UTC - 6) out of Windsor, Colorado, USA. Payload weight of 20+ Lbs flying NOAA Aircore's. EOSS flight numbers 168, 169 and 170 will be a mix of two 3000 and one 2000 gram helium balloons. Mission details can be found on their web page: http://www.eoss.org/flight/index.html

- Steer the kids over to http://spaceplace.nasa.gov/ where they can learn about astronomy, the solar system, galaxies, the Earth at a fun level. Hundreds of interactive pages let them play scientific video games, print pictures to color, visit space image galleries, make creative scientifc projects at home.

[ANS thanks everyone for the above information]

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SB SAT @ AMSAT $ANS-247.08

IARU Region 1 Meeting Addresses Interference to 2-Meter Satellite Band

AMSAT News Service Bulletin 247.08
>From AMSAT HQ SILVER SPRING, MD.
September 4, 2011
To All RADIO AMATEURS
BID: $ANS-247.08

The International Amateur Radio Union (IARU) Region 1 meeting in Sun City, South Africa this week noted that several Italian repeaters are currently causing on-going interference to satellite uplinks and downlinks in the Amateur Satellite Service segment from 145.8-146.0 MHz.

While the IARU R1 decision stressed the importance of the satellite service they also noted that coordination is needed to continue to introduce new modes. The IARU R1 C5 committee report recommended that the D-STAR repeaters/nodes that continue operation in contradiction to the IARU-R1 band plans be disconnected from the international D_STAR network.

The IARU-R1 Sun City conference SC11_C5_16 committee meeting notes say that initial methods listed below were passed unanimously:

1. Write the repeater operator to remove [their operating frequency] out of the satellite segment.
2. Inform the trust server operator of the IARU bandplan breach made by the use of the repeater.
3. Inform the government about the repeater and request them to remove the repeater.

[ANS thanks Trevor, M5AKA for the above information]

/EX

SB SAT @ AMSAT $ANS-247.09
ESA Successfully Repressurizes Satellite With Solid State Stored Gas

AMSAT News Service Bulletin 247.09
>From AMSAT HQ SILVER SPRING, MD.
September 4, 2011
To All RADIO AMATEURS
BID: $ANS-247.09

The European Space Agency reported that its August 16 test to re-pressurize gas tanks aboard their Proba-2 spacecraft were successful. Proba-2 was launched on 2 November 2009. Less than a cubic metre in volume, it carries a total of 17 new technologies and four science payloads focused on the Sun and space weather.

According to the ESA, Proba-2 uses a 'resistojet' engine to maintain the microsatellite's orbit at 600 km altitude. This experimental engine runs on xenon gas heated before ejection to provide added thrust.

Laurens van Vliet of Dutch research organisation TNO, which developed the technology explained, "What makes this repressurisation unique is that the added gas was not stored in a pressurised state but produced from a solid material at room temperature, the first of four 'cool-gas generators' on Proba-2. Nitrogen, like xenon, is an inert, non-reactive gas, so the resistojet can work just as well with a xenon-nitrogen mixture."

The bottle-shaped cool-gas generators are filled with a rigid solid material that, once triggered, produces more than 250 times its own volume in pure nitrogen gas. The other three generators will be used later in Proba-2's orbital lifetime.

The original story was published by SpaceDaily.com on their web:
http://tinyurl.com/3rfg4fj (SpaceDaily.com)

[ANS thanks SpaceDaily.com for the above information]

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SB SAT @ AMSAT $ANS-247.10
EduSat Mission to Test PocketQub Satellite Orbital Deployment System

AMSAT News Service Bulletin 247.10
>From AMSAT HQ SILVER SPRING, MD.
September 4, 2011
To All RADIO AMATEURS

BID: $ANS-247.10

The PocketQub is a new satellite standard that was proposed in 2009 by Professor Robert Twiggs, W7RMT at Kentucky's Morehead State University (MSU) for a satellite even smaller than the CubeSat. PocketQubs are 5 cm cubes and can literally fit in a pocket. The PocketQub leverages the CubeSat standard and the revolution in the miniaturization of electronics. PocketQubs will ultimately have a wide range of applications including: Network Nodes, Sensor Systems, Satellite Constellations, Inexpensive, Redundant, and Spatially Organized Earth Remote Sensing Platforms.

Morehead State University's Space Science Center (SSC) and Kentucky Space collaborated with the University of Rome Sapienza Aerospace Engineering School on a series of student-driven educational satellite projects. The goal was for students to develop, build and fly a series of four satellites (EduSat, UNISAT-5, UNISAT-6, and UNISAT-7). These satellites were built in Rome and in Morehead and controlled from MSU by students using the big dish antenna and by Italian students using satellite ground assets in Europe.

EduSat was launched in August, 2011 by a Russian Dnepr rocket from a silo. During its first 30-days on orbit, EduSat will test an orbital deployer designed to release the PocketQub, also called a femto-class satellite. While the femtosats will not be released on the first mission, the deployment system that will ultimately deploy them will be tested. A follow-on mission in 2012 (UNISAT-5) will deploy four femto-class satellites when they are ejected from the UNISAT-5 "mothership" at apogee.

The original story was published by SpaceDaily.com on their web:
http://tinyurl.com/3mgrbkw (SpaceDaily.com)

[ANS thanks SpaceDaily.com for the above information]

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In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office. And with that, please keep in mind the ham while visiting his friend at the hospital pointed to a machine with all sorts of tubes, knobs, lights, and beepers and said, "Wow, I sure wouldn't like being hooked up to that!" The nurse answered, "Me neither, that's the floor cleaning machine!"

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM

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From 5217101465256763104
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X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!postnews.google.com!r8g2000prd.googlegroups.com!not-for-
mail
From: devi <satyamsivam9030@gmail.com>
Newsgroups: rec.radio.amateur.space
Subject: KATRINA KAIF RARE PHOTOS
Date: Sat, 3 Sep 2011 19:53:15 -0700 (PDT)
Organization: http://groups.google.com
Lines: 54
Message-ID: <33353518-b365-4a37-afb6-1bffb1e966a1@r8g2000prd.googlegroups.com>
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Mime-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
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X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Sun, 4 Sep 2011 02:55:13 +0000 (UTC)
Complaints-To: groups-abuse@google.com
Injection-Info: r8g2000prd.googlegroups.com; posting-host=117.199.246.213;
posting-account=xYWSigoAAADp0Q2VAMlANM4syM5q3uRr
User-Agent: G2/1.0
X-Google-Web-Client: true
X-Google-Header-Order: HUALESNKRC
X-HTTP-UserAgent: Mozilla/5.0 (Windows; U; Windows NT 5.1; en-US; rv:1.9.2.21)
 Gecko/20110830 Firefox/3.6.21,gzip(gfe)
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X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,domainid0,public,usenet
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Content-Transfer-Encoding: quoted-printable
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X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Sun, 4 Sep 2011 14:42:23 +0000 (UTC)
Complaints-To: groups-abuse@google.com
Injection-Info: a27g2000yqc.googlegroups.com; posting-host=190.237.120.108;
posting-account=Nb48VwoAAABbJ_NtkPVaVDQNxfxlowo2
User-Agent: G2/1.0
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solutions manual The Legal Environment of Business Meiners Ringleb
Edwards 11
solutions manual The Legal Environment of Business Cross 7
solutions manual The Legal Environment of Business Text and Cases --
Ethical, Regulatory, Global, and E-Commerce Issues Cross 7
solutions manual The Management & Control of Quality Evans 7
International
solutions manual The Macroeconomics Today Schiller 12
solutions manual The Microeconomics Today Schiller 12
solutions manual The Science and Engineering of Materials Askeland
Fulay 5
solutions manual The Science and Engineering of Materials Askeland
Fulay Wright 6
solutions manual The Science and Design of Engineering Materials
Schaffer Sanders Saxena Antolovich Warner 2
solutions manual The Mathematics of Money Biehler 1
solutions manual The Media of Mass Communication Vivian 9

solutions manual Theory and Design for Mechanical Measurements Figliola Beasley 4
solutions manual Theory and Design for Mechanical Measurements Figliola Beasley 5
solutions manual Theory of Vibrations with Applications Thomson Dahleh 5
solutions manual Thermal-Fluid Sciences Turns
solutions manual Thermal Environmental Engineering Kuehn Ramsey Threlkeld 3
solutions manual Thermodynamics Concepts and Applications Turns
solutions manual Thermodynamics: An Engineering Approach cengel 6
solutions manual Thermodynamics: An Engineering Approach cengel Boles 7
solutions manual Traffic Engineering Roess Prassas McShane 4
solutions manual Traffic and Highway Engineering Garber Hoel 3
solutions manual Traffic and Highway Engineering Garber Hoel 4
solutions manual Transportation Engineering and Planning Papacostas Prevedouros 3
solutions manual Transportation Engineering: An Introduction Khisty Lall 3
solutions manual Transportation Infrastructure Engineering: A Multimodal Integration Hoel Garber Sadek 1
solutions manual Understanding Business Nickels McHugh McHugh 8
solutions manual Understanding Business Nickels McHugh McHugh 9
solutions manual Understanding Corporate Annual Reports Pasewark 7
solutions manual Understanding and Managing Organizational Behavior George 5
solutions manual Understanding Business Strategy Concepts and Cases Ireland 2
solutions manual Understanding Financial statements Fraser 7
solutions manual Understanding Financial Statements Fraser 8
solutions manual Understanding Financial Statements Ormiston Fraser 9
solutions manual University Chemistry Laird
solutions manual Unit Operations and Processes in Environmental Engineering Reynolds Richards 2
solutions manual Unit Operations of Chemical Engineering McCabe 6
solutions manual Unit Operations of Chemical Engineering McCabe Smith Harriott 7
solutions manual Unified Design of Steel Structures Geschwindner 1
solutions manual University Physics with Modern Physics Young Freedman 13
solutions manual Urban transportation planning Meyer Miller 2
solutions manual Using and Understanding Mathematics A Quantitative Reasoning Approach Bennett 4
solutions manual Using MIS Kroenke 2
solutions manual Water Treatment: Principles and Design MWH 2
solutions manual Water and Wastewater Engineering Davis 1
solutions manual Water and Wastewater Technology Hammer Hammer 6
solutions manual Water and Wastewater Technology Hammer Hammer 7
solutions manual Water Reuse : Issues, Technologies, and Applications Metcalf Asano Burton Leverenz Tsuchihashi Tchobanoglous 1
solutions manual Water Chemistry Benjamin
solutions manual Water Resources Engineering Chin 2

solutions manual Water Resources Engineering Wurbs James
solutions manual Water Resource Mays 2
solutions manual Water Supply and Pollution Control Viessman Hammer Perez Chadik 8
solutions manual West Federal Taxation 2008 Comprehensive Willis 31
solutions manual West Federal Taxation 2008 Corporations, Partnerships, Estates, and Trusts Hoffman 31
solutions manual West's Business Law Clarkson 10
solutions manual Venture Capital and the Finance of Innovation Metrick 2
solutions manual Viscous Fluid Flow White 3
solutions manual Window on Humanity A Concise Introduction to Anthropology Kottak 3

```
From -2534813331154070006
X-Google-Thread: 10e8ad,c40aad92bc5b65d9,start
X-Google-NewGroupId: yes
X-Google-Thread: 10b9c8,c40aad92bc5b65d9,start
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,gida4a23d5f63,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news3.google.com!news2.google.com!
border1.nntp.dca.giganews.com!nntp.giganews.com!novia!news-out.readnews.com!news-
xxxfer.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-248 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Mon, 5 Sep 2011 13:33:19 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 2094
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000c01cc6bf1$deb424e0$9c1c6ea0$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1315243999 22852 166.84.1.6 (5 Sep 2011 17:33:19 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Mon, 5 Sep 2011 17:33:19 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
```

X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news1.google.com rec.radio.amateur.space:547 rec.radio.info:2643

This report is organized into four (4) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - deborbited/returned satellites

SB SAT @ AMSAT W8ISS $WSR-248.S1
WSR 248 Part 1 09/05/2011

AMSAT NEWS SERVICE BULLETIN 248.S1
FROM AMSAT HQ SILVER SPRING, MD, September 05, 2011
TO ALL RADIO AMATEURS
BID: $WSR-248.S1

ARISSat-1 (Radioskaf-b) (Kedr)
Catalog number: 37772
Launch date: August 03, 2011 1843z
Launch site: International Space Station

Status: Operational

Callsign: RS01S

Current Mode(s):
Linear Transponder: U/v
Uplink: 435.758 to 435.742 MHz CW/LSB
Downlink: 145.922 to 145.938 MHz CW/USB

FM Telemetry/SSTV/Messages/ID:
Downlink: 145.950 MHz FM

Telemetry/Beacon:
Downlink: 145.939 MHz CW1
             145.919 MHz CW2
             145.920 MHz 1k BPSK USB
             145.920 MHz 400b BPSK USB

Official Webpage:http://www.amsat.org/amsat-new/ARISSat/ARISSat.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/informal_detail.php?serialnum=89
[08112011]
=====
SO-67 SumbandilaSat
Catalog Number: 35870
Launch Date: September 17, 2009 1555z
Launch site: Baikonur, Kazakhstan

Status: By schedule

Callsign: ZS0SUM

Uplink: 145.875MHz FM tone 233.6 Hz
Downlink: 435.345MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

For more information about SO-67:
http://www.amsatsa.org.za/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=88
[02092011]
=====
DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational
Current Mode: Science Mode - Beacon ONLY

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink: 435.530 to 435.570 MHz

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=68
[02092011]
=====
VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05, 2005 0444z
Launch site: Satish Dhawan Space Centre, India

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.9360 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=30

To know what transponder is switched on please listen for the beacon that is active. Each transponder has a different beacon.
[02092011]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004 0745z
Launch site: Baikonur, Kazakhstan

Status: Semi-operational - IHU crash each eclipse

Current Mode(s):
Voice repeater: V/u
Uplink: 145.880 MHz FM
Downlink: 435.150 MHz FM

Telemetry: Recovery efforts
Downlink: 435.150MHz 9k6

Analog voice downlink: 435.300 MHz FM
                           435.150 MHz FM
                          2401.200 Mhz FM
Analog voice uplink: 145.860 MHZ FM
                           145.880 MHz USB
                           145.880 MHz FM
                           145.920 MHz FM
                           145.920 MHz FM - 67 Hz PL tone burst
                          1268.705 MHz FM
Digital Downlinks: 435.150 MHz FM 38k4 PBP, 1 watt output
                           435.150 MHz FM 9k6 Pacsat Broadcast Protocol
                          2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Pacsat Broadcast Protocol
                          1268.703 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear

U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=19
[06162011]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002 1700z
Launch site: Baikonur, Kazakhstan

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4
Hz. The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute
   timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset
   the 10 minute timer.
[02092011]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Operational
Current Mode: V/u (Mode JA)

Voice/CW (Mode JA)
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB

Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage:
http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's
CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/
fo29cwts.htm
[06232011]
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993 0140z
Launch site: Kourou, French Guiana

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[02092011]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974
Launch site: Vandenberg AFB, California, USA

Status: Operational

Current Mode: Alternating between Mode A and B every 24 hours

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz CW
145.972 MHz CW
435.100 MHz CW
2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
[02092011]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998 0640z (ZARYA module)
Launch sites: Baikonur, Kazakhstan
Kourou, French Guiana
Uchinoura Space Center, Japan
Kennedy Space Center, Titusville, Florida, USA

Status: Operational

Current Active Modes: FM Repeater - OFF
Voice - V/v
BBS - OFF
APRS - OFF
SSTV - OFF

Expedition 28 Crew (May - September 2011):

Commander:	Andrey Borisenko	
Flight Engineer:	Ron Garan	KF5GPO
Flight Engineer:	Alexander Samokutyaev	
Flight Engineer:	Satoshi Furukawa	
Flight Engineer:	Sergey Volkov	KE5DAW
Flight Engineer:	Micheal Fossum	KF5AQG

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:

Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[07282011]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-248.S2
WSR 248 Part 2 09/05/2011

AMSAT NEWS SERVICE BULLETIN 248.S2
FROM AMSAT HQ SILVER SPRING, MD, September 05, 2011
TO ALL RADIO AMATEURS
BID: $WSR-248.S2

O/OREOS
Catalog Number: 37224
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: On Orbit

Uplink:
Downlink: 437.035 MHZ AX.25

Beacon:

Callsign:

URL: http://www.ooreos.org/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=146
[02092011]
=====
Rax-1 Radio Aurora Explorer
Catalog Number: 37223
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: On Orbit

Uplink:
Downlink: 437.505 MHz 9k6 GMSK

Beacon:

Callsign: RAX-1

URL: http://rax.engin.umich.edu/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=165
[02092011]
=====
FO-69 Fastrac-1 Sara Lily
Catalog Number: 37227
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: Operational

Uplink 1: 145.980 MHz 1k2 baud
Uplink 2: 145.825 MHz 1k2 baud
Downlink: 437.345 MHz 1k2 and 8k6 baud

Beacon: 437.435 MHz 1k2 AX.25

Callsign: Fast1

URL: http://fastrac.ae.utexas.edu/index.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=83
[07052011]

```
=====
FO-70 Fastrac-2 Emma
Catalog Number: 37380
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: Operational

Uplink 1: 435.025 MHz 1k2 baud
Uplink 2: 437.435 MHz 9k6 baud
Downlink: 145.825 MHz

Beacon:   145.825 MHz 1k2 AX.25

Callsign: Fast2

URL: http://fastrac.ae.utexas.edu/index.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=84
[07052011]
=====
StudSat
Catalog Number: 36796
Launch Date: July 12, 2010 0352z
Launch site: Satish Dhawan Space Centre, India

Status: On Orbit

Uplink:   437.505MHz, 9600bps FSK
Downlink: 437.505MHz, 9600bps FSK
Beacon  : 437.505MHz,   20bps ASK

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=164
[02092011]
=====
TIsat-1
Catalog Number: 36799
Launch Date: July 12, 2010 0352z
Launch site: Satish Dhawan Space Centre, India

Status: On orbit

Callsign: HB9DE

Uplink:   145.980MHz FM, AFSK
Downlink: 437.305MHz FM, AFSK
Beacon:   437.305MHz CW

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=118
[02092011]
```

```
=====
HO-68 HOPE-1 (CAS-1)(XW-1)
Catalog Number: 36122
Launch Date: December 15, 2009 0231z
Launch site: Taiyuan Space Center, PRC

Status: Beacon only

Callsign:
Broadcast:    BJ1SA-11
BBS:     BJ1SA-12

Uplinks:   145.8250 MHz FM, PL 67.0 Hz.
           145.9250 - 145.9750 MHz SSB/CW
           145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
           435.7650 - 435.7150 MHz SSB/CW
           435.6750 MHz AFSK 1200 BPS

Beacon:    435.7900 MHz CW

Mode and Antenna Polarization:
V: LHCP 2.0dBi max
U: RHCP 3.0dBi max

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=108

For more information about XW-1 (CAS-1):
http://
[08112011]
=====
SwissCube
Catalog Number: 35932
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Callsign: HB9EG

Beacon(100mw): 437.5050MHz CW
Beacon(1w):    437.5050MHz FSK 1k2bps

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=109
[02092011]
=====
UWE-2
Catalog Number: 35934
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India
```

Status: In Orbit

Beacon(500mw): 437.3850 MHz AFSK 1k2bps
               437.3850 MHz FSK 9k6bps

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=110
[02092011]
=====
ITUpsAT1
Catalog Number: 35935
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Beacon(100mw): 437.325MHz CW
Beacon(1w): 437.325MHz 19k2bps

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=113
[02092011]
=====
BEESAT
Catalog Number: 35933
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Callsign: DP0BEE

Beacon(100mw): 436.000MHz CW
Beacon(500mw): 436.000MHz GMSK 4k8bps
Beacon(500mw): 436.000MHz GMSK 9k6bp
[02092011]
=====
CP-6
Catalog Number: 35003
Launch Date: May 19, 2009 2355z
Launch site: Wallops Island, Virginia, USA

Status: Operational

Downlink: 437.365 MHz 1k2 AFSK

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=121
[02092011]
=====
HAWKSAT 1
Catalog number: 35004
Launch Date: May 19, 2009 2355z

Launch site: Wallops Island, Virginia, USA

Status: operational

Downlink: 437.345 MHz ?

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=105
[02092011]
=====
Pharmasat
Catalog Number: 35002
Launch Date: May 19, 2009 2355z
Launch site: Wallops Island, Virginia, USA

Status: Operational

Downlink: 437.465 MHz 1k2 AFSK

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=94
[02092011]
=====
ANUSAT
Catalog Number: 34808
Launch Date: April 20, 2009 0115z
Launch Site: Satish Dhawan Space Centre, India

Status: ?

Downlink: 435.000 MHz
Uplink: 145.800 MHz

Telemetry: 137.400 MHz
[02092011]
=====
SOHLA-1 (ASTRO TECH.)
Catalog Number: 33496
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational

Proposed Frequencies and Modes:
Downlink: 437.505 MHz AFSK/CW
Beacon: 437.505 MHz AFSK/CW

Callsign:

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=101
[02092011]
=====

KAGAYAKI (Solan Co.)
Catalog Number: 33495
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: In Orbit

Downlink: 437.375 MHZ   FSK9k6/CW
Beacon: 437.375 MHz   FSK9k6/CW

IARU coordination status page:

AMSAT-NA webpage:

[02092011]
=====
STARS (Kagawa Univ.) (Twin Satellites)
Catalog Number: 33498
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational ?

Downlinks: 437.485 MHz FM/CW
           437.465 MHz FM/CW
Beacons: 437.305 MHz FM/CW
           437.275 MHz FM/CW

Callsigns: JR5YBN
           JR5YBO

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=99

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=121&retURL
=/satellites/status.php
[02092011]
=====
KKS-1 (Tokyo MCIT)
Catalog Number: 33499
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational

Downlink: 437.455 MHz AFSK/CW
Beacon: 437.385 MHz AFSK/CW

Callsign: JQ1YYY

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=107

```
AMSAT-NA webapge:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=120&retURL
=/satellites/status.php
[20092011]
=====
PRISM (Tokyo Univ.)
Catalog Number: 33493
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational ?

Downlink: 437.425 MHz AFSK/GMSK/CW
Beacon:   437.250 MHz AFSK/GMSK/CW

Callsign: JQ1YCX

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=97

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=119&retURL
=/satellites/status.php
[02092011]
=====
RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number: 32953
Launch Date: May 23, 2008 1520z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational

Curent Modes: Telemetry
              Audio
              Images

Downlinks: 435.315 MHz
           435.215 MHz

AMSAT-NA website:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=115&ret
URL=/satellites/status.php

Official website:
http://www.npopm.com/?cid=leoca&caid=43
[02092011]
=====
CanX-2
Catalog number: 32790
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India
```

Status: Operational in range of ground station only

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=46
[02092011]
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Downlink: 437.425 MHz 1k2 baud packet

For the latest project status update please visit the AAUSAT-II web page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=60
[02092011]
=====
CO-65 CUTE-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational ?

Downlink: 437.475 MHz 9k6 Packet
Uplink: 1267.600 Mhz

Telemetry Beacon:
Downlink: 437.2750 MHz CW

For the latest project status update please visit the Cute-1.7+APD II web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=78

Command Station blog website:
http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=112&retURL=/satellites/status.php

```
[07052011]
=====
Compass-1
Catalog number: 32787
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Current Mode: dependant on last received command

Uplink:   145.980 MHz FM
Downlink: 437.275 Mhz CW
          437.405 MHz Packet

For the latest project status update please visit the Compass 1 web
page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=52

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=114&retURL
=/satellites/status.php
[06162011]
=====
CO-66 Seeds II
Catalog number:
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Downlink: 437.485 MHz

Callsign: JQ1YGU

For the latest project status update please visit the Seeds 2 web
page: http://cubesat.aero.cst.nihon-u.ac.jp/english/seeds_2_e.html

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=36

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=113&retURL
=/satellites/status.php
[02092011]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007 0702z
Launch site: Baikonur, Kazakhstan
```

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=94&retURL=
/satellites/status.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=72
[02092011]
=====
CP3
Catalog Number: 31129
Launch Date: April 17,2007 0702z
Launch site: Baikonur, Kazakhstan

Status: Operational

Current Mode: /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=74
[02092011]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005 0652z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon: 437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/xivpicte.htm

```
IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=37
[02092011]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: ?????

Current Mode: /u

Beacon:     436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=96&retURL
=/satellites/status.php

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[02092011]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004 0745z
Launch site: Baikonur, Kazakhstan

Status: Semi-operational - IHU crash each eclipse

Current Mode(s):
Voice repeater: V/u
Uplink:      145.880 MHz FM
Downlink:    435.150 MHz FM

Telemetry: Recovery efforts
Downlink:    435.150MHz 9k6


Analog voice downlink:     435.300 MHz FM
                           435.150 MHz FM
                          2401.200 Mhz FM
Analog voice uplink:       145.860 MHZ FM
                           145.880 MHz USB
                           145.880 MHz FM
                           145.920 MHz FM
                           145.920 MHz FM - 67 Hz PL tone burst
                          1268.700 MHz FM
Digital Downlinks:         435.150 MHz FM 38k4 PBP, 1 watt output
                           435.150 MHz FM 9k6 Pacsat Broadcast Protocol
                          2401.200 MHz FM 38k4 bps, AX.25
```

```
Digital Uplink:            145.860 MHz FM 9k6 Pacsat Broadcast Protocol
                          1268.708 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon:                    435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=19
[06162011]
=====
QuakeSat
Catalog Number: 27845
Launch Date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Telemetry only

Current Mode: 9600 baud data packet

Mode U packet
Downlink: 436.675 MHz 9k6 BPS

Quakesat webpage:
http://www.quakefinder.com/services/quakesat-ssite/
[02252011]
=====
CO-55 Cute-1.7+APD II
Catalog Number: 27844
Launch date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational

Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW
```

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=69&retURL
=/satellites/status.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=78
[02092011]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001 0240z
Launch site: Kodiak Launch Complex, Alaska, USA

Status: Telemetry only

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[02092011]
=====
RS-22 RADIO SPORT 22 (MOZHAYETS 4)
Catalog number: 27939
Launch Date: September 27, 2003 0612z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational - 70cm cw only

Current Mode: /u

CW Beacon - 435.352 MHz
            145.818 MHz

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=76&retURL
=/satellites/status.php
[02092011]
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990
Launch site: Kourou, French Guiana

Status: CW Beacon only

Uplinks: 145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK

145.900 MHz 1200-baud Manchester FSK

CW downlink: 437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[02092011]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984
Launch site: Vandenburg AFB, California, USA

Status: Operational ?

Current Mode: /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon: 435.025 MHz
Mode-S Beacon: 2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[07052011]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998 0640z (ZARYA module)
Launch sites: Baikonur, Kazakhstan
              Kourou, French Guiana
              Uchinoura Space Center, Japan
              Kennedy Space Center, Titusville, Florida, USA

Status: Operational

Current Active Modes: FM Repeater - OFF
                      Voice -   V/v
                      BBS -   OFF
                      APRS -   OFF
                      SSTV -   OFF

Expedition 28 Crew (May - September 2011):
Commander: Andrey Borisenko

```
Flight Engineer:          Ron Garan              KF5GPO
Flight Engineer:          Alexander Samokutyaev
Flight Engineer:          Satoshi Furukawa
Flight Engineer:          Sergey Volkov          KE5DAW
Flight Engineer:          Micheal Fossum         KF5AQG


Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink:   145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink:     145.200 MHz FM
Region 2/3 voice uplink:   144.490 MHz FM
Worldwide downlink:        145.800 MHz FM

Crossband Repeater:
Repeater Uplinks:         1269.650 MHz FM
                           437.800 MHz FM
                           145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink:         145.800 MHz FM
                           437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink:                  145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian:                   OR4ISS
German:                    DP0ISS
Russian:                   RS0ISS
                           RZ3DZR
United States:             NA1SS
Packet Mailbox:            RS0ISS-11
Digipeater callsign:       ARISS

Official ARISS Webpage:    http://www.rac.ca/ariss
ISS Fan Club Webpage:      http://www.issfanclub.com
APRS tracking page:        http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[07282011]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-248.S3
WSR 248 Part 3 09/05/2011
```

AMSAT NEWS SERVICE BULLETIN 248.S3
FROM AMSAT HQ SILVER SPRING, MD, September 05, 2011
TO ALL RADIO AMATEURS
BID: $WSR-248.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

NANOSAIL-D
Catalog Number:
Ejection Date: January 17, 2011

Status: On orbit

Downlink: 437.270 MHz AX.25

URL: http://nanosaild.engr.scu.edu/dashboard.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=115
[01272011]
=====
CP4
Catalog Number: 31132
Launch Date: April 17, 2007

Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon: 437.325 MHz CW

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=79
[09062010]
=====
LIBERTAD-1
Catalog Number: 31128
Launch Date: April 17, 2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink: 145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25

IARU coordination status page:

http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=76
[09062010]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: Non-Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder: 145.825 Mhz FM

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=51
[09062010]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
                             2407.250

Official Website: http://www.ncube.no

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=24
[09062010]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 MHz FM 67Hz CTCSS
Voice Downlink: 2401.835 MHz FM
Packet Up/Downlink: 437.250 MHz 9k6 packet
Packet Downlink   2401.835 MHz 38k4 packet

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=54
[09062010]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non-Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=53
[09062010]
=====
CANX-1
Catalog Number: 27847
Launch Date: June 30, 2003

Status: Non-Operational

Downlink: 437.8800 MHz AFSK 1k2bps
[06052009]
=====
DTUSAT
Catalog Number: 27842
Launch Date: June 30, 2003

Status: Non-Operational

Current Mode: 2k4 AFSK Packet last reported

Downlink: 437.475MHz

Officail webpage: http://dtusat1.dtusat.dtu.dk/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=101&retURL=satellites/all_oscars.php
[02212009]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)

Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Telemetry only

Uplinks: 145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[03302009]

=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]

=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]

=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

```
Status: Non-Operational

Uplink:   145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
V-band:   145.840 -  145.990 MHz CW/LSB
U-band:   435.550 -  435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks
---------
S2-band:  2401.225 -  2401.475 MHz CW/USB
K-band:  24048.010 - 24048.060 MHz CW/USB
Beacon:   2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)
----------------------------
BEACON   General Beacon(GB)  Middle Beacon(MB)  Engineering Beacon(EB)
2 m                    none        145.898 MHz                    none
70cm            435.438 MHz        435.588 MHz             435.838 MHz
13cm(1)        2400.188 MHz       2400.338 MHz            2400.588 MHz
13cm(2)        2401.173 MHz       2401.323 MHz            2401.573 MHz
3cm           10450.975 MHz      10451.125 MHz           10451.375 MHz
1.5cm         24047.885 MHz      24048.035 MHz           24048.285 MHz
[07162007]
=====
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink:    145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: 25636
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater:         436.250 MHz

Uplinks: Mode B Repeater:  145.825 MHz
Mode J Digipeater:         145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)
```

```
The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Non-Operational

Current Modes:
Telemetry : /u

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign:       4XTECH-12

More information of GO-32 can be found at:
http://asri.technion.ac.il/techsat/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=14&retURL
=/satellites/status.php
[07172010]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink:   145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
MO-30 UNAMSAT-2
Catalog Number: 24305
Launch Date: September 5, 1996
```

```
Status: Non-operational

Downlink:       435.1380 MHz AFSK 1200 BPS
Downlink:       435.2060 MHz AFSK 1200 BPS
Uplink:         145.8150 MHz AFSK 1200 BPS
Uplink:         145.8350 MHz AFSK 1200 BPS
Uplink:         145.8550 MHz AFSK 1200 BPS
Uplink:         145.8750 MHz AFSK 1200 BPS
[06042009]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Non-operational

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign:       POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012009]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993
```

```
Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
AO-24 ARSENE
Catalog Number: 22654
Launch Date: May 13, 1993

Status: Non-operational

Uplink:    435.0625 MHz FM 1k2bps AFSK
           435.1125 MHz FM 1k2bps AFSK
           435.1375 MHz FM 1k2bps AFSK
Downlink:  145.9750 MHz FM 1k2bps AFSK
          2446.5025 MHz FM 1k2bps AFSK

Beacon:    2446.4700 MHz CW

Broadcast callsign:
BBS:
[12162009]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HL01-11
BBS: HL01-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
```

```
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
[05012006]
```

```
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: non-operational

Current Mode:  V/u

Uplink:         145.900 MHz FM 1200-baud Manchester FSK (reserved)
                145.920 MHz FM VOICE
                145.940 MHz FM 1200-baud Manchester FSK (reserved)
                145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink:       437.026 MHz USB VOICE
                (1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[07242009]
=====
UO-15 UoSAT-4
Catalog Number: 20438
Launch Date: January 22, 1990

Status: Non-operational

Uplink: ?
Downlink: 435.1250MHz (?)
          435.1200MHz (?)
[06042009]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
```

```
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon:   145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink  29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
```

```
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
Beacons:   29.450 MHz
          435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon 1:  29.352 MHz (intermittent)
Beacon 2:  29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991
```

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB

Beacon: 145.860 MHz

Robot: 145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-248.S4
WSR 248 Part 4 09/05/2011

AMSAT NEWS SERVICE BULLETIN 248.S4
FROM AMSAT HQ SILVER SPRING, MD, September 05, 2011
TO ALL RADIO AMATEURS
BID: $WSR-248.S4

THE FOLLOWING SATELLITES HAVE RE-ENTERED OR HAVE BEEN RETURNED SAFELY:

CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Re-entered
Re-entered: October 25, 2009

Uplink: 1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/

IARU coordination status page:

```
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=56
[09062010]
=====
BEVO-1 (DRAGONSAT-1)
Catalog Number: 35690
Launch Date: May 19, 2009

Status: Re-entered
Re-entered:

Downlink: 437.325 MHz 9k6 GMSK
          437.325 MHz CW 20wpm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=117
[07312009]
=====
AggieSat2 (DRAGONSAT-2)
Catalog Number: 35690
Launch Date: May 19, 2009

Status: Re-entered
Re-entered:

Downlink: 436.250 MHz 9k6 FHSS
[11112009]
=====
Pollux
Catalog Number: 35693
Launch Date: July 31, 2009

Status: Re-entered
Re-entered:

Callsign: POLLUX-1

Downlink: 145.825MHz 1k2 AX.25

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=139
[09062010]
=====
Castor (ANDE-2)
Catalog Number: 35694
Launch Date: July 31, 2009

Status: Re-entered
Re-entered:

Callsign: KD4HBO-1

Downlink: 145.825 MHz 1k2 AX.25
```

```
IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=144
[09062010]
=====
NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: July 28, 2008

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=59
[01012009]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink:      145.825 Mhz FM APRS AX25
APRS Uplink:        145.825 MHz FM APRS AX25
Voice/PSK31 Uplink:  28.120 MHz

Packet to Voice ID: RAFT
[06112007]
=====
GENESAT-1
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Re-Entered
Re-entered date: August 8, 2010

Current Mode: /u
```

Callsign: KE7EGC

Telemetry Beacon Downlink: 437.0695 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[08082010]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Re-Entered
Re-entered: June 18, 2008

```
Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon:             437.2750 MHz CW
```

Callsign: JR8YJT
[01012009]
=====
SO-43 Starshine 3
Catalog Number: 26929
Launch Date: September 30, 2001

Status: Re-Entered
Re-entered: January 21, 2003

Beacon: 145.825Mhz
[02212009]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

```
Voice: 301-589-6062
       888-322-6728
FAX:   301-608-3410
```

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at}amsat.org
NNNN
/EX

```
From 2816674939330458063
X-Google-Thread: 107ada,ecdf31839db866c6,start
X-Google-NewGroupId: yes
X-Google-Thread: 11480d,ecdf31839db866c6,start
X-Google-NewGroupId: yes
X-Google-Thread: 10e8ad,ecdf31839db866c6,start
X-Google-NewGroupId: yes
X-Google-Thread: 10b9c8,ecdf31839db866c6,start
X-Google-NewGroupId: yes
X-Google-Attributes:
gida3e752f117,gid7221ecd0f7,gid8f86f75953,gida4a23d5f63,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news2.google.com!news.glorb.com!news-out.readnews.com!
transit3.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: SWPC.Webmaster@noaa.gov
Newsgroups:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.info
Subject: Weekly Highlights of Solar and Geomagnetic Activity, 29 August - 04
September 2011
Followup-To: rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space
```

```
Date: Tue, 6 Sep 2011 17:30:07 EDT
Organization: NOAA Space Weather Prediction Center
Lines: 68
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <20110906213001.D529E33C9A@panix2.panix.com>
NNTP-Posting-Host: panix6.panix.com
X-Trace: reader1.panix.com 1315344608 21095 166.84.1.6 (6 Sep 2011 21:30:08 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Tue, 6 Sep 2011 21:30:08 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Xref: g2news2.google.com rec.radio.amateur.misc:6803 rec.radio.amateur.dx:1135
rec.radio.amateur.space:573 rec.radio.info:2723
```

```
:Product: Weekly Highlights and Forecasts
:Issued: 2011 Sep 06 2004 UTC
# Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center
# Product description and SWPC contact on the Web
# http://www.swpc.noaa.gov/weekly.html
#
#                 Weekly Highlights and Forecasts
#
```

Highlights of Solar and Geomagnetic Activity
29 August - 04 September 2011

Solar activity began the week at low levels with 27 C-class flares between 09 August - 03 September and ended at moderate levels with an M3 flare at 04/1145 UTC from Region 1286 (N20, L=304, class/area Dso/080 on 03 September). The M3 event was associated with a partial-halo coronal mass ejection which was directed away from the west limb. Although Region 1282 (N25, L=300, class/area Eso/170) did not produce any significant activity during the period, it did develop a delta magnetic configuration on 03 September. Region 1283 (N14, L=223, class/area Dsi/220) developed into the largest spot group during the period.

No proton events were observed at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit was at normal levels.

Geomagnetic field activity began the week at generally quiet to unsettled levels with isolated active and minor storm periods at high latitudes due to a negative polarity coronal hole high speed stream (CH HSS). Activity decreased to mostly quiet levels for 30 August - 02 September. Activity increased to quiet to unsettled levels with isolated active periods at high latitudes for 03 - 04 September. An isolated major storm period occurred at high latitudes during 03/0900 - 1200 UTC. Solar wind data indicated a solar sector boundary crossing on 02 September at about 1000 UTC, and a co-rotating interaction region on 03 September at about 0100 UTC followed by a negative polarity CH HSS.

Forecast of Solar and Geomagnetic Activity
07 September - 03 October 2011

Solar activity is expected to be low with M-class activity likely and a slight chance for X-class activity through 11 September when Region 1283 rotates off the disk. A decrease to very low to low levels is expected from 12 - 17 September. An increase to low to moderate levels is expected as old Regions 1286 and 1283 return and transit the disk from 18 September through the remainder of the forecast period.

A slight chance for proton events is expected at geosynchronous orbit until 12 September.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to be at high levels 07 - 08 September, followed by normal to moderate levels for 09 - 12 September. High levels are expected 13 - 14 September, followed by another decrease to normal to moderate levels for 15 - 28 September. High levels resume 29 - 30 September. Normal to moderate levels are expected 01 - 03 October.

Geomagnetic field activity is expected to be at mostly quiet levels through 09 September. Activity is expected to increase to unsettled to active levels 10 - 13 September with the arrival of a coronal mass ejection coupled with a CH HSS. Mostly quiet levels will prevail from 14 - 29 September. An increase to unsettled is expected 30 September - 01 October due to another recurrent CH HSS. Quiet levels will predominate for 02 - 03 October.

From 884124544359392030
X-Google-Thread: addc8bf063,f0f5183b19aa874a,start
X-Google-Attributes: gidaddc8bf063,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news3.google.com!feeder.news-service.com!feeder.erje.net!newsfeed1.swip.net!news.astraweb.com!border5.a.newsrouter.astraweb.com!not-for-mail
From: Chris Steyaert <observations@rmob.org>
Newsgroups: rec.radio.amateur.space,sci.astro.amateur
Subject: Radio Meteor Obs. Bull. August 2011 Perseids
Date: Wed, 07 Sep 2011 22:16:46 +0200
Message-ID: <57kf67dekbpvebrp17lc78jt9nkv1q6um3@4ax.com>

```
X-Newsreader: Forte Agent 5.00/32.1171
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Lines: 14
Organization: Unlimited download news at news.astraweb.com
NNTP-Posting-Host: 92e49225.news.astraweb.com
X-Trace: DXC=@g=BFo_mY1d3i\;U\i>iJhL?0kYOcDh@jT=47B=V8C_dN:bTSN?
IBJlBZ<AX`0A\Jcb3<D_UX>L;iX<`3P5ZY[ZjKA0a2d]FV[jTK^Jh`DIISm
Xref: g2news1.google.com rec.radio.amateur.space:549 sci.astro.amateur:50111
```

Radio Meteor Observation Bulletin No. 217 of August 2011 (74 K) is available now as

    http://www.rmob.org/rmobtext/rmob1108.txt

More information and the visual presentation of the hourly forward scatter counts can be found on

    http://www.rmob.org

    Chris

```
From 5778856037078750091
X-Google-Thread: 10e8ad,adef457a82416136,start
X-Google-NewGroupId: yes
X-Google-Thread: 10b9c8,adef457a82416136,start
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,gida4a23d5f63,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Received: by 10.68.44.102 with SMTP id d6mr1125797pbm.9.1315852558904;
        Mon, 12 Sep 2011 11:35:58 -0700 (PDT)
Path: m9ni4836pbd.0!nntp.google.com!news1.google.com!
border1.nntp.dca.giganews.com!nntp.giganews.com!novia!news-out.readnews.com!news-
xxxfer.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-254 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Mon, 12 Sep 2011 14:35:58 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 517
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <001201cc717a$cae62150$60b263f0$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
X-Trace: reader1.panix.com 1315852558 2686 166.84.1.6 (12 Sep 2011 18:35:58 GMT)
X-Complaints-To: abuse@panix.com
```

NNTP-Posting-Date: Mon, 12 Sep 2011 18:35:58 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to   rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to   rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Xref: news1.google.com rec.radio.amateur.space:410 rec.radio.info:2274
Content-Type: text/plain;charset="us-ascii"
Content-Transfer-Encoding: 7bit
Content-language: en-us

AMSAT NEWS SERVICE
ANS-254

ANS is a free, weekly, news and information service of AMSAT North America, The
Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
- Final Call for AMSAT-NA Board of Directors Ballots
- Registration Open for 2011 AMSAT Space Symposium 4-6 November 2011
- STRaND-1 Frequency Coordinated
- Louis Varney G5RV Cup
- KiwiSAT Students Win Grant
- OSCAR-11 Report   01 September 2011
- 5.7 Metric Ton Satellite Uncontrolled Re-Entry Expected Soon
- Satellite Shorts From All Over
- ARISS Status - 5 September 2011

SB SAT @ AMSAT $ANS-254.01
Final Call for AMSAT-NA Board of Directors Ballots

AMSAT News Service Bulletin 254.01
  From AMSAT HQ SILVER SPRING, MD.
September 11, 2011
To All RADIO AMATEURS
BID: $ANS-254.01

Ballots for the AMSAT-North America 2011 Board of Directors election have been mailed to all members. To have your vote count you must return your ballot by mail to:

AMSAT-NA
850 Sligo Ave #600
Silver Spring, MD, 20910

Ballots must arrive at the AMSAT Office by the close of business, September 15, 2011.

Four director's terms expire this year:

Barry Baines, WD4ASW
Alan Biddle, WA4SCA
Drew Glasbrenner, KO4MA
Tony Monteiro, AA2TX

Seven nominations have been received for the open seats. Listed alphabetically they are:

Barry Baines, WD4ASW
Alan Biddle, WA4SCA
Steve Coy, K8UD
Drew Glasbrenner, KO4MA
Mark Hammond, N8MH
Tony Monteiro, AA2TX
Patrick E. Stoddard, WD9EWK

Select no more than four candidates on your ballot. The four candidates receiving the highest number of votes will be seated as full Board members for two year terms. The two candidates receiving the next highest number of votes will be seated as alternate Board members for one year terms.

[ANS thanks the AMSAT Office the above information]

/EX

SB SAT @ AMSAT $ANS-254.02
Registration Open for 2011 AMSAT Space Symposium 4-6 November 2011

AMSAT News Service Bulletin 254.02
From AMSAT HQ SILVER SPRING, MD.
September 11, 2011
To All RADIO AMATEURS
BID: $ANS-254.02

AMSAT announces the 2011 AMSAT Space Symposium will be held on Friday, November 4th through Sunday, November 6th in San Jose, CA. Our annual gathering will feature:

+ Space Symposium with Amateur Satellite Presentations
+ Operating Techniques, News, & Plans from the Amateur Satellite World

+ Board of Directors Meeting open to AMSAT members (Nov. 3-4)
+ Meet Board Members and Officers
+ Annual General Membership Meeting
+ Annual Banquet-Keynote Speaker and Door Prizes

The 2011 Symposium hotel and registration web pages are now available on the AMSAT web site. You may register for the Symposium and Annual Banquet at the AMSAT Store:
http://www.amsat-na.com/store/SymposiumReg.php

Visit the Symposium and Annual General Meeting web page for details and the latest information:
http://www.amsat.org/amsat-new/symposium/2011/index.php

Symposium Registration including a copy of the Proceedings is:
+ $45 per person until September 19, 2011
+ $50 per person starting September 20, 2011
+ $55 per person at the door

The Saturday evening banquet is $45 per person. The Sunday morning Area Coordinator's Breakfast is $15 per person.

The hotel selected is the Wyndham San Jose, close to the airport. The AMSAT discount rate is $79.00+taxes per night. The reservation block code when calling the hotel directly is "AMSAT". The hotel telephone number is 408-453-6200. If you are making reservations on-line use 1031FSJAM for the group code. The direct link to the hotel web page is: http://www.wyndham.com/hotels/SJCAP/main.wnt

If you are planning to book a room on dates other than November 2, 3, 4, 5, you will have to call the hotel directly and ask for *in-house reservations*. You can get the $79 rate 3 days before and 3 days after the above dates but you cannot book the room on their website. Any problems, give Martha a call at the AMSAT Office:
301-589-6062.

[ANS thanks the 2011 Symposium Committee for the above information]

/EX

SB SAT @ AMSAT $ANS-254.03
STRaND-1 Frequency Coordinated

AMSAT News Service Bulletin 254.03
From AMSAT HQ SILVER SPRING, MD.
September 11, 2011
To All RADIO AMATEURS
BID: $ANS-254.03

The IARU Satellite Frequency Coordination Panel has recently agreed a frequency of 437.575 MHz for the UK CubeSat STRaND-1. It will carry a Smartphone and plans to have a UOSAT style speech synthesiser and a

9600 or 19200 bps AX.25 packet downlink.

STRaND-1 is a 3U CubeSat measuring 30 by 10 by 10 cm and weighing 4 kg. Unlike previous CubeSats it will feature full 3-axis control with the attitude an orbit control system comprising a nano-magnetorquer, nano-reaction wheels, GPS receiver, 8 pulse plasma thrusters and a butane thruster.

A six page article on STRaND-1 appeared in the Spring issue of OSCAR News available at http://www.uk.amsat.org/on_193_final.pdf

The video of the presentation on the STRaND-1 Smartphone CubeSat given by Shaun Kenyon to the AMSAT-UK Colloquium is at
http://www.batc.tv/vod/Strand.flv

The PDF of the PowerPoint slides is at
http://www.uk.amsat.org/wp-content/uploads/colloquium%202011/AMSAT-UK-STRaND-Presentation.pdf

AMSAT-UK: http://www.uk.amsat.org/

[ANS thanks Trevor, M5AKA, for the above information]

/EX

SB SAT @ AMSAT $ANS-254.04
Louis Varney G5RV Cup

AMSAT News Service Bulletin 254.04
From AMSAT HQ SILVER SPRING, MD.
September 11, 2011
To All RADIO AMATEURS
BID: $ANS-254.04

The Louis Varney G5RV Cup for Space Communications has been awarded to Paul Robinson 2E1EUB by RSGB president Dave Wilson M0OBW.

The cup is awarded for advances in space communication and the presentation took place at the Telford Hamfest on Sunday, September 4.

Paul was nominated by AMSAT-UK for his work promoting and encouraging the use of amateur radio satellites and perfecting the art of a portable ground station.

Paul comments that he is privileged to have his call sign and name on the cup alongside some very famous call signs, some of which are no longer with us, he would like to thank AMSAT-UK and the RSGB for this award.

AMSAT-UK publishes a colour A4 newsletter, OSCAR News, which is full of Amateur Satellite information. A sample edition can be seen at:

http://www.uk.amsat.org/on_193_final.pdf

Join online at http://tinyurl.com/JoinAMSAT-UK

http://www.uk.amsat.org/2011/09/05/louis-varney-g5rv-cup/

Paul is well known for his mobile 2M1EUB satellite operations in Interesting and wild locations such on an island off the Scottish Coast. Photos and additional information about Paul's rover and solar-powered station set-up can be seen on the 2E1EUB look up results on QRZ.com

[ANS thanks AMSAT-UK and RSGB for the above information]

/EX

SB SAT @ AMSAT $ANS-254.05
KiwiSAT Students Win Grant

AMSAT News Service Bulletin 254.05
From AMSAT HQ SILVER SPRING, MD.
September 11, 2011
To All RADIO AMATEURS
BID: $ANS-254.05

Massey University engineering students have been awarded a grant to work on software for the Amateur Radio satellite KiwiSAT.

Scoop reports that:

Four fourth-year honours students and a Masters student from the School of Engineering and Advanced Technology at the Albany campus have been awarded a $7,500 grant from the New Zealand Association of Radio Transmitters' Radio Science Education Trust to develop the software. The micro satellite is the size of a basketball and will be launched from a Russian rocket in the northern hemisphere when the project is finished.

KiwiSAT is being designed and built by a team of volunteers from New Zealand Radio Amateurs supported by Massey and various corporate sponsors. It will connect with amateur radio stations globally and will carry out experimental work in small satellite Attitude Determination and Control (ADAC) - a low cost control system that works through interaction with the Earth's magnetic field to position the satellite at a specific attitude.

Read the full story at
http://www.scoop.co.nz/stories/ED1108/S00164/massey-students-create-space-satellite-software.htm

KiwiSAT - Taking New Zealand into Space
http://www.kiwisat.org/

[ANS thanks Southgate ARC news site for the above information]

/EX

SB SAT @ AMSAT $ANS-254.06
OSCAR-11 Report   01 September 2011

AMSAT News Service Bulletin 254.06
  From AMSAT HQ SILVER SPRING, MD.
September 11, 2011
To All RADIO AMATEURS
BID: $ANS-254.06

This report covers the period from 27 April to 01 September 2011. The satellite has continued to operate in a very predictable way since the last report, and no changes have been observed. During this time the satellite has been heard reliably during its ten-day transmission periods. Excellent signals have been reported from stations located around the world, and good copy obtained from decoded telemetry frames.

The easiest way to check whether OSCAR-11 is operational is to look at the General Satellite Status website http://oscar.dcarr.org/index.php . You can also calculate the operating schedule from the last switch-off time, which was 26 August 2011 at 08:00 UTC (approx), using 10.35 days off followed by 10.35 days on.

Reception reports have been received from David VE3SB, Jerry WB5LHD, Toby MM0TOB, Colin VK5HI and Lee M0HOK. Many thanks to all and those who posted to the status website.

Although eclipses occur during every orbit, the evening passes over the UK were mostly clear of eclipses, owing to the longer hours of daylight during the Summer months. This resulted in stronger signals during the evening passes. However, as winter approaches eclipses will now start to affect the evening passes.

The on-board clock continues to gain, 26 seconds during the current reporting period, and 83 seconds since regular transmissions started at the end of August 2010. There is however a large accumulated error of 308.54339 days slow. This was caused mainly by the clock stopping during eclipses, when there was also an unknown drain on the power supply. The units of the least significant digit correspond approximately to seconds (0.86 seconds actually).

The VHF beacon frequency is 145.826 MHz. AFSK FM ASCII Telemetry. The satellite is operating in the default mode, with a cycle time of 20.7 days. 10.35 days on followed by

10.35 days off.

At the present time, while OSCAR-11 is operating in a predictable way, I no longer need direct reports or files by e-mail. However, could all listeners continue to enter their reports on the general satellite status website. This is a very convenient and easy to use facility, which shows the current status of all the amateur satellites, and is of use to everyone. Reports around the expected times of switch-on and switch-off are of special interest, especially for times 12:00 - 17:00 and 22:00 - 07:00 UTC, when the satellite is out-of-range in the UK . The URL is
http://oscar.dcarr.org/index.php

A longer version of this report report is available on my website, and new listeners to OSCAR-11 should read this for further information. The URL is www.g3cwv.co.uk/oscar11.htm This page contains a links to the longer report, a short audio clip to help you identify the satellite and a file of the last telemetry received. The website also contains an archive of news & telemetry data which is updated from time to time, and details about using a soundcard or hardware demodulators for data capture. There is also software for capturing data, and decoding ASCII telemetry.

If you place this bulletin on a terrestrial packet network, please use the bulletin identifier $BID:U2RPT156.CWV, to prevent duplication.

73 Clive G3CWV xxxxx@amsat.org (please replace the x's by g3cwv)

[ANS thanks Clive, G2CWV, for the above information]

/EX

SB SAT @ AMSAT $ANS-254.07
5.7 Metric Ton Satellite Uncontrolled Re-Entry Expected Soon

AMSAT News Service Bulletin 254.07
From AMSAT HQ SILVER SPRING, MD.
September 11, 2011
To All RADIO AMATEURS
BID: $ANS-254.07

Leonard David reported in his September 7 Space Insider Column on Space.com, "Huge Defunct Satellite to Plunge to Earth Soon, NASA Says".

He wrote, "The huge Upper Atmosphere Research Satellite (UARS) is expected to re-enter Earth's atmosphere in an uncontrolled fall in late September or early October. Much of the spacecraft is expected to burn up during re-entry, but some pieces are expected to make it intact to the ground, NASA officials said."

He further reported that NASA computer analysis showed that about 150 component types, including the parent body of the satellite, will demise during re-entry, and 12 types (26 counting multiple components) would endure the fiery fall to Earth. The analysis indicated a surviving mass of 1,170 pounds (532 kilograms) falling within a debris footprint length of some 500 miles (800 kilometers).

The satellite is 35 feet long, 15 feet in diameter, and weighs 5.7 metric tons. It's operational orbit was at 375 miles inclined at 57 degrees to the equator.

"The risk to public safety or property is extremely small, and safety is NASA's top priority," noted a NASA website dedicated to the re-entry. There is a chance that pieces of debris from the satellite will crash in areas accessible to the public.

According to NASA, on UARS re-entry day, "if you find something you think may be a piece of UARS, do not touch it. Contact a local law enforcement official for assistance."

As of September 7 a NASA statement read, "It is too early to say exactly when UARS will re-enter and what geographic area may be affected, but NASA is watching the satellite closely and will keep you informed."

The full story was published on September 7 on the Space.com site:
http://www.space.com/12859-nasa-satellite-falling-space-debris-uars.html

[ANS thanks Space.com for the above information]

/EX

SB SAT @ AMSAT $ANS-254.08
Satellite Shorts From All Over

AMSAT News Service Bulletin 254.08
From AMSAT HQ SILVER SPRING, MD.
September 11, 2011
To All RADIO AMATEURS
BID: $ANS-254.08

+ Episode 16 of the internet TV show Ham Nation is available for down load at http://twit.tv/show/ham-nation/16. This week's show features Steve Bible, N7HPR talking about AMSAT & ARISsat-1 along with many other interesting ham radio topics.

+ Trevor, M5AKA forwarded a link from the BBC with news that the United Kingdom's first satellite launched on a UK built rocket 40 years ago will attempt to be reactivated. The Prospero space craft was launched by a Black Arrow rocket on October 28, 1971 from Launch Area 5B, Woomera. It operated on 137.560 MHz. Full story and pictures at http://www.bbc.co.uk/news/science-environment-14783135 Additional information on the AMSAT-UK website: http://tinyurl.com/3dny3s4 Web based tracking for Prospero: http://www.n2yo.com/?s=5580 and at: http://www.vk3ukf.com/Space/GadgetSatProspero.htm

+ Congratulations to Rodney, KC0ZHF for earning his VUCC endorsement for grids 100-250.

+ The AO-27 website is temporarily down. The Java scheduler app will always be accurate to within 2 minutes (the cumulative error in the satellite's clock) as long as a new schedule hasn't been uploaded to the bird itself. While the latest files for the AO-27 schedule are on the webpage, the required data files for the Java app until the website is back up, have been placed on the Java scheduler download page http://sites.google.com/site/ao27satellitescheduler (George, KA3HSW)

+ An article regarding getting the FUNcube Dongle to run under linux can be found at: http://webshed.org/wiki/FUNcube-Dongle-Linux

+ NASA is giving the public the power to journey through the solar system using a new interactive Web-based tool. The "Eyes on the Solar System" interface combines video game technology and NASA data to create an environment for users to ride along with agency spacecraft and explore the cosmos. Screen graphics and information such as planet locations and spacecraft maneuvers use actual space mission data. Begin your ride at: http://solarsystem.nasa.gov/eyes/

+ The Summer 2011 TAPR Packet Status Register newsletter is now available at http://www.tapr.org/psr

+ A.R.I. DX Bulletin No 1061 posted that Eric, KV1J and Jack, KV1E will be active as FP/KV1J and FP/KV1E from Miquelon Island (NA-032) from 25 October to 1 November. Plans are to operate SSB and RTTY, with some CW and PSK31, on 160-10 metres, plus 6m "if indications of openings". FP/KV1J will take part in the CQ WW DX SSB Contest (SOAB HP). QSL via home calls, direct or bureau, and LoTW, Information on satellite activity and and other details can be found at: http://www.kv1j.com/fp/october11.html AO-51 (if available), AO-27, SO-50, SO-67, and HO-68. All FM mode, V/U

[ANS thanks everyone for the above information]

/EX

SB SAT @ AMSAT $ANS-254.09
ARISS Status - 5 September 2011

AMSAT News Service Bulletin 254.09
From AMSAT HQ SILVER SPRING, MD.
September 11, 2011
To All RADIO AMATEURS
BID: $ANS-254.09

1. Vision Australia Contact Successful

Students from Vision Australia in Enfield, New South Wales, Australia took part in an Amateur Radio on the International Space Station (ARISS) contact on Monday, August 29 via station WH6PN in Hawaii. On-orbit Astronaut Mike Fossum, KF5AQG answered 12 questions put to him by the youth before the ISS went over the horizon. Students were interested in the logistics of living in space as well as how astronauts stay in contact with friends and family during their missions. Vision Australia is a nonprofit agency that provides low vision and blindness services to the community in Australia.

2. Merritt Island Students Speak with Satoshi Furukawa

On Tuesday, August 30, an Amateur Radio on the International Space Station (ARISS) contact was held between da Vinci Academy of Aerospace Technology students at Merritt Island High School in Florida and Astronaut Satoshi Furukawa, KE5DAW on the ISS. Questions asked included those concerning the long term effects of microgravity on the human body and influences on Furukawa's decision to study in the fields of STEM (Science, Technology, Engineering and Math). Florida Today ran a story on the event:
http://www.floridatoday.com/apps/pbcs.dll/article?AID=2011108310317

3. EE Times, ARISSat Blog

Another entry has been posted to the EE (Electronic Engineering) Times "Chips in Space" blog about amateur radio satellite ARISSat-1. This week the blog covers the "Design challenges, intrigue and solutions" of the project. See:
http://www.eetimes.com/electronics-blogs/other/4219588/Chips-in-Space--Design-challenges--intrigue-and-solutions

[ANS thanks Carol, KB3LKI, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's
Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are
available from the AMSAT Office.

73,

This week's ANS Editor,
Lee McLamb, KU4OS

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From 7416306654336482913
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X-Google-Attributes: gid8f86f75953,domainid0,public,usenet
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        Tue, 13 Sep 2011 03:35:03 -0700 (PDT)
Path: m9ni5309pbd.0!nntp.google.com!news1.google.com!postnews.google.com!
m4g2000pri.googlegroups.com!not-for-mail
From: devi <satyamsivam9030@gmail.com>
Newsgroups: rec.radio.amateur.space
Subject: KAJAL AGARWAL LATEST HOT WITHOUT TOP
Date: Tue, 13 Sep 2011 03:32:05 -0700 (PDT)
Organization: http://groups.google.com
Lines: 40
Message-ID: <6d57b47d-0458-4373-8ce3-35653bee018b@m4g2000pri.googlegroups.com>
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Mime-Version: 1.0
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 Gecko/20110902 Firefox/3.6.22,gzip(gfe)
Xref: news1.google.com rec.radio.amateur.space:411
Content-Type: text/plain; charset=ISO-8859-1


   LATEST HOT TAPSEE KISSING STILLS
http://southactresstou.blogspot.com/2011/06/tapsee.html
  KAJAL AGARWAL ROMANTIC STILLS
http://southactresstou.blogspot.com/2011/05/kajal-agarwal.html
 TAMANNA BEAUTIFUL PHOTOS
http://southactresstou.blogspot.com/2011/05/tamanna.html
ANUSHKA SHETTY HOT SAREE STILLS
http://southactresstou.blogspot.com/2011/06/anushka-shetty.html
SNEHA RARE PHOTOS
http://southactresstou.blogspot.com/2011/05/sneha.html
 NAMITHA HOT NAVEL SHOW
http://southactresstou.blogspot.com/2011/05/namitha.html
ILIYANA HOT WALLPAPERS
http://southactresstou.blogspot.com/2011/05/iliyana.html
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PRIYAMANI LATEST SPICY PHOTOS
http://southactresstou.blogspot.com/2011/05/priyamani.html

FOR ONLY HOT GUYS SEE THIS
TOP 20 HOT ACTRESS PHOTOS
http://hotactress-kalyani.blogspot.com/2011/08/hot-actrsess.html
KAJAL AGARWAL LATEST HOT
http://hotactress-kalyani.blogspot.com/2011/08/kajal-agarwal-hot-photos.html
LATEST   AMISHA PATEL HOT PICS
http://hotactress-kalyani.blogspot.com/2011/08/amisha-patel-hot.html
TAPSEE DIFFERENT STILLS
http://hotactress-kalyani.blogspot.com/2011/08/tapsee-hot.html
PRIYAMANI HOT PHOTOS
http://hotactress-kalyani.blogspot.com/2011/08/priyamani-hot.html
ARTHI CHABRIA HOT PHOTOS
http://hotactress-kalyani.blogspot.com/2011/08/aarti-chabria-hot.html
DIYA MIRZA HOT PHOTOS
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KATRINA KAIF HOT PHOTOS
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DEEPIKA PADUKONE HOT PHOTOS
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NAMITHA HOT PHOTOS
http://hotactress-kalyani.blogspot.com/2011/08/namitha-hot-photos.html

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border1.a.newsrouter.astraweb.com!not-for-mail
From: Chris Steyaert <observations@rmob.org>
Newsgroups: rec.radio.amateur.space,sci.astro.amateur
Subject: Radio Meteor Obs. Bull. May 2010 eta Aquarids
Date: Mon, 07 Jun 2010 20:21:52 +0200
Message-ID: <h4eq065dkdabbdmp7l9fki785gre5h0jkv@4ax.com>
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Radio Meteor Observation Bulletin No. 202 of May 2010 (92 K) is available now as

http://www.rmob.org/rmobtext/rmob1005.txt

More information and the visual presentation of the hourly forward scatter counts can be found on

http://www.rmob.org

Chris

```
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out.readnews.com!news-xxxfer.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-164 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sat, 12 Jun 2010 21:43:04 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 449
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <001301cb0a99$bdf95820$39ec0860$@net>
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Mime-Version: 1.0
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Content-Transfer-Encoding: 7bit
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NNTP-Posting-Date: Sun, 13 Jun 2010 01:43:04 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
```

X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news2.google.com rec.radio.amateur.space:376 rec.radio.info:1585

AMSAT NEWS SERVICE
ANS-164

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

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**********************************************************************
*             FINAL NOTICE: BoD Nominations Due June 15              *
* It is time to submit nominations for the upcoming open seats on    *
* the AMSAT-NA Board of Directors. A nomination requires either      *
* one Member Society or five current individual members to nominate  *
* an AMSAT member for the position. Three director's terms expire    *
* this year: Tom Clark, K3IO, Lou McFadin, W5DID and Gould Smith,    *
* WA4SXM. Nominations must be in writing and mailed to: AMSAT,       *
* 850 Sligo Ave #600, Silver Spring MD 20910. They can arrive no     *
* later than June 15th.                                              *
**********************************************************************
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In this edition:

* Thank You! We've Met The Dayton $5000 Challenge
* 2010 AMSAT Space Symposium Room Reservation Code
* AMSAT Forum at Dayton Hamvention Videos Ready to be Viewed On-line
* Museum Ships Weekend 2010 - Special Event on the Satellites
* A Summer List of Seminars and Symposiums
* Early Colloquium Pictures Sought
* Satellite Shorts From All Over

SB SAT @ AMSAT $ANS-164.01
Thank You! We've Met The Dayton $5000 Challenge

AMSAT News Service Bulletin 164.01
>From AMSAT HQ SILVER SPRING, MD.
June 13, 2010
To All RADIO AMATEURS
BID: $ANS-164.01

Thanks to the generosity expressed by AMSAT members and others, we have met the "Dayton Challenge" one-for-one matching gift goal of $5,000.00. This goal was achieved in less than two months. AMSAT thanks the Dayton Amateur Radio Association (DARA) for their continued support of AMSAT. These donations will help support "Getting AMSAT Back into Space."

DARA President Steve Coy, K8UD wrote to AMSAT President Barry Baines, WD4ASW, "I am glad that this promotion has worked well and I am looking forward to other endeavors in the future. AMSAT has been a major attraction to Hamvention for many years, and hopefully for many years to come. I hope other organizations will step up with similar programs. Launches have not been going down in price, however with the recent launch of Falcon 9, perhaps there may be other opportunities in the future. We all need to continuously look outside the box for new solutions. Again, DARA congratulates all the AMSAT members and best wishes for the new satellite."

While this one-for-one matching opportunity has been met, AMSAT continues on it's capital drive to raise $100,000.00 in both 2010 and 2011. One AMSAT member has just agreed to pledge $500.00 to AMSAT as an additional 'one-for-one' matching opportunity, so donations made now will continue to "grow".

Since announcement of the campaign in October 2009, over $25,087.00 has been raised to date, not including the DARA matching gift. If you haven't donated to AMSAT this year, please consider making a donation as we must continue to raise funds in 2010 to underwrite the construction and launch of our next satellite, Fox. We will continue to provide opportunities for 'small donations' at various hamfests as well as making contributions online:
http://www.amsat-na.com/store/donation.php

[ANS thanks AMSAT President Barry Baines, WD4ASW for the above information]

/EX

SB SAT @ AMSAT $ANS-164.02
2010 AMSAT Space Symposium Room Reservation Code

AMSAT News Service Bulletin 164.02
>From AMSAT HQ SILVER SPRING, MD.
June 13, 2010
To All RADIO AMATEURS
BID: $ANS-164.02

The 2010 AMSAT Space Symposium and Annual Meeting will be held on Friday, October 8 through Sunday, October 10. This year we have selected the Chicago/Elk Grove Holiday Inn which is near O'Hare Airport for the event.

The 2010 Symposium Committee has completed the room reservation and registration details for the event. The Hotel booking code for the Elk Grove Village Holiday Inn is AMS for the AMSAT convention. The $79 per-night room rate will apply for those using this group code.

The direct web page link to the Elk Grove Village Holiday Inn is http://tinyurl.com/22s788d

For people needing special accommodations please call the Hotel directly at (847) 437-6010, ask for Brad.

[ANS thanks the 2010 Symposium Committee for the above information]

/EX

SB SAT @ AMSAT $ANS-164.03
AMSAT Forum at Dayton Hamvention Videos Ready to be Viewed On-line

AMSAT News Service Bulletin 164.03
>From AMSAT HQ SILVER SPRING, MD.
June 13, 2010
To All RADIO AMATEURS
BID: $ANS-164.03

If you weren't able to attend the Dayton Hamvention this year, you missed five interesting and informative presentations at the AMSAT Forum. The complete presentations are now available on the AMSAT website at http://www.amsat.org. From the menu on the left side of the home page, select "AMSAT Video News".

The direct link to the AMSAT Video News Page is:
http://www.amsat.org/amsat-new/information/videoNews.php

Here's what you'll find:

Barry Baines, WD4ASW, AMSAT President, "AMSAT Status Report"
AMSAT President Barry Baines highlights current activities within AMSAT and discusses some of the challenges facing the organization.

Drew Glasbrenner, KO4MA, AMSAT VP Operations, "AMSAT Satellite Operations and International Satellite Operations". Drew discussed operational AMSAT satellites and described new and future international Satellites.

Mike Forsythe, AC2V, "Integrating Satellite Operations into DXpeditions"
Mike, K4T Team Leader described the planning and execution of the K4T DXpedition, and how to have satellite operations be a major part of DXpeditions, involving youth and making it all work on green power!

Gould Smith, WA4SXM, AMSAT VP User Services, "Getting ARISSat-1 Ready to Fly". Gould is the AMSAT Project Manager for ARISSat-1 and talked about the evolution of SuitSat-2 to ARRISat-1, the current status of the satellite project, and the testing and delivery of two satellites to Russia in July.

Roger Westgate, WC2R, "NextGen CubeSat Program Update".

Roger delivered the update prepared by Alex Harvilchuck, N3NP, a Systems Engineer with IBM and the NextGen CubeSat Program Manager. A team of engineering students from the State University of New York (SUNY) at Binghamton have been modifying the power systems from ARISSat-1 for use in a 3U CubeSat with a U/V linear transponder, for AMSAT.

The files are in Windows Media Video (.wmv) format and will work with Internet Explorer and Windows Media Player on a PC, Safari and QuickTime (with .wmv plug-in) under OS X on an Apple Macintosh, and with a .wmv player under Linux or other operating system.

Credits:
Video and audio recording: Patrick Stoddard WD9EWK and
Douglas Quagliana KA2UPW
Moderator: Alan Biddle WA4SCA
Video server: Rob Meisse W8REM and Gunther Meisse W8GSM
Webmaster: Rick Hambly W2GPS
Video editor: Steve Belter N9IP

[ANS thanks Steve Belter, N9IP for the above information]

/EX

SB SAT @ AMSAT $ANS-164.04
Museum Ships Weekend 2010 - Special Event on the Satellites

AMSAT News Service Bulletin 164.04
>From AMSAT HQ SILVER SPRING, MD.
June 13, 2010
To All RADIO AMATEURS
BID: $ANS-164.04

The Brazos Valley Amateur Radio Club (BVARC) wishes to thank all the amateur radio operators who worked special event station KK5W operating from Seawolf Park in Galveston, Texas during the Museum Ships Weekend event June 5-6, 2010.

Two passes of SO-50 and one pass of AO-27 were worked by KK5W on June 5, 2010, and a total of 26 satellite contacts were made with stations in 17 US states and Ontario. Contacts were made with K8YSE at the Hudsonville Michigan hamfest, WD9EWK at the Show Low Arizona hamfest, and N2SPI at the Rochester New York hamfest. It was nice to be able support these stations conducting satellite demonstrations, and to let those listening at the hamfests know that special event stations operate on the satellites.

A contact with Patrick, WD9EWK, also provided the opportunity to talk with a boy scout about the Museum Ships Weekend Event, and the scout was able to satisfy several requirements toward the Radio Merit Badge.

Two club stations that were demonstrating amateur radio to the public, W9MJL operated by the Vermilion County Amateur Radio Association in Illinois and VE3JW at the Canada Science & Technology Museum in Ottawa, were also worked. The stations operating at the various hamfests and special events took turns working stations which allowed many contacts to be made on the congested passes.

A schedule was set up for KK5W to try for a ship-to-ship satellite contact with the USS Wisconsin Radio Club - N4WIS in Virginia Beach, Virginia, but due to the heavy congestion on the passes we were unable to make the contact. It was nice, however, to have another ship operating on the satellites for Museum Ship Weekend and we hope that satellite operators living near some of the museum ships that participate in the event will come forward and volunteer to help to put other ships on the satellites next year.

[ANS thanks Allen Mattis, N5AFV for the above information]

/EX

SB SAT @ AMSAT $ANS-164.05
A Summer List of Seminars and Symposiums

AMSAT News Service Bulletin 164.05
>From AMSAT HQ SILVER SPRING, MD.
June 13, 2010
To All RADIO AMATEURS
BID: $ANS-164.05

See the list below for Educational and Symposium Opportunities:

2010 AMSAT Space Symposium Call For Papers:

This is the first call for papers for the 2010 AMSAT Space Symposium and Annual Meeting. The Symposium Committee invites proposals for:

+ Papers for publication in the Proceedings
+ Symposium Presentations
+ Poster Presentations
+ Equipment and Operating Demonstrations

These can be on any topic of interest to the amateur satellite community. We request a tentative title of your presentation as soon as possible, with final copy submitted by September 1, 2010 for inclusion in the printed proceedings.

Abstracts and papers should be sent to JoAnne Maenpaa, K9JKM at k9jkm@comcast.net. Dan Schultz, N8FGV will assist as Co-Editor of the Proceedings.

Remember also the AMSAT-UK Colloquium 2010 which will be held at the Holiday Inn, Guildford, UK (same venue as in 2009) on Saturday July 31 to Sunday August 1. Details on-line at: http://www.uk.amsat.org/

NASA Science News for June 7, 2010 says they have started sending complimentary DVDs of the smash-hit planetarium show "Journey to the Stars" to teachers and students around the country. The story from Science@NASA reviews the show and tells educators how to request their copies: http://tinyurl.com/255leto

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The IEEE is co-sponsoring with the Control Systems Society, American Automatic Control Council, International Federation of Automatic Control, University of Maryland, and University of Kansas. a Workshop targeted for Teachers and Students on Ideas and Technology of Control Systems.

>Date: June 29, 2010
Place: Baltimore Marriott Hotel

The workshop is for middle and high school teachers and students. It will be held in Baltimore at the Baltimore Marriott Hotel on Tuesday, June 29, 2010. This one-day workshop is organized in celebration of 10th Anniversary of the Control Outreach Program in conjunction with the 2010 American Control Conference (a pre-conference event): http://www.a2c2.org/conferences/acc2010/SpecialEd.html

Registration: Free.
Deadline: June 15, 2010
Send E-mail to: kumath@math.ku.edu

Lunch will be provided and a reception will follow immediately after the workshop.

The workshop activities include short presentations by control systems experts from the technical community, informal discussions, and the opportunity for teachers to meet passionate researchers and educators from academia and industry. The talks are designed to be educational, inspirational and entertaining showing the excitement of being an engineer but showing also that control systems is a field that spans science, technology, engineering and mathematics (STEM).

The 44th annual CSVHFS Conference is July 22nd - 24th in St. Louis. The Online Registration form is up and running, as is the Hotel Reservation Form. All the details are on the CSVHFS Web Site.
http://www.csvhfs.org/conference/index.html

Technical papers are solicited for presentation at the 29th Annual ARRL and TAPR Digital Communications Conference to be held September 24-26, 2010 in Portland, Oregon. These papers will also be published in the Conference Proceedings (you do NOT need to attend the conference to have your paper included in the Proceedings). The submission deadline is July 31, 2010. Please send papers to:

Maty Weinberg
ARRL
225 Main St
Newington, CT 06111

or you can make your submission via e-mail to: maty@arrl.org.

Papers will be published exactly as submitted and authors will retain all rights.

[ANS thanks everyone for the above information]

/EX

SB SAT @ AMSAT $ANS-164.06
Early Colloquium Pictures Sought

AMSAT News Service Bulletin 164.06
>From AMSAT HQ SILVER SPRING, MD.
June 13, 2010
To All RADIO AMATEURS
BID: $ANS-164.06

This year sees the 25th AMSAT-UK International Space Colloquium and Jim Heck G3WGM is looking for pictures of the early years.

The first event was held in Harrow School a quarter of a century ago, it later moved to the University of Surrey and finally to the Holiday Inn at Guildford. Jim is looking to have a display of early pictures at this years event which takes place 31 July - 1 Aug.

If you have any pictures of the early years please email Jim at g3wgm@amsat.org

The Colloquium is open to all Radio Amateurs and Shortwave listeners, for further details see: http://www.uk.amsat.org/colloquium

Videos from 2008/9 can be seen at http://www.batc.tv/channel.php?ch=1

[ANS thanks Trevor, M5AKA for the above information]

/EX

SB SAT @ AMSAT $ANS-164.07
Satellite Shorts From All Over

AMSAT News Service Bulletin 164.07
>From AMSAT HQ SILVER SPRING, MD.
June 13, 2010
To All RADIO AMATEURS
BID: $ANS-164.07

+ Congratulations to Don WB8ZOM on his first contact via satellite on SO-50 on June 7. Don contacted John K8YSE. N3TL added encouragement, "Working the satellites is the most fun and satisfying thing I've ever done in amateur radio." Bob W7LRD observed, "Be aware this is an addictive part of ham radio - there is no cure!" Greg KO6TH noted, "That bug bit me about 17 years ago. It still hasn't let go."

+ The SpaceX Falcon 9 blasted-off successfully from Cape Canaveral at 1545 UT on Friday, June 4. Watch the Falcon 9 Launch 1 Webstream at: http://tinyurl.com/26cjwuv

+ ESA's Italian astronaut Paolo Nespoli will visit the International Space Station in November, and he needs your help to name his mission. More information can be found at http://tinyurl.com/35wukjn

+ A video of the French Over The Horizon (OTH) radar, Nostradamus, which operates across 3-30 MHz can be seen on YouTube: http://tinyurl.com/299g7oy

+ Listen for Paul, 2E1EUB to be active for just a few days from northern Scotland from his converted van operating as 2M1EUB/P. Paul plans to to be on the air around June 25-27.

+ The goal of the Moon Zoo website is "to provide detailed crater counts for as much of the Moon's surface as possible." Interested parties can help out with this effort by examining images of the moon's surface and providing feedback to be used by the team of researchers in charge of the Moon Zoo project. First-time visitors should click on the "How To Take Part" for a tutorial that will help determine which project they might be best suited for. See http://www.moonzoo.org/ for more information.

+ The Amateur Radio contact between the International Space Station (ISS) and Japanese boy and girl scouts is now available on YouTube. The contact with Astronaut Soichi Noguchi, KD5TVP, was broadcast on Japanese cable TV. Watch at: http://tinyurl.com/28y6h7r

+ AMSAT has received the sad news of the passing of Frank Lumney, W2UHI. He passed away in the early hours of June 3, 2010. Frank was a great friend and a true asset to the amateur radio community. Many old time AMSAT operators (AO-13 for example) will remember Frank. Many years ago, he was also a frequent check-in to the AMSAT-NA

75 meter net. Frank would have turned 88 on July 4.

+ NASA has released the first-ever up close video available for the public, taken from inside a space shuttle after landing, showing the checkout procedures and the "towback" to the Orbiter Processing Facility. It was taken on May 26, 2010 following shuttle Atlantis' landing following the STS-132 mission. See: http://tinyurl.com/2fbkks4 (UniverseToday.com)

+ Watch the YouTube video at http://tinyurl.com/23fftkg that addresses one of amateur radio's urban legends regarding homebrewing an antenna from a Slinky.

[ANS thanks whomever for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office. And with that, please keep in mind the tale of the two trout who were dining in a restaurant when one of them starts waving his empty glass in the air. The waiter observed, "I think there's a fish out of water."

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM

From -5109441007306613657
X-Google-Thread: 10e8ad,5119d5623272c494,start
X-Google-NewGroupId: yes
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X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,gida4a23d5f63,domainid0,public,usenet
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newshosting.com!198.186.194.249.MISMATCH!transit3.readnews.com!news-
xxxfer.readnews.com!news-out.readnews.com!transit4.readnews.com!panix!
rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-171 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Tue, 22 Jun 2010 12:28:30 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 367
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <001201cb1227$ea7e4780$bf7ad680$@net>

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X-Trace: reader1.panix.com 1277224110 7862 166.84.1.6 (22 Jun 2010 16:28:30 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Tue, 22 Jun 2010 16:28:30 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news2.google.com rec.radio.amateur.space:377 rec.radio.info:1607
```

AMSAT NEWS SERVICE
ANS-171

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:

* Last Call For Speakers
* BOD Nominations Announced
* AO-51 Field Day Schedule
* Lunar Lander Cubesat Poposed
* 1675-1710 MHz Weather Satellite Band Under Study for Re-Allocation
* Name That Satellite
* Hudson Valley, NY SatCom Net on Thursday
* ARISS Status

SB SAT @ AMSAT $ANS-171.01
Last Call For Speakers

AMSAT News Service Bulletin 171.01
>From AMSAT HQ SILVER SPRING, MD.
June 20, 2010

To All RADIO AMATEURS
BID: $ANS-171.01

Hi All,

This is the final call for speakers for the AMSAT-UK Colloquium 2010 which will be held at the Holiday Inn, Guildford, UK (same venue as in 2009) on *Sat 31st Jul and Sun 1st Aug 2010*, with a beginners session on the afternoon of Friday 30th.

AMSAT-UK invite speakers, about amateur radio, space and associated activities to this event, details of which, can be found at:

http://www.uk.amsat.org/content/view/32/42/

As this is a late call, the submission of a paper is not required but any PowerPoint or similar material can be made available online, afterterwards.

Submissions should be sent *ONLY* to G4DPZ, via the following routes:

e-mail: david.johnson AT blackpepper.co.uk

SnailMail: QTHR from www.QRZ.com

Likewise if anyone knows of a good speaker, please send contact and other information to G4DPZ.

73

Dave
G4DPZ

[ANS thanks Dave, G4DPZ, for the above information]

/EX

SB SAT @ AMSAT $ANS-171.02
BOD Nominations Announced

AMSAT News Service Bulletin 171.02
>From AMSAT HQ SILVER SPRING, MD.
June 20, 2010
To All RADIO AMATEURS
BID: $ANS-171.02

It is my pleasure to announce that the following have been nominated to serve on the AMSAT Board of Directors for two year terms:

Tom Clark, K3IO

Lou McFadin, W5DID
Tony Monteiro, AA2TX
Gould Smith, WA4SXM

Candidates will be afforded the opportunity to have statements of their qualifications and positions circulated to the membership. In accordance with the bylaws of the Radio Amateur Satellite Corporation, the ballots will be mailed no later than July 15th, and must be returned no later than September 15h to be counted.

Since there are four candidates for three seats, the three candidates having the greatest number of votes will be elected to full terms. The forth candidate will serve as an alternate until the next annual election.

Alan Biddle
WA4SCA
AMSAT Corporate Secretary

[ANS thanks Alan, WA4SCA for the above information]

/EX

SB SAT @ AMSAT $ANS-171.03
AO-51 Field Day Schedule

AMSAT News Service Bulletin 171.03
>From AMSAT HQ SILVER SPRING, MD.
June 20, 2010
To All RADIO AMATEURS
BID: $ANS-171.03

AO-51 Operations Team Announces Field Day Schedule

It's that time of year again; summer and Field Day! Each year the American Radio Relay League (ARRL) sponsors Field Day as an emergency preparedness exercise. The event takes place during a 24-hour period on the fourth weekend of June.

For 2010 the event takes place during a 27-hour period from 1800 UTC on Saturday June 26, 2010 through 2100 UTC on Sunday June 27, 2010. Those who set up prior to 1800 UTC on June 26 can operate only 24 hours. The Radio Amateur Satellite Corporation (AMSAT) promotes its own version of Field Day for operation via the amateur satellites, held concurrently with the ARRL event.

AMSAT-NA VP Operations, Drew KO4MA says the AO-51 Command Team and Operations Group has announced the AO-51 configuration for Field Day:

June 21 10:40Z - June 24 09:35Z FM Repeater, V/S to allow testing

of V/S station equipment prior to Field Day:
Uplink: 145.880 Mhz FM
Downlink: 2401.200 Mhz FM

June 24 09:35Z - June 27 06:40Z FM Repeater, V/U
Please observe the 1 QSO per repeater Field Day rule
Uplink: 145.920 Mhz FM, PL 67Hz
Downlink: 435.300 Mhz FM

June 27 06:40 - June 27 22:00Z FM Repeater, V/S
Please observe the 1 QSO per repeater Field Day rule
Uplink: 145.880 Mhz FM
Downlink: 2401.200 Mhz FM

AMSAT Field Day rules and scoring instructions are available on-line at:
http://www.amsat.org/amsat-new/awards/amsatfd.php
Read the latest AO-51 Command Team and Operations Group News on-line at:
http://www.amsat.org/amsat-new/echo/CTNews.php

[ANS thanks the AO-51 Operations Team for the above information]

/EX

SB SAT @ AMSAT $ANS-171.04
Lunar Lander Cubesat Proposed

AMSAT News Service Bulletin 171.04
>From AMSAT HQ SILVER SPRING, MD.
June 20, 2010
To All RADIO AMATEURS
BID: $ANS-171.04

Lunar Lander CubeSat Proposed

In a story first reported in the European EE Times, Vermont Technical College, Norwich University, St. Michael's College, and the University of Vermont are working together to land a CubeSat on the moon.
(EE Times http://tinyurl.com/22vuz7q)

The team is currently working on initial designs for the spacecraft, with the aim of achieving further NASA funding in June 2011. Primary funding for this effort is being provided by the Vermont Space Grant Consortium under NASA grant.

In the current phase of the program The Vermont CubeSat project, led by Professor Carl Brandon of Vermont Technical College aims to launch by 2015. It is developing the first CubeSat that can be launched from a geostationary orbit to successfully land on the moon. The CubeSat electronics are based on a Texas Instruments (TI) MSP430 processor and the software will control navigation, communications, scientific instruments, camera and the CubeSat's propulsion system.

SPARK, a new high level programming language and toolset designed to support the development of mission critical software will be used for the moonbound cubesat. SPARK was adopted for the CubeSat project because of Vermont Technical College's experience in using SPARK and the related Ada programming language in developing mission critical control systems for a project to create Arctic sea ice monitoring buoys. Both the CubeSat and buoy systems face similar challenges in terms of coping with inhospitable conditions and the impossibility of fixing any software bugs when deployed.

The proposed lunar lander will be a single unit CubeSat (10*10*10 cm) with four mini-thrusters on the bottom to maximize control and manoeuvrability. Two potential options for propulsion are being examined - a bi-propellant booster or a Xenon powered ion drive booster. The Xenon thruster can also be used for a triple CubeSat that would go to and orbit the moon.

[ANS thanks EE Times and the SouthGate ARC News for the above information]

/EX

SB SAT @ AMSAT $ANS-171.05
1675-1710 MHz Weather Satellite Band Under Study for Re-Allocation

AMSAT News Service Bulletin 171.05
>From AMSAT HQ SILVER SPRING, MD.
June 20, 2010
To All RADIO AMATEURS
BID: $ANS-171.05

1675-1710 MHz Weather Satellite Band Under Study for Re-Allocation

The ARRL has picked up on a news item in regards to the National Broadband Plan (NBP) recommending that the FCC should make 500 MHz of spectrum available for broadband use within the next 10 years, including 300 MHz between 225 MHz-3.7 GHz for mobile use in the next five years. One of the first slices of spectrum being eyeballed includes the 1675-1710 MHz band utilized by weather satellites.

The FCC's Office of Engineering and Technology (OET) has engaged in discussions with the National Telecommunications and Information Administration's (NTIA) Office of Spectrum Management to begin examining various frequency bands that may be suitable for mobile broadband use.

NTIA has preliminarily identified the 1675-1710 MHz band for such use and is examining the impact on its incumbent federal users of the weather satellite products. The FCC issued a Public Notice (ET Docket No 10-123) on June 4, 2010, seeking information to help better comprehend the current use of the 1675-1710 MHz band by non-federal entities and better understand its potential utility for broadband.

The full story can be found on the ARRL web site:
http://tinyurl.com/29zv8a6

[ANS thanks the ARRL Letter for June 17, 2010, Editor: S. Khrystyne Keane, K1SFA for the above information]

/EX

SB SAT @ AMSAT $ANS-171.06
Name That Satellite

AMSAT News Service Bulletin 171.06
>From AMSAT HQ SILVER SPRING, MD.
June 20, 2010
To All RADIO AMATEURS
BID: $ANS-171.06

SA-AMSAT is inviting radio amateurs to propose a name for its CubeSat project which was announced at the recently held Space Symposium. The project name should be a single word in any of South Africa's official languages and reflect the spirit of the project.

A good example is the name given to the around-the-world-balloon project which is called "lalela", the Zulu word for "listen".

The winning entry will receive a satellite handbook.
Entries should be sent by e-mail to saamsat@intekom.co.za.
SA-AMSAT's web page is at: http://www.amsatsa.org.za/

The closing date is 15 July.

[ANS thanks SA-AMSAT, SARL, and SouthGate for the above information]

/EX

SB SAT @ AMSAT $ANS-171.07
Hudson Valley, NY SatCom Net on Thursday

AMSAT News Service Bulletin 171.07
>From AMSAT HQ SILVER SPRING, MD.
June 20, 2010
To All RADIO AMATEURS
BID: $ANS-171.07

The next "HV Satcom" group net is Thursday June 24
8PM (EDT) (Or 2400 UTC), with an echolink Node of
N2EYH-L, & the repeater used is "146.970 (Pl 100;
600 down), & for more info: www.hvsatcom.org

73,.Stu (WA2BSS)

(Director;Mt. Beacon ARC)

[ANS thanks Stu, WA2BSS, for the above information]

/EX

SB SAT @ AMSAT $ANS-171.08
ARISS Report

AMSAT News Service Bulletin 171.08
>From AMSAT HQ SILVER SPRING, MD.
June 14, 2010
To All RADIO AMATEURS
BID: $ANS-171.08

Amateur Radio on the International Space Station (ARISS) Status ReportJune 14, 2010

1. Upcoming School Contact

Asahi Manabiya, located in Owariasahi, Aichi, Japan, has been scheduled for an Amateur Radio on the International Space Station (ARISS) contact on Wednesday, June 23 at 12:48 UTC. Asahi Manabiya is a volunteer club with approximately 50 members. It hopes to pique children's interest in natural science including electrical and electronic phenomena through this ARISS activity.

2. Astronaut Caldwell-Dyson Speaks with ISIS Andrea Ponti via ARISS

On Monday, June 7, students from ISIS Andrea Ponti in Gallarate, Varese, Italy, linked up with on-orbit astronaut Tracy Caldwell-Dyson, KF5DBF via an Amateur Radio on the International Space Station (ARISS) contact. An audience of more than 250 students, teachers and visitors, located in several classrooms and connected by multimedia screens, were present for the contact. ARISS mentor Francesco De Paolis, IK0WGF introduced the event and ARISS activities with a presentation via phone line. The event was distributed via webcast and was covered by the local media and newspapers. This contact was the final event of several cross-curricular activities involving different school subjects including Science, History, Geography, Math, Information Technology and English.

3. ARISS News on Amateur Radio Newsline

On June 11, the Amateur Radio Newsline Report 1713 included a short story titled, "Radio from Space: Astroham Congratulates WIA on its 100th Anniversary." The article is about Tracy Caldwell-Dyson's ARISS contact during the WIA's anniversary dinner in which she sent greetings and talked about the advancements in communications over the years. A link to the audio is provided. To view the article, see:
ftp://ftp.arnewsline.org/quincy/News/news.txt

4.Astronaut Training Status

Astronaut Tom Marshburn, KE5HOC is scheduled to receive ARISS basic operations training on July 12.

[ANS thanks Carol, KB3LKI, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits.
Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Dee Interdonato, NB2F

```
From -9129460616202424656
X-Google-Thread: 10e8ad,6145e905e838d099,start
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!newsfeed2.dallas1.level3.net!
news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-174 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Wed, 23 Jun 2010 09:04:39 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 1884
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <001e01cb12d4$9078e580$b16ab080$@net>
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NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
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Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1277298279 22668 166.84.1.6 (23 Jun 2010 13:04:39 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Wed, 23 Jun 2010 13:04:39 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
```

X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
x-cr-hashedpuzzle: AAe2 ApTR BDfg BKXZ CeUH C8SS EBlS Ek3b Fe08 F4y8 HZDF IY60 IpYE Izqm JOVq
J3cC;1;cgBlAGMALQByAGEAZABpAG8ALQBpAG4AZgBvAEAAcABhAG4AaQB4AC4AYwBvAG0A;Sosha1_v1;7;{E790F53C-EF45-49C2-AD34-185026CD10C7};awA5AGoAawBtAEAAYwBvAG0AYwBhAHMAdAAuAG4AZQB0AA==;Wed, 23 Jun 2010 13:04:03 GMT;VwBTAFIALQAxADcANAAgAEEATQBTAEEAVAAgAFcAZQBlAGsAbAB5ACAAUwBhAHQAZQBsAGwAaQB0AGUAIABSAGUAcABvAHIAdAA=
x-cr-puzzleid: {E790F53C-EF45-49C2-AD34-185026CD10C7}
Xref: g2news1.google.com rec.radio.amateur.space:353 rec.radio.info:1530

This report is organized into four (4) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - deborbited/returned satellites

SB SAT @ AMSAT W8ISS $WSR-174.S1
WSR 174 Part 1 06/23/2010

AMSAT NEWS SERVICE BULLETIN 174.S1
FROM AMSAT HQ SILVER SPRING, MD, June 23, 2010
TO ALL RADIO AMATEURS
BID: $WSR-174.S1

HO-68 XW-1 (CAS-1)
Catalog Number:
Launch Date: December 15, 2009
Status: Commissioning

Callsign:
Broadcast: BJ1SA-11
BBS: BJ1SA-12

Uplinks: 145.8250 MHz FM, PL 67.0 Hz.
           145.9250 - 145.9750 MHz SSB/CW
           145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
           435.7650 - 435.7150 MHz SSB/CW
           435.6750 MHz AFSK 1200 BPS

Beacon: 435.7900 MHz CW

Mode and Antenna Polarization:
V: LHCP 2.0dBi max
U: RHCP 3.0dBi max

IARU coordination page:

http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108

For more information about XW-1 (CAS-1):
http://www.camsat.cn
[04222010]
=====
SO-67 SumbandilaSat
Catalog Number: 35870
Launch Date: September 17, 2009

Status: Commissioning

Callsign: ZS0SUM

Uplink: 145.875MHz FM tone 233.6 Hz
Downlink: 435.345MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

For more information about SO-67:
http://www.amsatsa.org.za/
[11212009]
=====
DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008

Status: Operational
Current Mode: Science Mode - Beacon ONLY

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink: 435.530 to 435.570 MHz

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68
[02122009]
=====
VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW

Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.9360 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is active. Each transponder has a different beacon.
[03082010]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Modes until June 24 0935Z:
Uplink: 145.880 MHz FM
Downlink: 2401.200 Mhz FM
Telemetry
Downlink: 435.150MHz 9k6

Field Day 2010 mode:
June 24 0935Z - June 27 0640Z:
Uplink: 145.920 MHz FM - 67 Hz PL
Downlink: 435.300 MHz FM
Telemetry
Downlink: 435.150MHz 9k6

Field Day 2010 mode:
June 27 0640 - June 27 2200Z:
Uplink: 145.880 MHz FM
Downlink: 2401.200 Mhz FM
Telemetry
Downlink: 435.150MHz 9k6

After June 27 2200z:
Uplink: 145.920 MHz FM - 67 Hz PL
Downlink: 435.300 MHz FM
Telemetry
Downlink: 435.150MHz 9k6

Analog voice downlink:	435.300 MHz FM
	435.150 MHz FM
	2401.200 Mhz FM
Analog voice uplink:	145.860 MHZ FM
	145.880 MHz USB
	145.880 MHz FM
	145.920 MHz FM
	145.920 MHz FM - 67 Hz PL
	1268.700 MHz FM
Digital Downlinks:	435.150 MHz FM 38k4 PBP, 1 watt output
	435.150 MHz FM 9k6 Pacsat Broadcast Protocol
	2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:	145.860 MHz FM 9k6 Pacsat Broadcast Protocol
	1268.700 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon:	435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[06222010]

=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz. The order of operation is thus: (allow for Doppler as necessary):

1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10 minute timer.

[05282007]

=====

FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: sCHEDULED oPERATIONS
Current Mode: V/u (Mode JA)

Voice/CW (Mode JA)
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage:
http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts.htm

[02132010]

=====

AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[03232009]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational

Current Mode: Alternating between Mode A and B every 24 hours

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz CW
145.972 MHz CW
435.100 MHz CW
2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
[02122009]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - V/u
Voice - V/v
BBS - V/v
APRS - V/v
SSTV - V/v

Expedition 24 Crew:
Commander: Alexander Skvortsov
Flight Engineer: Tracy Caldwell Dyson KF5DBF

Flight Engineer: Mikhail Kornienko RN3BF
Flight Engineer: Doug Wheelock KF5BOC
Flight Engineer: Shannon Walker KD5DXB
Flight Engineer: Fyodor Yurchikhin RN3FI

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[062252010]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-174.S2
WSR 174 Part 2 06/23/2010

AMSAT NEWS SERVICE BULLETIN 174.S2
FROM AMSAT HQ SILVER SPRING, MD, June 23, 2010
TO ALL RADIO AMATEURS
BID: $WSR-174.S2

HO-68 XW-1 (CAS-1)
Catalog Number:
Launch Date: December 15, 2009
Status: Operational

Callsign:
Broadcast: BJ1SA-11
BBS: BJ1SA-12

Uplinks: 145.8250 MHz FM, PL 67.0 Hz.
           145.9250 - 145.9750 MHz SSB/CW
           145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
           435.7650 - 435.7150 MHz SSB/CW
           435.6750 MHz AFSK 1200 BPS

Beacon: 435.7900 MHz CW

IARU coordination page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108

For more information about XW-1 (CAS-1):
http://www.camsat.cn
[04222010]
=====
SwissCube
Catalog Number: 35932
Launch Date: September 23, 2009

Status: Operational

Callsign: HB9EG

Beacon(100mw): 437.5050MHz CW
Beacon(1w):   437.5050MHz FSK 1k2bps
[04222010]
=====
UWE-2
Catalog Number: 35934
Launch Date: September 23, 2009

Status: In Orbit

Beacon(500mw): 437.3850 MHz AFSK 1k2bps
               437.3850 MHz FSK 9k6bps
[1112009]
=====
ITUpsAT1

```
Catalog Number: 35935
Launch Date: September 23, 2009

Status: Operational

Beacon(100mw): 437.325MHz CW
Beacon(1w): 437.325MHz 19k2bps
[11112009]
=====
BEESAT
Catalog Number: 35933
Launch Date: September 23, 2009

Status: Operational

Callsign: DP0BEE

Beacon(100mw): 436.000MHz CW
Beacon(500mw): 436.000MHz GMSK 4k8bps
Beacon(500mw): 436.000MHz GMSK 9k6bps
[04222010]
=====
Pollux
Catalog Number:
Launch Date: July 31, 2009

Status: Operational

Callsign: POLLUX-1

Downlink: 145.825MHz 1k2 AX.25
[10042009]
=====
Castor (ANDE-2)
Catalog Number:
Launch Date: July 31, 2009

Status: Operational

Callsign: KD4HBO-1

Downlink: 145.825 MHz 1k2 AX.25
[10042009]
=====
BEVO-1 (DRAGONSAT-1)
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Operational

Downlink: 437.325 MHz 9k6 GMSK
          437.325 MHz CW 20wpm
[07312009]
```

```
=====
AggieSat2 (DRAGONSAT-2)
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Operational

Downlink: 436.250 MHz 9k6 FHSS
[11112009]
=====
CP-6
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Commissioning

Downlink: 437.365 MHz 1k2 AFSK
[06052009]
=====
HAWKSAT 1
Catalog number: 35003
Launch Date: May 19, 2009

Status: ?

Downlink: 437.345 ?
[06052009]
=====
Pharmasat
Catalog Number: 35002
Launch Date: May 19, 2009
Status: Commissioning

Downlink: 437.465 MHz 1k2 AFSK
[06052009]
=====
ANUSAT
Catalog Number: 34808
Launch Date: April 20, 2009

Status: ?

Downlink:  435.000 MHz
Uplink:    145.800 MHz

Telemetry: 137.400 MHz
[05112009]
=====
SOHLA-1 (ASTRO TECH.)
Catalog Number: 33496
Launch Date: January 23, 2009

Status: Commisioning
```

Proposed Frequencies and Modes:
Downlink: 437.505 MHz AFSK/CW
Beacon: 437.505 MHz AFSK/CW

Callsign:

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=101
[03232009]
=====
KAGAYAKI (Solan Co.)
Catalog Number: 33495?
Launch Date: January 23, 2009

Status: In Orbit

Downlink: 437.375 MHZ FSK9k6/CW
Beacon: 437.375 MHz FSK9k6/CW

IARU coordination status page:

AMSAT-NA webpage:

[01152009]
=====
STARS (Kagawa Univ.) (Twin Satellites)
Catalog Number: 33498
Launch Date: January 23, 2009

Status: Operational ?

Downlinks: 437.485 MHz FM/CW
437.465 MHz FM/CW
Beacons: 437.305 MHz FM/CW
437.275 MHz FM/CW

Callsigns: JR5YBN
JR5YBO

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=99

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=121&retURL
=/satellites/status.php
[022152009]
=====
KKS-1 (Tokyo MCIT)
Catalog Number: 33499
Launch Date: January 23, 2009

Status: Operational

Downlink: 437.455 MHz AFSK/CW
Beacon: 437.385 MHz AFSK/CW

Callsign: JQ1YYY

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=107

AMSAT-NA webapge:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=120&retURL
=/satellites/status.php
[02212009]
=====
PRISM (Tokyo Univ.)
Catalog Number: 33493
Launch Date: January 23, 2009

Status: Operational ?

Downlink: 437.425 MHz AFSK/GMSK/CW
Beacon: 437.250 MHz AFSK/GMSK/CW

Callsign: JQ1YCX

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=97

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=119&retURL
=/satellites/status.php
[02212009]
=====
RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number: 32953
Launch Date: May 23, 2008

Status: Operational

Curent Modes: Telemetry
              Audio
              Images

Downlinks: 435.315 MHz
           435.215 MHz

AMSAT-NA website:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=115&ret
URL=/satellites/status.php

Official website:
http://www.npopm.com/?cid=leoca&caid=43
[02122009]

```
=====
CanX-2
Catalog number: 32790
Launch Date: April 28, 2008

Status: Operational in range of ground station only

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web
page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[02212009]
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.425 MHz 1k2 baud packet

For the latest project status update please visit the AAUSAT-II web
page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[02212009]
=====
CO-65 CUTE-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008

Status: Digipeater

Downlink:  437.475 MHz 9k6 Packet
Uplink:   1267.600 Mhz

Telemetry Beacon:
Downlink: 437.2750 MHz CW

For the latest project status update please visit the Cute-1.7+APD II
web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78

Command Station blog website:
http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/
```

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=112&retURL=/satellites/status.php
[02212009]
=====
Compass-1
Catalog number: 32787
Launch Date: April 28, 2008

Status: Operational

Current Mode: 4k8 MSK packet

```
Uplink:   145.980 MHz FM
Downlink: 437.275 Mhz CW
          437.405 MHz Packet
```

For the latest project status update please visit the Compass 1 web page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=114&retURL=/satellites/status.php
[04272009]
=====
CO-66 Seeds II
Catalog number: 32791
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.485 MHz

Callsign: JQ1YGU

For the latest project status update please visit the Seeds 2 web page: http://cubesat.aero.cst.nihon-u.ac.jp/english/seeds_2_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=113&retURL=/satellites/status.php
[02212009]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=94&retURL=/satellites/status.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=72
[02122009]
=====
CP3
Catalog Number: 31129
Launch Date: April 17,2007

Status: Operational

Current Mode: /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[02122009]
=====
GENESAT-1
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Current Mode: /u

Callsign: KE7EGC

Telemetry Beacon Downlink: 437.0695 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[09152009]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon: 437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/xivpicte.htm
[02212009]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003

Status: ?????

Current Mode: /u

Beacon: 436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=96&retURL
=/satellites/status.php

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[06082009]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Operational?

Uplink: 1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=56
[02122009]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Modes until June 24 0935Z:
Uplink: 145.880 MHz FM
Downlink: 2401.200 Mhz FM
Telemetry
Downlink: 435.150MHz 9k6

Field Day 2010 mode:
June 24 0935Z - June 27 0640Z:
Uplink: 145.920 MHz FM - 67 Hz PL
Downlink: 435.300 MHz FM
Telemetry
Downlink: 435.150MHz 9k6

Field Day 2010 mode:
June 27 0640 - June 27 2200Z:
Uplink: 145.880 MHz FM
Downlink: 2401.200 Mhz FM
Telemetry
Downlink: 435.150MHz 9k6

After June 27 2200z:
Uplink: 145.920 MHz FM - 67 Hz PL
Downlink: 435.300 MHz FM
Telemetry
Downlink: 435.150MHz 9k6

Analog voice downlink:	435.300 MHz FM
	435.150 MHz FM
	2401.200 Mhz FM
Analog voice uplink:	145.860 MHZ FM
	145.880 MHz USB
	145.880 MHz FM
	145.920 MHz FM
	145.920 MHz FM - 67 Hz PL
	1268.700 MHz FM
Digital Downlinks:	435.150 MHz FM 38k4 PBP, 1 watt output
	435.150 MHz FM 9k6 Pacsat Broadcast Protocol
	2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:	145.860 MHz FM 9k6 Pacsat Broadcast Protocol
	1268.700 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon:	435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

```
Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[06222010]
=====
QuakeSat
Catalog Number: 27845
Launch Date: June 30, 2003

Status: Telemetry only

Current Mode: 9600 baud data packet

Mode U packet
Downlink: 436.675 MHz 9k6 BPS

Quakesat webpage:
http://www.quakefinder.com/services/quakesat-ssite/
[04272009]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=69&retURL
=/satellites/status.php
[02212009]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Telemetry only

Current Mode: V/v
```

```
General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink:        144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[03302009]
=====
RS-22 RADIO SPORT 22
Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only

Current Mode:  /u

CW Beacon - 435.352 MHz
            145.818 MHz

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=76&retURL
=/satellites/status.php
[02212009]
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990

Status: CW Beacon only

Uplinks:          145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink:      437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[03162009]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984

Status: Non-operational.
```

Current Mode: /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon: 435.025 MHz
Mode-S Beacon: 2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[12162009]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes:	FM Repeater -	V/u
	Voice -	V/v
	BBS -	V/v
	APRS -	V/v
	SSTV -	V/v

Expedition 24 Crew:

Commander:	Alexander Skvortsov	
Flight Engineer:	Tracy Caldwell Dyson	KF5DBF
Flight Engineer:	Mikhail Kornienko	RN3BF
Flight Engineer:	Doug Wheelock	KF5BOC
Flight Engineer:	Shannon Walker	KD5DXB
Flight Engineer:	Fyodor Yurchikhin	RN3FI

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:

Repeater Uplinks:	1269.650 MHz FM
	437.800 MHz FM
	145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink:	145.800 MHz FM
	437.800 MHz FM (Kenwood)

SSTV Robot 36:

```
Downlink:                  145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian:                   OR4ISS
German:                    DP0ISS
Russian:                   RS0ISS
                           RZ3DZR
United States:             NA1SS
Packet Mailbox:            RS0ISS-11
Digipeater callsign:       ARISS

Official ARISS Webpage:    http://www.rac.ca/ariss
ISS Fan Club Webpage:      http://www.issfanclub.com
APRS tracking page:        http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[06222010]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-174.S3
WSR 174 Part 3 06/23/2010

AMSAT NEWS SERVICE BULLETIN 174.S3
FROM AMSAT HQ SILVER SPRING, MD, June 23, 2010
TO ALL RADIO AMATEURS
BID: $WSR-174.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

CP4
Catalog Number: 31122
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon:    437.325 MHz CW

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=79
[10022008]
=====
LIBERTAD-1
Catalog Number: 31128
```

```
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink:   145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[02122009]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: Non-Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder:  145.825 Mhz FM
[01012009]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency:  437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink:         437.250 MHz FM 67Hz CTCSS
Voice Downlink:      2401.835 MHz FM
Packet Up/Downlink:   437.250 MHz 9k6 packet
Packet Downlink      2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
```

```
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non-Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[08132007]
=====
CANX-1
Catalog Number: 27847
Launch Date: June 30, 2003

Status: Non-Operational

Downlink: 437.8800 MHz AFSK 1k2bps
[06052009]
=====
DTUSAT
Catalog Number: 27842
Launch Date: June 30, 2003

Status: Non-Operational

Current Mode: 2k4 AFSK Packet last reported

Downlink: 437.475MHz

Officail webpage: http://dtusat1.dtusat.dtu.dk/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=101&retURL
=satellites/all_oscars.php
[02212009]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink:   435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)

Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
```

```
Catalog number: 26548
Launch date: September 26, 2000

Status: Telemetry only

Uplinks:   145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink:  437.325 MHz

Broadcast callsign: MYSAT3-11
BBS:                MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial land and weather imaging payloads offers FM and FSK
Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as
a collaborative effort between the Malaysian government and Surrey
Satellite Technology Ltd.
[03302009]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink:   145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS:                SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
```

Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]

=====

AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks

V-band: 145.840 - 145.990 MHz CW/LSB
U-band: 435.550 - 435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks

S2-band: 2401.225 - 2401.475 MHz CW/USB
K-band: 24048.010 - 24048.060 MHz CW/USB
Beacon: 2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)

BEACON	General Beacon(GB)	Middle Beacon(MB)	Engineering Beacon(EB)
2 m	none	145.898 MHz	none
70cm	435.438 MHz	435.588 MHz	435.838 MHz
13cm(1)	2400.188 MHz	2400.338 MHz	2400.588 MHz
13cm(2)	2401.173 MHz	2401.323 MHz	2401.573 MHz
3cm	10450.975 MHz	10451.125 MHz	10451.375 MHz
1.5cm	24047.885 MHz	24048.035 MHz	24048.285 MHz

[07162007]

=====

OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK

```
[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink:    145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: 25636
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater:         436.250 MHz

Uplinks: Mode B Repeater:  145.825 MHz
Mode J Digipeater:         145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational
```

```
Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Telemetry only

Current Modes:
Telemetry : /u

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign:       4XTECH-12

More information of GO-32 can be found at:
http://asri.technion.ac.il/techsat/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=14&retURL
=/satellites/status.php
[12012009]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink:   145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
MO-30 UNAMSAT-2
```

Catalog Number: 24305
Launch Date: September 5, 1996

Status: Non-operational

Downlink: 435.1380 MHz AFSK 1200 BPS
Downlink: 435.2060 MHz AFSK 1200 BPS
Uplink: 145.8150 MHz AFSK 1200 BPS
Uplink: 145.8350 MHz AFSK 1200 BPS
Uplink: 145.8550 MHz AFSK 1200 BPS
Uplink: 145.8750 MHz AFSK 1200 BPS
[06042009]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Non-operational

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012009]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks: 145.875 MHz FM 1200-baud
145.900 MHz FM 1200-baud
145.925 MHz FM 1200-baud
145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT

```
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
AO-24 ARSENE
Catalog Number: 22654
Launch Date: May 13, 1993

Status: Non-operational

Uplink:    435.0625 MHz FM 1k2bps AFSK
           435.1125 MHz FM 1k2bps AFSK
           435.1375 MHz FM 1k2bps AFSK
Downlink:  145.9750 MHz FM 1k2bps AFSK
          2446.5025 MHz FM 1k2bps AFSK

Beacon:    2446.4700 MHz CW

Broadcast callsign:
BBS:
[12162009]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HL01-11
BBS: HL01-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
```

```
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
```

```
Beacon:   2401.220 MHz
[05012006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: non-operational

Current Mode:  V/u

Uplink:         145.900 MHz FM 1200-baud Manchester FSK (reserved)
                145.920 MHz FM VOICE
                145.940 MHz FM 1200-baud Manchester FSK (reserved)
                145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink:       437.026 MHz USB VOICE
                (1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[07242009]
=====
UO-15 UoSAT-4
Catalog Number: 20438
Launch Date: January 22, 1990

Status: Non-operational

Uplink: ?
Downlink: 435.1250MHz (?)
          435.1200MHz (?)
[06042009]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon:   145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink  29.4000 -  29.5000 MHz SSB/CW
```

```
Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
Beacons:   29.450 MHz
          435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon 1:  29.352 MHz (intermittent)
Beacon 2:  29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
```

Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB

Beacon: 145.860 MHz

Robot: 145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-174.S4
WSR 174 Part 4 06/23/2010

AMSAT NEWS SERVICE BULLETIN 174.S4
FROM AMSAT HQ SILVER SPRING, MD, June 23, 2010
TO ALL RADIO AMATEURS
BID: $WSR-174.S4

THE FOLLOWING SATELLITES HAVE RE-ENTERED OR HAVE BEEN RETURNED SAFELY:

NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: July 28, 2008

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[01012009]
=====
NO-61 ANDE

Catalog Number: 29664
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink: 145.825 Mhz FM APRS AX25
APRS Uplink: 145.825 MHz FM APRS AX25
Voice/PSK31 Uplink: 28.120 MHz

Packet to Voice ID: RAFT
[06112007]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Re-Entered
Re-entered: June 18, 2008

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon: 437.2750 MHz CW

Callsign: JR8YJT
[01012009]
=====
SO-43 Starshine 3
Catalog Number: 26929
Launch Date: September 30, 2001

Status: Re-Entered
Re-entered: January 21, 2003

Beacon: 145.825Mhz
[02212009]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at}
amsat.org
NNNN
/EX

```
From 941035378540209900
X-Google-Thread: 10e8ad,b3f8ea6742d59b29,start
X-Google-NewGroupId: yes
X-Google-Thread: 10b9c8,b3f8ea6742d59b29,start
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,gida4a23d5f63,domainid0,public,usenet
```

X-Google-Language: ENGLISH,ASCII
Path: g2news2.google.com!news4.google.com!npeer02.iad.highwinds-media.com!news.highwinds-media.com!feed-me.highwinds-media.com!nx01.iad01.newshosting.com!newshosting.com!198.186.194.249.MISMATCH!transit3.readnews.com!news-out.readnews.com!news-xxxfer.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-178 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sat, 26 Jun 2010 21:08:45 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 332
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <001401cb1595$42f87280$c8e95780$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
X-Trace: reader1.panix.com 1277600925 25028 166.84.1.6 (27 Jun 2010 01:08:45 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 27 Jun 2010 01:08:45 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to   rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to   rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news2.google.com rec.radio.amateur.space:379 rec.radio.info:1616

AMSAT NEWS SERVICE
ANS-178

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:

* AMSAT 2010 Space Symposium Adds Sunday FermiLab Supercollider Tour
* ARISS-Built AIS Antenna Reports Good Performance On-Orbit
* ARISSat-1 Assembly and Testing Making Progress
* SO-67 SumbandilaSat is Back on the Air
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SB SAT @ AMSAT $ANS-178.01
AMSAT 2010 Space Symposium Adds Sunday FermiLab Supercollider Tour

AMSAT News Service Bulletin 178.01
>From AMSAT HQ SILVER SPRING, MD.
June 27, 2010
To All RADIO AMATEURS
BID: $ANS-178.01

The 2010 AMSAT Space Symposium and Annual Meeting will be held on Friday, October 8 through Sunday, October 10. This year we have selected the Chicago/Elk Grove Holiday Inn which is near O'Hare Airport for the event.

At the conclusion of the Symposium activities you are invited to participate in a tour of the Tevatron at the Fermi National Accelerator Laboratory on Sunday. Part of the tour will include a tour of the multi-megawatt RF portions of the particle accelerator as well as a tour of the new Super Conducting RF Test Facility. We will be arranging car pools for travel to FermiLab and back to the hotel. The planned start time for the FermiLab tour will be 12 Noon.

The 2010 Symposium Committee has completed the room reservation and registration details for the event. The Hotel booking code for the Elk Grove Village Holiday Inn is AMS for the AMSAT convention. The $79 per-night room rate will apply for those using this group code.

The direct web page link to the Elk Grove Village Holiday Inn is http://tinyurl.com/22s788d For people needing special accommodations please call the Hotel directly at (847) 437-6010, ask for Brad.

[ANS thanks the 2010 Symposium Committee for the above information]

/EX

SB SAT @ AMSAT $ANS-178.02
ARISS-Built AIS Antenna Reports Good Performance On-Orbit

AMSAT News Service Bulletin 178.02
>From AMSAT HQ SILVER SPRING, MD.
June 27, 2010
To All RADIO AMATEURS
BID: $ANS-178.02

SpaceDaily.com reported this week that ESA's Columbus module maritime Automatic Identification System (AIS) aboard the International Space Station was switched on. The AIS antenna, mounted externally on the Columbus module, was fabricated by AMSAT and ARISS member Lou McFadin, W5DID and the US ARISS team. The team has also fabricated a nearly-identical twin amateur band antenna for ARISS. The ARISS antenna will be used when the Ericsson amateur radio gear is activated in early 2011.

ESA reported receiving more than 90,000 Class A AIS messages during a 14 hour test between 1900 GMT on 2 June and 0900 GMT on 3 June. This generated a global view of maritime traffic as the ISS orbit crosses all major shipping lanes.

AIS is currently a terrestrial VHF system with an average range of 40 nautical miles (74 km). This makes it useful within coastal zones and on a ship-to-ship basis but open ocean traffic remains largely untracked. The Columbus AIS Experiment (COLAIS) detected these signals from orbit. All international vessels, cargo ships above certain weights and passenger carriers of all sizes must carry 'Class A' AIS transponders, broadcasting continually updated identification and navigation data.

An ESA spokesman said, "We are currently testing the NORAIS receiver, built by the Norwegian Defense Research Establishment and Kongsberg Seatex. In three months' time the Station crew will switch it with a second receiver called LUXAIS, the work of Luxembourg companies Luxspace

and Emtronix. For the next two years we will go on swapping between these receivers."

With commissioning completed, the experiment is run remotely and the results are routed via the Columbus Control Centre in Oberpfaffenhofen, Germany to COLAIS teams.

ARISS-International says the cable for operating the Ericsson system in the Columbus Module is in final preparation at Kennedy Space Center for launch to the ISS. Installation is planned for early 2011. At that time the twin ARISS amateur radio antenna on the Columbus module and the second amateur radio station aboard the ISS will be activated.

See the full story at SpaceDaily.com http://tinyurl.com/263rkj7

[ANS thanks ARISS, SpaceDaily.com, and ESA for the above information]

/EX

SB SAT @ AMSAT $ANS-178.03
ARISSat-1 Assembly and Testing Making Progress

AMSAT News Service Bulletin 178.03
>From AMSAT HQ SILVER SPRING, MD.
June 27, 2010
To All RADIO AMATEURS
BID: $ANS-178.03

Lou McFadin, W5DID reported that ARISSat-1 is currently undergoing assembly and testing procedures in Orlando, Florida. In preparation for delivery of the ARISSat-1 flight unit to Russia in July continuous operation testing of flight components was started and has gone well.

The next milestone includes completing thermal vacuum testing followed by vibration testing at NASA's Wallops Flight Facility in Virginia prior to shipping the flight version of ARISSat-1 to Russia for the ride up to the ISS on a supply mission.

The ARRISat-1 Guided Tour video produced at Dayton Hamvention 2010 and the latest photos and information can be viewed on-line at:
http://arissat1.org/

[ANS thanks ARISS for the above information]

/EX

SB SAT @ AMSAT $ANS-178.04
SO-67 SumbandilaSat is Back on the Air

AMSAT News Service Bulletin 178.04
>From AMSAT HQ SILVER SPRING, MD.
June 27, 2010
To All RADIO AMATEURS
BID: $ANS-178.04

Jan-Albert Koekemoer, PrEng at Sun Space & Information Systems (Pty) Ltd. in Stellenbosch, South Africa announced this week, "After much delay we are now in a position to re-activate the SA-AMSAT payload schedules on a regular basis again!"

During the downtime Sun Space conducted several experiments in order to investigate possible alternatives for the "cut-off" problem experienced by many at the end of last year / beginning of this year.

The cut-off is caused by SW running on piggyback electronics that continues to gate the received audio on to the transmitter for about 3s after a specific ground transmission has ended, whereafter the received audio is cut off.

The SW then waits for the next ground transmission with a valid "transponder" tone embedded, before gating the audio onto the transmitter again.
So if a second transmission starts within the 3s "tail" period, it will be cut off when the 3s expires. Listen to this mp3 recording as an example: http://tinyurl.com/38vvg3o

Unfortunately the piggyback electronics does not have reprogramming functionality, so we are not able to change the SW. Sun Space did however manage to implement a mechanism on the satellite transponder (used by the piggyback) that should be of some assistance when using the payload: the PTT of the transmitter now STAYS ON for the duration of the payload activation (i.e. 15 min), regardless of a valid "transponder" tone received. Note that this does not get rid of the "cut-off" problem, nor of the requirement to embed a valid tone when you want to use the payload - see detailed explanation below.

The following example depicts the ideal usage scenario of the payload:

1. As the satellite comes over the horizon, an unmodulated carrier ("quieting") will be received by all on UHF

2. Person A starts to transmit on VHF (with valid "transponding" tone embedded in the transmission) and the transmission is relayed on UHF

3. When Person A releases his/her PTT, the satellite will continue to transmit what it is receiving (usually this will be "noise") for a further �3s. Nobody should start to transmit during this time!

4. At the end of the �3s period, everybody will again hear the unmodulated carrier.

5. NB: only when this unmodulated carrier is heard should Person B start to transmit. Listen to this mp3 recording as an example of valid usage: http://tinyurl.com/32rjbxm

This will take some getting use to - at least the system has a built-in "punishment" mechanism for the impatient! Please refer to previous posts on general voice quality optimization when using the SA-AMSAT payload on SO-67.

Gladys Magagula at the Satellite Application Centre to obtain regular schedules from the regional coordinators as soon as possible. We will start off with day passes only, transmit on 2.5W and see how things go. Request for operation over your area should be sent to: saamsat@intekom.co.za by Mondays for possible inclusion in the schedule published on Thursday night/Friday morning cover the following week. It may not always be possible to accede to every request. The weekly schedule will be published at http://www.amsatsa.org.za/.

Uplink   145.875 MHz
Downlink 435.345 MHz

The Sumbandila team has experienced recent problems with the scheduling system. The schedules for the weekend onward were not uploaded to the satellite. They are working on the problem and will post a message as soon as they have uploaded the schedule.

[ANS thanks Jan-Albert Koekemoer, at Sun Space for the above information]

/EX

SB SAT @ AMSAT $ANS-178.05
IARU International Amateur Radio Satellite Forum at Colloquium

AMSAT News Service Bulletin 178.05
>From AMSAT HQ SILVER SPRING, MD.
June 27, 2010
To All RADIO AMATEURS
BID: $ANS-178.05

The IARU International Amateur Radio Satellite Forum will this year be held in conjunction with the AMSAT-UK Colloquium which takes place in Guildford, England on the weekend of July 31 - Aug 1.

The forum, chaired by IARU Amateur Satellite Advisor Hans van de Groenendaal ZS6AKV, takes place on the Sunday morning.

On the Agenda is a report back on the activities of the IARU Satellite Adviser and his Advisory Panel.

There will be a brief presentation covering the ITU notification requirements for satellites operating in the amateur service and the requirement to be able disable transmissions should the signals interfere with other users of the radio spectrum.

The forum is open to all delegates at the colloquium.

Colloquium Info: http://www.uk.amsat.org/colloquium/

[ANS thanks Trevor M5AKA for the above information]

/EX

SB SAT @ AMSAT $ANS-178.05
Satellite Shorts From All Over

AMSAT News Service Bulletin 178.05
>From AMSAT HQ SILVER SPRING, MD.
June 27, 2010
To All RADIO AMATEURS
BID: $ANS-178.05

+ SpaceWeather.com advises the International Space Station (ISS) is putting on a remarkable show. For the next few days, the behemoth spacecraft will be in constant sunlight as its orbit lines up with Earth's day-night terminator. This means it will shine brightly in the night sky every single time it passes over head. Some observers can see it 3, 4, even 5 times a night! Full story at http://www.spaceweather.com

+ Piraj�, PS8RF says that a new distance record may be accomplished soon via AO-7. Joe, K3SZH copied Luciano, PY5LF but the two stations could not complete a two-way contact during that orbit. The distance between K3SZH and PY5LF is 7839 KM.

+ Central States VHF Society Conference, St. Louis, MO July 22nd to 24th. http://www.csvhfs.org/conference/index.html

+ Congratulations to Zeljko 9A2EY on being awarded VUCC Satellite Award #197.

+ The 2010 CubeSat Summer Workshop takes place in Logan, Utah on August 7th-8th - the weekend before the Smallsat conference. The last day to register for the workshop is Friday, July 23rd. If you wish to present at the workshop the last day to submit an abstract is Friday, July 23rd. For more information regarding deadlines and registration information please visit the cubesat website at http://www.cubesat.org/index.php/workshops/upcoming-workshops/ or the smallsat website at http://www.smallsat.org/

+ Listen for Patrick WD9EWK/VA7EWK mobile/portable satellite operation between July 3 - July 11 on Vancouver Island west of the British Columbia "Lower Mainland". Plans include spending most of Sunday, July 4 operating from somewhere on the CO60/CO70 grid boundary on Vancouver Island. Patrick's gear includes an all-mode satellite station (two FT-817s) and an Elk Antenna. He will try to work as many passes as possible on the linear and FM satellites. Patrick has posted information at: http://july2010.wd9ewk.net/

[ANS thanks everyone for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office. And with that, please keep in mind the young ham who got his first job working in an orange juice factory but he got canned because he couldn't concentrate. The young ham's next career was as a lumberjack but he couldn't hack it so he got the axe. The poor fellow also found that his subsequent job at the muffler factory was exhausting.

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM

From 2903839970026502744
X-Google-Thread: fc2a5,e2d04cc5a3f3defb,start
X-Google-NewGroupId: yes
X-Google-Thread: 107ada,e2d04cc5a3f3defb,start

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X-Google-NewGroupId: yes
X-Google-Thread: 10bf43,e2d04cc5a3f3defb,start
X-Google-NewGroupId: yes
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X-Google-Thread: 10b9c8,e2d04cc5a3f3defb,start
X-Google-NewGroupId: yes
X-Google-Attributes:
gid241b302a50,gida3e752f117,gide721ae2bf6,gid8f86f75953,gida4a23d5f63,domainid0,pu
blic,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news3.google.com!news.glorb.com!news2.glorb.com!news-
out.readnews.com!transit3.readnews.com!panix!panix2.panix.com!not-for-mail
From: rram@panix.com (rec.radio.amateur.moderated Admin)
Newsgroups:
rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.rad
io.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amat
eur.space,rec.radio.info
Subject: Crossposting Permitted to rec.radio.amateur.moderated
Supersedes: <radio/ham-radio/moderated/crossposting-1-1275372001@panix.com>
Followup-To: poster
Date: 1 Jul 2010 02:00:02 -0400
Organization: rec.radio.amateur.moderated Moderation Team
Lines: 47
Approved: RRI Admin <rec-radio-info-request@panix.com>
Distribution: world
Expires: 03 Aug 2010 02:00:01 -0000
Message-ID: <radio/ham-radio/moderated/crossposting-1-1277964001@panix.com>
Reply-To: rec-radio-amateur-moderated-request@panix.com
(rec.radio.amateur.moderated Admin)
NNTP-Posting-Host: panix2.panix.com
X-Trace: reader1.panix.com 1277964002 13012 166.84.1.2 (1 Jul 2010 06:00:02 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Thu, 1 Jul 2010 06:00:02 +0000 (UTC)
Summary: Short reminder for unmoderated newsgroups that crossposting is permitted
Keywords: FAQ, ham, amateur, radio, moderated, unmoderated, crossposting,
permitted
Xref: g2news2.google.com rec.radio.amateur.antenna:19027 rec.radio.amateur.dx:698
rec.radio.amateur.equipment:2311 rec.radio.amateur.homebrew:3800
rec.radio.amateur.misc:5285 rec.radio.amateur.policy:30258
rec.radio.amateur.space:380 rec.radio.info:1623

Posted-By: auto-faq 3.3.2 beta (PGPMoose V2.0, Perl 5.005)
Archive-name: radio/ham-radio/moderated/crossposting
Revision: 1.1 2009/04/12 19:42:04
Posting-Frequency: posted monthly
URL: http://www.panix.com/~rram/usenet/rram/index.html
```

Changes followed by "|".

After a 30-day public discussion and feedback period to gauge reader opinions in March of 2009:

http://groups.google.com/group/rec.radio.amateur.moderated/browse_thread/thread/d7d337db35f23326

the rec.radio.amateur.moderated Moderation Team has decided to consider amending its charter, and permit limited simultaneous crossposting to rec.radio.amateur.moderated and one other unmoderated amateur-radio-related discussion newsgroup. We are currently trying this on a temporary basis (90 days, through early July 2009), and adopt it permanently if successful.

Approved rec.radio.amateur.* newsgroups are those that are currently listed in the latest version of the "List of Big Eight Newsgroups" which is crossposted monthly to news.announce.newgroups, news.groups, and news.lists.misc.

Approved alt.radio.amateur.* and alt.ham-radio.* newsgroups are those that have been created consistent with the suggestions in "So You Want to Create an Alt Newsgroup" at:

  http://www.faqs.org/faqs/alt-creation-guide/

Approved regional hierarchy newsgroups are those that contain either "radio.amateur" or "ham-radio" in their names, including uk.radio.amateur and aus.radio.amateur.misc.

We will make every reasonable effort to keep our list of approved newsgroups up-to-date. In case we have overlooked any, and a submission is rejected in error as a result, the rejected submitter can E-mail us at our administrative contact address (in the signature at the bottom of this article, and the default Reply-To for the rejection message) requesting that it be added, and that the article be approved. We may still choose to reject articles crossposted to any alt.* newsgroup with an inappropriate name, including obscene language, embedded name-calling, or encouragement of unlawful conduct.

Please direct any comments, questions, or criticisms to rec-radio-amateur-moderated-request@panix.com.

From 3649024200158280210
X-Google-Thread: 10e8ad,9372914d5a3edad2,start
X-Google-NewGroupId: yes
X-Google-Thread: 10b9c8,9372914d5a3edad2,start
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,gida4a23d5f63,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!border1.nntp.dca.giganews.com!border2.nntp.dca.giganews.com!nntp.giganews.com!news-out.readnews.com!transit3.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-185 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space

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Date: Sun, 4 Jul 2010 10:39:05 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 346
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000f01cb1b86$9de18000$d9a48000$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1278254345 22349 166.84.1.6 (4 Jul 2010 14:39:05 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 4 Jul 2010 14:39:05 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
X-Original-Bytes: 14256
Xref: g2news1.google.com rec.radio.amateur.space:356 rec.radio.info:1555
```

AMSAT NEWS SERVICE
ANS-185

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* 2010 AMSAT Space Symposium and Annual Meeting - Call for papers
* 13 Original Colonies Special Event on the Satellites
* AMSAT-UK Colloquium Hotel booking deadline
* AMSAT Field Day Wrap Up - Reminder Send Your Logs
* Long Island Celebration of Amateur Radio Satellite Operation
* Final Call for Papers--2010 ARRL/TAPR Digital Communications Conference
* Final Shuttle Launch Dates Announced
* ARISS Status - 28 June 2010

SB SAT @ AMSAT $ANS-185.01
2010 AMSAT Space Symposium and Annual Meeting - Call for papers

AMSAT News Service Bulletin 185.01
  From AMSAT HQ SILVER SPRING, MD.
July 4, 2010
To All RADIO AMATEURS
BID: $ANS-185.01

This is a reminder of the call for papers for the 2010 AMSAT Space Symposium and Annual Meeting to be held October 8 - 10 at the Chicago/Elk Grove Holiday Inn which is near O'Hare Airport.

The Symposium Committee invites proposals for:

+ Papers for publication in the Proceedings

+ Symposium Presentations

+ Poster Presentations

+ Equipment and Operating Demonstrations

These can be on any topic of interest to the amateur satellite community. We request a tentative title of your presentation as soon as possible, with final copy submitted by September 1, 2010 for inclusion in the printed proceedings.

Abstracts and papers should be sent to JoAnne Maenpaa, K9JKM at k9jkm@comcast.net.

[ANS thanks AMSAT's 2010 Symposium Committee for the above information]

/EX

SB SAT @ AMSAT $ANS-185.02
13 Original Colonies Special Event on the Satellites

AMSAT News Service Bulletin 185.02
  From AMSAT HQ SILVER SPRING, MD.
July 4, 2010
To All RADIO AMATEURS
BID: $ANS-185.02

As of press time a couple of days remain to work the 13 Original Colonies Special Event stations via amateur radio satellites. The special event has been in progress since July 1 and will end on July 6. Here is the link for more info-

Here are the calls to listen for

NY - Pete,   WB2OQQ/K2A

VA - Steve, NL7VX/K2B (July 1 thru AM of July 2)
RI - Fletch, N1RCN/K2C
CT - Paul,   K1PL/K2D
DE - Jeff,   KB2M/K2E/MM
MD - Bruce, WA3SWJ/K2F
GA - Tim,   N3TL/K2G
MA - Dave,   KB1PVH/K2H
NJ - John,   K2ZA/K2I
NC - Mark,   N8MH/K2J
NH - Jack,   WA1ZDV/K2K
SC - Art,   K4YYL/K2L
PA - Rich,   K3BFS/K2M

More info at: http://www.13colonies.info/

[ANS thanks Dave, KB1PVH for the above information]

/EX

SB SAT @ AMSAT $ANS-185.03
AMSAT-UK Colloquium Hotel booking deadline

AMSAT News Service Bulletin 185.03
From AMSAT HQ SILVER SPRING, MD.
July 4, 2010
To All RADIO AMATEURS
BID: $ANS-185.03

Jim Heck, G3WGM, Hon. Sec. of AMSAT-UK reports
that the Holiday Inn at Guildford
will release the dedicated rooms for the AMSAT-UK Colloquium on
9 July. So there isn't a great deal of time to be sure of a room.
This year's Colloquium will be held 31 July - 1 August.

Please contact Emily Morris in the Hotel's Business Centre on
+44 (0) 1483 784437 emily.morris@ihg.com.

Further info, prices etc is at:
http://www.uk.amsat.org/content/view/32/42/

Last year there were still rooms available after the deadline,
but one or two delegates left it too late, and ended up in hotels
in other parts of Guildford.

SO PLEASE MAKE YOU BOOKING WITHIN THE NEXT WEEK TO BE SURE OF
AVAILABILITY!

[ANS thanks Jim, G3WGM, for the above information]

/EX

SB SAT @ AMSAT $ANS-185.04
AMSAT Field Day Wrap Up - Reminder Send Your Logs

AMSAT News Service Bulletin 185.04
From AMSAT HQ SILVER SPRING, MD.
July 4, 2010
To All RADIO AMATEURS
BID: $ANS-185.04

AMSAT Director Contests and Awards Bruce Paige, KK5DO reminds everyone who participated in the AMSAT Field Day that you need to email your results to him. Per the rules....

The Satellite Summary Sheet, available on-line at: http://www.amsat.org/amsat-new/awards/amsatfd.php should be used for submission of the AMSAT Field Day competition. It must be received by KK5DO (email or postal mail) by 11:59 P.M. CDT, Monday, July 12, 2010. The preferred method for submitting your log is via e-mail to: kk5do@amsat.org or kk5do@arrl.net.

You will receive an email back (within one or two days) from Bruce when he receives your email submission. If you do not receive a confirmation message, try sending it again or send it to Bruce's other email address.

Tim, N3TL noted, "I've never heard AO-7 so busy. I heard more stations on AO-7 than I've heard in the two years I've been working the satellites and I stayed in the CW portion of the passband! If CW was that busy, I suspect the SSB going on above 145.950 was even busier." Tim used an FT-817ND as the transmit radio, and a Yaesu VR-500 handheld all-mode receiver as the receive radio connected to an Elk antenna with a Diamond diplexer. In addition to hand-holding the Elk and manually tracking AO-7, Tim said he tuned for Doppler manually and used a straight key for CW. His goal was to show that effective satellite communications doesn't require significant expense and many satellites can be worked with the equipment you already own.

Patrick, WD9EWK/VA7EWK, operated from the Garland Prairie Vista picnic ground in the Kaibab National Forest 20 miles/32km west of Flagstaff AZ, along old US-66 in grid DM45ag. Patrick reported, "For AMSAT Field Day, 14 QSOs on 6 satellites - 6 on AO-7, 4 on FO-29, and one each on the other 4 (AO-27, AO-51, SO-50, VO-52). All done on battery power with a pair of 12V/20Ah jumpstart battery packs, 5W transmitter power, without generators or running off my truck's electrical system."

Andy W5ACM, wrote "Everything worked right this year for the Houston MosQRPitos, operating as W5MSQ near Brookshire, Texas. We were set up for all possible satellite configurations including Mode S down via AO-51. It was great to find AO-7 and FO-29 in good shape and fantastic ops via HO-68. It may have only been one pass at the end of the event, but it was a GOOD one. Thanks to all for the many satellite QSO's."

George, KA3HSW, Satellite op for W9CCU said, "We managed 21 contacts in all ... one on each FM bird and the remainder on the linear sats.I was very impressed at how well AO-7 held up. AO-51 V/S was a treat, and some observers couldn't believe how strong the downlink was with just a corner reflector on the K5GNA downconverter. Nice to have SO-67 back, too!"

A report received from <B>Andrew KE5GDB says, "Field day was quite amazing down here in Houston too. I was one of the operators for K5HOU. I had never heard SO-50 with so many people!"

Bob W7LRD, reported, "We had an absolute blast on field day. AO-7 sounded like a 20M pile up. Even the S band operation on AO-51 was busy. With so many stations on the satellites should we not have more AMSAT members?"

[ANS thanks Bruce, KK5DO and all the reporting stations for the above information]

/EX

SB SAT @ AMSAT $ANS-185.05
Long Island Celebration of Amateur Radio Satellite Operation

AMSAT News Service Bulletin 185.05
From AMSAT HQ SILVER SPRING, MD.
July 4, 2010
To All RADIO AMATEURS
BID: $ANS-185.05

AMSAT NY Area Coordinator, Pete WB2OQQ asks all stations to listen on Saturday, July 10 for the Great South Bay ARC Special Event, "A Celebration of Amateur Radio" This special event will take place at The Custer Institute, Long Island's Oldest Public Observatory. Pete, WB2OQQ will be "Satellite Active" from 9 AM to 3 PM for FM and Linear Satellite passes. At 3:45 - 4:45 Pete will give a talk on "A History of Amateur Satellites, and how to communicate thru them". A special QSL card will be available, for more information visit, www.CusterObservatory.org or www.gsbarc.org.

[ANS thanks Pete WB2OQQ for the above information]

/EX

SB SAT @ AMSAT $ANS-185.06
Final Call for Papers--2010 ARRL/TAPR Digital Communications Conference

AMSAT News Service Bulletin 185.06
From AMSAT HQ SILVER SPRING, MD.
July 4, 2010
To All RADIO AMATEURS
BID: $ANS-185.06

Technical papers are solicited for presentation at the 29th Annual ARRL and TAPR Digital Communications Conference to be held September 24-26, 2010 near Portland, Oregon. These papers will also be published in the Conference Proceedings (you do NOT need to attend the conference to have your paper included in the Proceedings). The submission deadline is July 31, 2010. Please send papers to:

Maty Weinberg
ARRL
225 Main St
Newington, CT 06111

or you can make your submission via e-mail to: maty@arrl.org

Papers will be published exactly as submitted and authors will retain all rights.

[ANS thanks Steve, WB8IMY, for the above information]

/EX

SB SAT @ AMSAT $ANS-185.07
Final Shuttle Launch Dates Announced

AMSAT News Service Bulletin 185.07
From AMSAT HQ SILVER SPRING, MD.
July 4, 2010
To All RADIO AMATEURS
BID: $ANS-185.07

The July 2 UniverseToday.com newsletter reports that NASA announced new target dates for the final two (and maybe three) shuttle missions. STS-133 is now aiming for November 1, 2010 at approximately 4:33 p.m. EDT for the final flight of shuttle Discovery, and for STS-134, February 26, 2011 at around 4:19 p.m. EST for shuttle Endeavour's last launch. The potential bonus mission STS-135, would launch sometime in August 2011, if approved by Congress and NASA. The latest word on that was that NASA officials hope the decision would be made sometime this month.

[ANS thanks UniverseToday.com for the above information]

/EX

SB SAT @ AMSAT $ANS-185.08
ARISS Status - 28 June 2010

AMSAT News Service Bulletin 185.08
From AMSAT HQ SILVER SPRING, MD.
July 4, 2010
To All RADIO AMATEURS
BID: $ANS-185.08

1. Upcoming School Contacts

Cavett Kids Foundation's Camp Cavett, based out of OU Medical Center in Kingston, Oklahoma, has been scheduled for an Amateur Radio on the International Space Station (ARISS) contact on Thursday, July 8 at 20:35 UTC. The mission of the Cavett Kids Foundation is to provide a forum of support through various camps, events, and programs for children with life-threatening and chronic illnesses while promoting character, coping skills, and connection. Using ARRL (American Radio Relay League) lesson plans, children will be introduced to the basics of radio wave propagation. Local radio clubs will assist with demonstrations and hands on activities.

2. Japanese Club Talks to ISS via ARISS Contact

On Wednesday, June 23, Asahi Manabiya, a volunteer club in Owariasahi, Japan, took part in a direct Amateur Radio on the International Space Station (ARISS) contact. Approximately 145 people attended the event and watched as the youth asked 23 questions of Expedition 23/24 astronaut Tracy Caldwell-Dyson, KF5DBF. This contact was a featured activity used by the club to pique children's interest in natural science. The event drew media attention and was covered by one radio station, two television stations and a newspaper.

3. ARISS Web Page Links to DLN Module

An Amateur Radio on the International Space Station (ARISS) page may be found on NASA's Teaching From Space (TFS) Web site. A link to the Digital Learning Network (DLN) amateur radio module has been added to this page. See:
http://www.nasa.gov/audience/foreducators/teachingfromspace/students/ariss.html

4. ARISSat Safety Review to be Held

The Johnson Space Center Payload Safety Review Panel will perform a flight safety review of ARISSat-1 on the mornings of Wednesday and Thursday, June 30 - July 1 in Houston. Participation in the review will include U.S. and Russian ARISSat team members as well as RSC-Energia safety specialists.

[ANS thanks Carol, KB3LKI, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,

This week's ANS Editor,
Lee McLamb, KU4OS

```
From -4913477785806414525
X-Google-Thread: 10e8ad,a70590b8b966c9d6,start
X-Google-NewGroupId: yes
X-Google-Thread: 113975,a70590b8b966c9d6,start
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,gidaddc8bf063,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news4.google.com!feeder.news-service.com!
newsfeed101.telia.com!megatron.dk.telia.net!news.astraweb.com!
border3.a.newsrouter.astraweb.com!not-for-mail
From: Chris Steyaert <observations@rmob.org>
Newsgroups: rec.radio.amateur.space,sci.astro.amateur
Subject: Radio Meteor Obs. Bull. June 2010
Date: Tue, 06 Jul 2010 23:15:29 +0200
Message-ID: <f677361ip36d2cu20hbrrbembiipq4pc6v@4ax.com>
X-Newsreader: Forte Agent 5.00/32.1171
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Lines: 14
Organization: Unlimited download news at news.astraweb.com
NNTP-Posting-Host: b8a1bb08.news.astraweb.com
X-Trace: DXC=UP;4j9L2?KS1IA2mQNenURL?
0kYOcDh@ZMFjQ3_9ALV[h4\VcSn=CUTCOQ1kOkAIAS_94>Ck?J=XRBjH`cY8a\5U
Xref: g2news2.google.com rec.radio.amateur.space:382 sci.astro.amateur:37827
```

Radio Meteor Observation Bulletin No. 203 of June 2010 (97 K) is available now as

http://www.rmob.org/rmobtext/rmob1006.txt

More information and the visual presentation of the hourly forward scatter counts can be found on

http://www.rmob.org

Chris

```
From 2250395060722086625
X-Google-Thread: 10e8ad,7058ae89e817ec35,start
X-Google-NewGroupId: yes
X-Google-Thread: 10b9c8,7058ae89e817ec35,start
X-Google-NewGroupId: yes
```

```
X-Google-Attributes: gid8f86f75953,gida4a23d5f63,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII
Path: g2news1.google.com!news2.google.com!npeer01.iad.highwinds-media.com!
news.highwinds-media.com!feed-me.highwinds-media.com!nx01.iad01.newshosting.com!
newshosting.com!198.186.194.249.MISMATCH!transit3.readnews.com!news-
out.readnews.com!news-xxxfer.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-192 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sun, 11 Jul 2010 09:26:57 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 466
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000c01cb20fc$b6177870$22466950$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
X-Trace: reader1.panix.com 1278854817 26886 166.84.1.6 (11 Jul 2010 13:26:57 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 11 Jul 2010 13:26:57 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news1.google.com rec.radio.amateur.space:358 rec.radio.info:1568
```

AMSAT NEWS SERVICE
ANS-192

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

This is your chance to join in the ranks of AMSAT. There is still an opening (or two) for someone to step in and assist with the ANS editing process. If you are interested, please drop a line to Gould Smith, WA4SXM@amsat.org. There are many other volunteer slots and you can find them in the advertisement in the AMSAT Journal. It takes many helpful hands to keep our group well oiled[lubricated]. (ed.)

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* NASA Releases Videogame Moonbase Alpha
* Phase-3E News
* Amateur satellite to investigate power line interference
* GO-32 Non-operational
* SO-67 Operation Temporally Suspended
* July 2010 AO-51 Schedule
* July 12-16 ARRL Teacher's Institute on the Satellites
* STudSat Launch
* ARISS Status - July 5, 2010

SB SAT @ AMSAT $ANS-192.01
NASA Releases Videogame Moonbase Alpha

AMSAT News Service Bulletin 192.01
From AMSAT HQ SILVER SPRING, MD.
July 11, 2010
To All RADIO AMATEURS
BID: $ANS-192.01

NASA Releases Videogame Moonbase Alpha

This week the MoonBaseAlphaGame.com and the MoonDaily.com web sites report that a free new online game, "Moonbase Alpha" has been released by NASA.

"Moonbase Alpha" allows players to join an exploration team in a futuristic 3D settlement on the south pole of the Moon where you assume the exciting role of an astronaut working to further human expansion and research," NASA said in an explanation of the game.

"Returning from a research expedition, you witness a meteorite impact that cripples the life support capability of the settlement. With precious minutes ticking away, you and your team must repair and replace equipment in order to restore the oxygen production to the settlement. To accomplish their mission, players use an interactive command center, lunar rover and mobile robotic repair units", NASA said.

Moonbase Alpha can be played by one or up to six players. NASA said it is a precursor to a planned NASA-based "multiplayer online game project."
The game is available from the MoonbaseAlphaGame.com web page.

[ANS thanks MoonDaily.com and NASA for the above information]

/EX

SB SAT @ AMSAT $ANS-192.02

Phase-3E News

AMSAT News Service Bulletin 192.02
From AMSAT HQ SILVER SPRING, MD.
July 11, 2010
To All RADIO AMATEURS
BID: $ANS-192.02

AMSAT-DL Meets With Germany's Space Agency

An earlier report by Achim Vollhardt, DH2VA, from the AMSAT-DL Annual General Meeting 2010 discussed the joint feasibility study by AMSAT-DL and DLR for lunar and Mars missions. DLR is Germany's national research center for aeronautics and space.

AMSAT-DL board members spent two weeks in the CEF (Concurrent Engineering Facility) of DLR in Bremen. Despite different views on the technical project management Dr. Achim Vollhardt described cooperation with the staff of the DLR as very constructive and mutually very useful.

The results of the study were presented in early May 2010 in a final presentation at the DLR in Cologne. Attendees included representatives of the DLR program Directorate, Peter Guelzow, DB2OS, and Hartmut Paesler, DL1YDD. The results were received by all participants as very positive and leading to further cooperation with the DLR. AMSAT-DL noted this was the first time the technical feasibility of their P5E Mars mission was confirmed by an independent team of experts.

Peter Guelzow sees the results of the study and the dialogue with politicians as an important foundation to the completion of P3E and as a strong argument for future negotiations with potential donors and launch operators.

[ANS thanks the SouthgateARC web site for the above information]

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SB SAT @ AMSAT $ANS-192.03
Amateur satellite to investigate power line interference

AMSAT News Service Bulletin 192.03
From AMSAT HQ SILVER SPRING, MD.
July 11, 2010
To All RADIO AMATEURS
BID: $ANS-192.03

Amateur satellite to investigate power line interference
Hans van de Groenendaal ZS6AKV will be giving a presentation on South Africa's first CubeSat at the AMSAT-UK Colloquium in Guild-

ford, England, July 31- Aug 1.

The world has experienced a long solar minimum which means that ionospheric communication had been very limited and for a few years was almost exclusively the domain of the commercial broadcasters running Megawatts.

HF radio communication is very susceptible to noise levels that are created by power lines, electrical installations and overhead lines used by trains and busses and power line telecommunication systems. If fact today there are many installation that do not necessarily comply with internationally agreed emission standards. With increasing solar activity interference signals are propagated over large areas and will interfere with HF communication.

The important mission of the SA AMSAT CubeSat is to measure the High Frequency noise levels over South Africa and report these measurement back to a ground station for analysis and action to reduce these unwanted signals. The information from the tiny satellite will identify the areas where the HF frequency polluters are situated and will help in reducing or eliminating the source.

It is also hoped to include a 30 kHz linear transponder and an Automatic Packet Reporting System (APRS) in the CubeSat.

AMSAT-UK International Space Colloquium,
Guildford July 31 - Aug 1
http://www.uk.amsat.org/colloquium/

[ANS thanks Southgate for the above information]

/EX

SB SAT @ AMSAT $ANS-192.04
GO-32 Non-operational

AMSAT News Service Bulletin 192.04
From AMSAT HQ SILVER SPRING, MD.
July 11, 2010
To All RADIO AMATEURS
BID: $ANS-192.04

Hi All,
I have received the UK copy of Oscar news and there is an article stating that GO-32 is now non-operational and has completed its 11 year mission successful. However, due to the degraded state of the solar panels it cannot keep the software in a stable condition.

The ground operating station has asked that we mark this satellite as no longer able to support any continued operation.

It's a shame to hear as this was a great strong satellite for operating APRS on.

[ANS thanks Chris, M0DQO, for the above information]

/EX

SB SAT @ AMSAT $ANS-192.05
SO-67 Operation Temporally Suspended

AMSAT News Service Bulletin 192.05
From AMSAT HQ SILVER SPRING, MD.
July 11, 2010
To All RADIO AMATEURS
BID: $ANS-192.05

Sumbandilasat SO-67 Operation Temporally Suspended

News posted on the SA-AMSAT web page (http://www.amsatsa.org.za/) reports, "Due to the erratic operation of the onboard computer, SO67 operations have been suspended while the ground station investigates the problem. It is expected that recent changes in the software that operates the amateur payload could be the cause."

SA AMSAT will advise the amateur world when operation will be resumed.

SA AMSAT requested, "Once the green light is given, requests for operation over your area should be sent to saamsat@intekom.co.za by Mondays for possible inclusion in the schedule published on Thursday night/Friday morning covering the following week. It may not always be possible to accede to every request. The weekly schedule will be published on the SA AMSAT web page at http://www.amsatsa.org.za/.

With recent changes in software please note the following operating procedure.

The PTT of the transmitter now STAYS ON for the duration of the payload activation (i.e. 15 min), regardless of a valid "transponder" tone received. Note that this does not get rid of the "cut-off" problem, nor of the requirement to embed a valid tone when you want to use the payload -

see detailed explanation below.

The following example depicts the ideal usage scenario of the payload:

1. As the satellite comes over the horizon, an unmodulated carrier ("quieting") will be received by all on UHF.

2. Person A starts to transmit on VHF (with valid "transponding" tone embedded in the transmission) and the transmission is relayed on UHF.

3. When Person A releases his/her PTT, the satellite will continue to transmit what it is receiving (usually this will be "noise") for a further �3s. Nobody should start to transmit during this time!

4. At the end of the �3s period, everybody will again hear the unmodulated carrier.

5. NB: only when this unmodulated carrier is heard should Person B start to transmit.

In simple repeater operation terms, leave a 3 second gap between overs.

[ANS thanks SA AMSAT for the above information]

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SB SAT @ AMSAT $ANS-192.06
July 2010 AO-51 Schedule

AMSAT News Service Bulletin 192.06
From AMSAT HQ SILVER SPRING, MD.
July 11, 2010
To All RADIO AMATEURS
BID: $ANS-192.06

Command Team and Operations Group AO-51 News
July 2010 AO-51 Schedule

Due to poor battery condition, AO-51 will be off during eclipses. Until further notice the schedule will remain:

FM Repeater, V/U
Uplink: 145.920 Mhz FM, PL 67Hz
Downlink: 435.300 Mhz FM

The 67Hz PL tone is required to activate the repeater, which will run unsquelched for two minutes after hearing a valid tone. Within that two minute period, no tone is required.

73, Drew KO4MA

AMSAT-NA VP Operations

AO-51 Echo Mode Suggestion Email Address
mailto:ao51-modes@amsat.org?subject�51%20web%20page%20request
The AO-51 Operations Group is made up of Amsat Members who are also AO-51 users. The Operations Group works with the Command Team to create the monthly schedule for the satellite. The AO-51 Operations

Group is OZ1MY, VK5HI, N8BBQ, KD8CAO. The Command Stations are
KO4MA, WA4SXM, WA6FWF, and N8MH.

[ANS thanks Mark, N8MH, for the above information]

/EX

SB SAT @ AMSAT $ANS-192.07
July 12-16 ARRL Teacher's Institute on the Satellites

AMSAT News Service Bulletin 192.07
From AMSAT HQ SILVER SPRING, MD.
July 11, 2010
To All RADIO AMATEURS
BID: $ANS-192.07

July 12-16 ARRL Teacher's Institute on the Satellites

ARRL Education and Technology Program Coordinator, Mark Spencer, WA8SME will conduct the Dayton Amateur Radio Association sponsored ARRL TI-2 Teacher's Institute - Space next week in Dayton from July 12 through 15.

The purpose of this teacher's institute is to instruct teachers on how to access satellites for use in their classrooms. The four day institute will involve a lot of on-the-air activity on the birds.

Mark invites you to listen up for the teachers who will be working the birds for the first time and help participate in the TI by making contacts with them. They will be novice satellite operators so he hopes you will forgive mistakes as they learn the ropes. It will be interesting to see how 8 ground stations operate from one location! (The stations consist of FT817s, ARROWS and computer controlled G5500 rotors.)

If anyone needs a contact with W1AW/8, Mark will be using that call sign periodically while doing some demonstrations during the TI.
If you have a specific request, let Mark know via e-mail and he'll listen for your call specifically. Mark's address is mspencer@arrl.org.

[ANS thanks Mark, WA8SME for the above information]

/EX

SB SAT @ AMSAT $ANS-192.08
STudSat Launch

AMSAT News Service Bulletin 192.08
From AMSAT HQ SILVER SPRING, MD.
July 11, 2010
To All RADIO AMATEURS
BID: $ANS-192.08

'StudSat' is to be launched aboard the Indian PSLV C 15 on 12th July 2010. The lift off is at 03:52 Z and the StudSat is to be injected into orbit around 04:12 Z. The CW beacon would be 'ON' at 04:42 Z, ie 30 minutes after separation from the launcher.
Beacon Frequency is 437.861 Mhz (10 mW).

During its first pass, around 04:50 Z, stations around west and North Mexico, Western Coast of US, Canada, Alaska, and North Asia would be able to receive the beacon signal.

We request stations over these regions to kindly listen on to the beacon frequency and provide us with their valuable reports. These initial reports are the only means for us to confirm on the 'Beacon ON' until it is visible over VU land. This help would be greatly appreciated.

Thanks in advance.

Mani, VU2WMY
Secretary & Station-In-Charge
Upagrah Amateur Radio Club VU2URC
ISRO Satellite Centre

ALSO...
The 51-hour countdown for the 17th flight launch of Indian space agency's
Polar Satellite Launch Vehicle PSLV-C 15 from Sriharikota spaceport is expected to begin on Saturday morning.

Preparations were in full swing for the launch of the PSLV-C-15 on July 12. All the parameters for the launch were doing well and the 51-hour countdown was expected to start at 6 am tomorrow.

TIsat-1: Swiss CubeSat
Uplink: 145.980MHz FM, AFSK
Downlink: 437.305MHz FM, AFSK
Beacon: 437.305MHz CW
Callsign: HB9DE
http://www.spacelab.dti.supsi.ch/tiSat1.html

StudSat : India CubeSat
Uplink: 437.505MHz, 9600bps FSK
Downlink: 437.505MHz, 9600bps FSK
Beacon : 437.505MHz,   20bps ASK
http://www.teamstudsat.com/

http://www.indianexpress.com/section/technology/698/
http://www.indianexpress.com/news/51hour-countdown-for-pslvc15-launch-starts-tomorrow/644288/
http://www.ne.jp/asahi/hamradio/je9pel/suitsfun.htm

JE9PEL, Mineo Wakita

[ANS Thanks Mani, VU2WMY, & Mineo, JE9PEL, for the above info]

/EX

SB SAT @ AMSAT $ANS-192.09
ARISS Status July 5, 2010

AMSAT News Service Bulletin 192.09
From AMSAT HQ SILVER SPRING, MD.
July 5, 2010
To All RADIO AMATEURS
BID: $ANS-192.09

Amateur Radio on the International Space Station (ARISS) Status Report
July 5, 2010

1. Upcoming School Contact

Cavett Kids Foundation's Camp Cavett, based out of OU Medical Center in Kingston, Oklahoma, was scheduled for an Amateur Radio on the International Space Station (ARISS) contact on Thursday, July 8 at 20:35 UTC. The mission of the Cavett Kids Foundation is to provide a forum of support through various camps, events, and programs for children with life-threatening and chronic illnesses while promoting character, coping skills, and connection. Using ARRL (American Radio Relay League) lesson plans, children were introduced to the basics of radio wave propagation and local radio clubs assisted with demonstrations and hands on activities.

2. Astronaut Speaks with Summer Camp via ARISS

Expedition 24 astronaut Doug Wheelock, KF5BOC participated in an Amateur

Radio on the International Space Station (ARISS) contact with summer camp
"Astronauts in Forest," in Perugia, Italy on Friday, July 2. The connection
was provided by telebridge station ON4ISS in Belgium. Wheelock managed eight questions put to him by the camp which was attended by twenty children and four staff members. The camp, which is based on astronomy and space education, provides a program of space activities for children, ages 11 to 14.

3. ARISS Included in Brazilian Space Agency Videos

Brazilian Space Agency AEB has produced two videos about the International
Space Station. The videos were recorded by astronaut Marcos Pontes and are
the first videos showing ARISS activities in Portuguese. See:

Part 1   http://www.youtube.com/user/PY1KCF#p/a/u/1/vilmCC7RRQ0
Part 2   http://www.youtube.com/user/PY1KCF#p/a/u/0/GJll0WZfYmg

[ANS thanks Carol, KB3LKI, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the
President's
Club. Members of the President's Club, as sustaining donors to AMSAT
Project
Funds, will be eligible to receive additional benefits. Application
forms
are
available from the AMSAT Office.

73,
This week's ANS Editor,
Dee Interdonato, NB2F
nb2f at amsat dot org

```
From -7725651696473586203
X-Google-Thread: 10e8ad,dc5d2e7ec0c006bd,start
X-Google-NewGroupId: yes
X-Google-Thread: 10b9c8,dc5d2e7ec0c006bd,start
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,gida4a23d5f63,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII
Path: g2news1.google.com!news2.google.com!npeer02.iad.highwinds-media.com!
news.highwinds-media.com!feed-me.highwinds-media.com!nx02.iad01.newshosting.com!
newshosting.com!news-out.readnews.com!transit3.readnews.com!panix!rri.panix.com!
robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-199 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sat, 17 Jul 2010 21:36:30 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 388
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <001101cb2618$ee44d4b0$cace7e10$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
X-Trace: reader1.panix.com 1279416990 14006 166.84.1.6 (18 Jul 2010 01:36:30 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 18 Jul 2010 01:36:30 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
```

X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news1.google.com rec.radio.amateur.space:359 rec.radio.info:1584

AMSAT NEWS SERVICE
ANS-199

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:

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* Live Webstream of AMSAT-UK Space Colloquium
* South Pacific Total Solar Eclipse Captured in AO-51 Telemetry Data
* New Distance Record for AO-7 DX
* ISS Active on Amateur Radio
* ARRL Teacher Institute Space Operation Successful
* India PSLV-C15 Launch Includes Two New Cubesats
* Satellite Shorts From All Over

SB SAT @ AMSAT $ANS-199.01
It's Time to Send in Your 2010 Symposium Paper Abstract

AMSAT News Service Bulletin 199.01
>From AMSAT HQ SILVER SPRING, MD.
July 18, 2010
To All RADIO AMATEURS
BID: $ANS-199.01

The September 1 deadline of the call for papers for the 2010 AMSAT Space Symposium and Annual Meeting is rapidly approaching! So far the Proceedings crew has received two abstracts for papers - thank you!

The abstract for your paper does not require any special format. Simply send an e-mail to the Proceedings Editor, K9JKM with the basic information: Author Name, Callsign, and a few sentences that describe your proposed topic. I'll be looking forward to receiving your abstracts in my in-box at k9jkm@comcast.net.

The Symposium Committee invites proposals for:

+ Papers for publication in the Proceedings

+ Symposium Presentations

+ Poster Presentations

+ Equipment and Operating Demonstrations

These can be on any topic of interest to the amateur satellite community. We request a tentative title of your presentation as soon as possible, with final copy submitted by September 1, 2010 for inclusion in the printed proceedings.

To help you prepare your paper the Symposium Committee has posted an author's guide on the AMSAT.org web page:
http://tinyurl.com/2djjnmx

The 2010 AMSAT Space Symposium and Annual Meeting will be held October 8 - 10 at the Chicago/Elk Grove Holiday Inn which is near O'Hare Airport.

[ANS thanks JoAnne, K9JKM for the above information]

/EX

SB SAT @ AMSAT $ANS-199.02
Live Webstream of AMSAT-UK Space Colloquium

AMSAT News Service Bulletin 199.02
>From AMSAT HQ SILVER SPRING, MD.
July 18, 2010
To All RADIO AMATEURS
BID: $ANS-199.02

The 2010 Space Colloquium - the 25th held by AMSAT-UK, is taking place on July 31 and August 1 at the Holiday Inn in Guildford, England.

As usual there will be many interesting presentations and demonstrations from the developers and users of the ever increasing number of amateur radio satellites. In addition there will be talks on nano propulsion systems, solar sails, cubesat sized linear transponders, the GENSO ground station network, GNU radios and numerous other topics.

It is still possible to attend the meeting itself, although the "early booking" rates may now no longer be available - for booking details see: http://www.uk.amsat.org/colloquium

If, however, you are unable to attend in person, we can announce that the batc.tv webstream service will again be provided over the weekend starting from 1000 BST (0900UTC) on Saturday, July 31.

The current programme - which is always subject to late changes - can be seen at http://www.uk.amsat.org/content/view/713/284/ - again please

note that all timings are given BST which is UTC +1.

The BATC.TV webstream will be available here, click on Live Events
http://www.batc.tv/

AMSAT-UK
http://www.uk.amsat.org/

[ANS thanks Trevor, M5AKA for the above information]

/EX

SB SAT @ AMSAT $ANS-199.03
South Pacific Total Solar Eclipse Captured in AO-51 Telemetry Data

AMSAT News Service Bulletin 199.03
>From AMSAT HQ SILVER SPRING, MD.
July 18, 2010
To All RADIO AMATEURS
BID: $ANS-199.03

On July 11 a total solar eclipse was observed in the southern Pacific Ocean. The path of totality stretched across the South Pacific Ocean, but the Moon's umbral shadow didn't make landfall except for a few spots such as the Cook Islands and Easter Island, and southern Chile and Argentina. A partial eclipse was visible from a much larger region covering the South Pacific and southern South America.

Masa, JN1GKZ noted a glitch in AO-51's Whole Orbit Data file (WOD) in the Total Array I current while AO-51 was located east of Argentina at the time. AO-51 Control Station, Mark, N8MH replied, "You have made a great observation, and I think you are exactly right about the cause of the observed 'glitches' in the telemetry. Usually at this point in its orbit we would observe AO-51 charging its batteries at a steady rate from fully illuminated panels."

Mark plotted some of the telemetry collected from 1800-2130utc) and posted it at:
http://www.amsat.org/amsat/ftp/telemetry/ao51/2010WOD/July2010/Wd071100_
1800to2130utc_solar_eclipse.xls (watch the line wrap!)

A screenshot of AO-51 at the time:
http://www.amsat.org/amsat/ftp/telemetry/ao51/2010WOD/July2010/ao51_11
July2010_2045utc_solar_eclipse.jpg (watch the line wrap!)

Alex, OZ9AEC ran a simulation using the Celestia space simulator and observed a partial solar eclipse as seen from AO-51. He recorded this simulation to a video and you can watch at:
http://www.youtube.com/watch?v~T8BhbqmVk

The Whole Orbit Data file for the eclipse can found at:
ftp://ftp.amsat.org/pub/amsat/telemetry/ao51/2010WOD/July2010/Wd071100

AO-51 WOD decoder can be downloaded from:
http://tinyurl.com/DK3WNsoftware

[ANS thanks Masa, JN1GKZ; Mark N8MH; and Alex, OZ9AEC for the above information]

/EX

SB SAT @ AMSAT $ANS-199.04
New Distance Record for AO-7 DX

AMSAT News Service Bulletin 199.04
>From AMSAT HQ SILVER SPRING, MD.
July 18, 2010
To All RADIO AMATEURS
BID: $ANS-199.04

A new distance record of 7843 km (4898 Miles) via AO-7 was established on July 15 between Luciano, PY5LF and Joe, K3SZH. The estimated maximum range of AO-7 is ~7,900 km. Piraj�, PS8RF noted that the log of QSO can be seen on the unofficial AO-7 web site:
http://www.planetemily.com/ao7/ao7log.php.
Congratulations to both Luciano and Joe!

[ANS thanks Piraj�, PS8RF for the above information]

/EX

SB SAT @ AMSAT $ANS-199.05
ISS Active on Amateur Radio

AMSAT News Service Bulletin 199.05
>From AMSAT HQ SILVER SPRING, MD.
July 18, 2010
To All RADIO AMATEURS
BID: $ANS-199.05

For several days last week, Colonel Doug Wheelock, KF5BOC, took to the air from the ISS to talk to hams around the globe. The 2-meter FM phone frequencies for voice operation with the ISS over the US are 144.490 MHz uplink with 145.800 MHz downlink.

Dee, NB2F noted, "I Just talked with the ISS. Loud and Clear. Good sigs and thanks to the ISS crew for making contacts." Damon, WA4HFN wrote, "I made my first ISS voice contact with NA1SS. He was full meter reading!" Greg, KO6TH also noted the strong downlink signal.

Later in the week the ISS crew activated the SSTV equipment to support the Moscow Aviation Institute experiment (MAI-75) on July 15 and 16. The system operated the space cam in slide show mode. The latest ISS SSTV information can be found on-line at:
http://ariss-sstv.blogspot.com/
The images uploaded by users can be found on-line at:
http://www.amsat.org/amsat/ariss/SSTV/.

[ANS thanks Kenneth, N5VHO for the above information]

/EX

SB SAT @ AMSAT $ANS-199.06
ARRL Teacher Institute Space Operation Successful

AMSAT News Service Bulletin 199.06
>From AMSAT HQ SILVER SPRING, MD.
July 18, 2010
To All RADIO AMATEURS
BID: $ANS-199.06

ARRL Education and Technology Program Coordinator, Mark Spencer, WA8SME conducted the Dayton Amateur Radio Association sponsored ARRL TI-2 Teacher's Institute - Space this week in Dayton. The purpose of this teacher's institute is to instruct teachers on how to access satellites for use in their classrooms. The four day institute will involve a lot of on-the-air activity on the birds.

Concluding a successful session, Mark wrote, "I want to offer my sincerest thanks to the satellite community, Drew, and AMSAT for the support that you gave us during the TI-2 Space this year. Over the last three days, your support in making contacts with the teachers, and in particular, the dedicated SSTV activity on AO51, has made the TI-2 Space a huge success this year. I wish each of you could have seen the glowing light bulbs in the teachers' heads at each successful satellite contact. I am confident that they will be taking what they learned this week back into their classrooms to make space 'alive' for their students. Thanks for the patience you showed as these novice satellite operators learned the tricks of the trade."

Mark also noted the success of having 8 satellite ground stations, and antennas operating at one time.

[ANS thanks Mark Spencer, WA8SME for the above information]

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SB SAT @ AMSAT $ANS-199.07
India PSLV-C15 Launch Includes Two New Cubesats

AMSAT News Service Bulletin 199.07
>From AMSAT HQ SILVER SPRING, MD.
July 18, 2010
To All RADIO AMATEURS
BID: $ANS-199.07

Reporting from the Upagrah Amateur Radio Club VU2URC, at the ISRO Satellite Centre in India, Mani, VU2WMY said the July 12 launch of the 17th flight launch of Indian space agency's Polar Satellite Launch Vehicle PSLV-C 15 from Sriharikota was successful. Mani wrote, "All the five satellites including the StudSat and TISat aboard the PSLV-C15 were successfully separated from the vehicle and they are in the [correct] 640 Km orbit right now."

The PSLV-C15 launch included a primary payload of the CartoSat-2B remote sensing satellite and AlSat-2A satellite. The three other satellites included AISSat-1, a Norwegian Defence Research Establishment satellit to demonstrate a new maritime AIS receiver; and the TISat-1 and StudSat amateur radio banded cubesat payloads.

TIsat-1: Swiss CubeSat
Uplink: 145.980MHz FM, AFSK
Downlink: 437.305MHz FM, AFSK
Beacon: 437.305MHz CW
Callsign: HB9DE
http://www.spacelab.dti.supsi.ch/tiSat1.html

StudSat : India CubeSat
Uplink: 437.505MHz, 9600bps FSK
Downlink: 437.505MHz, 9600bps FSK
Beacon : 437.861 MHz (10 mW),   20bps ASK
http://www.teamstudsat.com/

Shortly after launch Alan, ZL2BX reported, "Good signals from TISat over ZL 0926 to 0936 when the signals stopped abruptly shortly before predicted LOS. Copied HI HI HI TISAT H."

Christian, F1AFZ, noted the beacon on 437.305 MHz TIsat-1 was on over Europe HI HI HI TISAT K." He posted a recording of the pass at:
listen:
http://www.f1afz.fr/satellites/new_2010/tisat_12-07-2010_8h45tu.mp3

Paolo, HB9TYP says TIsat-1 is in power/battery saving mode during eclipse. Its transmission is limited or completely shut off according to on board rules. On behalf of the TIsat-1 team Paolo thanks the AMSAT community for signal reports already received. He says you can find the latest keps and other details on the project and mission status webpages:

http://www.spacelab.dti.supsi.ch/tiSat1MS.php. The TIsat-1 team invites your continued feedback. While copying the beacon please collect and report the character emitted AFTER "HI HI HI TISAT" along with time in UTC, your location and signal quality.

A Video of the launch is on line at http://tinyurl.com/29ukc4l

[ANS thanks Mineo Wakita, JE9PEL; Mani, VU2WMY; Alan, ZL2BX; Christian, F1AFZ; and Paolo, HB9TYP for the above information]

/EX

SB SAT @ AMSAT $ANS-199.08
Satellite Shorts From All Over

AMSAT News Service Bulletin 199.08
>From AMSAT HQ SILVER SPRING, MD.
July 18, 2010
To All RADIO AMATEURS
BID: $ANS-199.08

+ AMSAT Keplerian Elements Guru Ray Hoad, WA5QGD noted this week that the following satellites have decayed from orbit and have been removed from the KEPS distribution list:
  1. DRAGNSAT Cat# 35690, Decay date 3-17-2010.
  2. POLLUX Cat# 35693, Decay date 3-29-2010.
  STUDSAT Cat# 36801, Launched 7-12-2010 has been added to the distribution list. The Swiss Cubesat TIsat-1 has now been identified as object #36796 and will be added shortly.

+ Stu WA2BSS reminds radio amateurs that the next Hudson Valley Satcom Net will meet on Thursday July 22 at 2000 EDT (2400 UTC). The Echolink node is: N2EYH-L, The net meets on the air on the 146.97 MHz repeater. More info: http://www.hvsatcom.org.

+ Mineo Wakita, JE9PEL noted that Japan's CO-65 (Cute-1.7+APD II) is in Digipeater Mode during weekends. The CO-65 digipeater is accessed using standard AX.25 protocol. The uplink of the digipeater is 1267.600 MHz and the downlink 437.475 MHz using 9600 bps GMSK. Mineo refers interested amateurs to these web pages for further information:
  http://lss.mes.titech.ac.jp/ssp/cute1.7/amateur_service_e.html
  http://www.ne.jp/asahi/hamradio/je9pel/ct17gmsk.htm
  http://www.ne.jp/asahi/hamradio/je9pel/ct17gms2.htm
  http://www.kc2rlm.info/soundcardpacket/

+ WorkedGrids is a freeware Windows application that displays a map showing Amateur Radio grid squares contacted and logged using a third-party logging program. The app was developed by VE2ZAZ, and uses colors to display information on a per-band basis. Up to four bands can be displayed concurrently. For its input, the program reads the plain-text ASCII log files generated by most logging programs. The file is read at a set interval and the worked grid squares on the map are updated in a dynamic way as the contest progresses and the log file is periodically saved. WorkedGrids can be downloaded from http://tinyurl.com/24okrtm.

+ SaturnDaily.com noted an interesting NASA JPL video produced from Cassini orbiter radar data showing a fly-by simulation of Ontario Lacus, the largest lake in the southern hemisphere of Saturn's moon Titan. Watch at: http://www.jpl.nasa.gov/video/index.cfm?id�2

[ANS thanks everyone for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office. And with that please keep in mind the young ham who got a job in the shoe factory but found that he didn't fit in. When he tried working at the deli they told him he didn't cut the mustard. He found that he just wasn't up to it in his latest job feeding the giraffes at the zoo.

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM

From -1114084826518787596
X-Google-Thread: 10e8ad,7ccb438e079bedc1,start
X-Google-NewGroupId: yes
X-Google-Thread: 10b9c8,7ccb438e079bedc1,start
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,gida4a23d5f63,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!border1.nntp.dca.giganews.com!nntp.giganews.com!nx01.iad01.newshosting.com!209.197.12.246.MISMATCH!nx02.iad01.newshosting.com!newshosting.com!198.186.194.249.MISMATCH!transit3.readnews.com!news-xxxfer.readnews.com!news-out.readnews.com!transit4.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-201 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Wed, 21 Jul 2010 08:17:17 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 1866
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <001401cb28ce$9a22b150$ce6813f0$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com

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Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1279714637 21224 166.84.1.6 (21 Jul 2010 12:17:17 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Wed, 21 Jul 2010 12:17:17 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
x-cr-hashedpuzzle: 4ik= BVJM B5tj CzPs DPyn D0vj EhiB Eocb FuGo GSA3 GU0/ G1xA
Ijhq JbAK JeB3
Jvpc;1;cgBlAGMALQByAGEAZABpAG8ALQBpAG4AZgBvAEAAcABhAG4AaQB4AC4AYwBvAG0A;Sosha1_v1;
7;{0AEFB288-4162-4CDB-
B277-839E37AEE25E};awA5AGoAawBtAEAAYwBvAG0AYwBhAHMAdAAuAG4AZQB0AA==;Wed, 21 Jul
2010 12:16:44
GMT;VwBTAFIALQAyADAAMQAgAEEATQBTAEEAVAAgAFcAZQBlAGsAbAB5ACAAUwBhAHQAZQBsAGwAaQB0AG
UAIABSAGUAcABvAHIAdAA=
x-cr-puzzleid: {0AEFB288-4162-4CDB-B277-839E37AEE25E}
Xref: g2news1.google.com rec.radio.amateur.space:360 rec.radio.info:1588
```

This report is organized into four (4) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - deborbited/returned satellites

SB SAT @ AMSAT W8ISS $WSR-201.S1
WSR 201 Part 1 07/20/2010

AMSAT NEWS SERVICE BULLETIN 201.S1
FROM AMSAT HQ SILVER SPRING, MD, July 20, 2010
TO ALL RADIO AMATEURS
BID: $WSR-201.S1

HO-68 XW-1 (CAS-1)
Catalog Number:
Launch Date: December 15, 2009
Status: Commissioning

Callsign:
Broadcast: BJ1SA-11
BBS: BJ1SA-12

```
Uplinks:   145.8250 MHz FM, PL 67.0 Hz.
           145.9250 - 145.9750 MHz SSB/CW
           145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
           435.7650 - 435.7150 MHz SSB/CW
           435.6750 MHz AFSK 1200 BPS

Beacon:    435.7900 MHz CW

Mode and Antenna Polarization:
V: LHCP 2.0dBi max
U: RHCP 3.0dBi max

IARU coordination page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108

For more information about XW-1 (CAS-1):
http://www.camsat.cn
[04222010]
=====
SO-67 SumbandilaSat
Catalog Number: 35870
Launch Date: September 17, 2009

Status: Suspended

Callsign: ZS0SUM

Uplink:   145.875MHz FM tone 233.6 Hz
Downlink: 435.345MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

For more information about SO-67:
http://www.amsatsa.org.za/
[11212009]
=====
DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008

Status: Operational
Current Mode: Science Mode - Beacon ONLY

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink:   435.530 to 435.570 MHz

Delfi-C3 web page: http://www.delfic3.nl/
```

```
IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68
[02122009]
=====
VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink:   435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink:   435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW


Indian Beacon:  145.9360 MHZ CW
Dutch Beacon:   145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is active. Each transponder has a different beacon.
[03082010]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Mode:
Uplink:    145.920 MHz FM - 67 Hz PL
Downlink:  435.300 MHz FM
Telemetry
Downlink:  435.150MHz 9k6


Analog voice downlink:     435.300 MHz FM
                           435.150 MHz FM
                          2401.200 Mhz FM
Analog voice uplink:       145.860 MHZ FM
                           145.880 MHz USB
                           145.880 MHz FM
```

145.920 MHz FM
145.920 MHz FM - 67 Hz PL
1268.700 MHz FM
Digital Downlinks: 435.150 MHz FM 38k4 PBP, 1 watt output
435.150 MHz FM 9k6 Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Pacsat Broadcast Protocol
1268.700 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[06292010]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz. The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10 minute timer.

```
[05282007]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: sCHEDULED oPERATIONS
Current Mode: V/u (Mode JA)

Voice/CW (Mode JA)
Uplink:   145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon:   435.795 MHz

Digital Mode JD
Uplinks:  145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage:
http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's
CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/
fo29cwts.htm
[02132010]
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993

Status: Operational

Current Mode: V/u

Uplink:   145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
```

```
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[03232009]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational

Current Mode: Alternating between Mode A and B every 24 hours

Uplink:   145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink:  29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons:   29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
[02122009]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - V/u
                      Voice -       V/v
                      BBS -         V/v
                      APRS -        V/v
                      SSTV -        V/v


Expedition 24 Crew:
Commander:                Alexander Skvortsov
Flight Engineer:          Tracy Caldwell Dyson  KF5DBF
Flight Engineer:          Mikhail Kornienko     RN3BF
Flight Engineer:          Doug Wheelock         KF5BOC
Flight Engineer:          Shannon Walker        KD5DXB
Flight Engineer:          Fyodor Yurchikhin     RN3FI
```

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
                           437.800 MHz FM
                           145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
                           437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
                           RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[062252010]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-201.S2
WSR 201 Part 2 07/20/2010

AMSAT NEWS SERVICE BULLETIN 201.S2
FROM AMSAT HQ SILVER SPRING, MD, July 20, 2010
TO ALL RADIO AMATEURS
BID: $WSR-201.S2

StudSat : India CubeSat

Catalog Number:
Launch Date: July 12, 2010
Status: On Orbit

Uplink: 437.505MHz, 9600bps FSK
Downlink: 437.505MHz, 9600bps FSK
Beacon : 437.505MHz,   20bps ASK
[07202010]
=====
TIsat-1: Swiss CubeSat
Catalog Number:
Launch Date: July 12, 2010
Status: On orbit

Callsign: HB9DE

Uplink: 145.980MHz FM, AFSK
Downlink: 437.305MHz FM, AFSK
Beacon: 437.305MHz CW
[07202010]
=====
HO-68 XW-1 (CAS-1)
Catalog Number:
Launch Date: December 15, 2009
Status: Operational

Callsign:
Broadcast: BJ1SA-11
BBS: BJ1SA-12

Uplinks: 145.8250 MHz FM, PL 67.0 Hz.
           145.9250 - 145.9750 MHz SSB/CW
           145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
           435.7650 - 435.7150 MHz SSB/CW
           435.6750 MHz AFSK 1200 BPS

Beacon: 435.7900 MHz CW

IARU coordination page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108

For more information about XW-1 (CAS-1):
http://www.camsat.cn
[04222010]
=====
SwissCube
Catalog Number: 35932
Launch Date: September 23, 2009

Status: Operational

Callsign: HB9EG

```
Beacon(100mw): 437.5050MHz CW
Beacon(1w):    437.5050MHz FSK 1k2bps
[04222010]
=====
UWE-2
Catalog Number: 35934
Launch Date: September 23, 2009

Status: In Orbit

Beacon(500mw): 437.3850 MHz AFSK 1k2bps
               437.3850 MHz FSK 9k6bps
[1112009]
=====
ITUpsAT1
Catalog Number: 35935
Launch Date: September 23, 2009

Status: Operational

Beacon(100mw): 437.325MHz CW
Beacon(1w): 437.325MHz 19k2bps
[11112009]
=====
BEESAT
Catalog Number: 35933
Launch Date: September 23, 2009

Status: Operational

Callsign: DP0BEE

Beacon(100mw): 436.000MHz CW
Beacon(500mw): 436.000MHz GMSK 4k8bps
Beacon(500mw): 436.000MHz GMSK 9k6bps
[04222010]
=====
Pollux
Catalog Number:
Launch Date: July 31, 2009

Status: Operational

Callsign: POLLUX-1

Downlink: 145.825MHz 1k2 AX.25
[10042009]
=====
Castor (ANDE-2)
Catalog Number:
Launch Date: July 31, 2009
```

```
Status: Operational

Callsign: KD4HBO-1

Downlink: 145.825 MHz 1k2 AX.25
[10042009]
=====
BEVO-1 (DRAGONSAT-1)
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Operational

Downlink: 437.325 MHz 9k6 GMSK
          437.325 MHz CW 20wpm
[07312009]
=====
AggieSat2 (DRAGONSAT-2)
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Operational

Downlink: 436.250 MHz 9k6 FHSS
[11112009]
=====
CP-6
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Commissioning

Downlink: 437.365 MHz 1k2 AFSK
[06052009]
=====
HAWKSAT 1
Catalog number: 35003
Launch Date: May 19, 2009

Status: ?

Downlink: 437.345 ?
[06052009]
=====
Pharmasat
Catalog Number: 35002
Launch Date: May 19, 2009
Status: Commissioning

Downlink: 437.465 MHz 1k2 AFSK
[06052009]
=====
ANUSAT
```

```
Catalog Number: 34808
Launch Date: April 20, 2009

Status: ?

Downlink:  435.000 MHz
Uplink:    145.800 MHz

Telemetry: 137.400 MHz
[05112009]
=====
SOHLA-1 (ASTRO TECH.)
Catalog Number: 33496
Launch Date: January 23, 2009

Status: Commisioning

Proposed Frequencies and Modes:
Downlink: 437.505 MHz AFSK/CW
Beacon:   437.505 MHz AFSK/CW

Callsign:

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=101
[03232009]
=====
KAGAYAKI (Solan Co.)
Catalog Number: 33495?
Launch Date: January 23, 2009

Status: In Orbit

Downlink: 437.375 MHZ    FSK9k6/CW
Beacon:   437.375 MHz    FSK9k6/CW

IARU coordination status page:

AMSAT-NA webpage:

[01152009]
=====
STARS (Kagawa Univ.) (Twin Satellites)
Catalog Number: 33498
Launch Date: January 23, 2009

Status: Operational ?

Downlinks: 437.485 MHz FM/CW
           437.465 MHz FM/CW
Beacons:   437.305 MHz FM/CW
           437.275 MHz FM/CW
```

Callsigns: JR5YBN
JR5YBO

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=99

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=121&retURL
=/satellites/status.php
[022152009]
=====
KKS-1 (Tokyo MCIT)
Catalog Number: 33499
Launch Date: January 23, 2009

Status: Operational

Downlink: 437.455 MHz AFSK/CW
Beacon: 437.385 MHz AFSK/CW

Callsign: JQ1YYY

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=107

AMSAT-NA webapge:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=120&retURL
=/satellites/status.php
[02212009]
=====
PRISM (Tokyo Univ.)
Catalog Number: 33493
Launch Date: January 23, 2009

Status: Operational ?

Downlink: 437.425 MHz AFSK/GMSK/CW
Beacon: 437.250 MHz AFSK/GMSK/CW

Callsign: JQ1YCX

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=97

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=119&retURL
=/satellites/status.php
[02212009]
=====
RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number: 32953
Launch Date: May 23, 2008

Status: Operational

Curent Modes: Telemetry
Audio
Images

Downlinks: 435.315 MHz
435.215 MHz

AMSAT-NA website:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=115&retURL=/satellites/status.php

Official website:
http://www.npopm.com/?cid=leoca&caid=43
[02122009]
=====
CanX-2
Catalog number: 32790
Launch Date: April 28, 2008

Status: Operational in range of ground station only

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[02212009]
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.425 MHz 1k2 baud packet

For the latest project status update please visit the AAUSAT-II web page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[02212009]
=====
CO-65 CUTE-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008

Status: Digipeater

```
Downlink:  437.475 MHz 9k6 Packet
Uplink:   1267.600 Mhz

Telemetry Beacon:
Downlink: 437.2750 MHz CW

For the latest project status update please visit the Cute-1.7+APD II
web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78

Command Station blog website:
http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=112&retURL
=/satellites/status.php
[02212009]
=====
Compass-1
Catalog number: 32787
Launch Date: April 28, 2008

Status: Operational

Current Mode: 4k8 MSK packet

Uplink:   145.980 MHz FM
Downlink: 437.275 Mhz CW
          437.405 MHz Packet

For the latest project status update please visit the Compass 1 web
page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=114&retURL
=/satellites/status.php
[04272009]
=====
CO-66 Seeds II
Catalog number: 32791
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.485 MHz

Callsign: JQ1YGU
```

For the latest project status update please visit the Seeds 2 web page: http://cubesat.aero.cst.nihon-u.ac.jp/english/seeds_2_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=113&retURL=/satellites/status.php
[02212009]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=94&retURL=/satellites/status.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=72
[02122009]
=====
CP3
Catalog Number: 31129
Launch Date: April 17,2007

Status: Operational

Current Mode: /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[02122009]
=====
GENESAT-1
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Current Mode: /u

```
Callsign: KE7EGC

Telemetry Beacon Downlink: 437.0695 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[09152009]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon:             437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/xivpicte.htm
[02212009]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003

Status: ?????

Current Mode: /u

Beacon:     436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=96&retURL
=/satellites/status.php

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[06082009]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Operational?
```

Uplink: 1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=56
[02122009]

=====

AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Mode:
Uplink: 145.920 MHz FM - 67 Hz PL
Downlink: 435.300 MHz FM
Telemetry
Downlink: 435.150MHz 9k6

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.860 MHZ FM
145.880 MHz USB
145.880 MHz FM
145.920 MHz FM
145.920 MHz FM - 67 Hz PL
1268.700 MHz FM
Digital Downlinks: 435.150 MHz FM 38k4 PBP, 1 watt output
435.150 MHz FM 9k6 Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Pacsat Broadcast Protocol
1268.700 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[06292010]
=====
QuakeSat
Catalog Number: 27845
Launch Date: June 30, 2003

Status: Telemetry only

Current Mode: 9600 baud data packet

Mode U packet
Downlink: 436.675 MHz 9k6 BPS

Quakesat webpage:
http://www.quakefinder.com/services/quakesat-ssite/
[04272009]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=69&retURL
=/satellites/status.php
[02212009]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Telemetry only

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

```
aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[03302009]
=====
RS-22 RADIO SPORT 22
Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only

Current Mode:  /u

CW Beacon - 435.352 MHz
            145.818 MHz

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=76&retURL
=/satellites/status.php
[02212009]
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990

Status: CW Beacon only

Uplinks:          145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink:      437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[03162009]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984

Status: Non-operational.

Current Mode:  /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon:          435.025 MHz
```

```
Mode-S Beacon:     2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[12162009]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - V/u
                      Voice -       V/v
                      BBS -         V/v
                      APRS -        V/v
                      SSTV -        V/v

Expedition 24 Crew:
Commander:                Alexander Skvortsov
Flight Engineer:          Tracy Caldwell Dyson  KF5DBF
Flight Engineer:          Mikhail Kornienko     RN3BF
Flight Engineer:          Doug Wheelock         KF5BOC
Flight Engineer:          Shannon Walker        KD5DXB
Flight Engineer:          Fyodor Yurchikhin     RN3FI


Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink:   145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink:     145.200 MHz FM
Region 2/3 voice uplink:   144.490 MHz FM
Worldwide downlink:        145.800 MHz FM

Crossband Repeater:
Repeater Uplinks:         1269.650 MHz FM
                           437.800 MHz FM
                           145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink:         145.800 MHz FM
                           437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink:                  145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
```

U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[06222010]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-201.S3
WSR 201 Part 3 07/20/2010

AMSAT NEWS SERVICE BULLETIN 201.S3
FROM AMSAT HQ SILVER SPRING, MD, July 20, 2010
TO ALL RADIO AMATEURS
BID: $WSR-201.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

CP4
Catalog Number: 31122
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon: 437.325 MHz CW

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=79
[10022008]
=====
LIBERTAD-1
Catalog Number: 31128
Launch Date: April 17,2007

Status: Non-Operational

```
Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink:   145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[02122009]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: Non-Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder:  145.825 Mhz FM
[01012009]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency:  437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink:         437.250 MHz FM 67Hz CTCSS
Voice Downlink:      2401.835 MHz FM
Packet Up/Downlink:  437.250 MHz 9k6 packet
Packet Downlink      2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005
```

Status: Non-Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[08132007]
=====
CANX-1
Catalog Number: 27847
Launch Date: June 30, 2003

Status: Non-Operational

Downlink: 437.8800 MHz AFSK 1k2bps
[06052009]
=====
DTUSAT
Catalog Number: 27842
Launch Date: June 30, 2003

Status: Non-Operational

Current Mode: 2k4 AFSK Packet last reported

Downlink: 437.475MHz

Officail webpage: http://dtusat1.dtusat.dtu.dk/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=101&retURL
=satellites/all_oscars.php
[02212009]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)

Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Telemetry only

```
Uplinks:   145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink:  437.325 MHz

Broadcast callsign: MYSAT3-11
BBS:                MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial land and weather imaging payloads offers FM and FSK
Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as
a collaborative effort between the Malaysian government and Surrey
Satellite Technology Ltd.
[03302009]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink:   145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS:                SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational
```

```
Uplink:   145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
V-band:   145.840 -  145.990 MHz CW/LSB
U-band:   435.550 -  435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks
---------
S2-band:  2401.225 -  2401.475 MHz CW/USB
K-band:  24048.010 - 24048.060 MHz CW/USB
Beacon:   2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)
----------------------------
BEACON   General Beacon(GB)  Middle Beacon(MB)  Engineering Beacon(EB)
2 m                   none        145.898 MHz                    none
70cm           435.438 MHz        435.588 MHz             435.838 MHz
13cm(1)       2400.188 MHz       2400.338 MHz            2400.588 MHz
13cm(2)       2401.173 MHz       2401.323 MHz            2401.573 MHz
3cm          10450.975 MHz      10451.125 MHz           10451.375 MHz
1.5cm        24047.885 MHz      24048.035 MHz           24048.285 MHz
[07162007]
=====
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
```

```
Launch date: April 21, 1999

Status: Unknown

Uplink:    145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: 25636
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater:         436.250 MHz

Uplinks: Mode B Repeater:  145.825 MHz
Mode J Digipeater:         145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
```

```
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Non-Operational

Current Modes:
Telemetry : /u

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign:       4XTECH-12

More information of GO-32 can be found at:
http://asri.technion.ac.il/techsat/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=14&retURL
=/satellites/status.php
[07172010]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink:   145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
MO-30 UNAMSAT-2
Catalog Number: 24305
Launch Date: September 5, 1996

Status: Non-operational
```

```
Downlink:       435.1380 MHz AFSK 1200 BPS
Downlink:       435.2060 MHz AFSK 1200 BPS
Uplink:         145.8150 MHz AFSK 1200 BPS
Uplink:         145.8350 MHz AFSK 1200 BPS
Uplink:         145.8550 MHz AFSK 1200 BPS
Uplink:         145.8750 MHz AFSK 1200 BPS
[06042009]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Non-operational

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign:       POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012009]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational
```

```
Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
AO-24 ARSENE
Catalog Number: 22654
Launch Date: May 13, 1993

Status: Non-operational

Uplink:    435.0625 MHz FM 1k2bps AFSK
           435.1125 MHz FM 1k2bps AFSK
           435.1375 MHz FM 1k2bps AFSK
Downlink:  145.9750 MHz FM 1k2bps AFSK
          2446.5025 MHz FM 1k2bps AFSK

Beacon:    2446.4700 MHz CW

Broadcast callsign:
BBS:
[12162009]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
```

Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink: 435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons: 435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink: 145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks: 145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink: 145.825 MHz FM 1200 Baud AFSK
Beacon: 2401.220 MHz
[05012006]
=====
AO-16 PACSAT

```
Catalog number: 20439
Launch Date: January 22, 1990

Status: non-operational

Current Mode:  V/u

Uplink:         145.900 MHz FM 1200-baud Manchester FSK (reserved)
                145.920 MHz FM VOICE
                145.940 MHz FM 1200-baud Manchester FSK (reserved)
                145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink:       437.026 MHz USB VOICE
                (1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[07242009]
=====
UO-15 UoSAT-4
Catalog Number: 20438
Launch Date: January 22, 1990

Status: Non-operational

Uplink: ?
Downlink: 435.1250MHz (?)
          435.1200MHz (?)
[06042009]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986
```

```
Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon:   145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink  29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
Beacons:   29.450 MHz
          435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon 1:  29.352 MHz (intermittent)
Beacon 2:  29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational
```

```
Uplink:     21.260 to 21.300 MHz CW/USB
Downlink:  145.860 to 145.900 MHz CW/USB

Beacon:    145.860 MHz

Robot:     145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink:   21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon:   29.408 MHz

Robot:    29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-201.S4
WSR 201 Part 4 07/20/2010

AMSAT NEWS SERVICE BULLETIN 201.S4
FROM AMSAT HQ SILVER SPRING, MD, July 20, 2010
TO ALL RADIO AMATEURS
BID: $WSR-201.S4

THE FOLLOWING SATELLITES HAVE RE-ENTERED OR HAVE BEEN RETURNED SAFELY:

NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: July 28, 2008

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[01012009]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Re-Entered
```

Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink: 145.825 Mhz FM APRS AX25
APRS Uplink: 145.825 MHz FM APRS AX25
Voice/PSK31 Uplink: 28.120 MHz

Packet to Voice ID: RAFT
[06112007]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Re-Entered
Re-entered: June 18, 2008

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon: 437.2750 MHz CW

Callsign: JR8YJT
[01012009]
=====
SO-43 Starshine 3
Catalog Number: 26929
Launch Date: September 30, 2001

Status: Re-Entered
Re-entered: January 21, 2003

Beacon: 145.825Mhz
[02212009]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at} amsat.org
NNNN
/EX

From 4939280490047185196
X-Google-Thread: 10e8ad,429ff36d6b0a21a1,start
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!postnews.google.com!g1g2000pre.googlegroups.com!not-for-mail
From: devi <satyamsivam9030@gmail.com>
Newsgroups: rec.radio.amateur.space
Subject: UN BELIVABLE HOT PHOTOS&VIDEOS

```
Date: Thu, 22 Jul 2010 02:28:43 -0700 (PDT)
Organization: http://groups.google.com
Lines: 34
Message-ID: <412ccfb2-b4b4-4f78-80bd-7aac983c8b9d@g1g2000pre.googlegroups.com>
NNTP-Posting-Host: 117.199.248.241
Mime-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
X-Trace: posting.google.com 1279790924 4075 127.0.0.1 (22 Jul 2010 09:28:44 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Thu, 22 Jul 2010 09:28:44 +0000 (UTC)
Complaints-To: groups-abuse@google.com
Injection-Info: g1g2000pre.googlegroups.com; posting-host=117.199.248.241;
     posting-account=xYWSigoAAADp0Q2VAMlANM4syM5q3uRr
User-Agent: G2/1.0
X-HTTP-UserAgent: Mozilla/5.0 (Windows; U; Windows NT 5.1; en-US; rv:1.9.2.6)
     Gecko/20100625 Firefox/3.6.6,gzip(gfe)
Xref: g2news1.google.com rec.radio.amateur.space:361
```

KATRINA KAIF BATH ROOM VIDEO

http://hotvideosee.blogspot.com/2010/07/katrina-in-bath.html

MUMAITH KHAN HOT SEXY PHOTO

http://hotvideosee.blogspot.com/2010/03/hot-photo-5_27.html

PRIYAMANI SEXY PHOTO

http://hotvideosee.blogspot.com/2010/03/hot-photo-6.html

HOT&SEXY AUNTY IN A ROMANTIC FEEL

http://hotvideosee.blogspot.com/2010/03/hot-photo-3.html

FOR HOT HEROINES PHOTOS

http://hotheroinesphoto.blogspot.com

AISHWARIYARAI HOT EXPOSING PHOTO

http://hotheroinesphoto.blogspot.com/2010/06/aishwariyarai-hot-photo.html

ANKITHA IN A TUB BATH

http://hotheroinesphoto.blogspot.com/2010/06/ankitha-in-tub-bath.html

TO SEE 100 HOT PHOTO GALLERIES

http://hotheroinesphoto.blogspot.com

```
From 6143282746045593106
X-Google-Thread: 10e8ad,51abdeb13dc7646f,start
X-Google-NewGroupId: yes
X-Google-Thread: 10b9c8,51abdeb13dc7646f,start
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,gida4a23d5f63,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!news.glorb.com!news2.glorb.com!
transit3.readnews.com!news-out.readnews.com!news-xxxfer.readnews.com!panix!
rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-206 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sun, 25 Jul 2010 09:58:12 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 499
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000901cb2c00$b210d1e0$163275a0$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1280066292 471 166.84.1.6 (25 Jul 2010 13:58:12 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 25 Jul 2010 13:58:12 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to            rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news1.google.com rec.radio.amateur.space:362 rec.radio.info:1600
```

AMSAT NEWS SERVICE
ANS-206

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* ARISS Contact Scheduled for 100th Anniversary of Scouting
* Satellite DXpedition Opportunities
* Presentations Scheduled at AMSAT-UK Colloquium 30 July-1 Aug
* AMSAT-NA Board of Directors Election Reminder
* AMSAT 2010 Space Symposium - Sign Up and Send Us Your Papers!
* Sumbandilasat Returns For Testing
* September Launch for India Ham Radio Satellite SRMSat
* LightSail-1 Passes Critical Design Review
* ARISS Status - 19 July 2010

SB SAT @ AMSAT $ANS-206.01
ARISS Contact Scheduled for 100th Anniversary of Scouting

AMSAT News Service Bulletin 206.01
  From AMSAT HQ SILVER SPRING, MD.
July 25, 2010
To All RADIO AMATEURS
BID: $ANS-206.01

On the morning of July 26 Fort A. P. Hill, Virginia will be the fastest growing city in the country. 43,000 scouts and leaders will join 8,000 volunteers to celebrate 100 years of scouting in the US. The 46 members of the K2BSA staff will be on the job to provide support and information to arriving Hams through the 2m and 70cm on site repeaters.

The K2BSA demonstration station will be located south east of the Mahone staff area. The demo station will provide tours and demonstrate Amateur Radio to visiting scouts and scouters. Scouts visiting the K2BSA station will have the opportunity to earn their Radio Merit Badge. The staff will teach the Radio Merit Badge at the Merit Badge Midway. Scouts can complete all the requirements required for the merit badge.

The K2BSA licensing staff will teach a Technician license class daily during the jamboree. The scout will learn everything he needs during the 6 hour class to pass the Technician Class license exam. Every night in the licensing tent the K2BSA licensing staff will offer an ARRL VE sponsored test session for all license classes.

Scouts are also offered the opportunity to upgrade their Amateur Radio License. Technician class licensees may upgrade to General by passing a 35-question multiple-choice examination. General licensees may upgrade to Extra Class by passing a 50-question multiple-choice examination.

ARISS reports that a contact with the International Space Station is a go on Sat 2010-07-31 18:21:06 UTC for a 56 deg elevation pass over the 2010 National Boy Scout Jamboree, Fort A. P. Hill, Virginia. Amateur Radio operators in North American may wish to monitor the 145.800 MHz downlink frequency at this time.

[ANS thanks K2BSA for the above information]

/EX

SB SAT @ AMSAT $ANS-206.02
Satellite DXpedition Opportunities

AMSAT News Service Bulletin 206.02
  From AMSAT HQ SILVER SPRING, MD.
July 25, 2010
To All RADIO AMATEURS
BID: $ANS-206.02

CHINA

News received from Michael Chen, BD5RV/4 reports that a group of operators will be active from China's Pingtan Island, IOTA AS-138, Grid OL95vn, from July 24 to 30. They will be active as B4R/5 in the RSGB IOTA contest and homecall/5 in regular operation. Activity will be on all HF bands and V/UHF bands, including EME and all active satellites. The group plans to use HO68, AO51, VO52, SO50, AO27.

An analysis of HO-68's schedule and terrestrial footprint by Alan Kung, BA1DU predicts that North East Asia, South Asia, Central Asia, Oceania, and Alaska will be within range of the DXpedition.

The group includes BA4TA, BA4TB, BA4RS, BD5RV, BA4RN, BH4REQ, and BH4RLO.

NORTH AMERICA

John, K8YSE says he is planning a 3 or 4 week grid expedition around Lake Superior during the week of August 2. The grids planned are: EN28-29-36-37-38-39-46-47-48-49-56-57-58-59-63-64-65-66-67-68-69-73-74-75-76-77-78-79-83-84-86-87 and EO30 in both the US and Canada.

John plans FM and SSB activity but probably little CW if any. This is a sightseeing trip around Lake Superior but he will do my best to operate on the birds as much as possible. The planned route is on John's website: http://www.papays.com/sat

[ANS thanks Michael Chen, BD5RV/4; Alan Kung BA1DU; and John, K8YSE for the above information.]

/EX

SB SAT @ AMSAT $ANS-206.03
Presentations Scheduled at AMSAT-UK Colloquim

AMSAT News Service Bulletin 206.03
  From AMSAT HQ SILVER SPRING, MD.
July 25, 2010
To All RADIO AMATEURS
BID: $ANS-206.03

FRIDAY 30 July

A satellite beginners session (content to be finalised) will be run by Dave Johnson, G4DPZ; Carlos Eavis, G0AKI and Ivo Kilnkert, PA1IVO on Friday afternoon.

SATURDAY 31 July

Opening / Welcome   Prof. Sir Martin Sweeting, G3YJO

Development of a Small Scaled Helicon Double layer Thruster
Tom Harle, Surrey Space Centre

CubeSail nano-satellite project
Lourens Visagie, Surrey Space Centre

AMSAT-NA Presentation
Barry Baines, President AMSAT-NA, WD4ASW

"The FUNcube project update"
The Project Manager Jim Heck G3WGM et. al.

Tiny U-V Transponder
William Leijenaar, PE1RAH

P3E/P5A - IHU3
Mario Lorenz, DL5MLO

FUNcube SimSat
Jim Heck, G3WGM

GENSO Presentation
Miguel Eduardo Gil Biraud, ESA

STK and matlab for orbital and attitude simulation
Tilman Glotzner, DG2TG

Orbit Determination with GENSO
Ivo Klinkert, PA1IVO

SUNDAY 1 Aug

IARU Satellite Meeting (Colloquium attendees welcome)
Chairman: Hans van de Groenendaal ZS6AKV

AMSAT-DL Presentation
Peter Guelzow, DB2OS

New Cubesat project from AMSAT-SA
Hans van de Groenendaal ZS6AKV

South Africa back in Space, an update on SO67, the CPUT 3U cubesat
Hans van de Groenendaal ZS6AKV

Satelliite Bands - What's New
Murray Niman, G6JYB

GNU Radio
Alex Csete, OZ9AEC

myPocketQub.com - an open source nano satellite project
Chris Brunskill

Clyde-Space Presentation
Steve Greenland

Group for Earth Observation (ENVISAT presentation)
Francis Bell, GEO

ESEO and QB50
Graham Shirville, G3VZV

AMSAT-UK Colloquium Schedule
http://www.uk.amsat.org/content/view/713/284/

[ANS thanks AMSAT-UK for the above information]

/EX

SB SAT @ AMSAT $ANS-206.04
AMSAT-NA Board of Directors Election Reminder

AMSAT News Service Bulletin 206.04
  From AMSAT HQ SILVER SPRING, MD.
July 25, 2010
To All RADIO AMATEURS
BID: $ANS-206.04

AMSAT-NA members,

The biographies and ballot for the 4 candidates for the AMSAT Board of Directors went out on July 15th. In order to be counted, your ballot must be RECEIVED at the AMSAT office by the close of business on September 15th. Now is a good time to review the biographical information, ask questions, and study the minutes of the recent Board of Directors meetings from the AMSAT Journal. Finally, please vote. This, along with the yearly opportunity to stand for election, is your best opportunity to influence the direction of our organization.

73,

Alan Biddle
WA4SCA
AMSAT-NA Corporate Secretary
[ANS thanks Alan, WA4SCA, for the above information]

/EX

SB SAT @ AMSAT $ANS-206.05
AMSAT 2010 Space Symposium - Sign Up and Send Us Your Papers!

AMSAT News Service Bulletin 206.05
From AMSAT HQ SILVER SPRING, MD.
July 25, 2010
To All RADIO AMATEURS
BID: $ANS-206.05

The 2010 AMSAT Space Symposium and Annual Meeting will be held on Friday, October 8 through Sunday, October 10. This year we have selected the Chicago/Elk Grove Holiday Inn which is near O'Hare Airport for the event.

At the conclusion of the Symposium activities you are invited to participate in a tour of the Tevatron at the Fermi National Accelerator Laboratory on Sunday. Part of the tour will include a tour of the multi-megawatt RF portions of the particle accelerator as well as a tour of the new Super Conducting RF Test Facility. We will be arranging car pools for travel to FermiLab and back to the hotel. The planned start time for the FermiLab tour will be 12 Noon.

The 2010 Symposium Committee has completed the room reservation and registration details for the event. The Hotel booking code for the Elk Grove Village Holiday Inn is AMS for the AMSAT convention. The $79 per-night room rate will apply for those using this group code.

The direct web page link to the Elk Grove Village Holiday Inn is http://tinyurl.com/22s788d For people needing special accommodations please call the Hotel directly at (847) 437-6010, ask for Brad.

The September 1 deadline of the call for papers for the 2010 AMSAT Space Symposium and Annual Meeting is rapidly approaching! So far the Proceedings crew has received two abstracts for papers - thank you!

The abstract for your paper does not require any special format. Simply send an e-mail to the Proceedings Editor, K9JKM with the basic information: Author Name, Callsign, and a few sentences that describe your proposed topic. We'll be looking forward to receiving your abstracts at k9jkm@comcast.net.

[ANS thanks the 2010 Symposium Committee for the above information]

/EX

SB SAT @ AMSAT $ANS-206.06
Sumbandilasat Returns For Testing

AMSAT News Service Bulletin 206.06
  From AMSAT HQ SILVER SPRING, MD.
July 25, 2010
To All RADIO AMATEURS
BID: $ANS-206.06

SA AMSAT reports on their web page http://www.amsatsa.org.za/ that operations are slowly being resumed on SO-67. The ground control station will observe the amateur payload to ensure the satellite remains stable and then gradually add more operating time.

SA AMSAT requested, "Once the green light is given, requests for operation over your area should be sent to saamsat@intekom.co.za by Mondays for possible inclusion in the schedule published on Thursday night/Friday morning covering the following week. It may not always be possible to accede to every request. The weekly schedule will be published on the SA AMSAT web page.

With recent changes in software please note the recommended operating procedure described at: http://www.amsatsa.org.za/

[ANS thanks SA AMSAT for the above information]

/EX

SB SAT @ AMSAT $ANS-206.07
September Launch for India Ham Radio Satellite SRMSat

AMSAT News Service Bulletin 206.07
  From AMSAT HQ SILVER SPRING, MD.
July 25, 2010
To All RADIO AMATEURS
BID: $ANS-206.07

An Amateur Radio satellite being built by students of SRM University in Chennai may be launched by the Indian Space Research Organization (ISRO) in September.

A description of the SRMSAT ground station indicates it may use the bands 145.8MHz for the uplink and 434.5MHz for the downlink. An SRM University press release describes SRMSAT as a 15 watt satellite weighing between 10 and 15 kg and measuring one meter cube. The satellite will be constructed at the university.

"This project is aimed at increasing the technical expertise of our staff and students and giving them the rare opportunity of constructing a satellite first-hand with ISRO scientists guiding them. We want to prove that our students are worthy of this feat. We hope to launch a satellite once in every two years, of course, with different scientific objectives," says P Satyanarayana, vice-chancellor, SRM University.

Read the NDTV story 'ISRO may launch nano satellite in September' at
http://tinyurl.com/25x3vy8

SRMSAT Information
http://www.prlog.org/10719954-future-perfect-of-srm-university.html

SRMSAT Ground Station
http://srmuniv.academia.edu/ssn/Papers

SRMSAT Yahoo Group
http://tech.groups.yahoo.com/group/srmsat/

Chennai Hams VHF/UHF/HF Enthusiasts Forum
http://chennaihams.blogspot.com/2010/03/asol-exam-conducted-at-srm-universit
y.
html

[ANS thanks SouthGate ARC for the above information]

/EX

SB SAT @ AMSAT $ANS-206.08
LightSail-1 Passes Critical Design Review

AMSAT News Service Bulletin 206.08
From AMSAT HQ SILVER SPRING, MD.
July 25, 2010
To All RADIO AMATEURS
BID: $ANS-206.08

LightSail-1, the Planetary Society's new ultra-light 3U Cubesat-based solar sail spacecraft, has passed its Critical Design Review.

At a two-day meeting in Pasadena, a team - including JPL project veterans Bud Schurmeier, Glenn Cunningham, Viktor Kerzhanovich, and Aerospace Corporation's Dave Bearden - reviewed the LightSail-1 project from soup to nuts and gave the thumbs up to proceed with building the spacecraft's hardware and software.

LightSat-1will demonstrate that sunlight alone can propel a spacecraft in Earth orbit. The 4.5-kilogram spacecraft is an amazing advance in technology -- analogous in my mind to the miniaturization of computers two decades ago.

LightSail-1 has:

o 10 solar panels -- four deployable arrays with panels on each side plus one panel on the top and one on the bottom of the spacecraft,
o Two 2-megapixel cameras mounted at the end of two of the solar panels
o Four Sun sensors mounted at the end of four of the solar panels,
o Six tiny ultra-sensitive accelerometers that will provide a direct measure of the light-force,
o A momentum wheel for attitude control,
o Three single axis gyros,
o Three torque rods also part of the attitude control system,
o A battery

More details at
http://www.planetary.org/programs/projects/solar_sailing/20100625.html

LightSail-1
http://www.planetary.org/programs/projects/solar_sailing/lightsail1.html

[ANS thanks The Planetary Society for the above information]

/EX

SB SAT @ AMSAT $ANS-206.09
ARISS Status - 19 July 2010

AMSAT News Service Bulletin 206.09
From AMSAT HQ SILVER SPRING, MD.
July 25, 2010
To All RADIO AMATEURS
BID: $ANS-206.09

1. ARISS Contact with Girl Guides of Canada

On Friday, July 16, the Girl Guides of Canada spoke with on-orbit astronaut Doug Wheelock, KF5BOC via an Amateur Radio on the International Space Station (ARISS) contact. The initial call to the ISS was made by the Commissioner of Girl Guides of Canada. Wheelock then answered 14 questions posed to him by twelve girls while an audience of approximately 2000 Girl Guides and Girl Scouts from around the world looked on. The girls had gathered at Guelph Lake, Ontario for the Guiding Mosaic 2010 to celebrate the 100th anniversary of Girl Guides in Canada. The Guides prepared for the contact by studying orbital mechanics and learning about the value of successful international partnerships.

2. MAI-75 Experiment Activated

The Russian ISS crew members activated the MAI-75 (Moscow Aviation Institute) experiment on July 15 and 16. The system operated Space Cam in slide show mode using the Martin 1 format. Among those who captured Slow Scan Television (SSTV) images transmitted by the crew were ground stations in South America, Europe and Africa.
For more information, see: http://ariss-sstv.blogspot.com/
Images have been archived here: http://www.amsat.org/amsat/ariss/SSTV/ .

3. Astronaut Training Status - Upcoming Simulation Contacts

Astronauts Ron Garan, KF5GPO, and Mike Fossum, KF5AQG, have been scheduled for simulated Amateur Radio on the International Space Station (ARISS) contacts with the Challenger Learning Center of Indianapolis on Thursday, July 22 at approximately 16:00 UTC and 16:15 UTC respectively. The contact should be available on IRLP (Internet Radio Linking Project) Node 9010. These training sessions are terrestrial-based amateur radio contacts using ARISS equivalent equipment.

4. ISS Ham Debrief Scheduled

An Amateur Radio on the International Space Station (ARISS) debrief session has been scheduled with Expedition 22/23 astronaut T. J. Creamer, KC5WKI on Monday, July 19. The feedback provided will help ARISS update program operations.

5. ARISS - Camp Cavett Contact in the News

On Thursday, July 8, Cavett Kids Foundation's Camp Cavett in Kingston, Oklahoma, participated in an Amateur Radio on the International Space Station (ARISS) contact with astronaut Doug Wheelock, KF5BOC. Channel 12 KXII Dara Downs covered the contact and a news clip has been posted to YouTube: http://www.youtube.com/watch?v=UF7BHbNGYbc

For News Talk Radio KRMG's press release, go to:
http://krmg.com/localnews/2010/07/oklahoma-kid-campers-to-talk-w.html

The September issues of CQ and CQ VHF are expected to carry stories on the contact as well.

6. ARISS News on Amateur Radio Newsline

On July 16, the Amateur Radio Newsline Report 1718 posted a short story which talked about general ham radio contacts made by astronaut Doug Wheelock on the ISS. To view the article, "Ham Radio in Space: ISS Random Contacts Back," see: ftp://ftp.arnewsline.org/quincy/News/news.txt

[ANS thanks Carol, KB3LKI, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the
President's
Club. Members of the President's Club, as sustaining donors to AMSAT Project
Funds, will be eligible to receive additional benefits. Application forms
are
available from the AMSAT Office.

73,
This week's ANS Editor,
Lee McLamb, KU4OS
ku4os at amsat dot org

```
From 3651638014949056712
X-Google-Thread: 10e8ad,5d76c6aab8668870,start
X-Google-NewGroupId: yes
X-Google-Thread: 10b9c8,5d76c6aab8668870,start
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,gida4a23d5f63,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx02.iad01.newshosting.com!newshosting.com!
198.186.194.249.MISMATCH!transit3.readnews.com!news-xxxfer.readnews.com!news-
out.readnews.com!transit4.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-211 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Fri, 30 Jul 2010 15:17:52 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 1868
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <004601cb301b$d75a4a20$860ede60$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1280517473 1007 166.84.1.6 (30 Jul 2010 19:17:53 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Fri, 30 Jul 2010 19:17:53 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
```

X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
x-cr-hashedpuzzle: qLQ= AIRG AxFn CczT DGNc DHqX DKAK Di6r E2A0 FUlu Gh+I Hb1h H1G5 H2b+ IZIZ I83g;1;cgBlAGMALQByAGEAZABpAG8ALQBpAG4AZgBvAEAAcABhAG4AaQB4AC4AYwBvAG0A;Sosha1_v1;7;{B8CC6A3E-DBC0-4E5A-93E5-259048C4A315};awA5AGoAawBtAEAAYwBvAG0AYwBhAHMAdAAuAG4AZQB0AA==;Fri, 30 Jul 2010 19:17:11 GMT;VwBTAFIALQAyADEAMQAgAEEATQBTAEEAVAAgAFcAZQBlAGsAbAB5ACAAUwBhAHQAZQBsAGwAaQB0AGUAIABSAGUAcABvAHIAdAA=
x-cr-puzzleid: {B8CC6A3E-DBC0-4E5A-93E5-259048C4A315}
Xref: g2news1.google.com rec.radio.amateur.space:363 rec.radio.info:1609

This report is organized into four (4) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - deborbited/returned satellites

SB SAT @ AMSAT W8ISS $WSR-211.S1
WSR 211 Part 1 07/30/2010

AMSAT NEWS SERVICE BULLETIN 211.S1
FROM AMSAT HQ SILVER SPRING, MD, July 30, 2010
TO ALL RADIO AMATEURS
BID: $WSR-211.S1

HO-68 XW-1 (CAS-1)
Catalog Number:
Launch Date: December 15, 2009
Status: Commissioning

Callsign:
Broadcast: BJ1SA-11
BBS: BJ1SA-12

```
Uplinks:   145.8250 MHz FM, PL 67.0 Hz.
           145.9250 - 145.9750 MHz SSB/CW
           145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
           435.7650 - 435.7150 MHz SSB/CW
           435.6750 MHz AFSK 1200 BPS

Beacon:    435.7900 MHz CW
```

Mode and Antenna Polarization:
V: LHCP 2.0dBi max
U: RHCP 3.0dBi max

IARU coordination page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108

For more information about XW-1 (CAS-1):

```
http://www.camsat.cn
[04222010]
=====
SO-67 SumbandilaSat
Catalog Number: 35870
Launch Date: September 17, 2009

Status: Suspended

Callsign: ZS0SUM

Uplink:   145.875MHz FM tone 233.6 Hz
Downlink: 435.345MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

For more information about SO-67:
http://www.amsatsa.org.za/
[11212009]
=====
DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008

Status: Operational
Current Mode: Science Mode - Beacon ONLY

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink:   435.530 to 435.570 MHz

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68
[02122009]
=====
VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink:   435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
```

Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.9360 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

To know what transponder is switched on please listen for the beacon that is active. Each transponder has a different beacon.
[03082010]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Mode:
Uplink: 145.920 MHz FM - 67 Hz PL
Downlink: 435.300 MHz FM
Telemetry
Downlink: 435.150MHz 9k6

Analog voice downlink: 435.300 MHz FM
                           435.150 MHz FM
                          2401.200 Mhz FM
Analog voice uplink: 145.860 MHZ FM
                           145.880 MHz USB
                           145.880 MHz FM
                           145.920 MHz FM
                           145.920 MHz FM - 67 Hz PL
                          1268.700 MHz FM
Digital Downlinks: 435.150 MHz FM 38k4 PBP, 1 watt output
                           435.150 MHz FM 9k6 Pacsat Broadcast Protocol
                          2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Pacsat Broadcast Protocol
                          1268.700 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

```
Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[06292010]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002

Status: Operational

Current Mode: V/u

Uplink:   145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4
Hz. The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute
   timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the re-
   peater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset
   the 10 minute timer.
[05282007]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: sCHEDULED oPERATIONS
Current Mode: V/u (Mode JA)

Voice/CW (Mode JA)
Uplink:   145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon:   435.795 MHz

Digital Mode JD
Uplinks:  145.850 MHz FM
          145.870 MHz FM
```

          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage:
http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's
CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/
fo29cwts.htm
[02132010]
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[03232009]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational

Current Mode: Alternating between Mode A and B every 24 hours

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)

```
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons:   29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
[02122009]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - OFF
                      Voice -       V/v
                      BBS -         OFF
                      APRS -        OFF
                      SSTV -        OFF


Expedition 24 Crew:
Commander:                Alexander Skvortsov
Flight Engineer:          Tracy Caldwell Dyson  KF5DBF
Flight Engineer:          Mikhail Kornienko     RN3BF
Flight Engineer:          Doug Wheelock         KF5BOC
Flight Engineer:          Shannon Walker        KD5DXB
Flight Engineer:          Fyodor Yurchikhin     RN3FI


Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink:   145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink:     145.200 MHz FM
Region 2/3 voice uplink:   144.490 MHz FM
Worldwide downlink:        145.800 MHz FM

Crossband Repeater:
Repeater Uplinks:         1269.650 MHz FM
                           437.800 MHz FM
                           145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink:         145.800 MHz FM
                           437.800 MHz FM (Kenwood)
```

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[07302010]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-211.S2
WSR 211 Part 2 07/30/2010

AMSAT NEWS SERVICE BULLETIN 211.S2
FROM AMSAT HQ SILVER SPRING, MD, July 30, 2010
TO ALL RADIO AMATEURS
BID: $WSR-211.S2

StudSat : India CubeSat
Catalog Number:
Launch Date: July 12, 2010
Status: On Orbit

Uplink: 437.505MHz, 9600bps FSK
Downlink: 437.505MHz, 9600bps FSK
Beacon : 437.505MHz, 20bps ASK
[07202010]
=====
TIsat-1: Swiss CubeSat
Catalog Number:
Launch Date: July 12, 2010
Status: On orbit

Callsign: HB9DE

Uplink: 145.980MHz FM, AFSK

```
Downlink: 437.305MHz FM, AFSK
Beacon:   437.305MHz CW
[07202010]
=====
HO-68 XW-1 (CAS-1)
Catalog Number:
Launch Date: December 15, 2009
Status: Operational

Callsign:
Broadcast:    BJ1SA-11
BBS:         BJ1SA-12

Uplinks:   145.8250 MHz FM, PL 67.0 Hz.
           145.9250 - 145.9750 MHz SSB/CW
           145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
           435.7650 - 435.7150 MHz SSB/CW
           435.6750 MHz AFSK 1200 BPS

Beacon:    435.7900 MHz CW

IARU coordination page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108

For more information about XW-1 (CAS-1):
http://www.camsat.cn
[04222010]
=====
SwissCube
Catalog Number: 35932
Launch Date: September 23, 2009

Status: Operational

Callsign: HB9EG

Beacon(100mw): 437.5050MHz CW
Beacon(1w):    437.5050MHz FSK 1k2bps
[04222010]
=====
UWE-2
Catalog Number: 35934
Launch Date: September 23, 2009

Status: In Orbit

Beacon(500mw): 437.3850 MHz AFSK 1k2bps
               437.3850 MHz FSK 9k6bps
[1112009]
=====
ITUpsAT1
Catalog Number: 35935
```

```
Launch Date: September 23, 2009

Status: Operational

Beacon(100mw): 437.325MHz CW
Beacon(1w): 437.325MHz 19k2bps
[11112009]
=====
BEESAT
Catalog Number: 35933
Launch Date: September 23, 2009

Status: Operational

Callsign: DP0BEE

Beacon(100mw): 436.000MHz CW
Beacon(500mw): 436.000MHz GMSK 4k8bps
Beacon(500mw): 436.000MHz GMSK 9k6bps
[04222010]
=====
Pollux
Catalog Number:
Launch Date: July 31, 2009

Status: Operational

Callsign: POLLUX-1

Downlink: 145.825MHz 1k2 AX.25
[10042009]
=====
Castor (ANDE-2)
Catalog Number:
Launch Date: July 31, 2009

Status: Operational

Callsign: KD4HBO-1

Downlink: 145.825 MHz 1k2 AX.25
[10042009]
=====
BEVO-1 (DRAGONSAT-1)
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Operational

Downlink: 437.325 MHz 9k6 GMSK
          437.325 MHz CW 20wpm
[07312009]
=====
AggieSat2 (DRAGONSAT-2)
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Operational

Downlink: 436.250 MHz 9k6 FHSS
[11112009]
=====
CP-6
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Commissioning

Downlink: 437.365 MHz 1k2 AFSK
[06052009]
=====
HAWKSAT 1
Catalog number: 35003
Launch Date: May 19, 2009

Status: ?

Downlink: 437.345 ?
[06052009]
=====
Pharmasat
Catalog Number: 35002
Launch Date: May 19, 2009
Status: Commissioning

Downlink: 437.465 MHz 1k2 AFSK
[06052009]
=====
ANUSAT
Catalog Number: 34808
Launch Date: April 20, 2009

Status: ?

Downlink:  435.000 MHz
Uplink:    145.800 MHz

Telemetry: 137.400 MHz
[05112009]
=====
SOHLA-1 (ASTRO TECH.)
Catalog Number: 33496
Launch Date: January 23, 2009

Status: Commisioning
```

Proposed Frequencies and Modes:
Downlink: 437.505 MHz AFSK/CW
Beacon: 437.505 MHz AFSK/CW

Callsign:

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=101
[03232009]
=====
KAGAYAKI (Solan Co.)
Catalog Number: 33495?
Launch Date: January 23, 2009

Status: In Orbit

Downlink: 437.375 MHZ   FSK9k6/CW
Beacon: 437.375 MHz   FSK9k6/CW

IARU coordination status page:

AMSAT-NA webpage:

[01152009]
=====
STARS (Kagawa Univ.) (Twin Satellites)
Catalog Number: 33498
Launch Date: January 23, 2009

Status: Operational ?

Downlinks: 437.485 MHz FM/CW
           437.465 MHz FM/CW
Beacons: 437.305 MHz FM/CW
           437.275 MHz FM/CW

Callsigns: JR5YBN
           JR5YBO

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=99

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=121&retURL
=/satellites/status.php
[022152009]
=====
KKS-1 (Tokyo MCIT)
Catalog Number: 33499
Launch Date: January 23, 2009

Status: Operational

Downlink: 437.455 MHz AFSK/CW
Beacon: 437.385 MHz AFSK/CW

Callsign: JQ1YYY

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=107

AMSAT-NA webapge:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=120&retURL
=/satellites/status.php
[02212009]
=====
PRISM (Tokyo Univ.)
Catalog Number: 33493
Launch Date: January 23, 2009

Status: Operational ?

Downlink: 437.425 MHz AFSK/GMSK/CW
Beacon: 437.250 MHz AFSK/GMSK/CW

Callsign: JQ1YCX

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=97

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=119&retURL
=/satellites/status.php
[02212009]
=====
RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number: 32953
Launch Date: May 23, 2008

Status: Operational

Curent Modes: Telemetry
              Audio
              Images

Downlinks: 435.315 MHz
           435.215 MHz

AMSAT-NA website:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=115&ret
URL=/satellites/status.php

Official website:
http://www.npopm.com/?cid=leoca&caid=43
[02122009]
=====

CanX-2
Catalog number: 32790
Launch Date: April 28, 2008

Status: Operational in range of ground station only

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[02212009]

=====

AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.425 MHz 1k2 baud packet

For the latest project status update please visit the AAUSAT-II web page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[02212009]

=====

CO-65 CUTE-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008

Status: Digipeater

Downlink: 437.475 MHz 9k6 Packet
Uplink: 1267.600 Mhz

Telemetry Beacon:
Downlink: 437.2750 MHz CW

For the latest project status update please visit the Cute-1.7+APD II web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78

Command Station blog website:
http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/

AMSAT-NA webpage:

http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=112&retURL=/satellites/status.php
[02212009]
=====
Compass-1
Catalog number: 32787
Launch Date: April 28, 2008

Status: Operational

Current Mode: 4k8 MSK packet

```
Uplink:   145.980 MHz FM
Downlink: 437.275 Mhz CW
          437.405 MHz Packet
```

For the latest project status update please visit the Compass 1 web page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=114&retURL=/satellites/status.php
[04272009]
=====
CO-66 Seeds II
Catalog number: 32791
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.485 MHz

Callsign: JQ1YGU

For the latest project status update please visit the Seeds 2 web page: http://cubesat.aero.cst.nihon-u.ac.jp/english/seeds_2_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=113&retURL=/satellites/status.php
[02212009]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=94&retURL=
/satellites/status.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=72
[02122009]
=====
CP3
Catalog Number: 31129
Launch Date: April 17,2007

Status: Operational

Current Mode: /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[02122009]
=====
GENESAT-1
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Current Mode: /u

Callsign: KE7EGC

Telemetry Beacon Downlink: 437.0695 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[09152009]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol

Beacon: 437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/xivpicte.htm
[02212009]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003

Status: ?????

Current Mode: /u

Beacon: 436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=96&retURL
=/satellites/status.php

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[06082009]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Operational?

Uplink: 1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=56
[02122009]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Mode:
Uplink: 145.920 MHz FM - 67 Hz PL
Downlink: 435.300 MHz FM
Telemetry
Downlink: 435.150MHz 9k6

```
Analog voice downlink:      435.300 MHz FM
                            435.150 MHz FM
                           2401.200 Mhz FM
Analog voice uplink:        145.860 MHZ FM
                            145.880 MHz USB
                            145.880 MHz FM
                            145.920 MHz FM
                            145.920 MHz FM - 67 Hz PL
                           1268.700 MHz FM
Digital Downlinks:          435.150 MHz FM 38k4 PBP, 1 watt output
                            435.150 MHz FM 9k6 Pacsat Broadcast Protocol
                           2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:             145.860 MHz FM 9k6 Pacsat Broadcast Protocol
                           1268.700 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon:                     435.150 MHz
```

```
Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear
```

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[06292010]
=====
QuakeSat
Catalog Number: 27845
Launch Date: June 30, 2003

Status: Telemetry only

Current Mode: 9600 baud data packet

Mode U packet
Downlink: 436.675 MHz 9k6 BPS

```
Quakesat webpage:
http://www.quakefinder.com/services/quakesat-ssite/
[04272009]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=69&retURL
=/satellites/status.php
[02212009]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Telemetry only

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink:        144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[03302009]
=====
RS-22 RADIO SPORT 22
Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only

Current Mode:  /u

CW Beacon - 435.352 MHz
            145.818 MHz

AMSAT-NA webpage:
```

```
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=76&retURL
=/satellites/status.php
[02212009]
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990

Status: CW Beacon only

Uplinks:          145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink:      437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[03162009]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984

Status: Non-operational.

Current Mode:  /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon:          435.025 MHz
Mode-S Beacon:     2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[12162009]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - OFF
```

Voice - V/v
BBS - OFF
APRS - OFF
SSTV - OFF

Expedition 24 Crew:
Commander: Alexander Skvortsov
Flight Engineer: Tracy Caldwell Dyson KF5DBF
Flight Engineer: Mikhail Kornienko RN3BF
Flight Engineer: Doug Wheelock KF5BOC
Flight Engineer: Shannon Walker KD5DXB
Flight Engineer: Fyodor Yurchikhin RN3FI

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time

line is NOT translated from Russian and posted.
[07302010]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-211.S3
WSR 211 Part 3 07/30/2010

AMSAT NEWS SERVICE BULLETIN 211.S3
FROM AMSAT HQ SILVER SPRING, MD, July 30, 2010
TO ALL RADIO AMATEURS
BID: $WSR-211.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

CP4
Catalog Number: 31122
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: /u

```
TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon:    437.325 MHz CW
```

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=79
[10022008]
=====
LIBERTAD-1
Catalog Number: 31128
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

```
Uplink:   145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS
```

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[02122009]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: Non-Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder: 145.825 Mhz FM
[01012009]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 MHz FM 67Hz CTCSS
Voice Downlink: 2401.835 MHz FM
Packet Up/Downlink: 437.250 MHz 9k6 packet
Packet Downlink   2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non-Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[08132007]
=====
CANX-1
Catalog Number: 27847
Launch Date: June 30, 2003

Status: Non-Operational

Downlink: 437.8800 MHz AFSK 1k2bps
[06052009]
=====
DTUSAT

Catalog Number: 27842
Launch Date: June 30, 2003

Status: Non-Operational

Current Mode: 2k4 AFSK Packet last reported

Downlink: 437.475MHz

Officail webpage: http://dtusat1.dtusat.dtu.dk/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=101&retURL=satellites/all_oscars.php
[02212009]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

```
Uplink:   435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)
```

Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Telemetry only

```
Uplinks:   145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink:  437.325 MHz
```

```
Broadcast callsign: MYSAT3-11
BBS:                MYSAT3-12
```

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[03302009]
=====

NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks

V-band: 145.840 - 145.990 MHz CW/LSB
U-band: 435.550 - 435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks

S2-band: 2401.225 - 2401.475 MHz CW/USB
K-band: 24048.010 - 24048.060 MHz CW/USB
Beacon: 2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)

BEACON	General Beacon(GB)	Middle Beacon(MB)	Engineering Beacon(EB)
2 m	none	145.898 MHz	none
70cm	435.438 MHz	435.588 MHz	435.838 MHz
13cm(1)	2400.188 MHz	2400.338 MHz	2400.588 MHz
13cm(2)	2401.173 MHz	2401.323 MHz	2401.573 MHz
3cm	10450.975 MHz	10451.125 MHz	10451.375 MHz
1.5cm	24047.885 MHz	24048.035 MHz	24048.285 MHz

[07162007]
=====
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT

```
Catalog Number: 25636
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater:         436.250 MHz

Uplinks: Mode B Repeater:  145.825 MHz
Mode J Digipeater:         145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Non-Operational

Current Modes:
Telemetry : /u

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
```

```
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign:       4XTECH-12

More information of GO-32 can be found at:
http://asri.technion.ac.il/techsat/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=14&retURL
=/satellites/status.php
[07172010]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink:   145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
MO-30 UNAMSAT-2
Catalog Number: 24305
Launch Date: September 5, 1996

Status: Non-operational

Downlink:       435.1380 MHz AFSK 1200 BPS
Downlink:       435.2060 MHz AFSK 1200 BPS
Uplink:         145.8150 MHz AFSK 1200 BPS
Uplink:         145.8350 MHz AFSK 1200 BPS
Uplink:         145.8550 MHz AFSK 1200 BPS
Uplink:         145.8750 MHz AFSK 1200 BPS
[06042009]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Non-operational

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage
```

```
Broadcast callsign: POSAT1-11
BBS callsign:       POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012009]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
AO-24 ARSENE
Catalog Number: 22654
Launch Date: May 13, 1993

Status: Non-operational

Uplink:    435.0625 MHz FM 1k2bps AFSK
           435.1125 MHz FM 1k2bps AFSK
           435.1375 MHz FM 1k2bps AFSK
```

```
Downlink:  145.9750 MHz FM 1k2bps AFSK
          2446.5025 MHz FM 1k2bps AFSK

Beacon:    2446.4700 MHz CW

Broadcast callsign:
BBS:
[12162009]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HL01-11
BBS: HL01-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25
```

Voice Transponder:
Uplink: 145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks: 145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink: 145.825 MHz FM 1200 Baud AFSK
Beacon: 2401.220 MHz
[05012006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: non-operational

Current Mode: V/u

Uplink: 145.900 MHz FM 1200-baud Manchester FSK (reserved)
                145.920 MHz FM VOICE
                145.940 MHz FM 1200-baud Manchester FSK (reserved)
                145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink: 437.026 MHz USB VOICE
                (1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

```
Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[07242009]
=====
UO-15 UoSAT-4
Catalog Number: 20438
Launch Date: January 22, 1990

Status: Non-operational

Uplink: ?
Downlink: 435.1250MHz (?)
          435.1200MHz (?)
[06042009]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon:   145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink  29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
Beacons:   29.450 MHz
          435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational
```

```
Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon 1:  29.352 MHz (intermittent)
Beacon 2:  29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink:     21.260 to 21.300 MHz CW/USB
Downlink:  145.860 to 145.900 MHz CW/USB

Beacon:    145.860 MHz

Robot:     145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink:   21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB
```

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-211.S4
WSR 211 Part 4 07/30/2010

AMSAT NEWS SERVICE BULLETIN 211.S4
FROM AMSAT HQ SILVER SPRING, MD, July 30, 2010
TO ALL RADIO AMATEURS
BID: $WSR-211.S4

THE FOLLOWING SATELLITES HAVE RE-ENTERED OR HAVE BEEN RETURNED SAFELY:

NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: July 28, 2008

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[01012009]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink: 145.825 Mhz FM APRS AX25
APRS Uplink: 145.825 MHz FM APRS AX25
Voice/PSK31 Uplink: 28.120 MHz

Packet to Voice ID: RAFT

[06112007]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Re-Entered
Re-entered: June 18, 2008

```
Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon:             437.2750 MHz CW
```

Callsign: JR8YJT
[01012009]
=====
SO-43 Starshine 3
Catalog Number: 26929
Launch Date: September 30, 2001

Status: Re-Entered
Re-entered: January 21, 2003

Beacon: 145.825Mhz
[02212009]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

```
Voice: 301-589-6062
       888-322-6728
FAX:   301-608-3410
```

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)

* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at} amsat.org
NNNN
/EX

From -8614251997210601922
X-Google-Thread: 10e8ad,e2f462a964e40716,start
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!postnews.google.com!m35g2000prn.googlegroups.com!not-for-mail
From: devi <satyamsivam9030@gmail.com>
Newsgroups: rec.radio.amateur.space
Subject: HOT ACTRESS
Date: Sat, 31 Jul 2010 22:53:15 -0700 (PDT)
Organization: http://groups.google.com
Lines: 32
Message-ID: <7d5277e8-8573-44e3-80c5-55bb2b1345ba@m35g2000prn.googlegroups.com>
NNTP-Posting-Host: 117.199.250.13
Mime-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
X-Trace: posting.google.com 1280641996 27033 127.0.0.1 (1 Aug 2010 05:53:16 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Sun, 1 Aug 2010 05:53:16 +0000 (UTC)
Complaints-To: groups-abuse@google.com
Injection-Info: m35g2000prn.googlegroups.com; posting-host=117.199.250.13;
    posting-account=xYWSigoAAADp0Q2VAMlANM4syM5q3uRr
User-Agent: G2/1.0
X-HTTP-UserAgent: Mozilla/5.0 (Windows; U; Windows NT 5.1; en-US; rv:1.9.2.8)

```
     Gecko/20100722 Firefox/3.6.8,gzip(gfe)
Xref: g2news1.google.com rec.radio.amateur.space:364


     FOR HOT HEROINES PHOTOS

http://hotheroinesphoto.blogspot.com

  AISHWARIYARAI HOT EXPOSING PHOTO

http://hotheroinesphoto.blogspot.com/2010/06/aishwariyarai-hot-photo.html

  ANKITHA IN A TUB BATH

http://hotheroinesphoto.blogspot.com/2010/06/ankitha-in-tub-bath.html

  NAMITHA SEXY PHOTO IN BEACH

http://hotheroinesphoto.blogspot.com/2010/06/namitha-in-beach.html

  CHARMI IN A SEXY FEEL

http://hotheroinesphoto.blogspot.com/2010/06/sexy-charmi.html

  CHENNAI HOT GIRLS WITH SWIM WEAR

http://hotheroinesphoto.blogspot.com/2010/06/chennai-hot-girls.html

  KAJAL AGARWALHOT PHOTO

http://hotheroinesphoto.blogspot.com/2010/06/kajal-agarwal-hot.html

  KATRINA KAIF IN A HOT SAREE

http://hotheroinesphoto.blogspot.com/2010/06/hot-katrina.html


From 5493136665318431062
X-Google-Thread: fcc6e,19db209159aa102e,start
X-Google-NewGroupId: yes
X-Google-Thread: 11480d,19db209159aa102e,start
X-Google-NewGroupId: yes
X-Google-Thread: 108122,19db209159aa102e,start
X-Google-NewGroupId: yes
X-Google-Thread: fc2a5,19db209159aa102e,start
X-Google-NewGroupId: yes
X-Google-Thread: 107ada,19db209159aa102e,start
X-Google-NewGroupId: yes
X-Google-Thread: 10bf43,19db209159aa102e,start
X-Google-NewGroupId: yes
X-Google-Thread: 10e8ad,19db209159aa102e,start
X-Google-NewGroupId: yes
X-Google-Thread: 10b9c8,19db209159aa102e,start
```

X-Google-NewGroupId: yes
X-Google-Attributes: gid4baf9708d4,gid7221ecd0f7,gidd7f5508063,gid241b302a50,gida3e752f117,gide721ae2bf6,gid8f86f75953,gida4a23d5f63,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!border1.nntp.dca.giganews.com!nntp.giganews.com!news-out.readnews.com!news-xxxfer.readnews.com!panix!panix2.panix.com!not-for-mail
From: rram@panix.com (rec.radio.amateur.moderated Admin)
Newsgroups: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.info
Subject: Crossposting Permitted to rec.radio.amateur.moderated
Supersedes: <radio/ham-radio/moderated/crossposting-1-1277964001@panix.com>
Followup-To: poster
Date: 1 Aug 2010 02:00:03 -0400
Organization: rec.radio.amateur.moderated Moderation Team
Lines: 47
Approved: RRI Admin <rec-radio-info-request@panix.com>
Distribution: world
Expires: 03 Sep 2010 02:00:01 -0000
Message-ID: <radio/ham-radio/moderated/crossposting-1-1280642401@panix.com>
Reply-To: rec-radio-amateur-moderated-request@panix.com (rec.radio.amateur.moderated Admin)
NNTP-Posting-Host: panix2.panix.com
X-Trace: reader1.panix.com 1280642403 21173 166.84.1.2 (1 Aug 2010 06:00:03 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 1 Aug 2010 06:00:03 +0000 (UTC)
Summary: Short reminder for unmoderated newsgroups that crossposting is permitted
Keywords: FAQ, ham, amateur, radio, moderated, unmoderated, crossposting, permitted
Xref: g2news1.google.com rec.radio.amateur.antenna:17726 rec.radio.amateur.dx:678 rec.radio.amateur.equipment:2148 rec.radio.amateur.homebrew:3675 rec.radio.amateur.misc:5148 rec.radio.amateur.policy:27800 rec.radio.amateur.space:365 rec.radio.info:1611

Posted-By: auto-faq 3.3.2 beta (PGPMoose V2.0, Perl 5.005)
Archive-name: radio/ham-radio/moderated/crossposting
Revision: 1.1 2009/04/12 19:42:04
Posting-Frequency: posted monthly
URL: http://www.panix.com/~rram/usenet/rram/index.html

Changes followed by "|".

After a 30-day public discussion and feedback period to gauge reader opinions in March of 2009:

http://groups.google.com/group/rec.radio.amateur.moderated/browse_thread/thread/d7d337db35f23326

the rec.radio.amateur.moderated Moderation Team has decided to consider amending its charter, and permit limited simultaneous crossposting to rec.radio.amateur.moderated and one other unmoderated amateur-radio-related discussion newsgroup. We are currently trying this on a temporary basis (90 days, through early July 2009), and adopt it permanently if successful.

Approved rec.radio.amateur.* newsgroups are those that are currently listed in the latest version of the "List of Big Eight Newsgroups" which is crossposted monthly to news.announce.newgroups, news.groups, and news.lists.misc.

Approved alt.radio.amateur.* and alt.ham-radio.* newsgroups are those that have been created consistent with the suggestions in "So You Want to Create an Alt Newsgroup" at:

  http://www.faqs.org/faqs/alt-creation-guide/

Approved regional hierarchy newsgroups are those that contain either "radio.amateur" or "ham-radio" in their names, including uk.radio.amateur and aus.radio.amateur.misc.

We will make every reasonable effort to keep our list of approved newsgroups up-to-date. In case we have overlooked any, and a submission is rejected in error as a result, the rejected submitter can E-mail us at our administrative contact address (in the signature at the bottom of this article, and the default Reply-To for the rejection message) requesting that it be added, and that the article be approved. We may still choose to reject articles crossposted to any alt.* newsgroup with an inappropriate name, including obscene language, embedded name-calling, or encouragement of unlawful conduct.

Please direct any comments, questions, or criticisms to rec-radio-amateur-moderated-request@panix.com.

```
From 1971297005677502490
X-Google-Thread: 10e8ad,41971666cd87896,start
X-Google-NewGroupId: yes
X-Google-Thread: 10b9c8,41971666cd87896,start
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,gida4a23d5f63,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!npeer02.iad.highwinds-media.com!
news.highwinds-media.com!feed-me.highwinds-media.com!nx01.iad01.newshosting.com!
newshosting.com!198.186.194.249.MISMATCH!news-out.readnews.com!
transit3.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-213 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Mon, 2 Aug 2010 20:32:52 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 340
Approved: RRI Admin <rec-radio-info-request@panix.com>
```

```
Message-ID: <000001cb32a2$aeb37b80$0c1a7280$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1280795572 16704 166.84.1.6 (3 Aug 2010 00:32:52 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Tue, 3 Aug 2010 00:32:52 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news1.google.com rec.radio.amateur.space:366 rec.radio.info:1617
```

AMSAT NEWS SERVICE
ANS-213

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

```
**************************************
* Please return the AMSAT BOD Ballots*
*      by September 15th, 2010       *
**************************************
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In this edition:
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* UK Space Agency to launch CubeSat
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* Balloon Launch Project
* Astronauts Complete Simulation Contacts
* ARISS Status - July 26, 2010

SB SAT @ AMSAT $ANS-213.01

Reminder: Symposium Call For Papers Deadline is Coming

AMSAT News Service Bulletin 213.01
From AMSAT HQ SILVER SPRING, MD.
August 1,, 2010
To All RADIO AMATEURS
BID: $ANS-213.01

It's already August 1 and the September 1 deadline of the call for papers for the 2010 AMSAT Space Symposium and Annual Meeting is approaching faster than ever! The abstracts and some completed papers have arrived - thank you. For everyone else - we need to get busier!

The abstract for your paper does not require any special format. Simply send an e-mail to the Proceedings Editor, K9JKM with the basic information: Author Name, Callsign, and a few sentences that describe your proposed topic. I'll be looking forward to receiving your abstracts in my in-box at k9jkm@comcast.net.

The Symposium Committee invites proposals for:

+ Papers for publication in the Proceedings

+ Symposium Presentations

+ Poster Presentations

+ Equipment and Operating Demonstrations

These can be on any topic of interest to the amateur satellite community. We request a tentative title of your presentation as soon as possible, with final copy submitted by September 1, 2010 for inclusion in the printed proceedings.

To help you prepare your paper the Symposium Committee has posted an author's guide on the AMSAT.org web page:
http://tinyurl.com/2djjnmx

The 2010 AMSAT Space Symposium and Annual Meeting will be held October 8 - 10 at the Chicago/Elk Grove Holiday Inn which is near O'Hare Airport.

[ANS thanks the 2010 Symposium Committee for the above information]

/EX

SB SAT @ AMSAT $ANS-213.02
UK Space Agency to launch CubeSat

AMSAT News Service Bulletin 213.02
From AMSAT HQ SILVER SPRING, MD.

August 1, 2010
To All RADIO AMATEURS
BID: $ANS-213.02

UK Space Agency to launch CubeSat
The UK Space Agency has announced a one-year pilot programme to design and launch a CubeSat and is running a competition for ideas for payloads.

This miniature, cube-shaped satellite will allow the UK to test new space technologies and carry out new space research 'cheaply' and quickly.

The pilot programme, named UKube 1, will use a spacecraft platform that is currently under development by the company Clyde Space Ltd and will involve a competition amongst companies and academic groups to come up with the most innovative ideas for payloads. The winning payloads will be launched on the satellite in mid 2011.

Companies and academics who are interested in designing a payload can contact the UK Space Agency for more information.

There is another CubeSat under construction in the UK called FUNcube.

It is being built by AMSAT-UK and the hardware will be shown at the AMSAT-UK International Space Colloquium in Guildford July 31 - Aug 1.

This event is being streamed live to the web at
http://www.batc.tv/ (click on Live Events)

UK Space Agency Announcement
http://www.ukspaceagency.bis.gov.uk/19128.aspx

AMSAT-UK FUNcube
http://www.funcube.org.uk/

[ANS thanks Southgate News for the above information.]

/EX

SB SAT @ AMSAT $ANS-213.03
Satellite Shorts

AMSAT News Service Bulletin 213.03
From AMSAT HQ SILVER SPRING, MD.
August 1, 2010
To All RADIO AMATEURS
BID: $ANS-213.03

+ Clint, K6LCS and Gordon West, WB6NOA will be giving a public AMSAT demonstration and presentation from the award-winning amateur radio booth at the Orange County Fairgrounds on August 5, 2010 at 5:45PM PDT.

+ The Scouting SpaceJam-4 Weekend will be on August 6-8, 2010 at the Chanute Air Museum in Rantoul IL (between Chicago and Champaign, IL). Amateur radio features include an APRS balloon launch transmitting on 144.39 MHz every minute under the call sign, W9YJ-11 and an ARISS contact with the scouts. The ISS-direct-to WB9SA contact is scheduled for a 36 degree elevation pass on Sat 2010-08-07 15:07:14 UTC. More information about SpaceJam-4 can be found at: http://www.spacejamboree.com

+ Stu, WA2BSS reminds interested amateur satellite operators that the the dates for the next two Hudson Valley Satcom nets are Aug. 5 & 19. The 2 M repeater used is:146.970 MHz (2M Pl. 100) Time: 8PM EDT, or 2400 UTC. The EchoLink node is N2EYH-L. More info: www.hvsatcom.org.

+ Bruce, VE9QRP is asking for input from amateur satellite operators. He is designing a microcontroller system for doppler tuning portable radios. He is looking for information regarding which HTs or mobile radios are CAT-controllable. He is testing this concept with an TH-D7A and reports it works well. Bruce's e-mail is ve9qrp_at_gmail.com. His web page is at: http://ve9qrp.blogspot.com. He demonstrates his project in a video at: http://www.youtube.com/user/VE9QRP.

+ While this video link is more related to new technology than the Amateur satellite program many radio amateurs will find learning about D-STAR technology interesting at: http://tinyurl.com/25moy7d (via SouthGateARC)

[ANS thanks everyone for the above information]

/EX

SB SAT @ AMSAT $ANS-213.04
Balloon Launch Project

AMSAT News Service Bulletin 213.04
From AMSAT HQ SILVER SPRING, MD.
August 1, 2010
To All RADIO AMATEURS
BID: $ANS-213.04

In association with Tom Webb, WA9AFM/5, President, Oklahoma City Autopatch Association, the North Texas Balloon Project would like to dedicate their Launch No. 18 to the memory of fellow ham, John Mark "Rob" Robbins.

Just two weeks ago, John Robbins, NO5X, became a Silent Key. John was a founding member of the Near Space Exploration Group in the OKC/Tulsa area. We conducted several balloon launches from OKC until John's health prevented his participation and leadership. It was

John's goal to do a record setting flight for an amateur radio balloon. He came very close, but never succeeded.

The John Mark Robbins Memorial Flight will be launched by the North Texas Balloon Project (NTEXBP) at about 8:30 am CDT on August 7, 2010 from the municipal airport in Hillsboro, Texas, just south of Fort Worth and Dallas. The public is invited to come out to the Hillsboro Municipal Airport, located at Exit 3 on Interstate Highway 35W, to watch the launch. The back up launch date is August 14, 2010.

Three payload packages containing sensors and amateur radios will be carried to nearly 100,000 feet in about 90 minutes by a helium balloon and return via parachute in about 50 minutes. Mobile recovery teams will use position reports from the onboard GPS and APRS transmitter on 144.390 MHz and radio direction finding techniques to recover the payloads.

A cross band repeater will be activated soon after launch. Uplink is 445.800 MHz and downlink is 147.560 MHz. At the peak altitude ham radio operators from Texas, New Mexico, Oklahoma, Arkansas, Louisiana, and Kansas can contact each other using the cross band repeater.

The third payload of the flight is a ten meter beacon operating on a frequency of 28.274 MHz. The antenna is a home brew loop and the transmitter will be running approximately 1 watt. This beacon may be heard world wide if the band is open. Please report reception and we will happily QSL the event. Email webmaster@ntexbp.org or kdvickers@aol.com

Pre-launch activities will begin about 7:00 am CDT with the HF Launch Net on 7260 +/- 5 KHz, LSB beginning around 8:00 am CDT. Follow us on HF radio or on Twitter@NTEXBP. Saturday's launch will show on APRS as W5SJZ-11.

[ANS thanks Keith, W5IU, for the above information]

/EX

SB SAT @ AMSAT $ANS-213.05
Astronauts Complete Simulation Contacts

AMSAT News Service Bulletin 213.05
  From AMSAT HQ SILVER SPRING, MD.
August 1, 2010
To All RADIO AMATEURS
BID: $ANS-213.05

Astronauts successfully complete amateur radio simulation contacts.

Astronauts Ron Garan, KF5GPO, and Mike Fossum, KF5AQG, each successfully completed a simulated Amateur Radio on the International Space Station (ARISS) contact with

the Challenger Learning Center of Indianapolis on Thursday, July 22.
Hopefully they will become as active as the present ISS crew And carry out some casual contacts with others throughout The World.

Garan and Fossum answered 14 and 22 questions respectively during their contacts.

These training sessions were terrestrial-based amateur radio contacts using ARISS equivalent equipment.

[ANS thanks Southgate for the above information]

/EX

SB SAT @ AMSAT $ANS-213.06
ARISS Status - July 26, 2010

AMSAT News Service Bulletin 213.06
From AMSAT HQ SILVER SPRING, MD.
August 1, 2010
To All RADIO AMATEURS
BID: $ANS-213.06

Amateur Radio on the International Space Station (ARISS) Status Report July 26, 2010

1. Upcoming School Contact

An Amateur Radio on the International Space Station (ARISS) contact was completed with the 2010 National Boy Scout Jamboree in Fort A.P. Hill, Virginia on Saturday, July 31 at 18:21 UTC. The jamboree is being planned for about 43,000 Scouts and leaders in 825 troops, plus some 5,000 staff members for support, program and headquarters services. The K2BSA Amateur Radio Demonstration Area is a hot spot of activity throughout the Jamboree. At past Jamborees, thousands of Scouts toured K2BSA. More than 300 earned their Radio Merit Badges and more than 100 new Technician licenses were earned. The club supporting this event is the K2BSA Amateur Radio Association.

2. ARISS Contact with International Space University Students

On Wednesday, July 21, International Space University in Illkirch-Graffenstaden, France, participated in an Amateur Radio on the International Space Station (ARISS) contact with Shannon Walker, KD5DXB on the ISS. Twelve questions were answered and regional television covered the event. In preparation for their contact, students studied the basics of satellite communications and learned about human spaceflight and space exploration.

3. ARRL Covers 2010 National Scout Jamboree

The American Radio Relay League (ARRL) posted a story on its web page covering the upcoming 2010 National Boy Scout Jamboree during which an ARISS contact was planned. The article was also included in the ARRL Letter. See:
http://www.arrl.org/news/connect-with-the-national-scout-jamboree-via-amateur-radio

4. ARISS-Brazil Web Page Updated

ARISS-Brazil has updated its Web page. The site has a new URL:
http://www.qsl.net/py1kcf/

5. Astronaut T. J. Creamer Participates in ISS Ham Debrief

An Amateur Radio on the International Space Station (ARISS) debrief session was held with Expedition 22/23 astronaut T. J. Creamer, KC5WKI on Monday, July 19. The feedback received will help ARISS with its program operations.

6. ARISS International Team Meeting Held

The Amateur Radio on the International Space Station (ARISS) International Team teleconference was held on Tuesday, July 20. Discussions included a status on the Columbus Module radio equipment as well as an update on ARISSat-1. The minutes have been posted.
See: https://www.rac.ca/ariss/arisstel2010-07-20.htm

[ANS thanks Carol, KB3LKI, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Dee Interdonato, NB2F

```
From -4966284469621788477
X-Google-Thread: 10e8ad,54b8be2ea2ceb8fa,start
X-Google-NewGroupId: yes
X-Google-Thread: 10b9c8,54b8be2ea2ceb8fa,start
X-Google-NewGroupId: yes
```

```
X-Google-Attributes: gid8f86f75953,gida4a23d5f63,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!border1.nntp.dca.giganews.com!
border2.nntp.dca.giganews.com!nntp.giganews.com!novia!news-out.readnews.com!news-
xxxfer.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-218 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Sat, 7 Aug 2010 09:53:02 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 1868
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000c01cb3637$cfdbf0b0$6f93d210$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1281189182 10464 166.84.1.6 (7 Aug 2010 13:53:02 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sat, 7 Aug 2010 13:53:02 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
x-cr-hashedpuzzle: A1J1 BB60 BVHE BmKa D6yu ETvW FHvu F3lh GdGB GkeA HSO9 H46e
IPVn KIEy KOU2
K53K;1;cgBlAGMALQByAGEAZABpAG8ALQBpAG4AZgBvAEAAcABhAG4AaQB4AC4AYwBvAG0A;Sosha1_v1;
7;{31F1B0D4-E9B5-4146-
B67C-6EF63BC42151};awA5AGoAawBtAEAAYwBvAG0AYwBhAHMAdAAuAG4AZQB0AA==;Sat, 07 Aug
2010 13:52:37
GMT;VwBTAFIALQAyADEAOAAgAEEATQBTAEEAVAAgAFcAZQBlAGsAbAB5ACAAUwBhAHQAZQBsAGwAaQB0AG
UAIABSAGUAcABvAHIAdAA=
x-cr-puzzleid: {31F1B0D4-E9B5-4146-B67C-6EF63BC42151}
X-Original-Bytes: 45149
Xref: g2news1.google.com rec.radio.amateur.space:367 rec.radio.info:1626
```

This report is organized into four (4) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - deborbited/returned satellites

SB SAT @ AMSAT W8ISS $WSR-218.S1
WSR 218 Part 1 08/06/2010

AMSAT NEWS SERVICE BULLETIN 218.S1
FROM AMSAT HQ SILVER SPRING, MD, August 06, 2010
TO ALL RADIO AMATEURS
BID: $WSR-218.S1

HO-68 XW-1 (CAS-1)
Catalog Number:
Launch Date: December 15, 2009
Status: Commissioning

Callsign:
Broadcast: BJ1SA-11
BBS: BJ1SA-12

Uplinks: 145.8250 MHz FM, PL 67.0 Hz.
           145.9250 - 145.9750 MHz SSB/CW
           145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
           435.7650 - 435.7150 MHz SSB/CW
           435.6750 MHz AFSK 1200 BPS

Beacon: 435.7900 MHz CW

Mode and Antenna Polarization:
V: LHCP 2.0dBi max
U: RHCP 3.0dBi max

IARU coordination page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108

For more information about XW-1 (CAS-1):
http://www.camsat.cn
[04222010]
=====
SO-67 SumbandilaSat
Catalog Number: 35870
Launch Date: September 17, 2009

Status: Suspended

Callsign: ZS0SUM

Uplink: 145.875MHz FM tone 233.6 Hz
Downlink: 435.345MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

For more information about SO-67:

http://www.amsatsa.org.za/
[11212009]
=====
DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008

Status: Operational
Current Mode: Science Mode - Beacon ONLY

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink: 435.530 to 435.570 MHz

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68
[02122009]
=====
VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.9360 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is active. Each transponder has a different beacon.
[03082010]
=====
AO-51 ECHO
Catalog number: 28375

Launch date: June 29, 2004

Status: Operational

Current Mode:
Uplink: 145.920 MHz FM - 67 Hz PL tone burst
Downlink: 435.300 MHz FM
Telemetry
Downlink: 435.150MHz 9k6

Analog voice downlink:	435.300 MHz FM
	435.150 MHz FM
	2401.200 Mhz FM
Analog voice uplink:	145.860 MHZ FM
	145.880 MHz USB
	145.880 MHz FM
	145.920 MHz FM
	145.920 MHz FM - 67 Hz PL tone burst
	1268.700 MHz FM
Digital Downlinks:	435.150 MHz FM 38k4 PBP, 1 watt output
	435.150 MHz FM 9k6 Pacsat Broadcast Protocol
	2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:	145.860 MHz FM 9k6 Pacsat Broadcast Protocol
	1268.700 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon:	435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[06292010]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone

```
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4
Hz. The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute
   timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the re-
   peater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset
   the 10 minute timer.
[05282007]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: sCHEDULED oPERATIONS
Current Mode: V/u (Mode JA)

Voice/CW (Mode JA)
Uplink:   145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon:   435.795 MHz

Digital Mode JD
Uplinks:  145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage:
http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php
```

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's
CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/
fo29cwts.htm
[02132010]
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[03232009]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational

Current Mode: Alternating between Mode A and B every 24 hours

```
Uplink:   145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink:  29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons:   29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW
```

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
[02122009]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - OFF
Voice - V/v
BBS - OFF
APRS - OFF
SSTV - OFF

Expedition 24 Crew:
Commander: Alexander Skvortsov
Flight Engineer: Tracy Caldwell Dyson KF5DBF
Flight Engineer: Mikhail Kornienko RN3BF
Flight Engineer: Doug Wheelock KF5BOC
Flight Engineer: Shannon Walker KD5DXB
Flight Engineer: Fyodor Yurchikhin RN3FI

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

```
ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[07302010]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-218.S2
WSR 218 Part 2 08/06/2010

AMSAT NEWS SERVICE BULLETIN 218.S2
FROM AMSAT HQ SILVER SPRING, MD, August 06, 2010
TO ALL RADIO AMATEURS
BID: $WSR-218.S2

StudSat : India CubeSat
Catalog Number: 36796
Launch Date: July 12, 2010
Status: On Orbit

Uplink:   437.505MHz, 9600bps FSK
Downlink: 437.505MHz, 9600bps FSK
Beacon  : 437.505MHz,   20bps ASK
[08062010]
=====
TIsat-1:  Swiss CubeSat
Catalog Number: 36799
Launch Date: July 12, 2010
Status: On orbit

Callsign: HB9DE

Uplink:   145.980MHz FM, AFSK
Downlink: 437.305MHz FM, AFSK
Beacon:   437.305MHz CW
[08062010]
=====
HO-68 XW-1 (CAS-1)
Catalog Number:
Launch Date: December 15, 2009
Status: Operational

Callsign:
Broadcast:    BJ1SA-11
BBS:         BJ1SA-12

Uplinks:   145.8250 MHz FM, PL 67.0 Hz.
           145.9250 - 145.9750 MHz SSB/CW
           145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
           435.7650 - 435.7150 MHz SSB/CW
           435.6750 MHz AFSK 1200 BPS
```

```
Beacon:    435.7900 MHz CW

IARU coordination page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108

For more information about XW-1 (CAS-1):
http://www.camsat.cn
[04222010]
=====
SwissCube
Catalog Number: 35932
Launch Date: September 23, 2009

Status: Operational

Callsign: HB9EG

Beacon(100mw): 437.5050MHz CW
Beacon(1w):    437.5050MHz FSK 1k2bps
[04222010]
=====
UWE-2
Catalog Number: 35934
Launch Date: September 23, 2009

Status: In Orbit

Beacon(500mw): 437.3850 MHz AFSK 1k2bps
               437.3850 MHz FSK 9k6bps
[1112009]
=====
ITUpsAT1
Catalog Number: 35935
Launch Date: September 23, 2009

Status: Operational

Beacon(100mw): 437.325MHz CW
Beacon(1w): 437.325MHz 19k2bps
[11112009]
=====
BEESAT
Catalog Number: 35933
Launch Date: September 23, 2009

Status: Operational

Callsign: DP0BEE

Beacon(100mw): 436.000MHz CW
Beacon(500mw): 436.000MHz GMSK 4k8bps
Beacon(500mw): 436.000MHz GMSK 9k6bps
```

```
[04222010]
=====
Pollux
Catalog Number:
Launch Date: July 31, 2009

Status: Operational

Callsign: POLLUX-1

Downlink: 145.825MHz 1k2 AX.25
[10042009]
=====
Castor (ANDE-2)
Catalog Number:
Launch Date: July 31, 2009

Status: Operational

Callsign: KD4HBO-1

Downlink: 145.825 MHz 1k2 AX.25
[10042009]
=====
BEVO-1 (DRAGONSAT-1)
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Operational

Downlink: 437.325 MHz 9k6 GMSK
          437.325 MHz CW 20wpm
[07312009]
=====
AggieSat2 (DRAGONSAT-2)
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Operational

Downlink: 436.250 MHz 9k6 FHSS
[11112009]
=====
CP-6
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Commissioning

Downlink: 437.365 MHz 1k2 AFSK
[06052009]
=====
HAWKSAT 1
```

```
Catalog number: 35003
Launch Date: May 19, 2009

Status: ?

Downlink: 437.345 ?
[06052009]
=====
Pharmasat
Catalog Number: 35002
Launch Date: May 19, 2009
Status: Commissioning

Downlink: 437.465 MHz 1k2 AFSK
[06052009]
=====
ANUSAT
Catalog Number: 34808
Launch Date: April 20, 2009

Status: ?

Downlink:  435.000 MHz
Uplink:    145.800 MHz

Telemetry: 137.400 MHz
[05112009]
=====
SOHLA-1 (ASTRO TECH.)
Catalog Number: 33496
Launch Date: January 23, 2009

Status: Commisioning

Proposed Frequencies and Modes:
Downlink: 437.505 MHz AFSK/CW
Beacon:   437.505 MHz AFSK/CW

Callsign:

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=101
[03232009]
=====
KAGAYAKI (Solan Co.)
Catalog Number: 33495?
Launch Date: January 23, 2009

Status: In Orbit

Downlink: 437.375 MHZ    FSK9k6/CW
Beacon:   437.375 MHz    FSK9k6/CW
```

```
IARU coordination status page:

AMSAT-NA webpage:

[01152009]
=====
STARS (Kagawa Univ.) (Twin Satellites)
Catalog Number: 33498
Launch Date: January 23, 2009

Status: Operational ?

Downlinks: 437.485 MHz FM/CW
           437.465 MHz FM/CW
Beacons:   437.305 MHz FM/CW
           437.275 MHz FM/CW

Callsigns: JR5YBN
           JR5YBO

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=99

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=121&retURL
=/satellites/status.php
[022152009]
=====
KKS-1 (Tokyo MCIT)
Catalog Number: 33499
Launch Date: January 23, 2009

Status: Operational

Downlink:  437.455 MHz AFSK/CW
Beacon:    437.385 MHz AFSK/CW

Callsign: JQ1YYY

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=107

AMSAT-NA webapge:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=120&retURL
=/satellites/status.php
[02212009]
=====
PRISM (Tokyo Univ.)
Catalog Number: 33493
Launch Date: January 23, 2009

Status: Operational ?
```

```
Downlink: 437.425 MHz AFSK/GMSK/CW
Beacon:   437.250 MHz AFSK/GMSK/CW

Callsign: JQ1YCX

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=97

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=119&retURL
=/satellites/status.php
[02212009]
=====
RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number: 32953
Launch Date: May 23, 2008

Status: Operational

Curent Modes: Telemetry
              Audio
              Images

Downlinks: 435.315 MHz
           435.215 MHz

AMSAT-NA website:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=115&ret
URL=/satellites/status.php

Official website:
http://www.npopm.com/?cid=leoca&caid=43
[02122009]
=====
CanX-2
Catalog number: 32790
Launch Date: April 28, 2008

Status: Operational in range of ground station only

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web
page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[02212009]
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008
```

Status: Operational

Downlink: 437.425 MHz 1k2 baud packet

For the latest project status update please visit the AAUSAT-II web
page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[02212009]
=====
CO-65 CUTE-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008

Status: Digipeater

Downlink: 437.475 MHz 9k6 Packet
Uplink: 1267.600 Mhz

Telemetry Beacon:
Downlink: 437.2750 MHz CW

For the latest project status update please visit the Cute-1.7+APD II
web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78

Command Station blog website:
http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=112&retURL
=/satellites/status.php
[02212009]
=====
Compass-1
Catalog number: 32787
Launch Date: April 28, 2008

Status: Operational

Current Mode: 4k8 MSK packet

Uplink: 145.980 MHz FM
Downlink: 437.275 Mhz CW
          437.405 MHz Packet

For the latest project status update please visit the Compass 1 web
page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=114&retURL
=/satellites/status.php
[04272009]
=====
CO-66 Seeds II
Catalog number: 32791
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.485 MHz

Callsign: JQ1YGU

For the latest project status update please visit the Seeds 2 web
page: http://cubesat.aero.cst.nihon-u.ac.jp/english/seeds_2_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=113&retURL
=/satellites/status.php
[02212009]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=94&retURL=
/satellites/status.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=72
[02122009]
=====
CP3

Catalog Number: 31129
Launch Date: April 17,2007

Status: Operational

Current Mode: /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[02122009]
=====
GENESAT-1
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Current Mode: /u

Callsign: KE7EGC

Telemetry Beacon Downlink: 437.0695 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[09152009]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon: 437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/xivpicte.htm
[02212009]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003

Status: ?????

Current Mode: /u

Beacon: 436.8475 MHz CW

Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=96&retURL=/satellites/status.php

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[06082009]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Operational?

```
Uplink:  1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan?)
```

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=56
[02122009]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

```
Current Mode:
Uplink:    145.920 MHz FM - 67 Hz PL tone burst
Downlink:  435.300 MHz FM
Telemetry
Downlink:  435.150MHz 9k6


Analog voice downlink:     435.300 MHz FM
                           435.150 MHz FM
                          2401.200 Mhz FM
Analog voice uplink:       145.860 MHZ FM
                           145.880 MHz USB
                           145.880 MHz FM
                           145.920 MHz FM
                           145.920 MHz FM - 67 Hz PL tone burst
                          1268.700 MHz FM
Digital Downlinks:         435.150 MHz FM 38k4 PBP, 1 watt output
```

435.150 MHz FM 9k6 Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Pacsat Broadcast Protocol
1268.700 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[06292010]
=====
QuakeSat
Catalog Number: 27845
Launch Date: June 30, 2003

Status: Telemetry only

Current Mode: 9600 baud data packet

Mode U packet
Downlink: 436.675 MHz 9k6 BPS

Quakesat webpage:
http://www.quakefinder.com/services/quakesat-ssite/
[04272009]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=69&retURL
=/satellites/status.php
[02212009]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Telemetry only

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[03302009]
=====
RS-22 RADIO SPORT 22
Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only

Current Mode: /u

CW Beacon - 435.352 MHz
            145.818 MHz

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=76&retURL
=/satellites/status.php
[02212009]
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990

Status: CW Beacon only

Uplinks: 145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink: 437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[03162009]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984

Status: Non-operational.

Current Mode: /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon: 435.025 MHz
Mode-S Beacon: 2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[12162009]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - OFF
Voice - V/v
BBS - OFF
APRS - OFF
SSTV - OFF

Expedition 24 Crew:

Commander:	Alexander Skvortsov	
Flight Engineer:	Tracy Caldwell Dyson	KF5DBF
Flight Engineer:	Mikhail Kornienko	RN3BF
Flight Engineer:	Doug Wheelock	KF5BOC
Flight Engineer:	Shannon Walker	KD5DXB
Flight Engineer:	Fyodor Yurchikhin	RN3FI

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
                           437.800 MHz FM
                           145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
                           437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
                           RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[07302010]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-218.S3
WSR 218 Part 3 08/06/2010

AMSAT NEWS SERVICE BULLETIN 218.S3
FROM AMSAT HQ SILVER SPRING, MD, August 06, 2010
TO ALL RADIO AMATEURS
BID: $WSR-218.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

CP4
Catalog Number: 31122
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon: 437.325 MHz CW

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=79
[10022008]
=====
LIBERTAD-1
Catalog Number: 31128
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink: 145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[02122009]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: Non-Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder: 145.825 Mhz FM
[01012009]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI

Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

```
Voice Uplink:         437.250 MHz FM 67Hz CTCSS
Voice Downlink:      2401.835 MHz FM
Packet Up/Downlink:   437.250 MHz 9k6 packet
Packet Downlink      2401.835 MHz 38k4 packet
```

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non-Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[08132007]
=====
CANX-1
Catalog Number: 27847
Launch Date: June 30, 2003

Status: Non-Operational

Downlink: 437.8800 MHz AFSK 1k2bps
[06052009]
=====
DTUSAT
Catalog Number: 27842
Launch Date: June 30, 2003

Status: Non-Operational

Current Mode: 2k4 AFSK Packet last reported

Downlink: 437.475MHz

Officail webpage: http://dtusat1.dtusat.dtu.dk/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=101&retURL
=satellites/all_oscars.php
[02212009]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)

Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Telemetry only

Uplinks: 145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[03302009]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]

=====

SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]

=====

AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks

V-band: 145.840 - 145.990 MHz CW/LSB
U-band: 435.550 - 435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks

S2-band: 2401.225 - 2401.475 MHz CW/USB
K-band: 24048.010 - 24048.060 MHz CW/USB
Beacon: 2401.323 MHz
24048.035 MHz

P3-D Telemetry Beacons (IHU)

BEACON	General Beacon(GB)	Middle Beacon(MB)	Engineering Beacon(EB)
2 m	none	145.898 MHz	none
70cm	435.438 MHz	435.588 MHz	435.838 MHz
13cm(1)	2400.188 MHz	2400.338 MHz	2400.588 MHz

13cm(2)	2401.173 MHz	2401.323 MHz	2401.573 MHz
3cm	10450.975 MHz	10451.125 MHz	10451.375 MHz
1.5cm	24047.885 MHz	24048.035 MHz	24048.285 MHz

[07162007]
=====
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: 25636
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

```
Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Non-Operational

Current Modes:
Telemetry : /u

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign:       4XTECH-12

More information of GO-32 can be found at:
http://asri.technion.ac.il/techsat/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=14&retURL
=/satellites/status.php
[07172010]
=====
TO-31 TMSAT-1
```

Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink: 145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
MO-30 UNAMSAT-2
Catalog Number: 24305
Launch Date: September 5, 1996

Status: Non-operational

Downlink: 435.1380 MHz AFSK 1200 BPS
Downlink: 435.2060 MHz AFSK 1200 BPS
Uplink: 145.8150 MHz AFSK 1200 BPS
Uplink: 145.8350 MHz AFSK 1200 BPS
Uplink: 145.8550 MHz AFSK 1200 BPS
Uplink: 145.8750 MHz AFSK 1200 BPS
[06042009]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Non-operational

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012009]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks: 145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud

```
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
AO-24 ARSENE
Catalog Number: 22654
Launch Date: May 13, 1993

Status: Non-operational

Uplink:    435.0625 MHz FM 1k2bps AFSK
           435.1125 MHz FM 1k2bps AFSK
           435.1375 MHz FM 1k2bps AFSK
Downlink:  145.9750 MHz FM 1k2bps AFSK
          2446.5025 MHz FM 1k2bps AFSK

Beacon:    2446.4700 MHz CW

Broadcast callsign:
BBS:
[12162009]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HL01-11
```

```
BBS: HL01-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990
```

```
Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
[05012006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: non-operational

Current Mode:  V/u

Uplink:         145.900 MHz FM 1200-baud Manchester FSK (reserved)
                145.920 MHz FM VOICE
                145.940 MHz FM 1200-baud Manchester FSK (reserved)
                145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink:       437.026 MHz USB VOICE
                (1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[07242009]
=====
UO-15 UoSAT-4
Catalog Number: 20438
Launch Date: January 22, 1990

Status: Non-operational

Uplink: ?
Downlink: 435.1250MHz (?)
```

```
          435.1200MHz (?)
[06042009]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon:   145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978
```

```
Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink  29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
Beacons:   29.450 MHz
          435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994
```

Status: Non-operational

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB

Beacon 1: 29.352 MHz (intermittent)
Beacon 2: 29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB

Beacon: 145.860 MHz

Robot: 145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-218.S4
WSR 218 Part 4 08/06/2010

AMSAT NEWS SERVICE BULLETIN 218.S4
FROM AMSAT HQ SILVER SPRING, MD, August 06, 2010
TO ALL RADIO AMATEURS
BID: $WSR-218.S4

THE FOLLOWING SATELLITES HAVE RE-ENTERED OR HAVE BEEN RETURNED SAFELY:

NO-62 FCAL
Catalog Number: 29667

```
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: July 28, 2008

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[01012009]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink:      145.825 Mhz FM APRS AX25
APRS Uplink:        145.825 MHz FM APRS AX25
Voice/PSK31 Uplink:  28.120 MHz

Packet to Voice ID: RAFT
[06112007]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Re-Entered
Re-entered: June 18, 2008

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon:             437.2750 MHz CW

Callsign: JR8YJT
[01012009]
=====
SO-43 Starshine 3
Catalog Number: 26929
Launch Date: September 30, 2001
```

Status: Re-Entered
Re-entered: January 21, 2003

Beacon: 145.825Mhz
[02212009]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at}amsat.org
NNNN
/EX

From 3880413003407193758
X-Google-Thread: 10e8ad,5b24f7fa62e474e9,start
X-Google-NewGroupId: yes
X-Google-Thread: 113975,5b24f7fa62e474e9,start
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,gidaddc8bf063,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news4.google.com!feeder.news-service.com!news.astraweb.com!border5.a.newsrouter.astraweb.com!not-for-mail
From: Chris Steyaert <observations@rmob.org>
Newsgroups: rec.radio.amateur.space,sci.astro.amateur
Subject: Radio Meteor Obs. Bull. July 2010
Date: Sat, 07 Aug 2010 19:22:02 +0200
Message-ID: <bg5r56pjckh93sq7t06n8906bo5a1sma3s@4ax.com>
X-Newsreader: Forte Agent 5.00/32.1171
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Lines: 14
Organization: Unlimited download news at news.astraweb.com
NNTP-Posting-Host: d5aa3e87.news.astraweb.com
X-Trace: DXC=<eDDa@]UH>PJ[9olalG_WRL?0kYOcDh@ZV=@K8]R_G:SeG?Kd6;g:DSCOQ1kOkAIASoV^C<PdjnjZ`I[K;`7oMlP
Xref: g2news1.google.com rec.radio.amateur.space:368 sci.astro.amateur:36397

Radio Meteor Observation Bulletin No. 204 of July 2010 (84 K) is available now as

http://www.rmob.org/rmobtext/rmob1007.txt

More information and the visual presentation of the hourly forward scatter counts can be found on

http://www.rmob.org

Chris

From 8639785282998092611
X-Google-Thread: 10e8ad,7623231394307e26,start
X-Google-NewGroupId: yes

X-Google-Thread: 10b9c8,7623231394307e26,start
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,gida4a23d5f63,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!npeer02.iad.highwinds-media.com!
news.highwinds-media.com!feed-me.highwinds-media.com!nx01.iad01.newshosting.com!
newshosting.com!198.186.194.249.MISMATCH!news-out.readnews.com!
transit3.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-220 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sat, 7 Aug 2010 21:12:21 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 356
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <001701cb3696$bad756a0$308603e0$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1281229941 14240 166.84.1.6 (8 Aug 2010 01:12:21 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 8 Aug 2010 01:12:21 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news1.google.com rec.radio.amateur.space:369 rec.radio.info:1628

AMSAT NEWS SERVICE
ANS-220

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:

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* Boy Scouts Celebrate Anniversary with ARISS Contact
* Operational Notes From AO-51 Control Team
* SumbandilaSat SO-67 South African Passes Planned for Testing
* Taiwan University Announces Plans for Attitude Controlled CubeSat
* AMSAT-UK Colloquium Videos Available
* Satellite Shorts From All Over

SB SAT @ AMSAT $ANS-220.01
2010 AMSAT Space Symposium Timeline

AMSAT News Service Bulletin 220.01
>From AMSAT HQ SILVER SPRING, MD.
August 8, 2010
To All RADIO AMATEURS
BID: $ANS-220.01

The 2010 Symposium Committee is at work regarding the details of The schedule. The details depend on the topics and quantity of the presentations still being worked on by the authors.

We will generally follow the timing framework of previous year's Symposiums which can be summarized as:

Thursday, October 7
AMSAT Board of Directors Meeting

Morning Friday, October 8
Symposium Registration Opens
AMSAT Board of Directors Meeting continues
Lunch

Friday, October 8 (1300)
Registration continues
Symposium Opening Remarks and Introductions
First Round of Presentations until ~1700

Saturday, October 9
Registration continues
Second Round of Presentations (0800 - 1000)
AMSAT General Membership Meeting (1000 - 1200)
Lunch
Third Round of Presentations (1300 - 1700)
Break
Attitude Adjustment with Cash Bar and Gathering (~1800)
AMSAT Annual Banquet and Speaker (~1900)
Door Prize Drawing (~2100)

Sunday, October 10
Area Coordinators Field Ops Breakfast
Fourth Round of Presentations (0800 - 1000)

Symposium Closing Remarks
Tour of FermiLab Tevatron (1200 - 1500 approx.)

The times listed are US Central Daylight Time (UTC - 5).

AMSAT's 2010 Symposium Committee looks forward to welcoming everyone to Chicago this October!

[ANS thanks the 2010 Symposium Committee for the above information]

/EX

SB SAT @ AMSAT $ANS-220.02
Get Those Symposium Papers Rolling Please!

AMSAT News Service Bulletin 220.02
>From AMSAT HQ SILVER SPRING, MD.
August 8, 2010
To All RADIO AMATEURS
BID: $ANS-220.02

August is rolling on and the September 1 deadline of the call for papers for the 2010 AMSAT Space Symposium and Annual Meeting is approaching faster than ever! So far 7 abstracts and two completed papers have arrived - thank you. For everyone else - we need to get busier!

The abstract for your paper does not require any special format. Simply send an e-mail to the Proceedings Editor, K9JKM with the basic information: Author Name, Callsign, and a few sentences that describe your proposed topic. I'll be looking forward to receiving your abstracts in my in-box at k9jkm@comcast.net.

These can be on any topic of interest to the amateur satellite community. We request a tentative title of your presentation as soon as possible, with final copy submitted by September 1, 2010 for inclusion in the printed proceedings.

To help you prepare your paper the Symposium Committee has posted an author's guide on the AMSAT.org web page:
http://tinyurl.com/2djjnmx

[ANS thanks the 2010 Symposium Committee for the above information]

/EX

SB SAT @ AMSAT $ANS-220.03
Boy Scouts Celebrate Anniversary with ARISS Contact

AMSAT News Service Bulletin 220.03
>From AMSAT HQ SILVER SPRING, MD.

August 8, 2010
To All RADIO AMATEURS
BID: $ANS-220.03

On Saturday, July 31, an Amateur Radio on the International Space Station (ARISS) contact was held with the 2010 National Boy Scout Jamboree in Fort A.P. Hill, Virginia. Doug Wheelock, KF5BOC answered 13 questions posed to him by the Scouts as approximately 800 others listened in.

Andrew Koenig, KE5GDB, who is Amateur Radio Newsline's 2009 Young Ham of the Year, initiated the biggest contact of the jamboree. Six Scouts representing Georgia, North Carolina, Pennsylvania, and Wisconsin, all got a chance to ask astronaut Wheelock a question, some relating to Scouting and the space program.

Prior to the contact, K2BSA Amateur Radio Association set up its radio station which thousands of Scouts toured. Some Scouts earned their Radio Merit Badges and amateur radio licenses as well. This year, the Jamboree celebrates 100 years of Scouting in the U.S., with attendees from all 50 states and other countries around the world. Forty-three thousand Scouts attended the National Jamboree.

K2BSA also operated on the satellites from the 2010 National Scout Jamboree amateur radio station. QSL cards for the 100th anniversary are available. Send your card, and SASE, to the QRZ.com K2BSA address.

[ANS thanks Carol, KB3LKI; Andrew Koenig, KE5GDB; and David Jordan, AA4KN for the above information]

/EX

SB SAT @ AMSAT $ANS-220.04
Operational Notes From AO-51 Control Team

AMSAT News Service Bulletin 220.04
>From AMSAT HQ SILVER SPRING, MD.
August 8, 2010
To All RADIO AMATEURS
BID: $ANS-220.04

After a brief outage aboard AO-51, AMSAT Vice-President of Operations, Drew KO4MA reported on Saturday, July 31 that the satellite had been restored to service. The 145.92/435.300 repeater was set to run with the 67 Hz tone required to activate the satellite. Power output was 740 mW.

On 5 August AO-51's operating mode was changed enable the 435.150 telemetry transmitter at 340 mW. This was to provide a telemetry collection demonstration for a cubesat team.

During the demonstration the 435.300 voice transmitter continued to operate at about 470 mW with PL tone activation of the transmitter. At the conclusion of the demonstration the Control Team changed the mode back to the 145.92/435.300 repeater running about 750 mW with PL tone activation of the transmitter. The 435.150 transmitter was turned off.

Please use the webpage at http://oscar.dcarr.org/ or post reports via the amsat-bb. For some reason very few US stations use this. Please do as it is impossible for the AO-51 Control Team to listen to every pass.

Keep up with the latest AO-51 Control Team news on-line at:
http://www.amsat.org/amsat-new/echo/CTNews.php

[ANS thanks Drew, KO4MA and Mark, N8MH for the above information]

/EX

SB SAT @ AMSAT $ANS-220.05
SumbandilaSat SO-67 South African Passes Planned for Testing

AMSAT News Service Bulletin 220.05
>From AMSAT HQ SILVER SPRING, MD.
August 8, 2010
To All RADIO AMATEURS
BID: $ANS-220.05

SA AMSAT has announced that, after consultation with the CSIR Satellite Application Centre (SAC), more passes over South Africa will be scheduled.

During the week, these passes will be in the evening and on weekends during the day and on some evenings.

If you are scheduling a special event at a school, a special morning pass can be scheduled on request by sending an email to saardt@intekom.co.za at least 2 weeks prior to the event. More details about passes over other areas will be announced soon.

Hans, ZS6AKV, presented a paper at the AMSAT UK Satellite Colloquium on Sunday, August 1 which discussed how best to accommodate other parts of the world on SO-67. The SA AMSAT web page at http://www.amsatsa.org.za/ invites satellite operators to, "Watch this space for the international schedule."

[ANS thanks SA AMSAT for the above information]

/EX

SB SAT @ AMSAT $ANS-220.06
Taiwan University Announces Plans for Attitude Controlled CubeSat

AMSAT News Service Bulletin 220.06
>From AMSAT HQ SILVER SPRING, MD.
August 8, 2010
To All RADIO AMATEURS
BID: $ANS-220.06

A team from the Department of Aeronautics and Astronautics and the Department of Electrical Engineering at the National Cheng Kung University in Taiwan has announced a 2X CubeSat development project named PACEsat, Platform for Attitude Control Experiment.

This cubesat will feature three-axis stabilization utilizing a miniature momentum wheel and magnetic coils. Attitude determination will use a three-axis magnetometer, a three-axis gyro, and coarse sun sensors. Temperature sensors will monitor the thermal environment inside the satellite.

Frequencies discussed in the satellite design documentation include 145 MHz is selected for uplink and downlink communication and 433 MHz CW/AX.25.

The satellite was designed for a 600km near-circular orbit with a 98 degree inclination. Mission lifetime is planned to be 2 months. A stable attitude determination and attitude control system is a prerequisite for future CubeSat missions which will include propulsion systems to attain higher orbits.

Technical details can be found on-line at:
http://tinyurl.com/2evtd7a
http://www.iaalab.ncku.edu.tw/pace/

[ANS thanks the PACEsat team for the above information]

/EX

SB SAT @ AMSAT $ANS-220.07
AMSAT-UK Colloquium Videos Available

AMSAT News Service Bulletin 220.07
>From AMSAT HQ SILVER SPRING, MD.
August 8, 2010
To All RADIO AMATEURS
BID: $ANS-220.07

Videos of the presentations given at the 25th AMSAT-UK International Space Colloquium are now available on the web. You can view and download them at: http://www.batc.tv/ Click on the 'Film Archive' icon and then select an 2010 AMSAT video from the pulldown menu on the left.

The Colloquium schedule can be seen at:
http://www.uk.amsat.org/content/view/713/284/1/2/

AMSAT-UK publishes a colour A4 newsletter, OSCAR News, which is full
of Amateur Satellite information. Join online at:
https://secure.amsat.org.uk/subs_form/

"Getting started on Amateur Radio Satellites" PDF file is available
at: http://www.uk.amsat.org/content/view/408/168/

[ANS thanks Trevor, M5AKA for the above information]

/EX

SB SAT @ AMSAT $ANS-220.08
Satellite Shorts From All Over

AMSAT News Service Bulletin 220.08
>From AMSAT HQ SILVER SPRING, MD.
August 8, 2010
To All RADIO AMATEURS
BID: $ANS-220.08

+ AMSAT received the sad news that John, NO5X has become a silent key. (via AA5JG)

+ AMSAT-NA Corporate Secretary Alan Biddle, WA4SCA reminds members that biographies and ballot for the 4 candidates for the AMSAT Board of Directors went out on July 15th. In order to be counted, your ballot must be RECEIVED at the AMSAT office by the close of business on September 15th.

+ Congratulations to John, W6ZKH on receiving the ARRL W.A.S. Satellite Award #320.

+ Videos from this weekends CubeSat workshop are at:
http://www.ustream.tv/recorded/6493870   (via M5AKA)

+ A video showing an Amateur Radio Satellite demonstration to members of the South Dublin Radio Club EI2SDR can be viewed on-line at:
http://tinyurl.com/23wn239
A YouTube video features Amateur Radio operators in contact with Doug Wheelock KF5BOC on the International Space Station using the call NA1SS on 145.800 MHz FM can be viewed at:
http://tinyurl.com/28cyd6w

+ Watch for a new feature in the AMSAT Journal. Keith Baker KB1SF/VA3KSF will begin a column called, "Getting Started in Amateur Satellites".

+ The Mid-Atlantic States VHF Conference will be on Saturday, Sept 25.
Register at http://dataandwireless.com/packrat/vhf_registration.php
K1DS & KB1JEY will host a Beginner's Session - a One Day Conference for experts and beginners alike hosted by the Mt Airy VHF RC Club.

+ John K8YSE reports he has hit the road and is heading toward his satellite grid expedition around Lake Superior.

+ The Echoes of Apollo team says plans are being worked on for a big, coordinated, world wide EME (Moon Bounce) event for Yuri's Night, on or about April 12, 2011. The 2010 event featured Arecibo being activated on EME. They hope to bring a lot of big dishes on board.

[ANS thanks everyone for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office. And with that, please keep in mind the hams who wondered what the attractive young lady carrying batteries at the beach was up to. Eventually they figured out that she sold C Cells by the seashore, of course.

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM

From 5216153003061226378
X-Google-Thread: 10e8ad,37529ab02c7137a3,start
X-Google-NewGroupId: yes
X-Google-Thread: 10b9c8,37529ab02c7137a3,start
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,gida4a23d5f63,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!npeer01.iad.highwinds-media.com!news.highwinds-media.com!feed-me.highwinds-media.com!nx02.iad01.newshosting.com!newshosting.com!198.186.194.249.MISMATCH!transit3.readnews.com!news-xxxfer.readnews.com!news-out.readnews.com!transit4.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-227 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sun, 15 Aug 2010 10:38:44 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 441
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000901cb3c87$88929370$99b7ba50$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
charset="us-ascii"

```
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1281883124 819 166.84.1.6 (15 Aug 2010 14:38:44 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 15 Aug 2010 14:38:44 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news1.google.com rec.radio.amateur.space:370 rec.radio.info:1644
```

AMSAT NEWS SERVICE
ANS-227

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* 2010 AMSAT Space Symposium Reminders
* ISS cooling system problem disrupts ARISS operations
* HO-68 Operating Schedule 15-22 August 2010
* ARRL Files Petition to Deny 433-445 MHz ReconRobotics Applications
* NASA Announces CubeSat Launch Initiative
* Satellite Shorts From All Over
* For Hams Who Like Science: Einstein@Home

SB SAT @ AMSAT $ANS-227.01
2010 AMSAT Space Symposium Reminders

AMSAT News Service Bulletin 227.01
  From AMSAT HQ SILVER SPRING, MD.
August 15, 2010
To All RADIO AMATEURS
BID: $ANS-227.01

The September 1 deadline of the call for papers for the 2010 AMSAT Space Symposium and Annual Meeting is rapidly approaching! So far the Proceedings crew has received two abstracts for papers - thank you!

The abstract for your paper does not require any special format. Simply send an e-mail to the Proceedings Editor, K9JKM with the basic information: Author Name, Callsign, and a few sentences that describe your proposed topic. I'll be looking forward to receiving your abstracts in my in-box at k9jkm@comcast.net.

You can now register on-line at the AMSAT store for the 2010 AMSAT Space Symposium and Annual Meeting:
http://www.amsat-na.com/store/SymposiumReg.php

The 2010 Symposium Committee is looking forward to welcoming you to Chicago in October! As the latest information becomes available you can find it on the AMSAT Symposium pages:
http://www.amsat.org/amsat-new/symposium/2010/index.php

[ANS thanks the 2010 Symposium Committee for the above information]

/EX

SB SAT @ AMSAT $ANS-227.02
ISS cooling system problem disrupts ARISS operations

AMSAT News Service Bulletin 227.02
From AMSAT HQ SILVER SPRING, MD.
August 15, 2010
To All RADIO AMATEURS
BID: $ANS-227.02

On Saturday, July 31, 2010, The ISS suffered a cooling system failure. Repair work planning for two spacewalks has been underway throughout the week to fix the problem. As a result, ARISS operations which include both voice and packet have been given a low priority until the problem is resolved. Attempts will be made to carry out scheduled ARISS contacts, but with the understanding that they may be aborted at the last minute.

[ANS thanks David, AA4KN, for the above information]

/EX

SB SAT @ AMSAT $ANS-227.03
HO-68 Operating Schedule 15-22 August 2010

AMSAT News Service Bulletin 227.03
From AMSAT HQ SILVER SPRING, MD.
August 15, 2010
To All RADIO AMATEURS
BID: $ANS-227.03

The following operating schedule for HO-68 (XW-1) was provided by Alan Kung,

BA1DU,
HO-68 Project Manager. Dates and times shown are UTC.

15 Aug 2010
================================
16:35...Turn On--FM/PACSAT
India, Africa, Middle East,
Europe,NA
17:20...Turn Off

18:25...Turn On--FM/PACSAT
Africa,Europe,Middle East,NA
19:10...Turn Off

19:50...Turn On--FM/PACSAT
Africa,Europe,Middle East,NA
20:35...Turn Off

16 Aug 2010
================================
00:15...Turn On--FM/PACSAT
South America,NA,North Asia
01:00...Turn Off

02:11...Turn On--FM/PACSAT
North Asia,East Asia,South Asia
02:27...Turn Off

16:20...Turn On--FM/PACSAT
Africa,Europe,NA
17:05...Turn Off

22:10...Turn On--FM/PACSAT
NA,North Asia,East Asia,
Oceania
22:55...Turn Off

17 Aug 2010
================================
00:00...Turn On--FM/PACSAT
South America,NA,North Asia
00:45...Turn Off

10:10...Turn On--FM/PACSAT
Oceania,Asia,Europe
10:55...Turn Off

16:00...Turn On--FM/PACSAT
India,Middle East,Europe,NA
16:45...Turn Off

17:50...Turn On--FM/PACSAT
Africa,Europe,NA

```
18:35...Turn Off

21:50...Turn On--FM/PACSAT
NA,North Asia,East Asia,
Oceania
22:35...Turn Off

18 Aug 2010
=================================
09:55...Turn On--FM/PACSAT
Oceania,East Asia,North Asia,Europe
10:40...Turn Off

16:00...Turn On--FM/PACSAT
Africa,Europe,NA
16:45...Turn Off

21:35...Turn On--FM/PACSAT
NA,North Asia,East Asia,Oceania
22:20...Turn Off

19 Aug 2010
=================================
01:42...Turn On--FM/PACSAT
South Asia,Oceania
02:00...Turn Off

06:40...Turn On--FM/PACSAT
Middle East,India,Africa
07:25...Turn Off

09:35...Turn On--FM/PACSAT
Oceania,Asia,Europe,NA
10:20...Turn Off

12:15...Turn On--FM/PACSAT
Europe,NA,South America
13:00...Turn Off

17:15...Turn On--FM/PACSAT
Africa,India,Middle East,Europe,NA
18:00...Turn Off

18:45...Turn On--FM/PACSAT
Africa,Europe,NA
19:30...Turn Off

21:20...Turn On--FM/PACSAT
Oceania,Asia,Europe,NA
22:05...Turn Off

20 Aug 2010
================================
09:20...Turn On--FM/PACSAT
Oceania,Asia,Europe,NA
10:05...Turn Off

12:00...Turn On--FM/PACSAT
Europe,NA,South America
12:45...Turn Off

17:00...Turn On--FM/PACSAT
India,Africa,Europe,NA
17:45...Turn Off

22:50...Turn On--FM/PACSAT
South America,Africa,NA,
Europe,North Asia,East Asia
23:35...Turn Off

21 Aug 2010
================================
00:40...Turn On--FM/PACSAT
South America,NA,North Asia
01:25...Turn Off

02:30...Turn On--FM/PACSAT
North Asia,East Asia,South Asia
02:45...Turn Off

10:50...Turn On--FM/PACSAT
Oceania,Asia,Europe,NA
11:35...Turn Off

13:25...Turn On--FM/PACSAT
Europe,NA,South America
14:10...Turn Off

16:45...Turn On--FM/PACSAT
Africa,Europe,NA
17:30...Turn Off

22:35...Turn On--FM/PACSAT
South America,NA,North Asia
23:20...Turn Off

22 Aug 2010
================================
00:20...Turn On--FM/PACSAT
NA,North Asia,East Asia,
South Asia,Oceania
01:05...Turn Off

02:21...Turn On--FM/PACSAT
North Asia,East Asia,South Asia
02:37...Turn Off
```

05:50...Turn On--FM/PACSAT
North Asia,Europe,Africa
06:35...Turn Off

13:10...Turn On--FM/PACSAT
Europe,NA,South America
13:55...Turn Off

[ANS thanks Alan, BA1DU, for the above information]

/EX

SB SAT @ AMSAT $ANS-227.04
ARRL Files Petition to Deny 433-445 MHz ReconRobotics Applications

AMSAT News Service Bulletin 227.04
From AMSAT HQ SILVER SPRING, MD.
August 15, 2010
To All RADIO AMATEURS
BID: $ANS-227.04

The ARRL Letter this week reported that on August 4, 2010, the ARRL filed a Petition to Deny Applications with the FCC to deny 68 pending Public Safety Pool license applications associated with the ReconRobotics Video and Audio Surveillance System.

Each license application is accompanied by a waiver request to permit operation of the devices in the 433-445 MHz band. The applications were coordinated by APCO International Inc Licensing Services -- the frequency coordinator for the public safety land mobile radio services -- and would allow the use of the Recon Scout product currently being marketed by ReconRobotics pursuant to an FCC waiver. Read more here: http://www.arrl.org/news/arrl-files-petition-with-fcc-to-deny-applications-with-reconrobotics.

[ANS thanks the ARRL for the above information]

/EX

SB SAT @ AMSAT $ANS-227.05
NASA Announces CubeSat Launch Initiative

AMSAT News Service Bulletin 227.05
From AMSAT HQ SILVER SPRING, MD.
August 15, 2010
To All RADIO AMATEURS
BID: $ANS-227.05

NASA said at the end of July that the space agency anticipates launch opportunities for a limited number of CubeSats may be available on launches currently planned for 2011 and 2012. These launch opportunities would constitute a pilot project intended to demonstrate viable launch opportunities for CubeSat payloads as auxiliary payloads on planned missions. The full announcement is published on-line at:

http://www.nasa.gov/pdf/430539main_CubeSat_Launch_Initiative_
Announcement_7_30_2010.pdf

An earlier NASA announcement did not solicit enough proposals to fill the launch opportunities. NASA noted that, "If there is adequate response from the CubeSat projects, the initiative could be continued on future flight opportunities.

Successful CubeSat proposal teams will be required to enter in a collaborative Agreement to support the pilot project. NASA will provide integration and other services as necessary to complete the launch activity. Participation in the pilot program will be contingent upon selection by NASA and negotiation of an appropriate Agreement between NASA and the collaborator. Collaborators may be required to provide partial reimbursement of the launch and integration costs of up to $30,000 per 1U Cube associated with their participation in the pilot project.

Investigations supported by CubeSat payloads proposed for the pilot project must address an aspect of science, exploration, technology development, education, or operations encompassed by NASA's strategic goals and outcomes as identified in the NASA Strategic Plan and/or Education Strategic Coordination Framework.

Selection is anticipated by January 31, 2011. Consult the NASA document at the URL above for all project proposal requirements.

[ANS thanks NASA for the above information]

/EX

SB SAT @ AMSAT $ANS-227.06
Satellite Shorts From All Over

AMSAT News Service Bulletin 227.06
  From AMSAT HQ SILVER SPRING, MD.
August 15, 2010
To All RADIO AMATEURS
BID: $ANS-227.06

+ Congratulations are in order to George, WA5KBH for being awarded his Worked All States - Satellite #319. George got his 50th state when he worked Adrian, AA5UK/KH6, during his April trip to Hawaii. George has also been awarded his VUCC Satellite award for 350 grids.

+ The next Hudson Valley Satcom Net will meet on the air and on

Echolink on August 19, at 8PM EDT (2400 UTC). If you are within range of the Mt. Beacon ARC repeater the net will be on 146.970. The Echolink node is N2EYH-L. More info; http://www.hvsatcom.org. (via Stu, WA2BSS)

+ The British Amateur Television Club (BATC) have produced a short video showing the people and equipment in the web streaming of the AMSAT-UK Colloquium, see: http://www.southgatearc.org/news/august2010/behind_the_scenes.htm (via Trevor, M5AKA)

+ Drew, KO4MA has posted a short video with my phone illustrating the differences in received performance when your portable FM satellite antenna can be twisted to track downlink polarity. This was recorded at the tail end of an AO-51 pass, with the satellite below 10 degrees. The downlink is received with the UHF half of an Arrow, 10 feet of high quality coax, and a Yaesu FT-817. Watch the video at: http://www.youtube.com/watch?v=XTqjQ9xIQQE

[ANS thanks everyone for the above information]

/EX

SB SAT @ AMSAT $ANS-227.07
For Hams Who Like Science: Einstein@Home

AMSAT News Service Bulletin 227.07
From AMSAT HQ SILVER SPRING, MD.
August 15, 2010
To All RADIO AMATEURS
BID: $ANS-227.07

SpaceDaily.com this week published a story about three citizen scientists, an American couple and a German, have discovered a new radio pulsar hidden in data gathered by the Arecibo Observatory. This is the first deep-space discovery by Einstein@Home, which uses donated time from the home and office computers of 250,000 volunteers from 192 different countries. Einstein@Home is based on SETI@Home, a similar program looking for signs of extraterrestrial life in data from the radio telescope at Arecibo Observatory.

Einstein@Home describes their project on their home page: http://www.einsteinathome.org. "Einstein suggested that we live in a universe full of gravitational waves. He proposed that exploding stars, colliding black holes and other violent events create waves that alter space and time. We have not detected these waves yet because it requires tools sensitive enough to measure very small effects. It's like trying to detect a change in the distance from the earth to the sun equal to the width of an atom. Technology has caught up with Einstein's prediction. We now have detectors sensitive enough to see these waves."

Einstein@Home uses private computers to process data. Private computer owners can download software onto their computers that receives data from a central server. The computers process the data when they are not being used for other things, like email or word processing. Then, the computers send the processed data back to the server and can get more to analyze. The site explains Einstein@Home doesn't affect how computers perform and you can stop it any time.

Imagine finding a new pulsar, such as this week's PSR J2007+2722 discovery, a neutron star rotating 41 times per second located in the Milky Way, approximately 17,000 light years from Earth in the constellation Vulpecula ... while waiting for the next satellite pass or for 10 meters to open.

The full story at SpaceDaily.com can be found on-line at:
http://tinyurl.com/29ggsb8

[ANS thanks Einstein@Home and SpaceDaily.com for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Lee McLamb, KU4OS

From 5810368708554803553
X-Google-Thread: 10e8ad,2d145f4099fa3a55,start
X-Google-NewGroupId: yes
X-Google-Thread: 10b9c8,2d145f4099fa3a55,start
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,gida4a23d5f63,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx01.iad01.newshosting.com!newshosting.com!
198.186.194.249.MISMATCH!transit3.readnews.com!news-xxxfer.readnews.com!news-
out.readnews.com!transit4.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-226 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Sun, 15 Aug 2010 10:39:51 EDT

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Organization: The Radio Amateur Satellite Corporation
Lines: 1869
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000a01cb3c87$ac10ba20$04322e60$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
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X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 15 Aug 2010 14:39:51 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
x-cr-hashedpuzzle: AcbT BTp1 CEo3 CvXz EdYm Ffsy F6tj F++B GhAX HNcF HnaL IaWL
KDRw MNrB Mfwq
MzxU;1;cgBlAGMALQByAGEAZABpAG8ALQBpAG4AZgBvAEAAcABhAG4AaQB4AC4AYwBvAG0A;Sosha1_v1;
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2010 14:39:18
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Xref: g2news1.google.com rec.radio.amateur.space:371 rec.radio.info:1645
```

This report is organized into four (4) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - deorbited/returned satellites

SB SAT @ AMSAT W8ISS $WSR-226.S1
WSR 226 Part 1 08/14/2010

AMSAT NEWS SERVICE BULLETIN 226.S1
FROM AMSAT HQ SILVER SPRING, MD, August 14, 2010
TO ALL RADIO AMATEURS
BID: $WSR-226.S1

HO-68 XW-1 (CAS-1)
Catalog Number:
Launch Date: December 15, 2009

Status: Commissioning

Callsign:
Broadcast: BJ1SA-11
BBS: BJ1SA-12

Uplinks: 145.8250 MHz FM, PL 67.0 Hz.
           145.9250 - 145.9750 MHz SSB/CW
           145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
           435.7650 - 435.7150 MHz SSB/CW
           435.6750 MHz AFSK 1200 BPS

Beacon: 435.7900 MHz CW

Mode and Antenna Polarization:
V: LHCP 2.0dBi max
U: RHCP 3.0dBi max

IARU coordination page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108

For more information about XW-1 (CAS-1):
http://www.camsat.cn
[04222010]
=====
SO-67 SumbandilaSat
Catalog Number: 35870
Launch Date: September 17, 2009

Status: Suspended

Callsign: ZS0SUM

Uplink: 145.875MHz FM tone 233.6 Hz
Downlink: 435.345MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

For more information about SO-67:
http://www.amsatsa.org.za/
[11212009]
=====
DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008

Status: Operational
Current Mode: Science Mode - Beacon ONLY

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink: 435.530 to 435.570 MHz

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68
[02122009]
=====
VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.9360 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is active. Each transponder has a different beacon.
[03082010]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Mode:
Uplink: 145.920 MHz FM - 67 Hz PL tone burst
Downlink: 435.300 MHz FM
Telemetry
Downlink: 435.150MHz 9k6

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.860 MHZ FM
145.880 MHz USB
145.880 MHz FM
145.920 MHz FM
145.920 MHz FM - 67 Hz PL tone burst
1268.700 MHz FM
Digital Downlinks: 435.150 MHz FM 38k4 PBP, 1 watt output
435.150 MHz FM 9k6 Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Pacsat Broadcast Protocol
1268.700 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[06292010]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz. The order of operation is thus: (allow for Doppler as necessary):

1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10 minute timer.
[05282007]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: sCHEDULED oPERATIONS
Current Mode: V/u (Mode JA)

Voice/CW (Mode JA)
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage:
http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts.htm
[02132010]
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993

Status: Operational

```
Current Mode: V/u

Uplink:   145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[03232009]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational

Current Mode: Alternating between Mode A and B every 24 hours

Uplink:   145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink:  29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons:   29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
[02122009]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - OFF
                      Voice -       V/v
                      BBS -         OFF
                      APRS -        OFF
                      SSTV -        OFF


Expedition 24 Crew:
Commander:                Alexander Skvortsov
Flight Engineer:          Tracy Caldwell Dyson  KF5DBF
```

Flight Engineer: Mikhail Kornienko RN3BF
Flight Engineer: Doug Wheelock KF5BOC
Flight Engineer: Shannon Walker KD5DXB
Flight Engineer: Fyodor Yurchikhin RN3FI

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[07302010]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-226.S2
WSR 226 Part 2 08/14/2010

AMSAT NEWS SERVICE BULLETIN 226.S2
FROM AMSAT HQ SILVER SPRING, MD, August 14, 2010
TO ALL RADIO AMATEURS
BID: $WSR-226.S2

StudSat : India CubeSat
Catalog Number: 36796
Launch Date: July 12, 2010
Status: On Orbit

Uplink: 437.505MHz, 9600bps FSK
Downlink: 437.505MHz, 9600bps FSK
Beacon : 437.505MHz,   20bps ASK
[08062010]
=====
TIsat-1: Swiss CubeSat
Catalog Number: 36799
Launch Date: July 12, 2010
Status: On orbit

Callsign: HB9DE

Uplink: 145.980MHz FM, AFSK
Downlink: 437.305MHz FM, AFSK
Beacon: 437.305MHz CW
[08062010]
=====
HO-68 XW-1 (CAS-1)
Catalog Number:
Launch Date: December 15, 2009
Status: Operational

Callsign:
Broadcast: BJ1SA-11
BBS: BJ1SA-12

Uplinks: 145.8250 MHz FM, PL 67.0 Hz.
           145.9250 - 145.9750 MHz SSB/CW
           145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
           435.7650 - 435.7150 MHz SSB/CW
           435.6750 MHz AFSK 1200 BPS

Beacon: 435.7900 MHz CW

IARU coordination page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108

For more information about XW-1 (CAS-1):
http://www.camsat.cn
[04222010]
=====
SwissCube

```
Catalog Number: 35932
Launch Date: September 23, 2009

Status: Operational

Callsign: HB9EG

Beacon(100mw): 437.5050MHz CW
Beacon(1w):    437.5050MHz FSK 1k2bps
[04222010]
=====
UWE-2
Catalog Number: 35934
Launch Date: September 23, 2009

Status: In Orbit

Beacon(500mw): 437.3850 MHz AFSK 1k2bps
               437.3850 MHz FSK 9k6bps
[1112009]
=====
ITUpsAT1
Catalog Number: 35935
Launch Date: September 23, 2009

Status: Operational

Beacon(100mw): 437.325MHz CW
Beacon(1w): 437.325MHz 19k2bps
[11112009]
=====
BEESAT
Catalog Number: 35933
Launch Date: September 23, 2009

Status: Operational

Callsign: DP0BEE

Beacon(100mw): 436.000MHz CW
Beacon(500mw): 436.000MHz GMSK 4k8bps
Beacon(500mw): 436.000MHz GMSK 9k6bps
[04222010]
=====
Pollux
Catalog Number:
Launch Date: July 31, 2009

Status: Operational

Callsign: POLLUX-1

Downlink: 145.825MHz 1k2 AX.25
```

```
[10042009]
=====
Castor (ANDE-2)
Catalog Number:
Launch Date: July 31, 2009

Status: Operational

Callsign: KD4HBO-1

Downlink: 145.825 MHz 1k2 AX.25
[10042009]
=====
BEVO-1 (DRAGONSAT-1)
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Operational

Downlink: 437.325 MHz 9k6 GMSK
          437.325 MHz CW 20wpm
[07312009]
=====
AggieSat2 (DRAGONSAT-2)
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Operational

Downlink: 436.250 MHz 9k6 FHSS
[11112009]
=====
CP-6
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Commissioning

Downlink: 437.365 MHz 1k2 AFSK
[06052009]
=====
HAWKSAT 1
Catalog number: 35003
Launch Date: May 19, 2009

Status: ?

Downlink: 437.345 ?
[06052009]
=====
Pharmasat
Catalog Number: 35002
Launch Date: May 19, 2009
```

```
Status: Commissioning

Downlink: 437.465 MHz 1k2 AFSK
[06052009]
=====
ANUSAT
Catalog Number: 34808
Launch Date: April 20, 2009

Status: ?

Downlink:  435.000 MHz
Uplink:    145.800 MHz

Telemetry: 137.400 MHz
[05112009]
=====
SOHLA-1 (ASTRO TECH.)
Catalog Number: 33496
Launch Date: January 23, 2009

Status: Commisioning

Proposed Frequencies and Modes:
Downlink: 437.505 MHz AFSK/CW
Beacon:   437.505 MHz AFSK/CW

Callsign:

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=101
[03232009]
=====
KAGAYAKI (Solan Co.)
Catalog Number: 33495?
Launch Date: January 23, 2009

Status: In Orbit

Downlink: 437.375 MHZ    FSK9k6/CW
Beacon:   437.375 MHz    FSK9k6/CW

IARU coordination status page:

AMSAT-NA webpage:

[01152009]
=====
STARS (Kagawa Univ.) (Twin Satellites)
Catalog Number: 33498
Launch Date: January 23, 2009

Status: Operational ?
```

```
Downlinks: 437.485 MHz FM/CW
           437.465 MHz FM/CW
Beacons:   437.305 MHz FM/CW
           437.275 MHz FM/CW

Callsigns: JR5YBN
           JR5YBO

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=99

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=121&retURL
=/satellites/status.php
[022152009]
=====
KKS-1 (Tokyo MCIT)
Catalog Number: 33499
Launch Date: January 23, 2009

Status: Operational

Downlink:  437.455 MHz AFSK/CW
Beacon:    437.385 MHz AFSK/CW

Callsign: JQ1YYY

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=107

AMSAT-NA webapge:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=120&retURL
=/satellites/status.php
[02212009]
=====
PRISM (Tokyo Univ.)
Catalog Number: 33493
Launch Date: January 23, 2009

Status: Operational ?

Downlink: 437.425 MHz AFSK/GMSK/CW
Beacon:   437.250 MHz AFSK/GMSK/CW

Callsign: JQ1YCX

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=97

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=119&retURL
=/satellites/status.php
```

[02212009]
=====
RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number: 32953
Launch Date: May 23, 2008

Status: Operational

Curent Modes: Telemetry
              Audio
              Images

Downlinks: 435.315 MHz
           435.215 MHz

AMSAT-NA website:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=115&ret
URL=/satellites/status.php

Official website:
http://www.npopm.com/?cid=leoca&caid=43
[02122009]
=====
CanX-2
Catalog number: 32790
Launch Date: April 28, 2008

Status: Operational in range of ground station only

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web
page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[02212009]
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.425 MHz 1k2 baud packet

For the latest project status update please visit the AAUSAT-II web
page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[02212009]

```
=====
CO-65 CUTE-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008

Status: Digipeater

Downlink:  437.475 MHz 9k6 Packet
Uplink:   1267.600 Mhz

Telemetry Beacon:
Downlink: 437.2750 MHz CW

For the latest project status update please visit the Cute-1.7+APD II
web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78

Command Station blog website:
http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=112&retURL
=/satellites/status.php
[02212009]
=====
Compass-1
Catalog number: 32787
Launch Date: April 28, 2008

Status: Operational

Current Mode: 4k8 MSK packet

Uplink:   145.980 MHz FM
Downlink: 437.275 Mhz CW
          437.405 MHz Packet

For the latest project status update please visit the Compass 1 web
page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=114&retURL
=/satellites/status.php
[04272009]
=====
CO-66 Seeds II
Catalog number: 32791
Launch Date: April 28, 2008
```

Status: Operational

Downlink: 437.485 MHz

Callsign: JQ1YGU

For the latest project status update please visit the Seeds 2 web page: http://cubesat.aero.cst.nihon-u.ac.jp/english/seeds_2_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=113&retURL=/satellites/status.php
[02212009]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=94&retURL=/satellites/status.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=72
[02122009]
=====
CP3
Catalog Number: 31129
Launch Date: April 17,2007

Status: Operational

Current Mode: /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[02122009]
=====
CO-58 CubeSat XI-V

Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon: 437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/xivpicte.htm
[02212009]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003

Status: ?????

Current Mode: /u

Beacon: 436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=96&retURL
=/satellites/status.php

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[06082009]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Operational?

Uplink: 1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=56
[02122009]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Mode:
Uplink: 145.920 MHz FM - 67 Hz PL tone burst
Downlink: 435.300 MHz FM
Telemetry
Downlink: 435.150MHz 9k6

Analog voice downlink:	435.300 MHz FM
	435.150 MHz FM
	2401.200 Mhz FM
Analog voice uplink:	145.860 MHZ FM
	145.880 MHz USB
	145.880 MHz FM
	145.920 MHz FM
	145.920 MHz FM - 67 Hz PL tone burst
	1268.700 MHz FM
Digital Downlinks:	435.150 MHz FM 38k4 PBP, 1 watt output
	435.150 MHz FM 9k6 Pacsat Broadcast Protocol
	2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:	145.860 MHz FM 9k6 Pacsat Broadcast Protocol
	1268.700 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon:	435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[06292010]
=====
QuakeSat
Catalog Number: 27845
Launch Date: June 30, 2003

```
Status: Telemetry only

Current Mode: 9600 baud data packet

Mode U packet
Downlink: 436.675 MHz 9k6 BPS

Quakesat webpage:
http://www.quakefinder.com/services/quakesat-ssite/
[04272009]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=69&retURL
=/satellites/status.php
[02212009]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Telemetry only

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink:        144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[03302009]
=====
RS-22 RADIO SPORT 22
Catalog number: 27939
Launch Date: September 27, 2003
```

Status: Operational - 70cm cw only

Current Mode: /u

CW Beacon - 435.352 MHz
            145.818 MHz

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=76&retURL
=/satellites/status.php
[02212009]
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990

Status: CW Beacon only

Uplinks: 145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink: 437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[03162009]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984

Status: Non-operational.

Current Mode: /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon: 435.025 MHz
Mode-S Beacon: 2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[12162009]

=====

INTERNATIONAL SPACE STATION (ISS) - ARISS

Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - OFF
Voice - V/v
BBS - OFF
APRS - OFF
SSTV - OFF

Expedition 24 Crew:

Commander:	Alexander Skvortsov	
Flight Engineer:	Tracy Caldwell Dyson	KF5DBF
Flight Engineer:	Mikhail Kornienko	RN3BF
Flight Engineer:	Doug Wheelock	KF5BOC
Flight Engineer:	Shannon Walker	KD5DXB
Flight Engineer:	Fyodor Yurchikhin	RN3FI

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11

Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time line is NOT translated from Russian and posted.
[07302010]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-226.S3
WSR 226 Part 3 08/14/2010

AMSAT NEWS SERVICE BULLETIN 226.S3
FROM AMSAT HQ SILVER SPRING, MD, August 14, 2010
TO ALL RADIO AMATEURS
BID: $WSR-226.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

CP4
Catalog Number: 31122
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon: 437.325 MHz CW

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=79
[10022008]
=====
LIBERTAD-1
Catalog Number: 31128
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink: 145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[02122009]

```
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: Non-Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder:  145.825 Mhz FM
[01012009]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency:  437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink:        437.250 MHz FM 67Hz CTCSS
Voice Downlink:     2401.835 MHz FM
Packet Up/Downlink:  437.250 MHz 9k6 packet
Packet Downlink     2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non-Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[08132007]
=====
CANX-1
Catalog Number: 27847
```

Launch Date: June 30, 2003

Status: Non-Operational

Downlink: 437.8800 MHz AFSK 1k2bps
[06052009]
=====
DTUSAT
Catalog Number: 27842
Launch Date: June 30, 2003

Status: Non-Operational

Current Mode: 2k4 AFSK Packet last reported

Downlink: 437.475MHz

Officail webpage: http://dtusat1.dtusat.dtu.dk/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=101&retURL
=satellites/all_oscars.php
[02212009]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)

Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Telemetry only

Uplinks: 145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to

commercial land and weather imaging payloads offers FM and FSK
Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as
a collaborative effort between the Malaysian government and Surrey
Satellite Technology Ltd.
[03302009]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]

```
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
V-band:   145.840 -  145.990 MHz CW/LSB
U-band:   435.550 -  435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks
---------
S2-band:  2401.225 -  2401.475 MHz CW/USB
K-band:  24048.010 - 24048.060 MHz CW/USB
Beacon:   2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)
----------------------------
BEACON   General Beacon(GB)  Middle Beacon(MB)  Engineering Beacon(EB)
2 m                   none        145.898 MHz                     none
70cm           435.438 MHz        435.588 MHz              435.838 MHz
13cm(1)       2400.188 MHz       2400.338 MHz             2400.588 MHz
13cm(2)       2401.173 MHz       2401.323 MHz             2401.573 MHz
3cm          10450.975 MHz      10451.125 MHz            10451.375 MHz
1.5cm        24047.885 MHz      24048.035 MHz            24048.285 MHz
[07162007]
=====
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink:    145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
```

BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: 25636
Launch date:February 23, 1999

Status: Non-Operational

```
Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater:         436.250 MHz

Uplinks: Mode B Repeater:  145.825 MHz
Mode J Digipeater:         145.825 MHz
                           145.900 MHz
```

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

```
Status: Non-Operational

Current Modes:
Telemetry : /u

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign:       4XTECH-12

More information of GO-32 can be found at:
http://asri.technion.ac.il/techsat/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=14&retURL
=/satellites/status.php
[07172010]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink:   145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
MO-30 UNAMSAT-2
Catalog Number: 24305
Launch Date: September 5, 1996

Status: Non-operational

Downlink:       435.1380 MHz AFSK 1200 BPS
Downlink:       435.2060 MHz AFSK 1200 BPS
Uplink:         145.8150 MHz AFSK 1200 BPS
Uplink:         145.8350 MHz AFSK 1200 BPS
Uplink:         145.8550 MHz AFSK 1200 BPS
Uplink:         145.8750 MHz AFSK 1200 BPS
[06042009]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Non-operational

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign:       POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012009]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
AO-24 ARSENE
```

```
Catalog Number: 22654
Launch Date: May 13, 1993

Status: Non-operational

Uplink:    435.0625 MHz FM 1k2bps AFSK
           435.1125 MHz FM 1k2bps AFSK
           435.1375 MHz FM 1k2bps AFSK
Downlink:  145.9750 MHz FM 1k2bps AFSK
          2446.5025 MHz FM 1k2bps AFSK

Beacon:    2446.4700 MHz CW

Broadcast callsign:
BBS:
[12162009]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HL01-11
BBS: HL01-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
[05012006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: non-operational

Current Mode:  V/u

Uplink:         145.900 MHz FM 1200-baud Manchester FSK (reserved)
                145.920 MHz FM VOICE
                145.940 MHz FM 1200-baud Manchester FSK (reserved)
                145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink:       437.026 MHz USB VOICE
                (1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[07242009]
=====
UO-15 UoSAT-4
Catalog Number: 20438
Launch Date: January 22, 1990

Status: Non-operational

Uplink: ?
Downlink: 435.1250MHz (?)
          435.1200MHz (?)
[06042009]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
```

```
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon:   145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink  29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
Beacons:   29.450 MHz
```

```
          435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon 1:  29.352 MHz (intermittent)
Beacon 2:  29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink:     21.260 to 21.300 MHz CW/USB
Downlink:  145.860 to 145.900 MHz CW/USB

Beacon:    145.860 MHz

Robot:     145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
```

```
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink:   21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon:   29.408 MHz

Robot:    29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-226.S4
WSR 226 Part 4 08/14/2010

AMSAT NEWS SERVICE BULLETIN 226.S4
FROM AMSAT HQ SILVER SPRING, MD, August 14, 2010
TO ALL RADIO AMATEURS
BID: $WSR-226.S4

THE FOLLOWING SATELLITES HAVE RE-ENTERED OR HAVE BEEN RETURNED SAFELY:

NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: July 28, 2008

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[01012009]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006
```

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink: 145.825 Mhz FM APRS AX25
APRS Uplink: 145.825 MHz FM APRS AX25
Voice/PSK31 Uplink: 28.120 MHz

Packet to Voice ID: RAFT
[06112007]
=====
GENESAT-1
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Re-Entered
Re-entered date: August 8, 2010

Current Mode: /u

Callsign: KE7EGC

Telemetry Beacon Downlink: 437.0695 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[08082010]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Re-Entered
Re-entered: June 18, 2008

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon: 437.2750 MHz CW

Callsign: JR8YJT
[01012009]
=====
SO-43 Starshine 3
Catalog Number: 26929
Launch Date: September 30, 2001

Status: Re-Entered
Re-entered: January 21, 2003

Beacon: 145.825Mhz
[02212009]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz.

Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at}amsat.org
NNNN
/EX

From 2009962699781977849

```
X-Google-Thread: 10e8ad,98befecebf0ee36c,start
X-Google-NewGroupId: yes
X-Google-Thread: 10b9c8,98befecebf0ee36c,start
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,gida4a23d5f63,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!news1.google.com!
border1.nntp.dca.giganews.com!border2.nntp.dca.giganews.com!nntp.giganews.com!
nx02.iad01.newshosting.com!newshosting.com!198.186.194.249.MISMATCH!
transit3.readnews.com!news-out.readnews.com!news-xxxfer.readnews.com!panix!
rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-235 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Wed, 25 Aug 2010 13:02:20 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 1868
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <002601cb4477$3c8aafb0$b5a00f10$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1282755740 16062 166.84.1.6 (25 Aug 2010 17:02:20 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Wed, 25 Aug 2010 17:02:20 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to            rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
x-cr-hashedpuzzle: ANA= AkhX B+gr CMOU DW+9 DalM D2lT EIRf FMVy FM9A GgGQ HJep
H4RD I4J/ JTAo
J9gh;1;cgBlAGMALQByAGEAZABpAG8ALQBpAG4AZgBvAEAAcABhAG4AaQB4AC4AYwBvAG0A;Sosha1_v1;
7;{5AA755E6-12A0-4820-
BBF4-0C7B89EA1CE6};awA5AGoAawBtAEAAYwBvAG0AYwBhAHMAdAAuAG4AZQB0AA==;Wed, 25 Aug
2010 17:01:43
GMT;VwBTAFIALQAyADMANQAgAEEATQBTAEEAVAAgAFcAZQBlAGsAbAB5ACAAUwBhAHQAZQBsAGwAaQB0AG
UAIABSAGUAcABvAHIAdAA=
x-cr-puzzleid: {5AA755E6-12A0-4820-BBF4-0C7B89EA1CE6}
X-Original-Bytes: 45266
Xref: g2news1.google.com rec.radio.amateur.space:372 rec.radio.info:1670
```

This report is organized into four (4) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - deborbited/returned satellites

SB SAT @ AMSAT W8ISS $WSR-235.S1
WSR 235 Part 1 08/23/2010

AMSAT NEWS SERVICE BULLETIN 235.S1
FROM AMSAT HQ SILVER SPRING, MD, August 23, 2010
TO ALL RADIO AMATEURS
BID: $WSR-235.S1

HO-68 XW-1 (CAS-1)
Catalog Number:
Launch Date: December 15, 2009
Status: Commissioning

Callsign:
Broadcast: BJ1SA-11
BBS: BJ1SA-12

Uplinks: 145.8250 MHz FM, PL 67.0 Hz.
           145.9250 - 145.9750 MHz SSB/CW
           145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
           435.7650 - 435.7150 MHz SSB/CW
           435.6750 MHz AFSK 1200 BPS

Beacon: 435.7900 MHz CW

Mode and Antenna Polarization:
V: LHCP 2.0dBi max
U: RHCP 3.0dBi max

IARU coordination page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108

For more information about XW-1 (CAS-1):
http://www.camsat.cn
[04222010]
=====
SO-67 SumbandilaSat
Catalog Number: 35870
Launch Date: September 17, 2009

Status: Suspended

Callsign: ZS0SUM

Uplink: 145.875MHz FM tone 233.6 Hz
Downlink: 435.345MHz FM

```
Mode and Antenna Polarization:
V: Linear
U: Linear

For more information about SO-67:
http://www.amsatsa.org.za/
[11212009]
=====
DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008

Status: Operational
Current Mode: Science Mode - Beacon ONLY

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink:   435.530 to 435.570 MHz

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68
[02122009]
=====
VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink:   435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink:   435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW


Indian Beacon:  145.9360 MHZ CW
Dutch Beacon:   145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm
```

To know what transponder is switched on please listen for the beacon
that is active. Each transponder has a different beacon.
[03082010]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Mode:
Uplink: 145.920 MHz FM - 67 Hz PL tone burst
Downlink: 435.300 MHz FM
Telemetry
Downlink: 435.150MHz 9k6

```
Analog voice downlink:     435.300 MHz FM
                           435.150 MHz FM
                          2401.200 Mhz FM
Analog voice uplink:       145.860 MHZ FM
                           145.880 MHz USB
                           145.880 MHz FM
                           145.920 MHz FM
                           145.920 MHz FM - 67 Hz PL tone burst
                          1268.700 MHz FM
Digital Downlinks:         435.150 MHz FM 38k4 PBP, 1 watt output
                           435.150 MHz FM 9k6 Pacsat Broadcast Protocol
                          2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:            145.860 MHz FM 9k6 Pacsat Broadcast Protocol
                          1268.700 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon:                    435.150 MHz
```

```
Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear
```

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[06292010]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz. The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10 minute timer.
[05282007]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: sCHEDULED oPERATIONS
Current Mode: V/u (Mode JA)

Voice/CW (Mode JA)
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage:

```
http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's
CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/
fo29cwts.htm
[02132010]
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993

Status: Operational

Current Mode: V/u

Uplink:   145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[03232009]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational

Current Mode: Alternating between Mode A and B every 24 hours

Uplink:   145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink:  29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons:   29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
[02122009]
```

=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes:		
	FM Repeater -	OFF
	Voice -	V/v
	BBS -	OFF
	APRS -	OFF
	SSTV -	OFF

Expedition 24 Crew:

Commander:	Alexander Skvortsov	
Flight Engineer:	Tracy Caldwell Dyson	KF5DBF
Flight Engineer:	Mikhail Kornienko	RN3BF
Flight Engineer:	Doug Wheelock	KF5BOC
Flight Engineer:	Shannon Walker	KD5DXB
Flight Engineer:	Fyodor Yurchikhin	RN3FI

Available Modes and Frequencies:

Digital/APRS:

Worldwide packet uplink:	145.825 MHz FM 1k2
Worldwide packet downlink:	145.825 Mhz FM 1k2

Voice:

Region 1 voice uplink:	145.200 MHz FM
Region 2/3 voice uplink:	144.490 MHz FM
Worldwide downlink:	145.800 MHz FM

Crossband Repeater:

Repeater Uplinks:	1269.650 MHz FM
	437.800 MHz FM
	145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink:	145.800 MHz FM
	437.800 MHz FM (Kenwood)

SSTV Robot 36:

Downlink:	145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:

Belgian:	OR4ISS
German:	DP0ISS
Russian:	RS0ISS
	RZ3DZR
United States:	NA1SS

Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[07302010]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-235.S2
WSR 235 Part 2 08/23/2010

AMSAT NEWS SERVICE BULLETIN 235.S2
FROM AMSAT HQ SILVER SPRING, MD, August 23, 2010
TO ALL RADIO AMATEURS
BID: $WSR-235.S2

StudSat : India CubeSat
Catalog Number: 36796
Launch Date: July 12, 2010
Status: On Orbit

Uplink: 437.505MHz, 9600bps FSK
Downlink: 437.505MHz, 9600bps FSK
Beacon : 437.505MHz,   20bps ASK
[08062010]
=====
TIsat-1: Swiss CubeSat
Catalog Number: 36799
Launch Date: July 12, 2010
Status: On orbit

Callsign: HB9DE

Uplink: 145.980MHz FM, AFSK
Downlink: 437.305MHz FM, AFSK
Beacon: 437.305MHz CW
[08062010]
=====
HO-68 XW-1 (CAS-1)
Catalog Number:
Launch Date: December 15, 2009
Status: Operational

Callsign:
Broadcast: BJ1SA-11
BBS: BJ1SA-12

```
Uplinks:   145.8250 MHz FM, PL 67.0 Hz.
           145.9250 - 145.9750 MHz SSB/CW
           145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
           435.7650 - 435.7150 MHz SSB/CW
           435.6750 MHz AFSK 1200 BPS

Beacon:    435.7900 MHz CW

IARU coordination page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108

For more information about XW-1 (CAS-1):
http://www.camsat.cn
[04222010]
=====
SwissCube
Catalog Number: 35932
Launch Date: September 23, 2009

Status: Operational

Callsign: HB9EG

Beacon(100mw): 437.5050MHz CW
Beacon(1w):    437.5050MHz FSK 1k2bps
[04222010]
=====
UWE-2
Catalog Number: 35934
Launch Date: September 23, 2009

Status: In Orbit

Beacon(500mw): 437.3850 MHz AFSK 1k2bps
               437.3850 MHz FSK 9k6bps
[1112009]
=====
ITUpsAT1
Catalog Number: 35935
Launch Date: September 23, 2009

Status: Operational

Beacon(100mw): 437.325MHz CW
Beacon(1w): 437.325MHz 19k2bps
[11112009]
=====
BEESAT
Catalog Number: 35933
Launch Date: September 23, 2009

Status: Operational
```

```
Callsign: DP0BEE

Beacon(100mw): 436.000MHz CW
Beacon(500mw): 436.000MHz GMSK 4k8bps
Beacon(500mw): 436.000MHz GMSK 9k6bps
[04222010]
=====
Pollux
Catalog Number:
Launch Date: July 31, 2009

Status: Operational

Callsign: POLLUX-1

Downlink: 145.825MHz 1k2 AX.25
[10042009]
=====
Castor (ANDE-2)
Catalog Number:
Launch Date: July 31, 2009

Status: Operational

Callsign: KD4HBO-1

Downlink: 145.825 MHz 1k2 AX.25
[10042009]
=====
BEVO-1 (DRAGONSAT-1)
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Operational

Downlink: 437.325 MHz 9k6 GMSK
          437.325 MHz CW 20wpm
[07312009]
=====
AggieSat2 (DRAGONSAT-2)
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Operational

Downlink: 436.250 MHz 9k6 FHSS
[11112009]
=====
CP-6
Catalog Number: 35004
Launch Date: May 19, 2009
```

```
Status: Commissioning

Downlink: 437.365 MHz 1k2 AFSK
[06052009]
=====
HAWKSAT 1
Catalog number: 35003
Launch Date: May 19, 2009

Status: ?

Downlink: 437.345 ?
[06052009]
=====
Pharmasat
Catalog Number: 35002
Launch Date: May 19, 2009
Status: Commissioning

Downlink: 437.465 MHz 1k2 AFSK
[06052009]
=====
ANUSAT
Catalog Number: 34808
Launch Date: April 20, 2009

Status: ?

Downlink:  435.000 MHz
Uplink:    145.800 MHz

Telemetry: 137.400 MHz
[05112009]
=====
SOHLA-1 (ASTRO TECH.)
Catalog Number: 33496
Launch Date: January 23, 2009

Status: Commisioning

Proposed Frequencies and Modes:
Downlink: 437.505 MHz AFSK/CW
Beacon:   437.505 MHz AFSK/CW

Callsign:

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=101
[03232009]
=====
KAGAYAKI (Solan Co.)
Catalog Number: 33495?
Launch Date: January 23, 2009
```

```
Status: In Orbit

Downlink: 437.375 MHZ    FSK9k6/CW
Beacon:   437.375 MHz    FSK9k6/CW

IARU coordination status page:

AMSAT-NA webpage:

[01152009]
=====
STARS (Kagawa Univ.) (Twin Satellites)
Catalog Number: 33498
Launch Date: January 23, 2009

Status: Operational ?

Downlinks: 437.485 MHz FM/CW
           437.465 MHz FM/CW
Beacons:   437.305 MHz FM/CW
           437.275 MHz FM/CW

Callsigns: JR5YBN
           JR5YBO

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=99

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=121&retURL
=/satellites/status.php
[022152009]
=====
KKS-1 (Tokyo MCIT)
Catalog Number: 33499
Launch Date: January 23, 2009

Status: Operational

Downlink:  437.455 MHz AFSK/CW
Beacon:    437.385 MHz AFSK/CW

Callsign: JQ1YYY

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=107

AMSAT-NA webapge:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=120&retURL
=/satellites/status.php
[02212009]
=====
PRISM (Tokyo Univ.)
Catalog Number: 33493
Launch Date: January 23, 2009

Status: Operational ?

Downlink: 437.425 MHz AFSK/GMSK/CW
Beacon:   437.250 MHz AFSK/GMSK/CW

Callsign: JQ1YCX

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=97

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=119&retURL
=/satellites/status.php
[02212009]
=====
RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number: 32953
Launch Date: May 23, 2008

Status: Operational

Curent Modes: Telemetry
              Audio
              Images

Downlinks: 435.315 MHz
           435.215 MHz

AMSAT-NA website:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=115&ret
URL=/satellites/status.php

Official website:
http://www.npopm.com/?cid=leoca&caid=43
[02122009]
=====
CanX-2
Catalog number: 32790
Launch Date: April 28, 2008

Status: Operational in range of ground station only

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web
page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
```

```
[02212009]
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.425 MHz 1k2 baud packet

For the latest project status update please visit the AAUSAT-II web
page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[02212009]
=====
CO-65 CUTE-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008

Status: Digipeater

Downlink:  437.475 MHz 9k6 Packet
Uplink:   1267.600 Mhz

Telemetry Beacon:
Downlink: 437.2750 MHz CW

For the latest project status update please visit the Cute-1.7+APD II
web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78

Command Station blog website:
http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=112&retURL
=/satellites/status.php
[02212009]
=====
Compass-1
Catalog number: 32787
Launch Date: April 28, 2008

Status: Operational

Current Mode: 4k8 MSK packet

Uplink:   145.980 MHz FM
```

Downlink: 437.275 Mhz CW
          437.405 MHz Packet

For the latest project status update please visit the Compass 1 web page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=114&retURL=/satellites/status.php
[04272009]
=====
CO-66 Seeds II
Catalog number: 32791
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.485 MHz

Callsign: JQ1YGU

For the latest project status update please visit the Seeds 2 web page: http://cubesat.aero.cst.nihon-u.ac.jp/english/seeds_2_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=113&retURL=/satellites/status.php
[02212009]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=94&retURL=/satellites/status.php

```
IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=72
[02122009]
=====
CP3
Catalog Number: 31129
Launch Date: April 17,2007

Status: Operational

Current Mode:  /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[02122009]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon:             437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/xivpicte.htm
[02212009]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003

Status: ?????

Current Mode: /u

Beacon:     436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=96&retURL
=/satellites/status.php

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
```

```
[06082009]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Operational?

Uplink:  1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=56
[02122009]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Mode:
Uplink:    145.920 MHz FM - 67 Hz PL tone burst
Downlink:  435.300 MHz FM
Telemetry
Downlink:  435.150MHz 9k6


Analog voice downlink:     435.300 MHz FM
                           435.150 MHz FM
                          2401.200 Mhz FM
Analog voice uplink:       145.860 MHZ FM
                           145.880 MHz USB
                           145.880 MHz FM
                           145.920 MHz FM
                           145.920 MHz FM - 67 Hz PL tone burst
                          1268.700 MHz FM
Digital Downlinks:         435.150 MHz FM 38k4 PBP, 1 watt output
                           435.150 MHz FM 9k6 Pacsat Broadcast Protocol
                          2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:            145.860 MHz FM 9k6 Pacsat Broadcast Protocol
                          1268.700 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon:                    435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
```

U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[06292010]
=====
QuakeSat
Catalog Number: 27845
Launch Date: June 30, 2003

Status: Telemetry only

Current Mode: 9600 baud data packet

Mode U packet
Downlink: 436.675 MHz 9k6 BPS

Quakesat webpage:
http://www.quakefinder.com/services/quakesat-ssite/
[04272009]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=69&retURL=/satellites/status.php
[02212009]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

```
Status: Telemetry only

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink:        144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[03302009]
=====
RS-22 RADIO SPORT 22
Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only

Current Mode:  /u

CW Beacon - 435.352 MHz
            145.818 MHz

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=76&retURL
=/satellites/status.php
[02212009]
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990

Status: CW Beacon only

Uplinks:          145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink:      437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[03162009]
=====
UO-11 OSCAR-11
Catalog number: 14781
```

Launch Date: March 1, 1984

Status: Non-operational.

Current Mode: /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon: 435.025 MHz
Mode-S Beacon: 2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[12162009]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - OFF
Voice - V/v
BBS - OFF
APRS - OFF
SSTV - OFF

Expedition 24 Crew:

Commander:	Alexander Skvortsov	
Flight Engineer:	Tracy Caldwell Dyson	KF5DBF
Flight Engineer:	Mikhail Kornienko	RN3BF
Flight Engineer:	Doug Wheelock	KF5BOC
Flight Engineer:	Shannon Walker	KD5DXB
Flight Engineer:	Fyodor Yurchikhin	RN3FI

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)

Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[07302010]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-235.S3
WSR 235 Part 3 08/23/2010

AMSAT NEWS SERVICE BULLETIN 235.S3
FROM AMSAT HQ SILVER SPRING, MD, August 23, 2010
TO ALL RADIO AMATEURS
BID: $WSR-235.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

CP4
Catalog Number: 31122
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon: 437.325 MHz CW

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=79

```
[10022008]
=====
LIBERTAD-1
Catalog Number: 31128
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink:   145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[02122009]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: Non-Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder:  145.825 Mhz FM
[01012009]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency:  437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink:        437.250 MHz FM 67Hz CTCSS
Voice Downlink:     2401.835 MHz FM
Packet Up/Downlink:  437.250 MHz 9k6 packet
Packet Downlink     2401.835 MHz 38k4 packet
```

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non-Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[08132007]
=====
CANX-1
Catalog Number: 27847
Launch Date: June 30, 2003

Status: Non-Operational

Downlink: 437.8800 MHz AFSK 1k2bps
[06052009]
=====
DTUSAT
Catalog Number: 27842
Launch Date: June 30, 2003

Status: Non-Operational

Current Mode: 2k4 AFSK Packet last reported

Downlink: 437.475MHz

Officail webpage: http://dtusat1.dtusat.dtu.dk/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=101&retURL=satellites/all_oscars.php
[02212009]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)

Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Telemetry only

Uplinks: 145.850 MHz
145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[03302009]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html

```
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink:   145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
V-band:   145.840 -  145.990 MHz CW/LSB
U-band:   435.550 -  435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks
---------
S2-band:  2401.225 -  2401.475 MHz CW/USB
K-band:  24048.010 - 24048.060 MHz CW/USB
Beacon:   2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)
----------------------------
BEACON   General Beacon(GB)  Middle Beacon(MB)  Engineering Beacon(EB)
2 m                   none        145.898 MHz                    none
70cm           435.438 MHz        435.588 MHz             435.838 MHz
13cm(1)       2400.188 MHz       2400.338 MHz            2400.588 MHz
13cm(2)       2401.173 MHz       2401.323 MHz            2401.573 MHz
3cm          10450.975 MHz      10451.125 MHz           10451.375 MHz
1.5cm        24047.885 MHz      24048.035 MHz           24048.285 MHz
[07162007]
=====
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000
```

```
Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink:    145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: 25636
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater:         436.250 MHz

Uplinks: Mode B Repeater:  145.825 MHz
Mode J Digipeater:         145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
```

```
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Non-Operational

Current Modes:
Telemetry : /u

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign:       4XTECH-12

More information of GO-32 can be found at:
http://asri.technion.ac.il/techsat/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=14&retURL
=/satellites/status.php
[07172010]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink:   145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
```

```
BBS: TMSAT1-12
[05012006]
=====
MO-30 UNAMSAT-2
Catalog Number: 24305
Launch Date: September 5, 1996

Status: Non-operational

Downlink:       435.1380 MHz AFSK 1200 BPS
Downlink:       435.2060 MHz AFSK 1200 BPS
Uplink:         145.8150 MHz AFSK 1200 BPS
Uplink:         145.8350 MHz AFSK 1200 BPS
Uplink:         145.8550 MHz AFSK 1200 BPS
Uplink:         145.8750 MHz AFSK 1200 BPS
[06042009]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Non-operational

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign:       POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012009]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
```

```
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
AO-24 ARSENE
Catalog Number: 22654
Launch Date: May 13, 1993

Status: Non-operational

Uplink:    435.0625 MHz FM 1k2bps AFSK
           435.1125 MHz FM 1k2bps AFSK
           435.1375 MHz FM 1k2bps AFSK
Downlink:  145.9750 MHz FM 1k2bps AFSK
          2446.5025 MHz FM 1k2bps AFSK

Beacon:    2446.4700 MHz CW

Broadcast callsign:
BBS:
[12162009]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational
```

```
Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990
```

Status: Non-operational.

Downlink: 145.825 MHz FM 1200 Baud AFSK
Beacon: 2401.220 MHz
[05012006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: non-operational

Current Mode: V/u

Uplink: 145.900 MHz FM 1200-baud Manchester FSK (reserved)
                145.920 MHz FM VOICE
                145.940 MHz FM 1200-baud Manchester FSK (reserved)
                145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink: 437.026 MHz USB VOICE
                (1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC 437.050 MHz RHCP
   PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[07242009]
=====
UO-15 UoSAT-4
Catalog Number: 20438
Launch Date: January 22, 1990

Status: Non-operational

Uplink: ?
Downlink: 435.1250MHz (?)
          435.1200MHz (?)
[06042009]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

```
Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon:   145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW
```

```
Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink  29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
Beacons:   29.450 MHz
          435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon 1:  29.352 MHz (intermittent)
Beacon 2:  29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
```

```
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink:     21.260 to 21.300 MHz CW/USB
Downlink:  145.860 to 145.900 MHz CW/USB

Beacon:    145.860 MHz

Robot:     145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink:   21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon:   29.408 MHz

Robot:    29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-235.S4
WSR 235 Part 4 08/23/2010

AMSAT NEWS SERVICE BULLETIN 235.S4
FROM AMSAT HQ SILVER SPRING, MD, August 23, 2010
TO ALL RADIO AMATEURS
BID: $WSR-235.S4

THE FOLLOWING SATELLITES HAVE RE-ENTERED OR HAVE BEEN RETURNED SAFELY:

NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: July 28, 2008

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO
```

```
Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[01012009]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink:      145.825 Mhz FM APRS AX25
APRS Uplink:        145.825 MHz FM APRS AX25
Voice/PSK31 Uplink:  28.120 MHz

Packet to Voice ID: RAFT
[06112007]
=====
GENESAT-1
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Re-Entered
Re-entered date: August 8, 2010

Current Mode: /u

Callsign: KE7EGC

Telemetry Beacon Downlink: 437.0695 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[08082010]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Re-Entered
Re-entered: June 18, 2008

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon:             437.2750 MHz CW
```

Callsign: JR8YJT
[01012009]
=====
SO-43 Starshine 3
Catalog Number: 26929
Launch Date: September 30, 2001

Status: Re-Entered
Re-entered: January 21, 2003

Beacon: 145.825Mhz
[02212009]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

- AMSAT News Service (ANS)
- General satellite discussion (AMSAT-BB)
- Orbit data (KEPS)
- Manned space missions (SAREX)
- District of Columbia area (AMSAT-DC)
- New England area (AMSAT-NE)
- AMSAT Educational Liaison mailing list (AMSAT-EDU)
- AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at} amsat.org
NNNN
/EX

```
From 181428776518163792
```

```
X-Google-Thread: 10e8ad,99ad77b7260e61e,start
X-Google-NewGroupId: yes
X-Google-Thread: 10b9c8,99ad77b7260e61e,start
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,gida4a23d5f63,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!newsfeed2.dallas1.level3.net!
news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-234 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Wed, 25 Aug 2010 13:25:09 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 309
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <002701cb447a$72717c50$575474f0$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1282757109 10125 166.84.1.6 (25 Aug 2010 17:25:09 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Wed, 25 Aug 2010 17:25:09 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
```

Content-Language: en-us
Xref: g2news1.google.com rec.radio.amateur.space:373 rec.radio.info:1671

AMSAT NEWS SERVICE
ANS-234

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* Election Reminder
* ARRISSat-1 Update
* Symposium Call for Papers
* AO-51 Update
* ARISS STATUS
* Satellite Shorts

SB SAT @ AMSAT $ANS-234.01
Election Reminder

AMSAT News Service Bulletin 234.01
   From AMSAT HQ SILVER SPRING, MD.
August 22, 2010
To All RADIO AMATEURS
BID: $ANS-234.01

Just another nag that the AMSAT election for members of the Board of Directors is in progress. The end of the summer, and the start of school is upon us. Still, if you haven't gotten around to it, take a few minutes to vote. The deadline will be here in a month. Obviously it is important as a member to vote, but it is also important for Board members to receive your input in this way.

73s,

Alan Biddle
WA4SCA
AMSAT Corporate Secretary

[ANS Thanks Alan, WA4SCA, for the above information]

/EX

SB SAT @ AMSAT $ANS-234.02
ARISSat-1 Update

AMSAT News Service Bulletin 234.02
From AMSAT HQ SILVER SPRING, MD.
August 22, 2010
To All RADIO AMATEURS
BID: $ANS-234.02

We are now manifested on Progress 41P to get ARISSat to the ISS. The current timeline has the launch in January 2011. Four ARISSat satellites have been assembled in Orlando. The two Russian flight units are assembled, electronics are undergoing operational tests, software is close to being the final version and we expect to have the satellite complete and ready for vibration tests next week. We don't have a date for the vibration test yet, but are working to get one in the next few weeks.

NASA has been very instrumental in getting us an export license, arranging for transportation to Russia and helping clarify how the satellite will be attached to the Progress vessel. We plan on shipping the two satellites to Russia in September, to give them time to install the Kursk experiment, test their battery with the satellite and do additional tests before shipping to Baikonur for launch.

Gould, WA4SXM, AMSAT ARISSat-1 Project Manager

[ANS thanks Gould, WA4SXM, for the above information]

/EX

SB SAT @ AMSAT $ANS-234.03
Symposium Call for Papers

AMSAT News Service Bulletin 234.03
From AMSAT HQ SILVER SPRING, MD.
August 22, 2010
To All RADIO AMATEURS
BID: $ANS-234.03

It's already August 1 and the September 1 deadline of the call for papers for the 2010 AMSAT Space Symposium and Annual Meeting is approaching faster than ever! The abstracts and some completed papers have arrived - thank you. For everyone else - we need to get busier ... please!

The abstract for your paper does not require any special format. Simply send an e-mail to the Proceedings Editor, K9JKM with the basic information: Author Name, Callsign, and a few sentences that describe your proposed topic. I'll be looking forward to receiving your abstracts in my in-box at k9jkm@comcast.net.

The Symposium Committee invites proposals for:

+ Papers for publication in the Proceedings

+ Symposium Presentations

+ Poster Presentations

+ Equipment and Operating Demonstrations

These can be on any topic of interest to the amateur satellite community. We request a tentative title of your presentation as soon as possible, with final copy submitted by September 1, 2010 for inclusion in the printed proceedings.

To help you prepare your paper the Symposium Committee has posted an author's guide on the AMSAT.org web page:
http://tinyurl.com/2djjnmx

The 2010 AMSAT Space Symposium and Annual Meeting will be held October 8 - 10 at the Chicago/Elk Grove Holiday Inn which is near O'Hare Airport.

[ANS thanks the 2010 Symposium Committee for the above information]

/EX

SB SAT @ AMSAT $ANS-234.04
AO-51 Update

AMSAT News Service Bulletin 234.04
From AMSAT HQ SILVER SPRING, MD.
August 22, 2010
To All RADIO AMATEURS
BID: $ANS-234.04

Eclipses Cause Short Term Changes to AO-51 Schedule

AO-51 Command Team member, Mark N8MH noted this week that AO-51 is still in eclipses until the last week of August. The satellite will be back in 100% sun until the end of December after this time. That means the Command Team should be able keep AO-51 transmitting all the time. In fact, they will need to do this in order to keep temperatures down!

In recent days the Command Team had to resort to shutting down the voice repeater in order to grab some telemetry files from the bird. This was very important as we are nearing the end of the eclipse period and was a unique opportunity to collect good data for current use and for future reference for AO-51 Operations.

Recently AO-51 has been automatically turning itself OFF and back ON because of the power budget. Users see this more often as it first comes out of eclipse and as it begins to enter eclipse. The Command Team will continue to fine tune this, but the goal is to keep AO-51 transmitting when there is enough power--without having the bird shutdown until manually commanded back ON by one of the command team members.

Starting January 2011, we won't see much of a break from the eclipse periods for a long, long time (there is one short window of full sun, but it's about 2 weeks long in late Feb/early March 2011). The command team has been using the recent eclipse period to learn how to become more efficient in the use of the power management code on board. This allows us to get the most "bang for the buck" out of the available power.   It's pretty complex and versatile. We've learned a tremendous amount this eclipse period, but still have more to learn in the future.

[ANS thanks AO-51 Command Team member, Mark N8MH for the above information]

/EX

SB SAT @ AMSAT $ANS-234.05
ARISS Status Report

AMSAT News Service Bulletin 234.05
From AMSAT HQ SILVER SPRING, MD.
August 16, 2010
To All RADIO AMATEURS
BID: $ANS-234.05

1.   Upcoming School Contact

An Amateur Radio on the International Space Station (ARISS) contact has been scheduled with the DaVinci Science Center in Allentown, Pennsylvania. The Center has integrated this activity into its Summer Camp Program for 2010. Students have learned about space through lessons from the NASA Goddard Space Flight Center Education Office and Astronaut Terry Hart is expected to give presentations. The Delaware-Lehigh Amateur Radio Club has provided instruction on Amateur Radio, how it works, what it is and its uses, how the ARISS radio systems work, the international ham radio team, satellite tracking, radio wave propagation and the organizations that sponsor ARISS. The club will also provide VHF demonstrations and multi-media presentations to the group which will enhance the center's 200 hands-on exhibits that promote the understanding of science and technology. Due to ISS Problems, This has been postponed, however, keep informed as this can change before this ANS is published.

2.   QST Covers ARISS

The American Radio Relay League (ARRL) September issue of QST carried an item in the "Inside HQ" column about how NASA ISS crew members participated in one or more ARISS educational activities per week during the first half of 2010. The ARRL monthly journal has a circulation of 150,000.

3. ISS Ham Debrief Scheduled

An Amateur Radio on the International Space Station (ARISS) debrief session has been scheduled with Expedition 22/23 astronaut Soichi Noguchi, KD5TVP on Tuesday, August 17. The feedback provided on the radio system and school contacts will help the ARISS program update its operations.

[ANS thanks Carol, KB3LKI, for the above information]

/EX

SB SAT @ AMSAT $ANS-234.06
Satellite Shorts

AMSAT News Service Bulletin 234.06
From AMSAT HQ SILVER SPRING, MD.
August 22, 2010
To All RADIO AMATEURS
BID: $ANS-234.06

SA-AMSAT Reports Plans for Sumbandilasat SO-67 Return to Service

South Africa AMSAT (SA-AMSAT) is slowly adding additional operational time for Sumbandilasat SO-67. On their web page they report that the ground control station will start slowly with the amateur payload and observe if the satellite remains stable and then gradually add more operating time. The current SO-67 schedule for operations over South Africa and Europe can be found on their web page at:
http://www.amsatsa.org.za/

The PTT of the transmitter now STAYS ON for the duration of the payload activation (i.e. 15 min), regardless of a valid "transponder" tone received. Please leave a 3 second gap between overs.

AMSAT Awards

AMSAT Director Contests and Awards, Bruce Paige, KK5DO says congratulations are in order for these stations earning AMSAT awards during July and August.

The following have entered into the Satellite Communicators Club for making their first satellite QSO.

George Jounakros, K2KVI
Johnathon Ballard, KI4UKF
Stephen Ponder, N5WBI
Bob Herrell, AJ5C
Jason Brisco, N5NBJ

The following have earned the AMSAT Communications Achievement Award.
Stephen Rish, K8SAR #516

The following have earned the South Africa AMSAT Communications Achievement Award
John Neeley, W6ZKH #US148

To see all the awards visit http://www.amsat.org

Japan's Venus Mission Getting Close

The mission that launched UNITEC-1, Amateur Radio's first interplanetary probe, the Venus Climate Orbiter also known as Akatsuki remains healthy and is nearing the planet. The 5.8 GHz amateur radio beacon from UNITEC-1 was last heard only two days outbound from Earth.

Akatsuki, bristling with cameras, will circle the exotic planet's equator in an elliptical orbit for at least 2 years, monitoring the atmosphere at different altitudes using various wavelengths (IR, UV, and visible). With this data and data from the spacecraft's radio dish, scientists will reconstruct a 3D model of the atmosphere's structure and dynamics.

The instruments will also scrutinize the planet's surface for volcanic activity. In addition, Akatsuki's Lightning and Airglow Camera will hunt for lightning in order to settle a longstanding debate about how is Venusian lightning generated in a dry atmosphere?

The full story can be found on-line at NASA Science News
http://science.nasa.gov/science-news/science-at-nasa/2010/16aug_vco/

[ANS thanks Everyone for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Dee Interdonato, NB2F

From -7869308786556787611
X-Google-Thread: 10e8ad,a08abc42a601946c,start
X-Google-NewGroupId: yes
X-Google-Thread: 10b9c8,a08abc42a601946c,start

```
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,gida4a23d5f63,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII
Path: g2news1.google.com!news2.google.com!npeer02.iad.highwinds-media.com!
news.highwinds-media.com!feed-me.highwinds-media.com!nx02.iad01.newshosting.com!
newshosting.com!198.186.194.249.MISMATCH!transit3.readnews.com!news-
out.readnews.com!news-xxxfer.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-241 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sat, 28 Aug 2010 21:18:29 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 555
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <001901cb4718$120a6750$361f35f0$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
X-Trace: reader1.panix.com 1283044709 28840 166.84.1.6 (29 Aug 2010 01:18:29 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 29 Aug 2010 01:18:29 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news1.google.com rec.radio.amateur.space:374 rec.radio.info:1679
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AMSAT NEWS SERVICE
ANS-241

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:

* It's Time to Register for the 2010 AMSAT Symposium
* Exciting Papers and Presentations Rolling In
* Symposium Poster Presentation & Demonstration Opportunity
* David Taylor W8AAS Appointed AMSAT US Delegate to ARISS-International

* AMSAT at Shelby, NC Hamfest Labor Day Weekend
* AMSAT Invited for Public Outreach at National Air & Space Museum
* New AO-51 Schedule As Satellite Enters Full Sun
* Satellite Shorts From All Over
* European Student Competition 'In The Can'

SB SAT @ AMSAT $ANS-241.01
It's Time to Register for the 2010 AMSAT Symposium

AMSAT News Service Bulletin 241.01
>From AMSAT HQ SILVER SPRING, MD.
August 29, 2010
To All RADIO AMATEURS
BID: $ANS-241.01

It is time to register for the 2010 AMSAT Space Symposium and General meeting. You can register on-line at the AMSAT Store:
http://www.amsat-na.com/store/SymposiumReg.php

Your conference fee includes entrance to the Symposium, refreshments and a copy of the 2010 Symposium Proceedings:

$40.00 per person before 15 September 2010
$45.00 from 21 September through 5 October
Online registration closes 5 October at Midnight.
Registration at the door will be $50.00.

The Saturday Night Banquet is the highlight of the Space Symposium. Join us for great food, major announcements and the traditional banquet prize awards. Saturday Evening Banquet $45.00 per person.

The keynote speaker at the banquet will be Dr. Albert Stebbins, a theoretical astrophysicist working with the Sloan Digital Sky Survey in the Fermilab Theoretical Astrophysics Group.

AMSAT Area Coordinators typically gather to exchange ideas and techniques for supporting AMSAT members and promoting amateur satellite operations. Sunday Morning Area Coordinator's Breakfast:
$15.00 per person

Symposium Hotel Information:

The Chicago/Elk Grove Holiday Inn is located west of O'Hare Airport at 1000 Busse Road, Elk Grove Village, IL 60007. Telephone 1-847-437-6010. The registration code for the discount rate of $79.00 per night is AMS. The direct link to the www.holidayinn.com hotel web page is:
http://tinyurl.com/2aptoeu
You can also reach this page from the Symposium web page at:
http://www.amsat.org/amsat-new/symposium/2010/Hotel.php

Flight & Airport Information:

Chicago-O'Hare International Airport is the closest to the Chicago/

Elk Grove Holiday Inn Hotel. The hotel offers free hourly shuttle service to and from O'Hare Airport. Call the hotel upon arrival to let them know to come pick you up.

Note that Chicago-Midway Airport is approximately 40 miles from the hotel and will require commuting or a $22.00 Shuttle fee. O'Hare Airport is served by all major air carriers.

Getting there by car:
The hotel address is 1000 Busse Road, Elk Grove Village, IL 60007.
A map link is included on the hotel web page.
The GPS coordinates are 42� 00' 37.30" N   87� 57' 36.5" W.

Sunday Afternoon Tour

At the conclusion of the Symposium activities you are invited to participate in a tour of the Tevatron at the Fermi National Accelerator Laboratory on Sunday. Part of the tour will include a tour of the multi-megawatt RF portions of the particle accelerator as well as a tour of the new Super Conducting RF Test Facility. The Symposium registration form includes a place to indicate whether you can help with the car pools for travel to FermiLab and back to the hotel. The planned start time for the FermiLab tour will be 12 Noon.

[ANS thanks the 2010 Symposium Committee for the above information]

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SB SAT @ AMSAT $ANS-241.02
Exciting Papers and Presentations Rolling In

AMSAT News Service Bulletin 241.02
>From AMSAT HQ SILVER SPRING, MD.
August 29, 2010
To All RADIO AMATEURS
BID: $ANS-241.02

As of this week the 2010 Symposium Committee has had several exciting offers for papers and presentations. Topics that have arrived include the list below.

Exploration and definition of AMSAT's opportunities to grow our outreach in the educational areas:
+ ARISS and Education
+ ARISS Operation Update
+ Education Paradigm Shift for AMSAT to Support Subsidized
  Launch Opportunities
+ University of Louisiana Satellite Program

Get up-to-date on AMSAT's next platform in space:
+ Assembling ARISSat

+ ARISSatTLM, a telemetry display program for ARISSat-1
+ Software Radio Technology on ARISSat-1
+ ARISSat-1 Overview
+ ARISSat-1 Power System
+ BPSK-1000 format for ARISSat-1

Discussion of AMSAT's future satellite technology:
+ Elmersat -- A Modest Proposal for Future Satellites
+ Using ham radio satellites to distribute amateur radio news in
  both voice and data formats
+ Characteristics of simulated data multicasts transmitted over
  K3IO's proposed GEO-Eagle communications platform
+ Proposal for Digital Television Aboard the ISS

Updates and information of current AMSAT topics:
+ ITAR Legal Update
+ AMSAT-FOX
+ SUNY-AMSAT System Development
+ AO-51 Battery Capacity and Spin Trends
+ South Africa AMSAT Update
+ AMSAT Publications - Future Direction for the Journal, News
  Service, & Web

Building up your satellite station:
+ Flex Radio V/U Module - 2m/70cm full duplex transverter module
  for the Flex 5000
+ Low Cost, Lightweight Homebrew Dish Construction

Teaching others how we do it:
+ How to Work the FM Ham Satellites With Your Handheld Radio
+ Successful Hamfest Demonstrations

Authors are reminded to send in your completed papers as soon as possible. Presentations should be in Powerpoint format. Bring your presentation loaded on a thumb drive which can be loaded into the projection system prior to your speaking time slot.

[ANS thanks the 2010 Symposium Committee for the above information]

/EX

SB SAT @ AMSAT $ANS-241.03
Symposium Poster Presentation & Demonstration Opportunity

AMSAT News Service Bulletin 241.03
>From AMSAT HQ SILVER SPRING, MD.
August 29, 2010
To All RADIO AMATEURS
BID: $ANS-241.03

The poster presentation and demonstration area proved to be a popular place to visit at the Baltimore Symposium. The 2010 Symposium Committee plans to duplicate this success at the Chicago Symposium.

So, if you don't have time to generate a paper or presentation please consider setting up a Poster Presentation or demonstration. We had the opportunity to view actual CubeSats, PPod launchers, ARISSat-1 prototypes.

If you plan on setting up a Poster or demonstration please contact the 2010 Symposium Proceedings Editor, JoAnne Maenpaa K9JKM via e-mail at k9jkm@amsat.org. We'll reserve table space for you!

[ANS thanks the 2010 Symposium Committee for the above information]

/EX

SB SAT @ AMSAT $ANS-241.04
David Taylor W8AAS Appointed AMSAT's US Delegate to ARISS-International

AMSAT News Service Bulletin 241.04
>From AMSAT HQ SILVER SPRING, MD.
August 29, 2010
To All RADIO AMATEURS
BID: $ANS-241.04

AMSAT President Barry Baines, WD4ASW has appointed David Taylor, W8AAS of Columbia, MD as AMSAT's US delegate to ARISS-International (ARISS-I). Dave replaces Barry Baines, WD4ASW who was holding the position temporarily following the resignation of Will Marchant, WC6ROL in 2009. ARISS is 'Amateur Radio on the International Space Station'.

Barry noted, "I am pleased to appoint Dave, W8AAS as our new ARISS-International delegate. Dave has extensive experience with the ARISS program, having participated as a trainer and procedure writer, ground station operator, school contact mentor and operations coordinator. His extensive knowledge of day-to-day operations of ARISS coupled with his exposure to the workings of ARISS-I as an observer as well as supporting the efforts of past AMSAT human spaceflight activities makes him well qualified to serve as AMSAT's representative and advocate for amateur radio in space."

Dave was first licensed in 1970 and has been involved with SAREX/ARISS since 2000. He holds an Extra Class amateur radio license.

ARISS-I is a working group consisting of a consortium of national amateur radio organizations and AMSAT organizations of the host countries represented on the International Space Station. ARISS-I serves as the 'unified voice of amateur radio' in working with the space agencies that manage the ISS. Since ARISS is international in scope, the team coordinates locally with their respective space agency (e.g. ESA, NASA, JAXA, CSA, and the Russian Space Agency) and as an international team through ARISS working group meetings, teleconferences and through electronic mail.

In North America, the US delegates are Rosalie White, K1STO (appointed by the ARRL) and David Taylor, W8AAS (appointed by AMSAT). The Canadian delegates are Daniel Lamoureux, VE2KA (appointed by Radio Amateurs of Canada) and Maurice-Andr� Vigneault, VE3VIG (appointed by AMSAT). In addition there are four European delegates, two Japanese delegates, and two Russian delegates. The Chairman of ARRIS-I is Gaston Bertels, ON4WF.

Information on the activities of ARISS can be found at:
http://www.rac.ca/ariss/oindex.htm

[ANS thanks AMSAT President Barry Baines, WD4ASW and ARISS-International for the above information]

/EX

SB SAT @ AMSAT $ANS-241.05
AMSAT at Shelby, NC Hamfest Labor Day Weekend

AMSAT News Service Bulletin 241.05
>From AMSAT HQ SILVER SPRING, MD.
August 29, 2010
To All RADIO AMATEURS
BID: $ANS-241.05

AMSAT Area Coordinator Bob Felt, KB5YZG of Hendersonville, NC and AMSAT President Barry Baines, WD4ASW of Westborough, MA will be representing AMSAT at the Shelby Hamfest on Saturday and Sunday, September 4-5. The Hamfest is at the Dallas, NC Park (1303 Dallas-Cherryville Highway, Dallas, NC 28034) adjacent to Gastonia College. Hamfest details may be found at http://www.shelbyhamfest.com.

Along with the traditional AMSAT booth, there is an AMSAT Forum scheduled for 0920-1020 on Saturday morning in Room B of the main commercial building. AMSAT President Barry Baines, WD4ASW will provide an update on AMSAT activities, including an overview of ARISSat-1. Bob and Barry also hope to do some satellite contacts from the hamfest as well.

AMSAT members who are attending the Shelby Hamfest are encouraged to stop by the AMSAT booth, which is expected to be positioned in the main commercial building. Any AMSAT member interested in helping to man the AMSAT booth are encouraged to contact Bob Felt, KB5YZG (kb5yzg@amsat.org). Shelby is always a busy weekend and additional volunteers are always welcome.

[ANS thanks AMSAT President Barry Baines, WD4ASW for the above information]

/EX

SB SAT @ AMSAT $ANS-241.06
AMSAT Invited for Public Outreach at National Air & Space Museum

AMSAT News Service Bulletin 241.06
>From AMSAT HQ SILVER SPRING, MD.
August 29, 2010
To All RADIO AMATEURS
BID: $ANS-241.06

Samudra Haque, N3RDX noted an opportunity to volunteer for an AMSAT outreach activities, being organized by the National Air and Space Museum in Washington, DC. Details include:

Event: Hispanic Heritage Month Family day - Argentina in Air and Space
Location: National Air and Space Museum, Washington, DC
>Date: Saturday, October 16, 2010
Time: 10 AM - 3 PM

Samudra is volunteering to organize AMSAT's participation for the event.

Please contact him through e-mail (n3rdx@amsat.org) if you are interested and able to participate in any form.

NASM is looking for AMSAT members who would be interested in talking to the visitors about satellites. Because the focus of the day is Argentina, we are particularly interested in people with expertise in Argentinean satellites. Bonus points for members how can discuss Pehuensat-1 because Pablo de Leon, who was the payload manager, will be a featured speaker at the event.

AMSAT members would set-up tables with equipment, posters, and other items of interest to visitors. These tables would be staffed throughout the day by AMSAT members. You are welcome to volunteer for a couple of hours or the whole day. Free parking will be provided all, and lunch will be provided for people who volunteer the whole day.

Samudra will need to know:
+ Can you volunteer any exhibition/display resources (pictures, posters, etc.) ?
+ Can you volunteer your time on October 16, 2010 for any portion?
+ Can you provide any presentation materials relevant to Argentina in Air and Space?
+ Will you require transportation? etc. etc.

[ANS thanks Samudra Haque, N3RDX for the above information]

/EX

SB SAT @ AMSAT $ANS-241.07
New AO-51 Schedule As Satellite Enters Full Sun

AMSAT News Service Bulletin 241.07
>From AMSAT HQ SILVER SPRING, MD.
August 29, 2010
To All RADIO AMATEURS
BID: $ANS-241.07

AO-51 Command Team, Mark Hammond, N8MH said this week that according to projections, the next 100% illumination period for AO-51 has begun. Hopefully for the next week or two AO-51 can run both transmitters ON at reasonable power. The PL tone isn't needed (and hasn't been for the last few weeks).

FM Digital PBBS, U
Uplink: N/A
Downlink: 435.150 Mhz FM

FM Repeater, V/U
Uplink: 145.920 Mhz FM
Downlink: 435.300 Mhz FM

Even though AO-51 "sees sunlight" all the time, it doesn't "see" the sun equally throughout an orbit. So, the Operations Team is going to keep the power management software running in hopes they can optimize the transmitter power output and keep the battery temperatures down.

The way it is currently configured, AO-51 can run in one of three states, depending on available battery power:
1) HIGH   435.300 at 550 mW and 435.150 at 420 mW
2) MEDIUM 435.300 at 420 mW and 435.150 at 300 mW
3) LOW which currently sets both transmitters effectively to OFF

It is very likely that users will see the transmitter power going up and down some as the battery voltage goes up and down. AO-51 Operator hope the power changes do not occur too often, and adjustments will be made after collecting some telemetry over the next few days. The goal has always been to keep it ON and useable as much as possible, and the Command Team will do their best to continue that tradition.

Activity reports over the next few weeks to http://oscar.dcarr.org/ (or to n8mh AT amsat.org if AO-51 appears to be OFF) will be very much appreciated.

And finally--telemetry files (KISS format preferred) from around the world will be greatly appreciated for the next few weeks!

[ANS thanks Mark Hammond, N8MH for the above information]

/EX

SB SAT @ AMSAT $ANS-241.08
Satellite Shorts From All Over

AMSAT News Service Bulletin 241.08
>From AMSAT HQ SILVER SPRING, MD.
August 29, 2010
To All RADIO AMATEURS
BID: $ANS-241.08

+ SA AMSAT has introduced SAT Network, a regular discussion on satellites. The first SAT Network will discuss the payload options for the proposed SA AMSAT payload. It will be on the air on Sunday 29 August 2010 at 19:30. Marten, ZS6ZY, will relay on 3718 kHz and Chris, ZS6FCS, will take care of Echolink and the Webcast. (SA-Amsat http://www.amsatsa.org.za/)

+ A video showing reception of the first signals by the SUPSI team from the Amateur Radio CubeSat TI-SAT HB9DE, launched July 12, is available on YouTube. See: http://tinyurl.com/22keqkz

+ Monitor the Copenhagen Suborbitals webpage for the countdown of an amateur built rocket launch on August 30. See: http://www.copenhagensuborbitals.com/index.php

+ Two videos on YouTube video show the concept for a CubeSat propulsion system using plasma electrolysis of water. This prototype shows that thrust can be produced by plasma electrolysis - it burns water, so to speak. See: http://tinyurl.com/2csky34

+ The wakeup song has been a part of the space program since the days of the Apollo missions, and now NASA is giving you two chances to be a part of this history! We need your help selecting wakeup songs to be played during the final missions of the Space Shuttle Program. See: https://songcontest.nasa.gov/home.aspx

+ Fabiano CT7ABD/PY5RX, celebrated his August 25 birthday by having the crew aboard the International Space Station sing Happy Birthday directly from space. Listen Audio by CT1EAT: http://www.issfanclub.com/node/28329

+ Echolink for Android - the suppliers of Echolink have developed an app for the Android phone system and it is live as of now. Details at: http://www.echolink.org/faq_android.htm

+ This time lapse footage of views of sunrise and sunset was taken by astronaut Don Pettit. See: http://tinyurl.com/39c7ylh

+ A group of 4 operators will be operating as AO1EME from IN70qk on 2-5 September. The main goal will be EME on 144 MHz, but they'll also have a 70cm. 20 el. cross yagi and plan to operate on the satellites when there is no Moon and time permits. For more information, operation status, on-line logs, etc please visit: http://www.vhfdx.info/burguillo.html (Gabriel, EA6VQ)

+ The next "Hudson Valley Satcom" net date is Thursday Sept. 2 at 8PM (EDT, or 2400 UTC), on the improved "146.97" MBARC Repeater. (Pl. 100; down 600); with an echolink node of: N2EYH-L More info: http:www.hvsatcom.org/ (Stu WA2BSS)

+ ESA astronaut Paolo Nespoli, IZ0JPA has been scheduled for an ARISS refresher course on September 3, during which he will be briefed on procedures to install the VHF Ericsson amateur radio system in the Columbus module. Nespoli is slated to fly with Expedition 26 in November 2010.

+ Clint Bradford, K6LCS and Gordon West WB6NOA ran a very successful amateur satellite operations demonstration at the Orange County Fair earlier this month. This has been written up in the ARRL Southwestern Division's newsletter available on-line at: http://web.me.com/clintbradford/k6lcs/Docs_files/OCFAIR-2010.pdf Clint reports that CQ Magazine has also accepted their article proposal. Watch for it in an upcoming issue!

+ MMSSTV is an easy to use SSTV program for your PC which will allow you to receive and decode the SSTV signals from the ISS. Makoto Mori, JE3HHT has released version 1.12. MMSSTV can be downloaded from http://mmhamsoft.amateur-radio.ca/pages/mmsstv.php

[ANS thanks everyone for the above information]

/EX

SB SAT @ AMSAT $ANS-241.09
European Student Competition 'In The Can'

AMSAT News Service Bulletin 241.09
>From AMSAT HQ SILVER SPRING, MD.
August 29, 2010
To All RADIO AMATEURS
BID: $ANS-241.09

A story appearing at SpaceMart.com section of SpaceDaily.com (http://tinyurl.com/32lxyjo) on August 27 described the success of the first ESA CanSat competition.

High school students from different ESA Member States were able to watch their own 'satellites' soar into the sky aboard suborbital rockets during the first European CanSat competition, held at the Andoya Rocket Range in Norway.

The CanSat competition, organised by ESA's Education Office and the Norwegian Centre for Space-related Education (NAROM), was open to teams of at least four students, assisted by a teacher or tutor.

The selected teams had to build their own small CanSat 'satellite' in six months, with each team developing an experiment that would fit inside a 350 ml soft drink can. These investigations ranged from calculating variations in Earth's magnetic field and tracking the Sun, to measuring solar radiation and levels of carbon dioxide.

The most exciting day was 17 August, when the students were able to watch five Intruder rockets launch their CanSats from Skarsteindalen, a former military facility close to Andoya Rocket Range. The mini-payloads soared to an altitude of 1 km before parachuting back to Earth.

The culmination of the competition was the prize ceremony on 18 August, when the expert jury announced the results of its evaluation of the projects and selected the three winning teams:
+ The bronze award went to the Brussels Vikings team from Sint-Pieterscollege Jette in Belgium.
+ The silver award went to the Irish team Triailliu from Laurel Hill School.
+ The gold award winners were 'Team Eclipse' from St Paul's School in London, United Kingdom.

A CanSat is a simulation of a real satellite, integrated within the volume and shape of a regular soft drink can. CanSats offer unique opportunities for students to experience their first real space-related project. The participating countries in the first competition were Belgium, Czech Republic, Denmark, Greece, Italy, Ireland, Norway, Spain, Sweden and United Kingdom.

The European CanSat competition is one of many ESA hands-on initiatives to inspire young people to follow a career in science or engineering. In this way, it is hoped to ensure the availability of a highly qualified work force in the space industry of the future.

One of the primary objectives of the competition is to promote the CanSat concept in ESA Member States. Similar competitions already exist in some

ESA Member States and ESA is seeking to support additional CanSat activities from 2011.

[ANS thanks SpaceMart.com for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office. And, with that please recall the young ham who went to work in an office. While the IT department is setting up his computer they tell him to think of a password. The fella says his password will be 'mickey goofy minnie pluto donald and Washington'. The IT guy asks why in the world did he pick that password? He replied, "You told me it had to be five characters with a capitol!"

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM

```
From 2003682211475201665
X-Google-Thread: 10e8ad,9f9890833827cae3,start
X-Google-NewGroupId: yes
X-Google-Thread: 10b9c8,9f9890833827cae3,start
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,gida4a23d5f63,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx01.iad01.newshosting.com!newshosting.com!
198.186.194.249.MISMATCH!transit3.readnews.com!news-out.readnews.com!news-
xxxfer.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-242 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Mon, 30 Aug 2010 11:24:42 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 1868
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <001101cb4857$6e90d050$4bb270f0$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1283181883 4966 166.84.1.6 (30 Aug 2010 15:24:43 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Mon, 30 Aug 2010 15:24:43 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
x-cr-hashedpuzzle: AMjf Co5g C2BM DAJO DEbp DMKR DRl5 EEKv EWm7 ExFF FZX8 Fsng
GmzF Ii5p JBAG
JJ5d;1;cgBlAGMALQByAGEAZABpAG8ALQBpAG4AZgBvAEAAcABhAG4AaQB4AC4AYwBvAG0A;Sosha1_v1;
```

7;{A6BEC407-7BB9-4D8B-840A-
D52157DC3DED};awA5AGoAawBtAEAAYwBvAG0AYwBhAHMAdAAuAG4AZQB0AA==;Mon, 30 Aug 2010
15:24:14
GMT;VwBTAFIALQAyADQAMgAgAEEATQBTAEEAVAAgAFcAZQBlAGsAbAB5ACAAUwBhAHQAZQBsAGwAaQB0AG
UAIABSAGUAcABvAHIAdAA=
x-cr-puzzleid: {A6BEC407-7BB9-4D8B-840A-D52157DC3DED}
Xref: g2news1.google.com rec.radio.amateur.space:375 rec.radio.info:1683

This report is organized into four (4) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - deorbited/returned satellites

SB SAT @ AMSAT W8ISS $WSR-242.S1
WSR 242 Part 1 08/30/2010

AMSAT NEWS SERVICE BULLETIN 242.S1
FROM AMSAT HQ SILVER SPRING, MD, August 30, 2010
TO ALL RADIO AMATEURS
BID: $WSR-242.S1

HO-68 XW-1 (CAS-1)
Catalog Number:
Launch Date: December 15, 2009
Status: Commissioning

Callsign:
Broadcast: BJ1SA-11
BBS: BJ1SA-12

Uplinks: 145.8250 MHz FM, PL 67.0 Hz.
           145.9250 - 145.9750 MHz SSB/CW
           145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
           435.7650 - 435.7150 MHz SSB/CW
           435.6750 MHz AFSK 1200 BPS

Beacon: 435.7900 MHz CW

Mode and Antenna Polarization:
V: LHCP 2.0dBi max
U: RHCP 3.0dBi max

IARU coordination page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108

For more information about XW-1 (CAS-1):
http://www.camsat.cn
[04222010]
=====
SO-67 SumbandilaSat
Catalog Number: 35870

```
Launch Date: September 17, 2009

Status: Suspended

Callsign: ZS0SUM

Uplink:   145.875MHz FM tone 233.6 Hz
Downlink: 435.345MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

For more information about SO-67:
http://www.amsatsa.org.za/
[11212009]
=====
DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008

Status: Operational
Current Mode: Science Mode - Beacon ONLY

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink:   435.530 to 435.570 MHz

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68
[02122009]
=====
VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink:   435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink:   435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW


Indian Beacon:  145.9360 MHZ CW
```

Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

To know what transponder is switched on please listen for the beacon that is active. Each transponder has a different beacon.
[03082010]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Mode:
Uplink: 145.920 MHz FM - 67 Hz PL tone burst
Downlink: 435.300 MHz FM
Telemetry
Downlink: 435.150MHz 9k6

Analog voice downlink:	435.300 MHz FM
	435.150 MHz FM
	2401.200 Mhz FM
Analog voice uplink:	145.860 MHZ FM
	145.880 MHz USB
	145.880 MHz FM
	145.920 MHz FM
	145.920 MHz FM - 67 Hz PL tone burst
	1268.700 MHz FM
Digital Downlinks:	435.150 MHz FM 38k4 PBP, 1 watt output
	435.150 MHz FM 9k6 Pacsat Broadcast Protocol
	2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:	145.860 MHz FM 9k6 Pacsat Broadcast Protocol
	1268.700 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon:	435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

```
IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[06292010]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002

Status: Operational

Current Mode: V/u

Uplink:   145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4
Hz. The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute
   timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the re-
   peater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset
   the 10 minute timer.
[05282007]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: sCHEDULED oPERATIONS
Current Mode: V/u (Mode JA)

Voice/CW (Mode JA)
Uplink:   145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon:   435.795 MHz

Digital Mode JD
Uplinks:  145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz
```

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage:
http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's
CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/
fo29cwts.htm
[02132010]
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993

Status: Operational

Current Mode: V/u

```
Uplink:   145.850 MHz FM
Downlink: 436.797 MHz FM
```

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[03232009]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational

Current Mode: Alternating between Mode A and B every 24 hours

```
Uplink:   145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink:  29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons:   29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
```

2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
[02122009]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - OFF
Voice - V/v
BBS - OFF
APRS - OFF
SSTV - OFF

Expedition 24 Crew:
Commander: Alexander Skvortsov
Flight Engineer: Tracy Caldwell Dyson KF5DBF
Flight Engineer: Mikhail Kornienko RN3BF
Flight Engineer: Doug Wheelock KF5BOC
Flight Engineer: Shannon Walker KD5DXB
Flight Engineer: Fyodor Yurchikhin RN3FI

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear

U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[07302010]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-242.S2
WSR 242 Part 2 08/30/2010

AMSAT NEWS SERVICE BULLETIN 242.S2
FROM AMSAT HQ SILVER SPRING, MD, August 30, 2010
TO ALL RADIO AMATEURS
BID: $WSR-242.S2

StudSat : India CubeSat
Catalog Number: 36796
Launch Date: July 12, 2010
Status: On Orbit

Uplink: 437.505MHz, 9600bps FSK
Downlink: 437.505MHz, 9600bps FSK
Beacon : 437.505MHz, 20bps ASK
[08062010]
=====
TIsat-1: Swiss CubeSat
Catalog Number: 36799
Launch Date: July 12, 2010
Status: On orbit

Callsign: HB9DE

Uplink: 145.980MHz FM, AFSK
Downlink: 437.305MHz FM, AFSK
Beacon: 437.305MHz CW
[08062010]
=====
HO-68 XW-1 (CAS-1)

```
Catalog Number:
Launch Date: December 15, 2009
Status: Operational

Callsign:
Broadcast:    BJ1SA-11
BBS:         BJ1SA-12

Uplinks:   145.8250 MHz FM, PL 67.0 Hz.
           145.9250 - 145.9750 MHz SSB/CW
           145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
           435.7650 - 435.7150 MHz SSB/CW
           435.6750 MHz AFSK 1200 BPS

Beacon:    435.7900 MHz CW

IARU coordination page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108

For more information about XW-1 (CAS-1):
http://www.camsat.cn
[04222010]
=====
SwissCube
Catalog Number: 35932
Launch Date: September 23, 2009

Status: Operational

Callsign: HB9EG

Beacon(100mw): 437.5050MHz CW
Beacon(1w):    437.5050MHz FSK 1k2bps
[04222010]
=====
UWE-2
Catalog Number: 35934
Launch Date: September 23, 2009

Status: In Orbit

Beacon(500mw): 437.3850 MHz AFSK 1k2bps
               437.3850 MHz FSK 9k6bps
[1112009]
=====
ITUpsAT1
Catalog Number: 35935
Launch Date: September 23, 2009

Status: Operational

Beacon(100mw): 437.325MHz CW
Beacon(1w): 437.325MHz 19k2bps
[11112009]
=====
BEESAT
Catalog Number: 35933
Launch Date: September 23, 2009

Status: Operational

Callsign: DP0BEE

Beacon(100mw): 436.000MHz CW
Beacon(500mw): 436.000MHz GMSK 4k8bps
Beacon(500mw): 436.000MHz GMSK 9k6bps
[04222010]
=====
Pollux
Catalog Number:
Launch Date: July 31, 2009

Status: Operational

Callsign: POLLUX-1

Downlink: 145.825MHz 1k2 AX.25
[10042009]
=====
Castor (ANDE-2)
Catalog Number:
Launch Date: July 31, 2009

Status: Operational

Callsign: KD4HBO-1

Downlink: 145.825 MHz 1k2 AX.25
[10042009]
=====
BEVO-1 (DRAGONSAT-1)
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Operational

Downlink: 437.325 MHz 9k6 GMSK
          437.325 MHz CW 20wpm
[07312009]
=====
AggieSat2 (DRAGONSAT-2)
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Operational
```

```
Downlink: 436.250 MHz 9k6 FHSS
[11112009]
=====
CP-6
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Commissioning

Downlink: 437.365 MHz 1k2 AFSK
[06052009]
=====
HAWKSAT 1
Catalog number: 35003
Launch Date: May 19, 2009

Status: ?

Downlink: 437.345 ?
[06052009]
=====
Pharmasat
Catalog Number: 35002
Launch Date: May 19, 2009
Status: Commissioning

Downlink: 437.465 MHz 1k2 AFSK
[06052009]
=====
ANUSAT
Catalog Number: 34808
Launch Date: April 20, 2009

Status: ?

Downlink:  435.000 MHz
Uplink:    145.800 MHz

Telemetry: 137.400 MHz
[05112009]
=====
SOHLA-1 (ASTRO TECH.)
Catalog Number: 33496
Launch Date: January 23, 2009

Status: Commisioning

Proposed Frequencies and Modes:
Downlink: 437.505 MHz AFSK/CW
Beacon:   437.505 MHz AFSK/CW

Callsign:
```

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=101
[03232009]
=====
KAGAYAKI (Solan Co.)
Catalog Number: 33495?
Launch Date: January 23, 2009

Status: In Orbit

Downlink: 437.375 MHZ   FSK9k6/CW
Beacon: 437.375 MHz   FSK9k6/CW

IARU coordination status page:

AMSAT-NA webpage:

[01152009]
=====
STARS (Kagawa Univ.) (Twin Satellites)
Catalog Number: 33498
Launch Date: January 23, 2009

Status: Operational ?

Downlinks: 437.485 MHz FM/CW
           437.465 MHz FM/CW
Beacons: 437.305 MHz FM/CW
           437.275 MHz FM/CW

Callsigns: JR5YBN
           JR5YBO

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=99

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=121&retURL
=/satellites/status.php
[022152009]
=====
KKS-1 (Tokyo MCIT)
Catalog Number: 33499
Launch Date: January 23, 2009

Status: Operational

Downlink: 437.455 MHz AFSK/CW
Beacon: 437.385 MHz AFSK/CW

Callsign: JQ1YYY

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=107

AMSAT-NA webapge:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=120&retURL
=/satellites/status.php
[02212009]
=====
PRISM (Tokyo Univ.)
Catalog Number: 33493
Launch Date: January 23, 2009

Status: Operational ?

Downlink: 437.425 MHz AFSK/GMSK/CW
Beacon: 437.250 MHz AFSK/GMSK/CW

Callsign: JQ1YCX

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=97

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=119&retURL
=/satellites/status.php
[02212009]
=====
RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number: 32953
Launch Date: May 23, 2008

Status: Operational

Curent Modes: Telemetry
              Audio
              Images

Downlinks: 435.315 MHz
           435.215 MHz

AMSAT-NA website:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=115&ret
URL=/satellites/status.php

Official website:
http://www.npopm.com/?cid=leoca&caid=43
[02122009]
=====
CanX-2
Catalog number: 32790
Launch Date: April 28, 2008

Status: Operational in range of ground station only

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web
page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[02212009]
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.425 MHz 1k2 baud packet

For the latest project status update please visit the AAUSAT-II web
page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[02212009]
=====
CO-65 CUTE-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008

Status: Digipeater

Downlink: 437.475 MHz 9k6 Packet
Uplink: 1267.600 Mhz

Telemetry Beacon:
Downlink: 437.2750 MHz CW

For the latest project status update please visit the Cute-1.7+APD II
web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78

Command Station blog website:
http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=112&retURL
=/satellites/status.php
[02212009]
=====
Compass-1

```
Catalog number: 32787
Launch Date: April 28, 2008

Status: Operational

Current Mode: 4k8 MSK packet

Uplink:   145.980 MHz FM
Downlink: 437.275 Mhz CW
          437.405 MHz Packet

For the latest project status update please visit the Compass 1 web
page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=114&retURL
=/satellites/status.php
[04272009]
=====
CO-66 Seeds II
Catalog number: 32791
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.485 MHz

Callsign: JQ1YGU

For the latest project status update please visit the Seeds 2 web
page: http://cubesat.aero.cst.nihon-u.ac.jp/english/seeds_2_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=113&retURL
=/satellites/status.php
[02212009]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode:  /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon:    435.245 MHz CW
```

```
Callsign: K5USL

TLM and CW interchange every 30 seconds.

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=94&retURL=
/satellites/status.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=72
[02122009]
=====
CP3
Catalog Number: 31129
Launch Date: April 17,2007

Status: Operational

Current Mode:  /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[02122009]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon:             437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/xivpicte.htm
[02212009]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003

Status: ?????

Current Mode: /u

Beacon:     436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS
```

Callsign: JQ1YGW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=96&retURL=/satellites/status.php

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[06082009]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Operational?

Uplink: 1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=56
[02122009]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Mode:
Uplink: 145.920 MHz FM - 67 Hz PL tone burst
Downlink: 435.300 MHz FM
Telemetry
Downlink: 435.150MHz 9k6

Analog voice downlink:	435.300 MHz FM
	435.150 MHz FM
	2401.200 Mhz FM
Analog voice uplink:	145.860 MHZ FM
	145.880 MHz USB
	145.880 MHz FM
	145.920 MHz FM
	145.920 MHz FM - 67 Hz PL tone burst
	1268.700 MHz FM
Digital Downlinks:	435.150 MHz FM 38k4 PBP, 1 watt output
	435.150 MHz FM 9k6 Pacsat Broadcast Protocol

```
                          2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:            145.860 MHz FM 9k6 Pacsat Broadcast Protocol
                          1268.700 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon:                    435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[06292010]
=====
QuakeSat
Catalog Number: 27845
Launch Date: June 30, 2003

Status: Telemetry only

Current Mode: 9600 baud data packet

Mode U packet
Downlink: 436.675 MHz 9k6 BPS

Quakesat webpage:
http://www.quakefinder.com/services/quakesat-ssite/
[04272009]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW

AMSAT-NA webpage:
```

```
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=69&retURL
=/satellites/status.php
[02212009]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Telemetry only

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink:        144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[03302009]
=====
RS-22 RADIO SPORT 22
Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only

Current Mode:  /u

CW Beacon - 435.352 MHz
            145.818 MHz

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=76&retURL
=/satellites/status.php
[02212009]
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990

Status: CW Beacon only

Uplinks:          145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink:      437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
```

BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[03162009]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984

Status: Non-operational.

Current Mode: /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon: 435.025 MHz
Mode-S Beacon: 2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[12162009]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - OFF
Voice - V/v
BBS - OFF
APRS - OFF
SSTV - OFF

Expedition 24 Crew:

Commander:	Alexander Skvortsov	
Flight Engineer:	Tracy Caldwell Dyson	KF5DBF
Flight Engineer:	Mikhail Kornienko	RN3BF
Flight Engineer:	Doug Wheelock	KF5BOC
Flight Engineer:	Shannon Walker	KD5DXB
Flight Engineer:	Fyodor Yurchikhin	RN3FI

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:

Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time line is NOT translated from Russian and posted.
[07302010]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-242.S3
WSR 242 Part 3 08/30/2010

AMSAT NEWS SERVICE BULLETIN 242.S3
FROM AMSAT HQ SILVER SPRING, MD, August 30, 2010
TO ALL RADIO AMATEURS
BID: $WSR-242.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

CP4
Catalog Number: 31122
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon: 437.325 MHz CW

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=79
[10022008]
=====
LIBERTAD-1
Catalog Number: 31128
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink: 145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[02122009]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: Non-Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder: 145.825 Mhz FM
[01012009]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
                              2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894

```
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink:         437.250 MHz FM 67Hz CTCSS
Voice Downlink:      2401.835 MHz FM
Packet Up/Downlink:   437.250 MHz 9k6 packet
Packet Downlink      2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non-Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[08132007]
=====
CANX-1
Catalog Number: 27847
Launch Date: June 30, 2003

Status: Non-Operational

Downlink: 437.8800 MHz AFSK 1k2bps
[06052009]
=====
DTUSAT
Catalog Number: 27842
Launch Date: June 30, 2003

Status: Non-Operational

Current Mode: 2k4 AFSK Packet last reported

Downlink: 437.475MHz

Officail webpage: http://dtusat1.dtusat.dtu.dk/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=101&retURL
=satellites/all_oscars.php
[02212009]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002
```

```
Status: Non-operational.

Uplink:   435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)

Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Telemetry only

Uplinks:   145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink:  437.325 MHz

Broadcast callsign: MYSAT3-11
BBS:                MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial land and weather imaging payloads offers FM and FSK
Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as
a collaborative effort between the Malaysian government and Surrey
Satellite Technology Ltd.
[03302009]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink:   145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational
```

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks

V-band: 145.840 - 145.990 MHz CW/LSB
U-band: 435.550 - 435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks

S2-band: 2401.225 - 2401.475 MHz CW/USB
K-band: 24048.010 - 24048.060 MHz CW/USB
Beacon: 2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)

BEACON	General Beacon(GB)	Middle Beacon(MB)	Engineering Beacon(EB)
2 m	none	145.898 MHz	none
70cm	435.438 MHz	435.588 MHz	435.838 MHz
13cm(1)	2400.188 MHz	2400.338 MHz	2400.588 MHz
13cm(2)	2401.173 MHz	2401.323 MHz	2401.573 MHz

3cm	10450.975 MHz	10451.125 MHz	10451.375 MHz
1.5cm	24047.885 MHz	24048.035 MHz	24048.285 MHz

[07162007]
=====
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: 25636
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Non-Operational

Current Modes:
Telemetry : /u

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks: 145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://asri.technion.ac.il/techsat/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=14&retURL=/satellites/status.php
[07172010]
=====
TO-31 TMSAT-1
Catalog number: 25396

Launch Date: July 10, 1998

Status: Non-operational

Uplink: 145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
MO-30 UNAMSAT-2
Catalog Number: 24305
Launch Date: September 5, 1996

Status: Non-operational

Downlink: 435.1380 MHz AFSK 1200 BPS
Downlink: 435.2060 MHz AFSK 1200 BPS
Uplink: 145.8150 MHz AFSK 1200 BPS
Uplink: 145.8350 MHz AFSK 1200 BPS
Uplink: 145.8550 MHz AFSK 1200 BPS
Uplink: 145.8750 MHz AFSK 1200 BPS
[06042009]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Non-operational

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012009]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks: 145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud

```
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
AO-24 ARSENE
Catalog Number: 22654
Launch Date: May 13, 1993

Status: Non-operational

Uplink:    435.0625 MHz FM 1k2bps AFSK
           435.1125 MHz FM 1k2bps AFSK
           435.1375 MHz FM 1k2bps AFSK
Downlink:  145.9750 MHz FM 1k2bps AFSK
          2446.5025 MHz FM 1k2bps AFSK

Beacon:    2446.4700 MHz CW

Broadcast callsign:
BBS:
[12162009]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HLO1-11
BBS: HLO1-12
```

```
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990
```

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink: 145.825 MHz FM 1200 Baud AFSK
Beacon: 2401.220 MHz
[05012006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: non-operational

Current Mode: V/u

Uplink: 145.900 MHz FM 1200-baud Manchester FSK (reserved)
                145.920 MHz FM VOICE
                145.940 MHz FM 1200-baud Manchester FSK (reserved)
                145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink: 437.026 MHz USB VOICE
                (1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC 437.050 MHz RHCP
   PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[07242009]
=====
UO-15 UoSAT-4
Catalog Number: 20438
Launch Date: January 22, 1990

Status: Non-operational

Uplink: ?
Downlink: 435.1250MHz (?)
          435.1200MHz (?)

```
[06042009]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon:   145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational
```

```
Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink  29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
Beacons:   29.450 MHz
          435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational
```

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB

Beacon 1: 29.352 MHz (intermittent)
Beacon 2: 29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB

Beacon: 145.860 MHz

Robot: 145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-242.S4
WSR 242 Part 4 08/30/2010

AMSAT NEWS SERVICE BULLETIN 242.S4
FROM AMSAT HQ SILVER SPRING, MD, August 30, 2010
TO ALL RADIO AMATEURS
BID: $WSR-242.S4

THE FOLLOWING SATELLITES HAVE RE-ENTERED OR HAVE BEEN RETURNED SAFELY:

NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

```
Status: Re-Entered
Re-entered: July 28, 2008

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[01012009]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink:      145.825 Mhz FM APRS AX25
APRS Uplink:        145.825 MHz FM APRS AX25
Voice/PSK31 Uplink:  28.120 MHz

Packet to Voice ID: RAFT
[06112007]
=====
GENESAT-1
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Re-Entered
Re-entered date: August 8, 2010

Current Mode: /u

Callsign: KE7EGC

Telemetry Beacon Downlink: 437.0695 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[08082010]
=====
HO-59 HITSat
Catalog number: 29484
```

Launch date: September 22, 2006

Status: Re-Entered
Re-entered: June 18, 2008

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon: 437.2750 MHz CW

Callsign: JR8YJT
[01012009]
=====
SO-43 Starshine 3
Catalog Number: 26929
Launch Date: September 30, 2001

Status: Re-Entered
Re-entered: January 21, 2003

Beacon: 145.825Mhz
[02212009]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

- AMSAT News Service (ANS)
- General satellite discussion (AMSAT-BB)
- Orbit data (KEPS)
- Manned space missions (SAREX)
- District of Columbia area (AMSAT-DC)
- New England area (AMSAT-NE)
- AMSAT Educational Liaison mailing list (AMSAT-EDU)
- AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL: http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at} amsat.org
NNNN
/EX

```
From 6277339503774187019
X-Google-Thread: fcc6e,504d62ebaadc187c,start
X-Google-NewGroupId: yes
X-Google-Thread: 11480d,504d62ebaadc187c,start
X-Google-NewGroupId: yes
X-Google-Thread: 108122,504d62ebaadc187c,start
X-Google-NewGroupId: yes
X-Google-Thread: fc2a5,504d62ebaadc187c,start
X-Google-NewGroupId: yes
X-Google-Thread: 107ada,504d62ebaadc187c,start
X-Google-NewGroupId: yes
X-Google-Thread: 10bf43,504d62ebaadc187c,start
X-Google-NewGroupId: yes
X-Google-Thread: 10e8ad,504d62ebaadc187c,start
X-Google-NewGroupId: yes
X-Google-Thread: 10b9c8,504d62ebaadc187c,start
X-Google-NewGroupId: yes
X-Google-Attributes:
gid4baf9708d4,gid7221ecd0f7,gidd7f5508063,gid241b302a50,gida3e752f117,gide721ae2bf
6,gid8f86f75953,gida4a23d5f63,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!newsfeed2.dallas1.level3.net!
news.level3.com!panix!panix2.panix.com!not-for-mail
From: rram@panix.com (rec.radio.amateur.moderated Admin)
Newsgroups:
rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.rad
io.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amat
eur.space,rec.radio.info
Subject: Crossposting Permitted to rec.radio.amateur.moderated
Supersedes: <radio/ham-radio/moderated/crossposting-1-1280642401@panix.com>
```

Followup-To: poster
Date: 1 Sep 2010 02:00:02 -0400
Organization: rec.radio.amateur.moderated Moderation Team
Lines: 47
Approved: RRI Admin <rec-radio-info-request@panix.com>
Distribution: world
Expires: 04 Oct 2010 02:00:00 -0000
Message-ID: <radio/ham-radio/moderated/crossposting-1-1283320800@panix.com>
Reply-To: rec-radio-amateur-moderated-request@panix.com
(rec.radio.amateur.moderated Admin)
NNTP-Posting-Host: panix2.panix.com
X-Trace: reader1.panix.com 1283320802 23527 166.84.1.2 (1 Sep 2010 06:00:02 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Wed, 1 Sep 2010 06:00:02 +0000 (UTC)
Summary: Short reminder for unmoderated newsgroups that crossposting is permitted
Keywords: FAQ, ham, amateur, radio, moderated, unmoderated, crossposting,
permitted
Xref: g2news1.google.com rec.radio.amateur.antenna:18194 rec.radio.amateur.dx:707
rec.radio.amateur.equipment:2200 rec.radio.amateur.homebrew:3786
rec.radio.amateur.misc:5223 rec.radio.amateur.policy:28183
rec.radio.amateur.space:376 rec.radio.info:1688

Posted-By: auto-faq 3.3.2 beta (PGPMoose V2.0, Perl 5.005)
Archive-name: radio/ham-radio/moderated/crossposting
Revision: 1.1 2009/04/12 19:42:04
Posting-Frequency: posted monthly
URL: http://www.panix.com/~rram/usenet/rram/index.html

Changes followed by "|".

After a 30-day public discussion and feedback period to gauge reader opinions in March of 2009:

http://groups.google.com/group/rec.radio.amateur.moderated/browse_thread/thread/
d7d337db35f23326

the rec.radio.amateur.moderated Moderation Team has decided to consider amending its charter, and permit limited simultaneous crossposting to rec.radio.amateur.moderated and one other unmoderated amateur-radio-related discussion newsgroup. We are currently trying this on a temporary basis (90 days, through early July 2009), and adopt it permanently if successful.

Approved rec.radio.amateur.* newsgroups are those that are currently listed in the latest version of the "List of Big Eight Newsgroups" which is crossposted monthly to news.announce.newgroups, news.groups, and news.lists.misc.

Approved alt.radio.amateur.* and alt.ham-radio.* newsgroups are those that have been created consistent with the suggestions in "So You Want to Create an Alt Newsgroup" at:

  http://www.faqs.org/faqs/alt-creation-guide/

Approved regional hierarchy newsgroups are those that contain either "radio.amateur" or "ham-radio" in their names, including uk.radio.amateur and aus.radio.amateur.misc.

We will make every reasonable effort to keep our list of approved newsgroups up-to-date. In case we have overlooked any, and a submission is rejected in error as a result, the rejected submitter can E-mail us at our administrative contact address (in the signature at the bottom of this article, and the default Reply-To for the rejection message) requesting that it be added, and that the article be approved. We may still choose to reject articles crossposted to any alt.* newsgroup with an inappropriate name, including obscene language, embedded name-calling, or encouragement of unlawful conduct.

Please direct any comments, questions, or criticisms to rec-radio-amateur-moderated-request@panix.com.

```
From -376176008470545156
X-Google-Thread: 10e8ad,2707835f9e4a4f4d,start
X-Google-NewGroupId: yes
X-Google-Thread: 10b9c8,2707835f9e4a4f4d,start
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,gida4a23d5f63,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII
Path: g2news1.google.com!news2.google.com!npeer02.iad.highwinds-media.com!
news.highwinds-media.com!feed-me.highwinds-media.com!news-
in-02.newsfeed.easynews.com!easynews.com!easynews!newsfeed1.dallas1.level3.net!
newsfeed3.dallas1.level3.net!news.level3.com!bloom-beacon.mit.edu!panix!
rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-248 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sun, 5 Sep 2010 10:34:52 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 281
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000e01cb4d07$7b4ec220$71ec4660$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
X-Trace: reader1.panix.com 1283697292 23855 166.84.1.6 (5 Sep 2010 14:34:52 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 5 Sep 2010 14:34:52 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
```

X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news1.google.com rec.radio.amateur.space:377 rec.radio.info:1702

AMSAT NEWS SERVICE
ANS-248

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:
* Reminder: Deadline to Return Board of Directors Ballots is Sept. 15
* Reminder: Important Symposium Dates Approaching
* ISRO Success Inspires India University Satellite Development
* Satellite Shorts From All Over
* ARISS Status - 30 August 2010

SB SAT @ AMSAT $ANS-248.01
Reminder: Deadline to Return Board of Directors Ballots is Sept. 15

AMSAT News Service Bulletin 248.01
>From AMSAT HQ SILVER SPRING, MD.
September 5, 2010
To All RADIO AMATEURS
BID: $ANS-248.01

AMSAT Corporate Secretary, Alan Biddle WA4SCA reminds all members that the deadline for submitting your ballot is rapidly approaching. In order to be counted, they must be received at the AMSAT office by the close of business on Wednesday, September 15th. The results will be announced as quickly as possible, with the new directors assuming their position immediately upon the formal announcement of the results. As always, this very direct feedback is essential for AMSAT to continue to represent its membership!

[ANS thanks AMSAT Corporate Secretary, Alan Biddle WA4SCA for the above information]

/EX

SB SAT @ AMSAT $ANS-248.02
Reminder: Important Symposium Dates Approaching

AMSAT News Service Bulletin 248.02
>From AMSAT HQ SILVER SPRING, MD.
September 5, 2010
To All RADIO AMATEURS
BID: $ANS-248.02

Two important deadlines are approaching for AMSAT's 2010 Space Symposium and Annual General Meeting being held on Friday, October 8 through Sunday, October 10.

EARLY SYMPOSIUM REGISTRATION EXPIRES SEPTEMBER 15

The early Symposium conference fee of $40 expires on September 15. Your conference fee includes entrance to the Symposium, refreshments and a copy of the 2010 Symposium Proceedings:

$40.00 per person before 15 September 2010
$45.00 from 21 September through 5 October
Online registration closes 5 October at Midnight.
Registration at the door will be $50.00.

You can register for the Symposium on-line at the AMSAT Store:
http://www.amsat-na.com/store/SymposiumReg.php

RESERVED ROOMS SPECIAL RATE EXPIRES ON SEPTEMBER 24

The block of reserved hotel rooms at the Chicago/Elk Grove Holiday Inn is available until September 24. This hotel is located west of O'Hare Airport at 1000 Busse Road, Elk Grove Village, IL 60007.

The registration code for the discount rate of $79.00 per night is AMS. The direct link to the www.holidayinn.com hotel web page is: http://tinyurl.com/2aptoeu You can also reach this page from the Symposium web page at:
http://www.amsat.org/amsat-new/symposium/2010/Hotel.php
The telephone number at the hotel is 1-847-437-6010

FLIGHT & AIRPORT INFORMATION

Chicago-O'Hare International Airport is the closest to the Chicago/Elk Grove Holiday Inn Hotel. The hotel offers free hourly shuttle service to and from O'Hare Airport. Call the hotel upon arrival to let them know to come pick you up.

Caution! Several cheap flights to/from Chicago go to Midway Airport. Note that Chicago-Midway Airport is approximately 40 miles from the hotel and will require commuting or a $22.00 Shuttle fee. O'Hare Airport is served by all major air carriers.

Getting there by car:
The hotel address is 1000 Busse Road, Elk Grove Village, IL 60007.
A map link is included on the hotel web page.
The GPS coordinates are 42� 00' 37.30" N   87� 57' 36.5" W.

[ANS thanks the 2010 Symposium Committee for the above information]

/EX

SB SAT @ AMSAT $ANS-248.03
ISRO Success Inspires India University Satellite Development

AMSAT News Service Bulletin 248.03
>From AMSAT HQ SILVER SPRING, MD.
September 5, 2010
To All RADIO AMATEURS
BID: $ANS-248.03

An August 26 story, "Indian universities aspire to launch student satellites", published on Calcutta News.Net carries a news item reporting that, "Around 25 universities are aspiring to launch satellites built by their students but the Indian space agency says its hands are full as it has to launch four more student satellites by the end of next year.

University students across India are clearly ignited by the successful launch last month by the Indian Space Research Organisation (ISRO) of the first Pico-satellite (StudSat) built by about 40 under-graduates from four engineering colleges from Karnataka and three from Andhra Pradesh.

'We have received around 25 proposals requesting us to guide, support and launch the satellites made by the students. Some of them have begun working on the proposals,' the project director of small satellites at ISRO's Satellite Centre (ISAC) Raghav Murthy told reporters on the margins of the second space exhibition and conference here.

Murthy declined to name the universities.

ISRO appears in no mood to take up new launches anytime soon.

'We want to launch the four more student satellites which are already in the making. We expect that all the launches will be completed by the end of 2011,' Murthy said.

The four satellites are being made by students of Indian Institutes of Technology Kanpur and Bombay (one each) and Tamil Nadu-based Satyabhama University and SRM University (two jointly).

The IIT-K satellite, called Jugnu, weighs three kg and carries a camera to study the near infrared region while IIT-B students have named their 3.5 kg product Pratham to measure the total electron content in the ionosphere.

The Satyabhama and SRM students are building two satellites weighing up to seven kilograms each to measure the carbon dioxide content in the atmosphere of the lower earth orbit.

The four satellites are being built by the B. Tech students, Murthy said.

The 40-kg Anusat readied by the students of Anna University in Chennai was the first student satellite launched in April 2009. It carried an amateur radio store and advanced communications system.

The Studsat launched in July this year is said to be 80 percent successful
in achieving its objectives.

'Building a satellite is educating students on space technology. It is also an inter-disciplinary study of physics, mechanics, control engineering,
communications, computer science,' Murthy said.

ISRO provides guidance, consultancy, support, training and free launch services to the students.

Putting together a satellite costs up to Rs.1 crore (Rs. 10 million) which
is funded by the respective universities/institutiuons.

Original story is published at: http://www.calcuttanews.net/story/677323

[ANS thanks Calcutta News.Net for the above information]

/EX

SB SAT @ AMSAT $ANS-248.04
Satellite Shorts From All Over

AMSAT News Service Bulletin 248.04
>From AMSAT HQ SILVER SPRING, MD.
September 5, 2010
To All RADIO AMATEURS
BID: $ANS-248.04

+ An online video report of space related activities is available from UniverseToday.com: http://www.universetoday.com/72403/this-week-in-space-7/

+ Keep an eye on the South Africa AMSAT web page for the expanded SO-67 operating schedule which now includes North America and South America: http://www.amsatsa.org.za/

+ An article on Space-Travel.com shows a photo of the ARISS antenna built by Lou McFadin W5DID on the Station's Columbus laboratory as it is being used to track Automatic Identification System (AIS) signals from ships at sea. The full story is availale on-line at: http://tinyurl.com/2cgkd5z

+ ARISS Public Relations Chairman, Dave, AA4KN says that ARISS has moved into the social networking realm. You are invited to visit the ARISS Facebook Page at http://tinyurl.com/2d2sfrv

+ Patrick Stoddard WD9EWK/VA7EWK has released videos showing Amateur Radio satellite operation during his recent trip to Mexico. You can view them on-line at: http://www.youtube.com/va7ewk and at: http://tinyurl.com/27x7pdw (SouthGateARC site).

+ Congratulations to Michael, K4MOA on his successful Satellite Demonstration on August 26 at the Isothermal Amateur Radio Club in Rutherford County, NC. Michael worked 5 stations during the demo. Eighteen amateur radio operators were there for his presentation during the meeting.

+ John, LA2QAA noted that AO-7 has now operated longer this second time around compared to the first time from the 1974 era. The best way to rattle John's cage is via e-mail at: la2qaa@amsat.org

[ANS thanks everyone for the above information]

/EX

SB SAT @ AMSAT $ANS-248.05
ARISS Status - 30 August 2010

AMSAT News Service Bulletin 248.05
>From AMSAT HQ SILVER SPRING, MD.
September 5, 2010
To All RADIO AMATEURS
BID: $ANS-248.05

1. Successful Contact with South Hobart Primary School

On Friday, August 27, South Hobart Primary School in South Hobart, Tasmania, Australia experienced a successful Amateur Radio on the International Space Station (ARISS) contact via telebridge station K6DUE in Greenbelt, Maryland. On-orbit astronaut Doug Wheelock, KF5BOC answered 7 out of 10 prepared questions before the ISS went over the horizon. ARISS member Dave Taylor stepped in to provide answers to the last few questions. The ARISS contact was incorporated into the school science curriculum through lessons covering the solar system, space exploration and the history of astronomy.

2. Crew Sends Birthday Wishes to ARISS Member

On August 25, onboard ISS crewmembers Doug Wheelock, Mikhail Kornienko, Alexander Skvortsov and Fyodor Yurchikhin sang "Happy Birthday" to ARISS

member Fabiano Moser, CT7ABD during a general ARISS contact. A recording of the contact may be found here: http://www.issfanclub.com/node/28329

[ANS thanks Carol, KB3LKI, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the
President's
Club. Members of the President's Club, as sustaining donors to AMSAT
Project
Funds, will be eligible to receive additional benefits. Application
forms
are
available from the AMSAT Office.

73,
This week's ANS Editor,
Lee McLamb, KU4OS
ku4os at amsat dot org

```
From -3936554207368771036
X-Google-Thread: 10e8ad,c2cbdb27deefecc1,start
X-Google-NewGroupId: yes
X-Google-Thread: 113975,c2cbdb27deefecc1,start
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,gidaddc8bf063,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news4.google.com!feeder.news-service.com!
news.astraweb.com!border5.a.newsrouter.astraweb.com!not-for-mail
From: Chris Steyaert <observations@rmob.org>
Newsgroups: rec.radio.amateur.space,sci.astro.amateur
Subject: Radio Meteor Obs. Bull. August 2010  Perseids
Date: Tue, 07 Sep 2010 21:20:29 +0200
Message-ID: <424d861i1j6ocl5aashdvrfhcuoqsu4pj5@4ax.com>
X-Newsreader: Forte Agent 5.00/32.1171
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Lines: 14
Organization: Unlimited download news at news.astraweb.com
NNTP-Posting-Host: 0e06ab4f.news.astraweb.com
X-Trace: DXC=;4=IHoVngjH;VG4<An`lKBL?0kYOcDh@J_Gc:
[NOgJOHDFdlYKH@@T@COQ1kOkAIACJK68o2Km;dDi0>l?IXNT0D
Xref: g2news1.google.com rec.radio.amateur.space:378 sci.astro.amateur:37578
```

Radio Meteor Observation Bulletin No. 205 of August 2010 (102 K) is available
now as

http://www.rmob.org/rmobtext/rmob1008.txt

More information and the visual presentation of the hourly forward scatter counts can be found on

http://www.rmob.org

Chris

```
From 2644932324546652254
X-Google-Thread: 10e8ad,76896a0d1f3c182f,start
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,domainid0,public,usenet
X-Google-Language: ENGLISH,CP1252
Path: g2news1.google.com!postnews.google.com!j2g2000vbo.googlegroups.com!not-for-
mail
From: claudeh <hclaudioblanco@gmail.com>
Newsgroups: rec.radio.amateur.space
Subject: Availables : More that 3750 Solutions manuals and Test Banks (Part 1)
Date: Mon, 20 Sep 2010 18:06:49 -0700 (PDT)
Organization: http://groups.google.com
Lines: 2415
Message-ID: <dbc8be27-4d1b-468a-a6e5-5ea83a74e075@j2g2000vbo.googlegroups.com>
NNTP-Posting-Host: 190.40.91.191
Mime-Version: 1.0
Content-Type: text/plain; charset=windows-1252
Content-Transfer-Encoding: quoted-printable
X-Trace: posting.google.com 1285031209 29591 127.0.0.1 (21 Sep 2010 01:06:49 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Tue, 21 Sep 2010 01:06:49 +0000 (UTC)
Complaints-To: groups-abuse@google.com
Injection-Info: j2g2000vbo.googlegroups.com; posting-host=190.40.91.191; posting-
account=mFFJOAoAAABaIQEBRX5f95y3rtsFRjms
User-Agent: G2/1.0
X-HTTP-UserAgent: Mozilla/5.0 (Windows; U; Windows NT 6.0; es-ES; rv:1.9.2.10)
 Gecko/20100914 Firefox/3.6.10 ( .NET CLR 3.5.30729; .NET4.0C),gzip(gfe)
Xref: g2news1.google.com rec.radio.amateur.space:379
```

List of Solutions Manuals
----

contact me to :   mattosbw1@gmail.com
mattosbw1(at)gmail.com

NOTE : "THIS SERVICE IS NOT AVAILABLE FOR : CHINA, INDIA, PAKISTAN, IRAQ, IRAN, PHILIPPINES, NORTH KOREA, NEPAL, BANGLADESH, SRI LANKA, MALDIVES & BHUTAN".

If your wanted solutions manual is not in this list, also can ask me if is available (it is a partial list). Then if you need solutions manual only contact me by email.

"ARE NOT AVAILABLES BOOKS IN DIGITAL FORMAT", ONLY SOLUTIONS MANUALS AND TEST BANKS.

This same "list of titles" of texts with availables solutions manual and/or test banks is for download from :

http://www.megaupload.com/?d=3DVQJ2M78Y

I do not review the forums, just send me an email.

- Mechanics, Mechanical Engineering & Aerospace Engineering:

Solution Manual Classical Mechanics (Douglas Gregory)
Solution Manual Advanced Dynamics (Donald T. Greenwood)
Solution Manual Principles of Dynamics (2nd Ed., Donald T. Greenwood)
Solution Manual Advanced Engineering Dynamics (2nd Ed., Jerry Ginsberg)
Solution Manual Classical Dynamics (Jorge V. Jos=E9)

Solution Manual Impact Mechanics (W.J. Stronge)
Solution Manual Statistical Mechanics (2nd Ed., R.K. Pathria)
Solution Manual Introduction to Continuum Mechanics (4th Ed., W. Michael Lai, David Rubin & Erhard Krempl)
Solution Manual Analytical Mechanics (7th Ed., Grant R. Fowles, George Cassiday)
Solution Manual Introduction to Mechanical Engineering (Rizza)
Solution Manual Engineering Fundamentals and Problem Solving (4th Ed., Eide, Jenison, Mashaw & Northup)
Solution Manual Engineering Fundamentals and Problem Solving (5th Ed., Eide, Jenison, Northup & Mickelson)
Solution Manual Mechanical Engineering Principles (Bird & Ross)
Solution Manual Dynamics of Mechanical Systems (C.T.F. Ross)
Solution Manual Mechanics of Solids (C.T.F. Ross)
Solution Manual Introduction to Engineering Analysis (1st Ed., Hagen)
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X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII
Path: g2news1.google.com!postnews.google.com!l17g2000vbf.googlegroups.com!not-for-mail
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X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,domainid0,public,usenet
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Path: g2news1.google.com!postnews.google.com!y3g2000vbm.googlegroups.com!not-for-
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Manijeh Razeghi)
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R.E. Smallman & A.H.W. Ngan)

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contact me to :      mattosbw1@gmail.com
mattosbw1(at)gmail.com



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X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,domainid0,public,usenet
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http://123maza.com/35/songs289/



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http://123maza.com/35/songs289/
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Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-269 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Wed, 29 Sep 2010 09:07:26 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 368
Approved: RRI Admin <rec-radio-info-request@panix.com>
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Reply-To: ans-editor@amsat.org
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X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Wed, 29 Sep 2010 13:07:26 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
x-cr-hashedpuzzle: BBiX BEz/ Bd0j Bo6c BviQ CNar EZLB Fa59 GAtA GEDe G05R IN5V
IvwO JFsL JTZq
J9R0;1;cgBlAGMALQByAGEAZABpAG8ALQBpAG4AZgBvAEAAcABhAG4AaQB4AC4AYwBvAG0A;Sosha1_v1;
7;
{9B153B1F-922D-4175-9A94-9DBEFF349EE0};awA5AGoAawBtAEAAYwBvAG0AYwBhAHMAdAAuAG4AZQB
0AA==;Wed, 29 Sep 2010 13:02:06
GMT;QQBOAFMALQAyADYAOQAgAEEATQBTAEEAVAAgAE4AZQB3AHMAIABTAGUAcgB2AGkAYwBlACAAVwBlAG
UAawBsAHkAIABCAHUAbABsAGUAdABpAG4AcwA=
x-cr-puzzleid: {9B153B1F-922D-4175-9A94-9DBEFF349EE0}
Xref: g2news1.google.com rec.radio.amateur.space:384 rec.radio.info:1759
```

AMSAT NEWS SERVICE
ANS-269

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the

activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:
* Exciting Symposium Papers Published for 2010
* Symposium Weekend Finale - Tour Fermilab
* Resignation of AMSAT Board of Directors Member
* UT1FG/MM Satellite Operation
* NASA Selects AubieSat-1 to Launch on Rocket
* ARISS Status - 20 September 2010

SB SAT @ AMSAT $ANS-269.01
Exciting Symposium Papers Published for 2010

AMSAT News Service Bulletin 269.01
From AMSAT HQ SILVER SPRING, MD.
September 26, 2010
To All RADIO AMATEURS
BID: $ANS-269.01

The AMSAT 2010 Space Symposium and Annual Meeting will be held on Friday, October 8 through Sunday, October 10. This year we have selected the Chicago/Elk Grove Holiday Inn which is near O'Hare Airport for the event.

On-line registration for the Symposium continues on-line at the AMSAT Store site:
http://www.amsat-na.com/store/SymposiumReg.php

The registration fee is $45.00 from now through 5 October. Online registration closes 5 October at Midnight. Registration at the door will be $50.00

The 2010 Symposium Proceedings book has been sent to the print shop with the exciting papers presented here. Also, the speaker schedule will include topics with late breaking news and photos as ARISSat-1 completes its assembly and test phase prior to shipment to NASA and then on to Russia.

This is what you'll find in the 2010 Proceedings:

AMSAT's Opportunities in Education

ARISS �ducation
Rosalie White K1STO

University of Louisiana Satellite Program
Nick Pugh K5QXJ

Education Paradigm Shift for AMSAT to Support Subsidized Launch Opportunities
Mark Spencer WA8SME

AMATEUR RADIO on the ISS - Operations Update - 2009-2010
Keith Pugh W5IU

AMSAT's Satellites

AO-51 Battery Capacity and Spin Trends
Mark Hammond N8MH & Colin Hurst VK5HI

ARISSat-1 Overview
Tony Monteiro AA2TX

ARISSat-1 Power System
Tony Monteiro AA2TX

Software Radio Technology on ARISSat-1
Tony Montiero AA2TX

ARISSatTLM - A Software Demodulator and Telemetry Display Program for the ARISSat-1 Satellite
Douglas Quagliana KA2UPW

AMSAT and ITAR: Lessons Learned
Barry Baines WD4ASW

AMSAT-FOX Preview
Tony Monteiro AA2TX

BPSK-1000 format for ARISSat-1
Phil Karn KA9Q

NextGen CubeSat Proposal - Evolutionary Leveraging of Assets and Opportunities
Alex Harvilchuck N3NP

NextGen CubeSat Student Report
Alex Harvilchuck N3NP

Satellite and Earth Station Technology

HamTV Experiment on-board ISS
Fabio Azzarello IW8QKU E. D'Andria I�ELE,
T. Giagnacovo IZ�LTG, P. Tognolatti I�KPT

A lightweight 20 foot stressed dish for 1296 MHz EME
Marc Franco N2UO

Characteristics of simulated data multicasts transmitted over K3IO's proposed GEO-Eagle communications platform
Paul D. Wiedemeier KE5LKY

Psat and the APRS Space Network
Bob Bruninga WB4APR

100 Watt VHF/UHF Amplifier Design and Construction
Stephen Turner K3HPA

Outreach: Getting the AMSAT Word Out

How to Work the FM Ham Satellites With Your Handheld Radio
Clint Bradford K6LCS

Getting the AMSAT Word Out
JoAnne Maenpaa K9JKM

Successful Hamfest Satellite Demonstrations
Keith Pugh W5IU

[ANS thanks the 2010 Symposium Committee for the above information]

/EX

SB SAT @ AMSAT $ANS-269.02
Symposium Weekend Finale - Tour Fermilab

AMSAT News Service Bulletin 269.02
From AMSAT HQ SILVER SPRING, MD.
September 26, 2010
To All RADIO AMATEURS
BID: $ANS-269.02

There will be an organized four-hour tour of the Fermilab National Accelerator Laboratory on Sunday starting at noon.

If you do not plan to rent a car while in Chicago; the Hosting Committee has rented a bus and will provide transportation from the Hotel to Fermilab, then to O'Hare and back to the Hotel on Sunday for the tour.

The cost of the bus is $25 per seat and it will provide transportation to Fermilab and return according to the following schedule:

11:00 AM	Leave the Holiday Inn Elk Grove Village
12 Noon	Arrive at Fermilab
3:30 PM	Depart Fermilab
4:15 PM	Arrive at O'hare Airport
5:00 PM	Arrive back at the Holiday Inn

There will be room on the bus to bring your luggage for those who will be departing for the airport directly after the Fermilab tour.

Please email Kermit Carlson (W9XA@yahoo.com) if you would like to attend the tour and please note if you plan to use the bus transportation.

[ANS thanks the 2010 Symposium Committee for the above information]

/EX

SB SAT @ AMSAT $ANS-269.03
Resignation of AMSAT Board of Directors Member

AMSAT News Service Bulletin 269.03
From AMSAT HQ SILVER SPRING, MD.
September 26, 2010
To All RADIO AMATEURS
BID: $ANS-269.03

AMSAT BOD member Bill Ress, N6GHZ, has informed the President of AMSAT and the AMSAT Board of Directors of his resignation as a Board Member effective September 20, 2010. In his notification, Bill noted, "My business demands, currently and into the foreseeable future, are leaving me with very little extra time (and energy) to properly serve as a member of the AMSAT Board." In his notification, Bill observed that he is seeing a 'spike' in his business that requires his full attention.

AMSAT President Barry Baines, WD4ASW received Bill's resignation with regret, noting Bill's significant contributions to AMSAT as a Board Member. Barry observed, "As a member of the Board of Directors over the past two years, Bill pushed AMSAT to establish realistic and achievable goals for maintaining amateur radio in space. As chairman of the Engineering Task Force, Bill led a concerted effort to develop a space strategy that was embraced by the AMSAT Board of Directors and resulted in the decision to proceed with Project Fox. Further, Bill helped to develop the strategy that AMSAT followed in dealing with ITAR (International Traffic in Arms Regulations)-related issues. We wish Bill success in his business endeavors."

In accordance with Article II, Section 7E of the AMSAT Bylaws, Tony Monteiro, AA2TX as First Alternate will immediately assume the position of Director until the next Board election in 2011. Tony also serves as AMSAT's Vice President-Engineering.

Alan Biddle
WA4SCA
AMSAT Corporate Secretary

/EX

SB SAT @ AMSAT $ANS-269.04

UT1FG/MM Satellite Operation

AMSAT News Service Bulletin 269.04
  From AMSAT HQ SILVER SPRING, MD.
September 26, 2010
To All RADIO AMATEURS
BID: $ANS-269.04

UT1FG/MM - Capt.Yuri Bodrov will be QRV on board MV "Mottler" again from "wet squares" via all satellites FM/SSB/CW from 5 October 2010 until March 2011.

First voyage will be from Baltic Sea/Western Europe to Paranagua/Brasil .

[ANS thanks Yuri, UT1FG, for the above information]

/EX

SB SAT @ AMSAT $ANS-269.05
NASA Selects AubieSat-1 to Launch on Rocket

AMSAT News Service Bulletin 269.05
  From AMSAT HQ SILVER SPRING, MD.
September 26, 2010
To All RADIO AMATEURS
BID: $ANS-269.05

NASA selected AubieSat-1, a small satellite built by Auburn University students, to be launched on board a NASA rocket.

"We are now much closer to putting Auburn University on the map of student designed and built satellites," says Professor J-M Wersinger, Physics. "We are proud and honored to have been selected by NASA."

AubieSat-1 is participating in the CubeSat Launch Initiative. The pilot project seeks to demonstrate viable launch opportunities for CubeSat payloads during 2011 and 2012 as auxiliary payloads on planned NASA missions, as explained by Jason C. Crusan, chief technologist for Space Operations at NASA.

Long-time AMSAT member John Klingelhoeffer, WB4LNM, is a technical advisor to the Auburn satellite program. John, who retired from the satellite operator Intelsat, has been assisting the students with system and RF design topics for several years.

AubieSat-1 is an aluminum-alloy cube with 4-inch sides weighing about 2.2 pounds. It is custom built by Auburn University students The data collected by the satellite will be transmitted to the ground station in the Physics Department for analysis. The science mission is to measure
gamma rays produced by high-altitude thunderstorms. In fall 2010 and

spring 2011, AubieSat-1 will be tested at the NASA Kennedy Space Center for launch

[ANS thanks John, WB4LNM, and COSAM Covalence E-News for the above information]

/EX

SB SAT @ AMSAT $ANS-269.06
ARISS Status - 20 September 2010

AMSAT News Service Bulletin 269.06
From AMSAT HQ SILVER SPRING, MD.
September 26, 2010
To All RADIO AMATEURS
BID: $ANS-269.06

1. Upcoming School Contact

Windsor Central School District and the Owego-Apalachin School District in New York have been scheduled for an Amateur Radio on the International Space Station (ARISS) contact on Wednesday, September 22 at 14:21 UTC. The school districts have planned an education program with the area's Kopernik Observatory and Science Center which includes topics such as space, radio communication, satellites and rocketry. The program is planned for thirty-six middle school and high school students from each school district. Students have been chosen through a competition process

at each grade level. The final outcome of this project will be the purchase of amateur radio equipment for each school and the formation of amateur radio clubs.

2. Astronaut Shannon Walker Radios Australian Students

On Tuesday, September 14, high school students from Perth and Western Australia gathered at Curtin University of Technology to participate in an Amateur Radio on the International Space Station (ARISS) contact with astronaut Shannon Walker, KD5DXB on the ISS. The connection was provided by telebridge station LU8YY in Argentina. Walker answered 16 space related questions prepared for her by the students and shared a few words with her husband, Australian astronaut Andy Thomas, who was in Perth to give a presentation on space exploration.

3. Utah Scouts Celebrate Centennial with ARISS Contact

On-orbit astronaut Doug Wheelock, KF5BOC conducted an Amateur Radio on the International Space Station (ARISS) contact with scouts from the Utah National Parks Council, Sector 7 in St. George, Utah on Saturday, September 18. The youth celebrated the 100th anniversary of scouting with a centennial jamboree and many completed the requirements for the Space Exploration and Radio merit badges.

4. MAI-75 Experiment Activated

The Russian ISS crew members activated the MAI-75 (Moscow Aviation Institute) experiment on Tuesday and Wednesday, September 14 - 15. The system operated Space Cam in slide show mode. Among those who captured Slow Scan Television (SSTV) images transmitted by the crew were ground stations in Asia, Europe and Africa. For more information, see: http://ariss-sstv.blogspot.com/
Images have been archived here: http://www.amsat.org/amsat/ariss/SSTV/

5. Astronaut Training Status

ESA astronaut Paolo Nespoli, IZ0JPA participated in a simulated ARISS contact with students from Scuola Media Statale "E.Galice," Civitavecchia, Rome, Italy on Tuesday, September 14. The training session was a terrestrial-based amateur radio contact using ARISS equivalent equipment. Nespoli is slated to fly withExpedition 26 in November 2010.

6. Video of ARISS - Norwegian Museum Contact

The Norwegian Museum of Science, Technology and Medicine in Oslo, Norway experienced an ARISS contact on September 11. A webcast presentation of the contact is now available.
See: http://www.tekniskmuseum.no/film/frontpage

[ANS thanks Carol, KB3LKI, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Lee McLamb, KU4OS

```
From 392575049329396318
X-Google-Thread: 10e8ad,6adbec8ca84938fb,start
X-Google-NewGroupId: yes
X-Google-Thread: 10b9c8,6adbec8ca84938fb,start
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,gida4a23d5f63,domainid0,public,usenet
```

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X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!border1.nntp.dca.giganews.com!
border2.nntp.dca.giganews.com!nntp.giganews.com!novia!transit3.readnews.com!news-
xxxfer.readnews.com!news-out.readnews.com!transit4.readnews.com!panix!
rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-270 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Thu, 30 Sep 2010 21:20:59 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 1873
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <002d01cb6106$e0140ea0$a03c2be0$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1285896060 22605 166.84.1.6 (1 Oct 2010 01:21:00 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Fri, 1 Oct 2010 01:21:00 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
x-cr-hashedpuzzle: fNo= BMog BM+W Bl1H CFN+ C0OE D2As EJSS EKpZ IKwX IMt6 ImX4
JEkw Jhry KAOO
Kt+I;1;cgBlAGMALQByAGEAZABpAG8ALQBpAG4AZgBvAEAAcABhAG4AaQB4AC4AYwBvAG0A;Sosha1_v1;
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2010 01:20:41
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Xref: g2news1.google.com rec.radio.amateur.space:385 rec.radio.info:1762
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This report is organized into four (4) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - deorbited/returned satellites

SB SAT @ AMSAT W8ISS $WSR-270.S1

WSR 270 Part 1 09/27/2010

AMSAT NEWS SERVICE BULLETIN 270.S1
FROM AMSAT HQ SILVER SPRING, MD, September 27, 2010
TO ALL RADIO AMATEURS
BID: $WSR-270.S1

HO-68 HOPE-1 (CAS-1)(XW-1)
Catalog Number: 36122
Launch Date: December 15, 2009
Status: Operational

Callsign:
Broadcast: BJ1SA-11
BBS: BJ1SA-12

Uplinks: 145.8250 MHz FM, PL 67.0 Hz.
           145.9250 - 145.9750 MHz SSB/CW
           145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
           435.7650 - 435.7150 MHz SSB/CW
           435.6750 MHz AFSK 1200 BPS

Beacon: 435.7900 MHz CW

Mode and Antenna Polarization:
V: LHCP 2.0dBi max
U: RHCP 3.0dBi max

IARU coordination page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108

For more information about XW-1 (CAS-1):
http://www.camsat.cn
[09062010]
=====
SO-67 SumbandilaSat
Catalog Number: 35870
Launch Date: September 17, 2009

Status: Suspended

Callsign: ZS0SUM

Uplink: 145.875MHz FM tone 233.6 Hz
Downlink: 435.345MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

For more information about SO-67:
http://www.amsatsa.org.za/

```
[09062010]
=====
DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008

Status: Operational
Current Mode: Science Mode - Beacon ONLY

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink:   435.530 to 435.570 MHz

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68
[09062010]
=====
VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink:   435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink:   435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW


Indian Beacon:  145.9360 MHZ CW
Dutch Beacon:   145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is active. Each transponder has a different beacon.
[09062010]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004
```

Status: Operational

Current Modes:
Voice: V/U
Uplink: 145.880 MHz FM
Downlink 1: 435.300 MHz FM
Downlink 2: 2401.200 MHz FM

Telemetry:
Downlink: 435.150MHz 9k6

Analog voice downlink:	435.300 MHz FM
	435.150 MHz FM
	2401.200 Mhz FM
Analog voice uplink:	145.860 MHZ FM
	145.880 MHz USB
	145.880 MHz FM
	145.920 MHz FM
	145.920 MHz FM - 67 Hz PL tone burst
	1268.708 MHz FM
Digital Downlinks:	435.150 MHz FM 38k4 PBP, 1 watt output
	435.150 MHz FM 9k6 Pacsat Broadcast Protocol
	2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:	145.860 MHz FM 9k6 Pacsat Broadcast Protocol
	1268.700 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon:	435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[09272010]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002

Status: Operational

Current Mode: V/u

```
Uplink:   145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4
Hz. The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute
   timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the re-
   peater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset
   the 10 minute timer.
[09062010]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Scheduled Operations
Current Mode: V/u (Mode JA)

Voice/CW (Mode JA)
Uplink:   145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon:   435.795 MHz

Digital Mode JD
Uplinks:  145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage:
http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
```

=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's
CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/
fo29cwts.htm
[09062010]
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[09062010]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational

Current Mode: Alternating between Mode A and B every 24 hours

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
[09062010]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

```
Status: Operational

Current Active Modes: FM Repeater - OFF
                      Voice -       V/v
                      BBS -         OFF
                      APRS -        OFF
                      SSTV -        OFF


Expedition 25 Crew:
Commander:                Doug Wheelock         KF5BOC
Flight Engineer:          Shannon Walker        KD5DXB
Flight Engineer:          Fyodor Yurchikhin     RN3FI


Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink:   145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink:     145.200 MHz FM
Region 2/3 voice uplink:   144.490 MHz FM
Worldwide downlink:        145.800 MHz FM

Crossband Repeater:
Repeater Uplinks:         1269.650 MHz FM
                           437.800 MHz FM
                           145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink:         145.800 MHz FM
                           437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink:                  145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian:                   OR4ISS
German:                    DP0ISS
Russian:                   RS0ISS
                           RZ3DZR
United States:             NA1SS
Packet Mailbox:            RS0ISS-11
Digipeater callsign:       ARISS

Official ARISS Webpage:    http://www.rac.ca/ariss
ISS Fan Club Webpage:      http://www.issfanclub.com
APRS tracking page:        http://www.ariss.net/
```

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[09272010]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-270.S2
WSR 270 Part 2 09/27/2010

AMSAT NEWS SERVICE BULLETIN 270.S2
FROM AMSAT HQ SILVER SPRING, MD, September 27, 2010
TO ALL RADIO AMATEURS
BID: $WSR-270.S2

StudSat
Catalog Number: 36796
Launch Date: July 12, 2010
Status: On Orbit

Uplink: 437.505MHz, 9600bps FSK
Downlink: 437.505MHz, 9600bps FSK
Beacon : 437.505MHz,   20bps ASK
[08062010]
=====
TIsat-1
Catalog Number: 36799
Launch Date: July 12, 2010
Status: On orbit

Callsign: HB9DE

Uplink: 145.980MHz FM, AFSK
Downlink: 437.305MHz FM, AFSK
Beacon: 437.305MHz CW
[08062010]
=====
HO-68 HOPE-1 (CAS-1)(XW-1)
Catalog Number: 36122
Launch Date: December 15, 2009
Status: Operational

Callsign:
Broadcast: BJ1SA-11
BBS: BJ1SA-12

Uplinks: 145.8250 MHz FM, PL 67.0 Hz.
           145.9250 - 145.9750 MHz SSB/CW
           145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
           435.7650 - 435.7150 MHz SSB/CW
           435.6750 MHz AFSK 1200 BPS

```
Beacon:    435.7900 MHz CW

IARU coordination page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108

For more information about XW-1 (CAS-1):
http://www.camsat.cn
[09062010]
=====
SwissCube
Catalog Number: 35932
Launch Date: September 23, 2009

Status: Operational

Callsign: HB9EG

Beacon(100mw): 437.5050MHz CW
Beacon(1w):    437.5050MHz FSK 1k2bps
[04222010]
=====
UWE-2
Catalog Number: 35934
Launch Date: September 23, 2009

Status: In Orbit

Beacon(500mw): 437.3850 MHz AFSK 1k2bps
               437.3850 MHz FSK 9k6bps
[1112009]
=====
ITUpsAT1
Catalog Number: 35935
Launch Date: September 23, 2009

Status: Operational

Beacon(100mw): 437.325MHz CW
Beacon(1w): 437.325MHz 19k2bps
[11112009]
=====
BEESAT
Catalog Number: 35933
Launch Date: September 23, 2009

Status: Operational

Callsign: DP0BEE

Beacon(100mw): 436.000MHz CW
Beacon(500mw): 436.000MHz GMSK 4k8bps
Beacon(500mw): 436.000MHz GMSK 9k6bps
[04222010]
```

```
=====
CP-6
Catalog Number: 35003
Launch Date: May 19, 2009

Status: Operational

Downlink: 437.365 MHz 1k2 AFSK
[09062010]
=====
HAWKSAT 1
Catalog number: 35004
Launch Date: May 19, 2009

Status: operational

Downlink: 437.345 MHz ?
[09062010]
=====
Pharmasat
Catalog Number: 35002
Launch Date: May 19, 2009
Status: Operational

Downlink: 437.465 MHz 1k2 AFSK
[09062010]
=====
ANUSAT
Catalog Number: 34808
Launch Date: April 20, 2009

Status: ?

Downlink:  435.000 MHz
Uplink:    145.800 MHz

Telemetry: 137.400 MHz
[09062010]
=====
SOHLA-1 (ASTRO TECH.)
Catalog Number: 33496
Launch Date: January 23, 2009

Status: Operational

Proposed Frequencies and Modes:
Downlink: 437.505 MHz AFSK/CW
Beacon:   437.505 MHz AFSK/CW

Callsign:

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=101
```

```
[09062010]
=====
KAGAYAKI (Solan Co.)
Catalog Number: 33495
Launch Date: January 23, 2009

Status: In Orbit

Downlink: 437.375 MHZ    FSK9k6/CW
Beacon:   437.375 MHz    FSK9k6/CW

IARU coordination status page:

AMSAT-NA webpage:

[09062010]
=====
STARS (Kagawa Univ.) (Twin Satellites)
Catalog Number: 33498
Launch Date: January 23, 2009

Status: Operational ?

Downlinks: 437.485 MHz FM/CW
           437.465 MHz FM/CW
Beacons:   437.305 MHz FM/CW
           437.275 MHz FM/CW

Callsigns: JR5YBN
           JR5YBO

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=99

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=121&retURL
=/satellites/status.php
[09062010]
=====
KKS-1 (Tokyo MCIT)
Catalog Number: 33499
Launch Date: January 23, 2009

Status: Operational

Downlink:  437.455 MHz AFSK/CW
Beacon:    437.385 MHz AFSK/CW

Callsign: JQ1YYY

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=107
```

```
AMSAT-NA webapge:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=120&retURL
=/satellites/status.php
[09062010]
=====
PRISM (Tokyo Univ.)
Catalog Number: 33493
Launch Date: January 23, 2009

Status: Operational ?

Downlink: 437.425 MHz AFSK/GMSK/CW
Beacon:   437.250 MHz AFSK/GMSK/CW

Callsign: JQ1YCX

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=97

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=119&retURL
=/satellites/status.php
[09062010]
=====
RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number: 32953
Launch Date: May 23, 2008

Status: Operational

Curent Modes: Telemetry
              Audio
              Images

Downlinks: 435.315 MHz
           435.215 MHz

AMSAT-NA website:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=115&ret
URL=/satellites/status.php

Official website:
http://www.npopm.com/?cid=leoca&caid=43
[09062010]
=====
CanX-2
Catalog number: 32790
Launch Date: April 28, 2008

Status: Operational in range of ground station only

Downlink: 437.478 MHz GFSK
```

```
For the latest project status update please visit the Can X-2 web
page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[09062010]
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.425 MHz 1k2 baud packet

For the latest project status update please visit the AAUSAT-II web
page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[09062010]
=====
CO-65 CUTE-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008

Status: Digipeater

Downlink:  437.475 MHz 9k6 Packet
Uplink:   1267.600 Mhz

Telemetry Beacon:
Downlink: 437.2750 MHz CW

For the latest project status update please visit the Cute-1.7+APD II
web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78

Command Station blog website:
http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=112&retURL
=/satellites/status.php
[09062010]
=====
Compass-1
Catalog number: 32787
Launch Date: April 28, 2008
```

Status: Operational

Current Mode: 4k8 MSK packet

Uplink: 145.980 MHz FM
Downlink: 437.275 Mhz CW
          437.405 MHz Packet

For the latest project status update please visit the Compass 1 web page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=114&retURL=/satellites/status.php
[09062010]
=====
CO-66 Seeds II
Catalog number: 32791
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.485 MHz

Callsign: JQ1YGU

For the latest project status update please visit the Seeds 2 web page: http://cubesat.aero.cst.nihon-u.ac.jp/english/seeds_2_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=113&retURL=/satellites/status.php
[09062010]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=94&retURL=
/satellites/status.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=72
[09062010]

=====
CP3
Catalog Number: 31129
Launch Date: April 17,2007

Status: Operational

Current Mode: /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[09062010]

=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon: 437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/xivpicte.htm
[09062010]

=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003

Status: ?????

Current Mode: /u

Beacon: 436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=96&retURL=/satellites/status.php

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[09062010]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Modes:
Voice: V/U
Uplink: 145.920 MHz FM
Downlink 1: 435.300 MHz FM
Downlink 2: 2401.200 MHz FM

Telemetry:
Downlink: 435.150MHz 9k6

Analog voice downlink:	435.300 MHz FM
	435.150 MHz FM
	2401.200 Mhz FM
Analog voice uplink:	145.860 MHZ FM
	145.880 MHz USB
	145.880 MHz FM
	145.920 MHz FM
	145.920 MHz FM - 67 Hz PL tone burst
	1268.700 MHz FM
Digital Downlinks:	435.150 MHz FM 38k4 PBP, 1 watt output
	435.150 MHz FM 9k6 Pacsat Broadcast Protocol
	2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:	145.860 MHz FM 9k6 Pacsat Broadcast Protocol
	1268.700 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon:	435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:

http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[092702010]
=====
QuakeSat
Catalog Number: 27845
Launch Date: June 30, 2003

Status: Telemetry only

Current Mode: 9600 baud data packet

Mode U packet
Downlink: 436.675 MHz 9k6 BPS

Quakesat webpage:
http://www.quakefinder.com/services/quakesat-ssite/
[09062010]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=69&retURL
=/satellites/status.php
[09062010]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Telemetry only

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/

```
[09062010]
=====
RS-22 RADIO SPORT 22
Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only

Current Mode:  /u

CW Beacon - 435.352 MHz
            145.818 MHz

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=76&retURL
=/satellites/status.php
[09062010]
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990

Status: CW Beacon only

Uplinks:          145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink:      437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[09062010]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - OFF
                      Voice -       V/v
                      BBS -         OFF
                      APRS -        OFF
                      SSTV -        OFF

Expedition 24 Crew:
```

Commander:	Doug Wheelock	KF5BOC
Flight Engineer:	Shannon Walker	KD5DXB
Flight Engineer:	Fyodor Yurchikhin	RN3FI

Available Modes and Frequencies:

Digital/APRS:

Worldwide packet uplink:	145.825 MHz FM 1k2
Worldwide packet downlink:	145.825 Mhz FM 1k2

Voice:

Region 1 voice uplink:	145.200 MHz FM
Region 2/3 voice uplink:	144.490 MHz FM
Worldwide downlink:	145.800 MHz FM

Crossband Repeater:

Repeater Uplinks:	1269.650 MHz FM 437.800 MHz FM 145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink:	145.800 MHz FM 437.800 MHz FM (Kenwood)

SSTV Robot 36:

Downlink:	145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:

Belgian:	OR4ISS
German:	DP0ISS
Russian:	RS0ISS RZ3DZR
United States:	NA1SS
Packet Mailbox:	RS0ISS-11
Digipeater callsign:	ARISS

Official ARISS Webpage:	http://www.rac.ca/ariss
ISS Fan Club Webpage:	http://www.issfanclub.com
APRS tracking page:	http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time line is NOT translated from Russian and posted.
[09272010]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-270.S3
WSR 270 Part 3 09/27/2010

AMSAT NEWS SERVICE BULLETIN 270.S3

FROM AMSAT HQ SILVER SPRING, MD, September 27, 2010
TO ALL RADIO AMATEURS
BID: $WSR-270.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

CP4
Catalog Number: 31132
Launch Date: April 17, 2007

Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon: 437.325 MHz CW

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=79
[09062010]
=====
LIBERTAD-1
Catalog Number: 31128
Launch Date: April 17, 2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink: 145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[09062010]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: Non-Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder: 145.825 Mhz FM
[09062010]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

```
Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency:  437.305
                             2407.250

Official Website: http://www.ncube.no
[09062010]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink:        437.250 MHz FM 67Hz CTCSS
Voice Downlink:     2401.835 MHz FM
Packet Up/Downlink:  437.250 MHz 9k6 packet
Packet Downlink     2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[09062010]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non-Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[09062010]
=====
CANX-1
Catalog Number: 27847
Launch Date: June 30, 2003

Status: Non-Operational

Downlink: 437.8800 MHz AFSK 1k2bps
[06052009]
=====
DTUSAT
Catalog Number: 27842
Launch Date: June 30, 2003

Status: Non-Operational

Current Mode: 2k4 AFSK Packet last reported

Downlink: 437.475MHz
```

```
Officail webpage: http://dtusat1.dtusat.dtu.dk/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=101&retURL
=satellites/all_oscars.php
[02212009]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink:   435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)

Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Telemetry only

Uplinks:   145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink:  437.325 MHz

Broadcast callsign: MYSAT3-11
BBS:                MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial land and weather imaging payloads offers FM and FSK
Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as
a collaborative effort between the Malaysian government and Surrey
Satellite Technology Ltd.
[03302009]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink:   145.945 MHz UI Digipeater
Digi Callsign: KE6QMD
```

```
Everyone is welcome to use the digipeating/APRS features of Sapphire,
as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS:                SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink:   145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
V-band:   145.840 -  145.990 MHz CW/LSB
U-band:   435.550 -  435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks
---------
S2-band:  2401.225 -  2401.475 MHz CW/USB
```

K-band: 24048.010 - 24048.060 MHz CW/USB
Beacon: 2401.323 MHz
24048.035 MHz

P3-D Telemetry Beacons (IHU)

BEACON	General Beacon(GB)	Middle Beacon(MB)	Engineering Beacon(EB)
2 m	none	145.898 MHz	none
70cm	435.438 MHz	435.588 MHz	435.838 MHz
13cm(1)	2400.188 MHz	2400.338 MHz	2400.588 MHz
13cm(2)	2401.173 MHz	2401.323 MHz	2401.573 MHz
3cm	10450.975 MHz	10451.125 MHz	10451.375 MHz
1.5cm	24047.885 MHz	24048.035 MHz	24048.285 MHz

[07162007]

=====

OO-38 OPAL

Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]

=====

UO-36 UoSAT-12

Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]

=====

SO-35 SUNSAT

Catalog Number: 25636
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz

Mode J Digipeater: 145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Non-Operational

Current Modes:
Telemetry : /u

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks: 145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

```
More information of GO-32 can be found at:
http://asri.technion.ac.il/techsat/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=14&retURL
=/satellites/status.php
[07172010]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink:   145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
MO-30 UNAMSAT-2
Catalog Number: 24305
Launch Date: September 5, 1996

Status: Non-operational

Downlink:       435.1380 MHz AFSK 1200 BPS
Downlink:       435.2060 MHz AFSK 1200 BPS
Uplink:         145.8150 MHz AFSK 1200 BPS
Uplink:         145.8350 MHz AFSK 1200 BPS
Uplink:         145.8550 MHz AFSK 1200 BPS
Uplink:         145.8750 MHz AFSK 1200 BPS
[06042009]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Non-operational

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign:       POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012009]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
AO-24 ARSENE
Catalog Number: 22654
Launch Date: May 13, 1993

Status: Non-operational

Uplink:    435.0625 MHz FM 1k2bps AFSK
           435.1125 MHz FM 1k2bps AFSK
           435.1375 MHz FM 1k2bps AFSK
Downlink:  145.9750 MHz FM 1k2bps AFSK
          2446.5025 MHz FM 1k2bps AFSK

Beacon:    2446.4700 MHz CW

Broadcast callsign:
BBS:
[12162009]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HL01-11
BBS: HL01-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
[05012006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: non-operational

Current Mode:  V/u

Uplink:         145.900 MHz FM 1200-baud Manchester FSK (reserved)
                145.920 MHz FM VOICE
                145.940 MHz FM 1200-baud Manchester FSK (reserved)
                145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink:       437.026 MHz USB VOICE
                (1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
```

```
[07242009]
=====
UO-15 UoSAT-4
Catalog Number: 20438
Launch Date: January 22, 1990

Status: Non-operational

Uplink: ?
Downlink: 435.1250MHz (?)
          435.1200MHz (?)
[06042009]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984

Status: Non-operational.

Current Mode:  /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
```

UHFBeacon: 435.025 MHz
Mode-S Beacon: 2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[09062010]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon: 145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.8500 - 145.9000 MHz SSB/CW
Downlink 29.4000 - 29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

```
Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
Beacons:   29.450 MHz
          435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon 1:  29.352 MHz (intermittent)
Beacon 2:  29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink:     21.260 to 21.300 MHz CW/USB
Downlink:  145.860 to 145.900 MHz CW/USB

Beacon:    145.860 MHz

Robot:     145.908 MHz
```

```
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink:   21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon:   29.408 MHz

Robot:    29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-270.S4
WSR 270 Part 4 09/27/2010

AMSAT NEWS SERVICE BULLETIN 270.S4
FROM AMSAT HQ SILVER SPRING, MD, September 27, 2010
TO ALL RADIO AMATEURS
BID: $WSR-270.S4

THE FOLLOWING SATELLITES HAVE RE-ENTERED OR HAVE BEEN RETURNED SAFELY:

CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Re-entered
Re-entered:

Uplink:  1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=56
[09062010]
=====
BEVO-1 (DRAGONSAT-1)
Catalog Number: 35690
Launch Date: May 19, 2009

Status: Re-entered
```

```
Re-entered:

Downlink: 437.325 MHz 9k6 GMSK
          437.325 MHz CW 20wpm
[07312009]
=====
AggieSat2 (DRAGONSAT-2)
Catalog Number: 35690
Launch Date: May 19, 2009

Status: Re-entered
Re-entered:

Downlink: 436.250 MHz 9k6 FHSS
[11112009]
=====
Pollux
Catalog Number: 35693
Launch Date: July 31, 2009

Status: Re-entered
Re-entered:

Callsign: POLLUX-1

Downlink: 145.825MHz 1k2 AX.25
[09062010]
=====
Castor (ANDE-2)
Catalog Number: 35694
Launch Date: July 31, 2009

Status: Re-entered
Re-entered:

Callsign: KD4HBO-1

Downlink: 145.825 MHz 1k2 AX.25
[09062010]
=====
NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: July 28, 2008

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[01012009]
```

```
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink:      145.825 Mhz FM APRS AX25
APRS Uplink:        145.825 MHz FM APRS AX25
Voice/PSK31 Uplink:  28.120 MHz

Packet to Voice ID: RAFT
[06112007]
=====
GENESAT-1
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Re-Entered
Re-entered date: August 8, 2010

Current Mode: /u

Callsign: KE7EGC

Telemetry Beacon Downlink: 437.0695 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[08082010]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Re-Entered
Re-entered: June 18, 2008

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon:             437.2750 MHz CW

Callsign: JR8YJT
[01012009]
```

=====
SO-43 Starshine 3
Catalog Number: 26929
Launch Date: September 30, 2001

Status: Re-Entered
Re-entered: January 21, 2003

Beacon: 145.825Mhz
[02212009]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

- AMSAT News Service (ANS)
- General satellite discussion (AMSAT-BB)
- Orbit data (KEPS)
- Manned space missions (SAREX)
- District of Columbia area (AMSAT-DC)
- New England area (AMSAT-NE)
- AMSAT Educational Liaison mailing list (AMSAT-EDU)
- AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to
the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis
Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at}
amsat.org
NNNN
/EX

From 5153661267348343780
X-Google-Thread: fcc6e,d7f1e990d28c106f,start
X-Google-NewGroupId: yes
X-Google-Thread: 11480d,d7f1e990d28c106f,start
X-Google-NewGroupId: yes
X-Google-Thread: 108122,d7f1e990d28c106f,start
X-Google-NewGroupId: yes
X-Google-Thread: fc2a5,d7f1e990d28c106f,start
X-Google-NewGroupId: yes
X-Google-Thread: 107ada,d7f1e990d28c106f,start
X-Google-NewGroupId: yes
X-Google-Thread: 10bf43,d7f1e990d28c106f,start
X-Google-NewGroupId: yes
X-Google-Thread: 10e8ad,d7f1e990d28c106f,start
X-Google-NewGroupId: yes
X-Google-Thread: 10b9c8,d7f1e990d28c106f,start
X-Google-NewGroupId: yes
X-Google-Attributes:
gid4baf9708d4,gid7221ecd0f7,gidd7f5508063,gid241b302a50,gida3e752f117,gide721ae2bf
6,gid8f86f75953,gida4a23d5f63,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!news1.google.com!
border1.nntp.dca.giganews.com!nntp.giganews.com!npeer01.iad.highwinds-media.com!
news.highwinds-media.com!feed-me.highwinds-media.com!nx02.iad01.newshosting.com!
newshosting.com!novia!news-out.readnews.com!news-xxxfer.readnews.com!panix!
panix2.panix.com!not-for-mail
From: rram@panix.com (rec.radio.amateur.moderated Admin)
Newsgroups:
rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.rad
io.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amat
eur.space,rec.radio.info
Subject: Crossposting Permitted to rec.radio.amateur.moderated
Supersedes: <radio/ham-radio/moderated/crossposting-1-1283320800@panix.com>
Followup-To: poster
Date: 1 Oct 2010 02:00:02 -0400
Organization: rec.radio.amateur.moderated Moderation Team
Lines: 47
Approved: RRI Admin <rec-radio-info-request@panix.com>
Distribution: world
Expires: 03 Nov 2010 02:00:00 -0000

Message-ID: <radio/ham-radio/moderated/crossposting-1-1285912800@panix.com>
Reply-To: rec-radio-amateur-moderated-request@panix.com (rec.radio.amateur.moderated Admin)
NNTP-Posting-Host: panix2.panix.com
X-Trace: reader1.panix.com 1285912802 29510 166.84.1.2 (1 Oct 2010 06:00:02 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Fri, 1 Oct 2010 06:00:02 +0000 (UTC)
Summary: Short reminder for unmoderated newsgroups that crossposting is permitted
Keywords: FAQ, ham, amateur, radio, moderated, unmoderated, crossposting, permitted
Xref: g2news1.google.com rec.radio.amateur.antenna:18686 rec.radio.amateur.dx:735 rec.radio.amateur.equipment:2236 rec.radio.amateur.homebrew:3855 rec.radio.amateur.misc:5429 rec.radio.amateur.policy:28614 rec.radio.amateur.space:386 rec.radio.info:1763

Posted-By: auto-faq 3.3.2 beta (PGPMoose V2.0, Perl 5.005)
Archive-name: radio/ham-radio/moderated/crossposting
Revision: 1.1 2009/04/12 19:42:04
Posting-Frequency: posted monthly
URL: http://www.panix.com/~rram/usenet/rram/index.html

Changes followed by "|".

After a 30-day public discussion and feedback period to gauge reader opinions in March of 2009:

http://groups.google.com/group/rec.radio.amateur.moderated/browse_thread/thread/d7d337db35f23326

the rec.radio.amateur.moderated Moderation Team has decided to consider amending its charter, and permit limited simultaneous crossposting to rec.radio.amateur.moderated and one other unmoderated amateur-radio-related discussion newsgroup. We are currently trying this on a temporary basis (90 days, through early July 2009), and adopt it permanently if successful.

Approved rec.radio.amateur.* newsgroups are those that are currently listed in the latest version of the "List of Big Eight Newsgroups" which is crossposted monthly to news.announce.newgroups, news.groups, and news.lists.misc.

Approved alt.radio.amateur.* and alt.ham-radio.* newsgroups are those that have been created consistent with the suggestions in "So You Want to Create an Alt Newsgroup" at:

  http://www.faqs.org/faqs/alt-creation-guide/

Approved regional hierarchy newsgroups are those that contain either "radio.amateur" or "ham-radio" in their names, including uk.radio.amateur and aus.radio.amateur.misc.

We will make every reasonable effort to keep our list of approved newsgroups up-to-date. In case we have overlooked any, and a submission is rejected in error as a result, the rejected submitter can E-mail us at our administrative contact address (in the signature at the bottom of this article, and the default Reply-To for the rejection message) requesting that it be added, and that the article be approved. We may still choose to reject articles crossposted to any alt.* newsgroup with an inappropriate name, including obscene language, embedded name-calling, or encouragement of unlawful conduct.

Please direct any comments, questions, or criticisms to rec-radio-amateur-moderated-request@panix.com.

```
From 1485269173759848133
X-Google-Thread: 107ada,d7f1e990d28c106f
X-Google-NewGroupId: yes
X-Google-Thread: 10bf43,d7f1e990d28c106f
X-Google-NewGroupId: yes
X-Google-Thread: 10e8ad,d7f1e990d28c106f
X-Google-NewGroupId: yes
X-Google-Attributes:
gida3e752f117,gide721ae2bf6,gid8f86f75953,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII
Path: g2news1.google.com!postnews.google.com!g18g2000vbn.googlegroups.com!not-for-
mail
From: kb9rqz <mark@kb9rqz.com>
Newsgroups:
rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space
Subject: get kelp
Date: Fri, 1 Oct 2010 15:59:30 -0700 (PDT)
Organization: http://groups.google.com
Lines: 9
Distribution: world
Message-ID: <d6411008-4782-4578-a1b1-08eb04145b97@g18g2000vbn.googlegroups.com>
References: <radio/ham-radio/moderated/crossposting-1-1285912800@panix.com>
NNTP-Posting-Host: 66.82.9.92
Mime-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: quoted-printable
X-Trace: posting.google.com 1285973971 25130 127.0.0.1 (1 Oct 2010 22:59:31 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Fri, 1 Oct 2010 22:59:31 +0000 (UTC)
Complaints-To: groups-abuse@google.com
Injection-Info: g18g2000vbn.googlegroups.com; posting-host=66.82.9.92; posting-
account=3ePh8QoAAABpiNDYEy2_bPCVy_4Crs1n
User-Agent: G2/1.0
X-HTTP-UserAgent: Mozilla/4.0 (compatible; MSIE 7.0; Windows NT 5.1;
 Trident/4.0; .NET CLR 1.1.4322; .NET CLR 2.0.50727; .NET CLR 3.0.4506.2152;
 .NET CLR 3.5.30729),gzip(gfe)
Xref: g2news1.google.com rec.radio.amateur.misc:5433
rec.radio.amateur.policy:28628 rec.radio.amateur.space:387
```

On Oct 1, 2:00=A0am, r...@panix.com (rec.radio.amateur.moderated Admin) wrote:

```
> Posted-By: auto-faq 3.3.2 beta (PGPMoose V2.0, Perl 5.005)
> Archive-name: radio/ham-radio/moderated/crossposting
> Revision: 1.1 2009/04/12 19:42:04
> Posting-Frequency: posted monthly
> URL:http://www.panix.com/~rram/usenet/rram/index.html
```

stop the trolling

```
From 8147567079937151377
X-Google-Thread: 10e8ad,ae008ddd59883854,start
X-Google-NewGroupId: yes
X-Google-Thread: 10b9c8,ae008ddd59883854,start
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,gida4a23d5f63,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news4.google.com!feeder1.cambriumusenet.nl!
feed.tweaknews.nl!194.134.4.91.MISMATCH!news2.euro.net!novso.com!npeer.de.kpn-
eurorings.net!npeer-ng0.de.kpn-eurorings.net!bloom-beacon.mit.edu!panix!
rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-276 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sun, 3 Oct 2010 09:53:00 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 407
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000e01cb6302$45fa5830$d1ef0890$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1286113980 20947 166.84.1.6 (3 Oct 2010 13:53:00 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 3 Oct 2010 13:53:00 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news1.google.com rec.radio.amateur.space:388 rec.radio.info:1771
```

AMSAT NEWS SERVICE

ANS-276

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

******SYMPOSIUM WEEK IN CHICAGO*******

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:
* Congratulations to the ARISSat-1 Team!
* Symposium links for updates
* AMSAT Symposium
* ARISS ham radio contact planned with IRSEA Institute, Italy
* OSCAR-11 Signals Heard
* AO-51 Resumes Operation
* ARISS Status - 27 September 2010

SB SAT @ AMSAT $ANS-276.01
Congratulations to the ARISSat-1 Team!

AMSAT News Service Bulletin 276.01
From AMSAT HQ SILVER SPRING, MD.
October 3, 2010
To All RADIO AMATEURS
BID: $ANS-276.01

Congratulations to the ARISSat-1 Team!

ARISSat-1 will be the presented in detail during the Saturday morning sessions at the AMSAT 2010 Space Symposium and Annual Meeting which will be held on Friday, October 8 through Sunday, October 10.

AMSAT Vice-President of Engineering Tony Montiero, AA2TX and ARISSat Project Manager Gould Smith, WA4SXM along with ARISSat team members will host the Saturday ARRISat-1 sessions including:

+ ARISSat-1 Overview
+ Software Radio Technology
+ BPSK-1000 format for ARISSat-1
+ ARISSatTLM - Software Demodulator and Telemetry Program Calculating
+ Available Power (Examples: ARISSat & Fox) Power System Assembling
+ ARISSat-1
+ ARISSat-1 Vibration Testing

The team plans to have a working ARISSat-1 prototype attending the Symposium.

ARISSat-1 design and operations are discussed in detail in these papers published in the 2010 Symposium Proceedings book:

ARISSat-1 Overview
Tony Monteiro AA2TX

ARISSat-1 Power System
Tony Monteiro AA2TX

Software Radio Technology on ARISSat-1
Tony Montiero AA2TX

ARISSatTLM - A Software Demodulator and Telemetry Display
Program for the ARISSat-1 Satellite
Douglas Quagliana KA2UPW

BPSK-1000 format for ARISSat-1
Phil Karn KA9Q

An additional feature presentation and paper will introduce you to AMSAT's next satellite ... AMSAT-FOX Preview by Tony Monteiro, AA2TX.

The AMSAT 2010 Space Symposium and Annual General Meeting will be held at the Chicago/Elk Grove Holiday Inn which is near O'Hare Airport.

On-line registration for the Symposium continues on-line at the AMSAT Store site: http://www.amsat-na.com/store/SymposiumReg.php
The registration fee is $45.00 from now through 5 October. Online registration closes 5 October at Midnight. Registration at the door will be $50.00.

[ANS thanks the 2010 Symposium Committee for the above information]

/EX

SB SAT @ AMSAT $ANS-276.02
Symposium links for updates

AMSAT News Service Bulletin 276.02
From AMSAT HQ SILVER SPRING, MD.
October 3, 2010
To All RADIO AMATEURS
BID: $ANS-276.02

2010 AMSAT Symposium Home Page
http://www.amsat.org/amsat-new/symposium/2010/index.php

Symposium Schedule
http://www.amsat.org/amsat-new/symposium/2010/SymposiumSchedule.php

List of Presentations
http://www.amsat.org/amsat-new/symposium/2010/Presentations.php

Hotel Information
http://www.amsat.org/amsat-new/symposium/2010/Hotel.php

Food and Drink information
http://www.amsat.org/amsat-new/symposium/2010/FoodandDrink.php

Banquet Speaker
http://www.amsat.org/amsat-new/symposium/2010/BanquetSpeaker.php

Board of Directors Agenda
http://www.amsat.org/amsat-new/symposium/2010/BoardofDirectorsAgenda.php

[ANS thanks the 2010 Symposium Committee for the above information]

/EX

SB SAT @ AMSAT $ANS-276.03
AMSAT Symposium

AMSAT News Service Bulletin 276.03
  From AMSAT HQ SILVER SPRING, MD.
October 3, 2010
To All RADIO AMATEURS
BID: $ANS-276.03

Of course we all know that this week the AMSAT Symposium will be held in Chicago. You will be able to find all the latest details at the AMSAT Website http://www.AMSAT.org. Information on when certain talks will be presented and full proceedings will be there for the asking. Details for all events, including a tour of the Fermi Lab are there for all to decide on what they would like to see and hear. Take this as an opportunity to get together with your elected officials and discuss with them what is important to you. The full schedule will be updated as they are finalized.

The 2010 Symposium Schedule is posted on the amsat.org web at:
http://www.amsat.org/amsat-new/symposium/2010/SymposiumSchedule.php

A few minor tweaks may be necessary over the next 7 days. The final version will be available on-site at the Symposium next week. Authors and presenters will be e-mailed any schedule change affecting the talks.

/EX

SB SAT @ AMSAT $ANS-276.04
ARISS ham radio contact planned with IRSEA Institute, Italy

AMSAT News Service Bulletin 276.04
  From AMSAT HQ SILVER SPRING, MD.
October 3, 2010
To All RADIO AMATEURS

BID: $ANS-276.04

An ARISS (Amateur Radio on the International Space Station) radio contact is planned with IRSEA, a non-profit Institute for Research and Education, located in southern Italy.

IRSEA's mission is to provide a bridge between university research and trade unions and corporations in the fields of education, development and innovative research.

The ARISS contact is scheduled Tuesday 5 October 2010 at 15:28 UTC. The contact will be a telebridge, operated by ARISS ground station K6DUE, located in Goddard Space Flight Center, Maryland. Stations in North America may be able to directly hear the ISS downlink on 145.800 MHz.

The contact will be available on EchoLink AMSAT conference server and IRLP Discovery Reflector 9010. The contact will be webcast on:
http://www.cittadellamediterraneadellascienza.it/

ARISS is an international educational outreach program partnering the participating space agencies, NASA, Russian Space Agency, ESA, CNES, JAXA, and CSA, with the AMSAT and IARU organizations from participating countries.

ARISS offers an opportunity for students to experience the excitement of Amateur Radio by talking directly with crewmembers onboard the International Space Station. Teachers, parents and communities see, first hand, how Amateur Radio and crewmembers on ISS can energize youngsters' interest in science, technology and learning.

[ANS thanks ARISS Chairman Gaston Bertels, ON4WF and the SouthGate ARC news for the above information]

/EX

SB SAT @ AMSAT $ANS-276.05
OSCAR-11 Signals Heard

AMSAT News Service Bulletin 276.05
From AMSAT HQ SILVER SPRING, MD.
October 3, 2010
To All RADIO AMATEURS
BID: $ANS-276.05

OSCAR-11 Signals Heard

Clive G3CWV reported that OSCAR-11 was heard by JA0CAW on August 29 after being silent since March 30, 2010. Since August 29 it continued to be heard until September 8 and then again September 18-29. Excellent signals have been reported from stations located around the world, and good copy obtained from decoded telemetry frames.

There has been a significant change since the previous period of activity which ended in March 2010. The on-board clock is now very stable. It's gained only three seconds in 30 days. This is comparable with its accuracy when the satellite was fully operational. During its first 21 years it gained approximately one minute per year. However, there is still an accumulated loss of 309 days, which has occurred during eclipses of the last few years!

The other change is that it's now transmitting during eclipses, although signals are weaker at those times. This indicates that there is still some capacity remaining in the battery.

These two changes suggest that some part of the system may have recently failed 'open circuit' thus reducing the overall power drain of the system, and allowing more power to be available during eclipses. There was an unexplained current drain observed when analogue telemetry was last transmitted. This fault might have cleared. Interestingly, the status telemetry shows that the Digital Store & Readout experiment has switched off, since the satellite was previously heard in February.

The satellite appears to be operating for ten days on, followed by ten days off, so it should start transmitting again around October 9, 2010.

Listen for OSCAR-11's VHF AFSK FM ASCII Telemetry beacon on 145.826 MHz.

Reception reports have been received from Bernard FY1LE, Roland DG1EBR, Mike DK3WN, Tetsu JA0CAW, Adam SQ8MFC, MM0DNX, Tony VK3KKP/G8HIM, Martin DC1MAR, John M0BIC, Etienne F1GRR and Carlos KD6GRF. Many thanks to everyone.

Many reports have also been added to the live satellite status page, on the website set up by David KD5QGR and Bob WB4APR. This is a very convenient and easy to use facility, which shows the current status of all the amateur satellites. Strongly recommended for future reports! The URL is http://oscar.dcarr.org/index.php

For the benefit of new listeners, here is a short history of OSCAR-11. It was lauched in 1984, providing telemetry and other digital services for amateur radio and educational users. During its many years of operation it survived long periods of eclipses and continuous full sunlight.

In 2002 the satellite reverted to its default mode of operation, controlled by the watchdog timer. In 2005 all the analogue telemetry channels failed. Solar eclipses also started to cause the watchdog timer cycle to reset, which switched off the satellite for approximately 15 days.

In 2008 solar eclipses became a permanent feature of every orbit, causing the satellite to switch off for about 15 days, probably after only one orbit of transmission. Thus the satellite was not expected to be heard again for any continuous period until 2019, when there will be some eclipse free periods. However, the satellite started transmissions unexpectedly in November 2008. These continued until March, when it was followed by silence until until the recent period of activity.

Clive's webpage at www.g3cwv.co.uk contains sound files of the satellite's beacon, archived news and telemetry, and information about using soundcard and hardware demodulators for data capture. There is also software for capturing data, and decoding ASCII telemetry.

[ANS thanks Clive G3CWV for the above information]

/EX

SB SAT @ AMSAT $ANS-276.06
AO-51 Resumes Operation

AMSAT News Service Bulletin 276.06
From AMSAT HQ SILVER SPRING, MD.
October 3, 2010
To All RADIO AMATEURS
BID: $ANS-276.06

AO-51 Resumes Operation

After a software crash on September 26 aboard AO-51 took the satellite off the air Ground Station Mark Hammond, N8MH reported that as of September 29, "The reloading of AO-51 is essentially complete; the bird is in good order."

The AO-51 Command Team configured the satellite for simultaneous operation of both the S-band and U-band transmitters. The tradeoff is that U-band will be low in power-around 250 mW or so. Also, please notice the use of the 145.880 MHz uplink!

September 29
FM Repeater, V/S-U
Uplink: 145.880 MHz FM (no PL tone)
Downlinks: 2401.200 MHz FM *and* 435.300 MHz FM (at low power!)

Mark said, "This is a great time to work on improving the sensitivity of your receiver setups! The 250 mW will challenge some of you for sure. PLEASE be sure to follow the "if you can't hear it, don't try to uplink" basic rule of satellite operation."

If the satellite supports the dual downlink mode OK, controllers may extend the V/S-U mode a few days past the original mode schedule in order to give mode S operators a fair shake at some operations and testing--while at the same time allowing some low power mode V/U operations.

Check the Command Team and Operations Group AO-51 News web page for the latest September 2010 AO-51 Schedule:
http://www.amsat.org/amsat-new/echo/CTNews.php

[ANS thanks Mark Hammond N8MH for the above information]

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SB SAT @ AMSAT $ANS-276.07
ARISS Status - 27 September 2010

AMSAT News Service Bulletin 276.07
From AMSAT HQ SILVER SPRING, MD.
October 3, 2010
To All RADIO AMATEURS
BID: $ANS-276.07

1. School Contact

English Estates Elementary School in Fern Park, Florida had a scheduled contact on Thursday, September 30 at 18:00 UTC. Through hands on activities, students will learn about space satellite tracking. The school has an established liaison with the Lake Monroe Amateur Radio Club and an on-campus

ham radio emergency operations station.

2. Astronaut Doug Wheelock Chats with New York Students

On Wednesday, September 22, students from Windsor Central and Owego-Apalachin School Districts in New York participated in an Amateur Radio on the International Space Station (ARISS) contact with astronaut Doug Wheelock, KF5BOC. Wheelock, a graduate of Windsor Central High School, fielded 16 questions put to him by the youth during the ISS pass. The school districts collaborated with the area's Kopernik Observatory and Science Center to put together an education program for the students which included topics on space, radio communication, satellites and rocketry. The final outcome of this project will be the purchase of amateur radio equipment for each school and the formation of amateur radio clubs for the youth.

3. ARISS International Team Meeting Held

The monthly ARISS-International team meeting was held on Tuesday, September 21. Topics of discussion included the recent ARISS elections, Columbus Module equipment and a status on ARISSat-1. Minutes have been posted. See: http://www.rac.ca/ariss/arisstel2010-09-21.htm

4. MAI-75 Experiment to be Activated

The Russian ISS crew members will activate the MAI-75 (Moscow Aviation Institute) experiment on September 27 - 29. The activity is planned for 2 runs per day over Western Russian between approximately 07:00 - 11:00 UTC.

5. Amateur Radio Newsline Covers ARISS Activities

On September 24, the Amateur Radio Newsline Report 1728 included two ARISS related stories. "Ham Radio in Space: ISS ATV Activated Briefly on September 14th" is about the recently held MAI-75 Slow Scan Television session. The second item, "Ham Radio in Space: ARISSAT 1 Near Completion" covers the final preparations of ARISSat-1 prior to shipping to Russia. Both stories may be found at: ftp://ftp.arnewsline.org/quincy/News/news.txt

[ANS thanks Carol, KB3LKI, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Dee Interdonato, NB2F

From -5616510050831637620
X-Google-Thread: 10e8ad,bd07b9607871b496,start
X-Google-NewGroupId: yes
X-Google-Thread: 113975,bd07b9607871b496,start
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,gidaddc8bf063,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news4.google.com!feeder.news-service.com!news.astraweb.com!border5.a.newsrouter.astraweb.com!not-for-mail
From: Chris Steyaert <observations@rmob.org>
Newsgroups: rec.radio.amateur.space,sci.astro.amateur
Subject: Radio Meteor Obs. Bull. September 2010
Date: Wed, 06 Oct 2010 20:49:22 +0200
Message-ID: <e4hpa6p79ulcr80cc2pigggvvhoncklbjf@4ax.com>
X-Newsreader: Forte Agent 5.00/32.1171
MIME-Version: 1.0

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Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Lines: 14
Organization: Unlimited download news at news.astraweb.com
NNTP-Posting-Host: aa683331.news.astraweb.com
X-Trace: DXC=3\`:dGX[3C5R@Y?`:@TCo5L?
0kYOcDh@:9WTKl=fkkg3;4fK:hd=R`6XIWYge3mQ6<eM7IG_Q>@o?i_=YE6RTP=?G<>PYkTj=H5c51j?J?
k[K;
Xref: g2news1.google.com rec.radio.amateur.space:389 sci.astro.amateur:38618
```

Radio Meteor Observation Bulletin No. 206 of September 2010 (102 K) is available now as

http://www.rmob.org/rmobtext/rmob1009.txt

More information and the visual presentation of the hourly forward scatter counts can be found on

http://www.rmob.org

Chris

```
From -3999577941179l8560
X-Google-Thread: 10e8ad,37262c1bb9f7309a,start
X-Google-NewGroupId: yes
X-Google-Thread: 10b9c8,37262c1bb9f7309a,start
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,gida4a23d5f63,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!novia!s09-08.readnews.com!news-out.readnews.com!
transit4.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-283 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sat, 9 Oct 2010 23:53:37 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 521
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000901cb682e$b429e560$1c7db020$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1286682817 11343 166.84.1.6 (10 Oct 2010 03:53:37 GMT)
X-Complaints-To: abuse@panix.com
```

```
NNTP-Posting-Date: Sun, 10 Oct 2010 03:53:37 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to            rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news1.google.com rec.radio.amateur.space:390 rec.radio.info:1790
```

AMSAT NEWS SERVICE
ANS-283

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:

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* AMSAT Board of Directors Names Senior Officers for 2010-2011
* AMSAT's Educational Outreach Reaches New High
* AO-51 Repeater Mode to Support JOTA Operations
* AO-51 Revised Schedule for October
* Call for Volunteers AMSAT at the NASM, Washington DC October 16
* SA AMSAT Presentation at South African Space Congress
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* AMSAT Awards
* Satellite Shorts From All Over

SB SAT @ AMSAT $ANS-283.01
ARISSat-1 Delivered to JSC Houston; Next Journey to Russia

AMSAT News Service Bulletin 283.01
>From AMSAT HQ SILVER SPRING, MD.
October 10, 2010
To All RADIO AMATEURS
BID: $ANS-283.01

AMSAT ARISSat Project Manager, Gould Smith, WA4SXM reported, ARISSat-1/RadioSkaf V, was shipped from Orlando, Florida to the Johnson Space Center in Houston and has arrived. From there it will be sent to Russia in early October. In Russia it will have the Kursk experiment added to the spaceframe.

The next milestone, the NASA Phase 2 Safety Review, is scheduled for October 13 - 14, 2010. The ARISSat-1 team says that actually two satellites (flight and backup) were ready for the trip to Russia.

A new Russian Orlan suit battery will be shipped to the ISS separately to be installed into the satellite (called the Amateur Radio Experiment) onboard the ISS. ARISSat-1 is scheduled to be sent to the ISS aboard Russian Progress vehicle 41P in January 2011 and deployed during EVA R-28 in February 2011.

[ANS thanks whomever for the above information]

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SB SAT @ AMSAT $ANS-283.02
AMSAT Board of Directors Names Senior Officers for 2010-2011

AMSAT News Service Bulletin 283.02
>From AMSAT HQ SILVER SPRING, MD.
October 10, 2010
To All RADIO AMATEURS
BID: $ANS-283.02

Election of AMSAT's Senior Officers was one of the first orders of business to be settled once the AMSAT Board of Directors meeting opened on October 7, prior to the start of the 2010 AMSAT Space Symposium held near Chicago, IL.

The following positions were voted upon and filled:

President	Barry Baines, WD4ASW
Vice-President Operations	Drew Glasbrenner, KO4MA
Vice President User Services	Gould Smith, WA4SXM
Vice-President Engineering	Tony Monteiro, AA2TX
Secretary	Alan Biddle, WA4SCA
Treasurer	Keith Baker, KB1SF/VA3KSF
Manager	Martha Saragovitz

The following Senior Officer positions remained open at this time awaiting appointments:
Executive Vice President
Vice-President Human Spaceflight
Vice-President Marketing

The AMSAT Board of Directors elected on September 15 include:

Barry Baines, WD4ASW
Dr. Thomas A. Clark, K3IO
Lou McFadin, W5DID

Drew Glasbrenner, KO4MA
Gould Smith, WA4SXM
Alan Biddle, WA4SCA
Tony Monteiro, AA2TX

The First Alternate member on the Board of Directors remains open at this time due to the resignation of Board Member Bill Ress, N6GHZ. First Alternate Board Member Tony Monteiro, AA2TX assumed Bill's seat on the Board according to AMSAT's Bylaws.

[ANS thanks the AMSAT Board of Directors for the above information]

/EX

SB SAT @ AMSAT $ANS-283.03
AMSAT's Educational Outreach Reaches New High

AMSAT News Service Bulletin 283.03
>From AMSAT HQ SILVER SPRING, MD.
October 10, 2010
To All RADIO AMATEURS
BID: $ANS-283.03

AMSAT President, Barry Baines, WD4ASW announced at the 2010 Symposium that the Board of Directors voted to approve the Memorandum of Understanding between AMSAT and the University of Florida, Gainesville to embark upon an educational outreach program.

Discussion with University of Florida's Dr. Norman Fitz-Coy, who leads a graduate Cubesat development program, has revealed several opportunities for AMSAT members to mentor the students on electronics and system engineering issues including on-orbit satellite management learned from operating AMSAT's fleet of spacecraft. AMSAT will also offer assistance with ground station development and operation.

The AMSAT Board of Directors also voted to continue with the educational outreach project between AMSAT, Binghamton University - SUNY, and IBM's Heritage Corridor Center for Advanced Studies. The NextGen Satellite Program is lead by Alex Harvilchuck, N3NP. During the first year of this cooperative effort the NextGen student team characterized supercapacitor performance in vacuum and developed an engineering model of deployable solar cells on a 3U cubesat.

AMSAT Vice-President of Engineering Tony Monteiro, AA2TX discussed plans for development of AMSAT's Project Fox cubesat. One goal for project Fox is to establish development of "standardized" cubesat components including reliable software-defined transponders, telemetry downlink, and spacecraft power management. A stable, well-documented, standardized "cubesat bus" can be made available to university cubesat development teams, freeing them to concentrate on the science of their research programs. This will have the net effect of having an amateur transponder flying in many cubesats in the future.

The NextGen partnership with AMSAT-SUNY-IBM will perform the system engineering leveraging on AMSAT's pioneering Project Fox Cubesat.

AMSAT's educational outreach program provides several advantages to ensure the continued growth of amateur radio in space by training the next generation of space engineers:

+ AMSAT establishes a presence on major universities with state-of-the-art facilities and satellite development teams.

+ Potential for student projects focused on AMSAT needs.

+ Broadening of AMSAT's presence in the wider university community.

+ Increased potential for involvement with research/development grant-funded opportunities for AMSAT and AMSAT members.

+ Establishing a program that offers significant traction for further education outreach.

This is developing news with ongoing details to be reported in future news bulletins, the AMSAT web, and the AMSAT Journal magazine.

[ANS thanks the AMSAT Board of Directors for the above information]

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SB SAT @ AMSAT $ANS-283.04
AO-51 Repeater Mode to Support JOTA Operations

AMSAT News Service Bulletin 283.04
>From AMSAT HQ SILVER SPRING, MD.
October 10, 2010
To All RADIO AMATEURS
BID: $ANS-283.04

AO-51 Command Station Mark Hammond N8MH, said that the AO-51 Operations Team will configure the satellite to support the Jamboree-On-The-Air (JOTA) for Scouting October, 16 - 17:

AO-51 FM Repeater, V/U
Uplink: 145.880 MHz FM (no PL tone)
Downlink: 435.150 MHz FM

No transmitter power or antenna restrictions usually associated with the QRP mode of AO-51 operation on this repeater apply to JOTA stations. Use good amateur practice during your operations.

Non-scouting users are asked to use 10 watts or less, and omni-directional or handheld antennas on this repeater. Last minute schedule changes may be required due to the power budget aboard

AO-51. Also non-scouting stations please give way to JOTA stations or QSOs with JOTA stations

The 2010 Jamboree-on-the-Air, or JOTA, will begin on Saturday, October 16, 2010, at 00:00 hours local time, and end on Sunday, October, 17, 2010, at 23:59 hours local time.

This is an annual Scouting and amateur radio event sponsored by the World Scout Bureau of the World Organization of the Scout Movement. Thousands of amateur radio stations around the world participate.

In the United States, Cub Scout dens and Boy Scout patrols visit a local amateur's ham shack during JOTA. Amateurs set up stations giving Scouts and leaders a chance to exchange greetings with Scouts from other areas. The exchanges typically include information such as Name, QTH, Scout rank, Hobbies, and Age. Full details from the World Scout Bureau can be found on-line at:
http://www.scouting.org/filestore/intl/pdf/130-218.pdf

Scouts and Amateur Radio operators may also find the ARBONET III high altitude balloon launch for JOTA interesting. ARBONET has published full details of their mission on-line at:
http://www.arbonet.net/ARBONET%20FLIGHTS.html

Launch Date: Saturday, Oct 17, 2009 9:30 AM CDT, Clarksville, Texas
Launch Net: K5FRC - 3.910MHz +/-, Starting at 9:00AM CST
Payloads: 2M Voice Beacon: ID: K5ARB - 144.390 MHz FM
             2M APRS: ID: K5ARB-1. 144.390 MHz.
             2M CW Homing Beacon ID: K5ARB. Comprised of FM carrier
                with CW tone at 147.475 MHz
             2M APRS: K5ARB-2 144.390 MHz.
             70CM / 2M FM Cross-Band Repeater: K5ARB -
                445.800 MHz UP, 145.560MHz Down
             20M CW Homing Beacon ID: K5RWK - 14.058 MHz

A DX-cluster for spotting JOTA activity can be accessed via telnet at pi4raz.nl port 7300. This cluster will be available for scouting purposes all year round, not just for JOTA.

[ANS thanks Mark N8MH, World Scouting, and ARBONET for the above information]

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SB SAT @ AMSAT $ANS-283.05
AO-51 Revised Schedule for October

AMSAT News Service Bulletin 283.05
>From AMSAT HQ SILVER SPRING, MD.
October 10, 2010
To All RADIO AMATEURS

BID: $ANS-283.05

The AO-51 Command Team and Operations Group has released this revised
schedule for October, 2010:

October 3 (late UTC)

FM Repeater, V/U
Uplink: 145.920 MHz FM (no PL tone)
Downlink: 435.300 MHz FM

9k6 Baud PBBS Operations, L/U
Uplink: 1268.708 MHz FM at 9600 baud
Downlink: 435.150 MHz FM at 9600 baud

October 10 (late UTC)

FM Repeater, V/U
Uplink: 145.920 MHz FM (no PL tone)
Downlink: 435.300 MHz FM

QRP (Oct. 10-15) and JOTA (Oct. 16-17) Only FM Repeater, V/U
Please give way to JOTA stations or QSOs with JOTA stations
Uplink: 145.880 MHz FM (no PL tone)
Downlink: 435.150 MHz FM

October 18 (late UTC)

FM Repeater, V/U
Uplink: 145.920 MHz FM (no PL tone)
Downlink: 435.300 MHz FM

9k6 Baud PBBS Operations, L/U
Uplink: 1268.708 MHz FM at 9600 baud
Downlink: 435.150 MHz FM at 9600 baud

Monitor http://www.amsat.org/amsat-new/echo/CTNews.php for the
latest Command Team and Operations Group AO-51 News.

[ANS thanks Mark Hammond N8MH for the above information]

/EX

SB SAT @ AMSAT $ANS-283.06
Call for Volunteers AMSAT at the NASM, Washington DC October 16

AMSAT News Service Bulletin 283.06
>From AMSAT HQ SILVER SPRING, MD.
October 10, 2010
To All RADIO AMATEURS
BID: $ANS-283.06

Samudra Haque, N3RDX is leading the AMSAT outreach activity at the Hispanic Heritage Month Family Day - Argentina in Air and Space which will held be at the National Air and Space Museum in Washington DC. The event will take place between 10 AM - 3 PM. Details can be found at: http://www.nasm.si.edu/

Samudra says he needs help with the AMSAT display and if you can volunteer any exhibition/display resources including pictures, posters. AMSAT members would set-up tables with equipment, posters, and other items of interest to visitors. These tables would be staffed throughout the day by AMSAT members. You are welcome to volunteer for a couple of hours or the whole day. Free parking will be provided to all, and lunch will be provided for people who volunteer the whole day.

Contact Samudra via e-mail (samudra.haque@gmail.com) if you need more information or can help out.

[ANS thanks Samudra Haque, N3RDX for the above information]

/EX

SB SAT @ AMSAT $ANS-283.07
SA AMSAT Presentation at South African Space Congress

AMSAT News Service Bulletin 283.07
>From AMSAT HQ SILVER SPRING, MD.
October 10, 2010
To All RADIO AMATEURS
BID: $ANS-283.07

Hans van de Groenendaal, ZS6AKV representing SA AMSAT presented a paper at the First Annual South African Space Congress in Cape Town at the SA Astronomical Observatory on 7 and 8 October 2010.

The paper entitled 'Amateur Radio's significant contribution to satellite communication' will trace the many facets of Amateur Radio's involvement in space.

ZS6AKV reviewed the major contributions made by Amateur Radio to satellite communication and focused on some of the current projects both world-wide and in South Africa. His paper will also touched on other space related activities such as SETI and Radio Telescopes.

SA AMSAT stated a copy of the paper will be available for download from http://www.amsatsa.org after the event.

[ANS thanks SA AMSAT and SouthGateARC site for the above information]

/EX

SB SAT @ AMSAT $ANS-283.08

KiwiSat Team Requires FPGA Chips

AMSAT News Service Bulletin 283.08
>From AMSAT HQ SILVER SPRING, MD.
October 10, 2010
To All RADIO AMATEURS
BID: $ANS-283.08

Terry Carrell, ZL3QL sent a request on behalf of the AMSAT-ZL KiwiSAT team. They require four (4) Cypress CY7C383A-0JC or QuickLogic QL12x16-2PL68C FPGA chips, used & un-programmed.

To date the team had 2 lots of 4 from two different sources but all proved to have been compromised and could not be programmed. Terry wrote, "We had a small stock but they have all been used during our development work and while we can purchase new units, the source requires us to buy a significant number more than our requirement which is proving to be very expensive. We are happy to pay for good units once we have confirmed they are clean. These chips will fly so it is important we have perfect units."

If you help in any way, please let Terry, ZL3QL know. Terry can be contacted via e-mail: tcarrell@xtra.co.nz

[ANS thanks Terry, ZL3QL and AMSAT-ZL for the above information]

/EX

SB SAT @ AMSAT $ANS-283.09
AMSAT Awards

AMSAT News Service Bulletin 283.09
>From AMSAT HQ SILVER SPRING, MD.
October 10, 2010
To All RADIO AMATEURS
BID: $ANS-283.09

AMSAT Director Contests and Awards Bruce Paige, KK5DO says congratulations are in order for the awards that he processed over the last month.

The following have entered into the Satellite Communicators Club for making their first satellite QSO:

Jay Kendall, N2JK
Darek Dabek, SP9TTX
Marisuz Kocot, SQ9MES

The following have earned the AMSAT Communications Achievement Award:

Bob Herrell, AJ5C #517
Jim Adams, K0BAM #518

Leo Hucin, OK2UUJ #519
Jay Kendall, N2JK #520

The following have earned the South Africa AMSAT Communications Achievement Award:

Jim Adams, K0BAM #US149
Jay Kendall, N2JK #US150
Marisuz Kocot, SQ9MES #US151

The following have earned the AMSAT Century Club Award:
John Papay, K8YSE #39

The following have earned the W4AMI Satellite Communications Achievement award:

Bob Herrell, AJ5C, #64
Zachary Beougher, KD8KSN #65
Mariusz Kocot, SQ9MES, #66 (plus 1 endorsement)
Darek Dabek, SP9TTX, #67 (plus 3 endorsements)

The following have earned the W4AMI 5000 Satellite Communications Achievement award:

Darek Dabek, SP9TTX #24

To see all the awards visit http://www.amsat.org.

[ANS thanks Bruce KK5DO for the above information]

/EX

SB SAT @ AMSAT $ANS-283.10
Satellite Shorts From All Over

AMSAT News Service Bulletin 283.10
>From AMSAT HQ SILVER SPRING, MD.
October 10, 2010
To All RADIO AMATEURS
BID: $ANS-283.10

+ Congratulations to Sebastian, W4AS for attaining Satellite VUCC Award #200!

+ A humorous overview of the review process for the upcoming MAVEN (Mars Atmosphere and Volatile Evolution) mission to Mars has been posted by NASA. NASA gave the mission a green light to continue development which will investigate the mystery of how Mars lost much of its atmosphere:
http://www.universetoday.com/75011/so-you-want-to-build-a-satellite/
Additional information about the MAVEN mission can be found at the MarsDaily.com web site: http://tinyurl.com/27zvovx

+ A good overview of HO-68 Operating has been posted by Henk, PA3GUO http://www.youtube.com/watch?v=o6oDgUTHCwg

+ A short video introduces the Firefly mission, a CubeSat built by undergraduate students with the partnership of Goddard Space Flight Center and the National Science Foundation. http://tinyurl.com/22tm3z5 (SoutGateARC site)

+ For those interested in building your own satellite antennas check out this article by Derek Hilleard, G4CQM considering three different state-of-the-art 7 element yagi designs for 144MHz. http://g4cqm.www.idnet.com/2M%20YAGI/ (via SouthGate)

+ This is not satellite related but you guys are going to like this one anyway. Watch this helmet-mounted camera video as our two heroes make a stomach-churning climb to the top of this 1,768 foot mast just to change a Xenon flasher: http://tinyurl.com/2c3nmul (SouthGate)

+ ARISS Chairman Gaston Bertels, ON4WF invites you to view the photos and listen to a a mp3 recording of the successful ARISS (Amateur Radio on the International Space Station) school contact with Norwegian Museum of Science, Technology and Medicine: http://www.ariss-eu.org/2010_09_25.htm

+ The next Hudson Valley Satcom Group net is Thursday Oct. 14, starting at 8PM EDT (UTC - 4) on the 146.970 MHz repeater (Down 600 & Pl. 100) and an Echo link node of: N2EYH-L. More info: http://www.hvsatcom.org (via Stu, WA2BSS)

+ Videos of the 2010 annual meeting of AMSAT-Italy held at Esrin south of Rome are available on the ESA website.
  http://download.esa.int/flv/amsat-i_2010_part1.flv (ISS)
  http://download.esa.int/flv/amsat-i_2010_part7.flv
  http://download.esa.int/flv/amsat-i_2010_part4.flv (ISS Digital ATV)
  http://www.esa-spaceweather.net/sda/ionosfera/amateur_radio.html

+ Paul 2E1EUB says starting this weekend and for the next 14 days he will be active at his 2M1EUB location in Scotland for the first 7 days. He will operate the last 7 days from the north west coast of Scotland.

[ANS thanks everyone for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office. And, with that, please keep this advice in mind for your next antenna project, working together, two men can do the work of three. The trick is convincing those two other suckers to work together.

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM

From 1826327524337742471
X-Google-Thread: 8f86f75953,79167fe8ce2850dc,start
X-Google-Attributes: gid8f86f75953,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: FRENCH,ASCII-7-bit
Path: g2news2.google.com!news2.google.com!newsfeed2.dallas1.level3.net!
news.level3.com!columbine.singnet.com.sg!not-for-mail
From: Ng Spim <ng@spim.woeishyang.com>
Newsgroups: rec.radio.amateur.space
Subject: a test posting
Date: 13 Oct 2010 21:17:44 GMT
Organization: Singapore Telecommunications Ltd
Lines: 10
Message-ID: <i957lo$v13$1@mawar.singnet.com.sg>
NNTP-Posting-Host: 121.6.177.177
Content-Type: text/plain; charset=ISO-8859-1;
Content-Transfer-Encoding: quoted-printable
Xref: g2news2.google.com rec.radio.amateur.space:416

Suspendisse potenti. Aenean cursus odio in sem ornare euismod. Duis
aliquet turpis eu est commodo aliquam. Vivamus fringilla, ligula
euismod congue cursus, tellus dui sagittis tortor, imperdiet varius
lectus urna quis ante. Donec sollicitudin ligula quis velit tincidunt
vitae consequat nisi tempus. Suspendisse potenti. Suspendisse blandit
rutrum mi, at laoreet risus facilisis sit amet. Curabitur tincidunt
quam fermentum odio vehicula ac consequat turpis hendrerit. Curabitur
rhoncus imperdiet felis, sollicitudin semper dolor pellentesque vel.
Aliquam lacus est, viverra adipiscing adipiscing viverra, lacinia et
diam.

From 3909471164659253682
X-Google-Thread: a4a23d5f63,6cee689a70780c15,start
X-Google-Attributes: gida4a23d5f63,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII
Path: g2news2.google.com!news1.google.com!newsfeed2.dallas1.level3.net!
news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-290 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sun, 17 Oct 2010 09:34:11 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 290

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Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000c01cb6dff$f723aeb0$e56b0c10$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
X-Trace: reader1.panix.com 1287322451 1713 166.84.1.6 (17 Oct 2010 13:34:11 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 17 Oct 2010 13:34:11 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news2.google.com rec.radio.amateur.space:417 rec.radio.info:1887
```

AMSAT NEWS SERVICE
ANS-290

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* ARISSat-1 Info Added to AMSAT Web
* 2010 AMSAT Symposium Proceedings Added To Online Store
* FUNCube Dongle Development Status
* Gpredict 1.2 released
* ARISS Status - 11 October 2010

SB SAT @ AMSAT $ANS-290.01
ARISSat-1 Info Added to AMSAT Web

AMSAT News Service Bulletin 290.01
  From AMSAT HQ SILVER SPRING, MD.
October 17, 2010
To All RADIO AMATEURS
BID: $ANS-290.01

Thanks to the ARISSat-1 team for providing a copy of their Symposium presentation materials. Links to the following have been posted at http://www.amsat.org.

1. ARISSat-1 color frequency guide
2. PDF copy of ARISSat-1 Overview presentation slides (~1MB)

Lots more information will be published in the AMSAT Journal.

ARISSat-1 will have these features ...

Transponder
. Mode U/V (70 cm Up, 2m Down)
. Linear
. Inverting (Tx LSB, Rx USB)
. 16 kHz bandwidth
. Can be worked with QRP transmitter and omni antennas

Digital Beacon
. BPSK-1000 w/FEC by Phil Karn KA9Q
. Legacy mode 400 BPSK (P3 type)
. Telemetry Data
. Experiment Data
. PC/Mac demodulator & decoder software will be available

CW Beacon
. Call sign �S01S
. CW Telemetry (subset)
. Call signs or names of developers
. CW1 or CW2 identifies BPSK mode

FM Audio
. Call sign �S01S
. Voice Telemetry (subset)
. SSTV in Robot-36 format
. Voice Greetings

Voice Greetings
. 24 different greetings
. Mostly children
. Special one from Yuri Gagarin
. Secret word
. 15 different languages
English Spanish Russian French
Italian Dutch Swedish Japanese
Chinese Catalan Bengali Portuguese
Hebrew Nepalese German

[ANS thanks the ARISSat-1 team for the above information]

/EX

SB SAT @ AMSAT $ANS-290.02
2010 AMSAT Symposium Proceedings Added To Online Store

AMSAT News Service Bulletin 290.02
  From AMSAT HQ SILVER SPRING, MD.
October 17, 2010
To All RADIO AMATEURS
BID: $ANS-290.02

The 2010 Symposium Proceedings have been added to the AMSAT Online Store.

Please be aware that it is heavy and shipping overseas will be expensive. Martha will add the shipping charges at time of mailing and notify you of the exact amount for postage.

http://www.amsat.org

Click on Online Store in the left margin

[ANS thanks Bruce, KK5DO, for the above information]

/EX

SB SAT @ AMSAT $ANS-290.03
FUNCube Dongle Development Status

AMSAT News Service Bulletin 290.03
  From AMSAT HQ SILVER SPRING, MD.
October 17, 2010
To All RADIO AMATEURS
BID: $ANS-290.03

Howard Long, G6LVB, reports that he is enormously gratified by the large volume of interest shown the FUNcube Dongle over the past few weeks. With so much interest being shown, Howard took some time to provide an update about the development progress.

The FUNcube Dongle was originally designed to be an accessible way to be able to receive amateur satellites, most notably AMSAT-UK's forthcoming FUNcube cubesat (http://www.funcube.org.uk).

What does accessible mean? Essentially we mean both low cost and easy to setup. The original target market is, and remains, what Howard calls,

"the unconverted", those, particularly in education, who need a means of being able to practically introduce and demonstrate real space technology in a hands-on way.

When the work on FUNcube was distributed, Howard was given the task of coming up with the ground segment, and the result is the FUNcube Dongle.

As it's tuned out, the FUNcube Dongle has the added bonus that it's a VHF/UHF and low microwave equivalent to the well-known Softrock in an integrated plug and play package. The intention is to have two models, an entry-level frequency-restricted version targeted at the educational market, and a full blown Pro version that seems to piqued the interest of many radio amateurs, radio astronomers and short wave listeners.

In pr�cis, it includes an integrated front end filter, LNA, quatrature

LO, zero-IF quadrature downconverter, dual 16 bit ADC and USB soundcard.

In it's simplest of forms, it's SMA in, USB out. It's also compatible with pretty much any software that works for the Softrock, for example LinRad,Spectravue, M0KGK and Rocky.

The passband is 96kHz, tuneable from 64MHz to 1,700MHz. The tuning is via a USB HID interface meaning that as well as your favourite soundcard

SDR program, you'll need a little app supplied with the FUNcube Dongle to control the centre frequency or you'll end up only listening to Howard's favorite FM broadcast station ;-)

It's also compatible with XP, Vista , Windows 7 in 32 bit and Vista and Windows 7 in 64 bit. Initial testing on the Mac and Ubuntu 32 and 64 bit shows compatibility too, however the frequency control application for those platforms has not been written yet.

So, no USB drivers are required!

To keep people informed going forward, a blog has been established at:
http://www.funcubedongle.com/.

Also there's a video of the first pre-production unit at:
http://www.youtube.com/watch?v�zTBPLqal0

Projected availability of the first production batch of the Pro version is December 2010. Pricing is subject to assembly costs, but to give you indicative pricing we are working on an initial price of the Pro version to be circa USD150/GBP100.

[ANS thanks Howard, G6LVB, for the above information]

/EX

SB SAT @ AMSAT $ANS-290.04
Gpredict 1.2 released

AMSAT News Service Bulletin 290.04
From AMSAT HQ SILVER SPRING, MD.
October 17, 2010
To All RADIO AMATEURS
BID: $ANS-290.04

Alex Csete, OZ9AEC, reports that after one year of development, bug fixing and testing it was decided that it was time to make a new release of Gpredict. This release features several new features such as the re-written layout engine as well as lots of bug fixes.

The new layout engine allows any combination of views to be created in a NxM grid, see an example screenshot:
http://picasaweb.google.com/lh/photo/eF3tizT-Xj-az6VcykUzaA

The sky at a glance widget has been improved to look nicer and to be more interactive. Moving the mouse over a pass pops up an info widget showing info about the pass. Clicking on the pass brungs up the pass details dialog. See:
http://picasaweb.google.com/lh/photo/anU9WhY4_40Gk-WVCP7ZWw

The info pop-ups have also been added to the map view and the polar video. Moving the mouse over a satellite will show the current position of the satellite as well as time until next AOS or LOS. You can see a demo video here:
http://www.youtube.com/watch?v�C4A6onbBg

The new release can be downloaded from:
https://sourceforge.net/projects/gpredict/files//Gpredict/1.2/
Currently only the source package is available. Binary packages for Windows, Mac and various Linux distributions should become available shortly.

Thanks to everyone who has contributed to this release!

[ANS thanks Alex, OZ9AEC, for the above information]

/EX

SB SAT @ AMSAT $ANS-290.05
ARISS Status - 11 October 2010

AMSAT News Service Bulletin 290.05
From AMSAT HQ SILVER SPRING, MD.
October 17, 2010
To All RADIO AMATEURS
BID: $ANS-290.05

<B>IRSEA Contact Successful</B>
An Amateur Radio on the International Space Station (ARISS) contact took place between IRSEA, a non-profit Institute of Research and Education, in Bisceglie, Italy and Doug Wheelock, KF5BOC on the ISS on Tuesday, October 5, via telebridge station K6DUE in Greenbelt, Maryland. Michele Mallardi, IZ7EVR introduced the ARISS event with a presentation to an audience of 100 students and visitors. Obscurations from the ISS structure may have hindered the contact, allowing time for five questions to be answered. The contact was part of a professional education program, "Promotion of the characteristics of the Puglia region" which dealt with space communications, space life, space achievements, advantage of space research, use of man-made

satellites and the International Space Station.

<B>ARISSat-1 Safety Review this Week</B>
The Johnson Space Center Payload Safety Review Panel will perform a Phase 2 flight safety review of ARISSat-1 on the mornings of Wednesday and Thursday, October 13 and 14 in Houston. Participation in the review will include U.S. and Russian ARISSat team members as well as RSC-Energia safety specialists.

<B>Challenger Learning Center Opens Ham Station</B>
On Monday October 4, a satellite ground station was opened at the Challenger Learning Center (CLC) in Oregon, Ohio. The station will pique students' interest in math and science and will allow the youth to contact the International Space Station. CLC will provide lesson plans and activities on amateur radio and will use the system during camps and workshops. The Toldeo Blade posted a story on the event. "Kids wired to learn to operate ham radios" may be found at:
http://www.toledoblade.com/article/20101009/NEWS16/10080352

<B>ARISS Facebook Page Status</B>
Amateur Radio on the International Space Station (ARISS) has generated some interest since it launched its Facebook page at the end of August. To view, go to:
http://www.facebook.com/pages/Amateur-Radio-on-the-International-Space-Station/143541532324016

[ANS thanks Carol, KB3LKI, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Lee McLamb, KU4OS

From 3769535045463174768
X-Google-Thread: a4a23d5f63,55e09aa0f17e1eff,start
X-Google-Attributes: gida4a23d5f63,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit

Path: g2news2.google.com!news4.google.com!news1.google.com!
newsfeed2.dallas1.level3.net!news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-284 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Sun, 17 Oct 2010 10:02:52 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 1884
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000d01cb6e03$ec3821d0$c4a86570$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1287324173 20681 166.84.1.6 (17 Oct 2010 14:02:53 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 17 Oct 2010 14:02:53 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to   rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to   rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
x-cr-hashedpuzzle: Abgr Bq5K Bvtu CIGV C4mU DBK5 D9Oj Ee09 E0zq FjzR GmK/ G9SH
HeVm JeUC JrQb
Kd+a;1;cgBlAGMALQByAGEAZABpAG8ALQBpAG4AZgBvAEAAcABhAG4AaQB4AC4AYwBvAG0A;Sosha1_v1;
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14:02:08
GMT;VwBTAFIALQAyADgANAAgAEEATQBTAEEAVAAgAFcAZQBlAGsAbAB5ACAAUwBhAHQAZQBsAGwAaQB0AG
UAIABSAGUAcABvAHIAdAA=
x-cr-puzzleid: {21903FC8-B604-4BB4-8E50-BDEDE18AF543}
Xref: g2news2.google.com rec.radio.amateur.space:418 rec.radio.info:1888

This report is organized into four (4) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - deborbited/returned satellites

SB SAT @ AMSAT W8ISS $WSR-284.S1
WSR 284 Part 1 10/11/2010

AMSAT NEWS SERVICE BULLETIN 284.S1
FROM AMSAT HQ SILVER SPRING, MD, October 11, 2010
TO ALL RADIO AMATEURS
BID: $WSR-284.S1

HO-68 HOPE-1 (CAS-1)(XW-1)
Catalog Number: 36122
Launch Date: December 15, 2009
Status: Operational

Callsign:
Broadcast: BJ1SA-11
BBS: BJ1SA-12

Uplinks: 145.8250 MHz FM, PL 67.0 Hz.
           145.9250 - 145.9750 MHz SSB/CW
           145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
           435.7650 - 435.7150 MHz SSB/CW
           435.6750 MHz AFSK 1200 BPS

Beacon: 435.7900 MHz CW

Mode and Antenna Polarization:
V: LHCP 2.0dBi max
U: RHCP 3.0dBi max

IARU coordination page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108

For more information about XW-1 (CAS-1):
http://www.camsat.cn
[09062010]
=====
SO-67 SumbandilaSat
Catalog Number: 35870
Launch Date: September 17, 2009

Status: Suspended

Callsign: ZS0SUM

Uplink: 145.875MHz FM tone 233.6 Hz
Downlink: 435.345MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

For more information about SO-67:
http://www.amsatsa.org.za/
[09062010]
=====

```
DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008

Status: Operational
Current Mode: Science Mode - Beacon ONLY

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink:   435.530 to 435.570 MHz

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68
[09062010]
=====
VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink:   435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink:   435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW


Indian Beacon:  145.9360 MHZ CW
Dutch Beacon:   145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is active. Each transponder has a different beacon.
[09062010]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational
```

Current Modes:
Voice 1: V/u
Uplink: 145.920 MHz FM
Downlink 1: 435.300 MHz FM

Voice 2: V/u
Uplink: 145.880 MHz FM
Downlink: 435.150 MHz FM

Telemetry:
Downlink: 435.150MHz 9k6

Analog voice downlink: 435.300 MHz FM
                           435.150 MHz FM
                          2401.200 Mhz FM
Analog voice uplink: 145.860 MHZ FM
                           145.880 MHz USB
                           145.880 MHz FM
                           145.920 MHz FM
                           145.920 MHz FM - 67 Hz PL tone burst
                          1268.708 MHz FM
Digital Downlinks: 435.150 MHz FM 38k4 PBP, 1 watt output
                           435.150 MHz FM 9k6 Pacsat Broadcast Protocol
                          2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Pacsat Broadcast Protocol
                          1268.700 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[10112010]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz. The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10 minute timer.
[09062010]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Scheduled Operations
Current Mode: V/u (Mode JA)

Voice/CW (Mode JA)
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage:
http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:

```
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's
CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/
fo29cwts.htm
[09062010]
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993

Status: Operational

Current Mode: V/u

Uplink:   145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[09062010]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational

Current Mode: Alternating between Mode A and B every 24 hours

Uplink:   145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink:  29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons:   29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
[09062010]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
```

Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - OFF
Voice - V/v
BBS - OFF
APRS - OFF
SSTV - OFF

Expedition 25 Crew:

Commander:	Doug Wheelock	KF5BOC
Flight Engineer:	Shannon Walker	KD5DXB
Flight Engineer:	Fyodor Yurchikhin	RN3FI
Flight Engineer:	Scott Kelly	
Flight Engineer:	Alexander Kaleri	U8MIR
Flight Engineer:	Oleg Skripochka	RN3FU

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss

ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[10112010]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-284.S2
WSR 284 Part 2 10/11/2010

AMSAT NEWS SERVICE BULLETIN 284.S2
FROM AMSAT HQ SILVER SPRING, MD, October 11, 2010
TO ALL RADIO AMATEURS
BID: $WSR-284.S2

StudSat
Catalog Number: 36796
Launch Date: July 12, 2010
Status: On Orbit

Uplink: 437.505MHz, 9600bps FSK
Downlink: 437.505MHz, 9600bps FSK
Beacon : 437.505MHz,   20bps ASK
[08062010]
=====
TIsat-1
Catalog Number: 36799
Launch Date: July 12, 2010
Status: On orbit

Callsign: HB9DE

Uplink: 145.980MHz FM, AFSK
Downlink: 437.305MHz FM, AFSK
Beacon: 437.305MHz CW
[08062010]
=====
HO-68 HOPE-1 (CAS-1)(XW-1)
Catalog Number: 36122
Launch Date: December 15, 2009
Status: Operational

Callsign:
Broadcast: BJ1SA-11
BBS: BJ1SA-12

Uplinks: 145.8250 MHz FM, PL 67.0 Hz.
           145.9250 - 145.9750 MHz SSB/CW
           145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM

```
           435.7650 - 435.7150 MHz SSB/CW
           435.6750 MHz AFSK 1200 BPS

Beacon:    435.7900 MHz CW

IARU coordination page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108

For more information about XW-1 (CAS-1):
http://www.camsat.cn
[09062010]
=====
SwissCube
Catalog Number: 35932
Launch Date: September 23, 2009

Status: Operational

Callsign: HB9EG

Beacon(100mw): 437.5050MHz CW
Beacon(1w):    437.5050MHz FSK 1k2bps
[04222010]
=====
UWE-2
Catalog Number: 35934
Launch Date: September 23, 2009

Status: In Orbit

Beacon(500mw): 437.3850 MHz AFSK 1k2bps
               437.3850 MHz FSK 9k6bps
[1112009]
=====
ITUpsAT1
Catalog Number: 35935
Launch Date: September 23, 2009

Status: Operational

Beacon(100mw): 437.325MHz CW
Beacon(1w): 437.325MHz 19k2bps
[11112009]
=====
BEESAT
Catalog Number: 35933
Launch Date: September 23, 2009

Status: Operational

Callsign: DP0BEE

Beacon(100mw): 436.000MHz CW
Beacon(500mw): 436.000MHz GMSK 4k8bps
Beacon(500mw): 436.000MHz GMSK 9k6bps
[04222010]
=====
CP-6
Catalog Number: 35003
Launch Date: May 19, 2009

Status: Operational

Downlink: 437.365 MHz 1k2 AFSK
[09062010]
=====
HAWKSAT 1
Catalog number: 35004
Launch Date: May 19, 2009

Status: operational

Downlink: 437.345 MHz ?
[09062010]
=====
Pharmasat
Catalog Number: 35002
Launch Date: May 19, 2009
Status: Operational

Downlink: 437.465 MHz 1k2 AFSK
[09062010]
=====
ANUSAT
Catalog Number: 34808
Launch Date: April 20, 2009

Status: ?

Downlink:  435.000 MHz
Uplink:    145.800 MHz

Telemetry: 137.400 MHz
[09062010]
=====
SOHLA-1 (ASTRO TECH.)
Catalog Number: 33496
Launch Date: January 23, 2009

Status: Operational

Proposed Frequencies and Modes:
Downlink: 437.505 MHz AFSK/CW
Beacon:   437.505 MHz AFSK/CW

Callsign:
```

```
IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=101
[09062010]
=====
KAGAYAKI (Solan Co.)
Catalog Number: 33495
Launch Date: January 23, 2009

Status: In Orbit

Downlink: 437.375 MHZ    FSK9k6/CW
Beacon:   437.375 MHz    FSK9k6/CW

IARU coordination status page:

AMSAT-NA webpage:

[09062010]
=====
STARS (Kagawa Univ.) (Twin Satellites)
Catalog Number: 33498
Launch Date: January 23, 2009

Status: Operational ?

Downlinks: 437.485 MHz FM/CW
           437.465 MHz FM/CW
Beacons:   437.305 MHz FM/CW
           437.275 MHz FM/CW

Callsigns: JR5YBN
           JR5YBO

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=99

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=121&retURL
=/satellites/status.php
[09062010]
=====
KKS-1 (Tokyo MCIT)
Catalog Number: 33499
Launch Date: January 23, 2009

Status: Operational

Downlink:  437.455 MHz AFSK/CW
Beacon:    437.385 MHz AFSK/CW

Callsign: JQ1YYY
```

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=107

AMSAT-NA webapge:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=120&retURL
=/satellites/status.php
[09062010]
=====
PRISM (Tokyo Univ.)
Catalog Number: 33493
Launch Date: January 23, 2009

Status: Operational ?

Downlink: 437.425 MHz AFSK/GMSK/CW
Beacon: 437.250 MHz AFSK/GMSK/CW

Callsign: JQ1YCX

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=97

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=119&retURL
=/satellites/status.php
[09062010]
=====
RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number: 32953
Launch Date: May 23, 2008

Status: Operational

Curent Modes: Telemetry
              Audio
              Images

Downlinks: 435.315 MHz
           435.215 MHz

AMSAT-NA website:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=115&ret
URL=/satellites/status.php

Official website:
http://www.npopm.com/?cid=leoca&caid=43
[09062010]
=====
CanX-2
Catalog number: 32790
Launch Date: April 28, 2008

Status: Operational in range of ground station only

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[09062010]
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.425 MHz 1k2 baud packet

For the latest project status update please visit the AAUSAT-II web page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[09062010]
=====
CO-65 CUTE-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008

Status: Digipeater

Downlink: 437.475 MHz 9k6 Packet
Uplink: 1267.600 Mhz

Telemetry Beacon:
Downlink: 437.2750 MHz CW

For the latest project status update please visit the Cute-1.7+APD II web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78

Command Station blog website:
http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=112&retURL=/satellites/status.php
[09062010]
=====
Compass-1

```
Catalog number: 32787
Launch Date: April 28, 2008

Status: Operational

Current Mode: 4k8 MSK packet

Uplink:   145.980 MHz FM
Downlink: 437.275 Mhz CW
          437.405 MHz Packet

For the latest project status update please visit the Compass 1 web
page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=114&retURL
=/satellites/status.php
[09062010]
=====
CO-66 Seeds II
Catalog number: 32791
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.485 MHz

Callsign: JQ1YGU

For the latest project status update please visit the Seeds 2 web
page: http://cubesat.aero.cst.nihon-u.ac.jp/english/seeds_2_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=113&retURL
=/satellites/status.php
[09062010]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode:  /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon:    435.245 MHz CW
```

Callsign: K5USL

TLM and CW interchange every 30 seconds.

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=94&retURL=
/satellites/status.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=72
[09062010]
=====
CP3
Catalog Number: 31129
Launch Date: April 17,2007

Status: Operational

Current Mode: /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[09062010]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon: 437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/xivpicte.htm
[09062010]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003

Status: ?????

Current Mode: /u

Beacon: 436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=96&retURL=/satellites/status.php

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[09062010]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Modes:
Voice 1: V/u
Uplink: 145.920 MHz FM
Downlink 1: 435.300 MHz FM

Voice 2: V/u
Uplink: 145.880 MHz FM
Downlink: 435.150 MHz FM

Telemetry:
Downlink: 435.150MHz 9k6

Analog voice downlink:	435.300 MHz FM
	435.150 MHz FM
	2401.200 Mhz FM
Analog voice uplink:	145.860 MHZ FM
	145.880 MHz USB
	145.880 MHz FM
	145.920 MHz FM
	145.920 MHz FM - 67 Hz PL tone burst
	1268.700 MHz FM
Digital Downlinks:	435.150 MHz FM 38k4 PBP, 1 watt output
	435.150 MHz FM 9k6 Pacsat Broadcast Protocol
	2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:	145.860 MHz FM 9k6 Pacsat Broadcast Protocol
	1268.708 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon:	435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

```
Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[10112010]
=====
QuakeSat
Catalog Number: 27845
Launch Date: June 30, 2003

Status: Telemetry only

Current Mode: 9600 baud data packet

Mode U packet
Downlink: 436.675 MHz 9k6 BPS

Quakesat webpage:
http://www.quakefinder.com/services/quakesat-ssite/
[10042010]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=69&retURL
=/satellites/status.php
[09062010]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Telemetry only

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
```

Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[09062010]
=====
RS-22 RADIO SPORT 22
Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only

Current Mode: /u

CW Beacon - 435.352 MHz
            145.818 MHz

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=76&retURL=/satellites/status.php
[09062010]
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990

Status: CW Beacon only

Uplinks: 145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink: 437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[09062010]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - OFF

Voice - V/v
BBS - OFF
APRS - OFF
SSTV - OFF

Expedition 25 Crew:

Commander:	Doug Wheelock	KF5BOC
Flight Engineer:	Shannon Walker	KD5DXB
Flight Engineer:	Fyodor Yurchikhin	RN3FI
Flight Engineer:	Scott Kelly	
Flight Engineer:	Alexander Kaleri	U8MIR
Flight Engineer:	Oleg Skripochka	RN3FU

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time

line is NOT translated from Russian and posted.
[10112010]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-284.S3
WSR 284 Part 3 10/11/2010

AMSAT NEWS SERVICE BULLETIN 284.S3
FROM AMSAT HQ SILVER SPRING, MD, October 11, 2010
TO ALL RADIO AMATEURS
BID: $WSR-284.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

CP4
Catalog Number: 31132
Launch Date: April 17, 2007

Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon: 437.325 MHz CW

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=79
[09062010]
=====
LIBERTAD-1
Catalog Number: 31128
Launch Date: April 17, 2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink: 145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[09062010]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: Non-Operational

Current Mode: V/v

```
Uplink/Downlink: 145.825 Mhz FM
Voice Recorder:  145.825 Mhz FM
[09062010]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency:  437.305
                             2407.250

Official Website: http://www.ncube.no
[09062010]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink:        437.250 MHz FM 67Hz CTCSS
Voice Downlink:     2401.835 MHz FM
Packet Up/Downlink:  437.250 MHz 9k6 packet
Packet Downlink     2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[09062010]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non-Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[09062010]
=====
CANX-1
Catalog Number: 27847
Launch Date: June 30, 2003

Status: Non-Operational

Downlink: 437.8800 MHz AFSK 1k2bps
[06052009]
=====
DTUSAT
```

Catalog Number: 27842
Launch Date: June 30, 2003

Status: Non-Operational

Current Mode: 2k4 AFSK Packet last reported

Downlink: 437.475MHz

Officail webpage: http://dtusat1.dtusat.dtu.dk/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=101&retURL=satellites/all_oscars.php
[02212009]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)

Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Telemetry only

Uplinks: 145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[03302009]
=====

```
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink:   145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS:                SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink:   145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
```

```
-------
V-band:   145.840 -  145.990 MHz CW/LSB
U-band:   435.550 -  435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks
---------
S2-band:  2401.225 -  2401.475 MHz CW/USB
K-band:  24048.010 - 24048.060 MHz CW/USB
Beacon:   2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)
----------------------------
BEACON   General Beacon(GB)  Middle Beacon(MB)  Engineering Beacon(EB)
2 m                   none        145.898 MHz                      none
70cm           435.438 MHz        435.588 MHz               435.838 MHz
13cm(1)       2400.188 MHz       2400.338 MHz              2400.588 MHz
13cm(2)       2401.173 MHz       2401.323 MHz              2401.573 MHz
3cm          10450.975 MHz      10451.125 MHz             10451.375 MHz
1.5cm        24047.885 MHz      24048.035 MHz             24048.285 MHz
[07162007]
=====
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink:    145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
```

Catalog Number: 25636
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Non-Operational

Current Modes:
Telemetry : /u

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems

```
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign:       4XTECH-12

More information of GO-32 can be found at:
http://asri.technion.ac.il/techsat/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=14&retURL
=/satellites/status.php
[07172010]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink:   145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
MO-30 UNAMSAT-2
Catalog Number: 24305
Launch Date: September 5, 1996

Status: Non-operational

Downlink:       435.1380 MHz AFSK 1200 BPS
Downlink:       435.2060 MHz AFSK 1200 BPS
Uplink:         145.8150 MHz AFSK 1200 BPS
Uplink:         145.8350 MHz AFSK 1200 BPS
Uplink:         145.8550 MHz AFSK 1200 BPS
Uplink:         145.8750 MHz AFSK 1200 BPS
[06042009]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Non-operational

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage
```

```
Broadcast callsign: POSAT1-11
BBS callsign:       POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012009]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
AO-24 ARSENE
Catalog Number: 22654
Launch Date: May 13, 1993

Status: Non-operational

Uplink:    435.0625 MHz FM 1k2bps AFSK
           435.1125 MHz FM 1k2bps AFSK
           435.1375 MHz FM 1k2bps AFSK
```

```
Downlink:  145.9750 MHz FM 1k2bps AFSK
          2446.5025 MHz FM 1k2bps AFSK

Beacon:    2446.4700 MHz CW

Broadcast callsign:
BBS:
[12162009]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HL01-11
BBS: HL01-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25
```

```
Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
[05012006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: non-operational

Current Mode:  V/u

Uplink:         145.900 MHz FM 1200-baud Manchester FSK (reserved)
                145.920 MHz FM VOICE
                145.940 MHz FM 1200-baud Manchester FSK (reserved)
                145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink:       437.026 MHz USB VOICE
                (1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]
```

Mode and Antenna Polarization:
U: RC 437.050 MHz RHCP
   PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[07242009]
=====
UO-15 UoSAT-4
Catalog Number: 20438
Launch Date: January 22, 1990

Status: Non-operational

Uplink: ?
Downlink: 435.1250MHz (?)
          435.1200MHz (?)
[06042009]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink: 145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink: 145.8500 MHz MFSK 1200 BPS
Uplink: 145.8700 MHz MFSK 1200 BPS
Uplink: 145.8900 MHz MFSK 1200 BPS
Uplink: 145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====

```
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984

Status: Non-operational.

Current Mode:  /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon:          435.025 MHz
Mode-S Beacon:     2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[09062010]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon:   145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink  29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
```

```
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
Beacons:   29.450 MHz
          435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon 1:  29.352 MHz (intermittent)
Beacon 2:  29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991
```

```
Status: Non-operational

Uplink:     21.260 to 21.300 MHz CW/USB
Downlink:  145.860 to 145.900 MHz CW/USB

Beacon:    145.860 MHz

Robot:     145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink:   21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon:   29.408 MHz

Robot:    29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-284.S4
WSR 284 Part 4 10/11/2010

AMSAT NEWS SERVICE BULLETIN 284.S4
FROM AMSAT HQ SILVER SPRING, MD, October 11, 2010
TO ALL RADIO AMATEURS
BID: $WSR-284.S4

THE FOLLOWING SATELLITES HAVE RE-ENTERED OR HAVE BEEN RETURNED SAFELY:

CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Re-entered
Re-entered:

Uplink:  1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
```

```
IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=56
[09062010]
=====
BEVO-1 (DRAGONSAT-1)
Catalog Number: 35690
Launch Date: May 19, 2009

Status: Re-entered
Re-entered:

Downlink: 437.325 MHz 9k6 GMSK
          437.325 MHz CW 20wpm
[07312009]
=====
AggieSat2 (DRAGONSAT-2)
Catalog Number: 35690
Launch Date: May 19, 2009

Status: Re-entered
Re-entered:

Downlink: 436.250 MHz 9k6 FHSS
[11112009]
=====
Pollux
Catalog Number: 35693
Launch Date: July 31, 2009

Status: Re-entered
Re-entered:

Callsign: POLLUX-1

Downlink: 145.825MHz 1k2 AX.25
[09062010]
=====
Castor (ANDE-2)
Catalog Number: 35694
Launch Date: July 31, 2009

Status: Re-entered
Re-entered:

Callsign: KD4HBO-1

Downlink: 145.825 MHz 1k2 AX.25
[09062010]
=====
NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006
```

```
Status: Re-Entered
Re-entered: July 28, 2008

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[01012009]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink:      145.825 Mhz FM APRS AX25
APRS Uplink:        145.825 MHz FM APRS AX25
Voice/PSK31 Uplink:  28.120 MHz

Packet to Voice ID: RAFT
[06112007]
=====
GENESAT-1
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Re-Entered
Re-entered date: August 8, 2010

Current Mode: /u

Callsign: KE7EGC

Telemetry Beacon Downlink: 437.0695 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[08082010]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006
```

Status: Re-Entered
Re-entered: June 18, 2008

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon: 437.2750 MHz CW

Callsign: JR8YJT
[01012009]
=====
SO-43 Starshine 3
Catalog Number: 26929
Launch Date: September 30, 2001

Status: Re-Entered
Re-entered: January 21, 2003

Beacon: 145.825Mhz
[02212009]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at}
amsat.org
NNNN
/EX

```
From -5733583046443317552
X-Google-Thread: 10e8ad,79167fe8ce2850dc
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!postnews.google.com!l20g2000yqm.googlegroups.com!not-for-
mail
From: ai8o <ai8o@lexcominc.net>
Newsgroups: rec.radio.amateur.space
Subject: Re: a test posting
Date: Thu, 21 Oct 2010 15:35:47 -0700 (PDT)
Organization: http://groups.google.com
Lines: 2
Message-ID: <9ed3acb7-6346-4c78-8486-6717a968507f@l20g2000yqm.googlegroups.com>
References: <i957lo$v13$1@mawar.singnet.com.sg>
NNTP-Posting-Host: 207.7.74.74
Mime-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
X-Trace: posting.google.com 1287700547 5822 127.0.0.1 (21 Oct 2010 22:35:47 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Thu, 21 Oct 2010 22:35:47 +0000 (UTC)
Complaints-To: groups-abuse@google.com
Injection-Info: l20g2000yqm.googlegroups.com; posting-host=207.7.74.74; posting-
account=ayHsSAoAAAAGv9FQPd_uUIEXqGDeSZmO
User-Agent: G2/1.0
X-HTTP-UserAgent: Mozilla/4.0 (compatible; MSIE 8.0; Windows NT 6.1; WOW64;
 Trident/4.0; SLCC2; .NET CLR 2.0.50727; .NET CLR 3.5.30729; .NET CLR
 3.0.30729; Media Center PC 6.0),gzip(gfe)
Xref: g2news2.google.com rec.radio.amateur.space:419
```

Semper Ubi,

Sub Ubi!

```
From -9013128550190483854
X-Google-Thread: a4a23d5f63,26cd8086943ca58a,start
X-Google-Attributes: gida4a23d5f63,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!border1.nntp.dca.giganews.com!
border4.nntp.dca.giganews.com!border2.nntp.dca.giganews.com!nntp.giganews.com!
nx01.iad01.newshosting.com!newshosting.com!198.186.194.249.MISMATCH!
transit3.readnews.com!news-xxxfer.readnews.com!news-out.readnews.com!
transit4.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-291 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Fri, 22 Oct 2010 08:47:02 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 1885
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000d01cb71e7$29db19c0$7d914d40$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1287751622 3361 166.84.1.6 (22 Oct 2010 12:47:02 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Fri, 22 Oct 2010 12:47:02 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
x-cr-hashedpuzzle: AnWZ Ars+ BFtn B54n CAVx EZA4 E5on HYYR H8NR IKwS IcBd IklL
IqQm JZXp Jj4V
KAAe;1;cgBlAGMALQByAGEAZABpAG8ALQBpAG4AZgBvAEAAcABhAG4AaQB4AC4AYwBvAG0A;Sosha1_v1;
7;{EE9B0582-E879-47AF-B9C4-
C846143065CD};awA5AGoAawBtAEAAYwBvAG0AYwBhAHMAdAAuAG4AZQB0AA==;Fri, 22 Oct 2010
12:46:31
GMT;VwBTAFIALQAyADkAMQAgAEEATQBTAEEAVAAgAFcAZQBlAGsAbAB5ACAAUwBhAHQAZQBsAGwAaQB0AG
UAIABSAGUAcABvAHIAdAA=
x-cr-puzzleid: {EE9B0582-E879-47AF-B9C4-C846143065CD}
Xref: g2news1.google.com rec.radio.amateur.space:395 rec.radio.info:1822
```

This report is organized into four (4) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - deborbited/returned satellites

SB SAT @ AMSAT W8ISS $WSR-291.S1
WSR 291 Part 1 10/18/2010

AMSAT NEWS SERVICE BULLETIN 291.S1
FROM AMSAT HQ SILVER SPRING, MD, October 18, 2010
TO ALL RADIO AMATEURS
BID: $WSR-291.S1

HO-68 HOPE-1 (CAS-1)(XW-1)
Catalog Number: 36122
Launch Date: December 15, 2009
Status: Operational

Callsign:
Broadcast: BJ1SA-11
BBS: BJ1SA-12

Uplinks: 145.8250 MHz FM, PL 67.0 Hz.
           145.9250 - 145.9750 MHz SSB/CW
           145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
           435.7650 - 435.7150 MHz SSB/CW
           435.6750 MHz AFSK 1200 BPS

Beacon: 435.7900 MHz CW

Mode and Antenna Polarization:
V: LHCP 2.0dBi max
U: RHCP 3.0dBi max

IARU coordination page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108

For more information about XW-1 (CAS-1):
http://www.camsat.cn
[09062010]
=====
SO-67 SumbandilaSat
Catalog Number: 35870
Launch Date: September 17, 2009

Status: Suspended

Callsign: ZS0SUM

Uplink: 145.875MHz FM tone 233.6 Hz

Downlink: 435.345MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

For more information about SO-67:
http://www.amsatsa.org.za/
[09062010]
=====
DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008

Status: Operational
Current Mode: Science Mode - Beacon ONLY

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink: 435.530 to 435.570 MHz

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68
[09062010]
=====
VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.9360 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

```
To know what transponder is switched on please listen for the beacon
that is active. Each transponder has a different beacon.
[09062010]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Modes:
Voice 1: V/u
Uplink:      145.920 MHz FM
Downlink 1:  435.300 MHz FM

PBBS: L/u
Uplink:     1268.708 mhz FM 9k6 Pacsat Broadcast Protocol
Downlink:    435.150 MHz FM 9k6 Pacsat Broadcast Protocol

Telemetry:
Downlink:    435.150MHz 9k6


Analog voice downlink:     435.300 MHz FM
                           435.150 MHz FM
                          2401.200 Mhz FM
Analog voice uplink:       145.860 MHZ FM
                           145.880 MHz USB
                           145.880 MHz FM
                           145.920 MHz FM
                           145.920 MHz FM - 67 Hz PL tone burst
                          1268.708 MHz FM
Digital Downlinks:         435.150 MHz FM 38k4 PBP, 1 watt output
                           435.150 MHz FM 9k6 Pacsat Broadcast Protocol
                          2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:            145.860 MHz FM 9k6 Pacsat Broadcast Protocol
                          1268.708 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon:                    435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php
```

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[10182010]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4
Hz. The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute
   timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset
   the 10 minute timer.
[09062010]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Scheduled Operations
Current Mode: V/u (Mode JA)

Voice/CW (Mode JA)
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:

V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage:
http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts.htm
[09062010]
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993

Status: Operational

Current Mode: V/u

```
Uplink:   145.850 MHz FM
Downlink: 436.797 MHz FM
```

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[09062010]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational

Current Mode: Alternating between Mode A and B every 24 hours

```
Uplink:   145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink:  29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons:   29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW
```

```
Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
[09062010]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - OFF
                      Voice -       V/v
                      BBS -         OFF
                      APRS -        OFF
                      SSTV -        OFF


Expedition 25 Crew:
Commander:                Doug Wheelock         KF5BOC
Flight Engineer:          Shannon Walker        KD5DXB
Flight Engineer:          Fyodor Yurchikhin     RN3FI
Flight Engineer:          Scott Kelly
Flight Engineer:          Alexander Kaleri      U8MIR
Flight Engineer:          Oleg Skripochka       RN3FU

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink:   145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink:     145.200 MHz FM
Region 2/3 voice uplink:   144.490 MHz FM
Worldwide downlink:        145.800 MHz FM

Crossband Repeater:
Repeater Uplinks:         1269.650 MHz FM
                           437.800 MHz FM
                           145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink:         145.800 MHz FM
                           437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink:                  145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear
```

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[10112010]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-291.S2
WSR 291 Part 2 10/18/2010

AMSAT NEWS SERVICE BULLETIN 291.S2
FROM AMSAT HQ SILVER SPRING, MD, October 18, 2010
TO ALL RADIO AMATEURS
BID: $WSR-291.S2

StudSat
Catalog Number: 36796
Launch Date: July 12, 2010
Status: On Orbit

Uplink: 437.505MHz, 9600bps FSK
Downlink: 437.505MHz, 9600bps FSK
Beacon : 437.505MHz, 20bps ASK
[08062010]
=====
TIsat-1
Catalog Number: 36799
Launch Date: July 12, 2010
Status: On orbit

Callsign: HB9DE

Uplink: 145.980MHz FM, AFSK
Downlink: 437.305MHz FM, AFSK
Beacon: 437.305MHz CW
[08062010]
=====
HO-68 HOPE-1 (CAS-1)(XW-1)
Catalog Number: 36122
Launch Date: December 15, 2009

```
Status: Operational

Callsign:
Broadcast:    BJ1SA-11
BBS:         BJ1SA-12

Uplinks:   145.8250 MHz FM, PL 67.0 Hz.
           145.9250 - 145.9750 MHz SSB/CW
           145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
           435.7650 - 435.7150 MHz SSB/CW
           435.6750 MHz AFSK 1200 BPS

Beacon:    435.7900 MHz CW

IARU coordination page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108

For more information about XW-1 (CAS-1):
http://www.camsat.cn
[09062010]
=====
SwissCube
Catalog Number: 35932
Launch Date: September 23, 2009

Status: Operational

Callsign: HB9EG

Beacon(100mw): 437.5050MHz CW
Beacon(1w):    437.5050MHz FSK 1k2bps
[04222010]
=====
UWE-2
Catalog Number: 35934
Launch Date: September 23, 2009

Status: In Orbit

Beacon(500mw): 437.3850 MHz AFSK 1k2bps
               437.3850 MHz FSK 9k6bps
[1112009]
=====
ITUpsAT1
Catalog Number: 35935
Launch Date: September 23, 2009

Status: Operational

Beacon(100mw): 437.325MHz CW
Beacon(1w): 437.325MHz 19k2bps
[11112009]
```

```
=====
BEESAT
Catalog Number: 35933
Launch Date: September 23, 2009

Status: Operational

Callsign: DP0BEE

Beacon(100mw): 436.000MHz CW
Beacon(500mw): 436.000MHz GMSK 4k8bps
Beacon(500mw): 436.000MHz GMSK 9k6bps
[04222010]
=====
CP-6
Catalog Number: 35003
Launch Date: May 19, 2009

Status: Operational

Downlink: 437.365 MHz 1k2 AFSK
[09062010]
=====
HAWKSAT 1
Catalog number: 35004
Launch Date: May 19, 2009

Status: operational

Downlink: 437.345 MHz ?
[09062010]
=====
Pharmasat
Catalog Number: 35002
Launch Date: May 19, 2009
Status: Operational

Downlink: 437.465 MHz 1k2 AFSK
[09062010]
=====
ANUSAT
Catalog Number: 34808
Launch Date: April 20, 2009

Status: ?

Downlink:  435.000 MHz
Uplink:    145.800 MHz

Telemetry: 137.400 MHz
[09062010]
=====
SOHLA-1 (ASTRO TECH.)
```

Catalog Number: 33496
Launch Date: January 23, 2009

Status: Operational

Proposed Frequencies and Modes:
Downlink: 437.505 MHz AFSK/CW
Beacon: 437.505 MHz AFSK/CW

Callsign:

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=101
[09062010]
=====
KAGAYAKI (Solan Co.)
Catalog Number: 33495
Launch Date: January 23, 2009

Status: In Orbit

Downlink: 437.375 MHZ   FSK9k6/CW
Beacon: 437.375 MHz   FSK9k6/CW

IARU coordination status page:

AMSAT-NA webpage:

[09062010]
=====
STARS (Kagawa Univ.) (Twin Satellites)
Catalog Number: 33498
Launch Date: January 23, 2009

Status: Operational ?

Downlinks: 437.485 MHz FM/CW
           437.465 MHz FM/CW
Beacons: 437.305 MHz FM/CW
           437.275 MHz FM/CW

Callsigns: JR5YBN
           JR5YBO

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=99

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=121&retURL
=/satellites/status.php
[09062010]
=====
KKS-1 (Tokyo MCIT)

Catalog Number: 33499
Launch Date: January 23, 2009

Status: Operational

Downlink: 437.455 MHz AFSK/CW
Beacon: 437.385 MHz AFSK/CW

Callsign: JQ1YYY

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=107

AMSAT-NA webapge:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=120&retURL
=/satellites/status.php
[09062010]
=====
PRISM (Tokyo Univ.)
Catalog Number: 33493
Launch Date: January 23, 2009

Status: Operational ?

Downlink: 437.425 MHz AFSK/GMSK/CW
Beacon: 437.250 MHz AFSK/GMSK/CW

Callsign: JQ1YCX

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=97

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=119&retURL
=/satellites/status.php
[09062010]
=====
RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number: 32953
Launch Date: May 23, 2008

Status: Operational

Curent Modes: Telemetry
              Audio
              Images

Downlinks: 435.315 MHz
           435.215 MHz

AMSAT-NA website:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=115&ret
URL=/satellites/status.php

Official website:
http://www.npopm.com/?cid=leoca&caid=43
[09062010]
=====
CanX-2
Catalog number: 32790
Launch Date: April 28, 2008

Status: Operational in range of ground station only

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[09062010]
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.425 MHz 1k2 baud packet

For the latest project status update please visit the AAUSAT-II web page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[09062010]
=====
CO-65 CUTE-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008

Status: Digipeater

Downlink: 437.475 MHz 9k6 Packet
Uplink: 1267.600 Mhz

Telemetry Beacon:
Downlink: 437.2750 MHz CW

For the latest project status update please visit the Cute-1.7+APD II web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78

Command Station blog website:
http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=112&retURL
=/satellites/status.php
[09062010]
=====
Compass-1
Catalog number: 32787
Launch Date: April 28, 2008

Status: Operational

Current Mode: 4k8 MSK packet

Uplink: 145.980 MHz FM
Downlink: 437.275 Mhz CW
          437.405 MHz Packet

For the latest project status update please visit the Compass 1 web
page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=114&retURL
=/satellites/status.php
[09062010]
=====
CO-66 Seeds II
Catalog number: 32791
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.485 MHz

Callsign: JQ1YGU

For the latest project status update please visit the Seeds 2 web
page: http://cubesat.aero.cst.nihon-u.ac.jp/english/seeds_2_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=113&retURL
=/satellites/status.php
[09062010]
=====

CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=94&retURL=/satellites/status.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=72
[09062010]
=====
CP3
Catalog Number: 31129
Launch Date: April 17,2007

Status: Operational

Current Mode: /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[09062010]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon: 437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/xivpicte.htm
[09062010]
=====

```
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003

Status: ?????

Current Mode: /u

Beacon:     436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=96&retURL
=/satellites/status.php

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[09062010]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Modes:
Voice 1: V/u
Uplink:      145.920 MHz FM
Downlink 1:  435.300 MHz FM

PBBS: L/u
Uplink:     1268.708 mhz FM 9k6 Pacsat Broadcast Protocol
Downlink:    435.150 MHz FM 9k6 Pacsat Broadcast Protocol

Telemetry:
Downlink:    435.150MHz 9k6


Analog voice downlink:     435.300 MHz FM
                           435.150 MHz FM
                          2401.200 Mhz FM
Analog voice uplink:       145.860 MHZ FM
                           145.880 MHz USB
                           145.880 MHz FM
                           145.920 MHz FM
                           145.920 MHz FM - 67 Hz PL tone burst
                          1268.700 MHz FM
Digital Downlinks:         435.150 MHz FM 38k4 PBP, 1 watt output
                           435.150 MHz FM 9k6 Pacsat Broadcast Protocol
                          2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:            145.860 MHz FM 9k6 Pacsat Broadcast Protocol
                          1268.708 mhz FM 9k6 Pacsat Broadcast Protocol
```

Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[10182010]
=====
QuakeSat
Catalog Number: 27845
Launch Date: June 30, 2003

Status: Telemetry only

Current Mode: 9600 baud data packet

Mode U packet
Downlink: 436.675 MHz 9k6 BPS

Quakesat webpage:
http://www.quakefinder.com/services/quakesat-ssite/
[10042010]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=69&retURL
=/satellites/status.php
[09062010]

```
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Telemetry only

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink:        144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[09062010]
=====
RS-22 RADIO SPORT 22
Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only

Current Mode:  /u

CW Beacon - 435.352 MHz
            145.818 MHz

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=76&retURL
=/satellites/status.php
[09062010]
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990

Status: CW Beacon only

Uplinks:          145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink:      437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12

General information and telemetry samples can be found at:
```

```
www.telecable.es/personales/ea1bcu
[09062010]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - OFF
                      Voice -       V/v
                      BBS -         OFF
                      APRS -        OFF
                      SSTV -        OFF


Expedition 25 Crew:
Commander:                Doug Wheelock         KF5BOC
Flight Engineer:          Shannon Walker        KD5DXB
Flight Engineer:          Fyodor Yurchikhin     RN3FI
Flight Engineer:          Scott Kelly
Flight Engineer:          Alexander Kaleri      U8MIR
Flight Engineer:          Oleg Skripochka       RN3FU

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink:   145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink:     145.200 MHz FM
Region 2/3 voice uplink:   144.490 MHz FM
Worldwide downlink:        145.800 MHz FM

Crossband Repeater:
Repeater Uplinks:         1269.650 MHz FM
                           437.800 MHz FM
                           145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink:         145.800 MHz FM
                           437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink:                  145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian:                   OR4ISS
German:                    DP0ISS
Russian:                   RS0ISS
                           RZ3DZR
```

United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[10112010]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-291.S3
WSR 291 Part 3 10/18/2010

AMSAT NEWS SERVICE BULLETIN 291.S3
FROM AMSAT HQ SILVER SPRING, MD, October 18, 2010
TO ALL RADIO AMATEURS
BID: $WSR-291.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

CP4
Catalog Number: 31132
Launch Date: April 17, 2007

Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon: 437.325 MHz CW

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=79
[09062010]

=====
LIBERTAD-1
Catalog Number: 31128
Launch Date: April 17, 2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink: 145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

```
Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[09062010]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: Non-Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder:  145.825 Mhz FM
[09062010]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency:  437.305
                             2407.250

Official Website: http://www.ncube.no
[09062010]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink:         437.250 MHz FM 67Hz CTCSS
Voice Downlink:      2401.835 MHz FM
Packet Up/Downlink:   437.250 MHz 9k6 packet
Packet Downlink      2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[09062010]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non-Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[09062010]
=====
CANX-1
Catalog Number: 27847
Launch Date: June 30, 2003

Status: Non-Operational

Downlink: 437.8800 MHz AFSK 1k2bps
[06052009]
=====
DTUSAT
Catalog Number: 27842
Launch Date: June 30, 2003

Status: Non-Operational

Current Mode: 2k4 AFSK Packet last reported

Downlink: 437.475MHz

Officail webpage: http://dtusat1.dtusat.dtu.dk/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=101&retURL
=satellites/all_oscars.php
[02212009]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink:   435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)

Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Telemetry only

Uplinks:   145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink:  437.325 MHz

Broadcast callsign: MYSAT3-11
BBS:                MYSAT3-12
```

```
TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial land and weather imaging payloads offers FM and FSK
Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as
a collaborative effort between the Malaysian government and Surrey
Satellite Technology Ltd.
[03302009]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink:   145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS:                SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink:   145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
```

```
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
V-band:   145.840 -  145.990 MHz CW/LSB
U-band:   435.550 -  435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks
---------
S2-band:  2401.225 -  2401.475 MHz CW/USB
K-band:  24048.010 - 24048.060 MHz CW/USB
Beacon:   2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)
----------------------------
BEACON   General Beacon(GB)  Middle Beacon(MB)  Engineering Beacon(EB)
2 m                    none        145.898 MHz                    none
70cm            435.438 MHz        435.588 MHz             435.838 MHz
13cm(1)        2400.188 MHz       2400.338 MHz            2400.588 MHz
13cm(2)        2401.173 MHz       2401.323 MHz            2401.573 MHz
3cm           10450.975 MHz      10451.125 MHz           10451.375 MHz
1.5cm         24047.885 MHz      24048.035 MHz           24048.285 MHz
[07162007]
=====
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink:    145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz
```

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]

=====

SO-35 SUNSAT
Catalog Number: 25636
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz
145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]

=====

PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]

=====

SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]

=====

GO-32 Gurwin TechSat-1B

```
Catalog number: 25397
Launch Date: July 10, 1998

Status: Non-Operational

Current Modes:
Telemetry : /u

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign:       4XTECH-12

More information of GO-32 can be found at:
http://asri.technion.ac.il/techsat/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=14&retURL
=/satellites/status.php
[07172010]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink:   145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
MO-30 UNAMSAT-2
Catalog Number: 24305
Launch Date: September 5, 1996

Status: Non-operational

Downlink:       435.1380 MHz AFSK 1200 BPS
Downlink:       435.2060 MHz AFSK 1200 BPS
Uplink:         145.8150 MHz AFSK 1200 BPS
Uplink:         145.8350 MHz AFSK 1200 BPS
Uplink:         145.8550 MHz AFSK 1200 BPS
Uplink:         145.8750 MHz AFSK 1200 BPS
```

```
[06042009]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Non-operational

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign:       POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012009]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
```

```
=====
AO-24 ARSENE
Catalog Number: 22654
Launch Date: May 13, 1993

Status: Non-operational

Uplink:    435.0625 MHz FM 1k2bps AFSK
           435.1125 MHz FM 1k2bps AFSK
           435.1375 MHz FM 1k2bps AFSK
Downlink:  145.9750 MHz FM 1k2bps AFSK
          2446.5025 MHz FM 1k2bps AFSK

Beacon:    2446.4700 MHz CW

Broadcast callsign:
BBS:
[12162009]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HL01-11
BBS: HL01-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
```

```
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
[05012006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: non-operational

Current Mode:  V/u
```

```
Uplink:         145.900 MHz FM 1200-baud Manchester FSK (reserved)
                145.920 MHz FM VOICE
                145.940 MHz FM 1200-baud Manchester FSK (reserved)
                145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink:       437.026 MHz USB VOICE
                (1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[07242009]
=====
UO-15 UoSAT-4
Catalog Number: 20438
Launch Date: January 22, 1990

Status: Non-operational

Uplink: ?
Downlink: 435.1250MHz (?)
          435.1200MHz (?)
[06042009]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
```

Uplink: 145.8500 MHz MFSK 1200 BPS
Uplink: 145.8700 MHz MFSK 1200 BPS
Uplink: 145.8900 MHz MFSK 1200 BPS
Uplink: 145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984

Status: Non-operational.

Current Mode: /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon: 435.025 MHz
Mode-S Beacon: 2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[09062010]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon: 145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.9000 - 146.0000 MHz SSB/CW

```
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink  29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
Beacons:   29.450 MHz
          435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB
```

```
Beacon 1:  29.352 MHz (intermittent)
Beacon 2:  29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink:     21.260 to 21.300 MHz CW/USB
Downlink:  145.860 to 145.900 MHz CW/USB

Beacon:    145.860 MHz

Robot:     145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink:   21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon:   29.408 MHz

Robot:    29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-291.S4
WSR 291 Part 4 10/18/2010

AMSAT NEWS SERVICE BULLETIN 291.S4
FROM AMSAT HQ SILVER SPRING, MD, October 18, 2010
TO ALL RADIO AMATEURS
BID: $WSR-291.S4

THE FOLLOWING SATELLITES HAVE RE-ENTERED OR HAVE BEEN RETURNED SAFELY:

CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Re-entered
Re-entered:
```

Uplink: 1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=56
[09062010]
=====
BEVO-1 (DRAGONSAT-1)
Catalog Number: 35690
Launch Date: May 19, 2009

Status: Re-entered
Re-entered:

Downlink: 437.325 MHz 9k6 GMSK
          437.325 MHz CW 20wpm
[07312009]
=====
AggieSat2 (DRAGONSAT-2)
Catalog Number: 35690
Launch Date: May 19, 2009

Status: Re-entered
Re-entered:

Downlink: 436.250 MHz 9k6 FHSS
[11112009]
=====
Pollux
Catalog Number: 35693
Launch Date: July 31, 2009

Status: Re-entered
Re-entered:

Callsign: POLLUX-1

Downlink: 145.825MHz 1k2 AX.25
[09062010]
=====
Castor (ANDE-2)
Catalog Number: 35694
Launch Date: July 31, 2009

Status: Re-entered
Re-entered:

Callsign: KD4HBO-1

Downlink: 145.825 MHz 1k2 AX.25
[09062010]
=====
NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: July 28, 2008

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[01012009]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

```
Main Downlink:      145.825 Mhz FM APRS AX25
APRS Uplink:        145.825 MHz FM APRS AX25
Voice/PSK31 Uplink:  28.120 MHz
```

Packet to Voice ID: RAFT
[06112007]
=====
GENESAT-1
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Re-Entered
Re-entered date: August 8, 2010

Current Mode: /u

Callsign: KE7EGC

Telemetry Beacon Downlink: 437.0695 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[08082010]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Re-Entered
Re-entered: June 18, 2008

```
Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon:             437.2750 MHz CW
```

Callsign: JR8YJT
[01012009]
=====
SO-43 Starshine 3
Catalog Number: 26929
Launch Date: September 30, 2001

Status: Re-Entered
Re-entered: January 21, 2003

Beacon: 145.825Mhz
[02212009]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

```
Voice: 301-589-6062
       888-322-6728
FAX:   301-608-3410
```

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)

* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at} amsat.org
NNNN
/EX

From 8908261521642953906
X-Google-Thread: 8f86f75953,177a27c132d7820c,start
X-Google-Attributes: gid8f86f75953,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!postnews.google.com!g20g2000prg.googlegroups.com!not-for-mail
From: devi <satyamsivam9030@gmail.com>
Newsgroups: rec.radio.amateur.space
Subject: HOT ACTRESS
Date: Sat, 23 Oct 2010 07:25:58 -0700 (PDT)
Organization: http://groups.google.com
Lines: 44
Message-ID: <6b9de02e-bee7-4d3c-94ae-1d69baa49b5c@g20g2000prg.googlegroups.com>
NNTP-Posting-Host: 117.199.251.27
Mime-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
X-Trace: posting.google.com 1287843959 9680 127.0.0.1 (23 Oct 2010 14:25:59 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Sat, 23 Oct 2010 14:25:59 +0000 (UTC)

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Complaints-To: groups-abuse@google.com
Injection-Info: g20g2000prg.googlegroups.com; posting-host=117.199.251.27;
posting-account=xYWSigoAAADp0Q2VAMlANM4syM5q3uRr
User-Agent: G2/1.0
X-HTTP-UserAgent: Mozilla/5.0 (Windows; U; Windows NT 5.1; en-GB; rv:1.9.2.11)
 Gecko/20101012 Firefox/3.6.11,gzip(gfe)
Xref: g2news1.google.com rec.radio.amateur.space:396

                 AISHWARIYA LATEST HOT PICS

http://babes-devi.blogspot.com/2010/10/aish-latest-pics.html

                 SOUTHACTRESS IN A SEXY TOWELS

http://babes-devi.blogspot.com/2010/10/south-actress-in-sexy-towels.html

                UDAYATHRA IN A BATH ROOM

http://babes-devi.blogspot.com/2010/10/udayatara-in-bath.html

                ACTRESS IN A HOT RED DRESS

http://babes-devi.blogspot.com/2010/10/actress-in-sexy-red-dress.html

                 ASIN CUTE HOT PHOTOS

http://babes-devi.blogspot.com/2010/09/asin-cute-photos.html

                SEXY CHARMI IN A BATH

http://babes-devi.blogspot.com/2010/06/charmi-in-bath.html

                FOR HOT PHOTOS&VIDEOS

http://babes-devi.blogspot.com/2010_06_01_archive.html

                 HOT SEXY BOOBS  SHOW

http://babes-devi.blogspot.com/2010/09/sexy-boobs.html

                 ASIN CUTE HOT PHOTOS

http://babes-devi.blogspot.com/2010/09/asin-cute-photos.html

        MALLIKA SHARAWAT UNBELIVABLE PHOTOS

http://babes-devi.blogspot.com/2010/08/sexy-mallika.html

             ANKHITA SPICY PHOTOS

http://babes-devi.blogspot.com/2010/08/sexy-ankhitha.html
```

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From 5531391254285201
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X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news1.google.com!newsfeed2.dallas1.level3.net!
news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-304 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sat, 30 Oct 2010 21:16:11 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 317
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <002101cb7899$2dcefb60$896cf220$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1288487771 1539 166.84.1.6 (31 Oct 2010 01:16:11 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 31 Oct 2010 01:16:11 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news2.google.com rec.radio.amateur.space:422 rec.radio.info:1918
```

AMSAT NEWS SERVICE
ANS-304

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:

* ARISSat-1 Passes NASA Safety Review - Ready For Trip to Russia
* Second Amateur Radio Station to be Activated on ISS
* ARISS Contact With George Observatory Successful
* FP/KV1J Miquelon Island DXpedition on Satellites Until November 2
* FUNcube User Group on Yahoo.com
* Finnish Student Satellite Aalto-1
* Satellite Shorts From All Over

SB SAT @ AMSAT $ANS-304.01
ARISSat-1 Passes NASA Safety Review - Ready For Trip to Russia

AMSAT News Service Bulletin 304.01
>From AMSAT HQ SILVER SPRING, MD.
October 31, 2010
To All RADIO AMATEURS
BID: $ANS-304.01

The NASA safety review for ARISSat-1 was completed with the written safety presentation and the written hazard report being approved with only simple modifications required. The safety review meeting was a two-day review running 6 hour sessions on October 13 & 14, 2010.

The ARISSat-1 Team expects to finalize shipping arrangements to Russia in the coming weeks. The Russian Energia Space Agency is handling the customs certifications to ship the satellite overseas.

When ARISSat-1 is shipped Lou McFadin W5DID and Mark Steiner K3MS will travel to Russia to assist with final testing before the satellite is forwarded to the launch site.

ARISSat-1 is scheduled to be sent to the ISS aboard Russian Progress vehicle 41P in January 2011 and deployed during EVA R-28 in February 2011.

The ARRL web describes ARISSat-1's features this week at:
http://www.arrl.org/news/arissat-1-suits-up-for-february-2011-launch
A description of ARISSat-1's successful vibration testing can be found on-line at: http://www.amsat.org

[ANS thanks the ARISSat-1 Team for the above information]

/EX

SB SAT @ AMSAT $ANS-304.02
Second Amateur Radio Station to be Activated on ISS

AMSAT News Service Bulletin 304.02
>From AMSAT HQ SILVER SPRING, MD.

October 31, 2010
To All RADIO AMATEURS
BID: $ANS-304.02

The original VHF and UHF Ericsson handheld radios in the Russian segment of the ISS originally used for ARISS have been approved by NASA for use in the US segment of the space station. When the Ericsson radios are installed in the Columbus module it will become the second Amateur Radio station aboard the ISS. A new power cable for the Ericsson radios is being delivered to the ISS.

ARISS members Kenneth Ransom and Steve Ponder met with Astronaut Paolo Nespoli for a training session on how to install the hardware in the Columbus module during Expedition 26. This launch is currently scheduled for December 13.

Paolo is looking forward to doing the installation work and is excited about using the equipment.

The second station is planned to initially use the same frequencies currently used by the Kenwood D-700 amateur radio transceiver aboard the ISS. Studies are underway to determine a compatible operating plan which would allow both stations to operate simultaneously.

[ANS thanks the ARISS team for the above information]

/EX

SB SAT @ AMSAT $ANS-304.03
ARISS Contact With George Observatory Successful

AMSAT News Service Bulletin 304.03
>From AMSAT HQ SILVER SPRING, MD.
October 31, 2010
To All RADIO AMATEURS
BID: $ANS-304.03

On Saturday, October 16, an Amateur Radio on the International Space Station (ARISS) contact was held with scouts and astronomy club members attending the Astronomy Day event at George Observatory in Needville, Texas. This was a telebridge contact via station WH6PN in Hawaii.

Approximately 150 people attended and listened as Doug Wheelock, KF5BOC answered 12 questions about life in space posed to him by the youth.

As part of the event, scout troops set up an amateur radio station near the observatory to conduct their all-day Jamboree on the Air (JOTA) radio contacts and also worked on Radio Merit Badges.

The Brazos Valley Amateur Radio Club was on hand to assist with JOTA activities and prepared for afternoon satellite contacts with an Arrow hand-held antenna. Bruce, KK5DO and Allen, N5AFV, operated via AO-27 from the George Observatory observation deck. Bruce reported they had a bunch of adults waiting for the satellite. When they heard it start up they were thrilled. It was more fun when they started making contacts.

[ANS thanks the Southgate ARC site and Bruce, KK5DO for the above information]

/EX

SB SAT @ AMSAT $ANS-304.04
FP/KV1J Miquelon Island DXpedition on Satellites Until November 2

AMSAT News Service Bulletin 304.04
>From AMSAT HQ SILVER SPRING, MD.
October 31, 2010
To All RADIO AMATEURS
BID: $ANS-304.04

A few more days remain to catch Eric's FP/KV1J operation from the island of Miquelon (Grid GN17) until November 2. This is a French territory off the coast of Newfoundland.

Eric planned to mostly operate on the low bands but plans to take breaks and work as many of the FM satellite passes that he can. Look for him on AO-51, AO-27, SO-50, SO-67, and HO-68. His satellite gear includes an FT-817 and an Arrow 146/437-10 antenna.

Having operated from Miquelon previously in November, 2009 he is preparing for rough weather off of the North Atlantic ocean. His satellite operating will outdoors with the handheld Arrow. He will favor the daylight passes because it is easier to operate in these conditions.

Eric's web page at http://www.kv1j.com/fp/october10.html will be updated with his status time permitting and also depending when internet access is available.

[ANS thanks Eric, FP/KV1J for the above information]

/EX

SB SAT @ AMSAT $ANS-304.05
FUNcube User Group on Yahoo.com

AMSAT News Service Bulletin 304.05
>From AMSAT HQ SILVER SPRING, MD.
October 31, 2010
To All RADIO AMATEURS

BID: $ANS-304.05

AMSAT-UK's FUNcube is an educational single cubesat project with the goal of enthusing and educating young people about radio, space, physics and electronics.

The target audience consists of primary and secondary school pupils. FUNcube will feature a 145 MHz telemetry beacon that will provide a strong signal for the pupils to receive. A simple receiver board, the FUNcube Dongle, is also being developed. It is intended that this will be connected to the USB port of a laptop to display telemetry and messages in an interesting way for the students.

FUNcube will carry a UHF to VHF linear transponder that will have up to 1 watt and which can be used by Radio Amateurs worldwide for SSB and CW communications. Measuring just 10 x 10 x 10 cm, and with a mass of less than 1kg, it will be the smallest ever satellite to carry a linear transponder and the choice of frequencies will enable Radio Amateurs to use their existing VO-52, DO-64, HO68 and similar stations.

Interested amateur satellite operators are invited to join the growing user group to follow all the latest with the Funcube and the receiver board, the FUNcube Dongle. Join the user group at:
http://uk.groups.yahoo.com/group/funcube/

A video tour of the AMSAT-UK FUNcube simulator is now available. AMSAT-UK secretary Jim Heck, G3WGM shows the whole structure and the various components of FUNcube. The video is available on the SouthGate website at: http://tinyurl.com/28n424q

[ANS thanks Rob, M0TFO, AMSAT-UK, and SouthGate News Site for the above information]

/EX

SB SAT @ AMSAT $ANS-304.06
Finnish Student Satellite Aalto-1

AMSAT News Service Bulletin 304.06
>From AMSAT HQ SILVER SPRING, MD.
October 31, 2010
To All RADIO AMATEURS
BID: $ANS-304.06

Aalto-1 is a student satellite project of Aalto University, Finland. When launched, it would be the first Finnish satellite.

It is planned to operate at VHF-UHF and there will also be an S-band transmitter. Up to 8 watts of power will be available from the Solar panels.

The main payload of the satellite is a novel tiny Fabry-Perot imaging spectrometer, developed by VTT, Finland. The primary scientific goal of the mission is to demonstrate the feasibility of MEMS Fabry-Perot spectrometers for space applications. This miniature technology can be used in nanosatellites for large a variety of remote sensing applications in the future. High spectral resolution images can be used for water quality monitoring and land use classification.

Aalto-1 was recently featured on Finnish TV and there is also a short video showing a graphic of the 3U CubeSat. The video clips can viewed on the South Gate ARC site at http://tinyurl.com/2dy4bqg

An Aalto-1 Discussion Forum in English can be found on-line at:
https://wiki.aalto.fi/display/SatForum/Aalto-1+Discussion+Forum

[ANS thanks the SouthGate ARC News Site for the above information]

/EX

SB SAT @ AMSAT $ANS-304.07
Satellite Shorts From All Over

AMSAT News Service Bulletin 304.07
>From AMSAT HQ SILVER SPRING, MD.
October 31, 2010
To All RADIO AMATEURS
BID: $ANS-304.07

+ Congratulations to Bob, AJ5C for earning the ARRL Satellite Worked All States #321.

+ If you are within FM Satellite range of the Indian Ocean listen for possible operation by Matt, NM6W operating as S79RC between 31 Oct through 8 Nov from the Seychelles with an HT and Arrow antenna.

+ Armando, N8IGJ reported hearing UO-11 back on, at 0303UTC 30 October over the central US. UO-11 is only active when in sunlight. Its beacon operates on 145.826 MHz.

+ You can send your name to Mars via the NASA microchip project: http://tinyurl.com/yhaphmg (Clint, K6LCS)

+ Mike DK3WN is spearheading a project that broadcasts audio streams received by satellite operators around the world. Mike's most recent addition is Tetsu san, JA0CAW. Links to the satellite audio streams can be found on the DK3WN SatBlog:
http://www.dk3wn.info/p/?page_id=17689

+ The ARRL's report of the recent AMSAT Space Symposium can be found on the ARRL web site at: http://tinyurl.com/2f3wfoa. ARISSat-1 is featured in this report.

+ AMSAT has received the sad news that Dr. David Clark, G6XYA from Manchester UK passed away.

+ Watch Patrick, WD9EWK/VA7EWK in action in this video clip shot by Adrian, AA5UK working HO-68 in FM mode outside of the AMSAT Space Symposium held earlier this month: http://tinyurl.com/29t7vov

+ Update your Keps for the ISS. The ISS orbit was boosted slightly on October 26 to avoid space debris.

+ AMSAT-NA VP Operations Drew KO4MA has posted a video of ARISSAT-1 and the AMSAT-UK FUNcube dongle receiver demonstrated at the AMSAT Space Symposium: http://www.youtube.com/watch?v=AgNM290k7-w

+ An AMSAT Forum at the Fort Wayne, Indiana Hamfest will be on Saturday, Nov. 13, at 1:15pm. For more info check the following: http://www.fortwaynehamfest.com (KA8QCU)

+ An interesting weather satellite photo of the October 26 superstorm that swept across North America can be viewed on the UniverseToday web site at: http://tinyurl.com/2bhx75r

[ANS thanks everyone for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office. And with that please keep in mind the time when Arnold Scwarzenegger was offered a role in a movie about the lives of classical music composers. Arnold said, "I'll be Bach."

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM
K9JKM at amsat dot org

From -2725024486135577558
X-Google-Thread: a4a23d5f63,ae4e45ce9a7ead4c,start
X-Google-Attributes: gida4a23d5f63,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!news2.google.com!border1.nntp.dca.giganews.com!nntp.giganews.com!transit3.readnews.com!news-out.readnews.com!news-xxxfer.readnews.com!panix!panix2.panix.com!not-for-mail
From: rram@panix.com (rec.radio.amateur.moderated Admin)
Newsgroups:

rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.info
Subject: Crossposting Permitted to rec.radio.amateur.moderated
Supersedes: <radio/ham-radio/moderated/crossposting-1-1285912800@panix.com>
Followup-To: poster
Date: 1 Nov 2010 02:00:01 -0400
Organization: rec.radio.amateur.moderated Moderation Team
Lines: 47
Approved: RRI Admin <rec-radio-info-request@panix.com>
Distribution: world
Expires: 04 Dec 2010 01:00:00 -0000
Message-ID: <radio/ham-radio/moderated/crossposting-1-1288591200@panix.com>
Reply-To: rec-radio-amateur-moderated-request@panix.com
(rec.radio.amateur.moderated Admin)
NNTP-Posting-Host: panix2.panix.com
X-Trace: reader1.panix.com 1288591202 12597 166.84.1.2 (1 Nov 2010 06:00:02 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Mon, 1 Nov 2010 06:00:02 +0000 (UTC)
Summary: Short reminder for unmoderated newsgroups that crossposting is permitted
Keywords: FAQ, ham, amateur, radio, moderated, unmoderated, crossposting,
permitted
Xref: g2news1.google.com rec.radio.amateur.antenna:19149 rec.radio.amateur.dx:762
rec.radio.amateur.equipment:2291 rec.radio.amateur.homebrew:3898
rec.radio.amateur.misc:5516 rec.radio.amateur.policy:28850
rec.radio.amateur.space:398 rec.radio.info:1843

Posted-By: auto-faq 3.3.2 beta (PGPMoose V2.0, Perl 5.005)
Archive-name: radio/ham-radio/moderated/crossposting
Revision: 1.1 2009/04/12 19:42:04
Posting-Frequency: posted monthly
URL: http://www.panix.com/~rram/usenet/rram/index.html

Changes followed by "|".

After a 30-day public discussion and feedback period to gauge reader opinions in March of 2009:

http://groups.google.com/group/rec.radio.amateur.moderated/browse_thread/thread/d7d337db35f23326

the rec.radio.amateur.moderated Moderation Team has decided to consider amending its charter, and permit limited simultaneous crossposting to rec.radio.amateur.moderated and one other unmoderated amateur-radio-related discussion newsgroup. We are currently trying this on a temporary basis (90 days, through early July 2009), and adopt it permanently if successful.

Approved rec.radio.amateur.* newsgroups are those that are currently listed in the latest version of the "List of Big Eight Newsgroups" which is crossposted monthly to news.announce.newgroups, news.groups, and news.lists.misc.

Approved alt.radio.amateur.* and alt.ham-radio.* newsgroups are those that have been created consistent with the suggestions in "So You Want to Create an Alt Newsgroup" at:

  http://www.faqs.org/faqs/alt-creation-guide/

Approved regional hierarchy newsgroups are those that contain either "radio.amateur" or "ham-radio" in their names, including uk.radio.amateur and aus.radio.amateur.misc.

We will make every reasonable effort to keep our list of approved newsgroups up-to-date. In case we have overlooked any, and a submission is rejected in error as a result, the rejected submitter can E-mail us at our administrative contact address (in the signature at the bottom of this article, and the default Reply-To for the rejection message) requesting that it be added, and that the article be approved. We may still choose to reject articles crossposted to any alt.* newsgroup with an inappropriate name, including obscene language, embedded name-calling, or encouragement of unlawful conduct.

Please direct any comments, questions, or criticisms to rec-radio-amateur-moderated-request@panix.com.

```
From -7875237412667490576
X-Google-Thread: 10e8ad,68c45a3a0f706c40,start
X-Google-NewGroupId: yes
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X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news2.google.com!goblin1!goblin.stu.neva.ru!
news.astraweb.com!border5.a.newsrouter.astraweb.com!not-for-mail
From: Chris Steyaert <observations@rmob.org>
Newsgroups: rec.radio.amateur.space,sci.astro.amateur
Subject: Radio Meteor Obs. Bull. October 2010  Orionids
Date: Sat, 06 Nov 2010 23:25:43 +0100
Message-ID: <4elbd6d2e5gvm2e316qe6ttn408ghnaguh@4ax.com>
X-Newsreader: Forte Agent 5.00/32.1171
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Lines: 14
Organization: Unlimited download news at news.astraweb.com
NNTP-Posting-Host: d2dac5bc.news.astraweb.com
X-Trace: DXC=Vf@N0LbjCMJmRUYobjn7jFL?0kYOcDh@JT7U22f;g0<EN:bTSN?
IBJL]>:Ma_6Vk8Ob3<D_UX>L;IX<`3P5ZY[ZJh_nR3m:Qm:IIGj>Tod7Z5B
Xref: g2news2.google.com rec.radio.amateur.space:424 sci.astro.amateur:42239
```

Radio Meteor Observation Bulletin No. 207 of October 2010 (102 K) is available now as

     http://www.rmob.org/rmobtext/rmob1010.txt

More information and the visual presentation of the hourly forward scatter counts can be found on

http://www.rmob.org

Chris

```
From -4533803088478595081
X-Google-Thread: 10e8ad,d2d3e3c4f5253820,start
X-Google-NewGroupId: yes
X-Google-Thread: 10b9c8,d2d3e3c4f5253820,start
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,gida4a23d5f63,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news2.google.com!newsfeed2.dallas1.level3.net!
news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-311 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Tue, 9 Nov 2010 21:09:30 EST
Organization: The Radio Amateur Satellite Corporation
Lines: 364
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000001cb807c$4a928f10$dfb7ad30$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1289354970 28899 166.84.1.6 (10 Nov 2010 02:09:30 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Wed, 10 Nov 2010 02:09:30 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news2.google.com rec.radio.amateur.space:425 rec.radio.info:1951
```

AMSAT NEWS SERVICE
ANS-311

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
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* Hudson Valley SatCom Net
* November 15 Deadline for NASA CubeSat Initiative Proposal
* AMSAT-UK FUNcube Frequencies Now Confirmed
* FO-29 Status Update
* OSCAR-11 REPORT   31 October 2010
* ARISS Status - 1 November 2010

SB SAT @ AMSAT $ANS-311.01
November AO-51 Schedule

AMSAT News Service Bulletin 311.01
  From AMSAT HQ SILVER SPRING, MD.
November 7, 2010
To All RADIO AMATEURS
BID: $ANS-311.01

AMSAT-NA VP Operations, Drew KO4MA published the November schedule for AO-51. Drew wrote, "This month we are catching up on several requests for L, S and even 38k4 BBS time. In January AO-51 leaves continuous illumination for many years and many of these modes may not be possible due to power budget and battery condition. However, if we find these modes under used this month, we may modify the schedule as we go.

October 31 (late UTC)
FM Repeater, L/SU
Uplink: 1268.705 MHz FM (no PL tone)
Downlinks: 2401.200 MHz FM and 435.300 MHz FM (at low power!)

November 4 (late UTC)
FM Repeater, V/U
Uplink: 145.920 MHz FM (no PL tone)
Downlink: 435.300 MHz FM

9k6 Baud PBBS Operations, L/U
Uplink: 1268.705 MHz FM at 9600 baud
Downlink: 435.150 MHz FM at 9600 baud

November 14 (late UTC)
38k4 Baud PBBS Operations, L/U
Uplink: 1268.705 MHz FM at 9600 baud
Downlink: 435.150 MHz FM at 38,400 baud

November 18 (late UTC)
FM Repeater, L/SU
Uplink: 1268.705 MHz FM (no PL tone)
Downlinks: 2401.200 MHz FM and 435.300 MHz FM (at low power!)

November 21 (late UTC)
FM Repeater, V/U
Uplink: 145.920 MHz FM (no PL tone)
Downlink: 435.300 MHz FM

9k6 Baud PBBS Operations, L/U
Uplink: 1268.705 MHz FM at 9600 baud
Downlink: 435.150 MHz FM at 9600 baud

SO-67 is active over North and South America this month, according to the schedule at http://www.amsatsa.org.za/ . V/U users of AO-51 are encouraged to try SO-67 while AO-51 is in mode L/US.

Read the latest AO-51 Control Team News on the AMSAT web at:
http://www.amsat.org/amsat-new/echo/CTNews.php

[ANS thanks Drew, KO4MA for the above information]

/EX

SB SAT @ AMSAT $ANS-311.02
Hudson Valley SatCom Net

AMSAT News Service Bulletin 311.02
From AMSAT HQ SILVER SPRING, MD.
November 7, 2010
To All RADIO AMATEURS
BID: $ANS-311.02

The next Hudson Valley Sat com Net will be Thursday Noveber 11 on the Mt. Beacon ARC 146.970 MH repeater and on EchoLink via the N2EYH-L node. Net starts at 8PM EST (UTC - 5). More information is available at http://www.hvsatcom.org and wa2aqh@amsat.org.

[ANS thanks Stu, WA2BSS for the above information]

/EX

SB SAT @ AMSAT $ANS-311.03
November 15 Deadline for NASA CubeSat Initiative Proposal

AMSAT News Service Bulletin 311.03
  From AMSAT HQ SILVER SPRING, MD.
November 7, 2010
To All RADIO AMATEURS
BID: $ANS-311.03

NASA made the first open announcement to create an agency-prioritized list of available CubeSat auxiliary payloads in April 2010. Additional CubeSat launch capacity is still available in 2011 and 2012, so NASA released a second announcement of CubeSat integration and launch opportunities. CubeSat mission proposers must still be educational institutions and contribute to NASA strategic goals and outcomes.

Investigations proposed for this pilot project must address an aspect of science, exploration, technology development, education or operations encompassed by NASA's strategic goals and outcomes as identified in the NASA Strategic Plan and/or NASA's Education Strategic Coordination Framework.

Collaborators may be required to provide partial reimbursement of approximately $30,000 per CubeSat. NASA will not provide funding to support CubeSat activity or development. Selection does not guarantee an availability of a launch opportunity.

The complete CubeSat Launch Initiative Announcement can be viewed on-line at NASA.gov at http://tinyurl.com/2b97n6r.

[ANS thanks NASA for the above information]

/EX

SB SAT @ AMSAT $ANS-311.04
AMSAT-UK FUNcube Frequencies Now Confirmed

AMSAT News Service Bulletin 311.04
  From AMSAT HQ SILVER SPRING, MD.
November 7, 2010
To All RADIO AMATEURS
BID: $ANS-311.04

Trevor, M5AKA reported the IARU Amateur Satellite Frequency Coordination panel has announced coordinated frequencies for the AMSAT-UK FUNcube 1U CubeSat.

The frequencies are:

Inverting linear transponder:
Uplink 435.080 - 435.060 MHz Downlink 145.960 - 145.980 MHz

Beacon 145.955 MHz CW and 1200 bps BPSK

FUNcube website

http://www.FUNcube.org.uk/

FUNcube SDR Dongle
http://www.FUNcubeDongle.com/

FUNcube Yahoo Group
http://groups.yahoo.com/group/FUNcube/

[ANS thanks Trevor, M5AKA and AMSAT-UK for the above information]

/EX

SB SAT @ AMSAT $ANS-311.05
FO-29 Status Update

AMSAT News Service Bulletin 311.05
From AMSAT HQ SILVER SPRING, MD.
November 7, 2010
To All RADIO AMATEURS
BID: $ANS-311.05

Yutaka Murata, JA1COU reported news from the Japan Amateur Radio League (JARL) FO-29 command team testing this past weekend when continuous commands were transmitted to the satellite when it was in range of Japan.

The current hypothesis of the recent shutdown of the satellite is that the temperature aboard FO-29 is too high to allow continuous operations and to accept commands or any other satellite operations.

Eclipse of FO-29 is:

November 1	0% (full illumination)
November 20	14%
November 30	17%

It is expected that the temperature aboard FO-29 will drop as the length of eclipse increases. FO-29 is designed to work over a wide temperature range. Because of degradation over time in orbit it is possible that some components may have lower performance. The JARL Command Team hopes that FO-29 will accept commands and resume operation when the temperature cools down during increased eclipse.

[ANS thanks Yutaka Murata, JA1COU for the above information]

/EX

SB SAT @ AMSAT $ANS-311.06
OSCAR-11 REPORT 31 October 2010

AMSAT News Service Bulletin 311.06
From AMSAT HQ SILVER SPRING, MD.

November 7, 2010
To All RADIO AMATEURS
BID: $ANS-311.06

This report covers the period from 30 September to 31 October 2010. During this time the satellite has been heard from 09 to 19 October and from 30 October. At the time of writing it is transmitting and is expected to continue until 09 November.

Excellent signals have been reported from stations located around the world, and good copy obtained from decoded telemetry frames.

The satellite is now transmitting during eclipses, although signals are weaker at those times. This indicates that there is still some capacity remaining in the battery.

The on-board clock is now very stable. It gained only ten seconds in 33 days. This is comparable with its accuracy when the satellite was fully operational, when it gained approximately one minute per year. However, there is still an accumulated loss of 309 days, which has occurred during eclipses of the last few years.

Operation during eclipses and stability of the on-board clock suggest that some part of the system may have recently failed 'open circuit' thus reducing the overall power drain of the system, and allowing more power to be available during eclipses. There was an unexplained current drain observed when analogue telemetry was last transmitted. This fault might have cleared.

The Beacon frequencies are -

VHF 145.826 MHz. AFSK FM ASCII Telemetry

UHF 435.025 MHz. OFF

S-band 2401.5 MHz. OFF

Reception reports have been received from Jeff N3QO, Rod CX2ABP and Ian KI4HLV/6Y5 (G4JMM) . Many thanks for those and to everyone who posted reports on the satellite status website. This is a very convenient and easy to use facility, which shows the current status of all the amateur satellites. Strongly recommended for future reports! Reports around the expected times of switch-on and switch-off are of special interest. The URL is http://oscar.dcarr.org/index.php

OSCAR-11 transmits on 145.826 MHz., set receiver to NBFM. The satellite has a characteristic sound, rather like raspy slow morse code, sending "di di dah dah dah dah dah dah dah" sent over a period of five seconds. If you are receiving a very weak signal, switch the receiver to CW or SSB. You should hear several sidebands around the carrier frequency and should be able to hear the characteristic 'morse code like' sound on at least one sideband.

Please note that you need a clean noise-free signal to decode the signals, and your receiver must be set to NBFM mode, for a decoder to work.

If you need to know what OSCAR-11 sounds like, there is an audio clip on my website www.g3cwv.co.uk/ which may be useful for identification and as a test signal for decoding.

The current status of the satellite, is that all the analogue telemetry channels, 0 to 59 are zero, ie they have failed. The status channels 60 to 67 are still working. The real time clock is showing a large accumulated error, but is now incrementing accurately to within a few seconds per month. The day of the month has a bit stuck at 'one' so the day of the month may show an error of +40 days for some dates. The time display has switched into 12 hour mode. Unfortunately, there is no AM/PM indicator, since the time display format was designed for 24 hour mode.

The spacecraft computer and active attitude control system have switched OFF, ie. the satellite' attitude is controlled only by the passive gravity boom gradient, and the satellite is free to spin at any speed.

The watchdog timer operates on a 20 day cycle. The ON/OFF times have tended to be very consistent. The average of many observations have shown this to be 20.7 days, ie. 10.3 day s ON followed by 10.4 days OFF.

Listeners to OSCAR-11 may be interested in visiting my website. If you need to know what OSCAR-11 should sound like, there is a short audio clip for you to hear. The last telemetry received from the satellite is available for download. The website contains an archive of news & telemetry data which is updated from time to time. It also contains details about using a sound card or hardware demodulators for data capture. There is software for capturing data, and decoding ASCII telemetry. The URL is www.g3cwv.co.uk .

If you place this bulletin on a terrestrial packet network, please use the bulletin identifier $BID:U2RPT150.CWV, to prevent duplication.

73 Clive G3CWV   xxxxx@amsat.org (please replace xxxxx by g3cwv)

[ANS thanks Clive, G3CWV, for the above information]

/EX

SB SAT @ AMSAT $ANS-311.07
ARISS Status - 1 November 2010

AMSAT News Service Bulletin 311.07
From AMSAT HQ SILVER SPRING, MD.
November 7, 2010
To All RADIO AMATEURS
BID: $ANS-311.07

1. Successful ARISS Contact with Funakata Elementary

On Friday, October 29, an Amateur Radio on the International Space Station (ARISS) contact was held between students from Funakata Elementary School in Nagoya, Aichi, Japan and astronaut Shannon Walker, KD5DXB on the International Space Station (ISS). The youth were able to get in 16 questions before the ISS went over the horizon. Approximately seventy students, guests and media were present.

2. Astronaut Training Status

Astronauts Joe Acaba, KE5DAR and Aki Hoshide, KE5DNI participated in simulated ARISS school contacts with students attending Ralph McCall School in Airdrie, Alberta, Canada on Tuesday, October 26. The training sessions were terrestrial-based amateur radio contacts using ARISS equivalent equipment.

Acaba, who is slated to fly with Expedition 31, also had an ARISS refresher course on Wednesday, October 27 for his upcoming mission in 2012.

[ANS thanks Carol, KB3LKI, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Lee McLamb, KU4OS

From -5971389976790345733
X-Google-Thread: 8f86f75953,4346d2998df65937,start
X-Google-Attributes: gid8f86f75953,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit

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Path: g2news2.google.com!postnews.google.com!37g2000prx.googlegroups.com!not-for-
mail
From: devi <satyamsivam9030@gmail.com>
Newsgroups: rec.radio.amateur.space
Subject: REAL HOT SEX PHOTOS&VIDEOS
Date: Wed, 10 Nov 2010 07:07:24 -0800 (PST)
Organization: http://groups.google.com
Lines: 28
Message-ID: <fd471b2f-36bd-40e9-b2c3-c7f469988e6e@37g2000prx.googlegroups.com>
NNTP-Posting-Host: 117.199.245.179
Mime-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
X-Trace: posting.google.com 1289401644 20520 127.0.0.1 (10 Nov 2010 15:07:24 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Wed, 10 Nov 2010 15:07:24 +0000 (UTC)
Complaints-To: groups-abuse@google.com
Injection-Info: 37g2000prx.googlegroups.com; posting-host=117.199.245.179;
posting-account=xYWSigoAAADp0Q2VAMlANM4syM5q3uRr
User-Agent: G2/1.0
X-HTTP-UserAgent: Mozilla/5.0 (Windows; U; Windows NT 5.1; en-US; rv:1.9.2.12)
 Gecko/20101026 Firefox/3.6.12,gzip(gfe)
Xref: g2news2.google.com rec.radio.amateur.space:426
```

```
     FOR SAVE WATER AND CHILD PROTECTION
                 http://savewaterinworld.blogspot.com



                          HOT COUPLE ROMANCE
http://babes-devi.blogspot.com/2010/11/couples-in-romance.html
                           PRANEEHA HOT PICS
http://babes-devi.blogspot.com/2010/11/praneetha-latest-pics.html
              AISHWARIYA LATEST HOT PICS
http://babes-devi.blogspot.com/2010/10/aish-latest-pics.html
                SOUTHACTRESS IN A SEXY TOWELS
http://babes-devi.blogspot.com/2010/10/south-actress-in-sexy-towels.html
                UDAYATHRA IN A BATH ROOM
http://babes-devi.blogspot.com/2010/10/udayatara-in-bath.html
                ACTRESS IN A HOT RED DRESS
http://babes-devi.blogspot.com/2010/10/actress-in-sexy-red-dress.html
                 ASIN CUTE HOT PHOTOS
http://babes-devi.blogspot.com/2010/09/asin-cute-photos.html
                SEXY CHARMI IN A BATH
http://babes-devi.blogspot.com/2010/06/charmi-in-bath.html
                FOR HOT PHOTOS&VIDEOS
http://babes-devi.blogspot.com/2010_06_01_archive.html
                 HOT SEXY BOOBS  SHOW
http://babes-devi.blogspot.com/2010/09/sexy-boobs.html
                 ASIN CUTE HOT PHOTOS
http://babes-devi.blogspot.com/2010/09/asin-cute-photos.html
             ANKHITA SPICY PHOTOS
http://babes-devi.blogspot.com/2010/08/sexy-ankhitha.html
```

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From -3435772732670436197
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X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!postnews.google.com!n32g2000pre.googlegroups.com!not-for-
mail
From: s s <staveinvaders@gmail.com>
Newsgroups: rec.radio.amateur.space
Subject: Free Music To Use on Ya Radios
Date: Wed, 10 Nov 2010 20:52:15 -0800 (PST)
Organization: http://groups.google.com
Lines: 5
Message-ID: <4b873e36-3710-44c6-a68a-49b0622e18e9@n32g2000pre.googlegroups.com>
NNTP-Posting-Host: 125.237.34.153
Mime-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
X-Trace: posting.google.com 1289451135 29347 127.0.0.1 (11 Nov 2010 04:52:15 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Thu, 11 Nov 2010 04:52:15 +0000 (UTC)
Complaints-To: groups-abuse@google.com
Injection-Info: n32g2000pre.googlegroups.com; posting-host=125.237.34.153;
posting-account=0R3GUgoAAAB6ro3wjKgu1ozUCduMATTw
User-Agent: G2/1.0
X-HTTP-UserAgent: Mozilla/5.0 (Windows; U; Windows NT 5.1; en-US; rv:1.9.2.12)
 Gecko/20101026 Firefox/3.6.12 ( .NET CLR 3.5.30729),gzip(gfe)
Xref: g2news1.google.com rec.radio.amateur.space:402

Music at

www.staveinvaders.com can be used for free for the next year.

Just download the mp3's


From 2710636880435815474
X-Google-Thread: 10e8ad,180ce6c747bdc976,start
X-Google-NewGroupId: yes
X-Google-Thread: 10b9c8,180ce6c747bdc976,start
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,gida4a23d5f63,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news2.google.com!newsfeed2.dallas1.level3.net!
news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-318 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sun, 14 Nov 2010 12:10:28 EST
Organization: The Radio Amateur Satellite Corporation
Lines: 280
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <001001cb841e$16ec2090$44c461b0$@net>
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Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
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Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1289754628 760 166.84.1.6 (14 Nov 2010 17:10:28 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 14 Nov 2010 17:10:28 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to   rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to   rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news2.google.com rec.radio.amateur.space:428 rec.radio.info:1959

AMSAT NEWS SERVICE
ANS-318

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* AMSAT Amateur Radio Satellite Awards
* Live Web Cast From MFJ on November 16
* Hams Like Science: Impact Earth Simulator For Your Shack
* Hams Like Free Stuff: Download E-Book Understanding LF and HF Propagation
* K8OCL, Silent Key
* ARISS Status Report November 8, 2010

SB SAT @ AMSAT $ANS-318.01
AMSAT Amateur Radio Satellite Awards

AMSAT News Service Bulletin 318.01
  From AMSAT HQ SILVER SPRING, MD.
November 14, 2010
To All RADIO AMATEURS
BID: $ANS-318.01

AMSAT offer a range of Amateur Radio Satellite awards, starting with the single contact Satellite Communicator's Club.

On the AMSAT bulletin board Clint Bradford, K6LCS, writes:

AMSAT has offered several awards over the years.
And you do not need 100 contacts to get awarded for your accomplishments:
a single documented satellite contact qualifies you for the AMSAT Satellite Communicator's Club award!

Current and past AMSAT awards include ...

-Satellite Communicator's Club
-Satellite Communications Achievement
-South African AMSAT Award
-OSCAR Sexagesimal Award
-OSCAR Century Award
-WA4AMI 1000 Award
-WA4AMI 5000 Award
-51 on 51 Achievment Award

Details on the AMSAT awards available at ...
http://www.amsat.org/amsat-new/awards/

In addition, the ARRL recognizes satellite efforts, too, with their WAC, DXCC, WAS, and VUCC awards.

- Worked All Continents Award (WAC) - Make one satellite contact with any station on each of the six continents.

- DXCC Award with Satellite Endorsement - Make one satellite contact with any station in 100 different DXCC countries.

- Worked All States Award - Make one satellite contact with any station in each of the 50 states.

VHF/UHF Century Club Award - Make one satellite contact with any station in 100 different grid squares. Endorsements for each additional 25 grid squares.

ARRL Awards information -
http://www.arrl.org/awards/

AMSAT Awards information -
http://www.amsat.org/amsat-new/awards/

Congratulations to these hams who have recently earned their VUCC Award with a Satellite Endorsement:

VUCC Satellite #203 Bob Herrell, AJ5C
VUCC Satellite #204 Zack Beougher, KD8KSN
VUCC Satellite #205 Greg Butler, KI4OTG

[ANS thanks AMSAT-NA for the above information]

/EX

SB SAT @ AMSAT $ANS-318.02
Live Web Cast From MFJ on November 16

AMSAT News Service Bulletin 318.02
From AMSAT HQ SILVER SPRING, MD.
November 14, 2010
To All RADIO AMATEURS
BID: $ANS-318.02

Tom, W5KUB will run a live web broadcast giving you a video guided tour of MFJ, Cushcraft, Hygain, Ameritron, Mirage, and Vectronics on Tuesday, November 16, starting at 0800 Central Standard Time, or 1400 UTC. Prizes will be given to lucky viewers. All you have to do is be logged in to be eligible for the drawings.

You can log into view the web video and join the on-line hamradio chat via Tom's web page at: http://w5kub.com. You can also join the live chat by pointing your IRC client to /server irc.liveharmony.org and then /join #hamradio.

Tom, W5KUB is well known for his live internet web casts from Dayton and from the Huntsville Hamfest every year.

[ANS thanks Tom, W5KUB for the above information]

/EX

SB SAT @ AMSAT $ANS-318.03
Hams Like Science: Impact Earth Simulator For Your Shack

AMSAT News Service Bulletin 318.03
From AMSAT HQ SILVER SPRING, MD.
November 14, 2010
To All RADIO AMATEURS
BID: $ANS-318.03

UniverseToday.com reported on Impact Earth, an interesting web page for scientifically oriented readers who may like to predict the effects of an asteroid impact before it happens.

All you have to do is input the parameters of the asteroid on the recently updated "Impact Earth" website:
http://www.purdue.edu/impactearth

You'll find out everything about what an impactor will do to Earth, including an estimate of the size of the crater, how far away you'll need to be in order to avoid being affected by the impact (and if that is possible), tsunami wave height, and other details of the subsequent disaster. This version does not predict if your amateur radio antenna will remain standing.

The original Impact Earth website was created in 2002 for use by NASA and homeland security. The new version, built in a collabora- tion between Purdue University and Imperial College London, is more user-friendly for the general public, as well as providing more visual details of an impact. Besides being rather fun to play around with, the website is highly educational about what a various sized impacts would do Earth, depending on if it hit ground or water.

[ANS thanks UniverseToday.com for the above information]

/EX

SB SAT @ AMSAT $ANS-318.04
Hams Like Free Stuff: Download E-Book Understanding LF and HF Propagation

AMSAT News Service Bulletin 318.04
From AMSAT HQ SILVER SPRING, MD.
November 14, 2010
To All RADIO AMATEURS
BID: $ANS-318.04

Steve G0KYA and Alan G3NYK, of the Radio Society of Great Britain's (RSGB) Propagation Studies Committee, have released a free ebook called 'Understanding LF and HF Propagation'

In 2008/2009 Steve and Alan wrote a series of features on LF and HF propagation for the RSGB's "RadCom" magazine.

The features consisted of a month-by-month look at each HF band in turn, showing the reader the propagation modes behind each band and explaining some of the technicalities of ionospheric propagation.

Steve says: "I looked at the D, E and F layers, Sporadic E, the MUF/LUF, using solar data, propagation programs, NVIS and much more.

"Alan then took over and wrote three detailed features on LF propagation. We are told that the features were well received and as a result I have managed to persuade the RSGB to allow me to put them together into a single document, which is now freely available for amateurs worldwide to download."

You can download your free copy of "Understanding LF and HF Propagation" at http://www.g0kya.blogspot.com

[ANS thanks the SouthGateARC News Site for the above information]

/EX

SB SAT @ AMSAT $ANS-318.05
K8OCL, Silent Key

AMSAT News Service Bulletin 318.05
  From AMSAT HQ SILVER SPRING, MD.
November 14, 2010
To All RADIO AMATEURS
BID: $ANS-318.05

Dee Interdonato, NB2F wrote this week, "It is with great sadness that I report Dr. John Champa, K8OCL, has become a silent key. I was friends with John since 1970 as we both served in the U.S. Army and were officers in the Ft. Gordon, Ga. Amateur radio club. His daughter, Rebecca, reported his passing after a formidable fight with an inoperable tumor."

John was on the BOD of AMSAT for several years and will be remembered for his significant contribution to Amateur Radio in Space. Dee concluded, "He will be missed by all and his important opinions (to me) will allow me to keep his ideas alive and in the hearts of all AMSAT members."

[ANS thanks Dee Interdonato, NB2F, for the above information]

/EX

SB SAT @ AMSAT $ANS-318.06
ARISS Status Report November 8, 2010

AMSAT News Service Bulletin 318.06
  From AMSAT HQ SILVER SPRING, MD.
November 14, 2010
To All RADIO AMATEURS
BID: $ANS-318.06

1. Upcoming School Contact

St. Louis Charter School, St. Louis, Missouri contact on Thursday, November 11 at 18:07 UTC. was a success St. Louis is a public charter school with an enrollment of 930 students in grades K - 8. Additional students are enrolled in the school's Special Education Self Contained Classrooms. The school has integrated the ARISS contact into its science curriculum which covers the solar system, space exploration and space missions. Students have taken part in several hands on activities and research papers to prepare for the contact.

2. Malaysian Contact Successful

On Tuesday, November 2, students from S.K. Bukit Damansara visited the National Planetarium in Kuala Lumpur, Malaysia and participated in an Amateur Radio on the International Space Station (ARISS) contact. The youth posed questions to astronaut Doug Wheelock, KF5BOC about what it is like to live in space. The contact was made in conjunction with the "Prime Minister's - National Space Challenge Trophy 2010" event.

3. Crew Debrief Held with Caldwell-Dyson

Expedition 23/24 astronaut Tracy Caldwell-Dyson, KF5DBF participated in an Amateur Radio on the International Space Station (ARISS) debrief session on Wednesday, November 3. The feedback she provided on the ISS Ham radio equipment and school contacts will aid the ARISS team in updating its program procedures.

4. Astronaut Training Status

On Friday, November 5, Aki Hoshide, KE5DNI was given an ARISS overview training session and Suni Williams, KD5PLB was provided with a refresher course on the ARISS program. Both astronauts are slated to fly on Expedition 32.

5. Amateur Radio Newsline Covers ARISS

On November 5, the Amateur Radio Newsline Report 1734 ran three ARISS related news items under Ham Radio in Space. "The ISS Celebrates its 10th Anniversary" talks about the crew members who have flown on the Space Station, many of whom were ham radio operators. "Second Ham Station for the ISS" covers the Ericsson radio which will be installed in the Columbus module in early 2011 and "ARISSat-1 Passes Safety Test" is a status on the satellite which will soon ship to Russia for final integration and testing. All stories may be found at:
ftp://ftp.arnewsline.org/quincy/News/news.txt

[ANS thanks Yutaka Carol, KB3LKI for the above information]

/EX

73,
This week's ANS Editor,
Dee Interdonato, NB2F
nb2f at amsat dot org

From -6716598795820070095
X-Google-Thread: 10e8ad,eca31714eff3eca1,start
X-Google-NewGroupId: yes
X-Google-Thread: 10b9c8,eca31714eff3eca1,start
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,gida4a23d5f63,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!newsfeed2.dallas1.level3.net!
news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-319 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space

Date: Tue, 16 Nov 2010 18:48:39 EST
Organization: The Radio Amateur Satellite Corporation
Lines: 1878
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <001c01cb85e8$c2432bc0$46c98340$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="US-ASCII"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1289951319 4181 166.84.1.6 (16 Nov 2010 23:48:39 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Tue, 16 Nov 2010 23:48:39 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to   rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to   rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
x-cr-hashedpuzzle: qKo= AdS7 AtiV AzzG BJrv BoJ5 ConO Dbpp EGPv EG4z G9xB Iks+
I5Nt JaiE J9qu
KHvE;1;cgBlAGMALQByAGEAZABpAG8ALQBpAG4AZgBvAEAAcABhAG4AaQB4AC4AYwBvAG0A;Sosha1_v1;
7;{ED60E873-5C88-440E-
A17B-8B133990B408};awA5AGoAawBtAEAAYwBvAG0AYwBhAHMAdAAuAG4AZQB0AA==;Tue, 16 Nov
2010 23:48:11
GMT;VwBTAFIALQAzADEAOQAgAEEATQBTAEEAVAAgAFcAZQBlAGsAbAB5ACAAUwBhAHQAZQBsAGwAaQB0AG
UAIABSAGUAcABvAHIAdAA=
x-cr-puzzleid: {ED60E873-5C88-440E-A17B-8B133990B408}
Xref: g2news1.google.com rec.radio.amateur.space:404 rec.radio.info:1888

This report is organized into four (4) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - deborbited/returned satellites

SB SAT @ AMSAT W8ISS $WSR-319.S1
WSR 319 Part 1 11/15/2010

AMSAT NEWS SERVICE BULLETIN 319.S1
FROM AMSAT HQ SILVER SPRING, MD, November 15, 2010
TO ALL RADIO AMATEURS
BID: $WSR-319.S1

HO-68 HOPE-1 (CAS-1)(XW-1)
Catalog Number: 36122

Launch Date: December 15, 2009
Status: Operational

Callsign:
Broadcast: BJ1SA-11
BBS: BJ1SA-12

Uplinks: 145.8250 MHz FM, PL 67.0 Hz.
145.9250 - 145.9750 MHz SSB/CW
145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
435.7650 - 435.7150 MHz SSB/CW
435.6750 MHz AFSK 1200 BPS

Beacon: 435.7900 MHz CW

Mode and Antenna Polarization:
V: LHCP 2.0dBi max
U: RHCP 3.0dBi max

IARU coordination page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108

For more information about XW-1 (CAS-1):
http://www.camsat.cn
[09062010]
=====
SO-67 SumbandilaSat
Catalog Number: 35870
Launch Date: September 17, 2009

Status: Suspended

Callsign: ZS0SUM

Uplink: 145.875MHz FM tone 233.6 Hz
Downlink: 435.345MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

For more information about SO-67:
http://www.amsatsa.org.za/
[09062010]
=====
DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008

Status: Operational
Current Mode: Science Mode - Beacon ONLY

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink: 435.530 to 435.570 MHz

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68
[09062010]
=====
VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.9360 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is active. Each transponder has a different beacon.
[09062010]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Mode:

PBBS: L/u
Uplink: 1268.705 mhz FM 9k6 Pacsat Broadcast Protocol
Downlink: 435.150 MHz FM 38k4 PBP, 1 watt output

Telemetry:
Downlink: 435.150MHz 9k6

Analog voice downlink:	435.300 MHz FM
	435.150 MHz FM
	2401.200 Mhz FM
Analog voice uplink:	145.860 MHZ FM
	145.880 MHz USB
	145.880 MHz FM
	145.920 MHz FM
	145.920 MHz FM - 67 Hz PL tone burst
	1268.705 MHz FM
Digital Downlinks:	435.150 MHz FM 38k4 PBP, 1 watt output
	435.150 MHz FM 9k6 Pacsat Broadcast Protocol
	2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:	145.860 MHz FM 9k6 Pacsat Broadcast Protocol
	1268.705 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon:	435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[11152010]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml

(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz. The order of operation is thus: (allow for Doppler as necessary):

1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10 minute timer.

[09062010]
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[09062010]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational

Current Mode: Alternating between Mode A and B every 24 hours

```
Uplink:   145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink:  29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons:   29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW
```

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/

```
[09062010]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - OFF
                      Voice -       V/v
                      BBS -         OFF
                      APRS -        OFF
                      SSTV -        OFF


Expedition 25 Crew:
Commander:                Doug Wheelock         KF5BOC
Flight Engineer:          Shannon Walker        KD5DXB
Flight Engineer:          Fyodor Yurchikhin     RN3FI
Flight Engineer:          Scott Kelly
Flight Engineer:          Alexander Kaleri      U8MIR
Flight Engineer:          Oleg Skripochka       RN3FU

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink:   145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink:     145.200 MHz FM
Region 2/3 voice uplink:   144.490 MHz FM
Worldwide downlink:        145.800 MHz FM

Crossband Repeater:
Repeater Uplinks:         1269.650 MHz FM
                           437.800 MHz FM
                           145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink:         145.800 MHz FM
                           437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink:                  145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian:                   OR4ISS
German:                    DP0ISS
Russian:                   RS0ISS
                           RZ3DZR
United States:             NA1SS
```

Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[10112010]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-319.S2
WSR 319 Part 2 11/15/2010

AMSAT NEWS SERVICE BULLETIN 319.S2
FROM AMSAT HQ SILVER SPRING, MD, November 15, 2010
TO ALL RADIO AMATEURS
BID: $WSR-319.S2

StudSat
Catalog Number: 36796
Launch Date: July 12, 2010
Status: On Orbit

Uplink: 437.505MHz, 9600bps FSK
Downlink: 437.505MHz, 9600bps FSK
Beacon : 437.505MHz,   20bps ASK
[08062010]
=====
TIsat-1
Catalog Number: 36799
Launch Date: July 12, 2010
Status: On orbit

Callsign: HB9DE

Uplink: 145.980MHz FM, AFSK
Downlink: 437.305MHz FM, AFSK
Beacon: 437.305MHz CW
[08062010]
=====
HO-68 HOPE-1 (CAS-1)(XW-1)
Catalog Number: 36122
Launch Date: December 15, 2009
Status: Operational

Callsign:
Broadcast: BJ1SA-11
BBS: BJ1SA-12

```
Uplinks:   145.8250 MHz FM, PL 67.0 Hz.
           145.9250 - 145.9750 MHz SSB/CW
           145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
           435.7650 - 435.7150 MHz SSB/CW
           435.6750 MHz AFSK 1200 BPS

Beacon:    435.7900 MHz CW

IARU coordination page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108

For more information about XW-1 (CAS-1):
http://www.camsat.cn
[09062010]
=====
SwissCube
Catalog Number: 35932
Launch Date: September 23, 2009

Status: Operational

Callsign: HB9EG

Beacon(100mw): 437.5050MHz CW
Beacon(1w):    437.5050MHz FSK 1k2bps
[04222010]
=====
UWE-2
Catalog Number: 35934
Launch Date: September 23, 2009

Status: In Orbit

Beacon(500mw): 437.3850 MHz AFSK 1k2bps
               437.3850 MHz FSK 9k6bps
[1112009]
=====
ITUpsAT1
Catalog Number: 35935
Launch Date: September 23, 2009

Status: Operational

Beacon(100mw): 437.325MHz CW
Beacon(1w): 437.325MHz 19k2bps
[11112009]
=====
BEESAT
Catalog Number: 35933
Launch Date: September 23, 2009

Status: Operational
```

```
Callsign: DP0BEE

Beacon(100mw): 436.000MHz CW
Beacon(500mw): 436.000MHz GMSK 4k8bps
Beacon(500mw): 436.000MHz GMSK 9k6bps
[04222010]
=====
CP-6
Catalog Number: 35003
Launch Date: May 19, 2009

Status: Operational

Downlink: 437.365 MHz 1k2 AFSK
[09062010]
=====
HAWKSAT 1
Catalog number: 35004
Launch Date: May 19, 2009

Status: operational

Downlink: 437.345 MHz ?
[09062010]
=====
Pharmasat
Catalog Number: 35002
Launch Date: May 19, 2009
Status: Operational

Downlink: 437.465 MHz 1k2 AFSK
[09062010]
=====
ANUSAT
Catalog Number: 34808
Launch Date: April 20, 2009

Status: ?

Downlink:  435.000 MHz
Uplink:    145.800 MHz

Telemetry: 137.400 MHz
[09062010]
=====
SOHLA-1 (ASTRO TECH.)
Catalog Number: 33496
Launch Date: January 23, 2009

Status: Operational

Proposed Frequencies and Modes:
```

```
Downlink: 437.505 MHz AFSK/CW
Beacon:   437.505 MHz AFSK/CW

Callsign:

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=101
[09062010]
=====
KAGAYAKI (Solan Co.)
Catalog Number: 33495
Launch Date: January 23, 2009

Status: In Orbit

Downlink: 437.375 MHZ    FSK9k6/CW
Beacon:   437.375 MHz    FSK9k6/CW

IARU coordination status page:

AMSAT-NA webpage:

[09062010]
=====
STARS (Kagawa Univ.) (Twin Satellites)
Catalog Number: 33498
Launch Date: January 23, 2009

Status: Operational ?

Downlinks: 437.485 MHz FM/CW
           437.465 MHz FM/CW
Beacons:   437.305 MHz FM/CW
           437.275 MHz FM/CW

Callsigns: JR5YBN
           JR5YBO

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=99

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=121&retURL
=/satellites/status.php
[09062010]
=====
KKS-1 (Tokyo MCIT)
Catalog Number: 33499
Launch Date: January 23, 2009

Status: Operational

Downlink:  437.455 MHz AFSK/CW
```

Beacon: 437.385 MHz AFSK/CW

Callsign: JQ1YYY

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=107

AMSAT-NA webapge:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=120&retURL
=/satellites/status.php
[09062010]
=====
PRISM (Tokyo Univ.)
Catalog Number: 33493
Launch Date: January 23, 2009

Status: Operational ?

Downlink: 437.425 MHz AFSK/GMSK/CW
Beacon: 437.250 MHz AFSK/GMSK/CW

Callsign: JQ1YCX

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=97

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=119&retURL
=/satellites/status.php
[09062010]
=====
RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number: 32953
Launch Date: May 23, 2008

Status: Operational

Curent Modes: Telemetry
              Audio
              Images

Downlinks: 435.315 MHz
           435.215 MHz

AMSAT-NA website:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=115&ret
URL=/satellites/status.php

Official website:
http://www.npopm.com/?cid=leoca&caid=43
[09062010]
=====
CanX-2

Catalog number: 32790
Launch Date: April 28, 2008

Status: Operational in range of ground station only

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web
page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[09062010]

=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.425 MHz 1k2 baud packet

For the latest project status update please visit the AAUSAT-II web
page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[09062010]

=====
CO-65 CUTE-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008

Status: Digipeater

Downlink: 437.475 MHz 9k6 Packet
Uplink: 1267.600 Mhz

Telemetry Beacon:
Downlink: 437.2750 MHz CW

For the latest project status update please visit the Cute-1.7+APD II
web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78

Command Station blog website:
http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=112&retURL

=/satellites/status.php
[09062010]
=====
Compass-1
Catalog number: 32787
Launch Date: April 28, 2008

Status: Operational

Current Mode: 4k8 MSK packet

```
Uplink:   145.980 MHz FM
Downlink: 437.275 Mhz CW
          437.405 MHz Packet
```

For the latest project status update please visit the Compass 1 web page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=114&retURL
=/satellites/status.php
[09062010]
=====
CO-66 Seeds II
Catalog number: 32791
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.485 MHz

Callsign: JQ1YGU

For the latest project status update please visit the Seeds 2 web page: http://cubesat.aero.cst.nihon-u.ac.jp/english/seeds_2_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=113&retURL
=/satellites/status.php
[09062010]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

```
Current Mode:  /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon:    435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=94&retURL=
/satellites/status.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=72
[09062010]
=====
CP3
Catalog Number: 31129
Launch Date: April 17,2007

Status: Operational

Current Mode:  /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[09062010]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon:             437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/xivpicte.htm
[09062010]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003

Status: ?????
```

Current Mode: /u

Beacon: 436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=96&retURL
=/satellites/status.php

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[09062010]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Mode:

PBBS: L/u
Uplink: 1268.708 mhz FM 9k6 Pacsat Broadcast Protocol
Downlink: 435.150 MHz FM 38k4 PBP, 1 watt output

Telemetry:
Downlink: 435.150MHz 9k6

Analog voice downlink: 435.300 MHz FM
                           435.150 MHz FM
                          2401.200 Mhz FM
Analog voice uplink: 145.860 MHZ FM
                           145.880 MHz USB
                           145.880 MHz FM
                           145.920 MHz FM
                           145.920 MHz FM - 67 Hz PL tone burst
                          1268.700 MHz FM
Digital Downlinks: 435.150 MHz FM 38k4 PBP, 1 watt output
                           435.150 MHz FM 9k6 Pacsat Broadcast Protocol
                          2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Pacsat Broadcast Protocol
                          1268.708 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[11152010]
=====
QuakeSat
Catalog Number: 27845
Launch Date: June 30, 2003

Status: Telemetry only

Current Mode: 9600 baud data packet

Mode U packet
Downlink: 436.675 MHz 9k6 BPS

Quakesat webpage:
http://www.quakefinder.com/services/quakesat-ssite/
[10042010]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

```
Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only
```

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=69&retURL=/satellites/status.php
[09062010]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Telemetry only

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[09062010]
=====
RS-22 RADIO SPORT 22
Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only

Current Mode: /u

CW Beacon - 435.352 MHz
            145.818 MHz

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=76&retURL
=/satellites/status.php
[09062010]
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990

Status: CW Beacon only

Uplinks: 145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink: 437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[09062010]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984

Status: Operational

Current Mode: /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon: 435.025 MHz
Mode-S Beacon: 2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[11062010]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - OFF
Voice - V/v
BBS - OFF
APRS - OFF
SSTV - OFF

Expedition 25 Crew:

Commander:	Doug Wheelock	KF5BOC
Flight Engineer:	Shannon Walker	KD5DXB
Flight Engineer:	Fyodor Yurchikhin	RN3FI
Flight Engineer:	Scott Kelly	
Flight Engineer:	Alexander Kaleri	U8MIR
Flight Engineer:	Oleg Skripochka	RN3FU

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:

Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
                             RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[10112010]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-319.S3
WSR 319 Part 3 11/15/2010

AMSAT NEWS SERVICE BULLETIN 319.S3
FROM AMSAT HQ SILVER SPRING, MD, November 15, 2010
TO ALL RADIO AMATEURS
BID: $WSR-319.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

CP4
Catalog Number: 31132
Launch Date: April 17, 2007

Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon: 437.325 MHz CW

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=79
[09062010]
=====
LIBERTAD-1
Catalog Number: 31128

```
Launch Date: April 17, 2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink:   145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[09062010]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: Non-Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder:  145.825 Mhz FM
[09062010]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency:  437.305
                             2407.250

Official Website: http://www.ncube.no
[09062010]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink:        437.250 MHz FM 67Hz CTCSS
Voice Downlink:     2401.835 MHz FM
Packet Up/Downlink:  437.250 MHz 9k6 packet
Packet Downlink     2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[09062010]
```

```
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non-Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[09062010]
=====
CANX-1
Catalog Number: 27847
Launch Date: June 30, 2003

Status: Non-Operational

Downlink: 437.8800 MHz AFSK 1k2bps
[06052009]
=====
DTUSAT
Catalog Number: 27842
Launch Date: June 30, 2003

Status: Non-Operational

Current Mode: 2k4 AFSK Packet last reported

Downlink: 437.475MHz

Officail webpage: http://dtusat1.dtusat.dtu.dk/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=101&retURL
=satellites/all_oscars.php
[02212009]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink:   435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)

Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
```

```
Catalog number: 26548
Launch date: September 26, 2000

Status: Telemetry only

Uplinks:   145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink:  437.325 MHz

Broadcast callsign: MYSAT3-11
BBS:                MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial land and weather imaging payloads offers FM and FSK
Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as
a collaborative effort between the Malaysian government and Surrey
Satellite Technology Ltd.
[03302009]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink:   145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS:                SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
```

```
Launch Date: September 26, 2000

Status: Non-Operational

Uplink:   145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
V-band:   145.840 -  145.990 MHz CW/LSB
U-band:   435.550 -  435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks
---------
S2-band:  2401.225 -  2401.475 MHz CW/USB
K-band:  24048.010 - 24048.060 MHz CW/USB
Beacon:   2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)
----------------------------
BEACON   General Beacon(GB)  Middle Beacon(MB)  Engineering Beacon(EB)
2 m                    none        145.898 MHz                    none
70cm            435.438 MHz        435.588 MHz             435.838 MHz
13cm(1)        2400.188 MHz       2400.338 MHz            2400.588 MHz
13cm(2)        2401.173 MHz       2401.323 MHz            2401.573 MHz
3cm           10450.975 MHz      10451.125 MHz           10451.375 MHz
1.5cm         24047.885 MHz      24048.035 MHz           24048.285 MHz
[07162007]
=====
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
```

```
[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink:    145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: 25636
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater:         436.250 MHz

Uplinks: Mode B Repeater:  145.825 MHz
Mode J Digipeater:         145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational
```

```
Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Non-Operational

Current Modes:
Telemetry : /u

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign:       4XTECH-12

More information of GO-32 can be found at:
http://asri.technion.ac.il/techsat/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=14&retURL
=/satellites/status.php
[07172010]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink:   145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
MO-30 UNAMSAT-2
```

Catalog Number: 24305
Launch Date: September 5, 1996

Status: Non-operational

Downlink: 435.1380 MHz AFSK 1200 BPS
Downlink: 435.2060 MHz AFSK 1200 BPS
Uplink: 145.8150 MHz AFSK 1200 BPS
Uplink: 145.8350 MHz AFSK 1200 BPS
Uplink: 145.8550 MHz AFSK 1200 BPS
Uplink: 145.8750 MHz AFSK 1200 BPS
[06042009]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Non-operational
Current Mode: V/u (Mode JA)

Voice/CW (Mode JA)
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage:
http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts.htm
[11062010]
=====
PO-28 POSAT-1

Catalog number: 22829
Launch Date: September 25, 1993

Status: Non-operational

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012009]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks: 145.875 MHz FM 1200-baud
145.900 MHz FM 1200-baud
145.925 MHz FM 1200-baud
145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
AO-24 ARSENE
Catalog Number: 22654

```
Launch Date: May 13, 1993

Status: Non-operational

Uplink:    435.0625 MHz FM 1k2bps AFSK
           435.1125 MHz FM 1k2bps AFSK
           435.1375 MHz FM 1k2bps AFSK
Downlink:  145.9750 MHz FM 1k2bps AFSK
          2446.5025 MHz FM 1k2bps AFSK

Beacon:    2446.4700 MHz CW

Broadcast callsign:
BBS:
[12162009]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HL01-11
BBS: HL01-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
```

```
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
[05012006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: non-operational

Current Mode:  V/u

Uplink:         145.900 MHz FM 1200-baud Manchester FSK (reserved)
                145.920 MHz FM VOICE
                145.940 MHz FM 1200-baud Manchester FSK (reserved)
                145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink:       437.026 MHz USB VOICE
                (1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[07242009]
=====
UO-15 UoSAT-4
Catalog Number: 20438
Launch Date: January 22, 1990

Status: Non-operational

Uplink: ?
Downlink: 435.1250MHz (?)
          435.1200MHz (?)
[06042009]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
```

```
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon:   145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink  29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
Beacons:   29.450 MHz
          435.100 MHz
```

```
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon 1:  29.352 MHz (intermittent)
Beacon 2:  29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink:     21.260 to 21.300 MHz CW/USB
Downlink:  145.860 to 145.900 MHz CW/USB

Beacon:    145.860 MHz

Robot:     145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
```

Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-319.S4
WSR 319 Part 4 11/15/2010

AMSAT NEWS SERVICE BULLETIN 319.S4
FROM AMSAT HQ SILVER SPRING, MD, November 15, 2010
TO ALL RADIO AMATEURS
BID: $WSR-319.S4

THE FOLLOWING SATELLITES HAVE RE-ENTERED OR HAVE BEEN RETURNED SAFELY:

CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Re-entered
Re-entered:

Uplink: 1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=56
[09062010]

=====
BEVO-1 (DRAGONSAT-1)
Catalog Number: 35690
Launch Date: May 19, 2009

Status: Re-entered
Re-entered:

Downlink: 437.325 MHz 9k6 GMSK
          437.325 MHz CW 20wpm

```
[07312009]
=====
AggieSat2 (DRAGONSAT-2)
Catalog Number: 35690
Launch Date: May 19, 2009

Status: Re-entered
Re-entered:

Downlink: 436.250 MHz 9k6 FHSS
[11112009]
=====
Pollux
Catalog Number: 35693
Launch Date: July 31, 2009

Status: Re-entered
Re-entered:

Callsign: POLLUX-1

Downlink: 145.825MHz 1k2 AX.25
[09062010]
=====
Castor (ANDE-2)
Catalog Number: 35694
Launch Date: July 31, 2009

Status: Re-entered
Re-entered:

Callsign: KD4HBO-1

Downlink: 145.825 MHz 1k2 AX.25
[09062010]
=====
NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: July 28, 2008

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[01012009]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006
```

```
Status: Re-Entered
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink:      145.825 Mhz FM APRS AX25
APRS Uplink:        145.825 MHz FM APRS AX25
Voice/PSK31 Uplink:  28.120 MHz

Packet to Voice ID: RAFT
[06112007]
=====
GENESAT-1
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Re-Entered
Re-entered date: August 8, 2010

Current Mode: /u

Callsign: KE7EGC

Telemetry Beacon Downlink: 437.0695 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[08082010]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Re-Entered
Re-entered: June 18, 2008

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon:             437.2750 MHz CW

Callsign: JR8YJT
[01012009]
=====
SO-43 Starshine 3
Catalog Number: 26929
Launch Date: September 30, 2001
```

Status: Re-Entered
Re-entered: January 21, 2003

Beacon: 145.825Mhz
[02212009]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at}
amsat.org
NNNN
/EX

```
From -6788016797535136968
X-Google-Thread: 10e8ad,cab2fc3ac4c5a57d,start
X-Google-NewGroupId: yes
X-Google-Thread: 10b9c8,cab2fc3ac4c5a57d,start
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,gida4a23d5f63,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII
Path: g2news2.google.com!news2.google.com!newsfeed2.dallas1.level3.net!
news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-325 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sat, 20 Nov 2010 21:39:14 EST
Organization: The Radio Amateur Satellite Corporation
Lines: 472
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <001b01cb8925$435d62e0$ca1828a0$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
X-Trace: reader1.panix.com 1290307154 6517 166.84.1.6 (21 Nov 2010 02:39:14 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 21 Nov 2010 02:39:14 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news2.google.com rec.radio.amateur.space:430 rec.radio.info:1974
```

AMSAT NEWS SERVICE
ANS-325

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating

through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:

* CubeSat Launch Includes Amateur Radio Missions
* AMSAT Rolls Out Web Fund Raising Widgets
* FUNCube Comes to Life at Martlesham, First Command & Telemetry Success
* WAS-Satellite Certificate Now Accepted as Credit for AMSAT Awards
* FO-29 Returns to Service
* Satellite Shorts From All Over
* CubeSat Winter Session and IAA Conference in Rome, January 24-29

SB SAT @ AMSAT $ANS-325.01
CubeSat Launch Includes Amateur Radio Missions

AMSAT News Service Bulletin 325.01
>From AMSAT HQ SILVER SPRING, MD.
November 21, 2010
To All RADIO AMATEURS
BID: $ANS-325.01

A Minotaur-4 launch from the Kodiak Launch Complex in Alaska, managed by Alaska Aerospace Corp. on November 19 lifted seven satellites into a 400 mile high circular orbit.

Four of the satellites will be of interested to amateur radio operators:

+ FASTRAC (science and amateur radio mission)
+ RAX - Radio Aurora eXplorer (science and amateur radio mission)
+ NanoSail-D
+ O/OREOS

FASTRAC
----
http://fastrac.ae.utexas.edu/for_radio_operators/overview.php
Status: Beacon copied and decoded after launch.

The FASTRAC mission consists of two satellites built by students at UT-Austin. This mission is divided into two basic phases, both phases relying heavily on the participation of the amateur radio community.

The first phase is the science portion of the mission. During this phase the two satellites will be sharing GPS data as long as they are within range of each other. The GPS data will be processed on board each satellite and then stored in flash memory to calculate an on-orbit relative navigation solution.

Also, the satellites will be performing attitude determination with the GPS receiver. FASTRAC 1 will be firing the micro-discharge plasma thruster whenever the thrust vector is within 15 degrees of the anti-velocity vector. The data will be relayed to the ground when the satellite is in communication with a ground station. A coordination plan is being developed so that participating amateur radio ground stations can play a major role in collecting this data and relaying it back to the FASTRAC web site.

The second phase of the mission begins by reconfiguring the satellites for use by the amateur radio community. The capabilities of these satellites are governed largely by the functionality of the Kantronics KPC9612-Plus TNC. The satellites will be reconfigured after the primary mission to serve on the APRS network.

	FASTRAC 1 "Sara Lily"	FASTRAC 2 "Emma"
Downlink	437.345 MHz FM	145.825 MHz FM
Beacon	437.345 MHz*	145.825 MHz*
Uplink (1200 Baud)	145.980 MHz FM	435.025 MHz FM
Uplink (9600 Baud)	145.825 MHz FM	437.345 MHz FM

* AX.25 1200 AFSK beacon data format

RAX (Radio Aurora eXplorer)

http://rax.engin.umich.edu/
Status: Beacon copied and decoded after launch.

RAX is a space weather science spacecraft carrying a 9600 baud UHF transceiver that will transmit telemetry in the amateur satellite bands. This mission also consists of a primary scientific experiment with future reconfiguration for amateur radio experimentation.

In the science phase the satellite will use a a radar receiver capable of 1 MHz I/Q sampling of select bandwidths between 400-500 MHz, including the amateur satellite bands.

The primary objective of the mission is to use the onboard radar receiver in conjunction with a powerful radar station in Alaska to study the formation of a plasma anomaly known for causing the scintillation of radio signals in the UHF and higher bands. This scintillation effect is known to inhibit our space radar tracking capabilities and ground-space communications.

The RAX team is looking for amateur ground stations to help acquire RAX's 437.505 MHz beacon during the next few weeks of early launch and continue to help collect telemetry throughout the mission.

The amateur radio phase of the mission is still under development. The RAX team will invite the AMSAT community to get involved with submitting proposals on how the radar receiver could be used for amateur radio experiments after the primary mission objective is achieved. They will issue a call for proposals which will be posted to the AMSAT-BB in the next few months.

NanoSail-D
----

http://www.nasa.gov/mission_pages/smallsats/nanosaild.html

NanoSail-D is a test of solar sail mechanism technology. The solar sail is designed to operate predominantly as a drag sail and will cause it to de-orbit in less than 100 days as a test of small satellite de-orbiting techniques. The amateur radio beacon will transmit a one-half second data signal every 5 seconds on 437.270 MHz. The satellite will operate primarily on battery power because of the short duration of the mission.

O/OREOS
----

http://www.nasa.gov/mission_pages/smallsats/oreos/main/index.html
Status: Beacon copied and decoded after launch.

O/OREOS is a biological test spacecraft developed by scientists and engineers at NASA Ames Research Center. O/OREOS is a triple cube spacecraft planned to perform two tests during its 1-year mission. The first experiment will test how microorganisms survive and adapt to the stresses of space; the other will monitor the stability of organic molecules in space. O/OREOS includes an amateur radio beacon operating on 437.305 MHz. This satellite also includes a novel de-orbit mechanism design by a Santa Clara University graduate student.

AX.25 437.305 MHz O/OREOS Beacon decoding information:
http://beacon.engr.scu.edu/BeaconProcessingSystem/OOREOSBeaconDecoding.pdf

If you are able to capture the beacon telemetry, please take the time to file a report at http://beacon.engr.scu.edu/Submission.aspx which is an interface to the Beacon Data Processing System.

An overview of the Kodiak launch can be found on-line at:
http://www.spaceflightnow.com/minotaur/stps26/101112launchpreps/

Photos of the payloads during integration with the launcher can be found on-line at:
http://spaceflightnow.com/minotaur/stps26/101112cleanroom/

[ANS thanks the CubeSat Teams and SpaceFlightNow.com for the above information]

/EX

SB SAT @ AMSAT $ANS-325.02
AMSAT Rolls Out Web Fund Raising Widgets

AMSAT News Service Bulletin 325.02
>From AMSAT HQ SILVER SPRING, MD.
November 21, 2010
To All RADIO AMATEURS
BID: $ANS-325.02

AMSAT-VP Operations Drew Glasbrenner, KO4MA announced AMSAT is now using a new web based fund raising tool on Facebook called Fundrazr along with a web widget from PayPal Labs you can add to other web pages. He hopes this will stimulate additional fund raising support for ARISSat-1 and AMSAT-FOX. He is looking for help rolling these web page widgets out to the public. Both are designed to be spread virally and attract donations from those outside the normal AMSAT circles.

For those with private webpages or blogs, we have a PayPal widget that can also be added to your own webpages and blogs. It has been added to the front page at http://www.amsat.org . Please consider adding it to your own webpages and blogs in a prominent place.

Drew concludes, "I'm proud to announce that the Facebook and PayPal widget campaign has raised $1,000 over the last 48 hours! This is a great first step towards replenishing the funds used in the construction of ARISSat-1, and beginning the design and construction of AMSAT-FOX. Thank you to those who posted the fundraiser to their own pages, and to those who donated."

Drew's Facebook page at http://bit.ly/c861N7 now prominently includes the Fundrazr widget that you can share or post. Drew has also added the PayPal Labs widget on his QRZ.com entry, see:
http://www.qrz.com/db/KO4MA or http://www.qrz.com/db/K9JKM

For the FundRazr app on Facebook, go to Drew's Facebook page and click share. For the PayPal widget on all other web sites, use the "add to site" button. It will prompt you how to do it. It also lets AMSAT see who and where it has been posted, and how much money has been raised from each location.

Please let Drew know if you add either of these so he can track results!
(e-mail: ko4ma@amsat.org)

[ANS thanks Drew, KO4MA for the above information]

/EX

SB SAT @ AMSAT $ANS-325.03
FUNCube Comes to Life at Martlesham, First Command & Telemetry Success

AMSAT News Service Bulletin 325.03
>From AMSAT HQ SILVER SPRING, MD.
November 21, 2010
To All RADIO AMATEURS

BID: $ANS-325.03

The UK Martlesham Microwavers Round Table weekend also included an AMSAT-UK FUNCube developer meeting. The aim of the working session was to build a `stack' of the various boards which will make up FUNcube and see if they worked!

Congratulations are in order to the FUNCube team being able to report success on these milestones:

+ Prove that we could command the satellite remotely via RF.
+ Receive and examine the telemetry from the stack remotely using the FUNcube dongle.
+ Command the antennas to deploy.
+ Command the satellite to change modes between transponder mode to education mode, and back again.

The main 'new' PCBs that arrived were David's PA, Wouter's RF board, and the CCT board from Jason and his team.

Photos of the meeting and FUNCube construction and testing videos can be viewed on-line at:
http://funcube.org.uk/working-meetings/cubesat-mtg-1314-nov-2010/

A screenshot of the first captured telemetry from FUNCube can be seen on-line at: http://www.funcubedongle.com/?p5

The Spectravue plot to the right shows the satellite's downlink received

using a FUNcube Dongle. To the right hand side of the plot, the solid green `hump' is the telemetry and the signal to the right of that being simultaneous transponded SSB voice traffic.

To the bottom left, old hands will recognise the AO-40RCV window being used to decode raw frames. The basic telemetry specification is based heavily on AO-40's FEC model.

[ANS thanks the AMSAT-UK FUNCube developers and Howard, G6LVB for the above information]

/EX

SB SAT @ AMSAT $ANS-325.04
WAS-Satellite Certificate Now Accepted as Credit for AMSAT Awards

AMSAT News Service Bulletin 325.04
>From AMSAT HQ SILVER SPRING, MD.
November 21, 2010
To All RADIO AMATEURS
BID: $ANS-325.04

AMSAT Director of Contests and Awards Bruce Paige, KK5DO says congratulations are in order for these radio amateurs who earned operating awards this month:

The following have entered into the Satellite Communicators Club for making their first satellite QSO:
Club Station, SP9PEX
Rick Tejera, K7TEJ
Merle Olmsted, AA4QE
Zachary Beougher, KD8KSN
George Heath, KF5IRG
Anthony Sirianni, Sr., KD8OEE

The following have earned the AMSAT Communications Achievement Award:
Ronald Oldham, N8RO #521
Ryan Case, KB9RID #522
Merle Olmsted, AA4QE #523
Zachary Beougher, KD8KSN #524

The following have earned the South Africa AMSAT Communications Achievement Award:
Ronald Oldham, N8RO #US152
Bob Herrell, AJ5C #US153
Ryan Case, KB9RID #US154
Merle Olmsted, AA4QE #US155
Zachary Beougher, KD8KSN #US156

The following have earned the AMSAT Sexagesimal Award:
Ronald Oldham, N8RO #154
Zachary Beougher, KD8KSN #155
Bob Herrell, AJ5C #156
Terry Moorby, VE3DIJ #157

The following have earned the AMSAT Century Club Award:
Nick Kucij, KB1RVT #40

The following have earned the W4AMI 5000 Satellite Communications Achievement award:
Zeljko Ulip, 9A2EY #25

Bruce also said that in some cases he can credit holders of the ARRL Worked All States (with the Satellite endorsement) toward appropriate AMSAT Satellite Operating Awards. He will accept a scanned copy of your Worked All States-Satellite certificate as proof of 50 of the 60 contacts to fill in the missing states for the AMSAT Sexagesimal Award or to qualify for the AMSAT Communication Achievement Award. Contact Bruce via e-mail (kk5do@amsat.org) with your specific details to see if you qualify.

Unfortunately, the ARRL W.A.S. certificate cannot be used towards the South Africa AMSAT Award. As all contacts for this award must be done on

LEO satellites, there is no way to determine if LEO or HEO was used on the certificate.

Full information on all of the AMSAT Satellite Operating Awards can be found on-line at: http://www.amsat.org/amsat-new/awards/

[ANS thanks Bruce Paige, KK5DO for the above information]

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SB SAT @ AMSAT $ANS-325.05
FO-29 Returns to Service

AMSAT News Service Bulletin 325.05
>From AMSAT HQ SILVER SPRING, MD.
November 21, 2010
To All RADIO AMATEURS
BID: $ANS-325.05

Mineo Wakita, JE9PEL reported that the FO-29 Command Team succeeded in bringing FO-29 back in service on 07:46UTC, 16 Nov 2010. Good signals have been reported. Rick, WA4NVM reported, "I caught Kerry, WC7V with a booming signal at 2 degrees elevation. Its nice to hear this bird again!"

Two weeks ago, Yutaka Murata, JA1COU reported that the JARL FO-29 command team hypothesized that recent shutdowns of the satellite may have been caused when the temperature aboard FO-29 became too high to allow continuous operations and to accept commands or any other satellite operations.

The FO-29 command team expected that the temperature aboard FO-29 would drop as the length of eclipse increases:

Eclipse of FO-29 is:

November 1	0%	(full illumination)
November 20	14%	
November 30	17%	

[ANS thanks Mineo Wakita, JE9PEL and Yutaka Murata, JA1COU for the above information]

/EX

SB SAT @ AMSAT $ANS-325.06
Satellite Shorts From All Over

AMSAT News Service Bulletin 325.06
>From AMSAT HQ SILVER SPRING, MD.
November 21, 2010
To All RADIO AMATEURS
BID: $ANS-325.06

+ An article and accompanying video on the SouthGate Site shows how terrestrial operation can impact satellite operations when the operators unwisely choose their frequency: http://tinyurl.com/24r4bdx (SouthGate)

+ Congratulations to Loren, K7CWQ on being awarded Satellite WAS #323 from the ARRL. His first contact was on 11-6-2009 with K8YSE. All of his contacts have been with an HT and an Arrow antenna from his driveway.

+ NASA and the National Institute of Aerospace have launched a new planetary rover engineering competition called Exploration Robo-Ops Student Challenge. University teams are eligible to win as much as $10,000 for designing and building a planetary rover. Teams are required to submit a project plan proposal by Dec. 15. More info can be found at SpaceDaily.com http://tinyurl.com/28nsglr

+ Tom, W5KUB was on Memphis, TN Channel 5 news with his amateur radio contact with the ISS. Video at http://tmedlin.com/iss.wmv

+ ReadySat Go is a store-and-forward CubeSat being developed by students at San Jose State University. They have posted a video showing construction of the satellite on the SouthGate site: http://tinyurl.com/274f7wq

+ NASA's Eyes on the Solar System is a browser application that gives you a 3D environment operating in real time, so you can virtually tag along with our robot spacecraft. More information and the stuff you need to download can be found at: http://solarsystem.nasa.gov/eyes/

+ Check out the Ten Years Of the ISS in Pictures feature on-line at UniverseToday.com ... http://tinyurl.com/27nglfh

+ The Daily Mail had a feature showing astronaut Tracy Caldwell Dyson and the views from the ISS Cupola: http://tinyurl.com/38eryox

[ANS thanks everyone for the above information]

/EX

SB SAT @ AMSAT $ANS-325.07
CubeSat Winter Session and IAA Conference in Rome, January 24-29

AMSAT News Service Bulletin 325.07
>From AMSAT HQ SILVER SPRING, MD.
November 21, 2010
To All RADIO AMATEURS
BID: $ANS-325.07

The 1st IAA Conference on University Satellites Missions and Cubesat Conference which will be held in Rome, Italy on January 24-29, 2011.

Submissions are due by December 18, 2010. Early registration begins on January 10, 2011.

The conference is organized by a team of professors, students and researchers from the School of Aerospace Engineering of Sapienza University of Roma (GAUSS - Gruppo di Astrodinamica dell'Universit� degli Studi Sapienza - Group of Astrodynamics of Sapienza University)

The Conference is supported by several authorities including:
+ The International Academy of Astronautics (IAA)
+ The European Space Agency (ESA)
+ Kosmotras)
+ The Von Karman Institute (VKI)
+ The Centro Ricerche Progetto San Marco
+ Sapienza Universit� di Roma
+ Morehead State University

Two days of the Conference will be entirely dedicated to the Winter Session of the Cubesat Workshop, for the first time in Europe.

More information can be found at: http://www.gaussteam.com under the section 'events'. An e-mail contact for the conference is:
gauss.group@gmail.com

[ANS thanks Group of Astrodynamics, Sapienza University of Roma for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office. And, with that please keep in mind the young ham expressing his frustration of his radio battery dying so his therapist recommended that he find an outlet.

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM
K9JKM at amsat dot org

From -1369867477824744821
X-Google-Thread: a4a23d5f63,a423082a8792b4dd,start
X-Google-Attributes: gida4a23d5f63,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news2.google.com!newsfeed2.dallas1.level3.net!news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: rac-bulletins@eton.ca
Newsgroups: rec.radio.amateur.misc,rec.radio.amateur.space,rec.radio.info
Subject: [RAC-Bulletin] RAC-News: Lanark ARES Balloon Launch 2010-11-20

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Followup-To: rec.radio.amateur.misc,rec.radio.amateur.space
Date: Tue, 23 Nov 2010 16:16:26 EST
Organization: Radio Amateurs of Canada
Lines: 68
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <4CEC2EEB.9010001@rac.ca>
Reply-To: <rachq@rac.ca>
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1; format=flowed
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1290546986 9320 166.84.1.6 (23 Nov 2010 21:16:26 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Tue, 23 Nov 2010 21:16:26 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
X-Default-Received-SPF: pass (skip=forwardok (res=PASS)) x-ip-name=127.0.0.1;
X-Reply-To: racnews@rac.ca
User-Agent: Mozilla/5.0 (Windows; U; Windows NT 5.1; en-US; rv:1.9.2.12) Gecko/
20101027 Thunderbird/3.1.6
X-Hay-Net-MailScanner-Information: Please contact the ISP for more information
X-Hay-Net-MailScanner-ID: 494929425CE.AC625
X-Hay-Net-MailScanner: Found to be clean
X-Hay-Net-MailScanner-SpamCheck: not spam, SpamAssassin (not cached,
     score=-2.499, required 6, BAYES_00 -2.60, RDNS_DYNAMIC 0.10)
X-Hay-Net-MailScanner-From: racnews@rac.ca
X-To-Not-Matched: true
X-LangGuess: English
X-Probe: +OK skipped, known ip address
Authentication-Results: eton.ca header.from=<racnews@rac.ca>; domainkeys=fail (no
signature)
X-Avast: Message is clean
X-X-Encryption: SSL encrypted
X-MyRbl: Color=Unknown ip=205.236.99.29
X-Mailing-List: rac-bulletins@eton.ca
List-ID: <rac-bulletins@eton.ca>
Xref: g2news2.google.com rec.radio.amateur.misc:5840 rec.radio.amateur.space:431
rec.radio.info:1981
```

Lanark ARES Balloon Launch 2010-11-20

(Via: Norm Rashleigh, VE3LC - RAC VP Industrial Liaison)

The Lanark Amateur Space Agency comprised of members of the Lanark North Leeds ARES Group launched an Amateur High Altitude Balloon from Perth Ontario on 20 November 2010. This launch undertaken by VA3ZKS, VE3ZBO, VA3KAI, VE3BSB and Zach McCracken the son of VA3ZKS was an attempt at the world height record for amateur balloons.

The flight was designated LASA 8 and transmitted as VE3REX-11 via APRS. VHF transmitted flight parameters including location, height, direction and speed were picked up by the extensive network of APRS digipeaters and gated to the internet so that Amateurs could follow the flight in real time. Feed back indicates that the flight had a large following.

Following the launch, chase cars which included VA3ZKS, VA3ZBO, VE3BSB, VE3OAX, VE3ICF and VE3JGL tracked the flight on in car computers equipped with VHF receivers, tncs and the UI View tracking program.

VA3QV of Ottawa ARES organized a group of amateurs to provide down range communication support to assist the chase cars with additional tracking and recovery. Thanks to VA3NPL of Prescott-Russell ARES, VE3AFV of Seaway Valley ARES, VE3XID and VE3RMJ for their patient monitoring of the down range repeaters and the HF comms frequency.

The tracking transmitter package included a Garmin 18 LVC GPS an Argent Data Surface Mount Open Tracker and a 300 miliwatt MX 146 transmitter. Power was provided by 3 AA batteries outputting 5.4 volts at launch.

VE3REX-11 attained a record setting altitude of 39,899 meters or 130,903 feet before bursting and descending by parachute to land in Jay, Maine. The balloon reached speeds of 256 kilometres per hour and travelled a flight distance of 598 kilometres.

VA3ZKS and VA3ZBO located the flight package during the evening by picking up beacons directly from the flight package which had landed in a tree a few meters from the edge of a river. They returned in the daylight to retrieve the package and return to Perth.

The flight package contained a picture of John W1AKV who had assisted the Vermont recovery of LASA 7 launched 7 Nov 2009. John who was 90 and became a silent key 7 Nov 2010. The picture is being sent as a memoriam to his friend K1XV in Vermont

Many thanks to all Amateurs and Clubs that have shown an interest in this aspect of Amateur Radio and have provided financial support for the flight consumables.

73 Barrie VE3BSB

--

* * * *

You are receiving this bulletin because you are subscribed to an electronic mailing list.
For more information or to change your subscription please visit:
http://rac.eton.ca/racbullemail.htm

```
From -9042089729463670103
X-Google-Thread: 10e8ad,d853713c2390bf47,start
X-Google-NewGroupId: yes
X-Google-Thread: 10b9c8,d853713c2390bf47,start
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,gida4a23d5f63,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!newsfeed2.dallas1.level3.net!
news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-328 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Wed, 24 Nov 2010 09:38:20 EST
Organization: The Radio Amateur Satellite Corporation
Lines: 1952
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <001301cb8be5$30a65590$91f300b0$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1290609501 12297 166.84.1.6 (24 Nov 2010 14:38:21 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Wed, 24 Nov 2010 14:38:21 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
x-cr-hashedpuzzle: AkC+ BBL9 BMHZ B2R4 Curh Ddff D5Hf EIl7 E8cE FqaA G7sE HeLF
```

IGbv IPVh Kc07
KwNg;1;cgBlAGMALQByAGEAZABpAG8ALQBpAG4AZgBvAEAAcABhAG4AaQB4AC4AYwBvAG0A;Sosha1_v1;
7;{1C3C9CB2-1884-4D5A-9753-
DAA0157C3A1E};awA5AGoAawBtAEAAYwBvAG0AYwBhAHMAdAAuAG4AZQB0AA==;Wed, 24 Nov 2010
14:37:43
GMT;VwBTAFIALQAzADIAOAAgAEEATQBTAEEAVAAgAFcAZQBlAGsAbAB5ACAAUwBhAHQAZQBsAGwAaQB0AG
UAIABSAGUAcABvAHIAdAA=
x-cr-puzzleid: {1C3C9CB2-1884-4D5A-9753-DAA0157C3A1E}
Xref: g2news1.google.com rec.radio.amateur.space:407 rec.radio.info:1906

This report is organized into four (4) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - deorbited/returned satellites

SB SAT @ AMSAT W8ISS $WSR-328.S1
WSR 328 Part 1 11/24/2010

AMSAT NEWS SERVICE BULLETIN 328.S1
FROM AMSAT HQ SILVER SPRING, MD, November 24, 2010
TO ALL RADIO AMATEURS
BID: $WSR-328.S1

HO-68 HOPE-1 (CAS-1)(XW-1)
Catalog Number: 36122
Launch Date: December 15, 2009
Status: Operational

Callsign:
Broadcast: BJ1SA-11
BBS: BJ1SA-12

```
Uplinks:   145.8250 MHz FM, PL 67.0 Hz.
           145.9250 - 145.9750 MHz SSB/CW
           145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
           435.7650 - 435.7150 MHz SSB/CW
           435.6750 MHz AFSK 1200 BPS

Beacon:    435.7900 MHz CW
```

Mode and Antenna Polarization:
V: LHCP 2.0dBi max
U: RHCP 3.0dBi max

IARU coordination page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108

For more information about XW-1 (CAS-1):
http://www.camsat.cn
[09062010]
=====

SO-67 SumbandilaSat
Catalog Number: 35870
Launch Date: September 17, 2009

Status: Suspended

Callsign: ZS0SUM

Uplink: 145.875MHz FM tone 233.6 Hz
Downlink: 435.345MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

For more information about SO-67:
http://www.amsatsa.org.za/
[09062010]
=====
DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008

Status: Operational
Current Mode: Science Mode - Beacon ONLY

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink: 435.530 to 435.570 MHz

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68
[09062010]
=====
VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.9360 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

To know what transponder is switched on please listen for the beacon that is active. Each transponder has a different beacon.
[09062010]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Mode:
Voice repeater:
Uplink: 145.920 MHz FM
Downlink: 435.300 MHz FM

PBBS: L/u
Uplink: 1268.705 mhz FM 9k6 Pacsat Broadcast Protocol
Downlink: 435.150 MHz FM 38k4 PBP, 1 watt output

Telemetry:
Downlink: 435.150MHz 9k6

Analog voice downlink:	435.300 MHz FM
	435.150 MHz FM
	2401.200 Mhz FM
Analog voice uplink:	145.860 MHZ FM
	145.880 MHz USB
	145.880 MHz FM
	145.920 MHz FM
	145.920 MHz FM - 67 Hz PL tone burst
	1268.705 MHz FM
Digital Downlinks:	435.150 MHz FM 38k4 PBP, 1 watt output
	435.150 MHz FM 9k6 Pacsat Broadcast Protocol
	2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:	145.860 MHz FM 9k6 Pacsat Broadcast Protocol
	1268.705 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon:	435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP

TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[11242010]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz. The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10 minute timer.
[09062010]
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:

```
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[09062010]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational

Current Mode: Alternating between Mode A and B every 24 hours

Uplink:   145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink:  29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons:   29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
[09062010]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - OFF
                      Voice -       V/v
                      BBS -         OFF
                      APRS -        OFF
                      SSTV -        OFF


Expedition 25 Crew:
Commander:                Doug Wheelock         KF5BOC
Flight Engineer:          Shannon Walker        KD5DXB
Flight Engineer:          Fyodor Yurchikhin     RN3FI
Flight Engineer:          Scott Kelly
Flight Engineer:          Alexander Kaleri      U8MIR
Flight Engineer:          Oleg Skripochka       RN3FU

Available Modes and Frequencies:
```

Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[10112010]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-328.S2
WSR 328 Part 2 11/24/2010

AMSAT NEWS SERVICE BULLETIN 328.S2
FROM AMSAT HQ SILVER SPRING, MD, November 24, 2010
TO ALL RADIO AMATEURS
BID: $WSR-328.S2

O/OREOS
Catalog Number:

```
Launch Date: November 19, 2010

Status: On Orbit

Uplink:
Downlink: 437.035 MHZ AX.25

Beacon:

Callsign:

URL: http://www.ooreos.org/
[11242010]
=====
Rax-1 Radio Aurora Explorer
Catalog Number:
Launch Date: November 19. 2010

Status: On Orbit

Uplink:
Downlink: 437.505 MHz 9k6 GMSK

Beacon:

Callsign: RAX-1

URL: http://rax.engin.umich.edu/
[11242010]
=====
Fastrac-1 Sara Lily
Catalog Number:
Launch Date: November 19, 2010

Status: On orbit

Uplink 1: 145.980 MHz 1k2 baud
Uplink 2: 145.825 MHz 1k2 baud
Downlink: 437.345 MHz 1k2 and 8k6 baud

Beacon:   437.435 MHz 1k2 AX.25

Callsign: Fast1

URL: http://fastrac.ae.utexas.edu/index.php
[11242010]
=====
Fastrac 2 Emma
Catalog Number:
Launch Date: November 19, 2010

Status: On Orbit
```

```
Uplink 1: 435.025 MHz 1k2 baud
Uplink 2: 437.435 MHz 9k6 baud
Downlink: 145.825 MHz

Beacon:   145.825 MHz 1k2 AX.25

Callsign: Fast2

URL: http://fastrac.ae.utexas.edu/index.php
[11242010]
=====
StudSat
Catalog Number: 36796
Launch Date: July 12, 2010
Status: On Orbit

Uplink:   437.505MHz, 9600bps FSK
Downlink: 437.505MHz, 9600bps FSK
Beacon  : 437.505MHz,   20bps ASK
[08062010]
=====
TIsat-1
Catalog Number: 36799
Launch Date: July 12, 2010

Status: On orbit

Callsign: HB9DE

Uplink:   145.980MHz FM, AFSK
Downlink: 437.305MHz FM, AFSK
Beacon:   437.305MHz CW
[08062010]
=====
HO-68 HOPE-1 (CAS-1)(XW-1)
Catalog Number: 36122
Launch Date: December 15, 2009

Status: Operational

Callsign:
Broadcast:    BJ1SA-11
BBS:         BJ1SA-12

Uplinks:   145.8250 MHz FM, PL 67.0 Hz.
           145.9250 - 145.9750 MHz SSB/CW
           145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
           435.7650 - 435.7150 MHz SSB/CW
           435.6750 MHz AFSK 1200 BPS

Beacon:    435.7900 MHz CW
```

```
IARU coordination page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108

For more information about XW-1 (CAS-1):
http://www.camsat.cn
[09062010]
=====
SwissCube
Catalog Number: 35932
Launch Date: September 23, 2009

Status: Operational

Callsign: HB9EG

Beacon(100mw): 437.5050MHz CW
Beacon(1w):    437.5050MHz FSK 1k2bps
[04222010]
=====
UWE-2
Catalog Number: 35934
Launch Date: September 23, 2009

Status: In Orbit

Beacon(500mw): 437.3850 MHz AFSK 1k2bps
               437.3850 MHz FSK 9k6bps
[1112009]
=====
ITUpsAT1
Catalog Number: 35935
Launch Date: September 23, 2009

Status: Operational

Beacon(100mw): 437.325MHz CW
Beacon(1w): 437.325MHz 19k2bps
[11112009]
=====
BEESAT
Catalog Number: 35933
Launch Date: September 23, 2009

Status: Operational

Callsign: DP0BEE

Beacon(100mw): 436.000MHz CW
Beacon(500mw): 436.000MHz GMSK 4k8bps
Beacon(500mw): 436.000MHz GMSK 9k6bps
[04222010]
=====
CP-6
```

```
Catalog Number: 35003
Launch Date: May 19, 2009

Status: Operational

Downlink: 437.365 MHz 1k2 AFSK
[09062010]
=====
HAWKSAT 1
Catalog number: 35004
Launch Date: May 19, 2009

Status: operational

Downlink: 437.345 MHz ?
[09062010]
=====
Pharmasat
Catalog Number: 35002
Launch Date: May 19, 2009
Status: Operational

Downlink: 437.465 MHz 1k2 AFSK
[09062010]
=====
ANUSAT
Catalog Number: 34808
Launch Date: April 20, 2009

Status: ?

Downlink:  435.000 MHz
Uplink:    145.800 MHz

Telemetry: 137.400 MHz
[09062010]
=====
SOHLA-1 (ASTRO TECH.)
Catalog Number: 33496
Launch Date: January 23, 2009

Status: Operational

Proposed Frequencies and Modes:
Downlink: 437.505 MHz AFSK/CW
Beacon:   437.505 MHz AFSK/CW

Callsign:

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=101
[09062010]
=====
```

KAGAYAKI (Solan Co.)
Catalog Number: 33495
Launch Date: January 23, 2009

Status: In Orbit

Downlink: 437.375 MHZ   FSK9k6/CW
Beacon: 437.375 MHz   FSK9k6/CW

IARU coordination status page:

AMSAT-NA webpage:

[09062010]
=====
STARS (Kagawa Univ.) (Twin Satellites)
Catalog Number: 33498
Launch Date: January 23, 2009

Status: Operational ?

Downlinks: 437.485 MHz FM/CW
           437.465 MHz FM/CW
Beacons: 437.305 MHz FM/CW
           437.275 MHz FM/CW

Callsigns: JR5YBN
           JR5YBO

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=99

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=121&retURL
=/satellites/status.php
[09062010]
=====
KKS-1 (Tokyo MCIT)
Catalog Number: 33499
Launch Date: January 23, 2009

Status: Operational

Downlink: 437.455 MHz AFSK/CW
Beacon: 437.385 MHz AFSK/CW

Callsign: JQ1YYY

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=107

AMSAT-NA webapge:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=120&retURL

=/satellites/status.php
[09062010]
=====
PRISM (Tokyo Univ.)
Catalog Number: 33493
Launch Date: January 23, 2009

Status: Operational ?

```
Downlink: 437.425 MHz AFSK/GMSK/CW
Beacon:   437.250 MHz AFSK/GMSK/CW
```

Callsign: JQ1YCX

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=97

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=119&retURL
=/satellites/status.php
[09062010]
=====
RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number: 32953
Launch Date: May 23, 2008

Status: Operational

```
Curent Modes: Telemetry
              Audio
              Images
```

```
Downlinks: 435.315 MHz
           435.215 MHz
```

AMSAT-NA website:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=115&ret
URL=/satellites/status.php

Official website:
http://www.npopm.com/?cid=leoca&caid=43
[09062010]
=====
CanX-2
Catalog number: 32790
Launch Date: April 28, 2008

Status: Operational in range of ground station only

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web
page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[09062010]
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.425 MHz 1k2 baud packet

For the latest project status update please visit the AAUSAT-II web page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[09062010]
=====
CO-65 CUTE-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008

Status: Digipeater

Downlink: 437.475 MHz 9k6 Packet
Uplink: 1267.600 Mhz

Telemetry Beacon:
Downlink: 437.2750 MHz CW

For the latest project status update please visit the Cute-1.7+APD II web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78

Command Station blog website:
http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=112&retURL=/satellites/status.php
[09062010]
=====
Compass-1
Catalog number: 32787
Launch Date: April 28, 2008

Status: Operational

```
Current Mode: 4k8 MSK packet

Uplink:   145.980 MHz FM
Downlink: 437.275 Mhz CW
          437.405 MHz Packet

For the latest project status update please visit the Compass 1 web
page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=114&retURL
=/satellites/status.php
[09062010]
=====
CO-66 Seeds II
Catalog number: 32791
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.485 MHz

Callsign: JQ1YGU

For the latest project status update please visit the Seeds 2 web
page: http://cubesat.aero.cst.nihon-u.ac.jp/english/seeds_2_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=113&retURL
=/satellites/status.php
[09062010]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode:  /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon:    435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.
```

```
AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=94&retURL=
/satellites/status.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=72
[09062010]
=====
CP3
Catalog Number: 31129
Launch Date: April 17,2007

Status: Operational

Current Mode:  /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[09062010]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon:             437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/xivpicte.htm
[09062010]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003

Status: ?????

Current Mode: /u

Beacon:     436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=96&retURL
```

```
=/satellites/status.php

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[09062010]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Mode:
Voice repeater:
Uplink:      145.920 MHz FM
Downlink:    435.300 MHz FM

PBBS: L/u
Uplink:     1268.705 mhz FM 9k6 Pacsat Broadcast Protocol
Downlink:    435.150 MHz FM 38k4 PBP, 1 watt output

Telemetry:
Downlink:    435.150MHz 9k6


Analog voice downlink:     435.300 MHz FM
                           435.150 MHz FM
                          2401.200 Mhz FM
Analog voice uplink:       145.860 MHZ FM
                           145.880 MHz USB
                           145.880 MHz FM
                           145.920 MHz FM
                           145.920 MHz FM - 67 Hz PL tone burst
                          1268.700 MHz FM
Digital Downlinks:         435.150 MHz FM 38k4 PBP, 1 watt output
                           435.150 MHz FM 9k6 Pacsat Broadcast Protocol
                          2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:            145.860 MHz FM 9k6 Pacsat Broadcast Protocol
                          1268.708 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon:                    435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php
```

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[11242010]
=====
QuakeSat
Catalog Number: 27845
Launch Date: June 30, 2003

Status: Telemetry only

Current Mode: 9600 baud data packet

Mode U packet
Downlink: 436.675 MHz 9k6 BPS

Quakesat webpage:
http://www.quakefinder.com/services/quakesat-ssite/
[10042010]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

```
Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only
```

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=69&retURL
=/satellites/status.php
[09062010]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Telemetry only

Current Mode: V/v

```
General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink:        144.390 Mhz 1200 Baud
```

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:

```
http://www.xciv.org/~iain/aprstlm/v1.2/
[09062010]
=====
RS-22 RADIO SPORT 22
Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only

Current Mode:  /u

CW Beacon - 435.352 MHz
            145.818 MHz

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=76&retURL
=/satellites/status.php
[09062010]
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990

Status: CW Beacon only

Uplinks:          145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink:      437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[09062010]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984

Status: Operational

Current Mode:  /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon:           435.025 MHz
Mode-S Beacon:     2401.500 MHz
```

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[11062010]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - OFF
Voice - V/v
BBS - OFF
APRS - OFF
SSTV - OFF

Expedition 25 Crew:

Commander:	Doug Wheelock	KF5BOC
Flight Engineer:	Shannon Walker	KD5DXB
Flight Engineer:	Fyodor Yurchikhin	RN3FI
Flight Engineer:	Scott Kelly	
Flight Engineer:	Alexander Kaleri	U8MIR
Flight Engineer:	Oleg Skripochka	RN3FU

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[10112010]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-328.S3
WSR 328 Part 3 11/24/2010

AMSAT NEWS SERVICE BULLETIN 328.S3
FROM AMSAT HQ SILVER SPRING, MD, November 24, 2010
TO ALL RADIO AMATEURS
BID: $WSR-328.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

CP4
Catalog Number: 31132
Launch Date: April 17, 2007

Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon: 437.325 MHz CW

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=79
[09062010]
=====
LIBERTAD-1
Catalog Number: 31128
Launch Date: April 17, 2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

```
Callsign: 5K3L

Uplink:   145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[09062010]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: Non-Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder:  145.825 Mhz FM
[09062010]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency:  437.305
                             2407.250

Official Website: http://www.ncube.no
[09062010]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink:        437.250 MHz FM 67Hz CTCSS
Voice Downlink:     2401.835 MHz FM
Packet Up/Downlink:  437.250 MHz 9k6 packet
Packet Downlink     2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[09062010]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non-Operational
```

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[09062010]
=====
CANX-1
Catalog Number: 27847
Launch Date: June 30, 2003

Status: Non-Operational

Downlink: 437.8800 MHz AFSK 1k2bps
[06052009]
=====
DTUSAT
Catalog Number: 27842
Launch Date: June 30, 2003

Status: Non-Operational

Current Mode: 2k4 AFSK Packet last reported

Downlink: 437.475MHz

Officail webpage: http://dtusat1.dtusat.dtu.dk/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=101&retURL=satellites/all_oscars.php
[02212009]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)

Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Telemetry only

Uplinks: 145.850 MHz

```
           145.925 MHz 9600-baud FSK
Downlink:  437.325 MHz

Broadcast callsign: MYSAT3-11
BBS:                MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial land and weather imaging payloads offers FM and FSK
Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as
a collaborative effort between the Malaysian government and Surrey
Satellite Technology Ltd.
[03302009]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink:   145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS:                SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink:   145.850 MHz
Downlink: 436.775 MHz
```

Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks

V-band: 145.840 - 145.990 MHz CW/LSB
U-band: 435.550 - 435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks

S2-band: 2401.225 - 2401.475 MHz CW/USB
K-band: 24048.010 - 24048.060 MHz CW/USB
Beacon: 2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)

BEACON	General Beacon(GB)	Middle Beacon(MB)	Engineering Beacon(EB)
2 m	none	145.898 MHz	none
70cm	435.438 MHz	435.588 MHz	435.838 MHz
13cm(1)	2400.188 MHz	2400.338 MHz	2400.588 MHz
13cm(2)	2401.173 MHz	2401.323 MHz	2401.573 MHz
3cm	10450.975 MHz	10451.125 MHz	10451.375 MHz
1.5cm	24047.885 MHz	24048.035 MHz	24048.285 MHz

[07162007]
=====
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: 25636
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and the image and transponder recovery efforts have been unsuccessful.

```
For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Non-Operational

Current Modes:
Telemetry : /u

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign:       4XTECH-12

More information of GO-32 can be found at:
http://asri.technion.ac.il/techsat/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=14&retURL
=/satellites/status.php
[07172010]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink:   145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
MO-30 UNAMSAT-2
Catalog Number: 24305
Launch Date: September 5, 1996

Status: Non-operational

Downlink:       435.1380 MHz AFSK 1200 BPS
```

Downlink: 435.2060 MHz AFSK 1200 BPS
Uplink: 145.8150 MHz AFSK 1200 BPS
Uplink: 145.8350 MHz AFSK 1200 BPS
Uplink: 145.8550 MHz AFSK 1200 BPS
Uplink: 145.8750 MHz AFSK 1200 BPS
[06042009]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Non-operational
Current Mode: V/u (Mode JA)

Voice/CW (Mode JA)
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage:
http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's
CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/
fo29cwts.htm
[11062010]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Non-operational

Downlink: 429.950

```
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign:       POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012009]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
AO-24 ARSENE
Catalog Number: 22654
Launch Date: May 13, 1993

Status: Non-operational

Uplink:    435.0625 MHz FM 1k2bps AFSK
           435.1125 MHz FM 1k2bps AFSK
           435.1375 MHz FM 1k2bps AFSK
Downlink:  145.9750 MHz FM 1k2bps AFSK
          2446.5025 MHz FM 1k2bps AFSK

Beacon:    2446.4700 MHz CW

Broadcast callsign:
BBS:
[12162009]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HL01-11
BBS: HL01-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
```

435.910 MHz AX25

Voice Transponder:
Uplink: 145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks: 145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink: 145.825 MHz FM 1200 Baud AFSK
Beacon: 2401.220 MHz
[05012006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: non-operational

Current Mode: V/u

Uplink: 145.900 MHz FM 1200-baud Manchester FSK (reserved)
                145.920 MHz FM VOICE
                145.940 MHz FM 1200-baud Manchester FSK (reserved)
                145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink: 437.026 MHz USB VOICE
                (1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC 437.050 MHz RHCP
   PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[07242009]
=====
UO-15 UoSAT-4
Catalog Number: 20438
Launch Date: January 22, 1990

Status: Non-operational

Uplink: ?
Downlink: 435.1250MHz (?)
          435.1200MHz (?)
[06042009]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink: 145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink: 145.8500 MHz MFSK 1200 BPS
Uplink: 145.8700 MHz MFSK 1200 BPS
Uplink: 145.8900 MHz MFSK 1200 BPS
Uplink: 145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]

```
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon:   145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink  29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
Beacons:   29.450 MHz
          435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970
```

```
Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon 1:  29.352 MHz (intermittent)
Beacon 2:  29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink:     21.260 to 21.300 MHz CW/USB
Downlink:  145.860 to 145.900 MHz CW/USB

Beacon:    145.860 MHz

Robot:     145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink:   21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB
```

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-328.S4
WSR 328 Part 4 11/24/2010

AMSAT NEWS SERVICE BULLETIN 328.S4
FROM AMSAT HQ SILVER SPRING, MD, November 24, 2010
TO ALL RADIO AMATEURS
BID: $WSR-328.S4

THE FOLLOWING SATELLITES HAVE RE-ENTERED OR HAVE BEEN RETURNED SAFELY:

CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Re-entered
Re-entered:

Uplink: 1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=56
[09062010]
=====
BEVO-1 (DRAGONSAT-1)
Catalog Number: 35690
Launch Date: May 19, 2009

Status: Re-entered
Re-entered:

Downlink: 437.325 MHz 9k6 GMSK
          437.325 MHz CW 20wpm
[07312009]
=====
AggieSat2 (DRAGONSAT-2)
Catalog Number: 35690
Launch Date: May 19, 2009

Status: Re-entered
Re-entered:

Downlink: 436.250 MHz 9k6 FHSS
[11112009]
=====
Pollux
Catalog Number: 35693
Launch Date: July 31, 2009

Status: Re-entered
Re-entered:

Callsign: POLLUX-1

Downlink: 145.825MHz 1k2 AX.25
[09062010]
=====
Castor (ANDE-2)
Catalog Number: 35694
Launch Date: July 31, 2009

Status: Re-entered
Re-entered:

Callsign: KD4HBO-1

Downlink: 145.825 MHz 1k2 AX.25
[09062010]
=====
NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: July 28, 2008

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[01012009]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]

```
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink:      145.825 Mhz FM APRS AX25
APRS Uplink:        145.825 MHz FM APRS AX25
Voice/PSK31 Uplink:  28.120 MHz

Packet to Voice ID: RAFT
[06112007]
=====
GENESAT-1
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Re-Entered
Re-entered date: August 8, 2010

Current Mode: /u

Callsign: KE7EGC

Telemetry Beacon Downlink: 437.0695 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[08082010]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Re-Entered
Re-entered: June 18, 2008

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon:             437.2750 MHz CW

Callsign: JR8YJT
[01012009]
=====
SO-43 Starshine 3
Catalog Number: 26929
Launch Date: September 30, 2001

Status: Re-Entered
Re-entered: January 21, 2003

Beacon: 145.825Mhz
[02212009]
```

NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

- AMSAT News Service (ANS)
- General satellite discussion (AMSAT-BB)
- Orbit data (KEPS)
- Manned space missions (SAREX)
- District of Columbia area (AMSAT-DC)
- New England area (AMSAT-NE)
- AMSAT Educational Liaison mailing list (AMSAT-EDU)
- AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at} amsat.org
NNNN
/EX

```
From 4154746012310191945
X-Google-Thread: 10e8ad,386ad92f15ec756a,start
X-Google-NewGroupId: yes
X-Google-Thread: 10b9c8,386ad92f15ec756a,start
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,gida4a23d5f63,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII
Path: g2news2.google.com!news1.google.com!newsfeed2.dallas1.level3.net!
news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-332 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sun, 28 Nov 2010 09:29:39 EST
Organization: The Radio Amateur Satellite Corporation
Lines: 390
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <001201cb8f08$a900bfa0$fb023ee0$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
X-Trace: reader1.panix.com 1290954579 13183 166.84.1.6 (28 Nov 2010 14:29:39 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 28 Nov 2010 14:29:39 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news2.google.com rec.radio.amateur.space:433 rec.radio.info:1993
```

AMSAT NEWS SERVICE
ANS-332

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* FASTRAC Tracking Assistance Requested
* Antarctic Satellite Operation Planned From M/V Kapitan Khlebnikov
* AMSAT at the Tampa, FL Hamfest
* AMSAT at the 2010 Superstition Hamfest, Mesa, AZ
* Bill Ress, N6GHZ, appointed AMSAT Director of Launch Opportunities
* ESA to Sponsor Student Participation in IAA Conference in Rome
* Satellite Shorts From All Over
* ARISS Status - 22 November 2010

SB SAT @ AMSAT $ANS-332.01
FASTRAC Tracking Assistance Requested

AMSAT News Service Bulletin 332.01
From AMSAT HQ SILVER SPRING, MD.
November 28, 2010
To All RADIO AMATEURS
BID: $ANS-332.01

Sebastian Munoz, KE5FKV, FASTRAC Student Program Manager, reports that last Friday 19 November 2010 the FASTRAC satellites (Emma and Sara Lily) were launched from Kodiak, AK. At this point the FASTRAC Team has been able to determine that both of them are beaconing and that they are talking to each other from their own station and with the help of HAMs all over the world.

They have been able to decode both Sara Lily and Emma's beacons and some of their crosslink data exchanges. From these they have been able to determine that their primary sensor, a GPS receiver is working properly.

At this point Emma's beacon has reverted to its default configuration where the satellite beacons at 9k6 every two minutes while Sara Lily is continuing to beacon at 1k2 baud every three minutes. Also at this point Sara Lily's signal appears to be weaker than Emma so they are asking the HAM community to help track both of them.

To do so it is recommended that you first try to hear FASTRAC-2's (Emma's) beacon which is on 145.825 MHz and then switch to see if you can listen for FASTRAC-1's (Sara Lily's) beacon which is on 437.345. You might also be able to hear the girls talking to each other at 9600 baud. The type of beacons that you should get if you are able to decode

them, should look something like this:

```
FAST1>BEACON/1: <UI>:
F11001611484723.998635824658.10 +3888795.01  -567497.09 -1500.24821
+1194.21584 -7135.59277+0330282372 056 033 032 032 048

FAST2>BEACON/2: <UI>:
FAST2 Safe Mode
```

Stations not set up to receive packets, can send an audio file for
attempted decoding.

Current TLE's as of 25 November:

```
FASTRAC
1 90025U 0        10327.90121560 -.00000191 +00000-0 -19331-4 0 00099
2 90025 071.9702 131.7903 0018126 299.0783 060.8722 14.76368636000560
```

A single TLE can be used to track both satellites as Emma and Sara Lily
are currently stacked together.

The FASTRAC website will be updated with the most current TLEs
http://fastrac.ae.utexas.edu/for_radio_operators/users/phpBB3/predictedor
bit
.php

If you track the satellites, please let the FASTRAC team know through
their website:
http://fastrac.ae.utexas.edu/for_radio_operators/users/phpBB3/index.php
or at fastracsats@gmail.com.

If your station has powerful transmitting capabilities on both 145.825
MHz
and 437.345 MHz and you are able to track the satellites, please let the

team know as you might be able to help them establish a command link
which
they are still in the process of doing.

[ANS thanks Sebastian, KE5FKV, for the above information]

/EX

SB SAT @ AMSAT $ANS-332.02
Antarctic Satellite Operation Planned From M/V Kapitan Khlebnikov

AMSAT News Service Bulletin 332.02
  From AMSAT HQ SILVER SPRING, MD.
November 28, 2010
To All RADIO AMATEURS
BID: $ANS-332.02

Herb, AA2PI plans amateur satellite operation during his voyage
aboard the polar-class Russian ice breaker Kapitan Khlebnikov as
it sails a route circumnavigating Antarctica from the Falkland
Islands to Hobart, TZ.

The itinerary is:
Depart Falkland Islands on December 4, 2010
Arrive Hobart, TZ on Jan 3, 2011

[ANS thanks Herb, AA2PI and Bill K7MT for the above information]

/EX

SB SAT @ AMSAT $ANS-332.03
AMSAT at the Tampa, FL Hamfest

AMSAT News Service Bulletin 332.03
From AMSAT HQ SILVER SPRING, MD.
November 28, 2010
To All RADIO AMATEURS
BID: $ANS-332.03

AMSAT will have a booth at the Tampabay Hamfest coming up on 4 December in Palmetto, Florida. AMSAT will also be doing 90 minutes of presentations on satellites and ARISS during a forum on Saturday. Please come by

to pick up the latest AMSAT gear, learn about ARISSat-1, FOX, and other projects, make a donation, or join or renew your AMSAT membership.

Andrew Glasbrenner, KO4MA, AMSAT's VP of Operations reports that he will

also be trying something new. For each donation of $25 or more, or each membership or renewal, Drew will personally provide the parts and help assembling an antenna for operating the satellites. We will be building a version of the CJU antenna in the booth, which is a small but very effective antenna to use with an HT to copy the Mode J satellites.

Using the CJU and an HT, and the 2m radio in your car, the Mode J satellites are easy to use. Drew requests that people interested in building the antenna contact him ahead of time for details or to RSVP for this offer.

[ANS thanks Drew, KO4MA, for the above information]

/EX

SB SAT @ AMSAT $ANS-332.04
AMSAT at the 2010 Superstition Hamfest, Mesa, AZ

AMSAT News Service Bulletin 332.04
From AMSAT HQ SILVER SPRING, MD.
November 28, 2010
To All RADIO AMATEURS
BID: $ANS-332.04

The Superstition Amateur Radio Club will host its annual hamfest on the morning of Saturday, 4 December 2010. The hamfest is located in the southwest parking lot of Mesa Community College, along the east side of Dobson Road between Southern Avenue and the US-60 freeway in Mesa, Arizona. Additional information about the hamfest, including talk-in frequencies, is available at: http://wb7tjd.org/hamfest

AMSAT will have a table at this hamfest, and Patrick Stoddard, WD9EWK, will be on the air for demonstrations using various satellites. The hamfest is in grid DM43bj.

[ANS thanks Patrick, WD9EWK, for the above information]

/EX

SB SAT @ AMSAT $ANS-332.05
Bill Ress, N6GHZ, appointed AMSAT Director of Launch Opportunities

AMSAT News Service Bulletin 332.05
  From AMSAT HQ SILVER SPRING, MD.
November 28, 2010
To All RADIO AMATEURS
BID: $ANS-332.05

AMSAT President Barry Baines, WD4ASW has appointed Bill Ress, N6GHZ of Camino, CA as AMSAT's Director of Launch Opportunities, a new position. The appointment was announced at the AMSAT BOD meeting and AMSAT Annual Meeting that was held last month in Elk Grove Village, IL. In his capacity as Director of Launch Opportunities, Bill will serve as the central point for managing:

+ Fox Launch Opportunities
+ Ride Share Opportunities
+ AMSAT Presence at small satellite conferences

Supporting Bill's efforts will be a volunteer task force to help coordinate and compile launch information. Working with the VP-Engineering and AMSAT President, the Director will make recommendations to the AMSAT

BOD to develop launch objectives and serve as the central point for securing feasible launches for AMSAT spacecraft.

AMSAT President Barry Baines, WD4ASW noted Bill's qualifications for this position. "As a former BOD member who chaired the Engineering Task Force that developed the recommendation to the AMSAT Board of Directors to build a cubesat('Project Fox'), Bill understands AMSAT's strategic vision, our current capabilities and the current state of flight options.
His professional contacts and location on the West Coast places him in an excellent position to identify and nurture potential launches, a significant task that requires an appreciation of both AMSAT and the state of the launch industry."

Bill and his team will be working to establish dialog with both satellite
customers who may have ride share potential a well as satellite builders

to evaluate potential ride share potential. The team will also evaluate

and determine how best for AMSAT to respond to NASA Launch Initiatives, other launch provider announcements, and potential university relationships for securing launches as these opportunities arise.

Individuals who become aware of potential launch opportunities which might be of interest to AMSAT are encouraged to contact Bill at his e-mai (n6ghz at amsat.org).

[ANS thanks Barry, WD4ASW, for the above information]

/EX

SB SAT @ AMSAT $ANS-332.06
ESA to Sponsor Student Participation in IAA Conference in Rome

AMSAT News Service Bulletin 332.06
  From AMSAT HQ SILVER SPRING, MD.
November 28, 2010
To All RADIO AMATEURS
BID: $ANS-332.06

The 1st International Academy of Astronautics (IAA) Conference on University Satellites Missions and Cubesat Conference which will be held in Rome, Italy on January 24-29, 2011. Submissions are due by December 18, 2010. Early registration begins on January 10, 2011.

The Gruppo di Astrodinamica Universit� degli Studi Sapienza is pleased to announce that ESA has kindly offered ten scholarships for students who will present a paper at the 1st IAA Conference on University Satellites Missions and Cubesat Conference next January. You can find the information at the following link:
http://tinyurl.com/25wouy5

Arrangements have been made for student housing at the Conference:
http://tinyurl.com/26jybsx

The Gruppo di Astrodinamica and the IAA hopes that this will encourage students to participate in the Conference.

[ANS thanks the Gruppo di Astrodinamica Universit� degli Studi
Sapienza
  the IAA for the above information]

/EX

SB SAT @ AMSAT $ANS-332.07
Satellite Shorts From All Over

AMSAT News Service Bulletin 332.07

From AMSAT HQ SILVER SPRING, MD.
November 28, 2010
To All RADIO AMATEURS
BID: $ANS-332.07

+ Art, W4ART has published a link to the photos he took at the 2010 AMSAT Space Symposium and Annual General Meeting:

http://www.afeller.us/Studio_dArt/Personal_Galleries/Pages/AMSAT_2010.html

Additional photos and captions will be published in the AMSAT Journal.

+ Project Engineer for ARISS, Kenneth, N5VHO wrote, "For all you that wonder what it is like for the astronauts to work ground stations during a general pass. Col. Wheelock gives you a personal video tour of the ISS ham radio station while he answers calls from operators on the ground." Watch at:
http://www.youtube.com/watch?v�3EYcyszf8

+ Membership of the FUNcube satellite and Software Defined Radio (SDR) Dongle Yahoo Group has now reached the 100 mark. You can join the FUNcube Yahoo Group at:
http://groups.yahoo.com/group/FUNcube/

+ A photo gallery of the Minotaur launch from Alaska that launched a payload of seven satellites can be viewed at:
http://spaceflightnow.com/minotaur/stps26/101120gallery/

+ Captain Yuri Bodrov, Master of the M/V "MOTTLER", says he will be operating as UT1FG/MM on AO-7, AO-27, AO-51, HO-68, SO-50, SO-67, amd VO-52 from the wet squares in the ocean on his next voyage around South America from Brasil/Paranagua to Argentina/San-Lorenzo, through the Strait of Magellan, Chile/San-Antonio/Punta Potache, and the Panama Cannal.

+ Martin, KC9JGE, has made a YouTube video of one of his contacts with Astronaut Doug Wheelock KF5BOC on the International Space Station. You can watch the video via the SouthGate ARC site at:
http://tinyurl.com/25qtdrt

[ANS thanks everyone for the above information]

/EX

SB SAT @ AMSAT $ANS-332.08
ARISS Status - 22 November 2010

AMSAT News Service Bulletin 332.08
From AMSAT HQ SILVER SPRING, MD.
November 28, 2010
To All RADIO AMATEURS

BID: $ANS-332.08

1. Euro Space Center Contact Successful

Twenty-four students from the International School Zurich North, Switzerland, attending the Euro Space Center in Transinne, Belgium, spoke with ISS astronaut Doug Wheelock, KF5BOC via an Amateur Radio on the International Space Station (ARISS) contact on Tuesday, November 16. Telebridge station VK5ZAI in Australia handled the radio link. Wheelock fielded 15 questions about life in space during the session. The contact was an activity incorporated into the Euro Space Center Space Camp which hosts students from all over Europe and abroad.

2. Grand Junction Students Speak with ISS Astronaut

On Friday, November 19, students attending Holy Family Catholic School in Grand Junction, Colorado participated in an Amateur Radio on the International Space Station (ARISS) contact with on-orbit astronaut Doug Wheelock, KF5BOC. The school involved the entire student body of 400 students in this project. Several of the older students earned their amateur radio licenses prior to the contact and younger students participated in essay contests and art activities devoted to the contact with the ISS.

3. ARISS International Team Meeting Held

The monthly ARISS International Team teleconference was held on Tuesday, November 16. Topics discussed included updates on ARISSat-1 and the Columbus module radio equipment. Minutes have been posted. See:
https://www.rac.ca/ariss/arisstel2010-11-16.htm

4. ARISSat-1 Approved for Shipping

ARISSat-1 has been approved by Energia for shipment to Russia. The satellite is currently scheduled to arrive in Russia the first week of December. After the battery and the Kursk University experiment are installed, the satellite will be tested for flight and a final safety review will be scheduled.

[ANS thanks Carol, KB3LKI, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Lee McLamb, KU4OS

```
From -6784434415081488402
X-Google-Thread: 10e8ad,fb060daacedd82e3,start
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,domainid0,public,usenet
X-Google-Language: ENGLISH,UTF8
Path: g2news1.google.com!news2.google.com!npeer02.iad.highwinds-media.com!
news.highwinds-media.com!feed-me.highwinds-media.com!nx01.iad01.newshosting.com!
newshosting.com!198.186.194.249.MISMATCH!news-out.readnews.com!
transit3.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: "ARRL Members Only Web site" <memberlist@www.arrl.org>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: University Satellites Missions and Cubesat Conference Sponsorships
Followup-To: rec.radio.amateur.space
Date: Mon, 29 Nov 2010 11:44:19 EST
Organization: American Radio Relay League
Lines: 49
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <20101129153805.B2EE2263E8@bmail.arrl.org>
NNTP-Posting-Host: panix6.panix.com
Content-Type: text/plain; charset=UTF-8
X-Trace: reader1.panix.com 1291049059 29051 166.84.1.6 (29 Nov 2010 16:44:19 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Mon, 29 Nov 2010 16:44:19 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Xref: g2news1.google.com rec.radio.amateur.space:409 rec.radio.info:1918
```

Joe Murray, KØVTY was kind enough to pass this along to me. Here it is just in case there are any students in the Section who might be interested.

>Date: Thu, 25 Nov 2010 10:59:12 +0100
>Subject: [amsat-bb] 1st IAA Conference on University Satellites
Missions
and Cubesat Conference Sponsorships and Accommodation

Dear all,

we are pleased to announce that ESA has kindly offered ten scholarships for students who will present a paper at the 1st IAA Conference on University Satellites Missions and Cubesat Conference next January. You can find the information at the following link:

ESA scholarships
<http://www.gaussteam.com/index.php?option=com_content&view=article&id=111&Itemid=214>

Furthermore, we have reached an agreement with two hotels for the accommodation of the participants. You can find all the information at the following link:

Accommodation
<http://www.gaussteam.com/index.php?option=com_content&view=article&id=109&Itemid=211>

We hope that this will encourage students in participating to the Conference.

Best regard

-- Gruppo di Astrodinamica Università degli Studi Sapienza
Via Salaria, 851
00138 Roma
website: www.gaussteam.com
tel. 0039 06 88346436

____
Sent via AMSAT-BB@amsat.org. Opinions expressed are those of the author. Not an AMSAT-NA member? Join now to support the amateur satellite program! Subscription settings: http://amsat.org/mailman/listinfo/amsat-bb

---

ARRL Nebraska Section
Section Manager: Arthur I Zygielbaum, K0AIZ
k0aiz@arrl.org

```
From 7543577850578227693
X-Google-Thread: 108122,bb01dda052860ff7,start
X-Google-NewGroupId: yes
X-Google-Thread: fc2a5,bb01dda052860ff7,start
X-Google-NewGroupId: yes
X-Google-Thread: 107ada,bb01dda052860ff7,start
X-Google-NewGroupId: yes
X-Google-Thread: 10bf43,bb01dda052860ff7,start
X-Google-NewGroupId: yes
```

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X-Google-Thread: 10e8ad,bb01dda052860ff7,start
X-Google-NewGroupId: yes
X-Google-Thread: 10b9c8,bb01dda052860ff7,start
X-Google-NewGroupId: yes
X-Google-Attributes:
gidd7f5508063,gid241b302a50,gida3e752f117,gide721ae2bf6,gid8f86f75953,gida4a23d5f6
3,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news1.google.com!newsfeed2.dallas1.level3.net!
news.level3.com!panix!panix2.panix.com!not-for-mail
From: rram@panix.com (rec.radio.amateur.moderated Admin)
Newsgroups:
rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.rad
io.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amat
eur.space,rec.radio.info
Subject: Crossposting Permitted to rec.radio.amateur.moderated
Supersedes: <radio/ham-radio/moderated/crossposting-1-1288591200@panix.com>
Followup-To: poster
Date: 1 Dec 2010 02:00:02 -0500
Organization: rec.radio.amateur.moderated Moderation Team
Lines: 47
Approved: RRI Admin <rec-radio-info-request@panix.com>
Distribution: world
Expires: 03 Jan 2011 02:00:01 -0000
Message-ID: <radio/ham-radio/moderated/crossposting-1-1291186801@panix.com>
Reply-To: rec-radio-amateur-moderated-request@panix.com
(rec.radio.amateur.moderated Admin)
NNTP-Posting-Host: panix2.panix.com
X-Trace: reader1.panix.com 1291186802 10812 166.84.1.2 (1 Dec 2010 07:00:02 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Wed, 1 Dec 2010 07:00:02 +0000 (UTC)
Summary: Short reminder for unmoderated newsgroups that crossposting is permitted
Keywords: FAQ, ham, amateur, radio, moderated, unmoderated, crossposting,
permitted
Xref: g2news2.google.com rec.radio.amateur.antenna:21379 rec.radio.amateur.dx:848
rec.radio.amateur.equipment:2579 rec.radio.amateur.homebrew:4261
rec.radio.amateur.misc:5859 rec.radio.amateur.policy:31993
rec.radio.amateur.space:435 rec.radio.info:2002
```

```
Posted-By: auto-faq 3.3.2 beta (PGPMoose V2.0, Perl 5.005)
Archive-name: radio/ham-radio/moderated/crossposting
Revision: 1.1 2009/04/12 19:42:04
Posting-Frequency: posted monthly
URL: http://www.panix.com/~rram/usenet/rram/index.html
```

Changes followed by "|".

After a 30-day public discussion and feedback period to gauge reader opinions in March of 2009:

http://groups.google.com/group/rec.radio.amateur.moderated/browse_thread/thread/d7d337db35f23326

the rec.radio.amateur.moderated Moderation Team has decided to consider amending its charter, and permit limited simultaneous crossposting to rec.radio.amateur.moderated and one other unmoderated amateur-radio-related discussion newsgroup. We are currently trying this on a temporary basis (90 days, through early July 2009), and adopt it permanently if successful.

Approved rec.radio.amateur.* newsgroups are those that are currently listed in the latest version of the "List of Big Eight Newsgroups" which is crossposted monthly to news.announce.newgroups, news.groups, and news.lists.misc.

Approved alt.radio.amateur.* and alt.ham-radio.* newsgroups are those that have been created consistent with the suggestions in "So You Want to Create an Alt Newsgroup" at:

  http://www.faqs.org/faqs/alt-creation-guide/

Approved regional hierarchy newsgroups are those that contain either "radio.amateur" or "ham-radio" in their names, including uk.radio.amateur and aus.radio.amateur.misc.

We will make every reasonable effort to keep our list of approved newsgroups up-to-date. In case we have overlooked any, and a submission is rejected in error as a result, the rejected submitter can E-mail us at our administrative contact address (in the signature at the bottom of this article, and the default Reply-To for the rejection message) requesting that it be added, and that the article be approved. We may still choose to reject articles crossposted to any alt.* newsgroup with an inappropriate name, including obscene language, embedded name-calling, or encouragement of unlawful conduct.

Please direct any comments, questions, or criticisms to rec-radio-amateur-moderated-request@panix.com.

```
From -994952387203372894
X-Google-Thread: 10e8ad,a6c1af4e8409bb8,start
X-Google-NewGroupId: yes
X-Google-Thread: 10b9c8,a6c1af4e8409bb8,start
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,gida4a23d5f63,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news2.google.com!newsfeed2.dallas1.level3.net!
news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-334 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Wed, 1 Dec 2010 12:39:49 EST
Organization: The Radio Amateur Satellite Corporation
Lines: 1948
Approved: RRI Admin <rec-radio-info-request@panix.com>
```

```
Message-ID: <002901cb917e$b42b6240$1c8226c0$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1291225189 7279 166.84.1.6 (1 Dec 2010 17:39:49 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Wed, 1 Dec 2010 17:39:49 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to            rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
x-cr-hashedpuzzle: AkgA A3dO CD1G CFDt CntM DoFp Dw7x EUtQ GqDu HhF+ H6EN JD8s
JPXb KOso KO7z
Kclt;1;cgBlAGMALQByAGEAZABpAG8ALQBpAG4AZgBvAEAAcABhAG4AaQB4AC4AYwBvAG0A;Sosha1_v1;
7;{89702EEB-
D93B-4DE1-9BE4-9475C88C3231};awA5AGoAawBtAEAAYwBvAG0AYwBhAHMAdAAuAG4AZQB0AA==;Wed,
01 Dec 2010 17:39:21
GMT;VwBTAFIALQAzADMANAAgAEEATQBTAEEAVAAgAFcAZQBlAGsAbAB5ACAAUwBhAHQAZQBsAGwAaQB0AG
UAIABSAGUAcABvAHIAdAA=
x-cr-puzzleid: {89702EEB-D93B-4DE1-9BE4-9475C88C3231}
Xref: g2news2.google.com rec.radio.amateur.space:436 rec.radio.info:2005
```

This report is organized into four (4) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - deorbited/returned satellites

SB SAT @ AMSAT W8ISS $WSR-334.S1
WSR 334 Part 1 11/30/2010

AMSAT NEWS SERVICE BULLETIN 334.S1
FROM AMSAT HQ SILVER SPRING, MD, November 30, 2010
TO ALL RADIO AMATEURS
BID: $WSR-334.S1

HO-68 HOPE-1 (CAS-1)(XW-1)
Catalog Number: 36122
Launch Date: December 15, 2009
Status: Operational

Callsign:

```
Broadcast:    BJ1SA-11
BBS:     BJ1SA-12

Uplinks:   145.8250 MHz FM, PL 67.0 Hz.
           145.9250 - 145.9750 MHz SSB/CW
           145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
           435.7650 - 435.7150 MHz SSB/CW
           435.6750 MHz AFSK 1200 BPS

Beacon:    435.7900 MHz CW

Mode and Antenna Polarization:
V: LHCP 2.0dBi max
U: RHCP 3.0dBi max

IARU coordination page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108

For more information about XW-1 (CAS-1):
http://www.camsat.cn
[09062010]
=====
SO-67 SumbandilaSat
Catalog Number: 35870
Launch Date: September 17, 2009

Status: Suspended

Callsign: ZS0SUM

Uplink:   145.875MHz FM tone 233.6 Hz
Downlink: 435.345MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

For more information about SO-67:
http://www.amsatsa.org.za/
[09062010]
=====
DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008

Status: Operational
Current Mode: Science Mode - Beacon ONLY

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink:   435.530 to 435.570 MHz
```

```
Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68
[09062010]
=====
VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink:   435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink:   435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW


Indian Beacon:  145.9360 MHZ CW
Dutch Beacon:   145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is active. Each transponder has a different beacon.
[09062010]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Mode:
Voice repeater:
Uplink:      145.920 MHz FM
Downlink:    435.300 MHz FM

PBBS: L/u
Uplink:     1268.705 mhz FM 9k6 Pacsat Broadcast Protocol
Downlink:    435.150 MHz FM 38k4 PBP, 1 watt output

Telemetry:
```

Downlink: 435.150MHz 9k6

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.860 MHZ FM
145.880 MHz USB
145.880 MHz FM
145.920 MHz FM
145.920 MHz FM - 67 Hz PL tone burst
1268.705 MHz FM
Digital Downlinks: 435.150 MHz FM 38k4 PBP, 1 watt output
435.150 MHz FM 9k6 Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Pacsat Broadcast Protocol
1268.705 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[11242010]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz. The order of operation is thus: (allow for Doppler as necessary):

1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10 minute timer.

[09062010]
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993

Status: Operational

Current Mode: V/u

```
Uplink:   145.850 MHz FM
Downlink: 436.797 MHz FM
```

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[09062010]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational

Current Mode: Alternating between Mode A and B every 24 hours

```
Uplink:   145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink:  29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons:   29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW
```

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
[09062010]

```
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - OFF
                      Voice -       V/v
                      BBS -         OFF
                      APRS -        OFF
                      SSTV -        OFF


Expedition 26 Crew:
Commander:                Scott Kelly
Flight Engineer:          Alexander Kaleri      U8MIR
Flight Engineer:          Oleg Skripochka       RN3FU

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink:   145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink:     145.200 MHz FM
Region 2/3 voice uplink:   144.490 MHz FM
Worldwide downlink:        145.800 MHz FM

Crossband Repeater:
Repeater Uplinks:         1269.650 MHz FM
                           437.800 MHz FM
                           145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink:         145.800 MHz FM
                           437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink:                  145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian:                   OR4ISS
German:                    DP0ISS
Russian:                   RS0ISS
                           RZ3DZR
United States:             NA1SS
Packet Mailbox:            RS0ISS-11
Digipeater callsign:       ARISS

Official ARISS Webpage:    http://www.rac.ca/ariss
```

ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[11302010]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-334.S2
WSR 334 Part 2 11/30/2010

AMSAT NEWS SERVICE BULLETIN 334.S2
FROM AMSAT HQ SILVER SPRING, MD, November 30, 2010
TO ALL RADIO AMATEURS
BID: $WSR-334.S2

O/OREOS
Catalog Number: 37224
Launch Date: November 20, 2010

Status: On Orbit

Uplink:
Downlink: 437.035 MHZ AX.25

Beacon:

Callsign:

URL: http://www.ooreos.org/
[11302010]
=====
Rax-1 Radio Aurora Explorer
Catalog Number: 37223
Launch Date: November 19. 2010

Status: On Orbit

Uplink:
Downlink: 437.505 MHz 9k6 GMSK

Beacon:

Callsign: RAX-1

URL: http://rax.engin.umich.edu/
[11302010]
=====
Fastrac-1 Sara Lily
Catalog Number:
Launch Date: November 19, 2010

```
Status: On orbit

Uplink 1: 145.980 MHz 1k2 baud
Uplink 2: 145.825 MHz 1k2 baud
Downlink: 437.345 MHz 1k2 and 8k6 baud

Beacon:   437.435 MHz 1k2 AX.25

Callsign: Fast1

URL: http://fastrac.ae.utexas.edu/index.php
[11242010]
=====
Fastrac-2 Emma
Catalog Number:
Launch Date: November 19, 2010

Status: On Orbit

Uplink 1: 435.025 MHz 1k2 baud
Uplink 2: 437.435 MHz 9k6 baud
Downlink: 145.825 MHz

Beacon:   145.825 MHz 1k2 AX.25

Callsign: Fast2

URL: http://fastrac.ae.utexas.edu/index.php
[11242010]
=====
StudSat
Catalog Number: 36796
Launch Date: July 12, 2010
Status: On Orbit

Uplink:   437.505MHz, 9600bps FSK
Downlink: 437.505MHz, 9600bps FSK
Beacon  : 437.505MHz,   20bps ASK
[08062010]
=====
TIsat-1
Catalog Number: 36799
Launch Date: July 12, 2010

Status: On orbit

Callsign: HB9DE

Uplink:   145.980MHz FM, AFSK
Downlink: 437.305MHz FM, AFSK
Beacon:   437.305MHz CW
[08062010]
```

```
=====
HO-68 HOPE-1 (CAS-1)(XW-1)
Catalog Number: 36122
Launch Date: December 15, 2009

Status: Operational

Callsign:
Broadcast:    BJ1SA-11
BBS:         BJ1SA-12

Uplinks:   145.8250 MHz FM, PL 67.0 Hz.
           145.9250 - 145.9750 MHz SSB/CW
           145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
           435.7650 - 435.7150 MHz SSB/CW
           435.6750 MHz AFSK 1200 BPS

Beacon:    435.7900 MHz CW

IARU coordination page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108

For more information about XW-1 (CAS-1):
http://www.camsat.cn
[09062010]
=====
SwissCube
Catalog Number: 35932
Launch Date: September 23, 2009

Status: Operational

Callsign: HB9EG

Beacon(100mw): 437.5050MHz CW
Beacon(1w):    437.5050MHz FSK 1k2bps
[04222010]
=====
UWE-2
Catalog Number: 35934
Launch Date: September 23, 2009

Status: In Orbit

Beacon(500mw): 437.3850 MHz AFSK 1k2bps
               437.3850 MHz FSK 9k6bps
[1112009]
=====
ITUpsAT1
Catalog Number: 35935
Launch Date: September 23, 2009
```

```
Status: Operational

Beacon(100mw): 437.325MHz CW
Beacon(1w): 437.325MHz 19k2bps
[11112009]
=====
BEESAT
Catalog Number: 35933
Launch Date: September 23, 2009

Status: Operational

Callsign: DP0BEE

Beacon(100mw): 436.000MHz CW
Beacon(500mw): 436.000MHz GMSK 4k8bps
Beacon(500mw): 436.000MHz GMSK 9k6bps
[04222010]
=====
CP-6
Catalog Number: 35003
Launch Date: May 19, 2009

Status: Operational

Downlink: 437.365 MHz 1k2 AFSK
[09062010]
=====
HAWKSAT 1
Catalog number: 35004
Launch Date: May 19, 2009

Status: operational

Downlink: 437.345 MHz ?
[09062010]
=====
Pharmasat
Catalog Number: 35002
Launch Date: May 19, 2009
Status: Operational

Downlink: 437.465 MHz 1k2 AFSK
[09062010]
=====
ANUSAT
Catalog Number: 34808
Launch Date: April 20, 2009

Status: ?

Downlink:  435.000 MHz
Uplink:    145.800 MHz
```

```
Telemetry: 137.400 MHz
[09062010]
=====
SOHLA-1 (ASTRO TECH.)
Catalog Number: 33496
Launch Date: January 23, 2009

Status: Operational

Proposed Frequencies and Modes:
Downlink: 437.505 MHz AFSK/CW
Beacon:   437.505 MHz AFSK/CW

Callsign:

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=101
[09062010]
=====
KAGAYAKI (Solan Co.)
Catalog Number: 33495
Launch Date: January 23, 2009

Status: In Orbit

Downlink: 437.375 MHZ    FSK9k6/CW
Beacon:   437.375 MHz    FSK9k6/CW

IARU coordination status page:

AMSAT-NA webpage:

[09062010]
=====
STARS (Kagawa Univ.) (Twin Satellites)
Catalog Number: 33498
Launch Date: January 23, 2009

Status: Operational ?

Downlinks: 437.485 MHz FM/CW
           437.465 MHz FM/CW
Beacons:   437.305 MHz FM/CW
           437.275 MHz FM/CW

Callsigns: JR5YBN
           JR5YBO

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=99

AMSAT-NA webpage:
```

http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=121&retURL
=/satellites/status.php
[09062010]
=====
KKS-1 (Tokyo MCIT)
Catalog Number: 33499
Launch Date: January 23, 2009

Status: Operational

Downlink: 437.455 MHz AFSK/CW
Beacon: 437.385 MHz AFSK/CW

Callsign: JQ1YYY

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=107

AMSAT-NA webapge:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=120&retURL
=/satellites/status.php
[09062010]
=====
PRISM (Tokyo Univ.)
Catalog Number: 33493
Launch Date: January 23, 2009

Status: Operational ?

Downlink: 437.425 MHz AFSK/GMSK/CW
Beacon: 437.250 MHz AFSK/GMSK/CW

Callsign: JQ1YCX

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=97

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=119&retURL
=/satellites/status.php
[09062010]
=====
RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number: 32953
Launch Date: May 23, 2008

Status: Operational

Curent Modes: Telemetry
              Audio
              Images

Downlinks: 435.315 MHz

435.215 MHz

AMSAT-NA website:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=115&retURL=/satellites/status.php

Official website:
http://www.npopm.com/?cid=leoca&caid=43
[09062010]
=====
CanX-2
Catalog number: 32790
Launch Date: April 28, 2008

Status: Operational in range of ground station only

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[09062010]
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.425 MHz 1k2 baud packet

For the latest project status update please visit the AAUSAT-II web page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[09062010]
=====
CO-65 CUTE-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008

Status: Digipeater

Downlink: 437.475 MHz 9k6 Packet
Uplink: 1267.600 Mhz

Telemetry Beacon:
Downlink: 437.2750 MHz CW

For the latest project status update please visit the Cute-1.7+APD II web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78

Command Station blog website:
http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=112&retURL=/satellites/status.php
[09062010]
=====
Compass-1
Catalog number: 32787
Launch Date: April 28, 2008

Status: Operational

Current Mode: 4k8 MSK packet

```
Uplink:   145.980 MHz FM
Downlink: 437.275 Mhz CW
          437.405 MHz Packet
```

For the latest project status update please visit the Compass 1 web page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=114&retURL=/satellites/status.php
[09062010]
=====
CO-66 Seeds II
Catalog number: 32791
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.485 MHz

Callsign: JQ1YGU

For the latest project status update please visit the Seeds 2 web page: http://cubesat.aero.cst.nihon-u.ac.jp/english/seeds_2_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36

```
AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=113&retURL
=/satellites/status.php
[09062010]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode:  /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon:    435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=94&retURL=
/satellites/status.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=72
[09062010]
=====
CP3
Catalog Number: 31129
Launch Date: April 17,2007

Status: Operational

Current Mode:  /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[09062010]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon:             437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
```

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/xivpicte.htm
[09062010]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003

Status: ?????

Current Mode: /u

Beacon: 436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=96&retURL
=/satellites/status.php

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[09062010]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Mode:
Voice repeater:
Uplink: 145.920 MHz FM
Downlink: 435.300 MHz FM

PBBS: L/u
Uplink: 1268.705 mhz FM 9k6 Pacsat Broadcast Protocol
Downlink: 435.150 MHz FM 38k4 PBP, 1 watt output

Telemetry:
Downlink: 435.150MHz 9k6

Analog voice downlink: 435.300 MHz FM
                           435.150 MHz FM
                          2401.200 Mhz FM
Analog voice uplink: 145.860 MHZ FM
                           145.880 MHz USB
                           145.880 MHz FM
                           145.920 MHz FM
                           145.920 MHz FM - 67 Hz PL tone burst
                          1268.700 MHz FM

Digital Downlinks: 435.150 MHz FM 38k4 PBP, 1 watt output
                            435.150 MHz FM 9k6 Pacsat Broadcast Protocol
                           2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Pacsat Broadcast Protocol
                           1268.708 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[11242010]
=====
QuakeSat
Catalog Number: 27845
Launch Date: June 30, 2003

Status: Telemetry only

Current Mode: 9600 baud data packet

Mode U packet
Downlink: 436.675 MHz 9k6 BPS

Quakesat webpage:
http://www.quakefinder.com/services/quakesat-ssite/
[10042010]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW

```
AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=69&retURL
=/satellites/status.php
[09062010]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Telemetry only

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink:        144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[09062010]
=====
RS-22 RADIO SPORT 22
Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only

Current Mode:  /u

CW Beacon - 435.352 MHz
            145.818 MHz

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=76&retURL
=/satellites/status.php
[09062010]
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990

Status: CW Beacon only

Uplinks:          145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink:      437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)
```

```
Broadcast Callsign: LUSAT-11
BBS: LUSAT-12

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[09062010]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984

Status: Operational

Current Mode:  /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon:          435.025 MHz
Mode-S Beacon:     2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[11062010]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - OFF
                      Voice -       V/v
                      BBS -         OFF
                      APRS -        OFF
                      SSTV -        OFF


Expedition 26 Crew:
Commander:                Scott Kelly
Flight Engineer:          Alexander Kaleri      U8MIR
Flight Engineer:          Oleg Skripochka       RN3FU


Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink:   145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
```

Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[11302010]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-334.S3
WSR 334 Part 3 11/30/2010

AMSAT NEWS SERVICE BULLETIN 334.S3
FROM AMSAT HQ SILVER SPRING, MD, November 30, 2010
TO ALL RADIO AMATEURS
BID: $WSR-334.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

CP4
Catalog Number: 31132
Launch Date: April 17, 2007

Status: Non-Operational

```
Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon:    437.325 MHz CW

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=79
[09062010]
=====
LIBERTAD-1
Catalog Number: 31128
Launch Date: April 17, 2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink:   145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[09062010]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: Non-Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder:  145.825 Mhz FM
[09062010]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency:  437.305
                             2407.250

Official Website: http://www.ncube.no
[09062010]
=====
XO-53 SSETI
Catalog number: 28894
```

Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 MHz FM 67Hz CTCSS
Voice Downlink: 2401.835 MHz FM
Packet Up/Downlink: 437.250 MHz 9k6 packet
Packet Downlink   2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[09062010]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non-Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[09062010]
=====
CANX-1
Catalog Number: 27847
Launch Date: June 30, 2003

Status: Non-Operational

Downlink: 437.8800 MHz AFSK 1k2bps
[06052009]
=====
DTUSAT
Catalog Number: 27842
Launch Date: June 30, 2003

Status: Non-Operational

Current Mode: 2k4 AFSK Packet last reported

Downlink: 437.475MHz

Officail webpage: http://dtusat1.dtusat.dtu.dk/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=101&retURL=satellites/all_oscars.php
[02212009]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)

Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Telemetry only

Uplinks: 145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[03302009]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

```
Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS:                SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink:   145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
V-band:   145.840 -  145.990 MHz CW/LSB
U-band:   435.550 -  435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks
---------
S2-band:  2401.225 -  2401.475 MHz CW/USB
K-band:  24048.010 - 24048.060 MHz CW/USB
Beacon:   2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)
----------------------------
BEACON   General Beacon(GB)  Middle Beacon(MB)  Engineering Beacon(EB)
2 m                    none        145.898 MHz                    none
70cm            435.438 MHz        435.588 MHz             435.838 MHz
13cm(1)        2400.188 MHz       2400.338 MHz            2400.588 MHz
13cm(2)        2401.173 MHz       2401.323 MHz            2401.573 MHz
```

3cm	10450.975 MHz	10451.125 MHz	10451.375 MHz
1.5cm	24047.885 MHz	24048.035 MHz	24048.285 MHz

[07162007]
=====
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: 25636
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Non-Operational

Current Modes:
Telemetry : /u

```
Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign:       4XTECH-12
```

More information of GO-32 can be found at:
http://asri.technion.ac.il/techsat/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=14&retURL
=/satellites/status.php
[07172010]
=====
TO-31 TMSAT-1
Catalog number: 25396

Launch Date: July 10, 1998

Status: Non-operational

Uplink: 145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
MO-30 UNAMSAT-2
Catalog Number: 24305
Launch Date: September 5, 1996

Status: Non-operational

Downlink: 435.1380 MHz AFSK 1200 BPS
Downlink: 435.2060 MHz AFSK 1200 BPS
Uplink: 145.8150 MHz AFSK 1200 BPS
Uplink: 145.8350 MHz AFSK 1200 BPS
Uplink: 145.8550 MHz AFSK 1200 BPS
Uplink: 145.8750 MHz AFSK 1200 BPS
[06042009]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Non-operational
Current Mode: V/u (Mode JA)

Voice/CW (Mode JA)
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage:

http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's
CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/
fo29cwts.htm
[11062010]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Non-operational

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012009]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks: 145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

```
Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
AO-24 ARSENE
Catalog Number: 22654
Launch Date: May 13, 1993

Status: Non-operational

Uplink:    435.0625 MHz FM 1k2bps AFSK
           435.1125 MHz FM 1k2bps AFSK
           435.1375 MHz FM 1k2bps AFSK
Downlink:  145.9750 MHz FM 1k2bps AFSK
          2446.5025 MHz FM 1k2bps AFSK

Beacon:    2446.4700 MHz CW

Broadcast callsign:
BBS:
[12162009]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
```

```
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
[05012006]
```

```
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: non-operational

Current Mode:  V/u

Uplink:         145.900 MHz FM 1200-baud Manchester FSK (reserved)
                145.920 MHz FM VOICE
                145.940 MHz FM 1200-baud Manchester FSK (reserved)
                145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink:       437.026 MHz USB VOICE
                (1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[07242009]
=====
UO-15 UoSAT-4
Catalog Number: 20438
Launch Date: January 22, 1990

Status: Non-operational

Uplink: ?
Downlink: 435.1250MHz (?)
          435.1200MHz (?)
[06042009]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
```

```
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon:   145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink  29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
```

```
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
Beacons:   29.450 MHz
          435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon 1:  29.352 MHz (intermittent)
Beacon 2:  29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991
```

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB

Beacon: 145.860 MHz

Robot: 145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-334.S4
WSR 334 Part 4 11/30/2010

AMSAT NEWS SERVICE BULLETIN 334.S4
FROM AMSAT HQ SILVER SPRING, MD, November 30, 2010
TO ALL RADIO AMATEURS
BID: $WSR-334.S4

THE FOLLOWING SATELLITES HAVE RE-ENTERED OR HAVE BEEN RETURNED SAFELY:

CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Re-entered
Re-entered:

Uplink: 1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/

IARU coordination status page:

```
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=56
[09062010]
=====
BEVO-1 (DRAGONSAT-1)
Catalog Number: 35690
Launch Date: May 19, 2009

Status: Re-entered
Re-entered:

Downlink: 437.325 MHz 9k6 GMSK
          437.325 MHz CW 20wpm
[07312009]
=====
AggieSat2 (DRAGONSAT-2)
Catalog Number: 35690
Launch Date: May 19, 2009

Status: Re-entered
Re-entered:

Downlink: 436.250 MHz 9k6 FHSS
[11112009]
=====
Pollux
Catalog Number: 35693
Launch Date: July 31, 2009

Status: Re-entered
Re-entered:

Callsign: POLLUX-1

Downlink: 145.825MHz 1k2 AX.25
[09062010]
=====
Castor (ANDE-2)
Catalog Number: 35694
Launch Date: July 31, 2009

Status: Re-entered
Re-entered:

Callsign: KD4HBO-1

Downlink: 145.825 MHz 1k2 AX.25
[09062010]
=====
NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Re-Entered
```

Re-entered: July 28, 2008

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[01012009]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

```
Main Downlink:      145.825 Mhz FM APRS AX25
APRS Uplink:        145.825 MHz FM APRS AX25
Voice/PSK31 Uplink:  28.120 MHz
```

Packet to Voice ID: RAFT
[06112007]
=====
GENESAT-1
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Re-Entered
Re-entered date: August 8, 2010

Current Mode: /u

Callsign: KE7EGC

Telemetry Beacon Downlink: 437.0695 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[08082010]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Re-Entered
Re-entered: June 18, 2008

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon: 437.2750 MHz CW

Callsign: JR8YJT
[01012009]
=====
SO-43 Starshine 3
Catalog Number: 26929
Launch Date: September 30, 2001

Status: Re-Entered
Re-entered: January 21, 2003

Beacon: 145.825Mhz
[02212009]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:

http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at} amsat.org
NNNN
/EX

```
From -7531398066300217322
X-Google-Thread: 10e8ad,6fd646a800fb0da5,start
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news3.google.com!feeder1.cambriumusenet.nl!
feed.tweaknews.nl!193.201.147.78.MISMATCH!feeder.news-service.com!
94.75.214.39.MISMATCH!aioe.org!not-for-mail
From: Sean Con <universeexplorer@cwahi.net>
Newsgroups: rec.radio.amateur.space
Subject: meteor scatter
Date: Sun, 5 Dec 2010 15:38:03 +0100
Organization: .
Lines: 26
Message-ID: <MPG.2765c231c71791c3989680@nntp.aioe.org>
NNTP-Posting-Host: 2ZVmNQiRQ6DzkWy8tksHIw.user.speranza.aioe.org
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Complaints-To: abuse@aioe.org
X-Notice: Filtered by postfilter v. 0.8.2
User-Agent: MicroPlanet-Gravity/3.0.4
Xref: g2news2.google.com rec.radio.amateur.space:437
```

Dear Meteor Scatterers..

My name is Sean . I found this newsgroup from www.VHFDX.de.

I am very interested in meteors scatter. However not primarily DXing. I am primarily interested in meteor scatter because that can be used for studying the meteor themselves, and the ionization they create.

There is another project from my friend called Constellation [www.aerospaceresearch.net/constellation]. He also expresses great interest in meteor scatter.

We would like to detect the scattered signals and triangulate for calculating the meteor trajectory. We would also like to study the ionization strength and possibly the meteor composition.

We would like to offer you a calaboration and start your own project about meteor-scattering on the Constellation platform. If you are intersted or want to learn more about us, just feel free to ask us at constellationathome@gmail.com.

regrads

Sean

```
From 639762306736239855
X-Google-Thread: 10e8ad,3955d9858d51956,start
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!postnews.google.com!z26g2000prf.googlegroups.com!not-for-mail
From: Kimberly Lilla <kimberlylilla@gmail.com>
Newsgroups: rec.radio.amateur.space
Subject: Why are you waiting here online Russian Wives
Date: Sun, 5 Dec 2010 22:38:50 -0800 (PST)
Organization: http://groups.google.com
Lines: 2
Message-ID: <f567e24e-cce7-494e-8fc6-6db0c44846f6@z26g2000prf.googlegroups.com>
NNTP-Posting-Host: 112.134.68.79
Mime-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
X-Trace: posting.google.com 1291617530 31828 127.0.0.1 (6 Dec 2010 06:38:50 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Mon, 6 Dec 2010 06:38:50 +0000 (UTC)
Complaints-To: groups-abuse@google.com
Injection-Info: z26g2000prf.googlegroups.com; posting-host=112.134.68.79; posting-account=CPxKkgoAAABS5X6c4kZ451KqEL1__yvs
User-Agent: G2/1.0
X-HTTP-UserAgent: Mozilla/5.0 (Windows; U; Windows NT 5.1; en-US; rv:1.9.2.12)
 Gecko/20101026 Firefox/3.6.12,gzip(gfe)
Xref: g2news1.google.com rec.radio.amateur.space:413
```

Think about your marriage and get trusted women
http://brad-zone.com/6zku

```
From -1472686999952860155
X-Google-Thread: 10e8ad,eb6b1d5f95b100c1,start
X-Google-NewGroupId: yes
X-Google-Thread: 10b9c8,eb6b1d5f95b100c1,start
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,gida4a23d5f63,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!newsfeed2.dallas1.level3.net!
news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-339 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Mon, 6 Dec 2010 17:08:58 EST
Organization: The Radio Amateur Satellite Corporation
Lines: 308
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <005b01cb9592$28c62830$7a527890$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1291673338 7429 166.84.1.6 (6 Dec 2010 22:08:58 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Mon, 6 Dec 2010 22:08:58 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news1.google.com rec.radio.amateur.space:414 rec.radio.info:1941
```

AMSAT NEWS SERVICE
ANS-339

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* ARISSat Status
* UO-11 Report
* STRAIGHT KEY NIGHT ON OSCAR 2011
* Satellite Shorts
* ARISS Status - 29 November 2010

SB SAT @ AMSAT $ANS-339.01
ARISSat Status

AMSAT News Service Bulletin 339.01
>From AMSAT HQ SILVER SPRING, MD.
December 3rd, 2010
To All RADIO AMATEURS
BID: $ANS-339.01

ARISSat and the backup unit are in Germany, they are schedulted for delivery to Moscow on Saturday. We will know Tuesday if there were any problems getting them through customs. Lou McFadin, W5DID and Mark Steiner, K3MS will be heading to Moscow on the 10th of December to assist with integration and testing of the Kursk experiment and battery.

The schedule still has ARISSat going to the ISS via a Progress vehicle in late January 2011 and release from the ISS in late February 2011.

[ANS thanks Gould, WA4SXM, for the above information]

/EX

SB SAT @ AMSAT $ANS-332.02
UO-11 Report

AMSAT News Service Bulletin 332.02
>From AMSAT HQ SILVER SPRING, MD.
December 5th, 2010
To All RADIO AMATEURS
BID: $ANS-332.02

This report covers the period from 29 October to 30 November 2010. During this time the satellite has been heard from 30 October to 09 November and 19 to 29 November . At the time of writing it is is expected to switch-on 10 December.

Excellent signals have been reported from stations located around the world, and good copy obtained from decoded telemetry frames.

The satellite is now transmitting during eclipses, although signals are weaker at those times. This indicates that there is still some capacityremaining in the battery.

The on-board clock is now very stable. It gained eight seconds during November. This is comparable with its accuracy when the satellite was fully operational, when it gained approximately one minute per year. However,there is still an accumulated loss of 309 days, which has occurred during eclipses of the last few years.

Operation during eclipses and stability of the on-board clock suggest that some part of the system may have recently failed 'open circuit' thus reducing the overall power drain of the system, and allowing more power to be available during eclipses. When analogue telemetry was last transmitted, an unexplained current drain was observed. This fault may have cleared.

The Beacon frequencies are -
VHF 145.826 MHz. AFSK FM ASCII Telemetry
UHF 435.025 MHz. OFF
S-band 2401.5 MHz. OFF

Reception reports have been received from Gene WA4UKX, Horatio CX8AF, David G8OQW and Michael M0MPM/PA3BHE . Many thanks for those and to everyone who posted reports on the satellite status website.

At the present time, while OSCAR-11 is operating in a predictable way, I no longer need direct reports by e-mail. However, could you continue to enter reports on the general satellite status website. This is a very convenient and easy to use facility, which shows the current status of all the amateur satellites, and is of use to everyone. Reports around the expected times of switch-on and switch-off are of special interest. The URL is http://oscar.dcarr.org/index.php

OSCAR-11 transmits on 145.826 MHz., set receiver to NBFM. The satellite has a characteristic sound, rather like raspy slow morse code, sending "di di dah dah dah dah dah dah dah" sent over a period of five seconds. If you are receiving a very weak signal, switch the receiver to CW or SSB. You should hear several sidebands around the carrier frequency and should be able to hear the characteristic 'morse code like' sound on at least one sideband.

Please note that you need a clean noise-free signal to decode the signals, and your receiver must be set to NBFM mode, for a decoder to work.

If you need to know what OSCAR-11 sounds like, there is an audio clip on my website http://www.g3cwv.co.uk/ which may be useful for identification and as a test signal for decoding.

The current status of the satellite, is that all the analogue telemetry channels, 0 to 59 are zero, ie they have failed. The status channels 60 to 67 are still working. The real time clock is showing a large accumulated error, but is now incrementing accurately to within a few seconds per month. The day of the month has a bit stuck at 'one' so the day of the month may show an error of +40 days for some dates. The time display has switched into 12 hour mode. Unfortunately, there is no AM/PM indicator, since the time display format was designed for 24 hour mode.

The spacecraft computer and active attitude control system have switched OFF, ie. the satellite' attitude is controlled only by the passive gravity boom gradient, and the satellite is free to spin at any speed.

The watchdog timer operates on a 20 day cycle. The ON/OFF times have tended to be very consistent. The average of many observations have shown this to be 20.7 days, ie. 10.35 days ON followed by 10.35 days OFF.

Listeners to OSCAR-11 may be interested in visiting my website. If you need to know what OSCAR-11 should sound like, there is a short audio clip for you to hear. The last telemetry received from the satellite is available for download. The website contains an archive of news & telemetry data which is updated from time to time. It also contains details about using a soundcard or hardware demodulators for data capture. There is software for capturing data, and decoding ASCII telemetry. The URL is http://www.g3cwv.co.uk .

73 Clive G3CWV

[ANS thanks Clive, G3CWV for the above information]

/EX

SB SAT @ AMSAT $ANS-339.03
Straight Key Night on OSCAR 2011

AMSAT News Service Bulletin 339.03
>From AMSAT HQ SILVER SPRING, MD.
December 5th, 2010
To All RADIO AMATEURS
BID: $ANS-339.03

You are cordially invited to participate in Straight Key Night on OSCAR 2011, conducted by AMSAT for radio amateurs throughout the world.

This year's event is dedicated to the memory of Dick Peacock, W2GFF, who died in 2010 aged 91. Dick was an active satellite operator in the 1970s and 1980s, mostly on CW and usually with a straight key. He was also active on 50 MHz and the HF bands, and could always be counted on for a kind word and a friendly QSO.

There are no rules, no scoring and no logs required. Just operate CW on any OSCAR satellite, using a straight hand key, from 0000 UTC to 2400 UTC on 1 January 2011, working as many SKN stations as you can.

In keeping with the friendly nature of this event, each participant is asked to nominate one of the operators worked for "Best Fist." It is not necessary that your nominee have the best fist of anyone you heard, just of those you worked. Please send your nomination to W2RS via email at w2rs@amsat.org. Those nominated will be recognized in an ANS bulletin to be published in early February, and in The AMSAT Journal.

[ANS thanks Ray, W2RS, for the above information]

/EX

SB SAT @ AMSAT $ANS-339.04
Satellite Shorts From All Over

AMSAT News Service Bulletin 339.04
>From AMSAT HQ SILVER SPRING, MD.
December 5th, 2010
To All RADIO AMATEURS
BID: $ANS-339.04
Satellite Shorts From All Over

+ Look for Drew, KO4MA operating on the satellites from the area around NASA Stennis and Slidell, Louisiana. This is a work trip so operating time will be limited to free time in the evenings. Drew said he favors transponder satellite operating over FM so look for him on SSB 20 KHz or more above the center of the passband. He will return QSL 100% with SASE. He will be enroute to Stennis from Tampa on December 6.

+ The Zooniverse started the Zooniverse Advent Calendar, similar to the one-a-day-chocolate-treat calendars we all love, but this calendar includes a surprise each day such as special images, downloads and even a couple of very big pieces of space news: http://www.zooniverse.org/advent

The Boston Globe's Big Picture has their third annual Advent Calendar of Hubble Pictures: http://tinyurl.com/232ssyj

If you'd like to send an e-card specifically to the astronauts on board the International Space Station, NASA has a website just for you: http://www.nasa.gov/externalflash/postcard/

You can send Chandra X-Ray Observatory E-Cards with a holiday theme from: http://tinyurl.com/27lf8s2

The Space Science Institute invites you to investigate their selection of e-cards at:
http://www.spaceweathercenter.org/ecard/01/gallery.php

If you love Hubble, and want to send space-themed holiday cards the folks from the Hubble Space Telescope have a great collection of beautiful cards you can download, and send. The cards are designed to be printed out at photo stores or online photo labs, though you can also use a home printer. See: http://hubblesite.org/gallery/holiday/

+ The next Hudson Valley Satcom Net is Thursday December 9 at 8PM EST (UTC - 5) on the 146.970 MHz Mt. Beacon ARC Repeater. The Echolink node N2EYH-L will also be carrying the net. More information is on-line at: http://www.hvsatcom.org or E-Mail wa2aqh@amsat.org

  The date for next year's Mt. Beacon ARC "Beaconfeste" is Sunday April 10, 2011 at Tymor Park in Central Dutchess County, NY. More information is available on-line at: http://www.wr2abb.org/home/ (Stu, WA2BSS)

+ NASA Television will provide live coverage of the prelaunch news conference for the COTS 1 Falcon 9 launch Monday, Decemeber 6, at 1:30 p.m. The first SpaceX Falcon 9 demonstration launch for NASA's Commercial Orbital Transportation Services program is targeted for liftoff on Tuesday, Dec. 7. Liftoff will occur from Launch Complex 40 at Cape Canaveral Air Force Station in Florida. The launch window extends from 9:03 a.m. to 12:22 p.m. EST. If necessary, launch opportunities also are available on Dec. 8 and Dec. 9 with the same window. (SpaceDaily.com)

+ Hans van de Groenendaal, ZS6AKV reminds users that the SO67 schedule is posted at http://www.amsatsa.org.za . It changes weekly with the Americas the first week of the month, Europe the second week, Middle East/India the third week and Australia and Japan fourth week. Special requests with time in UTC should be sent to: saamsat@intekom.co.za

[ANS thanks everyone for the above information]

/EX

SB SAT @ AMSAT $ANS-339.05
ARISS Status - 29 November 2010

AMSAT News Service Bulletin 339.05
>From AMSAT HQ SILVER SPRING, MD.
December 5th, 2010
To All RADIO AMATEURS
BID: $ANS-339.05

1. Italian Students Question Astronaut via ARISS

On Wednesday, November 24, on-orbit astronaut Doug Wheelock, KF5BOC participated in an Amateur Radio on the International Space Station (ARISS) contact with students attending the Istituto Leopardi - Liceo classico e scientifico in Lecco, Lecco, Italy. The activity was the high point of the school's curriculum which included astronautics, astronomy, radio and English. Approximately 200 students, teachers and guests were present for the event and listened as Wheelock ans-

wered 13 questions posed by the youth. Video streamed on the Web received over 100 connections. ESA covered the contact in an article posted to its Web site.
See: http://www.esa.int/esaCP/SEMSPVFMTGG_Italy_0.html

2. Video of Wheelock Working Ground Stations

Doug Wheelock had a video made while on-orbit in which he gives a tour of the ISS as well as of the amateur radio station. He demonstrates what it is like for an astronaut to handle general contacts with multiple ground stations calling at the same time. AMSAT included this news in its November 28 ANS report:
http://amsat.org/pipermail/ans/2010/000464.html

The video has been posted to YouTube.
See: http://www.youtube.com/watch?v=h73EYcyszf8

[ANS thanks Carol, KB3LKI, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Dee Interdonato, NB2F
nb2f at amsat dot org

From -5475126505816527795
X-Google-Thread: 10e8ad,411b357997f991c9,start
X-Google-NewGroupId: yes
X-Google-Thread: 113975,411b357997f991c9,start
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,gidaddc8bf063,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news4.google.com!feeder.news-service.com!xlned.com!
feeder1.xlned.com!goblin1!goblin.stu.neva.ru!news.astraweb.com!
border5.a.newsrouter.astraweb.com!not-for-mail
From: Chris Steyaert <observations@rmob.org>
Newsgroups: rec.radio.amateur.space,sci.astro.amateur
Subject: Radio Meteor Obs. Bull. November 2010 Leonids November Orionids
Date: Wed, 08 Dec 2010 23:06:47 +0100
Message-ID: <h500g69qoqkqgpuni0i2ov8dsld66kjugj@4ax.com>
X-Newsreader: Forte Agent 5.00/32.1171
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Lines: 14

Organization: Unlimited download news at news.astraweb.com
NNTP-Posting-Host: 168cb7e1.news.astraweb.com
X-Trace: DXC=jm4d\=EcCI1<MO_7`o`AH2L?0kYOcDh@:WQS[T<FWcM=o3ChWA?aJN=eYm?[0I116?
b3<D_UX>L;9[K0;HFBJ]m?XV_^kXQKM57G6e?9b>CRm>
Xref: g2news2.google.com rec.radio.amateur.space:440 sci.astro.amateur:43462

Radio Meteor Observation Bulletin No. 208 of November 2010 (100 K) is available now as

http://www.rmob.org/rmobtext/rmob1011.txt

More information and the visual presentation of the hourly forward scatter counts can be found on

http://www.rmob.org

Chris

From -9030361912930219956
X-Google-Thread: 10e8ad,f1fe7f7fd531e1e3,start
X-Google-NewGroupId: yes
X-Google-Thread: 10b9c8,f1fe7f7fd531e1e3,start
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,gida4a23d5f63,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!npeer02.iad.highwinds-media.com!
news.highwinds-media.com!feed-me.highwinds-media.com!nx02.iad01.newshosting.com!
newshosting.com!198.186.194.249.MISMATCH!transit3.readnews.com!
textspool2.readnews.com!news-out.readnews.com!transit4.readnews.com!panix!
rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-346 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sat, 11 Dec 2010 20:21:02 EST
Organization: The Radio Amateur Satellite Corporation
Lines: 440
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000801cb999a$d77fc780$867f5680$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1292116862 8150 166.84.1.6 (12 Dec 2010 01:21:02 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 12 Dec 2010 01:21:02 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html

X-RRI-Info-1: Send submissions to rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news1.google.com rec.radio.amateur.space:416 rec.radio.info:1957

AMSAT NEWS SERVICE
ANS-346

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:

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* SpaceX Falcon 9 Mission Successful - Deploys Cubesats
* December AO-51 Schedule Features VHF BBS Test, SKN, Dual SU Downlink
* AMSAT-UK FUNcube Documents On-Line
* Remembering Lost UNITEC-1 - Japan's Akatsuki Problem at Venus Encounter
* Writing Opportunities for Amateur Radio in Space
* Satellite Shorts From All Over

SB SAT @ AMSAT $ANS-346.01
ARISS Celebrates 10th Anniversary of Student Conversations with ISS Astronauts

AMSAT News Service Bulletin 346.01
>From AMSAT HQ SILVER SPRING, MD.
December 12, 2010
To All RADIO AMATEURS
BID: $ANS-346.01

On 21 December 2000, astronaut William Shepherd turned from his usual activities aboard the newly occupied International Space Station (ISS). Floating over to a "ham" radio attached to a station bulkhead, he called the Burbank School in Burbank, Illinois and was soon talking with 14 enthusiastic students from grades 1-8. This month, amateur radio operators world-wide celebrate the tenth anniversary of this first school contact from ISS.

Since that first contact, Amateur Radio on the International Space Station (ARISS) volunteers have conducted 565 successful contacts in 40 countries, allowing thousands of students to share the excitement of those first 14. Moreover, tens of thousands of students, faculty, and parents have participated by planning and attending these events.

ARISS contacts have prompted countless students to seriously consider pursuing science, technology, engineering, and math (STEM) careers, including becoming an astronaut. Educational programs and amateur radio clubs established at participating schools continue to inspire students long after the contact has ended.

The use of amateur radio in space began in 1983 aboard the Space Shuttle Columbia. The Shuttle Amateur Radio Experiment (SAREX) flew on 28 shuttle missions, proving the educational and crew morale benefits of ham radio. Ham radio also proved popular with the cosmonauts aboard space station Mir. The value of amateur radio in space was so apparent to NASA and the Russian Space Agency that the ARISS radio became the first experiment to be activated on ISS.

ARISS is a volunteer program that inspires students the world over to pursue STEM careers by providing amateur radio communications opportunities with the International Space Station (ISS) on-orbit crew. Students learn about life on board the ISS and explore Earth from space through science and math activities. ARISS provides opportunities for the school community (students, teachers, families, and local residents) to become more aware of the substantial benefits of human spaceflight and the exploration and discovery that occur on spaceflight journeys while learning about technology and amateur radio.

ARISS is an international working group comprising delegations from 9 countries, including several countries in Europe as well as Japan, Russia, Canada, and the USA. The organization is run by volunteers from national amateur radio organizations and international AMSAT (Radio Amateur Satellite Corporation) organizations in each member country. ARISS team members in each country work with their respective space agencies (ESA, NASA, JAXA, CSA, and the Russian Space Agency). In the USA, ARISS works with the NASA Teaching From Space program.

[ANS thanks ARISS for the above information]

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SB SAT @ AMSAT $ANS-346.02
SpaceX Falcon 9 Mission Successful - Deploys Cubesats

AMSAT News Service Bulletin 346.02
>From AMSAT HQ SILVER SPRING, MD.
December 12, 2010
To All RADIO AMATEURS
BID: $ANS-346.02

SpaceX launched the Dragon spacecraft from Florida on a two-orbit test flight Wednesday, December 8 and the company brought the automated capsule back to Earth less than three-and-a-half hours later.

A video of the Falcon 9 liftoff can be viewed at:
http://www.youtube.com/watch?v=Xi9ljTW3GEQ

Liftoff photos from pad cameras can be viewed at:
http://spaceflightnow.com/falcon9/002/remotes/

SpaceFlightNow.com's Photo Gallery of the launch can be viwed at:
http://spaceflightnow.com/falcon9/002/press/

Photos of the Dragon parachute landing in the Pacific can be viewed at: http://spaceflightnow.com/falcon9/002/splashdown/

During the flight four cubesats were deployed from the "trunk" section of the Dragon spacecraft. At press time the function of two of the cubesats have been identified.

The University of Southern California's (USC) CAERUS cubesat was deployed SpaceX Falcon 9 rocket. CAERUS is part of the "MAYFLOWER" Next Generation Technology CubeSat that is a joint effort with Northrop Grumman NOVAWORKS group. CAERUS is licensed by the FCC in the Experimental Service. It also has an amateur callsign and a downlink in the 70cm band:

Call Sign: KJ6FIX
Downlink Frequency: 437.600 MHz (not coordinated by IARU)
Beacon Output Power: 900mW
Modulation Type: AFSK, 1200 baud
TLE: Updated on website, right after launch.

The CAERUS website is at: http://tinyurl.com/37w8map. The beacon data can also be translated with the jar applet provided on this website.

The second cubesat identifed aboard the Falcon X launch was the US Army SMDC-ONE nanosatellite mission which is a store and forward satellite. The primary objective of the first flight wass to receive data from a ground transmitter and relay that data to a ground station. The technology is planned to be expanded to build a number of identical satellites and deploy them together into Low Earth Orbit to simulate enhanced tactical communications capability.

[ANS thanks Omair A. Rahman at the University of Southern California, SpaceDaily.com, and SpaceFlightNow.com for the above information]

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SB SAT @ AMSAT $ANS-346.03
December AO-51 Schedule Features VHF BBS Test, SKN, Dual SU Downlink

AMSAT News Service Bulletin 346.03
>From AMSAT HQ SILVER SPRING, MD.
December 12, 2010
To All RADIO AMATEURS
BID: $ANS-346.03

AMSAT-NA VP Operations Drew KO4MA says the December 2010 AO-51 schedule has been released. Some of the dates of mode changes may move a day or so according to command station availability.

Note the 2m up BBS test beginning December 12. Beginning on December 17 a dual downlink of UHF and S-band will be available. AO-51 will feature its CW up, FM down mode for Straight Key Night.

At the end of December we go back into eclipses for a LONG time, so the overall power budget will shrink, and the command team will reinstate the new PL mode, and the satellite will likely be off in eclipse.

December 12 (late UTC)

FM Repeater, V/U
Uplink: 145.920 MHz FM (no PL tone)
Downlink: 435.300 MHz FM

9k6 Baud PBBS Operations, V/U
Uplink: 145.860 MHz FM at 9600 baud
Downlink: 435.150 MHz FM at 9600 baud

December 17 (late UTC)

FM Repeater, V/SU
Uplink: 145.880 MHz FM (no PL tone)
Downlinks: 2401.200 MHz FM *and* 435.300 MHz FM (at low power!)

December 22 (late UTC)

FM Repeater, V/U
Uplink: 145.920 MHz FM (no PL tone)
Downlink: 435.300 MHz FM

9k6 Baud PBBS Operations, L/U
Uplink: 1268.705 MHz FM at 9600 baud
Downlink: 435.150 MHz FM at 9600 baud

December 30 (late UTC)

CW/FM Repeater, V/U For Straight Key Night
Uplink: 145.880 MHz CW
Downlink: 435.300 MHz CW over FM

9k6 Baud Telemetry
Downlink: 435.150 MHz FM at 9600 baud

As always, keep up with the latest AO-51 Control Team news at:
http://www.amsat.org/amsat-new/echo/CTNews.php

[ANS thanks Drew, KO4MA for the above information]

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SB SAT @ AMSAT $ANS-346.04
AMSAT-UK FUNcube Documents On-Line

AMSAT News Service Bulletin 346.04
>From AMSAT HQ SILVER SPRING, MD.
December 12, 2010
To All RADIO AMATEURS
BID: $ANS-346.04

AMSAT-UK says they intend to publish as many of the working documents as possible for their FUNcube satellite and the first two documents are now available. The Mission Requirements Specification and the PA Board Specification can be downloaded from:
http://funcube.org.uk/working-documents/

Pictures and videos from the recent FUNcube developers meeting at Martlesham are at:
http://funcube.org.uk/working-meetings/cubesat-mtg-1314-nov-2010/

The UK Space Agency is proposing to use the AMSAT-UK FUNcube boards as part of its innovative new CubeSat UKube-1 slated for launch in December 2011.

The United Kingdom Space Agency website now includes some more details of the UKube-1, a 3U CubeSat (10 * 10 * 30cm) project. See:
http://www.ukspaceagency.bis.gov.uk/20084.aspx

The baseline design for this satellite includes a set of FUNcube boards to provide the educational outreach for the project. AMSAT-UK are presently discussing the precise details of this arrangement with the UKube-1 project team. This development will enable a much higher level service to be provided for Science, Technology, Engineering and Mathematics (STEM) outreach to schools than would be possible with just a single spacecraft.

An information pack is provided by the UK Space Agency is at
http://www.ukspaceagency.bis.gov.uk/assets/ZIP/CubesatAOpayload.zip

BBC report on UKube: http://tinyurl.com/2w3rgyc (bbc.co.uk site)

FUNcube website
http://www.FUNcube.org.uk/

[ANS thanks Trevor, M5AKA, AMSAT-UK, and the SouthGate ARC News for the above information]

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SB SAT @ AMSAT $ANS-346.05
Remembering Lost UNITEC-1 - Japan's Akatsuki Problem at Venus Encounter

AMSAT News Service Bulletin 346.05
>From AMSAT HQ SILVER SPRING, MD.
December 12, 2010
To All RADIO AMATEURS
BID: $ANS-346.05

UniverseToday reported that Japan's first Venus space probe has arrived at the planet but encountered problems while attempting orbit insertion and went into safe mode. It took longer than expected (an hour and a half) to regain communications after a known 22 minute blackout with the Akatsuki spacecraft, and apparently controllers are still trying to ascertain the spacecraft's orbit. They have regained some radio communications. Telemetry analysis confirmed the spacecraft was in safe mode.

The planned orbit for Akatsuki ranged between 300 and 80,000 kilometers (186 to 49,600 miles), looking for signs of lightning and active volcanoes.

Once communications were restored JAXA was able to determine that the probe's High Gain Antenna is working and telemetry from the spacecraft is back to normal function as is full control and stabilization. AKATSUKI is in a Sun circular orbit after not reaching Venus orbit.

Read the UniverseToday story at: http://tinyurl.com/2cfgw5p
and at: http://tinyurl.com/2vvl8yd (SpaceCoalition.com)

The May 21, 2010 Akatsuki launch also carried the UNITEC-1 amateur radio satellite with the callsign of JQ1ZUN. Its 5840.000 MHz, 4.8W beacon was initially copied from low earth orbit but the signal was lost days later. UNITEC-1 would have become the world's first university satellite which went beyond Lunar orbit.

[ANS thanks UniverseToday for the above information]

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SB SAT @ AMSAT $ANS-346.06
Writing Opportunities for Amateur Radio in Space

AMSAT News Service Bulletin 346.06
>From AMSAT HQ SILVER SPRING, MD.
December 12, 2010
To All RADIO AMATEURS
BID: $ANS-346.06

IAA Conference on University Satellites Missions and Cubesats

The December 18 deadline for abstract submissions for the 1st IAA Conference on University Satellites Missions and Cubesat Conference is rapidly approaching. This conference will be held in Rome on January 24-29, 2011. Early registration closes on January, 10th. Those who register before this date will have a discount rate. Full information is posted at: http://www.gaussteam.com under the "Events" tab.

Call for papers for 2011 SA AMSAT Space Symposium

The 2011 SA AMSAT Space Symposium will be held in Gauteng on Saturday 26 March 2011 at Vodaworld in Midrand. This is the first call for papers. Authors are invited to submit a synopsis in a MSWord document not exceeding 300 words. The synopsis should be mailed to: saamsat@intekom.co.za (with Space Symposium 2011 in the subject line). The theme of the conference is Innovation in Space Communication. Closing date for paper proposals and a synopsis is 20 January 2011. For more details visit: http://www.amsatsa.org.za.

Call for Papers: 15th Annual SEVHF Society Conference

The Southeastern VHF Society is calling for the submission of papers and presentations for the upcoming 15th annual Southeastern VHF Society Conference to be held in Huntsville, Alabama on April 29th and 30th, 2011. Papers and presentations are solicited on both the technical and operational aspects of VHF, UHF and Microwave weak signal amateur radio.

Contact Steve Kostro, (e-mail: SVHFS2011 AT downeastmicrowave DOT com) by January 8th, 2011 if you wish to make a presentation or submit your paper. Deadline for the submission of papers is March 11, 2011. For further information and updates about the conference please go to: http://www.svhfs.org

Call for Papers: 45th Central States VHF Society Conference

The Central States VHF Society is hosting their 45th Conference July 29-30, 2011 in Irving Texas. They are currently looking for papers relating to amateur radio above 50 MHz. Anticipated topics include: Design and build of VHF thru microwave equipment, VHF DXPeditions, Antenna Design, Weak Signal Reception Techniques. Deadline for papers is May 1, 2011. Papers should be sent to:
Kent Britain <wa5vjb@flash.net>

[ANS thanks the IAA, SA AMSAT, and Robin Midgett K4IDC 2011 Conference Program Co-Chair, SVHFS; Chuck Clark, AF8Z for the above information]

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SB SAT @ AMSAT $ANS-346.07
Satellite Shorts From All Over

AMSAT News Service Bulletin 346.07
>From AMSAT HQ SILVER SPRING, MD.
December 12, 2010
To All RADIO AMATEURS
BID: $ANS-346.07

+ For those who collect archived publications here is a link to a recently posted digitized copy of the 1985 1296/2304 MHz Conference which has evolved into the Microwave Update MUD Conference. Thanks to the work of Brian, WA1ZMS, these proceedings have been digitized and can be downloaded in 7 sections from http://www.wa5vjb.com in the Reference Section.

+ The AMSAT India newsletter is back after a long break and will be published every month. A softcopy of the newsletter can be found at:
http://amsatindia.org/Newsletter/AMSATINDIA-News-Dec2010.pdf
Archives are at http://amsatindia.org/Newsletter/
(via Nitin, VU3TYG, Secretary, AMSAT India)

+ AMSAT-ZL's Fred Kennedy, ZL1BYP says the KiwiSAT team is in need of a small quantity supply source of space quality thermally conductive epoxy for KiwiSAT. They will need probably less than 10 grams total over the last few months of KiwiSAT construction. Minimum order quantities have been quoted as 100 tubes and this amount is not needed nor can be afforded. Contact Fred at: fredk@kcbbs.gen.nz if you can help.

+ Henk, PA3GUO has posted a YouTube video (HD) that features the O/OREOS satellite from launch to telemetry reception and decode, including DK3WN's Softwar and Mission control upload:
http://www.youtube.com/watch?v=Qh6lH5vqw-Y

Henk also has a video of the 'bare' telemetry stream at:
http://www.youtube.com/watch?v=M4Ka-RVpEHU

O/OREOS audio recording: http://www.pa3guo.com/OOREOS_PA3GUO.mp3
FASTRAC/FAST1 audio recording: http://www.pa3guo.com/FAST1_PA3GUO.mp3
(Henk says you can use MixW with your MP3 your player to decode the telemetry.)

+ Roland PY4ZBZ reports that Yuri UT1FG/MM, has been active at sea from the vessel M/V "MOTTLER", on SO-50, FO-29 and HO68, in the squares: GG85, GG54, GE06, FD37, FD29, FE82, FE81, FE20 and FE21, from Rio de Janeiro to Chili via the Strait of Magellan.

+ UniverseToday.com declares, "What a view!" A photograph taken by one of the astronauts on the International Space Station shows several snow-covered volcanoes on Russia's Kamchatka Peninsula.
See: http://tinyurl.com/24ccnz4

+ The Nanosail-D nanosatellite may have failed to eject from FASTSAT. NASA had planned to eject Nanosail-D from its cannister on December 6. Initial telemetry indicated that ejection was successful. It also now appears that the solar sail may not have unfurled. NASA continues to investigate. The NanoSail-D amateur radio beacon will transmit a one-half second data signal every 5 seconds on 437.270 MHz if it becomes active. The satellite will operate primarily on battery power because of the short duration of the mission.

+ The next crew arriving at the International Space Station on December 17 includes two radio amateurs: US astronaut Catherine Coleman, KC5ZTH, and the European Space Agency's Paolo Nespoli, IZ0JPA.

[ANS thanks everyone for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office. And with that please keep in mind that upon receiving his invitation to his radio club's Christmas Party the ham decided it was time to get spruced up.

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM

```
From 9050544005493362435
X-Google-Thread: 10e8ad,4e42e3ef0e64f795,start
X-Google-NewGroupId: yes
X-Google-Thread: 10b9c8,4e42e3ef0e64f795,start
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,gida4a23d5f63,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!newsfeed2.dallas1.level3.net!
news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-342 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Sun, 12 Dec 2010 11:05:33 EST
Organization: The Radio Amateur Satellite Corporation
Lines: 1947
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <001201cb9a16$65e0a410$31a1ec30$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
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X-Trace: reader1.panix.com 1292169934 20653 166.84.1.6 (12 Dec 2010 16:05:34 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 12 Dec 2010 16:05:34 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
x-cr-hashedpuzzle: AZLO AckR BQSA DKO0 FFYN Fyv1 GKju IC0X ITe8 I2S0 JtpR KRPR KbSE KwLw K9Nd
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Xref: g2news1.google.com rec.radio.amateur.space:417 rec.radio.info:1958

This report is organized into four (4) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - deorbited/returned satellites

SB SAT @ AMSAT W8ISS $WSR-342.S1
WSR 342 Part 1 12/08/2010

AMSAT NEWS SERVICE BULLETIN 342.S1
FROM AMSAT HQ SILVER SPRING, MD, December 08, 2010
TO ALL RADIO AMATEURS
BID: $WSR-342.S1

HO-68 HOPE-1 (CAS-1)(XW-1)
Catalog Number: 36122
Launch Date: December 15, 2009
Status: Operational

Callsign:
Broadcast: BJ1SA-11
BBS: BJ1SA-12

Uplinks: 145.8250 MHz FM, PL 67.0 Hz.
145.9250 - 145.9750 MHz SSB/CW

```
           145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
           435.7650 - 435.7150 MHz SSB/CW
           435.6750 MHz AFSK 1200 BPS

Beacon:    435.7900 MHz CW

Mode and Antenna Polarization:
V: LHCP 2.0dBi max
U: RHCP 3.0dBi max

IARU coordination page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108

For more information about XW-1 (CAS-1):
http://www.camsat.cn
[09062010]
=====
SO-67 SumbandilaSat
Catalog Number: 35870
Launch Date: September 17, 2009

Status: Suspended

Callsign: ZS0SUM

Uplink:   145.875MHz FM tone 233.6 Hz
Downlink: 435.345MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

For more information about SO-67:
http://www.amsatsa.org.za/
[09062010]
=====
DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008

Status: Operational
Current Mode: Science Mode - Beacon ONLY

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink:   435.530 to 435.570 MHz

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68
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[09062010]
=====
VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink:   435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink:   435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW


Indian Beacon:  145.9360 MHZ CW
Dutch Beacon:   145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is active. Each transponder has a different beacon.
[09062010]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Mode:
Voice repeater:
Uplink:      145.920 MHz FM
Downlink:    435.300 MHz FM

PBBS: L/u
Uplink:     1268.705 mhz FM 9k6 Pacsat Broadcast Protocol
Downlink:    435.150 MHz FM 38k4 PBP, 1 watt output

Telemetry:
Downlink:    435.150MHz 9k6


Analog voice downlink:     435.300 MHz FM
                           435.150 MHz FM
```

	2401.200 Mhz FM
Analog voice uplink:	145.860 MHZ FM
	145.880 MHz USB
	145.880 MHz FM
	145.920 MHz FM
	145.920 MHz FM - 67 Hz PL tone burst
	1268.705 MHz FM
Digital Downlinks:	435.150 MHz FM 38k4 PBP, 1 watt output
	435.150 MHz FM 9k6 Pacsat Broadcast Protocol
	2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:	145.860 MHz FM 9k6 Pacsat Broadcast Protocol
	1268.705 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon:	435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[11242010]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz. The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer on board the spacecraft.

2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10 minute timer.
[09062010]
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[09062010]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational

Current Mode: Alternating between Mode A and B every 24 hours

```
Uplink:   145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink:  29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons:   29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW
```

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
[09062010]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - OFF
Voice - V/v
BBS - OFF
APRS - OFF
SSTV - OFF

Expedition 26 Crew:
Commander: Scott Kelly
Flight Engineer: Alexander Kaleri U8MIR
Flight Engineer: Oleg Skripochka RN3FU

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time

```
line is NOT translated from Russian and posted.
[11302010]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-342.S2
WSR 342 Part 2 12/08/2010

AMSAT NEWS SERVICE BULLETIN 342.S2
FROM AMSAT HQ SILVER SPRING, MD, December 08, 2010
TO ALL RADIO AMATEURS
BID: $WSR-342.S2

O/OREOS
Catalog Number: 37224
Launch Date: November 20, 2010

Status: On Orbit

Uplink:
Downlink: 437.035 MHZ AX.25

Beacon:

Callsign:

URL: http://www.ooreos.org/
[11302010]
=====
Rax-1 Radio Aurora Explorer
Catalog Number: 37223
Launch Date: November 19. 2010

Status: On Orbit

Uplink:
Downlink: 437.505 MHz 9k6 GMSK

Beacon:

Callsign: RAX-1

URL: http://rax.engin.umich.edu/
[11302010]
=====
Fastrac-1 Sara Lily
Catalog Number:
Launch Date: November 19, 2010

Status: On orbit

Uplink 1: 145.980 MHz 1k2 baud
Uplink 2: 145.825 MHz 1k2 baud
```

Downlink: 437.345 MHz 1k2 and 8k6 baud

Beacon: 437.435 MHz 1k2 AX.25

Callsign: Fast1

URL: http://fastrac.ae.utexas.edu/index.php
[11242010]
=====
Fastrac-2 Emma
Catalog Number:
Launch Date: November 19, 2010

Status: On Orbit

Uplink 1: 435.025 MHz 1k2 baud
Uplink 2: 437.435 MHz 9k6 baud
Downlink: 145.825 MHz

Beacon: 145.825 MHz 1k2 AX.25

Callsign: Fast2

URL: http://fastrac.ae.utexas.edu/index.php
[11242010]
=====
StudSat
Catalog Number: 36796
Launch Date: July 12, 2010
Status: On Orbit

Uplink: 437.505MHz, 9600bps FSK
Downlink: 437.505MHz, 9600bps FSK
Beacon : 437.505MHz,   20bps ASK
[08062010]
=====
TIsat-1
Catalog Number: 36799
Launch Date: July 12, 2010

Status: On orbit

Callsign: HB9DE

Uplink: 145.980MHz FM, AFSK
Downlink: 437.305MHz FM, AFSK
Beacon: 437.305MHz CW
[08062010]
=====
HO-68 HOPE-1 (CAS-1)(XW-1)
Catalog Number: 36122
Launch Date: December 15, 2009

Status: Operational

Callsign:
Broadcast: BJ1SA-11
BBS: BJ1SA-12

Uplinks: 145.8250 MHz FM, PL 67.0 Hz.
           145.9250 - 145.9750 MHz SSB/CW
           145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
           435.7650 - 435.7150 MHz SSB/CW
           435.6750 MHz AFSK 1200 BPS

Beacon: 435.7900 MHz CW

IARU coordination page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108

For more information about XW-1 (CAS-1):
http://www.camsat.cn
[09062010]
=====
SwissCube
Catalog Number: 35932
Launch Date: September 23, 2009

Status: Operational

Callsign: HB9EG

Beacon(100mw): 437.5050MHz CW
Beacon(1w):   437.5050MHz FSK 1k2bps
[04222010]
=====
UWE-2
Catalog Number: 35934
Launch Date: September 23, 2009

Status: In Orbit

Beacon(500mw): 437.3850 MHz AFSK 1k2bps
               437.3850 MHz FSK 9k6bps
[1112009]
=====
ITUpsAT1
Catalog Number: 35935
Launch Date: September 23, 2009

Status: Operational

Beacon(100mw): 437.325MHz CW
Beacon(1w): 437.325MHz 19k2bps
[11112009]

```
=====
BEESAT
Catalog Number: 35933
Launch Date: September 23, 2009

Status: Operational

Callsign: DP0BEE

Beacon(100mw): 436.000MHz CW
Beacon(500mw): 436.000MHz GMSK 4k8bps
Beacon(500mw): 436.000MHz GMSK 9k6bps
[04222010]
=====
CP-6
Catalog Number: 35003
Launch Date: May 19, 2009

Status: Operational

Downlink: 437.365 MHz 1k2 AFSK
[09062010]
=====
HAWKSAT 1
Catalog number: 35004
Launch Date: May 19, 2009

Status: operational

Downlink: 437.345 MHz ?
[09062010]
=====
Pharmasat
Catalog Number: 35002
Launch Date: May 19, 2009
Status: Operational

Downlink: 437.465 MHz 1k2 AFSK
[09062010]
=====
ANUSAT
Catalog Number: 34808
Launch Date: April 20, 2009

Status: ?

Downlink:  435.000 MHz
Uplink:    145.800 MHz

Telemetry: 137.400 MHz
[09062010]
=====
SOHLA-1 (ASTRO TECH.)
```

```
Catalog Number: 33496
Launch Date: January 23, 2009

Status: Operational

Proposed Frequencies and Modes:
Downlink: 437.505 MHz AFSK/CW
Beacon:   437.505 MHz AFSK/CW

Callsign:

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=101
[09062010]
=====
KAGAYAKI (Solan Co.)
Catalog Number: 33495
Launch Date: January 23, 2009

Status: In Orbit

Downlink: 437.375 MHZ    FSK9k6/CW
Beacon:   437.375 MHz    FSK9k6/CW

IARU coordination status page:

AMSAT-NA webpage:

[09062010]
=====
STARS (Kagawa Univ.) (Twin Satellites)
Catalog Number: 33498
Launch Date: January 23, 2009

Status: Operational ?

Downlinks: 437.485 MHz FM/CW
           437.465 MHz FM/CW
Beacons:   437.305 MHz FM/CW
           437.275 MHz FM/CW

Callsigns: JR5YBN
           JR5YBO

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=99

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=121&retURL
=/satellites/status.php
[09062010]
=====
KKS-1 (Tokyo MCIT)
```

Catalog Number: 33499
Launch Date: January 23, 2009

Status: Operational

Downlink: 437.455 MHz AFSK/CW
Beacon: 437.385 MHz AFSK/CW

Callsign: JQ1YYY

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=107

AMSAT-NA webapge:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=120&retURL
=/satellites/status.php
[09062010]

=====

PRISM (Tokyo Univ.)
Catalog Number: 33493
Launch Date: January 23, 2009

Status: Operational ?

Downlink: 437.425 MHz AFSK/GMSK/CW
Beacon: 437.250 MHz AFSK/GMSK/CW

Callsign: JQ1YCX

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=97

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=119&retURL
=/satellites/status.php
[09062010]

=====

RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number: 32953
Launch Date: May 23, 2008

Status: Operational

Curent Modes: Telemetry
              Audio
              Images

Downlinks: 435.315 MHz
           435.215 MHz

AMSAT-NA website:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=115&ret
URL=/satellites/status.php

Official website:
http://www.npopm.com/?cid=leoca&caid=43
[09062010]
=====
CanX-2
Catalog number: 32790
Launch Date: April 28, 2008

Status: Operational in range of ground station only

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web
page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[09062010]
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.425 MHz 1k2 baud packet

For the latest project status update please visit the AAUSAT-II web
page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[09062010]
=====
CO-65 CUTE-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008

Status: Digipeater

Downlink: 437.475 MHz 9k6 Packet
Uplink: 1267.600 Mhz

Telemetry Beacon:
Downlink: 437.2750 MHz CW

For the latest project status update please visit the Cute-1.7+APD II
web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78

Command Station blog website:
http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=112&retURL
=/satellites/status.php
[09062010]
=====
Compass-1
Catalog number: 32787
Launch Date: April 28, 2008

Status: Operational

Current Mode: 4k8 MSK packet

Uplink: 145.980 MHz FM
Downlink: 437.275 Mhz CW
          437.405 MHz Packet

For the latest project status update please visit the Compass 1 web
page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=114&retURL
=/satellites/status.php
[09062010]
=====
CO-66 Seeds II
Catalog number: 32791
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.485 MHz

Callsign: JQ1YGU

For the latest project status update please visit the Seeds 2 web
page: http://cubesat.aero.cst.nihon-u.ac.jp/english/seeds_2_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=113&retURL
=/satellites/status.php
[09062010]
=====

CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=94&retURL=
/satellites/status.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=72
[09062010]
=====
CP3
Catalog Number: 31129
Launch Date: April 17,2007

Status: Operational

Current Mode: /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[09062010]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon: 437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/xivpicte.htm
[09062010]
=====

CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003

Status: ?????

Current Mode: /u

Beacon: 436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=96&retURL=/satellites/status.php

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[09062010]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Mode:
Voice repeater:
Uplink: 145.920 MHz FM
Downlink: 435.300 MHz FM

PBBS: L/u
Uplink: 1268.705 mhz FM 9k6 Pacsat Broadcast Protocol
Downlink: 435.150 MHz FM 38k4 PBP, 1 watt output

Telemetry:
Downlink: 435.150MHz 9k6

Analog voice downlink: 435.300 MHz FM
                           435.150 MHz FM
                          2401.200 Mhz FM
Analog voice uplink: 145.860 MHZ FM
                           145.880 MHz USB
                           145.880 MHz FM
                           145.920 MHz FM
                           145.920 MHz FM - 67 Hz PL tone burst
                          1268.700 MHz FM
Digital Downlinks: 435.150 MHz FM 38k4 PBP, 1 watt output
                           435.150 MHz FM 9k6 Pacsat Broadcast Protocol
                          2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Pacsat Broadcast Protocol
                          1268.708 mhz FM 9k6 Pacsat Broadcast Protocol

Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[11242010]
=====
QuakeSat
Catalog Number: 27845
Launch Date: June 30, 2003

Status: Telemetry only

Current Mode: 9600 baud data packet

Mode U packet
Downlink: 436.675 MHz 9k6 BPS

Quakesat webpage:
http://www.quakefinder.com/services/quakesat-ssite/
[10042010]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=69&retURL
=/satellites/status.php
[09062010]

=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Telemetry only

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[09062010]
=====
RS-22 RADIO SPORT 22
Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only

Current Mode: /u

CW Beacon - 435.352 MHz
            145.818 MHz

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=76&retURL
=/satellites/status.php
[09062010]
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990

Status: CW Beacon only

Uplinks: 145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink: 437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12

General information and telemetry samples can be found at:

```
www.telecable.es/personales/ea1bcu
[09062010]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984

Status: Operational

Current Mode:  /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon:           435.025 MHz
Mode-S Beacon:     2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[11062010]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - OFF
                      Voice -       V/v
                      BBS -         OFF
                      APRS -        OFF
                      SSTV -        OFF


Expedition 26 Crew:
Commander:                Scott Kelly
Flight Engineer:          Alexander Kaleri      U8MIR
Flight Engineer:          Oleg Skripochka       RN3FU


Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink:   145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink:     145.200 MHz FM
Region 2/3 voice uplink:   144.490 MHz FM
Worldwide downlink:        145.800 MHz FM

Crossband Repeater:
```

Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[11302010]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-342.S3
WSR 342 Part 3 12/08/2010

AMSAT NEWS SERVICE BULLETIN 342.S3
FROM AMSAT HQ SILVER SPRING, MD, December 08, 2010
TO ALL RADIO AMATEURS
BID: $WSR-342.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

CP4
Catalog Number: 31132
Launch Date: April 17, 2007

Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon: 437.325 MHz CW

```
IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=79
[09062010]
=====
LIBERTAD-1
Catalog Number: 31128
Launch Date: April 17, 2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink:   145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[09062010]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: Non-Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder:  145.825 Mhz FM
[09062010]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency:  437.305
                             2407.250

Official Website: http://www.ncube.no
[09062010]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink:        437.250 MHz FM 67Hz CTCSS
Voice Downlink:     2401.835 MHz FM
Packet Up/Downlink:  437.250 MHz 9k6 packet
Packet Downlink     2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[09062010]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non-Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[09062010]
=====
CANX-1
Catalog Number: 27847
Launch Date: June 30, 2003

Status: Non-Operational

Downlink: 437.8800 MHz AFSK 1k2bps
[06052009]
=====
DTUSAT
Catalog Number: 27842
Launch Date: June 30, 2003

Status: Non-Operational

Current Mode: 2k4 AFSK Packet last reported

Downlink: 437.475MHz

Officail webpage: http://dtusat1.dtusat.dtu.dk/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=101&retURL
=satellites/all_oscars.php
[02212009]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink:   435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)
```

```
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Telemetry only

Uplinks:   145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink:  437.325 MHz

Broadcast callsign: MYSAT3-11
BBS:                MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial land and weather imaging payloads offers FM and FSK
Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as
a collaborative effort between the Malaysian government and Surrey
Satellite Technology Ltd.
[03302009]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink:   145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS:                SASAT2-12
```

```
Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink:   145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
V-band:   145.840 -  145.990 MHz CW/LSB
U-band:   435.550 -  435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks
---------
S2-band:  2401.225 -  2401.475 MHz CW/USB
K-band:  24048.010 - 24048.060 MHz CW/USB
Beacon:   2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)
----------------------------
BEACON   General Beacon(GB)  Middle Beacon(MB)  Engineering Beacon(EB)
2 m                   none        145.898 MHz                     none
70cm           435.438 MHz        435.588 MHz              435.838 MHz
13cm(1)       2400.188 MHz       2400.338 MHz             2400.588 MHz
13cm(2)       2401.173 MHz       2401.323 MHz             2401.573 MHz
3cm          10450.975 MHz      10451.125 MHz            10451.375 MHz
1.5cm        24047.885 MHz      24048.035 MHz            24048.285 MHz
[07162007]
=====
OO-38 OPAL
```

Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: 25636
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/

```
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Non-Operational

Current Modes:
Telemetry : /u

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign:       4XTECH-12

More information of GO-32 can be found at:
http://asri.technion.ac.il/techsat/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=14&retURL
=/satellites/status.php
[07172010]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink:   145.925 MHz 9600 baud FSK
```

Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
MO-30 UNAMSAT-2
Catalog Number: 24305
Launch Date: September 5, 1996

Status: Non-operational

Downlink: 435.1380 MHz AFSK 1200 BPS
Downlink: 435.2060 MHz AFSK 1200 BPS
Uplink: 145.8150 MHz AFSK 1200 BPS
Uplink: 145.8350 MHz AFSK 1200 BPS
Uplink: 145.8550 MHz AFSK 1200 BPS
Uplink: 145.8750 MHz AFSK 1200 BPS
[06042009]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Non-operational
Current Mode: V/u (Mode JA)

Voice/CW (Mode JA)
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage:
http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's
CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/
fo29cwts.htm
[11062010]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Non-operational

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012009]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks: 145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

```
Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
AO-24 ARSENE
Catalog Number: 22654
Launch Date: May 13, 1993

Status: Non-operational

Uplink:    435.0625 MHz FM 1k2bps AFSK
           435.1125 MHz FM 1k2bps AFSK
           435.1375 MHz FM 1k2bps AFSK
Downlink:  145.9750 MHz FM 1k2bps AFSK
          2446.5025 MHz FM 1k2bps AFSK

Beacon:    2446.4700 MHz CW

Broadcast callsign:
BBS:
[12162009]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HL01-11
BBS: HL01-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991
```

```
Status: Non-Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
[05012006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990
```

```
Status: non-operational

Current Mode:  V/u

Uplink:         145.900 MHz FM 1200-baud Manchester FSK (reserved)
                145.920 MHz FM VOICE
                145.940 MHz FM 1200-baud Manchester FSK (reserved)
                145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink:       437.026 MHz USB VOICE
                (1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[07242009]
=====
UO-15 UoSAT-4
Catalog Number: 20438
Launch Date: January 22, 1990

Status: Non-operational

Uplink: ?
Downlink: 435.1250MHz (?)
          435.1200MHz (?)
[06042009]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
```

```
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon:   145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink  29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972
```

```
Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
Beacons:   29.450 MHz
          435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon 1:  29.352 MHz (intermittent)
Beacon 2:  29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink:     21.260 to 21.300 MHz CW/USB
Downlink:  145.860 to 145.900 MHz CW/USB
```

```
Beacon:    145.860 MHz

Robot:     145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink:   21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon:   29.408 MHz

Robot:    29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-342.S4
WSR 342 Part 4 12/08/2010

AMSAT NEWS SERVICE BULLETIN 342.S4
FROM AMSAT HQ SILVER SPRING, MD, December 08, 2010
TO ALL RADIO AMATEURS
BID: $WSR-342.S4

THE FOLLOWING SATELLITES HAVE RE-ENTERED OR HAVE BEEN RETURNED SAFELY:

CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Re-entered
Re-entered:

Uplink:  1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=56
[09062010]
=====
BEVO-1 (DRAGONSAT-1)
Catalog Number: 35690
```

```
Launch Date: May 19, 2009

Status: Re-entered
Re-entered:

Downlink: 437.325 MHz 9k6 GMSK
          437.325 MHz CW 20wpm
[07312009]
=====
AggieSat2 (DRAGONSAT-2)
Catalog Number: 35690
Launch Date: May 19, 2009

Status: Re-entered
Re-entered:

Downlink: 436.250 MHz 9k6 FHSS
[11112009]
=====
Pollux
Catalog Number: 35693
Launch Date: July 31, 2009

Status: Re-entered
Re-entered:

Callsign: POLLUX-1

Downlink: 145.825MHz 1k2 AX.25
[09062010]
=====
Castor (ANDE-2)
Catalog Number: 35694
Launch Date: July 31, 2009

Status: Re-entered
Re-entered:

Callsign: KD4HBO-1

Downlink: 145.825 MHz 1k2 AX.25
[09062010]
=====
NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: July 28, 2008

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO
```

```
Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[01012009]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink:      145.825 Mhz FM APRS AX25
APRS Uplink:        145.825 MHz FM APRS AX25
Voice/PSK31 Uplink:  28.120 MHz

Packet to Voice ID: RAFT
[06112007]
=====
GENESAT-1
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Re-Entered
Re-entered date: August 8, 2010

Current Mode: /u

Callsign: KE7EGC

Telemetry Beacon Downlink: 437.0695 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[08082010]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Re-Entered
Re-entered: June 18, 2008

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon:             437.2750 MHz CW
```

Callsign: JR8YJT
[01012009]
=====
SO-43 Starshine 3
Catalog Number: 26929
Launch Date: September 30, 2001

Status: Re-Entered
Re-entered: January 21, 2003

Beacon: 145.825Mhz
[02212009]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional

benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at}
amsat.org
NNNN
/EX

```
From -4959129934780236494
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!novia!news-out.readnews.com!transit4.readnews.com!panix!
rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-351 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Fri, 17 Dec 2010 14:35:40 EST
Organization: The Radio Amateur Satellite Corporation
Lines: 1947
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <001501cb9e21$83b92750$8b2b75f0$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1292614541 21824 166.84.1.6 (17 Dec 2010 19:35:41 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Fri, 17 Dec 2010 19:35:41 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news1.google.com rec.radio.amateur.space:419 rec.radio.info:1971
```

This report is organized into four (4) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - deborbited/returned satellites

SB SAT @ AMSAT W8ISS $WSR-351.S1
WSR 351 Part 1 12/17/2010

AMSAT NEWS SERVICE BULLETIN 351.S1
FROM AMSAT HQ SILVER SPRING, MD, December 17, 2010
TO ALL RADIO AMATEURS
BID: $WSR-351.S1

HO-68 HOPE-1 (CAS-1)(XW-1)
Catalog Number: 36122
Launch Date: December 15, 2009
Status: Operational

Callsign:
Broadcast: BJ1SA-11
BBS: BJ1SA-12

Uplinks: 145.8250 MHz FM, PL 67.0 Hz.
145.9250 - 145.9750 MHz SSB/CW
145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
435.7650 - 435.7150 MHz SSB/CW
435.6750 MHz AFSK 1200 BPS

Beacon: 435.7900 MHz CW

Mode and Antenna Polarization:
V: LHCP 2.0dBi max
U: RHCP 3.0dBi max

IARU coordination page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108

For more information about XW-1 (CAS-1):
http://www.camsat.cn
[09062010]
=====
SO-67 SumbandilaSat
Catalog Number: 35870
Launch Date: September 17, 2009

Status: Suspended

Callsign: ZS0SUM

Uplink: 145.875MHz FM tone 233.6 Hz
Downlink: 435.345MHz FM

```
Mode and Antenna Polarization:
V: Linear
U: Linear

For more information about SO-67:
http://www.amsatsa.org.za/
[09062010]
=====
DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008

Status: Operational
Current Mode: Science Mode - Beacon ONLY

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink:   435.530 to 435.570 MHz

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68
[09062010]
=====
VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink:   435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink:   435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW


Indian Beacon:  145.9360 MHZ CW
Dutch Beacon:   145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm
```

To know what transponder is switched on please listen for the beacon
that is active. Each transponder has a different beacon.
[09062010]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Mode:
Voice repeater: V/su
Uplink: 145.920 MHz FM
Downlink: 435.300 MHz FM
Downlink: 2401.200 MHz FM

Telemetry:
Downlink: 435.150MHz 9k6

Analog voice downlink: 435.300 MHz FM
                           435.150 MHz FM
                          2401.200 Mhz FM
Analog voice uplink: 145.860 MHZ FM
                           145.880 MHz USB
                           145.880 MHz FM
                           145.920 MHz FM
                           145.920 MHz FM - 67 Hz PL tone burst
                          1268.705 MHz FM
Digital Downlinks: 435.150 MHz FM 38k4 PBP, 1 watt output
                           435.150 MHz FM 9k6 Pacsat Broadcast Protocol
                          2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Pacsat Broadcast Protocol
                          1268.705 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[11242010]
=====

SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz. The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10 minute timer.
[09062010]

=====

AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[09062010]

=====

AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational

Current Mode: Alternating between Mode A and B every 24 hours

```
Uplink:   145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink:  29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons:   29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
[09062010]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - OFF
                      Voice -       V/v
                      BBS -         OFF
                      APRS -        OFF
                      SSTV -        OFF


Expedition 26 Crew:
Commander:                Scott Kelly
Flight Engineer:          Alexander Kaleri      U8MIR
Flight Engineer:          Oleg Skripochka       RN3FU
Flight Engineer:          Dmitry Kondratyev
Flight Engineer:          Catherine Coleman     KC5ZTH
Flight Engineer:          Paolo Nespoli         IZ0JPA

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink:   145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink:     145.200 MHz FM
Region 2/3 voice uplink:   144.490 MHz FM
Worldwide downlink:        145.800 MHz FM

Crossband Repeater:
Repeater Uplinks:         1269.650 MHz FM
                           437.800 MHz FM
                           145.990 MHz FM - 67.0 PL (Kenwood)
```

Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time line is NOT translated from Russian and posted.
[12172010]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-351.S2
WSR 351 Part 2 12/17/2010

AMSAT NEWS SERVICE BULLETIN 351.S2
FROM AMSAT HQ SILVER SPRING, MD, December 17, 2010
TO ALL RADIO AMATEURS
BID: $WSR-351.S2

O/OREOS
Catalog Number: 37224
Launch Date: November 20, 2010

Status: On Orbit

Uplink:
Downlink: 437.035 MHZ AX.25

Beacon:

Callsign:

URL: http://www.ooreos.org/
[11302010]

```
=====
Rax-1 Radio Aurora Explorer
Catalog Number: 37223
Launch Date: November 19. 2010

Status: On Orbit

Uplink:
Downlink: 437.505 MHz 9k6 GMSK

Beacon:

Callsign: RAX-1

URL: http://rax.engin.umich.edu/
[11302010]
=====
Fastrac-1 Sara Lily
Catalog Number:
Launch Date: November 19, 2010

Status: On orbit

Uplink 1: 145.980 MHz 1k2 baud
Uplink 2: 145.825 MHz 1k2 baud
Downlink: 437.345 MHz 1k2 and 8k6 baud

Beacon:   437.435 MHz 1k2 AX.25

Callsign: Fast1

URL: http://fastrac.ae.utexas.edu/index.php
[11242010]
=====
Fastrac-2 Emma
Catalog Number:
Launch Date: November 19, 2010

Status: On Orbit

Uplink 1: 435.025 MHz 1k2 baud
Uplink 2: 437.435 MHz 9k6 baud
Downlink: 145.825 MHz

Beacon:   145.825 MHz 1k2 AX.25

Callsign: Fast2

URL: http://fastrac.ae.utexas.edu/index.php
[11242010]
=====
StudSat
Catalog Number: 36796
```

```
Launch Date: July 12, 2010
Status: On Orbit

Uplink:   437.505MHz, 9600bps FSK
Downlink: 437.505MHz, 9600bps FSK
Beacon  : 437.505MHz,   20bps ASK
[08062010]
=====
TIsat-1
Catalog Number: 36799
Launch Date: July 12, 2010

Status: On orbit

Callsign: HB9DE

Uplink:   145.980MHz FM, AFSK
Downlink: 437.305MHz FM, AFSK
Beacon:   437.305MHz CW
[08062010]
=====
HO-68 HOPE-1 (CAS-1)(XW-1)
Catalog Number: 36122
Launch Date: December 15, 2009

Status: Operational

Callsign:
Broadcast:    BJ1SA-11
BBS:         BJ1SA-12

Uplinks:   145.8250 MHz FM, PL 67.0 Hz.
           145.9250 - 145.9750 MHz SSB/CW
           145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
           435.7650 - 435.7150 MHz SSB/CW
           435.6750 MHz AFSK 1200 BPS

Beacon:    435.7900 MHz CW

IARU coordination page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108

For more information about XW-1 (CAS-1):
http://www.camsat.cn
[09062010]
=====
SwissCube
Catalog Number: 35932
Launch Date: September 23, 2009

Status: Operational
```

```
Callsign: HB9EG

Beacon(100mw): 437.5050MHz CW
Beacon(1w):    437.5050MHz FSK 1k2bps
[04222010]
=====
UWE-2
Catalog Number: 35934
Launch Date: September 23, 2009

Status: In Orbit

Beacon(500mw): 437.3850 MHz AFSK 1k2bps
               437.3850 MHz FSK 9k6bps
[1112009]
=====
ITUpsAT1
Catalog Number: 35935
Launch Date: September 23, 2009

Status: Operational

Beacon(100mw): 437.325MHz CW
Beacon(1w): 437.325MHz 19k2bps
[11112009]
=====
BEESAT
Catalog Number: 35933
Launch Date: September 23, 2009

Status: Operational

Callsign: DP0BEE

Beacon(100mw): 436.000MHz CW
Beacon(500mw): 436.000MHz GMSK 4k8bps
Beacon(500mw): 436.000MHz GMSK 9k6bps
[04222010]
=====
CP-6
Catalog Number: 35003
Launch Date: May 19, 2009

Status: Operational

Downlink: 437.365 MHz 1k2 AFSK
[09062010]
=====
HAWKSAT 1
Catalog number: 35004
Launch Date: May 19, 2009

Status: operational
```

```
Downlink: 437.345 MHz ?
[09062010]
=====
Pharmasat
Catalog Number: 35002
Launch Date: May 19, 2009
Status: Operational

Downlink: 437.465 MHz 1k2 AFSK
[09062010]
=====
ANUSAT
Catalog Number: 34808
Launch Date: April 20, 2009

Status: ?

Downlink:  435.000 MHz
Uplink:    145.800 MHz

Telemetry: 137.400 MHz
[09062010]
=====
SOHLA-1 (ASTRO TECH.)
Catalog Number: 33496
Launch Date: January 23, 2009

Status: Operational

Proposed Frequencies and Modes:
Downlink: 437.505 MHz AFSK/CW
Beacon:   437.505 MHz AFSK/CW

Callsign:

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=101
[09062010]
=====
KAGAYAKI (Solan Co.)
Catalog Number: 33495
Launch Date: January 23, 2009

Status: In Orbit

Downlink: 437.375 MHZ    FSK9k6/CW
Beacon:   437.375 MHz    FSK9k6/CW

IARU coordination status page:

AMSAT-NA webpage:
```

```
[09062010]
=====
STARS (Kagawa Univ.) (Twin Satellites)
Catalog Number: 33498
Launch Date: January 23, 2009

Status: Operational ?

Downlinks: 437.485 MHz FM/CW
           437.465 MHz FM/CW
Beacons:   437.305 MHz FM/CW
           437.275 MHz FM/CW

Callsigns: JR5YBN
           JR5YBO

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=99

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=121&retURL
=/satellites/status.php
[09062010]
=====
KKS-1 (Tokyo MCIT)
Catalog Number: 33499
Launch Date: January 23, 2009

Status: Operational

Downlink:  437.455 MHz AFSK/CW
Beacon:    437.385 MHz AFSK/CW

Callsign: JQ1YYY

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=107

AMSAT-NA webapge:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=120&retURL
=/satellites/status.php
[09062010]
=====
PRISM (Tokyo Univ.)
Catalog Number: 33493
Launch Date: January 23, 2009

Status: Operational ?

Downlink: 437.425 MHz AFSK/GMSK/CW
Beacon:   437.250 MHz AFSK/GMSK/CW

Callsign: JQ1YCX
```

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=97

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=119&retURL=/satellites/status.php
[09062010]
=====
RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number: 32953
Launch Date: May 23, 2008

Status: Operational

Curent Modes: Telemetry
Audio
Images

Downlinks: 435.315 MHz
435.215 MHz

AMSAT-NA website:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=115&retURL=/satellites/status.php

Official website:
http://www.npopm.com/?cid=leoca&caid=43
[09062010]
=====
CanX-2
Catalog number: 32790
Launch Date: April 28, 2008

Status: Operational in range of ground station only

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[09062010]
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.425 MHz 1k2 baud packet

For the latest project status update please visit the AAUSAT-II web page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[09062010]
=====
CO-65 CUTE-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008

Status: Digipeater

```
Downlink:  437.475 MHz 9k6 Packet
Uplink:   1267.600 Mhz
```

Telemetry Beacon:
Downlink: 437.2750 MHz CW

For the latest project status update please visit the Cute-1.7+APD II web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78

Command Station blog website:
http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=112&retURL=/satellites/status.php
[09062010]
=====
Compass-1
Catalog number: 32787
Launch Date: April 28, 2008

Status: Operational

Current Mode: 4k8 MSK packet

```
Uplink:   145.980 MHz FM
Downlink: 437.275 Mhz CW
          437.405 MHz Packet
```

For the latest project status update please visit the Compass 1 web page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52

AMSAT-NA webpage:

http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=114&retURL
=/satellites/status.php
[09062010]
=====
CO-66 Seeds II
Catalog number: 32791
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.485 MHz

Callsign: JQ1YGU

For the latest project status update please visit the Seeds 2 web
page: http://cubesat.aero.cst.nihon-u.ac.jp/english/seeds_2_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=113&retURL
=/satellites/status.php
[09062010]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=94&retURL=
/satellites/status.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=72
[09062010]
=====
CP3
Catalog Number: 31129
Launch Date: April 17,2007

Status: Operational

Current Mode: /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[09062010]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon: 437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/xivpicte.htm
[09062010]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003

Status: ?????

Current Mode: /u

Beacon: 436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=96&retURL=/satellites/status.php

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[09062010]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Mode:
Voice repeater: V/su

Uplink: 145.920 MHz FM
Downlink: 435.300 MHz FM
Downlink: 2401.200 MHz FM

Telemetry:
Downlink: 435.150MHz 9k6

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.860 MHZ FM
145.880 MHz USB
145.880 MHz FM
145.920 MHz FM
145.920 MHz FM - 67 Hz PL tone burst
1268.700 MHz FM
Digital Downlinks: 435.150 MHz FM 38k4 PBP, 1 watt output
435.150 MHz FM 9k6 Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Pacsat Broadcast Protocol
1268.708 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[12172010]
=====
QuakeSat
Catalog Number: 27845
Launch Date: June 30, 2003

Status: Telemetry only

Current Mode: 9600 baud data packet

Mode U packet
Downlink: 436.675 MHz 9k6 BPS

Quakesat webpage:

```
http://www.quakefinder.com/services/quakesat-ssite/
[10042010]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=69&retURL
=/satellites/status.php
[09062010]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Telemetry only

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink:        144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[09062010]
=====
RS-22 RADIO SPORT 22
Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only

Current Mode:  /u

CW Beacon - 435.352 MHz
            145.818 MHz

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=76&retURL
```

```
=/satellites/status.php
[09062010]
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990

Status: CW Beacon only

Uplinks:          145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink:      437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[09062010]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984

Status: Operational

Current Mode:  /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon:          435.025 MHz
Mode-S Beacon:     2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[11062010]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - OFF
                      Voice -       V/v
```

BBS - OFF
APRS - OFF
SSTV - OFF

Expedition 26 Crew:
Commander: Scott Kelly
Flight Engineer: Alexander Kaleri U8MIR
Flight Engineer: Oleg Skripochka RN3FU
Flight Engineer: Dmitry Kondratyev
Flight Engineer: Catherine Coleman KC5ZTH
Flight Engineer: Paolo Nespoli IZ0JPA

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time

line is NOT translated from Russian and posted.
[121702010]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-351.S3
WSR 351 Part 3 12/17/2010

AMSAT NEWS SERVICE BULLETIN 351.S3
FROM AMSAT HQ SILVER SPRING, MD, December 17, 2010
TO ALL RADIO AMATEURS
BID: $WSR-351.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

CP4
Catalog Number: 31132
Launch Date: April 17, 2007

Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon: 437.325 MHz CW

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=79
[09062010]
=====
LIBERTAD-1
Catalog Number: 31128
Launch Date: April 17, 2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink: 145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[09062010]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: Non-Operational

Current Mode: V/v

```
Uplink/Downlink: 145.825 Mhz FM
Voice Recorder:  145.825 Mhz FM
[09062010]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency:  437.305
                             2407.250

Official Website: http://www.ncube.no
[09062010]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink:         437.250 MHz FM 67Hz CTCSS
Voice Downlink:      2401.835 MHz FM
Packet Up/Downlink:   437.250 MHz 9k6 packet
Packet Downlink      2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[09062010]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non-Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[09062010]
=====
CANX-1
Catalog Number: 27847
Launch Date: June 30, 2003

Status: Non-Operational

Downlink: 437.8800 MHz AFSK 1k2bps
[06052009]
=====
DTUSAT
```

Catalog Number: 27842
Launch Date: June 30, 2003

Status: Non-Operational

Current Mode: 2k4 AFSK Packet last reported

Downlink: 437.475MHz

Officail webpage: http://dtusat1.dtusat.dtu.dk/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=101&retURL=satellites/all_oscars.php
[02212009]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

```
Uplink:   435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)
```

Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Telemetry only

```
Uplinks:   145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink:  437.325 MHz
```

```
Broadcast callsign: MYSAT3-11
BBS:                MYSAT3-12
```

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[03302009]
=====

NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks

V-band: 145.840 - 145.990 MHz CW/LSB
U-band: 435.550 - 435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks

S2-band: 2401.225 - 2401.475 MHz CW/USB
K-band: 24048.010 - 24048.060 MHz CW/USB
Beacon: 2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)

BEACON	General Beacon(GB)	Middle Beacon(MB)	Engineering Beacon(EB)
2 m	none	145.898 MHz	none
70cm	435.438 MHz	435.588 MHz	435.838 MHz
13cm(1)	2400.188 MHz	2400.338 MHz	2400.588 MHz
13cm(2)	2401.173 MHz	2401.323 MHz	2401.573 MHz
3cm	10450.975 MHz	10451.125 MHz	10451.375 MHz
1.5cm	24047.885 MHz	24048.035 MHz	24048.285 MHz

[07162007]
=====
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT

Catalog Number: 25636
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz
145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Non-Operational

Current Modes:
Telemetry : /u

Downlink: 435.225 MHz FM (9600-baud FSK)
435.325 Mhz - Not Available - temperature problems

```
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign:       4XTECH-12

More information of GO-32 can be found at:
http://asri.technion.ac.il/techsat/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=14&retURL
=/satellites/status.php
[07172010]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink:   145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
MO-30 UNAMSAT-2
Catalog Number: 24305
Launch Date: September 5, 1996

Status: Non-operational

Downlink:       435.1380 MHz AFSK 1200 BPS
Downlink:       435.2060 MHz AFSK 1200 BPS
Uplink:         145.8150 MHz AFSK 1200 BPS
Uplink:         145.8350 MHz AFSK 1200 BPS
Uplink:         145.8550 MHz AFSK 1200 BPS
Uplink:         145.8750 MHz AFSK 1200 BPS
[06042009]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Non-operational
Current Mode: V/u (Mode JA)

Voice/CW (Mode JA)
```

Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage:
http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's
CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/
fo29cwts.htm
[11062010]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Non-operational

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012009]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

```
Current Mode:

Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
AO-24 ARSENE
Catalog Number: 22654
Launch Date: May 13, 1993

Status: Non-operational

Uplink:    435.0625 MHz FM 1k2bps AFSK
           435.1125 MHz FM 1k2bps AFSK
           435.1375 MHz FM 1k2bps AFSK
Downlink:  145.9750 MHz FM 1k2bps AFSK
          2446.5025 MHz FM 1k2bps AFSK

Beacon:    2446.4700 MHz CW

Broadcast callsign:
BBS:
[12162009]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational
```

```
Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HL01-11
BBS: HL01-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
```

```
[01152007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
[05012006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: non-operational

Current Mode:  V/u

Uplink:         145.900 MHz FM 1200-baud Manchester FSK (reserved)
                145.920 MHz FM VOICE
                145.940 MHz FM 1200-baud Manchester FSK (reserved)
                145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink:       437.026 MHz USB VOICE
                (1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[07242009]
=====
UO-15 UoSAT-4
Catalog Number: 20438
Launch Date: January 22, 1990
```

```
Status: Non-operational

Uplink: ?
Downlink: 435.1250MHz (?)
          435.1200MHz (?)
[06042009]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon:   145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
```

```
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink  29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
Beacons:   29.450 MHz
          435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
```

=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB

Beacon 1: 29.352 MHz (intermittent)
Beacon 2: 29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB

Beacon: 145.860 MHz

Robot: 145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-351.S4
WSR 351 Part 4 12/17/2010

AMSAT NEWS SERVICE BULLETIN 351.S4
FROM AMSAT HQ SILVER SPRING, MD, December 17, 2010
TO ALL RADIO AMATEURS
BID: $WSR-351.S4

```
THE FOLLOWING SATELLITES HAVE RE-ENTERED OR HAVE BEEN RETURNED SAFELY:

CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Re-entered
Re-entered:

Uplink:  1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=56
[09062010]
=====
BEVO-1 (DRAGONSAT-1)
Catalog Number: 35690
Launch Date: May 19, 2009

Status: Re-entered
Re-entered:

Downlink: 437.325 MHz 9k6 GMSK
          437.325 MHz CW 20wpm
[07312009]
=====
AggieSat2 (DRAGONSAT-2)
Catalog Number: 35690
Launch Date: May 19, 2009

Status: Re-entered
Re-entered:

Downlink: 436.250 MHz 9k6 FHSS
[11112009]
=====
Pollux
Catalog Number: 35693
Launch Date: July 31, 2009

Status: Re-entered
Re-entered:

Callsign: POLLUX-1
```

Downlink: 145.825MHz 1k2 AX.25
[09062010]
=====
Castor (ANDE-2)
Catalog Number: 35694
Launch Date: July 31, 2009

Status: Re-entered
Re-entered:

Callsign: KD4HBO-1

Downlink: 145.825 MHz 1k2 AX.25
[09062010]
=====
NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: July 28, 2008

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[01012009]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink: 145.825 Mhz FM APRS AX25
APRS Uplink: 145.825 MHz FM APRS AX25
Voice/PSK31 Uplink: 28.120 MHz

Packet to Voice ID: RAFT
[06112007]
=====

GENESAT-1
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Re-Entered
Re-entered date: August 8, 2010

Current Mode: /u

Callsign: KE7EGC

Telemetry Beacon Downlink: 437.0695 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[08082010]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Re-Entered
Re-entered: June 18, 2008

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon: 437.2750 MHz CW

Callsign: JR8YJT
[01012009]
=====
SO-43 Starshine 3
Catalog Number: 26929
Launch Date: September 30, 2001

Status: Re-Entered
Re-entered: January 21, 2003

Beacon: 145.825Mhz
[02212009]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600

Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at}amsat.org
NNNN
/EX

```
From -1526996185749182706
X-Google-Thread: a4a23d5f63,e3ade62f3d613f53,start
X-Google-Attributes: gida4a23d5f63,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news2.google.com!newsfeed2.dallas1.level3.net!
news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-353 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Mon, 20 Dec 2010 10:00:52 EST
```

Organization: The Radio Amateur Satellite Corporation
Lines: 385
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000d01cba056$b1cc50e0$1564f2a0$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1292857253 4935 166.84.1.6 (20 Dec 2010 15:00:53 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Mon, 20 Dec 2010 15:00:53 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
x-cr-hashedpuzzle: BN9H BPqp CJUE CTRh DdxP EAcC Ef6M E6aO FgtE H1Ow H5TN Ic6U I65I I9ci JcQO Jgk1;1;cgBlAGMALQByAGEAZABpAG8ALQBpAG4AZgBvAEAAcABhAG4AaQB4AC4AYwBvAG0A;Sosha1_v1;7;{5E590E2F-73B4-452C-B500-8FD2883F2C75};awA5AGoAawBtAEAAYwBvAG0AYwBhAHMAdAAuAG4AZQB0AA==;Mon, 20 Dec 2010 15:00:47 GMT;QQBOAFMALQAzADUAMwAgAEEATQBTAEEAVAAgAE4AZQB3AHMAIABTAGUAcgB2AGkAYwBlACAAVwBlAGUAawBsAHkAIABCAHUAbABsAGUAdABpAG4AcwA=
x-cr-puzzleid: {5E590E2F-73B4-452C-B500-8FD2883F2C75}
Xref: g2news2.google.com rec.radio.amateur.space:445 rec.radio.info:2054

AMSAT NEWS SERVICE
ANS-353

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:

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* AMSAT-UK FUNcube Needs Help
* ARISS Status December 13, 2010
* Satellite Shorts
* Thanks for your support

SB SAT @ AMSAT $ANS-353.01
Straight Key Night

AMSAT News Service Bulletin 353.01
>From AMSAT HQ SILVER SPRING, MD.
December 19, 2010
To All RADIO AMATEURS
BID: $ANS-353.01

You are cordially invited to participate in Straight Key Night on OSCAR 2011, conducted by AMSAT for radio amateurs throughout the world.

This year's event is dedicated to the memory of Dick Peacock, W2GFF, who died in 2010 aged 91. Dick was an active satellite operator in the 1970s and 1980s, mostly on CW and usually with a straight key. He was also active on 50 MHz and the HF bands, and could always be counted on for a kind word and a friendly QSO.

There are no rules, no scoring and no logs required. Just operate CW on any OSCAR satellite, using a straight hand key, from 0000 UTC to 2400 UTC on 1 January 2011, working as many SKN stations as you can.

In keeping with the friendly nature of this event, each participant is asked to nominate one of the operators worked for "Best Fist." It is not necessary that your nominee have the best fist of anyone you heard, just of those you worked. Please send your nomination to W2RS via email at w2rs@amsat.org.

Those nominated will be recognized in an ANS bulletin to be published in early February, and in The AMSAT Journal.

[ANS thanks Ray, W2RS for the above information]

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SB SAT @ AMSAT $ANS-353.02
This month's satellite awards

AMSAT News Service Bulletin 353.02
>From AMSAT HQ SILVER SPRING, MD.
December 19, 2010
To All RADIO AMATEURS
BID: $ANS-353.02

Here are the awards that I have processed over the last month. This will be the last posting for 2010.

The following have entered into the Satellite Communicators Club for making their first satellite QSO.

Alan Murray, Jr., N1ZWL
Richard Lewis, KG6ZVC

The following have earned the AMSAT Communications Achievement Award.

Boris Lanca, 9A2GA #525
Paul Gagnon, N6MA #526
Rick Tejera, K7TEJ #527
Jim Bennett, KE4KOL #528
Tom Deeble, KA6SIP #529
Glenn Barr, WB0KFC #530

The following have earned the AMSAT Sexagesimal Award

Paul Gagnon, N6MA #158

The following have earned the South Africa Satellite Communications Achievement award

Nick Kucij, KB1RVT #US157
Boris Lanca, 9A2GA #US158
Rick Tejera, K7TEJ #US159
Jim Bennett, KE4KOL #US160
Tom Deeble, KA6SIP #US161
Glenn Barr, WB0KFC #US162

To see all the awards visit http://www.amsat.org

Bruce Paige, KK5DO

[ANS thanks Bruce, KK5DO, for the above information]

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SB SAT @ AMSAT $ANS-353.03
XW-1 1 year anniversary

AMSAT News Service Bulletin 353.03
>From AMSAT HQ SILVER SPRING, MD.
December 19, 2010
To All RADIO AMATEURS
BID: $ANS-353.03

HOPE-OSCAR 68 HO-68 Commemorates First Anniversary

This week AMSAT China noted the first anniversary of XW-1, also known as Hope-Oscar 68 HO-68 with an announcement from Michael

Chen, BD5RV/4 at AMSAT-China.

AMSAT President Barry Baines, WD4ASW remarked that HO-68 was a significant milestone for both amateur radio and AMSAT-China. Barry wrote, "We are very excited to see that HO-68 continues to operate in good health and that a new member of the AMSAT International family has established itself. Again, congratulations on a placing HO-68 in service and best wishes for the New Year."

>From India, Secretary of the Upagrah Amateur Radio Club at the ISRO Satellite Centre, Mani, VU2WMY wrote, "Wishing XW 1 HO-68 'A Happy Birthday'. Our good wishes and greetings to HO-68 for a very long and healthy life to serve the Ham community World wide."

Rick, K7TEJ said, "Many thanks thanks to you and Allan and the rest of your team for your efforts to make this great bird available to us. May HO-68 have a long life!"

>From Alaska, Dale KL7XJ commented, "A very Happy Birthday to XW1, HO-68. A very good satellite to work!"

Roland, PY4ZBZ reported good signals from HO-68 as he worked PY1AT, PY5LF and UT1FG/MM on his sea voyage in grid FF36.

The latest HO-68 information and operating schedule can be found on-line at: http://www.camsat.cn/

[ANS thanks BD5RV/4, WD4ASW, VU2WMY, K7TEJ, KL7XJ, and PY4ZBZ for the above information]

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SB SAT @ AMSAT $ANS-353.04
AMSAT-UK FUNcube Needs Help

AMSAT News Service Bulletin 353.04
>From AMSAT HQ SILVER SPRING, MD.
December 19, 2010
To All RADIO AMATEURS
BID: $ANS-353.04

AMSAT-UK is looking for people in the educational field to help develop the educational outreach part of the FUNcube satellite project.

AMSAT-UK's FUNcube is an educational satellite project with the goal of enthusing and educating young people about radio, space, physics and electronics. Additionally it features a 435 to 145 MHz Linear Transponder for SSB/CW operation for use outside school hours.

It will support the many existing educational Science, Technology, Engineering and Maths (STEM) initiatives including GB4FUN.

The target audience consists of school pupils and young people generally, FUNcube will feature a 145 MHz telemetry beacon that will provide a strong signal for the pupils to receive.

A simple FUNcube dongle SDR receiver has also been developed. This will connect to the USB port of a laptop to display telemetry and messages in an interesting way.

The project commenced in October 2009 and it is anticipated that the satellite will be launched before the end of 2011. More information can be found at http://www.funcube.org.uk/

As the technical work on the satellite itself is now well underway, AMSAT-UK is now looking to develop the educational outreach part of the project. This will include the design and contents of the "ground station" laptop display, the best method of providing the information so that it relates to current curricula, and all the supporting information that will be needed by the teachers. As they have little current educational experience Amsat-UK need additional professional advice as to how to carry it forward.

The FUNcube website now has details of the planned educational aspects of the project. See http://www.funcube.org.uk (see the "education outreach" link).

If you are in the educational field and have experience in curriculum matters then please consider helping AMSAT-UK with this.

In the first instance please contact Richard G3RWL for further information via e-mail: g3rwl at amsat.org

The latest FUNcube information can be found on-line at these pages:

FUNcube website
http://www.FUNcube.org.uk/

FUNcube SDR Dongle
http://www.FUNcubeDongle.com/

FUNcube Yahoo Group
http://groups.yahoo.com/group/FUNcube/

[ANS thanks AMSAT-UK for the above information]

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SB SAT @ AMSAT $ANS-353.05
ARISS Status December 13, 2010

AMSAT News Service Bulletin 353.05
>From AMSAT HQ SILVER SPRING, MD.

December 19, 2010
To All RADIO AMATEURS
BID: $ANS-353.05

1. AMSAT Covers ARISS Anniversary

The AMSAT (Radio Amateur Satellite Corporation) News Service bulletin (ANS-346) included an article on the tenth anniversary of ARISS.
See: http://amsat.org/pipermail/ans/2010/000468.html

2. Amateur Radio Newsline Reports on ARISS

On December 10, the Amateur Radio Newsline Report 1739 ran two ARISS news items under its heading Ham Radio in Space. Covering ten years of contacts is the story, "ARISS Celebrates its 10th Anniversary." "ARISSat One Enroute to Moscow" talks about the satellite on its way to Russia for testing and launch.
See: ftp://ftp.arnewsline.org/quincy/News/news.txt

3. Astronaut Training Status

Astronaut Tom Marshburn, KE5HOC is scheduled for an ARISS introduction class on December 13. Marshburn is slated to fly with Expedition 34 in November 2012.

[ANS thanks Carol,KB3LKI, for the above information]

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SB SAT @ AMSAT $ANS-353.06
Satellite Shorts

AMSAT News Service Bulletin 353.06
>From AMSAT HQ SILVER SPRING, MD.
December 19, 2010
To All RADIO AMATEURS
BID: $ANS-353.06

+ AMSAT's Keeper of the Keps, Ray Hoad WA5QGD advised that recent Cubesats launched from Kodiak have been added to the AMSAT KEP distribution:
  RAX - Cat # 37223
  OOREOS - Cat # 37224
  FASTSAT - Cat # 37225
  FAST1 and FAST2 - Cat # 37227 (FAST1 and FAST2 have the same KEPs)

  For some reason, yet unknown, Spacetrack is not publishing the KEPs for the above satellites. Special thanks to Drew Glasbrenner (KO4MA) for helping find the location of the KEPs for the above satellites.

+ Boris, UA0QJ (Asiatic Russia) in grid PP42TA has been reported to be active on AO7 mode B. He has been operating CW so far.

- Listen for Duane, K5VGU operating portable on the satellites from Kentucky grid EM67 mostly and possibly the Kentucky piece of EM68. Duane will be in the area December 22 through December 29.

- Listen for Daniel, VO1DZX operating portable VO2 from Labrador (FO62) until December 31. Daniel reports that bad operating conditions and lack of transportation will probably keep him from working any additional grids. The best time to find him will be on the late afternoon/ early evening AO51 passes as long as he can get on. Weekends will be a good time to catch him as well.

- Congratulations to AMSAT's Samudra N3RDX on his selection to present a technical paper at the AIAA Aerospace Sciences Meeting in January 2011 in Orlando, Florida. His paper is: "A Broadband Multi-hop Network for Earth-Mars Communication using Multi-purpose Interplanetary Relay Satellites and Linear-Circular Commutating Chain Topology".

- The next Hudson Valley Satcom Net will be on Thursday, December 23 at 8:00PM EST (UTC - 5). The net meets on the Mt. Beacon 146.970 MHZ repeater and also on Echolink N2EYH-L node. More information is on-line at http://www.hvsatcom.org.

- The December 10 edition of the UK Metro newspaper carried an article titled 'Celebrating great British science' which featured the AMSAT-UK FUNcube satellite. Read the article on page 25 of the Online edition of the Metro newspaper at http://e-edition.metro.co.uk/2010/12/10/?p=25

- Video of the spectacular night launch of the Soyuz TMA-20 spacecraft with Expedition 26 crew members NASA astronaut Cady Coleman, Russian cosmonaut Dmitry Kondratyev, and European Space Agency astronaut Paolo Nespoli can be watched at: http://tinyurl.com/2be6w6k (UniverseToday.com)

- More images, details on SpaceX's Dragon Flight are posted on-line at: http://tinyurl.com/34dj7gt (UniverseToday.com)

- Northern winter is beginning in a special way. On December 21, the winter solstice, a lunar eclipse will be visible across all of North America. Full story at: http://tinyurl.com/285grxy (nasa.gov)

[ANS thanks everyone for the above information]

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SB SAT @ AMSAT $ANS-353.07
Thanks for your support

AMSAT News Service Bulletin 353.07
>From AMSAT HQ SILVER SPRING, MD.
December 19, 2010
To All RADIO AMATEURS
BID: $ANS-353.07

Thank-You For Your Support - ARISSat-1 and FOX PayPal Widget Fundraising

AMSAT-NA VP Operations, Drew Glasbrenner, KO4MA noted this week that, "We are just about to cross the $1000 mark on our PayPal fundraiser, and along with the $710 raised from the Facebook campaign, we are making a dent in recovering the funds spent on ARISSat-1 and those funds that will be spent on FOX."

Drew continued, "I want to thank those that donated, and those that took the time to add the widget to their webpages and QRZ profiles, and especially recognize two members who have excelled in creating exposure for our campaign. John Papay, K8YSE and Clint Bradford, K6LCS have pulled away from the pack in the number and amount of donations resulting from their copies of the widget, with $290 dollars raised between them. Gentlemen, thank you!"

Beginning with the $1250 mark, we will be randomly picking a donor from every $250 increment to receive an item from the AMSAT store. We currently have two different hats, a nice luggage tag, or a desktop thermometer/clock set to choose from, all bearing the AMSAT name and logo. Drew hopes to announce our first recipient soon!

In conclusion, Drew writes, "Thanks again, and if you'd like to donate to the campaign or share the widget to your own website, please visit http://www.amsat.org. The widget is on the front page below the ARISSat-1 news, and you can click on "Give" to donate, or "add to site" to receive the HTML code, or "supporters" to scroll through the statistics. I hope to soon see more familiar names scrolling across the widget soon, showing your support for AMSAT's next two satellites."

Donations, memberships, and store purchases may also be made through the AMSAT store on the website, or by calling Martha at 1 888 322 6728.

[ANS thanks AMSAT-NA VP Operations, Drew Glasbrenner, KO4MA for the above information]

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In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office. Remember to track Santa bringing you all the Happy Christmas Wishes from all the AMSAT volunteers giving their Time so willingly.

73,
This week's ANS Editor,
Dee Interdonato, NB2F

From 2953639298305019263

X-Google-Thread: 10e8ad,4612e2191e1b15dd,start
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!postnews.google.com!e16g2000pri.googlegroups.com!not-for-mail
From: Xama <xamalek@yahoo.com>
Newsgroups: rec.radio.amateur.space
Subject: Automatic Doppler Compensation (BPSK setup)
Date: Mon, 20 Dec 2010 15:39:06 -0800 (PST)
Organization: http://groups.google.com
Lines: 14
Message-ID: <d59ae88e-be43-4e4e-b64c-0db5ce5f5935@e16g2000pri.googlegroups.com>
NNTP-Posting-Host: 128.149.8.148
Mime-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
X-Trace: posting.google.com 1292888346 15528 127.0.0.1 (20 Dec 2010 23:39:06 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Mon, 20 Dec 2010 23:39:06 +0000 (UTC)
Complaints-To: groups-abuse@google.com
Injection-Info: e16g2000pri.googlegroups.com; posting-host=128.149.8.148; posting-account=fPjAugoAAAB9YjXsHuTIwahcooyChin-
User-Agent: G2/1.0
X-HTTP-UserAgent: Mozilla/5.0 (Macintosh; U; Intel Mac OS X 10.5; en-US;
 rv:1.9.2.13) Gecko/20101203 Firefox/3.6.13 GTB7.1,gzip(gfe)
Xref: g2news1.google.com rec.radio.amateur.space:421

Hello,

I am interested in satellite communication. I would like to ask a few questions.

* What radios provide Automatic Doppler Compensation?

* What (ground) radios provide this as well as 9600 BPSK modulation?

* What are the general methods for Automatic Doppler Compensation, e.g. are radios software tunable perhaps through an RS-XXX port ???

Regards,
Xama

From 3300064141443836179
X-Google-Thread: 10e8ad,4612e2191e1b15dd
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!goblin2!goblin.stu.neva.ru!newsfeed.kpn.net!pfeed09.wxs.nl!eternal-september.org!feeder.eternal-september.org!.POSTED!not-for-mail
From: Alan WA4SCA <WA4SCA@YAHOO.COM>
Newsgroups: rec.radio.amateur.space

Subject: Re: Automatic Doppler Compensation (BPSK setup)
Date: Tue, 21 Dec 2010 06:05:35 -0600
Organization: AMSAT-NA
Lines: 16
Message-ID: <vl51h6ppbicq2srjrlf92o2madk27mbptj@4ax.com>
References: <d59ae88e-be43-4e4e-b64c-0db5ce5f5935@e16g2000pri.googlegroups.com>
Reply-To: ALANBIDDLE70@YAHOO.COM
Mime-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Injection-Info: mx02.eternal-september.org; posting-host="K1i/zVGkXyW85CnQ0pVSxQ";
logging-data="15200"; mail-complaints-to="abuse@eternal-september.org";
posting-account="U2FsdGVkX18RUtoc/6sHvBc9M9OibYGO5wPzcXZgWyg="
X-Newsreader: Forte Agent 6.00/32.1186
Cancel-Lock: sha1:pBcq1T3bg+2SgBrISuFGB70ocdc=
Xref: g2news1.google.com rec.radio.amateur.space:422

Right now the Icom 910, and presumably the 9100, will do Doppler correction for 9600 baud. There are a few telemetry programs, little used now, which would do Doppler correction through the microphone up/down buttons. It looks as if the Flex-VU5K will have some sort of function, though that is not definite.

Doppler correction is normally done with external software through the CAT port. There are several program which do this with varying levels of sophistication. One of the most popular for Windows is SATPC32, and for the Mac, MacDoppler. There is at least one program for Linux, PREDICT.

--
Alan
WA4SCA

From 3744209379288932638
X-Google-Thread: 10e8ad,4612e2191e1b15dd
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII
Path: g2news2.google.com!postnews.google.com!21g2000prv.googlegroups.com!not-for-mail
From: Xama <xamalek@yahoo.com>
Newsgroups: rec.radio.amateur.space
Subject: Re: Automatic Doppler Compensation (BPSK setup)
Date: Tue, 21 Dec 2010 10:25:40 -0800 (PST)
Organization: http://groups.google.com
Lines: 46
Message-ID: <bf05ebe4-45f6-4e77-b423-55c58b962f8d@21g2000prv.googlegroups.com>
References: <d59ae88e-be43-4e4e-b64c-0db5ce5f5935@e16g2000pri.googlegroups.com>
<vl51h6ppbicq2srjrlf92o2madk27mbptj@4ax.com>
NNTP-Posting-Host: 99.8.24.67
Mime-Version: 1.0

Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: quoted-printable
X-Trace: posting.google.com 1292955943 26525 127.0.0.1 (21 Dec 2010 18:25:43 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Tue, 21 Dec 2010 18:25:43 +0000 (UTC)
Complaints-To: groups-abuse@google.com
Injection-Info: 21g2000prv.googlegroups.com; posting-host=99.8.24.67; posting-account=fPjAugoAAAB9YjXsHuTIwahcooyChin-
User-Agent: G2/1.0
X-HTTP-UserAgent: Mozilla/5.0 (Macintosh; U; Intel Mac OS X 10.5; en-US;
 rv:1.9.2.13) Gecko/20101203 Firefox/3.6.13 GTB7.1,gzip(gfe)
Xref: g2news2.google.com rec.radio.amateur.space:448

On Dec 21, 4:05=A0am, Alan WA4SCA <WA4...@YAHOO.COM> wrote:
> Right now the Icom 910, and presumably the 9100, will doDoppler
> correction for 9600 baud. =A0There are a few telemetry programs, little
> used now, which would doDopplercorrection through the microphone
> up/down buttons. =A0It looks as if the Flex-VU5K will have some sort of
> function, though that is not definite.
>
> Dopplercorrection is normally done with external software through the
> CAT port. =A0There are several program which do this with varying levels
> of sophistication. =A0One of the most popular for Windows is SATPC32,
> and for the Mac, MacDoppler. =A0There is at least one program for Linux,
> PREDICT. =A0
>
> --
> Alan
> WA4SCA

I think I understand this better now:

The CAT interface also known as the CAT port is the standard controller/ancillary interface port found on transceivers. The documentation I read states that it connects computers with ham radio transceiver. Some transceivers have a built-in RS-232C interface a serial cable which is good enough a straightforward computer connection. However other transceivers have proprietary interfaces and as such one would need a suitable circuit for controlling the transceiver. The general recommendations state that one can get suitable CAT interface control circuits directly from the manufacturer of the equipment, or you can build it yourself ...

So what I understand is that if I want to do some automatic tuning, or automatic Doppler compensation for a stream (that is BPSK encoded), I would need some software that does this automatically, and use that to control the transceiver.

You mentioned (G)Predict. Is there documentation on how to do this automatic tuning using GPredict? What is the algorithm for automatic tuning of a channel that is experiencing this? I assume that this stuff just works out of the box with GPredict. I would like to learn more about this and I guess I would need to read some more ARRL literature and attend some of the local meetings ...

Any more comments, suggestions and the like would be helpful.

-Xa

```
From 4922644738544371481
X-Google-Thread: 10e8ad,4612e2191e1b15dd
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news4.google.com!feeder3.cambriumusenet.nl!
feed.tweaknews.nl!193.201.147.78.MISMATCH!feeder.news-service.com!
85.214.198.2.MISMATCH!eternal-september.org!feeder.eternal-september.org!.POSTED!
not-for-mail
From: Alan WA4SCA <WA4SCA@YAHOO.COM>
Newsgroups: rec.radio.amateur.space
Subject: Re: Automatic Doppler Compensation (BPSK setup)
Date: Tue, 21 Dec 2010 20:37:55 -0600
Organization: AMSAT-NA
Lines: 23
Message-ID: <roo2h61rgtigtqgtoof27to3o7i5dc0p3j@4ax.com>
References: <d59ae88e-be43-4e4e-b64c-0db5ce5f5935@e16g2000pri.googlegroups.com>
<vl51h6ppbicq2srjrlf92o2madk27mbptj@4ax.com> <bf05ebe4-45f6-4e77-
b423-55c58b962f8d@21g2000prv.googlegroups.com>
Reply-To: ALANBIDDLE70@YAHOO.COM
Mime-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Injection-Info: mx02.eternal-september.org; posting-host="K1i/zVGkXyW85CnQ0pVSxQ";
     logging-data="9455"; mail-complaints-to="abuse@eternal-september.org";
     posting-account="U2FsdGVkX1/5BymZXvh7kMKhxxt8FDP9XFxJzXxG9YQ="
X-Newsreader: Forte Agent 6.00/32.1186
Cancel-Lock: sha1:58YaB/Xcz17r5Ga8xWwCNJ/WiXI=
Xref: g2news2.google.com rec.radio.amateur.space:449
```

Xama,

Generally the CAT, or computer port, is a serial port. Some are RS-232, others use TTL and need a level converter. Usually the manufacturer sells a interface box if needed, or you can buy something a lot cheaper on eBay.

General tracking programs do not do closed loop tuning. They calculate the Doppler shift and tune appropriately. You need to fine tune them a bit, but it works sup rising well, since most decoder programs will allow a range of a few hundred Hz to lock up.

I would direct you to AMSAT though the ARRL does have some good information. Look at:

WWW.AMSAT.ORG

for the US & Canada organization.

--
Alan
WA4SCA

From -1564418678209201975
X-Google-Thread: 10e8ad,89b0927cf552abf2,start
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!postnews.google.com!a28g2000prb.googlegroups.com!not-for-mail
From: devi <satyamsivam9030@gmail.com>
Newsgroups: rec.radio.amateur.space
Subject: SOMETHING SPECIAL FOR U
Date: Fri, 24 Dec 2010 21:35:58 -0800 (PST)
Organization: http://groups.google.com
Lines: 36
Message-ID: <94c3a701-aafb-460f-8505-b700a56f6481@a28g2000prb.googlegroups.com>
NNTP-Posting-Host: 117.199.240.94
Mime-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
X-Trace: posting.google.com 1293255358 30428 127.0.0.1 (25 Dec 2010 05:35:58 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Sat, 25 Dec 2010 05:35:58 +0000 (UTC)
Complaints-To: groups-abuse@google.com
Injection-Info: a28g2000prb.googlegroups.com; posting-host=117.199.240.94;
posting-account=xYWSigoAAADp0Q2VAMlANM4syM5q3uRr
User-Agent: G2/1.0
X-HTTP-UserAgent: Mozilla/5.0 (Windows; U; Windows NT 5.1; en-US; rv:1.9.2.13)
Gecko/20101203 Firefox/3.6.13,gzip(gfe)
Xref: g2news1.google.com rec.radio.amateur.space:425

priyamani hot&sexy photos
http://karomasti9.blogspot.com/2010/12/priyamani.html
KATRINA SEXY PHOTOS
http://karomasti9.blogspot.com/2010/12/katrina.html
ANUSHKA HOT PHOTOS
http://karomasti9.blogspot.com/2010/12/anuska.html
BEAUTIFUL AISHWARIYA RAI
http://karomasti9.blogspot.com/2010/12/aiesh.html
TRISHA HOT PHOTOS
http://karomasti9.blogspot.com/2010/11/trisha-hot.html
AMISHAPATEL HOT VIDEOS
http://karomasti9.blogspot.com/search/label/amisha
HANSIKHA HOT SEXY PHOTOS
http://karomasti9.blogspot.com/search/label/HANSIKA
HOT SEXY COLLEGE GIRLS

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http://karomasti9.blogspot.com/search/label/hot
              BEAUTIFUL LARADATTA
http://karomasti9.blogspot.com/search/label/laradatta
              NIKISHA HOT BOOBS
http://karomasti9.blogspot.com/search/label/nikisha
           PRIYANKA SPICY LATEST PICS
http://karomasti9.blogspot.com/search/label/priyanka
              ONLY FOR YOUTH
http://karomasti9.blogspot.com/search/label/spicy
           SRILEKHA UNSEENED PHOTOS
http://karomasti9.blogspot.com/search/label/Srilekha
             CHOPRA UNBELIVABLE PHOTOS
http://karomasti9.blogspot.com/search/label/chopra
              HOT BIPASA BASU PHOTOS
http://karomasti9.blogspot.com/search/label/bipasa
              TRISHA IN A SEXY FEEL
http://karomasti9.blogspot.com/search/label/thrisha
           SRISHA HOT BOOBS SHOW
http://karomasti9.blogspot.com/search/label/srisha
           BEAUTIFUL POONAM PHOTOS
http://karomasti9.blogspot.com/search/label/poonam
```

```
From -9182173356281844250
X-Google-Thread: 10e8ad,41b7145d6c581b9f,start
X-Google-NewGroupId: yes
X-Google-Thread: 10b9c8,41b7145d6c581b9f,start
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,gida4a23d5f63,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!newsfeed2.dallas1.level3.net!
news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-360 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sun, 26 Dec 2010 10:54:31 EST
Organization: The Radio Amateur Satellite Corporation
Lines: 343
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000901cba515$2a46cb50$7ed461f0$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1293378871 16419 166.84.1.6 (26 Dec 2010 15:54:31 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 26 Dec 2010 15:54:31 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to            rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
```

X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news1.google.com rec.radio.amateur.space:426 rec.radio.info:1990

AMSAT NEWS SERVICE
ANS-360

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* ARISS 10th Anniversary
* SA AMSAT Announces Two Cubesat Projects
* New South Africa Space Agency Promises Support for Amateur Satellites
* First Winner Picked in AMSAT PayPal Fundraiser Drive
* SO-67 Repeater Temporarily Suspended
* Satellite Shorts From All Over
* ARISS Status - 20 December 2010

SB SAT @ AMSAT $ANS-360.01
ARISS 10th Anniversary

AMSAT News Service Bulletin 360.01
From AMSAT HQ SILVER SPRING, MD.
December 26, 2010
To All RADIO AMATEURS
BID: $ANS-360.01

Frank Bauer, KA3HDO, who served as AMSAT's VP of Human Spaceflight for many years, took time to reflect on the 10th anniversary of the very first Amateur Radio on the International Space Station (ARISS) contacts.

My heartiest of congratulations to all the ARISS volunteers and their international sponsoring organizations on this, the 10th anniversary of the first Amateur Radio on the International Space Station (ARISS) school group contact.

It is breathtaking to see all that you have done this past decade. Ham radio operations on ISS started with the first Moscow/USA checkout contact on November 13, 2000-just 11 days after Expedition 1 took up residence on ISS. That paved the way for the historic first school contact between the students at the Burbank School in Burbank, Illinois and Bill Shepherd, KD5GSL on December 21, 2000. Long-time ARISS volunteer Charlie Sufana, AJ9N, mentored that first contact.preparing the Burbank students, teachers and community for an activity that they will remember for the rest of their lives. Since then, the ARISS team's volunteer spirit and can-do attitude have kept the ARISS stations on ISS operational the entire decade--through all 26 crew expeditions. Over 560 schools or organizations have performed ARISS contacts -- inspiring tens of thousands of students and enabling millions and millions, worldwide, to experience the human spaceflight journey and to share in the excitement and camaraderie of the ham radio hobby. The international team has installed antennas and equipment in several ISS modules, deployed SuitSat, delivered ARISSat, and a school contact was a prominent "star" in the IMAX ISS 3D movie. Most importantly, you have inspired a legion of students to pursue careers in science, technology, engineering and math.

On my desk is a copy of NASA's "Reference Guide to the ISS." I recently noticed that on the back cover is a beautiful photograph of ISS with the Sun shining prominently on one of the ARISS antennas mounted on the Russian Service Module. That photograph reminds me of a story from the U.S. Constitutional Convention when statesmen Benjamin Franklin, looking towards the president's chair, at the back of which a rising sun happened to be painted, observed to a few members near him, that painters had found it difficult to distinguish in their art a rising sun from a setting sun. Franklin said "I have often looked at that behind the president without being able to tell whether it was rising or setting: But now at length I have the happiness to know that it is a rising and not a setting sun."

Indeed..the sun that shines over ARISS is a rising sun.

Congratulations to the ARISS international team and their sponsoring organizations!!

[ANS thanks Frank, KA3HDO, for the above information]

/EX

SB SAT @ AMSAT $ANS-360.02
SA AMSAT Announces Two Cubesat Projects

AMSAT News Service Bulletin 360.02
  From AMSAT HQ SILVER SPRING, MD.
December 26, 2010
To All RADIO AMATEURS
BID: $ANS-360.02

This week SA AMSAT announced on their web page they plan to launch two satellite projects, both CubeSats but with totally different design approaches and time lines.

The first project will focus on providing a FM transponder that will be available on most passes over South Africa and will have a short time line to launch.

The second project, called SAiSAT focuses on an innovative approach to the deployment of fold-out solar panels. The project is aimed at getting Master and Phd students involved in the development and design of various payloads and substructures. A detailed paper on SAiSAT will be released in the next two weeks on http://www.amsatsa.org.za

The FM Transponder CubeSat which has yet to be named will be based on a standard available space frame and sub system with a locally designed payload. The project will be coordinated by Hannes Coetzee, ZS6BPZ.

SA AMSAT is inviting radio amateurs who have an interest in satellites to join the project team. The team will meet for its first meeting on mid-January via a teleconference.

To participate in the project team, please send your full details, a description of your expertise in electronics, communication, satellite tracking, software design, antenna design and any other areas of experience that will support the project. In true amateur spirit participants must have enthusiasm. Besides technical experience the team also requires radio amateurs with management, financial, and communication skills.

Send your details to saamsat@intekom.co.za by 31 December 2010. You will be advised of the details of the teleconference in early January, 2011.

Both satellite projects will the subject of papers to be present at the SA AMSAT Space Symposium to be held on 26 March 2011.

[ANS thanks SA AMSAT for the above information]

/EX

SB SAT @ AMSAT $ANS-360.03
New South Africa Space Agency Promises Support for Amateur Satellites

AMSAT News Service Bulletin 360.03
  From AMSAT HQ SILVER SPRING, MD.
December 26, 2010
To All RADIO AMATEURS
BID: $ANS-360.03

News posted on the SARL web (http://www.sarl.org.za) reported on the launch of the South African National Space Agency on December 9.

The Minister of Science and Technology, Naledi Pandor, said that SANSA is mandated as the primary, but not sole, implementer of South Africa's National Space Programme to direct Government's investment in space sciences and technology.

The purpose is to integrate and manage the country's space activities for the greater good and implement an effective, sustainable, long term, national space programme aligned with South Africa's socio-economic policies.

On a question by the SARL at the media briefing if SANSA will support amateur radio satellite programme, the CEO of SANSA said definitely. The Radio Amateurs are part of our plans.

[ANS thanks SARL for the above information]

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SB SAT @ AMSAT $ANS-360.04
First Winner Picked in AMSAT PayPal Fund raiser Drive

AMSAT News Service Bulletin 360.04
From AMSAT HQ SILVER SPRING, MD.
December 26, 2010
To All RADIO AMATEURS
BID: $ANS-360.04

First Winner Picked in AMSAT PayPal Fund raiser Drive

Last week AMSAT-NA VP Operations, Drew Glasbrenner, KO4MA announced an incentive plan being integrated into the AMSAT PayPal and Facebook fund raiser campaign. Drew wrote, "Beginning with the $1250 mark, we will be randomly picking a donor from every $250 increment to receive an item from the AMSAT store. I hope to announce our first recipient soon!"

This week Martha at the AMSAT office was privileged to announce the winner from the first $250 increment. Eric Schecter was our very first winner. He will have the choice of an AMSAT clock, hat or golf shirt. Hopefully, there will be more winners in the near future.

If you'd like to donate to the campaign or share the widget to your own website, please visit http://www.amsat.org. The widget is on the front page below the ARISSat-1 news, and you can click on "Give" to donate, or "add to site" to receive the HTML code, or "supporters" to scroll through the statistics.

Drew concludes, "I hope to soon see many more familiar names scrolling across the widget, showing your support for ARISSat-1 and Project Fox, AMSAT's next two satellites."

Donations, memberships, and store purchases may also be made through the AMSAT store on the website, or by calling Martha at 1 888 322 6728.

[ANS thanks AMSAT-NA VP Operations, Drew Glasbrenner, KO4MA, and Martha at the AMSAT Office for the above information]

/EX

SB SAT @ AMSAT $ANS-360.05
SO-67 Repeater Temporarily Suspended

AMSAT News Service Bulletin 360.05
From AMSAT HQ SILVER SPRING, MD.
December 26, 2010
To All RADIO AMATEURS
BID: $ANS-360.05

Johann, ZR1CBC reports from South Africa that the flash boot memory of a CAN controller on Sumbandila was corrupted by a probable radiation event. It does not affect satellite health but prevents activation of the amateur radio repeater, as the particular script detects an anomaly and aborts.

The same problem also occurred in October of 2009 and was corrected. However, the fix requires time consuming effort, which cannot be exerted immediately.

SO-67 repeater activations are therefore suspended. We apologize for any disappointment and hope to return to normal operations somewhere in January.

[ANS thanks Johann, ZR1CBC for the above information]

/EX

SB SAT @ AMSAT $ANS-360.06
Satellite Shorts From All Over

AMSAT News Service Bulletin 360.06
From AMSAT HQ SILVER SPRING, MD.
December 26, 2010
To All RADIO AMATEURS
BID: $ANS-360.06

+ NASA Jet Propulsion Labs has an on-line slide show with views of the Earth varying with the seasons. See: http://tinyurl.com/26yqfun (jpl.nasa.gov)

+ Drew KO4MA demonstrates how circular downlinks are more elliptical, and have a preferred polarity. The same principles apply on the uplink too! You can get smarter by watching the video at:

http://www.youtube.com/watch?v=XTqjQ9xIQQE

+ Terry G1WPR reports successful trans-Atlantic contacts via HO-68 with Nick, KB1RVT and Paul N2BX.

+ ClydeSpace has released a video showing the deployment of a sail which could be used to de-orbit a CubeSat. The first prototype of an aerobrake system being developed by Clyde Space and the University of Glasgow can be seen at: http://tinyurl.com/2wlr3yh (SouthGate)

+ Matt, KF6RTB reports that the RAX Cubesat is recovering from a low battery charge condition. An anomaly last week that has severely reduced RAX's power generation capability on her remaining three panels (the first panel shorted out). RAX will operate in two safe operating modes while engineering analysis is underway. You may copy infrequent beacons (every 1-2 minutes) or beacons off to regain energy spent on testing.

+ Luciano Fabricio, PY5LF, has produced a video showing reception of the two Amateur Radio FASTRAC satellites, Sara Lily and Emma on 145.825 and 437.345MHz FM: http://tinyurl.com/34d58y5 (SouthGate)

+ Luis, LU6QI is trying to attempt a QSO with USA via AO7 or FO29. He thinks it could be possible with stations in Florida. Contact Luis by e-mail at lquintas@unsl.edu.ar to set up schedules.

+ Sebastian, W4AS found this news on-line on the ARRL LoTW web page: Dec 22, 2010 VUCC Award Support Testing - VUCC support is being installed and tested. When this upgrade is implemented, amateurs can use LoTW to apply for awards based on Maidenhead grid squares, such as VUCC and the Fred Fish Memorial Award.

+ AMSAT has received news from Captain Yuri Bodrov, UT1FG/MM, Master of the MV "Mottler" he is still operating through all satellites from the ocean "wet grid squares" on his sea voyage. Presently he in Coquimbo, Chile and expects to depart on December 23 enroute to Huelva, Spain and Brunsbuttel, Germany via the Panama Canal. This route will enable him to operated FG-FH-EH-EI-EJ-FJ-FK-GK-GL-HL-HM-IM-IN-IO-JO "wet grids". Yuri estimates he will be in satellite range for US stations beginning December 24. He will transit the Panama Canal on January 3.

+ Update your ISS keps. Russia's Mission Control raised the orbit of the International Space Station (ISS) on Wednesday, December 22 by raising it 4.2 kilometers (2.6 miles). The readjustment is necessary to ensure the best conditions for the docking of Russia's Progress M-09M space freighter and the U.S. Discovery's final mission to the ISS.

[ANS thanks everyone for the above information]

/EX

SB SAT @ AMSAT $ANS-360.07

ARISS Status - 20 December 2010

AMSAT News Service Bulletin 360.07
From AMSAT HQ SILVER SPRING, MD.
December 26, 2010
To All RADIO AMATEURS
BID: $ANS-360.07

1. Upcoming Contacts

The ARISS operations team is working to schedule school contacts for the next year. Paolo Nespoli, IZ0JPA and Cady Coleman, KC5ZTH arrived at the ISS on Friday, December 17. Both plan to be active in the ARISS program.

2. Astronaut Training Status

Astronaut Tom Marshburn, KE5HOC attended an ARISS introduction course this past week. Marshburn is slated to fly with Expedition 34 in November 2012.

[ANS thanks Carol, KB3LKI, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor, wishing everyone a happy new year,
Lee McLamb, KU4OS

```
From 1177007232142734106
X-Google-Thread: 108122,d2e252304c5ea03f,start
X-Google-NewGroupId: yes
X-Google-Thread: 107ada,d2e252304c5ea03f,start
X-Google-NewGroupId: yes
X-Google-Thread: 10bf43,d2e252304c5ea03f,start
X-Google-NewGroupId: yes
X-Google-Thread: 10e8ad,d2e252304c5ea03f,start
X-Google-NewGroupId: yes
X-Google-Thread: 10b9c8,d2e252304c5ea03f,start
X-Google-NewGroupId: yes
X-Google-Attributes:
gidd7f5508063,gida3e752f117,gide721ae2bf6,gid8f86f75953,gida4a23d5f63,domainid0,pu
blic,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
```

Path: g2news2.google.com!news1.google.com!newsfeed2.dallas1.level3.net!news.level3.com!panix!panix2.panix.com!not-for-mail
From: rram@panix.com (rec.radio.amateur.moderated Admin)
Newsgroups: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.info
Subject: Crossposting Permitted to rec.radio.amateur.moderated
Supersedes: <radio/ham-radio/moderated/crossposting-1-1291186801@panix.com>
Followup-To: poster
Date: 1 Jan 2011 02:00:01 -0500
Organization: rec.radio.amateur.moderated Moderation Team
Lines: 47
Approved: RRI Admin <rec-radio-info-request@panix.com>
Distribution: world
Expires: 03 Feb 2011 02:00:00 -0000
Message-ID: <radio/ham-radio/moderated/crossposting-1-1293865200@panix.com>
Reply-To: rec-radio-amateur-moderated-request@panix.com (rec.radio.amateur.moderated Admin)
NNTP-Posting-Host: panix2.panix.com
X-Trace: reader1.panix.com 1293865202 23161 166.84.1.2 (1 Jan 2011 07:00:02 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sat, 1 Jan 2011 07:00:02 +0000 (UTC)
Summary: Short reminder for unmoderated newsgroups that crossposting is permitted
Keywords: FAQ, ham, amateur, radio, moderated, unmoderated, crossposting, permitted
Xref: g2news2.google.com rec.radio.amateur.antenna:21895 rec.radio.amateur.dx:881 rec.radio.amateur.equipment:2635 rec.radio.amateur.homebrew:4339 rec.radio.amateur.misc:5969 rec.radio.amateur.policy:32418 rec.radio.amateur.space:452 rec.radio.info:2074

Posted-By: auto-faq 3.3.2 beta (PGPMoose V2.0, Perl 5.005)
Archive-name: radio/ham-radio/moderated/crossposting
Revision: 1.1 2009/04/12 19:42:04
Posting-Frequency: posted monthly
URL: http://www.panix.com/~rram/usenet/rram/index.html

Changes followed by "|".

After a 30-day public discussion and feedback period to gauge reader opinions in March of 2009:

http://groups.google.com/group/rec.radio.amateur.moderated/browse_thread/thread/d7d337db35f23326

the rec.radio.amateur.moderated Moderation Team has decided to consider amending its charter, and permit limited simultaneous crossposting to rec.radio.amateur.moderated and one other unmoderated amateur-radio-related discussion newsgroup. We are currently trying this on a temporary basis (90 days, through early July 2009), and adopt it permanently if successful.

Approved rec.radio.amateur.* newsgroups are those that are currently listed in the latest version of the "List of Big Eight Newsgroups" which is crossposted monthly to news.announce.newgroups, news.groups, and news.lists.misc.

Approved alt.radio.amateur.* and alt.ham-radio.* newsgroups are those that have been created consistent with the suggestions in "So You Want to Create an Alt Newsgroup" at:

http://www.faqs.org/faqs/alt-creation-guide/

Approved regional hierarchy newsgroups are those that contain either "radio.amateur" or "ham-radio" in their names, including uk.radio.amateur and aus.radio.amateur.misc.

We will make every reasonable effort to keep our list of approved newsgroups up-to-date. In case we have overlooked any, and a submission is rejected in error as a result, the rejected submitter can E-mail us at our administrative contact address (in the signature at the bottom of this article, and the default Reply-To for the rejection message) requesting that it be added, and that the article be approved. We may still choose to reject articles crossposted to any alt.* newsgroup with an inappropriate name, including obscene language, embedded name-calling, or encouragement of unlawful conduct.

Please direct any comments, questions, or criticisms to rec-radio-amateur-moderated-request@panix.com.

```
From -1262853299306404194
X-Google-Thread: 10e8ad,501673a6d4596895,start
X-Google-NewGroupId: yes
X-Google-Thread: 10b9c8,501673a6d4596895,start
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,gida4a23d5f63,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII
Path: g2news2.google.com!news1.google.com!npeer02.iad.highwinds-media.com!
news.highwinds-media.com!feed-me.highwinds-media.com!nx01.iad01.newshosting.com!
newshosting.com!198.186.194.249.MISMATCH!news-out.readnews.com!
transit3.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-002 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sat, 1 Jan 2011 21:12:50 EST
Organization: The Radio Amateur Satellite Corporation
Lines: 419
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000e01cbaa22$8ac8b350$a05a19f0$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
X-Trace: reader1.panix.com 1293934370 25658 166.84.1.6 (2 Jan 2011 02:12:50 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 2 Jan 2011 02:12:50 +0000 (UTC)
```

```
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news2.google.com rec.radio.amateur.space:453 rec.radio.info:2079
```

AMSAT NEWS SERVICE
ANS-002

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:

* AO-51 Power Management Enabled as Satellite Enters Eclipses
* Latest Winners Announced in AMSAT Fundraising Drive
* Ham Radio University Program Includes Satellite Operations
* Chichijima Island Activation Includes Satellites
* Satellite Shorts From All Over
* Rogue GEO Satellite Back Under Control
* Russian Engineers Plan to Extend Internet to Space
* ARISS Status Report for the Week of December 27, 2010

SB SAT @ AMSAT $ANS-002.01
AO-51 Power Management Enabled as Satellite Enters Eclipses

AMSAT News Service Bulletin 002.01
>From AMSAT HQ SILVER SPRING, MD.
January 2, 2011
To All RADIO AMATEURS
BID: $ANS-002.01

The AO-51 Control Team reported they enabled the power management function of the satellite in anticipation of eclipses expected to begin before the end of December, 2010.

Command Team member Mark Hammond, N8MH wrote, "You might see the transmitter power levels go UP and DOWN a bit as the battery voltage changes. We'll make some adjustments and tweaks to keep it from going UP and DOWN too often--but it's the way it's gonna work. In a few weeks we expect transmitter(s) to be OFF while in eclipse and ON when in the sun."

AO-51 users should expect adjustments and various power management schemes from now until the end of February when we'll again see full sunlight for a brief period. On December 28 the Command Team shut down the digital transmitter TXA (435.150 MHz). This is due to less sun (we are on the edge of eclipse). TXA off for the most part, except to collect telemetry. The 435.300 MHz repeater will be kept running as much as possible.

The command team could really use your help. If you work AO-51 (or hear it) and there isn't a recent entry, please make a report entry at: http://oscar.dcarr.org/ so we know all is well.

Things are touch-and-go now that we are experiencing eclipses, and reports on the OSCAR Status Page that the bird is up and functional are extremely helpful.

The Command Team notes that expected behavior is for the transmitter to go OFF during eclipse, but eclipses are only a couple minutes or less at the moment. The regular voice repeater is planned to be operation for the month of January, 2011 as the Command Team manages the changing eclipse periods. AO-51 will be seeing longer eclipses and there will be times when the bird goes off for several minutes at a time--including over populated areas. It seems like it's occurring in the early morning time frame.

Keep up to date with the latest Command Team and Operations Group AO-51 News at: http://www.amsat.org/amsat-new/echo/CTNews.php

[ANS thanks Mark, N8MH for the above information]

/EX

SB SAT @ AMSAT $ANS-002.02
Latest Winners Announced in AMSAT Fundraising Drive

AMSAT News Service Bulletin 002.02
>From AMSAT HQ SILVER SPRING, MD.
January 2, 2011
To All RADIO AMATEURS
BID: $ANS-002.02

AMSAT's fundraising campaign via PayPal Widget continues to produce results. AMSAT VP Operations Drew Glasbrenner, KO4MA announced last week, "Beginning with the $1250 mark, we will be randomly picking a donor from every $250 increment to receive an item from the AMSAT store."

The drawing winners for the next three $250 increments have been announced:

$1000-$1250	Richard Lewis
$1250-$1500	Eric Schecter
$1500-$1750	Stephen Silverman and Charles Suprin

In conclusion, Drew writes, "Thanks again, and if you'd like to donate to the campaign or share the widget to your own website, please visit http://www.amsat.org. The widget is on the front page below the ARISSat-1 news, and you can click on "Give" to donate, or "add to site" to receive the HTML code, or "supporters" to scroll through the statistics. I hope to soon see more familiar names scrolling across the widget soon, showing your support for AMSAT's next two satellites."

Donations, memberships, and store purchases may also be made through the AMSAT store on the website, or by calling Martha at 1 888 322 6728.

[ANS thanks Drew KO4MA for the above information]

/EX

SB SAT @ AMSAT $ANS-002.03
Ham Radio University Program Includes Satellite Operations

AMSAT News Service Bulletin 002.03
>From AMSAT HQ SILVER SPRING, MD.
January 2, 2011
To All RADIO AMATEURS
BID: $ANS-002.03

On January 9, 2011, AMSAT Area Coordinator Pete, WB2OQQ will be presenting "Satellite Operations with an HT" at the Ham Radio University 2011 event at Briarcliffe College, Bethpage, NY. Full information can be found on-line at: http://www.hamradiouniversity.org.

Pete's presentation is scheduled at 11:00 - 11:50AM in Room D. He will be using the special event call sign W2V for the afternoon satellite passes. Someone attending his forum will be leaving with an ELK Antenna, graciously donated by the company for the event.

[ANS thanks Pete, WB2OQQ for the above information]

/EX

SB SAT @ AMSAT $ANS-002.04
Chichijima Island Activation Includes Satellites

AMSAT News Service Bulletin 002.04
>From AMSAT HQ SILVER SPRING, MD.
January 2, 2011
To All RADIO AMATEURS
BID: $ANS-002.04

Makoto, JI5RPT (JD1BLY) and Harry, JG7PSJ (JD1BMH) are again active from Chichijima Island (IOTA AS-031) between 24 December 2010 and 8 January 2011.

They are active on all bands 160-10m, with focus on the lower bands, using CW, SSB, Digital and the satellites.

JD1BLY will be active between 24 December 2010 and 3 January 2011, while JD1BMH will be active between 30 December and 8 January 2011.

QSL via the bureau to the JD1 callsigns or direct to their home callsigns.

[ANS thanks the SouthGate ARC News for the above information]

/EX

SB SAT @ AMSAT $ANS-002.05
Satellite Shorts From All Over

AMSAT News Service Bulletin 002.05
>From AMSAT HQ SILVER SPRING, MD.
January 2, 2011
To All RADIO AMATEURS
BID: $ANS-002.05

+ The next Hudson Valley Satcom Group Net is Thursday January 6 at 8:00 PM EST (UTC - 5) on the MBARC 146.970 MHz repeater (-600; & PL 100). The EchoLink node is N2EYH-L. Latest information can be found on-line at: http://www.hhvsatcom.org. (Stu, WA2BSS)

+ University of Texas FASTRAC updated TLEs are available at: http://tinyurl.com/25sykwb (UTexas.edu)

+ NASA has posted a video: Satellite Views of the �Christmas Blizzard� on-line at: http://tinyurl.com/399x2r5

+ WB2SIH (grid FN31DD) reported a successful CW contact via AO-7 with RW3XL (grid KO84DM) at a distance of 7,480 KM.

+ News received from Derrick, GM0FMW reports good transatlantic satellite contacts via HO-68 with Paul N2BX, Nick KB1RVT, Paul KB1QYS, John K8YSE, Thomas KL0BK,and Ricky VE4AMU. Derrick wishes a Happy New Year to all AMSAT members.

+ Clint, K6LCS published an updated copy of the "How to Work Ham Satellites With Your HT" tutorial. This is posted on-line at: http://www.work-sat.com

+ Online Registration is now available to register to the 1st IAA Conference on University Satellites Missions and Cubesat Conference in Rome. See http://www.gaussteam.com/ for the latest information.

+ On the morning of Tuesday, January 4, 2011, an eclipse of the Sun will be widely visible across Europe and as far east as India. The eclipse won't be visible in North and South America. UniverseToday.com

has the full story at: http://tinyurl.com/388sb2r

+ More NASA Videos! See http://tinyurl.com/2847r6h for Seasons Greetings

and a Look Back at 2010 from NASA. Watch the video at: http://www.youtube.com/watch?vHhjjKUS7G8 for the "Best of the Best" Launches", powered by Music with imagery rarely seen by the public that highlights three space shuttle launches.

+ Henk, PA3GUO has posted a video featuring his first test at satellite reception with a FUNcube dongle SDR receiver straight out of the box: http://www.youtube.com/watch?v�ZGlqKPPQo (HD video: set to 720p and Fullscreen). Henk says his results are amazing with similar performance with a Kenwood TS2000x. Satellites in the video include HO68 CW, HO68 FM, AO51 FM, VO52 SSB, and OOREOS 1k2 AX25 (packet radio with MixW).

+ The software to auto-decode the University of Michigan RAX beacons can be found on the website at: http://rax.engin.umich.edu. Mike Rupprecht, DK3WN has his own version at http://www.dk3wn.info/software.shtml. (via Matt Bennett, KF6RTB, RAX Project Manager

[ANS thanks everyone for the above information]

/EX

SB SAT @ AMSAT $ANS-002.06
Rogue GEO Satellite Back Under Control

AMSAT News Service Bulletin 002.06
>From AMSAT HQ SILVER SPRING, MD.
January 2, 2011
To All RADIO AMATEURS
BID: $ANS-002.06

UniverseToday.com reported that the geostationary satellite that became a �zombie� earlier this year and stopped communicating with ground controllers has now finally been reset and is under control.

The Galaxy 15 communications satellite had its �brains fried� by a solar flare and went rogue in early May. Although it was still functional, its navigation and communications systems would not accept commands, and the satellite drifted out of its orbit. On December 23, 2010, engineers at Intelsat were finally able to command the unit to reset after a battery drained. Shortly thereafter Galaxy 15 began accepting commands, and then was put into safe mode. �We are pleased to report it no longer poses any threat of satellite interference to either neighboring satellites or customer services,� IntelSat said on their website.

While there was little chance that Galaxy 15 would crash into another satellite, it caused some problems when it entered an orbital space occupied by other satellites and �stole� their signal, thereby interrupting other vendor�s services to customers on Earth.

Engineers will now do some diagnostic tests and load updated commanding software to the satellite. The satellite is currently pointed towards the Sun, allowing the spacecraft�s batteries to become fully charged and the satellite thermally balanced.

Once initial diagnostic testing has been completed, IntelSat will attempt to stop the drift of the satellite. This phase could take as long as two weeks to complete.

Intelsat is hoping full functionality of Galaxy 15 can be regained and they hope to relocate the satellite to an orbital location where we they can assess the viability of the payload, and conduct extensive in-orbit testing to determine the functionality of every aspect of the spacecraft.

Source: http://tinyurl.com/2amezh4

[ANS thanks UniverseToday.com for the above information

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SB SAT @ AMSAT $ANS-002.07
Russian Engineers Plan to Extend Internet to Space

AMSAT News Service Bulletin 002.07
>From AMSAT HQ SILVER SPRING, MD.
January 2, 2011
To All RADIO AMATEURS
BID: $ANS-002.07

Russian engineers have started drawing up a new 'Kosmonet' project, and its implementation will provide an opportunity for the Runet users to enter the 'Space' Internet.

The developers say that rapid access to the Internet is only part of the task set before the �Kosmonet�. They give priority to guaranteeing communications between spacecraft and establishing control over flying objects from any point on the Earth and stable communications with remote regions of Russia.

�Such a communication system is crucial for the north and in the Polar Regions because satellites in the geostationary orbit cannot provide access to these regions. In fact, to built transmitter units there or lay optic fibre cables to these regions is either economically inexpedient or technically impossible, says deputy head of the Russian space agency,� Vitaly Davydov.

�The new project is an upgraded version of the present system known as �Gonets� (Messenger). �It�s crucial for Russia to have the possibility of ensuring communication with any of its satellites at any time and linking them with the mission control centres. In short, we are �lifting� the Internet into orbit. At present, there is no such a system, and we hope to enter into this market first,� Vitaly Davydov said.

�According to the president of the �Gonets� Satellite System� Company, Alexander Galkevich, it has been planned to place a group of 48 satellites into orbit that will cover the entire planet. In fact, 18 satellites are sufficient for Russia. This will make it possible to provide services that are highly sought on the market,� says Mr Galkevich.

�Among the services demanded by consumers are voice communications, broadband broadcasting, video conferencing and transmitting short messages. Such services are not provided comprehensively by any existing system in the world,� Alexander Galkevich said.

The developers emphasize that the �Kosmonet� does not depend on ground infrastructure. Communications will be maintained with the assistance of terminals and basic stations through satellites. Consequently, emergency situations such as earthquakes or other calamities cannot interrupt communications. The ground transmitting and receiving stations usually go out of order in such incidents. The �Kosmonet� will help to control the movements of dangerous cargo shipments and link with ships at any point on a sea or an ocean.

According to preliminary estimates, about US$20 billion will be needed to implement the project. This will pay off in ten years. The preparations for launching the work have to be completed in three years. It will take five years to create the full-fledged space group.

Source: SouthGate ARC site: http://tinyurl.com/37rnkn8

[ANS thanks SouthGate ARC site for the above information]

/EX

SB SAT @ AMSAT $ANS-002.08
ARISS Status Report for the Week of December 27, 2010

AMSAT News Service Bulletin 002.08
>From AMSAT HQ SILVER SPRING, MD.
January 2, 2011
To All RADIO AMATEURS
BID: $ANS-002.08

1. ISS Astronaut Sends Birthday Greetings to ARISS

On December 21, ARISS celebrated its tenth anniversary of the first school contact. The first contact was made with Burbank School in Illinois on December 21, 2000. Since that time, ARISS has performed 565 successful contacts with school children around the world. ESA astronaut P�olo Nespoli, IZ0JPA, from onboard the ISS, wished ARISS a Happy Birthday. His photo presenting his birthday wishes is available for download from: http://www.ariss-eu.org/Nespoli_10ARISS.jpg

ARRL also covered this story. See: http://tinyurl.com/38a4eog

2. ARISS International Team Meeting Held

The monthly ARISS International Team meeting was held on Tuesday, December 21. Topics of discussion included ARISS' tenth anniversary, the upcoming face to face meeting and a status on the Columbus module equipment as well as ARISSat-1. To view the minutes, see: https://www.rac.ca/ariss/arisstel2010-12-21.htm

3. AMSAT Article on 10th Anniversary of ARISS

The AMSAT (Radio Amateur Satellite Corporation) News Service bulletin (ANS-360) posted an article on the tenth anniversary of ARISS. See: http://www.amsat.org/amsat/archive/amsat-bb/48hour/msg82907.html

[ANS thanks Carol, KB3LKI for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office. And with that,

take a moment to ponder what did Godzilla say after eating a four
cylinder Datsun? "Gosh, I could have had a V-8!"

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM

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Xref: g2news2.google.com rec.radio.amateur.space:454

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X-Google-Language: ENGLISH,ASCII
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From 1525319971269080210
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X-Google-Attributes: gid8f86f75953,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII
Path: g2news2.google.com!postnews.google.com!p7g2000prb.googlegroups.com!not-for-
mail
From: BERGH <mattosbw1@gmail.com>
Newsgroups: rec.radio.amateur.space
Subject: 4000 Solutions manual and Test banks to Math, Statistics and
 Probability Books
Date: Thu, 6 Jan 2011 11:23:01 -0800 (PST)
Organization: http://groups.google.com
Lines: 1372
Message-ID: <91aaf5fd-9f8d-402e-b22c-04b65cfd6130@p7g2000prb.googlegroups.com>
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Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: quoted-printable
X-Trace: posting.google.com 1294341782 23433 127.0.0.1 (6 Jan 2011 19:23:02 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Thu, 6 Jan 2011 19:23:02 +0000 (UTC)
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Injection-Info: p7g2000prb.googlegroups.com; posting-host=190.40.94.137; posting-
account=Tr_lEAoAAAADSBji3TkK41k7g4TuE_dn
User-Agent: G2/1.0
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Date: Thu, 6 Jan 2011 11:51:43 -0800 (PST)
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X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Thu, 6 Jan 2011 19:51:43 +0000 (UTC)
Complaints-To: groups-abuse@google.com
Injection-Info: 35g2000prb.googlegroups.com; posting-host=190.42.227.151; posting-account=MkidQgkAAACu2HVV76DkFeaeglL9cZe4
User-Agent: G2/1.0
X-HTTP-UserAgent: Mozilla/5.0 (Windows; U; Windows NT 6.0; es-ES; rv:1.9.2.13)
 Gecko/20101203 Firefox/3.6.13 ( .NET CLR 3.5.30729; .NET4.0C),gzip(gfe)
Xref: g2news2.google.com rec.radio.amateur.space:463
```

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contact me to : mattosbw1@gmail.com
mattosbw1(at)gmail.com

NOTE : "THIS SERVICE IS NOT AVAILABLE FOR : CHINA, INDIA, RUSSIA, PAKISTAN, IRAQ, IRAN, PHILIPPINES, NORTH KOREA, NEPAL, BANGLADESH, SRI LANKA, MALDIVES, BHUTAN & COLOMBIA".

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http://www.megaupload.com/?d=IQCRN2AV

I do not review the forums, just send me an email.

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Solution manual Fundamentals of Modern Manufacturing : Materials, Processes, and Systems (3rd Ed., Mikell Groover)
Solution manual Fundamentals of Modern Manufacturing : Materials, Processes, and Systems (4th Ed., Mikell Groover)
Solution manual Fundamentals of Manufacturing (2nd Ed., Philip D. Rufe)
Solution manual Principles of Metal Manufacturing Processes (Beddoes & Bibby)
Solution manual Materials Science for Engineering Students (Traugott Fischer)
Solution manual Essentials of Modern Materials Science and Engineering (James Newell)
Solution manual Materials Science and Engineering : An Introduction (6th Ed., William Callister)
Solution manual Materials Science and Engineering : An Introduction (7th Ed., William Callister)
Solution manual Materials Science and Engineering : An Introduction (8th Ed., William Callister)
Solution manual Fundamentals of Materials Science and Engineering : Integrated Approach (2nd Ed., William Callister)
Solution manual Fundamentals of Materials Science and Engineering : Integrated Approach (3rd Ed., William Callister)
Solution manual Science and Design of Engineering Materials (2nd Ed., Schaffer, Saxena, et al)
Solution manual Manual of Mineral Science (23rd Ed., Cornelis Klein & Barbara Dutrow)
Solution manual Materials and Processes in Manufacturing (9th Ed., E. Paul DeGarmo, J. T. Black, Ronald A. Kohser)
Solution manual DeGarmo's Materials and Processes in Manufacturing (10th Ed., E. Paul DeGarmo, J. T. Black, Ronald A. Kohser)
Solution manual Foundations of Materials Science and Engineering (3rd Ed, Smith)
Solution manual Foundations of Materials Science and Engineering (4th Ed, Smith & Hashemi)
Solution manual Foundations of Materials Science and Engineering (5th Ed, Smith & Hashemi)
Solution manual Engineering Materials Science (Milton Ohring)
Solution manual Metal Fatigue in Engineering (2nd Ed., Stephens, Fatemi & Fuchs)
Solution manual Mechanical Behavior of Materials (3rd Ed. Dowling)
Solution manual Mechanical Behavior of Materials (W.F. Hosford)
Solution manual Mechanical Behavior of Materials (Keith Bowman)
Solution manual Deformation and Fracture Mechanics of Engineering Materials (4th Ed., Richard Hertzberg)
Solution manual From Polymers to Plastics (A.K. van der Vegt)
Solution manual Nanoengineering of Structural, Functional and Smart Materials (Mark Schulz, Ajit Kelkar, Mannur Sundaresan)
Solution manual Principles Of Polymer Systems (5th Ed., by Ferdinand Rodriguez, Claude Cohen, Christopher Ober, Lynden Archer)
Solution manual Introduction to the Thermodynamics of Materials (4th

Ed. David Gaskell)
Solution manual Structure and Properties of Engineering Materiales (5th Ed., Daniel Henkel & Alan Pense)
Solution manual Plastics : Materials and Processing (3rd Ed., Strong)
Solution manual Engineering Materials : Properties and Selection (8th Ed., Budinski)
Solution manual Engineering Materials : Properties and Selection (9th Ed., Budinski)
Solution manual Introduction to Materials Science for Engineers (6th Ed., Shackelford)
Solution manual Introduction to Materials Science for Engineers (7th Ed., Shackelford)
Solution manual Introduction to Materials Science for Engineers - International Edition (7th Ed., Shackelford)
Solution manual Creative Design of Products and Systems (Saeed Niku)
Solution manual Materials : Engineering, Science, Processing and Design (1st Ed., Michael Ashby, Hugh Shercliff & David Cebon)
Solution manual Materials : Engineering, Science, Processing and Design (2nd Ed., Michael Ashby, Hugh Shercliff & David Cebon)
Solution manual Engineering Materials Vol. 1 : An Introduction to Properties, Applications and Design (3rd Ed., Michael Ashby & David Jones)
Solution manual Engineering Materials Vol. 2 : An Introduction to Microstructures, Processing and Design (3rd Ed., Michael Ashby & David Jones)
Solution manual Materials and the Environment : Eco-informed Material Choice (Michael Ashby)
Solution manual Principles of Corrosion Engineering and Corrosion Control (Zaki Ahmad)
Solution manual Analysis and Performance of Fiber Composites (3rd Ed., Bhagwan Agarwal, Lawrence Broutman & K. Chandrashekhara)
Solution manual Basic Engineering Plasticity : An Introduction with Engineering and Manufacturing Applications (David Rees)
Solution manual Steels : Microstructure and Properties (3rd Ed. Bhadeshia & Honeycombe)
Solution manual Theory of Plasticity (3rd Ed. Jagabanduhu Chakrabarty)
Solution manual Plastics : Microstructure and Engineering Applications (3rd Ed., Nigel Mills)
Solution manual Laser Processing of Engineering Materials : Principles, Procedure and Industrial Application (John Ion)
Solution manual Sintering : Densification, Grain Growth and Microstructure (Suk-Joong Kang)
Solution manual Biomaterials : An Introduction (3rd Ed., Joon Park & R.S. Lakes)
Solution manual Biomaterials : The Intersection of Biology and Materials Science (Temenoff & Mikos)
Solution manual Biomaterials Science : An Introduction to Materials in Medicine (2nd Ed., Ratner, Hoffman, Schoen & Lemons)
Solution manual Tissue Engineering (Bernhard O. Palsson & Sangeeta N. Bhatia)
Solution manual Tissue Engineering (Clemens van Blitterswijk, et al.)
Solution manual Introduction to Materials Management (6th Ed., Arnold, Chapman & Clive)

Solution manual Fundamentals of Solid State Engineering (2nd Ed., Manijeh Razeghi)
Solution manual Smart Electronic Materials : Fundamentals and Applications (Jasprit Singh)
Solution manual Composite Materials : Science and Engineering (2nd Ed., Krishan K. Chawla)
Solution manual Laminar Composites (George Staab)
Solution manual Physical Metallurgy and Advanced Materials (7th Ed., R.E. Smallman & A.H.W. Ngan)

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contact me to :   mattosbw1@gmail.com
mattosbw1(at)gmail.com

```
From 5305361990899448863
X-Google-Thread: addc8bf063,1792673162a36138,start
X-Google-Attributes: gidaddc8bf063,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news3.google.com!proxad.net!feeder1-2.proxad.net!
feeder.erje.net!newsfeed1.swip.net!news.astraweb.com!
border5.a.newsrouter.astraweb.com!not-for-mail
From: Chris Steyaert <observations@rmob.org>
Newsgroups: rec.radio.amateur.space,sci.astro.amateur
Subject: Radio Meteor Obs. Bull. December 2010  Geminids Ursids
Date: Sat, 08 Jan 2011 00:08:08 +0100
Message-ID: <327fi6hq93tsmi6f6no34kf19lsp7e7oot@4ax.com>
X-Newsreader: Forte Agent 5.00/32.1171
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Lines: 14
Organization: Unlimited download news at news.astraweb.com
NNTP-Posting-Host: 5903bb92.news.astraweb.com
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Xref: g2news2.google.com rec.radio.amateur.space:464 sci.astro.amateur:44376
```

Radio Meteor Observation Bulletin No. 209 of December 2010 (85 K) is available now as

http://www.rmob.org/rmobtext/rmob1012.txt

More information and the visual presentation of the hourly forward scatter counts can be found on

http://www.rmob.org

Chris

From -7378591667917652259
X-Google-Thread: 10e8ad,b95d5bbfb8d44691,start
X-Google-NewGroupId: yes
X-Google-Thread: 10b9c8,b95d5bbfb8d44691,start
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,gida4a23d5f63,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII
Path: g2news1.google.com!news1.google.com!newsfeed2.dallas1.level3.net!news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-009 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sun, 9 Jan 2011 11:14:33 EST
Organization: The Radio Amateur Satellite Corporation
Lines: 391
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <001201cbb018$4a60c270$df224750$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
X-Trace: reader1.panix.com 1294589673 330 166.84.1.6 (9 Jan 2011 16:14:33 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 9 Jan 2011 16:14:33 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to   rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to   rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news1.google.com rec.radio.amateur.space:440 rec.radio.info:2015

AMSAT NEWS SERVICE
ANS-009

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating

through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
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* SO-67 Repeater to Resume Operations
* ARISSat-1/RadioSkaf-V Update
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* OSCAR-11 REPORT   31 December 2010
* Satellite Presentation at Murray State University, KY
* ARISS School Contacts Resume for 2011
* AMSAT-UK's John Heaton, G1YYH Silent Key
* Vietnam CubeSat to Launch in 2011

SB SAT @ AMSAT $ANS-009.01
OSCAR SKN Best Fist Nominations Are Due

AMSAT News Service Bulletin 009.01
From AMSAT HQ SILVER SPRING, MD.
January 9, 2011
To All RADIO AMATEURS
BID: $ANS-009.01

Ray, W2RS thanks all who participated in AMSAT's Straight Key Night on OSCAR 2011. Please remember to nominate someone you worked for 'Best Fist.' Your nominee need not have the best fist of those you heard, just of those you worked. Nominations should be sent to w2rs@amsat.org. A list of those nominated will be published in ANS in early February, and in a forthcoming issue of The AMSAT Journal.

[ANS thanks Ray, W2RS, for the above information]

/EX

SB SAT @ AMSAT $ANS-009.02
AO-51 Power Management Update

AMSAT News Service Bulletin 009.02
From AMSAT HQ SILVER SPRING, MD.
January 9, 2011
To All RADIO AMATEURS
BID: $ANS-009.02

Mark Hammond, N8MH notes that AO-51's power management feature has been operational now that this satellite is entering eclipses and its batteries cannot maintain full power when the solar panels are not being illuminated.

Mark noted, "The good news is that eclipses are pretty short right now and are occurring at early local time in the Northern Hemisphere. So many aren't even awake yet. Looking longer term--by early March 2011 we will have a period of full sun again, that lasts a couple of months. Then we are back into eclipses for a long, long time --and we'll have eclipses that will get up to 30 minutes in length! If that's over your QTH, that means you can't work AO-51 potentially for a whole pass. Final operating details remain to be determined to see exactly what the orbit and eclipses will look like at that time."

Mark has posted a file at: http://tinyurl.com/2358a3x (amsat.org) captured during the January 4 solar eclipse. You can see the normal eclipses of AO-51 every 100 mins (just over 14 times each day). Now, look right in the middle--see what is a double dip? That is a normal eclipse AND an extra one from the partial solar eclipse.

The AO-51 Command Team requests that users continue to post their observations of AO-51's operating condition on the Live OSCAR Satellite Status Page: http://oscar.dcarr.org/index.php.

Keep up to date with the latest Command Team and Operations Group AO-51 News at: http://www.amsat.org/amsat-new/echo/CTNews.php

[ANS thanks Mark, N8MH, for the above information]

/EX

SB SAT @ AMSAT $ANS-009.03
SO-67 Repeater to Resume Operations

AMSAT News Service Bulletin 009.03
  From AMSAT HQ SILVER SPRING, MD.
January 9, 2011
To All RADIO AMATEURS
BID: $ANS-009.03

With the troublesome controller reprogrammed it is hoped that Sumbandila will resume its repeater schedule next week.

Four passes over South Africa during the evening of 8 January will be scheduled as a test. Please report your observations at David Carr's live OSCAR status page: http://oscar.dcarr.org/

The weekly schedule will be published at http://amsatsa.org.za/ once full operations resume.

[ANS thanks Johann, ZR1CBC, for the above information]

/EX

SB SAT @ AMSAT $ANS-009.04
ARISSat-1/RadioSkaf-V Update

AMSAT News Service Bulletin 009.04
From AMSAT HQ SILVER SPRING, MD.
January 9, 2011
To All RADIO AMATEURS
BID: $ANS-009.04

The ARISSat-1/RadioSkaf-V team has faced a number of challenges since the two amateur radio experiments were crated and shipped to NASA Johnson Center in early October.

However, Gould Smith, AMSAT's ARISSat-1 project manager recently told ANS that, "We are very pleased to report that the flight unit and backup arrived in Moscow on December 8th, 2010 and were delivered to RSC-Energia in Moscow on December 29th, 2010.

We now understand that the Russian team is working on testing and integrating the Kursk Experiment and Silver-Zinc battery into the flight unit during their Russian Orthodox Christmas holidays." Gould went on to note that the flight unit is still scheduled to fly to the Baikonur Cosmodrome on January 11th, 2011 where it will be attached to Progress vehicle 41P. The Progress vehicle is scheduled to launch up to the ISS at the end of January.

Once ARISSat-1 is on board the ISS, crew members will re-attach the handles, install the battery, replace the dummy loads with the real antennas and perform a quick power-on test. The Extra Vehicular Activity (EVA) to deploy the satellite is still scheduled for the end of February 2011.

Needless to say, the ARISSat-1 team is excited about all the effort being made by RSC-Energia to complete integration, and remains cautiously optimistic that all will continue to go according to schedule.

[ANS thanks Gould, WA4SXM, for the above information]

/EX

SB SAT @ AMSAT $ANS-009.05
Satellite Meeting in South Africa

AMSAT News Service Bulletin 009.05
From AMSAT HQ SILVER SPRING, MD.
January 9, 2011
To All RADIO AMATEURS
BID: $ANS-009.05

Eddie Leighton, ZS6BNS, will be anchoring a meeting on satellites on Saturday 15 January beginning at 10AM at South Africa's National Amateur Radio Centre.

Learn more about operating amateur radio satellites, how to build a simple satellite antenna, how to track and all the ins and outs of this fascinating part of Amateur Radio.

Find out how you can get involved in the SA AMSAT CubeSat project.

The NARC is situated at Sender Technology Park, Octave Road, Radiokop, Roodepoort.

[ANS thanks the SouthGateARC News Site for the above information]

/EX

SB SAT @ AMSAT $ANS-009.06
OSCAR-11 REPORT   31 December 2010

AMSAT News Service Bulletin 009.06
  From AMSAT HQ SILVER SPRING, MD.
January 9, 2011
To All RADIO AMATEURS
BID: $ANS-009.06

At the present time OSCAR-11 (AKA UO-11 or UoSAT-2) is now in a very stable and predictable mode of operation. Between the period of November 30 to December 31, 2010 the satellite has been heard from December 10-20 and again is on since December 31. It is expected to switch-off on January 10, 2011 under control of its internal timer.

Excellent signals have been reported from stations located around the world, and good copy obtained from decoded telemetry frames. The satellite is now transmitting during eclipses, although signals are weaker at those times. This indicates that there is still some capacity remaining in the battery.

The on-board clock is now very stable. It gained seven seconds during December.

The VHF beacon frequency is 145.826 MHz. AFSK FM ASCII Telemetry

Reception reports have been received from Horatio CX8AF, John KB2HSH, Francisco PY9FP and Mike DK3WN. Many thanks for those and to everyone who posted reports on the satellite status website.

If you hear UO-11 please post the information on the Live OSCAR Satellite Status Page: http://oscar.dcarr.org/index.php. Reports around the expected times of switch-on and switch-off are of special interest.

At the present time, while OSCAR-11 is operating in a predictable way Clive, G3CWV no longer needs direct reports or files by e-mail. Visit Clive's UO-11 web page http://www.g3cwv.co.uk/oscar11.htm for links to a full UO-11 status report, a short audio clip to help you identify the satellite and a file of the last telemetry received. The website also contains an archive of news & telemetry data which is updated from time to time, and details about using a sound card or hardware demodulators for data capture. There is also software for capturing data, and decoding ASCII telemetry.

[ANS thanks Clive, G3CWV, for the above information]

/EX

SB SAT @ AMSAT $ANS-009.07
Satellite Presentation at Murray State University, KY

AMSAT News Service Bulletin 009.07
  From AMSAT HQ SILVER SPRING, MD.
January 9, 2011
To All RADIO AMATEURS
BID: $ANS-009.07

AMSAT area coordinator Clint Bradford, K6LCS, will be presenting his "Working Amateur Satellites With Your HT" session at the February 1, 2011 meeting of the Murray State University Amateur Radio Club. ALL are welcome to attend.

"MSUARC has been serving their region for fifty years," writes Clint. "I am really looking forward to meeting the group!"

(Wait a sec - isn't Clint in California? What is he doing in Kentucky? Too many frequent flier miles?)

Clint's out in Southern California - but has prepared a custom slide show for MSUARC, which will be displayed as Skype handles the session's audio. "I'd much rather be there in person - but this arrangement has worked quite successfully in the past. We'll have a great time!"

Clint has full information on his web page:
http://www.work-sat.com

[ANS thanks Clint, K6LCS, for the above information]

/EX

SB SAT @ AMSAT $ANS-009.08
ARISS School Contacts Resume for 2011

AMSAT News Service Bulletin 009.08

From AMSAT HQ SILVER SPRING, MD.
January 9, 2011
To All RADIO AMATEURS
BID: $ANS-009.08

ARISS Operations Team Mentor Charlie Sufana, AJ9N noted that the school contact schedule is being resumed following the recent crew change on board the International Space Station. The Expedition 26 crew current on orbit includes Dmitry Kondratyev, Catherine G. Coleman, KC5ZTH and Paolo Nespoli, IZ�JPA.

The first school contact occurred on Saturday, January 8 with the Università degli studi di Bari "Cittadella Mediterranea della Scienza", Bari, Ba, Italy, direct via IZ7EVR.

Additional school contacts continue with this planned schedule:

Wednesday January 12 08:08:20 UTC
Tsutsujigaoka Minami Elementary School in Akishima City (Tokyo), Japan, direct via 8J1TME

Wednesday January 12 10:54:52 UTC
Istituto Comprensivo Marco Polo-Viani Scuola Secondaria 1� Grado, Viareggio, Lucca, Italy, and Istituto Suore Mantellate, Viareggio, Lucca, Italy direct via IZ5PVC. Simulcast on:
http://www.versiliawebtv.it/streaming/reteversilia.html

Saturday January 15 09:02:16 UTC
Istituto Comprensivo Via Toscana 2 Civitavecchia, Roma, Italy, direct via IK�WGF. Simulcast on:
http://www.livestream.com/AMSAT_Italia

The Total number of ARISS ISS to earth school contacts is 565.

ARISS has posted a frequency chart for packet, voice, and cross band repeater modes showing Doppler correction at:
http://www.amsat.org/amsat/ariss/news/ISS_frequencies_and_Doppler_correction.rtf (careful with the line wrap).

Finally, astronauts Michael Fossum, KF5AQG, and Satoshi Furukawa, KE5DAW, are scheduled for ARISS prebrief sessions this month. Both are scheduled to fly with Expedition 28 in June 2011.

[ANS thanks ARISS Mentor Charlie, AJ9N, and Carol, KB3LKI, for the above information]

/EX

SB SAT @ AMSAT $ANS-009.09
AMSAT-UK's John Heaton, G1YYH Silent Key

AMSAT News Service Bulletin 009.09

From AMSAT HQ SILVER SPRING, MD.
January 9, 2011
To All RADIO AMATEURS
BID: $ANS-009.09

AMSAT-UK Hon Sec Jim G3WGM wrote, "It is with a heavy heart that I have to report the death of AMSAT-UK committee member John Heaton, G1YYH. He died in hospital in Manchester UK on Christmas Eve, having been admitted two weeks earlier. He had not been well for several months prior to his death."

"John was the AMSAT-UK Webmaster for many years, and a regular attender at the annual AMSAT-UK Colloquium. He always gave his time and considerable expertise very generously. He will be terribly missed by his friends and colleagues. He was a real gentleman."

[ANS thanks AMSAT-UK and Jim, G3WGM, for the above information]

/EX

SB SAT @ AMSAT $ANS-009.10
Vietnam CubeSat to Launch in 2011

AMSAT News Service Bulletin 009.10
From AMSAT HQ SILVER SPRING, MD.
January 9, 2011
To All RADIO AMATEURS
BID: $ANS-009.10

Satellite news carried on the SouthGateARC news site reported that a Vietnamese Amateur Radio CubeSat, F-1, is slated for launch towards the end of next year.

The F-1 CubeSat will carry 2 independent transceivers (Yaesu VX-3R & MHX L400) using amateur radio 145 and 437MHz bands. The transmission speed will be 1200bps and higher using FM AFSK & GMSK modulation, AX.25, KISS protocol. It will carry a low resolution C328 camera with 640x480 resolution.

The IARU satellite frequency coordination committee have agreed a downlink frequency of 437.485MHz and it is hoped to launch in the 4th quarter of 2011.

Vietnam F-1 CubeSat on Facebook
http://www.facebook.com/group.php?gid6436068290

F-1 on IARU Satellite Frequency Coordination pages
http://www.amsatuk.me.uk/iaru/
finished_detail.php?serialnum0

[ANS thanks the SouthGateARC News site for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor, wishing everyone a happy new year,
Lee McLamb, KU4OS

```
From 703437057365315428
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!border1.nntp.dca.giganews.com!
border4.nntp.dca.giganews.com!border2.nntp.dca.giganews.com!nntp.giganews.com!
novia!news-out.readnews.com!transit4.readnews.com!panix!rri.panix.com!robomod!not-
for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Tue, 11 Jan 2011 09:47:32 EST
Organization: The Radio Amateur Satellite Corporation
Lines: 1945
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000e01cbb19e$71a37d00$54ea7700$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1294757252 4121 166.84.1.6 (11 Jan 2011 14:47:32 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Tue, 11 Jan 2011 14:47:32 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news1.google.com rec.radio.amateur.space:441 rec.radio.info:2020
```

This report is organized into four (4) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - deborbited/returned satellites

SB SAT @ AMSAT W8ISS $WSR-010.S1
WSR 010 Part 1 01/10/2011

AMSAT NEWS SERVICE BULLETIN 010.S1
FROM AMSAT HQ SILVER SPRING, MD, January 10, 2011
TO ALL RADIO AMATEURS
BID: $WSR-010.S1

HO-68 HOPE-1 (CAS-1)(XW-1)
Catalog Number: 36122
Launch Date: December 15, 2009
Status: By schedule

Callsign:
Broadcast: BJ1SA-11
BBS: BJ1SA-12

Uplinks: 145.8250 MHz FM, PL 67.0 Hz.
145.9250 - 145.9750 MHz SSB/CW
145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
435.7650 - 435.7150 MHz SSB/CW
435.6750 MHz AFSK 1200 BPS

Beacon: 435.7900 MHz CW

Mode and Antenna Polarization:
V: LHCP 2.0dBi max
U: RHCP 3.0dBi max

IARU coordination page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108

For more information about XW-1 (CAS-1):
http://www.camsat.cn
[01102011]
=====
SO-67 SumbandilaSat
Catalog Number: 35870
Launch Date: September 17, 2009

Status: By schedule

Callsign: ZS0SUM

Uplink: 145.875MHz FM tone 233.6 Hz
Downlink: 435.345MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

For more information about SO-67:
http://www.amsatsa.org.za/
[01102011]
=====
DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008

Status: Operational
Current Mode: Science Mode - Beacon ONLY

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink: 435.530 to 435.570 MHz

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68
[09062010]
=====
VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.9360 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

```
To know what transponder is switched on please listen for the beacon
that is active. Each transponder has a different beacon.
[09062010]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Mode(s):
Voice repeater: V/u
Uplink:      145.920 MHz FM
Downlink:    435.300 MHz FM

Telemetry: By Command ONLY
Downlink:    435.150MHz 9k6


Analog voice downlink:     435.300 MHz FM
                           435.150 MHz FM
                          2401.200 Mhz FM
Analog voice uplink:       145.860 MHZ FM
                           145.880 MHz USB
                           145.880 MHz FM
                           145.920 MHz FM
                           145.920 MHz FM - 67 Hz PL tone burst
                          1268.705 MHz FM
Digital Downlinks:         435.150 MHz FM 38k4 PBP, 1 watt output
                           435.150 MHz FM 9k6 Pacsat Broadcast Protocol
                          2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:            145.860 MHz FM 9k6 Pacsat Broadcast Protocol
                          1268.705 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon:                    435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[01022011]
=====
SO-50 SAUDISAT-1C
```

Catalog number: 27607
Launch date: December 20, 2002

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4
Hz. The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute
   timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater
   on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset
   the 10 minute timer.
[09062010]
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[09062010]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational

Current Mode: Alternating between Mode A and B every 24 hours

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz CW
145.972 MHz CW
435.100 MHz CW
2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
[09062010]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - OFF
Voice - V/v
BBS - OFF
APRS - OFF
SSTV - OFF

Expedition 26 Crew:

Commander:	Scott Kelly	
Flight Engineer:	Alexander Kaleri	U8MIR
Flight Engineer:	Oleg Skripochka	RN3FU
Flight Engineer:	Dmitry Kondratyev	
Flight Engineer:	Catherine Coleman	KC5ZTH
Flight Engineer:	Paolo Nespoli	IZ0JPA

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM

437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[12172010]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-010.S2
WSR 010 Part 2 01/10/2011

AMSAT NEWS SERVICE BULLETIN 010.S2
FROM AMSAT HQ SILVER SPRING, MD, January 10, 2011
TO ALL RADIO AMATEURS
BID: $WSR-010.S2

O/OREOS
Catalog Number: 37224
Launch Date: November 20, 2010

Status: On Orbit

Uplink:
Downlink: 437.035 MHZ AX.25

Beacon:

Callsign:

URL: http://www.ooreos.org/
[11302010]
=====

```
Rax-1 Radio Aurora Explorer
Catalog Number: 37223
Launch Date: November 19. 2010

Status: On Orbit

Uplink:
Downlink: 437.505 MHz 9k6 GMSK

Beacon:

Callsign: RAX-1

URL: http://rax.engin.umich.edu/
[11302010]
=====
Fastrac-1 Sara Lily
Catalog Number: 37225
Launch Date: November 19, 2010

Status: On orbit

Uplink 1: 145.980 MHz 1k2 baud
Uplink 2: 145.825 MHz 1k2 baud
Downlink: 437.345 MHz 1k2 and 8k6 baud

Beacon:   437.435 MHz 1k2 AX.25

Callsign: Fast1

URL: http://fastrac.ae.utexas.edu/index.php
[01102011]
=====
Fastrac-2 Emma
Catalog Number: 37227
Launch Date: November 19, 2010

Status: On Orbit

Uplink 1: 435.025 MHz 1k2 baud
Uplink 2: 437.435 MHz 9k6 baud
Downlink: 145.825 MHz

Beacon:   145.825 MHz 1k2 AX.25

Callsign: Fast2

URL: http://fastrac.ae.utexas.edu/index.php
[01102011]
=====
StudSat
Catalog Number: 36796
Launch Date: July 12, 2010
```

```
Status: On Orbit

Uplink:   437.505MHz, 9600bps FSK
Downlink: 437.505MHz, 9600bps FSK
Beacon  : 437.505MHz,   20bps ASK
[08062010]
=====
TIsat-1
Catalog Number: 36799
Launch Date: July 12, 2010

Status: On orbit

Callsign: HB9DE

Uplink:   145.980MHz FM, AFSK
Downlink: 437.305MHz FM, AFSK
Beacon:   437.305MHz CW
[08062010]
=====
HO-68 HOPE-1 (CAS-1)(XW-1)
Catalog Number: 36122
Launch Date: December 15, 2009

Status: By schedule

Callsign:
Broadcast:    BJ1SA-11
BBS:         BJ1SA-12

Uplinks:   145.8250 MHz FM, PL 67.0 Hz.
           145.9250 - 145.9750 MHz SSB/CW
           145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
           435.7650 - 435.7150 MHz SSB/CW
           435.6750 MHz AFSK 1200 BPS

Beacon:    435.7900 MHz CW

IARU coordination page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108

For more information about XW-1 (CAS-1):
http://www.camsat.cn
[01102011]
=====
SwissCube
Catalog Number: 35932
Launch Date: September 23, 2009

Status: Operational

Callsign: HB9EG
```

```
Beacon(100mw): 437.5050MHz CW
Beacon(1w):    437.5050MHz FSK 1k2bps
[04222010]
=====
UWE-2
Catalog Number: 35934
Launch Date: September 23, 2009

Status: In Orbit

Beacon(500mw): 437.3850 MHz AFSK 1k2bps
               437.3850 MHz FSK 9k6bps
[1112009]
=====
ITUpsAT1
Catalog Number: 35935
Launch Date: September 23, 2009

Status: Operational

Beacon(100mw): 437.325MHz CW
Beacon(1w): 437.325MHz 19k2bps
[11112009]
=====
BEESAT
Catalog Number: 35933
Launch Date: September 23, 2009

Status: Operational

Callsign: DP0BEE

Beacon(100mw): 436.000MHz CW
Beacon(500mw): 436.000MHz GMSK 4k8bps
Beacon(500mw): 436.000MHz GMSK 9k6bps
[04222010]
=====
CP-6
Catalog Number: 35003
Launch Date: May 19, 2009

Status: Operational

Downlink: 437.365 MHz 1k2 AFSK
[09062010]
=====
HAWKSAT 1
Catalog number: 35004
Launch Date: May 19, 2009

Status: operational
```

```
Downlink: 437.345 MHz ?
[09062010]
=====
Pharmasat
Catalog Number: 35002
Launch Date: May 19, 2009
Status: Operational

Downlink: 437.465 MHz 1k2 AFSK
[09062010]
=====
ANUSAT
Catalog Number: 34808
Launch Date: April 20, 2009

Status: ?

Downlink:  435.000 MHz
Uplink:    145.800 MHz

Telemetry: 137.400 MHz
[09062010]
=====
SOHLA-1 (ASTRO TECH.)
Catalog Number: 33496
Launch Date: January 23, 2009

Status: Operational

Proposed Frequencies and Modes:
Downlink: 437.505 MHz AFSK/CW
Beacon:   437.505 MHz AFSK/CW

Callsign:

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=101
[09062010]
=====
KAGAYAKI (Solan Co.)
Catalog Number: 33495
Launch Date: January 23, 2009

Status: In Orbit

Downlink: 437.375 MHZ    FSK9k6/CW
Beacon:   437.375 MHz    FSK9k6/CW

IARU coordination status page:

AMSAT-NA webpage:

[09062010]
```

```
=====
STARS (Kagawa Univ.) (Twin Satellites)
Catalog Number: 33498
Launch Date: January 23, 2009

Status: Operational ?

Downlinks: 437.485 MHz FM/CW
           437.465 MHz FM/CW
Beacons:   437.305 MHz FM/CW
           437.275 MHz FM/CW

Callsigns: JR5YBN
           JR5YBO

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=99

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=121&retURL
=/satellites/status.php
[09062010]
=====
KKS-1 (Tokyo MCIT)
Catalog Number: 33499
Launch Date: January 23, 2009

Status: Operational

Downlink:  437.455 MHz AFSK/CW
Beacon:    437.385 MHz AFSK/CW

Callsign: JQ1YYY

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=107

AMSAT-NA webapge:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=120&retURL
=/satellites/status.php
[09062010]
=====
PRISM (Tokyo Univ.)
Catalog Number: 33493
Launch Date: January 23, 2009

Status: Operational ?

Downlink: 437.425 MHz AFSK/GMSK/CW
Beacon:   437.250 MHz AFSK/GMSK/CW

Callsign: JQ1YCX
```

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=97

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=119&retURL=/satellites/status.php
[09062010]
=====
RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number: 32953
Launch Date: May 23, 2008

Status: Operational

Curent Modes: Telemetry
Audio
Images

Downlinks: 435.315 MHz
435.215 MHz

AMSAT-NA website:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=115&retURL=/satellites/status.php

Official website:
http://www.npopm.com/?cid=leoca&caid=43
[09062010]
=====
CanX-2
Catalog number: 32790
Launch Date: April 28, 2008

Status: Operational in range of ground station only

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[09062010]
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.425 MHz 1k2 baud packet

For the latest project status update please visit the AAUSAT-II web

page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[09062010]
=====
CO-65 CUTE-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008

Status: Digipeater

Downlink: 437.475 MHz 9k6 Packet
Uplink: 1267.600 Mhz

Telemetry Beacon:
Downlink: 437.2750 MHz CW

For the latest project status update please visit the Cute-1.7+APD II web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78

Command Station blog website:
http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=112&retURL=/satellites/status.php
[09062010]
=====
Compass-1
Catalog number: 32787
Launch Date: April 28, 2008

Status: Operational

Current Mode: 4k8 MSK packet

Uplink: 145.980 MHz FM
Downlink: 437.275 Mhz CW
          437.405 MHz Packet

For the latest project status update please visit the Compass 1 web page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=114&retURL

=/satellites/status.php
[09062010]
=====
CO-66 Seeds II
Catalog number: 32791
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.485 MHz

Callsign: JQ1YGU

For the latest project status update please visit the Seeds 2 web page: http://cubesat.aero.cst.nihon-u.ac.jp/english/seeds_2_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=113&retURL
=/satellites/status.php
[09062010]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode: /u

```
TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon:    435.245 MHz CW
```

Callsign: K5USL

TLM and CW interchange every 30 seconds.

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=94&retURL=
/satellites/status.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=72
[09062010]
=====
CP3
Catalog Number: 31129
Launch Date: April 17,2007

Status: Operational

```
Current Mode:  /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[09062010]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon:             437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/xivpicte.htm
[09062010]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003

Status: ?????

Current Mode: /u

Beacon:     436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=96&retURL
=/satellites/status.php

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[09062010]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Mode(s):
Voice repeater: V/u
Uplink:      145.920 MHz FM
```

Downlink: 435.300 MHz FM

Telemetry:
Downlink: 435.150MHz 9k6

Analog voice downlink:	435.300 MHz FM
	435.150 MHz FM
	2401.200 Mhz FM
Analog voice uplink:	145.860 MHZ FM
	145.880 MHz USB
	145.880 MHz FM
	145.920 MHz FM
	145.920 MHz FM - 67 Hz PL tone burst
	1268.700 MHz FM
Digital Downlinks:	435.150 MHz FM 38k4 PBP, 1 watt output
	435.150 MHz FM 9k6 Pacsat Broadcast Protocol
	2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:	145.860 MHz FM 9k6 Pacsat Broadcast Protocol
	1268.708 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon:	435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[12172010]
=====
QuakeSat
Catalog Number: 27845
Launch Date: June 30, 2003

Status: Telemetry only

Current Mode: 9600 baud data packet

Mode U packet
Downlink: 436.675 MHz 9k6 BPS

Quakesat webpage:
http://www.quakefinder.com/services/quakesat-ssite/
[10042010]

```
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=69&retURL
=/satellites/status.php
[09062010]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Telemetry only

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink:        144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[09062010]
=====
RS-22 RADIO SPORT 22
Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only

Current Mode:  /u

CW Beacon - 435.352 MHz
            145.818 MHz

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=76&retURL
=/satellites/status.php
[09062010]
```

```
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990

Status: CW Beacon only

Uplinks:          145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink:      437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[09062010]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984

Status: Operational

Current Mode:  /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon:          435.025 MHz
Mode-S Beacon:     2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[11062010]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - OFF
                      Voice -       V/v
                      BBS -         OFF
                      APRS -        OFF
```

SSTV - OFF

Expedition 26 Crew:
Commander: Scott Kelly
Flight Engineer: Alexander Kaleri U8MIR
Flight Engineer: Oleg Skripochka RN3FU
Flight Engineer: Dmitry Kondratyev
Flight Engineer: Catherine Coleman KC5ZTH
Flight Engineer: Paolo Nespoli IZ0JPA

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time line is NOT translated from Russian and posted.
[121702010]

```
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-010.S3
WSR 010 Part 3 01/10/2011

AMSAT NEWS SERVICE BULLETIN 010.S3
FROM AMSAT HQ SILVER SPRING, MD, January 10, 2011
TO ALL RADIO AMATEURS
BID: $WSR-010.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

CP4
Catalog Number: 31132
Launch Date: April 17, 2007

Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon:    437.325 MHz CW

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=79
[09062010]
=====
LIBERTAD-1
Catalog Number: 31128
Launch Date: April 17, 2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink:   145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[09062010]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: Non-Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
```

```
Voice Recorder:  145.825 Mhz FM
[09062010]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency:  437.305
                             2407.250

Official Website: http://www.ncube.no
[09062010]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink:         437.250 MHz FM 67Hz CTCSS
Voice Downlink:      2401.835 MHz FM
Packet Up/Downlink:   437.250 MHz 9k6 packet
Packet Downlink      2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[09062010]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non-Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[09062010]
=====
CANX-1
Catalog Number: 27847
Launch Date: June 30, 2003

Status: Non-Operational

Downlink: 437.8800 MHz AFSK 1k2bps
[06052009]
=====
DTUSAT
Catalog Number: 27842
Launch Date: June 30, 2003
```

Status: Non-Operational

Current Mode: 2k4 AFSK Packet last reported

Downlink: 437.475MHz

Officail webpage: http://dtusat1.dtusat.dtu.dk/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=101&retURL
=satellites/all_oscars.php
[02212009]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)

Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Telemetry only

Uplinks: 145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[03302009]
=====
NO-45 SAPPHIRE
Catalog number: 26932

Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks

V-band: 145.840 - 145.990 MHz CW/LSB

U-band: 435.550 - 435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks

S2-band: 2401.225 - 2401.475 MHz CW/USB
K-band: 24048.010 - 24048.060 MHz CW/USB
Beacon: 2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)

BEACON	General Beacon(GB)	Middle Beacon(MB)	Engineering Beacon(EB)
2 m	none	145.898 MHz	none
70cm	435.438 MHz	435.588 MHz	435.838 MHz
13cm(1)	2400.188 MHz	2400.338 MHz	2400.588 MHz
13cm(2)	2401.173 MHz	2401.323 MHz	2401.573 MHz
3cm	10450.975 MHz	10451.125 MHz	10451.375 MHz
1.5cm	24047.885 MHz	24048.035 MHz	24048.285 MHz

[07162007]

=====

OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]

=====

UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]

=====

SO-35 SUNSAT
Catalog Number: 25636
Launch date:February 23, 1999

```
Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater:         436.250 MHz

Uplinks: Mode B Repeater:  145.825 MHz
Mode J Digipeater:         145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Non-Operational

Current Modes:
Telemetry : /u

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign:       4XTECH-12

More information of GO-32 can be found at:
http://asri.technion.ac.il/techsat/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=14&retURL
=/satellites/status.php
[07172010]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink:   145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
MO-30 UNAMSAT-2
Catalog Number: 24305
Launch Date: September 5, 1996

Status: Non-operational

Downlink:       435.1380 MHz AFSK 1200 BPS
Downlink:       435.2060 MHz AFSK 1200 BPS
Uplink:         145.8150 MHz AFSK 1200 BPS
Uplink:         145.8350 MHz AFSK 1200 BPS
Uplink:         145.8550 MHz AFSK 1200 BPS
Uplink:         145.8750 MHz AFSK 1200 BPS
[06042009]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Non-operational
Current Mode: V/u (Mode JA)

Voice/CW (Mode JA)
Uplink:   145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
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```
Beacon:   435.795 MHz

Digital Mode JD
Uplinks:  145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage:
http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's
CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/
fo29cwts.htm
[11062010]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Non-operational

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign:       POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012009]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:
```

```
Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
AO-24 ARSENE
Catalog Number: 22654
Launch Date: May 13, 1993

Status: Non-operational

Uplink:    435.0625 MHz FM 1k2bps AFSK
           435.1125 MHz FM 1k2bps AFSK
           435.1375 MHz FM 1k2bps AFSK
Downlink:  145.9750 MHz FM 1k2bps AFSK
          2446.5025 MHz FM 1k2bps AFSK

Beacon:    2446.4700 MHz CW

Broadcast callsign:
BBS:
[12162009]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
```

```
Downlink: 435.170 MHz FM

Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
[05012006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: non-operational

Current Mode:  V/u

Uplink:         145.900 MHz FM 1200-baud Manchester FSK (reserved)
                145.920 MHz FM VOICE
                145.940 MHz FM 1200-baud Manchester FSK (reserved)
                145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink:       437.026 MHz USB VOICE
                (1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[07242009]
=====
UO-15 UoSAT-4
Catalog Number: 20438
Launch Date: January 22, 1990

Status: Non-operational
```

Uplink: ?
Downlink: 435.1250MHz (?)
          435.1200MHz (?)
[06042009]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink: 145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink: 145.8500 MHz MFSK 1200 BPS
Uplink: 145.8700 MHz MFSK 1200 BPS
Uplink: 145.8900 MHz MFSK 1200 BPS
Uplink: 145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon: 145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8

```
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink  29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
Beacons:   29.450 MHz
          435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
```

Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB

Beacon 1: 29.352 MHz (intermittent)
Beacon 2: 29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB

Beacon: 145.860 MHz

Robot: 145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-010.S4
WSR 010 Part 4 01/10/2011

AMSAT NEWS SERVICE BULLETIN 010.S4
FROM AMSAT HQ SILVER SPRING, MD, January 10, 2011
TO ALL RADIO AMATEURS
BID: $WSR-010.S4

THE FOLLOWING SATELLITES HAVE RE-ENTERED OR HAVE BEEN RETURNED SAFELY:

```
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Re-entered
Re-entered:

Uplink:  1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=56
[09062010]
=====
BEVO-1 (DRAGONSAT-1)
Catalog Number: 35690
Launch Date: May 19, 2009

Status: Re-entered
Re-entered:

Downlink: 437.325 MHz 9k6 GMSK
          437.325 MHz CW 20wpm
[07312009]
=====
AggieSat2 (DRAGONSAT-2)
Catalog Number: 35690
Launch Date: May 19, 2009

Status: Re-entered
Re-entered:

Downlink: 436.250 MHz 9k6 FHSS
[11112009]
=====
Pollux
Catalog Number: 35693
Launch Date: July 31, 2009

Status: Re-entered
Re-entered:

Callsign: POLLUX-1

Downlink: 145.825MHz 1k2 AX.25
[09062010]
```

```
=====
Castor (ANDE-2)
Catalog Number: 35694
Launch Date: July 31, 2009

Status: Re-entered
Re-entered:

Callsign: KD4HBO-1

Downlink: 145.825 MHz 1k2 AX.25
[09062010]
=====
NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: July 28, 2008

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[01012009]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink:      145.825 Mhz FM APRS AX25
APRS Uplink:        145.825 MHz FM APRS AX25
Voice/PSK31 Uplink:  28.120 MHz

Packet to Voice ID: RAFT
[06112007]
=====
GENESAT-1
Catalog Number: 29655
```

Launch Date: December 16, 2006

Status: Re-Entered
Re-entered date: August 8, 2010

Current Mode: /u

Callsign: KE7EGC

Telemetry Beacon Downlink: 437.0695 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[08082010]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Re-Entered
Re-entered: June 18, 2008

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon: 437.2750 MHz CW

Callsign: JR8YJT
[01012009]
=====
SO-43 Starshine 3
Catalog Number: 26929
Launch Date: September 30, 2001

Status: Re-Entered
Re-entered: January 21, 2003

Beacon: 145.825Mhz
[02212009]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at}
amsat.org
NNNN
/EX

```
From -8588225128822363134
X-Google-Thread: 10e8ad,fab3fa303b257865,start
X-Google-NewGroupId: yes
X-Google-Thread: 10b9c8,fab3fa303b257865,start
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,gida4a23d5f63,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII
Path: g2news2.google.com!news2.google.com!newsfeed2.dallas1.level3.net!
news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-016 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Mon, 17 Jan 2011 15:48:34 EST
```

Organization: The Radio Amateur Satellite Corporation
Lines: 381
Approved: RRI Admin <rec-radio-info-request@panix.com>
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X-Complaints-To: abuse@panix.com
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X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to   rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to   rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news2.google.com rec.radio.amateur.space:467 rec.radio.info:2116

AMSAT NEWS SERVICE
ANS-016

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* Satellite Protocol
* ARISSat-1 Update
* SKN Reminder
* SA AMSAT Cubesat project needs programmers
* ARISS Report
* NASA Redoubling Efforts to Contact Spirit Rover on Mars
* Satellite Shorts
* AMSAT China Report on HO-68 Health

SB SAT @ AMSAT $ANS-016.01
Satellite Protocol

AMSAT News Service Bulletin 016.01
  From AMSAT HQ SILVER SPRING, MD.
January 16, 2011

To All RADIO AMATEURS
BID: $ANS-016.01

Recently, there has been comments on activity on the LEO satellites. With newcomers added to the mixture everyday, it is a good idea to re-read a Guideline from many years ago.

http://www.innismir.net/article/26

Enjoy and use as a reminder of our resposibilities.

[ANS thanks Drew, KO4MA, for the above information]

/EX

SB SAT @ AMSAT $ANS-016.02
ARISSat-1 Update

AMSAT News Service Bulletin 016.02
  From AMSAT HQ SILVER SPRING, MD.
January 16, 2011
To All RADIO AMATEURS
BID: $ANS-016.02

The ARISSat-1 satellite/amateur radio experiment is in Baikonur. RSC Energia has information and photographs about the satellite on their news site:
http://www.energia.ru/en/news/news-2010/news_12-31.html

The NASA Phase 3 Safety Review for ARISSat is scheduled for Thursday 20 January 2011. The Progress 41P launch carrying ARISSat-1/RadioSkaf-V is scheduled for late January and the release of the satellite is scheduled for the end of February 2011.

Energia is also calling the satellite KEDR, after Yuri Gagarin's call sign in celebration of the 50th anniversary of the first manned space flight 12 April 1961. Sergey Samburov, RV3DR is shown in the photos with the satellite on the RSC Energia site.

[ANS thanks ARISSat-1 Project Manager Gould Smith, WA4SXM, for the above information]

/EX

SB SAT @ AMSAT $ANS-016.03
SKN reminder

AMSAT News Service Bulletin 016.03
  From AMSAT HQ SILVER SPRING, MD.
January 16, 2011
To All RADIO AMATEURS

BID: $ANS-016.03

Ray, W2RS thanks all who participated in AMSAT's Straight Key Night on OSCAR 2011 and reminds us to please nominate someone you worked for 'Best Fist.' Your nominee need not have the best fist of those you heard, just of those you worked. Nominations should be sent to w2rs@amsat.org. A list of those nominated will be published in ANS in early February, and in a forthcoming issue of The AMSAT Journal.

[ANS thanks Ray, W2RS, for the above information]

/EX

SB SAT @ AMSAT $ANS-016.04
SA AMSAT Cubesat project needs programmers

AMSAT News Service Bulletin 016.04
From AMSAT HQ SILVER SPRING, MD.
January 16, 2011
To All RADIO AMATEURS
BID: $ANS-016.04

The development team for the planned South African CubeSat project is taking shape nicely.

Radio amateurs with diverse specialist skills are offering their expertise from all over. "However, we still need a person with experience in programming PIC or 8051 microprocessors," Hannes Coetzee, ZS6BZP, told SARL News.

"This person will be a critical member of the team and will be responsible for the development of the onboard controller software. Other amateurs who are interested in the development of the satellite and would like to join the development team are still welcome to send their Amateur Radio CVs to: saamsat@intekom.co.za," Hannes said.

The team will meet for its first formal teleconference on Wednesday evening 26 January 2011 at 20:00. Team members will receive a formal notification.

[ANS thanks SARL, SA AMSAT, and SouthGateARC site for the above information]

/EX

SB SAT @ AMSAT $ANS-016.05
ARISS Report

AMSAT News Service Bulletin 016.05
From AMSAT HQ SILVER SPRING, MD.
January 16, 2011
To All RADIO AMATEURS
BID: $ANS-016.05

Amateur Radio on the International Space Station (ARISS)
Status Report January 10, 2011

1. Upcoming School Contacts

An Amateur Radio on the International Space Station (ARISS) contact scheduled for Tsutsujigaoka Minami Elementary School in Akishima, Tokyo, Japan on Wednesday, January 12 was completed. Students participating in the contact are learning about space science and the global cooperation required to operate the ISS.

An Amateur Radio on the International Space Station (ARISS) contact with Istituto Comprensivo Marco Polo-Viani Scuola Secondaria 1� Grado, Viareggio, Lucca, Italy on Wednesday, January 12 has been completed. Through this contact, the school hoped to increase students' interest in science, technology, space research and other space-related subject matters.

Istituto Comprensivo Via Toscana 2 in Civitavecchia, Italy scheduled for an Amateur Radio on the International Space Station (ARISS) contact on Saturday, January 15 has also been successful. The school, with an enrollment of 750 children, ages 3-14, had prepared questions about life in space and the research performed on the ISS.

2. Italian Students Chat with Astronaut through ARISS Contact

On Saturday, January 8, University of Bari "Cittadella Mediterranea della Scienza" in Bari, Italy participated in an Amateur Radio on the International Space Station (ARISS) contact with ESA astronaut Paolo Nespoli, IZ0JPA. Prior to the contact, ARISS mentor Francesco De Paolis, IK0WGF introduced the event via phone line. Nespoli made the radio link with the students, answering 14 of their questions. A second contact was established on the following ISS pass to finish up the questions and exchange greetings. Approximately 100 students, teachers, visitors and media attended. Regional television, local media and newspapers covered the event and video was streamed over the internet, receiving more than 100 connections. Cittadella Mediterranea della Scienza promotes technology and scientific knowledge in schools of all grades using projects that encourage academic research.

3. Astronaut Training Status

Astronaut Chris Cassidy was given an introductory session on ARISS this past week. He will train for his amateur radio license and plans to participate in the ARISS program. He is currently scheduled to fly in the spring of 2013.

4. ARRISat Featured in February QST

The American Radio Relay League (ARRL) posted a story in its January 6 ARRL Letter about the February issue of QST which features ARISSat-1 on its front cover. The ARRL monthly journal has a circulation of 156,000.

See: http://www.arrl.org/arrlletter?issue 11-01-06

5. AMSAT Posts ARISSat-1 Update to Web Site

The Radio Amateur Satellite Corporation (AMSAT) posted an update on its Web page covering the current status of ARISSat-1. "ARISSat-1/RadioSkaf-V Integration and Testing Underway in Moscow," may be viewed here:

http://www.amsat.org/amsat-new/index.php

6. AMSAT Articles on ARISS News

On January 9, the AMSAT (Radio Amateur Satellite Corporation) News Service bulletin (ANS-009) included two ARISS-related news items. "ARISSat-1/RadioSkaf-V Update" and "ARISS School Contacts Resume for 2011" may be found at:

http://www.amsat.org/amsat/archive/amsat-bb/48hour/msg83129.html

[ANS thanks Carol, KB3LKI, for the above information]

/EX

SB SAT @ AMSAT $ANS-016.06

NASA Redoubling Efforts to Contact Spirit Rover on Mars

AMSAT News Service Bulletin 016.06
  From AMSAT HQ SILVER SPRING, MD.
January 16, 2011
To All RADIO AMATEURS
BID: $ANS-016.06

A news item carried on UniverseToday.com (http://tinyurl.com/2ccsnku) reports that NASA is stepping up operational efforts to contact the Martian Spirit rover with more communications commands; more listening time; more frequencies. Spirit last communicated with mission controllers back on Earth on March 22, 2010. The rover entered hibernation mode, some nine months ago, as the available sunlight to power the life giving solar panels was diminishing. NASA hopes to reawaken Spirit from a long slumber and reignite her breakthrough campaign of exploration and discovery from a scientific goldmine on the surface of the red planet.

At Spirit's location in the southern hemisphere of Mars, Southern Summer has not yet arrived. Right now it's mid Southern Spring and daylight hours are increasing. And Summer doesn't even start until mid-March 2011. The question is whether Spirit's unheated electronics components have endured the extremely harsh and frigidly cold conditions of her 4th winter on Mars - her coldest ever. At about -100 C.

Spirit entered a low-power fault mode in March 2010 with minimal activity except charging and heating the batteries and keeping its clock running. With most heaters shut off, Spirit's internal temperatures dipped lower than ever before on Mars. That stress could have caused damage, s uch as impaired electrical connections, that would prevent reawakening or, even if Spirit returns to operation, would reduce its capabilities.

"Components within the rover electronic module (REM) inside the rover's warm electronic box (WEB) are experiencing record low temperatures," said Doug McCuistion, the director of Mars Exploration at NASA Headquarters in Washington, DC, in an interview about Spirit's predicament. "The expectation is for the REM hardware to reach -55C at the coldest part of the winter. We have tested the REM down to -55C".

NASA's Deep Space Network of antennas in California, Spain and Australia

has been listening for Spirit daily in coordination with the spacecraft orbiting Mars; Mars Odyssey and Mars Reconnaissance Orbiter. In X-band, the DSN listens for Spirit during one pass each day. The rover team has also been sending commands to elicit a response from the rover even if the rover has lost track of time.

Now, the monitoring is being increased. Additional listening periods include times when Spirit might mistake a signal from NASA's Mars Reconnaissance Orbiter as a signal from Earth and respond to such a signal. Commands for a beep from Spirit will be sent at additional times to cover a wider range of times-of-day on Mars when Spirit might awaken.

"DSN does an average of 4 "sweep & beep" commands in each day's pass," according to JPL spokesman Guy Webster. Also, NASA is listening on a wider range of frequencies to cover more possibilities of temperature effects on Spirit's radio systems.

[ANS thanks UniverseToday.com for the above information]

SB SAT @ AMSAT $ANS-016.07
Satellite Shorts

AMSAT News Service Bulletin 016.07
  From AMSAT HQ SILVER SPRING, MD.
January 16, 2011
To All RADIO AMATEURS
BID: $ANS-016.07

+ The next "HV Satcom" Net is Thursday January 20 at 8PM (UTC -5);

(Host) Mt. Beacon ARC) on the 146.970MHz. Repeater (-600;Pl;100)
with an Echolink Node of "N2EYH-L" ("HV Satcom"net): www.hvsatcom.org/
E-Mail: wa2aqh@amsat.org ("HV Satcom"Net)

+ January SatMagazine Covers CubeSats

Amateur Radio satellites NanoSail-D and O/OREOS get a mention in the January edition of SatMagazine, now available for free download.

NanoSail-D and O/OREOS feature on pages 61/62.

Pages 14-18 have a article by Surrey Satellite Technologies Ltd. (SSTL) project lead Shaun Kenyon on the recent increase in interest in NanoSats and pages 20-22 cover "The Power Of Picosatellites".

The US military are making use of NanoSats and the recently launched US Army satellite SMDC-ONE, a 3U CubeSat, is covered on page 60.

Download a copy of the January SatMagazine from
http://www.satmagazine.com/2011/SM_January_2011.pdf

Free subscription to SatMagazine and SatNews
http://www.satnews.com/cgi-bin/regester.cgi

SatMagazine
http://www.satmagazine.com/

[ANS thanks the SouthGateARC Site and the HVSatCom Net for the above information]

/EX

SB SAT @ AMSAT $ANS-016.08
AMSAT China Report on HO-68 Health

AMSAT News Service Bulletin 016.08
From AMSAT HQ SILVER SPRING, MD.
January 16, 2011
To All RADIO AMATEURS
BID: $ANS-016.08

AMSAT China Report on HO-68 Health

HO-68 (XW-1) Project Manager, Alan Kung, BA1DU sent an update on the satellite's operational status. Alan wrote, "This week I received many reports from all over the world about faults of HO-68's telemetry beacon."

Alan continues, "After we analyzed the situation of the satellite, we think that the software in the payload management MPU was not running properly. Software crashes stopped communication between the payload management MPU and the satellite management unit. This caused the problem with the beacon and caused an abnormal switch of the transponder mode."

On January 14 AMSAT China controllers switched the satellite into safe mode at 0300Z. They turned off most of the onboard units, and then at 0440Z re-powered up. The satellite returned to normal operating mode and so far the beacon has continued to operate normally.

AMSAT China said they will not upload commands to the satellite to change the transponder operating schedule for the next week. The command team will continually monitor HO-68 operational status this week. Please send Alan a report if you observe any abnormal operation of HO-68.
Alan can be reached at: alankung@public3.bta.net.cn

AMSAT China web page: http://www.camsat.cn

[ANS thanks Alan Kung, BA1DU for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor
Dee Interdonato, NB2F

From 4441682517913195676
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X-Google-NewGroupId: yes
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http://karomasti9.blogspot.com/2011/01/deepika-padukone.html
                        HOT ARCHANA STILLS
http://karomasti9.blogspot.com/2011/01/archana.html
          DEEKSHA SETH HOT WALLPAPERS
http://karomasti9.blogspot.com/2011/01/deeksha-seth.html
       KATRINA KAIF HOT VIDEOS&PHOTOS
http://karomasti9.blogspot.com/2011/01/katrina-kaif.html
                 SAMEERAREDDY HOT BOOBS
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From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-023 AMSAT News Service Weekly Bulletins
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Lines: 574
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X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
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AMSAT NEWS SERVICE
ANS-023

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Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:

* ARISSat-1 Loaded Aboard Progress-41P for Launch on January 28
* AO-51 Power Management Update
* NanoSail-D Feared Lost Now Active - Amateur Radio Reports Requested
* Marshall Amateur Radio Club Confirms NanoSail-D Beacon Active
* January AMSAT India Newsletter - CubeSat Transponder Announced
* ESA Astronaut Paolo Nespoli Speaks with Italian Youth via ARISS
* Last Call: OSCAR SKN Best Fist Nominations Are Due
* Satellite Shorts From All Over
* Next Winners From PayPal Widget Announced
* HI0RCD Special Events Station Plans AO-51 Operation
* Donation to AMSAT via Required Minimum Distribution Option

SB SAT @ AMSAT $ANS-023.01
ARISSat-1 Loaded Aboard Progress-41P for Launch on January 28

AMSAT News Service Bulletin 023.01
>From AMSAT HQ SILVER SPRING, MD.
January 23, 2011
To All RADIO AMATEURS
BID: $ANS-023.01

The ARISSat-1 space craft is mounted in the Progress vehicle at Baikonur and the hatch sealed. Progress 41P is scheduled to lift off next Friday, 28 January 2011. Due to the launch of STS-133, the EVA to deploy ARISSat-1 has been moved up to 16 February 2011.

The NASA Phase 3 Safety Review for ARISSat-1 was held Thursday morning, 19 Jan 2011 in Houston. There were three items that did not have complete paperwork; Energia and the US teams are working to clear this up by early next week.

A NASA press release describes the plans for ARISSat-1 in an article about planned Russian EVAs from the ISS:
http://tinyurl.com/6kceotn (nasa.gov)

Bob, N4HY reports that NASA TV (http://www.nasa.gov/ntv) has run a program featuring ARISSat-1. Watch for repeat playback.

[ANS thanks ARISSat-1 Project Manager Gould Smith, WA4SXM, and NASA for the above information]

/EX

SB SAT @ AMSAT $ANS-023.02
AO-51 Power Management Update

AMSAT News Service Bulletin 023.02
>From AMSAT HQ SILVER SPRING, MD.
January 23, 2011
To All RADIO AMATEURS
BID: $ANS-023.02

AO-51 Control Operator, Mark Hammond, N8MH reported this week, "The satellite continues to be in good operating condition thanks to good power management."

The Control Team continues to make adjustments and refinements in the specific settings. While AO-51 is in the sun its downlink power output remains strong at around 1.3 W output. The transmitters are OFF while in eclipse.

The current schedule is planned to continue through the end of February 2011, when the satellite will return to full sunlight again.
The current AO-51 operating mode is:

Single FM Repeater:
Uplink: 145.920 MHz FM
Downlink: 435.300 MHz FM

The AO-51 Command Team requests that users continue to post their observations of AO-51's operating condition on the Live OSCAR Satellite Status Page: http://oscar.dcarr.org/index.php.

Keep up to date with the latest Command Team and Operations Group AO-51 News at: http://www.amsat.org/amsat-new/echo/CTNews.php

[ANS thanks Mark, N8MH, for the above information]

/EX

SB SAT @ AMSAT $ANS-023.03

NanoSail-D Feared Lost Now Active - Amateur Radio Reports Requested

AMSAT News Service Bulletin 023.03
>From AMSAT HQ SILVER SPRING, MD.
January 23, 2011
To All RADIO AMATEURS
BID: $ANS-023.03

[Editor note: The NanoSail-D satellite launched with the NASA FASTSAT mission from Kodiak. It had appeared to not have been ejected and subsequently not activated. This week NASA said that telemetry from FASTSAT now indicated that NanoSail-D was now active and issued the following press release.]

NANOSAIL-D EJECTS; NASA SEEKS AMATUER RADIO OPERATORS' AID TO LISTEN FOR BEACON SIGNAL

HUNTSVILLE, Ala. - Wednesday, Jan. 19 at 11:30 a.m. EST, engineers at Marshall Space Flight Center in Huntsville, Ala., confirmed that the NanoSail-D nanosatellite ejected from Fast Affordable Scientific and Technology Satellite, FASTSAT. The ejection event occurred spontaneously and was identified this morning when engineers at the center analyzed onboard FASTSAT telemetry. The ejection of NanoSail-D also has been confirmed by ground-based satellite tracking assets.

Amateur ham operators are asked to listen for the signal to verify NanoSail-D is operating. This information should be sent to the NanoSail-D dashboard at: http://nanosaild.engr.scu.edu/dashboard.htm. The NanoSail-D beacon signal can be found at 437.270 MHz.

The NanoSail-D science team is hopeful the nanosatellite is healthy and can complete its solar sail mission. After ejection, a timer within NanoSail-D begins a three-day countdown as the satellite orbits the Earth. Once the timer reaches zero, four booms will quickly deploy and the NanoSail-D sail will start to unfold to a 100-square-foot polymer sail. Within five seconds the sail fully unfurls.

"This is great news for our team. We're anxious to hear the beacon which tells us that NanoSail-D is healthy and operating as planned", said Dean Alhorn, NanoSail-D principal investigator and aerospace engineer at the Marshall Center. "The science team is hopeful to see that NanoSail-D is operational and will be able to unfurl its solar sail."

On December 6, 2010, NASA triggered the planned ejection of NanoSail-D from FASTSAT. At that time, the team confirmed that the door successfully opened and data indicated a successful ejection. Upon further analysis, no evidence of NanoSail-D was identified in low-Earth orbit, leading the team to believe NanoSail-D remained inside FASTSAT.

The FASTSAT mission has continued to operate as planned with the five other scientific experiments operating nominally.

"We knew that the door opened and it was possible that NanoSail-D could eject on its own," said Mark Boudreaux, FASTSAT project manager at the Marshall Center. "What a pleasant surprise this morning when our flight operations team confirmed that NanoSail-D is now a free flyer."

If the deployment is successful, NanoSail-D will stay in low-Earth orbit between 70 and 120 days, depending on atmospheric conditions. NanoSail-D is designed to demonstrate deployment of a compact solar sail boom system that could lead to further development of this alternative solar sail propulsion technology and FASTSAT's ability to eject a nano-satellite from a micro-satellite - while avoiding re-contact with the FASTSAT satellite bus.

Follow the NanoSail-D mission operation on Twitter at:
http://twitter.com/nanosaild

For additional information on the timeline of the NanoSail-D deployment visit:
http://www.nasa.gov/pdf/501204main_NSD2_timeline_sequence.pdf

To learn more about FASTSAT and the NanoSail-D missions visit:
http://www.nasa.gov/mission_pages/smallsats

NanoSail-D is predicted to be visible once the sail is unfurled. The site at http://www.heavens-above.com has a link for the predicted viewing times and sky coordinates to find NanoSail-D at your location.

[ANS thanks Dave Taylor, W8AAS and the NASA Marshall Space Flight Center for the above information]

/EX

SB SAT @ AMSAT $ANS-023.04
Marshall Amateur Radio Club Confirms NanoSail-D Beacon Active

AMSAT News Service Bulletin 023.04
>From AMSAT HQ SILVER SPRING, MD.
January 23, 2011
To All RADIO AMATEURS
BID: $ANS-023.04

The Marshall Amateur Radio Club, WA4NZD late Wednesday afternoon, January 19, 2011, confirmed ejection of the NanoSail-D sub-satellite. This loaf-of-bread sized spacecraft was carried to orbit late last year on an Air Force rocket as part of NASA's FastSat project. This is the first successful deployment of a satellite, launched from a satellite already in orbit! The only communication from the NanoSail-D vehicle is via ham radio with 1200 baud FM AX25 beacon packets.

The WA4NZD team of N4PMF and WB5RMG, was listening on 437.275 MHz FM with the NanoSail-D Principal Investigator Dean Alhorn at the club station when the beacon was heard and susbequently decoded onto the screen. Please visit http://wa4nzd.wordpress.com for pictures and more links to the NanoSail-D project. They are asking for telemetry reception reports from all over the world to help fill in gaps. The battery is expected to last for only three days.

The NanoSail-D mission page contains the latest tracking data and a link to report received packet telemetry data:
http://nanosaild.engr.scu.edu/dashboard.htm

Details on the format of the packet data downlink are presented in a PDF document at: http://tinyurl.com/6497q84 (scu.edu).

An example of received packets from NanoSail-D:

```
Fm KE7EGC To UNDEF Via TELEM <UI pid� Lend >[22:55:45]
NanoSailD.org 8C0F0000A21400000004008A890200004939C37ACFC0000000
```

UniverseToday.com also carried a story: http://tinyurl.com/4etefaa
In another story on UniverseToday the NanoSail-D data capture video by Henk, PA3GUO is featured at:
http://www.universetoday.com/82733/success-nanosail-d-deploys/

John, VE8EV wrote from Inuvik, Canada to provide a link describing his successful telemetry capture to confirm the deployment of the NanoSail-D solar sail:
http://ve8ev.blogspot.com/2011/01/nanosat-d-sailing-new-sea.html
This page describes a novel approach to decoding telemetry by using an Excel spreadsheet.

AMSAT's Keeper of the Keps, Ray Hoad, WA5QGD says the KEPs for NANOSAIL-D are now being updated with the label NANOSALD.

[ANS thanks Alan Sieg, WB5RMG and the Marshall Amateur Radio Club, WA4NZD; John, VE8EV, and UniverseToday.com for the above information]

/EX

SB SAT @ AMSAT $ANS-023.05
January AMSAT India Newsletter - CubeSat Transponder Announced

AMSAT News Service Bulletin 023.05
>From AMSAT HQ SILVER SPRING, MD.
January 23, 2011
To All RADIO AMATEURS
BID: $ANS-023.05

This week AMSAT India Secretary Nitin, VU3TYG announced that the AMSAT India January 2011 news letter is available for download.
The PDF of the newsletter is at:
http://amsatindia.org/Newsletter/AMSATINDIA-News-January2011.pdf

This month's newsletter includes an announcement by AMSAT India Technical Director Pop, VU2POP, regarding the latest developments with their CubeSat transponder. Pop wrote, "I have immense pleasure in announcing that the initial design of the transponder has been completed and the components have been procured."

Features of the AMSAT India CubeSat transponder include:

- 435.250 MHz uplink and downlink, half-duplex UHF narrow-band FM transceiver.
- FSK/MSK baseband for 1200-9600 baud operation.
- Supports AX.25 or user-defined frame formats supported
- Transmitter output power 1 Watt
- Super heterodyne receiver with Packet reception sensitivity to -120 dBm at 1200 bps
- On-board measurement of TXO and PA temperatures, battery voltage, and RSSI and RF-error on receiver
- Downlink of configurable content (text and measurements)
- Autonomous audio Morse beacon when idle
- Compatible with the Cube sat Kit "PC104" form factor with the first set of PCBs ordered for the engineering model

Pop concluded, "Thanks to my team for their great focus in spite of their busy schedule and Ganesan (KJ6LRR) for his efforts in this baby step which we have taken in this domain. Look out for more updates in our future News letters."

The full list of specifications and an engineering CAD drawing of the CubeSat transponder PCB can be found in the AMSAT India January newsletter link. The newsletter archives can be obtained on-line at:
http://www.amsatindia.org/Newsletter

[ANS thanks AMSAT India for the above information]

/EX

SB SAT @ AMSAT $ANS-023.06
ESA Astronaut Paolo Nespoli Speaks with Italian Youth via ARISS

AMSAT News Service Bulletin 023.06
>From AMSAT HQ SILVER SPRING, MD.
January 23, 2011
To All RADIO AMATEURS
BID: $ANS-023.06

On Saturday, January 15, students attending the Istituto Comprensivo Via Toscana 2 in Civitavecchia, Italy took part in an Amateur Radio on the International Space Station (ARISS) contact with ESA astronaut Paolo Nespoli, IZ�JPA.

Nespoli answered 12 questions during the first ISS pass. On the following pass, he completed the students' questions and exchanged greetings with Italian Space Agency President Enrico Saggese. Nespoli also talked about the importance of school contacts as well as the 10th anniversary of ARISS contacts in both Italian and English. The event was attended by 300 people and was covered by national television and other media.

[ANS thanks Carol Jackson, KB3LKI and the January 17, 2011 ARISS Status Report for the above information]

/EX

SB SAT @ AMSAT $ANS-023.07
Last Call: OSCAR SKN Best Fist Nominations Are Due

AMSAT News Service Bulletin 023.07
>From AMSAT HQ SILVER SPRING, MD.
January 23, 2011
To All RADIO AMATEURS
BID: $ANS-023.07

Ray, W2RS thanks all who participated in AMSAT's Straight Key Night on OSCAR 2011. Please remember to nominate someone you worked for 'Best Fist.' Your nominee need not have the best fist of those you heard, just of those you worked. Nominations should be sent to w2rs@amsat.org. A list of those nominated will be published in ANS in early February, and in a forthcoming issue of The AMSAT Journal.

[ANS thanks Ray, W2RS for the above information]

/EX

SB SAT @ AMSAT $ANS-023.08
Satellite Shorts From All Over

AMSAT News Service Bulletin 023.08
>From AMSAT HQ SILVER SPRING, MD.
January 23, 2011
To All RADIO AMATEURS
BID: $ANS-023.08

+ Congratulations to Tom, KA6SIP for earning ARRL VUCC #208, and to Jim, K0BAM for earning ARRL VUCC #209.

+ The February Scientific American magazine has an article about Cubesats entitled "Citizen Satellites" on pages 48-53 by Alex Soojung-Kim Pang and Bob Twiggs. Many of you know Bob Twiggs as KE6QMD, a long-time AMSAT supporter who is widely known as having been "father" of the Cubesat concept when he was at Stanford University. Bob is now a Professor at Moorehead State Univ in Kentucky.

+ AMSAT Manger, Martha says you can own a piece of AMSAT history. She has the following software available for a minimum donation of $5.00:
  - <> Atari W3IWI (1985) 5 1/4 disk
  - <> AMSAT AMS-81 (1986) for Sinclair computers - Cassette
  - <> W3IWI Basic Orbits for I-99 (1985) - Cassette
  - <> UoSat 1 & 2 Telemetry Capture Editing and Decoding program for IBM - 5 1/4 disk
  - <> W3IWI Orbit Prediction Program for TRS-80 Color Computer - Cassette
  - <> AMSAT 2064 Tracking Program (1984) - Cassette
  - <> ORBITS II for IBM (1993) - 3 1/2 disk
  - <> N4HY QuikTrak for IBM - 3 1/2 disk

  If you are interested send your order to:
  AMSAT, 850 Sligo Ave, #600, Silver Spring MD 20910

+ AMSAT-UK has introduced a new online shop for satellite ground station hardware and software: http://tinyurl.com/AMSAT-UK-Shop

+ The AMSAT-UK FUNcube Amateur Radio satellite project is now on Facebook and Twitter. Go to http://www.facebook.com just lookup FUNcube. Twitter: http://www.twitter.com/FUNcubeUK You can join the FUNcube Yahoo Group at: http://groups.yahoo.com/group/FUNcube/
  FUNcube website: http://www.FUNcube.org.uk/
  FUNcube SDR Dongle: http://www.FUNcubeDongle.com/

+ Print Your 10th Anniversary International Space Station Calendar: NASA�s International Space Station calendar is now available in both

  large and small file sizes to print at home, or with the help of a professional printer. To print it out on your home printer, download the 6.8 Mb file. To print it out in full resolution, take the link to the 74 Mb file to your preferred printer and specify the paper quality and printing instructions. The link to these files is on NASA's web at:
  http://www.nasa.gov/mission_pages/station/main/index.html

+ For hams who experiment with space communications the latest VK3UM EME Calculator update (Ver 7.08) is now available. Download direct from http://www.vk3um.com

+ Space Adventures expects to resume tourist visits to the space station starting in 2013. The company does not discuss costs, but a seat on a Soyuz is believed to run between $30 million and $40 million. Full story at: http://spaceflightnow.com/news/n1101/12soyuz/

+ Science in the shack! Participate in real space research from your shack. The January 10, 2011 edition of the One Minute Astronomer describes an astronomy project which may be of interest to many scientifically oriented amateur radio operators. You are invited to become a Planet Hunter to aid in the search for exoplanets:
  http://www.oneminuteastronomer.com/2011/01/10/planet-hunter/
  Additionally, the http://www.zooniverse.org/ site has several other

opportunities for amateur scientists to participate in research.

+ Tom, K8CX, has posted his collection of DX Sound Bites at: http://hamgallery.com/dx2010

+ To celebrate the January 3, 2011 7th Anniversary on Mars for the Spirit and Opportunity rovers Glen Nagle created a downloadable poster. The poster includes scenes from both Spirit's and Opportunity's adventures. Download your copy from: http://tinyurl.com/2aua69c (UniverseToday.com)

+ The latest information, photos, and videos of Vietnam's planned F-1 Cubesat are posted on-line at: http://www.facebook.com/group.php?gid6436068290

+ John, VE3YUL reports that UO-11 was heard in darkness with a strong signal received on his handheld radio at 21:12 local on January 20, 2011 on the 145.825 MHz downlink.

[ANS thanks everyone for the above information]

/EX

SB SAT @ AMSAT $ANS-023.09
Next Winners From PayPal Widget Announced

AMSAT News Service Bulletin 023.09
>From AMSAT HQ SILVER SPRING, MD.
January 23, 2011
To All RADIO AMATEURS
BID: $ANS-023.09

AMSAT-NA VP Operations, Drew KO4MA said this week, "We've randomly selected the next group of prize winners from those that have donated via the Paypal widget. For every $250 dollars raised we randomly pick a donor to receive a prize from the AMSAT prize closet:

$1750-$2000	Robert Benton	W7VB
$2000-$2250	Kevin Schuchmann	WA6FWF
$2250-$2500	Nigel Gunn	W8IFF

Thank you to all that have donated to pay for the construction of ARISSat-1 and the beginning of the AMSAT-Fox project. ARISSat-1 is featured in this month's QST, and AMSAT-Fox is described by the VP Engineering in the current issue of the AMSAT Journal."

If you have an amateur radio website or blog, you too can help AMSAT raise the money required to pay for construction of these two satellites by adding the widget code to your site. You can even add it to your QRZ.com entry. Contact Drew at KO4MA@amsat.org for details. You can see the widget at http://www.amsat.org.

[ANS thanks Drew, KO4MA for the above information]

/EX

SB SAT @ AMSAT $ANS-023.10
HI0RCD Special Events Station Plans AO-51 Operation

AMSAT News Service Bulletin 023.10
>From AMSAT HQ SILVER SPRING, MD.
January 23, 2011
To All RADIO AMATEURS
BID: $ANS-023.10

The Radio Club Dominicano invites satellite operators to look for their special event station HI0RCD via AO-51 as they commemorate "The Month of the Patria" beginning on January 26, 2011 and ending on February 27, 2011 at 23:59 UTC.

January 26 marks the birthday of Juan Pablo Duarte, the Father of the Patria. February 27 marks the 167th anniversary of Dominican independence.

A special QSL card will be available via the bureau. In addition to the planned AO-51 operation HI0RCD plans to also operate on 160, 80, 40, 20, 17, 15, and 10 meters using SSB, CW, and digital modes.

Luis, HI8LAM has also posted information of the special event station on his blog at: http://www.hi8lam.blogspot.com/

[ANS thanks Luis, HI8LAM for the above information]

/EX

AMSAT News Service Bulletin - 023.11
Donation to AMSAT via Required Minimum Distribution Option

AMSAT News Service Bulletin 023.11
>From AMSAT HQ SILVER SPRING, MD.
January 23, 2011
To All RADIO AMATEURS
AMSAT News Service Bulletin 023.11

[Editor Note: This bulletin header has been modified so that its content will not be automatically forwarded via packet bulletins. It contains a fundraising message which may not be allowed in some jurisdictions and discusses income tax provisions applicable to the United States. This message will appear in the e-mail release of the ANS-023 bulletins only.]

We're all getting older and many of us have reached the age of 70-1/2 when of us U.S. taxpayers must begin withdrawing funds from our IRAs.

It's called Required Minimum Distribution (RMD). Of course, the amount withdrawn is counted as income and hence U.S. income Tax is due on that amount plus whatever other income the person has.

In the past several years, there has been a provision in the IRS Tax Code which allowed U.S. taxpayers to contribute a portion of the RMD to a charity and NOT have that portion be counted as taxable income.

That provision was due to expire for Tax Year 2010 but at the last minute, the new tax legislation passed by Congress and signed by the President included a provision reinstating it.

Normally, such charitable donations had to be made from the institution holding the IRA funds to the charity without passing through the hands of the RMD recipient. But, since the new tax legislation was not signed into law until December 17th, a special provision was included for the 2010 Tax Year only, allowing these contributions to be made directly by the person receiving them to the charity as long as they are made by January 31, 2011.

Thus, according to this provision, those of us who have already received RMDs for 2010 have until that end of this month to make much needed contributions to AMSAT and NOT have that amount counted as income in calculating the federal income tax due for the 2010 Tax Year.

Note that AMSAT is NOT a tax consultant and is NOT empowered to furnish tax advice. The information presented here was obtained from news releases from several other reliable charities and is, to the best of our knowledge, reliable. Nevertheless, it is always best to consult your own tax advisor.

[ANS thanks the AMSAT Board of Directors for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office. And with that please keep in mind, the ham who decided to take up outdoor activities for the new year. He started by trying to play catch and wondered why the baseball was getting bigger ... then it hit him. Next he tried throwing a boomerang. He couldn't quite remember how it worked, but then it came back to him. Next up was hurdle jumping but he always had a fear of hurdles, but got over it. Finally, he tried rowing but being an indecisive person he couldn't choose either oar.

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM

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X-Google-Language: SWEDISH,ASCII
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From: Giuelith Diamond <giuelith@yahoo.com>
Newsgroups: rec.radio.amateur.space
Subject: Mixet.se Media Center - Mixet B2B Marketplace
Date: Wed, 26 Jan 2011 06:20:30 -0800 (PST)
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Xref: g2news2.google.com rec.radio.amateur.space:470

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Marketplace Malm=F6, Mixet B2B Marketplace Uppsala, Mixet B2B
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Marketplace Lerum, Mixet B2B Marketplace Lindome, Mixet B2B
Marketplace Stenugnsund, Mixet B2B Marketplace Str=F6mstad, Mixet B2B
Marketplace Gnosj=F6, Mixet B2B Marketplace N=E4ssj=F6, Mixet B2B
Marketplace Oskarshamn, Mixet B2B Marketplace V=E4stervik, Mixet B2B
Marketplace Gotland, Mixet B2B Marketplace =D6land, Mixet B2B
Marketplace Vimmerby, Mixet B2B Marketplace Markaryd, Mixet B2B
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Marketplace Vellinge, Mixet B2B Marketplace Sj=F6bo, Mixet B2B
Marketplace Skurup, Mixet B2B Marketplace Landskrona, Mixet B2B
Marketplace Esl=F6v, Mixet B2B Marketplace Lomma, Mixet B2B Marketplace
Simrishamn, Mixet B2B Marketplace Beta.

Annonsering: http://mixet.se
Blog Archive: http://ibank.mixet.se/

From -8134796689518070186
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X-Google-Attributes: gida4a23d5f63,public,usenet
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panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-030 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sat, 29 Jan 2011 22:22:25 EST
Organization: The Radio Amateur Satellite Corporation
Lines: 412
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <001401cbc02c$e3129150$a937b3f0$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
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Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1296357745 15310 166.84.1.6 (30 Jan 2011 03:22:25 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 30 Jan 2011 03:22:25 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
x-cr-hashedpuzzle: ARuG A8IH CIL6 Cub5 DJ12 DP3h DTXI Dj2p EQOA F0JT GQTU G4S4
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AMSAT NEWS SERVICE
ANS-030

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating

through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* ARISSat-1 Arrives at the International Space Station
* AMSAT-UK FUNcube System Accepted for UK Space Agency UKube1 Payload
* 1000 Days in Orbit for Ham Radio Satellite Delfi-C3
* ND9M/VQ9JC Maritime Mobile Satellite Operations Planned
* Catch a Visual Glimpse of NanoSail-D in Orbit
* Echoes of Apollo Call for Student Investigators & Adult Engineering Mentors
* Satellite Shorts From All Over
* ARISS Status - 24 January 2011

SB SAT @ AMSAT $ANS-030.01

ARISSat-1 Arrives at the International Space Station

AMSAT News Service Bulletin 030.01
From AMSAT HQ SILVER SPRING, MD.
January 30, 2011
To All RADIO AMATEURS
BID: $ANS-030.01

On January 28 at 0132 UTC,a Soyuz rocket lifted off from Kazakhstan carrying the Russian Progress M-09M cargo vehicle to orbit headed for the International Space Station (ISS).

While the primary cargo of the Progress vehicle is fuel, oxygen, food and other supplies, the Progress also contains AMSAT's ARISSat-1 Amateur Radio satellite.

Progress docked with the space station just two days after launch, on January 30 at 0239 UTC.

Currently ARISSat-1 is planned to be manually deployed from the ISS by Russian cosmonauts Dmitry Kondratyev and Oleg Skripochka during a spacewalk on February 16. ARISSat-1/RadioSkaf V will have simultaneous 2m FM, CW, BPSK and transponder transmissions. These multiple transmissions are created by a new software defined transponder (SDX) board. Features provided by the SDX include:

* The FM transmissions with cycle between a voice ID, select telemetry values, 24 international greeting messages in 15 languages and live SSTV images.
* The CW transmissions will be callsign ID, select telemetry, and call signs of people actively involved with the ARISS program.
* The BPSK transmissions will feature a new 1kBPSK protocol developed by Phil Karn, KA9Q to be readable in low signal level conditions. The BPSK data will alternate betwen telemetry and Kursk experiment

data. Free ground station soundcard demodulator and display software will be available before deployment for multiple platforms.
* There also is a 16kHz wide amateur radio U/V transponder between the BPSK and FM signals.
* The Kursk experiment will be sampling the amount of vacuum each day for 90 minutes and sending down data to map the vacuum change as the satellite slowly spirals into the atmosphere.

[ANS thanks Gould, WA4SXM, for the above information]

/EX

SB SAT @ AMSAT $ANS-030.02
AMSAT-UK FUNcube System Accepted for UK Space Agency UKube1 Payload

AMSAT News Service Bulletin 030.02
  From AMSAT HQ SILVER SPRING, MD.
January 30, 2011
To All RADIO AMATEURS
BID: $ANS-030.02

Graham, G3VZV announced on behalf of AMSAT-UK this week that the FUNcube system has now been formally accepted as a participant in the UK Space Agency Announcement of Opportunity for payload providers for its pilot CubeSat mission, UKube1.

Seven finalist payloads are currently under consideration with the final three or four flight payloads to be announced in March, 2011. This includes the AMSAT-UK FunCube telemetry system for science education, which will be integrated with the spacecraft as part of the program.

Graham explained, "While the UK Space Agency release does not mention the FUNcube linear U/V transponder function during evenings and weekends, this functionality will be included in the same way that it is planned for the actual FUNcube-1 cubesat itself. The FUNcube development team is looking forward to the extra challenge of producing two sets of everything in the very short time scales required by both projects!"

[ANS thanks Graham, G3VZV for the above information]

/EX

SB SAT @ AMSAT $ANS-030.03
1000 Days in Orbit for Ham Radio Satellite Delfi-C3

AMSAT News Service Bulletin 030.03
  From AMSAT HQ SILVER SPRING, MD.
January 30, 2011
To All RADIO AMATEURS

BID: $ANS-030.03

Sunday, January 23 saw the 1000th day in orbit for the Amateur Radio satellite Delfi-C3, which was the first 3U CubeSat to carry a linear transponder.

Wouter, PA3WEG wrote, "The downlink is still OK and telemetry shows no big degradations. This means Delfi-C3 is still in good health. Apart from the problems with the transponder and some occasional resets and lockups, scientific data is still being received. Also, this data is still forwarded by radio amateurs to our server. Once again our big thanks for receiving Delfi-C3 and your continued support of the project."

Visit the Delfi-C3 web page at: http://www.delfic3.nl/ The radio amateur section at: http://tinyurl.com/6f362zu has the information you need to receive the satellite. There is also a link to the Rascal Software if you would like to have your amateur radio station become a part of the global Delfi-C3 monitoring network.

[ANS thanks Wouter Weggelaar, PA3WEG and his Delfi-C3 team and the SouthGateARC site for the above information]

/EX

SB SAT @ AMSAT $ANS-030.04
ND9M/VQ9JC Maritime Mobile Satellite Operations Planned

AMSAT News Service Bulletin 030.04
From AMSAT HQ SILVER SPRING, MD.
January 30, 2011
To All RADIO AMATEURS
BID: $ANS-030.04

Jim, ND9M/VQ9JC plans to operate the amateur radio satellites from his merchant marine ship presently enroute from Diego Garcia (grid MI62) to Charleston, SC (FM03) via the Pacific Ocean. Jim says he has an FT897D and an FT817ND with an Arrow-2 antenna. He plans to be active from quite a few wet grids along the way. His ocean route will take him through grid fields include MI, NI, OI, OJ, PJ, PK, QK (24 hours at Guam), QL, RL, RM, AM, BM, CM. and DM.

Jim's job is seven days a week for four months straight and he will not generally be available during the normal daytime working hours so operating opportunities during these times cannot be predicted.

The majority of passes he can be on will be in the late afternoon and early evening, so AO51, FO29, and AO7 Mode B will be the focus. Early morning AO7 passes will occasionally be available. Operating during late evening passes will be likely once the ship crosses the International Date line and enters the eastern Pacific. Jim's portable satellite station will be setup on the ship's helicopter deck.

The ship will be off the coast of southern California by the end of February and should be there for about 10 days before resuming the voyage towards Charleston via the Panama Canal, then northward around Cuba towards Jacksonville (EM90) for another stop at the end of March. The voyage will finish in April in Charleston, SC.

Jim says he has applied for an IARP permit for Panama so that, barring unforeseen regulations, he will be able to operate whatever passes occur as the ship transits the Canal.

E-mail contact for Jim is via james.t.clary.civ(at)msc.navy.mil. He plans to post regular updates on his trip's progress to the AMSAT-BB.

[ANS thanks Jim ND9M/VQ9JC for the above information]

/EX

SB SAT @ AMSAT $ANS-030.05
Catch a Visual Glimpse of NanoSail-D in Orbit

AMSAT News Service Bulletin 030.05
From AMSAT HQ SILVER SPRING, MD.
January 30, 2011
To All RADIO AMATEURS
BID: $ANS-030.05

In a posting on http://www.nanosail.org/ Spaceweather.com and NASA announce they are joining forces to encourage photography of NanoSail-D, the first solar sail to circle Earth in low orbit.

Amateur and professional astronomers and even casual sky watchers can participate. The solar sail will occasionally be visible to the naked eye when sunlight glints off the spacecraft's 10 m2 sail, producing a spectacular flash akin to an Iridium Flare. UniverseToday predicts NanoSail-D could be five to 10 times as bright as the planet Venus, especially later in the mission when the sail descends to lower orbits.

Even novice photographers can capture such a bright event. Advanced astrophotographers, meanwhile, will want to try to image the sail through backyard telescopes. It will be a challenge (the sail is only 1 arc second across), but even fuzzy pictures could help NASA monitor the condition of the spacecraft. Cash prizes will be awarded to the first ($500), second ($200), and third ($100) place photos, judged by a NASA-appointed panel on the basis of beauty and technical merit.

The contest begins now and ends when NanoSail-D reenters the atmosphere in April or May 2011.

These sites provide viewing predictions:

http://spaceweather.com/flybys/
http://www.heavens-above.com

NASA's Science News web site has additional NanoSail-D news and a link to audio from the satellite recorded by Henk, PA3GUO: http://tinyurl.com/4s7nj4r (nasa.gov)

[ANS thanks SpaceWeather.com and UniverseToday.com for the above information]

/EX

SB SAT @ AMSAT $ANS-030.06
Echoes of Apollo Call for Student Investigators & Adult Engineering Mentors

AMSAT News Service Bulletin 030.06
From AMSAT HQ SILVER SPRING, MD.
January 30, 2011
To All RADIO AMATEURS
BID: $ANS-030.06

Pat Barthelow, AA6EG of the Echoes of Apollo Project (the folks who brought us the 70cm Arecibo EME activity) is working with kids on the Google Science Fair. The students and adult mentors have devised a simple experiment to measure the distance to the moon using Moon Bounce.

Pat has several EME stations committed and is looking for more technical support. He is also looking for additional young Co-Primary Investigators (Age 13-18) to participate.

Time is of the essence. Reply directly to: apolloeme@gmail.com

Pat says the students will develop the experiment, lead, analyze. Adults are needed to nurture, guide, mentor with these goals in mind:

+ Key a CW transmission or alternatively, send an audio impulse via microphone to EME TX.

+ Starting the time clock on the impulse transmission whether Audio "Clack" or CW key.

+ Recording for Science Fair presentation, using Multimedia video/audio eqiupment in the Moon bounce Station.

+ Stopping the clock when the audio/RF does RT to moon (~2.5 Seconds) and returns, and is demodulated by Moon bounce RX and presented at Audio speaker terminals.

+ Pre-measure station delays in TX and RX to develop a constant for internal equipment delays.

- Measuring the EME interval as closely as possible, with simple equipment, say, to milliseconds. Probably take the Multimedia video/ audio to a Video editor, to measure delay, digitally.

- Compare distance to the moon in the NASA, or US Naval Observatory databases for their actual distance to moon, at the moment of the experiment.

- Student analyzes for errors, error sources, discusses return signal distortion, due to doppler, Libration, pulse stretching, due to spherical moon, etc.

- Student suggests follow up experiment, to minimize measurement errors, or assuming more sophisticated equipment became available.

QUESTION: For an analog RX to audio output, what would be the best way be to measure the internal propagation delay in an [Analog, Digital] receiver, from the time of arrival of the RF at the Antenna connector to demodulated output [Analog, Digital] at the speaker, or computer screen.

For analog receivers, is the internal RX propagation delay, in order of: microseconds? Milliseconds? For Digital receivers?

Best Regards,
Pat Barthelow, Echoes of Apollo
apolloeme@gmail.com

[ANS thanks Pat Barthelow, AA6EG of the Echoes of Apollo Project for the above information]

/EX

SB SAT @ AMSAT $ANS-030.07
Satellite Shorts From All Over

AMSAT News Service Bulletin 030.07
From AMSAT HQ SILVER SPRING, MD.
January 30, 2011
To All RADIO AMATEURS
BID: $ANS-030.07

- Clint, K6LCS has posted his AMSAT and amateur satellite handouts he plans to use at the Palm Springs HamFest. One is an "Intro to AMSAT" newsletter with membership form, the other an ARISSat-1 Update and Band Plan. Both are posted at: http://tinyurl.com/ps-handouts Clint invites you to use or adapt either for your projects and presentations.

- Two videos of Japan's H-IIB rocket launch with the Kounotori 2 cargo resupply transporter January 22 from Tanegashima Space Center in southern Japan can be viewed at: http://tinyurl.com/64zuajp

Kounotori2, or 'White Stork' in Japanese, is loaded with crucial supplies destined for the International Space Station (ISS). Video and photos of the arrival and capture of the Kounotori2 can be seen at: http://tinyurl.com/4vop4rt

+ A new video gives the latest news on the Euroluna 2U CubeSat project with the Amateur Radio callsign OZ9LUNA. It describes the 2U cubesat, work on the software and the attitude control, and work ongoing on the ion motor. Watch on-line at: http://tinyurl.com/4cnfahv

+ An interesting science blog posting about the special relativity you would encounter while traveling at the speed of light is posted at: http://tinyurl.com/5sj7q2p (UniverseToday.com) This may present a way to change the subject to something scientific if the subject on 75 meters LSB QSO gets stuck on the state of the other fellow's gallbladder.

+ The folks from the HiRISE Camera on the Mars Reconnaissance Orbiter have put together a video of the latest images from the Red Planet: http://tinyurl.com/6hc7edb. The Mars Express spacecraft took a series of detailed images of the Martian moon Phobos. These images have been morphed into a seamless flyby movie which can be viewed on-line at: http://tinyurl.com/4srutec

+ The next Hudson Valley Satcom Net will meet on Thursday, February 3 at 8PM EST (UTC-5) on the Mt.Beacon ARC 146.970 MHz repeater (-600 & Pl 100). You can also join via Echolink on the N2EYH-L node. All hams are welcome! More info at htp://www.hvsatcom.org/ (Stu, WA2BSS)

[ANS thanks everyone for the above information]

/EX

SB SAT @ AMSAT $ANS-030.08
ARISS Status - 24 January 2011

AMSAT News Service Bulletin 030.08
From AMSAT HQ SILVER SPRING, MD.
January 30, 2011
To All RADIO AMATEURS
BID: $ANS-030.08

1. Two Italian Schools Experience ARISS Contact

On Tuesday, January 18, two Italian schools, "Istituto Comprensivo Ladispoli" and Middle School "Corrado Melone", located in Ladispoli, Rome, Italy participated in a joint Amateur Radio on the International Space Station (ARISS) contact with Paolo Nespoli, IZ0JPA. Twenty-eight space-related questions were answered and greetings exchanged over two ISS passes. ARISS mentor Francesco De Paolis, IK0WGF introduced the event and presented the ARISS program to an audience of 250 students, teachers and visitors. National Television (RAI NEWS 24 hours), local media and newspapers covered the event. The contact was the highlight of a curriculum covering space, geography and telecommunications.

2. Expedition 24 Crew Debrief Session

An ARISS debrief session was held with Expedition 24 crewmembers Doug Wheelock, KF5BOC and Shannon Walker, KD5DXB on Tuesday, January 18. The feedback they provided on the ISS Ham radio equipment and school contacts will aid the ARISS team in updating its program procedures.

3. ARISS International Meeting Held

The monthly ARISS International Team meeting was held on Tuesday, January 18. Topics of discussion included the upcoming face to face meeting and a status on the Columbus module equipment as well as ARISSat-1. Minutes have been posted.
See: https://www.rac.ca/ariss/arisstel2011-01-18.htm

[ANS thanks Carol, KB3LKI, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Lee McLamb, KU4OS

```
From 8266907235631224341
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Path: g2news2.google.com!news1.google.com!news.glorb.com!news-out.readnews.com!
transit4.readnews.com!panix!panix2.panix.com!not-for-mail
From: rram@panix.com (rec.radio.amateur.moderated Admin)
Newsgroups:
rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.rad
io.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amat
eur.space,rec.radio.info
Subject: Crossposting Permitted to rec.radio.amateur.moderated
Supersedes: <radio/ham-radio/moderated/crossposting-1-1293865200@panix.com>
Followup-To: poster
Date: 1 Feb 2011 02:00:02 -0500
Organization: rec.radio.amateur.moderated Moderation Team
Lines: 47
Approved: RRI Admin <rec-radio-info-request@panix.com>
Distribution: world
Expires: 06 Mar 2011 02:00:00 -0000
Message-ID: <radio/ham-radio/moderated/crossposting-1-1296543600@panix.com>
Reply-To: rec-radio-amateur-moderated-request@panix.com
(rec.radio.amateur.moderated Admin)
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X-Trace: reader1.panix.com 1296543602 3739 166.84.1.2 (1 Feb 2011 07:00:02 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Tue, 1 Feb 2011 07:00:02 +0000 (UTC)
Summary: Short reminder for unmoderated newsgroups that crossposting is permitted
Keywords: FAQ, ham, amateur, radio, moderated, unmoderated, crossposting,
permitted
Xref: g2news2.google.com rec.radio.amateur.antenna:22124 rec.radio.amateur.dx:921
rec.radio.amateur.equipment:2681 rec.radio.amateur.homebrew:4392
rec.radio.amateur.misc:6072 rec.radio.amateur.policy:32642
rec.radio.amateur.space:472 rec.radio.info:2147

Posted-By: auto-faq 3.3.2 beta (PGPMoose V2.0, Perl 5.005)
Archive-name: radio/ham-radio/moderated/crossposting
Revision: 1.1 2009/04/12 19:42:04
Posting-Frequency: posted monthly
URL: http://www.panix.com/~rram/usenet/rram/index.html

Changes followed by "|".

After a 30-day public discussion and feedback period to gauge reader
opinions in March of 2009:

http://groups.google.com/group/rec.radio.amateur.moderated/browse_thread/thread/
d7d337db35f23326

the rec.radio.amateur.moderated Moderation Team has decided to consider
amending its charter, and permit limited simultaneous crossposting to
rec.radio.amateur.moderated and one other unmoderated
amateur-radio-related discussion newsgroup. We are currently trying

this on a temporary basis (90 days, through early July 2009), and adopt it permanently if successful.

Approved rec.radio.amateur.* newsgroups are those that are currently listed in the latest version of the "List of Big Eight Newsgroups" which is crossposted monthly to news.announce.newgroups, news.groups, and news.lists.misc.

Approved alt.radio.amateur.* and alt.ham-radio.* newsgroups are those that have been created consistent with the suggestions in "So You Want to Create an Alt Newsgroup" at:

  http://www.faqs.org/faqs/alt-creation-guide/

Approved regional hierarchy newsgroups are those that contain either "radio.amateur" or "ham-radio" in their names, including uk.radio.amateur and aus.radio.amateur.misc.

We will make every reasonable effort to keep our list of approved newsgroups up-to-date. In case we have overlooked any, and a submission is rejected in error as a result, the rejected submitter can E-mail us at our administrative contact address (in the signature at the bottom of this article, and the default Reply-To for the rejection message) requesting that it be added, and that the article be approved. We may still choose to reject articles crossposted to any alt.* newsgroup with an inappropriate name, including obscene language, embedded name-calling, or encouragement of unlawful conduct.

Please direct any comments, questions, or criticisms to rec-radio-amateur-moderated-request@panix.com.

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X-Google-Thread: 10e8ad,a54fe75cca500afd,start
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From: Chris Steyaert <observations@rmob.org>
Newsgroups: rec.radio.amateur.space,sci.astro.amateur
Subject: Radio Meteor Obs. Bull. January 2011 Quadrantids
Date: Sun, 06 Feb 2011 11:47:06 +0100
Message-ID: <lsusk6lsiuimp05nentn6bkpkrrtgi6hdn@4ax.com>
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WBEe
Xref: g2news1.google.com rec.radio.amateur.space:448 sci.astro.amateur:42859
```

Radio Meteor Observation Bulletin No. 210 of January 2011 (108 K) is available now as

http://www.rmob.org/rmobtext/rmob1101.txt

More information and the visual presentation of the hourly forward scatter counts can be found on

http://www.rmob.org

Chris

```
From -7740126409539513779
X-Google-Thread: 10e8ad,32095adf69378be7,start
X-Google-NewGroupId: yes
X-Google-Thread: 10b9c8,32095adf69378be7,start
X-Google-NewGroupId: yes
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X-Google-Language: ENGLISH,ASCII
Path: g2news2.google.com!news2.google.com!newsfeed2.dallas1.level3.net!
news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-037 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sun, 6 Feb 2011 10:40:03 EST
Organization: The Radio Amateur Satellite Corporation
Lines: 584
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000901cbc613$671811a0$354834e0$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
X-Trace: reader1.panix.com 1297006803 16148 166.84.1.6 (6 Feb 2011 15:40:03 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 6 Feb 2011 15:40:03 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
```

X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news2.google.com rec.radio.amateur.space:474 rec.radio.info:2163

AMSAT NEWS SERVICE
ANS-037

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* SKN Results
* ARRISSat-1 Update
* UO-11 Report
* AMSAT-DC Spring-Summer Workshop in planning
* 2 Notes from SA AMSAT
* ARRL Announces Teachers Institute TI-2 Space Curriculum
* Codec2 Alpha Release Demonstration
* ARISS Status - 31 January 2011
* AMSAT Will Be at the Orlando Hamcation February 11-13
* ARISSat-1 QSL Manager Volunteer Request

SB SAT @ AMSAT $ANS-037.01
SKN Results

AMSAT News Service Bulletin 037.01
From AMSAT HQ SILVER SPRING, MD.
February 6, 2011
To All RADIO AMATEURS
BID: $ANS-037.01

Many thanks to all who participated in AMSAT's Straight Key Night on OSCAR 2011, this year's event held in memory of Dick Peacock, W2GFF. Despite the frequent necessary power-management shut-downs of AO-51, activity was generally good, with AO-7, FO-29 and VO-52 picking up the load. A big "Well Done!" to all of the command stations.

The following participants each received one or more "Best Fist" nominations:

AA5PK, JH7UJI, JM1SBU, JR0EFE, K9CIS, N1AIA, N4ZQ,
N5AFV, N9AMW, ON5NY, PR7VX, PU4RON, VA7MG, W9EN,
WA5KBH, WB2SIH, WC7V, WD9EWK, 9A2EY

As can be seen from the list, from its very modest, informal beginnings on the North American east coast AMSAT net in the 1970s, SKN on OSCAR is now a worldwideevent. Long may it continue, and we hope to see you next year!

73,
Ray, W2RS

[ANS thanks Ray, W2RS, for the above information]

/EX

SB SAT @ AMSAT $ANS-037.02
ARISSat-1 Update

AMSAT News Service Bulletin 037.02
  From AMSAT HQ SILVER SPRING, MD.
February 6, 2011
To All RADIO AMATEURS
BID: $ANS-037.02

The ARISSat team is anxiously awaiting the deployment of ARISSat-1 from the ISS during an EVA on 16 Feb 2011. NASA will cover the EVA on NASA Select TV. We don't have a final time during the EVA when the deployment task will occur. We are continuing to work on the arissat1.org site and adding information, people can also follow on Twitter @Arissat1.

[ANS thanks Gould, WA4SXM, for the above information]

/EX

SB SAT @ AMSAT $ANS-037.03
UO-11 Report

AMSAT News Service Bulletin 037.03
  From AMSAT HQ SILVER SPRING, MD.
February 6, 2011
To All RADIO AMATEURS
BID: $ANS-037.03

OSCAR-11 REPORT   31 January 2011

This report covers the period from 31 December 2010 to 31 January 2011. During this time the satellite has been heard from 31 December 2010 to 10 January 2011, and from 21 January to 30 January . It is expected to switch-on again 10 February for ten days, and remain silent for the remainder of the month.

Excellent signals have been reported from stations located around the world, and good copy obtained from decoded telemetry frames.

The satellite is now transmitting during eclipses, although signals are weaker at those times. This indicates that there is still some capacity remaining in the battery.

The on-board clock is now very stable. It gained eight seconds during January.

The VHF beacon frequency is 145.826 MHz. AFSK FM ASCII Telemetry

Reception reports have been received from Christian SWL-CHMY, Mike DK3WN, Campo PY5JAP, Ron WB0SOK and Horatio CX8AF. Many thanks for those and to everyone who posted reports on the satellite status website.

At the present time, while OSCAR-11 is operating in a predictable way, I no longer need direct reports or files by e-mail. However, could all listeners continue to enter their reports on the general satellite status website. This is a very convenient and easy to use facility, which shows the current status of all the amateur satellites, and is of use to everyone. Reports around the expected times of switch-on and switch-off are of special interest, especially for times 12:00 - 17:00 and 22:00 - 07:00 UTC, to when the satellite is out-of-range in the UK. The URL is http://oscar.dcarr.org/index.php

A longer version of this report report is available on my website, and new listeners to OSCAR-11 should read this for further information. The URL is http://www.g3cwv.co.uk/oscar11.htm. This page contains a links to the longer report, a short audio clip to help you identify the satellite and a file of the last telemetry received. The website also contains an archive of news & telemetry data which is updated from time to time, and details about using a soundcard or hardware demodulators for data capture. There is also software for capturing data, and decoding ASCII telemetry.

If you place this bulletin on a terrestrial packet network, please use the bulletin identifier $BID:U2RPT153.CWV, to prevent duplication.

73 Clive G3CWV   xxxxx@amsat.org (please replace the x's by g3cwv)

[ANS thanks Clive, G3CWV, for the above information]

/EX

SB SAT @ AMSAT $ANS-037.04
AMSAT-DC Spring-Summer Workshop in planning

AMSAT News Service Bulletin 037.04
  From AMSAT HQ SILVER SPRING, MD.
February 6, 2011
To All RADIO AMATEURS

BID: $ANS-037.04

AMSAT Maryland-DC Area Coordinator Pat Kilroy, N8PK invites East Coast satellite operators to participate with him to plan, organize and conduct the 2011 AMSAT-DC Spring (or summer) Workshop. Pat says the focus of the event will be To BUILD AND TEST something.

"Something" may include a PICetSat II flight module, a SoftRock SDR project, SDR Cube transceiver, a photovoltaic system battery charging regulator deep-cycle 90AH batteries, and the door is open for more suggestions.

Such a workshop for any of these projects will take nearly a whole day on which to make good progress. Pat is looking for a free or low cost meeting place. The free facility at Goddard Space Flight Center in Greenbelt, Maryland is availble subject security screening such as at the last Workshop.

Pat needs to know if there is enough interest? PLEASE RESPOND soon, by Tuesday, February 7, 5 PM, to amsat-dc@amsat.org list (preferred) or privately to Pat at n8pk@amsat.org. Pat hopes to hear from a great team of volunteers! Please pass the word!

[ANS thanks AMSAT Maryland-DC Area Coordinator Pat Kilroy, N8PK for the above information]

/EX

SB SAT @ AMSAT $ANS-037.05
2 Notes from SA AMSAT

AMSAT News Service Bulletin 037.05
From AMSAT HQ SILVER SPRING, MD.
February 6, 2011
To All RADIO AMATEURS
BID: $ANS-037.05

SA AMSAT Announces SAiSAT A Journey Into Tomorrow

This week SA AMSAT announced two new satellite initiatives. The first is a long-term research and development project called SAiSAT.

The Southern Africa Amateur Radio Satellite Association (SA AMSAT) which is affiliated to other AMSAT groups around the world is proposing an exciting satellite project and is inviting the participation of South African Universities and Universities of Technology in the development and construction of a completely South African Amateur Radio experimental satellite.

The objective of this satellite is to demonstrate South Africa's ability to engineer a satellite, employing the latest technology, and new innovations. In addition to some feasibility projects for future commercial use. The aim of the project is to contribute to propelling South Africa into a world position as a technology resource.

SAiSAT is based on the CubeSat satellite design. SAiSAT plans to use fold out panel a total of 24 in all that support solar panel steering in order to capture the maximum energy available from the sun. The rear of the solar panels is free for project use. They have the potential to house 24 projects depending on size.

An additional research proposal is that the outer rim of each panel is fitted with pcb tracks in the form of a coil:

+ To generate additional power from the Earth's magnetic field.
+ To torque stabilise the satellite against the Earths magnetic field.
+ To give orientation data to resolve the attitude of the satellite.
+ Take additional unused power from the batteries and elevate the satellite into an every increasing orbit thus extending its usefulness and orbital life.
+ Possible to create an 12 antenna arrary
  * Provide a steerable antenna array with gain, thus reducing the necessary radio frequency power needed to maintain contact with earth.
  * Provide a radio Doppler system on board so the satellite can confirm and report position, and supply the radial of interfering emissions.
  * Provide a vital radio redundancy feature from antenna failure.
  * Provide static charge data.
  * Provide residual atmospheric density readings

SA AMSAT has issued an open invitation to tertiary institutions and individuals to participate in the project. A project meeting is scheduled on Friday 25 March ahead of the annual Space Symposium which will take place the next day. Full details are posted at: http://www.amsatsa.org.za/SAiSAT.htm

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SA AMSAT Announces Kletskous Amateur Radio Satellite Project

Project Manager Hannes Coetzee, ZS6BZP invites amateur satellite operators world-wide to monitor the SA AMSAT web page for project plans of the Kletskous satellite. (http://www.amsatsa.org.za)

Kletskous is a hands-on CubeSat aimed at promoting greater involvement in satellite activity by South African Radio Amateurs. The first draft of a project plan will be available soon on the SA AMSAT web. Regular updates will be posted as the project develops.

Hannes is inviting interested persons to join the team. "We are particularly looking for radio amateurs with RF design experience, antenna design experience and software writing experience. Send your contact details and a short description of you technical background to saamsat@intekom.co.za.

[ANS thanks SA AMSAT and Hannes Coetzee, ZS6BZP for the above information]

/EX

SB SAT @ AMSAT $ANS-037.06
ARRL Announces Teachers Institute TI-2 Space Curriculum

AMSAT News Service Bulletin 037.06
From AMSAT HQ SILVER SPRING, MD.
February 6, 2011
To All RADIO AMATEURS
BID: $ANS-037.06

ARRL Announces Teachers Institute TI-2 Space Curriculum

The ARRL Education Services Department has announced the 2011 schedule for the Teachers Institute on Wireless Technology (TI) workshop.

Offered through the ARRL's Education & Technology Program, the Teachers Institute is a four-day, expenses paid, in-residence learning opportunity designed for motivated teachers and other school staff who want to learn more about wireless technology and bring that knowledge to their students.

A variety of topics are covered during the TI, including basic wireless technology literacy, electronics, the science of radio, radio astronomy, how to bring space into the classroom, ham radio operation, introduction to microcontrollers and basic robotics. While participants do not need to have an Amateur Radio license to attend the basic TI sessions, one is required for the advanced (TI-2) session.

TI-2 Space is sponsored by the Dayton Amateur Radio Association. The TI-2 Space curriculum focuses on the nuts and bolts of setting up and operating a satellite ground station. This serves as excellent preparation for a scheduled contact with the ISS through the Amateur Radio on the International Space Station (ARISS) program. But it also provides instruction for continued use of satellites and other man made space assets to explore naturally generated signals, space and a variety of topics. Dates of the Institute are July 11-14, 2011. The application deadline is May 15, 2011.

The course will be 4 days: the first half will be setting up and learning to operate the ground station, the second half will be practice making satellite contacts and instruction in using space borne assets in the classroom. Participants will receive all the equipment necessary to set up a basic satellite ground station.

They will participate in an antenna building party (an activity they can duplicate back home with their students).

Though participants need not hold an amateur radio license to enroll in all other sessions of the TI, to be considered for a seat in TI-2 Space, participants must possess at least a Technician class license at the time of application. Priority for attending the TI-2 Space session will first be given to teachers who are signed up for an ARISS contact; second, to TI graduate teachers who have completed an ARISS contact; third to TI graduates who want to learn more about bringing space related activities into their classrooms.

This session has a class limit of 8 participants, so apply early! Full information and applications are on-line at:
http://www.arrl.org/ti-2-space-in-the-classroom

[ANS thanks the ARRL for the above information]

/EX

SB SAT @ AMSAT $ANS-037.07
Codec2 Alpha Release Demonstration

AMSAT News Service Bulletin 037.07
  From AMSAT HQ SILVER SPRING, MD.
February 6, 2011
To All RADIO AMATEURS
BID: $ANS-037.07

If you attended the 2010 AMSAT Space Symposium you heard the talk by Bruce Perens, K6BP about the Codec2 Project, the open-source, low-bit rate voice codec that is being led by David Rowe VK5DGR.

Bruce, VE9QRP recently completed an internet bitstream concact with Paul, ZL3IN using an alpha-level release of Codec2. Bruce made a video of the conversation using the actual audio of the digital audio. You are invited to view/listen to the Codec2 demonstration at: http://www.youtube.com/watch?v�-nhHE6CrI

This demonstration is running at 2500 bps. Bruce wrote, "We're aiming for 2400 bps with Forward Error Correction, it could make satellite voice communication comprise a smaller bandwidth, offering less demanding downlink systems. Because it is open source, the codec could even be implemented in the satellite, perhaps to provide voice-encoded telemetry for a FUNcube-like project of the future."

The Codec2 site is http://www.rowetel.com/blog/?page_idE2

The source files of Bruce's conversation with ZL3IN, and many ancillary Codec2 materials are available on his blog:
http://ve9qrp.blogspot.com

[ANS thanks Bruce, VE9QRP for the above information]

/EX

SB SAT @ AMSAT $ANS-037.08
ARISS Status - 31 January 2011

AMSAT News Service Bulletin 037.08
From AMSAT HQ SILVER SPRING, MD.
February 6, 2011
To All RADIO AMATEURS
BID: $ANS-037.08

Amateur Radio on the International Space Station (ARISS) Status Report
January 31, 2011

1. Upcoming School Contacts

An Amateur Radio on the International Space Station (ARISS) contact scheduled for Arsaniq School in Kangiqsujuaq, Wakeham Bay, Quebec, Canada on Monday, January 31 at 19:26 UTC was successful via telebridge station LU8YY in Argentina will handle the radio connection. Students have learned about the ISS through videos, the internet and guest speakers.

Coll�ge Joseph Chassigneux, located in Vinay, France, was completed on Tuesday, February 1 at 07:02 UTC. Through this activity, teachers hope to expose students from mostly rural villages to the outside world. In French class, students have written articles for the school magazine about life on the ISS as well as items about their preparations for the radio contact. They have learned technical terms in English, built CW circuits in Physics and have studied continents and countries in Geography. Amateur radio operators plan to discuss the technical aspects of the contact with the youth.

An Amateur Radio on the International Space Station (ARISS) contact was completed with Buehl-Realschule Dornstadt in Dornstadt, Germany on Wednesday, February 2 at 07:32 UTC. Students have been introduced to wireless technology and have participated in related hands-on activities. In addition, workshops have been planned which will teach about the challenges faced in space travel.

An Amateur Radio on the International Space Station (ARISS) contact was scheduled and completed for Adobe Bluffs Elementary School, San Diego, California on Thursday, February 3 at 17:12 UTC. Through projects and hands on activities, students have been learning about electromagnetic waves, astronomy and other space-related topics.

2. Paolo Nespoli Speaks with Marco da Melo Students via ARISS

Istituto Comprensivo "Marco da Melo" in Mel, Belluno, Italy took part in an Amateur Radio on the International Space Station (ARISS) contact on Tuesday, January 25. Astronaut Paolo Nespoli, IZ�JPA answered the students' 21 questions over two ISS passes and exchanged greetings with the audience. Nearly 250 students, teachers and visitors were in attendance for the contact. Regional television RAI and local media and newspapers covered the event. Video streamed over the internet received over 50 connections. The ARISS contact was the featured event of a curriculum covering telecommunications, electrophysics and telegraphy.

3. Successful ARISS Contact with Polish School

On Wednesday, January 26, astronaut Cady Coleman, KC5ZTH participated in an Amateur Radio on the International Space Station (ARISS) contact with students, ages 15 - 18, from Liceum Ogolnokształcace Nr I im Stanislawa Staszica in Ostrowiec Swietokrzyski, Poland. Coleman answered 20 space-related questions posed to her by the youth. Approximately 150 students, teachers and guests were on hand for this event which was covered by several media outlets. In addition to the required science curriculum, the school sponsors astronomy and amateur radio clubs as well as featured activities such as this ARISS contact, in order to stimulate students' scientific interests.

4. Nelson County Area Technology Center Sponsors ARISS Contact

On Friday, January 28, on-orbit astronaut Cady Coleman, KC5ZTH took part in an Amateur Radio on the International Space Station (ARISS) contact with Foster Heights Elementary School students in Bardstown, Kentucky. Nelson County Area Technology Center students operated the amateur radio equipment during the pass during which Coleman answered 16 questions. An audience of approximately 100 people attended the event, including a representative from the Kentucky Department of Education. Television stations and newspapers covered the contact. To view the Kentucky Standard article, go to:
http://www.kystandard.com/content/foster-heights-students-use-amateur-radio-speak-astronaut

5. Civitavecchia, Italy Students Radio ISS

The primary school "Alessandro Cialdi" in Civitavecchia, Italy participated in an Amateur Radio on the International Space Station (ARISS) contact on Saturday, January 29. ESA astronaut Paolo Nespoli, IZ0JPA answered 17 questions posed by the students from "Autorit� Portuale" in Civitavecchia (Port authority of Rome) where an audience of nearly 200 students, teachers, visitors and media gathered for the contact. Before the ISS call, ARISS mentor Francesco De Paolis, IK0WGF introduced the event with a presentation on the ARISS program. Regional and local media and newspapers covered the event and the video, streamed on the internet by AMSAT-Italia, received 60 connections.

6. AMSAT - ARISSat-1 Delivered to the ISS

On January 27, ARISSat-1 was launched on Progress 41P and arrived at the ISS on Saturday, January 29. The satellite is expected to be deployed during a Russian EVA on February 16. The January 30 AMSAT (Radio Amateur Satellite Corporation) News Service bulletin (ANS-030) included an update on ARISSat-1. "ARISSat-1 Arrives at the International

Space Station" may be found at:
http://amsat.org/pipermail/ans/2011/000482.html

The AMSAT Web site has also been revised to include the latest information on ARISSat-1 with links to several news stories covering the satellite. See: http://www.amsat.org/amsat-new/index.php

7. ARRL Story on ARISSat-1 Launch

The American Radio Relay League (ARRL) ran an item on the launch of ARISSat-1 aboard Progress 41P. See:
http://www.arrl.org/news/arissat-1-blasts-off

8. Amateur Radio Newsline Covers ARISS

On January 28, the Amateur Radio Newsline Report 1746 posted an item, "ARISSat-1 Set for Trip to the ISS" under its heading Ham Radio in Space. See: ftp://ftp.arnewsline.org/quincy/News/news.txt

[ANS thanks Carol, KB3LKI, for the above information]

/EX

SB SAT @ AMSAT $ANS-037.09
AMSAT Will Be at the Orlando Hamcation February 11-13

AMSAT News Service Bulletin 037.09
From AMSAT HQ SILVER SPRING, MD.
February 6, 2011
To All RADIO AMATEURS
BID: $ANS-037.09

AMSAT VP Operations Drew Glasbrenner, KO4MA reminds everyone that the Orlando Hamcation is just a week away, and AMSAT will be there in force. Here are the details of the hamfest ...

Orlando HamCation 2011
February 11, 12, 13
Central Florida Fairgrounds
Orlando, Florida 32808
Friday: Noon to 6pm
Saturday: 9am to 5pm

Sunday: 9am to 2pm

AMSAT has a forum scheduled Saturday from 1:45 to 3:15, and this year it is INSIDE! ARISSat-1 will be one of the main topic of discussion. The ARISSat-1 engineering model will be on display, and on the air. Drew will have a FUNcube Dongle Pro on display and in use. Tune your HT to 145.950 MHz to copy the FM downlink transmitting live from the hamfest.

AMSAT will also have live satellite demonstrations, ranging from simple handheld/portable operations, to fully automated systems.

Drew is also planning on having materials on hand for new members to build their own CJU 435 MHz antenna, for free as incentive to join and support AMSAT.

To make this all happen, we need your help. Orlando has become AMSAT's busiest hamfest behind Dayton, and we need current members to assist in the booth. If you can help answer questions and talk up the amateur satellite program, please consider putting in a few hours behind the table. Drop Drew an email at ko4ma@amsat.org, and let him know when you can come by and help out!

[ANS thanks Drew Glasbrenner, KO4MA for the above information]

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SB SAT @ AMSAT $ANS-037.10
ARISSat-1 QSL Manager Volunteer Request

AMSAT News Service Bulletin 037.10
From AMSAT HQ SILVER SPRING, MD.
February 6, 2011
To All RADIO AMATEURS
BID: $ANS-037.10

The ARISSat-1 team is looking for volunteers to manage the QSL operations for ARISSat-1. There will be recognitions for voice, CW, SSTV, telemetry and Secret Word reception reports. We expect to have participation from many students and classes worldwide. Please contact Gould at wa4sxm at amsat dot org if you can help us with this part of the project.

[ANS thanks Gould, WA4SXM, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's
Club. Members of the President's Club, as sustaining donors to AMSAT Project
Funds, will be eligible to receive additional benefits. Application forms

are
available from the AMSAT Office.

73,
This week's ANS Editor,
Dee Interdonato, NB2F

```
From -1706256971467400806
X-Google-Thread: a4a23d5f63,b088dd16cc367723,start
X-Google-Attributes: gida4a23d5f63,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news1.google.com!border1.nntp.dca.giganews.com!
border4.nntp.dca.giganews.com!border2.nntp.dca.giganews.com!nntp.giganews.com!
nx01.iad01.newshosting.com!newshosting.com!198.186.194.249.MISMATCH!news-
out.readnews.com!transit3.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-041 AMSAT Weekly Satellite Bulletin
Followup-To: rec.radio.amateur.space
Date: Thu, 10 Feb 2011 11:22:40 EST
Organization: The Radio Amateur Satellite Corporation
Lines: 2012
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <001701cbc93e$adc89470$0959bd50$@net>
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NNTP-Posting-Host: panix6.panix.com
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Content-Type: text/plain;
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Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1297354961 20069 166.84.1.6 (10 Feb 2011 16:22:41 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Thu, 10 Feb 2011 16:22:41 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-language: en-us
x-cr-hashedpuzzle: A39z BnbE CTme EMRY E61T FI7/ FUDc GBqO GU+N IHBL Iib1 J4/g
KG4T KMIR KbKU
Lgbo;1;cgBlAGMALQByAGEAZABpAG8ALQBpAG4AZgBvAEAAcABhAG4AaQB4AC4AYwBvAG0A;Sosha1_v1;
7;
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Xref: g2news2.google.com rec.radio.amateur.space:475 rec.radio.info:2175

This report is organized into four (4) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - deorbited/returned satellites

SB SAT @ AMSAT W8ISS $WSR-041.S1
WSR 041 Part 1 02/10/2011

AMSAT NEWS SERVICE BULLETIN 041.S1
FROM AMSAT HQ SILVER SPRING, MD, February 10, 2011
TO ALL RADIO AMATEURS
BID: $WSR-041.S1

HO-68 HOPE-1 (CAS-1)(XW-1)
Catalog Number: 36122
Launch Date: December 15, 2009 0231z
Launch site: Taiyuan Space Center, PRC

Status: By schedule

Callsign:
Broadcast: BJ1SA-11
BBS: BJ1SA-12

Uplinks: 145.8250 MHz FM, PL 67.0 Hz.
145.9250 - 145.9750 MHz SSB/CW
145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
435.7650 - 435.7150 MHz SSB/CW
435.6750 MHz AFSK 1200 BPS

Beacon: 435.7900 MHz CW

Mode and Antenna Polarization:
V: LHCP 2.0dBi max
U: RHCP 3.0dBi max

IARU coordination page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108

For more information about XW-1 (CAS-1):
http://www.camsat.cn
[02092011]
=====
SO-67 SumbandilaSat

Catalog Number: 35870
Launch Date: September 17, 2009 1555z
Launch site: Baikonur, Kazakhstan

Status: By schedule

Callsign: ZS0SUM

Uplink: 145.875MHz FM tone 233.6 Hz
Downlink: 435.345MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

For more information about SO-67:
http://www.amsatsa.org.za/
[02092011]
=====
DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational
Current Mode: Science Mode - Beacon ONLY

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink: 435.530 to 435.570 MHz

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68
[02092011]
=====
VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05, 2005 0444z
Launch site: Satish Dhawan Space Centre, India

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW

Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.9360 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

To know what transponder is switched on please listen for the beacon that is active. Each transponder has a different beacon.
[02092011]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004 0745z
Launch site: Baikonur, Kazakhstan

Status: Operational

Current Mode(s):
Voice repeater: V/u
Uplink: 145.920 MHz FM
Downlink: 435.300 MHz FM

Telemetry: By Command ONLY
Downlink: 435.150MHz 9k6

Analog voice downlink: 435.300 MHz FM
                           435.150 MHz FM
                          2401.200 Mhz FM
Analog voice uplink: 145.860 MHZ FM
                           145.880 MHz USB
                           145.880 MHz FM
                           145.920 MHz FM
                           145.920 MHz FM - 67 Hz PL tone burst
                          1268.705 MHz FM
Digital Downlinks: 435.150 MHz FM 38k4 PBP, 1 watt output
                           435.150 MHz FM 9k6 Pacsat Broadcast Protocol
                          2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Pacsat Broadcast Protocol
                          1268.705 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP

L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[02092011]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002 1700z
Launch site: Baikonur, Kazakhstan

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz. The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10 minute timer.
[02092011]
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993 0140z
Launch site: Kourou, French Guiana

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM
Downlink: 436.797 MHz FM

```
Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[02092011]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974
Launch site: Vandenberg AFB, California, USA

Status: Operational

Current Mode: Alternating between Mode A and B every 24 hours

Uplink:   145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink:  29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons:   29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
[02092011]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998 0640z (ZARYA module)
Launch sites: Baikonur, Kazakhstan
              Kourou, French Guiana
              Uchinoura Space Center, Japan
              Kennedy Space Center, Titusville, Florida, USA

Status: Operational

Current Active Modes: FM Repeater - OFF
                      Voice -       V/v
                      BBS -         OFF
                      APRS -        OFF
                      SSTV -        OFF


Expedition 26 Crew:
Commander:                Scott Kelly
Flight Engineer:          Alexander Kaleri      U8MIR
```

Flight Engineer: Oleg Skripochka RN3FU
Flight Engineer: Dmitry Kondratyev
Flight Engineer: Catherine Coleman KC5ZTH
Flight Engineer: Paolo Nespoli IZ0JPA

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time line is NOT translated from Russian and posted.
[02092011]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-041.S2
WSR 041 Part 2 02/10/2011

AMSAT NEWS SERVICE BULLETIN 041.S2

FROM AMSAT HQ SILVER SPRING, MD, February 10, 2011
TO ALL RADIO AMATEURS
BID: $WSR-041.S2

O/OREOS
Catalog Number: 37224
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: On Orbit

Uplink:
Downlink: 437.035 MHZ AX.25

Beacon:

Callsign:

URL: http://www.ooreos.org/
[02092011]
=====
Rax-1 Radio Aurora Explorer
Catalog Number: 37223
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: On Orbit

Uplink:
Downlink: 437.505 MHz 9k6 GMSK

Beacon:

Callsign: RAX-1

URL: http://rax.engin.umich.edu/
[02092011]
=====
Fastrac-1 Sara Lily
Catalog Number: 37225
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: On orbit

Uplink 1: 145.980 MHz 1k2 baud
Uplink 2: 145.825 MHz 1k2 baud
Downlink: 437.345 MHz 1k2 and 8k6 baud

Beacon: 437.435 MHz 1k2 AX.25

Callsign: Fast1

URL: http://fastrac.ae.utexas.edu/index.php
[02092011]
=====
Fastrac-2 Emma
Catalog Number: 37227
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: On Orbit

Uplink 1: 435.025 MHz 1k2 baud
Uplink 2: 437.435 MHz 9k6 baud
Downlink: 145.825 MHz

Beacon: 145.825 MHz 1k2 AX.25

Callsign: Fast2

URL: http://fastrac.ae.utexas.edu/index.php
[02092011]
=====
StudSat
Catalog Number: 36796
Launch Date: July 12, 2010 0352z
Launch site: Satish Dhawan Space Centre, India

Status: On Orbit

Uplink: 437.505MHz, 9600bps FSK
Downlink: 437.505MHz, 9600bps FSK
Beacon : 437.505MHz,   20bps ASK
[02092011]
=====
TIsat-1
Catalog Number: 36799
Launch Date: July 12, 2010 0352z
Launch site: Satish Dhawan Space Centre, India

Status: On orbit

Callsign: HB9DE

Uplink: 145.980MHz FM, AFSK
Downlink: 437.305MHz FM, AFSK
Beacon: 437.305MHz CW
[02092011]
=====
HO-68 HOPE-1 (CAS-1)(XW-1)
Catalog Number: 36122
Launch Date: December 15, 2009 0231z
Launch site: Taiyuan Space Center, PRC

Status: By schedule

```
Callsign:
Broadcast:    BJ1SA-11
BBS:         BJ1SA-12

Uplinks:   145.8250 MHz FM, PL 67.0 Hz.
           145.9250 - 145.9750 MHz SSB/CW
           145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
           435.7650 - 435.7150 MHz SSB/CW
           435.6750 MHz AFSK 1200 BPS

Beacon:    435.7900 MHz CW

IARU coordination page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108

For more information about XW-1 (CAS-1):
http://www.camsat.cn
[02092011]
=====
SwissCube
Catalog Number: 35932
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Callsign: HB9EG

Beacon(100mw): 437.5050MHz CW
Beacon(1w):    437.5050MHz FSK 1k2bps
[02092011]
=====
UWE-2
Catalog Number: 35934
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: In Orbit

Beacon(500mw): 437.3850 MHz AFSK 1k2bps
               437.3850 MHz FSK 9k6bps
[02092011]
=====
ITUpsAT1
Catalog Number: 35935
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Beacon(100mw): 437.325MHz CW
Beacon(1w): 437.325MHz 19k2bps
[02092011]
=====
BEESAT
Catalog Number: 35933
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Callsign: DP0BEE

Beacon(100mw): 436.000MHz CW
Beacon(500mw): 436.000MHz GMSK 4k8bps
Beacon(500mw): 436.000MHz GMSK 9k6bps
[02092011]
=====
CP-6
Catalog Number: 35003
Launch Date: May 19, 2009 2355z
Launch site: Wallops Island, Virginia, USA

Status: Operational

Downlink: 437.365 MHz 1k2 AFSK
[02092011]
=====
HAWKSAT 1
Catalog number: 35004
Launch Date: May 19, 2009 2355z
Launch site: Wallops Island, Virginia, USA

Status: operational

Downlink: 437.345 MHz ?
[02092011]
=====
Pharmasat
Catalog Number: 35002
Launch Date: May 19, 2009 2355z
Launch site: Wallops Island, Virginia, USA

Status: Operational

Downlink: 437.465 MHz 1k2 AFSK
[02092011]
=====
ANUSAT
Catalog Number: 34808
Launch Date: April 20, 2009 0115z
Launch Site: Satish Dhawan Space Centre, India

Status: ?
```

```
Downlink:  435.000 MHz
Uplink:    145.800 MHz

Telemetry: 137.400 MHz
[02092011]
=====
SOHLA-1 (ASTRO TECH.)
Catalog Number: 33496
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational

Proposed Frequencies and Modes:
Downlink: 437.505 MHz AFSK/CW
Beacon:   437.505 MHz AFSK/CW

Callsign:

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=101
[02092011]
=====
KAGAYAKI (Solan Co.)
Catalog Number: 33495
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: In Orbit

Downlink: 437.375 MHZ    FSK9k6/CW
Beacon:   437.375 MHz    FSK9k6/CW

IARU coordination status page:

AMSAT-NA webpage:

[02092011]
=====
STARS (Kagawa Univ.) (Twin Satellites)
Catalog Number: 33498
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational ?

Downlinks: 437.485 MHz FM/CW
           437.465 MHz FM/CW
Beacons:   437.305 MHz FM/CW
           437.275 MHz FM/CW

Callsigns: JR5YBN
```

```
           JR5YBO

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=99

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=121&retURL
=/satellites/status.php
[02092011]
=====
KKS-1 (Tokyo MCIT)
Catalog Number: 33499
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational

Downlink:  437.455 MHz AFSK/CW
Beacon:    437.385 MHz AFSK/CW

Callsign: JQ1YYY

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=107

AMSAT-NA webapge:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=120&retURL
=/satellites/status.php
[20092011]
=====
PRISM (Tokyo Univ.)
Catalog Number: 33493
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational ?

Downlink: 437.425 MHz AFSK/GMSK/CW
Beacon:   437.250 MHz AFSK/GMSK/CW

Callsign: JQ1YCX

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=97

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=119&retURL
=/satellites/status.php
[02092011]
=====
RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number: 32953
Launch Date: May 23, 2008 1520z
```

Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational

Curent Modes: Telemetry
Audio
Images

Downlinks: 435.315 MHz
435.215 MHz

AMSAT-NA website:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=115&retURL=/satellites/status.php

Official website:
http://www.npopm.com/?cid=leoca&caid=43
[02092011]
=====
CanX-2
Catalog number: 32790
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational in range of ground station only

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[02092011]
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Downlink: 437.425 MHz 1k2 baud packet

For the latest project status update please visit the AAUSAT-II web page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[02092011]
=====
CO-65 CUTE-1.7+APD II

```
Catalog number: 32785
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Digipeater

Downlink:  437.475 MHz 9k6 Packet
Uplink:   1267.600 Mhz

Telemetry Beacon:
Downlink: 437.2750 MHz CW

For the latest project status update please visit the Cute-1.7+APD II
web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78

Command Station blog website:
http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=112&retURL
=/satellites/status.php
[02092011]
=====
Compass-1
Catalog number: 32787
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Current Mode: 4k8 MSK packet

Uplink:   145.980 MHz FM
Downlink: 437.275 Mhz CW
          437.405 MHz Packet

For the latest project status update please visit the Compass 1 web
page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=114&retURL
=/satellites/status.php
[02092011]
=====
CO-66 Seeds II
Catalog number:
Launch Date: April 28, 2008 0354z
```

Launch site: Satish Dhawan Space Centre, India

Status: Operational

Downlink: 437.485 MHz

Callsign: JQ1YGU

For the latest project status update please visit the Seeds 2 web page: http://cubesat.aero.cst.nihon-u.ac.jp/english/seeds_2_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=113&retURL=/satellites/status.php
[02092011]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007 0702z
Launch site: Baikonur, Kazakhstan

Status: Intermittent

Current Mode: /u

```
TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon:    435.245 MHz CW
```

Callsign: K5USL

TLM and CW interchange every 30 seconds.

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=94&retURL=/satellites/status.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=72
[02092011]
=====
CP3
Catalog Number: 31129
Launch Date: April 17,2007 0702z
Launch site: Baikonur, Kazakhstan

Status: Operational

Current Mode: /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25

```
[02092011]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005 0652z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon:             437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/xivpicte.htm
[02092011]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: ?????

Current Mode: /u

Beacon:     436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=96&retURL
=/satellites/status.php

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[02092011]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004 0745z
Launch site: Baikonur, Kazakhstan

Status: Operational

Current Mode(s):
Voice repeater: V/u
Uplink:      145.920 MHz FM
```

Downlink: 435.300 MHz FM

Telemetry:
Downlink: 435.150MHz 9k6

Analog voice downlink: 435.300 MHz FM
                           435.150 MHz FM
                          2401.200 Mhz FM
Analog voice uplink: 145.860 MHZ FM
                           145.880 MHz USB
                           145.880 MHz FM
                           145.920 MHz FM
                           145.920 MHz FM - 67 Hz PL tone burst
                          1268.700 MHz FM
Digital Downlinks: 435.150 MHz FM 38k4 PBP, 1 watt output
                           435.150 MHz FM 9k6 Pacsat Broadcast Protocol
                          2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Pacsat Broadcast Protocol
                          1268.708 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[02092011]
=====
QuakeSat
Catalog Number: 27845
Launch Date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Telemetry only

Current Mode: 9600 baud data packet

Mode U packet
Downlink: 436.675 MHz 9k6 BPS

Quakesat webpage:
http://www.quakefinder.com/services/quakesat-ssite/

```
[02092011]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational

Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=69&retURL
=/satellites/status.php
[02092011]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001 0240z
Launch site: Kodiak Launch Complex, Alaska, USA

Status: Telemetry only

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink:        144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[02092011]
=====
RS-22 RADIO SPORT 22 (MOZHAYETS 4)
Catalog number: 27939
Launch Date: September 27, 2003 0612z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational - 70cm cw only

Current Mode:  /u

CW Beacon - 435.352 MHz
            145.818 MHz
```

```
AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=76&retURL
=/satellites/status.php
[02092011]
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990
Launch site: Kourou, French Guiana

Status: CW Beacon only

Uplinks:          145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink:      437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[02092011]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984
Launch site: Vandenburg AFB, California, USA

Status: Operational

Current Mode:  /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon:          435.025 MHz
Mode-S Beacon:     2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[02092011]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998 0640z (ZARYA module)
Launch sites: Baikonur, Kazakhstan
```

```
              Kourou, French Guiana
              Uchinoura Space Center, Japan
              Kennedy Space Center, Titusville, Florida, USA

Status: Operational

Current Active Modes: FM Repeater - OFF
                      Voice -       V/v
                      BBS -         OFF
                      APRS -        OFF
                      SSTV -        OFF


Expedition 26 Crew:
Commander:                Scott Kelly
Flight Engineer:          Alexander Kaleri      U8MIR
Flight Engineer:          Oleg Skripochka       RN3FU
Flight Engineer:          Dmitry Kondratyev
Flight Engineer:          Catherine Coleman     KC5ZTH
Flight Engineer:          Paolo Nespoli         IZ0JPA


Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink:   145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink:     145.200 MHz FM
Region 2/3 voice uplink:   144.490 MHz FM
Worldwide downlink:        145.800 MHz FM

Crossband Repeater:
Repeater Uplinks:         1269.650 MHz FM
                           437.800 MHz FM
                           145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink:         145.800 MHz FM
                           437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink:                  145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian:                   OR4ISS
German:                    DP0ISS
Russian:                   RS0ISS
                           RZ3DZR
United States:             NA1SS
Packet Mailbox:            RS0ISS-11
```

```
Digipeater callsign:       ARISS

Official ARISS Webpage:    http://www.rac.ca/ariss
ISS Fan Club Webpage:      http://www.issfanclub.com
APRS tracking page:        http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[02092011]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-041.S3
WSR 041 Part 3 02/10/2011

AMSAT NEWS SERVICE BULLETIN 041.S3
FROM AMSAT HQ SILVER SPRING, MD, February 10, 2011
TO ALL RADIO AMATEURS
BID: $WSR-041.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

NANOSAIL-D
Catalog Number:
Ejection Date: January 17, 2011

Status: On orbit

Downlink: 437.270 MHz AX.25

URL: http://nanosaild.engr.scu.edu/dashboard.htm
[01272011]
=====
CP4
Catalog Number: 31132
Launch Date: April 17, 2007

Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon:    437.325 MHz CW

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=79
[09062010]
=====
LIBERTAD-1
Catalog Number: 31128
Launch Date: April 17, 2007
```

```
Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink:   145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[09062010]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: Non-Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder:  145.825 Mhz FM
[09062010]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency:  437.305
                             2407.250

Official Website: http://www.ncube.no
[09062010]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink:        437.250 MHz FM 67Hz CTCSS
Voice Downlink:     2401.835 MHz FM
Packet Up/Downlink:  437.250 MHz 9k6 packet
Packet Downlink     2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[09062010]
=====
UWE-1
```

Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non-Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[09062010]
=====
CANX-1
Catalog Number: 27847
Launch Date: June 30, 2003

Status: Non-Operational

Downlink: 437.8800 MHz AFSK 1k2bps
[06052009]
=====
DTUSAT
Catalog Number: 27842
Launch Date: June 30, 2003

Status: Non-Operational

Current Mode: 2k4 AFSK Packet last reported

Downlink: 437.475MHz

Officail webpage: http://dtusat1.dtusat.dtu.dk/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=101&retURL=satellites/all_oscars.php
[02212009]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)

Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Telemetry only

Uplinks: 145.850 MHz
145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[03302009]

=====

NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]

=====

SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]

=====

SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

```
Status: Non-Operational

Uplink:   145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
V-band:   145.840 -  145.990 MHz CW/LSB
U-band:   435.550 -  435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks
---------
S2-band:  2401.225 -  2401.475 MHz CW/USB
K-band:  24048.010 - 24048.060 MHz CW/USB
Beacon:   2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)
----------------------------
BEACON   General Beacon(GB)  Middle Beacon(MB)  Engineering Beacon(EB)
2 m                   none        145.898 MHz                     none
70cm           435.438 MHz        435.588 MHz              435.838 MHz
13cm(1)       2400.188 MHz       2400.338 MHz             2400.588 MHz
13cm(2)       2401.173 MHz       2401.323 MHz             2401.573 MHz
3cm          10450.975 MHz      10451.125 MHz            10451.375 MHz
1.5cm        24047.885 MHz      24048.035 MHz            24048.285 MHz
[07162007]
=====
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
=====
```

UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: 25636
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Non-Operational

Current Modes:
Telemetry : /u

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks: 145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://asri.technion.ac.il/techsat/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=14&retURL
=/satellites/status.php
[07172010]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink: 145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
MO-30 UNAMSAT-2
Catalog Number: 24305
Launch Date: September 5, 1996

```
Status: Non-operational

Downlink:       435.1380 MHz AFSK 1200 BPS
Downlink:       435.2060 MHz AFSK 1200 BPS
Uplink:         145.8150 MHz AFSK 1200 BPS
Uplink:         145.8350 MHz AFSK 1200 BPS
Uplink:         145.8550 MHz AFSK 1200 BPS
Uplink:         145.8750 MHz AFSK 1200 BPS
[06042009]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Non-operational
Current Mode: V/u (Mode JA)

Voice/CW (Mode JA)
Uplink:   145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon:   435.795 MHz

Digital Mode JD
Uplinks:  145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage:
http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's
CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/
fo29cwts.htm
[11062010]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993
```

```
Status: Non-operational

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign:       POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012009]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
AO-24 ARSENE
Catalog Number: 22654
Launch Date: May 13, 1993
```

```
Status: Non-operational

Uplink:    435.0625 MHz FM 1k2bps AFSK
           435.1125 MHz FM 1k2bps AFSK
           435.1375 MHz FM 1k2bps AFSK
Downlink:  145.9750 MHz FM 1k2bps AFSK
          2446.5025 MHz FM 1k2bps AFSK

Beacon:    2446.4700 MHz CW

Broadcast callsign:
BBS:
[12162009]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990
```

```
Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
[05012006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: non-operational

Current Mode:  V/u

Uplink:         145.900 MHz FM 1200-baud Manchester FSK (reserved)
                145.920 MHz FM VOICE
                145.940 MHz FM 1200-baud Manchester FSK (reserved)
                145.960 MHz FM 1200-baud Manchester FSK (reserved)
```

Downlink: 437.026 MHz USB VOICE
                (1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC 437.050 MHz RHCP
   PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[07242009]
=====
UO-15 UoSAT-4
Catalog Number: 20438
Launch Date: January 22, 1990

Status: Non-operational

Uplink: ?
Downlink: 435.1250MHz (?)
          435.1200MHz (?)
[06042009]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink: 145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink: 145.8500 MHz MFSK 1200 BPS
Uplink: 145.8700 MHz MFSK 1200 BPS
Uplink: 145.8900 MHz MFSK 1200 BPS
Uplink: 145.9100 MHz MFSK 1200 BPS

```
Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon:   145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink  29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
Beacons:   29.450 MHz
          435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon 1:  29.352 MHz (intermittent)
Beacon 2:  29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink:     21.260 to 21.300 MHz CW/USB
Downlink:  145.860 to 145.900 MHz CW/USB

Beacon:    145.860 MHz

Robot:     145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991
```

```
Status: Non-operational

Uplink:   21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon:   29.408 MHz

Robot:    29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-041.S4
WSR 041 Part 4 02/10/2011

AMSAT NEWS SERVICE BULLETIN 041.S4
FROM AMSAT HQ SILVER SPRING, MD, February 10, 2011
TO ALL RADIO AMATEURS
BID: $WSR-041.S4

THE FOLLOWING SATELLITES HAVE RE-ENTERED OR HAVE BEEN RETURNED SAFELY:

CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Re-entered
Re-entered: October 25, 2009

Uplink:  1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=56
[09062010]
=====
BEVO-1 (DRAGONSAT-1)
Catalog Number: 35690
Launch Date: May 19, 2009

Status: Re-entered
Re-entered:

Downlink: 437.325 MHz 9k6 GMSK
          437.325 MHz CW 20wpm
[07312009]
=====
```

AggieSat2 (DRAGONSAT-2)
Catalog Number: 35690
Launch Date: May 19, 2009

Status: Re-entered
Re-entered:

Downlink: 436.250 MHz 9k6 FHSS
[11112009]
=====
Pollux
Catalog Number: 35693
Launch Date: July 31, 2009

Status: Re-entered
Re-entered:

Callsign: POLLUX-1

Downlink: 145.825MHz 1k2 AX.25
[09062010]
=====
Castor (ANDE-2)
Catalog Number: 35694
Launch Date: July 31, 2009

Status: Re-entered
Re-entered:

Callsign: KD4HBO-1

Downlink: 145.825 MHz 1k2 AX.25
[09062010]
=====
NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: July 28, 2008

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[01012009]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Re-Entered

Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink: 145.825 Mhz FM APRS AX25
APRS Uplink: 145.825 MHz FM APRS AX25
Voice/PSK31 Uplink: 28.120 MHz

Packet to Voice ID: RAFT
[06112007]
=====
GENESAT-1
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Re-Entered
Re-entered date: August 8, 2010

Current Mode: /u

Callsign: KE7EGC

Telemetry Beacon Downlink: 437.0695 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[08082010]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Re-Entered
Re-entered: June 18, 2008

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon: 437.2750 MHz CW

Callsign: JR8YJT
[01012009]
=====
SO-43 Starshine 3
Catalog Number: 26929
Launch Date: September 30, 2001

Status: Re-Entered

Re-entered: January 21, 2003

Beacon: 145.825Mhz
[02212009]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at}

amsat.org
NNNN
/EX

```
From 3581661946442489454
X-Google-Thread: 10e8ad,9ccb0d36f3e9b7e5,start
X-Google-NewGroupId: yes
X-Google-Thread: 10b9c8,9ccb0d36f3e9b7e5,start
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,gida4a23d5f63,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news1.google.com!npeer01.iad.highwinds-media.com!
news.highwinds-media.com!feed-me.highwinds-media.com!nx02.iad01.newshosting.com!
newshosting.com!news-out.readnews.com!transit3.readnews.com!panix!rri.panix.com!
robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-044 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sat, 12 Feb 2011 21:59:49 EST
Organization: The Radio Amateur Satellite Corporation
Lines: 430
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <001401cbcb2a$0f706440$2e512cc0$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1297565989 25611 166.84.1.6 (13 Feb 2011 02:59:49 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 13 Feb 2011 02:59:49 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
x-cr-hashedpuzzle: AJJU ATgT A4Ma B/so CwXc Da+l EGle GeVF GqHQ IZvy IaNo JFCc
JXhZ KP7n Kdcu
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2011 02:59:22
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Xref: g2news2.google.com rec.radio.amateur.space:476 rec.radio.info:2183

AMSAT NEWS SERVICE
ANS-044

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

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* Opportunity for Students to Participate on "Extra" Shuttle Mission
* Launch Opportunity To All Balloon Groups, Or Individuals

SB SAT @ AMSAT $ANS-044.01
ARISSat-1 Update - No Wednesday Deployment of ARISSat-1

AMSAT News Service Bulletin 044.01
>From AMSAT HQ SILVER SPRING, MD.
February 13, 2011
To All RADIO AMATEURS
BID: $ANS-044.01

1. On Wednesday, 9 FEB 11 NASA announced that ISS Russian Segment (RS) EVA28 will be broadcast live on NASA TV, starting at 1245 UTC on Wednesday, 16 FEB 11. Included in the schedule for RS EVA28 posted by NASA was the deployment of ARISSat-1/RadioSkaf-V/Kedr RS EVA 28 is being managed by RSC-Energia, the operating entity of the ISS RS, as well as the Soyuz and Progress vehicles.

2. On Thursday, 10 FEB 11 RSC-Energia finalized plans to perform a preliminary test of ARISSat-1 while inside the ISS to verify that the satellite could transmit following its delivery to the ISS on a Progress resupply vehicle.

This was not an event that was previously scheduled. Instructions were sent to the Cosmonauts to give them a test procedure with activation scheduled for that day at 1605 UTC. For this test, the

ARISSat-1 VHF antenna port was connected to an RF patch panel inside of the Zvezda Service Module, to provide an RF connection of the satellite to one of the four ARISS external antennas mounted on the aft end of the Service Module. ARISSat-1 was then activated and the Cosmonauts listened for the satellite's FM transmissions using the Kenwood TM-D700(E). This radio is normally used for ARISS school contacts which is connected to an adjacent ARISS external antenna.

During the test, RSC-Energia decided to keep the transmitter on until Friday morning. AMSAT was notified Friday morning that the cosmonauts reported that tests were nominal. A number of ground stations reported hearing the transmissions as well, including AMSAT VP-Engineering Tony Monteiro, AA2TX in North Andover, MA.

This preliminary test was not announced to amateurs in advance due to the short time frame between RSC-Energia's decision to conduct this test and when it was conducted as well as the uncertainty as to how long the satellite's transmitter would remain activated.

3. AMSAT learned on Friday morning, 11 FEB 11 that the deployment of the ARISSat-1 satellite had been removed from the RSA EVA 28 timeline by RSC-Energia management. NASA was informed that the ARISSat-1 deployment would be deferred to a later RS EVA, due to changes in the tasks associated with the configuration of RS payloads to be performed during RS EVA 28. Subsequently, RSC-Energia informed NASA that deployment of ARISSat-1 will be added to RSC EVA 29 currently scheduled for July 2011.

[ANS thanks the ARISSat-1 Team for the above information]

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SB SAT @ AMSAT $ANS-044.02
ARRISat-1 Team Pointers to Get Ready for SSTV Reception

AMSAT News Service Bulletin 044.02
>From AMSAT HQ SILVER SPRING, MD.
February 13, 2011
To All RADIO AMATEURS
BID: $ANS-044.02

The ARISSat-1 FM downlink on 145.950 MHz includes live SSTV images as part of the cycling voice ID, select spoken telemetry values, and the international greeting messages. The recently announced schedule delay for ARISSat-1 deployment gives every one time to begin station improvements to receive SSTV pictures from orbit.

One fun feature is that there are four SSTV cameras mounted on the spacecraft. On photos of ARISSat-1 you may have noticed black brackets on the outside of the spacecraft. These hold the mirrors that reflect the light onto the lens of the cameras. The software-defined-transponder will use the image data from the cameras to generate the SSTV downlink.

ARISSat's software will sequentially select a new or stored image from one the four cameras. There are two pre-recorded images as part of the sequence. The camera that took the the picture can be identified by the color of the call sign in the upper left of the SSTV image. The SSTV image will be sent down as FM audio SSTV in Robot 36 format on 145.950 MHz about every 140 seconds.

The RF downlink power on the 145.950 MHz FM downlink will be 250mW which is predicted to provide a link margin around 6 dB on an HT with a 'big whip' when the satellite is at 15 degrees elevation. This should be sufficient to receive SSTV pictures although you may need to orient the whip to line up the antenna polarization.

ARISSat-1 is not stabilized so the antenna orientation is unpredictable and a certain amount of fading will happen. The receiving link margin may be improved with a handheld beam such as an "Arrow", "Elk", or "Cheap Yagi" antenna.
(See: http://www.wa5vjb.com/references/Cheap%20Antennas-LEOs.pdf)

General Overview Radio-to-Soundcard Interface

To view the SSTV downlink from ARISSat-1 you'll need a computer running SSTV software for your soundcard and an audio connection between your radio and the computer.

If you are already on the air with other amateur radio soundcard applications chances are you are ready to receive ARISSat's SSTV downlink with little or no modification to your setup.

The audio from the radio to the computer is the key link. An initial "Receive Only" configuration is easily done consisting of an audio patch cable between your radio and the soundcard. Take the speaker or headphone output from the radio and run it into the line (or mic) input on your PC sound card.

Setting the level is simple also as the MMSSTV software has a bar indicator. Just adjust the sound card gain slider and/or radio volume control so that the SSTV signal is within the center part of the bar. MMSSTV will give you an "overflow" indication if the volume is too high.

If your rig has a 'Line Out' connection this can be run to the soundcard 'Line In'. Using the radio 'Line Out' you won't have to deal with the interaction of the radio's volume control with the soundcard levels. But you will still need to use the soundcard 'Volume Control' to set the 'Line In' levels.

SSTV Software Download Sites

There are many amateur radio SSTV software decoding applications available. One of the easiest to use on Windows computers is the MMSSTV program. This can be downloaded from:
http://mmhamsoft.amateur-radio.ca/pages/mmsstv.php

MMSSTV installs like most other Windows software. The download site has audio test files for you to learn with. If you have an HF rig the SSTV crowd hangs out 14.230 MHz and you can use their signals for testing and learning.

MMSSTV will also automatically determine which SSTV protocol is in use. You won't need to remember Robot 36 if you set MMSSTV's RX mode to 'Auto'.

SSTV software for the Mac is available at:
http://web.me.com/kd6cji/MacSSTV/MultiScan.html

[ANS thanks the ARISSat-1 Team for the above information]

/EX

SB SAT @ AMSAT $ANS-044.03
View Student Projects Flying on ARISSat-1

AMSAT News Service Bulletin 044.03
>From AMSAT HQ SILVER SPRING, MD.
February 13, 2011
To All RADIO AMATEURS
BID: $ANS-044.03

ARISSat-1 will carry many education-based features encouraging student interaction. During the development of the satellite, students from around the world were invited to submit images and letters documenting their participation in science activities and projects.

These submissions have been processed and stored on a memory chip that has been attached to ARISSat-1 and is flying along with the craft as it orbits the Earth. The student projects and photos can all be viewed ARISS Europe web site at:
http://www.ariss-eu.org/arissat-1.htm

[ANS thanks ARISS-Europe for the above information]

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SB SAT @ AMSAT $ANS-044.04
AMSAT Awards Announcement

AMSAT News Service Bulletin 044.04
>From AMSAT HQ SILVER SPRING, MD.

February 13, 2011
To All RADIO AMATEURS
BID: $ANS-044.04

AMSAT Director Contests and Awards Bruce Paige, KK5DO says that congratulations are in order for the first awards issued for 2011.

The following have entered into the Satellite Communicators Club for making their first satellite QSO.
Anthony Allen, W6CSA
Wyatt Dirks, AC0RA
Brian Erwin, KJ4TDM
Palo Lanca, 9A3DPL
Zeljko Eklic, 9A1WW
Vaclav Ujcik WD9HBC

The following have earned the AMSAT Communications Achievement Award.
Wyatt Dirks, AC0RA #531
Patrick Farcon, N2VYT #532

The following have earned the South Africa Satellite Communications Achievement award
Wyatt Dirks, AC0RA #US163
Patrick Farcon, N2VYT #US164

To see all the awards visit http://www.amsat.org.

[ANS thanks Bruce Paige, KK5DO for the above information]

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SB SAT @ AMSAT $ANS-044.05
AA5UK Announces Plans for ZF2AE Grand Cayman Satellite Operation

AMSAT News Service Bulletin 044.05
>From AMSAT HQ SILVER SPRING, MD.
February 13, 2011
To All RADIO AMATEURS
BID: $ANS-044.05

Adrian, AA5UK will be operating portable as ZF2AE from Grand Cayman and as ZF2AE/ZF8 from Little Cayman from March 23th to April 5th, 2011.

Most activity will be in the afternoons and evenings using two FT-817s and an Elk Antenna. He plans to operate holiday style on the FM and SSB satellites with some HF.

Activity will be from grids: EK99hi from March 23 - 24th, EK99xp from March 25th - April 2nd (he plans to operate HF during part of CQ WPX SSB contest while on Little Cayman: 40m to 10 m) and EK99kh from April 2nd - April 5th.

Time permitting; he will try to make it to grid FK09. Frequently check AMSAT-BB and http://twitter.com/AA5UK for last minute operational updates. QSL Direct with SASE, the Bureau, LOTW or eQSL.

[ANS thanks Adrian, AA5UK for the above information]

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SB SAT @ AMSAT $ANS-044.06
Satellite Shorts From All Over

AMSAT News Service Bulletin 044.06
>From AMSAT HQ SILVER SPRING, MD.
February 13, 2011
To All RADIO AMATEURS
BID: $ANS-044.06

+ Get ARISSat-1 updates via SMS by texting 'follow Arissat1' (no quotes) to 40404 in the United States. Codes for other countries can be found at http://twitter.com/arissat1

+ Roland, PY4ZBZ received the ARISSat-1 145.950 MHz test transmission from the ISS on February 10 when the crew tested the satellite using one of the external antennas on the space station. Audio file can be found at: http://www.qsl.net/py4zbz/satelite/ARISSAT1PY4ZBZ1.wav

+ A web based satellite tracker can be found at: http://carlfretwell.com/satellites/

+ A YouTube video shows that a simple handheld radio is all you need to hear Radio Amateur Astronauts from the ISS. In the video Astronaut Catherine Coleman, KC5ZTH is using the ISS Amateur Radio station to talk to young people at a school radio station near Ulm, Germany. Watch ISS hamradio contact received with a Kenwood handheld TH-F7: http://tinyurl.com/5rgslof (SouthGate)

+ ICOM factory tour slides are posted at: http://www.nsarc.ca/hf/icom2010.pdf

+ Good DX via AO-51: Pierre ZS8M on Marion island made contact with John ZD9GI on Gough Island, both remotely located islands in the South Atlantic. Pierre also logged ZS1LS, ZS2BK, ZS3SVD, ZR5JT, 5R8KH, ZS1UR , ZS6AC, ZD9GI and V51PJ.

+ Good DX via AO-7: Gary, K4MF and Luis, LU6QI made a CW contact on AO-7 Mode B on January 30, 2011. Both stations reported a clear copy with the satellite just above the horizon. The distance is 7024.45 KM.

+ The next Hudson Valley Sat Com Group net is February 17 at 2000 EST (UTC-5) on the 146.97 MHz. Repeater (-600; Pl 100); w/ an Echolink Node of "N2EYH-L" More info: http://www.hvsatcom.org. (Stu, WA2BSS)

+ SA AMSAT reminds satellite operators that SO67 operates on the following schedule:
  Week 1 America
  Week 2 Europe
  Week 3 Asia
  Week 4 Eastern Asia/Australasia

  The schedules are published on http://www.amsatsa.org.za

+ Jim, G3WGM uploaded a very brief description plus a few pics of the FUNcube model: http://funcube.org.uk/overview/model/

+ Two satellite videos of the February blizzard that swept across the continental United States can be viewed at:
  http://tinyurl.com/6zbad68 (UniverseToday.com)

+ Brad Goodspeed created an animation which shows different planets in our solar system as they would appear in the sky if it shared an orbit with our Moon, 380,000 km from earth:
  http://bradblogspeed.com/what-would-neptune-look-like-if-it-orbited-ea

+ Edge of Space Sciences Balloon Flight, Saturday, 19 Feb 11 from Colorado (USA) with amateur radio aboard. Details at:
  http://www.eoss.org/flight/index.html

[ANS thanks everyone for the above information]

/EX

SB SAT @ AMSAT $ANS-044.07
Opportunity for Students to Participate on "Extra" Shuttle Mission

AMSAT News Service Bulletin 044.07
>From AMSAT HQ SILVER SPRING, MD.
February 13, 2011
To All RADIO AMATEURS
BID: $ANS-044.07

UniverseToday published a news item (http://tinyurl.com/6dnjp4e) with a new opportunity for students to be part of history and fly an experiment on what could be the last space shuttle mission. The program is the Student Spaceflight Experiments Program (SSEP) for the STS-135, the shuttle mission that might fly in June of 2011.

SSEP is a new program that launched in June 2010 by the National Center for Earth and Space Science Education in partnership with NanoRacks, LLC, a company that is working with NASA under a Space Act Agreement as part of the utilization of the International Space Station as a National Laboratory.

The company hopes to stimulate space station research by providing a very low-cost 1 kilogram platform that puts micro-gravity projects within the reach of universities and small companies, as well as elementary and secondary schools through SSEP. So, this is actually a commercial space program and not a NASA program.

This opportunity offers real research done on orbit, with students designing and proposing the experiments to fly in low Earth orbit.

According to the National Center for Earth and Space Science Education, "We hope to get 50 communities and 100,000 students participating in the initiative which allows grade 5-14 student design of real experiments to fly aboard Atlantis, and engages entire communities,"

But it is now time critical for schools to be able to participate. There is a proposal submission deadline of May 12, 2011. By the end of May, the flight experiments will be selected, so that NASA can be provided with the materials list 3 months in advance of launch.

For more information see the SSEP website http://ssep.ncesse.org/

[ANS thanks UniverseToday for the above information]

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SB SAT @ AMSAT $ANS-044.08
Launch Opportunity To All Balloon Groups, Or Individuals

AMSAT News Service Bulletin 044.08
>From AMSAT HQ SILVER SPRING, MD.
February 13, 2011
To All RADIO AMATEURS
BID: $ANS-044.08

Joe, WB9SBD of Near Space Sciences, a group that specializes in high altitude balloon flights is offering a launch opportunity that will be a once in a lifetime opportunity!

Near Space Sciences is looking for proposals to fly a payload on a maximum altitude record attempt to +250,000 feet. Other mission plans include to allow the high altitude balloon to be a free-floating flight since it will not burst at its maxmum altitude.

For more details visit: http://www.qsl.net/wb9sbd/300K.html
Joe will post any proposals he receives for everyone to examine.

[ANS thanks Joe, WB9SBD for the above information]

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In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors

to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office. And, with that, keep in mind the ham who thought he found the perfect hands-on job where he set his own hours as a watchmaker. When that didn't work out he tried to become a grocer but it only offered a meager celery and he came home every evening beet.

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM

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X-Google-Language: ENGLISH,ASCII
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news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-051 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sun, 20 Feb 2011 10:35:26 EST
Organization: The Radio Amateur Satellite Corporation
Lines: 402
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000e01cbd113$c76b1a60$56414f20$@net>
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NNTP-Posting-Date: Sun, 20 Feb 2011 15:35:26 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news1.google.com rec.radio.amateur.space:452 rec.radio.info:2125
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AMSAT NEWS SERVICE
ANS-051

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In this edition:
* February 23 CubeSat Launch From Vandenberg AFB
* ARISSat-1 Update
* AMSAT India February 2011 Newsletter Published
* Satellite Operation From Canary Islands Special Event Station
* First Call for Speakers for AMSAT UK Colloquium 2011
* University Nanosat-6 Winner Announced
* Satellite Shorts From All Over
* Four Successful ARISS Contacts Held this Week

SB SAT @ AMSAT $ANS-051.01
February 23 CubeSat Launch From Vandenberg AFB

AMSAT News Service Bulletin 051.01
From AMSAT HQ SILVER SPRING, MD.
February 20, 2011
To All RADIO AMATEURS
BID: $ANS-051.01

NASA will launch the Glory satellite, an Earth-observation satellite from Vandenberg Air Force base, California on February 23 at 0809 UTC. Secondary payloads include student cubesats from the University of Kentucky, University of Montana, and University of Colorado.

KySat-1, University of Kentucky

436.790 MHz Beacon and FM downlink
Commercial S-band downlink
http://ssl.engineering.uky.edu/missions/orbital/kysat1/about-kysat-1/

The primary mission objective for KySat-1 is educational outreach. For educational purposes KySat-1 can be commanded via mobile ground stations using amateur radio frequencies. Mobile ground stations will be taken to schools around the state for children to have their first direct interaction with a satellite. Grade K-12 students and their teachers will be able to upload/download images and audio files, and will also have the capability to command the satellite to take photos using ground station software developed by the University of Kentucky Space Systems Laboratory.

The KySat-1 Team is requesting amateur satellite operators listen for the 436.790 MHz beacon after launch. Amateur stations who copy packets or beacons are invited send their data (decoded packets, audio recordings, signal reports) to ssl@engr.uky.edu.

The FM modulated pseudo-CW beacon transmits every 5 minutes at 32 wpm. The message that will be transmitted is "KYSAT-1 ... followed by the battery voltage to the tenth volt, and the processor temperature to the hundredth degree C.

The FM modulated AX.25 encoded digital beacon transmits every 2.5 minutes. The digital beacon consists of a header, six binary-coded decimal numbers separated by commas, and a 8 "bit" bitfield consisted of eight ascii bytes showing either a "1" or "0". Full details of the packet format:
http://ssl.engineering.uky.edu/missions/orbital/kysat1/operations/

Explorer-1 [Prime], University of Montana

437.505 MHz Downlink 1200 bps KISS/Custom Non-Coherent FSK
Every 15 seconds worldwide
http://ssel.montana.edu/e1p/

The primary mission consists of critical space weather observations for space weather forecasting and specification. The cubesat will monitor the flux of trapped electrons in the horns of the inner and outer radiation belts of the Van Allen radiation belts.

The E1P telemetry beacon consists of essential state of health information and a quick look payload data product. The quick-look data consists of one second averages of the intensity of energetic particles encountered along the spacecraft trajectory as provided by our Geiger-Mueller Counter.

A telemetry decoder can be downloaded from:
http://ssel.montana.edu/e1p/?page_id�

Hermes, University of Colorado

437.425 MHz Downlink
http://spacegrant.colorado.edu/

The primary mission is to 1) Create modular and extensible satellite subsystems; 2) Utilize S-Band frequencies to communicate at higher data rates than those obtainable with Ultra-High Frequencies (UHF); 3) Characterize Hermes' orbital environment and satellite status to validate models and design.

The primary communication system for the satellite is a UHF system that transmits using a monopole antenna. The radio is a COTS Yaesu VX-7R which transmits telemetry data using a TNC that was built by students.

[ANS thanks the University of Kentucky, University of Montana, and University of Colorado for the above information]

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SB SAT @ AMSAT $ANS-051.02
ARISSat-1 Update

AMSAT News Service Bulletin 051.02
From AMSAT HQ SILVER SPRING, MD.
February 20, 2011
To All RADIO AMATEURS
BID: $ANS-051.02

The ARISSat-1 satellite is still inside the ISS. Roscosmos has announced that the satellite will be deployed during the next EVA in July of this year. The US team is trying to get clarification from Roscosmos about the "weak batteries" condition causing the satellite not to be deployed this week. The news item can be found on the Roscosmos web site, http://www.federalspace.ru/main.php?id�nid374 .

Roscosmos also announced that the satellite will be turned on inside the ISS and use an external antenna on 12 April 2011. This is to celebrate the 50th anniversary of Yuri Gagarin's first manned space flight. AMSAT will support this event and issue certificates to those stations reporting reception of the ARISSat-1 signals.

Tony Monteiro, AA2TX has an excellent article describing the ARISSat-1 power system using the Russian Olan suit battery in the upcoming AMSAT Journal that should be mailed to members next week.

[ANS thanks Gould, WA4SXM, for the above information]

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SB SAT @ AMSAT $ANS-051.03
AMSAT India February 2011 Newsletter Published

AMSAT News Service Bulletin 051.03
From AMSAT HQ SILVER SPRING, MD.
February 20, 2011
To All RADIO AMATEURS
BID: $ANS-051.03

AMSAT India Secretary Nitin, VU3TYG advises that their February 2011 news letter is available for download. A PDF copy has been posted at:

http://amsatindia.org/Newsletter/AMSATINDIA-News-February2011.pdf
AMSAT India newsletter archives can be found on-line at:
http://www.amsatindia.org/Newsletter

Content of the February 2011 Newsletter includes:
1. Update on the Technical talk held on January 30th
2. Update on the Cubesat Transponder project by AMSAT INDIA.
3. Azimuth Elevation Rotator - A Homebrew approach by VU2POP
4. News from AMSAT organizations worldwide

[ANS thanks AMSAT India Secretary Nitin, VU3TYG for the above information]

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SB SAT @ AMSAT $ANS-051.04
Satellite Operation From Canary Islands Special Event Station

AMSAT News Service Bulletin 051.04
From AMSAT HQ SILVER SPRING, MD.
February 20, 2011
To All RADIO AMATEURS
BID: $ANS-051.04

EG8ISS in the Canary Islands will be active on both HF and the Amateur Radio satellites between between February 12 through March 11 from Las Palmas, Gran Canaria.

Activity is to celebrate/publicize the first ARISS (International Space Station) contact with one of the "Institute for Technological Development and Innovation in Communications" (IDeTIC) facilities on campus.

The special event station will be on the HF bands, 40-10 meters, using CW, SSB, RTTY, PSK31 and SSTV. Also, activities are planned for VHF (2m FM local and R7 repeater) and the satellites (AO-27, SO-50, AO-51 and VO-52).

There is a special QSL card designed for this event that will be automatically mailed to your QRZ.com address.

More info is available on the QRZ.com under EG8ISS. A Twitter page is also available at: http://twitter.com/eg8iss

[ANS thanks Ted, K7TRK and the SouthGateARC News site for the above information]

/EX

SB SAT @ AMSAT $ANS-051.05
First Call for Speakers for AMSAT UK Colloquium 2011

AMSAT News Service Bulletin 051.05
From AMSAT HQ SILVER SPRING, MD.
February 20, 2011
To All RADIO AMATEURS
BID: $ANS-051.05

This is the first call for speakers for the AMSAT-UK Colloquium 2011 which will be held at the Holiday Inn, Guildford, UK from July 29 to July 31, 2011. This is the same venue as in 2010.

AMSAT-UK invite speakers, about amateur radio, space and associated activities, for this event.

Offers of talks should be sent ONLY to G4DPZ, via the following routes:
e-mail: david.johnson AT blackpepper.co.uk
SnailMail: QTHR from www.QRZ.com

AMSAT-UK also invite anyone with requests for Program Topics to submit them as soon as possible to G4DPZ. Invitations for specific subjects will be included in the future call.

Likewise if anyone knows of a good speaker, please send contact and other information to G4DPZ.

[ANS thanks Dave, G4DPZ for the above information]

/EX

SB SAT @ AMSAT $ANS-051.06
University Nanosat-6 Winner Announced

AMSAT News Service Bulletin 051.06
From AMSAT HQ SILVER SPRING, MD.
February 20, 2011
To All RADIO AMATEURS
BID: $ANS-051.06

The team from the Houghton, Michigan college won first place in this year's University Nanosat Program (UNP) Nanosat 6 competition with their Oculus-ASR nanosatellite. The UNP competition was conceived in 1999 as a means to "sustain and promote university research and education focused on small satellites. This program was developed by the Air Force Office of Scientific Research (AFOSR) in conjunction with the Air Force Research Laboratories Space Vehicle Directorate (AFRL/RV). For this competition a nansat is defined as 50kg in mass (or less) and 50 x 50 x 60 cm or smaller.

The name Oculus comes from its operating as an "orbiting eye" for the Department of Defense. The DoD (and many other organizations) have a vested interest in the observation and tracking of the many asteroids neighboring the earth.

According to the MTU Aerospace Enterprise team blog Oculus-ASR should launch in 2013. The MTU nanosat has shape-shifting capabilities that are important to ground-based observations and measurement. Imaging of the asteroids and other space objects will then be compared with ground-based observations too. The Oculus-ASR's work will be of great importance to the DoD's need to know what is orbiting the earth and what those

objects are doing.

[ANS thanks AFRL and Michigan Tech News for the above information]

/EX

SB SAT @ AMSAT $ANS-051.07
Satellite Shorts From All Over

AMSAT News Service Bulletin 051.07
  From AMSAT HQ SILVER SPRING, MD.
February 20, 2011
To All RADIO AMATEURS
BID: $ANS-051.07

+ Robb, N0KGM has posted a two way video capturing a ham radio contact both with Doug Wheelock on the ISS and his home QTH at the same time at: http://vimeo.com/19854803

+ Roland PY4ZBZ has a very interesting web page showing reception and telemetry decoding of several satellites. This page also has a grid map showing the 36 wet grid squares with contacts with Yuri, UT1FG/MM during his ocean voyage around South America: http://www.qsl.net/py4zbz/satelite.htm#y

+ KA1SKY Ham Radio Station was dedicated on February 14, 2011 at the McAuliffe-Shepard Discovery Center, Concord, NH in conjunction with the Contoocook Valley Radio Club (CVRC) and the New England Amateur Radio Festival (NEAR-Fest). This includes an amateur radio station KA1SKY with full operational capabilities. KA1SKY has been heard operating the amateur radio satellites. (Nick, KB1RVT)

+ Photos of Commander Dimitri Kondratyev with the Kedr/Arissat satellite connected inside the ISS on 10 February can be found at: http://www.federalspace.ru/main.php?id)3 (Andy, G0SFJ)

+ A video of Earth-Moon-Earth (EME) Amateur Radio station HB9MOON has been released showing a Moonbounce demonstration dedicated to the Google Science fair experiment, "How do you measure the distance between Earth and the Moon?" The video is on the SouthGate site at: http://tinyurl.com/6kmr7nf

+ A new schedule was uploaded to AO-27 on February 5. Users of the AO-27 Java schedule lister should make sure they update their data files. The schedule lister is available for download at: http://sites.google.com/site/ao27satellitescheduler/ (George, KA3HSW)

+ Dimitrios, SW1JGW has posted a video of VO-52 satellite reception using Genesis G59 software defined radio with a TenTec 1210 10M to 2M transverter at: http://www.youtube.com/watch?v�Ih2bOs34I

[ANS thanks everyone for the above information]

/EX

SB SAT @ AMSAT $ANS-051.08

Four Successful ARISS Contacts Held this Week

AMSAT News Service Bulletin 051.08
From AMSAT HQ SILVER SPRING, MD.
February 20, 2011
To All RADIO AMATEURS
BID: $ANS-051.08

On Thursday, February 10, an Amateur Radio on the International Space Station (ARISS) contact was held between astronaut Paolo Nespoli, IZ�JPA and Istituto Comprensivo Statale "E. Fermi - A. Oggioni," Villasanta, Monza Brianza, Italy via telebridge station VK5ZAI in Australia. During the ISS pass Nespoli answered 19 questions and exchanged greetings with the youth. An audience of approximately 200 students and others were on hand for the contact and afterwards, students sang the well known hit "Volare" which means "To fly." Regional and local media and newspapers covered the event and streaming video, provided by AMSAT-Italia, received 80 connections.

On-orbit astronaut Cady Coleman, KC5ZTH participated in an ARISS contact with Lake Silver Elementary School students in Orlando, Florida on February 10 via radio station LU8YY in Argentina. Coleman answered 14 questions as a large crowd of students, parents and guests gathered for the event. The school put together a comprehensive education plan to compliment this ARISS contact.

An ARISS contact was held between Lillestr�m videreg�ende skole, Lillestr�m, Norway and Cady Coleman, KC5ZTH on the ISS on Friday, February 11. Station W5RRR in Houston, Texas handled the radio connection. Over 150 people assembled for the event and listened as the astronaut fielded eight questions, mainly in Norwegian. The contact was the highlight of a science and applied technology curriculum.

National Institute for Astrophysics - Astronomical Observatory of

Bologna, Bologna, Italy took part in an ARISS contact on Saturday, February 12 via telebridge station LU8YY in Argentina. Italian astronaut Paolo Nespoli, IZ�JPA participated from the ISS, answering 16 questions. Approximately 150 people were present for the contact which occurred during the Bologna science festival, "Scienza in Piazza," held February 3 - 13. The festival focuses on schools, promoting science through hands-on exhibitions and conferences and is backed by the Italian Space Agency (ASI). Regional and local media and newspapers covered the event.

The audio from all contacts was available on EchoLink and IRLP (Internet Radio Linking Project).

[ANS thanks Carol, KB3LKI, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Lee McLamb, KU4OS

```
From -3308502098904274450
X-Google-Thread: 10e8ad,475a66d97f58cd97,start
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!postnews.google.com!k16g2000vbq.googlegroups.com!not-for-mail
From: vikku <vikku2287@gmail.com>
Newsgroups: rec.radio.amateur.space
Subject: Using icom910h to receive BPSK at higher data rates
Date: Mon, 21 Feb 2011 14:26:44 -0800 (PST)
Organization: http://groups.google.com
Lines: 12
Message-ID: <cccfd256-2091-4668-a2d3-e88c3daa2fff@k16g2000vbq.googlegroups.com>
NNTP-Posting-Host: 82.139.122.52
Mime-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
X-Trace: posting.google.com 1298327204 12125 127.0.0.1 (21 Feb 2011 22:26:44 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Mon, 21 Feb 2011 22:26:44 +0000 (UTC)
Complaints-To: groups-abuse@google.com
Injection-Info: k16g2000vbq.googlegroups.com; posting-host=82.139.122.52; posting-
```

```
account=ssjdqwoAAAAuGtiF2ybFvOTiyzfi_9TV
User-Agent: G2/1.0
X-HTTP-UserAgent: Mozilla/5.0 (Windows; U; Windows NT 6.0; en-US)
 AppleWebKit/534.13 (KHTML, like Gecko) Chrome/9.0.597.98 Safari/534.13,gzip(gfe)
Xref: g2news2.google.com rec.radio.amateur.space:478

Hi i have a question regarding using icom910h to receive BPSK signals
at a data rate greater than 1200bps . I was stuck with this question
because the intermediate signal (signal from the is 1600 Hz) can
accommodate a 1200bps signal easily but to accommodate a signal
greater than 1600bps would be tough as the phase of the signal cannot
be recognized (my assumption ). My doubt is regarding my assumption
and is my assumption correct. Also i have not worked a lot on icom 910
so i wanted to know if there is any possibility to change this
intermediate frequency from the transceiver.
In short: What are the settings i need to change to receive a BPSK
signal which has a higher data rate?
Thank you in advance for your reply



From -8664538342634527412
X-Google-Thread: 107ada,65b23bfa307f2599,start
X-Google-NewGroupId: yes
X-Google-Thread: 10bf43,65b23bfa307f2599,start
X-Google-NewGroupId: yes
X-Google-Thread: 10e8ad,65b23bfa307f2599,start
X-Google-NewGroupId: yes
X-Google-Attributes:
gida3e752f117,gide721ae2bf6,gid8f86f75953,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news2.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!news-out.readnews.com!transit3.readnews.com!panix!
panix2.panix.com!not-for-mail
From: rram@panix.com (rec.radio.amateur.moderated Admin)
Newsgroups:
rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.rad
io.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amat
eur.space,rec.radio.info
Subject: Crossposting Permitted to rec.radio.amateur.moderated
Supersedes: <radio/ham-radio/moderated/crossposting-1-1296543600@panix.com>
Followup-To: poster
Date: 1 Mar 2011 02:00:02 -0500
Organization: rec.radio.amateur.moderated Moderation Team
Lines: 47
Approved: RRI Admin <rec-radio-info-request@panix.com>
Distribution: world
Expires: 03 Apr 2011 03:00:01 -0000
Message-ID: <radio/ham-radio/moderated/crossposting-1-1298962801@panix.com>
Reply-To: rec-radio-amateur-moderated-request@panix.com
(rec.radio.amateur.moderated Admin)
NNTP-Posting-Host: panix2.panix.com
X-Trace: reader1.panix.com 1298962803 7151 166.84.1.2 (1 Mar 2011 07:00:03 GMT)
X-Complaints-To: abuse@panix.com
```

NNTP-Posting-Date: Tue, 1 Mar 2011 07:00:03 +0000 (UTC)
Summary: Short reminder for unmoderated newsgroups that crossposting is permitted
Keywords: FAQ, ham, amateur, radio, moderated, unmoderated, crossposting, permitted
Xref: g2news2.google.com rec.radio.amateur.antenna:22426 rec.radio.amateur.dx:946 rec.radio.amateur.equipment:2734 rec.radio.amateur.homebrew:4510 rec.radio.amateur.misc:6197 rec.radio.amateur.policy:32747 rec.radio.amateur.space:479 rec.radio.info:2222

Posted-By: auto-faq 3.3.2 beta (PGPMoose V2.0, Perl 5.005)
Archive-name: radio/ham-radio/moderated/crossposting
Revision: 1.1 2009/04/12 19:42:04
Posting-Frequency: posted monthly
URL: http://www.panix.com/~rram/usenet/rram/index.html

Changes followed by "|".

After a 30-day public discussion and feedback period to gauge reader opinions in March of 2009:

http://groups.google.com/group/rec.radio.amateur.moderated/browse_thread/thread/d7d337db35f23326

the rec.radio.amateur.moderated Moderation Team has decided to consider amending its charter, and permit limited simultaneous crossposting to rec.radio.amateur.moderated and one other unmoderated amateur-radio-related discussion newsgroup. We are currently trying this on a temporary basis (90 days, through early July 2009), and adopt it permanently if successful.

Approved rec.radio.amateur.* newsgroups are those that are currently listed in the latest version of the "List of Big Eight Newsgroups" which is crossposted monthly to news.announce.newgroups, news.groups, and news.lists.misc.

Approved alt.radio.amateur.* and alt.ham-radio.* newsgroups are those that have been created consistent with the suggestions in "So You Want to Create an Alt Newsgroup" at:

http://www.faqs.org/faqs/alt-creation-guide/

Approved regional hierarchy newsgroups are those that contain either "radio.amateur" or "ham-radio" in their names, including uk.radio.amateur and aus.radio.amateur.misc.

We will make every reasonable effort to keep our list of approved newsgroups up-to-date. In case we have overlooked any, and a submission is rejected in error as a result, the rejected submitter can E-mail us at our administrative contact address (in the signature at the bottom of this article, and the default Reply-To for the rejection message) requesting that it be added, and that the article be approved. We may still choose to reject articles crossposted to any alt.* newsgroup with an inappropriate name, including obscene language, embedded

name-calling, or encouragement of unlawful conduct.

Please direct any comments, questions, or criticisms to
rec-radio-amateur-moderated-request@panix.com.

```
From 842648783168222471
X-Google-Thread: 10e8ad,f2f07561e7fdee89,start
X-Google-NewGroupId: yes
X-Google-Thread: 10b9c8,f2f07561e7fdee89,start
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,gida4a23d5f63,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII
Path: g2news1.google.com!news3.google.com!news1.google.com!
newsfeed2.dallas1.level3.net!newsfeed3.dallas1.level3.net!news.level3.com!bloom-
beacon.mit.edu!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-058 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Tue, 1 Mar 2011 12:10:07 EST
Organization: The Radio Amateur Satellite Corporation
Lines: 511
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <003001cbd833$7d171eb0$77455c10$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
X-Trace: reader1.panix.com 1298999407 11902 166.84.1.6 (1 Mar 2011 17:10:07 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Tue, 1 Mar 2011 17:10:07 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news1.google.com rec.radio.amateur.space:455 rec.radio.info:2148
```

AMSAT NEWS SERVICE
ANS-058

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:
* Electronic Nominating Procedures Announced for AMSAT-NA Elections
* SA AMSAT Space Symposium on April 2, 2011
* SA-AMSAT Decides on UV Linear Transponder for Kletskous Payload
* NASA Assessing New Launch Dates For The Glory Mission
* Wide selection of Modes is scheduled for AO-51
* Satellite Shorts From All Over
* ARISS CONTACTS
* Spectrum Management Bill Threatens 70cm Amateur Satellite Frequencies

SB SAT @ AMSAT $ANS-058.01
Electronic Nominating Procedures Announced for AMSAT-NA Elections

AMSAT News Service Bulletin 058.01
>From AMSAT HQ SILVER SPRING, MD.
February 27, 2011
To All RADIO AMATEURS
BID: $ANS-058.01

AMSAT has in the past required written submission of nominating petitions for the Board of Directors, usually gathered at hamfests or other meetings, to be received at the AMSAT office no later than June 15th. This procedure will remain available, unchanged, and is the preferred method.

However, in the decades since the founding of AMSAT, electronic communications, once limited to the few at government or other technical facilities, have become readily available. This has prompted a review of the nominating procedures used at comparable organizations.

Beginning with 2011 AMSAT Board of Directors election, a supplemental method, using electronic submissions, will be available.

This will be a two step process:

1. Preliminary nominating petitions may be made by FAX, PDF, or similar electronic means. As with the written version, this petition must be from one Member Society, or five AMSAT-NA members in good standing, and received at the AMSAT office by June 15th. This will allow nominations up to the last day to cover a last minute withdrawal or declaration of candidacy.

2. However, in accordance with the AMSAT Bylaws, there remains a requirement of a confirming written nominating petition. This must be received at the AMSAT office no later than 7 days after June 15th.

In effect, by submitting a petition electronically, you extend the deadline for the written petition to be received by 7 days. Electronic submissions without this second, written petition are not valid under the existing AMSAT Bylaws. More extensive changes, for instance to a fully electronic method, will require an amendment of the Bylaws.

The addresses, FAX number, and requirements for submission will be provided in the formal call for nominations published in the AMSAT Journal.

Alan Biddle
WA4SCA
AMSAT Corporate Secretary

[ANS thanks AMSAT Corporate Secretary Alan Biddle, WA4SCA for the above information]

/EX

SB SAT @ AMSAT $ANS-058.02
SA AMSAT Space Symposium on April 2, 2011

AMSAT News Service Bulletin 058.02
From AMSAT HQ SILVER SPRING, MD.
February 27, 2011
To All RADIO AMATEURS
BID: $ANS-058.02

The 2011 SA AMSAT Space Symposium will be held in Gauteng on Saturday, April 2, 2011 at Vodaworld, Midrand in South Africa.

If you book before March 15 you receive a discount on the registration fee. Download the registration form from http://www.amsatsa.org.za/ Registration fee includes refreshments and lunch.

Symposium Highlights:

+ Keynote Address: Sandile Malinga CEO of SANSA
+ RaDAR- Rapid Deployed Amateur Radio
+ SA AMSAT Satellite projects:
   SAiSAT
   KLETSkous
+ The African Space Institute: the first year of blood, sweat and space.
+ Cryogenic receiver systems for the KAT-7 and MeerKAT projects
+ The CHEETAH-1 CSLV-Moving Toward Independent Access to Space for South Africa
+ CPUT - Student Satellite projects

[ANS thanks SA AMSAT for the above information]

/EX

SB SAT @ AMSAT $ANS-058.03
SA-AMSAT Decides on UV Linear Transponder for Kletskous Payload

AMSAT News Service Bulletin 058.03
From AMSAT HQ SILVER SPRING, MD.
February 27, 2011
To All RADIO AMATEURS
BID: $ANS-058.03

SA-AMSAT has started the development of a Cubesat project. It has been named Project KLETSkous during its development phase. Once the satellite nears completion it is plannedto run a competition to decide on an applicable name for the satellite as was the case for SumbandilaSat.

Project KLETSkous reflects nicely on the mission and functionality of the satellite: "Klets" is an Afrikaans work for talking a lot. We want the Southern African radio amateurs to talk and operate much more via satellite. "Kous" is the Afrikaans word for a sock. The transponder that is planned for the satellite can also be referred to as a "bent-pipe" transponder, aligning the idea to the "sock".

SA-AMSAT this week announced that the main payload on the KLETSkous CubeSat will be a linear UV transponder with a bandwidth of 20 kHz. The UV mode which is 70 cm uplink and 2 meter downlink was chosen in line with internationally recommended practice as it will minimize interference.

The aim is to have it operating over Africa without the need of an access tone to open the transponder to give Amateurs with modest equipment easy access to the satellite. For the rest of the world where the Amateur population is denser, tone access will be required to reduce unwanted interference even on 70 cm uplinks.

For educational purposes a beacon and parrot functionality may be highly desirable. Proposals for additional payloads will be considered. It should however be remembered that the amount of available power is a limiting factor.

Fundraising for the project has started in all earnest and radio amateurs are invited to make contributions to the fund.

Visit http://www.amsatsa.org.za/KLETSkous.htm for bank details and more about the KLETSkous project.

[ANS thanks SA AMSAT for the above information]

/EX

SB SAT @ AMSAT $ANS-058.04
NASA Assessing New Launch Dates For The Glory Mission

AMSAT News Service Bulletin 058.04
From AMSAT HQ SILVER SPRING, MD.
February 27, 2011
To All RADIO AMATEURS
BID: $ANS-058.04

[Editor Note: This is the launch from Vandenberg AFB that includes the University of Kentucky, University of Montana, and University of Colorado cubesats announced in ANS-051.]

WASHINGTON -- Preparations for the launch of NASA's Glory mission from Vandenberg Air Force Base in California have been suspended temporarily. Engineers continue to troubleshoot a malfunction in ground support equipment associated with the Taurus XL rocket.

On Feb. 23, a false indication was received about the rocket's status after commands were sent approximately 15 minutes before launch to activate the Taurus.

"We had an indication that a 'hold-fire' command was sent when indeed it had not," said Omar Baez, NASA launch director.

The commands originated from the Vehicle Interface Control Console in the mobile launch support van stationed a few miles from the launch pad. The problem has not yet been isolated, and trouble-shooting continues. Managers are evaluating possible Glory launch opportunities in early to mid-March.

"The Glory spacecraft is doing fine," reported Bryan Fafaul, Glory project manager from NASA's Goddard Space Flight in Greenbelt, Md. "We are continuing to slow charge the battery until we have a new launch date."

The Glory satellite will be launched aboard a Taurus on a mission to improve our understanding of how the sun and tiny atmospheric particles called aerosols affect Earth's climate. Glory launch management is provided by NASA's Launch Service Program at the agency's Kennedy Space Center in Florida. Orbital Sciences Corp. is providing the Taurus XL launch vehicle and is responsible for spacecraft operations.

For status updates on the Glory launch, visit:
http://www.nasa.gov/glory

[ANS thanks NASA for the above information]

/EX

SB SAT @ AMSAT $ANS-058.05
Wide selection of modes is scheduled for AO-51

AMSAT News Service Bulletin 058.05
From AMSAT HQ SILVER SPRING, MD.
February 27, 2011
To All RADIO AMATEURS
BID: $ANS-058.05

Here is the AO-51 schedule for the next few weeks. There is a little bit of something for everyone in here!

Keep in mind that the schedule is subject to change due to power budget and/or telemetry downloading.

AO-51 Mode Change Schedule(updated 2/27/11)

February 21 (~2145 UTC) [Eclipses should end around Feb. 24/25]

Dual Voice Repeaters :
Mode V/U FM Voice Repeater (no PL tone needed)
Uplink: 145.920 MHz FM
Downlink 435.300 MHz FM

Mode L/U FM Voice Repeater (no PL tone needed)
Uplink: 1268.703 MHz FM
Downlink 435.150 MHz FM

March 1 (~1005 UTC)

Mode V/S Voice Repeater (no PL tone needed)
Uplink: 145.880 MHz FM
Downlink 2401.200 MHz FM

March 4 (~0945 UTC)

Mode V/U FM Voice Repeater (no PL tone needed)
Uplink: 145.920 MHz FM
Downlink 435.300 MHz FM

Mode L/U PacSat BBS
Uplink: 1268.703 MHz FSK 9k6 baud
Downlink 435.150 MHz FSK 9k6 baud

March 6 (~2115 UTC)

Mode L/SU FM Voice Repeater (no PL tone needed)
Uplink: 1268.703 MHz FM
Downlink1 2401.200 MHz FM
Downlink2 435.300 MHz FM (low power)

March 11 (~1000 UTC) [Eclipses return around March 12/13]

Mode V/U FM Voice Repeater (no PL tone needed)
Uplink: 145.920 MHz FM
Downlink 435.300 MHz FM

Mode L/U PacSat BBS
Uplink: 1268.703 MHz 9k6 baud
Downlink 435.150 MHz 9k6 baud

As always, command stations may need to reconfigure modes in order to collect telemetry as needed.

Remember that power management may be running, and the transmitter(s) will shut OFF during periods of eclipse and/or low battery voltage.

73,

Mark N8MH
AO-51 Command Team

[ANS thanks Mark, N8MH & Team for the above information]

/EX

SB SAT @ AMSAT $ANS-058.06
Satellite Shorts From All Over

AMSAT News Service Bulletin 058.06
  From AMSAT HQ SILVER SPRING, MD.
February 27, 2011
To All RADIO AMATEURS
BID: $ANS-058.06

+ David Jordan AA4KN's excellent article on working ARISSat-1 that was published in the February, 2011 issue of QST magazine is available for download: http://tinyurl.com/work-arissat1 It is a 1.1MB .pdf document. (Thanks Clint, K6LCS)

+ Roscosmos has announced that ARISSat-1, still inside the ISS will be turned on using an external antenna on Yuri's Night, April 12, 2011 to celebrate the 50th anniversary of Yuri Gagarin's first manned space flight. AMSAT will support this event and issue certificates to those stations reporting reception of the ARISSat-1 signals. Yuri's Night is a global event with more information available on-line at: http://yurisnight.net/

+ Listen for possible satellite operation from the Camb-Hams DXpedition from the Isle of Arran (Grid IO75HO) between May 1-8, 2011. Their latest information can be found on-line at: http://dx.camb-hams.com/

+ The next Hudson Valley Satcom Net date is Thursday, March 3 at 8PM EST (UTC-5) on the 146.970MHz Repeater (-600;Pl 100) and on the echolink node of N2EYH-L. More info: http://www.hvsatcom.org (Stu,WA2BSS)

+ The Florida AMSAT net is held every Thursday evening at 7:30pm Eastern

Time (UTC-5). Many Florida repeaters are connected together for this net but others are welcome to join by using the AMSAT Echolink Conference Node. Mike N4HHA is usually the moderator. Bring your questions and news items to share. (John K8YSE/4)

+ Several videos of the innovative KySat-1 CubeSat are available: http://tinyurl.com/4zodwy8 (SouthGateARC)

+ Movies of Comet Tempel 1 encounter by Stardust-NExT can be viewed at: http://tinyurl.com/4tnbwan (UniverseToday.com)

[ANS thanks everyone for the above information]

/EX

SB SAT @ AMSAT $ANS-058.07
ARISS Contacts

AMSAT News Service Bulletin 058.07
From AMSAT HQ SILVER SPRING, MD.
February 21, 2011
To All RADIO AMATEURS
BID: $ANS-058.07

1. School Contacts

Preston North East Primary School in Preston, Victoria, Australia had an Amateur Radio on the International Space Station (ARISS) contact on Tuesday, February 22 at 08:04 UTC via telebridge station W5RRR in Houston. The contact was successful. Students in Grades 5 and 6 have been engaged in an integrated unit of work that focuses on Earth and the Solar System. The students have been learning why we are able to live on Earth and why other planets are not suitable to sustain human life.

Nishibori Eizaburo Memorial Explorer Museum Radio Club, located in Higashiomi, Shiga, Japan had a successful Amateur Radio on the International Space Station (ARISS) contact on Tuesday, February 22. The radio club is an independent club that used the museum facilities for this event. Children are learning about the ISS mission and space science and it is hoped that the contact will pique student interest in science and space technology.

Students from Matsubara High School, located in Matsubara, Osaka, Japan, experienced an Amateur Radio on the International Space Station (ARISS) contact with U.S. astronaut Cady Coleman, KC5ZTH on Monday, February 14. The contact, which highlighted lessons on radios and the ISS, was attended by approximately 200 people. Media representatives from 3 newspapers, one radio station and 3 television stations, including NHK (Japan Broadcasting Corporation) covered the event.

On Thursday, February 17, students attending "Claudio Varalli," and "Salvador Allende" High Schools in Milano, Italy participated in an ARISS contact with ESA astronaut Paolo Nespoli, IZ�JPA on the ISS. Telebridge station W5RRR in Houston handled the connection. Varalli, which has both a technical school and a secondary school that focuses on foreign languages, has a radio club station, IZ2SHS that is used to practice languages. "Salvador Allende" emphasizes three courses of study in science, humanities and accounting. More than 100 students, teachers and visitors attended the event and listened as Nespoli fielded 16 questions posed to him by the students. Regional and local media covered the contact, which was available on EchoLink and streamed on the Web.

An ARISS contact was held between youth visiting Experiencing Learning, "Imparare Sperimentando," in San Quirino, Italy and on-orbit astronaut Paolo Nespoli, IZ0JPA on Saturday, February 19 via station LU8YY in Argentina. A crowd of approximately 400 people gathered at Imparare Sperimentando, an interactive exhibition that covers a wide variety of physics experiments and science, and watched as the students asked 16 questions of the astronaut. Regional and local media covered the event. The audio was fed into EchoLink and streaming video was provided by AMSAT-Italia.

3. Kentucky Standard Says ARISS Inspires Students to Study Science

The Kentucky Standard Editorial Board printed an article about the recent ARISS - Foster Heights Elementary School contact, made possible with the help of Nelson County Area Technology Center students, and how this activity inspires children to learn more about science and technology. The story talks about how the radio contact fits in with President Barack Obama's recent State of the Union address on how the nation needs to encourage students to learn and excel, especially in math and science. See:
http://www.kystandard.com/content/space-contact-may-increase-science-and-math-interest

4. ARISS International Team Meeting Held

The ARISS International Team met for its monthly teleconference on Tuesday, February 15. Discussions included the upcoming ARISS-I face to face meeting, as well as status reports on Columbus Module projects and ARISSat-1 plans. Minutes have been posted to the ARISS Web site.
https://www.rac.ca/ariss/arisstel2011-02-15.htm

5. AMSAT - ARISSat-1 Updates

On February 20, the AMSAT (Radio Amateur Satellite Corporation) News Service bulletin (ANS-051) provided a status on ARISSat-1. Roscosmos has delayed the deployment of ARISSat-1 until the next Russian EVA scheduled in July. On April 12, the crew will connect the satellite, while still inside the ISS, to anexternal antenna and turn it on in celebration of the 50th anniversary of Gagarin's first manned space-

flight. For more information, see:
http://amsat.org/pipermail/ans/2011/000488.html

6. ARRL - Doug Wheelock will be Guest at Dayton Hamvention

The American Radio Relay League (ARRL) posted a story in its February 17 ARRL Letter about astronaut Doug Wheelock's plans to attend the Dayton Hamvention which will be held May 20-22, 2011. Wheelock will talk about his stay on the ISS, his contacts with school children and his many general contacts with hams. For the full story, "Astronaut Doug Wheelock, KF5BOC, to Be Guest of ARRL and AMSAT at Hamvention,�" go to:
http://www.arrl.org/news/astronaut-doug-wheelock-kf5boc-to-be-guest-of-arrl-and-amsat-at-hamvention

7. Astronaut Training Status

Three astronauts were given the ARISS Basic Operations class this past week. Kevin Ford, KF5GPP (Expedition 33), Chris Cassidy (Expedition 35) and Akihiko Hoshide, KE5DNI (Expedition 32) all participated in the training sessions.

8. Amateur Radio Newsline Covers ARISSat

On February 18, the Amateur Radio Newsline Report 1749 posted the story, "Ham Radio in Space: ARISSat-1 Deployment Delayed until July." The story covers the recent events affecting the satellite.
See: ftp://ftp.arnewsline.org/quincy/News/news.txt

[ANS thanks Carol, KB3LKI, for the above information]

/EX

SB SAT @ AMSAT $ANS-058.08
Spectrum Management Bill Threatens 70cm Amateur Satellite Frequencies

AMSAT News Service Bulletin 058.08
  From AMSAT HQ SILVER SPRING, MD.
February 27, 2011
To All RADIO AMATEURS
BID: $ANS-058.08

The ARRL and AMSAT are closely monitoring progress on a new bill HR-607, the Broadband for First Responders Act of 2011, introduced by Representative Peter King (R-NY-3), Chairman of the House Homeland Security Committee. At present the bill has been referred to the House Energy and Commerce Committee, which handles telecommunications legislation.

Several blocks of spectrum are proposed for auction. There are several bills in Congress providing for the allocation of the D-Block (758-763 and 788-793 MHz) for Public Safety use, and HR-607 is one of those.

But HR-607 uniquely provides for the reallocation of other spectrum for auction to commercial users, in order to offset the loss of revenue that would occur as the result of the allocation of the D-Block to Public Safety instead of commercial auction. The band of 420-440 MHz is listed among the bands to be reallocated for commercial auction within 10 years of passage of HR-607.

A full article on this topic is posted on the ARRL web at:
http://tinyurl.com/4prgouq (arrl.org)

[ANS thanks the ARRL for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Dee Interdonato, NB2F

```
From -4074313181474787O9
X-Google-Thread: 10e8ad,64e1b8490daab114,start
X-Google-NewGroupId: yes
X-Google-Thread: 10b9c8,64e1b8490daab114,start
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,gida4a23d5f63,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!newsfeed2.dallas1.level3.net!
news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-063 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Fri, 4 Mar 2011 21:29:46 EST
Organization: The Radio Amateur Satellite Corporation
Lines: 2037
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <001e01cbdadd$2adbda30$80938e90$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1299292187 8178 166.84.1.6 (5 Mar 2011 02:29:47 GMT)
X-Complaints-To: abuse@panix.com
```

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NNTP-Posting-Date: Sat, 5 Mar 2011 02:29:47 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to            rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
x-cr-hashedpuzzle: 8ws= CQzJ DNql DTxw DVAx EAJ4 F8Oo GHIb GZu4 IDKv Ib5D JeT/
JpBb Jret KXgT
LFv9;1;cgBlAGMALQByAGEAZABpAG8ALQBpAG4AZgBvAEAAcABhAG4AaQB4AC4AYwBvAG0A;Sosha1_v1;
7;{D45F0685-11B7-4F77-89D7-
EC011D692EDA};awA5AGoAawBtAEAAYwBvAG0AYwBhAHMAdAAuAG4AZQB0AA==;Sat, 05 Mar 2011
02:29:29
GMT;VwBTAFIALQAwADYAMwAgAEEATQBTAEEAVAAgAFcAZQBlAGsAbAB5ACAAUwBhAHQAZQBsAGwAaQB0AG
UAIABSAGUAcABvAHIAdAA=
x-cr-puzzleid: {D45F0685-11B7-4F77-89D7-EC011D692EDA}
Xref: g2news1.google.com rec.radio.amateur.space:456 rec.radio.info:2158
```

This report is organized into four (4) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - deorbited/returned satellites

SB SAT @ AMSAT W8ISS $WSR-063.S1
WSR 063 Part 1 03/04/2011

AMSAT NEWS SERVICE BULLETIN 063.S1
FROM AMSAT HQ SILVER SPRING, MD, March 04, 2011
TO ALL RADIO AMATEURS
BID: $WSR-063.S1

HO-68 HOPE-1 (CAS-1)(XW-1)
Catalog Number: 36122
Launch Date: December 15, 2009 0231z
Launch site: Taiyuan Space Center, PRC

Status: By schedule

```
Callsign:
Broadcast:    BJ1SA-11
BBS:     BJ1SA-12

Uplinks:   145.8250 MHz FM, PL 67.0 Hz.
           145.9250 - 145.9750 MHz SSB/CW
           145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
```

435.7650 - 435.7150 MHz SSB/CW
435.6750 MHz AFSK 1200 BPS

Beacon: 435.7900 MHz CW

Mode and Antenna Polarization:
V: LHCP 2.0dBi max
U: RHCP 3.0dBi max

IARU coordination page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108

For more information about XW-1 (CAS-1):
http://www.camsat.cn
[02092011]
=====
SO-67 SumbandilaSat
Catalog Number: 35870
Launch Date: September 17, 2009 1555z
Launch site: Baikonur, Kazakhstan

Status: By schedule

Callsign: ZS0SUM

Uplink: 145.875MHz FM tone 233.6 Hz
Downlink: 435.345MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

For more information about SO-67:
http://www.amsatsa.org.za/
[02092011]
=====
DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational
Current Mode: Science Mode - Beacon ONLY

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink: 435.530 to 435.570 MHz

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68

```
[02092011]
=====
VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05, 2005 0444z
Launch site: Satish Dhawan Space Centre, India

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink:   435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink:   435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW


Indian Beacon:  145.9360 MHZ CW
Dutch Beacon:   145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is active. Each transponder has a different beacon.
[02092011]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004 0745z
Launch site: Baikonur, Kazakhstan

Status: Operational

Current Mode(s):
Voice repeater: V/u
Uplink:      145.920 MHz FM
Downlink:    435.300 MHz FM

Packet BBS: L/s
Uplink:     1268.703 mhz FM 9k6 Pacsat Broadcast Protocol
Downlink:    435.150 MHz FM 9k6 Pacsat Broadcast Protocol

Telemetry: By Command ONLY
Downlink:    435.150MHz 9k6
```

```
Analog voice downlink:     435.300 MHz FM
                           435.150 MHz FM
                          2401.200 Mhz FM
Analog voice uplink:       145.860 MHZ FM
                           145.880 MHz USB
                           145.880 MHz FM
                           145.920 MHz FM
                           145.920 MHz FM - 67 Hz PL tone burst
                          1268.705 MHz FM
Digital Downlinks:         435.150 MHz FM 38k4 PBP, 1 watt output
                           435.150 MHz FM 9k6 Pacsat Broadcast Protocol
                          2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:            145.860 MHz FM 9k6 Pacsat Broadcast Protocol
                          1268.703 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon:                    435.150 MHz
```

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[03042011]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002 1700z
Launch site: Baikonur, Kazakhstan

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4

Hz. The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10 minute timer.
[02092011]
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993 0140z
Launch site: Kourou, French Guiana

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[02092011]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974
Launch site: Vandenberg AFB, California, USA

Status: Operational

Current Mode: Alternating between Mode A and B every 24 hours

```
Uplink:   145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink:  29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons:   29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW
```

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
[02092011]

=====

INTERNATIONAL SPACE STATION (ISS) - ARISS

Catalog number: 25544

Launch date: November 20, 1998 0640z (ZARYA module)

Launch sites: Baikonur, Kazakhstan
Kourou, French Guiana
Uchinoura Space Center, Japan
Kennedy Space Center, Titusville, Florida, USA

Status: Operational

Current Active Modes: FM Repeater - OFF
Voice - V/v
BBS - OFF
APRS - OFF
SSTV - OFF

Expedition 26 Crew:

Commander:	Scott Kelly	
Flight Engineer:	Alexander Kaleri	U8MIR
Flight Engineer:	Oleg Skripochka	RN3FU
Flight Engineer:	Dmitry Kondratyev	
Flight Engineer:	Catherine Coleman	KC5ZTH
Flight Engineer:	Paolo Nespoli	IZ0JPA

STS-133 Discovery Crew:

Commander:	Steven Lindsey	
Pilot:	Eric Boe	
Mission Specialist:	Alvin Drew	
Mission Specialist:	Michael Barratt	KD5MIJ
Mission Specialist:	Steve Bowen	
Mission Specialist:	Nicole Stott	KE5GJN

Available Modes and Frequencies:

Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:

Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time line is NOT translated from Russian and posted.
[02252011]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-063.S2
WSR 063 Part 2 03/04/2011

AMSAT NEWS SERVICE BULLETIN 063.S2
FROM AMSAT HQ SILVER SPRING, MD, March 04, 2011
TO ALL RADIO AMATEURS
BID: $WSR-063.S2

O/OREOS
Catalog Number: 37224
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: On Orbit

Uplink:
Downlink: 437.035 MHZ AX.25

Beacon:

Callsign:

URL: http://www.ooreos.org/
[02092011]
=====
Rax-1 Radio Aurora Explorer
Catalog Number: 37223

Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: On Orbit

Uplink:
Downlink: 437.505 MHz 9k6 GMSK

Beacon:

Callsign: RAX-1

URL: http://rax.engin.umich.edu/
[02092011]
=====
Fastrac-1 Sara Lily
Catalog Number: 37225
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: On orbit

Uplink 1: 145.980 MHz 1k2 baud
Uplink 2: 145.825 MHz 1k2 baud
Downlink: 437.345 MHz 1k2 and 8k6 baud

Beacon: 437.435 MHz 1k2 AX.25

Callsign: Fast1

URL: http://fastrac.ae.utexas.edu/index.php
[02092011]
=====
Fastrac-2 Emma
Catalog Number: 37227
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: On Orbit

Uplink 1: 435.025 MHz 1k2 baud
Uplink 2: 437.435 MHz 9k6 baud
Downlink: 145.825 MHz

Beacon: 145.825 MHz 1k2 AX.25

Callsign: Fast2

URL: http://fastrac.ae.utexas.edu/index.php
[02092011]
=====
StudSat
Catalog Number: 36796

```
Launch Date: July 12, 2010 0352z
Launch site: Satish Dhawan Space Centre, India

Status: On Orbit

Uplink:   437.505MHz, 9600bps FSK
Downlink: 437.505MHz, 9600bps FSK
Beacon  : 437.505MHz,   20bps ASK
[02092011]
=====
TIsat-1
Catalog Number: 36799
Launch Date: July 12, 2010 0352z
Launch site: Satish Dhawan Space Centre, India

Status: On orbit

Callsign: HB9DE

Uplink:   145.980MHz FM, AFSK
Downlink: 437.305MHz FM, AFSK
Beacon:   437.305MHz CW
[02092011]
=====
HO-68 HOPE-1 (CAS-1)(XW-1)
Catalog Number: 36122
Launch Date: December 15, 2009 0231z
Launch site: Taiyuan Space Center, PRC

Status: By schedule

Callsign:
Broadcast:    BJ1SA-11
BBS:         BJ1SA-12

Uplinks:   145.8250 MHz FM, PL 67.0 Hz.
           145.9250 - 145.9750 MHz SSB/CW
           145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
           435.7650 - 435.7150 MHz SSB/CW
           435.6750 MHz AFSK 1200 BPS

Beacon:    435.7900 MHz CW

IARU coordination page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108

For more information about XW-1 (CAS-1):
http://www.camsat.cn
[02092011]
=====
SwissCube
Catalog Number: 35932
```

```
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Callsign: HB9EG

Beacon(100mw): 437.5050MHz CW
Beacon(1w):    437.5050MHz FSK 1k2bps
[02092011]
=====
UWE-2
Catalog Number: 35934
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: In Orbit

Beacon(500mw): 437.3850 MHz AFSK 1k2bps
               437.3850 MHz FSK 9k6bps
[02092011]
=====
ITUpsAT1
Catalog Number: 35935
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Beacon(100mw): 437.325MHz CW
Beacon(1w): 437.325MHz 19k2bps
[02092011]
=====
BEESAT
Catalog Number: 35933
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Callsign: DP0BEE

Beacon(100mw): 436.000MHz CW
Beacon(500mw): 436.000MHz GMSK 4k8bps
Beacon(500mw): 436.000MHz GMSK 9k6bps
[02092011]
=====
CP-6
Catalog Number: 35003
Launch Date: May 19, 2009 2355z
Launch site: Wallops Island, Virginia, USA

Status: Operational
```

```
Downlink: 437.365 MHz 1k2 AFSK
[02092011]
=====
HAWKSAT 1
Catalog number: 35004
Launch Date: May 19, 2009 2355z
Launch site: Wallops Island, Virginia, USA

Status: operational

Downlink: 437.345 MHz ?
[02092011]
=====
Pharmasat
Catalog Number: 35002
Launch Date: May 19, 2009 2355z
Launch site: Wallops Island, Virginia, USA

Status: Operational

Downlink: 437.465 MHz 1k2 AFSK
[02092011]
=====
ANUSAT
Catalog Number: 34808
Launch Date: April 20, 2009 0115z
Launch Site: Satish Dhawan Space Centre, India

Status: ?

Downlink:  435.000 MHz
Uplink:    145.800 MHz

Telemetry: 137.400 MHz
[02092011]
=====
SOHLA-1 (ASTRO TECH.)
Catalog Number: 33496
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational

Proposed Frequencies and Modes:
Downlink: 437.505 MHz AFSK/CW
Beacon:   437.505 MHz AFSK/CW

Callsign:

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=101
[02092011]
```

=====
KAGAYAKI (Solan Co.)
Catalog Number: 33495
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: In Orbit

Downlink: 437.375 MHZ   FSK9k6/CW
Beacon: 437.375 MHz   FSK9k6/CW

IARU coordination status page:

AMSAT-NA webpage:

[02092011]
=====
STARS (Kagawa Univ.) (Twin Satellites)
Catalog Number: 33498
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational ?

Downlinks: 437.485 MHz FM/CW
437.465 MHz FM/CW
Beacons: 437.305 MHz FM/CW
437.275 MHz FM/CW

Callsigns: JR5YBN
JR5YBO

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=99

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=121&retURL
=/satellites/status.php
[02092011]
=====
KKS-1 (Tokyo MCIT)
Catalog Number: 33499
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational

Downlink: 437.455 MHz AFSK/CW
Beacon: 437.385 MHz AFSK/CW

Callsign: JQ1YYY

IARU coordination status page:

```
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=107

AMSAT-NA webapge:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=120&retURL
=/satellites/status.php
[20092011]
=====
PRISM (Tokyo Univ.)
Catalog Number: 33493
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational ?

Downlink: 437.425 MHz AFSK/GMSK/CW
Beacon:   437.250 MHz AFSK/GMSK/CW

Callsign: JQ1YCX

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=97

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=119&retURL
=/satellites/status.php
[02092011]
=====
RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number: 32953
Launch Date: May 23, 2008 1520z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational

Curent Modes: Telemetry
              Audio
              Images

Downlinks: 435.315 MHz
           435.215 MHz

AMSAT-NA website:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=115&ret
URL=/satellites/status.php

Official website:
http://www.npopm.com/?cid=leoca&caid=43
[02092011]
=====
CanX-2
Catalog number: 32790
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India
```

Status: Operational in range of ground station only

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[02092011]

=====

AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Downlink: 437.425 MHz 1k2 baud packet

For the latest project status update please visit the AAUSAT-II web page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[02092011]

=====

CO-65 CUTE-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Digipeater

Downlink: 437.475 MHz 9k6 Packet
Uplink: 1267.600 Mhz

Telemetry Beacon:
Downlink: 437.2750 MHz CW

For the latest project status update please visit the Cute-1.7+APD II web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78

Command Station blog website:
http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=112&retURL

=/satellites/status.php
[02092011]
=====
Compass-1
Catalog number: 32787
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Current Mode: 4k8 MSK packet

Uplink: 145.980 MHz FM
Downlink: 437.275 Mhz CW
          437.405 MHz Packet

For the latest project status update please visit the Compass 1 web page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=114&retURL
=/satellites/status.php
[02092011]
=====
CO-66 Seeds II
Catalog number:
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Downlink: 437.485 MHz

Callsign: JQ1YGU

For the latest project status update please visit the Seeds 2 web page: http://cubesat.aero.cst.nihon-u.ac.jp/english/seeds_2_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=113&retURL
=/satellites/status.php
[02092011]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007 0702z
Launch site: Baikonur, Kazakhstan

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=94&retURL=
/satellites/status.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=72
[02092011]
=====
CP3
Catalog Number: 31129
Launch Date: April 17,2007 0702z
Launch site: Baikonur, Kazakhstan

Status: Operational

Current Mode: /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[02092011]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005 0652z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon: 437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/xivpicte.htm
[02092011]
=====
CO-57 CubeSat XI-IV

```
Catalog number: 27848
Launch date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: ?????

Current Mode: /u

Beacon:     436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=96&retURL
=/satellites/status.php

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[02092011]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004 0745z
Launch site: Baikonur, Kazakhstan

Status: Operational

Current Mode(s):
Voice repeater: V/u
Uplink:      145.920 MHz FM
Downlink:    435.300 MHz FM

Packet BBS: L/s
Uplink:     1268.703 mhz FM 9k6 Pacsat Broadcast Protocol
Downlink:    435.150 MHz FM 9k6 Pacsat Broadcast Protocol

Telemetry:
Downlink:    435.150MHz 9k6


Analog voice downlink:     435.300 MHz FM
                           435.150 MHz FM
                          2401.200 Mhz FM
Analog voice uplink:       145.860 MHZ FM
                           145.880 MHz USB
                           145.880 MHz FM
                           145.920 MHz FM
                           145.920 MHz FM - 67 Hz PL tone burst
                          1268.700 MHz FM
Digital Downlinks:         435.150 MHz FM 38k4 PBP, 1 watt output
                           435.150 MHz FM 9k6 Pacsat Broadcast Protocol
                          2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:            145.860 MHz FM 9k6 Pacsat Broadcast Protocol
```

1268.708 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[030492011]
=====
QuakeSat
Catalog Number: 27845
Launch Date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Telemetry only

Current Mode: 9600 baud data packet

Mode U packet
Downlink: 436.675 MHz 9k6 BPS

Quakesat webpage:
http://www.quakefinder.com/services/quakesat-ssite/
[02252011]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational

Current Mode: CW downlink worldwide
AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW

AMSAT-NA webpage:

http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=69&retURL
=/satellites/status.php
[02092011]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001 0240z
Launch site: Kodiak Launch Complex, Alaska, USA

Status: Telemetry only

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[02092011]
=====
RS-22 RADIO SPORT 22 (MOZHAYETS 4)
Catalog number: 27939
Launch Date: September 27, 2003 0612z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational - 70cm cw only

Current Mode: /u

CW Beacon - 435.352 MHz
            145.818 MHz

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=76&retURL
=/satellites/status.php
[02092011]
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990
Launch site: Kourou, French Guiana

Status: CW Beacon only

Uplinks: 145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink: 437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[02092011]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984
Launch site: Vandenburg AFB, California, USA

Status: Operational

Current Mode: /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon: 435.025 MHz
Mode-S Beacon: 2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[02092011]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998 0640z (ZARYA module)
Launch sites: Baikonur, Kazakhstan
Kourou, French Guiana
Uchinoura Space Center, Japan
Kennedy Space Center, Titusville, Florida, USA

Status: Operational

Current Active Modes: FM Repeater - OFF
Voice - V/v
BBS - OFF
APRS - OFF
SSTV - OFF

Expedition 26 Crew:
Commander: Scott Kelly
Flight Engineer: Alexander Kaleri U8MIR
Flight Engineer: Oleg Skripochka RN3FU
Flight Engineer: Dmitry Kondratyev
Flight Engineer: Catherine Coleman KC5ZTH

Flight Engineer: Paolo Nespoli IZ0JPA

STS-133 Discovery Crew:
Commander: Steven Lindsey
Pilot: Eric Boe
Mission Specialist: Alvin Drew
Mission Specialist: Michael Barratt KD5MIJ
Mission Specialist: Steve Bowen
Mission Specialist: Nicole Stott KE5GJN

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[02252011]
NNNN

```
/EX

SB SAT @ AMSAT W8ISS $WSR-063.S3
WSR 063 Part 3 03/04/2011

AMSAT NEWS SERVICE BULLETIN 063.S3
FROM AMSAT HQ SILVER SPRING, MD, March 04, 2011
TO ALL RADIO AMATEURS
BID: $WSR-063.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

NANOSAIL-D
Catalog Number:
Ejection Date: January 17, 2011

Status: On orbit

Downlink: 437.270 MHz AX.25

URL: http://nanosaild.engr.scu.edu/dashboard.htm
[01272011]
=====
CP4
Catalog Number: 31132
Launch Date: April 17, 2007

Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon:    437.325 MHz CW

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=79
[09062010]
=====
LIBERTAD-1
Catalog Number: 31128
Launch Date: April 17, 2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink:   145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[09062010]
```

```
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: Non-Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder:  145.825 Mhz FM
[09062010]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency:  437.305
                             2407.250

Official Website: http://www.ncube.no
[09062010]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink:        437.250 MHz FM 67Hz CTCSS
Voice Downlink:     2401.835 MHz FM
Packet Up/Downlink:  437.250 MHz 9k6 packet
Packet Downlink     2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[09062010]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non-Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[09062010]
=====
CANX-1
Catalog Number: 27847
```

Launch Date: June 30, 2003

Status: Non-Operational

Downlink: 437.8800 MHz AFSK 1k2bps
[06052009]
=====
DTUSAT
Catalog Number: 27842
Launch Date: June 30, 2003

Status: Non-Operational

Current Mode: 2k4 AFSK Packet last reported

Downlink: 437.475MHz

Officail webpage: http://dtusat1.dtusat.dtu.dk/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=101&retURL
=satellites/all_oscars.php
[02212009]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)

Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Telemetry only

Uplinks: 145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to

commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[03302009]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]

```
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
V-band:   145.840 -  145.990 MHz CW/LSB
U-band:   435.550 -  435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks
---------
S2-band:  2401.225 -  2401.475 MHz CW/USB
K-band:  24048.010 - 24048.060 MHz CW/USB
Beacon:   2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)
----------------------------
BEACON   General Beacon(GB)  Middle Beacon(MB)  Engineering Beacon(EB)
2 m                   none        145.898 MHz                    none
70cm           435.438 MHz        435.588 MHz             435.838 MHz
13cm(1)       2400.188 MHz       2400.338 MHz            2400.588 MHz
13cm(2)       2401.173 MHz       2401.323 MHz            2401.573 MHz
3cm          10450.975 MHz      10451.125 MHz           10451.375 MHz
1.5cm        24047.885 MHz      24048.035 MHz           24048.285 MHz
[07162007]
=====
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink:    145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
```

BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: 25636
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

```
Status: Non-Operational

Current Modes:
Telemetry : /u

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign:       4XTECH-12

More information of GO-32 can be found at:
http://asri.technion.ac.il/techsat/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=14&retURL
=/satellites/status.php
[07172010]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink:   145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
MO-30 UNAMSAT-2
Catalog Number: 24305
Launch Date: September 5, 1996

Status: Non-operational

Downlink:       435.1380 MHz AFSK 1200 BPS
Downlink:       435.2060 MHz AFSK 1200 BPS
Uplink:         145.8150 MHz AFSK 1200 BPS
Uplink:         145.8350 MHz AFSK 1200 BPS
Uplink:         145.8550 MHz AFSK 1200 BPS
Uplink:         145.8750 MHz AFSK 1200 BPS
[06042009]
=====
```

FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Non-operational
Current Mode: V/u (Mode JA)

Voice/CW (Mode JA)
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage:
http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts.htm
[11062010]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Non-operational

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:

```
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012009]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
AO-24 ARSENE
Catalog Number: 22654
Launch Date: May 13, 1993

Status: Non-operational

Uplink:    435.0625 MHz FM 1k2bps AFSK
           435.1125 MHz FM 1k2bps AFSK
           435.1375 MHz FM 1k2bps AFSK
Downlink:  145.9750 MHz FM 1k2bps AFSK
          2446.5025 MHz FM 1k2bps AFSK

Beacon:    2446.4700 MHz CW

Broadcast callsign:
```

```
BBS:
[12162009]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HL01-11
BBS: HL01-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
```

```
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
[05012006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: non-operational

Current Mode:  V/u

Uplink:         145.900 MHz FM 1200-baud Manchester FSK (reserved)
                145.920 MHz FM VOICE
                145.940 MHz FM 1200-baud Manchester FSK (reserved)
                145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink:       437.026 MHz USB VOICE
                (1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
```

```
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[07242009]
=====
UO-15 UoSAT-4
Catalog Number: 20438
Launch Date: January 22, 1990

Status: Non-operational

Uplink: ?
Downlink: 435.1250MHz (?)
          435.1200MHz (?)
[06042009]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational
```

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon: 145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.8500 - 145.9000 MHz SSB/CW
Downlink 29.4000 - 29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink: 29.4500 - 29.5500 MHz SSB/CW
Beacons: 29.450 MHz
          435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III

```
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon 1:  29.352 MHz (intermittent)
Beacon 2:  29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink:     21.260 to 21.300 MHz CW/USB
Downlink:  145.860 to 145.900 MHz CW/USB

Beacon:    145.860 MHz

Robot:     145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink:   21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon:   29.408 MHz

Robot:    29.454 MHz
[05232004]
NNNN
/EX
```

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SB SAT @ AMSAT W8ISS $WSR-063.S4
WSR 063 Part 4 03/04/2011

AMSAT NEWS SERVICE BULLETIN 063.S4
FROM AMSAT HQ SILVER SPRING, MD, March 04, 2011
TO ALL RADIO AMATEURS
BID: $WSR-063.S4

THE FOLLOWING SATELLITES HAVE RE-ENTERED OR HAVE BEEN RETURNED SAFELY:

CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Re-entered
Re-entered: October 25, 2009

Uplink:  1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=56
[09062010]
=====
BEVO-1 (DRAGONSAT-1)
Catalog Number: 35690
Launch Date: May 19, 2009

Status: Re-entered
Re-entered:

Downlink: 437.325 MHz 9k6 GMSK
          437.325 MHz CW 20wpm
[07312009]
=====
AggieSat2 (DRAGONSAT-2)
Catalog Number: 35690
Launch Date: May 19, 2009

Status: Re-entered
Re-entered:

Downlink: 436.250 MHz 9k6 FHSS
[11112009]
=====
Pollux
```

```
Catalog Number: 35693
Launch Date: July 31, 2009

Status: Re-entered
Re-entered:

Callsign: POLLUX-1

Downlink: 145.825MHz 1k2 AX.25
[09062010]
=====
Castor (ANDE-2)
Catalog Number: 35694
Launch Date: July 31, 2009

Status: Re-entered
Re-entered:

Callsign: KD4HBO-1

Downlink: 145.825 MHz 1k2 AX.25
[09062010]
=====
NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: July 28, 2008

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[01012009]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007
```

Main Downlink: 145.825 Mhz FM APRS AX25
APRS Uplink: 145.825 MHz FM APRS AX25
Voice/PSK31 Uplink: 28.120 MHz

Packet to Voice ID: RAFT
[06112007]
=====
GENESAT-1
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Re-Entered
Re-entered date: August 8, 2010

Current Mode: /u

Callsign: KE7EGC

Telemetry Beacon Downlink: 437.0695 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[08082010]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Re-Entered
Re-entered: June 18, 2008

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon: 437.2750 MHz CW

Callsign: JR8YJT
[01012009]
=====
SO-43 Starshine 3
Catalog Number: 26929
Launch Date: September 30, 2001

Status: Re-Entered
Re-entered: January 21, 2003

Beacon: 145.825Mhz
[02212009]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30

UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at}amsat.org
NNNN
/EX

From 786389639485005848
X-Google-Thread: 10e8ad,807073b03ddb03af,start
X-Google-NewGroupId: yes
X-Google-Thread: 113975,807073b03ddb03af,start

```
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,gidaddc8bf063,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news3.google.com!feeder.news-service.com!
news.astraweb.com!border5.a.newsrouter.astraweb.com!not-for-mail
From: Chris Steyaert <observations@rmob.org>
Newsgroups: rec.radio.amateur.space,sci.astro.amateur
Subject: Radio Meteor Obs. Bull. February 2011
Date: Sat, 05 Mar 2011 20:27:49 +0100
Message-ID: <il35n6lmnj1op72884o9qv8809i3e0bcmg@4ax.com>
X-Newsreader: Forte Agent 5.00/32.1171
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Lines: 13
Organization: Unlimited download news at news.astraweb.com
NNTP-Posting-Host: 696eddc4.news.astraweb.com
X-Trace: DXC=\><V\^GF0F;CObSL`Ra@h6L?0kYOcDh@:\?i=>1V9b71?
^414dl]5<4BZ<AX`0A\J3b3<D_UX>L;9X<`3P5ZY[Z:;k2S1fD7Oo0<?Ofag<@A5;
Xref: g2news1.google.com rec.radio.amateur.space:458 sci.astro.amateur:43913
```

Radio Meteor Observation Bulletin No. 211 of February 2011 (86 K) is available now as

http://www.rmob.org/rmobtext/rmob1102.txt

More information and the visual presentation of the hourly forward scatter counts can be found on

http://www.rmob.org

Chris

```
From -1700366277183791896
X-Google-Thread: 10e8ad,f485b32367179135,start
X-Google-NewGroupId: yes
X-Google-Thread: 10b9c8,f485b32367179135,start
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,gida4a23d5f63,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news2.google.com!newsfeed2.dallas1.level3.net!
news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-065 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sat, 5 Mar 2011 21:22:46 EST
Organization: The Radio Amateur Satellite Corporation
Lines: 422
Approved: RRI Admin <rec-radio-info-request@panix.com>
```

```
Message-ID: <000f01cbdba5$5cd94220$168bc660$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1299378166 486 166.84.1.6 (6 Mar 2011 02:22:46 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 6 Mar 2011 02:22:46 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news2.google.com rec.radio.amateur.space:484 rec.radio.info:2239
```

AMSAT NEWS SERVICE
ANS-065

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:

* AO-51 Configuration Plans Still Affected by Eclipses
* ARISSat-1 to be Activated Aboard ISS on April 12
* AMSAT Heading For Dayton Hamvention
* NASA Glory Satellite and Three CubeSats Lost Vandenberg Launch Failure
* Pakistan Developing Student CubeSat Projects
* Satellite Shorts From All Over
* NASA, Make Magazine Announce Competition to Fly Student Experiments

SB SAT @ AMSAT $ANS-065.01
AO-51 Configuration Plans Still Affected by Eclipses

AMSAT News Service Bulletin 065.01
>From AMSAT HQ SILVER SPRING, MD.
March 6, 2011

To All RADIO AMATEURS
BID: $ANS-065.01

AO-51 Command Station, Mark Hammond, N8MH reported that AO-51 is nearing the end of eclipse periods. Analysis of telemetery from the satellite shows that AO-51 is still not experiencing full sunlight, most likely due to spacecraft orientation and sun angle. On-board temperatures are climbing and the Command Team continues to monitor and tweak various power management parameters to take advantage of the solar power that is available.

Helpful reports from users (about the transmitters turning OFF) and telemetry confirm that AO-51 is still seeing a few minutes of "darkness" every orbit.

AO-51 was configured for "normal operational mode" on March 3, and will remain in this configuration until further notice. That includes the V/U repeater the Packet BBS with L-band uplink:

AO-51 Schedule as of March 3:

Mode V/U FM Voice Repeater (no PL tone needed)
Uplink: 145.920 MHz FM
Downlink 435.300 MHz FM

Mode L/U PacSat BBS
Uplink: 1268.703 MHz FSK 9k6 baud
Downlink 435.150 MHz FSK 9k6 baud

The Packet BBS will be open for use, but the Command Team asks for your cooperation (by standing by and not entering the queue) if you share the footprint with a command station (most often on the East coast of the US). Should conditions improve, there will be an attempt support some S-band operations--but for now that seems unlikely.

The latest AO-51 status and configuration news will be posted on the amsat-bb and on the AO-51 Control Team News web page at:
http://www.amsat.org/amsat-new/echo/CTNews.php

[ANS thanks Mark Hammond, N8MH for the above information]

/EX

SB SAT @ AMSAT $ANS-065.02
ARISSat-1 to be Activated Aboard ISS on April 12

AMSAT News Service Bulletin 065.02
>From AMSAT HQ SILVER SPRING, MD.
March 6, 2011
To All RADIO AMATEURS
BID: $ANS-065.02

The ARISSat-1 satellite, presently still inside the ISS, will be turned on and use an external antenna on 12 April 2011 to celebrate the 50th anniversary of Yuri Gagarin's first manned space flight. AMSAT will support this event and issue certificates to those stations reporting reception of the ARISSat-1 signals. Roscosmos has announced that the satellite will be deployed into orbit during the next EVA in July of this year.

Latest ARISSat-1 News
http://www.arissat1.org/v3/

Get your color ARISSat-1 Frequency Guide here.
http://tinyurl.com/4t497t2 (AMSAT web)

ARISSat-1 Presentation Slides (~1MB)
http://tinyurl.com/4n4pzkm (AMSAT web)

SouthGate streaming videos about the April 12 Yuri's Night plus links to more resources can be found at:
http://tinyurl.com/49jnbg2 (SouthGate ARC)

[ANS thanks the ARISSat-1 Team for the above information]

/EX

SB SAT @ AMSAT $ANS-065.03
AMSAT Heading For Dayton Hamvention

AMSAT News Service Bulletin 065.03
>From AMSAT HQ SILVER SPRING, MD.
March 6, 2011
To All RADIO AMATEURS
BID: $ANS-065.03

The 2011 Dayton Hamvention will be held this year May 20-22. This year featured AMSAT attractions include:

+ Operational ARISSat-1 Prototype
+ Astronaut Doug Wheelock, KF5BOC, will be attending as a special guest of the ARRL and AMSAT. Doug will visit the AMSAT booth on both Friday and Saturday.
+ AMSAT theme for 2011 is "Providing Education Through Amateur Satellites"

The latest AMSAT at Hamvention news will always be posted at:
http://www.amsat.org/amsat-new/hamvention/2011/Dayton.php

This is the 60th year of the Dayton Hamvention, sponsored by DARA (Dayton Amateur Radio Association). As has been the case for the many years the Hamvention will be at the Hara Arena Complex on the north side of Dayton. Further information on Hamvention 2011, including advance ticket sales and motel accommodations, can be found at http://www.hamvention.org.

AMSAT will occupy the same booths (444-449) in Ball Arena, right across from the ARRL area and just inside the door from the Satellite Demonstration area. Plan to visit all of the AMSAT activities!

AMSAT Activities at Dayton

AMSAT has planned a number of great activities during Hamvention. There will also be a number of new offerings at the AMSAT booth as well as Specials, follow the link for Booth Activities to see them.

The AMSAT theme for 2011 is "Providing Education Through Amateur Satellites". We will have multiple exhibits of the new AMSAT satellites on display.

ARISSat-1

ARISSat has been completed and is in orbit waiting for the July, 2011 EVA to deploy it into orbit. We will have on display an operational prototype. Tune your HT to 145.950 MHz to hear the FM beacon.

AMSAT Thursday Night Get-together

We will be at Tickets Pub & Eatery this year. The menu is great and a nice change of pace. Check it out at TicketsPub.com

AMSAT Forum

The AMSAT Forum will be on Saturday May 21.

AMSAT/TAPR Banquet

The fifth annual AMSAT/TAPR Banquet will be Friday night May 20 at the Kohler Presidental Banquet Center. The speaker for the event has not been finalized.

Seating is limited and reservations are required. Go to the Dayton Banquet 2011 link: http://www.amsat.org/amsat-new/hamvention/2011/Banquet.php to find information about reservations and additional information.

AMSAT Hotel

AMSAT has only a few rooms left in the reserved block at the Country Inn & Suites in Fairborn, OH. Please contact Martha at the AMSAT office for room price and availability during Hamvention. Priority for rooms will be given to those volunteering to work in the AMSAT booth for multiple 2 hour shifts during Hamvention. The phone number for the AMSAT office is 301-589-6062. Other hotels in the immediate area of the Country inn & Suites include the Fairfield Inn, Ramada Inn, Hampton Inn, Fairborn Holiday Inn, Red Roof Inn and the Homewood Suites if additional accommodations are needed.

[ANS thanks Gould Smith, WA4SXM for the above information]

/EX

SB SAT @ AMSAT $ANS-065.04
NASA Glory Satellite and Three CubeSats Lost Vandenberg Launch Failure

AMSAT News Service Bulletin 065.04
>From AMSAT HQ SILVER SPRING, MD.
March 6, 2011
To All RADIO AMATEURS
BID: $ANS-065.04

NASA announced on Friday that the March 4 launch from Vandenberg AFB of a Taurus XL rocket carrying the Glory Satellite Mission and three student cubesats from the University of Kentucky, University of Montana, and University of Colorado failed to reach orbit. Telemetry indicated the fairing, the protective shell atop the Taurus XL rocket, did not separate as expected about three minutes after launch.

+ Glory was a new NASA Earth-observing satellite intended to improve our understanding of how the sun and tiny atmospheric particles called aerosols affect Earth's climate.

+ KySat-1, University of Kentucky was designed to bring satellite command, control, and communications into Kentucky classrooms using mobile and portable stations.

+ Explorer-1 [Prime], University of Montana was designed to make space weather observations of the Van Allen Radiation Belts.

+ Hermes, University of Colorado was designed to test high speed communications from small satellites.

The NASA Press Release can be found on-line at:
http://www.nasa.gov/home/hqnews/2011/mar/HQ_11-050_N0_Glory.html

A news item of this launch failure is also available from the UniverseToday.com website at: http://tinyurl.com/5rf3b7g

See also:
http://tinyurl.com/63htzgr (National Journal with streaming video)
http://tinyurl.com/4uvne77 (Lompoc Record news coverage)
http://tinyurl.com/4ksdare (LA Times)
http://spaceflightnow.com/taurus/glory/110304gloryfail/
http://tinyurl.com/6fntsfw (SpaceFlightNow.com streaming video)
http://tinyurl.com/6c46mt5 (NASA Press conference on SpaceFlightNow)

[ANS thanks NASA and the news websites cited above for this information]

/EX

SB SAT @ AMSAT $ANS-065.05
Pakistan Developing Student CubeSat Projects

AMSAT News Service Bulletin 065.05
>From AMSAT HQ SILVER SPRING, MD.
March 6, 2011
To All RADIO AMATEURS
BID: $ANS-065.05

Pakistan's Institute of Space Technology (IST) has initiated a space program aimed at designing, building, launching and succesfully operating a standard CubeSat.

The program is led by Communication Systems Engineering (CSE) Department with support from Aeronautics & Astronautics as well as Materials Department. As a Space technology institute and research center, one of the objectives of IST is to design and develop miniature satellites for technology evaluation and in-orbit demonstration and to provide students with hands-on experience in space technologies, to meet the work force requirement for the national space program. Institute of Space Technology is the first academic institution of Pakistan to initiate the small satellite development program.

New Pakistan Satellite ICube-1 Specifications include:

Beacon	436.8475 MHz, CW, 100mW
Downlink	437.490 MHz, FSK, AX.25, 1200bps, 600mW
Uplink	145.835 MHz, FSK, AX.25, 1200bps

Plans are for a launch in the 3rd quarter of 2011.

Full information can be found on ICube-1 web pages:
http://www.icube.org.pk/

Student Satellite Project
http://www.ist.edu.pk/student_satellite.html

Institute of Space Technology (IST)
http://www.ist.edu.pk/

[ANS thanks Pakistan IST and SouthGate ARC News Site for the above information]

/EX

SB SAT @ AMSAT $ANS-065.06
Satellite Shorts From All Over

AMSAT News Service Bulletin 065.06

>From AMSAT HQ SILVER SPRING, MD.
March 6, 2011
To All RADIO AMATEURS
BID: $ANS-065.06

+ Happy 27th birthday this past week to Oscar 11 which was launched on March 1, 1984. Clive, G3CWV noted in his UO-11 report that the satellite wasn't transmitting on its birthday but did resume its AFSK FM ASCII Telemetry on 145.826 MHz on March 3. The satellite is now transmitting during eclipses, although signals are weaker at those times. This indicates that there is still some capacity remaining in the battery. Excellent signals have been reported from stations located around the world, and good copy obtained from decoded telemetry frames. More information can be found on-line at: http://www.g3cwv.co.uk/oscar11.htm.

+ Congratulations to Scott N6PG on his first satellite contacts last week via AO-51 with W7JPI, and ND9M/mm, and K0VK. Scott was using a VX-8R and an Elk antenna. Scott has posted a video of the contact at: http://www.youtube.com/watch?v=foCs_eoIL1A

+ The Southeastern VHF Society has issued their last call for the 2011 SVHFS Conference Papers which need to be received by March 11. Please send to N2CEI, Steve Kostro at:
SVHFS2011@downeastmicrowave.com.
They also have one or two more presentation slots open so if you would like to make one; published paper not required. Contact Steve with your presentation also. Deadline for hotel reservations is March 29. A link for hotel reservations can be found on the conference page at: http://www.svhfs.org. 15th annual Southeastern VHF Society Conference to be held in Huntsville, Alabama on April 29th and 30th, 2011.

+ Alex OZ9AEC has produced three videos showing reception of weak 70cm Amateur Radio satellite signals using the AMSAT-UK FUNcube SDR Dongle. Alex used the FUNcube Dongle with a standard 8 ele Wimo X-yagi, preamp and ~40 meters of coax down to the shack to receive these satellite signals in the 70cm satellite segment 435-438MHz. The beacons run about 100mw output. Watch at: http://tinyurl.com/6f7hdag (SouthGate)

+ UniverseToday.com has posted a gallery of STS-133 launch photos at: http://tinyurl.com/6gvbuqc Also at UniverseToday.com are high resolution, pan-able images of the Space Shuttle:
http://tinyurl.com/4fma9x8
Rick, K7TEJ posted this link to a video of the STS-133 launch that was captured from a passing airliner:
http://www.youtube.com/watch?v=GE_USPTmYXM

+ Bob, W7LRD plans to run a AMSAT information table at the Mike and Key Amateur Radio Club 30th Electronics Show and Fleamarket on Saturday, March 12, 2011 at Puyallup, Washington. Ticket Sales open at 8:00 AM; Doors open at 9:00 AM.

+ NASA has released a cool sound track of the sounds of thousands of cometary dust particles pelting Stardust-NExT as it flew past Comet Tempel at 9.8 km/sec, or 24,000 MPH. The audio was recorded by an instrument aboard the spacecraft called the Dust Flux Monitor which measures sound waves and electrical pulses from dust impacts. Listen at: http://tinyurl.com/5rorrou (UniverseToday.com)

[ANS thanks everyone for the above information]

/EX

SB SAT @ AMSAT $ANS-065.07
NASA, Make Magazine Announce Competition to Fly Student Experiments

AMSAT News Service Bulletin 065.07
>From AMSAT HQ SILVER SPRING, MD.
March 6, 2011
To All RADIO AMATEURS
BID: $ANS-065.07

In a press release titled, "NASA Launches 2011 Nationwide Technology Space Competition for Education", NASA says it's Emerging Commercial Space Office (ECSO) is teaming with Make Magazine, and Teachers in Space to help develop spaceflight kits that high school teachers and students can build and fly on suborbital flights.

The NASA/Make competition is designed to inspire curiosity and create interest in science, technology, engineering and mathematics (STEM) among classroom teachers and their students. Contenders will be invited to submit ideas, concepts and prototypes for kits that teachers and students can build for future spaceflights.

Competition rules are simple. Kits should use components that are likely to be available at most high schools, and submitted experiments must be self-contained and fit in a standard Cubesat container. To make kits accessible to students nationwide, part of the challenge is to be able to build these kits for under $100, the kind of funds that could be raised by a school bake sale.

The first experiment kits to be selected will fly aboard the Excelsior STEM mission, a commercial unmanned suborbital mission sponsored by Teachers in Space and scheduled to fly in 2011. Experiment kits for the Excelsior STEM mission will be assembled by teachers at a Suborbital Flight Experiment Workshop to be held August 1-5, 2011 at the NASA Dryden Flight Research Center's AERO Institute in Palmdale, Calif.

The full NASA Press Release can be found on-line at:
http://www.nasa.gov/centers/ames/news/releases/2011/11-14AR.html

Make Magazine says more details about the challenge, including rules, prizes, etc., will be coming soon. If you'd like to participate in the MAKE Space Challenge, get on the mailing list! They will notify you the details for challenge have been finalized and when the application process opens. You can sign up for the Space Challenge mailing list at: http://blog.makezine.com/space

[ANS thanks NASA and Make Magazine for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office. And, with that please keep in mind that you realize you are getting old when your body begins to make the same noises as your coffee maker.

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM

```
From 695553060233746977
X-Google-Thread: a4a23d5f63,9b2ddce2e72ce0e7,start
X-Google-Attributes: gida4a23d5f63,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII
Path: g2news2.google.com!news2.google.com!news.glorb.com!news2.glorb.com!news-out.readnews.com!transit4.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-072 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Wed, 16 Mar 2011 09:33:21 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 305
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000c01cbe3de$b2bbd450$18337cf0$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
X-Trace: reader1.panix.com 1300282401 698 166.84.1.6 (16 Mar 2011 13:33:21 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Wed, 16 Mar 2011 13:33:21 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
```

```
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news2.google.com rec.radio.amateur.space:485 rec.radio.info:2266
```

AMSAT NEWS SERVICE
ANS-072

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* AMSAT responds to HR 607 threat to 70-cm satellite operations
* GPredict Now Available for Windows
* OSCAR 11 Report 04 March 2011
* Middle School Students to Launch Near-Space Balloon
* ARISS Status - 7 March 2011

SB SAT @ AMSAT $ANS-072.01
AMSAT responds to HR 607 threat to 70-cm satellite operations

AMSAT News Service Bulletin 072.01
  From AMSAT HQ SILVER SPRING, MD.
March 13, 2011
To All RADIO AMATEURS
BID: $ANS-072.01

Recently a bill, H.R. 607, the "Broadband for First Responders Act of 2011," was introduced by Rep. Peter King (R-NY). The bill addresses the creation and maintenance of a nationwide Public Safety broadband network.

This bill is unique in that it provides for the reallocation of the 420-440 MHz block of frequencies away from its current primary and secondary users. The inclusion of most of the amateur 70-cm spectrum, and the entire spectrum allocated for the Amateur Satellite Service, constitutes a major threat to satellite operations. Almost all current and planned amateur satellites include the use of 70-cm band. If the use of 70-cm is lost, there is no reasonable replacement.

The next available band, 23-cms, is restricted to uplinks, and is coming under increasing pressure from global navigation services. Likewise, 13-cms is rapidly becoming unusable due to terrestrial noise sources from consumer devices. The passage and implementation of this bill will effectively end the ability to use relatively cheap, readily available amateur equipment for both amateur communications and university research programs.

More details can be found at WWW.ARRL.ORG as well as a sample letter which may be edited for your use. There is information on using the ARRL's legislative liaison to speed the delivery due to existing security restrictions on direct mail. An AMSAT sample letter, stressing the interests of amateur satellite users, is available at WWW.AMSAT.ORG.

[ANS thanks Alan, WA4SCA, for the above information]

/EX

SB SAT @ AMSAT $ANS-072.02
GPredict Now Available for Windows

AMSAT News Service Bulletin 072.02
  From AMSAT HQ SILVER SPRING, MD.
March 13, 2011
To All RADIO AMATEURS
BID: $ANS-072.02

Alexandru has just made Gpredict 1.3 available free for all you Windows operators at

https://sourceforge.net/projects/gpredict/files/Gpredict/1.3/

Of course, it's also available for Mac and Linux users.

[ANS Nigel, W8IFF, for the above information]

/EX

SB SAT @ AMSAT $ANS-051.03
OSCAR 11 Report 04 March 2011

AMSAT News Service Bulletin 051.03
  From AMSAT HQ SILVER SPRING, MD.
February 20, 2011
To All RADIO AMATEURS
BID: $ANS-051.03

OSCAR-11 celebrated it's 27th birthday on 01 March! It was designed, built and launched within a period of six months, using commercially available 'off the shelf' components (COTS). Once again, congratulations to Professor Sir Martin Sweeting G3YJO, his team at the University of Surrey and groups of radio amateurs who also contributed to the project. Unfortunately, the satellite wasn't transmitting on its birthday, but resumed transmissions, three days later.

This report covers the period from 31 January to 04 March 2011. During this time the satellite has been heard from 10 to 21 February and from 03 March 2011. It is expected to switch-off again 13 March until 23 March.

Excellent signals have been reported from stations located around the world, and good copy obtained from decoded telemetry frames.

The satellite is now transmitting during eclipses, although signals are weaker at those times. This indicates that there is still some capacity remaining in the battery.

The on-board clock is now very stable.

The VHF beacon frequency is 145.826 MHz. AFSK FM ASCII Telemetry

At the present time, while OSCAR-11 is operating in a predictable way, I no longer need direct reports or files by e-mail. However, could all listeners continue to enter their reports on the general satellite status website. This is a very convenient and easy to use facility, which shows the current status of all the amateur satellites, and is of use to everyone. Reports around the expected times of switch-on and switch-off are of special interest, especially for times 12:00 - 17:00 and 22:00 - 07:00 UTC, to when the satellite is out-of-range in the UK . The URL is http://oscar.dcarr.org/index.php

A longer version of this report is available on my website, and new listeners to OSCAR-11 should read this for further information. The URL is www.g3cwv.co.uk/oscar11.htm . This page contains a links to the longer report, a short audio clip to help you identify the satellite and a file of the last telemetry received. The website also contains an archive of news & telemetry data which is updated from time to time, and details about using a sound card or hardware demodulators for data capture. There is also software for capturing data, and decoding ASCII telemetry.

If you place this bulletin on a terrestrial packet network, please use the bulletin identifier $BID:U2RPT154.CWV, to prevent duplication.

73 Clive G3CWV   xxxxx@amsat.org (please replace the x's by g3cwv)

[ANS thanks Clive, G3CWV, for the above information]

/EX

SB SAT @ AMSAT $ANS-051.04
Middle School Students to Launch Near-Space Balloon

AMSAT News Service Bulletin 051.04
From AMSAT HQ SILVER SPRING, MD.
February 20, 2011
To All RADIO AMATEURS
BID: $ANS-051.04

A group of students from Olde Towne Middle School (OTMS) in Ridgeland, Mississippi is preparing for a trip to space -- or as close as they can get. The OTMS Radio and Technology Club, along with the school's Science Team, are planning a near-space balloon launch at 9 AM (CDT) on March 26 (the date and time are subject to change depending on weather). The balloon -- nicknamed Titans in Space -- will use the call sign KC5NXD and is expected to reach an altitude of 94,825 feet.

The project is led by Bill Richardson, N5VEI, a past participant in the ARRL Teachers Institute on Wireless Technology, a professional development program that is part of ARRL's donor-funded Education & Technology Program. The school has also received several grants of Amateur Radio station equipment from this program. Richardson is the sponsor of the school's Radio and Technology Club.

The balloon will be equipped with instruments to track its exact location and a camera that will take snapshots every 15 seconds. The students will stay on the ground and analyze the data as it is transmitted back to them from the balloon. "As far as I can research, we are the first elementary, middle or high school to launch a near-space balloon in our state," Richardson told the ARRL. The balloon will launch from the Madison County Career and Technology Center in Gluckstadt. Preflight will begin at 90 minutes before the scheduled launch. The preflight and launch will be stream-cast live on the Internet at, http://www.ustream.tv/user/kc5nxd. You can also follow along on Twitter.

"Our students are busy with assembly and payload testing right now, preparing for launch day," said OTMS Principal Allen Lawrence. "This is really a great science experiment and they are all excited."

Richardson is encouraging radio amateurs to follow the balloon via APRS on 144.39 MHz, on http://aprs.fi with the call sign kc5nxd-11 and via a 2 meter voice beacon on 146.565 MHz. A 20 meter beacon at 14.079-14.080.5 MHz will offer telemetry in four modes: Domino-ex16, CW, RTTY and Hellschreiber.

According to Richardson, the group will be using a special balloon-modified version of FLdigi, called dl-FLdigi. Ground stations receive the balloon's telemetry via the program's soundcard decoding software (available as a free download from http://www.w1hkj.com). "In essence, you are creating your own HF or VHF APRS-style network on the fly," he explained. "When a valid frame is received by a ground station, it is then sent via dl-FLdigi to a server that then plots the position onto a website dedicated to high altitude ballooning." The website can be found at, http://spacenear.us/tracker.

Richardson said that the students need help to grab data packets or use the FLdigi to relay to packets to the network: "With the new telemetry system, we will have a better data set for a final landing spot, as well as research data."

The launch is in partnership with the Mississippi State University's Bagley College of Engineering's aeronautical engineering program, which has provided support and supplies to the students' efforts. The project has already received national attention from The Sally Ride Foundation, named after the first American woman to fly in space. The foundation -- dedicated to supporting girls' and boys' interests in science, math and technology -- sent the students a letter of support and congratulations in advance of the launch. All funding for the project has come from donations and fund raisers. The project has received support from the local community, including the Jackson (Mississippi) Amateur Radio Club.

[ANS thanks ARRL for the above information]

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SB SAT @ AMSAT $ANS-072.05
ARISS Status - 7 March 2011

AMSAT News Service Bulletin 072.05
  From AMSAT HQ SILVER SPRING, MD.
March 13, 2011
To All RADIO AMATEURS
BID: $ANS-072.05

1. Recent ARISS Contacts

On Wednesday, March 2 an ARISS contact was held between on-orbit astronaut Paolo Nespoli, IZ�JPA and Mackay State High School students in Queensland, Australia via telebridge station VK5ZAI, Australia. All 16 questions were answered. One of the approximately 200 people in attendance was the mayor of Mackay who asked the ARISS team to "keep up the good work - you are doing a great job inspiring our students." He expressed his amazement on how well timed and extremely enjoyable the contact was. Three television stations covered the radio hookup and snippets of the event were broadcast on at least 2 regional TV channels all afternoon following the contact. The Mackay Daily Mercury wrote a story on the event:
http://www.dailymercury.com.au/story/2011/03/03/historic-link-to-space-mackay-high-school/

Technological Centre for Innovation in Communications (CeTIC) in Las Palmas de Gran Canaria, Spain experienced a successful ARISS contact on Thursday, March 3. Astronaut Paolo Nespoli, IZ�JPA answered all 20 questions posed to him by the students. The contact supplemented lessons on orbit prediction, satellite tracking and common communications systems.

Victory Primary School in Nelson, New Zealand participated in an ARISS contact on Thursday, March 3 via telebridge station W6SRJ in California.

Cady Coleman,KC5ZTH answered 17 questions prepared by the students. One additional query was answered with the help of shuttle crew member Alvin Drew. The contact was the culmination of a science curriculum focused on space and technology.

2. NASA Posts Article on Ten Years of ARISS Contacts

NASA posted a feature story on the 10th anniversary of ARISS contacts to its Web site. "One Small Radio Call for a Ham" may be found on the following page:
http://www.nasa.gov/audience/foreducators/one-small-radio-call.html

3. Astronaut Training Status

A few exam review sessions were provided for Chris Cassidy this past week. Astronauts Andre Kuipers, PI9ISS and Don Pettit, KD5MDT participated in simulated ARISS contacts with students in Belgium and Canada, respectively on March 3.

An ARISS introductory course is planned for Mike Hopkins on March 9 and a refresher course for Chris Hadfield is scheduled for March 10.

[ANS thanks Carol, KB3LKI, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Lee McLamb, KU4OS

```
From -4243763888218488966
X-Google-Language: ENGLISH,ASCII
Path: g2news1.google.com!news2.google.com!npeer03.iad.highwinds-media.com!
news.highwinds-media.com!feed-me.highwinds-media.com!nx02.iad01.newshosting.com!
newshosting.com!novia!news-out.readnews.com!news-xxxfer.readnews.com!panix!
```

rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-079 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sun, 20 Mar 2011 10:29:31 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 491
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000f01cbe70b$35f4e710$a1deb530$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
X-Trace: reader1.panix.com 1300631371 29401 166.84.1.6 (20 Mar 2011 14:29:31 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 20 Mar 2011 14:29:31 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news1.google.com rec.radio.amateur.space:461 rec.radio.info:2199

AMSAT NEWS SERVICE
ANS-079

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* ARISS Contact-Fair Lawn, NJ
* BJ8TA Amateur Radio EME & Satellites Expedition
* 2M1EUB/P Satellite Operation Begins from Scotland
* AMSAT India March Newsletter Available for Download
* ARISS Status - 14 March 2011
* Fastrack Satellites Separated
* AO-51 in eclipse
* UK Space Agency UKube-1 Cubesat Takes Shape
* ISS Reboost March 18th

SB SAT @ AMSAT $ANS-079.01
ARISS Contact-Fair Lawn, NJ

AMSAT News Service Bulletin 079.01
From AMSAT HQ SILVER SPRING, MD.
March 20, 2011
To All RADIO AMATEURS
BID: $ANS-079.01

This past Monday, March 14, 2011, The Fair Lawn ARC conducted a successful ARISS Contact. It was the fruition of a few years of applications, paperwork and sweat equity. After initial instructions giving specific details, the last weekend a complete change of Astronaut and frequency of OPS was dictated. The operating group quickly made necessary changes.

The school system involved was thrilled after hearing Paulo Nespoli, IZ0JPA, calling back from NA1SS after our student Zack, KC2RSS, gave the initial calls. Everyone breathed a sigh of relief after that. All questions were answered by a gracious Paulo on the ISS and applause was given after the contact by the 200 plus people that attended the contact. Everyone involved felt a great deal of pride and accomplishment. ARISS has made it a smooth ride for all that decides to get involved and show local school officials what is involved and the scientific aspects of making such a contact. Newspaper coverage can be found on-line at:
http://www.northjersey.com/news/031411_Fair_Lawn_students_talk_to_orbiting_astronaut.html

[ANS thanks Dee, NB2F, for the above information]

/EX

SB SAT @ AMSAT $ANS-079.02
BJ8TA Amateur Radio EME & Satellites Expedition

AMSAT News Service Bulletin 079.02
From AMSAT HQ SILVER SPRING, MD.
March 20, 2011
To All RADIO AMATEURS
BID: $ANS-079.02

AMSAT-China Chief Executive Officer Alan Kung, BA1DU reports that AMSAT-China is organizing an expedition to southwest China for EME experiments and amateur satellite communications. The expedition team will use special technology experiments amateur radio call sign BJ8TA.

BJ8TA team will be active on the available satellites, including AO-51, VO-52, AO-7, AO-27, FO-29, SO-50, SO-67 etc, during the expedition period.

Initially the team will operate from Shangri-La County(NL97ut), Yunnan Province of China during March 20-23. This will mark the first time amateur radio EME communications in grid NL, the communications scheme on the 6m, 2m and 70cm bands, using Yagi antennas with PA of one kilowatt.

And then, the team will move to Yunnan Astronomical Observatory of the Chinese Academy of Sciences in Chengjiang county, it is located in grid OL14kq. The EME communications will use the 11 meter diameter radio telescope antenna with gain of 29dbi on the 70cm band. These operations will be from March 28 to April 1.

BJ8TA Amateur Radio EME & Satellites Expedition is supported by the Bureau of Radio Regulation of China and Yunnan Astronomical Observatory of the Chinese Academy of Sciences.

BJ8TA team members:

VIP operators:
Xie Feibo, BA1XIE, Director General of the Bureau of Radio Regulation of China.
Yin Hu, BD1AZ, Land Service Department of the Bureau of Radio Regulation of China.
Chen Ping, BA1HAM, Deputy Secretary General of the Amateur Radio Committee of Chinese Radio Association.
Li Jian, Land Service Department of the Bureau of Radio Regulation of China.

Team leader: Fan, BA1EO
Operators: Alan, BA1DU; Wang, BA4RN; Wang, BH4REQ; Zhao, BH4RLO; Jin, BA4TA; Michael, BD5RV;and Chen, BA7CK
Logistics: Zhu, BG5FCB; Zhang, BG8SF
QSL manager: Alan, BA1DU (P.O.Box 8091, Beijing 100088, CHINA).

[ANS thanks Alan Kung, BA1DU for the above information]

/EX

SB SAT @ AMSAT $ANS-079.03
2M1EUB/P Satellite Operation Begins from Scotland

AMSAT News Service Bulletin 079.03
From AMSAT HQ SILVER SPRING, MD.
March 20, 2011
To All RADIO AMATEURS
BID: $ANS-079.03

Paul, 2E1EUB says he will begin portable satellite operation from Scotland as 2M1EUB/P beginning on March 20 and continuing for one week.

Paul has spent the winter preparing his van for operating which he plans to drive up into the mountains weather permitting.

Paul's information for both callsigns can be found at http://www.qrz.com.

[ANS thanks Paul, 2E1EUB for the above information]

/EX

SB SAT @ AMSAT $ANS-079.04
AMSAT India March Newsletter Available for Download

AMSAT News Service Bulletin 079.04
From AMSAT HQ SILVER SPRING, MD.
March 20, 2011
To All RADIO AMATEURS
BID: $ANS-079.04

AMSAT INDIA Secretary Nitin, VU3TYG announced this week that AMSAT INDIA's March 2011 Newsletter is available for download at:
http://amsatindia.org/Newsletter/AMSATINDIA-News-March_2011.pdf

Content of the March Newsletter include:
1. Update on the Technical talk held on February 20th 2011
2. Update on the Cubesat Transponder project by AMSAT INDIA.
3. Report by Anantha - VU3GPF on the scheduled contact with ISS with his school in India.
4. VU4PB - DXpedition by Amateur Radio Society of India (ARSI) to Andaman and Nicobar.
5. News from AMSAT Organizations worldwide.

Archives of previous newsletters are also available on-line at:
http://www.amsatindia.org/Newsletter.

[ANS thanks Nitin, VU3TYG for the above information]

/EX

SB SAT @ AMSAT $ANS-079.05
ARISS Status - 14 March 2011

AMSAT News Service Bulletin 079.05
From AMSAT HQ SILVER SPRING, MD.
March 20, 2011
To All RADIO AMATEURS
BID: $ANS-079.05

Amateur Radio on the International Space Station (ARISS) Status Report
March 14, 2011

1. School Contacts

The March 14Fair Lawn High School, Fair Lawn, New Jersey contact was a great success and the contact on Monday was rebroadcast on Echo Link. The contact was integrated into the curriculum covering space and earth science as well as human anatomy and physiology. The link to local newspaper coverage is:
http://www.northjersey.com/news/031411_Fair_Lawn_students_talk_to_orbiting_astronaut.html

There were over 200 people in attendance to hear Paulo Nespoli graciously answered the questions of the various age students from 2nd, 5th & High School levels. The Fair Lawn ARC was involved along with local AMSAT Volunteers to assure the contact went smoothly and without any last minute Murphy adventures.

Students from five schools in Plock and Liszyno, Poland jointly participated in an Amateur Radio on the International Space Station (ARISS) contact on Thursday, March 17 at 09:21 UTC. Through this activity and related studies, students will learn about space and space exploration, communication and technology. The Scout Amateur Radio Club SP5ZBA will handle the radio connection for the contact.

An ARISS contact has been accomplished for Luitpold-Gymnasium Muenchen, Munich, Bavaria, Germany on Thursday, March 17 at 14:05 UTC. Preparations for their contact, seventeen year olds took the course "Spaceflight" were joined by children from lower grades to learn about aeronautics and scientific work. The ESA ISS Education Kit was used in their studies and the German amateur radio organization (DARC) gave the youth a comprehensive introduction to amateur radio on the ISS.

ISIP Cossar/Da Vinci, Gorizia, Italy was realized for an Amateur Radio on the International Space Station (ARISS) contact on Saturday, March 19 at 08:38 UTC. The radio contact, the telecommunication equipment installed and used in the school as well as the collaboration with a local group of amateur radio operators will offer telecommunications students the chance to test instruments able to connect to listening posts 300 km away.

2. Recent ARISS Contacts

On Tuesday, March 8, youth from ICS "Marco D'oggiono", Oggiono, Italy spoke with Paolo Nespoli, IZ�JPA via an Amateur Radio on the International Space Station (ARISS) contact. The astronaut fielded 13 questions before the ISS went over the horizon. Students wanted to know for example, what one needs to do to become an astronaut and what type of research is performed on the ISS. The contact was the featured event of lessons emphasizing astronautics, astronomy, radio techniques and English. Nearly 400 students and teachers and about 100 visitors were present for the contact. Regional television, local media and newspapers covered the event.

An ARISS contact took place between youth attending Schulhaus Dorf in Richterswil, Switzerland and on-orbit astronaut Cady Coleman, KC5ZTH on Tuesday, March 8. Coleman answered the 22 questions prepared for her with time left to exchange greetings. The contact was the culmination of science lessons on space and gave the students the opportunity to practice their English.

Students from "Francesco d'Assisi" Middle School and "Don Lorenzo Milani" Primary School in Modugno, Bari, Italy, experienced an Amateur Radio on the International Space Station (ARISS) contact on Saturday, March 12. The event was held at "Cittadella Mediterranea della Scienza" in Bari where an audience of approximately 150 students, teachers, visitors and media were assembled.

Astronaut Paolo Nespoli, IZ�JPA on the ISS spoke with the youth over 2 consecutive passes, answering 30 questions about what it is like to live in space. He answered a final question concerning the earthquake in Japan and expressed his concern for the Japanese. Regional television, local media and newspapers covered the event.

On Saturday, March 12, Shri Krishna Vithyaalayam Matric School in Pollachi, India participated in an Amateur Radio on the International Space Station (ARISS) contact with ISS astronaut Cady Coleman, KC5ZTH via telebridge station IK1SLD in Italy. Twelve questions were asked and answered. The contact was integrated into science lessons about astronomy, satellites and the ISS and included radio classes taught by the Anamalai Amateur Radio Club located at the school.

3. Astronaut Training Status

Astronauts Luca Parmitano (Expedition 36) and Chris Cassidy (Expedition 35) both passed their amateur radio license exams on March 8. Their call signs should be issued within a week.

On March 9, Michael Hopkins completed his ARISS introductory course and is currently preparing for his amateur radio license exam. Hopkins is slated to fly with Expedition 37 in September 2013.

An ARISS refresher course was provided to Chris Hadfield, KC5RNJ/VA3OOG on March 11. Hadfield is currently scheduled for Expedition 34, November

2012.

4. ARRL QST Covers ARISS Activities

The American Radio Relay League (ARRL) printed a few ARISS items in its April issue of QST, which has a circulation of 156,000. Under its "Media Hits" column was a piece about ARISS and the newspaper articles and TV news stories about Adobe Bluffs Elementary School's ARISS contact

and about Foster Heights Elementary/Nelson County Area Technical Center in Kentucky. The "Inside HQ" column, a column giving ARRL 2010 highlights, had a paragraph on education programs including the 48 ARISS QSOs of 2010 (not NASA's fiscal year 2010), and ARISS's 10th anniversary.

[ANS thanks Carol, KB3LKI, for the above information]

/EX

SB SAT @ AMSAT $ANS-079.06
FASTRAC Satellites Separated

AMSAT News Service Bulletin 079.06
  From AMSAT HQ SILVER SPRING, MD.
March 20, 2011
To All RADIO AMATEURS
BID: $ANS-079.06

FASTRAC Satellites Separated

FASTRAC Student Program Manager Sebastian Munoz, KE5FKV, wrote, "First of all I wanted to thank the HAM community all over the world for supporting our project, your support has been incredible that we really value."

On March 15, after a few months of initial operations, FASTRAC started one of the most exciting phases of the project by separating both satellites so they can compute on-orbit real-time relative navigation solutions while both of them are freely drifting from one another.

The two Amateur Radio FASTRAC AX.25 satellites are:

FASTRAC-1	Sara Lily	437.345 MHz FM
FASTRAC-2	Emma	145.825 MHz FM

A FASTRAC Beacon decoder program is available on-line at:
http://www.dk3wn.info/software.shtml

[ANS thanks FASTRAC Student Program Manager Sebastian Munoz, KE5FKV for the above information]

/EX

SB SAT @ AMSAT $ANS-079.07
AO-51 in Eclipse

AMSAT News Service Bulletin 079.07
From AMSAT HQ SILVER SPRING, MD.
March 20, 2011
To All RADIO AMATEURS
BID: $ANS-079.07

AO-51 Enters Eclipse Periods Again

AO-51 Command Station, Mark Hammond, N8MH said this week, "Eclipses are back for AO-51, and the length is increasing every day. Eclipses are now lasting about 1-2 mins per pass, and it goes up pretty fast, gaining a minute every day or two. They will become rather long in the coming weeks/months (as long as 20 mins or more as I recall)."

DK3WN's Illum program illustrates what is ahead for AO-51 operations. This free download is available at:
http://www.dk3wn.info/software.shtml

AO-51 is still running under power management in single transmitter Mode on the 435.300 MHz downlink running approximately 1.3 watts. The satellite will be OFF during eclipses (and probably right before, and soon after). You'll probably still hear the transmitter cycling OFF and ON around eclipse times. But most voice users will appreciate the stronger signals.

AO-51 be in this mode until further notice.

Keep up with the latest AO-51 Control Team News on-line at:
http://www.amsat.org/amsat-new/echo/CTNews.php

[ANS thanks Mark Hammond, N8MH for the above information]

/EX

SB SAT @ AMSAT $ANS-079.08
UK Space Agency UKube-1 Cubesat Takes Shape

AMSAT News Service Bulletin 079.08
From AMSAT HQ SILVER SPRING, MD.
March 20, 2011
To All RADIO AMATEURS
BID: $ANS-079.08

UK Space Agency UKube-1 Cubesat Takes Shape

This week the UK Space Agency revealed the instruments and experiments that will be launched into orbit onboard the UKube-1 CubeSat in early 2012.

UKube-1 - a nanosatellite that will allow the UK to test new technologies and carry out new space research quickly and efficiently is an exciting and novel collaboration between the UK Space Agency, industry and academia, and is envisaged as the pilot for a full national CubeSat programme.

As well as providing a fantastic opportunity for innovative UK companies and UK academics to collaborate on a national space project, UKube-1 is also useful for training the next generation of space engineers.

A radio subsystem provided by AMSAT-UK, derived from the FUNcube program will provide a downlink for science education, and a mater- ials science experiment from which school students can receive data.
The system, funded by volunteer members and friends of AMSAT-UK, will be integrated with UKube-1 as part of the program.

The winning payloads from the UK Space Agency's payload competition include:

+ The first GPS device aimed at measuring plasmaspheric space weather.

+ A camera that will take images of the Earth and test the effect of radiation on space hardware, using a new generation of imaging sensor.

+ An experiment to demonstrate the feasibility of using cosmic radiation to improve the security of communications satellites and to flight test lower cost electronic systems.

+ A payload made up of 5 experiments that UK students and the public can interact with.

A complete list of the experiments is listed on the UKube-1 web page at: http://tinyurl.com/5v8g2a4 (bis.gov.uk/ukspaceagency)

The FUNcube subsystem which will be included on UKube-1, will have exactly the same functionality as the "original" FUNcube cubesat - including a U/V linear transponder. Full details of the whole FUNcube project can be found here http://funcube.org.uk/

[ANS thanks AMSAT-UK and the UK Space Agency for the above information]

/EX

SB SAT @ AMSAT $ANS-079.09
ISS Reboost on March 18 Changes AOS at Your QTH

AMSAT News Service Bulletin 079.09
  From AMSAT HQ SILVER SPRING, MD.
March 20, 2011
To All RADIO AMATEURS
BID: $ANS-079.09

ISS Reboost on March 18 Changes AOS at Your QTH

Roscosmos, the Russian Federal Space Agency has announced the ISS was reboosted 3.7 km on Friday, March 18. The readjustment is necessary to ensure the best conditions to dock Russia's Soyuz TMA-21 piloted spacecraft and the U.S. Endeavor space shuttle. Russia's Soyuz TMA-21 is expected to travel to the ISS sometime in early April, while the U.S. Endeavor will blast off from Cape Canaveral on April 19.

According to the Roscosmos press release the maneuver was conducted using the two main engines on board the European Space Agency's Automated Transfer Vehicle (ATV-2), named after Johannes Kepler.

Since the orbital period changes _roughly_ 1.2 seconds for each 1 km of altitude, observers on the ground should see almost 5 seconds of change. The usual caveats about tracking program ISS discrepancies should be kept in mind until the Keplerian Elements catch up.

The Roscosmos press release can be found on-line at:
http://www.federalspace.ru/main.php?id�nid541&lang�

[ANS thanks Roscosmos and information provided by Alan, WA4SCA via the sarex@amsat.org list for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Dee Interdonato, NB2F

From 5036231260137423265
X-Google-Thread: 10e8ad,f19128b9ae788389,start
X-Google-NewGroupId: yes
X-Google-Thread: 10b9c8,f19128b9ae788389,start
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,gida4a23d5f63,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news2.google.com!news.glorb.com!news2.glorb.com!news-

out.readnews.com!transit4.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-080 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Tue, 22 Mar 2011 12:08:47 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 2007
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <002501cbe8ab$5f9a9910$1ecfcb30$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1300810127 28755 166.84.1.6 (22 Mar 2011 16:08:47 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Tue, 22 Mar 2011 16:08:47 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news2.google.com rec.radio.amateur.space:487 rec.radio.info:2286

This report is organized into four (4) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - deorbited/returned satellites

SB SAT @ AMSAT W8ISS $WSR-080.S1
WSR 080 Part 1 03/21/2011

AMSAT NEWS SERVICE BULLETIN 080.S1
FROM AMSAT HQ SILVER SPRING, MD, March 21, 2011
TO ALL RADIO AMATEURS
BID: $WSR-080.S1

HO-68 HOPE-1 (CAS-1)(XW-1)
Catalog Number: 36122
Launch Date: December 15, 2009 0231z
Launch site: Taiyuan Space Center, PRC

Status: By schedule

```
Callsign:
Broadcast:    BJ1SA-11
BBS:     BJ1SA-12

Uplinks:   145.8250 MHz FM, PL 67.0 Hz.
           145.9250 - 145.9750 MHz SSB/CW
           145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
           435.7650 - 435.7150 MHz SSB/CW
           435.6750 MHz AFSK 1200 BPS

Beacon:    435.7900 MHz CW

Mode and Antenna Polarization:
V: LHCP 2.0dBi max
U: RHCP 3.0dBi max

IARU coordination page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108

For more information about XW-1 (CAS-1):
http://www.camsat.cn
[02092011]
=====
SO-67 SumbandilaSat
Catalog Number: 35870
Launch Date: September 17, 2009 1555z
Launch site: Baikonur, Kazakhstan

Status: By schedule

Callsign: ZS0SUM

Uplink:   145.875MHz FM tone 233.6 Hz
Downlink: 435.345MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

For more information about SO-67:
http://www.amsatsa.org.za/
[02092011]
=====
DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational
Current Mode: Science Mode - Beacon ONLY
```

```
Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink:   435.530 to 435.570 MHz

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68
[02092011]
=====
VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05, 2005 0444z
Launch site: Satish Dhawan Space Centre, India

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink:   435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink:   435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW


Indian Beacon:  145.9360 MHZ CW
Dutch Beacon:   145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is active. Each transponder has a different beacon.
[02092011]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004 0745z
Launch site: Baikonur, Kazakhstan

Status: Operational

Current Mode(s):
Voice repeater: V/u
Uplink:      145.920 MHz FM
Downlink:    435.300 MHz FM
```

```
Telemetry: By Command ONLY
Downlink:    435.150MHz 9k6


Analog voice downlink:     435.300 MHz FM
                           435.150 MHz FM
                          2401.200 Mhz FM
Analog voice uplink:       145.860 MHZ FM
                           145.880 MHz USB
                           145.880 MHz FM
                           145.920 MHz FM
                           145.920 MHz FM - 67 Hz PL tone burst
                          1268.705 MHz FM
Digital Downlinks:         435.150 MHz FM 38k4 PBP, 1 watt output
                           435.150 MHz FM 9k6 Pacsat Broadcast Protocol
                          2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:            145.860 MHz FM 9k6 Pacsat Broadcast Protocol
                          1268.703 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon:                    435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[03212011]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002 1700z
Launch site: Baikonur, Kazakhstan

Status: Operational

Current Mode: V/u

Uplink:   145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear
```

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz. The order of operation is thus: (allow for Doppler as necessary):

1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10 minute timer.

[02092011]
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993 0140z
Launch site: Kourou, French Guiana

Status: Operational

Current Mode: V/u

```
Uplink:   145.850 MHz FM
Downlink: 436.797 MHz FM
```

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[02092011]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974
Launch site: Vandenberg AFB, California, USA

Status: Operational

Current Mode: Alternating between Mode A and B every 24 hours

```
Uplink:   145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink:  29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons:   29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW
```

Official Webpage:

http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
[02092011]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998 0640z (ZARYA module)
Launch sites: Baikonur, Kazakhstan
Kourou, French Guiana
Uchinoura Space Center, Japan
Kennedy Space Center, Titusville, Florida, USA

Status: Operational

Current Active Modes: FM Repeater - OFF
Voice - V/v
BBS - OFF
APRS - OFF
SSTV - OFF

Expedition 27 Crew:
Commander: Dmitry Kondratyev
Flight Engineer: Catherine Coleman KC5ZTH
Flight Engineer: Paolo Nespoli IZ0JPA

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time line is NOT translated from Russian and posted.
[03212011]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-080.S2
WSR 080 Part 2 03/21/2011

AMSAT NEWS SERVICE BULLETIN 080.S2
FROM AMSAT HQ SILVER SPRING, MD, March 21, 2011
TO ALL RADIO AMATEURS
BID: $WSR-080.S2

O/OREOS
Catalog Number: 37224
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: On Orbit

Uplink:
Downlink: 437.035 MHZ AX.25

Beacon:

Callsign:

URL: http://www.ooreos.org/
[02092011]
=====
Rax-1 Radio Aurora Explorer
Catalog Number: 37223
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: On Orbit

Uplink:

```
Downlink: 437.505 MHz 9k6 GMSK

Beacon:

Callsign: RAX-1

URL: http://rax.engin.umich.edu/
[02092011]
=====
Fastrac-1 Sara Lily
Catalog Number: 37225
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: On orbit

Uplink 1: 145.980 MHz 1k2 baud
Uplink 2: 145.825 MHz 1k2 baud
Downlink: 437.345 MHz 1k2 and 8k6 baud

Beacon:   437.435 MHz 1k2 AX.25

Callsign: Fast1

URL: http://fastrac.ae.utexas.edu/index.php
[02092011]
=====
Fastrac-2 Emma
Catalog Number: 37227
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: On Orbit

Uplink 1: 435.025 MHz 1k2 baud
Uplink 2: 437.435 MHz 9k6 baud
Downlink: 145.825 MHz

Beacon:   145.825 MHz 1k2 AX.25

Callsign: Fast2

URL: http://fastrac.ae.utexas.edu/index.php
[02092011]
=====
StudSat
Catalog Number: 36796
Launch Date: July 12, 2010 0352z
Launch site: Satish Dhawan Space Centre, India

Status: On Orbit

Uplink:   437.505MHz, 9600bps FSK
```

```
Downlink: 437.505MHz, 9600bps FSK
Beacon  : 437.505MHz,   20bps ASK
[02092011]
=====
TIsat-1
Catalog Number: 36799
Launch Date: July 12, 2010 0352z
Launch site: Satish Dhawan Space Centre, India

Status: On orbit

Callsign: HB9DE

Uplink:   145.980MHz FM, AFSK
Downlink: 437.305MHz FM, AFSK
Beacon:   437.305MHz CW
[02092011]
=====
HO-68 HOPE-1 (CAS-1)(XW-1)
Catalog Number: 36122
Launch Date: December 15, 2009 0231z
Launch site: Taiyuan Space Center, PRC

Status: By schedule

Callsign:
Broadcast:    BJ1SA-11
BBS:         BJ1SA-12

Uplinks:   145.8250 MHz FM, PL 67.0 Hz.
           145.9250 - 145.9750 MHz SSB/CW
           145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
           435.7650 - 435.7150 MHz SSB/CW
           435.6750 MHz AFSK 1200 BPS

Beacon:    435.7900 MHz CW

IARU coordination page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108

For more information about XW-1 (CAS-1):
http://www.camsat.cn
[02092011]
=====
SwissCube
Catalog Number: 35932
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Callsign: HB9EG
```

```
Beacon(100mw): 437.5050MHz CW
Beacon(1w):    437.5050MHz FSK 1k2bps
[02092011]
=====
UWE-2
Catalog Number: 35934
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: In Orbit

Beacon(500mw): 437.3850 MHz AFSK 1k2bps
               437.3850 MHz FSK 9k6bps
[02092011]
=====
ITUpsAT1
Catalog Number: 35935
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Beacon(100mw): 437.325MHz CW
Beacon(1w): 437.325MHz 19k2bps
[02092011]
=====
BEESAT
Catalog Number: 35933
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Callsign: DP0BEE

Beacon(100mw): 436.000MHz CW
Beacon(500mw): 436.000MHz GMSK 4k8bps
Beacon(500mw): 436.000MHz GMSK 9k6bps
[02092011]
=====
CP-6
Catalog Number: 35003
Launch Date: May 19, 2009 2355z
Launch site: Wallops Island, Virginia, USA

Status: Operational

Downlink: 437.365 MHz 1k2 AFSK
[02092011]
=====
HAWKSAT 1
Catalog number: 35004
```

```
Launch Date: May 19, 2009 2355z
Launch site: Wallops Island, Virginia, USA

Status: operational

Downlink: 437.345 MHz ?
[02092011]
=====
Pharmasat
Catalog Number: 35002
Launch Date: May 19, 2009 2355z
Launch site: Wallops Island, Virginia, USA

Status: Operational

Downlink: 437.465 MHz 1k2 AFSK
[02092011]
=====
ANUSAT
Catalog Number: 34808
Launch Date: April 20, 2009 0115z
Launch Site: Satish Dhawan Space Centre, India

Status: ?

Downlink:  435.000 MHz
Uplink:    145.800 MHz

Telemetry: 137.400 MHz
[02092011]
=====
SOHLA-1 (ASTRO TECH.)
Catalog Number: 33496
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational

Proposed Frequencies and Modes:
Downlink: 437.505 MHz AFSK/CW
Beacon:   437.505 MHz AFSK/CW

Callsign:

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=101
[02092011]
=====
KAGAYAKI (Solan Co.)
Catalog Number: 33495
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan
```

```
Status: In Orbit

Downlink: 437.375 MHZ    FSK9k6/CW
Beacon:   437.375 MHz    FSK9k6/CW

IARU coordination status page:

AMSAT-NA webpage:

[02092011]
=====
STARS (Kagawa Univ.) (Twin Satellites)
Catalog Number: 33498
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational ?

Downlinks: 437.485 MHz FM/CW
           437.465 MHz FM/CW
Beacons:   437.305 MHz FM/CW
           437.275 MHz FM/CW

Callsigns: JR5YBN
           JR5YBO

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=99

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=121&retURL
=/satellites/status.php
[02092011]
=====
KKS-1 (Tokyo MCIT)
Catalog Number: 33499
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational

Downlink:  437.455 MHz AFSK/CW
Beacon:    437.385 MHz AFSK/CW

Callsign: JQ1YYY

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=107

AMSAT-NA webapge:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=120&retURL
=/satellites/status.php
[20092011]
```

=====
PRISM (Tokyo Univ.)
Catalog Number: 33493
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational ?

Downlink: 437.425 MHz AFSK/GMSK/CW
Beacon: 437.250 MHz AFSK/GMSK/CW

Callsign: JQ1YCX

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=97

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=119&retURL
=/satellites/status.php
[02092011]
=====
RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number: 32953
Launch Date: May 23, 2008 1520z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational

Curent Modes: Telemetry
              Audio
              Images

Downlinks: 435.315 MHz
           435.215 MHz

AMSAT-NA website:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=115&ret
URL=/satellites/status.php

Official website:
http://www.npopm.com/?cid=leoca&caid=43
[02092011]
=====
CanX-2
Catalog number: 32790
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational in range of ground station only

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web

page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[02092011]
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Downlink: 437.425 MHz 1k2 baud packet

For the latest project status update please visit the AAUSAT-II web page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[02092011]
=====
CO-65 CUTE-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Digipeater

Downlink: 437.475 MHz 9k6 Packet
Uplink: 1267.600 Mhz

Telemetry Beacon:
Downlink: 437.2750 MHz CW

For the latest project status update please visit the Cute-1.7+APD II web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78

Command Station blog website:
http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=112&retURL=/satellites/status.php
[02092011]
=====
Compass-1
Catalog number: 32787
Launch Date: April 28, 2008 0354z

Launch site: Satish Dhawan Space Centre, India

Status: Operational

Current Mode: 4k8 MSK packet

Uplink: 145.980 MHz FM
Downlink: 437.275 Mhz CW
          437.405 MHz Packet

For the latest project status update please visit the Compass 1 web page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=114&retURL=/satellites/status.php
[02092011]
=====
CO-66 Seeds II
Catalog number:
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Downlink: 437.485 MHz

Callsign: JQ1YGU

For the latest project status update please visit the Seeds 2 web page: http://cubesat.aero.cst.nihon-u.ac.jp/english/seeds_2_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=113&retURL=/satellites/status.php
[02092011]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007 0702z
Launch site: Baikonur, Kazakhstan

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25

CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=94&retURL=/satellites/status.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=72
[02092011]
=====
CP3
Catalog Number: 31129
Launch Date: April 17,2007 0702z
Launch site: Baikonur, Kazakhstan

Status: Operational

Current Mode: /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[02092011]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005 0652z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon: 437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/xivpicte.htm
[02092011]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: ?????

```
Current Mode: /u

Beacon:     436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=96&retURL
=/satellites/status.php

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[02092011]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004 0745z
Launch site: Baikonur, Kazakhstan

Status: Operational

Current Mode(s):
Voice repeater: V/u
Uplink:      145.920 MHz FM
Downlink:    435.300 MHz FM

Telemetry:
Downlink:    435.150MHz 9k6


Analog voice downlink:     435.300 MHz FM
                           435.150 MHz FM
                          2401.200 Mhz FM
Analog voice uplink:       145.860 MHZ FM
                           145.880 MHz USB
                           145.880 MHz FM
                           145.920 MHz FM
                           145.920 MHz FM - 67 Hz PL tone burst
                          1268.700 MHz FM
Digital Downlinks:         435.150 MHz FM 38k4 PBP, 1 watt output
                           435.150 MHz FM 9k6 Pacsat Broadcast Protocol
                          2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:            145.860 MHz FM 9k6 Pacsat Broadcast Protocol
                          1268.708 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon:                    435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear
```

```
Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[032192011]
=====
QuakeSat
Catalog Number: 27845
Launch Date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Telemetry only

Current Mode: 9600 baud data packet

Mode U packet
Downlink: 436.675 MHz 9k6 BPS

Quakesat webpage:
http://www.quakefinder.com/services/quakesat-ssite/
[02252011]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational

Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=69&retURL
=/satellites/status.php
[02092011]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001 0240z
Launch site: Kodiak Launch Complex, Alaska, USA

Status: Telemetry only
```

```
Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink:        144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[02092011]
=====
RS-22 RADIO SPORT 22 (MOZHAYETS 4)
Catalog number: 27939
Launch Date: September 27, 2003 0612z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational - 70cm cw only

Current Mode:  /u

CW Beacon - 435.352 MHz
            145.818 MHz

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=76&retURL
=/satellites/status.php
[02092011]
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990
Launch site: Kourou, French Guiana

Status: CW Beacon only

Uplinks:          145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink:      437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[02092011]
=====
UO-11 OSCAR-11
```

Catalog number: 14781
Launch Date: March 1, 1984
Launch site: Vandenburg AFB, California, USA

Status: Operational

Current Mode: /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon: 435.025 MHz
Mode-S Beacon: 2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[02092011]

=====

INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998 0640z (ZARYA module)
Launch sites: Baikonur, Kazakhstan
Kourou, French Guiana
Uchinoura Space Center, Japan
Kennedy Space Center, Titusville, Florida, USA

Status: Operational

Current Active Modes: FM Repeater - OFF
Voice - V/v
BBS - OFF
APRS - OFF
SSTV - OFF

Expedition 27 Crew:

Commander:	Dmitry Kondratyev	
Flight Engineer:	Catherine Coleman	KC5ZTH
Flight Engineer:	Paolo Nespoli	IZ0JPA

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[03212011]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-080.S3
WSR 080 Part 3 03/21/2011

AMSAT NEWS SERVICE BULLETIN 080.S3
FROM AMSAT HQ SILVER SPRING, MD, March 21, 2011
TO ALL RADIO AMATEURS
BID: $WSR-080.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

NANOSAIL-D
Catalog Number:
Ejection Date: January 17, 2011

Status: On orbit

Downlink: 437.270 MHz AX.25

URL: http://nanosaild.engr.scu.edu/dashboard.htm

```
[01272011]
=====
CP4
Catalog Number: 31132
Launch Date: April 17, 2007

Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon:    437.325 MHz CW

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=79
[09062010]
=====
LIBERTAD-1
Catalog Number: 31128
Launch Date: April 17, 2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink:   145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[09062010]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: Non-Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder:  145.825 Mhz FM
[09062010]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency:  437.305
```

2407.250

Official Website: http://www.ncube.no
[09062010]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 MHz FM 67Hz CTCSS
Voice Downlink: 2401.835 MHz FM
Packet Up/Downlink: 437.250 MHz 9k6 packet
Packet Downlink   2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[09062010]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non-Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[09062010]
=====
CANX-1
Catalog Number: 27847
Launch Date: June 30, 2003

Status: Non-Operational

Downlink: 437.8800 MHz AFSK 1k2bps
[06052009]
=====
DTUSAT
Catalog Number: 27842
Launch Date: June 30, 2003

Status: Non-Operational

Current Mode: 2k4 AFSK Packet last reported

Downlink: 437.475MHz

Officail webpage: http://dtusat1.dtusat.dtu.dk/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=101&retURL

```
=satellites/all_oscars.php
[02212009]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink:   435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)

Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Telemetry only

Uplinks:   145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink:  437.325 MHz

Broadcast callsign: MYSAT3-11
BBS:                MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial land and weather imaging payloads offers FM and FSK
Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as
a collaborative effort between the Malaysian government and Surrey
Satellite Technology Ltd.
[03302009]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink:   145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
```

```
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS:                SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink:   145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
V-band:   145.840 -  145.990 MHz CW/LSB
U-band:   435.550 -  435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks
---------
S2-band:  2401.225 -  2401.475 MHz CW/USB
K-band:  24048.010 - 24048.060 MHz CW/USB
Beacon:   2401.323 MHz
         24048.035 MHz
```

P3-D Telemetry Beacons (IHU)

BEACON	General Beacon(GB)	Middle Beacon(MB)	Engineering Beacon(EB)
2 m	none	145.898 MHz	none
70cm	435.438 MHz	435.588 MHz	435.838 MHz
13cm(1)	2400.188 MHz	2400.338 MHz	2400.588 MHz
13cm(2)	2401.173 MHz	2401.323 MHz	2401.573 MHz
3cm	10450.975 MHz	10451.125 MHz	10451.375 MHz
1.5cm	24047.885 MHz	24048.035 MHz	24048.285 MHz

[07162007]

=====

OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]

=====

UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]

=====

SO-35 SUNSAT
Catalog Number: 25636
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:

http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Non-Operational

Current Modes:
Telemetry : /u

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks: 145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://asri.technion.ac.il/techsat/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=14&retURL
=/satellites/status.php
[07172010]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink: 145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
MO-30 UNAMSAT-2
Catalog Number: 24305
Launch Date: September 5, 1996

Status: Non-operational

Downlink: 435.1380 MHz AFSK 1200 BPS
Downlink: 435.2060 MHz AFSK 1200 BPS
Uplink: 145.8150 MHz AFSK 1200 BPS
Uplink: 145.8350 MHz AFSK 1200 BPS
Uplink: 145.8550 MHz AFSK 1200 BPS
Uplink: 145.8750 MHz AFSK 1200 BPS
[06042009]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Non-operational
Current Mode: V/u (Mode JA)

Voice/CW (Mode JA)
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:

V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage:
http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's
CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/
fo29cwts.htm
[11062010]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Non-operational

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012009]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks: 145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

```
Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
AO-24 ARSENE
Catalog Number: 22654
Launch Date: May 13, 1993

Status: Non-operational

Uplink:    435.0625 MHz FM 1k2bps AFSK
           435.1125 MHz FM 1k2bps AFSK
           435.1375 MHz FM 1k2bps AFSK
Downlink:  145.9750 MHz FM 1k2bps AFSK
          2446.5025 MHz FM 1k2bps AFSK

Beacon:    2446.4700 MHz CW

Broadcast callsign:
BBS:
[12162009]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational
```

```
Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
```

```
Launch Date: January 22, 1990

Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
[05012006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: non-operational

Current Mode:  V/u

Uplink:         145.900 MHz FM 1200-baud Manchester FSK (reserved)
                145.920 MHz FM VOICE
                145.940 MHz FM 1200-baud Manchester FSK (reserved)
                145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink:       437.026 MHz USB VOICE
                (1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[07242009]
=====
UO-15 UoSAT-4
Catalog Number: 20438
Launch Date: January 22, 1990

Status: Non-operational

Uplink: ?
Downlink: 435.1250MHz (?)
          435.1200MHz (?)
[06042009]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational
```

```
Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon:   145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW
```

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.8500 - 145.9000 MHz SSB/CW
Downlink 29.4000 - 29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink: 29.4500 - 29.5500 MHz SSB/CW
Beacons: 29.450 MHz
          435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink: 145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB

Beacon 1: 29.352 MHz (intermittent)
Beacon 2: 29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB

Beacon: 145.860 MHz

Robot: 145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
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SB SAT @ AMSAT W8ISS $WSR-080.S4
WSR 080 Part 4 03/21/2011

AMSAT NEWS SERVICE BULLETIN 080.S4
FROM AMSAT HQ SILVER SPRING, MD, March 21, 2011
TO ALL RADIO AMATEURS
BID: $WSR-080.S4

THE FOLLOWING SATELLITES HAVE RE-ENTERED OR HAVE BEEN RETURNED SAFELY:

CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Re-entered
Re-entered: October 25, 2009

Uplink: 1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan?)

```
Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=56
[09062010]
=====
BEVO-1 (DRAGONSAT-1)
Catalog Number: 35690
Launch Date: May 19, 2009

Status: Re-entered
Re-entered:

Downlink: 437.325 MHz 9k6 GMSK
          437.325 MHz CW 20wpm
[07312009]
=====
AggieSat2 (DRAGONSAT-2)
Catalog Number: 35690
Launch Date: May 19, 2009

Status: Re-entered
Re-entered:

Downlink: 436.250 MHz 9k6 FHSS
[11112009]
=====
Pollux
Catalog Number: 35693
Launch Date: July 31, 2009

Status: Re-entered
Re-entered:

Callsign: POLLUX-1

Downlink: 145.825MHz 1k2 AX.25
[09062010]
=====
Castor (ANDE-2)
Catalog Number: 35694
Launch Date: July 31, 2009

Status: Re-entered
Re-entered:

Callsign: KD4HBO-1

Downlink: 145.825 MHz 1k2 AX.25
```

```
[09062010]
=====
NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: July 28, 2008

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[01012009]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink:      145.825 Mhz FM APRS AX25
APRS Uplink:        145.825 MHz FM APRS AX25
Voice/PSK31 Uplink:  28.120 MHz

Packet to Voice ID: RAFT
[06112007]
=====
GENESAT-1
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Re-Entered
Re-entered date: August 8, 2010

Current Mode: /u

Callsign: KE7EGC

Telemetry Beacon Downlink: 437.0695 MHz AFSK 1200 BPS
```

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[08082010]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Re-Entered
Re-entered: June 18, 2008

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon: 437.2750 MHz CW

Callsign: JR8YJT
[01012009]
=====
SO-43 Starshine 3
Catalog Number: 26929
Launch Date: September 30, 2001

Status: Re-Entered
Re-entered: January 21, 2003

Beacon: 145.825Mhz
[02212009]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)

* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at}
amsat.org
NNNN
/EX

```
From 2891828275149086152
X-Google-Thread: 10e8ad,5d9d59fe8e4bc682,start
X-Google-NewGroupId: yes
X-Google-Thread: 10b9c8,5d9d59fe8e4bc682,start
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,gida4a23d5f63,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII
Path: g2news1.google.com!news1.google.com!npeer01.iad.highwinds-media.com!
news.highwinds-media.com!feed-me.highwinds-media.com!nx01.iad01.newshosting.com!
newshosting.com!198.186.194.249.MISMATCH!news-out.readnews.com!
transit3.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-086 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sat, 26 Mar 2011 21:19:52 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 450
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <001001cbec1d$0d997a80$28cc6f80$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
X-Trace: reader1.panix.com 1301188793 25351 166.84.1.6 (27 Mar 2011 01:19:53 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 27 Mar 2011 01:19:53 +0000 (UTC)
```

X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news1.google.com rec.radio.amateur.space:463 rec.radio.info:2219

AMSAT NEWS SERVICE
ANS-086

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:

- ARISS School Contact Milestone - 600th School Contact on March 17
- KA1SKY McAuliffe-Shepard Discovery Center Operating Events
- How's (Satellite) DX?
- AMSAT Awards Now Accepting Credit From RAC CANADAWARD
- Japan Space Agency Unveils New ISS CubeSat Deployment System
- Satellite Shorts From All Over
- MAKE Magazine Publishes NASA Make: Challenge Rules and Guidelines
- Falcon 9 To Launch SES-8 To GTO In 2013

SB SAT @ AMSAT $ANS-086.01
ARISS School Contact Milestone - 600th School Contact on March 17

AMSAT News Service Bulletin 086.01
>From AMSAT HQ SILVER SPRING, MD.
March 27, 2011
To All RADIO AMATEURS
BID: $ANS-086.01

ARISS reached a milestone on Thursday, March 17 when it held its 600th contact between on-orbit astronaut Cady Coleman, KC5ZTH and students from several schools in Plock and Liszyno, Poland.

The contact supported lessons about space and space exploration, communication and technology. The Scout Amateur Radio Club SP5ZBA handled the radio connection during which the astronaut fielded

19 space related questions. Nearly 120 people were in the audience and came from Plock, Liszyno, Zuromin and Warsaw. There was extensive media coverage that included newspapers, four scientific magazines, one radio magazine, a television station, national radio (two programs) and two internet portals.

Also on Thursday, March 17, Luitpold-Gymnasium Muenchen students in Munich, Germany spoke with Paolo Nespoli, IZ0JPA on the ISS via an ARISS contact. Nespoli answered 19 questions as an audience of over 110 students, teachers and visitors listened.

The contact was the highlight of studies emphasizing aeronautics, scientific work and amateur radio. Several media outlets were present including three radio stations (Bayerischer Rundfunk, Radio Charivari, Radio Arabella), one television station (Bayerisches Fernsehen) and four newspapers (S�ddeutsche Zeitung, Abendzeitung, TZ-M�nchen, M�nchner Merkur). The Bavarian TV channel BR (Bayerisches Fernsehen) posted a clip on its Web site: http://tinyurl.com/62vkve4 (www.br-online.de)

[ANS thanks Carol Jackson, KB3LKI and the ARISS weekly status report for the above information]

/EX

SB SAT @ AMSAT $ANS-086.02
KA1SKY McAuliffe-Shepard Discovery Center Operating Events

AMSAT News Service Bulletin 086.02
>From AMSAT HQ SILVER SPRING, MD.
March 27, 2011
To All RADIO AMATEURS
BID: $ANS-086.02

Amateur Radio Operators at KA1SKY, Amateur Radio Club Station at the McAuliffe-Shepard Discovery Center (DC) in Concord, NH have been working to enhance presentations and programs at the Center through the vehicle of Amateur Radio.

Wayne Santos, N1CKM, Station Manager at KA1SKY would like to hear from AMSAT members in New England who can assist with amateur radio operations from the Discovery Center:

April 29-30 - Aerospacefest Weekend
May 5 - KA1SKY special event station in Commemoration of the 50th
Anniversary of the Alan Shepard Manned Space Flight.

Wayne said the Discovery Center also needs assistance to schedule an ARISS contact. If you can help contact Wayne via e-mail at N1CKM@arrl.net.

Information about the McAuliffe-Shepard Discovery Center can be found on-line at: http://www.starhop.com/

KA1SKY features a robust VHF/UHF/Sat station and has been successful with EME and satellite contacts. The station enjoys a highly visible place with many school groups and the public interested in the station. Information about the station is posted at:
http://www.k1bke.org/planetarium/ka1sky.htm
http://www.starhop.com/education-and-exploration/ka1sky.aspx

[ANS thanks Wayne, N1CKM at the McAuliffe-Shepard Discovery Center for the above information]

/EX

SB SAT @ AMSAT $ANS-086.03
How's (Satellite) DX?

AMSAT News Service Bulletin 086.03
>From AMSAT HQ SILVER SPRING, MD.
March 27, 2011
To All RADIO AMATEURS
BID: $ANS-086.03

March 23 - April 2 ZF2AE/ZF8 Cayman Island

Adrian, AA5UK will be operating portable as ZF2AE from Grand Cayman and as ZF2AE/ZF8 from Little Cayman from March 23th to April 5th, 2011.

Most activity will be in the afternoons and evenings using two FT-817s and an Elk Antenna. He plans to operate holiday style on the FM and SSB satellites with some HF.

Activity will be from grids: EK99hi from March 23 - 24th, EK99xp from March 25th - April 2nd (he plans to operate HF during part of CQ WPX SSB contest while on Little Cayman: 40m to 10 m) and EK99kh from April 2nd - April 5th.

Time permitting; he will try to make it to grid FK09. Frequently check AMSAT-BB and http://twitter.com/AA5UK for last minute operational updates. QSL Direct with SASE, the Bureau, LOTW or eQSL.

April 29 - May 1 XF2P from Isla de Lobos

Operation is planned on AO27, AO51 and SO50 satellites and all HF bands, plus 6 meters CW, SSB and RTTY. They will also activate the Lobos Island lighthouse. Operators include Ismael XE1AY; Gustavo XE1KKK; Francisco Javier XE1P; Ricardo XE1RZL; Ricardo Raymundo XE1SOV; Fernando XE1VGC; Jose XE1UYU; Martin XE1UZH; Modesto XE1UZU; Juan Manuel XE2IA; Jose XE2IVG;and Ricardo XE3NMC. QSL via XE1AY.

May 1 - May 8 GS3PYE/P and GS6PYE/P Isle of Arran

Camb-Hams members Bob G1SAA, Terry G3VFC, Martin G3ZAY, Colin G4ERO, Colin G8TMV, Mark M0MJH, Rob M0VFC, Steve M1ACB and Gavin M1BXF will be active from a rented cottage near Balliekine, Isle of Arran with most HF bands, 6 meters, 4 meters (SSB CW, JT65M, FSK441). Satellite operation is planned, time permitting. QSL direct or via bureau to M0VFC. Website: http://dx.camb-hams.com/

[ANS thanks Adrian, AA5UK, Cambi-Hams, and the ICPO Bulletin for the XF2P information]

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SB SAT @ AMSAT $ANS-086.04
AMSAT Awards Now Accepting Credit From RAC CANADAWARD

AMSAT News Service Bulletin 086.04
>From AMSAT HQ SILVER SPRING, MD.
March 27, 2011
To All RADIO AMATEURS
BID: $ANS-086.04

AMSAT Director Contests and Awards, Bruce Paige, KK5DO announced, "In keeping up with technology and limiting duplication of work, AMSAT Awards will now accept a scanned copy the Radio Amateurs of Canada (RAC) CANADAWARD for satellites as proof of working the 13 valid Canadian Provinces." They are:

VE1/VA1 Nova Scotia
VE2/VA2 Quebec
VE3/VA3 Ontario
VE4/VA4 Manitoba
VE5/VA5 Saskatchewan
VE6/VA6 Alberta
VE7/VA7 British Columbia
VE8 Northwest Territories
VE9 New Brunswick
VO1/2 Newfoundland and Labrador
VY0 Nanavut
VY1 Yukon
VY2 Prince Edward

Bruce says, "This will make it easier for everyone to submit either or both, ARRL Worked All States / RAC CANADAWARD and not have to scan all those cards to be checked for AMSAT satellite awards a second time.

[ANS thanks Bruce Paige, KK5DO for the above information]

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SB SAT @ AMSAT $ANS-086.05

Japan Space Agency Unveils New ISS CubeSat Deployment System

AMSAT News Service Bulletin 086.05
>From AMSAT HQ SILVER SPRING, MD.
March 27, 2011
To All RADIO AMATEURS
BID: $ANS-086.05

Information received via Masa, JN1GKZ and the Southgate ARC news site report that the Japan Aerospace Exploration Agency (JAXA) has announced a new ISS CubeSat deployment system. JAXA's ISS small satellite deployment system will use Japan's ISS Experiment module Kibo's airlock and robot arm.

Satellites are planned to be delivered to the ISS in a cushioned bag by Progress or HTV supply ship. The satellites are then mounted in the deployment pod. The deployment pod is put into the airlock where it is grabbed by the robot arm. The arm then moves the pod into position and deploys the satellites which will re-enter the atmosphere after about 100 days.

JAXA has put out a call for Japanese satellites to demonstrate this new system. The satellites can be 1U, 2U or 3U CubeSat. Total size is 4U. Two to four satellites will be selected (eg 1U+3U, 1Ux2+2U, 1Ux4). The demonstration schedule is:

May 2011: satellites selection
May 2012: deliver satellites to JAXA
Sep 2012 or later: deployment using the new system

The press release material is on the JAXA's web site in Japanese.
http://www.jaxa.jp/press/2011/03/20110302_sac_smallsat.pdf

A Google English version of the press release is available:
http://tinyurl.com/JAXA-Kibo/

[ANS thanks Masa, JN1GKZ and the Southgate ARC news site for the above information]

/EX

SB SAT @ AMSAT $ANS-086.06

Satellite Shorts From All Over

AMSAT News Service Bulletin 086.06
>From AMSAT HQ SILVER SPRING, MD.
March 27, 2011
To All RADIO AMATEURS
BID: $ANS-086.06

+ Congratulations to Allen, N5AFV on making his 50,000th satellite contact on March 23; that's quite an accomplishment!

+ Congratulations to Al, XE2AT on reaching a milestone of 1000 grids worked via satellite after 13 years of operating. Al wrote, "I hope each of you will accept this as my sincere thanks and appreciation for all your help and info. Many thanks to all rovers and maritime mobile and a lot of people that passed along your QTH grid. Thanks to all private mails and BB mails with a lot of kind words."

+ Congratulations to K8YSE for hitting the 900th grid mark with his contact with UT1FG/mm on AO-27 and grid 901st with ND9M/mm on AO-27 on March 24.

+ Congratulations to Nick, KB1RVT on reaching grid #600 in two years using only an Arrow Antenna.

+ Mineo Wakita, JE9PEL invites you to listen to the CW beacon on CO-65 for a special message: HI HI DE JQ1YTC DIGI ON CUTE 1.7
GANBARE JAPAN CUTE 86 CA A4 67 3D 2B 27 A2 61 31 17
Mineo explains 'GANBARE' in Japanese means 'Show spirit' concerning the Earthquake and Tsunami.

+ Astronauts Luca Parmitano (Expedition 36) and Chris Cassidy (Expedition 35) both passed their amateur radio license exams on March 8. Luca Parmitano was issued call sign KF5KDP and Chris Cassidy received KF5KDR.

+ The SO67 schedule for South Africa and Australasia is now posted on http://www.amsatsa.org.za. The next USA week will be 28 March - 10 April, a two week period. The schedule will then continue Europe 11 to 17 April, Central Asia 18 - 24, April and Australasia 25 April to 1 May.

+ Alcatel-Lucent has made the entire Bell System Technical Journal archive available on-line at: http://bstj.bell-labs.com/
(via Jerry, W7QX)

+ http://tinyurl.com/62asmcc will bring you to page from which you may download all the presentations of 1st IAA Conference on University Satellite Missions and Cubesat Workshop in Rome.
(Gruppo di Astrodinamica Universit� degli Studi Sapienza)

+ Sundeep Shah, VU3SXE reports another video of the homebrew AZ EL Rotor by VU2POP is posted at:
http://www.youtube.com/watch?v�Bh29MyqWU

+ F1NSR has made a video showing the AMSAT-UK VHF/UHF FUNcube SDR Dongle being used for a contact on 23cm. Watch at:
http://tinyurl.com/4lryfxo (via Southgate ARC site)

+ EuroLuna OZ9LUNA have produced a video showing the testing of their Romit1 CubeSat due for launch later this year. The Euroluna team are currently developing a 2U cubesat Romit1, OZ9LUNA, as part of their attempt to win the Google Lunar X PRIZE. Watch at:

http://tinyurl.com/49s6jyp (via Southgate ARC site)

+ A collection of amateur videos of the Discovery STS-133 launch and landing has been posted at the UniverseToday web at: http://tinyurl.com/6bzvd9k

+ NASA TV will cover the Expedition 27 launch for the next three residents of the International Space Station. Russian cosmonaut and Soyuz Commander Alexander Samokutyaev, NASA Flight Engineer Ron Garan and Russian Flight Engineer Andrey Borisenko are scheduled to launch from the Baikonur Cosmodrome at 5:18 p.m. CDT on April 4 (4:18 a.m. Baikonur time on April 5). Streaming video is available at http://www.nasa.gov/ntv

+ Ramon, XE1KK and Luis, LU6QI made a QSO on AO7 in SSB Mode B at 11.12 UTC on March 14, 2011 during the orbit #66247. The distance between Ramon's location (EK09JI) and Luis (FF66TQ) is 6816.7 km. On March 25 Luis made contact with Omar, XE1AO and Keith, N4ZQ) via AO-7 with both distances a little more than 7000 km apart.

+ AMSAT's Keeper of the Keps, Ray Hoad, WA5QGD reported this week, "I am pleased to announce that AMSAT's request to re-distribute AFSPC Keplerian elements from Space-Track has been approved for the period April 1, 2010 to April 1, 2012. Our USSTRATCOM ODR (Orbital Data Request) to distribute the KEPs was approved on March 8, 2010."

+ An interesting photo showing ISS transiting the sun near a group of sunspots can be viewed at: http://tinyurl.com/4gcuble (UniverseToday.com)

+ AMSAT area coordinator Clint Bradford, K6LCS, will be presenting his 'Working Amateur Satellites With Your HT' session at the April 1, 2011 meeting of the Associated Radio Amateurs of Long Beach. All are welcome to attend.
  7PM, April 1, 2011 (no kidding!)
  Signal Hill Community Center
  1780 E. Hill Street (off Cherry Ave, behind the PD)
  Signal Hill CA 90755

+ Clint will be busy ... he will make his 'Working Amateur Satellites With Your HT' presentation at the April 4, 2011 meeting of the Corona Norco Amateur Radio Club (CNARC). All are welcome to attend.
  7PM, Monday, April 4, 2011
  Norco Fire Station
  3902 Hillside Ave
  Norco 92860-1515

[ANS thanks everyone for the above information]

/EX

SB SAT @ AMSAT $ANS-086.07
MAKE Magazine Publishes NASA Make: Challenge Rules and Guidelines

AMSAT News Service Bulletin 086.07
>From AMSAT HQ SILVER SPRING, MD.
March 27, 2011
To All RADIO AMATEURS
BID: $ANS-086.07

In a press release titled, "NASA Launches 2011 Nationwide Technology Space Competition for Education", NASA says it's Emerging Commercial Space Office (ECSO) is teaming with Make Magazine, and Teachers in Space to help develop spaceflight kits that high school teachers and students can build and fly on suborbital flights.

Competition rules are simple. Kits should use components that are likely to be available at most high schools, and submitted experiments must be self-contained and fit in a standard Cubesat container. To make kits accessible to students nationwide, part of the challenge is to be able to build these kits for under $100, the kind of funds that could be raised by a school bake sale.

Make Magazine has now published the rules and guidelines for the 2011 NASA Make: Challenge at http://www.makezine.com/space/rules
Proposals for the NASA Make: Challenge should be submitted electronically to makespacekits@gmail.com by midnight (Pacific Daylight Savings Time) April 30, 2011.

NOTE: The NASA Make: Challenge is open to all U.S. citizens. Proposers under the age of 18 must include the permission of a parent or guardian to participate.

The winner of the NASA Make: Challenge will win a trip to the Bay Area Maker Faire on May 21 & 22. The winning project will also be published in MAKE Magazine.

Make Magazine is planning a webcast for the week of March 28. This will be an opportunity to learn from experts about developing experiments that can fly in space. They will be available for questions as well.

You can sign up for the Space Challenge mailing list at:
http://blog.makezine.com/space

The full NASA Press Release can be found on-line at:
http://www.nasa.gov/centers/ames/news/releases/2011/11-14AR.html

[ANS thanks NASA and Make Magazine for the above information]

/EX

SB SAT @ AMSAT $ANS-086.08

Falcon 9 To Launch SES-8 To GTO In 2013

AMSAT News Service Bulletin 086.08
>From AMSAT HQ SILVER SPRING, MD.
March 27, 2011
To All RADIO AMATEURS
BID: $ANS-086.08

A news item from SpaceDaily reported that Space Exploration Technologies (SpaceX) and SES, one of the largest satellite operators in the world, announced an agreement to launch an SES satellite using the Falcon 9 rocket. This will be the first geostationary satellite launch using SpaceX's Falcon 9 rocket. The firm launch agreement with SpaceX also includes an option for a second SES launch.

The SES-8 satellite is scheduled to launch in the first quarter of 2013 from SpaceX's Launch Complex 40 at the Air Force Station at Cape Canaveral, Florida.

Full story can be found on-line at: http://tinyurl.com/4al2rk8

[ANS thanks SpaceDaily.com for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office. And with that keep in mind the ham who endured a long losing stretch at the racetrack. He decided to take up horseback riding but could not figure out how to make his horse stop. He called out, "How do I make it stop!?" ... someone yelled back, "Put a bet on it!"

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM

From 4641875639144458437
X-Google-Thread: 10e8ad,5ac53c7b2644ed2e,start
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII
Path: g2news2.google.com!postnews.google.com!j13g2000pro.googlegroups.com!not-for-mail
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Content-Transfer-Encoding: quoted-printable
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NNTP-Posting-Date: Sun, 27 Mar 2011 19:15:40 +0000 (UTC)
Complaints-To: groups-abuse@google.com
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posting-account=mFFJOAoAAABaIQEBRX5f95y3rtsFRjms
User-Agent: G2/1.0
X-HTTP-UserAgent: Mozilla/5.0 (Windows; U; Windows NT 6.0; es-ES; rv:1.9.2.16)
 Gecko/20110319 Firefox/3.6.16 ( .NET CLR 3.5.30729; .NET4.0C),gzip(gfe)
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X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII
Path: g2news2.google.com!postnews.google.com!x18g2000yqe.googlegroups.com!not-for-
mail
From: Arthur Decker <marcdemoura@gmail.com>
Newsgroups: rec.radio.amateur.space
Subject: 4075 Solutions manual and Test Banks to Electrical, Electronics and
 Computer Engineering Books - part2
Date: Sun, 27 Mar 2011 15:43:56 -0700 (PDT)
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X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII
Path: g2news2.google.com!postnews.google.com!f30g2000yqa.googlegroups.com!not-for-mail
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X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,domainid0,public,usenet
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Solution Manual Introduction to Human Resource Management (2nd Ed., John Stredwick)
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Solution Manual Worldwide Destinations : The Geography of Travel and Tourism (5th Ed., Boniface & Cooper)
Solution Manual Worldwide Destinations Casebook : The Geography of Travel and Tourism (2nd Ed., Boniface & Cooper)
Solution Manual Marketing in Travel and Tourism (4th Ed., Middleton, Fyall, Morgan & Ranchhod)
Solution Manual Strategic Marketing Planning (1st Ed., C. Gilligan & R. Wilson)
Solution Manual Strategic Marketing Planning (2nd Ed., C. Gilligan & R. Wilson)
Solution Manual Strategic Marketing Management : Planning, Implementation and Control (3rd Ed., Wilson & Gilligan)
Solution Manual Marketing Communications Management : Concepts and Theories, Cases and Practices (Paul Copley)
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Solution Manual Principles of Financial Engineering (1st Ed., Salih Neftci)
Solution Manual Principles of Financial Engineering (2nd Ed., Salih

Neftci)
Solution Manual A Behavioral Approach to Asset Pricing (2nd Ed., Hersh Shefrin)
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Solution manual Introduction to Emergency Management (3rd Ed., Haddow, Bullock & Coppola)
Solution manual Food and Beverage Management (4th Ed., Davis, Lockwood, Pantelidis & Alcott)
Solution manual Maritime Security : An Introduction (Michael McNicholas)
Solution manual Contemporary Logistics (8th Ed., Paul R. Murphy, Donald Wood)
Solution manual Contemporary Logistics (9th Ed., Paul R. Murphy, Donald Wood)

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contact me to : mattosbw1@gmail.com
mattosbw1(at)gmail.com

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From -709753986098646977
X-Google-Thread: 10e8ad,8fd324869700e0a3,start
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,domainid0,public,usenet
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mail
From: BERGH <mattosbw1@gmail.com>
Newsgroups: rec.radio.amateur.space
Subject: 4075 Solutions manual and Test banks to Materials Engineering Books
Date: Tue, 29 Mar 2011 11:08:38 -0700 (PDT)
Organization: http://groups.google.com
Lines: 183
Message-ID: <e4dd623a-c080-49f6-9e3b-7ed4827994fa@r19g2000prm.googlegroups.com>
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Mime-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
X-Trace: posting.google.com 1301422119 24978 127.0.0.1 (29 Mar 2011 18:08:39 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Tue, 29 Mar 2011 18:08:39 +0000 (UTC)
Complaints-To: groups-abuse@google.com
Injection-Info: r19g2000prm.googlegroups.com; posting-host=190.40.115.31; posting-
account=Tr_lEAoAAAADSBji3TkK41k7g4TuE_dn
User-Agent: G2/1.0
X-HTTP-UserAgent: Mozilla/5.0 (Windows; U; Windows NT 6.0; es-ES; rv:1.9.2.16)
 Gecko/20110319 Firefox/3.6.16 ( .NET CLR 3.5.30729; .NET4.0C),gzip(gfe)
Xref: g2news1.google.com rec.radio.amateur.space:474
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mattosbw1(at)gmail.com

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http://www.megaupload.com/?d=ADDS77XH

I do not review the forums, just send me an email.

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Solution manual Principles of Metal Manufacturing Processes (Beddoes &

Bibby)
Solution manual Materials Science for Engineering Students (Traugott Fischer)
Solution manual Essentials of Modern Materials Science and Engineering (James Newell)
Solution manual Materials Science and Engineering : An Introduction (6th Ed., William Callister)
Solution manual Materials Science and Engineering : An Introduction (7th Ed., William Callister)
Solution manual Materials Science and Engineering : An Introduction (8th Ed., William Callister)
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Solution manual Materials and Processes in Manufacturing (9th Ed., E. Paul DeGarmo, J. T. Black, Ronald A. Kohser)
Solution manual DeGarmo's Materials and Processes in Manufacturing (10th Ed., E. Paul DeGarmo, J. T. Black, Ronald A. Kohser)
Solution manual Foundations of Materials Science and Engineering (3rd Ed, Smith)
Solution manual Foundations of Materials Science and Engineering (4th Ed, Smith & Hashemi)
Solution manual Foundations of Materials Science and Engineering (5th Ed, Smith & Hashemi)
Solution manual Engineering Materials Science (Milton Ohring)
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Solution manual Mechanical Behavior of Materials (W.F. Hosford)
Solution manual Mechanical Behavior of Materials (Keith Bowman)
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Solution manual Plastics : Materials and Processing (3rd Ed., Strong)
Solution manual Engineering Materials : Properties and Selection (8th Ed., Budinski)
Solution manual Engineering Materials : Properties and Selection (9th Ed., Budinski)
Solution manual Introduction to Materials Science for Engineers (6th Ed., Shackelford)

Solution manual Introduction to Materials Science for Engineers (7th Ed., Shackelford)
Solution manual Introduction to Materials Science for Engineers - International Edition (7th Ed., Shackelford)
Solution manual Creative Design of Products and Systems (Saeed Niku)
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Solution manual Materials : Engineering, Science, Processing and Design (2nd Ed., Michael Ashby, Hugh Shercliff & David Cebon)
Solution manual Engineering Materials Vol. 1 : An Introduction to Properties, Applications and Design (3rd Ed., Michael Ashby & David Jones)
Solution manual Engineering Materials Vol. 2 : An Introduction to Microstructures, Processing and Design (3rd Ed., Michael Ashby & David Jones)
Solution manual Materials and the Environment : Eco-informed Material Choice (Michael Ashby)
Solution manual Principles of Corrosion Engineering and Corrosion Control (Zaki Ahmad)
Solution manual Analysis and Performance of Fiber Composites (3rd Ed., Bhagwan Agarwal, Lawrence Broutman & K. Chandrashekhara)
Solution manual Basic Engineering Plasticity : An Introduction with Engineering and Manufacturing Applications (David Rees)
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Solution manual Tissue Engineering (Clemens van Blitterswijk, et al.)
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Solution manual Laminar Composites (George Staab)
Solution manual Physical Metallurgy and Advanced Materials (7th Ed., R.E. Smallman & A.H.W. Ngan)

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mattosbw1(at)gmail.com

```
From -175558700715221724
X-Google-Thread: fcc6e,9344788875c75ae1,start
X-Google-NewGroupId: yes
X-Google-Thread: 11480d,9344788875c75ae1,start
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6,gid8f86f75953,gida4a23d5f63,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news1.google.com!npeer02.iad.highwinds-media.com!
news.highwinds-media.com!feed-me.highwinds-media.com!nx02.iad01.newshosting.com!
newshosting.com!198.186.194.249.MISMATCH!transit3.readnews.com!news-
out.readnews.com!transit4.readnews.com!panix!panix2.panix.com!not-for-mail
From: rram@panix.com (rec.radio.amateur.moderated Admin)
Newsgroups:
rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.rad
io.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amat
eur.space,rec.radio.info
Subject: Crossposting Permitted to rec.radio.amateur.moderated
Supersedes: <radio/ham-radio/moderated/crossposting-1-1298962801@panix.com>
Followup-To: poster
Date: 1 Apr 2011 02:00:03 -0400
Organization: rec.radio.amateur.moderated Moderation Team
Lines: 47
Approved: RRI Admin <rec-radio-info-request@panix.com>
Distribution: world
Expires: 04 May 2011 02:00:01 -0000
Message-ID: <radio/ham-radio/moderated/crossposting-1-1301637601@panix.com>
Reply-To: rec-radio-amateur-moderated-request@panix.com
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(rec.radio.amateur.moderated Admin)
NNTP-Posting-Host: panix2.panix.com
X-Trace: reader1.panix.com 1301637604 18526 166.84.1.2 (1 Apr 2011 06:00:04 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Fri, 1 Apr 2011 06:00:04 +0000 (UTC)
Summary: Short reminder for unmoderated newsgroups that crossposting is permitted
Keywords: FAQ, ham, amateur, radio, moderated, unmoderated, crossposting, permitted
Xref: g2news2.google.com rec.radio.amateur.antenna:22735 rec.radio.amateur.dx:986 rec.radio.amateur.equipment:2782 rec.radio.amateur.homebrew:4598 rec.radio.amateur.misc:6309 rec.radio.amateur.policy:33059 rec.radio.amateur.space:500 rec.radio.info:2305

Posted-By: auto-faq 3.3.2 beta (PGPMoose V2.0, Perl 5.005)
Archive-name: radio/ham-radio/moderated/crossposting
Revision: 1.1 2009/04/12 19:42:04
Posting-Frequency: posted monthly
URL: http://www.panix.com/~rram/usenet/rram/index.html

Changes followed by "|".

After a 30-day public discussion and feedback period to gauge reader opinions in March of 2009:

http://groups.google.com/group/rec.radio.amateur.moderated/browse_thread/thread/d7d337db35f23326

the rec.radio.amateur.moderated Moderation Team has decided to consider amending its charter, and permit limited simultaneous crossposting to rec.radio.amateur.moderated and one other unmoderated amateur-radio-related discussion newsgroup. We are currently trying this on a temporary basis (90 days, through early July 2009), and adopt it permanently if successful.

Approved rec.radio.amateur.* newsgroups are those that are currently listed in the latest version of the "List of Big Eight Newsgroups" which is crossposted monthly to news.announce.newgroups, news.groups, and news.lists.misc.

Approved alt.radio.amateur.* and alt.ham-radio.* newsgroups are those that have been created consistent with the suggestions in "So You Want to Create an Alt Newsgroup" at:

  http://www.faqs.org/faqs/alt-creation-guide/

Approved regional hierarchy newsgroups are those that contain either "radio.amateur" or "ham-radio" in their names, including uk.radio.amateur and aus.radio.amateur.misc.

We will make every reasonable effort to keep our list of approved newsgroups up-to-date. In case we have overlooked any, and a submission is rejected in error as a result, the rejected submitter can E-mail us at our administrative contact address (in the signature at the bottom of this article, and the default Reply-To for the rejection message) requesting that it be added, and that the article be approved. We may still choose to reject articles crossposted to any alt.* newsgroup with an inappropriate name, including obscene language, embedded name-calling, or encouragement of unlawful conduct.

Please direct any comments, questions, or criticisms to rec-radio-amateur-moderated-request@panix.com.

```
From 2938797703287728231
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Path: g2news1.google.com!news1.google.com!newsfeed2.dallas1.level3.net!
news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-092 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sun, 3 Apr 2011 09:55:19 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 324
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <001201cbf206$be103590$3a30a0b0$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
X-Trace: reader1.panix.com 1301838919 7541 166.84.1.6 (3 Apr 2011 13:55:19 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 3 Apr 2011 13:55:19 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news1.google.com rec.radio.amateur.space:476 rec.radio.info:2235
```

AMSAT NEWS SERVICE
ANS-093

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* ARISSat-1 Operations on 12 April 2011
* Celebrate Yuri - ARISSat-1 Activation
* AMSAT Gets Ready for Dayton Hamvention 2011
* Satellite Shorts From All Over
* ARISS Recent School Contacts

SB SAT @ AMSAT $ANS-093.01
ARISSat-1 Operations Possible 11-13 April UTC

AMSAT News Service Bulletin 093.01
  From AMSAT HQ SILVER SPRING, MD.
April 3, 2011
To All RADIO AMATEURS
BID: $ANS-093.01

The ARISSat-1 satellite, presently still inside the ISS, will be turned on and use an external antenna from the afternoon of 11 April UTC through the morning of 13 April to celebrate the 50th anniversary of Yuri Gagarin's first manned space flight. More specific times will be announced as they become available.

AMSAT will support this event and issue certificates to those stations reporting reception of the ARISSat-1 signals. Roscosmos has announced that the satellite will be deployed into orbit during the next EVA in July of this year.

The release of a development version of the BPSK/CW decoding software next week. Schedule specifics of the 12 April operation transmissions are not available yet. These will be posted on the AMSAT and ARISSat1 web sites and in ANS when available.

The transmissions on the 12th will see ARISSat-1 in low power mode, this means 40-60 secs on, 2 minutes off. It should be a challenge to find and tune the CW signal then decode some BPSK data during the short on times.

This mode was developed to be used when the batteries are low or the satellite is in eclipse. During this even data and information will be collected to improve the BPSK demodulating, decoding and display software. Those with the FUNcube Dongle and SDR-IQ and variants are encouraged to record the wideband transmissions to help us better understand the signals

and improve the ground station software. Information on where to send the
recordings will be available on the AMSAT and ARISSat1 Web sites.

[ANS thanks Gould, WA4SXM, for the above information]

/EX

SB SAT @ AMSAT $ANS-093.02
Celebrate Yuri - ARISSat-1 Activation

AMSAT News Service Bulletin 093.02
From AMSAT HQ SILVER SPRING, MD.
April 3, 2011
To All RADIO AMATEURS
BID: $ANS-093.02

RSVP MANDATORY - April 12 is bringing us the 50th anniversary of Yuri Gagarin's space flight - as well as (hopefully!) an activation of ARISSat-1.

Clint Bradford, K6LCS, invites those in the Mira Loma, CA area to come and have some fun that night!

The party Web site URL is
http://tinyurl.com/YURI-K6LCS

There will be exclusive videos to share (even one from Bill Nye, the Science Guy!), history to relate, and - if all works well (grin) - Clint will record celebratory transmissions from the International Space Station and amateur radio satellite ARISSat-1 at 5AM that morning to show you all while you are here! (There's another great pass of the ISS at 9:41PM - but that's technically April 13 GMT...)

Let's use this date to promote everything we've been working on for years: the ham radio hobby, AMSAT, and the future of manned space travel.

RSVP MANDATORY - So we'll know how many goodies to have on hand! Send an email as soon as you can, please! FAMILY- AND CHILDREN-FRIENDLY! (No pony rides, but they can pet noses of our horse and donkey!)

Appetizers, soft drinks, a little wine, and miscellaneous munchies will be served. Prizes, handouts, and freebies to all. The rumor that an official "Yuri Gagarin Commemorative T-Shirt" being given away as a door prize has been ... VERIFIED!

Bring a light jacket - in case we try to work the 9:41PM pass. S'mores and fire pits outside? OF COURSE! Rain or shine ...

Tuesday, April 12, 2011 - 6PM to 10PM

Clint and Karen Bradford's house
5085 Trail Canyon Drive
Mira Loma CA 91752
909-241-7666 - Clint cell
Email - clint@clintbradford.com

[ANS thanks Clint, K6LCS, for the above information]

/EX

SB SAT @ AMSAT $ANS-093.03
AMSAT Gets Ready for Dayton Hamvention 2011

AMSAT News Service Bulletin 093.03
From AMSAT HQ SILVER SPRING, MD.
April 3, 2011
To All RADIO AMATEURS
BID: $ANS-093.03

The 2011 Dayton Hamvention will be held this year May 20-22. This year featured AMSAT attractions include:

+ Operational ARISSat-1 Prototype
+ Astronaut Doug Wheelock, KF5BOC, will be attending as a special guest of the ARRL and AMSAT. Doug will visit the AMSAT booth on both Friday and Saturday.
+ AMSAT theme for 2011 is "Providing Education Through Amateur Satellites"

Check out AMSAT's Hamvention posted at ...
http://www.amsat.org/amsat-new/hamvention/2011/Dayton.php
for the latest events:

+ AMSAT theme for 2011 is "Providing Education Through Amateur Satellites"

+ ARISSat-1

+ AMSAT Thursday Night Get-together

+ AMSAT Forum

+ AMSAT/TAPR Banquet

This is the 60th year of the Dayton Hamvention, sponsored by DARA (Dayton Amateur Radio Association). As has been the case for the many years the Hamvention will be at the Hara Arena Complex on the north side of Dayton. Further information on Hamvention 2011, including advance ticket sales and motel accommodations, can be found at http://www.hamvention.org.

AMSAT will occupy the same booths (444-449) in Ball Arena, right across from the ARRL area and just inside the door from the Satellite Demonstration area. Plan to visit all of the AMSAT activities!

AMSAT/TAPR Banquet

The fifth annual AMSAT/TAPR Banquet will be Friday night May 20 at the Kohler Presidental Banquet Center. The Banquet speaker will be David Rowe, VK5DGR talking on The Village Telco. Additional information about the talk can be found on the AMSAT Web site, 2011 Hamvention,

Banquet page.

Seating is limited and reservations are required. Go to the Dayton Banquet 2011 link:
http://www.amsat.org/amsat-new/hamvention/2011/Banquet.php to find information about reservations and additional information.

AMSAT Hotel

AMSAT has only a few rooms left in the reserved block at the Country Inn & Suites in Fairborn, OH. Please contact Martha at the AMSAT office for room price and availability during Hamvention. Priority for rooms will be given to those volunteering to work in the AMSAT booth for multiple 2 hour shifts during Hamvention. The phone number for the AMSAT office is 301-589-6062. Other hotels in the immediate area of the Country inn & Suites include the Fairfield Inn, Ramada Inn, Hampton Inn, Fairborn Holiday Inn, Red Roof Inn and the Homewood Suites if additional accommodations are needed.

[ANS thanks Gould Smith, WA4SXM for the above information]

/EX

SB SAT @ AMSAT $ANS-093.04
Satellite Shorts From All Over

AMSAT News Service Bulletin 093.04
From AMSAT HQ SILVER SPRING, MD.
April 3, 2011
To All RADIO AMATEURS
BID: $ANS-093.04

+ Look for Bryan, KL7CN to be active in a holiday-style DXpedition on the FM satellites from various Caribbean locations starting Sunday, April 3. Bryan will start /KP4 from San Juan, and then operate /MM from as many grids as we can, followed by J6/ from St. Lucia, then as V25CN from Antigua, then as a very special FS/PJ7 operation from the border monument on St. Martin, then /KP2 from St. Croix, and finally again as /KP4.

+ A video of the March 26 launch of an Amateur Radio near-space balloon by the Old Towne Middle School in Ridgeland, MS is now available at: http://tinyurl.com/42ufohw (Southgate)

+ Two videos of the Amateur Radio satellite SwissCube are now available at: http://tinyurl.com/3uqlhn4 (Southgate)

+ Russia's Elektro-L weather forecasting spacecraft captured a stunning view of the Moon over the Red Sea region of the Earth. It can be viewed at:http://tinyurl.com/4ajwqs5 (UniverseToday)

+ NASA is offering you a chance to vote for your favorite tunes to be played as the wake up song during the STS-134 mission, which is currently scheduled to launch on April 19, 2011. Voting will be open until mission launch day. You can find the list and listen to the songs and cast your vote at:
  https://songcontest.nasa.gov/toporig.aspx

+ Austin, Texas Fox News coverage of the ARISS school contact with the Lehman High School in Kyle, Texas is posted at:
  http://tinyurl.com/iss-lehman

+ AMSAT's Keeper of the Keps, Ray Hoad, WA5QGD reported this week, the following two changes have been made to the KEP distribution:
  1. FAST1-2 has separated into FAST1 and FAST2. Each now has its own set of KEPs as FAST1 (cat# 37227) and FAST2 (cat# 37380).
  2. The Cat# of NANOSAIL-D (listed in the KEPs as NANOSALD) has been corrected from Cat# 37225 to Cat# 37361 per Spacetrack website.

  You can subscribe to the AMSAT Keps mailing list at:
  http://amsat.org/mailman/listinfo/keps

+ Congratulations and welcome home to Jim, ND9M/VQ9JC on the completion of a two month sea voyage where he provided dozens of wet-grids from his maritime mobile operation. Jim says he is working on getting his logs together and post a trip wrap up in a few days once he gets the numbers compiled. Jim wrote, "Thanks for helping to make the two-month voyage a memorable one!"

+ Luis, LU6QI reported continued success in stretching AO-7's footprint with a Mode B contact on March 26 with Sebastian, W4AS for a distance of 6715 km.

+ Tetsu, JA0CAW has posted three videos showing the AMSAT-UK FUNcube SDR Dongle being used to receive satellites:
  1. Using FUNcube Dongle with DK3WN satcontrol_fcd software, SDRadio software, and Delfi-C3 RASCAL software to decode telemetry:
     http://www.youtube.com/watch?v�-RphZikoA
  2. FUNcube Dongle receiving AO-51 satellite:
     http://www.youtube.com/watch?v�jKwVlMqCc&NR�
  3. FUNcube Dongle receiving UO-11 satellite:
     http://www.youtube.com/watch?v�rNvhRIqmo

+ Dave, KB1PVH is heading up the July 4th 13 Colonies Special Event. He is in need of satellite operators from NH, CT, NJ, and most likely RI. If you are from one of those states and want to be a part of the event email Dave directly at: kb1pvh@gmail.com More information of the 13 Colonies Special Event can be found on-line at: http://www.13colonies.info/

[ANS thanks everyone for the above information]

/EX

SB SAT @ AMSAT $ANS-093.05
ARISS Recent School Contacts

AMSAT News Service Bulletin 093.05
From AMSAT HQ SILVER SPRING, MD.
April 3, 2011
To All RADIO AMATEURS
BID: $ANS-093.05

On Wednesday, March 23, Paolo Nespoli, IZ�JPA spoke with students from Istituto Comprensivo di Verano Brianza - Scuola Media in Italy via an Amateur Radio on the International Space Station (ARISS) contact. Nespoli, an alumnus of the school, exchanged greetings with the youth and answered 15 of their questions. Approximately 250 students, teachers and guests were on hand for the event which received regional and local media coverage. The contact supplemented course studies emphasizing astronautics, astronomy, radio techniques and English.

Students from two schools in Italy, Istituto Comprensivo "G. Manzi" and Istituzione Scolalstica "Saint-Roch" jointly participated in an Amateur Radio on the International Space Station (ARISS) contact with astronaut Paolo Nespoli, IZ�JPA on Saturday, March 26. The activity was part of a curriculum concentrating on space, technology and human spaceflight. Nespoli fielded thestudents' 34 questions over 2 consecutive ISS passes as 400 students and visitors gathered for the event. Regional and local media reported the event.

[ANS thanks Carol, KB3LKI, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits.

Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Lee McLamb, KU4OS

```
From -749723770507906768
X-Google-Thread: 107ada,810f5b2bef9dc4bb,start
X-Google-NewGroupId: yes
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news.level3.com!bloom-beacon.mit.edu!panix!rri.panix.com!robomod!not-for-mail
From: SWPC.Webmaster@noaa.gov
Newsgroups:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.info
Subject: Weekly Highlights of Solar and Geomagnetic Activity, 21 - 27 March 2011
Followup-To: rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space
Date: Mon, 4 Apr 2011 16:27:52 EDT
Organization: NOAA Space Weather Prediction Center
Lines: 66
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <20110404202700.A781C33C6C@panix2.panix.com>
NNTP-Posting-Host: panix6.panix.com
X-Trace: reader1.panix.com 1301948872 5458 166.84.1.6 (4 Apr 2011 20:27:52 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Mon, 4 Apr 2011 20:27:52 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Xref: g2news2.google.com rec.radio.amateur.misc:6334 rec.radio.amateur.dx:991
rec.radio.amateur.space:502 rec.radio.info:2318

:Product: Weekly Highlights and Forecasts
:Issued: 2011 Mar 29 1817 UTC
# Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center
# Product description and SWPC contact on the Web
# http://www.swpc.noaa.gov/weekly.html
#
#                Weekly Highlights and Forecasts
#
```

Highlights of Solar and Geomagnetic Activity
21 - 27 March 2011

Solar activity ranged from very low to moderate levels. Region 1176 (S16, L=199, class/area Fki/420 on 26 March) rotated onto the visible disk on 21 March, and produced a long duration C4 flare. Low levels of activity continued through the 22nd. Activity increased to moderate levels from 23-25 March as Region 1176 produced one M1 flare each day (23/0217Z, 24/1207Z, 25/2322Z). Partial halo CMEs associated with the M1 flares on the 24th and 25th were observed. The first had an estimated plane-of-sky speed of 421 km/s; the second was accompanied by Type II (673 km/s), Type IV, and 10.7 cm (170 sfu) radio emissions. A fast (approx. 850 km/s), asymmetric, partial halo CME was observed on 26 March was attributed to Region 1180 (N25, L=162, class/area Hsx/070 on 26 March), but was not expected to be potentially geoeffoective. Only the CME from the 24th was expected to have geoeffective potential. Of the four remaining active regions, Region 1178 (S15, L=172, class/area Dai/130) was the largest.

The greater than 10 MeV proton flux at geosynchronous orbit rose above 10 pfu on 21 March at 1950Z and reached a maximum of 14 pfu on 22 March at 0130Z and ended that day at 0335Z. The most likely source of the event was a flare and back-sided CME.

The greater than 2 MeV electron flux at geosynchronous orbit was at normal levels throughout the period.

The geomagnetic field was quiet for the majority of the period, except for a few instances of unsettled conditions on 24 March due to Coronal Hole (CH) high speed stream (HSS) effects.

Forecast of Solar and Geomagnetic Activity
30 March - 25 April 2011

Solar activity is forecast to be low for the period with C-class flares expected and a chance for M-class flares exists based on the size and magnetic complexity of Regions 1176 and 1183 (N15, L= 136, class/area Eai/250 on 28 March). Region 1176 is expected to remain on the disk through 05 April and Region 1183 will rotate off the west limb on 09 April, if it does not decay prior. Old Region 1169 which is anticipated to return on 31 March produced an M4.2/1N flare during the last rotation. Imagery from STEREO-B spacecraft as well as brightening on the east limb on GOES 15 SXI and NASA SDO AIA 193 suggest that the region may remain prominent this rotation as well.

No proton events are expected at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to reach high levels on 01-02 April.

Geomagnetic activity is expected to range from quiet to unsettled levels. Unsettled levels are expected 30 - 31 March, 07 - 09 April, and 18 - 19 April, with a slight chance for an isolated active to minor storm period at high latitudes due to anticipated recurrent coronal holes. Predominantly quiet levels are expected for the remainder of the period.

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X-Google-Thread: 10b9c8,fa6292b7e6dc1046,start
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X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news1.google.com!news.glorb.com!news-out.readnews.com!
news-xxxfer.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: SWPC.Webmaster@noaa.gov
Newsgroups:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.info
Subject: Weekly Highlights of Solar and Geomagnetic Activity, 28 March - 03 April
2011
Followup-To: rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space
Date: Tue, 5 Apr 2011 21:30:06 EDT
Organization: NOAA Space Weather Prediction Center
Lines: 97
Approved: RRI Admin <rec-radio-info-request@panix.com>
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NNTP-Posting-Date: Wed, 6 Apr 2011 01:30:07 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Xref: g2news2.google.com rec.radio.amateur.misc:6338 rec.radio.amateur.dx:992
rec.radio.amateur.space:503 rec.radio.info:2319

:Product: Weekly Highlights and Forecasts
:Issued: 2011 Apr 05 2218 UTC
# Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center
# Product description and SWPC contact on the Web
# http://www.swpc.noaa.gov/weekly.html
#
#               Weekly Highlights and Forecasts
#
```

Highlights of Solar and Geomagnetic Activity
28 March - 03 April 2011

Solar activity ranged from very low to low levels throughout the period. C-class events were observed every day except for 02 April. Region 1181 (S26, L=157, class/area Hsx/20 on 27 March) produced a C1/Sf flare at 27/2326Z and Region 1178 (S15, L=172, class/area Dai/130 on 26 March) produced a C1/Sf flare at 31/2221Z with an associated partial halo CME that appeared to be directed southward below the ecliptic plane. Region 1183 (N15, L=135, class/area Eai/330 on 30 March) rotated on the disk on 27 March and contributed four C-class events, the largest a C1 at 30/2005Z. No X-ray sensor data was available at 27/0600Z when a CME was observed in LASCO C2 and C3 imagery. However, the CME was attributed to Region 1183 based on limited GOES 15 SXI imagery. Type II (651 km/s S.V.) and Type IV radio signatures were observed at 27/0511 associated with this event. Region 1176 (S15, L=196, class/area Eko/490 on 23 March) produced four C-class events and four CMEs during the period. The only CME that is potentially geoeffective was associated with a B8/Sf flare observed at 02/2347Z. At 03/0024Z, GOES-15 SXI imagery detected material movement from the SW limb that was later observed in SEREO-B COR2 imagery at 03/0109Z and STEREO-A COR2 imagery at 03/0409Z. Using this imagery, a plane-of-sky speed of approximately 650 km/s was assigned. This CME appeared to be directed southward out of the ecliptic plane but it was a very large event and has the potential to cause enhanced activity at Earth.

No proton events were observed at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit was at moderate levels from 28 - 29 March and then decreased to normal levels from 30 March - 01 April. An increase to moderate levels was observed on 02 April and high levels were observed on 03 April. The 1000 pfu threshold was reached at 03/0735Z.

Geomagnetic field activity ranged from quiet to major storm levels throughout the period. Quiet conditions prevailed from 28 March through midday on 01 April. A weak geomagnetic Sudden Impulse (SI) was observed at 29/1604Z (8 nT as measured at the Boulder magnetometer). The SI likely represented the passage of a halo CME observed on 24 March. ACE solar wind data indicated increased velocities (313 to 398 km/s), as well as increases in density of (2 to 26 p/cc) and the total field (Bt 5 to 9 nT). Interplanetary Magnetic Field (IMF) Bz remained mostly northward following the passage. By midday on 01 April, ACE solar wind observations indicated the onset of a coronal hole high speed stream (CH HSS) at approximately 01/1600Z. Velocities steadily increased from about 360 km/s to a peak of 665 km/s at 02/2128Z. IMF changes associated with the CH HSS included increased Bt (peaks to 12 nT from 01/2000 - 2100Z) and intervals of southward Bz (maximum deflection of -10 nT at 01/1628Z). The geomagnetic field responded with periods of unsettled to active levels, including an isolated minor storm period observed at high latitudes at 01/1500Z. These conditions persisted through 03 April with an isolated major storm period observed at high latitudes at 02/1200Z and another isolated minor storm at high latitudes at 03/1200Z.

Forecast of Solar and Geomagnetic Activity
06 April - 02 May 2011

Solar activity is expected to be very low to low for the majority of the period. A chance for M-class activity exists from 17 - 30 April due to the return of Region 1176.

No proton events are expected at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to be at high levels from 06 - 07 April and then return to normal to moderate levels for the remainder of the period.

Geomagnetic field activity is expected to be quiet to unsettled from 07 - 08 April due to the effects of a recurrent CH HSS becoming geoeffective. Quiet conditions are expected from 09 - 16 April. A second CH HSS is expected to be geoeffective from 17 - 19 April bringing with it quiet to unsettled conditions. Mostly quiet conditions are expected from 20 - 27 April. Unsettled to active conditions with a chance for isolated minor storm periods at high latitudes are expected due to a third CH HSS that is expected to become geoeffective on 28 April. A return to quiet conditions is anticipated on 02 May as the effects from the CH HSS wane.

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X-Google-Language: ENGLISH,ASCII-7-bit
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From: Chris Steyaert <observations@rmob.org>
Newsgroups: rec.radio.amateur.space,sci.astro.amateur
Subject: Radio Meteor Obs. Bull. March 2011
Date: Fri, 08 Apr 2011 19:56:02 +0200
Message-ID: <vviup6lu0vfmdvhpsnuiskll8vi7j97huh@4ax.com>

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MIME-Version: 1.0
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Content-Transfer-Encoding: 7bit
Lines: 14
Organization: Unlimited download news at news.astraweb.com
NNTP-Posting-Host: 8106f32f.news.astraweb.com
X-Trace: DXC=H2AOcfaQ?NjK;GKPh8BJfdL?
0kYOcDh@jS4Tk8a5CGnb;4fK:hd=R`f;H2[Dh2O0^jeM7IG_Q>@ooi_=YE6RTP=om2D5?
82Sdngo>>2B3AP?9e
Xref: g2news2.google.com rec.radio.amateur.space:504 sci.astro.amateur:47564
```

Radio Meteor Observation Bulletin No. 212 of March 2011 (92 K) is available now as

http://www.rmob.org/rmobtext/rmob1103.txt

More information and the visual presentation of the hourly forward scatter counts can be found on

http://www.rmob.org

Chris

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Path: g2news1.google.com!postnews.google.com!24g2000yqk.googlegroups.com!not-for-
mail
From: devi <satyamsivam9030@gmail.com>
Newsgroups: rec.radio.amateur.space
Subject: SEXY HOT PHOTOS
Date: Mon, 11 Apr 2011 03:01:19 -0700 (PDT)
Organization: http://groups.google.com
Lines: 22
Message-ID: <ed7f1254-6456-429f-b981-bffd5cbff995@24g2000yqk.googlegroups.com>
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Content-Type: text/plain; charset=ISO-8859-1
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Injection-Info: 24g2000yqk.googlegroups.com; posting-host=117.199.254.66; posting-
account=xYWSigoAAADp0Q2VAMlANM4syM5q3uRr
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Xref: g2news1.google.com rec.radio.amateur.space:480

                           hot lipkiss
http://hotactressstoyou.blogspot.com/2011/04/lipkiss-2.html
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http://hotactressstoyou.blogspot.com/2011/04/lipkiss.html
                seepika padukone sexy back look
http://hotactressstoyou.blogspot.com/2011/04/deepika-padukone.html
                   sexy katrina kaif
http://hotactressstoyou.blogspot.com/2011/04/katrina-kaif.html
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http://hotactressstoyou.blogspot.com/2011/04/keerthi-chawla.html
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http://hotactressstoyou.blogspot.com/2011/04/deeksha-seth.html
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http://hotactressstoyou.blogspot.com/2011/04/asin.html
            ramba in a red dress
http://hotactressstoyou.blogspot.com/2011/04/ramba.html
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http://hotactressstoyou.blogspot.com/2011/04/ileana.html




From 749733954495327474
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X-Google-Thread: 10b9c8,df66f5dc6082e1f8,start
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newshosting.com!novia!news-out.readnews.com!transit3.readnews.com!panix!
rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-100 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Tue, 12 Apr 2011 12:51:04 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 439
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <001201cbf931$c8d81830$5a884890$@net>
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X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Tue, 12 Apr 2011 16:51:04 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
```

X-RRI-Info-1: Send submissions to   rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to   rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news2.google.com rec.radio.amateur.space:506 rec.radio.info:2332

AMSAT NEWS SERVICE
ANS-100

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* ARISSat-1 to Help Celebrate Gagarin Flight Anniversary
* Adding doppler files for the ISS ARRISSsat-1 Activation
* AMSAT at National Air and Space Museum's Space Day
* Satellite Shorts from all over
* ARISS Recent School Contacts
* AMSAT Awards
* New OSCAR Numbers

SB SAT @ AMSAT $ANS-100.01
ARISSat-1 to Help Celebrate Gagarin Flight Anniversary

AMSAT News Service Bulletin 100.01
>From AMSAT HQ SILVER SPRING, MD.
April 10, 2011
To All RADIO AMATEURS
BID: $ANS-100.01

ARISSat-1 to Help Celebrate Gagarin Flight Anniversary

ARISSat-1 transmissions from the ISS will be used to help celebrate man's 50th year in space. Yuri Gagarin became the first man in space on 12 April 1961.

Fifty years later on 12 April 2011 the Russians will have a nationwide commemoration of this historic event. The ARISSat-1/RadioSkaf-V satellite on board the ISS and awaiting deployment in late July of 2011 will be turned on and transmit during the celebration period. The transmissions will begin on Monday 11 April 2011 at 14:30 UTC and continue until 10:30 UTC on 13 April 2011.

Due to the fact that the solar panels are covered, the satellite will be powered only by the onboard battery. The satellite will run in low power mode. This means that the transmissions will cycle ON/OFF. They will be On for 40-60 seconds and Off for 2 minutes.

The FM transmissions on 145.95 MHz will contain an ID for the satellite, call sign RS01S, international greeting messages, spoken telemetry values and SSTV images. There will also be CW transmitted on 145.919 MHz and SSB BPSK-1000 telemetry data on 145.920 MHz.

ARISSatTLM software can be used with a computer soundcard to tune, receive, demodulate, decode and display the telemetry values if tuned correctly. The transponder will not be active during this event.

AMSAT will issue commemorative certificates to those receiving the transmissions and sending an email to gagarin@arissat1.org or yuri@arissat1.org with your name or group, a description of what you heard and the UTC time you heard it. Recording the Battery voltage values and the UTC time you received them will be especially helpful.

One of the messages will be a conversation between Yuri Gagarin and ground control. The ARISS team is working to get the D-700 aboard the ISS to also transmit the FM signals on 437.550 MHz.

[ANS thanks Gould, WA4SXM, for the above information]

/EX

SB SAT @ AMSAT $ANS-100.02
Adding doppler files for the ISS ARRISSsat-1 Activation

AMSAT News Service Bulletin 100.02
>From AMSAT HQ SILVER SPRING, MD.
April 10, 2011
To All RADIO AMATEURS
BID: $ANS-100.02

Alan, WA4SCA has worked out the ARISSat-1 data to add to the SATPC32 tracking software for the April 11 - April 13 activation aboard the ISS.

Alan wrote, "If you are going to be listening for ARISSat-1 and use SATPC32, you will be using the ISS for antenna tracking, but you will need to add a few modes in the DOPPLER.SQF file for the ISS."

```
ISS,145918.5,0,USB,,,0,0,BPSK/CW-2
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ISS,145938.5,0,USB,,,0,0,CW-1
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If you use a name other than ISS, such as Zarya, then substitute that so SATPC32 will know what you mean.

These new ARISSat modes will appear along with all the "real" ISS modes. The FM frequencies should be good, and the SSB modes as usual will need a little tweaking. Assuming your rig is calibrated, you should be at least close enough to hear the short transmit periods.

[ANS thanks Alan, WA4SCA for the above information]

/EX

SB SAT @ AMSAT $ANS-100.03
AMSAT at National Air and Space Museum's Space Day

AMSAT News Service Bulletin 100.03
  From AMSAT HQ SILVER SPRING, MD.
April 10, 2011
To All RADIO AMATEURS
BID: $ANS-100.03

Dave Taylor, W8AAS says that, "The Smithsonian National Air and Space Museum has invited AMSAT to organize displays and activities at Space Day to be held on Saturday, 7 May from 10:30 to 3:00 at the Air & Space Museum on the National Mall."

Dave would like to hear from anyone who has space-related amateur radio artifacts, posters, activities or anything else they'd like to display. Also needed volunteers who can staff our tables (either all day or any part), help with setup and tear down, and various other tasks.

There are always lots of interesting exhibits to visit and visitors to talk with, so attending is fun and it helps promote ham radio.

ARISS will have various flight-type hardware on hand and also expects a radio contact with ISS.

To sign up contact Dave via e-mail: w8aas@amsat.org

[ANS thanks Dave Taylor, W8AAS for the above information]

/EX

SB SAT @ AMSAT $ANS-100.04

Satellite Shorts From All Over

AMSAT News Service Bulletin 100.04
From AMSAT HQ SILVER SPRING, MD.
April 10, 2011
To All RADIO AMATEURS
BID: $ANS-100.04

2011 AMSAT Space Symposium Announced

The 2011 AMSAT Space Symposium and Annual Meeting will be held in San Jose, CA at the Wyndham San Jose Nov 4th - 6th, 2011. The AMSAT Board meeting will be at the same hotel on Thursday and Friday 3 & 4 November. The hotel rate will be $79 +taxes and offers free Wi Fi, parking and airport shuttle. Mark your calendars and plan to attend this exciting and informative event.

Thanks,
Gould, WA4SXM

K5OE Plans Maritime Mobile FM Satellite Operation This Week

Jerry, K5OE will operate on the FM amateur radio satellites while maritime mobile aboard the Carnival Ecstasy from late on 11-April till early on 16 April (CDT).

Jerry writes, "This is a family holiday but I will work as many FM satellite passes as our hectic schedule allows. This trip crosses grids between Galveston and Yucatan/Cozumel and I expect to be the most active on 12 April and 15 April (days at sea). Per IARP rules I will be signing HP/K5OE/MM while at sea and XE/K5OE/P while in Mexico."

No QSLs are needed: Just send Jerry an email request with your QSO date/time and he will confirm and send a QSL. Please wait until 18 April to send requests for a QSL card to (k5oe at amsat dot org).

Jerry notes special thanks are in order for Allen, N5AFV, for his excellent, detailed how-to guides:
http://www.qsl.net/n5afv/cruise.html and to the AO-51 command team for leaving AO-51 in mode V/U.

Hudson Valley Net

To all,
The next "HV Satcom"Net is Thursday April 14 (8PM; EDT; - 4 UTC)on the 146.97 MHz. repeater, w an echolink node of "N2EYH-L" (Repeater Pl;100 - 600 to Xmit), & all welcome!
More info :www.hvsatcom.org   (E-Mail:wa2aqh@amsat.org)

or (Mt.Beacon ARC: www.wr2abb.org/home/
73,.Stu (WA2BSS)(Director;MBARC)

N4S Special Event Station from Puerto Rico

Angel L Santana-Diaz, WP3GW announced a Special Events station N4S operating from Puerto Rico to commemorate the 50 years of the First Man in Space: Russian pilot Yuri Gagarin who in April 12, 1961 was the first human being to go into space on an 108 minute flight, and the first flight of the Space Shuttle Columbia Sunday morning on April 12th, 1981, known as mission STS-1, opening what is called the Shuttle era.

The Special Event callsign N4S will be on the air to remember these two events: one which changed the course of history, and the other helped expand our knowledge of the space sciences and in the construction of the International Space Station (ISS).

The Special Event will be active on the HF bands from 10 to 80 meters on SSB. The KP4IA-R (145.370 Mhz) and the simplex frequency 147.480 Mhz will be used for local contacts in Puerto Rico. A special electronic certificate will be issued for this occasion. For information go to http://www.qrz.com/db/wp3gw or write to wp3gw@arrl.net

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KAZAKHSTAN, SPECIAL EVENT STATIONS

50 years of manned spaceflight is the 50th anniversary of the first flight of Yuri Gagarin. Besides of other events (contest, awards, etc) there will be two special event stations active from the cosmodrome in Baikonur. R50YG (Yuri Gagarin) and R50SK (Sergej Korolev) will be QRV from Apr 6-14. Both stations will take part in the "Gagarin Cup 2011" contest and count as an additional multiplier in this contest. Furthermore there will be also the special callsign R50KEDR (KEDR was the callsign of Yuri Gagarin during his flight) activated from the launch site of Yuri Gagarin on Apr 12 from 0507 until 0655 UTC. This is the same time like the 108 minutes of Gagarin's first flight.

[ANS thanks the DXNL DX Newsletter, Issue 1722 - Apr 6, 2011
for the Russian Special Event Station information]

[ANS thanks everyone for all of the above information]

/EX

SB SAT @ AMSAT $ANS-100.05
ARISS Recent School Contacts

AMSAT News Service Bulletin 100.05
>From AMSAT HQ SILVER SPRING, MD.
April 10, 2011

To All RADIO AMATEURS
BID: $ANS-100.05

Amateur Radio on the International Space Station (ARISS) Status Report April 4, 2011

1. Recent ARISS Contacts

Lehman High School in Kyle, Texas participated in an ARISS contact with ISS astronaut Cady Coleman, KC5ZTH on Tuesday, March 29. Students researched and studied the topic of space travel to prepare their questions and were able to get 13 answered before the ISS went over the horizon. The students used the high school's own satellite tracking station for the contact. MyFOXAustin.com posted a story on the event:
http://www.myfoxaustin.com/dpp/top_stories/Lehman-HS-Students-Tal-to-Astronauts-20110329-ktbcw

On Wednesday, March 30, students from Canterbury High School, Ottawa, Ontario, Canada took part in an ARISS contact with astronaut Paolo Nespoli, IZ�JPA on the ISS. Approximately 450 students and administrators attended the event and listened as Nespoli handled 10 questions from the students. The contact was included in the Grades 9 and 10 curricula covering Earth and Space Science, Scientific Investigation Skills and Career Exploration. The Ottawa Citizen ran an article on the contact.
http://www.ottawacitizen.com/technology/Canterbury+students+enjoy+this+world+conversation/4533084/story.html

An ARISS contact was held on Saturday, April 2 between on-orbit astronaut Paolo Nespoli, IZ�JPA and students from Istituto Tecnico Industriale Statale "Leonardo da Vinci" and Istituto Comprensivo Scolastico "G. Tedeschi," Pratola Peligna, Italy. Students from both schools posed 23 questions to the astronaut over two ISS passes. The contact highlighted the telecommunications curriculum, and was supported by local radio amateurs. The event was attended by over 100 people including regional and local media representatives.

2. ARRL Covers Ham Astronauts

The American Radio Relay League (ARRL) posted a story in its March 31 ARRL Letter about two astronauts who recently earned their ham licenses.

"Two Astronauts Get Their Ham Ticket" may be found here:
http://www.arrl.org/news/two-astronauts-get-their-ham-ticket

3. AMSAT Posts News on ARISSat, Hamvention

On April 3, AMSAT (Radio Amateur Satellite Corporation) posted ARISS-related items in its News Service bulletin (ANS-093). The first story covered the anticipated activation of ARISSat-1 which will occur over April 11 - 13 in celebration of the 50th anniversary of Yuri Gagarin's first space flight.

Another story was about the upcoming Dayton Hamvention on May 20 - 22 which will feature an ARISSat prototype and will be attended by astronaut Doug Wheelock.
See: http://amsat.org/pipermail/ans/2011/000498.html

4. NASA Article on ARISS Telebridge Station

NASA wrote an article about Sacred Hearts Academy, an all-girls school in Hawaii that has a telebridge station which can be used to link schools with the ISS astronauts during ARISS contacts. ARISS members Dick Flagg and Nancy Rocheleau were interviewed for the story that talks about ARISS and other NASA programs in which the girls are involved. The story, "A Heart-to-Heart Talk" has been posted to the NASA web site. See:
http://www.nasa.gov/audience/foreducators/a-heart-to-heart-talk_prt.htm

[ANS thanks Carol, KB3LKI, for the above information]

/EX

SB SAT @ AMSAT $ANS-100.06
AMSAT Awards

AMSAT News Service Bulletin 100.06
From AMSAT HQ SILVER SPRING, MD.
April 10, 2011
To All RADIO AMATEURS
BID: $ANS-100.06

AMSAT Awards

AMSAT Director Contests and Awards, Bruce Paige, KK5DO says that congratulations are in order for the AMSAT Awards issued in the last month or so.

The following have entered into the Satellite Communicators Club for making their first satellite QSO:

Joseph Patrick, K4XZ
Scott Rights, N6PG
Dave McFadden, VE3ECV
Rene Bourrassa, VE2SUD
Paul-Ernest Plante, VE2DBX
Joe Lemieux, VE3EUS
Claudio Ferrari, IK1YRC
Robert Foster, KD0JLN

The following have earned the AMSAT Communications Achievement Award:

Branko Martincic, 9A3ST #533
Pozdrawiam Mariusz, SQ9MES #534

The following have earned the AMSAT Sexagesimal Award:
Gerry Krebs, N0JE #159

The following have earned the AMSAT Century Award:
Doug Papay, KD8CAO #41

The following have earned the South Africa Satellite Communications Achievement award:
Branko Martincic, 9A3ST #US165

The following have earned their Robert W. Barbee Jr., W4AMI Award.

Jim Bennett, KE4KOL #68
Loren Rasmussen, K7CWQ #69
Jim Adams, K0BAM #70
Bill Dzurilla, NZ5N #71

To see all the awards visit http://www.amsat.org.

[ANS thanks Bruce Paige, KK5DO for the above information]

/EX

SB SAT @ AMSAT $ANS-100.07
New OSCAR Numbers

AMSAT News Service Bulletin 100.07
From AMSAT HQ SILVER SPRING, MD.
April 10, 2011
To All RADIO AMATEURS
BID: $ANS-100.07

University of Texas FASTRAC Satellites Receive OSCAR Numbers

OSCAR Number Administrator, William A. (Bill) Tynan, W3XO issued this notice in regards to OSCAR number assignment to the two University of Texas FASTRAC satellites.

"I have received word from Thomas M Campbel through Andy MacAllister, W5ACM that the two FASTRAC satellites developed by the University of Texas Satellite Design Laboratory, Department of Aerospace Engineering and Engineering Mechanics Department have been confirmed as separated and functioning. Further, I am informed by Drew Glasbrenner, KO4MA, that these two spacecraft have been coordinated through IARU and meet the other requirements for issuance of OSCAR numbers.

Therefore I congratulate Sebastian Mu�oz Toro and all on the FASTRAC team for building testing and launching these two satellites; and by the authority vested in me by the AMSAT-NA President, I hereby issue

FASTRAC OSCAR-69 or FO-69 to FASTRAC 1 and FASTRAC OSCAR-70 to FASTRAC 2.

AMSAT-NA is pleased to welcome FO-69 and FO-70 into the family of Amateur Radio satellites. We are hopeful that they will fulfill their intended mission of furthering education and increasing interest in the Amateur Radio space program."

73 and best wishes,

William A. (Bill) Tynan, W3XO
OSCAR Number Administrator

[ANS thanks Bill Tynan, W3XO for the above information]

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In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Dee Interdonato, NB2F

From -5590888521963005l8
X-Google-Thread: 10e8ad,b6164d3857f55374,start
X-Google-NewGroupId: yes
X-Google-Thread: 10b9c8,b6164d3857f55374,start
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,gida4a23d5f63,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news1.google.com!newsfeed2.dallas1.level3.net!news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: SWPC.Webmaster@noaa.gov
Newsgroups: rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.info
Subject: Weekly Highlights of Solar and Geomagnetic Activity, 04 - 10 April 2011
Followup-To: rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space
Date: Tue, 12 Apr 2011 17:30:06 EDT
Organization: NOAA Space Weather Prediction Center
Lines: 87
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <20110412213001.CEA6333C6C@panix2.panix.com>
NNTP-Posting-Host: panix6.panix.com
X-Trace: reader1.panix.com 1302643806 3687 166.84.1.6 (12 Apr 2011 21:30:06 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Tue, 12 Apr 2011 21:30:06 +0000 (UTC)

```
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Xref: g2news2.google.com rec.radio.amateur.misc:6357 rec.radio.amateur.dx:1002
rec.radio.amateur.space:507 rec.radio.info:2334

:Product: Weekly Highlights and Forecasts
:Issued: 2011 Apr 12 1823 UTC
# Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center
# Product description and SWPC contact on the Web
# http://www.swpc.noaa.gov/weekly.html
#
#                Weekly Highlights and Forecasts
#
```

Highlights of Solar and Geomagnetic Activity
04 - 10 April 2011

Solar activity was low. Three C-class events were observed on 06 and 07 April from the East Limb. On 08 April, Region 1185 (N23, L=033, class/area Cso/100 on 05 April) was redefined as two distinct groups, the second of which was designated Region 1189 (N23, L=033, class/area Dso/040 on 08 April). Six regions, numbered 1184 through 1189, populated the visible disk by the end of the period. Of those, Region 1184 (N17, L=110, class/area Dso/170 on 04 April) was the largest. The remaining regions were small B or C type groups with simple Beta magnetic characteristics. While x-ray activity was low, several CMEs were observed during the period. The first CME launched at 02/2347 UTC from Region 1176 (S15, L=200, class/area Eko/490 on 23 March). Additional CMEs were observed on 04 April, including one from the northeast limb at 04/0509 UTC associated with a long duration B-class flare. Two more CMEs were observed on 07 April. The first originated from an active filament channel on the southeast limb and was observed in SOHO/LASCO C3 imagery at 07/0754 UTC. The second, seen at 07/1042 UTC, was thought to originate from old Region 1176 which had rotated around the west limb on 04 April. Finally, a slow partial halo CME was observed in SOHO/LASCO C2 imagery at 09/0024UTC.

No proton events were observed at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit was at high levels from 04 - 06 April. Moderate levels were observed throughout the rest of the period.

Geomagnetic field activity ranged from quiet to major storm levels.

The period began at unsettled to active levels in the midst of a coronal hole high speed stream (CH HSS). The CME observed at 02/2347 UTC arrived at the ACE spacecraft at approximately 06/0854 UTC. A sudden impulse of 24 nT was observed at Boulder at 06/0942 UTC. Solar wind speeds at ACE jumped from 494 to 559 km/s, then climbed to a peak of 591 km/s at 06/1700 UTC. The Interplanetary Magnetic Field (IMF Bt) initially rose from +07 to +14 nT following the shock and peaked at +17 nT at 06/1030 UTC. The IMF Bz turned southward following shock passage and remained mostly southward until approximately 06/2000 UTC. A maximum southward deflection of -11 nT was observed at 06/1213 UTC. The geomagnetic field was at quiet to unsettled levels in the days prior to the CME arrival (04 - 06 April). Activity increased to unsettled to major storm levels once the CME arrived. Active to minor storm levels were recorded at Boulder and minor to major storm levels detected at high latitudes. Activity decreased to mostly unsettled levels after 06/1800 UTC as Bt decreased and Bz became variable at +03 to -03 nT. Geomagnetic activity returned to quiet to unsettled levels for the remainder of the week.

Forecast of Solar and Geomagnetic Activity
13 April - 09 May 2011

Solar activity is expected to be at predominantly low levels for the entire period, with a slight chance for an M-class event when old Region 1176 returns on 17 April.

No proton events are expected at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to begin the period at high levels following the increased windspeeds associated with the CH HSS. A return to normal to moderate levels is expected from 17 April until 01 May. High levels are expected to return from 02 - 05 May following a second CH HSS. Normal to moderate levels are expected for the remainder of the period.

Geomagnetic field activity is expected to be at predominantly quiet levels from 12 April until a CH HSS arrives on 17 April. Three days of unsettled to active conditions are anticipated, with a return to mostly quiet conditions on 20 April. Quiet to unsettled conditions with isolated active and minor storm periods are expected from 28 April - 01 May due to a second recurrent CH HSS becoming geoeffective. Quiet conditions are expected to return and persist until 07 May. Unsettled to active conditions with a chance for isolated minor storm periods are expected from 08 - 09 May as a third CH HSS rotates into a geoeffective position.

```
From 8486221817746287636
X-Google-Thread: 10e8ad,17acce8808c52860,start
X-Google-NewGroupId: yes
```

```
X-Google-Attributes: gid8f86f75953,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!postnews.google.com!17g2000prr.googlegroups.com!not-for-
mail
From: devi <satyamsivam9030@gmail.com>
Newsgroups: rec.radio.amateur.space
Subject: HOT FOR TENAGERS
Date: Wed, 13 Apr 2011 10:37:53 -0700 (PDT)
Organization: http://groups.google.com
Lines: 22
Message-ID: <f8f18806-870a-471c-929c-d87f798cc4ac@17g2000prr.googlegroups.com>
NNTP-Posting-Host: 117.199.240.104
Mime-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
X-Trace: posting.google.com 1302716273 13867 127.0.0.1 (13 Apr 2011 17:37:53 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Wed, 13 Apr 2011 17:37:53 +0000 (UTC)
Complaints-To: groups-abuse@google.com
Injection-Info: 17g2000prr.googlegroups.com; posting-host=117.199.240.104;
posting-account=xYWSigoAAADp0Q2VAMlANM4syM5q3uRr
User-Agent: G2/1.0
X-HTTP-UserAgent: Mozilla/5.0 (Windows; U; Windows NT 5.1; en-US; rv:1.9.2.16)
 Gecko/20110319 Firefox/3.6.16,gzip(gfe)
Xref: g2news2.google.com rec.radio.amateur.space:508

    hot lipkiss
http://hotactressstoyou.blogspot.com/2011/04/lipkiss-2.html
               lipkiss in without dress
http://hotactressstoyou.blogspot.com/2011/04/lipkiss.html
                seepika padukone sexy back look
http://hotactressstoyou.blogspot.com/2011/04/deepika-padukone.html
                   sexy katrina kaif
http://hotactressstoyou.blogspot.com/2011/04/katrina-kaif.html
            beauty keerthi chawla
http://hotactressstoyou.blogspot.com/2011/04/keerthi-chawla.html
               saloni sexy photos
http://hotactressstoyou.blogspot.com/2011/04/saloni.html
             deeksha seth in a hot saree
http://hotactressstoyou.blogspot.com/2011/04/deeksha-seth.html
             asin hot wallpapers
http://hotactressstoyou.blogspot.com/2011/04/asin.html
            ramba in a red dress
http://hotactressstoyou.blogspot.com/2011/04/ramba.html
              sexy ilieana is in scert
http://hotactressstoyou.blogspot.com/2011/04/ileana.html




From 5506038310681367350
X-Google-Thread: 10e8ad,d95f9b63469fbaf1,start
X-Google-NewGroupId: yes
X-Google-Thread: 10b9c8,d95f9b63469fbaf1,start
```

```
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,gida4a23d5f63,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!newsfeed2.dallas1.level3.net!
news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-103 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Wed, 13 Apr 2011 19:51:19 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 2007
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <003601cbfa35$a340ba50$e9c22ef0$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1302738679 24415 166.84.1.6 (13 Apr 2011 23:51:19 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Wed, 13 Apr 2011 23:51:19 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news1.google.com rec.radio.amateur.space:484 rec.radio.info:2261
```

This report is organized into four (4) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - deborbited/returned satellites

SB SAT @ AMSAT W8ISS $WSR-103.S1
WSR 103 Part 1 04/13/2011

AMSAT NEWS SERVICE BULLETIN 103.S1
FROM AMSAT HQ SILVER SPRING, MD, April 13, 2011
TO ALL RADIO AMATEURS
BID: $WSR-103.S1

HO-68 HOPE-1 (CAS-1)(XW-1)
Catalog Number: 36122

Launch Date: December 15, 2009 0231z
Launch site: Taiyuan Space Center, PRC

Status: By schedule

Callsign:
Broadcast: BJ1SA-11
BBS: BJ1SA-12

Uplinks: 145.8250 MHz FM, PL 67.0 Hz.
145.9250 - 145.9750 MHz SSB/CW
145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
435.7650 - 435.7150 MHz SSB/CW
435.6750 MHz AFSK 1200 BPS

Beacon: 435.7900 MHz CW

Mode and Antenna Polarization:
V: LHCP 2.0dBi max
U: RHCP 3.0dBi max

IARU coordination page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108

For more information about XW-1 (CAS-1):
http://
[02092011]
=====
SO-67 SumbandilaSat
Catalog Number: 35870
Launch Date: September 17, 2009 1555z
Launch site: Baikonur, Kazakhstan

Status: By schedule

Callsign: ZS0SUM

Uplink: 145.875MHz FM tone 233.6 Hz
Downlink: 435.345MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

For more information about SO-67:
http://www.amsatsa.org.za/
[02092011]
=====
DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational
Current Mode: Science Mode - Beacon ONLY

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink: 435.530 to 435.570 MHz

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68
[02092011]
=====
VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05, 2005 0444z
Launch site: Satish Dhawan Space Centre, India

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.9360 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

To know what transponder is switched on please listen for the beacon that is active. Each transponder has a different beacon.
[02092011]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004 0745z
Launch site: Baikonur, Kazakhstan

Status: Operational

Current Mode(s):
Voice repeater: V/u
Uplink: 145.880 MHz FM
Downlink: 435.300 MHz FM

Telemetry: By Command ONLY
Downlink: 435.150MHz 9k6

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.860 MHZ FM
145.880 MHz USB
145.880 MHz FM
145.920 MHz FM
145.920 MHz FM - 67 Hz PL tone burst
1268.705 MHz FM
Digital Downlinks: 435.150 MHz FM 38k4 PBP, 1 watt output
435.150 MHz FM 9k6 Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Pacsat Broadcast Protocol
1268.703 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[03292011]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002 1700z
Launch site: Baikonur, Kazakhstan

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz. The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10 minute timer.
[02092011]
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993 0140z
Launch site: Kourou, French Guiana

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[02092011]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974
Launch site: Vandenberg AFB, California, USA

Status: Operational

Current Mode: Alternating between Mode A and B every 24 hours

```
Uplink:   145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink:  29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons:   29.502 MHz CW
          145.972 MHz CW
```

435.100 MHz CW
2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
[02092011]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998 0640z (ZARYA module)
Launch sites: Baikonur, Kazakhstan
Kourou, French Guiana
Uchinoura Space Center, Japan
Kennedy Space Center, Titusville, Florida, USA

Status: Operational

Current Active Modes: FM Repeater - OFF
Voice - V/v
BBS - OFF
APRS - OFF
SSTV - OFF

Expedition 27 Crew:

Commander:	Dmitry Kondratyev	
Flight Engineer:	Catherine Coleman	KC5ZTH
Flight Engineer:	Paolo Nespoli	IZ0JPA

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[03212011]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-103.S2
WSR 103 Part 2 04/13/2011

AMSAT NEWS SERVICE BULLETIN 103.S2
FROM AMSAT HQ SILVER SPRING, MD, April 13, 2011
TO ALL RADIO AMATEURS
BID: $WSR-103.S2

O/OREOS
Catalog Number: 37224
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: On Orbit

Uplink:
Downlink: 437.035 MHZ AX.25

Beacon:

Callsign:

URL: http://www.ooreos.org/
[02092011]
=====
Rax-1 Radio Aurora Explorer
Catalog Number: 37223
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

```
Status: On Orbit

Uplink:
Downlink: 437.505 MHz 9k6 GMSK

Beacon:

Callsign: RAX-1

URL: http://rax.engin.umich.edu/
[02092011]
=====
Fastrac-1 Sara Lily
Catalog Number: 37225
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: On orbit

Uplink 1: 145.980 MHz 1k2 baud
Uplink 2: 145.825 MHz 1k2 baud
Downlink: 437.345 MHz 1k2 and 8k6 baud

Beacon:   437.435 MHz 1k2 AX.25

Callsign: Fast1

URL: http://fastrac.ae.utexas.edu/index.php
[02092011]
=====
Fastrac-2 Emma
Catalog Number: 37227
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: On Orbit

Uplink 1: 435.025 MHz 1k2 baud
Uplink 2: 437.435 MHz 9k6 baud
Downlink: 145.825 MHz

Beacon:   145.825 MHz 1k2 AX.25

Callsign: Fast2

URL: http://fastrac.ae.utexas.edu/index.php
[02092011]
=====
StudSat
Catalog Number: 36796
Launch Date: July 12, 2010 0352z
Launch site: Satish Dhawan Space Centre, India
```

```
Status: On Orbit

Uplink:   437.505MHz, 9600bps FSK
Downlink: 437.505MHz, 9600bps FSK
Beacon  : 437.505MHz,   20bps ASK
[02092011]
=====
TIsat-1
Catalog Number: 36799
Launch Date: July 12, 2010 0352z
Launch site: Satish Dhawan Space Centre, India

Status: On orbit

Callsign: HB9DE

Uplink:   145.980MHz FM, AFSK
Downlink: 437.305MHz FM, AFSK
Beacon:   437.305MHz CW
[02092011]
=====
HO-68 HOPE-1 (CAS-1)(XW-1)
Catalog Number: 36122
Launch Date: December 15, 2009 0231z
Launch site: Taiyuan Space Center, PRC

Status: By schedule

Callsign:
Broadcast:    BJ1SA-11
BBS:         BJ1SA-12

Uplinks:   145.8250 MHz FM, PL 67.0 Hz.
           145.9250 - 145.9750 MHz SSB/CW
           145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
           435.7650 - 435.7150 MHz SSB/CW
           435.6750 MHz AFSK 1200 BPS

Beacon:    435.7900 MHz CW

IARU coordination page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108

For more information about XW-1 (CAS-1):
http://
[02092011]
=====
SwissCube
Catalog Number: 35932
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India
```

```
Status: Operational

Callsign: HB9EG

Beacon(100mw): 437.5050MHz CW
Beacon(1w):    437.5050MHz FSK 1k2bps
[02092011]
=====
UWE-2
Catalog Number: 35934
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: In Orbit

Beacon(500mw): 437.3850 MHz AFSK 1k2bps
               437.3850 MHz FSK 9k6bps
[02092011]
=====
ITUpsAT1
Catalog Number: 35935
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Beacon(100mw): 437.325MHz CW
Beacon(1w): 437.325MHz 19k2bps
[02092011]
=====
BEESAT
Catalog Number: 35933
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Callsign: DP0BEE

Beacon(100mw): 436.000MHz CW
Beacon(500mw): 436.000MHz GMSK 4k8bps
Beacon(500mw): 436.000MHz GMSK 9k6bps
[02092011]
=====
CP-6
Catalog Number: 35003
Launch Date: May 19, 2009 2355z
Launch site: Wallops Island, Virginia, USA

Status: Operational

Downlink: 437.365 MHz 1k2 AFSK
```

```
[02092011]
=====
HAWKSAT 1
Catalog number: 35004
Launch Date: May 19, 2009 2355z
Launch site: Wallops Island, Virginia, USA

Status: operational

Downlink: 437.345 MHz ?
[02092011]
=====
Pharmasat
Catalog Number: 35002
Launch Date: May 19, 2009 2355z
Launch site: Wallops Island, Virginia, USA

Status: Operational

Downlink: 437.465 MHz 1k2 AFSK
[02092011]
=====
ANUSAT
Catalog Number: 34808
Launch Date: April 20, 2009 0115z
Launch Site: Satish Dhawan Space Centre, India

Status: ?

Downlink:  435.000 MHz
Uplink:    145.800 MHz

Telemetry: 137.400 MHz
[02092011]
=====
SOHLA-1 (ASTRO TECH.)
Catalog Number: 33496
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational

Proposed Frequencies and Modes:
Downlink: 437.505 MHz AFSK/CW
Beacon:   437.505 MHz AFSK/CW

Callsign:

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=101
[02092011]
=====
KAGAYAKI (Solan Co.)
```

```
Catalog Number: 33495
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: In Orbit

Downlink: 437.375 MHZ    FSK9k6/CW
Beacon:   437.375 MHz    FSK9k6/CW

IARU coordination status page:

AMSAT-NA webpage:

[02092011]
=====
STARS (Kagawa Univ.) (Twin Satellites)
Catalog Number: 33498
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational ?

Downlinks: 437.485 MHz FM/CW
           437.465 MHz FM/CW
Beacons:   437.305 MHz FM/CW
           437.275 MHz FM/CW

Callsigns: JR5YBN
           JR5YBO

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=99

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=121&retURL
=/satellites/status.php
[02092011]
=====
KKS-1 (Tokyo MCIT)
Catalog Number: 33499
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational

Downlink:  437.455 MHz AFSK/CW
Beacon:    437.385 MHz AFSK/CW

Callsign: JQ1YYY

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=107
```

```
AMSAT-NA webapge:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=120&retURL
=/satellites/status.php
[20092011]
=====
PRISM (Tokyo Univ.)
Catalog Number: 33493
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational ?

Downlink: 437.425 MHz AFSK/GMSK/CW
Beacon:   437.250 MHz AFSK/GMSK/CW

Callsign: JQ1YCX

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=97

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=119&retURL
=/satellites/status.php
[02092011]
=====
RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number: 32953
Launch Date: May 23, 2008 1520z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational

Curent Modes: Telemetry
              Audio
              Images

Downlinks: 435.315 MHz
           435.215 MHz

AMSAT-NA website:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=115&ret
URL=/satellites/status.php

Official website:
http://www.npopm.com/?cid=leoca&caid=43
[02092011]
=====
CanX-2
Catalog number: 32790
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational in range of ground station only
```

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[02092011]
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Downlink: 437.425 MHz 1k2 baud packet

For the latest project status update please visit the AAUSAT-II web page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[02092011]
=====
CO-65 CUTE-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Digipeater

Downlink: 437.475 MHz 9k6 Packet
Uplink: 1267.600 Mhz

Telemetry Beacon:
Downlink: 437.2750 MHz CW

For the latest project status update please visit the Cute-1.7+APD II web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78

Command Station blog website:
http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=112&retURL=/satellites/status.php
[02092011]

=====
Compass-1
Catalog number: 32787
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Current Mode: 4k8 MSK packet

Uplink: 145.980 MHz FM
Downlink: 437.275 Mhz CW
          437.405 MHz Packet

For the latest project status update please visit the Compass 1 web page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=114&retURL=/satellites/status.php
[02092011]
=====
CO-66 Seeds II
Catalog number:
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Downlink: 437.485 MHz

Callsign: JQ1YGU

For the latest project status update please visit the Seeds 2 web page: http://cubesat.aero.cst.nihon-u.ac.jp/english/seeds_2_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=113&retURL=/satellites/status.php
[02092011]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007 0702z
Launch site: Baikonur, Kazakhstan

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=94&retURL=/satellites/status.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=72
[02092011]
=====
CP3
Catalog Number: 31129
Launch Date: April 17,2007 0702z
Launch site: Baikonur, Kazakhstan

Status: Operational

Current Mode: /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[02092011]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005 0652z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon: 437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/xivpicte.htm
[02092011]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003 1415z

Launch site: Plesetsk Missile and Space Complex, Russia

Status: ?????

Current Mode: /u

Beacon: 436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=96&retURL=/satellites/status.php

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[02092011]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004 0745z
Launch site: Baikonur, Kazakhstan

Status: Operational

Current Mode(s):
Voice repeater: V/u
Uplink: 145.880 MHz FM
Downlink: 435.300 MHz FM

Telemetry:
Downlink: 435.150MHz 9k6

Analog voice downlink:	435.300 MHz FM
	435.150 MHz FM
	2401.200 Mhz FM
Analog voice uplink:	145.860 MHZ FM
	145.880 MHz USB
	145.880 MHz FM
	145.920 MHz FM
	145.920 MHz FM - 67 Hz PL tone burst
	1268.700 MHz FM
Digital Downlinks:	435.150 MHz FM 38k4 PBP, 1 watt output
	435.150 MHz FM 9k6 Pacsat Broadcast Protocol
	2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:	145.860 MHz FM 9k6 Pacsat Broadcast Protocol
	1268.708 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon:	435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear

U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[032992011]
=====
QuakeSat
Catalog Number: 27845
Launch Date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Telemetry only

Current Mode: 9600 baud data packet

Mode U packet
Downlink: 436.675 MHz 9k6 BPS

Quakesat webpage:
http://www.quakefinder.com/services/quakesat-ssite/
[02252011]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational

Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=69&retURL
=/satellites/status.php
[02092011]
=====
NO-44 PCSAT
Catalog number: 26931

Launch Date: September 30, 2001 0240z
Launch site: Kodiak Launch Complex, Alaska, USA

Status: Telemetry only

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[02092011]
=====
RS-22 RADIO SPORT 22 (MOZHAYETS 4)
Catalog number: 27939
Launch Date: September 27, 2003 0612z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational - 70cm cw only

Current Mode: /u

CW Beacon - 435.352 MHz
            145.818 MHz

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=76&retURL
=/satellites/status.php
[02092011]
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990
Launch site: Kourou, French Guiana

Status: CW Beacon only

Uplinks: 145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink: 437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12

General information and telemetry samples can be found at:

```
www.telecable.es/personales/ea1bcu
[02092011]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984
Launch site: Vandenburg AFB, California, USA

Status: Operational

Current Mode:  /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon:           435.025 MHz
Mode-S Beacon:     2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[02092011]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998 0640z (ZARYA module)
Launch sites: Baikonur, Kazakhstan
              Kourou, French Guiana
              Uchinoura Space Center, Japan
              Kennedy Space Center, Titusville, Florida, USA

Status: Operational

Current Active Modes: FM Repeater - OFF
                      Voice -       V/v
                      BBS -         OFF
                      APRS -        OFF
                      SSTV -        OFF


Expedition 27 Crew:
Commander:                Dmitry Kondratyev
Flight Engineer:          Catherine Coleman     KC5ZTH
Flight Engineer:          Paolo Nespoli         IZ0JPA


Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink:   145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
```

Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time line is NOT translated from Russian and posted.
[03212011]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-103.S3
WSR 103 Part 3 04/13/2011

AMSAT NEWS SERVICE BULLETIN 103.S3
FROM AMSAT HQ SILVER SPRING, MD, April 13, 2011
TO ALL RADIO AMATEURS
BID: $WSR-103.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

NANOSAIL-D
Catalog Number:
Ejection Date: January 17, 2011

Status: On orbit

Downlink: 437.270 MHz AX.25

URL: http://nanosaild.engr.scu.edu/dashboard.htm
[01272011]
=====
CP4
Catalog Number: 31132
Launch Date: April 17, 2007

Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon: 437.325 MHz CW

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=79
[09062010]
=====
LIBERTAD-1
Catalog Number: 31128
Launch Date: April 17, 2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink: 145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[09062010]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: Non-Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder: 145.825 Mhz FM
[09062010]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

```
Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency:  437.305
                             2407.250

Official Website: http://www.ncube.no
[09062010]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink:         437.250 MHz FM 67Hz CTCSS
Voice Downlink:      2401.835 MHz FM
Packet Up/Downlink:   437.250 MHz 9k6 packet
Packet Downlink      2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[09062010]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non-Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[09062010]
=====
CANX-1
Catalog Number: 27847
Launch Date: June 30, 2003

Status: Non-Operational

Downlink: 437.8800 MHz AFSK 1k2bps
[06052009]
=====
DTUSAT
Catalog Number: 27842
Launch Date: June 30, 2003

Status: Non-Operational

Current Mode: 2k4 AFSK Packet last reported

Downlink: 437.475MHz
```

Officail webpage: http://dtusat1.dtusat.dtu.dk/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=101&retURL=satellites/all_oscars.php
[02212009]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)

Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Telemetry only

Uplinks: 145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[03302009]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

```
Everyone is welcome to use the digipeating/APRS features of Sapphire,
as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS:                SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink:   145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
V-band:   145.840 -  145.990 MHz CW/LSB
U-band:   435.550 -  435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks
---------
S2-band:  2401.225 -  2401.475 MHz CW/USB
```

K-band: 24048.010 - 24048.060 MHz CW/USB
Beacon: 2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)

BEACON	General Beacon(GB)	Middle Beacon(MB)	Engineering Beacon(EB)
2 m	none	145.898 MHz	none
70cm	435.438 MHz	435.588 MHz	435.838 MHz
13cm(1)	2400.188 MHz	2400.338 MHz	2400.588 MHz
13cm(2)	2401.173 MHz	2401.323 MHz	2401.573 MHz
3cm	10450.975 MHz	10451.125 MHz	10451.375 MHz
1.5cm	24047.885 MHz	24048.035 MHz	24048.285 MHz

[07162007]

=====

OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]

=====

UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]

=====

SO-35 SUNSAT
Catalog Number: 25636
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz

```
Mode J Digipeater:         145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Non-Operational

Current Modes:
Telemetry : /u

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign:       4XTECH-12
```

```
More information of GO-32 can be found at:
http://asri.technion.ac.il/techsat/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=14&retURL
=/satellites/status.php
[07172010]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink:   145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
MO-30 UNAMSAT-2
Catalog Number: 24305
Launch Date: September 5, 1996

Status: Non-operational

Downlink:      435.1380 MHz AFSK 1200 BPS
Downlink:      435.2060 MHz AFSK 1200 BPS
Uplink:        145.8150 MHz AFSK 1200 BPS
Uplink:        145.8350 MHz AFSK 1200 BPS
Uplink:        145.8550 MHz AFSK 1200 BPS
Uplink:        145.8750 MHz AFSK 1200 BPS
[06042009]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Non-operational
Current Mode: V/u (Mode JA)

Voice/CW (Mode JA)
Uplink:   145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon:   435.795 MHz

Digital Mode JD
Uplinks:  145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
```

```
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage:
http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's
CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/
fo29cwts.htm
[11062010]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Non-operational

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign:       POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012009]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK
```

```
Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
AO-24 ARSENE
Catalog Number: 22654
Launch Date: May 13, 1993

Status: Non-operational

Uplink:    435.0625 MHz FM 1k2bps AFSK
           435.1125 MHz FM 1k2bps AFSK
           435.1375 MHz FM 1k2bps AFSK
Downlink:  145.9750 MHz FM 1k2bps AFSK
          2446.5025 MHz FM 1k2bps AFSK

Beacon:    2446.4700 MHz CW

Broadcast callsign:
BBS:
[12162009]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]
=====
UO-22 UOSAT
```

```
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
```

```
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
[05012006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: non-operational

Current Mode:  V/u

Uplink:         145.900 MHz FM 1200-baud Manchester FSK (reserved)
                145.920 MHz FM VOICE
                145.940 MHz FM 1200-baud Manchester FSK (reserved)
                145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink:       437.026 MHz USB VOICE
                (1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[07242009]
=====
UO-15 UoSAT-4
Catalog Number: 20438
Launch Date: January 22, 1990

Status: Non-operational

Uplink: ?
Downlink: 435.1250MHz (?)
          435.1200MHz (?)
[06042009]
=====
UO-14 UoSAT-3
```

```
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon:   145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
```

```
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink  29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
Beacons:   29.450 MHz
          435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB
```

Beacon 1: 29.352 MHz (intermittent)
Beacon 2: 29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB

Beacon: 145.860 MHz

Robot: 145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-103.S4
WSR 103 Part 4 04/13/2011

AMSAT NEWS SERVICE BULLETIN 103.S4
FROM AMSAT HQ SILVER SPRING, MD, April 13, 2011
TO ALL RADIO AMATEURS
BID: $WSR-103.S4

THE FOLLOWING SATELLITES HAVE RE-ENTERED OR HAVE BEEN RETURNED SAFELY:

CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Re-entered
Re-entered: October 25, 2009

Uplink: 1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=56
[09062010]
=====
BEVO-1 (DRAGONSAT-1)
Catalog Number: 35690
Launch Date: May 19, 2009

Status: Re-entered
Re-entered:

Downlink: 437.325 MHz 9k6 GMSK
          437.325 MHz CW 20wpm
[07312009]
=====
AggieSat2 (DRAGONSAT-2)
Catalog Number: 35690
Launch Date: May 19, 2009

Status: Re-entered
Re-entered:

Downlink: 436.250 MHz 9k6 FHSS
[11112009]
=====
Pollux
Catalog Number: 35693
Launch Date: July 31, 2009

Status: Re-entered
Re-entered:

Callsign: POLLUX-1

Downlink: 145.825MHz 1k2 AX.25
[09062010]
=====
Castor (ANDE-2)
Catalog Number: 35694
Launch Date: July 31, 2009

Status: Re-entered
Re-entered:

Callsign: KD4HBO-1

Downlink: 145.825 MHz 1k2 AX.25
[09062010]
=====
NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: July 28, 2008

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[01012009]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink: 145.825 Mhz FM APRS AX25
APRS Uplink: 145.825 MHz FM APRS AX25
Voice/PSK31 Uplink: 28.120 MHz

Packet to Voice ID: RAFT
[06112007]
=====
GENESAT-1
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Re-Entered
Re-entered date: August 8, 2010

Current Mode: /u

Callsign: KE7EGC

Telemetry Beacon Downlink: 437.0695 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[08082010]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Re-Entered
Re-entered: June 18, 2008

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon: 437.2750 MHz CW

Callsign: JR8YJT
[01012009]
=====
SO-43 Starshine 3
Catalog Number: 26929
Launch Date: September 30, 2001

Status: Re-Entered
Re-entered: January 21, 2003

Beacon: 145.825Mhz
[02212009]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)

* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at}
amsat.org
NNNN
/EX

From 7063258193816456511
X-Google-Thread: 10e8ad,972435121e8d871d,start
X-Google-NewGroupId: yes
X-Google-Thread: 10b9c8,972435121e8d871d,start
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,gida4a23d5f63,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!news2.google.com!news.glorb.com!
news2.glorb.com!news-out.readnews.com!news-xxxfer.readnews.com!panix!
rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-107 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sat, 16 Apr 2011 21:14:22 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 297
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <001701cbfc9c$c2f11bb0$48d35310$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com

```
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1303002863 18925 166.84.1.6 (17 Apr 2011 01:14:23 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 17 Apr 2011 01:14:23 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news1.google.com rec.radio.amateur.space:485 rec.radio.info:2271
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AMSAT NEWS SERVICE
ANS-107

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:

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* Satellite Grid Opportunities From Mexico
* UK Marconi Day Special Events Station Plans Satellite Operation
* AO-51 Operational Again After Short Glitch
* Reminder: AMSAT at National Air and Space Museum's Space Day
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SB SAT @ AMSAT $ANS-107.01
Come See AMSAT at Dayton Hamvention 2011

AMSAT News Service Bulletin 107.01
>From AMSAT HQ SILVER SPRING, MD.
April 17, 2011
To All RADIO AMATEURS
BID: $ANS-107.01

The 2011 Dayton Hamvention will be held this year May 20-22. AMSAT will have new hats, golf shirts and tee shirts. Also featured will be a free "gift" with every new or renewing membership.

This year featured AMSAT attractions include:

+ Operational ARISSat-1 Prototype
+ Astronaut Doug Wheelock, KF5BOC, will be attending as a special guest of the ARRL and AMSAT. Doug will visit the AMSAT booth on both Friday and Saturday.
+ AMSAT theme for 2011 is "Providing Education Through Amateur Satellites"

Check out AMSAT's Hamvention posted at ...
http://www.amsat.org/amsat-new/hamvention/2011/Dayton.php
for the latest events:

+ AMSAT theme for 2011 is "Providing Education Through Amateur Satellites"

+ ARISSat-1

+ AMSAT Thursday Night Get-together

+ AMSAT Forum

+ AMSAT/TAPR Banquet

This is the 60th year of the Dayton Hamvention, sponsored by DARA (Dayton Amateur Radio Association). As has been the case for the many years the Hamvention will be at the Hara Arena Complex on the north side of Dayton. Further information on Hamvention 2011, including advance ticket sales and motel accommodations, can be found at http://www.hamvention.org.

AMSAT will occupy the same booths (444-449) in Ball Arena, right across from the ARRL area and just inside the door from the Satellite Demonstration area. Plan to visit all of the AMSAT activities!

AMSAT/TAPR Banquet

The fifth annual AMSAT/TAPR Banquet will be Friday night May 20 at the Kohler Presidental Banquet Center. The Banquet speaker will be David Rowe, VK5DGR talking on The Village Telco. Additional information about the talk can be found on the AMSAT Web site, 2011 Hamvention, Banquet page.

Seating is limited and reservations are required. Go to the Dayton Banquet 2011 link:
http://www.amsat.org/amsat-new/hamvention/2011/Banquet.php to find information about reservations and additional information.

AMSAT Hotel

The AMSAT block of rooms at the Fairborn Country Inn & Suites are now closed. Please make your own accommdations for Hamvention 2011.

[ANS thanks Gould Smith, WA4SXM for the above information]

/EX

SB SAT @ AMSAT $ANS-107.02
Satellite Grid Opportunities From Mexico

AMSAT News Service Bulletin 107.02
>From AMSAT HQ SILVER SPRING, MD.
April 17, 2011
To All RADIO AMATEURS
BID: $ANS-107.02

David XE3DX recently posted that he will be operating from EK08, EK09, EK18 and EK19 from April 17th to the 30th. These are grids that you don't hear very often so if you are chasing grids, be on the lookout and please give David some room. Also heard on AO-51 from EK18 was XE1SOV.

David uses LOTW, so if you make a contact you'll be able to get confirmation without sending for a card. If he doesn't get your call right, there will be no match in LOTW.

[ANS thanks David XE3DX and John K8YSE for the above information]

/EX

SB SAT @ AMSAT $ANS-107.03
UK Marconi Day Special Events Station Plans Satellite Operation

AMSAT News Service Bulletin 107.03
>From AMSAT HQ SILVER SPRING, MD.
April 17, 2011
To All RADIO AMATEURS
BID: $ANS-107.03

On Saturday, April 30, 2011 two members of the Barry Amateur Radio Society, South Wales, UK will be activating a Marconi Day International Special Event Station from Flatholm Island located in the Bristol Channel. They plan to operate on many of the HF bands and amateur satellites when access is possible. They will be using the club callsign GB4MBC. Operation from Flatholm Island is subject to weather for landing. Additional information will be posted at QRZ.com.

[ANS thanks Ken Eaton, GW1FKY for the above information]

/EX

SB SAT @ AMSAT $ANS-107.04
AO-51 Operational Again After Short Glitch

AMSAT News Service Bulletin 107.04
>From AMSAT HQ SILVER SPRING, MD.
April 17, 2011
To All RADIO AMATEURS
BID: $ANS-107.04

This week the AO-51 Command Team received reports that AO-51 was down. Mark N8MH, AO-51 Command Station noted, "Eclipses are still getting longer, and the sun angle is getting worse too. It probably has experienced a low battery trip." The AO-51 Command Team requests that users post their operational information on the OSCAR Status Page: http://oscar.dcarr.org/

The good news was that AO-51 resumed operation in time for Steve, KJ4FEL to make his first satellite contact. Steve wrote, "AO-51 was working fine for the 2158Z, 4-13-2011 pass over my QTH (EM95md) during which I made my FIRST successful satellite QSO ever with K8YSE. Thank You K8YSE!!"

Heard from Mark, N8MH, "People like you are the reason that Drew KO4MA and I dropped what we were doing to run home from work early today to turn AO-51

back on. We're happy to hear about your first QSO! Congrats."

Keep up with the latest AO-51 Control Team News on-line at:
http://www.amsat.org/amsat-new/echo/CTNews.php

[ANS thanks Mark, N8MH for the above information]

/EX

SB SAT @ AMSAT $ANS-107.05
Reminder: AMSAT at National Air and Space Museum's Space Day

AMSAT News Service Bulletin 107.05
>From AMSAT HQ SILVER SPRING, MD.
April 17, 2011
To All RADIO AMATEURS
BID: $ANS-107.05

Dave Taylor, W8AAS says that, "The Smithsonian National Air and Space Museum has invited AMSAT to organize displays and activities at Space Day to be held on Saturday, 7 May from 10:30 to 3:00 at the Air & Space Museum on the National Mall."

Dave would like to hear from anyone who has space-related amateur radio artifacts, posters, activities or anything else they'd like to display. Also needed volunteers who can staff our tables (either all day or any part), help with setup and tear down, and various other tasks.

There are always lots of interesting exhibits to visit and visitors to talk with, so attending is fun and it helps promote ham radio.

ARISS will have various flight-type hardware on hand and also expects a radio contact with ISS.

To sign up contact Dave via e-mail: w8aas@amsat.org

[ANS thanks Dave Taylor, W8AAS for the above information]

/EX

SB SAT @ AMSAT $ANS-107.06
AMSAT France Disbands

AMSAT News Service Bulletin 107.06
>From AMSAT HQ SILVER SPRING, MD.
April 17, 2011
To All RADIO AMATEURS
BID: $ANS-107.06

Reports have been received that AMSAT France appears to have disbanded. According to a notice published in France URC News on Monday April 11th, 21 leaders present at an Extraordinary General Assembly of AMSAT France voted over the weekend of April 9th to dissolve the organization.

The actual vote is reported as 11 votes in favor of going out of business and 10 in favor of continuing. A short news release gave no reason for this decision. The original press release, in French is on line at: http://tinyurl.com/3spvx6l.

[ANS thanks the URC News Site for the above information]

/EX

SB SAT @ AMSAT $ANS-107.07
Satellite Shorts From All Over

AMSAT News Service Bulletin 107.07
>From AMSAT HQ SILVER SPRING, MD.
April 17, 2011
To All RADIO AMATEURS
BID: $ANS-107.07

+ William Shatner narrates a look back at how the idea for the space
  shuttle was born; it also details what needs to happen for a space
  shuttle mission to take place. Watch the video at:
  http://www.universetoday.com/84875/captain-kirk-and-the-space-shuttle/

+ NASA has a downloadable poster showing Fun Facts About the Space Shuttle Orbiters posted at: http://tinyurl.com/6kblwea

+ Technical papers are solicited for presentation at the 30th Annual ARRL and TAPR Digital Communications Conference to be held September 16-18, 2011 in Baltimore, Maryland. These papers will also be published in the Conference Proceedings (you do NOT need to attend the conference to have your paper included in the Proceedings). The submission deadline is July 31, 2011. Please send papers to: Maty Weinberg, ARRL, 225 Main St, Newington, CT 06111. You can make your submission via e-mail to: maty@arrl.org

+ Luis, LU6QI continues to report stretching the AO-7 footprint with a DX contact with Bob, N3LL in SSB Mode B on April 5, 2011, covering a distance of 6914.6 km. Luis also contacted Adrian ZF8/ZF2AE a few days before, covering more than 6000 km. Luis wrote, "I am QRV for other stations who would like to attempt a QSO either in SSB or CW. My grid locator is FF66TQ. My mail is lu6quintas@gmail.com".

+ Hams like science so you will be interested in learning some quick facts about NASA's next-generation space telescope. NASA has created a short video to show you just how literally "cool" the James Webb Space Telescope really is. In a 4 minute video produced at NASA's Goddard Space Flight Center in Greenbelt, Md., astrophysicist Amber Straughn takes you on a quick journey of facts and images to explain what the Webb will tell us about the cosmos. Watch the video at: http://tinyurl.com/3ze2ulq (Spacedaily.com)

+ The 2011 AMSAT Space Symposium and Annual Meeting will be held November 4-6 at the Wyndham San Jose in San Jose, California. The AMSAT Board meeting will be at the same hotel on Thursday and Friday November 3 - 4. A special hotel rate for attendees has been negotiated that includes free WiFi, parking and airport shuttle.

[ANS thanks everyone for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office. And with that keep in mind the ham who was the drummer in an orchestra. When he missed a beat the conductor commented that players who cannot follow notes have their instrument taken away and are given two sticks so they can be the drummer. The drummer was heard mentioning that when you cannot play the drums they take away one of the sticks and make you the conductor.

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM

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From: SWPC.Webmaster@noaa.gov
Newsgroups:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.info
Subject: Weekly Highlights of Solar and Geomagnetic Activity, 11 - 17 April 2011
Followup-To: rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space
Date: Tue, 19 Apr 2011 17:30:06 EDT
Organization: NOAA Space Weather Prediction Center
Lines: 83
Approved: RRI Admin <rec-radio-info-request@panix.com>
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X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Xref: g2news1.google.com rec.radio.amateur.misc:6120 rec.radio.amateur.dx:962
rec.radio.amateur.space:486 rec.radio.info:2276
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:Product: Weekly Highlights and Forecasts
:Issued: 2011 Apr 19 1900 UTC
# Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center
# Product description and SWPC contact on the Web
# http://www.swpc.noaa.gov/weekly.html
#
#                 Weekly Highlights and Forecasts
#
```

Highlights of Solar and Geomagnetic Activity
11 - 17 April 2011

Solar activity was at low to moderate levels. Low activity occurred during 11 - 14 April with C-class flares from Regions 1185 (N18, L=025, class/area Cso/100 on 05 April), 1190 (N13, L=338, class/area

Eki/440 on 16 April), and 1193 (N17, L=266, class/area Eai/430 on 17 April). Activity increased to moderate levels on 15 April due to an M1/1f flare at 15/1712 UTC from Region 1190 associated with minor discrete radio emission. Region 1190 showed gradual spot growth during 12 - 15 April and displayed a beta-gamma magnetic configuration, then began to gradually decay on 16 April. Region 1193, which also contained a beta-gamma magnetic configuration, showed gradual spot growth during 13 - 17 April. An Earth-directed coronal mass ejection was observed early on 15 April, associated with a filament disappearance from the northeast quadrant late on 14 April. Estimated plane-of-sky velocity was for the CME was 390 km/s, based on an analysis of SOHO/LASCO coronagraph images. Activity decreased to low levels during 16 - 17 April with C-class flares from Regions 1185, 1190, and 1193.

No proton events were observed at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit was at normal to moderate levels during 11 - 13 April. Fluxes increased to moderate to high levels during 14 - 16 April, then decreased to normal to moderate levels during 16 - 17 April.

Geomagnetic activity was at quiet to active levels on 11 April. Activity increased to quiet to minor storm levels on 12 April with major storm periods observed at high latitudes. Activity decreased to quiet to active levels on 13 April with minor to major storm periods observed at high latitudes. Activity decreased to quiet to unsettled levels on 14 April. A further decrease to quiet levels at all latitudes occurred during 15 - 17 April. ACE solar wind observations indicated the activity during 11 - 13 April was associated with a coronal hole high-speed stream (CH HSS). The HSS source was an equatorward extension of the southern polar CH. The CH HSS commenced on 11 April following a negative- to positive-polarity solar sector boundary crossing. Velocities increased during 11 - 12 April, eventually reaching a peak of 674 km/s at 12/1940, then gradually decreased during the rest of the period. Interplanetary magnetic field (IMF) changes associated with the onset of the CH HSS included increased Bt (peak 17 nT at 11/2001 UTC) as well as increased Bz variability with intermittent periods of southward Bz (maximum deflection -9 nT at 12/0525 UTC). The CH HSS began to gradually subside on 13 April.

Forecast of Solar and Geomagnetic Activity
20 April - 16 May 2011

Solar activity is expected to be low with C-class flares likely during the period. There will be a chance for moderate activity (isolated M-class flares) during the second half of the period due to the return of previously active regions.

No proton events are expected at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to be at normal to moderate levels during most of the period. However, high flux levels are expected during 22 - 23 April, 30 April - 03 May, and 11 - 13 May.

Geomagnetic field activity is expected to be to be at quiet to unsettled levels during 20 - 22 April due to weak coronal hole effects on 20 - 21 April and weak coronal mass ejection effects on 22 April (associated with the Earth-directed CME observed on 15 April). Activity is expected to decrease to quiet levels during 23 - 27 April. Field activity is expected to increase to quiet to active levels during 28 April - 01 May due to recurrent coronal hole effects. Activity is expected to decrease to quiet levels during 02 - 07 May. Activity is expected to increase to quiet to active levels during 08 - 11 May due to recurrent coronal hole effects. Quiet conditions are expected during 12 - 16 May.

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news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-114 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Mon, 25 Apr 2011 14:09:02 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 364
Approved: RRI Admin <rec-radio-info-request@panix.com>
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X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Mon, 25 Apr 2011 18:09:02 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
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Xref: g2news1.google.com rec.radio.amateur.space:487 rec.radio.info:2292

AMSAT NEWS SERVICE
ANS-114

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Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* ARISSat-1 Update
* AO-51 PL Reminder
* AMSAT India April 2011 Newsletter Available
* Ukrainian Hams Lose Allocations Including Some Satellite Bands
* FCC Decision in Favor of ReconRobotics Affects Satellite Frequencies
* Satellite Shorts From All Over
* ARISS Status - 18 April 2011

SB SAT @ AMSAT $ANS-114.01
ARISSat-1 Update

AMSAT News Service Bulletin 114.01
From AMSAT HQ SILVER SPRING, MD.
April 24, 2011
To All RADIO AMATEURS
BID: $ANS-114.01

Lou McFadin, W5DID, ARISS US Hardware Manager, reports that a telecon was recently held the ARISSat team in Russia. Here is the situation as described by them. The Russian suit battery that was intended to be used on ARISSat was used during testing both on the ground and onboard ISS when it first arrived. When it was tested prior to the planned April 12 operation, it was discovered that the battery was low on charge. The suit batteries are specified for only five cycles of charge. It was decided to not recharge the battery at this time in order to keep the number of cycles as low as possible and thus saving the battery for the actual mission. That deployment is currently scheduled for July 26. We are still trying to get more information on the storage status and the battery health from the Russian team. We will keep you informed as we prepare for the eventual deployment of ARISSat.

[ANS thanks Lou, W5DID, for the above information]

/EX

SB SAT @ AMSAT $ANS-114.02
AO-51 PL Reminder

AMSAT News Service Bulletin 114.02
From AMSAT HQ SILVER SPRING, MD.
April 24, 2011
To All RADIO AMATEURS
BID: $ANS-114.02

Mark Hammond, N8MH, provided the following reminder about current AO-51 operations.

As you have noticed, AO-51 has recently experienced a few shutdowns due to a low battery voltage trip. This is because of increasing eclipses (now at 20 minuets per orbit and increasing), poor sun angles (still getting worse), and a "weak" battery.

AO-51 is now using the 67 Hz PL tone required mode in order to turn the transmitter(s) OFF when not in use. The transmitter power is down to about 550 mW. The Command Team will continue adjusting various parameters, including transmitter power, trigger voltages, etc. in order to keep the battery temperatures reasonable. Keep in mind that the power management feature keeps the transmitter(s) OFF during eclipses, so you can't bring it up even with a PL tone while the satellite is in eclipse.

Here is our current schedule, which will continue until further notice:

AO-51 Schedule

Mode V/U FM Voice Repeater (**67 Hz PL tone required**)
Uplink: 145.880 MHz FM (Temporarily from 145.920)
Downlink 435.300 MHz FM

The AO-51 Command Team can use your help!

1-Please make activity reports to: http://oscar.dcarr.org/ This is very useful to all users. Until everyone knows that the 67 Hz tone is required, we might see some conflicting reports.

2-Please help spread the word about needing the 67 Hz tone!

[ANS thanks Mark, N8MH, for the above information]

/EX

SB SAT @ AMSAT $ANS-114.03
AMSAT India April 2011 Newsletter Available

AMSAT News Service Bulletin 114.03

  From AMSAT HQ SILVER SPRING, MD.
April 24, 2011
To All RADIO AMATEURS
BID: $ANS-114.03

The April 2011 issue of the AMSAT-INDIA newsletter is now available for free download.

Topics in this month's edition include:

- Update on the Technical talk held on April 17th
- Update on the CubeSat Communication system project by AMSAT INDIA.
- News from AMSAT organizations around the world

Download the newsletter from
http://amsatindia.org/Newsletter/AMSATINDIA-News-April2011.pdf

Previous issues are available at:
http://www.amsatindia.org/Newsletter/

Regards

Nitin [VU3TYG]
Secretary, AMSAT India
vu3tyg@amsatindia.org
www.amsatindia.org

[ANS thanks Nitin, VU3TYG, for the above information]

/EX

SB SAT @ AMSAT $ANS-114.04
Ukrainian Hams Lose Allocations Including Some Satellite Bands

AMSAT News Service Bulletin 114.04
  From AMSAT HQ SILVER SPRING, MD.
April 24, 2011
To All RADIO AMATEURS
BID: $ANS-114.04

Some restructuring news out of the Ukrane that's bad news for ham radio operators in that nation. This, as the Ukrainian government has affirmed new rules for amateur radio operations that have resulted in spectrum losses on the High Frequency, UHF and microwave bands.

According to an e-mail from Alexander Doshchich, UY0LL, the spectrum withdrawn from access by Ukranian hams includes 10.100 to 10.150 and 14.250 to 14.350 MHz on the HF bands. On UHF an above the losses include 1240 to 1300 MHz, 2300 to 2450 MHz, 5670 to 5850 MHz and numerous other spectrum slots right on up to 248 to 250 GHz.

[ANS thanks Newsline for the above information]

/EX

SB SAT @ AMSAT $ANS-114.05
FCC Decision in Favor of ReconRobotics Affects Satellite Frequencies

AMSAT News Service Bulletin 114.05
  From AMSAT HQ SILVER SPRING, MD.
April 24, 2011
To All RADIO AMATEURS
BID: $ANS-114.05

A robot used to covertly transmit live video during military operations in Iraq and Afghanistan was approved by the Federal Communications Commission (FCC) for use by local and state fire-fighters and police, ending a legal battle between amateur radio operators and law enforcement over the device.

Called the Recon Scout Throwbot, the robot transmits over the 430-448 MHz portion of the 420-450 MHz frequency band, which is primarily used by the federal radiolocation service. The spectrum is also utilized by amateur radio enthusiasts. The latter group, spearheaded by the American Radio Relay League (ARRL), opposed a waiver request filed with the FCC by Recon Scout maker ReconRobotics, Inc. to use the band.

The ARRL argued that ReconRobotics' claims that the device would be useful in public safety and anti-terrorism operations didn't prove that a waiver to use the frequency bands was in the public interest. The FCC admitted, in its order approving the waiver, that while some interference in the frequency bands may occur, it isn't a reason to prohibit the use of the Recon Scout.

The FCC approval does come with some limitations, however. The robot can only be used by state and local police and firefighters on the specific band. Operators must also first use the Recon Scout on 436-442 MHz bands. If those frequencies are inaccessible, then the 430-436 MHz and 442-448 MHz bands - where interference is more likely - can be accessed.

In a subsequent Order on Reconsideration released April 15, the FCC granted the ARRL's request for changes in the labeling and instruction manual requirements to ensure that users of the Recon Scout are aware of the interference limitations.

Use of the device is also limited to emergencies involving threats to the safety of life and training purposes. In addition, the Recon Scout is restricted from use near various radar installations and Air Force bases, and the amount of units that can be sold is limited to 2,000 the first year and 8,000 the second year. After that period of time, future sales will be re-evaluated, according to the FCC.

Read more on the Government Technology website at:
http://tinyurl.com/3gbdru6

[ANS thanks Govtech.com and Southgate ARC News site for the above information]

/EX

SB SAT @ AMSAT $ANS-114.06
Satellite Shorts From All Over

AMSAT News Service Bulletin 114.06
From AMSAT HQ SILVER SPRING, MD.
April 24, 2011
To All RADIO AMATEURS
BID: $ANS-114.06

+ Members of the Camb-Hams will be activating the Isle of Arran between May 1-8th. They will be operating as GS3PYE/P and GS6PYE/P. Activity will be on all bands 160-2 meters, and 70cm via satellites. For VHF, the island lies in IO75. More information is available at:
http://dx.camb-hams.com/dx-peditions/arran-dxpedition-11/
On Twitter at: http://twitter.com/g3pye
On Facebook at: http://facebook.com/ArranDX

+ A group of enthusiastic Mexican ham radio operators, IsmaelXE1AY, Gustavo XE1KKK, Francisco Javier XE1P, Ricardo XE1RZL, Ricardo Raymundo XE1SOV, Fernando XE1VGC, Jose XE1UYU, Martin XE1UZH, Modesto XE1UZU, Juan Manuel XE2IA, Jose XE2IVG and Ricardo XE3NMC will be active from Isla de Lobos (IOTA NA-221, WW Loc. EL11JK), Veracruz State, between 29th April and 1st May 2011. They will also activate the Lobos Island lighthouse QRV on all HF bands, plus 6 metres and AO27, AO51 and SO50 Satellites. Modes: CW, SSB and RTTY. QSL via XE1AY. Website: xf2p.puebladx.org/XF2P/Bienvenida.html

+ Transatlantic Balloon Launch now planned for April 27-29 depending on weather conditions. Hams in the USA and worldwide are needed to listen on 7.1023 and 10.1466 MHz and to send readings of the balloon's progress to PBH15.data@gmail.com. More information about the program, including the latest projected flight path, can be found at http://www.projectbluehorizon.com/ and https://twitter.com/PBH5. It also has an APRS GPS tracker on 144.39 with the callsign KC2ZJH and will launch from Oswego, NY.

+ Iran plans to launch a monkey into space in mid-September according to a press release by the ISNA news agency. The monkey will be sent into orbit in a capsule carried by the Kavoshgar-4 rocket. Full story available on-line at: http://tinyurl.com/3wlehmt (Space-Travel.com)

+ The next Hudson Valley Satcom net will be Thursday, April 28 at
   8PM EDT (UTC-4). You can join the net via the N2EYH-L EchoLink
   Node or on the 146.970 MHz repeater -600; PL 100 if you are within
   range. More info at http://www.hvsatcom.org or or e-Mail:
   wa2aqh@amsat.org (Stu, WA2BSS)

[ANS thanks everyone for the above information]

/EX

SB SAT @ AMSAT $ANS-114.07
ARISS Status - 18 April 2011

AMSAT News Service Bulletin 114.07
From AMSAT HQ SILVER SPRING, MD.
April 24, 2011
To All RADIO AMATEURS
BID: $ANS-114.07

1. Upcoming School Contacts

Primary School "Dante Alighieri" De Neuquen, located in Neuquen - Patagonia, Argentina, has been scheduled for an Amateur Radio on the International Space Station (ARISS) contact on Monday, April 18 at 12:25 UTC. The contact will be performed with support from CETRA (Science Education and Technology united by Ham Radio), a delegation of AMSAT-Argentina which promotes space activities and amateur radio in schools, using station LU8YY. This activity has been integrated into science and technology lessons and plans have been made for students to visit the local observatory to research the history of space exploration and space shuttles.

Istituto Comprensivo Dedalo 2000 - Scuola secondaria di Cingia de' Botti in Solarolo Rainerio, Italy has been scheduled for an Amateur Radio on the International Space Station (ARISS) contact on Saturday, April 23 at 09:13 UTC via telebridge station W6SRJ in California. Students participating in this ARISS activity have been learning about astronomy, physics of radio waves, the history of space flights and the history of radio communications.

2. Recent ARISS Contacts

Students from John XXIII College, Perth, Western Australia experienced an ARISS contact on Monday, April 11. Telebridge station W6SRJ in California provided the radio connection. On-orbit astronaut Cady Coleman, KC5ZTH fielded 13 questions from the students who were interested in how missions on the ISS benefit life on Earth as well as future missions to Mars.

On Wednesday, April 13, Hopewell Ave Public School, Ottawa, Ontario, Canada took part in an ARISS contact via telebridge station WH6PN in Hawaii. Six hundred students gathered in the gym for the event and listened to astronaut Paolo Nespoli answer 16 questions posed by the youth. ARISS mentors took large screens to the school and showed the students videos of space and the ISS construction along with some special effect videos.

The school and community were thrilled with the ARISS contact and the opportunity for their young students to take part in this event. Talk Radio CFRA ran a story about the contact:
http://www.cfra.com/?cat�nidx953

An ARISS contact was held between middle school students attending Istituto Sociale, a Catholic school in Turin, Italy and ISS astronaut Paolo Nespoli, IZ�JPA on Thursday, April 14. The radio connection was made possible via telebridge station K6DUE in Maryland. Students asked 19 questions concerning things such as mission training and the daily routine and tasks performed on the ISS. Over 200 students, teachers and guests turned out for the event. The ARISS contact was highly appreciated, since many modules of the ISS have been built in Turin by Thales Alenia Space. Regional and local media covered the event.

3. Astronaut Training Status

Astronaut Luca Parmitano, KF5KDP (Expedition 36) is scheduled for an ARISS basic operations session on Monday, April 25.

Dan Burbank, KC5ZSX is scheduled for a preflight session in early May. He is slated to fly with Expedition 29 in September 2011.

[ANS thanks Carol, KB3LKI, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Lee McLamb, KU4OS
ku4os at amsat dot org

```
From -7547809679913963716
X-Google-Thread: 107ada,f28de46ccd91db28,start
X-Google-NewGroupId: yes
```

```
X-Google-Thread: 11480d,f28de46ccd91db28,start
X-Google-NewGroupId: yes
X-Google-Thread: 10e8ad,f28de46ccd91db28,start
X-Google-NewGroupId: yes
X-Google-Thread: 10b9c8,f28de46ccd91db28,start
X-Google-NewGroupId: yes
X-Google-Attributes:
gida3e752f117,gid7221ecd0f7,gid8f86f75953,gida4a23d5f63,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news2.google.com!border1.nntp.dca.giganews.com!
border4.nntp.dca.giganews.com!border2.nntp.dca.giganews.com!nntp.giganews.com!
news-out.readnews.com!transit3.readnews.com!panix!rri.panix.com!robomod!not-for-
mail
From: SWPC.Webmaster@noaa.gov
Newsgroups:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.info
Subject: Weekly Highlights of Solar and Geomagnetic Activity, 18 - 24 April 2011
Followup-To: rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space
Date: Tue, 26 Apr 2011 17:30:05 EDT
Organization: NOAA Space Weather Prediction Center
Lines: 60
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <20110426213001.BAA2333C5C@panix2.panix.com>
NNTP-Posting-Host: panix6.panix.com
X-Trace: reader1.panix.com 1303853405 14537 166.84.1.6 (26 Apr 2011 21:30:05 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Tue, 26 Apr 2011 21:30:05 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Xref: g2news2.google.com rec.radio.amateur.misc:6400 rec.radio.amateur.dx:1014
rec.radio.amateur.space:513 rec.radio.info:2371
```

```
:Product: Weekly Highlights and Forecasts
:Issued: 2011 Apr 26 1649 UTC
# Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center
# Product description and SWPC contact on the Web
# http://www.swpc.noaa.gov/weekly.html
#
#                 Weekly Highlights and Forecasts
#
Highlights of Solar and Geomagnetic Activity
18 - 24 April 2011
```

Solar activity ranged from low to moderate levels. Region 1195 (S16, L=129, class/area Ekc/340 on 22 April) produced the majority of the flares observed during the period. Solar activity from 17-21 April was limited to C-class or lower x-ray flares. Activity increased to moderate for a day on 22 April as Region 1195 produced two M-class flares, an M1.8/SN at 0457Z and an M1.2/1N at 1553Z. Neither significant radio emissions nor coronal mass ejections (CMEs) were associated with these flares. Activity returned to low levels, with only C-class or lower flares observed for the remainder of the week.

No proton events were observed at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit began the period at moderate levels and fluctuated between normal and moderate levels each day during the week.

Geomagnetic field activity ranged from quiet to minor storm levels during the week. The week began with with a 24 nT sudden impulse at 18/0634Z followed by unesttled to occasionally active levels at mid latitudes, and minor storm periods at high latitudes. The disturbance was attributed to the passage of a CME. Activity decreased to quiet to unsettled levels on 19 April. Minor storm levels returned on 20 April, briefly reaching major storm levels at high latitudes with the onset of a coronal hole high speed stream (CH HSS). Solar wind speed at the ACE spacecraft peaked over 540 km/s mid-day on the 20th, then gradually decreased through 23 April. Quiet to unsettled levels prevailed on 21-24 April as the CH HSS effects subsided.

Forecast of Solar and Geomagnetic Activity
27 April - 23 May 2011

Solar activity is expected to be at low levels through the period with a chance for isolated M-class flares until Region 1195 rotates off the visible disk on 01 May.

No proton events are expected at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to be at normal to moderate levels during most of the period. However, an increase to moderate to high flux levels is possible from 02 - 05 May, 11 - 13 May and 19 - 22 May in response to coronal hole high speed streams.

Geomagnetic field activity is expected to be unsettled to active on 30 April - 02 May, 08 - 10 May, and 18 - 19 May in response to geoeffective recurrent coronal hole high speed streams. The remainder of the period is expected to be quiet.

```
From -4119974338847238351
X-Google-Thread: fcc6e,296bad26c2a1240e,start
X-Google-NewGroupId: yes
```

```
X-Google-Thread: 11480d,296bad26c2a1240e,start
X-Google-NewGroupId: yes
X-Google-Thread: 108122,296bad26c2a1240e,start
X-Google-NewGroupId: yes
X-Google-Thread: fc2a5,296bad26c2a1240e,start
X-Google-NewGroupId: yes
X-Google-Thread: 107ada,296bad26c2a1240e,start
X-Google-NewGroupId: yes
X-Google-Thread: 10bf43,296bad26c2a1240e,start
X-Google-NewGroupId: yes
X-Google-Thread: 10e8ad,296bad26c2a1240e,start
X-Google-NewGroupId: yes
X-Google-Thread: 10b9c8,296bad26c2a1240e,start
X-Google-NewGroupId: yes
X-Google-Attributes:
gid4baf9708d4,gid7221ecd0f7,gidd7f5508063,gid241b302a50,gida3e752f117,gide721ae2bf
6,gid8f86f75953,gida4a23d5f63,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news2.google.com!news.glorb.com!news-out.readnews.com!
transit4.readnews.com!panix!panix2.panix.com!not-for-mail
From: rram@panix.com (rec.radio.amateur.moderated Admin)
Newsgroups:
rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.rad
io.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amat
eur.space,rec.radio.info
Subject: Crossposting Permitted to rec.radio.amateur.moderated
Supersedes: <radio/ham-radio/moderated/crossposting-1-1301637601@panix.com>
Followup-To: poster
Date: 1 May 2011 02:00:03 -0400
Organization: rec.radio.amateur.moderated Moderation Team
Lines: 47
Approved: RRI Admin <rec-radio-info-request@panix.com>
Distribution: world
Expires: 03 Jun 2011 02:00:01 -0000
Message-ID: <radio/ham-radio/moderated/crossposting-1-1304229601@panix.com>
Reply-To: rec-radio-amateur-moderated-request@panix.com
(rec.radio.amateur.moderated Admin)
NNTP-Posting-Host: panix2.panix.com
X-Trace: reader1.panix.com 1304229604 27444 166.84.1.2 (1 May 2011 06:00:04 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 1 May 2011 06:00:04 +0000 (UTC)
Summary: Short reminder for unmoderated newsgroups that crossposting is permitted
Keywords: FAQ, ham, amateur, radio, moderated, unmoderated, crossposting,
permitted
Xref: g2news2.google.com rec.radio.amateur.antenna:22964 rec.radio.amateur.dx:1019
rec.radio.amateur.equipment:2809 rec.radio.amateur.homebrew:4708
rec.radio.amateur.misc:6410 rec.radio.amateur.policy:33249
rec.radio.amateur.space:514 rec.radio.info:2382

Posted-By: auto-faq 3.3.2 beta (PGPMoose V2.0, Perl 5.005)
Archive-name: radio/ham-radio/moderated/crossposting
Revision: 1.1 2009/04/12 19:42:04
Posting-Frequency: posted monthly
```

URL: http://www.panix.com/~rram/usenet/rram/index.html

Changes followed by "|".

After a 30-day public discussion and feedback period to gauge reader opinions in March of 2009:

http://groups.google.com/group/rec.radio.amateur.moderated/browse_thread/thread/d7d337db35f23326

the rec.radio.amateur.moderated Moderation Team has decided to consider amending its charter, and permit limited simultaneous crossposting to rec.radio.amateur.moderated and one other unmoderated amateur-radio-related discussion newsgroup. We are currently trying this on a temporary basis (90 days, through early July 2009), and adopt it permanently if successful.

Approved rec.radio.amateur.* newsgroups are those that are currently listed in the latest version of the "List of Big Eight Newsgroups" which is crossposted monthly to news.announce.newgroups, news.groups, and news.lists.misc.

Approved alt.radio.amateur.* and alt.ham-radio.* newsgroups are those that have been created consistent with the suggestions in "So You Want to Create an Alt Newsgroup" at:

  http://www.faqs.org/faqs/alt-creation-guide/

Approved regional hierarchy newsgroups are those that contain either "radio.amateur" or "ham-radio" in their names, including uk.radio.amateur and aus.radio.amateur.misc.

We will make every reasonable effort to keep our list of approved newsgroups up-to-date. In case we have overlooked any, and a submission is rejected in error as a result, the rejected submitter can E-mail us at our administrative contact address (in the signature at the bottom of this article, and the default Reply-To for the rejection message) requesting that it be added, and that the article be approved. We may still choose to reject articles crossposted to any alt.* newsgroup with an inappropriate name, including obscene language, embedded name-calling, or encouragement of unlawful conduct.

Please direct any comments, questions, or criticisms to rec-radio-amateur-moderated-request@panix.com.

```
From -1380050831459170539
X-Google-Thread: 10e8ad,5b5c2b2b86e2f4d4,start
X-Google-NewGroupId: yes
X-Google-Thread: 10b9c8,5b5c2b2b86e2f4d4,start
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,gida4a23d5f63,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII
```

Path: g2news2.google.com!news1.google.com!newsfeed2.dallas1.level3.net!
news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-121 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sun, 1 May 2011 11:47:46 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 449
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <003501cc0817$18f0b540$4ad21fc0$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
X-Trace: reader1.panix.com 1304264866 2618 166.84.1.6 (1 May 2011 15:47:46 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 1 May 2011 15:47:46 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news2.google.com rec.radio.amateur.space:515 rec.radio.info:2387

AMSAT NEWS SERVICE
ANS-121

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

```
*********************************************************************
* NOTICE:  Requesting Volunteers to Help at the AMSAT booth at Dayton. *
* Gould, WA4SXM, is looking for volunteers to help man the AMSAT booth *
* during the 2011 Hamvention in Dayton. People are needed all 3 days   *
* for 2 hour shifts. Please send the days and times you are available  *
* to help as well as how many shifts you are willing to work to        *
* wa4sxm at amsat.org.                                                 *
*********************************************************************
```

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* Dayton Update
* AO-51 Status
* OSCAR-11 REPORT   27 April 2011
* 2nd ARISS Amateur Radio Station Installed in ISS Columbus Module
* Satellite Shorts From All Over
* ARISS Status - 25 April 2011
* UT1FG/MM Photos Posted on the Web
* Radio Hams on Endeavour's final flight

SB SAT @ AMSAT $ANS-121.01
Dayton Update

AMSAT News Service Bulletin 121.01
From AMSAT HQ SILVER SPRING, MD.
May 1, 2011
To All RADIO AMATEURS
BID: $ANS-121.01

Dayton Update
Hamvention is only 3 weeks away, please join AMSAT at all of the activities planned during the event.
Stop by the booth to meet and talk with your AMSAT Officers and Board members.
See the AMSAT Web site for complete details. As usual we have a nice renewal/new member premium this year.

Thursday, 19 May booth setup and Get-Together at Tickets Pub

Friday, May 20
Booth open with new items, ARISSat and Fox exhibits, visit by astronaut Doug Wheelock, KF5BOC AMSAT/TAPR Banquet with renowned voice codex expert David Rowe, VK5DGR. His talk will be on The Village Telco.
Reservations for the Banquet close on Monday May 16th. Use the AMSAT store to make your reservations.
Satellite demonstrations

Saturday
Booth open with new items, ARISSat and Fox exhibits, visit by astronaut Doug Wheelock, KF5BOC Satellite demonstrations
AMSAT Forum 11:15 - 1:30 in Forum Room 5

Sunday
Booth open with new items, ARISSat and Fox exhibits, visit by astronaut Doug Wheelock, KF5BOC Satellite demonstrations

[ANS thanks Gould, WA4SXM, for the above information]

/EX

SB SAT @ AMSAT $ANS-121.02

AO-51 Status

AMSAT News Service Bulletin 121.02
  From AMSAT HQ SILVER SPRING, MD.
May 1, 2011
To All RADIO AMATEURS
BID: $ANS-121.02

For now, it looks like the PL tone management (and changes to other settings) has helped to keep AO-51 running and supporting normal operations. We are now running around 475 mW of power out on 435.300 MHz.

Over the last few days, some of you on the east coast of the U.S. have probably heard command stations downloading telemetry files on the 435.300 frequency. You can expect this to happen every few days; sometimes in the AM, sometimes in the PM. Because it's 9600 baud packet, it sounds like a carrier or open squelch with a "SSSSSHHHHHHHHHH" sound to it. If you hear that sound, there isn't much use in trying to uplink;

it means we're collecting telemetry and the voice repeater is off for the moment. Wait for the "SSSHHHHHHH" sound to go away, and you'll know the voice repeater is active again.

The current power budget makes it very hard to run both transmitters at the same time. Also, we are trying to keep the amount of commanding to a minimum, so using the single transmitter for both voice and telemetry is our current approach. We'll see how it goes. It does mean that it eats into voice operations a little, but the trade off is worth it-both for the short and long terms.

In the meantime, keeping using our old bird when it's active! We don't want to take it for granted...

73 on behalf of the Command Team,
Mark L. Hammond [N8MH]

[ANS thanks Mark, N8MH, for the above information]

/EX

SB SAT @ AMSAT $ANS-121.03
OSCAR-11 REPORT   27 April 2011

AMSAT News Service Bulletin 121.03
  From AMSAT HQ SILVER SPRING, MD.
May 1, 2011
To All RADIO AMATEURS
BID: $ANS-121.03

OSCAR-11 REPORT   27 April 2011

This report covers the period from 02 March to 27 April 2011 .

During this time the satellite has been heard from 03 to 13 March, 24 March to 03 April, 13 April to 23 April 2011. It is expected to switch-on again 04 May until 14 May.

Excellent signals have been reported from stations located around the world, and good copy obtained from decoded telemetry frames.

Transmissions are controlled by the watchdog timer, which has a 20.7 day cycle time, 10.35 days on, 10,35 days off. Solar eclipses occur during every orbit, when signals are weaker. This indicates that there is still some capacity remaining in the battery.

The on-board clock is now very stable. It gained 12 seconds during during the current reporting period. This is comparable with its accuracy when the satellite was fully operational, when it gained approximately one minute per year. However, there is still an accumulated loss of 309 days, which has occurred during eclipses of the last few years.

The VHF beacon frequency is 145.826 MHz. AFSK FM ASCII Telemetry

Reception reports have been received from Horatio CX8AF, Jerry WB5LHD and Stefano IZ1GRJ. Many thanks.

At the present time, while OSCAR-11 is operating in a predictable way, I no longer need direct reports or files by e-mail. However, could all listeners continue to enter their reports on the general satellite status website http://oscar.dcarr.org/index.php. This is a very convenient and easy to use facility, which shows the current status of all the amateur satellites, and is of use to everyone. Reports around the expected times of switch-on and switch-off are of special interest, especially for times 12:00 - 17:00 and 22:00 - 07:00 UTC, to when the satellite is out-of-range in the UK.

A longer version of this report report is available on my website, and new listeners to OSCAR-11 should read this for further information. The URL is www.g3cwv.co.uk/oscar11.htm . This page contains a links to the longer report, a short audio clip to help you identify the satellite and a file of the last telemetry received. The website also contains an archive of news & telemetry data which is updated from time to time, and details about using a soundcard or hardware demodulators for data capture. There is also software for capturing data, and decoding ASCII telemetry.

73 Clive G3CWV   G3CWV@amsat.org (please replace the x's by g3cwv)

[ANS thanks Clive, G3CWV, for the above information]

/EX

SB SAT @ AMSAT $ANS-121.04
2nd ARISS Amateur Radio Station Installed in ISS Columbus Module

AMSAT News Service Bulletin 121.04
From AMSAT HQ SILVER SPRING, MD.
May 1, 2011
To All RADIO AMATEURS
BID: $ANS-121.04

2nd ARISS Amateur Radio Station Installed in ISS Columbus Module

NASA reported this week that Astronaut Cady Coleman completed the installation of the original ARISS Ericsson radio in the Columbus Orbital Laboratory, connecting it to a 2 m/70 cm antenna installed last year via EVA and creating the second amateur radio station aboard the ISS. Astronaut Paolo Nespoli checked out the radio's audio for proper functioning by talking with ham operators on the ground.

In addition to this second station, the Amateur Radio - Columbus (ARCOL) Working Group has already accomplished the assembly and installation of the L- and S-band patch antennas mounted on the exterior of the Columbus Module to be used with future radio systems to be launched to the ISS.

[ANS thanks the ARISS team for the above information]

/EX

SB SAT @ AMSAT $ANS-121.05
Satellite Shorts From All Over

AMSAT News Service Bulletin 121.05
From AMSAT HQ SILVER SPRING, MD.
May 1, 2011
To All RADIO AMATEURS
BID: $ANS-121.05

Satellite Shorts From All Over

+ Central States VHF Society Vice President Kent Britain, WA5VJB has issued a call for papers for the CSVHFS Proceedings. Kent says the deadline is May 20. The CSVHFS is trying to have an emphasis on smaller papers this year such as 1 to 2 page "Hints and Kinks" covering radio modifications, rover and contest operations, antenna construction, etc. Kent says there are plenty of open slots and interested contributors should contact him at WA5VJB@FLASH.NET immediately.

+ Word has been received that the XF2P HF, 50 MHz and Satellite operation initially planned from the Isla de Lobos, Veracruz State, Mexico has been forced to revise their plans. The group's webpage (http://xf2p.puebladx.org/XF2P/Bienvenida.html) reports that bad weather has closed down navigation to the island. The group plans to operate from Riachuelos, Veracruz, Mexico between April 28 through May 1. XE1AY will be conducting satellite operations from rare grids nearby.

+ JD1 - OGASAWARA, AS-031 satellite operation is planned when Makoto, JD1BLY (JI5RPT), Harry,JD1BMH (JG7PSJ), and Masaru,JD1BMT (JE4SMQ), are staying on Chichijima (AS-031) again by the end of April and beginning of May. Team members will stay there for different period of times. You can expect activities from:
JD1BLY: Apr 30 until May 7
JD1BMT: Apr 30 until May 4
JD1BMH: May 4-13
Activities are planned in CW, SSB and digital modes on 160m-6m and via satellite. You can visit the websites of the OPs for news and logs:
JD1BLY: http://www.ji5rpt.com/jd1
JD1BMH: http://sapphire.es.tohoku.ac.jp/jd1bmh
JD1BMT: http://homepage3.nifty.com/maaberu/logsjd1/logsearch.html
QSL cards should be sent via bureau or direct to their homecalls.

+ Remember to listen for the Camb-Hams members Bob G1SAA, Terry G3VFC, Martin G3ZAY, Colin G4ERO, Colin G8TMV, Mark M0MJH, Rob M0VFC, Steve M1ACB and Gavin M1BXF who will be active between May 1-8 the Isle of Arran. Website: http://dx.camb-hams.com/.

+ NASA is collecting names to be put on a microchip that'll be onboard the Mars Science Laboratory rover heading to Mars in the fall of 2011. Some Radio Amateurs have been adding their call sign to last name field. You can add your name and call on the Mars microchip at: http://tinyurl.com/marsham.

[ANS thanks everyone for the above information]

/EX

SB SAT @ AMSAT $ANS-121.06
ARISS Status - 25 April 2011

AMSAT News Service Bulletin 121.06
From AMSAT HQ SILVER SPRING, MD.
May 1, 2011
To All RADIO AMATEURS
BID: $ANS-121.06

1. Upcoming School Contacts

The Italian Air Force Academy in Pozzuoli, Italy has been scheduled for an Amateur Radio on the International Space Station (ARISS) contact on Thursday, April 28 at 07:04 UTC via telebridge station LU1CGB in Argentina. This contact has been integrated into the aerospace engineering curriculum for cadets and will draw interest from the scientific community.

Ecole Primaire de Larochette (Fiels), Larochette (Fiels), Luxembourg has been scheduled for an Amateur Radio on the International Space Station (ARISS) contact on Friday, April 29 at 10:12 UTC via station WH6PN in Hawaii. School lesson plans have covered space exploration, communications and human spaceflight. Field trips, radio demonstrations and hands-on activities have been planned. The radio contact with the ISS will be the highlight of this science program.

Scuola Secondaria I Grado "M.Maccioni" Nuoro, Nuoro, Italy, has been scheduled for an Amateur Radio on the International Space Station (ARISS) contact on Friday, April 29 at 15:56 UTC via station IK1SLD in Italy. The contact will be held in collaboration with the Astronomical Association of Nuoro during Spring Festival and has been integrated in the Maccioni students' studies of astronomy and space flight.

2.   Recent ARISS Contacts

On Monday, April 18, an ARISS contact was held between youth visiting the Toyota Children's Scientific Expedition in Toyota, Aichi, Japan and Cady Coleman, KC5ZTH on the ISS. The Scientific Expedition teaches children about science and engineering through the various experiments it offers and on this day, the ARISS contact was the featured event, drawing approximately 100 people including representatives from four newspapers. Video is available:
http://www.ariss.jp/toyota/video/ARISS.wmv

On-orbit astronaut Paolo Nespoli, IZ�JPA participated in a successful contact with students from Primary School "Dante Alighieri" De Neuquen located in Neuquen - Patagonia, Argentina, on Monday, April 18. Four hundred students and guests attended the event and were pleased that Nespoli continued answering their questions over a second ISS pass. The contact was performed with support from CETRA (Science Education and Technology united by Ham Radio), a delegation of AMSAT-Argentina which promotes space activities and amateur radio in schools, using station LU8YY. This activity was integrated into the science and technology curriculum.

On Saturday, April 23, Istituto Comprensivo Dedalo 2000 - Scuola secondaria di Cingia de' Botti students in Solarolo Rainerio, Italy spoke with astronaut Paolo Nespoli, IZ�JPA via an ARISS contact, using telebridge station W6SRJ in California for the radio link. Nearly 150 students, teachers and guests turned out for the event during which Nespoli answered 18 space-related questions. The contact was the culmination of science lessons covering astronomy, physics of radio waves, the history of space flights and the history of radio communications.

3.   ARISS International Team Meeting Held

The ARISS International Team held its monthly teleconference on Tuesday,

April 19. A status was given on the radio that will be installed in the Columbus Module and a discussion was held about issues concerning the recent Gagarin Commemorative Event. Minutes have been posted.
See: https://www.rac.ca/ariss/arisstel2011-04-19.htm

4.   ARISS in ARRL QST

The American Radio Relay League (ARRL) included an ARISS item in its May QST. The "In Brief" column discusses how Astronaut Doug Wheelock, KF5BOC, will be attending the ARRL Expo exhibits at the Dayton Hamvention as a special guest of ARRL and AMSAT.

5.   AMSAT Update on ARISSat-1

The AMSAT (Radio Amateur Satellite Corporation) News Service put out a bulletin (ANS-114) on April 24 that gave an update on ARISSat-1. The item talks about the satellite's battery status and how this affected its activation during the Gagarin Event on April 12. See: http://amsat.org/pipermail/ans/2011/000508.html

[ANS thanks Carol, KB3LKI, for the above information]

/EX

SB SAT @ AMSAT $ANS-121.07
UT1FG/MM Photos Posted on the Web

AMSAT News Service Bulletin 121.07
  From AMSAT HQ SILVER SPRING, MD.
May 1, 2011
To All RADIO AMATEURS
BID: $ANS-121.07

UT1FG/MM Photos Posted on the Web

John, K8YSE invites you to view the photos he has posted on his web page showing Yuri, UT1FG/MM aboard his ship the MV Mottler. Yuri has operated maritime mobile on his sea voyages between Russia, Europe, North America, Central America, and South America sailing across the Atlantic, Caribbean, and Pacific Oceans.

John explains, "Yuri, UT1FG/MM, is currently in port at San Juan Puerto Rico. Walt, WP4T and his family drove over to San Juan to attempt to see him. They were successful and were treated to a red carpet tour of his ship the Mottler. They took pictures and they are available for viewing on my website: http://www.papays.com/sat".

The Mottler is very modern and was just built in 2009. Yuri has logged many miles on it He will fly home to the Ukraine later this week.

[ANS thanks John, K8YSE and Walt, WP4T for the above information]

/EX

SB SAT @ AMSAT $ANS-121.08
Radio Hams on Endeavour's final flight

AMSAT News Service Bulletin 121.08
From AMSAT HQ SILVER SPRING, MD.
May 1, 2011
To All RADIO AMATEURS
BID: $ANS-121.08

Radio Hams on Endeavour's final flight

Radio Amateurs Greg Chamitoff KD5PKZ, Mike Fincke KE5AIT and Robert Vittori IZ6ERU will be on the Space Shuttle Endeavour when it blasts off. The launch will be broadcast on NASA TV.

During the 14-day mission, Endeavour will deliver the Alpha Magnetic Spectrometer (AMS) and spare parts including two S-band communications antennas, a high-pressure gas tank and additional spare parts for Dextre. This will be the 36th shuttle mission to the International Space Station.

Follow these links for additional information"
NASA TV
http://www.nasa.gov/multimedia/nasatv/

NASA - STS-134: Endeavour
http://www.nasa.gov/externalflash/134_flash/

NASA Podcast - STS-134: What's Going Up
http://www.nasa.gov/multimedia/podcasting/whatsgoingupsts134.html

[ANS thanks the Southgate ARC News Site for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Dee Interdonato, NB2F

nb2f at amsat dot org

```
From 3997637013988360187
X-Google-Thread: 10e8ad,21adb3993c853098,start
X-Google-NewGroupId: yes
X-Google-Thread: 10b9c8,21adb3993c853098,start
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,gida4a23d5f63,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news1.google.com!news.glorb.com!news-out.readnews.com!
transit3.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-119 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Sun, 1 May 2011 11:56:15 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 2007
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <003701cc0818$40052ca0$c00f85e0$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1304265375 629 166.84.1.6 (1 May 2011 15:56:15 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 1 May 2011 15:56:15 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news2.google.com rec.radio.amateur.space:516 rec.radio.info:2388
```

This report is organized into four (4) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - deborbited/returned satellites

SB SAT @ AMSAT W8ISS $WSR-119.S1
WSR 119 Part 1 04/29/2011

AMSAT NEWS SERVICE BULLETIN 119.S1
FROM AMSAT HQ SILVER SPRING, MD, April 29, 2011
TO ALL RADIO AMATEURS
BID: $WSR-119.S1

HO-68 HOPE-1 (CAS-1)(XW-1)
Catalog Number: 36122
Launch Date: December 15, 2009 0231z
Launch site: Taiyuan Space Center, PRC

Status: By schedule

Callsign:
Broadcast: BJ1SA-11
BBS: BJ1SA-12

Uplinks: 145.8250 MHz FM, PL 67.0 Hz.
           145.9250 - 145.9750 MHz SSB/CW
           145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
           435.7650 - 435.7150 MHz SSB/CW
           435.6750 MHz AFSK 1200 BPS

Beacon: 435.7900 MHz CW

Mode and Antenna Polarization:
V: LHCP 2.0dBi max
U: RHCP 3.0dBi max

IARU coordination page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108

For more information about XW-1 (CAS-1):
http://
[02092011]
=====
SO-67 SumbandilaSat
Catalog Number: 35870
Launch Date: September 17, 2009 1555z
Launch site: Baikonur, Kazakhstan

Status: By schedule

Callsign: ZS0SUM

Uplink: 145.875MHz FM tone 233.6 Hz
Downlink: 435.345MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

For more information about SO-67:
http://www.amsatsa.org.za/
[02092011]
=====
DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational
Current Mode: Science Mode - Beacon ONLY

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink: 435.530 to 435.570 MHz

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68
[02092011]
=====
VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05, 2005 0444z
Launch site: Satish Dhawan Space Centre, India

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.9360 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

To know what transponder is switched on please listen for the beacon that is active. Each transponder has a different beacon.
[02092011]

```
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004 0745z
Launch site: Baikonur, Kazakhstan

Status: Operational

Current Mode(s):
Voice repeater: V/u
Uplink:      145.880 MHz FM - 67hz PL required
Downlink:    435.300 MHz FM

Telemetry: By Command ONLY
Downlink:    435.150MHz 9k6


Analog voice downlink:     435.300 MHz FM
                           435.150 MHz FM
                          2401.200 Mhz FM
Analog voice uplink:       145.860 MHZ FM
                           145.880 MHz USB
                           145.880 MHz FM
                           145.920 MHz FM
                           145.920 MHz FM - 67 Hz PL tone burst
                          1268.705 MHz FM
Digital Downlinks:         435.150 MHz FM 38k4 PBP, 1 watt output
                           435.150 MHz FM 9k6 Pacsat Broadcast Protocol
                          2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:            145.860 MHz FM 9k6 Pacsat Broadcast Protocol
                          1268.703 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon:                    435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[04292011]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002 1700z
```

Launch site: Baikonur, Kazakhstan

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz. The order of operation is thus: (allow for Doppler as necessary):

1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10 minute timer.

[02092011]
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993 0140z
Launch site: Kourou, French Guiana

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[02092011]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974
Launch site: Vandenberg AFB, California, USA

Status: Operational

Current Mode: Alternating between Mode A and B every 24 hours

```
Uplink:   145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink:  29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons:   29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
[02092011]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998 0640z (ZARYA module)
Launch sites: Baikonur, Kazakhstan
              Kourou, French Guiana
              Uchinoura Space Center, Japan
              Kennedy Space Center, Titusville, Florida, USA

Status: Operational

Current Active Modes: FM Repeater - OFF
                      Voice -       V/v
                      BBS -         OFF
                      APRS -        OFF
                      SSTV -        OFF


Expedition 27 Crew:
Commander:                Dmitry Kondratyev
Flight Engineer:          Catherine Coleman     KC5ZTH
Flight Engineer:          Paolo Nespoli         IZ0JPA


Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink:   145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink:     145.200 MHz FM
Region 2/3 voice uplink:   144.490 MHz FM
Worldwide downlink:        145.800 MHz FM

Crossband Repeater:
Repeater Uplinks:         1269.650 MHz FM
```

437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[03212011]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-119.S2
WSR 119 Part 2 04/29/2011

AMSAT NEWS SERVICE BULLETIN 119.S2
FROM AMSAT HQ SILVER SPRING, MD, April 29, 2011
TO ALL RADIO AMATEURS
BID: $WSR-119.S2

O/OREOS
Catalog Number: 37224
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: On Orbit

Uplink:
Downlink: 437.035 MHZ AX.25

Beacon:

Callsign:

```
URL: http://www.ooreos.org/
[02092011]
=====
Rax-1 Radio Aurora Explorer
Catalog Number: 37223
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: On Orbit

Uplink:
Downlink: 437.505 MHz 9k6 GMSK

Beacon:

Callsign: RAX-1

URL: http://rax.engin.umich.edu/
[02092011]
=====
Fastrac-1 Sara Lily
Catalog Number: 37225
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: On orbit

Uplink 1: 145.980 MHz 1k2 baud
Uplink 2: 145.825 MHz 1k2 baud
Downlink: 437.345 MHz 1k2 and 8k6 baud

Beacon:   437.435 MHz 1k2 AX.25

Callsign: Fast1

URL: http://fastrac.ae.utexas.edu/index.php
[02092011]
=====
Fastrac-2 Emma
Catalog Number: 37227
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: On Orbit

Uplink 1: 435.025 MHz 1k2 baud
Uplink 2: 437.435 MHz 9k6 baud
Downlink: 145.825 MHz

Beacon:   145.825 MHz 1k2 AX.25

Callsign: Fast2
```

```
URL: http://fastrac.ae.utexas.edu/index.php
[02092011]
=====
StudSat
Catalog Number: 36796
Launch Date: July 12, 2010 0352z
Launch site: Satish Dhawan Space Centre, India

Status: On Orbit

Uplink:   437.505MHz, 9600bps FSK
Downlink: 437.505MHz, 9600bps FSK
Beacon  : 437.505MHz,   20bps ASK
[02092011]
=====
TIsat-1
Catalog Number: 36799
Launch Date: July 12, 2010 0352z
Launch site: Satish Dhawan Space Centre, India

Status: On orbit

Callsign: HB9DE

Uplink:   145.980MHz FM, AFSK
Downlink: 437.305MHz FM, AFSK
Beacon:   437.305MHz CW
[02092011]
=====
HO-68 HOPE-1 (CAS-1)(XW-1)
Catalog Number: 36122
Launch Date: December 15, 2009 0231z
Launch site: Taiyuan Space Center, PRC

Status: By schedule

Callsign:
Broadcast:    BJ1SA-11
BBS:         BJ1SA-12

Uplinks:   145.8250 MHz FM, PL 67.0 Hz.
           145.9250 - 145.9750 MHz SSB/CW
           145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
           435.7650 - 435.7150 MHz SSB/CW
           435.6750 MHz AFSK 1200 BPS

Beacon:    435.7900 MHz CW

IARU coordination page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108
```

```
For more information about XW-1 (CAS-1):
http://
[02092011]
=====
SwissCube
Catalog Number: 35932
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Callsign: HB9EG

Beacon(100mw): 437.5050MHz CW
Beacon(1w):    437.5050MHz FSK 1k2bps
[02092011]
=====
UWE-2
Catalog Number: 35934
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: In Orbit

Beacon(500mw): 437.3850 MHz AFSK 1k2bps
               437.3850 MHz FSK 9k6bps
[02092011]
=====
ITUpsAT1
Catalog Number: 35935
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Beacon(100mw): 437.325MHz CW
Beacon(1w): 437.325MHz 19k2bps
[02092011]
=====
BEESAT
Catalog Number: 35933
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Callsign: DP0BEE

Beacon(100mw): 436.000MHz CW
Beacon(500mw): 436.000MHz GMSK 4k8bps
Beacon(500mw): 436.000MHz GMSK 9k6bps
[02092011]
=====
CP-6
Catalog Number: 35003
Launch Date: May 19, 2009 2355z
Launch site: Wallops Island, Virginia, USA

Status: Operational

Downlink: 437.365 MHz 1k2 AFSK
[02092011]
=====
HAWKSAT 1
Catalog number: 35004
Launch Date: May 19, 2009 2355z
Launch site: Wallops Island, Virginia, USA

Status: operational

Downlink: 437.345 MHz ?
[02092011]
=====
Pharmasat
Catalog Number: 35002
Launch Date: May 19, 2009 2355z
Launch site: Wallops Island, Virginia, USA

Status: Operational

Downlink: 437.465 MHz 1k2 AFSK
[02092011]
=====
ANUSAT
Catalog Number: 34808
Launch Date: April 20, 2009 0115z
Launch Site: Satish Dhawan Space Centre, India

Status: ?

Downlink:  435.000 MHz
Uplink:    145.800 MHz

Telemetry: 137.400 MHz
[02092011]
=====
SOHLA-1 (ASTRO TECH.)
Catalog Number: 33496
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational

Proposed Frequencies and Modes:
Downlink: 437.505 MHz AFSK/CW
Beacon:   437.505 MHz AFSK/CW
```

Callsign:

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=101
[02092011]
=====
KAGAYAKI (Solan Co.)
Catalog Number: 33495
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: In Orbit

Downlink: 437.375 MHZ   FSK9k6/CW
Beacon: 437.375 MHz   FSK9k6/CW

IARU coordination status page:

AMSAT-NA webpage:

[02092011]
=====
STARS (Kagawa Univ.) (Twin Satellites)
Catalog Number: 33498
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational ?

Downlinks: 437.485 MHz FM/CW
437.465 MHz FM/CW
Beacons: 437.305 MHz FM/CW
437.275 MHz FM/CW

Callsigns: JR5YBN
JR5YBO

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=99

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=121&retURL
=/satellites/status.php
[02092011]
=====
KKS-1 (Tokyo MCIT)
Catalog Number: 33499
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational

Downlink: 437.455 MHz AFSK/CW
Beacon: 437.385 MHz AFSK/CW

Callsign: JQ1YYY

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=107

AMSAT-NA webapge:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=120&retURL
=/satellites/status.php
[20092011]
=====
PRISM (Tokyo Univ.)
Catalog Number: 33493
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational ?

Downlink: 437.425 MHz AFSK/GMSK/CW
Beacon: 437.250 MHz AFSK/GMSK/CW

Callsign: JQ1YCX

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=97

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=119&retURL
=/satellites/status.php
[02092011]
=====
RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number: 32953
Launch Date: May 23, 2008 1520z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational

Curent Modes: Telemetry
              Audio
              Images

Downlinks: 435.315 MHz
           435.215 MHz

AMSAT-NA website:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=115&ret
URL=/satellites/status.php

Official website:
http://www.npopm.com/?cid=leoca&caid=43

[02092011]
=====
CanX-2
Catalog number: 32790
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational in range of ground station only

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[02092011]
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Downlink: 437.425 MHz 1k2 baud packet

For the latest project status update please visit the AAUSAT-II web page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[02092011]
=====
CO-65 CUTE-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Digipeater

Downlink: 437.475 MHz 9k6 Packet
Uplink: 1267.600 Mhz

Telemetry Beacon:
Downlink: 437.2750 MHz CW

For the latest project status update please visit the Cute-1.7+APD II web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78

Command Station blog website:
http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=112&retURL
=/satellites/status.php
[02092011]
=====
Compass-1
Catalog number: 32787
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Current Mode: 4k8 MSK packet

Uplink: 145.980 MHz FM
Downlink: 437.275 Mhz CW
          437.405 MHz Packet

For the latest project status update please visit the Compass 1 web
page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=114&retURL
=/satellites/status.php
[02092011]
=====
CO-66 Seeds II
Catalog number:
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Downlink: 437.485 MHz

Callsign: JQ1YGU

For the latest project status update please visit the Seeds 2 web
page: http://cubesat.aero.cst.nihon-u.ac.jp/english/seeds_2_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=113&retURL
=/satellites/status.php

```
[02092011]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007 0702z
Launch site: Baikonur, Kazakhstan

Status: Intermittent

Current Mode:  /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon:    435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=94&retURL=
/satellites/status.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=72
[02092011]
=====
CP3
Catalog Number: 31129
Launch Date: April 17,2007 0702z
Launch site: Baikonur, Kazakhstan

Status: Operational

Current Mode:  /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[02092011]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005 0652z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon:             437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
```

```
Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/xivpicte.htm
[02092011]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: ?????

Current Mode: /u

Beacon:     436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=96&retURL
=/satellites/status.php

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[02092011]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004 0745z
Launch site: Baikonur, Kazakhstan

Status: Operational

Current Mode(s):
Voice repeater: V/u
Uplink:      145.880 MHz FM - 67 hz PL required
Downlink:    435.300 MHz FM

Telemetry:
Downlink:    435.150MHz 9k6


Analog voice downlink:     435.300 MHz FM
                           435.150 MHz FM
                          2401.200 Mhz FM
Analog voice uplink:       145.860 MHZ FM
                           145.880 MHz USB
                           145.880 MHz FM
                           145.920 MHz FM
                           145.920 MHz FM - 67 Hz PL tone burst
                          1268.700 MHz FM
Digital Downlinks:         435.150 MHz FM 38k4 PBP, 1 watt output
                           435.150 MHz FM 9k6 Pacsat Broadcast Protocol
                          2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:            145.860 MHz FM 9k6 Pacsat Broadcast Protocol
                          1268.708 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon:                    435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[04292011]
=====
QuakeSat
Catalog Number: 27845
Launch Date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Telemetry only

Current Mode: 9600 baud data packet

Mode U packet
Downlink: 436.675 MHz 9k6 BPS

Quakesat webpage:
http://www.quakefinder.com/services/quakesat-ssite/
[02252011]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational

Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW
```

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=69&retURL=/satellites/status.php
[02092011]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001 0240z
Launch site: Kodiak Launch Complex, Alaska, USA

Status: Telemetry only

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[02092011]
=====
RS-22 RADIO SPORT 22 (MOZHAYETS 4)
Catalog number: 27939
Launch Date: September 27, 2003 0612z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational - 70cm cw only

Current Mode: /u

CW Beacon - 435.352 MHz
            145.818 MHz

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=76&retURL=/satellites/status.php
[02092011]
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990
Launch site: Kourou, French Guiana

Status: CW Beacon only

Uplinks: 145.840 MHz 1200-baud Manchester FSK
                   145.860 MHz 1200-baud Manchester FSK
                   145.880 MHz 1200-baud Manchester FSK
                   145.900 MHz 1200-baud Manchester FSK

CW downlink: 437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[02092011]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984
Launch site: Vandenburg AFB, California, USA

Status: Operational

Current Mode: /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon: 435.025 MHz
Mode-S Beacon: 2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[02092011]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998 0640z (ZARYA module)
Launch sites: Baikonur, Kazakhstan
Kourou, French Guiana
Uchinoura Space Center, Japan
Kennedy Space Center, Titusville, Florida, USA

Status: Operational

Current Active Modes: FM Repeater - OFF
Voice - V/v
BBS - OFF
APRS - OFF
SSTV - OFF

Expedition 27 Crew:

Commander:	Dmitry Kondratyev	
Flight Engineer:	Catherine Coleman	KC5ZTH
Flight Engineer:	Paolo Nespoli	IZ0JPA

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[03212011]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-119.S3
WSR 119 Part 3 04/29/2011

AMSAT NEWS SERVICE BULLETIN 119.S3
FROM AMSAT HQ SILVER SPRING, MD, April 29, 2011
TO ALL RADIO AMATEURS
BID: $WSR-119.S3

```
THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

NANOSAIL-D
Catalog Number:
Ejection Date: January 17, 2011

Status: On orbit

Downlink: 437.270 MHz AX.25

URL: http://nanosaild.engr.scu.edu/dashboard.htm
[01272011]
=====
CP4
Catalog Number: 31132
Launch Date: April 17, 2007

Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon:    437.325 MHz CW

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=79
[09062010]
=====
LIBERTAD-1
Catalog Number: 31128
Launch Date: April 17, 2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink:   145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[09062010]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: Non-Operational

Current Mode: V/v
```

```
Uplink/Downlink: 145.825 Mhz FM
Voice Recorder:  145.825 Mhz FM
[09062010]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency:  437.305
                             2407.250

Official Website: http://www.ncube.no
[09062010]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink:        437.250 MHz FM 67Hz CTCSS
Voice Downlink:     2401.835 MHz FM
Packet Up/Downlink:  437.250 MHz 9k6 packet
Packet Downlink     2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[09062010]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non-Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[09062010]
=====
CANX-1
Catalog Number: 27847
Launch Date: June 30, 2003

Status: Non-Operational

Downlink: 437.8800 MHz AFSK 1k2bps
[06052009]
=====
DTUSAT
Catalog Number: 27842
```

Launch Date: June 30, 2003

Status: Non-Operational

Current Mode: 2k4 AFSK Packet last reported

Downlink: 437.475MHz

Officail webpage: http://dtusat1.dtusat.dtu.dk/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=101&retURL
=satellites/all_oscars.php
[02212009]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)

Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Telemetry only

Uplinks: 145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[03302009]
=====
NO-45 SAPPHIRE

```
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink:   145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS:                SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink:   145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
```

V-band: 145.840 - 145.990 MHz CW/LSB
U-band: 435.550 - 435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks

S2-band: 2401.225 - 2401.475 MHz CW/USB
K-band: 24048.010 - 24048.060 MHz CW/USB
Beacon: 2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)

BEACON	General Beacon(GB)	Middle Beacon(MB)	Engineering Beacon(EB)
2 m	none	145.898 MHz	none
70cm	435.438 MHz	435.588 MHz	435.838 MHz
13cm(1)	2400.188 MHz	2400.338 MHz	2400.588 MHz
13cm(2)	2401.173 MHz	2401.323 MHz	2401.573 MHz
3cm	10450.975 MHz	10451.125 MHz	10451.375 MHz
1.5cm	24047.885 MHz	24048.035 MHz	24048.285 MHz

[07162007]
=====
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: 25636

```
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater:         436.250 MHz

Uplinks: Mode B Repeater:  145.825 MHz
Mode J Digipeater:         145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Non-Operational

Current Modes:
Telemetry : /u

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
```

145.890 FM
145.930 FM
1269.700 FM
1269.800 FM
1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://asri.technion.ac.il/techsat/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=14&retURL=/satellites/status.php
[07172010]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink: 145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
MO-30 UNAMSAT-2
Catalog Number: 24305
Launch Date: September 5, 1996

Status: Non-operational

Downlink: 435.1380 MHz AFSK 1200 BPS
Downlink: 435.2060 MHz AFSK 1200 BPS
Uplink: 145.8150 MHz AFSK 1200 BPS
Uplink: 145.8350 MHz AFSK 1200 BPS
Uplink: 145.8550 MHz AFSK 1200 BPS
Uplink: 145.8750 MHz AFSK 1200 BPS
[06042009]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Non-operational
Current Mode: V/u (Mode JA)

Voice/CW (Mode JA)
Uplink: 145.90 to 146.00 MHz CW/LSB

```
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon:   435.795 MHz

Digital Mode JD
Uplinks:  145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage:
http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's
CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/
fo29cwts.htm
[11062010]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Non-operational

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign:       POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012009]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only
```

```
Current Mode:

Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
AO-24 ARSENE
Catalog Number: 22654
Launch Date: May 13, 1993

Status: Non-operational

Uplink:    435.0625 MHz FM 1k2bps AFSK
           435.1125 MHz FM 1k2bps AFSK
           435.1375 MHz FM 1k2bps AFSK
Downlink:  145.9750 MHz FM 1k2bps AFSK
          2446.5025 MHz FM 1k2bps AFSK

Beacon:    2446.4700 MHz CW

Broadcast callsign:
BBS:
[12162009]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational
```

```
Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HL01-11
BBS: HL01-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
```

```
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
[05012006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: non-operational

Current Mode:  V/u

Uplink:         145.900 MHz FM 1200-baud Manchester FSK (reserved)
                145.920 MHz FM VOICE
                145.940 MHz FM 1200-baud Manchester FSK (reserved)
                145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink:       437.026 MHz USB VOICE
                (1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[07242009]
=====
UO-15 UoSAT-4
Catalog Number: 20438
Launch Date: January 22, 1990
```

```
Status: Non-operational

Uplink: ?
Downlink: 435.1250MHz (?)
          435.1200MHz (?)
[06042009]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon:   145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink  29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
Beacons:   29.450 MHz
          435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon 1:  29.352 MHz (intermittent)
Beacon 2:  29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink:     21.260 to 21.300 MHz CW/USB
Downlink:  145.860 to 145.900 MHz CW/USB

Beacon:    145.860 MHz

Robot:     145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink:   21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon:   29.408 MHz

Robot:    29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-119.S4
WSR 119 Part 4 04/29/2011

AMSAT NEWS SERVICE BULLETIN 119.S4
FROM AMSAT HQ SILVER SPRING, MD, April 29, 2011
TO ALL RADIO AMATEURS
BID: $WSR-119.S4
```

THE FOLLOWING SATELLITES HAVE RE-ENTERED OR HAVE BEEN RETURNED SAFELY:

CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Re-entered
Re-entered: October 25, 2009

Uplink: 1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=56
[09062010]
=====
BEVO-1 (DRAGONSAT-1)
Catalog Number: 35690
Launch Date: May 19, 2009

Status: Re-entered
Re-entered:

Downlink: 437.325 MHz 9k6 GMSK
          437.325 MHz CW 20wpm
[07312009]
=====
AggieSat2 (DRAGONSAT-2)
Catalog Number: 35690
Launch Date: May 19, 2009

Status: Re-entered
Re-entered:

Downlink: 436.250 MHz 9k6 FHSS
[11112009]
=====
Pollux
Catalog Number: 35693
Launch Date: July 31, 2009

Status: Re-entered
Re-entered:

Callsign: POLLUX-1

Downlink: 145.825MHz 1k2 AX.25

```
[09062010]
=====
Castor (ANDE-2)
Catalog Number: 35694
Launch Date: July 31, 2009

Status: Re-entered
Re-entered:

Callsign: KD4HBO-1

Downlink: 145.825 MHz 1k2 AX.25
[09062010]
=====
NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: July 28, 2008

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[01012009]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink:      145.825 Mhz FM APRS AX25
APRS Uplink:        145.825 MHz FM APRS AX25
Voice/PSK31 Uplink:  28.120 MHz

Packet to Voice ID: RAFT
[06112007]
=====
GENESAT-1
```

Catalog Number: 29655
Launch Date: December 16, 2006

Status: Re-Entered
Re-entered date: August 8, 2010

Current Mode: /u

Callsign: KE7EGC

Telemetry Beacon Downlink: 437.0695 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[08082010]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Re-Entered
Re-entered: June 18, 2008

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon: 437.2750 MHz CW

Callsign: JR8YJT
[01012009]
=====
SO-43 Starshine 3
Catalog Number: 26929
Launch Date: September 30, 2001

Status: Re-Entered
Re-entered: January 21, 2003

Beacon: 145.825Mhz
[02212009]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at} amsat.org
NNNN
/EX

From -6425494390575229829
X-Google-Thread: 107ada,35f7ead2a9463685,start
X-Google-NewGroupId: yes
X-Google-Thread: 11480d,35f7ead2a9463685,start
X-Google-NewGroupId: yes
X-Google-Thread: 10e8ad,35f7ead2a9463685,start
X-Google-NewGroupId: yes
X-Google-Attributes:
gida3e752f117,gid7221ecd0f7,gid8f86f75953,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!border1.nntp.dca.giganews.com!nntp.giganews.com!novia!news-out.readnews.com!transit3.readnews.com!panix!rri.panix.com!robomod!not-for-mail

```
From: SWPC.Webmaster@noaa.gov
Newsgroups: rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.info
Subject: Weekly Highlights of Solar and Geomagnetic Activity, 25 April - 01 May 2011
Followup-To: rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space
Date: Tue, 3 May 2011 17:30:09 EDT
Organization: NOAA Space Weather Prediction Center
Lines: 68
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <20110503213001.E8DDC33C5C@panix2.panix.com>
NNTP-Posting-Host: panix6.panix.com
X-Trace: reader1.panix.com 1304458210 24429 166.84.1.6 (3 May 2011 21:30:10 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Tue, 3 May 2011 21:30:10 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Xref: g2news1.google.com rec.radio.amateur.misc:6164 rec.radio.amateur.dx:976 rec.radio.amateur.space:492 rec.radio.info:2317
```

```
:Product: Weekly Highlights and Forecasts
:Issued: 2011 May 03 2027 UTC
# Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center
# Product description and SWPC contact on the Web
# http://www.swpc.noaa.gov/weekly.html
#
#                Weekly Highlights and Forecasts
#
```

Highlights of Solar and Geomagnetic Activity
25 April - 01 May 2011

Solar activity began the week at very low levels. An increase to low occurred with a C2 x-ray event at 0233 UTC on 27 April from Region 1201 (N16, L=116, plage region). Activity continued at low levels for the remainder of the week with the primary contributions from Region 1199 (N20, L=188, class/area Dso/210 on 01 May), Region 1203 (N18, L=061, class/area Cso/160 on 01 May), and Region 1195 (S16, L=191, class/area Ehi/400 on 25 April). The largest event of the week was a C6/Sf from Region 1199 at 2332 UTC on 01 May.

No proton events were observed at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit was at low to moderate levels for 25-30 April, and reached high levels on

01 May.

Geomagnetic field activity was generally quiet from 25-28 April. An increase to unsettled to active levels (with occasional storm periods at high latitudes) occurred late on 29 April and persisted through 01 May in response to a favorably positioned negative polarity coronal hole. The high speed stream followed a clear solar sector boundary crossing at 1445 UTC on 28 April. Solar wind velocity began to increase at 1600 UTC on 29 April and reached peak values around 740 km/s. The north-south component of the solar wind Bz turned negative after 1600 UTC on 29 April and persisted at generally negative values for the remainder of the week. Typical values were in the range between 0 and -5 nT with peak values reaching -10 to -12 nT.

Forecast of Solar and Geomagnetic Activity
04 May - 30 May 2011

Solar activity is expected to be very low to low. There is a chance for isolated periods of moderate levels due to the possible emergence of new regions as well as the return of old Region 1195 on 15 May.

No proton events are expected at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to be at high levels for 04-07 May in response to the sustained high solar wind speed mentioned previously. Normal background levels should resume for 08-09 May but another increase to high levels is expected for 10-12 May in response to another high speed stream. Normal background levels should return for the remainder of the outlook interval with the exception of 19-20 May and 28-30 May due to recurrent high speed streams.

Geomagnetic field activity is expected to be quiet to unsettled for 04 May and generally quiet for 05-08 May. An increase to unsettled levels with possible active periods is expected for 9-10 May in response to a recurrent coronal hole. Quiet levels should prevail until 17 May when another recurrent high speed stream is expected to increase activity to unsettled to active levels. Quiet levels should return for 18-25 May, followed by an increase to unsettled to active levels with a chance for storm periods at high latitudes for 26-30 May in response to a recurrent coronal hole.

```
From -1451112259619709962
X-Google-Thread: 10e8ad,cf02edbf50e1bf0a,start
X-Google-NewGroupId: yes
X-Google-Thread: 113975,cf02edbf50e1bf0a,start
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,gidaddc8bf063,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
```

```
Path: g2news1.google.com!news2.google.com!news.glorb.com!feeder.erje.net!
newsfeed.kpn.net!pfeed09.wxs.nl!news.astraweb.com!
border5.a.newsrouter.astraweb.com!not-for-mail
From: Chris Steyaert <observations@rmob.org>
Newsgroups: rec.radio.amateur.space,sci.astro.amateur
Subject: Radio Meteor Obs. Bull. April 2011 Lyrids
Date: Sat, 07 May 2011 22:53:23 +0200
Message-ID: <u8cbs61hpu3phq8qeovra9jcer600epqmu@4ax.com>
X-Newsreader: Forte Agent 5.00/32.1171
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Lines: 14
Organization: Unlimited download news at news.astraweb.com
NNTP-Posting-Host: e2dda858.news.astraweb.com
X-Trace: DXC=AF`D^acamN\7HkD[4f_4]SL?
0kYOcDh@Z<of2N2@gWTR322ba1Qh\>]]>:Ma_6Vk8_b3<D_UX>L;YX<`3P5ZY[ZZDYJoCf;H`1\FbHQ>`C
CVe\
Xref: g2news1.google.com rec.radio.amateur.space:493 sci.astro.amateur:46063

Radio Meteor Observation Bulletin No. 21 of April 2011 (84 K) is available now
as

    http://www.rmob.org/rmobtext/rmob1104.txt


More information and the visual presentation of the hourly forward scatter
counts can be found on

     http://www.rmob.org


     Chris




From 6805617825659630825
X-Google-Thread: 10e8ad,60ecf3707ea8d316,start
X-Google-NewGroupId: yes
X-Google-Thread: 10b9c8,60ecf3707ea8d316,start
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,gida4a23d5f63,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news2.google.com!news.glorb.com!news-out.readnews.com!
news-xxxfer.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-128 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sun, 8 May 2011 09:42:13 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 597
Approved: RRI Admin <rec-radio-info-request@panix.com>
```

```
Message-ID: <003101cc0d1e$ddee3e60$99cabb20$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1304862133 15615 166.84.1.6 (8 May 2011 13:42:13 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 8 May 2011 13:42:13 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news2.google.com rec.radio.amateur.space:519 rec.radio.info:2406
```

AMSAT NEWS SERVICE
ANS-128

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

```
**********************************************************************
* Volunteers are needed to Help at the AMSAT booth at Dayton. Gould  *
* WA4SXM, is looking for volunteers to help man the AMSAT booth dur- *
* ing the 2011 Hamvention. People are needed all 3 days for 2 hour   *
* shifts. Please send the days and times you are available to help   *
* as well as how many shifts you are willing to work via e-mail to   *
* wa4sxm at amsat.org.                                               *
**********************************************************************
```

In this edition:

* AMSAT at the Dayton Hamvention 2011
* The DARA Matching Gift Challenge
* May 16 Deadline for Dayton AMSAT/TAPR 2011 Banquet Reservations
* AO-51 Batteries Failing
* Calling all software developers - AMSAT needs you!
* W5KUB Dayton Webcast to Feature Interview with Astronaut

* Satellite Shorts From All Over
* Satellite Presentations for May 2011
* 6th Anniversary of HAMSAT VO 52
* Ben Stevenson, W2BXA Silent Key

SB SAT @ AMSAT $ANS-128.01
AMSAT at the Dayton Hamvention 2011

AMSAT News Service Bulletin 128.01
>From AMSAT HQ SILVER SPRING, MD.
May 8, 2011
To All RADIO AMATEURS
BID: $ANS-128.01

The 2011 Dayton Hamvention will be held this year from May 20-22, 2011 and AMSAT will be there. The AMSAT theme for 2011 is "Providing Education Through Amateur Satellites". We will have multiple exhibits of the new AMSAT satellites on display.

You'll find AMSAT at the same spot (Booths 444-449) in the Ball Arena, right across from the ARRL area and just inside the door from the Satellite Demonstration area. Plan to visit all of the AMSAT activities!

AMSAT has planned a number of great activities during the Hamvention. To help produce and deliver our great list of AMSAT activities we need you to volunteer to help at the AMSAT booth all three days for 2 hour shifts. Please contact AMSAT-VP User Services, Gould Smith, WA4SXM by e-mail (wa4sxm@amsat.org) to tell him the days and times you are available to help as well as how many shifts you are able to help.

Here is a sample of the events and activities planned for the entire weekend. Links to all of these activities can be found on the AMSAT web page: http://www.amsat.org.

+ Meet astronaut Doug Wheelock, KF5BOC Friday 1:30-2:30, Saturday, 3:00-4:00 at the AMSAT booth.

+ ARISSat-1 operational prototype will be on display.
  - o Tune your HT to 145.950 MHz to hear a preview of the FM downlink.
  - o Watch the demonstration of the ARISSatTLM software receive and display the CW beacon and BPSK telemetry using G6LVB's FUNcube Dongle.

+ AMSAT Thursday Night Get-together at Tickets Pub & Eatery.

+ The AMSAT Forum will be on Saturday May 21. Moderated by Alan Biddle, WA4SCA you will have a chance to hear and see the latest news of amateur radio in space.
  - o AMSAT President Barry Baines, WD4ASW will present an AMSAT Status Report
  - o Alan Kung, BA1DU, CEO of AMSAT-China, will discuss the activities of AMSAT-China.

  o Project Manager for ARISSat-1, Gould Smith, WA4SXM, will talk about
    its operation aboard the ISS, and the planned deployment and operations this summer.
  o Tony Monteiro, AA2TX, will discuss the design and status of
    Project-FOX.
  o Alex Harvilchuck, N3NP, will present NextGen CubeSat
    Program Update.

+ Satellite demonstrations will take place outside the Ball Arena entrance Friday, Saturday and Sunday.

+ The fifth annual AMSAT/TAPR Banquet will be Friday night May 20. (More information below).

Be sure and come by the booth and renew your membership and receive an AMSAT multiblade screwdriver as a premium!

The AMSAT leadership team will be at Hamvention and invite you to take advantage of this opportunity to interact with both board members and senior officers. If you have issues or concerns that you wish to express here is your chance to do so.

[ANS thanks AMSAT HQ for the above information]

/EX

SB SAT @ AMSAT $ANS-128.02
The DARA Matching Gift Challenge

AMSAT News Service Bulletin 128.02
>From AMSAT HQ SILVER SPRING, MD.
May 8, 2011
To All RADIO AMATEURS
BID: $ANS-128.02

The Dayton Amateur Radio Association (DARA) has also announced a fundraising challenge for AMSAT whereby they will match on a 1:3 basis up to $5,000.00 for donations made in 2011. That is, for every $3.00 that AMSAT raises, DARA will provide $1.00 up to a maximum of $5,000 donated by DARA.

AMSAT will be conducting fundraising at Hamvention, where donations will count against this goal. Please consider making a donation to AMSAT at Hamvention or anytime this Spring as we strive to meet this goal. We appreciate DARA's support for AMSAT and see this as an opportunity for donors to increase the impact of their donations by taking advantage of this matching program.

This is the 60th year of the Dayton Hamvention, sponsored by DARA (Dayton Amateur Radio Association). As has been the case for the many years Hamvention will be at the Hara Arena Complex on the north side of Dayton. Further information on Hamvention 2011, including advance ticket sales and motel accommodations, can be found at the Hamvention web site: http://www.hamvention.org/

[ANS thanks AMSAT HQ for the above information]

/EX

SB SAT @ AMSAT $ANS-128.03
May 16 Deadline for Dayton AMSAT/TAPR 2011 Banquet Reservations

AMSAT News Service Bulletin 128.03
>From AMSAT HQ SILVER SPRING, MD.
May 8, 2011
To All RADIO AMATEURS
BID: $ANS-128.03

May 16 Deadline for Dayton AMSAT/TAPR 2011 Banquet Reservations

The cutoff date for the AMSAT-TAPR dinner at Dayton is May 16th. You can register at the AMSAT website. As in previous years, we will NOT be selling banquet tickets at the AMSAT booth.

The fifth annual joint AMSAT/TAPR Banquet will be held Friday evening, May 20, 2011 during the Dayton Hamvention.

The Banquet will be at the:

Kohler Presidential Banquet Center
4572 Presidential Way
Kettering, OH   45429
(just south of Dayton).

The price for the Banquet is $30 per person. Reserved tickets may be picked up at the AMSAT booth at Hamvention on Friday, or at the door.

You may make reservations for the 2011 AMSAT/TAPR Banquet online in the AMSAT Store: http://www.amsat-na.com/store/item.php?id=100158

AMSAT Presidents Club Gold members should let Martha know if they are planning to attend the banquet. For additional information contact Martha at the AMSAT office (martha@amsat.org).

Banquet Schedule

6:30 PM Doors open and Cash bar is available with Beer, Wine, Liquor and soft drinks.

7:15 PM Buffet Dinner service begins. The Center has a justly deserved reputation for good food and service.

8:15 PM Presentation by David Rowe, VK5DGR - The Village Telco

There are now billions of mobile phones all over the world. However in many developing countries, mobile phones are simply too expensive to use. For example, in a country where people earn $1.50/day, a phone call can cost 21 cents/minute. This is a huge tax on communications.

David Rowe, VK5DGR, will describe how a community of people from around the world set out to fix this problem, using a mix of Wi-Fi and open source software. The result is the Village Telco - a DIY telephone company that anyone can set up.

A Village Telco is constructed from a network of "Mesh Potatoes" - small Wi-Fi boxes that are mounted on homes in a village. They form a mesh network, relaying telephone calls for each other. Each Mesh Potato connects to a regular telephone inside village homes. Phone calls on the network are free. A local person in the Village can be trained in a few hours to set up and maintain the network.

To build the Village Telco we borrowed many ideas from Ham Radio, such as sharing hardware designs and community networks.

The talk will include real world stories of how Village Telcos are helping people in several developing countries, and explain why a simple phone call that we take for granted can be so important.

[ANS thanks AMSAT HQ for the above information]

/EX

SB SAT @ AMSAT $ANS-128.04
AO-51 Batteries Failing

AMSAT News Service Bulletin 128.04
>From AMSAT HQ SILVER SPRING, MD.
May 8, 2011
To All RADIO AMATEURS
BID: $ANS-128.04

AMSAT Vice-President of Operations Drew Glasbrenner, KO4MA reported the AO-51 Command Team is having a difficult time trying to restore AO-51 to operation.

The current situation is the satellite will not retain the upload of the flight software across eclipse. The batteries are in very poor condition.

AO-51 ground control stations plan a few more things to try, but with eclipses peaking around July at approximately 27 minutes, the long term situation is grim.

There is a brief period around November where eclipses are as short as 16 minutes, but past that it is a long climb to 30 minutes or longer eclipses for many years.

At this time the Command Team cannot provide an estimated "return to service" date. Stations with 9k6 digital capability can listen in on control station attempts at recovery on 435.150 MHz on many passes over the US.

Please support AMSAT-NA and the other AMSAT groups around the world, and help us get new satellites into orbit. Projects like Fox, FunCube, P3E, and Kiwisat need your financial support to keep our amateur satellite fleet flying. You can donate to AMSAT-NA via the link on the front page at http://www.amsat.org.

Keep up with the latest AO-51 Control Team News on-line at:
http://www.amsat.org/amsat-new/echo/CTNews.php

[ANS thanks AMSAT-NA VP Operations Drew Glasbrenner, KO4MA for the above information]

/EX

SB SAT @ AMSAT $ANS-128.05
Calling all software developers - AMSAT needs you!

AMSAT News Service Bulletin 128.05
>From AMSAT HQ SILVER SPRING, MD.
May 8, 2011
To All RADIO AMATEURS
BID: $ANS-128.05

To receive the new BPSK-1000 telemetry format from ARISSat-1, AMSAT has developed demodulation and decoding software called ARISSatTLM. This software is designed to be used with a standard 2-meter SSB receiver. With the advent of software defined radios, we would like to test receiving the telemetry on one of these new devices such as the "FUNcube Dongle" receiver. This would require modifying the software to use an I/Q source and doing the Doppler tracking in software. The ARISSatTLM software by Phil Karn KA9Q and Douglas Quagliana KA2UPW is open source and is available here:

https://svn.sarpeidon.net/suitsat2/repos/ground_station_software

Interested software developers are invited to download the software and see what you can do with it for your favorite SDR.

[ANS thanks AMSAT Vice-President of Engineering Tony Montiero, AA2TX for the above information]

/EX

SB SAT @ AMSAT $ANS-128.06
Dayton Webcast to Feature Interview with Astronaut Doug Wheelock

AMSAT News Service Bulletin 128.06
>From AMSAT HQ SILVER SPRING, MD.
May 8, 2011
To All RADIO AMATEURS
BID: $ANS-128.06

If you cannot make it to Dayton this year you can watch the event via the webcam broadcast by Tom Medlin, W5KUB. Tom had 28 contacts with Col. Doug Wheelock during Expedition 25 on the International Space Station. Tom and Doug will meet in-person with the event to be broadcast on the webcam link at: http://w5kub.com.

W5KUB.Com will start the live broadcast on Wednesday May 18th at approximately 0800 Central Time or 1300 UTC with the webcam mounted in the car for the 550 mile drive to Dayton. They will broadcast the shelter set up on Thursday morning May 19th at Hara Arena at 0900 Eastern time or 1300 UTC. Thursday afternoon they will try to broadcast the Air Force Museum.

Then they will be live for the entire Hamvention Friday May 20th through Sunday May 22nd.

Tom says, "We will also be giving away over $5000 to lucky winners on our broadcast. All you have to do is be logged into our chatroom and claim your prize when your name is called. We have so many prizes that we will be giving them out every 20-30 minutes during live broadcasts."

This year prizes include:

+ Grand prize FT-950
+ Icom IC80AD D-star radio
+ headsets with mic from Heil Sound
+ headset and mic from TenTec
+ Diawa wattmeters
+ LDG auto antenna tuners
+ Comet antennas
+ baluns
+ communication speakers
+ weather stations
+ ham hats
+ QSL cards
+ ham plaques
+ And many other ham related prizes

Last year over 50,000 unique hams followed the broadcast in about 150 countries. Log into the chat room on the web site and chat with us or other hams watching the broadcast. You can also join the ham chat room via your IRC client: server: irc.liveharmony.org then join #hamradio.

Tom concludes, "Watch for our interview with Astronaut Doug Wheelock when he visits the W5KUB booth. There will also be other surprise interviews and guests."

The http://w5kub.com website on-line 24 x 7, 365 days per year. It will have recorded videos on when we are not live. Come on over and say hello.

[ANS thanks Tom Medlin, W5KUB for the above information]

/EX

SB SAT @ AMSAT $ANS-128.07
Satellite Shorts From All Over

AMSAT News Service Bulletin 128.07
>From AMSAT HQ SILVER SPRING, MD.
May 8, 2011
To All RADIO AMATEURS
BID: $ANS-128.07

+ AMSAT extends sincere sympathy and best wishes to ISS astronaut Paolo Nespoli, IZ0JPA from Italy upon his recent sad news while in orbit on the International Space Station about the passing of his mother following an illness. She was 78. Nespoli is scheduled to return to Earth in three weeks.

+ A school contact with Greenville was done with the recently installed Ericsson radio from the Columbus module on the ISS. The ARISS team has received some reports that the signal may been lower than from past contacts. Please pass along your thoughts on how the signals seemed to be. ARISS had several contacts on Saturday, so if you listened, please tell ARISS how the signals sounded to you. Please post your signal reports on the sarex@amsat.org list.

+ NASA has made available for the public a new online collection of images of our solar system and locations on Earth where astrobiology researchers travel to conduct field research. The 90+ images in the collection were chosen for their scientific significance and sheer beauty. The photos can be viewed on the "From Earth to the Solar System (FETTSS)" website at: http://fettss.arc.nasa.gov/ A related story is at: http://tinyurl.com/3wzjve5 (skynightly.com)

+ NASA's Jet Propulsion Laboratory says the Space Images Version 2 app for iPad, iPhone, iPod Touch and Android is available for free download from: http://www.jpl.nasa.gov/apps/spaceimages/index.cfm
The Space Images are also available on a web site:
http://www.jpl.nasa.gov/spaceimages/

+ Kazakhstan Special Event Stations to celebrate the 50th anniversary of manned space flight using special callsigns will remain active until May 31. UN50SK (homecall UN7GWC), UO50G (UN2G), UP1ASTR (UN0GL), UP50F (UN7FW), UP50ASTR (UN6GK), UP50YG (UN7Z), UQ50G (UN6QC), UQ50L (UN7LZ) and UQ50P (UN7PL). They have also a special award and the

rules can be found at: http://un-dx.ucoz.com/index/yuri_gagarin/0-36
(DXNL 1726 - May 4, 2011 DX Newsletter)

+ Here's your chance to dress up your QSL mailings with new postage stamps honoring Mercury astronaut Alan Shepard, America's first man in space, and NASA's MESSENGER probe, the first spacecraft to orbit Mercury. For more information see: http://tinyurl.com/637uz3n (UniverseToday.com)

+ Something to talk about on 75 meters besides the weather ... Researchers at Northwestern University have created a new kind of cloaking material that can render objects invisible in the terahertz range. Though this design can't translate into an invisibility cloak for the visible spectrum, it could have implications in diagnostics, security, and communication. See: http://tinyurl.com/3m8uehs (spacewar.com)

+ 70MHz is not an amateur band in the USA, but European stations may try to listen for a new 4-Meter Band Radio Science E-skip Trans-Atlantic propagation beacon from the East Coast of the US. Its operating frequency is 70.005 MHz, QTH is FM07fm, CW emissions.
The callsign of the beacon is WE9XUP. Any and all QSL/SWL reports are welcome via email to: WA1ZMS (at) ARRL (dot) NET.
The beacon is scheduled to run 24 hours a day until 1 Sept, 2011.

+ Additional information about the Resourcesat-2, Youthsat, and X-Sat satellites launched on PSLV-C16 rocket on April 20 from India can be found on-line at: http://tinyurl.com/3fh53zt (spacemart.com)

+ A group of Cornell-developed, fingernail-sized satellites may travel to Saturn within the next decade, and as they flutter down through its atmosphere, they will collect data about chemistry, radiation and particle impacts. Three prototypes of these chip satellites, named "Sprite," will be mounted on the International Space Station after the space shuttle Endeavour delivers them on its final flight. The thin, 1-inch-square chips will be mounted to the Materials International Space Station Experiment (MISSE-8) pallet, which will be attached to the space station, exposing them to the harsh conditions of space to see how they hold up and transmit data. More information at: http://tinyurl.com/3fs5ks7 (spacemart.com)

+ Dave, KB1PVH is still looking for operators for CT, NH, NJ for the 13 Original Colonies Special Event. If anyone wants to participate send him an email at kb1pvh@gmail.com. More info on-line at: http://www.13colonies.info/

+ 'CQ EGYPT' Amateur Radio Magazine from The Egyptian Radio Amateurs Society (ERASD). One of their foremost goals is providing educational programs and materials to promote amateur radio and develop the scientific and technical skills of the Egyptian and Arab youth. In this context, ERASD is currently issued an online magazine focused on simplifying science and technology to youth in general, and more particularly in areas related to amateur radio and satellite. The Magazine articles will be a mix of English and Arabic. The May issue is NOW on-line at: http://erasd.net/CQSUAMATEURRADIOMAGAZIN.aspx

[ANS thanks everyone for the above information]

/EX

SB SAT @ AMSAT $ANS-128.08
Satellite Presentations for May 2011

AMSAT News Service Bulletin 128.08
>From AMSAT HQ SILVER SPRING, MD.
May 8, 2011
To All RADIO AMATEURS
BID: $ANS-128.08

Clint Bradford, K6LCS, will be presenting his "How to Work the FM Amateur Satellites With Your HT" session at the following clubs in the month of May, 2011. ALL are welcome to attend.

Attendees will be shown everything needed to work the FM ham satellites - with a re-occurring theme of, "Most hams already have most of the necessary equipment ... " Attendees should download the four-page tutorial beforehand at ...

http://www.work-sat.com

... and Clint welcomes pre-presentation questions. Call him at 909-241-7666, or send email to clint@clintbradford.com .

Chattanooga Tennessee ARC, 7PM local time
Thursday, May 5, 2011
American Red Cross chapter
3801 McCallie Avenue
Chattanooga TN 37403

Iredell County ARS, 7PM local time
May 12, 2011
Julia's Talley House Restaurant
Highway 21 North
Troutman NC 28166

Palos Verdes ARC, 7:30PM PDT
Wednesday, May 18, 2011
Hesse Park Community Room
23901 Hawthorne Boulevard
Rancho Palos Verdes CA 90275

West Coast ARC, 7PM PDT
Thursday, May 19, 2011
Huntington Beach Senior Outreach Center
1718 Orange Avenue
Huntington Beach CA 92648-2478

Barrow ARC, 7PM local time
Tuesday, May 24, 2011
Barrow Regional Medical Center - 3rd floor conference room
316 North Broad Street
Winder Georgia 30680

[ANS thanks Clint Bradford, K6LCS for the above information and thanks him for his on-going outreach work for amateur radio in space.]

/EX

SB SAT @ AMSAT $ANS-128.09
6th Anniversary of HAMSAT VO 52

AMSAT News Service Bulletin 128.09
>From AMSAT HQ SILVER SPRING, MD.
May 8, 2011
To All RADIO AMATEURS
BID: $ANS-128.09

Mani, VU2WMY, Secretary & Station-In-Charge of the Upagrah Amateur Radio Club VU2URC at the ISRO Satellite Centre in India released the following statement this week:

"It gives us great pleasure and satisfaction to say that 'HAMSAT-VO 52' has completed 6 years of successful operation in orbit. HAMSAT was launched on 5th May 2005 aboard PSLV-C6 from Sriharikotta.

The transponder and the beacon on-board were never been off the air, even for a second from the time they were switched 'ON'. Looking at the health parameters, HAMSAT is still in good condition and we are sure it would provide fruitful services for many more years to come.

On this happy occasion, we express our sincere thanks to the entire ISRO HAMSAT project team for this great feat. Our thanks to AMSAT-India, Kumar VU2BGS and William PEIRAH for their contributions."

[ANS thanks Mani, VU2WMY for the above information]

/EX

SB SAT @ AMSAT $ANS-128.10
Ben Stevenson, W2BXA Silent Key

AMSAT News Service Bulletin 128.10
>From AMSAT HQ SILVER SPRING, MD.
May 8, 2011
To All RADIO AMATEURS
BID: $ANS-128.10

AMSAT has received the sad news of the passing of Ben Stevenson, W2BXA, of Colonia, New Jersey, on May 5, 2011. He was 97. An ARRL member since 1934, Stevenson was also a charter member of the North Jersey DX Association (NJDXA) since 1957, serving as its first president. Stevenson held Satellite DXCC #1, Mixed DXCC #6 (390 countries confirmed) and Phone DXCC #6 (388 countries confirmed). He held WAZ No.1, as well as DXCC on 10 bands, 6 through 160, plus of course OSCAR. At his death he had 225 confirmed on Top Band, all from a 1-acre lot in central New Jersey. He held his call sign continuously for 82 years.

Ray Soifer, W2RS recalls, "Ben was a good friend for nearly 40 years. Ben and I made the first-ever two-way contact by satellite-to-satellite relay in any radio service, using AO-7 and AO-6 in 1975. Ben often said that the secrets of success in DX are persistence and consistency. Not a bad formula for success in life either. I'll miss him."

[ANS thanks the ARRL and Ray Soifer, W2RS for the above information]

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In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office. And with that please keep in mind the ham who realized several reasons why he was getting older ... he realized him and his teeth don't sleep together; when he went to try to straighten out the wrinkles in his socks he discovered he wasn't wearing any; he woke up looking like his drivers license picture; and when his wife told him to suck in his gut he realized he had already done so.

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM

From -4171507439398775904
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From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-130 AMSAT News Service Special Bulletin ARISSat-1 Update

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Followup-To: rec.radio.amateur.space
Date: Mon, 9 May 2011 22:09:44 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 42
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Message-ID: <007001cc0eb7$52549260$f6fdb720$@net>
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X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news1.google.com rec.radio.amateur.space:495 rec.radio.info:2334
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SB SAT @ AMSAT $ANS-130.01
AMSAT News Service Special Bulletin - ARISSat-1 Update

AMSAT News Service Bulletin 130.01
>From AMSAT HQ SILVER SPRING, MD.
May 10, 2011
To All RADIO AMATEURS
BID: $ANS-130.01

The ARISSat-1 satellite was intended to be activated in April as part of the 50th anniversary of Yuri Gagarin's famous flight. However, no ground stations reported hearing the satellite. To follow up, the ARISSat-1 team had a teleconference with representatives of RSC-Energia (Russia) and NASA to request a clarification of the events and discuss what happened.

According to RSC-Energia, the battery in ARISSat-1 was only charged once on the ground and was then used for a variety of tests and during the February activation event. It was not recharged prior to the April Yuri Gagarin activity since it can only be charged a limited number of times on the ISS.

The cosmonauts reported that they activated the satellite and confirmed that they heard the signal on the ham radio equipment on board the ISS. Since the battery was nearly depleted of its original charge, they switched the satellite off after six hours of operation in order to prevent over-discharging the battery. The battery was then removed from the satellite and stored separately as per their normal battery handling procedures. For more information on this battery, please see the JAN/FEB 2011 AMSAT Journal.

RSC-Energia reported that their plan is to recharge the battery about three weeks prior to the EVA deployment. This will give the cosmonauts time to reinstall the battery and test the satellite to make sure it is working properly. The EVA deployment is planned for late July of this year.

[ANS thanks AMSAT Vice-President of Engineering, Tony Monteiro, AA2TX for the above information]

/EX

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Newsgroups:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.info
Subject: Weekly Highlights of Solar and Geomagnetic Activity, 02 - 08 May 2011
Followup-To: rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space
Date: Tue, 10 May 2011 17:30:05 EDT
Organization: NOAA Space Weather Prediction Center
Lines: 68
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X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Tue, 10 May 2011 21:30:05 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
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article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Xref: g2news1.google.com rec.radio.amateur.misc:6181 rec.radio.amateur.dx:981
rec.radio.amateur.space:496 rec.radio.info:2335

:Product: Weekly Highlights and Forecasts
:Issued: 2011 May 10 1749 UTC
# Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center
# Product description and SWPC contact on the Web
# http://www.swpc.noaa.gov/weekly.html
#
#                Weekly Highlights and Forecasts
#
```

Highlights of Solar and Geomagnetic Activity
02 - 08 May 2011

Solar activity began the week at low levels with a C1 x-ray event at 1352 UTC on 02 May from Region 1199 (N18, L=188, class/area Dso/210 on 01 May), after rotating around the west limb. Activity continued at low levels with another C1 x-ray event at 1052 UTC on 03 May from Region 1204 (N17, L=47, class/area Cao/130 on 03 May). Activity decreased to very low levels, with only isolated B-class events occurring throughout the remainder of the summary period.

No proton events were observed at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit was at high levels during most of the summary period.

Geomagnetic field activity began the week ranging between unsettled to active conditions at mid latitudes, and minor to severe conditions at high latitudes on 02 May, due to a favorably positioned coronal hole. The high speed stream effects began prior to the summary period (29 April) and persisted through 02 May with solar wind speeds in excess of 640 km/s, and intermittent periods of negative Bz. Conditions began to subside on 03 May, settling to predominately quiet conditions with predominately positive Bz, before solar wind speeds decreased to background velocities near 400 km/s on 04 May. Conditions remained mostly quiet at all latitudes for the remainder of the summary period.

Forecast of Solar and Geomagnetic Activity
11 May - 06 June 2011

Solar activity is expected to be very low to low. There is a chance for isolated periods of moderate levels due to the possible emergence of new regions, the return of old Region 1195 on 13 May, as well as Regions 1199 and 1202 on 14 May.

No proton events are expected at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to be at high levels 11-19 May due to multiple coronal hole high-speed streams. Normal to moderate levels are expected to be predominate from 20-27 May, before elevated wind speeds from another recurrent coronal hole should produce high levels from 28 May until 02 June. Moderate or lower conditions should persist from 03 June until the end of the outlook period.

Geomagnetic field activity is expected to be unsettled to active 11-13 May due to coronal hole high-speed stream effects. Conditions are expected to subside for a day or so before increasing back to mostly unsettled conditions 15-17 May with another coronal hole coming into a favorable position to impact Earth. Conditions are forecasted to be predominately quiet 18-26 May, bar any transient activity, before the next recurrent coronal hole is expected on or around 26 May. Active to minor strorm conditions are possible 27-29 May due to the coronal hole, and lesser effects in the form of mostly unsettled to acive conditions should persist 30-31 May. Mostly quiet conditions are expected 01-05 Jun before the currently geo-effective coronal hole returns to produce unsettled conditions on 06 June.

From -3622700778606993940
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X-Google-NewGroupId: yes
X-Google-Thread: 10b9c8,31a93707cef3d26d,start
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,gida4a23d5f63,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII
Path: g2news1.google.com!news2.google.com!npeer02.iad.highwinds-media.com!
news.highwinds-media.com!feed-me.highwinds-media.com!nx02.iad01.newshosting.com!
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robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-135 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sun, 15 May 2011 00:42:48 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 510
Approved: RRI Admin <rec-radio-info-request@panix.com>
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X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to   rec-radio-info@panix.com

X-RRI-Info-2: Send technical complaints to   rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news1.google.com rec.radio.amateur.space:497 rec.radio.info:2346

AMSAT NEWS SERVICE
ANS-135

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

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* New High For Space Tourism: Lunar Tour

SB SAT @ AMSAT $ANS-135.01
Ready, Set, GO! AMSAT is Ready for Dayton Hamvention

AMSAT News Service Bulletin 135.01
>From AMSAT HQ SILVER SPRING, MD.
May 15, 2011
To All RADIO AMATEURS
BID: $ANS-135.01

The 2011 Dayton Hamvention will be held this year from May 20-22, 2011 and AMSAT will be there. The AMSAT theme for 2011 is "Providing Education Through Amateur Satellites". We will have multiple exhibits of the new AMSAT satellites on display.

You'll find AMSAT at the same spot (Booths 444-449) in the Ball Arena, right across from the ARRL area and just inside the door from the Satellite Demonstration area. Plan to visit all of the AMSAT activities!

AMSAT has planned a number of great activities during the Hamvention. Here is a sample of the events and activities planned for the entire weekend. Links to all of these activities can be found on the AMSAT web page: http://www.amsat.org.

This list has been updated since last week's bulletin!

+ Meet astronaut Doug Wheelock, KF5BOC Friday 1:30-2:30, Saturday, 3:00-4:00 at the AMSAT booth.

+ ARISSat-1 operational prototype will be on display.
  o Tune your HT to 145.950 MHz to hear a preview of the FM downlink.
  o Watch the demonstration of the ARISSatTLM software receive and display the CW beacon and BPSK telemetry using G6LVB's FUNcube Dongle.

+ Howard Long, G6LVB will be at the AMSAT booth periodically to talk about his FUNcube Dongle (FCD) project. This small (1" x 3") USB software defined radio will receive from 64 - 1700 MHz.

+ CAMSAT delegates will be at AMSAT booth. The CAMSAT delegation consists of Alan, BA1DU; Ken, BH4REQ; Jin, BA4TA; and Michael, BD5RV/4.

+ The ARRL Expo, next door to AMSAT, will have the backup OSCAR-1 satellite on display, resurrected by W1AW Station Manager Joe Carcia, and ARRL Lab Test Engineer Bob Allison, WB1GCM. The CW transmitter is tuned to 145.080 MHz. It will transmit at Part 15 levels with only 10 microwatts of power across a 50 ohm dummy load. A satellite transceiver will be positioned next to the unit that will be used to receive the CW signal. You will hear it transmit "HI HI," just as it did 50 years ago.

+ The fifth annual AMSAT/TAPR Banquet will be Friday night May 20. Just a reminder that the cutoff date for the AMSAT-TAPR dinner at Dayton is Monday May 16th. You can register at the AMSAT Store website: http://www.amsat-na.com/store/item.php?id0158 We will NOT be selling tickets at the booth. Our new Banquet speaker will be Bob Bruninga, WB4APR speaking on "Power from Space and in your Shack". David Rowe, VK5DGR is unable to attend. Read about Bob's presentation on the AMSAT at Dayton webpages at: http://www.amsat.org/amsat-new/hamvention/2011/Banquet.php

+ AMSAT Thursday Night Get-together at Tickets Pub & Eatery.

+ Dave Jordan, AA4KN will speak about ARISS at the Teachers Forum at 1000 on Friday in Room 3. The title of his talk "Space Communications from the Classroom-ARISS and AMSAT". Dave will describe as how to apply for an ARISS contact at your school and find out how amateur radio satellites can be accessed and used for classroom projects."

+ The AMSAT Forum will be on Saturday May 21 1115-1330 in Forum Room

5 on Saturday. Moderated by Alan Biddle, WA4SCA you will have a chance to hear and see the latest news of amateur radio in space.

- AMSAT President Barry Baines, WD4ASW will present an AMSAT Status Report
- Alan Kung, BA1DU, CEO of AMSAT-China, will discuss the activities of AMSAT-China.
- Project Manager for ARISSat-1, Gould Smith, WA4SXM, will talk about its operation aboard the ISS, and the planned deployment and operations this summer.
- Tony Monteiro, AA2TX, will discuss the design and status of Project-FOX.
- Alex Harvilchuck, N3NP, will present NextGen CubeSat Program Update.

+ NASA Astronaut Doug Wheelock, KF5BOC is scheduled to speak from 1315-1415 on Saturday in Forum Room 3. Doug is attending Hamvention as guest of ARRL and AMSAT. According to the Forum listing, "Doug will share his experiences about space flight and using Amateur Radio in space."

+ Lou McFadin, W5DID is scheduled to speak at the "Introduction to Digital-ATV" Forum, scheduled on Saturday from 1530-1700 in Forum Room 2. The title of his talk is "DATV Space Station Project".

+ Satellite demonstrations will take place outside the Ball Arena entrance Friday, Saturday and Sunday.

Be sure and come by the booth and renew your membership and receive an AMSAT multiblade screwdriver as a premium!

The AMSAT leadership team will be at Hamvention and invite you to take advantage of this opportunity to interact with both board members and senior officers. If you have issues or concerns that you wish to express here is your chance to do so.

[ANS thanks AMSAT HQ for the above information]

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SB SAT @ AMSAT $ANS-135.02
AMSAT at Smithsonian Space Day 2011

AMSAT News Service Bulletin 135.02
>From AMSAT HQ SILVER SPRING, MD.
May 15, 2011
To All RADIO AMATEURS
BID: $ANS-135.02

Dave Taylor, W8AAS reported a very successful AMSAT presence at Space Day 2011 held at the Smithsonian National Air and Space Museum on the Mall in Washington DC on May 7. According to the ARISS status report, the average crowd in the Museum on this Saturday in May is about 30,000.

Featured displays included prototype picosats, cubesats, space hardware including laser reflectors for the kids to try out. A crowd of 250 people watched the ARISS contact as six youngsters asked questions. Each one had three questions to ask and we got through all of them with time to thank Cady Coleman, KC5ZTH, give her a round of applause, and hear her response. Mark Steiner, K3MS handled the ARISS uplink/downlink from NASA Goddard amateur radio station K6DUE.

Prior to the contact, former Payload Specialist Greg Linteris spoke to the crowd. Greg had trained with Cady for one of his flights. He was also on one of the last SAREX missions (STS-94).

This year a group from Thomas Jefferson High School for Science and Technology brought a working prototype of their Cubesat. They demonstrated with the prototype how one can uplink a text message and their Cubesat converts the text message to speech and transmits the speech on the downlink. They are manifested on a SpaceX Falcon 9 launch for early next year. Orbital Sciences has been providing them with assistance for the project.

At Space Day a new version of the AMSAT-OSCAR slide show was run. A link to a PDF version of the slide show has been added to the AMSAT web page. (see http://www.amsat.org).

Thanks to all who helped out:
Dave Taylor, W8AAS
Perry Klein, W3PK
Dick Daniels, W4PUJ
Mark Kanawati, N4TPY
Samudra Haque, N3RDX
Don Sylvain, WA3WOD from the Smithsonian Amateur Radio Club NN3SI
Mark Steiner, K3MS from NASA Goddard K6DUE
Bob McCown, N3IYI from NASA Goddard K6DUE

Photos will be published in the AMSAT Journal.

[ANS thanks Perry Klein, W3PK and Dave Taylor W8AAS for the above information]

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SB SAT @ AMSAT $ANS-135.03
Second Call for Speakers for AMSAT UK Colloquium 2011

AMSAT News Service Bulletin 135.03
>From AMSAT HQ SILVER SPRING, MD.
May 15, 2011
To All RADIO AMATEURS
BID: $ANS-135.03

This is the second call for speakers for the AMSAT-UK Colloquium 2011 which will be held at the Holiday Inn, Guildford, UK (same venue as in 2010) from *Sat 30 Jul to Sun 31 July 2011*

AMSAT-UK invite speakers, about amateur radio, space and associated activities, for this event.

Offers of talks should be sent *ONLY* to G4DPZ, via the following routes:

e-mail: david.johnson AT blackpepper.co.uk

SnailMail: QTHR from http://www.QRZ.com

Likewise if anyone knows of a good speaker, please send contact and other information to G4DPZ.

[ANS thanks Dave, G4DPZ for the above information]

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SB SAT @ AMSAT $ANS-135.04
2011 AMSAT Field Day Competition

AMSAT News Service Bulletin 135.04
>From AMSAT HQ SILVER SPRING, MD.
May 15, 2011
To All RADIO AMATEURS
BID: $ANS-135.04

AMSAT Director of Awards, Bruce Paige, KK5DO says, "It's that time of year again: Summer and Field Day!"

Each year the American Radio Relay League (ARRL) sponsors Field Day as an emergency preparedness exercise. The event takes place during a 24-hour period on the fourth weekend of June. For 2011 the event takes place during a 27-hour period from 1800 UTC on Saturday June 25, 2011 through 2100 UTC on Sunday June 26, 2011. Those who set up prior to 1800 UTC on June 25 can operate only 24 hours.

The Radio Amateur Satellite Corporation (AMSAT) promotes its own version of Field Day for operation via the amateur satellites, held concurrently with the ARRL event.

Bruce advises, "If you are considering ONLY the FM voice satellites like AMSAT-OSCAR 16, AMRAD-OSCAR-27, SaudiSat-Oscar-50, or AMSAT-OSCAR-51 for your AMSAT Field Day focus. Don't, unless you are simply hoping to make one contact for the ARRL rules bonus points."

The congestion on FM LEO satellites was so intense in prior years that we must continue to limit their use to one-QSO-per-FM-satellite. This includes the International Space Station. You will be allowed one QSO if the ISS is operating Voice. You will also be allowed one digital QSO with the ISS or any other digital, non-store-and-forward, packet satellite (if operational).

Please refer to these links for the full document of the AMSAT Field Day rules:
http://www.amsat.org/ (link on AMSAT.org front page to PDF file)
And, an alternative site is:
http://www.amsatnet.com/2011fd.doc (MS-Word Doc File)
http://www.amsatnet.com/2011fd.pdf (PDF File)

These documents also cover the message exchange format, scoring requirements, reporting requirements, station classes, etc.

[ANS thanks AMSAT Director of Awards, Bruce Paige, KK5DO for the above information]

/EX

SB SAT @ AMSAT $ANS-135.05
ISRO Request For VO-52 HAMSAT User Feedback and Comments

AMSAT News Service Bulletin 135.05
>From AMSAT HQ SILVER SPRING, MD.
May 15, 2011
To All RADIO AMATEURS
BID: $ANS-135.05

The VO-52 HAMSAT community has received a request from the Indian Space Research Organisation (ISRO), in Bangalore for user reports on the satellite's performance. Shri. T. Parimalarangan, HAMSAT Operations Director, ISRO Tracking, Ranging and Command Centre (ISTRAC) asks that feedback be sent via e-mail directly to him at: tprangan@istrac.org. Mani, VU2WMY, Secretary & Station-In-Charge at the Upagrah Amateur Radio Club VU2URC at the ISRO Satellite Centre requests a copy to be sent to him at: wmy@isac.gov.in.

ISTRAC/ISRO is interested in gathering VO-52 data with responses to these questions:

1. Qualitative/quantitative performance report. (Signal strength telemetry observations, availability).

2. Observation on the quality of services from the launch to present (trend of the onboard behaviour as seen from the ground).

3. Comparison with other amateur radio satellites.

4. Positive/negative aspects of HAMSAT.

The data will be used to generate a HAMSAT Performance Report on the 6th anniversary since launch. ISRO values direct feedback from the user community.

[ANS thanks Mani, VU2WMY for the above information]

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SB SAT @ AMSAT $ANS-135.06
ARISSat-1 Update

AMSAT News Service Bulletin 135.06
>From AMSAT HQ SILVER SPRING, MD.
May 15, 2011
To All RADIO AMATEURS
BID: $ANS-135.06

The ARISSat-1 satellite was intended to be activated in April as part of the 50th anniversary of Yuri Gagarin's famous flight. However, no ground stations reported hearing the satellite. To follow up, the ARISSat-1 team had a teleconference with representatives of RSC-Energia (Russia) and NASA to request a clarification of the events and discuss what happened.

According to RSC-Energia, the battery in ARISSat-1 was only charged once on the ground and was then used for a variety of tests and during the February activation event. It was not recharged prior to the April Yuri Gagarin activity since it can only be charged a limited number of times on the ISS.

The cosmonauts reported that they activated the satellite and confirmed that they heard the signal on the ham radio equipment on board the ISS. Since the battery was nearly depleted of its original charge, they switched the satellite off after six hours of operation in order to prevent over-discharging the battery. The battery was then removed from the satellite and stored separately as per their normal battery handling procedures. For more information on this battery, please see the JAN/FEB 2011 AMSAT Journal.

RSC-Energia reported that their plan is to recharge the battery about three weeks prior to the EVA deployment. This will give the cosmonauts time to reinstall the battery and test the satellite to make sure it is working properly. The EVA deployment is planned for late July of this year.

[ANS thanks AMSAT Vice-President of Engineering, Tony Monteiro, AA2TX for the above information]

/EX

SB SAT @ AMSAT $ANS-135.07
Satellite Shorts From All Over

AMSAT News Service Bulletin 135.07
>From AMSAT HQ SILVER SPRING, MD.
May 15, 2011
To All RADIO AMATEURS
BID: $ANS-135.07

+ Congratulations to Paolo Nespoli IZ�JPA! Paolo now has the record for the number of contacts during a single flight at 42. He is part of Expedition 26/27).

+ AMSAT-UK is now active on Twitter as @AMSAT_UK. Keep up to date with all the AMSAT-UK news and updates.

+ MILESTONE! On Saturday May 7, Bob Herrell, AJ5C, acheived his 5,000th amateur radio satellite contact when he worked Kerry, WC7V on the FO-29 satellite using SSB. Bob posted a video at: http://www.youtube.com/watch?v�6gM7K7Kv0. The Southgate ARC news site also carried the story: http://www.southgatearc.org/news/may2011/5000_sat_qsos.htm Bob, congratulations on a remarkable acheivement.

+ SA AMSAT said that its Space Symposium 2011 will go full steam ahead on Saturday 21 May. The auditorium at Radiokop will be the venue and the SARL National Amateur Radio Centre being used for refreshment breaks and lunch. The new arrangement has substantially reduced the registration fee to R75 for SARL and SA AMSAT members if booked before 15 May 2011. Students and scholars will enter free if a student card or scholar ID is submitted at the time of Registration. The conference will be opened by the CEO of the South African National Space Agency, Sandile Malinga. John Willescroft, ZS6EF, will demonstrate the development of a totally new concept which allows a solar panel to be released from SAiSAT once in Space. For full details, registration forms and programme, visit: http://www.amsatsa.org.za

+ Spaceflightnow.com has posted a movie capturing the Atlas 5 rocket's launch over the weekend that successfully deployed the first in a new generation of missile warning satellites for the U.S. military. Watch on-line at: http://spaceflightnow.com/atlas/av022/video.html

+ OY, FAROE ISLANDS. Operators Hans/PA0VHA, Steef/PA2A and Wim/PA2AM will be active as OY/homecall from Skaelingur, Streymoy Island, in the Faroes (EU-018), between May 22nd and June 3rd. Activity will be on all bands using CW and RTTY. Also, look for activity on 6 and 4 meters, and PA2AM will also be on AO-51 satellite. Streymoy Island has a population of 11 and some sheep! QSL via their home callsigns. ADDED NOTE: This team also plans activity from Market Reef later this year. (Ohio/Penn DX Bulletin)

+ The next Hudson Valley Satcom Nets "HV Satcom" Net ia scheduled for

May 26, at 8PM EDT (UTC-4) on the 146.970 MHz repeater, (Pl 100), and also on Echolink node N2EYH-L. More info: http://www.hvsatcom.org (Stu, WA2BSS)

+ Technical papers are solicited for presentation at the 30th Annual ARRL and TAPR Digital Communications Conference to be held September 16-18, 2011 in Baltimore, Maryland. These papers will also be published in the Conference Proceedings (you do NOT need to attend the conference to have your paper included in the Proceedings). The submission deadline is July 31, 2011. Please send papers to: Maty Weinberg, ARRL, 225 Main St, Newington, CT 06111 or you can make your submission via e-mail to: maty@arrl.org.

+ Squrl may be a useful tool for storing your on-line videos. Its primary function is to help visitors collect interesting videos online for later "consumption". First-time visitors will need to complete a short registration, and they can get started saving videos from a range of sources. Visitors can also organize playlists, and then email them to friends and colleagues. This version is compatible with all operating systems. See: http://www.squrl.com/

+ AMSAT's Keeper of the Keps, Ray Hoad, WA5QGD says he has updated the name designation in the AMSAT KEPs for FAST1 as FO-69 and FAST2 as FO-70. This matches the OSCAR designators assigned to these satellites earlier this year.

[ANS thanks everyone for the above information]

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SB SAT @ AMSAT $ANS-135.08
New High For Space Tourism: Lunar Tour

AMSAT News Service Bulletin 135.08
>From AMSAT HQ SILVER SPRING, MD.
May 15, 2011
To All RADIO AMATEURS
BID: $ANS-135.08

This week MoonDaily.com posted a story, "Space Adventures proposes modified Soyuz TMA for Lunar tourists" which follows below:

U.S. Space Adventures, the only company currently offering tourist orbital spaceflights, has offered to equip the Russian Soyuz TMA spaceship with additional living space for eight-day commercial flights around the moon, the company said late on Thursday.

The firm announced on April 28 that it would offer moon orbit tourist trips, albeit with a price tag of around $150 million per seat.

"After consultation with Rocket Space Corporation Energia (the Soyuz TMA design authority), modifications to the Soyuz TMA configuration have been agreed upon. The most important is the addition of a second habitation module to the Soyuz TMA lunar complex," Space Adventures said.

A moon tour mission would include separate launches of a Soyuz and the upper stage, their docking in a low Earth orbit, a flight to the moon with the upper stage engine, the separation of Soyuz from the upper stage rocket, an orbit around the moon, return to Earth and landing.

Space Adventures is currently selecting candidates for the next space tour together with the Russian Federal Space Agency.

The company quoted Vice Chairman Richard Garriott as saying it had sold one of the two seats for the flight and anticipated that the launch would occur in 2015.

The CEO of Russia's Gagarin Research and Test Cosmonaut Training Center Sergei Krikalyov has said the center was ready to train a professional cosmonaut and a space tourist for the future flight.

This story is on the MoonDaily.com web site, see:
http://tinyurl.com/3zn8xhl

[ANS thanks MoonDaily.com for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office. And with that, please keep in mind the ham who was a physics professor. His lectures could be quite animated and exciting. He would jump off of the desk or fling frisbees to illustrate his point. One day in class he was spinning on an office chair holding weights in each hand when he lost his balance and tumbled into the first row. He apologized to his class for going off on a tangent.

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM

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Newsgroups:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.info
Subject: Weekly Highlights of Solar and Geomagnetic Activity, 09 - 15 May 2011
Followup-To: rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space
Date: Tue, 17 May 2011 17:30:06 EDT
Organization: NOAA Space Weather Prediction Center
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X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Xref: g2news2.google.com rec.radio.amateur.misc:6483 rec.radio.amateur.dx:1033
rec.radio.amateur.space:523 rec.radio.info:2433

:Product: Weekly Highlights and Forecasts
:Issued: 2011 May 17 1420 UTC
# Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center
# Product description and SWPC contact on the Web
# http://www.swpc.noaa.gov/weekly.html
#
#                Weekly Highlights and Forecasts
#
Highlights of Solar and Geomagnetic Activity
09 - 15 May 2011
```

Solar activity was at very low to low levels with isolated B and C-class flares observed. Two CMEs on the earthward side of the sun were observed during the period. The first CME was associated with a C5 x-ray event at 09/2059 UTC from a region rounding the NE limb. It appeared to be the return of old Region 1193 (N17, L=266). This event produced a partial-halo CME with an estimated plane-of-sky velocity of 1225 km/s, based on SOHO/LASCO imagery. The second CME was associated with a B8 x-ray event at 11/0243 UTC, likely associated with a filament eruption between Region 1205 (N14, L=036, class/area Bxo/010 on 03 May) and Region 1207 (N24, L=007, class/area Bxo/020 on 05 May). Associated with the second CME was a Type II radio sweep (632 km/s). Based on SOHO/LASCO imagery, the estimated plane-of-sky velocity was 420 km/s. The rest of the disk was populated with numerous small, magnetically simple spot groups.

No proton events were observed at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit was at high levels on 09 May and at moderate levels 10 - 15 May.

Geomagnetic activity ranged from quiet to active levels during the period. Activity was at quiet levels on 09 May. Levels increased to quiet to unsettled, with isolated active periods on 10 - 11 May. This increase in activity was associated with the onset of a CH HSS. Activity decreased to quiet levels from 12 - 13 May before increasing to unsettled to active conditions midday on 14 May with the onset of another CH HSS. Conditions were mostly quiet to unsettled on 15 May as weak HSS effects continued.

Forecast of Solar and Geomagnetic Activity
18 May - 13 June 2011

Solar activity is expected to be at very low to low levels through the forecast period. There is a slight chance for isolated periods of moderate levels due to the possible emergence of new regions as well as the return of old regions.

No proton events are expected at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to be at moderate to high flux levels during 18 - 20 May, normal to moderate flux levels on 21 - 26 May and back to moderate to high flux levels 27 - 29 May. This forecast is based on anticipated recurrent CH HSS influences.

Geomagnetic activity is expected to be at predominately quiet to unsettled levels on 17 May due to continued recurrent CH HSS effects. Activity is expected to decrease to mostly quiet levels during 18 - 25 May. The field is expected to be under the influence of a recurrent negative polarity CH HSS during 26 - 30 May. During this period, quiet to unsettled levels are expected, with isolated active periods on 27 May. Mostly quiet conditions are forecasted to return 31 May - 5 June, before another CH HSS is expected to return. Mostly quiet to unsettled conditions are expected 6 - 7 June from this small feature, before returning to quiet conditions 8 - 10 June. Mostly unsettled to active conditions are expected to return 11 - 13 June as HSS effects from the CH we are currently under the influence of should return.

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From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-142 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Mon, 23 May 2011 15:15:37 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 265
Approved: RRI Admin <rec-radio-info-request@panix.com>
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NNTP-Posting-Host: panix6.panix.com
X-Trace: reader1.panix.com 1306178138 14119 166.84.1.6 (23 May 2011 19:15:38 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Mon, 23 May 2011 19:15:38 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
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Xref: g2news2.google.com rec.radio.amateur.space:524 rec.radio.info:2446
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AMSAT NEWS SERVICE
ANS-142

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the

activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* AMSAT-NA Board of Directors Nominations Due by June 15th
* The May 2011 issue of the AMSAT-INDIA newsletter is now available
* Masten Signs Contract With Space Florida For Demonstration Launches
* Satellite Shorts From All Over
* ARISS Status - 16 May 2011

SB SAT @ AMSAT $ANS-142.01
AMSAT-NA Board of Directors Nominations Due by June 15th

AMSAT News Service Bulletin 142.01
From AMSAT HQ SILVER SPRING, MD.
May 22, 2011
To All RADIO AMATEURS
BID: $ANS-142.01

It is time to submit nominations for the upcoming open seats on the AMSAT-NA Board of Directors. The deadline is June 15th. A valid nomination requires either one Member Society, or five current individual members in good standing, to nominate an AMSAT member for the position.

Four director's terms expire this year:

Barry Baines, WD4ASW
Alan Biddle, WA4SCA
Drew Glasbrenner, KO4MA
Tony Monteiro, AA2TX

The four candidates receiving the highest number of votes will be seated as full Board members for two year terms. The two candidates receiving the next highest number of votes will be seated as alternate Board members for one year terms.

Beginning this year, in addition to traditional submissions of written nominations which remains unchanged and is the preferred method, initial nominations may be made by electronic means.� These include e-mail, FAX, or electronic image of a petition. Electronic petitions should be sent to MARTHA@AMSAT.ORG or faxed to 301-608-3410. Written nominations, consisting of names, calls, and individual signatures, should be mailed to:

AMSAT-NA
850 Sligo Ave #600
Silver Spring, MD, 20910

No matter what method is used, petitions MUST arrive no later than June 15th at the AMSAT-NA office. If the nomination is a traditional written nomination, no other action is required. If it is other than this, i.e. electronic, a verifying traditional written petition MUST be received at the AMSAT-NA office at the above address within 7 days following the close of nominations on June 15th. ELECTRONIC SUBMISSIONS WITHOUT THIS SECOND, WRITTEN VERIFICATION ARE NOT VALID UNDER THE EXISTING AMSAT-NA BYLAWS.

Alan Biddle
WA4SCA
AMSAT Corporate Secretary

[ANS thanks Alan, WA4SCA, for the above information]

/EX

SB SAT @ AMSAT $ANS-142.02
The May 2011 issue of the AMSAT-INDIA newsletter is now available

AMSAT News Service Bulletin 142.02
From AMSAT HQ SILVER SPRING, MD.
May 22, 2011
To All RADIO AMATEURS
BID: $ANS-142.02

Topics in this month's edition include:
- HAMSAT (VO-52) Completes Six years in orbit.
- Update- Meeting with distinguished guests from ISRO at AMSAT INDIA ground station.
- Update on the CubeSat Communication system project by AMSAT INDIA.
- High Intercept Low Noise Amplifier with GaAs pHEMT MMIC By: Goran Popovic AD6IW
- News from AMSAT organizations around the world

Download the newsletter from
http://amsatindia.org/Newsletter/AMSATINDIA-News-May_2011.pdf

Previous issues are available at:
http://www.amsatindia.org/Newsletter/

Regards

Nitin [VU3TYG]
Secretary, AMSAT India
vu3tyg@amsatindia.org
www.amsatindia.org

[ANS thanks Nitin, VU3TYG, for the above information]

/EX

SB SAT @ AMSAT $ANS-142.03
Masten Signs Contract With Space Florida For Demonstration Launches

AMSAT News Service Bulletin 142.03
  From AMSAT HQ SILVER SPRING, MD.
May 22, 2011
To All RADIO AMATEURS
BID: $ANS-142.03

Masten Space Systems and Space Florida announced contract under which Masten will perform a series of demonstration flights of a Vertical Takeoff Vertical Landing (VTVL) reusable suborbital launch vehicle from Launch Complex 36 at Cape Canaveral Air Force Station.

Under the contract, Masten will complete multiple flights. These operations will serve as a pathfinder to assist Space Florida in developing operational requirements for VTVL vehicles, recommending the optimum operational scenario, and determining the program schedule to achieve launch capability as soon as possible.

The upcoming flights will also enable Masten to fully evaluate Florida, CCAFS, and LC-36 as a base for the company's flight operations group. "We look forward to successfully completing our demonstration flights and better understanding what is needed for operations in Florida," said David Masten. "Space Florida and the 45th Space Wing have been very helpful as we continue to develop operational concepts for Florida."

[ANS thanks Masten Space Systems for the above information]

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SB SAT @ AMSAT $ANS-142.04
Satellite Shorts From All Over

AMSAT News Service Bulletin 142.04
  From AMSAT HQ SILVER SPRING, MD.
May 22, 2011
To All RADIO AMATEURS
BID: $ANS-142.04

+ The new edition of the popular SolderSmoke amateur radio podcast
   is now available. One of the topics on this edition includes the
   Space Station Packet Beacon. You can listen on-line at:
   http://soldersmoke.com/soldersmoke134.mp3

+ Congratulations to Ben, KC0PCQ on his first satellite contacts.
   Ben wrote, "I've been grinning ear-to-ear for a little while now
   that I have my first satellite contacts completed. Thank you to
   my #1 - K8YSE, #2 - AC0RA, #3 - W7JPI, #4 - WA4NV, and #5 - K8TL.

+ Congratulations to Patrick WD9EWK/VA7EWK on being awarded satellite
VUCC #210!

+ On-line photos and videos of the Endeavor Shuttle launch can be found in many places. The first two links here are from amateur radio operators who were at the launch:
Ken, KK0HF got these photos from the press area:
http://radiogeek.us/NASA2/
Bobby, KF4GTA was also in the press area and posted these photos:
http://bit.ly/jvdhNv
Launch videos can be viewed at the UniverseToday site:
http://tinyurl.com/65wou9s

+ The next Hudson Valley Satcom Nets "HV Satcom" Net ia scheduled for May 26, at 8PM EDT (UTC-4) on the 146.970 MHz repeater, (Pl 100), and also on Echolink node N2EYH-L. More info: http://www.hvsatcom.org
(Stu, WA2BSS)

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SB SAT @ AMSAT $ANS-142.05
ARISS Status - 16 May 2011

AMSAT News Service Bulletin 142.05
From AMSAT HQ SILVER SPRING, MD.
May 22, 2011
To All RADIO AMATEURS
BID: $ANS-142.05

1. Upcoming School Contacts

The ARISS team continues to work on the school contact schedule. The next contacts to be held are dependent on the launch date of STS-134.

2. Recent ARISS Contacts

On Monday, May 9 students from St. Michael School in Schererville, Indiana and astronaut Cady Coleman, KC5ZTH on the ISS took part in an ARISS contact. The school partners with the Challenger Learning Center in Hammond, Indiana and provided students with this ARISS contact to highlight its science curriculum. Approximately 430 students, teachers and guests watched and listened as 16 questions about life in space were asked and answered. Contact video was streamed on the internet and representatives from three newspapers covered the event. The Times posted an article. See:
http://www.nwitimes.com/news/local/lake/schererville/article_1a1b5c1d-0f5d-5f33-b9ae-25bad21e6e9e.html

Mount Carmel Academy students from Houston, Texas participated in an ARISS contact with on-orbit astronaut Ron Garan, KF5GPO on Tuesday,

May 10 via telebridge station ON4ISS in Belgium. This was Garan's first ARISS contact and he handled nine questions, providing comprehensive answers. The contact complemented lessons on the International Space Station as well as amateur radio and Clear Lake Amateur Radio Club provided follow-on educational support. News of the ARISS contact reached approximately 580,000 households through the Comcast Channel 18 simulcast of Houston Independent School District news andthrough KUHF, the local PBS radio station. See:
http://app1.kuhf.org/houston_public_radio-news-display.php?articles_id 1305066316

Students from Tecnico Industriale Statale "Gerolamo e Margherita Montani," in Fermo, Italy established an ARISS contact with Paolo Nespoli, IZ�JPA on Thursday, May 12. The contact highlighted the school curriculum which focuses on Chemistry, Biotechnology, Electronics, Computer Science, Telecommunications and Mechanics. Nespoli fielded 21 questions posed by the youth over two ISS passes. The event was attended by nearly 300 students and visitors and video was streamed over the internet.

An ARISS contact was held between students from Primary School Pasquale Luisi and Secondaria Di 1� Grado Virgilio, both located in Foggia, Italy, and ISS astronaut Paolo Nespoli on Saturday, May 14. An audience of 200 attended the event and listened as Nespoli spoke to the students over two consecutive ISS passes, answering a total of 18 questions. Through this contact and related studies, students were introduced to amateur radio, astronauts and the International Space Station.

[ANS thanks Carol, KB3LKI, for the above information]

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In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits.

Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Lee McLamb, KU4OS

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transit3.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: SWPC.Webmaster@noaa.gov
Newsgroups:
rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.info
Subject: Weekly Highlights of Solar and Geomagnetic Activity, 16 - 22 May 2011
Followup-To: rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space
Date: Tue, 24 May 2011 17:30:10 EDT
Organization: NOAA Space Weather Prediction Center
Lines: 55
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X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Xref: g2news2.google.com rec.radio.amateur.misc:6496 rec.radio.amateur.dx:1036
rec.radio.amateur.space:525 rec.radio.info:2448
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:Product: Weekly Highlights and Forecasts
:Issued: 2011 May 24 1842 UTC
# Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center
# Product description and SWPC contact on the Web
# http://www.swpc.noaa.gov/weekly.html
#
#                Weekly Highlights and Forecasts
#
```

Highlights of Solar and Geomagnetic Activity
16 - 22 May 2011

Solar activity was at very low to low levels, with predominantly B-class flares. A C1 flare occurred at 18/1259 UTC from Region 1218 (N16, L=168, class/area Bxo/010 on 19 May), and a long duration C2 flare occurred at 18/1830 UTC from Region 1208 (N12, L=318, class/area Dso/100 on 09 May). A long duration B3 flare occurred at 19/0436 UTC which was associated with a filament eruption centered near N20W25.

No proton events were observed at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit was at normal to moderate levels.

Geomagnetic field activity was at quiet to active levels, with an isolated minor storm levels at high latitudes during 16-17 May. During this time, wind speeds ranged from 428-610 km/s, while Bt ranged from 11 to 2 nT, and Bz ranged from -6 to 7 nT. The increase in activity was due to a favorably positioned coronal hole high-speed stream. Activity decreased to quiet levels for the rest of the period.

Forecast of Solar and Geomagnetic Activity
25 May - 20 June 2011

Solar activity is expected to be very low, with a slight chance for low levels between 25-30 May. Activity is expected to increase to very low to low levels during the rest of the period, when old Region 1208 returns during the rest of the period.

No proton events are expected at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to be at normal to moderate levels. High levels are expected during 29 May - 06 June.

Geomagnetic field activity is expected to be at quiet levels on 25 May. Activity is expected to increase to quiet to active levels, with isolated minor storm levels at high latitudes during 26-30 May, due to a recurrent coronal hole high-speed stream. Activity is expected to decrease to predominantly quiet levels during 31 May - 10 June. Activity is expected to increase to during 11 - 12 June due to a recurrent coronal hole high-speed stream. Quiet levels are expected for the rest of the period.

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From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-149 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sun, 29 May 2011 09:52:03 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 620
Approved: RRI Admin <rec-radio-info-request@panix.com>
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X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 29 May 2011 13:52:04 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to   rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to   rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this article.
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X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news1.google.com rec.radio.amateur.space:501 rec.radio.info:2382

AMSAT NEWS SERVICE
ANS-149

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Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* 70 CM Spectrum in HR 607 Safe After Meeting With Congressman King
* The DARA Matching Gift Challenge
* Cornell University Chip Satellite Team Invites Ham Radio Collaboration
* Awards Manager for AMSAT Marks 10 Years
* Satellite Shorts From All Over
* ARISS Status - 23 May 2011
* Nine New Cubesats

* UK Coloqium
* New ARISS School Procedure
* AO-51 Partial Operation Restored

SB SAT @ AMSAT $ANS-149.01
70 CM Spectrum Safe

AMSAT News Service Bulletin 149.01
  From AMSAT HQ SILVER SPRING, MD.
May 29, 2011
To All RADIO AMATEURS
BID: $ANS-149.01

70 CM Spectrum in HR 607 Safe After Meeting With Congressman King

A delegation of Amateur operators led by Peter Portanova, WB2OQQ, AMSAT NY Area Coordinator, from the Long Island/New York City area met with Congressman Peter T. King (R-NY) on May 19 to discuss his recent proposed legislation, H.R. 607, and its impact on Amateur Radio. Peter, who resides in King's Congressional District, worked for many months with only assistance from his local Town of Massapequa government to arrange this important meeting.

The delegation included Mike Lisenco, N2YBB, ARRL Section Manager for New York City/Long Island (NLI), Peter Portanova, WB2OQQ, NLI Local Government Liaison and AMSAT NY Area Coordinator, George Tranos, N2GA, NLI State Government Liaison (SGL), and Jim Mezey, W2KFV, NLI ARES Section Emergency Coordinator (SEC).

Portanova, Lisenco, Mezey, and Tranos spoke about the importance of Amateur Radio emergency communications and Portanova, who is the Radio Amateur Satellite Corporation (AMSAT) NY Area Coordinator, addressed the amateur satellites and its contributions to Science, Technology, Engineering, Mathematics (STEM) education and disaster communication. Barry Baines, WD4ASW, President of AMSAT, prepared an important letter that was delivered to Congressman King, by Peter, addressing his concerns of HR 607. Mr. Baines also contributed and shared a great deal of information to Peter to allow him to make a successful presentation of AMSAT's activities to Congressman King.

Congressman King said that he fully understands and appreciates the importance of Amateur Radio and the Amateur Satellite Service for the contributions it provides to the community, and that he would see to the modification of the bill so that the 420-440 MHz band would be excluded from the spectrum to be auctioned. The Congressman was very receptive to the group and listed Peter Portanova as point of contact.

"The Congressman went on to explain that it was never his intention to remove the 70 centimeter band from Amateur use. He further asked us to 'get the word out' and inform the Amateur Radio community that 70 centimeters is not in jeopardy", said Portanova.

Portanova learned on May 26 that Congressman King has requested the House Committee on Energy and Commerce to remove section 207, the section covering the auction of the 420-440 MHz and 450-470 MHz spectrum, from the bill. Sub-Committee Chairman Rep. Walden agreed so the threat to amateur radio access to 70 cm spectrum is no longer an issue.

The ARRL has reported that the Senate companion bill S-1040 with similar objectives as H.R. 607 does not call for auctioning any portions of Amateur Radio spectrum.

AMSAT President Barry Baines, WD4ASW noted, "Peter is to be commended for taking the initiative to arrange for this meeting with his Congressman on behalf of AMSAT. Using his contacts within the Town of Massapequa, NY government, Peter made the appropriate queries to schedule the meeting and then sought input from AMSAT to maximize the quality of information presented. He also invited amateur radio operators to the meeting with ties to the ARRL as well. His initiative and thorough preparation for the meeting resulted in a very positive experience as well as enlightened Rep. King to the significant benefit of amateur radio in space and the wonderful work done by AMSAT volunteers and others in the areas of technology and education outreach."

(Editor Note: AMSAT President Barry Baines, WD4ASW letter to Congressman King can be read on a link at the AMSAT web site http://www.amsat.org).

[ANS thanks Peter Portanova, WB2OQQ and AMSAT President Barry Baines WD4ASW for the above information]

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SB SAT @ AMSAT $ANS-149.02
The DARA Matching Gift Challenge

AMSAT News Service Bulletin 149.02
From AMSAT HQ SILVER SPRING, MD.
May 29, 2011
To All RADIO AMATEURS
BID: $ANS-149.02

The DARA Matching Gift Challenge

The Dayton Amateur Radio Association (DARA) has announced a fund raising challenge for AMSAT whereby they will match on a 1:3 basis up to $5,000.00 for donations made in 2011. That is, for every $3.00 that AMSAT raises, DARA will provide $1.00 up to a maximum of $5,000 donated by DARA.

AMSAT kicked off the fundraising campaign at the Hamvention, where donations began count against this goal. Please consider making a donation to AMSAT at Hamvention or anytime this Spring as we strive to meet this goal.

We appreciate DARA's support for AMSAT and see this as an opportunity for donors to increase the impact of their donations by taking advantage of this matching program.

[ANS thanks AMSAT Headquarters for the above information]

/EX

SB SAT @ AMSAT $ANS-149.03
Cornell University Chip Satellite Team Invites Ham Radio Collaboration

AMSAT News Service Bulletin 149.03
From AMSAT HQ SILVER SPRING, MD.
May 29, 2011
To All RADIO AMATEURS
BID: $ANS-149.03

Cornell University Chip Satellite Team Invites Ham Radio Collaboration

A group of Cornell University-developed, fingernail-sized satellites may travel to Saturn within the next decade, and as they flutter down through its atmosphere, they will collect data about chemistry, radiation and particle impacts.

Three prototypes of these chip satellites, named "Sprite," were mounted on the International Space Station during a recent spacewalk. The thin, 1-inch-square chips are mounted to the external Materials International Space Station Experiment (MISSE-8) pallet, exposing them to the harsh conditions of space to see how they hold up and transmit data.

Zac Manchester at Cornell University explained that the chips transmit as beacons with 10 milliwatts of RF power at 902 MHz using MSK modulation (minimum-shift keying) with a chipping rate of 50 kbps. The Cornell team invites AMSAT satellite operators to collaborate with this experiment to determine conditions in which the low-power signal has been detected on the ground.

The Cornell ground station consists of a 18 dBi yagi with a GNU Radio and USRP receiver (http://www.ettus.com/products). A significant challenge is that the MISSE-8 pallet the chips are on is mounted on the anti-nadir side of the space station, facing away from the earth. The team is hoping to be lucky to catch some kind of reflection off the ISS structure.

Beyond being able to detect the signal on Earth, decoding the message requires signal processing. The chips all transmit on the same frequency, each with it's own PRN code. The Cornell team uses these codes to differentiate each one, as well as to provide signal processing gain. At Cornell, data is being recorded and post-processed with a standard PC.

To track these chip satellites just use the ISS keplerian elements
because they are mounted on the space station.

Mason Peck, Associate Professor Mechanical and Aerospace Engineering
at Cornell University wrote, "Receiving the full sequence of data per
se is not of interest, but the mere reception of it (a single digital
bit, for us), indicates successful transmission. If you would like to
serve as one of the lucky few to try detecting this signal, please
follow up with Zac Manchester (zrm3@cornell.edu). We definitely welcome
the collaboration of HAM operators."

More information be found at these sources:
http://tinyurl.com/3fs5ks7 (spacemart.com)
http://www.spacecraftresearch.com/blog

[ANS thanks Zac Manchester and Mason Peck at Cornell University for
the above information]

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SB SAT @ AMSAT $ANS-149.04
Awards Manager for AMSAT marks 10 Years

AMSAT News Service Bulletin 149.04
From AMSAT HQ SILVER SPRING, MD.
May 29, 2011
To All RADIO AMATEURS
BID: $ANS-149.04

It was May 12, 2001, the day that Mike Scarcella, WA5TWT, the previous AMSAT Awards Manager handed over all the files to me as the new Awards Manager. For 10 years I have performed this duty as fairly and equitably as I can. I computerized all the awards, entered some of the very early Communication Achievement Awards into the computer and helped create some new awards along the way.

Here's to another 10 years, enjoy.

Here is a list of awards issued in the last month or so.

The following have entered into the Satellite Communicators Club for
making their first satellite QSO.

Brandon Rasmussen, K7BBR
Stephen Davis, KJ4FEL
Richard Ryan, KC2YDQ

The following have earned the AMSAT Communications Achievement Award.
Nikolai Ozerov, VE3NKL, #535

Richard Batchelor, KA5IQX, #536

The following have earned the AMSAT Sexagesimal Award.
Rodney Waln, KC0ZHF, #160

The following have earned the AMSAT Century Award.
Doug Papay, KD8CAO #41

The following have earned the South Africa Satellite Communications Achievement award Richard Batchelor, KA5IQX, #US166

The following have earned their Robert W. Barbee Jr., W4AMI Award.
Gerald Krebs, N0JE, #US72
John Papay, K8YSE, #US73
Ron Oldham, N8RO, #US63 endorsement for 2K, 3K, 4K
Bob Harrell, AJ5C, #US64 endorsement for 2K, 3K, 4K

The following have earned their Robert W. Barbee Jr., W4AMI 5000 Award.
Ron Oldham, N8RO, #26
Bob Herrell, AJ5C, #27

To see all the awards visit http://www.amsat.org or http://www.amsatnet.com

Bruce Paige, KK5DO
AMSAT Director Contests and Awards

[ANS thanks Bruce, KK5DO, for the above information]

/EX

SB SAT @ AMSAT $ANS-149.05
Satellite Shorts From All Over

AMSAT News Service Bulletin 149.05
From AMSAT HQ SILVER SPRING, MD.
May 29, 2011
To All RADIO AMATEURS
BID: $ANS-149.05

+ AMSAT has received the sad news that Robin Harvey, G4BBR died on the morning of May 23, 2011 after a long illness. He was active in the early days of satellites in the 1970's. He was most active on Oscar 7. Robin was AMSAT Life Member number 445. Our condolences go out to his wife Shirley.

+ According to the 21 May 2011 A.R.I. DX Bulletin No. 1046 425 DX NEWS bulletin OY/PA0VHA, OY/PA2A and OY/PA2AM are active from Streymoy, Faroe Islands (EU-018) from 23 May to 2 June. In addition to HF, 6 meters, and 4 meters they plan satellite operation via AO-51 (if available). QSL via home calls.

+ A link on UniverseToday will bring you to an Infographic: How the New Multi-Purpose Crew Vehicle Stacks Up. Thanks to Space.com and the Tech Media Network for sharing this great graphic showing NASA's "new" MPCV and how it compares with other human spaceflight vehicles. http://tinyurl.com/3bngf99 (UniverseToday.com)

+ Back in time: Steve Haines VK3DBL has released a video showing a March 1997 contact he had with astronaut Andy Thomas KD5CHF/ VK5MIR who was on the MIR space station. See: http://tinyurl.com/3v7rbmh (Southgate)

+ The new WorldRadio OnLine magazine is now available at: http://www.worldradiomagazine.com/ ... In addition to several interesting features, the satellite column on page 38.

+ UniverseToday.com has a video, "The Sights and Sounds of Endeavour's Final Launch" made with HD cameras and multiple channel audio recording at: http://tinyurl.com/438s64y

+ OSCAR-11 UO-11 has switched back on. Its beacon is on 145.826 MHz FM. Bob, N4HY posted photos of UO-11 construction and testing: http://tinyurl.com/3d48j7x (n4hy.smugmug.com/)

+ AO-7 continues to provide good DX:
Luciano, PY5LF reports a 7843 km contact with Joe K3SZH, in Mode B, SSB.

Luis, LU6QI reports on his AO-7 DX on Mode B, CW:
Humberto XE1FZE: covering 7162 km
Jay AA4FL operating W4DFU covering 7200 km
Jim ND9M covering 7346 km

+ Pete, WB2OQQ posted a video showing his satellite operation from the special event station W2GSB/APM during the Great South Bay Air Power Museum event celebrating Armed Forces Day: http://www.youtube.com/watch?v=WyXHvYWaasg ... W2GSB/APM, a collector QSL will be sent on SASE request to WB2OQQ's QRZ address.

+ Congratulations to Cori, XYL of intrepid maritime-mobile satellite operator Jim, ND9M/VQ9JC, upon passing her Technician exam at the Dayton Hamvention!

+ Peter Guelzow, DB2OS, says a PDF presented at the AMSAT-DL Satellite Symposium and General Meeting 2011 discussing the 'Status of AMSAT P3-E and DLR-AMSAT P5-Moon/Mars' can be downloaded directly from the AMSAT-DL server: http://tinyurl.com/44ter7y (AMSAT-DL)

[ANS thanks everyone for the above information]

/EX

SB SAT @ AMSAT $ANS-149.06
ARISS Status - 23 May 2011

AMSAT News Service Bulletin 149.06
From AMSAT HQ SILVER SPRING, MD.
May 29, 2011
To All RADIO AMATEURS
BID: $ANS-149.06

1. Successful ARISS Contact with Debica, Poland

On Thursday, May 19, an ARISS contact was held between Primary and Junior High Schools Complex in Podgrodziein, Debica, Poland and on-orbit astronaut Ron Garan, KF5GPO. The contact complemented the science curriculum covering physics and astronomy. Local amateur radio operators, experienced in satellite contacts, worked with the school's radio club to prepare for this event. Approximately eighty students were in attendance and listened as Garan fielded 14 space-related questions. News coverage was provided by radio, television and newspapers.

2. ARISS International Team Meeting Held

The monthly ARISS partners meeting was held on Tuesday, May 17. Topics of discussion included the ISS National Lab, the new proposal process for U.S. schools and the Ericsson radio which was recently installed in the Columbus Module. Minutes will be posted to the ARISS Web site in the near future. http://www.rac.ca/ariss/arissmin.htm

3. ARRL QST Posts ARISS News

The American Radio Relay League (ARRL) included several ARISS-related items in its June QST.

"In Brief" column told about Astronaut Chris Cassidy earning his Amateur Radio license KF5KDR, and Astronaut Luca Parmitano earning his Amateur Radio license KF5KDP. The "Happenings" column ran their photos and a lengthier story about them.

Then the two-page pictorial ran, titled "Houston, We Have Amateur Radio!" written by ARRL Chief Operating Officer Harold Kramer, WJ1B. There was a short summary about the ARISS education program, and then pictures of Kenneth Ransom with the radio in the simulator, the antenna on the ISS mockup, the Kenwood radio, W5RRR's satellite antenna on the tower, W5RRR's president (John Maca, AB5SS) with Harold, Mission Control, and Don Pettit, KD5MDT with Kenneth Ransom and Mark Severance.

4. ARRL Article on New Process for U.S. Schools

The American Radio Relay League (ARRL) ran a Web story on the new ARISS proposal process for U.S. schools. There will be two windows of opportunity each year for U.S. schools and organizations to submit proposals

for an ARISS contact. A window is currently open and proposals should be submitted by July 15, 2011 for a contact that will be scheduled during the January - July 2012 time frame. NASA sent out an EXPRESS message to 18,000 educators letting them know of this opportunity. The message may be found at the end of the article.
http://www.arrl.org/news/nasa-and-ariss-reach-out-to-educators

[ANS thanks Carol, KB3LKI, for the above information]

/EX

SB SAT @ AMSAT $ANS-149.07
Nine New Cubesats

AMSAT News Service Bulletin 149.07
From AMSAT HQ SILVER SPRING, MD.
May 29, 2011
To All RADIO AMATEURS
BID: $ANS-149.07

Nine European Cubesats Heading to Space on Vega

Nine CubeSats built by European Universities are to be flown during the debut of Europe's new Vega launch vehicle scheduled for the final quarter of 2011.

Vega aims to make access to space easier, quicker and cheaper.

Development started in 1998 and it will be launched from the ESA Spaceport at Kourou in the Caribbean.

The nine CubeSats are: AtmoCube, e-st@r, Goliat, OUFTI 1, PW-Sat 1, ROBUSTA, UNICubeSAT, UWE 3, XaTcobeo

A video of the new VEGA launcher can be viewed here
http://esatv-movies.e-vision.nl/videos/mplo/
vega_tests_TV_05-10-11_wmplow.wmv

ESA CubeSat information
http://www.esa.int/esaMI/Education/SEM3N03MDAF_0.html

IARU Satellite Frequency Coordination pages
http://www.amsat.org.uk/iaru/

Southgate has this item posted at http://tinyurl.com/44smkw8.

[ANS thanks Southgate ARC News Site for the above information]

/EX

SB SAT @ AMSAT $ANS-149.08
UK Coloqium

AMSAT News Service Bulletin 149.08
  From AMSAT HQ SILVER SPRING, MD.
May 29, 2011
To All RADIO AMATEURS
BID: $ANS-149.08

FUNcube at AMSAT-UK Colloquium July 30-31

The 26th AMSAT-UK International Space Colloquium will be held on the weekend of July 30-31 at the Holiday Inn Hotel, Guildford, England, close to the University of Surrey. A special beginner's session is planned for Friday afternoon July 29.

Among the presentations will be talks on the FUNcube satellite and the FUNcube Dongle VHF-UHF Software Defined Radio.

In additional to the lecture stream there will be the GB4FUN Mobile Communications Centre, AMSAT-UK shop, a Saturday night Gala dinner, auction and raffle.

The event is open to all Radio Amateurs and SWL's. Either day passes or full packages comprising overnight accommodation and meals are available.

Further details are available on the AMSAT-UK website at:
http://www.uk.amsat.org/

[ANS thanks AMSAT-UK for the above information]

/EX

SB SAT @ AMSAT $ANS-149.09
New ARISS School Procedure

AMSAT News Service Bulletin 149.09
  From AMSAT HQ SILVER SPRING, MD.
May 29, 2011
To All RADIO AMATEURS
BID: $ANS-149.09

ARISS Announces New Process for US School Contact Proposals

ARISS and the NASA Johnson Space Center Education Office's Teaching

>From Space staff have announced new processes that US-based educators will need to follow to propose a school contact with the International Space Station crew.

ARRL ARISS Program Manager Rosalie White, K1STO says there will be two windows of opportunity each year for educators to submit their proposals for an ARISS contact. The first window opened on May 19 and will close on July 15, 2011. NASA's Teaching From Space Office says the new proposal process applies only to US schools at this time. Schools in other countries will continue to follow their existing process.

A proposal for an ARISS school contact consists of a comprehensive education plan, of which the ARISS contact is one of many components:

- The proposal should integrate NASA education and ARRL content with surrounding education activities, and include creative ways to maximize the reach of the ARISS contact and the experience for students.

- The educator must describe the instructional activities and lessons to be engaged in with students as part of the learning and preparation for the ARISS contact.

- The proposal should include study topics related to space technology, space exploration or space research, as well as Amateur Radio, radio science and wireless communications technology.

ARISS astronaut contacts under the new processes will begin in January 2012 and end in July 2012. A window of opportunity will open every six months when another NASA news release goes to educators. The initial NASA news release was sent on May 19 to 18,000 educators.

Full coverage of the ARISS program changes can be found on-line at:
http://www.arrl.org/news/nasa-and-ariss-reach-out-to-educators

NASA Teaching From Space web site can be viewed at:
http://www.nasa.gov/audience/foreducators/teachingfromspace/home/ariss.html

US schools wishing to propose an ARISS contact can get started at:
http://www.nasa.gov/audience/foreducators/teachingfromspace/students/ariss.html

Non-US schools can find information regarding the proposal for an ARISS contact at: http://www.rac.ca/ariss/oindex.htm

AMSAT Web site: http://www.amsat.org
ARISS Web site: http://www.ariss.org
ARISS Facebook Page: Amateur Radio on the ISS (ARISS)
ARISS Twitter site: @ARISS_status

Amateur Radio on the International Space Station (ARISS) is a volunteer program in partnership with AMSAT, ARRL, and NASA which inspires students, worldwide, to pursue careers in science, technology, engineering and math through amateur radio communications opportunities with the International Space Station on-orbit crew. Students learn about life on board the ISS and explore Earth from space through science and math activities. ARISS provides opportunities for the school community (students, teachers, families and local residents) to become more aware of the substantial benefits of human space flight and the exploration and discovery that occur on space flight journeys along with learning about technology and amateur radio.

[ANS thanks ARISS, the ARRL, and NASA for the above information]

/EX

SB SAT @ AMSAT $ANS-149.10
AO-51 Partial Operation Restored

AMSAT News Service Bulletin 149.10
From AMSAT HQ SILVER SPRING, MD.
May 29, 2011
To All RADIO AMATEURS
BID: $ANS-149.10

AO-51 Partial Operation Restored

AMSAT-NA VP Operations, Drew Glasbrenner, KO4MA reports that partial operation has been restored to AO-51.

Because the Integrated Housekeeping (IHU) computer crashes during each eclipse turning AO-51 ON requires a manually sent series of commands from a control station to reload a small housekeeping program stored on the satellite from ROM, then turning the repeater on, setting the modulation level and turning the RF power down.

At present, this re-start sequence is being done on afternoon passes over North America when the satellite's solar panels are being illuminated by sunlight and it is in range of an available control station. AO-51 is being left enabled after the North American afternoon passes so stations in Asia may hear it active still on the descending morning passes there.

The crashes prevent Whole Orbit Data from being collected for analysis on the ground. Analysis of live telemetry indicates that one of the Ni-Cd battery cells has failed. Further study is still in progress.

Drew concluded, "Thanks for all the donations for Fox and ARISSat-1 over the last week! If you haven't yet donated, drop by http://www.amsat.org, or call Martha at 1-888-322-6728 today and help us get Fox in space."

Keep up with the latest AO-51 Control Team News on-line at:
http://www.amsat.org/amsat-new/echo/CTNews.php

[ANS thanks AMSAT-NA VP Operations Drew Glasbrenner, KO4MA for the
above information]

/EX

In addition to regular membership, AMSAT offers membership in the
President's Club. Members of the President's Club, as sustaining
donors to AMSAT Project Funds, will be eligible to receive
additional benefits. Application forms are available from the AMSAT Office.
Memeorial Day Tribute-Thanks to Veterans for what they have earned for us.

73,
This week's ANS Editor,
Dee Interdonato, NB2F
nb2f at amsat dot org

From 8714102019905451589
X-Google-Thread: a4a23d5f63,8599325b87b5b84e,start
X-Google-Attributes: gida4a23d5f63,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news1.google.com!news.glorb.com!news2.glorb.com!news-out.readnews.com!transit3.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-219 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Sat, 8 Aug 2009 09:11:24 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 1700
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000c01ca1829$b1e374c0$15aa5e40$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1249737084 2203 166.84.1.6 (8 Aug 2009 13:11:24 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sat, 8 Aug 2009 13:11:24 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available

X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
x-cr-hashedpuzzle: yIA= ATOi A4fB DCLO DRWh DmQh Eh2l GJC7 HUCP HWZr HtA2 H0sp JFYR Kj9y KpoY LLHV;1;cgBlAGMALQByAGEAZABpAG8ALQBpAG4AZgBvAEAAcABhAG4AaQB4AC4AYwBvAG0A;Sosha1_v1;7;{20F71A2B-21B2-4433-BA5A-7B488D53A939};awA5AGoAawBtAEAAYwBvAG0AYwBhAHMAdAAuAG4AZQB0AA==;Sat, 08 Aug 2009 13:11:00 GMT;VwBTAFIALQAyADEAOQAgAEEATQBTAEEAVAAgAFcAZQBlAGsAbAB5ACAAUwBhAHQAZQBsAGwAaQB0AGUAIABSAGUAcABvAHIAdAA=
x-cr-puzzleid: {20F71A2B-21B2-4433-BA5A-7B488D53A939}
Xref: g2news2.google.com rec.radio.amateur.space:274 rec.radio.info:894

This report is organized into four (4) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - deborbited/returned satellites

SB SAT @ AMSAT W8ISS ANS-219.S1
WSR 219 Part 1 08/07/2009

AMSAT NEWS SERVICE BULLETIN 219.S1
FROM AMSAT HQ SILVER SPRING, MD, August 31, 2009
TO ALL RADIO AMATEURS
BID: $ANS-219.S1

DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008

Status: Operational
Current Mode: Science Mode - Beacon ONLY

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink: 435.530 to 435.570 MHz

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68
[02122009]

=====

VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:

Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.859330 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

To know what transponder is switched on please listen for the beacon that is active. Each transponder has a different beacon.
[08072008]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

```
Current Modes:   FM Repeater - Uplink:    145.920 Mhz FM
                               Downlink:  435.300 Mhz FM
                 BBS         - Uplink:   1268.700 Mhz FM 9k6
                               Downlink:  435.150 Mhz FM 9k6
                 Telemetry   - Downlink:  435.150 MHz FM
```

```
Analog voice downlink:     435.300 MHz FM
                           435.150 MHz FM
                          2401.200 Mhz FM
Analog voice uplink:       145.860 MHZ FM
                           145.880 MHz USB
                           145.920 MHz FM
                          1268.700 MHz FM
Digital Downlinks:         435.150 MHz FM 38k4 PBP, 1 watt output
                           435.150 MHz FM 9k6 Pacsat Broadcast Protocol
                          2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:            145.860 MHz FM 9k6 Pacsat Broadcast Protocol
                          1268.700 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon:                    435.150 MHz
```

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP

L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[07032009]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz. The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10 minute timer.
[05282007]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Operational
Current Mode: V/u (Mode JA)

Voice/CW (Mode JA)
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD

Uplinks: 145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage:
http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's
CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/
fo29cwts.htm
[02122009]
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[03232009]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational

Current Mode: Alternating between Mode A and B every 24 hours

Uplink: 145.850 to 145.950 MHz CW/USB Mode A

432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz CW
145.972 MHz CW
435.100 MHz CW
2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
[02122009]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - V/u
Voice - V/v
BBS - V/v
APRS - V/v
SSTV - V/v

Expedition 20 Crew:
Commander: Gennady Padalka RN3DT
Flight Engineer: Michael Barratt KD5MIJ
Flight Engineer: Timothy Kopra KE5UDN
Flight Engineer: Robert Thirsk VA3CSA
Flight Engineer: Roman Romanenko
Flight Engineer: Frank De Winne ON1DWN

Available Modes and Frequencies:

Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)

Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[07312009]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-219.S2
WSR 219 Part 2 08/07/2009

AMSAT NEWS SERVICE BULLETIN 219.S2
FROM AMSAT HQ SILVER SPRING, MD, August 07, 2009
TO ALL RADIO AMATEURS
BID: $ANS-219.S2

Pollux
Catalog Number:
Launch Date: July 31, 2009

Status: Operational

Downlink: 145.825MHz 1k2 AX.25
[07312009]
=====
Castor
Catalog Number:
Launch Date: July 31, 2009

Status: Operational

```
Downlink: 145.825 MHz 1k2 AX.25
[07312009]
=====
BEVO-1 (DRAGONSAT-1)
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Operational

Downlink: 437.325 MHz 9k6 GMSK
          437.325 MHz CW 20wpm
[07312009]
=====
AggieSat2 (DRAGONSAT-2)
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Operational

Downlink: 436.250 MHz 9k6
[07312009]
=====
CP-6
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Commissioning

Downlink: 437.365 MHz 1k2 AFSK
[06052009]
=====
HAWKSAT 1
Catalog number: 35003
Launch Date: May 19, 2009

Status: ?

Downlink: 437.345 ?
[06052009]
=====
Pharmasat
Catalog Number: 35002
Launch Date: May 19, 2009
Status: Commissioning

Downlink: 437.465 MHz 1k2 AFSK
[06052009]
=====
ANUSAT
Catalog Number: 34808
Launch Date: April 20, 2009

Status: ?
```

Downlink: 435.000 MHz
Uplink: 145.800 MHz

Telemetry: 137.400 MHz
[05112009]
=====
SOHLA-1 (ASTRO TECH.)
Catalog Number: 33496
Launch Date: January 23, 2009

Status: Commisioning

Proposed Frequencies and Modes:
Downlink: 437.505 MHz AFSK/CW
Beacon: 437.505 MHz AFSK/CW

Callsign:

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=101
[03232009]
=====
KAGAYAKI (Solan Co.)
Catalog Number: 33495?
Launch Date: January 23, 2009

Status: In Orbit

Downlink: 437.375 MHZ   FSK9k6/CW
Beacon: 437.375 MHz   FSK9k6/CW

IARU coordination status page:

AMSAT-NA webpage:

[01152009]
=====
STARS (Kagawa Univ.) (Twin Satellites)
Catalog Number: 33498
Launch Date: January 23, 2009

Status: Operational ?

Downlinks: 437.485 MHz FM/CW
           437.465 MHz FM/CW
Beacons: 437.305 MHz FM/CW
           437.275 MHz FM/CW

Callsigns: JR5YBN
           JR5YBO

IARU coordination status page:

```
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=99

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=121&retURL
=/satellites/status.php
[022152009]
=====
KKS-1 (Tokyo MCIT)
Catalog Number: 33499
Launch Date: January 23, 2009

Status: Operational

Downlink:  437.455 MHz AFSK/CW
Beacon:    437.385 MHz AFSK/CW

Callsign: JQ1YYY

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=107

AMSAT-NA webapge:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=120&retURL
=/satellites/status.php
[02212009]
=====
PRISM (Tokyo Univ.)
Catalog Number: 33493
Launch Date: January 23, 2009

Status: Operational ?

Downlink: 437.425 MHz AFSK/GMSK/CW
Beacon:   437.250 MHz AFSK/GMSK/CW

Callsign: JQ1YCX

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=97

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=119&retURL
=/satellites/status.php
[02212009]
=====
RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number: 32953
Launch Date: May 23, 2008

Status: Operational

Curent Modes: Telemetry
              Audio
```

```
               Images

Downlinks: 435.315 MHz
           435.215 MHz

AMSAT-NA website:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=115&ret
URL=/satellites/status.php

Official website:
http://www.npopm.com/?cid=leoca&caid=43
[02122009]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode:  /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon:    435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=94&retURL=
/satellites/status.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=72
[02122009]
=====
CP3
Catalog Number: 31129
Launch Date: April 17,2007

Status: Operational

Current Mode:  /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[02122009]
=====
GENESAT-1
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational
```

Current Mode: /u

Callsign: KE7EGC

Telemetry Beacon Downlink: 437.0670 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[02212009]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon: 437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/xivpicte.htm
[02212009]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003

Status: ?????

Current Mode: /u

Beacon: 436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=96&retURL
=/satellites/status.php

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[06082009]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Operational?

```
Uplink:  1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=56
[02122009]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Modes:   FM Repeater - Uplink:    145.920 Mhz FM
                               Downlink:  435.300 Mhz FM
                 BBS         - Uplink:   1268.700 Mhz FM 9k6
                               Downlink:  435.150 Mhz FM 9k6
                 Telemetry   - Downlink:  435.150 MHz FM

Analog voice downlink:     435.300 MHz FM
                           435.150 MHz FM
                          2401.200 Mhz FM
Analog voice uplink:       145.860 MHZ FM
                           145.880 MHz USB
                           145.920 MHz FM
                          1268.700 MHz FM
Digital Downlinks:         435.150 MHz FM 38k4 PBP, 1 watt output
                           435.150 MHz FM 9k6 Pacsat Broadcast Protocol
                          2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:            145.860 MHz FM 9k6 Pacsat Broadcast Protocol
                          1268.700 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon:                    435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
```

```
IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[07032009]
=====
QuakeSat
Catalog Number: 27845
Launch Date: June 30, 2003

Status: Telemetry only

Current Mode: 9600 baud data packet

Mode U packet
Downlink: 436.675 MHz 9k6 BPS

Quakesat webpage:
http://www.quakefinder.com/services/quakesat-ssite/
[04272009]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=69&retURL
=/satellites/status.php
[02212009]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Telemetry only

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink:        144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
```

```
http://www.xciv.org/~iain/aprstlm/v1.2/
[03302009]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Telemetry only

Current Modes:
Telemetry : /u

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign:       4XTECH-12

More information of GO-32 can be found at:
http://asri.technion.ac.il/techsat/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=14&retURL
=/satellites/status.php
[04272009]
=====
RS-22 RADIO SPORT RS-22
Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only

Current Mode:  /u

CW Beacon - 435.352 MHz
            145.818 MHz

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=76&retURL
=/satellites/status.php
[02212009]
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990

Status: CW Beacon only
```

Uplinks: 145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink: 437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[03162009]
=====
CanX-2
Catalog number: 32790
Launch Date: April 28, 2008

Status: Operational in range of ground station only

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[02212009]
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.425 MHz 1k2 baud packet

For the latest project status update please visit the AAUSAT-II web page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[02212009]
=====
CO-65 CUTE-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008

Status: Digipeater

Downlink: 437.475 MHz 9k6 Packet
Uplink: 1267.600 Mhz

Telemetry Beacon:
Downlink: 437.2750 MHz CW

For the latest project status update please visit the Cute-1.7+APD II web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78

Command Station blog website:
http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=112&retURL=/satellites/status.php
[02212009]

=====

Compass-1
Catalog number: 32787
Launch Date: April 28, 2008

Status: Operational

Current Mode: 4k8 MSK packet

Uplink: 145.980 MHz FM
Downlink: 437.275 Mhz CW
          437.405 MHz Packet

For the latest project status update please visit the Compass 1 web page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=114&retURL=/satellites/status.php
[04272009]

=====

CO-66 Seeds II
Catalog number: 32791
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.485 MHz

Callsign: JQ1YGU

For the latest project status update please visit the Seeds 2 web page: http://cubesat.aero.cst.nihon-u.ac.jp/english/seeds_2_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=113&retURL=/satellites/status.php
[02212009]

=====

INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes:	FM Repeater -	V/u
	Voice -	V/v
	BBS -	V/v
	APRS -	V/v
	SSTV -	V/v

Expedition 20 Crew:

Commander:	Gennady Padalka	RN3DT
Flight Engineer:	Michael Barratt	KD5MIJ
Flight Engineer:	Timothy Kopra	KE5UDN
Flight Engineer:	Robert Thirsk	VA3CSA
Flight Engineer:	Roman Romanenko	
Flight Engineer:	Frank De Winne	ON1DWN

Available Modes and Frequencies:
Digital/APRS:

Worldwide packet uplink:	145.825 MHz FM 1k2
Worldwide packet downlink:	145.825 Mhz FM 1k2

Voice:

Region 1 voice uplink:	145.200 MHz FM
Region 2/3 voice uplink:	144.490 MHz FM
Worldwide downlink:	145.800 MHz FM

Crossband Repeater:

Repeater Uplinks:	1269.650 MHz FM
	437.800 MHz FM
	145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink:	145.800 MHz FM
	437.800 MHz FM (Kenwood)

SSTV Robot 36:

Downlink:	145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time line is NOT translated from Russian and posted.
[07312009]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-219.S3
WSR 219 Part 3 08/07/2009

AMSAT NEWS SERVICE BULLETIN 219.S3
FROM AMSAT HQ SILVER SPRING, MD, August 07, 2009
TO ALL RADIO AMATEURS
BID: $ANS-219.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

CP4
Catalog Number: 31122
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon: 437.325 MHz CW

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=79
[10022008]
=====
LIBERTAD-1
Catalog Number: 31128
Launch Date: April 17,2007

```
Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink:   145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[02122009]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: Non-Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder:  145.825 Mhz FM
[01012009]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency:  437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink:        437.250 MHz FM 67Hz CTCSS
Voice Downlink:     2401.835 MHz FM
Packet Up/Downlink:  437.250 MHz 9k6 packet
Packet Downlink     2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
UWE-1
```

```
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non-Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[08132007]
=====
CANX-1
Catalog Number: 27847
Launch Date: June 30, 2003

Status: Non-Operational

Downlink: 437.8800 MHz AFSK 1k2bps
[06052009]
=====
DTUSAT
Catalog Number: 27842
Launch Date: June 30, 2003

Status: Non-Operational

Current Mode: 2k4 AFSK Packet last reported

Downlink: 437.475MHz

Officail webpage: http://dtusat1.dtusat.dtu.dk/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=101&retURL
=satellites/all_oscars.php
[02212009]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink:   435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)

Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000
```

Status: Telemetry only

Uplinks: 145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[03302009]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

```
Status: Non-Operational

Uplink:   145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
V-band:   145.840 -  145.990 MHz CW/LSB
U-band:   435.550 -  435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks
---------
S2-band:  2401.225 -  2401.475 MHz CW/USB
K-band:  24048.010 - 24048.060 MHz CW/USB
Beacon:   2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)
----------------------------
BEACON   General Beacon(GB)  Middle Beacon(MB)  Engineering Beacon(EB)
2 m                   none        145.898 MHz                     none
70cm           435.438 MHz        435.588 MHz              435.838 MHz
13cm(1)       2400.188 MHz       2400.338 MHz             2400.588 MHz
13cm(2)       2401.173 MHz       2401.323 MHz             2401.573 MHz
3cm          10450.975 MHz      10451.125 MHz            10451.375 MHz
1.5cm        24047.885 MHz      24048.035 MHz            24048.285 MHz
[07162007]
=====
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
=====
```

UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]

=====

SO-35 SUNSAT
Catalog Number: 25636
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]

=====

PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]

=====

SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

```
The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink:   145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
MO-30 UNAMSAT-2
Catalog Number: 24305
Launch Date: September 5, 1996

Status: Non-operational

Downlink:       435.1380 MHz AFSK 1200 BPS
Downlink:       435.2060 MHz AFSK 1200 BPS
Uplink:         145.8150 MHz AFSK 1200 BPS
Uplink:         145.8350 MHz AFSK 1200 BPS
Uplink:         145.8550 MHz AFSK 1200 BPS
Uplink:         145.8750 MHz AFSK 1200 BPS
[06042009]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Non-operational

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign:       POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012009]
=====
IO-26 ITAMSAT
```

Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks: 145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]

=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]

=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HL01-11
BBS: HL01-12
[01222007]

=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

```
Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990
```

```
Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
[05012006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: non-operational

Current Mode:  V/u

Uplink:         145.900 MHz FM 1200-baud Manchester FSK (reserved)
                145.920 MHz FM VOICE
                145.940 MHz FM 1200-baud Manchester FSK (reserved)
                145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink:       437.026 MHz USB VOICE
                (1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[07242009]
=====
UO-15 UoSAT-4
Catalog Number: 20438
Launch Date: January 22, 1990

Status: Non-operational

Uplink: ?
Downlink: 435.1250MHz (?)
          435.1200MHz (?)
[06042009]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational
```

```
Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984

Status: Non-operational.

Current Mode:  /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon:          435.025 MHz
Mode-S Beacon:     2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[01012009]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB
```

```
Beacon:   145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink  29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
Beacons:   29.450 MHz
          435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965
```

Status: Non-Operational

Uplink: 145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB

Beacon 1: 29.352 MHz (intermittent)
Beacon 2: 29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB

Beacon: 145.860 MHz

Robot: 145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
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SB SAT @ AMSAT W8ISS ANS-219.S4

WSR 219 Part 4 08/07/2009

AMSAT NEWS SERVICE BULLETIN 219.S4
FROM AMSAT HQ SILVER SPRING, MD, August 07, 2009
TO ALL RADIO AMATEURS
BID: $ANS-219.S4

THE FOLLOWING SATELLITES HAVE RE-ENTERED OR HAVE BEEN RETURNED SAFELY:

NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: July 28, 2008

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[01012009]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink: 145.825 Mhz FM APRS AX25
APRS Uplink: 145.825 MHz FM APRS AX25
Voice/PSK31 Uplink: 28.120 MHz

Packet to Voice ID: RAFT
[06112007]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Re-Entered
Re-entered: June 18, 2008

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon: 437.2750 MHz CW

Callsign: JR8YJT
[01012009]
=====
SO-43 Starshine 3
Catalog Number: 26929
Launch Date: September 30, 2001

Status: Re-Entered
Re-entered: January 21, 2003

Beacon: 145.825Mhz
[02212009]
NNNN
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ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at} amsat.org
NNNN
/EX

From 6501992595548138704
X-Google-Thread: a4a23d5f63,f5b3fa03d65737a5,start
X-Google-Attributes: gida4a23d5f63,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news1.google.com!newsfeed2.dallas1.level3.net!news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-221 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sun, 9 Aug 2009 12:02:05 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 487
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000401ca190a$b4f31f80$1ed95e80$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1249833725 25407 166.84.1.6 (9 Aug 2009 16:02:05 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 9 Aug 2009 16:02:05 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to   rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to   rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting

X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news2.google.com rec.radio.amateur.space:275 rec.radio.info:896

AMSAT NEWS SERVICE
ANS-221

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* AMSAT-UK Colloquium Video and Powerpoint Available On-line
* CW Contest Milestone
* SpaceJam-3 Introduces Scouts to Amateur Radio in Space
* UT Austin Requests Help to Track BEVO1
* Satellite shorts
* ITAR Update
* ARISS Status - 03 August 2009

SB SAT @ AMSAT $ANS-221.01
AMSAT-UK Colloquium Video and Powerpoint Available On-line

AMSAT News Service Bulletin 221.01
From AMSAT HQ SILVER SPRING, MD.
August 9, 2009
To All RADIO AMATEURS
BID: $ANS-221.01

The videos of the presentations at this years successful AMSAT-UK Colloquium in Guildford are now available to watch on the British Amateur Television Club (BATC) website

Among the fascinating video presentations are:

+ FUNcube, the new AMSAT-UK linear transponder satellite project
  by Graham Shirville G3VZV
+ AMSAT-NA Update by Drew Glasbrenner KO4MA
+ AMSAT-DL Update by Peter Guelzow DB2OS
+ Electronics and Teddy Bears: A Near-Space Adventure"
  by Ed Moore M0TEK and Fergus Noble M0NBL, Cambridge University
+ Engineers Wanted! Tempting Teenagers to Explore Technology

by Garry Bulmer, Software Architect
+ Medium Earth Orbits by David Bowman G0MRF

All 18 videos can be seen at http://www.batc.tv/ Click on the "Film Archive" icon on the left to see all the videos available then select the video you wish to see (they start with 2009 AMSAT). To see the video full screen click on the icon at the bottom of the video player.

PDFs of the slides from the presentations can be found on the AMSAT-UK website at:
http://www.uk.amsat.org/component/option,com_wrapper/Itemid,278/

Thanks to the BATC for recording and editing the videos (a time consuming job) as well providing this invaluable video service at batc.tv for the Amateur Satellite community.

[ANS thanks Trevor, M5AKA for the above information]

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SB SAT @ AMSAT $ANS-221.02
CW Contest Milestone

AMSAT News Service Bulletin 221.02
From AMSAT HQ SILVER SPRING, MD.
August 9, 2009
To All RADIO AMATEURS
BID: $ANS-221.02

FOR RELEASE: Immediate (August 4, 2009)

2008 CQ World Wide CW Contest Marks Major Milestone
for K0DQ Becomes Possibly the Only Person Ever
to Win All Six Major Ham Radio Contests

Scott Redd, K0DQ, operating the 2008 CW weekend of the CQ World Wide DX Contest from Aruba as P40Q, racked up over a million more points than his closest competitor in the Single-Operator Low Power Class, and became perhaps the only person ever to win single-op world championships in all six major ham radio DX contests.

"I don't know of anyone else" who has won all the major contests, said CQWW Contest Director Bob Cox, K3EST, in announcing the results, which will be published in the September issue of CQ magazine.

Scott had his first taste of contest victory back in 1966, as a young Navy officer posted to Uruguay and operating

CX2CO in the phone weekend of the CQ World Wide DX Contest. Over the succeeding years, Scott worked his way through the Navy ranks to Vice Admiral and became Commander of the Fifth Fleet, then served as a civilian in the Iraq Coalition P rovisional Authority and as Director of the National Counterterrorism Center before retiring in late 2007. But ham radio and contesting were never far away, and operating from Mexico as XE1IIJ in the early 1970s, Scott won single-op world championships in the CQWW Phone Contest, the ARRL DX Phone and CW Contests and the CQ WPX Phone Contest. Thirty years later, when his professional life permitted a little more hamming time, Scott added the WPX CW crown as P41P, operating from P43P's station in Aruba, in 2002. The only prize that eluded him -- until now -- was the CQWW CW.

"I've been trying like a son-of-a-gun to win (the) CQ World Wide CW," Scott commented in a 2008 interview with CQ. "I've come in number two, I've come in number three, but I've never won that one . so that's still my goal, every time I get close, in CQ World Wide CW, to win the world."

When informed that he had finally achieved that goal, K0DQ said, "I guess the message is if you keep at it long enough good things happen. In this case, four decades. It's been a great ride ... and it's still magic!"

CQ congratulates Scott -- already a member of the CQ Amateur Radio Hall of Fame, for his contesting achievements on top of all his other achievements.

[ANS thanks CQ Magazine for the above information]

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SB SAT @ AMSAT $ANS-221.03
SpaceJam-3 Introduces Scouts to Amateur Radio in Space

AMSAT News Service Bulletin 221.03
From AMSAT HQ SILVER SPRING, MD.
August 9, 2009
To All RADIO AMATEURS
BID: $ANS-221.03

While the world was watching replays of the history making moon walk last week, dozens of Illinois Boy Scouts were taking their first steps toward space technology.

Space Jam 3 got off the ground last week with a high altitude balloon launch in Rantoul, Illinois. Space Jam is sponsored by DePauw University. It's purpose is to get Scouts into technology.

With assistance from the Vermillion County Amateur Radio Association, they were able to launch a helium filled balloon and use the cross band repeater for amateur radio contacts across the Midwest.

The longest radio contact occurred when the balloon reached the 99-thousand foot level. Two stations, one in Walbridge, Ohio the other in Mexico, Missouri, completed a 470 mile QSO.

On the ground, Dave Cline KB9ZMF, said he thought 200 Boy Scouts were on the radios throughout the Space Jam. They also worked on high tech merit badges in Space Exploration, Aviation, Radio & Electronics and on Nuclear Science Composite Materials

Talking with Astronaut Robert Thirsk, VA3CSA, onboard the International Space Station, topped the weekend Space Jam activities. Space Jam Four is already being planned for August of 2010.

[ANS thanks Amateur Radio NewslineT Report 1668 - July 31 2009 for the above information]

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SB SAT @ AMSAT $ANS-221.04
UT Austin Requests Help to Track BEVO1

AMSAT News Service Bulletin 221.04
From AMSAT HQ SILVER SPRING, MD.
August 9, 2009
To All RADIO AMATEURS
BID: $ANS-221.04

Last week STS-127 deployed DragonSat last week via its Space Shuttle Picosatellite Launcher (SSPL) system. Dragonsat was the designation for both Aggiesat2 and Bevo1 (DragonSat = AggieSat2 + BEVO1). They were ejected together from the SSPL, but it appears that they failed to separate.

As of ANS press time still no signals have been received from BEVO1, although beacon packets were heard from AggieSat2. The current theory on the state of the satellites is that only partial separation occurred. The inhibit switches keeping the satellites powered off have been closed, allowing the satellites to boot up. However, it is likely that the antennas did not deploy correctly, leaving the antennas disconnected from their respective transmitters. AggieSat2 transmits with 1W of power so it is easier to hear, while BEVO1 only transmits with 200mW during beacon mode.

AggieSat-2 transmits on 436.250 MHz using a proprietary data format.

BEVO1 Downlink Information:

Beacon Mode
Downlink Freq: 437.325 MHz
Modulation: FM, 200mW, Morse Code, ~20 WPM

Data Mode
Downlink Freq: 437.325 MHz
Modulation:
GMSK, 1W, 9600 baud, AX.25 (default)
FM, 1W, Bell 202, AX.25

UT Austin has also posted some pictures here:
http://paradigm.ae.utexas.edu/ops/

The 2-line tracking elements are:

```
DRAGONSAT
1 35690U 09038B   09217.97658609 +.00019083 +00000-0 +10072-3 0 00133
2 35690 051.6416 050.8490 0005305 104.3300 255.8301 15.80669917001027
```

[ANS thanks Karla Vega, KE5FKU for above information]

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SB SAT @ AMSAT $ANS-221.05
Satellite shorts

AMSAT News Service Bulletin 221.05
From AMSAT HQ SILVER SPRING, MD.
August 9, 2009
To All RADIO AMATEURS
BID: $ANS-221.05

+AMSAT-UK's FUNcube Amateur Radio satellite project is featured in this week's Electronics Weekly email newletter and a longer article should appear in the next issue of the printed magazine which will also be available in digital format. See http://tinyurl.com/kmlssm for the article in the e-mail newsletter.

A free subscription to the digital version of Electronics Weekly magazine is available at:
http://www.qssweb.co.uk/controlledcirc/main/index.aspx

Electronics Weekly Magazine is on-line at:
http://www.electronicweekly.com/

[ANS thanks Trevor, M5AKA for the above information]

+ Gould, WA4SXM reported the AO-51 Command Team has set the satellite into the following configuration:
FM repeater V/U (620 mW)
Uplink 145.920 MHz FM
Downlink 435.300 MHz FM

FM 9k6 digital (590 mW)
L band uplink on 1268.700 MHz
Downlink 435.150 MHz FM

+ AMSAT INDIA July News letter is available for download at http://www.amsatindia.org/Newsletter or directly at http://amsatindia.org/Newsletter/AmsatIndia-News-July-09.pdf

+ Makoto, JI5RPT will operate as JD1BLY and Yoshihi, JO1LVZ will operate as JD1BNF from Chichijima, Ogasawara Island, Japan between August 9-15. Satellite operation is planned. QSLs via homecalls. (DXNL DX Newsletter #1635 - Aug 5, 2009)

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SB SAT @ AMSAT $ANS-221.06
ITAR Update

AMSAT News Service Bulletin 221.06
From AMSAT HQ SILVER SPRING, MD.
August 9, 2009
To All RADIO AMATEURS
BID: $ANS-221.06

AMSAT Files CJ Requests with US State Department

The Radio Amateur Satellite Corporation filed four Commodity Jurisdiction (CJ) requests with the Directorate of Defense Trade Controls, US State Department last week. These requests ask that the four commodity groups that AMSAT provided support for AMSAT-DL's Phase 3-E project (SDX, IHU-3, Can-Do! Bus, and thermal design) be transferred to the Department of Commerce and be regulated under the Export Administration Regulations (EAR), removing them from ITAR (International Traffic in Arms Regulations) managed by the State Department's DDTC.

"Our CJ requests are based upon AMSAT's status as a not-for-profit corporation that adheres to 'open source' and ' public domain' principles where all of our technical activities are freely available through the Internet and publications, such as the "AMSAT Journal", observed AMSAT President Barry Baines, WD4ASW. "Given the open nature of our activities, the focus on scientific and educational purposes of our satellites, and lack of military applications, we believe that our activities in these areas are better suited for EAR rather than ITAR", said Barry.

The CJ requests will be reviewed by the Directorate of Defense Trade Controls as well as other federal agencies such as the Commerce Department and Department of Defense. AMSAT expects this review to take several months before a decision is made by DDTC whether to grant the request.

AMSAT's involvement with P3-E halted in 2006 due to concerns over possible ITAR violations. In January 2009, AMSAT filed a 'Voluntary Disclosure' with DDTC outlining AMSAT's activities with AMSAT-DL and AMSAT-UK on P3-E. In March 2009, DDTC advised AMSAT that ITAR violations did occur but that the case was being closed. AMSAT was admonished not to violate ITAR in the future. Subsequent to receiving DDTC's letter closing the case, AMSAT is now seeking a means to re-establish technical exchanges in support of P3-E while abiding under rules administered by the Commerce Department.

Further details on AMSAT's efforts to comply with ITAR while developing ways which will allow AMSAT satellite builders to work cooperatively with foreign nationals on amateur radio satellite projects will be available in the next issue of the "AMSAT Journal."

[ANS thanks, Barry, WD4ASW, for the above info]

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SB SAT @ AMSAT $ANS-221.07
ARISS Status - 3 August, 2009

AMSAT News Service Bulletin 221.07
  From AMSAT HQ SILVER SPRING, MD.
August 9, 2009
To All RADIO AMATEURS
BID: $ANS-221.07

1.   ARISS School Contact with Space School

An Amateur Radio on the International Space Station (ARISS) contact has been conducted with the United Space School in Seabrook, Texas on Wednesday, August 5 at 13:47 UTC via telebridge station ON4ISS. The school is a once a year session of high school students that meets annually in the NASA/Clear Lake Area. These students come from around the world for a two week session, during which they stay with local host families while being mentored by astronauts, engineers, and scientists to design a mission to Mars as their team project. Class sessions are held at the University of Houston at Clear Lake. The contact allowed students to learn firsthand what the experience of spaceflight is like. They will use this knowledge in putting together their team project presentation, which they will present to the Houston space community at the end of their session.

2. ARISS Contact with Hospital for Sick Children

On Thursday, July 30, patients of the Hospital for Sick Children in Toronto, Ontario, Canada participated in an Amateur Radio on the International Space Station (ARISS) contact. Children spoke with Astronaut Robert Thirsk, VA3CSA via telebridge station ON4ISS in Belgium and were able to ask 18 questions about life in space. Nearly 100 people were present for the event and the contact was broadcasted throughout the hospital on closed circuit television.

3. ARISS Contact Between Michael Barratt and Summer Playground Camp

Borough of New Providence, NJ, Summer Playground Camp in New Providence, New Jersey took part in an Amateur Radio on the International Space Station (ARISS) contact on Thursday, July 30. Ten children asked twenty questions of Expedition 19's Michael Barratt, KD5MIJ in front of an audience of approximately 100 people. This was a town sponsored summer camp activity for elementary school children (K - 6). The New Providence Amateur Radio Club (NPARC) has been involved with this type of camp for the last five years and regularly provides an introduction to amateur radio on the air by setting up HF and VHF stations so that campers may communicate with hams around the world. The ARISS contact was an extension of this activity.

4. ARISS News on Amateur Radio Newsline

On July 31, Amateur Radio Newsline Report 1668 reported on the Scout Space Jamboree in Rantoul, Illinois which included an Amateur Radio on the International Space Station (ARISS) contact. To view "Ham Radio in Space: Space Jam 3 in Illinois," see: ftp://ftp.arnewsline.org/quincy/News-A/news.txt

5. ARISS International Meeting Minutes Posted

The Amateur Radio on the International Space Station (ARISS) team held its annual meeting at the European Space Research and Technology Centre (ESTEC) in the Netherlands in June. Minutes are now available and have been posted to the ARISS Web site. See: http://www.rac.ca/ariss/ARISS-I%202009%20Annual%20Mtg%20final%20edit%20minutes.doc

6. ARRL Articles on FUNcube

The American Radio Relay League (ARRL) posted a Web story on a new AMSAT-UK (Radio Amateur Satellite Corporation) satellite project, FUNcube. FUNcube is a cubesat which will educate youth about radio, electronics and physics. For more information,

see: http://www.arrl.org/news/stories/2009/07/29/10985/?nc=1
The article may also be found in the ARRL Letter:
http://www.arrl.org/arrlletter/09/0731/

7. SuitSat-2 Demo

The Amateur Radio on the International Space Station (ARISS) SuitSat-2 prototype was demonstrated at the Microchip Master's conference which was held in Phoenix on July 29 - August 1. See:
https://secure.microchip.com/usmasters/EveningEvents.aspx

8. De Winne Comments on Importance of Amateur Radio on ISS

During a recent Amateur Radio on the International Space Station (ARISS) contact, Astronaut Frank De Winne was asked about the importance of amateur radio on the ISS. He answered that the radio was an important means of psychological support.
The audio of this contact may be found on the ARISS-Europe Web site. See:
http://www.ariss-eu.org/2009_07_31.htm

9. ARISS Teleconference Minutes Posted

The Amateur Radio on the International Space Station (ARISS) team held its monthly meeting on Tuesday, July 21. Agenda items included a recap of the face-to-face meeting held in the Netherlands and the status of the SuitSat-2 project.
The minutes have been posted.
See: http://www.rac.ca/ariss/arisstel2009-07-21.htm

10. MAI-75 Experiments Planned

MAI-75 (Moscow Aviation Institute) experiments are planned for August 3 and 4. The VC-H1 unit will run in auto mode (Robot-36 and transmitting once every 3 minutes) and should be operational on 145.800 MHz from approximately 0800-1600 UTC each day.
Information on the MAI-75 experiment is available
at: http://www.energia.ru/eng/iss/researches/education-26.html

11. Astronaut Training Status - Simulated Contact Scheduled

A simulated contact is planned for Thursday, August 6 at approximately 13:30 UTC. The contact will be between Euro Space Camp (ESC) and Paolo Nespoli, IZ0JPA. Audio should be available on EchoLink and IRLP (Internet Radio Linking Project).
The training session is a terrestrial-based amateur radio contact using Amateur Radio on the International Space Station (ARISS) equivalent equipment.

[ANS thanks Carol, KB3LKI, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Dee Interdonato, NB2F

```
From -3569475557444725176
X-Google-Thread: a4a23d5f63,71d3d91e9b4a4b72,start
X-Google-Attributes: gida4a23d5f63,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news2.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx01.iad01.newshosting.com!newshosting.com!
198.186.194.249.MISMATCH!news-out.readnews.com!transit3.readnews.com!panix!
rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-228 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sat, 15 Aug 2009 21:24:46 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 406
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <001401ca1e10$529cfad0$f7d6f070$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1250385886 830 166.84.1.6 (16 Aug 2009 01:24:46 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 16 Aug 2009 01:24:46 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
```

X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news2.google.com rec.radio.amateur.space:276 rec.radio.info:910

AMSAT NEWS SERVICE
ANS-228

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

```
**********************************************************************
* 2009 AMSAT Space Symposium and Annual General Meeting October 9-11 *
*   Four Points Sheraton Hotel at the Baltimore Washington Airport   *
*  Details - http://www.amsat.org/amsat-new/symposium/2009/index.php *
**********************************************************************
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In this edition:

* Final Call For Papers AMSAT 2009 Space Symposium
* New Satellite Location Maps Available
* AO-51 Mode Change This Weekend
* South Africa's SumbandilaSat Launch Scheduled For September 15
* AMSAT Awards
* SimSat-4 Amateur Radio High Altitude Balloon Flight Announcement
* Satellite Shorts From All Over
* Invitation to Join Nova East Star Party ARISS Video Link
* Mars Orbit Getting Busier

SB SAT @ AMSAT $ANS-228.01
Final Call For Papers AMSAT 2009 Space Symposium

AMSAT News Service Bulletin 228.01
>From AMSAT HQ SILVER SPRING, MD.
August 16, 2009
To All RADIO AMATEURS
BID: $ANS-228.01

Symposium Proceedings Editor Daniel Schultz, N8GFV this week issued the final call for papers for the 2009 AMSAT Annual Meeting and Space Symposium to be held October 9 - 11 at the Four Points Sheraton Hotel at the Baltimore Washington Airport.

Proposals for papers, symposium presentations and poster presentations are invited on any topic of interest to the amateur satellite community. Since the subject of launch opportunities is driving most of what AMSAT can do in the near future, papers on possible cooperative projects with other space organizations would also be relevant. You might also consider doing a tutorial session on some technical subject that you are an expert on for the education of the rest of us.

Daniel requests a tentative title of your presentation as soon as possible, with final copy submitted by September 1, 2009 for inclusion in the printed proceedings. Abstracts and papers should be sent to Dan Schultz, N8FGV, at n8fgv@amsat.org.

[ANS thanks Daniel Schultz, N8FGV for the above information]

/EX

SB SAT @ AMSAT $ANS-228.02
New Satellite Location Maps Available

AMSAT News Service Bulletin 228.02
>From AMSAT HQ SILVER SPRING, MD.
August 16, 2009
To All RADIO AMATEURS
BID: $ANS-228.02

A map showing the current satellite location for most of the amateur satellites are now available on the AMSAT web site.

>From the AMSAT front page, use the left hand side navigation, go to the 'Satellite Information' navigation box, then select 'Satellite Status'. You may also go directly there using this URL: http://www.amsat.org/amsat-new/satellites/status.php

Next click on an underlined satellite name in the left hand column. This will display a satellite summary, scroll to the bottom of the page and there will be a map showing the current location of that satellite and the illuminated and dark portions of the earth.

This feature can be used for a quick check of the satellite's location or to verify that your tracking program was setup correctly. Thanks to Rick, W2GPS and Chip, N2YO for providing this useful feature.

[ANS thanks Gould, WA4SXM for the above information]

/EX

SB SAT @ AMSAT $ANS-228.03
AO-51 Mode Change This Weekend

AMSAT News Service Bulletin 228.03
>From AMSAT HQ SILVER SPRING, MD.
August 16, 2009
To All RADIO AMATEURS
BID: $ANS-228.03

On Sunday night Eastern Daylight Time (UTC - 4), around 0000Z Aug 17 UTC AO-51 will switch to V/S FM repeater mode using the 145.880 MHz uplink and 2401.200 MHz downlink.

The AO-51 spin rate has slowed to over 7 minutes per revolution. Eighteen months ago this was about 2.5 RPM. So, either you should experience less to no fading during the pass or longer fades depending upon the satellite's orientation to your QTH. The AO-51 modes team welcomes your observations, especially those providing actual measured data.

Ground controllers probably will turn the L-Band digital uplink off, to get the best power allocation to both transmitters. You will still be able to receive the telemetry on 435.150 MHz.

[ANS thanks AO-51 Operations Team for the above information]

/EX

SB SAT @ AMSAT $ANS-228.04
South Africa's SumbandilaSat Launch Scheduled For September 15

AMSAT News Service Bulletin 228.04
>From AMSAT HQ SILVER SPRING, MD.
August 16, 2009
To All RADIO AMATEURS
BID: $ANS-228.04

The South African Amateur Radio Satellite Association (SA AMSAT) reports that South Africa's second Amateur Radio satellite SumbandilaSat is due to launch on September 15

AMSAT-SA reported that the satellite is already in Baikonur for system integration and from where it will be launched on its journey around the earth on a Soyuz rocket.

The Amateur Radio payload comprises a V/U FM voice transponder with an uplink in the 2 meter band and a downlink in the 70cm band. It has a parrot repeater (voice digipeater) and a voice beacon.

The Amateur Radio Payload will be operating in conjunction with the University of Stellenbosch Software Defined Receiver project as it will share the VHF receiver and UHF transmitter used by the SDR project.

The SA AMSAT payload has been assigned the callsign ZS0SUM. Control of the satellite's function from the ground will be accomplished by transmitting CTCSS tones which will be announced. One tone will will command the satellite in the transponder mode; another CTCSS tone will command the satellite into the parrot repeater mode; and if no tones are received for a period of time the satellite will activate its voice beacon.

Frequencies of operation for the FM voice Transponder and Parrot are:
Uplink   145.880 MHz
Downlink 435.350 MHz

Additional information can be found at these links.
A paper presented by a Stellenbosch student on the SA satellite:
http://dataweek.co.za/article.aspx?pklArticleId=4118&pklCategoryId=42

University of Stellenbosch
http://www.sun.ac.za/

University of KwaZulu-Natal
http://www.ukzn.ac.za/

SunSpace
http://www.sunspace.co.za/

Southern African Amateur Radio Satellite Association (SA AMSAT)
http://www.amsatsa.org.za/

[ANS thanks Trevor, M5AKA, The SouthGate Web site, and SA-AMSAT for the above information]

/EX

SB SAT @ AMSAT $ANS-228.05
AMSAT Awards

AMSAT News Service Bulletin 228.05
>From AMSAT HQ SILVER SPRING, MD.
August 16, 2009
To All RADIO AMATEURS
BID: $ANS-228.05

AMSAT Director Contests and Awards, Bruce Paige, KK5DO congratulates the following Amateur Radio operators who have earned these awards.

AMSAT Satellite Communications Achievement Award:

Rizkallah Azrak	OD5RI	#503
Dave Glow	AA1VX	#504
Evangelos Kafetzopoulos	SV1EEK	#505

The following have earned the AMSAT Sexagesimal Award.

David Bird	KC7USS	#150

The following have earned the South Africa Communications Achievement Award.
Evangelos Kafetzopoulos SV1EEK #US137

The following have earned the W4AMI Achievement Award (for 1000 contacts)

Dimtrios Pallis	SW1JGW	#54
George Carr	WA5KBH	#55
Evangelos Kafetzopoulos	SV1EEK	#56

To see all the awards visit http://www.amsat.org

[ANS thanks Bruce, KK5DO for the above information]

/EX

SB SAT @ AMSAT $ANS-228.06
SimSat-4 Amateur Radio High Altitude Balloon Flight Announcement

AMSAT News Service Bulletin 228.06
>From AMSAT HQ SILVER SPRING, MD.
August 16, 2009
To All RADIO AMATEURS
BID: $ANS-228.06

The SimSat-4 high-altitude balloon flight experiment has been scheduled for Saturday morning, September 19, 2009.

SimSat-4 Principal Investigator, Pat Kilroy, N8PK has posted the latest information on the web at: http://simsat.net then click SimSat-4. Pat invites you to check this link on a regular basis for updates and late breaking news about SimSat-4.

Pat says he needs more volunteers to help execute a successful flight. He is looking for:

1. Net Control Station for the (A) HF or (B) VHF net. You are also invited to create your own net on a repeater more local to you and your club.

2. Amateur Radio stations to copy and save telemetry during the mission from the comfort of your own home/shack.

3. Invite a student (young or old) to participate with you. Show 'em how to listen. That's all.

4. Download and install a CW code reader on your PC. Play with it and let us know how well it works.

5. There are many other fun tasksand you can see the list on the SimSat-4 announcement page. http://simsat.net and then click SimSat-4.

[ANS thanks SimSat-4 Principal Investigator, Pat Kilroy, N8PK for the above information]

/EX

SB SAT @ AMSAT $ANS-228.07
Satellite Shorts From All Over

AMSAT News Service Bulletin 228.07
>From AMSAT HQ SILVER SPRING, MD.
August 16, 2009
To All RADIO AMATEURS
BID: $ANS-228.07

+ Congratulations to Patrick, WD9EWK on his Worked All States award. Patrick completed WAS completely via the FM LEO satellites.

+ Short Notice! Mark WA8SME plans to activate the rare grid DM19 (smack in the middle of Nevada) on August 17 during the 2130Z AO27 pass (approximate). He will operate using an HT and Arrow antenna.

+ Software enhancement allows you to fly through the 10,000 galaxies of the Hubble Ultra Deep Field image at: http://tinyurl.com/n3fhjg Try the full screen option in the bottom toolbar for the best experience. (UniverseToday.com)

+ Congratulations to Doug, KD8CAO and Jim, W8MRR on their successful Amateur Satellite demonstration via AO-51 on 8/11/09 at the Holland Area Radio Club in Michigan. Jim said, "Everything went right, the weather was perfect, the satellite and our equipment performed flawlessly, and a huge crowd of hams were there for our monthly meeting." Doug and Jim also included a Power Point presentation.

+ AMSAT-UK's FUNcube satellite project is featured on the front cover of the August 12-18 edition of Electronics Weekly magazine. You can read the digital version of Electronics Weekly magazine online in PDF format at: http://cde.cerosmedia.com/1D4a803d8814a11352.cde

+ Roland PY4ZBZ has posted an audio recording from his AO-7 SSB QSO with Andre, ZS2BK covering a of distance of 6890 km. The recording is at: http://www.qsl.net/py4zbz/satelite/ZS2BK_AO7.wav Photos of his 2 element Yagi on VHF and 6 el on UHF are on-line at: http://www.qsl.net/py4zbz/satelite.htm#owa6

+ The next Hudson Valley Satcom Group net is Thursday August 20 at 8PM EDT (UTC-4), on the 146.97 Repeater and Echolink node: N2EYH-L (via WA2BSS)

[ANS thanks everyone for the above information]

/EX

SB SAT @ AMSAT $ANS-228.08
Invitation to Join Nova East Star Party ARISS Video Link

AMSAT News Service Bulletin 228.08
>From AMSAT HQ SILVER SPRING, MD.
August 16, 2009
To All RADIO AMATEURS
BID: $ANS-228.08

On Saturday, August 22, 2009 participants at the Nova East Star Party (Smileys Provincail Park, Brooklyn, Nova Scotia Canada) will have the opportunity to speak with Canadian Astronaut and Expedition 20/21 Flight Engineer Dr. Robert (Bob) Thirsk, VA3CSA, on board the International Space Station.

With the help of the Province of Nova Scotia's Emergency Management Office and Bell Aliant a LIVE satellite uplink will be used to provide a 1 hour webcast of the event.

Starting at shortly after 12:00 UTC the webcast will include amateur radio and astronomical topics. The webcast will conclude with the actual contact which begins with AOS at 12:54:08 UTC.

Please join us for this very special educational outreach event at http://exclusive.bellaliant.net/spacestation.

[ANS thanks the ARISS Mentor for Nova East Star Party 2009, Wayne Harasimovitch, VE1WPH for the above information]

/EX

SB SAT @ AMSAT $ANS-228.09
Mars Orbit Getting Busier

AMSAT News Service Bulletin 228.09
>From AMSAT HQ SILVER SPRING, MD.
August 16, 2009
To All RADIO AMATEURS
BID: $ANS-228.09

MarsDaily.com reports that NASA's Mars Reconnaissance Orbiter is in safe mode, a precautionary standby status, and in communications with Earth after unexpectedly switching to its backup computer on Thursday, August 6.

Engineers are working to determine the cause of the spontaneous swap from the orbiter's "A" side computer and subsystems to the redundant "B" side.

They have successfully increased the communication rate from the orbiter, but some engineering data about what was occurring just before the side swap may never be available. The team expects it will be at least several days until normal science operations resume.

After the challenging mission to moon, ISRO has begun preparations for sending an Indian spacecraft to Mars within the next six years. Mission studies have been completed and collection of scientific proposals has begun. India is examining launch opportunities between 2013 and 2015.

MarsDaily.com also reported this week that China's first satellite to probe Mars has been transported to Russia for a launch later this year.

Yinghuo-1, the 110-kilogramme (242-pound) Chinese satellite, is scheduled to be launched along with Russia's "Phobos Explorer" aboard a Zenit rocket in October after final testing, the Beijing News said.

After entering Mars' orbit -- 10 to 11 months later -- the orbiter will probe the Martian space environment, with a special focus on what happened to the water that appears to have once been abundant on the planet's surface.

[ANS thanks MarsDaily.com and SpaceDaily.com for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office. And with that please keep in mind the camel who journeyed a thousand miles across the desert to reach the oasis palm, and yet he could not get a date.

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM
K9JKM at amsat dot org

From -8101767585389246677
X-Google-Thread: a4a23d5f63,ac4268d7de2a7fd1,start
X-Google-Attributes: gida4a23d5f63,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news1.google.com!newsfeed2.dallas1.level3.net!
news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-227 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space

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Date: Sat, 15 Aug 2009 21:27:14 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 1703
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <001501ca1e10$a886ff90$f994feb0$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
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X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 16 Aug 2009 01:27:14 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
x-cr-hashedpuzzle: e8s= ASRm BAne DmVl D5nz EE6u EMmL Ewpg E14u FdT1 G9Qw Hwu5
IBsS IsJW Kozf
K6e0;1;cgBlAGMALQByAGEAZABpAG8ALQBpAG4AZgBvAEAAcABhAG4AaQB4AC4AYwBvAG0A;Sosha1_v1;
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Xref: g2news2.google.com rec.radio.amateur.space:277 rec.radio.info:911
```

This report is organized into four (4) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - deborbited/returned satellites

SB SAT @ AMSAT W8ISS ANS-227.S1
WSR 227 Part 1 08/15/2009

AMSAT NEWS SERVICE BULLETIN 227.S1
FROM AMSAT HQ SILVER SPRING, MD, August 15, 2009
TO ALL RADIO AMATEURS
BID: $ANS-227.S1

DO-64 Delfi-C3
Catalog number: 32789

Launch Date: April 28, 2008

Status: Operational
Current Mode: Science Mode - Beacon ONLY

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink: 435.530 to 435.570 MHz

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68
[02122009]
=====
VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.859330 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is active. Each transponder has a different beacon.
[08072008]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Modes: FM Repeater - Uplink: 145.880 Mhz FM

```
                              Downlink: 2401.200 Mhz FM
                 BBS         - Uplink:   1268.700 Mhz FM 9k6
                              Downlink:  435.150 Mhz FM 9k6
                 Telemetry   - Downlink:  435.150 MHz FM

Analog voice downlink:      435.300 MHz FM
                            435.150 MHz FM
                           2401.200 Mhz FM
Analog voice uplink:        145.860 MHZ FM
                            145.880 MHz USB
                            145.920 MHz FM
                           1268.700 MHz FM
Digital Downlinks:          435.150 MHz FM 38k4 PBP, 1 watt output
                            435.150 MHz FM 9k6 Pacsat Broadcast Protocol
                           2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:             145.860 MHz FM 9k6 Pacsat Broadcast Protocol
                           1268.700 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon:                     435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[09152009]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002

Status: Operational

Current Mode: V/u

Uplink:   145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)
```

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz. The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10 minute timer.
[05282007]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Operational
Current Mode: V/u (Mode JA)

Voice/CW (Mode JA)
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage:
http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts.htm
[02122009]
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[03232009]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational

Current Mode: Alternating between Mode A and B every 24 hours

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
[02122009]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - V/u
                      Voice -   V/v
                      BBS -   V/v
                      APRS -   V/v
                      SSTV -   V/v

Expedition 19/20 Crew:
Commander: Gennady Padalka RN3DT
Flight Engineer: Michael Barratt KD5MIJ
Flight Engineer: Timothy Kopra KE5UDN
Flight Engineer: Robert Thirsk VA3CSA
Flight Engineer: Roman Romanenko
Flight Engineer: Frank De Winne ON1DWN

Available Modes and Frequencies:

Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[07312009]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-227.S2
WSR 227 Part 2 08/15/2009

AMSAT NEWS SERVICE BULLETIN 227.S2
FROM AMSAT HQ SILVER SPRING, MD, August 15, 2009
TO ALL RADIO AMATEURS
BID: $ANS-227.S2

Pollux
Catalog Number:
Launch Date: July 31, 2009

Status: Operational

Downlink: 145.825MHz 1k2 AX.25
[07312009]
=====
Castor
Catalog Number:
Launch Date: July 31, 2009

Status: Operational

Downlink: 145.825 MHz 1k2 AX.25
[07312009]
=====
BEVO-1 (DRAGONSAT-1)
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Operational

Downlink: 437.325 MHz 9k6 GMSK
437.325 MHz CW 20wpm
[07312009]
=====
AggieSat2 (DRAGONSAT-2)
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Operational

Downlink: 436.250 MHz 9k6
[07312009]
=====
CP-6
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Commissioning

Downlink: 437.365 MHz 1k2 AFSK

```
[06052009]
=====
HAWKSAT 1
Catalog number: 35003
Launch Date: May 19, 2009

Status: ?

Downlink: 437.345 ?
[06052009]
=====
Pharmasat
Catalog Number: 35002
Launch Date: May 19, 2009
Status: Commissioning

Downlink: 437.465 MHz 1k2 AFSK
[06052009]
=====
ANUSAT
Catalog Number: 34808
Launch Date: April 20, 2009

Status: ?

Downlink:  435.000 MHz
Uplink:    145.800 MHz

Telemetry: 137.400 MHz
[05112009]
=====
SOHLA-1 (ASTRO TECH.)
Catalog Number: 33496
Launch Date: January 23, 2009

Status: Commisioning

Proposed Frequencies and Modes:
Downlink: 437.505 MHz AFSK/CW
Beacon:   437.505 MHz AFSK/CW

Callsign:

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=101
[03232009]
=====
KAGAYAKI (Solan Co.)
Catalog Number: 33495?
Launch Date: January 23, 2009

Status: In Orbit
```

```
Downlink: 437.375 MHZ    FSK9k6/CW
Beacon:   437.375 MHz    FSK9k6/CW

IARU coordination status page:

AMSAT-NA webpage:

[01152009]
=====
STARS (Kagawa Univ.) (Twin Satellites)
Catalog Number: 33498
Launch Date: January 23, 2009

Status: Operational ?

Downlinks: 437.485 MHz FM/CW
           437.465 MHz FM/CW
Beacons:   437.305 MHz FM/CW
           437.275 MHz FM/CW

Callsigns: JR5YBN
           JR5YBO

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=99

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=121&retURL
=/satellites/status.php
[022152009]
=====
KKS-1 (Tokyo MCIT)
Catalog Number: 33499
Launch Date: January 23, 2009

Status: Operational

Downlink:  437.455 MHz AFSK/CW
Beacon:    437.385 MHz AFSK/CW

Callsign: JQ1YYY

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=107

AMSAT-NA webapge:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=120&retURL
=/satellites/status.php
[02212009]
=====
PRISM (Tokyo Univ.)
Catalog Number: 33493
Launch Date: January 23, 2009
```

Status: Operational ?

Downlink: 437.425 MHz AFSK/GMSK/CW
Beacon: 437.250 MHz AFSK/GMSK/CW

Callsign: JQ1YCX

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=97

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=119&retURL
=/satellites/status.php
[02212009]
=====
RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number: 32953
Launch Date: May 23, 2008

Status: Operational

Curent Modes: Telemetry
              Audio
              Images

Downlinks: 435.315 MHz
           435.215 MHz

AMSAT-NA website:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=115&ret
URL=/satellites/status.php

Official website:
http://www.npopm.com/?cid=leoca&caid=43
[02122009]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.

AMSAT-NA webpage:

http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=94&retURL=
/satellites/status.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=72
[02122009]
=====
CP3
Catalog Number: 31129
Launch Date: April 17,2007

Status: Operational

Current Mode: /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[02122009]
=====
GENESAT-1
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Current Mode: /u

Callsign: KE7EGC

Telemetry Beacon Downlink: 437.0695 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[091512009]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon: 437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/xivpicte.htm
[02212009]
=====
CO-57 CubeSat XI-IV

```
Catalog number: 27848
Launch date: June 30, 2003

Status: ?????

Current Mode: /u

Beacon:     436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=96&retURL
=/satellites/status.php

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[06082009]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Operational?

Uplink:  1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=56
[02122009]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Modes:   FM Repeater - Uplink:    145.880 Mhz FM
                               Downlink: 2401.200 Mhz FM
                 BBS         - Uplink:   1268.700 Mhz FM 9k6
                               Downlink:  435.150 Mhz FM 9k6
                 Telemetry   - Downlink:  435.150 MHz FM

Analog voice downlink:     435.300 MHz FM
                           435.150 MHz FM
                          2401.200 Mhz FM
```

Analog voice uplink: 145.860 MHZ FM
145.880 MHz USB
145.920 MHz FM
1268.700 MHz FM
Digital Downlinks: 435.150 MHz FM 38k4 PBP, 1 watt output
435.150 MHz FM 9k6 Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Pacsat Broadcast Protocol
1268.700 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[09152009]

=====
QuakeSat
Catalog Number: 27845
Launch Date: June 30, 2003

Status: Telemetry only

Current Mode: 9600 baud data packet

Mode U packet
Downlink: 436.675 MHz 9k6 BPS

Quakesat webpage:
http://www.quakefinder.com/services/quakesat-ssite/
[04272009]

=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
AX25 Packet with uplink command over Japan only

Mode U Telemetry

Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=69&retURL
=/satellites/status.php
[02212009]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Telemetry only

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[03302009]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Telemetry only

Current Modes:
Telemetry : /u

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks: 145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://asri.technion.ac.il/techsat/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=14&retURL

=/satellites/status.php
[04272009]
=====
RS-22 RADIO SPORT RS-22
Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only

Current Mode: /u

CW Beacon - 435.352 MHz
            145.818 MHz

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=76&retURL
=/satellites/status.php
[02212009]
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990

Status: CW Beacon only

Uplinks: 145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink: 437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[03162009]
=====
CanX-2
Catalog number: 32790
Launch Date: April 28, 2008

Status: Operational in range of ground station only

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web
page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:

http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[02212009]
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.425 MHz 1k2 baud packet

For the latest project status update please visit the AAUSAT-II web page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[02212009]
=====
CO-65 CUTE-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008

Status: Digipeater

Downlink: 437.475 MHz 9k6 Packet
Uplink: 1267.600 Mhz

Telemetry Beacon:
Downlink: 437.2750 MHz CW

For the latest project status update please visit the Cute-1.7+APD II web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78

Command Station blog website:
http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=112&retURL=/satellites/status.php
[02212009]
=====
Compass-1
Catalog number: 32787
Launch Date: April 28, 2008

Status: Operational

Current Mode: 4k8 MSK packet

Uplink: 145.980 MHz FM
Downlink: 437.275 Mhz CW
          437.405 MHz Packet

For the latest project status update please visit the Compass 1 web page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=114&retURL=/satellites/status.php
[04272009]

=====

CO-66 Seeds II
Catalog number: 32791
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.485 MHz

Callsign: JQ1YGU

For the latest project status update please visit the Seeds 2 web page: http://cubesat.aero.cst.nihon-u.ac.jp/english/seeds_2_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=113&retURL=/satellites/status.php
[02212009]

=====

INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

```
Current Active Modes: FM Repeater - V/u
                      Voice -       V/v
                      BBS -         V/v
                      APRS -        V/v
                      SSTV -        V/v
```

Expedition 20 Crew:

Commander:	Gennady Padalka	RN3DT
Flight Engineer:	Michael Barratt	KD5MIJ
Flight Engineer:	Timothy Kopra	KE5UDN
Flight Engineer:	Robert Thirsk	VA3CSA

Flight Engineer: Roman Romanenko
Flight Engineer: Frank De Winne ON1DWN

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[07312009]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-227.S3
WSR 227 Part 3 08/15/2009

AMSAT NEWS SERVICE BULLETIN 227.S3
FROM AMSAT HQ SILVER SPRING, MD, August 15, 2009

TO ALL RADIO AMATEURS
BID: $ANS-227.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

CP4
Catalog Number: 31122
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon: 437.325 MHz CW

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=79
[10022008]
=====
LIBERTAD-1
Catalog Number: 31128
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink: 145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[02122009]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: Non-Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder: 145.825 Mhz FM
[01012009]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

```
Proposed Callsign: TBA
Proposed Transmit Frequency:  437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink:         437.250 MHz FM 67Hz CTCSS
Voice Downlink:      2401.835 MHz FM
Packet Up/Downlink:  437.250 MHz 9k6 packet
Packet Downlink      2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non-Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[08132007]
=====
CANX-1
Catalog Number: 27847
Launch Date: June 30, 2003

Status: Non-Operational

Downlink: 437.8800 MHz AFSK 1k2bps
[06052009]
=====
DTUSAT
Catalog Number: 27842
Launch Date: June 30, 2003

Status: Non-Operational

Current Mode: 2k4 AFSK Packet last reported

Downlink: 437.475MHz

Officail webpage: http://dtusat1.dtusat.dtu.dk/
```

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=101&retURL
=satellites/all_oscars.php
[02212009]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)

Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Telemetry only

Uplinks: 145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[03302009]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

```
Everyone is welcome to use the digipeating/APRS features of Sapphire,
as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS:                SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink:   145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
V-band:   145.840 -  145.990 MHz CW/LSB
U-band:   435.550 -  435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks
---------
S2-band:  2401.225 -  2401.475 MHz CW/USB
K-band:  24048.010 - 24048.060 MHz CW/USB
```

Beacon: 2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)

BEACON	General Beacon(GB)	Middle Beacon(MB)	Engineering Beacon(EB)
2 m	none	145.898 MHz	none
70cm	435.438 MHz	435.588 MHz	435.838 MHz
13cm(1)	2400.188 MHz	2400.338 MHz	2400.588 MHz
13cm(2)	2401.173 MHz	2401.323 MHz	2401.573 MHz
3cm	10450.975 MHz	10451.125 MHz	10451.375 MHz
1.5cm	24047.885 MHz	24048.035 MHz	24048.285 MHz

[07162007]

=====

OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]

=====

UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]

=====

SO-35 SUNSAT
Catalog Number: 25636
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz

145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink: 145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
MO-30 UNAMSAT-2
Catalog Number: 24305
Launch Date: September 5, 1996

Status: Non-operational

Downlink: 435.1380 MHz AFSK 1200 BPS
Downlink: 435.2060 MHz AFSK 1200 BPS

```
Uplink:         145.8150 MHz AFSK 1200 BPS
Uplink:         145.8350 MHz AFSK 1200 BPS
Uplink:         145.8550 MHz AFSK 1200 BPS
Uplink:         145.8750 MHz AFSK 1200 BPS
[06042009]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Non-operational

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign:       POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012009]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM
```

```
Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HL01-11
BBS: HL01-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB
```

```
Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
[05012006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: non-operational

Current Mode:  V/u

Uplink:         145.900 MHz FM 1200-baud Manchester FSK (reserved)
                145.920 MHz FM VOICE
                145.940 MHz FM 1200-baud Manchester FSK (reserved)
                145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink:       437.026 MHz USB VOICE
                (1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.026 MHz LHCP
V: Linear
```

```
Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[07242009]
=====
UO-15 UoSAT-4
Catalog Number: 20438
Launch Date: January 22, 1990

Status: Non-operational

Uplink: ?
Downlink: 435.1250MHz (?)
          435.1200MHz (?)
[06042009]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984
```

Status: Non-operational.

Current Mode: /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon: 435.025 MHz
Mode-S Beacon: 2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[01012009]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon: 145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.8500 - 145.9000 MHz SSB/CW
Downlink 29.4000 - 29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6

```
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
Beacons:   29.450 MHz
          435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon 1:  29.352 MHz (intermittent)
Beacon 2:  29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink:     21.260 to 21.300 MHz CW/USB
```

Downlink: 145.860 to 145.900 MHz CW/USB

Beacon: 145.860 MHz

Robot: 145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-227.S4
WSR 227 Part 4 08/15/2009

AMSAT NEWS SERVICE BULLETIN 227.S4
FROM AMSAT HQ SILVER SPRING, MD, August 15, 2009
TO ALL RADIO AMATEURS
BID: $ANS-227.S4

THE FOLLOWING SATELLITES HAVE RE-ENTERED OR HAVE BEEN RETURNED SAFELY:

NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: July 28, 2008

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[01012009]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink: 145.825 Mhz FM APRS AX25
APRS Uplink: 145.825 MHz FM APRS AX25
Voice/PSK31 Uplink: 28.120 MHz

Packet to Voice ID: RAFT
[06112007]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Re-Entered
Re-entered: June 18, 2008

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon: 437.2750 MHz CW

Callsign: JR8YJT
[01012009]
=====
SO-43 Starshine 3
Catalog Number: 26929
Launch Date: September 30, 2001

Status: Re-Entered
Re-entered: January 21, 2003

Beacon: 145.825Mhz
[02212009]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:

AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at}amsat.org
NNNN
/EX

____
Via the ANS mailing list courtesy of AMSAT-NA
http://amsat.org/mailman/listinfo/ans

```
From -9115901059752989334
X-Google-Thread: a4a23d5f63,3ce9de3dfb0a1691,start
X-Google-Attributes: gida4a23d5f63,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII
Path: g2news2.google.com!news2.google.com!newsfeed2.dallas1.level3.net!
news.level3.com!panix!rri.panix.com!robomod!not-for-mail
```

From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-235 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sun, 23 Aug 2009 14:48:42 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 293
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <002e01ca2422$4d7a0210$e86e0630$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;charset="iso-8859-1"
Content-Transfer-Encoding: quoted-printable
X-Trace: reader1.panix.com 1251053323 12416 166.84.1.6 (23 Aug 2009 18:48:43 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 23 Aug 2009 18:48:43 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to   rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to   rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news2.google.com rec.radio.amateur.space:278 rec.radio.info:924

AMSAT NEWS SERVICE
ANS-235

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

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****
* 2009 AMSAT Space Symposium and Annual General Meeting October 9-11 *
*   Four Points Sheraton Hotel at the Baltimore

Washington Airport *
* Details - http://www.amsat.org/amsat-new/symposium/2009/index.php
*
****
***
****

In this edition:
* SuitSat-2 Gets A New Name
* AMSAT Ballot Deadline Approaching
* Wallops Suborbital Launch With APRS
* ARISS Status - 17 August 2009

SB SAT @ AMSAT $ANS-235.01
SuitSat-2 Gets A New Name

AMSAT News Service Bulletin 235.01
From AMSAT HQ SILVER SPRING, MD.
August 23, 2009
To All RADIO AMATEURS
BID: $ANS-235.01

The SuitSat-2 project now has a new name to go with its new shape, ARISSat-1
.

Gaston Bertels, ON4WF, the ARISS Chairman announced the new name for the satellite and project this week. The project team is moving ahead using the same hardware that was to fly in the Russian Orlan suit. The team is re-configuring some of the modules to fit into the new structure being designed by Bob Davis, KF4KSS and his team.

[ANS thanks Gould, WA4SXM, for the above information]

/EX

SB SAT @ AMSAT $ANS-235.02
AMSAT Ballot Deadline Approaching

AMSAT News Service Bulletin 235.02
From AMSAT HQ SILVER SPRING, MD.
August 23, 2009
To All RADIO AMATEURS
BID: $ANS-235.02

The deadline for returning the gold "corrected" ballot to the AMSAT office is September 15th. If you need biographical information on the candidates, it can be found on the AMSAT website.

[ANS thanks Martha for the above information]

/EX

SB SAT @ AMSAT $ANS-235.03
Wallops Suborbital Launch With APRS

AMSAT News Service Bulletin 235.03
  From AMSAT HQ SILVER SPRING, MD.
August 23, 2009
To All RADIO AMATEURS
BID: $ANS-235.03

There will be a launch to 300+ km of an APRS payload on a sounding rocket out of Wallops Island VA, this fall. Bob Bruninga, WB4APR, says,
"I don't want to steal anyone's thunder, but they said I could give this heads up". More details will be posted when available.

It is only 300 milliiwatts and will be on the National APRS frequency 144.39 to make sure everyone can track it. The total mission duration is on the order of 10 minutes from launch to re-entry.

AMSAT stations with beams in the mid-Atlantic states will be valuable.

APRS stations with Igates with beams will be even better so the student builders half way across the country can get their packets live via the APRS-IS (internet)...

OMNI antennas in quiet locations should be able to hear the packets direct, so nearby Igates with omni's probably need no enhancement.

[ANS thanks Bob, WB4APR, for the above information]

/EX

SB SAT @ AMSAT $ANS-235.04
ARISS Status - 17 August 2009

AMSAT News Service Bulletin 235.04
  From AMSAT HQ SILVER SPRING, MD.
August 23, 2009
To All RADIO AMATEURS
BID: $ANS-235.04

1. Upcoming School Contacts

An Amateur Radio on the International Space Station (ARISS) contact has been approved for Tension Woods College in Mount Gambier, South Australia. The contact is scheduled for Monday, August 24 at 07:19 UTC via telebridge station W6DUE in Maryland. The contact will be integrated into the curriculum�s astronomy and physics units through participation in hands-on activities.

An Amateur Radio on the International Space Station (ARISS) contact has been scheduled for Volkssterrenwacht Urania in Hove, Antwerp, Belgium on Monday, August 24 at 10:22 UTC via telebridge station W6SRJ in California, assuming STS-128 launches on August 24. (If STS-128 is delayed, the contact will be rescheduled for Monday, August 24 at 11:30 UTC through telebridge station VK4KHZ in Australia.) Urania is a public observatory that raises public awareness of astronomy, meteorology and astronautics. A range of activities and services are available: lessons for beginners and the experienced, guided tours of the observatory, an extended documentation center, various publications, stargazing evenings, conferences, Urania Mobile (Flanders' first mobile observatory) and the astroshop. This "Space Talk" will boost activities at the start of the new season.

2. ARISS Contact Between Robert Thirsk and Ottawa Sports Camp

On Tuesday, August 11, an Amateur Radio on the International Space Station (ARISS) contact was held between Canadian Space Agency (CSA) Astronaut Robert Thirsk, VA3CSA and Ottawa South United Sports Camp held at the Walter Baker Sports Centre in Ontario, Canada. Telebridge station W6SRJ in California facilitated the connection. All 18 questions prepared for the contact were answered with enough time left over for one additional question.

Approximately 130 people attended the event. The audio was fed into the EchoLink AMSAT and JK1ZRW conference room servers and the IRLP (Internet Radio Linking Project) Discovery Reflector 9010.

3. ARISS Contact with Euro Space Center, Night of Stars Event

On Thursday, August 13, approximately 200 people attending the Euro Space Center, Night of Stars Event in Transinne, Belgium gathered for an Amateur Radio on the International Space Station (ARISS) contact. Frank DeWinne, ON1DWN on the ISS participated in the contact, answering 20 questions. Telebridge station W6SRJ in California assisted with the contact. The audio was fed into the EchoLink AMSAT and JK1ZRW conference room servers and the IRLP (Internet Radio Linking Project) Discovery Reflector 9010.

4. ARISS Promoted at Quebec Hamfest

On August 1, Amateur Radio on the International Space Station (ARISS) Canadian Delegate Maurice-Andr� Vigneault set up an ARISS display and satellite communication demonstration station at the Quebec City Hamfest in nearby St-Romuald. ARISS Delegate Daniel Lamoureux also participated in the Hamfest. Pamphlets explaining the purpose of ARISS and AMSAT (Radio Amateur Satellite Corporation) were handed out. The Canadian Space Agency (CSA) also provided handouts, stickers and decals. The delegates will next visit the Ottawa Hamfest in nearby Carp, Ontario, on September 12 to promote the ARISS program.

5. Astronaut Training Status

Christer Fuglesang, KE5CGR/SA0AFS, was given a review of the Amateur Radio on the International Space Station (ARISS) radio system in preparation for an expected contact during the STS-128 mission time frame. Information on his upcoming mission may be found here:
http://www.esa.int/esaCP/SEM56UE3GXF_index_0.html

On Thursday, August 13, an introduction course was also provided to Dan Burbank, KC5ZSX. Burbank is scheduled to fly on a future ISS expedition.

6. Electronics Weekly Interviews ARISS Member

AMSAT-UK�s FUNcube satellite has been featured on the front cover of the August 12-18 issue of Electronics Weekly. The full FUNcube article titled, �Bringing FUN back to the classroom,� by Steve Bush may be found on page 8 and contains an interview with Amateur Radio on the International Space Station (ARISS) member Graham Shirville, G3VZV. See:
http://cde.cerosmedia.com/1D4a803d8814a11352.cde

7. ARRL QST Covers ARISS News

The American Radio Relay League (ARRL) published two small ARISS (Amateur Radio on the International Space Station) related news items in its September 2009 issue of QST. One item pointed readers to the article on the Garriotts, "Two Generations of Hams in Space" that ran in The Bridge, printed by the Electrical and Computer Engineering Honor Society. The second item was a notice to readers that space shuttle Endeavour carried three astronauts to the ISS who are hams and would be doing ARISS educational activities.

The ARRL monthly journal has a circulation of 150,000.

[ANS thanks Carol, KB3LKI, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Lee McLamb, KU4OS

```
From -7005217554723688206
X-Google-Thread: a4a23d5f63,20fd79414a5a897b,start
X-Google-Attributes: gida4a23d5f63,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news2.google.com!newsfeed2.dallas1.level3.net!
news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-234 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Sun, 23 Aug 2009 14:50:12 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 1702
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <002f01ca2422$77baf6b0$6730e410$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1251053412 20409 166.84.1.6 (23 Aug 2009 18:50:12 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 23 Aug 2009 18:50:12 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
x-cr-hashedpuzzle: AfCP CKOL CdQD DOqj DYV8 DiI5 EP4l EapD FHJU GIDt GyXc HDbj
HUgp Irf0 JusW KV/
8;1;cgBlAGMALQByAGEAZABpAG8ALQBpAG4AZgBvAEAAcABhAG4AaQB4AC4AYwBvAG0A;Sosha1_v1;7;
{E822ACA5-1BB5-47B3-
BA60-2E4F61D47A25};awA5AGoAawBtAEAAYwBvAG0AYwBhAHMAdAAuAG4AZQB0AA==;Sun, 23 Aug
2009 18:49:30
GMT;VwBTAFIALQAyADMANAAgAEEATQBTAEEAVAAgAFcAZQBlAGsAbAB5ACAAUwBhAHQAZQBsAGwAaQB0AG
UAIABSAGUAcABvAHIAdAA=
```

x-cr-puzzleid: {E822ACA5-1BB5-47B3-BA60-2E4F61D47A25}
Xref: g2news2.google.com rec.radio.amateur.space:279 rec.radio.info:925

This report is organized into four (4) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - deborbited/returned satellites

SB SAT @ AMSAT W8ISS ANS-234.S1
WSR 234 Part 1 08/22/2009

AMSAT NEWS SERVICE BULLETIN 234.S1
FROM AMSAT HQ SILVER SPRING, MD, August 22, 2009
TO ALL RADIO AMATEURS
BID: $ANS-234.S1

DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008

Status: Operational
Current Mode: Science Mode - Beacon ONLY

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink: 435.530 to 435.570 MHz

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68

=====
VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.859330 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

To know what transponder is switched on please listen for the beacon that is active. Each transponder has a different beacon.

=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Modes: FM Repeater - Uplink: 145.920 Mhz FM
                               Downlink: 435.300 Mhz FM
                 BBS   - Uplink: 1268.700 Mhz FM 9k6
                               Downlink: 435.150 Mhz FM 9k6
                 Telemetry   - Downlink: 435.150 MHz FM

Analog voice downlink: 435.300 MHz FM
                           435.150 MHz FM
                          2401.200 Mhz FM
Analog voice uplink: 145.860 MHZ FM
                           145.880 MHz USB
                           145.920 MHz FM
                          1268.700 MHz FM
Digital Downlinks: 435.150 MHz FM 38k4 PBP, 1 watt output
                           435.150 MHz FM 9k6 Pacsat Broadcast Protocol
                          2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Pacsat Broadcast Protocol
                          1268.700 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/

IARU coordination status page:

http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19

=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz. The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10 minute timer.

=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Operational
Current Mode: V/u (Mode JA)

Voice/CW (Mode JA)
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP

U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage:
http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts.htm

=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org

=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational

Current Mode: Alternating between Mode A and B every 24 hours

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/

=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - V/u
Voice - V/v
BBS - V/v
APRS - V/v
SSTV - V/v

Expedition 19/20 Crew:

Commander:	Gennady Padalka	RN3DT
Flight Engineer:	Michael Barratt	KD5MIJ
Flight Engineer:	Timothy Kopra	KE5UDN
Flight Engineer:	Robert Thirsk	VA3CSA
Flight Engineer:	Roman Romanenko	
Flight Engineer:	Frank De Winne	ON1DWN

Available Modes and Frequencies:

Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time line is NOT translated from Russian and posted.

NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-234.S2
WSR 234 Part 2 08/22/2009

AMSAT NEWS SERVICE BULLETIN 234.S2
FROM AMSAT HQ SILVER SPRING, MD, August 22, 2009
TO ALL RADIO AMATEURS
BID: $ANS-234.S2

Pollux
Catalog Number:
Launch Date: July 31, 2009

Status: Operational

Downlink: 145.825MHz 1k2 AX.25

=====
Castor
Catalog Number:
Launch Date: July 31, 2009

Status: Operational

Downlink: 145.825 MHz 1k2 AX.25

=====
BEVO-1 (DRAGONSAT-1)
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Operational

```
Downlink: 437.325 MHz 9k6 GMSK
          437.325 MHz CW 20wpm

=====
AggieSat2 (DRAGONSAT-2)
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Operational

Downlink: 436.250 MHz 9k6

=====
CP-6
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Commissioning

Downlink: 437.365 MHz 1k2 AFSK

=====
HAWKSAT 1
Catalog number: 35003
Launch Date: May 19, 2009

Status: ?

Downlink: 437.345 ?

=====
Pharmasat
Catalog Number: 35002
Launch Date: May 19, 2009
Status: Commissioning

Downlink: 437.465 MHz 1k2 AFSK

=====
ANUSAT
Catalog Number: 34808
Launch Date: April 20, 2009

Status: ?

Downlink:  435.000 MHz
Uplink:    145.800 MHz

Telemetry: 137.400 MHz

=====
SOHLA-1 (ASTRO TECH.)
Catalog Number: 33496
```

Launch Date: January 23, 2009

Status: Commisioning

Proposed Frequencies and Modes:
Downlink: 437.505 MHz AFSK/CW
Beacon: 437.505 MHz AFSK/CW

Callsign:

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=101

=====
KAGAYAKI (Solan Co.)
Catalog Number: 33495?
Launch Date: January 23, 2009

Status: In Orbit

Downlink: 437.375 MHZ   FSK9k6/CW
Beacon: 437.375 MHz   FSK9k6/CW

IARU coordination status page:

AMSAT-NA webpage:

=====
STARS (Kagawa Univ.) (Twin Satellites)
Catalog Number: 33498
Launch Date: January 23, 2009

Status: Operational ?

Downlinks: 437.485 MHz FM/CW
           437.465 MHz FM/CW
Beacons: 437.305 MHz FM/CW
           437.275 MHz FM/CW

Callsigns: JR5YBN
           JR5YBO

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=99

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=121&retURL
=/satellites/status.php

=====
KKS-1 (Tokyo MCIT)
Catalog Number: 33499

Launch Date: January 23, 2009

Status: Operational

Downlink: 437.455 MHz AFSK/CW
Beacon: 437.385 MHz AFSK/CW

Callsign: JQ1YYY

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=107

AMSAT-NA webapge:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=120&retURL=/satellites/status.php

=====
PRISM (Tokyo Univ.)
Catalog Number: 33493
Launch Date: January 23, 2009

Status: Operational ?

Downlink: 437.425 MHz AFSK/GMSK/CW
Beacon: 437.250 MHz AFSK/GMSK/CW

Callsign: JQ1YCX

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=97

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=119&retURL=/satellites/status.php

=====
RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number: 32953
Launch Date: May 23, 2008

Status: Operational

Curent Modes: Telemetry
              Audio
              Images

Downlinks: 435.315 MHz
           435.215 MHz

AMSAT-NA website:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=115&retURL=/satellites/status.php

Official website:
http://www.npopm.com/?cid=leoca&caid=43

=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=94&retURL=
/satellites/status.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=72

=====
CP3
Catalog Number: 31129
Launch Date: April 17,2007

Status: Operational

Current Mode: /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25

=====
GENESAT-1
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Current Mode: /u

Callsign: KE7EGC

Telemetry Beacon Downlink: 437.0695 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html

=====

CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon: 437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/xivpicte.htm

=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003

Status: ?????

Current Mode: /u

Beacon: 436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=96&retURL=/satellites/status.php

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Operational?

Uplink: 1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=56

=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

```
Current Modes:   FM Repeater - Uplink:    145.920 Mhz FM
                               Downlink:  435.300 Mhz FM
                 BBS         - Uplink:   1268.700 Mhz FM 9k6
                               Downlink:  435.150 Mhz FM 9k6
                 Telemetry   - Downlink:  435.150 MHz FM

Analog voice downlink:     435.300 MHz FM
                           435.150 MHz FM
                          2401.200 Mhz FM
Analog voice uplink:       145.860 MHZ FM
                           145.880 MHz USB
                           145.920 MHz FM
                          1268.700 MHz FM
Digital Downlinks:         435.150 MHz FM 38k4 PBP, 1 watt output
                           435.150 MHz FM 9k6 Pacsat Broadcast Protocol
                          2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:            145.860 MHz FM 9k6 Pacsat Broadcast Protocol
                          1268.700 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon:                    435.150 MHz
```

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19

=====
QuakeSat
Catalog Number: 27845
Launch Date: June 30, 2003

Status: Telemetry only

```
Current Mode: 9600 baud data packet

Mode U packet
Downlink: 436.675 MHz 9k6 BPS

Quakesat webpage:
http://www.quakefinder.com/services/quakesat-ssite/

=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=69&retURL
=/satellites/status.php

=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Telemetry only

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink:        144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/

=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Telemetry only
```

Current Modes:
Telemetry : /u

Downlink: 435.225 MHz FM (9600-baud FSK)
435.325 Mhz - Not Available - temperature problems
Uplinks: 145.850 FM
145.890 FM
145.930 FM
1269.700 FM
1269.800 FM
1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://asri.technion.ac.il/techsat/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=14&retURL
=/satellites/status.php

=====
RS-22 RADIO SPORT RS-22
Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only

Current Mode: /u

CW Beacon - 435.352 MHz
145.818 MHz

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=76&retURL
=/satellites/status.php

=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990

Status: CW Beacon only

Uplinks: 145.840 MHz 1200-baud Manchester FSK
145.860 MHz 1200-baud Manchester FSK
145.880 MHz 1200-baud Manchester FSK
145.900 MHz 1200-baud Manchester FSK

CW downlink: 437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu

=====
CanX-2
Catalog number: 32790
Launch Date: April 28, 2008

Status: Operational in range of ground station only

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web
page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46

=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.425 MHz 1k2 baud packet

For the latest project status update please visit the AAUSAT-II web
page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60

=====
CO-65 CUTE-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008

Status: Digipeater

Downlink: 437.475 MHz 9k6 Packet
Uplink: 1267.600 Mhz

Telemetry Beacon:
Downlink: 437.2750 MHz CW

For the latest project status update please visit the Cute-1.7+APD II
web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78

Command Station blog website:
http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=112&retURL=/satellites/status.php

=====

Compass-1
Catalog number: 32787
Launch Date: April 28, 2008

Status: Operational

Current Mode: 4k8 MSK packet

Uplink: 145.980 MHz FM
Downlink: 437.275 Mhz CW
437.405 MHz Packet

For the latest project status update please visit the Compass 1 web page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=114&retURL=/satellites/status.php

=====

CO-66 Seeds II
Catalog number: 32791
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.485 MHz

Callsign: JQ1YGU

For the latest project status update please visit the Seeds 2 web page: http://cubesat.aero.cst.nihon-u.ac.jp/english/seeds_2_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=113&retURL

```
=/satellites/status.php

=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - V/u
                      Voice -       V/v
                      BBS -         V/v
                      APRS -        V/v
                      SSTV -        V/v

Expedition 20 Crew:
Commander:                Gennady Padalka  RN3DT
Flight Engineer:          Michael Barratt  KD5MIJ
Flight Engineer:          Timothy Kopra    KE5UDN
Flight Engineer:          Robert Thirsk    VA3CSA
Flight Engineer:          Roman Romanenko
Flight Engineer:          Frank De Winne   ON1DWN


Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink:   145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink:     145.200 MHz FM
Region 2/3 voice uplink:   144.490 MHz FM
Worldwide downlink:        145.800 MHz FM

Crossband Repeater:
Repeater Uplinks:         1269.650 MHz FM
                           437.800 MHz FM
                           145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink:         145.800 MHz FM
                           437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink:                  145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian:                   OR4ISS
German:                    DP0ISS
Russian:                   RS0ISS
                           RZ3DZR
```

United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.

NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-234.S3
WSR 234 Part 3 08/22/2009

AMSAT NEWS SERVICE BULLETIN 234.S3
FROM AMSAT HQ SILVER SPRING, MD, August 22, 2009
TO ALL RADIO AMATEURS
BID: $ANS-234.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

CP4
Catalog Number: 31122
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon: 437.325 MHz CW

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=79

=====
LIBERTAD-1
Catalog Number: 31128
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink: 145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25

=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: Non-Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder: 145.825 Mhz FM

=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
2407.250

Official Website: http://www.ncube.no

=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 MHz FM 67Hz CTCSS
Voice Downlink: 2401.835 MHz FM
Packet Up/Downlink: 437.250 MHz 9k6 packet
Packet Downlink   2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php

=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non-Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK

=====

CANX-1
Catalog Number: 27847
Launch Date: June 30, 2003

Status: Non-Operational

Downlink: 437.8800 MHz AFSK 1k2bps

=====
DTUSAT
Catalog Number: 27842
Launch Date: June 30, 2003

Status: Non-Operational

Current Mode: 2k4 AFSK Packet last reported

Downlink: 437.475MHz

Officail webpage: http://dtusat1.dtusat.dtu.dk/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=101&retURL
=satellites/all_oscars.php

=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)

Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de

=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Telemetry only

Uplinks: 145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.

=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt

=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html

=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:

```
http://www.amsat.org/amsat/sats/n7hpr/so41.html

=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
V-band:   145.840 -  145.990 MHz CW/LSB
U-band:   435.550 -  435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks
---------
S2-band:  2401.225 -  2401.475 MHz CW/USB
K-band:  24048.010 - 24048.060 MHz CW/USB
Beacon:   2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)
----------------------------
BEACON   General Beacon(GB)  Middle Beacon(MB)  Engineering Beacon(EB)
2 m                   none        145.898 MHz                   none
70cm           435.438 MHz        435.588 MHz            435.838 MHz
13cm(1)       2400.188 MHz       2400.338 MHz           2400.588 MHz
13cm(2)       2401.173 MHz       2401.323 MHz           2401.573 MHz
3cm          10450.975 MHz      10451.125 MHz          10451.375 MHz
1.5cm        24047.885 MHz      24048.035 MHz          24048.285 MHz

=====
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK

=====
UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink:    145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz
```

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip

=====
SO-35 SUNSAT
Catalog Number: 25636
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/

=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/

=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm

=====
TO-31 TMSAT-1

Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink: 145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12

=====
MO-30 UNAMSAT-2
Catalog Number: 24305
Launch Date: September 5, 1996

Status: Non-operational

Downlink: 435.1380 MHz AFSK 1200 BPS
Downlink: 435.2060 MHz AFSK 1200 BPS
Uplink: 145.8150 MHz AFSK 1200 BPS
Uplink: 145.8350 MHz AFSK 1200 BPS
Uplink: 145.8550 MHz AFSK 1200 BPS
Uplink: 145.8750 MHz AFSK 1200 BPS

=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Non-operational

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html

=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks: 145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud

145.925 MHz FM 1200-baud
145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html

=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12

=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HL01-11
BBS: HL01-12

=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink: 145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12

=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087

Launch Date: January 29, 1991

Status: Non-Operational

Uplink: 435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP

=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons: 435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink: 145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks: 145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html

=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25

=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink: 145.825 MHz FM 1200 Baud AFSK
Beacon: 2401.220 MHz

=====
AO-16 PACSAT
Catalog number: 20439

```
Launch Date: January 22, 1990

Status: non-operational

Current Mode:  V/u

Uplink:         145.900 MHz FM 1200-baud Manchester FSK (reserved)
                145.920 MHz FM VOICE
                145.940 MHz FM 1200-baud Manchester FSK (reserved)
                145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink:       437.026 MHz USB VOICE
                (1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html

=====
UO-15 UoSAT-4
Catalog Number: 20438
Launch Date: January 22, 1990

Status: Non-operational

Uplink: ?
Downlink: 435.1250MHz (?)
          435.1200MHz (?)

=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM

=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational
```

Mode V/U (J) Linear Transponder (Inverting):
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink: 145.8500 MHz MFSK 1200 BPS
Uplink: 145.8700 MHz MFSK 1200 BPS
Uplink: 145.8900 MHz MFSK 1200 BPS
Uplink: 145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW

=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984

Status: Non-operational.

Current Mode: /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon: 435.025 MHz
Mode-S Beacon: 2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm

=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon: 145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html

=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703

```
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink  29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW

=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
Beacons:   29.450 MHz
          435.100 MHz

=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW

=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW

=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
```

Launch Date: December 26, 1994

Status: Non-operational

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB

Beacon 1: 29.352 MHz (intermittent)
Beacon 2: 29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)

=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB

Beacon: 145.860 MHz

Robot: 145.908 MHz

=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz

NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-234.S4
WSR 234 Part 4 08/22/2009

AMSAT NEWS SERVICE BULLETIN 234.S4
FROM AMSAT HQ SILVER SPRING, MD, August 22, 2009
TO ALL RADIO AMATEURS
BID: $ANS-234.S4

THE FOLLOWING SATELLITES HAVE RE-ENTERED OR HAVE BEEN RETURNED SAFELY:

```
NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: July 28, 2008

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html

=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25

=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink:      145.825 Mhz FM APRS AX25
APRS Uplink:        145.825 MHz FM APRS AX25
Voice/PSK31 Uplink:  28.120 MHz

Packet to Voice ID: RAFT

=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Re-Entered
Re-entered: June 18, 2008

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon:             437.2750 MHz CW

Callsign: JR8YJT

=====
SO-43 Starshine 3
Catalog Number: 26929
```

Launch Date: September 30, 2001

Status: Re-Entered
Re-entered: January 21, 2003

Beacon: 145.825Mhz

NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis

Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at}
amsat.org
NNNN
/EX

```
From -1386170787831651969
X-Google-Thread: 8f86f75953,3121c2269f31f643,start
X-Google-Attributes: gid8f86f75953,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII
Path: g2news2.google.com!news2.google.com!news.glorb.com!transit3.readnews.com!
news-xxxfer.readnews.com!news-out.readnews.com!transit4.readnews.com!panix!
rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-242 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Mon, 31 Aug 2009 20:34:29 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 1723
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000001ca2a9b$ee8547d0$cb8fd770$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;charset="iso-8859-1"
Content-Transfer-Encoding: quoted-printable
X-Trace: reader1.panix.com 1251765269 14966 166.84.1.6 (1 Sep 2009 00:34:29 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Tue, 1 Sep 2009 00:34:29 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
x-cr-hashedpuzzle: AkvL AlYL BhCK B64M DZla Dm+f Dm+q EYf6 FFQE FN0O F4V2 GDoo
GEzh Hntw IRZY
JDVw;1;cgBlAGMALQByAGEAZABpAG8ALQBpAG4AZgBvAEAAcABhAG4AaQB4AC4AYwBvAG0A;Sosha1_v1;
7;
{C188A752-757E-4F87-9063-6210F17C330C};awA5AGoAawBtAEAAYwBvAG0AYwBhAHMAdAAuAG4AZQB
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0AA==;Tue, 01 Sep 2009 00:34:09
GMT;VwBTAFIALQAyADQAMgAgAEEATQBTAEEAVAAgAFcAZQBlAGsAbAB5ACAAUwBhAHQAZQBsAGwAaQB0AG
UAIABSAGUAcABvAHIAdAA=
x-cr-puzzleid: {C188A752-757E-4F87-9063-6210F17C330C}
Xref: g2news2.google.com rec.radio.amateur.space:280 rec.radio.info:940

This report is organized into four (4) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - deborbited/returned satellites

SB SAT @ AMSAT W8ISS ANS-242.S1
WSR 242 Part 1 08/30/2009

AMSAT NEWS SERVICE BULLETIN 242.S1
FROM AMSAT HQ SILVER SPRING, MD, August 30, 2009
TO ALL RADIO AMATEURS
BID: $ANS-242.S1

DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008

Status: Operational
Current Mode: Science Mode - Beacon ONLY

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink: 435.530 to 435.570 MHz

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68
[02122009]
=====
VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

```
Indian Beacon:  145.859330 MHZ CW
Dutch Beacon:   145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is active. Each transponder has a different beacon.
[08072008]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Modes:   FM Repeater - Uplink:    145.920 Mhz FM
                               Downlink:  435.300 Mhz FM
                               Uplink:   1268.700 Mhz FM
                               Downlink:  435.150 Mhz FM
                 BBS         - Uplink:    OFF
                               Downlink:  OFF
                 Telemetry   - Downlink:  OFF

Analog voice downlink:     435.300 MHz FM
                           435.150 MHz FM
                          2401.200 Mhz FM
Analog voice uplink:       145.860 MHZ FM
                           145.880 MHz USB
                           145.920 MHz FM
                          1268.700 MHz FM
Digital Downlinks:         435.150 MHz FM 38k4 PBP, 1 watt output
                           435.150 MHz FM 9k6 Pacsat Broadcast Protocol
                          2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:            145.860 MHz FM 9k6 Pacsat Broadcast Protocol
                          1268.700 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon:                    435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12
```

Official Webpage: http://www.amsat.org/amsat-new/echo/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[08302009]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz. The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10 minute timer.
[05282007]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Operational
Current Mode: V/u (Mode JA)

Voice/CW (Mode JA)
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS

Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage:
http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's
CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/
fo29cwts.htm
[02122009]
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[03232009]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational

Current Mode: Alternating between Mode A and B every 24 hours

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz CW

145.972 MHz CW
435.100 MHz CW
2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
[02122009]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes:		
	FM Repeater -	V/u
	Voice -	V/v
	BBS -	V/v
	APRS -	V/v
	SSTV -	V/v

Expedition 19/20/21 Crew:

Commander:	Gennady Padalka	RN3DT
Flight Engineer:	Michael Barratt	KD5MIJ
Flight Engineer:	Timothy Kopra	KE5UDN
Flight Engineer:	Robert Thirsk	VA3CSA
Flight Engineer:	Roman Romanenko	
Flight Engineer:	Frank De Winne	ON1DWN
Flight Engineer:	Nicole P. Stott	KE5GJN

STS-128 Discovery Crew:

Commandeer:	Frederick Sturckow	
Pilot:	Kevin A. Ford	
Mission Specialist:	Patrick Forrester	
Mission Specialist:	Jos� Hern�ndez	KE5DAV
Mission Specialist:	Christer Fuglesang	SA0AFS/KE5CG
Mission Specialist:	John D. "Danny� Olivas	

Available Modes and Frequencies:

Digital/APRS:

Worldwide packet uplink:	145.825 MHz FM 1k2
Worldwide packet downlink:	145.825 Mhz FM 1k2

Voice:

Region 1 voice uplink:	145.200 MHz FM
Region 2/3 voice uplink:	144.490 MHz FM
Worldwide downlink:	145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[08302009]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-242.S2
WSR 242 Part 2 08/30/2009

AMSAT NEWS SERVICE BULLETIN 242.S2
FROM AMSAT HQ SILVER SPRING, MD, August 30, 2009
TO ALL RADIO AMATEURS
BID: $ANS-242.S2

Pollux
Catalog Number:
Launch Date: July 31, 2009

Status: Operational

Downlink: 145.825MHz 1k2 AX.25
[07312009]
=====
Castor
Catalog Number:

```
Launch Date: July 31, 2009

Status: Operational

Downlink: 145.825 MHz 1k2 AX.25
[07312009]
=====
BEVO-1 (DRAGONSAT-1)
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Operational

Downlink: 437.325 MHz 9k6 GMSK
          437.325 MHz CW 20wpm
[07312009]
=====
AggieSat2 (DRAGONSAT-2)
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Operational

Downlink: 436.250 MHz 9k6
[07312009]
=====
CP-6
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Commissioning

Downlink: 437.365 MHz 1k2 AFSK
[06052009]
=====
HAWKSAT 1
Catalog number: 35003
Launch Date: May 19, 2009

Status: ?

Downlink: 437.345 ?
[06052009]
=====
Pharmasat
Catalog Number: 35002
Launch Date: May 19, 2009
Status: Commissioning

Downlink: 437.465 MHz 1k2 AFSK
[06052009]
=====
ANUSAT
```

Catalog Number: 34808
Launch Date: April 20, 2009

Status: ?

Downlink: 435.000 MHz
Uplink: 145.800 MHz

Telemetry: 137.400 MHz
[05112009]
=====
SOHLA-1 (ASTRO TECH.)
Catalog Number: 33496
Launch Date: January 23, 2009

Status: Commisioning

Proposed Frequencies and Modes:
Downlink: 437.505 MHz AFSK/CW
Beacon: 437.505 MHz AFSK/CW

Callsign:

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=101
[03232009]
=====
KAGAYAKI (Solan Co.)
Catalog Number: 33495?
Launch Date: January 23, 2009

Status: In Orbit

Downlink: 437.375 MHZ   FSK9k6/CW
Beacon: 437.375 MHz   FSK9k6/CW

IARU coordination status page:

AMSAT-NA webpage:

[01152009]
=====
STARS (Kagawa Univ.) (Twin Satellites)
Catalog Number: 33498
Launch Date: January 23, 2009

Status: Operational ?

Downlinks: 437.485 MHz FM/CW
           437.465 MHz FM/CW
Beacons: 437.305 MHz FM/CW
           437.275 MHz FM/CW

```
Callsigns: JR5YBN
           JR5YBO

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=99

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=121&retURL
=/satellites/status.php
[022152009]
=====
KKS-1 (Tokyo MCIT)
Catalog Number: 33499
Launch Date: January 23, 2009

Status: Operational

Downlink:  437.455 MHz AFSK/CW
Beacon:    437.385 MHz AFSK/CW

Callsign: JQ1YYY

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=107

AMSAT-NA webapge:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=120&retURL
=/satellites/status.php
[02212009]
=====
PRISM (Tokyo Univ.)
Catalog Number: 33493
Launch Date: January 23, 2009

Status: Operational ?

Downlink: 437.425 MHz AFSK/GMSK/CW
Beacon:   437.250 MHz AFSK/GMSK/CW

Callsign: JQ1YCX

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=97

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=119&retURL
=/satellites/status.php
[02212009]
=====
RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number: 32953
Launch Date: May 23, 2008
```

Status: Operational

Curent Modes: Telemetry
Audio
Images

Downlinks: 435.315 MHz
435.215 MHz

AMSAT-NA website:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=115&retURL=/satellites/status.php

Official website:
http://www.npopm.com/?cid=leoca&caid=43
[02122009]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=94&retURL=

/satellites/status.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=72
[02122009]
=====
CP3
Catalog Number: 31129
Launch Date: April 17,2007

Status: Operational

Current Mode: /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[02122009]
=====
GENESAT-1

Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Current Mode: /u

Callsign: KE7EGC

Telemetry Beacon Downlink: 437.0695 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[091512009]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

```
Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon:             437.2750 MHz CW
```

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/xivpicte.htm
[02212009]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003

Status: ?????

Current Mode: /u

```
Beacon:     436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS
```

Callsign: JQ1YGW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=96&retURL=/satellites/status.php

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[06082009]
=====

CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Operational?

Uplink: 1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=56
[02122009]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

```
Current Modes:   FM Repeater - Uplink:    145.920 Mhz FM
                               Downlink:  435.300 Mhz FM
                               Uplink:   1268.700 Mhz FM
                               Downlink:  435.150 Mhz FM
                 BBS         - Uplink:    OFF
                               Downlink:  OFF
                 Telemetry   - Downlink:  OFF
```

```
Analog voice downlink:     435.300 MHz FM
                           435.150 MHz FM
                          2401.200 Mhz FM
Analog voice uplink:       145.860 MHZ FM
                           145.880 MHz USB
                           145.920 MHz FM
                          1268.700 MHz FM
Digital Downlinks:         435.150 MHz FM 38k4 PBP, 1 watt output
                           435.150 MHz FM 9k6 Pacsat Broadcast Protocol
                          2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:            145.860 MHz FM 9k6 Pacsat Broadcast Protocol
                          1268.700 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon:                    435.150 MHz
```

```
Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
```

```
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[08302009]
=====
QuakeSat
Catalog Number: 27845
Launch Date: June 30, 2003

Status: Telemetry only

Current Mode: 9600 baud data packet

Mode U packet
Downlink: 436.675 MHz 9k6 BPS

Quakesat webpage:
http://www.quakefinder.com/services/quakesat-ssite/
[04272009]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=69&retURL
=/satellites/status.php
[02212009]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Telemetry only

Current Mode: V/v
```

```
General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink:        144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[03302009]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Telemetry only

Current Modes:
Telemetry : /u

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign:       4XTECH-12

More information of GO-32 can be found at:
http://asri.technion.ac.il/techsat/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=14&retURL
=/satellites/status.php
[04272009]
=====
RS-22 RADIO SPORT RS-22
Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only

Current Mode:  /u

CW Beacon - 435.352 MHz
            145.818 MHz

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=76&retURL
=/satellites/status.php
```

```
[02212009]
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990

Status: CW Beacon only

Uplinks:          145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink:      437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[03162009]
=====
CanX-2
Catalog number: 32790
Launch Date: April 28, 2008

Status: Operational in range of ground station only

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web
page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[02212009]
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.425 MHz 1k2 baud packet

For the latest project status update please visit the AAUSAT-II web
page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
```

```
[02212009]
=====
CO-65 CUTE-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008

Status: Digipeater

Downlink:  437.475 MHz 9k6 Packet
Uplink:   1267.600 Mhz

Telemetry Beacon:
Downlink: 437.2750 MHz CW

For the latest project status update please visit the Cute-1.7+APD II
web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78

Command Station blog website:
http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=112&retURL
=/satellites/status.php
[02212009]
=====
Compass-1
Catalog number: 32787
Launch Date: April 28, 2008

Status: Operational

Current Mode: 4k8 MSK packet

Uplink:   145.980 MHz FM
Downlink: 437.275 Mhz CW
          437.405 MHz Packet

For the latest project status update please visit the Compass 1 web
page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=114&retURL
=/satellites/status.php
[04272009]
=====
CO-66 Seeds II
Catalog number: 32791
```

Launch Date: April 28, 2008

Status: Operational

Downlink: 437.485 MHz

Callsign: JQ1YGU

For the latest project status update please visit the Seeds 2 web page: http://cubesat.aero.cst.nihon-u.ac.jp/english/seeds_2_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=113&retURL=/satellites/status.php
[02212009]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes:		
	FM Repeater -	V/u
	Voice -	V/v
	BBS -	V/v
	APRS -	V/v
	SSTV -	V/v

Expedition 19/20/21 Crew:

Commander:	Gennady Padalka	RN3DT
Flight Engineer:	Michael Barratt	KD5MIJ
Flight Engineer:	Timothy Kopra	KE5UDN
Flight Engineer:	Robert Thirsk	VA3CSA
Flight Engineer:	Roman Romanenko	
Flight Engineer:	Frank De Winne	ON1DWN
Flight Engineer:	Nicole P. Stott	KE5GJN

STS-128 Discovery Crew:

Commandeer:	Frederick Sturckow	
Pilot:	Kevin A. Ford	
Mission Specialist:	Patrick Forrester	
Mission Specialist:	Jos� Hern�ndez	KE5DAV
Mission Specialist:	Christer Fuglesang	SA0AFS/KE5CG
Mission Specialist:	John D. "Danny� Olivas	

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[08302009]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-242.S3
WSR 242 Part 3 08/30/2009

AMSAT NEWS SERVICE BULLETIN 242.S3
FROM AMSAT HQ SILVER SPRING, MD, August 30, 2009
TO ALL RADIO AMATEURS
BID: $ANS-242.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

CP4
Catalog Number: 31122
Launch Date: April 17,2007

```
Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon:    437.325 MHz CW

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=79
[10022008]
=====
LIBERTAD-1
Catalog Number: 31128
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink:   145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[02122009]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: Non-Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder:  145.825 Mhz FM
[01012009]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency:  437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink:         437.250 MHz FM 67Hz CTCSS
Voice Downlink:      2401.835 MHz FM
Packet Up/Downlink:   437.250 MHz 9k6 packet
Packet Downlink      2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non-Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[08132007]
=====
CANX-1
Catalog Number: 27847
Launch Date: June 30, 2003

Status: Non-Operational

Downlink: 437.8800 MHz AFSK 1k2bps
[06052009]
=====
DTUSAT
Catalog Number: 27842
Launch Date: June 30, 2003

Status: Non-Operational

Current Mode: 2k4 AFSK Packet last reported

Downlink: 437.475MHz

Officail webpage: http://dtusat1.dtusat.dtu.dk/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=101&retURL
=satellites/all_oscars.php
[02212009]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
```

Launch Date: December 20, 2002

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)

Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Telemetry only

Uplinks: 145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial land and weather imaging payloads offers FM and FSK
Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as
a collaborative effort between the Malaysian government and Surrey
Satellite Technology Ltd.
[03302009]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

```
Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS:                SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink:   145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
V-band:   145.840 -  145.990 MHz CW/LSB
U-band:   435.550 -  435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks
---------
S2-band:  2401.225 -  2401.475 MHz CW/USB
K-band:  24048.010 - 24048.060 MHz CW/USB
Beacon:   2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)
----------------------------
BEACON   General Beacon(GB)  Middle Beacon(MB)  Engineering Beacon(EB)
2 m                    none        145.898 MHz                    none
70cm           435.438 MHz        435.588 MHz            435.838 MHz
```

```
13cm(1)       2400.188 MHz       2400.338 MHz            2400.588 MHz
13cm(2)       2401.173 MHz       2401.323 MHz            2401.573 MHz
3cm          10450.975 MHz      10451.125 MHz           10451.375 MHz
1.5cm        24047.885 MHz      24048.035 MHz           24048.285 MHz
[07162007]
=====
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink:    145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: 25636
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater:         436.250 MHz

Uplinks: Mode B Repeater:  145.825 MHz
Mode J Digipeater:         145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
```

Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

```
Uplink:   145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK
```

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
MO-30 UNAMSAT-2
Catalog Number: 24305
Launch Date: September 5, 1996

Status: Non-operational

```
Downlink:       435.1380 MHz AFSK 1200 BPS
Downlink:       435.2060 MHz AFSK 1200 BPS
Uplink:         145.8150 MHz AFSK 1200 BPS
Uplink:         145.8350 MHz AFSK 1200 BPS
Uplink:         145.8550 MHz AFSK 1200 BPS
Uplink:         145.8750 MHz AFSK 1200 BPS
```
[06042009]
=====
PO-28 POSAT-1
Catalog number: 22829

```
Launch Date: September 25, 1993

Status: Non-operational

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign:       POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012009]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992
```

```
Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HL01-11
BBS: HL01-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz
```

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink: 145.825 MHz FM 1200 Baud AFSK
Beacon: 2401.220 MHz
[05012006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: non-operational

Current Mode: V/u

Uplink: 145.900 MHz FM 1200-baud Manchester FSK (reserved)
145.920 MHz FM VOICE
145.940 MHz FM 1200-baud Manchester FSK (reserved)
145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink: 437.026 MHz USB VOICE
(1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC 437.050 MHz RHCP
PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[07242009]
=====
UO-15 UoSAT-4

```
Catalog Number: 20438
Launch Date: January 22, 1990

Status: Non-operational

Uplink: ?
Downlink: 435.1250MHz (?)
          435.1200MHz (?)
[06042009]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984

Status: Non-operational.

Current Mode:  /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon:          435.025 MHz
Mode-S Beacon:     2401.500 MHz
```

```
Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[01012009]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon:   145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink  29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
Beacons:   29.450 MHz
```

```
          435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon 1:  29.352 MHz (intermittent)
Beacon 2:  29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink:     21.260 to 21.300 MHz CW/USB
Downlink:  145.860 to 145.900 MHz CW/USB

Beacon:    145.860 MHz

Robot:     145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
```

```
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink:   21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon:   29.408 MHz

Robot:    29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-242.S4
WSR 242 Part 4 08/30/2009

AMSAT NEWS SERVICE BULLETIN 242.S4
FROM AMSAT HQ SILVER SPRING, MD, August 30, 2009
TO ALL RADIO AMATEURS
BID: $ANS-242.S4

THE FOLLOWING SATELLITES HAVE RE-ENTERED OR HAVE BEEN RETURNED SAFELY:

NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: July 28, 2008

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[01012009]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006
```

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink: 145.825 Mhz FM APRS AX25
APRS Uplink: 145.825 MHz FM APRS AX25
Voice/PSK31 Uplink: 28.120 MHz

Packet to Voice ID: RAFT
[06112007]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Re-Entered
Re-entered: June 18, 2008

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon: 437.2750 MHz CW

Callsign: JR8YJT
[01012009]
=====
SO-43 Starshine 3
Catalog Number: 26929
Launch Date: September 30, 2001

Status: Re-Entered
Re-entered: January 21, 2003

Beacon: 145.825Mhz
[02212009]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at}
amsat.org
NNNN
/EX

From 1907575217727371151
X-Google-Thread: a4a23d5f63,af2a6ea7c9669e1c,start
X-Google-Attributes: gida4a23d5f63,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII
Path: g2news2.google.com!news1.google.com!newsfeed2.dallas1.level3.net!
news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-242 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Mon, 31 Aug 2009 20:35:31 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 353
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000101ca2a9c$15352670$3f9f7350$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com

```
Mime-Version: 1.0
Content-Type: text/plain;charset="iso-8859-1"
Content-Transfer-Encoding: quoted-printable
X-Trace: reader1.panix.com 1251765331 7332 166.84.1.6 (1 Sep 2009 00:35:31 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Tue, 1 Sep 2009 00:35:31 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to            rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news2.google.com rec.radio.amateur.space:281 rec.radio.info:941
```

AMSAT NEWS SERVICE
ANS-242

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

```
**********************************************************************
* 2009 AMSAT Space Symposium and Annual General Meeting October 9-11 *
* Four Points Sheraton Hotel at the Baltimore Washington Airport *
* Guest Banquet Speaker Dr.Martin Collins *
*  Details - http://www.amsat.org/amsat-new/symposium/2009/index.php *
**********************************************************************
```

In this edition:
* Satellite Notes
* AMSAT Space Symposium Registration
* News From the Tokyo Ham Fair
* ARISS Status - 24 August 2009

SB SAT @ AMSAT $ANS-242.01
Satellite Notes

AMSAT News Service Bulletin 242.01
  From AMSAT HQ SILVER SPRING, MD.

August 30, 2009
To All RADIO AMATEURS
BID: $ANS-242.01

Help Needed For AMSAT Publications

AMSAT-NA currently has two positions that need a volunteer to jump in and assist with our publishing efforts.

The AMSAT Journal needs a person who can provide translation from German to English. AMSAT-DL has published several significant updates about P3-E which can be shared with the english-speaking operators. Conversely, translation from English to German would enable sharing of articles both ways.

Next, the weekly AMSAT News Service ANS Bulletins has an opening (or 2) for an editor to take on news gathering and reporting work. This is a rotating position shared with 3 existing editors so your ANS duty would occur approximately once every 4 weeks per the schedule.

If you can help please contact AMSAT VP User Services, Gould Smith WA4SXM (wa4sxm@amsat.org) and let him know which position you are interested in helping with.

[ANS thanks Gould, WA4SXM for the above information]

AO-51 Mode Change to V/U and L/U Repeaters This Week

AMSAT VP Operations, Drew KO4MA reported that AO-51 Control Station has turned on the SQRX receiver and the 1268.700 uplink to allow users to access the satellite according to the following schedule:

August 31 - September 5:

FM Repeater, V/U
Uplink: 145.920 MHz FM
Downlink: 435.300 MHz FM

FM Repeater, L/U
Uplink: 1268.700 MHz FM
Downlink: 435.150 MHz FM

Ground controllers reported they lowered the power on the 435.300 transmitter to compensate for the extra power the receiver uses. Currently 435.150 is at 400mw, and 435.300 is at 700mw. Together the transmitters are drawing 1.06 amps continuously.

Please remember to send those your AO-51 operating mode suggestions to the ao51-modes@amsat.org e-mail address. Keep an eye on the AO-51 webpage at http://www.amsat.org/amsat-new/echo/CTNews.php, ANS news bulletins, posts to AMSAT-BB, and AMSAT on Twitter for updates and

information.

[ANS thanks Drew, KO4MA for the above information]

Satellite Tracker For Your iPhone

OK folks, we could pretty much guess these applications would arrive sooner or later. Well its sooner now. For who are interested to have a free satellite tracker application in your iPhone here are two for you to test out:

These can be downloaded from the AppStore via these links:

Space Station Lite (ISSLite) FREE
http://itunes.apple.com/WebObjects/MZStore.woa/wa/viewSoftware?id=305522724&
mt=8

Satellite Tracker - FREE
http://itunes.apple.com/WebObjects/MZStore.woa/wa/viewSoftware?id=306260378&
mt=8

[ANS thanks Fabiano Moser CR7/PY5RX for the above information]

FO-29 Satellite Recovery Progress Report

Mineo Wakita, JE9PEL reported that FO-29's ground control stations have been working on recovering this satellite after an outage reported by users earlier this week. As of August 28 the control station has succeeded in transmitting commands to the satellite and received good response.

At present FO-29 is available only when it is over Japan so that the control station can command the satellite, retrieve telemetry data, and analyze the results. The receiver aboard FO-29 is used for both command and transponder operations. When too many stations attempt to uplink they interfere with ground controllers efforts to command the satellite. FO-29 controllers will advise when the satellite becomes available for general amateur radio use. After this please do not attempt to uplink to FO-29 if you cannot copy its CW beacon.

The fo29cwts.exe telemetry decoding program was updated to Ver 2.4 this week. CW telemetry copy/pasted into the decoder is displayed graphically. Refer to the following pages to download the software:

http://www.ne.jp/asahi/hamradio/je9pel/90828f29.jpg
http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts.zip

[ANS thanks Mineo Wakita, JE9PEL for the above information]

[ANS thanks all for the above information]

/EX

SB SAT @ AMSAT $ANS-242.02
AMSAT Space Symposium Registration

AMSAT News Service Bulletin 242.02
  From AMSAT HQ SILVER SPRING, MD.
August 30, 2009
To All RADIO AMATEURS
BID: $ANS-242.02

You can now register online for the 2009 AMSAT Space Symposium and Annual Meeting. This year we are celebrating our 40th anniversary so please come and visit with old friends, listen to interesting presentations and enjoy our guest speaker, Dr. Martin Collins. Dr Collins who works at the the Smithsonian Air and Space Museum will talk on "Making the Space Age: The First Fifty Years".   Online registration will disappear on October 5th so do not wait too long!
Don't forget your BOD Ballots-Due by Sept 15th.!
--
[ANS thanks Martha for the above information]

/EX

SB SAT @ AMSAT $ANS-242.03
News From the Tokyo Ham Fair

AMSAT News Service Bulletin 242.03
  From AMSAT HQ SILVER SPRING, MD.
August 30, 2009
To All RADIO AMATEURS
BID: $ANS-242.03

Hello (J)AMSATs,

Today was the last day of Tokyo Ham Fair, which was another great day like it was yesterday. I was at the JAMSAT booth where I showed my small transponder design to the HAM people, which gave a lot off interest from all kinds of people. Possibilities for future satellite have been created and people have been made interrested in doing satellite communication.

I had also the opertunity to meet a lot of people using the VO-52 satellite, on which is my transponder. It is a great joy to see the satellite activities here on the other side of the globe (seen from my home in The Netherlands). I noticed that a lot of CW is used here. Some people are doing city junting, which means they have their car build like a satellite station (incl. rotor and elevation) and hop between satellite passes from one city to another, and try to make QSOs from as many cities as possible. The car stations are real nice contructions, and of great ham spirit. Very nice to see...

There was also a list with number of contacts made for each satellite pass by one ham. The highest number was on VO-52 with 42 QSO's for one pass (over Japan), 36 in CW and 6 in SSB. Its really amazing, and it must have been done with very high time efficiency, and a very fast CW wrist hihi...

It was a great time at the JAMSAT booth, and we had a nice after party with lot of JAMSAT members, and with delicious Japanese food. My thanks for the great hospitality from the JAMSAT people, and thanks for the nice talks we had about satellites.

73 de JA/PE1RAH
William Leijenaar in Tokyo (till 28 August)

[ANS thanks William Leijenaar, JA/PE1RAH, for the above information]

/EX

SB SAT @ AMSAT $ANS-242.04
ARISS Status - 24 August 2009

AMSAT News Service Bulletin 242.04
From AMSAT HQ SILVER SPRING, MD.
August 30, 2009
To All RADIO AMATEURS
BID: $ANS-242.04

1. Upcoming School Contacts

An Amateur Radio on the International Space Station (ARISS) contact has been made with Tenison Woods College in Mount Gambier, South Australia. The contact was scheduled for Monday, August 24 at 07:19 UTC via telebridge station W6DUE in Maryland. The contact has been integrated into the curriculum�s astronomy and physics units through participation in hands-on activities.

An Amateur Radio on the International Space Station (ARISS) contact has been accomplished with Volkssterrenwacht Urania in

Hove, Antwerp, Belgium on Monday, August 24 at 11:30 UTC via telebridge station VK4KHZ in Australia. Urania is a public observatory that raises public awareness of astronomy, meteorology and astronautics. A range of activities and services are available: lessons for beginners and the experienced, guided tours of the observatory, an extended documentation center, various publications, stargazing evenings, conferences, Urania Mobile (Flanders' first mobile observatory) and the astroshop. This "Space Talk" will boost activities at the start of the new season.

2.Timothy Kopra Participates in ARISS Contact with KIPP:3D Academy

On Thursday, August 20, the Knowledge is Power Program (KIPP:3D) Academy in Houston, Texas participated in an Amateur Radio on the International Space Station (ARISS) contact with Timothy Kopra, KE5UDN via telebridge station W6SRJ in California. All 18 prepared questions were answered with time for an additional two. The audio was fed into the EchoLink AMSAT and JK1ZRW conference room servers.

3.   ARISS Contact Held with Peruvian University

On Thursday, August 20, an Amateur Radio on the International Space Station (ARISS) contact was held between Gennady Padalka, RN3DT on the ISS and participants in the international forum to discuss small satellite development and launch projects, held at the Peruvian National University of Lima in Lima, Peru. Participants were delegates from different South American countries and technical university representatives from foreign countries. Among the participants was the Kursk State Technical University delegate, Valery Pikkiev, who developed a space experiment for SuitSat-2 (ARISSat-1).

4.   Successful ARISS Contact with Scouts of Maur

The international year of astronomy inspired a few scout guides from Maur near Z�rich, Switzerland, to create a special scout event, the Astrocamp 2009, where participants learn about astronomy and space technology, communication technologies, journalism and public relations. One of the activities scheduled for the event was an Amateur Radio on the International Space Station (ARISS) contact between the Girl and Boy Scouts of Maur �Pfadimuur,� and Frank De Winne, ON1DWN on the ISS. The contact took place on Saturday, August 22. Twelve questions were answered as an audience of approximately 100 listened. Scouts, mass-media representatives, parents and interested parties were present.
Television channel TELETOP, radio stations DRS-3, DRS-1 Regional, Radio Energy, Radio 24, Radio Z�richsee and the newspaper Sonntagsblick covered the event. The audio was fed into the EchoLink AMSAT and JK1ZRW conference room servers.

5.Thirsk Participates in ARISS Contact with Nova East Star Party

On Saturday, August 22, an Amateur Radio on the International Space Station (ARISS) contact took place between the Nova East Star Party, sponsored by the Royal Astronomical Society of Canada, Halifax Center in Nova Scotia, Canada and Robert Thirsk, VA3CSA, on the ISS. Four hundred people witnessed the contact as Thirsk answered the 18 questions posed to him. Bell Aliant was present to record the event. The Nova East Star Party is Atlantic Canada�s oldest and largest Star Party which draws both professional as well as amateur astronomers from the Atlantic Provinces, Quebec, Eastern Ontario and the New England States. The focus of the event is public outreach and education. Through daytime seminars and workshops and evening observing sessions, the public is introduced to the wonders of the night sky.

6. ARISS International Team Meeting Held

An Amateur Radio on the International Space Station (ARISS) teleconference was held on Wednesday, August 19. SuitSat-2 (now ARISSat-1) was among the topics discussed. The minutes have been posted to the ARISS Web site.
See: http://www.rac.ca/ariss/arisstel2009-08-19.htm

7. Make Magazine Posts SuitSat Article

Make Magazine published an article on Amateur Radio on the International Space Station (ARISS) project, SuitSat-2 (now ARISSat-1). To view the story, go to:
http://blog.makezine.com/archive/2009/08/suitsat_hacking_for_outer_space.
htm
l

[ANS thanks Carol, KB3LKI, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Dee Interdonato, NB2F

From 6068519247878215067
X-Google-Thread: a4a23d5f63,59af87800d49c028,start
X-Google-Attributes: gida4a23d5f63,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news1.google.com!news.glorb.com!news2.glorb.com!transit3.readnews.com!news-out.readnews.com!news-xxxfer.readnews.com!panix!panix2.panix.com!not-for-mail
From: rram@panix.com (rec.radio.amateur.moderated Admin)
Newsgroups: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.info
Subject: Crossposting Permitted to rec.radio.amateur.moderated
Supersedes: <radio/ham-radio/moderated/crossposting-1-1249106400@panix.com>
Followup-To: poster
Date: 1 Sep 2009 02:00:02 -0400
Organization: rec.radio.amateur.moderated Moderation Team
Lines: 47
Approved: rec-radio-info@panix.com
Distribution: world
Expires: 04 Oct 2009 02:00:01 -0000
Message-ID: <radio/ham-radio/moderated/crossposting-1-1251784801@panix.com>
Reply-To: rec-radio-amateur-moderated-request@panix.com (rec.radio.amateur.moderated Admin)
NNTP-Posting-Host: panix2.panix.com
X-Trace: reader1.panix.com 1251784803 25418 166.84.1.2 (1 Sep 2009 06:00:03 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Tue, 1 Sep 2009 06:00:03 +0000 (UTC)
Summary: Short reminder for unmoderated newsgroups that crossposting is permitted
Keywords: FAQ, ham, amateur, radio, moderated, unmoderated, crossposting, permitted
Xref: g2news2.google.com rec.radio.amateur.antenna:13815 rec.radio.amateur.dx:482 rec.radio.amateur.equipment:1771 rec.radio.amateur.homebrew:3035 rec.radio.amateur.misc:4496 rec.radio.amateur.policy:26656 rec.radio.amateur.space:282 rec.radio.info:942

Posted-By: auto-faq 3.3.2 beta (PGPMoose V2.0, Perl 5.005)
Archive-name: radio/ham-radio/moderated/crossposting
Revision: 1.1 2009/04/12 19:42:04
Posting-Frequency: posted monthly
URL: http://www.panix.com/~rram/usenet/rram/index.html

Changes followed by "|".

After a 30-day public discussion and feedback period to gauge reader opinions in March of 2009:

http://groups.google.com/group/rec.radio.amateur.moderated/browse_thread/thread/

d7d337db35f23326

the rec.radio.amateur.moderated Moderation Team has decided to consider amending its charter, and permit limited simultaneous crossposting to rec.radio.amateur.moderated and one other unmoderated amateur-radio-related discussion newsgroup. We are currently trying this on a temporary basis (90 days, through early July 2009), and adopt it permanently if successful.

Approved rec.radio.amateur.* newsgroups are those that are currently listed in the latest version of the "List of Big Eight Newsgroups" which is crossposted monthly to news.announce.newgroups, news.groups, and news.lists.misc.

Approved alt.radio.amateur.* and alt.ham-radio.* newsgroups are those that have been created consistent with the suggestions in "So You Want to Create an Alt Newsgroup" at:

  http://www.faqs.org/faqs/alt-creation-guide/

Approved regional hierarchy newsgroups are those that contain either "radio.amateur" or "ham-radio" in their names, including uk.radio.amateur and aus.radio.amateur.misc.

We will make every reasonable effort to keep our list of approved newsgroups up-to-date. In case we have overlooked any, and a submission is rejected in error as a result, the rejected submitter can E-mail us at our administrative contact address (in the signature at the bottom of this article, and the default Reply-To for the rejection message) requesting that it be added, and that the article be approved. We may still choose to reject articles crossposted to any alt.* newsgroup with an inappropriate name, including obscene language, embedded name-calling, or encouragement of unlawful conduct.

Please direct any comments, questions, or criticisms to rec-radio-amateur-moderated-request@panix.com.

```
From -6747744639414685704
X-Google-Thread: a4a23d5f63,1d8f98be17c0109,start
X-Google-Attributes: gida4a23d5f63,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news2.google.com!newsfeed2.dallas1.level3.net!
news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-249 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sun, 6 Sep 2009 00:37:04 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 295
Approved: RRI Admin <rec-radio-info-request@panix.com>
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Message-ID: <000201ca2eab$03705820$0a510860$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1252211824 4021 166.84.1.6 (6 Sep 2009 04:37:04 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 6 Sep 2009 04:37:04 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news2.google.com rec.radio.amateur.space:283 rec.radio.info:951

AMSAT NEWS SERVICE
ANS-249

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

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*********************************************************************
* 2009 AMSAT Space Symposium and Annual General Meeting October 9-11 *
*   Four Points Sheraton Hotel at the Baltimore Washington Airport   *
*  Details - http://www.amsat.org/amsat-new/symposium/2009/index.php *
*********************************************************************
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In this edition:

* AMSAT-NA BoD Ballots Due September 15
* Only One Month Until the AMSAT Space Symposium
* FO-29 Recovery Efforts Continue
* AO-7 DX Reports
* Silent Key: Packet Satellite Pioneer Den Connors, KD2S
* Satellite Shorts From All Over
* ESA Astronaut Answers Your Questions From Space

SB SAT @ AMSAT $ANS-249.01
AMSAT-NA BoD Ballots Due September 15

AMSAT News Service Bulletin 249.01
>From AMSAT HQ SILVER SPRING, MD.
September 6, 2009
To All RADIO AMATEURS
BID: $ANS-249.01

The deadline for returning the gold "corrected" ballot to the AMSAT office is September 15th. If you need biographical information on the candidates, it can be found on the AMSAT website.

[ANS thanks Martha for the above information]

/EX

SB SAT @ AMSAT $ANS-249.02
Only One Month Until the AMSAT Space Symposium

AMSAT News Service Bulletin 249.02
>From AMSAT HQ SILVER SPRING, MD.
September 6, 2009
To All RADIO AMATEURS
BID: $ANS-249.02

Co-Chairs, Frank Bauer, KA3HDO, and Janet Bauer remind you that the 2009 AMSAT Symposium is rapidly approaching! And we hope you can join us, especially given that there are some low-cost airfares out there for those of us in the US.

We have an outstanding venue this year at the Four Points Sheraton at the BWI Airport. Your symposium committee recently did a walk through of this facility. The accommodations and meeting rooms are superb. Frank said, "I do a lot of traveling and I must say that the rooms are absolutely beautiful. You will definitely get a substantial bang for your buck (or Euro, etc.) at this symposium. And planned 40th Anniversary celebratory events will be truly memorable".

So we'd love to see you in "Charm City"-Baltimore Maryland..for the symposium presentations, 40th anniversary celebrations, poster sessions, ARISS Operations Team Meeting, and AMSAT BoD meeting.

Full details are available on-line:
http://www.amsat.org/amsat-new/symposium/2009/index.php

You can now register online for the 2009 AMSAT Space Symposium and Annual Meeting: http://www.amsat-na.com/store2/SymposiumReg2009.php Online registration will disappear on October 5th so do not wait too long!

Our guest speaker is Dr. Martin Collins from the the Smithsonian Air and Space Museum. He will talk on "Making the Space Age: The First Fifty Years".

Follow the links from the Symposium page to book your room at the hotel. An 800 number is also available. When booking your room let the operator know that you are with the Radio Amateur Satellite Corporation for the special rates. (They don't seem to know about AMSAT.)

[ANS thanks Frank Bauer, KA3HDO, and Janet Bauer for the above information]

/EX

SB SAT @ AMSAT $ANS-249.03
FO-29 Recovery Efforts Continue

AMSAT News Service Bulletin 249.03
>From AMSAT HQ SILVER SPRING, MD.
September 6, 2009
To All RADIO AMATEURS
BID: $ANS-249.03

Mineo Wakita, JE9PEL reported that recovery efforts continue for the FO-29 satellite. Partial CW telemetry from FO-29 was received by Luciano, PY5LF, "during the orbit 64384 of FO29 I heard and decoded the telemetry for only 3 times then the satellite turned off." At the present time the ground control team continues to analyze telemetry and are continuing attempts to restore the satellite while it is over Japan.

The latest information can be found on Mineo's web page at:
http://www.ne.jp/asahi/hamradio/je9pel/fo29rest.htm

[ANS thanks Mineo Wakita, JE9PEL for the above information]

/EX

SB SAT @ AMSAT $ANS-249.04
AO-7 DX Reports

AMSAT News Service Bulletin 249.04
>From AMSAT HQ SILVER SPRING, MD.
September 6, 2009
To All RADIO AMATEURS
BID: $ANS-249.04

Piraja, PS8RF reported more transatlantic DX via AO-7 from Brazil. During the orbit number 59094 of AO-7 (MODE B - 20:14:21 UTC - 21/08/2009) I could hear Andre, ZS2ACP calling CQ and giving a signal report to another station here in Brazil (PY5LF). Unfortunately I could not find the uplink, was prepared, but I missed the time to call it. Despite the weather have been enough I could not hear me. The AO-7 in spite of 35 years continues to bring surprises to the satellite community. See: http://www.youtube.com/watch?v=meMa0zz5v4k

Piraja also noted another AO-7 milestone. Joe, K3SZH has reached 10,000 contacts via AO-7. Congratulations Joe!

[ANS thanks Piraja, PS8RF for the above information]

/EX

SB SAT @ AMSAT $ANS-249.05
Silent Key: Packet Satellite Pioneer Den Connors, KD2S

AMSAT News Service Bulletin 249.05
>From AMSAT HQ SILVER SPRING, MD.
September 6, 2009
To All RADIO AMATEURS
BID: $ANS-249.05

Tom Clark, K3IO noted, "It is with much sadness that I report the passing of Den Connors, KD2S. Den passed on after a year long fight to conquer lymphoma."

Den was TAPR's first president, overseeing the transition from a local Tucson club into the multi-national TAPR. He was a major sponsor of the adoption of AX.25 as the amateur packet standard. Under his lead, TAPR introduced the TNC-1 and then later the TNC-2. Den worked with Tom to define an amateur store-and-forward packet radio satellite which morphed into the AO16, IO-26, AO-27, and MO-30 Microsats.

73, Den -- you will be missed by all your friends!

[ANS thanks Tom Clark, K3IO for the above information]

/EX

SB SAT @ AMSAT $ANS-249.06
Satellite Shorts From All Over

AMSAT News Service Bulletin 249.06
>From AMSAT HQ SILVER SPRING, MD.
September 6, 2009
To All RADIO AMATEURS
BID: $ANS-249.06

+ The dates of the 2010 AMSAT-UK Colloquium will be the weekend of July 30 to August 1, 2010. The location will be the same as in 2009, the Holiday Inn, Guildford, Surrey, United Kingdom. (G3WGM)

+ Please collect and send telemetry data you receive on 145.825 from the Pollux and Castor satellites to ande@juno.nrl.navy.mil. There was a laser ranging experiment this weekend from Maui to illuminate the retroreflectors on both satellites. If you include your address you can receive a QSL card. (KD4HBO)

+ Photos of the night time launch of STS-128 can be viewed on-line: From 200 miles north on Jekyll Island, GA see: http://bit.ly/4uBi3N The view from Orlando can be seen at http://www.mydrive.ch/en. The username is plethra2. The guest password is aa4kn_1. They are found in the STS-128 folder.

+ Listen for Tom, KB9BIT as he activates the far western part of the Oklahoma Panhandle between September 12 - 19 (grids DM86 and DM87) To get your QSL card e-mail Tom at kb9bit@arrl.net or tmlask@att.net with the details of the QSO.

+ Congratulations and a hearty well-done to Clint, K6LCS on his very successful "How to Work Ham Sats With Your HT" presentation to the Moreno Valley (CA) Amateur Radio Association. Clint says, "They were, indeed, properly impressed!" Listen for Clint's upcoming demos on:
  September 11 - EchoLink/IRLP via K0GQ
  September 17 - Conejo Valley ARC
  October 5 - WARA (Fullerton) meeting
  October 17 - Victor Valley ARC's JOTA

+ West Coast USA stations worked Hawaii via AO-51 on September 4. Ron, W6ZQ operated from Kauai in grid BL02. Robert, NH7WN from Honolulu (BL11) was also on the same pass. Patrick, WD9EWK said he was able to work W6ZQ at just under 2 degrees elevation and got NH7WN at just over 3 degrees elevation.

[ANS thanks everyone for the above information]

/EX

SB SAT @ AMSAT $ANS-249.07
ESA Astronaut Answers Your Questions From Space

AMSAT News Service Bulletin 249.07
>From AMSAT HQ SILVER SPRING, MD.
September 6, 2009
To All RADIO AMATEURS
BID: $ANS-249.07

This week Space Daily carried a story dateline September 3, from Paris, France about a new way to contact the International Space Station.

How do you wash your clothes in space? How does food stay fresh if there is no fridge on the ISS? ESA's Frank De Winne is answering these, and many more of your questions, right now, from space.

Is there something you always wanted to know about being an astronaut? Or you are just curious about living and working in space? Well, now is the time to ask. Instead of searching the Internet, you can ask an ESA astronaut directly. Frank De Winne, on the International Space Station, is keen to answer your questions personally via ESA's YouTube channel.

Questions answered so far have been "Will you exercise a lot on your bike?", "What medical conditions would stop you becoming an astronaut?", "Will Europe have its own Space Shuttle in the future?" and "Do you use washing powder for washing clothes in space?"

Frank is answering questions from space fans all over Europe, and he will greet you in English, French or Dutch in your personal video response.

All you have to do is record your question using a webcam, video camera or mobile phone, and post it on ESA"s YouTube channel. Each week, Frank posts his responses to your questions on the site, directly from space.

Frank is part way through his six-month mission on the International Space Station. Later in his mission, he will also become the first European commander of the ISS.

Have a go, it could be your question answered next!

Record and upload your questions to ESA"s YouTube channel as a 'Video Response' to De Winne's video message which can viewed at this link: http://www.youtube.com/watch?v=okpNcG3vu_E

(ed. note: Frank's amateur radio callsign is ON1DWN.)

[ANS thanks SpaceDaily.com for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office. And with that please keep in mind when wondering how important feed line loss is in your antenna installation that ancient wisdom reminds us about the man who digs his well at a distance from the tent soon laments when his wife's mustache catches fire.

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM
K9JKM at amsat dot org

```
From 3321301383201931472
X-Google-Thread: a4a23d5f63,be3444e2ea1f5247,start
X-Google-Attributes: gida4a23d5f63,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII
Path: g2news2.google.com!news1.google.com!newsfeed2.dallas1.level3.net!
news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-249 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Sun, 6 Sep 2009 09:30:25 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 1723
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000601ca2ef6$284eb600$78ec2200$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;charset="iso-8859-1"
Content-Transfer-Encoding: quoted-printable
X-Trace: reader1.panix.com 1252243825 22256 166.84.1.6 (6 Sep 2009 13:30:25 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 6 Sep 2009 13:30:25 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
x-cr-hashedpuzzle: NKg= AqjW BWE0 B9p8 B/3Y CZKZ Da4V Dkcu EIsK E5Xz GbpH G5Wk
HsAi HwtV I9RN
JiV4;1;cgBlAGMALQByAGEAZABpAG8ALQBpAG4AZgBvAEAAcABhAG4AaQB4AC4AYwBvAG0A;Sosha1_v1;
7;{C37FF8DE-30C9-43A9-82A6-
CDA23B0EE1E6};awA5AGoAawBtAEAAYwBvAG0AYwBhAHMAdAAuAG4AZQB0AA==;Sun, 06 Sep 2009
13:30:05
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Xref: g2news2.google.com rec.radio.amateur.space:284 rec.radio.info:953
```

This report is organized into four (4) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites

Part 3 (S3) - non - operational satellites
Part 4 (S4) - deorbited/returned satellites

SB SAT @ AMSAT W8ISS ANS-249.S1
WSR 249 Part 1 09/06/2009

AMSAT NEWS SERVICE BULLETIN 249.S1
FROM AMSAT HQ SILVER SPRING, MD, September 06, 2009
TO ALL RADIO AMATEURS
BID: $ANS-249.S1

DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008

Status: Operational
Current Mode: Science Mode - Beacon ONLY

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink: 435.530 to 435.570 MHz

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68
[02122009]
=====
VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.859330 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is active. Each transponder has a different beacon.
[08072008]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

```
Current Modes:   FM Repeater - Uplink:    145.920 Mhz FM
                               Downlink:  435.300 Mhz FM
                               Uplink:   1268.700 Mhz FM
                               Downlink:  435.150 Mhz FM
                 BBS         - Uplink:    OFF
                               Downlink:  OFF
                 Telemetry   - Downlink:  OFF

Analog voice downlink:     435.300 MHz FM
                           435.150 MHz FM
                          2401.200 Mhz FM
Analog voice uplink:       145.860 MHZ FM
                           145.880 MHz USB
                           145.920 MHz FM
                          1268.700 MHz FM
Digital Downlinks:         435.150 MHz FM 38k4 PBP, 1 watt output
                           435.150 MHz FM 9k6 Pacsat Broadcast Protocol
                          2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:            145.860 MHz FM 9k6 Pacsat Broadcast Protocol
                          1268.700 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon:                    435.150 MHz
```

```
Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear
```

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[08302009]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607

Launch date: December 20, 2002

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz. The order of operation is thus: (allow for Doppler as necessary):

1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10 minute timer.

[05282007]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: RECOVERY
Current Mode: V/u (Mode JA)

Voice/CW (Mode JA)
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage:
http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's
CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/
fo29cwts.htm
[09062009]
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[03232009]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational

Current Mode: Alternating between Mode A and B every 24 hours

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/

[02122009]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes:		
	FM Repeater -	V/u
	Voice -	V/v
	BBS -	V/v
	APRS -	V/v
	SSTV -	V/v

Expedition 19/20/21 Crew:

Commander:	Gennady Padalka	RN3DT
Flight Engineer:	Michael Barratt	KD5MIJ
Flight Engineer:	Timothy Kopra	KE5UDN
Flight Engineer:	Robert Thirsk	VA3CSA
Flight Engineer:	Roman Romanenko	
Flight Engineer:	Frank De Winne	ON1DWN
Flight Engineer:	Nicole P. Stott	KE5GJN

STS-128 Discovery Crew:

Commandeer:	Frederick Sturckow	
Pilot:	Kevin A. Ford	
Mission Specialist:	Patrick Forrester	
Mission Specialist:	Jos� Hern�ndez	KE5DAV
Mission Specialist:	Christer Fuglesang	SA0AFS/KE5CG
Mission Specialist:	John D. "Danny� Olivas	

Available Modes and Frequencies:

Digital/APRS:

Worldwide packet uplink:	145.825 MHz FM 1k2
Worldwide packet downlink:	145.825 Mhz FM 1k2

Voice:

Region 1 voice uplink:	145.200 MHz FM
Region 2/3 voice uplink:	144.490 MHz FM
Worldwide downlink:	145.800 MHz FM

Crossband Repeater:

Repeater Uplinks:	1269.650 MHz FM
	437.800 MHz FM
	145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink:	145.800 MHz FM
	437.800 MHz FM (Kenwood)

SSTV Robot 36:

Downlink:	145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[08302009]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-249.S2
WSR 249 Part 2 09/06/2009

AMSAT NEWS SERVICE BULLETIN 249.S2
FROM AMSAT HQ SILVER SPRING, MD, September 06, 2009
TO ALL RADIO AMATEURS
BID: $ANS-249.S2

Pollux
Catalog Number:
Launch Date: July 31, 2009

Status: Operational

Downlink: 145.825MHz 1k2 AX.25
[07312009]
=====
Castor
Catalog Number:
Launch Date: July 31, 2009

Status: Operational

Downlink: 145.825 MHz 1k2 AX.25
[07312009]
=====
BEVO-1 (DRAGONSAT-1)
Catalog Number: 35004

```
Launch Date: May 19, 2009

Status: Operational

Downlink: 437.325 MHz 9k6 GMSK
          437.325 MHz CW 20wpm
[07312009]
=====
AggieSat2 (DRAGONSAT-2)
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Operational

Downlink: 436.250 MHz 9k6
[07312009]
=====
CP-6
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Commissioning

Downlink: 437.365 MHz 1k2 AFSK
[06052009]
=====
HAWKSAT 1
Catalog number: 35003
Launch Date: May 19, 2009

Status: ?

Downlink: 437.345 ?
[06052009]
=====
Pharmasat
Catalog Number: 35002
Launch Date: May 19, 2009
Status: Commissioning

Downlink: 437.465 MHz 1k2 AFSK
[06052009]
=====
ANUSAT
Catalog Number: 34808
Launch Date: April 20, 2009

Status: ?

Downlink:  435.000 MHz
Uplink:    145.800 MHz

Telemetry: 137.400 MHz
```

```
[05112009]
=====
SOHLA-1 (ASTRO TECH.)
Catalog Number: 33496
Launch Date: January 23, 2009

Status: Commisioning

Proposed Frequencies and Modes:
Downlink: 437.505 MHz AFSK/CW
Beacon:   437.505 MHz AFSK/CW

Callsign:

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=101
[03232009]
=====
KAGAYAKI (Solan Co.)
Catalog Number: 33495?
Launch Date: January 23, 2009

Status: In Orbit

Downlink: 437.375 MHZ    FSK9k6/CW
Beacon:   437.375 MHz    FSK9k6/CW

IARU coordination status page:

AMSAT-NA webpage:

[01152009]
=====
STARS (Kagawa Univ.) (Twin Satellites)
Catalog Number: 33498
Launch Date: January 23, 2009

Status: Operational ?

Downlinks: 437.485 MHz FM/CW
           437.465 MHz FM/CW
Beacons:   437.305 MHz FM/CW
           437.275 MHz FM/CW

Callsigns: JR5YBN
           JR5YBO

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=99

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=121&retURL
=/satellites/status.php
```

```
[022152009]
=====
KKS-1 (Tokyo MCIT)
Catalog Number: 33499
Launch Date: January 23, 2009

Status: Operational

Downlink:  437.455 MHz AFSK/CW
Beacon:    437.385 MHz AFSK/CW

Callsign: JQ1YYY

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=107

AMSAT-NA webapge:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=120&retURL
=/satellites/status.php
[02212009]
=====
PRISM (Tokyo Univ.)
Catalog Number: 33493
Launch Date: January 23, 2009

Status: Operational ?

Downlink: 437.425 MHz AFSK/GMSK/CW
Beacon:   437.250 MHz AFSK/GMSK/CW

Callsign: JQ1YCX

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=97

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=119&retURL
=/satellites/status.php
[02212009]
=====
RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number: 32953
Launch Date: May 23, 2008

Status: Operational

Curent Modes: Telemetry
              Audio
              Images

Downlinks: 435.315 MHz
           435.215 MHz
```

AMSAT-NA website:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=115&ret
URL=/satellites/status.php

Official website:
http://www.npopm.com/?cid=leoca&caid=43
[02122009]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=94&retURL=

/satellites/status.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=72
[02122009]
=====
CP3
Catalog Number: 31129
Launch Date: April 17,2007

Status: Operational

Current Mode: /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[02122009]
=====
GENESAT-1
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Current Mode: /u

Callsign: KE7EGC

```
Telemetry Beacon Downlink: 437.0695 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[091512009]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon:             437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/xivpicte.htm
[02212009]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003

Status: ?????

Current Mode: /u

Beacon:     436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=96&retURL
=/satellites/status.php

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[06082009]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Operational?

Uplink:  1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan?)
```

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=56
[02122009]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

```
Current Modes:   FM Repeater - Uplink:    145.920 Mhz FM
                               Downlink:  435.300 Mhz FM
                               Uplink:   1268.700 Mhz FM
                               Downlink:  435.150 Mhz FM
                 BBS         - Uplink:    OFF
                               Downlink:  OFF
                 Telemetry   - Downlink:  OFF

Analog voice downlink:     435.300 MHz FM
                           435.150 MHz FM
                          2401.200 Mhz FM
Analog voice uplink:       145.860 MHZ FM
                           145.880 MHz USB
                           145.920 MHz FM
                          1268.700 MHz FM
Digital Downlinks:         435.150 MHz FM 38k4 PBP, 1 watt output
                           435.150 MHz FM 9k6 Pacsat Broadcast Protocol
                          2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:            145.860 MHz FM 9k6 Pacsat Broadcast Protocol
                          1268.700 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon:                    435.150 MHz
```

Mode and Antenna Polarization:
```
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear
```

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19

```
[08302009]
=====
QuakeSat
Catalog Number: 27845
Launch Date: June 30, 2003

Status: Telemetry only

Current Mode: 9600 baud data packet

Mode U packet
Downlink: 436.675 MHz 9k6 BPS

Quakesat webpage:
http://www.quakefinder.com/services/quakesat-ssite/
[04272009]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=69&retURL
=/satellites/status.php
[02212009]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Telemetry only

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink:        144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[03302009]
```

```
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Telemetry only

Current Modes:
Telemetry : /u

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign:       4XTECH-12

More information of GO-32 can be found at:
http://asri.technion.ac.il/techsat/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=14&retURL
=/satellites/status.php
[04272009]
=====
RS-22 RADIO SPORT RS-22
Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only

Current Mode:  /u

CW Beacon - 435.352 MHz
            145.818 MHz

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=76&retURL
=/satellites/status.php
[02212009]
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990

Status: CW Beacon only

Uplinks:          145.840 MHz 1200-baud Manchester FSK
```

145.860 MHz 1200-baud Manchester FSK
145.880 MHz 1200-baud Manchester FSK
145.900 MHz 1200-baud Manchester FSK

CW downlink: 437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[03162009]
=====
CanX-2
Catalog number: 32790
Launch Date: April 28, 2008

Status: Operational in range of ground station only

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[02212009]
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.425 MHz 1k2 baud packet

For the latest project status update please visit the AAUSAT-II web page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[02212009]
=====
CO-65 CUTE-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008

Status: Digipeater

Downlink: 437.475 MHz 9k6 Packet

Uplink: 1267.600 Mhz

Telemetry Beacon:
Downlink: 437.2750 MHz CW

For the latest project status update please visit the Cute-1.7+APD II
web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78

Command Station blog website:
http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=112&retURL
=/satellites/status.php
[02212009]

=====
Compass-1
Catalog number: 32787
Launch Date: April 28, 2008

Status: Operational

Current Mode: 4k8 MSK packet

Uplink: 145.980 MHz FM
Downlink: 437.275 Mhz CW
          437.405 MHz Packet

For the latest project status update please visit the Compass 1 web
page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=114&retURL
=/satellites/status.php
[04272009]

=====
CO-66 Seeds II
Catalog number: 32791
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.485 MHz

Callsign: JQ1YGU

For the latest project status update please visit the Seeds 2 web

page: http://cubesat.aero.cst.nihon-u.ac.jp/english/seeds_2_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=113&retURL=/satellites/status.php
[02212009]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - V/u
Voice - V/v
BBS - V/v
APRS - V/v
SSTV - V/v

Expedition 19/20/21 Crew:

Commander:	Gennady Padalka	RN3DT
Flight Engineer:	Michael Barratt	KD5MIJ
Flight Engineer:	Timothy Kopra	KE5UDN
Flight Engineer:	Robert Thirsk	VA3CSA
Flight Engineer:	Roman Romanenko	
Flight Engineer:	Frank De Winne	ON1DWN
Flight Engineer:	Nicole P. Stott	KE5GJN

STS-128 Discovery Crew:

Commandeer:	Frederick Sturckow	
Pilot:	Kevin A. Ford	
Mission Specialist:	Patrick Forrester	
Mission Specialist:	Jos� Hern�ndez	KE5DAV
Mission Specialist:	Christer Fuglesang	SA0AFS/KE5CG
Mission Specialist:	John D. "Danny� Olivas	

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM

145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[08302009]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-249.S3
WSR 249 Part 3 09/06/2009

AMSAT NEWS SERVICE BULLETIN 249.S3
FROM AMSAT HQ SILVER SPRING, MD, September 06, 2009
TO ALL RADIO AMATEURS
BID: $ANS-249.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

CP4
Catalog Number: 31122
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon: 437.325 MHz CW

IARU coordination status page:

http://www.amsat.org.uk/iaru/finished_detail.asp?serial=79
[10022008]
=====
LIBERTAD-1
Catalog Number: 31128
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink: 145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[02122009]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: Non-Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder: 145.825 Mhz FM
[01012009]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 MHz FM 67Hz CTCSS
Voice Downlink: 2401.835 MHz FM
Packet Up/Downlink: 437.250 MHz 9k6 packet

Packet Downlink   2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non-Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[08132007]
=====
CANX-1
Catalog Number: 27847
Launch Date: June 30, 2003

Status: Non-Operational

Downlink: 437.8800 MHz AFSK 1k2bps
[06052009]
=====
DTUSAT
Catalog Number: 27842
Launch Date: June 30, 2003

Status: Non-Operational

Current Mode: 2k4 AFSK Packet last reported

Downlink: 437.475MHz

Officail webpage: http://dtusat1.dtusat.dtu.dk/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=101&retURL
=satellites/all_oscars.php
[02212009]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)

Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Telemetry only

Uplinks: 145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[03302009]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:

```
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink:   145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
V-band:   145.840 -  145.990 MHz CW/LSB
U-band:   435.550 -  435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks
---------
S2-band:  2401.225 -  2401.475 MHz CW/USB
K-band:  24048.010 - 24048.060 MHz CW/USB
Beacon:   2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)
----------------------------
BEACON   General Beacon(GB)  Middle Beacon(MB)  Engineering Beacon(EB)
2 m                   none        145.898 MHz                    none
70cm           435.438 MHz        435.588 MHz            435.838 MHz
13cm(1)       2400.188 MHz       2400.338 MHz           2400.588 MHz
13cm(2)       2401.173 MHz       2401.323 MHz           2401.573 MHz
3cm          10450.975 MHz      10451.125 MHz          10451.375 MHz
1.5cm        24047.885 MHz      24048.035 MHz          24048.285 MHz
[07162007]
=====
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000
```

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: 25636
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====

```
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink:   145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
MO-30 UNAMSAT-2
Catalog Number: 24305
Launch Date: September 5, 1996

Status: Non-operational

Downlink:       435.1380 MHz AFSK 1200 BPS
Downlink:       435.2060 MHz AFSK 1200 BPS
Uplink:         145.8150 MHz AFSK 1200 BPS
Uplink:         145.8350 MHz AFSK 1200 BPS
Uplink:         145.8550 MHz AFSK 1200 BPS
Uplink:         145.8750 MHz AFSK 1200 BPS
[06042009]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Non-operational

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign:       POSAT1-12
```

```
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012009]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HL01-11
BBS: HL01-12
[01222007]
```

```
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational
```

```
Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
[05012006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: non-operational

Current Mode:  V/u

Uplink:          145.900 MHz FM 1200-baud Manchester FSK (reserved)
                 145.920 MHz FM VOICE
                 145.940 MHz FM 1200-baud Manchester FSK (reserved)
                 145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink:        437.026 MHz USB VOICE
                 (1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[07242009]
=====
UO-15 UoSAT-4
Catalog Number: 20438
Launch Date: January 22, 1990

Status: Non-operational

Uplink: ?
Downlink: 435.1250MHz (?)
          435.1200MHz (?)
[06042009]
```

```
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984

Status: Non-operational.

Current Mode:  /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon:          435.025 MHz
Mode-S Beacon:     2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[01012009]
=====
AO-10 OSCAR 10
```

Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon: 145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.8500 - 145.9000 MHz SSB/CW
Downlink 29.4000 - 29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink: 29.4500 - 29.5500 MHz SSB/CW
Beacons: 29.450 MHz
          435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

```
Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon 1:  29.352 MHz (intermittent)
Beacon 2:  29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink:     21.260 to 21.300 MHz CW/USB
Downlink:  145.860 to 145.900 MHz CW/USB

Beacon:    145.860 MHz

Robot:     145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink:   21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon:   29.408 MHz
```

Robot: 29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-249.S4
WSR 249 Part 4 09/06/2009

AMSAT NEWS SERVICE BULLETIN 249.S4
FROM AMSAT HQ SILVER SPRING, MD, September 06, 2009
TO ALL RADIO AMATEURS
BID: $ANS-249.S4

THE FOLLOWING SATELLITES HAVE RE-ENTERED OR HAVE BEEN RETURNED SAFELY:

NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: July 28, 2008

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[01012009]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink: 145.825 Mhz FM APRS AX25
APRS Uplink: 145.825 MHz FM APRS AX25
Voice/PSK31 Uplink: 28.120 MHz

Packet to Voice ID: RAFT
[06112007]

=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Re-Entered
Re-entered: June 18, 2008

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon: 437.2750 MHz CW

Callsign: JR8YJT
[01012009]
=====
SO-43 Starshine 3
Catalog Number: 26929
Launch Date: September 30, 2001

Status: Re-Entered
Re-entered: January 21, 2003

Beacon: 145.825Mhz
[02212009]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

- AMSAT News Service (ANS)
- General satellite discussion (AMSAT-BB)
- Orbit data (KEPS)
- Manned space missions (SAREX)
- District of Columbia area (AMSAT-DC)
- New England area (AMSAT-NE)
- AMSAT Educational Liaison mailing list (AMSAT-EDU)

* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at}amsat.org
NNNN
/EX

From -2535963353334021565
X-Google-Thread: addc8bf063,da28d0fab0d0fedf,start
X-Google-Attributes: gidaddc8bf063,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news1.google.com!news.glorb.com!pfeed08.wxs.nl!newsfeed.kpn.net!pfeed09.wxs.nl!news.astraweb.com!border3.a.newsrouter.astraweb.com!not-for-mail
From: Chris Steyaert <observations@rmob.org>
Newsgroups: rec.radio.amateur.space,sci.astro.amateur
Subject: Radio Meteor Obs. Bull. August 2009 Perseids
Date: Mon, 07 Sep 2009 19:05:30 +0200
Message-ID: <u7faa5tngoggsjcnmlda7v73hmn7v795si@4ax.com>
X-Newsreader: Forte Agent 1.93/32.576 English (American)
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Lines: 13
Organization: Unlimited download news at news.astraweb.com
NNTP-Posting-Host: abeeac1a.news.astraweb.com
X-Trace: DXC=on2b=9F=MU^1IA2mQNenURL?0kYOcDh@Z2AWVo<6C[TRaCeHVS^7]7RG?ifhhgG3CQYogLCkkRJR\i7RfXnI1anZ
Xref: g2news2.google.com rec.radio.amateur.space:285 sci.astro.amateur:25751

Radio Meteor Observation Bulletin No. 193 of August 2009 (84 K) is available now as

http://www.rmob.org/rmobtext/rmob0908.txt

More information and the visual presentation of the hourly forward scatter counts can be found on

http://www.rmob.org

Chris

From 4494372010419204320
X-Google-Thread: a4a23d5f63,d7c8ef1243c0a677,start
X-Google-Attributes: gida4a23d5f63,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news1.google.com!newsfeed2.dallas1.level3.net!
news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-255 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Mon, 14 Sep 2009 09:40:05 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 1716
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000601ca3540$d584a6e0$808df4a0$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1252935606 25183 166.84.1.6 (14 Sep 2009 13:40:06 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Mon, 14 Sep 2009 13:40:06 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to   rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to   rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news2.google.com rec.radio.amateur.space:286 rec.radio.info:971

This report is organized into four (4) parts.
Part 1 (S1) - operational analog amateur satellites

Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - deborbited/returned satellites

SB SAT @ AMSAT W8ISS $WSR-255.S1
WSR 255 Part 1 09/12/2009

AMSAT NEWS SERVICE BULLETIN 255.S1
FROM AMSAT HQ SILVER SPRING, MD, September 12, 2009
TO ALL RADIO AMATEURS
BID: $WSR-255.S1

DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008

Status: Operational
Current Mode: Science Mode - Beacon ONLY

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink: 435.530 to 435.570 MHz

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68
[02122009]
=====
VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.859330 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

```
Official Webpage: http://www.amsatindia.org/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is active. Each transponder has a different beacon.
[08072008]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: System Reload in progress

Current Modes:
FM Repeater ONE
Uplink:    145.920 Mhz FM
Downlink:  435.300 Mhz FM
FM Repeater TWO
Uplink:    OFF
Downlink:  OFF
BBS
Uplink:    OFF
Downlink:  OFF
Telemetry
Downlink:  OFF

Analog voice downlink:     435.300 MHz FM
                           435.150 MHz FM
                          2401.200 Mhz FM
Analog voice uplink:       145.860 MHZ FM
                           145.880 MHz USB
                           145.920 MHz FM
                          1268.700 MHz FM
Digital Downlinks:         435.150 MHz FM 38k4 PBP, 1 watt output
                           435.150 MHz FM 9k6 Pacsat Broadcast Protocol
                          2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:            145.860 MHz FM 9k6 Pacsat Broadcast Protocol
                          1268.700 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon:                    435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
```

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[09122009]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4
Hz. The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute
   timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater
   on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset
   the 10 minute timer.
[05282007]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: RECOVERY
Current Mode: V/u (Mode JA)

Voice/CW (Mode JA)
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:

V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage:
http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts.htm
[09062009]
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[03232009]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational

Current Mode: Alternating between Mode A and B every 24 hours

```
Uplink:   145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink:  29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons:   29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW
```

```
Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
[02122009]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - V/u
                      Voice -       V/v
                      BBS -         V/v
                      APRS -        V/v
                      SSTV -        V/v


Expedition 21 Crew:
Commander:                Gennady Padalka  RN3DT
Flight Engineer:          Michael Barratt  KD5MIJ
Flight Engineer:          Robert Thirsk    VA3CSA
Flight Engineer:          Roman Romanenko
Flight Engineer:          Frank De Winne   ON1DWN
Flight Engineer:          Nicole P. Stott  KE5GJN


Available Modes and Frequencies:

Digital/APRS:
Worldwide packet uplink:   145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink:     145.200 MHz FM
Region 2/3 voice uplink:   144.490 MHz FM
Worldwide downlink:        145.800 MHz FM

Crossband Repeater:
Repeater Uplinks:         1269.650 MHz FM
                           437.800 MHz FM
                           145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink:         145.800 MHz FM
                           437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink:                  145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
```

U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[09122009]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-255.S2
WSR 255 Part 2 09/12/2009

AMSAT NEWS SERVICE BULLETIN 255.S2
FROM AMSAT HQ SILVER SPRING, MD, September 12, 2009
TO ALL RADIO AMATEURS
BID: $WSR-245.S2

Pollux
Catalog Number:
Launch Date: July 31, 2009

Status: Operational

Downlink: 145.825MHz 1k2 AX.25
[07312009]
=====
Castor
Catalog Number:
Launch Date: July 31, 2009

Status: Operational

Downlink: 145.825 MHz 1k2 AX.25
[07312009]
=====
BEVO-1 (DRAGONSAT-1)
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Operational

```
Downlink: 437.325 MHz 9k6 GMSK
          437.325 MHz CW 20wpm
[07312009]
=====
AggieSat2 (DRAGONSAT-2)
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Operational

Downlink: 436.250 MHz 9k6
[07312009]
=====
CP-6
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Commissioning

Downlink: 437.365 MHz 1k2 AFSK
[06052009]
=====
HAWKSAT 1
Catalog number: 35003
Launch Date: May 19, 2009

Status: ?

Downlink: 437.345 ?
[06052009]
=====
Pharmasat
Catalog Number: 35002
Launch Date: May 19, 2009
Status: Commissioning

Downlink: 437.465 MHz 1k2 AFSK
[06052009]
=====
ANUSAT
Catalog Number: 34808
Launch Date: April 20, 2009

Status: ?

Downlink:  435.000 MHz
Uplink:    145.800 MHz

Telemetry: 137.400 MHz
[05112009]
=====
SOHLA-1 (ASTRO TECH.)
```

```
Catalog Number: 33496
Launch Date: January 23, 2009

Status: Commisioning

Proposed Frequencies and Modes:
Downlink: 437.505 MHz AFSK/CW
Beacon:   437.505 MHz AFSK/CW

Callsign:

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=101
[03232009]
=====
KAGAYAKI (Solan Co.)
Catalog Number: 33495?
Launch Date: January 23, 2009

Status: In Orbit

Downlink: 437.375 MHZ    FSK9k6/CW
Beacon:   437.375 MHz    FSK9k6/CW

IARU coordination status page:

AMSAT-NA webpage:

[01152009]
=====
STARS (Kagawa Univ.) (Twin Satellites)
Catalog Number: 33498
Launch Date: January 23, 2009

Status: Operational ?

Downlinks: 437.485 MHz FM/CW
           437.465 MHz FM/CW
Beacons:   437.305 MHz FM/CW
           437.275 MHz FM/CW

Callsigns: JR5YBN
           JR5YBO

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=99

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=121&retURL
=/satellites/status.php
[022152009]
=====
KKS-1 (Tokyo MCIT)
```

Catalog Number: 33499
Launch Date: January 23, 2009

Status: Operational

Downlink: 437.455 MHz AFSK/CW
Beacon: 437.385 MHz AFSK/CW

Callsign: JQ1YYY

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=107

AMSAT-NA webapge:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=120&retURL
=/satellites/status.php
[02212009]
=====
PRISM (Tokyo Univ.)
Catalog Number: 33493
Launch Date: January 23, 2009

Status: Operational ?

Downlink: 437.425 MHz AFSK/GMSK/CW
Beacon: 437.250 MHz AFSK/GMSK/CW

Callsign: JQ1YCX

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=97

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=119&retURL
=/satellites/status.php
[02212009]
=====
RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number: 32953
Launch Date: May 23, 2008

Status: Operational

Curent Modes: Telemetry
              Audio
              Images

Downlinks: 435.315 MHz
           435.215 MHz

AMSAT-NA website:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=115&ret
URL=/satellites/status.php

```
Official website:
http://www.npopm.com/?cid=leoca&caid=43
[02122009]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode:  /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon:    435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=94&retURL=
/satellites/status.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=72
[02122009]
=====
CP3
Catalog Number: 31129
Launch Date: April 17,2007

Status: Operational

Current Mode:  /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[02122009]
=====
GENESAT-1
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Current Mode: /u

Callsign: KE7EGC

Telemetry Beacon Downlink: 437.0695 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[091512009]
```

```
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon:             437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/xivpicte.htm
[02212009]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003

Status: ?????

Current Mode: /u

Beacon:     436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=96&retURL
=/satellites/status.php

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[06082009]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Operational?

Uplink:  1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
```

http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=56
[02122009]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: System Reload in Progress

Current Modes:
FM Repeater ONE
Uplink: 145.920 Mhz FM
Downlink: 435.300 Mhz FM
FM REPEATER TWO
Uplink: OFF
Downlink: OFF
BBS
Uplink: OFF
Downlink: OFF
Telemetry
Downlink: OFF

Analog voice downlink: 435.300 MHz FM
                           435.150 MHz FM
                          2401.200 Mhz FM
Analog voice uplink: 145.860 MHZ FM
                           145.880 MHz USB
                           145.920 MHz FM
                          1268.700 MHz FM
Digital Downlinks: 435.150 MHz FM 38k4 PBP, 1 watt output
                           435.150 MHz FM 9k6 Pacsat Broadcast Protocol
                          2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Pacsat Broadcast Protocol
                          1268.700 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/

IARU coordination status page:

```
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[09122009]
=====
QuakeSat
Catalog Number: 27845
Launch Date: June 30, 2003

Status: Telemetry only

Current Mode: 9600 baud data packet

Mode U packet
Downlink: 436.675 MHz 9k6 BPS

Quakesat webpage:
http://www.quakefinder.com/services/quakesat-ssite/
[04272009]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=69&retURL
=/satellites/status.php
[02212009]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Telemetry only

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink:        144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
```

```
[03302009]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Telemetry only

Current Modes:
Telemetry : /u

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign:       4XTECH-12

More information of GO-32 can be found at:
http://asri.technion.ac.il/techsat/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=14&retURL
=/satellites/status.php
[04272009]
=====
RS-22 RADIO SPORT RS-22
Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only

Current Mode:  /u

CW Beacon - 435.352 MHz
            145.818 MHz

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=76&retURL
=/satellites/status.php
[02212009]
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990

Status: CW Beacon only
```

```
Uplinks:          145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink:      437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[03162009]
=====
CanX-2
Catalog number: 32790
Launch Date: April 28, 2008

Status: Operational in range of ground station only

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web
page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[02212009]
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.425 MHz 1k2 baud packet

For the latest project status update please visit the AAUSAT-II web
page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[02212009]
=====
CO-65 CUTE-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008

Status: Digipeater
```

Downlink: 437.475 MHz 9k6 Packet
Uplink: 1267.600 Mhz

Telemetry Beacon:
Downlink: 437.2750 MHz CW

For the latest project status update please visit the Cute-1.7+APD II web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78

Command Station blog website:
http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=112&retURL=/satellites/status.php
[02212009]
=====
Compass-1
Catalog number: 32787
Launch Date: April 28, 2008

Status: Operational

Current Mode: 4k8 MSK packet

Uplink: 145.980 MHz FM
Downlink: 437.275 Mhz CW
          437.405 MHz Packet

For the latest project status update please visit the Compass 1 web page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=114&retURL=/satellites/status.php
[04272009]
=====
CO-66 Seeds II
Catalog number: 32791
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.485 MHz

Callsign: JQ1YGU

For the latest project status update please visit the Seeds 2 web
page: http://cubesat.aero.cst.nihon-u.ac.jp/english/seeds_2_e.html

IAARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=113&retURL=/satellites/status.php
[02212009]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - V/u
Voice - V/v
BBS - V/v
APRS - V/v
SSTV - V/v

Expedition 21 Crew:
Commander: Gennady Padalka RN3DT
Flight Engineer: Michael Barratt KD5MIJ
Flight Engineer: Robert Thirsk VA3CSA
Flight Engineer: Roman Romanenko
Flight Engineer: Frank De Winne ON1DWN
Flight Engineer: Nicole P. Stott KE5GJN

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:

V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[09122009]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-249.S3
WSR 255 Part 3 09/12/2009

AMSAT NEWS SERVICE BULLETIN 255.S3
FROM AMSAT HQ SILVER SPRING, MD, September 12, 2009
TO ALL RADIO AMATEURS
BID: $WSR-255.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

CP4
Catalog Number: 31122
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon: 437.325 MHz CW

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=79
[10022008]
=====
LIBERTAD-1
Catalog Number: 31128
Launch Date: April 17,2007

Status: Non-Operational

```
Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink:   145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[02122009]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: Non-Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder:  145.825 Mhz FM
[01012009]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency:  437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink:        437.250 MHz FM 67Hz CTCSS
Voice Downlink:     2401.835 MHz FM
Packet Up/Downlink:  437.250 MHz 9k6 packet
Packet Downlink     2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
UWE-1
Catalog Number: 28892
```

Launch Date: October 27, 2005

Status: Non-Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[08132007]
=====
CANX-1
Catalog Number: 27847
Launch Date: June 30, 2003

Status: Non-Operational

Downlink: 437.8800 MHz AFSK 1k2bps
[06052009]
=====
DTUSAT
Catalog Number: 27842
Launch Date: June 30, 2003

Status: Non-Operational

Current Mode: 2k4 AFSK Packet last reported

Downlink: 437.475MHz

Officail webpage: http://dtusat1.dtusat.dtu.dk/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=101&retURL=satellites/all_oscars.php
[02212009]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)

Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

```
Status: Telemetry only

Uplinks:   145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink:  437.325 MHz

Broadcast callsign: MYSAT3-11
BBS:                MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial land and weather imaging payloads offers FM and FSK
Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as
a collaborative effort between the Malaysian government and Surrey
Satellite Technology Ltd.
[03302009]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink:   145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS:                SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational
```

```
Uplink:   145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
V-band:   145.840 -  145.990 MHz CW/LSB
U-band:   435.550 -  435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks
---------
S2-band:  2401.225 -  2401.475 MHz CW/USB
K-band:  24048.010 - 24048.060 MHz CW/USB
Beacon:   2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)
----------------------------
BEACON   General Beacon(GB)  Middle Beacon(MB)  Engineering Beacon(EB)
2 m                   none        145.898 MHz                     none
70cm           435.438 MHz        435.588 MHz              435.838 MHz
13cm(1)       2400.188 MHz       2400.338 MHz             2400.588 MHz
13cm(2)       2401.173 MHz       2401.323 MHz             2401.573 MHz
3cm          10450.975 MHz      10451.125 MHz            10451.375 MHz
1.5cm        24047.885 MHz      24048.035 MHz            24048.285 MHz
[07162007]
=====
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
=====
UO-36 UoSAT-12
```

Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: 25636
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

```
The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink:   145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
MO-30 UNAMSAT-2
Catalog Number: 24305
Launch Date: September 5, 1996

Status: Non-operational

Downlink:       435.1380 MHz AFSK 1200 BPS
Downlink:       435.2060 MHz AFSK 1200 BPS
Uplink:         145.8150 MHz AFSK 1200 BPS
Uplink:         145.8350 MHz AFSK 1200 BPS
Uplink:         145.8550 MHz AFSK 1200 BPS
Uplink:         145.8750 MHz AFSK 1200 BPS
[06042009]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Non-operational

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign:       POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012009]
=====
IO-26 ITAMSAT
Catalog number: 22826
```

Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks: 145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink: 145.900 FM 9600-baud FSK

```
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990
```

```
Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
[05012006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: non-operational

Current Mode:  V/u

Uplink:         145.900 MHz FM 1200-baud Manchester FSK (reserved)
                145.920 MHz FM VOICE
                145.940 MHz FM 1200-baud Manchester FSK (reserved)
                145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink:       437.026 MHz USB VOICE
                (1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[07242009]
=====
UO-15 UoSAT-4
Catalog Number: 20438
Launch Date: January 22, 1990

Status: Non-operational

Uplink: ?
Downlink: 435.1250MHz (?)
          435.1200MHz (?)
[06042009]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
```

```
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984

Status: Non-operational.

Current Mode:  /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon:          435.025 MHz
Mode-S Beacon:     2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[01012009]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB
```

Beacon: 145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.8500 - 145.9000 MHz SSB/CW
Downlink 29.4000 - 29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink: 29.4500 - 29.5500 MHz SSB/CW
Beacons: 29.450 MHz
          435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

```
Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon 1:  29.352 MHz (intermittent)
Beacon 2:  29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink:     21.260 to 21.300 MHz CW/USB
Downlink:  145.860 to 145.900 MHz CW/USB

Beacon:    145.860 MHz

Robot:     145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink:   21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon:   29.408 MHz

Robot:    29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-249.S4
WSR 249 Part 4 09/12/2009
```

AMSAT NEWS SERVICE BULLETIN 255.S4
FROM AMSAT HQ SILVER SPRING, MD, September 12, 2009
TO ALL RADIO AMATEURS
BID: $WSR-255.S4

THE FOLLOWING SATELLITES HAVE RE-ENTERED OR HAVE BEEN RETURNED SAFELY:

NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: July 28, 2008

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[01012009]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink: 145.825 Mhz FM APRS AX25
APRS Uplink: 145.825 MHz FM APRS AX25
Voice/PSK31 Uplink: 28.120 MHz

Packet to Voice ID: RAFT
[06112007]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Re-Entered
Re-entered: June 18, 2008

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon: 437.2750 MHz CW

Callsign: JR8YJT
[01012009]
=====
SO-43 Starshine 3
Catalog Number: 26929
Launch Date: September 30, 2001

Status: Re-Entered
Re-entered: January 21, 2003

Beacon: 145.825Mhz
[02212009]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the

President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at} amsat.org
NNNN
/EX

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Via the ANS mailing list courtesy of AMSAT-NA
http://amsat.org/mailman/listinfo/ans

```
From -2113874803359604039
X-Google-Thread: a4a23d5f63,851f0227de8de1a3,start
X-Google-Attributes: gida4a23d5f63,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII
Path: g2news2.google.com!news1.google.com!npeer02.iad.highwinds-media.com!
news.highwinds-media.com!feed-me.highwinds-media.com!nx02.iad01.newshosting.com!
newshosting.com!198.186.194.249.MISMATCH!transit3.readnews.com!news-
xxxfer.readnews.com!news-out.readnews.com!transit4.readnews.com!panix!
rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-256 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Mon, 14 Sep 2009 10:09:19 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 544
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000701ca3540$f201be20$d6053a60$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;charset="iso-8859-1"
Content-Transfer-Encoding: quoted-printable
X-Trace: reader1.panix.com 1252937360 26302 166.84.1.6 (14 Sep 2009 14:09:20 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Mon, 14 Sep 2009 14:09:20 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
```

X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news2.google.com rec.radio.amateur.space:287 rec.radio.info:972

AMSAT NEWS SERVICE
ANS-256

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

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**********************************************************************
* 2009 AMSAT Space Symposium and Annual General Meeting October 9-11 *
*   Four Points Sheraton Hotel at the Baltimore Washington Airport   *
*  Details - http://www.amsat.org/amsat-new/symposium/2009/index.php *
**********************************************************************
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In this edition:
* Sumbandilasat Launch on Track
* September 2009 AO-51 Schedule
* AMSAT Symposium Breaking News: Low Cost Airfare
* Special Event Coinciding with AMSAT Symposium
* Dutch Authorities Propose Rebanding D-STAR Into 70cm Satellite Band
* ARRL/TAPR DCC (Digital Communications Conference) Forum Schedule Announced
* Satellite Shorts From All Over
* ARISS Status - 7 September 2009

SB SAT @ AMSAT $ANS-256.01
Sumbandilasat Launch on Track

AMSAT News Service Bulletin 256.01
  From AMSAT HQ SILVER SPRING, MD.
September 13, 2009
To All RADIO AMATEURS
BID: $ANS-256.01

The latest information on the SA AMSAT web page says that the launch of SumbandilaSat is on track for 15 September 2009. Monitor the web pages at http://www.amsatsa.org.za/index.htm for the latest information.

In an interview with SA AMSAT, Johan Erasmus, SunSpace systems engineer speaking from Baikonur, said that the satellite traveled well and that all system performed to specification during the testing phase. Tests were carried out in the clean room at the Baikonur launch facility in Kazakhstan. "All payloads operated well and we were able to test the amateur payload from a little distance away. The parrot, voice repeater and the voice beacon responded well"

The voice beacon message was recorded by Anton Coetzee, at the time a learner at the Technical High School Kimberley. His message was selected from entries in a competition to find the best message with which to launch SumbandilaSat. It reads: "This is ZSOSUM in space. I am the voice of the South African youth. We are knocking on the door of opportunity, marking our place in the orbit of space research and communication. Hear us!" You can preview the audio message on-line:
http://www.amsatsa.org.za/Anton%20Cotezzee%20Sumbandila%20Sat%20Message.mp3

During the week the butane propulsion system tank was filled and the batteries were charged. On Wednesday 2 September SumbandilaSat was integrated with the launch platform. The main payload, a Russian weather satellite, has also arrived at Baikonur and is currently being integrated into the launch structure. Next week the launch structure will be transported to the launch site and integrated with the Soyuz rocket. "With all now in place we can expect a launch on 15 September", Johan Erasmus said.

A few members of the SunSpace team will remain behind to give the batteries a final charge so that when SumbandilaSat is separated from the final stage of the rocket the batteries are in a healthy state and to remove the last of the protective covers. The focus is now shifting to the ground station at the University of Stellenbosch where the satellite will be commanded approximately 30 minutes after separation and three hours into the flight.

An intensive period of payload qualification will follow during which each system will be tested. This is expected to take up to 3 months after which the command will shift to the CSIR's Satellite Application Centre at Hartebeeshoek, north of Pretoria.

Once the main payload, a Multi-spectral imager which has a 6.25m Ground Sampling Distance (GSD) with 6 spectral bands and is supported by an on-board storage of 24 Giga byte of memory and a main downlink of 72 Mb/s is fully put into service, will a schedule be set up according to which the various experimental payloads on board will be operated.

FREQUENCIES Mode VU FM voice Transponder and Parrot

Uplink	145.880 MHz
Downlink	435.350 MHz

Voice Beacon 435.300 MHz

AMATEUR OPERATION OF ZS0SUM PAYLOAD

+ The details of the CTCSS tones will be made available after the payload has been commissioned.

+ On receipt of a "X" CTCSS tone the control unit will command the satellite in the transponder mode.

+ On receipt of a "Y" CTCSS tone the control unit will command the satellite in the parrot mode.

+ If for a period no tones are received, the system will activate a voice beacon.

[ANS thanks SA AMSAT for the above information and sends our congratulations and best wishes for a successful mission]

/EX

SB SAT @ AMSAT $ANS-256.02
September 2009 AO-51 Schedule

AMSAT News Service Bulletin 256.02
From AMSAT HQ SILVER SPRING, MD.
September 13, 2009
To All RADIO AMATEURS
BID: $ANS-256.02

All 435.150 repeater downlinks are subject to interruption for telemetry, generally one AM pass/day over the eastern US

August 31 - September 7 (~1200Z)

FM Repeater, V/U
Uplink: 145.920 MHz FM
Downlink: 435.300 MHz FM

FM Repeater, L/U
Uplink: 1268.700 MHz FM
Downlink: 435.150 MHz FM

September 7 - September 13

FM Repeater, V/U
Uplink: 145.920 MHz FM
Downlink: 435.300 MHz FM

9k6 BBS, L/U
Uplink: 1268.700 MHz 9k6 FM
Downlink: 435.150 MHz 9k6 FM

September 14 - September 20

FM Repeater, V/U
Uplink: 145.920 MHz FM
Downlink: 435.300 MHz FM

QRP Only FM Repeater, V/U
(<10 watts and hand held or omni antennas only)
Uplink: 145.880 MHz FM
Downlink: 435.150 MHz FM

September 21 - September 27

FM Repeater, V/U
Uplink: 145.920 MHz FM
Downlink: 435.300 MHz FM

9k6 BBS, L/U
Uplink: 1268.700 MHz 9k6 FM
Downlink: 435.150 MHz 9k6 FM

September 28 - October 4

FM Repeater, V/U
Uplink: 145.920 MHz FM
Downlink: 435.300 MHz FM

QRP Only FM Repeater, V/U and College Radio Night (October 1-2)
(<10 watts and hand held or omni antennas only)
Uplink: 145.880 MHz FM
Downlink: 435.150 MHz FM

October 5 - October 11 AMSAT Symposium week

FM Repeater, V/U
Uplink: 145.920 MHz FM
Downlink: 435.300 MHz FM

9k6 BBS, L/U
Uplink: 1268.700 MHz 9k6 FM
Downlink: 435.150 MHz 9k6 FM

[ANS thanks Mark,N8MH, for the above information]

/EX

SB SAT @ AMSAT $ANS-256.03
AMSAT Symposium Breaking News: Low Cost Airfare

AMSAT News Service Bulletin 256.03
  From AMSAT HQ SILVER SPRING, MD.
September 13, 2009
To All RADIO AMATEURS
BID: $ANS-256.03

The 2009 AMSAT Symposium is rapidly approaching! And we hope you can join us..especially given that there are some low-cost airfares out there for those of us in the US.

We have an outstanding venue this year at the Four Points Sheraton at the BWI Airport. Your symposium committee recently did a walkthrough of this facility. The accommodations and meeting rooms are superb. I do a lot of traveling and I must say that the rooms are absolutely beautiful. You will definitely get a substantial bang for your buck (or Euro, etc) at this symposium. And planned 40th Anniversary celebratory events will be truly memorable.

And to make things even better, Southwest Airlines has a phenomenal Nationwide (US) fall sale. $59-109 one-way airfares are available to BWI until Sept 3. And remember, with Southwest, there are no baggage fees.

Also, Airtran has a sale to and from BWI until September 17. $39-119 with a 10 day advance purchase. Sign up now to get the best fares before they are taken by others.

Airtran does charge for checked luggage.

We will be posting the Symposium agenda this week. For planning purposes, the BoD meeting starts Thursday morning and runs until noon Friday. The symposium starts at 1 pm Friday and runs until noon Sunday. The AMSAT annual meeting with be Saturday afternoon. And there will be an ARISS ops meeting (all are invited) on Sunday. The 40th anniversary celebration is Friday night and the Banquet is Saturday night.

So we'd love to see you in "Charm City"-Baltimore Maryland..for the symposium presentations, 40th anniversary celebrations, poster sessions, and BoD meeting.

And don't forget to submit a symposium paper to Dan Schultz, N8FGV, ASAP!!

Frank Bauer, KA3HDO, and Janet Bauer
2009 Symposium Co-Chairs

[ANS thanks Frank and Janet for the above information]

/EX

SB SAT @ AMSAT $ANS-256.04
Special Event Coinciding with AMSAT Symposium

AMSAT News Service Bulletin 256.04
  From AMSAT HQ SILVER SPRING, MD.
September 13, 2009
To All RADIO AMATEURS

BID: $ANS-256.04

Those of you into Edgar Allan Poe.there is a special treat if you come to this year's symposium. The famous poet is celebrating his 200th birthday this year. He lived in Baltimore for several years and died and was buried in the city. And there is a Poe Museum at the Baltimore house he lived in before his death.

The year-long commemoration of Poe will culminate with a recreation of his funeral that occurs around the Symposium dates. Poe died on October 7, 1849. There will be a recreation of a wake for Poe from noon to 11 pm at the Poe House. This will be followed up with a mock-funeral for Poe on Sunday October 11 (12:30 and 4:30). John Astin (Gomez Addams from the Addams family fame) will officiate the funeral services.

If you want more information on this, go to the following web sites:

www.nevermore2009.com

www.poebicentennial.com

www.annabelleetavern.com   This "all Poe" tavern was named after one of Poe's last poems.a virtual shrine to Edgar Allan Poe with his poetry covering the walls.

www.westminsterhall.org Where he is buried.and where a mystery man dresses in black leaves a bottle of cognac and three red roses on Poe's birthday.

If you didn't know it before, now you know why the Baltimore Football team is called the Ravens...

73, Frank Bauer, KA3HDO
2009 AMSAT Symposium Co-Chair

[ANS thanks Frank, KA3HDO, for the above information]

/EX

SB SAT @ AMSAT $ANS-256.05
Dutch Authorities Propose Rebanding D-STAR Into 70cm Satellite Band

AMSAT News Service Bulletin 256.05
  From AMSAT HQ SILVER SPRING, MD.
September 13, 2009
To All RADIO AMATEURS
BID: $ANS-256.05

Information received from the Netherlands this week indicated a growing threat to frequencies allocated and used by the Amateur Satellite Service.

Worldwide, including the Netherlands, amateur use of frequencies in many portions of the 70cm band are allocated as secondary users. The threat arises from proposals to move the output frequency band of terrestrial D-STAR repeaters from the 439-440 MHz range down to 437-438 MHz. Dutch regulators have halted amateur D-STAR repeater licensing in that country because they plan to reallocate 439.500 MHz and upward to the Differential GPS (DGPS) service.

Despite protest from Dutch amateur radio operators, amateur clubs in the surrounding countries, and regulators in nearby countries it seems as if the Dutch authorities are still planning on this frequency re-allocation to favor DGPS operation in violation of ITU allocations.

If completed this reallocation of the terrestrial D-STAR repeater outputs would place them right in the downlink band of the Amateur Satellite Service. This would have immediate operational impact on European amateur satellite stations. Longer term it may open the door for future infringement on satellite operations in other countries.

[ANS thanks Geert Jan, PE1HZG for the above information]

/EX

SB SAT @ AMSAT $ANS-256.06
ARRL/TAPR DCC (Digital Communications Conference) Forum Schedule Announced

AMSAT News Service Bulletin 256.06
  From AMSAT HQ SILVER SPRING, MD.
September 13, 2009
To All RADIO AMATEURS
BID: $ANS-256.06

TAPR is the premiere national digital organization covering all digital voice & data technologies and digital techniques such as SDR. More information about TAPR can be found at: www.tapr.org

TAPR is active throughout the year. At the Dayton Hamvention TAPR sponsors a digital forum and a joint banquet with AMSAT. TAPR publishes a quarterly journal, the PSR and develops digital techniques such as SDR. TAPR holds in conjunction with the ARRL an annual national Digital Communication Conference. You can follow TAPR's activities, events & updates regularly on Twitter at: www.twitter.org/taprdigital

The ARRL/TAPR DCC (Digital Communications Conference) will be held on September 25 - 27, 2009 again in the northwest suburbs of Chicago at the Elk Grove Village Holiday Inn near O'Hare airport with a free hotel shuttle bus.

The DCC has something for everyone from those new to digital modes to those experienced with digital communications. The DCC has 2 full days of Technical forums on Friday & Saturday. On Saturday there is an additional concurrent track of Introductory forums. On Sunday morning there is a 1/2 day technical session which is a deep dive into one or more digital topics, such as SDR.

The DCC is well known for introducing new technologies & concepts. This year presentations include:

- Two Ham DTV, Digital Television presentations by Art, WA8RMC & Ken, W6HHC.
- "Use of Digital Communications at the Marine Corps Marathon in Washington D.C." by Tom, N4ZPT.
- "Universal Ham Radio Text Messaging" by Bob Bruninga, WB4APR, creator of APRS.

After the Friday night social we plan to have another D-STAR get together.

The Saturday night banquet speaker will be Bill Brown, WB8ELK. Bill is a pioneer in flying BalloonSats, balloons with payloads including amateur radio digital communication technologies.

You can learn more about the DCC & register on-line at: www.tapr.org/dcc
Registration is preferred prior to September 17th for planning purposes, but walk-in registrations will be accepted.

If you can't attend the DCC the Proceedings can be purchased at the TAPR web site at: www.tapr.org/pub_dcc.html

Starting last year, 2008 and continuing this year DCC presentations are being recorded by Amateur Radio Video News. DVDs of the presentations are available at: http://www.arvideonews.com

If you have any questions you can reach the TAPR Office at:
taproffice@tapr.org

Look forward to seeing many of you at the DCC.

73, Mark, WB9QZB
DCC Local Co-Host
Chicago, IL

The 2009 DCC forum & speaker schedule is attached & is available online at the TAPR web site at:
http://www.tapr.org/pdf/DCC_2009_Schedule_Preliminary2009-09-08.pdf

[ANS thanks Mark, WB9QZB, for the above information]

/EX

SB SAT @ AMSAT $ANS-256.07

Satellite Shorts From All Over

AMSAT News Service Bulletin 256.07
From AMSAT HQ SILVER SPRING, MD.
September 13, 2009
To All RADIO AMATEURS
BID: $ANS-256.07

+ FO-29 Control Team operator Yutaka Murata, JA1COU says that data analysis and recovery efforts continued this week. The control team confirms their suspicion that FO-29's outage is caused by the long eclipse periods currently encountered. FO-29 is only commanded on when it is over Japan although with luck it may remain on depending on illumination of its solar panels and be heard elsewhere. If you capture any telemetry from FO-29 over your location please forward your data via e-mail to lab (at) jarl.or.jp and include your QTH, date and time.

+ Allen, KK4AK plans to active on the FM satellites from the mountains of North Carolina (Grid EM96) this coming week.

+ Operating from the Hawaiian Island of Kauai W6ZQ made contact with stations in Hawaii, Alaska, and the US mainland via AO-51.

+ Luc, VE2DWE has made available a recording of his experimentation using D-STAR through the AO-27 satellite. He reports using an uplink frequency of 436.797 MHz and monitored downlink audio on 145.850 MHz. The entire recording can be heard at Luc's website: http://www.qsl.net/ve2dwe/

+ http://spacesat.blogspot.com/2009/08/uma-noite-memoravel-no-ao-7.html is the link to a video of AO-7 DX operations posted by Piraja, PS8RF.

[ANS thanks everyone for the above information]

/EX

SB SAT @ AMSAT $ANS-256.08
ARISS Status - 7 September 2009

AMSAT News Service Bulletin 256.08
From AMSAT HQ SILVER SPRING, MD.
September 13, 2009
To All RADIO AMATEURS
BID: $ANS-256.08

1. ARISS Contact with Craigmore High School

On Wednesday, September 2, an Amateur Radio on the International Space Station (ARISS) contact was held between Craigmore High School in Blakeview, South Australia and Expedition 20 Astronaut Frank De Winne, ON1DWN, on the ISS. An audience of 40 people gathered for the event and one newspaper provided media coverage.

2. ESA Astronaut De Winne Speaks with Vrije Basisschool, Belgium

On Thursday, September 3, Frank De Winne, ON1DWN, participated in an Amateur Radio on the International Space Station (ARISS) contact with Vrije Basisschool in De Haan, Belgium via telebridge station VK4HZ in Australia. De Winne answered twenty-two questions posed to him by the students. Approximately 240 students, teachers and parents as well as radio, television and newspaper reporters attended the event. The audio was fed into the EchoLink AMSAT and JK1ZRW servers. This was a European Space Agency (ESA) event. Students who participated in the ARISS contact were chosen through an ESA competition.

3. ARISS Contact with ESA/ESOC Successful

An Amateur Radio on the International Space Station (ARISS) contact was held at the European Space Agency (ESA)/European Space Operation Centre (ESOC) in Darmstadt, Germany on Friday, September 4 via telebridge station LU8YY in Argentina. The contact was held during an open day event, �The Long Night of the Stars.� Students from a local school, �Schuldorf Bergstrasse,� in Seeheim participated in the contact. Astronauts Robert Thirsk, Frank de Winne and Christer Fuglesang took turns answering eleven questions posed to them. An audience of 200 gathered at the stage for the contact and several audio and video links were provided for all the visitor rooms of the Open Day event at ESOC, so that an additional 750 visitors could connect to the contact. The event was covered by the television station Hessischer Rundfunk HR3, the radio station HR-Info Radio Hessischer Rundfunk Frankfurt and two newspapers, Frankfurter Rundschau and Darmstaedter Echo. There was also a live coverage via the Internet (Kosmologs) and five freelance journalists were present. The audio was also fed into the EchoLink AMSAT and JK1ZRW servers.

4. Stockholm Students Question Fuglesang via ARISS Contact

On Sunday, September 6, students from S�traskolan in Sk�rholmen, Stockholm, Sweden participated in an Amateur Radio on the International Space Station (ARISS) contact via telebridge station LU8YY in Argentina. STS-128 Mission Specialist Christer Fuglesang, KE5CGR, answered 14 questions as an audience of 400 gathered for the contact. Media covered the event and the audio was fed into the EchoLink AMSAT and JK1ZRW servers.

5. Astronaut Training Status

Astronaut Tracy Caldwell is scheduled for an Amateur Radio on the International Space Station (ARISS) licensing session on Wednesday, September 9. Caldwell is scheduled to fly with Expedition 23 in April

2010.

[ANS thanks Carol, KB3LKI, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Lee McLamb, KU4OS
ku4os at amsat dot org

____
Via the ANS mailing list courtesy of AMSAT-NA
http://amsat.org/mailman/listinfo/ans

```
From -2528483358452193558
X-Google-Thread: a4a23d5f63,bee045574259bd97,start
X-Google-Attributes: gida4a23d5f63,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news2.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx02.iad01.newshosting.com!newshosting.com!
198.186.194.249.MISMATCH!news-out.readnews.com!transit3.readnews.com!panix!
rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR=261 AMSAT Weekly Satellie Report
Followup-To: rec.radio.amateur.space
Date: Thu, 17 Sep 2009 23:12:25 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 1714
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <001701ca380d$cee588c0$6cb09a40$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1253243545 28875 166.84.1.6 (18 Sep 2009 03:12:25 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Fri, 18 Sep 2009 03:12:25 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
```

X-RRI-Info-2: Send technical complaints to   rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news2.google.com rec.radio.amateur.space:288 rec.radio.info:977

This report is organized into four (4) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - deborbited/returned satellites

SB SAT @ AMSAT W8ISS $WSR-261.S1
WSR 261 Part 1 09/18/2009

AMSAT NEWS SERVICE BULLETIN 261.S1
FROM AMSAT HQ SILVER SPRING, MD, September 18, 2009
TO ALL RADIO AMATEURS
BID: $WSR-261.S1

DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008

Status: Operational
Current Mode: Science Mode - Beacon ONLY

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink: 435.530 to 435.570 MHz

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68
[02122009]
=====
VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:

Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.859330 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is active. Each transponder has a different beacon.
[08072008]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: System Reload in progress

Current Modes:
FM Repeater ONE
Uplink: 145.920 Mhz FM
Downlink: 435.300 Mhz FM
FM Repeater TWO (QRP ONLY)
Uplink: 145.880 MHz FM
Downlink: 435.150 MHz FM
BBS
Uplink: OFF
Downlink: OFF
Telemetry
Downlink: OFF

Analog voice downlink: 435.300 MHz FM
                           435.150 MHz FM
                          2401.200 Mhz FM
Analog voice uplink: 145.860 MHZ FM
                           145.880 MHz USB
                           145.920 MHz FM
                          1268.700 MHz FM
Digital Downlinks: 435.150 MHz FM 38k4 PBP, 1 watt output
                           435.150 MHz FM 9k6 Pacsat Broadcast Protocol
                          2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Pacsat Broadcast Protocol
                          1268.700 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon: 435.150 MHz

```
Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[09182009]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002

Status: Operational

Current Mode: V/u

Uplink:   145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4
Hz. The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute
   timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the re-
   peater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset
   the 10 minute timer.
[05282007]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: RECOVERY
Current Mode: V/u (Mode JA)
```

```
Voice/CW (Mode JA)
Uplink:   145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon:   435.795 MHz

Digital Mode JD
Uplinks:  145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage:
http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's
CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/
fo29cwts.htm
[09062009]
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993

Status: Operational

Current Mode: V/u

Uplink:   145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[03232009]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974
```

Status: Operational

Current Mode: Alternating between Mode A and B every 24 hours

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz CW
145.972 MHz CW
435.100 MHz CW
2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
[02122009]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - V/u
Voice - V/v
BBS - V/v
APRS - V/v
SSTV - V/v

Expedition 21 Crew:

Commander:	Gennady Padalka	RN3DT
Flight Engineer:	Michael Barratt	KD5MIJ
Flight Engineer:	Robert Thirsk	VA3CSA
Flight Engineer:	Roman Romanenko	
Flight Engineer:	Frank De Winne	ON1DWN
Flight Engineer:	Nicole P. Stott	KE5GJN

Available Modes and Frequencies:

Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM

Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[09122009]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-261.S2
WSR 261 Part 2 09/18/2009

AMSAT NEWS SERVICE BULLETIN 261.S2
FROM AMSAT HQ SILVER SPRING, MD, September 18, 2009
TO ALL RADIO AMATEURS
BID: $WSR-261.S2

Pollux
Catalog Number:
Launch Date: July 31, 2009

Status: Operational

Downlink: 145.825MHz 1k2 AX.25
[07312009]
=====

```
Castor
Catalog Number:
Launch Date: July 31, 2009

Status: Operational

Downlink: 145.825 MHz 1k2 AX.25
[07312009]
=====
BEVO-1 (DRAGONSAT-1)
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Operational

Downlink: 437.325 MHz 9k6 GMSK
          437.325 MHz CW 20wpm
[07312009]
=====
AggieSat2 (DRAGONSAT-2)
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Operational

Downlink: 436.250 MHz 9k6
[07312009]
=====
CP-6
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Commissioning

Downlink: 437.365 MHz 1k2 AFSK
[06052009]
=====
HAWKSAT 1
Catalog number: 35003
Launch Date: May 19, 2009

Status: ?

Downlink: 437.345 ?
[06052009]
=====
Pharmasat
Catalog Number: 35002
Launch Date: May 19, 2009
Status: Commissioning

Downlink: 437.465 MHz 1k2 AFSK
[06052009]
```

```
=====
ANUSAT
Catalog Number: 34808
Launch Date: April 20, 2009

Status: ?

Downlink:  435.000 MHz
Uplink:    145.800 MHz

Telemetry: 137.400 MHz
[05112009]
=====
SOHLA-1 (ASTRO TECH.)
Catalog Number: 33496
Launch Date: January 23, 2009

Status: Commisioning

Proposed Frequencies and Modes:
Downlink: 437.505 MHz AFSK/CW
Beacon:   437.505 MHz AFSK/CW

Callsign:

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=101
[03232009]
=====
KAGAYAKI (Solan Co.)
Catalog Number: 33495?
Launch Date: January 23, 2009

Status: In Orbit

Downlink: 437.375 MHZ    FSK9k6/CW
Beacon:   437.375 MHz    FSK9k6/CW

IARU coordination status page:

AMSAT-NA webpage:

[01152009]
=====
STARS (Kagawa Univ.) (Twin Satellites)
Catalog Number: 33498
Launch Date: January 23, 2009

Status: Operational ?

Downlinks: 437.485 MHz FM/CW
           437.465 MHz FM/CW
Beacons:   437.305 MHz FM/CW
```

437.275 MHz FM/CW

Callsigns: JR5YBN
JR5YBO

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=99

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=121&retURL=/satellites/status.php
[022152009]
=====
KKS-1 (Tokyo MCIT)
Catalog Number: 33499
Launch Date: January 23, 2009

Status: Operational

Downlink: 437.455 MHz AFSK/CW
Beacon: 437.385 MHz AFSK/CW

Callsign: JQ1YYY

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=107

AMSAT-NA webapge:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=120&retURL=/satellites/status.php
[02212009]
=====
PRISM (Tokyo Univ.)
Catalog Number: 33493
Launch Date: January 23, 2009

Status: Operational ?

Downlink: 437.425 MHz AFSK/GMSK/CW
Beacon: 437.250 MHz AFSK/GMSK/CW

Callsign: JQ1YCX

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=97

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=119&retURL=/satellites/status.php
[02212009]
=====
RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number: 32953

Launch Date: May 23, 2008

Status: Operational

Curent Modes: Telemetry
              Audio
              Images

Downlinks: 435.315 MHz
           435.215 MHz

AMSAT-NA website:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=115&retURL=/satellites/status.php

Official website:
http://www.npopm.com/?cid=leoca&caid=43
[02122009]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=94&retURL=/satellites/status.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=72
[02122009]
=====
CP3
Catalog Number: 31129
Launch Date: April 17,2007

Status: Operational

Current Mode: /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[02122009]
=====

GENESAT-1
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Current Mode: /u

Callsign: KE7EGC

Telemetry Beacon Downlink: 437.0695 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[091512009]

=====

CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon: 437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/xivpicte.htm
[02212009]

=====

CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003

Status: ?????

Current Mode: /u

Beacon: 436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=96&retURL=/satellites/status.php

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[06082009]

```
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Operational?

Uplink:  1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=56
[02122009]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: System Reload in Progress

Current Modes:
FM Repeater ONE
Uplink:    145.920 Mhz FM
Downlink:  435.300 Mhz FM
FM Repeater TWO (QRP ONLY)
Uplink:    145.880 MHz FM
Downlink:  435.150 MHz FM
BBS
Uplink:    OFF
Downlink:  OFF
Telemetry
Downlink:  OFF

Analog voice downlink:     435.300 MHz FM
                           435.150 MHz FM
                          2401.200 Mhz FM
Analog voice uplink:       145.860 MHZ FM
                           145.880 MHz USB
                           145.920 MHz FM
                          1268.700 MHz FM
Digital Downlinks:         435.150 MHz FM 38k4 PBP, 1 watt output
                           435.150 MHz FM 9k6 Pacsat Broadcast Protocol
                          2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:            145.860 MHz FM 9k6 Pacsat Broadcast Protocol
                          1268.700 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon:                    435.150 MHz
```

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[09182009]
=====
QuakeSat
Catalog Number: 27845
Launch Date: June 30, 2003

Status: Telemetry only

Current Mode: 9600 baud data packet

Mode U packet
Downlink: 436.675 MHz 9k6 BPS

Quakesat webpage:
http://www.quakefinder.com/services/quakesat-ssite/
[04272009]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=69&retURL
=/satellites/status.php
[02212009]
=====
NO-44 PCSAT

```
Catalog number: 26931
Launch Date: September 30, 2001

Status: Telemetry only

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink:        144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[03302009]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Telemetry only

Current Modes:
Telemetry : /u

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign:       4XTECH-12

More information of GO-32 can be found at:
http://asri.technion.ac.il/techsat/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=14&retURL
=/satellites/status.php
[04272009]
=====
RS-22 RADIO SPORT RS-22
Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only

Current Mode:  /u
```

```
CW Beacon - 435.352 MHz
            145.818 MHz

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=76&retURL
=/satellites/status.php
[02212009]
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990

Status: CW Beacon only

Uplinks:          145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink:      437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[03162009]
=====
CanX-2
Catalog number: 32790
Launch Date: April 28, 2008

Status: Operational in range of ground station only

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web
page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[02212009]
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.425 MHz 1k2 baud packet
```

For the latest project status update please visit the AAUSAT-II web page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[02212009]
=====
CO-65 CUTE-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008

Status: Digipeater

```
Downlink:  437.475 MHz 9k6 Packet
Uplink:   1267.600 Mhz
```

Telemetry Beacon:
Downlink: 437.2750 MHz CW

For the latest project status update please visit the Cute-1.7+APD II web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78

Command Station blog website:
http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=112&retURL=/satellites/status.php
[02212009]
=====
Compass-1
Catalog number: 32787
Launch Date: April 28, 2008

Status: Operational

Current Mode: 4k8 MSK packet

```
Uplink:   145.980 MHz FM
Downlink: 437.275 Mhz CW
          437.405 MHz Packet
```

For the latest project status update please visit the Compass 1 web page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52

AMSAT-NA webpage:

http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=114&retURL=/satellites/status.php
[04272009]
=====
CO-66 Seeds II
Catalog number: 32791
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.485 MHz

Callsign: JQ1YGU

For the latest project status update please visit the Seeds 2 web page: http://cubesat.aero.cst.nihon-u.ac.jp/english/seeds_2_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=113&retURL=/satellites/status.php
[02212009]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - V/u
Voice - V/v
BBS - V/v
APRS - V/v
SSTV - V/v

Expedition 21 Crew:

Commander:	Gennady Padalka	RN3DT
Flight Engineer:	Michael Barratt	KD5MIJ
Flight Engineer:	Robert Thirsk	VA3CSA
Flight Engineer:	Roman Romanenko	
Flight Engineer:	Frank De Winne	ON1DWN
Flight Engineer:	Nicole P. Stott	KE5GJN

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM

Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[09122009]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-261.S3
WSR 261 Part 3 09/18/2009

AMSAT NEWS SERVICE BULLETIN 261.S3
FROM AMSAT HQ SILVER SPRING, MD, September 18, 2009
TO ALL RADIO AMATEURS
BID: $WSR-261.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

CP4
Catalog Number: 31122
Launch Date: April 17,2007

Status: Non-Operational

```
Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon:    437.325 MHz CW

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=79
[10022008]
=====
LIBERTAD-1
Catalog Number: 31128
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink:   145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[02122009]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: Non-Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder:  145.825 Mhz FM
[01012009]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency:  437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005
```

Status: Non-operational

Voice Uplink: 437.250 MHz FM 67Hz CTCSS
Voice Downlink: 2401.835 MHz FM
Packet Up/Downlink: 437.250 MHz 9k6 packet
Packet Downlink   2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non-Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[08132007]
=====
CANX-1
Catalog Number: 27847
Launch Date: June 30, 2003

Status: Non-Operational

Downlink: 437.8800 MHz AFSK 1k2bps
[06052009]
=====
DTUSAT
Catalog Number: 27842
Launch Date: June 30, 2003

Status: Non-Operational

Current Mode: 2k4 AFSK Packet last reported

Downlink: 437.475MHz

Officail webpage: http://dtusat1.dtusat.dtu.dk/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=101&retURL
=satellites/all_oscars.php
[02212009]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)

Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Telemetry only

Uplinks: 145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial land and weather imaging payloads offers FM and FSK
Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as
a collaborative effort between the Malaysian government and Surrey
Satellite Technology Ltd.
[03302009]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

```
Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS:                SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink:   145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
V-band:   145.840 -  145.990 MHz CW/LSB
U-band:   435.550 -  435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks
---------
S2-band:  2401.225 -  2401.475 MHz CW/USB
K-band:  24048.010 - 24048.060 MHz CW/USB
Beacon:   2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)
----------------------------
BEACON   General Beacon(GB)  Middle Beacon(MB)  Engineering Beacon(EB)
2 m                    none        145.898 MHz                    none
70cm            435.438 MHz        435.588 MHz             435.838 MHz
13cm(1)        2400.188 MHz       2400.338 MHz            2400.588 MHz
13cm(2)        2401.173 MHz       2401.323 MHz            2401.573 MHz
3cm           10450.975 MHz      10451.125 MHz           10451.375 MHz
```

```
1.5cm        24047.885 MHz      24048.035 MHz           24048.285 MHz
[07162007]
=====
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink:    145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: 25636
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater:         436.250 MHz

Uplinks: Mode B Repeater:  145.825 MHz
Mode J Digipeater:         145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only
```

```
Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink:   145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
MO-30 UNAMSAT-2
Catalog Number: 24305
Launch Date: September 5, 1996

Status: Non-operational

Downlink:       435.1380 MHz AFSK 1200 BPS
Downlink:       435.2060 MHz AFSK 1200 BPS
Uplink:         145.8150 MHz AFSK 1200 BPS
Uplink:         145.8350 MHz AFSK 1200 BPS
Uplink:         145.8550 MHz AFSK 1200 BPS
Uplink:         145.8750 MHz AFSK 1200 BPS
[06042009]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Non-operational
```

```
Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign:       POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012009]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational
```

```
Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HL01-11
BBS: HL01-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
```

```
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
[05012006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: non-operational

Current Mode:  V/u

Uplink:         145.900 MHz FM 1200-baud Manchester FSK (reserved)
                145.920 MHz FM VOICE
                145.940 MHz FM 1200-baud Manchester FSK (reserved)
                145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink:       437.026 MHz USB VOICE
                (1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[07242009]
=====
UO-15 UoSAT-4
Catalog Number: 20438
Launch Date: January 22, 1990
```

```
Status: Non-operational

Uplink: ?
Downlink: 435.1250MHz (?)
          435.1200MHz (?)
[06042009]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984

Status: Non-operational.

Current Mode:  /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon:          435.025 MHz
Mode-S Beacon:     2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP
```

```
Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[01012009]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon:   145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink  29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
Beacons:   29.450 MHz
          435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon 1:  29.352 MHz (intermittent)
Beacon 2:  29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink:     21.260 to 21.300 MHz CW/USB
Downlink:  145.860 to 145.900 MHz CW/USB

Beacon:    145.860 MHz

Robot:     145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991
```

```
Status: Non-operational

Uplink:   21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon:   29.408 MHz

Robot:    29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-261.S4
WSR 261 Part 4 09/18/2009

AMSAT NEWS SERVICE BULLETIN 261.S4
FROM AMSAT HQ SILVER SPRING, MD, September 18, 2009
TO ALL RADIO AMATEURS
BID: $WSR-261.S4

THE FOLLOWING SATELLITES HAVE RE-ENTERED OR HAVE BEEN RETURNED SAFELY:

NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: July 28, 2008

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[01012009]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007
```

Main Downlink: 145.825 Mhz FM APRS AX25
APRS Uplink: 145.825 MHz FM APRS AX25
Voice/PSK31 Uplink: 28.120 MHz

Packet to Voice ID: RAFT
[06112007]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Re-Entered
Re-entered: June 18, 2008

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon: 437.2750 MHz CW

Callsign: JR8YJT
[01012009]
=====
SO-43 Starshine 3
Catalog Number: 26929
Launch Date: September 30, 2001

Status: Re-Entered
Re-entered: January 21, 2003

Beacon: 145.825Mhz
[02212009]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)

* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at}
amsat.org
NNNN
/EX

From -1609602906649732091
X-Google-Thread: a4a23d5f63,7096aea1071c4794,start
X-Google-Attributes: gida4a23d5f63,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news1.google.com!newsfeed2.dallas1.level3.net!
news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-270 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sat, 26 Sep 2009 21:20:08 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 428
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <001101ca3f10$a0f52f10$e2df8d30$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
    charset="us-ascii"

Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1254014409 14824 166.84.1.6 (27 Sep 2009 01:20:09 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 27 Sep 2009 01:20:09 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to   rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to   rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news2.google.com rec.radio.amateur.space:289 rec.radio.info:999

AMSAT NEWS SERVICE
ANS-270

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

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**********************************************************************
* 2009 AMSAT Space Symposium and Annual General Meeting October 9-11 *
*   Four Points Sheraton Hotel at the Baltimore Washington Airport   *
*  Details - http://www.amsat.org/amsat-new/symposium/2009/index.php *
**********************************************************************
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In this edition:

- Two Weeks and Counting to 2009 AMSAT-NA Space Symposium
- ARISSat-1 Structure Drawings Available on AMSAT Web
- SumbandilaSat Reaches Orbit - Awaiting Commissioning
- Four New University Cubesats in Orbit and Heard on 70cm
- College Night on Satellites Coming October 1-2
- Satellite Operators Sought for Shortwave Broadcast Interview
- Satellite Shorts From All Over

SB SAT @ AMSAT $ANS-270.01
Two Weeks and Counting to 2009 AMSAT-NA Space Symposium

AMSAT News Service Bulletin 270.01
>From AMSAT HQ SILVER SPRING, MD.
September 27, 2009
To All RADIO AMATEURS

BID: $ANS-270.01

Co-Chairs, Frank Bauer, KA3HDO, and Janet Bauer remind you that the 2009 AMSAT Symposium is rapidly approaching! And we hope you can join us, especially given that there are some low-cost airfares out there for those of us in the US.

We have an outstanding venue this year at the Four Points Sheraton at the BWI Airport. Your symposium committee recently did a walk through of this facility. The accommodations and meeting rooms are superb. Frank said, "I do a lot of traveling and I must say that the rooms are absolutely beautiful. You will definitely get a substantial bang for your buck (or Euro, etc.) at this symposium. And planned 40th Anniversary celebratory events will be truly memorable".

+ Free internet in the rooms and in the conference facility
+ Free parking
+ All AMSAT member get free admittance to the 40th Anniversary Party
  Friday Evening---food, cake, meet 'n greet, eyeball QSOs.
+ Beautiful flat screen televisions in each room
+ Great Banquet Speaker--- Martin Collins, Smithsonian Institution
  National Air and Space Museum Curator, Space History Museum, "Making
  the Space Age, the First 50 years"
+ High-Caliber paper presentations on recent Satellite Developments
  and satellite operations
+ Poster Session with Satellite, University, and ARISS activities.
+ An AMSAT 40th anniversary retrospective is included
+ IARU Satellite Forum
+ ARISS Operations Team Meeting---ARISS team members and new volunteers
  are welcome to attend
+ Great prizes from major ham radio manufacturers

Full details are available on-line:
http://www.amsat.org/amsat-new/symposium/2009/index.php
The Symposium Schedule and list of presentations has been posted.

You can now register online for the 2009 AMSAT Space Symposium and Annual Meeting: http://www.amsat-na.com/store2/SymposiumReg2009.php Online registration will disappear on October 5th so do not wait too long!

Our guest speaker is Dr. Martin Collins from the the Smithsonian Air and Space Museum. He will talk on "Making the Space Age: The First Fifty Years".

Follow the links from the Symposium page to book your room at the hotel. An 800 number is also available. When booking your room let the operator know that you are with the Radio Amateur Satellite Corporation for the special rates. (They don't seem to know about AMSAT.) Please be advised that the cut-off date for the AMSAT block at the Four Points by Sheraton BWI Airport is September 28th. Getting our meeting rooms for free is dependant on the number of room nights we secure. So, PLEASE make your room reservations as soon as possible.

Contact Mark Steiner, K3MS (k3ms@amsat.org) if you are interested in preparing a poster display. Mark needs the following information by Tuesday, Oct. 6 regarding what you will need for your display:

+ Square footage of floor space
+ Number of tables (to be provided by hotel)
+ If a power drop is needed
+ Any other special needs

[ANS thanks Frank Bauer, KA3HDO, and Janet Bauer for the above information]

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SB SAT @ AMSAT $ANS-270.02
ARISSat-1 Structure Drawings Available on AMSAT Web

AMSAT News Service Bulletin 270.02
>From AMSAT HQ SILVER SPRING, MD.
September 27, 2009
To All RADIO AMATEURS
BID: $ANS-270.02

Drawings of the ARISSat-1 structure are available on the AMSAT web site. Bob Davis, KF4KSS and team have done an outstanding job designing this structure around the existing modules for SuitSat-2.

There will be a full scale model of ARISSat-1 at the Symposium as well as working hardware. Bob expects to start cutting metal for the structure next week.

[ANS thanks Gould, WA4SXM for the above information]

/EX

SB SAT @ AMSAT $ANS-270.03
SumbandilaSat Reaches Orbit - Awaiting Commissioning

AMSAT News Service Bulletin 270.03
>From AMSAT HQ SILVER SPRING, MD.
September 27, 2009
To All RADIO AMATEURS
BID: $ANS-270.03

South Africa's SumbandilaSat satellite is now in orbit after a successful liftoff aboard a Soyuz rocket from the Baikonur Cosmodrome in Kazakhstan on September 16. The main payload is a multi-spectral imager, but the satellite also carries an Amateur Radio component consisting of a 2 meter/70 cm FM repeater.

After SumbandilaSat is fully commissioned, the repeater will be activated with an uplink at 145.880 MHz and a downlink at 435.350 MHz; there will also be a voice beacon at 435.300 MHz. The transponder mode will be controlled by a CTCSS tone on the uplink frequency. The CTCSS tone frequencies have yet to be announced.

SumbandilaSat was sponsored by the Department of Science and Technology and was built at SunSpace in cooperation with the Stellenbosch University.

SumbandilaSat has responded by returning its first telemetry. Testing now involves a period of payload qualification to verify operation of each subsystem. This may require 3 months before the satellite continues with the remainder of its mission and opens for general use.

Pieter, ZS1PK/M0PAK provided additional feedback, "Please note that the Amateur payload will probably not be switched on straight after launch. Commissioning is most likely to be performed from Stellenbosch South Africa only. Telemetry will only be heard while in contact with the groundstation and NOT on the amateur frequencies. There are a number of hams involved in the project so rest assured the amateur payload will be supported as soon as practical and safe."

[ANS thanks SA-AMSAT, ARRL, and Pieter ZS1PK/M0PAK for the above information]

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SB SAT @ AMSAT $ANS-270.04
Four New University Cubesats in Orbit and Heard on 70cm

AMSAT News Service Bulletin 270.04
>From AMSAT HQ SILVER SPRING, MD.
September 27, 2009
To All RADIO AMATEURS
BID: $ANS-270.04

This week India successfully launched seven satellites on its PSLV-C14 misson. The primary payload was OceanSat-2 but also included six other satellites. Four of the satellites are CubeSats in the ISILaunch01, a cluster launch of the following with downlinks in the 70cm amateur radio band: BEESAT, ITUpSAT1, SwissCube, and UWE-2

NAME	CALL	BEACON	DOWNLINK
BEESAT	DP0BEE	436.000 MHz 0.1W CW	436.000 MHz 0.5W 4800/9600 GMSK
UWE-2			437.385 MHz 0.5W 1200 AFSK 9600 FSK

```
ITUpSAT1          437.325 MHz 0.1W CW  437.325 MHz 1.0W 19200 GFSK

SwissCube HB9EG   437.505 MHz 0.1W CW  437.505 MHz 1.0W 1200 FSK
```

BeeSat is a pico satellite project of the Technical University of Berlin. The main objective of BeeSat is the on orbit verification of newly developed micro reaction wheels for pico satellite applications. Their web page is at:
http://www.raumfahrttechnik.tu-berlin.de/menue/forschung/projekte/beesat/v-menue2/news/

The UWE-2 team encourages all radio amateurs to send us the received signals to uwe-2@informatik.uni-wuerzburg.de. Their web page is at:
http://www7.informatik.uni-wuerzburg.de/en/research/space_exploration/projekte/cubesat/uwe-2/

ITUpSAT1 is the first student-made satellite of Turkey. Their web page is at: http://usl.itu.edu.tr/

SwissCube is the first satellite entirely built in Switzerland by students from different universities under the supervision of the Space Center EPFL. More than 180 students participated in the adventure from EPFL, from the university of Neuchatel, from the HES-SO (Sion, Yverdon, Fribourg, St-Immer, Le Locle), and from the FHNW (Brugg-Windisch). The main objective is educational and also includes a small telescope which will allow to obtain images of the nightglow, a luminescence phenomena occurring at 100 km of height above the Earth surface. Their web page is at: http://swisscube.epfl.ch/

A replay of the PSLV-C14 launch video can be viewed at:
http://www.youtube.com/watch?v=h69XGgHXMS0&feature=player_embedded#t=16
http://archangelo.net/misc/sat/new/sep09/pslvc14/view.htm

Signal reports have been received from amateur radio operators around the world. Recordings of the beacon signals can be heard at:
http://mstl.atl.calpoly.edu/~bklofas/PSLV/

2-Line Keplerian elements user for the satellites can use the following for a starting point:

```
ITUPSAT1
1 35934U 09051D   09266.99498802  .00000364  00000-0  10000-3 0    34
2 35934 098.3432 001.6766 0010433 256.9573 103.1084 14.52588677   111
SWISSCUBE
1 35932U 09051B   09266.92637809  .00000360  00000-0  10000-3 0    33
2 35932 098.3362 001.6263 0006692 285.2589 074.8063 14.52095115    95
BEESAT
1 35933U 09051C   09267.20165191  .00000365  00000-0  10000-3 0    42
2 35933 098.3316 001.8957 0004681 307.1077 052.9887 14.52667744   138
UWE-2
1 35935U 09051E   09267.47761234  .00001929  00000-0  48744-3 0    46
2 35935 098.3417 002.1786 0006949 283.1563 076.8911 14.52112524   176
```

[ANS thanks the CubeSat teams for the above information]

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SB SAT @ AMSAT $ANS-270.05
College Night on Satellites Coming October 1-2

AMSAT News Service Bulletin 270.05
>From AMSAT HQ SILVER SPRING, MD.
September 27, 2009
To All RADIO AMATEURS
BID: $ANS-270.05

It's time for another College Satellite night! Expect to hear many Oscar capable NA college club stations on the air Thursday evening Oct. 1st-2nd (NA local times) from 22:00 UTC to 0500 UTC for this special event.

College clubs are getting priority on the QRP AO-51 repeater that night (uplink: 145.880 MHz FM. downlink: 435.150 MHz FM). Please work each college station but afford them the ability to take calls and make as many QSOs as possible.

Club stations will also be on other birds so make as many contacts if you can, on each bird. We have encouraged college stations to QSL all the stations they work during the event as we (either through AMSAT or a college group) are planning on creating an award for working college club stations on satellite.

Make sure to e-mail or call as many hams that you know associated with college ham radio clubs so that they will know about this special event and get on the air - usage and NA-wide involvement is important. While we are focusing on North American activity let me know of interest and participation from other parts of the globe, e-mail Dr. Jay Garlitz, AA4FL off-list at jgarlitz@ufl.edu.

[ANS thanks Gator ARC Faculty Advisor at UF, Dr. Jay Garlitz, AA4FL for the above information]

/EX

SB SAT @ AMSAT $ANS-270.06
Satellite Operators Sought for Shortwave Broadcast Interview

AMSAT News Service Bulletin 270.06
>From AMSAT HQ SILVER SPRING, MD.
September 27, 2009
To All RADIO AMATEURS
BID: $ANS-270.06

Ted Randall, host of the shortwave broadcast QSO Radio Show, invites satellite operators who are interested in coming on show and talking about your personal experiences in satellite communication. Ted requests, "I would like someone who can take an entry level approach in that we have a lot of new and young hams listening. If you could have someone join in me in an informal telephone interview please contact me."

The QSO Radio Show is heard on WBCQ 7415 KHz Tuesdays 5-7 PM EDT or 2100-2300 UT; and on WRMI Radio Miami International 9955 KHz Sundays from 1-3 AM EDT or 0500-0700 UTC.

Ted's web page is at: http://www.tedrandall.com and you can e-mail Ted Randall at tedrandall@kaij.us

[ANS thanks Ted Randall for the above information]

/EX

SB SAT @ AMSAT $ANS-270.07
Satellite Shorts From All Over

AMSAT News Service Bulletin 270.07
>From AMSAT HQ SILVER SPRING, MD.
September 27, 2009
To All RADIO AMATEURS
BID: $ANS-270.07

+ Hams like science. Follow these links for fun and interesting scientific articles and videos of space:

  Images from the newly refurbished Hubble Space Telescope:
  http://www.nasa.gov/mission_pages/hubble/multimedia/ero/index.html

  A simulated flyover of Mars using images from the Mars Reconnaissance Orbiter and Spirit Rover:

http://www.universetoday.com/2009/09/23/columbia-hills-flyover-2-0-awesome-meridiani-panoramas/

  A video discussing a mission to the oceans of Jupiter's moon Europa:

http://www.dailygalaxy.com/my_weblog/2009/09/nasa-worlds-space-powers-targets-jupiters-europa-.html

  Video of the Shuttle piggyback ride back to Florida:

http://www.universetoday.com/2009/09/21/spectacular-videos-of-shuttle-piggyback-flight/

  Video of NASA Wallops Island launch:
  http://sites.wff.nasa.gov/webcast/

Watch the ARES-1X rocket built in 6 minutes (time lapse)

http://www.universetoday.com/2009/09/23/build-the-ares-i-x-in-less-than-six-minutes/

Cassini views of Saturn, its rings, and moons during equinox:

http://www.nasa.gov/externalflash/cassini_equinox/cassini_equinox_slideshow.html

+ Congratulations to Omar, XE1AO, for achieving Satellite VUCC #182 and to George, WA5KHB, for confirming 225 Grids for his VUCC!

+ Henk, PA3GUO has created a video showing the ISS passing over the Netherlands along with sounds and decoded signals of the digital APRS signals at: http://www.vimeo.com/6657880

+ A helpful page for configuring your TM-D700 rig for operating with with spacecraft can be found at: http://www.aj3u.com/tm-d700-tips/

+ Congratulations to Mark, N8MH on his successful AO-51 demonstration via the QRP repeater to the JARS club. He worked WA4SCA, KB1RVT, KB0RZD, N3TL, AA5UK, KB1PVH, and KD8CAO

+ Remember to tune in on Thursday evenings, October 1, 15, 29 at 8pm eastern time will be the sessions of the Hudson Valley Satellite net. You can check in via radio if you are in range of the Mt. Beacon ARC repeater on 146.970 (PL 100.0) or via echolink on the N2EYH-L node.

+ Jan, PE0SAT has copied FO-29 over Europe. He has posted audio and data at:
Here is a recording of the CW telemetry and the data below.
http://www.ham.vgnet.nl/downloads/FO-29-CW-19-09-2009_2344CEST.mp3
http://www.ham.vgnet.nl/images/FO-29-CW-19-09-2009-2355CEST.jpg

+ Listen for Paul, 2E1EUB to be active on the satellites from Scotland as 2M1EUB/P starting October 10 for approximately 14 days. Paul will try for as many satellites as possible including AO-7.

+ Adrian, AA5UK, will be operating again from Ibiza, Spain (IOTA EU-004, Balearic Islands) Grid: JM09tb as: EA6/AA5UK from Oct. 14 - 29th. Satellite activity is planned for the FM and SSB satellites. Adrian will be posting regular satellite schedules via the AMSAT BB. Sked requests are welcome and encouraged; please email him via his email address located at QRZ.com. QSL via home call: Direct, bureau, LOTW or eQSL.

+ Andrew, VK4TEC operates a satellite status display showing latest data received from ISS, PCSAT, AO-51, with manual entries of additional satellites. See: http://vk4tec.no-ip.org/sat_status/

+ Congratulations to Astronaut Tracy Caldwell for passing her amateur radio license exam. She has been issued the callsign, KF5DBF. Caldwell is scheduled to fly with Expedition 23 in April 2010.

[ANS thanks everyone for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office. And with that please be on the look out for plumbers who may have a multi-fauceted personality.

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM
K9JKM at amsat dot org

```
From -2152651531112128907
X-Google-Thread: a4a23d5f63,85b3406ceb388edf,start
X-Google-Attributes: gida4a23d5f63,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news1.google.com!goblin3!goblin1!goblin.stu.neva.ru!
news.mixmin.net!newspeer.monmouth.com!newsswitch.lcs.mit.edu!bloom-beacon.mit.edu!
panix!panix2.panix.com!not-for-mail
From: rram@panix.com (rec.radio.amateur.moderated Admin)
Newsgroups:
rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.rad
io.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amat
eur.space,rec.radio.info
Subject: Crossposting Permitted to rec.radio.amateur.moderated
Supersedes: <radio/ham-radio/moderated/crossposting-1-1251784801@panix.com>
Followup-To: poster
Date: 1 Oct 2009 02:00:02 -0400
Organization: rec.radio.amateur.moderated Moderation Team
Lines: 47
Approved: rec-radio-info@panix.com
Distribution: world
Expires: 03 Nov 2009 01:00:01 -0000
Message-ID: <radio/ham-radio/moderated/crossposting-1-1254376801@panix.com>
Reply-To: rec-radio-amateur-moderated-request@panix.com
(rec.radio.amateur.moderated Admin)
NNTP-Posting-Host: panix2.panix.com
X-Trace: reader1.panix.com 1254376803 21192 166.84.1.2 (1 Oct 2009 06:00:03 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Thu, 1 Oct 2009 06:00:03 +0000 (UTC)
```

Summary: Short reminder for unmoderated newsgroups that crossposting is permitted
Keywords: FAQ, ham, amateur, radio, moderated, unmoderated, crossposting, permitted
Xref: g2news2.google.com rec.radio.amateur.antenna:14860 rec.radio.amateur.dx:506 rec.radio.amateur.equipment:1817 rec.radio.amateur.homebrew:3116 rec.radio.amateur.misc:4563 rec.radio.amateur.policy:26864 rec.radio.amateur.space:290 rec.radio.info:1006

Posted-By: auto-faq 3.3.2 beta (PGPMoose V2.0, Perl 5.005)
Archive-name: radio/ham-radio/moderated/crossposting
Revision: 1.1 2009/04/12 19:42:04
Posting-Frequency: posted monthly
URL: http://www.panix.com/~rram/usenet/rram/index.html

Changes followed by "|".

After a 30-day public discussion and feedback period to gauge reader opinions in March of 2009:

http://groups.google.com/group/rec.radio.amateur.moderated/browse_thread/thread/d7d337db35f23326

the rec.radio.amateur.moderated Moderation Team has decided to consider amending its charter, and permit limited simultaneous crossposting to rec.radio.amateur.moderated and one other unmoderated amateur-radio-related discussion newsgroup. We are currently trying this on a temporary basis (90 days, through early July 2009), and adopt it permanently if successful.

Approved rec.radio.amateur.* newsgroups are those that are currently listed in the latest version of the "List of Big Eight Newsgroups" which is crossposted monthly to news.announce.newgroups, news.groups, and news.lists.misc.

Approved alt.radio.amateur.* and alt.ham-radio.* newsgroups are those that have been created consistent with the suggestions in "So You Want to Create an Alt Newsgroup" at:

  http://www.faqs.org/faqs/alt-creation-guide/

Approved regional hierarchy newsgroups are those that contain either "radio.amateur" or "ham-radio" in their names, including uk.radio.amateur and aus.radio.amateur.misc.

We will make every reasonable effort to keep our list of approved newsgroups up-to-date. In case we have overlooked any, and a submission is rejected in error as a result, the rejected submitter can E-mail us at our administrative contact address (in the signature at the bottom of this article, and the default Reply-To for the rejection message) requesting that it be added, and that the article be approved. We may still choose to reject articles crossposted to any alt.* newsgroup with an inappropriate name, including obscene language, embedded name-calling, or encouragement of unlawful conduct.

Please direct any comments, questions, or criticisms to
rec-radio-amateur-moderated-request@panix.com.

```
From -7640409607716970233
X-Google-Thread: a4a23d5f63,f8a06320a1bd6cf1,start
X-Google-Attributes: gida4a23d5f63,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII
Path: g2news2.google.com!news1.google.com!border1.nntp.dca.giganews.com!
border2.nntp.dca.giganews.com!nntp.giganews.com!cyclone1.gnilink.net!gnilink.net!
newsfeed3.dallas1.level3.net!newsfeed2.dallas1.level3.net!news.level3.com!panix!
rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-277 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Mon, 5 Oct 2009 08:30:37 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 1780
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000601ca45b7$9c334d60$d499e820$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;charset="iso-8859-1"
Content-Transfer-Encoding: quoted-printable
X-Trace: reader1.panix.com 1254745838 25909 166.84.1.6 (5 Oct 2009 12:30:38 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Mon, 5 Oct 2009 12:30:38 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news2.google.com rec.radio.amateur.space:291 rec.radio.info:1021
X-Original-Bytes: 42788
```

This report is organized into four (4) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - deborbited/returned satellites

SB SAT @ AMSAT W8ISS $WSR-277.S1

WSR 277 Part 1 10/04/2009

AMSAT NEWS SERVICE BULLETIN 277.S1
FROM AMSAT HQ SILVER SPRING, MD, October 04, 2009
TO ALL RADIO AMATEURS
BID: $WSR-277.S1

SumbandilaSat
Catalog Number: 35870
Launch Date: September 17, 2009

Status: Commissioning

Callsign: ZS0SUM

Uplink: 145.880MHz FM
Downlink: 435.350MHz FM
[10042009]
=====
DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008

Status: Operational
Current Mode: Science Mode - Beacon ONLY

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink: 435.530 to 435.570 MHz

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68
[02122009]
=====
VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.859330 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

To know what transponder is switched on please listen for the beacon that is active. Each transponder has a different beacon.
[08072008]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: System Reload in progress

Current Modes:
FM Repeater ONE
Uplink: 145.920Mhz FM
Downlink: 435.300Mhz FM
FM Repeater TWO (QRP ONLY)
Uplink: OFF
Downlink: OFF
BBS
Uplink: 1268.700MHz 9k6 FM
Downlink: 435.150MHz 9k6 FM
Telemetry
Downlink: OFF

```
Analog voice downlink:     435.300 MHz FM
                           435.150 MHz FM
                          2401.200 Mhz FM
Analog voice uplink:       145.860 MHZ FM
                           145.880 MHz USB
                           145.920 MHz FM
                          1268.700 MHz FM
Digital Downlinks:         435.150 MHz FM 38k4 PBP, 1 watt output
                           435.150 MHz FM 9k6 Pacsat Broadcast Protocol
                          2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:            145.860 MHz FM 9k6 Pacsat Broadcast Protocol
                          1268.700 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon:                    435.150 MHz
```

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear

S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[10042009]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz. The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10 minute timer.
[05282007]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: RECOVERY
Current Mode: V/u (Mode JA)

Voice/CW (Mode JA)
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM

          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage:
http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's
CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/
fo29cwts.htm
[09062009]
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[03232009]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational

Current Mode: Alternating between Mode A and B every 24 hours

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B

Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz CW
145.972 MHz CW
435.100 MHz CW
2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
[02122009]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - V/u
Voice - V/v
BBS - V/v
APRS - V/v
SSTV - V/v

Expedition 21 Crew:
Commander: Gennady Padalka RN3DT
Flight Engineer: Michael Barratt KD5MIJ
Flight Engineer: Robert Thirsk VA3CSA
Flight Engineer: Roman Romanenko
Flight Engineer: Frank De Winne ON1DWN
Flight Engineer: Nicole P. Stott KE5GJN
Flight Engineer: Jeff Williams KD5TVQ
Flight Engineer: Maxim Suraev
Flight participant: Guy Lalibert�

Available Modes and Frequencies:

Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM

437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time line is NOT translated from Russian and posted.
[10042009]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-277.S2
WSR 277 Part 2 10/04/2009

AMSAT NEWS SERVICE BULLETIN 277.S2
FROM AMSAT HQ SILVER SPRING, MD, October 04, 2009
TO ALL RADIO AMATEURS
BID: $WSR-277.S2

SwissCube
Catalog Number: 35932?
Launch Date: September 23, 2009

Status: In Orbit

Callsign: HB9EG

Beacon(100mw): 437.5050MHz CW
Beacon(1w): 437.5050MHz FSK 1k2bps
[10042009]
=====
UWE-2

```
Catalog Number: 35935?
Launch Date: September 23, 2009

Status: In Orbit

Beacon(500mw): 437.3850 MHz AFSK 1k2bps
               437.3850 MHz FSK 9k6bps
[10042009]
=====
ITUpsAT1
Catalog Number: 35934?
Launch Date: September 23, 2009

Status: In Orbit

Beacon(100mw): 437.325MHz CW
Beacon(1w): 437.325MHz 19k2bps
[10042009]
=====
BEESAT
Catalog Number: 35933?
Launch Date: September 23, 2009

Status: In Orbit

Callsign: DP0BEE

Beacon(100mw): 436.000MHz CW
Beacon(500mw): 436.000MHz GMSK 4k8bps
[10042009]
=====
Pollux
Catalog Number:
Launch Date: July 31, 2009

Status: Operational

Callsign: POLLUX-1

Downlink: 145.825MHz 1k2 AX.25
[10042009]
=====
Castor
Catalog Number:
Launch Date: July 31, 2009

Status: Operational

Callsign: KD4HBO-1

Downlink: 145.825 MHz 1k2 AX.25
[10042009]
=====
BEVO-1 (DRAGONSAT-1)
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Operational

Downlink: 437.325 MHz 9k6 GMSK
          437.325 MHz CW 20wpm
[07312009]
=====
AggieSat2 (DRAGONSAT-2)
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Operational

Downlink: 436.250 MHz 9k6
[07312009]
=====
CP-6
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Commissioning

Downlink: 437.365 MHz 1k2 AFSK
[06052009]
=====
HAWKSAT 1
Catalog number: 35003
Launch Date: May 19, 2009

Status: ?

Downlink: 437.345 ?
[06052009]
=====
Pharmasat
Catalog Number: 35002
Launch Date: May 19, 2009
Status: Commissioning

Downlink: 437.465 MHz 1k2 AFSK
[06052009]
=====
ANUSAT
Catalog Number: 34808
Launch Date: April 20, 2009

Status: ?

Downlink:  435.000 MHz
Uplink:    145.800 MHz
```

```
Telemetry: 137.400 MHz
[05112009]
=====
SOHLA-1 (ASTRO TECH.)
Catalog Number: 33496
Launch Date: January 23, 2009

Status: Commisioning

Proposed Frequencies and Modes:
Downlink: 437.505 MHz AFSK/CW
Beacon:   437.505 MHz AFSK/CW

Callsign:

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=101
[03232009]
=====
KAGAYAKI (Solan Co.)
Catalog Number: 33495?
Launch Date: January 23, 2009

Status: In Orbit

Downlink: 437.375 MHZ    FSK9k6/CW
Beacon:   437.375 MHz    FSK9k6/CW

IARU coordination status page:

AMSAT-NA webpage:

[01152009]
=====
STARS (Kagawa Univ.) (Twin Satellites)
Catalog Number: 33498
Launch Date: January 23, 2009

Status: Operational ?

Downlinks: 437.485 MHz FM/CW
           437.465 MHz FM/CW
Beacons:   437.305 MHz FM/CW
           437.275 MHz FM/CW

Callsigns: JR5YBN
           JR5YBO

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=99

AMSAT-NA webpage:
```

```
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=121&retURL
=/satellites/status.php
[022152009]
=====
KKS-1 (Tokyo MCIT)
Catalog Number: 33499
Launch Date: January 23, 2009

Status: Operational

Downlink:  437.455 MHz AFSK/CW
Beacon:    437.385 MHz AFSK/CW

Callsign: JQ1YYY

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=107

AMSAT-NA webapge:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=120&retURL
=/satellites/status.php
[02212009]
=====
PRISM (Tokyo Univ.)
Catalog Number: 33493
Launch Date: January 23, 2009

Status: Operational ?

Downlink: 437.425 MHz AFSK/GMSK/CW
Beacon:   437.250 MHz AFSK/GMSK/CW

Callsign: JQ1YCX

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=97

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=119&retURL
=/satellites/status.php
[02212009]
=====
RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number: 32953
Launch Date: May 23, 2008

Status: Operational

Curent Modes: Telemetry
              Audio
              Images

Downlinks: 435.315 MHz
```

```
           435.215 MHz

AMSAT-NA website:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=115&ret
URL=/satellites/status.php

Official website:
http://www.npopm.com/?cid=leoca&caid=43
[02122009]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode:  /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon:    435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=94&retURL=

/satellites/status.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=72
[02122009]
=====
CP3
Catalog Number: 31129
Launch Date: April 17,2007

Status: Operational

Current Mode:  /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[02122009]
=====
GENESAT-1
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Current Mode: /u
```

```
Callsign: KE7EGC

Telemetry Beacon Downlink: 437.0695 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[091512009]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon:             437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/xivpicte.htm
[02212009]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003

Status: ?????

Current Mode: /u

Beacon:     436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=96&retURL
=/satellites/status.php

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[06082009]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Operational?

Uplink:  1268.5000 MHz GMSK 9600 BPS
```

Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=56
[02122009]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: System Reload in Progress

Current Modes:
FM Repeater ONE
Uplink: 145.920 Mhz FM
Downlink: 435.300 Mhz FM
FM Repeater TWO (QRP ONLY)
Uplink: OFF
Downlink: OFF
BBS
Uplink: 1268.700MHz 9k6 FM
Downlink: 435.150MHz 9k6 FM
Telemetry
Downlink: OFF

Analog voice downlink:	435.300 MHz FM
	435.150 MHz FM
	2401.200 Mhz FM
Analog voice uplink:	145.860 MHZ FM
	145.880 MHz USB
	145.920 MHz FM
	1268.700 MHz FM
Digital Downlinks:	435.150 MHz FM 38k4 PBP, 1 watt output
	435.150 MHz FM 9k6 Pacsat Broadcast Protocol
	2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:	145.860 MHz FM 9k6 Pacsat Broadcast Protocol
	1268.700 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon:	435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

```
Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[10042009]
=====
QuakeSat
Catalog Number: 27845
Launch Date: June 30, 2003

Status: Telemetry only

Current Mode: 9600 baud data packet

Mode U packet
Downlink: 436.675 MHz 9k6 BPS

Quakesat webpage:
http://www.quakefinder.com/services/quakesat-ssite/
[04272009]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=69&retURL
=/satellites/status.php
[02212009]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Telemetry only

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
```

```
Special Usage Downlink:        144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[03302009]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Telemetry only

Current Modes:
Telemetry : /u

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign:       4XTECH-12

More information of GO-32 can be found at:
http://asri.technion.ac.il/techsat/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=14&retURL
=/satellites/status.php
[04272009]
=====
RS-22 RADIO SPORT RS-22
Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only

Current Mode:  /u

CW Beacon - 435.352 MHz
            145.818 MHz

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=76&retURL
=/satellites/status.php
[02212009]
=====
```

LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990

Status: CW Beacon only

Uplinks: 145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink: 437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[03162009]
=====
CanX-2
Catalog number: 32790
Launch Date: April 28, 2008

Status: Operational in range of ground station only

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[02212009]
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.425 MHz 1k2 baud packet

For the latest project status update please visit the AAUSAT-II web page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[02212009]
=====

```
CO-65 CUTE-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008

Status: Digipeater

Downlink:  437.475 MHz 9k6 Packet
Uplink:   1267.600 Mhz

Telemetry Beacon:
Downlink: 437.2750 MHz CW

For the latest project status update please visit the Cute-1.7+APD II
web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78

Command Station blog website:
http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=112&retURL
=/satellites/status.php
[02212009]
=====
Compass-1
Catalog number: 32787
Launch Date: April 28, 2008

Status: Operational

Current Mode: 4k8 MSK packet

Uplink:   145.980 MHz FM
Downlink: 437.275 Mhz CW
          437.405 MHz Packet

For the latest project status update please visit the Compass 1 web
page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=114&retURL
=/satellites/status.php
[04272009]
=====
CO-66 Seeds II
Catalog number: 32791
Launch Date: April 28, 2008
```

Status: Operational

Downlink: 437.485 MHz

Callsign: JQ1YGU

For the latest project status update please visit the Seeds 2 web page: http://cubesat.aero.cst.nihon-u.ac.jp/english/seeds_2_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=113&retURL=/satellites/status.php
[02212009]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - V/u
Voice - V/v
BBS - V/v
APRS - V/v
SSTV - V/v

Expedition 21 Crew:
Commander: Gennady Padalka RN3DT
Flight Engineer: Michael Barratt KD5MIJ
Flight Engineer: Robert Thirsk VA3CSA
Flight Engineer: Roman Romanenko
Flight Engineer: Frank De Winne ON1DWN
Flight Engineer: Nicole P. Stott KE5GJN
Flight Engineer: Jeff Williams
Flight Engineer: Maxim Suraev
Flight participant: Guy Lalibert�

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM

145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[10042009]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-277.S3
WSR 277 Part 3 10/04/2009

AMSAT NEWS SERVICE BULLETIN 277.S3
FROM AMSAT HQ SILVER SPRING, MD, October 04, 2009
TO ALL RADIO AMATEURS
BID: $WSR-277.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

CP4
Catalog Number: 31122
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon: 437.325 MHz CW

IARU coordination status page:

```
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=79
[10022008]
=====
LIBERTAD-1
Catalog Number: 31128
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink:   145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[02122009]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: Non-Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder:  145.825 Mhz FM
[01012009]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency:  437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink:         437.250 MHz FM 67Hz CTCSS
Voice Downlink:      2401.835 MHz FM
Packet Up/Downlink:   437.250 MHz 9k6 packet
Packet Downlink     2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non-Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[08132007]
=====
CANX-1
Catalog Number: 27847
Launch Date: June 30, 2003

Status: Non-Operational

Downlink: 437.8800 MHz AFSK 1k2bps
[06052009]
=====
DTUSAT
Catalog Number: 27842
Launch Date: June 30, 2003

Status: Non-Operational

Current Mode: 2k4 AFSK Packet last reported

Downlink: 437.475MHz

Officail webpage: http://dtusat1.dtusat.dtu.dk/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=101&retURL
=satellites/all_oscars.php
[02212009]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink:   435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)

Broadcast callsign: DP0AIS
```

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Telemetry only

Uplinks: 145.850 MHz
145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[03302009]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:

```
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink:   145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
V-band:   145.840 -  145.990 MHz CW/LSB
U-band:   435.550 -  435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks
---------
S2-band:  2401.225 -  2401.475 MHz CW/USB
K-band:  24048.010 - 24048.060 MHz CW/USB
Beacon:   2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)
----------------------------
BEACON   General Beacon(GB)  Middle Beacon(MB)  Engineering Beacon(EB)
2 m                    none       145.898 MHz                     none
70cm           435.438 MHz        435.588 MHz             435.838 MHz
13cm(1)       2400.188 MHz       2400.338 MHz            2400.588 MHz
13cm(2)       2401.173 MHz       2401.323 MHz            2401.573 MHz
3cm          10450.975 MHz      10451.125 MHz           10451.375 MHz
1.5cm        24047.885 MHz      24048.035 MHz           24048.285 MHz
[07162007]
=====
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000
```

```
Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink:    145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: 25636
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater:         436.250 MHz

Uplinks: Mode B Repeater:  145.825 MHz
Mode J Digipeater:         145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink:   145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
MO-30 UNAMSAT-2
Catalog Number: 24305
Launch Date: September 5, 1996

Status: Non-operational

Downlink:       435.1380 MHz AFSK 1200 BPS
Downlink:       435.2060 MHz AFSK 1200 BPS
Uplink:         145.8150 MHz AFSK 1200 BPS
Uplink:         145.8350 MHz AFSK 1200 BPS
Uplink:         145.8550 MHz AFSK 1200 BPS
Uplink:         145.8750 MHz AFSK 1200 BPS
[06042009]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Non-operational

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign:       POSAT1-12
```

```
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012009]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HL01-11
BBS: HL01-12
[01222007]
```

```
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational
```

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink: 145.825 MHz FM 1200 Baud AFSK
Beacon: 2401.220 MHz
[05012006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: non-operational

Current Mode: V/u

Uplink: 145.900 MHz FM 1200-baud Manchester FSK (reserved)
                145.920 MHz FM VOICE
                145.940 MHz FM 1200-baud Manchester FSK (reserved)
                145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink: 437.026 MHz USB VOICE
                (1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC 437.050 MHz RHCP
   PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[07242009]
=====
UO-15 UoSAT-4
Catalog Number: 20438
Launch Date: January 22, 1990

Status: Non-operational

Uplink: ?
Downlink: 435.1250MHz (?)
          435.1200MHz (?)
[06042009]

```
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984

Status: Non-operational.

Current Mode:  /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon:           435.025 MHz
Mode-S Beacon:     2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[01012009]
=====
AO-10 OSCAR 10
```

```
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon:   145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink  29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
Beacons:   29.450 MHz
          435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational
```

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink: 145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB

Beacon 1: 29.352 MHz (intermittent)
Beacon 2: 29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB

Beacon: 145.860 MHz

Robot: 145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

```
Robot:    29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-277.S4
WSR 277 Part 4 10/04/2009

AMSAT NEWS SERVICE BULLETIN 277.S4
FROM AMSAT HQ SILVER SPRING, MD, October 04, 2009
TO ALL RADIO AMATEURS
BID: $WSR-277.S4

THE FOLLOWING SATELLITES HAVE RE-ENTERED OR HAVE BEEN RETURNED SAFELY:

NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: July 28, 2008

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[01012009]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink:      145.825 Mhz FM APRS AX25
APRS Uplink:        145.825 MHz FM APRS AX25
Voice/PSK31 Uplink:  28.120 MHz

Packet to Voice ID: RAFT
[06112007]
```

=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Re-Entered
Re-entered: June 18, 2008

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon: 437.2750 MHz CW

Callsign: JR8YJT
[01012009]
=====
SO-43 Starshine 3
Catalog Number: 26929
Launch Date: September 30, 2001

Status: Re-Entered
Re-entered: January 21, 2003

Beacon: 145.825Mhz
[02212009]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

- AMSAT News Service (ANS)
- General satellite discussion (AMSAT-BB)
- Orbit data (KEPS)
- Manned space missions (SAREX)
- District of Columbia area (AMSAT-DC)
- New England area (AMSAT-NE)
- AMSAT Educational Liaison mailing list (AMSAT-EDU)

* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at} amsat.org
NNNN
/EX

```
From 4494673798575502414
X-Google-Thread: a4a23d5f63,d1a448dbb51cef65,start
X-Google-Attributes: gida4a23d5f63,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,UTF8
Path: g2news2.google.com!news1.google.com!newsfeed2.dallas1.level3.net!
news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-277 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Mon, 5 Oct 2009 08:31:49 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 485
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000701ca45b7$c87e90f0$597bb2d0$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;charset="utf-8"
Content-Transfer-Encoding: quoted-printable
X-Trace: reader1.panix.com 1254745909 14374 166.84.1.6 (5 Oct 2009 12:31:49 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Mon, 5 Oct 2009 12:31:49 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
```

```
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news2.google.com rec.radio.amateur.space:292 rec.radio.info:1022
```

AMSAT NEWS SERVICE
ANS-277

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

```
**********************************************************************
* 2009 AMSAT Space Symposium and Annual General Meeting October 9-11 *
*   Four Points Sheraton Hotel at the Baltimore Washington Airport   *
*  Details - http://www.amsat.org/amsat-new/symposium/2009/index.php *
**********************************************************************
```

In this edition:
* AMSAT Symposium is quickly approaching
* California Satellite Demo/Presentation Schedule
* AO-51 configuration to support Scouting JOTA
* European Space Weather Week 16-20 November
* FM sats from Antartica for VK and ZL
* Satellite Shorts From All Over
* ARISS Status - 28 September 2009

SB SAT @ AMSAT $ANS-277.01
AMSAT Symposium is quickly approaching

AMSAT News Service Bulletin 277.01
  From AMSAT HQ SILVER SPRING, MD.
October 4, 2009
To All RADIO AMATEURS
BID: $ANS-277.01

This is a reminder that the AMSAT Symposium is quickly approaching.

It takes place next weekend (9-11 OCT) at the BWI Sheraton and you're invited!

This Symposium marks the 40th Anniversary of AMSAT and we'll be celebrating this significant milestone along with looking forward to the next 40 years. AMSAT members who are registered for the Symposium are invited to a 'birthday party' for AMSAT Friday evening (including a birthday cake). In addition, Symposium attendees will also receive a 40th Anniversary History of AMSAT written/edited by Bill Tynan, W3XO in their registration packets. Many of us don't know the 'story of AMSAT', and thanks to the work of Bill Tynan, Dick Daniels, Keith Baker and others, we've focused this year on telling AMSAT's story through their articles in the AMSAT Journal. Bill's new book provides significantly more detail as well as brings the reader right up to the current year. It makes for fun reading and gives recognition to the significant achievements over the past 40 years!

This year's "AMSAT Proceedings" has a wide assortment of papers and this year's presentations will be both interesting and informative. Dan Schultz, N8FGV is finalizing the "Proceedings" as this is written and attendees will be in position to hear the presentations, discuss the papers with the authors, and gain some insight into the future direction of AMSAT's satellite program.

The Saturday evening Banquet will feature Martin Collins, a curator at the Smithsonian Air & Space Museum. The title of his talk is "Making the Space Age: The First Fifty Years".

A reminder that that the AMSAT BOD meeting takes place Thursday, 8 OCT and Friday morning, 9 OCT. This is an open meeting, though the BOD does go into closed session briefly on Friday morning. In addition the AMSAT Annual Meeting takes place Saturday afternoon 1530-1700 EDT. We expect to have the Annual Meeting 'online' via Echolink. I anticipate that both the Symposium and the Annual Meeting will be an opportunity to highlight some of the significant accomplishments that have taken place over the last 12 months plus give some perspective on the future direction of AMSAT.

Please consider joining us to celebrate a significant milestone for AMSAT and build the foundation for the next 40 years! You may register online at the AMSAT Store:
http://www.amsat-na.com/store2/SymposiumReg2009.php

73,
Barry A. Baines, WD4ASW
President-AMSAT

[ANS thanks Barry, WD4ASW, for the above information]

/EX

SB SAT @ AMSAT $ANS-277.02

California Satellite Demo/Presentation Schedule

AMSAT News Service Bulletin 277.02
From AMSAT HQ SILVER SPRING, MD.
October 4, 2009
To All RADIO AMATEURS
BID: $ANS-277.02

Clint Bradford, K6LCS, will be making
presentations and demonstrations on amateur
satellites at the following meetings around California:

October 2 - Long Beach ARC*
October 5 - WARA (Fullerton) meeting*
October 8 - EchoLink via “SCARS” Node 96140 5:30PM PDT
October 15 - West Coast ARC (Huntington Beach)*
October 17 - Victor Valley ARC’s JOTA*
November 5 - Crest REACT (Corona)*
November 8 - QWCA Chapter 7 (Norwalk)

The (*) asterisks indicate tentative workable passes for either before or during the presentations!

[ANS thanks Clint, K6LCS, for the above information]

/EX

SB SAT @ AMSAT $ANS-277.03
AO-51 configuration to support Scouting JOTA

AMSAT News Service Bulletin 277.03
From AMSAT HQ SILVER SPRING, MD.
October 4, 2009
To All RADIO AMATEURS
BID: $ANS-277.03

AMSAT-NA is supporting the 52nd Jamboree on the Air (JOTA) Scouting event by
dedicating AO-51 operation to the event.

For October 17th and 18th, the AO-51 QRP repeater will be allocated for JOTA
use. All users are requested to give way to JOTA stations or QSOs with JOTA
stations.

The frequencies used for this weekend will be 145.880 FM uplink, and 435.150 FM
downlink, no PL tone required. The mode change
should occur at ~00:00 UTC on the
17th (Friday evening in the US) and run for approximately 48 hours.

AMSAT wishes the Scouts good luck operating via the AO-51 satellite for the event.

Reports of your JOTA operations should be sent to the AMSAT-BB or directly to ko4ma@amsat.org.

Photo files up to 5 Mb total are also welcome for possible inclusion in an upcoming AMSAT Journal article.

73, Drew KO4MA
AMSAT-NA VP Operations

[ANS thanks Ed, N8BBQ, for the above information]

/EX

SB SAT @ AMSAT $ANS-277.04
European Space Weather Week 16-20 November

AMSAT News Service Bulletin 277.04
From AMSAT HQ SILVER SPRING, MD.
October 4, 2009
To All RADIO AMATEURS
BID: $ANS-277.04

The sixth European Space Weather Week will take place in Brugge, Belgium, from Monday 16th November to Friday 20th November 2009.

The ESWW meetings aim to bring together diverse communities working on all elements of space weather with a strong focus on user involvement. This year’s meeting will discuss recent advances in both scientific and applications based domains and how these advances relate to user needs.

This year the space weather tutorial and one of the plenary sessions will focus on issues relating to space weather effects on communications. With this in mind, the programme committee has made a special arrangement for radio hams who would like to attend the meeting.

Radio amateurs with a license to operate are also welcome to the conference and will get a discount. Radio Amateurs are requested to send a copy of their license to esa.conference.bureau@esa.int within one week after registration. Registration as a Radio Amateur includes access to scientific sessions on Tuesday and Wednesday and tutorial only. The reduced fee is 50 €. Attendance to the reception and conference dinner is not included. The deadline for online registration for hams is October 19.

For more info see: http://sidc.oma.be/esww6

[ANS Neil, PA9N, for the above information]

/EX

SB SAT @ AMSAT $ANS-277.05
FM sats from Antarctica for VK and ZL

AMSAT News Service Bulletin 277.05
From AMSAT HQ SILVER SPRING, MD.
October 4, 2009
To All RADIO AMATEURS
BID: $ANS-277.05

Bill Erhardt, K7MT, will be deploying back to McMurdo Station Antarctica Nov 15, 2009 - Feb 20, 2010. Bill reports that he will be active from KC4USV Sundays 0000 GMT on SSB. He has also received requests from Europe to come in early around 1800 GMT on Saturdays so they can work Antarctica. Equipment will include a rigblaster for PSK-31 on 14.070 and CW on 14.043 if time permits. Bill is also taking an Arrow II antenna/Kenwood TH-7 to work the FM satellites to VK and ZL land. Finally, if Bill can get it operational, APRS VHF to HF with a Kam Plus. VK6CO will help with HF 30 meters with their HF APRS parameters. You just might see Bill driving out on the Ross Ice Sea as K7MT-7 in Ivan the Terra Bus. Pictures and information will be available on Bill's home web page at:

http://www.mt.net/~k7mt

QSL is via K1IED Larry who has done a terrific job with the QSL cards from Excel spread sheets sent to him weekly from McMurdo.

ANS thanks Andrew, VK4TEC, for the above information]

/EX

SB SAT @ AMSAT $ANS-277.06
Satellite Shorts From All Over

AMSAT News Service Bulletin 277.06
From AMSAT HQ SILVER SPRING, MD.
October 4, 2009
To All RADIO AMATEURS
BID: $ANS-277.06

+ The European Southern Observatory (ESO) has made available a free astronomy site that allows you to zoom in on galactic images right from your personal computer. Check out the GigaGalaxy Zoom site: http://www.gigagalaxyzoom.org/W.html - the zoomable images are tagged in the red boxed areas of the main image.

+ Lance Collister, W7GJ released a new version of GJTRACKER (v2.0.3) at http://bigskyspaces.com/w7gj/GJTRACKER.zip If you have already installed GJTRACKER on your computer, all you need is to replace the application file http://www.bigskyspaces.com/w7gj/GJTRACKER.exe

+ NASA TV http://www.nasa.gov/multimedia/nasatv/index.html will carry the video of the LCROSS mission as it flies through the plume of lunar debris when the upper stage of a Centaur rocket will purposefully crash into the crater Cabeus near the south pole of the moon. Coverage begins at 1030 UTC on October 9. Mission information is available at: http://lcross.arc.nasa.gov/observation/amateur.htm

+ Video replay of the Soyuz launch from the Baikonur Cosmodrome: http://www.universetoday.com/2009/09/30/soyuz-launch-video/

+ The October 1 ARISS School Contact with Ciencia Viva Museum in Lisbon, Portugal was a success. A video is at : http://www.cvtv.pt/imagens/index.asp?id_tag=15&id_video=408

+ Here's a correction in regards to last week's report about George attaining 225 grids on his VUCC. George's correct callsign is WA5KBH.

[ANS thanks everyone for the above information]

/EX

SB SAT @ AMSAT $ANS-277.07
ARISS Statuts - 28 September 2009

AMSAT News Service Bulletin 277.07
From AMSAT HQ SILVER SPRING, MD.
October 4, 2009
To All RADIO AMATEURS
BID: $ANS-277.07

1. Upcoming School Contacts

An Amateur Radio on the International Space Station (ARISS) contact has been scheduled for Sint-Michielscollege Brasschaat vzw (SMCB) in Brasschaat, Belgium on Wednesday, October 7 at 10:20 UTC. Visits to space and science museums are among the science activities planned for the children. Guest speakers will include a representative from Verhaert Space Systems and Dirk Frimout, Belgium’s first astronaut.

An Amateur Radio on the International Space Station (ARISS) contact has been scheduled with the National Planetarium in Kuala Lumpur, Wilayah Persekutuan, Malaysia on Thursday, October 8 at 09:34 UTC. The contact will occur as part of the National Space Challenge, a program that was created in an effort to instill the talents and desire towards the understanding of space in primary school aged children. Sixteen schools will participate.

An Amateur Radio on the International Space Station (ARISS) contact has been scheduled for Belmont Elementary School in Langley, British Columbia, Canada on Friday, October 9 at 20:20 UTC. Students will complete projects with a “Mission Control” theme and the Langley Amateur Radio Association (L.A.R.A.) will work with the school to organize this event.

2. ARISS Contact Between De Winne and Vrij Technisch Instituut Sint-Lucas

An Amateur Radio on the International Space Station (ARISS) contact took place on Tuesday, September 22. Students from Vrij Technisch Instituut Sint-Lucas in Oudenaarde, Oost – Vlaanderen, Belgium posed 20 questions to Frank De Winne, ON1DWN. An audience of 300 students and teachers were present as well as television, radio and newspaper reporters. The antennas used for the contact as well as a UPS device were constructed by the students.

3. Barratt and HMS Beagle Project Connect via ARISS

On Tuesday, September 22, the HMS Beagle Project in Parati, Brazil participated in an Amateur Radio on the International Space Station (ARISS) contact via ground station K6DUE in Maryland. Approximately sixty students were present and watched as classmates asked ten questions of Mike Barratt, KD5MIJ. The project (which aims to rebuild the ship that carried Darwin around the world) and NASA have signed an International Space Act Agreement, with Barratt as the initiator and main connection on the NASA side of the project. The project will unite ISS astronaut photography with ocean surface water and other biological and physical samples taken by the crew of the new Beagle.

4. ARISS Contact with Cedarview Middle School

Students attending Cedarview Middle School in Ottawa, Ontario, Canada experienced an Amateur Radio on the International Space Station (ARISS) contact on Thursday, September 24. Astronaut Robert Thirsk, VA3CSA answered 20 questions put to him by the students. The school principal commented on the contact, “I have never seen this kind of quiet on students at a school wide event before.” CTV Ottawa and other local media provided news coverage.

5. Garfield Elementary, WHEELS and ARISS Team up to Talk about Space

Garfield Elementary School students in Boise, Idaho participated in an Amateur Radio on the International Space Station (ARISS) contact on Thursday, September 24 via telebridge station W6SRJ in California. Students visited the NASA Exploration Experience traveling exhibit on display at the Idaho Historical Museum to learn about space exploration and its benefits. Students were able to ask 6 questions of Astronaut Mike Barratt, KD5MIJ during the 9 minute pass. The event was well attended by youth, teachers and parents. Students were also observing the contact at the W6SRJ ground station - two were students from Santa Rosa Junior College and another student was visiting from a local K-12 school. Media coverage included three television stations and the audio was fed into the EchoLink AMSAT and JK1ZRW servers.

6. Thirsk Speaks with Japanese Students via ARISS Contact

On Saturday, September 27, students from Houya Elementary School in Nishitokyo, Japan participated in an Amateur Radio on the International Space Station (ARISS) contact. Astronaut Robert Thirsk, VA3CSA answered 15 questions posed by the students. An audience of approximately 250 was present for the contact. News coverage was provided by two magazines and an FM radio station.

7. ISS SSTV Active

Gennady Padalka, RN3DT activated the MAI-75 experiment onboard the ISS on Thursday and Friday, September 24 and 25 from approximately 1000-1600 UTC. Slow Scan Television (SSTV) images of Earth were downlinked to ground stations, including one at the Moscow Aviation Institute (MAI).

8. Astronaut Training Status

Astronaut Tracy Caldwell, KF5DBF was given an overview session on the Amateur Radio on the International Space Station (ARISS) program this past week. Caldwell is scheduled to fly with Expedition 23 in April 2010.

9. AMSAT Symposium, ARISS Ops Meeting

The Radio Amateur Satellite Corporation (AMSAT) Symposium will be held on Friday, October 9 through Sunday, October 11 at the Four Points Sheraton Hotel at the Baltimore Washington Airport in Maryland. Several ARISS (Amateur Radio on the International Space Station) and ARISSat-1 presentations will be given and a demo of ARISSat-1 is planned. To view a list of these presentations, go to: http://www.amsat.org/amsat-new/symposium/2009/Presentations.php

The ARISS Operations team will hold a meeting after the symposium on Sunday, October 11.

[ANS thanks Carol, KB3LKI, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Lee McLamb, KU4OS

```
From -5473406246171385442
X-Google-Thread: addc8bf063,ae613e642224061b,start
X-Google-Attributes: gidaddc8bf063,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news1.google.com!goblin1!goblin.stu.neva.ru!
news.astraweb.com!border2.a.newsrouter.astraweb.com!not-for-mail
From: Chris Steyaert <observations@rmob.org>
Newsgroups: rec.radio.amateur.space,sci.astro.amateur
Subject: Radio Meteor Obs. Bull. September 2009
Date: Fri, 09 Oct 2009 22:00:59 +0200
Message-ID: <6j5vc5tmvtu6li5tt01aoj0aa8n0qfoca5@4ax.com>
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ifhhgG3C1I5I5V4KIcX<lFY;`V\fBD4
Xref: g2news2.google.com rec.radio.amateur.space:293 sci.astro.amateur:27161
```

Radio Meteor Observation Bulletin No. 194 of September 2009 (91 K) is available now as

http://www.rmob.org/rmobtext/rmob0909.txt

More information and the visual presentation of the hourly forward scatter counts can be found on

http://www.rmob.org

Chris

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From 4674197540844408645
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X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII
Path: g2news2.google.com!news2.google.com!newsfeed2.dallas1.level3.net!
news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-284 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sun, 11 Oct 2009 20:10:18 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 324
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000601ca4ad0$5a8cf280$0fa6d780$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;charset="iso-8859-1"
Content-Transfer-Encoding: quoted-printable
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X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Mon, 12 Oct 2009 00:10:18 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to            rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-language: en-us
Xref: g2news2.google.com rec.radio.amateur.space:294 rec.radio.info:1037
```

AMSAT NEWS SERVICE
ANS-284

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in

designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* AMSAT Election of new Officers at the Symposium
* SpaceX Announces Conference
* US Senate Bill Introduced
* AO-51 configuration to support Scouting JOTA
* ARISS Status - October 4, 2009

SB SAT @ AMSAT $ANS-284.01
AMSAT Election of Officers

AMSAT News Service Bulletin 284.01
From AMSAT HQ SILVER SPRING, MD.
October 11 2009
To All RADIO AMATEURS
BID: $ANS-284.01

At the Baltimore Symposium the initial actions of the newly elected BOD is to elect new officers. The seats were filled as follows:

President	Barry Baines, WD4ASW
VP of Engineering	Tony Monteiro, AA2TX
VP of Operations	Drew Glassbrenner, KO4MA
VP of User Services	Gould Smith, WA4SXM
Secretary	Alan Biddle, WA4SCA
Treasurer	Gunther Meisse, W8GSM
Manager	Martha

Congratulations to the newly elected officers.

Also, a fine time was had by all that attended the Baltimore AMSAT Symposium. Many excellent presentations were given during the event. At

the annual meeting, the newly elected officers were introduced and new priorities were introduced. AMSAT will offer a DVD of the presentations.
The Banquet had a great guest speaker, Mr. Collins from the Air and Space museum.
Plan to attend next years meeting.

(ANS thanks Martha for the above information]

/EX
SB Sat @ $ans-284.02
SpaceX announces Conference

AMSAT News Service Bulletin 284.02
From AMSAT HQ SILVER SPRING, MD.
October 11, 2009
To All RADIO AMATEURS
BID: $ANS-284.02

Space Exploration Technologies (SpaceX) has announced a second user conference for its commercial product DragonLab�, a free-flying, reusable spacecraft capable of hosting pressurized and unpressurized payloads to and from orbit. The event will focus on the needs of European users and take place on October 29th, 2009, in Haarlem, Netherlands.

DragonLab provides a platform for in-space experimentation, including recovery of pressurized and some unpressurized payloads, as well as deployment of small spacecraft. As a complete system, DragonLab provides a highly capable spacecraft platform that includes propulsion, power, thermal control, environmental control, avionics, communications, thermal protection, flight software, guidance, navigation and control, entry, descent and landing, and recovery.

The user conference is an opportunity for potential customers to explore DragonLab's capabilities, as well as present customer-specific interests and requirements. The agenda includes an overview of the Dragon spacecraft, concept of operations, payload accommodations and cost parameters.

DragonLab is an alternate configuration of SpaceX's Dragon spacecraft which, along with the Falcon 9 launch vehicle, has been contracted by NASA to provide cargo resupply services to the International Space Station as early as 2010.

To express interest in attending the user conference, visit DragonLabUserConference.com.

Space is limited and all participants must receive confirmation from SpaceX in order to attend this workshop. For more information or questions regarding the user conference, please email DragonLab@spacex.com.

[ANS thanks Lee for the above information]

/EX

SB Sat @ amsat $ans284.03
US Senate Bill Introduced

AMSAT News Service Bulletin 284.03
From AMSAT HQ SILVER SPRING, MD.
October 11, 2009
To All RADIO AMATEURS
BID: $ANS-284.03

RADIO LAW: SENATE BILL INTRODUCED TO STUDY HAM RADIO EMCOMM

A companion bill to the Amateur Radio Emergency Communications Enhancement Act of 2009 was introduced in the U.S. Senate on Tuesday, October 6 by Connecticut Democrat Joe Lieberman and Maine Republican Susan Collins.

Titled Senate Bill 1755, it carries the same name as the House measure introduced this past April by Representative Sheila Jackson-Lee. The bill, if passed, would direct the Department of Homeland Security to undertake a study on emergency communications with an emphasis on the role that ham radio operators play.

S 1755 points out that "There is a strong Federal interest in the effective performance of Amateur Radio Service stations, and that performance must be given support at all levels of government; and protection against unreasonable regulation and impediments to the provision of the valuable communications provided by such stations.

Introduction of S 1755 is the result of many months of groundwork laid by the American Radio Relay League and appears to be directly based on the basis and purpose of the service. This as outlined in Section 97.1 of the FCC rules. (ARRL)

[ANS thanks ARRL for the above information]

/EX

SB SAT @ AMSAT $ANS-284.04
AO-51 Configured for JOTA

AMSAT News Service Bulletin 284.04
From AMSAT HQ SILVER SPRING, MD.
October 11, 2009
To All RADIO AMATEURS
BID: $ANS-284.04

AO-51 configuration to support Scouting JOTA

AMSAT-NA is supporting the 52nd Jamboree on the Air (JOTA) Scouting event by dedicating AO-51 operation to the event.

For October 17th and 18th, the AO-51 QRP repeater will be allocated for JOTA use. All users are requested to give way to JOTA stations or QSOs with JOTA stations.

The frequencies used for this weekend will be 145.880 FM uplink, and 435.150 FM downlink, no PL tone required. The mode change should occur at ~00:00 UTC on the 17th (Friday evening in the US) and run for approximately 48 hours.

AMSAT wishes the Scouts good luck operating via the AO-51 satellite for the event.

Reports of your JOTA operations should be sent to the AMSAT-BB or directly to ko4ma@amsat.org.

Photo files up to 5 Mb total are also welcome for possible inclusion in an upcoming AMSAT Journal article.

73, Drew KO4MA
AMSAT-NA VP Operations

[ANS thanks the AO-51 Operations Team for the above information]

/EX

SB SAT @ AMSAT $ANS-284.05
ARISS Report for Oct 4,2009

AMSAT News Service Bulletin 284.05
From AMSAT HQ SILVER SPRING, MD.
October 4, 2009
To All RADIO AMATEURS
BID: $ANS-284.045

1. Upcoming School Contacts

An Amateur Radio on the International Space Station (ARISS) contact has been scheduled for Sint-Michielscollege Brasschaat vzw (SMCB) in Brasschaat, Belgium on Wednesday, October 7 at 10:20 UTC. Visits to space and science museums are among the science activities planned for the children. Guest speakers will include a representative from Verhaert Space Systems and Dirk Frimout, Belgium�s first astronaut.

An Amateur Radio on the International Space Station (ARISS) contact has been scheduled with the National Planetarium in Kuala Lumpur, Wilayah Persekutuan, Malaysia on Thursday, October 8 at 09:34 UTC. The contact will occur as part of the National Space Challenge, a program that was created in an effort to instill the talents and desire towards the understanding of space in primary school aged children. Sixteen schools will participate.

An Amateur Radio on the International Space Station (ARISS) contact has been scheduled for Belmont Elementary School in Langley, British Columbia, Canada on Friday, October 9 at 20:20 UTC. Students are working on projects with a �Mission Control� theme and the Langley Amateur Radio Association (L.A.R.A.) is working with the school to organize this event.

2. Thirsk Participates in ARISS Contact with R.T. Alderman Students

Astronaut Bob Thirsk, VA3CSA participated in an Amateur Radio on the International Space Station (ARISS) contact with students attending R. T. Alderman School in Calgary, Alberta, Canada on Monday, September 28. An audience of 615 people gathered, watched and listened as Thirsk answered 15 questions posed to him by the students. Media coverage was provided by a local television station. After the contact, Thirsk changed the ISS radio beacon text to read, �Hello to RT Alderman School!�

3. De Winne Speaks with Lisbon, Portugal Students via ARISS

On Thursday, October 1 an Amateur Radio on the International Space Station (ARISS) contact was held between the Ci�ncia Viva Museum in Lisbon, Portugal and Frank De Winne, ON1DWN onboard the ISS. Ground station ON4ISS in Belgium provide the telebridge connection. An audience of 300 people gathered and watched as twenty-three questions were asked and answered. The ARISS contact at Ciencia Viva was a major event during the nationwide celebrated Space Week. The participating students have been working on space projects for two years and they were highly motivated to do this science-related activity.

4. ARISS Contact with University of Liege

An Amateur Radio on the International Space Station (ARISS) contact took place on Friday, October 2 between the University of Liege in Belgium and on-orbit astronaut Frank De Winne, ON1DWN via telebridge station ON4ISS in Belgium. Eighteen questions were answered before losing contact with the ISS. The University of Liege offers the only aerospace engineering education program in the French part of Belgium. In the context of the OUFTI-1 project (www.oufti.ulg.ac.be) that aims at building a CubeSat featuring the amateur radio D-STAR technology, an amateur radio club was formed at the university.

5. Nicole Stott Participates in ARISS Contact with Italian Students

On Friday, October 2, students attending Scuola Secondaria 1� Grado �Alighieri � Trevigi� in Casale Monferrato, Prov. Alessandria, Italy participated in an Amateur Radio on the International Space Station (ARISS) contact. The youth asked Nicole Stott, KE5GJN 21 questions as an audience of 200 students, parents and teachers looked on. Local media provided news coverage. The event was streamed live on the internet and the audio was fed into the EchoLink AMSAT and JK1ZRW servers. The contact motivated the youth to study Science, History, Geography, Information Technology and English.

6. ARISS Contact with Boy Scouts of Canada

On Saturday, October 3, Scouts of Canada in Ottawa, Ontario experienced an Amateur Radio on the International Space Station (ARISS) contact. Three hundred scouts and parents were present as Robert Thirsk VA3CSA answered questions about life and work in space. Thirsk turned over a few questions to Mr. Guy Laliberte, Circ De Soleil president and spaceflight participant. Audio was fed into the EchoLink AMSAT and JK1ZRW servers. The ARISS contact was held in conjunction with the Scout Science Badge Award system.

7. ARISS News on Amateur Radio Newsline

On October 2, Amateur Radio Newsline Report 1677 reported on Amateur Radio on the International Space Station (ARISS) astronaut licensing. To view �Ham Radio in Space: New Ham Astronaut is KF5DBF,� see: ftp://ftp.arnewsline.org/quincy/News-A/news.txt

/EX

73,
This week's ANS Editor,
Dee Interdonato, NB2F

From 2062639605121418582
X-Google-Thread: a4a23d5f63,855ac28b3a5f85ed,start
X-Google-Attributes: gida4a23d5f63,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII
Path: g2news2.google.com!news2.google.com!newsfeed2.dallas1.level3.net!
news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-281 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Sun, 11 Oct 2009 20:13:09 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 1780
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000701ca4ad0$bfd01aa0$3f704fe0$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;charset="iso-8859-1"
Content-Transfer-Encoding: quoted-printable
X-Trace: reader1.panix.com 1255306389 15236 166.84.1.6 (12 Oct 2009 00:13:09 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Mon, 12 Oct 2009 00:13:09 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to   rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to   rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-language: en-us
Xref: g2news2.google.com rec.radio.amateur.space:295 rec.radio.info:1038

This report is organized into four (4) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - deorbited/returned satellites

SB SAT @ AMSAT W8ISS $WSR-281.S1
WSR 281 Part 1 10/08/2009

AMSAT NEWS SERVICE BULLETIN 281.S1
FROM AMSAT HQ SILVER SPRING, MD, October 08, 2009
TO ALL RADIO AMATEURS
BID: $WSR-281.S1

SumbandilaSat

```
Catalog Number: 35870
Launch Date: September 17, 2009

Status: Commissioning

Callsign: ZS0SUM

Uplink: 145.880MHz FM
Downlink: 435.350MHz FM
[10042009]
=====
DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008

Status: Operational
Current Mode: Science Mode - Beacon ONLY

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink:   435.530 to 435.570 MHz

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68
[02122009]
=====
VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink:   435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink:   435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW


Indian Beacon:  145.859330 MHZ CW
Dutch Beacon:   145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP
```

```
Official Webpage: http://www.amsatindia.org/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is active. Each transponder has a different beacon.
[08072008]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: System Reload in progress

Current Modes:
FM Repeater ONE
Uplink:    145.920Mhz FM
Downlink:  435.300Mhz FM
FM Repeater TWO (QRP ONLY)
Uplink:    OFF
Downlink:  OFF
BBS
Uplink:   1268.700MHz 9k6 FM
Downlink:  435.150MHz 9k6 FM
Telemetry
Downlink:  OFF

Analog voice downlink:     435.300 MHz FM
                           435.150 MHz FM
                          2401.200 Mhz FM
Analog voice uplink:       145.860 MHZ FM
                           145.880 MHz USB
                           145.920 MHz FM
                          1268.700 MHz FM
Digital Downlinks:         435.150 MHz FM 38k4 PBP, 1 watt output
                           435.150 MHz FM 9k6 Pacsat Broadcast Protocol
                          2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:            145.860 MHz FM 9k6 Pacsat Broadcast Protocol
                          1268.700 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon:                    435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/

IARU coordination status page:
```

```
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[10042009]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002

Status: Operational

Current Mode: V/u

Uplink:   145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4
Hz. The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute
   timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the re-
   peater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset
   the 10 minute timer.
[05282007]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: RECOVERY
Current Mode: V/u (Mode JA)

Voice/CW (Mode JA)
Uplink:   145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon:   435.795 MHz

Digital Mode JD
Uplinks:  145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
```

U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage:
http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts.htm
[09062009]
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993

Status: Operational

Current Mode: V/u

```
Uplink:   145.850 MHz FM
Downlink: 436.797 MHz FM
```

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[03232009]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational

Current Mode: Alternating between Mode A and B every 24 hours

```
Uplink:   145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink:  29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons:   29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW
```

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
[02122009]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - V/u
Voice - V/v
BBS - V/v
APRS - V/v
SSTV - V/v

Expedition 21 Crew:
Commander: Gennady Padalka RN3DT
Flight Engineer: Michael Barratt KD5MIJ
Flight Engineer: Robert Thirsk VA3CSA
Flight Engineer: Roman Romanenko
Flight Engineer: Frank De Winne ON1DWN
Flight Engineer: Nicole P. Stott KE5GJN
Flight Engineer: Jeff Williams KD5TVQ
Flight Engineer: Maxim Suraev
Flight participant: Guy Lalibert�

Available Modes and Frequencies:

Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[10042009]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-281.S2
WSR 281 Part 2 10/08/2009

AMSAT NEWS SERVICE BULLETIN 281.S2
FROM AMSAT HQ SILVER SPRING, MD, October 08, 2009
TO ALL RADIO AMATEURS
BID: $WSR-281.S2

SwissCube
Catalog Number: 35932?
Launch Date: September 23, 2009

Status: In Orbit

Callsign: HB9EG

Beacon(100mw): 437.5050MHz CW
Beacon(1w): 437.5050MHz FSK 1k2bps
[10042009]
=====
UWE-2
Catalog Number: 35935?
Launch Date: September 23, 2009

Status: In Orbit

Beacon(500mw): 437.3850 MHz AFSK 1k2bps
437.3850 MHz FSK 9k6bps
[10042009]

```
=====
ITUpsAT1
Catalog Number: 35934?
Launch Date: September 23, 2009

Status: In Orbit

Beacon(100mw): 437.325MHz CW
Beacon(1w): 437.325MHz 19k2bps
[10042009]
=====
BEESAT
Catalog Number: 35933?
Launch Date: September 23, 2009

Status: In Orbit

Callsign: DP0BEE

Beacon(100mw): 436.000MHz CW
Beacon(500mw): 436.000MHz GMSK 4k8bps
[10042009]
=====
Pollux
Catalog Number:
Launch Date: July 31, 2009

Status: Operational

Callsign: POLLUX-1

Downlink: 145.825MHz 1k2 AX.25
[10042009]
=====
Castor
Catalog Number:
Launch Date: July 31, 2009

Status: Operational

Callsign: KD4HBO-1

Downlink: 145.825 MHz 1k2 AX.25
[10042009]
=====
BEVO-1 (DRAGONSAT-1)
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Operational

Downlink: 437.325 MHz 9k6 GMSK
          437.325 MHz CW 20wpm
```

```
[07312009]
=====
AggieSat2 (DRAGONSAT-2)
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Operational

Downlink: 436.250 MHz 9k6
[07312009]
=====
CP-6
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Commissioning

Downlink: 437.365 MHz 1k2 AFSK
[06052009]
=====
HAWKSAT 1
Catalog number: 35003
Launch Date: May 19, 2009

Status: ?

Downlink: 437.345 ?
[06052009]
=====
Pharmasat
Catalog Number: 35002
Launch Date: May 19, 2009
Status: Commissioning

Downlink: 437.465 MHz 1k2 AFSK
[06052009]
=====
ANUSAT
Catalog Number: 34808
Launch Date: April 20, 2009

Status: ?

Downlink:  435.000 MHz
Uplink:    145.800 MHz

Telemetry: 137.400 MHz
[05112009]
=====
SOHLA-1 (ASTRO TECH.)
Catalog Number: 33496
Launch Date: January 23, 2009
```

Status: Commisioning

Proposed Frequencies and Modes:
Downlink: 437.505 MHz AFSK/CW
Beacon: 437.505 MHz AFSK/CW

Callsign:

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=101
[03232009]
=====
KAGAYAKI (Solan Co.)
Catalog Number: 33495?
Launch Date: January 23, 2009

Status: In Orbit

Downlink: 437.375 MHZ   FSK9k6/CW
Beacon: 437.375 MHz   FSK9k6/CW

IARU coordination status page:

AMSAT-NA webpage:

[01152009]
=====
STARS (Kagawa Univ.) (Twin Satellites)
Catalog Number: 33498
Launch Date: January 23, 2009

Status: Operational ?

Downlinks: 437.485 MHz FM/CW
           437.465 MHz FM/CW
Beacons: 437.305 MHz FM/CW
           437.275 MHz FM/CW

Callsigns: JR5YBN
           JR5YBO

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=99

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=121&retURL
=/satellites/status.php
[022152009]
=====
KKS-1 (Tokyo MCIT)
Catalog Number: 33499
Launch Date: January 23, 2009

Status: Operational

Downlink: 437.455 MHz AFSK/CW
Beacon: 437.385 MHz AFSK/CW

Callsign: JQ1YYY

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=107

AMSAT-NA webapge:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=120&retURL
=/satellites/status.php
[02212009]
=====
PRISM (Tokyo Univ.)
Catalog Number: 33493
Launch Date: January 23, 2009

Status: Operational ?

Downlink: 437.425 MHz AFSK/GMSK/CW
Beacon: 437.250 MHz AFSK/GMSK/CW

Callsign: JQ1YCX

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=97

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=119&retURL
=/satellites/status.php
[02212009]
=====
RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number: 32953
Launch Date: May 23, 2008

Status: Operational

Curent Modes: Telemetry
              Audio
              Images

Downlinks: 435.315 MHz
           435.215 MHz

AMSAT-NA website:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=115&ret
URL=/satellites/status.php

Official website:
http://www.npopm.com/?cid=leoca&caid=43

```
[02122009]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode:  /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon:    435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=94&retURL=

/satellites/status.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=72
[02122009]
=====
CP3
Catalog Number: 31129
Launch Date: April 17,2007

Status: Operational

Current Mode:  /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[02122009]
=====
GENESAT-1
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Current Mode: /u

Callsign: KE7EGC

Telemetry Beacon Downlink: 437.0695 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[091512009]
=====
CO-58 CubeSat XI-V
```

Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

```
Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon:             437.2750 MHz CW
```

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/xivpicte.htm
[02212009]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003

Status: ?????

Current Mode: /u

```
Beacon:     436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS
```

Callsign: JQ1YGW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=96&retURL=/satellites/status.php

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[06082009]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Operational?

```
Uplink:  1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan?)
```

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/

```
IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=56
[02122009]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: System Reload in Progress

Current Modes:
FM Repeater ONE
Uplink:    145.920 Mhz FM
Downlink:  435.300 Mhz FM
FM Repeater TWO (QRP ONLY)
Uplink:    OFF
Downlink:  OFF
BBS
Uplink:   1268.700MHz 9k6 FM
Downlink:  435.150MHz 9k6 FM
Telemetry
Downlink:  OFF

Analog voice downlink:     435.300 MHz FM
                           435.150 MHz FM
                          2401.200 Mhz FM
Analog voice uplink:       145.860 MHZ FM
                           145.880 MHz USB
                           145.920 MHz FM
                          1268.700 MHz FM
Digital Downlinks:         435.150 MHz FM 38k4 PBP, 1 watt output
                           435.150 MHz FM 9k6 Pacsat Broadcast Protocol
                          2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:            145.860 MHz FM 9k6 Pacsat Broadcast Protocol
                          1268.700 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon:                    435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[10042009]
```

```
=====
QuakeSat
Catalog Number: 27845
Launch Date: June 30, 2003

Status: Telemetry only

Current Mode: 9600 baud data packet

Mode U packet
Downlink: 436.675 MHz 9k6 BPS

Quakesat webpage:
http://www.quakefinder.com/services/quakesat-ssite/
[04272009]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=69&retURL
=/satellites/status.php
[02212009]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Telemetry only

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink:        144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[03302009]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Telemetry only

Current Modes:
Telemetry : /u

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign:       4XTECH-12

More information of GO-32 can be found at:
http://asri.technion.ac.il/techsat/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=14&retURL
=/satellites/status.php
[04272009]
=====
RS-22 RADIO SPORT RS-22
Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only

Current Mode:  /u

CW Beacon - 435.352 MHz
            145.818 MHz

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=76&retURL
=/satellites/status.php
[02212009]
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990

Status: CW Beacon only

Uplinks:          145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
```

```
                   145.880 MHz 1200-baud Manchester FSK
                   145.900 MHz 1200-baud Manchester FSK

CW downlink:       437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[03162009]
=====
CanX-2
Catalog number: 32790
Launch Date: April 28, 2008

Status: Operational in range of ground station only

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web
page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[02212009]
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.425 MHz 1k2 baud packet

For the latest project status update please visit the AAUSAT-II web
page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[02212009]
=====
CO-65 CUTE-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008

Status: Digipeater

Downlink:  437.475 MHz 9k6 Packet
Uplink:   1267.600 Mhz
```

Telemetry Beacon:
Downlink: 437.2750 MHz CW

For the latest project status update please visit the Cute-1.7+APD II web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78

Command Station blog website:
http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=112&retURL=/satellites/status.php
[02212009]
=====
Compass-1
Catalog number: 32787
Launch Date: April 28, 2008

Status: Operational

Current Mode: 4k8 MSK packet

Uplink: 145.980 MHz FM
Downlink: 437.275 Mhz CW
          437.405 MHz Packet

For the latest project status update please visit the Compass 1 web page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=114&retURL=/satellites/status.php
[04272009]
=====
CO-66 Seeds II
Catalog number: 32791
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.485 MHz

Callsign: JQ1YGU

For the latest project status update please visit the Seeds 2 web page: http://cubesat.aero.cst.nihon-u.ac.jp/english/seeds_2_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=113&retURL=/satellites/status.php
[02212009]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes:	FM Repeater -	V/u
	Voice -	V/v
	BBS -	V/v
	APRS -	V/v
	SSTV -	V/v

Expedition 21 Crew:

Commander:	Gennady Padalka	RN3DT
Flight Engineer:	Michael Barratt	KD5MIJ
Flight Engineer:	Robert Thirsk	VA3CSA
Flight Engineer:	Roman Romanenko	
Flight Engineer:	Frank De Winne	ON1DWN
Flight Engineer:	Nicole P. Stott	KE5GJN
Flight Engineer:	Jeff Williams	
Flight Engineer:	Maxim Suraev	
Flight participant:	Guy Lalibert�	

Available Modes and Frequencies:
Digital/APRS:

Worldwide packet uplink:	145.825 MHz FM 1k2
Worldwide packet downlink:	145.825 Mhz FM 1k2

Voice:

Region 1 voice uplink:	145.200 MHz FM
Region 2/3 voice uplink:	144.490 MHz FM
Worldwide downlink:	145.800 MHz FM

Crossband Repeater:

Repeater Uplinks:	1269.650 MHz FM
	437.800 MHz FM
	145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink:	145.800 MHz FM
	437.800 MHz FM (Kenwood)

SSTV Robot 36:

Downlink:	145.800 MHz FM

Mode and Antenna Polarization:

V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
                          RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[10042009]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-281.S3
WSR 281 Part 3 10/08/2009

AMSAT NEWS SERVICE BULLETIN 281.S3
FROM AMSAT HQ SILVER SPRING, MD, October 08, 2009
TO ALL RADIO AMATEURS
BID: $WSR-281.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

CP4
Catalog Number: 31122
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon: 437.325 MHz CW

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=79
[10022008]
=====
LIBERTAD-1
Catalog Number: 31128
Launch Date: April 17,2007

Status: Non-Operational

```
Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink:   145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[02122009]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: Non-Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder:  145.825 Mhz FM
[01012009]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency:  437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink:         437.250 MHz FM 67Hz CTCSS
Voice Downlink:      2401.835 MHz FM
Packet Up/Downlink:  437.250 MHz 9k6 packet
Packet Downlink      2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
UWE-1
Catalog Number: 28892
```

Launch Date: October 27, 2005

Status: Non-Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[08132007]
=====
CANX-1
Catalog Number: 27847
Launch Date: June 30, 2003

Status: Non-Operational

Downlink: 437.8800 MHz AFSK 1k2bps
[06052009]
=====
DTUSAT
Catalog Number: 27842
Launch Date: June 30, 2003

Status: Non-Operational

Current Mode: 2k4 AFSK Packet last reported

Downlink: 437.475MHz

Officail webpage: http://dtusat1.dtusat.dtu.dk/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=101&retURL
=satellites/all_oscars.php
[02212009]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)

Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

```
Status: Telemetry only

Uplinks:   145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink:  437.325 MHz

Broadcast callsign: MYSAT3-11
BBS:                MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial land and weather imaging payloads offers FM and FSK
Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as
a collaborative effort between the Malaysian government and Surrey
Satellite Technology Ltd.
[03302009]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink:   145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS:                SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational
```

```
Uplink:   145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
V-band:   145.840 -  145.990 MHz CW/LSB
U-band:   435.550 -  435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks
---------
S2-band:  2401.225 -  2401.475 MHz CW/USB
K-band:  24048.010 - 24048.060 MHz CW/USB
Beacon:   2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)
----------------------------
BEACON   General Beacon(GB)  Middle Beacon(MB)  Engineering Beacon(EB)
2 m                    none        145.898 MHz                     none
70cm            435.438 MHz        435.588 MHz              435.838 MHz
13cm(1)        2400.188 MHz       2400.338 MHz             2400.588 MHz
13cm(2)        2401.173 MHz       2401.323 MHz             2401.573 MHz
3cm           10450.975 MHz      10451.125 MHz            10451.375 MHz
1.5cm         24047.885 MHz      24048.035 MHz            24048.285 MHz
[07162007]
=====
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
=====
UO-36 UoSAT-12
```

```
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink:    145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: 25636
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater:         436.250 MHz

Uplinks: Mode B Repeater:  145.825 MHz
Mode J Digipeater:         145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)
```

```
The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink:   145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
MO-30 UNAMSAT-2
Catalog Number: 24305
Launch Date: September 5, 1996

Status: Non-operational

Downlink:       435.1380 MHz AFSK 1200 BPS
Downlink:       435.2060 MHz AFSK 1200 BPS
Uplink:         145.8150 MHz AFSK 1200 BPS
Uplink:         145.8350 MHz AFSK 1200 BPS
Uplink:         145.8550 MHz AFSK 1200 BPS
Uplink:         145.8750 MHz AFSK 1200 BPS
[06042009]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Non-operational

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign:       POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012009]
=====
IO-26 ITAMSAT
Catalog number: 22826
```

Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks: 145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink: 145.900 FM 9600-baud FSK

```
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990
```

```
Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
[05012006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: non-operational

Current Mode:  V/u

Uplink:         145.900 MHz FM 1200-baud Manchester FSK (reserved)
                145.920 MHz FM VOICE
                145.940 MHz FM 1200-baud Manchester FSK (reserved)
                145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink:       437.026 MHz USB VOICE
                (1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[07242009]
=====
UO-15 UoSAT-4
Catalog Number: 20438
Launch Date: January 22, 1990

Status: Non-operational

Uplink: ?
Downlink: 435.1250MHz (?)
          435.1200MHz (?)
[06042009]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
```

```
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984

Status: Non-operational.

Current Mode:  /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon:          435.025 MHz
Mode-S Beacon:     2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[01012009]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB
```

```
Beacon:   145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink  29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
Beacons:   29.450 MHz
          435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965
```

```
Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon 1:  29.352 MHz (intermittent)
Beacon 2:  29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink:     21.260 to 21.300 MHz CW/USB
Downlink:  145.860 to 145.900 MHz CW/USB

Beacon:    145.860 MHz

Robot:     145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink:   21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon:   29.408 MHz

Robot:    29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-281.S4
WSR 281 Part 4 10/08/2009
```

AMSAT NEWS SERVICE BULLETIN 281.S4
FROM AMSAT HQ SILVER SPRING, MD, October 08, 2009
TO ALL RADIO AMATEURS
BID: $WSR-281.S4

THE FOLLOWING SATELLITES HAVE RE-ENTERED OR HAVE BEEN RETURNED SAFELY:

NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: July 28, 2008

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[01012009]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink: 145.825 Mhz FM APRS AX25
APRS Uplink: 145.825 MHz FM APRS AX25
Voice/PSK31 Uplink: 28.120 MHz

Packet to Voice ID: RAFT
[06112007]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Re-Entered
Re-entered: June 18, 2008

```
Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon:             437.2750 MHz CW

Callsign: JR8YJT
[01012009]
=====
SO-43 Starshine 3
Catalog Number: 26929
Launch Date: September 30, 2001

Status: Re-Entered
Re-entered: January 21, 2003

Beacon: 145.825Mhz
[02212009]
NNNN
/EX
```

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the

President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at}
amsat.org
NNNN
/EX

```
From -3664812454685305867
X-Google-Thread: a4a23d5f63,9711f6ba66973b89,start
X-Google-Attributes: gida4a23d5f63,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news1.google.com!npeer01.iad.highwinds-media.com!
news.highwinds-media.com!feed-me.highwinds-media.com!nx01.iad01.newshosting.com!
newshosting.com!198.186.194.249.MISMATCH!news-out.readnews.com!
transit3.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-291 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sat, 17 Oct 2009 21:41:10 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 364
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000201ca4f94$09b39a80$1d1acf80$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1255830070 26786 166.84.1.6 (18 Oct 2009 01:41:10 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 18 Oct 2009 01:41:10 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
```

X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
x-cr-hashedpuzzle: AiB2 Aj3F AmqM AtO+ BGVS CsCC Ef5f EiVX Fm9e IO5g Iu5N IxJd I/5O JeeY JgC5 JnU7;1;cgBlAGMALQByAGEAZABpAG8ALQBpAG4AZgBvAEAAcABhAG4AaQB4AC4AYwBvAG0A;Sosha1_v1;7;{22E8EF70-E879-4003-B566-40245EE98F4D};awA5AGoAawBtAEAAYwBvAG0AYwBhAHMAdAAuAG4AZQB0AA==;Sun, 18 Oct 2009 01:39:55 GMT;QQBOAFMALQAyADkAMQAgAEEATQBTAEEAVAAgAE4AZQB3AHMAIABTAGUAcgB2AGkAYwBlACAAVwBlAGUAawBsAHkAIABCAHUAbABsAGUAdABpAG4AcwA=
x-cr-puzzleid: {22E8EF70-E879-4003-B566-40245EE98F4D}
Xref: g2news2.google.com rec.radio.amateur.space:296 rec.radio.info:1050

AMSAT NEWS SERVICE
ANS-291

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

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**********************************************************************
*  AMSAT thanks Frank Bauer, KA3HDO and Janet Bauer and the entire   *
*    2009 Symposium Team for a spectacular and inspiring event!      *
**********************************************************************
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In this edition:

- AMSAT Says "We're Going Back to Space"
- AMSAT, IBM, SUNY-Binghamton Announce NextGen CubeSat Development
- Discussions Continue For New AMSAT Lab Site
- Canadian Hams to Share 430-450 MHz With Military System
- AO-51 Operations Schedule Posted
- Satellite Shorts From All Over

SB SAT @ AMSAT $ANS-291.01
AMSAT Says "We're Going Back to Space"

AMSAT News Service Bulletin 291.01
>From AMSAT HQ SILVER SPRING, MD.
October 18, 2009
To All RADIO AMATEURS
BID: $ANS-291.01

The Board of Directors has adopted the Engineering Task Force recommendation that low-cost launch options be immediately pursued. The AMSAT engineering team will develop a 1U CubeSat design effective immediately. Tony Monteiro, AA2TX, Vice-President of Engineering said, "We are recommending an approach that gets AMSAT back up in space with new satellites by leveraging the skills and technology we have today."

The new AMSAT CubeSat's initial capability is planned to add to the popular low-earth orbit FM transponder fleet allowing hams to continue to use their existing handheld and portable antenna systems. This also allows an accessible entry path for new satellite operators to get started. The existing FM satellites are starting to show their age.

The flight version of ARISSat-1 has been developed to fit into the CubeSat model. AMSAT's flexible Software Defined Transponder (SDX), simplified IHU, power control subsystem, external interfaces to experimental payloads and cameras will now allow a modular approach to mission design using proven subsystems and components. The ARISSat-1 mission planned in 2010 will be the initial flight test of AMSAT's modular satellite.

Here are some of the highlights ...

+ AMSAT will develop comparable AO-51 level of performance packaged into a 1U CubeSat. This includes a U-V transponder, V telemetry, U command receiver, IHU, power control. This can be done with our modular design.

+ This will be a U/V FM Transponder, not done before in a 1U CubeSat, which can be worked with a HT and a simple antenna. CubeSat power limitations are planned to be addressed through research and development of deployable solar-cells.

+ AMSAT will make our open-design satellite modules and technology available for other satellite teams to build into their missions.

+ This new approach will provide a reliable radio link for future CubeSats allowing university teams to concentrate on their scientific objectives.

+ The modular nature of the AMSAT CubeSat system will allow add-on missions utilizing several different types of modulation and bandwidth. These can be pursued with future low-cost CubeSat launch opportunities.

AMSAT President, Barry Baines, WD4ASW Annual Meeting Powerpoint Presentation has been posted at http://www.amsat.org

[ANS thanks the AMSAT Board of Directors for the above information]

/EX

SB SAT @ AMSAT $ANS-291.02
AMSAT, IBM, SUNY-Binghamton Announce NextGen CubeSat Development

AMSAT News Service Bulletin 291.02
>From AMSAT HQ SILVER SPRING, MD.
October 18, 2009
To All RADIO AMATEURS
BID: $ANS-291.02

AMSAT will work with a university student engineering team to develop the NextGen Cubesat.

NextGen Program Manager, Alex Harvilchuck, N3NP introduced this new program at the AMSAT Symposium. Alex revealed program goals and its initial plans with a paper in the Proceedings and presentations to the AMSAT Board of Directors and to the attendees during Symposium sessions.

NextGen consists of AMSAT volunteer mentors working with IBM Global Services Systems Engineering Division, and SUNY-Binghamton (also called University of Binghamton) senior level engineering students participating in their 'capstone' engineering project.

Alex summarized the NexGen program goals:

+ Intial analysis of ARISSat-1, documenting the systems, and analysis of the lessons learned from ARISSat-1 and other prior spacecraft to create a building block architecture for future satellites.

+ Open, modular, evolutionary, and documented design based on this analysis.

+ Redesigning the ARISSat-1 Power Systems into a next generation power system using supercapacitors instead of batteries and reducing the footprint of some of the boards.

+ Analysis and modification to the structure to incorporate deployable solar panels with a scalable design that will work for 1U, 2U and 3U sizes.

+ Design a Picosat-class bus structure that AMSAT, or any other University, can use for 1U, 2U, or 3U CubeSat spacecraft. AMSAT could make the open design available at low-to-no-cost to qualified University groups.

+ An Engineering Model of the NextGen CubeSat spacecraft bus will be on display at the Dayton Hamvention AMSAT Booth for everyone to study.

Alex summarized, "Starting with our initial core team of 34 students, plus advisers, mentors and volunteers at Binghamton University this will be an ongoing effort. It is not a one time event, but the start of a stable, evolutionary design process that will further STEM (Science, Technology, Engineering & Mathematics) with the Next Generation of engineers and amateur radio operators. We are looking for other individuals and University/School teams to participate in all aspects of the spacecraft design - RF Systems - Guidance, Navigation, Control & Experiment Systems - Power & Structure Systems."

Volunteer mentors are needed! Even if you only have an hour a week, you can mentor a student over the phone or you can peer review a document that the students are working on. If you have more than an hour a week, you can implement a small design change to an existing subsystem; you could respin the board layout to meet a reduced form factor; you could redesign a module to use different technology. Contact Alex via e-mail at amsat@elkmtn.org .

AMSAT's Board of Directors has approved the support of the University of Binghamton NextGen Cubesat Proposal and agreed to provide $1,200.00 in immediate funding to the Binghamton Foundation to support student expenses and initially budgeted $10,000.00 to cover material costs associated with hardware development between September 2009 and May 2010. The Board will review progress at the end of the first semester.

[ANS thanks Alex, N3NP and AMSAT Board of Directors for the above information]

/EX

SB SAT @ AMSAT $ANS-291.03
Discussions Continue For New AMSAT Lab Site

AMSAT News Service Bulletin 291.03
>From AMSAT HQ SILVER SPRING, MD.
October 18, 2009
To All RADIO AMATEURS
BID: $ANS-291.03

AMSAT President, Barry Baines, WD4ASW discussed an opportunity under serious discussions with the University of Florida, Gainesville to locate AMSAT's satellite laboratory on campus.

Among discussions over the past 12 months, AMSAT has had conversations with several universities concerning a potential relationship. This opportunity arose out of an amateur radio talk given at The Villages ARC by Dave, AA4KN and Drew, KO4MA in April. This lead to contact with UF's Dr. Norman Fitz-Coy. A Memorandum of Understanding has been drafted and is currently under review by legal teams. At this time there is no timeframe for bringing about a formal conclusion as the MOU discussions continue and internal UF approval still needed.

Relocating the AMSAT Lab from the 'Eastern Shore' to 'The Swamp' offers significant potential:

+ Location on a major university campus in a state-of-the-art building

+ Integrated into a facility focused on small satellite development with clean room installation at the host's expense (not AMSAT)

+ Potential for student projects focused on AMSAT needs

+ Broadening of AMSAT's presence in the wider university community

+ Potential research/development opportunities for AMSAT and AMSAT members

+ Establishing a program that offers significant traction for education outreach

[ANS thanks AMSAT President, Barry Baines, WD4ASW for the above information]

/EX

SB SAT @ AMSAT $ANS-291.04
Canadian Hams to Share 430-450 MHz With Military System

AMSAT News Service Bulletin 291.04
>From AMSAT HQ SILVER SPRING, MD.
October 18, 2009
To All RADIO AMATEURS
BID: $ANS-291.04

Amateur Radio Newsline #1678 reported that Industry Canada has informed Radio Amateurs of Canada that it has authorized the Department of National Defense to use a digital system called Enhanced Position Location Reporting System or EPLRS in the 430 to 450 MHz shared 70 centimeter band. The EPLRS system consists of mobile, fixed, transportable and airborne stations that use 5 MHz-wide spread spectrum channels to provide strategic telemetry information for military platforms.

This authorization is on a no-protection, non-interference basis, which means that no new restrictions will be imposed on Canadian amateur operations in this band as a result. Industry Canada says that there is a slight chance of minor interference to amateur radio systems. Typically in the form of a minor audible clicking noise. If Canadian amateurs encounter such interference, they are requested to report it by e-mail to Radio Amateurs of Canada at regulatory at rac dot ca. The information reported should include the geographical location, date, time, frequency and mode being used by the amateur station, and a description of theinterference.

[ANS thanks Amateur Radio Newsline Report 1678 and RAC for the above information]

/EX

SB SAT @ AMSAT $ANS-291.05

AO-51 Operations Schedule Posted

AMSAT News Service Bulletin 291.05
>From AMSAT HQ SILVER SPRING, MD.
October 18, 2009
To All RADIO AMATEURS
BID: $ANS-291.05

The AO-51 command team has posted the operating schedule for the remainder of October. For the latest Command Team and Operations Group news about AO-51 refer to:
http://www.amsat.org/amsat-new/echo/CTNews.php

October 17 - October 18

FM Repeater, V/U
Uplink: 145.920 MHz FM
Downlink: 435.300 MHz FM

JOTA Only FM Repeater, V/U
Please give way to JOTA stations or QSOs with JOTA stations
Uplink: 145.880 MHz FM
Downlink: 435.150 MHz FM

October 19 - October 25

FM Repeater, V/U
Uplink: 145.920 MHz FM
Downlink: 435.300 MHz FM

9k6 BBS, L/U
Uplink: 1268.700 MHz 9k6 FM
Downlink: 435.150 MHz 9k6 FM

October 26 - November 1

FM Repeater, V/US
Uplink: 145.920 MHz FM
Downlink: 435.300 and 2401.200 MHz FM

[ANS thanks AO-51 Command Team Member Mark, N8MH for the above information]

/EX

SB SAT @ AMSAT $ANS-291.06
Satellite Shorts From All Over

AMSAT News Service Bulletin 291.06
>From AMSAT HQ SILVER SPRING, MD.
October 18, 2009
To All RADIO AMATEURS

BID: $ANS-291.06

+ The American Radio Relay League (ARRL) has a feature story on the ARISS antennas that will be launched to the ISS on STS-129 in mid-November and installed on the Columbus module during the mission's second spacewalk. See: http://www.arrl.org/news/features/2009/10/05/11110/?nc=1

+ Mineo Wakita, JE9PEL reports that at present FO-29 is only turned on once a week over Japan for testing of its power system.

+ Bob, N4HY has uploaded his camera phone pictures from the 2009 Symposium at http://twitpic.com/photos/rwmcgwier

+ Although EME is a bit off topic, every ham wishes for antennas like these. Here is a video from the Echoes of Apollo event: http://www.youtube.com/watch?v=AHGXp4Afr4g&feature=related

+ Amateur satellite operators in range of the west coast will have an opportunity to work W6FOG as he sails from San Francisco to Puerto Vallarta departing on 10/19/09. Neil will be working many of the ocean grids on the way.

+ Jim, ND9M/VQ9JC is presently deployed on a Navy ship heading for Sumatra on a humanitarian mission with fresh water for the victims of the recent earthquakes there. Jim has been active with his FT897 (TX) and the FT817 (RX) using an Arrow antenna and a UPS battery for power. He operates from the Helicopter Pad on the ship. JIm says, "There isn't much activity in the Indian Ocean but he is working VU's and E21's and handing out rare water grids!"

+ Hams like science so here are a couple of links to follow.

National Geographic has a zoomable map of space exploration http://books.nationalgeographic.com/map/map-day/index After you close the opening text screen you will see the image zoom control in the top right of the page.

This page contains an embedded video, "Do the Oceans of Jupiter's Europa Harbor Life?"

http://www.dailygalaxy.com/my_weblog/2009/10/europas-ice-sheet-enables-an-oxygenrich-ocean.html

[ANS thanks everyone for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office. And with that please keep in mind if you want to travel fast, travel alone. If you want to travel far, travel together. If you want to travel in comfort, fake an ankle sprain and convince the other travelers to carry you.

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM

```
From 1785662499517790277
X-Google-Thread: a4a23d5f63,342d4cb95e2e3539,start
X-Google-Attributes: gida4a23d5f63,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news1.google.com!border1.nntp.dca.giganews.com!
border2.nntp.dca.giganews.com!nntp.giganews.com!novia!news-out.readnews.com!
transit4.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-291 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Sun, 18 Oct 2009 09:32:01 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 1774
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000301ca4ff7$575316e0$05f944a0$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1255872721 6264 166.84.1.6 (18 Oct 2009 13:32:01 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 18 Oct 2009 13:32:01 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
x-cr-hashedpuzzle: AtWN EUQ0 Elai Et8G E5WY FUvZ FYie F4o2 GGNg Hnhd HuT5 IK3p
I65J KGUp K4gK
LTEj;1;cgBlAGMALQByAGEAZABpAG8ALQBpAG4AZgBvAEAAcABhAG4AaQB4AC4AYwBvAG0A;Sosha1_v1;
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X-Original-Bytes: 42831
Xref: g2news2.google.com rec.radio.amateur.space:297 rec.radio.info:1052

This report is organized into four (4) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - deorbited/returned satellites

SB SAT @ AMSAT W8ISS $WSR-291.S1
WSR 291 Part 1 10/18/2009

AMSAT NEWS SERVICE BULLETIN 291.S1
FROM AMSAT HQ SILVER SPRING, MD, October 18, 2009
TO ALL RADIO AMATEURS
BID: $WSR-291.S1

SumbandilaSat
Catalog Number: 35870
Launch Date: September 17, 2009

Status: Commissioning

Callsign: ZS0SUM

Uplink: 145.880MHz FM
Downlink: 435.350MHz FM
[10042009]
=====
DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008

Status: Operational
Current Mode: Science Mode - Beacon ONLY

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink: 435.530 to 435.570 MHz

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68
[02122009]
=====
VO-52 HAMSAT
Catalog number: 28650

Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.859330 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

To know what transponder is switched on please listen for the beacon that is active. Each transponder has a different beacon.
[08072008]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: System Reload in progress

Current Modes:
FM Repeater ONE
Uplink: 145.920Mhz FM
Downlink: 435.300Mhz FM
FM Repeater TWO (QRP ONLY)
Uplink: OFF
Downlink: OFF
BBS
Uplink: 1268.700MHz 9k6 FM
Downlink: 435.150MHz 9k6 FM
Telemetry
Downlink: OFF

Analog voice downlink: 435.300 MHz FM
                           435.150 MHz FM
                          2401.200 Mhz FM
Analog voice uplink: 145.860 MHZ FM
                           145.880 MHz USB
                           145.920 MHz FM

```
                          1268.700 MHz FM
Digital Downlinks:         435.150 MHz FM 38k4 PBP, 1 watt output
                           435.150 MHz FM 9k6 Pacsat Broadcast Protocol
                          2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:            145.860 MHz FM 9k6 Pacsat Broadcast Protocol
                          1268.700 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon:                    435.150 MHz
```

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[10042009]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz. The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10 minute timer.
[05282007]
=====

FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: RECOVERY
Current Mode: V/u (Mode JA)

Voice/CW (Mode JA)
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage:
http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's
CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/
fo29cwts.htm
[09062009]
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[03232009]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational

Current Mode: Alternating between Mode A and B every 24 hours

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz CW
145.972 MHz CW
435.100 MHz CW
2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
[02122009]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - V/u
Voice - V/v
BBS - V/v
APRS - V/v
SSTV - V/v

Expedition 21 Crew:

Commander:	Frank De Winne	ON1DWN
Flight Engineer:	Robert Thirsk	VA3CSA
Flight Engineer:	Roman Romanenko	
Flight Engineer:	Nicole P. Stott	KE5GJN
Flight Engineer:	Jeff Williams	KD5TVQ
Flight Engineer:	Maxim Suraev	

Available Modes and Frequencies:

Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[10182009]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-291.S2
WSR 291 Part 2 10/18/2009

AMSAT NEWS SERVICE BULLETIN 291.S2
FROM AMSAT HQ SILVER SPRING, MD, October 18, 2009
TO ALL RADIO AMATEURS
BID: $WSR-291.S2

SwissCube

```
Catalog Number: 35932?
Launch Date: September 23, 2009

Status: In Orbit

Callsign: HB9EG

Beacon(100mw): 437.5050MHz CW
Beacon(1w): 437.5050MHz FSK 1k2bps
[10042009]
=====
UWE-2
Catalog Number: 35935?
Launch Date: September 23, 2009

Status: In Orbit

Beacon(500mw): 437.3850 MHz AFSK 1k2bps
               437.3850 MHz FSK 9k6bps
[10042009]
=====
ITUpsAT1
Catalog Number: 35934?
Launch Date: September 23, 2009

Status: In Orbit

Beacon(100mw): 437.325MHz CW
Beacon(1w): 437.325MHz 19k2bps
[10042009]
=====
BEESAT
Catalog Number: 35933?
Launch Date: September 23, 2009

Status: In Orbit

Callsign: DP0BEE

Beacon(100mw): 436.000MHz CW
Beacon(500mw): 436.000MHz GMSK 4k8bps
[10042009]
=====
Pollux
Catalog Number:
Launch Date: July 31, 2009

Status: Operational

Callsign: POLLUX-1

Downlink: 145.825MHz 1k2 AX.25
[10042009]
```

```
=====
Castor
Catalog Number:
Launch Date: July 31, 2009

Status: Operational

Callsign: KD4HBO-1

Downlink: 145.825 MHz 1k2 AX.25
[10042009]
=====
BEVO-1 (DRAGONSAT-1)
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Operational

Downlink: 437.325 MHz 9k6 GMSK
          437.325 MHz CW 20wpm
[07312009]
=====
AggieSat2 (DRAGONSAT-2)
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Operational

Downlink: 436.250 MHz 9k6
[07312009]
=====
CP-6
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Commissioning

Downlink: 437.365 MHz 1k2 AFSK
[06052009]
=====
HAWKSAT 1
Catalog number: 35003
Launch Date: May 19, 2009

Status: ?

Downlink: 437.345 ?
[06052009]
=====
Pharmasat
Catalog Number: 35002
Launch Date: May 19, 2009
Status: Commissioning
```

```
Downlink: 437.465 MHz 1k2 AFSK
[06052009]
=====
ANUSAT
Catalog Number: 34808
Launch Date: April 20, 2009

Status: ?

Downlink:  435.000 MHz
Uplink:    145.800 MHz

Telemetry: 137.400 MHz
[05112009]
=====
SOHLA-1 (ASTRO TECH.)
Catalog Number: 33496
Launch Date: January 23, 2009

Status: Commisioning

Proposed Frequencies and Modes:
Downlink: 437.505 MHz AFSK/CW
Beacon:   437.505 MHz AFSK/CW

Callsign:

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=101
[03232009]
=====
KAGAYAKI (Solan Co.)
Catalog Number: 33495?
Launch Date: January 23, 2009

Status: In Orbit

Downlink: 437.375 MHZ    FSK9k6/CW
Beacon:   437.375 MHz    FSK9k6/CW

IARU coordination status page:

AMSAT-NA webpage:

[01152009]
=====
STARS (Kagawa Univ.) (Twin Satellites)
Catalog Number: 33498
Launch Date: January 23, 2009

Status: Operational ?
```

Downlinks: 437.485 MHz FM/CW
           437.465 MHz FM/CW
Beacons: 437.305 MHz FM/CW
           437.275 MHz FM/CW

Callsigns: JR5YBN
           JR5YBO

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=99

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=121&retURL
=/satellites/status.php
[022152009]

=====
KKS-1 (Tokyo MCIT)
Catalog Number: 33499
Launch Date: January 23, 2009

Status: Operational

Downlink: 437.455 MHz AFSK/CW
Beacon: 437.385 MHz AFSK/CW

Callsign: JQ1YYY

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=107

AMSAT-NA webapge:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=120&retURL
=/satellites/status.php
[02212009]

=====
PRISM (Tokyo Univ.)
Catalog Number: 33493
Launch Date: January 23, 2009

Status: Operational ?

Downlink: 437.425 MHz AFSK/GMSK/CW
Beacon: 437.250 MHz AFSK/GMSK/CW

Callsign: JQ1YCX

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=97

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=119&retURL
=/satellites/status.php
[02212009]

```
=====
RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number: 32953
Launch Date: May 23, 2008

Status: Operational

Curent Modes: Telemetry
              Audio
              Images

Downlinks: 435.315 MHz
           435.215 MHz

AMSAT-NA website:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=115&ret
URL=/satellites/status.php

Official website:
http://www.npopm.com/?cid=leoca&caid=43
[02122009]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode:  /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon:    435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=94&retURL=
/satellites/status.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=72
[02122009]
=====
CP3
Catalog Number: 31129
Launch Date: April 17,2007

Status: Operational

Current Mode:  /u
```

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[02122009]
=====
GENESAT-1
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Current Mode: /u

Callsign: KE7EGC

Telemetry Beacon Downlink: 437.0695 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[091512009]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon: 437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/xivpicte.htm
[02212009]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003

Status: ?????

Current Mode: /u

Beacon: 436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=96&retURL
=/satellites/status.php

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[06082009]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Operational?

Uplink: 1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=56
[02122009]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: System Reload in Progress

Current Modes:
FM Repeater ONE
Uplink: 145.920 Mhz FM
Downlink: 435.300 Mhz FM
FM Repeater TWO (QRP ONLY)
Uplink: OFF
Downlink: OFF
BBS
Uplink: 1268.700MHz 9k6 FM
Downlink: 435.150MHz 9k6 FM
Telemetry
Downlink: OFF

Analog voice downlink: 435.300 MHz FM
                           435.150 MHz FM
                          2401.200 Mhz FM
Analog voice uplink: 145.860 MHZ FM
                           145.880 MHz USB
                           145.920 MHz FM
                          1268.700 MHz FM
Digital Downlinks: 435.150 MHz FM 38k4 PBP, 1 watt output
                           435.150 MHz FM 9k6 Pacsat Broadcast Protocol
                          2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Pacsat Broadcast Protocol

```
                          1268.700 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon:                    435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[10042009]
=====
QuakeSat
Catalog Number: 27845
Launch Date: June 30, 2003

Status: Telemetry only

Current Mode: 9600 baud data packet

Mode U packet
Downlink: 436.675 MHz 9k6 BPS

Quakesat webpage:
http://www.quakefinder.com/services/quakesat-ssite/
[04272009]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=69&retURL
=/satellites/status.php
```

```
[02212009]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Telemetry only

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink:        144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[03302009]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Telemetry only

Current Modes:
Telemetry : /u

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign:       4XTECH-12

More information of GO-32 can be found at:
http://asri.technion.ac.il/techsat/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=14&retURL
=/satellites/status.php
[04272009]
=====
RS-22 RADIO SPORT RS-22
Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only
```

Current Mode: /u

CW Beacon - 435.352 MHz
145.818 MHz

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=76&retURL=/satellites/status.php
[02212009]
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990

Status: CW Beacon only

Uplinks: 145.840 MHz 1200-baud Manchester FSK
145.860 MHz 1200-baud Manchester FSK
145.880 MHz 1200-baud Manchester FSK
145.900 MHz 1200-baud Manchester FSK

CW downlink: 437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[03162009]
=====
CanX-2
Catalog number: 32790
Launch Date: April 28, 2008

Status: Operational in range of ground station only

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[02212009]
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008

Status: Operational

```
Downlink: 437.425 MHz 1k2 baud packet

For the latest project status update please visit the AAUSAT-II web
page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[02212009]
=====
CO-65 CUTE-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008

Status: Digipeater

Downlink:  437.475 MHz 9k6 Packet
Uplink:   1267.600 Mhz

Telemetry Beacon:
Downlink: 437.2750 MHz CW

For the latest project status update please visit the Cute-1.7+APD II
web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78

Command Station blog website:
http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=112&retURL
=/satellites/status.php
[02212009]
=====
Compass-1
Catalog number: 32787
Launch Date: April 28, 2008

Status: Operational

Current Mode: 4k8 MSK packet

Uplink:   145.980 MHz FM
Downlink: 437.275 Mhz CW
          437.405 MHz Packet

For the latest project status update please visit the Compass 1 web
page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
```

http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=114&retURL=/satellites/status.php
[04272009]
=====
CO-66 Seeds II
Catalog number: 32791
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.485 MHz

Callsign: JQ1YGU

For the latest project status update please visit the Seeds 2 web page: http://cubesat.aero.cst.nihon-u.ac.jp/english/seeds_2_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=113&retURL=/satellites/status.php
[02212009]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - V/u
Voice - V/v
BBS - V/v
APRS - V/v
SSTV - V/v

Expedition 21 Crew:

Commander:	Frank De Winne	ON1DWN
Flight Engineer:	Robert Thirsk	VA3CSA
Flight Engineer:	Roman Romanenko	
Flight Engineer:	Nicole P. Stott	KE5GJN
Flight Engineer:	Jeff Williams	KD5TVQ
Flight Engineer:	Maxim Suraev	

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[10042009]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-291.S3
WSR 291 Part 3 10/18/2009

AMSAT NEWS SERVICE BULLETIN 291.S3
FROM AMSAT HQ SILVER SPRING, MD, October 18, 2009
TO ALL RADIO AMATEURS
BID: $WSR-291.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

CP4
Catalog Number: 31122
Launch Date: April 17,2007

```
Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon:    437.325 MHz CW

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=79
[10022008]
=====
LIBERTAD-1
Catalog Number: 31128
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink:   145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[02122009]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: Non-Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder:  145.825 Mhz FM
[01012009]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency:  437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
```

```
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink:         437.250 MHz FM 67Hz CTCSS
Voice Downlink:      2401.835 MHz FM
Packet Up/Downlink:   437.250 MHz 9k6 packet
Packet Downlink      2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non-Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[08132007]
=====
CANX-1
Catalog Number: 27847
Launch Date: June 30, 2003

Status: Non-Operational

Downlink: 437.8800 MHz AFSK 1k2bps
[06052009]
=====
DTUSAT
Catalog Number: 27842
Launch Date: June 30, 2003

Status: Non-Operational

Current Mode: 2k4 AFSK Packet last reported

Downlink: 437.475MHz

Officail webpage: http://dtusat1.dtusat.dtu.dk/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=101&retURL
=satellites/all_oscars.php
[02212009]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002
```

```
Status: Non-operational.

Uplink:   435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)

Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Telemetry only

Uplinks:   145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink:  437.325 MHz

Broadcast callsign: MYSAT3-11
BBS:                MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial land and weather imaging payloads offers FM and FSK
Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as
a collaborative effort between the Malaysian government and Surrey
Satellite Technology Ltd.
[03302009]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink:   145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000
```

```
Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS:                SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink:   145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
V-band:   145.840 -  145.990 MHz CW/LSB
U-band:   435.550 -  435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks
---------
S2-band:  2401.225 -  2401.475 MHz CW/USB
K-band:  24048.010 - 24048.060 MHz CW/USB
Beacon:   2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)
----------------------------
BEACON   General Beacon(GB)  Middle Beacon(MB)  Engineering Beacon(EB)
2 m                    none        145.898 MHz                    none
70cm            435.438 MHz        435.588 MHz             435.838 MHz
13cm(1)        2400.188 MHz       2400.338 MHz            2400.588 MHz
```

13cm(2)	2401.173 MHz	2401.323 MHz	2401.573 MHz
3cm	10450.975 MHz	10451.125 MHz	10451.375 MHz
1.5cm	24047.885 MHz	24048.035 MHz	24048.285 MHz

[07162007]
=====
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: 25636
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

```
Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink:   145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
MO-30 UNAMSAT-2
Catalog Number: 24305
Launch Date: September 5, 1996

Status: Non-operational

Downlink:       435.1380 MHz AFSK 1200 BPS
Downlink:       435.2060 MHz AFSK 1200 BPS
Uplink:         145.8150 MHz AFSK 1200 BPS
Uplink:         145.8350 MHz AFSK 1200 BPS
Uplink:         145.8550 MHz AFSK 1200 BPS
Uplink:         145.8750 MHz AFSK 1200 BPS
[06042009]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993
```

```
Status: Non-operational

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign:       POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012009]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992
```

```
Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
```

```
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
[05012006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: non-operational

Current Mode:  V/u

Uplink:         145.900 MHz FM 1200-baud Manchester FSK (reserved)
                145.920 MHz FM VOICE
                145.940 MHz FM 1200-baud Manchester FSK (reserved)
                145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink:       437.026 MHz USB VOICE
                (1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[07242009]
=====
UO-15 UoSAT-4
Catalog Number: 20438
```

```
Launch Date: January 22, 1990

Status: Non-operational

Uplink: ?
Downlink: 435.1250MHz (?)
          435.1200MHz (?)
[06042009]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984

Status: Non-operational.

Current Mode:  /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon:          435.025 MHz
Mode-S Beacon:     2401.500 MHz

Mode and Antenna Polarization:
```

```
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[01012009]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon:   145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink  29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
Beacons:   29.450 MHz
          435.100 MHz
```

```
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon 1:  29.352 MHz (intermittent)
Beacon 2:  29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink:     21.260 to 21.300 MHz CW/USB
Downlink:  145.860 to 145.900 MHz CW/USB

Beacon:    145.860 MHz

Robot:     145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
```

Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-291.S4
WSR 291 Part 4 10/18/2009

AMSAT NEWS SERVICE BULLETIN 291.S4
FROM AMSAT HQ SILVER SPRING, MD, October 18, 2009
TO ALL RADIO AMATEURS
BID: $WSR-291.S4

THE FOLLOWING SATELLITES HAVE RE-ENTERED OR HAVE BEEN RETURNED SAFELY:

NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: July 28, 2008

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[01012009]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered

Re-entered: May 30, 2007

Main Downlink: 145.825 Mhz FM APRS AX25
APRS Uplink: 145.825 MHz FM APRS AX25
Voice/PSK31 Uplink: 28.120 MHz

Packet to Voice ID: RAFT
[06112007]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Re-Entered
Re-entered: June 18, 2008

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon: 437.2750 MHz CW

Callsign: JR8YJT
[01012009]
=====
SO-43 Starshine 3
Catalog Number: 26929
Launch Date: September 30, 2001

Status: Re-Entered
Re-entered: January 21, 2003

Beacon: 145.825Mhz
[02212009]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at} amsat.org
NNNN
/EX

```
From -2500479405313939546
X-Google-Thread: 8f86f75953,674b00a72ae420e7,start
X-Google-Attributes: gid8f86f75953,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news2.google.com!news.glorb.com!news2.glorb.com!
news.cse.ohio-state.edu!usenet01.sei.cmu.edu!elk.ncren.net!newsswitch.lcs.mit.edu!
bloom-beacon.mit.edu!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-294 AMSAT News Service Special Bulletin SumbandilaSat Designated as
SO-67
Followup-To: rec.radio.amateur.space
Date: Wed, 21 Oct 2009 22:12:25 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 36
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <003201ca52bd$12967fb0$37c37f10$@net>
Reply-To: ans-editor@amsat.org
```

NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1256177546 26346 166.84.1.6 (22 Oct 2009 02:12:26 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Thu, 22 Oct 2009 02:12:26 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to   rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to   rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news2.google.com rec.radio.amateur.space:298 rec.radio.info:1059

SB SAT @ AMSAT $ANS-294.01
SumbandilaSat Designated as SO-67

AMSAT News Service Bulletin 294.01
>From AMSAT HQ SILVER SPRING, MD.
October 21, 2009
To All RADIO AMATEURS
BID: $ANS-294.01

AMSAT's OSCAR Number Coordinator Bill Tynan, W3XO announced he has received an e-mail sent to the AMSAT-NA Board of Directors by Hans van de Groenendaal, ZS6AKV, Secretary SA AMSAT requesting that an OSCAR number be allocated to SumbandilaSat.

In the e-mail Hans states that the amateur radio transponder on SumbandilaSat was successfully switched on from the ground by ZS6BPZ during the test phase on Sunday 18 October 2009 and that several QSOs were made through the transponder.

The amateur radio payload on SumbandilaSat was developed by SA AMSAT and incorporated by the University of Stellenbosch into the main payload. The SA AMSAT payload was officially coordinated through the IARU Satellite Frequency Coordination Panel with an uplink of 145.880 and downlink of 435.350 MHz

Bill replied, "Therefore, by the authority vested in me by the AMSAT-NA President, I hereby designate this latest amateur radio satellite as SumbandilaSat Oscar 67 or SO-67. On behalf of AMSAT-NA and the world's amateur radio satellite community I congratulate those responsible for building, testing and launching this new satellite. May it have a long and successful life."

[ANS thanks Bill Tynan, W3XO for the above information]

/EX

```
From 6302522604402769120
X-Google-Thread: a4a23d5f63,d479e6b4541e5511,start
X-Google-Attributes: gida4a23d5f63,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news1.google.com!newsfeed2.dallas1.level3.net!
news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-298  AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Mon, 26 Oct 2009 14:57:30 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 352
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000c01ca566e$069b9010$13d2b030$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1256583450 26050 166.84.1.6 (26 Oct 2009 18:57:30 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Mon, 26 Oct 2009 18:57:30 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news2.google.com rec.radio.amateur.space:299 rec.radio.info:1071
```

AMSAT NEWS SERVICE
ANS-298

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in

designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* New AO-51 Whole Orbit Data decoder released
* SumbandilaSat Designated as SO-67
* New items for sale at the AMSAT online store
* New EMI Calculator Available From Australian ACMA
* Satellite Shorts From All Over
* Iran May Put Satellite in the Ham Satellite Bands
* ARISS Status - 19 October 2009

SB SAT @ AMSAT $ANS-298.01
New AO-51 Whole Orbit Data decoder released

AMSAT News Service Bulletin 298.01
  From AMSAT HQ SILVER SPRING, MD.
October 25, 2009
To All RADIO AMATEURS
BID: $ANS-298.01

Thanks to our resident telemery guru Mike Rupprecht DK3WN a new AO-51 whole orbit data (WOD) telemetry decoder has been released! The file with decoder and coefficients file can be downloaded from here:

http://www.dk3wn.info/files/ao51wod.zip

The AO-51 telemetry archive is on the AMSAT FTP server. DK3WN's new decoder is for processing "raw" WOD telemetry files. For example, the WOD data collected for October 2009 is here:

ftp://ftp.amsat.org/pub/amsat/telemetry/ao51/2009WOD/Oct2009/raw1009/

The decoder generates a .CSV (comma separated) file that can be opened in Excel, etc. A nice feature is that the telemetry program actually graphs the data, too!

THANKS, Mike DK3WN!

[ANS thanks Mark, N8MH, for the above information]

/EX

SB SAT @ AMSAT $ANS-298.02
SumbandilaSat Designated as SO-67

AMSAT News Service Bulletin 298.02
  From AMSAT HQ SILVER SPRING, MD.
October 25, 2009
To All RADIO AMATEURS
BID: $ANS-298.02

AMSAT's OSCAR Number Coordinator Bill Tynan, W3XO announced he has received an e-mail sent to the AMSAT-NA Board of Directors by Hans van de Groenendaal, ZS6AKV, Secretary SA AMSAT requesting that an OSCAR number be allocated to SumbandilaSat.

In the e-mail Hans states that the amateur radio transponder on SumbandilaSat was successfully switched on from the ground by ZS6BPZ during the test phase on Sunday 18 October 2009 and that several QSOs were made through the transponder.

The amateur radio payload on SumbandilaSat was developed by SA AMSAT and incorporated by the University of Stellenbosch into the main payload. The SA AMSAT payload was officially coordinated through the IARU Satellite Frequency Coordination Panel with an uplink of 145.880 and downlink of 435.350 MHz

Bill replied, "Therefore, by the authority vested in me by the AMSAT-NA President, I hereby designate this latest amateur radio satellite as SumbandilaSat Oscar 67 or SO-67. On behalf of AMSAT-NA and the world's amateur radio satellite community I congratulate those responsible for building, testing and launching this new satellite. May it have a long and successful life."

You can hear more of these initial and QSO's through this new South African ham radio satellite at:
http://previews.matogen.com/sunspace/assets/galleries/sounds/Sumbandila-FirstActivePass-Recording-2009-10-18.mp3

[ANS thanks Bill Tynan, W3XO and SA AMSAT for the above information]

/EX

SB SAT @ AMSAT $ANS-298.03
New items for sale at the AMSAT online store

AMSAT News Service Bulletin 298.03
  From AMSAT HQ SILVER SPRING, MD.
October 25, 2009
To All RADIO AMATEURS
BID: $ANS-298.03

Did you miss the symposium? Now available at the AMSAT online store -- a 40th Anniversary Tote as well as the Proceedings of the Symposium. Get yours while supplies last.

[ANS thanks Bruce, KK5DO, for the above information]

/EX

SB SAT @ AMSAT $ANS-298.04
New EMI Calculator Available From Australian ACMA

AMSAT News Service Bulletin 298.04
From AMSAT HQ SILVER SPRING, MD.
October 25, 2009
To All RADIO AMATEURS
BID: $ANS-298.04

Australia's Swinburne University, together with EM Software and Systems, has developed an online tool that will allow users to calculate exclusion zones around antennas where radiation levels exceed safety standard limits.

Commissioned by the Australian Communications and Media Authority, the exclusion zone calculator will allow people to conduct safety assessments of transmitting antennas, such as those found on boats, four wheel drives, at fixed station locations and even communication networks operating in the VHF and UHF spectrum. This includes ham bands from 2 meters on up through 2.4 GHz.

To calculate the zone, all users need to do is enter the antenna type, transmitter power, antenna gain and frequency band into the online tool. Click your mouse and the program will automatically calculate the safe distance around the antenna in metric distance.

The ACMA has also produced a booklet entitled Human Exposure to Radio Frequency Electromagnetic Radiation Information for Licensees of Radio-Communications Transmitters. Both the on-line tool and a booklet that explains EME health exposure can be found at: http://www.acma.gov.au. (ACMA)

[ANS thanks ACMA and Amateur Radio Newsline Report 1679 for the above information]

/EX

SB SAT @ AMSAT $ANS-298.05
Satellite Shorts From All Over

AMSAT News Service Bulletin 298.05
From AMSAT HQ SILVER SPRING, MD.
October 25, 2009
To All RADIO AMATEURS
BID: $ANS-298.05

+ The AMSAT Symposium was held over the October 9 - 11 weekend in Baltimore, Maryland. AMSAT President Barry Baines' presentation has been posted to the AMSAT Web site. A video of symposium high lights was put together and has been posted on YouTube. See: http://www.youtube.com/watch?v=1efXlL75dvA

+ Drew, KO4MA says the QSL cards for the July Apollo anniversary event on AO-51 have arrived and he is starting on the stack this weekend. He is pretty sure they should all be in the mail by next week and thanks all for the interest and support.

+ For those going to the Ft. Wayne, Ind. Hamfest, Nov. 14-15, there will be an AMSAT Forum on Sat. the 14th at 1:15pm. There is also an APRS forum on Sun. 15 Nov. at 10 am. More info can be found at: http://www.fortwaynehamfest.com

+ Page 43 of the October issue of SatMagazine features an article on CubeSats titled 'A Costing + Pricing Challenge', see: http://www.satmagazine.com/2009/SatMag_Oct09.pdf

+ USA Today has a flash graphic showing the step-by-step construction of the International Space Station: http://i.usatoday.net/tech/graphics/iss_timeline/flash.htm

[ANS thanks everyone for the above information]

/EX

SB SAT @ AMSAT $ANS-298.06
Iran May Put Satellite in the Ham Satellite Bands

AMSAT News Service Bulletin 298.06
From AMSAT HQ SILVER SPRING, MD.
October 25, 2009
To All RADIO AMATEURS
BID: $ANS-298.06

The SouthGate Amateur Radio News Site and Amateur Radio Newsline reported this week there is a possibility that Iran's Mesbah-2 satellite, slated for launch early 2010, could operate on frequencies allocated to the Amateur Satellite Service.

An on-line report at astronautix.com says that the original Mesbah satellite, lost in a 2005 launch failure, was to have operated on Amateur Satellite Service frequencies. Now its being reported that Iran's Minister of Communications and Information Technology, Reza Taqipour, has said that the replacement Mesbah satellite has successfully completed pre-launch tests and is now ready for liftoff early next year.

Most observers think that there will be little difference between the transponder set-up between the lost Mesbah satellite on the new replacement bird. See: http://www.astronautix.com/craft/mesbah2.htm

[ANS thanks SouthGate and Amateur Radio Newsline Report 1680 for the above information]

/EX

SB SAT @ AMSAT $ANS-298.07
ARISS Status - 19 October 2009

AMSAT News Service Bulletin 298.07
From AMSAT HQ SILVER SPRING, MD.
October 25, 2009
To All RADIO AMATEURS
BID: $ANS-298.07

1. Upcoming School Contacts

An Amateur Radio on the International Space Station (ARISS) contact has been scheduled with Copernicus Science Centre in Warsaw, Poland on Tuesday, October 27 at 09:33 UTC via telebridge station VK4KHZ in Australia. The centre organized a student competition for naming asteroids, using rules of the science naming process. In October the winners travel to Warsaw for the competition finale and will take part in the ARISS event.

Sherbrooke Community School in Sassafras, Victoria, Australia has been scheduled for an Amateur Radio on the International Space Station (ARISS) contact on Wednesday, October 28 at 07:13 UTC. This will be a telebridge contact via station W6SRJ in California. Sherbrooke Community School fosters student participation and the advancement of amateur radio in the community. It operates Sherbrooke Community Club station, VK3KID. The school has invited representatives from neighboring schools to pose questions to the astronauts and asked its sister schools in China and Bhutan to also submit questions for students to ask the ISS crew.

David Thompson Middle School (DTMS) in Calgary, Alberta, Canada has been scheduled for an Amateur Radio on the International Space Station (ARISS) contact on Friday, October 30 at 21:12 UTC via station LU8YY in Argentina. DTMS and the University of Calgary's science department have collaborated on this event.

2. ARISS Contact Between Thirsk and Boundary Beach Students

On Tuesday, October 13, students from Boundary Beach Elementary School in Delta, British Columbia, Canada spoke with astronaut Robert Thirsk, VA3CSA on the

ISS via an Amateur Radio on the International Space Station (ARISS) contact. Seventeen questions were answered, including one from the radio team. The contact was made possible through the Langley Amateur Radio Association. To prepare for the contact, students got involved in many space related activities and participated in Dr. Thirsk's "Get Fit for Space" program.

3. Glenmore Christian Academy Experiences ARISS Contact

An Amateur Radio on the International Space Station (ARISS) contact occurred on Wednesday, October 14 between Glenmore Christian Academy students in Calgary, Alberta, Canada and Robert Thirsk, VA3CSA. Nearly six hundred students, teachers, parents and guests gathered to watch the youth ask 20 questions of the astronaut. CBC (Canadian Broadcasting Corporation) and CTV (Canadian television) covered the event.

4. ARISS Contact with UNICEF - Mali

Children in Gao, Mali participated in an Amateur Radio on the International Space Station (ARISS) contact on Thursday, October 15 via telebridge station K6DUE in Maryland. The contact was held as part of the UNICEF WaSH (Water, Sanitation, Hygiene) campaign. Astronaut Frank De Winne, ON1DWN, a UNICEF Belgium goodwill ambassador, spoke to the children, answering 5 questions.

5. ARISS - JOTA Contact Unsuccessful

An Amateur Radio on the International Space Station (ARISS) contact was scheduled for Jamboree on the Air (JOTA), Boy Scouts of America Headquarters in Irving, Texas on Saturday, October 17. Due to technical difficulties, the contact did not take place. Contact demonstrations on other satellites were given during the day, however, and there was an amateur radio balloon flight as well. Scouts also took part in a Jamboree on the Internet (JOTI) activity. Approximately 400 Scouts, parents and officials attended the event.

6. NASA Reports on ARISS Contact

NASA posted as one of its "Daily Top Stories" an article from the Vancouver Sun about the October 9 Amateur Radio on the International Space Station (ARISS) contact with Belmont Elementary School:

Hundreds Of Students "Enthralled" Talking To ISS Astronaut. The Vancouver

Sun (10/10, 178K) reported, "Canadian astronaut Robert Thirsk zipped through the heavens above Langley's Ecole Belmont elementary school Friday, riding the International Space Station and chatting with 533 enthralled students." The event was organized by "ARISS (Amateur Radio International Space Station), a NASA- sponsored educational outreach program." According to the article, "Judging by the reaction of the children sitting cross-legged in the gym, the program was an obvious hit."

[ANS thanks Carol, KB3LKI, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Lee McLamb, KU4OS

From 5432394743036151934
X-Google-Thread: a4a23d5f63,2fe9e5136002649c,start
X-Google-Attributes: gida4a23d5f63,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news2.google.com!newsfeed2.dallas1.level3.net!
news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-299 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Tue, 27 Oct 2009 08:03:41 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 1776
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000901ca56fd$7e7630b0$7b629210$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
    charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1256645022 3403 166.84.1.6 (27 Oct 2009 12:03:42 GMT)
X-Complaints-To: abuse@panix.com

NNTP-Posting-Date: Tue, 27 Oct 2009 12:03:42 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to   rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to   rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
x-cr-hashedpuzzle: YGM= a7E= AsID BYVS Dq1c D0J+ EPBc EmLc EtNe FKou F5K7 F+LK GWAc G5RW H6uW H7ql;1;cgBlAGMALQByAGEAZABpAG8ALQBpAG4AZgBvAEAAcABhAG4AaQB4AC4AYwBvAG0A;Sosha1_v1;7;{2A671E70-5541-48EC-97CB-2B1499B1CC43};awA5AGoAawBtAEAAYwBvAG0AYwBhAHMAdAAuAG4AZQB0AA==;Tue, 27 Oct 2009 12:03:23 GMT;VwBTAFIALQAyADkAOQAgAEEATQBTAEEAVAAgAFcAZQBlAGsAbAB5ACAAUwBhAHQAZQBsAGwAaQB0AGUAIABSAGUAcABvAHIAdAA=
x-cr-puzzleid: {2A671E70-5541-48EC-97CB-2B1499B1CC43}
Xref: g2news2.google.com rec.radio.amateur.space:300 rec.radio.info:1072

This report is organized into four (4) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - deborbited/returned satellites

SB SAT @ AMSAT W8ISS $WSR-299.S1
WSR 299 Part 1 10/26/2009

AMSAT NEWS SERVICE BULLETIN 299.S1
FROM AMSAT HQ SILVER SPRING, MD, October 26, 2009
TO ALL RADIO AMATEURS
BID: $WSR-299.S1

SO-67 SumbandilaSat
Catalog Number: 35870
Launch Date: September 17, 2009

Status: Commissioning

Callsign: ZS0SUM

Uplink: 145.880MHz FM
Downlink: 435.350MHz FM
[10262009]
=====
DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008

Status: Operational
Current Mode: Science Mode - Beacon ONLY

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink: 435.530 to 435.570 MHz

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68
[02122009]
=====
VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.859330 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is active. Each transponder has a different beacon.
[08072008]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: System Reload in progress

Current Modes:
FM Repeater ONE

```
Uplink:    145.920Mhz FM
Downlink:  435.300Mhz FM
Downlink: 2401.200MHz FM
FM Repeater TWO (QRP ONLY)
Uplink:    OFF
Downlink:  OFF
BBS
Uplink:    OFF
Downlink:  OFF
Telemetry
Downlink:  435.150MHz

Analog voice downlink:     435.300 MHz FM
                           435.150 MHz FM
                          2401.200 Mhz FM
Analog voice uplink:       145.860 MHZ FM
                           145.880 MHz USB
                           145.920 MHz FM
                          1268.700 MHz FM
Digital Downlinks:         435.150 MHz FM 38k4 PBP, 1 watt output
                           435.150 MHz FM 9k6 Pacsat Broadcast Protocol
                          2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:            145.860 MHz FM 9k6 Pacsat Broadcast Protocol
                          1268.700 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon:                    435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[10262009]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002

Status: Operational

Current Mode: V/u

Uplink:   145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz
```

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz. The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10 minute timer.
[05282007]

=====

FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: RECOVERY
Current Mode: V/u (Mode JA)

Voice/CW (Mode JA)
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage:
http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's

```
CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/
fo29cwts.htm
[09062009]
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993

Status: Operational

Current Mode: V/u

Uplink:   145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[03232009]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational

Current Mode: Alternating between Mode A and B every 24 hours

Uplink:   145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink:  29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons:   29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
[02122009]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
```

Current Active Modes: FM Repeater - V/u
Voice - V/v
BBS - V/v
APRS - V/v
SSTV - V/v

Expedition 21 Crew:
Commander: Frank De Winne ON1DWN
Flight Engineer: Robert Thirsk VA3CSA
Flight Engineer: Roman Romanenko
Flight Engineer: Nicole P. Stott KE5GJN
Flight Engineer: Jeff Williams KD5TVQ
Flight Engineer: Maxim Suraev

Available Modes and Frequencies:

Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com

APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[10182009]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-299.S2
WSR 299 Part 2 10/26/2009

AMSAT NEWS SERVICE BULLETIN 299.S2
FROM AMSAT HQ SILVER SPRING, MD, October 26, 2009
TO ALL RADIO AMATEURS
BID: $WSR-299.S2

SwissCube
Catalog Number: 35932?
Launch Date: September 23, 2009

Status: In Orbit

Callsign: HB9EG

Beacon(100mw): 437.5050MHz CW
Beacon(1w): 437.5050MHz FSK 1k2bps
[10042009]
=====
UWE-2
Catalog Number: 35935?
Launch Date: September 23, 2009

Status: In Orbit

```
Beacon(500mw): 437.3850 MHz AFSK 1k2bps
               437.3850 MHz FSK 9k6bps
```
[10042009]
=====
ITUpsAT1
Catalog Number: 35934?
Launch Date: September 23, 2009

Status: In Orbit

Beacon(100mw): 437.325MHz CW
Beacon(1w): 437.325MHz 19k2bps
[10042009]
=====
BEESAT
Catalog Number: 35933?
Launch Date: September 23, 2009

```
Status: In Orbit

Callsign: DP0BEE

Beacon(100mw): 436.000MHz CW
Beacon(500mw): 436.000MHz GMSK 4k8bps
[10042009]
=====
Pollux
Catalog Number:
Launch Date: July 31, 2009

Status: Operational

Callsign: POLLUX-1

Downlink: 145.825MHz 1k2 AX.25
[10042009]
=====
Castor
Catalog Number:
Launch Date: July 31, 2009

Status: Operational

Callsign: KD4HBO-1

Downlink: 145.825 MHz 1k2 AX.25
[10042009]
=====
BEVO-1 (DRAGONSAT-1)
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Operational

Downlink: 437.325 MHz 9k6 GMSK
          437.325 MHz CW 20wpm
[07312009]
=====
AggieSat2 (DRAGONSAT-2)
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Operational

Downlink: 436.250 MHz 9k6
[07312009]
=====
CP-6
Catalog Number: 35004
Launch Date: May 19, 2009
```

```
Status: Commissioning

Downlink: 437.365 MHz 1k2 AFSK
[06052009]
=====
HAWKSAT 1
Catalog number: 35003
Launch Date: May 19, 2009

Status: ?

Downlink: 437.345 ?
[06052009]
=====
Pharmasat
Catalog Number: 35002
Launch Date: May 19, 2009
Status: Commissioning

Downlink: 437.465 MHz 1k2 AFSK
[06052009]
=====
ANUSAT
Catalog Number: 34808
Launch Date: April 20, 2009

Status: ?

Downlink:  435.000 MHz
Uplink:    145.800 MHz

Telemetry: 137.400 MHz
[05112009]
=====
SOHLA-1 (ASTRO TECH.)
Catalog Number: 33496
Launch Date: January 23, 2009

Status: Commisioning

Proposed Frequencies and Modes:
Downlink: 437.505 MHz AFSK/CW
Beacon:   437.505 MHz AFSK/CW

Callsign:

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=101
[03232009]
=====
KAGAYAKI (Solan Co.)
Catalog Number: 33495?
Launch Date: January 23, 2009
```

Status: In Orbit

Downlink: 437.375 MHZ   FSK9k6/CW
Beacon: 437.375 MHz   FSK9k6/CW

IARU coordination status page:

AMSAT-NA webpage:

[01152009]
=====
STARS (Kagawa Univ.) (Twin Satellites)
Catalog Number: 33498
Launch Date: January 23, 2009

Status: Operational ?

Downlinks: 437.485 MHz FM/CW
           437.465 MHz FM/CW
Beacons: 437.305 MHz FM/CW
           437.275 MHz FM/CW

Callsigns: JR5YBN
           JR5YBO

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=99

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=121&retURL
=/satellites/status.php
[022152009]
=====
KKS-1 (Tokyo MCIT)
Catalog Number: 33499
Launch Date: January 23, 2009

Status: Operational

Downlink: 437.455 MHz AFSK/CW
Beacon: 437.385 MHz AFSK/CW

Callsign: JQ1YYY

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=107

AMSAT-NA webapge:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=120&retURL
=/satellites/status.php
[02212009]
=====

```
PRISM (Tokyo Univ.)
Catalog Number: 33493
Launch Date: January 23, 2009

Status: Operational ?

Downlink: 437.425 MHz AFSK/GMSK/CW
Beacon:   437.250 MHz AFSK/GMSK/CW

Callsign: JQ1YCX

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=97

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=119&retURL
=/satellites/status.php
[02212009]
=====
RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number: 32953
Launch Date: May 23, 2008

Status: Operational

Curent Modes: Telemetry
              Audio
              Images

Downlinks: 435.315 MHz
           435.215 MHz

AMSAT-NA website:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=115&ret
URL=/satellites/status.php

Official website:
http://www.npopm.com/?cid=leoca&caid=43
[02122009]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode:  /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon:    435.245 MHz CW

Callsign: K5USL
```

TLM and CW interchange every 30 seconds.

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=94&retURL=
/satellites/status.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=72
[02122009]
=====
CP3
Catalog Number: 31129
Launch Date: April 17,2007

Status: Operational

Current Mode: /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[02122009]
=====
GENESAT-1
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Current Mode: /u

Callsign: KE7EGC

Telemetry Beacon Downlink: 437.0695 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[091512009]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon: 437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/xivpicte.htm

[02212009]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003

Status: ?????

Current Mode: /u

Beacon: 436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=96&retURL=/satellites/status.php

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[06082009]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Operational?

Uplink: 1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=56
[02122009]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: System Reload in Progress

Current Modes:
FM Repeater ONE
Uplink: 145.920Mhz FM
Downlink: 435.300Mhz FM
Downlink: 2401.200MHz FM
FM Repeater TWO (QRP ONLY)

Uplink: OFF
Downlink: OFF
BBS
Uplink: OFF
Downlink: OFF
Telemetry
Downlink: 435.150MHz

```
Analog voice downlink:     435.300 MHz FM
                           435.150 MHz FM
                          2401.200 Mhz FM
Analog voice uplink:       145.860 MHZ FM
                           145.880 MHz USB
                           145.920 MHz FM
                          1268.700 MHz FM
Digital Downlinks:         435.150 MHz FM 38k4 PBP, 1 watt output
                           435.150 MHz FM 9k6 Pacsat Broadcast Protocol
                          2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:            145.860 MHz FM 9k6 Pacsat Broadcast Protocol
                          1268.700 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon:                    435.150 MHz
```

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[10262009]
=====
QuakeSat
Catalog Number: 27845
Launch Date: June 30, 2003

Status: Telemetry only

Current Mode: 9600 baud data packet

Mode U packet
Downlink: 436.675 MHz 9k6 BPS

Quakesat webpage:
http://www.quakefinder.com/services/quakesat-ssite/
[04272009]

```
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=69&retURL
=/satellites/status.php
[02212009]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Telemetry only

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink:        144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[03302009]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Telemetry only

Current Modes:
Telemetry : /u

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign:       4XTECH-12

More information of GO-32 can be found at:
http://asri.technion.ac.il/techsat/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=14&retURL
=/satellites/status.php
[04272009]
=====
RS-22 RADIO SPORT RS-22
Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only

Current Mode:  /u

CW Beacon - 435.352 MHz
            145.818 MHz

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=76&retURL
=/satellites/status.php
[02212009]
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990

Status: CW Beacon only

Uplinks:          145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink:      437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[03162009]
=====
CanX-2
```

Catalog number: 32790
Launch Date: April 28, 2008

Status: Operational in range of ground station only

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[02212009]
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.425 MHz 1k2 baud packet

For the latest project status update please visit the AAUSAT-II web page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[02212009]
=====
CO-65 CUTE-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008

Status: Digipeater

Downlink: 437.475 MHz 9k6 Packet
Uplink: 1267.600 Mhz

Telemetry Beacon:
Downlink: 437.2750 MHz CW

For the latest project status update please visit the Cute-1.7+APD II web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78

Command Station blog website:
http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=112&retURL

=/satellites/status.php
[02212009]
=====
Compass-1
Catalog number: 32787
Launch Date: April 28, 2008

Status: Operational

Current Mode: 4k8 MSK packet

```
Uplink:   145.980 MHz FM
Downlink: 437.275 Mhz CW
          437.405 MHz Packet
```

For the latest project status update please visit the Compass 1 web page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=114&retURL
=/satellites/status.php
[04272009]
=====
CO-66 Seeds II
Catalog number: 32791
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.485 MHz

Callsign: JQ1YGU

For the latest project status update please visit the Seeds 2 web page: http://cubesat.aero.cst.nihon-u.ac.jp/english/seeds_2_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=113&retURL
=/satellites/status.php
[02212009]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes:		
	FM Repeater -	V/u
	Voice -	V/v
	BBS -	V/v
	APRS -	V/v
	SSTV -	V/v

Expedition 21 Crew:

Commander:	Frank De Winne	ON1DWN
Flight Engineer:	Robert Thirsk	VA3CSA
Flight Engineer:	Roman Romanenko	
Flight Engineer:	Nicole P. Stott	KE5GJN
Flight Engineer:	Jeff Williams	KD5TVQ
Flight Engineer:	Maxim Suraev	

Available Modes and Frequencies:

Digital/APRS:

Worldwide packet uplink:	145.825 MHz FM 1k2
Worldwide packet downlink:	145.825 Mhz FM 1k2

Voice:

Region 1 voice uplink:	145.200 MHz FM
Region 2/3 voice uplink:	144.490 MHz FM
Worldwide downlink:	145.800 MHz FM

Crossband Repeater:

Repeater Uplinks:	1269.650 MHz FM
	437.800 MHz FM
	145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink:	145.800 MHz FM
	437.800 MHz FM (Kenwood)

SSTV Robot 36:

Downlink:	145.800 MHz FM

Mode and Antenna Polarization:

V: Linear

U: Linear

Callsigns:

Belgian:	OR4ISS
German:	DP0ISS
Russian:	RS0ISS
	RZ3DZR
United States:	NA1SS
Packet Mailbox:	RS0ISS-11
Digipeater callsign:	ARISS

Official ARISS Webpage:	http://www.rac.ca/ariss
ISS Fan Club Webpage:	http://www.issfanclub.com
APRS tracking page:	http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines

Remember that the crew operates on UTC time. Also, all of the time

```
line is NOT translated from Russian and posted.
[10042009]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-299.S3
WSR 299 Part 3 10/26/2009

AMSAT NEWS SERVICE BULLETIN 299.S3
FROM AMSAT HQ SILVER SPRING, MD, October 26, 2009
TO ALL RADIO AMATEURS
BID: $WSR-299.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

CP4
Catalog Number: 31122
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon:    437.325 MHz CW

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=79
[10022008]
=====
LIBERTAD-1
Catalog Number: 31128
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink:   145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[02122009]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: Non-Operational

Current Mode: V/v
```

```
Uplink/Downlink: 145.825 Mhz FM
Voice Recorder:  145.825 Mhz FM
[01012009]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency:  437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink:        437.250 MHz FM 67Hz CTCSS
Voice Downlink:     2401.835 MHz FM
Packet Up/Downlink:  437.250 MHz 9k6 packet
Packet Downlink     2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non-Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[08132007]
=====
CANX-1
Catalog Number: 27847
Launch Date: June 30, 2003

Status: Non-Operational

Downlink: 437.8800 MHz AFSK 1k2bps
[06052009]
=====
DTUSAT
```

Catalog Number: 27842
Launch Date: June 30, 2003

Status: Non-Operational

Current Mode: 2k4 AFSK Packet last reported

Downlink: 437.475MHz

Officail webpage: http://dtusat1.dtusat.dtu.dk/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=101&retURL=satellites/all_oscars.php
[02212009]

=====

AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)

Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]

=====

MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Telemetry only

Uplinks: 145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[03302009]

=====

```
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink:   145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS:                SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink:   145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
```

V-band: 145.840 - 145.990 MHz CW/LSB
U-band: 435.550 - 435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks

S2-band: 2401.225 - 2401.475 MHz CW/USB
K-band: 24048.010 - 24048.060 MHz CW/USB
Beacon: 2401.323 MHz
24048.035 MHz

P3-D Telemetry Beacons (IHU)

BEACON	General Beacon(GB)	Middle Beacon(MB)	Engineering Beacon(EB)
2 m	none	145.898 MHz	none
70cm	435.438 MHz	435.588 MHz	435.838 MHz
13cm(1)	2400.188 MHz	2400.338 MHz	2400.588 MHz
13cm(2)	2401.173 MHz	2401.323 MHz	2401.573 MHz
3cm	10450.975 MHz	10451.125 MHz	10451.375 MHz
1.5cm	24047.885 MHz	24048.035 MHz	24048.285 MHz

[07162007]

OO-38 OPAL

Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]

UO-36 UoSAT-12

Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]

SO-35 SUNSAT

Catalog Number: 25636
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink: 145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12

```
[05012006]
=====
MO-30 UNAMSAT-2
Catalog Number: 24305
Launch Date: September 5, 1996

Status: Non-operational

Downlink:       435.1380 MHz AFSK 1200 BPS
Downlink:       435.2060 MHz AFSK 1200 BPS
Uplink:         145.8150 MHz AFSK 1200 BPS
Uplink:         145.8350 MHz AFSK 1200 BPS
Uplink:         145.8550 MHz AFSK 1200 BPS
Uplink:         145.8750 MHz AFSK 1200 BPS
[06042009]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Non-operational

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign:       POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012009]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
```

```
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
```

```
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
[05012006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: non-operational

Current Mode:  V/u

Uplink:         145.900 MHz FM 1200-baud Manchester FSK (reserved)
                145.920 MHz FM VOICE
                145.940 MHz FM 1200-baud Manchester FSK (reserved)
                145.960 MHz FM 1200-baud Manchester FSK (reserved)
```

```
Downlink:       437.026 MHz USB VOICE
                (1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[07242009]
=====
UO-15 UoSAT-4
Catalog Number: 20438
Launch Date: January 22, 1990

Status: Non-operational

Uplink: ?
Downlink: 435.1250MHz (?)
          435.1200MHz (?)
[06042009]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS
```

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984

Status: Non-operational.

Current Mode: /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon: 435.025 MHz
Mode-S Beacon: 2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[01012009]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon: 145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

```
Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink  29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
Beacons:   29.450 MHz
          435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon 1:  29.352 MHz (intermittent)
Beacon 2:  29.398 MHz
```

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB

Beacon: 145.860 MHz

Robot: 145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-299.S4
WSR 299 Part 4 10/26/2009

AMSAT NEWS SERVICE BULLETIN 299.S4
FROM AMSAT HQ SILVER SPRING, MD, October 26, 2009
TO ALL RADIO AMATEURS
BID: $WSR-299.S4

THE FOLLOWING SATELLITES HAVE RE-ENTERED OR HAVE BEEN RETURNED SAFELY:

NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: July 28, 2008

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

```
Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[01012009]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink:      145.825 Mhz FM APRS AX25
APRS Uplink:        145.825 MHz FM APRS AX25
Voice/PSK31 Uplink:  28.120 MHz

Packet to Voice ID: RAFT
[06112007]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Re-Entered
Re-entered: June 18, 2008

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon:             437.2750 MHz CW

Callsign: JR8YJT
[01012009]
=====
SO-43 Starshine 3
Catalog Number: 26929
Launch Date: September 30, 2001

Status: Re-Entered
Re-entered: January 21, 2003

Beacon: 145.825Mhz
[02212009]
NNNN
/EX
```

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at}amsat.org
NNNN
/EX

From 1057558145437973734
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news2.google.com!newsfeed2.dallas1.level3.net!news.level3.com!panix!panix2.panix.com!not-for-mail
From: rram@panix.com (rec.radio.amateur.moderated Admin)
Newsgroups:
rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.info
Subject: Crossposting Permitted to rec.radio.amateur.moderated
Supersedes: <radio/ham-radio/moderated/crossposting-1-1254376801@panix.com>
Followup-To: poster
Date: 1 Nov 2009 02:00:03 -0500
Organization: rec.radio.amateur.moderated Moderation Team
Lines: 47
Approved: RRI Admin <rec-radio-info-request@panix.com>
Distribution: world
Expires: 04 Dec 2009 02:00:00 -0000
Message-ID: <radio/ham-radio/moderated/crossposting-1-1257058800@panix.com>
Reply-To: rec-radio-amateur-moderated-request@panix.com
(rec.radio.amateur.moderated Admin)
NNTP-Posting-Host: panix2.panix.com
X-Trace: reader1.panix.com 1257058803 24258 166.84.1.2 (1 Nov 2009 07:00:03 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 1 Nov 2009 07:00:03 +0000 (UTC)
Summary: Short reminder for unmoderated newsgroups that crossposting is permitted
Keywords: FAQ, ham, amateur, radio, moderated, unmoderated, crossposting, permitted
Xref: g2news2.google.com rec.radio.amateur.antenna:15204 rec.radio.amateur.dx:530
rec.radio.amateur.equipment:1834 rec.radio.amateur.homebrew:3199
rec.radio.amateur.misc:4622 rec.radio.amateur.policy:27050
rec.radio.amateur.space:301 rec.radio.info:1084

Posted-By: auto-faq 3.3.2 beta (PGPMoose V2.0, Perl 5.005)
Archive-name: radio/ham-radio/moderated/crossposting
Revision: 1.1 2009/04/12 19:42:04
Posting-Frequency: posted monthly
URL: http://www.panix.com/~rram/usenet/rram/index.html

Changes followed by "|".

After a 30-day public discussion and feedback period to gauge reader opinions in March of 2009:

http://groups.google.com/group/rec.radio.amateur.moderated/browse_thread/thread/d7d337db35f23326

the rec.radio.amateur.moderated Moderation Team has decided to consider amending its charter, and permit limited simultaneous crossposting to rec.radio.amateur.moderated and one other unmoderated amateur-radio-related discussion newsgroup. We are currently trying this on a temporary basis (90 days, through early July 2009), and adopt it permanently if successful.

Approved rec.radio.amateur.* newsgroups are those that are currently listed in the latest version of the "List of Big Eight Newsgroups" which is crossposted monthly to news.announce.newgroups, news.groups, and news.lists.misc.

Approved alt.radio.amateur.* and alt.ham-radio.* newsgroups are those that have been created consistent with the suggestions in "So You Want to Create an Alt Newsgroup" at:

http://www.faqs.org/faqs/alt-creation-guide/

Approved regional hierarchy newsgroups are those that contain either "radio.amateur" or "ham-radio" in their names, including uk.radio.amateur and aus.radio.amateur.misc.

We will make every reasonable effort to keep our list of approved newsgroups up-to-date. In case we have overlooked any, and a submission is rejected in error as a result, the rejected submitter can E-mail us at our administrative contact address (in the signature at the bottom of this article, and the default Reply-To for the rejection message) requesting that it be added, and that the article be approved. We may still choose to reject articles crossposted to any alt.* newsgroup with an inappropriate name, including obscene language, embedded name-calling, or encouragement of unlawful conduct.

Please direct any comments, questions, or criticisms to rec-radio-amateur-moderated-request@panix.com.

From -2330603704431089367
X-Google-Thread: a4a23d5f63,fab6805be80e24bd,start
X-Google-Attributes: gida4a23d5f63,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news2.google.com!newsfeed2.dallas1.level3.net!
news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-305 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sun, 1 Nov 2009 14:49:12 EST
Organization: The Radio Amateur Satellite Corporation
Lines: 313
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000001ca5b2c$6093ad60$21bb0820$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1257104952 24287 166.84.1.6 (1 Nov 2009 19:49:12 GMT)

```
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 1 Nov 2009 19:49:12 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news2.google.com rec.radio.amateur.space:302 rec.radio.info:1085
```

AMSAT NEWS SERVICE
ANS-305

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* Ares I-X Completes a Successful Flight Test
* Call for Papers
* 500th School Contact
* LUSAT-1 Silent
* ARISS Status

SB SAT @ AMSAT $ANS-305.01
Ares I-X Completes a Successful Flight Test

AMSAT News Service Bulletin 305.01
From AMSAT HQ SILVER SPRING, MD.
November 1, 2009
To All RADIO AMATEURS
BID: $ANS-305.01

Ares I-X Completes a Successful Flight Test
NASA's Ares I-X test rocket lifted off Oct. 28, 2009, at 11:30 a.m. EDT from Kennedy Space Center in Florida for a two-minute powered flight. The flight test lasted about six minutes from its launch from the newly modified Launch Complex 39B until splashdown of

the rocket's booster stage nearly 150 miles downrange.

The 327-foot-tall Ares I-X test vehicle produced 2.6 million pounds of thrust to accelerate the rocket to nearly 3 g's and Mach 4.76, just shy of hypersonic speed. It capped its easterly flight at a suborbital altitude of 150,000 feet after the separation of its first stage, a four-segment solid rocket booster.

Parachutes deployed for recovery of the booster and the solid rocket motor, which were recovered at sea and will be towed back to Florida by the booster recovery ship, Freedom Star, for later inspection. The simulated upper stage and Orion crew module, and the launch abort system will not be recovered.

The flight test is expected to provide NASA with an enormous amount of data that will be used to improve the design and safety of the next generation of American spaceflight vehicles, which could again take humans beyond low Earth orbit.

[ANS thanks NASA for this info]

/EX

SB SAT @ AMSAT $ANS-305.02
Call for Papers

AMSAT News Service Bulletin 305.02
  From AMSAT HQ SILVER SPRING, MD.
November 1, 2009
To All RADIO AMATEURS
BID: $ANS-305.02

Call for Papers 14th Annual Southeastern VHF Society Conference April 23rd and 24th, 2010 Morehead State University in Morehead, Kentucky.

The Southeastern VHF Society is calling for the submission of papers and presentations for the upcoming 14th Annual Southeastern VHF Society Conference to be held at Morehead State University in Morehead, KY on April 23rd and 24th, 2010. Papers and presentations are solicited on both the technical and operational aspects of VHF, UHF and Microwave weak signal amateur radio.

The deadline for the submission of papers and presentations is February 5, 2010. All submissions for the proceedings should be in Microsoft Word (.doc). Submissions for presentation at the conference should be in PowerPoint (.ppt) format, and delivered on either a USB memory stick or CDROM or posted for download on a web site of your choice.

For further information about the conference
please go to http://www.svhfs.org

Thank you,
Robin Midgett K4IDC
2010 Program Chair, SVHFS

[ANS thanks SVHFS for the above information]

/EX

SB SAT @ AMSAT $ANS-305.03
500th School Contact

AMSAT News Service Bulletin 305.03
  From AMSAT HQ SILVER SPRING, MD.
November 1, 2009
To All RADIO AMATEURS
BID: $ANS-305.03

ARISS celebrates 500th school space contact

ARISS Chairman Gaston Bertels, ON4WF noted that on Tuesday, 27 October 2009, ISS Commander Frank De Winne, ON1DWN answered questions from students participating to a venue at the brand new Copernic Science Center in Warsaw, Poland. This was the 500th School Contact since ARISS began operations in the year 2000. Schools in all continents benefit from ARISS educative School Contacts.

This telebridge contact was operated by ARISS ground station VK4KHZ located in Glenden, Queensland, Australia. At the end of the contact, Frank thanked Shane Lynd VK4KHZ - for the many ARISS telebridge contacts he'd already performed. Shane shares these thanks with his colleagues of the 11 ARISS telebridge ground stations which cover all five continents.

October 15, 2009 students in Gao, Mali talked with UNICEF good will ambassador Frank De Winne onboard the ISS and 23 October, students in Mbour, Senegal got answers to their questions, direct from space. During the same orbit, Frank De Winne also talked with students in Ieper, Belgium.

Audio recordings of the Warsaw and Ieper school contacts are available at http://www.ariss-eu.org/archive.htm.

ARISS is an international educational outreach program partnering the participating space agencies, NASA, Russian Space Agency, ESA, CNES, JAXA, and CSA, with the AMSAT and IARU organizations from participating countries.

ARISS offers an opportunity for students to experience the excitement of Amateur Radio by talking directly with crewmembers onboard the International Space Station. Teachers, parents and communities see, first hand, how Amateur Radio and crewmembers on ISS can energize youngsters' interest in science, technology and learning.

[ANS thanks ARISS Chairman Gaston Bertels, ON4WF and SouthGate for the above information]

/EX

SB SAT @ AMSAT $ANS-305.04
LUSAT-1 Silent

AMSAT News Service Bulletin 305.04
From AMSAT HQ SILVER SPRING, MD.
November 1, 2009
To All RADIO AMATEURS
BID: $ANS-305.04

LUSAT-1 Silent

AMSAT-Argentina reported LUSAT-1, LO-19 stopped transmitting CW telemetry on 437.125 MHz around October 20. Ignacio, LU1ESY reported he last received a signal on October 11 after which he noted a drift in the downlink frequency beyond the expected doppler shift.

AMSAT-Argentina says, "We hope to re-live LUSAT to allow him to celebrate its 20 years in space next January 23. We welcome any reception reports!"

[ANS thanks AMSAT-Argentina for the above information]

/EX

SB SAT @ AMSAT $ANS-305.05
ARISS Status

AMSAT News Service Bulletin 305.05
From AMSAT HQ SILVER SPRING, MD.
October 26, 2009
To All RADIO AMATEURS
BID: $ANS-305.05

1. Recent & Upcoming School Contacts

An Amateur Radio on the International Space Station (ARISS) contact has been completed with Copernicus Science Centre in Warsaw, Poland on Tuesday, October 27 at 09:33 UTC via telebridge station VK4KHZ in Australia. The centre organized a student competition for naming the asteroids, using rules of the science naming process. This month the winners travelled to Warsaw for the competition finale and will take part in the ARISS event.

Sherbrooke Community School in Sassafras, Victoria, Australia has been completed for an Amateur Radio on the International Space Station (ARISS) contact on Wednesday, October 28 at 07:13 UTC. This will be a telebridge contact with station W6SRJ in California. The school fosters student participation and the advancement of amateur radio in the community. It operates Sherbrooke Community Club station, VK3KID. The school invited representatives from neighboring schools to pose questions to the astronauts and asked its sister schools in China and Bhutan to also submit questions for students to ask the ISS crew.

David Thompson Middle School (DTMS) in Calgary, Alberta, Canada has been completed for an Amateur Radio on the International Space Station (ARISS) contact on Friday, October 30 at 21:12 UTC via station LU8YY in Argentina. DTMS and the University of Calgary's science department will collaborate on this event.

2. Italian Students Contact Astronaut Frank De Winne via ARISS

On Tuesday, October 20, students attending Istituto Comprensivo "Romualdo TRIFONE" in Montecorvino Rovella, Salerno, Italy participated in an Amateur Radio on the International Space Station (ARISS) contact with Frank DeWinne, ON1DWN on the ISS. To prepare for the contact, teachers partnered with astrophysicists of the Astronomical Observatory "Giancamillo Glorious" in M. Rovella and the local amateur radio group ARI Salerno. Assistance was provided by the amateur radio station in "Alighieri Trevigi" School, located in Casale Monferrato, Italy. The school used a combination of a direct and telebridge contact to avoid local obscurations.
An audience of more than 40 (Casale Monferrato) and 450 (Montecorvino Rovella) students, teachers and visitors gathered for the event and the webcast received over 500 connections. Regional television, local media and newspapers covered the news.

3. ARISS Contact with Senegal Students

On Friday, October 23, C. E. M. IV in Mbour, Senegal experienced an Amateur Radio on the International Space Station (ARISS) contact with Frank De Winne, ON1DWN on the ISS. Students asked twenty questions of the astronaut. Swiss astronaut Claude Nicollier, HB9CN also participated in a videoconference with the youth. C. E. M. IV is a technical college and has formed a scientific club at the school based on new technologies.

4. De Winne has ARISS Contact with Ieper Students

Students from VTI Ieper in Ieper, West-Vlaanderen, Belgium spoke with Frank DeWinne, ON1DWN via an Amateur Radio on the International Space Station (ARISS) contact on Friday, October 23. Telebridge station VK4KHZ in Australia provided the connection. Twenty questions were asked and answered in front of a large audience including several reporters. The school recently built a replica of the plane, 'Mourane Parasol' which Guynemer (a French pilot) flew during World War I and incorporated the ARISS contact as a feature event in their celebration of 100 years of aviation.

5. Astronaut Jeff Williams has ARISS Contact with Arctic School

On Friday, October 23, students from Samuel Hearne Secondary School in Inuvik, Northwest Territories, Canada experienced an Amateur Radio on the International Space Station (ARISS) contact with Expedition 21 astronaut Jeffrey Williams, KD5TVQ. This was a telebridge contact via ground station W6SRJ in California. At the school's request, ARISS representatives visited the school and classrooms prior to the contact to talk about amateur radio and the ISS. Six hundred people attended the event and watched as the students asked Williams 22 questions about life and work in space. CBC (Canadian Broadcasting Corporation) Radio and the local and area press covered the event. The school is located very near the Arctic Ocean which makes this the most northerly ARISS contact to date.

6. Canadian Bel Ayr Pathfinders Speak with Robert Thirsk via ARISS

An Amateur Radio on the International Space Station (ARISS) contact took place on Saturday, October 24 between Bel Ayr Pathfinders in Dartmouth, Nova Scotia, Canada and Robert Thirsk, VA3CSA on the ISS via telebridge station W6SRJ in California. Thirsk answered 17 questions posed to him by the students as an audience of 160 gathered for the event, including the media (CBC, CTV, a community television station, a radio station and a local newspaper). The Pathfinders that participated in the ARISS contact earned Galactic Adventures badges and will share this experience with other Girl Guides of all ages.

7. ARISSat-1 Meeting Held

The ARISSat-1 Team met in Phoenix, Arizona over the October 23 -25 weekend to assemble and test the integration of the various satellite components. The team has also been compiling voice messages to be included on ARISSat and has been preparing for the Safety Review meeting to be held on Thursday, October 29.

8. ARISS International Meeting Held

An Amateur Radio on the International Space Station (ARISS) Team meeting was held on Tuesday, October 20. Topics of discussions included a status on the Columbus module antennas and an ARISSat-1 update.

See: http://www.rac.ca/ariss/arisstel2009-10-20.htm

[ANS thanks Carol, KB3LKI, for the above information]

/EX

73,
This week's ANS Editor,
Dee Interdonato, NB2F
nb2f at amsat dot org

```
From 5436884131189126676
X-Google-Thread: a4a23d5f63,4a27e15e3a0927f0,start
X-Google-Attributes: gida4a23d5f63,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news3.google.com!feeder.news-service.com!
news.astraweb.com!border2.a.newsrouter.astraweb.com!tiscali!
newsfeed2.ip.tiscali.net!nx01.iad01.newshosting.com!newshosting.com!
198.186.194.249.MISMATCH!news-out.readnews.com!transit3.readnews.com!panix!
rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-306 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Mon, 2 Nov 2009 21:30:43 EST
Organization: The Radio Amateur Satellite Corporation
Lines: 1776
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000c01ca5c2d$a3683640$ea38a2c0$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1257215444 5341 166.84.1.6 (3 Nov 2009 02:30:44 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Tue, 3 Nov 2009 02:30:44 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
```

x-cr-hashedpuzzle: AX5A Ackl BVPf CGX5 DQ/e DSV6 DcWR EyP9 FJoI FuZN GMH9 HABf
HGKr IgOD J+x/ KP/
R;1;cgBlAGMALQByAGEAZABpAG8ALQBpAG4AZgBvAEAAcABhAG4AaQB4AC4AYwBvAG0A;Sosha1_v1;7;
{9CAAE1AB-92B1-47FD-
A616-3F05E8A74815};awA5AGoAawBtAEAAYwBvAG0AYwBhAHMAdAAuAG4AZQB0AA==;Tue, 03 Nov
2009 02:30:37
GMT;VwBTAFIALQAzADAANgAgAEEATQBTAEEAVAAgAFcAZQBlAGsAbAB5ACAAUwBhAHQAZQBsAGwAaQB0AG
UAIABSAGUAcABvAHIAdAA=
x-cr-puzzleid: {9CAAE1AB-92B1-47FD-A616-3F05E8A74815}
Xref: g2news2.google.com rec.radio.amateur.space:303 rec.radio.info:1088

This report is organized into four (4) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - deborbited/returned satellites

SB SAT @ AMSAT W8ISS $WSR-306.S1
WSR 306 Part 1 11/02/2009

AMSAT NEWS SERVICE BULLETIN 306.S1
FROM AMSAT HQ SILVER SPRING, MD, November 02, 2009
TO ALL RADIO AMATEURS
BID: $WSR-306.S1

SO-67 SumbandilaSat
Catalog Number: 35870
Launch Date: September 17, 2009

Status: Commissioning

Callsign: ZS0SUM

Uplink: 145.880MHz FM
Downlink: 435.350MHz FM
[10262009]
=====
DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008

Status: Operational
Current Mode: Science Mode - Beacon ONLY

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink: 435.530 to 435.570 MHz

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68

```
[02122009]
=====
VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink:   435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink:   435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW


Indian Beacon:  145.859330 MHZ CW
Dutch Beacon:   145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is active. Each transponder has a different beacon.
[08072008]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: System Reload in progress

Current Modes:
FM Repeater ONE
Uplink:    145.920Mhz FM
Downlink:  435.300Mhz FM
Downlink: 2401.200MHz FM
FM Repeater TWO (QRP ONLY)
Uplink:    OFF
Downlink:  OFF
BBS
Uplink:    OFF
Downlink:  OFF
Telemetry
Downlink:  435.150MHz

Analog voice downlink:     435.300 MHz FM
```

435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.860 MHZ FM
145.880 MHz USB
145.920 MHz FM
1268.700 MHz FM
Digital Downlinks: 435.150 MHz FM 38k4 PBP, 1 watt output
435.150 MHz FM 9k6 Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Pacsat Broadcast Protocol
1268.700 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[10262009]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz. The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the re-

peater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset
the 10 minute timer.
[05282007]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: RECOVERY
Current Mode: V/u (Mode JA)

Voice/CW (Mode JA)
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
145.870 MHz FM
145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage:
http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's
CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/
fo29cwts.htm
[09062009]
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM

```
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[03232009]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational

Current Mode: Alternating between Mode A and B every 24 hours

Uplink:   145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink:  29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons:   29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
[02122009]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - V/u
                      Voice -       V/v
                      BBS -         V/v
                      APRS -        V/v
                      SSTV -        V/v


Expedition 21 Crew:
Commander:                Frank De Winne   ON1DWN
Flight Engineer:          Robert Thirsk    VA3CSA
Flight Engineer:          Roman Romanenko
Flight Engineer:          Nicole P. Stott  KE5GJN
Flight Engineer:          Jeff Williams    KD5TVQ
```

Flight Engineer: Maxim Suraev

Available Modes and Frequencies:

Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[10182009]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-306.S2
WSR 306 Part 2 11/02/2009

AMSAT NEWS SERVICE BULLETIN 306.S2

```
FROM AMSAT HQ SILVER SPRING, MD, November 02, 2009
TO ALL RADIO AMATEURS
BID: $WSR-306.S2

SwissCube
Catalog Number: 35932?
Launch Date: September 23, 2009

Status: In Orbit

Callsign: HB9EG

Beacon(100mw): 437.5050MHz CW
Beacon(1w): 437.5050MHz FSK 1k2bps
[10042009]
=====
UWE-2
Catalog Number: 35935?
Launch Date: September 23, 2009

Status: In Orbit

Beacon(500mw): 437.3850 MHz AFSK 1k2bps
               437.3850 MHz FSK 9k6bps
[10042009]
=====
ITUpsAT1
Catalog Number: 35934?
Launch Date: September 23, 2009

Status: In Orbit

Beacon(100mw): 437.325MHz CW
Beacon(1w): 437.325MHz 19k2bps
[10042009]
=====
BEESAT
Catalog Number: 35933?
Launch Date: September 23, 2009

Status: In Orbit

Callsign: DP0BEE

Beacon(100mw): 436.000MHz CW
Beacon(500mw): 436.000MHz GMSK 4k8bps
[10042009]
=====
Pollux
Catalog Number:
Launch Date: July 31, 2009

Status: Operational
```

```
Callsign: POLLUX-1

Downlink: 145.825MHz 1k2 AX.25
[10042009]
=====
Castor
Catalog Number:
Launch Date: July 31, 2009

Status: Operational

Callsign: KD4HBO-1

Downlink: 145.825 MHz 1k2 AX.25
[10042009]
=====
BEVO-1 (DRAGONSAT-1)
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Operational

Downlink: 437.325 MHz 9k6 GMSK
          437.325 MHz CW 20wpm
[07312009]
=====
AggieSat2 (DRAGONSAT-2)
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Operational

Downlink: 436.250 MHz 9k6
[07312009]
=====
CP-6
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Commissioning

Downlink: 437.365 MHz 1k2 AFSK
[06052009]
=====
HAWKSAT 1
Catalog number: 35003
Launch Date: May 19, 2009

Status: ?

Downlink: 437.345 ?
[06052009]
```

```
=====
Pharmasat
Catalog Number: 35002
Launch Date: May 19, 2009
Status: Commissioning

Downlink: 437.465 MHz 1k2 AFSK
[06052009]
=====
ANUSAT
Catalog Number: 34808
Launch Date: April 20, 2009

Status: ?

Downlink:  435.000 MHz
Uplink:    145.800 MHz

Telemetry: 137.400 MHz
[05112009]
=====
SOHLA-1 (ASTRO TECH.)
Catalog Number: 33496
Launch Date: January 23, 2009

Status: Commisioning

Proposed Frequencies and Modes:
Downlink: 437.505 MHz AFSK/CW
Beacon:   437.505 MHz AFSK/CW

Callsign:

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=101
[03232009]
=====
KAGAYAKI (Solan Co.)
Catalog Number: 33495?
Launch Date: January 23, 2009

Status: In Orbit

Downlink: 437.375 MHZ    FSK9k6/CW
Beacon:   437.375 MHz    FSK9k6/CW

IARU coordination status page:

AMSAT-NA webpage:

[01152009]
=====
STARS (Kagawa Univ.) (Twin Satellites)
```

```
Catalog Number: 33498
Launch Date: January 23, 2009

Status: Operational ?

Downlinks: 437.485 MHz FM/CW
           437.465 MHz FM/CW
Beacons:   437.305 MHz FM/CW
           437.275 MHz FM/CW

Callsigns: JR5YBN
           JR5YBO

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=99

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=121&retURL
=/satellites/status.php
[022152009]
=====
KKS-1 (Tokyo MCIT)
Catalog Number: 33499
Launch Date: January 23, 2009

Status: Operational

Downlink:  437.455 MHz AFSK/CW
Beacon:    437.385 MHz AFSK/CW

Callsign: JQ1YYY

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=107

AMSAT-NA webapge:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=120&retURL
=/satellites/status.php
[02212009]
=====
PRISM (Tokyo Univ.)
Catalog Number: 33493
Launch Date: January 23, 2009

Status: Operational ?

Downlink: 437.425 MHz AFSK/GMSK/CW
Beacon:   437.250 MHz AFSK/GMSK/CW

Callsign: JQ1YCX

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=97
```

```
AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=119&retURL
=/satellites/status.php
[02212009]
=====
RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number: 32953
Launch Date: May 23, 2008

Status: Operational

Curent Modes: Telemetry
              Audio
              Images

Downlinks: 435.315 MHz
           435.215 MHz

AMSAT-NA website:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=115&ret
URL=/satellites/status.php

Official website:
http://www.npopm.com/?cid=leoca&caid=43
[02122009]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode:  /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon:    435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=94&retURL=
/satellites/status.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=72
[02122009]
=====
CP3
Catalog Number: 31129
Launch Date: April 17,2007
```

```
Status: Operational

Current Mode:  /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[02122009]
=====
GENESAT-1
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Current Mode: /u

Callsign: KE7EGC

Telemetry Beacon Downlink: 437.0695 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[091512009]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon:             437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/xivpicte.htm
[02212009]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003

Status: ?????

Current Mode: /u

Beacon:     436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS
```

```
Callsign: JQ1YGW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=96&retURL
=/satellites/status.php

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[06082009]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Operational?

Uplink:  1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=56
[02122009]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: System Reload in Progress

Current Modes:
FM Repeater ONE
Uplink:    145.920Mhz FM
Downlink:  435.300Mhz FM
Downlink: 2401.200MHz FM
FM Repeater TWO (QRP ONLY)
Uplink:    OFF
Downlink:  OFF
BBS
Uplink:    OFF
Downlink:  OFF
Telemetry
Downlink:  435.150MHz

Analog voice downlink:     435.300 MHz FM
                           435.150 MHz FM
                          2401.200 Mhz FM
Analog voice uplink:       145.860 MHZ FM
                           145.880 MHz USB
```

145.920 MHz FM
1268.700 MHz FM
Digital Downlinks: 435.150 MHz FM 38k4 PBP, 1 watt output
435.150 MHz FM 9k6 Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Pacsat Broadcast Protocol
1268.700 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[10262009]
=====
QuakeSat
Catalog Number: 27845
Launch Date: June 30, 2003

Status: Telemetry only

Current Mode: 9600 baud data packet

Mode U packet
Downlink: 436.675 MHz 9k6 BPS

Quakesat webpage:
http://www.quakefinder.com/services/quakesat-ssite/
[04272009]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=69&retURL
=/satellites/status.php
[02212009]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Telemetry only

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[03302009]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Telemetry only

Current Modes:
Telemetry : /u

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks: 145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://asri.technion.ac.il/techsat/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=14&retURL
=/satellites/status.php
[04272009]

=====
RS-22 RADIO SPORT RS-22
Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only

Current Mode: /u

CW Beacon - 435.352 MHz
            145.818 MHz

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=76&retURL=/satellites/status.php
[02212009]
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990

Status: CW Beacon only

Uplinks: 145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink: 437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[03162009]
=====
CanX-2
Catalog number: 32790
Launch Date: April 28, 2008

Status: Operational in range of ground station only

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[02212009]

```
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.425 MHz 1k2 baud packet

For the latest project status update please visit the AAUSAT-II web
page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[02212009]
=====
CO-65 CUTE-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008

Status: Digipeater

Downlink:  437.475 MHz 9k6 Packet
Uplink:   1267.600 Mhz

Telemetry Beacon:
Downlink: 437.2750 MHz CW

For the latest project status update please visit the Cute-1.7+APD II
web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78

Command Station blog website:
http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=112&retURL
=/satellites/status.php
[02212009]
=====
Compass-1
Catalog number: 32787
Launch Date: April 28, 2008

Status: Operational

Current Mode: 4k8 MSK packet

Uplink:   145.980 MHz FM
Downlink: 437.275 Mhz CW
```

437.405 MHz Packet

For the latest project status update please visit the Compass 1 web page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=114&retURL=/satellites/status.php
[04272009]
=====
CO-66 Seeds II
Catalog number: 32791
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.485 MHz

Callsign: JQ1YGU

For the latest project status update please visit the Seeds 2 web page: http://cubesat.aero.cst.nihon-u.ac.jp/english/seeds_2_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=113&retURL=/satellites/status.php
[02212009]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - V/u
Voice - V/v
BBS - V/v
APRS - V/v
SSTV - V/v

Expedition 21 Crew:

Commander:	Frank De Winne	ON1DWN
Flight Engineer:	Robert Thirsk	VA3CSA
Flight Engineer:	Roman Romanenko	
Flight Engineer:	Nicole P. Stott	KE5GJN
Flight Engineer:	Jeff Williams	KD5TVQ
Flight Engineer:	Maxim Suraev	

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[10042009]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-306.S3
WSR 306 Part 3 11/02/2009

AMSAT NEWS SERVICE BULLETIN 306.S3
FROM AMSAT HQ SILVER SPRING, MD, November 02, 2009
TO ALL RADIO AMATEURS
BID: $WSR-306.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

CP4
Catalog Number: 31122
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon: 437.325 MHz CW

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=79
[10022008]
=====
LIBERTAD-1
Catalog Number: 31128
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink: 145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[02122009]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: Non-Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder: 145.825 Mhz FM
[01012009]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305

```
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink:        437.250 MHz FM 67Hz CTCSS
Voice Downlink:     2401.835 MHz FM
Packet Up/Downlink:  437.250 MHz 9k6 packet
Packet Downlink     2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non-Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[08132007]
=====
CANX-1
Catalog Number: 27847
Launch Date: June 30, 2003

Status: Non-Operational

Downlink: 437.8800 MHz AFSK 1k2bps
[06052009]
=====
DTUSAT
Catalog Number: 27842
Launch Date: June 30, 2003

Status: Non-Operational

Current Mode: 2k4 AFSK Packet last reported

Downlink: 437.475MHz

Officail webpage: http://dtusat1.dtusat.dtu.dk/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=101&retURL
```

```
=satellites/all_oscars.php
[02212009]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink:   435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)

Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Telemetry only

Uplinks:   145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink:  437.325 MHz

Broadcast callsign: MYSAT3-11
BBS:                MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial land and weather imaging payloads offers FM and FSK
Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as
a collaborative effort between the Malaysian government and Surrey
Satellite Technology Ltd.
[03302009]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink:   145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
```

```
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS:                SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink:   145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
V-band:   145.840 -  145.990 MHz CW/LSB
U-band:   435.550 -  435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks
---------
S2-band:  2401.225 -  2401.475 MHz CW/USB
K-band:  24048.010 - 24048.060 MHz CW/USB
Beacon:   2401.323 MHz
         24048.035 MHz
```

P3-D Telemetry Beacons (IHU)

BEACON	General Beacon(GB)	Middle Beacon(MB)	Engineering Beacon(EB)
2 m	none	145.898 MHz	none
70cm	435.438 MHz	435.588 MHz	435.838 MHz
13cm(1)	2400.188 MHz	2400.338 MHz	2400.588 MHz
13cm(2)	2401.173 MHz	2401.323 MHz	2401.573 MHz
3cm	10450.975 MHz	10451.125 MHz	10451.375 MHz
1.5cm	24047.885 MHz	24048.035 MHz	24048.285 MHz

[07162007]

=====

OO-38 OPAL

Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]

=====

UO-36 UoSAT-12

Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]

=====

SO-35 SUNSAT

Catalog Number: 25636
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz
145.900 MHz

For more information of SUNSAT vist the satellite web site:

http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink: 145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
MO-30 UNAMSAT-2
Catalog Number: 24305
Launch Date: September 5, 1996

Status: Non-operational

Downlink: 435.1380 MHz AFSK 1200 BPS
Downlink: 435.2060 MHz AFSK 1200 BPS
Uplink: 145.8150 MHz AFSK 1200 BPS
Uplink: 145.8350 MHz AFSK 1200 BPS
Uplink: 145.8550 MHz AFSK 1200 BPS

```
Uplink:         145.8750 MHz AFSK 1200 BPS
[06042009]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Non-operational

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign:       POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012009]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
```

```
[05092004]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HL01-11
BBS: HL01-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
```

```
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
[05012006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: non-operational

Current Mode:  V/u

Uplink:         145.900 MHz FM 1200-baud Manchester FSK (reserved)
                145.920 MHz FM VOICE
                145.940 MHz FM 1200-baud Manchester FSK (reserved)
                145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink:       437.026 MHz USB VOICE
                (1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12
```

```
AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[07242009]
=====
UO-15 UoSAT-4
Catalog Number: 20438
Launch Date: January 22, 1990

Status: Non-operational

Uplink: ?
Downlink: 435.1250MHz (?)
          435.1200MHz (?)
[06042009]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984

Status: Non-operational.

Current Mode:  /v
```

```
Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon:          435.025 MHz
Mode-S Beacon:     2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[01012009]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon:   145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink  29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972
```

```
Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
Beacons:   29.450 MHz
          435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon 1:  29.352 MHz (intermittent)
Beacon 2:  29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink:     21.260 to 21.300 MHz CW/USB
Downlink:  145.860 to 145.900 MHz CW/USB

Beacon:    145.860 MHz
```

Robot: 145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-306.S4
WSR 306 Part 4 11/02/2009

AMSAT NEWS SERVICE BULLETIN 306.S4
FROM AMSAT HQ SILVER SPRING, MD, November 02, 2009
TO ALL RADIO AMATEURS
BID: $WSR-306.S4

THE FOLLOWING SATELLITES HAVE RE-ENTERED OR HAVE BEEN RETURNED SAFELY:

NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: July 28, 2008

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[01012009]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]

=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink: 145.825 Mhz FM APRS AX25
APRS Uplink: 145.825 MHz FM APRS AX25
Voice/PSK31 Uplink: 28.120 MHz

Packet to Voice ID: RAFT
[06112007]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Re-Entered
Re-entered: June 18, 2008

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon: 437.2750 MHz CW

Callsign: JR8YJT
[01012009]
=====
SO-43 Starshine 3
Catalog Number: 26929
Launch Date: September 30, 2001

Status: Re-Entered
Re-entered: January 21, 2003

Beacon: 145.825Mhz
[02212009]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at}amsat.org
NNNN
/EX

From -3961035903521681750
X-Google-Thread: addc8bf063,10d3ca089a9fbdb8,start
X-Google-Attributes: gidaddc8bf063,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news2.google.com!news.glorb.com!feeder.erje.net!newsfeed.kpn.net!pfeed09.wxs.nl!news.astraweb.com!border5.a.newsrouter.astraweb.com!not-for-mail
From: Chris Steyaert <observations@rmob.org>
Newsgroups: rec.radio.amateur.space,sci.astro.amateur
Subject: Radio Meteor Obs. Bull. October 2009   Orionids
Date: Sat, 07 Nov 2009 21:21:40 +0100
Message-ID: <9klbf51hmc715sedosri0af2u51g1pasep@4ax.com>

X-Newsreader: Forte Agent 5.00/32.1171
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Lines: 14
Organization: Unlimited download news at news.astraweb.com
NNTP-Posting-Host: d2763fdc.news.astraweb.com
X-Trace: DXC=`JQCK33M77@0UO2<>T]L;AL?0kYOcDh@JinIgL>jl;<EBSQ_gHCa=aH?VNOJ?
WbP>IUAOlJlPgdaH?SjRMoU:j5H
Xref: g2news2.google.com rec.radio.amateur.space:304 sci.astro.amateur:28442

Radio Meteor Observation Bulletin No. 195 of October 2009 (91 K) is available now as

http://www.rmob.org/rmobtext/rmob0910.txt

More information and the visual presentation of the hourly forward scatter counts can be found on

http://www.rmob.org

Chris

From -1936252093791043661
X-Google-Thread: a4a23d5f63,29bb6326d056e950,start
X-Google-Attributes: gida4a23d5f63,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news1.google.com!npeer03.iad.highwinds-media.com!
news.highwinds-media.com!feed-me.highwinds-media.com!nx02.iad01.newshosting.com!
newshosting.com!198.186.194.249.MISMATCH!transit3.readnews.com!news-
xxxfer.readnews.com!news-out.readnews.com!transit4.readnews.com!panix!
rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-312 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sat, 7 Nov 2009 21:17:40 EST
Organization: The Radio Amateur Satellite Corporation
Lines: 365
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <001401ca6019$a5646730$f02d3590$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1257646661 15602 166.84.1.6 (8 Nov 2009 02:17:41 GMT)

X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 8 Nov 2009 02:17:41 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to   rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to   rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news2.google.com rec.radio.amateur.space:305 rec.radio.info:1098

AMSAT NEWS SERVICE
ANS-312

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:

* ARISS Prepares Amateur Radio Equipment for ISS
* AMSAT Board Votes to Add a Student Membership
* November AO-51 Schedule Includes V, U, L, SSTV
* SO-67 Testing Progress
* Dish Calculation Software Released by VK3UM
* Satellite Shorts From All Over

SB SAT @ AMSAT $ANS-312.01
ARISS Prepares Amateur Radio Equipment for ISS

AMSAT News Service Bulletin 312.01
>From AMSAT HQ SILVER SPRING, MD.
November 8, 2009
To All RADIO AMATEURS
BID: $ANS-312.01

ARISSat-1 development work as well as the testing and delivery of the Amateur Radio antennas for the ISS Columbus module have been mentioned in prior week's news coverage. Now, as these projects prepare for space flight, is a good time for a summary report.

Columbus Module Antennas Ready for Flight

Rosalie White, K1STO reported on ARISS Columbus module antenna work via a feature story on the ARRL Web. She described Lou McFadin's W5DID, work on getting the antenna shipment from Europe cleared through customs and delivered to the Kennedy Space Center. Lou showed the astronauts the best ways for them to safely unpack and assemble the antennas and associated cables once they and the hardware reach the ISS. They reviewed how to maneuver and install the antennas during the second spacewalk of the STS-129 scheduled for Mid-November. These new antennas will increase opportunities for hams to make contacts with astronauts and cosmonauts. Frequencies available for transmission to and from Columbus will be 2 meters, 70 centimeters, L-band and S-band. To start, the two Ericcson radios (2 meters and 70 centimeters) that are already on the ISS (but seldom used) will be moved and installed in Columbus. Lou McFadin reported that the antennas are now loaded in the Shuttle and waiting for the November launch. Lou also developed a cable that will allow the astronauts to power the Ericsson radio from a computer power brick and get a station up and operating quickly.

ARISSat-1 Development Team Meets in Phoenix

Many of the ARISSat team met in Phoenix over the weekend of Oct 23-25 to work on software integration, to assemble the spaceframe and to make final measurements for the new cables. The team put in long hours at the Microchip facility where a number of new milestones were met.

+ The satellite was commanded via a radio.
+ New PSU (power supply unit) board was tested in the system.
+ New ICU (Interconnect board) was tested in the system.
+ New MPPT (Max Power Point Tracker) boards were tested with solar panels.
+ New solar panel test structure was built and used to test the power system.
+ The new 1k BPSK error correcting data was transmitted and received.
+ New telemetry data was transmitted.
+ Received data from the Russian experiment simulator and transmitted it.
+ Basic spaceframe was constructed.
+ The US made Ag-Zn battery was assembled and activated and will be available for testing.

The team is working hard to get the satellite completely operational by early Dec 2009, when in-depth system testing will begin. A NASA Safety Briefing for ARISSat-1 was held on Thursday 22 Oct 2009. The team was well prepared and only have a few items to provide additional descriptions for at the next safety review in December 2009.

The ARISSat-1 team also invites students from around the world to submit papers or other visual items that will be flown on the satellite. Submissions should be in jpg or pdf format such as a paper or a study done on science, technology, engineering, or math. Items such as a drawing of space craft, schematic, journal kept on an educational topic, a story, photo or news article about a class doing a hands on educational project are acceptable. The deadline for submission is on

Sunday, November 15, 2009. Send your files via e-mail to Dave, AA4KN (aa4kn at amsat.org) with a Cc: to Gaston, ON4WF, gaston (dot) bertels (at) skynet (dot) be.

[ANS thanks ARISS and the ARRL for the above information]

/EX

SB SAT @ AMSAT $ANS-312.02
AMSAT Board Votes to Add a Student Membership

AMSAT News Service Bulletin 312.02
>From AMSAT HQ SILVER SPRING, MD.
November 8, 2009
To All RADIO AMATEURS
BID: $ANS-312.02

During the November 3, 2009 Board meeting the motion to add a student membership category was unanimously approved. The student membership will be one half of the current membership. Until we update the web site and membership forms, please contact Martha at the AMSAT office to join at the student rate.

The approved motion reads:

"In order to expand its educational outreach efforts, AMSAT-NA establishes a student category of membership. The yearly rate will be half the standard applicable rate, and shall be available to all students in primary and secondary school. Post-secondary school students enrolled in at least half time status shall be eligible for a maximum of 6 post-secondary years in this status. In addition, the student membership application should indicate:
1) school attending.
2) course of study.
3) expected graduation date."

[ANS thanks the AMSAT Board of Directors for the above information]

/EX

SB SAT @ AMSAT $ANS-312.03
November AO-51 Schedule Includes V, U, L, SSTV

AMSAT News Service Bulletin 312.03
>From AMSAT HQ SILVER SPRING, MD.
November 8, 2009
To All RADIO AMATEURS
BID: $ANS-312.03

The AO-51 Control Team has posted the satellite schedule for the month of November and the first week of December:

November 6 - November 12

FM Repeater, V/U
Uplink: 145.920 MHz FM
Downlink: 435.300 MHz FM

9k6 BBS, L/U
Uplink: 1268.700 MHz 9k6 FM
Downlink: 435.150 MHz 9k6 FM

November 13 - November 15

ZS1LS requested a weekend of the QRP repeater for the AMSAT-SA group to use. QRP gets such little use here, and we had a request for SSTV, so we are going for dual use this weekend.

FM Repeater, V/U
Uplink: 145.920 MHz FM
Downlink: 435.300 MHz FM

FM repeater, V/U SSTV and AMSAT-SA Event
Uplink: 145.880 MHz FM
Downlink: 435.150 MHz FM

November 16 - November 19

38k4 BBS, L/U
Uplink: 1268.700 MHz 9k6 FM
Downlink: 435.150 MHz 38k4 FM

November 20 - November 25

FM Repeater, V/U
Uplink: 145.920 MHz FM
Downlink: 435.300 MHz FM

9k6 BBS, L/U
Uplink: 1268.700 MHz 9k6 FM
Downlink: 435.150 MHz 9k6 FM

November 26 - November 29

FM Repeater, V/U
Uplink: 145.920 MHz FM
Downlink: 435.300 MHz FM

FM repeater, L/U
Uplink: 1268.700 MHz FM
Downlink: 435.150 MHz FM

November 30 - December 6

For the reversal, the Control Team is going to use the chargeable magnet to reverse the orientation of AO-51 so the downlink antennas and the L/S antenna will favor the southern hemisphere.

We have not done this before. We'll need as many quantitative observations before and after the flip as possible, especially from the Southern Hemisphere. Tentative plans are to flip it on a Tuesday or Wednesday after collecting some 5 second telemetry WOD files as a baseline.

FM Repeater, V/U
Uplink: 145.920 MHz FM
Downlink: 435.300 MHz FM

9k6 BBS, L/U
Uplink: 1268.700 MHz 9k6 FM
Downlink: 435.150 MHz 9k6 FM

The latest AO-51 Control Team news can be found on-line at:
http://www.amsat.org/amsat-new/echo/CTNews.php

[ANS thanks Mark N8MH, Drew KO4MA and the AO-51 Control Team for the above information]

/EX

SB SAT @ AMSAT $ANS-312.04
SO-67 Testing Progress

AMSAT News Service Bulletin 312.04
>From AMSAT HQ SILVER SPRING, MD.
November 8, 2009
To All RADIO AMATEURS
BID: $ANS-312.04

South African amateur radio operators testing on the Sumbandila SO-67 satellite have reported receiving very strong downlink signals. Occasionally the satellite beacon was not copied but the parrot repeater and transponder were operational. The SO-67 operations team posted these hints for operation:

The CTCSS tone for the transponder is 233.6 Hz.

Uplink: 145.875MHz
Downlink: 435.345MHz

Additional recommendations:
Use only narrow FM
Switch off compression
Speak softly (mic gain down)

Satellite characteristics:

All antennas are linear vertically polarized (1/4 wavelength)
Sat Tx power = 5W
Sat Rx sensitivity = -116.5dBm for 12dB SINAD
Max antenna gain = 4dBi

Video taken by Sumbandila satellite at 500km received over S-band at the ground station in Stellenbosch, South Africa can be seen at:
http://tinyurl.com/yg4mymz

[ANS thanks SA-AMSAT for the above information]

/EX

SB SAT @ AMSAT $ANS-312.05
Dish Calculation Software Released by VK3UM

AMSAT News Service Bulletin 312.05
>From AMSAT HQ SILVER SPRING, MD.
November 8, 2009
To All RADIO AMATEURS
BID: $ANS-312.05

Although principally designed for the EME community VK3UM's EMECalc Ver. 7.00 software also contains tools that satellite dish users may find useful.

Doug, VK3UM says his software provides the capability to select various feed types (derived from Paul W1GHZ simulations), and match it your own dish f/d. This allows prediction of spill over and then simplies the correct selection of a feed to match your dish. This match provides several dB of performance improvement.

The software in a zip format may be obtained from
http://sm2cew.com/download.htm
http://www.ve1alq.com/vk3um/
http://www.vk3bez.org/vk3um_software.htm (available shortly)

[ANS thanks Doug, VK3UM for the above information]

/EX

SB SAT @ AMSAT $ANS-312.06
Satellite Shorts From All Over

AMSAT News Service Bulletin 312.06
>From AMSAT HQ SILVER SPRING, MD.
November 8, 2009
To All RADIO AMATEURS
BID: $ANS-312.06

+ Watch for possible AO-51 operation from the 2009 DXpedition to

Miquelon with Eric, KV1J and Tom, W8TOM operating as FP/homecall between November 7-15. Miquelon Island is also desginated NA-032, the grid square is GN17TC. QSL via home calls, direct or bureau. Further information at: http://www.kv1j.com/fp/october09.html

+ Trevor, M5AKA says there are 3 KiwiSAT videos on YouTube: View them via the SouthGate site at: http://tinyurl.com/ylepffp

+ SwissCube has an application that allows amateur stations in range of the spacecraft to listen and forward the BPSK downlink data to the SwissCube team. Details are at: http://swisscube-live.ch/RadioAmateurs/DownlinkForwarder Note - you need to register to use this application.

+ Pedro, LU7ABF reported AMSAT-Argentina's satellite predictor page can be found at http://amsat.org.ar/?f=d After setting your grid locator you get next passes in local time at your location.

+ Doug, KA8QCU reminds hams going to the Ft. Wayne, Ind. Hamfest, Nov. 14-15 that there will be an AMSAT Forum on Sat. the 14th at 1:15pm. More info at: http://www.fortwaynehamfest.com

+ Jim, N8OQ is collecting AO-7 telemetry from the anomalous 435.1 MHz RTTY telemetry event during February and March 2009. Good quality telemetry is defined as being collected continuosly for at least 4 minutes during a pass. Jim is also interested in any archives of AO-7 telemetry the "early days" before 1981 if any exists. Contact Jim via e-mail at: deyoung_james (at) yahoo.com

+ Satellite hams following the news about Neil's W6FOG sailing trip will be pleased to hear he has recovered and plans to be back out to sea soon. As of November 2 Neil had survived very bad weather and high seas along with hypothermia. The sea was so heavy his tow line to the Coast Guard cutter broke three times during the rescue. When he heads out this weekend his plans are to travel along the west coast to the Panama Canal and to the Caribbean.

+ November 5 was OSCAR College Station Satellite Night. Please forward reports and comments/observations to Dr. Jay Garlitz, AA4FL at the University of Florida via jgarlitz@ufl.edu.

+ Jeff, WB3JFS is compiling a list of "most wanted grids". Send your list via e-mail by November 14 to <callsign>@amsat.org. Please do not send any "water grids" since any operation from them is sporadic and most cases, impractical to activate for most of us.

[ANS thanks everyone for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors

to AMSAT Project Funds, will be eligible to receive additional benefits.
Application forms are available from the AMSAT Office. And, with that
ponder the question why don't skeletons cross the road? Its probably
because they don't have the guts.

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM

```
From 6632834310750516080
X-Google-Thread: 8f86f75953,e389cbf0553e3f60,start
X-Google-Attributes: gid8f86f75953,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!postnews.google.com!r24g2000yqd.googlegroups.com!not-for-
mail
From: =?ISO-8859-1?B?Q2FybONv?= <ca8065@gmail.com>
Newsgroups: rec.radio.amateur.space
Subject: td
Date: Wed, 11 Nov 2009 03:56:39 -0800 (PST)
Organization: http://groups.google.com
Lines: 1
Message-ID: <2fe6460c-f68f-4ecc-a08d-d763f4f15bb0@r24g2000yqd.googlegroups.com>
NNTP-Posting-Host: 189.59.8.130
Mime-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
X-Trace: posting.google.com 1257940599 32391 127.0.0.1 (11 Nov 2009 11:56:39 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Wed, 11 Nov 2009 11:56:39 +0000 (UTC)
Cc: ca8065@gmail.com
Complaints-To: groups-abuse@google.com
Injection-Info: r24g2000yqd.googlegroups.com; posting-host=189.59.8.130;
     posting-account=r6AelwoAAACir9lfuQsbQ_s7SLUMpMxz
User-Agent: G2/1.0
X-HTTP-Via: 1.0 localhost.localdomain:3128 (squid/2.6.STABLE21)
X-HTTP-UserAgent: Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1; SV1; .NET
     CLR 1.1.4322),gzip(gfe),gzip(gfe)
Xref: g2news1.google.com rec.radio.amateur.space:281
```

receber mensagem

```
From 5225728359997050355
X-Google-Thread: a4a23d5f63,66cf2fc7c46e9568,start
X-Google-Attributes: gida4a23d5f63,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!newsfeed2.dallas1.level3.net!
news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
```

Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-315 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Wed, 11 Nov 2009 08:11:25 EST
Organization: The Radio Amateur Satellite Corporation
Lines: 1774
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000901ca62d0$75eaeb50$61c0c1f0$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1257945085 6930 166.84.1.6 (11 Nov 2009 13:11:25 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Wed, 11 Nov 2009 13:11:25 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to   rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to   rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news1.google.com rec.radio.amateur.space:282 rec.radio.info:1027

This report is organized into four (4) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - deorbited/returned satellites

SB SAT @ AMSAT W8ISS $WSR-315.S1
WSR 315 Part 1 11/11/2009

AMSAT NEWS SERVICE BULLETIN 315.S1
FROM AMSAT HQ SILVER SPRING, MD, November 11, 2009
TO ALL RADIO AMATEURS
BID: $WSR-315.S1

SO-67 SumbandilaSat
Catalog Number: 35870
Launch Date: September 17, 2009

Status: Commissioning

Callsign: ZS0SUM

```
Uplink: 145.880MHz FM
Downlink: 435.350MHz FM
[10262009]
=====
DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008

Status: Operational
Current Mode: Science Mode - Beacon ONLY

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink:   435.530 to 435.570 MHz

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68
[02122009]
=====
VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink:   435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink:   435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW


Indian Beacon:  145.859330 MHZ CW
Dutch Beacon:   145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is active. Each transponder has a different beacon.
[08072008]
=====
AO-51 ECHO
```

```
Catalog number: 28375
Launch date: June 29, 2004

Status: System Reload in progress

Current Modes:
FM Repeater ONE
Uplink:    145.920MHz FM
Downlink:  435.300Mhz FM
FM Repeater TWO
Uplink:    OFF
Downlink:  OFF
BBS
Uplink:    1268.700MHz 9k6 FM
Downlink:  435.150MHz 9k6 FM
Telemetry
Downlink:  435.150MHz

Analog voice downlink:     435.300 MHz FM
                           435.150 MHz FM
                          2401.200 Mhz FM
Analog voice uplink:       145.860 MHZ FM
                           145.880 MHz USB
                           145.920 MHz FM
                          1268.700 MHz FM
Digital Downlinks:         435.150 MHz FM 38k4 PBP, 1 watt output
                           435.150 MHz FM 9k6 Pacsat Broadcast Protocol
                          2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:            145.860 MHz FM 9k6 Pacsat Broadcast Protocol
                          1268.700 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon:                    435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[11112009]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002
```

```
Status: Operational

Current Mode: V/u

Uplink:   145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4
Hz. The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute
   timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the re-
   peater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset
   the 10 minute timer.
[05282007]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: RECOVERY
Current Mode: V/u (Mode JA)

Voice/CW (Mode JA)
Uplink:   145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon:   435.795 MHz

Digital Mode JD
Uplinks:  145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage:
http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm
```

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's
CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/
fo29cwts.htm
[09062009]
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[03232009]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational

Current Mode: Alternating between Mode A and B every 24 hours

```
Uplink:   145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink:  29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons:   29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW
```

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
[02122009]
=====

INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes:	FM Repeater -	V/u
	Voice -	V/v
	BBS -	V/v
	APRS -	V/v
	SSTV -	V/v

Expedition 21 Crew:

Commander:	Frank De Winne	ON1DWN
Flight Engineer:	Robert Thirsk	VA3CSA
Flight Engineer:	Roman Romanenko	
Flight Engineer:	Nicole P. Stott	KE5GJN
Flight Engineer:	Jeff Williams	KD5TVQ
Flight Engineer:	Maxim Suraev	

Available Modes and Frequencies:

Digital/APRS:

Worldwide packet uplink:	145.825 MHz FM 1k2
Worldwide packet downlink:	145.825 Mhz FM 1k2

Voice:

Region 1 voice uplink:	145.200 MHz FM
Region 2/3 voice uplink:	144.490 MHz FM
Worldwide downlink:	145.800 MHz FM

Crossband Repeater:

Repeater Uplinks:	1269.650 MHz FM
	437.800 MHz FM
	145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink:	145.800 MHz FM
	437.800 MHz FM (Kenwood)

SSTV Robot 36:

Downlink:	145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:

Belgian:	OR4ISS
German:	DP0ISS
Russian:	RS0ISS
	RZ3DZR

United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[10182009]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-315.S2
WSR 315 Part 2 11/11/2009

AMSAT NEWS SERVICE BULLETIN 315.S2
FROM AMSAT HQ SILVER SPRING, MD, November 11, 2009
TO ALL RADIO AMATEURS
BID: $WSR-315.S2

SwissCube
Catalog Number: 35932
Launch Date: September 23, 2009

Status: In Orbit

Callsign: HB9EG

Beacon(100mw): 437.5050MHz CW
Beacon(1w): 437.5050MHz FSK 1k2bps
[11112009]
=====
UWE-2
Catalog Number: 35934
Launch Date: September 23, 2009

Status: In Orbit

Beacon(500mw): 437.3850 MHz AFSK 1k2bps
               437.3850 MHz FSK 9k6bps
[1112009]
=====
ITUpsAT1
Catalog Number: 35935
Launch Date: September 23, 2009

Status: In Orbit

Beacon(100mw): 437.325MHz CW
Beacon(1w): 437.325MHz 19k2bps

```
[11112009]
=====
BEESAT
Catalog Number: 35933
Launch Date: September 23, 2009

Status: In Orbit

Callsign: DP0BEE

Beacon(100mw): 436.000MHz CW
Beacon(500mw): 436.000MHz GMSK 4k8bps
[11112009]
=====
Pollux
Catalog Number:
Launch Date: July 31, 2009

Status: Operational

Callsign: POLLUX-1

Downlink: 145.825MHz 1k2 AX.25
[10042009]
=====
Castor
Catalog Number:
Launch Date: July 31, 2009

Status: Operational

Callsign: KD4HBO-1

Downlink: 145.825 MHz 1k2 AX.25
[10042009]
=====
BEVO-1 (DRAGONSAT-1)
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Operational

Downlink: 437.325 MHz 9k6 GMSK
          437.325 MHz CW 20wpm
[07312009]
=====
AggieSat2 (DRAGONSAT-2)
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Operational

Downlink: 436.250 MHz 9k6 FHSS
```

```
[11112009]
=====
CP-6
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Commissioning

Downlink: 437.365 MHz 1k2 AFSK
[06052009]
=====
HAWKSAT 1
Catalog number: 35003
Launch Date: May 19, 2009

Status: ?

Downlink: 437.345 ?
[06052009]
=====
Pharmasat
Catalog Number: 35002
Launch Date: May 19, 2009
Status: Commissioning

Downlink: 437.465 MHz 1k2 AFSK
[06052009]
=====
ANUSAT
Catalog Number: 34808
Launch Date: April 20, 2009

Status: ?

Downlink:  435.000 MHz
Uplink:    145.800 MHz

Telemetry: 137.400 MHz
[05112009]
=====
SOHLA-1 (ASTRO TECH.)
Catalog Number: 33496
Launch Date: January 23, 2009

Status: Commisioning

Proposed Frequencies and Modes:
Downlink: 437.505 MHz AFSK/CW
Beacon:   437.505 MHz AFSK/CW

Callsign:

IARU coordination status page:
```

```
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=101
[03232009]
=====
KAGAYAKI (Solan Co.)
Catalog Number: 33495?
Launch Date: January 23, 2009

Status: In Orbit

Downlink: 437.375 MHZ    FSK9k6/CW
Beacon:   437.375 MHz    FSK9k6/CW

IARU coordination status page:

AMSAT-NA webpage:

[01152009]
=====
STARS (Kagawa Univ.) (Twin Satellites)
Catalog Number: 33498
Launch Date: January 23, 2009

Status: Operational ?

Downlinks: 437.485 MHz FM/CW
           437.465 MHz FM/CW
Beacons:   437.305 MHz FM/CW
           437.275 MHz FM/CW

Callsigns: JR5YBN
           JR5YBO

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=99

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=121&retURL
=/satellites/status.php
[022152009]
=====
KKS-1 (Tokyo MCIT)
Catalog Number: 33499
Launch Date: January 23, 2009

Status: Operational

Downlink:  437.455 MHz AFSK/CW
Beacon:    437.385 MHz AFSK/CW

Callsign: JQ1YYY

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=107
```

```
AMSAT-NA webapge:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=120&retURL
=/satellites/status.php
[02212009]
=====
PRISM (Tokyo Univ.)
Catalog Number: 33493
Launch Date: January 23, 2009

Status: Operational ?

Downlink: 437.425 MHz AFSK/GMSK/CW
Beacon:   437.250 MHz AFSK/GMSK/CW

Callsign: JQ1YCX

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=97

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=119&retURL
=/satellites/status.php
[02212009]
=====
RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number: 32953
Launch Date: May 23, 2008

Status: Operational

Curent Modes: Telemetry
              Audio
              Images

Downlinks: 435.315 MHz
           435.215 MHz

AMSAT-NA website:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=115&ret
URL=/satellites/status.php

Official website:
http://www.npopm.com/?cid=leoca&caid=43
[02122009]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode:  /u
```

```
TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon:    435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=94&retURL=
/satellites/status.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=72
[02122009]
=====
CP3
Catalog Number: 31129
Launch Date: April 17,2007

Status: Operational

Current Mode:  /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[02122009]
=====
GENESAT-1
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Current Mode: /u

Callsign: KE7EGC

Telemetry Beacon Downlink: 437.0695 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[091512009]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon:             437.2750 MHz CW
```

```
Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/xivpicte.htm
[02212009]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003

Status: ?????

Current Mode: /u

Beacon:     436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=96&retURL
=/satellites/status.php

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[06082009]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Operational?

Uplink:  1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=56
[02122009]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: System Reload in Progress
```

```
Current Modes:
FM Repeater ONE
Uplink:    145.920MHz FM
Downlink:  435.300Mhz FM
FM Repeater TWO
Uplink:    OFF
Downlink:  OFF
BBS
Uplink:    1268.700MHz 9k6 FM
Downlink:  435.150MHz 9k6 FM
Telemetry
Downlink:  435.150MHz

Analog voice downlink:      435.300 MHz FM
                            435.150 MHz FM
                           2401.200 Mhz FM
Analog voice uplink:        145.860 MHZ FM
                            145.880 MHz USB
                            145.920 MHz FM
                           1268.700 MHz FM
Digital Downlinks:          435.150 MHz FM 38k4 PBP, 1 watt output
                            435.150 MHz FM 9k6 Pacsat Broadcast Protocol
                           2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:             145.860 MHz FM 9k6 Pacsat Broadcast Protocol
                           1268.700 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon:                     435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[10262009]
=====
QuakeSat
Catalog Number: 27845
Launch Date: June 30, 2003

Status: Telemetry only

Current Mode: 9600 baud data packet

Mode U packet
```

```
Downlink: 436.675 MHz 9k6 BPS

Quakesat webpage:
http://www.quakefinder.com/services/quakesat-ssite/
[04272009]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=69&retURL
=/satellites/status.php
[02212009]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Telemetry only

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink:        144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[03302009]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Telemetry only

Current Modes:
Telemetry : /u

Downlink: 435.225 MHz FM (9600-baud FSK)
```

```
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign:       4XTECH-12

More information of GO-32 can be found at:
http://asri.technion.ac.il/techsat/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=14&retURL
=/satellites/status.php
[04272009]
=====
RS-22 RADIO SPORT RS-22
Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only

Current Mode:  /u

CW Beacon - 435.352 MHz
            145.818 MHz

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=76&retURL
=/satellites/status.php
[02212009]
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990

Status: CW Beacon only

Uplinks:          145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink:      437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o
```

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[03162009]
=====
CanX-2
Catalog number: 32790
Launch Date: April 28, 2008

Status: Operational in range of ground station only

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[02212009]
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.425 MHz 1k2 baud packet

For the latest project status update please visit the AAUSAT-II web page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[02212009]
=====
CO-65 CUTE-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008

Status: Digipeater

Downlink: 437.475 MHz 9k6 Packet
Uplink: 1267.600 Mhz

Telemetry Beacon:
Downlink: 437.2750 MHz CW

For the latest project status update please visit the Cute-1.7+APD II web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78

Command Station blog website:
http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=112&retURL
=/satellites/status.php
[02212009]
=====
Compass-1
Catalog number: 32787
Launch Date: April 28, 2008

Status: Operational

Current Mode: 4k8 MSK packet

Uplink: 145.980 MHz FM
Downlink: 437.275 Mhz CW
          437.405 MHz Packet

For the latest project status update please visit the Compass 1 web
page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=114&retURL
=/satellites/status.php
[04272009]
=====
CO-66 Seeds II
Catalog number: 32791
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.485 MHz

Callsign: JQ1YGU

For the latest project status update please visit the Seeds 2 web
page: http://cubesat.aero.cst.nihon-u.ac.jp/english/seeds_2_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=113&retURL
=/satellites/status.php
[02212009]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS

Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - V/u
Voice - V/v
BBS - V/v
APRS - V/v
SSTV - V/v

Expedition 21 Crew:
Commander: Frank De Winne ON1DWN
Flight Engineer: Robert Thirsk VA3CSA
Flight Engineer: Roman Romanenko
Flight Engineer: Nicole P. Stott KE5GJN
Flight Engineer: Jeff Williams KD5TVQ
Flight Engineer: Maxim Suraev

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss

ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time line is NOT translated from Russian and posted.
[10042009]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-315.S3
WSR 315 Part 3 11/11/2009

AMSAT NEWS SERVICE BULLETIN 315.S3
FROM AMSAT HQ SILVER SPRING, MD, November 11, 2009
TO ALL RADIO AMATEURS
BID: $WSR-315.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

CP4
Catalog Number: 31122
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon: 437.325 MHz CW

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=79
[10022008]
=====
LIBERTAD-1
Catalog Number: 31128
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink: 145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[02122009]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712

Launch Date: January 10, 2007

Status: Non-Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder: 145.825 Mhz FM
[01012009]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 MHz FM 67Hz CTCSS
Voice Downlink: 2401.835 MHz FM
Packet Up/Downlink: 437.250 MHz 9k6 packet
Packet Downlink   2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non-Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[08132007]
=====
CANX-1
Catalog Number: 27847
Launch Date: June 30, 2003

Status: Non-Operational

```
Downlink: 437.8800 MHz AFSK 1k2bps
[06052009]
=====
DTUSAT
Catalog Number: 27842
Launch Date: June 30, 2003

Status: Non-Operational

Current Mode: 2k4 AFSK Packet last reported

Downlink: 437.475MHz

Officail webpage: http://dtusat1.dtusat.dtu.dk/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=101&retURL
=satellites/all_oscars.php
[02212009]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink:   435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)

Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Telemetry only

Uplinks:   145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink:  437.325 MHz

Broadcast callsign: MYSAT3-11
BBS:                MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial land and weather imaging payloads offers FM and FSK
Amateur Radio communication.
```

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[03302009]

=====

NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]

=====

SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]

=====

SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]

=====

AO-40 AMSAT OSCAR 40
Catalog number: 26609

Launch Date: November 16, 2000

Status: Non-Operational

Uplinks

V-band: 145.840 - 145.990 MHz CW/LSB
U-band: 435.550 - 435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks

S2-band: 2401.225 - 2401.475 MHz CW/USB
K-band: 24048.010 - 24048.060 MHz CW/USB
Beacon: 2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)

BEACON	General Beacon(GB)	Middle Beacon(MB)	Engineering Beacon(EB)
2 m	none	145.898 MHz	none
70cm	435.438 MHz	435.588 MHz	435.838 MHz
13cm(1)	2400.188 MHz	2400.338 MHz	2400.588 MHz
13cm(2)	2401.173 MHz	2401.323 MHz	2401.573 MHz
3cm	10450.975 MHz	10451.125 MHz	10451.375 MHz
1.5cm	24047.885 MHz	24048.035 MHz	24048.285 MHz

[07162007]
=====
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web

```
site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: 25636
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater:         436.250 MHz

Uplinks: Mode B Repeater:  145.825 MHz
Mode J Digipeater:         145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational
```

```
Uplink:   145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
MO-30 UNAMSAT-2
Catalog Number: 24305
Launch Date: September 5, 1996

Status: Non-operational

Downlink:       435.1380 MHz AFSK 1200 BPS
Downlink:       435.2060 MHz AFSK 1200 BPS
Uplink:         145.8150 MHz AFSK 1200 BPS
Uplink:         145.8350 MHz AFSK 1200 BPS
Uplink:         145.8550 MHz AFSK 1200 BPS
Uplink:         145.8750 MHz AFSK 1200 BPS
[06042009]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Non-operational

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign:       POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012009]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK
```

```
Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink:   435.041 MHz FM DSP
```

```
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
[05012006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: non-operational

Current Mode:  V/u
```

```
Uplink:         145.900 MHz FM 1200-baud Manchester FSK (reserved)
                145.920 MHz FM VOICE
                145.940 MHz FM 1200-baud Manchester FSK (reserved)
                145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink:       437.026 MHz USB VOICE
                (1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[07242009]
=====
UO-15 UoSAT-4
Catalog Number: 20438
Launch Date: January 22, 1990

Status: Non-operational

Uplink: ?
Downlink: 435.1250MHz (?)
          435.1200MHz (?)
[06042009]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW
```

```
Mode V/U (J) Packet:
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984

Status: Non-operational.

Current Mode:  /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon:          435.025 MHz
Mode-S Beacon:     2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[01012009]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon:   145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
```

Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.8500 - 145.9000 MHz SSB/CW
Downlink 29.4000 - 29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink: 29.4500 - 29.5500 MHz SSB/CW
Beacons: 29.450 MHz
          435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink: 145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink: 145.858 to 145.898 MHz CW/USB

Downlink: 29.354 to 29.394 MHz CW/USB

Beacon 1: 29.352 MHz (intermittent)
Beacon 2: 29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB

Beacon: 145.860 MHz

Robot: 145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-315.S4
WSR 315 Part 4 11/11/2009

AMSAT NEWS SERVICE BULLETIN 315.S4
FROM AMSAT HQ SILVER SPRING, MD, November 11, 2009
TO ALL RADIO AMATEURS
BID: $WSR-315.S4

THE FOLLOWING SATELLITES HAVE RE-ENTERED OR HAVE BEEN RETURNED SAFELY:

NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Re-Entered

```
Re-entered: July 28, 2008

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[01012009]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink:      145.825 Mhz FM APRS AX25
APRS Uplink:        145.825 MHz FM APRS AX25
Voice/PSK31 Uplink:  28.120 MHz

Packet to Voice ID: RAFT
[06112007]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Re-Entered
Re-entered: June 18, 2008

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon:             437.2750 MHz CW

Callsign: JR8YJT
[01012009]
=====
SO-43 Starshine 3
Catalog Number: 26929
Launch Date: September 30, 2001

Status: Re-Entered
Re-entered: January 21, 2003
```

Beacon: 145.825Mhz
[02212009]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at}amsat.org
NNNN

/EX

```
From 3587211469338748910
X-Google-Thread: a4a23d5f63,867355efc1ef70bf,start
X-Google-Attributes: gida4a23d5f63,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!npeer02.iad.highwinds-media.com!
news.highwinds-media.com!feed-me.highwinds-media.com!news.glorb.com!
news2.glorb.com!news.cse.ohio-state.edu!usenet01.sei.cmu.edu!elk.ncren.net!
newsswitch.lcs.mit.edu!bloom-beacon.mit.edu!panix!rri.panix.com!robomod!not-for-
mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-319 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sun, 15 Nov 2009 10:29:24 EST
Organization: The Radio Amateur Satellite Corporation
Lines: 401
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000e01ca6608$6f350e40$4d9f2ac0$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1258298964 20325 166.84.1.6 (15 Nov 2009 15:29:24 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 15 Nov 2009 15:29:24 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news1.google.com rec.radio.amateur.space:283 rec.radio.info:1036
```

AMSAT NEWS SERVICE
ANS-319

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* AMSAT NextGen Progress
* AO-51 38k4 BPS Operations 16-19 November
* AO-7 has 35th Birthday on 15 November
* SatPC32 V.12.8a Upgrade Available for Download
* High Altitude Balloon Project Seeks Student Applications
* ARISS Status - 09 November 2009

SB SAT @ AMSAT $ANS-319.01
AMSAT NextGen Progress

AMSAT News Service Bulletin 319.01
From AMSAT HQ SILVER SPRING, MD.
November 15, 2009
To All RADIO AMATEURS
BID: $ANS-319.01

Just to give everyone a little update on how the AMSAT NextGen Program is doing @ Binghamton University . . .

(a) CONTROL & EXPERIMENT SYSTEMS
- The Systems Engineering students are doing well analyzing the ARISSat documentation and will be scheduling meetings with the primary AMSAT engineering contact to discuss documentation questions.

- Identified Design Changes Needing to Occur for NextGen:
* The Control/Safety Timer needs to be adapted to conform with the CubeSat deployment switch standard
* Consolidation of Camera functionality into a separate camera payload board (functionality is currently spread across a number of boards in the stack)

(b) RF SYSTEMS
- The Systems Engineering students are doing well analyzing the ARISSat documentation and will be scheduling meetings with the primary AMSAT engineering contact to discuss documentation questions.

- Identified Design Changes Needing to Occur for NextGen:
* Antenna design choice - single dual-band vs dual mono-band
* New RF container design needed

(c) POWER & STRUCTURE SYSTEMS
- The Systems Engineering students are doing well analyzing the ARISSat documentation and will be scheduling meetings with the primary AMSAT engineering contact to discuss documentation questions.

- The Hardware Engineering students have been busy creating a preliminary design for solar panel deployment and use of supercapacitors to replace the battery. A Preliminary Design Review is being scheduled in mid-November with the AMSAT Engineering Team.

- Identified Design Changes Needing to Occur for NextGen:
* Replace Battery with modular stacks of Supercapacitors in parallel to the Solar Panels
* Shrink ICB (Interconnect Board) to fit within CubeSat frame
* Reduce PSU footprint by moving camera power function to a Camera Payload Board (CPB)
* Slight PSU voltage supply design change
* Remove test/program load functionality from ICB to external test board (XTB) via standard CubeSat & PPOD maintenance ports (per CubeSat spec.)

We are still on-target to have an engineering model ready for the AMSAT table at the 2010 Dayton Hamvention with readiness for launch later in 2010.

[ANS thanks Alex, N3NP, for the above information]

/EX

SB SAT @ AMSAT $ANS-319.02
AO-51 38k4 bps Operations 16-19 November

AMSAT News Service Bulletin 319.02
  From AMSAT HQ SILVER SPRING, MD.
November 15, 2009
To All RADIO AMATEURS
BID: $ANS-319.02

Okay 38k4 packet operators, get ready to start your engines!!

AO-51 is scheduled for a four day period of high speed packet operations at 38k4 bps. It's been about 2 years since the satellite was configured in this mode. The satellite will be in high power mode (only TXA 435.150 transmitter ON) during this period.

The posted schedule is as follows:

November 16 - November 19

38k4 BBS, L/U
Uplink: 1268.700 MHz 9k6 FM
Downlink: 435.150 MHz 38k4 FM

Usually this means the mode will run from around 22:00-23:00UTC November 15 (Sunday evening Eastern US) until around 22:00-23:00UTC November 19 (Thursday evening Eastern US).

Users of the PacketBBS are encouraged to send me feedback/reports on your experiences during this period.

Please note that 38k4 packet operations require a receiver with sufficient bandwidth and that your normal 9600 radio receive connection will not work. Users also need a TNC that is capable of running packet at 38k4.   A special "wide" filter like the ones available through Symek (www.symek.com) need to be installed in the radio to "tap" a wide band signal. A few commercially available TNCs, like the KPC-9612+ and the Paccomm Spirit-2 (with satellite option) can be used.

You can use a PCR-1000 or PCR-1500/2500 as a wide band receiver, without modification. Use the packet jack and set the receiver to FM (not FM-W) with a 50 kHz filter width. If you have one of these receivers, but not the right TNC, you might try Doug Qualigiana's KA2UPW sound card software here: http://www.quagliana.com/willow/ It will decode at 9600 and 38k4. There was an article about his software in the AMSAT Journal just a few months ago.

Hope to see you active on AO-51 at 38k4!

[ANS thanks Mark, N8MH, for the above information]

/EX

SB SAT @ AMSAT $ANS-319.03
AO-7 has 35th Birthday on 15 November

AMSAT News Service Bulletin 319.03
  From AMSAT HQ SILVER SPRING, MD.
November 15, 2009
To All RADIO AMATEURS
BID: $ANS-319.03

Thirty-five years ago this Sunday (15 November), AO-7 reached orbit. The following is from the AO-7 page on the AMSAT-NA Web site:

"AMSAT-OSCAR 7 was launched November 15, 1974 by a Delta 2310 launcher from Vandenberg Air Force Base, Lompoc, California. AO-7 was launched piggyback with ITOS-G (NOAA 4) and the Spanish INTASAT. The second phase 2 satellite (Phase II-B). Weight 28.6 kg. Orbit 1444 x 1459 km. Inclination 101.7 degrees. Octahedrally shaped 360 mm high and 424 mm in diameter. Circularly polarized canted turnstile VHF/UHF antenna system and HF dipole."

If you're not set up for the linear satellites but have a receiver with CW/SSB capability on 2 meters, try listening to a pass. The middle of her Mode B downlink passband is 145.950 mHz, and you will find most of the activity occurring between 145.940 mHz and 145.960 mHz. Generally, you'll hear CW operators below 145..950 and SSB operators above 145.950.

Here is a link to the online log for AO-7:
http://www.planetemily.com/ao7/ao7log.php

[ANS thanks Tim, N3TL, for the above information]

/EX

SB SAT @ AMSAT $ANS-319.04
SatPC32 V.12.8a Upgrade Available for Download

AMSAT News Service Bulletin 319.04
From AMSAT HQ SILVER SPRING, MD.
November 15, 2009
To All RADIO AMATEURS
BID: $ANS-319.04

Erich, DK1TB has uploaded an upgrade of SatPC32 (V. 12.8a) on his website http://www.dk1tb.de.

The V.12.8a update includes the following:

1. The main program SatPC32 can now manage up to 4 different configurations. Configuration #1, for example, could steer a single satellite transceiver to work the normal V/U and U/V satellites. Configuration #2, for example, could steer a separate radio (FT-817, IC-706MKIIG) as RX and the satellite transceiver as TX. This configuration is useful for AO-51, mode V/S. Most users will receive S-band with a 13cm/2m down converter and a 2m RX. Configuration #1 would not work because the satellite transceiver cannot simultaneously receive and transmit on the same band (2m).

The Keplerian data only needs to be updated with one configuration. The new data will be used by the all configurations.

The configurations can be switched via mouse click in menu 'Setup', 'Configurations'.

2. In 'Real Time' mode the program updates it's calculations once per second. With previous versions the update interval could not be changed. Now the speed can be increased by 5 and 10 fold (menu 'CAT'). On the higher bands the Doppler shift can change by 50 Hertz per second and more. That will cause scale effects on the received signal. Due to the narrow filters CW signals even can be lost. Increasing the update speed can prevent these effects.

3. In menu 'CAT' a bottom line has been added. It displays the complete data line from file Doppler.SQF. So, the optional comments at the end of a data line can also be seen. That is particularly helpful with satellites that provide multiple modes (i.e. AO-51 and ISS) and therefore require multiple data lines in Doppler.SQF.

4. CAT steering of the Icom radios IC-706MKIIG, IC-7000 and IC-910H has been simplified. With previous program versions the IC-706MKIIG and IC-7000 required an extra line between the radio's ACC jacket and the PC's COM port to inhibit frequency changes while the radio is transmitting (because that would cause frequency errors). The IC-910H required the line with SatPC32ISS. This line is no longer necessary.

5. The programs now works flawlessly on 64-bit Windows systems, except rotor steering with the interfaces FODTrack, KCT, IF-100 and RifPC. The kernel driver that is used to output data to these interfaces is a 32-bit version. A 64-bit version is not available yet. The KCT and RifPC could not be used anyhow with 64-bit systems because they require an ISA slot which is no longer supported by newer PCs.

The program also works flawlessly under Windows 7. It supports the 96-dpi (100%) and the 120-dpi 125%) fonts. It does not work properly with the new 144-dpi (150%) fonts. Program versions 12.8 and older work only with the 96-dpi fonts.

6. The CD and the Internet Setup File now include the tool DataBackup.Exe. Via a single mouse click, the program can generate a backup copy or restore the entire SatPC32 data folder (all personal settings). That is particularly helpful when the program is upgraded.

7. Some bugs have been fixed (concerning, i.e., downlink correction and transverter operation).

THANK YOU to Erich Eichmann DK1TB for creating and continuously enhancing SatPC32 for the global amateur satellite community. And for donating it to AMSAT-DL, AMSAT-NA, and AMSAT-UK. SatPC32 is surely the most lucrative fund raising item for these AMSAT groups.

Please support these AMSAT groups by registering your copy of SatPC32.

[ANS thanks Erich, DK1TB, for the above information]

/EX

SB SAT @ AMSAT $ANS-319.05
High Altitude Balloon Project Seeks Student Applications

AMSAT News Service Bulletin 319.05
  From AMSAT HQ SILVER SPRING, MD.
November 15, 2009
To All RADIO AMATEURS
BID: $ANS-319.05

The SpaceDaily Express newsletter carried the announcement that NASA is accepting applications from students at U.S. colleges and universities who want to send their experiments to the edge of space on a high-flying scientific balloon.

The annual NASA project provides near space access for 12 undergraduate and graduate student experiments to be carried by a NASA high-altitude research balloon. The flights typically last 15 to 20 hours and reach an altitude of 23 miles. Experiments may include compact satellites or prototypes.

The experiments are flown aboard the High Altitude Student Platform, or HASP, a balloon-born instrument stack launched from the Columbia Scientific Balloon Facility's remote site in Fort Sumner, N.M.

The goals of the project are to provide a space test platform to encourage student research and stimulate the development of student satellite payloads and other space-engineering products.

HASP seeks to enhance the technical skills and research abilities of students in critical science, technology, engineering and mathematics disciplines. The project is a joint effort between NASA and the Louisiana Space Grant Consortium.

NASA's HASP houses and provides power, mechanical support and communications for test articles and instruments. It can support approximately 200 pounds of student payloads. Since 2006, the HASP program has selected 44 payloads for flight, the work of more than 200 students from across the United States.

The deadline for applications is Dec. 18. NASA is targeting fall 2010 for the next flight opportunity. NASA expects to make selections in January 2010.

Information is available on-line at:
http://laspace.lsu.edu/hasp/Participantinfo.html

[ANS thanks SpaceDaily Express and the Louisiana Space Grant Consortium for the above information]

/EX

SB SAT @ AMSAT $ANS-319.06
ARISS Status - 09 November 2009

AMSAT News Service Bulletin 319.06
From AMSAT HQ SILVER SPRING, MD.
November 15, 2009
To All RADIO AMATEURS
BID: $ANS-319.06

1. Upcoming School Contacts

An Amateur Radio on the International Space Station (ARISS) contact has been approved for Institut Don Bosco in Bruxelles, Belgium. The contact will take place on Monday, November 16 at 09:41 UTC via telebridge station WH6PN in Hawaii. Don Bosco is a secondary industrial technical school with an enrollment of approximately 750 students and offers courses in carpentry, electricity, mechanics, computing, printing and electronics.

Flanders District of Creativity and the Department of Education of the Flemish Government have teamed up for an Amateur Radio on the International Space Station (ARISS) contact on Tuesday, November 17 at 13:44 UTC via station LU8YY in Argentina. The groups have partnered to organize the very first congress for kids in Belgium. A conference is being set up with keynote speakers and interactive workshops for 1200 twelve year olds. Dirk Frimout & Sijtn Meuris will give a presentation about astronomy.

2. Westbrook Intermediate Experiences ARISS Contact

On Tuesday, November 3, an Amateur Radio on the International Space Station (ARISS) contact was held with Westbrook Intermediate School in Friendswood, Texas via telebridge station LU8YY in Argentina. Eleven students were able to ask Robert Thirsk, VA3CSA 11 questions before losing the connection with the ISS. Thirsk's son offered his father a surprise with the third question using his newly acquired ham radio license, KF5DRU.

3. Successful ARISS Contact John Taylor Collegiate

On Wednesday, November 4, an Amateur Radio on the International Space Station (ARISS) contact took place between John Taylor Collegiate in Winnipeg, Manitoba, Canada and Robert Thirsk, VA3CSA on the ISS. Telebridge station WH6PN in Hawaii provided the link. Fifteen people gathered for the event and observed the students as they asked 13 questions of the astronaut. Media coverage was provided by the Winnipeg Free Press.

4. Embry-Riddle Aeronautical University Speaks with Stott Through ARISS

Students at Embry-Riddle Aeronautical University (ERAU) in Daytona Beach, Florida experienced an Amateur Radio on the International Space Station (ARISS) contact on Thursday, November 5. The connection was made through the telebridge station VK4KHZ in Australia. Approximately seventy students and educators were present for the event and eighteen questions were asked and answered. This was a school crew pick of Nicole Stott, KE5GJN, an alumna of ERAU. The ERAU Web site boasts a news release as well as a photo of Stott on the ISS holding an Embry-Riddle banner.

5. ARISS Contact with Tokaisonritsu Muramatsu Elementary School

Tokaisonritsu Muramatsu Elementary School in Tokai Village, Ibaraki, Japan participated in an Amateur Radio on the International Space Station (ARISS) contact on Friday, November 6. Eight students posed two questions each to Nicole Stott, KE5GJN on the ISS as an audience of 110 students and parents watched. Media coverage was provided by three newspapers, one magazine and other outlets.

6. Astronaut Training Status

A basic operations session on the ARISS (Amateur Radio on the International Space Station) program was held with astronaut Mike Fossum, KF5AQG on Monday, November 2. Fossum is scheduled to fly with Expedition 28 in May 2011.

[ANS thanks Carol, KB3LKI, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Lee McLamb, KU4OS

```
From 8054477594484678804
X-Google-Thread: a4a23d5f63,13270c33db4ba403,start
X-Google-Attributes: gida4a23d5f63,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!newsfeed2.dallas1.level3.net!
news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-325 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Sat, 21 Nov 2009 21:16:11 EST
Organization: The Radio Amateur Satellite Corporation
Lines: 1805
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <001501ca6b19$d55bd440$80137cc0$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1258856171 24125 166.84.1.6 (22 Nov 2009 02:16:11 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 22 Nov 2009 02:16:11 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
```

X-RRI-Info-2: Send technical complaints to   rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news1.google.com rec.radio.amateur.space:284 rec.radio.info:1049

This report is organized into four (4) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - deorbited/returned satellites

SB SAT @ AMSAT W8ISS $WSR-325.S1
WSR 325 Part 1 11/21/2009

AMSAT NEWS SERVICE BULLETIN 325.S1
FROM AMSAT HQ SILVER SPRING, MD, November 21, 2009
TO ALL RADIO AMATEURS
BID: $WSR-325.S1

SO-67 SumbandilaSat
Catalog Number: 35870
Launch Date: September 17, 2009

Status: Commissioning

Callsign: ZS0SUM

Uplink: 145.875MHz FM tone 233.6 Hz
Downlink: 435.345MHz FM

For more information about SO-67:
http://www.amsatsa.org.za/
[11212009]
=====
DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008

Status: Operational
Current Mode: Science Mode - Beacon ONLY

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink: 435.530 to 435.570 MHz

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68
[02122009]
=====
VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.859330 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is active. Each transponder has a different beacon.
[08072008]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: System Reload in progress

Current Modes:
FM Repeater ONE
Uplink: 145.920MHz FM
Downlink: 435.300Mhz FM
FM Repeater TWO
Uplink: OFF
Downlink: OFF
BBS
Uplink: 1268.700MHz 9k6 FM
Downlink: 435.150MHz 9k6 FM
Telemetry

Downlink: 435.150MHz

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.860 MHZ FM
145.880 MHz USB
145.920 MHz FM
1268.700 MHz FM
Digital Downlinks: 435.150 MHz FM 38k4 PBP, 1 watt output
435.150 MHz FM 9k6 Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Pacsat Broadcast Protocol
1268.700 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[11112009]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz. The order of operation is thus: (allow for Doppler as necessary):

1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10 minute timer.
[05282007]

=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: RECOVERY
Current Mode: V/u (Mode JA)

Voice/CW (Mode JA)
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage:
http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts.htm
[09062009]

=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[03232009]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational

Current Mode: Alternating between Mode A and B every 24 hours

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz CW
145.972 MHz CW
435.100 MHz CW
2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
[02122009]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - V/u
Voice - V/v
BBS - V/v
APRS - V/v
SSTV - V/v

Expedition 21 Crew:

Commander:	Frank De Winne	ON1DWN
Flight Engineer:	Robert Thirsk	VA3CSA

Flight Engineer: Roman Romanenko
Flight Engineer: Nicole P. Stott KE5GJN
Flight Engineer: Jeff Williams KD5TVQ
Flight Engineer: Maxim Suraev

STS-129 Crew:
Commander: Charlie Hobaugh
Pilot: Barry Wilmore
Mission Specialist: Bobby Satcher
Mission Specialist: Mike Foreman
Mission Specialist: Randy Bresnik
Mission Specialist: Leland Melvin

Available Modes and Frequencies:

Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time

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line is NOT translated from Russian and posted.
[11212009]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-325.S2
WSR 325 Part 2 11/21/2009

AMSAT NEWS SERVICE BULLETIN 325.S2
FROM AMSAT HQ SILVER SPRING, MD, November 21, 2009
TO ALL RADIO AMATEURS
BID: $WSR-325.S2

SwissCube
Catalog Number: 35932
Launch Date: September 23, 2009

Status: In Orbit

Callsign: HB9EG

Beacon(100mw): 437.5050MHz CW
Beacon(1w): 437.5050MHz FSK 1k2bps
[11112009]
=====
UWE-2
Catalog Number: 35934
Launch Date: September 23, 2009

Status: In Orbit

Beacon(500mw): 437.3850 MHz AFSK 1k2bps
               437.3850 MHz FSK 9k6bps
[1112009]
=====
ITUpsAT1
Catalog Number: 35935
Launch Date: September 23, 2009

Status: In Orbit

Beacon(100mw): 437.325MHz CW
Beacon(1w): 437.325MHz 19k2bps
[11112009]
=====
BEESAT
Catalog Number: 35933
Launch Date: September 23, 2009

Status: In Orbit

Callsign: DP0BEE
```

```
Beacon(100mw): 436.000MHz CW
Beacon(500mw): 436.000MHz GMSK 4k8bps
[11112009]
=====
Pollux
Catalog Number:
Launch Date: July 31, 2009

Status: Operational

Callsign: POLLUX-1

Downlink: 145.825MHz 1k2 AX.25
[10042009]
=====
Castor
Catalog Number:
Launch Date: July 31, 2009

Status: Operational

Callsign: KD4HBO-1

Downlink: 145.825 MHz 1k2 AX.25
[10042009]
=====
BEVO-1 (DRAGONSAT-1)
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Operational

Downlink: 437.325 MHz 9k6 GMSK
          437.325 MHz CW 20wpm
[07312009]
=====
AggieSat2 (DRAGONSAT-2)
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Operational

Downlink: 436.250 MHz 9k6 FHSS
[11112009]
=====
CP-6
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Commissioning

Downlink: 437.365 MHz 1k2 AFSK
[06052009]
```

```
=====
HAWKSAT 1
Catalog number: 35003
Launch Date: May 19, 2009

Status: ?

Downlink: 437.345 ?
[06052009]
=====
Pharmasat
Catalog Number: 35002
Launch Date: May 19, 2009
Status: Commissioning

Downlink: 437.465 MHz 1k2 AFSK
[06052009]
=====
ANUSAT
Catalog Number: 34808
Launch Date: April 20, 2009

Status: ?

Downlink:  435.000 MHz
Uplink:    145.800 MHz

Telemetry: 137.400 MHz
[05112009]
=====
SOHLA-1 (ASTRO TECH.)
Catalog Number: 33496
Launch Date: January 23, 2009

Status: Commisioning

Proposed Frequencies and Modes:
Downlink: 437.505 MHz AFSK/CW
Beacon:   437.505 MHz AFSK/CW

Callsign:

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=101
[03232009]
=====
KAGAYAKI (Solan Co.)
Catalog Number: 33495?
Launch Date: January 23, 2009

Status: In Orbit

Downlink: 437.375 MHZ    FSK9k6/CW
```

Beacon: 437.375 MHz   FSK9k6/CW

IARU coordination status page:

AMSAT-NA webpage:

[01152009]
=====
STARS (Kagawa Univ.) (Twin Satellites)
Catalog Number: 33498
Launch Date: January 23, 2009

Status: Operational ?

Downlinks: 437.485 MHz FM/CW
           437.465 MHz FM/CW
Beacons: 437.305 MHz FM/CW
           437.275 MHz FM/CW

Callsigns: JR5YBN
           JR5YBO

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=99

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=121&retURL
=/satellites/status.php
[022152009]
=====
KKS-1 (Tokyo MCIT)
Catalog Number: 33499
Launch Date: January 23, 2009

Status: Operational

Downlink: 437.455 MHz AFSK/CW
Beacon: 437.385 MHz AFSK/CW

Callsign: JQ1YYY

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=107

AMSAT-NA webapge:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=120&retURL
=/satellites/status.php
[02212009]
=====
PRISM (Tokyo Univ.)
Catalog Number: 33493
Launch Date: January 23, 2009

Status: Operational ?

Downlink: 437.425 MHz AFSK/GMSK/CW
Beacon: 437.250 MHz AFSK/GMSK/CW

Callsign: JQ1YCX

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=97

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=119&retURL=/satellites/status.php
[02212009]
=====
RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number: 32953
Launch Date: May 23, 2008

Status: Operational

Curent Modes: Telemetry
              Audio
              Images

Downlinks: 435.315 MHz
           435.215 MHz

AMSAT-NA website:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=115&retURL=/satellites/status.php

Official website:
http://www.npopm.com/?cid=leoca&caid=43
[02122009]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=94&retURL=

```
/satellites/status.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=72
[02122009]
=====
CP3
Catalog Number: 31129
Launch Date: April 17,2007

Status: Operational

Current Mode:  /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[02122009]
=====
GENESAT-1
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Current Mode: /u

Callsign: KE7EGC

Telemetry Beacon Downlink: 437.0695 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[091512009]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon:             437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/xivpicte.htm
[02212009]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
```

Launch date: June 30, 2003

Status: ?????

Current Mode: /u

Beacon: 436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=96&retURL
=/satellites/status.php

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[06082009]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Operational?

Uplink: 1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=56
[02122009]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: System Reload in Progress

Current Modes:
FM Repeater ONE
Uplink: 145.920MHz FM
Downlink: 435.300Mhz FM
FM Repeater TWO
Uplink: OFF
Downlink: OFF
BBS
Uplink: 1268.700MHz 9k6 FM
Downlink: 435.150MHz 9k6 FM

Telemetry
Downlink: 435.150MHz

```
Analog voice downlink:     435.300 MHz FM
                           435.150 MHz FM
                          2401.200 Mhz FM
Analog voice uplink:       145.860 MHZ FM
                           145.880 MHz USB
                           145.920 MHz FM
                          1268.700 MHz FM
Digital Downlinks:         435.150 MHz FM 38k4 PBP, 1 watt output
                           435.150 MHz FM 9k6 Pacsat Broadcast Protocol
                          2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:            145.860 MHz FM 9k6 Pacsat Broadcast Protocol
                          1268.700 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon:                    435.150 MHz
```

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[10262009]
=====
QuakeSat
Catalog Number: 27845
Launch Date: June 30, 2003

Status: Telemetry only

Current Mode: 9600 baud data packet

Mode U packet
Downlink: 436.675 MHz 9k6 BPS

Quakesat webpage:
http://www.quakefinder.com/services/quakesat-ssite/
[04272009]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

```
Status: Operational

Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=69&retURL
=/satellites/status.php
[02212009]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Telemetry only

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink:        144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[03302009]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Telemetry only

Current Modes:
Telemetry : /u

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign:       4XTECH-12
```

More information of GO-32 can be found at:
http://asri.technion.ac.il/techsat/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=14&retURL
=/satellites/status.php
[04272009]
=====
RS-22 RADIO SPORT RS-22
Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only

Current Mode: /u

CW Beacon - 435.352 MHz
            145.818 MHz

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=76&retURL
=/satellites/status.php
[02212009]
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990

Status: CW Beacon only

Uplinks: 145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink: 437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[03162009]
=====
CanX-2
Catalog number: 32790
Launch Date: April 28, 2008

Status: Operational in range of ground station only

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[02212009]
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.425 MHz 1k2 baud packet

For the latest project status update please visit the AAUSAT-II web page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[02212009]
=====
CO-65 CUTE-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008

Status: Digipeater

Downlink: 437.475 MHz 9k6 Packet
Uplink: 1267.600 Mhz

Telemetry Beacon:
Downlink: 437.2750 MHz CW

For the latest project status update please visit the Cute-1.7+APD II web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78

Command Station blog website:
http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=112&retURL=/satellites/status.php
[02212009]
=====
Compass-1
Catalog number: 32787

```
Launch Date: April 28, 2008

Status: Operational

Current Mode: 4k8 MSK packet

Uplink:   145.980 MHz FM
Downlink: 437.275 Mhz CW
          437.405 MHz Packet

For the latest project status update please visit the Compass 1 web
page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=114&retURL
=/satellites/status.php
[04272009]
=====
CO-66 Seeds II
Catalog number: 32791
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.485 MHz

Callsign: JQ1YGU

For the latest project status update please visit the Seeds 2 web
page: http://cubesat.aero.cst.nihon-u.ac.jp/english/seeds_2_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=113&retURL
=/satellites/status.php
[02212009]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - V/u
                      Voice -       V/v
                      BBS -         V/v
                      APRS -        V/v
                      SSTV -        V/v
```

Expedition 21 Crew:
Commander: Frank De Winne ON1DWN
Flight Engineer: Robert Thirsk VA3CSA
Flight Engineer: Roman Romanenko
Flight Engineer: Nicole P. Stott KE5GJN
Flight Engineer: Jeff Williams KD5TVQ
Flight Engineer: Maxim Suraev

STS-129 Crew:
Commander: Charlie Hobaugh
Pilot: Barry Wilmore
Mission Specialist: Bobby Satcher
Mission Specialist: Mike Foreman
Mission Specialist: Randy Bresnik
Mission Specialist: Leland Melvin

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[11212009]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-325.S3
WSR 325 Part 3 11/21/2009

AMSAT NEWS SERVICE BULLETIN 325.S3
FROM AMSAT HQ SILVER SPRING, MD, November 21, 2009
TO ALL RADIO AMATEURS
BID: $WSR-325.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

CP4
Catalog Number: 31122
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon: 437.325 MHz CW

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=79
[10022008]

=====
LIBERTAD-1
Catalog Number: 31128
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink: 145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[02122009]

=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

```
Status: Non-Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder:  145.825 Mhz FM
[01012009]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency:  437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink:        437.250 MHz FM 67Hz CTCSS
Voice Downlink:     2401.835 MHz FM
Packet Up/Downlink:  437.250 MHz 9k6 packet
Packet Downlink     2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non-Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[08132007]
=====
CANX-1
Catalog Number: 27847
Launch Date: June 30, 2003

Status: Non-Operational

Downlink: 437.8800 MHz AFSK 1k2bps
```

[06052009]
=====
DTUSAT
Catalog Number: 27842
Launch Date: June 30, 2003

Status: Non-Operational

Current Mode: 2k4 AFSK Packet last reported

Downlink: 437.475MHz

Officail webpage: http://dtusat1.dtusat.dtu.dk/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=101&retURL
=satellites/all_oscars.php
[02212009]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)

Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Telemetry only

Uplinks: 145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey

```
Satellite Technology Ltd.
[03302009]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink:   145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS:                SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink:   145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000
```

Status: Non-Operational

Uplinks

V-band: 145.840 - 145.990 MHz CW/LSB
U-band: 435.550 - 435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks

S2-band: 2401.225 - 2401.475 MHz CW/USB
K-band: 24048.010 - 24048.060 MHz CW/USB
Beacon: 2401.323 MHz
24048.035 MHz

P3-D Telemetry Beacons (IHU)

BEACON	General Beacon(GB)	Middle Beacon(MB)	Engineering Beacon(EB)
2 m	none	145.898 MHz	none
70cm	435.438 MHz	435.588 MHz	435.838 MHz
13cm(1)	2400.188 MHz	2400.338 MHz	2400.588 MHz
13cm(2)	2401.173 MHz	2401.323 MHz	2401.573 MHz
3cm	10450.975 MHz	10451.125 MHz	10451.375 MHz
1.5cm	24047.885 MHz	24048.035 MHz	24048.285 MHz

[07162007]

=====

OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]

=====

UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip

```
[01222007]
=====
SO-35 SUNSAT
Catalog Number: 25636
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater:         436.250 MHz

Uplinks: Mode B Repeater:  145.825 MHz
Mode J Digipeater:         145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink:   145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK
```

```
Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
MO-30 UNAMSAT-2
Catalog Number: 24305
Launch Date: September 5, 1996

Status: Non-operational

Downlink:       435.1380 MHz AFSK 1200 BPS
Downlink:       435.2060 MHz AFSK 1200 BPS
Uplink:         145.8150 MHz AFSK 1200 BPS
Uplink:         145.8350 MHz AFSK 1200 BPS
Uplink:         145.8550 MHz AFSK 1200 BPS
Uplink:         145.8750 MHz AFSK 1200 BPS
[06042009]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Non-operational

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign:       POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012009]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12
```

```
Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
AO-24 ARSENE
Catalog Number: 22654
Launch Date: May 13, 1993

Status: Non-operational

Uplink:    ?
Downlink:  145.975 MHz 1k2bps FM AFSK
          2446.540 MHz

Broadcast callsign:
BBS:
[11212009]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM
```

```
Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.
```

```
Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
[05012006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: non-operational

Current Mode:  V/u

Uplink:         145.900 MHz FM 1200-baud Manchester FSK (reserved)
                145.920 MHz FM VOICE
                145.940 MHz FM 1200-baud Manchester FSK (reserved)
                145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink:       437.026 MHz USB VOICE
                (1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[07242009]
=====
UO-15 UoSAT-4
Catalog Number: 20438
Launch Date: January 22, 1990

Status: Non-operational

Uplink: ?
Downlink: 435.1250MHz (?)
          435.1200MHz (?)
[06042009]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
```

```
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984

Status: Non-operational.

Current Mode:  /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon:           435.025 MHz
Mode-S Beacon:     2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[01012009]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon:   145.810 MHz (unmodulated carrier)
```

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.8500 - 145.9000 MHz SSB/CW
Downlink 29.4000 - 29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink: 29.4500 - 29.5500 MHz SSB/CW
Beacons: 29.450 MHz
435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

```
Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon 1:  29.352 MHz (intermittent)
Beacon 2:  29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink:     21.260 to 21.300 MHz CW/USB
Downlink:  145.860 to 145.900 MHz CW/USB

Beacon:    145.860 MHz

Robot:     145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink:   21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon:   29.408 MHz

Robot:    29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-325.S4
WSR 325 Part 4 11/21/2009
```

AMSAT NEWS SERVICE BULLETIN 325.S4
FROM AMSAT HQ SILVER SPRING, MD, November 21, 2009
TO ALL RADIO AMATEURS
BID: $WSR-325.S4

THE FOLLOWING SATELLITES HAVE RE-ENTERED OR HAVE BEEN RETURNED SAFELY:

NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: July 28, 2008

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[01012009]

=====

NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]

=====

NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink: 145.825 Mhz FM APRS AX25
APRS Uplink: 145.825 MHz FM APRS AX25
Voice/PSK31 Uplink: 28.120 MHz

Packet to Voice ID: RAFT
[06112007]

=====

HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Re-Entered
Re-entered: June 18, 2008

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS

Beacon: 437.2750 MHz CW

Callsign: JR8YJT
[01012009]
=====
SO-43 Starshine 3
Catalog Number: 26929
Launch Date: September 30, 2001

Status: Re-Entered
Re-entered: January 21, 2003

Beacon: 145.825Mhz
[02212009]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining

donors to AMSAT Project Funds, will be eligible to receive additional
benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to
the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis
Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at}
amsat.org
NNNN
/EX

From 5325988024351507756
X-Google-Thread: 8f86f75953,9baa8c93bcbf1c02,start
X-Google-Attributes: gid8f86f75953,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news3.google.com!proxad.net!feeder1-2.proxad.net!
feeder.erje.net!newsfeed01.sul.t-online.de!newsfeed00.sul.t-online.de!t-online.de!
news.nask.pl!news.nask.org.pl!news.onet.pl!not-for-mail
From: "Adrian Szumilas" <szumiksp8aqk@poczta.onet.pl>
Newsgroups: rec.radio.amateur.space
Subject: sumbandila SO67
Date: Sun, 22 Nov 2009 09:26:29 +0100
Organization: http://onet.pl
Lines: 7
Message-ID: <heasjm$qv3$1@news.onet.pl>
NNTP-Posting-Host: 78-131-155-140.tktelekom.pl
X-Trace: news.onet.pl 1258878390 27619 78.131.155.140 (22 Nov 2009 08:26:30 GMT)
X-Complaints-To: niusy@onet.pl
NNTP-Posting-Date: Sun, 22 Nov 2009 08:26:30 +0000 (UTC)
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.3598
X-RFC2646: Format=Flowed; Original
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.3350
Xref: g2news1.google.com rec.radio.amateur.space:285

Hello friends
Sumbandila SO67 it works? Please information for me. I listen and not copy
frequency 435.350
73!
ADRIAN SP8AQK

From -5329332265576837283

X-Google-Thread: 8f86f75953,9baa8c93bcbf1c02
X-Google-Attributes: gid8f86f75953,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!npeer02.iad.highwinds-media.com!
news.highwinds-media.com!feed-me.highwinds-media.com!post02.iad.highwinds-
media.com!API-DIGITAL.COM-a2kHrUvQQWlmc!not-for-mail
From: Alan WA4SCA <WA4SCA@YAHOO.COM>
Newsgroups: rec.radio.amateur.space
Subject: Re: sumbandila SO67
Date: Sun, 22 Nov 2009 06:50:37 -0600
Organization: AMSAT-NA
Reply-To: ALANBIDDLE70@YAHOO.COM
Message-ID: <9mcig59bu1itolvo09q79k6k5j3bf4itvl@4ax.com>
References: <heasjm$qv3$1@news.onet.pl>
X-Newsreader: Forte Agent 6.00/32.1186
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
X-Complaints-To: abuse@usenetserver.com
Lines: 13
X-Trace: d91914b09339d6b5e752204039
Xref: g2news1.google.com rec.radio.amateur.space:286

Adrian,

SO-67 works, but only on a schedule. So far, it is only available on
weekends.

http://www.amsatsa.org.za/index.htm

See the notes for operation. The downlink is 435.345 MHZ.

--
Alan
WA4SCA

From -4523458538153700793
X-Google-Thread: 8f86f75953,9baa8c93bcbf1c02
X-Google-Attributes: gid8f86f75953,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news3.google.com!feeder1-2.proxad.net!proxad.net!
feeder1-1.proxad.net!ecngs!feeder2.ecngs.de!194.25.134.126.MISMATCH!
newsfeed01.sul.t-online.de!newsfeed00.sul.t-online.de!t-online.de!news.nask.pl!
news.nask.org.pl!news.onet.pl!not-for-mail
From: "Adrian Szumilas" <szumiksp8aqk@poczta.onet.pl>
Newsgroups: rec.radio.amateur.space
Subject: Re: sumbandila SO67
Date: Sun, 22 Nov 2009 18:22:22 +0100
Organization: http://onet.pl

```
Lines: 18
Message-ID: <hebs0g$fbr$1@news.onet.pl>
References: <heasjm$qv3$1@news.onet.pl>
<9mcig59bu1itolvo09q79k6k5j3bf4itvl@4ax.com>
NNTP-Posting-Host: 78-131-155-140.tktelekom.pl
X-Trace: news.onet.pl 1258910544 15739 78.131.155.140 (22 Nov 2009 17:22:24 GMT)
X-Complaints-To: niusy@onet.pl
NNTP-Posting-Date: Sun, 22 Nov 2009 17:22:24 +0000 (UTC)
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.3598
X-RFC2646: Format=Flowed; Original
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.3350
Xref: g2news1.google.com rec.radio.amateur.space:287
```

Thank you Alan for info.
Adrian SP8AQK

> Adrian,
>
> SO-67 works, but only on a schedule. So far, it is only available on
> weekends.
>
> http://www.amsatsa.org.za/index.htm
>
> See the notes for operation. The downlink is 435.345 MHZ.
>
>
> --
> Alan
> WA4SCA

```
From -6015571733441395599
X-Google-Thread: a4a23d5f63,c978cf99746a7db0,start
X-Google-Attributes: gida4a23d5f63,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII
Path: g2news1.google.com!news2.google.com!npeer01.iad.highwinds-media.com!
news.highwinds-media.com!feed-me.highwinds-media.com!nx02.iad01.newshosting.com!
newshosting.com!198.186.194.249.MISMATCH!transit3.readnews.com!news-
xxxfer.readnews.com!news-out.readnews.com!transit4.readnews.com!panix!
rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-326 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Mon, 23 Nov 2009 13:59:33 EST
Organization: The Radio Amateur Satellite Corporation
Lines: 321
Approved: RRI Admin <rec-radio-info-request@panix.com>
```

```
Message-ID: <000501ca6c6f$2f9df090$8ed9d1b0$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;charset="iso-8859-1"
Content-Transfer-Encoding: quoted-printable
X-Trace: reader1.panix.com 1259002773 23045 166.84.1.6 (23 Nov 2009 18:59:33 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Mon, 23 Nov 2009 18:59:33 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to            rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news1.google.com rec.radio.amateur.space:288 rec.radio.info:1055
```

AMSAT NEWS SERVICE
ANS-326

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* New Ham Antenna Installed
* DQ11APOLLO Activation on All Bands
* Next Hudson Valley Satcom Net
* Satellite Shorts
* ARISS Status - 16 November 2009

SB SAT @ AMSAT $ANS-326.01
New Ham Antenna Installed

AMSAT News Service Bulletin 326.01
  From AMSAT HQ SILVER SPRING, MD.
November 22, 2009
To All RADIO AMATEURS
BID: $ANS-326.01

New Ham Antenna Installed on the ISS Columbus Module

ARISS US Hardware Manager Lou McFadin, W5DID says that all the teamwork and effort to expand the ARISS amateur radio station aboard the ISS were successful this weekend when the new dual band 2m/70CM antenna was installed on the outside of ESA's Columbus module.

Lou congratulated the team, "This is an example of what can be achieved by volunteer hams working closely with a space agency. This antenna project was funded entirely by AMSAT-NA and volunteers who built the antennas for both an ESA experiment and for ARISS. I am very proud of all the teamwork and effort that has gone into this project."

The new ARISS antenna is very similar to the antennas already on the Russian service module. Now that the antennas are in place the ARISS team will be working to bring amateur radio to the Columbus module.

In conclusion Lou noted the tremendous contribution from ESA for the experiment, the launch and the EVA making this expansion of amateur radio aboard the ISS possible.

[ANS thanks Lou McFadin, W5DID for the above the information]

/EX

SB SAT @ AMSAT $ANS-326.02
DQ11APOLLO Activation on All Bands

AMSAT News Service Bulletin 326.02
From AMSAT HQ SILVER SPRING, MD.
November 22, 2009
To All RADIO AMATEURS
BID: $ANS-326.02

DQ11APOLLO Activation on All Bands

DQ11APOLLO is a special-event station of the Deutsche Amateuer-Radio-Club (DARC) celebrating the 40th. anniversary of the first manned landing on the moon by NASA.

July 20, 2009 marked the 40th annnivesary of the first manned landing on the moon by the Apollo-11 mission. To celebrate this brilliant technical achievement of NASA, a group of space-flight enthusiast radio amateurs of the Deutsche Amateur-Radio-Club applied for the special-event callsign DQ11APOLLO. It was issued on July 15, 2009 and is valid 365 days. The station will be activated on the mission-dates of the past Apollo flights on all HF, VHF & UHF-bands using SSB, CW, FM and

PSK.

The call will be activated during several occasions in 2009 and 2010:

Apollo 12	November	14-24, 2009
Apollo 17	December	07-19, 2009
Apollo 8	December	21-27, 2009
Apollo 14	January	31-Feb 9, 2010
Apollo 9	March	03-13, 2010
Apollo 13	April	11-17, 2010
Apollo 16	April	16-27, 2010
Apollo 10	May	18-26, 2010.

Buereau-cards via DF3JO, c/o Deutscher Amateur-Radio Club-DARC, Germany
Direct-cards via DF3JO, Thomas Stinder, Braukkamp 11, 48249 D�lmen, Germany

Preference will be given to cards sent direct with return postage and will be answered directly. The alternative is to send cards via Bureau. The QSL cards DQ11APOLLO will be printed in late autumn with the first delivery expected in December 2009.

Many details are available at the DQ11APOLLO web page:
http://tinyurl.com/ylenq3k

[ANS thanks the SouthGate ARC Site and DQ11APOLLO for the above Information]

/EX

SB SAT @ AMSAT $ANS-326.03
Next Hudson Valley Satcom Net

AMSAT News Service Bulletin 326.03
From AMSAT HQ SILVER SPRING, MD.
November 22, 2009
To All RADIO AMATEURS
BID: $ANS-326.03

The next "HV Satcom" net is Thursday December 10 at 8PM (EST) (0100UTC) on the 146.97MHz repeater. Echolink node of N2EYH-L will also relay the net. For more info (and download pass predictions go to: http://www.hvsatcom.org/

The reason there was no Satcom net (Thursday of this week) was that the "97" Repeater went down!   Also, there won't be a "HV Satcom" net on Nov. 26 (Thanksgiving evening).

Ballinger (WA2BSS)

[ANS thanks Stuart, WA2BSS, for the above information]

/EX

SB SAT @ AMSAT $ANS-326.04
Satellite Shorts

AMSAT News Service Bulletin 326.04
From AMSAT HQ SILVER SPRING, MD.
November 22, 2009
To All RADIO AMATEURS
BID: $ANS-326.04

CUTE=1.7 Satellite Captures Image

Mineo Wakita, JE9PEL reported the CO-65 control station received an image below from the CUTE-1.7 satellite camera. Their analysis indicates the image was taken on October 28, 2009 and downloaded this week. The image is from the region around 84.6392 degrees north latitude and was 128.3049 degrees longitude near the north pole.

The CUTE-1.7 image can be viewed on-line at:
http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/1_48_caption.Jpeg

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Antartica Planned for Activation on HamSats

Bill, K7MT, is going to work at the McMurdo base (AN-011) between Nov 15 and Feb 20, 2010. He will sign KC4USV mostly on 20m during Sundays. Listen for him in SSB on 14243 kHz, in CW on 14043 kHz or in PSK-31 on 14070 kHz. He plans to bring his Arrow II antenna and a Kenwood TH-7 which he can use also on amateur radio satellites. QSL via K1IED. His homepage can be found at: http://www.mt.net/~k7mt

-----

Indonesia to Launch Rescue Radio HamSat

The Bernama dot com on line newspaper reports that the Indonesian Amateur Radio Organization called Orari and the Indonesian National Institute of Aeronautic and Space plan to launch the ham radio bird next year. But so far the president of the Orari has not revealed the satellite's size nor its orbital distance from Earth.

According to the website, the new ham radio bird will be used to expand the nations ham radio communication network to remote districts. It went on to note that the satellite will play a major role in linking land, sea and air communication for rescue radio operations.

The article also noted that ham radio operators from Orari had become the alternative communication tool. This, during disasters like the tsunami in Aceh and the recent earthquake in Padang.

Amateur Radio Newsline Report 1683

Call for Papers 14th Annual Southeastern VHF Society Conference
April 23rd and 24th, 2010 Morehead State University in Morehead,
Kentucky.

The Southeastern VHF Society is calling for the submission of papers and presentations for the upcoming 14th Annual Southeastern VHF Society Conference to be held at Morehead State University in Morehead, KY on April 23rd and 24th, 2010. Papers and presentations are solicited on both the technical and operational aspects of VHF, UHF and Microwave weak signal amateur radio.

The deadline for the submission of papers and presentations is February 5,
2010. All submissions for the proceedings should be in Microsoft Word (.doc). Submissions for presentation at the conference should be in PowerPoint (.ppt) format, and delivered on either a USB memory stick or CDROM or posted for download on a web site of your choice.

For further information about the conference
please go to http://www.svhfs.org

Thank you,
Robin Midgett K4IDC
2010 Program Chair, SVHFS

[ANS thanks SVHFS for the above information]

/EX

SB SAT @ AMSAT $ANS-326.05
ARISS Status 16 November 2009

AMSAT News Service Bulletin 326.05
From AMSAT HQ SILVER SPRING, MD.
November 22, 2009
To All RADIO AMATEURS
BID: $ANS-326.05

(ARISS) Status Report November 16, 2009

1. Upcoming School Contact

Flanders District of Creativity and the Department of Education of the Flemish Government have teamed up for an Amateur Radio on the International Space Station (ARISS) contact on Tuesday, November 17 at 13:44 UTC via station LU8YY in Argentina. The groups are partnering to organize the very first congress for kids in Belgium. A conference has been set up with keynote speakers and interactive workshops for 1200 twelve year olds. Dirk Frimout and Sijtn Meuris will give a presentation about astronomy.

2. Italian Students Contact De Winne via ARISS

On Friday, November 13, Frank De Winne, ON1DWN on the ISS spoke with youth from Scuola Istituto Salesiano "Sacro Cuore" Vomero in Napoli, Italy via an Amateur Radio on the International Space Station (ARISS) contact. De Winne answered twenty questions put to him by the students. Approximately six hundred children were present for the contact which highlighted a curriculum of English, astronomy and physics. Prior to the contact, the students learned from amateur radio operators about the history of radio transmissions, radio equipment, the structure and the scientific goals of the ISS, as well as real HF radio contacts with amateur radio stations from around the world. After the contact, an ESA Communication Office representative gave a presentation on the ESA education program and ESA Astronaut Paolo Nespoli was present to meet with and talk to the students. There was extensive media coverage including television and newspapers as well as video streaming on the Web.

3. ARISS Contact Between Robert Thirsk and Montreal Schoolchildren

An Amateur Radio on the International Space Station (ARISS) contact was held between Marie-Rivier School in Montreal, Quebec, Canada and Robert Thirsk, VA3CSA on Friday, November 13 via telebridge station VK4KHZ in Australia.
Sixteen questions were asked and answered during the space chat as students learned about the ISS and work and life in space.

4. ARISS International Team Meeting Held

An Amateur Radio on the International Space Station (ARISS) Team meeting was held on Tuesday, November 10. The team provided a status on both the Columbus module antennas and ARISSat-1.
See: https://www.rac.ca/ariss/arisstel2009-11-10.htm

5. ARRL Web Article on STS-129 Mission

The American Radio Relay League (ARRL) ran a Web story on the STS-129 mission which will carry Amateur Radio on the International Space Station (ARISS) antennas to the ISS and deploy them during the second spacewalk.
See: https://www.arrl.org/news/stories/2009/11/12/11195/?nc=1

6. ARRL Letter Posts Two ARISS News Items

The American Radio Relay League (ARRL) posted two ARISS (Amateur Radio on the International Space Station) articles in its November 12 issue of the ARRL Letter. The first item covers the STS-129 mission carrying ARISS antennas to the ISS. The second is an article on the ARISS contact with Garfield Elementary School held in conjunction with the WHEELS NASA Exploration Experience traveling exhibit in Boise, Idaho.
See: https://www.arrl.org/arrlletter/index.html?issue=2009-11-12

[ANS thanks Carol, KB3LKI, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits.

Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Dee Interdonato, NB2F
nb2f at amsat dot org

```
From 3932301798558002463
X-Google-Thread: a4a23d5f63,8256258d29c9c4ec,start
X-Google-Attributes: gida4a23d5f63,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!news2.google.com!
border1.nntp.dca.giganews.com!border2.nntp.dca.giganews.com!nntp.giganews.com!
nx02.iad01.newshosting.com!newshosting.com!198.186.194.249.MISMATCH!news-
out.readnews.com!transit3.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-333 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sat, 28 Nov 2009 21:12:26 EST
Organization: The Radio Amateur Satellite Corporation
Lines: 474
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000201ca7099$863b2250$92b166f0$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1259460747 4298 166.84.1.6 (29 Nov 2009 02:12:27 GMT)
```

```
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 29 Nov 2009 02:12:27 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
X-Original-Bytes: 19364
Xref: g2news1.google.com rec.radio.amateur.space:289 rec.radio.info:1067
```

AMSAT NEWS SERVICE
ANS-333

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:

* AMSAT Settles Clean Room Lawsuits with Defendants
* UO-11 Calls Again
* BT3WX Special Event Station Celebrates Launch of XW-1 Amateur Satellite
* AMSAT Awards
* SKN on OSCAR 2010
* How's Satellite DX?
* ARISS Meets With Astronaut Hams
* SO-67 SumbandilaSat Control Team Invites Coordination Suggestions

SB SAT @ AMSAT $ANS-333.01
AMSAT Settles Clean Room Lawsuits with Defendants

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To All RADIO AMATEURS
BID: $ANS-333.01

On October 20, 2009, AMSAT President Barry Baines, WD4ASW, Rick Hambly, W2GPS, and Bob Davis, KF4KSS met with AMSAT attorney Bruce Bright and participated in a mediation process to see if an agreement could be reached with MDHawk Corporation, MIST, Hawk Institute for Space Sciences (HISS) and University of Maryland Eastern Shore (UMES) regarding the AMSAT clean room litigation (See previous 'Apogee View' articles in the AMSAT JOURNAL for background). After a full day of negotiations at the Henson Center of UMES, an agreement was reached with the defendants that averts further court litigation proceedings. The agreement calls for the defendants to pay AMSAT $19,000.00 and AMSAT will leave the existing cleanroom in place "as-is, where-is." In addition, AMSAT will remove the portable storage unit ('POD') that currently sits on HISS property by November 20, 2009 with payment by the defendants due by that date.

Per the agreement, by November 6 AMSAT removed the POD that was at the HISS facility being used for outside storage and the $19,000.00 payment was received last week from the defendants. Once the check clears, AMSAT attorney Bruce Bright will file the appropriate paperwork to dismiss both the case before the Circuit Court and the case before the District Court that are pending.

The outcome of the negotiation leaves AMSAT in the following condition:

- We have $19,000.00 (minus legal fees owed to our attorney) to invest in a new clean room at a new location in a manner that best serves AMSAT.

- We avoided the cost of dismantling the existing clean room (including electricians to disconnect power and plumbers to remove the fire suppression system), placing it in storage (paying storage fees) and then shipping to our new lab location (incurring relocation fees with a moving company) once such a facility is finalized.

- We end all interaction with HISS, eliminating the need for volunteers to travel to Pocomoke City, MD to be on scene to oversee/manage the removal process of the existing clean room as well as enlist the local amateurs who assisted us in the construction of the clean room in 2007-2008.

- We avoid the cost of future litigation, including the costs of taking depositions, submission of legal briefs, and court costs. The cost of going to court would likely wipe out a significant portion of any cash that we might be able to secure from the legal process and there is no guarantee that court action would result in a desirable outcome.

- Settling at this time allows AMSAT to focus on future opportunities and not continue to allocate resources on resolving past actions.

AMSAT President Barry Baines noted, "This legal process over the past year has been both frustrating and a 'learning experience'. The 'lessons learned' will be applied to future relationships. I look forward to getting this legal process behind us and moving forward on new opportunities."

[ANS thanks AMSAT President Barry Baines, WD4ASW for the above information]

/EX

SB SAT @ AMSAT $ANS-333.02
UO-11 Calls Again

AMSAT News Service Bulletin 333.02
>From AMSAT HQ SILVER SPRING, MD.
November 29, 2009
To All RADIO AMATEURS
BID: $ANS-333.02

Silent for 18 months, it seems as if 25 year old OSCAR-11 has reactivated itself on 145.826 MHz. After its batteries failed, UO-11 remained operational with good signals when its solar cells were exposed to sufficient sunlight.

The UO-11 Control Station at G3CWV came out of retirement last weekend with Clive noting, "I have received two reports from Keith N4ZQ that he has heard UO-11 on 19 November at 13:33 - 13:43, and on 22 November at 13:02 UTC. The frequency is 145.826 MHz. Mode is FM."

Clive says, "I've been receiving good signals from the satellite during the morning passes, when it was not in eclipse. However, on November 27 nothing was heard this morning, so the watchdog timer may have caused the bird to switch off. I would be interested in any reports of reception AFTER 09:30 UTC 26 November."

Since last week, reception reports have been rolling in from around the world:

KB2M reported he has been collecting telemetry from UO-11 for the last week or so. His files are available for anyone decoding the telemetry.

KU7Z heard strong signals from UO-11 on November 26 in Utah.

VK5DG heard UO-11 buzzing away over the west half of VK on November 26 at 0003 UTC.

NH6VB reported from Hawaii his 706MKIIG and Arrow antenna on a photo tripod, copied a weak, barely above noise level, but it was there.

ZL2BX says he heard very strong signals from UO-11 during the entire pass on November 22. Up to 60db over S9 almost all pass. (TS-2000, 10 el yagis, preamp at ant). Also same report from VK2AYE.

W5IU heard the old familiar "buzz" loud and clear on a Yaesu FT-530 HT and a hand held three element Yagi on a November 23 pass over Fort Worth, TX, this morning. It reached full scale on the FT-530 during a good part of the pass.

K9MSG in Indianapolis reported that on November 24 he heard UO-11 on two passes using a ground plane vertical on a tower. Signals on the first pass were S-2 to S-7 signal level and reception was very noisy. The second pass of that day yielded reception at S-1 to S-3 with 1 to 3 second noise bursts.

Clive wraps up with, "Very many thanks to everyone who sent reception reports of this satellite or posted them to the amsat-bb board. I've been overwhelmed by the number received! I've replied to most, but my apologies if I've missed anyone."

Further details, including an audio clip to help identify the satellite are on Clive's OLD website at: http://www.users.zetnet.co.uk/clivew

[ANS thanks Clive, G3CWV for the above information]

/EX

SB SAT @ AMSAT $ANS-333.03
BT3WX Special Event Station Celebrates Launch of XW-1 Amateur Satellite

AMSAT News Service Bulletin 333.03
>From AMSAT HQ SILVER SPRING, MD.
November 29, 2009
To All RADIO AMATEURS
BID: $ANS-333.03

To celebrate the launch of China's first amateur satellite, XW-1, AMSAT-China will set up a special event station in Taiyuan, Shanxi Province of China using the callsign BT3WX. The station plans to operate on all HF amateur bands from 10 to 160 meters and on VHF/UHF amateur satellite bands, including FM, SSB, CW, RTTY and PACSAT modes.

Operations at BT3WX have already commenced and the special event station will remain active until XW-1 is launched. A specific launch date has not been released as of press time, but is expected in mid-December.

A team of 200 participants will consist of radio amateurs from all around China, teachers and students, the State Radio Regulation Bureau of China, the China Association for Science Technology, the Chinese Society of Astronautics and the Chinese Radio Sports Association officials, as well as journalists will participate in the operation of BT3WX. Their goal is to inspire enthusiasm for amateur radio satellite communications activities in China among radio amateurs and young people learning satellite communication technology and space knowledge.

THE BT3WX operating team is as follows:
Team leader: BA1EO, Fan
Operation and Technology support: BD5RV, Michael Chen
Press release and QSL Manager: BA1DU, Alan Kung

(P.O.Box 8091, Beijing, CHINA 100088)

The operators include BA4RB, BA4RN, BA4RS, BA4RX, BA4TA, BA4TB, BD4IBW, BD4REB, BD4RPJ, BD4XX, BH4REQ, BA6AA, BD6BW, BA7CK, BA7JG, BD7PZL.

The equipment at the HF Station includes an Icom IC-756PROIII and IC-7000. The HF antennas are:

160/80M	Ground Plane
40M	3ele Yagi
20/15M	5ele Yagi
10M	3ele Yagi
WARC	Ground Plane

Power Amplifier: GO-2KW

At the Satellite station the gear will include an Icom IC-910H feeding a VHF 7 element cross Yagi and UHF 13 element cross Yagi.

BT3WX Communications HF Award:
Stations completing two-way communications with BT3WX on 9 different bands and modes can apply for the BT3WX HF communications award. The same band in different modes counts as a different band / mode.

BT3WX Communications Satellite Award
Stations completing two-way communications with BT3WX through at least two different mode of transponders can apply for the BT3WX satellite communications award. The different modes can be through the same satellite.

BT3WX Communications Awards applications mailing address:
AMSAT-China, P.O.Box 8091, Beijing, CHINA 100088
E-mail: camsat@vip.163.com

The XW-1 communications payload includes a beacon and three cross band transponders operating in FM, linear, and digital modes.
Here is a Spacecraft Summary:

Common Name: XW-1
Alternate Name: CAS-1
Satellite Type: Microsatellite
Launch Date: TBD
Launch Location: Taiyuan Satellite Launch Center of China
Launch Vehicle: CZ-2C(LM-2C) Rocket
Apogee: 1200.00 km
Perigee: 1200.00 km
Inclination: 100.50 deg
Period: 109.00 min
Dimensions: 680mm*480mm (Envelope dimension), not including antennas

Weight: 60.000 Kg
Organization: CAMSAT

Frequency Information

Mode Beacon (200 mw):
Downlink 435.7900 MHz CW

Mode FM Voice Repeater (1 watt, PL: 67Hz):
Uplink: 145.8250 MHz FM
Downlink 435.6750 MHz FM

Mode Linear Transponder (1 watt, Inverting):
Uplink: 145.950 MHz SSB/CW
Downlink 435.740 MHz SSB/CW
The transponder is 50khz wide and centered on the frequencies given.

Mode PacSat BBS (1 watt):
Uplink: 145.8250 MHz AFSK 1200 BPS
Downlink 435.6750 MHz AFSK 1200 BPS

Antennas:
145 Mhz RX Antenna: 2.0dBi max, LHCP
435 Mhz TX Antenna: 3.0dBi max, RHCP

The AMSAT Satellite information page will be updated as the latest information is received from AMSAT-China. Monitor this page for the latest news: http://tinyurl.com/ylj9z5j

[ANS thanks Alan Kung, BA1DU and Drew Glasbrenner, KO4MA for the above information]

/EX

SB SAT @ AMSAT $ANS-333.04
AMSAT Awards

AMSAT News Service Bulletin 333.04
>From AMSAT HQ SILVER SPRING, MD.
November 29, 2009
To All RADIO AMATEURS
BID: $ANS-333.04

AMSAT Director Contests and Awards, Bruce KK5DO congratulates all who have earned these AMSAT Awards:

The following have entered into the Satellite Communicators Club for making their first satellite QSO:
Luis Benvenutty, WP4NYY
Zeljko Ulip, 9A2EY

The following have earned the AMSAT Satellite Communications Achievement Award:
Rodney Waln, KC0ZHF #506
Neven Mrduljas, 9A5YY #507

Zeljko Ulip, 9A2EY #508

The following have earned the AMSAT Sexagesimal Award.
Patrick Stoddard, WD9EWK #151
Gail McDaniel, KB0RZD #152
Nick Kucij, KB1RVT #153

The following have earned the AMSAT Century Club award.
Michael Klomfass, DH5MK #38

The following have earned the South Africa Communications Achievement Award.
Rodney Waln, KC0ZHF #US138
Zeljko Ulip, 9A2EY #US139

The following have earned the W4AMI Achievement Award (for 1000 contacts)
Gail McDaniel, KB0RZD #57
Zeljko Ulip, 9A2EY #58

To see all the awards visit http://www.amsat.org.

[ANS thanks Bruce, KK5DO for the above information]

/EX

SB SAT @ AMSAT $ANS-333.05
SKN on OSCAR 2010

AMSAT News Service Bulletin 333.05
>From AMSAT HQ SILVER SPRING, MD.
November 29, 2009
To All RADIO AMATEURS
BID: $ANS-333.05

All radio amateurs, worldwide, are cordially invited to participate in AMSAT's Straight Key Night on OSCAR 2010.

Participating in SKN on OSCAR 2010 is easy. No rules, no scoring and no need to send in a log. Just operate CW through any OSCAR between 0000 and 2400 UTC on 1 January 2010, using a straight hand key.

In keeping with the friendly nature of this event, all participants are encouraged to nominate someone they worked for "Best Fist." Your nominee need not have the best fist of those you heard, just of those you worked. Please send your nomination to w2rs@amsat.org. A list of those nominated will appear in ANS and The AMSAT Journal.

CU SKN de W2RS!

[ANS thanks Ray, W2RS for the above information]

/EX

SB SAT @ AMSAT $ANS-333.06
How's Satellite DX?

AMSAT News Service Bulletin 333.06
>From AMSAT HQ SILVER SPRING, MD.
November 29, 2009
To All RADIO AMATEURS
BID: $ANS-333.06

AO-51 Contact ZL2BX from McMurdo Station Antarctica

Bill, K7MT has activated Antarctica as KC4USV on AO-51. He worked Alan, ZL2BX from the McMurdo Station Antarctica on November 27. Bill plans more satellite operation this weekend when he is off for two days. Hopefully more VK's and ZL's will hear "Cheers from McMurdo Station Antarctica KC4USV."

Iceland to W7 via AO-7

Bob, W7LRD reported he recently worked Ari, TF3ARI in Iceland on AO-7. The AO-7 footprint from TF will cover most of the U.S.! Contacts via AO-51 between US East Coast stations and Iceland were reported by John, K8YSE

[ANS thanks Terry, ZL3QL; Bill, K7MT/KC4USV; Bob, W7LRD for the above information]

/EX

SB SAT @ AMSAT $ANS-333.07
ARISS Meets With Astronaut Hams

AMSAT News Service Bulletin 333.07
>From AMSAT HQ SILVER SPRING, MD.
November 29, 2009
To All RADIO AMATEURS
BID: $ANS-333.07

ISS Ham Debrief Held with Astronaut Michael Barratt

On November 16, Amateur Radio on the International Space Station (ARISS) team members participated in an ISS Ham debrief session with Expedition 19/20 astronaut Michael Barratt. Barratt provided the team with feedback about the ARISS contacts held during his ISS mission. The feedback will be used to fine-tune ARISS program operations.

Astronaut Training Status

Two training sessions were held this week with astronauts Tracy Caldwell, KF5DBF and Dan Burbank, KC5ZSX. Both astronauts were given the Amateur Radio on the International Space Station (ARISS) basic operations and school contact course. Caldwell also received her preflight overview as she is scheduled to fly with Expedition 23 in April 2010. Burbank will fly with Expedition 29 in September 2011.

[ANS thanks Carol, KB3LKI and the ARISS Status Report for the above information]

/EX

SB SAT @ AMSAT $ANS-333.08
SO-67 SumbandilaSat Control Team Invites Coordination Suggestions

AMSAT News Service Bulletin 333.08
>From AMSAT HQ SILVER SPRING, MD.
November 29, 2009
To All RADIO AMATEURS
BID: $ANS-333.08

Jan-Albert, ZR1JAK, wrote on behalf of the SO-67 SumbandilaSat team, "Given that the SA-AMSAT payload on SO-67 is shared with the satellite's back-up TT&C transponder, there is unfortunately not a way to keep the payload switched on permanently, or even semi-permanently. For the lifetime of the satellite we will therefore have to do with active scheduling."

In an effort to make this as painless as possible, ZR1AJK requests comments on the possible use of regional coordinators, which worked quite well for SO-35. Such coordinators would then be responsible for setting up schedules in advance for their specific regions, taking into account obviously the pool of possible satellite passes, as well as local events / fairs etc. The SO-67 Command Station would then simply load the schedules on a weekly basis.

The initial focus has been on Europe, RSA, South America, North America, Canada, Japan and Australia, and New Zealand, ZR1JAK invites suggestions for amateur radio use of the payload over other regions as well.

In regards to questions of possible activation at night he explained, "This is entirely possible, but would have to be planned and managed more actively, given the power limitations in eclipse. We have yet to experiment with this and see what the available capacity would be.

Interested satellite operators are invited to e-mail responses to the AMSAT bulletin board, or if you prefer, to ZR1JAK's work address:
jak "at" sunspace "dot" co "dot" za.

[ANS thanks Jan-Albert, ZR1JAK for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office. And with that, consider what sound does a space turkey make? Hubble, hubble, hubble, of course.

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM
K9JKM at amsat dot org

From -8903568842705009800
X-Google-Thread: 8f86f75953,10ba73974168ad6d,start
X-Google-Attributes: gid8f86f75953,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII
Path: g2news1.google.com!news3.google.com!feeder.news-service.com!news-out1.kabelfoon.nl!newsfeed.kabelfoon.nl!bandi.nntp.kabelfoon.nl!plix.pl!newsfeed1.plix.pl!news.nask.pl!news.nask.org.pl!news.onet.pl!not-for-mail
From: "Adrian Szumilas" <szumiksp8aqk@poczta.onet.pl>
Newsgroups: rec.radio.amateur.space
Subject: satelita Chin WX-1
Date: Sun, 29 Nov 2009 10:41:55 +0100
Organization: http://onet.pl
Lines: 39
Message-ID: <hetflc$3hg$1@news.onet.pl>
NNTP-Posting-Host: 78-131-155-140.tktelekom.pl
X-Trace: news.onet.pl 1259487729 3632 78.131.155.140 (29 Nov 2009 09:42:09 GMT)
X-Complaints-To: niusy@onet.pl
NNTP-Posting-Date: Sun, 29 Nov 2009 09:42:09 +0000 (UTC)
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.3598
X-RFC2646: Format=Flowed; Original
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.3350
Xref: g2news1.google.com rec.radio.amateur.space:290

Satelita WX-1 planowany start po�owa grudnia

Mode Beacon (200mW)

Downlink 435.7900 MHz CW

Mode FM Voice Repeater (1 watt, PL: 67Hz)

Uplink: 145.8250 MHz FM

Downlink 435.6750 MHz FM

Mode Linear Transponder (1 watt, Inverting):

Uplink: 145.950 MHz SSB/CW

Downlink 435.740 MHz SSB/CW

The transponder is 50khz wide and centered on the frequencies given.

Mode PacSat BBS (1 watt):

Uplink: 145.8250 MHz AFSK 1200 BPS

Downlink 435.6750 MHz AFSK 1200 BPS

Antennas:

145 Mhz RX Antenna: 2.0dBi max, LHCP

435 Mhz TX Antenna: 3.0dBi max, RHCP

Informacje AMSAT -
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=116&retURL=satellites/futures.php
b�d� uaktualniane.
--
ADRIAN SP8AQK GG 8897051

From -9137462028359783348
X-Google-Thread: a4a23d5f63,ef652190207316bb,start
X-Google-Attributes: gida4a23d5f63,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!newsfeed2.dallas1.level3.net!news.level3.com!panix!panix2.panix.com!not-for-mail
From: rram@panix.com (rec.radio.amateur.moderated Admin)
Newsgroups:
rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.info
Subject: Crossposting Permitted to rec.radio.amateur.moderated
Supersedes: <radio/ham-radio/moderated/crossposting-1-1257058800@panix.com>
Followup-To: poster
Date: 1 Dec 2009 02:00:08 -0500
Organization: rec.radio.amateur.moderated Moderation Team
Lines: 47
Approved: RRI Admin <rec-radio-info-request@panix.com>
Distribution: world
Expires: 03 Jan 2010 02:00:00 -0000
Message-ID: <radio/ham-radio/moderated/crossposting-1-1259650800@panix.com>

Reply-To: rec-radio-amateur-moderated-request@panix.com
(rec.radio.amateur.moderated Admin)
NNTP-Posting-Host: panix2.panix.com
X-Trace: reader1.panix.com 1259650808 6024 166.84.1.2 (1 Dec 2009 07:00:08 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Tue, 1 Dec 2009 07:00:08 +0000 (UTC)
Summary: Short reminder for unmoderated newsgroups that crossposting is permitted
Keywords: FAQ, ham, amateur, radio, moderated, unmoderated, crossposting,
permitted
Xref: g2news1.google.com rec.radio.amateur.antenna:13894 rec.radio.amateur.dx:505
rec.radio.amateur.equipment:1657 rec.radio.amateur.homebrew:2960
rec.radio.amateur.misc:4448 rec.radio.amateur.policy:24491
rec.radio.amateur.space:291 rec.radio.info:1072

Posted-By: auto-faq 3.3.2 beta (PGPMoose V2.0, Perl 5.005)
Archive-name: radio/ham-radio/moderated/crossposting
Revision: 1.1 2009/04/12 19:42:04
Posting-Frequency: posted monthly
URL: http://www.panix.com/~rram/usenet/rram/index.html

Changes followed by "|".

After a 30-day public discussion and feedback period to gauge reader opinions in March of 2009:

http://groups.google.com/group/rec.radio.amateur.moderated/browse_thread/thread/d7d337db35f23326

the rec.radio.amateur.moderated Moderation Team has decided to consider amending its charter, and permit limited simultaneous crossposting to rec.radio.amateur.moderated and one other unmoderated amateur-radio-related discussion newsgroup. We are currently trying this on a temporary basis (90 days, through early July 2009), and adopt it permanently if successful.

Approved rec.radio.amateur.* newsgroups are those that are currently listed in the latest version of the "List of Big Eight Newsgroups" which is crossposted monthly to news.announce.newgroups, news.groups, and news.lists.misc.

Approved alt.radio.amateur.* and alt.ham-radio.* newsgroups are those that have been created consistent with the suggestions in "So You Want to Create an Alt Newsgroup" at:

  http://www.faqs.org/faqs/alt-creation-guide/

Approved regional hierarchy newsgroups are those that contain either "radio.amateur" or "ham-radio" in their names, including uk.radio.amateur and aus.radio.amateur.misc.

We will make every reasonable effort to keep our list of approved newsgroups up-to-date. In case we have overlooked any, and a submission is rejected in error as a result, the rejected submitter can E-mail us at our administrative contact address (in the signature at the bottom of this article, and the default Reply-To for the rejection message) requesting that it be added, and that the article be approved. We may still choose to reject articles crossposted to any alt.* newsgroup with an inappropriate name, including obscene language, embedded name-calling, or encouragement of unlawful conduct.

Please direct any comments, questions, or criticisms to rec-radio-amateur-moderated-request@panix.com.

```
From 4143950740931076193
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!border1.nntp.dca.giganews.com!
border2.nntp.dca.giganews.com!nntp.giganews.com!nx02.iad01.newshosting.com!
newshosting.com!198.186.194.249.MISMATCH!transit3.readnews.com!news-
out.readnews.com!news-xxxfer.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-335 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Tue, 1 Dec 2009 08:59:53 EST
Organization: The Radio Amateur Satellite Corporation
Lines: 1781
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000f01ca728e$88985e90$99c91bb0$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1259675999 8643 166.84.1.6 (1 Dec 2009 13:59:59 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Tue, 1 Dec 2009 13:59:59 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
X-Original-Bytes: 42356
Xref: g2news1.google.com rec.radio.amateur.space:292 rec.radio.info:1075
```

This report is organized into four (4) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites

Part 3 (S3) - non - operational satellites
Part 4 (S4) - deborbited/returned satellites

SB SAT @ AMSAT W8ISS $WSR-335.S1
WSR 335 Part 1 12/01/2009

AMSAT NEWS SERVICE BULLETIN 335.S1
FROM AMSAT HQ SILVER SPRING, MD, December 01, 2009
TO ALL RADIO AMATEURS
BID: $WSR-335.S1

SO-67 SumbandilaSat
Catalog Number: 35870
Launch Date: September 17, 2009

Status: Commissioning

Callsign: ZS0SUM

Uplink: 145.875MHz FM tone 233.6 Hz
Downlink: 435.345MHz FM

For more information about SO-67:
http://www.amsatsa.org.za/
[11212009]
=====
DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008

Status: Operational
Current Mode: Science Mode - Beacon ONLY

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink: 435.530 to 435.570 MHz

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68
[02122009]
=====
VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:

Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.859330 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is active. Each transponder has a different beacon.
[08072008]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: System Reload in progress

Current Modes:
FM Repeater ONE
Uplink: 145.920MHz FM
Downlink: 435.300Mhz FM
FM Repeater TWO
Uplink: OFF
Downlink: OFF
BBS
Uplink: 1268.700MHz 9k6 FM
Downlink: 435.150MHz 9k6 FM
Telemetry
Downlink: 435.150MHz

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.860 MHZ FM
145.880 MHz USB
145.920 MHz FM
1268.700 MHz FM
Digital Downlinks: 435.150 MHz FM 38k4 PBP, 1 watt output
435.150 MHz FM 9k6 Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Pacsat Broadcast Protocol
1268.700 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon: 435.150 MHz

```
Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[11112009]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002

Status: Operational

Current Mode: V/u

Uplink:   145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4
Hz. The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute
   timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the re-
   peater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset
   the 10 minute timer.
[05282007]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: RECOVERY
Current Mode: V/u (Mode JA)
```

Voice/CW (Mode JA)
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage:
http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts.htm
[09062009]
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[03232009]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

```
Status: Operational

Current Mode: Alternating between Mode A and B every 24 hours

Uplink:   145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink:  29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons:   29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
[02122009]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - V/u
                      Voice -       V/v
                      BBS -         V/v
                      APRS -        V/v
                      SSTV -        V/v


Expedition 22 Crew:
Commander:                Jeff Williams  KD5TVQ
Flight Engineer:          Maxim Suraev

Available Modes and Frequencies:

Digital/APRS:
Worldwide packet uplink:   145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink:     145.200 MHz FM
Region 2/3 voice uplink:   144.490 MHz FM
Worldwide downlink:        145.800 MHz FM

Crossband Repeater:
Repeater Uplinks:         1269.650 MHz FM
                           437.800 MHz FM
```

145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[12012009]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-335.S2
WSR 335 Part 2 12/01/2009

AMSAT NEWS SERVICE BULLETIN 335.S2
FROM AMSAT HQ SILVER SPRING, MD, December 01, 2009
TO ALL RADIO AMATEURS
BID: $WSR-335.S2

SwissCube
Catalog Number: 35932
Launch Date: September 23, 2009

Status: In Orbit

Callsign: HB9EG

Beacon(100mw): 437.5050MHz CW
Beacon(1w): 437.5050MHz FSK 1k2bps
[11112009]
=====
UWE-2
Catalog Number: 35934

```
Launch Date: September 23, 2009

Status: In Orbit

Beacon(500mw): 437.3850 MHz AFSK 1k2bps
               437.3850 MHz FSK 9k6bps
[1112009]
=====
ITUpsAT1
Catalog Number: 35935
Launch Date: September 23, 2009

Status: In Orbit

Beacon(100mw): 437.325MHz CW
Beacon(1w): 437.325MHz 19k2bps
[11112009]
=====
BEESAT
Catalog Number: 35933
Launch Date: September 23, 2009

Status: In Orbit

Callsign: DP0BEE

Beacon(100mw): 436.000MHz CW
Beacon(500mw): 436.000MHz GMSK 4k8bps
[11112009]
=====
Pollux
Catalog Number:
Launch Date: July 31, 2009

Status: Operational

Callsign: POLLUX-1

Downlink: 145.825MHz 1k2 AX.25
[10042009]
=====
Castor
Catalog Number:
Launch Date: July 31, 2009

Status: Operational

Callsign: KD4HBO-1

Downlink: 145.825 MHz 1k2 AX.25
[10042009]
=====
BEVO-1 (DRAGONSAT-1)
```

```
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Operational

Downlink: 437.325 MHz 9k6 GMSK
          437.325 MHz CW 20wpm
[07312009]
=====
AggieSat2 (DRAGONSAT-2)
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Operational

Downlink: 436.250 MHz 9k6 FHSS
[11112009]
=====
CP-6
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Commissioning

Downlink: 437.365 MHz 1k2 AFSK
[06052009]
=====
HAWKSAT 1
Catalog number: 35003
Launch Date: May 19, 2009

Status: ?

Downlink: 437.345 ?
[06052009]
=====
Pharmasat
Catalog Number: 35002
Launch Date: May 19, 2009
Status: Commissioning

Downlink: 437.465 MHz 1k2 AFSK
[06052009]
=====
ANUSAT
Catalog Number: 34808
Launch Date: April 20, 2009

Status: ?

Downlink:  435.000 MHz
Uplink:    145.800 MHz
```

Telemetry: 137.400 MHz
[05112009]
=====
SOHLA-1 (ASTRO TECH.)
Catalog Number: 33496
Launch Date: January 23, 2009

Status: Commisioning

Proposed Frequencies and Modes:
Downlink: 437.505 MHz AFSK/CW
Beacon: 437.505 MHz AFSK/CW

Callsign:

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=101
[03232009]
=====
KAGAYAKI (Solan Co.)
Catalog Number: 33495?
Launch Date: January 23, 2009

Status: In Orbit

Downlink: 437.375 MHZ   FSK9k6/CW
Beacon: 437.375 MHz   FSK9k6/CW

IARU coordination status page:

AMSAT-NA webpage:

[01152009]
=====
STARS (Kagawa Univ.) (Twin Satellites)
Catalog Number: 33498
Launch Date: January 23, 2009

Status: Operational ?

Downlinks: 437.485 MHz FM/CW
           437.465 MHz FM/CW
Beacons: 437.305 MHz FM/CW
           437.275 MHz FM/CW

Callsigns: JR5YBN
           JR5YBO

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=99

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=121&retURL

=/satellites/status.php
[022152009]
=====
KKS-1 (Tokyo MCIT)
Catalog Number: 33499
Launch Date: January 23, 2009

Status: Operational

Downlink: 437.455 MHz AFSK/CW
Beacon: 437.385 MHz AFSK/CW

Callsign: JQ1YYY

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=107

AMSAT-NA webapge:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=120&retURL
=/satellites/status.php
[02212009]
=====
PRISM (Tokyo Univ.)
Catalog Number: 33493
Launch Date: January 23, 2009

Status: Operational ?

Downlink: 437.425 MHz AFSK/GMSK/CW
Beacon: 437.250 MHz AFSK/GMSK/CW

Callsign: JQ1YCX

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=97

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=119&retURL
=/satellites/status.php
[02212009]
=====
RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number: 32953
Launch Date: May 23, 2008

Status: Operational

Curent Modes: Telemetry
              Audio
              Images

Downlinks: 435.315 MHz
           435.215 MHz

```
AMSAT-NA website:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=115&ret
URL=/satellites/status.php

Official website:
http://www.npopm.com/?cid=leoca&caid=43
[02122009]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode:  /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon:    435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=94&retURL=
/satellites/status.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=72
[02122009]
=====
CP3
Catalog Number: 31129
Launch Date: April 17,2007

Status: Operational

Current Mode:  /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[02122009]
=====
GENESAT-1
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Current Mode: /u

Callsign: KE7EGC
```

Telemetry Beacon Downlink: 437.0695 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[091512009]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon: 437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/xivpicte.htm
[02212009]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003

Status: ?????

Current Mode: /u

Beacon: 436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=96&retURL
=/satellites/status.php

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[06082009]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Operational?

Uplink: 1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan?)

```
Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=56
[02122009]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: System Reload in Progress

Current Modes:
FM Repeater ONE
Uplink:    145.920MHz FM
Downlink:  435.300Mhz FM
FM Repeater TWO
Uplink:    OFF
Downlink:  OFF
BBS
Uplink:   1268.700MHz 9k6 FM
Downlink:  435.150MHz 9k6 FM
Telemetry
Downlink:  435.150MHz

Analog voice downlink:     435.300 MHz FM
                           435.150 MHz FM
                          2401.200 Mhz FM
Analog voice uplink:       145.860 MHZ FM
                           145.880 MHz USB
                           145.920 MHz FM
                          1268.700 MHz FM
Digital Downlinks:         435.150 MHz FM 38k4 PBP, 1 watt output
                           435.150 MHz FM 9k6 Pacsat Broadcast Protocol
                          2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:            145.860 MHz FM 9k6 Pacsat Broadcast Protocol
                          1268.700 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon:                    435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12
```

```
Official Webpage: http://www.amsat.org/amsat-new/echo/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[10262009]
=====
QuakeSat
Catalog Number: 27845
Launch Date: June 30, 2003

Status: Telemetry only

Current Mode: 9600 baud data packet

Mode U packet
Downlink: 436.675 MHz 9k6 BPS

Quakesat webpage:
http://www.quakefinder.com/services/quakesat-ssite/
[04272009]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=69&retURL
=/satellites/status.php
[02212009]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Telemetry only

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink:        144.390 Mhz 1200 Baud
```

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[03302009]
=====
RS-22 RADIO SPORT RS-22
Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only

Current Mode: /u

CW Beacon - 435.352 MHz
            145.818 MHz

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=76&retURL
=/satellites/status.php
[02212009]
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990

Status: CW Beacon only

Uplinks: 145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink: 437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[03162009]
=====
CanX-2
Catalog number: 32790
Launch Date: April 28, 2008

Status: Operational in range of ground station only

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web

page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[02212009]
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.425 MHz 1k2 baud packet

For the latest project status update please visit the AAUSAT-II web page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[02212009]
=====
CO-65 CUTE-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008

Status: Digipeater

Downlink: 437.475 MHz 9k6 Packet
Uplink: 1267.600 Mhz

Telemetry Beacon:
Downlink: 437.2750 MHz CW

For the latest project status update please visit the Cute-1.7+APD II web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78

Command Station blog website:
http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=112&retURL=/satellites/status.php
[02212009]
=====
Compass-1
Catalog number: 32787
Launch Date: April 28, 2008

Status: Operational

```
Current Mode: 4k8 MSK packet

Uplink:   145.980 MHz FM
Downlink: 437.275 Mhz CW
          437.405 MHz Packet

For the latest project status update please visit the Compass 1 web
page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=114&retURL
=/satellites/status.php
[04272009]
=====
CO-66 Seeds II
Catalog number: 32791
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.485 MHz

Callsign: JQ1YGU

For the latest project status update please visit the Seeds 2 web
page: http://cubesat.aero.cst.nihon-u.ac.jp/english/seeds_2_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=113&retURL
=/satellites/status.php
[02212009]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - V/u
                      Voice -       V/v
                      BBS -         V/v
                      APRS -        V/v
                      SSTV -        V/v

Expedition 22 Crew:
Commander:                Jeff Williams  KD5TVQ
```

Flight Engineer: Maxim Suraev

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time line is NOT translated from Russian and posted.
[12012009]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-335.S3
WSR 335 Part 3 12/01/2009

AMSAT NEWS SERVICE BULLETIN 335.S3
FROM AMSAT HQ SILVER SPRING, MD, December 01, 2009
TO ALL RADIO AMATEURS
BID: $WSR-335.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

CP4
Catalog Number: 31122
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon: 437.325 MHz CW

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=79
[10022008]
=====
LIBERTAD-1
Catalog Number: 31128
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink: 145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[02122009]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: Non-Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder: 145.825 Mhz FM
[01012009]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA

```
Proposed Transmit Frequency:  437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink:        437.250 MHz FM 67Hz CTCSS
Voice Downlink:     2401.835 MHz FM
Packet Up/Downlink:  437.250 MHz 9k6 packet
Packet Downlink     2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non-Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[08132007]
=====
CANX-1
Catalog Number: 27847
Launch Date: June 30, 2003

Status: Non-Operational

Downlink: 437.8800 MHz AFSK 1k2bps
[06052009]
=====
DTUSAT
Catalog Number: 27842
Launch Date: June 30, 2003

Status: Non-Operational

Current Mode: 2k4 AFSK Packet last reported

Downlink: 437.475MHz

Officail webpage: http://dtusat1.dtusat.dtu.dk/

AMSAT-NA webpage:
```

```
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=101&retURL
=satellites/all_oscars.php
[02212009]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink:   435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)

Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Telemetry only

Uplinks:   145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink:  437.325 MHz

Broadcast callsign: MYSAT3-11
BBS:                MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial land and weather imaging payloads offers FM and FSK
Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as
a collaborative effort between the Malaysian government and Surrey
Satellite Technology Ltd.
[03302009]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink:   145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
as per the user service agreement located at the following URL:
```

```
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS:                SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink:   145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
V-band:   145.840 -  145.990 MHz CW/LSB
U-band:   435.550 -  435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks
---------
S2-band:  2401.225 -  2401.475 MHz CW/USB
K-band:  24048.010 - 24048.060 MHz CW/USB
Beacon:   2401.323 MHz
         24048.035 MHz
```

P3-D Telemetry Beacons (IHU)

BEACON	General Beacon(GB)	Middle Beacon(MB)	Engineering Beacon(EB)
2 m	none	145.898 MHz	none
70cm	435.438 MHz	435.588 MHz	435.838 MHz
13cm(1)	2400.188 MHz	2400.338 MHz	2400.588 MHz
13cm(2)	2401.173 MHz	2401.323 MHz	2401.573 MHz
3cm	10450.975 MHz	10451.125 MHz	10451.375 MHz
1.5cm	24047.885 MHz	24048.035 MHz	24048.285 MHz

[07162007]

=====

OO-38 OPAL

Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]

=====

UO-36 UoSAT-12

Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]

=====

SO-35 SUNSAT

Catalog Number: 25636
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz
145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]

=====

PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]

=====

SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]

=====

GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Telemetry only

Current Modes:
Telemetry : /u

```
Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign:       4XTECH-12
```

More information of GO-32 can be found at:
http://asri.technion.ac.il/techsat/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=14&retURL=/satellites/status.php
[12012009]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink: 145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
MO-30 UNAMSAT-2
Catalog Number: 24305
Launch Date: September 5, 1996

Status: Non-operational

Downlink: 435.1380 MHz AFSK 1200 BPS
Downlink: 435.2060 MHz AFSK 1200 BPS
Uplink: 145.8150 MHz AFSK 1200 BPS
Uplink: 145.8350 MHz AFSK 1200 BPS
Uplink: 145.8550 MHz AFSK 1200 BPS
Uplink: 145.8750 MHz AFSK 1200 BPS
[06042009]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Non-operational

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012009]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

```
Status: PSK carrier only

Current Mode:

Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
AO-24 ARSENE
Catalog Number: 22654
Launch Date: May 13, 1993

Status: Non-operational

Uplink:    ?
Downlink:  145.975 MHz 1k2bps FM AFSK
          2446.540 MHz

Broadcast callsign:
BBS:
[11212009]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
```

```
Downlink: 435.170 MHz FM

Broadcast Callsign: HL01-11
BBS: HL01-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
```

WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink: 145.825 MHz FM 1200 Baud AFSK
Beacon: 2401.220 MHz
[05012006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: non-operational

Current Mode: V/u

Uplink: 145.900 MHz FM 1200-baud Manchester FSK (reserved)
                145.920 MHz FM VOICE
                145.940 MHz FM 1200-baud Manchester FSK (reserved)
                145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink: 437.026 MHz USB VOICE
                (1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC 437.050 MHz RHCP
   PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[07242009]
=====
UO-15 UoSAT-4
Catalog Number: 20438
Launch Date: January 22, 1990

Status: Non-operational

```
Uplink: ?
Downlink: 435.1250MHz (?)
          435.1200MHz (?)
[06042009]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984

Status: Non-operational.

Current Mode:  /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon:          435.025 MHz
Mode-S Beacon:     2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP
```

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[01012009]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon: 145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.8500 - 145.9000 MHz SSB/CW
Downlink 29.4000 - 29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink: 29.4500 - 29.5500 MHz SSB/CW
Beacons: 29.450 MHz
          435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5

```
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon 1:  29.352 MHz (intermittent)
Beacon 2:  29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink:     21.260 to 21.300 MHz CW/USB
Downlink:  145.860 to 145.900 MHz CW/USB

Beacon:    145.860 MHz

Robot:     145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational
```

```
Uplink:   21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon:   29.408 MHz

Robot:    29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-335.S4
WSR 335 Part 4 12/01/2009

AMSAT NEWS SERVICE BULLETIN 335.S4
FROM AMSAT HQ SILVER SPRING, MD, December 01, 2009
TO ALL RADIO AMATEURS
BID: $WSR-335.S4

THE FOLLOWING SATELLITES HAVE RE-ENTERED OR HAVE BEEN RETURNED SAFELY:

NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: July 28, 2008

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[01012009]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink:      145.825 Mhz FM APRS AX25
```

APRS Uplink: 145.825 MHz FM APRS AX25
Voice/PSK31 Uplink: 28.120 MHz

Packet to Voice ID: RAFT
[06112007]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Re-Entered
Re-entered: June 18, 2008

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon: 437.2750 MHz CW

Callsign: JR8YJT
[01012009]
=====
SO-43 Starshine 3
Catalog Number: 26929
Launch Date: September 30, 2001

Status: Re-Entered
Re-entered: January 21, 2003

Beacon: 145.825Mhz
[02212009]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)

* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at}
amsat.org
NNNN
/EX

```
From 4688063097157140908
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!npeer02.iad.highwinds-media.com!
news.highwinds-media.com!feed-me.highwinds-media.com!nx02.iad01.newshosting.com!
newshosting.com!198.186.194.249.MISMATCH!news-out.readnews.com!
transit3.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: "Dr. Jay Garlitz" <drjay@gatordental.com>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: [HAM-UNIV] College Satellite night Thursday December 3rd
Followup-To: rec.radio.amateur.space
Date: Wed, 2 Dec 2009 11:24:06 EST
Organization: Gator Dental Asscociates
Lines: 43
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <200912021206.nB2C6Tk8010484@mail41.atl.registeredsite.com>
Reply-To: <drjay@gatordental.com>
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"
X-Trace: reader1.panix.com 1259771046 7744 166.84.1.6 (2 Dec 2009 16:24:06 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Wed, 2 Dec 2009 16:24:06 +0000 (UTC)
```

X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
X-Authentication-Warning: oasis.novia.net: Host smtp1.Stanford.EDU [171.67.219.81] claimed to be smtp.stanford.edu
X-Authentication-Warning: w6yx.stanford.edu: majordom set sender to owner-ham-univ@w6yx.stanford.edu using -f
X-Converted-To-Plain-Text: from multipart/alternative by demime 1.01d
X-Converted-To-Plain-Text: Alternative section used was text/plain
Xref: g2news1.google.com rec.radio.amateur.space:293 rec.radio.info:1076

It's time for another College Satellite night! I hope to see you on Thursday evening Dec. 3rd (local time) from 22:00 UTC to 0500 UTC.

>From 22:00 UTC to 05:00 UTC get on as many of the birds and make as many contacts if you can, identifying your contacts as part of a college night effort. Birds include AO51, SO50, AO7, VO52, should all have passes during that time. Contact friends at other university clubs and get them to join in.

Please QSL all the stations you work as we are planning on creating an award for working college club stations on satellite. This makes for a great public image for your school and rewards the stations for allowing us coordinated use of such valuable time on the birds.   Make sure to work each other as well and we will also create a special award for college clubs that work and confirm the most other club stations on the birds!

Let's make College Satellite nights a monthly event. Currently we have it set for the first Thursday of the month. If you would like to work on a team creating the awards and publicizing these events please let me know at jgarlitz@ufl.edu. It would help to have on-air moderators from the east coast, central and west coast regions, to make sure hams using the birds know why we are there and to focus on working college stations. Stanford U and Kansas U have been very active in recent events and would be ideal for their two geographic areas.

73, Dr. Jay Garlitz, AA4FL

Gator ARC Faculty Advisor at UF

www.gatorradio.org <http://www.gatorradio.org/>

```
------
Submissions: ham-univ@w6yx.stanford.edu
Administrative requests: ham-univ-request@w6yx.stanford.edu
Human list administrator: ham-univ-approval@w6yx.stanford.edu
```

```
From 4773791669484073052
X-Google-Thread: a4a23d5f63,abffa1cc1452e3c4,start
X-Google-Attributes: gida4a23d5f63,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII
Path: g2news1.google.com!news1.google.com!newsfeed2.dallas1.level3.net!
news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-340 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Mon, 7 Dec 2009 14:06:46 EST
Organization: The Radio Amateur Satellite Corporation
Lines: 327
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <001001ca7770$70acdd60$52069820$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;charset="iso-8859-1"
Content-Transfer-Encoding: quoted-printable
X-Trace: reader1.panix.com 1260212806 1288 166.84.1.6 (7 Dec 2009 19:06:46 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Mon, 7 Dec 2009 19:06:46 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news1.google.com rec.radio.amateur.space:294 rec.radio.info:1089
```

AMSAT NEWS SERVICE
ANS-340

ANS is a free, weekly, news and information service of AMSAT North

America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* Magnetic Flip Experiment Aboard AO-51 Successfull
* OSCAR-11 REPORT 30 November 2009
* ARISS Status - 30 November 2009

SB SAT @ AMSAT $ANS-340.01
Magnetic Flip Experiment Aboard AO-51 Successfull

AMSAT News Service Bulletin 340.01
  From AMSAT HQ SILVER SPRING, MD.
December 6, 2009
To All RADIO AMATEURS
BID: $ANS-340.01

Since its launch AMSAT-Echo AO-51 has carried a spacecraft attitude adjustment experiment which was tested for the first time this week. The experiment contains a "reversible" magnet which will align the spacecraft with Earth's magnetic field.

On the December 2, 2242 UTC pass of AO-51 AMSAT-NA VP Operations Drew Glasbrenner, KO4MA issued the command to reverse the magnet and "flip" the orientation of the satellite. The first effect of the experiment was expected to be some changes in signal levels and patterns. AO-51's 435 MHz downlink was expected to become slightly weaker in the northern hemisphere and slightly stronger in the southern hemisphere.

ZL2BX reported, "With two usable passes over ZL last night the most notable feature was the frequent polarity shifts. Certainly good strong signals but difficult to tell how it compares to previous signal levels."

IW4DVZ reported results from a contact with EI8JB, "For me nothing changed, I received from AO-51 the same strong signal as usual."

W6ZKH reported the only difference were frequent polarity changes. The signal strength here on the West Coast seemed to be the same as before.

Tom Clark, K3IO offered an explanation for the received signal changes, "Since angular momentum must be conserved when you "flip" the spacecraft it should precess (probably looking like tumbling) until the momentum dampers absorb the change. Keep an eye on the solar panel currents and I'll bet the spin rate will change."

Drew concluded, "We are still sifting through the telemetry, but as Tom suggested in his email, the satellite is precessing (wobbling) quite severely. This will calm down as the hysteresis rods do their job. Initial reports from Australia and New Zealand indicate stronger signals, and about the same from South Africa. There are some peculiar things about the magnetic field near South Africa, so that doesn't surprise me too much, but is worth digging into once we get the whole orbit telemetry down."

The AO-51 Command Team appreciates any signal reports or observations for the next few days that you can email to ao51-modes@amsat.org or ko4ma@amsat.org. In a week or so the Command Team expects to re-orient AO-51 back to its original attitude.

Twitter users can receive tweets from the AO-51 command team at http://twitter.com/AMSAT or by adding "AMSAT" to your follow list.

[ANS thanks the AO-51 Command Team for the above information]

/EX

SB SAT @ AMSAT $ANS-340.02
OSCAR-11 REPORT 30 November 2009

AMSAT News Service Bulletin 340.02
  From AMSAT HQ SILVER SPRING, MD.
December 6, 2009
To All RADIO AMATEURS
BID: $ANS-340.02

This report covers the period from 21 April 2008 to 30 November 2009.

The satellite unexpectedly resumed transmissions recently. It was first heard by Keith N4ZQ on 19 November 2009 and transmissions continued until it switched OFF on 27 November. It was last heard by Tetsu JA0CAW at 23:59 UTC 26 November 2009. Previously, it was last heard by Peter ZL3TC on 23 April 2008, on a single pass.

Study of the satellite's behavior had suggested that its battery would not sustain operation during solar eclipses, and the watchdog timer would switch the satellite OFF after less than an orbit. Eclipses are now occur during every orbit and will continue for many years. In practice this meant that OSCAR-11 would only be heard occasionally by stations monitoring the frequency while listening for other satellites.

During this period of inactivity the satellite achieved 25 years in orbit on 01 March 2009. Congratulations to Professor Sir Martin Sweeting, his team at the University of Surrey and participating amateur radio groups, for this fine achievement.

Good signals have been received by stations located all over the world during this recent period of activity and telemetry has been decoded successfully. However, the satellite has only transmitted when in sunlight. I have been overwhelmed by the number of reports received, too many to list individually! Many thanks to everyone who sent email reports or posted to AMSAT-BB.

The telemetry is unchanged from the 2008 downloads. The on-board clock is now 241 days slow. When last received in 2008 it was 83 days slow. The increasing error suggests that the clock may be stopping, when the satellite is in eclipse.

The exact date when the satellite started transmitting is not known, so if the watchdog timer was reset, the next transmissions might start around 16 December, however if the timer went through its full operating cycle, transmissions could resume around 06 December.

The Beacon frequencies are -

VHF 145.826 MHz. AFSK FM ASCII Telemetry

UHF 435.025 MHz. OFF

S-band 2401.5 MHz. OFF

The satellite is now subject to eclipses during every orbit. Long term predictions indicate that eclipses will occur until 2019, when there will be some eclipse free periods until 2023. However these very long term predictions should be regarded with caution, as large tracking errors can accumulate over long periods of time.

When telemetry was last received it showed that one of the solar arrays had failed, and there was a large unexplained current drain on the main 14 volt bus. After 25 years in orbit the battery has undergone over 100,000 partial charge/discharge cycles, and observations suggest that it cannot power the satellite during eclipses lasting more than about ten minutes, or sometimes even during periods of poor solar attitude.

RECEPTION REPORTS REQUESTED!

Please send reception reports to xxxxx@amsat.org (replace xxxxx by g3cwv) or post to amsat-bb. If you have a file, please let me know what you have, before sending it!

The satellite transmits on 145.826 MHz., set receiver to NBFM. OSCAR-11 has a characteristic sound, rather like raspy slow morse code, sending "di di dah dah dah dah dah dah dah" sent over five seconds. If you are receiving a very weak signal, switch the receiver to CW or SSB. You should hear several sidebands around the carrier frequency, should be able to hear the characteristic 'morse code like' sound on at least one sideband.

Please note that you need a clean noise free signal to decode the signals. There is an audio clip on my OLD website www.users.zetnet.co.uk/clivew/ which may be useful for identification and as test signal for decoding.

The current status of the satellite, is that all the analogue telemetry channels, 0 to 59 are zero, ie they have failed. The status channels 60 to 67 are still working. The real time clock is showing a large accumulated error, although over short periods timekeeping is accurate to a few seconds per month. When last heard the clock was 241 days slow. The day of the month has a bit stuck at 'one' so the day of the month may show an error of +40 days for some dates. The time display has switched

into 12 hour mode. Unfortunately, there is no AM/PM indicator, since the

time display format was designed for 24 hour mode.

The spacecraft computer and active attitude control system have switched OFF, ie. the satellite' attitude is controlled only by the passive gravity boom gradient, and the satellite is free to spin at any speed.

The watchdog timer now operates on a 20 day cycle. The ON/OFF times have tended to be very consistent. The average of many observations show this

to be 20.7 days, ie. 10.3 days ON followed by 10.4 days OFF. However, poor solar attitude may result may result in a low 14 volt line supply, which may cause the beacon to switch OFF prematurely, and reset the watchdog timer cycle. When this occurs, the beacon is OFF for 20.7 days.

OSCAR-11 was the second satellite from the University of Surrey, http://www.ee.surrey.ac.uk/SSC. It was designed, built and launched, within a time scale of six months, by a team headed by Martin Sweeting G3YJO. Amateur radio groups working at various locations in the world, also contributed to the project. It used commercially available 'off the shelf' components (COTS). Following the success of these satellites,

in 1985 Surrey Satellite Technology Ltd. www.sstl.co.uk was formed, as a commercial venture. This grew into a major company which has produced over 30 small satellite projects for a global market.

The University of Surrey has recently sold it's major shareholding in SSTL to EADS-Astrium. The joint company will therefore have the experience of manufacturing large and small satellites, for geo-synchronous and low earth orbits.

In regognition of his work, Martin G3YJO, was appointed Professor at the University of Surrey. He received an OBE in the 1995 Queens birthday honours list, and in 2002 a knighthood in the New Year's honours list.

Listeners to OSCAR-11 may be interested in visiting my websites. If you need to know what OSCAR-11 should sound like, there is a short audio clip for you to hear. The last telemetry received from the satellite is available for download. The website contains an archive of news & telemetry data which has now been updated. It also contains details about using a soundcard or hardware demodulators for data capture. There is software for capturing data, and decoding ASCII telemetry. The URL is http://www.users.zetnet.co.uk/clivew/ However, please note that this site is no longer being updated, and the latest news and information will and will be uploaded to my new site which is currently being constructed at http://www.g3cwv.co.uk.

If you place this bulletin on a terrestrial packet network, please use the bulletin identifier $BID:U2RPT145.CWV, to prevent duplication.

73 Clive G3CWV xxxxx@amsat.org (please replace xxxxx by g3cwv)

[ANS thanks Clive, G3CWV, for the above information]

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SB SAT @ AMSAT $ANS-340.03
ARISS Status - 30 November 2009

AMSAT News Service Bulletin 340.03
From AMSAT HQ SILVER SPRING, MD.
December 6, 2009
To All RADIO AMATEURS
BID: $ANS-340.03

1. De Winne Speaks with Dumbleyung Primary School through ARISS

On Thursday, November 26, Dumbleyung Primary School in Western Australia took part in an Amateur Radio on the International Space Station (ARISS) contact with Frank De Winne, ON1DWN via telebridge station VK4KHZ in Australia. To prepare for the contact, students studied Earth, its structure and the solar system. As part of the ARISS event, students in Years 5 -7 gave presentations of their space work and viewed footage of the ISS as well as video of an astronaut interview. All 21 children had their questions answered during their radio contact and ABC (Australian Broadcasting Corporation) News covered the event.

2. Don Bosco Institut Experiences ARISS Contact

On Thursday, November 26, an Amateur Radio on the International Space Station (ARISS) contact was held between Institut Don Bosco in Bruxelles,
Belgium and Frank De Winne on the ISS. The connection was made possible through telebridge station ON4ISS in Belgium. Students asked 19 questions
of the astronaut during the ISS pass. Don Bosco is a secondary industrial

technical school with an enrollment of approximately 750 students and offers courses in carpentry, electricity, mechanics, computing, printing

and electronics.

3. ARISS Contact held with Katholieke Centrumscholen Sint-Truiden Students

Students attending Katholieke Centrumscholen Sint-Truiden in Sint-Truiden, Belgium experienced a successful Amateur Radio on the International Space Station (ARISS) contact with Frank De Winne on Thursday, November 26 via telebridge station ON4ISS in Belgium. Twenty questions were asked and answered. In order to prepare for the radio contact, the students studied astronomy and science. In addition, the school headmaster talked to the youth about the ISS and his own experiences during two "space camps" in the U.S. (Huntsville and Kennedy Space Center).

4. ARRL Covers Installation of Columbus Module Antennas

The American Radio Relay League (ARRL) ran an article about the new antennas that were installed on the Columbus module. To view the story, which ran in the November 25 issue of the ARRL Letter, see:
https://www.arrl.org/arrlletter/index.html?issue=2009-11-25

5. ARISS News on Amateur Radio Newsline

On November 27, Amateur Radio Newsline Report 1685 reported on the new Columbus module ARISS (Amateur Radio on the International Space Station) antenna. To view "Ham Radio in Space: ISS Gets New Dual Band Antenna," see: ftp://ftp.arnewsline.org/quincy/News/news.txt

6. New Web Site for ARISS-Brazil

ARISS Brazil recently formed a partnership with the internet portal Di�rio da Produ��o.com to publicize ARISS activities in Brazil and

South America. To view the Web site, go to: http://diariodaproducao.com/

[ANS thanks Carol, KB3LKI, for the above information]

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In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits.

Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Lee McLamb, KU4OS

From 9095238920458663244
X-Google-Thread: addc8bf063,30156562ed5d0998,start
X-Google-Attributes: gidaddc8bf063,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!news.glorb.com!feeder.erje.net!
newsfeed1.swip.net!news.astraweb.com!border5.a.newsrouter.astraweb.com!not-for-
mail
From: Chris Steyaert <observations@rmob.org>
Newsgroups: rec.radio.amateur.space,sci.astro.amateur
Subject: Radio Meteor Obs. Bull. November 2009   Leonids
Date: Mon, 07 Dec 2009 20:39:18 +0100
Message-ID: <3fmqh5duqba767jifr5d5jvik0elhlbl3v@4ax.com>
X-Newsreader: Forte Agent 5.00/32.1171
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Lines: 13
Organization: Unlimited download news at news.astraweb.com
NNTP-Posting-Host: d585ef9d.news.astraweb.com
X-Trace: DXC=`_W\I=ABeNUW]I=Ra]NaiPL?0kYOcDh@Z0`196N?Z=H]kgO2?\8Y2iZG?
ifhhgG3CQRT:c`9<^MeZ5dB\KQgQX<W
Xref: g2news1.google.com rec.radio.amateur.space:295 sci.astro.amateur:27396

Radio Meteor Observation Bulletin No. 196 of November 2009 (99 K) is available now as

http://www.rmob.org/rmobtext/rmob0911.txt

More information and the visual presentation of the hourly forward scatter counts can be found on

http://www.rmob.org

Chris

From 3876891485724872042
X-Google-Thread: a4a23d5f63,7fbd3516035891d4,start
X-Google-Attributes: gida4a23d5f63,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!novia!nx02.iad01.newshosting.com!newshosting.com!

```
198.186.194.249.MISMATCH!transit3.readnews.com!news-out.readnews.com!news-
xxxfer.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-350 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Thu, 17 Dec 2009 18:33:17 EST
Organization: The Radio Amateur Satellite Corporation
Lines: 1835
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <007301ca7f71$645f0020$2d1d0060$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1261092797 13235 166.84.1.6 (17 Dec 2009 23:33:17 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Thu, 17 Dec 2009 23:33:17 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news1.google.com rec.radio.amateur.space:296 rec.radio.info:1107
```

This report is organized into four (4) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - deborbited/returned satellites

SB SAT @ AMSAT W8ISS $WSR-350.S1
WSR 350 Part 1 12/16/2009

AMSAT NEWS SERVICE BULLETIN 350.S1
FROM AMSAT HQ SILVER SPRING, MD, December 16, 2009
TO ALL RADIO AMATEURS
BID: $WSR-350.S1

XW-1 CAS-1
Catalog Number:
Launch Date: December 15, 2009
Status: Commissioning

Callsign:

Uplinks: 145.8250 MHz FM, PL 67.0 Hz.
           145.9250 - 145.9750 MHz SSB/CW
           145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
           435.7650 - 435.7150 MHz SSB/CW
           435.6750 MHz AFSK 1200 BPS

Beacon: 435.7900 MHz CW

Mode and Antenna Polarization:
V:
U:

IARU coordination page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108

For more information about XW-1 (CAS-1):
http://www.camsat.cn
[12162009]
=====
SO-67 SumbandilaSat
Catalog Number: 35870
Launch Date: September 17, 2009

Status: Commissioning

Callsign: ZS0SUM

Uplink: 145.875MHz FM tone 233.6 Hz
Downlink: 435.345MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

For more information about SO-67:
http://www.amsatsa.org.za/
[11212009]
=====
DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008

Status: Operational
Current Mode: Science Mode - Beacon ONLY

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink: 435.530 to 435.570 MHz

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68
[02122009]
=====
VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.859330 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is active. Each transponder has a different beacon.
[08072008]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Modes:
FM Repeater ONE
Uplink: 145.880MHz FM
Downlink: 2401.200Mhz FM
FM Repeater TWO
Uplink: OFF
Downlink: OFF
BBS
Uplink: OFF
Downlink: OFF
Telemetry

Downlink: 435.150MHz 9k6

Analog voice downlink:	435.300 MHz FM
	435.150 MHz FM
	2401.200 Mhz FM
Analog voice uplink:	145.860 MHZ FM
	145.880 MHz USB
	145.920 MHz FM
	1268.700 MHz FM
Digital Downlinks:	435.150 MHz FM 38k4 PBP, 1 watt output
	435.150 MHz FM 9k6 Pacsat Broadcast Protocol
	2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:	145.860 MHz FM 9k6 Pacsat Broadcast Protocol
	1268.700 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon:	435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[12162009]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz. The order of operation is thus: (allow for Doppler as necessary):

1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10 minute timer.

[05282007]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: RECOVERY
Current Mode: V/u (Mode JA)

Voice/CW (Mode JA)
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage:
http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts.htm

[09062009]
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993

Status: Operational

```
Current Mode: V/u

Uplink:   145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[03232009]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational

Current Mode: Alternating between Mode A and B every 24 hours

Uplink:   145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink:  29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons:   29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
[02122009]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - V/u
                      Voice -       V/v
                      BBS -         V/v
                      APRS -        V/v
                      SSTV -        V/v


Expedition 22 Crew:
Commander:                Jeff Williams  KD5TVQ
Flight Engineer:          Maxim Suraev
```

Available Modes and Frequencies:

Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[12012009]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-350.S2
WSR 350 Part 2 12/16/2009

AMSAT NEWS SERVICE BULLETIN 350.S2
FROM AMSAT HQ SILVER SPRING, MD, December 16, 2009
TO ALL RADIO AMATEURS
BID: $WSR-350.S2

```
XW-1 CAS-1
Catalog Number:
Launch Date: December 15, 2009
Status: Commissioning

Callsign:

Uplinks:   145.8250 MHz FM, PL 67.0 Hz.
           145.9250 - 145.9750 MHz SSB/CW
           145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
           435.7650 - 435.7150 MHz SSB/CW
           435.6750 MHz AFSK 1200 BPS

Beacon:    435.7900 MHz CW

IARU coordination page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108

For more information about XW-1 (CAS-1):
http://www.camsat.cn
[12162009]
=====
SwissCube
Catalog Number: 35932
Launch Date: September 23, 2009

Status: In Orbit

Callsign: HB9EG

Beacon(100mw): 437.5050MHz CW
Beacon(1w): 437.5050MHz FSK 1k2bps
[11112009]
=====
UWE-2
Catalog Number: 35934
Launch Date: September 23, 2009

Status: In Orbit

Beacon(500mw): 437.3850 MHz AFSK 1k2bps
               437.3850 MHz FSK 9k6bps
[1112009]
=====
ITUpsAT1
Catalog Number: 35935
Launch Date: September 23, 2009

Status: In Orbit

Beacon(100mw): 437.325MHz CW
Beacon(1w): 437.325MHz 19k2bps
[11112009]
=====
BEESAT
Catalog Number: 35933
Launch Date: September 23, 2009

Status: In Orbit

Callsign: DP0BEE

Beacon(100mw): 436.000MHz CW
Beacon(500mw): 436.000MHz GMSK 4k8bps
[11112009]
=====
Pollux
Catalog Number:
Launch Date: July 31, 2009

Status: Operational

Callsign: POLLUX-1

Downlink: 145.825MHz 1k2 AX.25
[10042009]
=====
Castor
Catalog Number:
Launch Date: July 31, 2009

Status: Operational

Callsign: KD4HBO-1

Downlink: 145.825 MHz 1k2 AX.25
[10042009]
=====
BEVO-1 (DRAGONSAT-1)
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Operational

Downlink: 437.325 MHz 9k6 GMSK
          437.325 MHz CW 20wpm
[07312009]
=====
AggieSat2 (DRAGONSAT-2)
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Operational
```

Downlink: 436.250 MHz 9k6 FHSS
[11112009]
=====
CP-6
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Commissioning

Downlink: 437.365 MHz 1k2 AFSK
[06052009]
=====
HAWKSAT 1
Catalog number: 35003
Launch Date: May 19, 2009

Status: ?

Downlink: 437.345 ?
[06052009]
=====
Pharmasat
Catalog Number: 35002
Launch Date: May 19, 2009
Status: Commissioning

Downlink: 437.465 MHz 1k2 AFSK
[06052009]
=====
ANUSAT
Catalog Number: 34808
Launch Date: April 20, 2009

Status: ?

Downlink: 435.000 MHz
Uplink: 145.800 MHz

Telemetry: 137.400 MHz
[05112009]
=====
SOHLA-1 (ASTRO TECH.)
Catalog Number: 33496
Launch Date: January 23, 2009

Status: Commisioning

Proposed Frequencies and Modes:
Downlink: 437.505 MHz AFSK/CW
Beacon: 437.505 MHz AFSK/CW

Callsign:

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=101
[03232009]
=====
KAGAYAKI (Solan Co.)
Catalog Number: 33495?
Launch Date: January 23, 2009

Status: In Orbit

Downlink: 437.375 MHZ   FSK9k6/CW
Beacon: 437.375 MHz   FSK9k6/CW

IARU coordination status page:

AMSAT-NA webpage:

[01152009]
=====
STARS (Kagawa Univ.) (Twin Satellites)
Catalog Number: 33498
Launch Date: January 23, 2009

Status: Operational ?

Downlinks: 437.485 MHz FM/CW
           437.465 MHz FM/CW
Beacons: 437.305 MHz FM/CW
           437.275 MHz FM/CW

Callsigns: JR5YBN
           JR5YBO

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=99

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=121&retURL
=/satellites/status.php
[022152009]
=====
KKS-1 (Tokyo MCIT)
Catalog Number: 33499
Launch Date: January 23, 2009

Status: Operational

Downlink: 437.455 MHz AFSK/CW
Beacon: 437.385 MHz AFSK/CW

Callsign: JQ1YYY

IARU coordination status page:

http://www.amsat.org.uk/iaru/finished_detail.asp?serial=107

AMSAT-NA webapge:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=120&retURL
=/satellites/status.php
[02212009]
=====
PRISM (Tokyo Univ.)
Catalog Number: 33493
Launch Date: January 23, 2009

Status: Operational ?

Downlink: 437.425 MHz AFSK/GMSK/CW
Beacon: 437.250 MHz AFSK/GMSK/CW

Callsign: JQ1YCX

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=97

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=119&retURL
=/satellites/status.php
[02212009]
=====
RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number: 32953
Launch Date: May 23, 2008

Status: Operational

Curent Modes: Telemetry
              Audio
              Images

Downlinks: 435.315 MHz
           435.215 MHz

AMSAT-NA website:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=115&ret
URL=/satellites/status.php

Official website:
http://www.npopm.com/?cid=leoca&caid=43
[02122009]
=====
CanX-2
Catalog number: 32790
Launch Date: April 28, 2008

Status: Operational in range of ground station only

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web
page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[02212009]
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.425 MHz 1k2 baud packet

For the latest project status update please visit the AAUSAT-II web
page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[02212009]
=====
CO-65 CUTE-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008

Status: Digipeater

Downlink: 437.475 MHz 9k6 Packet
Uplink: 1267.600 Mhz

Telemetry Beacon:
Downlink: 437.2750 MHz CW

For the latest project status update please visit the Cute-1.7+APD II
web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78

Command Station blog website:
http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=112&retURL
=/satellites/status.php
[02212009]
=====
Compass-1
Catalog number: 32787

```
Launch Date: April 28, 2008

Status: Operational

Current Mode: 4k8 MSK packet

Uplink:   145.980 MHz FM
Downlink: 437.275 Mhz CW
          437.405 MHz Packet

For the latest project status update please visit the Compass 1 web
page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=114&retURL
=/satellites/status.php
[04272009]
=====
CO-66 Seeds II
Catalog number: 32791
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.485 MHz

Callsign: JQ1YGU

For the latest project status update please visit the Seeds 2 web
page: http://cubesat.aero.cst.nihon-u.ac.jp/english/seeds_2_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=113&retURL
=/satellites/status.php
[02212009]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode:  /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon:    435.245 MHz CW
```

Callsign: K5USL

TLM and CW interchange every 30 seconds.

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=94&retURL=/satellites/status.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=72
[02122009]
=====
CP3
Catalog Number: 31129
Launch Date: April 17,2007

Status: Operational

Current Mode: /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[02122009]
=====
GENESAT-1
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Current Mode: /u

Callsign: KE7EGC

Telemetry Beacon Downlink: 437.0695 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[091512009]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon: 437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/xivpicte.htm
[02212009]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003

Status: ?????

Current Mode: /u

Beacon: 436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=96&retURL
=/satellites/status.php

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[06082009]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Operational?

Uplink: 1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=56
[02122009]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Modes:
FM Repeater ONE
Uplink: 145.880MHz FM
Downlink: 2401.200Mhz FM

FM Repeater TWO
Uplink: OFF
Downlink: OFF
BBS
Uplink: OFF
Downlink: OFF
Telemetry
Downlink: 435.150MHz 9k6

Analog voice downlink:	435.300 MHz FM
	435.150 MHz FM
	2401.200 Mhz FM
Analog voice uplink:	145.860 MHZ FM
	145.880 MHz USB
	145.920 MHz FM
	1268.700 MHz FM
Digital Downlinks:	435.150 MHz FM 38k4 PBP, 1 watt output
	435.150 MHz FM 9k6 Pacsat Broadcast Protocol
	2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:	145.860 MHz FM 9k6 Pacsat Broadcast Protocol
	1268.700 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon:	435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[12162009]

=====

QuakeSat
Catalog Number: 27845
Launch Date: June 30, 2003

Status: Telemetry only

Current Mode: 9600 baud data packet

Mode U packet
Downlink: 436.675 MHz 9k6 BPS

Quakesat webpage:
http://www.quakefinder.com/services/quakesat-ssite/

```
[04272009]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=69&retURL
=/satellites/status.php
[02212009]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Telemetry only

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink:        144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[03302009]
=====
RS-22 RADIO SPORT RS-22
Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only

Current Mode:  /u

CW Beacon - 435.352 MHz
            145.818 MHz

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=76&retURL
=/satellites/status.php
```

```
[02212009]
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990

Status: CW Beacon only

Uplinks:          145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink:      437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[03162009]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984

Status: Non-operational.

Current Mode:  /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon:          435.025 MHz
Mode-S Beacon:     2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[12162009]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - V/u
                      Voice -       V/v
                      BBS -         V/v
```

APRS - V/v
SSTV - V/v

Expedition 22 Crew:
Commander: Jeff Williams KD5TVQ
Flight Engineer: Maxim Suraev

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[12012009]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-350.S3
WSR 350 Part 3 12/16/2009

AMSAT NEWS SERVICE BULLETIN 350.S3
FROM AMSAT HQ SILVER SPRING, MD, December 16, 2009
TO ALL RADIO AMATEURS
BID: $WSR-350.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

CP4
Catalog Number: 31122
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon: 437.325 MHz CW

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=79
[10022008]
=====
LIBERTAD-1
Catalog Number: 31128
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink: 145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[02122009]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: Non-Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder: 145.825 Mhz FM
[01012009]
=====
NCUBE-2
Catalog number: 28897

Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 MHz FM 67Hz CTCSS
Voice Downlink: 2401.835 MHz FM
Packet Up/Downlink: 437.250 MHz 9k6 packet
Packet Downlink   2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non-Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[08132007]
=====
CANX-1
Catalog Number: 27847
Launch Date: June 30, 2003

Status: Non-Operational

Downlink: 437.8800 MHz AFSK 1k2bps
[06052009]
=====
DTUSAT
Catalog Number: 27842
Launch Date: June 30, 2003

Status: Non-Operational

Current Mode: 2k4 AFSK Packet last reported

Downlink: 437.475MHz

Officail webpage: http://dtusat1.dtusat.dtu.dk/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=101&retURL=satellites/all_oscars.php
[02212009]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)

Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Telemetry only

Uplinks: 145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[03302009]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK

Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks

V-band: 145.840 - 145.990 MHz CW/LSB
U-band: 435.550 - 435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks

```
---------
S2-band:  2401.225 -  2401.475 MHz CW/USB
K-band:  24048.010 - 24048.060 MHz CW/USB
Beacon:   2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)
----------------------------
BEACON   General Beacon(GB)  Middle Beacon(MB)  Engineering Beacon(EB)
2 m                    none        145.898 MHz                    none
70cm            435.438 MHz        435.588 MHz             435.838 MHz
13cm(1)        2400.188 MHz       2400.338 MHz            2400.588 MHz
13cm(2)        2401.173 MHz       2401.323 MHz            2401.573 MHz
3cm           10450.975 MHz      10451.125 MHz           10451.375 MHz
1.5cm         24047.885 MHz      24048.035 MHz           24048.285 MHz
[07162007]
=====
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink:    145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: 25636
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater:         436.250 MHz
```

```
Uplinks: Mode B Repeater:  145.825 MHz
Mode J Digipeater:         145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Telemetry only

Current Modes:
Telemetry : /u

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM
```

```
Broadcast Callsign: 4XTECH-11
BBS Callsign:       4XTECH-12

More information of GO-32 can be found at:
http://asri.technion.ac.il/techsat/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=14&retURL
=/satellites/status.php
[12012009]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink:   145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
MO-30 UNAMSAT-2
Catalog Number: 24305
Launch Date: September 5, 1996

Status: Non-operational

Downlink:       435.1380 MHz AFSK 1200 BPS
Downlink:       435.2060 MHz AFSK 1200 BPS
Uplink:         145.8150 MHz AFSK 1200 BPS
Uplink:         145.8350 MHz AFSK 1200 BPS
Uplink:         145.8550 MHz AFSK 1200 BPS
Uplink:         145.8750 MHz AFSK 1200 BPS
[06042009]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Non-operational

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign:       POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
```

[01012009]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks: 145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
AO-24 ARSENE
Catalog Number: 22654
Launch Date: May 13, 1993

Status: Non-operational

Uplink: ?
Downlink: 145.975 MHz 1k2bps FM AFSK
          2446.540 MHz

Broadcast callsign:
BBS:
[11212009]
=====
KO-23 KITSAT
Catalog number: 22077

```
Launch date: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz
```

```
More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
[05012006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: non-operational

Current Mode:  V/u

Uplink:         145.900 MHz FM 1200-baud Manchester FSK (reserved)
                145.920 MHz FM VOICE
                145.940 MHz FM 1200-baud Manchester FSK (reserved)
                145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink:       437.026 MHz USB VOICE
                (1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[07242009]
=====
UO-15 UoSAT-4
Catalog Number: 20438
Launch Date: January 22, 1990

Status: Non-operational

Uplink: ?
Downlink: 435.1250MHz (?)
          435.1200MHz (?)
[06042009]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon:   145.810 MHz (unmodulated carrier)
```

```
W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink  29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
Beacons:   29.450 MHz
          435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational
```

Uplink: 145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB

Beacon 1: 29.352 MHz (intermittent)
Beacon 2: 29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB

Beacon: 145.860 MHz

Robot: 145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-350.S4
WSR 350 Part 4 12/16/2009

AMSAT NEWS SERVICE BULLETIN 350.S4

```
FROM AMSAT HQ SILVER SPRING, MD, December 16, 2009
TO ALL RADIO AMATEURS
BID: $WSR-350.S4

THE FOLLOWING SATELLITES HAVE RE-ENTERED OR HAVE BEEN RETURNED SAFELY:

NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: July 28, 2008

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[01012009]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink:      145.825 Mhz FM APRS AX25
APRS Uplink:        145.825 MHz FM APRS AX25
Voice/PSK31 Uplink:  28.120 MHz

Packet to Voice ID: RAFT
[06112007]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Re-Entered
Re-entered: June 18, 2008

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon:             437.2750 MHz CW
```

Callsign: JR8YJT
[01012009]
=====
SO-43 Starshine 3
Catalog Number: 26929
Launch Date: September 30, 2001

Status: Re-Entered
Re-entered: January 21, 2003

Beacon: 145.825Mhz
[02212009]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

- AMSAT News Service (ANS)
- General satellite discussion (AMSAT-BB)
- Orbit data (KEPS)
- Manned space missions (SAREX)
- District of Columbia area (AMSAT-DC)
- New England area (AMSAT-NE)
- AMSAT Educational Liaison mailing list (AMSAT-EDU)
- AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional

benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at}
amsat.org
NNNN
/EX

```
From -4947283583839206646
X-Google-Thread: a4a23d5f63,d5d631ff33e45d69,start
X-Google-Attributes: gida4a23d5f63,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!newsfeed2.dallas1.level3.net!
news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-354 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sat, 19 Dec 2009 21:45:17 EST
Organization: The Radio Amateur Satellite Corporation
Lines: 372
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <001a01ca811e$90519c70$b0f4d550$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1261277117 22599 166.84.1.6 (20 Dec 2009 02:45:17 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 20 Dec 2009 02:45:17 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
```

x-cr-hashedpuzzle: AblD Anc5 AuVU Ayph BBQa BNrr CMrw DUy3 FYg8 FhLE GoMy H8Wa I6u6 JT6o J49c Krl3;1;cgBlAGMALQByAGEAZABpAG8ALQBpAG4AZgBvAEAAcABhAG4AaQB4AC4AYwBvAG0A;Sosha1_v1;7;{2CE04CF6-8DAD-429F-8205-63738D0F24EC};awA5AGoAawBtAEAAYwBvAG0AYwBhAHMAdAAuAG4AZQB0AA==;Sun, 20 Dec 2009 02:45:12 GMT;QQBOAFMALQAzADUANAAgAEEATQBTAEEAVAAgAE4AZQB3AHMAIABTAGUAcgB2AGkAYwBlACAAVwBlAGUAawBsAHkAIABCAHUAbABsAGUAdABpAG4AcwA=
x-cr-puzzleid: {2CE04CF6-8DAD-429F-8205-63738D0F24EC}
Xref: g2news1.google.com rec.radio.amateur.space:297 rec.radio.info:1114

AMSAT NEWS SERVICE
ANS-354

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:

* AMSAT China's XW-1 Satellite Testing Proceeding Well
* AO-51 Schedule to Support SKN
* January 2010 AMSAT Kid's Day on AO-51
* Students and Teachers Invited to Fly a File on ARISSAT-1
* NASA Revised EVA Schedule Affects ARISSat
* Satellite Shorts From All Over
* ESA and CNES to Fly Atomic Clock to ISS Columbus Module

SB SAT @ AMSAT $ANS-354.01
AMSAT China's XW-1 Satellite Testing Proceeding Well

AMSAT News Service Bulletin 354.01
>From AMSAT HQ SILVER SPRING, MD.
December 20, 2009
To All RADIO AMATEURS
BID: $ANS-354.01

Amateur satellite operators worldwide have reported receiving strong signals on the telemetry beacon of China's XW-1 satellite launched on December 15, 2009.

The satellite is currently being commissioned but all three amateur radio modes, which include an V/U FM repeater, V/U linear transponder, and V/U AFSK packet, have been tested.

Michael Chen, BD5RV/4 reported, "I managed to operate the special event station BT3WX to work several E2, BY, VR2, XX9 throughout an evening pass of XW-1 using the FM transponder. It was the first open test of this bird's transponder. Everything works just great!"

AFSK packets were active over Japan with JA0CAW receiving the downlink on 435.675 MHz AFSK 1200bps.

JE1CVL, JH1EKH, BD4SY, JF2CTY, JH1BCL, JA5BLZ succeeded in a QSO over Japan using the linear transponder in 'VHF(LSB) up and UHF (USB) Linear Transponder Inverting on 145.950 MHz (Up) and 435.740 MHz (Down).

The XW-1 communications payload includes a beacon and three cross band transponders operating in FM, linear, and digital modes.

Uplinks: 145.8250 MHz FM, PL 67.0 Hz.
145.9250 - 145.9750 MHz SSB/CW
145.8250 MHz AFSK 1200 BPS

Downlinks: 435.6750 MHz FM
435.7650 - 435.7150 MHz SSB/CW
435.6750 MHz AFSK 1200 BPS

Beacon: 435.7900 MHz CW

Users have posted videos on YouTube regarding XW-1:
http://www.youtube.com/watch?v=n4-0yuC4Sx4&feature=related
http://www.youtube.com/watch?v=WwyTZT6JkC4

Luciano Fabricio PY5LF has made a YouTube video showing his reception of the beacon: http://tinyurl.com/yjgett6

XW-1 was a secondary payload aboard the CZ-4C rocket from Taiyuan Satellite Launch Center into a sun-synchronous orbit about 1200 kilometers high. The primary payload of this launch is the Yaogen-8 Remote Sensing Satellite.

BD5RV/4 requests amateur radio operators send him audio recordings, notes on received content, your QTH, callsign, date/time of the XW-1 beacon you heard to AMSAT China by email. Later, you'll be able to upload it via web, but for now, email works. Send your files and information to michael.bd5rv@gmail.com.

XW-1 CW Telemetry Decoder by Mike Rupprecht, DK3WN can be downloaded from his web site at: http://www.dk3wn.info/software.shtml

You can get an updated copy of the XW-1 Telemetry Format at:
http://www.camsat.cn/index.php?option=com_phocadownload&view=category&
id=1:xw-1&download=1:xw-1-telemetry&Itemid=66 (careful - line wrap)

The XW-1 Store-forward Transponder User's Manual can be found on the AMSAT web at: http://www.amsat.org/amsat-new/satellites/documents/
XW-1_Store-forward_Transponder_Users_Manual.pdf (careful - line wrap)

Details of the XW-1 satellite are available at:

http://www.camsat.cn/index.php?option=com_content&view=article&id=56&
Itemid=67 (careful - line wrap)

[ANS thanks Michael Chen BD5RV/4 and Alan Kung, BA1DU for the above information]

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SB SAT @ AMSAT $ANS-354.02
AO-51 Schedule to Support SKN

AMSAT News Service Bulletin 354.02
>From AMSAT HQ SILVER SPRING, MD.
December 20, 2009
To All RADIO AMATEURS
BID: $ANS-354.02

The AMSAT AO-51 Operations Group reminds everyone that AO-51 will be configured to support CW operations during the annual Straight Key Night event. Participants may operate CW through AO-51 between 0000 and 2400 UTC on 1 January 2010, using a straight hand key.

AO-51 will be configured in the following mode during the event:
SSB/FM Repeater, V/U (CW QSOs only on Straight Key Night)
Uplink: 145.880 MHz USB
Downlink: 435.150 MHz FM

And don't forget to nominate someone you work for "Best Fist". Please send your nomination to w2rs@amsat.org. A list of those nominated will appear in ANS and the AMSAT Journal.

Have fun and enjoy AO-51!

[ANS thanks the AMSAT AO-51 Operations Group and Ray, W2RS for the above information]

/EX

SB SAT @ AMSAT $ANS-354.03
January 2010 AMSAT Kid's Day on AO-51

AMSAT News Service Bulletin 354.03
>From AMSAT HQ SILVER SPRING, MD.
December 20, 2009
To All RADIO AMATEURS
BID: $ANS-354.03

AMSAT-NA and the AO-51 Operations Group will sponsor Kid's Day on AO-51 on January 3, 2010. The event is open to all kids, worldwide.

We ask all amateur radio stations to give this short time window to promote satellite operations with kids, by actually showing a kid how to make contacts via AO-51, providing a station to contact, or stepping aside to allow others to make contacts with the kids. During the event, please limit contacts to stations that are operating with kids at the microphone. This should allow the kids to have a nice QSO and pass some information. Kids can tell their name, age, who is helping them operate on AO-51, where they live, and other information about themselves.

AO-51 will be configured in the following mode during the event.
Uplink: 145.880 MHz FM voice
Downlink: 435.300 MHz FM voice

See http://www.arrl.org/FandES/ead/kd-rules.html on the ARRL website for more Kids Day information.

Have fun and enjoy AO-51!

[ANS thanks the AO-51 Operations Committee for the above information]

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SB SAT @ AMSAT $ANS-354.04
Students and Teachers Invited to Fly a File on ARISSAT-1

AMSAT News Service Bulletin 354.04
>From AMSAT HQ SILVER SPRING, MD.
December 20, 2009
To All RADIO AMATEURS
BID: $ANS-354.04

On 3 February 2006, cosmonaut Valery Ivanovich Tokarev hand launched the Amateur Radio satellite SuitSat-1 from the ISS during an EVA (Extra Vehicular Activity = Spacewalk).

SuitSat-1 was a very special Amateur Radio satellite. A discarded Russian ORLAN Space Suit (in Russian a "Skafander") was equipped with an Amateur Radio transmitter, which transmitted telemetry and greetings from youngsters to the youth of the world in several languages.

In 2010, an Amateur Radio satellite will once more be hand launched from the International Space Station. It will be called ARISSat-1.

ARISSat-1 will again transmit messages recorded by students. Moreover, teachers and students are invited to fly a file aboard this amateur radio satellite.

The ARISSat-1 Team wishes to include on our new satellite a memory stick of files prepared by students. This should be a jpg or pdf of things the student has prepared such as a paper or a study done on a STEM (science, technology, engineering, math) topic, a drawing of space craft or a schematic, a journal kept on a STEM topic, a story or news article about a STEM subject, a photo of the class doing a hands-on STEM activity -- that type of thing.

Having the student's work be a part of ARISSat-1 means the student is a part of the satellite project and along for the spacewalk and deployment of ARISSat-1.

Readers of this Bulletin are invited to approach teachers and students and draw their attention on this opportunity to participate directly to a space flight for the honor of being part of space activities.

Dave Jordan, AA4KN, will take delivery of these files and copy them onto a memory stick. The quantity of files and the size of a file are unlimited since memory sticks provide for a very large amount of file space.

Files should be either .JPG or .PDF -- no Word documents, please.
Please send files to Dave Jordan's address -- <aa4kn@amsat.org>
He will look at all of them for content appropriate to students.

Files can be in any language as long as an English translation is also included as a text file.

If the file contains sound recordings and/or photos or names of persons, a "Talent Authorisation and Release" is requested. The appropriate document can be downloaded from
http://www.rac.ca/ariss/Talent_Release.htm

The permission slip has to be signed by the student or his/her guardian if the student is a minor.

The signed release form is to be mailed to:
AMSAT
Martha Saragovitz
850 Sligo Ave. Suite 600
Silver Spring, MD 20910

Deadline for submitting files: March 1st, 2010.

[ANS thanks the ARISS Team for the above information]

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SB SAT @ AMSAT $ANS-354.05
NASA Revised EVA Schedule Affects ARISSat

AMSAT News Service Bulletin 354.05
>From AMSAT HQ SILVER SPRING, MD.
December 20, 2009
To All RADIO AMATEURS

BID: $ANS-354.05

NASA has informed AMSAT that the schedule of work for EVAs at the International Space Station is being revised. The planned deployment of ARISSat-1 from the ISS is now being scheduled for either Fall 2010 or early 2011 rather than Spring 2010.

This schedule adjustment also impacts when ARISSat-1 will be flown to the Space Station with upload likely to take place sometime in Summer 2010 rather than in January.

These revisions were made in response to new higher priority work that must be done during the timeframe of the EVA that ARISSat-1 was originally scheduled in April 2010.

Overall, this revision helps ARISSat-1 because it provides additional time for testing of the spacecraft. Furthermore, it also ensures that the NASA Safety Review process for ARISSat-1 can be concluded prior to shipment of the spacecraft to Russia.

The major items to complete for ARISSat are the IHU software, PSU software, PSU testing and system testing. The structure is coming together well and the team looks forward to providing an innovative and reliable satellite this coming spring.

[ANS thanks Gould, WA4SXM for the above information]

/EX

SB SAT @ AMSAT $ANS-354.06
Satellite Shorts From All Over

AMSAT News Service Bulletin 354.06
>From AMSAT HQ SILVER SPRING, MD.
December 20, 2009
To All RADIO AMATEURS
BID: $ANS-354.06

+ SSTV pictures received during the Moscow Aviation Institute Experiment aboard the ISS on December 9 can be viewed in the ARISS SSTV Gallery at: http://www.amsat.org/amsat/ariss/SSTV/

+ Congratulations to Jean-Marie, F2IL for 10,000 contacts via AO-7. (Via Zeljko, 9A2EY)

+ On December 7 Juan Antonio, EA4CYQ had a contact with Piraja PS8RF in Brazil via AO-7 Mode B. Signals were reported to sound clear without any noise or distortion over the Atlantic Ocean.

+ AMSAT Area Coordinator for the Washington, D.C. - Maryland Areas, Pat Kilroy, N8PK will kick off the planning for the next AMSAT-DC gathering with a teleconference call on Thursday, January 7, 2010, at 7:00 P.M. Eastern Standard Time. Please RSVP for the telecon directly to Patrick.L.Kilroy@nasa.gov, and he will forward the meeting information to you.

+ A YouTube video showing how to make a VO-52 contact can be viewed at: http://tinyurl.com/ydpc6ru

[ANS thanks everyone for the above information]

/EX

SB SAT @ AMSAT $ANS-354.07
ESA and CNES to Fly Atomic Clock to ISS Columbus Module

AMSAT News Service Bulletin 354.07
>From AMSAT HQ SILVER SPRING, MD.
December 20, 2009
To All RADIO AMATEURS
BID: $ANS-354.07

The French space agency (CNES) and ESA have signed an agreement that paves the way for the launch of a high-accuracy atomic clock to be attached to the outside of the European Columbus laboratory onboard the International Space Station (ISS).

The PHARAO (Projet d'Horloge Atomique par Refroidissement d'Atomes en Orbite) atomic clock, which will be combined with another atomic clock, the Space Hydrogen Maser (SHM), to form ESA's Atomic Clock Ensemble in Space (ACES), will have an accuracy of 1x10-16, corresponding to a time error of about one second over 300 million years.

This new generation of atomic clocks in space will be instrumental in enabling accurate testing of Einstein's theory of general relativity. In addition, it will contribute to the accuracy and long-term stability of global timescales, such as Coordinated Universal Time (UTC). A dedicated microwave link will send the timing signal to the ground.

The atomic clock is designed for launch in the unpressurised cargo bay of the Japanese H-II Transfer Vehicle (HTV) or commercial SpaceX carrier in the second half of 2013. Once in orbit, it will be attached to Columbus' Earth-facing external payload platform using the Station Robotic Arm.

(Via SpaceDaily.com, see http://www.spacedaily.com/reports/PHARAO_Atomic_Clock_Agreement_Signed_By_ESA_And_CNES_999.html for full story.)

[ANS thanks SpaceDaily.com for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office. And with that please keep in mind that Santa's elves are actually subordinate Clauses.

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM
K9JKM at amsat dot org

From 2627594093725756968
X-Google-Thread: 8f86f75953,95bacbf2242369e6,start
X-Google-Attributes: gid8f86f75953,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: POLISH,Latin2
Path: g2news1.google.com!news2.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!newsfeed00.sul.t-online.de!t-online.de!news.nask.pl!
news.nask.org.pl!news.onet.pl!not-for-mail
From: "Adrian Szumilas" <szumiksp8aqk@poczta.onet.pl>
Newsgroups: rec.radio.amateur.space
Subject: SATELITA WX-1
Date: Sun, 20 Dec 2009 09:55:19 +0100
Organization: http://onet.pl
Lines: 37
Message-ID: <hgkopn$99e$1@news.onet.pl>
NNTP-Posting-Host: 78-131-155-140.tktelekom.pl
X-Trace: news.onet.pl 1261299319 9518 78.131.155.140 (20 Dec 2009 08:55:19 GMT)
X-Complaints-To: niusy@onet.pl
NNTP-Posting-Date: Sun, 20 Dec 2009 08:55:19 +0000 (UTC)
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.3598
X-RFC2646: Format=Flowed; Original
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.3350
Xref: g2news1.google.com rec.radio.amateur.space:298

Radioamatorzy pracuj�cy via satelity z ca�ego �wiata donie�li, �e sygna�y z bikonu WX-1 by�y bardzo silne.
Zosta� przetestowany r�wnie� transponder FM kt�ry dzia�a prawid�owo.
Pakiety AFSK dzia�a�y nad Japoni� na 435.675 AFSK MHz 1200bps.

JE1CVL, JH1EKH, BD4SY, JF2CTY, JH1BCL, JA5BLZ przeprowadzili ��czno�ci nad Japoni� przy transponderze VHF(LSB) up i UHF (USB) down
(145.950 MHz up i 435.740 MHz down).

Mo�liwo�ci WX-1

```
Uplinks:   145.8250 MHz FM, PL 67.0 Hz.
           145.9250 - 145.9750 MHz SSB/CW
           145.8250 MHz AFSK 1200 BPS

Downlinks: 435.6750 MHz FM
           435.7650 - 435.7150 MHz SSB/CW
           435.6750 MHz AFSK 1200 BPS

Beacon:    435.7900 MHz CW
```

Poni�ej link Luciano Fabricio PY5LF do filmu video pokazuj�cego odbi�r
bikona z WX-1 i efekt Dopplera.

http://tinyurl.com/yjgett6

BD5RV/4 prosi i wysy�anie raport�w audio z odbioru WX-1 z podaniem QTH
godziny, daty i znaku na adres e-mail - michael.bd5rv@gmail.com

XW-1 CW Telemetry Dekoder Mike Rupprecht, DK3WN mo�na �ci�gn�� ze strony
http://www.dk3wn.info/software.shtml

Adrian SP8AQK

From -3922759287131129564
X-Google-Thread: a4a23d5f63,f48c6f7351391932,start
X-Google-Attributes: gida4a23d5f63,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!npeer01.iad.highwinds-media.com!
news.highwinds-media.com!feed-me.highwinds-media.com!nx02.iad01.newshosting.com!
newshosting.com!198.186.194.249.MISMATCH!transit3.readnews.com!news-
out.readnews.com!news-xxxfer.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-361 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sun, 27 Dec 2009 18:26:05 EST
Organization: The Radio Amateur Satellite Corporation
Lines: 386
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000001ca86fe$3df80500$b9e80f00$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1261956365 24432 166.84.1.6 (27 Dec 2009 23:26:05 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 27 Dec 2009 23:26:05 +0000 (UTC)

X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to   rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to   rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news1.google.com rec.radio.amateur.space:299 rec.radio.info:1128

AMSAT NEWS SERVICE
ANS-361

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* Report Your AMSAT Volunteer Hours
* SO-67 schedule
* SKN on OSCAR 2010
* AMSAT Kid's Day on AO-51 on 3 January
*Thank You and Season Greetings on Behalf of the HO-68 Team
* AO-51 Satellite Grid DXpedition Announced
* ARISS Status - 21 December 2009

SB SAT @ AMSAT $ANS-361.01
Report Your AMSAT Volunteer Hours

AMSAT News Service Bulletin 361.01
From AMSAT HQ SILVER SPRING, MD.
December 27, 2009
To All RADIO AMATEURS
BID: $ANS-361.01

Attention AMSAT Volunteers!

It is that time again when we gather volunteer hours donated to the AMSAT Program of Work to include within our yearly Audit. These important donations of personal time help us illustrate to the outside world the involvement of our members. We welcome reporting in all areas of service from Managing a booth at a Hamfest, to engineering of new AMSAT projects, to day to day operational activities.

If you are not already signed up for the on line Web site "VRS" (Volunteer Reporting System) program, please go to amsat.org and select "Become a Volunteer" from the link on the left side of the main page. Select #2 in order to create an account for your reporting. You will be given a confidential account into which you can report your volunteer hours. Select # 3 to actually report your 2009 efforts.

We total up the efforts and total value while we keep confidential the actual dollar amount of each volunteer.

With the year drawing to a close, this is a great time to submit those hours. After January 1, 2010 we'll download the file and report these numbers to our Auditor.

Your efforts are important, so please take the time to report. If you have any questions feel free to email me at: w8gsm@amsat.org.

Gunther Meisse
AMSAT Treasurer
W8GSM

[ANS thanks Gunther, W8GSM, for the above information]

/EX

SB SAT @ AMSAT $ANS-361.02
SO-67 schedule

AMSAT News Service Bulletin 361.02
  From AMSAT HQ SILVER SPRING, MD.
December 27, 2009
To All RADIO AMATEURS
BID: $ANS-361.02

Jan-Albert Koekemoer, ZR1JAK, received the following schedules from the various
coordinators. Note that some passes had to be omitted due to other higher priorities on the satellite.

SOUTH AMERICA:
27/12 01:18
27/12 11:48
27/12 13:25
27/12 23:25
28/12 00:58
28/12 11:28
28/12 13:02
28/12 23:05

29/12 00:35
29/12 11:08
29/12 12:41
30/12 00:16
30/12 01:50
30/12 10:48
30/12 12:20
30/12 23:56
31/12 01:30
31/12 10:29
31/12 11:59
31/12 23:36
01/01 01:10
01/01 11:38
01/01 13:14
01/01 23:16

AUSTRALIA/NZ:
27/12 21:19
28/12 00:28
28/12 20:57
28/12 22:31
29/12 00:07
29/12 20:37
29/12 22:09
29/12 23:46
30/12 21:51
30/12 23:24
30/12 21:30
30/12 23:05
01/01 00:40

USSR:
27/12 14:20
27/12 19:00

AFRICA:
27/12 05:30
28/12 08:16
29/12 07:58
30/12 06:03
30/12 07:38
31/12 05:42
31/12 07:17
01/01 05:20
01/01 06:57
01/01 08:26

JAPAN
27/12 00:30
27/12 22:37
28/12 00:09 (Deleted)
28/12 23:48

29/12 01:24
29/12 23:28
30/12 01:03
30/12 23:08
31/12 00:42
31/12 22:48
01/01 00:21

EUROPE
27/12 06:47
27/12 08:20
27/12 09:54
27/12 11:28
28/12 09:33
29/12 09:12

USA/CANADA
27/12 00:22 (Deleted)
27/12 13:08
27/12 14:43
27/12 16:16
27/12 17:49
27/12 19:21
27/12 20:54
27/12 22:28 (Deleted)
28/12 00:02

[ANS thanks Jan-Albert, ZR1JAK, for the above information]

/EX

SB SAT @ AMSAT $ANS-361.03
SKN on OSCAR 2010

AMSAT News Service Bulletin 361.03
From AMSAT HQ SILVER SPRING, MD.
December 27, 2009
To All RADIO AMATEURS
BID: $ANS-361.03

All radio amateurs, worldwide, are cordially invited to participate in AMSAT's Straight Key Night on OSCAR 2010.

Participating in SKN on OSCAR 2010 is easy. No rules, no scoring and no need to send in a log. Just operate CW through any OSCAR between 0000 and 2400 UTC on 1 January 2010, using a straight hand key.

The AMSAT AO-51 Operations Group reminds everyone that AO-51 will be configured to support CW operations during the annual Straight Key Night event. Participants may operate CW through AO-51 between 0000 and 2400 UTC on 1 January 2010, using a straight hand key.

AO-51 will be configured in the following mode during the event:
SSB/FM Repeater, V/U (CW QSOs only on Straight Key Night)
Uplink: 145.880 MHz USB
Downlink: 435.150 MHz FM

In keeping with the friendly nature of this event, all participants are encouraged to nominate someone they worked for "Best Fist." Your nominee need not have the best fist of those you heard, just of those you worked. Please send your nomination to w2rs@amsat.org. A list of those nominated will appear in ANS and The AMSAT Journal.

[ANS thanks Ray, W2RS, and the AMSAT AO-51 Operations Group for the above information]

/EX

SB SAT @ AMSAT $ANS-361.04
AMSAT Kid's Day on AO-51 on 3 January

AMSAT News Service Bulletin 361.04
From AMSAT HQ SILVER SPRING, MD.
December 27, 2009
To All RADIO AMATEURS
BID: $ANS-361.04

AMSAT-NA and the AO-51 Operations Group will sponsor Kid's Day on AO-51 on January 3, 2010. The event is open to all kids, worldwide.

We ask all amateur radio stations to give this short time window to promote satellite operations with kids, by actually showing a kid how to make contacts via AO-51, providing a station to contact, or stepping aside to allow others to make contacts with the kids. During the event, please limit contacts to stations that are operating with kids at the microphone. This should allow the kids to have a nice QSO and pass some information. Kids can tell their name, age, who is helping them operate on AO-51, where they live, and other information about themselves.

AO-51 will be configured in the following mode during the event.
Uplink: 145.880 MHz FM voice
Downlink: 435.300 MHz FM voice

See http://www.arrl.org/FandES/ead/kd-rules.html on the ARRL website for more Kids Day information.

Have fun and enjoy AO-51!

[ANS thanks the AO-51 Operations Committee for the above information]

/EX

SB SAT @ AMSAT $ANS-361.05
Thank You and Season Greetings on Behalf of the HO-68 Team

AMSAT News Service Bulletin 361.05
From AMSAT HQ SILVER SPRING, MD.
December 27, 2009
To All RADIO AMATEURS
BID: $ANS-361.05

CEO of Amsat-China and HO-68 (XW-1) Project Manager Alan Kung, BA1DU wrote, "On behalf of Amsat-China and the HO-68 amateur satellite project Team, I would like to express my sincere thanks to all radio amateurs who reported the communications status of HO-68 satellite in the past few days."

Alan continued, "I would also like to express my sincere thanks to all individuals and organizations for your congratulations. I must say I am sorry I am not able to respond to each of the reports, but your reports are very valuable for our analysis of status of the satellite. Thank you very much for your participation in the in-orbit satellite communications test of HO-68."

The HO-68 team wishes all a happy holiday and we hope HO-68 amateur satellite will be able to bring you a new fun!

This week AMSAT-NA President, Barry Baines, WD4ASW wrote, "On behalf of Radio Amateur Satellite Corporation, congratulations on the successful launch of XW-1 and its subsequent designation as HO-68. This is a significant milestone for both Amateur Radio and AMSAT-China. We are very excited to see not only a new amateur satellite successfully placed in service, but a new member of the AMSAT International family establishing itself as well. Please let us know more about your organization and how we might be able to develop appropriate relationships between AMSAT-China and other AMSAT organizations. Again, congratulations on placing HO-68 in service and best wishes for the New Year."

The latest official information can be found on-line on the AMSAT-China web page at http://www.camsat.cn/

The AMSAT-NA Satellite Status Web may also be consulted for frequency and operating mode information:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=116&amp;retURL=/satellites/status.php

[ANS thanks Alan Kung, BA1DU and Barry Baines, WD4ASW for the above information]

/EX

SB SAT @ AMSAT $ANS-361.06
AO-51 Satellite Grid DXpedition Announced

AMSAT News Service Bulletin 361.06

From AMSAT HQ SILVER SPRING, MD.
December 27, 2009
To All RADIO AMATEURS
BID: $ANS-361.06

Jim, ND9M/VQ9JC, plans to activate 85 grids in 8 states on AO-51 between January 21st and February 10th. Jim and his wife will be driving to the Denver area (DN70) where his step-son lives and Cheyenne (DN71) where his brother lives. The trip will start from Panama City, Florida, on/or around January 21st, from where they head to Memphis, TN. Jim may possibly activate some grids. From Memphis they will head westbound through OK, then into KS and NE before hitting CO. Their around trip will take them through Big Bend National Park and Texas (hitting every grid in TX) and the Gulf Coast into Louisiana.

[ANS thanks KB8NW, OPDX Bulletin, and MakeMoreMilesOnVHF Newsletter
For the above information]

/EX

SB SAT @ AMSAT $ANS-361.07
ARISS Status - 21 December 2009

AMSAT News Service Bulletin 361.07
From AMSAT HQ SILVER SPRING, MD.
December 27, 2009
To All RADIO AMATEURS
BID: $ANS-361.07

1. Jeffrey Williams Chats with Italian Students via ARISS Contact

On Monday, December 14, Expedition 21 astronaut Jeffrey Williams, KD5TVQ participated in an Amateur Radio on the International Space Station (ARISS) contact with students from Istituto Comprensivo di Govone - Scuola Secondaria di primo grado "Nino Costa" di Priocca in Priocca, Cuneo, Italy. The contact was held at Infinito Astronomic Park in Pino Torinese, Torino, where an audience of more than 150 students, teachers, visitors and media watched as the students posed 22 questions to the astronaut during the nine minute pass. Following the contact, ARISS mentor Francesco De Paolis spoke to the children via teleconference about the contact and amateur radio. Regional television, local media and newspapers covered the event. The video, which was streamed on the web, received over 170 connections. The European Space Agency (ESA) reported the news on its Web site. See:
http://www.esa.int/esaCP/SEMLSV9K73G_Italy_0.html

2. ARISS International Team Meeting Held

An Amateur Radio on the International Space Station (ARISS) meeting was held on Tuesday, December 15. Agenda items addressed included the VHF AIS (Automatic Identification System) and ARISS antennas which were recently installed on the Columbus module and the status of ARISSat-1. To view the minutes, see:
https://www.rac.ca/ariss/arisstel2009-12-15.htm

[ANS thanks Carol, KB3LKI, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Lee McLamb, KU4OS

From 1342025997397791946
X-Google-Thread: a4a23d5f63,65469709c6873d3a,start
X-Google-Attributes: gida4a23d5f63,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx02.iad01.newshosting.com!209.197.12.242.MISMATCH!
nx01.iad01.newshosting.com!newshosting.com!198.186.194.249.MISMATCH!
transit3.readnews.com!news-xxxfer.readnews.com!news-out.readnews.com!
transit4.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-364 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Wed, 30 Dec 2009 17:32:22 EST
Organization: The Radio Amateur Satellite Corporation
Lines: 1844
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <001201ca89a0$1eb23a90$5c16afb0$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0

Content-Type: text/plain;
charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1262212342 29868 166.84.1.6 (30 Dec 2009 22:32:22 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Wed, 30 Dec 2009 22:32:22 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to   rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to   rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news1.google.com rec.radio.amateur.space:300 rec.radio.info:1131

This report is organized into four (4) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - deborbited/returned satellites

SB SAT @ AMSAT W8ISS $WSR-364.S1
WSR 364 Part 1 12/30/2009

AMSAT NEWS SERVICE BULLETIN 364.S1
FROM AMSAT HQ SILVER SPRING, MD, December 30, 2009
TO ALL RADIO AMATEURS
BID: $WSR-364.S1

HO-68 XW-1 (CAS-1)
Catalog Number:
Launch Date: December 15, 2009
Status: Commissioning

Callsign:

```
Uplinks:   145.8250 MHz FM, PL 67.0 Hz.
           145.9250 - 145.9750 MHz SSB/CW
           145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
           435.7650 - 435.7150 MHz SSB/CW
           435.6750 MHz AFSK 1200 BPS

Beacon:    435.7900 MHz CW
```

Mode and Antenna Polarization:
V: LHCP 2.0dBi max
U: RHCP 3.0dBi max

```
IARU coordination page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108

For more information about XW-1 (CAS-1):
http://www.camsat.cn
[12122009]
=====
SO-67 SumbandilaSat
Catalog Number: 35870
Launch Date: September 17, 2009

Status: Commissioning

Callsign: ZS0SUM

Uplink:   145.875MHz FM tone 233.6 Hz
Downlink: 435.345MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

For more information about SO-67:
http://www.amsatsa.org.za/
[11212009]
=====
DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008

Status: Operational
Current Mode: Science Mode - Beacon ONLY

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink:   435.530 to 435.570 MHz

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68
[02122009]
=====
VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
```

Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.859330 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

To know what transponder is switched on please listen for the beacon that is active. Each transponder has a different beacon.
[08072008]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Software Reload in Progress

Current Modes:
FM Repeater ONE
Uplink: 145.920 MHz FM
Downlink: 435.300 MHz FM
FM Repeater TWO
Uplink: 145.880 MHz USB
Downlink: 435.150 MHz FM
BBS
Uplink: OFF
Downlink: OFF
Telemetry
Downlink: 435.150MHz 9k6

Analog voice downlink: 435.300 MHz FM
                           435.150 MHz FM
                          2401.200 Mhz FM
Analog voice uplink: 145.860 MHZ FM
                           145.880 MHz USB
                           145.920 MHz FM
                          1268.700 MHz FM
Digital Downlinks: 435.150 MHz FM 38k4 PBP, 1 watt output
                           435.150 MHz FM 9k6 Pacsat Broadcast Protocol
                          2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Pacsat Broadcast Protocol
                          1268.700 mhz FM 9k6 Pacsat Broadcast Protocol

Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[12302009]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz. The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10 minute timer.
[05282007]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: RECOVERY
Current Mode: V/u (Mode JA)

Voice/CW (Mode JA)
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage:
http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's
CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/
fo29cwts.htm
[09062009]
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[03232009]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530

Launch Date: November 15, 1974

Status: Operational

Current Mode: Alternating between Mode A and B every 24 hours

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz CW
145.972 MHz CW
435.100 MHz CW
2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
[02122009]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - V/u
Voice - V/v
BBS - V/v
APRS - V/v
SSTV - V/v

Expedition 22 Crew:
Commander: Jeff Williams KD5TVQ
Flight Engineer: Maxim Suraev
Flight Engineer: Oleg Kotov
Flight Engineer: T.J. Creamer KC5WKI
Flight Engineer: Soichi Noguchi KD5TVP

Available Modes and Frequencies:

Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[12222009]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-364.S2
WSR 364 Part 2 12/30/2009

AMSAT NEWS SERVICE BULLETIN 364.S2
FROM AMSAT HQ SILVER SPRING, MD, December 30, 2009
TO ALL RADIO AMATEURS
BID: $WSR-364.S2

HO-68 XW-1 (CAS-1)
Catalog Number:
Launch Date: December 15, 2009
Status: Commissioning

Callsign:

Uplinks: 145.8250 MHz FM, PL 67.0 Hz.
145.9250 - 145.9750 MHz SSB/CW
145.8250 MHz AFSK 1200 BPS

```
Downlinks: 435.6750 MHz FM
           435.7650 - 435.7150 MHz SSB/CW
           435.6750 MHz AFSK 1200 BPS

Beacon:    435.7900 MHz CW

IARU coordination page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108

For more information about XW-1 (CAS-1):
http://www.camsat.cn
[122262009]
=====
SwissCube
Catalog Number: 35932
Launch Date: September 23, 2009

Status: In Orbit

Callsign: HB9EG

Beacon(100mw): 437.5050MHz CW
Beacon(1w): 437.5050MHz FSK 1k2bps
[11112009]
=====
UWE-2
Catalog Number: 35934
Launch Date: September 23, 2009

Status: In Orbit

Beacon(500mw): 437.3850 MHz AFSK 1k2bps
               437.3850 MHz FSK 9k6bps
[1112009]
=====
ITUpsAT1
Catalog Number: 35935
Launch Date: September 23, 2009

Status: In Orbit

Beacon(100mw): 437.325MHz CW
Beacon(1w): 437.325MHz 19k2bps
[11112009]
=====
BEESAT
Catalog Number: 35933
Launch Date: September 23, 2009

Status: In Orbit

Callsign: DP0BEE
```

```
Beacon(100mw): 436.000MHz CW
Beacon(500mw): 436.000MHz GMSK 4k8bps
[11112009]
=====
Pollux
Catalog Number:
Launch Date: July 31, 2009

Status: Operational

Callsign: POLLUX-1

Downlink: 145.825MHz 1k2 AX.25
[10042009]
=====
Castor
Catalog Number:
Launch Date: July 31, 2009

Status: Operational

Callsign: KD4HBO-1

Downlink: 145.825 MHz 1k2 AX.25
[10042009]
=====
BEVO-1 (DRAGONSAT-1)
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Operational

Downlink: 437.325 MHz 9k6 GMSK
          437.325 MHz CW 20wpm
[07312009]
=====
AggieSat2 (DRAGONSAT-2)
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Operational

Downlink: 436.250 MHz 9k6 FHSS
[11112009]
=====
CP-6
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Commissioning

Downlink: 437.365 MHz 1k2 AFSK
[06052009]
```

```
=====
HAWKSAT 1
Catalog number: 35003
Launch Date: May 19, 2009

Status: ?

Downlink: 437.345 ?
[06052009]
=====
Pharmasat
Catalog Number: 35002
Launch Date: May 19, 2009
Status: Commissioning

Downlink: 437.465 MHz 1k2 AFSK
[06052009]
=====
ANUSAT
Catalog Number: 34808
Launch Date: April 20, 2009

Status: ?

Downlink:  435.000 MHz
Uplink:    145.800 MHz

Telemetry: 137.400 MHz
[05112009]
=====
SOHLA-1 (ASTRO TECH.)
Catalog Number: 33496
Launch Date: January 23, 2009

Status: Commisioning

Proposed Frequencies and Modes:
Downlink: 437.505 MHz AFSK/CW
Beacon:   437.505 MHz AFSK/CW

Callsign:

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=101
[03232009]
=====
KAGAYAKI (Solan Co.)
Catalog Number: 33495?
Launch Date: January 23, 2009

Status: In Orbit

Downlink: 437.375 MHZ    FSK9k6/CW
```

```
Beacon:   437.375 MHz    FSK9k6/CW

IARU coordination status page:

AMSAT-NA webpage:

[01152009]
=====
STARS (Kagawa Univ.) (Twin Satellites)
Catalog Number: 33498
Launch Date: January 23, 2009

Status: Operational ?

Downlinks: 437.485 MHz FM/CW
           437.465 MHz FM/CW
Beacons:   437.305 MHz FM/CW
           437.275 MHz FM/CW

Callsigns: JR5YBN
           JR5YBO

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=99

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=121&retURL
=/satellites/status.php
[022152009]
=====
KKS-1 (Tokyo MCIT)
Catalog Number: 33499
Launch Date: January 23, 2009

Status: Operational

Downlink:  437.455 MHz AFSK/CW
Beacon:    437.385 MHz AFSK/CW

Callsign: JQ1YYY

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=107

AMSAT-NA webapge:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=120&retURL
=/satellites/status.php
[02212009]
=====
PRISM (Tokyo Univ.)
Catalog Number: 33493
Launch Date: January 23, 2009
```

```
Status: Operational ?

Downlink: 437.425 MHz AFSK/GMSK/CW
Beacon:   437.250 MHz AFSK/GMSK/CW

Callsign: JQ1YCX

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=97

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=119&retURL
=/satellites/status.php
[02212009]
=====
RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number: 32953
Launch Date: May 23, 2008

Status: Operational

Curent Modes: Telemetry
              Audio
              Images

Downlinks: 435.315 MHz
           435.215 MHz

AMSAT-NA website:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=115&ret
URL=/satellites/status.php

Official website:
http://www.npopm.com/?cid=leoca&caid=43
[02122009]
=====
CanX-2
Catalog number: 32790
Launch Date: April 28, 2008

Status: Operational in range of ground station only

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web
page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[02212009]
=====
AAUSAT-II
Catalog number: 32788
```

Launch Date: April 28, 2008

Status: Operational

Downlink: 437.425 MHz 1k2 baud packet

For the latest project status update please visit the AAUSAT-II web page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[02212009]
=====
CO-65 CUTE-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008

Status: Digipeater

Downlink: 437.475 MHz 9k6 Packet
Uplink: 1267.600 Mhz

Telemetry Beacon:
Downlink: 437.2750 MHz CW

For the latest project status update please visit the Cute-1.7+APD II web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78

Command Station blog website:
http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=112&retURL=/satellites/status.php
[02212009]
=====
Compass-1
Catalog number: 32787
Launch Date: April 28, 2008

Status: Operational

Current Mode: 4k8 MSK packet

Uplink: 145.980 MHz FM
Downlink: 437.275 Mhz CW
          437.405 MHz Packet

For the latest project status update please visit the Compass 1 web

page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=114&retURL=/satellites/status.php
[04272009]
=====
CO-66 Seeds II
Catalog number: 32791
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.485 MHz

Callsign: JQ1YGU

For the latest project status update please visit the Seeds 2 web page: http://cubesat.aero.cst.nihon-u.ac.jp/english/seeds_2_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=113&retURL=/satellites/status.php
[02212009]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=94&retURL=/satellites/status.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=72
[02122009]

```
=====
CP3
Catalog Number: 31129
Launch Date: April 17,2007

Status: Operational

Current Mode:  /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[02122009]
=====
GENESAT-1
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Current Mode: /u

Callsign: KE7EGC

Telemetry Beacon Downlink: 437.0695 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[091512009]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon:             437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/xivpicte.htm
[02212009]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003

Status: ?????

Current Mode: /u
```

Beacon: 436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=96&retURL
=/satellites/status.php

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[06082009]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Operational?

Uplink: 1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=56
[02122009]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Modes:
FM Repeater ONE
Uplink: 145.920 MHz FM
Downlink: 435.300 MHz FM
FM Repeater TWO
Uplink: 145.880 MHz USB
Downlink: 435.150 MHz FM
BBS
Uplink: OFF
Downlink: OFF
Telemetry
Downlink: 435.150MHz 9k6

Analog voice downlink: 435.300 MHz FM
                           435.150 MHz FM

                           2401.200 Mhz FM
Analog voice uplink: 145.860 MHZ FM
                            145.880 MHz USB
                            145.920 MHz FM
                           1268.700 MHz FM
Digital Downlinks: 435.150 MHz FM 38k4 PBP, 1 watt output
                            435.150 MHz FM 9k6 Pacsat Broadcast Protocol
                           2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Pacsat Broadcast Protocol
                           1268.700 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[12162009]
=====
QuakeSat
Catalog Number: 27845
Launch Date: June 30, 2003

Status: Telemetry only

Current Mode: 9600 baud data packet

Mode U packet
Downlink: 436.675 MHz 9k6 BPS

Quakesat webpage:
http://www.quakefinder.com/services/quakesat-ssite/
[04272009]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only

```
Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=69&retURL
=/satellites/status.php
[02212009]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Telemetry only

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink:        144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[03302009]
=====
RS-22 RADIO SPORT 22
Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only

Current Mode:  /u

CW Beacon - 435.352 MHz
            145.818 MHz

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=76&retURL
=/satellites/status.php
[02212009]
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990

Status: CW Beacon only

Uplinks:           145.840 MHz 1200-baud Manchester FSK
                   145.860 MHz 1200-baud Manchester FSK
                   145.880 MHz 1200-baud Manchester FSK
```

145.900 MHz 1200-baud Manchester FSK

CW downlink: 437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[03162009]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984

Status: Non-operational.

Current Mode: /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon: 435.025 MHz
Mode-S Beacon: 2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[12162009]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - V/u
Voice - V/v
BBS - V/v
APRS - V/v
SSTV - V/v

Expedition 22 Crew:
Commander: Jeff Williams KD5TVQ
Flight Engineer: Maxim Suraev
Flight Engineer: Oleg Kotov
Flight Engineer: T.J. Creamer KC5WKI
Flight Engineer: Soichi Noguchi KD5TVP

Available Modes and Frequencies:

Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time line is NOT translated from Russian and posted.
[12222009]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-364.S3
WSR 364 Part 3 12/30/2009

AMSAT NEWS SERVICE BULLETIN 364.S3
FROM AMSAT HQ SILVER SPRING, MD, December 30, 2009
TO ALL RADIO AMATEURS
BID: $WSR-364.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

```
CP4
Catalog Number: 31122
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon:    437.325 MHz CW

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=79
[10022008]
=====
LIBERTAD-1
Catalog Number: 31128
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink:   145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[02122009]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: Non-Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder:  145.825 Mhz FM
[01012009]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency:  437.305
                             2407.250
```

```
Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink:         437.250 MHz FM 67Hz CTCSS
Voice Downlink:      2401.835 MHz FM
Packet Up/Downlink:   437.250 MHz 9k6 packet
Packet Downlink      2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non-Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[08132007]
=====
CANX-1
Catalog Number: 27847
Launch Date: June 30, 2003

Status: Non-Operational

Downlink: 437.8800 MHz AFSK 1k2bps
[06052009]
=====
DTUSAT
Catalog Number: 27842
Launch Date: June 30, 2003

Status: Non-Operational

Current Mode: 2k4 AFSK Packet last reported

Downlink: 437.475MHz

Officail webpage: http://dtusat1.dtusat.dtu.dk/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=101&retURL
=satellites/all_oscars.php
[02212009]
```

```
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink:   435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)

Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Telemetry only

Uplinks:   145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink:  437.325 MHz

Broadcast callsign: MYSAT3-11
BBS:                MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial land and weather imaging payloads offers FM and FSK
Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as
a collaborative effort between the Malaysian government and Surrey
Satellite Technology Ltd.
[03302009]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink:   145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS:                SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink:   145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
V-band:   145.840 -  145.990 MHz CW/LSB
U-band:   435.550 -  435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks
---------
S2-band:  2401.225 -  2401.475 MHz CW/USB
K-band:  24048.010 - 24048.060 MHz CW/USB
Beacon:   2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)
----------------------------
```

BEACON	General Beacon(GB)	Middle Beacon(MB)	Engineering Beacon(EB)
2 m	none	145.898 MHz	none
70cm	435.438 MHz	435.588 MHz	435.838 MHz
13cm(1)	2400.188 MHz	2400.338 MHz	2400.588 MHz
13cm(2)	2401.173 MHz	2401.323 MHz	2401.573 MHz
3cm	10450.975 MHz	10451.125 MHz	10451.375 MHz
1.5cm	24047.885 MHz	24048.035 MHz	24048.285 MHz

[07162007]
=====
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: 25636
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]

```
=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Telemetry only

Current Modes:
Telemetry : /u

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign:       4XTECH-12

More information of GO-32 can be found at:
http://asri.technion.ac.il/techsat/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=14&retURL
```

```
=/satellites/status.php
[12012009]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink:   145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
MO-30 UNAMSAT-2
Catalog Number: 24305
Launch Date: September 5, 1996

Status: Non-operational

Downlink:       435.1380 MHz AFSK 1200 BPS
Downlink:       435.2060 MHz AFSK 1200 BPS
Uplink:         145.8150 MHz AFSK 1200 BPS
Uplink:         145.8350 MHz AFSK 1200 BPS
Uplink:         145.8550 MHz AFSK 1200 BPS
Uplink:         145.8750 MHz AFSK 1200 BPS
[06042009]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Non-operational

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign:       POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012009]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only
```

```
Current Mode:

Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
AO-24 ARSENE
Catalog Number: 22654
Launch Date: May 13, 1993

Status: Non-operational

Uplink:    435.0625 MHz FM 1k2bps AFSK
           435.1125 MHz FM 1k2bps AFSK
           435.1375 MHz FM 1k2bps AFSK
Downlink:  145.9750 MHz FM 1k2bps AFSK
          2446.5025 MHz FM 1k2bps AFSK

Beacon:    2446.4700 MHz CW

Broadcast callsign:
BBS:
[12162009]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational
```

```
Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HL01-11
BBS: HL01-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
```

```
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
[05012006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: non-operational

Current Mode:  V/u

Uplink:         145.900 MHz FM 1200-baud Manchester FSK (reserved)
                145.920 MHz FM VOICE
                145.940 MHz FM 1200-baud Manchester FSK (reserved)
                145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink:       437.026 MHz USB VOICE
                (1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[07242009]
=====
UO-15 UoSAT-4
Catalog Number: 20438
Launch Date: January 22, 1990
```

```
Status: Non-operational

Uplink: ?
Downlink: 435.1250MHz (?)
          435.1200MHz (?)
[06042009]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon:   145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink  29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
Beacons:   29.450 MHz
          435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
```

RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB

Beacon 1: 29.352 MHz (intermittent)
Beacon 2: 29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB

Beacon: 145.860 MHz

Robot: 145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-364.S4
WSR 364 Part 4 12/30/2009

AMSAT NEWS SERVICE BULLETIN 364.S4
FROM AMSAT HQ SILVER SPRING, MD, December 30, 2009
TO ALL RADIO AMATEURS
BID: $WSR-364.S4

```
THE FOLLOWING SATELLITES HAVE RE-ENTERED OR HAVE BEEN RETURNED SAFELY:

NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: July 28, 2008

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[01012009]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink:      145.825 Mhz FM APRS AX25
APRS Uplink:        145.825 MHz FM APRS AX25
Voice/PSK31 Uplink:  28.120 MHz

Packet to Voice ID: RAFT
[06112007]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Re-Entered
Re-entered: June 18, 2008

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon:             437.2750 MHz CW

Callsign: JR8YJT
[01012009]
=====
```

SO-43 Starshine 3
Catalog Number: 26929
Launch Date: September 30, 2001

Status: Re-Entered
Re-entered: January 21, 2003

Beacon: 145.825Mhz
[02212009]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to
the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis
Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at}
amsat.org
NNNN
/EX

```
From 8678569215539879359
X-Google-Thread: 8f86f75953,d63ad81fc14c3d43,start
X-Google-Attributes: gid8f86f75953,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!postnews.google.com!22g2000yqr.googlegroups.com!not-for-
mail
From: Pirata <iz8qlk@live.it>
Newsgroups: rec.radio.amateur.space
Subject: Kenwood SM-220 Station Monitor (no BS-8) Oscilloscope
Date: Thu, 31 Dec 2009 03:20:37 -0800 (PST)
Organization: http://groups.google.com
Lines: 14
Message-ID: <b710b826-f8a1-470e-8883-8f2785c068da@22g2000yqr.googlegroups.com>
NNTP-Posting-Host: 93.147.212.189
Mime-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
X-Trace: posting.google.com 1262258437 19875 127.0.0.1 (31 Dec 2009 11:20:37 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Thu, 31 Dec 2009 11:20:37 +0000 (UTC)
Complaints-To: groups-abuse@google.com
Injection-Info: 22g2000yqr.googlegroups.com; posting-host=93.147.212.189;
     posting-account=o8DqbAoAAAB3hY3586k6SyRvp7ZBLuBs
User-Agent: G2/1.0
X-HTTP-UserAgent: Mozilla/5.0 (Windows; U; Windows NT 5.1; it; rv:1.9.0.16)
     Gecko/2009120208 Firefox/3.0.16 (.NET CLR 3.5.30729),gzip(gfe),gzip(gfe)
Xref: g2news1.google.com rec.radio.amateur.space:301
```

Station monitor used but in perfect aesthetics conditions (see in
photo), there are only some imperfections due to the time.
The electronics is perfect, and the catodic ray tube works perfectly,
the item has been used as oscilloscope up to few days ago.

The auction includes:
Original box,
manual copy (or if you don't want it, it's possible to download it
here)
Kenwood SM 220

The optional BS-8 is not included

http://cgi.ebay.com/Kenwood-SM-220-Station-Monitor-no-BS-8-

Oscilloscope_W0QQitemZ110475765945QQcmdZViewItemQQptZAccessori_per_Radioamatori?
hash=item19b8de68b9

```
From 4120307487963727059
X-Google-Thread: a4a23d5f63,b325263f3719e822,start
X-Google-Attributes: gida4a23d5f63,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx02.iad01.newshosting.com!209.197.12.242.MISMATCH!
nx01.iad01.newshosting.com!newshosting.com!198.186.194.249.MISMATCH!
transit3.readnews.com!news-out.readnews.com!transit4.readnews.com!panix!
panix2.panix.com!not-for-mail
From: rram@panix.com (rec.radio.amateur.moderated Admin)
Newsgroups:
rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.rad
io.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amat
eur.space,rec.radio.info
Subject: Crossposting Permitted to rec.radio.amateur.moderated
Supersedes: <radio/ham-radio/moderated/crossposting-1-1259650800@panix.com>
Followup-To: poster
Date: 1 Jan 2010 02:00:03 -0500
Organization: rec.radio.amateur.moderated Moderation Team
Lines: 47
Approved: RRI Admin <rec-radio-info-request@panix.com>
Distribution: world
Expires: 03 Feb 2010 02:00:01 -0000
Message-ID: <radio/ham-radio/moderated/crossposting-1-1262329201@panix.com>
Reply-To: rec-radio-amateur-moderated-request@panix.com
(rec.radio.amateur.moderated Admin)
NNTP-Posting-Host: panix2.panix.com
X-Trace: reader1.panix.com 1262329203 22124 166.84.1.2 (1 Jan 2010 07:00:03 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Fri, 1 Jan 2010 07:00:03 +0000 (UTC)
Summary: Short reminder for unmoderated newsgroups that crossposting is permitted
Keywords: FAQ, ham, amateur, radio, moderated, unmoderated, crossposting,
permitted
Xref: g2news1.google.com rec.radio.amateur.antenna:14299 rec.radio.amateur.dx:526
rec.radio.amateur.equipment:1693 rec.radio.amateur.homebrew:3015
rec.radio.amateur.misc:4522 rec.radio.amateur.policy:24840
rec.radio.amateur.space:302 rec.radio.info:1134

Posted-By: auto-faq 3.3.2 beta (PGPMoose V2.0, Perl 5.005)
Archive-name: radio/ham-radio/moderated/crossposting
Revision: 1.1 2009/04/12 19:42:04
Posting-Frequency: posted monthly
URL: http://www.panix.com/~rram/usenet/rram/index.html
```

Changes followed by "|".

After a 30-day public discussion and feedback period to gauge reader
opinions in March of 2009:

http://groups.google.com/group/rec.radio.amateur.moderated/browse_thread/thread/
d7d337db35f23326

the rec.radio.amateur.moderated Moderation Team has decided to consider amending its charter, and permit limited simultaneous crossposting to rec.radio.amateur.moderated and one other unmoderated amateur-radio-related discussion newsgroup. We are currently trying this on a temporary basis (90 days, through early July 2009), and adopt it permanently if successful.

Approved rec.radio.amateur.* newsgroups are those that are currently listed in the latest version of the "List of Big Eight Newsgroups" which is crossposted monthly to news.announce.newgroups, news.groups, and news.lists.misc.

Approved alt.radio.amateur.* and alt.ham-radio.* newsgroups are those that have been created consistent with the suggestions in "So You Want to Create an Alt Newsgroup" at:

http://www.faqs.org/faqs/alt-creation-guide/

Approved regional hierarchy newsgroups are those that contain either "radio.amateur" or "ham-radio" in their names, including uk.radio.amateur and aus.radio.amateur.misc.

We will make every reasonable effort to keep our list of approved newsgroups up-to-date. In case we have overlooked any, and a submission is rejected in error as a result, the rejected submitter can E-mail us at our administrative contact address (in the signature at the bottom of this article, and the default Reply-To for the rejection message) requesting that it be added, and that the article be approved. We may still choose to reject articles crossposted to any alt.* newsgroup with an inappropriate name, including obscene language, embedded name-calling, or encouragement of unlawful conduct.

Please direct any comments, questions, or criticisms to
rec-radio-amateur-moderated-request@panix.com.

From 3618691433149896507
X-Google-Thread: addc8bf063,cd74d00824882279,start
X-Google-Attributes: gidaddc8bf063,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!news.glorb.com!news2.glorb.com!
feeder.erje.net!newsfeed.kpn.net!pfeed09.wxs.nl!news.astraweb.com!
border5.a.newsrouter.astraweb.com!not-for-mail
From: Chris Steyaert <observations@rmob.org>
Newsgroups: rec.radio.amateur.space,sci.astro.amateur
Subject: Radio Meteor Obs. Bull. December 2009   Geminids Ursids
Date: Thu, 07 Jan 2010 20:28:19 +0100
Message-ID: <ccdck59hhmkejkbuiiot96makg8tocsr6n@4ax.com>

```
X-Newsreader: Forte Agent 5.00/32.1171
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Lines: 14
Organization: Unlimited download news at news.astraweb.com
NNTP-Posting-Host: 9774f16e.news.astraweb.com
X-Trace: DXC=[h<K_hSY`5N6;?e@]GfeBGL?0kYOcDh@JIGb]mONgOiJM:A=bg4_m9Mb9QL:MeQY9C?
ELEFFJbaPF7hX?C\@O:7K
Xref: g2news1.google.com rec.radio.amateur.space:303 sci.astro.amateur:28802
```

Radio Meteor Observation Bulletin No. 197 of December 2009 (99 K) is available now as

http://www.rmob.org/rmobtext/rmob0912.txt

More information and the visual presentation of the hourly forward scatter counts can be found on

http://www.rmob.org

Chris

```
From -7039702214128197342
X-Google-Thread: a4a23d5f63,e4a1f6e55e003ef2,start
X-Google-Attributes: gida4a23d5f63,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx02.iad01.newshosting.com!newshosting.com!
198.186.194.249.MISMATCH!news-out.readnews.com!transit3.readnews.com!panix!
rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-010 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sat, 9 Jan 2010 21:52:30 EST
Organization: The Radio Amateur Satellite Corporation
Lines: 383
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000301ca919d$9b641180$d22c3480$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1263091950 28195 166.84.1.6 (10 Jan 2010 02:52:30 GMT)
X-Complaints-To: abuse@panix.com
```

```
NNTP-Posting-Date: Sun, 10 Jan 2010 02:52:30 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to            rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news1.google.com rec.radio.amateur.space:304 rec.radio.info:1153
```

AMSAT NEWS SERVICE
ANS-010

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:

- BoD Adopts Accepted Use Policy For AMSAT Mail Lists
- AO-51 Spacecraft Reorientation Planned in January
- AMSAT at the Cowtown Hamfest - 15 & 16 January 2010
- AMSAT Awards
- New Student Satellites Announced by India and University of Colorado
- How's Satellite DX?
- Final Call: Remember to Nominate SKN Best Fist

SB SAT @ AMSAT $ANS-010.01
AMSAT Adopts Accepted Use Policy For AMSAT Mail Lists

AMSAT News Service Bulletin 010.01
>From AMSAT HQ SILVER SPRING, MD.
January 10, 2010
To All RADIO AMATEURS
BID: $ANS-010.01

The AMSAT Board of Directors unanimously adopted an Accepted Use Policy for the AMSAT Public Mailing Lists on January 5, 2010. This policy takes effect immediately and applies to all those using the AMSAT mailing lists.

Following the October 2009 AMSAT Board meeting Gould Smith, WA4SXM AMSAT VP of User Services appointed a committee to develop a use policy for the mailing lists. The members of the committee did an outstanding job of putting together a document that is acceptable to all the committe members and was passed without change by the BoD. Thank you to the committee members: Stephen Belter, N9IP; Alan Biddle, WA4SCA; Mark Hammond, N8MH; Samudra Haque, N3RDX; and Paul Williamson, KB5MU.

The policy has been added to the AMSAT Web site and will be included as part of the process when applying to join any of the AMSAT mailing lists. The link to the PDF file can be found at: http://www.amsat.org

Acceptable Use Policy for the AMSAT Public Mailing Lists

Approved by the AMSAT BoD 5 January 2010

The AMSAT Bulletin Board (AMSAT-BB) public mailing list carries general AMSAT information and discussion. The purpose of this mailing list is to provide a forum for general discussion of any satellite-related topic.

The Space Amateur Radio Experiment (SAREX) public mailing list contains information and discussion pertaining to amateur radio operation on manned space missions, including the Space Shuttle, Mir (formerly), and the International Space Station. The name is left over from the Shuttle Amateur Radio Experiment (SAREX) aboard Space Shuttle flights. It is now mainly concerned with ARISS operations aboard the International Space Station.

There are also regional AMSAT public mailing lists (e.g., AMSAT-DC, AMSAT-Florida, and AMSAT-NE) and numerous private mailing lists (e.g., Board of Directors, Officers, AO-51 operations, etc.).

Anyone can read the messages posted on any of the public mailing lists, and many people from around the world do so. Our audience includes AMSAT members, board members, and officers. At any given time, the readers may also include amateur radio operators, shortwave listeners, minors, potential financial donors, potential launch providers, officials from other amateur radio and satellite organizations, officials from international space agencies, and equipment suppliers and manufacturers.

Since the archives of the public mailing lists are available on the AMSAT website, the contents of individual messages are easily found using common search engines. Because of this wide readership, AMSAT insists that messages posted on its public mailing lists conform to this Acceptable Use Policy (AUP).

Acceptable Content

We embrace diversity of opinions and values. In order to preserve a constructive environment, we do insist that messages contain appropriate content and are respectful of the members and readers of the list. All posts should include the author's first name and call sign, or full name if not currently licensed.

In general, messages for the AMSAT mailing lists should be related to amateur radio satellites. Examples of on-topic posts include:

+ Announcements of general interest, including but not limited to AMSAT news, meetings, satellite availability, and DXpeditions.

+ Technical discussions, including the physics of space flight, modulation techniques, satellite design, RF path loss calculations, noise figure, etc.

+ Inquiries and suggestions about choosing equipment, learning operating techniques, and troubleshooting problems.

+ Discussion of AMSAT plans and policies in ways that foster better understanding of the opportunities, trade-offs, and limitations that AMSAT faces, and constructive suggestions for improvement.

+ Posting of amateur radio satellite-related equipment and software available for sale.

Unacceptable Content

Strong disagreements on issues are inevitable, but the AMSAT mailing lists are not the place for exchanges which become spiteful, unproductive exchanges. If you must have a heated exchange, it should be conducted privately and not in public on a mailing list.

We define unacceptable content as anything that is:
+ Illegal
+ Insulting, abusive, harassing, or threatening
+ Knowingly false or misrepresentative

Enforcement of this AUP

Access to the AMSAT mailing lists is a privilege and not a right. While these rules cover most common situations, they cannot anticipate everything. Consequently AMSAT reserves the right to take any actions it deems appropriate to ensure these forums are not disrupted or abused.

Violators of this policy may be subjected to manual moderation or have their ability to post messages suspended. Violators may or may not be warned prior to enforcement.

If you feel that you've been unfairly blocked from the list, you may appeal your situation in writing to:

The Radio Amateur Satellite Corporation
Attention: AMSAT-BB
850 Sligo Avenue, Suite 600
Silver Spring, MD 20910

Your letter of appeal will be forwarded to the VP of User Services and the Director of Electronic Communications for consideration.

[ANS thanks the AMSAT-NA Board of Directors for the above information]

/EX

SB SAT @ AMSAT $ANS-010.02
AO-51 Spacecraft Reorientation Planned in January

AMSAT News Service Bulletin 010.02
>From AMSAT HQ SILVER SPRING, MD.
January 10, 2010
To All RADIO AMATEURS
BID: $ANS-010.02

AMSAT-NA VP Operations, Drew KO4MA says AO-51 is back in to it's normal configuration between January 4 - January 31:

FM Repeater, V/U
Uplink: 145.920 MHz FM
Downlink: 435.300 MHz FM (570 mw)

9k6 BBS and Telemetry
Uplink: 1268.700 MHz FM
Downlink: 435.150 MHz FM (450 mw)

Sometime in early January the AO-51 Operations Team plans to use the reversible magnet to reorient the spacecraft to the normal polarity favoring the northern hemisphere.

Toward the end of January 2010 the schedule may allow for L/U voice configuration on the 435.150 downlink between telemetry collections. The AO-51 schedule will be updated when this mode becomes available:
http://www.amsat.org/amsat-new/echo/CTNews.php

Please address all AO-51 inquiries to the Operations Committee via ao51-modes@amsat.org.

[ANS thanks the AO-51 Operations Team for the above information]

/EX

SB SAT @ AMSAT $ANS-010.03
AMSAT at the Cowtown Hamfest - 15 & 16 January 2010

AMSAT News Service Bulletin 010.03
>From AMSAT HQ SILVER SPRING, MD.
January 10, 2010
To All RADIO AMATEURS
BID: $ANS-010.03

Keith, W5IU reports that AMSAT will have a strong presence at the

Cowtown Hamfest in Fort Worth, TX, on 15 and 16 January 2010. AMSAT will maintain a booth both days of the event.

Also Douglas Quagliana, KA2UPW/5, will have two hours of forum time on Saturday afternoon to present an "Introduction to Amateur Radio Satellites" and monitoring the health of satellites by capturing and decoding telemetry. Douglas is very knowledgeable in both of these areas and is an excellent speaker.

Live demonstrations of communications through the current satellites, including the new ones, will take place on both days.

This Hamfest is sponsored by the Lockheed Martin Amateur Radio Club. Additional details are available at: http://www.cowtownhamfest.com/

[ANS thanks Keith, W5IU for the above information]

/EX

SB SAT @ AMSAT $ANS-010.04
AMSAT Awards

AMSAT News Service Bulletin 010.04
>From AMSAT HQ SILVER SPRING, MD.
January 10, 2010
To All RADIO AMATEURS
BID: $ANS-010.04

AMSAT Director Contests and Awards, Bruce KK5DO says congratulations are in order for these satellite operators earning awards this month:

The following have entered into the Satellite Communicators Club for making their first satellite QSO:

Luis Benvenutty, WP4NYY
Anotnio Barbieri, I0JOW

The following have earned the South Africa Communications Achievement Award:

Neven Nrdljas, 9A5YY #US140
Kent Frazier, K5KNT #US141

The following have earned the W4AMI Achievement Award (for 1000 contacts):

David Webb, KB1PVH #59

To see all the awards visit http://www.amsat.org.

[ANS thanks Bruce, KK5DO for the above information]

/EX

SB SAT @ AMSAT $ANS-010.05
New Student Satellites Announced by India and University of Colorado

AMSAT News Service Bulletin 010.05
>From AMSAT HQ SILVER SPRING, MD.
January 10, 2010
To All RADIO AMATEURS
BID: $ANS-010.05

A new Amateur Radio Satellite from India, named StudSat (STUDent SATellite) is slated for a March 2010 launch and will carry a camera capable of 90 metre resolution which will be used to perform the function of a remote sensing satellite and take images of earth's surface.

The satellite resembles a small cube of size (10 cm x 10 cm x 13.5 cm), weighing about 850 gm and has a volume of 1.1 litres. The satellite is intended to be launched in 700 km Sun-synchronous orbit on an Indian launcher. StudSat plans to use a 10mW CW beacon on UHF and also a half duplex 9k6 or 4k8bps FSK TC/TLM link with 1 watt output also on UHF. This satellite has been coordinated by the IARU but the only frequency information available at this time states that 437 MHz will be used.

Further information on StudSat can be found at
http://www.teamstudsat.com/

The University of Colorado at Boulder has been awarded $840,000 from the National Science Foundation for students to build a tiny spacecraft to observe energetic particles in space that should give scientists a better understanding of solar flares and their interaction with Earth's atmosphere.

Scheduled for launch in 2012, the three-year grant to CU-Boulder's Laboratory for Atmospheric and Space Physics and the aerospace engineering sciences department involves the development of a 5-pound, loaf of bread-sized spacecraft carrying a miniature instrument package to observe energetic particles tied to "space weather" in the near-Earth environment. This satellite has been coordinated by the IARU but no specific frequency information is available at this time.

[ANS thanks SouthGate Amateur Radio News for the above information]

/EX

SB SAT @ AMSAT $ANS-010.06
How's Satellite DX?

AMSAT News Service Bulletin 010.06
>From AMSAT HQ SILVER SPRING, MD.

January 10, 2010
To All RADIO AMATEURS
BID: $ANS-010.06

On January 8, 2010 Piraja, PS8RF worked Andre, ZS2BK via AO-7 (Mode B) in a footprint limit 34 second time window. The distance between the stations was 7694 Km. See the sound/video in youtube:
http://www.youtube.com/watch?v=zNFmHERisWQ

On AO-51 Piraja reports additional satellite DX with several contacts with Hugo, EA8HB on Las Palmas Island with strong signals. On January 6 Piraja heard the N1EL calling him, which is 5579 Km from him.

On January 4 Bob, W7LRD copied 2E1EUB and MM5AJW on an AO-7 pass. Bob said it was the first time I heard anything other that Mika, OH8MBN. He invites European stations help him to stretch the AO-7 footprint.

Mineo Wakita, JE9PEL reported FO-29 should come out of the eclipse soon. JARL continues to test the satellite and an operating schedule may be announced soon.

Dave, KB1PVH noted this week that Perry, WB8OTH has now reached 6000 QSOs on the satellites. Nice job!

SA-AMSAT says SumbandilaSat has reduced its power level to 2.5 watts to conserve power for other operations related to the primary mission. Initial reports from stations in Australia indicate that the reduction was hardly noticeable and that the signals remain stronger than most other amateur radio satellites. The SO-67 schedule is published on-line at http://www.amsatsa.org.za.

The DX Newsletter DXNL 1657 - Jan 6, 2010 reported that XR9JA will be the callsign of Luis, XQ5CIE, Carlos, CE6UFF, Didier, F6DXE, and Dagoberto, CE5COX, from Jan 10-24 for their DXpedition to the Chilean naval base "Arturo Prat" on Greenwich Island belonging to the South Shetland Islands (AN-010). Operation will take place in CW, SSB, PSK31 on 160m-6m and via satellite on AO-51. Their QSL manager is CE5JA (direct or via bureau) and more information is available online at:
http://www.ce5ja.cl

[ANS thanks everyone for the above information]

/EX

SB SAT @ AMSAT $ANS-010.07
Final Call: Remember to Nominate SKN Best Fist

AMSAT News Service Bulletin 010.07
>From AMSAT HQ SILVER SPRING, MD.
January 10, 2010
To All RADIO AMATEURS
BID: $ANS-010.07

Many thanks to all who participated in Straight Key Night on OSCAR 2010. If you have not already done so, please take a moment to nominate someone you worked for Best Fist. Your nominee need not have the best fist of those you heard, but only of those you worked.

Please send your nomination to Ray at w2rs@amsat.org. A list of those nominated will be published in an ANS bulletin in early February, and in The AMSAT Journal.

[ANS thanks Ray, W2RS for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office. And, for those of you going to Cowtown, please keep in mind that when NASA puts a bunch of Holsteins into low earth orbit it will be the herd shot around the world.

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM

From -8219721452466189605
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!news.glorb.com!usenet.stanford.edu!
panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-011 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Mon, 11 Jan 2010 21:58:04 EST
Organization: The Radio Amateur Satellite Corporation
Lines: 1845
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <001b01ca9333$193131b0$4b939510$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1263265084 15437 166.84.1.6 (12 Jan 2010 02:58:04 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Tue, 12 Jan 2010 02:58:04 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to rec-radio-info@panix.com

X-RRI-Info-2: Send technical complaints to   rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news1.google.com rec.radio.amateur.space:305 rec.radio.info:1158

This report is organized into four (4) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - deborbited/returned satellites

SB SAT @ AMSAT W8ISS $WSR-011.S1
WSR 011 Part 1 01/11/2010

AMSAT NEWS SERVICE BULLETIN 011.S1
FROM AMSAT HQ SILVER SPRING, MD, January 11, 2010
TO ALL RADIO AMATEURS
BID: $WSR-011.S1

HO-68 XW-1 (CAS-1)
Catalog Number:
Launch Date: December 15, 2009
Status: Commissioning

Callsign:

```
Uplinks:   145.8250 MHz FM, PL 67.0 Hz.
               145.9250 - 145.9750 MHz SSB/CW
               145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
           435.7650 - 435.7150 MHz SSB/CW
           435.6750 MHz AFSK 1200 BPS

Beacon:    435.7900 MHz CW
```

Mode and Antenna Polarization:
V: LHCP 2.0dBi max
U: RHCP 3.0dBi max

IARU coordination page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108

For more information about XW-1 (CAS-1):
http://www.camsat.cn
[12122009]
=====

SO-67 SumbandilaSat
Catalog Number: 35870
Launch Date: September 17, 2009

Status: Commissioning

Callsign: ZS0SUM

Uplink: 145.875MHz FM tone 233.6 Hz
Downlink: 435.345MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

For more information about SO-67:
http://www.amsatsa.org.za/
[11212009]
=====
DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008

Status: Operational
Current Mode: Science Mode - Beacon ONLY

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink: 435.530 to 435.570 MHz

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68
[02122009]
=====
VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

```
Indian Beacon:  145.859330 MHZ CW
Dutch Beacon:   145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is active. Each transponder has a different beacon.
[08072008]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Software Reload in Progress

Current Modes:
FM Repeater ONE
Uplink:    145.920 MHz FM
Downlink:  435.300 MHz FM
FM Repeater TWO
Uplink:    OFF
Downlink:  OFF
BBS
Uplink:   1268.700 mhz FM 9k6 Pacsat Broadcast Protocol
Downlink:  435.150 MHz FM 9k6 Pacsat Broadcast Protocol
Telemetry
Downlink:  435.150MHz 9k6

Analog voice downlink:     435.300 MHz FM
                           435.150 MHz FM
                          2401.200 Mhz FM
Analog voice uplink:       145.860 MHZ FM
                           145.880 MHz USB
                           145.920 MHz FM
                          1268.700 MHz FM
Digital Downlinks:         435.150 MHz FM 38k4 PBP, 1 watt output
                           435.150 MHz FM 9k6 Pacsat Broadcast Protocol
                          2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:            145.860 MHz FM 9k6 Pacsat Broadcast Protocol
                          1268.700 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon:                    435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
```

S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[01112010]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz. The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10 minute timer.
[05282007]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: RECOVERY
Current Mode: V/u (Mode JA)

Voice/CW (Mode JA)
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM

145.870 MHz FM
145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage:
http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts.htm
[09062009]
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[03232009]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational

Current Mode: Alternating between Mode A and B every 24 hours

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
432.125 to 432.175 MHz CW/LSB Mode B

Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
[02122009]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - V/u
                      Voice -   V/v
                      BBS -   V/v
                      APRS -   V/v
                      SSTV -   V/v

Expedition 22 Crew:
Commander: Jeff Williams KD5TVQ
Flight Engineer: Maxim Suraev
Flight Engineer: Oleg Kotov
Flight Engineer: T.J. Creamer   KC5WKI
Flight Engineer: Soichi Noguchi KD5TVP

Available Modes and Frequencies:

Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
                           437.800 MHz FM
                           145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
                           437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time line is NOT translated from Russian and posted.
[12222009]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-011.S2
WSR 011 Part 2 01/11/2010

AMSAT NEWS SERVICE BULLETIN 011.S2
FROM AMSAT HQ SILVER SPRING, MD, January 11, 2010
TO ALL RADIO AMATEURS
BID: $WSR-011.S2

HO-68 XW-1 (CAS-1)
Catalog Number:
Launch Date: December 15, 2009
Status: Commissioning

Callsign:

Uplinks: 145.8250 MHz FM, PL 67.0 Hz.
145.9250 - 145.9750 MHz SSB/CW
145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
435.7650 - 435.7150 MHz SSB/CW
435.6750 MHz AFSK 1200 BPS

Beacon: 435.7900 MHz CW

IARU coordination page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108

```
For more information about XW-1 (CAS-1):
http://www.camsat.cn
[122262009]
=====
SwissCube
Catalog Number: 35932
Launch Date: September 23, 2009

Status: In Orbit

Callsign: HB9EG

Beacon(100mw): 437.5050MHz CW
Beacon(1w): 437.5050MHz FSK 1k2bps
[11112009]
=====
UWE-2
Catalog Number: 35934
Launch Date: September 23, 2009

Status: In Orbit

Beacon(500mw): 437.3850 MHz AFSK 1k2bps
               437.3850 MHz FSK 9k6bps
[1112009]
=====
ITUpsAT1
Catalog Number: 35935
Launch Date: September 23, 2009

Status: In Orbit

Beacon(100mw): 437.325MHz CW
Beacon(1w): 437.325MHz 19k2bps
[11112009]
=====
BEESAT
Catalog Number: 35933
Launch Date: September 23, 2009

Status: In Orbit

Callsign: DP0BEE

Beacon(100mw): 436.000MHz CW
Beacon(500mw): 436.000MHz GMSK 4k8bps
[11112009]
=====
Pollux
Catalog Number:
Launch Date: July 31, 2009
```

```
Status: Operational

Callsign: POLLUX-1

Downlink: 145.825MHz 1k2 AX.25
[10042009]
=====
Castor
Catalog Number:
Launch Date: July 31, 2009

Status: Operational

Callsign: KD4HBO-1

Downlink: 145.825 MHz 1k2 AX.25
[10042009]
=====
BEVO-1 (DRAGONSAT-1)
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Operational

Downlink: 437.325 MHz 9k6 GMSK
          437.325 MHz CW 20wpm
[07312009]
=====
AggieSat2 (DRAGONSAT-2)
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Operational

Downlink: 436.250 MHz 9k6 FHSS
[11112009]
=====
CP-6
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Commissioning

Downlink: 437.365 MHz 1k2 AFSK
[06052009]
=====
HAWKSAT 1
Catalog number: 35003
Launch Date: May 19, 2009

Status: ?

Downlink: 437.345 ?
```

```
[06052009]
=====
Pharmasat
Catalog Number: 35002
Launch Date: May 19, 2009
Status: Commissioning

Downlink: 437.465 MHz 1k2 AFSK
[06052009]
=====
ANUSAT
Catalog Number: 34808
Launch Date: April 20, 2009

Status: ?

Downlink:  435.000 MHz
Uplink:    145.800 MHz

Telemetry: 137.400 MHz
[05112009]
=====
SOHLA-1 (ASTRO TECH.)
Catalog Number: 33496
Launch Date: January 23, 2009

Status: Commisioning

Proposed Frequencies and Modes:
Downlink: 437.505 MHz AFSK/CW
Beacon:   437.505 MHz AFSK/CW

Callsign:

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=101
[03232009]
=====
KAGAYAKI (Solan Co.)
Catalog Number: 33495?
Launch Date: January 23, 2009

Status: In Orbit

Downlink: 437.375 MHZ    FSK9k6/CW
Beacon:   437.375 MHz    FSK9k6/CW

IARU coordination status page:

AMSAT-NA webpage:

[01152009]
=====
STARS (Kagawa Univ.) (Twin Satellites)
Catalog Number: 33498
Launch Date: January 23, 2009

Status: Operational ?

Downlinks: 437.485 MHz FM/CW
           437.465 MHz FM/CW
Beacons:   437.305 MHz FM/CW
           437.275 MHz FM/CW

Callsigns: JR5YBN
           JR5YBO

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=99

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=121&retURL
=/satellites/status.php
[022152009]
=====
KKS-1 (Tokyo MCIT)
Catalog Number: 33499
Launch Date: January 23, 2009

Status: Operational

Downlink:  437.455 MHz AFSK/CW
Beacon:    437.385 MHz AFSK/CW

Callsign: JQ1YYY

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=107

AMSAT-NA webapge:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=120&retURL
=/satellites/status.php
[02212009]
=====
PRISM (Tokyo Univ.)
Catalog Number: 33493
Launch Date: January 23, 2009

Status: Operational ?

Downlink: 437.425 MHz AFSK/GMSK/CW
Beacon:   437.250 MHz AFSK/GMSK/CW

Callsign: JQ1YCX

IARU coordination status page:
```

http://www.amsat.org.uk/iaru/finished_detail.asp?serial=97

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=119&retURL=/satellites/status.php
[02212009]
=====
RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number: 32953
Launch Date: May 23, 2008

Status: Operational

Curent Modes: Telemetry
              Audio
              Images

Downlinks: 435.315 MHz
           435.215 MHz

AMSAT-NA website:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=115&retURL=/satellites/status.php

Official website:
http://www.npopm.com/?cid=leoca&caid=43
[02122009]
=====
CanX-2
Catalog number: 32790
Launch Date: April 28, 2008

Status: Operational in range of ground station only

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[02212009]
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.425 MHz 1k2 baud packet

For the latest project status update please visit the AAUSAT-II web page:

http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[02212009]
=====
CO-65 CUTE-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008

Status: Digipeater

Downlink: 437.475 MHz 9k6 Packet
Uplink: 1267.600 Mhz

Telemetry Beacon:
Downlink: 437.2750 MHz CW

For the latest project status update please visit the Cute-1.7+APD II
web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78

Command Station blog website:
http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=112&retURL
=/satellites/status.php
[02212009]
=====
Compass-1
Catalog number: 32787
Launch Date: April 28, 2008

Status: Operational

Current Mode: 4k8 MSK packet

Uplink: 145.980 MHz FM
Downlink: 437.275 Mhz CW
          437.405 MHz Packet

For the latest project status update please visit the Compass 1 web
page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=114&retURL
=/satellites/status.php

```
[04272009]
=====
CO-66 Seeds II
Catalog number: 32791
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.485 MHz

Callsign: JQ1YGU

For the latest project status update please visit the Seeds 2 web
page: http://cubesat.aero.cst.nihon-u.ac.jp/english/seeds_2_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=113&retURL
=/satellites/status.php
[02212009]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode:  /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon:    435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=94&retURL=
/satellites/status.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=72
[02122009]
=====
CP3
Catalog Number: 31129
Launch Date: April 17,2007

Status: Operational

Current Mode:  /u
```

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[02122009]

=====

GENESAT-1
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Current Mode: /u

Callsign: KE7EGC

Telemetry Beacon Downlink: 437.0695 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[091512009]

=====

CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon: 437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/xivpicte.htm
[02212009]

=====

CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003

Status: ?????

Current Mode: /u

Beacon: 436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=96&retURL

```
=/satellites/status.php

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[06082009]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Operational?

Uplink:  1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=56
[02122009]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Modes:
FM Repeater ONE
Uplink:    145.920 MHz FM
Downlink:  435.300 MHz FM
FM Repeater TWO
Uplink:    OFF
Downlink:  OFF
BBS
Uplink:   1268.700 mhz FM 9k6 Pacsat Broadcast Protocol
Downlink:  435.150 MHz FM 9k6 Pacsat Broadcast Protocol
Telemetry
Downlink:  435.150MHz 9k6

Analog voice downlink:     435.300 MHz FM
                           435.150 MHz FM
                          2401.200 Mhz FM
Analog voice uplink:       145.860 MHZ FM
                           145.880 MHz USB
                           145.920 MHz FM
                          1268.700 MHz FM
Digital Downlinks:         435.150 MHz FM 38k4 PBP, 1 watt output
                           435.150 MHz FM 9k6 Pacsat Broadcast Protocol
                          2401.200 MHz FM 38k4 bps, AX.25
```

Digital Uplink: 145.860 MHz FM 9k6 Pacsat Broadcast Protocol
                           1268.700 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[01112010]
=====
QuakeSat
Catalog Number: 27845
Launch Date: June 30, 2003

Status: Telemetry only

Current Mode: 9600 baud data packet

Mode U packet
Downlink: 436.675 MHz 9k6 BPS

Quakesat webpage:
http://www.quakefinder.com/services/quakesat-ssite/
[04272009]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=69&retURL

```
=/satellites/status.php
[02212009]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Telemetry only

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink:        144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[03302009]
=====
RS-22 RADIO SPORT 22
Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only

Current Mode:  /u

CW Beacon - 435.352 MHz
            145.818 MHz

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=76&retURL
=/satellites/status.php
[02212009]
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990

Status: CW Beacon only

Uplinks:          145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink:      437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o
```

```
General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[03162009]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984

Status: Non-operational.

Current Mode:  /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon:           435.025 MHz
Mode-S Beacon:     2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[12162009]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - V/u
                      Voice -       V/v
                      BBS -         V/v
                      APRS -        V/v
                      SSTV -        V/v

Expedition 22 Crew:
Commander:                Jeff Williams  KD5TVQ
Flight Engineer:          Maxim Suraev
Flight Engineer:          Oleg Kotov
Flight Engineer:          T.J. Creamer   KC5WKI
Flight Engineer:          Soichi Noguchi KD5TVP

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink:   145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink:     145.200 MHz FM
Region 2/3 voice uplink:   144.490 MHz FM
Worldwide downlink:        145.800 MHz FM
```

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
                           437.800 MHz FM
                           145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
                           437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
                           RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[12222009]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-011.S3
WSR 011 Part 3 01/11/2010

AMSAT NEWS SERVICE BULLETIN 011.S3
FROM AMSAT HQ SILVER SPRING, MD, January 11, 2010
TO ALL RADIO AMATEURS
BID: $WSR-011.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

CP4
Catalog Number: 31122
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: /u

```
TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon:    437.325 MHz CW

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=79
[10022008]
=====
LIBERTAD-1
Catalog Number: 31128
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink:   145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[02122009]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: Non-Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder:  145.825 Mhz FM
[01012009]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency:  437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational
```

```
Voice Uplink:        437.250 MHz FM 67Hz CTCSS
Voice Downlink:     2401.835 MHz FM
Packet Up/Downlink:  437.250 MHz 9k6 packet
Packet Downlink     2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non-Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[08132007]
=====
CANX-1
Catalog Number: 27847
Launch Date: June 30, 2003

Status: Non-Operational

Downlink: 437.8800 MHz AFSK 1k2bps
[06052009]
=====
DTUSAT
Catalog Number: 27842
Launch Date: June 30, 2003

Status: Non-Operational

Current Mode: 2k4 AFSK Packet last reported

Downlink: 437.475MHz

Officail webpage: http://dtusat1.dtusat.dtu.dk/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=101&retURL
=satellites/all_oscars.php
[02212009]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink:   435.275 MHz 1200-baud AFSK
```

Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)

Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Telemetry only

Uplinks: 145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[03302009]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

```
Broadcast Callsign: SASAT2-11
BBS:                SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink:   145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
V-band:   145.840 -  145.990 MHz CW/LSB
U-band:   435.550 -  435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks
---------
S2-band:  2401.225 -  2401.475 MHz CW/USB
K-band:  24048.010 - 24048.060 MHz CW/USB
Beacon:   2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)
----------------------------
BEACON   General Beacon(GB)  Middle Beacon(MB)  Engineering Beacon(EB)
2 m                   none        145.898 MHz                    none
70cm           435.438 MHz        435.588 MHz             435.838 MHz
13cm(1)       2400.188 MHz       2400.338 MHz            2400.588 MHz
13cm(2)       2401.173 MHz       2401.323 MHz            2401.573 MHz
3cm          10450.975 MHz      10451.125 MHz           10451.375 MHz
1.5cm        24047.885 MHz      24048.035 MHz           24048.285 MHz
[07162007]
```

```
=====
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink:    145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: 25636
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater:         436.250 MHz

Uplinks: Mode B Repeater:  145.825 MHz
Mode J Digipeater:         145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz
```

```
Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Telemetry only

Current Modes:
Telemetry : /u

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign:       4XTECH-12

More information of GO-32 can be found at:
http://asri.technion.ac.il/techsat/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=14&retURL
=/satellites/status.php
[12012009]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational
```

```
Uplink:   145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
MO-30 UNAMSAT-2
Catalog Number: 24305
Launch Date: September 5, 1996

Status: Non-operational

Downlink:       435.1380 MHz AFSK 1200 BPS
Downlink:       435.2060 MHz AFSK 1200 BPS
Uplink:         145.8150 MHz AFSK 1200 BPS
Uplink:         145.8350 MHz AFSK 1200 BPS
Uplink:         145.8550 MHz AFSK 1200 BPS
Uplink:         145.8750 MHz AFSK 1200 BPS
[06042009]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Non-operational

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign:       POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012009]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK
```

```
Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
AO-24 ARSENE
Catalog Number: 22654
Launch Date: May 13, 1993

Status: Non-operational

Uplink:    435.0625 MHz FM 1k2bps AFSK
           435.1125 MHz FM 1k2bps AFSK
           435.1375 MHz FM 1k2bps AFSK
Downlink:  145.9750 MHz FM 1k2bps AFSK
          2446.5025 MHz FM 1k2bps AFSK

Beacon:    2446.4700 MHz CW

Broadcast callsign:
BBS:
[12162009]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HL01-11
BBS: HL01-12
[01222007]
=====
UO-22 UOSAT
```

```
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
```

```
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
[05012006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: non-operational

Current Mode:  V/u

Uplink:         145.900 MHz FM 1200-baud Manchester FSK (reserved)
                145.920 MHz FM VOICE
                145.940 MHz FM 1200-baud Manchester FSK (reserved)
                145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink:       437.026 MHz USB VOICE
                (1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[07242009]
=====
UO-15 UoSAT-4
Catalog Number: 20438
Launch Date: January 22, 1990

Status: Non-operational

Uplink: ?
Downlink: 435.1250MHz (?)
          435.1200MHz (?)
[06042009]
=====
UO-14 UoSAT-3
```

```
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon:   145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
```

```
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink  29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
Beacons:   29.450 MHz
          435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB
```

```
Beacon 1:  29.352 MHz (intermittent)
Beacon 2:  29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink:     21.260 to 21.300 MHz CW/USB
Downlink:  145.860 to 145.900 MHz CW/USB

Beacon:    145.860 MHz

Robot:     145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink:   21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon:   29.408 MHz

Robot:    29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-011.S4
WSR 011 Part 4 01/11/2010

AMSAT NEWS SERVICE BULLETIN 011.S4
FROM AMSAT HQ SILVER SPRING, MD, January 11, 2010
TO ALL RADIO AMATEURS
BID: $WSR-011.S4

THE FOLLOWING SATELLITES HAVE RE-ENTERED OR HAVE BEEN RETURNED SAFELY:

NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: July 28, 2008
```

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[01012009]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink: 145.825 Mhz FM APRS AX25
APRS Uplink: 145.825 MHz FM APRS AX25
Voice/PSK31 Uplink: 28.120 MHz

Packet to Voice ID: RAFT
[06112007]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Re-Entered
Re-entered: June 18, 2008

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon: 437.2750 MHz CW

Callsign: JR8YJT
[01012009]
=====
SO-43 Starshine 3
Catalog Number: 26929
Launch Date: September 30, 2001

Status: Re-Entered
Re-entered: January 21, 2003

Beacon: 145.825Mhz

[02212009]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at} amsat.org
NNNN
/EX

```
From -8821940839540439313
X-Google-Thread: a4a23d5f63,8847f47050f8d708,start
X-Google-Attributes: gida4a23d5f63,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII
Path: g2news1.google.com!news2.google.com!npeer02.iad.highwinds-media.com!
news.highwinds-media.com!feed-me.highwinds-media.com!nx01.iad01.newshosting.com!
newshosting.com!198.186.194.249.MISMATCH!transit3.readnews.com!news-
out.readnews.com!news-xxxfer.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-024 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sun, 24 Jan 2010 12:26:10 EST
Organization: The Radio Amateur Satellite Corporation
Lines: 392
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <001001ca9d1a$4ae67c10$e0b37430$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;charset="iso-8859-1"
Content-Transfer-Encoding: quoted-printable
X-Trace: reader1.panix.com 1264353970 12333 166.84.1.6 (24 Jan 2010 17:26:10 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 24 Jan 2010 17:26:10 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news1.google.com rec.radio.amateur.space:306 rec.radio.info:1186
```

AMSAT NEWS SERVICE
ANS-024

ANS is a free, weekly, news and information service of AMSAT North America,
The Radio Amateur Satellite Corporation. ANS reports on the activities of a
worldwide group of Amateur Radio operators who share an active interest

in
designing, building, launching and communicating through analog and
digital
Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* Phase-3E News From AMSAT-DL General Meeting
* Request for submision of articles for the SVHFS Conference
* Happy Birthday
* ARISS Status - 18 January 2010

SB SAT @ AMSAT $ANS-024.01
Phase-3E News From AMSAT-DL General Meeting

AMSAT News Service Bulletin 024.01
From AMSAT HQ SILVER SPRING, MD.
January 24, 2010
To All RADIO AMATEURS
BID: $ANS-024.01

Phase-3E News From AMSAT-DL General Meeting(1st English Translation)

Peter, DB2OS, informed the extraordinary general meeting at 10 October 2009 about Phase-3E. The mechanics of the satellite are ready. Also many modules are mostly still at the developers.

Following the extraordinary general meeting there were celebrating a major milestone in the project. Mario, DL5MLO, showed the data transfer between a in Germany produced engineering model of the IHU-3 and a notebook with 400 bps PSK.

OM Dr. Karl Meinzer takes immediately some IPS commands to the onboard computer enjoying to see the correct answer in the display of the laptop. This is the core of the data communications for P3E control and monitoring in flight.

So far there is only a prototype at basic layout of the last stand. Due to various changes in the schematic and no longer available or improved components all layouts will be revised or newly created.

The construction of the IHU-3, CAN-DO! Bus and the SDX at AMSAT-DL, Phase-3E is now "ITAR-free", ie free of export restrictions in the U.S. These modules were developed also as an aid by members of AMSAT-NA.

Launch costs

A satellite launch with the Ariane will cost about 3 million Euros. An alternative to Ariane and Soyuz could be the new agency SpaceX. It was talked about the possibilities for an inexpensive launch for P3E with one of the Falcon 9 rockets. At present, the prices for a regular Falcon-9 are outside the financial resources of AMSAT-DL. During the interview, there were signs however, a vague possibility of how to reduce costs. AMSAT-DL will continue to remain in contact with SpaceX.

The financing of launch costs would be done by the Mars P5A mission. For the feasibility of P5A with costs of 10 million Euros for each start and developing it was agreed with DLR the creation of a study. The planned realization of the P5A Mission to Mars was between 2016 to 2018.

Alternative P5-Moon mission

Hartmut, DL1YDD, said that talks in September 2009 with the DLR at technical level took place. A lunar mission as an intermediate step to a Mars mission would be equipped with a probe in a 100-km orbit around the Moon

and possible in 2014.

The satellite design for the P5-Moon mission is, as the P5-Mars mission,

based on the P3D structure of AO-40. Further details will follow after completion of the currently for six months pending DLR/AMSAT-DL-study in spring 2010.

See also:
http://www.amsat-dl.org
http://www.p3e-satellite.org/
http://www.dlr.de
http://www.spacex.com/

[ANS thanks to Thomas Frey, HB9SKA, and the SouthGate Amateur Radio News for the above information]

/EX

SB SAT @ AMSAT $ANS-024.02
Request for submision of articles for the SVHFS Conference

AMSAT News Service Bulletin 024.02
From AMSAT HQ SILVER SPRING, MD.
January 24, 2010
To All RADIO AMATEURS
BID: $ANS-024.02

Friends,
It would be very helpful if you're planning to present and/or submit a

paper for the 2010 SVHFS Conference to let us know. The deadline for submissions is February 5th, so time is ticking but not out. The conference planners are busy making preparations. So far we have open slots for the presentations on both Friday and Saturday. Requests for presentation slots are being taken now, please let us hear from you.

Call for Papers 14th Annual Southeastern VHF Society Conference April 23rd and 24th, 2010 Morehead State University in Morehead, Kentucky

The Southeastern VHF Society is calling for the submission of papers and presentations for the upcoming 14th Annual Southeastern VHF Society Conference to be held at Morehead State Univeristy in Morehead, KY on April 23rd and 24th, 2010. Papers and presentations are solicited on both the technical and operational aspects of VHF, UHF and Microwave weak signal amateur radio. Some suggested areas of interest are:

Transmitters
Receivers
Transverters
RF Power Amplifiers
RF Low Noise Pre Amplifiers
Antennas
Construction Projects
Test Equipment And Station Accessories
Station Design And Construction
Contesting
Roving
DXpeditions
EME
Propagation (Sporadic E, Meteor Scatter, Troposphere Ducting, etc.)
Digital Modes (WSJT, etc.) Digital Signal Processing (DSP) Software Defined Radio (SDR) Amateur Satellites Amateur Television

In general papers and presentations on non weak signal related topics such as FM repeaters and packet will not be accepted but exceptions may be made if the topic is related to weak signal. For example, a paper or presentation on the use of APRS to track rovers during contests would be considered.

The deadline for the submission of papers and presentations is February 5,

2010. All submissions for the proceedings should be in Microsoft Word (.doc). Submissions for presentation at the conference should be in PowerPoint (.ppt) format, and delivered on either a USB memory stick or CDROM or posted for download on a web site of your choice.

Pages are 8 and 1/2 by 11 inches with a 1 inch margin on the bottom and � inch margin on the other three sides. All text, drawings, photos, etc. should be black and white only (no color).

Please indicate when you submit your paper or presentation if you plan to attend the conference and present there or if you are submitting just for publication. Papers and presentations will be published in bound proceedings by the ARRL. Send all questions, comments and submissions to the program chair, Robin Midgett K4IDC via K4IDC at comcast dot net.

For further information about the conference please go to <http://www.svhfs.org>www.svhfs.org

Thank you,
Robin Midgett K4IDC
2010 Program Chair, SVHFS

[ANS thanks Robin, K4IDC for the above information]

/EX

SB SAT @ AMSAT $ANS-024.03
Happy Birthday

AMSAT News Service Bulletin 024.03
From AMSAT HQ SILVER SPRING, MD.
January 24, 2010
To All RADIO AMATEURS
BID: $ANS-024.03

Happy Birthday! Guess who turned 20 years old on January 22nd?

AO-16, DO-17, WO-18, and LO-19 !! :)

To honor the great work of AMSAT volunteers that created, built, and launched the original "fleet of four" microsats exactly 20 years old, we will be *attempting* to operate AO-16 in its special "voice mode" on select passes during the period January 21-24. Operations will be limited to stations that share the footprint with the command station N8MH (grid FM05pj).

Mode FM Voice Repeater (Downlink is DSB. Operation is Intermittent)

Uplink: 145.9200 MHz FM
Downlink 437.0260 MHz USB and LSB

Please understand that because of the current orbit and a thermal issue in the spacecraft, the satellite turns itself OFF via a reset rather unpredictably--sometimes only moments after being turned ON. So operations may be limited to very short periods of times (barely enough for quick exchange).   During some passes it might not work at all...but I'm willing to give it a shot.

Watch for AO-16 to be turned ON for operations during the following dates and times, posted below in UTC:

```
 WinAos   QTH: -78.7/35.4
 ----------------------------------------------------------
    Day       Object      AOS (U) LOS
 ----------------------------------------------------------
 21.01.2010  AO-16        19:02 19:16

 22.01.2010  AO-16        08:56 09:10  <- (yes, that's 4am Eastern time
;)

 22.01.2010  AO-16        20:10 20:25

 23.01.2010  AO-16        08:25 08:40

 23.01.2010  AO-16        19:39 19:54

 24.01.2010  AO-16        19:09 19:23

 24.01.2010  AO-16        20:49 21:02
```

Let's hope at least a few of you can make a contact! If nothing else, you can listen to the familiar "hmmmmm" of 1200BPSK and reminisce.

73,

Mark L. Hammond [N8MH]
AO-16 Command Station

[ANS thanks Mark, N8MH For the above information]

/EX

SB SAT @ AMSAT $ANS-024.05
ARISS Report

AMSAT News Service Bulletin 024.05
From AMSAT HQ SILVER SPRING, MD.
January 18, 2010
To All RADIO AMATEURS
BID: $ANS-024.05

Amateur Radio on the International Space Station (ARISS) Status Report
January 18, 2010

1. Upcoming School Contacts

An Amateur Radio on the International Space Station (ARISS) contact was scheduled for Minato Junior High School in Hachinohe, Aomori, Japan on Friday, January 22 at 09:24 UTC. Students are learning about the goals of the ISS as well as radio communications and are studying for their amateur radio licenses.

Morioka Children�s Museum of Science in Morioka, Iwate, Japan has been scheduled for an Amateur Radio on the International Space Station (ARISS) contact with JAXA astronaut Soichi Noguchi, KD5TVP on Thursday, January 28 at 06:53 UTC. The youth are currently learning about the ISS, satellite orbits and amateur radio. The contact is expected to be conducted in Japanese.

2. Commander Jeffrey Williams and Taiwanese Youth Speak via ARISS Contact

On Monday, January 11, Expedition 22 Commander Jeffrey Williams, KD5TVQ participated in an Amateur Radio on the International Space Station (ARISS) contact with students attending Humanity Primary and Junior High School (HPJHS), the first charter school in Taiwan. Joining in the contact were students from the Technology and Science Institute of Northern Taiwan�s Department of Computer and Communication Engineering. Six hundred guests attended the event, which was sponsored by the Chinese Taipei Amateur Radio League (CTARL), and listened as Williams answered 15 questions about life in space. Media coverage included six television stations and five newspapers.

3. Cosmonauts Participate in Two ARISS Contacts with Kursk University

On Saturday, January 16, cosmonauts Maksim Suraev and Oleg Kotov both participated in two Amateur Radio on the International Space Station (ARISS) sessions with students and faculty of the Kursk State Technical

University.
The sessions were held on successive ISS passes.

4. Astronaut Training Status

JAXA astronaut Satoshi Furukawa, KE5DAW received Amateur Radio on the International Space Station (ARISS) basic operations training as well as an ARISS program overview on January 13. Furukawa is training as an Expedition 28 crew member which is planned to launch in May 2011.

Two Amateur Radio on the International Space Station (ARISS) simulated contacts are planned with astronauts Doug Wheelock, KF5BOC and Shannon Walker, KD5DXB on Thursday, January 21. Wheelock and Walker will answer questions posed by students at the Manhattan Challenger Learning Center, New York, New York and the Challenger Learning Center of Alaska, Kenai, Alaska, respectively. Both astronauts are slated to fly with Expedition 24 in May 2010.

5. ARISS Audio in Podcast

On the NASA Do-It-Yourself Podcast Web site is an item about using Amateur Radio on the International Space Station (ARISS) contacts to record unique audio for use in a student built podcast. The blog provides additional information via links to the Teaching From Space ARISS Web page as well as the DIY Podcast Homepage. See:
http://blogs.nasa.gov/cm/blog/diyPodcastBlog

6. ARRL Articles on Record Number of ARISS Contacts

The American Radio Relay League (ARRL) ran a Web story on the record number of Amateur Radio on the International Space Station (ARISS) contacts held during 2009. ARISS delegate Rosalie White noted in the article that by year�s end, there was an increased interest in ARISS among U.S. schools as indicated by educators� queries and the increase in U.S. ARISS applications submitted. To view the article, go to:
http://www.arrl.org/news/stories/2010/01/12/11285/?nc=1

The story also ran in the ARRL Letter. See:
http://www.arrl.org/arrlletter/index.html?issue=2010-01-14#toc04

[ANS thanks Carol, KB3LKI, for the above information]

/EX

73,
This week's ANS Editor,
Dee Interdonato, NB2F

```
From -6152015878156211431
X-Google-Thread: a4a23d5f63,b585322e05e65f06,start
X-Google-Attributes: gida4a23d5f63,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!newsfeed2.dallas1.level3.net!
news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-029 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Fri, 29 Jan 2010 09:22:03 EST
Organization: The Radio Amateur Satellite Corporation
Lines: 1845
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <001201caa0ee$65f2ec00$31d8c400$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1264774923 10800 166.84.1.6 (29 Jan 2010 14:22:03 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Fri, 29 Jan 2010 14:22:03 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news1.google.com rec.radio.amateur.space:307 rec.radio.info:1197
```

This report is organized into four (4) parts.

Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - deborbited/returned satellites

SB SAT @ AMSAT W8ISS $WSR-029.S1
WSR 029 Part 1 01/29/2010

AMSAT NEWS SERVICE BULLETIN 029.S1
FROM AMSAT HQ SILVER SPRING, MD, January 29, 2010
TO ALL RADIO AMATEURS
BID: $WSR-029.S1

HO-68 XW-1 (CAS-1)
Catalog Number:
Launch Date: December 15, 2009
Status: Commissioning

Callsign:

Uplinks: 145.8250 MHz FM, PL 67.0 Hz.
145.9250 - 145.9750 MHz SSB/CW
145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
435.7650 - 435.7150 MHz SSB/CW
435.6750 MHz AFSK 1200 BPS

Beacon: 435.7900 MHz CW

Mode and Antenna Polarization:
V: LHCP 2.0dBi max
U: RHCP 3.0dBi max

IARU coordination page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108

For more information about XW-1 (CAS-1):
http://www.camsat.cn
[12122009]
=====
SO-67 SumbandilaSat
Catalog Number: 35870
Launch Date: September 17, 2009

Status: Commissioning

Callsign: ZS0SUM

Uplink: 145.875MHz FM tone 233.6 Hz
Downlink: 435.345MHz FM

Mode and Antenna Polarization:
V: Linear

```
U: Linear

For more information about SO-67:
http://www.amsatsa.org.za/
[11212009]
=====
DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008

Status: Operational
Current Mode: Science Mode - Beacon ONLY

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink:   435.530 to 435.570 MHz

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68
[02122009]
=====
VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink:   435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink:   435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW


Indian Beacon:  145.859330 MHZ CW
Dutch Beacon:   145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is active. Each transponder has a different beacon.
[08072008]
```

=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Software Reload in Progress

Current Modes:
FM Repeater ONE
Uplink: 145.920 MHz FM
Downlink: 435.300 MHz FM
FM Repeater TWO
Uplink: OFF
Downlink: OFF
BBS
Uplink: 1268.700 mhz FM 9k6 Pacsat Broadcast Protocol
Downlink: 435.150 MHz FM 9k6 Pacsat Broadcast Protocol
Telemetry
Downlink: 435.150MHz 9k6

Analog voice downlink: 435.300 MHz FM
                           435.150 MHz FM
                          2401.200 Mhz FM
Analog voice uplink: 145.860 MHZ FM
                           145.880 MHz USB
                           145.920 MHz FM
                          1268.700 MHz FM
Digital Downlinks: 435.150 MHz FM 38k4 PBP, 1 watt output
                           435.150 MHz FM 9k6 Pacsat Broadcast Protocol
                          2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Pacsat Broadcast Protocol
                          1268.700 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[01112010]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607

Launch date: December 20, 2002

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz. The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10 minute timer.
[05282007]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: RECOVERY
Current Mode: V/u (Mode JA)

Voice/CW (Mode JA)
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage:
http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's
CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/
fo29cwts.htm
[09062009]
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993

Status: Operational

Current Mode: V/u

```
Uplink:   145.850 MHz FM
Downlink: 436.797 MHz FM
```

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[03232009]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational

Current Mode: Alternating between Mode A and B every 24 hours

```
Uplink:   145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink:  29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons:   29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW
```

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/

```
[02122009]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - V/u
                      Voice -       V/v
                      BBS -         V/v
                      APRS -        V/v
                      SSTV -        V/v


Expedition 22 Crew:
Commander:                Jeff Williams  KD5TVQ
Flight Engineer:          Maxim Suraev
Flight Engineer:          Oleg Kotov
Flight Engineer:          T.J. Creamer   KC5WKI
Flight Engineer:          Soichi Noguchi KD5TVP

Available Modes and Frequencies:

Digital/APRS:
Worldwide packet uplink:   145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink:     145.200 MHz FM
Region 2/3 voice uplink:   144.490 MHz FM
Worldwide downlink:        145.800 MHz FM

Crossband Repeater:
Repeater Uplinks:         1269.650 MHz FM
                           437.800 MHz FM
                           145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink:         145.800 MHz FM
                           437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink:                  145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian:                   OR4ISS
German:                    DP0ISS
Russian:                   RS0ISS
                           RZ3DZR
United States:             NA1SS
```

Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[12222009]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-029.S2
WSR 029 Part 2 01/29/2010

AMSAT NEWS SERVICE BULLETIN 029.S2
FROM AMSAT HQ SILVER SPRING, MD, January 29, 2010
TO ALL RADIO AMATEURS
BID: $WSR-029.S2

HO-68 XW-1 (CAS-1)
Catalog Number:
Launch Date: December 15, 2009
Status: Commissioning

Callsign:

Uplinks: 145.8250 MHz FM, PL 67.0 Hz.
145.9250 - 145.9750 MHz SSB/CW
145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
435.7650 - 435.7150 MHz SSB/CW
435.6750 MHz AFSK 1200 BPS

Beacon: 435.7900 MHz CW

IARU coordination page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108

For more information about XW-1 (CAS-1):
http://www.camsat.cn
[122262009]

=====
SwissCube
Catalog Number: 35932
Launch Date: September 23, 2009

Status: In Orbit

Callsign: HB9EG

```
Beacon(100mw): 437.5050MHz CW
Beacon(1w): 437.5050MHz FSK 1k2bps
[11112009]
=====
UWE-2
Catalog Number: 35934
Launch Date: September 23, 2009

Status: In Orbit

Beacon(500mw): 437.3850 MHz AFSK 1k2bps
               437.3850 MHz FSK 9k6bps
[1112009]
=====
ITUpsAT1
Catalog Number: 35935
Launch Date: September 23, 2009

Status: In Orbit

Beacon(100mw): 437.325MHz CW
Beacon(1w): 437.325MHz 19k2bps
[11112009]
=====
BEESAT
Catalog Number: 35933
Launch Date: September 23, 2009

Status: In Orbit

Callsign: DP0BEE

Beacon(100mw): 436.000MHz CW
Beacon(500mw): 436.000MHz GMSK 4k8bps
[11112009]
=====
Pollux
Catalog Number:
Launch Date: July 31, 2009

Status: Operational

Callsign: POLLUX-1

Downlink: 145.825MHz 1k2 AX.25
[10042009]
=====
Castor (ANDE-2)
Catalog Number:
Launch Date: July 31, 2009

Status: Operational
```

```
Callsign: KD4HBO-1

Downlink: 145.825 MHz 1k2 AX.25
[10042009]
=====
BEVO-1 (DRAGONSAT-1)
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Operational

Downlink: 437.325 MHz 9k6 GMSK
          437.325 MHz CW 20wpm
[07312009]
=====
AggieSat2 (DRAGONSAT-2)
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Operational

Downlink: 436.250 MHz 9k6 FHSS
[11112009]
=====
CP-6
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Commissioning

Downlink: 437.365 MHz 1k2 AFSK
[06052009]
=====
HAWKSAT 1
Catalog number: 35003
Launch Date: May 19, 2009

Status: ?

Downlink: 437.345 ?
[06052009]
=====
Pharmasat
Catalog Number: 35002
Launch Date: May 19, 2009
Status: Commissioning

Downlink: 437.465 MHz 1k2 AFSK
[06052009]
=====
ANUSAT
Catalog Number: 34808
Launch Date: April 20, 2009
```

```
Status: ?

Downlink:  435.000 MHz
Uplink:    145.800 MHz

Telemetry: 137.400 MHz
[05112009]
=====
SOHLA-1 (ASTRO TECH.)
Catalog Number: 33496
Launch Date: January 23, 2009

Status: Commisioning

Proposed Frequencies and Modes:
Downlink: 437.505 MHz AFSK/CW
Beacon:   437.505 MHz AFSK/CW

Callsign:

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=101
[03232009]
=====
KAGAYAKI (Solan Co.)
Catalog Number: 33495?
Launch Date: January 23, 2009

Status: In Orbit

Downlink: 437.375 MHZ    FSK9k6/CW
Beacon:   437.375 MHz    FSK9k6/CW

IARU coordination status page:

AMSAT-NA webpage:

[01152009]
=====
STARS (Kagawa Univ.) (Twin Satellites)
Catalog Number: 33498
Launch Date: January 23, 2009

Status: Operational ?

Downlinks: 437.485 MHz FM/CW
           437.465 MHz FM/CW
Beacons:   437.305 MHz FM/CW
           437.275 MHz FM/CW

Callsigns: JR5YBN
           JR5YBO
```

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=99

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=121&retURL
=/satellites/status.php
[022152009]
=====
KKS-1 (Tokyo MCIT)
Catalog Number: 33499
Launch Date: January 23, 2009

Status: Operational

Downlink: 437.455 MHz AFSK/CW
Beacon: 437.385 MHz AFSK/CW

Callsign: JQ1YYY

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=107

AMSAT-NA webapge:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=120&retURL
=/satellites/status.php
[02212009]
=====
PRISM (Tokyo Univ.)
Catalog Number: 33493
Launch Date: January 23, 2009

Status: Operational ?

Downlink: 437.425 MHz AFSK/GMSK/CW
Beacon: 437.250 MHz AFSK/GMSK/CW

Callsign: JQ1YCX

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=97

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=119&retURL
=/satellites/status.php
[02212009]
=====
RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number: 32953
Launch Date: May 23, 2008

Status: Operational

Curent Modes: Telemetry
              Audio
              Images

Downlinks: 435.315 MHz
           435.215 MHz

AMSAT-NA website:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=115&retURL=/satellites/status.php

Official website:
http://www.npopm.com/?cid=leoca&caid=43
[02122009]
=====
CanX-2
Catalog number: 32790
Launch Date: April 28, 2008

Status: Operational in range of ground station only

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[02212009]
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.425 MHz 1k2 baud packet

For the latest project status update please visit the AAUSAT-II web page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[02212009]
=====
CO-65 CUTE-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008

Status: Digipeater

Downlink: 437.475 MHz 9k6 Packet

```
Uplink:   1267.600 Mhz

Telemetry Beacon:
Downlink: 437.2750 MHz CW

For the latest project status update please visit the Cute-1.7+APD II
web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78

Command Station blog website:
http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=112&retURL
=/satellites/status.php
[02212009]
=====
Compass-1
Catalog number: 32787
Launch Date: April 28, 2008

Status: Operational

Current Mode: 4k8 MSK packet

Uplink:   145.980 MHz FM
Downlink: 437.275 Mhz CW
          437.405 MHz Packet

For the latest project status update please visit the Compass 1 web
page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=114&retURL
=/satellites/status.php
[04272009]
=====
CO-66 Seeds II
Catalog number: 32791
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.485 MHz

Callsign: JQ1YGU

For the latest project status update please visit the Seeds 2 web
```

page: http://cubesat.aero.cst.nihon-u.ac.jp/english/seeds_2_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=113&retURL
=/satellites/status.php
[02212009]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=94&retURL=
/satellites/status.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=72
[02122009]
=====
CP3
Catalog Number: 31129
Launch Date: April 17,2007

Status: Operational

Current Mode: /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[02122009]
=====
GENESAT-1
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Current Mode: /u

Callsign: KE7EGC

Telemetry Beacon Downlink: 437.0695 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[09152009]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon: 437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/xivpicte.htm
[02212009]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003

Status: ?????

Current Mode: /u

Beacon: 436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=96&retURL=/satellites/status.php

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[06082009]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Operational?

Uplink: 1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=56
[02122009]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Modes:
FM Repeater ONE
Uplink: 145.920 MHz FM
Downlink: 435.300 MHz FM
FM Repeater TWO
Uplink: OFF
Downlink: OFF
BBS
Uplink: 1268.700 mhz FM 9k6 Pacsat Broadcast Protocol
Downlink: 435.150 MHz FM 9k6 Pacsat Broadcast Protocol
Telemetry
Downlink: 435.150MHz 9k6

Analog voice downlink: 435.300 MHz FM
                           435.150 MHz FM
                          2401.200 Mhz FM
Analog voice uplink: 145.860 MHZ FM
                           145.880 MHz USB
                           145.920 MHz FM
                          1268.700 MHz FM
Digital Downlinks: 435.150 MHz FM 38k4 PBP, 1 watt output
                           435.150 MHz FM 9k6 Pacsat Broadcast Protocol
                          2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Pacsat Broadcast Protocol
                          1268.700 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11

BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[01112010]
=====
QuakeSat
Catalog Number: 27845
Launch Date: June 30, 2003

Status: Telemetry only

Current Mode: 9600 baud data packet

Mode U packet
Downlink: 436.675 MHz 9k6 BPS

Quakesat webpage:
http://www.quakefinder.com/services/quakesat-ssite/
[04272009]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=69&retURL=/satellites/status.php
[02212009]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Telemetry only

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[03302009]
=====
RS-22 RADIO SPORT 22
Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only

Current Mode: /u

CW Beacon - 435.352 MHz
            145.818 MHz

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=76&retURL
=/satellites/status.php
[02212009]
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990

Status: CW Beacon only

Uplinks: 145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink: 437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[03162009]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984

Status: Non-operational.

Current Mode: /v

```
Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon:           435.025 MHz
Mode-S Beacon:      2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[12162009]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - V/u
                      Voice -       V/v
                      BBS -         V/v
                      APRS -        V/v
                      SSTV -        V/v

Expedition 22 Crew:
Commander:                Jeff Williams  KD5TVQ
Flight Engineer:          Maxim Suraev
Flight Engineer:          Oleg Kotov
Flight Engineer:          T.J. Creamer   KC5WKI
Flight Engineer:          Soichi Noguchi KD5TVP

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink:   145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink:     145.200 MHz FM
Region 2/3 voice uplink:   144.490 MHz FM
Worldwide downlink:        145.800 MHz FM

Crossband Repeater:
Repeater Uplinks:         1269.650 MHz FM
                           437.800 MHz FM
                           145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink:         145.800 MHz FM
                           437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink:                  145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
```

U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[12222009]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-029.S3
WSR 029 Part 3 01/29/2010

AMSAT NEWS SERVICE BULLETIN 029.S3
FROM AMSAT HQ SILVER SPRING, MD, January 29, 2010
TO ALL RADIO AMATEURS
BID: $WSR-029.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

CP4
Catalog Number: 31122
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon: 437.325 MHz CW

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=79
[10022008]
=====
LIBERTAD-1
Catalog Number: 31128
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink: 145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[02122009]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: Non-Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder: 145.825 Mhz FM
[01012009]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 MHz FM 67Hz CTCSS
Voice Downlink: 2401.835 MHz FM
Packet Up/Downlink: 437.250 MHz 9k6 packet
Packet Downlink   2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non-Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[08132007]
=====
CANX-1
Catalog Number: 27847
Launch Date: June 30, 2003

Status: Non-Operational

Downlink: 437.8800 MHz AFSK 1k2bps
[06052009]
=====
DTUSAT
Catalog Number: 27842
Launch Date: June 30, 2003

Status: Non-Operational

Current Mode: 2k4 AFSK Packet last reported

Downlink: 437.475MHz

Officail webpage: http://dtusat1.dtusat.dtu.dk/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=101&retURL
=satellites/all_oscars.php
[02212009]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)

Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Telemetry only

Uplinks: 145.850 MHz
145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[03302009]

=====

NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]

=====

SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]

=====

SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

```
Uplink:   145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
V-band:   145.840 -  145.990 MHz CW/LSB
U-band:   435.550 -  435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks
---------
S2-band:  2401.225 -  2401.475 MHz CW/USB
K-band:  24048.010 - 24048.060 MHz CW/USB
Beacon:   2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)
----------------------------
BEACON   General Beacon(GB)  Middle Beacon(MB)  Engineering Beacon(EB)
2 m                    none        145.898 MHz                    none
70cm           435.438 MHz         435.588 MHz             435.838 MHz
13cm(1)       2400.188 MHz        2400.338 MHz            2400.588 MHz
13cm(2)       2401.173 MHz        2401.323 MHz            2401.573 MHz
3cm          10450.975 MHz       10451.125 MHz           10451.375 MHz
1.5cm        24047.885 MHz       24048.035 MHz           24048.285 MHz
[07162007]
=====
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
```

```
Launch date: April 21, 1999

Status: Unknown

Uplink:    145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: 25636
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater:         436.250 MHz

Uplinks: Mode B Repeater:  145.825 MHz
Mode J Digipeater:         145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
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the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Telemetry only

Current Modes:
Telemetry : /u

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign:       4XTECH-12

More information of GO-32 can be found at:
http://asri.technion.ac.il/techsat/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=14&retURL
=/satellites/status.php
[12012009]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink:   145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
MO-30 UNAMSAT-2
Catalog Number: 24305
Launch Date: September 5, 1996

Status: Non-operational
```

```
Downlink:       435.1380 MHz AFSK 1200 BPS
Downlink:       435.2060 MHz AFSK 1200 BPS
Uplink:         145.8150 MHz AFSK 1200 BPS
Uplink:         145.8350 MHz AFSK 1200 BPS
Uplink:         145.8550 MHz AFSK 1200 BPS
Uplink:         145.8750 MHz AFSK 1200 BPS
[06042009]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Non-operational

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign:       POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012009]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational
```

```
Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
AO-24 ARSENE
Catalog Number: 22654
Launch Date: May 13, 1993

Status: Non-operational

Uplink:    435.0625 MHz FM 1k2bps AFSK
           435.1125 MHz FM 1k2bps AFSK
           435.1375 MHz FM 1k2bps AFSK
Downlink:  145.9750 MHz FM 1k2bps AFSK
          2446.5025 MHz FM 1k2bps AFSK

Beacon:    2446.4700 MHz CW

Broadcast callsign:
BBS:
[12162009]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
```

```
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
[05012006]
=====
AO-16 PACSAT
```

```
Catalog number: 20439
Launch Date: January 22, 1990

Status: non-operational

Current Mode:  V/u

Uplink:         145.900 MHz FM 1200-baud Manchester FSK (reserved)
                145.920 MHz FM VOICE
                145.940 MHz FM 1200-baud Manchester FSK (reserved)
                145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink:       437.026 MHz USB VOICE
                (1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[07242009]
=====
UO-15 UoSAT-4
Catalog Number: 20438
Launch Date: January 22, 1990

Status: Non-operational

Uplink: ?
Downlink: 435.1250MHz (?)
          435.1200MHz (?)
[06042009]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986
```

```
Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon:   145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink  29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
Beacons:   29.450 MHz
          435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon 1:  29.352 MHz (intermittent)
Beacon 2:  29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational
```

```
Uplink:     21.260 to 21.300 MHz CW/USB
Downlink:  145.860 to 145.900 MHz CW/USB

Beacon:    145.860 MHz

Robot:     145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink:   21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon:   29.408 MHz

Robot:    29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-029.S4
WSR 029 Part 4 01/29/2010

AMSAT NEWS SERVICE BULLETIN 029.S4
FROM AMSAT HQ SILVER SPRING, MD, January 29, 2010
TO ALL RADIO AMATEURS
BID: $WSR-029.S4

THE FOLLOWING SATELLITES HAVE RE-ENTERED OR HAVE BEEN RETURNED SAFELY:

NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: July 28, 2008

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[01012009]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Re-Entered
```

```
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink:      145.825 Mhz FM APRS AX25
APRS Uplink:        145.825 MHz FM APRS AX25
Voice/PSK31 Uplink:  28.120 MHz

Packet to Voice ID: RAFT
[06112007]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Re-Entered
Re-entered: June 18, 2008

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon:             437.2750 MHz CW

Callsign: JR8YJT
[01012009]
=====
SO-43 Starshine 3
Catalog Number: 26929
Launch Date: September 30, 2001

Status: Re-Entered
Re-entered: January 21, 2003

Beacon: 145.825Mhz
[02212009]
NNNN
/EX
```

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at}amsat.org
NNNN
/EX

```
From -6775317261612736467
X-Google-Thread: 8f86f75953,22aef5f1d74d6b54,start
X-Google-Attributes: gid8f86f75953,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!news2.google.com!
newsfeed2.dallas1.level3.net!news.level3.com!bloom-beacon.mit.edu!panix!
rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
```

```
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-031 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sat, 30 Jan 2010 21:32:38 EST
Organization: The Radio Amateur Satellite Corporation
Lines: 323
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000d01caa21d$a0f8c650$e2ea52f0$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1264905159 8156 166.84.1.6 (31 Jan 2010 02:32:39 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 31 Jan 2010 02:32:39 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
x-cr-hashedpuzzle: B1gd CHyy DU+S Dkhs EgN9 GWEV GdrF G2pN G4Ab HH/e Hbxt HmuM
JEyB Jajo Js0h
LBvs;1;cgBlAGMALQByAGEAZABpAG8ALQBpAG4AZgBvAEAAcABhAG4AaQB4AC4AYwBvAG0A;Sosha1_v1;
7;{4B131CB3-
CE0E-413D-8921-1C45CA8FE5FE};awA5AGoAawBtAEAAYwBvAG0AYwBhAHMAdAAuAG4AZQB0AA==;Sun,
31 Jan 2010 02:32:20
GMT;QQBOAFMALQAwADMAMQAgAEEATQBTAEEAVAAgAE4AZQB3AHMAIABTAGUAcgB2AGkAYwBlACAAVwBlAG
UAawBsAHkAIABCAHUAbABsAGUAdABpAG4AcwA=
x-cr-puzzleid: {4B131CB3-CE0E-413D-8921-1C45CA8FE5FE}
Xref: g2news1.google.com rec.radio.amateur.space:308 rec.radio.info:1201
```

AMSAT NEWS SERVICE
ANS-031

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:

* 2010 OSCAR SKN "Best Fist" Winners
* ISS on SSTV This Week
* How's Satellite DX? Pretty Good, Thanks for Asking
* Sumbandila SO-67 Amateur Radio Operations Suspended
* Building the First US ARISSAT-1 Flight Unit Begins
* 8 New Cubesats in Development

SB SAT @ AMSAT $ANS-031.01
2010 OSCAR SKN "Best Fist" Winners

AMSAT News Service Bulletin 031.01
>From AMSAT HQ SILVER SPRING, MD.
January 31, 2010
To All RADIO AMATEURS
BID: $ANS-031.01

Ray Soifer, W2RS has compiled the Best Fist votes from AMSAT's Straight Key Night on OSCAR 2010 and reported the results this week. Ray said, "We saw a great deal of activity throughout the world, with 'Best Fist' nominations coming in from four continents." The following "Best Fist" winners, 23 in all, each received at least one nomination from someone they worked:

AA5PK, JA6SZV, JH7UJI, JO2ASQ, JR0EFE, K0RJS, N3TE, N3TL, N4ZQ, N5AFV, N7EQF, N9AMW, NR7Q, PV5AZ, PV8DX, PY2FFG, PY4ZBZ, WA5KBH, WA6ARA, WC7V, WD9EWK, 9A2EY, 9A5YY.

As some will remember, at one time we used to award a "grand prize" to the participant who got the most nominations. This was discontinued a few years ago, for fear of making the event too "competitive." However, we have to make an exception this year: Glenn Miller, AA5PK, received a record six nominations. Well done!

Many thanks to all who participated, and congratulations to all of our "Best Fist" winners.

See you next year!

[ANS thanks Ray Soifer, W2RS for the above information]

/EX

SB SAT @ AMSAT $ANS-031.02
ISS on SSTV This Week

AMSAT News Service Bulletin 031.02
>From AMSAT HQ SILVER SPRING, MD.
January 31, 2010
To All RADIO AMATEURS
BID: $ANS-031.02

This week the 145.800 MHz downlink from the International Space Station was active with the Slow Scan Television (SSTV) signals from the MAI-75 experiment. On Wednesday, January 27 automated SSTV operations were conducted using the VC-H1 system transmitting a Robot-36 formatted picture once every 3 minutes worldwide between 0900 to 1400 UTC. SSTV operations on Thursday, January 28, and Friday, January 29 were conducted using the PD-160 transmission format using MMSSTV and were generally focused toward ground stations in western Russia.

SSTV images received by Amateur Radio Operators worldwide this week have been uploaded to the ARISS SSTV gallery at:
http://www.amsat.org/amsat/ariss/SSTV/

The SSTV downlink on 145.800 from the ISS is transmitted in FM mode. You can receive and decode these images at your station using freeware software. You will need to connect the audio output from your 145.800 MHz receiver to an input on your computer's soundcard. Depending on your radio and computer an audio interface may be required. Plans for these are available via internet searches. Others have reported success by simply connecting a speaker or headphone jack to their soundcard input and adjusting levels using the soundcard driver program's audio slider controls.

One widely used SSTV software program is MMSSTV available at:
http://mmhamsoft.amateur-radio.ca/ (MMSSTV 1.11G or later is recommended).

The downlink signal from the ISS on 145.800 MHz is generally very strong and a full OSCAR class tracking system is not needed. Many Amateur Radio operators are successful using a 2 meter vertical on the house roof.

Tracking information for those who do not have a tracking program can be viewed on-line at:
http://www.amsat.org/amsat-new/tools/predict/satloc.php (and select the ISS as the object to be displayed).

[ANS thanks the ARISS team for the above information]

/EX

SB SAT @ AMSAT $ANS-031.03
How's Satellite DX? Pretty Good, Thanks for Asking

AMSAT News Service Bulletin 031.03
>From AMSAT HQ SILVER SPRING, MD.
January 31, 2010
To All RADIO AMATEURS
BID: $ANS-031.03

+ January 16 - WC7V had a contact with RN1NW via AO-7 Mode B over
  a distance of 7659 KM. Kerry, WC7V said, "I have hoped to make this

contact for over 30 years. The satellite was ascending at my QTH and was at about 3 degrees elevation at the end of our QSO."

- January 18 - ZS6BB had a contact with EA6SA via AO-7 Mode B over a distance of 7,766 KM. This contact was conducted via SSB.

- January 23 - N3TL and KL7XJ had a contact on HO-68 in FM. Tim, N3TL said, "At the time, the satellite was below 4.5 degrees and descending for me. I'm thrilled to put state No. 49 in the log with my handheld station."

- January 24 - Piraja PS8RF had a contact with EA4CYQ in SSB via the linear transponder through HO-68. This is believed to be the first SSB contact between South America and Europe on this satellite over a distance 7,477 KM. Juan Antonio, EA4CYQ wrote, "After that I worked Canada VE2DWE and several USA stations KB1RVT, K3SZH and KC9ELU.

- January 25 - K3SZH with PY2OV on SSB via AO-7. The distance between the two stations was 7738 KM. PS8RF recorded the contact and posted a short video at: http://www.youtube.com/watch?v=gS4Mdl-P6X4

- Schedule update for VP8 South Shetland Islands AO-51 operation. The DNXL Newsletter #1660 (Jan 27, 2010) reports that XR9JA will now be active between February 1 - 28. This operation was originally planned for January but has been re-scheduled. Their QTH will be the Chilean naval base "Arturo Prat" on Greenwich Island belonging to the South Shetland archipelago (AN-010). Their QSL manager is CE5JA (via bureau or direct) and more information can be found on their website: http://www.ce5ja.cl

- FO-29 seems to be recovering well. On January 24 Rowland K4XD heard strong signals while copying his own CW signal with no one else on the satellite. On January 27 Mike, DK3WN reported strong signals received from FO-29.

- January 28 - ZS6WB in Pretoria, South Africa copied a double-hop signal from I8CVS in Italy. Dom, I8CVS was uplinking to AO-7 on 432.158 MHz which translated out on 145.940 MHz on AO-7. The signal on 145.940 from AO-7 was received as an input on FO-29, and translated to 435.840 MHz output on FO-29. Hal, ZS6WB said he copied a good signal via 435.840 MHz for several minutes.

[ANS thanks everyone for the above information]

/EX

SB SAT @ AMSAT $ANS-031.04
Sumbandila SO-67 Amateur Radio Operations Suspended

AMSAT News Service Bulletin 031.04
>From AMSAT HQ SILVER SPRING, MD.
January 31, 2010

To All RADIO AMATEURS
BID: $ANS-031.04

The Sumbandila Satellite Operations at SunSpace in South Africa said this week that Amateur Radio Operations via SO-67 must be suspended temporarily due to system commissioning requirements of the main payload.

The message said after handover of operations of the commissioned payloads the Satellite Applications Center plans return SO-67 back to scheduled Amateur Radio operation in the middle-March to early-April, 2010 timeframe.

[ANS thanks Jan-Albert Koekemoer for the above information]

/EX

SB SAT @ AMSAT $ANS-031.05
Building the First US ARISSAT-1 Flight Unit Begins

AMSAT News Service Bulletin 031.05
>From AMSAT HQ SILVER SPRING, MD.
January 31, 2010
To All RADIO AMATEURS
BID: $ANS-031.05

Gould Smith, WA4SXM writing on behalf of the ARISSAT-1 team said construction of the flight unit begins next week when Tony Monteiro, AA2TX begins electronic assembly of the first US flight unit for ARISSat.

The ARISSAT-1 team has had prototypes working for months. The enclosures have been painted by NASA and the cables prepared by Larry Brown, N7LB. The flight boards were built by the Microchip ARISSat team and Chuck Green, N0ADI, with Chuck checking all the flight units.

Lou McFadin, W5DID has nearly assembled a complete flight structure designed by Bob Davis, KF4KSS. Lou expects to exhibit the structure in the AMSAT Booth at the upcoming Orlando HamCation. The first two flight TX/RX/Command receiver modules from Bill Ress, N6GHZ are due to arrive next week.

We just found out that ARISSat will receive a new callsign and some additional Russian greetings will be added. We will have more than 25 international greetings from around the world in twelve languages broadcast on the FM downlink. In addition to the greetings will be voice ID, voice telemetry values, SSTV images, CW signals, new 1k BPSK signal by Phil Karn, KA9Q sending full telemetry and experiment data and a 16 kHz wide transponder. Kurst State University in Russia is providing the experiment and the Silver-Zinc battery for the mission.

The ARISSAT-1 team will start system testing and Flight Safety reviews soon and plans to ship two flight units to Russia in the spring.

[ANS thanks Gould Smith, WA4SXM and the ARISSAT-1 Team for the above information]

/EX

SB SAT @ AMSAT $ANS-031.06
8 New Cubesats in Development

AMSAT News Service Bulletin 031.06
>From AMSAT HQ SILVER SPRING, MD.
January 31, 2010
To All RADIO AMATEURS
BID: $ANS-031.06

Four CubeSats from Japan are planned to launch on 20 May 2010 aboard the JAXA PLANET-C mission to Venus.

UNITEC-1, NPO UNISEC (University Space Engineering Consortium) will fly to Venus. This will provide Amateur Radio operators a deep space beacon for experimentation on 5.8GHz. More information is at:
http://www.unisec.jp/unitec-1/en/top.html

Negai*", developed by Soka University will remain in low-earth orbit with a 437.305 MHz CW, Packet 1200bps FSK AX.25 downlink. More information is at: http://kuro.t.soka.ac.jp/main.html

WASEDA-SAT2, developed by Waseda University will remain in low-earth orbit with a 437.485 MHz CW(FM), PCM-FSK(FM) 9600bps downlink. More information is at:
http://www.miyashita.mmech.waseda.ac.jp/Waseda-Sat2/index.htm

KSAT, developed by Kagoshima University will remain in low-earth orbit with an uplink: S-band (2GHz, 10kbps) and downlink: Ku-band(13.275GHz, 10kbps/1Mbps). More information is at:
http://www.sci.kagoshima-u.ac.jp/~nishio/download/Ukaren2008Nishio.pdf

NASA plans to launch 3 CubeSats with Amateur Radio payloads. The satellites are manifested as an auxiliary payload on the Taurus XL launch vehicle for NASA's Glory Climate Mission, planned for liftoff in late November, 2010.

Montana State designated its satellite as Explorer 1 Prime, or E1P. The name honors the launch and scientific discoveries of the Explorer-1 mission, which detected the Van Allen radiation belts more than 50 years ago. E1P will carry a miniature Geiger tube to measure the intensity and variability of the electrons in the Van Allen belts. This satellite will use 437.505 MHz as its downlink. See:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=116

Colorado's satellite is named Hermes. Its mission is to improve CubeSat communications through the on-orbit testing of a high data-rate communication system that will allow the downlink of large quantities of data. The planned downlink frequency is 437.425 MHz. See:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=104

The Kentucky vehicle is called KySat-1. KySat, is believed to be the first CubeSat to carry a 2m to 70cm FM repeater. It includes a camera to support a scientific outreach program intended for, but not limited to, Kentucky students in kindergarten through 12th grade. The satellite also has a 2.4 gigahertz industrial, scientific and medical band radio, which will be used to test high-bandwidth communications in the license free portion of the S-band. KySat-1 plans to use 145.850 MHz FM uplink and 436.975 MHz FM downlink. See:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=102

The Cape Peninsula University of Technology (CPUT) in South Africa F'SATI post graduate program in Satellite Engineering announced plans for the development of an academic project which will develop and launch a 3U cubesat. The payloads will include a camera, a parrot repeater and a transponder. In partnership with the Hermanus Magnetic Observatory, a HF beacon will be included to assist the HMO to calibrate their radar systems in the Antarctic. A new type of magnetometer is also under consideration. The project plans to have a flight ready display in October 2011 when the International Astronomy Conference is held in Cape Town.

[ANS thanks Mineo Wakita, JE9PEL; SouthGate Amateur Radio News for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office. And, with that please keep in mind when the artist was questioned about his vehicle being stalled by the side of the road his reply was, "I had no Monet to buy Degas to make the Van Gogh."

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM
K9JKM at amsat dot org

From -2165240109603076668
X-Google-Thread: a4a23d5f63,4b5d61260b0db691,start
X-Google-Attributes: gida4a23d5f63,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!news.glorb.com!solaris.cc.vt.edu!

news.vt.edu!elk.ncren.net!newsswitch.lcs.mit.edu!bloom-beacon.mit.edu!panix!panix2.panix.com!not-for-mail
From: rram@panix.com (rec.radio.amateur.moderated Admin)
Newsgroups: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.info
Subject: Crossposting Permitted to rec.radio.amateur.moderated
Supersedes: <radio/ham-radio/moderated/crossposting-1-1262329201@panix.com>
Followup-To: poster
Date: 1 Feb 2010 02:00:02 -0500
Organization: rec.radio.amateur.moderated Moderation Team
Lines: 47
Approved: RRI Admin <rec-radio-info-request@panix.com>
Distribution: world
Expires: 06 Mar 2010 02:00:01 -0000
Message-ID: <radio/ham-radio/moderated/crossposting-1-1265007601@panix.com>
Reply-To: rec-radio-amateur-moderated-request@panix.com (rec.radio.amateur.moderated Admin)
NNTP-Posting-Host: panix2.panix.com
X-Trace: reader1.panix.com 1265007603 24932 166.84.1.2 (1 Feb 2010 07:00:03 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Mon, 1 Feb 2010 07:00:03 +0000 (UTC)
Summary: Short reminder for unmoderated newsgroups that crossposting is permitted
Keywords: FAQ, ham, amateur, radio, moderated, unmoderated, crossposting, permitted
Xref: g2news1.google.com rec.radio.amateur.antenna:14622 rec.radio.amateur.dx:545 rec.radio.amateur.equipment:1737 rec.radio.amateur.homebrew:3095 rec.radio.amateur.misc:4586 rec.radio.amateur.policy:25179 rec.radio.amateur.space:309 rec.radio.info:1204

Posted-By: auto-faq 3.3.2 beta (PGPMoose V2.0, Perl 5.005)
Archive-name: radio/ham-radio/moderated/crossposting
Revision: 1.1 2009/04/12 19:42:04
Posting-Frequency: posted monthly
URL: http://www.panix.com/~rram/usenet/rram/index.html

Changes followed by "|".

After a 30-day public discussion and feedback period to gauge reader opinions in March of 2009:

http://groups.google.com/group/rec.radio.amateur.moderated/browse_thread/thread/d7d337db35f23326

the rec.radio.amateur.moderated Moderation Team has decided to consider amending its charter, and permit limited simultaneous crossposting to rec.radio.amateur.moderated and one other unmoderated amateur-radio-related discussion newsgroup. We are currently trying this on a temporary basis (90 days, through early July 2009), and adopt it permanently if successful.

Approved rec.radio.amateur.* newsgroups are those that are currently listed in the latest version of the "List of Big Eight Newsgroups" which is crossposted monthly to news.announce.newgroups, news.groups, and news.lists.misc.

Approved alt.radio.amateur.* and alt.ham-radio.* newsgroups are those that have been created consistent with the suggestions in "So You Want to Create an Alt Newsgroup" at:

  http://www.faqs.org/faqs/alt-creation-guide/

Approved regional hierarchy newsgroups are those that contain either "radio.amateur" or "ham-radio" in their names, including uk.radio.amateur and aus.radio.amateur.misc.

We will make every reasonable effort to keep our list of approved newsgroups up-to-date. In case we have overlooked any, and a submission is rejected in error as a result, the rejected submitter can E-mail us at our administrative contact address (in the signature at the bottom of this article, and the default Reply-To for the rejection message) requesting that it be added, and that the article be approved. We may still choose to reject articles crossposted to any alt.* newsgroup with an inappropriate name, including obscene language, embedded name-calling, or encouragement of unlawful conduct.

Please direct any comments, questions, or criticisms to rec-radio-amateur-moderated-request@panix.com.

```
From 6291911494097985364
X-Google-Thread: addc8bf063,df7e505ab83d5016,start
X-Google-Attributes: gidaddc8bf063,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!goblin1!goblin.stu.neva.ru!
news.astraweb.com!border5.a.newsrouter.astraweb.com!not-for-mail
From: Chris Steyaert <observations@rmob.org>
Newsgroups: rec.radio.amateur.space,sci.astro.amateur
Subject: Radio Meteor Obs. Bull. January 2010  Quadrantids
Date: Sun, 07 Feb 2010 18:31:44 +0100
Message-ID: <i6utm5981hp2khnd0l198vb2ijv0a6slh8@4ax.com>
X-Newsreader: Forte Agent 5.00/32.1171
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Lines: 14
Organization: Unlimited download news at news.astraweb.com
NNTP-Posting-Host: 3005dbf2.news.astraweb.com
X-Trace: DXC=B\OUfm95lW[WIOATn\8amXL?0kYOcDh@ZL_M`JAI;G@]Ne?O`9bdD6_496KDYYgaLV2b?
VOVb;lBYe9KhjN^4WX\
Xref: g2news1.google.com rec.radio.amateur.space:310 sci.astro.amateur:30739
```

Radio Meteor Observation Bulletin No. 198 of January 2010 (92 K) is available now as

http://www.rmob.org/rmobtext/rmob1001.txt

More information and the visual presentation of the hourly forward scatter counts can be found on

http://www.rmob.org

Chris

From 4173547541338103159
X-Google-Thread: a4a23d5f63,ad82cb287ff0a551,start
X-Google-Attributes: gida4a23d5f63,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!newsfeed2.dallas1.level3.net!
news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-044 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Mon, 15 Feb 2010 10:11:56 EST
Organization: The Radio Amateur Satellite Corporation
Lines: 1860
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <001501caae51$2e764f90$8b62eeb0$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader2.panix.com 1266246716 9674 166.84.1.6 (15 Feb 2010 15:11:56 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Mon, 15 Feb 2010 15:11:56 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to   rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to   rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
x-cr-hashedpuzzle: ACQS CELr Cfi5 DBG7 ELQz Ek9J GT1b HRY9 Hppw H3C3 I2MT I82x
JlZP J860 KVd+

KmMx;1;cgBlAGMALQByAGEAZABpAG8ALQBpAG4AZgBvAEAAcABhAG4AaQB4AC4AYwBvAG0A;Sosha1_v1;
7;
{7562FBF7-4003-469C-97F8-626F4D85BF37};awA5AGoAawBtAEAAYwBvAG0AYwBhAHMAdAAuAG4AZQB
0AA==;Mon, 15 Feb 2010 15:11:37
GMT;VwBTAFIALQAwADQANAAgAEEATQBTAEEAVAAgAFcAZQBlAGsAbAB5ACAAUwBhAHQAZQBsAGwAaQB0AG
UAIABSAGUAcABvAHIAdAA=
x-cr-puzzleid: {7562FBF7-4003-469C-97F8-626F4D85BF37}
Xref: g2news1.google.com rec.radio.amateur.space:311 rec.radio.info:1229

This report is organized into four (4) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - deborbited/returned satellites

SB SAT @ AMSAT W8ISS $WSR-044.S1
WSR 044 Part 1 02/13/2010

AMSAT NEWS SERVICE BULLETIN 044.S1
FROM AMSAT HQ SILVER SPRING, MD, February 13, 2010
TO ALL RADIO AMATEURS
BID: $WSR-044.S1

HO-68 XW-1 (CAS-1)
Catalog Number:
Launch Date: December 15, 2009
Status: Commissioning

Callsign:

```
Uplinks:   145.8250 MHz FM, PL 67.0 Hz.
           145.9250 - 145.9750 MHz SSB/CW
           145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
           435.7650 - 435.7150 MHz SSB/CW
           435.6750 MHz AFSK 1200 BPS

Beacon:    435.7900 MHz CW
```

Mode and Antenna Polarization:
V: LHCP 2.0dBi max
U: RHCP 3.0dBi max

IARU coordination page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108

For more information about XW-1 (CAS-1):
http://www.camsat.cn
[12122009]
=====
SO-67 SumbandilaSat
Catalog Number: 35870
Launch Date: September 17, 2009

```
Status: Commissioning

Callsign: ZS0SUM

Uplink:   145.875MHz FM tone 233.6 Hz
Downlink: 435.345MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

For more information about SO-67:
http://www.amsatsa.org.za/
[11212009]
=====
DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008

Status: Operational
Current Mode: Science Mode - Beacon ONLY

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink:   435.530 to 435.570 MHz

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68
[02122009]
=====
VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink:   435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink:   435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW


Indian Beacon:  145.859330 MHZ CW
Dutch Beacon:   145.860 MHz 12WPM with CW message
```

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is active. Each transponder has a different beacon.
[08072008]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Modes:
FM Repeater ONE
Uplink: 145.920 MHz FM
Downlink: 435.300 MHz FM
FM Repeater TWO
Uplink: OFF
Downlink: OFF
BBS
Uplink: 1268.700 Mhz FM 9k6 Pacsat Broadcast Protocol
Downlink: 435.150 Mhz FM 9k6 Pacsat Broadcast Protocol
Telemetry
Downlink: 435.150MHz 9k6

Analog voice downlink: 435.300 MHz FM
                           435.150 MHz FM
                          2401.200 Mhz FM
Analog voice uplink: 145.860 MHZ FM
                           145.880 MHz USB
                           145.920 MHz FM
                          1268.700 MHz FM
Digital Downlinks: 435.150 MHz FM 38k4 PBP, 1 watt output
                           435.150 MHz FM 9k6 Pacsat Broadcast Protocol
                          2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Pacsat Broadcast Protocol
                          1268.700 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11

BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[02132010]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz. The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10 minute timer.
[05282007]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: sCHEDULED oPERATIONS
Current Mode: V/u (Mode JA)

Voice/CW (Mode JA)
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK

Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage:
http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts.htm
[02132010]
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[03232009]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational

Current Mode: Alternating between Mode A and B every 24 hours

```
Uplink:   145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink:  29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
```

Beacons: 29.502 MHz CW
145.972 MHz CW
435.100 MHz CW
2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
[02122009]

=====

INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - V/u
Voice - V/v
BBS - V/v
APRS - V/v
SSTV - V/v

Expedition 22 Crew:
Commander: Jeff Williams KD5TVQ
Flight Engineer: Maxim Suraev
Flight Engineer: Oleg Kotov
Flight Engineer: T.J. Creamer KC5WKI
Flight Engineer: Soichi Noguchi KD5TVP

STS-130 Crew:
Commander: George Zamka
Pilot: Terry Virts
Mission Specialist: Nicholas Patrick
Mission Specialist: Robert Behnken
Mission Specialist: Kathryn Hire
Mission Specialist: Stephen Robinson

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM

145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[02132010]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-044.S2
WSR 044 Part 2 02/13/2010

AMSAT NEWS SERVICE BULLETIN 044.S2
FROM AMSAT HQ SILVER SPRING, MD, February 13, 2010
TO ALL RADIO AMATEURS
BID: $WSR-044.S2

HO-68 XW-1 (CAS-1)
Catalog Number:
Launch Date: December 15, 2009
Status: Commissioning

Callsign:

Uplinks: 145.8250 MHz FM, PL 67.0 Hz.
145.9250 - 145.9750 MHz SSB/CW
145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
435.7650 - 435.7150 MHz SSB/CW
435.6750 MHz AFSK 1200 BPS

```
Beacon:    435.7900 MHz CW

IARU coordination page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108

For more information about XW-1 (CAS-1):
http://www.camsat.cn
[122262009]
=====
SwissCube
Catalog Number: 35932
Launch Date: September 23, 2009

Status: In Orbit

Callsign: HB9EG

Beacon(100mw): 437.5050MHz CW
Beacon(1w): 437.5050MHz FSK 1k2bps
[11112009]
=====
UWE-2
Catalog Number: 35934
Launch Date: September 23, 2009

Status: In Orbit

Beacon(500mw): 437.3850 MHz AFSK 1k2bps
               437.3850 MHz FSK 9k6bps
[1112009]
=====
ITUpsAT1
Catalog Number: 35935
Launch Date: September 23, 2009

Status: In Orbit

Beacon(100mw): 437.325MHz CW
Beacon(1w): 437.325MHz 19k2bps
[11112009]
=====
BEESAT
Catalog Number: 35933
Launch Date: September 23, 2009

Status: In Orbit

Callsign: DP0BEE

Beacon(100mw): 436.000MHz CW
Beacon(500mw): 436.000MHz GMSK 4k8bps
[11112009]
=====
Pollux
Catalog Number:
Launch Date: July 31, 2009

Status: Operational

Callsign: POLLUX-1

Downlink: 145.825MHz 1k2 AX.25
[10042009]
=====
Castor (ANDE-2)
Catalog Number:
Launch Date: July 31, 2009

Status: Operational

Callsign: KD4HBO-1

Downlink: 145.825 MHz 1k2 AX.25
[10042009]
=====
BEVO-1 (DRAGONSAT-1)
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Operational

Downlink: 437.325 MHz 9k6 GMSK
          437.325 MHz CW 20wpm
[07312009]
=====
AggieSat2 (DRAGONSAT-2)
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Operational

Downlink: 436.250 MHz 9k6 FHSS
[11112009]
=====
CP-6
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Commissioning

Downlink: 437.365 MHz 1k2 AFSK
[06052009]
=====
HAWKSAT 1
Catalog number: 35003
Launch Date: May 19, 2009
```

```
Status: ?

Downlink: 437.345 ?
[06052009]
=====
Pharmasat
Catalog Number: 35002
Launch Date: May 19, 2009
Status: Commissioning

Downlink: 437.465 MHz 1k2 AFSK
[06052009]
=====
ANUSAT
Catalog Number: 34808
Launch Date: April 20, 2009

Status: ?

Downlink:  435.000 MHz
Uplink:    145.800 MHz

Telemetry: 137.400 MHz
[05112009]
=====
SOHLA-1 (ASTRO TECH.)
Catalog Number: 33496
Launch Date: January 23, 2009

Status: Commisioning

Proposed Frequencies and Modes:
Downlink: 437.505 MHz AFSK/CW
Beacon:   437.505 MHz AFSK/CW

Callsign:

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=101
[03232009]
=====
KAGAYAKI (Solan Co.)
Catalog Number: 33495?
Launch Date: January 23, 2009

Status: In Orbit

Downlink: 437.375 MHZ    FSK9k6/CW
Beacon:   437.375 MHz    FSK9k6/CW

IARU coordination status page:
```

```
AMSAT-NA webpage:

[01152009]
=====
STARS (Kagawa Univ.) (Twin Satellites)
Catalog Number: 33498
Launch Date: January 23, 2009

Status: Operational ?

Downlinks: 437.485 MHz FM/CW
           437.465 MHz FM/CW
Beacons:   437.305 MHz FM/CW
           437.275 MHz FM/CW

Callsigns: JR5YBN
           JR5YBO

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=99

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=121&retURL
=/satellites/status.php
[022152009]
=====
KKS-1 (Tokyo MCIT)
Catalog Number: 33499
Launch Date: January 23, 2009

Status: Operational

Downlink:  437.455 MHz AFSK/CW
Beacon:    437.385 MHz AFSK/CW

Callsign: JQ1YYY

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=107

AMSAT-NA webapge:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=120&retURL
=/satellites/status.php
[02212009]
=====
PRISM (Tokyo Univ.)
Catalog Number: 33493
Launch Date: January 23, 2009

Status: Operational ?

Downlink: 437.425 MHz AFSK/GMSK/CW
Beacon:   437.250 MHz AFSK/GMSK/CW
```

```
Callsign: JQ1YCX

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=97

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=119&retURL
=/satellites/status.php
[02212009]
=====
RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number: 32953
Launch Date: May 23, 2008

Status: Operational

Curent Modes: Telemetry
              Audio
              Images

Downlinks: 435.315 MHz
           435.215 MHz

AMSAT-NA website:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=115&ret
URL=/satellites/status.php

Official website:
http://www.npopm.com/?cid=leoca&caid=43
[02122009]
=====
CanX-2
Catalog number: 32790
Launch Date: April 28, 2008

Status: Operational in range of ground station only

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web
page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[02212009]
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008

Status: Operational
```

```
Downlink: 437.425 MHz 1k2 baud packet

For the latest project status update please visit the AAUSAT-II web
page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[02212009]
=====
CO-65 CUTE-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008

Status: Digipeater

Downlink:  437.475 MHz 9k6 Packet
Uplink:   1267.600 Mhz

Telemetry Beacon:
Downlink: 437.2750 MHz CW

For the latest project status update please visit the Cute-1.7+APD II
web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78

Command Station blog website:
http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=112&retURL
=/satellites/status.php
[02212009]
=====
Compass-1
Catalog number: 32787
Launch Date: April 28, 2008

Status: Operational

Current Mode: 4k8 MSK packet

Uplink:   145.980 MHz FM
Downlink: 437.275 Mhz CW
          437.405 MHz Packet

For the latest project status update please visit the Compass 1 web
page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52
```

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=114&retURL=/satellites/status.php
[04272009]
=====
CO-66 Seeds II
Catalog number: 32791
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.485 MHz

Callsign: JQ1YGU

For the latest project status update please visit the Seeds 2 web page: http://cubesat.aero.cst.nihon-u.ac.jp/english/seeds_2_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=113&retURL=/satellites/status.php
[02212009]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode: /u

```
TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon:    435.245 MHz CW
```

Callsign: K5USL

TLM and CW interchange every 30 seconds.

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=94&retURL=/satellites/status.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=72
[02122009]
=====
CP3
Catalog Number: 31129
Launch Date: April 17,2007

Status: Operational

Current Mode: /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[02122009]
=====
GENESAT-1
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Current Mode: /u

Callsign: KE7EGC

Telemetry Beacon Downlink: 437.0695 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[09152009]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon: 437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/xivpicte.htm
[02212009]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003

Status: ?????

Current Mode: /u

Beacon: 436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=96&retURL
=/satellites/status.php

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[06082009]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Operational?

Uplink: 1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=56
[02122009]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Modes:
FM Repeater ONE
Uplink: 145.920 MHz FM
Downlink: 435.300 MHz FM
FM Repeater TWO
Uplink: OFF
Downlink: OFF
BBS
Uplink: 1268.700 Mhz FM 9k6 Pacsat Broadcast Protocol
Downlink: 435.150 Mhz FM 9k6 Pacsat Broadcast Protocol
Telemetry
Downlink: 435.150MHz 9k6

Analog voice downlink: 435.300 MHz FM
                           435.150 MHz FM
                          2401.200 Mhz FM
Analog voice uplink: 145.860 MHZ FM
                           145.880 MHz USB
                           145.920 MHz FM

```
                          1268.700 MHz FM
Digital Downlinks:         435.150 MHz FM 38k4 PBP, 1 watt output
                           435.150 MHz FM 9k6 Pacsat Broadcast Protocol
                          2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:            145.860 MHz FM 9k6 Pacsat Broadcast Protocol
                          1268.700 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon:                    435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[02132010]
=====
QuakeSat
Catalog Number: 27845
Launch Date: June 30, 2003

Status: Telemetry only

Current Mode: 9600 baud data packet

Mode U packet
Downlink: 436.675 MHz 9k6 BPS

Quakesat webpage:
http://www.quakefinder.com/services/quakesat-ssite/
[04272009]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
```

Downlink: 436.8375 MHz CW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=69&retURL
=/satellites/status.php
[02212009]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Telemetry only

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[03302009]
=====
RS-22 RADIO SPORT 22
Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only

Current Mode: /u

CW Beacon - 435.352 MHz
            145.818 MHz

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=76&retURL
=/satellites/status.php
[02212009]
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990

Status: CW Beacon only

Uplinks: 145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink: 437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[03162009]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984

Status: Non-operational.

Current Mode: /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon: 435.025 MHz
Mode-S Beacon: 2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[12162009]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - V/u
                      Voice -   V/v
                      BBS -   V/v
                      APRS -   V/v
                      SSTV -   V/v

Expedition 22 Crew:
Commander: Jeff Williams KD5TVQ
Flight Engineer: Maxim Suraev
Flight Engineer: Oleg Kotov
Flight Engineer: T.J. Creamer   KC5WKI
Flight Engineer: Soichi Noguchi KD5TVP

STS-130 Crew:
Commander: George Zamka
Pilot: Terry Virts
Mission Specialist: Nicholas Patrick
Mission Specialist: Robert Behnken

Mission Specialist: Kathryn Hire
Mission Specialist: Stephen Robinson

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time line is NOT translated from Russian and posted.
[02132010]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-044.S3
WSR 044 Part 3 02/13/2010

AMSAT NEWS SERVICE BULLETIN 044.S3
FROM AMSAT HQ SILVER SPRING, MD, February 13, 2010
TO ALL RADIO AMATEURS

```
BID: $WSR-044.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

CP4
Catalog Number: 31122
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon:    437.325 MHz CW

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=79
[10022008]
=====
LIBERTAD-1
Catalog Number: 31128
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink:   145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[02122009]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: Non-Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder:  145.825 Mhz FM
[01012009]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?
```

```
Proposed Callsign: TBA
Proposed Transmit Frequency:  437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink:         437.250 MHz FM 67Hz CTCSS
Voice Downlink:      2401.835 MHz FM
Packet Up/Downlink:   437.250 MHz 9k6 packet
Packet Downlink      2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non-Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[08132007]
=====
CANX-1
Catalog Number: 27847
Launch Date: June 30, 2003

Status: Non-Operational

Downlink: 437.8800 MHz AFSK 1k2bps
[06052009]
=====
DTUSAT
Catalog Number: 27842
Launch Date: June 30, 2003

Status: Non-Operational

Current Mode: 2k4 AFSK Packet last reported

Downlink: 437.475MHz

Officail webpage: http://dtusat1.dtusat.dtu.dk/
```

```
AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=101&retURL
=satellites/all_oscars.php
[02212009]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink:   435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)

Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Telemetry only

Uplinks:   145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink:  437.325 MHz

Broadcast callsign: MYSAT3-11
BBS:                MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial land and weather imaging payloads offers FM and FSK
Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as
a collaborative effort between the Malaysian government and Surrey
Satellite Technology Ltd.
[03302009]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink:   145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS:                SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink:   145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
V-band:   145.840 -  145.990 MHz CW/LSB
U-band:   435.550 -  435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks
---------
S2-band:  2401.225 -  2401.475 MHz CW/USB
K-band:  24048.010 - 24048.060 MHz CW/USB
Beacon:   2401.323 MHz
```

24048.035 MHz

P3-D Telemetry Beacons (IHU)

BEACON	General Beacon(GB)	Middle Beacon(MB)	Engineering Beacon(EB)
2 m	none	145.898 MHz	none
70cm	435.438 MHz	435.588 MHz	435.838 MHz
13cm(1)	2400.188 MHz	2400.338 MHz	2400.588 MHz
13cm(2)	2401.173 MHz	2401.323 MHz	2401.573 MHz
3cm	10450.975 MHz	10451.125 MHz	10451.375 MHz
1.5cm	24047.885 MHz	24048.035 MHz	24048.285 MHz

[07162007]

=====

OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]

=====

UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]

=====

SO-35 SUNSAT
Catalog Number: 25636
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Telemetry only

Current Modes:
Telemetry : /u

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks: 145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:

```
http://asri.technion.ac.il/techsat/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=14&retURL
=/satellites/status.php
[12012009]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink:   145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
MO-30 UNAMSAT-2
Catalog Number: 24305
Launch Date: September 5, 1996

Status: Non-operational

Downlink:       435.1380 MHz AFSK 1200 BPS
Downlink:       435.2060 MHz AFSK 1200 BPS
Uplink:         145.8150 MHz AFSK 1200 BPS
Uplink:         145.8350 MHz AFSK 1200 BPS
Uplink:         145.8550 MHz AFSK 1200 BPS
Uplink:         145.8750 MHz AFSK 1200 BPS
[06042009]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Non-operational

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign:       POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012009]
=====
IO-26 ITAMSAT
Catalog number: 22826
```

```
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
AO-24 ARSENE
Catalog Number: 22654
Launch Date: May 13, 1993

Status: Non-operational

Uplink:    435.0625 MHz FM 1k2bps AFSK
           435.1125 MHz FM 1k2bps AFSK
           435.1375 MHz FM 1k2bps AFSK
Downlink:  145.9750 MHz FM 1k2bps AFSK
          2446.5025 MHz FM 1k2bps AFSK

Beacon:    2446.4700 MHz CW

Broadcast callsign:
BBS:
[12162009]
=====
KO-23 KITSAT
Catalog number: 22077
```

```
Launch date: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HL01-11
BBS: HL01-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz
```

```
More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
[05012006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: non-operational

Current Mode:  V/u

Uplink:         145.900 MHz FM 1200-baud Manchester FSK (reserved)
                145.920 MHz FM VOICE
                145.940 MHz FM 1200-baud Manchester FSK (reserved)
                145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink:       437.026 MHz USB VOICE
                (1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[07242009]
=====
UO-15 UoSAT-4
Catalog Number: 20438
Launch Date: January 22, 1990

Status: Non-operational

Uplink: ?
Downlink: 435.1250MHz (?)
          435.1200MHz (?)
[06042009]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon:   145.810 MHz (unmodulated carrier)
```

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.8500 - 145.9000 MHz SSB/CW
Downlink 29.4000 - 29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink: 29.4500 - 29.5500 MHz SSB/CW
Beacons: 29.450 MHz
          435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

```
Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon 1:  29.352 MHz (intermittent)
Beacon 2:  29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink:     21.260 to 21.300 MHz CW/USB
Downlink:  145.860 to 145.900 MHz CW/USB

Beacon:    145.860 MHz

Robot:     145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink:   21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon:   29.408 MHz

Robot:    29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-044.S4
WSR 044 Part 4 02/13/2010

AMSAT NEWS SERVICE BULLETIN 044.S4
```

```
FROM AMSAT HQ SILVER SPRING, MD, February 13, 2010
TO ALL RADIO AMATEURS
BID: $WSR-044.S4

THE FOLLOWING SATELLITES HAVE RE-ENTERED OR HAVE BEEN RETURNED SAFELY:

NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: July 28, 2008

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[01012009]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink:      145.825 Mhz FM APRS AX25
APRS Uplink:        145.825 MHz FM APRS AX25
Voice/PSK31 Uplink:  28.120 MHz

Packet to Voice ID: RAFT
[06112007]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Re-Entered
Re-entered: June 18, 2008

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon:             437.2750 MHz CW
```

Callsign: JR8YJT
[01012009]
=====
SO-43 Starshine 3
Catalog Number: 26929
Launch Date: September 30, 2001

Status: Re-Entered
Re-entered: January 21, 2003

Beacon: 145.825Mhz
[02212009]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

```
Voice: 301-589-6062
       888-322-6728
FAX:   301-608-3410
```

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
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In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional

benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at}amsat.org
NNNN
/EX

From -7671540068390290709
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From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-045 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Wed, 17 Feb 2010 12:05:16 EST
Organization: The Radio Amateur Satellite Corporation
Lines: 228
Approved: RRI Admin <rec-radio-info-request@panix.com>
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X-RRI-Info-2: Send technical complaints to rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us

Xref: g2news1.google.com rec.radio.amateur.space:312 rec.radio.info:1232

AMSAT NEWS SERVICE
ANS-045

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:
* 36th Annual Eastern VHF/UHF Conference
* LORAN C Shutdown
* Arecibo Dish to be Activated on Amateur Radio EME
* W6ZH, Silent Key
* ARISS Status - 8 February 2010

SB SAT @ AMSAT $ANS-045.01
36th Annual Eastern VHF/UHF Conference

AMSAT News Service Bulletin 045.01
From AMSAT HQ SILVER SPRING, MD.
February 14, 2010
To All RADIO AMATEURS
BID: $ANS-045.01

36th Annual Eastern VHF/UHF Conference

The 36th Annual Eastern VHF/UHF Conference will be on April 16-18, 2010 at the Crowne Plaza Hotel, Enfield, CT. The NorthEast Weak Signal Group (NEWS) is calling for the submission of papers and presentations. Papers and presentations are solicited on both the technical and operational aspects of VHF, UHF and Microwave weak signal amateur radio.

We will have a Hospitality Suite for early arrivals on Friday Evening starting at 7:00PM to 11:00 PM. Conference registration will begin on Saturday at 7:30 AM and talks and band sessions will start at 8:30 AM. A banquet dinner, Triva quiz and prize raffles will begin at 7:00 PM. On Sunday an outdoor flea market, weather permitting, will begin at 8:00 to 11:00 AM. Starting this year flea market admission will be FREE for both buyers and sellers of VHF and above relate equipment items only. Compliments of Greg WA1VUG and R&S we will have the following test capabilities up to 50 GHz.

Registration is now open for this years conference. A block of Hotel Rooms is available at the Crowne Plaza, Enfield under the NEWS group for $99. The latest conference news can be found on-line at:
http://www.newsvhf.com/vhfconf.html

[ANS thanks Bruce, N2LIV Conference Chairman for the above information]

/EX

SB SAT @ AMSAT $ANS-045.02
LORAN C Shut Down

AMSAT News Service Bulletin 045.02
From AMSAT HQ SILVER SPRING, MD.
February 14, 2010
To All RADIO AMATEURS
BID: $ANS-045.02

LORAN-C shut down
On February 8 the U.S Coast Guard shut down the Loran-C a navigation system that has been in use since World War II.

LORAN (LOng RAnge Navigation) made use of a network of Low Frequency (LF) radio transmitters and the receivers used these multiple signals to determine the location and speed of the vessel. It has served mariners and aviators well for over 60 years.

President Obama has called the system obsolete, saying it is no longer needed in an age in which Global Positioning System devices are nearly ubiquitous in cars, planes and boats.

Running Loran-C is claimed to cost the Federal Government about $38 million a year but shutting it down means there is no longer a back-up system for GPS.

[ANS thanks Southgate news service for the above information]

/EX

SB SAT @ AMSAT $ANS-045.04
Arecibo Dish to be Activated on Amateur Radio EME

AMSAT News Service Bulletin 045.04
From AMSAT HQ SILVER SPRING, MD.
February 14, 2010
To All RADIO AMATEURS
BID: $ANS-045.04

Arecibo Dish to be Activated on Amateur Radio EME

While this item is not satellite related it may provide our ANS readers with a unique opportunity to utilize modest UHF and 1296 stations to copy EME signals. A large OSCAR-class antenna array equipped station may be able to participate.

Echoes of Apollo EME 2010 or World Moon Bounce Day, is scheduled for the weekend of April 16, 17, and 18. This year, EOA has been graced with a special opportunity to use the Arecibo Dish as the ultimate "big gun" station on 432 MHz SSB & CW. EME operation on 1296 MHz may also be possible. Arecibo has more than 50 dbi gain on 432 MHz so the team thinks it can be heard with modest equipment.

[ANS thanks the Echoes of Apollo project for the above information]

/EX

SB SAT @ AMSAT $ANS-045.05
W6ZH, Silent Key

AMSAT News Service Bulletin 045.05
From AMSAT HQ SILVER SPRING, MD.
February 14, 2010
To All RADIO AMATEURS
BID: $ANS-045.05

It is with much sadness that AMSAT notes the passing on Feb.4 of Herbert "Pete" Hoover III, W6ZH at his home in San Marino, CA. Pete was the grandson of former President Herbert Hoover. Pete's W6ZH call was inherited from his father who served as ARRL President; Pete's original call was W6APW. He was AMSAT Life Member #65.

In the 1970's, Pete and Bill Eitel (W6UF) saw that AMSAT and amateur satellites were a significant wave of amateur radio's future. In addition to making substantial contributions, they worked with the ARRL to form the ARRL Foundation in 1976. Beginning in 1978 Pete served on the ARRL Long Range Planning Committee.

I remember the hospitality Pete and his wife Meridith showed to Jan King (W3GET) and me on several occasions when we dropped by his home in San Marino to discuss AMSAT's future.

Pete was always very active in the American Red Cross. When the Pacsat concept was being developed, Harold Price (NK6K) and I called on Pete at the Hoover Foundation offices to discuss the concept of a store-and-forward messaging satellite to provide medical communications to a remote area. At Pete's instigation, we began working with VITA (Volunteers in Technical Assistance) and our Pacsat concept bore fruit when UoSAT-3 was re-badged as Healthsat-1
(see http://space.skyrocket.de/doc_sdat/healthsat-2.htm).

I last saw Pete at Dayton two years ago. I was in the chow line when I heard a "Hey Tom" from a nearby table. Pete was spending most of his time at his retirement home on Maui and he looked very fit and had an incredible tan! While I was munching on a hamburger we has a great face-to-face QSO. He told me that he was still on the air, now using an Elecraft radio.

I'll miss Pete's enthusiasm and friendship. I could always count on his thoughtful advice.

73 de Tom, K3IO (ex W3IWI)

/EX

SB SAT @ AMSAT $ANS-045.06
ARISS Status - 8 February 2010

AMSAT News Service Bulletin 045.06
From AMSAT HQ SILVER SPRING, MD.
February 14, 2010
To All RADIO AMATEURS
BID: $ANS-045.06

1. Astronaut T. J. Creamer Enjoys ARISS Contact with Riley Ave. Students

On Tuesday, February 2, astronaut Timothy Creamer, KC5WKI spoke with Riley Avenue Elementary School students through an Amateur Radio on the International Space Station (ARISS) contact. The Calverton, New York youth spent weeks preparing for the contact, studying space and the solar system during Science and creating rockets and robots in Art class. The Peconic Amateur Radio Club helped coordinate the contact and provided the equipment used. A Riley fourth grader and newly licensed ham acted as the control operator during the contact.

2. Principal has Good Memories of First ARISS Contact

The first Amateur Radio on the International Space Station (ARISS) contact was held between Bill Shepherd on the ISS and students attending Burbank School in Burbank, Illinois on December 21, 2000. Recently Burbank's principal made the comment, "I continue to feel that the contact and the follow-up visit were by far my best experiences as an educator," which says much about the program and its effect on those who participate. The school continues to display a plaque commemorating the ARISS event in its lobby.

3. ISS Ham Debrief Held with Frank De Winne

Expedition 20/21 astronaut Frank DeWinne, ON1DWN participated in an Amateur Radio on the International Space Station (ARISS) debrief session on Thursday, February 4, 2010. The feedback provided will help ARISS update program operations.

4. ARISSat-1 Status Report Posted

AMSAT (Radio Amateur Satellite Corporation) posted an article on the status of ARISSat-1. To view "Building the First US ARISSAT-1 Flight Unit Begins," see: http://www.amsat.org/amsat-new/index.php

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Dee Interdonato, NB2F
nb2f at amsat dot org

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transit3.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-052 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sun, 21 Feb 2010 01:00:05 EST
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X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
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article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news1.google.com rec.radio.amateur.space:313 rec.radio.info:1240

AMSAT NEWS SERVICE
ANS-052

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:

* ARISSat Design Review Held
* Satellite DXpeditions Coming Soon: K4T & Hawaii
* AO-27 Schedule Lister Updated
* College Satellite Night First Thursday Each Month
* Satellite and Space Shorts From All Over
* AMSAT - SUNY Binghamton - IBM NextGen CubeSat Development Report

SB SAT @ AMSAT $ANS-052.01
ARISSat Design Review Held

AMSAT News Service Bulletin 052.01
>From AMSAT HQ SILVER SPRING, MD.
February 21, 2010
To All RADIO AMATEURS
BID: $ANS-052.01

Members of the ARISSat team from AMSAT, NASA and Microchip held a Design Review in Orlando Monday and Tuesday February 15-16, 2010. There were 23 presentations describing the operation, status and testing of the major areas of the satellite. Many of the members used their holiday and vacation time to participate in a 12 hour session on Monday and 9 hour session on Tuesday before heading home.

The meeting was very successful in identifying areas that need additional work and definition. The major items to work on are the Max Power Point Tracker, the ICB (Interconnect Board), working on making a warmer environment for the battery, power management software and IHU software.

The prototype structure was on display and additional structures are being built. We have nearly all the flight electronics built and checked. The next challenges are developing test plans and coordinating with NASA for thermal, vacuum and vibrations tests. We will not be able to deliver an operational and vetted satellite in March and are in discussion about a launch and EVA date later this year.

The presentations in PDF format will shortly be available on the arissat.org site under Design Review.

[ANS thanks Gould Smith, WA4SXM for the above information]

/EX

SB SAT @ AMSAT $ANS-052.02
Satellite DXpeditions Coming Soon: K4T & Hawaii

AMSAT News Service Bulletin 052.02
>From AMSAT HQ SILVER SPRING, MD.
February 21, 2010
To All RADIO AMATEURS
BID: $ANS-052.02

K4T DXpedition

The K4T DXpedtion to EL84 web page (http://aroadventures.org/) says the team plans to include satellite operations. The DXpedition dates are March 11-15, 2010. Team Leader for K4T, Mike Forsythe, AC2V says, "One of the primary stations will be dedicated to satellite operations on a 24 hour basis. Mark Hammond, N8MH will be heading up K4T satellite operations. K4T will be using batteries, solar power, and wind power. It's a completely 'green' operation".

Mike, AC2V said, "The satellite station plans to work FM, SSB and perhaps a bit of CW. We have requested that the secondary repeater on AO51 be dedicated to K4T. As for equipment, at the primary station we are going to have redundant Icom 910 transceivers, Yaesu G-5500 rotor, LVB Tracker, ARR preamps and M2 CP yagi antennas and will be running SATPC32. We also have the option of portable operations with a Yaesu FT-817 with an Elk antenna."

Mark, N8MH said, "We're going to have a top-notch satellite station! You can expect us to be active on AO-7, AO-27, FO-29, SO-50, AO-51, VO-52, SO-67, and HO-68 (depending on the mode schedules of the satellites, of course)." In order to make it easiest to catch K4T this list of target frequencies is planned to be used as a starting point:

Target Frequencies for K4T 11 March - 15 March 2010:

Satellite	Downlink	Uplink
AO-7	145.960 USB	432.136 LSB

AO-27	436.795 FM	145.850 FM
FO-29	435.860 USB	145.940 LSB
SO-50	436.795 FM	145.850 FM
AO-51	435.150 FM	145.880 FM (primary)
AO-51	435.300 FM	145.920 FM (secondary)
VO-52	145.910 USB	435.240 LSB
HO-68	435.760 USB	145.930 LSB

Oahu BL11 and Kauai BL01 and BL02

Adrian, AA5UK, will be on Oahu (BL11) and Kauai (BL02ic & BL01) from March 24th through April 7th operating portable KH6. He plans to operate on the Linear and FM satellites during his stay, mostly from his rented house in BL02ic (March 27th through April 5th) and will try to operate portable/mobile from BL11 and BL01 time permitting. Emphasis will be SSB on FO-29, VU-52, AO-7 and HO-68. Adrian will post daily availability via AMSAT BB, QRZ.com: http://www.qrz.com/db/aa5uk, and Twitter: @AA5UK. Sked requests are encouraged due to the limited pass windows for those operators needing HI for WAS at the fringe of the footprints. Please use the email listed on QRZ.com to arrange for a time and date.

AMSAT DXpedition Loaner Gear

As a reminder, AMSAT has two Arrow antennas, and a TH-D7 available for loan to any member going on a DXpedition, or grid trip. This is the same gear used to activate K5D last year about this time. The D7 is programmed with Alpha-Memory tags for the FM satellites and has both rechargeable and AA battery packs, and is very simple to use. Contact Drew, KO4MA (ko4ma@amsat.org) if you have a need to use it.

[ANS thanks Mike, AC2V; Mark, N8MH; Adrian, AA5UK; and Drew, KO4MA for the above information]

/EX

SB SAT @ AMSAT $ANS-052.03
AO-27 Schedule Lister Updated

AMSAT News Service Bulletin 052.03
>From AMSAT HQ SILVER SPRING, MD.
February 21, 2010
To All RADIO AMATEURS
BID: $ANS-052.03

A new schedule was uploaded to AO-27 on February 9. The ON-OFF timing of AO-27 may be out of sync with your prior expectations.

George, KA3HSW reminds users of the AO-27 Java schedule lister to make sure that you have updated your data files! (File menu, Update Data or hit CTRL U)

The AO-27 schedule lister is available to download at http://sites.google.com/site/ao27satellitescheduler.

[ANS thanks George, KA3HSW for the above information]

/EX

SB SAT @ AMSAT $ANS-052.04
College Satellite Night First Thursday Each Month

AMSAT News Service Bulletin 052.04
>From AMSAT HQ SILVER SPRING, MD.
February 21, 2010
To All RADIO AMATEURS
BID: $ANS-052.04

College Satellite Night is planned for all available satellites on the first Thursday of each month. These are a monthly event! College club stations plan on being on birds AO51, SO50, AO7, VO52, HO-68 and FO-29. Welcome the student operators and enjoy your QSOs with them as we are planning on creating an award for working college club stations on satellite. Mark your calendar and spread the word to college hams/club stations that you know!

[ANS thanks Dr. Jay Garlitz, AA4FL, Faculty Advisor for the Gator Radio Club at the University of Florida for the above information]

/EX

SB SAT @ AMSAT $ANS-052.05
Satellite and Space Shorts From All Over

AMSAT News Service Bulletin 052.05
>From AMSAT HQ SILVER SPRING, MD.
February 21, 2010
To All RADIO AMATEURS
BID: $ANS-052.05

Hams like science so here we go ...

+ Spectacular SRB Videos from STS-130 Provide Night-time Shuttle Launch can be viewed on-line at: http://tinyurl.com/yknofyh This launch video taken from the perspective of a camera mounted on the space shuttle's solid rocket boosters. [UniverseToday]

+ Watch Time-Lapse of EVA-1/Tranquility Node Berthing at: http://tinyurl.com/ycsa4r7 A shorter time lapse video clip of the berthing can be viewed at: http://tinyurl.com/y9lxyhk [UniverseToday]

+ A collection of photos from the STS-130 mission can be found on-line at: http://tinyurl.com/ydnugtl [UniverseToday]

+ An animation of a trip to Mars can be viewed at the One Minute Astronomer web page: http://tinyurl.com/ycdut88

+ Matthias, DD1US has updated his "Sounds from Space" collection at http://www.dd1us.de with recently received information about early AMSAT satellites. He would like audio files from early satellites AO-2 thorough AO-5 if you have them available.

+ Watch for Paul, 2M1EUB operating on the satellites from Scotland starting on March 20, 2010 for 7 days (Grid IO87mc). QSL via home callsign 2E1EUB.

+ Congratulations to Clint Bradford, K6LCS for a successful satellite demonstration at the Desert Rats Amateur Radio Club on February 16. Clint says about twenty folks showed up for the 5:37PM PST pass of AO-51. The main meeting and presentation started at 7PM to a packed house. Clint's web page is at: http://www.work-sat.com

[ANS thanks everyone for the above information]

/EX

SB SAT @ AMSAT $ANS-052.06
AMSAT - SUNY Binghamton - IBM NextGen CubeSat Development Report

AMSAT News Service Bulletin 052.06
>From AMSAT HQ SILVER SPRING, MD.
February 21, 2010
To All RADIO AMATEURS
BID: $ANS-052.06

NextGen CubeSat Program Manager, Alex Harvilchuck, N3NP has provided an update on AMSAT's cooperative CubeSat development project working with senior class engineering students at the State University of New York at Binghamton (SUNY) and the IBM Research Center.

Using the ARISSat Power Supply Unit as a baseline design the backplane and Solar Panel Charge Controller designs have been redesigned to use Pseudocapacitors instead of traditional batteries. Based on a worse-case, 600km orbit, the student design can produce a whole-orbit power budget of 7.5 watts using a 3U CubeSat design. Analysis has shown if a spacecraft is launched into a more optimal orbit, like a sun-synchronous orbit, one of the two Pseudocapacitor banks can be removed. The design can be scaled to be used with other classes of spacecraft (2U/1U CubeSat, or Microsats). The design has gone through two reviews with AMSAT Engineering including Lou W5DID, Barry WD4ASW & Tony AA2TX.

A second student engineering team has designed a light-weight deployable solar panel design with integral magnetorquer coils for attitude control. The design will produce about 12-15 watts per minute in any orientation (worse-case) for 3U, less with 2U or 1U. If a spacecraft is launched into a more optimal orbit the number of solar cells can be reduced while maintaining the power budget

Alex also reported that the students have analyzed the existing AMSAT spacecraft modules (from ARISSat & P3D) and determined that they can fit the SDX and U/V Linear Transponder systems from ARISSat into a 2U or 3U CubeSat Chassis without significant re-design. If the ARISSat boards were redesigned/repackaged they could fit within a 1U Chassis.

The Internal Housekeeping Unit is going to be slightly redesigned to incorporate the Command Decoder board functions. The base concepts from P3D for the Sun & Earth Sensor Systems are reusable in the NextGen satellite.

Alex concluded, "The NextGen Satellite R&D, sponsored by AMSAT, is being performed by Engineering Students for their Senior Design projects. We have 8 Mechanical Engineers and Electronic Engineers plus 26 Systems Engineering students. So I encourage everyone to contribute what you can to AMSAT to help fund spacecraft systems development and launch opportunities. If we have reliable, lower-cost, modular systems, then AMSAT can be more responsive to any launch opportunity.

We'll have more info on the research we're doing in the next issue of the Journal and look for us at the AMSAT table in Dayton!

[ANS thanks Alex Harvilchuck, N3NP for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office. And with that, having recently observed President's Day in the USA please keep in mind that when George Washington cut down the cherry tree he could not tell a lie because he ate all the cherries, got cherry juice on his hands and got caught red handed.

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM
K9JKM at amsat dot org

```
From 8324268017132231725
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Date: Tue, 23 Feb 2010 17:25:29 GMT
NNTP-Posting-Host: 207.216.221.93
X-Trace: edtnps82 1266945929 207.216.221.93 (Tue, 23 Feb 2010 10:25:29 MST)
NNTP-Posting-Date: Tue, 23 Feb 2010 10:25:29 MST
Xref: g2news1.google.com rec.radio.amateur.space:315
```

Inductiojns being what they are, -You're in,

"bcon1" <bcon1@telus.net> wrote in message
news:4hSgn.69102$PH1.27874@edtnps82...

```
> Application to look at this cluB
>




From 3818913911033860611
X-Google-Thread: 8f86f75953,3a7697fe60a8967f
X-Google-Attributes: gid8f86f75953,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!Xl.tags.giganews.com!
border1.nntp.dca.giganews.com!nntp.giganews.com!local2.nntp.dca.giganews.com!
nntp.posted.localnet!news.posted.localnet.POSTED!not-for-mail
NNTP-Posting-Date: Thu, 25 Feb 2010 20:47:04 -0600
From: "James" <jnipperxxx@nospamfdn.com>
Newsgroups: rec.radio.amateur.space
References: <4hSgn.69102$PH1.27874@edtnps82>
Subject: Re: pre aMP
Date: Thu, 25 Feb 2010 21:47:04 -0500
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1437
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1441
X-Antivirus: avast! (VPS 100225-0, 02/25/2010), Outbound message
X-Antivirus-Status: Clean
Message-ID: <XZWdnRcRn6e0qxrWnZ2dnUVZ_hidnZ2d@posted.localnet>
Lines: 6
X-Usenet-Provider: http://www.giganews.com
NNTP-Posting-Host: 66.177.75.40
X-Trace: sv3-bLOMAkU4DvDRJABDHOUtRpV08oBu6Mr4/
RsCkCkTN0CBhCK6PP3WyQptyOQE6oINVOdoEswaCaHQBNS!/
HDMHpz2+Ryamwre30idJsYv1tZc4WfCoDGdbAmsR0vJvYaZ5/6WrZ+ifYx+U8WSWKAz2orID9OX!
6YFJoBnxOMZb4Oh0O/1id677KQ==
X-Complaints-To: abuse@localnet.com
X-DMCA-Complaints-To: abuse@localnet.com
X-Abuse-and-DMCA-Info: Please be sure to forward a copy of ALL headers
X-Abuse-and-DMCA-Info: Otherwise we will be unable to process your complaint
properly
X-Postfilter: 1.3.40
Xref: g2news1.google.com rec.radio.amateur.space:316

yes
------------------------

Application to look at this cluB





From -7378374851918102443
X-Google-Thread: a4a23d5f63,d20340964db25d8e,start
X-Google-Attributes: gida4a23d5f63,public,usenet
```

X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!newsfeed2.dallas1.level3.net!news.level3.com!panix!panix2.panix.com!not-for-mail
From: rram@panix.com (rec.radio.amateur.moderated Admin)
Newsgroups: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.info
Subject: Crossposting Permitted to rec.radio.amateur.moderated
Supersedes: <radio/ham-radio/moderated/crossposting-1-1265007601@panix.com>
Followup-To: poster
Date: 1 Mar 2010 02:00:02 -0500
Organization: rec.radio.amateur.moderated Moderation Team
Lines: 47
Approved: RRI Admin <rec-radio-info-request@panix.com>
Distribution: world
Expires: 03 Apr 2010 03:00:00 -0000
Message-ID: <radio/ham-radio/moderated/crossposting-1-1267426800@panix.com>
Reply-To: rec-radio-amateur-moderated-request@panix.com (rec.radio.amateur.moderated Admin)
NNTP-Posting-Host: panix2.panix.com
X-Trace: reader1.panix.com 1267426802 10066 166.84.1.2 (1 Mar 2010 07:00:02 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Mon, 1 Mar 2010 07:00:02 +0000 (UTC)
Summary: Short reminder for unmoderated newsgroups that crossposting is permitted
Keywords: FAQ, ham, amateur, radio, moderated, unmoderated, crossposting, permitted
Xref: g2news1.google.com rec.radio.amateur.antenna:14994 rec.radio.amateur.dx:566 rec.radio.amateur.equipment:1778 rec.radio.amateur.homebrew:3149 rec.radio.amateur.misc:4659 rec.radio.amateur.policy:25363 rec.radio.amateur.space:317 rec.radio.info:1259

Posted-By: auto-faq 3.3.2 beta (PGPMoose V2.0, Perl 5.005)
Archive-name: radio/ham-radio/moderated/crossposting
Revision: 1.1 2009/04/12 19:42:04
Posting-Frequency: posted monthly
URL: http://www.panix.com/~rram/usenet/rram/index.html

Changes followed by "|".

After a 30-day public discussion and feedback period to gauge reader opinions in March of 2009:

http://groups.google.com/group/rec.radio.amateur.moderated/browse_thread/thread/d7d337db35f23326

the rec.radio.amateur.moderated Moderation Team has decided to consider amending its charter, and permit limited simultaneous crossposting to rec.radio.amateur.moderated and one other unmoderated amateur-radio-related discussion newsgroup. We are currently trying this on a temporary basis (90 days, through early July 2009), and adopt it permanently if successful.

Approved rec.radio.amateur.* newsgroups are those that are currently listed in the latest version of the "List of Big Eight Newsgroups" which is crossposted monthly to news.announce.newgroups, news.groups, and news.lists.misc.

Approved alt.radio.amateur.* and alt.ham-radio.* newsgroups are those that have been created consistent with the suggestions in "So You Want to Create an Alt Newsgroup" at:

  http://www.faqs.org/faqs/alt-creation-guide/

Approved regional hierarchy newsgroups are those that contain either "radio.amateur" or "ham-radio" in their names, including uk.radio.amateur and aus.radio.amateur.misc.

We will make every reasonable effort to keep our list of approved newsgroups up-to-date. In case we have overlooked any, and a submission is rejected in error as a result, the rejected submitter can E-mail us at our administrative contact address (in the signature at the bottom of this article, and the default Reply-To for the rejection message) requesting that it be added, and that the article be approved. We may still choose to reject articles crossposted to any alt.* newsgroup with an inappropriate name, including obscene language, embedded name-calling, or encouragement of unlawful conduct.

Please direct any comments, questions, or criticisms to rec-radio-amateur-moderated-request@panix.com.

```
From -5709670601995718056
X-Google-Thread: a4a23d5f63,eda74df23a752cb5,start
X-Google-Attributes: gida4a23d5f63,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII
Path: g2news1.google.com!news2.google.com!news1.google.com!
newsfeed2.dallas1.level3.net!news.level3.com!panix!rri.panix.com!robomod!not-for-
mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-059 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Tue, 2 Mar 2010 10:31:16 EST
Organization: The Radio Amateur Satellite Corporation
Lines: 203
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <001701caba1d$5d5b1a70$18114f50$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;charset="iso-8859-1"
Content-Transfer-Encoding: quoted-printable
X-Trace: reader1.panix.com 1267543876 21870 166.84.1.6 (2 Mar 2010 15:31:16 GMT)
```

```
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Tue, 2 Mar 2010 15:31:16 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to            rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news1.google.com rec.radio.amateur.space:318 rec.radio.info:1264
```

AMSAT NEWS SERVICE
ANS-059

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* Amateur Satellite Presentation at Edison Amateur Radio Network Meeting
* AMSAT Activities at the Greater Houston Hamfest
* AMSAT Preparing for Hamvention 2010
* Indonesian Amateur Radio Satellite update
* ARISS Status - 22 February 2010

SB SAT @ AMSAT $ANS-059.01
Amateur Satellite Presentation at Edison Amateur Radio Network Meeting

AMSAT News Service Bulletin 059.01
  From AMSAT HQ SILVER SPRING, MD.
February 28, 2010
To All RADIO AMATEURS
BID: $ANS-059.01

[Note: times listed are for the local Pacific time zone]

AMSAT area coordinator Clint Bradford, K6LCS, will be presenting his 'Working Amateur Satellites With Your HT' multimedia session at the March 3, 2010 meeting of the Edison Amateur Radio Network. All are welcome to attend.

"Tentatively, we have a pass of AO-51 at 5:40PM before the meeting," Clint reports. "I'll be working the satellite from the AQMD parking lot if you'd like to show up a few minutes early."

The club meets at the Diamond Bar AQMD building,
21865 Copley Drive, Diamond Bar
CA 91765 - close to the 57/60 freeway interchange. Meeting starts at 6PM.

Attendees are encouraged to download Clint's four-page tutorial and radio programming matrix before the meeting from ...
http://www.work-sat.com

And Clint welcomes pre-presentation questions - call him at
909-241-7666,
or send email to ... clint@clintbradford.com

/EX

SB SAT @ AMSAT $ANS-059.02
AMSAT Activities at the Greater Houston Hamfest

AMSAT News Service Bulletin 059.02
  From AMSAT HQ SILVER SPRING, MD.
February 28, 2010
To All RADIO AMATEURS
BID: $ANS-059.02

Greater Houston Hamfest 2010 in Rosenburg, TX will feature an AMSAT booth, technical presentation and satellite demos. Second prize drawing at Hamfest will be for Kenwood F6A HT with Arrow antenna and duplexer. Allen Mattis N5AFV & Andy MacAllister W5ACM are organizing the AMSAT activities. Listen for special event callsign, KK5W.

/EX

SB SAT @ AMSAT $ANS-059.03
AMSAT Preparing for Hamvention 2010

AMSAT News Service Bulletin 059.03
  From AMSAT HQ SILVER SPRING, MD.
February 28, 2010
To All RADIO AMATEURS
BID: $ANS-059.03

The AMSAT team is preparing for the 2010 Dayton Hamvention AMSAT Booth and activities. We are updating information about the AMSAT presence at Dayton on the AMSAT Web site, follow the left hand navigation to get to the AMSAT Hamvention area. Those wishing to stay with the AMSAT contingent and volunteering to work on booth setup/ take down or in the booth itself are invited to contact Martha to make your hotel reservations. Additional information about the hotel can be found under the Dayton Hotel 2010 link.

The Friday night AMSAT/TAPR Banquet will be at the same location as the last three years, the Kohler Banquet Center. The menu has been selected and posted on the AMSAT/TAPR Banquet 2010 link. TAPR will be selecting the speaker for the banquet this year. The team is looking forward to displaying AMSAT accomplishments, new merchandise and talking with our members during the May 14-16, 2010 event.

/EX

SB SAT @ AMSAT $ANS-059.04
Indonesian Amateur Radio Satellite update

AMSAT News Service Bulletin 059.04
From AMSAT HQ SILVER SPRING, MD.
February 28, 2010
To All RADIO AMATEURS
BID: $ANS-059.04

Wisnu Widjaja YB�AZ brings the latest news on the two new Indonesian Amateur Radio satellites, LAPAN-ORARI and LAPAN-A2 which are planned to launch in 2011. ORARI is the Organisasi Amatir Radio Indonesia.

LAPAN-ORARI will carry a 5 watt output FM voice transponder with a 435.880 MHz uplink and 145.880 MHz downlink as well as an APRS Digipeater on 145.825 MHz. It will also carry a green light laser for attitude determination.

It is planned to be launched from India into a 650km orbit with low (8 degree) inclination as a secondary payload with "Megha-Tropique".

LAPAN-A2 will use S band (non amateur frequency) for video surveillance and the amateur frequency 437.425 MHz for telemetry.

Wisnu Widjaja YB�AZ was the responsible operator on the frequency coordination request for the two satellites submitted to the IARU Amateur Satellite Frequency Coordination panel which was approved on December 23, 2009.

Work on LAPAN-ORARI and LAPAN-A2 satellites is currently at the stage of assembly and testing of components.

More information is available on these satellites at
http://www.lapan.go.id
http://www.orari.or.id
http://www.amsat-id.net
http://lapantubsat.org
http://www.amsat.org.uk/iaru/finished.asp

Vice Secretary General and International Affairs Coordinator and IARU Liaison of ORARI, Wisnu Widjaja YB�AZ said, "Hopefully this information can be useful for the member of ORARI and amateur radio throughout the world about LAPAN ORARI and LAPAN A2 satellites.

[ANS thanks ORARI and the SouthGate Amateur Radio News for the above information]

/EX

SB SAT @ AMSAT $ANS-059.05
ARISS Status - 22 February 2010

AMSAT News Service Bulletin 059.05
From AMSAT HQ SILVER SPRING, MD.
February 28, 2010
To All RADIO AMATEURS
BID: $ANS-059.05

1. ARISS International Team Meeting Held

The monthly Amateur Radio on the International Space Station (ARISS) Team teleconference was held on Tuesday, February 16. A status was given on the Columbus module as well as ARISSat-1. The minutes have been posted. See: https://www.rac.ca/ariss/arisstel2010-02-16.htm

2. ARISS News on Amateur Radio Newsline

The February 19, Amateur Radio Newsline Report 1697 included one ARISS news item. The "Ham Radio in Space" article was about astro naut Ron Garan studying to obtain his amateur radio license. See: ftp://ftp.arnewsline.org/quincy/News/news.txt

3. ARISSat-1 Meeting Held

An ARISSat Design Review was held in Orlando, Florida on Monday and Tuesday, February 15 - 16. Thirteen members attended the meeting and gave 23 presentations concerning the status of ARISSat-1. A write-up on the meeting can be found on the AMSAT (Radio Amateur Satellite Corporation) Web site. Links to the presentations will be posted soon. See: http://www.amsat.org/amsat-new/index.php

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are

available from the AMSAT Office.

73,
This week's ANS Editor,
Lee McLamb, KU4OS

From 3650476456788837687
X-Google-Thread: a4a23d5f63,6d10faf488bba2b0,start
X-Google-Attributes: gida4a23d5f63,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!newsfeed2.dallas1.level3.net!
news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-060 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Tue, 2 Mar 2010 10:35:36 EST
Organization: The Radio Amateur Satellite Corporation
Lines: 1844
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <001e01caba1d$f3266c80$d9734580$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1267544136 6103 166.84.1.6 (2 Mar 2010 15:35:36 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Tue, 2 Mar 2010 15:35:36 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
x-cr-hashedpuzzle: khg= AaUS AkeX BR1W Bi18 CoGM EQc6 Ep1j G78x HKQn HK+H HXt3
H8K+ IAt7 JWM3
JkOF;1;cgBlAGMALQByAGEAZABpAG8ALQBpAG4AZgBvAEAAcABhAG4AaQB4AC4AYwBvAG0A;Sosha1_v1;
7;
{19C8688D-0223-440D-8914-2BD088F5285C};awA5AGoAawBtAEAAYwBvAG0AYwBhAHMAdAAuAG4AZQB
0AA==;Tue, 02 Mar 2010 15:35:03
GMT;VwBTAFIALQAwADYAMAAgAEEATQBTAEEAVAAgAFcAZQBlAGsAbAB5ACAAUwBhAHQAZQBsAGwAaQB0AG

UAIABSAGUAcABvAHIAdAA=
x-cr-puzzleid: {19C8688D-0223-440D-8914-2BD088F5285C}
Xref: g2news1.google.com rec.radio.amateur.space:319 rec.radio.info:1265

This report is organized into four (4) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - deborbited/returned satellites

SB SAT @ AMSAT W8ISS $WSR-060.S1
WSR 060 Part 1 03/01/2010

AMSAT NEWS SERVICE BULLETIN 060.S1
FROM AMSAT HQ SILVER SPRING, MD, March 01, 2010
TO ALL RADIO AMATEURS
BID: $WSR-060.S1

HO-68 XW-1 (CAS-1)
Catalog Number:
Launch Date: December 15, 2009
Status: Commissioning

Callsign:

```
Uplinks:   145.8250 MHz FM, PL 67.0 Hz.
           145.9250 - 145.9750 MHz SSB/CW
           145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
           435.7650 - 435.7150 MHz SSB/CW
           435.6750 MHz AFSK 1200 BPS

Beacon:    435.7900 MHz CW
```

Mode and Antenna Polarization:
V: LHCP 2.0dBi max
U: RHCP 3.0dBi max

IARU coordination page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108

For more information about XW-1 (CAS-1):
http://www.camsat.cn
[12122009]
=====
SO-67 SumbandilaSat
Catalog Number: 35870
Launch Date: September 17, 2009

Status: Commissioning

Callsign: ZS0SUM

Uplink: 145.875MHz FM tone 233.6 Hz
Downlink: 435.345MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

For more information about SO-67:
http://www.amsatsa.org.za/
[11212009]
=====
DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008

Status: Operational
Current Mode: Science Mode - Beacon ONLY

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink: 435.530 to 435.570 MHz

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68
[02122009]
=====
VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.859330 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

```
Official Webpage: http://www.amsatindia.org/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is active. Each transponder has a different beacon.
[08072008]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Modes:
FM Repeater ONE
Uplink:    145.920 MHz FM
Downlink:  435.300 MHz FM
FM Repeater TWO
Uplink:    OFF
Downlink:  OFF
BBS
Uplink:    OFF
Downlink:  OFF
Telemetry
Downlink:  435.150MHz 9k6

Analog voice downlink:     435.300 MHz FM
                           435.150 MHz FM
                          2401.200 Mhz FM
Analog voice uplink:       145.860 MHZ FM
                           145.880 MHz USB
                           145.920 MHz FM
                          1268.700 MHz FM
Digital Downlinks:         435.150 MHz FM 38k4 PBP, 1 watt output
                           435.150 MHz FM 9k6 Pacsat Broadcast Protocol
                          2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:            145.860 MHz FM 9k6 Pacsat Broadcast Protocol
                          1268.700 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon:                    435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
```

```
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[03012010]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002

Status: Operational

Current Mode: V/u

Uplink:   145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4
Hz. The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute
   timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the re-
   peater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset
   the 10 minute timer.
[05282007]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: sCHEDULED oPERATIONS
Current Mode: V/u (Mode JA)

Voice/CW (Mode JA)
Uplink:   145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon:   435.795 MHz

Digital Mode JD
Uplinks:  145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
```

U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage:
http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's
CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts.htm
[02132010]
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993

Status: Operational

Current Mode: V/u

```
Uplink:   145.850 MHz FM
Downlink: 436.797 MHz FM
```

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[03232009]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational

Current Mode: Alternating between Mode A and B every 24 hours

```
Uplink:   145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink:  29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons:   29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW
```

```
Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
[02122009]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - V/u
                      Voice -       V/v
                      BBS -         V/v
                      APRS -        V/v
                      SSTV -        V/v


Expedition 22 Crew:
Commander:                Jeff Williams  KD5TVQ
Flight Engineer:          Maxim Suraev
Flight Engineer:          Oleg Kotov
Flight Engineer:          T.J. Creamer   KC5WKI
Flight Engineer:          Soichi Noguchi KD5TVP

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink:   145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink:     145.200 MHz FM
Region 2/3 voice uplink:   144.490 MHz FM
Worldwide downlink:        145.800 MHz FM

Crossband Repeater:
Repeater Uplinks:         1269.650 MHz FM
                           437.800 MHz FM
                           145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink:         145.800 MHz FM
                           437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink:                  145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian:                   OR4ISS
```

German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[02222010]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-060.S2
WSR 060 Part 2 03/01/2010

AMSAT NEWS SERVICE BULLETIN 060.S2
FROM AMSAT HQ SILVER SPRING, MD, March 01, 2010
TO ALL RADIO AMATEURS
BID: $WSR-060.S2

HO-68 XW-1 (CAS-1)
Catalog Number:
Launch Date: December 15, 2009
Status: Commissioning

Callsign:

Uplinks: 145.8250 MHz FM, PL 67.0 Hz.
145.9250 - 145.9750 MHz SSB/CW
145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
435.7650 - 435.7150 MHz SSB/CW
435.6750 MHz AFSK 1200 BPS

Beacon: 435.7900 MHz CW

IARU coordination page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108

For more information about XW-1 (CAS-1):
http://www.camsat.cn
[122262009]
=====
SwissCube
Catalog Number: 35932
Launch Date: September 23, 2009

Status: In Orbit

Callsign: HB9EG

Beacon(100mw): 437.5050MHz CW
Beacon(1w): 437.5050MHz FSK 1k2bps
[11112009]
=====
UWE-2
Catalog Number: 35934
Launch Date: September 23, 2009

Status: In Orbit

Beacon(500mw): 437.3850 MHz AFSK 1k2bps
               437.3850 MHz FSK 9k6bps
[1112009]
=====
ITUpsAT1
Catalog Number: 35935
Launch Date: September 23, 2009

Status: In Orbit

Beacon(100mw): 437.325MHz CW
Beacon(1w): 437.325MHz 19k2bps
[11112009]
=====
BEESAT
Catalog Number: 35933
Launch Date: September 23, 2009

Status: In Orbit

Callsign: DP0BEE

Beacon(100mw): 436.000MHz CW
Beacon(500mw): 436.000MHz GMSK 4k8bps
[11112009]
=====
Pollux
Catalog Number:
Launch Date: July 31, 2009

Status: Operational

Callsign: POLLUX-1

Downlink: 145.825MHz 1k2 AX.25
[10042009]
=====
Castor (ANDE-2)
Catalog Number:

```
Launch Date: July 31, 2009

Status: Operational

Callsign: KD4HBO-1

Downlink: 145.825 MHz 1k2 AX.25
[10042009]
=====
BEVO-1 (DRAGONSAT-1)
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Operational

Downlink: 437.325 MHz 9k6 GMSK
          437.325 MHz CW 20wpm
[07312009]
=====
AggieSat2 (DRAGONSAT-2)
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Operational

Downlink: 436.250 MHz 9k6 FHSS
[11112009]
=====
CP-6
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Commissioning

Downlink: 437.365 MHz 1k2 AFSK
[06052009]
=====
HAWKSAT 1
Catalog number: 35003
Launch Date: May 19, 2009

Status: ?

Downlink: 437.345 ?
[06052009]
=====
Pharmasat
Catalog Number: 35002
Launch Date: May 19, 2009
Status: Commissioning

Downlink: 437.465 MHz 1k2 AFSK
[06052009]
```

```
=====
ANUSAT
Catalog Number: 34808
Launch Date: April 20, 2009

Status: ?

Downlink:  435.000 MHz
Uplink:    145.800 MHz

Telemetry: 137.400 MHz
[05112009]
=====
SOHLA-1 (ASTRO TECH.)
Catalog Number: 33496
Launch Date: January 23, 2009

Status: Commisioning

Proposed Frequencies and Modes:
Downlink: 437.505 MHz AFSK/CW
Beacon:   437.505 MHz AFSK/CW

Callsign:

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=101
[03232009]
=====
KAGAYAKI (Solan Co.)
Catalog Number: 33495?
Launch Date: January 23, 2009

Status: In Orbit

Downlink: 437.375 MHZ    FSK9k6/CW
Beacon:   437.375 MHz    FSK9k6/CW

IARU coordination status page:

AMSAT-NA webpage:

[01152009]
=====
STARS (Kagawa Univ.) (Twin Satellites)
Catalog Number: 33498
Launch Date: January 23, 2009

Status: Operational ?

Downlinks: 437.485 MHz FM/CW
           437.465 MHz FM/CW
Beacons:   437.305 MHz FM/CW
```

```
           437.275 MHz FM/CW

Callsigns: JR5YBN
           JR5YBO

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=99

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=121&retURL
=/satellites/status.php
[022152009]
=====
KKS-1 (Tokyo MCIT)
Catalog Number: 33499
Launch Date: January 23, 2009

Status: Operational

Downlink:  437.455 MHz AFSK/CW
Beacon:    437.385 MHz AFSK/CW

Callsign: JQ1YYY

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=107

AMSAT-NA webapge:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=120&retURL
=/satellites/status.php
[02212009]
=====
PRISM (Tokyo Univ.)
Catalog Number: 33493
Launch Date: January 23, 2009

Status: Operational ?

Downlink: 437.425 MHz AFSK/GMSK/CW
Beacon:   437.250 MHz AFSK/GMSK/CW

Callsign: JQ1YCX

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=97

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=119&retURL
=/satellites/status.php
[02212009]
=====
RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number: 32953
```

Launch Date: May 23, 2008

Status: Operational

Curent Modes: Telemetry
Audio
Images

Downlinks: 435.315 MHz
435.215 MHz

AMSAT-NA website:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=115&retURL=/satellites/status.php

Official website:
http://www.npopm.com/?cid=leoca&caid=43
[02122009]
=====
CanX-2
Catalog number: 32790
Launch Date: April 28, 2008

Status: Operational in range of ground station only

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[02212009]
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.425 MHz 1k2 baud packet

For the latest project status update please visit the AAUSAT-II web page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[02212009]
=====
CO-65 CUTE-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008

Status: Digipeater

Downlink: 437.475 MHz 9k6 Packet
Uplink: 1267.600 Mhz

Telemetry Beacon:
Downlink: 437.2750 MHz CW

For the latest project status update please visit the Cute-1.7+APD II web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78

Command Station blog website:
http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=112&retURL=/satellites/status.php
[02212009]
=====
Compass-1
Catalog number: 32787
Launch Date: April 28, 2008

Status: Operational

Current Mode: 4k8 MSK packet

Uplink: 145.980 MHz FM
Downlink: 437.275 Mhz CW
          437.405 MHz Packet

For the latest project status update please visit the Compass 1 web page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=114&retURL=/satellites/status.php
[04272009]
=====
CO-66 Seeds II
Catalog number: 32791
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.485 MHz

```
Callsign: JQ1YGU

For the latest project status update please visit the Seeds 2 web
page: http://cubesat.aero.cst.nihon-u.ac.jp/english/seeds_2_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=113&retURL
=/satellites/status.php
[02212009]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode:  /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon:    435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=94&retURL=
/satellites/status.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=72
[02122009]
=====
CP3
Catalog Number: 31129
Launch Date: April 17,2007

Status: Operational

Current Mode:  /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[02122009]
=====
GENESAT-1
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational
```

Current Mode: /u

Callsign: KE7EGC

Telemetry Beacon Downlink: 437.0695 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[09152009]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

```
Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon:             437.2750 MHz CW
```

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/xivpicte.htm
[02212009]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003

Status: ?????

Current Mode: /u

```
Beacon:     436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS
```

Callsign: JQ1YGW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=96&retURL=/satellites/status.php

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[06082009]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Operational?

Uplink: 1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=56
[02122009]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Modes:
FM Repeater ONE
Uplink: 145.920 MHz FM
Downlink: 435.300 MHz FM
FM Repeater TWO
Uplink: OFF
Downlink: OFF
BBS
Uplink: OFF
Downlink: OFF
Telemetry
Downlink: 435.150MHz 9k6

Analog voice downlink:	435.300 MHz FM
	435.150 MHz FM
	2401.200 Mhz FM
Analog voice uplink:	145.860 MHZ FM
	145.880 MHz USB
	145.920 MHz FM
	1268.700 MHz FM
Digital Downlinks:	435.150 MHz FM 38k4 PBP, 1 watt output
	435.150 MHz FM 9k6 Pacsat Broadcast Protocol
	2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:	145.860 MHz FM 9k6 Pacsat Broadcast Protocol
	1268.700 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon:	435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP

```
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[03012010]
=====
QuakeSat
Catalog Number: 27845
Launch Date: June 30, 2003

Status: Telemetry only

Current Mode: 9600 baud data packet

Mode U packet
Downlink: 436.675 MHz 9k6 BPS

Quakesat webpage:
http://www.quakefinder.com/services/quakesat-ssite/
[04272009]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=69&retURL
=/satellites/status.php
[02212009]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Telemetry only
```

```
Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink:        144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[03302009]
=====
RS-22 RADIO SPORT 22
Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only

Current Mode:  /u

CW Beacon - 435.352 MHz
            145.818 MHz

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=76&retURL
=/satellites/status.php
[02212009]
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990

Status: CW Beacon only

Uplinks:          145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink:      437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[03162009]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984
```

Status: Non-operational.

Current Mode: /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon: 435.025 MHz
Mode-S Beacon: 2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[12162009]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - V/u
                      Voice -   V/v
                      BBS -   V/v
                      APRS -   V/v
                      SSTV -   V/v

Expedition 22 Crew:
Commander: Jeff Williams KD5TVQ
Flight Engineer: Maxim Suraev
Flight Engineer: Oleg Kotov
Flight Engineer: T.J. Creamer   KC5WKI
Flight Engineer: Soichi Noguchi KD5TVP

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
                           437.800 MHz FM
                           145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
                           437.800 MHz FM (Kenwood)

SSTV Robot 36:

```
Downlink:                    145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian:                     OR4ISS
German:                      DP0ISS
Russian:                     RS0ISS
                             RZ3DZR
United States:               NA1SS
Packet Mailbox:              RS0ISS-11
Digipeater callsign:         ARISS

Official ARISS Webpage:      http://www.rac.ca/ariss
ISS Fan Club Webpage:        http://www.issfanclub.com
APRS tracking page:          http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[02222010]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-060.S3
WSR 060 Part 3 03/01/2010

AMSAT NEWS SERVICE BULLETIN 060.S3
FROM AMSAT HQ SILVER SPRING, MD, March 01, 2010
TO ALL RADIO AMATEURS
BID: $WSR-060.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

CP4
Catalog Number: 31122
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon:    437.325 MHz CW

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=79
[10022008]
=====
LIBERTAD-1
Catalog Number: 31128
```

```
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink:   145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[02122009]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: Non-Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder:  145.825 Mhz FM
[01012009]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency:  437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink:        437.250 MHz FM 67Hz CTCSS
Voice Downlink:     2401.835 MHz FM
Packet Up/Downlink:  437.250 MHz 9k6 packet
Packet Downlink     2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
```

```
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non-Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[08132007]
=====
CANX-1
Catalog Number: 27847
Launch Date: June 30, 2003

Status: Non-Operational

Downlink: 437.8800 MHz AFSK 1k2bps
[06052009]
=====
DTUSAT
Catalog Number: 27842
Launch Date: June 30, 2003

Status: Non-Operational

Current Mode: 2k4 AFSK Packet last reported

Downlink: 437.475MHz

Officail webpage: http://dtusat1.dtusat.dtu.dk/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=101&retURL
=satellites/all_oscars.php
[02212009]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink:   435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)

Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
```

Catalog number: 26548
Launch date: September 26, 2000

Status: Telemetry only

Uplinks: 145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[03302009]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545

Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks

V-band: 145.840 - 145.990 MHz CW/LSB
U-band: 435.550 - 435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks

S2-band: 2401.225 - 2401.475 MHz CW/USB
K-band: 24048.010 - 24048.060 MHz CW/USB
Beacon: 2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)

BEACON	General Beacon(GB)	Middle Beacon(MB)	Engineering Beacon(EB)
2 m	none	145.898 MHz	none
70cm	435.438 MHz	435.588 MHz	435.838 MHz
13cm(1)	2400.188 MHz	2400.338 MHz	2400.588 MHz
13cm(2)	2401.173 MHz	2401.323 MHz	2401.573 MHz
3cm	10450.975 MHz	10451.125 MHz	10451.375 MHz
1.5cm	24047.885 MHz	24048.035 MHz	24048.285 MHz

[07162007]
=====
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK

```
[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink:    145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: 25636
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater:         436.250 MHz

Uplinks: Mode B Repeater:  145.825 MHz
Mode J Digipeater:         145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational
```

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Telemetry only

Current Modes:
Telemetry : /u

Downlink: 435.225 MHz FM (9600-baud FSK)
435.325 Mhz - Not Available - temperature problems
Uplinks: 145.850 FM
145.890 FM
145.930 FM
1269.700 FM
1269.800 FM
1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://asri.technion.ac.il/techsat/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=14&retURL=/satellites/status.php
[12012009]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink: 145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
MO-30 UNAMSAT-2

Catalog Number: 24305
Launch Date: September 5, 1996

Status: Non-operational

Downlink: 435.1380 MHz AFSK 1200 BPS
Downlink: 435.2060 MHz AFSK 1200 BPS
Uplink: 145.8150 MHz AFSK 1200 BPS
Uplink: 145.8350 MHz AFSK 1200 BPS
Uplink: 145.8550 MHz AFSK 1200 BPS
Uplink: 145.8750 MHz AFSK 1200 BPS
[06042009]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Non-operational

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012009]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks: 145.875 MHz FM 1200-baud
145.900 MHz FM 1200-baud
145.925 MHz FM 1200-baud
145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT

```
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
AO-24 ARSENE
Catalog Number: 22654
Launch Date: May 13, 1993

Status: Non-operational

Uplink:    435.0625 MHz FM 1k2bps AFSK
           435.1125 MHz FM 1k2bps AFSK
           435.1375 MHz FM 1k2bps AFSK
Downlink:  145.9750 MHz FM 1k2bps AFSK
          2446.5025 MHz FM 1k2bps AFSK

Beacon:    2446.4700 MHz CW

Broadcast callsign:
BBS:
[12162009]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
```

```
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
```

```
Beacon:   2401.220 MHz
[05012006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: non-operational

Current Mode:  V/u

Uplink:         145.900 MHz FM 1200-baud Manchester FSK (reserved)
                145.920 MHz FM VOICE
                145.940 MHz FM 1200-baud Manchester FSK (reserved)
                145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink:       437.026 MHz USB VOICE
                (1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[07242009]
=====
UO-15 UoSAT-4
Catalog Number: 20438
Launch Date: January 22, 1990

Status: Non-operational

Uplink: ?
Downlink: 435.1250MHz (?)
          435.1200MHz (?)
[06042009]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon:   145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink  29.4000 -  29.5000 MHz SSB/CW
```

```
Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
Beacons:   29.450 MHz
          435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon 1:  29.352 MHz (intermittent)
Beacon 2:  29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
```

```
Launch date: February 5, 1991

Status: Non-operational

Uplink:     21.260 to 21.300 MHz CW/USB
Downlink:  145.860 to 145.900 MHz CW/USB

Beacon:    145.860 MHz

Robot:     145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink:   21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon:   29.408 MHz

Robot:    29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-060.S4
WSR 060 Part 4 03/01/2010

AMSAT NEWS SERVICE BULLETIN 060.S4
FROM AMSAT HQ SILVER SPRING, MD, March 01, 2010
TO ALL RADIO AMATEURS
BID: $WSR-060.S4

THE FOLLOWING SATELLITES HAVE RE-ENTERED OR HAVE BEEN RETURNED SAFELY:

NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: July 28, 2008

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[01012009]
=====
NO-61 ANDE
```

Catalog Number: 29664
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink: 145.825 Mhz FM APRS AX25
APRS Uplink: 145.825 MHz FM APRS AX25
Voice/PSK31 Uplink: 28.120 MHz

Packet to Voice ID: RAFT
[06112007]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Re-Entered
Re-entered: June 18, 2008

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon: 437.2750 MHz CW

Callsign: JR8YJT
[01012009]
=====
SO-43 Starshine 3
Catalog Number: 26929
Launch Date: September 30, 2001

Status: Re-Entered
Re-entered: January 21, 2003

Beacon: 145.825Mhz
[02212009]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

```
Voice: 301-589-6062
       888-322-6728
FAX:   301-608-3410
```

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at}
amsat.org
NNNN
/EX

```
From 7570555531541076073
X-Google-Thread: a4a23d5f63,706622470fc04660,start
X-Google-Attributes: gida4a23d5f63,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
```

```
Path: g2news1.google.com!news1.google.com!newsfeed2.dallas1.level3.net!
news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-066 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sun, 7 Mar 2010 10:31:17 EST
Organization: The Radio Amateur Satellite Corporation
Lines: 325
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000c01cabe0b$336bc920$9a435b60$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1267975877 21321 166.84.1.6 (7 Mar 2010 15:31:17 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 7 Mar 2010 15:31:17 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
x-cr-hashedpuzzle: rR8= ALDE BBu6 BDdn CCjR DhKm D8Es D+Z/ EDBt E/dd FARg FMTs
FV5e G2j9 IN0B
IcEG;1;cgBlAGMALQByAGEAZABpAG8ALQBpAG4AZgBvAEAAcABhAG4AaQB4AC4AYwBvAG0A;Sosha1_v1;
7;{0245089A-45C2-4C43-8952-
A01A61AC19C5};awA5AGoAawBtAEAAYwBvAG0AYwBhAHMAdAAuAG4AZQB0AA==;Sun, 07 Mar 2010
15:30:44
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UAawBsAHkAIABCAHUAbABsAGUAdABpAG4AcwA=
x-cr-puzzleid: {0245089A-45C2-4C43-8952-A01A61AC19C5}
Xref: g2news1.google.com rec.radio.amateur.space:320 rec.radio.info:1282
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AMSAT NEWS SERVICE
ANS-066

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:

* East Coast APRS Satellite Launch 11 March!
* A new interference threat to the Ham Bands
* SK: Dave Toth, VE3GYQ
* AO-51 Survives Close Encounter With FORMOSAT-3
* A Self adjusting Orbit Scheme
* ARISS Update

SB SAT @ AMSAT $ANS-066.01
East Coast APRS Satellite Launch 11 March!

AMSAT News Service Bulletin 066.01
>From AMSAT HQ SILVER SPRING, MD.
March 7, 2010
To All RADIO AMATEURS
BID: $ANS-066.01

Likely visible over most of the mid-Atlantic; no specific launch time information received at press time. I don't see a launch time or any other info yet.

A sounding rocket with amateur satellite operating on 144.39 MHZ APRS will rise to 100 miles or so for an 8 minute mission. The rocket is the Hall 12.067.

The payload is called SOCEM/ADAMASat. There is a computer program and GUI to interface to your PC so you can grab the telemetry live. It is on: http://ssl.engr.uky.edu/adamasat_free_gui.exe

Bob, WB4APR said, "It's a one shot deal, so I'm gonna have a backup TNC and HYPERTERM collecting everything. ADAMASat is the Antenna Deployment and Mono-filament Actuator Satellite. It's a 2U CubeSat designed by Kentucky Space as part of SOCEM, the Sub-Orbital CubeSat Experimental Mission. ADAMASat, which is scheduled to launch on Hall 12.067 out of Wallops Flight Facility on 11 March, will fly in space for roughly 8 minutes performing an engineering experiment and transmitting data down to Earth via APRS packets.

More information on ADAMASat is available at
http://ssl.engr.uky.edu/suborbital/adamasat

Kentucky Space is hereby releasing to the AMSAT-NA community the ADAMASat FREE GUI, a free 32-bit Windows binary for amateur radio operators in the Eastern United States who are interested in tracking ADAMASat on its launch day. The GUI is a standalone application and upon opening it on his/her computer, the HAM will be greeted with a popup window which explains the steps required to track the payload.

All that is needed is a Windows machine, a radio and TNC which can receive on 144.390 MHz, a serial or USB cable, and a suitable location. The GUI parses the APRS packets as they are received, graphing temperatures on-board the payload and reporting status of the mission in real-time. It also includes instructions on e-mailing the packet log to Kentucky Space to aid in post-processing, and a built-in aggregator for the official ADAMASatTwitter RSS feed.

Disclaimer: Kentucky Space provides the GUI "as is" without warranties of any kind, and shall not incur any liability for any damages connected to the use of the GUI.

[ANS thanks Bob, WA4APR, for the above information]

/EX

SB SAT @ AMSAT $ANS-066.02
A new interference threat to the Ham Bands

AMSAT News Service Bulletin 066.02
>From AMSAT HQ SILVER SPRING, MD.
March 7, 2010
To All RADIO AMATEURS
BID: $ANS-066.02

FCC to Permit Rescue Radio Robot in the 430 to 450 MHz Band

Reports initially carried in the February 26, 2010 edition of Amateur Radio NewslineT Report 1698, and on the QRZ.com website say the FCC has issued a waiver of the Part 90 rules to permit a company called Reconrobotics Incorporated to sell a remote controlled security robot that will operate in the 430 to 448 MHz band. This is spectrum that is primary to the Federal Radiolocation Service but also encompasses the Amateur Service weak signal, satellite and repeater subbands.

The waiver permits Reconrobitics to manufacture and sell a device called the Recon Scout. This is described as a device designed for state and local law enforcement and firefighting agencies, and security personnel in critical infrastructure industries. The Recon Scout can be thrown, dropped, or launched into potentially hazardous areas and can provide real-time video to an operator located a safe distance away. Typical applications will include such things as checking a building prior to forced entry, searching vehicle undercarriages for explosives and searching for survivors in a burning structure.

The Recon Scout transmits the analog video signal to the operator on one of three six megahertz channels. These are 430 to 436 MHz, 436 to 442 MHz, and 442 to 448 MHz. Reconrobotics says that multiple channels are necessary in order to avoid interference during incidents where multiple Recon Scouts are in use, but that such situations should be rare.

The company's now approved proposal is that the first unit sold to a responding organization would operate on 442 to 448 MHz. That happens to be where thousands of ham radio repeaters operate. The 436 to 442 MHz version being sold only to entities that already own the 442 to 448 MHz version, and the 430 to 436 MHz version being sold only to entities that already own both of the others.

In approving the waiver, the FCC told Reconrobotics the Recon Scout will have to operate on a secondary basis where it cannot cause interference and is not protected from interference to all Federal users and licensed non-Federal users including radio amateurs. The FCC also warned prospective users that operation of the Recon Scout in an unauthorized manner will subject licensees to Commission enforcement action and license revocation. It also said that widespread improper use of the device could lead the Commission to stop granting or renewing Recon Scout authorizations.

[ANS thanks Amateur Radio NewslineT Report 1698 for the above information]

/EX

SB SAT @ AMSAT $ANS-066.03
SK: Dave Toth, VE3GYQ

AMSAT News Service Bulletin 066.03
>From AMSAT HQ SILVER SPRING, MD.
March 7, 2010
To All RADIO AMATEURS
BID: $ANS-066.03

SK: Dave Toth, VE3GYQ

AMSAT received the sad news of the passing of a friend this week noting the passing of Dr David Toth, VE3GYQ. Dave was the President Emeritus of Tucson Amateur Packet Radio (TAPR) Group. He was an early member of TAPR, a long time supporter of AMSAT and he gave of his time and talents to promote technical endeavors in Amateur Radio. Former AMSAT President Tom Clark, K3IO remembered Dave, "He was always a friend of AMSAT, giving up personal vacations to help with the integration of AO-40 in Orlando. For many years, he was the glue that held TAPR together."

Former AMSAT Board Member, Bob McGwier, N4HY recalled that, "Dave was an important player in the earliest days of packet radio in that he helped promote packet and supported it with on the air hardware. As a board member and President of TAPR, he helped TAPR become the principal support for Open HPSDR, a project to promote the development of hardware and software for software defined radio use by Amateur Radio. He will be sorely missed by all who knew him."

Dr. Toth graduated from the University of Western Ontario Medical School in 1978. He practiced family medicine in London, Ontario but moved to the U.S. in 1993 to began a career in emergency medicine. He was a partner of Premier Health Care Services, in Dayton, Ohio, and worked at Lima Memorial Health System and St. Rita's Medical Center until the time of his illness.

[ANS thanks Tom Clark, K3IO; Bob Bob McGwier, N4HY; Steve Bible, N7HPR; ARRL, TAPR, and Amateur Radio Newsline for the above information]

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SB SAT @ AMSAT $ANS-066.05
AO-51 Survives Close Encounter With FORMOSAT-3

AMSAT News Service Bulletin 066.05
>From AMSAT HQ SILVER SPRING, MD.
March 7, 2010
To All RADIO AMATEURS
BID: $ANS-066.05

AO-51 Survives Close Encounter With FORMOSAT-3

AMSAT-NA VP Operations, Drew KO4MA, received notification from the US Joint Space Operations Center, located at Vandenberg Air Force Base, California on Sunday, February 28 warning that AO-51 would have a close approach to another satellite, FORMOSAT 3-D, on Monday at 1056 UTC. This occurred over the Eastern US, with many stations on hand capable of receiving telemetry from AO-51 before and after the near miss. Drew said, "The predicted miss distance was 953 meters, which is over 3000 feet overall but the radial difference between the two orbits was only 39 meters."

Steve, W3HF noted, "Given the orbital uncertanties of both satellites, an orbit separated by only 39 meters could mean that distance may become eaten up rather quickly!"

In preparation for the close encounter, Drew shut off the S band transmitter and turned on the digital downlink at 2 watts, with telemetry transmitted every 5 seconds. The next morning, on March 1, Drew was able to post a message that AO-51 was alive and well, "It looks like we are fine. A second warning email this morning from the Air Force called it even closer, but everything was working at LOS this pass."

FORMOSAT-3 is a constellation of satellites launched on April 15, 2006. It is a joint U.S.-Taiwanese project with major participants including the University Corporation for Atmospheric Research (UCAR), the National Science Foundation, the Naval Research Laboratory (NRL), the Air Force Research Laboratory (AFRL) on the U.S. side and the National Space Organization (NSPO) on the Taiwanese side.

[ANS thanks AMSAT-NA VP Operations, Drew KO4MA, and Steve, W3HF for the above information]

/EX

SB SAT @ AMSAT $ANS-066.06
A Self adjusting Orbit Scheme

AMSAT News Service Bulletin 066.06
>From AMSAT HQ SILVER SPRING, MD.
March 7, 2010
To All RADIO AMATEURS
BID: $ANS-066.06

>From the IARU Amateur Satellite Frequency Coordination pages at
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=168

POPACS-RR a 2U cubesat will use self-contained, warm gas, propulsion system to adjust satellite's initial circular orbit of 450 km to eccentric orbit with apogee of 1500 km and perigee of 450 km.

Demonstrate use of 3D printing (a.k.a. rapid prototyping) for manufacturing small satellites. Measure flux of energetic particles in lower Van Allen Belt. Test radiation-hardened electronic components and high performance solar cells in high radiation environment over a period of five years. Test radiation hardened components for a Plug and Play satellite. Proposing a UHF downlink of 9k6 GMSK AX25 packet and also an S Band downlink of BPSK at 9k6 or 38k4. Planning a launch on the first flight of SpaceX Falcon 1E not earlier than May 2011 with a 45 deg inclination. Will apply for a FCC part 5 Experimental licence for this project.

IARU Amateur Satellite Frequency Coordination pages
http://www.amsat.org.uk/iaru/

73 Trevor M5AKA

/EX

SB SAT @ AMSAT $ANS-066.7
ARISS Update

AMSAT News Service Bulletin 066.07
>From AMSAT HQ SILVER SPRING, MD.
March 7, 2010
To All RADIO AMATEURS
BID: $ANS-066.07

Amateur Radio on the International Space Station (ARISS) Status Report
March 1, 2010

1. School Contact

Expedition 22 astronaut Soichi Noguchi, KD5TVP Participated in an Amateur Radio on the International Space Station (ARISS) contact with Hamasuka Junior High School in Chigasaki City, Kanagawa, Japan on Thursday, March 4. This is a direct contact and was scheduled for 10:09 UTC. Noguchi is an alumnus of the school.

2. Timothy Creamer Chats with Doncaster Students via ARISS Contact

On Thursday, February 25, Timothy Creamer, KC5WKI spoke with Doncaster Primary School students in Doncaster, Victoria, Australia via an Amateur Radio on the International Space Station (ARISS) contact. The connection was made through telebridge ground station VK4KHZ in Queensland. Two hundred fifty guests attended the event and watched as the students asked nineteen questions of the on-orbit astronaut. The students were involved in many activities leading up to the contact in their Physics, Space, Geography, and English classes. During one such activity, the students researched a place in the solar system and created a short television program for the intergalactic travel show "Postcards."

3. ARISS Annual Report 2009 Posted

The Amateur Radio on the International Space Station (ARISS) Annual Report 2009 has been posted to the AMSAT Web site. See:
http://www.amsat.org/amsat/ariss/Papers/Annual%20Reports/ARISS_Annual_Report_2009_Final.pdf

4. ARISS News on Amateur Radio Newsline

The February 26, Amateur Radio Newsline Report 1698 includes one item about the ARISS program. The "Ham Radio in Space" article summarizes the ARISSat Design Review meeting held in Orlando, Florida. See:
ftp://ftp.arnewsline.org/quincy/News/news.txt

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Dee Interdonato, NB2F
nb2f at amsat dot org

From 2914274866507629925

```
X-Google-Thread: addc8bf063,591bd2c3002c26c6,start
X-Google-Attributes: gidaddc8bf063,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news4.google.com!feeder.news-service.com!
news.astraweb.com!border5.a.newsrouter.astraweb.com!not-for-mail
From: Chris Steyaert <observations@rmob.org>
Newsgroups: rec.radio.amateur.space,sci.astro.amateur
Subject: Radio Meteor Obs. Bull. February
Date: Mon, 08 Mar 2010 22:12:53 +0100
Message-ID: <c0qap55mc9vknrrm4350i1g1tppo7n1fnd@4ax.com>
X-Newsreader: Forte Agent 5.00/32.1171
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Lines: 14
Organization: Unlimited download news at news.astraweb.com
NNTP-Posting-Host: 7cec28e4.news.astraweb.com
X-Trace: DXC=ZSWk6AlRLbFm=FFS;n7SGML?
0kYOcDh@JC[>fl>lLBlK4RA2[T<]RQACOQ1kOkAIAC8lHan?aN]8Hee:7X8WH?=F
Xref: g2news1.google.com rec.radio.amateur.space:321 sci.astro.amateur:32283
```

Radio Meteor Observation Bulletin No. 199 of February 2010 (87 K) is available now as

http://www.rmob.org/rmobtext/rmob1002.txt

More information and the visual presentation of the hourly forward scatter counts can be found on

http://www.rmob.org

Chris

```
From 8010806402872355361
X-Google-Thread: 10e8ad,17d57447c5080576,start
X-Google-NewGroupId: yes
X-Google-Thread: 10b9c8,17d57447c5080576,start
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,gida4a23d5f63,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII
Path: g2news1.google.com!news1.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!transit3.readnews.com!news-xxxfer.readnews.com!news-
out.readnews.com!transit4.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-073 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sat, 13 Mar 2010 21:27:03 EST
```

```
Organization: The Radio Amateur Satellite Corporation
Lines: 551
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <001601cac31d$d08908f0$719b1ad0$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;charset="iso-8859-1"
Content-Transfer-Encoding: quoted-printable
X-Trace: reader1.panix.com 1268533623 20081 166.84.1.6 (14 Mar 2010 02:27:03 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 14 Mar 2010 02:27:03 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news1.google.com rec.radio.amateur.space:322 rec.radio.info:1299
```

AMSAT NEWS SERVICE
ANS-073

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

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* The AMSAT team is preparing for the 2010 Dayton Hamvention AMSAT *
*     Booth and activities. For the latest information go to:      *
*    http://www.amsat.org/amsat-new/hamvention/2010/Dayton.php     *
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In this edition:

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* Satellite Shorts From All Over
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* First Reminder for 2010 AMSAT Field Day Competition

SB SAT @ AMSAT $ANS-073.01
ARISS to Receive A.I.R Boselli Award

AMSAT News Service Bulletin 073.01
>From AMSAT HQ SILVER SPRING, MD.
March 14, 2010
To All RADIO AMATEURS
BID: $ANS-073.01

This week's ARISS Status Report says the "Associazione Italiana Radioascolto" A.I.R. (Italian Radio Listeners Association) has awarded the Boselli prize 2010 to the Amateur Radio on the International Space Station (ARISS) program.

The A.I.R. Board found that ARISS meets every requirement for the award,

which is bestowed on "radio enthusiasts who promote the culture of radio,
showing the importance of radio communications to hundreds of young students in Italy, Europe and beyond, spreading the use of radio from the forefront of science in the vast outer space down to small classrooms."

The prize will be delivered on May 8 in Faenza during the A.I.R. annual meeting.

[ANS thanks Carol, KB3LKI for the above information]

/EX

SB SAT @ AMSAT $ANS-073.02
Thule Greenland Activation on Satellites Beginning March 23

AMSAT News Service Bulletin 073.02
>From AMSAT HQ SILVER SPRING, MD.
March 14, 2010
To All RADIO AMATEURS
BID: $ANS-073.02

Reid, N0RC plans to operate on FM satellites from Thule, Greenland (Grid FQ56) for one month starting March 23. Reid describes his plans, "I will try to use satellites that uplink on VHF, because my transmissions on UHF would interfere with the BMEWS radar on base. I'll need to determine if BMEWS interferes with UHF downlink which will affect my satellite operation."

Reid's schedule will be as work/passes/weather permits. He plans to primarily operate the FM satellites due to equipment limitations. He plans some HF operating in between passes. Look for OX3RC on the satellites and on HF starting March 23.

Reid concludes, "I cannot give a specific time of operation because my primary mission is work, and my work schedule is dependent on weather." Since he will not have a set operating schedule Reid will send out an email right before I go on the air for that time period. Reid has setup an email list on Google Groups:
http://groups.google.com/group/ox-thule-2010

[ANS thanks Reid, N0RC for the above information]

/EX

SB SAT @ AMSAT $ANS-073.03
Viet Nam 3W6C DXpedition Plans Include Satellite Operation

AMSAT News Service Bulletin 073.03
>From AMSAT HQ SILVER SPRING, MD.
March 14, 2010
To All RADIO AMATEURS
BID: $ANS-073.03

The 3W6C-Team will activate C�n C� Island (AS-185) near Viet Nam on satellites from April 10-18, 2010. The crew use a FT-897 transceiver with homebrewed "Easysat" antenna for 2m and 70cm and a homebrewed 10m cross dipole for AO-7 Mode A.

The team plans to use AO-07*, AO-51*, HO-68*, SO-50, and SO-67.
(*first priority on passes when the satellite team is available.)
AO-07 will be activated in SBB/CW-mode and ll other satellites will be in FM-mode.

The main areas in the footprint are: East-Asia, Japan, China, India, Australia and east part of Russia. If possible, the 3W6C-Team will use some DX-Windows to near East and west part of Russia.

The main-operator for Satellite will be Hans-Peter, HB9BXE. The satellite station will be operating in manual mode without automatic doppler correction or tracking. On AO-7 expect him to search the his downlink frequency +/- 5KHz to establish contacts. If there is a pileup on the satellites please transmit only your callsign, signal strength and gridsquare.

All DXpedition crew members are primary shortwave operators. So please be patient if they have some difficulty with satellite operation.

For additional information and operating-plan, please see the 3W6C Website: http://www.3w6c.qrv.ch.

[ANS thanks Michael, HB9WDF, Satellite Training Coach for the 3W6C DXpedition, for the above information]

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SB SAT @ AMSAT $ANS-073.04
FUNcube Pictures Released

AMSAT News Service Bulletin 073.04
>From AMSAT HQ SILVER SPRING, MD.
March 14, 2010
To All RADIO AMATEURS
BID: $ANS-073.04

AMSAT-UK has released images of the Command, Control & Telemetry (CCT) board being developed for the FUNcube Amateur Radio satellite.

FUNcube is the latest satellite project being developed by AMSAT-UK members. In addition to a telemetry beacon FUNcube will carry a 435 to 145 MHz linear transponder for SSB/CW operation. It will be the first time a satellite this small has carried such a transponder.

The CCT (Command, Control & Telemetry) Board is one of the circuit boards being designed and made by a number of members of the AMSAT-UK FUNcube development team. Its function is to control what the satellite does in realtime:

+ Automatically switch the satellite from 'education mode' to 'amateur mode'.

+ Gather readings from more than 30 sensors on the satellite, eg: temperatures, battery voltages, currents and encode them in a Forward Error Correcting format for downlinking via the beacon transmitter.

+ Collect and store the data from the Material Science Experiment for a whole orbit to demonstrate variations in thermal performance of material having different surface finishes in a vacuum and no gravity.

+ Monitor the main battery voltage, and switch the satellite into a low power mode if the battery voltage drops below a certain preset level.

The board will also contain the vital circuitry to deploy the 2 metre and 70 cms antennas after the satellite is deployed from the rocket. The board will communicate with the rest of the satellite via the I2C bus.

The pictures can be seen on the FUNcube site at
http://www.FUNcube.org.uk/

FunCube frequencies for the inverting linear transponder are:
Uplink   435.080 � 435.060 MHz

Downlink 145.960 � 145.980 MHz
Beacon   145.955 MHz CW and BPSK

AMSAT-UK publishes a colour A4 newsletter, OSCAR News, that is full of Amateur Satellite information. Information to join AMSAT-UK can be found on-line at: https://secure.amsat.org.uk/subs_form/

[ANS thanks Trevor, M5AKA for the above information]

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SB SAT @ AMSAT $ANS-073.05
RSGB Response to OFCOM WRC-12 Consultation Includes Satellite Bands

AMSAT News Service Bulletin 073.05
>From AMSAT HQ SILVER SPRING, MD.
March 14, 2010
To All RADIO AMATEURS
BID: $ANS-073.05

Amateur Satellite Service frequency allocations vary worldwide depending on your location in the ITU Regions 1, 2, or 3. This means that some stations may not be able to operate on all of the satellites; and conversely, if all frequency allocations are taken into account the design of future satellites becomes limited.

In preparation for the World Radiocommunication Conference 2012 (WRC-12) the Radio Society of Great Britain (RSGB) has provided the the UK communications regulator OFCOM with a response covering concerns and planning for future satellite frequency allocation between 50 MHz to the microwave bands.

The RSGB response expressed concern about the use of high powered VHF Radar at 142-144MHz immediately adjacent to the weak signal section of the Amateur Primary 144-146MHz allocation. It says that the 53830-5850MHz Amateur Satellite Service downlink allocation should be protected from harmful out of band emissions from High Altitude Platform Stations (HAPS).

Amateur Satellite Service allocations at 50MHz and 3400MHz are identified as medium term objectives in the response of Radio Society of Great Britain (RSGB) to the WRC-12 consultation held by the UK communications regulator OFCOM:

These medium/long term objectives were identified:
+ Amateur allocation at 5 MHz with expanded allocations at 7, 10,
  14, 18MHz.

+ A 50MHz Amateur Satellite Service allocation.

+ Allocation of 3400-3410MHz to the Amateur Satellite Service in

ITU Region 1.

- Allocations 10-50MHz wide at low atmospheric attenuation spots between amateur 10, 24 and 47GHz allocations.

- Amateur and Amateur Satellite Services experimental access or formal allocations above 275GHz.

Read the RSGB WRC-12 response at
http://www.ofcom.org.uk/consult/condocs/wrc_12/responses1/RSGB.pdf

OFCOM World Radiocommunication Conference 2012 (WRC-12) Consultation
http://www.ofcom.org.uk/consult/condocs/wrc_12/

[ANS thanks Trevor, M5AKA for the above information]

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SB SAT @ AMSAT $ANS-073.06
Satellite Shorts From All Over

AMSAT News Service Bulletin 073.06
>From AMSAT HQ SILVER SPRING, MD.
March 14, 2010
To All RADIO AMATEURS
BID: $ANS-073.06

- The K4T DXpedition to Dry Tortugas in the Gulf of Mexico wraps up operation on March 15. Satellite operating details have been posted at http://www.amsat.org

- Listen for Paul, 2E1EUB operating as 2M1EUB from his holiday QTH in northeastern Scotland, about 50 miles west of Aberdeen in the Caringnorms National Park. He will be active on HF and satellites from this QTH starting March 20 for 7 days.

- Contact Dave, G4DPZ (david.johnson AT blackpepper.co.uk) as soon as possible if you wish to submit a paper or presentation for the AMSAT-UK Colloquium 2010 which will be held at the Holiday Inn, Guildford, UK July 31 - August 1, 2010.

- Adrian, AA5UK, will be on Oahu (BL11) and Kauai (BL02ic & BL01) from March 24th through April 7th o operating portable KH6. He plans to operate on the Linear and FM satellites during his stay, mostly from his rented house in BL02ic (March 27th through April 5th) and will try to operate portable/mobile from BL11 and BL01 time permitting. Emphasis will be SSB on FO-29, VU-52, AO-7 and HO-68. He will post daily availability via AMSAT BB, QRZ.com: http://www.qrz.com/db/aa5uk, and Twitter: @AA5UK. Sked requests are encouraged due to the limited pass windows for those operators needing HI for WAS at the fringe of the footprints. Please use the email listed on QRZ.com to arrange for a time and date.

+ Mark Hammond, N8MH will be hosting an AMSAT table at the RARSFest in Raleigh, NC on April 3. He would really appreciate some help. It's a nice hamfest, and the RARS club is always very hospitable to an AMSAT table and workers. See: http://rars.org/hamfest/
If you can commit to helping me on April 3, please contact Mark directly off-list via n8mh AT amsat   dot   org

+ AMSAT Store Manager, Bruce, KK5DO reported the book, "AO-51 Publication Development, Operation and Specifications" by G. Gould Smith, WA4SXM, is once again in stock at the AMSAT online store and ready for immediate shipment. Originally published in 2004, this publication was updated in 2005. It is 73 pages and is in color. Order yours today for only $20.00 plus shipping where applicable. See: http://www.amsat-na.com/store/item.php?id=100165

+ In this YouTube video Marlin W3MAT shows the equipment he uses for communicating via the Amateur Radio satellites. The equipment comprises a dual-band hand held FM rig and an Elk dual band antenna. http://tinyurl.com/yzzhhry (SouthGate ARC)

+ Here's a nice video posted by KP4WK using a tape measure antenna to work AO-51. "Satellite Fever KP4WK working AO51 with the tape measure antenna" http://www.youtube.com/watch?v=LBVT-3BwYI8

+ Patrick WD9EWK/VA7EWK posted video clips from his trip to Mexicali last year. One clip was from part of an SO-50 pass, and the other two were during a shallow AO-51 pass:
The SO-50 pass video can be seen at:
http://www.youtube.com/watch?v=qf_pJw9qthM
The two clips from the AO-51 pass are at:
http://www.youtube.com/watch?v=3WskH1spZIc
http://www.youtube.com/watch?v=qseb6JVNgvo
Demonstration from the Yuma hamfest on 20 February 2010
http://www.youtube.com/watch?v=gwyFsk9tFAc
Two videos were from an AO-51 pass I worked as XE2/WD9EWK
from grid DM21jw in northern Baja California:
http://www.youtube.com/watch?v=JW5-hL3SDig
http://www.youtube.com/watch?v=2k2yAMGeALc

+ Bertrand Pinel, F5PL near Castelnaudary, France, used his 3.5m dish to listen to the signal from Mars Express during the Phobos Flyby. Details at: http://webservices.esa.int/blog/post/7/1058

+ The next Hudson Valley Satcom Net is Thursday 18 March at 8PM (EDT) (or 2400 UTC) on the 146.97 MBARC Repeater. The net is also carried on the N2EYH-L Echolink node. See: http://www.hvsatcom.org
Two area Hamfests in April:
Saturday April 10, the Orange Co. (NY) ARC Hamfest at the Wallkil Community Center(Near Middletown, NY) See: http://www.ocarc-ny.org
Sunday April 25 Mt. Beacon ARC or "Beaconfeste" at Tymor Pard.
(In the Town of Unionvale, NY) See: http://www.wr2abb.org

[ANS thanks everyone for the above information]

/EX

SB SAT @ AMSAT $ANS-073.07
GcmWin Software By SM3GSJ Global Grid Square Visualization Tool

AMSAT News Service Bulletin 073.07
>From AMSAT HQ SILVER SPRING, MD.
March 14, 2010
To All RADIO AMATEURS
BID: $ANS-073.07

John, K8YSE posted a map this week showing the map of the at least 86 different grids worked by Jim, ND9M during his recent 6 week road trip. John says the red grids are ones that he worked ND9M in and blue grids are the ones he missed. See: http://www.papays.com/nd9m.jpg

John wrote, "I've received several inquiries about the software that was used to create the ND9M/p road trip grid square plot. The program is a Great Circle Map generator with some very nice features created by SM3GSJ. KD8CAO originally discovered this program and posted info about it on the amsat-bb. It is called GcmWin."

Roger, SM3GSJ has added some functionality that makes it very suitable for those who chase grids. Originally, to plot grid square data, a 6 character grid designation was required. Roger changed it so that 4 character grids were acceptable.

In addition, only one set of grid square data could be overlayed on the map. He graciously changed the software so that two different colors from two different grid square files could be plotted. Now you can show your confirmed grids in one color and your worked grids in another. The program has many other features related to propagation that might interest those who work HF.

The homepage for the software is: http://www.qsl.net/sm3gsj/

John is thinking about creating a webpage that could be used as a repository for posting these maps for anyone that is interested in having their plot on line. Let him know if you're interested. You can view his plot at: http://www.papays.com/k8ysegrids.jpg

In that plot John set the radius at 8200 miles which is a compromise between detail and the maximum distance that can be worked on AO-7. If you decrease the radius, more detail can be shown. You can include grid square numbers if you make the radius small enough. Red is confirmed and Blue is worked.

[ANS thanks John, K8YSE for the above information]

/EX

SB SAT @ AMSAT $ANS-073.08
Update on Arecibo EME Activation

AMSAT News Service Bulletin 073.08
>From AMSAT HQ SILVER SPRING, MD.
March 14, 2010
To All RADIO AMATEURS
BID: $ANS-073.08

The planned activation of the Arecibo Dish on Amateur Radio Earth-Moon-Earth (EME) operation was initially mentioned in ANS-045. This article provides additional information to assist stations to prepare for the Echoes of Apollo EME 2010 or World Moon Bounce Day.

Echoes of Apollo EME 2010 or World Moon Bounce Day, is scheduled for the weekend of April 16, 17, and 18. This year, EOA has been graced with a special opportunity to use the Arecibo Dish as the ultimate "big gun" station on 432 MHz SSB & CW. Arecibo has more than 50 dBi gain on 432 MHz so the team thinks it can be heard with modest equipment. A large OSCAR-class antenna array equipped station with low-noise figure preamps may be able to receive the bounced signal.

Ed, KL7UW, wrote an analysis of minimum antenna requirements on the Moon-Net e-mail reflector. Ed said, "My preliminary EME path-link analysis indicates that you will need more than 60 watts at Arecibo for the small home-built antenna/receivers to be successful (especially for SSB). My guess is that a 7-10 element yagi (12-dBi gain) would require use of JT-65 for reception of a 60 watt transmitter at Arecibo. Therefore, obtaining a high power amplifier, 1 KW or greater for Arecibo is very important for successful SSB reception by small stations."

Echoes of Apollo EME event coordinator, Pat Barthelow, AA6EG predicts success by many small stations since he has confirmed the offer and availability of an SSPA producing approximately 600 watts at the output connector of the amplifier for EOA Arecibo use, custom manufactured for this event, and future EME events, by Lionel, F1JRD of Freescale Semiconductor (http://www.freescale.com). Many Many thanks, Lionel! An SSPA 48 volt, 20A power supply has also been donated for use in the event, and future EME events, THANKS to the generosity of Andrea, IK5QLO. Diligent effort on antenna gain, low-noise preamplifiers for 432 MHz, high quality coax, and accurate aiming are necessary for success.

Pat, and others, have posted links to antenna construction sites which are within construction capabilities of many amateur radio operators.

Kent Britian's site with his wonderful homebrew yagi antenna designs using simple materials: http://www.wa5vjb.com/yagi-pdf/cheapyagi.pdf
Look at Page 2, for the 432 Yagi.

DK7ZB 70cm-Long Yagis:
http://www.qsl.net/dk7zb/70cm-longyagi/details.htm

G0KSC High Performance Antennas:
http://www.g0ksc.co.uk (scroll down the side panels to 432MHz LFA Yagis)

Wayne Oberbeck, N6NB literally wrote the book, and landmark articles on Quagis: http://commfaculty.fullerton.edu/woverbeck/quagi.htm

An operational transmit test will happen before the end of the month. All operators are encouraged to listen during the test, with the objective of defining a minimum receive system antenna/preamp required for reception of Arecibo SSB Signals. Take careful notes of your station setup and the quality of received signals. Monitor the Echoes of Apollo web page for the latest information:
http://echoesofapollo.com/2010/03/07/world-moon-bounce-2010/

Pat ended with, "Future EME events at Arecibo are being discussed, and are anticipated. NASA has joined discussions to plan to integrate EME as a recognized and appreciated activity useful in NASA training and science outreach activities."

A video tour of Arecibo can be viewed at:
http://www.youtube.com/watch?v=vicxDnn6LEY
http://www.youtube.com/watch?v=7rFeXsVz8hE&NR=1

[ANS thanks Echoes of Apollo EME event coordinator, Pat Barthelow, AA6EG, and EME/Satellite Operator Ed, KL7UW for the above information]

/EX

SB SAT @ AMSAT $ANS-073.09
First Reminder for 2010 AMSAT Field Day Competition

AMSAT News Service Bulletin 073.09
>From AMSAT HQ SILVER SPRING, MD.
March 14, 2010
To All RADIO AMATEURS
BID: $ANS-073.09

Field Day is coming again! Each year the American Radio Relay League (ARRL) sponsors Field Day as an emergency preparedness exercise. The event takes place during a 24-hour period on the fourth weekend of June. The Radio Amateur Satellite Corporation (AMSAT) promotes its own version of Field Day for operation via the amateur satellites, held concurrently with the ARRL event.

If you are considering ONLY the FM voice satellites like AMSAT-OSCAR 16, AMRAD-OSCAR-27, SaudiSat-Oscar-50, or AMSAT-OSCAR-51 for your AMSAT Field Day focus. Don't, unless you are simply hoping to make one contact for the ARRL rules bonus points. The congestion on FM LEO satellites was so intense in prior years that we must continue to limit their use to one-QSO-per-FM-satellite. This includes the International Space Station. You will be allowed one QSO if the ISS is operating Voice. You will also be allowed one digital QSO with the ISS or any other digital, non-store-and-forward, packet satellite (if operational).

The format for the message exchange on the ISS or other digital packet satellite is an unproto packet to the other station (3-way exchange required) with all the same information as normally exchanged for ARRL Field Day,
e.g.:
W6NWG de KK5DO 2A STX
KK5DO de W6NWG QSL 5A SDG
W6NWG de KK5DO QSL

If you have worked the satellites on Field Day in recent years, you may have noticed a lot of good contacts can be made on some of the less-populated, low-earth-orbit satellites like Fuji-OSCAR 29 (may or may not be operational), AMSAT-OSCAR 7. During Field Day the transponders come alive like 20 meters on a weekend. The good news is that the transponders on these satellites will support multiple simultaneous contacts. The bad news is that you can't use FM, just low duty-cycle modes like SSB and CW.

2010 AMSAT Field Day Rules are in the process of being posted on the amsat web pages in the near future. Watch for an announcement when the document (.doc and .pdf) is available.

[ANS thanks AMSAT Director Contests and Awards, Bruce KK5DO for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office. And with that, please consider the note left for a pianist from his wife: Gone Chopin, have Liszt, Bach in a Minuet.

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM

```
From 6630942599838060997
X-Google-Thread: 10e8ad,157d1eaea260dc92,start
X-Google-NewGroupId: yes
X-Google-Thread: 10b9c8,157d1eaea260dc92,start
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X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,gida4a23d5f63,domainid0,public,usenet
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From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-080 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sun, 21 Mar 2010 09:19:24 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 271
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000c01cac8f9$18a2ba10$49e82e30$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
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Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1269177564 17781 166.84.1.6 (21 Mar 2010 13:19:24 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 21 Mar 2010 13:19:24 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to   rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to   rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news2.google.com rec.radio.amateur.space:348 rec.radio.info:1398

AMSAT NEWS SERVICE
ANS-080

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

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* The AMSAT team is preparing for the 2010 Dayton Hamvention AMSAT *
*   Booth and activities. For the latest information go to: *
*   http://www.amsat.org/amsat-new/hamvention/2010/Dayton.php   *
****

In this edition:
* Satellite Operations from Oahu and Kauai Hawii
* AMSAT Hamfest Activities for 27 March 2010
* AO-51 to support Boy Scouts 100th Anniversary
* AMSAT-DL Symposium and AGM
* Call for Papers--2010 ARRL/TAPR Digital Communications Conference
* SpaceX Completes Falcon 9 Static Fire Test
* ARISS Status - 15 March 2010

SB SAT @ AMSAT $ANS-080.01
Satellite Operations from Oahu and Kauai Hawii

AMSAT News Service Bulletin 080.01
From AMSAT HQ SILVER SPRING, MD.
March 21, 2010
To All RADIO AMATEURS
BID: $ANS-080.01

Adrian, AA5UK, will be on Oahu (BL11) and Kauai (BL02ic & BL01) operating portable KH6. He plans to operate on the Linear and FM satellites during his stay, mostly from his rented house in BL02ic (March 27th through April 5th) and will try to operate portable/mobile from BL11 and BL01 time permitting. Emphasis will be SSB on FO-29, VU-52, AO-7 and HO-68. He will post daily availability via AMSAT BB, his QRZ page and Twitter: @AA5UK. Schedule requests are encouraged due to the limited pass windows for those operators needing HI for WAS at the fringe of the footprints. Please use the email listed on QRZ.com to arrange for a time and date.

[ANS thanks JoAnne, K9JKM, for the above information]

/EX

SB SAT @ AMSAT $ANS-080.02
AMSAT Hamfest Activities for 27 March 2010

AMSAT News Service Bulletin 080.02
From AMSAT HQ SILVER SPRING, MD.
March 21, 2010
To All RADIO AMATEURS

BID: $ANS-080.02

The Radio Society of Tucson (K7RST) will host the Tucson spring hamfest on Saturday, 27 March 2010, at the Kino Sports Complex in Tucson, AZ. The Kino Sports Complex is on Ajo Way, east of the I-10 freeway and Tucson Electric Park
stadium in Tucson. The hamfest will run from 7am-11am (1400-1800 UTC).

Along with an AMSAT table, Patrick Stoddard, WD9EWK, will have on-air demonstrations using various satellites during the hamfest.

Meanwhile, further East, Keith Pugh, W5IU, will have an AMSAT booth and be conducting demonstrations at the Parker County Hamfest in Weatherford, TX.

[ANS thanks Patrick, WD9EWK, and Keith, W5IU, for the above information]

/EX

SB SAT @ AMSAT $ANS-080.03
AO-51 to support Boy Scouts 100th Anniversary

AMSAT News Service Bulletin 080.03
  From AMSAT HQ SILVER SPRING, MD.
March 21, 2010
To All RADIO AMATEURS
BID: $ANS-080.03

AMSAT-NA is supporting the Boy Scouts of America 100th Anniversary Jamboree by
dedicating an AO-51 V/U FM repeater for the event. From Friday April 16, 15:00
UTC until Sunday April 18 19:00 UTC, an AO-51 repeater will be allocated for Jamboree use. All users are requested to give way to Jamboree stations or QSO's
with Jamboree stations.

The frequencies used will be 145.880 FM uplink, and 435.150 FM downlink, no PL
tone required.

AMSAT wishes the Scouts good luck operating via the AO-51 satellite for the event.

73, Ed N8BBQ
AO-51 Operations Group

[ANS thanks Ed, N8BBQ, for the above information}

/EX

SB SAT @ AMSAT $ANS-080.04
AMSAT-DL Symposium and AGM

AMSAT News Service Bulletin 080.04
  From AMSAT HQ SILVER SPRING, MD.
March 21, 2010
To All RADIO AMATEURS
BID: $ANS-080.04

The AMSAT-DL Symposium and AGM will be held in the radome of the spectacular 20 metre dish at Bochum.

The event takes place on Saturday April 24, 2010 from 10:00 to 17:00 local time.

There will be a lecture programme and an update on AMSAT-DL projects and the results of the joint study between AMSAT-DL and the Federal Republic of Germany Research Center for Aeronautics and Astronautics (DLR).

For further details of the Symposium including directions see
http://tinyurl.com/ykezgjj

AMSAT-DL in Google English
http://tinyurl.com/AMSAT-DL

Federal Republic of Germany Research Center for Aeronautics and Astronautics (DLR)
http://tinyurl.com/GermanyDLR

GO-Mars with AMSAT-DL's P5A Mission - Pixel Page
http://ticket-to-mars.org/index.pl?lang=en_EN

[ANS thanks AMSAT-DL for the above information]

/EX

SB SAT @ AMSAT $ANS-080.05
Call for Papers--2010 ARRL/TAPR Digital Communications Conference

AMSAT News Service Bulletin 080.05
  From AMSAT HQ SILVER SPRING, MD.
March 21, 2010
To All RADIO AMATEURS
BID: $ANS-080.05

Technical papers are solicited for presentation at the 29th Annual ARRL and TAPR Digital Communications Conference to be held September 24-26, 2010 in Vancouver, Washington [Portland, Oregon]. These papers will also be published in the Conference Proceedings (you do NOT need to attend the conference to have your paper included in the Proceedings). The submission deadline is July 31, 2010. Please send papers to:

Maty Weinberg
ARRL
225 Main St
Newington, CT 06111

or you can make your submission via e-mail to: maty@arrl.org

Papers will be published exactly as submitted and authors will retain all rights.

[ANS thanks Steve, WB8IMY, for the above information]

/EX

SB SAT @ AMSAT $ANS-080.06
SpaceX Completes Falcon 9 Static Fire Test

AMSAT News Service Bulletin 080.06
  From AMSAT HQ SILVER SPRING, MD.
March 21, 2010
To All RADIO AMATEURS
BID: $ANS-080.06

On Saturday, March 13, SpaceX successfully completed a test firing of the inaugural Falcon 9 launch vehicle at Space Launch Complex 40 located at Cape Canaveral. Following a nominal terminal countdown, the launch sequencer commanded ignition of all 9 Merlin first stage engines for a period of 3.5 seconds.

Just prior to engine ignition, the pad water deluge system was activated providing acoustic suppression to keep vibration levels within acceptable limits. The test validated the launch pad propellant and pneumatic systems as
well as the ground and flight control software that controls pad and launch vehicle configurations.

This was the final step for the rocket and launch pad before launch itself. SpaceX is now waiting for completion of the final set of tests of the flight termination system, specifically the explosives and initiators, and the acceptance of that test documentation by Air Force range safety.

[ANS thanks SpaceX for the above information]

/EX

SB SAT @ AMSAT $ANS-080.07
ARISS Status - 15 March 2010

AMSAT News Service Bulletin 080.07
  From AMSAT HQ SILVER SPRING, MD.
March 21, 2010

To All RADIO AMATEURS
BID: $ANS-080.07

1. Upcoming School Contacts

Shiogama Daini Junior High School in Shiogama, Japan has been scheduled for an Amateur Radio on the International Space Station (ARISS) contact on Thursday, March 25 at 07:44 UTC. To prepare for the contact, the youth studied astronomy and were introduced to the Hubble Space Telescope. They learned about radio communication and some students continued their studies and prepared for their amateur radio license exams.

2. JAXA Astronaut Participates in ARISS Contact with Alma Mater

On Tuesday, March 9, JAXA's Soichi Noguchi, KD5TVP participated in an Amateur Radio on the International Space Station (ARISS) contact with his alma mater, Ikaruga Elementary School, in Taishi Town, Japan. Approximately 350 guests watched as fifteen students asked their questions of the on-orbit astronaut. This ARISS activity was the highlight of the Ikaruga science curriculum on environmental issues and received significant media coverage.

[ANS thanks Carol, KB3LKI, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Lee McLamb, KU4OS

```
From -2032499396667351396
X-Google-Thread: 10e8ad,34a774f0b0635a6b,start
X-Google-NewGroupId: yes
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Path: g2news1.google.com!news1.google.com!newsfeed2.dallas1.level3.net!
news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-087 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Mon, 29 Mar 2010 11:07:11 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 311
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000c01cacf51$7bb0b7c0$73122740$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
X-Trace: reader1.panix.com 1269875231 10207 166.84.1.6 (29 Mar 2010 15:07:11 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Mon, 29 Mar 2010 15:07:11 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to   rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to   rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news1.google.com rec.radio.amateur.space:324 rec.radio.info:1337

AMSAT NEWS SERVICE
ANS-087

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

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********************************************************************
* The AMSAT team is preparing for the 2010 Dayton Hamvention AMSAT *
*     Booth and activities. For the latest information go to:      *
*    http://www.amsat.org/amsat-new/hamvention/2010/Dayton.php     *
********************************************************************
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In this edition:
* NASA to Launch Three New CubeSats in November
* Amateur Radio Emergency Regulations Proposal

* Latest AMSAT Awards
* New Agency
* Satellite Shorts
* Document Signed with Energia
* ARISS Status - 22 March 2010

SB SAT @ AMSAT $ANS-087.01
NASA to Launch Three New CubeSats in November

AMSAT News Service Bulletin 087.01
>From AMSAT HQ SILVER SPRING, MD.
March 28, 2010
To All RADIO AMATEURS
BID: $ANS-087.01

Three small research satellites with amateur radio educational payloads are scheduled for launch in late November.

Called CubeSats because of their shape, they come from Montana State University, the University of Colorado and Kentucky Space as part of NASA's Educational Launch of Nanosatellite mission.

Kentucky's KySat-1 is believed to be the first CubeSat to carry a 2 meter-to-70 cm FM transponder - truly a crossband repeater in space and one that should be accessible by most radio amateurs within its flight path, authorities said.

CubeSats are in a class of small research spacecraft called pico-satellites. They have a volume of about one quart and weigh no more than 2.2 pounds. The University of Florida was selected as an alternate in case one of the three primary spacecraft cannot fly.

[ANS thanks Jack, KD1PE, for the above information]

/EX

SB SAT @ AMSAT $ANS-087.02
Amateur Radio Emergency Regulations Proposal

AMSAT News Service Bulletin 087.02
>From AMSAT HQ SILVER SPRING, MD.
March 28, 2010
To All RADIO AMATEURS
BID: $ANS-087.02

FCC propose amendment to Amateur Radio emergency drill regulations
There has been much debate in the US recently on the issue of amateur radio operators participating in emergency drills which have been organised the their employers. The FCC is hoping to clarify the rules and allow more flexibility with this amendment.

A Proposed Rulemaking was released yesterday containing amendments to Section 97:113 of the Amateur Radio Service Rules regarding using paid employees in government sponsored emergency training drills.

For actual filing see:
WWW.regulations.gov

[ANS thanks Southgate for the above information]

/EX

SB SAT @ AMSAT $ANS-087.03
Latest AMSAT Awards

AMSAT News Service Bulletin 087.03
>From AMSAT HQ SILVER SPRING, MD.
March 28, 2010
To All RADIO AMATEURS
BID: $ANS-087.03

The following have entered into the Satellite Communicators Club for making their first satellite QSO.

Jonathan Guthrie, KA8KPN
Mesa Community College ARC, KM7CC
David Sharpe, KF7DRQ
Jim Adams, K0BAM
Richard Rowe, KJ4OUQ

The following have earned the AMSAT Communications Achievement Award.

Randal Schulze, KD0HKD, #509
Michael Vargo, AC8CX, #510
Jose Toste, CU3EQ, #511

The following have earned the W4AMI Achievement Award
(for 1000 contacts)

Douglas Anoman, KC9MLN, #60
Howard Merritt, KD7ZLF, #61
Chip Weems, W4PBG, #62

The following have earned the South Africa AMSAT Communications Achievement Award

Randal Schulze, KD0HKD, #US142
Michael Vargo, AC8CX, #US143
Jose Toste, CU3EQ, #US144

To see all the awards visit http://www.amsat.org or http://www.amsatnet.com

Bruce Paige, KK5DO
AMSAT Director Contests and Awards

[ANS thanks Bruce, KK5DO, for the above information}

/EX

SB SAT @ AMSAT $ANS-087.04
New Agency

AMSAT News Service Bulletin 087.04
   From AMSAT HQ SILVER SPRING, MD.
March 28, 2010
To All RADIO AMATEURS
BID: $ANS-087.04

At a Conference in London held today, it was announced that April 1st 2010 is to be the "launch" date for the establishment of the United Kingdom Space Agency. This will take over responsibility for space from the previous voluntary partnerships of Government Departments and research councils, the British National Space Centre.

It is reported that the new agency will bring these together "under oneroof". It will also include the Technology Strategy Board and the Met Office.

In addition to this announcement, the UK Government has stated that �24m will be invested into The International Space Innovation Centre (ISIC) at Harwell which is also the site of the new ESA technical facility.

Lets hope the new Agency looks kindly towards UK cubesat projects like AMSAT-UK's FUNcube! (New possibilities?)

For more details see http://news.bbc.co.uk/1/hi/sci/tech/8579270.stm

Graham G3VZV

[ANS thanks Graham, G3VZV, for the above information]

/EX

SB SAT @ AMSAT $ANS-087.05
Satellite Shorts

AMSAT News Service Bulletin 087.05
   From AMSAT HQ SILVER SPRING, MD.
March 28, 2010

To All RADIO AMATEURS
BID: $ANS-087.05

AMSAT at Dayton Reminders

Another reminder that AMSAT has available a block of rooms for Dayton. The hotel is the Country Inn & Suites in Fairborn. The cost is $99 a night. If you are interested, please call me at 301-589-6062 to make a reservation. The block will be gone on April 13th! Don't forget the AMSAT-TAPR dinner on Friday night. You can register for that online at the AMSAT website.

[ANS thanks Martha for the above information]

Listen to 2 Meter Houston AMSAT Net via the Internet

The Houston AMSAT Net now has a new Icecast streaming server, thanks to Mike, N0VZC. During our net, Tuesday 8PM Central Time (Wednesday 0100 UTC), our audio can be heard by pasting the following into your URL, Winamp, iPhone, iTunes or almost any other player.

radio.arert.net:8000/amsat.m3u

We hope that you continue enjoying the Houston AMSAT Net. You can also listen on Echolink in the *AMSAT* conference as well as after the net completes as a Podcast from the iTunes store or your favorite Podcast player.

[ANS thanks Bruce KK5DO for the above information]

/EX

SB SAT @ AMSAT $ANS-087.06
Document Signed for ARISSat Delivery

AMSAT News Service Bulletin 087.06
From AMSAT HQ SILVER SPRING, MD.
March 28, 2010
To All RADIO AMATEURS
BID: $ANS-087.06

Protocol Document Signed for ARISSat delivery
This week a protocol document was signed between AMSAT, NASA and Energia stating that AMSAT would deliver two satellites to Energia by 1 July 2010. Since we only have one set of solar panels, the second unit will be tested and operational except for the solar panels. The project is on schedule for the July delivery and we look forward to having ARISSat in space later this year.

Gould, WA4SXM
ARISSat Project Manager for AMSAT

[ANS Thankd Gould, WA4SXM, for this information]
/EX

SB SAT @ AMSAT $ANS-087.07
ARISS Status - 15 March 2010

AMSAT News Service Bulletin 087.07
From AMSAT HQ SILVER SPRING, MD.
March 22, 2010
To All RADIO AMATEURS
BID: $ANS-087.07

Amateur Radio on the International Space Station (ARISS) Status Report
March 22, 2010

1. Upcoming School Contacts

Shiogama Daini Junior High School in Shiogama, Japan was scheduled for an Amateur Radio on the International Space Station (ARISS) contact on Thursday, March 25 at 07:44 UTC. To prepare for the contact, students studied astronomy and were introduced to the Hubble Space Telescope. They also learned about radio communications and some continued their studies and prepared for their amateur radio license exams.

An Amateur Radio on the International Space Station (ARISS) contact has been scheduled for Walnut Creek Elementary School in Azle, Texas on Monday, March 29 at 15:08 UTC. Each student researched and created a modelof a selected space object and then presented his work to the class. Retired Lockheed employees and members of local radio clubs gave demonstrations of satellite communications to the youth. The school recently formed an amateur radio club and students have enjoyed learning what radios can do.

2. Greece Students Question Astronaut via ARISS Contact

On Tuesday, March 16, Timothy Creamer, KC5WKI connected with students attending 18 Dimotiko Scholeio Peristeriou in Athens, Greece via an Amateur Radio on the International Space Station (ARISS) contact. Students posed 19 questions to the on-orbit astronaut during the ISS overhead pass as an audience of 700 students, teachers and community members gathered to watch the event. Several dignitaries were present, including the General Secretary for Communications of the Ministry of Transportation and Telecommunication of Greece, the Mayor of Peristeri (Athens) and the four vice mayors of Peristeri City. The contact was integrated into the school's science curriculum covering subjects on astronomy and radio communications.

3. Astronaut Training Status

On Monday, March 15, astronaut Paolo Nespoli, IZ0JPA participated in an Amateur Radio on the International Space Station (ARISS) simulated contact with students from Quintino Sella, Biella, Italy with audio available on IRLP (Internet Radio Linking Project). This training session was a terrestrial-based amateur radio contact using ARISS equivalent equipment. Nespoli is slated to fly with Expedition 26 in November 2010.

4. ARISS International Team Meeting Held

The Amateur Radio on the International Space Station (ARISS) international team met for the monthly teleconference on March 16. Status reports were given on the Columbus module radio equipment as well as ARISSat-1. Minutes have been posted.
See: https://www.rac.ca/ariss/arisstel2010-03-16.htm

[ANS thanks Carol, KB3LKI, for the above information]

/EX

73,
This week's ANS Editor,
Dee Interdonato, NB2F

From 1380335173939272415
X-Google-Thread: a4a23d5f63,5d207ca3a12c9152,start
X-Google-Attributes: gida4a23d5f63,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!newsfeed2.dallas1.level3.net!news.level3.com!panix!panix2.panix.com!not-for-mail
From: rram@panix.com (rec.radio.amateur.moderated Admin)
Newsgroups:
rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.info
Subject: Crossposting Permitted to rec.radio.amateur.moderated
Supersedes: <radio/ham-radio/moderated/crossposting-1-1267426800@panix.com>
Followup-To: poster
Date: 1 Apr 2010 02:00:02 -0400
Organization: rec.radio.amateur.moderated Moderation Team
Lines: 47
Approved: RRI Admin <rec-radio-info-request@panix.com>
Distribution: world
Expires: 04 May 2010 02:00:01 -0000
Message-ID: <radio/ham-radio/moderated/crossposting-1-1270101601@panix.com>
Reply-To: rec-radio-amateur-moderated-request@panix.com (rec.radio.amateur.moderated Admin)
NNTP-Posting-Host: panix2.panix.com
X-Trace: reader1.panix.com 1270101603 8652 166.84.1.2 (1 Apr 2010 06:00:03 GMT)
X-Complaints-To: abuse@panix.com

NNTP-Posting-Date: Thu, 1 Apr 2010 06:00:03 +0000 (UTC)
Summary: Short reminder for unmoderated newsgroups that crossposting is permitted
Keywords: FAQ, ham, amateur, radio, moderated, unmoderated, crossposting, permitted
Xref: g2news1.google.com rec.radio.amateur.antenna:15373 rec.radio.amateur.dx:588 rec.radio.amateur.equipment:1891 rec.radio.amateur.homebrew:3294 rec.radio.amateur.misc:4747 rec.radio.amateur.policy:25666 rec.radio.amateur.space:325 rec.radio.info:1340

Posted-By: auto-faq 3.3.2 beta (PGPMoose V2.0, Perl 5.005)
Archive-name: radio/ham-radio/moderated/crossposting
Revision: 1.1 2009/04/12 19:42:04
Posting-Frequency: posted monthly
URL: http://www.panix.com/~rram/usenet/rram/index.html

Changes followed by "|".

After a 30-day public discussion and feedback period to gauge reader opinions in March of 2009:

http://groups.google.com/group/rec.radio.amateur.moderated/browse_thread/thread/d7d337db35f23326

the rec.radio.amateur.moderated Moderation Team has decided to consider amending its charter, and permit limited simultaneous crossposting to rec.radio.amateur.moderated and one other unmoderated amateur-radio-related discussion newsgroup. We are currently trying this on a temporary basis (90 days, through early July 2009), and adopt it permanently if successful.

Approved rec.radio.amateur.* newsgroups are those that are currently listed in the latest version of the "List of Big Eight Newsgroups" which is crossposted monthly to news.announce.newgroups, news.groups, and news.lists.misc.

Approved alt.radio.amateur.* and alt.ham-radio.* newsgroups are those that have been created consistent with the suggestions in "So You Want to Create an Alt Newsgroup" at:

  http://www.faqs.org/faqs/alt-creation-guide/

Approved regional hierarchy newsgroups are those that contain either "radio.amateur" or "ham-radio" in their names, including uk.radio.amateur and aus.radio.amateur.misc.

We will make every reasonable effort to keep our list of approved newsgroups up-to-date. In case we have overlooked any, and a submission is rejected in error as a result, the rejected submitter can E-mail us at our administrative contact address (in the signature at the bottom of this article, and the default Reply-To for the rejection message) requesting that it be added, and that the article be approved. We may still choose to reject articles crossposted to any alt.* newsgroup with an inappropriate name, including obscene language, embedded

name-calling, or encouragement of unlawful conduct.

Please direct any comments, questions, or criticisms to
rec-radio-amateur-moderated-request@panix.com.

```
From 7802836699266553581
X-Google-Thread: 10e8ad,865a5200b16243b7,start
X-Google-NewGroupId: yes
X-Google-Thread: 10b9c8,865a5200b16243b7,start
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,gida4a23d5f63,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news2.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx01.iad01.newshosting.com!newshosting.com!
198.186.194.249.MISMATCH!transit3.readnews.com!news-out.readnews.com!news-
xxxfer.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-091 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Sat, 3 Apr 2010 08:07:33 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 1846
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <001001cad326$38977b30$a9c67190$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1270296453 2836 166.84.1.6 (3 Apr 2010 12:07:33 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sat, 3 Apr 2010 12:07:33 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
x-cr-hashedpuzzle: Ak64 BCVE B2xB B7x6 CKHs CQ+Q DOFA DwFo ESR9 F5ze Gj9Y HBgT
ITbv IVgg Jvz2
KHZo;1;cgBlAGMALQByAGEAZABpAG8ALQBpAG4AZgBvAEAAcABhAG4AaQB4AC4AYwBvAG0A;Sosha1_v1;
7;{696D5F8A-5A44-451C-A3B8-
CDB4112B5E2E};awA5AGoAawBtAEAAYwBvAG0AYwBhAHMAdAAuAG4AZQB0AA==;Sat, 03 Apr 2010
12:07:19
```

GMT;VwBTAFIALQAwADkAMQAgAEEATQBTAEEAVAAgAFcAZQBlAGsAbAB5ACAAUwBhAHQAZQBsAGwAaQB0AG
UAIABSAGUAcABvAHIAdAA=
x-cr-puzzleid: {696D5F8A-5A44-451C-A3B8-CDB4112B5E2E}
Xref: g2news2.google.com rec.radio.amateur.space:351 rec.radio.info:1427

This report is organized into four (4) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - deborbited/returned satellites

SB SAT @ AMSAT W8ISS $WSR-091.S1
WSR 091 Part 1 04/01/2010

AMSAT NEWS SERVICE BULLETIN 091.S1
FROM AMSAT HQ SILVER SPRING, MD, April 01, 2010
TO ALL RADIO AMATEURS
BID: $WSR-091.S1

HO-68 XW-1 (CAS-1)
Catalog Number:
Launch Date: December 15, 2009
Status: Commissioning

Callsign:

Uplinks: 145.8250 MHz FM, PL 67.0 Hz.
           145.9250 - 145.9750 MHz SSB/CW
           145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
           435.7650 - 435.7150 MHz SSB/CW
           435.6750 MHz AFSK 1200 BPS

Beacon: 435.7900 MHz CW

Mode and Antenna Polarization:
V: LHCP 2.0dBi max
U: RHCP 3.0dBi max

IARU coordination page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108

For more information about XW-1 (CAS-1):
http://www.camsat.cn
[12122009]
=====
SO-67 SumbandilaSat
Catalog Number: 35870
Launch Date: September 17, 2009

Status: Commissioning

Callsign: ZS0SUM

```
Uplink:   145.875MHz FM tone 233.6 Hz
Downlink: 435.345MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

For more information about SO-67:
http://www.amsatsa.org.za/
[11212009]
=====
DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008

Status: Operational
Current Mode: Science Mode - Beacon ONLY

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink:   435.530 to 435.570 MHz

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68
[02122009]
=====
VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink:   435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink:   435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW


Indian Beacon:  145.9360 MHZ CW
Dutch Beacon:   145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP
```

Official Webpage: http://www.amsatindia.org/hamsat.htm

To know what transponder is switched on please listen for the beacon that is active. Each transponder has a different beacon.
[03082010]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Modes:
FM Repeater ONE
Uplink: 145.880 MHz FM
Downlink: 2401.200 Mhz FM
FM Repeater TWO
Uplink: OFF
Downlink: OFF
BBS
Uplink: OFF
Downlink: OFF
Telemetry
Downlink: 435.150MHz 9k6

Analog voice downlink: 435.300 MHz FM
                           435.150 MHz FM
                          2401.200 Mhz FM
Analog voice uplink: 145.860 MHZ FM
                           145.880 MHz USB
                           145.880 MHz FM
                           145.920 MHz FM
                          1268.700 MHz FM
Digital Downlinks: 435.150 MHz FM 38k4 PBP, 1 watt output
                           435.150 MHz FM 9k6 Pacsat Broadcast Protocol
                          2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Pacsat Broadcast Protocol
                          1268.700 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[040152010]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz. The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10 minute timer.
[05282007]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: sCHEDULED oPERATIONS
Current Mode: V/u (Mode JA)

Voice/CW (Mode JA)
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage:
http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's
CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/
fo29cwts.htm
[02132010]
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[03232009]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational

Current Mode: Alternating between Mode A and B every 24 hours

```
Uplink:   145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink:  29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons:   29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
```

2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
[02122009]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - V/u
Voice - V/v
BBS - V/v
APRS - V/v
SSTV - V/v

Expedition 22 Crew:
Commander: Jeff Williams KD5TVQ
Flight Engineer: Maxim Suraev
Flight Engineer: Oleg Kotov
Flight Engineer: T.J. Creamer KC5WKI
Flight Engineer: Soichi Noguchi KD5TVP

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[02222010]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-091.S2
WSR 091 Part 2 04/01/2010

AMSAT NEWS SERVICE BULLETIN 091.S2
FROM AMSAT HQ SILVER SPRING, MD, April 01, 2010
TO ALL RADIO AMATEURS
BID: $WSR-091.S2

HO-68 XW-1 (CAS-1)
Catalog Number:
Launch Date: December 15, 2009
Status: Commissioning

Callsign:

Uplinks: 145.8250 MHz FM, PL 67.0 Hz.
145.9250 - 145.9750 MHz SSB/CW
145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
435.7650 - 435.7150 MHz SSB/CW
435.6750 MHz AFSK 1200 BPS

Beacon: 435.7900 MHz CW

IARU coordination page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108

For more information about XW-1 (CAS-1):
http://www.camsat.cn
[122262009]
=====
SwissCube
Catalog Number: 35932

Launch Date: September 23, 2009

Status: In Orbit

Callsign: HB9EG

Beacon(100mw): 437.5050MHz CW
Beacon(1w): 437.5050MHz FSK 1k2bps
[11112009]
=====
UWE-2
Catalog Number: 35934
Launch Date: September 23, 2009

Status: In Orbit

Beacon(500mw): 437.3850 MHz AFSK 1k2bps
437.3850 MHz FSK 9k6bps
[1112009]
=====
ITUpsAT1
Catalog Number: 35935
Launch Date: September 23, 2009

Status: In Orbit

Beacon(100mw): 437.325MHz CW
Beacon(1w): 437.325MHz 19k2bps
[11112009]
=====
BEESAT
Catalog Number: 35933
Launch Date: September 23, 2009

Status: In Orbit

Callsign: DP0BEE

Beacon(100mw): 436.000MHz CW
Beacon(500mw): 436.000MHz GMSK 4k8bps
[11112009]
=====
Pollux
Catalog Number:
Launch Date: July 31, 2009

Status: Operational

Callsign: POLLUX-1

Downlink: 145.825MHz 1k2 AX.25
[10042009]
=====

```
Castor (ANDE-2)
Catalog Number:
Launch Date: July 31, 2009

Status: Operational

Callsign: KD4HBO-1

Downlink: 145.825 MHz 1k2 AX.25
[10042009]
=====
BEVO-1 (DRAGONSAT-1)
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Operational

Downlink: 437.325 MHz 9k6 GMSK
          437.325 MHz CW 20wpm
[07312009]
=====
AggieSat2 (DRAGONSAT-2)
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Operational

Downlink: 436.250 MHz 9k6 FHSS
[11112009]
=====
CP-6
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Commissioning

Downlink: 437.365 MHz 1k2 AFSK
[06052009]
=====
HAWKSAT 1
Catalog number: 35003
Launch Date: May 19, 2009

Status: ?

Downlink: 437.345 ?
[06052009]
=====
Pharmasat
Catalog Number: 35002
Launch Date: May 19, 2009
Status: Commissioning
```

Downlink: 437.465 MHz 1k2 AFSK
[06052009]
=====
ANUSAT
Catalog Number: 34808
Launch Date: April 20, 2009

Status: ?

Downlink: 435.000 MHz
Uplink: 145.800 MHz

Telemetry: 137.400 MHz
[05112009]
=====
SOHLA-1 (ASTRO TECH.)
Catalog Number: 33496
Launch Date: January 23, 2009

Status: Commisioning

Proposed Frequencies and Modes:
Downlink: 437.505 MHz AFSK/CW
Beacon: 437.505 MHz AFSK/CW

Callsign:

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=101
[03232009]
=====
KAGAYAKI (Solan Co.)
Catalog Number: 33495?
Launch Date: January 23, 2009

Status: In Orbit

Downlink: 437.375 MHZ   FSK9k6/CW
Beacon: 437.375 MHz   FSK9k6/CW

IARU coordination status page:

AMSAT-NA webpage:

[01152009]
=====
STARS (Kagawa Univ.) (Twin Satellites)
Catalog Number: 33498
Launch Date: January 23, 2009

Status: Operational ?

Downlinks: 437.485 MHz FM/CW

```
           437.465 MHz FM/CW
Beacons:   437.305 MHz FM/CW
           437.275 MHz FM/CW

Callsigns: JR5YBN
           JR5YBO

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=99

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=121&retURL
=/satellites/status.php
[022152009]
=====
KKS-1 (Tokyo MCIT)
Catalog Number: 33499
Launch Date: January 23, 2009

Status: Operational

Downlink:  437.455 MHz AFSK/CW
Beacon:    437.385 MHz AFSK/CW

Callsign: JQ1YYY

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=107

AMSAT-NA webapge:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=120&retURL
=/satellites/status.php
[02212009]
=====
PRISM (Tokyo Univ.)
Catalog Number: 33493
Launch Date: January 23, 2009

Status: Operational ?

Downlink: 437.425 MHz AFSK/GMSK/CW
Beacon:   437.250 MHz AFSK/GMSK/CW

Callsign: JQ1YCX

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=97

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=119&retURL
=/satellites/status.php
[02212009]
=====
```

RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number: 32953
Launch Date: May 23, 2008

Status: Operational

Curent Modes: Telemetry
              Audio
              Images

Downlinks: 435.315 MHz
           435.215 MHz

AMSAT-NA website:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=115&retURL=/satellites/status.php

Official website:
http://www.npopm.com/?cid=leoca&caid=43
[02122009]
=====
CanX-2
Catalog number: 32790
Launch Date: April 28, 2008

Status: Operational in range of ground station only

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[02212009]
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.425 MHz 1k2 baud packet

For the latest project status update please visit the AAUSAT-II web page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[02212009]
=====
CO-65 CUTE-1.7+APD II

Catalog number: 32785
Launch Date: April 28, 2008

Status: Digipeater

Downlink: 437.475 MHz 9k6 Packet
Uplink: 1267.600 Mhz

Telemetry Beacon:
Downlink: 437.2750 MHz CW

For the latest project status update please visit the Cute-1.7+APD II
web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78

Command Station blog website:
http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=112&retURL
=/satellites/status.php
[02212009]
=====
Compass-1
Catalog number: 32787
Launch Date: April 28, 2008

Status: Operational

Current Mode: 4k8 MSK packet

Uplink: 145.980 MHz FM
Downlink: 437.275 Mhz CW
          437.405 MHz Packet

For the latest project status update please visit the Compass 1 web
page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=114&retURL
=/satellites/status.php
[04272009]
=====
CO-66 Seeds II
Catalog number: 32791
Launch Date: April 28, 2008

Status: Operational

```
Downlink: 437.485 MHz

Callsign: JQ1YGU

For the latest project status update please visit the Seeds 2 web
page: http://cubesat.aero.cst.nihon-u.ac.jp/english/seeds_2_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=113&retURL
=/satellites/status.php
[02212009]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode:  /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon:    435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=94&retURL=
/satellites/status.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=72
[02122009]
=====
CP3
Catalog Number: 31129
Launch Date: April 17,2007

Status: Operational

Current Mode:  /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[02122009]
=====
GENESAT-1
Catalog Number: 29655
Launch Date: December 16, 2006
```

```
Status: Operational

Current Mode: /u

Callsign: KE7EGC

Telemetry Beacon Downlink: 437.0695 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[09152009]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon:             437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/xivpicte.htm
[02212009]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003

Status: ?????

Current Mode: /u

Beacon:     436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=96&retURL
=/satellites/status.php

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[06082009]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
```

```
Launch date: February 21, 2006

Status: Operational?

Uplink:  1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=56
[02122009]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Modes:
FM Repeater ONE
Uplink:    145.880 MHz FM
Downlink: 2401.200 Mhz FM
FM Repeater TWO
Uplink:    OFF
Downlink:  OFF
BBS
Uplink:    OFF
Downlink:  OFF
Telemetry
Downlink:  435.150MHz 9k6

Analog voice downlink:     435.300 MHz FM
                           435.150 MHz FM
                          2401.200 Mhz FM
Analog voice uplink:       145.860 MHZ FM
                           145.880 MHz USB
                           145.880 MHz FM
                           145.920 MHz FM
                          1268.700 MHz FM
Digital Downlinks:         435.150 MHz FM 38k4 PBP, 1 watt output
                           435.150 MHz FM 9k6 Pacsat Broadcast Protocol
                          2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:            145.860 MHz FM 9k6 Pacsat Broadcast Protocol
                          1268.700 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon:                    435.150 MHz

Mode and Antenna Polarization:
T: Linear
```

V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[04012010]
=====
QuakeSat
Catalog Number: 27845
Launch Date: June 30, 2003

Status: Telemetry only

Current Mode: 9600 baud data packet

Mode U packet
Downlink: 436.675 MHz 9k6 BPS

Quakesat webpage:
http://www.quakefinder.com/services/quakesat-ssite/
[04272009]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=69&retURL
=/satellites/status.php
[02212009]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

```
Status: Telemetry only

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink:        144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[03302009]
=====
RS-22 RADIO SPORT 22
Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only

Current Mode:  /u

CW Beacon - 435.352 MHz
            145.818 MHz

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=76&retURL
=/satellites/status.php
[02212009]
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990

Status: CW Beacon only

Uplinks:          145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink:      437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[03162009]
=====
UO-11 OSCAR-11
```

Catalog number: 14781
Launch Date: March 1, 1984

Status: Non-operational.

Current Mode: /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon: 435.025 MHz
Mode-S Beacon: 2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[12162009]

=====

INTERNATIONAL SPACE STATION (ISS) - ARISS

Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - V/u
Voice - V/v
BBS - V/v
APRS - V/v
SSTV - V/v

Expedition 22 Crew:
Commander: Jeff Williams KD5TVQ
Flight Engineer: Maxim Suraev
Flight Engineer: Oleg Kotov
Flight Engineer: T.J. Creamer KC5WKI
Flight Engineer: Soichi Noguchi KD5TVP

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM

437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[02222010]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-091.S3
WSR 091 Part 3 04/01/2010

AMSAT NEWS SERVICE BULLETIN 091.S3
FROM AMSAT HQ SILVER SPRING, MD, April 01, 2010
TO ALL RADIO AMATEURS
BID: $WSR-091.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

CP4
Catalog Number: 31122
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon: 437.325 MHz CW

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=79
[10022008]

```
=====
LIBERTAD-1
Catalog Number: 31128
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink:   145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[02122009]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: Non-Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder:  145.825 Mhz FM
[01012009]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency:  437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink:         437.250 MHz FM 67Hz CTCSS
Voice Downlink:      2401.835 MHz FM
Packet Up/Downlink:   437.250 MHz 9k6 packet
Packet Downlink      2401.835 MHz 38k4 packet
```

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non-Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[08132007]
=====
CANX-1
Catalog Number: 27847
Launch Date: June 30, 2003

Status: Non-Operational

Downlink: 437.8800 MHz AFSK 1k2bps
[06052009]
=====
DTUSAT
Catalog Number: 27842
Launch Date: June 30, 2003

Status: Non-Operational

Current Mode: 2k4 AFSK Packet last reported

Downlink: 437.475MHz

Officail webpage: http://dtusat1.dtusat.dtu.dk/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=101&retURL=satellites/all_oscars.php
[02212009]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)

Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de

```
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Telemetry only

Uplinks:   145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink:  437.325 MHz

Broadcast callsign: MYSAT3-11
BBS:                MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial land and weather imaging payloads offers FM and FSK
Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as
a collaborative effort between the Malaysian government and Surrey
Satellite Technology Ltd.
[03302009]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink:   145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS:                SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
```

```
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink:   145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
V-band:   145.840 -  145.990 MHz CW/LSB
U-band:   435.550 -  435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks
---------
S2-band:  2401.225 -  2401.475 MHz CW/USB
K-band:  24048.010 - 24048.060 MHz CW/USB
Beacon:   2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)
----------------------------
BEACON   General Beacon(GB)  Middle Beacon(MB)  Engineering Beacon(EB)
2 m                    none        145.898 MHz                    none
70cm            435.438 MHz        435.588 MHz             435.838 MHz
13cm(1)        2400.188 MHz       2400.338 MHz            2400.588 MHz
13cm(2)        2401.173 MHz       2401.323 MHz            2401.573 MHz
3cm           10450.975 MHz      10451.125 MHz           10451.375 MHz
1.5cm         24047.885 MHz      24048.035 MHz           24048.285 MHz
[07162007]
=====
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational
```

```
Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink:    145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: 25636
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater:         436.250 MHz

Uplinks: Mode B Repeater:  145.825 MHz
Mode J Digipeater:         145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
```

```
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Telemetry only

Current Modes:
Telemetry : /u

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign:       4XTECH-12

More information of GO-32 can be found at:
http://asri.technion.ac.il/techsat/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=14&retURL
=/satellites/status.php
[12012009]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink:   145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
```

```
[05012006]
=====
MO-30 UNAMSAT-2
Catalog Number: 24305
Launch Date: September 5, 1996

Status: Non-operational

Downlink:       435.1380 MHz AFSK 1200 BPS
Downlink:       435.2060 MHz AFSK 1200 BPS
Uplink:         145.8150 MHz AFSK 1200 BPS
Uplink:         145.8350 MHz AFSK 1200 BPS
Uplink:         145.8550 MHz AFSK 1200 BPS
Uplink:         145.8750 MHz AFSK 1200 BPS
[06042009]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Non-operational

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign:       POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012009]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
```

```
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
AO-24 ARSENE
Catalog Number: 22654
Launch Date: May 13, 1993

Status: Non-operational

Uplink:    435.0625 MHz FM 1k2bps AFSK
           435.1125 MHz FM 1k2bps AFSK
           435.1375 MHz FM 1k2bps AFSK
Downlink:  145.9750 MHz FM 1k2bps AFSK
          2446.5025 MHz FM 1k2bps AFSK

Beacon:    2446.4700 MHz CW

Broadcast callsign:
BBS:
[12162009]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
```

```
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990
```

```
Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
[05012006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: non-operational

Current Mode:  V/u

Uplink:         145.900 MHz FM 1200-baud Manchester FSK (reserved)
                145.920 MHz FM VOICE
                145.940 MHz FM 1200-baud Manchester FSK (reserved)
                145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink:       437.026 MHz USB VOICE
                (1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[07242009]
=====
UO-15 UoSAT-4
Catalog Number: 20438
Launch Date: January 22, 1990

Status: Non-operational

Uplink: ?
Downlink: 435.1250MHz (?)
          435.1200MHz (?)
[06042009]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
```

```
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon:   145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
```

```
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink  29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
Beacons:   29.450 MHz
          435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon 1:  29.352 MHz (intermittent)
Beacon 2:  29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
```

=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB

Beacon: 145.860 MHz

Robot: 145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-091.S4
WSR 091 Part 4 04/01/2010

AMSAT NEWS SERVICE BULLETIN 091.S4
FROM AMSAT HQ SILVER SPRING, MD, April 01, 2010
TO ALL RADIO AMATEURS
BID: $WSR-091.S4

THE FOLLOWING SATELLITES HAVE RE-ENTERED OR HAVE BEEN RETURNED SAFELY:

NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: July 28, 2008

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html

[01012009]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink: 145.825 Mhz FM APRS AX25
APRS Uplink: 145.825 MHz FM APRS AX25
Voice/PSK31 Uplink: 28.120 MHz

Packet to Voice ID: RAFT
[06112007]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Re-Entered
Re-entered: June 18, 2008

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon: 437.2750 MHz CW

Callsign: JR8YJT
[01012009]
=====
SO-43 Starshine 3
Catalog Number: 26929
Launch Date: September 30, 2001

Status: Re-Entered
Re-entered: January 21, 2003

Beacon: 145.825Mhz
[02212009]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz.

Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at}
amsat.org
NNNN
/EX

From 9053385569770527530
X-Google-Thread: a4a23d5f63,e35535f31955abdb,start

```
X-Google-Attributes: gida4a23d5f63,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII
Path: g2news1.google.com!news2.google.com!newsfeed2.dallas1.level3.net!
news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-094 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sat, 3 Apr 2010 21:08:34 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 352
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <001601cad393$55d29dc0$0177d940$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
X-Trace: reader1.panix.com 1270343314 26483 166.84.1.6 (4 Apr 2010 01:08:34 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 4 Apr 2010 01:08:34 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news1.google.com rec.radio.amateur.space:327 rec.radio.info:1351
```

AMSAT NEWS SERVICE
ANS-094

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

```
********************************************************************
* The AMSAT team is preparing for the 2010 Dayton Hamvention AMSAT *
*     Booth and activities. For the latest information go to:      *
*    http://www.amsat.org/amsat-new/hamvention/2010/Dayton.php     *
********************************************************************
```

In this edition:

- AMSAT at Dayton Hamvention 2010
- 2010 AMSAT Space Symposium & Annual General Meeting
- FUNcube at United Kingdom Space Conference 2010
- Delfi-C3 Survives Orbital Near Miss
- Satellite Shorts From All Over
- Update on the ISS Columbus Module Amateur Radio Station

SB SAT @ AMSAT $ANS-094.01
AMSAT at Dayton Hamvention 2010

AMSAT News Service Bulletin 094.01
>From AMSAT HQ SILVER SPRING, MD.
April 4, 2010
To All RADIO AMATEURS
BID: $ANS-094.01

The 2010 Dayton Hamvention will be held this year on 14-16 May 2010.

This is the 59th year of the Dayton Hamvention, sponsored by DARA (Dayton Amateur Radio Association). As has been the case for the many years Hamvention will be at the Hara Arena Complex on the north side of Dayton. Further information on Hamvention 2010, including advance ticket sales and motel accommodations, can be found at http://www.hamvention.org

AMSAT will occupy the same booths (444-449) in Ball Arena, right across from the ARRL area and just inside the door from the Satellite Demonstration area. Plan to visit all of the AMSAT activities!

AMSAT Activities at Dayton

AMSAT has planned a number of great activities during Hamvention. There will also be a number of new offerings at the AMSAT booth as well as special deals.

The AMSAT theme for 2010 is "Space Technology for Hams". We will have multipe exhibits of the new AMSAT satellites on display.

ARISSat

ARISSat has continued to develop this past year. We will have on display one of the operational development prototypes. We expect the satellite to be launched later this year.

AMSAT Thursday Night Get-together

We will be at Tickets Pub & Eatery this year. The menu is great and a nice change of pace. Check it out at TicketsPub.com

AMSAT Forum

The AMSAT Forum will be on Saturday May 15 in Forum Room 5 from

11:15 am - 1:30 pm.

AMSAT/TAPR Banquet

The fourth annual AMSAT/TAPR Banquet will be Friday night May 14 at the Kohler Banquet Center. TAPR will be providing the keynote speaker. The price for the Banquet is $30. Seating is limited and reservations are required. Follow the Dayton Banquet 2010 link below for information about reservations and additional information. Additional information as it becomes available.

AMSAT Hotel

AMSAT has a limited block of rooms reserved at the Country Inn & Suites in Fairborn, OH. Please contact Martha at the AMSAT office for room price and availability during Hamvention. Priority for rooms will be given to those volunteering to work in the AMSAT booth for multiple 2 hour shifts during Hamvention. The phone number for the AMSAT office is 301-589-6062. Other hotels in the immediate area of the Country Inn & Suites include the Fairfield Inn, Ramada Inn, Hampton Inn, Fairborn Holiday Inn, Red Roof Inn and the Homewood Suites if additional accommodations are needed.

[ANS thanks the AMSAT Dayton Hamvention Team for the above information]

/EX

SB SAT @ AMSAT $ANS-094.02
2010 AMSAT Space Symposium & Annual General Meeting

AMSAT News Service Bulletin 094.02
>From AMSAT HQ SILVER SPRING, MD.
April 4, 2010
To All RADIO AMATEURS
BID: $ANS-094.02

AMSAT announced the 2010 AMSAT Space Symposium will be held in Chicago on Friday, October 8th through Sunday, October 10th.

Features planned for this exciting weekend of Amateur Radio in Space:

+ Space Symposium with Amateur Satellite Presentations
+ Operating Techniques, News, & Plans from the Amateur Satellite World
+ Board of Directors Meeting open to AMSAT members
+ Meet Board Members and Officers
+ Annual General Membership Meeting
+ Annual Banquet�Keynote Speaker and Door Prizes

This year we have selected the Chicago/Elk Grove Holiday Inn just west of Chicago at 1000 Busse Road, Elk Grove, IL. The hotel is near O�Hare

Airport and has free hourly shuttles.

Watch the ANS bulletins and the AMSAT Symposiumweb page for the latest updates: http://www.amsat.org/amsat-new/hamvention/2010/Dayton.php

[ANS thanks the 2010 Symposium Committee for the above information]

/EX

SB SAT @ AMSAT $ANS-094.03
FUNcube at United Kingdom Space Conference 2010

AMSAT News Service Bulletin 094.03
>From AMSAT HQ SILVER SPRING, MD.
April 4, 2010
To All RADIO AMATEURS
BID: $ANS-094.03

The United Kingdom Space Conference was held from March 24-28 in Godalming Surrey. This premier event always attracts a stellar cast of speakers and this year was no exception. The launch of the UK Space Agency in same week added to the excitement. Many of the presentations are available for view from the Ustream server

AMSAT-UK attended to explain their exciting plans for the FUNcube satellite. As well as the Amateur Radio SSB/CW transponder FUNcube will provide an in-orbit tool for science education outreach and hands-on training in space and all the STEM subjects (Science technology Engineering & Mathematics)The telemetry system is designed for easy reception by school pupils using extremely simple hand held VHF receive equipment connected to a PC soundcard or USB port.

The satellite contains a materials science experiment and pupils will be able to receive the results direct from space and compare them with similar reference experiments in the classroom.

The FUNcube stand at the conference included a mock-up of the new satellite and a demonstration of the telemetry. FUNcube is expected to be launched in early 2011

Michael Castle, G1ZVN, gave a short introduction on FUNcube during one of the education sessions and FUNcube was also featured in a presentation on the UK National Cubesat project.

During the 5 days over 1000 people attended the event and the concept behind FUNcube was well received.

There will be more demonstrations of FUNcube at the AMSAT-UK International Space Colloquium to be held in Guildford from 31 July to 1 August.

For more information about AMSAT-UK follow these links:

FUNcube: http://www.FUNcube.org.uk/
AMSAT-UK: http://www.uk.amsat.org/
Ustream Server: http://www.ustream.tv/channel/uksc-2010

[ANS thanks Trevor, M5AKA for the above information]

/EX

SB SAT @ AMSAT $ANS-094.04
Delfi-C3 Survives Orbital Near Miss

AMSAT News Service Bulletin 094.04
>From AMSAT HQ SILVER SPRING, MD.
April 4, 2010
To All RADIO AMATEURS
BID: $ANS-094.04

This week the Delft University of Technology in the Netherland's Delfi-C3 satellite survived a close encounter with orbiting COSMOS debris. On March 30 the two spacecraft passed near each other with a head-on velocity of 15 km/sec and an estimated clearance of 492 meters. As of April 2, Wouter was able to report, "Delfi-C3 and the COSMOS debris missed each other by more than 700 meters, so no harm was done as far as we know. Delfi-C3 is still performing nominally."

The Delfi-C3 Operations Team invites amateur radio operators to have a look at the mission operations page at:
http://www.delfic3.nl/index.php?option�m_content&task�ew&id�&
Itemid
2
for frequency info and the latest RASCAL download.

Due to Delfi-C3's habit of sometimes switching off from science mode, you might hear nothing while Delfi-C3 is fine. Don't panic! but please do listen the orbits after and post your findings on the satellite status page at: http://oscar.dcarr.org

[ANS thanks Wouter Weggelaar, PA3WEG for the above information]

/EX

SB SAT @ AMSAT $ANS-094.05
Satellite Shorts From All Over

AMSAT News Service Bulletin 094.05
>From AMSAT HQ SILVER SPRING, MD.
April 4, 2010
To All RADIO AMATEURS
BID: $ANS-094.05

+ Nick, KB1RVT reported working OX/N0RC, Reid on HO-68 from Greenland (grid FQ56) at 1544 UTC on April 1. Ib, OZ1MY reported he could copy Reid in Copenhagen during the same pass. Reid will be using OX/N0RC for his call since OX3RC never came in. Reid added that his trip to Greenland has been extended until the end of May.

+ If you want to read a straight-forward guide to Software Defined Radio check out the web pages produced by Tobias Wellnitz DH1TW: http://www.dh1tw.de/understanding-the-sdr-concept

+ Gabriel, EA6VQ reported DX-Sherlock now provides satellite-specific real-time maps and QSO lists. See: http://www.vhfdx.info/spots/map.php?Frec�T

+ OSCAR-11 achieved 26 years in orbit on 01 March! It was designed, built and launched within a period of six months, using commercially available 'off the shelf' components (COTS). Once again, congratulations to Professor Sir Martin Sweeting G3YJO, his team at the University of Surrey and groups of radio amateurs who also contributed to the project. Unfortunately, the satellite wasn't transmitting on its birthday, but was heard briefly, three days later. Due to eclipses, deterioration of the battery and other parts of the satellite, it's not possible to predict when the satellite will be heard in the coming months. It is likely that it may be heard occasionally, by stations tuning around the beacon frequency: 145.826 MHz. AFSK FM ASCII Telemetry. Please send reception reports to g3cwv at amsat dot org.

+ JI5RPT plans to operate as JD1BLY from Chichijima Island (IOTA AS-031) Ogasawara on 40m to 6m and Satellite (CW/DIGI/SSB) between May 2 to May 7, 2010. QSL via his home callsign JI5RPT. Logsearch will be on his website. http://www.ji5rpt.com/jd1/ (via Makoto, JI5RPT via NG3K-DX-News and MakeMoreMilesonVHF Newsletter).

+ Eric, ON4HF has set up a new satellite forum and invites interested radio amateurs to register and enjoy the site at: http://www.on4hf.be/forum

+ Listen for Brock, W6GMT on the FM satellites as he begins his annual trip north to the summer QTH in Minnesota on Wednesday, April 7th. His trip will take him through Oklahoma, Kansas, Nebraska, Iowa, and Minnesota. I will activate grids using his FT-817 and an Elk antenna. He will accept grid requests via e-mail at w6gmt@bak.rr.com. QSL to his Minnesota address.

+ And, LU4FLJ worked Sebasti�n, W4AS via AO-7, Mode B on 3/21/2010 at 23:22 UTC.

[ANS thanks everyone for the above information]

/EX

SB SAT @ AMSAT $ANS-094.06
Update on the ISS Columbus Module Amateur Radio Station

AMSAT News Service Bulletin 094.06
>From AMSAT HQ SILVER SPRING, MD.
April 4, 2010
To All RADIO AMATEURS
BID: $ANS-094.06

The Amateur Radio on the International Space Station (ARISS) international team met for the monthly teleconference on March 16. Two highlights of the meeting include the planned installation of VHF and UHF FM amateur radio equipment and possible digital amateur television from the Columbus module at the International Space Station.

The installation of the Ericsson radio used by ARISS in the Columbus module is scheduled to be done by astronaut Mike Fincke, KE5AIT on the STS-134 shuttle flight planned for late July 2010. ESA hopes to have a special contact to commemorate the first operation of amateur radio in the Columbus Module.

Gaston Bertels, ON4WF reported that the Amateur Radio - Columbus (ARCOL) Working Group is currently proposing the flight of a digital amateur television (DATV) system to downlink TV on S-band. ARISS US team members Mark Severance N5XWF; Mark Steiner K3MS; Lou McFadin W5DID; Kenneth Ransom N5VHO; Rosalie White K1STO; and Carol Jackson KB3LKI are assisting.

The Digital Television capability, under consideration for installation by the ESA in December, 2010 poses technical challenges. The biggest technical challenge is the obtaining of a suitable power supply. Gaston is working with ESA to resolve this.

While DATV from the Columbus module will open up an exciting new capability for education contacts, it will require a more capable ground station to receive the S-band DATV signals. This has implications for the existing telebridge stations, including how the DATV images would be routed to the event sites. Gaston will be establishing a working group to help tackle these two challenges (reception and passing to the event site), and is actively soliciting volunteers to help out.

The ARCOL group has already accomplished the assembly and installation of
the L- and S-band patch antennas mounted on the exterior of the Columbus

Module.

[ANS thanks the ARISS team for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the

President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office. And with that please keep in mind the tale of the man who walks into a hardware store and asks if they have a tool for breaking up some hard ground. The shop assistant points to a row of suitable tools along the wall and replies, "Certainly sir, take your pick." After that the bloke tried a career as a gold prospector, but it didn't pan out.

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM

From -8109863557289961775
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X-Google-NewGroupId: yes
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X-Google-Language: ENGLISH,ASCII-7-bit
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news.astraweb.com!border5.newsrouter.astraweb.com!not-for-mail
From: Chris Steyaert <observations@rmob.org>
Newsgroups: rec.radio.amateur.space,sci.astro.amateur
Subject: Radio Meteor Obs. Bull. March 2010
Date: Wed, 07 Apr 2010 22:32:43 +0200
Message-ID: <9tqpr5plad3hjcagmn40r66445opa3hfar@4ax.com>
X-Newsreader: Forte Agent 5.00/32.1171
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Lines: 14
Organization: Unlimited download news at news.astraweb.com
NNTP-Posting-Host: f8dc857c.news.astraweb.com
X-Trace: DXC=cK7Q589oIeTD:=ciL5QPHRL?
0kYOcDh@Z04CI;T]Ja1[S2A5gT6F]C]8Vjho8MC7_^@7F@nn5fk5R^D:Xg0?CSaY
Xref: g2news2.google.com rec.radio.amateur.space:353 sci.astro.amateur:35519

Radio Meteor Observation Bulletin No. 200 of March 2010 (95 K) is available now as

http://www.rmob.org/rmobtext/rmob1003.txt

More information and the visual presentation of the hourly forward scatter counts can be found on

http://www.rmob.org

Chris

```
From 7269877791299385640
X-Google-Thread: 10e8ad,95214219ab8dac6a,start
X-Google-NewGroupId: yes
X-Google-Thread: 10b9c8,95214219ab8dac6a,start
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,gida4a23d5f63,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news1.google.com!newsfeed2.dallas1.level3.net!
news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-101 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Wed, 14 Apr 2010 14:22:35 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 306
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000c01cadbff$70909f30$51b1dd90$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1271269355 2009 166.84.1.6 (14 Apr 2010 18:22:35 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Wed, 14 Apr 2010 18:22:35 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news2.google.com rec.radio.amateur.space:354 rec.radio.info:1449
```

AMSAT NEWS SERVICE
ANS-101

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

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*******************************************************************
* The AMSAT team is preparing for the 2010 Dayton Hamvention AMSAT *
*     Booth and activities. For the latest information go to:      *
*    http://www.amsat.org/amsat-new/hamvention/2010/Dayton.php     *
*******************************************************************
```

In this edition:
* AO-51 New PL Operation Being Tested
* Deadline Approaching To Reserve Rooms in AMSAT Block At Dayton
* USSTRATCOM Approves Continued AMSAT TLE Distribution
* Ten Hams in Orbit Now
* Estonian University Plans Amateur Radio CubeSat
* Arecibo on 432 MHz Moon Bounce
* ARISS Status - 5 April 2010

SB SAT @ AMSAT $ANS-101.01
AO-51 New PL Operation Being Tested

AMSAT News Service Bulletin 101.01
From AMSAT HQ SILVER SPRING, MD.
April 11, 2010
To All RADIO AMATEURS
BID: $ANS-101.01

Drew Glasbrenner, KO4MA, reports that AO-51's 435.150 transmitter has been turned off and the 435.300 transmitter raised to near 2 watts output. On Saturday, 10 April, the new PL routine was turned on. This improved routine will turn the downlink on with an unsquelched uplink when it hears a 67 hz tone. The plan is to leave a tail of several minutes, so the transmitter will stay on without hearing a tone for an interval of several minutes.

What does this mean for the user? It would be helpful to program in a 67 hz PL tone again, but not absolutely required as long as someone else in the footprint does. It also means if you are the first person in the footprint (not very likely in North America, Europe, or Japan) you might not hear the satellite until after it hears 67hz for a few seconds.

Reports from when the downlink turns on or off would be appreciated.

73, Drew KO4MA
AMSAT-NA VP Operations

[ANS thanks Drew, KO4MA, for the above information]

/EX

SB SAT @ AMSAT $ANS-101.02
Deadline Approaching To Reserve Rooms in AMSAT Block At Dayton

AMSAT News Service Bulletin 101.02
  From AMSAT HQ SILVER SPRING, MD.
April 11, 2010
To All RADIO AMATEURS
BID: $ANS-101.02

Again a friendly reminder that the cutoff date for the AMSAT block of rooms in Dayton is April 20th. If you are planning to stay with us, please call me at 301-589-6062 to make your reservation. I will need a credit card number to hold the room.

[ANS thanks Martha for the above information]

/EX

SB SAT @ AMSAT $ANS-101.03
USSTRATCOM Approves Continued AMSAT TLE Distribution

AMSAT News Service Bulletin 101.03
  From AMSAT HQ SILVER SPRING, MD.
April 11, 2010
To All RADIO AMATEURS
BID: $ANS-101.03

AMSAT-NA Orbital Data Manager Ray Hoad, WA5QGD said this week, "I am pleased to announce that AMSAT NA has received approval to continue re-distribution of Keplerian elements from the USSTRATCOM data source (Space Track website) for the period April 1, 2010 to April 1, 2011. Thanks to the USSTRATCOM team and especially to Mr. Mark Riddle for their help in this process."

This means that the AMSAT Keplerian Elements in verbose format and the 2-line format can be freely distributed by those who recieve them from AMSAT. AMSAT's two formats are each considered an AMSAT product and therefore can be freely distributed. AMSAT asks that AMSAT-NA be given credit as the source for your redistribution.

[ANS thanks Ray Hoad, WA5QGD for the above information]

/EX

SB SAT @ AMSAT $ANS-101.04
Ten Hams in Orbit Now

AMSAT News Service Bulletin 101.04

From AMSAT HQ SILVER SPRING, MD.
April 11, 2010
To All RADIO AMATEURS
BID: $ANS-101.04

Six of the seven astronauts on the shuttle Discovery are licensed radio amateurs and will join four radio hams already on the International Space Station (ISS).

The shuttle Discovery (STS131) crew consists of:
Dorothy Metcalf-Lindenburger, KE5DAT
Stephanie Wilson, KD5DZE
Naoko Yamazaki, KE5DAS
James P. Dutton, Jr., KE5HOE,
Rick Mastracchio, KC5ZTE,
Clayton Anderson, KD5PLA
Alan Poindexter

Already onboard the ISS are radio hams:
Tracy Caldwell Dyson, KF5DBF
Timothy J. Creamer, KC5WKI
Soichi Noguchi, KD5TVP
Mikhail Kornienko, RN3BF
along with Oleg Kotov and Alexander Skvortsov.

[ANS thanks SouthGate ARC and ISS Fan Club for the above information]

/EX

SB SAT @ AMSAT $ANS-101.05
Estonian University Plans Amateur Radio CubeSat

AMSAT News Service Bulletin 101.05
From AMSAT HQ SILVER SPRING, MD.
April 11, 2010
To All RADIO AMATEURS
BID: $ANS-101.05

IARU Amateur Satellite Frequency Coordination reports the University of Tartu, Estonia, has submitted a frequency coordination application to the IARU for an Amateur Radio CubeSat called ESTCube-1.

The proposal is for a 1U CubeSat in Low Earth Orbit (LEO) with UHF downlinks and a VHF telecommand uplink. It is hoped to launch in 2012 although no launch opportunity has yet been confirmed.

ESTCube-1 will carry a camera to acquire images of Estonia for out reach purposes and will deploy a 10 meter conductive Hoytether as a part of the development work of an electric solar wind sail.

ESTCube
http://tinyurl.com/yk66s2o

[ANS thanks IARU for the above information]

/EX

SB SAT @ AMSAT $ANS-101.06
Arecibo on 432 MHz Moon Bounce

AMSAT News Service Bulletin 101.06
  From AMSAT HQ SILVER SPRING, MD.
April 11, 2010
To All RADIO AMATEURS
BID: $ANS-101.06

The Arecibo Observatory Amateur Radio Club will be putting the 1000-foot radio telescope on the air for 432 MHz EME from April 16-18.

It can be heard with a small hand-held yagi pointed at the moon

The scheduled times of operation are:

April 16: 1645 - 1930 UTC

April 17: 1740 - 2020 UTC

April 18: 1840 - 2125 UTC

Callsign: KP4AO

Tx Frequency: 432.045 MHz

Rx Frequency: 432.050 to 432.060+

Tx power: 400 W

Antenna gain: 60 dBi

System noise temp: 120 K (cold sky)

System noise temp: 330 K (when pointed at moon)

KP4AO can be heard with a small hand-held yagi pointed at the moon and a good receiver. A 15 dBi antenna and 100 W will be enough to work us on CW.

Operators at KP4AO will do their best to work as many stations as possible. Each session will start with a brief announcement and CQ in SSB. SSB QSOs may continue for 30 minutes to an hour, if the QSO rate remains high.

The mode will be shifted to CW as soon as it is judged that higher QSO rates would result.

We will listen for calls at frequencies 5-15 kHz higher than our own, and even higher if QRM warrants. Callers who s-p-r-e-a-d o-u-t are more likely to be copied.

If you've already worked us in any mode, please do not call again -- give others a chance.

If we call "CQ QRP", we will listen for stations running 100 W or less to a single yagi. Please do not answer such a CQ if you are running more power or have a larger antenna.

On April 18, if we reach a condition where most calling stations have been worked, and we judge that operating in the digital mode JT65B would produce a higher QSO rate, we will switch to JT65B.

Note that any of these planned operating strategies may be changed as circumstances dictate.

We are extremely fortunate to have been granted access to the world's largest radio telescope for this amateur radio good-will event. We look forward to working as many stations as possible in the alloted time!

[ANS thanks John, KB1MGI, for the above information]

/EX

SB SAT @ AMSAT $ANS-101.07
ARISS Status - 5 April 2010

AMSAT News Service Bulletin 101.07
  From AMSAT HQ SILVER SPRING, MD.
April 11, 2010
To All RADIO AMATEURS
BID: $ANS-101.07

1. Astronaut Soichi Noguchi Chats with Texas Students via ARISS Contact

On Monday, March 29, Walnut Creek Elementary School students in Azle, Texas took part in an Amateur Radio on the International Space Station (ARISS) contact with JAXA astronaut Soichi Noguchi, KD5TVP. All 23 questions were answered with time for a two way "Goodbye." ARISS was integrated into the science curriculum as students researched space objects and gave presentations to their class. The youth also attended satellite communications demonstrations given by retired Lockheed employees and members of local radio clubs. On the day of the contact, a proclamation was read by an Azle City representative declaring it to be Space Day in Azle. Four television stations and one local newspaper covered the event and the audio was available on EchoLink.

2. HAMEX 2010 ARISS Exhibit

HAMEX 2010, the largest RadioFest in Canada, was held on Saturday, March 27 in Toronto. AMSAT (Radio Amateur Satellite Corporation) and ARISS (Amateur Radio on the International Space Station) members attended the event and manned an exhibition booth which displayed two mini satellite communications stations as well as information boards with pictures of astronauts involved in the ARISS program. A large AMSAT banner was posted, along with two 7 foot posters on loan from the Canada Space Agency (CSA). CSA also provided handouts, stickers and various magnetic logos, which along with pamphlets describing AMSAT and the ARISS program, were distributed to the many visitors the exhibit attracted. The event was a success in generating interest in the ARISS program and the team was invited back next year.

[ANS thanks Carol, KB3LKI, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Lee McLamb, KU4OS
ku4os at amsat dot org

From 1026777325994787808
X-Google-Thread: 10e8ad,40961cdd3584fdcc,start
X-Google-NewGroupId: yes
X-Google-Thread: 10b9c8,40961cdd3584fdcc,start
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,gida4a23d5f63,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII
Path: g2news2.google.com!news2.google.com!newsfeed2.dallas1.level3.net!
news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-108 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sun, 18 Apr 2010 10:20:51 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 381
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000a01cadf02$56090200$021b0600$@net>

Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
X-Trace: reader1.panix.com 1271600451 27088 166.84.1.6 (18 Apr 2010 14:20:51 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 18 Apr 2010 14:20:51 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to   rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to   rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news2.google.com rec.radio.amateur.space:355 rec.radio.info:1460

AMSAT NEWS SERVICE
ANS-108

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

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********************************************************************
* The AMSAT team is preparing for the 2010 Dayton Hamvention AMSAT *
*     Booth and activities. For the latest information go to:      *
*    http://www.amsat.org/amsat-new/hamvention/2010/Dayton.php     *
********************************************************************
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In this edition:
* AMSAT BOD Nominations Due
* AO-51 67Hz Access Tone Experiment in Progress
* Deadline Extension To Reserve Rooms in AMSAT Block At Dayton
* Matching Funds Opportunity
* SO-67 Operation Expected to Resume Soon
* Dayton Happenings
* Satellite Shorts From All Over
* ARISS Status - 12 April 2010

SB SAT @ AMSAT $ANS-108.01
AMSAT BOD Nominations Due

AMSAT News Service Bulletin 108.01
  From AMSAT HQ SILVER SPRING, MD.
April 18, 2010

To All RADIO AMATEURS
BID: $ANS-108.01

It is time to submit nominations for the upcoming open seats on the AMSAT--NA Board of Directors. A nomination requires either one Member Society or five current individual members to nominate an AMSAT member for the position. Three director's terms expire this year:
Tom Clark, K3IO, Lou McFadin, W5DID and Gould Smith, WA4SXM.
Nominations must be in writing and mailed to:
AMSAT, 850 Sligo Ave #600, Silver Spring MD 20910.
They can arrive no later than June 15th.

[ANS Thanks Martha for the above information]

/EX

SB SAT @ AMSAT $ANS-108.02
AO-51 67Hz Access Tone Experiment in Progress

AMSAT News Service Bulletin 108.02
  From AMSAT HQ SILVER SPRING, MD.
April 18, 2010
To All RADIO AMATEURS
BID: $ANS-108.02

The AO-51 Control Team has enabled the new PL routine. This improved routine will turn the downlink on with an unsquelched uplink when it hears a 67 Hz tone. At present there is a tail of several minutes so the transmitter will stay on without hearing the tone.

AO-51 users are urged to program in a 67 Hz PL tone again, but this is not absolutely required as long as someone else in the footprint has already enabled the satellite with the tone. It also means if you are the first person in the footprint (not very likely in North America, Europe, or Japan) you might not hear the satellite until after it hears 67 Hz for a few seconds.

Mark, N8MH commented on the new operating mode, "The transmitter shuts off (for about a second, maybe less) after 2 minutes, even if people are talking with a 67Hz tone. So, a new 120 second period will not start

until the current one ends."

Andre, ZS2BK observed, "On a south to north pass into ZS, the bird was off and was switched on with the tone. It stayed on for 120 seconds. It goes off momentarily as a tone equipped station is transmitting."

The latest AO-51 Control Team news can be viewed on-line at:
http://www.amsat.org/amsat-new/echo/CTNews.php

[ANS thanks the AO-51 Control Team for the above information]

/EX

SB SAT @ AMSAT $ANS-108.03
Deadline Extension To Reserve Rooms in AMSAT Block At Dayton

AMSAT News Service Bulletin 108.03
  From AMSAT HQ SILVER SPRING, MD.
April 18, 2010
To All RADIO AMATEURS
BID: $ANS-108.03

Again, a friendly reminder that the cutoff date for the AMSAT block of rooms in Dayton has been extended until April 20th. If you are planning to stay with us, please call me at 301-589-6062 to make your reservation. I will need a credit card number to hold the room.

[ANS thanks Martha for the above information]

/EX

SB SAT @ AMSAT $ANS-108.04
Matching Funds Opportunity

AMSAT News Service Bulletin 108.04
  From AMSAT HQ SILVER SPRING, MD.
April 18, 2010
To All RADIO AMATEURS
BID: $ANS-108.04

Matching Funds Opportunity

The Dayton Amateur Radio Association (DARA) will match one-for-one any donations made to AMSAT between now and June 30, 2010 up to a maximum of $5,000. You can make your donation count even more. Now is the time to accept the DARA challenge. Please support "Getting AMSAT Back into Space" and help us raise the funds needed for our next satellite project.

AMSAT's Project "Fox" is a cubesat that will provide a 2 meter-70 Centimeter FM transponder that will match the ground performance of AO-51. You can send your donation to: AMSAT, 850 Sligo Ave #600, Silver Spring MD 20910. If you prefer, you can call Martha at the AMSAT office (US call toll free at 888-322-6728 or 301-589-6062) and contribute with a credit card.

[ANS thanks Martha for the above information]

/EX

SB SAT @ AMSAT $ANS-108.05
SO-67 Operation Expected to Resume Soon

AMSAT News Service Bulletin 108.05
From AMSAT HQ SILVER SPRING, MD.
April 18, 2010
To All RADIO AMATEURS
BID: $ANS-108.05

The SA AMSAT web page at http://www.amsatsa.org.za/ says, "Amateur Radio operation is expected to return soon. Keep an eye on the SA-AMSAT web page. All requests for SO67 operation will be handled by SA AMSAT and schedules will be published on http://www.amsatsa.org.za. Details on how to apply for operation in your area will be announced soon."

This month saw the transfer of the control of the satellite from Sunspace to the CSIR's Satellite Application Centre at Hartebeeshoek. Sunspace will continue working on the commission of some of the experimental payload which include the NMMU string experiment, the DOC communication experiment and the VLF experiment from UKZN.

Although a hugely successful mission thus far, the past six months have been challenging for Engineers at Sunspace and unfortunately not without incident.

"We suffered a permanent loss of the Z-axis reaction wheel early on during commissioning" Jan-Albert Koekemoer commissioning engineer at Sunspace said. We adapted the Attitude Determination and Control System (ADCS) algorithms so as to still allow for controlled imaging with the remaining two wheels - Yaw-control was then slightly impeded and the off-Nadir Roll angle limited to �20�."

"Due to a power system anomaly, we have also lost access to one of the two CCD control boards. Each control board interfaces to one three-colour CCD. The board we lost contains the Green, Xantrophyl and Blue spectral bands. The remaining board contains the Red, Red-Edge and Near-Infrared bands."

"We recently also lost the Y-axis reaction wheel (most likely also due to a power distribution failure), this meant the loss of three-axis control, but amazingly we can still take high-resolution images as before." An image captured by SUMBANDILASAT can be seen at:
http://www.amsatsa.org.za/

[ANS thanks SA AMSAT for the above information]

/EX

SB SAT @ AMSAT $ANS-108.06
Dayton Happenings

AMSAT News Service Bulletin 108.06

From AMSAT HQ SILVER SPRING, MD.
April 18, 2010
To All RADIO AMATEURS
BID: $ANS-108.06

AMSAT/TAPR Banquet
Dr. Bob McGwier will be the speaker at the 2010 AMSAT/TAPR Banquet. Bob has been a very active volunteer in both organizations for many years and always delivers an enteraining and informative presentation. Reserved tickets may be ordered via the AMSAT Web site store or by calling Martha at the AMSAT office (301) 589-6062.

AMSAT Forum at Dayton
The 2010 AMSAT Forum at the Dayton Hamvention will be on:

Saturday, May 15 from 11:15 am to 1:30 pm in Forum Room 5

Alan Biddle, WA4SCA will moderate the Forum

Speakers

Barry Baines, WD4ASW, AMSAT President, "AMSAT Status Report"
What is happening within AMSAT? AMSAT President Barry Baines will highlight current activities within AMSAT and discuss some of the challenges facing the organization.

Drew Glasbrenner, KO4MA, AMSAT VP Operations,"AMSAT Satellite Operations

and International Satellite Operations". Drew, AMSAT VP of Operations, will discuss operational AMSAT satellites as well as update us on new and future International Satellites.

Mike Forsythe, AC2V, "Integrating Satellite Operations into DXpeditions"
Mike, K4T Team Leader will present the K4T DXpedition and how to have satellite operations as a major part of DXpeditions, involving youth and making it all work on green power!

Gould Smith, WA4SXM,AMSAT VP User Services, "Getting ARISSat-1 Ready to Fly". Gould is the AMSAT Project Manager for ARISSat-1 and will

talk about the current status of the satellite project, testing and the delivery of two satellites to Russia in July.

Alex Harvilchuck, N3NP, "NextGen CubeSat Program Update".
Alex, a Systems Engineer with IBM, is the NextGen CubeSat Program Manager and will be providing an update on the Program.
A team of Binghamton University engineering students have been modifying the power systems from ARISSat-1 for use in a 3U CubeSat, with a U/V linear transponder, for AMSAT.

[ANS Thanks, Gould, WA4SXM, for the above information]

/EX

SB SAT @ AMSAT $ANS-108.07
Satellite Shorts From All Over

AMSAT News Service Bulletin 108.07
From AMSAT HQ SILVER SPRING, MD.
April 18, 2010
To All RADIO AMATEURS
BID: $ANS-108.07

Satellite Shorts From All Over

+ K4T DXpedition video of the recent DXpedition to Dry Tortugas was unique in being entirely wind powered and having two amateur radio satellite stations. They have posted a video at:
http://www.youtube.com/watch?v�oDk36CaWA

+ Gavin, M1BXF reports the Camb-hams, the social side of the Cambridge Repeater Group (ex Pye telecoms group) will be active on FM and SSB satellites as GS3PYE/P from grid IO67nt on the Island of Harris, Scotland between May 1st and May 15th. More information can found on their DXpedition webpage:
http://dx.camb-hams.com/dx-peditions/harris-dxpedition-10/

+ The 2010 CubeSat Developers' Workshop takes place this week at Cal Poly in San Luis Obispo between April 21-23. A link to the webcast of workshop forums has been posted at:
http://www.cubesat.org/index.php/workshops/upcoming-workshops

+ The Mexican Federal Telecommunications Commission ("CoFeTel"), Mexico's "FCC", announced today that hams in Mexico have been authorized the use of the 4B prefix for 2010, to commemorate both the 200th anniversary of Mexican independence and the 100th anniversary of the Mexican Revolution. With this in mind, maybe we will hear some of our Mexican friends using this prefix on the satellites throughout the rest of 2010.

+ The Houston AMSAT Net simulcasts via an Icecast streaming server at this link: radio.arert.net:8000/amsat.m3u This net meets on Tuesday 8PM Central Time (Wednesday 0100 UTC). The audio is also available on Echolink in the *AMSAT* conference.

[ANS thanks everyone for the above information]

/EX

SB SAT @ AMSAT $ANS-108.09
ARISS Status - 12 April 2010

AMSAT News Service Bulletin 108.09
From AMSAT HQ SILVER SPRING, MD.

April 12, 2010
To All RADIO AMATEURS
BID: $ANS-108.09

Amateur Radio on the International Space Station (ARISS) Status Report
April 12, 2010

1. Upcoming School Contact

An Amateur Radio on the International Space Station (ARISS) contact has been scheduled for Jessup Elementary School in Houston, Texas on Monday, April 19 at 18:43 UTC. This will be a telebridge connection through ground station WH6PN in Hawaii. The school has incorporated the ARISS activity into its curriculum, specifically focusing on science, math, and language arts instruction across the pre-kindergarten to fourth grade levels.

2. Astronaut Timothy Creamer Speaks with Italian Students via ARISS

On Tuesday, April 6, on-orbit astronaut Timothy Creamer, KC5WKI participated in an Amateur Radio on the International Space Station (ARISS) contact with students from Scuola Primaria De Gasperi in Bari, Italy. The contact was held at the Cittadella Mediterranea della Scienza, which was designed to stimulate interest of the general public and especially youth, in fields of science and technology. To prepare for the contact, students studied principles of radio communications and space missions and were given a presentation on ARISS by ARISS mentor Francesco De Paolis, IK0WGF. The event drew an audience of more than 100 students, teachers and guests as well as members of the media. The contact audio and video were distributed throughout Europe and America by webcast, receiving 500 connections.

3. ISS Ham Debrief Held with Astronaut Jeff Williams

Expedition 21/22 astronaut Jeff Williams, KD5TVQ participated in an Amateur Radio on the International Space Station (ARISS) debrief session on Friday, April 9. The feedback he provided on the ISS Ham radio equipment and school contacts will help the ARISS team improve program operations.

4. ARISSat Presentation to be Given at Dayton Hamvention

Dayton Hamvention 2010 will be held at the Hara Arena Complex in Dayton, Ohio on May 14 - 16. The American Radio Relay League (ARRL) and the Radio Amateur Satellite Corporation (AMSAT) will both man exhibit booths at the event. Gould Smith, WA4SXM, AMSAT Project Manager for ARISSat-1, plans to give a presentation at the AMSAT Forum titled, "Getting ARISSat-1 Ready to Fly." The Dayton Hamvention is an internationally attended amateur radio convention that draws crowds of 25,000 annually. For more information on Dayton Hamvention 2010, go to: http://www.hamvention.org/

5. Four Women in Space Hold Amateur Radio Licenses

Shuttle STS-131 launched on April 5, carrying three women into space: Dorothy Metcalf-Lindenburger, KE5DAT, Stephanie Wilson, KD5DZE and JAXA astronaut Naoko Yamazaki, KE5DAS. Upon docking with the ISS, they joined

Expedition 23 crew member Tracy Caldwell-Dyson, KF5DBF. This was the first time that four women have been in space, and all are licensed hams. Caldwell-Dyson will participate in her first Amateur Radio on the International Space Station (ARISS) contact with Jessup Elementary School in Houston on April 19. Let's hope they like to make random contacts to give the Amateur Community some excitement.

[ANS thanks Carol, KB3LKI, for the above information]

/EX

73,
This week's ANS Editor,
Dee Interdonato, NB2F

```
From -5603011499784300207
X-Google-Thread: 10e8ad,ca32f5e87840df27,start
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!newsfeed2.dallas1.level3.net!
news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-112 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Fri, 23 Apr 2010 09:38:18 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 1853
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <001b01cae2ea$349f4c00$9ddde400$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
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X-Trace: reader1.panix.com 1272029898 8404 166.84.1.6 (23 Apr 2010 13:38:18 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Fri, 23 Apr 2010 13:38:18 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to   rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to   rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
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Xref: g2news1.google.com rec.radio.amateur.space:331 rec.radio.info:1394

This report is organized into four (4) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - deborbited/returned satellites

SB SAT @ AMSAT W8ISS $WSR-112.S1
WSR 112 Part 1 04/22/2010

AMSAT NEWS SERVICE BULLETIN 112.S1
FROM AMSAT HQ SILVER SPRING, MD, April 22, 2010
TO ALL RADIO AMATEURS
BID: $WSR-112.S1

HO-68 XW-1 (CAS-1)
Catalog Number:
Launch Date: December 15, 2009
Status: Commissioning

Callsign:
Broadcast: BJ1SA-11
BBS: BJ1SA-12

Uplinks: 145.8250 MHz FM, PL 67.0 Hz.
           145.9250 - 145.9750 MHz SSB/CW
           145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM

```
           435.7650 - 435.7150 MHz SSB/CW
           435.6750 MHz AFSK 1200 BPS

Beacon:    435.7900 MHz CW

Mode and Antenna Polarization:
V: LHCP 2.0dBi max
U: RHCP 3.0dBi max

IARU coordination page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108

For more information about XW-1 (CAS-1):
http://www.camsat.cn
[04222010]
=====
SO-67 SumbandilaSat
Catalog Number: 35870
Launch Date: September 17, 2009

Status: Commissioning

Callsign: ZS0SUM

Uplink:   145.875MHz FM tone 233.6 Hz
Downlink: 435.345MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

For more information about SO-67:
http://www.amsatsa.org.za/
[11212009]
=====
DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008

Status: Operational
Current Mode: Science Mode - Beacon ONLY

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink:   435.530 to 435.570 MHz

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68
[02122009]
=====
```

VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.9360 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

To know what transponder is switched on please listen for the beacon that is active. Each transponder has a different beacon.
[03082010]

=====

AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Modes:
FM Repeater ONE
Uplink: 145.880 MHz FM
Downlink: 2401.200 Mhz FM
FM Repeater TWO
Uplink: OFF
Downlink: OFF
BBS
Uplink: OFF
Downlink: OFF
Telemetry
Downlink: 435.150MHz 9k6

Analog voice downlink: 435.300 MHz FM
                           435.150 MHz FM
                          2401.200 Mhz FM
Analog voice uplink: 145.860 MHZ FM

145.880 MHz USB
145.880 MHz FM
145.920 MHz FM
1268.700 MHz FM
Digital Downlinks: 435.150 MHz FM 38k4 PBP, 1 watt output
435.150 MHz FM 9k6 Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Pacsat Broadcast Protocol
1268.700 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[04222010]

=====

SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz. The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset

```
   the 10 minute timer.
[05282007]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: sCHEDULED oPERATIONS
Current Mode: V/u (Mode JA)

Voice/CW (Mode JA)
Uplink:   145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon:   435.795 MHz

Digital Mode JD
Uplinks:  145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage:
http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's
CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/
fo29cwts.htm
[02132010]
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993

Status: Operational

Current Mode: V/u

Uplink:   145.850 MHz FM
Downlink: 436.797 MHz FM
```

```
Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[03232009]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational

Current Mode: Alternating between Mode A and B every 24 hours

Uplink:   145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink:  29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons:   29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
[02122009]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - V/u
                      Voice -       V/v
                      BBS -         V/v
                      APRS -        V/v
                      SSTV -        V/v


Expedition 23 Crew:
Commander:                Oleg Kotov
Flight Engineer:          Soichi Noguchi        KD5TVP
Flight Engineer:          T.J. Creamer          KC5WKI
Flight Engineer:          Alexander Skvortsov
Flight Engineer:          Tracy Caldwell Dyson  KF5DBF
Flight Engineer:          Mikhail Kornienko     RN3BF
```

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time line is NOT translated from Russian and posted.
[04222010]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-112.S2
WSR 112 Part 2 04/22/2010

AMSAT NEWS SERVICE BULLETIN 112.S2
FROM AMSAT HQ SILVER SPRING, MD, April 22, 2010
TO ALL RADIO AMATEURS
BID: $WSR-112.S2

HO-68 XW-1 (CAS-1)
Catalog Number:
Launch Date: December 15, 2009
Status: Operational

Callsign:
Broadcast: BJ1SA-11
BBS: BJ1SA-12

Uplinks: 145.8250 MHz FM, PL 67.0 Hz.
           145.9250 - 145.9750 MHz SSB/CW
           145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
           435.7650 - 435.7150 MHz SSB/CW
           435.6750 MHz AFSK 1200 BPS

Beacon: 435.7900 MHz CW

IARU coordination page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108

For more information about XW-1 (CAS-1):
http://www.camsat.cn
[04222010]
=====
SwissCube
Catalog Number: 35932
Launch Date: September 23, 2009

Status: Operational

Callsign: HB9EG

Beacon(100mw): 437.5050MHz CW
Beacon(1w):   437.5050MHz FSK 1k2bps
[04222010]
=====
UWE-2
Catalog Number: 35934
Launch Date: September 23, 2009

Status: In Orbit

Beacon(500mw): 437.3850 MHz AFSK 1k2bps
               437.3850 MHz FSK 9k6bps
[1112009]
=====
ITUpsAT1
Catalog Number: 35935
Launch Date: September 23, 2009

Status: Operational

```
Beacon(100mw): 437.325MHz CW
Beacon(1w): 437.325MHz 19k2bps
[11112009]
=====
BEESAT
Catalog Number: 35933
Launch Date: September 23, 2009

Status: Operational

Callsign: DP0BEE

Beacon(100mw): 436.000MHz CW
Beacon(500mw): 436.000MHz GMSK 4k8bps
Beacon(500mw): 436.000MHz GMSK 9k6bps
[04222010]
=====
Pollux
Catalog Number:
Launch Date: July 31, 2009

Status: Operational

Callsign: POLLUX-1

Downlink: 145.825MHz 1k2 AX.25
[10042009]
=====
Castor (ANDE-2)
Catalog Number:
Launch Date: July 31, 2009

Status: Operational

Callsign: KD4HBO-1

Downlink: 145.825 MHz 1k2 AX.25
[10042009]
=====
BEVO-1 (DRAGONSAT-1)
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Operational

Downlink: 437.325 MHz 9k6 GMSK
          437.325 MHz CW 20wpm
[07312009]
=====
AggieSat2 (DRAGONSAT-2)
Catalog Number: 35004
Launch Date: May 19, 2009
```

```
Status: Operational

Downlink: 436.250 MHz 9k6 FHSS
[11112009]
=====
CP-6
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Commissioning

Downlink: 437.365 MHz 1k2 AFSK
[06052009]
=====
HAWKSAT 1
Catalog number: 35003
Launch Date: May 19, 2009

Status: ?

Downlink: 437.345 ?
[06052009]
=====
Pharmasat
Catalog Number: 35002
Launch Date: May 19, 2009
Status: Commissioning

Downlink: 437.465 MHz 1k2 AFSK
[06052009]
=====
ANUSAT
Catalog Number: 34808
Launch Date: April 20, 2009

Status: ?

Downlink:  435.000 MHz
Uplink:    145.800 MHz

Telemetry: 137.400 MHz
[05112009]
=====
SOHLA-1 (ASTRO TECH.)
Catalog Number: 33496
Launch Date: January 23, 2009

Status: Commisioning

Proposed Frequencies and Modes:
Downlink: 437.505 MHz AFSK/CW
Beacon:   437.505 MHz AFSK/CW
```

```
Callsign:

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=101
[03232009]
=====
KAGAYAKI (Solan Co.)
Catalog Number: 33495?
Launch Date: January 23, 2009

Status: In Orbit

Downlink: 437.375 MHZ    FSK9k6/CW
Beacon:   437.375 MHz    FSK9k6/CW

IARU coordination status page:

AMSAT-NA webpage:

[01152009]
=====
STARS (Kagawa Univ.) (Twin Satellites)
Catalog Number: 33498
Launch Date: January 23, 2009

Status: Operational ?

Downlinks: 437.485 MHz FM/CW
           437.465 MHz FM/CW
Beacons:   437.305 MHz FM/CW
           437.275 MHz FM/CW

Callsigns: JR5YBN
           JR5YBO

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=99

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=121&retURL
=/satellites/status.php
[022152009]
=====
KKS-1 (Tokyo MCIT)
Catalog Number: 33499
Launch Date: January 23, 2009

Status: Operational

Downlink:  437.455 MHz AFSK/CW
Beacon:    437.385 MHz AFSK/CW

Callsign: JQ1YYY
```

```
IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=107

AMSAT-NA webapge:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=120&retURL
=/satellites/status.php
[02212009]
=====
PRISM (Tokyo Univ.)
Catalog Number: 33493
Launch Date: January 23, 2009

Status: Operational ?

Downlink: 437.425 MHz AFSK/GMSK/CW
Beacon:   437.250 MHz AFSK/GMSK/CW

Callsign: JQ1YCX

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=97

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=119&retURL
=/satellites/status.php
[02212009]
=====
RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number: 32953
Launch Date: May 23, 2008

Status: Operational

Curent Modes: Telemetry
              Audio
              Images

Downlinks: 435.315 MHz
           435.215 MHz

AMSAT-NA website:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=115&ret
URL=/satellites/status.php

Official website:
http://www.npopm.com/?cid=leoca&caid=43
[02122009]
=====
CanX-2
Catalog number: 32790
Launch Date: April 28, 2008
```

Status: Operational in range of ground station only

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[02212009]
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.425 MHz 1k2 baud packet

For the latest project status update please visit the AAUSAT-II web page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[02212009]
=====
CO-65 CUTE-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008

Status: Digipeater

Downlink: 437.475 MHz 9k6 Packet
Uplink: 1267.600 Mhz

Telemetry Beacon:
Downlink: 437.2750 MHz CW

For the latest project status update please visit the Cute-1.7+APD II web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78

Command Station blog website:
http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=112&retURL=/satellites/status.php
[02212009]
=====

Compass-1
Catalog number: 32787
Launch Date: April 28, 2008

Status: Operational

Current Mode: 4k8 MSK packet

Uplink: 145.980 MHz FM
Downlink: 437.275 Mhz CW
          437.405 MHz Packet

For the latest project status update please visit the Compass 1 web page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=114&retURL=/satellites/status.php
[04272009]
=====
CO-66 Seeds II
Catalog number: 32791
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.485 MHz

Callsign: JQ1YGU

For the latest project status update please visit the Seeds 2 web page: http://cubesat.aero.cst.nihon-u.ac.jp/english/seeds_2_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=113&retURL=/satellites/status.php
[02212009]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25

```
CW Beacon:    435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=94&retURL=
/satellites/status.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=72
[02122009]
=====
CP3
Catalog Number: 31129
Launch Date: April 17,2007

Status: Operational

Current Mode:  /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[02122009]
=====
GENESAT-1
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Current Mode: /u

Callsign: KE7EGC

Telemetry Beacon Downlink: 437.0695 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[09152009]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon:             437.2750 MHz CW

Callsign: JQ1YGW
```

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/xivpicte.htm
[02212009]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003

Status: ?????

Current Mode: /u

Beacon: 436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=96&retURL=/satellites/status.php

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[06082009]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Operational?

Uplink: 1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=56
[02122009]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Modes:
FM Repeater ONE

Uplink: 145.880 MHz FM
Downlink: 2401.200 Mhz FM
FM Repeater TWO
Uplink: OFF
Downlink: OFF
BBS
Uplink: OFF
Downlink: OFF
Telemetry
Downlink: 435.150MHz 9k6

Analog voice downlink: 435.300 MHz FM
                           435.150 MHz FM
                          2401.200 Mhz FM
Analog voice uplink: 145.860 MHZ FM
                           145.880 MHz USB
                           145.880 MHz FM
                           145.920 MHz FM
                          1268.700 MHz FM
Digital Downlinks: 435.150 MHz FM 38k4 PBP, 1 watt output
                           435.150 MHz FM 9k6 Pacsat Broadcast Protocol
                          2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Pacsat Broadcast Protocol
                          1268.700 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[04222010]
=====
QuakeSat
Catalog Number: 27845
Launch Date: June 30, 2003

Status: Telemetry only

Current Mode: 9600 baud data packet

Mode U packet
Downlink: 436.675 MHz 9k6 BPS

```
Quakesat webpage:
http://www.quakefinder.com/services/quakesat-ssite/
[04272009]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=69&retURL
=/satellites/status.php
[02212009]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Telemetry only

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink:        144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[03302009]
=====
RS-22 RADIO SPORT 22
Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only

Current Mode:  /u

CW Beacon - 435.352 MHz
            145.818 MHz
```

```
AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=76&retURL
=/satellites/status.php
[02212009]
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990

Status: CW Beacon only

Uplinks:          145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink:      437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[03162009]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984

Status: Non-operational.

Current Mode:  /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon:           435.025 MHz
Mode-S Beacon:      2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[12162009]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
```

Current Active Modes: FM Repeater - V/u
Voice - V/v
BBS - V/v
APRS - V/v
SSTV - V/v

Expedition 23 Crew:
Commander: Oleg Kotov
Flight Engineer: Soichi Noguchi KD5TVP
Flight Engineer: T.J. Creamer KC5WKI
Flight Engineer: Alexander Skvortsov
Flight Engineer: Tracy Caldwell Dyson KF5DBF
Flight Engineer: Mikhail Kornienko RN3BF

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time

line is NOT translated from Russian and posted.
[04222010]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-112.S3
WSR 112 Part 3 04/22/2010

AMSAT NEWS SERVICE BULLETIN 112.S3
FROM AMSAT HQ SILVER SPRING, MD, April 22, 2010
TO ALL RADIO AMATEURS
BID: $WSR-112.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

CP4
Catalog Number: 31122
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon: 437.325 MHz CW

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=79
[10022008]
=====
LIBERTAD-1
Catalog Number: 31128
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink: 145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[02122009]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: Non-Operational

Current Mode: V/v

```
Uplink/Downlink: 145.825 Mhz FM
Voice Recorder:  145.825 Mhz FM
[01012009]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency:  437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink:         437.250 MHz FM 67Hz CTCSS
Voice Downlink:      2401.835 MHz FM
Packet Up/Downlink:  437.250 MHz 9k6 packet
Packet Downlink      2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non-Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[08132007]
=====
CANX-1
Catalog Number: 27847
Launch Date: June 30, 2003

Status: Non-Operational

Downlink: 437.8800 MHz AFSK 1k2bps
[06052009]
=====
DTUSAT
```

Catalog Number: 27842
Launch Date: June 30, 2003

Status: Non-Operational

Current Mode: 2k4 AFSK Packet last reported

Downlink: 437.475MHz

Officail webpage: http://dtusat1.dtusat.dtu.dk/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=101&retURL=satellites/all_oscars.php
[02212009]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)

Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Telemetry only

Uplinks: 145.850 MHz
145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[03302009]
=====

```
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink:   145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS:                SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink:   145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
```

V-band: 145.840 - 145.990 MHz CW/LSB
U-band: 435.550 - 435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks

S2-band: 2401.225 - 2401.475 MHz CW/USB
K-band: 24048.010 - 24048.060 MHz CW/USB
Beacon: 2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)

BEACON	General Beacon(GB)	Middle Beacon(MB)	Engineering Beacon(EB)
2 m	none	145.898 MHz	none
70cm	435.438 MHz	435.588 MHz	435.838 MHz
13cm(1)	2400.188 MHz	2400.338 MHz	2400.588 MHz
13cm(2)	2401.173 MHz	2401.323 MHz	2401.573 MHz
3cm	10450.975 MHz	10451.125 MHz	10451.375 MHz
1.5cm	24047.885 MHz	24048.035 MHz	24048.285 MHz

[07162007]
=====
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT

Catalog Number: 25636
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Telemetry only

Current Modes:
Telemetry : /u

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems

Uplinks: 145.850 FM
145.890 FM
145.930 FM
1269.700 FM
1269.800 FM
1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://asri.technion.ac.il/techsat/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=14&retURL=/satellites/status.php
[12012009]

=====

TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink: 145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]

=====

MO-30 UNAMSAT-2
Catalog Number: 24305
Launch Date: September 5, 1996

Status: Non-operational

Downlink: 435.1380 MHz AFSK 1200 BPS
Downlink: 435.2060 MHz AFSK 1200 BPS
Uplink: 145.8150 MHz AFSK 1200 BPS
Uplink: 145.8350 MHz AFSK 1200 BPS
Uplink: 145.8550 MHz AFSK 1200 BPS
Uplink: 145.8750 MHz AFSK 1200 BPS
[06042009]

=====

PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Non-operational

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

```
Broadcast callsign: POSAT1-11
BBS callsign:       POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012009]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
AO-24 ARSENE
Catalog Number: 22654
Launch Date: May 13, 1993

Status: Non-operational

Uplink:    435.0625 MHz FM 1k2bps AFSK
           435.1125 MHz FM 1k2bps AFSK
           435.1375 MHz FM 1k2bps AFSK
```

```
Downlink:  145.9750 MHz FM 1k2bps AFSK
          2446.5025 MHz FM 1k2bps AFSK

Beacon:    2446.4700 MHz CW

Broadcast callsign:
BBS:
[12162009]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HL01-11
BBS: HL01-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25
```

Voice Transponder:
Uplink: 145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks: 145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink: 145.825 MHz FM 1200 Baud AFSK
Beacon: 2401.220 MHz
[05012006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: non-operational

Current Mode: V/u

Uplink: 145.900 MHz FM 1200-baud Manchester FSK (reserved)
                145.920 MHz FM VOICE
                145.940 MHz FM 1200-baud Manchester FSK (reserved)
                145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink: 437.026 MHz USB VOICE
                (1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

```
Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[07242009]
=====
UO-15 UoSAT-4
Catalog Number: 20438
Launch Date: January 22, 1990

Status: Non-operational

Uplink: ?
Downlink: 435.1250MHz (?)
          435.1200MHz (?)
[06042009]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon:   145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink  29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
Beacons:   29.450 MHz
          435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational
```

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink: 145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB

Beacon 1: 29.352 MHz (intermittent)
Beacon 2: 29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB

Beacon: 145.860 MHz

Robot: 145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-112.S4
WSR 112 Part 4 04/22/2010

AMSAT NEWS SERVICE BULLETIN 112.S4
FROM AMSAT HQ SILVER SPRING, MD, April 22, 2010
TO ALL RADIO AMATEURS
BID: $WSR-112.S4

THE FOLLOWING SATELLITES HAVE RE-ENTERED OR HAVE BEEN RETURNED SAFELY:

NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: July 28, 2008

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[01012009]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink: 145.825 Mhz FM APRS AX25
APRS Uplink: 145.825 MHz FM APRS AX25
Voice/PSK31 Uplink: 28.120 MHz

Packet to Voice ID: RAFT

[06112007]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Re-Entered
Re-entered: June 18, 2008

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon: 437.2750 MHz CW

Callsign: JR8YJT
[01012009]
=====
SO-43 Starshine 3
Catalog Number: 26929
Launch Date: September 30, 2001

Status: Re-Entered
Re-entered: January 21, 2003

Beacon: 145.825Mhz
[02212009]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)

* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at} amsat.org
NNNN
/EX

```
From 6132475085166739352
X-Google-Thread: 10e8ad,f27f49231c6e7bdd,start
X-Google-NewGroupId: yes
X-Google-Thread: 10b9c8,f27f49231c6e7bdd,start
X-Google-NewGroupId: yes
X-Google-Attributes: gid8f86f75953,gida4a23d5f63,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news1.google.com!npeer01.iad.highwinds-media.com!
news.highwinds-media.com!feed-me.highwinds-media.com!nx02.iad01.newshosting.com!
newshosting.com!198.186.194.249.MISMATCH!transit3.readnews.com!news-
out.readnews.com!news-xxxfer.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-115 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sat, 24 Apr 2010 21:14:23 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 309
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <001601cae414$a2158a80$e6409f80$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1272158063 5389 166.84.1.6 (25 Apr 2010 01:14:23 GMT)
```

X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 25 Apr 2010 01:14:23 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to   rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to   rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news2.google.com rec.radio.amateur.space:357 rec.radio.info:1477

AMSAT NEWS SERVICE
ANS-115

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

```
********************************************************************
* The AMSAT team is preparing for the 2010 Dayton Hamvention AMSAT *
*     Booth and activities. For the latest information go to:      *
*    http://www.amsat.org/amsat-new/hamvention/2010/Dayton.php     *
*                                                                  *
*   Please be advised that tickets for the AMSAT-TAPR banquet at   *
*             Dayton will not be sold at the booth.                *
*         All tickets must be purchased at the AMSAT store         *
*         http://www.amsat-na.com/store/item.php?id=100158         *
********************************************************************
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In this edition:

* Reminder: AMSAT Board of Directors Nominations Now Open
* The Dayton $5000 Challenge Extended to September 1
* CubeSat Workshop Videos Can Be Viewed On-line
* Swiss Amateur Radio Cubesat TIsat-1 Ready for Launch
* Operations Team Requests Feedback on VO-52's 5th Anniversary
* SA AMSAT Space Symposium Announces Cubesat Development
* Arecibo EME Wrap Up

SB SAT @ AMSAT $ANS-115.01
Reminder: AMSAT Board of Directors Nominations Now Open

AMSAT News Service Bulletin 115.01

>From AMSAT HQ SILVER SPRING, MD.
April 25, 2010
To All RADIO AMATEURS
BID: $ANS-115.01

It is time to submit nominations for the upcoming open seats on the AMSAT--NA Board of Directors. A nomination requires either one Member Society or five current individual members to nominate an AMSAT member for the position. Three director's terms expire this year: Tom Clark, K3IO, Lou McFadin, W5DID and Gould Smith, WA4SXM. Nominations must be in writing and mailed to: AMSAT, 850 Sligo Ave #600, Silver Spring MD 20910. They can arrive no later than June 15th

[ANS thanks Martha for the above information]

/EX

SB SAT @ AMSAT $ANS-115.02
The Dayton $5000 Challenge Extended to September 1

AMSAT News Service Bulletin 115.02
>From AMSAT HQ SILVER SPRING, MD.
April 25, 2010
To All RADIO AMATEURS
BID: $ANS-115.02

The Dayton Amateur Radio Association (DARA) will match one-for-one any donations made to AMSAT between now and September 1, 2010 up to a maximum of $5,000. Please support "Getting AMSAT Back into Space" and help us raise the funds needed for our next satellite project.

AMSAT's Project "Fox" is a cubesat that will provide a 2 meter-70 Centimeter FM transponder that will match the ground performance of AO-51. You can send your donation to: AMSAT, 850 Sligo Ave #600, Silver Spring MD 20910. If you prefer, you can call Martha at the AMSAT office (US call toll free at 888-322-6728 or 301-589-6062) and contribute with a credit card.

We will be accepting 'Getting AMSAT Back into Space' donations at various hamfests where AMSAT has a presence, including the Hamvention.

You can also make contributions online in the AMSAT Store:
http://www.amsat-na.com/store/donation.php

[ANS thanks Martha for the above information]

/EX

SB SAT @ AMSAT $ANS-115.03

CubeSat Workshop Videos Can Be Viewed On-line

AMSAT News Service Bulletin 115.03
>From AMSAT HQ SILVER SPRING, MD.
April 25, 2010
To All RADIO AMATEURS
BID: $ANS-115.03

This week's CubeSat Workshop at Cal Poly has posted many videos of the presentations. At press time videos from the first 2 days are available now: http://www.ustream.tv/channel/CubeSatWorkshop/v3

Among the many presentations available are:

+ NSF Comms Project Update - Bryan Klofas KF6ZEO - SRI International
+ Extending 1U Communications - Kevin Brown - AstroDev
+ Development Approaches for CubeSats - Ehson Mosleh & David Klumpar Montana State University
+ The Spectrum of Space Projects for Student Education - Robert Twiggs KE6QMD - Morehead State University
+ Implementation of Deployable Solar Panels on a 1U CubeSat - Abhishek Bajpayee - University of Louisiana

These videos can be seen at
http://www.ustream.tv/channel/CubeSatWorkshop/v3

Check the website for video of later presentations covering a D-STAR cubesat OUFTI-1, GENSO and Lunar Lander/Orbiter CubeSats which are expected to be added at the conclusion of the Cubesat Workshop.

[ANS thanks Bryan Klofas, KF6ZEO and SouthGate News for the above information]

/EX

SB SAT @ AMSAT $ANS-115.04
Swiss Amateur Radio Cubesat TIsat-1 Ready for Launch

AMSAT News Service Bulletin 115.04
>From AMSAT HQ SILVER SPRING, MD.
April 25, 2010
To All RADIO AMATEURS
BID: $ANS-115.04

The Swiss Amateur Radio CubeSat TIsat-1 built by students in Ticino is ready for launch from India later this spring. TIsat-1 is to be launched on the PSLV-C15 launcher from the Sriharikota Space Center (SHAR) in India. It will go into a 670 km sun synchronous orbit with an inclination of 98.5 degrees.

The radio communications system is based on the Alinco DJC-6 dual band hand held transceiver. Downlink power will be 400mW on 437.305

MHz. An uplink will be at 145.980 MHz. TIsat-1 will send its call sign HB9DE in CW and transmit AFSK telemetry from its on-board experiments.

Experiments are planned for:

- Monitoring of the durability of exposed thin bonding wires, PCB tracks and lines (Atomic Oxygen effects).
- Verification of the system fault tolerance scheme including algorithms for error detection and correction both for on-board memories and for communication.
- Acquisition of spacecraft environment and operating data.
- Redundancy in the key systems in order to resist space environment induced effects. The critical hardware functions were replicated and implemented with different technologies.
- Careful hardware and software design taking care of latchups and single-event upsets.
- Smart self-adaptive software management scheme based on techniques stemming from Artificial Intelligence.

[ANS thanks TIsat-1, SouthGate ARC News and the IARU Satellite Coordinator for the above information]

/EX

SB SAT @ AMSAT $ANS-115.05
Operations Team Requests Feedback on VO-52's 5th Anniversary

AMSAT News Service Bulletin 115.05
>From AMSAT HQ SILVER SPRING, MD.
April 25, 2010
To All RADIO AMATEURS
BID: $ANS-115.05

This week Mani, VU2WMY Secretary & Station-In-Charge of the Upagrah Amateur Radio Club VU2URC at the India ISRO Satellite Centre sent a request on behalf of the Hamsat VO-52 Operations Director.

To commemorate the milestone of Hamsat's VO-52 5 successful years in space on May 4 the India/ISRO team plans to publish a 'Comprehensive Performance & Utilization Report' of the VO-52 Transponder based on user feedback from around the world. Information specifically requested by ISTRAC for the report includes:

1. PERFORMANCE of the HAMSAT TRANSPONDER as _perceived by the users_
2. COMPARISON of the HAMSAT Transponder with her CONTEMPORARIES
3. Details of SATELLITES providing SIMILAR SERVICES
4. Approximate NUMBER OF USERS of HAMSAT in _India / over the globe_
5. GROWTH of HAMSAT USERS, since launch
6. Approximate HAMSAT TRANSPONDER UTILISATION (transponder interaction period) over the globe (transponder is ON always)
7. Any more INTERESTING INFORMATION on HAMSAT

Send your feedback to Mani, VU2WMY at wmy@isac.gov.in or vu2wmy_mani@yahoo.com.

[ANS thanks Mani, VU2WMY for the above information]

/EX

SB SAT @ AMSAT $ANS-115.06
SA AMSAT Space Symposium Announces Cubesat Development

AMSAT News Service Bulletin 115.06
>From AMSAT HQ SILVER SPRING, MD.
April 25, 2010
To All RADIO AMATEURS
BID: $ANS-115.06

SA AMSAT announced at their recent Space Symposium held at the University of KwaZulu-Natal that it would be building its own CubeSat.

The project will involve radio amateurs, students and learners. At this stage the project will start with inviting input from radio amateurs before the final payload is decided on, and project teams will then be set up. If you are interested in becoming involved, you are invited to send an email with your contact details and areas of expertise to saamsat@intekom.co.za.

The currently proposed payload will include a transponder with a 30 kHz bandwidth, a telemetry beacon and science projects.

[ANS thanks SA AMSAT for the above information]

/EX

SB SAT @ AMSAT $ANS-115.07
Arecibo EME Wrap Up

AMSAT News Service Bulletin 115.07
>From AMSAT HQ SILVER SPRING, MD.
April 25, 2010
To All RADIO AMATEURS
BID: $ANS-115.07

While not strictly amateur satellite related, another aspect of amateur radio in space includes EME operations. Many amateur satellite operators participated in the recent EME test from Arecibo and may be interested in this.

Joe Taylor K1JT wrote to the EME community on the memorable KP4AO amateur radio moon bounce operation from the Arecibo Observatory in Puerto Rico, "Many thanks to all stations we worked from KP4AO -- and our apologies to the many more who called without completing a QSO. The Arecibo telescope's short moon windows were frustrating for all, ourselves included."

Joe descibed the "wall" of stations calling as simply incredible. A rough estimate suggests that we may have worked something like 20% of the callers potentially workable on SSB, 10% of those workable on CW, and only a few percent of those workable on JT65. I guess we'll have todo it again, in due course.

The KP4AO log shows nearly 240 completed QSOs with some 57 DXCC entities, in a total of 8 operating hours. The team made recordings of the whole 432 MHz EME sub-band for for most of the time KP4AO was on the air. In due course it will be possible to "tune the band" carefully, many times, picking out callsigns.

Joe continued, "Here's a request for all ...

1. If you worked us with a setup significantly smaller than is normally required for EME, please send me a short note describing your antenna, receiver, and Tx power to joe@Princeton.EDU

2. If you copied us with a small setup, please send me details on your antenna and receiver.

I know we worked and were heard by some pretty small setups, and I'd like to document some of them for a write-up in QST."

Members of the Arecibo Observatory Amateur Radio Club who constructed and operated the KP4AO station for this event:
Angel, WP3R
Pedro, NP4A
Angel, WP4G
Jim, WA3FET
Joe, K1JT
Additional guest operator: Pat, AA6EG

The WSJT software for operating JT-65B by K1JT can be downloaded from http://www.physics.princeton.edu/pulsar/K1JT/

Many thanks, and see you on the moon!
73, Joe, K1JT

[ANS thanks Joe, K1JT for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office. And with that please keep in mind the lament of the fellow who didn't pass his exam, "I'll never take another ham radio code test," Tom said without remorse.

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM

From -3734313924764947430
X-Google-Thread: 8f86f75953,ca066c98331a5c47,start
X-Google-Attributes: gid8f86f75953,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news2.google.com!border1.nntp.dca.giganews.com!
border2.nntp.dca.giganews.com!nntp.giganews.com!news.glorb.com!news2.glorb.com!
newsfeed-3001.bay.webtv.net!newssorter-3001.bay.webtv.net!not-for-mail
From: Bojutsu1@webtv.net (David O'Daniel)
Newsgroups: rec.radio.amateur.space
Subject: Earth-like planets?
Date: Fri, 30 Apr 2010 02:04:06 -0500
Organization: WebTV Subscriber
Lines: 11
Message-ID: <14891-4BDA80E6-3874@storefull-3173.bay.webtv.net>
NNTP-Posting-Host: localhost.webtv.net
Mime-Version: 1.0 (WebTV)
Content-Type: Text/Plain; Charset=US-ASCII
Content-Transfer-Encoding: 7Bit
X-WebTV-Signature: 1
ETAsAhRfM1IHA/2xNSVIV7xJkfBlsHvtTwIUNhyUd9tCWWnZjeXVd5gSlVwyaA0=
Content-Disposition: Inline
Xref: g2news2.google.com rec.radio.amateur.space:358
X-Original-Bytes: 1141

If anyone is still active here, is there a listing of the so far
potential Earth-like or habitable range potential rocky planets with a
jupiter-like commet-catching further out planet?

I have foudn individual articles of possible planets around other stars
but no listing of them all in one list. Does anyone know of a website
with such a listing, maybe showing the light-year distances? Thanks.

Bo

From 7184782619396014106
X-Google-Thread: a4a23d5f63,8aa0b118132b73ad,start
X-Google-Attributes: gida4a23d5f63,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news2.google.com!newsfeed2.dallas1.level3.net!

news.level3.com!panix!panix2.panix.com!not-for-mail
From: rram@panix.com (rec.radio.amateur.moderated Admin)
Newsgroups:
rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.info
Subject: Crossposting Permitted to rec.radio.amateur.moderated
Supersedes: <radio/ham-radio/moderated/crossposting-1-1270101601@panix.com>
Followup-To: poster
Date: 1 May 2010 02:00:02 -0400
Organization: rec.radio.amateur.moderated Moderation Team
Lines: 47
Approved: RRI Admin <rec-radio-info-request@panix.com>
Distribution: world
Expires: 03 Jun 2010 02:00:01 -0000
Message-ID: <radio/ham-radio/moderated/crossposting-1-1272693601@panix.com>
Reply-To: rec-radio-amateur-moderated-request@panix.com
(rec.radio.amateur.moderated Admin)
NNTP-Posting-Host: panix2.panix.com
X-Trace: reader1.panix.com 1272693603 15285 166.84.1.2 (1 May 2010 06:00:03 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sat, 1 May 2010 06:00:03 +0000 (UTC)
Summary: Short reminder for unmoderated newsgroups that crossposting is permitted
Keywords: FAQ, ham, amateur, radio, moderated, unmoderated, crossposting,
permitted
Xref: g2news2.google.com rec.radio.amateur.antenna:17461 rec.radio.amateur.dx:653
rec.radio.amateur.equipment:2155 rec.radio.amateur.homebrew:3693
rec.radio.amateur.misc:5106 rec.radio.amateur.policy:29027
rec.radio.amateur.space:360 rec.radio.info:1488

Posted-By: auto-faq 3.3.2 beta (PGPMoose V2.0, Perl 5.005)
Archive-name: radio/ham-radio/moderated/crossposting
Revision: 1.1 2009/04/12 19:42:04
Posting-Frequency: posted monthly
URL: http://www.panix.com/~rram/usenet/rram/index.html

Changes followed by "|".

After a 30-day public discussion and feedback period to gauge reader opinions in March of 2009:

http://groups.google.com/group/rec.radio.amateur.moderated/browse_thread/thread/d7d337db35f23326

the rec.radio.amateur.moderated Moderation Team has decided to consider amending its charter, and permit limited simultaneous crossposting to rec.radio.amateur.moderated and one other unmoderated amateur-radio-related discussion newsgroup. We are currently trying this on a temporary basis (90 days, through early July 2009), and adopt it permanently if successful.

Approved rec.radio.amateur.* newsgroups are those that are currently listed in the latest version of the "List of Big Eight Newsgroups" which is crossposted monthly to news.announce.newgroups, news.groups, and news.lists.misc.

Approved alt.radio.amateur.* and alt.ham-radio.* newsgroups are those that have been created consistent with the suggestions in "So You Want to Create an Alt Newsgroup" at:

  http://www.faqs.org/faqs/alt-creation-guide/

Approved regional hierarchy newsgroups are those that contain either "radio.amateur" or "ham-radio" in their names, including uk.radio.amateur and aus.radio.amateur.misc.

We will make every reasonable effort to keep our list of approved newsgroups up-to-date. In case we have overlooked any, and a submission is rejected in error as a result, the rejected submitter can E-mail us at our administrative contact address (in the signature at the bottom of this article, and the default Reply-To for the rejection message) requesting that it be added, and that the article be approved. We may still choose to reject articles crossposted to any alt.* newsgroup with an inappropriate name, including obscene language, embedded name-calling, or encouragement of unlawful conduct.

Please direct any comments, questions, or criticisms to rec-radio-amateur-moderated-request@panix.com.

```
From 9219111534968669497
X-Google-Thread: a4a23d5f63,39d9ea406d056c0c,start
X-Google-Attributes: gida4a23d5f63,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news2.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx01.iad01.newshosting.com!newshosting.com!
198.186.194.249.MISMATCH!news-out.readnews.com!transit3.readnews.com!panix!
rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-120 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Sun, 2 May 2010 10:04:36 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 1854
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <001601caea00$5d752ba0$185f82e0$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1272809076 11553 166.84.1.6 (2 May 2010 14:04:36 GMT)
X-Complaints-To: abuse@panix.com
```

```
NNTP-Posting-Date: Sun, 2 May 2010 14:04:36 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to            rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
x-cr-hashedpuzzle: 5oc= AwlP BDgL BpuL CKUb DtjZ E2E1 E82a Fq7/ HHky H3EC J+ZW
KD7p KPcn KTOk
LGDk;1;cgBlAGMALQByAGEAZABpAG8ALQBpAG4AZgBvAEAAcABhAG4AaQB4AC4AYwBvAG0A;Sosha1_v1;
7;{FDDF55CD-
C3CD-4D41-9D88-02A033899CAE};awA5AGoAawBtAEAAYwBvAG0AYwBhAHMAdAAuAG4AZQB0AA==;Sun,
02 May 2010 14:04:17
GMT;VwBTAFIALQAxADIAMAAgAEEATQBTAEEAVAAgAFcAZQBlAGsAbAB5ACAAUwBhAHQAZQBsAGwAaQB0AG
UAIABSAGUAcABvAHIAdAA=
x-cr-puzzleid: {FDDF55CD-C3CD-4D41-9D88-02A033899CAE}
Xref: g2news2.google.com rec.radio.amateur.space:361 rec.radio.info:1492
```

This report is organized into four (4) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - deborbited/returned satellites

SB SAT @ AMSAT W8ISS $WSR-120.S1
WSR 120 Part 1 04/30/2010

AMSAT NEWS SERVICE BULLETIN 120.S1
FROM AMSAT HQ SILVER SPRING, MD, April 30, 2010
TO ALL RADIO AMATEURS
BID: $WSR-120.S1

HO-68 XW-1 (CAS-1)
Catalog Number:
Launch Date: December 15, 2009
Status: Commissioning

```
Callsign:
Broadcast:    BJ1SA-11
BBS:     BJ1SA-12

Uplinks:   145.8250 MHz FM, PL 67.0 Hz.
           145.9250 - 145.9750 MHz SSB/CW
           145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
           435.7650 - 435.7150 MHz SSB/CW
           435.6750 MHz AFSK 1200 BPS
```

Beacon: 435.7900 MHz CW

Mode and Antenna Polarization:
V: LHCP 2.0dBi max
U: RHCP 3.0dBi max

IARU coordination page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108

For more information about XW-1 (CAS-1):
http://www.camsat.cn
[04222010]
=====
SO-67 SumbandilaSat
Catalog Number: 35870
Launch Date: September 17, 2009

Status: Commissioning

Callsign: ZS0SUM

Uplink: 145.875MHz FM tone 233.6 Hz
Downlink: 435.345MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

For more information about SO-67:
http://www.amsatsa.org.za/
[11212009]
=====
DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008

Status: Operational
Current Mode: Science Mode - Beacon ONLY

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink: 435.530 to 435.570 MHz

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68
[02122009]
=====
VO-52 HAMSAT
Catalog number: 28650

Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.9360 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is active. Each transponder has a different beacon.
[03082010]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Modes:
FM Repeater ONE
Uplink: 145.920 MHz FM
Downlink: 435.300 MHz FM
FM Repeater TWO
Uplink: 1268.700 MHz FM
Downlink: 435.150 MHz FM
BBS
Uplink: OFF
Downlink: OFF
Telemetry
Downlink: 435.150MHz 9k6

Analog voice downlink: 435.300 MHz FM
                           435.150 MHz FM
                          2401.200 Mhz FM
Analog voice uplink: 145.860 MHZ FM
                           145.880 MHz USB
                           145.880 MHz FM

145.920 MHz FM
1268.700 MHz FM
Digital Downlinks: 435.150 MHz FM 38k4 PBP, 1 watt output
435.150 MHz FM 9k6 Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Pacsat Broadcast Protocol
1268.700 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[04302010]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz. The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10 minute timer.
[05282007]

```
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: sCHEDULED oPERATIONS
Current Mode: V/u (Mode JA)

Voice/CW (Mode JA)
Uplink:   145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon:   435.795 MHz

Digital Mode JD
Uplinks:  145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage:
http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's
CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/
fo29cwts.htm
[02132010]
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993

Status: Operational

Current Mode: V/u

Uplink:   145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
```

```
U: Linear

Official Webpage: http://www.ao27.org
[03232009]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational

Current Mode: Alternating between Mode A and B every 24 hours

Uplink:   145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink:  29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons:   29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
[02122009]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - V/u
                      Voice -       V/v
                      BBS -         V/v
                      APRS -        V/v
                      SSTV -        V/v


Expedition 23 Crew:
Commander:                Oleg Kotov
Flight Engineer:          Soichi Noguchi        KD5TVP
Flight Engineer:          T.J. Creamer          KC5WKI
Flight Engineer:          Alexander Skvortsov
Flight Engineer:          Tracy Caldwell Dyson  KF5DBF
Flight Engineer:          Mikhail Kornienko     RN3BF


Available Modes and Frequencies:
```

Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[04222010]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-120.S2
WSR 120 Part 2 04/30/2010

AMSAT NEWS SERVICE BULLETIN 120.S2
FROM AMSAT HQ SILVER SPRING, MD, April 30, 2010
TO ALL RADIO AMATEURS
BID: $WSR-120.S2

HO-68 XW-1 (CAS-1)
Catalog Number:

Launch Date: December 15, 2009
Status: Operational

Callsign:
Broadcast: BJ1SA-11
BBS: BJ1SA-12

Uplinks: 145.8250 MHz FM, PL 67.0 Hz.
           145.9250 - 145.9750 MHz SSB/CW
           145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
           435.7650 - 435.7150 MHz SSB/CW
           435.6750 MHz AFSK 1200 BPS

Beacon: 435.7900 MHz CW

IARU coordination page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108

For more information about XW-1 (CAS-1):
http://www.camsat.cn
[04222010]
=====
SwissCube
Catalog Number: 35932
Launch Date: September 23, 2009

Status: Operational

Callsign: HB9EG

Beacon(100mw): 437.5050MHz CW
Beacon(1w):   437.5050MHz FSK 1k2bps
[04222010]
=====
UWE-2
Catalog Number: 35934
Launch Date: September 23, 2009

Status: In Orbit

Beacon(500mw): 437.3850 MHz AFSK 1k2bps
               437.3850 MHz FSK 9k6bps
[1112009]
=====
ITUpsAT1
Catalog Number: 35935
Launch Date: September 23, 2009

Status: Operational

Beacon(100mw): 437.325MHz CW
Beacon(1w): 437.325MHz 19k2bps

```
[11112009]
=====
BEESAT
Catalog Number: 35933
Launch Date: September 23, 2009

Status: Operational

Callsign: DP0BEE

Beacon(100mw): 436.000MHz CW
Beacon(500mw): 436.000MHz GMSK 4k8bps
Beacon(500mw): 436.000MHz GMSK 9k6bps
[04222010]
=====
Pollux
Catalog Number:
Launch Date: July 31, 2009

Status: Operational

Callsign: POLLUX-1

Downlink: 145.825MHz 1k2 AX.25
[10042009]
=====
Castor (ANDE-2)
Catalog Number:
Launch Date: July 31, 2009

Status: Operational

Callsign: KD4HBO-1

Downlink: 145.825 MHz 1k2 AX.25
[10042009]
=====
BEVO-1 (DRAGONSAT-1)
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Operational

Downlink: 437.325 MHz 9k6 GMSK
          437.325 MHz CW 20wpm
[07312009]
=====
AggieSat2 (DRAGONSAT-2)
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Operational
```

Downlink: 436.250 MHz 9k6 FHSS
[11112009]
=====
CP-6
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Commissioning

Downlink: 437.365 MHz 1k2 AFSK
[06052009]
=====
HAWKSAT 1
Catalog number: 35003
Launch Date: May 19, 2009

Status: ?

Downlink: 437.345 ?
[06052009]
=====
Pharmasat
Catalog Number: 35002
Launch Date: May 19, 2009
Status: Commissioning

Downlink: 437.465 MHz 1k2 AFSK
[06052009]
=====
ANUSAT
Catalog Number: 34808
Launch Date: April 20, 2009

Status: ?

Downlink: 435.000 MHz
Uplink: 145.800 MHz

Telemetry: 137.400 MHz
[05112009]
=====
SOHLA-1 (ASTRO TECH.)
Catalog Number: 33496
Launch Date: January 23, 2009

Status: Commisioning

Proposed Frequencies and Modes:
Downlink: 437.505 MHz AFSK/CW
Beacon: 437.505 MHz AFSK/CW

Callsign:

```
IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=101
[03232009]
=====
KAGAYAKI (Solan Co.)
Catalog Number: 33495?
Launch Date: January 23, 2009

Status: In Orbit

Downlink: 437.375 MHZ    FSK9k6/CW
Beacon:   437.375 MHz    FSK9k6/CW

IARU coordination status page:

AMSAT-NA webpage:

[01152009]
=====
STARS (Kagawa Univ.) (Twin Satellites)
Catalog Number: 33498
Launch Date: January 23, 2009

Status: Operational ?

Downlinks: 437.485 MHz FM/CW
           437.465 MHz FM/CW
Beacons:   437.305 MHz FM/CW
           437.275 MHz FM/CW

Callsigns: JR5YBN
           JR5YBO

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=99

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=121&retURL
=/satellites/status.php
[022152009]
=====
KKS-1 (Tokyo MCIT)
Catalog Number: 33499
Launch Date: January 23, 2009

Status: Operational

Downlink:  437.455 MHz AFSK/CW
Beacon:    437.385 MHz AFSK/CW

Callsign: JQ1YYY

IARU coordination status page:
```

```
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=107

AMSAT-NA webapge:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=120&retURL
=/satellites/status.php
[02212009]
=====
PRISM (Tokyo Univ.)
Catalog Number: 33493
Launch Date: January 23, 2009

Status: Operational ?

Downlink: 437.425 MHz AFSK/GMSK/CW
Beacon:   437.250 MHz AFSK/GMSK/CW

Callsign: JQ1YCX

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=97

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=119&retURL
=/satellites/status.php
[02212009]
=====
RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number: 32953
Launch Date: May 23, 2008

Status: Operational

Curent Modes: Telemetry
              Audio
              Images

Downlinks: 435.315 MHz
           435.215 MHz

AMSAT-NA website:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=115&ret
URL=/satellites/status.php

Official website:
http://www.npopm.com/?cid=leoca&caid=43
[02122009]
=====
CanX-2
Catalog number: 32790
Launch Date: April 28, 2008

Status: Operational in range of ground station only
```

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[02212009]
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.425 MHz 1k2 baud packet

For the latest project status update please visit the AAUSAT-II web page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[02212009]
=====
CO-65 CUTE-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008

Status: Digipeater

Downlink: 437.475 MHz 9k6 Packet
Uplink: 1267.600 Mhz

Telemetry Beacon:
Downlink: 437.2750 MHz CW

For the latest project status update please visit the Cute-1.7+APD II web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78

Command Station blog website:
http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=112&retURL=/satellites/status.php
[02212009]
=====
Compass-1
Catalog number: 32787

```
Launch Date: April 28, 2008

Status: Operational

Current Mode: 4k8 MSK packet

Uplink:   145.980 MHz FM
Downlink: 437.275 Mhz CW
          437.405 MHz Packet

For the latest project status update please visit the Compass 1 web
page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=114&retURL
=/satellites/status.php
[04272009]
=====
CO-66 Seeds II
Catalog number: 32791
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.485 MHz

Callsign: JQ1YGU

For the latest project status update please visit the Seeds 2 web
page: http://cubesat.aero.cst.nihon-u.ac.jp/english/seeds_2_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=113&retURL
=/satellites/status.php
[02212009]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode:  /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon:    435.245 MHz CW
```

Callsign: K5USL

TLM and CW interchange every 30 seconds.

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=94&retURL=/satellites/status.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=72
[02122009]
=====
CP3
Catalog Number: 31129
Launch Date: April 17,2007

Status: Operational

Current Mode: /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[02122009]
=====
GENESAT-1
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Current Mode: /u

Callsign: KE7EGC

Telemetry Beacon Downlink: 437.0695 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[09152009]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon: 437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/xivpicte.htm
[02212009]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003

Status: ?????

Current Mode: /u

Beacon: 436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=96&retURL
=/satellites/status.php

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[06082009]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Operational?

Uplink: 1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=56
[02122009]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Modes:
FM Repeater ONE
Uplink: 145.920 MHz FM
Downlink: 435.300 MHz FM

```
FM Repeater TWO
Uplink:   1268.700 MHz FM
Downlink:  435.150 MHz FM
BBS
Uplink:    OFF
Downlink:  OFF
Telemetry
Downlink:  435.150MHz 9k6

Analog voice downlink:     435.300 MHz FM
                           435.150 MHz FM
                          2401.200 Mhz FM
Analog voice uplink:       145.860 MHZ FM
                           145.880 MHz USB
                           145.880 MHz FM
                           145.920 MHz FM
                          1268.700 MHz FM
Digital Downlinks:         435.150 MHz FM 38k4 PBP, 1 watt output
                           435.150 MHz FM 9k6 Pacsat Broadcast Protocol
                          2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:            145.860 MHz FM 9k6 Pacsat Broadcast Protocol
                          1268.700 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon:                    435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[04222010]
=====
QuakeSat
Catalog Number: 27845
Launch Date: June 30, 2003

Status: Telemetry only

Current Mode: 9600 baud data packet

Mode U packet
Downlink: 436.675 MHz 9k6 BPS

Quakesat webpage:
```

```
http://www.quakefinder.com/services/quakesat-ssite/
[04272009]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=69&retURL
=/satellites/status.php
[02212009]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Telemetry only

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink:        144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[03302009]
=====
RS-22 RADIO SPORT 22
Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only

Current Mode:  /u

CW Beacon - 435.352 MHz
            145.818 MHz

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=76&retURL
```

```
=/satellites/status.php
[02212009]
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990

Status: CW Beacon only

Uplinks:          145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink:      437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[03162009]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984

Status: Non-operational.

Current Mode:  /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon:          435.025 MHz
Mode-S Beacon:     2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[12162009]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - V/u
                      Voice -       V/v
```

BBS - V/v
APRS - V/v
SSTV - V/v

Expedition 23 Crew:
Commander: Oleg Kotov
Flight Engineer: Soichi Noguchi KD5TVP
Flight Engineer: T.J. Creamer KC5WKI
Flight Engineer: Alexander Skvortsov
Flight Engineer: Tracy Caldwell Dyson KF5DBF
Flight Engineer: Mikhail Kornienko RN3BF

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time line is NOT translated from Russian and posted.
[04222010]

NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-120.S3
WSR 120 Part 3 04/30/2010

AMSAT NEWS SERVICE BULLETIN 120.S3
FROM AMSAT HQ SILVER SPRING, MD, April 30, 2010
TO ALL RADIO AMATEURS
BID: $WSR-120.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

CP4
Catalog Number: 31122
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: /u

```
TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon:    437.325 MHz CW
```

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=79
[10022008]
=====
LIBERTAD-1
Catalog Number: 31128
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

```
Uplink:   145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS
```

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[02122009]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: Non-Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM

Voice Recorder: 145.825 Mhz FM
[01012009]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 MHz FM 67Hz CTCSS
Voice Downlink: 2401.835 MHz FM
Packet Up/Downlink: 437.250 MHz 9k6 packet
Packet Downlink   2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non-Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[08132007]
=====
CANX-1
Catalog Number: 27847
Launch Date: June 30, 2003

Status: Non-Operational

Downlink: 437.8800 MHz AFSK 1k2bps
[06052009]
=====
DTUSAT
Catalog Number: 27842
Launch Date: June 30, 2003

```
Status: Non-Operational

Current Mode: 2k4 AFSK Packet last reported

Downlink: 437.475MHz

Officail webpage: http://dtusat1.dtusat.dtu.dk/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=101&retURL
=satellites/all_oscars.php
[02212009]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink:   435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)

Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Telemetry only

Uplinks:   145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink:  437.325 MHz

Broadcast callsign: MYSAT3-11
BBS:                MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial land and weather imaging payloads offers FM and FSK
Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as
a collaborative effort between the Malaysian government and Surrey
Satellite Technology Ltd.
[03302009]
=====
NO-45 SAPPHIRE
Catalog number: 26932
```

```
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink:   145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS:                SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink:   145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
V-band:   145.840 -  145.990 MHz CW/LSB
```

```
U-band:   435.550 -  435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks
---------
S2-band:  2401.225 -  2401.475 MHz CW/USB
K-band:  24048.010 - 24048.060 MHz CW/USB
Beacon:   2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)
----------------------------
```

BEACON	General Beacon(GB)	Middle Beacon(MB)	Engineering Beacon(EB)
2 m	none	145.898 MHz	none
70cm	435.438 MHz	435.588 MHz	435.838 MHz
13cm(1)	2400.188 MHz	2400.338 MHz	2400.588 MHz
13cm(2)	2401.173 MHz	2401.323 MHz	2401.573 MHz
3cm	10450.975 MHz	10451.125 MHz	10451.375 MHz
1.5cm	24047.885 MHz	24048.035 MHz	24048.285 MHz

```
[07162007]
=====
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink:    145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: 25636
Launch date:February 23, 1999
```

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Telemetry only

Current Modes:
Telemetry : /u

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks: 145.850 FM
          145.890 FM

145.930 FM
1269.700 FM
1269.800 FM
1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://asri.technion.ac.il/techsat/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=14&retURL
=/satellites/status.php
[12012009]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink: 145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
MO-30 UNAMSAT-2
Catalog Number: 24305
Launch Date: September 5, 1996

Status: Non-operational

Downlink: 435.1380 MHz AFSK 1200 BPS
Downlink: 435.2060 MHz AFSK 1200 BPS
Uplink: 145.8150 MHz AFSK 1200 BPS
Uplink: 145.8350 MHz AFSK 1200 BPS
Uplink: 145.8550 MHz AFSK 1200 BPS
Uplink: 145.8750 MHz AFSK 1200 BPS
[06042009]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Non-operational

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11

```
BBS callsign:       POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012009]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
AO-24 ARSENE
Catalog Number: 22654
Launch Date: May 13, 1993

Status: Non-operational

Uplink:    435.0625 MHz FM 1k2bps AFSK
           435.1125 MHz FM 1k2bps AFSK
           435.1375 MHz FM 1k2bps AFSK
Downlink:  145.9750 MHz FM 1k2bps AFSK
          2446.5025 MHz FM 1k2bps AFSK
```

Beacon: 2446.4700 MHz CW

Broadcast callsign:
BBS:
[12162009]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HL01-11
BBS: HL01-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink: 145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink: 435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons: 435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:

```
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
[05012006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: non-operational

Current Mode:  V/u

Uplink:         145.900 MHz FM 1200-baud Manchester FSK (reserved)
                145.920 MHz FM VOICE
                145.940 MHz FM 1200-baud Manchester FSK (reserved)
                145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink:       437.026 MHz USB VOICE
                (1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
```

```
   PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[07242009]
=====
UO-15 UoSAT-4
Catalog Number: 20438
Launch Date: January 22, 1990

Status: Non-operational

Uplink: ?
Downlink: 435.1250MHz (?)
          435.1200MHz (?)
[06042009]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
```

```
Launch Date: June 16, 1983

Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon:   145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink  29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
Beacons:   29.450 MHz
          435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
```

```
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon 1:  29.352 MHz (intermittent)
Beacon 2:  29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink:     21.260 to 21.300 MHz CW/USB
Downlink:  145.860 to 145.900 MHz CW/USB

Beacon:    145.860 MHz

Robot:     145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink:   21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon:   29.408 MHz
```

```
Robot:    29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-120.S4
WSR 120 Part 4 04/30/2010

AMSAT NEWS SERVICE BULLETIN 120.S4
FROM AMSAT HQ SILVER SPRING, MD, April 30, 2010
TO ALL RADIO AMATEURS
BID: $WSR-120.S4

THE FOLLOWING SATELLITES HAVE RE-ENTERED OR HAVE BEEN RETURNED SAFELY:

NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: July 28, 2008

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[01012009]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink:      145.825 Mhz FM APRS AX25
APRS Uplink:        145.825 MHz FM APRS AX25
Voice/PSK31 Uplink:  28.120 MHz

Packet to Voice ID: RAFT
[06112007]
=====
```

HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Re-Entered
Re-entered: June 18, 2008

```
Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon:             437.2750 MHz CW
```

Callsign: JR8YJT
[01012009]
=====
SO-43 Starshine 3
Catalog Number: 26929
Launch Date: September 30, 2001

Status: Re-Entered
Re-entered: January 21, 2003

Beacon: 145.825Mhz
[02212009]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

```
Voice: 301-589-6062
       888-322-6728
FAX:   301-608-3410
```

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at}
amsat.org
NNNN
/EX

```
From -2586984262950540437
X-Google-Thread: a4a23d5f63,2508704f5bd64457,start
X-Google-Attributes: gida4a23d5f63,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news2.google.com!newsfeed2.dallas1.level3.net!
news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-122 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sun, 2 May 2010 11:55:28 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 392
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <006301caea0f$ddc6c200$99544600$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1272815728 3825 166.84.1.6 (2 May 2010 15:55:28 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 2 May 2010 15:55:28 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
```

X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news2.google.com rec.radio.amateur.space:362 rec.radio.info:1493

AMSAT NEWS SERVICE
ANS-122

ANS is a free, weekly, news and information service of AMSAT North America, The
Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

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********************************************************************
* The AMSAT team is preparing for the 2010 Dayton Hamvention AMSAT *
*     Booth and activities. For the latest information go to:      *
*    http://www.amsat.org/amsat-new/hamvention/2010/Dayton.php     *
*                                                                  *
*   Please be advised that tickets for the AMSAT-TAPR banquet at   *
*             Dayton will not be sold at the booth.                *
*All tickets must be purchased at the AMSAT store by Monday, 10 May*
*         http://www.amsat-na.com/store/item.php?id=100158         *
********************************************************************
```

In this edition:
* Successful ARISS Contact With European School in European Parliament
* H-IIA Rocket to Launch Four Cubesats
* Nanosatellite Launch Service 6 on PSLV-C15
* Satellite Shorts From All Over
* ARISS Status - 26 April 2010

SB SAT @ AMSAT $ANS-122.01
Successful ARISS Contact With European School in European Parliament

AMSAT News Service Bulletin 122.01
  From AMSAT HQ SILVER SPRING, MD.
May 2, 2010
To All RADIO AMATEURS
BID: $ANS-122.01

On Tuesday, April 27 students of the European School II, Brussels enjoyed a successful Amateur Radio on the International Space Station (ARISS) contact with Astronaut Tim Creamer, KC5WKI operating the Amateur Radio station NA1SS aboard the International Space Station. The ISS was over South America during the contact with Adrian Sinclair's ARISS Telebridge station LU1CGB in Buenos Aires providing a solid earth station link. Twelve students selected from the school completed the contact.

ARISS Chairman Gaston Bertels, ON4WF hosted the event at the European Parliament in Brussels as a feature of a cultural exhibition set up in collaboration with the International Amateur Radio Union, the European Space Agency and sponsored by MEP Birgit, Sippel, Germany. The IARU Exhibition's name is "European Amateur Radio Benefiting Society" with the theme of Emergency, Education and Space.

Because of the high profile of the location of the event at the European Parliament Building in Brussels there was considerable opportunity to raise awareness through media coverage, especially with Brussels European School's 'model' schooling for Europe.

This chance to participate in an ARISS project was actively embraced by the Science faculty and it is here where the opportunities for curricular integration are gaining momentum. In the 1st Year Secondary (typically aged 11) students study forces, gravity, weight and basic ideas about 'fields'. In the 2nd Year, studies of the Solar System, and well beyond, link directly to the Shuttle missions and the International Space Station. In Year 7 (the final Baccalaureate year, when most students are aged 18) the Physics section on 'Gravitational Fields' is mainly about the mechanics of planetary and satellite motion. Topics (and questions) are often presented within the context of NASA and ESA missions.

Reporting from Brussels, Gaston wrote, "In the European School, located in a residential area of Brussels, a similar setup was provided and many students listened in to the event live. Later in the same afternoon, ISS crew members came to visit the exhibition. ISS Commander Frank De Winne, ON1DWN, Robert Thirsk, VA3CSA and Roman Romanenko, each one representing a different Space Agency participated in a live question and answer session with a group of students from the European School and from another school."

ARISS is an international educational outreach program partnering the participating space agencies, NASA, Russian Space Agency, ESA, CNES, JAXA, and CSA, with the AMSAT and IARU organizations from participating countries.

ARISS offers an opportunity for students to experience the excitement of Amateur Radio by talking directly with crew members onboard the International Space Station. Teachers, parents and communities see, first hand, how Amateur Radio and crew members on ISS can energize youngsters' interest in science, technology and learning.

Further information on the ARISS program is available on the website http://www.ariss.org/ (graciously hosted by the Radio Amateurs of

Canada).

[ANS thanks ARISS Chairman Gaston Bertels, ON4WF; David Jordan, AA4KN;
and ARISS for the above information]

/EX

SB SAT @ AMSAT $ANS-122.02
H-IIA Rocket to Launch Four Cubesats

AMSAT News Service Bulletin 122.02
From AMSAT HQ SILVER SPRING, MD.
May 2, 2010
To All RADIO AMATEURS
BID: $ANS-122.02

Four CubeSats in Japan are planning to launch on 17 May 2010 together with PLANET-C which belongs to JAXA by H-IIA rocket.

Launch date, 17 May 2010
Launch time, 21:44:14UTC
Launch site, Tanegashima Space Center in Japan

http://www.jaxa.jp/press/2010/03/20100303_h2af17_e.html
http://www.jaxa.jp/index_e.html

Three of the CubeSats, Negai*", WASEDA-SAT2, KSAT, being launched by the H-IIA rocket on May 17 will be dropped off into a low earth orbit but UNITEC-1 will continue following the JAXA's Venus Climate Orbiter PLANET-C / AKATSUKI on its journey to Venus.

UNITEC-1, NPO UNISEC (University Space Engineering Consortium)
5.840GHz, travel into deep space towards Venus
http://www.unisec.jp/unitec-1/en/top.html

Negai*", Soka University
437.305MHz CW, Packet 1200bps FSK AX.25
http://kuro.t.soka.ac.jp/main.html

WASEDA-SAT2, Waseda University
437.485MHz CW(FM), PCM-FSK(FM) 9600bps
http://www.miyashita.mmech.waseda.ac.jp/Waseda-Sat2/index.htm

KSAT, Kagoshima University
Uplink: S-band(2GHz, 10kbps), Downlink: Ku-band(13.275GHz, 10kbps/1Mbps)
http://www.sci.kagoshima-u.ac.jp/~nishio/download/Ukaren2008Nishio.pdf

[ANS thanks Mineo, JE9PEL, for the above information]

/EX

SB SAT @ AMSAT $ANS-122.03
Nanosatellite Launch Service 6 on PSLV-C15

AMSAT News Service Bulletin 122.03
From AMSAT HQ SILVER SPRING, MD.
May 2, 2010
To All RADIO AMATEURS
BID: $ANS-122.03

The Space Flight Laboratory (SFL) at the University of Toronto Institute for Aerospace Studies (UTIAS) would like to announce the delivery of Nanosatellite Launch Service 6 (NLS-6) cluster payload to Satish Dhawan Space Centre in Sriharikota (SDSC-SHAR), Andhra Pradesh, India, for launch on board PSLV-C15. PSLV-C15 will be launching from the First Launch Pad at SDSC-SHAR into 637 km sun-synchronous orbit with 10:30 Local-Time of Descending Node. NLS-6 shares this launch with Cartosat-2B primary, Alsat-2A co-primary, and STUDSAT auxiliary payload.

NLS-6 is the 6th launch by SFL. The NLS-6 cluster comprises of two nanosatellite: AISSat-1 and TIsat-1.

NLS-6 launch updates are being posted to
http://www.utias-sfl.net/NLS-6/

About AISSat-1

AISSat-1 is built by SFL for the Norwegian Defence Research Establishment (FFI). It is intended to demonstrate a new maritime AIS receiver that has been developed by FFI. The AIS receiver will be used to monitor ship traffic in Norwegian waters. The design of AISSat-1 is based on SFL Generic Nanosatellite Bus (GNB).

The spacecraft has a main structure measuring 20 cm by 20 cm by 20 cm and it is stabilized in three-axes using reaction wheels. It has a fixed 46 cm long VHF payload monopole antenna for the AIS receiver and four UHF uplink monopole antennas for the command receiver. The downlink in the S-Band. AISSat-1 has an overall dimension of 80 cm by 45 cm by 37 cm and an overall mass of 6.5 kg. AISSat-1 will be secured to the launch vehicle using the XPOD GNB separation system.

AISSat-1 is not an amateur satellite and, as such, has coordinated appropriate frequencies. Its ground segment is located at Svalbard and its control centre is at FFI, near Oslo, Norway.

More information on the spacecraft can be found at
http://www.utias-sfl.net/nanosatellites/AISSat-1/
and
http://www.spacecentre.no/?module=Articles;action=Article.publicShow;ID=51389

About TIsat-1

TIsat-1 is a 1 kg CubeSat of 10 cm by 10 cm by 10 cm and is built by students and staff at University of Applied Sciences of Southern Switzerland (SUPSI). The primary mission objective is to involve students in systems engineering, development and test with a very challenging project and to provide students and staff at SUPSI with space mission knowledge. TIsat-1 will monitor the durability of material probes exposed to space environment, will test a micro electromechanical device and will validate the redundant, fault tolerant hardware and firmware design of the bus.

Two monopole antennas (VHF and UHF) will be deployed after separation. Housekeeping and payload data will be communicated to the ground as orbital data profiles. TIsat-1 will be secured to the launch vehicle using the XPOD Single separation system.

TIsat-1 communicates over amateur radio frequencies, as coordinated through the IARU, and they have been working with radio amateurs in Switzerland during the spacecraft's development. They have a Morse Code and data beacons. More information can be found at
http://www.spacelab.dti.supsi.ch/tiSat1.html

Future Launches by SFL

SFL has signed its 7th launch contract with ANTRIX for NLS-7 in late 2010/early 2011. NLS-7 will launch the twin-satellite CanX-4 and CanX-5 formation flying mission.

SFL will be signing its 8th launch contract for NLS-8 momentarily, for the launch of two astronomy nanosatellites: BRITE-Austria (CanX-3A) and UniBRITE (CanX-3B). NLS-8 will also launch one partner spacecraft.

In addition, SFL is under discussion for NLS-9, NLS-10, and NLS-11 launches in 2011/2012 time frame, and would like to extend an invitation to spacecraft developers world-wide to join our launches.

For further information, please contact:
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UTIAS Space Flight Laboratory
4925 Dufferin Street, Toronto, Ontario, CANADA M3H 5T6
+1-416-667-7890 Voice
+1-416-667-7799 Fax
freddyp@utias-sfl.net
http://www.utias-sfl.net/

[ANS thanks Daniel, VA3KKZ, for the above information]

/EX

SB SAT @ AMSAT $ANS-122.04
Satellite Shorts From All Over

AMSAT News Service Bulletin 122.04
From AMSAT HQ SILVER SPRING, MD.
May 2, 2010
To All RADIO AMATEURS
BID: $ANS-122.04

- Hiroyuki, JG7PSJ will be QRV as JD1BMH from Chichijima, IOTA AS-031, from May 2 to 14. Activity is on 40 to 6 meters, and possibly 80 meters, using CW, SSB and digital modes. QSL to home call. In addition, Makoto, JI5RPT will be QRV as JD1BLY, also from Chichijima, from May 2 to 7. Activity will be on 40 to 6 meters using CW, SSB, digital modes and Satellites. QSL to home call. (via ARRL ARLD017 DX news)

- Congratulations to Loren, K7CWQ, who just received his VUCC award - using a FT-60R and Arrow Sat antenna as his station. Well done, sir!

- Also congratulations to KD0EM, Harold in EL98 Florida. On April 22 he worked W4AS for his first satellit contact via AO-27 FM.

- Martha reminds us from AMSAT HQ that tickets for the AMSAT-TAPR banquet at Dayton will not be sold at the booth. All tickets must be purchased at the AMSAT store by Monday, 10 May:
  http://www.amsat-na.com/store/item.php?id=100158
  Dr. Robert McGwier, N4HY, will be the Banquet speaker

- Gavin, M1BXF reports the Camb-hams, the social side of the Cambridge Repeater Group (ex Pye telecoms group) will be active on FM and SSB satellites as GS3PYE/P from grid IO67nt on the Island of Harris Scotland between May 1st and May 15th. More information can found on their DXpedition webpage:
  http://dx.camb-hams.com/dx-peditions/harris-dxpedition-10/

- A video has been released that explains the design philosophy of the core power control unit of New Zealand's first Amateur Radio satellite KiwiSAT. In the video Hans Holtz ZL1HB and Andrew Cammell ZL1AVC explains the design and operation of the KiwiSAT central power control system know as the Battery Control Regulator or BCR. Watch at:
  http://tinyurl.com/28ocp8h

- The Radio Club Ushuaia LU8XW is planning an expedition to the City of Tolhuin, commemorating the 25th anniversary of the radio club. LU8XW will be active in SSB, CW, PSK, RTTY and Satellites, from 01:00 UTC May 22 until 03:00 UTC May 24. QSLs via WD9EWK and LoTW (IOTA SA 008) - (W.A.P. - W.A.C.A Ref ARG-23) All contacts on this expedition are all contacts are valid for Radio Club Ushuaia

Permanent Diploma. Please sen dany questions or comments to
lu8xw@lu8xw.com.ar Please visit our web www.lu8xw.com.ar Thanks!
Pablo LU6XV SOURCE: 73 de Augusto HB9TZA / I2JJR - SRT

[ANS thanks everyone for the above information]

/EX

SB SAT @ AMSAT $ANS-122.05
ARISS Status - 26 April 2010

AMSAT News Service Bulletin 122.05
From AMSAT HQ SILVER SPRING, MD.
May 2, 2010
To All RADIO AMATEURS
BID: $ANS-122.05

1. Upcoming School Contacts

An Amateur Radio on the International Space Station (ARISS) contact has been scheduled for Nippon Boy Scout Amateur Radio Club in Mitaka-shi, Japan on Tuesday, May 4 at 15:09 UTC. The Japan Boy Scouts have an amateur radio club,
JA1YSS and study amateur radio station operations. The boys look forward to speaking with JAXA astronaut Soichi Noguchi, a former Boy Scout.

The Smithsonian Institution National Air and Space Museum (NASM) in Washington,
D.C. has been scheduled for an Amateur Radio on the International Space Station
(ARISS) contact on Family Day, Saturday, May 8 at 17:01 UTC via VK4KHZ in Australia. The Education Division of NASM is recruiting the young people who will participate in the contact. Generally, Boy Scouts and other groups are involved with this activity. The Museum draws approximately 30,000 on this Saturday in May.

2. Caldwell-Dyson Speaks with Houston School via ARISS

On Monday, April 19, Expedition 23 astronaut Tracy Caldwell-Dyson, KF5DBF participated in an Amateur Radio on the International Space Station (ARISS) contact with students from Jessup Elementary School in Houston, Texas. The connection was made through telebridge station WH6PN in Hawaii. Prior to the contact, ARISS was incorporated into science, math, and language arts classes
and children prepared 20 questions for the astronaut. Caldwell-Dyson answered
them all as a crowd, filling the school's gymnasium, listened in. Several newspapers also attended and covered the event.

3. ARISS International Team Meeting Held

The monthly ARISS International Team teleconference was held on Tuesday, April
20. Topics of discussion included an update on the radio equipment for the Columbus Module and an ARISSat-1 status. Minutes have been posted. See:
https://www.rac.ca/ariss/arisstel2010-04-20.htm

4. Astronaut Training Status

On Monday, April 19, astronauts Kevin Ford and Shane Kimbrough received an overview of the Amateur Radio on the International Space Station (ARISS) program, followed by a Basic Ops session with Kimbrough. Both astronauts are scheduled to fly on future ISS expeditions.

[ANS thanks Carol, KB3LKI, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's
Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are
available from the AMSAT Office.

73,
This week's ANS Editor,
Lee McLamb, KU4OS

```
From 240766668286299818
X-Google-Thread: a4a23d5f63,41e2e72ceb40668b,start
X-Google-Attributes: gida4a23d5f63,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news2.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx01.iad01.newshosting.com!newshosting.com!
198.186.194.249.MISMATCH!transit3.readnews.com!news-out.readnews.com!news-
xxxfer.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-127 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Fri, 7 May 2010 09:46:05 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 1854
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <001101caedeb$9c48bab0$d4da3010$@net>
Reply-To: ans-editor@amsat.org
```

NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1273239966 28657 166.84.1.6 (7 May 2010 13:46:06 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Fri, 7 May 2010 13:46:06 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to   rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to   rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
x-cr-hashedpuzzle: B+Ie DXuV DZLh DatR EVor EvrU FMXu Fj8v HMYG IcB9 KSJl KVwG K2um LkO6 LsDV
L8Vp;1;cgBlAGMALQByAGEAZABpAG8ALQBpAG4AZgBvAEAAcABhAG4AaQB4AC4AYwBvAG0A;Sosha1_v1;7;
{DD9BAA09-19E0-419E-837B-4844A64A3F98};awA5AGoAawBtAEAAYwBvAG0AYwBhAHMAdAAuAG4AZQB0AA==;Fri, 07 May 2010 13:45:47
GMT;VwBTAFIALQAxADIANwAgAEEATQBTAEEAVAAgAFcAZQBlAGsAbAB5ACAAUwBhAHQAZQBsAGwAaQB0AGUAIABSAGUAcABvAHIAdAA=
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Xref: g2news2.google.com rec.radio.amateur.space:363 rec.radio.info:1506

This report is organized into four (4) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - deborbited/returned satellites

SB SAT @ AMSAT W8ISS $WSR-127.S1
WSR 127 Part 1 045/07/2010

AMSAT NEWS SERVICE BULLETIN 127.S1
FROM AMSAT HQ SILVER SPRING, MD, May 07, 2010
TO ALL RADIO AMATEURS
BID: $WSR-127.S1

HO-68 XW-1 (CAS-1)
Catalog Number:
Launch Date: December 15, 2009
Status: Commissioning

Callsign:
Broadcast: BJ1SA-11
BBS: BJ1SA-12

```
Uplinks:   145.8250 MHz FM, PL 67.0 Hz.
           145.9250 - 145.9750 MHz SSB/CW
           145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
           435.7650 - 435.7150 MHz SSB/CW
           435.6750 MHz AFSK 1200 BPS

Beacon:    435.7900 MHz CW

Mode and Antenna Polarization:
V: LHCP 2.0dBi max
U: RHCP 3.0dBi max

IARU coordination page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108

For more information about XW-1 (CAS-1):
http://www.camsat.cn
[04222010]
=====
SO-67 SumbandilaSat
Catalog Number: 35870
Launch Date: September 17, 2009

Status: Commissioning

Callsign: ZS0SUM

Uplink:   145.875MHz FM tone 233.6 Hz
Downlink: 435.345MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

For more information about SO-67:
http://www.amsatsa.org.za/
[11212009]
=====
DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008

Status: Operational
Current Mode: Science Mode - Beacon ONLY

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink:   435.530 to 435.570 MHz

Delfi-C3 web page: http://www.delfic3.nl/
```

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68
[02122009]
=====
VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.9360 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is active. Each transponder has a different beacon.
[03082010]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Modes:
FM Repeater ONE
Uplink: 145.920 MHz FM
Downlink: 435.300 MHz FM
FM Repeater TWO
Uplink: OFF
Downlink: OFF
BBS
Uplink: OFF
Downlink: OFF
Telemetry
Downlink: 435.150MHz 9k6

Analog voice downlink:	435.300 MHz FM
	435.150 MHz FM
	2401.200 Mhz FM
Analog voice uplink:	145.860 MHZ FM
	145.880 MHz USB
	145.880 MHz FM
	145.920 MHz FM
	1268.700 MHz FM
Digital Downlinks:	435.150 MHz FM 38k4 PBP, 1 watt output
	435.150 MHz FM 9k6 Pacsat Broadcast Protocol
	2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:	145.860 MHz FM 9k6 Pacsat Broadcast Protocol
	1268.700 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon:	435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[05072010]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz. The order of operation is thus: (allow for Doppler as necessary):

```
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute
   timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the re-
   peater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset
   the 10 minute timer.
[05282007]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: sCHEDULED oPERATIONS
Current Mode: V/u (Mode JA)

Voice/CW (Mode JA)
Uplink:   145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon:   435.795 MHz

Digital Mode JD
Uplinks:  145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage:
http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's
CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/
fo29cwts.htm
[02132010]
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993

Status: Operational
```

Current Mode: V/u

Uplink: 145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[03232009]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational

Current Mode: Alternating between Mode A and B every 24 hours

```
Uplink:   145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink:  29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons:   29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW
```

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
[02122009]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

```
Current Active Modes: FM Repeater - V/u
                      Voice -       V/v
                      BBS -         V/v
                      APRS -        V/v
                      SSTV -        V/v
```

Expedition 23 Crew:

Commander:	Oleg Kotov	
Flight Engineer:	Soichi Noguchi	KD5TVP

Flight Engineer: T.J. Creamer   KC5WKI
Flight Engineer: Alexander Skvortsov
Flight Engineer: Tracy Caldwell Dyson KF5DBF
Flight Engineer: Mikhail Kornienko   RN3BF

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
                           437.800 MHz FM
                           145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
                           437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
                           RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[04222010]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-127.S2
WSR 127 Part 2 05/07/2010

AMSAT NEWS SERVICE BULLETIN 127.S2
FROM AMSAT HQ SILVER SPRING, MD, May 07, 2010
TO ALL RADIO AMATEURS
BID: $WSR-127.S2

HO-68 XW-1 (CAS-1)
Catalog Number:
Launch Date: December 15, 2009
Status: Operational

Callsign:
Broadcast: BJ1SA-11
BBS: BJ1SA-12

Uplinks: 145.8250 MHz FM, PL 67.0 Hz.
           145.9250 - 145.9750 MHz SSB/CW
           145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
           435.7650 - 435.7150 MHz SSB/CW
           435.6750 MHz AFSK 1200 BPS

Beacon: 435.7900 MHz CW

IARU coordination page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108

For more information about XW-1 (CAS-1):
http://www.camsat.cn
[04222010]
=====
SwissCube
Catalog Number: 35932
Launch Date: September 23, 2009

Status: Operational

Callsign: HB9EG

Beacon(100mw): 437.5050MHz CW
Beacon(1w):   437.5050MHz FSK 1k2bps
[04222010]
=====
UWE-2
Catalog Number: 35934
Launch Date: September 23, 2009

Status: In Orbit

Beacon(500mw): 437.3850 MHz AFSK 1k2bps
               437.3850 MHz FSK 9k6bps
[1112009]
=====
ITUpsAT1

```
Catalog Number: 35935
Launch Date: September 23, 2009

Status: Operational

Beacon(100mw): 437.325MHz CW
Beacon(1w): 437.325MHz 19k2bps
[11112009]
=====
BEESAT
Catalog Number: 35933
Launch Date: September 23, 2009

Status: Operational

Callsign: DP0BEE

Beacon(100mw): 436.000MHz CW
Beacon(500mw): 436.000MHz GMSK 4k8bps
Beacon(500mw): 436.000MHz GMSK 9k6bps
[04222010]
=====
Pollux
Catalog Number:
Launch Date: July 31, 2009

Status: Operational

Callsign: POLLUX-1

Downlink: 145.825MHz 1k2 AX.25
[10042009]
=====
Castor (ANDE-2)
Catalog Number:
Launch Date: July 31, 2009

Status: Operational

Callsign: KD4HBO-1

Downlink: 145.825 MHz 1k2 AX.25
[10042009]
=====
BEVO-1 (DRAGONSAT-1)
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Operational

Downlink: 437.325 MHz 9k6 GMSK
          437.325 MHz CW 20wpm
[07312009]
```

```
=====
AggieSat2 (DRAGONSAT-2)
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Operational

Downlink: 436.250 MHz 9k6 FHSS
[11112009]
=====
CP-6
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Commissioning

Downlink: 437.365 MHz 1k2 AFSK
[06052009]
=====
HAWKSAT 1
Catalog number: 35003
Launch Date: May 19, 2009

Status: ?

Downlink: 437.345 ?
[06052009]
=====
Pharmasat
Catalog Number: 35002
Launch Date: May 19, 2009
Status: Commissioning

Downlink: 437.465 MHz 1k2 AFSK
[06052009]
=====
ANUSAT
Catalog Number: 34808
Launch Date: April 20, 2009

Status: ?

Downlink:  435.000 MHz
Uplink:    145.800 MHz

Telemetry: 137.400 MHz
[05112009]
=====
SOHLA-1 (ASTRO TECH.)
Catalog Number: 33496
Launch Date: January 23, 2009

Status: Commisioning
```

Proposed Frequencies and Modes:
Downlink: 437.505 MHz AFSK/CW
Beacon: 437.505 MHz AFSK/CW

Callsign:

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=101
[03232009]
=====
KAGAYAKI (Solan Co.)
Catalog Number: 33495?
Launch Date: January 23, 2009

Status: In Orbit

Downlink: 437.375 MHZ   FSK9k6/CW
Beacon: 437.375 MHz   FSK9k6/CW

IARU coordination status page:

AMSAT-NA webpage:

[01152009]
=====
STARS (Kagawa Univ.) (Twin Satellites)
Catalog Number: 33498
Launch Date: January 23, 2009

Status: Operational ?

Downlinks: 437.485 MHz FM/CW
           437.465 MHz FM/CW
Beacons: 437.305 MHz FM/CW
           437.275 MHz FM/CW

Callsigns: JR5YBN
           JR5YBO

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=99

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=121&retURL
=/satellites/status.php
[022152009]
=====
KKS-1 (Tokyo MCIT)
Catalog Number: 33499
Launch Date: January 23, 2009

Status: Operational

Downlink: 437.455 MHz AFSK/CW
Beacon: 437.385 MHz AFSK/CW

Callsign: JQ1YYY

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=107

AMSAT-NA webapge:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=120&retURL=/satellites/status.php
[02212009]
=====
PRISM (Tokyo Univ.)
Catalog Number: 33493
Launch Date: January 23, 2009

Status: Operational ?

Downlink: 437.425 MHz AFSK/GMSK/CW
Beacon: 437.250 MHz AFSK/GMSK/CW

Callsign: JQ1YCX

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=97

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=119&retURL=/satellites/status.php
[02212009]
=====
RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number: 32953
Launch Date: May 23, 2008

Status: Operational

Curent Modes: Telemetry
              Audio
              Images

Downlinks: 435.315 MHz
           435.215 MHz

AMSAT-NA website:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=115&retURL=/satellites/status.php

Official website:
http://www.npopm.com/?cid=leoca&caid=43
[02122009]

```
=====
CanX-2
Catalog number: 32790
Launch Date: April 28, 2008

Status: Operational in range of ground station only

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web
page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[02212009]
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.425 MHz 1k2 baud packet

For the latest project status update please visit the AAUSAT-II web
page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[02212009]
=====
CO-65 CUTE-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008

Status: Digipeater

Downlink:  437.475 MHz 9k6 Packet
Uplink:   1267.600 Mhz

Telemetry Beacon:
Downlink: 437.2750 MHz CW

For the latest project status update please visit the Cute-1.7+APD II
web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78

Command Station blog website:
http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/
```

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=112&retURL
=/satellites/status.php
[02212009]
=====
Compass-1
Catalog number: 32787
Launch Date: April 28, 2008

Status: Operational

Current Mode: 4k8 MSK packet

Uplink: 145.980 MHz FM
Downlink: 437.275 Mhz CW
          437.405 MHz Packet

For the latest project status update please visit the Compass 1 web
page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=114&retURL
=/satellites/status.php
[04272009]
=====
CO-66 Seeds II
Catalog number: 32791
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.485 MHz

Callsign: JQ1YGU

For the latest project status update please visit the Seeds 2 web
page: http://cubesat.aero.cst.nihon-u.ac.jp/english/seeds_2_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=113&retURL
=/satellites/status.php
[02212009]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=94&retURL=/satellites/status.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=72
[02122009]
=====
CP3
Catalog Number: 31129
Launch Date: April 17,2007

Status: Operational

Current Mode: /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[02122009]
=====
GENESAT-1
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Current Mode: /u

Callsign: KE7EGC

Telemetry Beacon Downlink: 437.0695 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[09152009]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon: 437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/xivpicte.htm
[02212009]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003

Status: ?????

Current Mode: /u

Beacon: 436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=96&retURL
=/satellites/status.php

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[06082009]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Operational?

Uplink: 1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=56
[02122009]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Modes:
FM Repeater ONE
Uplink: 145.920 MHz FM
Downlink: 435.300 MHz FM
FM Repeater TWO
Uplink: OFF
Downlink: OFF
BBS
Uplink: OFF
Downlink: OFF
Telemetry
Downlink: 435.150MHz 9k6

```
Analog voice downlink:     435.300 MHz FM
                           435.150 MHz FM
                          2401.200 Mhz FM
Analog voice uplink:       145.860 MHZ FM
                           145.880 MHz USB
                           145.880 MHz FM
                           145.920 MHz FM
                          1268.700 MHz FM
Digital Downlinks:         435.150 MHz FM 38k4 PBP, 1 watt output
                           435.150 MHz FM 9k6 Pacsat Broadcast Protocol
                          2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:            145.860 MHz FM 9k6 Pacsat Broadcast Protocol
                          1268.700 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon:                    435.150 MHz
```

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[05072010]
=====
QuakeSat
Catalog Number: 27845
Launch Date: June 30, 2003

Status: Telemetry only

Current Mode: 9600 baud data packet

Mode U packet
Downlink: 436.675 MHz 9k6 BPS

Quakesat webpage:
http://www.quakefinder.com/services/quakesat-ssite/
[04272009]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=69&retURL
=/satellites/status.php
[02212009]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Telemetry only

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[03302009]
=====
RS-22 RADIO SPORT 22
Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only

```
Current Mode:  /u

CW Beacon - 435.352 MHz
            145.818 MHz

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=76&retURL
=/satellites/status.php
[02212009]
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990

Status: CW Beacon only

Uplinks:          145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink:      437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[03162009]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984

Status: Non-operational.

Current Mode:  /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon:          435.025 MHz
Mode-S Beacon:     2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[12162009]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
```

Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - V/u
Voice - V/v
BBS - V/v
APRS - V/v
SSTV - V/v

Expedition 23 Crew:

Commander:	Oleg Kotov	
Flight Engineer:	Soichi Noguchi	KD5TVP
Flight Engineer:	T.J. Creamer	KC5WKI
Flight Engineer:	Alexander Skvortsov	
Flight Engineer:	Tracy Caldwell Dyson	KF5DBF
Flight Engineer:	Mikhail Kornienko	RN3BF

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss

```
ISS Fan Club Webpage:      http://www.issfanclub.com
APRS tracking page:        http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[04222010]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-127.S3
WSR 127 Part 3 05/07/2010

AMSAT NEWS SERVICE BULLETIN 127.S3
FROM AMSAT HQ SILVER SPRING, MD, May 07, 2010
TO ALL RADIO AMATEURS
BID: $WSR-127.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

CP4
Catalog Number: 31122
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon:    437.325 MHz CW

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=79
[10022008]
=====
LIBERTAD-1
Catalog Number: 31128
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink:   145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[02122009]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
```

```
Launch Date: January 10, 2007

Status: Non-Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder:  145.825 Mhz FM
[01012009]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency:  437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink:        437.250 MHz FM 67Hz CTCSS
Voice Downlink:     2401.835 MHz FM
Packet Up/Downlink:  437.250 MHz 9k6 packet
Packet Downlink     2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non-Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[08132007]
=====
CANX-1
Catalog Number: 27847
Launch Date: June 30, 2003

Status: Non-Operational
```

Downlink: 437.8800 MHz AFSK 1k2bps
[06052009]
=====
DTUSAT
Catalog Number: 27842
Launch Date: June 30, 2003

Status: Non-Operational

Current Mode: 2k4 AFSK Packet last reported

Downlink: 437.475MHz

Officail webpage: http://dtusat1.dtusat.dtu.dk/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=101&retURL
=satellites/all_oscars.php
[02212009]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)

Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Telemetry only

Uplinks: 145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial land and weather imaging payloads offers FM and FSK
Amateur Radio communication.

```
TiungSat-1, named after the mynah bird of Malaysia, was developed as
a collaborative effort between the Malaysian government and Surrey
Satellite Technology Ltd.
[03302009]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink:   145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS:                SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink:   145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
```

Launch Date: November 16, 2000

Status: Non-Operational

Uplinks

V-band: 145.840 - 145.990 MHz CW/LSB
U-band: 435.550 - 435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks

S2-band: 2401.225 - 2401.475 MHz CW/USB
K-band: 24048.010 - 24048.060 MHz CW/USB
Beacon: 2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)

BEACON	General Beacon(GB)	Middle Beacon(MB)	Engineering Beacon(EB)
2 m	none	145.898 MHz	none
70cm	435.438 MHz	435.588 MHz	435.838 MHz
13cm(1)	2400.188 MHz	2400.338 MHz	2400.588 MHz
13cm(2)	2401.173 MHz	2401.323 MHz	2401.573 MHz
3cm	10450.975 MHz	10451.125 MHz	10451.375 MHz
1.5cm	24047.885 MHz	24048.035 MHz	24048.285 MHz

[07162007]
=====
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web

```
site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: 25636
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater:         436.250 MHz

Uplinks: Mode B Repeater:  145.825 MHz
Mode J Digipeater:         145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Telemetry only
```

Current Modes:
Telemetry : /u

Downlink: 435.225 MHz FM (9600-baud FSK)
435.325 Mhz - Not Available - temperature problems
Uplinks: 145.850 FM
145.890 FM
145.930 FM
1269.700 FM
1269.800 FM
1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://asri.technion.ac.il/techsat/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=14&retURL=/satellites/status.php
[12012009]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink: 145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
MO-30 UNAMSAT-2
Catalog Number: 24305
Launch Date: September 5, 1996

Status: Non-operational

Downlink: 435.1380 MHz AFSK 1200 BPS
Downlink: 435.2060 MHz AFSK 1200 BPS
Uplink: 145.8150 MHz AFSK 1200 BPS
Uplink: 145.8350 MHz AFSK 1200 BPS
Uplink: 145.8550 MHz AFSK 1200 BPS
Uplink: 145.8750 MHz AFSK 1200 BPS
[06042009]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

```
Status: Non-operational

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign:       POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012009]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
AO-24 ARSENE
Catalog Number: 22654
Launch Date: May 13, 1993
```

```
Status: Non-operational

Uplink:    435.0625 MHz FM 1k2bps AFSK
           435.1125 MHz FM 1k2bps AFSK
           435.1375 MHz FM 1k2bps AFSK
Downlink:  145.9750 MHz FM 1k2bps AFSK
          2446.5025 MHz FM 1k2bps AFSK

Beacon:    2446.4700 MHz CW

Broadcast callsign:
BBS:
[12162009]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HL01-11
BBS: HL01-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990
```

```
Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
[05012006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: non-operational

Current Mode:  V/u

Uplink:         145.900 MHz FM 1200-baud Manchester FSK (reserved)
                145.920 MHz FM VOICE
                145.940 MHz FM 1200-baud Manchester FSK (reserved)
                145.960 MHz FM 1200-baud Manchester FSK (reserved)
```

```
Downlink:       437.026 MHz USB VOICE
                (1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[07242009]
=====
UO-15 UoSAT-4
Catalog Number: 20438
Launch Date: January 22, 1990

Status: Non-operational

Uplink: ?
Downlink: 435.1250MHz (?)
          435.1200MHz (?)
[06042009]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS
```

```
Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon:   145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink  29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
Beacons:   29.450 MHz
          435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon 1:  29.352 MHz (intermittent)
Beacon 2:  29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink:     21.260 to 21.300 MHz CW/USB
Downlink:  145.860 to 145.900 MHz CW/USB

Beacon:    145.860 MHz

Robot:     145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991
```

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-127.S4
WSR 127 Part 4 05/07/2010

AMSAT NEWS SERVICE BULLETIN 127.S4
FROM AMSAT HQ SILVER SPRING, MD, May 07, 2010
TO ALL RADIO AMATEURS
BID: $WSR-127.S4

THE FOLLOWING SATELLITES HAVE RE-ENTERED OR HAVE BEEN RETURNED SAFELY:

NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: July 28, 2008

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[01012009]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink: 145.825 Mhz FM APRS AX25
APRS Uplink: 145.825 MHz FM APRS AX25
Voice/PSK31 Uplink: 28.120 MHz

Packet to Voice ID: RAFT
[06112007]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Re-Entered
Re-entered: June 18, 2008

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon: 437.2750 MHz CW

Callsign: JR8YJT
[01012009]
=====
SO-43 Starshine 3
Catalog Number: 26929
Launch Date: September 30, 2001

Status: Re-Entered
Re-entered: January 21, 2003

Beacon: 145.825Mhz
[02212009]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)

* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at}
amsat.org
NNNN
/EX

```
From 5576409624719884702
X-Google-Thread: addc8bf063,bd7e1dfe065763e0,start
X-Google-Attributes: gidaddc8bf063,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news1.google.com!news.glorb.com!feeder.erje.net!
border1.nntp.ams.giganews.com!nntp.giganews.com!news.astraweb.com!
border5.a.newsrouter.astraweb.com!not-for-mail
From: Chris Steyaert <observations@rmob.org>
Newsgroups: rec.radio.amateur.space,sci.astro.amateur
Subject: Radio Meteor Obs. Bull. April 2010  Lyrids
Date: Sat, 08 May 2010 20:31:26 +0200
Message-ID: <8ebbu5pcgnkhd8j5bncrim9gms4p3slqo4@4ax.com>
X-Newsreader: Forte Agent 5.00/32.1171
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Lines: 14
Organization: Unlimited download news at news.astraweb.com
NNTP-Posting-Host: 156e5dc1.news.astraweb.com
X-Trace: DXC=3o8OEZ]:FUVJRMXARX<CETL?0kYOcDh@Zc^I;S>_PNiZV[L2]?@BcNR?VNOJ?
```

```
WbP>YCjV_d0<:9;SE_N\_>8<R9Z
Xref: g2news2.google.com rec.radio.amateur.space:364 sci.astro.amateur:36364
```

Radio Meteor Observation Bulletin No. 201 of April 2010 (88 K) is available now as

http://www.rmob.org/rmobtext/rmob1004.txt

More information and the visual presentation of the hourly forward scatter counts can be found on

http://www.rmob.org

Chris

```
From -494482543951528673
X-Google-Thread: a4a23d5f63,e4383186d93b0fbe,start
X-Google-Attributes: gida4a23d5f63,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news1.google.com!newsfeed2.dallas1.level3.net!
news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-136 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sun, 16 May 2010 01:24:00 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 369
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000d01caf4b7$f84822b0$e8d86810$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1273987440 12628 166.84.1.6 (16 May 2010 05:24:00 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 16 May 2010 05:24:00 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
```

X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news2.google.com rec.radio.amateur.space:365 rec.radio.info:1523

AMSAT NEWS SERVICE
ANS-136

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:

* AMSAT Forum at Dayton - News of Amateur Radio in Space
* Reminder: The Dayton $5000 Challenge Extended to September 1
* Two More Astronaut Hams
* IARU Publishes Revised Requirements for the Amateur Satellite Service
* Venus Bound UNITEC-1 Amateur Radio Forum Web Pages Established
* AMSAT-India Reports Several University Cubesats Under Development
* Vietnamese CubeSat Under Development
* Satellite Shorts From All Over

SB SAT @ AMSAT $ANS-136.01
AMSAT Forum at Dayton - News of Amateur Radio in Space

AMSAT News Service Bulletin 136.01
>From AMSAT HQ SILVER SPRING, MD.
May 16, 2010
To All RADIO AMATEURS
BID: $ANS-136.01

This weekend was the Dayton Hamvention and one of the features included the 2010 AMSAT Forum on Saturday, May 15 from 11:15 am to 1:30 pm. See the list of topics introduced by AMSAT Board Member Alan Biddle, WA4SCA:

Barry Baines, WD4ASW, AMSAT President, presented the "AMSAT Status Report" as a mid-year update about what is happening within AMSAT. Barry highlighted current activities within AMSAT and discusses some of the challenges facing the organization.

Drew Glasbrenner, KO4MA, AMSAT VP Operations, told attendees about "AMSAT Satellite Operations and International Satellite Operations". Drew discussed operational AMSAT satellites and updates on new and future International Satellites.

Mike Forsythe, AC2V, Team Leader of the successful K4T DXpedition spoke about "Integrating Satellite Operations into DXpeditions". Mike discussed how to have satellite operations as a major part of DXpeditions,involving youth and making it all work on green power!

Gould Smith, WA4SXM,AMSAT VP User Services, and AMSAT Project Manager for ARISSat-1 spoke on "Getting ARISSat-1 Ready to Fly". Gould's talk covered the current status of the satellite project, testing and the delivery of two satellites to Russia in July.

Alex Harvilchuck, N3NP, Systems Engineer with IBM, and the NextGen CubeSat Program Manager reported progress on the "NextGen CubeSat Program Update". A team of Binghamton University engineering students have been modifying the power systems from ARISSat-1 for use in a 3U CubeSat, with a U/V linear transponder, for AMSAT.

Watch for more AMSAT news from Dayton in future ANS reports!

[ANS thanks AMSAT Team at Dayton for the above information]

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SB SAT @ AMSAT $ANS-136.02
Reminder: The Dayton $5000 Challenge Extended to September 1

AMSAT News Service Bulletin 136.02
>From AMSAT HQ SILVER SPRING, MD.
May 16, 2010
To All RADIO AMATEURS
BID: $ANS-136.02

The Dayton Amateur Radio Association (DARA) will match one-for-one any donations made to AMSAT between now and September 1, 2010 up to a maximum of $5,000. Please support "Getting AMSAT Back into Space" and help us raise the funds needed for our next satellite project.

AMSAT's Project "Fox" is a cubesat that will provide a 2 meter-70 Centimeter FM transponder that will match the ground performance of AO-51. You can send your donation to: AMSAT, 850 Sligo Ave #600, Silver Spring MD 20910. If you prefer, you can call Martha at the AMSAT office (US call toll free at 888-322-6728 or 301-589-6062) and contribute with a credit card.

We will be accepting 'Getting AMSAT Back into Space' donations at various hamfests where AMSAT has a presence, including the Hamvention. You can also make contributions online in the AMSAT Store:
http://www.amsat-na.com/store/donation.php

[ANS thanks Martha at the AMSAT Office for the above information]

/EX

SB SAT @ AMSAT $ANS-136.03
Two More Astronaut Hams

AMSAT News Service Bulletin 136.03
>From AMSAT HQ SILVER SPRING, MD.
May 16, 2010
To All RADIO AMATEURS
BID: $ANS-136.03

The ARISS Status Report this week says two more astronauts have received their Amateur Radio Licenses.

Ron Garan of Expedition 27 completed testing for his amateur radio license and has been issued KF5GPO.

Kevin Ford has been issued the callsign of KF5GPP and is currently training for a future expedition crew assignment.

Andre Kuipers had an ISS amateur radio review session on May 4 in preparation for his tour on the ISS as part of the Expedition 30 crew. Don Pettit will join him as part of that crew.

[ANS thanks ARISS for the above information]

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SB SAT @ AMSAT $ANS-136.04
IARU Publishes Revised Requirements for the Amateur Satellite Service

AMSAT News Service Bulletin 136.04
>From AMSAT HQ SILVER SPRING, MD.
May 16, 2010
To All RADIO AMATEURS
BID: $ANS-136.04

In preparation for frequency allocation negotiations the IARU has published a full specification at http://www.iaru.org/ac-09spec.pdf

Items of interest to the Amateur Satellite Service include:

+ An allocation for the Amateur Satellite Service is sought in the 50-54 MHz range to bridge the gap between 28 MHz and 144 MHz.

+ The Amateur Service requires retention of the existing allocations in the 420-450 MHz band and opposes new uses by other services or low-power devices except where sharing or compatibility studies have been satisfactorily concluded. Because of the crowding of the existing band 435-438 MHz with unmanned amateur satellites and manned space stations, it is desirable to study expansion of the band.

+ The Amateur Service seeks retention of the band 1240-1300 MHz. The Amateur-Satellite Service seeks retention of the band 1260-1270 MHz and deletion of the "Earth-to-space only" restriction.

[ANS thanks Trevor, M5AKA for the above information]

/EX

SB SAT @ AMSAT $ANS-136.05
Venus Bound UNITEC-1 Amateur Radio Forum Web Pages Established

AMSAT News Service Bulletin 136.05
>From AMSAT HQ SILVER SPRING, MD.
May 16, 2010
To All RADIO AMATEURS
BID: $ANS-136.05

As reported previously, on May 17 Japan's Space Agency JAXA plans to launch its Planet-C Venus Climate Orbiter "AKATSUKI" mission to Venus. Also aboard will be UNITEC-1, a 15 kg, 35cm cubed nano-satellite developed by twenty-two universities and colleges of UNISEC (University Space Engineering Consortium).

UNITEC-1 be inserted into a Venus encounter trajectory and will become the world first university satellite which goes beyond Lunar orbit. The main mission of UNITEC-1 is to perform technological experiments of on-board computers and test long-range, inter-planetary communication using amateur radio frequencies:

Downlink Frequency: 5840.000MHz, band width 20MHz
Transmission Power: 4.8W/antenna, 9.6W total
Antenna: 2 Microstrip patch antennas
Modulation: AFSK/FM 1200bps during LEO flight
CW 1bps during Interplanetary flight
Callsign: JQ1ZUN

UNITEC will rely heavily on amateur radio stations around the world to receive its microwave downlink signal. The team has created an Amateur Radio forum which is planned to evolve into a site for the latest information as well as provide a path to upload received data.
See: http://sites.google.com/site/unitec1ops/amservice

Software to aid in the tracking of the satellite and decoding the received telemetry is posted at:
http://sites.google.com/site/unitec1ops/swdownload
This includes the Initial Orbit Estimation Sheet, Unitec 1 Orbit Estimation, and Receiving Data Analyzer

A forum to upload received UNITEC-1 data is under construction at:
http://sites.google.com/site/unitec1ops/amservice/amuploader

Many additional details are available on the UNITEC-1 Operations page:

http://sites.google.com/site/unitec1ops/

The UNITEC-1 team will use a special version of Spectran, that produces a log file of all the frequency peaks found. This will allow them to do an offline analysis. You can download this special version of Spectran from I2PHD, Alberto's site:
http://www.weaksignals.com

[ANS thanks the UNITEC-1 Team and Alberto, I2PHD for the above information]

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SB SAT @ AMSAT $ANS-136.06
AMSAT-India Reports Several University Cubesats Under Development

AMSAT News Service Bulletin 136.06
>From AMSAT HQ SILVER SPRING, MD.
May 16, 2010
To All RADIO AMATEURS
BID: $ANS-136.06

AMSAT-India attended the first Indian Small Satellite Systems Conference at ISRO Bangalore. VU2POP reported that 26 univerities in India have established amateur radio clubs and are in various stages of Amateur Radio Satellite development.

VU2POP wrote, "As of now most of the university satellites are either digital with only beacon downlink and no voice transponder. AMSAT India has two linear tranponders ready. We are asking ISRO for a higher orbit to cover a larger foot print and longer pass duration for future AMSAT-India satellites".

As a reminder, on VO-52's 5th Birthday the HAMSAT team and ISTRAC has requested user feedback from the Amateur Radio community. Send your feedback to Mani, VU2WMY at wmy@isac.gov.in or vu2wmy_mani@yahoo.com.

[ANS thanks AMSAT-India Technical Director, Pop VU2POP for the above information]

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SB SAT @ AMSAT $ANS-136.07
Vietnamese CubeSat Under Development

AMSAT News Service Bulletin 136.07
>From AMSAT HQ SILVER SPRING, MD.
May 16, 2010
To All RADIO AMATEURS
BID: $ANS-136.07

News has been received from Vu Trong Thu, XV9AA, in Hanoi of a Vietnamese 2U CubeSat under development. Thu wrote, "We hope to complete the F-1 satellite by the end of 2010 and launch it to Sun-synchronous, 98 deg inclination LEO. At the moment we are negotiating with several launch providers to find a way into orbit but the high launch cost is really an issue. If we can solve the budget issue, we'll be ready to launch our cubesat in 2011."

The satellite carries several low-resolution cameras to take photos of the Earth along with temperature and magnetic sensors to study space environment. Some of the project goals for the F-1 satellite include:

+ Students to learn about aerospace engineering.
+ Demonstrate the application of COTS products to reduce cost and time developing a small satellite.
+ Survive in space environment for at least a year.

The satellite will use amateur VHF and UHF frequencies. The IARU has coordinated at downlink frequency of 437.485 MHz to support a 1200 baud AX.25 telemetry link. The F-1 satellite will also transmit a beacon using a modulated Morse code audio signal on FM carrier when it is not in range of the earth station in Hanoi. In case of emergency, DTMF tones can be used to control the satellite to some extent. The satellite also carries a COTS transceiver (using UHF frequency) from Microhard Systems to experiment with higher data transmission speed.

A breadboard model of the satellite has been built and the communication link has been tested at a range of 50km. The team is now working on the Engineering Model of the satellite and more tests are planned including shock, vibration and thermal tests.

The F-1 team leader Thu can be reached at: thuvt@fpt.com.vn
Their web page is at: http://fspace.fsoft.com.vn/

[ANS thanks Thu, XV9AA for the above information]

/EX

SB SAT @ AMSAT $ANS-136.08
Satellite Shorts From All Over

AMSAT News Service Bulletin 136.08
>From AMSAT HQ SILVER SPRING, MD.
May 16, 2010
To All RADIO AMATEURS
BID: $ANS-136.08

+ This week the ISS activated SSTV over Europe for the MAI-75 experiment. If you have received images please send them via the ARISS SSTV submission page: http://www.amsat.org/amsat/ariss/SSTV/submit.php
  Also see the ARISS SSTV gallery page:

http://www.amsat.org/amsat/ariss/SSTV/

+ NASA Science News says a unique sky view will be visible as Venus and the Moon are gathering for a sunset conjunction on Sunday, May 16th. On that night, the ISS is going to be flying over many US towns and cities. And if space shuttle Atlantis launches on schedule people could witness a rare meeting of the shuttle, station, Venus and the Moon. Details and observing tips may be found in the story from Science@NASA: http://tinyurl.com/334954k

+ Congratulations to Bobby, KF4GTA for being selected to participate in NASA's STS-132 Tweetup from the final launch of the space shuttle Atlantis which took place on Friday, May 14. Bobby's tweets were published at: http://www.twitter.com/kf4gta

+ UniverseToday has posted a very interesting video hosted by Astronaut Mike Massimino about what he describes as, "This is the deepest, darkest secret about spaceflight. People always ask us about UFOs and aliens, and we've got nothing for them. But they don't know about this!" Watch at: http://tinyurl.com/25gdzxq (UniverseToday.com)

+ The Camb-Hams DX'Pedition to Harris 2010 operated on satellites. They have a video of us assembling the HyGain 2m and 70cm OSCAR antennas on a 2 inch mast at about 12 feet. Watch - How To Build Satellite Antennas in 30 Seconds at http://tinyurl.com/23mmvww (SouthGate ARC)

+ Henk Hamoen PA3GUO has made available some videos about Amateur Radio CubeSats. See: http://tinyurl.com/2gybunt (SouthGate ARC)

+ A YouTube video shows how to use WebSDR which enables you to receive the LF and HF amateur radio bands via a web controlled receiver that supports multiple users. WebSDR is a free website that anyone can use to receive short wave ham radio. It will function on SSB and CW modes. Watch at: http://tinyurl.com/23ol4j7 (Please click the quality button and raise it to 720p before making the video full screen to see all the details. The WebSDRs can be found on-line at: http://www.websdr.org.

[ANS thanks everyone for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office. And, with that please keep in mind the radio amateur who was LED to believe it was a good time for this humor: His friends were shocked and their stomach did flip-flops but he soon rectified the situation and that phase soon passed. We were no longer choked up and encountered no more impedance to our progress.

73,
This week's ANS Editor,

JoAnne Maenpaa, K9JKM

```
From -3877042748283618374
X-Google-Thread: a4a23d5f63,626d5f85413e59b3,start
X-Google-Attributes: gida4a23d5f63,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news1.google.com!newsfeed2.dallas1.level3.net!
news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-135 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Mon, 17 May 2010 10:15:37 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 1870
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000601caf5cb$5fe2dd70$1fa89850$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1274105740 11021 166.84.1.6 (17 May 2010 14:15:40 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Mon, 17 May 2010 14:15:40 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
x-cr-hashedpuzzle: 9Ag= AAka Aar/ AsCJ CfM6 DMLZ DWTs EQKT GGT2 Ht1i Ib64 Inh+
Kw9w LH6Y LoAF Lw/
F;1;cgBlAGMALQByAGEAZABpAG8ALQBpAG4AZgBvAEAAcABhAG4AaQB4AC4AYwBvAG0A;Sosha1_v1;7;
{EF76AC15-6D4F-4FFA-
BAD6-35A63F2254C8};awA5AGoAawBtAEAAYwBvAG0AYwBhAHMAdAAuAG4AZQB0AA==;Mon, 17 May
2010 14:15:08
GMT;VwBTAFIALQAxADMANQAgAEEATQBTAEEAVAAgAFcAZQBlAGsAbAB5ACAAUwBhAHQAZQBsAGwAaQB0AG
UAIABSAGUAcABvAHIAdAA=
x-cr-puzzleid: {EF76AC15-6D4F-4FFA-BAD6-35A63F2254C8}
Xref: g2news2.google.com rec.radio.amateur.space:366 rec.radio.info:1525
```

This report is organized into four (4) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - deborbited/returned satellites

SB SAT @ AMSAT W8ISS $WSR-135.S1
WSR 135 Part 1 05/15/2010

AMSAT NEWS SERVICE BULLETIN 135.S1
FROM AMSAT HQ SILVER SPRING, MD, May 15, 2010
TO ALL RADIO AMATEURS
BID: $WSR-1357.S1

HO-68 XW-1 (CAS-1)
Catalog Number:
Launch Date: December 15, 2009
Status: Commissioning

Callsign:
Broadcast: BJ1SA-11
BBS: BJ1SA-12

Uplinks: 145.8250 MHz FM, PL 67.0 Hz.
145.9250 - 145.9750 MHz SSB/CW
145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
435.7650 - 435.7150 MHz SSB/CW
435.6750 MHz AFSK 1200 BPS

Beacon: 435.7900 MHz CW

Mode and Antenna Polarization:
V: LHCP 2.0dBi max
U: RHCP 3.0dBi max

IARU coordination page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108

For more information about XW-1 (CAS-1):
http://www.camsat.cn
[04222010]
=====
SO-67 SumbandilaSat
Catalog Number: 35870
Launch Date: September 17, 2009

Status: Commissioning

Callsign: ZS0SUM

Uplink: 145.875MHz FM tone 233.6 Hz
Downlink: 435.345MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

For more information about SO-67:
http://www.amsatsa.org.za/
[11212009]
=====
DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008

Status: Operational
Current Mode: Science Mode - Beacon ONLY

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink: 435.530 to 435.570 MHz

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68
[02122009]
=====
VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.9360 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

To know what transponder is switched on please listen for the beacon that is active. Each transponder has a different beacon.
[03082010]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Modes:
FM Repeater ONE
Uplink: 145.880 MHz FM
Downlink: 2401.200 Mhz FM
FM Repeater TWO
Uplink: OFF
Downlink: OFF
BBS
Uplink: OFF
Downlink: OFF
Telemetry
Downlink: 435.150MHz 9k6

Analog voice downlink:	435.300 MHz FM
	435.150 MHz FM
	2401.200 Mhz FM
Analog voice uplink:	145.860 MHZ FM
	145.880 MHz USB
	145.880 MHz FM
	145.920 MHz FM
	1268.700 MHz FM
Digital Downlinks:	435.150 MHz FM 38k4 PBP, 1 watt output
	435.150 MHz FM 9k6 Pacsat Broadcast Protocol
	2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:	145.860 MHz FM 9k6 Pacsat Broadcast Protocol
	1268.700 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon:	435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19

```
[05152010]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002

Status: Operational

Current Mode: V/u

Uplink:   145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4
Hz. The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute
   timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the re-
   peater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset
   the 10 minute timer.
[05282007]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: sCHEDULED oPERATIONS
Current Mode: V/u (Mode JA)

Voice/CW (Mode JA)
Uplink:   145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon:   435.795 MHz

Digital Mode JD
Uplinks:  145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP
```

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage:
http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's
CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/
fo29cwts.htm
[02132010]
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[03232009]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational

Current Mode: Alternating between Mode A and B every 24 hours

```
Uplink:   145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink:  29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons:   29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW
```

Official Webpage:

http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
[02122009]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - V/u
Voice - V/v
BBS - V/v
APRS - V/v
SSTV - V/v

Expedition 23 Crew:

Commander:	Oleg Kotov	
Flight Engineer:	Soichi Noguchi	KD5TVP
Flight Engineer:	T.J. Creamer	KC5WKI
Flight Engineer:	Alexander Skvortsov	
Flight Engineer:	Tracy Caldwell Dyson	KF5DBF
Flight Engineer:	Mikhail Kornienko	RN3BF

STS-132 Shuttle Mission:

Commander:	Ken Ham	
Pilot:	Tony Antonelli	
Mission Specialist-1:	Garrett Reisman	KE5HAE
Mission Specialist-2:	Michael Good	
Mission Specialist-3:	Steve Bowen	
Mission Specialist-4:	Piers Sellers	

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time line is NOT translated from Russian and posted.
[05152010]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-135.S2
WSR 135 Part 2 05/15/2010

AMSAT NEWS SERVICE BULLETIN 135.S2
FROM AMSAT HQ SILVER SPRING, MD, May 15, 2010
TO ALL RADIO AMATEURS
BID: $WSR-135.S2

HO-68 XW-1 (CAS-1)
Catalog Number:
Launch Date: December 15, 2009
Status: Operational

Callsign:
Broadcast: BJ1SA-11
BBS: BJ1SA-12

Uplinks: 145.8250 MHz FM, PL 67.0 Hz.
145.9250 - 145.9750 MHz SSB/CW
145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
435.7650 - 435.7150 MHz SSB/CW
435.6750 MHz AFSK 1200 BPS

Beacon: 435.7900 MHz CW

```
IARU coordination page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108

For more information about XW-1 (CAS-1):
http://www.camsat.cn
[04222010]
=====
SwissCube
Catalog Number: 35932
Launch Date: September 23, 2009

Status: Operational

Callsign: HB9EG

Beacon(100mw): 437.5050MHz CW
Beacon(1w):    437.5050MHz FSK 1k2bps
[04222010]
=====
UWE-2
Catalog Number: 35934
Launch Date: September 23, 2009

Status: In Orbit

Beacon(500mw): 437.3850 MHz AFSK 1k2bps
               437.3850 MHz FSK 9k6bps
[1112009]
=====
ITUpsAT1
Catalog Number: 35935
Launch Date: September 23, 2009

Status: Operational

Beacon(100mw): 437.325MHz CW
Beacon(1w): 437.325MHz 19k2bps
[11112009]
=====
BEESAT
Catalog Number: 35933
Launch Date: September 23, 2009

Status: Operational

Callsign: DP0BEE

Beacon(100mw): 436.000MHz CW
Beacon(500mw): 436.000MHz GMSK 4k8bps
Beacon(500mw): 436.000MHz GMSK 9k6bps
[04222010]
=====
Pollux
```

```
Catalog Number:
Launch Date: July 31, 2009

Status: Operational

Callsign: POLLUX-1

Downlink: 145.825MHz 1k2 AX.25
[10042009]
=====
Castor (ANDE-2)
Catalog Number:
Launch Date: July 31, 2009

Status: Operational

Callsign: KD4HBO-1

Downlink: 145.825 MHz 1k2 AX.25
[10042009]
=====
BEVO-1 (DRAGONSAT-1)
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Operational

Downlink: 437.325 MHz 9k6 GMSK
          437.325 MHz CW 20wpm
[07312009]
=====
AggieSat2 (DRAGONSAT-2)
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Operational

Downlink: 436.250 MHz 9k6 FHSS
[11112009]
=====
CP-6
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Commissioning

Downlink: 437.365 MHz 1k2 AFSK
[06052009]
=====
HAWKSAT 1
Catalog number: 35003
Launch Date: May 19, 2009
```

```
Status: ?

Downlink: 437.345 ?
[06052009]
=====
Pharmasat
Catalog Number: 35002
Launch Date: May 19, 2009
Status: Commissioning

Downlink: 437.465 MHz 1k2 AFSK
[06052009]
=====
ANUSAT
Catalog Number: 34808
Launch Date: April 20, 2009

Status: ?

Downlink:  435.000 MHz
Uplink:    145.800 MHz

Telemetry: 137.400 MHz
[05112009]
=====
SOHLA-1 (ASTRO TECH.)
Catalog Number: 33496
Launch Date: January 23, 2009

Status: Commisioning

Proposed Frequencies and Modes:
Downlink: 437.505 MHz AFSK/CW
Beacon:   437.505 MHz AFSK/CW

Callsign:

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=101
[03232009]
=====
KAGAYAKI (Solan Co.)
Catalog Number: 33495?
Launch Date: January 23, 2009

Status: In Orbit

Downlink: 437.375 MHZ    FSK9k6/CW
Beacon:   437.375 MHz    FSK9k6/CW

IARU coordination status page:

AMSAT-NA webpage:
```

```
[01152009]
=====
STARS (Kagawa Univ.) (Twin Satellites)
Catalog Number: 33498
Launch Date: January 23, 2009

Status: Operational ?

Downlinks: 437.485 MHz FM/CW
           437.465 MHz FM/CW
Beacons:   437.305 MHz FM/CW
           437.275 MHz FM/CW

Callsigns: JR5YBN
           JR5YBO

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=99

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=121&retURL
=/satellites/status.php
[022152009]
=====
KKS-1 (Tokyo MCIT)
Catalog Number: 33499
Launch Date: January 23, 2009

Status: Operational

Downlink:  437.455 MHz AFSK/CW
Beacon:    437.385 MHz AFSK/CW

Callsign: JQ1YYY

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=107

AMSAT-NA webapge:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=120&retURL
=/satellites/status.php
[02212009]
=====
PRISM (Tokyo Univ.)
Catalog Number: 33493
Launch Date: January 23, 2009

Status: Operational ?

Downlink: 437.425 MHz AFSK/GMSK/CW
Beacon:   437.250 MHz AFSK/GMSK/CW
```

Callsign: JQ1YCX

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=97

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=119&retURL
=/satellites/status.php
[02212009]
=====
RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number: 32953
Launch Date: May 23, 2008

Status: Operational

Curent Modes: Telemetry
              Audio
              Images

Downlinks: 435.315 MHz
           435.215 MHz

AMSAT-NA website:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=115&ret
URL=/satellites/status.php

Official website:
http://www.npopm.com/?cid=leoca&caid=43
[02122009]
=====
CanX-2
Catalog number: 32790
Launch Date: April 28, 2008

Status: Operational in range of ground station only

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web
page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[02212009]
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.425 MHz 1k2 baud packet

For the latest project status update please visit the AAUSAT-II web
page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[02212009]
=====
CO-65 CUTE-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008

Status: Digipeater

Downlink: 437.475 MHz 9k6 Packet
Uplink: 1267.600 Mhz

Telemetry Beacon:
Downlink: 437.2750 MHz CW

For the latest project status update please visit the Cute-1.7+APD II
web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78

Command Station blog website:
http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=112&retURL
=/satellites/status.php
[02212009]
=====
Compass-1
Catalog number: 32787
Launch Date: April 28, 2008

Status: Operational

Current Mode: 4k8 MSK packet

Uplink: 145.980 MHz FM
Downlink: 437.275 Mhz CW
          437.405 MHz Packet

For the latest project status update please visit the Compass 1 web
page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=114&retURL=/satellites/status.php
[04272009]
=====
CO-66 Seeds II
Catalog number: 32791
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.485 MHz

Callsign: JQ1YGU

For the latest project status update please visit the Seeds 2 web page: http://cubesat.aero.cst.nihon-u.ac.jp/english/seeds_2_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=113&retURL=/satellites/status.php
[02212009]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=94&retURL=/satellites/status.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=72
[02122009]
=====
CP3
Catalog Number: 31129
Launch Date: April 17,2007

```
Status: Operational

Current Mode:  /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[02122009]
=====
GENESAT-1
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Current Mode: /u

Callsign: KE7EGC

Telemetry Beacon Downlink: 437.0695 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[09152009]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon:             437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/xivpicte.htm
[02212009]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003

Status: ?????

Current Mode: /u

Beacon:     436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW
```

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=96&retURL
=/satellites/status.php

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[06082009]

=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Operational?

Uplink: 1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=56
[02122009]

=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Modes:
FM Repeater ONE
Uplink: 145.880 MHz FM
Downlink: 2401.200 Mhz FM
FM Repeater TWO
Uplink: OFF
Downlink: OFF
BBS
Uplink: OFF
Downlink: OFF
Telemetry
Downlink: 435.150MHz 9k6

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.860 MHZ FM
145.880 MHz USB
145.880 MHz FM
145.920 MHz FM

1268.700 MHz FM
Digital Downlinks: 435.150 MHz FM 38k4 PBP, 1 watt output
435.150 MHz FM 9k6 Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Pacsat Broadcast Protocol
1268.700 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[05152010]
=====
QuakeSat
Catalog Number: 27845
Launch Date: June 30, 2003

Status: Telemetry only

Current Mode: 9600 baud data packet

Mode U packet
Downlink: 436.675 MHz 9k6 BPS

Quakesat webpage:
http://www.quakefinder.com/services/quakesat-ssite/
[04272009]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon

```
Downlink: 436.8375 MHz CW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=69&retURL
=/satellites/status.php
[02212009]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Telemetry only

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink:        144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[03302009]
=====
RS-22 RADIO SPORT 22
Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only

Current Mode:  /u

CW Beacon - 435.352 MHz
            145.818 MHz

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=76&retURL
=/satellites/status.php
[02212009]
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990

Status: CW Beacon only

Uplinks:          145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink:      437.125 MHz
```

```
Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[03162009]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984

Status: Non-operational.

Current Mode:  /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon:           435.025 MHz
Mode-S Beacon:     2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[12162009]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - V/u
                      Voice -       V/v
                      BBS -         V/v
                      APRS -        V/v
                      SSTV -        V/v

Expedition 23 Crew:
Commander:                Oleg Kotov
Flight Engineer:          Soichi Noguchi        KD5TVP
Flight Engineer:          T.J. Creamer          KC5WKI
Flight Engineer:          Alexander Skvortsov
Flight Engineer:          Tracy Caldwell Dyson  KF5DBF
Flight Engineer:          Mikhail Kornienko     RN3BF

STS-132 Shuttle Mission:
Commander:                Ken Ham
Pilot:                    Tony Antonelli
Mission Specialist-1:     Garrett Reisman       KE5HAE
```

Mission Specialist-2: Michael Good
Mission Specialist-3: Steve Bowen
Mission Specialist-4: Piers Sellers

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[05152010]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-135.S3
WSR 135 Part 3 05/15/2010

AMSAT NEWS SERVICE BULLETIN 135.S3

FROM AMSAT HQ SILVER SPRING, MD, May 15, 2010
TO ALL RADIO AMATEURS
BID: $WSR-135.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

CP4
Catalog Number: 31122
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon: 437.325 MHz CW

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=79
[10022008]
=====
LIBERTAD-1
Catalog Number: 31128
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink: 145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[02122009]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: Non-Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder: 145.825 Mhz FM
[01012009]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

```
Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency:  437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink:        437.250 MHz FM 67Hz CTCSS
Voice Downlink:     2401.835 MHz FM
Packet Up/Downlink:  437.250 MHz 9k6 packet
Packet Downlink     2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non-Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[08132007]
=====
CANX-1
Catalog Number: 27847
Launch Date: June 30, 2003

Status: Non-Operational

Downlink: 437.8800 MHz AFSK 1k2bps
[06052009]
=====
DTUSAT
Catalog Number: 27842
Launch Date: June 30, 2003

Status: Non-Operational

Current Mode: 2k4 AFSK Packet last reported

Downlink: 437.475MHz
```

Officail webpage: http://dtusat1.dtusat.dtu.dk/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=101&retURL
=satellites/all_oscars.php
[02212009]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)

Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Telemetry only

Uplinks: 145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial land and weather imaging payloads offers FM and FSK
Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as
a collaborative effort between the Malaysian government and Surrey
Satellite Technology Ltd.
[03302009]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

```
Everyone is welcome to use the digipeating/APRS features of Sapphire,
as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS:                SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink:   145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
V-band:   145.840 -  145.990 MHz CW/LSB
U-band:   435.550 -  435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks
---------
S2-band:  2401.225 -  2401.475 MHz CW/USB
```

K-band: 24048.010 - 24048.060 MHz CW/USB
Beacon: 2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)

BEACON	General Beacon(GB)	Middle Beacon(MB)	Engineering Beacon(EB)
2 m	none	145.898 MHz	none
70cm	435.438 MHz	435.588 MHz	435.838 MHz
13cm(1)	2400.188 MHz	2400.338 MHz	2400.588 MHz
13cm(2)	2401.173 MHz	2401.323 MHz	2401.573 MHz
3cm	10450.975 MHz	10451.125 MHz	10451.375 MHz
1.5cm	24047.885 MHz	24048.035 MHz	24048.285 MHz

[07162007]

=====

OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]

=====

UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]

=====

SO-35 SUNSAT
Catalog Number: 25636
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz

Mode J Digipeater: 145.825 MHz
145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]

=====

PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]

=====

SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]

=====

GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Telemetry only

Current Modes:
Telemetry : /u

Downlink: 435.225 MHz FM (9600-baud FSK)
435.325 Mhz - Not Available - temperature problems
Uplinks: 145.850 FM
145.890 FM
145.930 FM
1269.700 FM
1269.800 FM
1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

```
More information of GO-32 can be found at:
http://asri.technion.ac.il/techsat/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=14&retURL
=/satellites/status.php
[12012009]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink:   145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
MO-30 UNAMSAT-2
Catalog Number: 24305
Launch Date: September 5, 1996

Status: Non-operational

Downlink:       435.1380 MHz AFSK 1200 BPS
Downlink:       435.2060 MHz AFSK 1200 BPS
Uplink:         145.8150 MHz AFSK 1200 BPS
Uplink:         145.8350 MHz AFSK 1200 BPS
Uplink:         145.8550 MHz AFSK 1200 BPS
Uplink:         145.8750 MHz AFSK 1200 BPS
[06042009]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Non-operational

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign:       POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012009]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
AO-24 ARSENE
Catalog Number: 22654
Launch Date: May 13, 1993

Status: Non-operational

Uplink:    435.0625 MHz FM 1k2bps AFSK
           435.1125 MHz FM 1k2bps AFSK
           435.1375 MHz FM 1k2bps AFSK
Downlink:  145.9750 MHz FM 1k2bps AFSK
          2446.5025 MHz FM 1k2bps AFSK

Beacon:    2446.4700 MHz CW

Broadcast callsign:
BBS:
[12162009]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HL01-11
BBS: HL01-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
[05012006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: non-operational

Current Mode:  V/u

Uplink:          145.900 MHz FM 1200-baud Manchester FSK (reserved)
                 145.920 MHz FM VOICE
                 145.940 MHz FM 1200-baud Manchester FSK (reserved)
                 145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink:        437.026 MHz USB VOICE
                 (1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
```

```
[07242009]
=====
UO-15 UoSAT-4
Catalog Number: 20438
Launch Date: January 22, 1990

Status: Non-operational

Uplink: ?
Downlink: 435.1250MHz (?)
          435.1200MHz (?)
[06042009]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB
```

```
Beacon:   145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink  29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
Beacons:   29.450 MHz
          435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965
```

```
Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon 1:  29.352 MHz (intermittent)
Beacon 2:  29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink:     21.260 to 21.300 MHz CW/USB
Downlink:  145.860 to 145.900 MHz CW/USB

Beacon:    145.860 MHz

Robot:     145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink:   21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon:   29.408 MHz

Robot:    29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-135.S4
WSR 135 Part 4 05/15/2010
```

AMSAT NEWS SERVICE BULLETIN 135.S4
FROM AMSAT HQ SILVER SPRING, MD, May 15, 2010
TO ALL RADIO AMATEURS
BID: $WSR-135.S4

THE FOLLOWING SATELLITES HAVE RE-ENTERED OR HAVE BEEN RETURNED SAFELY:

NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: July 28, 2008

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[01012009]

=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]

=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink: 145.825 Mhz FM APRS AX25
APRS Uplink: 145.825 MHz FM APRS AX25
Voice/PSK31 Uplink: 28.120 MHz

Packet to Voice ID: RAFT
[06112007]

=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Re-Entered
Re-entered: June 18, 2008

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon: 437.2750 MHz CW

Callsign: JR8YJT
[01012009]
=====
SO-43 Starshine 3
Catalog Number: 26929
Launch Date: September 30, 2001

Status: Re-Entered
Re-entered: January 21, 2003

Beacon: 145.825Mhz
[02212009]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the

President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at} amsat.org
NNNN
/EX

From 1564688106188889926
X-Google-Thread: a4a23d5f63,530661fef97d9d53,start
X-Google-Attributes: gida4a23d5f63,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII
Path: g2news2.google.com!news1.google.com!newsfeed2.dallas1.level3.net!news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-143 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Mon, 24 May 2010 11:06:19 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 427
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000401cafb52$8ac421c0$a04c6540$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
X-Trace: reader1.panix.com 1274713579 14832 166.84.1.6 (24 May 2010 15:06:19 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Mon, 24 May 2010 15:06:19 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to   rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to   rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news2.google.com rec.radio.amateur.space:367 rec.radio.info:1543

AMSAT NEWS SERVICE

ANS-143

ANS is a free, weekly, news and information service of AMSAT North America,
The
Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in
designing, building, launching and communicating through analog and digital
Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* Please Do Not Use AO-51 While the Satellite is in Eclipse
* Maryland-DC PICetSat Balloon Launch on May 29
* AMSAT Videos From Dayton Hamvention
* Downlink Signal Successfully Received From Venus-bound UNITEC-1
* Report on ARISS Contact at the National Air and Space Museum
* AMSAT-DL Symposium and AGM
* NASA Listens One More Time for Phoenix
* ARISS Status - 17 May 2010

SB SAT @ AMSAT $ANS-143.01
Please Do Not Use AO-51 While the Satellite is in Eclipse

AMSAT News Service Bulletin 143.01
From AMSAT HQ SILVER SPRING, MD.
May 23, 2010
To All RADIO AMATEURS
BID: $ANS-143.01

After a brief outage on May 16 the AO-51 Command Team has turned the repeater back on on AO-51, including the 67 Hz PL mode. The Command Team has a favor to ask of our Southern Hemisphere users, including those in South America, Southern Africa, Australia, and New Zealand:

Please avoid using AO-51 while the satellite is eclipsed.

Most tracking programs indicate illuminated or eclipsed states, and it can always be found by whether the footprint of the satellite is crossing or in contact with the footprint of the sun. Generally this is occurring when the satellite is South of 30 degrees South latitude at present. AO-51 eclipses are predicted to reach almost 20 minutes by July 2010.

AMSAT-NA VP of Operations, Drew Glasbrenner, KO4MA said, "I realize this is a large favor to ask, but the alternative right now is moving to a scheduled type operation, which I would like to avoid. Please pass this to your friends, other users you know, and your national satellite email lists and forums."

For this summer eclipse season, the eclipsed periods are while AO-51 is over mostly unoccupied Antarctica and surrounding areas. This means when the batteries alone are supporting the transmitter there are not likely to be any users. The power management software combined with the PL, should mean the satellite's batteries can be protected from over-discharge, while still providing the strongest possible downlink signal and highest possible availability.

Observations from the southern hemisphere while entering and leaving eclipse are very helpful. Post your reports on the AMSAT-BB or e-mail your report to the AO-51 Control Team via ao51-modes@amsat.org. AO-51 operators also monitor the Live OSCAR Satellite Status page (http://oscar.dcarr.org/). Analysis of AO-51's Whole Orbit Data (WOD) files shows the distribution of the satellite's users.
See: http://tinyurl.com/2ehbxv5

If the eclipse periods get too long too fast the repeater may shut off due to a low battery voltage watchdog. If this happens, please email Drew directly via ko4ma@amsat.org.

Read the latest AO-51 Control Team News at:
http://www.amsat.org/amsat-new/echo/CTNews.php

[ANS thanks Drew, KO4MA, for the above information]

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SB SAT @ AMSAT $ANS-143.02
Maryland-DC PICetSat Balloon Launch on May 29

AMSAT News Service Bulletin 143.02
From AMSAT HQ SILVER SPRING, MD.
May 23, 2010
To All RADIO AMATEURS
BID: $ANS-143.02

If you're in the Washington DC - Maryland area you're invited to join Pat Kilroy, N8PK for a PICetSat Lite balloon launch on Saturday, May 29 at about 10:00 AM EDT.

Pat says the launch site can be any place in Carroll County, Maryland. Coordination will be on the 145.410 MHz K3PZN/R machine in Westminster, MD. (backup 147.285 MHz machine in Sykesville, MD). We will launch anything you wish with a microcontroller attached, so your ideas are welcome. RSVP by May 27 to pat@patkilroy.com.

Pat has posted some background info: http://simsat.net.

[ANS thanks Pak, N8PK for the above information]

/EX

SB SAT @ AMSAT $ANS-143.03
AMSAT Videos From Dayton Hamvention

AMSAT News Service Bulletin 143.03
From AMSAT HQ SILVER SPRING, MD.
May 23, 2010
To All RADIO AMATEURS
BID: $ANS-143.03

David Jordan, AA4KN, ARISS Public Relations requested David Larsen, KK4WW, to produce informative videos while attending the 2010 Dayton Hamvention.

One video features AMSAT Treasurer, Keith Baker KB1SF describing AMSAT's efforts in Cubesat development. The Cubesat video can be viewed on-line at http://www.youtube.com/watch?v�DpyEhw-vI

The second video is David's interview with AMSAT VP of User Services, Gould Smith WA4SXM where he discusses in detail the upcoming ARISS satellite, ARISSat-1. This can be viewed on-line at:
http://www.youtube.com/watch?v�DfSCw6VcU

David would like to thank David Larsen with the LCF Group and a director of the Foundation for Amateur International Radio Service
(www.fairs.org),
for his time in producing these videos.

[ANS thanks David Jordan, AA4KN for the above information]

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SB SAT @ AMSAT $ANS-143.04
Downlink Signal Successfully Received From Venus-bound UNITEC-1

AMSAT News Service Bulletin 143.04
From AMSAT HQ SILVER SPRING, MD.
May 23, 2010
To All RADIO AMATEURS
BID: $ANS-143.04

JAXA successfully launched the seventeenth H-IIA mission on May 21 (JST) carrying the Planet-C Venus Climate Orbiter a Venus probe, the experimental "Ikaros" space sail, a Venus-bound University satellite called UNITEC-1 and 3 small satellites also developed by Japanese universities and other institutions delivered to low earth orbit:

Negai*", Soka University
437.305MHz CW, Packet 1200bps FSK AX.25
http://kuro.t.soka.ac.jp/main.html

WASEDA-SAT2, Waseda University
437.485MHz CW(FM), PCM-FSK(FM) 9600bps
http://www.miyashita.mmech.waseda.ac.jp/Waseda-Sat2/index.htm

KSAT, Kagoshima University
Uplink: S-band(2GHz, 10kbps), Downlink: Ku-band(13.275GHz, 10kbps/1Mbps)
http://www.sci.kagoshima-u.ac.jp/~nishio/download/Ukaren2008Nishio.pdf

UNITEC-1 be inserted into a Venus encounter trajectory and will become the world first university satellite which goes beyond Lunar orbit. The main mission of UNITEC-1 is to perform technological experiments of on-board computers and test long-range, inter-planetary communication using amateur radio frequencies:

Downlink Frequency: 5840.000MHz, band width 20MHz
Transmission Power: 4.8W/antenna, 9.6W total
Antenna: 2 Microstrip patch antennas
Modulation: AFSK/FM 1200bps during LEO flight
CW 1bps during Interplanetary flight
Callsign: JQ1ZUN

News posted on the UNITEC-1 Operations Center web page reports that its CW and FSK signal have been received from a distance of approximately 300,000 km by Japanese ground stations on its first pass over Japan kept from 16:15 (JST) to 25:15 (JST) at 21st May. Their signal report indicated the measured downlink frequency of 5839.91 MHz which is down slightly from the design frequency of 5840.00 MHz. The UNITEC team will continue to work on refining receiving and recording techniques as well as tracking and orbital determination.

You can find the latest UNITEC-1 mission news on the team's operation center website: http://sites.google.com/site/unitec1ops/ This also includes a link to their software page where a telemetry data decoder program is available.

Several universities with access to big dishes have expressed interest in creating a network of ground stations to track UNITEC-1 on its flight to Venus and continuing once the satellite is in orbit around the planet. This is still under development at press time and progress will be reported in future ANS bulletins. A radio link budget is under study to help amateur radio stations develop their capability to receive this interplanetary signal.

Pat Barthelow, AA6EG has developed a Facebook Event Page which he calls "UNiTEC-1 VENUS PROBE COMMUNICATIONS" at:
http://www.facebook.com/event.php?eid4468414245469&amp;index�
[ANS thanks the UNITEC-1 Operations Team and SpaceDaily.com
For the above information]

/EX

SB SAT @ AMSAT $ANS-143.05
Report on ARISS Contact at the National Air and Space Museum

AMSAT News Service Bulletin 143.05
  From AMSAT HQ SILVER SPRING, MD.
May 23, 2010
To All RADIO AMATEURS
BID: $ANS-143.05

ARRL Maryland-DC Section Manager, Jim Cross, WI3N published news of the successful ARISS contact in the "The MDC Section News".

Thanks to Bob Curran, KE3GG for submitting this report ...

On Saturday, May 8, the Smithsonian National Air and Space Museum held a public ARISS contact. The contact was part of their participation in the annual Lockheed Martin Space Day event.

Fifteen Boy Scouts from Troop 417 of Waldorf, MD were given the opportunity to speak directly to astronaut Tracy Caldwell Dyson, KF5DBF, aboard the International Space Station (ISS) via amateur radio. The contact was facilitated via ground station VK4KHZ in Australia.

Each scout was able to ask at least one question during the nearly 10 minute contact window. During the whole program audience members were able to watch a real time satellite track of the ISS on a large video monitor beside the stage.

The program was introduced by astronaut Dan Tani, KD5DXE, himself having recently returned from four months aboard the ISS. On hand to locally MC the event was Dave Taylor, W8AAS. At the controls of the sound system and the telebridge interface was Bob Curran, KE3GG. The coordinator of the Boy Scout participation in the program was Bob Davidson, KB3KOW.

Located a short distance left of the stage where the ARISS contact was taking place, AMSAT had a large display table showcasing amateur radio and amateur radio satellites. In addition to fielding questions about amateur radio and explaining the various satellite samples on their table, they also had an example of the amateur radio antennas installed on the ISS and were running a video explaining the ARISS program on a large video monitor.

[ANS thanks Jim Cross, WI3N; Dave Taylor, W8AAS; and Bob Curran, KE3GG for the above information]

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SB SAT @ AMSAT $ANS-143.06
AMSAT-DL Symposium and AGM

AMSAT News Service Bulletin 143.06
From AMSAT HQ SILVER SPRING, MD.
May 23, 2010
To All RADIO AMATEURS
BID: $ANS-143.06

The SouthGate ARC web site carried a summary of the The 2010 Symposium and AGM of AMSAT-DL that took place on April 24 in the Amateur Radio facility at Bochum with its spectacular 20 metre dish.

The Symposium was told that a successor to the COMPASS-1 CubeSat will be built. COMPASS-2 will be a triple CubeSat, 100x100x340 mm, weighing 4 kg.

Mario Lorenz, DL5MLO gave a presentation on the telemetry and command operations of the new IHU-3 computer for P3-E. This included a live demonstration of the operation of the IHU-3 and the IPS operating system and showed the robustness of the turbo codes.

Peter G�lzow DB2OS reported that the 20m dish at Bochum has been operating successfully in automatic mode for over a year allowing continuous reception of the NASA solar probes Stereo-A and-B. Bochum supplies the received data to the NOAA in the United States.

Achim Vollhardt DH2VA reported in detail to the symposium on the joint feasibility study by AMSAT-DL and DLR (German Aerospace Center) on Lunar and Mars missions.

AMSAT-DL 2010 Symposium and AGM Report
http://tinyurl.com/33rcasl

AMSAT-DL in Google English
http://tinyurl.com/Amsat-DL

[ANS thanks the SouthGate ARC News for the above information]

/EX

SB SAT @ AMSAT $ANS-143.07
NASA Listens One More Time for Phoenix

AMSAT News Service Bulletin 143.07
From AMSAT HQ SILVER SPRING, MD.
May 23, 2010
To All RADIO AMATEURS

BID: $ANS-143.07

by Staff Writers (Mars Daily http://tinyurl.com/23hwyuj)
Pasadena, Calif. (UPI) May 17, 2010

NASA officials say they are conducting the fourth and final series of checks this week to determine whether the Phoenix Mars Lander has resumed operations.

NASA says its Mars Odyssey orbiter will listen for a signal from Phoenix during 61 flights over the lander's site on northern Mars. The orbiter detected no transmission from the lander during earlier campaigns totaling 150 overflights in January, February and April.

In 2008, Phoenix completed its three-month mission studying martian ice, soil and atmosphere. It continued work for an additional two months before reduced sunlight caused energy to become insufficient to keep it functioning. The solar-powered robot was not designed to survive the dark and cold conditions of a martian arctic winter, NASA said, but in case it did, scientists are using Odyssey to listen for the signals Phoenix would transmit if abundant spring sunshine revived the lander.

"To be thorough, we decided to conduct this final session around the time of the summer solstice, during the best thermal and power conditions for Phoenix," said Chad Edwards, chief telecommunications engineer for the Mars Exploration Program at NASA's Jet Propulsion Laboratory in Pasadena, Calif.

[ANS thanks Mars Daily for the above information]

SB SAT @ AMSAT $ANS-143.08
ARISS Status - 17 May 2010

AMSAT News Service Bulletin 143.08
  From AMSAT HQ SILVER SPRING, MD.
May 23, 2010
To All RADIO AMATEURS
BID: $ANS-143.08

1. Upcoming School Contacts

The Wireless Institute of Australia (WIA) in Bayswater, Victoria, Australia has been scheduled for an Amateur Radio on the International Space Station (ARISS) contact on Saturday, May 29 at 10:43 UTC via ON4ISS in Belgium. The WIA will hold a special dinner to celebrate its centenary and has invited students from local schools in Canberra to make an ARISS school contact on that evening. It is anticipated that this dinner will be a high key event with Australia wide coverage.

2. Successful ARISS Contact Held with Komoro Higashi Junior High

On Friday, May 14, Komoro Higashi Junior High School students in Komoro, Nagano, Japan contacted onboard astronaut Soichi Noguchi, KD5TVP via the Amateur Radio on the International Space Station (ARISS) program. Prior to the event, children visited Nobeyama Radio Observatory and worked on radio kits as part of their science curriculum. Over 140 students, parents and guests watched as 15 students had their questions answered during the contact, while 2 television stations and 5 newspapers provided media coverage.

3. MAI-75 Experiment Activated

The MAI-75 (Moscow Aviation Institute) experiment was activated on Friday, May 14. The ISS crew transmitted several SSTV (Slow Scan Television) images which were received by ground stations in Europe, Asia, Africa and South America. Images have been posted to the SSTV Web site: http://www.amsat.org/amsat/ariss/SSTV/

4. ARISS at Dayton Hamvention

Dayton Hamvention 2010 was held at the Hara Arena Complex in Dayton, Ohio over the May 14-16 weekend. The American Radio Relay League (ARRL) and the Radio Amateur Satellite Corporation (AMSAT) manned exhibition booths at the event. Gould Smith, WA4SXM, AMSAT Project Manager for ARISSat-1, gave a presentation on the satellite. The ARISSat-1 prototype was on exhibit and demonstrated to the crowds. ARRL held a Teachers Workshop and distributed ARISS bookmarks to educators interested in the ARISS program. The Dayton Hamvention is an internationally attended amateur radio convention that draws crowds of 25,000 annually.

[ANS thanks Carol, KB3LKI, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Lee McLamb, KU4OS
ku4os at amsat dot org

```
From 4226110099265258747
X-Google-Thread: a4a23d5f63,c24eefab9b2f9563,start
X-Google-Attributes: gida4a23d5f63,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news2.google.com!newsfeed2.dallas1.level3.net!
news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-142 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Mon, 24 May 2010 11:10:17 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 1857
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000501cafb53$2b989e00$82c9da00$@net>
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NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
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X-Trace: reader1.panix.com 1274713817 15726 166.84.1.6 (24 May 2010 15:10:17 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Mon, 24 May 2010 15:10:17 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
x-cr-hashedpuzzle: MFY= Bfls CBVy DBn3 DRfI DeGI ENeZ EXi+ GKds Grf+ Gu1Q JafW
JiBr J+19 J/CU
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0AA==;Mon, 24 May 2010 15:09:48
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Xref: g2news2.google.com rec.radio.amateur.space:368 rec.radio.info:1544
```

This report is organized into four (4) parts.

Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - deborbited/returned satellites

SB SAT @ AMSAT W8ISS $WSR-142.S1
WSR 142 Part 1 05/22/2010

AMSAT NEWS SERVICE BULLETIN 142.S1
FROM AMSAT HQ SILVER SPRING, MD, May 22, 2010
TO ALL RADIO AMATEURS
BID: $WSR-142.S1

HO-68 XW-1 (CAS-1)
Catalog Number:
Launch Date: December 15, 2009
Status: Commissioning

Callsign:
Broadcast: BJ1SA-11
BBS: BJ1SA-12

Uplinks: 145.8250 MHz FM, PL 67.0 Hz.
           145.9250 - 145.9750 MHz SSB/CW
           145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
           435.7650 - 435.7150 MHz SSB/CW
           435.6750 MHz AFSK 1200 BPS

Beacon: 435.7900 MHz CW

Mode and Antenna Polarization:
V: LHCP 2.0dBi max
U: RHCP 3.0dBi max

IARU coordination page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108

For more information about XW-1 (CAS-1):
http://www.camsat.cn
[04222010]
=====
SO-67 SumbandilaSat
Catalog Number: 35870
Launch Date: September 17, 2009

Status: Commissioning

Callsign: ZS0SUM

Uplink: 145.875MHz FM tone 233.6 Hz
Downlink: 435.345MHz FM

```
Mode and Antenna Polarization:
V: Linear
U: Linear

For more information about SO-67:
http://www.amsatsa.org.za/
[11212009]
=====
DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008

Status: Operational
Current Mode: Science Mode - Beacon ONLY

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink:   435.530 to 435.570 MHz

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68
[02122009]
=====
VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink:   435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink:   435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW


Indian Beacon:  145.9360 MHZ CW
Dutch Beacon:   145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

To know what transponder is switched on please listen for the beacon
```

that is active. Each transponder has a different beacon.
[03082010]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Modes:
FM Repeater ONE
Uplink: 145.920 MHz FM - 67 Hz PL
Downlink: 435.300 MHz FM
FM Repeater TWO
Uplink: OFF
Downlink: OFF
BBS
Uplink: OFF
Downlink: OFF
Telemetry
Downlink: 435.150MHz 9k6

```
Analog voice downlink:     435.300 MHz FM
                           435.150 MHz FM
                          2401.200 Mhz FM
Analog voice uplink:       145.860 MHZ FM
                           145.880 MHz USB
                           145.880 MHz FM
                           145.920 MHz FM
                           145.920 MHz FM - 67 Hz PL
                          1268.700 MHz FM
Digital Downlinks:         435.150 MHz FM 38k4 PBP, 1 watt output
                           435.150 MHz FM 9k6 Pacsat Broadcast Protocol
                          2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:            145.860 MHz FM 9k6 Pacsat Broadcast Protocol
                          1268.700 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon:                    435.150 MHz
```

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19

```
[05222010]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002

Status: Operational

Current Mode: V/u

Uplink:   145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4
Hz. The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute
   timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the re-
   peater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset
   the 10 minute timer.
[05282007]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: sCHEDULED oPERATIONS
Current Mode: V/u (Mode JA)

Voice/CW (Mode JA)
Uplink:   145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon:   435.795 MHz

Digital Mode JD
Uplinks:  145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP
```

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage:
http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's
CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/
fo29cwts.htm
[02132010]
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[03232009]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational

Current Mode: Alternating between Mode A and B every 24 hours

```
Uplink:   145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink:  29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons:   29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW
```

Official Webpage:

http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
[02122009]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - V/u
Voice - V/v
BBS - V/v
APRS - V/v
SSTV - V/v

Expedition 23 Crew:

Commander:	Oleg Kotov	
Flight Engineer:	Soichi Noguchi	KD5TVP
Flight Engineer:	T.J. Creamer	KC5WKI
Flight Engineer:	Alexander Skvortsov	
Flight Engineer:	Tracy Caldwell Dyson	KF5DBF
Flight Engineer:	Mikhail Kornienko	RN3BF

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:

Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[05222010]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-142.S2
WSR 142 Part 2 05/22/2010

AMSAT NEWS SERVICE BULLETIN 142.S2
FROM AMSAT HQ SILVER SPRING, MD, May 22, 2010
TO ALL RADIO AMATEURS
BID: $WSR-142.S2

HO-68 XW-1 (CAS-1)
Catalog Number:
Launch Date: December 15, 2009
Status: Operational

Callsign:
Broadcast: BJ1SA-11
BBS: BJ1SA-12

Uplinks: 145.8250 MHz FM, PL 67.0 Hz.
145.9250 - 145.9750 MHz SSB/CW
145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
435.7650 - 435.7150 MHz SSB/CW
435.6750 MHz AFSK 1200 BPS

Beacon: 435.7900 MHz CW

IARU coordination page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108

For more information about XW-1 (CAS-1):
http://www.camsat.cn
[04222010]
=====
SwissCube

```
Catalog Number: 35932
Launch Date: September 23, 2009

Status: Operational

Callsign: HB9EG

Beacon(100mw): 437.5050MHz CW
Beacon(1w):    437.5050MHz FSK 1k2bps
[04222010]
=====
UWE-2
Catalog Number: 35934
Launch Date: September 23, 2009

Status: In Orbit

Beacon(500mw): 437.3850 MHz AFSK 1k2bps
               437.3850 MHz FSK 9k6bps
[1112009]
=====
ITUpsAT1
Catalog Number: 35935
Launch Date: September 23, 2009

Status: Operational

Beacon(100mw): 437.325MHz CW
Beacon(1w): 437.325MHz 19k2bps
[11112009]
=====
BEESAT
Catalog Number: 35933
Launch Date: September 23, 2009

Status: Operational

Callsign: DP0BEE

Beacon(100mw): 436.000MHz CW
Beacon(500mw): 436.000MHz GMSK 4k8bps
Beacon(500mw): 436.000MHz GMSK 9k6bps
[04222010]
=====
Pollux
Catalog Number:
Launch Date: July 31, 2009

Status: Operational

Callsign: POLLUX-1

Downlink: 145.825MHz 1k2 AX.25
```

```
[10042009]
=====
Castor (ANDE-2)
Catalog Number:
Launch Date: July 31, 2009

Status: Operational

Callsign: KD4HBO-1

Downlink: 145.825 MHz 1k2 AX.25
[10042009]
=====
BEVO-1 (DRAGONSAT-1)
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Operational

Downlink: 437.325 MHz 9k6 GMSK
          437.325 MHz CW 20wpm
[07312009]
=====
AggieSat2 (DRAGONSAT-2)
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Operational

Downlink: 436.250 MHz 9k6 FHSS
[11112009]
=====
CP-6
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Commissioning

Downlink: 437.365 MHz 1k2 AFSK
[06052009]
=====
HAWKSAT 1
Catalog number: 35003
Launch Date: May 19, 2009

Status: ?

Downlink: 437.345 ?
[06052009]
=====
Pharmasat
Catalog Number: 35002
Launch Date: May 19, 2009
```

```
Status: Commissioning

Downlink: 437.465 MHz 1k2 AFSK
[06052009]
=====
ANUSAT
Catalog Number: 34808
Launch Date: April 20, 2009

Status: ?

Downlink:  435.000 MHz
Uplink:    145.800 MHz

Telemetry: 137.400 MHz
[05112009]
=====
SOHLA-1 (ASTRO TECH.)
Catalog Number: 33496
Launch Date: January 23, 2009

Status: Commisioning

Proposed Frequencies and Modes:
Downlink: 437.505 MHz AFSK/CW
Beacon:   437.505 MHz AFSK/CW

Callsign:

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=101
[03232009]
=====
KAGAYAKI (Solan Co.)
Catalog Number: 33495?
Launch Date: January 23, 2009

Status: In Orbit

Downlink: 437.375 MHZ    FSK9k6/CW
Beacon:   437.375 MHz    FSK9k6/CW

IARU coordination status page:

AMSAT-NA webpage:

[01152009]
=====
STARS (Kagawa Univ.) (Twin Satellites)
Catalog Number: 33498
Launch Date: January 23, 2009

Status: Operational ?
```

Downlinks: 437.485 MHz FM/CW
437.465 MHz FM/CW
Beacons: 437.305 MHz FM/CW
437.275 MHz FM/CW

Callsigns: JR5YBN
JR5YBO

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=99

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=121&retURL
=/satellites/status.php
[022152009]
=====
KKS-1 (Tokyo MCIT)
Catalog Number: 33499
Launch Date: January 23, 2009

Status: Operational

Downlink: 437.455 MHz AFSK/CW
Beacon: 437.385 MHz AFSK/CW

Callsign: JQ1YYY

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=107

AMSAT-NA webapge:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=120&retURL
=/satellites/status.php
[02212009]
=====
PRISM (Tokyo Univ.)
Catalog Number: 33493
Launch Date: January 23, 2009

Status: Operational ?

Downlink: 437.425 MHz AFSK/GMSK/CW
Beacon: 437.250 MHz AFSK/GMSK/CW

Callsign: JQ1YCX

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=97

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=119&retURL
=/satellites/status.php

```
[02212009]
=====
RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number: 32953
Launch Date: May 23, 2008

Status: Operational

Curent Modes: Telemetry
              Audio
              Images

Downlinks: 435.315 MHz
           435.215 MHz

AMSAT-NA website:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=115&ret
URL=/satellites/status.php

Official website:
http://www.npopm.com/?cid=leoca&caid=43
[02122009]
=====
CanX-2
Catalog number: 32790
Launch Date: April 28, 2008

Status: Operational in range of ground station only

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web
page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[02212009]
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.425 MHz 1k2 baud packet

For the latest project status update please visit the AAUSAT-II web
page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[02212009]
```

```
=====
CO-65 CUTE-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008

Status: Digipeater

Downlink:  437.475 MHz 9k6 Packet
Uplink:   1267.600 Mhz

Telemetry Beacon:
Downlink: 437.2750 MHz CW

For the latest project status update please visit the Cute-1.7+APD II
web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78

Command Station blog website:
http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=112&retURL
=/satellites/status.php
[02212009]
=====
Compass-1
Catalog number: 32787
Launch Date: April 28, 2008

Status: Operational

Current Mode: 4k8 MSK packet

Uplink:   145.980 MHz FM
Downlink: 437.275 Mhz CW
          437.405 MHz Packet

For the latest project status update please visit the Compass 1 web
page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=114&retURL
=/satellites/status.php
[04272009]
=====
CO-66 Seeds II
Catalog number: 32791
Launch Date: April 28, 2008
```

Status: Operational

Downlink: 437.485 MHz

Callsign: JQ1YGU

For the latest project status update please visit the Seeds 2 web
page: http://cubesat.aero.cst.nihon-u.ac.jp/english/seeds_2_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=113&retURL
=/satellites/status.php
[02212009]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=94&retURL=
/satellites/status.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=72
[02122009]
=====
CP3
Catalog Number: 31129
Launch Date: April 17,2007

Status: Operational

Current Mode: /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[02122009]
=====
GENESAT-1

Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Current Mode: /u

Callsign: KE7EGC

Telemetry Beacon Downlink: 437.0695 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[09152009]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon: 437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/xivpicte.htm
[02212009]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003

Status: ?????

Current Mode: /u

Beacon: 436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=96&retURL
=/satellites/status.php

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[06082009]
=====

```
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Operational?

Uplink:  1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=56
[02122009]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Modes:
FM Repeater ONE
Uplink:    145.920 MHz FM - 67 Hz PL
Downlink:  435.300 MHz FM
FM Repeater TWO
Uplink:    OFF
Downlink:  OFF
BBS
Uplink:    OFF
Downlink:  OFF
Telemetry
Downlink:  435.150MHz 9k6

Analog voice downlink:     435.300 MHz FM
                           435.150 MHz FM
                          2401.200 Mhz FM
Analog voice uplink:       145.860 MHZ FM
                           145.880 MHz USB
                           145.880 MHz FM
                           145.920 MHz FM
                           145.920 MHz FM - 67 Hz PL
                          1268.700 MHz FM
Digital Downlinks:         435.150 MHz FM 38k4 PBP, 1 watt output
                           435.150 MHz FM 9k6 Pacsat Broadcast Protocol
                          2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:            145.860 MHz FM 9k6 Pacsat Broadcast Protocol
                          1268.700 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon:                    435.150 MHz
```

```
Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[05222010]
=====
QuakeSat
Catalog Number: 27845
Launch Date: June 30, 2003

Status: Telemetry only

Current Mode: 9600 baud data packet

Mode U packet
Downlink: 436.675 MHz 9k6 BPS

Quakesat webpage:
http://www.quakefinder.com/services/quakesat-ssite/
[04272009]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=69&retURL
=/satellites/status.php
[02212009]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Telemetry only

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink:        144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[03302009]
=====
RS-22 RADIO SPORT 22
Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only

Current Mode:  /u

CW Beacon - 435.352 MHz
            145.818 MHz

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=76&retURL
=/satellites/status.php
[02212009]
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990

Status: CW Beacon only

Uplinks:          145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink:      437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
```

```
[03162009]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984

Status: Non-operational.

Current Mode:  /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon:           435.025 MHz
Mode-S Beacon:     2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[12162009]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - V/u
                      Voice -       V/v
                      BBS -         V/v
                      APRS -        V/v
                      SSTV -        V/v

Expedition 23 Crew:
Commander:                Oleg Kotov
Flight Engineer:          Soichi Noguchi        KD5TVP
Flight Engineer:          T.J. Creamer          KC5WKI
Flight Engineer:          Alexander Skvortsov
Flight Engineer:          Tracy Caldwell Dyson  KF5DBF
Flight Engineer:          Mikhail Kornienko     RN3BF


Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink:   145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink:     145.200 MHz FM
Region 2/3 voice uplink:   144.490 MHz FM
Worldwide downlink:        145.800 MHz FM
```

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[05222010]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-142.S3
WSR 142 Part 3 05/22/2010

AMSAT NEWS SERVICE BULLETIN 142.S3
FROM AMSAT HQ SILVER SPRING, MD, May 22, 2010
TO ALL RADIO AMATEURS
BID: $WSR-142.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

CP4
Catalog Number: 31122
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25

```
CW Beacon:    437.325 MHz CW

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=79
[10022008]
=====
LIBERTAD-1
Catalog Number: 31128
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink:   145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[02122009]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: Non-Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder:  145.825 Mhz FM
[01012009]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency:  437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational
```

Voice Uplink: 437.250 MHz FM 67Hz CTCSS
Voice Downlink: 2401.835 MHz FM
Packet Up/Downlink: 437.250 MHz 9k6 packet
Packet Downlink   2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non-Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[08132007]
=====
CANX-1
Catalog Number: 27847
Launch Date: June 30, 2003

Status: Non-Operational

Downlink: 437.8800 MHz AFSK 1k2bps
[06052009]
=====
DTUSAT
Catalog Number: 27842
Launch Date: June 30, 2003

Status: Non-Operational

Current Mode: 2k4 AFSK Packet last reported

Downlink: 437.475MHz

Officail webpage: http://dtusat1.dtusat.dtu.dk/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=101&retURL
=satellites/all_oscars.php
[02212009]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK

```
(optional voice message)

Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Telemetry only

Uplinks:   145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink:  437.325 MHz

Broadcast callsign: MYSAT3-11
BBS:                MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial land and weather imaging payloads offers FM and FSK
Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as
a collaborative effort between the Malaysian government and Surrey
Satellite Technology Ltd.
[03302009]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink:   145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
```

BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks

V-band: 145.840 - 145.990 MHz CW/LSB
U-band: 435.550 - 435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks

S2-band: 2401.225 - 2401.475 MHz CW/USB
K-band: 24048.010 - 24048.060 MHz CW/USB
Beacon: 2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)

BEACON	General Beacon(GB)	Middle Beacon(MB)	Engineering Beacon(EB)
2 m	none	145.898 MHz	none
70cm	435.438 MHz	435.588 MHz	435.838 MHz
13cm(1)	2400.188 MHz	2400.338 MHz	2400.588 MHz
13cm(2)	2401.173 MHz	2401.323 MHz	2401.573 MHz
3cm	10450.975 MHz	10451.125 MHz	10451.375 MHz
1.5cm	24047.885 MHz	24048.035 MHz	24048.285 MHz

[07162007]
=====

```
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink:    145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: 25636
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater:         436.250 MHz

Uplinks: Mode B Repeater:  145.825 MHz
Mode J Digipeater:         145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz
```

```
Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Telemetry only

Current Modes:
Telemetry : /u

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign:       4XTECH-12

More information of GO-32 can be found at:
http://asri.technion.ac.il/techsat/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=14&retURL
=/satellites/status.php
[12012009]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational
```

```
Uplink:   145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
MO-30 UNAMSAT-2
Catalog Number: 24305
Launch Date: September 5, 1996

Status: Non-operational

Downlink:       435.1380 MHz AFSK 1200 BPS
Downlink:       435.2060 MHz AFSK 1200 BPS
Uplink:         145.8150 MHz AFSK 1200 BPS
Uplink:         145.8350 MHz AFSK 1200 BPS
Uplink:         145.8550 MHz AFSK 1200 BPS
Uplink:         145.8750 MHz AFSK 1200 BPS
[06042009]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Non-operational

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign:       POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012009]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK
```

```
Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
AO-24 ARSENE
Catalog Number: 22654
Launch Date: May 13, 1993

Status: Non-operational

Uplink:    435.0625 MHz FM 1k2bps AFSK
           435.1125 MHz FM 1k2bps AFSK
           435.1375 MHz FM 1k2bps AFSK
Downlink:  145.9750 MHz FM 1k2bps AFSK
          2446.5025 MHz FM 1k2bps AFSK

Beacon:    2446.4700 MHz CW

Broadcast callsign:
BBS:
[12162009]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
```

```
Launch date: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
```

```
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
[05012006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: non-operational

Current Mode:  V/u

Uplink:         145.900 MHz FM 1200-baud Manchester FSK (reserved)
                145.920 MHz FM VOICE
                145.940 MHz FM 1200-baud Manchester FSK (reserved)
                145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink:       437.026 MHz USB VOICE
                (1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[07242009]
=====
UO-15 UoSAT-4
Catalog Number: 20438
Launch Date: January 22, 1990

Status: Non-operational

Uplink: ?
Downlink: 435.1250MHz (?)
          435.1200MHz (?)
[06042009]
=====
UO-14 UoSAT-3
Catalog number: 20437
```

Launch date: January 22, 1990

Status: Non-operational

Uplink: 145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink: 145.8500 MHz MFSK 1200 BPS
Uplink: 145.8700 MHz MFSK 1200 BPS
Uplink: 145.8900 MHz MFSK 1200 BPS
Uplink: 145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon: 145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.8500 - 145.9000 MHz SSB/CW
Downlink 29.4000 - 29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink: 29.4500 - 29.5500 MHz SSB/CW
Beacons: 29.450 MHz
          435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink: 145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB

Beacon 1: 29.352 MHz (intermittent)
Beacon 2: 29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB

Beacon: 145.860 MHz

Robot: 145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-142.S4
WSR 142 Part 4 05/22/2010

AMSAT NEWS SERVICE BULLETIN 142.S4
FROM AMSAT HQ SILVER SPRING, MD, May 22, 2010
TO ALL RADIO AMATEURS
BID: $WSR-142.S4

THE FOLLOWING SATELLITES HAVE RE-ENTERED OR HAVE BEEN RETURNED SAFELY:

NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: July 28, 2008

```
Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[01012009]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink:      145.825 Mhz FM APRS AX25
APRS Uplink:        145.825 MHz FM APRS AX25
Voice/PSK31 Uplink:  28.120 MHz

Packet to Voice ID: RAFT
[06112007]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Re-Entered
Re-entered: June 18, 2008

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon:             437.2750 MHz CW

Callsign: JR8YJT
[01012009]
=====
SO-43 Starshine 3
Catalog Number: 26929
Launch Date: September 30, 2001

Status: Re-Entered
Re-entered: January 21, 2003

Beacon: 145.825Mhz
[02212009]
```

NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at} amsat.org
NNNN
/EX

```
From 2050019694129825130
X-Google-Thread: 8f86f75953,62a8fccccb26d851,start
X-Google-Attributes: gid8f86f75953,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news1.google.com!news2.google.com!Xl.tags.giganews.com!
border1.nntp.dca.giganews.com!nntp.giganews.com!local2.nntp.dca.giganews.com!
nntp.bt.com!news.bt.com.POSTED!not-for-mail
NNTP-Posting-Date: Sat, 29 May 2010 07:35:58 -0500
From: "Richard Ferryman" <richardferryman@btinternet.com>
Newsgroups: rec.radio.amateur.space
Subject: SatPC32
Date: Sat, 29 May 2010 13:35:58 +0100
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.5931
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.5931
X-RFC2646: Format=Flowed; Original
Message-ID: <6_ednb6-f_izl5zRnZ2dnUVZ7q-dnZ2d@bt.com>
Lines: 12
X-Usenet-Provider: http://www.giganews.com
X-AuthenticatedUsername: NoAuthUser
X-Trace:
sv3-6O8wKe4FJ2HjAOaPGSTSwzj02mYoExKAK7i8q7htpDLCdimrianYupj9Ri1glaZQslyayw2nmMlF0W
z!WAg/ekHeBSz+EGWsY+WpsJJIrVrslHUIch7TvsukicIaYKptjdgEob7q3On3tX0XagyWdcL0+FI=
X-Complaints-To: abuse@btinternet.com
X-DMCA-Complaints-To: abuse@btinternet.com
X-Abuse-and-DMCA-Info: Please be sure to forward a copy of ALL headers
X-Abuse-and-DMCA-Info: Otherwise we will be unable to process your complaint
properly
X-Postfilter: 1.3.40
Xref: g2news2.google.com rec.radio.amateur.space:369
```

I want to somehow disable the PTT on my TX from SatPC32 when the satellite is below the horizon. This is very pertinent to running APRS through ISS. At present I have to be stop my APRS program and restart it manually at the correct times and I keep missing passes. I suspect I would need to use DDE to link to some sort of port control program or maybe via rotor control but am not experienced in using DDE.

Is there any SatPC32 guru who can make some suggestions?

Thanks from Dick G4BBH

```
From -8957667579519366076
X-Google-Thread: 8f86f75953,62a8fccccb26d851
X-Google-Attributes: gid8f86f75953,public,usenet
```

X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news1.google.com!npeer02.iad.highwinds-media.com!news.highwinds-media.com!feed-me.highwinds-media.com!post01.iad.highwinds-media.com!API-DIGITAL.COM-a2kHrUvQQWlmc!not-for-mail
From: Alan WA4SCA <WA4SCA@YAHOO.COM>
Newsgroups: rec.radio.amateur.space
Subject: Re: SatPC32
Date: Sat, 29 May 2010 08:19:48 -0500
Organization: AMSAT-NA
Reply-To: ALANBIDDLE70@YAHOO.COM
Message-ID: <fr4206t5odop1ekg23kc1ivn8u3j4r663t@4ax.com>
References: <6_ednb6-f_izl5zRnZ2dnUVZ7q-dnZ2d@bt.com>
X-Newsreader: Forte Agent 6.00/32.1186
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
X-Complaints-To: abuse@usenetserver.com
Lines: 9
X-Trace: 9539c4c0114786b5e751c21125
Xref: g2news2.google.com rec.radio.amateur.space:370

Interesting question. Is it possible to resolve the problem through the APRS client? For instance, can you tweak the beaconing parameters? If you set the beaconing parameters long enough, you will cause minimal QRM yet get the pass stations.

--
Alan
WA4SCA

From -6512459710485640339
X-Google-Thread: 8f86f75953,62a8fccccb26d851
X-Google-Attributes: gid8f86f75953,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news1.google.com!npeer03.iad.highwinds-media.com!news.highwinds-media.com!feed-me.highwinds-media.com!post01.iad.highwinds-media.com!API-DIGITAL.COM-a2kHrUvQQWlmc!not-for-mail
From: Alan WA4SCA <WA4SCA@YAHOO.COM>
Newsgroups: rec.radio.amateur.space
Subject: Re: SatPC32
Date: Sat, 29 May 2010 12:29:15 -0500
Organization: AMSAT-NA
Reply-To: ALANBIDDLE70@YAHOO.COM
Message-ID: <iri206dcbv00a22h263men73glti34ue4c@4ax.com>
References: <6_ednb6-f_izl5zRnZ2dnUVZ7q-dnZ2d@bt.com>
X-Newsreader: Forte Agent 6.00/32.1186
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

```
X-Complaints-To: abuse@usenetserver.com
Lines: 33
X-Trace: bbfe64c014ee06b5e753b11112
Xref: g2news2.google.com rec.radio.amateur.space:371
```

After some thought, I think that perhaps WISP may be what you want:

http://www.amsat.org/amsat/ftpsoft.html#win-wisp

It was originally written for the pacsats, but it has the ability to run any program before a pass, track the pass, and then close it after a pass. You can do this even if you select the satellite as an analogue type. The SATPC32 DDE program will interface with it, so you should be able to schedule your APRS client, run the pass with antenna pointing, and then close the APRS client until the next pass. I used it for years with some extra programs back in the pacsat days.

WISP is old software, but is reported to run on XP-WIN7 32 bit versions. Not 64 bits however. There is/was provision for registering the program, but unless you are using it for pacsats, that is not a factor. Finally, the documentation is adequate, but can cause some head scratching. Some of the needed parameters are not always in the intuitively obvious locations.

I am nearly positive this will do what you want, but it may take a bit of tinkering to put all the pieces together. If you are not already subscribed, I would suggest the AMSAT-BB mailing list:

http://www.amsat.org/amsat-new/tools/maillist/maillist.php

There are a lot of folks there with expertise going back decades.

--
Alan
WA4SCA

```
From 2007693976427687543
X-Google-Thread: a4a23d5f63,f4bd7f18abe42112,start
X-Google-Attributes: gida4a23d5f63,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII
Path: g2news2.google.com!news4.google.com!news2.google.com!npeer01.iad.highwinds-media.com!news.highwinds-media.com!feed-me.highwinds-media.com!nx02.iad01.newshosting.com!newshosting.com!198.186.194.249.MISMATCH!transit3.readnews.com!news-xxxfer.readnews.com!news-out.readnews.com!transit4.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS=150 AMSAT News Service Weekly Bulletins
```

Followup-To: rec.radio.amateur.space
Date: Sun, 30 May 2010 10:46:58 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 397
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <001301cb0006$e995bf20$bcc13d60$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
X-Trace: reader1.panix.com 1275230818 13648 166.84.1.6 (30 May 2010 14:46:58 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 30 May 2010 14:46:58 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to   rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to   rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news2.google.com rec.radio.amateur.space:372 rec.radio.info:1556

AMSAT NEWS SERVICE
ANS-150

ANS is a free, weekly, news and information service of
AMSAT North America, The Radio Amateur Satellite Corporation.
ANS reports on the activities of a worldwide group of Amateur
Radio operators who share an active interest in designing,
building, launching and communicating through analog and
digital Amateur Radio satellites.

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**********************************************************************
*                           NOTICE                                   *
* It is time to submit nominations for the upcoming open seats on    *
* the AMSAT--NA Board of Directors. A nomination requires either     *
* one Member Society or five current individual members to nominate  *
* an AMSAT member for the position. Three director's terms expire    *
* this year: Tom Clark, K3IO, Lou McFadin, W5DID and Gould Smith,    *
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* 850 Sligo Ave #600, Silver Spring MD 20910. They can arrive no     *
* later than June 15th.                                              *
**********************************************************************
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Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:
* AMSAT Announces 2010 Space Symposium Will Be Near Chicago
* ARISSat-1 Latest Status

* Thirteen Original Colonies Satellite Operators Wanted
* Museum Ships Weekend Special Event Station KK5W June 5, 2010
* Satellite Shorts From All Over
* Launch of Mars500 mission
* 2010 AMSAT Annual Meeting and Space Symposium - First Call for papers
* ARISS Status - 24 May 2010

SB SAT @ AMSAT $ANS-150.01
AMSAT Announces 2010 Space Symposium Will Be Near Chicago

AMSAT News Service Bulletin 150.01
>From AMSAT HQ SILVER SPRING, MD.
May 30, 2010
To All RADIO AMATEURS
BID: $ANS-150.01

MSAT Announces 2010 Space Symposium Will Be Near Chicago

AMSAT announces the 2010 AMSAT Space Symposium and Annual Meeting will be held on Friday, October 8 through Sunday, October 10. This year we have selected the Chicago/Elk Grove Holiday Inn which is near O'Hare Airport for the event. This is the same hotel that recently has hosted the Central States VHF Conference, Digital Communications Conference and NIDXCC events.

All Amateur Radio Operators interested in space communications are invited to participate in the Symposium offerings including:

+ Space Symposium with Amateur Satellite Presentations

+ Operating Techniques, News, & Plans from the Amateur Satellite World

+ Board of Directors Meeting open to AMSAT members

+ Meet Board Members and Officers

+ Annual General Membership Meeting

+ Annual Banquet-Keynote Speaker and Door Prizes

+ President's Club Reception

+ Area Coordinator's Breakfast

The Chicago/Elk Grove Holiday Inn is located at 1000 Busse Road,
Elk Grove, IL (near O'Hare Airport with free hourly shuttles).
The room rate and reservation information will be announced shortly.

Watch http://www.amsat.org/amsat-new/symposium/2010/index.php
for more news as it becomes available.

[ANS thanks AMSAT's 2010 Symposium Committee for the above information]

/EX

SB SAT @ AMSAT $ANS-150.02
ARISSat-1 Latest Status

AMSAT News Service Bulletin 150.02
From AMSAT HQ SILVER SPRING, MD.
May 30, 2010
To All RADIO AMATEURS
BID: $ANS-150.02

ARISSat-1 prototype and flight units underwent Thermal/Vacuum testing in Orlando during the last week. Prototype ground station software for telemetry collection was tested from a remote site. Additional flight unit Thermal/Vacuum testing, Vibration testing and a Phase 3 Safety Review are the next major milestones before shipment to Russia in early July.

[ANS Thanks Gould, WA4SXM, for this latest information]

/EX

SB SAT @ AMSAT $ANS-150.03
Thirteen Original Colonies Satellite Operators Wanted

AMSAT News Service Bulletin 150.03
From AMSAT HQ SILVER SPRING, MD.
May 30, 2010
To All RADIO AMATEURS
BID: $ANS-150.03

Thirteen Original Colonies Satellite Operators Wanted

Dave, KB1PVH is heading up organizing a team of satellite operators from each of the original colonies for the 13 Colonies special event on July 4.

Dave is looking for is one operator from each of the 13 original colonies, NY-NJ-RI-GA-PA-NH-SC-VA-CT-DE-MD-NC, Dave, KB1PVH will be MA. There is no pressure to work all passes, just do what you can and have fun.

Anyone interested in participating is invited to contact Dave via e-mail at kb1pvh@gmail.com. Additional information on the Special Event can be found at: http://www.13Colonies.info/

[ANS thanks Dave, KB1PVH for above information]

/EX

SB SAT @ AMSAT $ANS-150.04

Museum Ships Weekend Special Event Station KK5W June 5, 2010

AMSAT News Service Bulletin 150.04
From AMSAT HQ SILVER SPRING, MD.
May 30, 2010
To All RADIO AMATEURS
BID: $ANS-150.04

Museum Ships Weekend Special Event Station KK5W June 5, 2010

The Brazos Valley Amateur Radio Club (BVARC) will be participating in the Museum Ships Weekend event on June 5-6, 2010 from Pelican Island (IOTA NA-143) near Galveston, Texas. BVARC plans a full 2-day operation and will very likely be the only group in Museum Ships Weekend working OSCAR satellites.

It is expected that amateur radio operators will activate amateur radio stations on over 70 ships worldwide during the event. The BVARC operation from Seawolf Park will activate both the submarine USS Cavalla and the destroyer escort USS Stewart.

The planned operation on OSCAR satellites will take place on Saturday, June 5, 2010 on the 1550 UTC and 1731 UTC passes of SO-50, and on the 1931 UTC pass of AO-27. The call sign will be the BVARC club station KK5W. QSL with SASE to KK5W, Brazos Valley Amateur Radio Club, PO BOX 2997, Sugar Land, TX 77487-2997.

The Museum Ships Team has more information on their website:
http://www.nj2bb.org/museum/index.html

Details of the Brazos Valley Amateur Radio Club operation are posted at: http://www.bvarc.org/index.php?page�

[ANS thanks Allen Mattis, N5AFV for the above information]

/EX

SB SAT @ AMSAT $ANS-150.05
Satellite Shorts From All Over

AMSAT News Service Bulletin 150.05
From AMSAT HQ SILVER SPRING, MD.
May 30, 2010
To All RADIO AMATEURS
BID: $ANS-150.05

+ Toyoshige Kamei JA3SGR has requested reception reports from southern hemisphere stations of the 437.305 MHz beacon on the Amateur Radio satellite Negai launched May 21. Negai was built by students at the Soka University in Tokyo and is in a low inclination 30 degree orbit. Reports should be sent to the Soka University kuroki Laboratory via e-mail: kurokilab.sokags@gmail.com

Beacon Frequency 437.305 MHz
Beacon is CW or FM (AFSK-FM AX25 Protocol)
TX power 0.1W CW and 0.4W on FM Packet.

Negai website In Google English including 2 Line Orbital Elements
http://tinyurl.com/Negai

+ Bobby Lacey, KF4GTA was selected to be a part of the NASA STS-132 Tweetup on May 14. He has posted his video of the Atlantis final scheduled launch to the ISS at: http://bit.ly/cPnA6o.

+ A YouTube video shows the mechanism for deploying four solar panels on a 2U CubeSat by using an electric motor: http://tinyurl.com/3xzs7oo (via SouthGate ARC)

+ Watch Keith Pugh W5IU, and Alan Biddle WA4SCA demonstrate satellite operation on HO-68 at the Dayton Hamvention. The YouTube videos can be viewed on the SouthGate site at: http://tinyurl.com/39zhje8.

+ Check out the amazing photo from ESA's Herschel Multi-tiered Extragalactic Survey (HerMES) Key Project, which studies the evolution of galaxies in the distant, ancient Universe. Each of the dots on this photo is a galaxy: http://tinyurl.com/2vf92b2 (UniverseToday.com)

+ John, N4QQ is in PJ2 (Curacao) for an HF contest this weekend, and has his Arrow, and the AMSAT DXpedition loaner D7 with him. He plans on being active on the FM satellites Thursday, Friday, and the following Monday and Tuesday. No activity is expected over the weekend. John is an experienced satellite operator, but new to the FM satellites, so please give him a little room to put a somewhat rare DXCC entity on the air. Members of other DXpeditions interested in adding satellite operations to their events should contact Drew via e-mail at ko4ma@amsat.org for information on AMSAT's loaner gear.

[ANS thanks everyone for the above information]

/EX

SB SAT @ AMSAT $ANS-150.06
Launch of Mars500 mission

AMSAT News Service Bulletin 150.06
From AMSAT HQ SILVER SPRING, MD.
May 30, 2010
To All RADIO AMATEURS
BID: $ANS-150.06

On June 3rd, 2010, the Launch of Mars500 mission will begin in Moscow.

The first full-duration simulation of a human mission to Mars is about to begin. After closing the hatch, the crew of six will remain in their 'spacecraft' for 520 days.

The 520-day simulated mission to Mars will start on 3 June, when the isolation facility is sealed and the international crew start their record-breaking experiment.

The crew will basically live and work like astronauts on the International Space Station, with maintenance work, scientific experiments and daily exercise. They will follow a seven-day week, with two days off, except when special and emergency situations are simulated.

Ed. Note: Now here is an example of plenty of free time for the Astronauts. A 2.4ghz Txmitter and a 1.2ghz RXcvr would go great to occupy their time. Maybe Even a spacewalk to put up 2 umbrella type antennas to communicate back to Earth. (They could use some short whips or small beams on 2 and 435 for the Earth Bound simulation even talking through AO-51)

There are six crewmembers plus a Russian backup: ESA-selected Diego Urbina(Italian/Colombian, age 27) and Romain Charles (French, 31); Sukhrob Kamolov (32), Alexey Sitev (38), Alexandr Smoleevskiy (33) and Mikhail Sinelnikov (37) from Russia; and Wang Yue (26) from China.

Housed in Russia's Institute of Biomedical Problems (IBMP) in Moscow, the 550 m� sealed space mockup includes an interplanetary spaceship, a Mars lander and a martian landscape.

[ANS thanks Southgate for the above information]

/EX

SB SAT @ AMSAT $ANS-150.07
2010 AMSAT Annual Meeting and Space Symposium - First Call for papers

AMSAT News Service Bulletin 150.07
>From AMSAT HQ SILVER SPRING, MD.
May 30, 2010
To All RADIO AMATEURS
BID: $ANS-150.07

2010 AMSAT Space Symposium and Annual Meeting - First Call for papers

This is the first call for papers for the 2010 AMSAT Space Symposium and Annual Meeting to be held October 8 - 10 at the Chicago/Elk Grove Holiday Inn which is near O'Hare Airport.

The Symposium Committee invites proposals for:

+ Papers for publication in the Proceedings

+ Symposium Presentations

+ Poster Presentations

+ Equipment and Operating Demonstrations

These can be on any topic of interest to the amateur satellite community. We request a tentative title of your presentation as soon as possible, with final copy submitted by September 1, 2010 for inclusion in the printed proceedings.

Abstracts and papers should be sent to JoAnne Maenpaa, K9JKM at k9jkm@comcast.net.

[ANS thanks AMSAT's 2010 Symposium Committee for the above information]

/EX

SB SAT @ AMSAT $ANS-150.08
ARISS Status - 24 May 2010

AMSAT News Service Bulletin 150.08
From AMSAT HQ SILVER SPRING, MD.
May 24, 2010
To All RADIO AMATEURS
BID: $ANS-150.08

1. School Contacts

The Wireless Institute of Australia (WIA) in Bayswater, Victoria, Australia was scheduled for an Amateur Radio contact with the International Space Station (ARISS) on Saturday, May 29 at 10:43 UTC via ON4ISS in Belgium. The WIA will held a special dinner to celebrate its centenary and has invited students from local schools in Canberra to make an ARISS school contact on that evening. It is anticipated that this dinner will be a high key event with Australia wide coverage.

Istituto Comprensivo Camaiore - Scuola Secondaria 1� Grado "M. Rosi," Camaiore, Italy has been scheduled for an Amateur Radio on the International Space Station (ARISS) contact on Saturday, June 5 at 10:21 UTC. Students participating in the contact have learned about space science, principles of radio communications and the benefits of space exploration and have prepared to use English in a real life situation.

2. ARISS Contact for Pita Kallak School

An Amateur Radio on the International Space Station (ARISS) contact was held between Pita Kallak School in Kuujjuaq, Quebec, Canada and on-orbit astronaut Timothy Creamer, KC5WKI on Thursday, May 20. Telebridge station ON4ISS in Belgium provided the connection. Some technical difficulties were encountered, but nine questions were answered during the session. In preparation for the contact, students learned about the ISS and amateur radio through video, the internet and guest speakers and created science related projects in the classroom.

3. ARISSat Presentation Available for Viewing

Gould Smith, WA4SXM gave a presentation on ARISSat-1 at the Dayton Hamvention, held over the May 14-16 weekend. His presentation has been posted to YouTube.
See: http://www.youtube.com/watch?v�DfSCw6VcU

4. ARRL QST Covers ARISS

The American Radio Relay League (ARRL) June QST carried an article by Steve Ford, WB8IMY titled, "Ground Control to Major Tom." The story was about ARISS and making general contacts with the ISS crew members. It started off with how ARISS is mainly to enhance youth STEM (Science, Technology, Engineering and Math) education, but that all amateur radio operators can have an ARISS contact. It talked about the types of contacts and included a picture of astronaut Mike Fincke. Then it talked about Richard Garriott and his SSTV (Slow Scan Television). The ARRL monthly journal has a circulation of 150,000.

5. Astronaut Training Status

Astronaut Don Pettit, KD5MDT had a productive ham radio training session review on May 19. He expects to be active with the amateur radio system while on the ISS and is currently assigned to Expedition 30.

6. ARISS Presented at Scout-O-Rama

"Scout-O-Rama" was held over the May 15 weekend in Wheaton, Illinois. ARISS Mentor John Spasojevich set up an exhibit about amateur radio and ARISS at this event.

[ANS thanks Carol, KB3LKI, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Dee Interdonato, NB2F

From -4443552588464386495
X-Google-Thread: a4a23d5f63,19982fab2fd2676d,start
X-Google-Attributes: gida4a23d5f63,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news1.google.com!news2.google.com!border1.nntp.dca.giganews.com!nntp.giganews.com!news-out.readnews.com!transit3.readnews.com!panix!panix2.panix.com!not-for-mail
From: rram@panix.com (rec.radio.amateur.moderated Admin)
Newsgroups: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.info
Subject: Crossposting Permitted to rec.radio.amateur.moderated
Supersedes: <radio/ham-radio/moderated/crossposting-1-1272693601@panix.com>
Followup-To: poster
Date: 1 Jun 2010 02:00:02 -0400
Organization: rec.radio.amateur.moderated Moderation Team
Lines: 47
Approved: RRI Admin <rec-radio-info-request@panix.com>
Distribution: world
Expires: 04 Jul 2010 02:00:01 -0000
Message-ID: <radio/ham-radio/moderated/crossposting-1-1275372001@panix.com>
Reply-To: rec-radio-amateur-moderated-request@panix.com (rec.radio.amateur.moderated Admin)
NNTP-Posting-Host: panix2.panix.com
X-Trace: reader1.panix.com 1275372002 23052 166.84.1.2 (1 Jun 2010 06:00:02 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Tue, 1 Jun 2010 06:00:02 +0000 (UTC)
Summary: Short reminder for unmoderated newsgroups that crossposting is permitted
Keywords: FAQ, ham, amateur, radio, moderated, unmoderated, crossposting, permitted
Xref: g2news2.google.com rec.radio.amateur.antenna:18150 rec.radio.amateur.dx:674 rec.radio.amateur.equipment:2245 rec.radio.amateur.homebrew:3764 rec.radio.amateur.misc:5189 rec.radio.amateur.policy:29470 rec.radio.amateur.space:373 rec.radio.info:1558

Posted-By: auto-faq 3.3.2 beta (PGPMoose V2.0, Perl 5.005)
Archive-name: radio/ham-radio/moderated/crossposting
Revision: 1.1 2009/04/12 19:42:04
Posting-Frequency: posted monthly
URL: http://www.panix.com/~rram/usenet/rram/index.html

Changes followed by "|".

After a 30-day public discussion and feedback period to gauge reader opinions in March of 2009:

http://groups.google.com/group/rec.radio.amateur.moderated/browse_thread/thread/d7d337db35f23326

the rec.radio.amateur.moderated Moderation Team has decided to consider amending its charter, and permit limited simultaneous crossposting to rec.radio.amateur.moderated and one other unmoderated amateur-radio-related discussion newsgroup. We are currently trying this on a temporary basis (90 days, through early July 2009), and adopt it permanently if successful.

Approved rec.radio.amateur.* newsgroups are those that are currently listed in the latest version of the "List of Big Eight Newsgroups" which is crossposted monthly to news.announce.newgroups, news.groups, and news.lists.misc.

Approved alt.radio.amateur.* and alt.ham-radio.* newsgroups are those that have been created consistent with the suggestions in "So You Want to Create an Alt Newsgroup" at:

  http://www.faqs.org/faqs/alt-creation-guide/

Approved regional hierarchy newsgroups are those that contain either "radio.amateur" or "ham-radio" in their names, including uk.radio.amateur and aus.radio.amateur.misc.

We will make every reasonable effort to keep our list of approved newsgroups up-to-date. In case we have overlooked any, and a submission is rejected in error as a result, the rejected submitter can E-mail us at our administrative contact address (in the signature at the bottom of this article, and the default Reply-To for the rejection message) requesting that it be added, and that the article be approved. We may still choose to reject articles crossposted to any alt.* newsgroup with an inappropriate name, including obscene language, embedded name-calling, or encouragement of unlawful conduct.

Please direct any comments, questions, or criticisms to rec-radio-amateur-moderated-request@panix.com.

From 7152983099007568558
X-Google-Thread: a4a23d5f63,78e0892ccea969fa,start
X-Google-Attributes: gida4a23d5f63,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!newsfeed2.dallas1.level3.net!
news.level3.com!bloom-beacon.mit.edu!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-157 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sat, 5 Jun 2010 21:18:50 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 489
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <001701cb0516$32061570$96124050$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0

```
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1275787130 20995 166.84.1.6 (6 Jun 2010 01:18:50 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 6 Jun 2010 01:18:50 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to            rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news1.google.com rec.radio.amateur.space:349 rec.radio.info:1493
```

AMSAT NEWS SERVICE
ANS-157

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Please send any amateur satellite news or reports to:
ans-editor@amsat.org

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* AMSAT-NA 2010 Symposium Announcement
* China President Hu Jintao Visits HO-68 Operation
* AO-51 Operations Team Says New Power Control Settings
* AMSAT-OH Reports P3E S/X Band Transponder Prototype Operational
* Canberran Students Enjoy ARISS Ham Radio Contact
* AMSAT-India Announces Re-Organization
* AMSAT Awards

* New Items at the AMSAT Online Store
* AO-51 Operations Team Announces Field Day Schedule

SB SAT @ AMSAT $ANS-157.01
AMSAT-NA 2010 Symposium Announcement

AMSAT News Service Bulletin 157.01
>From AMSAT HQ SILVER SPRING, MD.
June 6, 2010
To All RADIO AMATEURS
BID: $ANS-157.01

AMSAT announces the 2010 AMSAT Space Symposium and Annual Meeting will be held on Friday, October 8 through Sunday, October 10. This year we have selected the Chicago/Elk Grove Holiday Inn which is near O'Hare Airport for the event. This is the same hotel that recently has hosted the Central States VHF Conference, Digital Communications Conference and NIDXCC events.

All Amateur Radio Operators interested in space communications are invited to participate in the Symposium offerings including:

+ Space Symposium with Amateur Satellite Presentations
+ Operating Techniques, News, & Plans from the Amateur Satellite World
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+ Meet Board Members and Officers
+ Annual General Membership Meeting
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Elk Grove, IL (near O'Hare Airport with free hourly shuttles).
The room rate and reservation information will be announced shortly.

Also with the 2010 Symposium Announcement please keep in mind the Call For Papers:

This is the first call for papers for the 2010 AMSAT Space Symposium and Annual Meeting. The Symposium Committee invites proposals for:

+ Papers for publication in the Proceedings
+ Symposium Presentations
+ Poster Presentations
+ Equipment and Operating Demonstrations

These can be on any topic of interest to the amateur satellite community. We request a tentative title of your presentation as soon as possible, with final copy submitted by September 1, 2010 for inclusion in the printed proceedings.

Abstracts and papers should be sent to JoAnne Maenpaa, K9JKM at k9jkm@comcast.net. Dan Schultz, N8FGV will assist as Co-Editor of the Proceedings.

Watch http://www.amsat.org/amsat-new/symposium/2010/index.php
for more news as it becomes available.

[ANS thanks the 2010 Symposium Committee for the above information]

/EX

SB SAT @ AMSAT $ANS-157.02
China President Hu Jintao Visits HO-68 Operation

AMSAT News Service Bulletin 157.02
>From AMSAT HQ SILVER SPRING, MD.
June 6, 2010
To All RADIO AMATEURS
BID: $ANS-157.02

Michael Chen, BD5RV/1 reported that on May 31 he, along with BA1DU, BG1TTA, BA1EO, BG1HOB accompanied Chinese President Hu Jintao as he visited the amateur satellite station set up in the China Science and Technology Museum in Beijing. Several children was operating HO68 while the president was watching. Michael reported, "He encouraged them for further activities and confirmed the positive effects of amateur satellites."

AMSAT-China Web Page: http://www.camsat.cn

[ANS thanks Michael Chen, BD5RV/1 for the above information]

/EX

SB SAT @ AMSAT $ANS-157.03
AO-51 Operations Team Says New Power Control Settings

AMSAT News Service Bulletin 157.03
>From AMSAT HQ SILVER SPRING, MD.
June 6, 2010
To All RADIO AMATEURS
BID: $ANS-157.03

AMSAT-NA VP Operations, Drew KO4MA reported on the current status of AO-51. The satellite is currently operational with the main V/U repeater, 67 Hz PL enabled.

June 1 - June 21 FM Repeater, V/U
Uplink: 145.920 Mhz FM, PL 67Hz
Downlink: 435.300 Mhz FM

The power management routine adjusts the power output in three stages based on illumination state and battery voltage. The high setting is 1.57 watts. The mid-setting is at 290 mw, and the low setting is off.

During passes over the eastern US, especially in the morning, the Operations Team has been collecting telemetry on the 435.150 transmitter, so users may have heard the power levels toggle on 435.300. The rest of the time outside of eclipse it should be pretty steadily at the high setting. Soon after entering eclipse, if in use, the transmitter will shut off. Please do not use AO-51 when it is in eclipse.

Eclipses continue to lengthen until about July 1, then drop back to zero by the third week of August. This last period of continuous illumination will last until January 2011. AO-51 will likely only be operational while illuminated after this date.

Drew thanks Mark Hammond N8MH, Kevin Schuchmann WA6FWF, and Jim White WD0E for their help with the satellite during this period of rearranging our operational plan, and learning new tricks to keep AO-51 available as much as possible. We are approaching 6 years in orbit!

[ANS thanks AMSAT-NA VP Operations, Drew KO4MA for the above information]

/EX

SB SAT @ AMSAT $ANS-157.04
AMSAT-OH Reports P3E S/X Band Transponder Prototype Operational

AMSAT News Service Bulletin 157.04
>From AMSAT HQ SILVER SPRING, MD.
June 6, 2010
To All RADIO AMATEURS
BID: $ANS-157.04

Michael, OH2AUE has written the latest news of the AMSAT-OH S/X band coherent/linear transponder for P3E project. The Coherent mode is a fully functional testbed for the P5A ranging transponder.

The Finnish team meets on a regular basis every 4 - 6 weeks for testing and to followup on the work of each individual. The team has assembled the linear transponder prototype and verified it with over-the-air tests and laboratory tests. Flight versions of the submodules are being produced at this time with the goal of integrating them and cabling the S/X transponder.

Full verification of the Coherent Mode is awaiting a fully functional command station AND a functional IHU + CAN environment. Preliminary testing and evaluation of the Coherent Processor have shown proper operation of the design and circuitry (e.g. locking onto a "modulated" uplink carrier, tracking this etc.).

The general design, block diagrams, and photos can be found on-line at:
http://www.rats.fi/rats/amsat-oh/ It is currently in Finnish but the team hopes you will enjoy it.

This transponder is especially complex as you can see from these key on figures on the web page:

- 9 different local oscillators
- All local oscillators locked to the common 10 MHz USO
- 21 different frequency mixers
- 13 different intermediate frequencies
- Linear Mode output power on 10 GHz: 3 W PEP
- P5A Mode output power on 10 GHz: 1 mW PEP
- 38 control lines on the CAN interfaces
- 2 CAN interfaces, one in multiplexed mode
- 4 dedicated direct control lines interfacing with the IHU
- 14 analogue telemetry lines to the CAN bus
- Coherent Mode Uplink/Downlink ratio is fixed at 30:7

Michael concludes, "Our team sincerely hopes funding will eventually be found for P3E/P5A - this is the only thing that keeps us motivated to continue our work. On the other hand we are clearly behind schedule, so the delays are welcome. But then again, any news of progress would boost our production rate phenomenally!"

[ANS thanks Michael, OH2AUE for the above information]

/EX

SB SAT @ AMSAT $ANS-157.05
Canberran Students Enjoy ARISS Ham Radio Contact

AMSAT News Service Bulletin 157.05
>From AMSAT HQ SILVER SPRING, MD.
June 6, 2010
To All RADIO AMATEURS
BID: $ANS-157.05

A very successful Amateur Radio on the International Space Station (ARISS) was completed this week. Jim Linton, VK3PC provided this information to the SouthGate ARC News site; the story is reprinted below:

Ten students from the Trinity Christian School at Wanniassa in the Australian Capital Territory made history at the weekend with the first Amateur Radio on the International Space Station (ARISS) program contact to be held in Canberra.

The event was part of the Wireless Institute of Australia (WIA) centenary dinner attended by 200 people including international guests, Australian Communications and Media Authority Chairman Chris Chapman, and WIA Centenary Patron Dick Smith VK2DIK.

A telebridge ON4ISS in Belgium (operator Philippe Van houte, ON5PV) made the contact with ARISS Asia-Pacific Coordinator, Tony Hutchison VK5ZAI at the controls in Canberra for the contact on Saturday, 29 May.

The audience remained quiet and listened intently as the Year 12 students asked Astronaut and Flight Engineer Tracy Caldwell-Dyson KF5DBF, on her assignment on the space station, a series of questions.

The session began with a brief speech by Tracy who congratulated the WIA on its centenary and commented briefly on amateur radio's history and amateur satellites.

Student William Shaw, asked: When you are in space, are you "above" the law? If there was a legal issue that arose on the space station which nation's law would apply?

Tracy replied that she did not foresee that there would be a legal problem on the space station and added that there were controls on what could occur in space.

Another student, Elizabeth Shen, asked about living is space with zero gravity, its effects on the body and whether there were changes to the normal blood pressure and pulse rate.

It was learnt in Tracy's response that the crew are constantly monitored, there are effects and rehabilitation on return to earth can take up to three months.

In other questions the topics of sleeping in an environment with 16 sunrises and sunsets a day, space walking - Tracy is to have that experience soon - and the potential for collision with solid matter in space.

After the ARISS contact Elizabeth Shen and William Shaw said they were both extremely impressed by the efforts made by astronauts to qualify and fly in space, giving them encouragement to strive in their chosen careers.

Elizabeth, aged 17 added: 'The opportunity to speak to someone above the space station was one of the best experiences in her life.'

While William, aged 18, said 'It was really cool to be able to talk to someone who is in a completely different situation - with the zero gravity and what not.'

Trinity Christian School Principal, Carl Palmer VK2TP/VK1TP was justifiably very proud of his students.

WIA President Michael Owen VK3KI presented each with a participation certificate. WIA Centenary Patron Dick Smith VK2DIK - aviator, adventurer and entrepreneur - shook their hands, spoke to them about their experience and had his photograph taken with them.

Originally posted at: SouthGateARC http://tinyurl.com/22lxg2d

Wireless Institute of Australia posting, including contact audio:

http://tinyurl.com/2dubf7a

[ANS thanks Jim Linton, VK3PC; Richard Brunton, G4TUT; and the Southgate ARC for the above information]

/EX

SB SAT @ AMSAT $ANS-157.06
AMSAT-India Announces Re-Organization

AMSAT News Service Bulletin 157.06
>From AMSAT HQ SILVER SPRING, MD.
June 6, 2010
To All RADIO AMATEURS
BID: $ANS-157.06

Nitin, VU3TYG, Secretary, AMSAT-India reported on a May 26 reorganization of the post of President and Vice-President for AMSAT-India Organization update for post of President and Vice President.

Current president Air Commodore Suby, VU2UV stepped down from the post citing health reasons. As a result, Ramesh, VU2RMS has taken the role of President, AMSAT-India.

Dr. Ved Prakash Sandlas, VU2VP was elected Vice-President, AMSAT-India.

AMSAT-India thanked Suby, VU2UV for his guidance to AMSAT-India during his tenure. Suby will continue to hold a seat on the core committee.

[ANS thanks Nitin, VU3TYG, Secretary, AMSAT-India for the above information]

/EX

SB SAT @ AMSAT $ANS-157.07
AMSAT Awards

AMSAT News Service Bulletin 157.07
>From AMSAT HQ SILVER SPRING, MD.
June 6, 2010
To All RADIO AMATEURS
BID: $ANS-157.07

AMSAT Director Contests and Awards, Bruce Paige, KK5DO says congratulations are in order for these Amateur Radio Operators:

The following have entered into the Satellite Communicators Club for making their first satellite QSO:

Brennan Price, N4QX
John Neeley, W6ZKH

Ed Empey, WA7ETH
Jennifer Melfi, KC2TMA

The following have earned the AMSAT Communications Achievement Award:

Larry Teran, KI6YAA, #512
John Neeley, W6KZH, #513
Gerry Krebs, N0JE, #514
Hugh Empey, W7ETH, #515

The following have earned the W4AMI Achievement Award for 1000 contacts:
Evangelos Kafetzopoulos, SV1EEK, endorsement from 3000 to 4000

The following have earned the W4AMI Achievement Award for 5000 contacts:
Evangelos Kafetzopoulos, SV1EEK, #23

The following have earned the South Africa AMSAT Communications Achievement Award

Larry Teran, KI6YAA, #US145
Gerry Krebs, N0JE, #US146
Hugh Empey, WA7ETH, #US147

To see all the awards visit http://www.amsat.org.

[ANS thanks AMSAT Director Contests and Awards, Bruce Paige, KK5DO for the above information]

/EX

SB SAT @ AMSAT $ANS-157.08
New Items at the AMSAT Online Store

AMSAT News Service Bulletin 157.08
>From AMSAT HQ SILVER SPRING, MD.
June 6, 2010
To All RADIO AMATEURS
BID: $ANS-157.08

Wearing his AMSAT On-line Store Manager hat, Bruce Paige, KK5DO says he has added the following items to the AMSAT online store:

2010 Red Baseball Cap with AMSAT logo
2010 Gold ARISSat-1 Tee Shirt
2010 Tan AMSAT Golf Shirt
2010 Getting Started with Amateur Satellites
AMSAT - The First Forty Years
2010 Laminated Frequency Guide

If you are interested in any of the limited supply items, now is

the time to order. Visit the AMSAT Online Store at:
http://www.amsat-na.com/store/categories.php

[ANS thanks Bruce, KK5DO for the above information]

/EX

SB SAT @ AMSAT $ANS-157.09
AO-51 Operations Team Announces Field Day Schedule

AMSAT News Service Bulletin 157.09
>From AMSAT HQ SILVER SPRING, MD.
June 6, 2010
To All RADIO AMATEURS
BID: $ANS-157.09

It's that time of year again; summer and Field Day! Each year the American Radio Relay League (ARRL) sponsors Field Day as an emergency preparedness exercise. The event takes place during a 24-hour period on the fourth weekend of June.

For 2010 the event takes place during a 27-hour period from 1800 UTC on Saturday June 26, 2010 through 2100 UTC on Sunday June 27, 2010. Those who set up prior to 1800 UTC on June 26 can operate only 24 hours.

The Radio Amateur Satellite Corporation (AMSAT) promotes its own version of Field Day for operation via the amateur satellites, held concurrently with the ARRL event.

AMSAT Field Day Rules are available on-line at:
http://www.amsat.org/amsat-new/awards/amsatfd.php
This page also includes instructions on how to report your score.

AMSAT-NA VP Operations, Drew KO4MA says the AO-51 Command Team and Operations Group has announced the AO-51 configuration for Field Day:

June 21 10:40Z - June 24 09:35Z FM Repeater, V/S to allow testing of V/S station equipment prior to Field Day:
  Uplink: 145.880 Mhz FM
  Downlink: 2401.200 Mhz FM

June 24 09:35Z - June 27 06:40Z FM Repeater, V/U
Please observe the 1 QSO per repeater Field Day rule
  Uplink: 145.920 Mhz FM, PL 67Hz
  Downlink: 435.300 Mhz FM

June 27 06:40 - June 27 22:00Z FM Repeater, V/S
Please observe the 1 QSO per repeater Field Day rule
  Uplink: 145.880 Mhz FM
  Downlink: 2401.200 Mhz FM

June 27 22:00Z - July 5 FM Repeater, V/U
Post-Field Day Configuration
  Uplink: 145.920 Mhz FM, PL 67Hz
  Downlink: 435.300 Mhz FM

AO-51 Echo Mode Suggestion Email Address is: ao51-modes@amsat.org

The latest AO-51 Command Team and Operations Group News can be found
on-line at: http://www.amsat.org/amsat-new/echo/CTNews.php

[ANS thanks the UNITEC-1 Team, AMSAT-DL, AMSAT-UK, and the SouthGate
site for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office. And with that, please keep in mind this advice to a student pilot, "A thunderstorm is never as bad on the inside as it appears on the outside. It's worse! If you push the stick forward, the houses get bigger, if you pull the stick back they get smaller. Try to keep the number of your landings equal to the number of your takeoffs."

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM
K9JKM at amsat dot org

From -3682227763893975971
X-Google-Thread: a4a23d5f63,8ef622694ca0ebe,start
X-Google-Attributes: gida4a23d5f63,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news1.google.com!newsfeed2.dallas1.level3.net!
news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-151 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sun, 31 May 2009 10:21:37 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 301
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000301c9e1fb$13c665e0$3b5331a0$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0

Content-Type: text/plain;
charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1243779697 8771 166.84.1.6 (31 May 2009 14:21:37 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 31 May 2009 14:21:37 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news2.google.com rec.radio.amateur.space:224 rec.radio.info:762

AMSAT NEWS SERVICE
ANS-151

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
- AMSAT-UK shop change
- Satellite info
- Satellite Shorts
- ARRL Presidential Award
- "Echoes of Apollo" event.
- ARISS Schedule

SB SAT @ AMSAT $ANS-151.1
AMSAT-UK shop change

AMSAT News Service Bulletin 151.1
>From AMSAT HQ SILVER SPRING, MD.
May 31, 2009
To All RADIO AMATEURS
BID: $ANS-151.1

After several years of running the AMSAT-UK shop,
Jim G3WGM has handed the reins to Ciaran Morgan M0XTD.
Ciaran obtained his full license in April
2008 and enjoyed organising a very successful ARISS
contact between Budbrooke School in Warwick, England
and Richard Garriott K5KWQ whilst he was onboard the
International Space Station in October 2008.
The AMSAT-UK shop has been an important source of funds
in the past and Ciaran is revamping the current shop to
help it to continue to make a valuable contribution to
the funds into the future. The shop has had a policy of
only stocking items that are difficult to obtain in the
UK and, initially, that policy will remain whilst Ciaran
gets familiar with the stock and identifies other
possible options.
Suggestions are always welcome and a new email address
(amsat-uk-shop@amsat.org) has been setup. Please send
the suggestions in and keep checking the web site for updates.
Due to the level of sales of software, and compatibility
issues with the more recent Microsoft Operating Systems,
it has been decided to stop selling InstantTrack and
QuickTrack. WiSP and SatPC32 licenses will continue to
be issued from the shop Also, there are currently no books
for sale - we are looking at this but suggestions are
always welcome.
On the hardware front, we have restocked with the ever
popular LVB motherboards and we also have a limited number
of complete kits for the LVB Tracker unit. Half of the new
kits also include the AMSAT-NA enclosure with compatible
display unit! We are also investigating restocking the
2.4GHz signal sources from G0MRF and the G7HIA 2.4GHz
patch kits - please keep a watch on the website for
more details.

The AMSAT UK website can be accessed via http://www.uk.amsat.org/
- the shop is accessed via a link on the left
hand side of the web page.

73
Ciaran
M0XTD

[ANS thanks Ciaran,M0XTD, for the above information]

/EX

SB SAT @ AMSAT $ANS-151.2
Satellite info

AMSAT News Service Bulletin 151.2

From AMSAT HQ SILVER SPRING, MD.
May 31, 2009
To All RADIO AMATEURS
BID: $ANS-151.2

AO-51 will be configured for Field Day with dual repeaters, 1268.700/435.150 and 145.920/435.300. No PL tone is required. Please note that the 435.150 downlink is left hand circular polarized, and the 435.300 transmitter is right hand circular polarized. This configuration will be available for the week preceding Field Day, through the Field Day weekend (June 22nd-28th, 2009).

AO-7 has returned to experiencing short eclipses each orbit, thereby preventing the 24 hour timer from switching modes. AO-7 has been observed to favor Mode U/V (B) almost exclusively during these periods. Please check
http://oscar.dcarr.org/ or
http://www.planetemily.com/ao7/ao7log.php for
the most recent reports of the current mode.

GO-32 still in bootloader status, return of the BBS is unknown.

[ANS thanks Drew, KO4MA, for the above information]
/EX

SB SAT @ AMSAT $ANS-151.3
Satellite Shorts From All Over

AMSAT News Service Bulletin 151.3
From AMSAT HQ SILVER SPRING, MD.
May 31, 2009
To All RADIO AMATEURS
BID: $ANS-151.3

+ A compendium of non-ham spacecraft frequencies can be found on-line at: http://www.ntia.doc.gov/osmhome/spectrumreform/Spectrum_Plans_2007/NASA_Strategic_Spectrum_Plan_Nov2007.pdf

+ Lately, a growing number of observers are reporting intense "flares" coming from the International Space Station (ISS). During some night time flybys, the luminosity of the space station surges 10-fold or more. Some people have witnessed flares of magnitude -8 or twenty-five times brighter than Venus. (via SpaceWeather.com)

+ A video of the Minotaur launch that lofted the latest flock of cube-sats (PharmaSat, Hawksat, CP6) to orbit can be viewed at: http://www.youtube.com/watch?v=YEf9trI1Hf8

+ Watch for Franco's HB9OAB - CN2AB satellite DXpedition to Morocco between June 27 and July 20. Franco says he favors operation via VO-52. QSL eQSL or BURO via HB9OAB.

+ An online video simulating a flyover of Mars Olympus Mons volcanco can be found at:
  http://www.dailygalaxy.com/my_weblog/2009/05/mapping-mars-mt.html

[ANS thanks everyone for the above information]

/EX

SB SAT @ AMSAT $ANS-151.4
ARRL Presidential Award

AMSAT News Service Bulletin 151.4
  From AMSAT HQ SILVER SPRING, MD.
May 31, 2009
To All RADIO AMATEURS
BID: $ANS-151.4

FRANK BAUER, KA3HDO, RECEIVES ARRL PRESIDENT'S AWARD

On Saturday, May 16 during the forum featuring Richard Garriott, W5KWQ, at the Dayton Hamvention, ARRL President Joel Harrison, W5ZN, presented former Amateur Radio on the International Space Station (ARISS) <http://www.rac.ca/ariss/oindex.htm> International Chairman Frank Bauer, KA3HDO, with the ARRL President's Award. Bauer, who stepped down from ARISS <http://www.arrl.org/news/stories/2009/03/25/10724/> and Radio Amateur Satellite Corporation's (AMSAT) <http://www.amsat.org/> duties this past March, served as ARISS Program Leader and ARISS International Working Group Chair. Since 1991, he served as AMSAT Vice President for Human Spaceflight Programs.

The ARRL Board of Directors voted to create the President's Award in 2003. The President's Award is to go to an ARRL member or members who "have shown long-term dedication to the goals and objectives of ARRL and Amateur Radio," and who have gone the extra mile to support individual League programs and goals. Nominations for the award come from directors and are approved by the ARRL President and the Executive Committee.

Under Bauer's leadership, Amateur Radio activities have been on human spaceflight vehicles, including NASA-sponsored ham radio activities on the shuttle, Space Station Mir and the ISS. Starting in 1983, Bauer led the Goddard Amateur Radio Club team that provided around-the clock space shuttle retransmissions from the WA3NAN club station. These retransmissions provided the international ham radio community up-to-the-minute information during the flight of Owen Garriott, W5LFL, on STS-9 <http://www.nasa.gov/mission_pages/shuttle/shuttlemissions/archives/sts-9.html> and subsequent SAREX flights. In the days prior to the Internet, these real-time bulletins and frequent orbital element updates could only be obtained through Amateur Radio.

"For well over a decade, I have been fortunate to be part of a group that has been leading international teams together to focus on Amateur Radio on the ISS," Bauer told the ARRL. "As AMSAT Vice President for Human

Spaceflight since 1991, I have really worked to get this international team to work as one, focusing on Amateur Radio. It is very critical to get all the space agency partners to have a vested interest in making sure we do Amateur Radio right on the ISS. We need to keep the partnership we have with our international team in good stead."

[ANS thanks ARRL for the above information]
/EX

SB SAT @ AMSAT $ANS-151.5
"Echoes of Apollo" event.

AMSAT News Service Bulletin 151.5
From AMSAT HQ SILVER SPRING, MD.
May 31, 2009
To All RADIO AMATEURS
BID: $ANS-151.5

Commemorating the 40th year anniversary of the Apollo 11 landing on the moon July 20th, 1969, many large commercial dishes worldwide will be active "on the air" on 23 CM on the weekend of June 26th (Field Day weekend). At present there are many very large commercial dishes as well as many Amateur radio dishes that will be activated on SSB and CW.

Some of the larger dishes will make a two way QSO between small Mode "L" satellite stations possible. The Stanford 150' dish will be participating using various calls, including W6TE. A list of participating dishes will follow.

W6TE will be on the air and testing the Big Stanford dish at various times... call for possible schedule (559) 260-5511 cell) 73,

[ANS thanks Dave Smith, W6TE and the Echoes of Apollo Event Team for the above information]

/EX

SB SAT @ AMSAT $ANS-151.6
ARISS Schedule

AMSAT News Service Bulletin 151.6
From AMSAT HQ SILVER SPRING, MD.
May 25, 2009
To All RADIO AMATEURS
BID: $ANS-151.6

1. Upcoming School Contacts

An Amateur Radio on the International Space Station (ARISS) contact was scheduled for Miyahara Junior High School in

Saitama, Japan on Tuesday, May 26 at 11:12 UTC. Speaking in Japanese, JAXA astronaut Koichi Wakata, KC5ZTA will chat with the students about life in space.

Mahopac Public Library in Mahopac, New York has been scheduled for an Amateur Radio on the International Space Station (ARISS) contact on Wednesday, June 3 at 15:47 UTC. This contact will be facilitated by telebridge station ON4ISS in Belgium. This school district public library serves six public and five private schools, with a total of 26,485 served. The library will coordinate this question and answer session with the Putnam Emergency Amateur Radio League.

Kawanishi Seiwadai Community Center in Hyogo, Japan has been scheduled for an Amateur Radio on the International Space Station (ARISS) contact on Saturday, June 6 at 07:55 UTC. The community center was established in 1987 and serves the area's 5000 households. To prepare for the contact, children researched the ISS and studied space and the global environment. This ARISS contact will be conducted in Japanese.

2. ARISS International Team Meeting Held

The Amateur Radio on the International Space Station (ARISS) International Team meeting was held on Tuesday, May 19. Topics of discussion included the upcoming face to face meeting in the Netherlands and SuitSat-2 status.
See: http://www.rac.ca/ariss/arisstel2009-05-19.htm

3. ARRL Article on Dayton Hamvention, Garriott

The American Radio Relay League (ARRL) published a story in its May 22 issue of the ARRL Letter about the 2009 ARRL National Convention, Dayton Hamvention and Richard Garriott, W5KWQ. The item on Garriott covers his presentations at the ARRL and AMSAT (Radio Amateur Satellite Corporation) forums, the ARRL Expo, and the ARRL Youth Lounge.
See: http://www.arrl.org/arrlletter/09/0522/

The ARRL Letter has a circulation of 115,000.

[ANS thanks Carol, KB3LKI, for the above information]

/EX

73,
This week's ANS Editor,

Dee Interdonato, NB2F

From -2264844227311916 87
X-Google-Thread: a4a23d5f63,6bb740fe266ce4f1,start
X-Google-Attributes: gida4a23d5f63,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news2.google.com!newsfeed2.dallas1.level3.net!
news.level3.com!bloom-beacon.mit.edu!panix!panix2.panix.com!not-for-mail
From: rram@panix.com (rec.radio.amateur.moderated Admin)
Newsgroups:
rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.rad
io.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amat
eur.space,rec.radio.info
Subject: Crossposting Permitted to rec.radio.amateur.moderated
Supersedes: <radio/ham-radio/moderated/crossposting-1-1241157601@panix.com>
Followup-To: poster
Date: 1 Jun 2009 02:00:03 -0400
Organization: rec.radio.amateur.moderated Moderation Team
Lines: 47
Approved: rec-radio-info@panix.com
Distribution: world
Expires: 04 Jul 2009 02:00:01 -0000
Message-ID: <radio/ham-radio/moderated/crossposting-1-1243836001@panix.com>
Reply-To: rec-radio-amateur-moderated-request@panix.com
(rec.radio.amateur.moderated Admin)
NNTP-Posting-Host: panix2.panix.com
X-Trace: reader1.panix.com 1243836003 26885 166.84.1.2 (1 Jun 2009 06:00:03 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Mon, 1 Jun 2009 06:00:03 +0000 (UTC)
Summary: Short reminder for unmoderated newsgroups that crossposting is permitted
Keywords: FAQ, ham, amateur, radio, moderated, unmoderated, crossposting,
permitted
Xref: g2news2.google.com rec.radio.amateur.antenna:12332 rec.radio.amateur.dx:409
rec.radio.amateur.equipment:1567 rec.radio.amateur.homebrew:2776
rec.radio.amateur.misc:4278 rec.radio.amateur.policy:26325
rec.radio.amateur.space:225 rec.radio.info:763

Posted-By: auto-faq 3.3.2 beta (PGPMoose V2.0, Perl 5.005)
Archive-name: radio/ham-radio/moderated/crossposting
Revision: 1.1 2009/04/12 19:42:04
Posting-Frequency: posted monthly
URL: http://www.panix.com/~rram/usenet/rram/index.html

Changes followed by "|".

After a 30-day public discussion and feedback period to gauge reader
opinions in March of 2009:

http://groups.google.com/group/rec.radio.amateur.moderated/browse_thread/thread/

```
d7d337db35f23326

the rec.radio.amateur.moderated Moderation Team has decided to consider
amending its charter, and permit limited simultaneous crossposting to
rec.radio.amateur.moderated and one other unmoderated
amateur-radio-related discussion newsgroup.  We are currently trying
this on a temporary basis (90 days, through early July 2009), and adopt
it permanently if successful.

Approved rec.radio.amateur.* newsgroups are those that are currently
listed in the latest version of the "List of Big Eight Newsgroups" which
is crossposted monthly to news.announce.newgroups, news.groups, and
news.lists.misc.

Approved alt.radio.amateur.* and alt.ham-radio.* newsgroups are those
that have been created consistent with the suggestions in "So You Want
to Create an Alt Newsgroup" at:

  http://www.faqs.org/faqs/alt-creation-guide/

Approved regional hierarchy newsgroups are those that contain either
"radio.amateur" or "ham-radio" in their names, including
uk.radio.amateur and aus.radio.amateur.misc.

We will make every reasonable effort to keep our list of approved
newsgroups up-to-date.  In case we have overlooked any, and a submission
is rejected in error as a result, the rejected submitter can E-mail us
at our administrative contact address (in the signature at the bottom of
this article, and the default Reply-To for the rejection message)
requesting that it be added, and that the article be approved.  We may
still choose to reject articles crossposted to any alt.* newsgroup with
an inappropriate name, including obscene language, embedded
name-calling, or encouragement of unlawful conduct.

Please direct any comments, questions, or criticisms to
rec-radio-amateur-moderated-request@panix.com.


From -8880839344969221653
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news1.google.com!news.glorb.com!
newsfeed2.telusplanet.net!newsfeed.telus.net!edtnps83.POSTED!7564ea0f!not-for-mail
From: "Rob" <robg@telus.net>
Newsgroups: rec.radio.amateur.space
Subject: Testing - aQuirements, ?
Lines: 9
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.3138
X-RFC2646: Format=Flowed; Original
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.3350
Message-ID: <5TwWl.29665$Db2.14025@edtnps83>
Date: Sat, 06 Jun 2009 16:33:05 GMT
```

NNTP-Posting-Host: 207.216.202.206
X-Trace: edtnps83 1244305985 207.216.202.206 (Sat, 06 Jun 2009 10:33:05 MDT)
NNTP-Posting-Date: Sat, 06 Jun 2009 10:33:05 MDT
Xref: g2news2.google.com rec.radio.amateur.space:226

A littler Lighters l Here, 1 - I'm movin ins, Tos the cerneGyies of ins the
_
"certer of The eaRth,<
-King Geek
-aLt.KnWWWWWWWWWWWwing not
& persuant of vast summs of cash, I'm in charGe, also - - -- spaceds ouT

From -2900518305358894047
X-Google-Thread: addc8bf063,9dddc81ac88a648f,start
X-Google-Attributes: gidaddc8bf063,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news3.google.com!feeder.news-service.com!
border1.nntp.ams.giganews.com!nntp.giganews.com!newsfeeder.ewetel.de!
news.astraweb.com!border1.a.newsrouter.astraweb.com!not-for-mail
From: Chris Steyaert <observations@rmob.org>
Newsgroups: rec.radio.amateur.space,sci.astro.amateur
Subject: Radio Meteor Obs. Bull. May 2009
Date: Sat, 06 Jun 2009 19:44:14 +0200
Message-ID: <3mal25lgf8a9vm60n5e6hr0863krv1qu29@4ax.com>
X-Newsreader: Forte Agent 1.93/32.576 English (American)
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Lines: 13
Organization: Unlimited download news at news.astraweb.com
NNTP-Posting-Host: 623e1326.news.astraweb.com
X-Trace: DXC=;\KU3GQJNYS;0`5D\QI41SL?0kYOcDh@Z73I2W[YToJ[3HT`QIJ0^0TG?
ifhhgG3CQ=0RF:fc8MK[Id1c_XJ0n7V
Xref: g2news2.google.com rec.radio.amateur.space:227 sci.astro.amateur:20485

Radio Meteor Observation Bulletin No. 190 of May 2009 (76 K) is available now
as

http://www.rmob.org/rmobtext/rmob0905.txt

More information and the visual presentation of the hourly forward scatter
counts can be found on

http://www.rmob.org

Chris

```
From -2191996807013678829
X-Google-Thread: a4a23d5f63,3c376e7bc3d1c0cd,start
X-Google-Attributes: gida4a23d5f63,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news1.google.com!newsfeed2.dallas1.level3.net!
news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-156 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Sat, 6 Jun 2009 21:16:33 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 1661
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <001201c9e70d$9239c360$b6ad4a20$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1244337393 20868 166.84.1.6 (7 Jun 2009 01:16:33 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 7 Jun 2009 01:16:33 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to            rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
x-cr-hashedpuzzle: ANfz B0qV DGQt DJIH Didi E++P FFsg FVdA F0+E GNTF Ga3H HEbM
ICgn IMNx KBIN
KRs9;1;cgBlAGMALQByAGEAZABpAG8ALQBpAG4AZgBvAEAAcABhAG4AaQB4AC4AYwBvAG0A;Sosha1_v1;
7;{74C69447-5594-4844-AB78-
E7008F554FA0};awA5AGoAawBtAEAAYwBvAG0AYwBhAHMAdAAuAG4AZQB0AA==;Sun, 07 Jun 2009
01:16:14
GMT;VwBTAFIALQAxADUANgAgAEEATQBTAEEAVAAgAFcAZQBlAGsAbAB5ACAAUwBhAHQAZQBsAGwAaQB0AG
UAIABSAGUAcABvAHIAdAA=
x-cr-puzzleid: {74C69447-5594-4844-AB78-E7008F554FA0}
Xref: g2news2.google.com rec.radio.amateur.space:228 rec.radio.info:774
```

This report is organized into four (4) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites

Part 3 (S3) - non - operational satellites
Part 4 (S4) - deorbited/returned satellites

SB SAT @ AMSAT W8ISS ANS-156.S1
WSR 156 Part 1 06/05/2009

AMSAT NEWS SERVICE BULLETIN 156.S1
FROM AMSAT HQ SILVER SPRING, MD, June 06, 2009
TO ALL RADIO AMATEURS
BID: $ANS-156.S1

DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008

Status: Operational
Current Mode: Science Mode - Beacon ONLY

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink: 435.530 to 435.570 MHz

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68
[02122009]
=====
VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.859330 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

```
Official Webpage: http://www.amsatindia.org/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is active. Each transponder has a different beacon.
[08072008]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Modes:   FM Repeater - Uplink:    145.920 Mhz FM
                               Downlink:  435.300 Mhz FM
                 BBS         - Uplink:    OFF
                               Downlink:  OFF
                 Telemetry   - Downlink:  435.150 MHz

Analog voice downlink:     435.300 MHz FM
                           435.150 MHz FM
                          2401.200 Mhz FM
Analog voice uplink:       145.860 MHZ FM
                           145.880 MHz USB
                           145.920 MHz FM
                          1268.700 MHz FM
Digital Downlinks:         435.150 MHz FM 38k4 PBP, 1 watt output
                           435.150 MHz FM 9k6 Pacsat Broadcast Protocol
                          2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:            145.860 MHz FM 9k6 Pacsat Broadcast Protocol
                          1268.700 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon:                    435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[06052009]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002
```

Status: Operational.

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz. The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10 minute timer.

[05282007]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Operational
Current Mode: V/u (Mode JA)

Voice/CW (Mode JA)
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage:
http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

```
AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's
CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/
fo29cwts.htm
[02122009]
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993

Status: Operational

Current Mode: V/u

Uplink:   145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[03232009]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational

Current Mode: Alternating between Mode A and B every 24 hours

Uplink:   145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink:  29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons:   29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
[02122009]
=====
```

INTERNATIONAL SPACE STATION (ISS) - ARISS

Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - V/u
Voice - V/v
BBS - V/v
APRS - V/v
SSTV - V/v

Expedition 20 Crew:
Commander: Gennady Padalka
Flight Engineer: Michael Barratt
Flight Engineer: Koichi Wakata KC5ZTA
Flight Engineer: Timothy Kopra
Flight Engineer: Roman Romanenko
Flight Engineer: Frank De Winne

Available Modes and Frequencies:

Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11

Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[06052009]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-156.S2
WSR 156 Part 2 06/05/2009

AMSAT NEWS SERVICE BULLETIN 156.S2
FROM AMSAT HQ SILVER SPRING, MD, June 06, 2009
TO ALL RADIO AMATEURS
BID: $ANS-156.S2

CP-6
Catalog Number: 35004
Launch Date: May 19th, 2009

Status: Commissioning

Downlink: 437.365 MHz 1k2 AFSK
[06052009]
=====
HAWKSAT 1
Catalog number: 35003
Launch Date: May 19th, 2009

Status: ?

Downlink: ?
[06052009]
=====
Pharmasat
Catalog Number: 35002

Status: Commissioning

Downlink: 437.465 MHz 1k2 AFSK
[06052009]
=====
ANUSAT
Catalog Number: 34808
Launch Date: April 20, 2009

Status: ?

```
Downlink:  435.000 MHz
Uplink:    145.800 MHz

Telemetry: 137.400 MHz
[05112009]
=====
SOHLA-1 (ASTRO TECH.)
Catalog Number: 33496
Launch Date: January 23, 2009

Status: Commisioning

Proposed Frequencies and Modes:
Downlink: 437.505 MHz AFSK/CW
Beacon:   437.505 MHz AFSK/CW

Callsign:

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=101
[03232009]
=====
KAGAYAKI (Solan Co.)
Catalog Number: 33495?
Launch Date: January 23, 2009

Status: In Orbit

Downlink: 437.375 MHZ    FSK9k6/CW
Beacon:   437.375 MHz    FSK9k6/CW

IARU coordination status page:

AMSAT-NA webpage:

[01152009]
=====
STARS (Kagawa Univ.) (Twin Satellites)
Catalog Number: 33498
Launch Date: January 23, 2009

Status: Operational ?

Downlinks: 437.485 MHz FM/CW
           437.465 MHz FM/CW
Beacons:   437.305 MHz FM/CW
           437.275 MHz FM/CW

Callsigns: JR5YBN
           JR5YBO

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=99
```

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=121&retURL
=/satellites/status.php
[022152009]
=====
KKS-1 (Tokyo MCIT)
Catalog Number: 33499
Launch Date: January 23, 2009

Status: Operational

Downlink: 437.455 MHz AFSK/CW
Beacon: 437.385 MHz AFSK/CW

Callsign: JQ1YYY

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=107

AMSAT-NA webapge:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=120&retURL
=/satellites/status.php
[02212009]
=====
PRISM (Tokyo Univ.)
Catalog Number: 33493
Launch Date: January 23, 2009

Status: Operational ?

Downlink: 437.425 MHz AFSK/GMSK/CW
Beacon: 437.250 MHz AFSK/GMSK/CW

Callsign: JQ1YCX

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=97

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=119&retURL
=/satellites/status.php
[02212009]
=====
RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number: 32953
Launch Date: May 23, 2008

Status: Operational

Curent Modes: Telemetry
              Audio
              Images

Downlinks: 435.315 MHz
           435.215 MHz

AMSAT-NA website:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=115&retURL=/satellites/status.php

Official website:
http://www.npopm.com/?cid=leoca&caid=43
[02122009]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=94&retURL=/satellites/status.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=72
[02122009]
=====
CP3
Catalog Number: 31129
Launch Date: April 17,2007

Status: Operational

Current Mode: /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[02122009]
=====
GENESAT-1
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Current Mode: /u

```
Callsign: KE7EGC

Telemetry Beacon Downlink: 437.0670 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[02212009]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon:             437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/xivpicte.htm
[02212009]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003

Status: Operational

Current Mode: /u

Beacon:     436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=96&retURL
=/satellites/status.php

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[02212009]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Operational?
```

```
Uplink:  1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=56
[02122009]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Modes:   FM Repeater - Uplink:    145.920 Mhz FM
                               Downlink:  435.300 Mhz FM
                 BBS         - Uplink:    OFF
                               Downlink:  OFF
                 Telemetry   - Downlink:  435.150 MHz

Analog voice downlink:     435.300 MHz FM
                           435.150 MHz FM
                          2401.200 Mhz FM
Analog voice uplink:       145.860 MHZ FM
                           145.880 MHz USB
                           145.920 MHz FM
                          1268.700 MHz FM
Digital Downlinks:         435.150 MHz FM 38k4 PBP, 1 watt output
                           435.150 MHz FM 9k6 Pacsat Broadcast Protocol
                          2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:            145.860 MHz FM 9k6 Pacsat Broadcast Protocol
                          1268.700 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon:                    435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/

IARU coordination status page:
```

http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[06052009]
=====
QuakeSat
Catalog Number: 27845
Launch Date: June 30, 2003

Status: Telemetry only

Current Mode: 9600 baud data packet

Mode U packet
Downlink: 436.675 MHz 9k6 BPS

Quakesat webpage:
http://www.quakefinder.com/services/quakesat-ssite/
[04272009]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=69&retURL
=/satellites/status.php
[02212009]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Telemetry only

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/

```
[03302009]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Telemetry only

Current Modes:
Telemetry : /u

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign:       4XTECH-12

More information of GO-32 can be found at:
http://asri.technion.ac.il/techsat/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=14&retURL
=/satellites/status.php
[04272009]
=====
RS-22 RADIO SPORT RS-22
Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only

Current Mode:  /u

CW Beacon - 435.352 MHz
            145.818 MHz

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=76&retURL
=/satellites/status.php
[02212009]
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990

Status: CW Beacon only
```

Uplinks: 145.840 MHz 1200-baud Manchester FSK
145.860 MHz 1200-baud Manchester FSK
145.880 MHz 1200-baud Manchester FSK
145.900 MHz 1200-baud Manchester FSK

CW downlink: 437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[03162009]
=====
CanX-2
Catalog number: 32790
Launch Date: April 28, 2008

Status: Operational in range of ground station only

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[02212009]
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.425 MHz 1k2 baud packet

For the latest project status update please visit the AAUSAT-II web page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[02212009]
=====
CO-65 CUTE-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008

Status: Digipeater

Downlink: 437.475 MHz 9k6 Packet
Uplink: 1267.600 Mhz

Telemetry Beacon:
Downlink: 437.2750 MHz CW

For the latest project status update please visit the Cute-1.7+APD II
web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78

Command Station blog website:
http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=112&retURL
=/satellites/status.php
[02212009]
=====
Compass-1
Catalog number: 32787
Launch Date: April 28, 2008

Status: Operational

Current Mode: 4k8 MSK packet

Uplink: 145.980 MHz FM
Downlink: 437.275 Mhz CW
          437.405 MHz Packet

For the latest project status update please visit the Compass 1 web
page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=114&retURL
=/satellites/status.php
[04272009]
=====
CO-66 Seeds II
Catalog number: 32791
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.485 MHz

Callsign: JQ1YGU

For the latest project status update please visit the Seeds 2 web page: http://cubesat.aero.cst.nihon-u.ac.jp/english/seeds_2_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=113&retURL=/satellites/status.php
[02212009]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - V/u
Voice - V/v
BBS - V/v
APRS - V/v
SSTV - V/v

Expedition 20 Crew:
Commander: Gennady Padalka
Flight Engineer: Michael Barratt
Flight Engineer: Koichi Wakata KC5ZTA
Flight Engineer: Timothy Kopra
Flight Engineer: Roman Romanenko
Flight Engineer: Frank De Winne

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear

U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[06052009]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-156.S3
WSR 156 Part 3 06/05/2009

AMSAT NEWS SERVICE BULLETIN 156.S3
FROM AMSAT HQ SILVER SPRING, MD, June 06, 2009
TO ALL RADIO AMATEURS
BID: $ANS-156.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

CP4
Catalog Number: 31122
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon: 437.325 MHz CW

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=79
[10022008]

=====
LIBERTAD-1
Catalog Number: 31128
Launch Date: April 17,2007

Status: Non-Operational

```
Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink:   145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[02122009]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: Non-Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder:  145.825 Mhz FM
[01012009]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency:  437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink:         437.250 MHz FM 67Hz CTCSS
Voice Downlink:      2401.835 MHz FM
Packet Up/Downlink:  437.250 MHz 9k6 packet
Packet Downlink      2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005
```

Status: Non-Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[08132007]
=====
CANX-1
Catalog Number: 27847
Launch Date: June 30, 2003

Status: Non-Operational

Downlink: 437.8800 MHz AFSK 1k2bps
[06052009]
=====
DTUSAT
Catalog Number: 27842
Launch Date: June 30, 2003

Status: Non-Operational

Current Mode: 2k4 AFSK Packet last reported

Downlink: 437.475MHz

Officail webpage: http://dtusat1.dtusat.dtu.dk/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=101&retURL
=satellites/all_oscars.php
[02212009]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)

Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Telemetry only

Uplinks: 145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[03302009]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

```
Uplink:   145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
V-band:   145.840 -  145.990 MHz CW/LSB
U-band:   435.550 -  435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks
---------
S2-band:  2401.225 -  2401.475 MHz CW/USB
K-band:  24048.010 - 24048.060 MHz CW/USB
Beacon:   2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)
----------------------------
BEACON   General Beacon(GB)  Middle Beacon(MB)  Engineering Beacon(EB)
2 m                   none        145.898 MHz                    none
70cm           435.438 MHz        435.588 MHz             435.838 MHz
13cm(1)       2400.188 MHz       2400.338 MHz            2400.588 MHz
13cm(2)       2401.173 MHz       2401.323 MHz            2401.573 MHz
3cm          10450.975 MHz      10451.125 MHz           10451.375 MHz
1.5cm        24047.885 MHz      24048.035 MHz           24048.285 MHz
[07162007]
=====
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
```

Launch date: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: 25636
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and

the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink: 145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
MO-30 UNAMSAT-2
Catalog Number: 24305
Launch Date: September 5, 1996

Status: Non-operational

Downlink: 435.1380 MHz AFSK 1200 BPS
Downlink: 435.2060 MHz AFSK 1200 BPS
Uplink: 145.8150 MHz AFSK 1200 BPS
Uplink: 145.8350 MHz AFSK 1200 BPS
Uplink: 145.8550 MHz AFSK 1200 BPS
Uplink: 145.8750 MHz AFSK 1200 BPS
[06042009]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Non-operational

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012009]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks: 145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink: 145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

```
Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.
```

```
Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
[05012006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: SEMI-Operational

Current Mode:  V/u

Uplink:         145.900 MHz FM 1200-baud Manchester FSK (reserved)
                145.920 MHz FM VOICE
                145.940 MHz FM 1200-baud Manchester FSK (reserved)
                145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink:       437.026 MHz USB VOICE
                (1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[12252008]
=====
UO-15 UoSAT-4
Catalog Number: 20438
Launch Date: January 22, 1990

Status: Non-operational

Uplink: ?
Downlink: 435.1250MHz (?)
          435.1200MHz (?)
[06042009]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
```

```
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984

Status: Non-operational.

Current Mode:  /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon:          435.025 MHz
Mode-S Beacon:     2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[01012009]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon:   145.810 MHz (unmodulated carrier)
```

```
W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink  29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
Beacons:   29.450 MHz
          435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational
```

```
Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon 1:  29.352 MHz (intermittent)
Beacon 2:  29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink:     21.260 to 21.300 MHz CW/USB
Downlink:  145.860 to 145.900 MHz CW/USB

Beacon:    145.860 MHz

Robot:     145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink:   21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon:   29.408 MHz

Robot:    29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-156.S4
WSR 156 Part 4 06/05/2009
```

```
AMSAT NEWS SERVICE BULLETIN 156.S4
FROM AMSAT HQ SILVER SPRING, MD, June 06, 2009
TO ALL RADIO AMATEURS
BID: $ANS-156.S4

THE FOLLOWING SATELLITES HAVE RE-ENTERED OR HAVE BEEN RETURNED SAFELY:

NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: July 28, 2008

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[01012009]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink:      145.825 Mhz FM APRS AX25
APRS Uplink:        145.825 MHz FM APRS AX25
Voice/PSK31 Uplink:  28.120 MHz

Packet to Voice ID: RAFT
[06112007]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Re-Entered
Re-entered: June 18, 2008

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
```

Beacon: 437.2750 MHz CW

Callsign: JR8YJT
[01012009]
=====
SO-43 Starshine 3
Catalog Number: 26929
Launch Date: September 30, 2001

Status: Re-Entered
Re-entered: January 21, 2003

Beacon: 145.825Mhz
[02212009]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at}
amsat.org
NNNN
/EX

From -2422716507980764600
X-Google-Language: ENGLISH,ASCII
Path: g2news2.google.com!news1.google.com!npeer01.iad.highwinds-media.com!
news.highwinds-media.com!feed-me.highwinds-media.com!nx02.iad01.newshosting.com!
newshosting.com!198.186.194.249.MISMATCH!news-out.readnews.com!
transit3.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-158 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sat, 6 Jun 2009 21:23:23 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 367
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <001501c9e70e$89a1a3c0$9ce4eb40$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;charset="iso-8859-1"
Content-Transfer-Encoding: quoted-printable
X-Trace: reader1.panix.com 1244337803 23957 166.84.1.6 (7 Jun 2009 01:23:23 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 7 Jun 2009 01:23:23 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to   rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to   rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news2.google.com rec.radio.amateur.space:229 rec.radio.info:775

AMSAT NEWS SERVICE
ANS-158

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

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*********************************************************************
* 2009 AMSAT Space Symposium and Annual General Meeting October 9-11 *
*   Four Points Sheraton Hotel at the Baltimore Washington Airport   *
*  Details - http://www.amsat.org/amsat-new/symposium/2009/index.php *
*********************************************************************
```

In this edition:

- Call for Nominations AMSAT Board of Directors
- 2009 AMSAT Annual Meeting and Space Symposium - Call for papers
- New Members Welcomed to AO-51 Operations Committee
- AMSAT Awards
- Hotel Booking Details for AMSAT-UK Space Colloquium July 25-26
- COMPASS Satellite Team Releases New Commands for Amateur Radio
- Satellite Shorts From All Over

SB SAT @ AMSAT $ANS-158.01
Call for Nominations AMSAT Board of Directors

AMSAT News Service Bulletin 158.01
>From AMSAT HQ SILVER SPRING, MD.
June 7, 2009
To All RADIO AMATEURS
BID: $ANS-158.01

Pursuant to AMSAT-NA Bylaws, ARTICLE III Meetings and Election of Directors; Section 2:
http://www.amsat.org/amsat-new/AboutAmsat/documents/bylaws.php

Written nominations of Members for the position of Director, which nominees shall have agreed to serve if elected, shall be received by the Secretary on or before June 15 of each year.

The deadline for nominations for the 2009 AMSAT Board of Directors elections to be received at the AMSAT office is no later than June 15, 2009. A nomination requires either one AMSAT Member Society or five current AMSAT members. A director serves 2 years.

Nominations must be in writing and send via regular mail to: AMSAT, 850 Sligo Ave #600, Silver Spring, MD 20910. E-mail nominations cannot be accepted.

The seats on the Board that are up for election include, Rick Hambly, W2GPS; Barry Baines, WD4ASW; Drew Glasbrenner, KO4MA; and Gunther Meisse, W8GSM.

The AMSAT Office reports at press time, the following people have been nominated: Anthony Monteiro, AA2TX; Bill Ress, N6GHZ; Barry Baines, WD4ASW; Drew Glasbrenner, KO4MA; Alan Biddle, WA4SCA.

Gunther Meisse, W8GSM has advised the Board that he will not run for another term. Gunther said, "With the increased pressure of my day job and the economic pressures that are present for the public media, I need to spend 110% of my time with the family's Radio and Television stations. I have enjoyed the wonderful time with the brilliant brain trust within AMSAT, but business calls. It is my hope that the membership will elect new, young, innovative thinkers to the BoD. AMSAT, just like my industry, is changing and we need new thinkers to deal with the new realities. I send my special thank you to all the members who have supported my ideas over the last few years. It has been fun and educational. Never stop seeking out new things to learn!" Rick Hambly, W2GPS also will not seek re-election to the Board this year.

[ANS thanks the AMSAT Board of Directors for the above information]

/EX

SB SAT @ AMSAT $ANS-158.02
2009 AMSAT Annual Meeting and Space Symposium - Call for papers

AMSAT News Service Bulletin 158.02
>From AMSAT HQ SILVER SPRING, MD.
June 7, 2009
To All RADIO AMATEURS
BID: $ANS-158.02

This is the first call for papers for the 2009 AMSAT Annual Meeting and Space Symposium to be held October 9 - 11 at the Four Points Sheraton Hotel at the Baltimore Washington Airport.

Proposals for papers, symposium presentations and poster presentations are invited on any topic of interest to the amateur satellite community.

We request a tentative title of your presentation as soon as possible, with final copy submitted by September 1, 2009 for inclusion in the printed proceedings.

Abstracts and papers should be sent to Dan Schultz, N8FGV, at n8fgv@amsat.org.

[ANS thanks Dan, N8FGV for the above information]

/EX

SB SAT @ AMSAT $ANS-158.03
New Members Welcomed to AO-51 Operations Committee

AMSAT News Service Bulletin 158.03
>From AMSAT HQ SILVER SPRING, MD.
June 7, 2009
To All RADIO AMATEURS
BID: $ANS-158.03

AMSAT VP Operations, Drew KO4MA announced, "I'm proud to welcome Doug Papay, KD8CAO and Ed Clayo, N8BBQ to the AO-51 Operations Committee. Doug and Ed are both consummate AO-51 operators, and have supported past AMSAT special events."

Drew continued, "The response for our call for volunteers last month was outstanding and I want to thank all of those who applied, and encourage them to continue to support AMSAT by volunteering in some way."

The Operations Committee also welcomed Mark Hammond, N8MH aboard joining the AO-51 command team now that AO-16 operations are on hiatus until the next period of increased illumination. Drew noted, "As AO-51 approaches 5 years in orbit this month, the satellite is becoming more demanding of our control team and Mark will be a fine addition to the team."

[ANS thanks Drew, KO4MA for the above information]

/EX

SB SAT @ AMSAT $ANS-158.04
AMSAT Awards

AMSAT News Service Bulletin 158.04
>From AMSAT HQ SILVER SPRING, MD.
June 7, 2009
To All RADIO AMATEURS
BID: $ANS-158.04

AMSAT Director Contests and Awards Bruce, KK5DO says congratulations are in order for the amateur radio operators on his AMSAT Awards list.

We would like to welcome the following to the Satellite Communicators Club for making their first satellite contact.

Michael Klomfass, DH5MK

Michael McMahan, KC9NXP
Steve Rish, K8SAR

The following have earned the AMSAT Satellite Sexagesimal Communications Award:

John Papay, K8YSE, #148
Michael Klomfass, DH5MK, #149

Bruce also noted that the he AMSAT Satellite Communications Achievement Award is approaching certificate #500. Bruce predicted that someone may possibly reach this milestone in the next week or two. If you have not sent in for this award yet, now is the time to do it.

To see all the awards visit http://www.amsat.org.

[ANS thanks Bruce, KK5DO for the above information]

/EX

SB SAT @ AMSAT $ANS-158.05
Hotel Booking Details for AMSAT-UK Space Colloquium July 25-26

AMSAT News Service Bulletin 158.05
>From AMSAT HQ SILVER SPRING, MD.
June 7, 2009
To All RADIO AMATEURS
BID: $ANS-158.05

As you may have heard, the location of the AMSAT-UK Colloquium (25/26 July 2009) has been switched from Manchester to Guildford. This is to ensure the best possible event for the largest number of visitors. The venue has been changed to the Holiday Inn Hotel at Guildford - this is very close to the Surrey University where the event has been held previously. It is just off the Cathedral roundabout on the A3.

The 2009 AMSAT Colloquium will now commence at 10am on Saturday July 25th and close at approximately 4.30 pm on the Sunday.

The new venue will enable visitors to attend at a significantly lower cost than last year and experience greatly improved accommodation. The two days will be filled with presentations covering all the latest amateur satellite happenings and developments.

The new GB4FUN trailer will also be in attendance and available to demonstrate satellite operations.

An informal social gathering is also planned for those who are able to arrive on the Friday evening

Full details of the booking arrangements are below. Check our website for any late breaking news. http://www.uk.amsat.org/ and also full details of how to get to Guildford etc.

Members and non-members will be equally welcome.

AMSAT-UK Colloquium 2009 - Booking Information

Special rates at the hotel have also been negotiated for the Friday and Sunday nights should delegates wish to arrive early, or depart late.

To book your place at the Colloquium, YOU MUST BOOK WITH THE HOTEL. (Please do not attempt to book with AMSAT-UK as in previous years)

The easiest way to do this is to phone the special Conference Office at the hotel on +44 (0) 1483 784444 and quote reference R0F (That's R zero F). You must lodge your credit card details with the hotel. If you wish to book over the internet, then please email the hotel on meetings-guildford@ihg.com. PLEASE NOTE THAT IN ORDER TO GUARANTEE A ROOM AT THE HOTEL FOR THE SAT NIGHT YOU MUST BOOK BEFORE FRIDAY 3 JULY.

Bookings for the Fri/Sun nights, or ones made after this date cannot be guaranteed.

YOU ARE ADVISED TO BOOK EARLY, AS THE HOTEL WILL ONLY HOLD A LIMITED NUMBER OF ROOMS FOR US.

Costs

The complete package, including tea/coffee, attendance at all presentations, a gala dinner on Saturday evening, bed and breakfast on Sat pm through Sun morning is only UK Pounds �128. This price does NOT include lunch, which may be taken at the hotel, or elsewhere. (Cost of a three-course buffet style lunch at the hotel is �15, alternatively the hotel offers bar meals/snacks)

The special rate for bed and breakfast on either Fri/Sat or Sun/Mon is UK pounds �75.00 per night.

If you do not wish to stay at the hotel overnight (for example, if you live locally), you can book attendance at the presentations at the rate of �25.00 per day (includes tea/coffee, excludes lunch) and/or the Gala Dinner on Saturday evening at �20.00. Again these booking must be made directly with the hotel.

Jim Heck, G3WGM

Hon Sec AMSAT-UK

[ANS thanks AMSAT-UK for the above information]

/EX

SB SAT @ AMSAT $ANS-158.06
COMPASS Satellite Team Releases New Commands for Amateur Radio

AMSAT News Service Bulletin 158.06
>From AMSAT HQ SILVER SPRING, MD.
June 7, 2009
To All RADIO AMATEURS
BID: $ANS-158.06

The COMPASS satellite team is happy to announce three DTMF commands to the Amateur Radio community to say THANK YOU for your support.

The uplink frequency for COMPASSis 145.980 MHz FM, and the new DTMF tones for Amateur Radio operator to request information from the satellite include:
**35## - request a test beacon CW
**36## - request a test packet 1k2 AFSK FM (UI-Frame)
**60## - request a housekeeping frame in 1k2 AFSK FM (KISS frame)

Every command will be confirmed with a short "beep" on the CW beacon frequency of 437.275 MHz. Packet data is sent on 437.405 MHz. A news blog can be found at http://www.raumfahrt.fh-aachen.de/news.htm.

COMPASS telemetry decoding software is available on-line from: http://www.dk3wn.info/software.shtml.

Please send your received data to compass1cubesat@googlemail.com
Also, if you have any questions please don�t hesitate to ask us at this e-mail address.

Henk, PA3GUO has posted a video describing his reception of Compass-1 AFSK telemetry at http://www.vimeo.com/4911267. To play the movie full-screen, click on the right bottom button in the player. Also there is a HD button, ensure it is showing "HD is on".

[ANS thanks Mike, DK3WN for the above information]

/EX

SB SAT @ AMSAT $ANS-158.07
Satellite Shorts From All Over

AMSAT News Service Bulletin 158.07
>From AMSAT HQ SILVER SPRING, MD.
June 7, 2009

To All RADIO AMATEURS
BID: $ANS-158.07

+ Piraja, PS8RF reported copying Jean-Jacques, ON7EQ via AO-7 over a distance of 4757 miles, or 7616 Km. He has a video of the DX event posted at http://www.youtube.com/watch?v=ggNmQqxARWY.

+ Once again we are approaching the 4th full weekend in June and that means Field Day. The AMSAT 2009 Field Day rules have been posted at: http://www.amsat.org/amsat-new/awards/amsatfd.php

+ Amateur Radio operators are reporting receiving the AMSAT-India VO-52 Award in the mail. AMSAT-India Secretary Nitin, VU3TYG says the award continues to be available with details on-line at: http://www.amsatindia.org

+ Robert, NH7WN in Honolulu reported contact with Patrick, WD9EWK and copied Michael WB7QXU via AO-51. Patrick reported, "It appears we covered a path of just over 2900 miles (almost 4700km) with that brief

contact. Clint, K6LCS reported that NH7WN sounded great in Riverside, California.

+ Tim, N3TL has been experimenting with 500 milliwatt power on his AO-7 uplink. He reports contact with K8YSE. Tim also thanks Rick, WA4NVM, Pete, WB2OQQ, and others who were listening for him on these tests.

+ Raul, CA3SOC has posted several videos of his satellite operation with his FT-847 and Ham Radio Deluxe software at: http://www.youtube.com/profile?user=ce3soc&view=videos

+ A graphic satellite tracker can be viewed at: http://www.opensats.net

[ANS thanks everyone for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office. With that please keep in mind that if you go duck hunting in a swamp try not to get stuck in the quackmire!

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM
K9JKM at amsat dot org

From 904043401384312292

```
X-Google-Thread: a4a23d5f63,58c2f2dc89b974b4,start
X-Google-Attributes: gida4a23d5f63,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news2.google.com!news.glorb.com!transit3.readnews.com!
news-out.readnews.com!news-xxxfer.readnews.com!panix!rri.panix.com!robomod!not-
for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-162 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Thu, 11 Jun 2009 21:43:29 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 1661
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <001801c9eaff$26d393d0$747abb70$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1244771009 638 166.84.1.6 (12 Jun 2009 01:43:29 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Fri, 12 Jun 2009 01:43:29 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
x-cr-hashedpuzzle: Pb8= jpY= ANCD AYkP CRig CdBA EaTT E8kl HAjP HGFb HPhM HlST
Hy4w JGl5 JUks
JWe8;1;cgBlAGMALQByAGEAZABpAG8ALQBpAG4AZgBvAEAAcABhAG4AaQB4AC4AYwBvAG0A;Sosha1_v1;
7;{241011CF-7629-4F3C-845E-
D8B20F29538C};awA5AGoAawBtAEAAYwBvAG0AYwBhAHMAdAAuAG4AZQB0AA==;Fri, 12 Jun 2009
01:43:02
GMT;VwBTAFIALQAxADYAMgAgAEEATQBTAEEAVAAgAFcAZQBlAGsAbAB5ACAAUwBhAHQAZQBsAGwAaQB0AG
UAIABSAGUAcABvAHIAdAA=
x-cr-puzzleid: {241011CF-7629-4F3C-845E-D8B20F29538C}
Xref: g2news2.google.com rec.radio.amateur.space:230 rec.radio.info:780
```

This report is organized into four (4) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - deborbited/returned satellites

SB SAT @ AMSAT W8ISS ANS-163.S1
WSR 163 Part 1 06/12/2009

AMSAT NEWS SERVICE BULLETIN 163.S1
FROM AMSAT HQ SILVER SPRING, MD, June 12, 2009
TO ALL RADIO AMATEURS
BID: $ANS-162.S1

DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008

Status: Operational
Current Mode: Science Mode - Beacon ONLY

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink: 435.530 to 435.570 MHz

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68
[02122009]
=====
VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.859330 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

```
To know what transponder is switched on please listen for the beacon
that is active. Each transponder has a different beacon.
[08072008]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Modes:   FM Repeater - Uplink:    145.920 Mhz FM
                               Downlink:  435.300 Mhz FM
                 BBS         - Uplink:    OFF
                               Downlink:  OFF
                 Telemetry   - Downlink:  435.150 MHz

Analog voice downlink:     435.300 MHz FM
                           435.150 MHz FM
                          2401.200 Mhz FM
Analog voice uplink:       145.860 MHZ FM
                           145.880 MHz USB
                           145.920 MHz FM
                          1268.700 MHz FM
Digital Downlinks:         435.150 MHz FM 38k4 PBP, 1 watt output
                           435.150 MHz FM 9k6 Pacsat Broadcast Protocol
                          2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:            145.860 MHz FM 9k6 Pacsat Broadcast Protocol
                          1268.700 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon:                    435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[06052009]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002

Status: Operational.
```

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz. The order of operation is thus: (allow for Doppler as necessary):

1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10 minute timer.

[05282007]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Operational
Current Mode: V/u (Mode JA)

Voice/CW (Mode JA)
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
145.870 MHz FM
145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage:
http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:

http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's
CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/
fo29cwts.htm
[02122009]
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[03232009]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational

Current Mode: Alternating between Mode A and B every 24 hours

```
Uplink:   145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink:  29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons:   29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW
```

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
[02122009]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544

Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - V/u
Voice - V/v
BBS - V/v
APRS - V/v
SSTV - V/v

Expedition 20 Crew:

Commander:	Gennady Padalka	RN3DT
Flight Engineer:	Michael Barratt	KD5MIJ
Flight Engineer:	Koichi Wakata	KC5ZTA
Flight Engineer:	Timothy Kopra	KE5UDN
Flight Engineer:	Roman Romanenko	
Flight Engineer:	Frank De Winne	ON1DWN

Available Modes and Frequencies:

Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time line is NOT translated from Russian and posted.
[06122009]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-163.S2
WSR 163 Part 2 06/12/2009

AMSAT NEWS SERVICE BULLETIN 163.S2
FROM AMSAT HQ SILVER SPRING, MD, June 12, 2009
TO ALL RADIO AMATEURS
BID: $ANS-163.S2

CP-6
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Commissioning

Downlink: 437.365 MHz 1k2 AFSK
[06052009]
=====
HAWKSAT 1
Catalog number: 35003
Launch Date: May 19, 2009

Status: ?

Downlink: 437.345 ?
[06052009]
=====
Pharmasat
Catalog Number: 35002
Launch Date: May 19, 2009
Status: Commissioning

Downlink: 437.465 MHz 1k2 AFSK
[06052009]
=====
ANUSAT
Catalog Number: 34808
Launch Date: April 20, 2009

Status: ?

Downlink: 435.000 MHz
Uplink: 145.800 MHz

```
Telemetry: 137.400 MHz
[05112009]
=====
SOHLA-1 (ASTRO TECH.)
Catalog Number: 33496
Launch Date: January 23, 2009

Status: Commisioning

Proposed Frequencies and Modes:
Downlink: 437.505 MHz AFSK/CW
Beacon:   437.505 MHz AFSK/CW

Callsign:

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=101
[03232009]
=====
KAGAYAKI (Solan Co.)
Catalog Number: 33495?
Launch Date: January 23, 2009

Status: In Orbit

Downlink: 437.375 MHZ    FSK9k6/CW
Beacon:   437.375 MHz    FSK9k6/CW

IARU coordination status page:

AMSAT-NA webpage:

[01152009]
=====
STARS (Kagawa Univ.) (Twin Satellites)
Catalog Number: 33498
Launch Date: January 23, 2009

Status: Operational ?

Downlinks: 437.485 MHz FM/CW
           437.465 MHz FM/CW
Beacons:   437.305 MHz FM/CW
           437.275 MHz FM/CW

Callsigns: JR5YBN
           JR5YBO

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=99

AMSAT-NA webpage:
```

http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=121&retURL
=/satellites/status.php
[022152009]
=====
KKS-1 (Tokyo MCIT)
Catalog Number: 33499
Launch Date: January 23, 2009

Status: Operational

Downlink: 437.455 MHz AFSK/CW
Beacon: 437.385 MHz AFSK/CW

Callsign: JQ1YYY

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=107

AMSAT-NA webapge:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=120&retURL
=/satellites/status.php
[02212009]
=====
PRISM (Tokyo Univ.)
Catalog Number: 33493
Launch Date: January 23, 2009

Status: Operational ?

Downlink: 437.425 MHz AFSK/GMSK/CW
Beacon: 437.250 MHz AFSK/GMSK/CW

Callsign: JQ1YCX

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=97

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=119&retURL
=/satellites/status.php
[02212009]
=====
RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number: 32953
Launch Date: May 23, 2008

Status: Operational

Curent Modes: Telemetry
              Audio
              Images

Downlinks: 435.315 MHz

```
           435.215 MHz

AMSAT-NA website:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=115&ret
URL=/satellites/status.php

Official website:
http://www.npopm.com/?cid=leoca&caid=43
[02122009]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode:  /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon:    435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=94&retURL=
/satellites/status.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=72
[02122009]
=====
CP3
Catalog Number: 31129
Launch Date: April 17,2007

Status: Operational

Current Mode:  /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[02122009]
=====
GENESAT-1
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Current Mode: /u

Callsign: KE7EGC
```

Telemetry Beacon Downlink: 437.0670 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[02212009]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon: 437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/xivpicte.htm
[02212009]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003

Status: Operational

Current Mode: /u

Beacon: 436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=96&retURL=/satellites/status.php

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[02212009]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Operational?

Uplink: 1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan?)

```
Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=56
[02122009]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Modes:   FM Repeater - Uplink:    145.920 Mhz FM
                             Downlink:  435.300 Mhz FM
                 BBS         - Uplink:    OFF
                             Downlink:  OFF
                 Telemetry   - Downlink:  435.150 MHz

Analog voice downlink:     435.300 MHz FM
                           435.150 MHz FM
                          2401.200 Mhz FM
Analog voice uplink:       145.860 MHZ FM
                           145.880 MHz USB
                           145.920 MHz FM
                          1268.700 MHz FM
Digital Downlinks:         435.150 MHz FM 38k4 PBP, 1 watt output
                           435.150 MHz FM 9k6 Pacsat Broadcast Protocol
                          2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:            145.860 MHz FM 9k6 Pacsat Broadcast Protocol
                          1268.700 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon:                    435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[06052009]
```

=====
QuakeSat
Catalog Number: 27845
Launch Date: June 30, 2003

Status: Telemetry only

Current Mode: 9600 baud data packet

Mode U packet
Downlink: 436.675 MHz 9k6 BPS

Quakesat webpage:
http://www.quakefinder.com/services/quakesat-ssite/
[04272009]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=69&retURL
=/satellites/status.php
[02212009]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Telemetry only

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[03302009]
=====

GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Telemetry only

Current Modes:
Telemetry : /u

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks: 145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://asri.technion.ac.il/techsat/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=14&retURL
=/satellites/status.php
[04272009]
=====
RS-22 RADIO SPORT RS-22
Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only

Current Mode: /u

CW Beacon - 435.352 MHz
            145.818 MHz

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=76&retURL
=/satellites/status.php
[02212009]
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990

Status: CW Beacon only

Uplinks: 145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK

145.880 MHz 1200-baud Manchester FSK
145.900 MHz 1200-baud Manchester FSK

CW downlink: 437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[03162009]

=====

CanX-2
Catalog number: 32790
Launch Date: April 28, 2008

Status: Operational in range of ground station only

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[02212009]

=====

AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.425 MHz 1k2 baud packet

For the latest project status update please visit the AAUSAT-II web page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[02212009]

=====

CO-65 CUTE-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008

Status: Digipeater

Downlink: 437.475 MHz 9k6 Packet
Uplink: 1267.600 Mhz

```
Telemetry Beacon:
Downlink: 437.2750 MHz CW

For the latest project status update please visit the Cute-1.7+APD II
web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78

Command Station blog website:
http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=112&retURL
=/satellites/status.php
[02212009]
=====
Compass-1
Catalog number: 32787
Launch Date: April 28, 2008

Status: Operational

Current Mode: 4k8 MSK packet

Uplink:   145.980 MHz FM
Downlink: 437.275 Mhz CW
          437.405 MHz Packet

For the latest project status update please visit the Compass 1 web
page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=114&retURL
=/satellites/status.php
[04272009]
=====
CO-66 Seeds II
Catalog number: 32791
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.485 MHz

Callsign: JQ1YGU

For the latest project status update please visit the Seeds 2 web
page: http://cubesat.aero.cst.nihon-u.ac.jp/english/seeds_2_e.html
```

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=113&retURL=/satellites/status.php
[02212009]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - V/u
Voice - V/v
BBS - V/v
APRS - V/v
SSTV - V/v

Expedition 20 Crew:
Commander: Gennady Padalka RN3DT
Flight Engineer: Michael Barratt KD5MIJ
Flight Engineer: Koichi Wakata KC5ZTA
Flight Engineer: Timothy Kopra KE5UDN
Flight Engineer: Roman Romanenko
Flight Engineer: Frank De Winne ON1DWN

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[06122009]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-163.S3
WSR 163 Part 3 06/12/2009

AMSAT NEWS SERVICE BULLETIN 163.S3
FROM AMSAT HQ SILVER SPRING, MD, June 12, 2009
TO ALL RADIO AMATEURS
BID: $ANS-163.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

CP4
Catalog Number: 31122
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon: 437.325 MHz CW

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=79
[10022008]
=====
LIBERTAD-1
Catalog Number: 31128
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

```
Callsign: 5K3L

Uplink:   145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[02122009]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: Non-Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder:  145.825 Mhz FM
[01012009]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency:  437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink:        437.250 MHz FM 67Hz CTCSS
Voice Downlink:     2401.835 MHz FM
Packet Up/Downlink:  437.250 MHz 9k6 packet
Packet Downlink     2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non-Operational
```

```
Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[08132007]
=====
CANX-1
Catalog Number: 27847
Launch Date: June 30, 2003

Status: Non-Operational

Downlink: 437.8800 MHz AFSK 1k2bps
[06052009]
=====
DTUSAT
Catalog Number: 27842
Launch Date: June 30, 2003

Status: Non-Operational

Current Mode: 2k4 AFSK Packet last reported

Downlink: 437.475MHz

Officail webpage: http://dtusat1.dtusat.dtu.dk/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=101&retURL
=satellites/all_oscars.php
[02212009]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink:   435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)

Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Telemetry only

Uplinks:   145.850 MHz
```

```
           145.925 MHz 9600-baud FSK
Downlink:  437.325 MHz

Broadcast callsign: MYSAT3-11
BBS:                MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial land and weather imaging payloads offers FM and FSK
Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as
a collaborative effort between the Malaysian government and Surrey
Satellite Technology Ltd.
[03302009]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink:   145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS:                SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink:   145.850 MHz
Downlink: 436.775 MHz
```

```
Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
V-band:   145.840 -  145.990 MHz CW/LSB
U-band:   435.550 -  435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks
---------
S2-band:  2401.225 -  2401.475 MHz CW/USB
K-band:  24048.010 - 24048.060 MHz CW/USB
Beacon:   2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)
----------------------------
BEACON   General Beacon(GB)  Middle Beacon(MB)  Engineering Beacon(EB)
2 m                   none        145.898 MHz                    none
70cm           435.438 MHz        435.588 MHz             435.838 MHz
13cm(1)       2400.188 MHz       2400.338 MHz            2400.588 MHz
13cm(2)       2401.173 MHz       2401.323 MHz            2401.573 MHz
3cm          10450.975 MHz      10451.125 MHz           10451.375 MHz
1.5cm        24047.885 MHz      24048.035 MHz           24048.285 MHz
[07162007]
=====
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999
```

```
Status: Unknown

Uplink:    145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: 25636
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater:         436.250 MHz

Uplinks: Mode B Repeater:  145.825 MHz
Mode J Digipeater:         145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.
```

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink: 145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
MO-30 UNAMSAT-2
Catalog Number: 24305
Launch Date: September 5, 1996

Status: Non-operational

Downlink: 435.1380 MHz AFSK 1200 BPS
Downlink: 435.2060 MHz AFSK 1200 BPS
Uplink: 145.8150 MHz AFSK 1200 BPS
Uplink: 145.8350 MHz AFSK 1200 BPS
Uplink: 145.8550 MHz AFSK 1200 BPS
Uplink: 145.8750 MHz AFSK 1200 BPS
[06042009]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Non-operational

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012009]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

```
Current Mode:

Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HL01-11
BBS: HL01-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
```

```
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
```

```
Beacon:   2401.220 MHz
[05012006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: SEMI-Operational

Current Mode:  V/u

Uplink:         145.900 MHz FM 1200-baud Manchester FSK (reserved)
                145.920 MHz FM VOICE
                145.940 MHz FM 1200-baud Manchester FSK (reserved)
                145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink:       437.026 MHz USB VOICE
                (1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[12252008]
=====
UO-15 UoSAT-4
Catalog Number: 20438
Launch Date: January 22, 1990

Status: Non-operational

Uplink: ?
Downlink: 435.1250MHz (?)
          435.1200MHz (?)
[06042009]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984

Status: Non-operational.

Current Mode:  /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon:          435.025 MHz
Mode-S Beacon:     2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[01012009]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon:   145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
```

```
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink  29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
Beacons:   29.450 MHz
          435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
```

Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB

Beacon 1: 29.352 MHz (intermittent)
Beacon 2: 29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB

Beacon: 145.860 MHz

Robot: 145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-163.S4
WSR 163 Part 4 06/12/2009

AMSAT NEWS SERVICE BULLETIN 163.S4
FROM AMSAT HQ SILVER SPRING, MD, June 12, 2009

```
TO ALL RADIO AMATEURS
BID: $ANS-163.S4

THE FOLLOWING SATELLITES HAVE RE-ENTERED OR HAVE BEEN RETURNED SAFELY:

NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: July 28, 2008

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[01012009]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink:      145.825 Mhz FM APRS AX25
APRS Uplink:        145.825 MHz FM APRS AX25
Voice/PSK31 Uplink:  28.120 MHz

Packet to Voice ID: RAFT
[06112007]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Re-Entered
Re-entered: June 18, 2008

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon:             437.2750 MHz CW
```

Callsign: JR8YJT
[01012009]
=====
SO-43 Starshine 3
Catalog Number: 26929
Launch Date: September 30, 2001

Status: Re-Entered
Re-entered: January 21, 2003

Beacon: 145.825Mhz
[02212009]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to
the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis
Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at}
amsat.org
NNNN
/EX

From 4370339600394338250
X-Google-Thread: a4a23d5f63,ee742ff596dcb0c8,start
X-Google-Attributes: gida4a23d5f63,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news2.google.com!newsfeed2.dallas1.level3.net!
news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-165 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sat, 13 Jun 2009 21:20:30 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 303
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000201c9ec8e$48236480$d86a2d80$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1244942430 1663 166.84.1.6 (14 Jun 2009 01:20:30 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 14 Jun 2009 01:20:30 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to   rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to   rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news2.google.com rec.radio.amateur.space:231 rec.radio.info:787

AMSAT NEWS SERVICE
ANS-165

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

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**********************************************************************
* 2009 AMSAT Space Symposium and Annual General Meeting October 9-11 *
*   Four Points Sheraton Hotel at the Baltimore Washington Airport   *
*  Details - http://www.amsat.org/amsat-new/symposium/2009/index.php *
**********************************************************************
```

In this edition:

- AO-51 Special Event: Kid's Day June 20
- AO-51 Field Day Configuration
- Treat Yourself to an Amateur Radio Conference
- 7000 KM Contact Via AO-7 Mode B - Brazil to Belgium
- Satellite Shorts From All Over

SB SAT @ AMSAT $ANS-165.01
AO-51 Special Event: Kid's Day June 20

AMSAT News Service Bulletin 165.01
>From AMSAT HQ SILVER SPRING, MD.
June 14, 2009
To All RADIO AMATEURS
BID: $ANS-165.01

Amateur Radio Kids Day will be held on Saturday, June 20, 2009, between 1800 UTC - 2400 UTC. This on-air event encourages young people (licensed or not) to have fun with Amateur Radio, hopefully interesting them get a ham radio license of their own. It also gives us "older hams" [ahem!] a chance to share our love for amateur radio with the kids.

AMSAT VP Operations, Drew KO4MA announced that one of AO-51's repeaters will be dedicated to Kid's Day stations during this period. During the event please limit QSOs to those with youth participants on the satellite. The frequencies for this event will be:

AO-51 FM Repeater, V/U
Uplink: 145.880 Mhz FM
Downlink: 435.300 Mhz FM

The suggested exchange includes name, age, location and favorite color. To draw attention mention "Kids Day" when you call on the satellite.

All participants are eligible to receive a colorful certificate. You can download this certificate for free, customized with the youngster's names, after filling out the Kids Day Survey on the ARRL Web Site.

Alternatively, you can send a 9" x 12" SASE to Boring Amateur Radio Club, PO Box 1357, Boring, OR 97009. An email reflector for Kids Day has been set up. More info about this list can be found at:
http://lists.contesting.com/mailman/listinfo/kids

[ANS thanks the AO-51 Operations Team and the ARRL for the above information]

/EX

SB SAT @ AMSAT $ANS-165.02
AO-51 Field Day Configuration

AMSAT News Service Bulletin 165.02
>From AMSAT HQ SILVER SPRING, MD.
June 14, 2009
To All RADIO AMATEURS
BID: $ANS-165.02

AMSAT's Satellite Field Day is held concurrently with the annual ARRL Field Day emergency preparedness exercise. This year the event will take place between 1800 UTC on Saturday June 27, 2009 through 2100 UTC on Sunday June 28, 2009.

AMSAT encourages stations to prepare for operations on all of the satellite modes - analog, FM, and digital. The congestion on FM LEO satellites has become so intense based on experience in prior years that we request to limit your use to one-QSO-per-FM-satellite. The ARRL rules only allow one contact per FM satellite to count. AMSAT Field Day rules allow one contact per FM repeater to count. This includes the International Space Station, if operational.

AO-51 will be configured to support Field Day operations. The Field Day configuration on AO-51 begins on June 21 to allow stations to test their equipment and antennas at home prior to the event. The satellite will remain in this mode through June 28.

AO-51 June 21 - June 28 Field Day Configuration
FM Repeater, V/U
Uplink: 145.920 Mhz FM
Downlink: 435.300 Mhz FM

FM Repeater, L/U (Subject to interuption for telemetry collection)

Uplink: 1268.700 Mhz FM
Downlink: 435.150 Mhz FM

The full text of the AMSAT Satellite Field Day Rules can be found on-line at: http://www.amsat.org/amsat-new/awards/amsatfd.php

The Satellite Summary Sheet can be found on this web page also. This format should be used for submission of the AMSAT Field Day competition and be received by KK5DO (email or postal mail) by 11:59 P.M. CDT, Monday, July 13, 2009. The preferred method for submitting your log is via e-mail to kk5do@amsat.org or kk5do@arrl.net.

You may also use the postal service but give plenty of time for your results to arrive by the submission date. Add photographs or other interesting information so that can be used an article for the Journal.

If mailing your submission, the address is:

Bruce Paige, KK5DO
Director of Awards and Contests
PO Box 310
Alief, TX 77411-0310.

Certificates will be awarded to the first-place, second, and third place emergency power/portable stations at the AMSAT General Meeting and Space Symposium in October, 2009.

[ANS thanks the AO-51 Operations Team and Bruce, KK5DO for the above information]

/EX

SB SAT @ AMSAT $ANS-165.03
Treat Yourself to an Amateur Radio Conference

AMSAT News Service Bulletin 165.03
>From AMSAT HQ SILVER SPRING, MD.
June 14, 2009
To All RADIO AMATEURS
BID: $ANS-165.03

AMSAT 2009 SPACE SYMPOSIUM AND ANNUAL GENERAL MEETING

Now is the time for you to prepare your papers and presentations for the 2009 AMSAT Annual Meeting and Space Symposium to be held October 9 - 11 at the Four Points Sheraton Hotel at the Baltimore Washington Airport.

Proposals for papers, symposium presentations and poster presentations are invited on any topic of interest to the amateur satellite community. We request a tentative title of your presentation as soon as possible, with final copy submitted by September 1, 2009 for inclusion in the printed proceedings.

Abstracts and papers should be sent to Dan Schultz, N8FGV, at n8fgv@amsat.org.

CENTRAL STATES VHF SOCIETY ANNUAL CONFERENCE

The Central States VHF Society (CSVHFS) is soliciting presentations and poster displays for their 43rd Annual Conference this summer, July 23-26 at the Holiday Inn in Elk Grove Village, Illinois. Find more information on-line at: http://www.csvhfs.org/conference/index.html.

Possible presentation topics on all aspects of weak-signal VHF and above include, but are not limited to, antennas (modeling, design, arrays and control), equipment construction, propagation, test gear, regulatory issues, operating, digital signal processing and software defined radio.

AMSAT-UK 2009 SPACE COLLOQIUM

The AMSAT-UK Colloquium will be held July 25 and July 26 at the the Holiday Inn Hotel in Guildford. This new site is very close to the Surrey University where the event has been held previously. The 2009 AMSAT Colloquium will now commence at 10am on Saturday July 25th and close at approximately 4.30 pm on Sunday.

ARRL AND TAPR DIGITAL COMMUNICATIONS CONFERENCE

Technical papers are solicited for presentation at the 28th Annual ARRL and TAPR Digital Communications Conference to be held September 25-27, 2009 in Chicago, Illinois. These papers will also be published in the Conference Proceedings (you do NOT need to attend the conference to have your paper included in the Proceedings). The submission deadline is July 31, 2009. Please send papers to: Maty Weinberg, ARRL, 225 Main St., Newington, CT 06111 - or you can make your submission via e-mail to: maty@arrl.org

MUD - MICROWAVE UPDATE 2009

Microwave Update 2009 will be held on Friday, October 23 through Saturday, October 24 in Dallas, Texas. Technical papers are currently being solicited for publication in the ARRL's Microwave Update 2009 Conference Proceedings. You do not need to attend the conference nor present your paper to have it published.

Strong preference will be given to original work and to those papers that are written and formatted specifically for publication rather than as a visual presentation aid. As this is a microwave conference papers must be on topics for frequencies above 900 MHz. Examples of such topics include microwave theory, construction, communication, deployment, propagation, antennas, activity, transmitters, receivers, components, amplifiers, communication modes, LASER, software design tools, and practical experiences.

If you are interested in submitting a paper please contact Kent Britain, at wa5vjb (at) flash (dot) net for additional information. The deadline for papers is Monday, August 31, 2008. More information is available on-line at: http://www.microwaveupdate.org/

[ANS thanks AMSAT-NA, AMSAT-UK, ARRL, CSVHFS, and MUD for the above information]

/EX

SB SAT @ AMSAT $ANS-165.04
7000 KM Contact Via AO-7 Mode B - Brazil to Belgium

AMSAT News Service Bulletin 165.04
>From AMSAT HQ SILVER SPRING, MD.
June 14, 2009
To All RADIO AMATEURS
BID: $ANS-165.04

ANS-158 carried a brief report of a successful AO-7 Mode B contact between Piraja, PS8RF in Brazil and Jean-Jacques, ON7EQ in Belgium. Since last week's report, additional information has been received on how they accomplished their 4736 mile (7622 KM) contact.

Jean-Jacques wrote, "As the theoretical window between both stations only lasts about 1 minute, 30 seconds, careful preparation was required for selection of the optimal window and calculation of doppler shifts both ways. The effective contact was only possible during about 20 seconds, just enough to exchange reports, while both stations met on the transponder within an offset of 500 Hz of calculated frequencies."

Well done and congratulations, gents! PS8RF has posted a video of the Satellite DX event at: http://www.youtube.com/watch?v=ggNmQqxARWY.

[ANS thanks Jean-Jacques, ON7EQ and Piraja, PS8RF for the above information.]

/EX

SB SAT @ AMSAT $ANS-165.05
Satellite Shorts From All Over

AMSAT News Service Bulletin 165.05
>From AMSAT HQ SILVER SPRING, MD.
June 14, 2009

To All RADIO AMATEURS
BID: $ANS-165.05

+ AMSAT received the sad news that Robert Kohli, VU2MKP, well known to many AO-40 operators and AMSAT-India life member has become a silent key. Ham radio has lost a great operator who guided many hams and was a source of inspiration to many of us.

+ The total number of ARISS ISS to earth school contacts has now reached 443. The complete listing of all scheduled school contacts, and questions, other ISS related websites, IRLP and Echolink websites can be found on-line at: http://www.amsat.org/amsat/ariss/news/arissnews.rtf

+ Franco, HB9OAB will activate CN2AB on VO-52 from Morocco between June 27 through July 20, 2009. Info at: http://www.qrz.com/cn2ab

+ Hams like science ... a BBC produced video of the Four Seasons of Titan: Weather & Climate Change on Saturn's Largest Moon can be viewed on-line at: http://tinyurl.com/mroemf

[ANS thanks everyone for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office. And with that please keep in mind in ancient Rome, deli workers were told that they could eat anything they wanted during the lunch hour. Anything, that is except the smoked salmon. Thus were created the world's first anti-lox breaks.

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM
K9JKM at amsat dot org

From 2094383903013842545
X-Google-Thread: 8f86f75953,3d6625dbd6819149,start
X-Google-Attributes: gid8f86f75953,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!postnews.google.com!w3g2000yqf.googlegroups.com!not-for-mail
From: "bill.meara@gmail.com" <bill.meara@gmail.com>
Newsgroups: rec.radio.amateur.space
Subject: New book... with satellite stories
Date: Sun, 14 Jun 2009 04:12:53 -0700 (PDT)
Organization: http://groups.google.com

```
Lines: 36
Message-ID: <44de711c-89fd-49e9-9546-48a02376edf7@w3g2000yqf.googlegroups.com>
NNTP-Posting-Host: 93.45.212.84
Mime-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 7bit
X-Trace: posting.google.com 1244977973 32063 127.0.0.1 (14 Jun 2009 11:12:53 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Sun, 14 Jun 2009 11:12:53 +0000 (UTC)
Complaints-To: groups-abuse@google.com
Injection-Info: w3g2000yqf.googlegroups.com; posting-host=93.45.212.84;
     posting-account=ePxsiwkAAACeKyenV1cL73nSaGPyDy3Q
User-Agent: G2/1.0
X-HTTP-UserAgent: Mozilla/5.0 (Windows; U; Windows NT 5.0; en-US; rv:1.9.0.11)
     Gecko/2009060215 Firefox/3.0.11,gzip(gfe),gzip(gfe)
Xref: g2news2.google.com rec.radio.amateur.space:232
```

Lots of satellite adventures in the new book -- tales of MIR, Shuttle contacts, AO-21, RS-12, RS-10, PC-Sat, ISS and more...

SolderSmoke -- A Global Adventure in Radio Electronics
From Crystal Radios to Podcast MP3s
With Occasional Forays into Astronomy, Kite Aerial Photography, and Model Rocketry

SolderSmoke is the story of a secret, round-the-world, after-hours life in electronics. Bill Meara started out as a normal kid, but around the age of 12 he got interested in radio... To make matters worse, when he got older he became a diplomat. In all of the places he has lived, his hobby caused him to seek out like-minded radio fiends, to stay up late into the night working on strange projects, and to build embarrassingly large antennas above innocent foreign neighborhoods. SolderSmoke takes you into the world of an expatriate geek. It is a technical memoir filled with funny stories and with serious descriptions of Bill's struggles to truly understand the theory behind the equipment that he built.

My intention was to produce a book that is both fun and useful. The memoir part of the book is about my life as electronics-addicted diplomat. But this is more than a memoir: portions of each chapter describe my struggles to really understand the theory behind the circuits that I was building. Throughout, I try to lace the text with inspirational descriptions of the fraternal, cooperative, international aspects of ham radio, of what we call "The International Brotherhood of Electronic Wizards." In short, its the kind of book that a techie would like to take to the beach.

Here is the web site -- it has the cover photo and a preview of the first chapter.

http://www.lulu.com/content/paperback-book/soldersmoke/6743576

From -4307357222395158795
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!postnews.google.com!e21g2000yqb.googlegroups.com!not-for-mail
From: Robert Clark <rgregoryclark@yahoo.com>
Newsgroups:
sci.astro,rec.radio.amateur.space,rec.radio.amateur.antenna,sci.astro.seti,sci.physics
Subject: Detecting the high def TV for the Google Lunar X Prize.
Date: Tue, 16 Jun 2009 15:57:38 -0700 (PDT)
Organization: http://groups.google.com
Lines: 76
Message-ID: <609fd5d7-b15e-4bf1-a5c5-60c4c68cc367@e21g2000yqb.googlegroups.com>
NNTP-Posting-Host: 72.94.102.136
Mime-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 7bit
X-Trace: posting.google.com 1245193059 26099 127.0.0.1 (16 Jun 2009 22:57:39 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Tue, 16 Jun 2009 22:57:39 +0000 (UTC)
Complaints-To: groups-abuse@google.com
Injection-Info: e21g2000yqb.googlegroups.com; posting-host=72.94.102.136;
posting-account=LrLGLAkAAAAGjouKUEM9rprSVVG_OeJd
User-Agent: G2/1.0
X-HTTP-UserAgent: Mozilla/5.0 (Windows; U; Windows NT 5.1; en-US; rv:1.9.0.10)
Gecko/2009042316 Firefox/3.0.10,gzip(gfe),gzip(gfe)
Xref: g2news2.google.com sci.astro:26218 rec.radio.amateur.space:233
rec.radio.amateur.antenna:12834 sci.astro.seti:386 sci.physics:161460

On another forum there was debate about whether the requirement of "near real time" high definition video transmissions was achievable for a such a low-cost mission.

It would certainly be doable if the receiving antennas on Earth were the large radio antennas used for space communications with interplanetary probes or those radio antennas used for radio astronomy. This is evidenced by the fact that the Kaguya(Selene) lunar orbiter mission was able to send high definition video to a large receiving dish radio antenna. And also by the fact that DirecTV sends high definition video to only 2 foot size antennas from geosynchronous orbit; so 10 times larger antennas would be able to receive such signals from a 10 times larger distance at the Moon.

However, I was wondering if it would be possible to detect this using amateur sized equipment at such a large distance. Usually for receiving high data rates you used transmissions at very high frequencies, as higher frequencies can carry more data. For instance both Kaguya and DirecTV transmit the high def video at gigahertz frequencies.

However, for the system I'm imaging I'm thinking of using much lower frequencies, and necessarily longer wavelengths. What I wanted to do is transmit at decametric wavelengths. High data transmissions rates would be achieved by making it be pulsed in an on-off fashion at high

intensity but at a rapid rate.
On that other forum the data rate required for high def TV was given as 256,000 bits per second. So I wanted to make these transmissions be pulsed at this rapid rate at wavelengths of a few tens's of meters.
My decametric wavelength requirement was because of the fact that high schools and universities have programs for detecting radio emissions from Jupiter at these wavelengths:

NASA's Radio JOVE Project.
http://radiojove.gsfc.nasa.gov/

The Discovery of Jupiter's Radio Emissions.
How a chance discovery opened up the field of Jovian radio studies.
by Dr. Leonard N. Garcia
http://radiojove.gsfc.nasa.gov/library/sci_briefs/discovery.html

These school and university receiving antennas on Earth consist of dozens to hundreds of vertical dipoles of lengths at the meters scale to correspond to the radio wavelengths. Some questions I had: how intense would the pulse have to be on the Moon to be detectable from the Moon above background noise for a detector on Earth of say a few dozen dipoles? Could this be done for the transmitter of power of say a few hundred watts for a low cost, low weight lander mission? Could the transmitter antenna on the moon be only a few meters size for the low weight requirement?
A secondary purpose I had in mind was a pet project of mine involving linking these many school receivers to form a global telescope at decametric wavelengths:

From: rgcl...@my-deja.com (Robert Clark)
Date: 23 May 2001 11:15:06 -0700
Subject: Will amateur radio astronomers be the first to directly detect extrasolar planets?
Newsgroups: rec.radio.amateur.space, rec.radio.amateur.antenna, sci.astro, sci.astro.seti, sci.space.policy
http://groups.google.com/group/sci.astro.seti/browse_frm/thread/c0018b68662c14e9

The long wavelengths should make the requirements for accurate distance information and timing synchrony between the separate detectors easy to manage even for amateur systems. Using this method might make the detection achievable even if the power or transmitting antenna size requirements are not practical for a low cost, low weight lander on the Moon for an individual detector on Earth.
The recent achievement of real-time very long baseline interferometry should make it possible to integrate these separate detector signals in real-time as well:

Astronomers Demonstrate a Global Internet Telescope.
Date Released: Friday, October 08, 2004
Source: Jodrell Bank Observatory
http://www.spaceref.com/news/viewpr.html?pid=15251

Bob Clark

```
From 3738193514061795874
X-Google-Thread: 54ac8f410d,189970b2f48406e0
X-Google-Attributes: gid54ac8f410d,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news4.google.com!proxad.net!feeder1-2.proxad.net!
74.125.46.134.MISMATCH!postnews.google.com!news2.google.com!news.glorb.com!
nlpi057.nbdc.sbc.com!prodigy.net!newspeer.monmouth.com!newsswitch.lcs.mit.edu!
news.uchicago.edu!nntp-server.caltech.edu!news.jpl.nasa.gov!not-for-mail
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Newsgroups:
sci.astro,rec.radio.amateur.space,rec.radio.amateur.antenna,sci.astro.seti,sci.phy
sics
Subject: Re: Detecting the high def TV for the Google Lunar X Prize.
Date: Tue, 16 Jun 2009 18:43:54 -0700
Organization: JPL Information Services, InterNetNews
Lines: 115
Message-ID: <h19hoo$i04$1@news.jpl.nasa.gov>
References: <609fd5d7-b15e-4bf1-a5c5-60c4c68cc367@e21g2000yqb.googlegroups.com>
NNTP-Posting-Host: seraphic.jpl.nasa.gov
Mime-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1; format=flowed
Content-Transfer-Encoding: 7bit
X-Trace: news.jpl.nasa.gov 1245203032 18436 137.79.6.96 (17 Jun 2009 01:43:52 GMT)
X-Complaints-To: newsmaster@jpl.nasa.gov
NNTP-Posting-Date: Wed, 17 Jun 2009 01:43:52 +0000 (UTC)
User-Agent: Thunderbird 2.0.0.21 (Windows/20090302)
In-Reply-To: <609fd5d7-b15e-4bf1-a5c5-60c4c68cc367@e21g2000yqb.googlegroups.com>
X-Received-Date: Wed, 17 Jun 2009 03:44:06 CDT (news.uchicago.edu)
Xref: g2news2.google.com sci.astro:26222 rec.radio.amateur.space:234
rec.radio.amateur.antenna:12837 sci.astro.seti:387 sci.physics:161494
```

Robert Clark wrote:

> On another forum there was debate about whether the requirement of "near real time" high definition video transmissions was achievable for a such a low-cost mission.
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Don't forget that DirecTV radiates a LOT more power than a typical deep space probe. AND they often have a higher gain antenna. A geosync relay satellite might have 96 TWTAs, each several hundred watts, on it, feeding a very clever multiple feed dish which is many meters in diameter (look at Thuraya, for instance).

> However, I was wondering if it would be possible to detect this using
> amateur sized equipment at such a large distance. Usually for
> receiving high data rates you used transmissions at very high
> frequencies, as higher frequencies can carry more data. For instance
> both Kaguya and DirecTV transmit the high def video at gigahertz
> frequencies.

There's a moderately active Amateur DSN group that listens for things
like Chandrayaan or MRO using relatively small dishes (1-2 meters).

The choice of higher frequencies isn't because it carries more data.
It's because a higher frequency allows you to get more gain with the
same physical antenna size. Double the frequency, and your antenna gain
goes up by a factor of 4, at both ends of the link.. a total of 12 dB
improvement in SNR, for the same transmitter power and receiver noise
figure. And, there's more spectrum available up high.

> However, for the system I'm imaging I'm thinking of using much lower
> frequencies, and necessarily longer wavelengths. What I wanted to do
> is transmit at decametric wavelengths. High data transmissions rates
> would be achieved by making it be pulsed in an on-off fashion at high
> intensity but at a rapid rate.

How high a data rate? If you're at 30 MHz (10m lambda), you're not
going to be pulsing at 10 MHz, or you're going to be generating a signal
that extends from 20 to 40 MHz (and then some). You need a low symbol
rate with lots of bits per symbol, which in turn means you'll need lots
of SNR.

> On that other forum the data rate required for high def TV was given
> as 256,000 bits per second.

HDTV, as carried on broadcast TV, is 19.8 Mbps. If you're happy with a
lower frame rate, or can do a lot of frame/frame compression, you can
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>
> NASA's Radio JOVE Project.
> http://radiojove.gsfc.nasa.gov/

>
> These school and university receiving antennas on Earth consist of
> dozens to hundreds of vertical dipoles of lengths at the meters scale

> to correspond to the radio wavelengths.

Any one school only has a couple dipoles up.. the gain is quite low.

  Some questions I had: how
> intense would the pulse have to be on the Moon to be detectable from
> the Moon above background noise for a detector on Earth of say a few
> dozen dipoles? Could this be done for the transmitter of power of say
> a few hundred watts for a low cost, low weight lander mission? Could
> the transmitter antenna on the moon be only a few meters size for the
> low weight requirement?

How technical do you want to get? There's a book about space telecommunications system design available for downloading from JPL (http://descanso.jpl.nasa.gov/ somewhere on that site)

Here's some basic numbers you'll need:

Free space path loss in dB = 32.44 + 20*log10(distance in km) + 20 *log10(frequency in MHz)
That's between isotropic antennas (0dBi)..

Antenna beamwidth is 70 degrees/ (diameter of antenna in wavelengths)
Antenna gain is 27000/(beamwidth^2)

A typical receiver noise figure (after figuring in losses in coax/waveguide, etc.) is probably 3dB.

kTB noise is -174 dBm/Hertz * 10*log10(bandwidth in Hz)

> A secondary purpose I had in mind was a pet project of mine involving
> linking these many school receivers to form a global telescope at
> decametric wavelengths:

Coherent combining would be a challenge, because of ionospheric variability at HF, not to mention the other challenges.

Look up LOFAR or the SKA (Square Kilometer Array) for a fairly well funded scheme.

From -2915737189258759135
X-Google-Thread: 54ac8f410d,189970b2f48406e0
X-Google-Attributes: gid54ac8f410d,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news1.google.com!news2.google.com!news.glorb.com!news-out.octanews.net!indigo.octanews.net!news-1.mpls.iphouse.net.POSTED!not-for-mail

```
Date: Tue, 16 Jun 2009 22:06:44 -0500
From: tom <news4792@taring.org>
User-Agent: Thunderbird 2.0.0.14 (Windows/20080421)
MIME-Version: 1.0
Newsgroups:
sci.astro,rec.radio.amateur.space,rec.radio.amateur.antenna,sci.astro.seti,sci.phy
sics
Subject: Re: Detecting the high def TV for the Google Lunar X Prize.
References: <609fd5d7-b15e-4bf1-a5c5-60c4c68cc367@e21g2000yqb.googlegroups.com>
<h19hoo$i04$1@news.jpl.nasa.gov>
In-Reply-To: <h19hoo$i04$1@news.jpl.nasa.gov>
Content-Type: text/plain; charset=ISO-8859-1; format=flowed
Content-Transfer-Encoding: 7bit
Lines: 18
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NNTP-Posting-Date: 16 Jun 2009 22:06:40 CDT
NNTP-Posting-Host: e0f009a4.newsreader.iphouse.net
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\@hA^50UU[C:R=]Mb:eHS>e[L>8303dC=f3i0WL7WX@ab@3=d:0Zn2>YI<c?B>YdO`K?K99i5
X-Complaints-To: abuse@iphouse.net
Xref: g2news2.google.com sci.astro:26225 rec.radio.amateur.space:235
rec.radio.amateur.antenna:12838 sci.astro.seti:388 sci.physics:161506

Jim Lux wrote:
>
> Don't forget that DirecTV radiates a LOT more power than a typical deep
> space probe. AND they often have a higher gain antenna. A geosync relay
> satellite might have 96 TWTAs, each several hundred watts, on it,
> feeding a very clever multiple feed dish which is many meters in
> diameter (look at Thuraya, for instance).
>

Wow.  96 TWTs with several hundred watts each.  From a satellite.  And
what's the efficiency?

So these are powered by what?  Small nuclear reactors?

Certainly not solar panels.

tom
K0TAR



From -4525244153573047563
X-Google-Thread: fd72c38c1,189970b2f48406e0
X-Google-Attributes: gidfd72c38c1,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news1.google.com!npeer01.iad.highwinds-media.com!
news.highwinds-media.com!feed-me.highwinds-media.com!post02.iad.highwinds-
media.com!newsfe09.iad.POSTED!7564ea0f!not-for-mail
From: "Sal M. Onella" <salmonella@food.poisoning.org>
```

Newsgroups:
sci.astro,rec.radio.amateur.space,rec.radio.amateur.antenna,sci.astro.seti
References: <609fd5d7-b15e-4bf1-a5c5-60c4c68cc367@e21g2000yqb.googlegroups.com>
<h19hoo$i04$1@news.jpl.nasa.gov>
Subject: Re: Detecting the high def TV for the Google Lunar X Prize.
Lines: 31
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <N0_Zl.6006$x_6.758@newsfe09.iad>
NNTP-Posting-Host: 72.199.59.151
X-Complaints-To: newsmaster@cox.net
X-Trace: newsfe09.iad 1245211821 72.199.59.151 (Wed, 17 Jun 2009 04:10:21 UTC)
NNTP-Posting-Date: Wed, 17 Jun 2009 04:10:21 UTC
Organization: Cox
Date: Tue, 16 Jun 2009 21:10:20 -0700
Xref: g2news2.google.com sci.astro:26228 rec.radio.amateur.space:236
rec.radio.amateur.antenna:12839 sci.astro.seti:390

"Jim Lux" <james.p.lux@jpl.nasa.gov> wrote in message
news:h19hoo$i04$1@news.jpl.nasa.gov...

Snip >

> HDTV, as carried on broadcast TV, is 19.8 Mbps. If you're happy with a
> lower frame rate, or can do a lot of frame/frame compression, you can
> get it lower.

Yes. OP said "near real time," which I take to mean "OK to drop some frames," like the satellite video phones the reporters use from the boondocks. Thus, high-def can be confined to a lot lower bandwidth if you don't mind seeing compression artifacts as each frame is being built on the screen.

I have a contemporary example: KABC-DT, Channel 7 Los Angeles is high-def on 7-1 AND high-def on 7-2, with a service called Living Well. See http://livingwell.tv/Welcome.html.

Living Well is apparently getting a skimpy bitshare, as compression artifacts are obvious, especially on scene changes and motion, whereas ABC programming on 7-1 is just beautiful. Living Well is very good, sharp HD, but you can see details being "painted in" for a quarter-second after a scene change.

"Sal"

```
From 7486639666069756923
X-Google-Thread: 54ac8f410d,189970b2f48406e0
X-Google-Attributes: gid54ac8f410d,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII
Path: g2news2.google.com!postnews.google.com!k8g2000yqn.googlegroups.com!not-for-
mail
From: Jim Lux <jimlux@earthlink.net>
Newsgroups:
sci.astro,rec.radio.amateur.space,rec.radio.amateur.antenna,sci.astro.seti,sci.phy
sics
Subject: Re: Detecting the high def TV for the Google Lunar X Prize.
Date: Tue, 16 Jun 2009 21:19:13 -0700 (PDT)
Organization: http://groups.google.com
Lines: 32
Message-ID: <731a24f8-4853-48e3-8189-b1f56c3920e9@k8g2000yqn.googlegroups.com>
References: <609fd5d7-b15e-4bf1-a5c5-60c4c68cc367@e21g2000yqb.googlegroups.com>
     <h19hoo$i04$1@news.jpl.nasa.gov>
<4a385dbf$0$18863$8046368a@newsreader.iphouse.net>
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Mime-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: quoted-printable
X-Trace: posting.google.com 1245212353 23967 127.0.0.1 (17 Jun 2009 04:19:13 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Wed, 17 Jun 2009 04:19:13 +0000 (UTC)
Complaints-To: groups-abuse@google.com
Injection-Info: k8g2000yqn.googlegroups.com; posting-host=71.165.151.34;
     posting-account=lkK1uwoAAAAoeD4xmAinKEHtukkQMEJ7
User-Agent: G2/1.0
X-HTTP-UserAgent: Mozilla/5.0 (Macintosh; U; Intel Mac OS X 10.5; en-US;
     rv:1.9.0.11) Gecko/2009060214 Firefox/3.0.11,gzip(gfe),gzip(gfe)
Xref: g2news2.google.com sci.astro:26229 rec.radio.amateur.space:237
rec.radio.amateur.antenna:12840 sci.astro.seti:391 sci.physics:161514

On Jun 16, 8:06=A0pm, tom <news4...@taring.org> wrote:
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>
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And
> what's the efficiency?
>
> So these are powered by what? =A0Small nuclear reactors?
>
> Certainly not solar panels.
>
> tom
```

> K0TAR

Not all will necessarily be on at the same time.
Typical narrow band coupled cavity TWTAs can get over 50% efficiency
(DC in to RF out)
Yes Solar Panels..10kW would not be unusual.

See, e.g., http://en.wikipedia.org/wiki/ASTRIUM_E3000 ... 14 kW of
power from 45 m^2 of solar panels and 4500kg of satellite..

This is so far beyond what is used in the scientific space program
it's mind boggling. But, hey, out of the $1-2B cost, the TWTAs are
probably only 5-10% of the total, and there are definitely quantity
discounts.

```
From 5424842837963364471
X-Google-Thread: 54ac8f410d,189970b2f48406e0
X-Google-Attributes: gid54ac8f410d,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news4.google.com!feeder.news-service.com!
news.albasani.net!not-for-mail
From: No Spam <nospam@nospam.com>
Newsgroups:
sci.astro,rec.radio.amateur.space,rec.radio.amateur.antenna,sci.astro.seti,sci.phy
sics
Subject: Re: Detecting the high def TV for the Google Lunar X Prize.
Date: Wed, 17 Jun 2009 06:14:05 +0000 (UTC)
Organization: albasani.net
Lines: 96
Message-ID: <h1a1jd$4s2$1@news.albasani.net>
References: <609fd5d7-b15e-4bf1-a5c5-60c4c68cc367@e21g2000yqb.googlegroups.com>
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Content-Type: text/plain; charset=UTF-8
Content-Transfer-Encoding: 8bit
X-Trace: news.albasani.net
SAKhrtdL9ZMGxVMhUqaarBmuldVH7PSuUn8i8TeplQC3CREuH3dfMAG+r31Gb625Q77TCGBQGZzm1zcjCl
G9K6FmsJ2UNifGM7luXRIRbBTTWdM7yk1FvMliP4+5ddOe
X-Complaints-To: abuse@albasani.net
NNTP-Posting-Date: Wed, 17 Jun 2009 06:14:05 +0000 (UTC)
X-User-ID: 6ldv6dN9V75RZSXSweheXS1G53j8dm/gFVIz0Ab4BMg=
Cancel-Lock: sha1:skWE6waS3KH3KujY/yAu0FhssMg=
X-NNTP-Posting-Host: JiO5MDBmc6G9bnwVeucILDSKIUA+N7ijgYHtP4ZhrZw=
Xref: g2news2.google.com sci.astro:26231 rec.radio.amateur.space:238
rec.radio.amateur.antenna:12841 sci.astro.seti:393 sci.physics:161544
```

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> On that other forum the data rate required for high def TV was given
> as 256,000 bits per second. So I wanted to make these transmissions be
> pulsed at this rapid rate at wavelengths of a few tens's of meters.
> My decametric wavelength requirement was because of the fact that
> high schools and universities have programs for detecting radio
> emissions from Jupiter at these wavelengths:
>
> NASA's Radio JOVE Project.
> http://radiojove.gsfc.nasa.gov/
>
> The Discovery of Jupiter's Radio Emissions. How a chance discovery
> opened up the field of Jovian radio studies. by Dr. Leonard N. Garcia
> http://radiojove.gsfc.nasa.gov/library/sci_briefs/discovery.html
>
> These school and university receiving antennas on Earth consist of
> dozens to hundreds of vertical dipoles of lengths at the meters scale to
> correspond to the radio wavelengths. Some questions I had: how intense
> would the pulse have to be on the Moon to be detectable from the Moon
> above background noise for a detector on Earth of say a few dozen
> dipoles? Could this be done for the transmitter of power of say a few
> hundred watts for a low cost, low weight lander mission? Could the
> transmitter antenna on the moon be only a few meters size for the low
> weight requirement?
> A secondary purpose I had in mind was a pet project of mine involving
> linking these many school receivers to form a global telescope at
> decametric wavelengths:
>
> From: rgcl...@my-deja.com (Robert Clark) Date: 23 May 2001 11:15:06
> -0700
> Subject: Will amateur radio astronomers be the first to directly detect
> extrasolar planets?
> Newsgroups: rec.radio.amateur.space, rec.radio.amateur.antenna,
> sci.astro, sci.astro.seti, sci.space.policy
> http://groups.google.com/group/sci.astro.seti/browse_frm/thread/

c0018b68662c14e9

>
> The long wavelengths should make the requirements for accurate
> distance information and timing synchrony between the separate detectors
> easy to manage even for amateur systems. Using this method might make
> the detection achievable even if the power or transmitting antenna size
> requirements are not practical for a low cost, low weight lander on the
> Moon for an individual detector on Earth.
> The recent achievement of real-time very long baseline interferometry
> should make it possible to integrate these separate detector signals in
> real-time as well:
>
> Astronomers Demonstrate a Global Internet Telescope. Date Released:
> Friday, October 08, 2004 Source: Jodrell Bank Observatory
> http://www.spaceref.com/news/viewpr.html?pid=15251
>

You will never get uncompressed HD video transmitted from the lunar
surface. And really, there is no need for it if the compression is
handled right. Only a few people I know can do that part.

Since the image is mostly repetitive, a low bitrate can be achieved which
should allow for a very good signal level path budget. this would make
for a higher energy per bit and a more reasonable earth station within
the budget of amateurs. (if thats the goal) To achieve a very low
bitrate, such things as Pre/post-distortion to utilize less bits, (black
gamas) using extremely long GOP structures and since the action of the
video is extremely slow and repetitive, a slow frame rate such as 1fps.
These can be counteracted at the receive station with software without
effecting the total image resolution.

The image resolution is where the wow factor is anyway! :-)

My *guess* is that whomever would put a spacecraft on the lunar surface
would only have one high speed datapath back. The HD transport stream
would be muxed in with the other data elements of the spacecraft on a
transmission system without consideration for amateur reception. Perhaps
encrypted if a commercial entity is paying for the broadcast rights.

From 1338770920977473712
X-Google-Thread: fd72c38c1,189970b2f48406e0
X-Google-Attributes: gidfd72c38c1,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII
Path: g2news2.google.com!postnews.google.com!c9g2000yqm.googlegroups.com!not-for-mail
From: Jim Lux <jimlux@earthlink.net>
Newsgroups:
sci.astro,rec.radio.amateur.space,rec.radio.amateur.antenna,sci.astro.seti
Subject: Re: Detecting the high def TV for the Google Lunar X Prize.
Date: Wed, 17 Jun 2009 06:31:42 -0700 (PDT)
Organization: http://groups.google.com
Lines: 47

Message-ID: <a8aced6a-cf3e-4664-8bc3-5e59d701c894@c9g2000yqm.googlegroups.com>
References: <609fd5d7-b15e-4bf1-a5c5-60c4c68cc367@e21g2000yqb.googlegroups.com>
<h19hoo$i04$1@news.jpl.nasa.gov> <N0_Zl.6006$x_6.758@newsfe09.iad>
NNTP-Posting-Host: 71.165.151.34
Mime-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: quoted-printable
X-Trace: posting.google.com 1245245502 1759 127.0.0.1 (17 Jun 2009 13:31:42 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Wed, 17 Jun 2009 13:31:42 +0000 (UTC)
Complaints-To: groups-abuse@google.com
Injection-Info: c9g2000yqm.googlegroups.com; posting-host=71.165.151.34;
posting-account=lkK1uwoAAAAoeD4xmAinKEHtukkQMEJ7
User-Agent: G2/1.0
X-HTTP-UserAgent: Mozilla/5.0 (Macintosh; U; Intel Mac OS X 10.5; en-US;
rv:1.9.0.11) Gecko/2009060214 Firefox/3.0.11,gzip(gfe),gzip(gfe)
Xref: g2news2.google.com sci.astro:26236 rec.radio.amateur.space:239
rec.radio.amateur.antenna:12842 sci.astro.seti:394

> Yes. =A0OP said "near real time," which I take to mean "OK to drop some
> frames," like the satellite video phones the reporters use from the
> boondocks. =A0Thus, high-def can be confined to a lot lower bandwidth if =
you
> don't mind seeing compression artifacts as each frame is being built on t=
he
> screen.
>
> I have a contemporary example: =A0KABC-DT, Channel 7 Los Angeles is high-=
def
> on 7-1 AND high-def on 7-2, with a service called Living Well. =A0Seehttp=
://livingwell.tv/Welcome.html.
>
> Living Well is apparently getting a skimpy bitshare, as compression
> artifacts are obvious, especially on scene changes and motion, whereas AB=
C
> programming on 7-1 is just beautiful. =A0Living Well is very good, sharp =
HD,
> but you can see details being "painted in" for a quarter-second after a
> scene change.
>

There's a fairly complex trade. For a lunar mission, the scene is going to be pretty static, just shifted. (not like there's a basketball team doing a fast break in the field of view), so it should compress well, given a suitable algorithm.

The challenge is that compression (especially good compression) takes computational power. So you have a tradeoff: do you spend you joules on compressing the images and radiate less RF energy, or do you compress less, and use a bigger power amp. There's also a mass tradeoff.. big amp or big antenna. The big antenna needs more accurate pointing, which increases complexity. Or the trade of frequency selection, higher frequency means more antenna gain, but usually lower efficiency in the PA and higher NF in the receiver end, as well as higher probabiliity of weather related fading.

And even there, because Moore's law means that semiconductor technology is always advancing, the tradespace is shifting towards more processing (because it gets cheaper in size, weight, power, while power amps are pretty much at the physics limits)

This is, of course, "rocket science".. or more properly, spacecraft system engineering. It's straightforward, for the most part, but non-trivial. Pick your requirements, define the tradespace(s), try configurations and see what happens.

```
From 4629772639774836352
X-Google-Thread: 54ac8f410d,189970b2f48406e0
X-Google-Attributes: gid54ac8f410d,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII
Path: g2news2.google.com!postnews.google.com!v4g2000vba.googlegroups.com!not-for-
mail
From: Robert Clark <rgregoryclark@yahoo.com>
Newsgroups:
sci.astro,rec.radio.amateur.space,rec.radio.amateur.antenna,sci.astro.seti,sci.phy
sics
Subject: Re: Detecting the high def TV for the Google Lunar X Prize.
Date: Fri, 19 Jun 2009 05:00:31 -0700 (PDT)
Organization: http://groups.google.com
Lines: 66
Message-ID: <50c8909e-6335-4931-b98f-5610e83209e3@v4g2000vba.googlegroups.com>
References: <609fd5d7-b15e-4bf1-a5c5-60c4c68cc367@e21g2000yqb.googlegroups.com>
     <h19hoo$i04$1@news.jpl.nasa.gov> <N0_Zl.6006$x_6.758@newsfe09.iad>
     <a8aced6a-cf3e-4664-8bc3-5e59d701c894@c9g2000yqm.googlegroups.com>
     <h1b2bj$2bq$1@news.jpl.nasa.gov>
NNTP-Posting-Host: 98.141.188.45
Mime-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: quoted-printable
X-Trace: posting.google.com 1245412832 28203 127.0.0.1 (19 Jun 2009 12:00:32 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Fri, 19 Jun 2009 12:00:32 +0000 (UTC)
Complaints-To: groups-abuse@google.com
Injection-Info: v4g2000vba.googlegroups.com; posting-host=98.141.188.45;
     posting-account=LrLGLAkAAAAGjouKUEM9rprSVVG_OeJd
User-Agent: G2/1.0
X-HTTP-UserAgent: Mozilla/5.0 (Windows; U; Windows NT 5.1; en-US; rv:1.9.0.11)
     Gecko/2009060215 Firefox/3.0.11,gzip(gfe),gzip(gfe)
Xref: g2news2.google.com sci.astro:26288 rec.radio.amateur.space:240
rec.radio.amateur.antenna:12879 sci.astro.seti:396 sci.physics:161903
```

On Jun 17, 11:32=A0am, Jim Lux <james.p....@jpl.nasa.gov> wrote:
> Jim Lux wrote:

```
> >> Yes. =A0OP said "near real time," which I take to mean "OK to drop som=
e
> >> frames," like the satellite video phones the reporters use from the
> >> boondocks. =A0Thus, high-def can be confined to a lot lower bandwidth =
if you
> >> don't mind seeing compression artifacts as each frame is being built o=
n the
> >> screen.
>
> Here's a back of the envelope link budget for a 500E3 km link carrying 1
> Mbps
>
> Let's assume 2GHz for the working frequency (not necessarily a good
> choice, but somewhere to start)
>
> Free Space Path Loss from Moon to earth, between isotropic antennas =3D
> 32.44 + 20*log10(500E3) + 20*log10(2E3) =3D 32.44 + 114 + 66 =3D about 21=
2 dB
>
> Assume an antenna 2m in diameter at one end (moon end)
> lambda for 2GHz is 15cm, so the antenna is 13 wavelengths in diameter
> Beamwidth will be about 70/13 =3D 5 degrees.. OK, because Earth is 2
> degrees wide from the moon, so you can just point at the middle of the
> visible earth.
>
> Assume an antenna 10m in diameter at the earth end. =A0Beamwidth will be =
1
> degree, twice the visible lunar disc size, so you can just point at the
> moon, generally.
>
> Gains of antennas
> 2m @ 2GHz =3D 30dB
> 10m @ 2GHz =3D 44dB
>
> Preceived at Earth =3D Ptransmitted +30 - 212 +44dB =3D Ptransmit -138dB.
>
> Assume transmitting with 10 Watts or +40dBm..
> Prec =3D -100dBm
>
> Now, let's look at the receiver:
> Power Spectral density of Noise is kT+NF.. kT is -174dBm/Hz and a decent
> NF might be 2dB (allowing for some plumbing losses, etc.
>
> -172 dBm/Hz
>
> Eb (energy/Bit) =3D -100dBm -60dB (1Mbps) =3D -160dBmJ
>
> So, Eb/No is about +12dB... =A0If you allow 2dB for implementation loss,
> that gets you to 10dB, which will get you a BER of 1E-6, which isn't
> terrible. =A0Coding will improve it, etc.
>
> Take home message:
>
```

> 10W at 2Ghz with reasonably sized antennas at moon and earth can carry 1
> Mbps.
>
> Scales linearly with data rate.. You want 10Mbps, you need 100W. =A0Or
> bigger antennas.

Thanks for the info. This at least should be doable with receiving antennas operated by universities.

Bob Clark

From -8515693909409492729
X-Google-Thread: 54ac8f410d,189970b2f48406e0
X-Google-Attributes: gid54ac8f410d,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!postnews.google.com!j20g2000vbp.googlegroups.com!not-for-mail
From: Robert Clark <rgregoryclark@yahoo.com>
Newsgroups:
sci.astro,rec.radio.amateur.space,rec.radio.amateur.antenna,sci.astro.seti,sci.physics
Subject: Re: Detecting the high def TV for the Google Lunar X Prize.
Date: Fri, 19 Jun 2009 11:20:03 -0700 (PDT)
Organization: http://groups.google.com
Lines: 135
Message-ID: <8ae6e568-4378-4858-972c-659d821bb746@j20g2000vbp.googlegroups.com>
References: <609fd5d7-b15e-4bf1-a5c5-60c4c68cc367@e21g2000yqb.googlegroups.com>
NNTP-Posting-Host: 98.141.188.45
Mime-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 7bit
X-Trace: posting.google.com 1245435603 6105 127.0.0.1 (19 Jun 2009 18:20:03 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Fri, 19 Jun 2009 18:20:03 +0000 (UTC)
Complaints-To: groups-abuse@google.com
Injection-Info: j20g2000vbp.googlegroups.com; posting-host=98.141.188.45;
posting-account=LrLGLAkAAAAGjouKUEM9rprSVVG_OeJd
User-Agent: G2/1.0
X-HTTP-UserAgent: Mozilla/5.0 (Windows; U; Windows NT 5.1; en-US; rv:1.9.0.11)
Gecko/2009060215 Firefox/3.0.11,gzip(gfe),gzip(gfe)
Xref: g2news2.google.com sci.astro:26298 rec.radio.amateur.space:241
rec.radio.amateur.antenna:12885 sci.astro.seti:397 sci.physics:161960

On Jun 16, 6:57 pm, Robert Clark <rgregorycl...@yahoo.com> wrote:
> On another forum there was debate about whether the requirement of
> "near real time" high definition video transmissions was achievable
> for a such a low-cost mission.
> It would certainly be doable if the receiving antennas on Earth were
> the large radio antennas used for space communications with
> interplanetary probes or those radio antennas used for radio

> astronomy. This is evidenced by the fact that the Kaguya(Selene) lunar
> orbiter mission was able to send high definition video to a large
> receiving dish radio antenna. And also by the fact that DirecTV sends
> high definition video to only 2 foot size antennas from geosynchronous
> orbit; so 10 times larger antennas would be able to receive such
> signals from a 10 times larger distance at the Moon.
> However, I was wondering if it would be possible to detect this using
> amateur sized equipment at such a large distance. Usually for
> receiving high data rates you used transmissions at very high
> frequencies, as higher frequencies can carry more data. For instance
> both Kaguya and DirecTV transmit the high def video at gigahertz
> frequencies.
> However, for the system I'm imaging I'm thinking of using much lower
> frequencies, and necessarily longer wavelengths. What I wanted to do
> is transmit at decametric wavelengths. High data transmissions rates
> would be achieved by making it be pulsed in an on-off fashion at high
> intensity but at a rapid rate.
> On that other forum the data rate required for high def TV was given
> as 256,000 bits per second. So I wanted to make these transmissions be
> pulsed at this rapid rate at wavelengths of a few tens's of meters.
> My decametric wavelength requirement was because of the fact that
> high schools and universities have programs for detecting radio
> emissions from Jupiter at these wavelengths:
>
> NASA's Radio JOVE Project.http://radiojove.gsfc.nasa.gov/
>
> The Discovery of Jupiter's Radio Emissions.
> How a chance discovery opened up the field of Jovian radio studies.
> by Dr. Leonard N. Garciahttp://radiojove.gsfc.nasa.gov/library/sci_briefs/
discovery.html
>
> These school and university receiving antennas on Earth consist of
> dozens to hundreds of vertical dipoles of lengths at the meters scale
> to correspond to the radio wavelengths. Some questions I had: how
> intense would the pulse have to be on the Moon to be detectable from
> the Moon above background noise for a detector on Earth of say a few
> dozen dipoles? Could this be done for the transmitter of power of say
> a few hundred watts for a low cost, low weight lander mission? Could
> the transmitter antenna on the moon be only a few meters size for the
> low weight requirement?
> A secondary purpose I had in mind was a pet project of mine involving
> linking these many school receivers to form a global telescope at
> decametric wavelengths:
>
> From: rgcl...@my-deja.com (Robert Clark)
> Date: 23 May 2001 11:15:06 -0700
> Subject: Will amateur radio astronomers be the first to directly
> detect extrasolar planets?
> Newsgroups: rec.radio.amateur.space, rec.radio.amateur.antenna,
> sci.astro, sci.astro.seti, sci.space.policyhttp://groups.google.com/group/
sci.astro.seti/browse_frm/thread/c0018...
>
> The long wavelengths should make the requirements for accurate

> distance information and timing synchrony between the separate
> detectors easy to manage even for amateur systems. Using this method
> might make the detection achievable even if the power or transmitting
> antenna size requirements are not practical for a low cost, low weight
> lander on the Moon for an individual detector on Earth.
> The recent achievement of real-time very long baseline interferometry
> should make it possible to integrate these separate detector signals
> in real-time as well:
>
> Astronomers Demonstrate a Global Internet Telescope.
> Date Released: Friday, October 08, 2004
> Source: Jodrell Bank Observatoryhttp://www.spaceref.com/news/viewpr.html?
pid=15251
>

In this post I suggested using DirecTV's and other satellite TV companies receiving dishes for SETI:

Newsgroups: sci.astro.seti, sci.astro, rec.radio.amateur.space, sci.physics
From: rgregorycl...@yahoo.com (Robert Clark)
Date: 7 Feb 2005 15:07:03 -0800
Subject: Could DirecTV satellite dishes be used for the Square Kilometer Array - and a more radical proposal[Re: Can DirectTV-type satellite dishes be used for SETI?]
http://groups.google.com/group/sci.astro.seti/msg/e425e5339227855a

In the discussion in that thread there were mentioned several problems with that proposal (possibly fixable with some expensive retrofits) but one big problem is that satellite TV is not designed to be two-way. Some satellite services are two-way when they are also used for internet access, but this is a much smaller proportion of the satellite TV subscribers.

However, instead of using the satellite TV dishes, we could use individual dipole antennas attached to each house. You would need to communicate high data rates for the signals detected so you would need broadband internet access for this.

These dipole antennas as per the Radio JOVE project are just simple vertical wires so could be attached to the house when the installer is connecting the wiring for the broadband. Possibly you could use the same external wiring as for the broadband but that might cause interference with the internet signals.

As shown on the Radio JOVE page the receivers for these dipole antennas are quite simple so would contribute minimally to the cost of installation. You do need accurate positional determination and timing synchrony for each receiving system to do the very long baseline interferometry, but at these decametric wavelengths this would be easy to do with GPS receivers carried by the installers. Over time you could keep the systems in synchrony by timing stamps accessed over the internet.

I suggested before using 10 million dipoles world-wide for detecting Jovian-sized planets close in to their primaries out to perhaps 10 light-years. According to this page, over 16.6 million new broadband internet users came online just in one quarter this year alone, bringing the number of broadband users world-wide to 429 million:

More people worldwide are subscribing to high-speed Internet connections.
China and other Asian countries among the growth leaders.
http://www.nationmultimedia.com/2009/06/17/technology/technology_30105358.php

New broadband subscribers would automatically get the dipole antennas. At the rate of increase of broadband subscribers, it would only take 3 months to reach 10 million separate dipoles. If each installer when setting up a new system, also retrofitted an another existing broadband system, then you could reach the full coverage of all the broadband subscribers dipoles in 6 years.
The number of world-wide broadband subscribers will be 500 million by 2010. At current growth rates it would be 900 million within the 6 years it took to equip each broadband subscriber system with one of the antenna dipoles. This is nearly two orders of magnitude better sensitivity than a 10 million dipole system. You could detect out to 100 light-years, opening up many more stars to the possibility of detection.

Bob Clark

```
From -4344379965018719105
X-Google-Thread: a4a23d5f63,e2ce312e261d9f75,start
X-Google-Attributes: gida4a23d5f63,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news1.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx02.iad01.newshosting.com!newshosting.com!
198.186.194.249.MISMATCH!transit3.readnews.com!news-xxxfer.readnews.com!news-
out.readnews.com!transit4.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-169 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Sun, 21 Jun 2009 09:22:45 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 1664
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000901c9f273$54b33000$fe199000$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1245590565 15777 166.84.1.6 (21 Jun 2009 13:22:45 GMT)
X-Complaints-To: abuse@panix.com
```

NNTP-Posting-Date: Sun, 21 Jun 2009 13:22:45 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
x-cr-hashedpuzzle: ACVa ARvr AtmQ BCNH BD4H BVx2 BmtS DLC/ DjOY EuQP E/qh FMvH FqJ0 GhYs JBV0 JVMg;1;cgBlAGMALQByAGEAZABpAG8ALQBpAG4AZgBvAEAAcABhAG4AaQB4AC4AYwBvAG0A;Sosha1_v1;7;{68F71F00-70AE-4E22-A668-12AAA434970D};awA5AGoAawBtAEAAYwBvAG0AYwBhAHMAdAAuAG4AZQB0AA==;Sun, 21 Jun 2009 13:22:26 GMT;VwBTAFIALQAxADYAOQAgAEEATQBTAEEAVAAgAFcAZQBlAGsAbAB5ACAAUwBhAHQAZQBsAGwAaQB0AGUAIABSAGUAcABvAHIAdAA=
x-cr-puzzleid: {68F71F00-70AE-4E22-A668-12AAA434970D}
Xref: g2news2.google.com rec.radio.amateur.space:242 rec.radio.info:798

This report is organized into four (4) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - deborbited/returned satellites

SB SAT @ AMSAT W8ISS ANS-169.S1
WSR 169 Part 1 06/18/2009

AMSAT NEWS SERVICE BULLETIN 169.S1
FROM AMSAT HQ SILVER SPRING, MD, June 18, 2009
TO ALL RADIO AMATEURS
BID: $ANS-169.S1

DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008

Status: Operational
Current Mode: Science Mode - Beacon ONLY

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink: 435.530 to 435.570 MHz

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:

http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68
[02122009]
=====
VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.859330 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is active. Each transponder has a different beacon.
[08072008]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

```
Current Modes:   FM Repeater - Uplink:    145.880 Mhz FM
                               Downlink: 2401.200 Mhz FM
                 BBS         - Uplink:    OFF
                               Downlink:  OFF
                 Telemetry   - Downlink:  OFF

Analog voice downlink:     435.300 MHz FM
                           435.150 MHz FM
                          2401.200 Mhz FM
Analog voice uplink:       145.860 MHZ FM
                           145.880 MHz USB
                           145.920 MHz FM
                          1268.700 MHz FM
Digital Downlinks:         435.150 MHz FM 38k4 PBP, 1 watt output
```

435.150 MHz FM 9k6 Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Pacsat Broadcast Protocol
1268.700 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[06182009]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz. The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10 minute timer.
[05282007]
=====
FO-29 JAS-2
Catalog number: 24278

Launch Date: August 17, 1996

Status: Operational
Current Mode: V/u (Mode JA)

Voice/CW (Mode JA)
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage:
http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's
CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts.htm
[02122009]
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org

```
[03232009]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational

Current Mode: Alternating between Mode A and B every 24 hours

Uplink:   145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink:  29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons:   29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
[02122009]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - V/u
                      Voice -       V/v
                      BBS -         V/v
                      APRS -        V/v
                      SSTV -        V/v


Expedition 20 Crew:
Commander:                Gennady Padalka  RN3DT
Flight Engineer:          Michael Barratt  KD5MIJ
Flight Engineer:          Koichi Wakata    KC5ZTA
Flight Engineer:          Timothy Kopra    KE5UDN
Flight Engineer:          Roman Romanenko
Flight Engineer:          Frank De Winne   ON1DWN

Available Modes and Frequencies:

Digital/APRS:
Worldwide packet uplink:   145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2
```

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[06122009]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-169.S2
WSR 169 Part 2 06/18/2009

AMSAT NEWS SERVICE BULLETIN 169.S2
FROM AMSAT HQ SILVER SPRING, MD, June 18, 2009
TO ALL RADIO AMATEURS
BID: $ANS-169.S2

CP-6
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Commissioning

Downlink: 437.365 MHz 1k2 AFSK
[06052009]
=====
HAWKSAT 1
Catalog number: 35003
Launch Date: May 19, 2009

Status: ?

Downlink: 437.345 ?
[06052009]
=====
Pharmasat
Catalog Number: 35002
Launch Date: May 19, 2009
Status: Commissioning

Downlink: 437.465 MHz 1k2 AFSK
[06052009]
=====
ANUSAT
Catalog Number: 34808
Launch Date: April 20, 2009

Status: ?

Downlink: 435.000 MHz
Uplink: 145.800 MHz

Telemetry: 137.400 MHz
[05112009]
=====
SOHLA-1 (ASTRO TECH.)
Catalog Number: 33496
Launch Date: January 23, 2009

Status: Commisioning

Proposed Frequencies and Modes:
Downlink: 437.505 MHz AFSK/CW
Beacon: 437.505 MHz AFSK/CW

Callsign:

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=101
[03232009]
=====
KAGAYAKI (Solan Co.)
Catalog Number: 33495?
Launch Date: January 23, 2009

Status: In Orbit

Downlink: 437.375 MHZ   FSK9k6/CW
Beacon: 437.375 MHz   FSK9k6/CW

IARU coordination status page:

AMSAT-NA webpage:

[01152009]
=====
STARS (Kagawa Univ.) (Twin Satellites)
Catalog Number: 33498
Launch Date: January 23, 2009

Status: Operational ?

Downlinks: 437.485 MHz FM/CW
           437.465 MHz FM/CW
Beacons: 437.305 MHz FM/CW
           437.275 MHz FM/CW

Callsigns: JR5YBN
           JR5YBO

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=99

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=121&retURL
=/satellites/status.php
[022152009]
=====
KKS-1 (Tokyo MCIT)
Catalog Number: 33499
Launch Date: January 23, 2009

Status: Operational

Downlink: 437.455 MHz AFSK/CW
Beacon: 437.385 MHz AFSK/CW

Callsign: JQ1YYY

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=107

AMSAT-NA webapge:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=120&retURL
=/satellites/status.php
[02212009]
=====
PRISM (Tokyo Univ.)

Catalog Number: 33493
Launch Date: January 23, 2009

Status: Operational ?

Downlink: 437.425 MHz AFSK/GMSK/CW
Beacon: 437.250 MHz AFSK/GMSK/CW

Callsign: JQ1YCX

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=97

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=119&retURL=/satellites/status.php
[02212009]
=====
RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number: 32953
Launch Date: May 23, 2008

Status: Operational

Curent Modes: Telemetry
Audio
Images

Downlinks: 435.315 MHz
435.215 MHz

AMSAT-NA website:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=115&retURL=/satellites/status.php

Official website:
http://www.npopm.com/?cid=leoca&caid=43
[02122009]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=94&retURL=
/satellites/status.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=72
[02122009]
=====
CP3
Catalog Number: 31129
Launch Date: April 17,2007

Status: Operational

Current Mode: /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[02122009]
=====
GENESAT-1
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Current Mode: /u

Callsign: KE7EGC

Telemetry Beacon Downlink: 437.0670 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[02212009]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon: 437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/xivpicte.htm
[02212009]

```
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003

Status: ?????

Current Mode: /u

Beacon:     436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=96&retURL
=/satellites/status.php

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[06082009]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Operational?

Uplink:  1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=56
[02122009]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Modes:   FM Repeater - Uplink:    145.880 Mhz FM
                               Downlink: 2401.200 Mhz FM
                 BBS         - Uplink:    OFF
                               Downlink:  OFF
                 Telemetry   - Downlink:  OFF

Analog voice downlink:     435.300 MHz FM
```

```
                          435.150 MHz FM
                         2401.200 Mhz FM
Analog voice uplink:      145.860 MHZ FM
                          145.880 MHz USB
                          145.920 MHz FM
                         1268.700 MHz FM
Digital Downlinks:        435.150 MHz FM 38k4 PBP, 1 watt output
                          435.150 MHz FM 9k6 Pacsat Broadcast Protocol
                         2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:           145.860 MHz FM 9k6 Pacsat Broadcast Protocol
                         1268.700 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon:                   435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[06182009]
=====
QuakeSat
Catalog Number: 27845
Launch Date: June 30, 2003

Status: Telemetry only

Current Mode: 9600 baud data packet

Mode U packet
Downlink: 436.675 MHz 9k6 BPS

Quakesat webpage:
http://www.quakefinder.com/services/quakesat-ssite/
[04272009]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only
```

```
Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=69&retURL
=/satellites/status.php
[02212009]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Telemetry only

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink:        144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[03302009]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Telemetry only

Current Modes:
Telemetry : /u

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign:       4XTECH-12

More information of GO-32 can be found at:
http://asri.technion.ac.il/techsat/
```

```
AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=14&retURL
=/satellites/status.php
[04272009]
=====
RS-22 RADIO SPORT RS-22
Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only

Current Mode:  /u

CW Beacon - 435.352 MHz
            145.818 MHz

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=76&retURL
=/satellites/status.php
[02212009]
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990

Status: CW Beacon only

Uplinks:          145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink:      437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[03162009]
=====
CanX-2
Catalog number: 32790
Launch Date: April 28, 2008

Status: Operational in range of ground station only

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web
page: http://www.utias-sfl.net/nanosatellites/CanX2/
```

```
IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[02212009]
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.425 MHz 1k2 baud packet

For the latest project status update please visit the AAUSAT-II web
page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[02212009]
=====
CO-65 CUTE-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008

Status: Digipeater

Downlink:  437.475 MHz 9k6 Packet
Uplink:   1267.600 Mhz

Telemetry Beacon:
Downlink: 437.2750 MHz CW

For the latest project status update please visit the Cute-1.7+APD II
web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78

Command Station blog website:
http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=112&retURL
=/satellites/status.php
[02212009]
=====
Compass-1
Catalog number: 32787
Launch Date: April 28, 2008

Status: Operational
```

Current Mode: 4k8 MSK packet

Uplink: 145.980 MHz FM
Downlink: 437.275 Mhz CW
          437.405 MHz Packet

For the latest project status update please visit the Compass 1 web
page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=114&retURL
=/satellites/status.php
[04272009]
=====
CO-66 Seeds II
Catalog number: 32791
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.485 MHz

Callsign: JQ1YGU

For the latest project status update please visit the Seeds 2 web
page: http://cubesat.aero.cst.nihon-u.ac.jp/english/seeds_2_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=113&retURL
=/satellites/status.php
[02212009]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - V/u
                      Voice -   V/v
                      BBS -   V/v
                      APRS -   V/v
                      SSTV -   V/v

Expedition 20 Crew:
Commander: Gennady Padalka RN3DT
Flight Engineer: Michael Barratt KD5MIJ

Flight Engineer: Koichi Wakata KC5ZTA
Flight Engineer: Timothy Kopra KE5UDN
Flight Engineer: Roman Romanenko
Flight Engineer: Frank De Winne ON1DWN

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time line is NOT translated from Russian and posted.
[06122009]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-169.S3
WSR 169 Part 3 06/18/2009

AMSAT NEWS SERVICE BULLETIN 169.S3

FROM AMSAT HQ SILVER SPRING, MD, June 18, 2009
TO ALL RADIO AMATEURS
BID: $ANS-169.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

CP4
Catalog Number: 31122
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon: 437.325 MHz CW

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=79
[10022008]
=====
LIBERTAD-1
Catalog Number: 31128
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink: 145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[02122009]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: Non-Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder: 145.825 Mhz FM
[01012009]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 MHz FM 67Hz CTCSS
Voice Downlink: 2401.835 MHz FM
Packet Up/Downlink: 437.250 MHz 9k6 packet
Packet Downlink   2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non-Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[08132007]
=====
CANX-1
Catalog Number: 27847
Launch Date: June 30, 2003

Status: Non-Operational

Downlink: 437.8800 MHz AFSK 1k2bps
[06052009]
=====
DTUSAT
Catalog Number: 27842
Launch Date: June 30, 2003

Status: Non-Operational

Current Mode: 2k4 AFSK Packet last reported

Downlink: 437.475MHz

Officail webpage: http://dtusat1.dtusat.dtu.dk/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=101&retURL=satellites/all_oscars.php
[02212009]

=====

AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)

Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]

=====

MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Telemetry only

Uplinks: 145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[03302009]

=====

NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

```
Everyone is welcome to use the digipeating/APRS features of Sapphire,
as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS:                SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink:   145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
V-band:   145.840 -  145.990 MHz CW/LSB
U-band:   435.550 -  435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks
---------
S2-band:  2401.225 -  2401.475 MHz CW/USB
```

K-band: 24048.010 - 24048.060 MHz CW/USB
Beacon: 2401.323 MHz
24048.035 MHz

P3-D Telemetry Beacons (IHU)

BEACON	General Beacon(GB)	Middle Beacon(MB)	Engineering Beacon(EB)
2 m	none	145.898 MHz	none
70cm	435.438 MHz	435.588 MHz	435.838 MHz
13cm(1)	2400.188 MHz	2400.338 MHz	2400.588 MHz
13cm(2)	2401.173 MHz	2401.323 MHz	2401.573 MHz
3cm	10450.975 MHz	10451.125 MHz	10451.375 MHz
1.5cm	24047.885 MHz	24048.035 MHz	24048.285 MHz

[07162007]

=====

OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]

=====

UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]

=====

SO-35 SUNSAT
Catalog Number: 25636
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz

Mode J Digipeater: 145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink: 145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
MO-30 UNAMSAT-2
Catalog Number: 24305
Launch Date: September 5, 1996

Status: Non-operational

Downlink: 435.1380 MHz AFSK 1200 BPS

Downlink: 435.2060 MHz AFSK 1200 BPS
Uplink: 145.8150 MHz AFSK 1200 BPS
Uplink: 145.8350 MHz AFSK 1200 BPS
Uplink: 145.8550 MHz AFSK 1200 BPS
Uplink: 145.8750 MHz AFSK 1200 BPS
[06042009]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Non-operational

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012009]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks: 145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM 9600-baud FSK

```
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
```

```
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
[05012006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: SEMI-Operational

Current Mode:  V/u

Uplink:         145.900 MHz FM 1200-baud Manchester FSK (reserved)
                145.920 MHz FM VOICE
                145.940 MHz FM 1200-baud Manchester FSK (reserved)
                145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink:       437.026 MHz USB VOICE
                (1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.026 MHz LHCP
```

V: Linear

Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[12252008]
=====
UO-15 UoSAT-4
Catalog Number: 20438
Launch Date: January 22, 1990

Status: Non-operational

Uplink: ?
Downlink: 435.1250MHz (?)
          435.1200MHz (?)
[06042009]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink: 145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink: 145.8500 MHz MFSK 1200 BPS
Uplink: 145.8700 MHz MFSK 1200 BPS
Uplink: 145.8900 MHz MFSK 1200 BPS
Uplink: 145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984

```
Status: Non-operational.

Current Mode:  /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon:          435.025 MHz
Mode-S Beacon:     2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[01012009]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon:   145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink  29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
Beacons:   29.450 MHz
          435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon 1:  29.352 MHz (intermittent)
Beacon 2:  29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational
```

```
Uplink:     21.260 to 21.300 MHz CW/USB
Downlink:  145.860 to 145.900 MHz CW/USB

Beacon:    145.860 MHz

Robot:     145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink:   21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon:   29.408 MHz

Robot:    29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-169.S4
WSR 169 Part 4 06/18/2009

AMSAT NEWS SERVICE BULLETIN 169.S4
FROM AMSAT HQ SILVER SPRING, MD, June 18, 2009
TO ALL RADIO AMATEURS
BID: $ANS-169.S4

THE FOLLOWING SATELLITES HAVE RE-ENTERED OR HAVE BEEN RETURNED SAFELY:

NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: July 28, 2008

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[01012009]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Re-Entered
```

Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink: 145.825 Mhz FM APRS AX25
APRS Uplink: 145.825 MHz FM APRS AX25
Voice/PSK31 Uplink: 28.120 MHz

Packet to Voice ID: RAFT
[06112007]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Re-Entered
Re-entered: June 18, 2008

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon: 437.2750 MHz CW

Callsign: JR8YJT
[01012009]
=====
SO-43 Starshine 3
Catalog Number: 26929
Launch Date: September 30, 2001

Status: Re-Entered
Re-entered: January 21, 2003

Beacon: 145.825Mhz
[02212009]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

- AMSAT News Service (ANS)
- General satellite discussion (AMSAT-BB)
- Orbit data (KEPS)
- Manned space missions (SAREX)
- District of Columbia area (AMSAT-DC)
- New England area (AMSAT-NE)
- AMSAT Educational Liaison mailing list (AMSAT-EDU)
- AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at}
amsat.org
NNNN
/EX

____
Via the ANS mailing list courtesy of AMSAT-NA
http://amsat.org/mailman/listinfo/ans

```
From 4388692329971941543
X-Google-Thread: 54ac8f410d,189970b2f48406e0
X-Google-Attributes: gid54ac8f410d,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII
Path: g2news2.google.com!postnews.google.com!j18g2000yql.googlegroups.com!not-for-
```

```
mail
From: Robert Clark <rgregoryclark@yahoo.com>
Newsgroups:
sci.astro,rec.radio.amateur.space,rec.radio.amateur.antenna,sci.astro.seti,sci.phy
sics
Subject: Detecting the HDTV for the Google Lunar X Prize, applications to the
     SETI search.
Date: Mon, 22 Jun 2009 09:07:59 -0700 (PDT)
Organization: http://groups.google.com
Lines: 159
Message-ID: <454ccf3d-4e5e-4aa6-8f27-edd6479d5986@j18g2000yql.googlegroups.com>
References: <609fd5d7-b15e-4bf1-a5c5-60c4c68cc367@e21g2000yqb.googlegroups.com>
     <8ae6e568-4378-4858-972c-659d821bb746@j20g2000vbp.googlegroups.com>
     <46430cd0-7c54-4005-a26a-e9b4f19b8cb7@r31g2000prh.googlegroups.com>
NNTP-Posting-Host: 98.141.188.45
Mime-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: quoted-printable
X-Trace: posting.google.com 1245686880 9748 127.0.0.1 (22 Jun 2009 16:08:00 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Mon, 22 Jun 2009 16:08:00 +0000 (UTC)
Complaints-To: groups-abuse@google.com
Injection-Info: j18g2000yql.googlegroups.com; posting-host=98.141.188.45;
     posting-account=LrLGLAkAAAAGjouKUEM9rprSVVG_OeJd
User-Agent: G2/1.0
X-HTTP-UserAgent: Mozilla/5.0 (Windows; U; Windows NT 5.1; en-US; rv:1.9.0.11)
     Gecko/2009060215 Firefox/3.0.11,gzip(gfe),gzip(gfe)
Xref: g2news2.google.com sci.astro:26423 rec.radio.amateur.space:243
rec.radio.amateur.antenna:12977 sci.astro.seti:398 sci.physics:162738

On Jun 20, 10:45 am, Jim Lux <jim...@earthlink.net> wrote:
> On Jun 19, 11:20 am, Robert Clark <rgregorycl...@yahoo.com> wrote:
>
> > On Jun 16, 6:57 pm, Robert Clark <rgregorycl...@yahoo.com> wrote:
>
> > > From: rgcl...@my-deja.com (Robert Clark)
> > > Date: 23 May 2001 11:15:06 -0700
> > > Subject: Will amateur radio astronomers be the first to directly
> > > detect extrasolar planets?
> > > Newsgroups: rec.radio.amateur.space, rec.radio.amateur.antenna,
> > > sci.astro, sci.astro.seti, sci.space.policyhttp://groups.google.com/g=
roup/sci.astro.seti/browse_frm/thread/c0018...
>
> > >  The long wavelengths should make the requirements for accurate
> > > distance information and timing synchrony between the separate
> > > detectors easy to manage even for amateur systems.
>
> Not easy, not for the precision required.
> You need not only precise time (straightforward), but also precise
> location (not so straightforward)
>
> You're interested in roughly 20MHz, as I recall.  Wavelength of 15
> meters.  In time, about 45 nanoseconds.
```

>
> Let's start with a real relaxed requirement, comparable to the mirror
> flatness for a telescope of lambda/14.   That means a time knowledge
> of about 3 ns and a position knowledge of 1 meter, in absolute terms.
>
> Typical GPS receivers that have a 1pps output are good to about 20-30
> nanoseconds. Using that to discipline a quartz oscillator, you can do
> a bit better, but it's non trivial to get to the 1-2 ns range.
> Remember, you're also planning on integrating over time, so you have
> to hold that tolerance for a long time.
>
> It would be difficult to determine your position to an absolute
> accuracy of 1 meter, much less the phase center of the antenna (which
> will change as a function of the angle of incidence, quite
> substantially, unless you're putting those dipoles up 100s of feet in
> the air.
>
> Using this method
>
> > > might make the detection achievable even if the power or transmitting
> > > antenna size requirements are not practical for a low cost, low weigh=
t
> > > lander on the Moon for an individual detector on Earth.
> > > The recent achievement of real-time very long baseline interferometr=
y
> > > should make it possible to integrate these separate detector signals
> > > in real-time as well:
>
> <snip>
>
> You need to go beyond looking at press releases from radio
> astronomers.
>
> > However, instead of using the satellite TV dishes, we could use
> > individual dipole antennas attached to each house. You would need to
> > communicate high data rates for the signals detected so you would need
> > broadband internet access for this.
> > These dipole antennas as per the Radio JOVE project are just simple
> > vertical wires so could be attached to the house when the installer is
> > connecting the wiring for the broadband. Possibly you could use the
> > same external wiring as for the broadband but that might cause
> > interference with the internet signals.
>
> Radio Jove uses a pair of horizontal dipoles connected together to
> create a single narrower lobe pointing up.
>
> > As shown on the Radio JOVE page the receivers for these dipole
> > antennas are quite simple so would contribute minimally to the cost of
> > installation.
>
> Who's paying, and how minimal? I don't think so.
>
> You do need accurate positional determination and timing

> > synchrony for each receiving system to do the very long baseline interferometry, but at these decametric wavelengths this would be easy to do with GPS receivers carried by the installers.
>
> No they can't. You need position accuracy of sub-1 meter accuracy, and that isn't achievable by simple handheld devices, like your Garmin E-trex, etc. A surveyor using a survey GPS system can get there, although absolute position (relative to, say, the center of the earth, or some standard datum) to 1 meter would be very challenging.
>
> There's also the not so little problem of tidal bulge. Your position changes in absolute (relative to a stellar reference) terms several tens of cm. On top of that, tectonic plate movement is on the order of several cm/year, which is in the same general ballpark as your accuracy requirement.
>
> ...

The NASA Global Differential GPS System.
"The NASA Global Differential GPS (GDGPS) System is a complete, highly accurate, and extremely robust real-time GPS monitoring and augmentation system.
"Employing a large ground network of real-time reference receivers, innovative network architecture, and award-winning real-time data processing software, the GDGPS System provides decimeter (10 cm) positioning accuracy and sub-nanosecond time transfer accuracy anywhere in the world, on the ground, in the air, and in space, independent of local infrastructure."
http://www.gdgps.net/

This would be enough for the positional accuracy at this wavelength. This type of highly accurate receiver would probably have to be used only by the installers as they are likely to be expensive. Perhaps the positional accuracy could be maintained over time by referring to a satellite signal.
The "time transfer" accuracy mentioned apparently does mean the many different sites can be put in time synchrony to within sub-nanosecond precision by reference to the atomic clocks on several GPS satellites at the same time:

Global Positioning System.
2.) Basic concept of GPS
    * 2.1 Position calculation introduction
    * 2.2 Correcting a GPS receiver's clock
http://en.wikipedia.org/wiki/Global_Positioning_System#Basic_concept_of_GPS

Innovation: GPS Time Transfer.
Using Precise Point Positioning for Clock Comparisons.
Nov 1, 2006
By: Fran=E7ois Lahaye, Diego Orgiazzi, Patrizia Tavella, Giancarlo Cerretto.
GPS World

http://www.gpsworld.com/gpsworld/Innovation-GPS-Time-Transfer/ArticleStanda=
rd/Article/detail/383189

However, JPL radio astronomer Dr. Dayton Jones responded to my question about the required timing accuracy at such long wavelengths, suggesting it might only have to be only at the ten's of nanoseconds to even microseconds range, depending on the bandwidth being detected:

Newsgroups: rec.radio.amateur.space, rec.radio.amateur.antenna,
sci.astro, sci.astro.seti, sci.space.policy
From: rgcl...@my-deja.com (Robert Clark)
Date: 18 Jun 2001 10:26:50 -0700
Subject: Re: Will amateur radio astronomers be the first to directly
detect extrasolar planets?
http://groups.google.com/group/sci.astro.seti/msg/8a56d6bc52a09590

Note that with the Radio JOVE system the bandwidth being detected is usually quite small at the tens to hundreds of khz range, as the emissions consist of short pulses. This would only require timing accuracy at the microsecond range.

For the cost, note that for cable, DSL, satellite, internet and/or TV service typically the receivers, modems, routers, etc are only "rented" where you pay a nominal fee every month. If the cost for the dipole and receivers were in the range of $100 dollars per installation then this could be amortized over the life of that broadband internet system, at say $1 dollar a month or even 50 cents a month.

Bob Clark

From -1394972005934795544
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news1.google.com!newsfeed2.dallas1.level3.net!
news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-172 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Tue, 23 Jun 2009 19:06:03 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 312
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <001b01c9f457$26ea9650$74bfc2f0$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1245798364 18771 166.84.1.6 (23 Jun 2009 23:06:04 GMT)
X-Complaints-To: abuse@panix.com

NNTP-Posting-Date: Tue, 23 Jun 2009 23:06:04 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to   rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to   rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news2.google.com rec.radio.amateur.space:244 rec.radio.info:805

AMSAT NEWS SERVICE
ANS-172

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* BOD Nominations
* Field Day Rules and SAT status
* More AO-7 DX Reported
* Rooms Filling Up for AMSAT-UK Colloquium
* ARISS Schedule

SB SAT @ AMSAT $ANS-172.1
BOD Nominations

AMSAT News Service Bulletin 172.1
>From AMSAT HQ SILVER SPRING, MD.
June 21, 2009
To All RADIO AMATEURS
BID: $ANS-172.1

Per the AMSAT bylaws, those individuals nominated to serve a 2 year term for the AMSAT Board of Directors are:

Barry Baines, WD4ASW
Alan Biddle, WA4SCA
Drew Glasbrenner, KO4MA

Tony Monteiro, AA2TX
Bill Ress, N6GHZ
--
Ballots should be in the mail by July 15th.

ALSO...To All: Please remember that AMSAT has one paid employee. So, if your order is not filled immediately, please be patient.

73- Martha

[ANS thanks Martha for the above information]

/EX

SB SAT @ AMSAT $ANS-172.2
Field Day Rules and SAT status

AMSAT News Service Bulletin 172.2
From AMSAT HQ SILVER SPRING, MD.
June 21, 2009
To All RADIO AMATEURS
BID: $ANS-172.2

AMSAT's Satellite Field Day is held concurrently with the annual ARRL Field Day emergency preparedness exercise. This year the event will take place between 1800 UTC on Saturday June 27, 2009 through 2100 UTC on Sunday June 28, 2009.

AMSAT encourages stations to prepare for operations on all of the satellite modes - analog, FM, and digital. The congestion on FM LEO satellites has become so intense based on experience in prior years that we request to limit your use to one-QSO-per-FM-satellite. The ARRL rules only allow one contact per FM satellite to count. AMSAT Field Day rules allow one contact per FM repeater to count. This includes the International Space Station, if operational.

AO-51 will be configured to support Field Day operations. The Field Day configuration on AO-51 begins on June 21 to allow stations to test their equipment and antennas at home prior to the event. The satellite will remain in this mode through June 28.

AO-51 June 21 - June 28 Field Day Configuration
FM Repeater, V/U
Uplink: 145.920 Mhz FM
Downlink: 435.300 Mhz FM

FM Repeater, L/U (Subject to interuption for telemetry collection)

Uplink: 1268.700 Mhz FM
Downlink: 435.150 Mhz FM

The full text of the AMSAT Satellite Field Day Rules can be found on-line at:
http://www.amsat.org/amsat-new/awards/amsatfd.php

The Satellite Summary Sheet can be found on this web page also. This format should be used for submission of the AMSAT Field Day competition and be received by KK5DO (email or postal mail) by 11:59 P.M. CDT, Monday, July 13, 2009. The preferred method for submitting your log is via e-mail to kk5do@amsat.org or kk5do@arrl.net.

You may also use the postal service but give plenty of time for your results to arrive by the submission date. Add photographs or other interesting information so that can be used an article for the Journal.

If mailing your submission, the address is:

Bruce Paige, KK5DO
Director of Awards and Contests
PO Box 310
Alief, TX 77411-0310.

Certificates will be awarded to the first-place, second, and third place emergency power/portable stations at the AMSAT General Meeting and Space Symposium in October, 2009.

[ANS thanks Bruce, KK5DO, for the above information]
/EX

SB SAT @ AMSAT $ANS-172.3
More AO-7 DX Reported

AMSAT News Service Bulletin 172.3
  From AMSAT HQ SILVER SPRING, MD.
June 21, 2009
To All RADIO AMATEURS
BID: $ANS-172.3

Piraja, PS8RF is pleased to report additional DX via AO-7 following on to his successful Brazil-to-Belgium contact with Jean-Jacques, ON7EQ as reported in ANS-165. This week Piraja was able to copy the CW signals of Andre, ZS2BK showing that a Brazil to South Africa contact is possible.

This contact is also close to the operational
limits of AO-7. The distance between the two
stations is 4805 miles (7904 KM). Piraja says
he can also copy F2IL on many AO-7 passes. He
has posted two videos on the web recording
these contacts:

PS8RF copy ZS2BK:
http://www.youtube.com/watch?v=8JUyIIi0s4I

PS8RF - ON7EQ contact:
http://www.youtube.com/watch?v=ggNmQqxARWY

[ANS thanks Piraja, PS8RF for the above information]

/EX

SB SAT @ AMSAT $ANS-172.4
Rooms Filling Up for AMSAT-UK Colloquium

AMSAT News Service Bulletin 172.4
From AMSAT HQ SILVER SPRING, MD.
June 21, 2009
To All RADIO AMATEURS
BID: $ANS-172.4

Rooms Filling Up for AMSAT-UK Colloquium

AMSAT-UK Hon Sec Jim Heck, G3WGM posted a
reminder to all plan- ning to the attend
the AMSAT-UK Colloquium, "If you are considering
attending the AMSAT-UK Colloquium at the
Holiday Inn, Guildford, UK on 25/26 July,
you should be booking soon. The hotel will only
hold rooms for us until Fri 3 July, after that
date, you may find that there are no more
rooms available."

Also please note that so far more than 50% of
people attending have booked in for the Friday
Night before the Colloquium, and the hotel
tells me that they are now getting quite full
on this night. So PLEASE BOOK EARLY to avoid
disappointment."

Full booking details, including prices are at:
http://www.uk.amsat.org/content/view/25/49/

The phone number of the hotel is +44 (0) 1483 784444
and their email address is meetings-guildford@ihg.com.
Please quote reference R0F (That's R zero F) when booking.

[ANS thanks Jim Heck, G3WGM for the above information]

/EX

SB SAT @ AMSAT $ANS-172.5
ARISS Schedule

AMSAT News Service Bulletin 172.5
From AMSAT HQ SILVER SPRING, MD.
June 15, 2009
To All RADIO AMATEURS
BID: $ANS-172.5

1. ARISS Contact with Tongfu Primary School, China

Youth attending Tongfu Road No. 1 Primary School in Guangzhou, Quangdong, P.R. China experienced an Amateur Radio on the International Space Station (ARISS) contact on Thursday, June 11. Astronaut Michael Barratt, KD5MIJ answered 19 questions put to him by the students as an audience of approximately 465 people looked on. Extensive media coverage included seven television stations, three radio stations and ten newspapers.

2. Successful ARISS Contact with Italian School

On Friday, June 12, children from several schools in L'Aquila, Abruzzo, Italy took part in an Amateur Radio on the International Space Station (ARISS) contact. Approximately 200 students and guests, including European Space Agency (ESA) and Agenzia Spaziale Italiana (ASI) representatives, attended the event. ESA astronaut Samantha Cristoforetti gave presentations on ISS missions and ESA/ASI activities. Astronaut Frank DeWinne, ON1DWN answered 13 questions on the first pass and another 7 questions on the following pass. Many television stations, including CANALE 5 and SKY, radio stations and newspapers provided media coverage. Internet video streaming had more than 6,500 connections.

3. Belgian Students Spoke with Frank De Winne

An Amateur Radio operator on the International Space Station (ARISS) contact took place on Friday, June 12 between Vrije Basisschool Terbank-Egenhoven in Heverlee, Belgium and Frank DeWinne ON1DWN on the ISS. Telebridge station ON4ISS in Belgium assisted with the contact. Twenty-two questions were answered during the nine minute pass, delighting the audience of 400 children, parents and guests. Four television stations and two radio broadcast stations with national and regional audiences covered the event. During the main evening news, a detailed report on telebridge ground station ON4ISS was broadcast by the national television service.

4. Astronaut Training Status

Astronaut Doug Wheelock passed his amateur radio licensing exam and was issued the callsign KF5BOC. He is scheduled to be part of Expedition 24 along with Shannon Walker, KD5DXB and Aleksandr Skvortsov.

On June 9, Wheelock also received Amateur Radio on the International Space Station (ARISS) training on basic radio operations.

5. Australia Journalist Takes Interest in ARISS

A local journalist in Kingston, Australia has taken an interest in Amateur Radio on the International Space Station (ARISS) and given great publicity to the program over the past three years. To view her latest article, see:
http://www.wia.org.au/newsevents/news/2009/20090603-2/index.php

6. ARISS on Twitter

The European Space Agency (ESA) is currently promoting their Amateur Radio on the International Space Station (ARISS) school contacts on their Twitter site.
See: http://twitter.com/esa_oasiss.

A U.S. ARISS member has also been posting ISS amateur radio related items to a Twitter site.
See: http://twitter.com/RF2Space.

7. ESA Press Release on Frank De Winne's ARISS Contacts

The European Space Agency (ESA) put out a press release on Frank De Winne's Amateur Radio on the International Space Station (ARISS) contacts. See:
http://www.esa.int/SPECIALS/OasISS_Mission/SEM6SOQORVF_0.html

8. ARISS International Meeting

The Amateur Radio on the International Space Station (ARISS) International Face to Face Meeting will be held on Thursday and Friday, June 18 -19 at the European Space Research and Technology Centre (ESTEC) in the Netherlands. The team will come together to give regional reports as well as status reports from the program's other committees including education, publicity, operations and hardware.

[ANS thanks Carol, KB3LKI, for the above information]

/EX

73,
This week's ANS Editor,
Dee Interdonato, NB2F

```
From -6201662766856504762
X-Google-Thread: a4a23d5f63,f0406e541710d2ff,start
X-Google-Attributes: gida4a23d5f63,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news1.google.com!newsfeed2.dallas1.level3.net!
news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-176 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Sat, 27 Jun 2009 11:32:38 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 1668
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000001c9f73c$78f10690$6ad313b0$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1246116758 19566 166.84.1.6 (27 Jun 2009 15:32:38 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sat, 27 Jun 2009 15:32:38 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
x-cr-hashedpuzzle: Hv4= AS28 Aico AvLs C3m/ EpGX FY0l GEMs HdbY HnV3 Ie1x JACs
JM6f Joxf KD29
Kiow;1;cgBlAGMALQByAGEAZABpAG8ALQBpAG4AZgBvAEAAcABhAG4AaQB4AC4AYwBvAG0A;Sosha1_v1;
7;{BBB30B3F-A82F-4F06-AE76-
C00A00E527CC};awA5AGoAawBtAEAAYwBvAG0AYwBhAHMAdAAuAG4AZQB0AA==;Sat, 27 Jun 2009
```

15:32:19
GMT;VwBTAFIALQAxADcANgAgAEEATQBTAEEAVAAgAFcAZQBlAGsAbAB5ACAAUwBhAHQAZQBsAGwAaQB0AG
UAIABSAGUAcABvAHIAdAA=
x-cr-puzzleid: {BBB30B3F-A82F-4F06-AE76-C00A00E527CC}
Xref: g2news2.google.com rec.radio.amateur.space:245 rec.radio.info:813

This report is organized into four (4) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - deborbited/returned satellites

SB SAT @ AMSAT W8ISS ANS-176.S1
WSR 176 Part 1 06/25/2009

AMSAT NEWS SERVICE BULLETIN 176.S1
FROM AMSAT HQ SILVER SPRING, MD, June 25, 2009
TO ALL RADIO AMATEURS
BID: $ANS-176.S1

DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008

Status: Operational
Current Mode: Science Mode - Beacon ONLY

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink: 435.530 to 435.570 MHz

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68
[02122009]
=====
VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

```
Indian Beacon:  145.859330 MHZ CW
Dutch Beacon:   145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is active. Each transponder has a different beacon.
[08072008]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Modes:   FM Repeater - Uplink:    145.920 Mhz FM
                               Downlink:  435.300 Mhz FM
                 FM Repeater - Uplink:   1268.700 Mhz FM
                               Downlink:  435.150 Mhz FM
                 BBS         - Uplink:    OFF
                               Downlink:  OFF
                 Telemetry   - Downlink:  435.150 MHz FM

Analog voice downlink:     435.300 MHz FM
                           435.150 MHz FM
                          2401.200 Mhz FM
Analog voice uplink:       145.860 MHZ FM
                           145.880 MHz USB
                           145.920 MHz FM
                          1268.700 MHz FM
Digital Downlinks:         435.150 MHz FM 38k4 PBP, 1 watt output
                           435.150 MHz FM 9k6 Pacsat Broadcast Protocol
                          2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:            145.860 MHz FM 9k6 Pacsat Broadcast Protocol
                          1268.700 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon:                    435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12
```

Official Webpage: http://www.amsat.org/amsat-new/echo/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[06252009]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz. The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10 minute timer.
[05282007]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Operational
Current Mode: V/u (Mode JA)

Voice/CW (Mode JA)
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS

Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage:
http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts.htm
[02122009]
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[03232009]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational

Current Mode: Alternating between Mode A and B every 24 hours

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz CW

145.972 MHz CW
435.100 MHz CW
2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
[02122009]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - V/u
Voice - V/v
BBS - V/v
APRS - V/v
SSTV - V/v

Expedition 20 Crew:

Commander:	Gennady Padalka	RN3DT
Flight Engineer:	Michael Barratt	KD5MIJ
Flight Engineer:	Koichi Wakata	KC5ZTA
Flight Engineer:	Timothy Kopra	KE5UDN
Flight Engineer:	Roman Romanenko	
Flight Engineer:	Frank De Winne	ON1DWN

Available Modes and Frequencies:

Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[06122009]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-176.S2
WSR 176 Part 2 06/25/2009

AMSAT NEWS SERVICE BULLETIN 176.S2
FROM AMSAT HQ SILVER SPRING, MD, June 25, 2009
TO ALL RADIO AMATEURS
BID: $ANS-176.S2

CP-6
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Commissioning

Downlink: 437.365 MHz 1k2 AFSK
[06052009]
=====
HAWKSAT 1
Catalog number: 35003
Launch Date: May 19, 2009

Status: ?

Downlink: 437.345 ?
[06052009]
=====
Pharmasat
Catalog Number: 35002
Launch Date: May 19, 2009

```
Status: Commissioning

Downlink: 437.465 MHz 1k2 AFSK
[06052009]
=====
ANUSAT
Catalog Number: 34808
Launch Date: April 20, 2009

Status: ?

Downlink:  435.000 MHz
Uplink:    145.800 MHz

Telemetry: 137.400 MHz
[05112009]
=====
SOHLA-1 (ASTRO TECH.)
Catalog Number: 33496
Launch Date: January 23, 2009

Status: Commisioning

Proposed Frequencies and Modes:
Downlink: 437.505 MHz AFSK/CW
Beacon:   437.505 MHz AFSK/CW

Callsign:

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=101
[03232009]
=====
KAGAYAKI (Solan Co.)
Catalog Number: 33495?
Launch Date: January 23, 2009

Status: In Orbit

Downlink: 437.375 MHZ    FSK9k6/CW
Beacon:   437.375 MHz    FSK9k6/CW

IARU coordination status page:

AMSAT-NA webpage:

[01152009]
=====
STARS (Kagawa Univ.) (Twin Satellites)
Catalog Number: 33498
Launch Date: January 23, 2009

Status: Operational ?
```

```
Downlinks: 437.485 MHz FM/CW
           437.465 MHz FM/CW
Beacons:   437.305 MHz FM/CW
           437.275 MHz FM/CW

Callsigns: JR5YBN
           JR5YBO

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=99

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=121&retURL
=/satellites/status.php
[022152009]
=====
KKS-1 (Tokyo MCIT)
Catalog Number: 33499
Launch Date: January 23, 2009

Status: Operational

Downlink:  437.455 MHz AFSK/CW
Beacon:    437.385 MHz AFSK/CW

Callsign: JQ1YYY

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=107

AMSAT-NA webapge:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=120&retURL
=/satellites/status.php
[02212009]
=====
PRISM (Tokyo Univ.)
Catalog Number: 33493
Launch Date: January 23, 2009

Status: Operational ?

Downlink: 437.425 MHz AFSK/GMSK/CW
Beacon:   437.250 MHz AFSK/GMSK/CW

Callsign: JQ1YCX

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=97

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=119&retURL
=/satellites/status.php
```

```
[02212009]
=====
RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number: 32953
Launch Date: May 23, 2008

Status: Operational

Curent Modes: Telemetry
              Audio
              Images

Downlinks: 435.315 MHz
           435.215 MHz

AMSAT-NA website:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=115&ret
URL=/satellites/status.php

Official website:
http://www.npopm.com/?cid=leoca&caid=43
[02122009]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode:  /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon:    435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=94&retURL=
/satellites/status.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=72
[02122009]
=====
CP3
Catalog Number: 31129
Launch Date: April 17,2007

Status: Operational

Current Mode:  /u
```

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[02122009]
=====
GENESAT-1
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Current Mode: /u

Callsign: KE7EGC

Telemetry Beacon Downlink: 437.0670 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[02212009]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon: 437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/xivpicte.htm
[02212009]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003

Status: ?????

Current Mode: /u

Beacon: 436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=96&retURL

```
=/satellites/status.php

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[06082009]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Operational?

Uplink:  1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=56
[02122009]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Modes:   FM Repeater - Uplink:    145.920 Mhz FM
                               Downlink:  435.300 Mhz FM
                 FM Repeater - Uplink:   1268.700 Mhz FM
                               Downlink:  435.150 Mhz FM
                 BBS         - Uplink:    OFF
                               Downlink:  OFF
                 Telemetry   - Downlink:  435.150 MHz FM

Analog voice downlink:     435.300 MHz FM
                           435.150 MHz FM
                          2401.200 Mhz FM
Analog voice uplink:       145.860 MHZ FM
                           145.880 MHz USB
                           145.920 MHz FM
                          1268.700 MHz FM
Digital Downlinks:         435.150 MHz FM 38k4 PBP, 1 watt output
                           435.150 MHz FM 9k6 Pacsat Broadcast Protocol
                          2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:            145.860 MHz FM 9k6 Pacsat Broadcast Protocol
                          1268.700 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon:                    435.150 MHz

Mode and Antenna Polarization:
```

```
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[06252009]
=====
QuakeSat
Catalog Number: 27845
Launch Date: June 30, 2003

Status: Telemetry only

Current Mode: 9600 baud data packet

Mode U packet
Downlink: 436.675 MHz 9k6 BPS

Quakesat webpage:
http://www.quakefinder.com/services/quakesat-ssite/
[04272009]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=69&retURL
=/satellites/status.php
[02212009]
=====
NO-44 PCSAT
Catalog number: 26931
```

```
Launch Date: September 30, 2001

Status: Telemetry only

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink:        144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[03302009]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Telemetry only

Current Modes:
Telemetry : /u

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign:       4XTECH-12

More information of GO-32 can be found at:
http://asri.technion.ac.il/techsat/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=14&retURL
=/satellites/status.php
[04272009]
=====
RS-22 RADIO SPORT RS-22
Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only

Current Mode:  /u

CW Beacon - 435.352 MHz
```

```
            145.818 MHz

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=76&retURL
=/satellites/status.php
[02212009]
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990

Status: CW Beacon only

Uplinks:          145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink:      437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[03162009]
=====
CanX-2
Catalog number: 32790
Launch Date: April 28, 2008

Status: Operational in range of ground station only

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web
page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[02212009]
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.425 MHz 1k2 baud packet

For the latest project status update please visit the AAUSAT-II web
```

page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[02212009]
=====
CO-65 CUTE-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008

Status: Digipeater

Downlink: 437.475 MHz 9k6 Packet
Uplink: 1267.600 Mhz

Telemetry Beacon:
Downlink: 437.2750 MHz CW

For the latest project status update please visit the Cute-1.7+APD II
web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78

Command Station blog website:
http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=112&retURL
=/satellites/status.php
[02212009]
=====
Compass-1
Catalog number: 32787
Launch Date: April 28, 2008

Status: Operational

Current Mode: 4k8 MSK packet

Uplink: 145.980 MHz FM
Downlink: 437.275 Mhz CW
          437.405 MHz Packet

For the latest project status update please visit the Compass 1 web
page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=114&retURL

=/satellites/status.php
[04272009]
=====
CO-66 Seeds II
Catalog number: 32791
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.485 MHz

Callsign: JQ1YGU

For the latest project status update please visit the Seeds 2 web page: http://cubesat.aero.cst.nihon-u.ac.jp/english/seeds_2_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=113&retURL
=/satellites/status.php
[02212009]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - V/u
Voice - V/v
BBS - V/v
APRS - V/v
SSTV - V/v

Expedition 20 Crew:
Commander: Gennady Padalka RN3DT
Flight Engineer: Michael Barratt KD5MIJ
Flight Engineer: Koichi Wakata KC5ZTA
Flight Engineer: Timothy Kopra KE5UDN
Flight Engineer: Roman Romanenko
Flight Engineer: Frank De Winne ON1DWN

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[06122009]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-176.S3
WSR 176 Part 3 06/25/2009

AMSAT NEWS SERVICE BULLETIN 176.S3
FROM AMSAT HQ SILVER SPRING, MD, June 25, 2009
TO ALL RADIO AMATEURS
BID: $ANS-176.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

CP4
Catalog Number: 31122
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: /u

```
TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon:    437.325 MHz CW

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=79
[10022008]
=====
LIBERTAD-1
Catalog Number: 31128
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink:   145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[02122009]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: Non-Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder:  145.825 Mhz FM
[01012009]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency:  437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational
```

```
Voice Uplink:        437.250 MHz FM 67Hz CTCSS
Voice Downlink:     2401.835 MHz FM
Packet Up/Downlink:  437.250 MHz 9k6 packet
Packet Downlink     2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non-Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[08132007]
=====
CANX-1
Catalog Number: 27847
Launch Date: June 30, 2003

Status: Non-Operational

Downlink: 437.8800 MHz AFSK 1k2bps
[06052009]
=====
DTUSAT
Catalog Number: 27842
Launch Date: June 30, 2003

Status: Non-Operational

Current Mode: 2k4 AFSK Packet last reported

Downlink: 437.475MHz

Officail webpage: http://dtusat1.dtusat.dtu.dk/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=101&retURL
=satellites/all_oscars.php
[02212009]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink:   435.275 MHz 1200-baud AFSK
```

Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)

Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]

=====

MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Telemetry only

```
Uplinks:   145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink:  437.325 MHz

Broadcast callsign: MYSAT3-11
BBS:                MYSAT3-12
```

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[03302009]

=====

NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]

=====

SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

```
Broadcast Callsign: SASAT2-11
BBS:                SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink:   145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
V-band:   145.840 -  145.990 MHz CW/LSB
U-band:   435.550 -  435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks
---------
S2-band:  2401.225 -  2401.475 MHz CW/USB
K-band:  24048.010 - 24048.060 MHz CW/USB
Beacon:   2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)
----------------------------
BEACON   General Beacon(GB)  Middle Beacon(MB)  Engineering Beacon(EB)
2 m                    none        145.898 MHz                    none
70cm           435.438 MHz        435.588 MHz             435.838 MHz
13cm(1)       2400.188 MHz       2400.338 MHz            2400.588 MHz
13cm(2)       2401.173 MHz       2401.323 MHz            2401.573 MHz
3cm          10450.975 MHz      10451.125 MHz           10451.375 MHz
1.5cm        24047.885 MHz      24048.035 MHz           24048.285 MHz
[07162007]
```

```
=====
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink:    145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: 25636
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater:         436.250 MHz

Uplinks: Mode B Repeater:  145.825 MHz
Mode J Digipeater:         145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz
```

```
Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink:   145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
MO-30 UNAMSAT-2
Catalog Number: 24305
Launch Date: September 5, 1996

Status: Non-operational

Downlink:       435.1380 MHz AFSK 1200 BPS
Downlink:       435.2060 MHz AFSK 1200 BPS
Uplink:         145.8150 MHz AFSK 1200 BPS
Uplink:         145.8350 MHz AFSK 1200 BPS
Uplink:         145.8550 MHz AFSK 1200 BPS
Uplink:         145.8750 MHz AFSK 1200 BPS
[06042009]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Non-operational

Downlink: 429.950
```

Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012009]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

```
Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud
```

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

```
Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
WO-18 WEBERSAT
```

```
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
[05012006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: SEMI-Operational

Current Mode:  V/u

Uplink:         145.900 MHz FM 1200-baud Manchester FSK (reserved)
                145.920 MHz FM VOICE
                145.940 MHz FM 1200-baud Manchester FSK (reserved)
                145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink:       437.026 MHz USB VOICE
                (1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[12252008]
=====
UO-15 UoSAT-4
Catalog Number: 20438
Launch Date: January 22, 1990

Status: Non-operational
```

```
Uplink: ?
Downlink: 435.1250MHz (?)
          435.1200MHz (?)
[06042009]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984

Status: Non-operational.

Current Mode:  /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon:          435.025 MHz
Mode-S Beacon:     2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
```

```
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[01012009]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon:   145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink  29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
Beacons:   29.450 MHz
          435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
```

```
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon 1:  29.352 MHz (intermittent)
Beacon 2:  29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink:     21.260 to 21.300 MHz CW/USB
Downlink:  145.860 to 145.900 MHz CW/USB

Beacon:    145.860 MHz

Robot:     145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational
```

```
Uplink:   21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon:   29.408 MHz

Robot:    29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-176.S4
WSR 176 Part 4 06/25/2009

AMSAT NEWS SERVICE BULLETIN 176.S4
FROM AMSAT HQ SILVER SPRING, MD, June 25, 2009
TO ALL RADIO AMATEURS
BID: $ANS-176.S4

THE FOLLOWING SATELLITES HAVE RE-ENTERED OR HAVE BEEN RETURNED SAFELY:

NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: July 28, 2008

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[01012009]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink:      145.825 Mhz FM APRS AX25
APRS Uplink:        145.825 MHz FM APRS AX25
```

Voice/PSK31 Uplink: 28.120 MHz

Packet to Voice ID: RAFT
[06112007]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Re-Entered
Re-entered: June 18, 2008

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon: 437.2750 MHz CW

Callsign: JR8YJT
[01012009]
=====
SO-43 Starshine 3
Catalog Number: 26929
Launch Date: September 30, 2001

Status: Re-Entered
Re-entered: January 21, 2003

Beacon: 145.825Mhz
[02212009]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)

* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at}amsat.org
NNNN
/EX

____
Via the ANS mailing list courtesy of AMSAT-NA
http://amsat.org/mailman/listinfo/ans

From 6468801203102224049
X-Google-Thread: 54ac8f410d,189970b2f48406e0
X-Google-Attributes: gid54ac8f410d,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII
Path: g2news2.google.com!postnews.google.com!h18g2000yqj.googlegroups.com!not-for-mail
From: Robert Clark <rgregoryclark@yahoo.com>
Newsgroups: sci.astro,rec.radio.amateur.space,rec.radio.amateur.antenna,sci.astro.seti,sci.physics
Subject: High data rate space transmissions through visible light communication.
Date: Sat, 27 Jun 2009 23:54:14 -0700 (PDT)
Organization: http://groups.google.com
Lines: 221
Message-ID: <d93b5c96-717b-43b1-8178-eec713504a89@h18g2000yqj.googlegroups.com>
References: <609fd5d7-b15e-4bf1-a5c5-60c4c68cc367@e21g2000yqb.googlegroups.com>
NNTP-Posting-Host: 98.141.188.45
Mime-Version: 1.0

Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: quoted-printable
X-Trace: posting.google.com 1246172055 14780 127.0.0.1 (28 Jun 2009 06:54:15 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Sun, 28 Jun 2009 06:54:15 +0000 (UTC)
Complaints-To: groups-abuse@google.com
Injection-Info: h18g2000yqj.googlegroups.com; posting-host=98.141.188.45;
     posting-account=LrLGLAkAAAAGjouKUEM9rprSVVG_OeJd
User-Agent: G2/1.0
X-HTTP-UserAgent: Mozilla/5.0 (Windows; U; Windows NT 5.1; en-US; rv:1.9.0.11)
     Gecko/2009060215 Firefox/3.0.11,gzip(gfe),gzip(gfe)
Xref: g2news2.google.com sci.astro:26684 rec.radio.amateur.space:246
rec.radio.amateur.antenna:13036 sci.astro.seti:401 sci.physics:164119

I had been thinking about methods of high data rate transmission in regards to getting *video* transmissions from Mars orbiter missions. I was irritated by the spotty coverage of the Mars surface at the best resolutions so I wanted to send real-time *continuous* imaging back to Earth receiving stations at the highest imaging resolutions. This would require very high transmission rates, much higher than what is currently used.

The idea would be to use light transmissions but only of the on-off variety. You would use a large surface, many meters across, capable of being alternatively lit up and darkened. There are computer chips of course capable of operating at Ghz rates. This would determine if the large surface was lit up or not electrically, possibly by using a material whose reflective properties can be changed electrically.

I was worried though about the twinkling seen in point sources, which this would appear to be, such as with stars due to atmospheric effects. So this might require the telescope(s) to be in Earth orbit. The question I had though was whether the atmospheric distortion would cause an "on" signal to appear "off" and vice versa? My understanding of atmospheric distortion is that it causes the point source to be constantly apparently undergoing small shifts in position. But this wouldn't be a problem if what you want to determine is whether it is on or off. If that is the case then ground based telescopes would work.

In the large reflecting surface, I actually wanted to use separate, say, squares on the reflecting surface that could be put separately in the on-off position to increase the information transmission rate. But that would require being able to distinguish the squares from Earth millions of kilometers away. This is why I wanted to use light rather than radio for this since the larger wavelengths in radio would make the reflecting surface impractically large for diffraction limited resolution.

Even with light you couldn't do this with a single telescope. They would have to be widely separated. Combining the signals from widely separated scopes is common in radio astronomy but is not nearly as successful in optical astronomy. That is because the light wavelengths are so much smaller and you would have to have nanoscale accuracy in positioning the widely separate mirrors in relationship to each other. However, in the case of just detecting an on-off signal this shouldn't be as big of a problem as you're not trying to form a usable image, but only trying to see if a particular location is on or off. You would need though highly accurate timing synchrony between the separate scopes, within nanoseconds, to be sure they are detecting the same on-off square. Note also here that the shifting in the image due to atmospheric distortion very definitely would be bad for using ground based scopes.

It occurred to me this might be a means of acquiring advertising support for a Google Lunar X Prize entrant. I had also been trying to come up with a method of having an illuminated image either on the Moon or in lunar orbit that would be visible to the naked eye on Earth. Such an idea was discussed here:

moon advertising.
put a billboard on the moon.
http://www.halfbakery.com/idea/moon_20advertising

I wouldn't be in favor of doing this in a way that would actually advertise a product. But I was thinking about it as a way of sending a message in favor of, for example, world peace. In this case you could still have advertisers who could say in TV commercials for example they supplied funding to support the mission and the message.
BTW, I would be in favor of advertisers who could pay to have advertising signs set up at the rover landing site so that if anyone who wanted to log on to the the rover transmissions or who watched a TV program on the rover transmissions would see the ads. This to me is something different than an ad that someone would be forced to see just by looking up at the Moon.
In any case you would need something large enough so that with naked eye resolution at the lunar distance it would still be distinguishable. This page gives the naked eye resolution at the lunar distance:

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It could work with orbiters by the example set of satellite formation flying by the Cluster mission:

Cluster mission.
http://en.wikipedia.org/wiki/Cluster_mission

I also needed to find how large a brightly illuminated surface needed to be at the lunar surface to be visible by the naked eye on Earth. I thought of the example of the "Iridium flares":

Satellite flare.
http://en.wikipedia.org/wiki/Satellite_flare

The Iridium satellites have 3 antennas that happen to be also reflective in visible light, totaling 4.8 m^2 in area. According to the Wikipedia page, the flares can be up to -8 in apparent magnitude, though typically at +6 magnitude, and are produced by an individual antenna, so by one of area 1.6 m^2.

I'll assume the brightest flares are produced just by the orientation the antennas happen to be in so we could make our reflective surfaces be oriented with respect to the Sun to get the greatest brightness. For the same size surface, the brightness would be lessened by the greater distance to the Moon. The Iridium satellites are at about 780 km altitude so the Moon is about 500 times further. This would lower the brightness by a factor of 500^2 =3D 250,000.

This page gives the apparent brightness commonly visible by the naked eye in urban areas as +3:

Apparent magnitude.
http://en.wikipedia.org/wiki/Apparent_magnitude

The 250,000 times lesser brightness at the lunar distance for an Iridium sized reflective surface would give it a +13.5 higher apparent magnitude so up to +5.5 in apparent magnitude. To make our reflective surface be at +3 apparent magnitude we could make the area be 10 times larger, so at 16 m^2 area, or a square 4 meters across.

We would need a method for a flat reflecting surface of unfolding it to this size. It might be easier instead to have the reflecting surface be a balloon inflated by stored gas. Since this would be in a vacuum, you wouldn't need much gas pressure or mass to accomplish this.

Another consideration is that because of the brightness of the Moon it could swamp out our illuminated surface. For the orbiter, this could probably be alleviated by having the orbiter have a highly elliptical orbit, (this also would be beneficial in minimizing the required delta-v and fuel load) then it would be visible at the higher distances from the Moon in its orbit. For the landers it might work for them to land in the dark lunar maria.

To communicate the message though we would need a method to turn on and off the reflecting surface. One possibility would be to have the reflecting surface consist of very many small squares that could be rotated to reflect toward the Earth or away. Another possibility might be to have it covered with LCD's. Whichever method it would have to be both lightweight and low power.

For our first attempts we probably would not want to send so many orbiter or landers at once to form a naked-eye visible image. We would first send just a single one to test it out. Note that this method with a single vehicle could still be used to send high definition video by having our single reflective surface be turned on and off at the required rate, about 256,000 times per sec with compression.

Bob Clark

```
On Jun 16, 6:57=A0pm, Robert Clark <rgregorycl...@yahoo.com> wrote:
> =A0On another forum there was debate about whether the requirement of
> "near real time" high definition video transmissions was achievable
> for a such a low-cost mission.
> =A0It would certainly be doable if the receiving antennas on Earth were
> the large radio antennas used for space communications with
> interplanetary probes or those radio antennas used for radio
> astronomy. This is evidenced by the fact that the Kaguya(Selene) lunar
> orbiter mission was able to send high definition video to a large
> receiving dish radio antenna. And also by the fact that DirecTV sends
> high definition video to only 2 foot size antennas from geosynchronous
> orbit; so 10 times larger antennas would be able to receive such
> signals from a 10 times larger distance at the Moon.
> =A0However, I was wondering if it would be possible to detect this using
> amateur sized equipment at such a large distance. Usually for
> receiving high data rates you used transmissions at very high
> frequencies, as higher frequencies can carry more data. For instance
> both Kaguya and DirecTV transmit the high def video at gigahertz
> frequencies.
> =A0However, for the system I'm imaging I'm thinking of using much lower
> frequencies, and necessarily longer wavelengths. What I wanted to do
> is transmit at decametric wavelengths. High data transmissions rates
> would be achieved by making it be pulsed in an on-off fashion at high
> intensity but at a rapid rate.
> =A0On that other forum the data rate required for high def TV was given
> as 256,000 bits per second. So I wanted to make these transmissions be
> pulsed at this rapid rate at wavelengths of a few tens's of meters.
> =A0My decametric wavelength requirement was because of the fact that
> high schools and universities have programs for detecting radio
> emissions from Jupiter at these wavelengths:
>
> NASA's Radio JOVE Project.http://radiojove.gsfc.nasa.gov/
>
> The Discovery of Jupiter's Radio Emissions.
> How a chance discovery opened up the field of Jovian radio studies.
> by Dr. Leonard N. Garciahttp://radiojove.gsfc.nasa.gov/library/sci_briefs=
/discovery.html
>
> =A0These school and university receiving antennas on Earth consist of
> dozens to hundreds of vertical dipoles of lengths at the meters scale
> to correspond to the radio wavelengths. Some questions I had: how
> intense would the pulse have to be on the Moon to be detectable from
> the Moon above background noise for a detector on Earth of say a few
> dozen dipoles? Could this be done for the transmitter of power of say
> a few hundred watts for a low cost, low weight lander mission? Could
> the transmitter antenna on the moon be only a few meters size for the
> low weight requirement?
> =A0A secondary purpose I had in mind was a pet project of mine involving
> linking these many school receivers to form a global telescope at
> decametric wavelengths:
>
> From: rgcl...@my-deja.com (Robert Clark)
> Date: 23 May 2001 11:15:06 -0700
> Subject: Will amateur radio astronomers be the first to directly
> detect extrasolar planets?
> Newsgroups: rec.radio.amateur.space, rec.radio.amateur.antenna,
> sci.astro, sci.astro.seti, sci.space.policyhttp://groups.google.com/group=
/sci.astro.seti/browse_frm/thread/c0018...
>
> =A0The long wavelengths should make the requirements for accurate
> distance information and timing synchrony between the separate
> detectors easy to manage even for amateur systems. Using this method
> might make the detection achievable even if the power or transmitting
> antenna size requirements are not practical for a low cost, low weight
> lander =A0on the Moon for an individual detector on Earth.
> =A0The recent achievement of real-time very long baseline interferometry
> should make it possible to integrate these separate detector signals
> in real-time as well:
>
> Astronomers Demonstrate a Global Internet Telescope.
> Date Released: Friday, October 08, 2004
> Source: Jodrell Bank Observatoryhttp://www.spaceref.com/news/viewpr.html?=
pid=3D15251
>
> =A0 =A0 =A0Bob Clark



From -6412803787232551213
X-Google-Thread: 54ac8f410d,189970b2f48406e0
X-Google-Attributes: gid54ac8f410d,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news2.google.com!npeer01.iad.highwinds-media.com!
news.highwinds-media.com!feed-me.highwinds-media.com!
border1.nntp.dca.giganews.com!border2.nntp.dca.giganews.com!nntp.giganews.com!
news1.optus.net.au!optus!newsfeeder.syd.optusnet.com.au!news.optusnet.com.au!not-
for-mail
From: "Peter Webb" <webbfamily@DIESPAMDIEoptusnet.com.au>
Newsgroups:
sci.astro,rec.radio.amateur.space,rec.radio.amateur.antenna,sci.astro.seti,sci.phy
sics
References: <609fd5d7-b15e-4bf1-a5c5-60c4c68cc367@e21g2000yqb.googlegroups.com>
<d93b5c96-717b-43b1-8178-eec713504a89@h18g2000yqj.googlegroups.com>
In-Reply-To: <d93b5c96-717b-43b1-8178-eec713504a89@h18g2000yqj.googlegroups.com>
Subject: Re: High data rate space transmissions through visible light
communication.
Date: Sun, 28 Jun 2009 17:14:14 +1000
MIME-Version: 1.0
Content-Type: text/plain;
     format=flowed;
     charset="iso-8859-1";
     reply-type=original
Content-Transfer-Encoding: 7bit
X-Priority: 3
X-MSMail-Priority: Normal
```

X-Newsreader: Microsoft Windows Mail 6.0.6001.18000
X-MimeOLE: Produced By Microsoft MimeOLE V6.0.6001.18049
Lines: 239
Message-ID: <4a471855$0$22552$afc38c87@news.optusnet.com.au>
NNTP-Posting-Host: 122.106.197.60
X-Trace: 1246173270 22552 122.106.197.60
X-Original-Bytes: 14005
Xref: g2news2.google.com sci.astro:26686 rec.radio.amateur.space:247 rec.radio.amateur.antenna:13037 sci.astro.seti:402 sci.physics:164122

Nice idea, but ...

Illuminating an area of Mars or the moon and relying on this secondary reflection will actually produce less photons returning to earth than aiming the light source directly at the earth.

Furthermore, the radiation from a reflected area is isotropic - goes in all directions - and hence very little is directed towards the earth.

If you were using the light source directly, rather than having it illuminate an area of the ground, you could also use lenses or mirrors to focus it back on the earth, giving thousands or millions of times the signal strength on earth, the same technique as is used for radio comms.

"Robert Clark" <rgregoryclark@yahoo.com> wrote in message
news:d93b5c96-717b-43b1-8178-eec713504a89@h18g2000yqj.googlegroups.com...

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http://en.wikipedia.org/wiki/Satellite_flare

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I'll assume the brightest flares are produced just by the orientation the antennas happen to be in so we could make our reflective surfaces be oriented with respect to the Sun to get the greatest brightness. For the same size surface, the brightness would be lessened by the greater distance to the Moon. The Iridium satellites are at about 780 km altitude so the Moon is about 500 times further. This would lower the brightness by a factor of 500^2 = 250,000.

This page gives the apparent brightness commonly visible by the naked eye in urban areas as +3:

Apparent magnitude.
http://en.wikipedia.org/wiki/Apparent_magnitude

The 250,000 times lesser brightness at the lunar distance for an Iridium sized reflective surface would give it a +13.5 higher apparent magnitude so up to +5.5 in apparent magnitude. To make our reflective surface be at +3 apparent magnitude we could make the area be 10 times larger, so at 16 m^2 area, or a square 4 meters across.

We would need a method for a flat reflecting surface of unfolding it to this size. It might be easier instead to have the reflecting surface be a balloon inflated by stored gas. Since this would be in a vacuum, you wouldn't need much gas pressure or mass to accomplish this.

Another consideration is that because of the brightness of the Moon it could swamp out our illuminated surface. For the orbiter, this could probably be alleviated by having the orbiter have a highly elliptical orbit, (this also would be beneficial in minimizing the required delta-v and fuel load) then it would be visible at the higher distances from the Moon in its orbit. For the landers it might work for them to land in the dark lunar maria.

To communicate the message though we would need a method to turn on and off the reflecting surface. One possibility would be to have the

reflecting surface consist of very many small squares that could be rotated to reflect toward the Earth or away. Another possibility might be to have it covered with LCD's. Whichever method it would have to be both lightweight and low power.
 For our first attempts we probably would not want to send so many orbiter or landers at once to form a naked-eye visible image. We would first send just a single one to test it out. Note that this method with a single vehicle could still be used to send high definition video by having our single reflective surface be turned on and off at the required rate, about 256,000 times per sec with compression.

Bob Clark

On Jun 16, 6:57 pm, Robert Clark <rgregorycl...@yahoo.com> wrote:
> On another forum there was debate about whether the requirement of
> "near real time" high definition video transmissions was achievable
> for a such a low-cost mission.
> It would certainly be doable if the receiving antennas on Earth were
> the large radio antennas used for space communications with
> interplanetary probes or those radio antennas used for radio
> astronomy. This is evidenced by the fact that the Kaguya(Selene) lunar
> orbiter mission was able to send high definition video to a large
> receiving dish radio antenna. And also by the fact that DirecTV sends
> high definition video to only 2 foot size antennas from geosynchronous
> orbit; so 10 times larger antennas would be able to receive such
> signals from a 10 times larger distance at the Moon.
> However, I was wondering if it would be possible to detect this using
> amateur sized equipment at such a large distance. Usually for
> receiving high data rates you used transmissions at very high
> frequencies, as higher frequencies can carry more data. For instance
> both Kaguya and DirecTV transmit the high def video at gigahertz
> frequencies.
> However, for the system I'm imaging I'm thinking of using much lower
> frequencies, and necessarily longer wavelengths. What I wanted to do
> is transmit at decametric wavelengths. High data transmissions rates
> would be achieved by making it be pulsed in an on-off fashion at high
> intensity but at a rapid rate.
> On that other forum the data rate required for high def TV was given
> as 256,000 bits per second. So I wanted to make these transmissions be
> pulsed at this rapid rate at wavelengths of a few tens's of meters.
> My decametric wavelength requirement was because of the fact that
> high schools and universities have programs for detecting radio
> emissions from Jupiter at these wavelengths:
>
> NASA's Radio JOVE Project.http://radiojove.gsfc.nasa.gov/
>
> The Discovery of Jupiter's Radio Emissions.
> How a chance discovery opened up the field of Jovian radio studies.
> by Dr. Leonard N.
> Garciahttp://radiojove.gsfc.nasa.gov/library/sci_briefs/discovery.html
>
> These school and university receiving antennas on Earth consist of

> dozens to hundreds of vertical dipoles of lengths at the meters scale
> to correspond to the radio wavelengths. Some questions I had: how
> intense would the pulse have to be on the Moon to be detectable from
> the Moon above background noise for a detector on Earth of say a few
> dozen dipoles? Could this be done for the transmitter of power of say
> a few hundred watts for a low cost, low weight lander mission? Could
> the transmitter antenna on the moon be only a few meters size for the
> low weight requirement?
> A secondary purpose I had in mind was a pet project of mine involving
> linking these many school receivers to form a global telescope at
> decametric wavelengths:
>
> From: rgcl...@my-deja.com (Robert Clark)
> Date: 23 May 2001 11:15:06 -0700
> Subject: Will amateur radio astronomers be the first to directly
> detect extrasolar planets?
> Newsgroups: rec.radio.amateur.space, rec.radio.amateur.antenna,
> sci.astro, sci.astro.seti,
> sci.space.policyhttp://groups.google.com/group/sci.astro.seti/browse_frm/thread/c0018...
>
> The long wavelengths should make the requirements for accurate
> distance information and timing synchrony between the separate
> detectors easy to manage even for amateur systems. Using this method
> might make the detection achievable even if the power or transmitting
> antenna size requirements are not practical for a low cost, low weight
> lander on the Moon for an individual detector on Earth.
> The recent achievement of real-time very long baseline interferometry
> should make it possible to integrate these separate detector signals
> in real-time as well:
>
> Astronomers Demonstrate a Global Internet Telescope.
> Date Released: Friday, October 08, 2004
> Source: Jodrell Bank
> Observatoryhttp://www.spaceref.com/news/viewpr.html?pid=15251
>
> Bob Clark

From -4518259810323134681
X-Google-Thread: 54ac8f410d,189970b2f48406e0
X-Google-Attributes: gid54ac8f410d,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news1.google.com!border1.nntp.dca.giganews.com!nntp.giganews.com!news-in-01.newsfeed.easynews.com!easynews!core-easynews-01!easynews.com!en-nntp-02.dc1.easynews.com.POSTED!not-for-mail
From: Richard Clark <kb7qhc@comcast.net>
Newsgroups:
sci.astro,rec.radio.amateur.space,rec.radio.amateur.antenna,sci.astro.seti,sci.physics
Subject: Re: High data rate space transmissions through visible light

communication.
Message-ID: <tiaf45p58ncdq3ssmgbtmef6jv7k3n7ve0@4ax.com>
References: <609fd5d7-b15e-4bf1-a5c5-60c4c68cc367@e21g2000yqb.googlegroups.com>
<d93b5c96-717b-43b1-8178-eec713504a89@h18g2000yqj.googlegroups.com>
<4a471855$0$22552$afc38c87@news.optusnet.com.au>
X-Newsreader: Forte Agent 5.00/32.1171
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Lines: 14
X-Complaints-To: abuse@easynews.com
Organization: Forte Inc. http://www.forteinc.com/apn/
X-Complaints-Info: Please be sure to forward a copy of ALL headers otherwise we will be unable to process your complaint properly.
Date: Sun, 28 Jun 2009 10:41:34 -0700
Xref: g2news2.google.com sci.astro:26698 rec.radio.amateur.space:248
rec.radio.amateur.antenna:13042 sci.astro.seti:403 sci.physics:164180

On Sun, 28 Jun 2009 17:14:14 +1000, "Peter Webb"
<webbfamily@DIESPAMDIEoptusnet.com.au> wrote:

>Furthermore, the radiation from a reflected area is isotropic - goes in all
>directions - and hence very little is directed towards the earth.

Actually, it is lambertian in its distribution, and it would have a
major lobe that was directed in rather typical fashion (at the same,
but negative angle to the norm to the surface). However, as is the
intent of your response, very much less will find its way to the
intended target.

73's
Richard Clark, KB7QHC

From 9011054508994618878
X-Google-Thread: 54ac8f410d,189970b2f48406e0
X-Google-Attributes: gid54ac8f410d,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news1.google.com!news.glorb.com!news2.glorb.com!news-in-01.newsfeed.easynews.com!easynews!core-easynews-01!easynews.com!en-nntp-01.dc1.easynews.com.POSTED!not-for-mail
From: Richard Clark <kb7qhc@comcast.net>
Newsgroups:
sci.astro,rec.radio.amateur.space,rec.radio.amateur.antenna,sci.astro.seti,sci.physics
Subject: Re: High data rate space transmissions through visible light
communication.
Message-ID: <72ef451urb76hj7jpsrqqu2rltv042lefk@4ax.com>
References: <609fd5d7-b15e-4bf1-a5c5-60c4c68cc367@e21g2000yqb.googlegroups.com>
<d93b5c96-717b-43b1-8178-eec713504a89@h18g2000yqj.googlegroups.com>
X-Newsreader: Forte Agent 5.00/32.1171
MIME-Version: 1.0

Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Lines: 108
X-Complaints-To: abuse@easynews.com
Organization: Forte Inc. http://www.forteinc.com/apn/
X-Complaints-Info: Please be sure to forward a copy of ALL headers otherwise we will be unable to process your complaint properly.
Date: Sun, 28 Jun 2009 11:37:01 -0700
Xref: g2news2.google.com sci.astro:26699 rec.radio.amateur.space:249 rec.radio.amateur.antenna:13043 sci.astro.seti:404 sci.physics:164203

On Sat, 27 Jun 2009 23:54:14 -0700 (PDT), Robert Clark
<rgregoryclark@yahoo.com> wrote:

> I had been thinking about methods of high data rate transmission in
>regards to getting *video* transmissions from Mars orbiter missions. I
>was irritated by the spotty coverage of the Mars surface at the best
>resolutions so I wanted to send real-time *continuous* imaging back to
>Earth receiving stations at the highest imaging resolutions.

A curious distinction in this "continuous." Direct Current
transmission from Mars? I think not. Anything else is rather
conventional.

>This
>would require very high transmission rates, much higher than what is
>currently used.

"Continuous" is not distinctive to rate except at DC. Grab both sides
of conventional 120VAC from any wall socket, and it will seem
distinctly continuous - boosting it 1 THz wouldn't bring any different
sensation.

>The idea would be to use light transmissions but only of the on-off
>variety.

Rates, and on-off have departed the realm of "continuous."

>You would use a large surface, many meters across, capable of
>being alternatively lit up and darkened.

This is entirely unrelated to "continuous" rates or modes of
transmission. In and of itself, in regards to establishing remote
communications at light wavelengths, it is guilding the lily and
painting the rose.

>There are computer chips of
>course capable of operating at Ghz rates.
How that relates to:
>This would determine if the
>large surface was lit up or not electrically, possibly by using a
>material whose reflective properties can be changed electrically.
is bordering on stream-of-consciousness rambling.

>I actually wanted to use separate,
>say, squares on the reflecting surface that could be put separately in
>the on-off position to increase the information transmission rate.

There is no causal correlation between many surfaces and rate. This is merely the substitution of complexity for the appearance of deep consideration (which it is not).

>This is why I wanted to use light rather
>than radio for this since the larger wavelengths in radio would make
>the reflecting surface impractically large for diffraction limited
>resolution.

You are simply limited in your perception of what RF and Light means. If one suffers for wavelength, then they both do.

>Even with light you couldn't do this with a single telescope.

Sounds like an artificial objection. Have you tried thinking in terms of a power budget?

>They would have to be widely separated.
Does not come naturally as a solution from the rather diaphonous problem put forward to this point, and the following is not a reason:
>Combining the signals from widely
>separated scopes is common in radio astronomy but is not nearly as
>successful in optical astronomy. That is because the light wavelengths
>are so much smaller and you would have to have nanoscale accuracy in
>positioning the widely separate mirrors in relationship to each other.
This is problem of degree, one which you painted yourself into a corner with. Further, it doesn't necessarily follow one from the other.

>However, in the case of just detecting an on-off signal this shouldn't
>be as big of a problem as you're not trying to form a usable image,
>but only trying to see if a particular location is on or off. You
>would need though highly accurate timing synchrony between the
>separate scopes, within nanoseconds, to be sure they are detecting the
>same on-off square. Note also here that the shifting in the image due
>to atmospheric distortion very definitely would be bad for using
>ground based scopes.

This is, based on your own objections, rather whipsawed by the application of the term "nano." Nanoseconds and nanometers are not on the balance to the solution of your problem. If you had nanometer issues optically, they are not solved within nanoseconds simply because they are not forming an image (which is a poor metaphor because if fails with its own application).

>moon advertising.
>put a billboard on the moon.
>http://www.halfbakery.com/idea/moon_20advertising

Half backed? It is undercooked by half that again.

Let's consider: To obtain a sufficient contrast ratio, the light
would have to exceed the brilliance of the sun.

Did I mention a power budget?

The rest of this hardly borders on novely so much as fantasy. Keep
that to the appropriate groups.

73's
Richard Clark, KB7QHC

From 7717520342355956108
X-Google-Thread: 54ac8f410d,189970b2f48406e0
X-Google-Attributes: gid54ac8f410d,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,CP1252
Path: g2news2.google.com!postnews.google.com!e21g2000yqb.googlegroups.com!not-for-mail
From: BradGuth <bradguth@gmail.com>
Newsgroups:
sci.astro,rec.radio.amateur.space,rec.radio.amateur.antenna,sci.astro.seti,sci.physics
Subject: Re: High data rate space transmissions through visible light communication.
Date: Sun, 28 Jun 2009 13:48:25 -0700 (PDT)
Organization: http://groups.google.com
Lines: 255
Message-ID: <a7ca4412-2049-4f84-a646-25bec33956a1@e21g2000yqb.googlegroups.com>
References: <609fd5d7-b15e-4bf1-a5c5-60c4c68cc367@e21g2000yqb.googlegroups.com> <d93b5c96-717b-43b1-8178-eec713504a89@h18g2000yqj.googlegroups.com> <4a471855$0$22552$afc38c87@news.optusnet.com.au>
NNTP-Posting-Host: 64.91.99.153
Mime-Version: 1.0
Content-Type: text/plain; charset=windows-1252
Content-Transfer-Encoding: quoted-printable
X-Trace: posting.google.com 1246222106 20052 127.0.0.1 (28 Jun 2009 20:48:26 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Sun, 28 Jun 2009 20:48:26 +0000 (UTC)
Complaints-To: groups-abuse@google.com
Injection-Info: e21g2000yqb.googlegroups.com; posting-host=64.91.99.153; posting-account=nf79RwoAAABXjvy5ztMzmPxgY1WGoktI
User-Agent: G2/1.0
X-HTTP-UserAgent: Mozilla/5.0 (Windows; U; Windows NT 5.1; en-US; rv:1.9.0.5) Gecko/2008120122 Firefox/3.0.5,gzip(gfe),gzip(gfe)
Xref: g2news2.google.com sci.astro:26702 rec.radio.amateur.space:250
rec.radio.amateur.antenna:13044 sci.astro.seti:405 sci.physics:164221

Yes, you are perfectly dead on the spot for using the visual spectrum
on behalf of interplanetary and interstellar communications, as by far

the most extremely narrow of monochromatic or those of FM photons
accomplishing their one-way or ideally two-way energy and technology
efficient alternative. I kid you not.

The problem is that it=92s perhaps too darn good and perhaps even too
energy efficient. Signal pointing and tracking errors from a
satellite platform are seriously narrow, though receiving isn=92t all
that insurmountable.

~ BG

On Jun 28, 12:14=A0am, "Peter Webb"
<webbfam...@DIESPAMDIEoptusnet.com.au> wrote:
> Nice idea, but ...
>
> Illuminating an area of Mars or the moon and relying on this secondary
> reflection will actually produce less photons returning to earth than aim=
ing
> the light source directly at the earth.
>
> Furthermore, the radiation from a reflected area is isotropic - goes in a=
ll
> directions - and hence very little is directed towards the earth.
>
> If you were using the light source directly, rather than having it
> illuminate an area of the ground, you could also use lenses or mirrors to
> focus it back on the earth, giving thousands or millions of times the sig=
nal
> strength on earth, the same technique as is used for radio comms.
>
> "Robert Clark" <rgregorycl...@yahoo.com> wrote in message
>
> news:d93b5c96-717b-43b1-8178-eec713504a89@h18g2000yqj.googlegroups.com...
> I had been thinking about methods of high data rate transmission in
> regards to getting *video* transmissions from Mars orbiter missions. I
> was irritated by the spotty coverage of the Mars surface at the best
> resolutions so I wanted to send real-time *continuous* imaging back to
> Earth receiving stations at the highest imaging resolutions. This
> would require very high transmission rates, much higher than what is
> currently used.
> The idea would be to use light transmissions but only of the on-off
> variety. You would use a large surface, many meters across, capable of
> being alternatively lit up and darkened. There are computer chips of
> course capable of operating at Ghz rates. This would determine if the
> large surface was lit up or not electrically, possibly by using a
> material whose reflective properties can be changed electrically.
> I was worried though about the twinkling seen in point sources, which
> this would appear to be, such as with stars due to atmospheric
> effects. So this might require the telescope(s) to be in Earth orbit.
> The question I had though was whether the atmospheric distortion would
> cause an "on" signal to appear "off" and vice versa? My understanding

> of atmospheric distortion is that it causes the point source to be
> constantly apparently undergoing small shifts in position. But this
> wouldn't be a problem if what you want to determine is whether it is
> on or off. If that is the case then ground based telescopes would
> work.
> In the large reflecting surface, I actually wanted to use separate,
> say, squares on the reflecting surface that could be put separately in
> the on-off position to increase the information transmission rate. But
> that would require being able to distinguish the squares from Earth
> millions of kilometers away. This is why I wanted to use light rather
> than radio for this since the larger wavelengths in radio would make
> the reflecting surface impractically large for diffraction limited
> resolution.
> Even with light you couldn't do this with a single telescope. They
> would have to be widely separated. Combining the signals from widely
> separated scopes is common in radio astronomy but is not nearly as
> successful in optical astronomy. That is because the light wavelengths
> are so much smaller and you would have to have nanoscale accuracy in
> positioning the widely separate mirrors in relationship to each other.
> However, in the case of just detecting an on-off signal this shouldn't
> be as big of a problem as you're not trying to form a usable image,
> but only trying to see if a particular location is on or off. You
> would need though highly accurate timing synchrony between the
> separate scopes, within nanoseconds, to be sure they are detecting the
> same on-off square. Note also here that the shifting in the image due
> to atmospheric distortion very definitely would be bad for using
> ground based scopes.
>
> =A0It occurred to me this might be a means of acquiring advertising
> support for a Google Lunar X Prize entrant. I had also been trying to
> come up with a method of having an illuminated image either on the
> Moon or in lunar orbit that would be visible to the naked eye on
> Earth. Such an idea was discussed here:
>
> moon advertising.
> put a billboard on the moon.http://www.halfbakery.com/idea/moon_20adverti=
sing
>
> =A0I wouldn't be in favor of doing this in a way that would actually
> advertise a product. But I was thinking about it as a way of sending a
> message in favor of, for example, world peace. In this case you could
> still have advertisers who could say in TV commercials for example
> they supplied funding to support the mission and the message.
> =A0BTW, I would be in favor of advertisers who could pay to have
> advertising signs set up at the rover landing site so that if anyone
> who wanted to log on to the the rover transmissions or who watched a
> TV program on the rover transmissions would see the ads. This to me is
> something different than an ad that someone would be forced to see
> just by looking up at the Moon.
> =A0In any case you would need something large enough so that with naked
> eye resolution at the lunar distance it would still be
> distinguishable. This page gives the naked eye resolution at the lunar
> distance:

>
> Purpose of Building Telescopes.http://www.astronomy.org/astronomy-surviva=
l/telepur.htm
>
> =A0According to this page the resolution of the human eye at the lunar
> distance would be about 22 miles. One single object clearly couldn't
> do this. However, if you had separate illuminated landers or orbiters
> at this large distance apart they could be used to send a message
> visible to the naked eye on Earth.
> =A0It could work with orbiters by the example set of satellite formation
> flying by the Cluster mission:
>
> Cluster mission.http://en.wikipedia.org/wiki/Cluster_mission
>
> =A0I also needed to find how large a brightly illuminated surface needed
> to be at the lunar surface to be visible by the naked eye on Earth. I
> thought of the example of the "Iridium flares":
>
> Satellite flare.http://en.wikipedia.org/wiki/Satellite_flare
>
> =A0The Iridium satellites have 3 antennas that happen to be also
> reflective in visible light, totaling 4.8 m^2 in area. According to
> the Wikipedia page, the flares can be up to -8 in apparent magnitude,
> though typically at +6 magnitude, and are produced by an individual
> antenna, so by one of area 1.6 m^2.
> =A0I'll assume the brightest flares are produced just by the orientation
> the antennas happen to be in so we could make our reflective surfaces
> be oriented with respect to the Sun to get the greatest brightness.
> For the same size surface, the brightness would be lessened by the
> greater distance to the Moon. The Iridium satellites are at about 780
> km altitude so the Moon is about 500 times further. This would lower
> the brightness by a factor of 500^2 =3D 250,000.
> =A0This page gives the apparent brightness commonly visible by the naked
> eye in urban areas as +3:
>
> Apparent magnitude.http://en.wikipedia.org/wiki/Apparent_magnitude
>
> The 250,000 times lesser brightness at the lunar distance for an
> Iridium sized reflective surface would give it a +13.5 higher apparent
> magnitude so up to +5.5 in apparent magnitude. To make our reflective
> surface be at +3 apparent magnitude we could make the area be 10 times
> larger, so at 16 m^2 area, or a square 4 meters across.
> =A0We would need a method for a flat reflecting surface of unfolding it
> to this size. It might be easier instead to have the reflecting
> surface be a balloon inflated by stored gas. Since this would be in a
> vacuum, you wouldn't need much gas pressure or mass to accomplish
> this.
> =A0Another consideration is that because of the brightness of the Moon
> it could swamp out our illuminated surface. For the orbiter, this
> could probably be alleviated by having the orbiter have a highly
> elliptical orbit, (this also would be beneficial in minimizing the
> required delta-v and fuel load) then it would be visible at the higher
> distances from the Moon in its orbit. For the landers it might work

> for them to land in the dark lunar maria.
>
> =A0To communicate the message though we would need a method to turn on
> and off the reflecting surface. One possibility would be to have the
> reflecting surface consist of very many small squares that could be
> rotated to reflect toward the Earth or away. Another possibility might
> be to have it covered with LCD's. Whichever method it would have to be
> both lightweight and low power.
> =A0For our first attempts we probably would not want to send so many
> orbiter or landers at once to form a naked-eye visible image. We would
> first send just a single one to test it out. Note that this method
> with a single vehicle could still be used to send high definition
> video by having our single reflective surface be turned on and off at
> the required rate, about 256,000 times per sec with compression.
>
> =A0 =A0 =A0Bob Clark
>
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> > for a such a low-cost mission.
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> > However, I was wondering if it would be possible to detect this using
> > amateur sized equipment at such a large distance. Usually for
> > receiving high data rates you used transmissions at very high
> > frequencies, as higher frequencies can carry more data. For instance
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> > would be achieved by making it be pulsed in an on-off fashion at high
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> > On that other forum the data rate required for high def TV was given
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> > high schools and universities have programs for detecting radio
> > emissions from Jupiter at these wavelengths:
>
> > NASA's Radio JOVE Project.http://radiojove.gsfc.nasa.gov/
>
> > The Discovery of Jupiter's Radio Emissions.
> > How a chance discovery opened up the field of Jovian radio studies.
> > by Dr. Leonard N.

```
> > Garciahttp://radiojove.gsfc.nasa.gov/library/sci_briefs/discovery.html
>
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> > dozen dipoles? Could this be done for the transmitter of power of say
> > a few hundred watts for a low cost, low weight lander mission? Could
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> > A secondary purpose I had in mind was a pet project of mine involving
> > linking these many school receivers to form a global telescope at
> > decametric wavelengths:
>
> > From: rgcl...@my-deja.com (Robert Clark)
> > Date: 23 May 2001 11:15:06 -0700
> > Subject: Will amateur radio astronomers be the first to directly
> > detect extrasolar planets?
> > Newsgroups: rec.radio.amateur.space, rec.radio.amateur.antenna,
> > sci.astro, sci.astro.seti,
> > sci.space.policyhttp://groups.google.com/group/sci.astro.seti/browse_fr=
m/thread/c0018...
>
> > The long wavelengths should make the requirements for accurate
> > distance information and timing synchrony between the separate
> > detectors easy to manage even for amateur systems. Using this method
> > might make the detection achievable even if the power or transmitting
> > antenna size requirements are not practical for a low cost, low weight
> > lander on the Moon for an individual detector on Earth.
> > The recent achievement of real-time very long baseline interferometry
> > should make it possible to integrate these separate detector signals
> > in real-time as well:
>
> > Astronomers Demonstrate a Global Internet Telescope.
> > Date Released: Friday, October 08, 2004
> > Source: Jodrell Bank
> > Observatoryhttp://www.spaceref.com/news/viewpr.html?pid=3D15251
>
> > Bob Clark



From 6541576517361791147
X-Google-Thread: fd72c38c1,189970b2f48406e0
X-Google-Attributes: gidfd72c38c1,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news1.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!npeer02.iad.highwinds-media.com!news.highwinds-media.com!feed-
me.highwinds-media.com!post01.iad.highwinds-media.com!newsfe04.iad.POSTED!
7564ea0f!not-for-mail
Message-ID: <4A47D99B.AF208356@hate.spam.net>
```

From: Uncle Al <UncleAl0@hate.spam.net>
Organization: The Noble Krell
X-Mailer: Mozilla 4.78 [en] (Win98; U)
X-Accept-Language: en
MIME-Version: 1.0
Newsgroups:
sci.astro,rec.radio.amateur.space,rec.radio.amateur.antenna,sci.astro.seti
Subject: Re: High data rate space transmissions through visible light
 communication.
References: <609fd5d7-b15e-4bf1-a5c5-60c4c68cc367@e21g2000yqb.googlegroups.com>
<d93b5c96-717b-43b1-8178-eec713504a89@h18g2000yqj.googlegroups.com>
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Lines: 36
NNTP-Posting-Host: 68.4.67.101
X-Complaints-To: newsmaster@cox.net
X-Trace: newsfe04.iad 1246222779 68.4.67.101 (Sun, 28 Jun 2009 20:59:39 UTC)
NNTP-Posting-Date: Sun, 28 Jun 2009 20:59:39 UTC
Date: Sun, 28 Jun 2009 13:59:07 -0700
Xref: g2news2.google.com sci.astro:26703 rec.radio.amateur.space:251
rec.radio.amateur.antenna:13045 sci.astro.seti:406

Robert Clark wrote:
>
> I had been thinking about methods of high data rate transmission in
> regards to getting *video* transmissions from Mars orbiter missions.

Would modulating a 1 GW continuous laser at Mars be sufficient? The
laser is already in place - and running,
[snip crap]

http://www.mazepath.com/uncleal/race.htm

Hey stooopid - what happened to the Mars surface space face? You
dumped a gigabyte of crap extolling it. Where's the compost?

> Even with light you couldn't do this with a single telescope.

[snip more crap]

What, a gigagatt continuous is not enough? Give an idiot the answer
and obtain NASA ratiocinating on how to get to the moon (and
presumably, back).

> I had also been trying to
> come up with a method of having an illuminated image either on the
> Moon or in lunar orbit that would be visible to the naked eye on
> Earth. Such an idea was discussed here:

[snip rest of crap]

http://www.geocities.com/SouthBeach/1380/crmoon.html

idiot

--
Uncle Al
http://www.mazepath.com/uncleal/
 (Toxic URL! Unsafe for children and most mammals)
http://www.mazepath.com/uncleal/lajos.htm#a2

```
From -4428259385501775131
X-Google-Thread: a4a23d5f63,3e911d6860720c8a,start
X-Google-Attributes: gida4a23d5f63,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news2.google.com!newsfeed2.dallas1.level3.net!
news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-179 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sun, 28 Jun 2009 18:40:12 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 293
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000c01c9f841$60963830$21c2a890$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1246228813 16367 166.84.1.6 (28 Jun 2009 22:40:13 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 28 Jun 2009 22:40:13 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news2.google.com rec.radio.amateur.space:252 rec.radio.info:814
```

AMSAT NEWS SERVICE
ANS-179

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in

designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* ARISS Reaches 443 School Contacts
* Alaskan Satellite Ops Planned
* Original American Colonies Will Be Active on Satellite
* Call for Papers--2009 ARRL/TAPR Digital Communications Conference
* AMSAT Awards
* ARISS Status - 22 June 2009

SB SAT @ AMSAT $ANS-137.01
ARISS Reaches 443 School Contacts

AMSAT News Service Bulletin 179.01
  From AMSAT HQ SILVER SPRING, MD.
June 28, 2009
To All RADIO AMATEURS
BID: $ANS-179.01

A major milestone for the Amateur Radio on the International Space Station or ARISS school project. This as the total number of ARISS contacts between the astronaut hams on board the orbiting outpost and schoolrooms here on Earth has now reached 443.

An average of 20 students are able to ask questions of an on-orbit crew during a normal ARISS contact. That totals out to well over 8000 school kids world-wide who have gotten a chance to vicariously visit the International Space Station via ham radio since the classroom contact program began.

As space experimentation has progressed so has amateur radio's part in it. Today, the ARISS school contact program is an important part of this ongoing work by ham radio volunteers world-wide. Hams working with astronauts and cosmonauts to bring the science of spaceflight a little closer to kids here on Earth.

[ANS thanks Bruce, K6PZW, & Newsline for the above information]

/EX

SB SAT @ AMSAT $ANS-137.02
Alaskan Satellite Ops Planned

AMSAT News Service Bulletin 179.02
  From AMSAT HQ SILVER SPRING, MD.
June 28, 2009

To All RADIO AMATEURS
BID: $ANS-179.02

Dan Littel, AJ9K has advised that he will be on vacation in Alaska between July 1 - 11, and will try to be active during a few passes during his stay. Dan will be using my 5w VX-5R HT and AL800 whip on AO27, SO50 and AO51, if in mode J. Here is Dan's expected schedule:

2 July2	BP51 Anchorage
3-4 July	AO63 Dutch Harbor, Aleutian Isl
5-8 July	BP64 Fairbanks
9-11 July	BP42 Denali NP

Dan may also be able to fit in a few more grids while in transit. Dan also noted that, "since this is a vacation, and I will have minimal control over my schedule (that's my family's job, and I'm only a minority voting member...). I hope to be as active as practical".

[ANS thanks Dan, AJ9K, for the above information]

/EX

SB SAT @ AMSAT $ANS-137.03
Original American Colonies Will Be Active on Satellite

AMSAT News Service Bulletin 179.03
From AMSAT HQ SILVER SPRING, MD.
June 28, 2009
To All RADIO AMATEURS
BID: $ANS-179.03

During the period from July 1 through July 5 at least nine of the Original 13 American Colonies will be active on the amateur satellites as part of a special event organized by Ken, KU2US, in New York. Here is the Web site announcing the event, and the certificate available:

http://home.comcast.net/~dzabawa/ThirteenColonies.htm

You'll also find updates on Ken's QRZ.com page - look up KU2US.

As of Wednesday, 24 June, there are commitments from stations in nine of the original 13 colonies, and they will be using the call signs for each that are listed on the special events page. Tim, N3TL provided the following example, "I'll be operating as K2G daily during the special event. I intend to work

at
least one pass of every satellite as K2G, every day."

Listed alphabetically by Colony, here are the stations that have confirmed to
date. The calls they will use are in parentheses:

Georgia - Tim, N3TL (K2G)
Massachusetts - Dave, KB1PVH (K2H)
New Hampshire - Rik, N1XED (K2K)
New Jersey - Marc, W4MPS (K2I)
New York - Peter, WB2OQQ (K2A)
North Carolina - Jim, ND9M (K2J)
Rhode Island - Fletch, N1RCN (K2C)
South Carolina - Art, K4YYL (K2L)
Virginia - Steve, NL7VX (K2B)

As of the 24th, there are four of the original 13 colonies NOT scheduled to be
active on the satellites:

Connecticut
Delaware
Maryland
Pennsylvania

Can anyone help with any of them?

The process is simple:
1 - Please email n3tl@bellsouth.netto let him know of your interest.
2 - You can work as many or as few satellite passes as you like during the special event. It's supposed to be fun, not work!
3 - After the event, email your log(s) to KU2US, who will handle the certificates.

Tim will provide more information after hearing from anyone who wants to activate one of the four remaining colonies.

Everyone is welcome and encouraged to work one or
more of us on passes from July
1 through July 5. You only need to work one station to get the certificate, but
the more the merrier!

[ANS thanks Tim, N3TL, for the above information]

/EX

SB SAT @ AMSAT $ANS-137.04
Call for Papers--2009 ARRL/TAPR Digital Communications Conference

AMSAT News Service Bulletin 179.04

From AMSAT HQ SILVER SPRING, MD.
June 28, 2009
To All RADIO AMATEURS
BID: $ANS-179.04

Technical papers are solicited for presentation at the 28th Annual ARRL and TAPR Digital Communications Conference to be held September 25-27, 2009 in Chicago, Illinois. These papers will also be published in the Conference Proceedings (you do NOT need to attend the conference to have your paper included in the Proceedings). The submission deadline is July 31, 2009. Please send papers to:

Maty Weinberg
ARRL
225 Main St
Newington, CT 06111

or you can make your submission via e-mail to: maty@arrl.org

Papers will be published exactly as submitted and authors will retain all rights.

[ANS thanks Steve, WB8IMY, for the above information]

/EX

SB SAT @ AMSAT $ANS-137.05
AMSAT Awards

AMSAT News Service Bulletin 179.05
From AMSAT HQ SILVER SPRING, MD.
June 28, 2009
To All RADIO AMATEURS
BID: $ANS-179.05

We would like to welcome the following to the Satellite Communicators Club for making their first satellite contact.

Nick Kucij, KB1RVT
Dave Glow, AA1VX

The following have earned the South Africa AMSAT Satellite Communications Achievement Award.

Peter Carr, WW3O #US133
Chris Lemon, KB9CL #US134
Thomas Lepley, KX3TL #US135
George Carr, WA5KBH #US136

The following have earned the AMSAT Satellite Communications Achievement

Award.

Ham Operator, Your Call #500

Who will receive #500? Stay tuned, possibly coming in a week, two weeks, could be soon. If you have not sent in for your award yet, don't miss out on this opportunity.

To see all the awards visit http://www.amsat.org or http://www.amsatnet.com

Bruce Paige, KK5DO
AMSAT Director Contests and Awards

[ANS thanks Bruce, KK5DO, for the above information]

/EX

SB SAT @ AMSAT $ANS-137.06
ARISS Status - 22 June 2009

AMSAT News Service Bulletin 179.06
From AMSAT HQ SILVER SPRING, MD.
June 28, 2009
To All RADIO AMATEURS
BID: $ANS-179.06

1. Upcoming School Contacts

Inukjuak Space Camp in Kuujjuaq Quebec, Canada has been scheduled for an Amateur Radio on the International Space Station (ARISS) contact on July 2 at 17:58 UTC, assisted by telebridge station WH6PN in Hawaii. Makivik Corporation, a non-profit organization that promotes economic growth of Inuit businesses, is supporting the event. Students from grades 1-6 have been involved in a space club to learn about space, the International Space Station and amateur radio protocol. Audio from this contact will be fed into the EchoLink AMSAT (101377) and JK1ZRW (277208) servers.

2. ARISS International Meeting Held

The Amateur Radio on the International Space Station (ARISS) International Face to Face Meeting was held on Thursday and Friday, June 18 -19 at the European Space Research and Technology Centre (ESTEC) in the Netherlands. Team members gave reports on their respective regions as well as status updates on the program's committees including education, publicity, operations and hardware.

[ANS thanks Carol, KB3LKI, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Lee McLamb, KU4OS

From -5334513718870195781
X-Google-Thread: fd72c38c1,189970b2f48406e0
X-Google-Attributes: gidfd72c38c1,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!postnews.google.com!y9g2000yqg.googlegroups.com!not-for-mail
From: Robert Clark <rgregoryclark@yahoo.com>
Newsgroups:
sci.astro,rec.radio.amateur.space,rec.radio.amateur.antenna,sci.astro.seti,sci.physics
Subject: Re: High data rate space transmissions through visible light
communication.
Date: Sun, 28 Jun 2009 17:31:58 -0700 (PDT)
Organization: http://groups.google.com
Lines: 33
Message-ID: <c4dfce48-4867-40b6-9d8f-7f515a21c1a5@y9g2000yqg.googlegroups.com>
References: <609fd5d7-b15e-4bf1-a5c5-60c4c68cc367@e21g2000yqb.googlegroups.com>
<d93b5c96-717b-43b1-8178-eec713504a89@h18g2000yqj.googlegroups.com>
<4a471855$0$22552$afc38c87@news.optusnet.com.au>
<tiaf45p58ncdq3ssmgbtmef6jv7k3n7ve0@4ax.com>
NNTP-Posting-Host: 98.141.188.45
Mime-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 7bit
X-Trace: posting.google.com 1246235518 12798 127.0.0.1 (29 Jun 2009 00:31:58 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Mon, 29 Jun 2009 00:31:58 +0000 (UTC)
Complaints-To: groups-abuse@google.com
Injection-Info: y9g2000yqg.googlegroups.com; posting-host=98.141.188.45;

```
     posting-account=LrLGLAkAAAAGjouKUEM9rprSVVG_OeJd
User-Agent: G2/1.0
X-HTTP-UserAgent: Mozilla/5.0 (Windows; U; Windows NT 5.1; en-US; rv:1.9.0.11)
     Gecko/2009060215 Firefox/3.0.11,gzip(gfe),gzip(gfe)
Xref: g2news2.google.com sci.astro:26717 rec.radio.amateur.space:253
rec.radio.amateur.antenna:13047 sci.astro.seti:407 sci.physics:164249
```

On Jun 28, 1:41 pm, Richard Clark <kb7...@comcast.net> wrote:

> On Sun, 28 Jun 2009 17:14:14 +1000, "Peter Webb"
>
> <webbfam...@DIESPAMDIEoptusnet.com.au> wrote:
> >Furthermore, the radiation from a reflected area is isotropic - goes in all
> >directions - and hence very little is directed towards the earth.
>
> Actually, it is lambertian in its distribution, and it would have a
> major lobe that was directed in rather typical fashion (at the same,
> but negative angle to the norm to the surface). However, as is the
> intent of your response, very much less will find its way to the
> intended target.
>
> 73's
> Richard Clark, KB7QHC

This describes the reflection from the Iridium antennas as specular where most of the reflected light is concentrated in a single direction:

SeeSat-L Apr-98: Method for predicting flare.
http://satobs.org/seesat/Apr-1998/0175.html

About specular reflection:

Specular reflection.
http://en.wikipedia.org/wiki/Specular_reflection

We could get even higher concentration of the image by using parabolic mirror reflectors.

Bob Clark

```
From -6931596490971229215
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news2.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!wns13feed!worldnet.att.net!attbi_s22.POSTED!53ab2750!not-for-
mail
From: Sam Wormley <swormley1@mchsi.com>
User-Agent: Thunderbird 2.0.0.22 (Macintosh/20090605)
MIME-Version: 1.0
Newsgroups:
sci.astro,rec.radio.amateur.space,rec.radio.amateur.antenna,sci.astro.seti,sci.phy
sics
```

```
Subject: Re: High data rate space transmissions through visible light
communication.
References: <609fd5d7-b15e-4bf1-a5c5-60c4c68cc367@e21g2000yqb.googlegroups.com>
<d93b5c96-717b-43b1-8178-eec713504a89@h18g2000yqj.googlegroups.com>
In-Reply-To: <d93b5c96-717b-43b1-8178-eec713504a89@h18g2000yqj.googlegroups.com>
Content-Type: text/plain; charset=ISO-8859-1; format=flowed
Content-Transfer-Encoding: 7bit
Lines: 10
Message-ID: <SkW1m.165323$DP1.155290@attbi_s22>
NNTP-Posting-Host: 173.26.214.185
X-Complaints-To: abuse@mchsi.com
X-Trace: attbi_s22 1246245298 173.26.214.185 (Mon, 29 Jun 2009 03:14:58 GMT)
NNTP-Posting-Date: Mon, 29 Jun 2009 03:14:58 GMT
Organization: AT&T ASP.att.net
Date: Mon, 29 Jun 2009 03:14:58 GMT
Xref: g2news2.google.com sci.astro:26721 rec.radio.amateur.space:254
rec.radio.amateur.antenna:13049 sci.astro.seti:408 sci.physics:164273

Plenty of bandwidth in the radio and microwave spectrum.

   A Mathematical Theory of Communication by Claude E. Shannon
     http://cm.bell-labs.com/cm/ms/what/shannonday/paper.html
     http://cm.bell-labs.com/cm/ms/what/shannonday/shannon1948.pdf

   Claude E. Shannon
     http://scienceworld.wolfram.com/biography/Shannon.html




From -1735785719246211774
X-Google-Thread: 54ac8f410d,189970b2f48406e0
X-Google-Attributes: gid54ac8f410d,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII
Path: g2news2.google.com!postnews.google.com!l32g2000vbp.googlegroups.com!not-for-
mail
From: Craig Markwardt <craig.markwardt@gmail.com>
Newsgroups:
sci.astro,rec.radio.amateur.space,rec.radio.amateur.antenna,sci.astro.seti,sci.phy
sics
Subject: Re: High data rate space transmissions through visible light
     communication.
Date: Sun, 28 Jun 2009 21:03:28 -0700 (PDT)
Organization: http://groups.google.com
Lines: 36
Message-ID: <ea4f31c6-ff4d-4c6b-b872-eb003d8b6659@l32g2000vbp.googlegroups.com>
References: <609fd5d7-b15e-4bf1-a5c5-60c4c68cc367@e21g2000yqb.googlegroups.com>
     <d93b5c96-717b-43b1-8178-eec713504a89@h18g2000yqj.googlegroups.com>
     <4a471855$0$22552$afc38c87@news.optusnet.com.au>
<tiaf45p58ncdq3ssmgbtmef6jv7k3n7ve0@4ax.com>
     <c4dfce48-4867-40b6-9d8f-7f515a21c1a5@y9g2000yqg.googlegroups.com>
NNTP-Posting-Host: 98.204.47.62
```

```
Mime-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: quoted-printable
X-Trace: posting.google.com 1246248208 20484 127.0.0.1 (29 Jun 2009 04:03:28 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Mon, 29 Jun 2009 04:03:28 +0000 (UTC)
Complaints-To: groups-abuse@google.com
Injection-Info: l32g2000vbp.googlegroups.com; posting-host=98.204.47.62;
     posting-account=wIXBhQoAAAAGcbi6fLZ1EkvWESg9wY47
User-Agent: G2/1.0
X-HTTP-UserAgent: Mozilla/5.0 (Macintosh; U; Intel Mac OS X 10.5; en-US;
     rv:1.9.1) Gecko/20090624 Firefox/3.5,gzip(gfe),gzip(gfe)
Xref: g2news2.google.com sci.astro:26723 rec.radio.amateur.space:255
rec.radio.amateur.antenna:13050 sci.astro.seti:409 sci.physics:164282

On Jun 28, 8:31=A0pm, Robert Clark <rgregorycl...@yahoo.com> wrote:
> On Jun 28, 1:41 pm, Richard Clark <kb7...@comcast.net> wrote:
>
> > On Sun, 28 Jun 2009 17:14:14 +1000, "Peter Webb"
>
> > <webbfam...@DIESPAMDIEoptusnet.com.au> wrote:
> > >Furthermore, the radiation from a reflected area is isotropic - goes i=
n all
> > >directions - and hence very little is directed towards the earth.
>
> > Actually, it is lambertian in its distribution, and it would have a
> > major lobe that was directed in rather typical fashion (at the same,
> > but negative angle to the norm to the surface). =A0However, as is the
> > intent of your response, very much less will find its way to the
> > intended target.
>
> > 73's
> > Richard Clark, KB7QHC
>
> =A0This describes the reflection from the Iridium antennas as specular
> where most of the reflected light is concentrated in a single
> direction:
>
> SeeSat-L Apr-98: Method for predicting flare.http://satobs.org/seesat/Apr=
-1998/0175.html
>
> =A0About specular reflection:
>
> Specular reflection.http://en.wikipedia.org/wiki/Specular_reflection
>
> =A0We could get even higher concentration of the image by using
> parabolic mirror reflectors.

So basically you discovered the parabolic antenna.  Congratulations.

CM
```

```
From -7566554430689899422
X-Google-Thread: 54ac8f410d,189970b2f48406e0
X-Google-Attributes: gid54ac8f410d,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII
Path: g2news2.google.com!postnews.google.com!z14g2000yqa.googlegroups.com!not-for-
mail
From: BradGuth <bradguth@gmail.com>
Newsgroups:
sci.astro,rec.radio.amateur.space,rec.radio.amateur.antenna,sci.astro.seti,sci.phy
sics
Subject: Re: High data rate space transmissions through visible light
     communication.
Date: Sun, 28 Jun 2009 22:03:42 -0700 (PDT)
Organization: http://groups.google.com
Lines: 39
Message-ID: <41bfcaf2-d9d9-4f81-8a10-3dc7faf4f08a@z14g2000yqa.googlegroups.com>
References: <609fd5d7-b15e-4bf1-a5c5-60c4c68cc367@e21g2000yqb.googlegroups.com>
     <d93b5c96-717b-43b1-8178-eec713504a89@h18g2000yqj.googlegroups.com>
     <4a471855$0$22552$afc38c87@news.optusnet.com.au>
<tiaf45p58ncdq3ssmgbtmef6jv7k3n7ve0@4ax.com>
     <c4dfce48-4867-40b6-9d8f-7f515a21c1a5@y9g2000yqg.googlegroups.com>
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Mime-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: quoted-printable
X-Trace: posting.google.com 1246251822 21311 127.0.0.1 (29 Jun 2009 05:03:42 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Mon, 29 Jun 2009 05:03:42 +0000 (UTC)
Complaints-To: groups-abuse@google.com
Injection-Info: z14g2000yqa.googlegroups.com; posting-host=64.91.99.182;
     posting-account=nf79RwoAAABXjvy5ztMzmPxgY1WGoktI
User-Agent: G2/1.0
X-HTTP-UserAgent: Mozilla/5.0 (Windows; U; Windows NT 5.1; en-US; rv:1.9.0.5)
     Gecko/2008120122 Firefox/3.0.5,gzip(gfe),gzip(gfe)
Xref: g2news2.google.com sci.astro:26727 rec.radio.amateur.space:256
rec.radio.amateur.antenna:13051 sci.astro.seti:410 sci.physics:164300
```

On Jun 28, 5:31=A0pm, Robert Clark <rgregorycl...@yahoo.com> wrote:

> On Jun 28, 1:41 pm, Richard Clark <kb7...@comcast.net> wrote:
>
> > On Sun, 28 Jun 2009 17:14:14 +1000, "Peter Webb"
>
> > <webbfam...@DIESPAMDIEoptusnet.com.au> wrote:
> > >Furthermore, the radiation from a reflected area is isotropic - goes i=
n all
> > >directions - and hence very little is directed towards the earth.
>
> > Actually, it is lambertian in its distribution, and it would have a
> > major lobe that was directed in rather typical fashion (at the same,
> > but negative angle to the norm to the surface). =A0However, as is the
> > intent of your response, very much less will find its way to the
> > intended target.

>
> > 73's
> > Richard Clark, KB7QHC
>
> =A0This describes the reflection from the Iridium antennas as specular
> where most of the reflected light is concentrated in a single
> direction:
>
> SeeSat-L Apr-98: Method for predicting flare.http://satobs.org/seesat/Apr=
-1998/0175.html
>
> =A0About specular reflection:
>
> Specular reflection.http://en.wikipedia.org/wiki/Specular_reflection
>
> =A0We could get even higher concentration of the image by using
> parabolic mirror reflectors.
>
> =A0 =A0Bob Clark

Yes, and it was all doable as of more than a decade ago. However, at
the rate we're going, perhaps another century is required.

 ~ BG

From -2135894645760465636
X-Google-Thread: 54ac8f410d,189970b2f48406e0
X-Google-Attributes: gid54ac8f410d,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,CP1252
Path: g2news2.google.com!postnews.google.com!q14g2000vbn.googlegroups.com!not-for-mail
From: Robert Clark <rgregoryclark@yahoo.com>
Newsgroups:
sci.astro,rec.radio.amateur.space,rec.radio.amateur.antenna,sci.astro.seti,sci.physics
Subject: Re: Detecting the HDTV for the Google Lunar X Prize, applications to
     the SETI search.
Date: Tue, 30 Jun 2009 11:37:29 -0700 (PDT)
Organization: http://groups.google.com
Lines: 34
Message-ID: <c3131f3f-b685-4510-bf2d-a9b74e6d3212@q14g2000vbn.googlegroups.com>
References: <609fd5d7-b15e-4bf1-a5c5-60c4c68cc367@e21g2000yqb.googlegroups.com>
     <h19hoo$i04$1@news.jpl.nasa.gov>
NNTP-Posting-Host: 98.141.188.45
Mime-Version: 1.0
Content-Type: text/plain; charset=windows-1252
Content-Transfer-Encoding: quoted-printable
X-Trace: posting.google.com 1246387052 15710 127.0.0.1 (30 Jun 2009 18:37:32 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Tue, 30 Jun 2009 18:37:32 +0000 (UTC)
Complaints-To: groups-abuse@google.com

Injection-Info: q14g2000vbn.googlegroups.com; posting-host=98.141.188.45;
     posting-account=LrLGLAkAAAAGjouKUEM9rprSVVG_OeJd
User-Agent: G2/1.0
X-HTTP-UserAgent: Mozilla/5.0 (Windows; U; Windows NT 5.1; en-US; rv:1.9.0.11)
     Gecko/2009060215 Firefox/3.0.11,gzip(gfe),gzip(gfe)
Xref: g2news2.google.com sci.astro:26776 rec.radio.amateur.space:257
rec.radio.amateur.antenna:13062 sci.astro.seti:414 sci.physics:164589

On Jun 16, 9:43=A0pm, Jim Lux <james.p....@jpl.nasa.gov> wrote:
> ...
>
> Look up LOFAR or the SKA (Square Kilometer Array) for a fairly well
> funded scheme.

LOFAR.
http://en.wikipedia.org/wiki/LOFAR

LOFAR like my proposal is to use many separate dipoles to detect long wavelength radio waves. However, it is to have only 10,000 dipoles whereas mine at the end will have ca. 1 billion dipoles.

The progenitors of the LOFAR project have argued in papers that it could be used for the SETI search. However, this article by well known SETI search scientist Seth Shostak argues LOFAR will be too weak to detect Earth type radio transmissions at a distance of say 55 light-years by a factor of 1 million:

Listening for ET=92s Television.
November 9, 2006
by Seth Shostak, Senior Astronomer
http://www.seti.org/Page.aspx?pid=3D917

Then since my proposal will be about 100,000 times more sensitive than LOFAR, it could detect Earth-like radio transmissions to about 1/3 the distance of 55 lightyears, or to about 18 lightyears way. There are several star systems in that range. The Shostak article notes you could get several hundred times better sensitivity by listening to certain stars over months or years. Then my proposal could detect such transmissions out to even 55 lightyears and further.

Bob Clark

From -4709298187687462729
X-Google-Thread: fd72c38c1,189970b2f48406e0
X-Google-Attributes: gidfd72c38c1,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news2.google.com!news.glorb.com!news2.glorb.com!news-in-01.newsfeed.easynews.com!easynews!core-easynews-01!easynews.com!en-nntp-03.dc1.easynews.com.POSTED!not-for-mail
From: Richard Clark <kb7qhc@comcast.net>

Newsgroups:
sci.astro,rec.radio.amateur.space,rec.radio.amateur.antenna,sci.astro.seti,sci.physics
Subject: Re: Detecting the HDTV for the Google Lunar X Prize, applications to the
SETI search.
Message-ID: <mnvk4516r26idmgfhd89caquonurv9e0re@4ax.com>
References: <609fd5d7-b15e-4bf1-a5c5-60c4c68cc367@e21g2000yqb.googlegroups.com>
<h19hoo$i04$1@news.jpl.nasa.gov> <c3131f3f-b685-4510-bf2d-a9b74e6d3212@q14g2000vbn.googlegroups.com>
X-Newsreader: Forte Agent 5.00/32.1171
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Lines: 14
X-Complaints-To: abuse@easynews.com
Organization: Forte Inc. http://www.forteinc.com/apn/
X-Complaints-Info: Please be sure to forward a copy of ALL headers otherwise we
will be unable to process your complaint properly.
Date: Tue, 30 Jun 2009 14:10:08 -0700
Xref: g2news2.google.com sci.astro:26779 rec.radio.amateur.space:258
rec.radio.amateur.antenna:13063 sci.astro.seti:415 sci.physics:164619

On Tue, 30 Jun 2009 11:37:29 -0700 (PDT), Robert Clark
<rgregoryclark@yahoo.com> wrote:

>The Shostak article
>notes you could get several hundred times better sensitivity by
>listening to certain stars over months or years.

And if you lost your keys at night, you might find them faster looking
under street lights.

Yet another troll.

73's
Richard Clark, KB7QHC

From 7176517139255718224
X-Google-Thread: 8f86f75953,2c7c6e1fa70bd76a,start
X-Google-Attributes: gid8f86f75953,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news1.google.com!news.glorb.com!news-out.readnews.com!transit3.readnews.com!panix!panix2.panix.com!not-for-mail
From: rram@panix.com (rec.radio.amateur.moderated Admin)
Newsgroups:
rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.info
Subject: Crossposting Permitted to rec.radio.amateur.moderated
Supersedes: <radio/ham-radio/moderated/crossposting-1-1243836001@panix.com>
Followup-To: poster

Date: 1 Jul 2009 02:00:02 -0400
Organization: rec.radio.amateur.moderated Moderation Team
Lines: 47
Approved: rec-radio-info@panix.com
Distribution: world
Expires: 03 Aug 2009 02:00:01 -0000
Message-ID: <radio/ham-radio/moderated/crossposting-1-1246428001@panix.com>
Reply-To: rec-radio-amateur-moderated-request@panix.com
(rec.radio.amateur.moderated Admin)
NNTP-Posting-Host: panix2.panix.com
X-Trace: reader1.panix.com 1246428002 4011 166.84.1.2 (1 Jul 2009 06:00:02 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Wed, 1 Jul 2009 06:00:02 +0000 (UTC)
Summary: Short reminder for unmoderated newsgroups that crossposting is permitted
Keywords: FAQ, ham, amateur, radio, moderated, unmoderated, crossposting,
permitted
Xref: g2news2.google.com rec.radio.amateur.antenna:13068 rec.radio.amateur.dx:431
rec.radio.amateur.equipment:1615 rec.radio.amateur.homebrew:2899
rec.radio.amateur.misc:4326 rec.radio.amateur.policy:26457
rec.radio.amateur.space:259 rec.radio.info:818

Posted-By: auto-faq 3.3.2 beta (PGPMoose V2.0, Perl 5.005)
Archive-name: radio/ham-radio/moderated/crossposting
Revision: 1.1 2009/04/12 19:42:04
Posting-Frequency: posted monthly
URL: http://www.panix.com/~rram/usenet/rram/index.html

Changes followed by "|".

After a 30-day public discussion and feedback period to gauge reader opinions in March of 2009:

http://groups.google.com/group/rec.radio.amateur.moderated/browse_thread/thread/d7d337db35f23326

the rec.radio.amateur.moderated Moderation Team has decided to consider amending its charter, and permit limited simultaneous crossposting to rec.radio.amateur.moderated and one other unmoderated amateur-radio-related discussion newsgroup. We are currently trying this on a temporary basis (90 days, through early July 2009), and adopt it permanently if successful.

Approved rec.radio.amateur.* newsgroups are those that are currently listed in the latest version of the "List of Big Eight Newsgroups" which is crossposted monthly to news.announce.newgroups, news.groups, and news.lists.misc.

Approved alt.radio.amateur.* and alt.ham-radio.* newsgroups are those that have been created consistent with the suggestions in "So You Want to Create an Alt Newsgroup" at:

  http://www.faqs.org/faqs/alt-creation-guide/

Approved regional hierarchy newsgroups are those that contain either "radio.amateur" or "ham-radio" in their names, including uk.radio.amateur and aus.radio.amateur.misc.

We will make every reasonable effort to keep our list of approved newsgroups up-to-date. In case we have overlooked any, and a submission is rejected in error as a result, the rejected submitter can E-mail us at our administrative contact address (in the signature at the bottom of this article, and the default Reply-To for the rejection message) requesting that it be added, and that the article be approved. We may still choose to reject articles crossposted to any alt.* newsgroup with an inappropriate name, including obscene language, embedded name-calling, or encouragement of unlawful conduct.

Please direct any comments, questions, or criticisms to rec-radio-amateur-moderated-request@panix.com.

```
From -4842222260854913781
X-Google-Thread: a4a23d5f63,59a9eede5817e9b7,start
X-Google-Attributes: gida4a23d5f63,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news1.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx02.iad01.newshosting.com!newshosting.com!
198.186.194.249.MISMATCH!transit3.readnews.com!news-out.readnews.com!news-
xxxfer.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-184 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Fri, 3 Jul 2009 23:16:28 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 1664
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <002701c9fc55$c8665860$59330920$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1246677388 8766 166.84.1.6 (4 Jul 2009 03:16:28 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sat, 4 Jul 2009 03:16:28 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to            rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
```

```
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
x-cr-hashedpuzzle: 7Fw= AQ3w Aj/T COPv CmzV Erkh GQ98 Geph HX8X Hb2W H1r/ H4kJ
I5iK Jl6u JqSY
LSth;1;cgBlAGMALQByAGEAZABpAG8ALQBpAG4AZgBvAEAAcABhAG4AaQB4AC4AYwBvAG0A;Sosha1_v1;
7;{F17FF426-BB5E-4E98-
A6CD-1C7C74661A8B};awA5AGoAawBtAEAAYwBvAG0AYwBhAHMAdAAuAG4AZQB0AA==;Sat, 04 Jul
2009 03:16:04
GMT;VwBTAFIALQAxADgANAAgAEEATQBTAEEAVAAgAFcAZQBlAGsAbAB5ACAAUwBhAHQAZQBsAGwAaQB0AG
UAIABSAGUAcABvAHIAdAA=
x-cr-puzzleid: {F17FF426-BB5E-4E98-A6CD-1C7C74661A8B}
Xref: g2news2.google.com rec.radio.amateur.space:260 rec.radio.info:826
```

This report is organized into four (4) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - deorbited/returned satellites

SB SAT @ AMSAT W8ISS ANS-184.S1
WSR 184 Part 1 07/03/2009

AMSAT NEWS SERVICE BULLETIN 184.S1
FROM AMSAT HQ SILVER SPRING, MD, July 03, 2009
TO ALL RADIO AMATEURS
BID: $ANS-184.S1

DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008

Status: Operational
Current Mode: Science Mode - Beacon ONLY

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink: 435.530 to 435.570 MHz

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68
[02122009]
=====
VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.859330 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is active. Each transponder has a different beacon.
[08072008]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

```
Current Modes:   FM Repeater - Uplink:    145.920 Mhz FM
                               Downlink:  435.300 Mhz FM
                 BBS         - Uplink:   1268.700 Mhz FM 9k6
                               Downlink:  435.150 Mhz FM 9k6
                 Telemetry   - Downlink:  435.150 MHz FM

Analog voice downlink:     435.300 MHz FM
                           435.150 MHz FM
                          2401.200 Mhz FM
Analog voice uplink:       145.860 MHZ FM
                           145.880 MHz USB
                           145.920 MHz FM
                          1268.700 MHz FM
Digital Downlinks:         435.150 MHz FM 38k4 PBP, 1 watt output
                           435.150 MHz FM 9k6 Pacsat Broadcast Protocol
                          2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:            145.860 MHz FM 9k6 Pacsat Broadcast Protocol
                          1268.700 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon:                    435.150 MHz
```

Mode and Antenna Polarization:
T: Linear
V: Linear

U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[07032009]

=====

SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz. The order of operation is thus: (allow for Doppler as necessary):

1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10 minute timer.

[05282007]

=====

FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Operational
Current Mode: V/u (Mode JA)

Voice/CW (Mode JA)
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

```
Digital Mode JD
Uplinks:  145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage:
http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's
CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/
fo29cwts.htm
[02122009]
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993

Status: Operational

Current Mode: V/u

Uplink:   145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[03232009]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational

Current Mode: Alternating between Mode A and B every 24 hours
```

```
Uplink:   145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink:  29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons:   29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
[02122009]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - V/u
                      Voice -       V/v
                      BBS -         V/v
                      APRS -        V/v
                      SSTV -        V/v


Expedition 20 Crew:
Commander:                Gennady Padalka  RN3DT
Flight Engineer:          Michael Barratt  KD5MIJ
Flight Engineer:          Koichi Wakata    KC5ZTA
Flight Engineer:          Timothy Kopra    KE5UDN
Flight Engineer:          Roman Romanenko
Flight Engineer:          Frank De Winne   ON1DWN

Available Modes and Frequencies:

Digital/APRS:
Worldwide packet uplink:   145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink:     145.200 MHz FM
Region 2/3 voice uplink:   144.490 MHz FM
Worldwide downlink:        145.800 MHz FM

Crossband Repeater:
Repeater Uplinks:         1269.650 MHz FM
                           437.800 MHz FM
```

145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[06122009]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-184.S2
WSR 184 Part 2 07/03/2009

AMSAT NEWS SERVICE BULLETIN 184.S2
FROM AMSAT HQ SILVER SPRING, MD, July 03, 2009
TO ALL RADIO AMATEURS
BID: $ANS-184.S2

CP-6
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Commissioning

Downlink: 437.365 MHz 1k2 AFSK
[06052009]
=====
HAWKSAT 1
Catalog number: 35003
Launch Date: May 19, 2009

Status: ?

```
Downlink: 437.345 ?
[06052009]
=====
Pharmasat
Catalog Number: 35002
Launch Date: May 19, 2009
Status: Commissioning

Downlink: 437.465 MHz 1k2 AFSK
[06052009]
=====
ANUSAT
Catalog Number: 34808
Launch Date: April 20, 2009

Status: ?

Downlink:  435.000 MHz
Uplink:    145.800 MHz

Telemetry: 137.400 MHz
[05112009]
=====
SOHLA-1 (ASTRO TECH.)
Catalog Number: 33496
Launch Date: January 23, 2009

Status: Commisioning

Proposed Frequencies and Modes:
Downlink: 437.505 MHz AFSK/CW
Beacon:   437.505 MHz AFSK/CW

Callsign:

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=101
[03232009]
=====
KAGAYAKI (Solan Co.)
Catalog Number: 33495?
Launch Date: January 23, 2009

Status: In Orbit

Downlink: 437.375 MHZ    FSK9k6/CW
Beacon:   437.375 MHz    FSK9k6/CW

IARU coordination status page:

AMSAT-NA webpage:
```

```
[01152009]
=====
STARS (Kagawa Univ.) (Twin Satellites)
Catalog Number: 33498
Launch Date: January 23, 2009

Status: Operational ?

Downlinks: 437.485 MHz FM/CW
           437.465 MHz FM/CW
Beacons:   437.305 MHz FM/CW
           437.275 MHz FM/CW

Callsigns: JR5YBN
           JR5YBO

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=99

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=121&retURL
=/satellites/status.php
[022152009]
=====
KKS-1 (Tokyo MCIT)
Catalog Number: 33499
Launch Date: January 23, 2009

Status: Operational

Downlink:  437.455 MHz AFSK/CW
Beacon:    437.385 MHz AFSK/CW

Callsign: JQ1YYY

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=107

AMSAT-NA webapge:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=120&retURL
=/satellites/status.php
[02212009]
=====
PRISM (Tokyo Univ.)
Catalog Number: 33493
Launch Date: January 23, 2009

Status: Operational ?

Downlink: 437.425 MHz AFSK/GMSK/CW
Beacon:   437.250 MHz AFSK/GMSK/CW

Callsign: JQ1YCX
```

```
IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=97

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=119&retURL
=/satellites/status.php
[02212009]
=====
RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number: 32953
Launch Date: May 23, 2008

Status: Operational

Curent Modes: Telemetry
              Audio
              Images

Downlinks: 435.315 MHz
           435.215 MHz

AMSAT-NA website:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=115&ret
URL=/satellites/status.php

Official website:
http://www.npopm.com/?cid=leoca&caid=43
[02122009]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode:  /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon:    435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=94&retURL=
/satellites/status.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=72
[02122009]
=====
CP3
Catalog Number: 31129
Launch Date: April 17,2007

Status: Operational

Current Mode:  /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[02122009]
=====
GENESAT-1
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Current Mode: /u

Callsign: KE7EGC

Telemetry Beacon Downlink: 437.0670 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[02212009]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon:             437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/xivpicte.htm
[02212009]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003

Status: ?????

Current Mode: /u
```

```
Beacon:     436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=96&retURL
=/satellites/status.php

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[06082009]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Operational?

Uplink:  1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=56
[02122009]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Modes:   FM Repeater - Uplink:    145.920 Mhz FM
                               Downlink:  435.300 Mhz FM
                 BBS         - Uplink:   1268.700 Mhz FM 9k6
                               Downlink:  435.150 Mhz FM 9k6
                 Telemetry   - Downlink:  435.150 MHz FM

Analog voice downlink:     435.300 MHz FM
                           435.150 MHz FM
                          2401.200 Mhz FM
Analog voice uplink:       145.860 MHZ FM
                           145.880 MHz USB
                           145.920 MHz FM
                          1268.700 MHz FM
Digital Downlinks:         435.150 MHz FM 38k4 PBP, 1 watt output
                           435.150 MHz FM 9k6 Pacsat Broadcast Protocol
                          2401.200 MHz FM 38k4 bps, AX.25
```

Digital Uplink: 145.860 MHz FM 9k6 Pacsat Broadcast Protocol
                           1268.700 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[07032009]
=====
QuakeSat
Catalog Number: 27845
Launch Date: June 30, 2003

Status: Telemetry only

Current Mode: 9600 baud data packet

Mode U packet
Downlink: 436.675 MHz 9k6 BPS

Quakesat webpage:
http://www.quakefinder.com/services/quakesat-ssite/
[04272009]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=69&retURL

```
=/satellites/status.php
[02212009]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Telemetry only

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink:        144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[03302009]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Telemetry only

Current Modes:
Telemetry : /u

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign:       4XTECH-12

More information of GO-32 can be found at:
http://asri.technion.ac.il/techsat/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=14&retURL
=/satellites/status.php
[04272009]
=====
RS-22 RADIO SPORT RS-22
Catalog number: 27939
Launch Date: September 27, 2003
```

```
Status: Operational - 70cm cw only

Current Mode:  /u

CW Beacon - 435.352 MHz
            145.818 MHz

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=76&retURL
=/satellites/status.php
[02212009]
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990

Status: CW Beacon only

Uplinks:          145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink:      437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[03162009]
=====
CanX-2
Catalog number: 32790
Launch Date: April 28, 2008

Status: Operational in range of ground station only

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web
page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[02212009]
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008
```

Status: Operational

Downlink: 437.425 MHz 1k2 baud packet

For the latest project status update please visit the AAUSAT-II web
page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[02212009]
=====
CO-65 CUTE-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008

Status: Digipeater

Downlink: 437.475 MHz 9k6 Packet
Uplink: 1267.600 Mhz

Telemetry Beacon:
Downlink: 437.2750 MHz CW

For the latest project status update please visit the Cute-1.7+APD II
web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78

Command Station blog website:
http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=112&retURL
=/satellites/status.php
[02212009]
=====
Compass-1
Catalog number: 32787
Launch Date: April 28, 2008

Status: Operational

Current Mode: 4k8 MSK packet

Uplink: 145.980 MHz FM
Downlink: 437.275 Mhz CW
          437.405 MHz Packet

For the latest project status update please visit the Compass 1 web
page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=114&retURL=/satellites/status.php
[04272009]
=====
CO-66 Seeds II
Catalog number: 32791
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.485 MHz

Callsign: JQ1YGU

For the latest project status update please visit the Seeds 2 web page: http://cubesat.aero.cst.nihon-u.ac.jp/english/seeds_2_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=113&retURL=/satellites/status.php
[02212009]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - V/u
Voice - V/v
BBS - V/v
APRS - V/v
SSTV - V/v

Expedition 20 Crew:

Commander:	Gennady Padalka	RN3DT
Flight Engineer:	Michael Barratt	KD5MIJ
Flight Engineer:	Koichi Wakata	KC5ZTA
Flight Engineer:	Timothy Kopra	KE5UDN
Flight Engineer:	Roman Romanenko	
Flight Engineer:	Frank De Winne	ON1DWN

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[06122009]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-184.S3
WSR 184 Part 3 07/03/2009

AMSAT NEWS SERVICE BULLETIN 184.S3
FROM AMSAT HQ SILVER SPRING, MD, July 03, 2009
TO ALL RADIO AMATEURS
BID: $ANS-184.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

CP4
Catalog Number: 31122
Launch Date: April 17,2007

```
Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon:    437.325 MHz CW

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=79
[10022008]
=====
LIBERTAD-1
Catalog Number: 31128
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink:   145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[02122009]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: Non-Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder:  145.825 Mhz FM
[01012009]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency:  437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
```

XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 MHz FM 67Hz CTCSS
Voice Downlink: 2401.835 MHz FM
Packet Up/Downlink: 437.250 MHz 9k6 packet
Packet Downlink   2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non-Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[08132007]
=====
CANX-1
Catalog Number: 27847
Launch Date: June 30, 2003

Status: Non-Operational

Downlink: 437.8800 MHz AFSK 1k2bps
[06052009]
=====
DTUSAT
Catalog Number: 27842
Launch Date: June 30, 2003

Status: Non-Operational

Current Mode: 2k4 AFSK Packet last reported

Downlink: 437.475MHz

Officail webpage: http://dtusat1.dtusat.dtu.dk/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=101&retURL
=satellites/all_oscars.php
[02212009]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605

```
Launch Date: December 20, 2002

Status: Non-operational.

Uplink:   435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)

Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Telemetry only

Uplinks:   145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink:  437.325 MHz

Broadcast callsign: MYSAT3-11
BBS:                MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial land and weather imaging payloads offers FM and FSK
Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as
a collaborative effort between the Malaysian government and Surrey
Satellite Technology Ltd.
[03302009]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink:   145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000
```

```
Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS:                SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink:   145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
V-band:   145.840 -  145.990 MHz CW/LSB
U-band:   435.550 -  435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks
---------
S2-band:  2401.225 -  2401.475 MHz CW/USB
K-band:  24048.010 - 24048.060 MHz CW/USB
Beacon:   2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)
----------------------------
BEACON   General Beacon(GB)  Middle Beacon(MB)  Engineering Beacon(EB)
2 m                    none        145.898 MHz                    none
70cm            435.438 MHz        435.588 MHz             435.838 MHz
```

```
13cm(1)       2400.188 MHz       2400.338 MHz            2400.588 MHz
13cm(2)       2401.173 MHz       2401.323 MHz            2401.573 MHz
3cm          10450.975 MHz      10451.125 MHz           10451.375 MHz
1.5cm        24047.885 MHz      24048.035 MHz           24048.285 MHz
[07162007]
=====
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink:    145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: 25636
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater:         436.250 MHz

Uplinks: Mode B Repeater:  145.825 MHz
Mode J Digipeater:         145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
```

Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink: 145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
MO-30 UNAMSAT-2
Catalog Number: 24305
Launch Date: September 5, 1996

Status: Non-operational

```
Downlink:       435.1380 MHz AFSK 1200 BPS
Downlink:       435.2060 MHz AFSK 1200 BPS
Uplink:         145.8150 MHz AFSK 1200 BPS
Uplink:         145.8350 MHz AFSK 1200 BPS
Uplink:         145.8550 MHz AFSK 1200 BPS
Uplink:         145.8750 MHz AFSK 1200 BPS
```
[06042009]
=====
PO-28 POSAT-1
Catalog number: 22829

```
Launch Date: September 25, 1993

Status: Non-operational

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign:       POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012009]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992
```

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink: 145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink: 435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons: 435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink: 145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks: 145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

```
More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
[05012006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: SEMI-Operational

Current Mode:  V/u

Uplink:          145.900 MHz FM 1200-baud Manchester FSK (reserved)
                 145.920 MHz FM VOICE
                 145.940 MHz FM 1200-baud Manchester FSK (reserved)
                 145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink:        437.026 MHz USB VOICE
                 (1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[12252008]
=====
UO-15 UoSAT-4
```

```
Catalog Number: 20438
Launch Date: January 22, 1990

Status: Non-operational

Uplink: ?
Downlink: 435.1250MHz (?)
          435.1200MHz (?)
[06042009]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984

Status: Non-operational.

Current Mode:  /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon:          435.025 MHz
Mode-S Beacon:     2401.500 MHz
```

```
Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[01012009]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon:   145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink  29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
Beacons:   29.450 MHz
```

```
          435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon 1:  29.352 MHz (intermittent)
Beacon 2:  29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink:     21.260 to 21.300 MHz CW/USB
Downlink:  145.860 to 145.900 MHz CW/USB

Beacon:    145.860 MHz

Robot:     145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
```

```
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink:   21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon:   29.408 MHz

Robot:    29.454 MHz
[05232004]
NNNN
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SB SAT @ AMSAT W8ISS ANS-184.S4
WSR 184 Part 4 07/03/2009

AMSAT NEWS SERVICE BULLETIN 184.S4
FROM AMSAT HQ SILVER SPRING, MD, July 03, 2009
TO ALL RADIO AMATEURS
BID: $ANS-184.S4

THE FOLLOWING SATELLITES HAVE RE-ENTERED OR HAVE BEEN RETURNED SAFELY:

NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: July 28, 2008

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[01012009]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006
```

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink: 145.825 Mhz FM APRS AX25
APRS Uplink: 145.825 MHz FM APRS AX25
Voice/PSK31 Uplink: 28.120 MHz

Packet to Voice ID: RAFT
[06112007]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Re-Entered
Re-entered: June 18, 2008

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon: 437.2750 MHz CW

Callsign: JR8YJT
[01012009]
=====
SO-43 Starshine 3
Catalog Number: 26929
Launch Date: September 30, 2001

Status: Re-Entered
Re-entered: January 21, 2003

Beacon: 145.825Mhz
[02212009]
NNNN
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ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at}
amsat.org
NNNN
/EX

____
Via the ANS mailing list courtesy of AMSAT-NA
http://amsat.org/mailman/listinfo/ans

```
From -5036087121533354759
X-Google-Thread: a4a23d5f63,69711810d49f7eaa,start
X-Google-Attributes: gida4a23d5f63,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news2.google.com!newsfeed2.dallas1.level3.net!
news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-186 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sat, 4 Jul 2009 21:43:48 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 376
Approved: RRI Admin <rec-radio-info-request@panix.com>
```

```
Message-ID: <000501c9fd12$060aa790$121ff6b0$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1246758228 14768 166.84.1.6 (5 Jul 2009 01:43:48 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 5 Jul 2009 01:43:48 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to            rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news2.google.com rec.radio.amateur.space:261 rec.radio.info:827
```

AMSAT NEWS SERVICE
ANS-186

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

```
**********************************************************************
* 2009 AMSAT Space Symposium and Annual General Meeting October 9-11 *
*   Four Points Sheraton Hotel at the Baltimore Washington Airport   *
*  Details - http://www.amsat.org/amsat-new/symposium/2009/index.php *
**********************************************************************
```

In this edition:

* AMSAT 2009 Space Symposium and Annual General Meeting
* AMSAT Forum videos from Dayton Hamvention
* SuitSat-2 Systems Integration
* AO-51 Engineering Team Continues to Monitor Power Levels
* Certificate Available for 13 Colonies Special Event Station
* Special Event Station 4C50C via Satellite From Mexico
* AMSAT Satellite Communications Achievement Award #500 Issued
* Recognition for SumbandilaSat Design and Development
* Satellite Shorts From All Over

SB SAT @ AMSAT $ANS-186.01
AMSAT 2009 Space Symposium and Annual General Meeting

AMSAT News Service Bulletin 186.01
>From AMSAT HQ SILVER SPRING, MD.
July 5, 2009
To All RADIO AMATEURS
BID: $ANS-186.01

Now is the time for you to prepare your papers and presentations for the 2009 AMSAT Annual Meeting and Space Symposium to be held October 9 - 11 at the Four Points Sheraton Hotel at the Baltimore Washington Airport.

Proposals for papers, symposium presentations and poster presentations are invited on any topic of interest to the amateur satellite community. We request a tentative title of your presentation as soon as possible, with final copy submitted by September 1, 2009 for inclusion in the printed proceedings.

Abstracts and papers should be sent to Dan Schultz, N8FGV, at n8fgv@amsat.org.

[ANS thanks the 2009 Symposium Committee for the above information]

/EX

SB SAT @ AMSAT $ANS-186.02
AMSAT Forum videos from Dayton Hamvention

AMSAT News Service Bulletin 186.02
>From AMSAT HQ SILVER SPRING, MD.
July 5, 2009
To All RADIO AMATEURS
BID: $ANS-186.02

Videos of the six presentations at the AMSAT Forum at the 2009 Dayton Hamvention are now on the AMSAT website. Click on this link:

http://www.amsat.org/amsat-new/information/videoNews.php - or -

go to the AMSAT website and click on the AMSAT Video News icon about halfway down the page in the left column.

The presentations include:

1. Richard Garriott's forum talk (mislabeled on the web site as the Banquet presentation, actual length about 15 minutes) on his visit to the ISS.

2. AMSAT Status report, Barry Baines, WD4ASW

3. SuitSat-2 Project Status, Gould Smith, WA4SXM

4. Satellite Operations Status, Drew Glasbrenner, KO4MA

5. ARISS Status, Will Marchant, KC6ROL

6. Columbus Module Antennas, Lou McFadin, W5DID

Be sure and watch Barry's presentation on the Status of AMSAT. Thanks go to Steve Belter, who recorded, edited and converted the video of the AMSAT presentations at the 2009 Dayton AMSAT Forum, Rob Meisse W8GSM for setting them up on his server and to Rick Hambly W2GPS for updates on this web page.

[ANS thanks Gould, WA4SXM and Steve, N9IP for above information]

/EX

SB SAT @ AMSAT $ANS-186.03
SuitSat-2 Systems Integration

AMSAT News Service Bulletin 186.03
>From AMSAT HQ SILVER SPRING, MD.
July 5, 2009
To All RADIO AMATEURS
BID: $ANS-186.03

Many of the SuitSat-2 team members will converge on Phoenix during the weekend of July 10-12 for a system integration party. The team expects to put all of the hardware modules together that have been developed in many parts of the country. SuitSat-2 Project Manager, Gould WA4SXM said, "It is great to be at the point that we can start testing system operations with the hardware and software. The fun begins Friday July 10." You can keep up with the integration activities next weekend using Twitter http://twitter.com/GGouldSmith.

[ANS thanks Gould, WA4SXM for the above information]

/EX

SB SAT @ AMSAT $ANS-186.04
AO-51 Engineering Team Continues to Monitor Power Levels

AMSAT News Service Bulletin 186.04
>From AMSAT HQ SILVER SPRING, MD.
July 5, 2009
To All RADIO AMATEURS
BID: $ANS-186.04

Due to the increasing time AO-51 is spending in eclipse AMSAT

Vice-President of Operations, Drew KO4MA reports that transmitter power levels have needed to be reduced. This way the batteries will provide enough power to keep the satellite operational when the solar cells are not providing charging current. AO-51 users have already noted the weaker signals on the downlinks.

The AO-51 Control Team Web Page for latest operating information will carry the latest status of the satellite. See:
http://www.amsat.org/amsat-new/echo/CTNews.php

AMSAT now has a Twitter account at http://twitter.com/AMSAT where the AO-51 Operations Team will try to tweet things too small for ANS bulletins or email, but of interest to the general AMSAT community. The most recent tweet reported, "AO-51 is in "normal" mode, telemetry on 435.150 @ 240mw, V/u repeater on 435.300 @ 290mw."

Gould, WA4SXM, AO-51 Ground Control Station said, "The eclipse time should start to decrease over the next few days hopefully allowing improvement in the transmitter power settings."

Gould continues with the news, "The AO-51 telemetry archive is up to date as of last night. AO-51 telemetry data is available in raw format, CSA (comma separated variable) format that has the channel data converted by the configuration equations and there are some Excel files (most with graphs). There are a number of Excel files with graphs for June 2009 as that was a very interesting month for AO-51 operation. I encourage exploration of the data and any insights gleaned."

The telemetry archive can be found at:
http://www.amsat.org/amsat/ftp/telemetry/ao51/

[ANS thanks AO-51 Command Station, Gould WA4SXM for the above information]

/EX

SB SAT @ AMSAT $ANS-186.05
Certificate Available for 13 Colonies Special Event Station

AMSAT News Service Bulletin 186.05
>From AMSAT HQ SILVER SPRING, MD.
July 5, 2009
To All RADIO AMATEURS
BID: $ANS-186.05

If you worked the stations participating in the Original 13 Colonies Independence Day Special Event between July 1- 5 you can send for a commemorative certificate.

Ken requests, "Each station to send a contact log stating the Date, UTC, Band, & call sign of each contact, along with your QSL card and $4.00 US. in check, MO. or cash (to help defray printing costs). NO

SASE required. We will furnish postage, certificate and 9"x12" envelope. No QSL cards will be issued - just the certificate. All award requests and payment to be sent and made out to the KU2US-Award Manager address shown on the event log form."

Log form in PDF format: http://tinyurl.com/nbrxzv
Log form in text format: http://tinyurl.com/klv53u

[ANS thanks Ken, KU2US and Tim, N3TL for the above information]

/EX

SB SAT @ AMSAT $ANS-186.06
Special Event Station 4C50C via Satellite From Mexico

AMSAT News Service Bulletin 186.06
>From AMSAT HQ SILVER SPRING, MD.
July 5, 2009
To All RADIO AMATEURS
BID: $ANS-186.06

Omar XE1AO, a regular satellite operator from central Mexico, reported news of a special callsign that will be showing up on the satellites between now and 31 August 2009.

The call, 4C50C ("Four Charlie Fifty Charlie"), is part of the "Trabaja Todo Colima" (Work All Colima) special event currently taking place in the central Mexican state of Colima. This event is commemorating the 50th anniversary of the creation of the J. Roberto Levy radio club in that state.

During the months of June, July, and August, stations from all over Colima have been on HF and the satellites, trying to put all 10 Colima "municipios" (municipalities, similar to counties in the USA) on the air. On HF, the special call XE50C has been used from different parts of Colima. Now, four hams (XE1AO, XE1ATZ, XE1AY, and XE1J) have been authorized by the Mexican telecommunications regulator CoFeTel to use 4C50C on the satellites as part of this event.

Initially, XE1AO will attempt to put 4C50C on AO-51's evening passes along with VO-52 and FO-29 evening passes. Omar and the other 3 hams hope to expand the use of 4C50C onto SO-50 and AO-27, plus look at passes at other times of the day during this period.

For hams outside Mexico, XE1J is the QSL manager for these special calls. The Mexican QSL bureau will take care of QSL requests from XE hams. Along with the QSL cards, there will be a certificate available to stations that work stations in at least 7 of the 10 Colima municipalities and also accumulate at least 74 points based on the location of the stations worked in Colima. Additional points are available for working certain stations like XE50C and

4C50C.

[ANS thanks Omar XE1AO and Patrick WD9EWK/VA7EWK for the above information]

/EX

SB SAT @ AMSAT $ANS-186.07
AMSAT Satellite Communications Achievement Award #500 Issued

AMSAT News Service Bulletin 186.07
>From AMSAT HQ SILVER SPRING, MD.
July 5, 2009
To All RADIO AMATEURS
BID: $ANS-186.07

AMSAT Director Contests and Awards, Bruce KK5DO reported, "Since mid May we have been waiting to see who would get the AMSAT Satellite Communications Achievement Award #500. Here are the awards issued in the order they were received. Congratulations to everyone that submitted for the award!"

The following have earned the AMSAT Satellite Communications Achievement Award.

Chris Lemon, KB9CL #490
Ernest Howard, W8EH #491
Peter Portanova, WB2OOQ #492
Michael Klomfass, DH5MK #493
James DeYoung, N8OQ #494
Ronald Parsons, W5RKN #495
Thomas Lepley, KX3TL #496
Chris Meyers, KC0YBM #497
Nick Kucij, KB1RVT #498
George Carr, WA5KBH #499
Ward Hall, WC0Y #500
Jim Klassen, N6JMK #501
James Clary, ND9M #502

To see all the awards visit http://www.amsat.org.

[ANS thanks Bruce, KK5DO for the above information]

/EX

SB SAT @ AMSAT $ANS-186.08
Recognition for SumbandilaSat Design and Development

AMSAT News Service Bulletin 186.08
>From AMSAT HQ SILVER SPRING, MD.
July 5, 2009

To All RADIO AMATEURS
BID: $ANS-186.08

In recognition of their design and development of the Amateur Payload on South Africa's SumbandilaSat Andrew Roos, ZS6AA, and Hannes Coetzee, ZS6BPZ jointly received the Garth Milne Technology Award. SumbandilaSat is currently planned to be launched on 21 August on a Soyuz Rocket from Baikonur.

[ANS thanks Amateur Radio Newsline Report 1664 - July 3 2009 for the above information]

/EX

SB SAT @ AMSAT $ANS-186.09
Satellite Shorts From All Over

AMSAT News Service Bulletin 186.09
>From AMSAT HQ SILVER SPRING, MD.
July 5, 2009
To All RADIO AMATEURS
BID: $ANS-186.09

+ Jim, ND9M/VQ9JC plans to return to Diego Garcia (VQ9, Grid MI62) in August. Operation will be on the FM and linear birds shortly thereafter.

+ The next Hudson Valley Satcom Group nets are Thurday July 9 and July 23 at 8:00 PM EDT (UTC-4) and will be simulcast on Echolink node N2EYH-L. More information at http://www.hvsatcom.org (Stu, WA2BSS)

+ Mark, WA8SME will be giving a demonstration of ham radio satellites during the ARRL ETP Teachers Institute in Dayton, Ohio on July 7th. He will be using AO27 on the 1515 EST pass. The equipment will be an ARROW and HT. The call will be W1AW/8. For those that make contact, if you would like a QSL, send your card to WA8SME, and he'll get you a card.

+ The Japan Aerospace Exploration Agency (JAXA) has released the final still images taken by the onboard High Definition Television (HDTV) from Kaguya, just before it completed its mission by impacting the moon on June 11, 2009. An entire series of images were taken with an interval of about one minute by the HDTV (Teltephoto) while Kaguya maneuvered its way to impact in Gill Crater. See: http://tinyurl.com/mfg32w click on the arrow in top left to navigate to the next photo. (via UniverseToday.com)

+ Launch images from LRO/LCROSS successfull liftoff can be found on-line at: http://tinyurl.com/n5vqab

+ Dutch journalists Govert Schilling and Jaap Meijers have built a

Twitter page to let people know when a visible ISS pass is coming.
To participate follow the Twitter account @twisst:
http://twitter.com/twisst

+ Simulated contacts are being planned for four licensed astronauts
  during the week of June 29. Soichi Noguchi, KD5TVP, Timothy J.
  Creamer, KC5WKI, Doug Wheelock, KF5BOC and Satoshi Furukawa, KE5DAW
  are tentatively scheduled for these training sessions, which are
  terrestrial-based amateur radio contacts using Amateur Radio on the
  International Space Station (ARISS) equivalent equipment.

[ANS thanks everyone for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the
President's Club. Members of the President's Club, as sustaining donors
to AMSAT Project Funds, will be eligible to receive additional benefits.
Application forms are available from the AMSAT Office. And with that
please keep in mind that another name for a boomerang that doesn't work
is a stick.

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM
K9JKM at amsat dot org

From -5192307707516369356
X-Google-Thread: a4a23d5f63,ba4ce7f29639ff76,start
X-Google-Attributes: gida4a23d5f63,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news1.google.com!news.glorb.com!transit3.readnews.com!
textspool2.readnews.com!news-out.readnews.com!transit4.readnews.com!panix!
rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-189 AMSAT News Service Special Bulletin - SuitSat-2 Transforms Into a
Satellite
Followup-To: rec.radio.amateur.space
Date: Wed, 8 Jul 2009 13:10:19 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 69
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <002d01c9ffee$ef78f1f0$ce6ad5d0$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;

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     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1247073019 14608 166.84.1.6 (8 Jul 2009 17:10:19 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Wed, 8 Jul 2009 17:10:19 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news2.google.com rec.radio.amateur.space:262 rec.radio.info:833
```

SB SAT @ AMSAT $ANS-189.01
SuitSat-2 Transforms Into a Satellite

AMSAT News Service Bulletin 189.01
>From AMSAT HQ SILVER SPRING, MD.
July 8, 2009
To All RADIO AMATEURS
BID: $ANS-189.01

Due to storage considerations on the International Space Station, the two surplus Orlan space suits in storage on the International Space Station were discarded via the Progress Cargo Vessel. One of these suits was to be used to house the electronics for the upcoming SuitSat-2 mission where the batteries were to be mounted inside the suit, solar panels attached to the extremities with the electronics, video cameras and antenna mounted on the helmet by the ISS crew prior to deployment during an EVA.

The Progress, with the suits included, was undocked from ISS this past week.

The ARISS International Team has been informed that there is still space available for shipment of the SuitSat-2 electronics on the projected cargo flight to the Space Station in January 2010 and the EVA scheduled for April 2010 still has a 'SuitSat-2' deployment scheduled.

Consequently, the AMSAT team developing SuitSat-2 electronics on behalf of ARISS International is focusing on completing development in anticipation that deployment will still take place in Spring 2010 using a new structure to house it. In addition, the experiment being developed by Russia's Kursk State University is still expected to be integrated into the electronics once the US produced equipment is delivered to Russia this fall. Discussions are currently taking place between Russian ARISS members and the AMSAT project managers concerning the design of the new structure and where it will be constructed with these decisions to be made in the next few weeks.

The AMSAT team building the electronics is meeting July 10-12 in Phoenix to initiate integration testing of all of the components built in the US with subsequent testing to continue through the remainder of the summer in anticipation of shipping equipment to Russia in the fall.

The removal of the Orlan space suits from ISS removes the 'Suit' component of this deployment and at some point a new project name will be used to reflect the change in configuration. However, the significant importance of this project to both ARISS and AMSAT is not diminished.

ARISS sees this mission as an important component of education outreach as it will provide an opportunity for students around the world to listen for recorded greetings from space as well as learn about tracking spacecraft in orbit.

Meanwhile, the deployment of SDX (Software Defined Transponder), the associated receiver and transmitter modules, and control electronics is a critical milestone for AMSAT as this upcoming flight provides an opportunity to flight test the next generation of spacecraft hardware. Lessons learned from this deployment will be applied to future flight opportunities as AMSAT moves towards a 'modularization approach' to spacecraft development with the expectation the future spacecraft missions will utilize a derivative of SDX and the associated hardware.

[ANS thanks AMSAT VP-Manned Spaceflight Will Marchant, KC6ROL for the above information]

/EX

From -2780240773806870378
X-Google-Thread: addc8bf063,1b6dce36ff9b56d9,start
X-Google-Attributes: gidaddc8bf063,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news1.google.com!news.glorb.com!feeder.erje.net!feeder.news-service.com!news.astraweb.com!border2.a.newsrouter.astraweb.com!not-for-mail
From: Chris Steyaert <observations@rmob.org>
Newsgroups: rec.radio.amateur.space,sci.astro.amateur
Subject: Radio Meteor Obs. Bull. June 2009
Date: Wed, 08 Jul 2009 21:35:16 +0200
X-Newsreader: Forte Agent 1.93/32.576 English (American)
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Lines: 13
Message-ID: <00445b2d$0$5128$c3e8da3@news.astraweb.com>
Organization: Unlimited download news at news.astraweb.com
NNTP-Posting-Host: fe4f507c.news.astraweb.com
X-Trace: DXC=jCnQRbcJ=C;RI=Qc=OLNJ2L?0kYOcDh@:cnU\J]@ekd9QK[oiT6IR5:?VNOJ?WbP>9>4I<g>Baa84D@IWPc<;]o<
Xref: g2news2.google.com rec.radio.amateur.space:263 sci.astro.amateur:22031

Radio Meteor Observation Bulletin No. 191 of June 2009 (78 K) is available now as

http://www.rmob.org/rmobtext/rmob0906.txt

More information and the visual presentation of the hourly forward scatter counts can be found on

http://www.rmob.org

Chris

From -8405956864010553619
X-Google-Thread: 8f86f75953,22291b32e828dbe5,start
X-Google-Attributes: gid8f86f75953,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news1.google.com!news.glorb.com!transit3.readnews.com!news-out.readnews.com!news-xxxfer.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-191 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Sat, 11 Jul 2009 08:58:47 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 1661
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000f01ca0227$4c3a9c10$e4afd430$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1247317127 1926 166.84.1.6 (11 Jul 2009 12:58:47 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sat, 11 Jul 2009 12:58:47 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com

```
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
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X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
```

```
x-cr-hashedpuzzle: AB/4 BqZY CIi+ CURA Cqgx DCdY Dhsr FjNc Fre5 GHKR GvNc Gzfq
HPEA Hzfu H68A
IFPe;1;cgBlAGMALQByAGEAZABpAG8ALQBpAG4AZgBvAEAAcABhAG4AaQB4AC4AYwBvAG0A;Sosha1_v1;
7;{45984141-BA20-421D-B546-
CC61E24D3F4A};awA5AGoAawBtAEAAYwBvAG0AYwBhAHMAdAAuAG4AZQB0AA==;Sat, 11 Jul 2009
12:58:28
GMT;VwBTAFIALQAxADkAMQAgAEEATQBTAEEAVAAgAFcAZQBlAGsAbAB5ACAAUwBhAHQAZQBsAGwAaQB0AG
UAIABSAGUAcABvAHIAdAA=
x-cr-puzzleid: {45984141-BA20-421D-B546-CC61E24D3F4A}
```

```
Xref: g2news2.google.com rec.radio.amateur.space:264 rec.radio.info:840
```

This report is organized into four (4) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - deborbited/returned satellites

SB SAT @ AMSAT W8ISS ANS-1914.S1
WSR 191 Part 1 07/10/2009

AMSAT NEWS SERVICE BULLETIN 191.S1
FROM AMSAT HQ SILVER SPRING, MD, July 10, 2009
TO ALL RADIO AMATEURS
BID: $ANS-191.S1

DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008

Status: Operational
Current Mode: Science Mode - Beacon ONLY

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink: 435.530 to 435.570 MHz

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68
[02122009]
=====
VO-52 HAMSAT
Catalog number: 28650

```
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink:   435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink:   435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW


Indian Beacon:  145.859330 MHZ CW
Dutch Beacon:   145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is active. Each transponder has a different beacon.
[08072008]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Modes:   FM Repeater - Uplink:    145.920 Mhz FM
                               Downlink:  435.300 Mhz FM
                 BBS         - Uplink:   1268.700 Mhz FM 9k6
                               Downlink:  435.150 Mhz FM 9k6
                 Telemetry   - Downlink:  435.150 MHz FM

Analog voice downlink:     435.300 MHz FM
                           435.150 MHz FM
                          2401.200 Mhz FM
Analog voice uplink:       145.860 MHZ FM
                           145.880 MHz USB
                           145.920 MHz FM
                          1268.700 MHz FM
Digital Downlinks:         435.150 MHz FM 38k4 PBP, 1 watt output
                           435.150 MHz FM 9k6 Pacsat Broadcast Protocol
                          2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:            145.860 MHz FM 9k6 Pacsat Broadcast Protocol
                          1268.700 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon:                    435.150 MHz
```

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[07032009]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz. The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10 minute timer.

[05282007]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Operational
Current Mode: V/u (Mode JA)

Voice/CW (Mode JA)
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage:
http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's
CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/
fo29cwts.htm
[02122009]
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[03232009]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

```
Status: Operational

Current Mode: Alternating between Mode A and B every 24 hours

Uplink:   145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink:  29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons:   29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
[02122009]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - V/u
                      Voice -       V/v
                      BBS -         V/v
                      APRS -        V/v
                      SSTV -        V/v


Expedition 20 Crew:
Commander:                Gennady Padalka  RN3DT
Flight Engineer:          Michael Barratt  KD5MIJ
Flight Engineer:          Koichi Wakata    KC5ZTA
Flight Engineer:          Timothy Kopra    KE5UDN
Flight Engineer:          Roman Romanenko
Flight Engineer:          Frank De Winne   ON1DWN

Available Modes and Frequencies:

Digital/APRS:
Worldwide packet uplink:   145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink:     145.200 MHz FM
Region 2/3 voice uplink:   144.490 MHz FM
Worldwide downlink:        145.800 MHz FM
```

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[06122009]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-191.S2
WSR 191 Part 2 07/10/2009

AMSAT NEWS SERVICE BULLETIN 191.S2
FROM AMSAT HQ SILVER SPRING, MD, July 10, 2009
TO ALL RADIO AMATEURS
BID: $ANS-191.S2

CP-6
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Commissioning

Downlink: 437.365 MHz 1k2 AFSK
[06052009]
=====
HAWKSAT 1

```
Catalog number: 35003
Launch Date: May 19, 2009

Status: ?

Downlink: 437.345 ?
[06052009]
=====
Pharmasat
Catalog Number: 35002
Launch Date: May 19, 2009
Status: Commissioning

Downlink: 437.465 MHz 1k2 AFSK
[06052009]
=====
ANUSAT
Catalog Number: 34808
Launch Date: April 20, 2009

Status: ?

Downlink:  435.000 MHz
Uplink:    145.800 MHz

Telemetry: 137.400 MHz
[05112009]
=====
SOHLA-1 (ASTRO TECH.)
Catalog Number: 33496
Launch Date: January 23, 2009

Status: Commisioning

Proposed Frequencies and Modes:
Downlink: 437.505 MHz AFSK/CW
Beacon:   437.505 MHz AFSK/CW

Callsign:

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=101
[03232009]
=====
KAGAYAKI (Solan Co.)
Catalog Number: 33495?
Launch Date: January 23, 2009

Status: In Orbit

Downlink: 437.375 MHZ    FSK9k6/CW
Beacon:   437.375 MHz    FSK9k6/CW
```

```
IARU coordination status page:

AMSAT-NA webpage:

[01152009]
=====
STARS (Kagawa Univ.) (Twin Satellites)
Catalog Number: 33498
Launch Date: January 23, 2009

Status: Operational ?

Downlinks: 437.485 MHz FM/CW
           437.465 MHz FM/CW
Beacons:   437.305 MHz FM/CW
           437.275 MHz FM/CW

Callsigns: JR5YBN
           JR5YBO

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=99

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=121&retURL
=/satellites/status.php
[022152009]
=====
KKS-1 (Tokyo MCIT)
Catalog Number: 33499
Launch Date: January 23, 2009

Status: Operational

Downlink:  437.455 MHz AFSK/CW
Beacon:    437.385 MHz AFSK/CW

Callsign: JQ1YYY

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=107

AMSAT-NA webapge:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=120&retURL
=/satellites/status.php
[02212009]
=====
PRISM (Tokyo Univ.)
Catalog Number: 33493
Launch Date: January 23, 2009

Status: Operational ?
```

Downlink: 437.425 MHz AFSK/GMSK/CW
Beacon: 437.250 MHz AFSK/GMSK/CW

Callsign: JQ1YCX

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=97

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=119&retURL
=/satellites/status.php
[02212009]
=====
RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number: 32953
Launch Date: May 23, 2008

Status: Operational

Curent Modes: Telemetry
              Audio
              Images

Downlinks: 435.315 MHz
           435.215 MHz

AMSAT-NA website:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=115&ret
URL=/satellites/status.php

Official website:
http://www.npopm.com/?cid=leoca&caid=43
[02122009]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=94&retURL=
/satellites/status.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=72
[02122009]
=====
CP3
Catalog Number: 31129
Launch Date: April 17,2007

Status: Operational

Current Mode: /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[02122009]
=====
GENESAT-1
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Current Mode: /u

Callsign: KE7EGC

Telemetry Beacon Downlink: 437.0670 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[02212009]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon: 437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/xivpicte.htm
[02212009]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003

```
Status: ?????

Current Mode: /u

Beacon:     436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=96&retURL
=/satellites/status.php

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[06082009]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Operational?

Uplink:  1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=56
[02122009]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Modes:   FM Repeater - Uplink:    145.920 Mhz FM
                               Downlink:  435.300 Mhz FM
                 BBS         - Uplink:   1268.700 Mhz FM 9k6
                               Downlink:  435.150 Mhz FM 9k6
                 Telemetry   - Downlink:  435.150 MHz FM

Analog voice downlink:     435.300 MHz FM
                           435.150 MHz FM
                          2401.200 Mhz FM
Analog voice uplink:       145.860 MHZ FM
                           145.880 MHz USB
                           145.920 MHz FM
```

1268.700 MHz FM
Digital Downlinks: 435.150 MHz FM 38k4 PBP, 1 watt output
435.150 MHz FM 9k6 Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Pacsat Broadcast Protocol
1268.700 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[07032009]
=====
QuakeSat
Catalog Number: 27845
Launch Date: June 30, 2003

Status: Telemetry only

Current Mode: 9600 baud data packet

Mode U packet
Downlink: 436.675 MHz 9k6 BPS

Quakesat webpage:
http://www.quakefinder.com/services/quakesat-ssite/
[04272009]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon

```
Downlink: 436.8375 MHz CW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=69&retURL
=/satellites/status.php
[02212009]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Telemetry only

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink:        144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[03302009]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Telemetry only

Current Modes:
Telemetry : /u

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign:       4XTECH-12

More information of GO-32 can be found at:
http://asri.technion.ac.il/techsat/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=14&retURL
=/satellites/status.php
[04272009]
=====
```

RS-22 RADIO SPORT RS-22
Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only

Current Mode: /u

CW Beacon - 435.352 MHz
145.818 MHz

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=76&retURL=/satellites/status.php
[02212009]
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990

Status: CW Beacon only

Uplinks: 145.840 MHz 1200-baud Manchester FSK
145.860 MHz 1200-baud Manchester FSK
145.880 MHz 1200-baud Manchester FSK
145.900 MHz 1200-baud Manchester FSK

CW downlink: 437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[03162009]
=====
CanX-2
Catalog number: 32790
Launch Date: April 28, 2008

Status: Operational in range of ground station only

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[02212009]
=====

AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.425 MHz 1k2 baud packet

For the latest project status update please visit the AAUSAT-II web
page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[02212009]
=====
CO-65 CUTE-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008

Status: Digipeater

Downlink: 437.475 MHz 9k6 Packet
Uplink: 1267.600 Mhz

Telemetry Beacon:
Downlink: 437.2750 MHz CW

For the latest project status update please visit the Cute-1.7+APD II
web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78

Command Station blog website:
http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=112&retURL=/satellites/status.php
[02212009]
=====
Compass-1
Catalog number: 32787
Launch Date: April 28, 2008

Status: Operational

Current Mode: 4k8 MSK packet

Uplink: 145.980 MHz FM
Downlink: 437.275 Mhz CW
437.405 MHz Packet

```
For the latest project status update please visit the Compass 1 web
page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=114&retURL
=/satellites/status.php
[04272009]
=====
CO-66 Seeds II
Catalog number: 32791
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.485 MHz

Callsign: JQ1YGU

For the latest project status update please visit the Seeds 2 web
page: http://cubesat.aero.cst.nihon-u.ac.jp/english/seeds_2_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=113&retURL
=/satellites/status.php
[02212009]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - V/u
                      Voice -       V/v
                      BBS -         V/v
                      APRS -        V/v
                      SSTV -        V/v

Expedition 20 Crew:
Commander:                Gennady Padalka  RN3DT
Flight Engineer:          Michael Barratt  KD5MIJ
Flight Engineer:          Koichi Wakata    KC5ZTA
Flight Engineer:          Timothy Kopra    KE5UDN
Flight Engineer:          Roman Romanenko
Flight Engineer:          Frank De Winne   ON1DWN
```

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
                           437.800 MHz FM
                           145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
                           437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
                           RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time line is NOT translated from Russian and posted.
[06122009]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-191.S3
WSR 191 Part 3 07/10/2009

AMSAT NEWS SERVICE BULLETIN 191.S3
FROM AMSAT HQ SILVER SPRING, MD, July 10, 2009
TO ALL RADIO AMATEURS
BID: $ANS-191.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

CP4
Catalog Number: 31122
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon: 437.325 MHz CW

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=79
[10022008]
=====
LIBERTAD-1
Catalog Number: 31128
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink: 145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[02122009]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: Non-Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder: 145.825 Mhz FM
[01012009]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
2407.250

```
Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink:         437.250 MHz FM 67Hz CTCSS
Voice Downlink:      2401.835 MHz FM
Packet Up/Downlink:   437.250 MHz 9k6 packet
Packet Downlink      2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non-Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[08132007]
=====
CANX-1
Catalog Number: 27847
Launch Date: June 30, 2003

Status: Non-Operational

Downlink: 437.8800 MHz AFSK 1k2bps
[06052009]
=====
DTUSAT
Catalog Number: 27842
Launch Date: June 30, 2003

Status: Non-Operational

Current Mode: 2k4 AFSK Packet last reported

Downlink: 437.475MHz

Officail webpage: http://dtusat1.dtusat.dtu.dk/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=101&retURL
=satellites/all_oscars.php
```

```
[02212009]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink:   435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)

Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Telemetry only

Uplinks:   145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink:  437.325 MHz

Broadcast callsign: MYSAT3-11
BBS:                MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial land and weather imaging payloads offers FM and FSK
Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as
a collaborative effort between the Malaysian government and Surrey
Satellite Technology Ltd.
[03302009]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink:   145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
```

```
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS:                SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink:   145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
V-band:   145.840 -  145.990 MHz CW/LSB
U-band:   435.550 -  435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks
---------
S2-band:  2401.225 -  2401.475 MHz CW/USB
K-band:  24048.010 - 24048.060 MHz CW/USB
Beacon:   2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)
```

BEACON	General Beacon(GB)	Middle Beacon(MB)	Engineering Beacon(EB)
2 m	none	145.898 MHz	none
70cm	435.438 MHz	435.588 MHz	435.838 MHz
13cm(1)	2400.188 MHz	2400.338 MHz	2400.588 MHz
13cm(2)	2401.173 MHz	2401.323 MHz	2401.573 MHz
3cm	10450.975 MHz	10451.125 MHz	10451.375 MHz
1.5cm	24047.885 MHz	24048.035 MHz	24048.285 MHz

[07162007]
=====
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: 25636
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz
145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/

```
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink:   145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
MO-30 UNAMSAT-2
Catalog Number: 24305
Launch Date: September 5, 1996

Status: Non-operational

Downlink:       435.1380 MHz AFSK 1200 BPS
Downlink:       435.2060 MHz AFSK 1200 BPS
Uplink:         145.8150 MHz AFSK 1200 BPS
Uplink:         145.8350 MHz AFSK 1200 BPS
Uplink:         145.8550 MHz AFSK 1200 BPS
Uplink:         145.8750 MHz AFSK 1200 BPS
```

```
[06042009]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Non-operational

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign:       POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012009]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
```

```
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HL01-11
BBS: HL01-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
[05012006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: SEMI-Operational

Current Mode:  V/u

Uplink:         145.900 MHz FM 1200-baud Manchester FSK (reserved)
                145.920 MHz FM VOICE
                145.940 MHz FM 1200-baud Manchester FSK (reserved)
                145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink:       437.026 MHz USB VOICE
                (1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12
```

```
AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[12252008]
=====
UO-15 UoSAT-4
Catalog Number: 20438
Launch Date: January 22, 1990

Status: Non-operational

Uplink: ?
Downlink: 435.1250MHz (?)
          435.1200MHz (?)
[06042009]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984

Status: Non-operational.

Current Mode:  /v
```

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon: 435.025 MHz
Mode-S Beacon: 2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[01012009]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon: 145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.8500 - 145.9000 MHz SSB/CW
Downlink 29.4000 - 29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

```
Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
Beacons:   29.450 MHz
          435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon 1:  29.352 MHz (intermittent)
Beacon 2:  29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink:     21.260 to 21.300 MHz CW/USB
Downlink:  145.860 to 145.900 MHz CW/USB

Beacon:    145.860 MHz
```

Robot: 145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-191.S4
WSR 191 Part 4 07/10/2009

AMSAT NEWS SERVICE BULLETIN 191.S4
FROM AMSAT HQ SILVER SPRING, MD, July 10, 2009
TO ALL RADIO AMATEURS
BID: $ANS-191.S4

THE FOLLOWING SATELLITES HAVE RE-ENTERED OR HAVE BEEN RETURNED SAFELY:

NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: July 28, 2008

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[01012009]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====

NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink: 145.825 Mhz FM APRS AX25
APRS Uplink: 145.825 MHz FM APRS AX25
Voice/PSK31 Uplink: 28.120 MHz

Packet to Voice ID: RAFT
[06112007]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Re-Entered
Re-entered: June 18, 2008

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon: 437.2750 MHz CW

Callsign: JR8YJT
[01012009]
=====
SO-43 Starshine 3
Catalog Number: 26929
Launch Date: September 30, 2001

Status: Re-Entered
Re-entered: January 21, 2003

Beacon: 145.825Mhz
[02212009]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

- AMSAT News Service (ANS)
- General satellite discussion (AMSAT-BB)
- Orbit data (KEPS)
- Manned space missions (SAREX)
- District of Columbia area (AMSAT-DC)
- New England area (AMSAT-NE)
- AMSAT Educational Liaison mailing list (AMSAT-EDU)
- AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at} amsat.org
NNNN
/EX

From 2843098226293006912
X-Google-Thread: a4a23d5f63,bbc5cbebf68d1396,start
X-Google-Attributes: gida4a23d5f63,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news2.google.com!border1.nntp.dca.giganews.com!nntp.giganews.com!npeer03.iad.highwinds-media.com!news.highwinds-media.com!feed-me.highwinds-media.com!nx01.iad01.newshosting.com!newshosting.com!198.186.194.249.MISMATCH!news-out.readnews.com!transit3.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-198 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space

```
Date: Mon, 20 Jul 2009 13:14:33 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 1681
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <001e01ca095d$818f2150$84ad63f0$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1248110073 4050 166.84.1.6 (20 Jul 2009 17:14:33 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Mon, 20 Jul 2009 17:14:33 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
x-cr-hashedpuzzle: ACw1 ASCL Awi5 CW3O CicD DEfq DiKl Dz8E D0wd FGur F1Ew HeMT
I+zr KR7S KSdQ
KyNk;1;cgBlAGMALQByAGEAZABpAG8ALQBpAG4AZgBvAEAAcABhAG4AaQB4AC4AYwBvAG0A;Sosha1_v1;
7;{3F4A299C-C716-4040-9818-
ABFC77DB0CD0};awA5AGoAawBtAEAAYwBvAG0AYwBhAHMAdAAuAG4AZQB0AA==;Mon, 20 Jul 2009
17:14:06
GMT;VwBTAFIALQAxADkAOAAgAEEATQBTAEEAVAAgAFcAZQBlAGsAbAB5ACAAUwBhAHQAZQBsAGwAaQB0AG
UAIABSAGUAcABvAHIAdAA=
x-cr-puzzleid: {3F4A299C-C716-4040-9818-ABFC77DB0CD0}
Xref: g2news2.google.com rec.radio.amateur.space:265 rec.radio.info:855
```

This report is organized into four (4) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - deorbited/returned satellites

SB SAT @ AMSAT W8ISS ANS-198.S1
WSR 198 Part 1 07/17/2009

AMSAT NEWS SERVICE BULLETIN 198.S1
FROM AMSAT HQ SILVER SPRING, MD, July 17, 2009
TO ALL RADIO AMATEURS
BID: $ANS-198.S1

DO-64 Delfi-C3
Catalog number: 32789

```
Launch Date: April 28, 2008

Status: Operational
Current Mode: Science Mode - Beacon ONLY

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink:   435.530 to 435.570 MHz

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68
[02122009]
=====
VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink:   435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink:   435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW


Indian Beacon:  145.859330 MHZ CW
Dutch Beacon:   145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is active. Each transponder has a different beacon.
[08072008]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Modes:   FM Repeater - Uplink:    145.920 Mhz FM
```

Downlink: 435.300 Mhz FM
BBS   - Uplink: 1268.700 Mhz FM 9k6
Downlink: 435.150 Mhz FM 9k6
Telemetry   - Downlink: 435.150 MHz FM

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.860 MHZ FM
145.880 MHz USB
145.920 MHz FM
1268.700 MHz FM
Digital Downlinks: 435.150 MHz FM 38k4 PBP, 1 watt output
435.150 MHz FM 9k6 Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Pacsat Broadcast Protocol
1268.700 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[07032009]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz. The order of operation is thus: (allow for Doppler as necessary):

1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10 minute timer.

[05282007]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Operational
Current Mode: V/u (Mode JA)

Voice/CW (Mode JA)
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage:
http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts.htm
[02122009]
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993

```
Status: Operational

Current Mode: V/u

Uplink:   145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[03232009]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational

Current Mode: Alternating between Mode A and B every 24 hours

Uplink:   145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink:  29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons:   29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
[02122009]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - V/u
                      Voice -       V/v
                      BBS -         V/v
                      APRS -        V/v
                      SSTV -        V/v
```

Expedition 20 Crew:

Commander:	Gennady Padalka	RN3DT
Flight Engineer:	Michael Barratt	KD5MIJ
Flight Engineer:	Koichi Wakata	KC5ZTA
Flight Engineer:	Robert Thirsk	VA3CSA
Flight Engineer:	Roman Romanenko	
Flight Engineer:	Frank De Winne	ON1DWN

STS-127 Space Shuttle Endeavour:

Commander:	Mark Polansky	
Pilot:	Douglas Hurley	
Mission specialist:	Christopher Cassidy	
Mission specialist:	Thomas Marshburn	KE5HOC
Mission specialist:	David Wolf	KC5VPF
Mission specialist:	Julie Payette	
Mission specialist:	Timothy Kopra	KE5UDN

Available Modes and Frequencies:

Digital/APRS:

Worldwide packet uplink:	145.825 MHz FM 1k2
Worldwide packet downlink:	145.825 Mhz FM 1k2

Voice:

Region 1 voice uplink:	145.200 MHz FM
Region 2/3 voice uplink:	144.490 MHz FM
Worldwide downlink:	145.800 MHz FM

Crossband Repeater:

Repeater Uplinks:	1269.650 MHz FM
	437.800 MHz FM
	145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink:	145.800 MHz FM
	437.800 MHz FM (Kenwood)

SSTV Robot 36:

Downlink:	145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:

Belgian:	OR4ISS
German:	DP0ISS
Russian:	RS0ISS
	RZ3DZR
United States:	NA1SS
Packet Mailbox:	RS0ISS-11
Digipeater callsign:	ARISS

Official ARISS Webpage: http://www.rac.ca/ariss

ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[07172009]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-198.S2
WSR 198 Part 2 07/17/2009

AMSAT NEWS SERVICE BULLETIN 198.S2
FROM AMSAT HQ SILVER SPRING, MD, July 17, 2009
TO ALL RADIO AMATEURS
BID: $ANS-198.S2

CP-6
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Commissioning

Downlink: 437.365 MHz 1k2 AFSK
[06052009]
=====
HAWKSAT 1
Catalog number: 35003
Launch Date: May 19, 2009

Status: ?

Downlink: 437.345 ?
[06052009]
=====
Pharmasat
Catalog Number: 35002
Launch Date: May 19, 2009
Status: Commissioning

Downlink: 437.465 MHz 1k2 AFSK
[06052009]
=====
ANUSAT
Catalog Number: 34808
Launch Date: April 20, 2009

Status: ?

Downlink: 435.000 MHz
Uplink: 145.800 MHz

Telemetry: 137.400 MHz
[05112009]
=====
SOHLA-1 (ASTRO TECH.)
Catalog Number: 33496
Launch Date: January 23, 2009

Status: Commisioning

Proposed Frequencies and Modes:
Downlink: 437.505 MHz AFSK/CW
Beacon: 437.505 MHz AFSK/CW

Callsign:

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=101
[03232009]
=====
KAGAYAKI (Solan Co.)
Catalog Number: 33495?
Launch Date: January 23, 2009

Status: In Orbit

Downlink: 437.375 MHZ   FSK9k6/CW
Beacon: 437.375 MHz   FSK9k6/CW

IARU coordination status page:

AMSAT-NA webpage:

[01152009]
=====
STARS (Kagawa Univ.) (Twin Satellites)
Catalog Number: 33498
Launch Date: January 23, 2009

Status: Operational ?

Downlinks: 437.485 MHz FM/CW
           437.465 MHz FM/CW
Beacons: 437.305 MHz FM/CW
           437.275 MHz FM/CW

Callsigns: JR5YBN
           JR5YBO

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=99

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=121&retURL

```
=/satellites/status.php
[022152009]
=====
KKS-1 (Tokyo MCIT)
Catalog Number: 33499
Launch Date: January 23, 2009

Status: Operational

Downlink:  437.455 MHz AFSK/CW
Beacon:    437.385 MHz AFSK/CW

Callsign: JQ1YYY

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=107

AMSAT-NA webapge:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=120&retURL
=/satellites/status.php
[02212009]
=====
PRISM (Tokyo Univ.)
Catalog Number: 33493
Launch Date: January 23, 2009

Status: Operational ?

Downlink: 437.425 MHz AFSK/GMSK/CW
Beacon:   437.250 MHz AFSK/GMSK/CW

Callsign: JQ1YCX

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=97

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=119&retURL
=/satellites/status.php
[02212009]
=====
RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number: 32953
Launch Date: May 23, 2008

Status: Operational

Curent Modes: Telemetry
              Audio
              Images

Downlinks: 435.315 MHz
           435.215 MHz
```

AMSAT-NA website:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=115&retURL=/satellites/status.php

Official website:
http://www.npopm.com/?cid=leoca&caid=43
[02122009]

=====

CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=94&retURL=/satellites/status.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=72
[02122009]

=====

CP3
Catalog Number: 31129
Launch Date: April 17,2007

Status: Operational

Current Mode: /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[02122009]

=====

GENESAT-1
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Current Mode: /u

Callsign: KE7EGC

```
Telemetry Beacon Downlink: 437.0670 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[02212009]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon:             437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/xivpicte.htm
[02212009]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003

Status: ?????

Current Mode: /u

Beacon:     436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=96&retURL
=/satellites/status.php

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[06082009]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Operational?

Uplink:  1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan?)
```

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=56
[02122009]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

```
Current Modes:   FM Repeater - Uplink:    145.920 Mhz FM
                               Downlink:  435.300 Mhz FM
                 BBS         - Uplink:   1268.700 Mhz FM 9k6
                               Downlink:  435.150 Mhz FM 9k6
                 Telemetry   - Downlink:  435.150 MHz FM

Analog voice downlink:     435.300 MHz FM
                           435.150 MHz FM
                          2401.200 Mhz FM
Analog voice uplink:       145.860 MHZ FM
                           145.880 MHz USB
                           145.920 MHz FM
                          1268.700 MHz FM
Digital Downlinks:         435.150 MHz FM 38k4 PBP, 1 watt output
                           435.150 MHz FM 9k6 Pacsat Broadcast Protocol
                          2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:            145.860 MHz FM 9k6 Pacsat Broadcast Protocol
                          1268.700 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon:                    435.150 MHz
```

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[07032009]
=====

```
QuakeSat
Catalog Number: 27845
Launch Date: June 30, 2003

Status: Telemetry only

Current Mode: 9600 baud data packet

Mode U packet
Downlink: 436.675 MHz 9k6 BPS

Quakesat webpage:
http://www.quakefinder.com/services/quakesat-ssite/
[04272009]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=69&retURL
=/satellites/status.php
[02212009]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Telemetry only

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink:        144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[03302009]
=====
GO-32 Gurwin TechSat-1B
```

```
Catalog number: 25397
Launch Date: July 10, 1998

Status: Telemetry only

Current Modes:
Telemetry : /u

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign:       4XTECH-12

More information of GO-32 can be found at:
http://asri.technion.ac.il/techsat/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=14&retURL
=/satellites/status.php
[04272009]
=====
RS-22 RADIO SPORT RS-22
Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only

Current Mode:  /u

CW Beacon - 435.352 MHz
            145.818 MHz

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=76&retURL
=/satellites/status.php
[02212009]
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990

Status: CW Beacon only

Uplinks:          145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
```

145.900 MHz 1200-baud Manchester FSK

CW downlink: 437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[03162009]
=====
CanX-2
Catalog number: 32790
Launch Date: April 28, 2008

Status: Operational in range of ground station only

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[02212009]
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.425 MHz 1k2 baud packet

For the latest project status update please visit the AAUSAT-II web page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[02212009]
=====
CO-65 CUTE-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008

Status: Digipeater

Downlink: 437.475 MHz 9k6 Packet
Uplink: 1267.600 Mhz

```
Telemetry Beacon:
Downlink: 437.2750 MHz CW

For the latest project status update please visit the Cute-1.7+APD II
web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78

Command Station blog website:
http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=112&retURL
=/satellites/status.php
[02212009]
=====
Compass-1
Catalog number: 32787
Launch Date: April 28, 2008

Status: Operational

Current Mode: 4k8 MSK packet

Uplink:   145.980 MHz FM
Downlink: 437.275 Mhz CW
          437.405 MHz Packet

For the latest project status update please visit the Compass 1 web
page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=114&retURL
=/satellites/status.php
[04272009]
=====
CO-66 Seeds II
Catalog number: 32791
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.485 MHz

Callsign: JQ1YGU

For the latest project status update please visit the Seeds 2 web
page: http://cubesat.aero.cst.nihon-u.ac.jp/english/seeds_2_e.html
```

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=113&retURL
=/satellites/status.php
[02212009]

=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - V/u
Voice - V/v
BBS - V/v
APRS - V/v
SSTV - V/v

Expedition 20 Crew:
Commander: Gennady Padalka RN3DT
Flight Engineer: Michael Barratt KD5MIJ
Flight Engineer: Koichi Wakata KC5ZTA
Flight Engineer: Robert Thirsk VA3CSA
Flight Engineer: Roman Romanenko
Flight Engineer: Frank De Winne ON1DWN

STS-127 Space Shuttle Endeavour:
Commander: Mark Polansky
Pilot: Douglas Hurley
Mission specialist: Christopher Cassidy
Mission specialist: Thomas Marshburn KE5HOC
Mission specialist: David Wolf KC5VPF
Mission specialist: Julie Payette
Mission specialist: Timothy Kopra KE5UDN

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM

437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[07172009]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-198.S3
WSR 198 Part 3 07/17/2009

AMSAT NEWS SERVICE BULLETIN 198.S3
FROM AMSAT HQ SILVER SPRING, MD, July 17, 2009
TO ALL RADIO AMATEURS
BID: $ANS-198.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

CP4
Catalog Number: 31122
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon: 437.325 MHz CW

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=79
[10022008]

```
=====
LIBERTAD-1
Catalog Number: 31128
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink:   145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[02122009]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: Non-Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder:  145.825 Mhz FM
[01012009]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency:  437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink:         437.250 MHz FM 67Hz CTCSS
Voice Downlink:      2401.835 MHz FM
Packet Up/Downlink:  437.250 MHz 9k6 packet
Packet Downlink      2401.835 MHz 38k4 packet
```

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non-Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[08132007]
=====
CANX-1
Catalog Number: 27847
Launch Date: June 30, 2003

Status: Non-Operational

Downlink: 437.8800 MHz AFSK 1k2bps
[06052009]
=====
DTUSAT
Catalog Number: 27842
Launch Date: June 30, 2003

Status: Non-Operational

Current Mode: 2k4 AFSK Packet last reported

Downlink: 437.475MHz

Officail webpage: http://dtusat1.dtusat.dtu.dk/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=101&retURL=satellites/all_oscars.php
[02212009]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)

Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de

```
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Telemetry only

Uplinks:   145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink:  437.325 MHz

Broadcast callsign: MYSAT3-11
BBS:                MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial land and weather imaging payloads offers FM and FSK
Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as
a collaborative effort between the Malaysian government and Surrey
Satellite Technology Ltd.
[03302009]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink:   145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS:                SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
```

```
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink:   145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
V-band:   145.840 -  145.990 MHz CW/LSB
U-band:   435.550 -  435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks
---------
S2-band:  2401.225 -  2401.475 MHz CW/USB
K-band:  24048.010 - 24048.060 MHz CW/USB
Beacon:   2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)
----------------------------
BEACON   General Beacon(GB)  Middle Beacon(MB)  Engineering Beacon(EB)
2 m                   none        145.898 MHz                    none
70cm           435.438 MHz        435.588 MHz             435.838 MHz
13cm(1)       2400.188 MHz       2400.338 MHz            2400.588 MHz
13cm(2)       2401.173 MHz       2401.323 MHz            2401.573 MHz
3cm          10450.975 MHz      10451.125 MHz           10451.375 MHz
1.5cm        24047.885 MHz      24048.035 MHz           24048.285 MHz
[07162007]
=====
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational
```

```
Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink:    145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: 25636
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater:         436.250 MHz

Uplinks: Mode B Repeater:  145.825 MHz
Mode J Digipeater:         145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
```

```
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink:   145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
MO-30 UNAMSAT-2
Catalog Number: 24305
Launch Date: September 5, 1996

Status: Non-operational

Downlink:       435.1380 MHz AFSK 1200 BPS
Downlink:       435.2060 MHz AFSK 1200 BPS
Uplink:         145.8150 MHz AFSK 1200 BPS
Uplink:         145.8350 MHz AFSK 1200 BPS
Uplink:         145.8550 MHz AFSK 1200 BPS
Uplink:         145.8750 MHz AFSK 1200 BPS
[06042009]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Non-operational

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign:       POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
```

```
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012009]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]
=====
UO-22 UOSAT
```

Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink: 145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink: 435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons: 435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink: 145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks: 145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25

```
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
[05012006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: SEMI-Operational

Current Mode:  V/u

Uplink:         145.900 MHz FM 1200-baud Manchester FSK (reserved)
                145.920 MHz FM VOICE
                145.940 MHz FM 1200-baud Manchester FSK (reserved)
                145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink:       437.026 MHz USB VOICE
                (1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[12252008]
=====
UO-15 UoSAT-4
Catalog Number: 20438
Launch Date: January 22, 1990

Status: Non-operational

Uplink: ?
Downlink: 435.1250MHz (?)
          435.1200MHz (?)
[06042009]
=====
UO-14 UoSAT-3
```

```
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984

Status: Non-operational.

Current Mode:  /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon:           435.025 MHz
Mode-S Beacon:     2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[01012009]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983
```

```
Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon:   145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink  29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
Beacons:   29.450 MHz
          435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
```

```
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon 1:  29.352 MHz (intermittent)
Beacon 2:  29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink:     21.260 to 21.300 MHz CW/USB
Downlink:  145.860 to 145.900 MHz CW/USB

Beacon:    145.860 MHz

Robot:     145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink:   21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon:   29.408 MHz

Robot:    29.454 MHz
```

```
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-198.S4
WSR 198 Part 4 07/17/2009

AMSAT NEWS SERVICE BULLETIN 198.S4
FROM AMSAT HQ SILVER SPRING, MD, July 17, 2009
TO ALL RADIO AMATEURS
BID: $ANS-198.S4

THE FOLLOWING SATELLITES HAVE RE-ENTERED OR HAVE BEEN RETURNED SAFELY:

NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: July 28, 2008

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[01012009]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink:      145.825 Mhz FM APRS AX25
APRS Uplink:        145.825 MHz FM APRS AX25
Voice/PSK31 Uplink:  28.120 MHz

Packet to Voice ID: RAFT
[06112007]
=====
HO-59 HITSat
```

Catalog number: 29484
Launch date: September 22, 2006

Status: Re-Entered
Re-entered: June 18, 2008

```
Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon:             437.2750 MHz CW
```

Callsign: JR8YJT
[01012009]
=====
SO-43 Starshine 3
Catalog Number: 26929
Launch Date: September 30, 2001

Status: Re-Entered
Re-entered: January 21, 2003

Beacon: 145.825Mhz
[02212009]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

```
Voice: 301-589-6062
       888-322-6728
FAX:   301-608-3410
```

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at}
amsat.org
NNNN
/EX

```
From -174666958132346547
X-Google-Thread: a4a23d5f63,ef63d20698ab5178,start
X-Google-Attributes: gida4a23d5f63,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news2.google.com!newsfeed.stanford.edu!panix!
rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-200 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Mon, 20 Jul 2009 13:15:30 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 278
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <001f01ca095d$a7210cd0$f5632670$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1248110131 19083 166.84.1.6 (20 Jul 2009 17:15:31 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Mon, 20 Jul 2009 17:15:31 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
```

X-Comment-1: The moderators do not necessarily agree or disagree with this article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news2.google.com rec.radio.amateur.space:266 rec.radio.info:856

AMSAT NEWS SERVICE
ANS-200

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* BOD Ballot Information
* Walter Cronkite, KB2GSD, SK
* OSCAR 5 In Print
* AO-51 Commemorative QSL
* Solar Eclipse 22nd July
* ARISS Schedule

SB SAT @ AMSAT $ANS-200.1
BOD Ballot Information

AMSAT News Service Bulletin 200.1
>From AMSAT HQ SILVER SPRING, MD.
June 21, 2009
To All RADIO AMATEURS
BID: $ANS-200.1

To All AMSAT Members: You will be receiving an envelope with important AMSAT information along with your ballot. PLEASE keep and read all information except the ballot - there is an error on it (It says vote for three candidates instead of four). Within the next few days, we will be sending a new ballot in an envelope marked "corrected ballot". The new ballot will be a different color and have the word "corrected" on the top.

That is the one you need to return.

[ANS thanks Martha for the above information]

/EX

SB SAT @ AMSAT $ANS-200.2
Walter Cronkite, KB2GSD, SK

AMSAT News Service Bulletin 200.2
From AMSAT HQ SILVER SPRING, MD.
June 21, 2009
To All RADIO AMATEURS
BID: $ANS-200.2

The Amateur Radio community has lost one of its ambassodors.
Walter Cronkite, amateur call KB2GSD, was a spokesman for the hobby. He
Narrated the "Amateur Radio Today" production by the ARRL. The
ARRL has presented him with many awards.
His love of Space science and the NASA Moon Missions won our
Admiration. His coverage of those showed his interests in technology. Who
Doesn't remember listening to those exciting broadcasts of the Moon
Missions?
Mr. Cronkite had won NASA's respect by winning one of their prestigious
"Ambassodor of Exploration Awards" given by them to the only "outsider"
by NASA.
His contributions and support of Amateur Radio will be remembered
For many years to come.
Note: A prepared special 14 minute audio only tribute to
Walter Cronkite hosted by Mark Abramowicz, NT3V,
that you can download and play from the website at www.arnewsline.org.

[ANS thanks William Pasternack, WA6ITF, for the above information]

/EX

SB SAT @ AMSAT $ANS-200.3
OSCAR 5 In Print

AMSAT News Service Bulletin 200.3
From AMSAT HQ SILVER SPRING, MD.
June 21, 2009
To All RADIO AMATEURS
BID: $ANS-200.3

The Oscar 5 satellite built by Australian Radio Amateurs
at the end of the 60's is mentioned in the latest issue
of SatMagazine.

The July/August issue of SatMagazine covers the Australian
space program and mentions the work of Australian Radio
Amateurs who built Oscar 5. The article on page 59 includes
a picture of Oscar 5 which carried transmitters on 29.450 MHz
and 144.050 MHz and was launched on January 23, 1970, into
an orbit of 1435 x 1481 km with an inclination of 102.0 degrees.

Ther July/Aug 2009 issue of SatMagazine
is at http://www.satmagazine.com/2009/SatMag_JulAug09.pdf

SatMagazine
http://www.satmagazine.com/

[ANS thanks Trevor, M5AKA, for the above information]
/EX

SB SAT @ AMSAT $ANS-200.4
AO-51 Commemorative QSL

AMSAT News Service Bulletin 200.4
From AMSAT HQ SILVER SPRING, MD.
June 21, 2009
To All RADIO AMATEURS
BID: $ANS-200.4

News release July 16, 2009:

AMSAT-NA will mark the 40th anniversary of the first manned
lunar landing with a special event on AO-51. AO-51 will
transmit a message commemorating the event Monday, July 20
during evening passes in the U.S. and Europe. The message
will be transmitted on the 435.300 MHz FM downlink and will
contain a Robot 36 SSTV image as well as a voice message.
A special AO-51 QSL will be available to those who copy the
downlink. Send QSL requests marked "Apollo 11" with SASE to
the AMSAT office at 850 Sligo Ave. Suite 600,
Silver Spring, MD 20910.

[ANS thanks Drew, KO4MA, for the above information]

/EX

SB SAT @ AMSAT $ANS-200.5
Solar Eclipse 22nd July

AMSAT News Service Bulletin 200.5
From AMSAT HQ SILVER SPRING, MD.
June 21, 2009
To All RADIO AMATEURS
BID: $ANS-200.5

Solar eclipse is visible at Asia and Pacific on 22nd July. Very limited area is able to see total solar eclipse.
Many amateur satellites pass above the solar eclipse area. Electric power generated by solar cells will show very interesting behavior under solar eclipse. How about collecting telemetry and ploting solar cell power condition? Temperature may also show interesting look.

I checked the telemetry transmitting satellite orbit around Japan. The following satellites pass above solar eclipse area.
COMPASS-1, FO-29, CO-66, CO-58, DO-64, STARS,
PRISM, SOHLA-1, AO-27, NO-44
There is something to be said for DO-64 condition.
Will DO-64 stop transmitting telemetry under the solar eclipse?
If AO-27 store telemetry as WOD, WOD shows complete solar eclipse condition.

Let's try to collect telemtry under solar eclipse!

solar eclipse info
http://eclipse.gsfc.nasa.gov/SEmono/TSE2009/TSE2009.html

[ANS thanks Masa, JN1GKZ for the above information]

/EX

SB SAT @ AMSAT $ANS-200.6
ARISS Schedule

AMSAT News Service Bulletin 200.6
From AMSAT HQ SILVER SPRING, MD.
July 13, 2009
To All RADIO AMATEURS
BID: $ANS-200.6

1. ARISS Contact Between Koichi Wakata and Mugegawa Junior High

On Saturday, July 11, students from Mugegawa Junior High School participated

in an Amateur Radio on the International Space Station (ARISS) contact with JAXA astronaut Koichi Wakata, KC5ZTA. Wakata answered 17 questions posed to him by the students. Over three hundred parents and guests attended the event, which was covered by five newspapers and a television station.

2. ARISS Contact Held with Technopolis, Belgium

An Amateur Radio on the International Space Station (ARISS) contact was held between ESA astronaut Frank De Winne, ON1DWN on the ISS and TechnopolisR in Mechelen, Antwerpen, Belgium. The contact took place on Saturday, July 11 via telebridge station LU8YY in Argentina. Fourteen questions were asked and answered as an audience of 200 looked on. Belgian astronaut Dirk Frimout was present and gave a talk on space. Three radio and television stations and two newspapers covered the event. The contact audio was fed into the Internet Radio Linking Project (IRLP) and EchoLink servers, providing additional outreach.

3. Successful ARISS Contact with Euro Space Center

On Sunday, July 12, youth visiting the Euro Space Center in Belgium during Air and Space Day participated in an Amateur Radio on the International Space Station (ARISS) contact with ESA astronaut Frank De Winne, ON1DWN on the ISS. The contact was made possible through telebridge station WH6PN in Hawaii. Twenty-four students asked one question each of the astronaut in front of an audience of 500 guests. The contact audio was fed into the Internet Radio Linking Project (IRLP) and EchoLink servers, providing additional outreach.

4. SuitSat-2 Becomes a Satellite

The Orlan spacesuit that was to house SuitSat-2 amateur radio equipment was recently discarded on a Progress due to space limitations on the ISS. Work continues on the satellite hardware with plans to use a different configuration for deployment. The Amateur Radio on the International Space Station (ARISS) team plans to meet delivery and launch dates for an EVA deployment in April 2010. For more information, see: http://www.amsat.org/amsat-new/index.php

5. ARISS Satellite Meeting Held

The Amateur Radio on the International Space Station (ARISS) U.S. team met in Phoenix, Arizona over the July 10 - 12 weekend. The team performed integration tests on various components of the SuitSat-2 hardware.

6. Astronaut Training Status

A training session is planned this week for astronaut Tracy Caldwell to prepare her for her amateur radio license exam. Caldwell is scheduled to fly with Expedition 23 in April 2010.

7. AMSAT Videos of Dayton Hamvention Available for Viewing

The Radio Amateur Satellite Corporation (AMSAT) has posted videos

taken at the Dayton Hamvention 2009. Several Amateur Radio on the International Space Station (ARISS) presentations are available for viewing. (ARISS Status, Will Marchant; Columbus Module Antennas, Lou McFadin; SuitSat-2, Gould Smith; Spaceflight Participant, Richard Garriott) See:
http://www.amsat.org/amsat-new/information/videoNews.php

8. ARISS News on Amateur Radio Newsline

On July 10, Amateur Radio Newsline Report 1665 provided a status on the Amateur Radio on the International Space Station (ARISS) SuitSat-2 program. To view "Ham Radio in Space: SuitSat-2 Loses the Suit Part but will Still Fly," see: ftp://ftp.arnewsline.org/quincy/News-A/news.txt

[ANS thanks Carol, KB3LKI, for the above information]

/EX

73,
This week's ANS Editor,
Dee Interdonato, NB2F

```
From -9222491977863030890
X-Google-Thread: a4a23d5f63,c4b9d249af37137b,start
X-Google-Attributes: gida4a23d5f63,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!newsfeed2.dallas1.level3.net!
news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-205 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Sat, 25 Jul 2009 17:10:22 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 1681
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000001ca0d6c$4b9cd980$e2d68c80$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1248556222 12834 166.84.1.6 (25 Jul 2009 21:10:22 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sat, 25 Jul 2009 21:10:22 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
```

X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
x-cr-hashedpuzzle: BjXP Bk3O CMoA C09o C7Ad DlQs EJIE EeKy ExNq E0tZ H0vm JEAs Jd72 KPnn KXw8 KizV;1;cgBlAGMALQByAGEAZABpAG8ALQBpAG4AZgBvAEAAcABhAG4AaQB4AC4AYwBvAG0A;Sosha1_v1;7;{199629FE-81BF-491A-B659-5421E54AF7AF};awA5AGoAawBtAEAAYwBvAG0AYwBhAHMAdAAuAG4AZQB0AA==;Sat, 25 Jul 2009 21:10:06 GMT;VwBTAFIALQAyADAANQAgAEEATQBTAEEAVAAgAFcAZQBlAGsAbAB5ACAAUwBhAHQAZQBsAGwAaQB0AGUAIABSAGUAcABvAHIAdAA=
x-cr-puzzleid: {199629FE-81BF-491A-B659-5421E54AF7AF}
Xref: g2news1.google.com rec.radio.amateur.space:242 rec.radio.info:788

This report is organized into four (4) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - deborbited/returned satellites

SB SAT @ AMSAT W8ISS ANS-205.S1
WSR 205 Part 1 07/24/2009

AMSAT NEWS SERVICE BULLETIN 205.S1
FROM AMSAT HQ SILVER SPRING, MD, July 24, 2009
TO ALL RADIO AMATEURS
BID: $ANS-205.S1

DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008

Status: Operational
Current Mode: Science Mode - Beacon ONLY

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink: 435.530 to 435.570 MHz

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68
[02122009]
=====
VO-52 HAMSAT

```
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink:   435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink:   435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW


Indian Beacon:  145.859330 MHZ CW
Dutch Beacon:   145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is active. Each transponder has a different beacon.
[08072008]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Modes:   FM Repeater - Uplink:    145.920 Mhz FM
                               Downlink:  435.300 Mhz FM
                 BBS         - Uplink:   1268.700 Mhz FM 9k6
                               Downlink:  435.150 Mhz FM 9k6
                 Telemetry   - Downlink:  435.150 MHz FM

Analog voice downlink:     435.300 MHz FM
                           435.150 MHz FM
                          2401.200 Mhz FM
Analog voice uplink:       145.860 MHZ FM
                           145.880 MHz USB
                           145.920 MHz FM
                          1268.700 MHz FM
Digital Downlinks:         435.150 MHz FM 38k4 PBP, 1 watt output
                           435.150 MHz FM 9k6 Pacsat Broadcast Protocol
                          2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:            145.860 MHz FM 9k6 Pacsat Broadcast Protocol
                          1268.700 mhz FM 9k6 Pacsat Broadcast Protocol
```

Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[07032009]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz. The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10 minute timer.
[05282007]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Operational
Current Mode: V/u (Mode JA)

Voice/CW (Mode JA)
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
145.870 MHz FM
145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage:
http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts.htm
[02122009]
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[03232009]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530

Launch Date: November 15, 1974

Status: Operational

Current Mode: Alternating between Mode A and B every 24 hours

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz CW
145.972 MHz CW
435.100 MHz CW
2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
[02122009]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - V/u
Voice - V/v
BBS - V/v
APRS - V/v
SSTV - V/v

Expedition 20 Crew:

Commander:	Gennady Padalka	RN3DT
Flight Engineer:	Michael Barratt	KD5MIJ
Flight Engineer:	Koichi Wakata	KC5ZTA
Flight Engineer:	Robert Thirsk	VA3CSA
Flight Engineer:	Roman Romanenko	
Flight Engineer:	Frank De Winne	ON1DWN

STS-127 Space Shuttle Endeavour:

Commander:	Mark Polansky	
Pilot:	Douglas Hurley	
Mission specialist:	Christopher Cassidy	
Mission specialist:	Thomas Marshburn	KE5HOC
Mission specialist:	David Wolf	KC5VPF
Mission specialist:	Julie Payette	
Mission specialist:	Timothy Kopra	KE5UDN

Available Modes and Frequencies:

Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time line is NOT translated from Russian and posted.
[07172009]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-205.S2
WSR 205 Part 2 07/24/2009

AMSAT NEWS SERVICE BULLETIN 205.S2
FROM AMSAT HQ SILVER SPRING, MD, July 24, 2009
TO ALL RADIO AMATEURS
BID: $ANS-205.S2

CP-6
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Commissioning

Downlink: 437.365 MHz 1k2 AFSK
[06052009]
=====
HAWKSAT 1
Catalog number: 35003
Launch Date: May 19, 2009

Status: ?

Downlink: 437.345 ?
[06052009]
=====
Pharmasat
Catalog Number: 35002
Launch Date: May 19, 2009
Status: Commissioning

Downlink: 437.465 MHz 1k2 AFSK
[06052009]
=====
ANUSAT
Catalog Number: 34808
Launch Date: April 20, 2009

Status: ?

Downlink: 435.000 MHz
Uplink: 145.800 MHz

Telemetry: 137.400 MHz
[05112009]
=====
SOHLA-1 (ASTRO TECH.)
Catalog Number: 33496
Launch Date: January 23, 2009

Status: Commisioning

Proposed Frequencies and Modes:
Downlink: 437.505 MHz AFSK/CW
Beacon: 437.505 MHz AFSK/CW

Callsign:

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=101

```
[03232009]
=====
KAGAYAKI (Solan Co.)
Catalog Number: 33495?
Launch Date: January 23, 2009

Status: In Orbit

Downlink: 437.375 MHZ    FSK9k6/CW
Beacon:   437.375 MHz    FSK9k6/CW

IARU coordination status page:

AMSAT-NA webpage:

[01152009]
=====
STARS (Kagawa Univ.) (Twin Satellites)
Catalog Number: 33498
Launch Date: January 23, 2009

Status: Operational ?

Downlinks: 437.485 MHz FM/CW
           437.465 MHz FM/CW
Beacons:   437.305 MHz FM/CW
           437.275 MHz FM/CW

Callsigns: JR5YBN
           JR5YBO

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=99

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=121&retURL
=/satellites/status.php
[022152009]
=====
KKS-1 (Tokyo MCIT)
Catalog Number: 33499
Launch Date: January 23, 2009

Status: Operational

Downlink:  437.455 MHz AFSK/CW
Beacon:    437.385 MHz AFSK/CW

Callsign: JQ1YYY

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=107
```

AMSAT-NA webapge:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=120&retURL=/satellites/status.php
[02212009]
=====
PRISM (Tokyo Univ.)
Catalog Number: 33493
Launch Date: January 23, 2009

Status: Operational ?

Downlink: 437.425 MHz AFSK/GMSK/CW
Beacon: 437.250 MHz AFSK/GMSK/CW

Callsign: JQ1YCX

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=97

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=119&retURL=/satellites/status.php
[02212009]
=====
RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number: 32953
Launch Date: May 23, 2008

Status: Operational

Curent Modes: Telemetry
              Audio
              Images

Downlinks: 435.315 MHz
           435.215 MHz

AMSAT-NA website:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=115&retURL=/satellites/status.php

Official website:
http://www.npopm.com/?cid=leoca&caid=43
[02122009]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=94&retURL=
/satellites/status.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=72
[02122009]
=====
CP3
Catalog Number: 31129
Launch Date: April 17,2007

Status: Operational

Current Mode: /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[02122009]
=====
GENESAT-1
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Current Mode: /u

Callsign: KE7EGC

Telemetry Beacon Downlink: 437.0670 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[02212009]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon: 437.2750 MHz CW

Callsign: JQ1YGW

```
Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/xivpicte.htm
[02212009]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003

Status: ?????

Current Mode: /u

Beacon:     436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=96&retURL
=/satellites/status.php

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[06082009]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Operational?

Uplink:  1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=56
[02122009]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Modes:   FM Repeater - Uplink:    145.920 Mhz FM
```

Downlink: 435.300 Mhz FM
BBS - Uplink: 1268.700 Mhz FM 9k6
Downlink: 435.150 Mhz FM 9k6
Telemetry - Downlink: 435.150 MHz FM

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.860 MHZ FM
145.880 MHz USB
145.920 MHz FM
1268.700 MHz FM
Digital Downlinks: 435.150 MHz FM 38k4 PBP, 1 watt output
435.150 MHz FM 9k6 Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Pacsat Broadcast Protocol
1268.700 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[07032009]
=====
QuakeSat
Catalog Number: 27845
Launch Date: June 30, 2003

Status: Telemetry only

Current Mode: 9600 baud data packet

Mode U packet
Downlink: 436.675 MHz 9k6 BPS

Quakesat webpage:
http://www.quakefinder.com/services/quakesat-ssite/
[04272009]
=====
CO-55 CUTE-1
Catalog Number: 27844

```
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=69&retURL
=/satellites/status.php
[02212009]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Telemetry only

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink:        144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[03302009]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Telemetry only

Current Modes:
Telemetry : /u

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM
```

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://asri.technion.ac.il/techsat/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=14&retURL=/satellites/status.php
[04272009]
=====
RS-22 RADIO SPORT RS-22
Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only

Current Mode: /u

CW Beacon - 435.352 MHz
            145.818 MHz

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=76&retURL=/satellites/status.php
[02212009]
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990

Status: CW Beacon only

Uplinks: 145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink: 437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[03162009]
=====
CanX-2
Catalog number: 32790
Launch Date: April 28, 2008

Status: Operational in range of ground station only

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[02212009]
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.425 MHz 1k2 baud packet

For the latest project status update please visit the AAUSAT-II web page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[02212009]
=====
CO-65 CUTE-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008

Status: Digipeater

Downlink: 437.475 MHz 9k6 Packet
Uplink: 1267.600 Mhz

Telemetry Beacon:
Downlink: 437.2750 MHz CW

For the latest project status update please visit the Cute-1.7+APD II web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78

Command Station blog website:
http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=112&retURL=/satellites/status.php
[02212009]
=====

```
Compass-1
Catalog number: 32787
Launch Date: April 28, 2008

Status: Operational

Current Mode: 4k8 MSK packet

Uplink:   145.980 MHz FM
Downlink: 437.275 Mhz CW
          437.405 MHz Packet

For the latest project status update please visit the Compass 1 web
page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=114&retURL
=/satellites/status.php
[04272009]
=====
CO-66 Seeds II
Catalog number: 32791
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.485 MHz

Callsign: JQ1YGU

For the latest project status update please visit the Seeds 2 web
page: http://cubesat.aero.cst.nihon-u.ac.jp/english/seeds_2_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=113&retURL
=/satellites/status.php
[02212009]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - V/u
                      Voice -       V/v
                      BBS -         V/v
```

APRS -	V/v
SSTV -	V/v

Expedition 20 Crew:

Commander:	Gennady Padalka	RN3DT
Flight Engineer:	Michael Barratt	KD5MIJ
Flight Engineer:	Koichi Wakata	KC5ZTA
Flight Engineer:	Robert Thirsk	VA3CSA
Flight Engineer:	Roman Romanenko	
Flight Engineer:	Frank De Winne	ON1DWN

STS-127 Space Shuttle Endeavour:

Commander:	Mark Polansky	
Pilot:	Douglas Hurley	
Mission specialist:	Christopher Cassidy	
Mission specialist:	Thomas Marshburn	KE5HOC
Mission specialist:	David Wolf	KC5VPF
Mission specialist:	Julie Payette	
Mission specialist:	Timothy Kopra	KE5UDN

Available Modes and Frequencies:

Digital/APRS:

Worldwide packet uplink:	145.825 MHz FM 1k2
Worldwide packet downlink:	145.825 Mhz FM 1k2

Voice:

Region 1 voice uplink:	145.200 MHz FM
Region 2/3 voice uplink:	144.490 MHz FM
Worldwide downlink:	145.800 MHz FM

Crossband Repeater:

Repeater Uplinks:	1269.650 MHz FM
	437.800 MHz FM
	145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink:	145.800 MHz FM
	437.800 MHz FM (Kenwood)

SSTV Robot 36:

Downlink:	145.800 MHz FM

Mode and Antenna Polarization:

V: Linear

U: Linear

Callsigns:

Belgian:	OR4ISS
German:	DP0ISS
Russian:	RS0ISS
	RZ3DZR
United States:	NA1SS
Packet Mailbox:	RS0ISS-11
Digipeater callsign:	ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[07172009]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-205.S3
WSR 205 Part 3 07/24/2009

AMSAT NEWS SERVICE BULLETIN 205.S3
FROM AMSAT HQ SILVER SPRING, MD, July 24, 2009
TO ALL RADIO AMATEURS
BID: $ANS-205.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

CP4
Catalog Number: 31122
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon: 437.325 MHz CW

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=79
[10022008]
=====
LIBERTAD-1
Catalog Number: 31128
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink: 145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[02122009]
=====

```
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: Non-Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder:  145.825 Mhz FM
[01012009]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency:  437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink:        437.250 MHz FM 67Hz CTCSS
Voice Downlink:     2401.835 MHz FM
Packet Up/Downlink:  437.250 MHz 9k6 packet
Packet Downlink     2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non-Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[08132007]
=====
CANX-1
Catalog Number: 27847
Launch Date: June 30, 2003
```

```
Status: Non-Operational

Downlink: 437.8800 MHz AFSK 1k2bps
[06052009]
=====
DTUSAT
Catalog Number: 27842
Launch Date: June 30, 2003

Status: Non-Operational

Current Mode: 2k4 AFSK Packet last reported

Downlink: 437.475MHz

Officail webpage: http://dtusat1.dtusat.dtu.dk/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=101&retURL
=satellites/all_oscars.php
[02212009]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink:   435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)

Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Telemetry only

Uplinks:   145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink:  437.325 MHz

Broadcast callsign: MYSAT3-11
BBS:                MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial land and weather imaging payloads offers FM and FSK
```

Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[03302009]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====

```
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
V-band:   145.840 -  145.990 MHz CW/LSB
U-band:   435.550 -  435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks
---------
S2-band:  2401.225 -  2401.475 MHz CW/USB
K-band:  24048.010 - 24048.060 MHz CW/USB
Beacon:   2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)
----------------------------
BEACON   General Beacon(GB)  Middle Beacon(MB)  Engineering Beacon(EB)
2 m                    none        145.898 MHz                    none
70cm            435.438 MHz        435.588 MHz             435.838 MHz
13cm(1)        2400.188 MHz       2400.338 MHz            2400.588 MHz
13cm(2)        2401.173 MHz       2401.323 MHz            2401.573 MHz
3cm           10450.975 MHz      10451.125 MHz           10451.375 MHz
1.5cm         24047.885 MHz      24048.035 MHz           24048.285 MHz
[07162007]
=====
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink:    145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12
```

```
The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: 25636
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater:         436.250 MHz

Uplinks: Mode B Repeater:  145.825 MHz
Mode J Digipeater:         145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998
```

```
Status: Non-operational

Uplink:   145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
MO-30 UNAMSAT-2
Catalog Number: 24305
Launch Date: September 5, 1996

Status: Non-operational

Downlink:       435.1380 MHz AFSK 1200 BPS
Downlink:       435.2060 MHz AFSK 1200 BPS
Uplink:         145.8150 MHz AFSK 1200 BPS
Uplink:         145.8350 MHz AFSK 1200 BPS
Uplink:         145.8550 MHz AFSK 1200 BPS
Uplink:         145.8750 MHz AFSK 1200 BPS
[06042009]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Non-operational

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign:       POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012009]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud
```

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink: 145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink: 435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons: 435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink: 145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks: 145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink: 145.825 MHz FM 1200 Baud AFSK
Beacon: 2401.220 MHz
[05012006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: non-operational

```
Current Mode:  V/u

Uplink:         145.900 MHz FM 1200-baud Manchester FSK (reserved)
                145.920 MHz FM VOICE
                145.940 MHz FM 1200-baud Manchester FSK (reserved)
                145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink:       437.026 MHz USB VOICE
                (1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[07242009]
=====
UO-15 UoSAT-4
Catalog Number: 20438
Launch Date: January 22, 1990

Status: Non-operational

Uplink: ?
Downlink: 435.1250MHz (?)
          435.1200MHz (?)
[06042009]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
Uplink:  145.9000 - 146.0000 MHz SSB/CW
```

```
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984

Status: Non-operational.

Current Mode:  /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon:           435.025 MHz
Mode-S Beacon:     2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[01012009]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon:   145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational
```

```
Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink  29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
Beacons:   29.450 MHz
          435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational
```

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB

Beacon 1: 29.352 MHz (intermittent)
Beacon 2: 29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB

Beacon: 145.860 MHz

Robot: 145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-205.S4
WSR 205 Part 4 07/24/2009

AMSAT NEWS SERVICE BULLETIN 205.S4
FROM AMSAT HQ SILVER SPRING, MD, July 24, 2009
TO ALL RADIO AMATEURS
BID: $ANS-205.S4

THE FOLLOWING SATELLITES HAVE RE-ENTERED OR HAVE BEEN RETURNED SAFELY:

NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

```
Status: Re-Entered
Re-entered: July 28, 2008

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[01012009]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink:      145.825 Mhz FM APRS AX25
APRS Uplink:        145.825 MHz FM APRS AX25
Voice/PSK31 Uplink:  28.120 MHz

Packet to Voice ID: RAFT
[06112007]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Re-Entered
Re-entered: June 18, 2008

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon:             437.2750 MHz CW

Callsign: JR8YJT
[01012009]
=====
SO-43 Starshine 3
Catalog Number: 26929
Launch Date: September 30, 2001

Status: Re-Entered
```

Re-entered: January 21, 2003

Beacon: 145.825Mhz
[02212009]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at}

amsat.org
NNNN
/EX

```
From 7358200387599764284
X-Google-Thread: a4a23d5f63,32645f6424f8f1cf,start
X-Google-Attributes: gida4a23d5f63,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news2.google.com!newsfeed2.dallas1.level3.net!
news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-207 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sat, 25 Jul 2009 23:10:46 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 390
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000801ca0d9e$a2fa7fc0$e8ef7f40$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1248577846 6687 166.84.1.6 (26 Jul 2009 03:10:46 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 26 Jul 2009 03:10:46 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news2.google.com rec.radio.amateur.space:268 rec.radio.info:867
```

AMSAT NEWS SERVICE
ANS-207

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating

through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

****
* 2009 AMSAT Space Symposium and Annual General Meeting October 9-11 *
*   Four Points Sheraton Hotel at the Baltimore Washington Airport   *
* Details - http://www.amsat.org/amsat-new/symposium/2009/index.php *
****

In this edition:

- Important Reminder AMSAT Board of Directors Ballots
- AMSAT-UK Announces FUNcube Amateur Radio Satellite
- SuitSat-2 Demo at the Central States VHF Society Conference
- Special Events Stations Commemorate Apollo 11 40th Anniversary
- STS-127 To Deploy Dual Picosats on July 30
- SwissCube Delivery to India, Three Additional CubeSats Planned
- Satellite Shorts From All Over

SB SAT @ AMSAT $ANS-207.01
Important Reminder AMSAT Board of Directors Ballots

AMSAT News Service Bulletin 207.01
>From AMSAT HQ SILVER SPRING, MD.
July 26, 2009
To All RADIO AMATEURS
BID: $ANS-207.01
To All AMSAT Members: As noted in last week's ANS, the original Board of Directors ballot that was mailed earlier this month to all AMSAT members and included with important AMSAT information has an error on it, stating "select no more than three" with five candidates listed. Replacement ballots of a different color have now been mailed to all AMSAT members in an an envelope marked "corrected ballot" and the new ballot states "Select no more than four" with five candidates listed as well as marked with "corrected ballot".

Please note that the none of the original ballots will be counted, so if you mailed the original ballot to AMSAT, you must also mail the corrected ballot in order to have your ballot be counted. The due date for submitting ballots has not changed and the corrected ballot must be received at the Silver Spring, MD no later than the close of business on September 15, 2009.

[ANS thanks AMSAT HQ for the above information]

/EX

SB SAT @ AMSAT $ANS-207.02

AMSAT-UK Announces FUNcube Amateur Radio Satellite

AMSAT News Service Bulletin 207.02
>From AMSAT HQ SILVER SPRING, MD.
July 26, 2009
To All RADIO AMATEURS
BID: $ANS-207.02

AMSAT-UK has announced a new amateur satellite project - FUNcube. The project has received major initial funding from the Radio Communications Foundation (RCF) and is expected be developed in collaboration with ISIS-Innovative Solutions in Space BV.

FUNcube is an educational single cubesat project with the goal of enthusing and educating young people about radio, space, physics and electronics. It will support the educational Science, Technology, Engineering, Maths (STEM) initiatives and provide an additional resource for the GB4FUN Mobile Communications Centre.

The target audience consists of primary and secondary school pupils and FUNcube will feature a 145 MHz telemetry beacon that will provide a strong signal for the pupils to receive. It is planned to develop a simple receiver board that can be connected to the USB port of a laptop to display telemetry in an interesting way. The satellite will contain a materials science experiment, from which the school students can receive telemetry data which they can compare to the results they obtained from similar reference experiments in the classroom.

FUNcube is the first cubesat designed to benefit this group and is expected to be the first UK cubesat to reach space.

It is anticipated FUNcube will be launched into a Sun Synchronous Low Earth Orbit about 600-700km above the earth using one of the many launch opportunities that exist for Cubesat missions. In such an orbit the satellite passes over Europe approximately 3 times in the morning, and 3 in the evening, every day, perhaps allowing the morning passes to be used for educational purposes and the evening passes for Amateur Radio communications.

FUNcube will carry a UHF to VHF linear transponder that will have up to 1 watt and which can be used by Radio Amateurs worldwide for SSB and CW communications. Measuring just 10 * 10 * 10 cm, and with a mass of less than 1kg, it will be the smallest ever satellite to carry a linear transponder and the choice of frequencies will enable Radio Amateurs to use their existing VO-52 or DO-64 station.

A key feature of the satellite is the absence of an On-Board Computer. For reliability and maximum power efficiency, the design has been kept as straight-forward as possible with satellite control being achieved using simple commands. See the AMSAT-UK FUNcube webpage at:http://www.uk.amsat.org/content/view/696/68/

AMSAT-UK has more than 350 individual members and is one of more than 20 such groups worldwide. AMSAT-UK teams have provided hardware for more than 10 satellites over the past 35+ years including SSETI Express in 2005.They are presently involved with the development of hardware and software for a number of satellite projects including the European Student Earth Orbiter (ESEO), P3E, SUITSAT2, the Columbus module on the ISS and also the GENSO Ground station network.

The Radio Communications Foundation is a Registered Charity (Number 1100694) set up in 2003 to fund efforts to bring the wonders of radio into the classrooms, universities and any other public place where hands on demonstration can influence understanding. The RCF funding for FUNcube is made possible through the generous bequest from a "silent key" who wanted the hobby that he loved brought to the attention of others.

AMSAT-UK: http://www.uk.amsat.org/
Radio Communications Foundation: http://www.commsfoundation.org/
GB4FUN: http://www.gb4fun.org.uk/
FUNcube contact: Graham Shirville G3VZV (g3vzv@amsat.org)

[ANS thanks AMSAT-UK for the above information]

/EX

SB SAT @ AMSAT $ANS-207.03
SuitSat-2 Demo at the Central States VHF Society Conference

AMSAT News Service Bulletin 207.03
>From AMSAT HQ SILVER SPRING, MD.
July 26, 2009
To All RADIO AMATEURS
BID: $ANS-207.03

On July 24-25 the Central States VHF Society hosted their 43rd Conference in the Chicago area. The event attracted radio amateurs interested in experimentation with weak signal VHF/UHF, microwave, terrestrial and space communications, and EME.

SuitSat-2 System Engineer Gould WA4SXM was at the Conference with a functioning prototype of the SuitSat-2 hardware, antennas, and initial software. The success of the Phoenix ARISS system integration meeting held July 10-12 was evident as SuitSat-2 transmitted live signals everyone at the Conference could monitor on 145.950 MHz.

The SSTV subsystem was transmitting live pictures in Robot36 mode captured by the cameras. Reminder: if your computer SSTV capture software such as MMSSTV is functional viewing existing terrestrial SSTV transmissions you will be ready to receive SuitSat-2 video.

Gould also gave a presentation to a full house during which he discussed SuitSat-2 architecture and software. The presentation, as well as the live display, included these subsystems:

+ Software Defined Radio Transponder
+ Internal Housekeeping Processor Board
+ Power Control Board
+ Interconnect Board
+ Safety Power Interlock
+ Flexible antennas

The SuitSat-2 team plans to deliver the completed flight system to Russia in December, 2009 with an EVA deployment planned for the Spring of 2010. Watch the AMSAT Journal for full details as system integration completes and SuitSat-2 moves toward orbit!

[ANS thanks whomever for the above information]

/EX

SB SAT @ AMSAT $ANS-207.04
Special Events Stations Commemorate Apollo 11 40th Anniversary

AMSAT News Service Bulletin 207.04
>From AMSAT HQ SILVER SPRING, MD.
July 26, 2009
To All RADIO AMATEURS
BID: $ANS-207.04

If you were fortunate to work the Amateur Radio special events stations that commemorated the 40th anniversay of the Apollo 11 landing on the moon here is a summary of the QSL information:

VE3MOON From the Canada Museum of Science and Technology
In celebration of the 40th anniversary of the first manned moon landing, the special event callsign VE3MOON will be operating from 14-27 July. The museum team plans to operate via AO-51, SO-50, VO-52, FO-29, and the ISS. QSL via Darin, VE3OIJ.

AO-51's 40th Anniversary Special Message
AMSAT-NA marked the 40th anniversary of the first manned lunar landing with a special event on AO-51. AO-51 transmited a special message commemorating the event on Monday, July 20. A special AO-51 SWL QSL is available to ground stations who copy the downlink. Send QSL requests marked "Apollo 11" with SASE to the AMSAT office at
850 Sligo Ave. Suite 600, Silver Spring, MD 20910.

Mark, K6HX posted recordings and SSTV images received during this event on his web page at http://tinyurl.com/kn9bgm. Ed, KL7UW has his recording at http://www.kl7uw.com/40th_apollo_message.wav.

Special Event Station K5E
The special call sign K5E was active on the satellites until July 24. If you worked K5E you can claim a special QSL card donated by WA3MVQ.

QSL via Tim, N3TL with a standard size SASE.

EE Times prepared a July 20th special edition that tells the Lunar Landing story from the viewpoint of a number of engineers. It can be found on-line at: http://tinyurl.com/npklma. Page 44 features comments by AMSAT member Steve Bible, N7HPR.

[ANS thanks VE3MOON, AO-51 Operations Team, K5E, and Tom K3IO for the above information]

/EX

SB SAT @ AMSAT $ANS-207.05
STS-127 To Deploy Dual Picosats on July 30

AMSAT News Service Bulletin 207.05
>From AMSAT HQ SILVER SPRING, MD.
July 26, 2009
To All RADIO AMATEURS
BID: $ANS-207.05

The University of Texas at Austin announced this week they will deploy a satellite in space on July 30, 2009 at 7:27 AM CDT via the STS-127 Space Shuttle Picosatellite Launcher (SSPL).

BEVO1 is a 12.5 cm cube and 3 kg in mass. The purpose of the mission is to collect data from NASA's DRAGON GPS receiver.

BEVO1 has two modes, data and beacon. The data mode is on over most parts of the United States, and the rest of the time, the satellite is in beacon mode. Also, anyone tracking BEVO1 can record what they hear at http://paradigm.ae.utexas.edu/ops. The University of Texas also has additional information at: http://www.utexas.edu/news/2009/06/09/picosatellite/

BEVO1 Downlink Information:

Beacon Mode
Downlink Freq: 437.325 MHz
Modulation: FM, 200mW, Morse Code, ~20 WPM

Data Mode
Downlink Freq: 437.325 MHz
Modulation:
GMSK, 1W, 9600 baud, AX.25 (default)
FM, 1W, Bell 202, AX.25

NASA describes DRAGONSat as an anticipated eight-year program with a launch of the satellites approximately every two years. The first three missions will test individual components and subsystems while the final mission will culminate with the successful docking of two satellites. Refer to http://tinyurl.com/m2blyc for additional mission

information.

The University of Texas at Austin has developed BEVO1 and Texas A&M University has developed AggieSat-2 for this mission. Both satellites will perform the initial data acquition testing of the DRAGONSat program.

[ANS thanks Jahshan Bhatti at the University of Texas at Austin and Andy, W5ACM for the above information]

/EX

SB SAT @ AMSAT $ANS-207.06
SwissCube Delivery to India, Three Additional CubeSats Planned

AMSAT News Service Bulletin 207.06
>From AMSAT HQ SILVER SPRING, MD.
July 26, 2009
To All RADIO AMATEURS
BID: $ANS-207.06

The Southgate ARC webpage reports the SwissCube Amateur Radio satellite, and its integration team will shortly be leaving for the launch site in India. The SwissCube mission has a scientific and a technology objective to observe and take measurements of the airglow phenomena. The IARU has coordinated a downlink frequency of 437.505 MHz.

The Technical University of Berlin will launch their BeeSat cubesat project on this mission. The main objective of BeeSat is the on orbit verification of newly developed micro wheels for pico satellite applications. BeeSat will demonstrate the use of coin size micro wheels for the attitude control. This satellite is licensed to operate on 436.00 MHz.

University of Wuerzburg, Department of Computer Science will launch UWE-2 is to test a newly developed attitude determination system. Other experiments related to "IP in space" will be performed. These experiments follow on from the experiments of the previous satellite UWE-1. A AX25 and CW downlink on 437.385 MHz has been coordinated by the IARU.

The Istanbul Technical University will launch ITUpSAT on a mission to characterize a passive attitude control system and take earth observation pictures. Main communications will take place on frequencies outside the amateur satellite service, but a 100mW 70cm CW telemtry beacon is planned to operated on 437.325 MHz.

Space launches are technically challenging and are usually prone to last minute changes, so the exact launch date for the PSLV is still not known.

[ANS thanks Trevor, M5AKA, Southgate, and IARU Coordination pages for the above information]

/EX

SB SAT @ AMSAT $ANS-207.07
Satellite Shorts From All Over

AMSAT News Service Bulletin 207.07
>From AMSAT HQ SILVER SPRING, MD.
July 26, 2009
To All RADIO AMATEURS
BID: $ANS-207.07

+ Congratulations to Andrew Koenig, KE5GDB upon winning the Newsline Youth Ham of the Year Award! Amateur Radio on the International Space Station (ARISS) Team member Nick Lance, KC5KBO, who does ham radio mentoring of students at his local school, was pleased to learn that his student, Andrew Koenig, KE5GDB, has won the Newsline Youth Ham of the Year Award. ARISS was one of the main motivators for Andrew to study for his license, and to stay licensed. He continued his interest in space by helping with ARISS contacts and by being active in ham satellite operations. (Via Carol Jackson, KB3LKI, ARISS Weekly Report)

+ Full information for the 2009 Mid-Atlantic VHF Conference Saturday, September 26 in Plymouth Meeting, PA is available on-line at: http://tinyurl.com/mdrbxx (Packrats)

+ Replay of the Falcon-1 launch is available at: http://www.youtube.com/watch?v=Mfdk_VZMjQI

+ Here's a science oriented web page that may be of interest to the young visitors to your shack. Visit the NASA: Home and City site http://www.nasa.gov/externalflash/nasacity/index2.htm to see how space exploration impacts daily life.

+ John K8YSE says he will prepare special QSL cards from his Delaware satellite operation July 11-12. Watch for his announcement via the amsat-bb and his QRZ.com web page.

+ NASA has an interactive web site to allow you to explore the Apollo 11 landing site: http://www.nasa.gov/externalflash/apollo11_landing/index.html

+ An on-line HD video of the STS-127 launch is available at: http://tinyurl.com/lqeqqo (UniverseToday.com)

[ANS thanks everyone for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the
President's Club. Members of the President's Club, as sustaining donors
to AMSAT Project Funds, will be eligible to receive additional benefits.
Application forms are available from the AMSAT Office. And, with that
please keep in mind that because cows eat grass they're lawn mooers.

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM
K9JKM at amsat dot org

From 5779375334346183356
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news2.google.com!news.glorb.com!news2.glorb.com!
transit3.readnews.com!news-out.readnews.com!transit4.readnews.com!panix!
panix2.panix.com!not-for-mail
From: rram@panix.com (rec.radio.amateur.moderated Admin)
Newsgroups:
rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.info
Subject: Crossposting Permitted to rec.radio.amateur.moderated
Supersedes: <radio/ham-radio/moderated/crossposting-1-1246428001@panix.com>
Followup-To: poster
Date: 1 Aug 2009 02:00:03 -0400
Organization: rec.radio.amateur.moderated Moderation Team
Lines: 47
Approved: rec-radio-info@panix.com
Distribution: world
Expires: 03 Sep 2009 02:00:00 -0000
Message-ID: <radio/ham-radio/moderated/crossposting-1-1249106400@panix.com>
Reply-To: rec-radio-amateur-moderated-request@panix.com
(rec.radio.amateur.moderated Admin)
NNTP-Posting-Host: panix2.panix.com
X-Trace: reader1.panix.com 1249106403 11583 166.84.1.2 (1 Aug 2009 06:00:03 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sat, 1 Aug 2009 06:00:03 +0000 (UTC)
Summary: Short reminder for unmoderated newsgroups that crossposting is permitted
Keywords: FAQ, ham, amateur, radio, moderated, unmoderated, crossposting,
permitted
Xref: g2news2.google.com rec.radio.amateur.antenna:13344 rec.radio.amateur.dx:455
rec.radio.amateur.equipment:1686 rec.radio.amateur.homebrew:2981
rec.radio.amateur.misc:4391 rec.radio.amateur.policy:26557
rec.radio.amateur.space:269 rec.radio.info:879

Posted-By: auto-faq 3.3.2 beta (PGPMoose V2.0, Perl 5.005)
Archive-name: radio/ham-radio/moderated/crossposting
Revision: 1.1 2009/04/12 19:42:04
Posting-Frequency: posted monthly
URL: http://www.panix.com/~rram/usenet/rram/index.html

Changes followed by "|".

After a 30-day public discussion and feedback period to gauge reader opinions in March of 2009:

http://groups.google.com/group/rec.radio.amateur.moderated/browse_thread/thread/d7d337db35f23326

the rec.radio.amateur.moderated Moderation Team has decided to consider amending its charter, and permit limited simultaneous crossposting to rec.radio.amateur.moderated and one other unmoderated amateur-radio-related discussion newsgroup. We are currently trying this on a temporary basis (90 days, through early July 2009), and adopt it permanently if successful.

Approved rec.radio.amateur.* newsgroups are those that are currently listed in the latest version of the "List of Big Eight Newsgroups" which is crossposted monthly to news.announce.newgroups, news.groups, and news.lists.misc.

Approved alt.radio.amateur.* and alt.ham-radio.* newsgroups are those that have been created consistent with the suggestions in "So You Want to Create an Alt Newsgroup" at:

  http://www.faqs.org/faqs/alt-creation-guide/

Approved regional hierarchy newsgroups are those that contain either "radio.amateur" or "ham-radio" in their names, including uk.radio.amateur and aus.radio.amateur.misc.

We will make every reasonable effort to keep our list of approved newsgroups up-to-date. In case we have overlooked any, and a submission is rejected in error as a result, the rejected submitter can E-mail us at our administrative contact address (in the signature at the bottom of this article, and the default Reply-To for the rejection message) requesting that it be added, and that the article be approved. We may still choose to reject articles crossposted to any alt.* newsgroup with an inappropriate name, including obscene language, embedded name-calling, or encouragement of unlawful conduct.

Please direct any comments, questions, or criticisms to rec-radio-amateur-moderated-request@panix.com.

From 3015119715237914954
X-Google-Thread: 8f86f75953,d80abdb024304cc8
X-Google-Attributes: gid8f86f75953,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII
Path: g2news2.google.com!postnews.google.com!l31g2000vbp.googlegroups.com!not-for-mail
From: kb9rqz <mark@kb9rqz.com>

```
Newsgroups:
rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space
Subject: get kelp
Date: Sat, 1 Aug 2009 11:49:38 -0700 (PDT)
Organization: http://groups.google.com
Lines: 5
Distribution: world
Message-ID: <f6906a26-23fc-4627-84a4-73da0028ab99@l31g2000vbp.googlegroups.com>
References: <radio/ham-radio/moderated/crossposting-1-1249106400@panix.com>
NNTP-Posting-Host: 66.82.9.83
Mime-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: quoted-printable
X-Trace: posting.google.com 1249152578 615 127.0.0.1 (1 Aug 2009 18:49:38 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Sat, 1 Aug 2009 18:49:38 +0000 (UTC)
Complaints-To: groups-abuse@google.com
Injection-Info: l31g2000vbp.googlegroups.com; posting-host=66.82.9.83;
     posting-account=3ePh8QoAAABpiNDYEy2_bPCVy_4Crs1n
User-Agent: G2/1.0
X-HTTP-UserAgent: Mozilla/4.0 (compatible; MSIE 7.0; Windows NT 5.1;
     Trident/4.0; .NET CLR 1.1.4322),gzip(gfe),gzip(gfe)
Xref: g2news2.google.com rec.radio.amateur.misc:4392
rec.radio.amateur.policy:26562 rec.radio.amateur.space:270

On Aug 1, 2:00=A0am, r...@panix.com (rec.radio.amateur.moderated Admin)
wrote:
> Posted-By: auto-faq 3.3.2 beta (PGPMoose V2.0, Perl 5.005)

please stop spaming and trolling for traffic


From 5411482411450838532
X-Google-Thread: a4a23d5f63,1bbc37f24fb0b2e6,start
X-Google-Attributes: gida4a23d5f63,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news1.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!npeer01.iad.highwinds-media.com!news.highwinds-media.com!feed-
me.highwinds-media.com!nx02.iad01.newshosting.com!newshosting.com!
newspump.sol.net!198.186.194.249.MISMATCH!transit3.readnews.com!news-
out.readnews.com!news-xxxfer.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-212 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Mon, 3 Aug 2009 16:57:40 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 1700
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <001e01ca147d$0017fcc0$0047f640$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
```

```
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1249333060 23984 166.84.1.6 (3 Aug 2009 20:57:40 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Mon, 3 Aug 2009 20:57:40 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
x-cr-hashedpuzzle: jw0= AoDK Aqf6 BVhx BlSM COj+ DIjk Db3v D1tm EpaK FuTa Fw77
GR37 G8++ HCCL
HxZU;1;cgBlAGMALQByAGEAZABpAG8ALQBpAG4AZgBvAEAAcABhAG4AaQB4AC4AYwBvAG0A;Sosha1_v1;
7;
{3C065D2F-009C-4F52-99EA-734F20BC5CBE};awA5AGoAawBtAEAAYwBvAG0AYwBhAHMAdAAuAG4AZQB
0AA==;Mon, 03 Aug 2009 20:57:15
GMT;VwBTAFIALQAyADEAMgAgAEEATQBTAEEAVAAgAFcAZQBlAGsAbAB5ACAAUwBhAHQAZQBsAGwAaQB0AG
UAIABSAGUAcABvAHIAdAA=
x-cr-puzzleid: {3C065D2F-009C-4F52-99EA-734F20BC5CBE}
Xref: g2news2.google.com rec.radio.amateur.space:271 rec.radio.info:884
```

This report is organized into four (4) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - deborbited/returned satellites

SB SAT @ AMSAT W8ISS ANS-212.S1
WSR 212 Part 1 07/31/2009

AMSAT NEWS SERVICE BULLETIN 205.S1
FROM AMSAT HQ SILVER SPRING, MD, July 31, 2009
TO ALL RADIO AMATEURS
BID: $ANS-212.S1

DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008

Status: Operational
Current Mode: Science Mode - Beacon ONLY

Telemetry: 145.870 MHz

```
Downlink: 145.880 to 145.920 MHz
Uplink:   435.530 to 435.570 MHz

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68
[02122009]
=====
VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink:   435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink:   435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW


Indian Beacon:  145.859330 MHZ CW
Dutch Beacon:   145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is active. Each transponder has a different beacon.
[08072008]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Modes:   FM Repeater - Uplink:    145.920 Mhz FM
                               Downlink:  435.300 Mhz FM
                 BBS         - Uplink:   1268.700 Mhz FM 9k6
                               Downlink:  435.150 Mhz FM 9k6
                 Telemetry   - Downlink:  435.150 MHz FM

Analog voice downlink:     435.300 MHz FM
                           435.150 MHz FM
```

2401.200 Mhz FM
Analog voice uplink: 145.860 MHZ FM
145.880 MHz USB
145.920 MHz FM
1268.700 MHz FM
Digital Downlinks: 435.150 MHz FM 38k4 PBP, 1 watt output
435.150 MHz FM 9k6 Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Pacsat Broadcast Protocol
1268.700 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[07032009]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz. The order of operation is thus: (allow for Doppler as necessary):

1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on and off within the 10 Minute window.

3) Sending the 74.4 tone again within the 10 minute window will reset
   the 10 minute timer.
[05282007]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Operational
Current Mode: V/u (Mode JA)

Voice/CW (Mode JA)
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage:
http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's
CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/
fo29cwts.htm
[02122009]
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[03232009]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational

Current Mode: Alternating between Mode A and B every 24 hours

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz CW
145.972 MHz CW
435.100 MHz CW
2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
[02122009]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - V/u
Voice - V/v
BBS - V/v
APRS - V/v
SSTV - V/v

Expedition 20 Crew:

Commander:	Gennady Padalka	RN3DT
Flight Engineer:	Michael Barratt	KD5MIJ
Flight Engineer:	Timothy Kopra	KE5UDN
Flight Engineer:	Robert Thirsk	VA3CSA
Flight Engineer:	Roman Romanenko	
Flight Engineer:	Frank De Winne	ON1DWN

Available Modes and Frequencies:

Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[07312009]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-212.S2
WSR 212 Part 2 07/31/2009

AMSAT NEWS SERVICE BULLETIN 212.S2
FROM AMSAT HQ SILVER SPRING, MD, July 31, 2009
TO ALL RADIO AMATEURS

```
BID: $ANS-212.S2

Pollux
Catalog Number:
Launch Date: July 31, 2009

Status: Operational

Downlink: 145.825MHz 1k2 AX.25
[07312009]
=====
Castor
Catalog Number:
Launch Date: July 31, 2009

Status: Operational

Downlink: 145.825 MHz 1k2 AX.25
[07312009]
=====
BEVO-1 (DRAGONSAT-1)
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Operational

Downlink: 437.325 MHz 9k6 GMSK
          437.325 MHz CW 20wpm
[07312009]
=====
AggieSat2 (DRAGONSAT-2)
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Operational

Downlink: 436.250 MHz 9k6
[07312009]
=====
CP-6
Catalog Number: 35004
Launch Date: May 19, 2009

Status: Commissioning

Downlink: 437.365 MHz 1k2 AFSK
[06052009]
=====
HAWKSAT 1
Catalog number: 35003
Launch Date: May 19, 2009

Status: ?
```

```
Downlink: 437.345 ?
[06052009]
=====
Pharmasat
Catalog Number: 35002
Launch Date: May 19, 2009
Status: Commissioning

Downlink: 437.465 MHz 1k2 AFSK
[06052009]
=====
ANUSAT
Catalog Number: 34808
Launch Date: April 20, 2009

Status: ?

Downlink:  435.000 MHz
Uplink:    145.800 MHz

Telemetry: 137.400 MHz
[05112009]
=====
SOHLA-1 (ASTRO TECH.)
Catalog Number: 33496
Launch Date: January 23, 2009

Status: Commisioning

Proposed Frequencies and Modes:
Downlink: 437.505 MHz AFSK/CW
Beacon:   437.505 MHz AFSK/CW

Callsign:

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=101
[03232009]
=====
KAGAYAKI (Solan Co.)
Catalog Number: 33495?
Launch Date: January 23, 2009

Status: In Orbit

Downlink: 437.375 MHZ    FSK9k6/CW
Beacon:   437.375 MHz    FSK9k6/CW

IARU coordination status page:

AMSAT-NA webpage:
```

```
[01152009]
=====
STARS (Kagawa Univ.) (Twin Satellites)
Catalog Number: 33498
Launch Date: January 23, 2009

Status: Operational ?

Downlinks: 437.485 MHz FM/CW
           437.465 MHz FM/CW
Beacons:   437.305 MHz FM/CW
           437.275 MHz FM/CW

Callsigns: JR5YBN
           JR5YBO

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=99

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=121&retURL
=/satellites/status.php
[022152009]
=====
KKS-1 (Tokyo MCIT)
Catalog Number: 33499
Launch Date: January 23, 2009

Status: Operational

Downlink:  437.455 MHz AFSK/CW
Beacon:    437.385 MHz AFSK/CW

Callsign: JQ1YYY

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=107

AMSAT-NA webapge:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=120&retURL
=/satellites/status.php
[02212009]
=====
PRISM (Tokyo Univ.)
Catalog Number: 33493
Launch Date: January 23, 2009

Status: Operational ?

Downlink: 437.425 MHz AFSK/GMSK/CW
Beacon:   437.250 MHz AFSK/GMSK/CW

Callsign: JQ1YCX
```

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=97

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=119&retURL
=/satellites/status.php
[02212009]
=====
RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number: 32953
Launch Date: May 23, 2008

Status: Operational

Curent Modes: Telemetry
              Audio
              Images

Downlinks: 435.315 MHz
           435.215 MHz

AMSAT-NA website:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=115&ret
URL=/satellites/status.php

Official website:
http://www.npopm.com/?cid=leoca&caid=43
[02122009]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=94&retURL=
/satellites/status.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=72
[02122009]
=====

CP3
Catalog Number: 31129
Launch Date: April 17,2007

Status: Operational

Current Mode: /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[02122009]
=====
GENESAT-1
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Current Mode: /u

Callsign: KE7EGC

Telemetry Beacon Downlink: 437.0670 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[02212009]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon: 437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/xivpicte.htm
[02212009]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003

Status: ?????

Current Mode: /u

```
Beacon:     436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS
```

Callsign: JQ1YGW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=96&retURL=/satellites/status.php

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[06082009]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Operational?

```
Uplink:  1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan?)
```

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=56
[02122009]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

```
Current Modes:   FM Repeater - Uplink:    145.920 Mhz FM
                               Downlink:  435.300 Mhz FM
                 BBS         - Uplink:   1268.700 Mhz FM 9k6
                               Downlink:  435.150 Mhz FM 9k6
                 Telemetry   - Downlink:  435.150 MHz FM

Analog voice downlink:     435.300 MHz FM
                           435.150 MHz FM
                          2401.200 Mhz FM
Analog voice uplink:       145.860 MHZ FM
                           145.880 MHz USB
                           145.920 MHz FM
                          1268.700 MHz FM
Digital Downlinks:         435.150 MHz FM 38k4 PBP, 1 watt output
                           435.150 MHz FM 9k6 Pacsat Broadcast Protocol
                          2401.200 MHz FM 38k4 bps, AX.25
```

```
Digital Uplink:            145.860 MHz FM 9k6 Pacsat Broadcast Protocol
                          1268.700 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon:                    435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[07032009]
=====
QuakeSat
Catalog Number: 27845
Launch Date: June 30, 2003

Status: Telemetry only

Current Mode: 9600 baud data packet

Mode U packet
Downlink: 436.675 MHz 9k6 BPS

Quakesat webpage:
http://www.quakefinder.com/services/quakesat-ssite/
[04272009]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=69&retURL
```

```
=/satellites/status.php
[02212009]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Telemetry only

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink:        144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[03302009]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Telemetry only

Current Modes:
Telemetry : /u

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign:       4XTECH-12

More information of GO-32 can be found at:
http://asri.technion.ac.il/techsat/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=14&retURL
=/satellites/status.php
[04272009]
=====
RS-22 RADIO SPORT RS-22
Catalog number: 27939
Launch Date: September 27, 2003
```

Status: Operational - 70cm cw only

Current Mode: /u

CW Beacon - 435.352 MHz
            145.818 MHz

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=76&retURL
=/satellites/status.php
[02212009]
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990

Status: CW Beacon only

Uplinks: 145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink: 437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[03162009]
=====
CanX-2
Catalog number: 32790
Launch Date: April 28, 2008

Status: Operational in range of ground station only

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web
page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[02212009]
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.425 MHz 1k2 baud packet

For the latest project status update please visit the AAUSAT-II web
page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[02212009]
=====
CO-65 CUTE-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008

Status: Digipeater

Downlink: 437.475 MHz 9k6 Packet
Uplink: 1267.600 Mhz

Telemetry Beacon:
Downlink: 437.2750 MHz CW

For the latest project status update please visit the Cute-1.7+APD II
web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78

Command Station blog website:
http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=112&retURL
=/satellites/status.php
[02212009]
=====
Compass-1
Catalog number: 32787
Launch Date: April 28, 2008

Status: Operational

Current Mode: 4k8 MSK packet

Uplink: 145.980 MHz FM
Downlink: 437.275 Mhz CW
          437.405 MHz Packet

For the latest project status update please visit the Compass 1 web
page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=114&retURL=/satellites/status.php
[04272009]
=====
CO-66 Seeds II
Catalog number: 32791
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.485 MHz

Callsign: JQ1YGU

For the latest project status update please visit the Seeds 2 web page: http://cubesat.aero.cst.nihon-u.ac.jp/english/seeds_2_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=113&retURL=/satellites/status.php
[02212009]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - V/u
Voice - V/v
BBS - V/v
APRS - V/v
SSTV - V/v

Expedition 20 Crew:

Commander:	Gennady Padalka	RN3DT
Flight Engineer:	Michael Barratt	KD5MIJ
Flight Engineer:	Timothy Kopra	KE5UDN
Flight Engineer:	Robert Thirsk	VA3CSA
Flight Engineer:	Roman Romanenko	
Flight Engineer:	Frank De Winne	ON1DWN

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2

Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time line is NOT translated from Russian and posted.
[07312009]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-212.S3
WSR 212 Part 3 07/31/2009

AMSAT NEWS SERVICE BULLETIN 212.S3
FROM AMSAT HQ SILVER SPRING, MD, July 31, 2009
TO ALL RADIO AMATEURS
BID: $ANS-212.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

CP4
Catalog Number: 31122

```
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon:    437.325 MHz CW

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=79
[10022008]
=====
LIBERTAD-1
Catalog Number: 31128
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink:   145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[02122009]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: Non-Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder:  145.825 Mhz FM
[01012009]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency:  437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
```

```
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink:         437.250 MHz FM 67Hz CTCSS
Voice Downlink:      2401.835 MHz FM
Packet Up/Downlink:   437.250 MHz 9k6 packet
Packet Downlink      2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non-Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[08132007]
=====
CANX-1
Catalog Number: 27847
Launch Date: June 30, 2003

Status: Non-Operational

Downlink: 437.8800 MHz AFSK 1k2bps
[06052009]
=====
DTUSAT
Catalog Number: 27842
Launch Date: June 30, 2003

Status: Non-Operational

Current Mode: 2k4 AFSK Packet last reported

Downlink: 437.475MHz

Officail webpage: http://dtusat1.dtusat.dtu.dk/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=101&retURL
=satellites/all_oscars.php
[02212009]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
```

```
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink:   435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)

Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Telemetry only

Uplinks:   145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink:  437.325 MHz

Broadcast callsign: MYSAT3-11
BBS:                MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial land and weather imaging payloads offers FM and FSK
Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as
a collaborative effort between the Malaysian government and Surrey
Satellite Technology Ltd.
[03302009]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink:   145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
```

```
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS:                SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink:   145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
V-band:   145.840 -  145.990 MHz CW/LSB
U-band:   435.550 -  435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks
---------
S2-band:  2401.225 -  2401.475 MHz CW/USB
K-band:  24048.010 - 24048.060 MHz CW/USB
Beacon:   2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)
----------------------------
BEACON   General Beacon(GB)  Middle Beacon(MB)  Engineering Beacon(EB)
2 m                   none        145.898 MHz                     none
```

70cm	435.438 MHz	435.588 MHz	435.838 MHz
13cm(1)	2400.188 MHz	2400.338 MHz	2400.588 MHz
13cm(2)	2401.173 MHz	2401.323 MHz	2401.573 MHz
3cm	10450.975 MHz	10451.125 MHz	10451.375 MHz
1.5cm	24047.885 MHz	24048.035 MHz	24048.285 MHz

```
[07162007]
=====
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink:    145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: 25636
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater:         436.250 MHz

Uplinks: Mode B Repeater:  145.825 MHz
Mode J Digipeater:         145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
```

Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink: 145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
MO-30 UNAMSAT-2
Catalog Number: 24305
Launch Date: September 5, 1996

Status: Non-operational

Downlink: 435.1380 MHz AFSK 1200 BPS
Downlink: 435.2060 MHz AFSK 1200 BPS
Uplink: 145.8150 MHz AFSK 1200 BPS
Uplink: 145.8350 MHz AFSK 1200 BPS
Uplink: 145.8550 MHz AFSK 1200 BPS
Uplink: 145.8750 MHz AFSK 1200 BPS
[06042009]
=====
PO-28 POSAT-1

Catalog number: 22829
Launch Date: September 25, 1993

Status: Non-operational

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012009]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks: 145.875 MHz FM 1200-baud
145.900 MHz FM 1200-baud
145.925 MHz FM 1200-baud
145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
KO-23 KITSAT
Catalog number: 22077

```
Launch date: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HL01-11
BBS: HL01-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz
```

```
More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
[05012006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: non-operational

Current Mode:  V/u

Uplink:         145.900 MHz FM 1200-baud Manchester FSK (reserved)
                145.920 MHz FM VOICE
                145.940 MHz FM 1200-baud Manchester FSK (reserved)
                145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink:       437.026 MHz USB VOICE
                (1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[07242009]
=====
UO-15 UoSAT-4
Catalog Number: 20438
Launch Date: January 22, 1990

Status: Non-operational

Uplink: ?
Downlink: 435.1250MHz (?)
          435.1200MHz (?)
[06042009]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984

Status: Non-operational.

Current Mode:  /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon:          435.025 MHz
Mode-S Beacon:     2401.500 MHz
```

```
Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[01012009]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon:   145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink  29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
```

```
Beacons:   29.450 MHz
          435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon 1:  29.352 MHz (intermittent)
Beacon 2:  29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink:     21.260 to 21.300 MHz CW/USB
Downlink:  145.860 to 145.900 MHz CW/USB

Beacon:    145.860 MHz

Robot:     145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink:   21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon:   29.408 MHz

Robot:    29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-212.S4
WSR 212 Part 4 07/31/2009

AMSAT NEWS SERVICE BULLETIN 212.S4
FROM AMSAT HQ SILVER SPRING, MD, July 31, 2009
TO ALL RADIO AMATEURS
BID: $ANS-212.S4

THE FOLLOWING SATELLITES HAVE RE-ENTERED OR HAVE BEEN RETURNED SAFELY:

NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: July 28, 2008

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[01012009]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006
```

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink: 145.825 Mhz FM APRS AX25
APRS Uplink: 145.825 MHz FM APRS AX25
Voice/PSK31 Uplink: 28.120 MHz

Packet to Voice ID: RAFT
[06112007]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Re-Entered
Re-entered: June 18, 2008

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon: 437.2750 MHz CW

Callsign: JR8YJT
[01012009]
=====
SO-43 Starshine 3
Catalog Number: 26929
Launch Date: September 30, 2001

Status: Re-Entered
Re-entered: January 21, 2003

Beacon: 145.825Mhz
[02212009]
NNNN
/EX

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Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at}
amsat.org
NNNN
/EX

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From -6581441103858917332
X-Google-Thread: a4a23d5f63,81a27fee848003eb,start
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news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-214 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Mon, 3 Aug 2009 16:58:35 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 629
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Reply-To: ans-editor@amsat.org
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X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
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AMSAT NEWS SERVICE
ANS-214

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* North Texas Balloon Launch Number 17
* Castor and Pollox Deployed From STS-127
* Amateur Radio Newsline 2009 "Young Ham of the Year" Announced
* DRAGONSat Deployed From STS-127
* Satellite Shorts From All Over

* ARISS Status - 27 July 2009

SB SAT @ AMSAT $ANS-214.01
North Texas Balloon Launch Number 17

AMSAT News Service Bulletin 214.01
From AMSAT HQ SILVER SPRING, MD.
August 2, 2009
To All RADIO AMATEURS
BID: $ANS-214.01

AMATEUR RADIO GROUP TO FLY BALLOON FLIGHT FROM HILLSBORO TEXAS AIRPORT

The next mission number 17, named �Summer Time Blues�, to be held by the North Texas Balloon Project (NTEXBP) is planned for launch about 8:30 am on August 8, 2009 from the municipal airport in Hillsboro, Texas, just south of Fort Worth and Dallas. Back up date is August 15, 2009. Two payload packages containing sensors and amateur radios will be carried to nearly 100,000 feet in about 90 minutes by a helium balloon and return via parachute in about 50 minutes. Mobile recovery teams will use position reports from the onboard GPS and APRS transmitter on 144.390 MHz and radio direction finding techniques to recover the payloads.

Pre-launch activities will begin about 7:00 am with the HF Launch Net on 7260 +/- 5 kHz, LSB beginning around 8:00 am. A cross band repeater will be activated soon after launch. Uplink is 445.800 MHz and downlink is 147.560 MHz. Handheld VHF radios and scanners can receive the downlink easily. At the peak altitude ham radio operators from Texas, New Mexico, Oklahoma, Arkansas, Louisiana, and Kansas can contact each other using the cross band repeater.

The radios used normally have a range of about 5 to 10 miles, but that range will be extended to about 500 miles at the peak altitude. At the peak altitude, the curvature of the earth is visible. Digital video is recorded for later playback. APRS packets transmit the balloon's location about once a minute.

NTEXBP's Tommy Davis said, "In past operations we did the launches for fun and the enjoyment of flight. It involves many different facets of amateur radio and thus a project that many types of amateur radio operators can enjoy together.� There is also an educational component utilized by scouting groups, because it involves orienteering and can be counted toward several different merit badges, as well as by teachers for science experiments. Davis said, �Area scout troops are invited along with all that are interested.�

In the event of unfavorable weather or poor jet stream conditions, the launch will occur at a later date. Be sure to check www.ntexbp.org or www.w5sjz.net and other Ham Radio forums and news sources for later information.

The public is invited to come out to the Hillsboro Municipal Airport, located at Exit 3 on Interstate Highway 35W, to watch the launch.

North Texas Balloon Project is a group of amateur (HAM) radio operators from Fort Worth and Dallas and has launched balloons from Cleburne, Clifton, and Hillsboro airports since 1991. This is the first launch during this year and is funded by the amateur radio operators associated with the North Texas Balloon Project.

Operator�s and Technical Data to follow at www.ntexbp.org or www.w5sjz.net. Reports, questions, APRS and other data may be sent to NTEXBP by emailing webmaster@ntexbp.org .

Please forward to interested Hams and ham communities. I would also appreciate any announcement that could be made on local repeaters during allotted calls for announcements. Thanks as always.

[ANS thanks Larry, K5PHD, for the above information]

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SB SAT @ AMSAT $ANS-214.02
Castor and Pollox Deployed From STS-127

AMSAT News Service Bulletin 214.02
From AMSAT HQ SILVER SPRING, MD.
August 2, 2009
To All RADIO AMATEURS
BID: $ANS-214.02

Castor and Pollox, two satellites in the Atmospheric Neutral Density Experiment (ANDE) program were successfully deployed from STS-127 after it undocked from the International Space Station

The ANDE mission consists of two spherical spacecraft fitted with retro-reflectors for satellite laser ranging (SLR). The constant and well-determined cross section and surface properties of the ANDE spacecraft provide an ideal set of objects for monitoring atmospheric drag and the calibration of space surveillance network (SSN) assets both radar and optical.

Castor
Castor is a 19 inch diameter aluminum sphere with a mass of 63 kg. The satellite has several different types of sensors. There are two main sensors, a Neutral particle wind and temperature spectrometer and an ion mass spectrometer. A group of college students designed and built a MEMS sensor payload to test some commercial gyroscopes and a magnetometer. There are also six light sensors and six temperature sensors mounted in the satellite hemispheres.

Pollox
The Pollux satellite was originally to be a passive satellite with retroreflectors for laser ranging. It has been turned into a high school student project involving several schools in the Fairfax County, Virginia area. The electronics is based on cubesat hardware developed at the Naval Research Laboratory and Stensat Group LLC.

The communications board contains the transmitter and receiver. The transmitter operates at 2 meters and can put out up to 1 watt of signal. Power level is adjustable. The transmitter can operate at 1200 baud AFSK and 9600 baud FSK. The transmitter uses the AX.25 protocol. An experimental FX.25 protocol will be tested that adds forward error correction capability to the AX.25 protocol and still allows typical TNCs to decode the packets.

Both satellites will transmit on 145.825 MHz. Additional details about the telemetry format, as well as the FX.25 and GMSK experiments can be found at
https://goby.nrl.navy.mil/ANDE/Main.html

[ANS thanks Ivan, KD4HBO, for the above information]

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SB SAT @ AMSAT $ANS-214.03
Amateur Radio Newsline 2009 "Young Ham of the Year" Announced

AMSAT News Service Bulletin 214.03
From AMSAT HQ SILVER SPRING, MD.
August 2, 2009
To All RADIO AMATEURS
BID: $ANS-214.03

"Wow! Oh, my God. All my friends here at Seabase are going to be really impressed. Oh, my God!"

And, that's how it sounded when we caught up with Andrew Koenig, call letters KE5GDB, by cellphone at the Boy Scouts of America Seabase in Key West, Florida, where he had just arrived with members of Troop 848 from Houston for a week of scuba diving adventures.

The Life Scout, who is just shy of his 16th birthday, is working to earn the Eagle rank and was ecstatic to learn he had been chosen for special recognition by the Amateur Radio Newsline. Before telling him he had been selected as the Young Ham of the Year, we asked Andrew how he might feel if he were to receive such an award. He said it would be a nice honor to share with his mentors, including his award nominator Nick Lance, call letters KC5KBO, who has helped several NASA astronauts earn their ham tickets.

"Young Ham of the Year would probably go in the book of things that I've done in ham radio that they are really impressed with," Andrew said. "It would just mean a lot to me.

"Nick Lance, he hasn't really been pushing me to do anything. A lot of the stuff I discover on my own. But, he's one of the big roles, one of the key aspects in ham radio and it would give him a really good feeling to know that one of his students went on to get youth ham of the year."

Andrew holds a General class license and passed the test for his first ticket back in 2005 while a sixth-grader at the Westbrook Intermediate School in Houston where Lance - who is retiring in August from the Johnson Space Center - teaches an amateur radio license class.

Andrew is the son of Joe and Lauri Koenig of Houston. Joe holds the call letters KE5JQA and got licensed as a result of Andrew's interest. Andrew also has a younger brother, Kyle.

Among the achievements Andrew has accomplished is helping with an Amateur Radio on the International Space Station (ARISS) contact at the Westbrook Intermediate School.

"I actually helped test a lot of the equipment for the contact, since it was a telebridge contact," Andrew recalled. "The station that was actually contacting the ISS was in California, I believe.

"And, we were in Clear Lake, Texas. So, for some reason the phone patch wasn't working properly. So, I had to actually go into one of the school phones and test that - I think about 15 minutes worth of testing before the contact started. And, finally right on time, we got it going again and everything was working just fine."

The contact with Astronaut Clay Anderson, who holds the ham radio call sign KD5PLA, was a success - thanks to Andrew.

Andrew also helped facilitate a terrestrial contact between Astronaut Chris Hadfield (ham radio call letters KC5RNJ and VA3OOG) and students at two Canadian schools using an Internet Repeater Linking Project (IRLP) node he had built and placed in his bedroom closet.

Andrew, who enjoys VHF and UHF operations, tried and tried and was finally successful in making his own contact with the space station using his handheld radios and portable directional antenna. He also has participated in training astronauts at the Johnson Space Center on ARISS contacts with schools, conducting simulated contacts with them, playing the role of the school students.

Andrew has also been quite active with public service events through the Clear Lake Amateur Radio Club in suburban Houston where he is immediate past vice president. He is also a member of the Seabrook Citizen's Emergency Response Team.

Among his other achievements is creating his own bicycle mobile setup:

"I had tried putting a handi-talkie on my bike and I wasn't impressed with the results because the rubber duck just didn't get out as far as I wanted to," Andrew recalled. "A couple months before, I had ordered my first mobile rig (radio), the FT-7800.

"And, actually a couple weeks before I decided to put it all together on the bike, I had bought a brand new gel cell battery. So, I thought, you know, hey I've got this remote that came free with the radio, I've got the battery, I've got an antenna, I got everything I need to make it happen. So, I just mounted it all on the bike with zip ties and I had 50 watts mobile on a bike for VHF and UHF."

That attracted some attention from CQ magazine, which was looking for photo ideas for its 2008 calendar. Photographer Larry Mulvehill (WB2ZPI) visited Houston and Andrew's bicycle mobile became the calendar photo for September 2008. He and his bedroom-closet IRLP node will be featured the cover of the September 2009 issue of CQ magazine.

Andrew is going into his sophomore year at Clear Lake High School where he is a member of the school's marching band. He is also into computers and creating websites and he maintains his own website started when he was in middle school. Check out www.thathamkid.com. It offers kid-friendly information about ham radio, along with a jokes page and a lot more about Andrew's activities in amateur radio - including his working satellites.

His mentor and nominator for this award, Nick Lance, KC5KBO, summed it up best when he said: "Andrew has truly been an outstanding student of amateur radio.....He is an inspiration both to his fellow students and to hams of all ages."

Award Ceremony

The 2009 Amateur Radio Newsline� "Young Ham of the Year Award" will be presented to Andrew Koenig, KE5GDB, on Saturday, August 15th, 2009 at the Huntsville Hamfest in Huntsville, Alabama. As the 2009 "Young Ham of the Year," Andrew will receive -- courtesy of Vertex-Standard -- an expense-paid trip to the Huntsville Hamfest, along with a gift of Yaesu brand ham radio equipment. CQ magazine will treat him to an expense-paid week at Spacecamp Huntsville, and will present Andrew with a variety of CQ products. Amateur Radio Newsline� will provide Andrew with a commemorative plaque at the award ceremony. Once again, the cost of year's plaque has been underwritten by Dave Bell (W6AQ), President of DBA Entertainment Inc., Hollywood California. Heil Sound Ltd. will also be presenting Andrew with a ham radio related gift.

The presentation of the award as a regular feature of the Huntsville Hamfest has been made possible through the generosity and kindness of the event's Planning Committee and the good offices of Huntsville Hamfest Association Vice President Charlie Emerson, N4OKL. (See http://www.hamfest.org)

This year's award ceremony will be hosted by Don Wilbanks (AE5DW) of Amateur Radio Newsline� along with representatives of corporate underwriters Vertex-Standard and CQ Communications, Inc.

Award Program Background

The Amateur Radio Newsline� "Young Ham of the Year" award (formerly the Westlink Report Young Ham of the Year Award) has been presented annually since 1986 to a licensed radio amateur (Ham) who is 18 years of age or younger and who has provided outstanding service to the nation, his/her community or the betterment of the state of the art in communications through the Amateur Radio hobby/service. It maintains a website will full information on the award program and background material located at http://www.arnewsline.org.

Award Sponsors

The award program is jointly sponsored by the Los Angeles, California-based Amateur Radio Newsline� with corporate support from Vertex-Standard Corporation of Cerritos, California and CQ Magazine of Hicksville, NY.

Since 1976, the Southern California-based Amateur Radio Newsline� and its
predecessor, the Westlink Radio Network, have been providing radio amateurs
around the world with up-to-the-minute news at no cost to them. Amateur
Radio Newsline� also co-sponsors with the Quarter Century Wireless
Association the "Roy Neal, K6DUE, Amateur Radio Mentoring Project" that
serves as a clearinghouse to match radio amateurs in need of educational
assistance on the hobby with those able to aid them. (See
http://www.arnewsline.org)

The award's two corporate underwriters are world leaders in their
respective areas of Amateur Radio product support.

Vertex-Standard Corporation is considered the trailblazer in the design,
manufacture and distribution of high quality Vertex-Standard commercial
two-way radio, monitoring and air-band communications equipment along with
its Standard Horizon marine electronics line and Yaesu brand Amateur Radio
equipment. The Yaesu name is known world-wide among ham radio aficionados
and is synonymous with premium quality ham radio gear. (See
http://www.vertexstandard.com)

CQ Magazine and its sister publications, CQ VHF, Popular Communications and
WorldRadio Online, are published by CQ Communications, Inc., and are
considered the trend-setting publications serving today�s modern radio
amateur. (See http://www.cq-amateur-radio.com)

[ANS thanks Newsline for the above information]

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SB SAT @ AMSAT $ANS-214.04
DRAGONSat Deployed From STS-127

AMSAT News Service Bulletin 214.04
From AMSAT HQ SILVER SPRING, MD.
August 2, 2009
To All RADIO AMATEURS
BID: $ANS-214.04

DRAGONSat, the Dual RF Astrodynamic GPS Orbital Navigator Satellite, was
deployed from from the cargo bay of STS-127 after the shuttle departed from
the
International Space Station. The DRAGONSat mission consists of two satellites,
BEVO-1 and AggieSat-2.

BEVO-1 Downlink Information:
Beacon Mode
Downlink Freq: 437.325 MHz
Modulation: FM, 200mW, Morse Code, ~20 WPM

Data Mode
Downlink Freq: 437.325 MHz
Modulation:
GMSK, 1W, 9600 baud, AX.25 (default)
FM, 1W, Bell 202, AX.25
http://www.utexas.edu/news/2009/06/09/picosatellite/

AggieSat-2
http://aggiesat.org/Home
436.250MHz

AggieSat2 operating mode uses a proprietary modem protocol as the main radio is a COTS data modem. It appears the only way to decipher the code is to have a model MHX425 that can speak the proprietary language. The radio data rate is actually at 19200 bps.

Initial indications are that it appears Bevo and AggieSat are stuck together
right now. We are looking for aliveness confirmation until we can get the
units
in a stable state.

[ANS thanks John, KE5JTG, for the above information]

/EX

SB SAT @ AMSAT $ANS-214.05
Satellite Shorts From All Over

AMSAT News Service Bulletin 214.05
From AMSAT HQ SILVER SPRING, MD.
August 2, 2009
To All RADIO AMATEURS
BID: $ANS-214.05

+ Presentations from the AMSAT-UK Colloquium can be viewed at:
http://www.uk.amsat.org/component/option,com_wrapper/Itemid,278/

+ The Gator Amateur Radio Club at University of Florida has posted a tutorial for Downloading and Decoding CP6 satellite data using the KPC-9612 Plus TNC, ICOM-910, SatPC32 and CPX Data Decoder Software at http://www.gatorradio.org/CP6_tutorial.pdf
(Dr. Jay Garlitz, AA4FL)

+ The Houston AMSAT Net now being heard on Echolink in the conference

AMSAT Wednesday 0100UTC (Tuesday 8PM Central) has moved to a new
IRC Channel (Internet Relay Chat) at:
IRC Server: irc.radiochat.org
PORT: 6667
Group: #amsat

+ A video replay of the ANDE deployment from STS-127 can be seen at:
http://www.youtube.com/watch?v=B19rIEZwTJU

+ European and Mediterranean stations may wish to be on the lookout for Paulo, CT1ETE/P from grid IM57sc betweem August 1-7 on the VO-52, AO-27, SO-50 and AO-51 satellites. Paulo plans to use a Yaesu FT-817ND and Arrow Antenna.

+ Scientific American magazine has an article on-line, "Space Aged: 10 Spacecraft from Decades Past That Are Still Ticking". This slide show includes AO-7: http://preview.tinyurl.com/kuryu9

+ A very nice interactive web site covering the entire Apollo 11 mission can be found at: http://www.wechoosethemoon.org/

[ANS thanks everyone for the above information]

/EX

SB SAT @ AMSAT $ANS-214.06
ARISS Status - 27 July 2009

AMSAT News Service Bulletin 214.06
From AMSAT HQ SILVER SPRING, MD.
August 2, 2009
To All RADIO AMATEURS
BID: $ANS-214.06

1. Upcoming School Contacts

An Amateur Radio on the International Space Station (ARISS) contact has been scheduled for United Space School in Seabrook, Texas on Wednesday, August 5 at 13:47 UTC via telebridge station ON4ISS. The school is a once a year session of high school students that meets annually in the NASA/Clear Lake Area. These students come from around the world for a two week session, during which they stay with local host families while being mentored by astronauts, engineers, and scientists to design a mission to Mars as their team project. Class sessions are held at the University of Houston at Clear Lake. The contact will allow students to learn firsthand what the experience of spaceflight is like. They may ask questions about the skills needed to be an astronaut, the effects of weightlessness on the body, the food eaten, leisure activities, etc. They will use this knowledge in putting together their team project presentation, which they will present to the Houston space community at the end of their session.

2. De Winne has ARISS Contact with Portuguese Students

On Tuesday, July 21, an Amateur Radio on the International Space Station (ARISS) contact took place between students attending Escola E.B.2/3 de S. Rom�o do Coronado in Trofa, Portugal and Frank De Winne, ON1DWN on the ISS. De Winne answered 16 questions put to him by the students. Media coverage included two television stations and the event was highlighted in the evening news.

3. De Winne Participates in ARISS Contact with Ugo Guidi

On Thursday, July 23, children from Ugo Guidi in Forte dei Marmi, Lucca, Italy participated in an Amateur Radio on the International Space Station (ARISS) contact. Frank De Winne, ON1DWN answered twenty questions posed to him by the students. The audio and video were available on: www.ondaforte.tv. OndaForteTV, local media and newspapers covered the event.

4. ARISS Member Comments on Lunar Landing in EE Times

EE Times published a July 20 special edition that tells the lunar landing story from the viewpoint of a number of engineers. Comments were included from a number of people who felt it was a very personal event in their lives. Comments by Amateur Radio on the International Space Station (ARISS) member Steve

Bible,
N7HPR may be found on page 44. See:
http://www.nxtbook.com/nxtbooks/cmp/eetimes_apollo_20090720/index.php

[ANS thanks Carol, KB3LKI, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the
President's
Club. Members of the President's Club, as sustaining donors to AMSAT
Project
Funds, will be eligible to receive additional benefits. Application
forms
are
available from the AMSAT Office.

73,
This week's ANS Editor,
Lee McLamb, KU4OS

```
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From: Chris Steyaert <observations@rmob.org>
Newsgroups: rec.radio.amateur.space,sci.astro.amateur
Subject: Radio Meteor Obs. Bull. July 2009
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Xref: g2news2.google.com rec.radio.amateur.space:273 sci.astro.amateur:23889
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Radio Meteor Observation Bulletin No. 192 of July 2009 (83 K) is available now
as

http://www.rmob.org/rmobtext/rmob0907.txt

More information and the visual presentation of the hourly forward scatter counts can be found on

http://www.rmob.org

Chris

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news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-265 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Wed, 24 Sep 2008 14:43:53 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 393
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X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Wed, 24 Sep 2008 18:43:48 +0000 (UTC)
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X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news2.google.com rec.radio.amateur.space:531 rec.radio.info:758
```

AMSAT NEWS SERVICE
ANS-265

****
*** 2008 AMSAT Space Symposium and Annual General Meeting ***
***   October 24-26 in Atlanta, Georgia   ***
****   Please see the AMSAT-NA Website for INFO   ****
****

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* South African SumbandilaSat Launch Likely By Year-End 2008
* Richard Garriott W5KWQ ISS Operations Will Include SSTV
* Increased Solar Illumination Allows AO-16 Operations to Continue
* Flight 4 of Falcon 1
* Welcome Aboard AMSAT-Indonesia
* ARISS Status - 21 August 2008

SB SAT @ AMSAT $ANS-265.01
South African SumbandilaSat Launch Likely By Year-End 2008

AMSAT News Service Bulletin 265.01
From AMSAT HQ SILVER SPRING, MD.
September 21, 2008
To All RADIO AMATEURS
BID: $ANS-265.01

South African SumbandilaSat Launch Likely By Year-End 2008

ITAR-TASS published a news item stating that the first South African satellite Sumbandila "is likely to be launched into orbit along with a Russian spacecraft Meteor-M at the end of 2008, said the head of the Federal Space Agency (Roskosmos), Anatoly Perminov.

"We are currently working toward adapting this cluster of satellite launch with the spacecraft Meteor-M, which will be launched this year." Perminov added that "in the near future to meet with experts from South Africa, perhaps even with the head of the South African Space Agency, to discuss the matter." According to Roscosmos, the South African side is ready to launch its first spacecraft to the new Russian launch vehicle Soyuz-2 ".

ITAR-TASS said that in return for launch services Russia will have the opportunity to place on the territory of South Africa a tracking station to receive f telemetry from upper stages of launch vehicles.

[Editor Note:] AMSAT South Africa has designed and built a control system to facilitate the following operations:

+ V/U voice transponder with an uplink in the 2 meter band and a
   downlink in the 70cm band.
+ A parrot repeater (voice digipeater)
+ A voice beacon

[ANS thanks ITAR-TASS for the above information]

/EX

SB SAT @ AMSAT $ANS-265.02
Richard Garriott W5KWQ ISS Operations Will Include SSTV

AMSAT News Service Bulletin 265.02
   From AMSAT HQ SILVER SPRING, MD.
September 21, 2008
To All RADIO AMATEURS
BID: $ANS-265.02

Richard Garriott W5KWQ ISS Operations Will Include SSTV

September 18, 2008
Silver Spring, Maryland

Richard Garriott, W5KWQ, to communicate with Students and Ham Radio Operators World-wide through the Amateur Radio Station on-board the International Space Station (ISS)

Through multiple agreements with NASA, the Russian Space Agency, RSC Energia, Space Adventures Ltd, and ARISS (Amateur Radio on the International Space Station), Richard Garriott will fly to ISS and will communicate with students, ham radio operators, friends, and family world-wide using the ARISS amateur radio station on-board the ISS.

Richard Garriott, with the amateur radio callsign, W5KWQ is the sixth private citizen to be flown by the Russian space agency to the ISS. A legendary video game programmer and designer, Garriott will be traveling to orbit this October and will speak with hundreds of students while thousands more listen in during a series of ten-minute ham radio contacts. His on-orbit stay on Soyuz and ISS is planned for October 12 through 22, 2008.

The locales for the worldwide student contacts include eight Challenger Learning Centers in the U.S., the Austin Liberal Arts and Sciences Academy in Austin, Texas, the Pinehurst School in Ashland, Oregon, the Budbrooke School in the U.K., and the National Space Challenge in Kuala Lumpur, Malaysia. Garriott also plans to have random chats with scouts world-wide as part of the amateur radio "Jamboree on the Air" which is planned for October 18 and 19.

"An important aspect of Richard Garriott's mission is to encourage students' interest in science and technology through the amateur radio contacts," said Rosalie White, ARISS International Secretary-Treasurer and ARISS Program Manager for ARRL (American Radio Relay League). "ARISS team members from all over the world volunteer their time every day so that students receive opportunities that we hope will cause them to study harder and learn more about any educational subject."

The connection from the ISS to individual student locations will be established through an amateur radio station set up directly at the school or through the ARISS network of worldwide amateur radio ground stations utilized to link Garriott directly with students. The amateur radio system works similar to the way mission control centers in the United States and Russia talk to their space explorers.

To date, the ARISS international working group volunteer team has conducted over 360 school contacts with crew members using ham radio on the ISS. The team has also set up radio contacts for family members of space explorers via ham radio. And have enabled countless contacts between the ISS crew members and hams on the ground. All previous Space Adventures private citizens who have flown to ISS have used the ARISS equipment to talk to school students, ham radio operators and friends and family.

As part of Richard Garriott's science investigations, he will be taking highdefinition photographs of many parts of the Earth and comparing them to photos taken on previous space missions. In conjunction with his Earth science investigation, Mr. Garriott is flying special amateur radio electronics that will enable him to send and receive low resolution images from space, comparable to cell phone images. Through this ham radio system, called Slow-Scan Television (SSTV), Garriott will beam down images of the Earth to schools and ham radio operators on the ground so that they can actively participate in his mission.

Frank Bauer, KA3HDO, ARISS International Chairman and AMSAT Vice President for Human Spaceflight Programs, states: "The ARISS team is quite excited about Richard's flight. He is very interested in bringing the wonders of space to those of us on Earth and he sees amateur radio as a great mechanism to make that happen. Through his school and scout voice contacts, his SSTV image downlinks and his communications with the world-wide amateur radio community, we see his mission as being "action packed" from an amateur radio perspective."

Bauer continues, "What is extra special is that Richard Garriott's flight coincides almost 25 years from when his father, Owen Garriott, made history as the first ham radio operator to communicate with radio amateurs from space on the STS-9 Space Shuttle mission." Owen Garriott's call sign is W5LFL. Richard also hopes to link up with his father via amateur radio during his flight.

Currently, Mr. Garriott is finishing his final spaceflight preparations at the Gagarin Cosmonaut Training Centre (GCTC) located in Star City, Russia. His launch date is scheduled for October 12, 2008, with ISS docking planned for October 14 and undocking planned for October 22. Mr. Garriott was trained thoroughly to be a member of the Soyuz TMA-13/17S crew.

Since its first flight with Owen Garriott, in November 1983, Ham Radio has flown on more than two-dozen space shuttle missions, on the Mir Space Station and on the ISS. ARISS is the first and longest continuous operating educational outreach program to fly on the ISS. ARISS is an internationally-based working group, sponsored by the national amateur radio organizations and the international AMSAT (Radio Amateur Satellite Corporation) organizations from each country as well as the ISS space agency partners. In the United States, ARISS is sponsored by the American Radio Relay League (ARRL), the Radio Amateur Satellite Corporation-North America (AMSAT-NA) and the National Aeronautics and Space Administration (NASA). NASA's education office provides support to ARISS and guidance in the development of ARISS educational objectives.

The primary purpose of ARISS is to allow students engaged in a science and technology curriculum to speak with an astronaut orbiting the Earth on the International Space Station. Using amateur radio, students ask questions about life in space or other space-related topics. Students fully participate in the ARISS contact by helping set up an amateur radio ground station at the school and then using that station to talk directly with the on-board crew member. Preparation for the experience motivates the children to learn about radio waves, space technology, science, geography and the space environment. In many cases, the students help write press releases and give presentations on the contact to their fellow students and to the local community. Through this hands-on experience, students are engaged and educated in the Science, Technology, Engineering and Mathematics (STEM) fields, and are inspired to pursue STEM-related careers.

For more information about amateur radio on the ISS and Richard Garriott's flight, go to:

http://www.ariss.org
http://richardinspace.com
http://spaceadventures.com
http://www.arrl.org
http://www.amsat.org
http://www.spaceflight.nasa.gov/station/reference/radio/index.html
http://dln.nasa.gov/dln/content/catalog/details/?cid=634
http://www.nasa.gov/mission_pages/station/science/experiments/ARISS.html

Scout Jamboree on the Air:
http://www.scout.org/jota

Frank H. Bauer, KA3HDO
AMSAT-NA V.P. for Human Spaceflight Programs

ARISS International Chairman

[ANS thanks ARISS for the above information]

/EX

SB SAT @ AMSAT $ANS-265.03
Increased Solar Illumination Allows AO-16 Operations to Continue

AMSAT News Service Bulletin 265.03
   From AMSAT HQ SILVER SPRING, MD.
September 21, 2008
To All RADIO AMATEURS
BID: $ANS-258.03

Increased Solar Illumination Allows AO-16 Operations to Continue

AO-16 Command Station, Mark N8MH commanded AO-16 ON and restored it to voice mode on September 15. Mark commented, "At the time of my message we are up to 30 hours of continuous uptime, which is a 'good thing.' Our predictions regarding sustained activities seem to be right on the mark. Recording your observations about AO-16 at http://oscar.dcarr.org/ has been, and will continue to be, very helpful to us."

It is possible that the transmitter will turn OFF; this requires some commanding to get it running again, which means a pass over the Eastern US coast is required for a change in status. The command team is hoping that the bird will remain ON more often than OFF for the next several weeks.

Illumination projects (and subsequent temperature predictions) suggest that AO-16 might be able to sustain operations until early November. So, if you want some AO-16 contacts, you had better get them before then. After November 2008, it may be a long, long, time before the orbit provides favorable temperatures for the bird to remain operational for more than a few seconds or minutes at a time.

Current operational mode for AO-16

Mode FM Voice Repeater (Downlink is DSB)
Uplink : 145.9200 MHz FM
Downlink 437.0260 MHz SSB

[ANS thanks Mark, N8MH for the above information]

/EX

SB SAT @ AMSAT $ANS-265.04
Flight 4 of Falcon 1

AMSAT News Service Bulletin 265.04

From AMSAT HQ SILVER SPRING, MD.
September 21, 2008
To All RADIO AMATEURS
BID: $ANS-265.04

Flight 4 of Falcon 1

As mentioned in my update last month, we do expect to conduct a launch countdown in late September - as scheduled.

Having said that, it is still possible that we encounter an issue that needs to be investigated, which would delay launch until the next available window in late October. If preparations go smoothly, we will conduct a static fire on Saturday and launch sometime between Tuesday and Thursday (California time).

The SpaceX team worked hard to make this launch window, but we also took the time to review data from Flight 3 in detail. In addition to us reviewing the data, we had several outside experts check the data and conclusions. No flight critical problems were found apart from the thrust transient issue.

Flight 5 production is well underway with an expected January completion date, Flight 6 parts are on order and Flight 7 production will begin early next year. We are now in steady state production of Falcon 1 at a rate of one vehicle every four months, which we will probably step up to one vehicle every two to three months in 2010.

--Elon--

[ANS thanks Lee, KU4OS for the above information]

EX/

SB SAT @ AMSAT $ANS-265.05
Welcome Aboard AMSAT-Indonesia

AMSAT News Service Bulletin 265.05
From AMSAT HQ SILVER SPRING, MD.
September 21, 2008
To All RADIO AMATEURS
BID: $ANS-265.05

Welcome Aboard AMSAT-Indonesia

Hakim Satar YB0AN, contacted AMSAT-NA President Rick Hambly W2GPS this week with the announcement that AMSAT-Indonesia has formed. Rick replied, "Congratulations on the new AMSAT. I have added you to the AMSAT Web site and included various AMSAT-NA mail groups on this reply so everyone will receive the good news."

Two web links are available:
http://www.amsat-id.net

http://www.amsat.org/amsat-new/links/Asia.php

[ANS thanks Hakim Satar YB0AN, President AMSAT-Indonesia for
the above information]

/EX

SB SAT @ AMSAT $ANS-265.06
ARISS Status - 21 September 2008

AMSAT News Service Bulletin 265.06
From AMSAT HQ SILVER SPRING, MD.
September 21, 2008
To All RADIO AMATEURS
BID: $ANS-265.06

ARISS Status Report for the Week of September 15, 2008

1. Upcoming School Contact - Status

The ARISS team continues working to schedule the next contact. Contact approvals for the week have been delayed due to the closure of Johnson Space Center, which was closed for Hurricane Ike.

2. Boy Scouts Contact Successful

On Saturday, September 13, Prairielands Council Scouts attending the Space Jamboree at Chanute Air Force Base in Rantoul, Illinois participated in an ARISS contact with Greg Chamitoff, KD5PKZ. Telebridge station WH6PN in Hawaii assisted with the contact. Thirteen Scouts were able to ask 17 questions of the astronaut during the pass. Scout leaders replayed the question and answer session later in the day for all 3,000 Scouts attending the Jamboree. The audio was fed into the EchoLink AMSAT server and Internet Radio Linking Project (IRLP) Reflector 9010.
The News-Gazette printed a press release for the event:
http://www.news-gazette.com/news/local/2008/09/12/scouts_at_jamboree_set_to_talk_with_space_station_astronauts

3. ARISS at Launchfest

On Saturday, September 13, the public was invited to Goddard Space Flight Center in Greenbelt, Maryland to attend Launchfest. There were plenty of exhibits and demonstrations of space related activities including model rocket launches and space robots. The event also celebrated NASA's 50th anniversary. ARISS members supported Launchfest and distributed ARISS lithographs.

4. Garriott Prepares for Ham Radio Activities

Spaceflight participant Richard Garriott, W5KWQ, is scheduled to launch on October 12 with the Expedition 18 crew. He plans to take part in several ARISS activities while onboard the ISS. His activities include

speaking with children at Challenger Learning Centers throughout the
U.S. He mentioned his radio training in his recent blog. See:
http://www.richardinspace.com/index.cfm?fuseaction=blog.welcome&theyear=&the
month=&view=77#77

[ANS thanks Carol, KB3LKI, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Dee Interdonato, NB2F

```
From -6471088378500871219
X-Google-Thread: 10e8ad,32956dcd607936b2,start
X-Google-Thread: 10b9c8,32956dcd607936b2,start
X-Google-Attributes: gid10e8ad,gid10b9c8,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news2.google.com!newsfeed2.dallas1.level3.net!
news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-269 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Fri, 26 Sep 2008 08:43:09 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 1263
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000901c91fd5$60820a80$21861f80$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1222432989 12909 166.84.1.6 (26 Sep 2008 12:43:09 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Fri, 26 Sep 2008 12:43:09 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
```

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X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news2.google.com rec.radio.amateur.space:532 rec.radio.info:761
```

This report is organized into FIVE parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites
Part 5 (S5) - deborbited/returned satellites

SB SAT @ AMSAT W8ISS ANS-269.S1
WSR 269 Part 1 09/25/2008

AMSAT NEWS SERVICE BULLETIN 269.S1 FROM AMSAT HQ
SILVER SPRING, MD, September 25, 2008
TO ALL RADIO AMATEURS
BID: $ANS-269.S1

DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008

Status: OPERATIONAL
Current Mode: U/v - voice

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink: 435.530 to 435.570 MHz

Proposed Frequencies:
* Primary telemetry downlink: 145.870 MHz 1200 Baud BPSK AX.25 400mW
* Backup telemetry downlink: 145.930 MHz 1200 Baud BPSK AX.25 400mW
* Linear transponder passband downlink: 145.880 - 145.920 MHz
(inverting)
  400mW PEP
* Linear transponder passband uplink: 435.570 - 435.530 MHz
* Transponder mode beacon: 145.870 MHz CW (10dB below transponder PEP)

For the latest project status update please visit the Delfi-C3 web page:
http://www.delfic3.nl/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68
[07312008]
=====
VO-52 HAMSAT
Catalog number: 28650

Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.859330 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

To know what transponder is switched on please listen for the beacon that is active. Each transponder has a different beacon.
[08072008]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Software reload

Current Modes: FM Repeater - V/u
L/u
BBS - OFF
Telemetry - OFF

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.880 MHZ FM
145.880 MHz USB
145.920 MHz FM
1268.700 MHz FM 67Hz PL tone
Digital Downlinks: 435.150 MHz FM 38k4 Digital, PBP, 1 watt output
435.150 MHz FM 9k6 Digital, Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Digital, Pacsat Broadcast Protocol

```
                      1268.700 mhz FM 9k6 PBP Digital
Beacon:                435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[09252008]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002

Status: Operational.

Current Mode: V/u

Uplink:   145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute
timer
   on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the
repeater on
   and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset
the 10
   minute timer.
[05282007]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Operational - check operational schedule for current times!!
```

Current Mode: V/u

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage: http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's CW
telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts.htm
[0820007]
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993

Status: OFF - Recovery Efforts

Current Mode: V/u

Uplink: 145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[09252008]
=====
AO-16 PACSAT
Catalog number: 20439

Launch Date: January 22, 1990

Status: TESTING - VOICE

Current Mode: V/u

Uplink: 145.900 MHz FM 1200-baud Manchester FSK (reserved)
145.920 MHz FM VOICE
145.940 MHz FM 1200-baud Manchester FSK (reserved)
145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink: 437.026 MHz USB VOICE
(1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC 437.050 MHz RHCP
PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[03202008]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational depending on amount of Sunlight

Current Mode: Listen before transmitting

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz CW
145.972 MHz CW
435.100 MHz CW
2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/

AO-7 Usage Guidelines on the AO-7 Log and Resource Site located at:
http://www.planetemily.com/ao7

[05282007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Mode: FM Repeater - U/v
Voice - V/v
BBS - V/v
APRS - V/v
SSTV - OFF

Expedition 17 crew:
Commander: Sergey Volkov RU3DIS
Flight Engineer: Oleg Kononenko RN3DX
Flight Engineer: Greg Chamitoff KD5PKZ

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM
Worldwide packet downlink: 145.825 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS
RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is

NOT translated from Russian and posted.
[08072008]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-269.S2
WSR 269 Part 2 09/25/2008

AMSAT NEWS SERVICE BULLETIN 269.S2 FROM AMSAT HQ
SILVER SPRING, MD, September 25, 2008
TO ALL RADIO AMATEURS
BID: $ANS-269.S2

RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number:
Launch Date: May 23, 2008

Status: Operational

Curent Mode: Telemetry
             Audio
             Images

Downlinks: 435.315 MHz
           435.215 MHz
[05292008]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.
[11152007]
=====
CP3
Catalog Number: 31128
Launch Date: April 17,2007

Status: Operational

Current Mode: /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[07302007]

```
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: In Orbit

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder:  145.825 Mhz FM
[02052007]
=====
NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Operational

Current Mode: /u

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[10222007]
=====
GENESAT-1 ?O-??
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Current Mode: /u

Telemetry Beacon Downlink: 437.0670 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[01082007]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon:             437.2750 MHz CW

Callsign: JQ1YGW
```

```
Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
[03262007]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003

Status: Operational

Current Mode: /u

Beacon:     436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[01082007]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Semi-Operational - Constant Carrier only

Uplink:  1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan ? )

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[01082007]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW
```

```
[08132007]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Softawre Reload

Current Modes:   FM Repeater - V/u
                               L/s
                 BBS         - OFF
                 Telemetry   - OFF

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink:   145.880 MHZ FM
                       145.880 MHz USB
                       145.920 MHz FM
                      1268.700 MHz FM 67Hz PL tone
Digital Downlinks:     435.150 MHz FM 38k4 Digital, PBP, 1 watt output
                       435.150 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:        145.860 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      1268.700 mhz FM 9k6 PBP Digital
Beacon:                435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[09112008]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Hibernation until full sunlight in November

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink:        144.390 Mhz 1200 Baud
```

```
PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[09242007]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Current Modes: V/U
               L/U

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[09172007]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984

Status: Semi-operational.

Current Mode:  /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon:           435.025 MHz
Mode-S Beacon:      2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[01242008]
=====
RS-22 RADIO SPORT RS-22
```

```
Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only

Current Mode:  /u

CW Beacon - 435.352 MHz
            145.818 MHz
[08062007]
=====
Can X-2
Catalog number:
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web page:
http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[05292008]
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink: 437.425 MHz

For the latest project status update please visit the AAUSAT-II web
page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[05292008]
=====
CO-65 Cute-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink:  437.475 MHz 9k6 Packet
Uplink:   1267.600 Mhz

For the latest project status update please visit the Cute-1.7+APD II
web
```

page:
http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78
[07312008]
=====
Compass-1
Catalog number: 32787
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink: 437.275 Mhz CW
          437.405 MHz Packet

For the latest project status update please visit the Compass 1 web page:
http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52
[05292008]
=====
CO-66 Seeds II
Catalog number:
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink: 437.485 MHz

For the latest project status update please visit the Seeds 2 web page:
http://cubesat.aero.cst.nihon-u.ac.jp/english/main_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36
[07312008]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

```
Current Modes: FM Repeater - U/v
               Voice -       V/v
               BBS -         V/v
               APRS -        V/v
               SSTV -        OFF
```

Expedition 17 crew:
Commander: Sergey Volkov   RU3DIS

Flight Engineer: Oleg Kononenko   RN3DX
Flight Engineer: Greg Chamitoff   KD5PKZ

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM
Worldwide packet downlink: 145.825 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS
                     RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.
[06122008]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-269.S2
WSR 269 Part 2 09/25/2008

AMSAT NEWS SERVICE BULLETIN 269.S2 FROM AMSAT HQ
SILVER SPRING, MD, September 25, 2008
TO ALL RADIO AMATEURS
BID: $ANS-269.S2

RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number:
Launch Date: May 23, 2008

```
Status: Operational

Curent Mode: Telemetry
             Audio
             Images

Downlinks: 435.315 MHz
           435.215 MHz
[05292008]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode:  /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon:    435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.
[11152007]
=====
CP3
Catalog Number: 31128
Launch Date: April 17,2007

Status: Operational

Current Mode:  /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[07302007]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: In Orbit

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder:  145.825 Mhz FM
[02052007]
=====
NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006
```

```
Status: Operational

Current Mode: /u

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[10222007]
=====
GENESAT-1 ?O-??
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Current Mode: /u

Telemetry Beacon Downlink: 437.0670 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[01082007]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon:             437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
[03262007]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003

Status: Operational

Current Mode: /u

Beacon:     436.8475 MHz CW
```

```
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[01082007]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Semi-Operational - Constant Carrier only

Uplink:  1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan ? )

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[01082007]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW
[08132007]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Softawre Reload

Current Modes:   FM Repeater - V/u
                               L/s
                 BBS         - OFF
                 Telemetry   - OFF

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
```

Analog voice uplink: 145.880 MHZ FM
145.880 MHz USB
145.920 MHz FM
1268.700 MHz FM 67Hz PL tone
Digital Downlinks: 435.150 MHz FM 38k4 Digital, PBP, 1 watt output
435.150 MHz FM 9k6 Digital, Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Digital, Pacsat Broadcast Protocol
1268.700 mhz FM 9k6 PBP Digital
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[09112008]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Hibernation until full sunlight in November

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[09242007]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Current Modes: V/U
L/U

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks: 145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[09172007]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984

Status: Semi-operational.

Current Mode: /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon: 435.025 MHz
Mode-S Beacon: 2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[01242008]
=====
RS-22 RADIO SPORT RS-22
Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only

Current Mode: /u

CW Beacon - 435.352 MHz
            145.818 MHz
[08062007]
=====
Can X-2
Catalog number:
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web page:
http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[05292008]
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink: 437.425 MHz

For the latest project status update please visit the AAUSAT-II web page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[05292008]
=====
CO-65 Cute-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink: 437.475 MHz 9k6 Packet
Uplink: 1267.600 Mhz

For the latest project status update please visit the Cute-1.7+APD II web page:
http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78
[07312008]
=====
Compass-1
Catalog number: 32787
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink: 437.275 Mhz CW
          437.405 MHz Packet

For the latest project status update please visit the Compass 1 web page:
http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52
[05292008]
=====
CO-66 Seeds II
Catalog number:
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink: 437.485 MHz

For the latest project status update please visit the Seeds 2 web page:
http://cubesat.aero.cst.nihon-u.ac.jp/english/main_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36
[07312008]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Modes: FM Repeater - U/v
Voice - V/v
BBS - V/v
APRS - V/v
SSTV - OFF

Expedition 17 crew:

Commander:	Sergey Volkov	RU3DIS
Flight Engineer:	Oleg Kononenko	RN3DX
Flight Engineer:	Greg Chamitoff	KD5PKZ

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM
Worldwide packet downlink: 145.825 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS
                      RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.
[06122008]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-269.S4
WSR 269 Part 4 09/25/2008

AMSAT NEWS SERVICE BULLETIN 269.S4 FROM AMSAT HQ
SILVER SPRING, MD, September 25, 2008
TO ALL RADIO AMATEURS
BID: $ANS-269.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE PROPOSED FOR LAUNCH AT
THIS TIME:

Phase 5a Mars Mission AO-??
Catalog Number:
Proposed Launch Date: 2009 or 2011

Status: Design Phase

For the latest project status update please visit the AMSAT-DL P5-A web
page:
http://ticket-to-mars.org
[01222007]
=====
PHASE 3E AO-??
Catalog number:
Proposed Launch Date: Late 2008

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web
page:
http://www.amsat-dl.org/p3e/
[01222007]
=====
Eagle AO-??
Catalog Number:
Proposed Launch Date: Early/Mid 2009

Status: Design Phase

For the latest project status updates please visit the AMSAT-NA webpage:
http://www.amsat.org
[01222007]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-269.S5
WSR 269 Part 5 09/25/2008

AMSAT NEWS SERVICE BULLETIN 269.S5 FROM AMSAT HQ
SILVER SPRING, MD, September 25, 2008
TO ALL RADIO AMATEURS
BID: $ANS-269.S5

THE FOLLOWING SATELLITES HAVE RE-ENTERED OR HAVE BEEN RETURNED SAFELY:

NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Operational
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

```
Main Downlink:      145.825 Mhz FM APRS AX25
APRS Uplink:        145.825 MHz FM APRS AX25
Voice/PSK31 Uplink:  28.120 MHz
```

Packet to Voice ID: RAFT
[06112007]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

```
From 592438210932524512
X-Google-Thread: fb93b,fbc2038152a47bb2,start
X-Google-Thread: 1086ba,fbc2038152a47bb2,start
X-Google-Thread: 1031e5,fbc2038152a47bb2,start
X-Google-Thread: 10e8ad,fbc2038152a47bb2,start
X-Google-Thread: 114aac,fbc2038152a47bb2,start
X-Google-Attributes:
gidfb93b,gid1086ba,gid1031e5,gid10e8ad,gid114aac,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!postnews.google.com!y38g2000hsy.googlegroups.com!not-for-
mail
From: bluebonysh@gmail.com
Newsgroups: rec.drugs.cannabis,rec.equestrian,rec.folk-
dancing,rec.radio.amateur.space,rec.radio.shortwave
Subject: I AM DOMME HEAR ME ROAR.25 year old Woman BellaPura
Date: Fri, 26 Sep 2008 06:17:25 -0700 (PDT)
Organization: http://groups.google.com
Lines: 3
Message-ID: <756b0c10-c2e6-4aa4-9b1a-a55f5613934b@y38g2000hsy.googlegroups.com>
NNTP-Posting-Host: 92.112.131.200
Mime-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 7bit
X-Trace: posting.google.com 1222435045 29375 127.0.0.1 (26 Sep 2008 13:17:25 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Fri, 26 Sep 2008 13:17:25 +0000 (UTC)
Complaints-To: groups-abuse@google.com
Injection-Info: y38g2000hsy.googlegroups.com; posting-host=92.112.131.200;
     posting-account=svIiVAoAAAD194OoxVvciHsrquGonmXe
User-Agent: G2/1.0
X-HTTP-UserAgent: Mozilla/4.0 (compatible; MSIE 7.0; Windows NT 5.1; WebMoney
     Advisor; Avant Browser;  Embedded Web Browser from: http://bsalsa.com/; .NET
     CLR 2.0.50727),gzip(gfe),gzip(gfe)
Xref: g2news2.google.com rec.drugs.cannabis:3562 rec.equestrian:47013 rec.folk-
dancing:552 rec.radio.amateur.space:533 rec.radio.shortwave:45260

25 year old Woman BellaPura in Saint Louis, Looking For: Men, Women,
Couples for erotic email exchange, phone fantasies, performing only,
watching only or active participation http://ragdai.info/BellaPura.htm



From 5317669102846033615
X-Google-Thread: 10e8ad,d2dee6f788265833,start
X-Google-Thread: 10b9c8,d2dee6f788265833,start
X-Google-Attributes: gid10e8ad,gid10b9c8,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx02.iad.newshosting.com!newshosting.com!
198.186.194.249.MISMATCH!transit3.readnews.com!news-out.readnews.com!news-
xxxfer.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
```

```
Subject: ANS-272 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sat, 27 Sep 2008 21:19:58 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 306
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000e01c92108$4d290a40$e77b1ec0$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix1.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1222564797 20582 166.84.1.1 (28 Sep 2008 01:19:57 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 28 Sep 2008 01:19:57 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news1.google.com rec.radio.amateur.space:102 rec.radio.info:256
```

AMSAT NEWS SERVICE
ANS-272

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

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***************************************************************
***  2008 AMSAT Space Symposium and Annual General Meeting  ***
***            October 24-26 in Atlanta, Georgia            ***
*** http://www.amsat.org/amsat-new/symposium/2008/index.php ***
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In this edition:

* AMSAT Symposium Presentations Posted
* ARISS Confirms Amateur Radio Hardware Deliveries
* Richard Garriott Operations Call for Support

* Call For AMSAT Journal Articles
* AMSAT-Italy Announces Joint VERTA-1 Satellite Project With AMSAT-UK
* Satellite Shorts From All Over
* ARISS Status Report for the Week of September 22, 2008

SB SAT @ AMSAT $ANS-272.01
AMSAT Symposium Presentations Posted

AMSAT News Service Bulletin 272.01
>From AMSAT HQ SILVER SPRING, MD.
September 28, 2008
To All RADIO AMATEURS
BID: $ANS-272.01

The list of presentations for the 2008 AMSAT Symposium Oct 24-26 is now posted on the AMSAT web site. There is a link on the front page and also on the Symposium information page. We have a great line up of speakers, so make your plans to attend the Symposium in Atlanta. The AMSAT board meeting Oct 23-24 preceeds the Symposium at the same hotel. Please make your reservations soon and join us to get the latest news and information about the organization, plans for future satellites and technical information.

Follow this link for the latest Symposium information:
http://www.amsat.org/amsat-new/symposium/2008/index.php

We are about to lose our room block at the Buckhead Doubletree in Atlanta. If you are planning to attend the 2008 AMSAT Symposium, you need to make your room reservations ASAP. Their direct phone number is 404-231-1234. The room rate is $125 per night and the Group Code is ASG.

[ANS thanks the 2008 Symposium Committee for the above information]

/EX

SB SAT @ AMSAT $ANS-272.02
ARISS Confirms Amateur Radio Hardware Deliveries

AMSAT News Service Bulletin 272.02
>From AMSAT HQ SILVER SPRING, MD.
September 28, 2008
To All RADIO AMATEURS
BID: $ANS-272.02

The ARISS team received confirmation from Sergey, RV3DR, that the recent Progress flight delivered the flight backup D-700, a David Clark Headset for the Ericsson system, and an additional VOX box and cables to support the computer-operated SSTV system. The D700 may be installed as early as late this week, depending on crew availability. The flight backup will not provide a significant change in ARISS operations, making it easier for the crew to change program modes.

Richard Garriott plans to take a Kenwood VC-H1 SSTV communicator with him on-board the Soyuz for his flight and leave it aboard the ISS for future ARISS use. The VC-H1 has completed all hardware certification on the US and Russian sides. The final test, an EMI radiated emissions test, was performed last week and the test data was delivered to Sergey Samburov, RV3DR in Russia this week. The VC-H1 provides a very simple interface for ISS crew members and does not require the use of a computer. Computer usage has been a real challenge for ARISS, so the VC-H1 represents a lesson learned to improve ARISS operations.

[ANS thanks ARISS International Chairman Frank Bauer, KA3HDO for the above information]

/EX

SB SAT @ AMSAT $ANS-272.03
Richard Garriott Operations Call for Support

AMSAT News Service Bulletin 272.03
>From AMSAT HQ SILVER SPRING, MD.
September 28, 2008
To All RADIO AMATEURS
BID: $ANS-272.03

Early during Richard Garriott's flight, he expects to setup the VC-H1 SSTV system and autonomously transmit a new Earth image every 3 minutes. He hopes to have this system on a great deal of his flight. We encourage the ham community to bring SSTV equipment into schools and download these images in real-time.

The ARISS team also plans to display images from hams around the world on a special on a web/blog site. A beta site has been developed and will be rolled out to the ham community in the near future.

To successfully implement the on-line SSTV picture site and support it 24/7 during Richard's flight, we will need some savvy individuals that can sort through the many SSTV photos that ARISS will receive and keep the SSTV site up to date in near real time. Some computer skills will be required. We are looking for global support from a few individuals in each international region to make this happen. That way we will not be asking individuals to volunteer all-night to realize this project. If you are interested in helping on this, please e-mail Frank Bauer, KA3HDO directly via ka3hdo@amsat.org.

[ANS thanks ARISS International Chairman Frank Bauer, KA3HDO for the above information]

/EX

SB SAT @ AMSAT $ANS-272.04
Call For AMSAT Journal Articles

AMSAT News Service Bulletin 272.04
>From AMSAT HQ SILVER SPRING, MD.
September 28, 2008
To All RADIO AMATEURS
BID: $ANS-272.04

AMSAT Journal Editor Ed, WA4SWJ said this week, "If you have articles for the Journal I need them now! Please, if you have an article to contribute to the Journal, get it to me right away. Do not delay. I want to get the Journal back on schedule."

The deadline for contributions to the Journal is the 15th of the ODD numbered months (1-3-5-7-9-11) throughout the year. The intent is to get the Journal released to the printer the first week of each EVEN numbered month.

[ANS thanks Ed, WA4SWJ for the above information]

/EX

SB SAT @ AMSAT $ANS-272.05
AMSAT-Italy Announces Joint VERTA-1 Satellite Project With AMSAT-UK

AMSAT News Service Bulletin 272.05
>From AMSAT HQ SILVER SPRING, MD.
September 28, 2008
To All RADIO AMATEURS
BID: $ANS-272.05

AMSAT-Italy President Florio LX2DV/IW2NMB said this week, "AMSAT-Italia along with AMSAT-UK has the great pleasure of announcing our joint application to launch the proposed "EuroDAST" micro-satellite onboard the Arianespace VEGA launcher, with its VERTA-1 flight opportunity."

Florio continues, "Although it be launched with a European Launcher and is based on an AMSAT-Italia mission concept, the development of such micro-satellite is open to worldwide contributions in hardware and software." Any individuals or groups of interested amateurs, universities, research centers having space based hardware or software concepts are invited to submit their ideas by e-mail to: cd@amsat.it.

More information about the Arianespace VEGA mission can be seen at: http://www.arianespace.com/launch-services-vega/vega_overview.asp.

[ANS thanks AMSAT-Italy for the above information]

/EX

SB SAT @ AMSAT $ANS-272.06
Satellite Shorts From All Over

AMSAT News Service Bulletin 272.06
>From AMSAT HQ SILVER SPRING, MD.
September 28, 2008
To All RADIO AMATEURS
BID: $ANS-272.06

+ Information about a Google Earth plug-in plotting orbiting earth satellites can be found at:

http://www.universetoday.com/2008/09/05/explore-earths-satellites-with-googl
e-earth/
(watch line wrap - this URL is a single line).

+ Howard, G6LVB has posted video of the successful ARISS School Contact with the Michael Sobell Sinai School, Harrow, United Kingdom at:
http://www.g6lvb.com/images/MichaelSobellSinaiSchoolHi.wmv 147Mb
http://www.g6lvb.com/images/MichaelSobellSinaiSchoolMed.wmv 45Mb
Howard recommends you download them first then play them, rather than attempting to stream. An MP4 format of the video is available at:
http://www.uk.amsat.org/content/view/669/68/

+ Congratulations to F3ZD on your 5000th contact via AO-7. Bob, W7LRD reports AO-7 contacts with OH8MBN and AL1F in Alaska.

+ The AO-27 command team will post updates on getting this satellite back on at http://www.ao27.org.

+ An interesting photo tour of the Baikonur Cosmodrome is at:

http://www.boston.com/bigpicture/2008/09/the_baikonur_cosmodrome.html#photo6
(watch line wrap - this URL is a single line).

+ Watch http://spaceweather.com/flybys/ & http://www.heavens-above.com for visual sighting opportunites of the Shenzhou-7 spacecraft, ISS, Jules Verne, and the Early Ammonia Service jettisoned from the ISS.

+ Have you forgotten your AMSAT Store account name or password? If you have forgotten or misplaced your account name or password for the AMSAT Store, simply create a new one. We hope to have someone working on new software to give your password in the future. Until then go ahead and make your reservations or purchases with a new account.

[ANS thanks everyone for the above information]

/EX

SB SAT @ AMSAT $ANS-272.07
ARISS Status Report for the Week of September 22, 2008

AMSAT News Service Bulletin 272.07
>From AMSAT HQ SILVER SPRING, MD.
September 28, 2008
To All RADIO AMATEURS
BID: $ANS-272.07

1. Upcoming School Contacts - Status

The ARISS team continues its work on scheduling the next school radio contacts. Johnson Space Center was closed the week of September 15 due to Hurricane Ike, delaying contact approvals. Scheduling is expected to resume this week.

2. Richard Garriott - ISS Flight

Richard Garriott, W5KWQ, will fly with the Expedition 18 crew to the ISS on Soyuz TMA-13 which is scheduled to launch on October 12, 2008. He plans to participate in several ARISS contacts during his mission. A press release has been posted.
See: http://www.rac.ca/ariss/Garriott%20PR%20Final.doc

3. GSFC LaunchFest Update

On Saturday, September 13, Goddard Space Flight Center (GSFC) in Greenbelt, Maryland held a LaunchFest event, during which the Center's personnel manned exhibits and provided space related demonstrations for the public. ARISS supported LaunchFest with its own exhibit booth, providing information, distributing lithographs and generating much interest in the program. Approximately 13,000 attended the event. See:
http://www.nasa.gov/centers/goddard/news/topstory/2008/launchfest_recap.html

4. ASTC - ARISS Presentation

The Association of Science - Technology Centers (ASTC) will hold its 2008 annual conference on October 18-21 in Philadelphia, Pennsylvania. Ten presenters from NASA will describe NASA's education and outreach programs and NASA resources. ARISS Deputy Program Manager Mark Steiner, K3MS, will give an ARISS overview. For more information on this event, see: http://www.astc.org/conference/index.htm

5. ARISS Volunteer Receives Award

Nancy Rabel Hall, a Research Scientist working at NASA Glenn Research Center and the current president of the NASA Glenn Amateur Radio Club, was the 15th recipient of the Allan Severson, AB8P memorial award. The Ohio ARRL (American Radio Relay League) Section Manager presents this award each year. Hall has assisted three local schools with ARISS contacts. For more information, see:

http://www.arrlohio.org/arrl_allan_severson.htm

[ANS thanks Carol, KB3LKI for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the
President's Club. Members of the President's Club, as sustaining donors
to AMSAT Project Funds, will be eligible to receive additional benefits.
Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM
K9JKM at amsat dot org

```
From -8133512264783792378
X-Google-Thread: fb93b,755aca1c7869868a,start
X-Google-Thread: 1086ba,755aca1c7869868a,start
X-Google-Thread: 1031e5,755aca1c7869868a,start
X-Google-Thread: 10e8ad,755aca1c7869868a,start
X-Google-Thread: 114aac,755aca1c7869868a,start
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X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!postnews.google.com!z72g2000hsb.googlegroups.com!not-for-
mail
From: bluebonysh@gmail.com
Newsgroups: rec.drugs.cannabis,rec.equestrian,rec.folk-
dancing,rec.radio.amateur.space,rec.radio.shortwave
Subject: Johshe 31 year old Woman in Santa Ana, California. Find Men for
     1-on-1 sex, Bondage
Date: Sun, 28 Sep 2008 10:49:10 -0700 (PDT)
Organization: http://groups.google.com
Lines: 3
Message-ID: <19ec999b-b68a-4544-bfc4-6fb039f14080@z72g2000hsb.googlegroups.com>
NNTP-Posting-Host: 92.112.149.66
Mime-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 7bit
X-Trace: posting.google.com 1222624151 29636 127.0.0.1 (28 Sep 2008 17:49:11 GMT)
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NNTP-Posting-Date: Sun, 28 Sep 2008 17:49:11 +0000 (UTC)
Complaints-To: groups-abuse@google.com
Injection-Info: z72g2000hsb.googlegroups.com; posting-host=92.112.149.66;
     posting-account=svIiVAoAAAD194OoxVvciHsrquGonmXe
User-Agent: G2/1.0
X-HTTP-UserAgent: Mozilla/4.0 (compatible; MSIE 7.0; Windows NT 5.1; WebMoney
     Advisor; Avant Browser;  Embedded Web Browser from: http://bsalsa.com/; .NET
     CLR 2.0.50727),gzip(gfe),gzip(gfe)
Xref: g2news1.google.com rec.drugs.cannabis:436 rec.equestrian:9891 rec.folk-
dancing:105 rec.radio.amateur.space:103 rec.radio.shortwave:12815

Johshe 31 year old Woman in Santa Ana, California. Find Men for 1-on-1
sex, Bondage, Discipline, Discreet Relationship or Group sex
http://ragdai.info/Johshe3.htm



From 750087770720098394
X-Google-Thread: fb93b,f1748c0f1a46556e,start
X-Google-Thread: 1086ba,f1748c0f1a46556e,start
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X-Google-Thread: 114aac,f1748c0f1a46556e,start
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X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!postnews.google.com!
m44g2000hsc.googlegroups.com!not-for-mail
From: bluebonysh@gmail.com
Newsgroups: rec.drugs.cannabis,rec.equestrian,rec.folk-
dancing,rec.radio.amateur.space,rec.radio.shortwave
Subject: Super virtual girl. Sexy. Must look ALL!
Date: Mon, 29 Sep 2008 08:45:51 -0700 (PDT)
Organization: http://groups.google.com
Lines: 1
Message-ID: <41d0f6fb-a813-4080-b4f5-4ce7ec980f3f@m44g2000hsc.googlegroups.com>
NNTP-Posting-Host: 92.112.155.134
Mime-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 7bit
X-Trace: posting.google.com 1222703152 16245 127.0.0.1 (29 Sep 2008 15:45:52 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Mon, 29 Sep 2008 15:45:52 +0000 (UTC)
Complaints-To: groups-abuse@google.com
Injection-Info: m44g2000hsc.googlegroups.com; posting-host=92.112.155.134;
     posting-account=svIiVAoAAAD194OoxVvciHsrquGonmXe
User-Agent: G2/1.0
X-HTTP-UserAgent: Mozilla/4.0 (compatible; MSIE 7.0; Windows NT 5.1; WebMoney
     Advisor; Avant Browser;  Embedded Web Browser from: http://bsalsa.com/; .NET
     CLR 2.0.50727),gzip(gfe),gzip(gfe)
Xref: g2news1.google.com rec.drugs.cannabis:438 rec.equestrian:10055 rec.folk-
dancing:107 rec.radio.amateur.space:104 rec.radio.shortwave:12884

Super real virtual girl. Sexy. Must look ALL http://ragdai.info/video.htm



From -6030805830295487281
X-Google-Thread: fb93b,b99d0e6fb774c5e8,start
X-Google-Thread: 1086ba,b99d0e6fb774c5e8,start
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X-Google-Thread: 10e8ad,b99d0e6fb774c5e8,start
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X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!postnews.google.com!25g2000hsx.googlegroups.com!not-for-
mail
From: bluebonysh@gmail.com
Newsgroups: rec.drugs.cannabis,rec.equestrian,rec.folk-
dancing,rec.radio.amateur.space,rec.radio.shortwave
Subject: Webcam: Landie,19 year.New Jersey. Viens me voir et tu verras!
Date: Tue, 30 Sep 2008 04:44:58 -0700 (PDT)
Organization: http://groups.google.com
Lines: 2
Message-ID: <b80f18e8-9536-4eb0-b196-34f67d4875de@25g2000hsx.googlegroups.com>
NNTP-Posting-Host: 92.112.142.130
Mime-Version: 1.0
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Content-Transfer-Encoding: 7bit
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X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Tue, 30 Sep 2008 11:44:59 +0000 (UTC)
Complaints-To: groups-abuse@google.com
Injection-Info: 25g2000hsx.googlegroups.com; posting-host=92.112.142.130;
     posting-account=svIiVAoAAAD194OoxVvciHsrquGonmXe
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     Advisor; Avant Browser;  Embedded Web Browser from: http://bsalsa.com/; .NET
     CLR 2.0.50727),gzip(gfe),gzip(gfe)
Xref: g2news1.google.com rec.drugs.cannabis:439 rec.equestrian:10156 rec.folk-
dancing:108 rec.radio.amateur.space:105 rec.radio.shortwave:12957

Webcam: Landie,19 year.New Jersey. Viens me voir et tu verras!
http://ragdai.info/landie1989.htm


From 5626961039691160807
X-Google-Thread: 10e8ad,c6c0a966eef84526,start
X-Google-Thread: 10b9c8,c6c0a966eef84526,start
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X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news4.google.com!feeder.news-service.com!
news.astraweb.com!border1.a.newsrouter.astraweb.com!tiscali!
newsfeed2.ip.tiscali.net!209.197.12.242.MISMATCH!nx01.iad.newshosting.com!
newshosting.com!198.186.194.249.MISMATCH!transit3.readnews.com!news-
xxxfer.readnews.com!news-out.readnews.com!transit4.readnews.com!panix!
rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-276 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Sat, 4 Oct 2008 09:29:22 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 1451
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NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
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Content-Transfer-Encoding: 7bit
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X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sat, 4 Oct 2008 13:29:22 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
x-cr-hashedpuzzle: AAHr Arsh BG9h BMTw BU1w BiaE Bsly C0vn C/7w DG9K DeTU FglD
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Xref: g2news2.google.com rec.radio.amateur.space:538 rec.radio.info:775
```

This report is organized into FIVE parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites
Part 5 (S5) - deborbited/returned satellites

SB SAT @ AMSAT W8ISS ANS-276.S1
WSR 276 Part 1 10/02/2008

AMSAT NEWS SERVICE BULLETIN 276.S1 FROM AMSAT HQ
SILVER SPRING, MD, October 02, 2008
TO ALL RADIO AMATEURS
BID: $ANS-276.S1

DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008

Status: OPERATIONAL
Current Mode: U/v - voice

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink: 435.530 to 435.570 MHz

Proposed Frequencies:
Primary telemetry downlink: 145.870 MHz 1200 Baud BPSK AX.25 400mW
Backup telemetry downlink: 145.930 MHz 1200 Baud BPSK AX.25 400mW
Linear transponder passband downlink: 145.880 - 145.920 MHz (inverting)
400mW
Linear transponder passband uplink: 435.570 - 435.530 MHz
Transponder mode beacon: 145.870 MHz CW (10dB below transponder PEP)

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68
[07312008]
=====
VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.859330 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is
active. Each transponder has a different beacon.
[08072008]
=====

AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Software reload

Current Modes: FM Repeater - V/u
BBS - L/u
Telemetry - /u

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.880 MHZ FM
145.880 MHz USB
145.920 MHz FM
1268.700 MHz FM 67Hz PL tone
Digital Downlinks: 435.150 MHz FM 38k4 Digital, PBP, 1 watt output
435.150 MHz FM 9k6 Digital, Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Digital, Pacsat Broadcast Protocol
1268.700 mhz FM 9k6 PBP Digital
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[10022008]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002

Status: Operational.

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer
   on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on
   and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10
   minute timer.
[05282007]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Operational - check operational schedule for current times!!

Current Mode: V/u

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage: http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID

=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's CW
telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts.htm
[0820007]
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993

Status: OFF - Recovery Efforts

Current Mode: V/u

Uplink: 145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[09252008]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: TESTING - VOICE

Current Mode: V/u

Uplink: 145.900 MHz FM 1200-baud Manchester FSK (reserved)
                145.920 MHz FM VOICE
                145.940 MHz FM 1200-baud Manchester FSK (reserved)
                145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink: 437.026 MHz USB VOICE
                (1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC 437.050 MHz RHCP
   PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[03202008]
=====

AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational depending on amount of Sunlight

Current Mode: Listen before transmitting

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/

AO-7 Usage Guidelines on the AO-7 Log and Resource Site located at:
http://www.planetemily.com/ao7
[05282007]

=====

INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Mode: FM Repeater - U/v
              Voice -   V/v
              BBS -   V/v
              APRS -   V/v
              SSTV -   OFF

Expedition 17 crew:

Commander:	Sergey Volkov	RU3DIS
Flight Engineer:	Oleg Kononenko	RN3DX
Flight Engineer:	Greg Chamitoff	KD5PKZ

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM
Worldwide packet downlink: 145.825 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM

Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS
                     RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.
[08072008]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-276.S2
WSR 276 Part 2 10/02/2008

AMSAT NEWS SERVICE BULLETIN 276.S2 FROM AMSAT HQ
SILVER SPRING, MD, October 02, 2008
TO ALL RADIO AMATEURS
BID: $ANS-276.S2

RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number:
Launch Date: May 23, 2008

Status: Operational

Curent Mode: Telemetry
             Audio
             Images

Downlinks: 435.315 MHz
           435.215 MHz
[05292008]
=====

```
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode:  /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon:    435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.
[11152007]
=====
CP3
Catalog Number: 31128
Launch Date: April 17,2007

Status: Operational

Current Mode:  /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[07302007]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: In Orbit

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder:  145.825 Mhz FM
[02052007]
=====
NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Operational

Current Mode: /u

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[10222007]
```

```
=====
GENESAT-1 ?O-??
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Current Mode: /u

Telemetry Beacon Downlink: 437.0670 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[01082007]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon:             437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
[03262007]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003

Status: Operational

Current Mode: /u

Beacon:     436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[01082007]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006
```

```
Status: Semi-Operational - Constant Carrier only

Uplink:  1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan ? )

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[01082007]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW
[08132007]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Softawre Reload

Current Modes:   FM Repeater - V/u
                 BBS         - L/u
                 Telemetry   -  /u

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink:   145.880 MHZ FM
                       145.880 MHz USB
                       145.920 MHz FM
                      1268.700 MHz FM 67Hz PL tone
Digital Downlinks:     435.150 MHz FM 38k4 Digital, PBP, 1 watt output
                       435.150 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:        145.860 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      1268.700 mhz FM 9k6 PBP Digital
Beacon:                435.150 MHz
```

```
Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[10022008]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Hibernation until full sunlight in November

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink:        144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[09242007]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Current Modes: V/U
               L/U

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM
```

```
Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[09172007]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984

Status: Semi-operational.

Current Mode:  /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon:          435.025 MHz
Mode-S Beacon:     2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[01242008]
=====
RS-22 RADIO SPORT RS-22
Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only

Current Mode:  /u

CW Beacon - 435.352 MHz
            145.818 MHz
[08062007]
=====
Can X-2
Catalog number:
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web page:
http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[05292008]
```

```
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink: 437.425 MHz

For the latest project status update please visit the AAUSAT-II web
page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[05292008]
=====
CO-65 Cute-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink:  437.475 MHz 9k6 Packet
Uplink:   1267.600 Mhz

For the latest project status update please visit the Cute-1.7+APD II
web
page:
http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78
[07312008]
=====
Compass-1
Catalog number: 32787
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink: 437.275 Mhz CW
          437.405 MHz Packet

For the latest project status update please visit the Compass 1 web
page:
http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52
[05292008]
=====
CO-66 Seeds II
```

Catalog number:
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink: 437.485 MHz

For the latest project status update please visit the Seeds 2 web page:
http://cubesat.aero.cst.nihon-u.ac.jp/english/main_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36
[07312008]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Modes: FM Repeater - U/v
Voice - V/v
BBS - V/v
APRS - V/v
SSTV - OFF

Expedition 17 crew:
Commander: Sergey Volkov RU3DIS
Flight Engineer: Oleg Kononenko RN3DX
Flight Engineer: Greg Chamitoff KD5PKZ

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM
Worldwide packet downlink: 145.825 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS
RZ3DZR

USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.
[06122008]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-276.S3
WSR 276 Part 3 10/02/2008

AMSAT NEWS SERVICE BULLETIN 276.S3 FROM AMSAT HQ
SILVER SPRING, MD, October 02, 2008
TO ALL RADIO AMATEURS
BID: $ANS-276.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

CP4
Catalog Number: 31122
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon: 437.325 MHz CW

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=79
[10022008]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Non-Operational

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon: 437.2750 MHz CW

```
Callsign: JR8YJT
[10152007]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency:  437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink:        437.250 MHz FM 67Hz CTCSS
Voice Downlink:     2401.835 MHz FM
Packet Up/Downlink:  437.250 MHz 9k6 packet
Packet Downlink     2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non=Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[08132007]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink:   435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
```

[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Non-Operational

Uplinks: 145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[007302007]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, callsign KE6QMD, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11

```
BBS:                SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink:   145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
V-band:   145.840 -  145.990 MHz CW/LSB
U-band:   435.550 -  435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks
---------
S2-band:  2401.225 -  2401.475 MHz CW/USB
K-band:  24048.010 - 24048.060 MHz CW/USB
Beacon:   2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)
----------------------------
BEACON   General Beacon (GB)    Middle Beacon (MB)    Engineering Beacon
(EB)
2 m       none                    145.898 MHz           none
70cm      435.438 MHz             435.588 MHz           435.838 MHz
13cm(1)  2400.188 MHz            2400.338 MHz          2400.588 MHz
13cm(2)  2401.173 MHz            2401.323 MHz          2401.573 MHz
3cm     10450.975 MHz           10451.125 MHz         10451.375 MHz
1.5cm   24047.885 MHz           24048.035 MHz         24048.285 MHz
[07162007]
```

```
=====
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink:    145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site
at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: ?
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater:         436.250 MHz

Uplinks: Mode B Repeater:  145.825 MHz
Mode J Digipeater:         145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only
```

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink: 145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012006]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

```
Status: PSK carrier only

Current Mode:

Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM
```

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Operational

Uplink: 435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons: 435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink: 145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks: 145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
LIBERTAD-1
Catalog Number: 31129
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink: 145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25

```
[10222007]
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990

Status: CW Beacon only

Uplinks:          145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink:      437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[01222007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
[05012006]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet: Non-Operational
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon:   145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink  29.4000 -  29.5000 MHz SSB/CW
```

```
Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
Beacons:   29.450 MHz
          435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon 1:  29.352 MHz (intermittent)
Beacon 2:  29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
```

Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB

Beacon: 145.860 MHz

Robot: 145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-276.S4
WSR 276 Part 4 10/02/2008

AMSAT NEWS SERVICE BULLETIN 276.S4 FROM AMSAT HQ
SILVER SPRING, MD, October 02, 2008
TO ALL RADIO AMATEURS
BID: $ANS-276.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE PROPOSED FOR LAUNCH AT THIS TIME:

Phase 5a Mars Mission AO-??
Catalog Number:
Proposed Launch Date: 2009 or 2011

Status: Design Phase

For the latest project status update please visit the AMSAT-DL P5-A web page:
http://ticket-to-mars.org
[01222007]
=====
PHASE 3E AO-??
Catalog number:
Proposed Launch Date: Late 2008

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/
[01222007]
=====
Eagle AO-??
Catalog Number:
Proposed Launch Date: Early/Mid 2009

Status: Design Phase

For the latest project status updates please visit the AMSAT-NA webpage:
http://www.amsat.org
[01222007]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-276.S5
WSR 276 Part 5 10/02/2008

AMSAT NEWS SERVICE BULLETIN 276.S5 FROM AMSAT HQ
SILVER SPRING, MD, October 02, 2008
TO ALL RADIO AMATEURS
BID: $ANS-276.S5

THE FOLLOWING SATELLITES HAVE RE-ENTERED OR HAVE BEEN RETURNED SAFELY:

NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Operational
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

```
Main Downlink:      145.825 Mhz FM APRS AX25
APRS Uplink:        145.825 MHz FM APRS AX25
Voice/PSK31 Uplink:  28.120 MHz
```

Packet to Voice ID: RAFT
[06112007]

NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

- AMSAT News Service (ANS)
- General satellite discussion (AMSAT-BB)
- Orbit data (KEPS)
- Manned space missions (SAREX)
- District of Columbia area (AMSAT-DC)
- New England area (AMSAT-NE)
- AMSAT Educational Liaison mailing list (AMSAT-EDU)
- AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

```
From 9083160538064746797
X-Google-Thread: 10e8ad,72a05e3981987e02,start
X-Google-Thread: 10b9c8,72a05e3981987e02,start
X-Google-Attributes: gid10e8ad,gid10b9c8,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx01.iad.newshosting.com!newshosting.com!
198.186.194.249.MISMATCH!news-out.readnews.com!transit3.readnews.com!panix!
rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-279 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sun, 5 Oct 2008 09:04:45 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 245
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000901c926ea$ebc04960$c340dc20$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1223211885 8890 166.84.1.6 (5 Oct 2008 13:04:45 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 5 Oct 2008 13:04:45 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to            rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news1.google.com rec.radio.amateur.space:107 rec.radio.info:266
```

AMSAT NEWS SERVICE
ANS-279

```
*************************************************************
***  2008 AMSAT Space Symposium and Annual General Meeting ***
***            October 24-26 in Atlanta, Georgia          ***
*************************************************************
```

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
- AMSAT Symposium Just Weeks Away
- First Chinese Amateur Radio Satellite to be launched in June 2009
- General Astrodynamics Library v0.4.0 Released
- Falcon 1 Rocket Successfully Launches to Orbit
- ARISS Status - 29 September 2008

SB SAT @ AMSAT $ANS-279.01
AMSAT Symposium Just Weeks Away

AMSAT News Service Bulletin 279.01
From AMSAT HQ SILVER SPRING, MD.
October 5, 2008
To All RADIO AMATEURS
BID: $ANS-279.01

The 2008 AMSAT Space Symosium in Atlanta, GA is just weeks away, October 24-26. This promises to be a very interesting symposium with presentations scheduled on a wide range of topics from the simplest operations with an HT to some of the latest ideas on digital communications. Every orbit; LEO, MEO, Geo and beyond will be covered. There will also be an extended general membership meeting as well as the ever popular Field Ops Breakfast.

Martha reminds everyone that room block with the special $125 per night rate for the 2008 AMSAT Space Symposium will be gone on October 8th. PLEASE make your reservations as soon as possible. The phone number is 404-231-1234.

The AMSAT board meeting preceeds the Symposium at the same hotel Oct 23-24.

[ANS thanks the 2008 Symposium Committee for the above information]

/EX

SB SAT @ AMSAT $ANS-279.02

First Chinese Amateur Radio Satellite to be launched in June 2009

AMSAT News Service Bulletin 279.02
  From AMSAT HQ SILVER SPRING, MD.
October 5, 2008
To All RADIO AMATEURS
BID: $ANS-279.02

Michael Chen, BD5RV/4, reports that he recently received an update from Alan, BA1DU, on the progress of the first Chinese amateur satellite. Things are now going smoothly. This satellite was formerly named CAS-1 and is now XW-1. It carries a beacon and three cross band transponders: FM, linear, and digital.

The satellite is planned to be launched into a Sun synchronous orbit in June 2009 by a CZ-2C rocket in Taiyuan Satellite Launch Center in North China.

[ANS thanks Michael, BD5RV/4, for the above information]

/EX

SB SAT @ AMSAT $ANS-279.03
General Astrodynamics Library v0.4.0 Released

AMSAT News Service Bulletin 279.03
  From AMSAT HQ SILVER SPRING, MD.
October 5, 2008
To All RADIO AMATEURS
BID: $ANS-279.03

Version 0.4.0 of the General Astrodynamics Library has been released. It can be downloaded from the project website here:

http://homepage.mac.com/pclwillmott/GAL/index.html

Updates in this release:

Higher precision ephemerides for the Sun, Planets, and Pluto. Implemented using VSOP87. Heliocentric and barycentric routines for position and velocity provided.

Support added for classical Keplerian models, circular, elliptical, parabolic, and hyperbolic orbits and trajectories supported. Keplerian propagation implemented using the Universal formulation.

Release includes some additional support files, and minor updates.

Work continues with the atmosphere, and remaining force models.

The General Astrodynamics Library (GAL) is a numerical library for C and C++ programmers. It is free software under the GNU General Public

License.

The library provides a wide range of astrodynamical routines such as ephemerides, earth orientation, and orbit propagation. There are over 250 functions in total with an extensive test suite.

[ANS thanks Paul, VP9MU, for the above information]
/EX

SB SAT @ AMSAT $ANS-279.04
Falcon 1 Rocket Successfully Launches to Orbit

AMSAT News Service Bulletin 279.04
From AMSAT HQ SILVER SPRING, MD.
October 5, 2008
To All RADIO AMATEURS
BID: $ANS-279.04

Space Exploration Technologies Corp. (SpaceX) announces that Flight 4 of the Falcon 1 launch vehicle has successfully launched and achieved Earth orbit. With this key milestone, Falcon 1 becomes the first privately developed liquid fuel rocket to orbit the Earth.

"This is a great day for SpaceX and the culmination of an enormous amount of work by a great team," said Elon Musk, CEO and CTO of SpaceX. "The data shows we achieved a super precise orbit insertion-middle of the bull's-eye - and then went on to coast and restart the second stage, which was icing on the cake."

The Falcon 1 lifted off at 4:15 p.m. (PDT) / 23:15 (UTC) from the Reagan Test Site (RTS) on Omelek Island at the U.S. Army Kwajalein Atoll (USAKA) in the Central Pacific, about 2,500 miles southwest of Hawaii.

Preliminary data indicates that Falcon 1 achieved an elliptical orbit of 500 km by 700 km, 9.2 degrees inclination-exactly as targeted.

Falcon 1 carried into orbit a payload mass simulator of approximately 165 kg (364 lbs), designed and built by SpaceX, specifically for this mission. Consisting of a hexagonal aluminum alloy chamber 1.5 meters (5 feet) tall, the payload remains attached to the second stage as it orbits Earth.

For more information about the Falcon family of vehicles, and to watch the archived video of the Falcon 1, Flight 4 launch, visit the SpaceX website at www.spacex.com

[ANS thanks SpaceX for the above information]
/EX

SB SAT @ AMSAT $ANS-279.05
ARISS Status - 29 September 2008

AMSAT News Service Bulletin 279.05
From AMSAT HQ SILVER SPRING, MD.
October 5, 2008
To All RADIO AMATEURS
BID: $ANS-279.05

1. Upcoming School Contact - Status

The Amateur Radio on the International Space Station (ARISS) team continues its
work on scheduling the next school radio contacts.

2. ARISS - UK School Contact, Successful

Students attending the Michael Sobell Sinai School in Harrow, Middlesex, UK experienced an Amateur Radio on the International Space Station (ARISS) contact
on Thursday, September 25 via telebridge station WH6PN in Hawaii. Eleven students asked astronaut Greg Chamitoff, KD5PKZ,
15 questions before an audience
of 200. The audio was fed into the EchoLink AMSAT server and received 15 connections from seven countries. Four television stations covered this event.
The BBC article may be viewed here:
http://news.bbc.co.uk/2/hi/uk_news/england/london/7636229.stm

3. Astronaut Training Status

Shannon Walker, KD5DXB, participated in an ARISS (Amateur Radio on the International Space Station) training session on Monday, September 22. She plans to support ARISS activities when she flies on a future ISS Expedition.

4. ARISS International Meeting Held

The Amateur Radio on the International Space Station (ARISS) team held its monthly teleconference on September 23. Discussions covered the flight backup
ARISS equipment, including the Kenwood D700 radio, which is expected to be swapped out at the end of the month. Other items on the agenda were Richard Garriott's ARISS schedule and SuitSat-2 progress. The minutes have been posted
to the ARISS Web site. See: http://www.rac.ca/ariss/arisstel2008-09-23.htm

5. CLC Posts Garriott Press Release

The Challenger Learning Center (CLC) has posted a
press release covering Richard
Garriott and his upcoming Amateur Radio on the International Space Station
(ARISS) contacts with CLCs across the country. See:
http://www.challenger.org/about/media/release.cfm?release_id=79

[ANS thanks Carol, KB3LKI, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the
President's
Club. Members of the President's Club, as sustaining donors to AMSAT Project
Funds, will be eligible to receive additional benefits. Application forms
are
available from the AMSAT Office.

73,
This week's ANS Editor,
Lee McLamb, KU4OS

From -4312085818066026314
X-Google-Thread: fb93b,6f1fffb8c854d3e3,start
X-Google-Thread: 1086ba,6f1fffb8c854d3e3,start
X-Google-Thread: 1031e5,6f1fffb8c854d3e3,start
X-Google-Thread: 10e8ad,6f1fffb8c854d3e3,start
X-Google-Thread: 114aac,6f1fffb8c854d3e3,start
X-Google-Attributes:
gidfb93b,gid1086ba,gid1031e5,gid10e8ad,gid114aac,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!postnews.google.com!
w32g2000hsf.googlegroups.com!not-for-mail
From: bluebonysh@gmail.com
Newsgroups: rec.drugs.cannabis,rec.equestrian,rec.folk-
dancing,rec.radio.amateur.space,rec.radio.shortwave
Subject: New Jersey webcam: Landie
Date: Mon, 6 Oct 2008 06:38:21 -0700 (PDT)
Organization: http://groups.google.com
Lines: 2
Message-ID: <a1b8e705-559c-4cb7-9f10-749c48a5d18e@w32g2000hsf.googlegroups.com>
NNTP-Posting-Host: 92.112.158.156
Mime-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 7bit
X-Trace: posting.google.com 1223300301 22468 127.0.0.1 (6 Oct 2008 13:38:21 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Mon, 6 Oct 2008 13:38:21 +0000 (UTC)
Complaints-To: groups-abuse@google.com

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Injection-Info: w32g2000hsf.googlegroups.com; posting-host=92.112.158.156;
     posting-account=svIiVAoAAAD194OoxVvciHsrquGonmXe
User-Agent: G2/1.0
X-HTTP-UserAgent: Mozilla/4.0 (compatible; MSIE 7.0; Windows NT 5.1; WebMoney
     Advisor; Avant Browser;  Embedded Web Browser from: http://bsalsa.com/; .NET
     CLR 2.0.50727),gzip(gfe),gzip(gfe)
Xref: g2news1.google.com rec.drugs.cannabis:451 rec.equestrian:10624 rec.folk-
dancing:120 rec.radio.amateur.space:108 rec.radio.shortwave:13547

Webcam: Landie,19 year.New Jersey. Viens me voir et tu verras!
http://datesex.xhostar.com/landie1989.htm



From 8926174831397751220
X-Google-Thread: fb93b,7a1be77e30cf0b0,start
X-Google-Thread: 1086ba,7a1be77e30cf0b0,start
X-Google-Thread: 1031e5,7a1be77e30cf0b0,start
X-Google-Thread: 10e8ad,7a1be77e30cf0b0,start
X-Google-Attributes:
gidfb93b,gid1086ba,gid1031e5,gid10e8ad,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!postnews.google.com!p58g2000hsb.googlegroups.com!not-for-
mail
From: bluebonysh@gmail.com
Newsgroups: rec.drugs.cannabis,rec.equestrian,rec.folk-
dancing,rec.radio.amateur.space,rec.radio.shortwave
Subject: Halle Berry's uncut Sex Scene in Monsters Ball
Date: Thu, 9 Oct 2008 09:22:30 -0700 (PDT)
Organization: http://groups.google.com
Lines: 2
Message-ID: <01ec6cec-98e7-45d9-be1a-21030025af85@p58g2000hsb.googlegroups.com>
NNTP-Posting-Host: 92.112.147.71
Mime-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 7bit
X-Trace: posting.google.com 1223569351 3676 127.0.0.1 (9 Oct 2008 16:22:31 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Thu, 9 Oct 2008 16:22:31 +0000 (UTC)
Complaints-To: groups-abuse@google.com
Injection-Info: p58g2000hsb.googlegroups.com; posting-host=92.112.147.71;
     posting-account=svIiVAoAAAD194OoxVvciHsrquGonmXe
User-Agent: G2/1.0
X-HTTP-UserAgent: Mozilla/4.0 (compatible; MSIE 7.0; Windows NT 5.1; WebMoney
     Advisor; Avant Browser;  Embedded Web Browser from: http://bsalsa.com/; .NET
     CLR 2.0.50727),gzip(gfe),gzip(gfe)
Xref: g2news2.google.com rec.drugs.cannabis:3596 rec.equestrian:48270 rec.folk-
dancing:570 rec.radio.amateur.space:541 rec.radio.shortwave:46475

Halle Berry's uncut Sex Scene in Monsters Ball  http://
spirs_manyac.googlegroups.com/web/halle
berry.htm
```

```
From -1980808658756029180
X-Google-Thread: 10e8ad,a2b77d36893694d9,start
X-Google-Thread: 113975,a2b77d36893694d9,start
X-Google-Attributes: gid10e8ad,gid113975,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news4.google.com!feeder.news-service.com!
news.astraweb.com!border2.a.newsrouter.astraweb.com!not-for-mail
From: Chris Steyaert <observations@rmob.org>
Newsgroups: rec.radio.amateur.space,sci.astro.amateur
Subject: Radio Meteor Obs. Bull. August September  September Perseids / outburst
Sept 30
Date: Fri, 10 Oct 2008 15:01:36 +0200
Message-ID: <2fkue4dogdiocq30hsn2kklt9md9pmbobs@4ax.com>
X-Newsreader: Forte Agent 1.93/32.576 English (American)
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Lines: 17
Organization: Unlimited download news at news.astraweb.com
NNTP-Posting-Host: c536e3fb.news.astraweb.com
X-Trace: DXC=bPTHcOg<d<>hZ4>`7BGPo4L?0kYOcDh@:=T<KeQkYiO?EkSmUgh1fT1G?
ifhhgG3C19mXR\;MTh]7O^_l`o2d370
Xref: g2news1.google.com rec.radio.amateur.space:110 sci.astro.amateur:5858
```

Radio Meteor Observation Bulletin No. 182 of September 2008 (72 K) is available now as

http://visualrmob.free.fr/rmobtext/rmob0809.txt

More information and the visual presentation of the hourly forward scatter counts can be found on

http://www.rmob.org

http://radio.data.free.fr

Chris

```
From -1654420615794136766
X-Google-Thread: 10e8ad,766b09b3528fa9f2,start
X-Google-Thread: 10b9c8,766b09b3528fa9f2,start
X-Google-Attributes: gid10e8ad,gid10b9c8,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news1.google.com!newsfeed2.dallas1.level3.net!
news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-283 AMSAT Weekly Satellite Report
```

Followup-To: rec.radio.amateur.space
Date: Fri, 10 Oct 2008 22:15:14 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 1475
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <001001c92b47$2bc89d90$8359d8b0$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1223691315 11292 166.84.1.6 (11 Oct 2008 02:15:15 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sat, 11 Oct 2008 02:15:15 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to   rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to   rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
x-cr-hashedpuzzle: phw= CAVo CC3m DCSC DMFB DTsT DkUD Egg8 Hyip ImFm Jy75 KkwW
LdhH Lmtb L3NI
MONH;1;cgBlAGMALQByAGEAZABpAG8ALQBpAG4AZgBvAEAAcABhAG4AaQB4AC4AYwBvAG0A;Sosha1_v1;
7;{ECE98498-6DC7-4821-B567-
EDEFA9BD3986};awA5AGoAawBtAEAAYwBvAG0AYwBhAHMAdAAuAG4AZQB0AA==;Sat, 11 Oct 2008
02:14:57
GMT;VwBTAFIALQAyADgAMwAgAEEATQBTAEEAVAAgAFcAZQBlAGsAbAB5ACAAUwBhAHQAZQBsAGwAaQB0AG
UAIABSAGUAcABvAHIAdAA=
x-cr-puzzleid: {ECE98498-6DC7-4821-B567-EDEFA9BD3986}
Xref: g2news2.google.com rec.radio.amateur.space:543 rec.radio.info:791

This report is organized into FIVE parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites
Part 5 (S5) - deborbited/returned satellites

SB SAT @ AMSAT W8ISS ANS-283.S1
WSR 283 Part 1 10/09/2008

AMSAT NEWS SERVICE BULLETIN 283.S1 FROM AMSAT HQ
SILVER SPRING, MD, October 09, 2008
TO ALL RADIO AMATEURS
BID: $ANS-283.S1

DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008

Status: OPERATIONAL
Current Mode: U/v - voice

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink: 435.530 to 435.570 MHz

Proposed Frequencies:
Primary telemetry downlink: 145.870 MHz 1200 Baud BPSK AX.25 400mW
Backup telemetry downlink: 145.930 MHz 1200 Baud BPSK AX.25 400mW
Linear transponder passband downlink: 145.880 - 145.920 MHz (inverting) 400mW
Linear transponder passband uplink: 435.570 - 435.530 MHz
Transponder mode beacon: 145.870 MHz CW (10dB below transponder PEP)

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68
[07312008]

=====

VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.859330 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

To know what transponder is switched on please listen for the beacon

```
that is
active. Each transponder has a different beacon.
[08072008]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Software reload

Current Modes:   FM Repeater - V/u
                               V/u
                 BBS         - OFF
                 Telemetry   - OFF

Analog voice downlink:     435.300 MHz FM
                           435.150 MHz FM
                          2401.200 Mhz FM
Analog voice uplink:       145.880 MHZ FM
                           145.880 MHz USB
                           145.920 MHz FM
                          1268.700 MHz FM 67Hz PL tone
Digital Downlinks:        435.150 MHz FM 38k4 PBP, 1 watt output
                          435.150 MHz FM 9k6 Pacsat Broadcast Protocol
                         2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:           145.860 MHz FM 9k6 Pacsat Broadcast Protocol
                         1268.700 mhz FM 9k6 PBP Digital
Beacon:                   435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[10092008]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002

Status: Operational.

Current Mode: V/u
```

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10 minute timer.
[05282007]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Operational - check operational schedule for current times!!

Current Mode: V/u

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage: http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's CW
telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts.htm
[0820007]
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993

Status: OFF - Reload software

Current Mode: V/u

Uplink: 145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[10092008]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: TESTING - VOICE

Current Mode: V/u

Uplink: 145.900 MHz FM 1200-baud Manchester FSK (reserved)
                145.920 MHz FM VOICE
                145.940 MHz FM 1200-baud Manchester FSK (reserved)
                145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink: 437.026 MHz USB VOICE
                (1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC 437.050 MHz RHCP
   PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[03202008]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational depending on amount of Sunlight

Current Mode: Listen before transmitting

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz CW
145.972 MHz CW
435.100 MHz CW
2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/

AO-7 Usage Guidelines on the AO-7 Log and Resource Site located at:
http://www.planetemily.com/ao7
[05282007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Mode: FM Repeater - U/v
Voice - V/v
BBS - V/v
APRS - V/v
SSTV - OFF

Expedition 17 crew:

Commander:	Sergey Volkov	RU3DIS
Flight Engineer:	Oleg Kononenko	RN3DX
Flight Engineer:	Greg Chamitoff	KD5PKZ

Available Modes and Frequencies:

Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM
Worldwide packet downlink: 145.825 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS
RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line is
NOT translated from Russian and posted.
[10092008]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-283.S2
WSR 283 Part 2 10/09/2008

AMSAT NEWS SERVICE BULLETIN 283.S2 FROM AMSAT HQ
SILVER SPRING, MD, October 09, 2008
TO ALL RADIO AMATEURS
BID: $ANS-283.S2

RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number:
Launch Date: May 23, 2008

Status: Operational

Curent Mode: Telemetry

```
             Audio
             Images

Downlinks: 435.315 MHz
           435.215 MHz
[05292008]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode:  /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon:    435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.
[11152007]
=====
CP3
Catalog Number: 31128
Launch Date: April 17,2007

Status: Operational

Current Mode:  /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[07302007]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: In Orbit

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder:  145.825 Mhz FM
[02052007]
=====
NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Operational

Current Mode: /u
```

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[10222007]
=====
GENESAT-1 ?O-??
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Current Mode: /u

Telemetry Beacon Downlink: 437.0670 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[01082007]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon: 437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
[03262007]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003

Status: Operational

Current Mode: /u

Beacon: 436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

```
Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[01082007]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Semi-Operational - Constant Carrier only

Uplink:  1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan ? )

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[01082007]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW
[08132007]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Software reload

Current Modes:   FM Repeater - V/u
                               V/u
                 BBS         - OFF
                 Telemetry   - OFF

Analog voice downlink:     435.300 MHz FM
                           435.150 MHz FM
                          2401.200 Mhz FM
Analog voice uplink:       145.880 MHZ FM
                           145.880 MHz USB
                           145.920 MHz FM
                          1268.700 MHz FM 67Hz PL tone
```

Digital Downlinks: 435.150 MHz FM 38k4 PBP, 1 watt output
435.150 MHz FM 9k6 Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Pacsat Broadcast Protocol
1268.700 mhz FM 9k6 PBP Digital
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[10092008]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Hibernation until full sunlight in November

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[09242007]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Current Modes: V/U
L/U

Downlink: 435.225 MHz FM (9600-baud FSK)
435.325 Mhz - Not Available - temperature problems
Uplinks: 145.850 FM

```
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[09172007]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984

Status: Semi-operational.

Current Mode:  /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon:          435.025 MHz
Mode-S Beacon:     2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[01242008]
=====
RS-22 RADIO SPORT RS-22
Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only

Current Mode:  /u

CW Beacon - 435.352 MHz
            145.818 MHz
[08062007]
=====
Can X-2
Catalog number:
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink: 437.478 MHz GFSK
```

```
For the latest project status update please visit the Can X-2 web page:
http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[05292008]
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink: 437.425 MHz

For the latest project status update please visit the AAUSAT-II web
page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[05292008]
=====
CO-65 Cute-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink:  437.475 MHz 9k6 Packet
Uplink:   1267.600 Mhz

For the latest project status update please visit the Cute-1.7+APD II
web
page:
http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78
[07312008]
=====
Compass-1
Catalog number: 32787
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink: 437.275 Mhz CW
          437.405 MHz Packet

For the latest project status update please visit the Compass 1 web
page:
http://www.raumfahrt.fh-aachen.de/
```

```
IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52
[05292008]
=====
CO-66 Seeds II
Catalog number:
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink: 437.485 MHz

For the latest project status update please visit the Seeds 2 web page:
http://cubesat.aero.cst.nihon-u.ac.jp/english/main_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36
[07312008]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Mode: FM Repeater - U/v
              Voice -       V/v
              BBS -         V/v
              APRS -        V/v
              SSTV -        OFF

Expedition 17 crew:
Commander:                Sergey Volkov   RU3DIS
Flight Engineer:          Oleg Kononenko  RN3DX
Flight Engineer:          Greg Chamitoff  KD5PKZ

Available Modes and Frequencies:

Digital/APRS:
Worldwide packet uplink:   145.825 MHz FM
Worldwide packet downlink: 145.825 Mhz FM

Voice:
Region 1 voice uplink:     145.200 MHz FM
Region 2/3 voice uplink:   144.490 MHz FM
Worldwide downlink:        145.800 MHz FM

Crossband Repeater:
Repeater Uplink:           437.800 MHz FM
Repeater Downlink:         145.800 MHz FM

SSTV Robot 36:
```

Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS
RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.
[10092008]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-283.S3
WSR 283 Part 3 10/09/2008

AMSAT NEWS SERVICE BULLETIN 283.S3 FROM AMSAT HQ
SILVER SPRING, MD, October 09, 2008
TO ALL RADIO AMATEURS
BID: $ANS-283.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

CP4
Catalog Number: 31122
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon: 437.325 MHz CW

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=79
[10022008]
=====
HO-59 HITSat

```
Catalog number: 29484
Launch date: September 22, 2006

Status: Non-Operational

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon:             437.2750 MHz CW

Callsign: JR8YJT
[10152007]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency:  437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink:         437.250 MHz FM 67Hz CTCSS
Voice Downlink:      2401.835 MHz FM
Packet Up/Downlink:   437.250 MHz 9k6 packet
Packet Downlink      2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non=Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[08132007]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
```

Launch Date: December 20, 2002

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]

=====

MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Non-Operational

Uplinks: 145.850 MHz
145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[007302007]

=====

NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, callsign KE6QMD, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]

```
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS:                SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink:   145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
V-band:   145.840 -  145.990 MHz CW/LSB
U-band:   435.550 -  435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks
---------
S2-band:  2401.225 -  2401.475 MHz CW/USB
K-band:  24048.010 - 24048.060 MHz CW/USB
Beacon:   2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)
```

BEACON	General Beacon (GB)	Middle Beacon (MB)	Engineering Beacon (EB)
2 m	none	145.898 MHz	none
70cm	435.438 MHz	435.588 MHz	435.838 MHz
13cm(1)	2400.188 MHz	2400.338 MHz	2400.588 MHz
13cm(2)	2401.173 MHz	2401.323 MHz	2401.573 MHz
3cm	10450.975 MHz	10451.125 MHz	10451.375 MHz
1.5cm	24047.885 MHz	24048.035 MHz	24048.285 MHz

[07162007]

=====

OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]

=====

UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]

=====

SO-35 SUNSAT
Catalog Number: ?
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz
                           145.900 MHz

```
For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink:   145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
```

```
BBS callsign:       POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012006]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HL01-11
BBS: HL01-12
```

```
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
LIBERTAD-1
Catalog Number: 31129
Launch Date: April 17,2007
```

```
Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink:   145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[10222007]
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990

Status: CW Beacon only

Uplinks:          145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink:      437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[01222007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
[05012006]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet: Non-Operational
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon:   145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
```

Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.8500 - 145.9000 MHz SSB/CW
Downlink 29.4000 - 29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink: 29.4500 - 29.5500 MHz SSB/CW
Beacons: 29.450 MHz
          435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink: 145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink: 145.858 to 145.898 MHz CW/USB

Downlink: 29.354 to 29.394 MHz CW/USB

Beacon 1: 29.352 MHz (intermittent)
Beacon 2: 29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB

Beacon: 145.860 MHz

Robot: 145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-283.S4
WSR 283 Part 4 10/09/2008

AMSAT NEWS SERVICE BULLETIN 283.S4 FROM AMSAT HQ
SILVER SPRING, MD, October 09, 2008
TO ALL RADIO AMATEURS
BID: $ANS-283.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE PROPOSED FOR LAUNCH AT THIS TIME:

XW-1
Catalog Number:
Proposed Launch Date: Summer 2009?

Status: Design Phase

Proposed Equipment:
Beacon: 435Mhz, CW 20dBm
Linear transponder: RX: 145Mhz, TX: 435Mhz, 40KHz, 30dBm
FM Transponder: RX: 145Mhz, TX: 435Mhz, 16KHz, 30dBm
Digital store and forward transponder: RX: 145Mhz, TX: 435Mhz, 16KHz, 30dBm

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108
[10092008]
=====
Phase 5a Mars Mission AO-??
Catalog Number:
Proposed Launch Date: 2009 or 2011

Status: Design Phase

For the latest project status update please visit the AMSAT-DL P5-A web page:
http://ticket-to-mars.org
[01222007]
=====
PHASE 3E AO-??
Catalog number:
Proposed Launch Date: Late 2008

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/
[01222007]
=====
Eagle AO-??
Catalog Number:
Proposed Launch Date: Early/Mid 2009

Status: Design Phase

For the latest project status updates please visit the AMSAT-NA webpage:
http://www.amsat.org
[01222007]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-283.S5
WSR 283 Part 5 10/09/2008

AMSAT NEWS SERVICE BULLETIN 283.S5 FROM AMSAT HQ
SILVER SPRING, MD, October 09, 2008

TO ALL RADIO AMATEURS
BID: $ANS-283.S5

THE FOLLOWING SATELLITES HAVE RE-ENTERED OR HAVE BEEN RETURNED SAFELY:

NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink: 145.825 Mhz FM APRS AX25
APRS Uplink: 145.825 MHz FM APRS AX25
Voice/PSK31 Uplink: 28.120 MHz

Packet to Voice ID: RAFT
[06112007]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)

* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

From 691604204893147531
X-Google-Thread: fb93b,8bbb3c07ad7c2d7,start
X-Google-Thread: 1086ba,8bbb3c07ad7c2d7,start
X-Google-Thread: 1031e5,8bbb3c07ad7c2d7,start
X-Google-Thread: 10e8ad,8bbb3c07ad7c2d7,start
X-Google-Thread: 114aac,8bbb3c07ad7c2d7,start
X-Google-Attributes: gidfb93b,gid1086ba,gid1031e5,gid10e8ad,gid114aac,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!postnews.google.com!25g2000prz.googlegroups.com!not-for-mail
From: bluebonysh@gmail.com
Newsgroups: rec.drugs.cannabis,rec.equestrian,rec.folk-dancing,rec.radio.amateur.space,rec.radio.shortwave
Subject: BDSM in BDSM mpeg
Date: Wed, 15 Oct 2008 07:22:27 -0700 (PDT)
Organization: http://groups.google.com
Lines: 1
Message-ID: <03c09a58-c602-4d15-892a-03c3dceff160@25g2000prz.googlegroups.com>
NNTP-Posting-Host: 92.112.204.219
Mime-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1

```
Content-Transfer-Encoding: 7bit
X-Trace: posting.google.com 1224080548 26203 127.0.0.1 (15 Oct 2008 14:22:28 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Wed, 15 Oct 2008 14:22:28 +0000 (UTC)
Complaints-To: groups-abuse@google.com
Injection-Info: 25g2000prz.googlegroups.com; posting-host=92.112.204.219;
     posting-account=svIiVAoAAAD194OoxVvciHsrquGonmXe
User-Agent: G2/1.0
X-HTTP-UserAgent: Mozilla/4.0 (compatible; MSIE 7.0; Windows NT 5.1; WebMoney
     Advisor; Avant Browser;  Embedded Web Browser from: http://bsalsa.com/; .NET
     CLR 2.0.50727; .NET CLR 3.0.4506.2152; .NET CLR
3.5.30729),gzip(gfe),gzip(gfe)
Xref: g2news2.google.com rec.drugs.cannabis:3666 rec.equestrian:48808 rec.folk-
dancing:579 rec.radio.amateur.space:544 rec.radio.shortwave:47032
```

BDSM http://youtubeplayer.byethost9.com/jpeg/bdsm.html BDSM

```
From 2421684189557157242
X-Google-Thread: 10e8ad,71529617d49d4ec4,start
X-Google-Thread: 10b9c8,71529617d49d4ec4,start
X-Google-Attributes: gid10e8ad,gid10b9c8,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx01.iad.newshosting.com!newshosting.com!
198.186.194.249.MISMATCH!news-out.readnews.com!transit3.readnews.com!panix!
rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-290 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Thu, 16 Oct 2008 07:54:47 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 1485
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000001c92f85$f0d904c0$d28b0e40$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix2.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1224158078 17879 166.84.1.2 (16 Oct 2008 11:54:38 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Thu, 16 Oct 2008 11:54:38 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
```

X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
x-cr-hashedpuzzle: AEE/ APof ARxF A2tP A+03 BPGR B6I8 Cb7x C598 D8OW EI86 E1bR
E106 GsQc IG5G
Irp2;1;cgBlAGMALQByAGEAZABpAG8ALQBpAG4AZgBvAEAAcABhAG4AaQB4AC4AYwBvAG0A;Sosha1_v1;
7;{A2D71EF4-3C66-4AD6-84A2-
AF41F627BB54};awA5AGoAawBtAEAAYwBvAG0AYwBhAHMAdAAuAG4AZQB0AA==;Thu, 16 Oct 2008
11:54:23
GMT;VwBTAFIALQAyADkAMAAgAEEATQBTAEEAVAAgAFcAZQBlAGsAbAB5ACAAUwBhAHQAZQBsAGwAaQB0AG
UAIABSAGUAcABvAHIAdAA=
x-cr-puzzleid: {A2D71EF4-3C66-4AD6-84A2-AF41F627BB54}
Xref: g2news1.google.com rec.radio.amateur.space:113 rec.radio.info:286

This report is organized into FIVE parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites
Part 5 (S5) - deborbited/returned satellites

SB SAT @ AMSAT W8ISS ANS-290.S1
WSR 290 Part 1 10/16/2008

AMSAT NEWS SERVICE BULLETIN 290.S1 FROM AMSAT HQ
SILVER SPRING, MD, October 16, 2008
TO ALL RADIO AMATEURS
BID: $ANS-290.S1

DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008

Status: OPERATIONAL
Current Mode: U/v - voice

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink: 435.530 to 435.570 MHz

Proposed Frequencies:
Primary telemetry downlink: 145.870 MHz 1200 Baud BPSK AX.25 400mW
Backup telemetry downlink: 145.930 MHz 1200 Baud BPSK AX.25 400mW
Linear transponder passband downlink: 145.880 - 145.920 MHz (inverting)
400mW
Linear transponder passband uplink: 435.570 - 435.530 MHz
Transponder mode beacon: 145.870 MHz CW (10dB below transponder PEP)

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:

```
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68
[07312008]
=====
VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink:   435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink:   435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW


Indian Beacon:  145.859330 MHZ CW
Dutch Beacon:   145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is
active. Each transponder has a different beacon.
[08072008]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Software reload

Current Modes:   FM Repeater - L/s
                               V/u
                 BBS         - OFF
                 Telemetry   - OFF

Analog voice downlink:     435.300 MHz FM
                           435.150 MHz FM
                          2401.200 Mhz FM
Analog voice uplink:       145.880 MHZ FM
                           145.880 MHz USB
                           145.920 MHz FM
                          1268.700 MHz FM 67Hz PL tone
Digital Downlinks:        435.150 MHz FM 38k4 PBP, 1 watt output
```

435.150 MHz FM 9k6 Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Pacsat Broadcast Protocol
1268.700 mhz FM 9k6 PBP Digital
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[10162008]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002

Status: Operational.

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer
on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on
and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10
minute timer.
[05282007]

```
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Operational - check operational schedule for current times!!

Current Mode: V/u

Voice/CW Mode JA
Uplink:   145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon:   435.795 MHz

Digital Mode JD
Uplinks:  145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage: http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's CW
telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts.htm
[0820007]
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993

Status: OFF - Reload software

Current Mode: V/u

Uplink:   145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear
```

```
Official Webpage: http://www.ao27.org
[10092008]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: TESTING - VOICE

Current Mode:  V/u

Uplink:         145.900 MHz FM 1200-baud Manchester FSK (reserved)
                145.920 MHz FM VOICE
                145.940 MHz FM 1200-baud Manchester FSK (reserved)
                145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink:       437.026 MHz USB VOICE
                ( 1200-baud PSK - MBL Telemetry Only )

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[03202008]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational depending on amount of Sunlight

Current Mode: Listen before transmitting

Uplink:   145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink:  29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons:   29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php
```

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/

AO-7 Usage Guidelines on the AO-7 Log and Resource Site located at:
http://www.planetemily.com/ao7
[05282007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - U/v
Voice - V/v
BBS - V/v
APRS - V/v
SSTV - V/v

Expedition 17 Crew:
Commander: Sergey Volkov RU3DIS
Flight Engineer: Oleg Kononenko RN3DX
Flight Engineer: Greg Chamitoff KD5PKZ

Expedition 18 Crew:
Commander: Mike Fincke KE5AIT
Flight Engineer: Yury Lonchakov RA3DT
Spaceflight Participant: Richard Garriott W5KWQ

Available Modes and Frequencies:

Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM
Worldwide packet downlink: 145.825 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:

German: DP0ISS
Russian: RS0ISS
                           RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.
[10162008]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-290.S2
WSR 290 Part 2 10/16/2008

AMSAT NEWS SERVICE BULLETIN 290.S2 FROM AMSAT HQ
SILVER SPRING, MD, October 16, 2008
TO ALL RADIO AMATEURS
BID: $ANS-290.S2

RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number:
Launch Date: May 23, 2008

Status: Operational

Curent Mode: Telemetry
             Audio
             Images

Downlinks: 435.315 MHz
           435.215 MHz
[05292008]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.
[11152007]
=====
CP3
Catalog Number: 31128
Launch Date: April 17,2007

Status: Operational

Current Mode: /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[07302007]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: In Orbit

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder: 145.825 Mhz FM
[02052007]
=====
NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Operational

Current Mode: /u

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[10222007]
=====
GENESAT-1 ?O-??
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Current Mode: /u

Telemetry Beacon Downlink: 437.0670 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[01082007]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon: 437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
[03262007]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003

Status: Operational

Current Mode: /u

Beacon: 436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[01082007]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Semi-Operational - Constant Carrier only

Uplink: 1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan ?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[01082007]

```
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW
[08132007]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Modes:   FM Repeater - L/s
                               V/u
                 BBS         - OFF
                 Telemetry   - OFF

Analog voice downlink:     435.300 MHz FM
                           435.150 MHz FM
                          2401.200 Mhz FM
Analog voice uplink:       145.880 MHZ FM
                           145.880 MHz USB
                           145.920 MHz FM
                          1268.700 MHz FM 67Hz PL tone
Digital Downlinks:        435.150 MHz FM 38k4 PBP, 1 watt output
                          435.150 MHz FM 9k6 Pacsat Broadcast Protocol
                         2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:           145.860 MHz FM 9k6 Pacsat Broadcast Protocol
                         1268.700 mhz FM 9k6 PBP Digital
Beacon:                   435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12
```

```
Official Webpage: http://www.amsat.org/amsat-new/echo/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[10162008]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Hibernation until full sunlight in November

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink:        144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[09242007]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Current Modes: V/U
               L/U

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[09172007]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984

Status: Semi-operational.
```

```
Current Mode:  /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon:           435.025 MHz
Mode-S Beacon:     2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[01242008]
=====
RS-22 RADIO SPORT RS-22
Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only

Current Mode:  /u

CW Beacon - 435.352 MHz
            145.818 MHz
[08062007]
=====
Can X-2
Catalog number:
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web page:
http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[05292008]
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink: 437.425 MHz

For the latest project status update please visit the AAUSAT-II web
page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home
```

```
IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[05292008]
=====
CO-65 Cute-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink:  437.475 MHz 9k6 Packet
Uplink:   1267.600 Mhz

For the latest project status update please visit the Cute-1.7+APD II
web
page:
http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78
[07312008]
=====
Compass-1
Catalog number: 32787
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink: 437.275 Mhz CW
          437.405 MHz Packet

For the latest project status update please visit the Compass 1 web
page:
http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52
[05292008]
=====
CO-66 Seeds II
Catalog number:
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink: 437.485 MHz

For the latest project status update please visit the Seeds 2 web page:
http://cubesat.aero.cst.nihon-u.ac.jp/english/main_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36
```

```
[07312008]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - U/v
                      Voice -       V/v
                      BBS -         V/v
                      APRS -        V/v
                      SSTV -        V/v

Expedition 17 Crew:
Commander:                Sergey Volkov    RU3DIS
Flight Engineer:          Oleg Kononenko   RN3DX
Flight Engineer:          Greg Chamitoff   KD5PKZ

Expedition 18 Crew:
Commander:                Mike Fincke      KE5AIT
Flight Engineer:          Yury Lonchakov   RA3DT
Spaceflight Participant:  Richard Garriott W5KWQ

Available Modes and Frequencies:

Digital/APRS:
Worldwide packet uplink:   145.825 MHz FM
Worldwide packet downlink: 145.825 Mhz FM

Voice:
Region 1 voice uplink:     145.200 MHz FM
Region 2/3 voice uplink:   144.490 MHz FM
Worldwide downlink:        145.800 MHz FM

Crossband Repeater:
Repeater Uplink:           437.800 MHz FM
Repeater Downlink:         145.800 MHz FM

SSTV Robot 36:
Downlink:                  145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German:                    DP0ISS
Russian:                   RS0ISS
                           RZ3DZR
USA:                       NA1SS
Packet Mailbox:            RS0ISS-11
Packet Keyboard:           RS0ISS-3
```

```
Digipeater callsign:       ARISS

Official ARISS Webpage:    http://www.rac.ca/ariss
ISS Fan Club Webpage:      http://www.issfanclub.com
APRS tracking page:        http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.
[10162008]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-290.S3
WSR 290 Part 3 10/16/2008

AMSAT NEWS SERVICE BULLETIN 290.S3 FROM AMSAT HQ
SILVER SPRING, MD, October 16, 2008
TO ALL RADIO AMATEURS
BID: $ANS-290.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

CP4
Catalog Number: 31122
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon:    437.325 MHz CW

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=79
[10022008]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Non-Operational

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon:             437.2750 MHz CW

Callsign: JR8YJT
[10152007]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency:  437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink:        437.250 MHz FM 67Hz CTCSS
Voice Downlink:     2401.835 MHz FM
Packet Up/Downlink:  437.250 MHz 9k6 packet
Packet Downlink     2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non=Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[08132007]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink:   435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
```

Catalog number: 26548
Launch date: September 26, 2000

Status: Non-Operational

Uplinks: 145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[007302007]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, callsign KE6QMD, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:

http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks

V-band: 145.840 - 145.990 MHz CW/LSB
U-band: 435.550 - 435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks

S2-band: 2401.225 - 2401.475 MHz CW/USB
K-band: 24048.010 - 24048.060 MHz CW/USB
Beacon: 2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)

BEACON	General Beacon (GB)	Middle Beacon (MB)	Engineering Beacon (EB)
2 m	none	145.898 MHz	none
70cm	435.438 MHz	435.588 MHz	435.838 MHz
13cm(1)	2400.188 MHz	2400.338 MHz	2400.588 MHz
13cm(2)	2401.173 MHz	2401.323 MHz	2401.573 MHz
3cm	10450.975 MHz	10451.125 MHz	10451.375 MHz
1.5cm	24047.885 MHz	24048.035 MHz	24048.285 MHz

[07162007]
=====
OO-38 OPAL
Catalog Number: 26063

```
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink:    145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site
at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: ?
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater:         436.250 MHz

Uplinks: Mode B Repeater:  145.825 MHz
Mode J Digipeater:         145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
```

```
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink:   145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign:       POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012006]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only
```

```
Current Mode:

Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
```

```
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
LIBERTAD-1
Catalog Number: 31129
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink:   145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[10222007]
=====
LO-19 LUSAT
```

Catalog number: 20442
Launch date: January 22, 1990

Status: CW Beacon only

Uplinks: 145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink: 437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[01222007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink: 145.825 MHz FM 1200 Baud AFSK
Beacon: 2401.220 MHz
[05012006]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink: 145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting): Non-Operational
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet: Non-Operational
Uplink: 145.8500 MHz MFSK 1200 BPS
Uplink: 145.8700 MHz MFSK 1200 BPS
Uplink: 145.8900 MHz MFSK 1200 BPS
Uplink: 145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon: 145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.8500 - 145.9000 MHz SSB/CW
Downlink 29.4000 - 29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]

```
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
Beacons:   29.450 MHz
          435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon 1:  29.352 MHz (intermittent)
Beacon 2:  29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational
```

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB

Beacon: 145.860 MHz

Robot: 145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-290.S4
WSR 290 Part 4 10/16/2008

AMSAT NEWS SERVICE BULLETIN 290.S4 FROM AMSAT HQ
SILVER SPRING, MD, October 16, 2008
TO ALL RADIO AMATEURS
BID: $ANS-290.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE PROPOSED FOR LAUNCH AT
THIS
TIME:

XW-1
Catalog Number:
Proposed Launch Date: Summer 2009?

Status: Design Phase

Proposed Equipment:
Beacon: 435Mhz, CW 20dBm
Linear transponder: RX: 145Mhz, TX: 435Mhz, 40KHz, 30dBm
FM Transponder: RX: 145Mhz, TX: 435Mhz, 16KHz, 30dBm
Digital store and forward transponder: RX: 145Mhz, TX: 435Mhz, 16KHz,
30dBm

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108
[10092008]

=====
Phase 5a Mars Mission AO-??
Catalog Number:
Proposed Launch Date: 2009 or 2011

Status: Design Phase

For the latest project status update please visit the AMSAT-DL P5-A web page:
http://ticket-to-mars.org
[01222007]
=====
PHASE 3E AO-??
Catalog number:
Proposed Launch Date: Late 2008

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/
[01222007]
=====
Eagle AO-??
Catalog Number:
Proposed Launch Date: Early/Mid 2009

Status: Design Phase

For the latest project status updates please visit the AMSAT-NA webpage:
http://www.amsat.org
[01222007]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-290.S5
WSR 290 Part 5 10/16/2008

AMSAT NEWS SERVICE BULLETIN 290.S5 FROM AMSAT HQ
SILVER SPRING, MD, October 16, 2008
TO ALL RADIO AMATEURS
BID: $ANS-290.S5

THE FOLLOWING SATELLITES HAVE RE-ENTERED OR HAVE BEEN RETURNED SAFELY:

NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25

[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink: 145.825 Mhz FM APRS AX25
APRS Uplink: 145.825 MHz FM APRS AX25
Voice/PSK31 Uplink: 28.120 MHz

Packet to Voice ID: RAFT
[06112007]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the

President's Club. Members of the President's Club, as sustaining donors
to AMSAT Project Funds, will be eligible to receive additional benefits.
Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the
memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen,
G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

```
From 478216876916606775
X-Google-Thread: fb93b,625ccd16d4926580,start
X-Google-Thread: 1086ba,625ccd16d4926580,start
X-Google-Thread: 1031e5,625ccd16d4926580,start
X-Google-Thread: 10e8ad,625ccd16d4926580,start
X-Google-Thread: 114aac,625ccd16d4926580,start
X-Google-Attributes:
gidfb93b,gid1086ba,gid1031e5,gid10e8ad,gid114aac,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!postnews.google.com!
2g2000hsn.googlegroups.com!not-for-mail
From: bluebonysh@gmail.com
Newsgroups: rec.drugs.cannabis,rec.equestrian,rec.folk-
dancing,rec.radio.amateur.space,rec.radio.shortwave
Subject: Looking for bondage webcam?
Date: Fri, 17 Oct 2008 04:08:59 -0700 (PDT)
Organization: http://groups.google.com
Lines: 2
Message-ID: <3eb5e9c3-50a0-45e1-ba64-214773ccafe4@2g2000hsn.googlegroups.com>
NNTP-Posting-Host: 92.112.134.178
Mime-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 7bit
X-Trace: posting.google.com 1224241739 15631 127.0.0.1 (17 Oct 2008 11:08:59 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Fri, 17 Oct 2008 11:08:59 +0000 (UTC)
Complaints-To: groups-abuse@google.com
Injection-Info: 2g2000hsn.googlegroups.com; posting-host=92.112.134.178;
     posting-account=svIiVAoAAAD194OoxVvciHsrquGonmXe
User-Agent: G2/1.0
X-HTTP-UserAgent: Mozilla/4.0 (compatible; MSIE 7.0; Windows NT 5.1; WebMoney
     Advisor; Avant Browser;  Embedded Web Browser from: http://bsalsa.com/; .NET
     CLR 2.0.50727; .NET CLR 3.0.4506.2152; .NET CLR
3.5.30729),gzip(gfe),gzip(gfe)
Xref: g2news1.google.com rec.drugs.cannabis:539 rec.equestrian:11727 rec.folk-
```

```
dancing:132 rec.radio.amateur.space:114 rec.radio.shortwave:14598
```

View explicit live Webcams, meet for amateur scenes!
http://puntyhouse.byethost11.com/altcam.htm

```
From -7878913731443807740
X-Google-Thread: 10e8ad,5086967493566f3b,start
X-Google-Thread: 10b9c8,5086967493566f3b,start
X-Google-Attributes: gid10e8ad,gid10b9c8,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII
Path: g2news1.google.com!news1.google.com!npeer01.iad.highwinds-media.com!
news.highwinds-media.com!feed-me.highwinds-media.com!news.glorb.com!
transit3.readnews.com!news-xxxfer.readnews.com!news-out.readnews.com!
transit4.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-293 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sat, 18 Oct 2008 21:33:29 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 343
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000201c93188$8fa72920$aef57b60$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;charset="iso-8859-1"
Content-Transfer-Encoding: quoted-printable
X-Trace: reader1.panix.com 1224380009 17907 166.84.1.6 (19 Oct 2008 01:33:29 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 19 Oct 2008 01:33:29 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news1.google.com rec.radio.amateur.space:115 rec.radio.info:294
```

AMSAT NEWS SERVICE
ANS-293

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating

through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

****
*** 2008 AMSAT Space Symposium and Annual General Meeting ***
***   October 24-26 in Atlanta, Georgia   ***
*** http://www.amsat.org/amsat-new/symposium/2008/index.php ***
****

In this edition:

* 2008 AMSAT Space Symposium Begins This Week
* 2008 AMSAT Space Symposium Presentations List
* Richard Garriott Amateur Radio Operations Commence From ISS
* Delfi-C3 in Telemetry Mode
* AMSAT Receives CFC Certification for 2008
* WinAPRS Writer Hurt in Balloon Crash

SB SAT @ AMSAT $ANS-293.01
2008 AMSAT Space Symposium Begins This Week

AMSAT News Service Bulletin 293.01
>From AMSAT HQ SILVER SPRING, MD.
October 19, 2008
To All RADIO AMATEURS
BID: $ANS-293.01

The 2008 Harry Yoneda JA1ANG AMSAT Space Symposium and Annual Meeting is right on schedule for October 24-26, 2008.

Highlights of the weekend include:

+ Board of Director's Meeting on October 23 - 24.

+ AMSAT-NA General Membership Meeting on Saturday, October 25 from 10-12 AM Eastern Daylight Time (UTC-4). The AMSAT General Meeting will be broadcast on EchoLink AMSAT Conference, node 101377. Users may ask questions via the chat link.

+ AMSAT Annual Banquet will be held on Saturday evening October 25. The banquet speaker is Daniel Schultz, N8FQV who will describe the The Hubble Space Telescope Repair Mission.

+ AMSAT's Field Operations Breakfast will be held on Sunday morning, October 26.

+ A free Sunday morning workshop 'Introduction to Digital Signal Processing' presented by Phil Harman, VK6APH.

+ The grand prize to be given away at the Banquet this year is an

ICOM IC-910.

The full Symposium Schedule will be posted on-line:
http://www.amsat.org/amsat-new/symposium/2008/index.php

[ANS thanks the 2008 Symposium Committee for the above information]

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SB SAT @ AMSAT $ANS-293.02
2008 AMSAT Space Symposium Presentations List

AMSAT News Service Bulletin 293.02
>From AMSAT HQ SILVER SPRING, MD.
October 19, 2008
To All RADIO AMATEURS
BID: $ANS-293.02

A list of the 2008 Symposium Talks has been released and includes:

+ Anthony Monteiro, AA2TX - Space Radio for Windows

+ L�pez Villalobos Jos� de Jes�s, XE2N; �lvarez C�rdenas Omar, XE1AO; Dora Luz Candanosa Salazar XE2DLC - Modeling Robot Control for AO-51 Satellite Follower

+ Paul Marsh, M0EYT - S-band and X-band deep space reception

+ Tim Salo, AB0DO - Proposed Network-Centric Architecture for the ACP

+ JoAnne Maenpaa, K9JKM - AMSAT Opportunities for Communications Interoperability

+ Richard Chapman, KC4IFB, Jean-Marie Wersinger KI4YAU; Thor Wilson; John Klingelhoeffer, WB4LNM - AubieSat1:A Student Designed CubeSat Developed at Auburn University

+ David Bowman, G0MRF - Medium Earth Orbit - An Affordable Alternative to HEO

+ Joe Lynch, N6CL - The Meteor Shower Nobody Saw � Revisited

+ Tim Lilley, N3TL - Handheld FM Satellite Stations : Meeting FCC Part 97.1 with a Superb Tool for Recruiting New Operators

+ Tom Clark, K3IO - Taking Eagle to New Heights: A Strawman Design for a Geostationary Amateur Satellite

+ Frank Bauer, KA3HDO - ARISS

+ Lou McFadin, W5DID - SuitSat-2/Radioskaf-2: The second Amateur Radio
  Space Suit project and stepping stone to future small amateur
  satellites

+ Christian Rodriguez, Henric Boiardt - Using Iridium's satellite
network
  for amateur satellite communications in Low Earth Orbit

+ Bill Ress, N6GHZ - ITAR and AMSAT

+ Phil Karn, KA9Q - Power-efficient FEC-coded low rate telemetry formats

+ Giulio Pezzi, IZ4FVW/AB2VY - HSSDT Project - High Speed Satellite Data

  Transmitter

+ Gould Smith, WA4SXM - AO-51 Operations Before, During and After the No

  Eclipse Period

+ Fred Kennedy, ZL1BYP - KiwiSat, A Communications Satellite for New
  Zealand (presented by Bill Ress, N6GHZ)

+ Hans van de Groenendaal, ZS6ZKV - SumbandilaSat UpOctober 19
(presented by

  Gould Smith, WA4SXM)

+ Howard Long, G6LVB - P3E's Software Defined Transponder (SDX)

+ Phil Harman, VK6APH - Introduction to Digital Signal Processing

[ANS thanks the 2008 Symposium Committee for the above information]

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SB SAT @ AMSAT $ANS-293.03
Richard Garriott Amateur Radio Operations Commence From ISS

AMSAT News Service Bulletin 293.03
>From AMSAT HQ SILVER SPRING, MD.
October 19, 2008
To All RADIO AMATEURS
BID: $ANS-293.03

ARISS International Chairman, and AMSAT-NA V.P. for Human Spaceflight Programs, Frank Bauer, KA3HDO reported Richard Garriott is now on-orbit after a successful launch. The Soyuz crew has completed docking with the ISS as of October 14. All are aboard the ISS.

Richard has commenced amateur radio activity from the ISS using FM phone, Slow-Scan Television (SSTV), and packet operations. The ARISS team encourages hams to upload their ISS SSTV pictures on the ARISS SSTV Gallery. In addition, we are posting late breaking information and pictures on the ARISS SSTV blog.

The blog is at:
http://www.ariss-sstv.blogspot.com/

And the gallery is at:
http://www.amsat.com/ARISS_SSTV/

There are links at the Gallery site to submit your SSTV pictures. Also included are helpful hints for SSTV operations during Richard Garriott's flight. ARISS appreciates your SSTV picture submissions to the gallery.

Amateur stations around the world have reported hearing FM voice and SSTV operation while the ISS crew is awake. Packet operations are planned for operation during the crew sleep period (20:30-05:00 UTC).

Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM
Worldwide packet downlink: 145.825 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

SSTV Robot 36:
Downlink: 145.800 MHz FM

[ANS thanks ARISS for the above information]

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SB SAT @ AMSAT $ANS-293.04
Delfi-C3 in Telemetry Mode

AMSAT News Service Bulletin 293.04
>From AMSAT HQ SILVER SPRING, MD.
October 19, 2008
To All RADIO AMATEURS
BID: $ANS-293.04

Wouter Jan Ubbels PE4WJ, reports the Delfi-C3/DO-64 teama has successfully switched their Delfi-C3 satellite into basic mode.

This means Delfi-C3 is currently transmitting 1200bit/s BPSK housekeeping telemetry on the primary downlink frequency of 145.870MHz.

In this mode, AX.25 frames containing housekeeping telemetry are transmitted approximately once every 4-5 secs, with the rest of the transmission being filled with idle flags.

The Delfi team encourages everyone to receive, decode and forward telemetry using the RASCAL software as previously done during the first three months of science mission. The RASCAL telemetry decoding software can be downloaded at: http://www.delfic3.nl/rascal

At this moment, the Delfi team does not know how long the satellite will be in this mode, but they are planning on a couple of weeks of telemetry operations. You can stay informed on their mission operations page at

http://www.delfic3.nl/index.php?option=com_content&task=view&id=93&
Itemid=12
2

and via the AMSAT-BB. They will regularly post on and monitor the OSCAR status page at http://oscar.dcarr.org/ as well.

[ANS thanks Wouter Jan Ubbels PE4WJ for the above information]

/EX

SB SAT @ AMSAT $ANS-293.05
AMSAT Receives CFC Certification for 2008

AMSAT News Service Bulletin 293.05
>From AMSAT HQ SILVER SPRING, MD.
October 19, 2008
To All RADIO AMATEURS
BID: $ANS-293.05

The Office of Combined Federal Campaign Operations has approved AMSAT-NA for participation in the 2008 CFC. The CFC, or Combined Federal Campaign, is the U.S. Government equivalent of the United Way in the private sector. The campaign affords all US Government employees the opportunity to make donations from their regular paychecks to CFC approved Charities.

This stamp of approval means that AMSAT has met the strict standards set by the U.S. Office of Personnel Management (OPM) assuring donors that our programs of work, financial, and operations meet the standards for eligible volunteer agencies.

Those AMSAT supporters who which to make payroll contributions should Select the Radio Amateur satellite Corporation (AMSAT) during their campaign this coming fall. The AMSAT CFC Charity number is 10158.
Payroll

deduction is a simple, convenient way to support your AMSAT.

Gunther Meisse W8GSM
Treasurer, AMSAT North America

[ANS thanks Gunther, W8GSM for the above information]

/EX

SB SAT @ AMSAT $ANS-293.06
WinAPRS Writer Hurt in Balloon Crash

AMSAT News Service Bulletin 293.06
>From AMSAT HQ SILVER SPRING, MD.
October 19, 2008
To All RADIO AMATEURS
BID: $ANS-293.06

ANS received news via Amateur Radio Newsline that a ham known to many in AMSAT has been critically injured in a hot air balloon crash at the Albuquerque International Balloon Fiesta on Friday, October 10th. Another passenger aboard the ballon was killed in the crash.

Killed in the crash was Stephen Lachendro, of Butler, Pennsylvania. Keith Sproul, WU2Z, was critically injured in the accident when the 'Wings of Wind' balloon hit powerlines near the festival grounds just North of the city.

According to news reports, there were gusty winds as the two balloonists were trying to land. From pictures taken by attendees, it appears as if the basket carrying the men caught fire after hitting the power lines, separated from the balloon envelope and fell to the ground.

First responders reported that Lachendro was found lying on the side of a ditch after falling 45 feet to his death. Sproul who was reportedly piloting the balloon jumped some 60 feet from the burning gondola. WU2Z was unconscious when he was found and was flown by helicopter to a local hospital where he was admitted in critical condition. Reports say that he suffered a broken leg and hip, punctured lungs and burns to his face.

Keith Sproul is the twin brother Mark Sproul, KB2ICI. The two are best known in ham radio circles as the co-authors of the popular WinAPRS, MacAPRS and X-APRS APRS is the multi-faceted position reporting system originally developed by Bob Bruninga, WB4APR. It allows the monitoring of real time geographical information such as the position of vehicles, the status of weather, radio direction finding and much more.

According to a National Guard spokesman at the scene, the National

Transportation Safety Board will investigate this latest crash.

[ANS thanks the Amateur Radio Newsline for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM
K9JKM at amsat dot org

From -1821465659007111014
X-Google-Thread: fb93b,37d4f27206abeb61,start
X-Google-Thread: 1086ba,37d4f27206abeb61,start
X-Google-Thread: 1031e5,37d4f27206abeb61,start
X-Google-Thread: 10e8ad,37d4f27206abeb61,start
X-Google-Thread: 114aac,37d4f27206abeb61,start
X-Google-Attributes:
gidfb93b,gid1086ba,gid1031e5,gid10e8ad,gid114aac,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!postnews.google.com!u46g2000hsc.googlegroups.com!not-for-mail
From: bluebonysh@gmail.com
Newsgroups: rec.drugs.cannabis,rec.equestrian,rec.folk-dancing,rec.radio.amateur.space,rec.radio.shortwave
Subject: Scandalous video reason Divorce Madonna and Ricchi
Date: Tue, 21 Oct 2008 04:01:19 -0700 (PDT)
Organization: http://groups.google.com
Lines: 4
Message-ID: <2b4cd35a-dfa0-4dd7-bed4-082d8c14254f@u46g2000hsc.googlegroups.com>
NNTP-Posting-Host: 92.112.154.96
Mime-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 7bit
X-Trace: posting.google.com 1224586880 26927 127.0.0.1 (21 Oct 2008 11:01:20 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Tue, 21 Oct 2008 11:01:20 +0000 (UTC)
Complaints-To: groups-abuse@google.com
Injection-Info: u46g2000hsc.googlegroups.com; posting-host=92.112.154.96;
posting-account=svIiVAoAAAD194OoxVvciHsrquGonmXe
User-Agent: G2/1.0
X-HTTP-UserAgent: Mozilla/4.0 (compatible; MSIE 7.0; Windows NT 5.1; WebMoney Advisor; Avant Browser; Embedded Web Browser from: http://bsalsa.com/; .NET CLR 2.0.50727; .NET CLR 3.0.4506.2152; .NET CLR

```
3.5.30729),gzip(gfe),gzip(gfe)
Xref: g2news1.google.com rec.drugs.cannabis:546 rec.equestrian:12115 rec.folk-
dancing:134 rec.radio.amateur.space:116 rec.radio.shortwave:15140

http://www.madonascandal.byethost31.com  Madonna page featuring
exclusive Madonna videos, Madonna photos, and Madonna news,Madonna
videos, Madonna news, Madonna photos, Madonna videos, Madonna gossip.
Scandalous video reason end-marriage Madonna and Ricchi


From -3976198814426310419
X-Google-Thread: fb93b,37d4f27206abeb61
X-Google-Thread: 1086ba,37d4f27206abeb61
X-Google-Thread: 1031e5,37d4f27206abeb61
X-Google-Thread: 10e8ad,37d4f27206abeb61
X-Google-Thread: 114aac,37d4f27206abeb61
X-Google-Attributes:
gidfb93b,gid1086ba,gid1031e5,gid10e8ad,gid114aac,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII
Path: g2news1.google.com!news2.google.com!postnews.google.com!
b1g2000hsg.googlegroups.com!not-for-mail
From: barnegatdx <barnegatdx@aol.com>
Newsgroups: rec.drugs.cannabis,rec.equestrian,rec.folk-
dancing,rec.radio.amateur.space,rec.radio.shortwave
Subject: VIRUS ! VIRUS ! Scandalous video reason Divorce Madonna and Ricchi
Date: Tue, 21 Oct 2008 14:39:57 -0700 (PDT)
Organization: http://groups.google.com
Lines: 8
Message-ID: <414cfef6-f780-4e97-9cad-79f539773a0c@b1g2000hsg.googlegroups.com>
References: <2b4cd35a-dfa0-4dd7-bed4-082d8c14254f@u46g2000hsc.googlegroups.com>
NNTP-Posting-Host: 66.171.182.13
Mime-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: quoted-printable
X-Trace: posting.google.com 1224625197 14271 127.0.0.1 (21 Oct 2008 21:39:57 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Tue, 21 Oct 2008 21:39:57 +0000 (UTC)
Complaints-To: groups-abuse@google.com
Injection-Info: b1g2000hsg.googlegroups.com; posting-host=66.171.182.13;
     posting-account=PUhl-woAAACv2-LoBd6t5EiK3k65MGIJ
User-Agent: G2/1.0
X-HTTP-UserAgent: Mozilla/5.0 (X11; U; Linux i686; en-US; rv:1.9.0.3)
     Gecko/2008092510 Ubuntu/8.04 (hardy) Firefox/3.0.3,gzip(gfe),gzip(gfe)
Xref: g2news1.google.com rec.drugs.cannabis:553 rec.equestrian:12159 rec.folk-
dancing:136 rec.radio.amateur.space:117 rec.radio.shortwave:15194

On Oct 21, 7:01=A0am, bluebon...@gmail.com wrote:
> http://www.madonascandal.byethost31.com=A0Madonna page featuring
> exclusive Madonna videos, Madonna photos, and Madonna news,Madonna
> videos, Madonna news, Madonna photos, Madonna videos, Madonna gossip.
> Scandalous video reason end-marriage Madonna and Ricchi

yeah, right;
```

```
From -2906005675255492387
X-Google-Thread: fb93b,1d65c24f2a4bb5d7,start
X-Google-Thread: 1086ba,1d65c24f2a4bb5d7,start
X-Google-Thread: 1031e5,1d65c24f2a4bb5d7,start
X-Google-Thread: 10e8ad,1d65c24f2a4bb5d7,start
X-Google-Thread: 114aac,1d65c24f2a4bb5d7,start
X-Google-Attributes:
gidfb93b,gid1086ba,gid1031e5,gid10e8ad,gid114aac,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!postnews.google.com!m32g2000hsf.googlegroups.com!not-for-
mail
From: bluebonysh@gmail.com
Newsgroups: rec.drugs.cannabis,rec.equestrian,rec.folk-
dancing,rec.radio.amateur.space,rec.radio.shortwave
Subject: BDSM HARDCORE 1 Tb movi
Date: Thu, 23 Oct 2008 06:20:15 -0700 (PDT)
Organization: http://groups.google.com
Lines: 2
Message-ID: <0a24d6eb-19ce-46d6-bc1c-b7674e244dc7@m32g2000hsf.googlegroups.com>
NNTP-Posting-Host: 92.112.136.140
Mime-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 7bit
X-Trace: posting.google.com 1224768016 9474 127.0.0.1 (23 Oct 2008 13:20:16 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Thu, 23 Oct 2008 13:20:16 +0000 (UTC)
Complaints-To: groups-abuse@google.com
Injection-Info: m32g2000hsf.googlegroups.com; posting-host=92.112.136.140;
     posting-account=svIiVAoAAAD194OoxVvciHsrquGonmXe
User-Agent: G2/1.0
X-HTTP-UserAgent: Mozilla/4.0 (compatible; MSIE 7.0; Windows NT 5.1; WebMoney
     Advisor; Avant Browser;  Embedded Web Browser from: http://bsalsa.com/; .NET
     CLR 2.0.50727; .NET CLR 3.0.4506.2152; .NET CLR
3.5.30729),gzip(gfe),gzip(gfe)
Xref: g2news1.google.com rec.drugs.cannabis:564 rec.equestrian:12352 rec.folk-
dancing:137 rec.radio.amateur.space:118 rec.radio.shortwave:15327

 http://traxanki.byethost15.com/bdsm.htm BDSM    http://traxanki.byethost15.com/
hardcore.htm
HARDCORE  http://s0x0.blogspot.com  http://groups.google.com/group/porntube-best-
movies-collection



From 4268815953174321484
X-Google-Thread: fb93b,1d65c24f2a4bb5d7
X-Google-Thread: 1086ba,1d65c24f2a4bb5d7
X-Google-Thread: 1031e5,1d65c24f2a4bb5d7
X-Google-Thread: 10e8ad,1d65c24f2a4bb5d7
X-Google-Thread: 114aac,1d65c24f2a4bb5d7
X-Google-Attributes:
```

```
gidfb93b,gid1086ba,gid1031e5,gid10e8ad,gid114aac,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!postnews.google.com!p59g2000hsd.googlegroups.com!not-for-
mail
From: bluebonysh@gmail.com
Newsgroups: rec.drugs.cannabis,rec.equestrian,rec.folk-
dancing,rec.radio.amateur.space,rec.radio.shortwave
Subject: BDSM HARDCORE 1 Tb movi
Date: Sat, 25 Oct 2008 06:41:50 -0700 (PDT)
Organization: http://groups.google.com
Lines: 2
Message-ID: <2667fecb-5a61-45e7-9a4e-e10fcb8c40c9@p59g2000hsd.googlegroups.com>
NNTP-Posting-Host: 92.112.230.221
Mime-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 7bit
X-Trace: posting.google.com 1224942111 9830 127.0.0.1 (25 Oct 2008 13:41:51 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Sat, 25 Oct 2008 13:41:51 +0000 (UTC)
Complaints-To: groups-abuse@google.com
Injection-Info: p59g2000hsd.googlegroups.com; posting-host=92.112.230.221;
     posting-account=svIiVAoAAAD194OoxVvciHsrquGonmXe
User-Agent: G2/1.0
X-HTTP-UserAgent: Mozilla/4.0 (compatible; MSIE 7.0; Windows NT 5.1; WebMoney
     Advisor; Avant Browser;  Embedded Web Browser from: http://bsalsa.com/; .NET
     CLR 2.0.50727; .NET CLR 3.0.4506.2152; .NET CLR
3.5.30729),gzip(gfe),gzip(gfe)
Xref: g2news2.google.com rec.drugs.cannabis:3704 rec.equestrian:49908 rec.folk-
dancing:589 rec.radio.amateur.space:551 rec.radio.shortwave:48060

 http://traxanki.byethost15.com/bdsm.htm BDSM    http://traxanki.byethost15.com/
hardcore.htm
HARDCORE  http://s0x0.blogspot.com  http://groups.google.com/group/porntube-best-
movies-collection


From 4926412467094153431
X-Google-Thread: 10e8ad,954f8b2e1a2232c5,start
X-Google-Thread: 10b9c8,954f8b2e1a2232c5,start
X-Google-Attributes: gid10e8ad,gid10b9c8,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx01.iad.newshosting.com!newshosting.com!
198.186.194.249.MISMATCH!news-out.readnews.com!transit3.readnews.com!panix!
rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-297 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Sun, 26 Oct 2008 11:27:31 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 1477
Approved: RRI Admin <rec-radio-info-request@panix.com>
```

```
Message-ID: <003c01c9377f$59987df0$0cc979d0$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1225034851 4925 166.84.1.6 (26 Oct 2008 15:27:31 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 26 Oct 2008 15:27:31 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-language: en-us
```

x-cr-hashedpuzzle: AbEx BJg7 BWqp BoJs CPiC D+Hg HqNc HvDW IZK1 Jqg2 JwMy JyyT
Ki9e KspR Kvy/
LCV1;1;cgBlAGMALQByAGEAZABpAG8ALQBpAG4AZgBvAEAAcABhAG4AaQB4AC4AYwBvAG0A;Sosha1_v1;
7;{D91D4AE6-A88E-43A0-
B5C5-434AC3C53B51};awA5AGoAawBtAEAAYwBvAG0AYwBhAHMAdAAuAG4AZQB0AA==;Sun, 26 Oct
2008 15:27:18
GMT;VwBTAFIALQAyADkANwAgAEEATQBTAEEAVAAgAFcAZQBlAGsAbAB5ACAAUwBhAHQAZQBsAGwAaQB0AG
UAIABSAGUAcABvAHIAdAA=
x-cr-puzzleid: {D91D4AE6-A88E-43A0-B5C5-434AC3C53B51}

```
Xref: g2news1.google.com rec.radio.amateur.space:120 rec.radio.info:310
```

This report is organized into FIVE parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites
Part 5 (S5) - deborbited/returned satellites

SB SAT @ AMSAT W8ISS ANS-297.S1
WSR 297 Part 1 10/23/2008

AMSAT NEWS SERVICE BULLETIN 297.S1 FROM AMSAT HQ
SILVER SPRING, MD, October 23, 2008
TO ALL RADIO AMATEURS
BID: $ANS-297.S1

DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008

Status: OPERATIONAL

Current Mode: U/v - voice

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink: 435.530 to 435.570 MHz

Proposed Frequencies:
Primary telemetry downlink: 145.870 MHz 1200 Baud BPSK AX.25 400mW
Backup telemetry downlink: 145.930 MHz 1200 Baud BPSK AX.25 400mW
Linear transponder passband downlink: 145.880 - 145.920 MHz (inverting)
400mW
Linear transponder passband uplink: 435.570 - 435.530 MHz
Transponder mode beacon: 145.870 MHz CW (10dB below transponder PEP)

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68
[07312008]
=====
VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.859330 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is
active. Each transponder has a different beacon.
[08072008]
=====
AO-51 ECHO

Catalog number: 28375
Launch date: June 29, 2004

Status: Software reload

```
Current Modes:   FM Repeater - V-SSB/u
                               V/u
                 BBS         - OFF
                 Telemetry   - OFF
```

```
Analog voice downlink:     435.300 MHz FM
                           435.150 MHz FM
                          2401.200 Mhz FM
Analog voice uplink:       145.880 MHZ FM
                           145.880 MHz USB
                           145.920 MHz FM
                          1268.700 MHz FM 67Hz PL tone
Digital Downlinks:        435.150 MHz FM 38k4 PBP, 1 watt output
                          435.150 MHz FM 9k6 Pacsat Broadcast Protocol
                         2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:           145.860 MHz FM 9k6 Pacsat Broadcast Protocol
                         1268.700 mhz FM 9k6 PBP Digital
Beacon:                   435.150 MHz
```

```
Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear
```

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[10232008]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002

Status: Operational.

Current Mode: V/u

```
Uplink:   145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz
```

Mode and Antenna Polarization:

V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer
   on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on
   and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10
   minute timer.
[05282007]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Operational - check operational schedule for current times!!

Current Mode: V/u

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage: http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=5&retURL=/satellites/status.php

```
Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's CW
telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts.htm
[0820007]
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993

Status: OFF - Reload software

Current Mode: V/u

Uplink:   145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[10092008]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: TESTING - VOICE

Current Mode:  V/u

Uplink:         145.900 MHz FM 1200-baud Manchester FSK (reserved)
                145.920 MHz FM VOICE
                145.940 MHz FM 1200-baud Manchester FSK (reserved)
                145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink:       437.026 MHz USB VOICE
                ( 1200-baud PSK - MBL Telemetry Only )

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[03202008]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
```

Launch Date: November 15, 1974

Status: Operational depending on amount of Sunlight

Current Mode: Listen before transmitting

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz CW
145.972 MHz CW
435.100 MHz CW
2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/

AO-7 Usage Guidelines on the AO-7 Log and Resource Site located at:
http://www.planetemily.com/ao7
[05282007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - U/v
Voice - V/v
BBS - V/v
APRS - V/v
SSTV - V/v

Expedition 18 Crew:

Commander:	Mike Fincke	KE5AIT
Flight Engineer:	Yury Lonchakov	RA3DT
Flight Engineer:	Greg Chamitoff	KD5PKZ

Available Modes and Frequencies:

Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM
Worldwide packet downlink: 145.825 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM

Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS
RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line is
NOT translated from Russian and posted.
[10232008]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-297.S2
WSR 297 Part 2 10/23/2008

AMSAT NEWS SERVICE BULLETIN 297.S2 FROM AMSAT HQ
SILVER SPRING, MD, October 23, 2008
TO ALL RADIO AMATEURS
BID: $ANS-297.S2

RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number:
Launch Date: May 23, 2008

Status: Operational

Curent Mode: Telemetry
Audio
Images

Downlinks: 435.315 MHz

435.215 MHz
[05292008]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.
[11152007]
=====
CP3
Catalog Number: 31128
Launch Date: April 17,2007

Status: Operational

Current Mode: /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[07302007]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: In Orbit

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder: 145.825 Mhz FM
[02052007]
=====
NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Operational

Current Mode: /u

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

```
Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[10222007]
=====
GENESAT-1 ?O-??
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Current Mode: /u

Telemetry Beacon Downlink: 437.0670 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[01082007]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon:             437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
[03262007]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003

Status: Operational

Current Mode: /u

Beacon:     436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[01082007]
=====
CO-56 CUTE-1.7 + APD
```

Catalog number: 28941
Launch date: February 21, 2006

Status: Semi-Operational - Constant Carrier only

Uplink: 1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan ?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[01082007]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW
[08132007]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Modes: FM Repeater - V-SSB/u
                               V/u
                 BBS   - OFF
                 Telemetry   - OFF

Analog voice downlink: 435.300 MHz FM
                           435.150 MHz FM
                          2401.200 Mhz FM
Analog voice uplink: 145.880 MHZ FM
                           145.880 MHz USB
                           145.920 MHz FM
                          1268.700 MHz FM 67Hz PL tone
Digital Downlinks: 435.150 MHz FM 38k4 PBP, 1 watt output
                          435.150 MHz FM 9k6 Pacsat Broadcast Protocol
                         2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Pacsat Broadcast Protocol

```
                         1268.700 mhz FM 9k6 PBP Digital
Beacon:                   435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[10232008]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Hibernation until full sunlight in November

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink:        144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[09242007]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Current Modes: V/U
               L/U

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[09172007]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984

Status: Semi-operational.

Current Mode:  /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon:          435.025 MHz
Mode-S Beacon:     2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[01242008]
=====
RS-22 RADIO SPORT RS-22
Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only

Current Mode:  /u

CW Beacon - 435.352 MHz
            145.818 MHz
[08062007]
=====
Can X-2
Catalog number:
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web page:
http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
```

```
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[05292008]
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink: 437.425 MHz

For the latest project status update please visit the AAUSAT-II web
page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[05292008]
=====
CO-65 Cute-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink:  437.475 MHz 9k6 Packet
Uplink:   1267.600 Mhz

For the latest project status update please visit the Cute-1.7+APD II
web
page:
http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78
[07312008]
=====
Compass-1
Catalog number: 32787
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink: 437.275 Mhz CW
          437.405 MHz Packet

For the latest project status update please visit the Compass 1 web
page:
http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52
[05292008]
```

=====
CO-66 Seeds II
Catalog number:
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink: 437.485 MHz

For the latest project status update please visit the Seeds 2 web page:
http://cubesat.aero.cst.nihon-u.ac.jp/english/main_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36
[07312008]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - U/v
Voice - V/v
BBS - V/v
APRS - V/v
SSTV - V/v

Expedition 18 Crew:

Commander:	Mike Fincke	KE5AIT
Flight Engineer:	Yury Lonchakov	RA3DT
Flight Engineer:	Greg Chamitoff	KD5PKZ

Available Modes and Frequencies:

Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM
Worldwide packet downlink: 145.825 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:

V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS
RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.
[10232008]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-297.S3
WSR 297 Part 3 10/23/2008

AMSAT NEWS SERVICE BULLETIN 297.S3 FROM AMSAT HQ
SILVER SPRING, MD, October 23, 2008
TO ALL RADIO AMATEURS
BID: $ANS-297.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

CP4
Catalog Number: 31122
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon: 437.325 MHz CW

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=79
[10022008]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

```
Status: Non-Operational

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon:             437.2750 MHz CW

Callsign: JR8YJT
[10152007]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency:  437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink:        437.250 MHz FM 67Hz CTCSS
Voice Downlink:     2401.835 MHz FM
Packet Up/Downlink:  437.250 MHz 9k6 packet
Packet Downlink     2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non=Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[08132007]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.
```

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]

=====

MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Non-Operational

Uplinks: 145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[007302007]

=====

NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, callsign KE6QMD, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]

=====

SO-42 SAUDISAT-1B
Catalog number: 26549

```
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS:                SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink:   145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
V-band:   145.840 -  145.990 MHz CW/LSB
U-band:   435.550 -  435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks
---------
S2-band:  2401.225 -  2401.475 MHz CW/USB
K-band:  24048.010 - 24048.060 MHz CW/USB
Beacon:   2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)
----------------------------
BEACON   General Beacon (GB)    Middle Beacon (MB)    Engineering Beacon
(EB)
```

2 m	none	145.898 MHz	none
70cm	435.438 MHz	435.588 MHz	435.838 MHz
13cm(1)	2400.188 MHz	2400.338 MHz	2400.588 MHz
13cm(2)	2401.173 MHz	2401.323 MHz	2401.573 MHz
3cm	10450.975 MHz	10451.125 MHz	10451.375 MHz
1.5cm	24047.885 MHz	24048.035 MHz	24048.285 MHz

[07162007]

=====

OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]

=====

UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web site
at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]

=====

SO-35 SUNSAT
Catalog Number: ?
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]

=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink: 145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html

```
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012006]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HL01-11
BBS: HL01-12
[01222007]
=====
UO-22 UOSAT
```

```
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
LIBERTAD-1
Catalog Number: 31129
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25
```

```
Callsign: 5K3L

Uplink:   145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[10222007]
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990

Status: CW Beacon only

Uplinks:          145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink:      437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[01222007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
[05012006]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990
```

```
Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet: Non-Operational
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon:   145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW
```

```
Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink  29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
Beacons:   29.450 MHz
          435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon 1:  29.352 MHz (intermittent)
Beacon 2:  29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink:     21.260 to 21.300 MHz CW/USB
Downlink:  145.860 to 145.900 MHz CW/USB

Beacon:    145.860 MHz

Robot:     145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink:   21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon:   29.408 MHz

Robot:    29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-297.S4
WSR 297 Part 4 10/23/2008

AMSAT NEWS SERVICE BULLETIN 297.S4 FROM AMSAT HQ
SILVER SPRING, MD, October 23, 2008
TO ALL RADIO AMATEURS
BID: $ANS-297.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE PROPOSED FOR LAUNCH AT
THIS
TIME:

XW-1
Catalog Number:
Proposed Launch Date: Summer 2009?

Status: Design Phase
```

Proposed Equipment:
Beacon: 435Mhz, CW 20dBm
Linear transponder: RX: 145Mhz, TX: 435Mhz, 40KHz, 30dBm
FM Transponder: RX: 145Mhz, TX: 435Mhz, 16KHz, 30dBm
Digital store and forward transponder: RX: 145Mhz, TX: 435Mhz, 16KHz, 30dBm

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108
[10092008]
=====
Phase 5a Mars Mission AO-??
Catalog Number:
Proposed Launch Date: 2009 or 2011

Status: Design Phase

For the latest project status update please visit the AMSAT-DL P5-A web page:
http://ticket-to-mars.org
[01222007]
=====
PHASE 3E AO-??
Catalog number:
Proposed Launch Date: Late 2008

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/
[01222007]
=====
Eagle AO-??
Catalog Number:
Proposed Launch Date: Early/Mid 2009

Status: Design Phase

For the latest project status updates please visit the AMSAT-NA webpage:
http://www.amsat.org
[01222007]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-297.S5
WSR 297 Part 5 10/23/2008

AMSAT NEWS SERVICE BULLETIN 297.S5 FROM AMSAT HQ
SILVER SPRING, MD, October 23, 2008
TO ALL RADIO AMATEURS
BID: $ANS-297.S5

THE FOLLOWING SATELLITES HAVE RE-ENTERED OR HAVE BEEN RETURNED SAFELY:

NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink: 145.825 Mhz FM APRS AX25
APRS Uplink: 145.825 MHz FM APRS AX25
Voice/PSK31 Uplink: 28.120 MHz

Packet to Voice ID: RAFT
[06112007]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)

* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

From 917629960442354164
X-Google-Thread: fb93b,d282d9c8b949b945,start
X-Google-Thread: 1086ba,d282d9c8b949b945,start
X-Google-Thread: 1031e5,d282d9c8b949b945,start
X-Google-Thread: 10e8ad,d282d9c8b949b945,start
X-Google-Attributes: gidfb93b,gid1086ba,gid1031e5,gid10e8ad,domainid0,public,usenet
X-Google-Language: ENGLISH,UTF8
Path: g2news1.google.com!postnews.google.com!d42g2000prb.googlegroups.com!not-for-mail
From: bluebonysh@gmail.com
Newsgroups: rec.drugs.cannabis,rec.equestrian,rec.folk-dancing,rec.radio.amateur.space,rec.radio.shortwave
Subject: Democrats sexy meltdown
Date: Tue, 28 Oct 2008 11:22:22 -0700 (PDT)
Organization: http://groups.google.com
Lines: 7
Message-ID: <2a038f06-dc8f-4053-9b55-b97377806f77@d42g2000prb.googlegroups.com>
NNTP-Posting-Host: 92.112.139.92
Mime-Version: 1.0
Content-Type: text/plain; charset=UTF-8
Content-Transfer-Encoding: quoted-printable
X-Trace: posting.google.com 1225218142 11054 127.0.0.1 (28 Oct 2008 18:22:22 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Tue, 28 Oct 2008 18:22:22 +0000 (UTC)

```
Complaints-To: groups-abuse@google.com
Injection-Info: d42g2000prb.googlegroups.com; posting-host=92.112.139.92;
     posting-account=svIiVAoAAAD194OoxVvciHsrquGonmXe
User-Agent: G2/1.0
X-HTTP-UserAgent: Mozilla/4.0 (compatible; MSIE 7.0; Windows NT 5.1; WebMoney
     Advisor; Avant Browser;  Embedded Web Browser from: http://bsalsa.com/; .NET
     CLR 2.0.50727; .NET CLR 3.0.4506.2152; .NET CLR
3.5.30729),gzip(gfe),gzip(gfe)
Xref: g2news1.google.com rec.drugs.cannabis:599 rec.equestrian:12769 rec.folk-
dancing:146 rec.radio.amateur.space:121 rec.radio.shortwave:15705

 http://salo.coolpage.biz/amateur.htm  read full=EF=BF=BD Natalie felt it w=
as
only fair that I remove the gag from Bills mouth so  he could answer
his loving wife and daughters probing questions. After clearing his
throat he said something that I will never forget Hillary  I feel your
pain http://groups.google.com/group/sexual-meltdown http://sexual-meltdown.=
blogspot.com/



From 3978111012143325424
X-Google-Thread: fb93b,e15ea8d16f8455c3,start
X-Google-Thread: 1086ba,e15ea8d16f8455c3,start
X-Google-Thread: 1031e5,e15ea8d16f8455c3,start
X-Google-Thread: 10e8ad,e15ea8d16f8455c3,start
X-Google-Attributes:
gidfb93b,gid1086ba,gid1031e5,gid10e8ad,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!postnews.google.com!f63g2000hsf.googlegroups.com!not-for-
mail
From: bluebonysh@gmail.com
Newsgroups: rec.drugs.cannabis,rec.equestrian,rec.folk-
dancing,rec.radio.amateur.space,rec.radio.shortwave
Subject: Devil Or Angel Lucy Finds Out sexo
Date: Thu, 30 Oct 2008 05:40:07 -0700 (PDT)
Organization: http://groups.google.com
Lines: 3
Message-ID: <8bb1d326-26f8-49b9-bfbf-8751897feae6@f63g2000hsf.googlegroups.com>
NNTP-Posting-Host: 92.112.146.171
Mime-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 7bit
X-Trace: posting.google.com 1225370407 19644 127.0.0.1 (30 Oct 2008 12:40:07 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Thu, 30 Oct 2008 12:40:07 +0000 (UTC)
Complaints-To: groups-abuse@google.com
Injection-Info: f63g2000hsf.googlegroups.com; posting-host=92.112.146.171;
     posting-account=svIiVAoAAAD194OoxVvciHsrquGonmXe
User-Agent: G2/1.0
X-HTTP-UserAgent: Mozilla/4.0 (compatible; MSIE 7.0; Windows NT 5.1; WebMoney
     Advisor; Avant Browser;  Embedded Web Browser from: http://bsalsa.com/; .NET
     CLR 2.0.50727; .NET CLR 3.0.4506.2152; .NET CLR
3.5.30729),gzip(gfe),gzip(gfe)
```

```
Xref: g2news1.google.com rec.drugs.cannabis:603 rec.equestrian:12911 rec.folk-
dancing:147 rec.radio.amateur.space:122 rec.radio.shortwave:15850
```

On a warm summer night last year, Lucy was walking alone on the side
of the road near a secluded ornamental park. http://sabir.servik.com/hardcore.htm
http://bdsm-big-tits.blogspot.com/ http://groups.google.com/group/salbon-lesbi

```
From -8648060322579968680
X-Google-Thread: fb93b,accecd9a6c595ed3,start
X-Google-Thread: 1031e5,accecd9a6c595ed3,start
X-Google-Thread: 10e8ad,accecd9a6c595ed3,start
X-Google-Attributes: gidfb93b,gid1031e5,gid10e8ad,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!postnews.google.com!k36g2000pri.googlegroups.com!not-for-
mail
From: bluebonysh@gmail.com
Newsgroups: rec.drugs.cannabis,rec.equestrian,rec.folk-
dancing,rec.radio.amateur.space,rec.radio.shortwave
Subject: Sex movies and flash porn videos.
Date: Fri, 31 Oct 2008 07:14:21 -0700 (PDT)
Organization: http://groups.google.com
Lines: 6
Message-ID: <ca51ed08-88f1-4804-aebc-3d44e94d3635@k36g2000pri.googlegroups.com>
NNTP-Posting-Host: 92.112.132.248
Mime-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 7bit
X-Trace: posting.google.com 1225462462 7571 127.0.0.1 (31 Oct 2008 14:14:22 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Fri, 31 Oct 2008 14:14:22 +0000 (UTC)
Complaints-To: groups-abuse@google.com
Injection-Info: k36g2000pri.googlegroups.com; posting-host=92.112.132.248;
     posting-account=svIiVAoAAAD194OoxVvciHsrquGonmXe
User-Agent: G2/1.0
X-HTTP-UserAgent: Mozilla/4.0 (compatible; MSIE 7.0; Windows NT 5.1; WebMoney
     Advisor; Avant Browser;  Embedded Web Browser from: http://bsalsa.com/; .NET
     CLR 2.0.50727; .NET CLR 3.0.4506.2152; .NET CLR
3.5.30729),gzip(gfe),gzip(gfe)
Xref: g2news2.google.com rec.drugs.cannabis:3733 rec.equestrian:50328 rec.folk-
dancing:596 rec.radio.amateur.space:555 rec.radio.shortwave:48598
```

http://sexos69.freetzi.com/ Full free porn videos and DVDs. The
ultimate xxx porn and sex site, download or stream free full xxx sex
DVDs. porn, sex, porno, free porn, porn tube, porn videos, stream
porn, free streaming porn, full sex videos porn,porn movies,free
porn,sex,porno,free sex,tube porn http://sexos69.freetzi.com/
http://sexos69.blogspot.com/ http://groups.google.com/group/sexos69

```
From 4936559606035094733
X-Google-Thread: 10e8ad,5b1d4d40eb7907eb,start
X-Google-Thread: 10b9c8,5b1d4d40eb7907eb,start
```

```
X-Google-Attributes: gid10e8ad,gid10b9c8,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news1.google.com!newsfeed.stanford.edu!panix!
rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-304 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Fri, 31 Oct 2008 20:14:10 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 1477
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <001501c93bb6$b68a3f90$239ebeb0$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1225498451 12752 166.84.1.6 (1 Nov 2008 00:14:11 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sat, 1 Nov 2008 00:14:11 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to            rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
x-cr-hashedpuzzle: Ffs= yqI= AcCg AfQ0 CPug EAsZ FP8u Fcwv G6mz HmTr H1Tn IS6x
KPSV KXCP Ks34
K56j;1;cgBlAGMALQByAGEAZABpAG8ALQBpAG4AZgBvAEAAcABhAG4AaQB4AC4AYwBvAG0A;Sosha1_v1;
7;{0133BF55-6FEA-49EE-B167-
E364B0EE9F62};awA5AGoAawBtAEAAYwBvAG0AYwBhAHMAdAAuAG4AZQB0AA==;Sat, 01 Nov 2008
00:13:37
GMT;VwBTAFIALQAzADAANAAgAEEATQBTAEEAVAAgAFcAZQBlAGsAbAB5ACAAUwBhAHQAZQBsAGwAaQB0AG
UAIABSAGUAcABvAHIAdAA=
x-cr-puzzleid: {0133BF55-6FEA-49EE-B167-E364B0EE9F62}
Xref: g2news2.google.com rec.radio.amateur.space:556 rec.radio.info:827
```

This report is organized into FIVE parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites
Part 5 (S5) - deorbited/returned satellites

SB SAT @ AMSAT W8ISS ANS-304.S1

WSR 304 Part 1 10/30/2008

AMSAT NEWS SERVICE BULLETIN 304.S1 FROM AMSAT HQ
SILVER SPRING, MD, October 30, 2008
TO ALL RADIO AMATEURS
BID: $ANS-304.S1

DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008

Status: OPERATIONAL
Current Mode: U/v - voice

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink: 435.530 to 435.570 MHz

Proposed Frequencies:
Primary telemetry downlink: 145.870 MHz 1200 Baud BPSK AX.25 400mW
Backup telemetry downlink: 145.930 MHz 1200 Baud BPSK AX.25 400mW
Linear transponder passband downlink: 145.880 - 145.920 MHz (inverting) 400mW
Linear transponder passband uplink: 435.570 - 435.530 MHz
Transponder mode beacon: 145.870 MHz CW (10dB below transponder PEP)

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68
[07312008]
=====
VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.859330 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

```
Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is
active. Each transponder has a different beacon.
[08072008]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Modes:   FM Repeater - V-SSB/u-FM
                               V-FM/u-FM
                 BBS         - OFF
                 Telemetry   - OFF

Analog voice downlink:     435.300 MHz FM
                           435.150 MHz FM
                          2401.200 Mhz FM
Analog voice uplink:       145.880 MHZ FM
                           145.880 MHz USB
                           145.920 MHz FM
                          1268.700 MHz FM 67Hz PL tone
Digital Downlinks:        435.150 MHz FM 38k4 PBP, 1 watt output
                          435.150 MHz FM 9k6 Pacsat Broadcast Protocol
                         2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:           145.860 MHz FM 9k6 Pacsat Broadcast Protocol
                         1268.700 mhz FM 9k6 PBP Digital
Beacon:                   435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[10302008]
=====
```

SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002

Status: Operational.

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer
   on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on
   and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10
   minute timer.
[05282007]

=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Operational - check operational schedule for current times!!

Current Mode: V/u

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:

V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage: http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's CW
telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts.htm
[0820007]
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993

Status: OFF - Reload software

Current Mode: V/u

Uplink: 145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[10092008]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: TESTING - VOICE

Current Mode: V/u

Uplink: 145.900 MHz FM 1200-baud Manchester FSK (reserved)
                145.920 MHz FM VOICE
                145.940 MHz FM 1200-baud Manchester FSK (reserved)
                145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink: 437.026 MHz USB VOICE
                (1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:

U: RC 437.050 MHz RHCP
PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[03202008]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational depending on amount of Sunlight

Current Mode: Listen before transmitting

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz CW
145.972 MHz CW
435.100 MHz CW
2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/

AO-7 Usage Guidelines on the AO-7 Log and Resource Site located at:
http://www.planetemily.com/ao7
[05282007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - U/v
Voice - V/v
BBS - V/v
APRS - V/v
SSTV - V/v

Expedition 18 Crew:

Commander:	Mike Fincke	KE5AIT
Flight Engineer:	Yury Lonchakov	RA3DT

Flight Engineer: Greg Chamitoff   KD5PKZ

Available Modes and Frequencies:

Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM
Worldwide packet downlink: 145.825 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS
                           RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.
[10232008]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-304.S2
WSR 304 Part 2 10/30/2008

AMSAT NEWS SERVICE BULLETIN 304.S2 FROM AMSAT HQ
SILVER SPRING, MD, October 30, 2008
TO ALL RADIO AMATEURS
BID: $ANS-304.S2

```
RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number:
Launch Date: May 23, 2008

Status: Operational

Curent Mode: Telemetry
             Audio
             Images

Downlinks: 435.315 MHz
           435.215 MHz
[05292008]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode:  /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon:    435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.
[11152007]
=====
CP3
Catalog Number: 31128
Launch Date: April 17,2007

Status: Operational

Current Mode:  /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[07302007]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: In Orbit

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder:  145.825 Mhz FM
[02052007]
```

```
=====
NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Operational

Current Mode: /u

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[10222007]
=====
GENESAT-1 ?O-??
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Current Mode: /u

Telemetry Beacon Downlink: 437.0670 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[01082007]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon:             437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
[03262007]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003

Status: Operational
```

```
Current Mode: /u

Beacon:     436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[01082007]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Semi-Operational - Constant Carrier only

Uplink:  1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan ? )

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[01082007]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW
[08132007]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Modes:   FM Repeater - V-SSB/u-FM
                               V-FM/u-FM
                 BBS         - OFF
                 Telemetry   - OFF
```

Analog voice downlink: 435.300 MHz FM
                           435.150 MHz FM
                          2401.200 Mhz FM
Analog voice uplink: 145.880 MHZ FM
                           145.880 MHz USB
                           145.920 MHz FM
                          1268.700 MHz FM 67Hz PL tone
Digital Downlinks: 435.150 MHz FM 38k4 PBP, 1 watt output
                          435.150 MHz FM 9k6 Pacsat Broadcast Protocol
                         2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Pacsat Broadcast Protocol
                         1268.700 mhz FM 9k6 PBP Digital
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[10302008]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Hibernation until full sunlight in November

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[09242007]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

```
Status: Operational

Current Modes: V/U
               L/U

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[09172007]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984

Status: Semi-operational.

Current Mode:  /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon:          435.025 MHz
Mode-S Beacon:     2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[01242008]
=====
RS-22 RADIO SPORT RS-22
Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only

Current Mode:  /u

CW Beacon - 435.352 MHz
            145.818 MHz
[08062007]
=====
```

Can X-2
Catalog number:
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web page:
http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[05292008]

=====

AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink: 437.425 MHz

For the latest project status update please visit the AAUSAT-II web page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[05292008]

=====

CO-65 Cute-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink: 437.475 MHz 9k6 Packet
Uplink: 1267.600 Mhz

For the latest project status update please visit the Cute-1.7+APD II web page:
http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78
[07312008]

=====

Compass-1
Catalog number: 32787
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink: 437.275 Mhz CW
437.405 MHz Packet

For the latest project status update please visit the Compass 1 web page:
http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52
[05292008]
=====
CO-66 Seeds II
Catalog number:
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink: 437.485 MHz

For the latest project status update please visit the Seeds 2 web page:
http://cubesat.aero.cst.nihon-u.ac.jp/english/main_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36
[07312008]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes:	FM Repeater -	U/v
	Voice -	V/v
	BBS -	V/v
	APRS -	V/v
	SSTV -	V/v

Expedition 18 Crew:

Commander:	Mike Fincke	KE5AIT
Flight Engineer:	Yury Lonchakov	RA3DT
Flight Engineer:	Greg Chamitoff	KD5PKZ

Available Modes and Frequencies:

Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM
Worldwide packet downlink: 145.825 Mhz FM

Voice:

Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS
RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line is
NOT translated from Russian and posted.
[10232008]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-304.S3
WSR 304 Part 3 10/30/2008

AMSAT NEWS SERVICE BULLETIN 304.S3 FROM AMSAT HQ
SILVER SPRING, MD, October 30, 2008
TO ALL RADIO AMATEURS
BID: $ANS-304.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

CP4
Catalog Number: 31122
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: /u

```
TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon:    437.325 MHz CW

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=79
[10022008]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Non-Operational

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon:             437.2750 MHz CW

Callsign: JR8YJT
[10152007]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency:  437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink:         437.250 MHz FM 67Hz CTCSS
Voice Downlink:      2401.835 MHz FM
Packet Up/Downlink:   437.250 MHz 9k6 packet
Packet Downlink      2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005
```

```
Status: Non=Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[08132007]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink:   435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Non-Operational

Uplinks:   145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink:  437.325 MHz

Broadcast callsign: MYSAT3-11
BBS:                MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial
land and weather imaging payloads offers FM and FSK Amateur Radio
communica-
tion.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a
collaborative effort between the Malaysian government and Surrey
Satellite
Technology Ltd.
[007302007]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
```

```
Uplink:   145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
call-
sign KE6QMD, as per the user service agreement located at the following
URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS:                SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink:   145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
V-band:   145.840 -  145.990 MHz CW/LSB
U-band:   435.550 -  435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB
```

Downlinks

S2-band: 2401.225 - 2401.475 MHz CW/USB
K-band: 24048.010 - 24048.060 MHz CW/USB
Beacon: 2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)

BEACON	General Beacon (GB)	Middle Beacon (MB)	Engineering Beacon (EB)
2 m	none	145.898 MHz	none
70cm	435.438 MHz	435.588 MHz	435.838 MHz
13cm(1)	2400.188 MHz	2400.338 MHz	2400.588 MHz
13cm(2)	2401.173 MHz	2401.323 MHz	2401.573 MHz
3cm	10450.975 MHz	10451.125 MHz	10451.375 MHz
1.5cm	24047.885 MHz	24048.035 MHz	24048.285 MHz

[07162007]

=====

OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]

=====

UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]

=====

SO-35 SUNSAT
Catalog Number: ?
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz
145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]

=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]

=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]

=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink: 145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]

=====
PO-28 POSAT-1

```
Catalog number: 22829
Launch Date: September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign:       POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012006]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
KO-23 KITSAT
Catalog number: 22077
```

```
Launch date: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HL01-11
BBS: HL01-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz
```

```
More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
LIBERTAD-1
Catalog Number: 31129
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink:   145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[10222007]
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990

Status: CW Beacon only

Uplinks:          145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink:      437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[01222007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
```

```
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
[05012006]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet: Non-Operational
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon:   145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
```

```
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink  29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
Beacons:   29.450 MHz
          435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
```

```
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon 1:  29.352 MHz (intermittent)
Beacon 2:  29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink:     21.260 to 21.300 MHz CW/USB
Downlink:  145.860 to 145.900 MHz CW/USB

Beacon:    145.860 MHz

Robot:     145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink:   21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon:   29.408 MHz

Robot:    29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-304.S4
WSR 304 Part 4 10/30/2008

AMSAT NEWS SERVICE BULLETIN 304.S4 FROM AMSAT HQ
SILVER SPRING, MD, October 30, 2008
TO ALL RADIO AMATEURS
```

BID: $ANS-304.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE PROPOSED FOR LAUNCH AT THIS TIME:

XW-1
Catalog Number:
Proposed Launch Date: Summer 2009?

Status: Design Phase

Proposed Equipment:
Beacon: 435Mhz, CW 20dBm
Linear transponder: RX: 145Mhz, TX: 435Mhz, 40KHz, 30dBm
FM Transponder: RX: 145Mhz, TX: 435Mhz, 16KHz, 30dBm
Digital store and forward transponder: RX: 145Mhz, TX: 435Mhz, 16KHz, 30dBm

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108
[10092008]
=====
Phase 5a Mars Mission AO-??
Catalog Number:
Proposed Launch Date: 2009 or 2011

Status: Design Phase

For the latest project status update please visit the AMSAT-DL P5-A web page:
http://ticket-to-mars.org
[01222007]
=====
PHASE 3E AO-??
Catalog number:
Proposed Launch Date: Late 2008

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/
[01222007]
=====
Eagle AO-??
Catalog Number:
Proposed Launch Date: Early/Mid 2009

Status: Design Phase

For the latest project status updates please visit the AMSAT-NA webpage:
http://www.amsat.org

[01222007]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-304.S5
WSR 304 Part 5 10/30/2008

AMSAT NEWS SERVICE BULLETIN 304.S5 FROM AMSAT HQ
SILVER SPRING, MD, October 30, 2008
TO ALL RADIO AMATEURS
BID: $ANS-304.S5

THE FOLLOWING SATELLITES HAVE RE-ENTERED OR HAVE BEEN RETURNED SAFELY:

NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink: 145.825 Mhz FM APRS AX25
APRS Uplink: 145.825 MHz FM APRS AX25
Voice/PSK31 Uplink: 28.120 MHz

Packet to Voice ID: RAFT
[06112007]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

From -7569677087144394740
X-Google-Thread: 10e8ad,a1e52cfc65a806e,start
X-Google-Thread: 10b9c8,a1e52cfc65a806e,start
X-Google-Attributes: gid10e8ad,gid10b9c8,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII
Path: g2news1.google.com!news2.google.com!border1.nntp.dca.giganews.com!nntp.giganews.com!nx01.iad.newshosting.com!newshosting.com!198.186.194.249.MISMATCH!transit3.readnews.com!news-out.readnews.com!news-xxxfer.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-307 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space

Date: Sun, 2 Nov 2008 21:56:45 EST
Organization: The Radio Amateur Satellite Corporation
Lines: 353
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <001801c93d39$0384e100$0a8ea300$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;charset="iso-8859-1"
Content-Transfer-Encoding: quoted-printable
X-Trace: reader1.panix.com 1225681005 10186 166.84.1.6 (3 Nov 2008 02:56:45 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Mon, 3 Nov 2008 02:56:45 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to   rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to   rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news1.google.com rec.radio.amateur.space:125 rec.radio.info:322

AMSAT NEWS SERVICE
ANS-307

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
- AMSAT Symposium notes
- Note from Owen Garriot
- ARISS Status - 27 October 2008
- ARISS contact video posted
- AO-51 Mode requests due

SB SAT @ AMSAT $ANS-307.01
AMSAT Symposium notes

AMSAT News Service Bulletin 307.01
From AMSAT HQ SILVER SPRING, MD.

October 26, 2008
To All RADIO AMATEURS
BID: $ANS-307.01

Now that Atlanta is behind us, we learned that AMSAT is in the same boat financially as the rest of the country. Our goals are still the same, however, the dates for future projects were taken out of the Vision Statement to reflect the reality of the launch environment.
The new BOD met and elected a new slate of officers.
Their plates are quite full and they have a huge task in front of them . The Symposium had many interesting presentations including new ways to become satellite active. HEO and MEO were discussed.
The Banquet was well attended and a great presentation on the Hubble Space Telescope by one of the actual "keepers," Dan Shultz, gave inside information on real time happenings.
The next Symposium site has not been selected, however, 2009 is our 40th anniversary so hopefully many of you will attend! Thanks to the Atlanta gang for providing a wonderful adventure.

[ANS thanks Dee, NB2F for the above information]

/EX

SB SAT @ AMSAT $ANS-307.02
Note from Owen Garriot

AMSAT News Service Bulletin 307.02
From AMSAT HQ SILVER SPRING, MD.
October 26, 2008
To All RADIO AMATEURS
BID: $ANS-307.02

All,
I received the following e-mail today from Owen Garriott, W5LFL and wanted to share this with the Amateur Community. Please post this and pass it to others in the amateur radio community, as appropriate.
73, Frank H. Bauer, KA3HDO
AMSAT-NA V.P. for Human Spaceflight Programs
ARISS International Chairman

Richard, W5KWQ, landed in Kazakhstan on Friday, 24 October 2008 at about 0936 local time and was met there by his father Owen, W5LFL. They became the first American "second generation" father/son combination to have both flown in space and the first cosmonaut/astronaut-trained pair in the world. They returned to Star City near Moscow that afternoon for medical evaluation and this is the first interview provided by Richard the very next day. It is transcribed and delivered by Owen to the ham community.
"On my recent flight I had the great opportunity to speak directly with

and trade call signs with hundreds of hams around the globe. For me it was a unexpected joy to find so many enthusiastic hams, who were so well informed and interested in my activities in orbit. When I began my transmissions with preplanned SSTV images including "pirate messages", test patterns and family images, I did not know how they would be received. But it seemed that fellow hams really enjoyed seeing this beginning to my time on the International Space Station (ISS). Throughout the bulk of my 10 days on the ISS I tried to be speaking by voice or transmitting SSTV images whenever possible.
After my first 100 or so QSOs, I understood how well "networked" the global ham community really is. I received specific reports back through Mission Control-Moscow about technical aspects of my work and how the community was enjoying the transmissions. This redoubled my enthusiasm to do quality work for the amateur radio legions around the world as I realized how much it meant to those with whom I had the chance to talk. By late in my flight I had contacted many hundreds of hams by voice and I have good records of these contacts. Finally I sent some "Goodbye" images on my last day in space. I also contacted many hams that had listened to or contacted my father from space 25 years ago. Some hams I contacted 2 to 4 times on my flight.
On those last days I was very moved when sent many "soft landing" messages from individuals and classrooms full of children as I passed by. The ham community has added greatly to my personal feelings of success on my flight. I can only hope that you enjoyed it as much as I did.
Thanks so much and 73, Richard, W5KWQ"

[ANS thanks Frank, KA3HDO, for the above information]

/EX

SB SAT @ AMSAT $ANS-307.03
ARISS Status - 27 October 2008

AMSAT News Service Bulletin 307.03
From AMSAT HQ SILVER SPRING, MD.
November 02, 2008

To All RADIO AMATEURS
BID: $ANS-307.03

Amateur Radio on the International Space Station (ARISS) Status Report
October 27, 2008

1. Upcoming School Contacts

An Amateur Radio on the International Space Station (ARISS) contact has been scheduled with Scuola Media Statale Donato Forlani in Conversano, Italy on Tuesday, October 28 at 09:37 UTC. Students have been introduced to amateur radio and have covered the importance of space missions. Media coverage is expected to include newspapers, radio and television and will be broadcast live by streaming video on: http://www.telenorba.it/home/streaming_d.php

An Amateur Radio on the International Space Station (ARISS) contact has been scheduled with Santa Teresa del Bambin Ges� in Rome, Italy on Thursday, October 30 at 08:51 UTC. Santa Teresa del Bambin Ges� is a Catholic primary school established to meet the needs for Catholic education of the local population. It has been preparing the children for the ARISS contact with educational projects on related scientific topics.

An Amateur Radio on the International Space Station (ARISS) contact has been scheduled with IES Trassierra in C�rdoba, Spain on Monday, November 3 at 08:58 UTC. Students have been learning about space and related ISS topics.

An Amateur Radio on the International Space Station (ARISS) contact has been scheduled with St. Thomas Primary School in Brisbane, Queensland, Australia on Tuesday, November 4 at 10:10 UTC. The school has its own radio club and has been using packet radio prior to the contact. Topics of space, science and technology have been taught and students, ages 4-12, have participated in related activities. These activities have included building models of space stations, using a telescope to explore the night sky, building crystal radios, producing a video and creating an ARISS Web site for the school.

2.   Training Session Contact Scheduled

A simulated Amateur Radio on the International Space Station (ARISS) contact has been scheduled for Monday, October 27 at approximately 17:00 UTC between ESA astronaut, Frank De Winne, ON1DWN, and youth attending the Technopolis in Mechelen, Belgium. This training session is a terrestrial-based amateur radio contact using ARISS-equivalent equipment.

3.   Oregon Students Question Garriott on Space

On Monday, October 20, Pinehurst School students in Ashland, Oregon participated in an Amateur Radio on the International Space Station (ARISS) contact via the telebridge stations WH6PN in Hawaii, and W6SRJ in California. Seventeen students had 24 questions answered by Richard Garriott, W5KWQ, as approximately 30 students, teachers and parents gathered for the contact. Audio was available via IRLP (Internet Radio Linking Project) Reflector 9010. The EchoLink AMSAT (101 377) server received six connections. The educational event received newspaper and television coverage. The Daily Tidings posted an article: http://www.dailytidings.com/2008/1020/stories/1020_astronaut.php

The Channel 12 News coverage may be viewed here:
http://kdrv.com/page/56321

The Pinehurst students also built a turnstile antenna for satellite contacts which they used to download some of Garriott�s SSTV images!

4. National Planetarium, Malaysia - Contact Successful

The National Planetarium in Kuala Lumpur, Malaysia experienced a successful Amateur Radio on the International Space Station (ARISS) contact with spaceflight participant Richard Garriott, W5KWQ, on Tuesday, October 21. The contact was requested for �The National Space Challenge, Prime Minister�s Trophy 2008,� which was held October 21-25, 2008. Students had twenty questions prepared. Richard answered the twenty and a few extra.

5. Armada Area School Students Speak with Space Traveler

Youth attending Armada Area Schools in Armada, Michigan took part in an Amateur Radio on the International Space Station (ARISS) contact on Friday, October 24. Approximately six hundred students, parents, teachers and members from the community gathered for the event as twelve children asked 20 questions of Mike Fincke, KE5AIT. Special guests in attendance were Armada Area Schools Superintendent Dr. Arnold Kummerow, Armada Area Schools Assistant Superintendent of Finance and Operations Michael Musary, district principals and school board members. A local newspaper and the local television channel 6 reported the news. There were 24 known connections on the 2 EchoLink servers and there were also uncounted listeners on 5 link nodes and 4 repeaters.

6. Update on Austin High School � ARISS Contact

The Liberal Arts and Science Academy (LASA) High School in Austin, Texas had a direct Amateur Radio on the International Space Station (ARISS) contact on Sunday, October 19 with Richard Garriott, W5KWQ. My Fox Austin posted a video of the contact on its Web site:
http://www.myfoxaustin.com/myfox/pages/Home/Detail?contentId=7678113&version=2&locale=EN-US&layoutCode=VSTY&pageId=1.1.1

News 8 Austin also covered the news:
http://www.news8austin.com/content/top_stories/default.asp?ArID=222425

7. Article on CLC Contact

Four Challenger Learning Centers (CLC) experienced a joint Amateur Radio on the International Space Station (ARISS) contact on October 16. The Howard B. Owens Science Center�s Challenger Center in Lanham, Maryland was one of those which participated. The local paper reported on the event:
http://www.gazette.net/stories/10232008/largnew170337_32474.shtml

8. Garriott SSTV, Voice Contacts

Richard Garriott, W5KWQ, transmitted Slow Scan Television (SSTV) images during his flight. Amateur radio operators from around the world receiving these pictures have uploaded them to an Amateur Radio on the International Space Station (ARISS) SSTV Web site. Over 2200 images have been received from SpaceCam, MMSSTV and the VC-H1! See:
http://ariss-sstv.ssl.berkeley.edu/SSTV/

Garriott also made hundreds of general voice contacts with the amateur radio community during his flight. A recording of Richard talking to his father, Owen, W5LFL, has been posted to the richardinspace Web site:
http://www.richardinspace.com/index.cfm?fuseaction=Multimedia_
Gallery.welcome&typeid=060A2E79-19B9-BA51-EE1A0CCF3
7084B95&albumid=060AA196-19B9-BA51-EEC1C439A223F0C3&media=1

Pictures taken of the Budbrooke School contact have also been uploaded to the richardinspace Web site. See October 20 entry:
http://www.richardinspace.com/

More information has been posted to the ARISS SSTV blog:
http://www.ariss-sstv.blogspot.com/

9. ARISS International Team Meeting Held

An Amateur Radio on the International Space Station (ARISS) Team teleconference was held on Tuesday, October 21. Discussions included Richard Garriott�s mission and the newly installed ISS Ham radio system.
Minutes have been posted. See:
http://www.rac.ca/ariss/arisstel2008-10-21.htm

10. Outcomes from Garriott�s ARISS Participation

The Amateur Radio on the International Space Station (ARISS) team has received feedback from Richard Garriott�s amateur radio activities while onboard the ISS. A sample of these follow:

[ANS thanks Carol, KB3LKI, for the above information]

/EX

SB SAT @ AMSAT $ANS-307.04
ARISS contact video posted

AMSAT News Service Bulletin 307.04
From AMSAT HQ SILVER SPRING, MD.
November 02, 2008

To All RADIO AMATEURS
BID: $ANS-307.04

UK ARISS School Contact Video Posted On-Line

This week Howard, G6LVB thanked the British Amateur TV club for their coverage of the ARISS School Contact, "I'm sure you'll agree that BATC, the British Amateur TV club have done a great job with a video of our recent ARISS school contact over here in the UK."

The original telecast is at:
http://www.batc.tv/channel.php?ch=1, then select "Richard Garriott HD" or "Richard Garriott SD".

Additional converted video formats can be found at:
http://www.g6lvb.com/images/RichardGarriotHD.mp4 (59.4Mb) for iPhone, Quicktime and VLC.

http://www.g6lvb.com/images/RichardGarriotHD.wmv (56.6Mb) for Windows Media Player and VLC.

[ANS thanks Howard, G6LVB for the above information]

/EX

SB SAT @ AMSAT $ANS-307.05
AO-51 Mode requests due

AMSAT News Service Bulletin 307.05
From AMSAT HQ SILVER SPRING, MD.
November 02, 2008

To All RADIO AMATEURS
BID: $ANS-307.05

Requests for AO-51 Operating Modes Due Soon

AMSAT-NA VP Operations Drew, KO4MA said, "If you have any requests for a particular mode on AO-51 in November, please e-mail them to ao51-modes@amsat.org as soon as you can."

Drew reminded the AO-51 community, "Please be aware that many emails that are sent to that address will be held for moderator review (me!) and as long as it's related to AO-51 it will be approved and posted to the list."

Until the graphics tools on the amsat web page are updated the best source of AO-51 operating mode information continues to be at:
http://www.amsat.org/amsat-new/echo/CTNews.php

[ANS thanks Drew, KO4MA for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits.

Application forms are available from the AMSAT Office.

73,

This week's ANS Editor,
Dee Interdonato, NB2F

```
From -5136662553133490067
X-Google-Thread: fb93b,8e5c903abb9b8c99,start
X-Google-Thread: 1086ba,8e5c903abb9b8c99,start
X-Google-Thread: 1031e5,8e5c903abb9b8c99,start
X-Google-Thread: 10e8ad,8e5c903abb9b8c99,start
X-Google-Thread: 114aac,8e5c903abb9b8c99,start
X-Google-Attributes:
gidfb93b,gid1086ba,gid1031e5,gid10e8ad,gid114aac,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!postnews.google.com!d36g2000prf.googlegroups.com!not-for-
mail
From: bluebonysh@gmail.com
Newsgroups: rec.drugs.cannabis,rec.equestrian,rec.folk-
dancing,rec.radio.amateur.space,rec.radio.shortwave
Subject: Financial crisis came in to farm industry. Viagra sell 300 percents
Date: Tue, 4 Nov 2008 22:12:00 -0800 (PST)
Organization: http://groups.google.com
Lines: 2
Message-ID: <979fddf4-7374-454a-9fd0-2f20b6762c76@d36g2000prf.googlegroups.com>
NNTP-Posting-Host: 92.112.154.94
Mime-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 7bit
X-Trace: posting.google.com 1225865520 13621 127.0.0.1 (5 Nov 2008 06:12:00 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Wed, 5 Nov 2008 06:12:00 +0000 (UTC)
Complaints-To: groups-abuse@google.com
Injection-Info: d36g2000prf.googlegroups.com; posting-host=92.112.154.94;
     posting-account=svIiVAoAAAD194OoxVvciHsrquGonmXe
User-Agent: G2/1.0
X-HTTP-UserAgent: Mozilla/4.0 (compatible; MSIE 7.0; Windows NT 5.1; WebMoney
     Advisor; Avant Browser;  Embedded Web Browser from: http://bsalsa.com/; .NET
     CLR 2.0.50727; .NET CLR 3.0.4506.2152; .NET CLR
3.5.30729),gzip(gfe),gzip(gfe)
Xref: g2news2.google.com rec.drugs.cannabis:3770 rec.equestrian:50826 rec.folk-
dancing:599 rec.radio.amateur.space:558 rec.radio.shortwave:49376
```

http://farmos.freetzi.com/ Financial crisis came in to farm industry.
Viagra sell 300 percents

```
From 4813148708337580755
```

```
X-Google-Thread: 10e8ad,325b396c39442fc3,start
X-Google-Thread: 10b9c8,325b396c39442fc3,start
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X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!newsfeed2.dallas1.level3.net!
news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-311 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Wed, 5 Nov 2008 21:26:53 EST
Organization: The Radio Amateur Satellite Corporation
Lines: 1475
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <001501c93fb7$16076c00$42164400$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1225938413 27314 166.84.1.6 (6 Nov 2008 02:26:53 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Thu, 6 Nov 2008 02:26:53 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
x-cr-hashedpuzzle: EAo= ATd+ Anrr AxIn CWyp CimX CnS3 DVGd Dc/x EHf2 ENvs GDH/
H0+t H3xM JG0Y
JZJw;1;cgBlAGMALQByAGEAZABpAG8ALQBpAG4AZgBvAEAAcABhAG4AaQB4AC4AYwBvAG0A;Sosha1_v1;
7;{FA6B2A47-FA06-4DD7-A2DB-
CB701DC3DDC0};awA5AGoAawBtAEAAYwBvAG0AYwBhAHMAdAAuAG4AZQB0AA==;Thu, 06 Nov 2008
02:26:27
GMT;VwBTAFIALQAzADEAMQAgAEEATQBTAEEAVAAgAFcAZQBlAGsAbAB5ACAAUwBhAHQAZQBsAGwAaQB0AG
UAIABSAGUAcABvAHIAdAA=
x-cr-puzzleid: {FA6B2A47-FA06-4DD7-A2DB-CB701DC3DDC0}
Xref: g2news1.google.com rec.radio.amateur.space:127 rec.radio.info:326
```

This report is organized into five (5) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites
Part 5 (S5) - deborbited/returned satellites

SB SAT @ AMSAT W8ISS ANS-311.S1
WSR 311 Part 1 11/06/2008

AMSAT NEWS SERVICE BULLETIN 311.S1 FROM AMSAT HQ
SILVER SPRING, MD, November 06, 2008
TO ALL RADIO AMATEURS
BID: $ANS-311.S1

DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008

Status: OPERATIONAL
Current Mode: U/v - voice

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink: 435.530 to 435.570 MHz

Proposed Frequencies:
Primary telemetry downlink: 145.870 MHz 1200 Baud BPSK AX.25 400mW
Backup telemetry downlink: 145.930 MHz 1200 Baud BPSK AX.25 400mW
Linear transponder passband downlink: 145.880 - 145.920 MHz (inverting) 400mW
Linear transponder passband uplink: 435.570 - 435.530 MHz
Transponder mode beacon: 145.870 MHz CW (10dB below transponder PEP)

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68
[07312008]
=====
VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.859330 MHZ CW

Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is
active. Each transponder has a different beacon.
[08072008]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

```
Current Modes:   FM Repeater - V-FM/u-FM
                 BBS         - OFF
                 Telemetry   - OFF

Analog voice downlink:     435.300 MHz FM
                           435.150 MHz FM
                          2401.200 Mhz FM
Analog voice uplink:       145.880 MHZ FM
                           145.880 MHz USB
                           145.920 MHz FM
                          1268.700 MHz FM 67Hz PL tone
Digital Downlinks:        435.150 MHz FM 38k4 PBP, 1 watt output
                          435.150 MHz FM 9k6 Pacsat Broadcast Protocol
                         2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:           145.860 MHz FM 9k6 Pacsat Broadcast Protocol
                         1268.700 mhz FM 9k6 PBP Digital
Beacon:                   435.150 MHz
```

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[11062008]

=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002

Status: Operational.

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer
   on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on
   and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10
   minute timer.
[05282007]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Operational - check operational schedule for current times!!

Current Mode: V/u

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage: http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's CW
telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts.htm
[0820007]
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993

Status: OFF - Reload software

Current Mode: V/u

Uplink: 145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[10092008]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: TESTING - VOICE

Current Mode: V/u

Uplink: 145.900 MHz FM 1200-baud Manchester FSK (reserved)
                145.920 MHz FM VOICE
                145.940 MHz FM 1200-baud Manchester FSK (reserved)
                145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink: 437.026 MHz USB VOICE
                (1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

```
Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[03202008]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational depending on amount of Sunlight

Current Mode: Listen before transmitting

Uplink:   145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink:  29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons:   29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/

AO-7 Usage Guidelines on the AO-7 Log and Resource Site located at:
http://www.planetemily.com/ao7
[05282007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - U/v
                      Voice -       V/v
                      BBS -         V/v
                      APRS -        V/v
                      SSTV -        V/v

Expedition 18 Crew:
Commander:                Mike Fincke      KE5AIT
```

Flight Engineer: Yury Lonchakov RA3DT
Flight Engineer: Greg Chamitoff KD5PKZ

Available Modes and Frequencies:

Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM
Worldwide packet downlink: 145.825 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS
RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line is
NOT translated from Russian and posted.
[10232008]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-311.S2
WSR 311 Part 2 11/06/2008

AMSAT NEWS SERVICE BULLETIN 311.S2 FROM AMSAT HQ
SILVER SPRING, MD, November 06, 2008
TO ALL RADIO AMATEURS

```
BID: $ANS-311.S2

RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number:
Launch Date: May 23, 2008

Status: Operational

Curent Mode: Telemetry
             Audio
             Images

Downlinks: 435.315 MHz
           435.215 MHz
[05292008]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode:  /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon:    435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.
[11152007]
=====
CP3
Catalog Number: 31128
Launch Date: April 17,2007

Status: Operational

Current Mode:  /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[07302007]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: In Orbit

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder:  145.825 Mhz FM
```

[02052007]
=====
NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Operational

Current Mode: /u

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[10222007]
=====
GENESAT-1 ?O-??
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Current Mode: /u

Telemetry Beacon Downlink: 437.0670 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[01082007]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

```
Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon:             437.2750 MHz CW
```

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
[03262007]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003

```
Status: Operational

Current Mode: /u

Beacon:     436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[01082007]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Semi-Operational - Constant Carrier only

Uplink:  1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan ? )

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[01082007]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW
[08132007]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Modes:   FM Repeater - V-FM/u-FM
                 BBS         - OFF
                 Telemetry   - OFF
```

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.880 MHZ FM
145.880 MHz USB
145.920 MHz FM
1268.700 MHz FM 67Hz PL tone
Digital Downlinks: 435.150 MHz FM 38k4 PBP, 1 watt output
435.150 MHz FM 9k6 Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Pacsat Broadcast Protocol
1268.700 mhz FM 9k6 PBP Digital
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[110602008]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Hibernation until full sunlight in November

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[09242007]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

```
Status: Operational

Current Modes: V/U
               L/U

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[09172007]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984

Status: Semi-operational.

Current Mode:  /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon:          435.025 MHz
Mode-S Beacon:     2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[01242008]
=====
RS-22 RADIO SPORT RS-22
Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only

Current Mode:  /u

CW Beacon - 435.352 MHz
            145.818 MHz
[08062007]
=====
```

Can X-2
Catalog number:
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web page:
http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[05292008]
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink: 437.425 MHz

For the latest project status update please visit the AAUSAT-II web
page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[05292008]
=====
CO-65 Cute-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink: 437.475 MHz 9k6 Packet
Uplink: 1267.600 Mhz

For the latest project status update please visit the Cute-1.7+APD II
web
page:
http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78
[07312008]
=====
Compass-1
Catalog number: 32787
Launch Date: April 28, 2008

```
Status: IN ORBIT

Downlink: 437.275 Mhz CW
          437.405 MHz Packet

For the latest project status update please visit the Compass 1 web
page:
http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52
[05292008]
=====
CO-66 Seeds II
Catalog number:
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink: 437.485 MHz

For the latest project status update please visit the Seeds 2 web page:
http://cubesat.aero.cst.nihon-u.ac.jp/english/main_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36
[07312008]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - U/v
                      Voice -       V/v
                      BBS -         V/v
                      APRS -        V/v
                      SSTV -        V/v

Expedition 18 Crew:
Commander:                Mike Fincke      KE5AIT
Flight Engineer:          Yury Lonchakov   RA3DT
Flight Engineer:          Greg Chamitoff   KD5PKZ


Available Modes and Frequencies:

Digital/APRS:
Worldwide packet uplink:   145.825 MHz FM
Worldwide packet downlink: 145.825 Mhz FM

Voice:
```

Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:

German:	DP0ISS
Russian:	RS0ISS RZ3DZR
USA:	NA1SS
Packet Mailbox:	RS0ISS-11
Packet Keyboard:	RS0ISS-3
Digipeater callsign:	ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.
[10232008]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-311.S3
WSR 311 Part 3 11/06/2008

AMSAT NEWS SERVICE BULLETIN 311.S3 FROM AMSAT HQ
SILVER SPRING, MD, November 06, 2008
TO ALL RADIO AMATEURS
BID: $ANS-311.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

CP4
Catalog Number: 31122
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon: 437.325 MHz CW

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=79
[10022008]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Non-Operational

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon: 437.2750 MHz CW

Callsign: JR8YJT
[10152007]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 MHz FM 67Hz CTCSS
Voice Downlink: 2401.835 MHz FM
Packet Up/Downlink: 437.250 MHz 9k6 packet
Packet Downlink   2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non=Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[08132007]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Non-Operational

Uplinks: 145.850 MHz
145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[007302007]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK

Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, callsign KE6QMD, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks

V-band: 145.840 - 145.990 MHz CW/LSB
U-band: 435.550 - 435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks

S2-band: 2401.225 - 2401.475 MHz CW/USB
K-band: 24048.010 - 24048.060 MHz CW/USB
Beacon: 2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)

BEACON	General Beacon (GB)	Middle Beacon (MB)	Engineering Beacon (EB)
2 m	none	145.898 MHz	none
70cm	435.438 MHz	435.588 MHz	435.838 MHz
13cm(1)	2400.188 MHz	2400.338 MHz	2400.588 MHz
13cm(2)	2401.173 MHz	2401.323 MHz	2401.573 MHz
3cm	10450.975 MHz	10451.125 MHz	10451.375 MHz
1.5cm	24047.885 MHz	24048.035 MHz	24048.285 MHz

[07162007]
=====
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: ?
Launch date:February 23, 1999

```
Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater:         436.250 MHz

Uplinks: Mode B Repeater:  145.825 MHz
Mode J Digipeater:         145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink:   145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
PO-28 POSAT-1
```

```
Catalog number: 22829
Launch Date: September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign:       POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012006]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
KO-23 KITSAT
Catalog number: 22077
```

```
Launch date: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HL01-11
BBS: HL01-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz
```

```
More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
LIBERTAD-1
Catalog Number: 31129
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink:   145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[10222007]
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990

Status: CW Beacon only

Uplinks:          145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink:      437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[01222007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
```

```
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
[05012006]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet: Non-Operational
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon:   145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
```

```
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink  29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
Beacons:   29.450 MHz
          435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
```

[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB

Beacon 1: 29.352 MHz (intermittent)
Beacon 2: 29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB

Beacon: 145.860 MHz

Robot: 145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-311.S4
WSR 311 Part 4 11/06/2008

AMSAT NEWS SERVICE BULLETIN 311.S4 FROM AMSAT HQ
SILVER SPRING, MD, November 06, 2008
TO ALL RADIO AMATEURS

BID: $ANS-311.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE PROPOSED FOR LAUNCH AT THIS TIME:

XW-1
Catalog Number:
Proposed Launch Date: Summer 2009?

Status: Design Phase

Proposed Equipment:
Beacon: 435Mhz, CW 20dBm
Linear transponder: RX: 145Mhz, TX: 435Mhz, 40KHz, 30dBm
FM Transponder: RX: 145Mhz, TX: 435Mhz, 16KHz, 30dBm
Digital store and forward transponder: RX: 145Mhz, TX: 435Mhz, 16KHz, 30dBm

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108
[10092008]
=====
Phase 5a Mars Mission AO-??
Catalog Number:
Proposed Launch Date: 2009 or 2011

Status: Design Phase

For the latest project status update please visit the AMSAT-DL P5-A web page:
http://ticket-to-mars.org
[01222007]
=====
PHASE 3E AO-??
Catalog number:
Proposed Launch Date: Late 2008

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/
[01222007]
=====
Eagle AO-??
Catalog Number:
Proposed Launch Date: Early/Mid 2009

Status: Design Phase

For the latest project status updates please visit the AMSAT-NA webpage:
http://www.amsat.org

[01222007]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-311.S5
WSR 311 Part 5 11/06/2008

AMSAT NEWS SERVICE BULLETIN 311.S5 FROM AMSAT HQ
SILVER SPRING, MD, November 06, 2008
TO ALL RADIO AMATEURS
BID: $ANS-311.S5

THE FOLLOWING SATELLITES HAVE RE-ENTERED OR HAVE BEEN RETURNED SAFELY:

NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink: 145.825 Mhz FM APRS AX25
APRS Uplink: 145.825 MHz FM APRS AX25
Voice/PSK31 Uplink: 28.120 MHz

Packet to Voice ID: RAFT
[06112007]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

From 5065981869731241612
X-Google-Thread: 10e8ad,76fc8ce385e5545a,start
X-Google-Attributes: gid10e8ad,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!postnews.google.com!r36g2000prf.googlegroups.com!not-for-mail
From: brad2000@gmail.com
Newsgroups: rec.radio.amateur.space
Subject: software for tracking satellites
Date: Thu, 6 Nov 2008 22:49:46 -0800 (PST)
Organization: http://groups.google.com
Lines: 16
Message-ID: <0dad2cfa-a669-4b65-bd6d-497705025a53@r36g2000prf.googlegroups.com>

NNTP-Posting-Host: 67.166.20.249
Mime-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 7bit
X-Trace: posting.google.com 1226040587 23395 127.0.0.1 (7 Nov 2008 06:49:47 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Fri, 7 Nov 2008 06:49:47 +0000 (UTC)
Complaints-To: groups-abuse@google.com
Injection-Info: r36g2000prf.googlegroups.com; posting-host=67.166.20.249;
posting-account=RTOJGgoAAADcPtHh4i5Eb-WnkxsEWnqh
User-Agent: G2/1.0
X-HTTP-UserAgent: Mozilla/5.0 (Windows; U; Windows NT 5.1; en-US; rv:1.9.0.4)
Gecko/2008102920 Firefox/3.0.4,gzip(gfe),gzip(gfe)
Xref: g2news2.google.com rec.radio.amateur.space:560

I'm taking a class in Java programming and I need to do a project.
Since I'm interested in satellite radio, I thought I would do
something here. I know about the satellite tracking software on AMSAT.
But, was thinking if I could do something from a clean sheet, what
would you like to see.

I'm hoping to put this into a Java app, that I will create.

Obviously, I would release it as public domain software. But, I'm
interested in getting some feedback on features that you would find
useful.

Thanks.

-brad w.
KG6MDU

From 5831075811739735724
X-Google-Thread: 10e8ad,76fc8ce385e5545a
X-Google-Attributes: gid10e8ad,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news2.google.com!news.glorb.com!news2!
newspeer1.se.telia.net!se.telia.net!masternews.telia.net.!newsb.telia.net.POSTED!
not-for-mail
From: "Greg" <ash_5@gravitywell.org>
Newsgroups: rec.radio.amateur.space
References: <0dad2cfa-a669-4b65-bd6d-497705025a53@r36g2000prf.googlegroups.com>
Subject: Re: software for tracking satellites
Lines: 38
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.5512
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.5579
X-RFC2646: Format=Flowed; Original
Message-ID: <8aVQk.3900$U5.25073@newsb.telia.net>
Date: Fri, 07 Nov 2008 10:57:08 GMT
NNTP-Posting-Host: 217.210.158.29

X-Complaints-To: abuse@telia.com
X-Trace: newsb.telia.net 1226055428 217.210.158.29 (Fri, 07 Nov 2008 11:57:08 CET)
NNTP-Posting-Date: Fri, 07 Nov 2008 11:57:08 CET
Organization: Telia Internet
Xref: g2news2.google.com rec.radio.amateur.space:561

Don't follow SatScape's route, the flashy 3D interface is just slow and buggy and it's simply annoying, 2D is just fine...
I do however like satscapes 'horizon view' and it would be nice to be able to step time forward/backward with +/- keys so it'll be easy to see how high above the horizon the sat will be...
Please use plain text keplar save-files so one can edit them manually.
One thing I would like to see, using 'Full Satellite Catalog' from Space-Track.org
I'd _really_ love a feature of de-selecting trash like debree and rocket booster stages
and should be fairly simple to do I think...
Debree is labeled DEB, example "FENGYUN 1C DEB"
and rocket stages example "DELTA 1 R/B".
I wish to track sats. - not garbage...

//Greg. JO89sn

<brad2000@gmail.com> wrote in message news:0dad2cfa-a669-4b65-bd6d-497705025a53@r36g2000prf.googlegroups.com...
> I'm taking a class in Java programming and I need to do a project.
> Since I'm interested in satellite radio, I thought I would do
> something here. I know about the satellite tracking software on AMSAT.
> But, was thinking if I could do something from a clean sheet, what
> would you like to see.
>
> I'm hoping to put this into a Java app, that I will create.
>
> Obviously, I would release it as public domain software. But, I'm
> interested in getting some feedback on features that you would find
> useful.
>
> Thanks.
>
> -brad w.
> KG6MDU

From -3108435494941689586
X-Google-Thread: 10e8ad,fd96266dba82a04b,start
X-Google-Thread: 10b9c8,fd96266dba82a04b,start
X-Google-Attributes: gid10e8ad,gid10b9c8,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII

```
Path: g2news2.google.com!news2.google.com!newsfeed.stanford.edu!panix!
rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-314 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sat, 8 Nov 2008 21:28:32 EST
Organization: The Radio Amateur Satellite Corporation
Lines: 398
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <002501c94212$d67fbcf0$837f36d0$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;charset="iso-8859-1"
Content-Transfer-Encoding: quoted-printable
X-Trace: reader1.panix.com 1226197712 4321 166.84.1.6 (9 Nov 2008 02:28:32 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 9 Nov 2008 02:28:32 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news2.google.com rec.radio.amateur.space:562 rec.radio.info:843
```

AMSAT NEWS SERVICE
ANS-314

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:

* AMSAT President's Message
* Second European CubeSat Workshop
* Satellite Shorts From All Over
* ARISS Status Report for the Week of November 3, 2008

SB SAT @ AMSAT $ANS-314.01
AMSAT President's Message

AMSAT News Service Bulletin 314.01
>From AMSAT HQ SILVER SPRING, MD.
November 9, 2008
To All RADIO AMATEURS
BID: $ANS-314.01

I just arrived home on Monday night, Nov 3rd from my trip to the Southeast to attend the the AMSAT Board of Directors Meeting and the 26th Space Symposium along with some personal travel.

As you probably know by now, AMSAT has undergone a change in leadership as a result of Rick Hambly's decision not to serve another one-year term as President. At the meeting in Atlanta, the Board voted to appoint me as President. I am honored that the Board has placed their trust in my leadership and I look forward to working with the Board, the Senior Team, and our membership as we move forward into 2009.

First, many thanks to Robin Cutshaw, AA4RC and his team of volunteers for putting together and hosting an excellent AMSAT Symposium in Atlanta. Attendance was lower this year than in past years, probably due to the impacts of the slowing economy, relatively high transportation costs, and lack of news concerning Eagle.

Those that did attend the Symposium, however, benefited from an excellent weekend of presentations, discussions, interaction with fellow AMSAT members, and an opportunity to meet with the AMSAT leadership. The efforts of Robin's team, coupled with the contributions of Gould Smith, WA4SXM and Martha Saragovitz, resulted in a Symposium that ran very smoothly, with attendees enjoying the presentations, a Friday night President's Club social that was open to all Symposium attendees, the Saturday night banquet, and the Field Ops Breakfast on Sunday Morning.

Dan Schultz, N8FGV was a masterful banquet speaker who through excellent slides and dry wit explained the upcoming Hubble Repair Mission.

Dan also was our editor for the "Proceedings of of the 26th Space Symposium" which is an excellent compilation of papers, most of which were presented at the Symposium. (I encourage you to order a copy of the Proceedings if you weren't able to attend.)

In addition, for the first time that I can recall, there were TWO major prizes given away at the Dinner (Icom IC-910H and a Kenwood TS-2000), both of which were won by women who attended the banquet. Judy Perkins, KE7ERI of Lilburn, GA won the IC-910 and Flo Bower of Pinson, AL won the TS-2000 (she is working on earning her ham license). Many thanks to both Icom and Kenwood for their support of AMSAT.

The Symposium closed on Sunday following an excellent two hour "Introduction to Digital Signal Processing" workshop conducted by Phil Harman,

VK6APH that was well attended. Overall, AMSAT enjoyed an excellent weekend in Atlanta.

During the Board meeting on Thursday, Oct 23rd and the Annual Meeting on Saturday morning, Oct 25, we took time to thank Rick Hambly, W2GPS for his four years of faithful and extensive service to AMSAT as President. Rick tackled many difficult issues and sought to move AMSAT forward in a number of areas. These included dealing with changes in the regulatory environment (Orbital Debris), establishing a relationship with University of Maryland-Eastern Shore that resulted in relocation of the AMSAT Integration Lab to Pocomoke, MD, working on the difficult issue of ITAR (International Traffic of Arms Regulations),

revamping the AMSAT senior leadership team organizational structure, initial discussions with Intelsat on a possible 'rideshare' opportunity,

and 'filling in' as our webmaster when we lost the volunteer who handled

that function. Much of what Rick did was 'behind the scenes' activities

that took many hours, required dedicated followup, and received little fanfare. Many thanks to Rick for his significant efforts to make AMSAT better. During the past four years, no one dedicated such a significant portion of their life to AMSAT as Rick.

At the Annual Meeting on Oct 25, I gave a presentation that briefly reviewed where things stood within AMSAT, discussed some of organizational issues that effect our ability to get projects completed, and mentioned some of the 'outside factors' that have impacted AMSAT. I also outlined some goals for 2009. You can download the presentation (in PDF format) off the AMSAT website. There is a link on the main page. While the 'bullet points' provide key comments, the presentation doesn't have the 'talking points' that I made during each slide, so please be aware of this limitation when reviewing the material. We made the Annual Meeting available via EchoLink, and we did have members listening 'live' and submitting questions during the meeting. Thank you to those individuals who participated in the Annual Meeting.

In upcoming 'Apogee View' columns of the AMSAT Journal, I will discuss some of the challenges facing AMSAT and what is happening in a number of areas. Some of these issues were discussed at the Annual Meeting.

Please don't forget that we need volunteers in a number of technical and non-technical areas. The July/August issue of the AMSAT JOURNAL had a brief 'We Want YOU' ad that highlighted some of the areas where AMSAT needs assistance. Please review that list and if you're interested in helping AMSAT, contact Gould Smith, WA4SXM as noted in the ad.

Finally, please don't hesitate to contact me directly if you have suggestions, comments, or concerns that you would like to share. I will make every effort to respond to e-mails that I receive, but please keep in mind that I travel extensively which may limit my ability to respond quickly. Please know that I read every e-mail that I receive from AMSAT members and that I appreciate every person's willingness and time spent to share their thoughts and suggestions.

73,
Barry Baines, WD4ASW
AMSAT President

[ANS thanks Barry, WD4ASW for the above information]

/EX

SB SAT @ AMSAT $ANS-314.02
Second European CubeSat Workshop

AMSAT News Service Bulletin 314.02
>From AMSAT HQ SILVER SPRING, MD.
November 9, 2008
To All RADIO AMATEURS
BID: $ANS-314.02

Following on from the successful "Vega Maiden Flight CubeSat Workshop" held at ESA/ESTEC in January 2008, which was the first CubeSat workshop to be held at European-level, the ESA Education Office is pleased to announce the Second European CubeSat Workshop one year later as planned.

This Second European CubeSat Workshop will take place in ESA/ESTEC, Noordwijk, The Netherlands on 20-22 January 2009.

Since the first workshop, the ESA Education Office in the Directorate of Legal Affairs and External Relations in conjunction with the Directorate of Launchers has selected nine CubeSats (plus two backups) from European universities for launch on the maiden flight of the Vega launcher, now scheduled for November 2009.

The nine CubeSats will be deployed from three different deployment systems mounted on the support structure of the main payload, LARES (LAser RElativity Satellite), into an orbit of 350 km by 1450 km at an inclination of 71 degrees.

The launch opportunity is offered by ESA to the selected CubeSats free of charge, and recognises the growing importance of the CubeSat as a powerful hands-on space education tool. It is intended as a first step to boost student hands-on development of CubeSats in Europe, thus providing a suitable and qualified space workforce for the future in complement with other education project activities.

The ESA Education Office solicits abstracts to be submitted for oral or poster presentation from both European and non-European participants. The amateur radio based CubeSat Ground Segment and Operations (GENSO network) along with new ground station technologies and operational methods/techniques/software are planned for discussion.

[ANS thanks ESA and SpaceDaily.com for the above information]

/EX

SB SAT @ AMSAT $ANS-314.03
Satellite Shorts From All Over

AMSAT News Service Bulletin 314.03
>From AMSAT HQ SILVER SPRING, MD.
November 9, 2008
To All RADIO AMATEURS
BID: $ANS-314.03

+ Congratulations to Joe, K3SZH for reaching 7000 contacts as recorded in the informal AO-7 log. Joe's presence and patience has helped countless hams in learning the personality of this unique satellite. See http://www.planetemily.com/ao7/ao7log.php to review the AO-7 log pages.

+ Kudos, a hearty handshake, and a pat on the back are in order to Robin, AA4RC who got on the air this weekend to demonstrate amateur radio and amateur satellites to 10,000 Scouts camped out at the Talladega Speedway. Robin also lead the team hosting the 2008 AMSAT Space Symposium in Atlanta.

+ Fernando, EC1AME has put 3 videos of Monday�s school contact in Spain at: http://www.ea1uro.com/isstation.html.

+ The 35th Eastern VHF/UHF Conference is scheduled for April 17-19, 2009 in Enfield, CT. Additional information and call for papers will be available soon.

+ Mineo, JE9PEL reports that the most recent photos received from the Cute-1.7+APDII camera (CO-65) can be viewed on-line at:
http://www.ne.jp/asahi/hamradio/je9pel/cut17ap4.htm
http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/1_25_rev2%20_Caption.jpg

+ UniverseToday.com announces Space Lifestyle Magazine. Its a free, digital magazine, with a full color layout just like a print magazine, but its all online. SLM has feature articles about all aspects of space - NewSpace, NASA, military, science and astronomy - but mostly it's about the people that make the space sector tick. See: http://www.newforks.net/spacelifestyle.html. The subscription is free but they do ask for e-mail, home address, phone number in the registration process. (source UniverseToday.com)

[ANS thanks everyone for the above information]

/EX

SB SAT @ AMSAT $ANS-314.04
ARISS Status Report for the Week of November 3, 2008

AMSAT News Service Bulletin 314.04
>From AMSAT HQ SILVER SPRING, MD.
November 9, 2008
To All RADIO AMATEURS
BID: $ANS-314.04

1. School Contacts

An ARISS contact was held with St. Thomas' Primary School in Brisbane, Queensland, Australia on Tuesday, November 4. The school has its own radio club and has been using packet radio prior to the contact. Topics of space, science and technology have been taught and students, ages 4-12, have participated in related activities such as building models of space stations, using a telescope to explore the night sky, building crystal radios, producing a video and creating an ARISS Web site for the school.

An ARISS contact was held with Dibrugarh University in Assam, India on Friday, November 7 via telebridge station W6SRJ in California. The university considers this event a great achievement with planned media coverage.

Anderson's Creek Primary School in Warrandyte, Victoria, Australia has been scheduled for an ARISS contact on Monday, November 10. Telebridge station VK5ZAI will assist with the contact. Students have researched the International Space Station and its experiments and determined the long term impact of these studies. They have studied the history of space exploration and the reasons why humans seek to broaden their horizons. The school has hosted evening sessions to introduce students to astronomy.

The Newcomers Club in Saitama, Japan has been scheduled for an ARISS contact on Saturday, November 15 at 10:22 UTC. Community involvement and media coverage is expected.

2. Italian Students Question Astronaut via Radio

On Tuesday, October 28, students attending Scuola Media Statale Donato Forlani in Conversano, Italy participated in an ARISS contact with Mike Fincke, KE5AIT. To prepare for the event, the students made satellite contacts and received SSTV pictures, sent from the ISS by Richard Garriott W5KWQ. On the day of the contact, twelve students were able to pose one question each to Fincke as an audience of more than 500 students, parents, teachers and visitors watched. Fincke spoke to the students in Italian at the beginning and end of the contact. Two television stations (CANALE 7, TeleNorba) and three newspapers (L'Informatore, Il Levante, Il Fax) covered the event.

3. School Contact in Rome, Successful

Students attending Santa Teresa del Bambin Ges� in Rome, Italy experienced an ARISS contact on Thursday, October 30. Mike Fincke, KE5AIT, answered twelve questions. More than 150 students, parents, teachers and guests were present. Also present were ESA representative Mr. Dieter Isakeit, Head of the ESA/ESRIN Corporate Communication Office (LEX-COR) and Mr. Daniele Giannini, President 18� District of City Hall
Rome. Mr. Isakeit translated the astronaut's answers, provided information and offered souvenirs. Four television stations (Regional RAI 3, SAT2000, Telelazio, Rete Blu) and RADIO RAI 1 covered the event. The audio was fed into the EchoLink AMSAT and JK1ZRW servers and received 6 connections from stations in the U.S., U.K. and Belgium. It was also fed into D-Star net and was repeated to 40 nodes in Europe, 70 nodes in USA and 20 in the rest of the world.

4. Budbrooke School Contact Update

Students attending Budbrooke Primary School in Warwick, England spoke with Richard Garriott, W5KWQ, during an ARISS contact on Friday, October 17. The British Amateur Television Club posted video of the event. Go to: http://www.batc.tv/channel.php?ch=1 and select "Richard Garriott HD" or "Richard Garriott SD."

5. ARISS Simulated Contacts Scheduled

Chris Hadfield, KC5RNJ/VA3OOG, and Cady Coleman, KC5ZTH, have been scheduled for ARISS simulated contacts on Thursday, November 6 at approximately 14:30 UTC. The astronauts will speak to two groups of students at a Canadian school for these events. These training sessions are terrestrial-based amateur radio contacts using ARISS-equivalent equipment. Hadfield and Coleman are currently assigned as back-up Expedition 19 crew members.

6. Training Sessions Successful

ESA astronaut Frank De Winne, ON1DWN, participated in a successful simulated ARISS contact with students at Technopolis in Mechelen, Belgium on Monday, October 27. He answered twenty-two questions posed to him by the students.

ESA astronaut Andre Kuipers took part in an ARISS review session on Friday, October 31. He is currently back-up for Frank De Winne.

7. Amateur Radio Newsline Reports on Garriott's Mission

On Friday, October 24, the Amateur Radio Newsline Report 1628 posted a story on Richard Garriott's participation in ARISS activities during his ISS mission. The article, "Ham Radio in Space: Richard

Garriott, W5KWQ, Mission a Success for Ham Radio," covered Garriott's involvement in the Scout Jamboree on the Air (JOTA), SSTV, and his contact with Owen Garriott, W5LFL.

8. NASA HQ Cites Stories on Garriott

NASA Headquarters News Service picked up on reports of Richard Garriott's mission, citing articles from CTV (Canada) and the Bennington Banner (Vermont). Both stories are about amateur radio operators who made radio contacts with Richard Garriott, W5KWQ, while onboard the ISS. To view the articles, go to:

http://www.ctv.ca/servlet/ArticleNews/story/CTVNews/20081025/space_radio_081025/20081026?hub=Canada
http://www.benningtonbanner.com/ci_10813257

9. AMSAT Symposium held

The Radio Amateur Satellite Corporation (AMSAT) held its Annual Meeting and Space Symposium on October 24-26 in Atlanta, Georgia. ARISS (Amateur Radio on the International Space Station) Chairman Frank Bauer, KA3HDO, attended and gave a talk on the ARISS program. ARISS Hardware Manager Lou McFadin, W5DID, presented an update on SuitSat-2. The presentations have been posted to the AMSAT Web site.
See:
http://www.amsat.org/amsat/ariss/Presentations/AMSAT%20Symposiums/2008%20Symposium/

10. ARRL ARISS Program Manager Interviewed

The ARRL (American Radio Relay League) ARISS (Amateur Radio on the International Space Station) Program Manager Rosalie White, K1STO, was interviewed on QSO, a ham radio interview and talk show. White spoke about Richard Garriott's flight, the ARRL, ARISS and AMSAT (Radio Amateur Satellite Corporation). The interview took place on Friday, October 24 and ran three times over the weekend on the Nashville station and again on a Miami station.

[ANS thanks Carol, KB3LKI for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

And with that remember, that no matter how much you push the envelope, it is still stationery.

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM

```
From 1827780671891553194
X-Google-Thread: 10e8ad,1aa73c9c56a90000,start
X-Google-Thread: 113975,1aa73c9c56a90000,start
X-Google-Attributes: gid10e8ad,gid113975,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news3.google.com!feeder.news-service.com!
transit4.hitnews.eu!eweka.nl!hq-usenetpeers.eweka.nl!news.astraweb.com!
border2.a.newsrouter.astraweb.com!not-for-mail
From: Chris Steyaert <observations@rmob.org>
Newsgroups: rec.radio.amateur.space,sci.astro.amateur
Subject: Radio Meteor Obs. Bull. October 2008
Date: Tue, 11 Nov 2008 11:50:58 +0100
Message-ID: <oqoih45rdvp1utb85oc2tbkogbu32bt2da@4ax.com>
X-Newsreader: Forte Agent 1.93/32.576 English (American)
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Lines: 17
Organization: Unlimited download news at news.astraweb.com
NNTP-Posting-Host: df23b6a7.news.astraweb.com
X-Trace: DXC=9bOI:FSKh0QW]I=Ra]NaiPL?
0kYOcDh@ZSjS\6:5`<HX[HC49f]eldX4B6[N>VWFWW5b\G@K<<O>ReF0eVojH5C\
Xref: g2news1.google.com rec.radio.amateur.space:131 sci.astro.amateur:7658
```

Radio Meteor Observation Bulletin No. 183 of October 2008 (77 K) is available now as

http://visualrmob.free.fr/rmobtext/rmob0810.txt

More information and the visual presentation of the hourly forward scatter counts can be found on

http://www.rmob.org

http://radio.data.free.fr

Chris

```
From 4469140329008735121
```

```
X-Google-Thread: 10e8ad,a81d0a6b61404f2c,start
X-Google-Thread: 10b9c8,a81d0a6b61404f2c,start
X-Google-Attributes: gid10e8ad,gid10b9c8,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news2.google.com!newsfeed2.dallas1.level3.net!
news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-318 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Sat, 15 Nov 2008 11:23:53 EST
Organization: The Radio Amateur Satellite Corporation
Lines: 1477
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000801c9473e$5fbd0f60$1f372e20$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix2.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1226766213 25376 166.84.1.2 (15 Nov 2008 16:23:33 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sat, 15 Nov 2008 16:23:33 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news2.google.com rec.radio.amateur.space:564 rec.radio.info:856
```

This report is organized into five (5) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites
Part 5 (S5) - deborbited/returned satellites

SB SAT @ AMSAT W8ISS ANS-318.S1
WSR 318 Part 1 11/13/2008

AMSAT NEWS SERVICE BULLETIN 318.S1 FROM AMSAT HQ
SILVER SPRING, MD, November 13, 2008
TO ALL RADIO AMATEURS
BID: $ANS-318.S1

```
DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008

Status: OPERATIONAL
Current Mode: U/v - voice

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink:   435.530 to 435.570 MHz

Proposed Frequencies:
Primary telemetry downlink: 145.870 MHz 1200 Baud BPSK AX.25 400mW
Backup telemetry downlink:  145.930 MHz 1200 Baud BPSK AX.25 400mW
Linear transponder passband downlink: 145.880 - 145.920 MHz (inverting)
400mW
Linear transponder passband uplink: 435.570 - 435.530 MHz
Transponder mode beacon: 145.870 MHz CW (10dB below transponder PEP)

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68
[07312008]
=====
VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink:   435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink:   435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW


Indian Beacon:  145.859330 MHZ CW
Dutch Beacon:   145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

To know what transponder is switched on please listen for the beacon
```

```
that is
active. Each transponder has a different beacon.
[08072008]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Modes:   FM Repeater - V-FM/u-FM
                               V-FM/u-FM
                 BBS         - OFF
                 Telemetry   - OFF

Analog voice downlink:     435.300 MHz FM
                           435.150 MHz FM
                          2401.200 Mhz FM
Analog voice uplink:       145.880 MHZ FM
                           145.880 MHz USB
                           145.920 MHz FM
                          1268.700 MHz FM 67Hz PL tone
Digital Downlinks:         435.150 MHz FM 38k4 PBP, 1 watt output
                          435.150 MHz FM 9k6 Pacsat Broadcast Protocol
                         2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:            145.860 MHz FM 9k6 Pacsat Broadcast Protocol
                         1268.700 mhz FM 9k6 PBP Digital
Beacon:                    435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[11132008]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002

Status: Operational.

Current Mode: V/u
```

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer
   on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on
   and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10
   minute timer.
[05282007]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Operational - check operational schedule for current times!!

Current Mode: V/u

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage: http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts.htm
[0820007]
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993

Status: OFF - Reload software

Current Mode: V/u

Uplink: 145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[10092008]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: TESTING - VOICE

Current Mode: V/u

Uplink: 145.900 MHz FM 1200-baud Manchester FSK (reserved)
                145.920 MHz FM VOICE
                145.940 MHz FM 1200-baud Manchester FSK (reserved)
                145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink: 437.026 MHz USB VOICE
                (1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC 437.050 MHz RHCP
   PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[03202008]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational depending on amount of Sunlight

Current Mode: Listen before transmitting

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/

AO-7 Usage Guidelines on the AO-7 Log and Resource Site located at:
http://www.planetemily.com/ao7
[05282007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - U/v
                      Voice -   V/v
                      BBS -   V/v
                      APRS -   V/v
                      SSTV -   V/v

Expedition 18 Crew:

Commander:	Mike Fincke	KE5AIT
Flight Engineer:	Yury Lonchakov	RA3DT
Flight Engineer:	Greg Chamitoff	KD5PKZ

Available Modes and Frequencies:

Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM

Worldwide packet downlink: 145.825 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS
RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.
[10232008]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-318.S2
WSR 318 Part 2 11/13/2008

AMSAT NEWS SERVICE BULLETIN 318.S2 FROM AMSAT HQ
SILVER SPRING, MD, November 13, 2008
TO ALL RADIO AMATEURS
BID: $ANS-318.S2

RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number:
Launch Date: May 23, 2008

Status: Operational

```
Curent Mode: Telemetry
             Audio
             Images

Downlinks: 435.315 MHz
           435.215 MHz
[05292008]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode:  /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon:    435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.
[11152007]
=====
CP3
Catalog Number: 31128
Launch Date: April 17,2007

Status: Operational

Current Mode:  /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[07302007]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: In Orbit

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder:  145.825 Mhz FM
[02052007]
=====
NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Operational
```

Current Mode: /u

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[10222007]
=====
GENESAT-1 ?O-??
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Current Mode: /u

Telemetry Beacon Downlink: 437.0670 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[01082007]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon: 437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
[03262007]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003

Status: Operational

Current Mode: /u

Beacon: 436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

```
Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[01082007]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Semi-Operational - Constant Carrier only

Uplink:  1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan ? )

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[01082007]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW
[08132007]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Modes:   FM Repeater - V-FM/u-FM
                               V-FM/u-FM
                 BBS         - OFF
                 Telemetry   - OFF

Analog voice downlink:     435.300 MHz FM
                           435.150 MHz FM
                          2401.200 Mhz FM
Analog voice uplink:       145.880 MHZ FM
                           145.880 MHz USB
                           145.920 MHz FM
                           1268.700 MHz FM 67Hz PL tone
Digital Downlinks:         435.150 MHz FM 38k4 PBP, 1 watt output
                           435.150 MHz FM 9k6 Pacsat Broadcast Protocol
                          2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:            145.860 MHz FM 9k6 Pacsat Broadcast Protocol
                          1268.700 mhz FM 9k6 PBP Digital
Beacon:                    435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[11132008]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Hibernation until full sunlight in November

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink:        144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[09242007]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Current Modes: V/U
               L/U

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
```

```
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[09172007]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984

Status: Semi-operational.

Current Mode:  /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon:          435.025 MHz
Mode-S Beacon:     2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[01242008]
=====
RS-22 RADIO SPORT RS-22
Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only

Current Mode:  /u

CW Beacon - 435.352 MHz
            145.818 MHz
[08062007]
=====
Can X-2
Catalog number:
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink: 437.478 MHz GFSK
```

For the latest project status update please visit the Can X-2 web page:
http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[05292008]
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink: 437.425 MHz

For the latest project status update please visit the AAUSAT-II web page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[05292008]
=====
CO-65 Cute-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008

Status: IN ORBIT

```
Downlink:  437.475 MHz 9k6 Packet
Uplink:   1267.600 Mhz
```

For the latest project status update please visit the Cute-1.7+APD II web page:
http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78
[07312008]
=====
Compass-1
Catalog number: 32787
Launch Date: April 28, 2008

Status: IN ORBIT

```
Downlink: 437.275 Mhz CW
          437.405 MHz Packet
```

For the latest project status update please visit the Compass 1 web page:

http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52
[05292008]
=====
CO-66 Seeds II
Catalog number:
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink: 437.485 MHz

For the latest project status update please visit the Seeds 2 web page:
http://cubesat.aero.cst.nihon-u.ac.jp/english/main_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36
[07312008]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - U/v
Voice - V/v
BBS - V/v
APRS - V/v
SSTV - V/v

Expedition 18 Crew:
Commander: Mike Fincke KE5AIT
Flight Engineer: Yury Lonchakov RA3DT
Flight Engineer: Greg Chamitoff KD5PKZ

Available Modes and Frequencies:

Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM
Worldwide packet downlink: 145.825 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS
RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line is
NOT translated from Russian and posted.
[10232008]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-318.S3
WSR 318 Part 3 11/13/2008

AMSAT NEWS SERVICE BULLETIN 318.S3 FROM AMSAT HQ
SILVER SPRING, MD, November 13, 2008
TO ALL RADIO AMATEURS
BID: $ANS-318.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

CP4
Catalog Number: 31122
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon: 437.325 MHz CW

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=79
[10022008]

```
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Non-Operational

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon:             437.2750 MHz CW

Callsign: JR8YJT
[10152007]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency:  437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink:         437.250 MHz FM 67Hz CTCSS
Voice Downlink:      2401.835 MHz FM
Packet Up/Downlink:   437.250 MHz 9k6 packet
Packet Downlink      2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non=Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[08132007]
=====
```

AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]

=====

MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Non-Operational

Uplinks: 145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[007302007]

=====

NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, callsign KE6QMD, as per the user service agreement located at the following URL:

```
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS:                SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink:   145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
V-band:   145.840 -  145.990 MHz CW/LSB
U-band:   435.550 -  435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks
---------
S2-band:  2401.225 -  2401.475 MHz CW/USB
K-band:  24048.010 - 24048.060 MHz CW/USB
Beacon:   2401.323 MHz
         24048.035 MHz
```

P3-D Telemetry Beacons (IHU)

BEACON	General Beacon (GB)	Middle Beacon (MB)	Engineering Beacon (EB)
2 m	none	145.898 MHz	none
70cm	435.438 MHz	435.588 MHz	435.838 MHz
13cm(1)	2400.188 MHz	2400.338 MHz	2400.588 MHz
13cm(2)	2401.173 MHz	2401.323 MHz	2401.573 MHz
3cm	10450.975 MHz	10451.125 MHz	10451.375 MHz
1.5cm	24047.885 MHz	24048.035 MHz	24048.285 MHz

[07162007]
=====
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web site
at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: ?
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz

145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink: 145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

```
Broadcast callsign: POSAT1-11
BBS callsign:       POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012006]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM
```

```
Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
LIBERTAD-1
Catalog Number: 31129
```

```
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink:   145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[10222007]
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990

Status: CW Beacon only

Uplinks:          145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink:      437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[01222007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
```

```
[05012006]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet: Non-Operational
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon:   145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational
```

```
Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink  29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
Beacons:   29.450 MHz
          435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational
```

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB

Beacon 1: 29.352 MHz (intermittent)
Beacon 2: 29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB

Beacon: 145.860 MHz

Robot: 145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-318.S4
WSR 318 Part 4 11/13/2008

AMSAT NEWS SERVICE BULLETIN 318.S4 FROM AMSAT HQ
SILVER SPRING, MD, November 13, 2008
TO ALL RADIO AMATEURS
BID: $ANS-318.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE PROPOSED FOR LAUNCH AT
THIS
TIME:

XW-1

Catalog Number:
Proposed Launch Date: Summer 2009?

Status: Design Phase

Proposed Equipment:
Beacon: 435Mhz, CW 20dBm
Linear transponder: RX: 145Mhz, TX: 435Mhz, 40KHz, 30dBm
FM Transponder: RX: 145Mhz, TX: 435Mhz, 16KHz, 30dBm
Digital store and forward transponder: RX: 145Mhz, TX: 435Mhz, 16KHz, 30dBm

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108
[10092008]

=====
Phase 5a Mars Mission AO-??
Catalog Number:
Proposed Launch Date: 2009 or 2011

Status: Design Phase

For the latest project status update please visit the AMSAT-DL P5-A web page:
http://ticket-to-mars.org
[01222007]

=====
PHASE 3E AO-??
Catalog number:
Proposed Launch Date: Late 2008

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/
[01222007]

=====
Eagle AO-??
Catalog Number:
Proposed Launch Date: Early/Mid 2009

Status: Design Phase

For the latest project status updates please visit the AMSAT-NA webpage:
http://www.amsat.org
[01222007]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-318.S5
WSR 318 Part 5 11/13/2008

AMSAT NEWS SERVICE BULLETIN 318.S5 FROM AMSAT HQ
SILVER SPRING, MD, November 13, 2008
TO ALL RADIO AMATEURS
BID: $ANS-318.S5

THE FOLLOWING SATELLITES HAVE RE-ENTERED OR HAVE BEEN RETURNED SAFELY:

NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink: 145.825 Mhz FM APRS AX25
APRS Uplink: 145.825 MHz FM APRS AX25
Voice/PSK31 Uplink: 28.120 MHz

Packet to Voice ID: RAFT
[06112007]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

- AMSAT News Service (ANS)
- General satellite discussion (AMSAT-BB)
- Orbit data (KEPS)
- Manned space missions (SAREX)
- District of Columbia area (AMSAT-DC)
- New England area (AMSAT-NE)
- AMSAT Educational Liaison mailing list (AMSAT-EDU)
- AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

```
From 6637622250151584248
X-Google-Thread: 10e8ad,29edad66adee3ad8,start
X-Google-Thread: 10b9c8,29edad66adee3ad8,start
X-Google-Attributes: gid10e8ad,gid10b9c8,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII
Path: g2news2.google.com!news2.google.com!newsfeed.stanford.edu!bloom-
beacon.mit.edu!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-321 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sun, 16 Nov 2008 09:12:58 EST
Organization: The Radio Amateur Satellite Corporation
Lines: 385
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000601c947f5$5c76d0e0$156472a0$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;charset="iso-8859-1"
```

Content-Transfer-Encoding: quoted-printable
X-Trace: reader1.panix.com 1226844778 18854 166.84.1.6 (16 Nov 2008 14:12:58 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 16 Nov 2008 14:12:58 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to   rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to   rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news2.google.com rec.radio.amateur.space:565 rec.radio.info:857

AMSAT NEWS SERVICE
ANS-321

ANS is a free, weekly, news and information service of AMSAT North America,
The
Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in
designing, building, launching and communicating through analog and digital
Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* IARU Region 1 Conference Satellite Topics
* AMSAT Awards
* ESA's Vega Launching To An Unusual Orbit
* VHF/UHF/microwave pioneer Reg Galle, VK5QR, SK
* ARISS Status - 10 November 2008

SB SAT @ AMSAT $ANS-321.01
IARU Region 1 Conference Satellite Topics

AMSAT News Service Bulletin 321.01
  From AMSAT HQ SILVER SPRING, MD.
November 16, 2008
To All RADIO AMATEURS
BID: $ANS-321.01

The IARU Region 1 Conference in Cavtat starts this weekend, see http://www.southgatearc.org/news/november2008/iaru_r1_cavtat.htm

There are a number of Satellite related papers being discussed
in C5 VHF/UHF/uW:
144 MHz increased satellite service
3400 MHz amateur satellite allocation
Microwave spectrum requirements
A new vision for 23 cm
Amateur satellites handbook chapter
Microwave spectrum requirements
VHF spectrum requirements

An REF response to the C5 VHF/UHF/uW papers can be seen at
http://thf.ref-union.org/c5_iaru_r1/08cavtat/08cavtat_c5_etat_commentaire
s.p
df

[ANS Trevor, M5AKA, for the above information]
/EX

SB SAT @ AMSAT $ANS-321.02
AMSAT Awards

AMSAT News Service Bulletin 321.02
  From AMSAT HQ SILVER SPRING, MD.
November 16, 2008
To All RADIO AMATEURS
BID: $ANS-321.02

We would like to welcome the following to the satellite community. They have made their first satellite contact and are now members of the AMSAT Satellite Communicators Club.

Boris Lanca, 9A2GA
Douglas Anoman, KC9MLN
Steve Rish, K8SAR

The following has earned the AMSAT Satellite Communications Achievement Award.

Jose Manuel Escribano Hinojosa #475

Jose also earned the AMSAT South Africa Satellite Communications Achievement Award #US127.

To see all the awards visit http://www.amsat.org or
http://www.amsatnet.com

Bruce Paige, KK5DO
AMSAT Director Contests and Awards

[ANS thanks Bruce, KK5DO, for the above information]

/EX

SB SAT @ AMSAT $ANS-321.03
ESA's Vega Launching To An Unusual Orbit

AMSAT News Service Bulletin 321.03
  From AMSAT HQ SILVER SPRING, MD.
November 16, 2008
To All RADIO AMATEURS
BID: $ANS-321.03

Following the selection of 9 cubesats to be launched on the maiden
flight
of
the Vega launcher, ESA have now announced that the cubesats will be
deployed
into a very interesting orbit measuring 350km x 1450km with an
inclination
of
71 degrees.

 >From the ESA website

"The nine CubeSats will be deployed from three different deployment
systems
mounted on the support structure of the main payload, LARES (LAser
RElativity
Satellite), into an orbit of 350 km by 1450 km at an inclination of 71
degrees. The launch opportunity is offered by ESA to the selected
CubeSats
free of charge"

Further details are at:
http://www.esa.int/esaED/SEMAYTRTKMF_index_0.html

[ANS thanks David, G0MRF, for the above information]
/EX

SB SAT @ AMSAT $ANS-321.04
VHF/UHF/microwave pioneer Reg Galle, VK5QR, SK

AMSAT News Service Bulletin 321.04
  From AMSAT HQ SILVER SPRING, MD.
November 16, 2008
To All RADIO AMATEURS
BID: $ANS-321.04

All those interested in long distance VHF/UHF/microwave propagation will
regret the death of Reg Galle VK5QR on 12 September 2008.

Reg was a leading pioneer of the use of these amateur radio bands.

On 31 December 1951, Reg made a 144 MHz Australian record distance of 2122 Km with a contact with the late Rolo Everingham VK6BO in Perth (just short of the then world record of 2253 Km). He then continued to seek answers to questions regarding the propagation of the higher bands.

Reg became the Adelaide end of record breaking distances on 432, 1296, 2304 and 3456 MHz across the Great Australian Bight with Wally Green VK6WG in Albany.

Reg and Wally, as true amateurs with no professional engineering backgrounds, built equipment for these UHF/microwave bands and were nearly 2 000 Km apart so that there were no "local" tests with each other. There were no precedents in Australia, and few in the world, for trying to make contacts over this distance.

In 1977, they bridged the 1296 MHz path on 25 January for a world record distance of 1885 Km.

The following year, on 17 February 1978, Reg and Wally made their first contact on the 2304 MHz band. Reg used SSB that was processed in a divide by 6 circuit and mixed to 28 MHz. The 28 MHz signal, with processed SSB, was then transverted to 384 MHz and then tripled and doubled to 2304 MHz. This multiplication by 6 restored the original SSB! To give you a feel of the type of gear in use 30 years ago, Wally Green VK6WG used a modified World War II SCR522 which, from a 7 MHz crystal, produced 128 MHz. This was then multiplied to 384 MHz with a BAY96 varactor tripler to 1152 MHz in a modified Microwave Modules MMV1296 and then doubled in by a 2C39 which drew 90mA at 600V.

In 1986, Reg and Wally completed their first 3456 MHz contact using CW. This distance of 1885 Km and that on 2304 MHz remain the Australian record distances.

Both Wally and Reg built equipment for the 5.7 GHz band and made tests on that band without success although Reg claimed that they could have had a contact had Wally not been in the midst of making apricot jam on that day!

Reg gradually lost interest in pushing the boundaries further and has been in poor health in recent years. His death followed several strokes. The most recent one returned him to hospital just over a week ago but he insisted that he wanted to go home despite living alone and with no close relatives in Adelaide. His niece watched over him and he was able to fulfil his wish of dying at home in his own bed! Reg was 96 years old!

Farewell to a tremendous pioneer on the higher bands!

[ANS thanks Wally, VK6KZ, for the above information]

/EX

SB SAT @ AMSAT $ANS-321.05
ARISS Status - 10 November 2008

AMSAT News Service Bulletin 321.05
From AMSAT HQ SILVER SPRING, MD.
November 16, 2008
To All RADIO AMATEURS
BID: $ANS-321.05

1. Spanish Students Speak to ISS via Radio

Students attending IES Trassierra in C�rdoba, Spain spoke with astronaut Mike Fincke, KE5AIT, via an Amateur Radio on the International Space Station (ARISS) contact on Monday, November 3. Twenty students asked one question each of the astronaut. Approximately 150 students, teachers and guests attended the event including the Cordoba City mayor and the Head Master of Education and Culture of Cordoba. Media coverage included 4 local and regional television stations, 2 local and regional radio stations and 3 newspapers. Photos, an audio recording and a video recording may be found at:
http://www.ariss-eu.org/2008_11_08.htm

An article (in Spanish) has been posted to El Dia de Cordoba:
http://www.eldiadecordoba.es/article/cordoba/270358/conocer/como/vive/astronauta.html

2. Successful Australian Contact

In preparation for an Amateur Radio on the International Space Station (ARISS) contact, students attending St. Thomas� Primary School in Brisbane, Queensland, Australia helped build an antenna. They spoke with Richard Garriott, W5KWQ, during his ISS mission and received Slow Scan Television (SSTV) images as

well. They also viewed Mike Fincke�s ISS video tour taken during Expedition 9. On Tuesday, November 4, the students spoke with Fincke, KE5AIT, as approximately 400 students looked on. Fincke answered all twenty questions posed to him by the 20 students. The event received extensive local and national media coverage including 2 newspapers, an online magazine, 2 television stations and 5 radio stations. The audio and a partial video of the event are available on the school�s Web site:
http://www.members.optusnet.com.au/jandnclark/?reload

An interview is available on the ABC site:
http://www.abc.net.au/local/photos/2008/11/07/2412996.htm?site=brisbane

The City South News posted an article on the contact. See:
http://city-south-news.whereilive.com.au/news/story/special-space-link-for-local-students/

3. India University Contact Successful

An Amateur Radio on the International Space Station (ARISS) contact between Dibrugarh University in Assam, India and astronaut Mike Fincke, KE5AIT, took place on Friday, November 7 via telebridge station W6SRJ in California. Ten students were able to ask eleven questions of Fincke as an audience of 700 gathered for the event. Mike spoke briefly in the Indian language. Media coverage included newspapers and television. Contact audio was fed into two EchoLink servers and into the Internet Radio Linking Project (IRLP) Discovery Reflector 9010. There were 5 known connections from England, Japan and South Korea on the EchoLink servers with uncounted listeners on one repeater and two link nodes.

4. Successful ARISS Simulated Contacts

On Thursday, November 6, Chris Hadfield, KC5RNJ/VA3OOG, and Cady Coleman, KC5ZTH, took part in Amateur Radio on the International Space Station (ARISS) simulated contacts. The astronauts spoke with two groups of students from Manordale Public School in Ottawa, Ontario, Canada. These training sessions were terrestrial-based amateur radio contacts using ARISS-equivalent equipment. Hadfield and Coleman are currently assigned as back-up Expedition 19 crew members.

5. ARRL Articles on Garriott Mission

On Thursday, November 6, the American Radio Relay League (ARRL) ran an article on Richard Garriott�s mission. �Richard Garriott, W5KWQ, Back on Terra Firma,� may be found at:
http://www.arrl.org/news/stories/2008/11/06/10437/?nc=1

The ARRL Letter also ran the story. See:
http://www.arrl.org/arrlletter/08/1107/

6. Interview on SuitSat

ARISS (Amateur Radio on the International Space Station) member Steve Bible, N7HPR, gave an interview on the concept and development of SuitSat-1. His interview has been posted to the Design News, Engineering Concept Conduit Web page. See: http://www.engineeringconceptconduit.com/

7. Astronaut Makes General Contacts

Mike Fincke, KE5AIT, made several contacts with the ham radio community over the November 8 weekend. Using the Amateur Radio on the International Space Station (ARISS) equipment, Fincke talked with stations in Australia, Thailand, South America and North America.

8. ARISS SSTV Web Site Status

The Amateur Radio on the International Space Station (ARISS) Slow Scan
Television (SSTV) Web site set up for Richard Garriott�s flight was a
big
success. Over 2200 images from SpaceCam, MMSSTV and the VC-H1 were
received
by
amateur radio operators worldwide and were uploaded to the site. The
site
received nearly 4 million hits! See the SSTV images:
http://ariss-sstv.ssl.berkeley.edu/SSTV/ and the SSTV blog:
http://ariss-sstv.blogspot.com/

[ANS thanks Carol, KB3LKI, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the
President's
Club. Members of the President's Club, as sustaining donors to AMSAT
Project
Funds, will be eligible to receive additional benefits. Application
forms
are
available from the AMSAT Office.

73,
This week's ANS Editor,
Lee McLamb, KU4OS

From 8530759192498374624
X-Google-Thread: 10e8ad,12c9470a7ff6f9eb,start
X-Google-Thread: 10b9c8,12c9470a7ff6f9eb,start
X-Google-Attributes: gid10e8ad,gid10b9c8,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news1.google.com!newsfeed2.dallas1.level3.net!
news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-325 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Fri, 21 Nov 2008 17:34:18 EST
Organization: The Radio Amateur Satellite Corporation
Lines: 1472
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <003401c94c29$3f7ee260$be7ca720$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix1.panix.com
Mime-Version: 1.0

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Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1227306854 14161 166.84.1.1 (21 Nov 2008 22:34:14 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Fri, 21 Nov 2008 22:34:14 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to            rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news2.google.com rec.radio.amateur.space:159 rec.radio.info:436
```

This report is organized into five (5) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites
Part 5 (S5) - deorbited/returned satellites

SB SAT @ AMSAT W8ISS ANS-325.S1
WSR 325 Part 1 11/20/2008

AMSAT NEWS SERVICE BULLETIN 325.S1 FROM AMSAT HQ
SILVER SPRING, MD, November 20, 2008
TO ALL RADIO AMATEURS
BID: $ANS-325.S1

DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008

Status: OPERATIONAL
Current Mode: U/v - voice

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink: 435.530 to 435.570 MHz

Proposed Frequencies:
Primary telemetry downlink: 145.870 MHz 1200 Baud BPSK AX.25 400mW
Backup telemetry downlink: 145.930 MHz 1200 Baud BPSK AX.25 400mW
Linear transponder passband downlink: 145.880 - 145.920 MHz (inverting)
400mW
Linear transponder passband uplink: 435.570 - 435.530 MHz

```
Transponder mode beacon: 145.870 MHz CW (10dB below transponder PEP)

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68
[07312008]
=====
VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink:   435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink:   435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW


Indian Beacon:  145.859330 MHZ CW
Dutch Beacon:   145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is
active. Each transponder has a different beacon.
[08072008]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Modes:   FM Repeater - V-FM/u-FM
                 BBS         - L-9k6/u-9k6
                 Telemetry   -  /u

Analog voice downlink:     435.300 MHz FM
                           435.150 MHz FM
                          2401.200 Mhz FM
Analog voice uplink:       145.880 MHZ FM
```

145.880 MHz USB
145.920 MHz FM
1268.700 MHz FM 67Hz PL tone
Digital Downlinks: 435.150 MHz FM 38k4 PBP, 1 watt output
435.150 MHz FM 9k6 Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Pacsat Broadcast Protocol
1268.700 mhz FM 9k6 PBP Digital
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[11202008]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002

Status: Operational.

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10 minute timer.

[05282007]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Operational - check operational schedule for current times!!

Current Mode: V/u

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage: http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's CW
telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts.htm
[0820007]
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993

Status: OFF - Reload software

Current Mode: V/u

Uplink: 145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear

```
U: Linear

Official Webpage: http://www.ao27.org
[10092008]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: TESTING - VOICE

Current Mode:  V/u

Uplink:         145.900 MHz FM 1200-baud Manchester FSK (reserved)
                145.920 MHz FM VOICE
                145.940 MHz FM 1200-baud Manchester FSK (reserved)
                145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink:       437.026 MHz USB VOICE
                ( 1200-baud PSK - MBL Telemetry Only )

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[03202008]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational depending on amount of Sunlight

Current Mode: Listen before transmitting

Uplink:   145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink:  29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons:   29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW

Official Webpage:
```

```
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/

AO-7 Usage Guidelines on the AO-7 Log and Resource Site located at:
http://www.planetemily.com/ao7
[05282007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - U/v
                      Voice -       V/v
                      BBS -         V/v
                      APRS -        V/v
                      SSTV -        V/v

Expedition 18 Crew:
Commander:                Mike Fincke      KE5AIT
Flight Engineer:          Yury Lonchakov   RA3DT
Flight Engineer:          Greg Chamitoff   KD5PKZ


Available Modes and Frequencies:

Digital/APRS:
Worldwide packet uplink:   145.825 MHz FM
Worldwide packet downlink: 145.825 Mhz FM

Voice:
Region 1 voice uplink:     145.200 MHz FM
Region 2/3 voice uplink:   144.490 MHz FM
Worldwide downlink:        145.800 MHz FM

Crossband Repeater:
Repeater Uplink:           437.800 MHz FM
Repeater Downlink:         145.800 MHz FM

SSTV Robot 36:
Downlink:                  145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German:                    DP0ISS
Russian:                   RS0ISS
                           RZ3DZR
```

```
USA:                        NA1SS
Packet Mailbox:             RS0ISS-11
Packet Keyboard:            RS0ISS-3
Digipeater callsign:        ARISS

Official ARISS Webpage:    http://www.rac.ca/ariss
ISS Fan Club Webpage:      http://www.issfanclub.com
APRS tracking page:        http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.
[10232008]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-325.S2
WSR 325 Part 2 11/20/2008

AMSAT NEWS SERVICE BULLETIN 325.S2 FROM AMSAT HQ
SILVER SPRING, MD, November 20, 2008
TO ALL RADIO AMATEURS
BID: $ANS-325.S2

RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number:
Launch Date: May 23, 2008

Status: Operational

Curent Mode: Telemetry
             Audio
             Images

Downlinks: 435.315 MHz
           435.215 MHz
[05292008]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode:  /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon:    435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.
```

```
[11152007]
=====
CP3
Catalog Number: 31128
Launch Date: April 17,2007

Status: Operational

Current Mode:  /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[07302007]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: In Orbit

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder:  145.825 Mhz FM
[02052007]
=====
NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Operational

Current Mode: /u

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[10222007]
=====
GENESAT-1 ?O-??
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Current Mode: /u

Telemetry Beacon Downlink: 437.0670 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[01082007]
=====
```

CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon: 437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
[03262007]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003

Status: Operational

Current Mode: /u

Beacon: 436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[01082007]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Semi-Operational - Constant Carrier only

Uplink: 1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan ?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[01082007]
=====
CO-55 CUTE-1
Catalog Number: 27844

```
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW
[08132007]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Modes:   FM Repeater - V-FM/u-FM
                 BBS         - L-9k6/u-9k6
                 Telemetry   -  /u

Analog voice downlink:     435.300 MHz FM
                           435.150 MHz FM
                          2401.200 Mhz FM
Analog voice uplink:       145.880 MHZ FM
                           145.880 MHz USB
                           145.920 MHz FM
                          1268.700 MHz FM 67Hz PL tone
Digital Downlinks:        435.150 MHz FM 38k4 PBP, 1 watt output
                          435.150 MHz FM 9k6 Pacsat Broadcast Protocol
                         2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:           145.860 MHz FM 9k6 Pacsat Broadcast Protocol
                         1268.700 mhz FM 9k6 PBP Digital
Beacon:                   435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
```

```
[11202008]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Hibernation until full sunlight in November

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink:        144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[09242007]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Current Modes: V/U
               L/U

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[09172007]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984

Status: Semi-operational.

Current Mode:  /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
```

UHFBeacon: 435.025 MHz
Mode-S Beacon: 2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[01242008]
=====
RS-22 RADIO SPORT RS-22
Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only

Current Mode: /u

CW Beacon - 435.352 MHz
            145.818 MHz
[08062007]
=====
Can X-2
Catalog number:
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web page:
http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[05292008]
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink: 437.425 MHz

For the latest project status update please visit the AAUSAT-II web page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[05292008]

```
=====
CO-65 Cute-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink:  437.475 MHz 9k6 Packet
Uplink:   1267.600 Mhz

For the latest project status update please visit the Cute-1.7+APD II
web
page:
http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78
[07312008]
=====
Compass-1
Catalog number: 32787
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink: 437.275 Mhz CW
          437.405 MHz Packet

For the latest project status update please visit the Compass 1 web
page:
http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52
[05292008]
=====
CO-66 Seeds II
Catalog number:
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink: 437.485 MHz

For the latest project status update please visit the Seeds 2 web page:
http://cubesat.aero.cst.nihon-u.ac.jp/english/main_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36
[07312008]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
```

Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - U/v
Voice - V/v
BBS - V/v
APRS - V/v
SSTV - V/v

Expedition 18 Crew:
Commander: Mike Fincke KE5AIT
Flight Engineer: Yury Lonchakov RA3DT
Flight Engineer: Greg Chamitoff KD5PKZ

Available Modes and Frequencies:

Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM
Worldwide packet downlink: 145.825 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS
RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line

is
NOT translated from Russian and posted.
[10232008]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-325.S3
WSR 325 Part 3 11/20/2008

AMSAT NEWS SERVICE BULLETIN 325.S3 FROM AMSAT HQ
SILVER SPRING, MD, November 20, 2008
TO ALL RADIO AMATEURS
BID: $ANS-325.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

CP4
Catalog Number: 31122
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon: 437.325 MHz CW

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=79
[10022008]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Non-Operational

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon: 437.2750 MHz CW

Callsign: JR8YJT
[10152007]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305

2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 MHz FM 67Hz CTCSS
Voice Downlink: 2401.835 MHz FM
Packet Up/Downlink: 437.250 MHz 9k6 packet
Packet Downlink   2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non=Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[08132007]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Non-Operational

Uplinks: 145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[007302007]

=====

NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, callsign KE6QMD, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]

=====

SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]

=====

SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

```
Uplink:   145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
V-band:   145.840 -  145.990 MHz CW/LSB
U-band:   435.550 -  435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks
---------
S2-band:  2401.225 -  2401.475 MHz CW/USB
K-band:  24048.010 - 24048.060 MHz CW/USB
Beacon:   2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)
----------------------------
BEACON   General Beacon (GB)    Middle Beacon (MB)    Engineering Beacon
(EB)
2 m       none                    145.898 MHz           none
70cm      435.438 MHz             435.588 MHz           435.838 MHz
13cm(1)  2400.188 MHz            2400.338 MHz          2400.588 MHz
13cm(2)  2401.173 MHz            2401.323 MHz          2401.573 MHz
3cm     10450.975 MHz           10451.125 MHz         10451.375 MHz
1.5cm   24047.885 MHz           24048.035 MHz         24048.285 MHz
[07162007]
=====
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
=====
```

UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site
at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: ?
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

```
Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink:   145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign:       POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012006]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK
```

```
Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational
```

```
Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
LIBERTAD-1
Catalog Number: 31129
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink:   145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[10222007]
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990

Status: CW Beacon only

Uplinks:          145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
```

145.900 MHz 1200-baud Manchester FSK

CW downlink: 437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[01222007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink: 145.825 MHz FM 1200 Baud AFSK
Beacon: 2401.220 MHz
[05012006]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink: 145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting): Non-Operational
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet: Non-Operational

```
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon:   145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink  29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
```

```
Downlink:  29.4500 -  29.5500 MHz SSB/CW
Beacons:   29.450 MHz
          435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon 1:  29.352 MHz (intermittent)
Beacon 2:  29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink:     21.260 to 21.300 MHz CW/USB
Downlink:  145.860 to 145.900 MHz CW/USB

Beacon:    145.860 MHz

Robot:     145.908 MHz
[05232004]
```

=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-325.S4
WSR 325 Part 4 11/20/2008

AMSAT NEWS SERVICE BULLETIN 325.S4 FROM AMSAT HQ
SILVER SPRING, MD, November 20, 2008
TO ALL RADIO AMATEURS
BID: $ANS-325.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE PROPOSED FOR LAUNCH AT
THIS
TIME:

XW-1
Catalog Number:
Proposed Launch Date: Summer 2009?

Status: Design Phase

Proposed Equipment:
Beacon: 435Mhz, CW 20dBm
Linear transponder: RX: 145Mhz, TX: 435Mhz, 40KHz, 30dBm
FM Transponder: RX: 145Mhz, TX: 435Mhz, 16KHz, 30dBm
Digital store and forward transponder: RX: 145Mhz, TX: 435Mhz, 16KHz,
30dBm

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108
[10092008]
=====
Phase 5a Mars Mission AO-??
Catalog Number:
Proposed Launch Date: 2009 or 2011

Status: Design Phase

For the latest project status update please visit the AMSAT-DL P5-A web

page:
http://ticket-to-mars.org
[01222007]
=====
PHASE 3E AO-??
Catalog number:
Proposed Launch Date: Late 2008

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/
[01222007]
=====
Eagle AO-??
Catalog Number:
Proposed Launch Date: Early/Mid 2009

Status: Design Phase

For the latest project status updates please visit the AMSAT-NA webpage:
http://www.amsat.org
[01222007]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-325.S5
WSR 325 Part 5 11/20/2008

AMSAT NEWS SERVICE BULLETIN 325.S5 FROM AMSAT HQ
SILVER SPRING, MD, November 20, 2008
TO ALL RADIO AMATEURS
BID: $ANS-325.S5

THE FOLLOWING SATELLITES HAVE RE-ENTERED OR HAVE BEEN RETURNED SAFELY:

NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

```
Main Downlink:      145.825 Mhz FM APRS AX25
APRS Uplink:        145.825 MHz FM APRS AX25
Voice/PSK31 Uplink:  28.120 MHz
```

Packet to Voice ID: RAFT
[06112007]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

- AMSAT News Service (ANS)
- General satellite discussion (AMSAT-BB)
- Orbit data (KEPS)
- Manned space missions (SAREX)
- District of Columbia area (AMSAT-DC)
- New England area (AMSAT-NE)
- AMSAT Educational Liaison mailing list (AMSAT-EDU)
- AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen,

G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

```
From 1494659170635548311
X-Google-Thread: 10e8ad,bd42ede3a84fe762,start
X-Google-Attributes: gid10e8ad,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news1.google.com!newsfeed2.dallas1.level3.net!
news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-328 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sun, 23 Nov 2008 10:39:54 EST
Organization: The Radio Amateur Satellite Corporation
Lines: 382
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000601c94d81$b78582b0$26908810$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1227454794 16622 166.84.1.6 (23 Nov 2008 15:39:54 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 23 Nov 2008 15:39:54 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news2.google.com rec.radio.amateur.space:160 rec.radio.info:440
```

AMSAT NEWS SERVICE
ANS-328

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the

activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* New publication start up announced
* Popular Magazine Acquired
* PCSAT Recovery Successful
* Nominations Due
* AO-16 Groundstation Predicts Last Days of Operation
* ARISS Status - 10 November 2008

SB SAT @ AMSAT $ANS-328.01
New publication start up announced

AMSAT News Service Bulletin 328.01
From AMSAT HQ SILVER SPRING, MD.
November 23, 2008
To All RADIO AMATEURS
BID: $ANS-328.01

After the great success of ham-mag (french ham "E-magazine"), we have decided to make it in ENGLISH !
But to make this challenge we need the help of a lot of O.M's
Everybody can send us informations, technical, homebrew, support, DX, expedition, sat infos, etc.
The claim is to share all informations about radio.
You can have a look on :
http://www.ham-mag.com

Best 73's
Vincent F5SLD

[ANS Thanks Vincent, F5SLD, for the above information]
/EX

SB SAT @ AMSAT $ANS-328.02
Popular Magazine Aquired

AMSAT News Service Bulletin 328.02
From AMSAT HQ SILVER SPRING, MD.
November 23, 2008
To All RADIO AMATEURS
BID: $ANS-328.02

CQ COMMUNICATIONS ACQUIRES WORLDRADIO MAGAZINE

(Hicksville, NY and Sacramento, CA, November 12, 2008) -- CQ Communications, Inc. has acquired WorldRadio magazine, CQ Publisher Dick Ross, K2MGA and WorldRadio Publisher Armond Noble, N6WR, announced jointly today. CQ, based in Hicksville, New York, currently publishes CQ Amateur Radio, CQ VHF and Popular Communications magazines.

WorldRadio, based in Sacramento, California, has been published monthly since July, 1971, with a primary focus on the human side of ham radio. CQ, a general-interest ham radio magazine best known for its support of DXing and contesting, has been in print since January, 1945.

Armond Noble, N6WR, Publisher of WorldRadio, said that at the age of 74 the time had come for him to retire. "I wanted to be sure that WorldRadio found a good home, and that our readers would continue to be served by an independent voice in amateur radio," Noble said.

CQ Publisher Dick Ross, K2MGA, said, "WorldRadio has filled an important niche in our hobby for nearly four decades. We welcome WorldRadio's readers to the CQ family, and we look forward to meeting their needs for many years to come."

Current plans call for WorldRadio to continue to be published online as part of the CQ family of magazines, with Editor Nancy Kott, WZ8C, continuing in that position. WorldRadio subscribers will also have their subscriptions transferred to CQ magazine. Readers will be notified of details as plans are finalized.

[ANS thanks Rich, W2VU, for the above information]

/EX

SB SAT @ AMSAT $ANS-328.03
PCSAT Recovery Successful

AMSAT News Service Bulletin 328.03
   From AMSAT HQ SILVER SPRING, MD.
November 23, 2008
To All RADIO AMATEURS
BID: $ANS-328.03

PCSAT Recovery Successful, Full Sun Operations Begin December 9

Bob, WB4APR reports from the US Naval Academy Satellite Lab that PCSAT-1 should return to full operations on 9 Dec 08 when this sunlight-only veteran bird once again receives solar illumination for two weeks.

Bob says "This should give a few weeks for some good 2 meter packet contacts and the opportunity to run a Satellite Simulated Emergency Test (SSET)". If the ISS is also operational on 145.825, there is the possibility for some lucky 2-hop DX contacts via both birds. Combined PCSAT and ISS 1200 baud packet operation on 145.825 MHz will give 12 opportunities per day for contacts without any change in your radio.

Operating PCSAT-1 is just like any 1200 baud 2 meter packet repeater. Uplink and downlink are on 145.825 and the path is VIA ARISS. This path is identical to the ISS path so that you do not have to change anything between the two spacecraft. (Until PCSAT-1 is reloaded, however, its digipeating alias is its FCC call W3ADO-1.) You can hear it every day right now, but its packets die before completion because of poor power budget.

Refer to: http://home.comcast.net/~k9jkm/ARISS_Packet_How_To/ for additional information to configure your TNC for 1200 baud satellite operation.

Bob continues, "I just commanded PCSAT-1 this week and all functions are normal. All we need is the first full-sun orbit on the 9th of Dec to be able to do a full recovery, and then it should last for 2 weeks or more".

Amateur Radio operators can make two-way contacts, send beacons and bulletins and send your position so you will show up on the PCSAT web page at: http://pcsat.aprs.org.

Bob recommends everyone plan on testing their emergency E-mail capability during the time window of 12 to 15 December for everyone to try to send an E-mail via the PCSAT or ISS digipeater. Please see the Satellite Simulated Emergency Test information at: http://www.aprs.org/sset.html. You can use any packet system and no special software is required.

[ANS thanks Bob, WB4APR for the above information]

/EX

SB SAT @ AMSAT $ANS-328.04
Nominations Due

AMSAT News Service Bulletin 328.04
From AMSAT HQ SILVER SPRING, MD.
November 23, 2008
To All RADIO AMATEURS
BID: $ANS-328.04

The Dayton HamventionR now is accepting nominations for its 2009 Amateur of the Year, Special Achievement, and Technical Excellence awards. The deadline for nominations is Feb. 18, 2009. All amateur radio operators are eligible. The winners will be recognized at the 2009 HamventionR, which runs May 15-17.

The Amateur of the Year Award goes to an individual who has made a long-term, outstanding commitment to the advancement of Amateur Radio.

The Technical Excellence Award is for the person who has made an outstanding technical advancement in the field of Amateur Radio. The Special Achievement Award honors someone who has made an outstanding contribution to the advancement of Amateur Radio, usually someone who has spearheaded a significant project.

The HamventionR Awards Committee makes the decision on all awards based in part upon the information it receives--and not on the number of nominations submitted.

Documentation that informs the Awards Committee of a candidate's accomplishments may include magazine articles, newsletters, newspaper clippings, and even videos (these materials become the property of HamventionR and will not be returned).

Additional details on these awards and a nomination form are available on the Dayton HamventionR Web site. Nominations also are accepted via US mail to Dayton HamventionR Awards, PO Box 964, Dayton, OH 45401.

[ANS thanks Henry Ruminski for the above information]

/EX

SB SAT @ AMSAT $ANS-328.05
AO-16 Groundstation Predicts Last Days of Operation

AMSAT News Service Bulletin 328.05
   From AMSAT HQ SILVER SPRING, MD.
November 23, 2008
To All RADIO AMATEURS
BID: $ANS-328.05

AO-16 Groundstation Predicts Last Days of Operation

AO-16 Groundstation controller, Mark, N8MH reminds amateur satellite stations that the time for contacts via AO-16 may be drawing short!

AO-16 has been in continuous voice operations since commanded back ON and configured in voice mail on 15 Sept 2008 at 10:58 UTC. The control team's predictions regarding sustained activities seem have been right on the mark. Recording your observations about AO-16 at: http://oscar.dcarr.org has been, and will continue to be, very helpful to the AO-16 control team. Please keep this up, especially over the upcoming 4 weeks.

Many of you will recall that the "best guess current model" is that a hardware timer in AO-16 is firing when the craft is at a certain temperature, currently around 15 deg C or cooler. When the space craft temperature is over 15 deg C, the hardware timer behaves and continuous operations are sustained. The craft temperature is dependent upon solar illumination. It appears that around 85% illumination is the "magic number." If the orbit puts AO-16 with less than 85% illumination, the watchdog timer restarts the satellite, and the transmitter shuts down.

Illumination projections (and subsequent temperature predictions) suggest that we might be able to sustain operations until sometime in the window of November 22 until December 4, 2008. So, if you want to make some AO-16 contacts, you had better get them as soon as possible!!!

Long term orbital projections suggest that if the satellite hardware remains fundamentally unchanged (i.e., no deterioration of components on-board), it will be nearly 10 years before AO-16 receives sufficient illumination to warm up the spacecraft enough to again support sustained operations! You can be sure that we'll continue to probe the craft with commands, in hopes that we something will change in a good way that will allow us to use the bird for operations of some sort.

It is possible that the transmitter on AO-16 will turn OFF sometime in the next few days/weeks; this requires some commanding to get it running again, which means a pass over the Eastern US coast is required for a change in operational status. We expect that as the spacecraft cools down, transmitter shutdowns will become more frequent.

Enjoy this grand old bird while you can!

Current operational mode for AO-16:

Mode FM Voice Repeater (Downlink is DSB)
Uplink : 145.9200 MHz FM
Downlink 437.0260 MHz SSB

[ANS thanks Mark, N8MH for the above information]

/EX

SB SAT @ AMSAT $ANS-328.06
ARISS Status - 17 November 2008

AMSAT News Service Bulletin 328.06
   From AMSAT HQ SILVER SPRING, MD.
November 23, 2008
To All RADIO AMATEURS
BID: $ANS-328.06

Amateur Radio on the International Space Station (ARISS) Status Report
November 17, 2008

1. Upcoming School Contacts

Planning continues for Amateur Radio on the International Space Station (ARISS) school contacts. New approvals are expected this week.

2. Australian School Contact Successful

On Monday, November 10, Anderson's Creek Primary School in Warrandyte, Victoria, Australia experienced a very successful Amateur Radio on the International Space Station (ARISS) contact via telebridge station VK5ZAI in Kingston, South Australia. Ten students asked two questions each of astronaut Mike Fincke, KE5AIT. An audience of over 230 witnessed the event including the mayor, sergeant, representative from Rotary, Bendigo Bank and the Warrandyte High School principal. There were also many representatives including the president from the local Wireless Institute. The majority of the teaching staff also joined in. The Herald Sun sent a photographer before and during the event and published an article in the paper and online. The Education Times, the Victorian Teacher newspaper, also conducted an interview and will publish a story in its next edition. The Victorian Space Science Education Centre published an account of the event in their emailed newsletter to teachers, and!
a student was also interviewed on ABC 774 Melbourne radio station. The audio, which was fed into the Internet Linking Project (IRLP) Discovery Reflector 9010, received 6 connections. EchoLink received 16 connections from Australia, New Zealand, Brazil, England and the U.S.

To view The Herald Sun article, see:
http://www.news.com.au/heraldsun/story/0,,24632605-2862,00.html

The Wireless Institute of Australia published a story covering the contact:
http://www.wia.org.au/newsevents/news/2008/20081110-1/index.php

The Victorian Space Science Education Centre also ran a short summary:
http://www.vssec.vic.edu.au/resources/download/capcom/capcom30-1108.pdf

3. International Education Week - ARISS Contact Successful

Students from Maryland, North Carolina and Ecuador participated in a joint Amateur Radio on the International Space Station (ARISS) contact on Friday, November 14 as part of International Education Week (IEW). The contact was facilitated by telebridge station WH6PN in Hawaii. The students asked 17 questions of Mike Fincke, KE5AIT. Enloe Magnet School had three television stations on site and had interviews with radio stations and the district PR personnel. NASA distributed a press release on this contact. See:
http://www.nasa.gov/centers/langley/news/releases/08-072.html

On Tuesday, November 18, the schools will tie in to a videoconference for another IEW session with an expert panel. Former astronaut Don Thomas will talk about space exploration and ARISS Chairman Frank Bauer will give an ARISS overview. Amateur radio operators from around the world will also participate, giving talks about amateur radio and their countries.

4. Japanese Club Talks to ISS Astronaut

Members of the Newcomers Club in Saitama, Japan participated in an Amateur Radio on the International Space Station (ARISS) contact on Saturday, November 15. Mike Fincke, KE5AIT, answered all twenty

questions posed to him by the 16 students, giving some answers in Japanese. Approximately 100 parents and guests attended the event. Media coverage included 3 newspapers, one television station and one radio station. To view the contact video, see:
http://www.ariss.jp/Newcomers/video/Newcomers_contact.wmv

5. ARRL Publishes ARISS News

The American Radio Relay League (ARRL) printed three Amateur Radio on the International Space Station (ARISS) news items in its December issue of QST.

The "Happenings" column (page 54) had a story with a photo about the first few days of Richard Garriott's mission as the magazine went to press.

"This Just In -- In Brief" section (page 12) had a paragraph about Richard Garriott's mission.

A paragraph and photo were printed (page 100) about a revolving display that is circulating in the San Diego Public libraries. The display is about ham radio and includes the topics of satellites, ARISS, packet, moonbounce, and other ham radio modes.

6. NASA Birthday Celebration Includes ARISS Students

The Naples Daily News ran an article about a Florida school that was invited to participate in NASA's Digital Learning Network presentation of its 50th anniversary.
Pine Ridge Middle, a NASA Explorer School, was one of ten schools to join in the celebration. Pine Ridge students took part in an Amateur Radio on the International Space Station (ARISS) contact with Bill McArthur, KC5ACR, in February 2006. The story may be found at:
http://www.naplesnews.com/news/2008/nov/13/local-students-have-blast-celebrating-nasas-50th-b/

7. NASA Cites Article on ARISS Students

NASA Headquarters News Service picked up on an article about four students attending Humber College in Toronto who are building two communications systems to make contact with the space station. Amateur Radio on the International Space Station (ARISS) Delegate Daniel Lamoureux was interviewed for the article. See:
http://canadianpress.google.com/article/ALeqM5jiaytfIhmwAy6LAnx0ey42_unrlg

[ANS thanks Carol, KB3LKI, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Dee Interdonato, NB2F

```
From -3504775956805992440
X-Google-Thread: 10e8ad,38587f0e1c2ac82e,start
X-Google-Attributes: gid10e8ad,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!postnews.google.com!l42g2000yqe.googlegroups.com!not-for-
mail
From: "Dwight D. Eisenhower" <rottedHonda@yahoo.com>
Newsgroups: rec.radio.amateur.space
Subject: SHOP CLEANOUT-PRIDE 100 WATT linear CB/Ham amp-(4) vintage tube CB
     radios-(2) old tube PA system amps for guitar projects-tube radios- test
     equipment-rare items-$10-25 each
Date: Tue, 25 Nov 2008 03:34:59 -0800 (PST)
Organization: http://groups.google.com
Lines: 42
Message-ID: <739696ba-c362-40d9-91eb-fc3fb49880d3@l42g2000yqe.googlegroups.com>
NNTP-Posting-Host: 216.222.249.22
Mime-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 7bit
X-Trace: posting.google.com 1227612899 2644 127.0.0.1 (25 Nov 2008 11:34:59 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Tue, 25 Nov 2008 11:34:59 +0000 (UTC)
Complaints-To: groups-abuse@google.com
Injection-Info: l42g2000yqe.googlegroups.com; posting-host=216.222.249.22;
     posting-account=r8XCBQoAAABNhqpsAkZNbLs4uIwOFVFO
User-Agent: G2/1.0
X-HTTP-UserAgent: Mozilla/4.0 (compatible; MSIE 6.0; Windows 98; Win 9x
     4.90),gzip(gfe),gzip(gfe)
Xref: g2news1.google.com rec.radio.amateur.space:136
```

http://shop.ebay.com/merchant/66-catalina_W0QQ_nkwZQQ_armrsZ1QQ_fromZQQ_mdoZ

(7) RCA SOUND MAGAZINE LOADED LARGE CASSETTE TAPES-old- 1 Bid $9.98
4h 5m
EICO VINTAGE ANTIQUE TUBE TESTER-MODEL 625-PARTS/FIX-$$ 3 Bids
$20.55 15h 1m
GRATEFUL DEAD 1965-85 LONG STRANGE TRIP TOUR T-SHIRT-$$ 1 Bid $9.98
15h 1m
VINTAGE 1960's MUNTZ 4-TRACK CARTRIDGE CAR TAPE DECK-$$ 0 Bids $9.98
15h 1m
STROMBERG CARLSON TUBE RADIO-ANTIQUE VINTAGE-rare item- 0 Bids $9.98
6d 10h 1m
SBE II VINTAGE CB BASE STATION W/MIC-WOOD COVER OPTION- 0 Bids
$49.98 6d 15h 1m
PRIDE 100 WATT BI-LINEAR POWER AMP-CB/HAM RADIO-12 VOLT 0 Bids

```
$99.88  6d 15h 1m
 LAYETTE COMSTAT-25 VINTAGE TUBE AMPED CB RADIO w/cord-$ 0 Bids $9.98
6d 15h 1m
 1970-81 PONTIAC TRANS AM-FORMULA STEERING WHEEL OEM GM- 0 Bids
$24.99  6d 15h 1m
 OLD PA TUBE AMP-35WATT-2CH-MONO-GUITAR TUBE AMP PROJECT 0 Bids
$24.99  6d 15h 1m
 EICO 340 VINTAGE TUBE AMPED AUDIO/RF SIGNAL GENERATOR-$ 0 Bids $9.98
6d 15h 1m
 VINTAGE MONO PA TUBE AMP-30 WATT-2CH-GUITAR AMP PROJECT 0 Bids
$24.99  6d 15h 1m
 EMERSON BAKELITE TUBE RADIO-VINTAGE ANTIQUE COLLECTIBLE 0 Bids $9.98
6d 15h 1m
 JC PENNEY VINTAGE 1970's CB/HAM/SHORTWAVE POWER MIC-$$$ 0 Bids $9.98
6d 15h 1m
 CRYSTALAB ANTIQUE TUBE AMPED METRONOME-mod mp-100-pa-$$ 0 Bids
$24.99  6d 15h 1m
 ANTIQUE COLLECTIBLE OLD FOLDING WOODEN IRONING BOARD-$$ 0 Bids $24.99
$75.00  2d 15h 1m
 LAFAYETTE HE-20C VINTAGE TUBE CB W/ELECTROVOICE 630 MIC 0 Bids $9.98
6d 15h 1m
 EICO 762W VINTAGE TUBE AMPED CB RADIO W/CORD-rare item- 0 Bids $9.98
6d 15h 1m
 3 SWR/FS METERS-MATCHBOX-JOHNSON-PARADYNAMICS-MICRONTA- 0 Bids
$24.99  6d 15h 1m
 LAFAYETTE HB-111 VINTAGE TUBE AMPED CB RADIO-rare item- 0 Bids $9.98
6d 15h 1m


From -4743328803147565814
X-Google-Thread: 10e8ad,901ec7ebdf309cf1,start
X-Google-Thread: 10b9c8,901ec7ebdf309cf1,start
X-Google-Attributes: gid10e8ad,gid10b9c8,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!newsfeed2.dallas1.level3.net!
news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-332 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Sat, 29 Nov 2008 12:25:27 EST
Organization: The Radio Amateur Satellite Corporation
Lines: 1461
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <001401c95247$71b78ce0$5526a6a0$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1227979527 25543 166.84.1.6 (29 Nov 2008 17:25:27 GMT)
X-Complaints-To: abuse@panix.com
```

```
NNTP-Posting-Date: Sat, 29 Nov 2008 17:25:27 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news1.google.com rec.radio.amateur.space:137 rec.radio.info:373
```

This report is organized into five (5) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites
Part 5 (S5) - deborbited/returned satellites

SB SAT @ AMSAT W8ISS ANS-332.S1
WSR 332 Part 1 11/27/2008

AMSAT NEWS SERVICE BULLETIN 332.S1 FROM AMSAT HQ
SILVER SPRING, MD, November 27, 2008
TO ALL RADIO AMATEURS
BID: $ANS-332.S1

DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008

Status: OPERATIONAL
Current Mode: U/v - voice

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink: 435.530 to 435.570 MHz

Proposed Frequencies:
Primary telemetry downlink: 145.870 MHz 1200 Baud BPSK AX.25 400mW
Backup telemetry downlink: 145.930 MHz 1200 Baud BPSK AX.25 400mW
Linear transponder passband downlink: 145.880 - 145.920 MHz(inverting)
Linear transponder passband uplink: 435.570 - 435.530 MHz
Transponder mode beacon: 145.870 MHz CW (10dB below transponder PEP)

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68

```
[07312008]
=====
VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink:   435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink:   435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW


Indian Beacon:  145.859330 MHZ CW
Dutch Beacon:   145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is active. Each transponder has a different beacon.
[08072008]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Modes:   FM Repeater - V-FM/u-FM
                               L-FM/u-FM
                 BBS         - OFF
                 Telemetry   - OFF

Analog voice downlink:     435.300 MHz FM
                           435.150 MHz FM
                          2401.200 Mhz FM
Analog voice uplink:       145.880 MHZ FM
                           145.880 MHz USB
                           145.920 MHz FM
                          1268.700 MHz FM 67Hz PL tone
Digital Downlinks:        435.150 MHz FM 38k4 PBP, 1 watt output
                          435.150 MHz FM 9k6 Pacsat Broadcast Protocol
                         2401.200 MHz FM 38k4 bps, AX.25
```

```
Digital Uplink:           145.860 MHz FM 9k6 Pacsat Broadcast Protocol
                         1268.700 mhz FM 9k6 PBP Digital
Beacon:                   435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[11272008]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002

Status: Operational.

Current Mode: V/u

Uplink:   145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4
Hz. The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute
   timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the re-
   peater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset
   the 10 minute timer.
[05282007]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996
```

Status: Operational - check operational schedule for current times!!

Current Mode: V/u

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
145.870 MHz FM
145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage: http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts.htm
[0820007]
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993

Status: OFF - Reload software

Current Mode: V/u

Uplink: 145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[10092008]

=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: TESTING - VOICE

Current Mode: V/u

Uplink: 145.900 MHz FM 1200-baud Manchester FSK (reserved)
145.920 MHz FM VOICE
145.940 MHz FM 1200-baud Manchester FSK (reserved)
145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink: 437.026 MHz USB VOICE
(1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC 437.050 MHz RHCP
PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[03202008]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational depending on amount of Sunlight

Current Mode: Listen before transmitting

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz CW
145.972 MHz CW
435.100 MHz CW
2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/

```
AO-7 Usage Guidelines on the AO-7 Log and Resource Site located at:
http://www.planetemily.com/ao7
[05282007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - U/v
                      Voice -       V/v
                      BBS -         V/v
                      APRS -        V/v
                      SSTV -        V/v

Expedition 18 Crew:
Commander:                Mike Fincke      KE5AIT
Flight Engineer:          Yury Lonchakov   RA3DT
Flight Engineer:          Sandra Magnus


Available Modes and Frequencies:

Digital/APRS:
Worldwide packet uplink:   145.825 MHz FM
Worldwide packet downlink: 145.825 Mhz FM

Voice:
Region 1 voice uplink:     145.200 MHz FM
Region 2/3 voice uplink:   144.490 MHz FM
Worldwide downlink:        145.800 MHz FM

Crossband Repeater:
Repeater Uplink:           437.800 MHz FM
Repeater Downlink:         145.800 MHz FM

SSTV Robot 36:
Downlink:                  145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German:                    DP0ISS
Russian:                   RS0ISS
                           RZ3DZR
USA:                       NA1SS
Packet Mailbox:            RS0ISS-11
Packet Keyboard:           RS0ISS-3
Digipeater callsign:       ARISS
```

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[11272008]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-332.S2
WSR 332 Part 2 11/27/2008

AMSAT NEWS SERVICE BULLETIN 332.S2 FROM AMSAT HQ
SILVER SPRING, MD, November 27, 2008
TO ALL RADIO AMATEURS
BID: $ANS-332.S2

RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number:
Launch Date: May 23, 2008

Status: Operational

Curent Mode: Telemetry
             Audio
             Images

Downlinks: 435.315 MHz
           435.215 MHz
[05292008]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.
[11152007]
=====
CP3
Catalog Number: 31128
Launch Date: April 17,2007

Status: Operational

Current Mode: /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[07302007]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: In Orbit

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder: 145.825 Mhz FM
[02052007]
=====
NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Operational

Current Mode: /u

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[10222007]
=====
GENESAT-1 ?O-??
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Current Mode: /u

Telemetry Beacon Downlink: 437.0670 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[01082007]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon: 437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
[03262007]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003

Status: Operational

Current Mode: /u

Beacon: 436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[01082007]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Semi-Operational - Constant Carrier only

Uplink: 1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[01082007]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide

```
              AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW
[08132007]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Modes:   FM Repeater - V-FM/u-FM
                               L-FM/u-FM
                 BBS         - OFF
                 Telemetry   - OFF

Analog voice downlink:     435.300 MHz FM
                           435.150 MHz FM
                          2401.200 Mhz FM
Analog voice uplink:       145.880 MHZ FM
                           145.880 MHz USB
                           145.920 MHz FM
                          1268.700 MHz FM 67Hz PL tone
Digital Downlinks:        435.150 MHz FM 38k4 PBP, 1 watt output
                          435.150 MHz FM 9k6 Pacsat Broadcast Protocol
                         2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:           145.860 MHz FM 9k6 Pacsat Broadcast Protocol
                         1268.700 mhz FM 9k6 PBP Digital
Beacon:                   435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[11272008]
=====
NO-44 PCSAT
Catalog number: 26931
```

```
Launch Date: September 30, 2001

Status: Hibernation until full sunlight in November

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink:        144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[09242007]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Current Modes: V/U
               L/U

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[09172007]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984

Status: Semi-operational.

Current Mode:  /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon:           435.025 MHz
Mode-S Beacon:      2401.500 MHz

Mode and Antenna Polarization:
```

V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[01242008]
=====
RS-22 RADIO SPORT RS-22
Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only

Current Mode: /u

CW Beacon - 435.352 MHz
            145.818 MHz
[08062007]
=====
Can X-2
Catalog number:
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[05292008]
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink: 437.425 MHz

For the latest project status update please visit the AAUSAT-II web page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[05292008]
=====
CO-65 Cute-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink: 437.475 MHz 9k6 Packet
Uplink: 1267.600 Mhz

For the latest project status update please visit the Cute-1.7+APD II
web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78
[07312008]
=====
Compass-1
Catalog number: 32787
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink: 437.275 Mhz CW
          437.405 MHz Packet

For the latest project status update please visit the Compass 1 web
page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52
[05292008]
=====
CO-66 Seeds II
Catalog number:
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink: 437.485 MHz

For the latest project status update please visit the Seeds 2 web
page: http://cubesat.aero.cst.nihon-u.ac.jp/english/main_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36
[07312008]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - U/v
                      Voice -   V/v
                      BBS -   V/v

APRS - V/v
SSTV - V/v

Expedition 18 Crew:
Commander: Mike Fincke KE5AIT
Flight Engineer: Yury Lonchakov RA3DT
Flight Engineer: Sandra Magnus

Available Modes and Frequencies:

Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM
Worldwide packet downlink: 145.825 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS
RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[11272008]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-332.S3
WSR 332 Part 3 11/27/2008

AMSAT NEWS SERVICE BULLETIN 332.S3 FROM AMSAT HQ
SILVER SPRING, MD, November 27, 2008
TO ALL RADIO AMATEURS
BID: $ANS-332.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

CP4
Catalog Number: 31122
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon: 437.325 MHz CW

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=79
[10022008]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Non-Operational

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon: 437.2750 MHz CW

Callsign: JR8YJT
[10152007]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 MHz FM 67Hz CTCSS
Voice Downlink: 2401.835 MHz FM
Packet Up/Downlink: 437.250 MHz 9k6 packet
Packet Downlink   2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non=Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[08132007]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Non-Operational

Uplinks: 145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial land and weather imaging payloads offers FM and FSK
Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as
a collaborative effort between the Malaysian government and Surrey
Satellite Technology Ltd.
[007302007]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609

```
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
V-band:   145.840 -  145.990 MHz CW/LSB
U-band:   435.550 -  435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks
---------
S2-band:  2401.225 -  2401.475 MHz CW/USB
K-band:  24048.010 - 24048.060 MHz CW/USB
Beacon:   2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)
----------------------------
BEACON   General Beacon(GB)  Middle Beacon(MB)  Engineering Beacon(EB)
2 m                   none        145.898 MHz                    none
70cm           435.438 MHz        435.588 MHz             435.838 MHz
13cm(1)       2400.188 MHz       2400.338 MHz            2400.588 MHz
13cm(2)       2401.173 MHz       2401.323 MHz            2401.573 MHz
3cm          10450.975 MHz      10451.125 MHz           10451.375 MHz
1.5cm        24047.885 MHz      24048.035 MHz           24048.285 MHz
[07162007]
=====
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink:    145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
```

```
site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: ?
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater:         436.250 MHz

Uplinks: Mode B Repeater:  145.825 MHz
Mode J Digipeater:         145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational
```

```
Uplink:   145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign:       POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012006]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
```

```
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
```

Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks: 145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
LIBERTAD-1
Catalog Number: 31129
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink: 145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[10222007]
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990

Status: CW Beacon only

Uplinks: 145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink: 437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[01222007]
=====
WO-18 WEBERSAT
Catalog Number: 20441

```
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
[05012006]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational
```

```
Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon:   145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink  29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
Beacons:   29.450 MHz
          435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon 1:  29.352 MHz (intermittent)
Beacon 2:  29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink:     21.260 to 21.300 MHz CW/USB
Downlink:  145.860 to 145.900 MHz CW/USB

Beacon:    145.860 MHz

Robot:     145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink:   21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon:   29.408 MHz

Robot:    29.454 MHz
[05232004]
NNNN
```

/EX

SB SAT @ AMSAT W8ISS ANS-332.S4
WSR 332 Part 4 11/27/2008

AMSAT NEWS SERVICE BULLETIN 332.S4 FROM AMSAT HQ
SILVER SPRING, MD, November 27, 2008
TO ALL RADIO AMATEURS
BID: $ANS-332.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE PROPOSED FOR LAUNCH AT THIS TIME:

XW-1
Catalog Number:
Proposed Launch Date: Summer 2009?

Status: Design Phase

Proposed Equipment:
Beacon: 435Mhz, CW 20dBm
Linear transponder: RX: 145Mhz, TX: 435Mhz, 40KHz, 30dBm
FM Transponder: RX: 145Mhz, TX: 435Mhz, 16KHz, 30dBm
Digital store and forward transponder: RX: 145Mhz, TX: 435Mhz, 16KHz, 30dBm

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108
[10092008]
=====
Phase 5a Mars Mission AO-??
Catalog Number:
Proposed Launch Date: 2009 or 2011

Status: Design Phase

For the latest project status update please visit the AMSAT-DL P5-A web page:
http://ticket-to-mars.org
[01222007]
=====
PHASE 3E AO-??
Catalog number:
Proposed Launch Date: Late 2008

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/
[01222007]
=====
Eagle AO-??

Catalog Number:
Proposed Launch Date: Early/Mid 2009

Status: Design Phase

For the latest project status updates please visit the AMSAT-NA web page: http://www.amsat.org
[01222007]
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SB SAT @ AMSAT W8ISS ANS-332.S5
WSR 332 Part 5 11/27/2008

AMSAT NEWS SERVICE BULLETIN 332.S5 FROM AMSAT HQ
SILVER SPRING, MD, November 27, 2008
TO ALL RADIO AMATEURS
BID: $ANS-332.S5

THE FOLLOWING SATELLITES HAVE RE-ENTERED OR HAVE BEEN RETURNED SAFELY:

NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink: 145.825 Mhz FM APRS AX25
APRS Uplink: 145.825 MHz FM APRS AX25
Voice/PSK31 Uplink: 28.120 MHz

Packet to Voice ID: RAFT
[06112007]
NNNN
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ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at}
amsat.org
NNNN
/EX

From -8280822822215553233
X-Google-Thread: 10e8ad,8c1f38dd441daba8,start
X-Google-Thread: 10b9c8,8c1f38dd441daba8,start
X-Google-Attributes: gid10e8ad,gid10b9c8,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!news2.google.com!

```
border1.nntp.dca.giganews.com!nntp.giganews.com!wns13feed!worldnet.att.net!
4.24.21.153!newsfeed3.dallas1.level3.net!newsfeed2.dallas1.level3.net!
news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-335 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sun, 30 Nov 2008 02:26:08 EST
Organization: The Radio Amateur Satellite Corporation
Lines: 381
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000901c95297$b4871220$1d953660$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1228029968 13250 166.84.1.6 (30 Nov 2008 07:26:08 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 30 Nov 2008 07:26:08 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news1.google.com rec.radio.amateur.space:138 rec.radio.info:374
```

AMSAT NEWS SERVICE
ANS-335

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:

* AO-51 Software Reload in Progress
* ARISS Commemorative Event 25th Anniversary of Ham Radio in Space
* SKN on OSCAR 2009

* GENSO Groundstation Development Opportunity For Students
* Call For Articles - Brief Author's Guide to the AMSAT Journal
* ARISS Status Report for the Week of November 24, 2008

SB SAT @ AMSAT $ANS-335.01
AO-51 Software Reload in Progress

AMSAT News Service Bulletin 335.01
>From AMSAT HQ SILVER SPRING, MD.
November 30, 2008
To All RADIO AMATEURS
BID: $ANS-335.01

AO-51 was reported as "not heard" starting Wednesday, November 26 by stations around the world. The satellite's ground stations determined that AO-51 required a software reload. AMSAT Vice President of Operations, Drew KO4MA reported, "It looks like we'll be reloading AO-51 for Thanksgiving. Gould WA4SXM started the process this evening, and I expected it'll be Saturday or later before it's back open for general use."

Gould, WA4SXM reported on Saturday, November 29, "AO-51 reload was mostly successful and the main V/U repeater became operational on Friday. The SQRX receiver task didn't reload and cause a the crash in the software. We are in the process of reloading the SW and hope to have it operational the first of the week. Thanks to Kevin, WA6FWF for all his work during the Thanksgiving holiday working on the software upload to AO51."

The latest status for AO-51 remains as not operational with a software reload in progress. Drew, KO4MA said, "Meanwhile, the 9600 baud downlink (only) on 435.150 is running at very high power, so it might be a good time to try your 9600 baud receive setups. Please do not attempt any uplinks until the repeater is back on. Once the satellite is recovered the Operations Team will test to determine the appropriate operating mode."

The full AO-51 schedule and Command Team News can be found on-line at: http://www.amsat.org/amsat-new/echo/ControlTeam.php. The AMSAT main web page will also provide a quick status update when the information changes. Operating mode requests can be sent via e-mail to ao51-modes@amsat.org .

[ANS thanks The AO-51 Command Team for the above information]

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SB SAT @ AMSAT $ANS-335.02
ARISS Commemorative Event 25th Anniversary of Ham Radio in Space

AMSAT News Service Bulletin 335.02
>From AMSAT HQ SILVER SPRING, MD.

November 30, 2008
To All RADIO AMATEURS
BID: $ANS-335.02

AMSAT-NA V.P. for Human Spaceflight Programs and ARISS International Chairman Frank Bauer, KA3HDO announced, "Twenty-five years ago this week, Owen Garriott, W5LFL, made history by being the first amateur radio operator to talk to hams from space. Owen's historic flight on the STS-9 Space Shuttle Columbia mission was launched on ovember 28 and landed on December 8, 1983. Owen's ham radio adventure on STS-9 ushered in a host of outstanding outreach activities that continue today with the ARISS program."

Frank continued, "Many will recall that first set of contacts and downlinks with Owen. Those first contacts allowed each of us to share the excitement of space exploration through Owen's first-hand eyewitness accounts. Owen's ham radio legacy enabled space travelers that have flown on the Space Shuttle, the Space Station Mir and now the International Space Station to share their journey of exploration."

"Owen's son Richard, W5KWQ just a month ago carried the torch further to become the first 2nd generation amateur rdaio operator to talk to hams from space. What other hobby, except amateur radio, could or would open the communications lines of space travelers beyond that of the space agencies or international heads of state?"

To celebrate our 25 years of amateur radio operations from space, the ARISS team has planned a set of special event opportunities during the month of December and part of January. A special certificate is being developed for those who communicate with the ISS, either 2-way direct (with the ISS crew,the digipeater, or cross band repeater), or 1-way reception of SSTV or voice downlink. Several events will be described here with several "surprises" planned over the month-long celebration. The surprises will be announced once we are prepositioned to accomplish them.

Specifically, the following is being planned in the near-term:

+ December 1-5 - in addition to school contacts and APRS digi operations, we plan to configure the radio system for cross band repeater operations. This will utilize the standard U/V operations in low power mode.

+ December 7-12 we will run a test of 9600 baud packet operations on the simplex frequency 145.825 MHz.

+ Given that PCSAT should be in full sun starting December 9, December 14-19 we will switch to 1200 baud packet on 145.825 to support double hop opportunities.

+ And at times, especially during the weekends, you might see some SSTV operations if the crew is available.

We will provide more updates in the near future. We would like to remind everyone that ISS flight requirements related to EVA and vehicle activity may require the radio to be off for some portion of this schedule. And school contacts and general QSO opportunities by the crew will also preempt this schedule for short periods of time. (But remember that if you hearthese, you still qualify for a commemorative certificate).

Frank concluded, "In the meantime, enjoy the ARISS ops on ISS! And congratulations to Owen Garriott, W5LFL, on the 25th anniversary of his historic flight!!"

[ANS thanks Frank, KA3HDO for the above information]

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SB SAT @ AMSAT $ANS-335.03
SKN on OSCAR 2009

AMSAT News Service Bulletin 335.03
>From AMSAT HQ SILVER SPRING, MD.
November 30, 2008
To All RADIO AMATEURS
BID: $ANS-335.03

Ray Soifer, W2RS this week extended the annual cordial invitation to all radio amateurs worldwide to participate in AMSAT s Straight Key Night (SKN) on OSCAR 2009.

Participating in SKN on OSCAR 2009 is easy. No rules, no scoring and no need to send in a log. Just operate CW through any OSCAR between 0000 and 2400 UTC on 1 January 2009, using a straight hand key.

In keeping with the friendly nature of this event, all participants are encouraged to nominate someone they worked for "Best Fist." Your nominee need not have the best fist of those you heard, just of those you worked. Please send your nomination to w2rs@amsat.org. A list of those nominated will appear in ANS and The AMSAT Journal.
CU SKN!

[ANS thanks Ray Soifer, W2RS for the above information]

/EX

SB SAT @ AMSAT $ANS-335.04
GENSO Groundstation Development Opportunity For Students

AMSAT News Service Bulletin 335.04
>From AMSAT HQ SILVER SPRING, MD.
November 30, 2008
To All RADIO AMATEURS

BID: $ANS-335.04

GENSO Project Software Engineering Mentor, Dave, G4GPZ writing on behalf of the ESA Education Office invites students to apply to take part in the development of the system.

The Groundstation Educational Network for Spacecraft Operations (GENSO) is a system is aimed at CubeSat operators and Amateur Satellite users to enable more effective use of the devices by providing better wordwide opportunities for telemetry recovery.

More details can be found at http://www.genso.org and
http://www.esa.int/esaED/SEMSOC5KXMF_index_0.html

The project is being sponsored by member agencies of ISEB.

AMSAT-UK is participating in the project by providing equipment recommemdations, setting up reference ground stations, software for predictions and hardware driver.

[ANS thanks Dave, G4DPZ and ESA for the above information]

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SB SAT @ AMSAT $ANS-335.05
Call For Articles - Brief Author's Guide to the AMSAT Journal

AMSAT News Service Bulletin 335.05
>From AMSAT HQ SILVER SPRING, MD.
November 30, 2008
To All RADIO AMATEURS
BID: $ANS-335.05

You are invited to share your amateur radio in space ideas and experiences with fellow satellite operators. The AMSAT Journal, a bi-monthly publication of AMSAT-North America, brings you the latest information in satellite mission planning, satellite-related hardware design and construction, satellite-related software design and implementation, and amateur radio earth station construction.

There are plenty of opportunities for you to share your ideas and experience across all levels. Did you homebrew a successful antenna? Which setup did you use for your first satellite contacts? A brief write-up and photos are appreciated by everyone!

Do you have ideas about future amateur radio space missions? Can you describe unique aspects of a particular orbit and the equipment needed to make it work? Simply type out your ideas on your computer and send them in. Let the AMSAT Journal editorial team do the clean up and formatting for you.

Its easy to send your article to the AMSAT Journal e-mail box via journal@amsat.org. There is no need to do any special formatting on your submission because the final layout format is driven by the magazine's typesetting software. All you need to include is:

+ Your text in MS-Word or plain text format
+ Graphics saved in separate files (jpg, gif, tiff)

(Actually, an MS-Word file with embedded graphics is the most difficult format to typeset.)

If you have any questions, or need some help feel free to contact the editors at the AMSAT Journal at journal@amsat.org. One of us will get back to you as soon as we can. To assist with your planning the submission deadline for articles is the 15th of each odd numbered month.

Ed Long, WA4SWJ Editor-in-Chief
Tim Lilley, N3TL Assistant Editor
Bill Hook, W3QBC Assistant Editor
JoAnne Maenpaa, K9JKM Assistant Editor

[ANS thanks the AMSAT Journal for the above information]

/EX

SB SAT @ AMSAT $ANS-335.06
ARISS Status Report for the Week of November 24, 2008

AMSAT News Service Bulletin 335.06
>From AMSAT HQ SILVER SPRING, MD.
November 30, 2008
To All RADIO AMATEURS
BID: $ANS-335.06

1. Upcoming School Contacts

The Wairarapa Home School Association in Carterton, Wairarapa, New Zealand had an ARISS contact on Wednesday, November 26 via telebridge station VK4KHZ in Australia. Students learned about space exploration and the International Space Station to prepare for the contact. Age appropriate studies, exercises, and activities have been undertaken by all those who will be involved in the event which will include some of the parents.

An ARISS contact has been scheduled with St. Anthony's College in Shillong, India on Monday, December 1 at 08:04 UTC. Telebridge station WH6PN will facilitate the contact.

An ARISS contact has been approved for Alexandroupolis School of Special Education and 11th Alexandroupolis Primary School in Alexandroupolis, Greece. The contact will take place on Monday, December 1.

Astronomy and amateur radio lectures have been given in preparation for the event. Special attention has been given to the role of humanity and science and to the every day life of an astronaut. The ISS courses have been based on ESA's education tool "ISS Education Kit."

Quispamsis Elementary and Middle Schools in Quispamsis, New Brunswick, Canada have been scheduled for an ARISS contact on Thursday, December 4 at 18:02 UTC. Math, Social Studies, and Literacy Skills have been emphasized through the participation of students in this project. Subjects of amateur radio, space, satellites and the ISS have been integrated into the science curriculum. Quispamsis Elementary School (QES) and the Loyalist City Amateur Radio Club (LCARC) have participated in AMSAT-Echo-51 Satellite contacts for the past two years. The Quispamsis Middle School has an enrichment program. Two years of students who participated in the satellite contacts at QES are also involved with this program. The amateur radio installation has been used to complement the enrichment program, and to demonstrate amateur radio to girl guides and scout troops. Children have created posters for placement in the school to publicize the event and local and national media coverage is anticipated.

2. First ARISS School Contact in New Zealand Successful

The first ARISS contact with a school in New Zealand took place on Thursday, November 20. Students from St. Teresa's School in Wairarapa connected with the ISS via the telebridge station VK4KHZ in Australia. Astronaut Mike Fincke, KE5AIT answered all questions from the 21 students as an audience of 130 watched. The audio was fed into the EchoLink AMSAT (101 377) and JK1ZRW (277 208) servers and received 7 connections from stations in Australia, New Zealand, Canada and the US There was extensive media coverage which included TVNZ, The Dominion Post, The Wellington Daily News and The Wairarapa Times Age. The contact was first reported on the late news on TV One at 10.30 pm on Thursday evening. It was repeated on 4 different occasions during the Early Morning and Midday news on TV One and a 3-4 minute slot was given in the Friday 6 pm evening news. The New Zealand Education Gazette editor also asked for details regarding the contact, as it is being written up for the December issue.

The Dominion Post article has been posted on-line.
See: http://www.stuff.co.nz/4767581a6479.html

To view The Wairarapa Times Age story, go to:
http://www.times-age.co.nz/localnews/storydisplay.cfm?storyid=3790845&thesection=localnews&thesubsection=&thesecondsubsection=

TVNZ One News coverage may be found here:
http://tvnz.co.nz/view/page/2324497

3. ARISS Celebrates International Education Week

Students from Poolesville, Maryland, Raleigh, North Carolina and Quito, Ecuador participated in a joint ARISS contact on Friday, November 14 as part of International Education Week (IEW).

The students, as well as family members and other guests, reconvened on Tuesday, November 18. Poolesville High School students visited the U.S. Department of Education in Washington, D.C. where approximately 150 students participated, and the North Carolina and Ecuador schools tied in via videoconference for another IEW session. Former astronaut Don Thomas gave a presentation on International Exploration, from the past to the present, and ARISS Chairman Frank Bauer gave an overview of amateur radio and the ARISS contact using video of the students from the contact event. They joined GSFC Earth Observation expert Robert Cahalan in the expert panel session. Amateur radio operators from Hawaii, Italy, China, England, Spain, and Canada participated through a teleconference, giving talks about amateur radio and the culture of their countries. Students participated in the sessions and asked questions in English, but also in foreign languages such as Spanish and German.

4. ARISS International Team Meeting Held

The monthly ARISS International Team teleconference was held on Tuesday, November 18. Agenda items discussed included the next ARISS face to face meeting, SuitSat-2 status and on-orbit hardware. The minutes have been posted to the ARISS Web site.
See: http://www.rac.ca/ariss/arisstel2008-11-18.htm

[ANS thanks Carol, KB3LKI for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office. With that please keep in mind that the preferred brand of coffee served aboard the Titanic was Sanka, of course.

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM
K9JKM at amsat dot org

```
From 3645961608614398016
X-Google-Thread: 10e8ad,a4bd3bb42706dcc0,start
X-Google-Thread: 10b9c8,a4bd3bb42706dcc0,start
X-Google-Attributes: gid10e8ad,gid10b9c8,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!newsfeed2.dallas1.level3.net!
```

```
news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-339 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Thu, 4 Dec 2008 18:13:49 EST
Organization: The Radio Amateur Satellite Corporation
Lines: 1459
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000901c95665$ed98f5c0$c8cae140$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix1.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1228432427 20410 166.84.1.1 (4 Dec 2008 23:13:47 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Thu, 4 Dec 2008 23:13:47 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to            rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news1.google.com rec.radio.amateur.space:139 rec.radio.info:379
```

This report is organized into five (5) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites
Part 5 (S5) - deborbited/returned satellites

SB SAT @ AMSAT W8ISS ANS-339.S1
WSR 339 Part 1 12/04/2008

AMSAT NEWS SERVICE BULLETIN 339.S1 FROM AMSAT HQ
SILVER SPRING, MD, December 04, 2008
TO ALL RADIO AMATEURS
BID: $ANS-339.S1

DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008

Status: OPERATIONAL

Current Mode: U/v - voice

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink: 435.530 to 435.570 MHz

Proposed Frequencies:
Primary telemetry downlink: 145.870 MHz 1200 Baud BPSK AX.25 400mW
Backup telemetry downlink: 145.930 MHz 1200 Baud BPSK AX.25 400mW
Linear transponder passband downlink: 145.880 - 145.920 MHz(inverting)
Linear transponder passband uplink: 435.570 - 435.530 MHz
Transponder mode beacon: 145.870 MHz CW (10dB below transponder PEP)

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68
[07312008]
=====
VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.859330 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is active. Each transponder has a different beacon.
[08072008]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Modes: FM Repeater - V-FM/u-FM
                 BBS   - L-9k6/u-9k6
                 Telemetry   - OFF

Analog voice downlink: 435.300 MHz FM
                           435.150 MHz FM
                          2401.200 Mhz FM
Analog voice uplink: 145.880 MHZ FM
                           145.880 MHz USB
                           145.920 MHz FM
                          1268.700 MHz FM 67Hz PL tone
Digital Downlinks: 435.150 MHz FM 38k4 PBP, 1 watt output
                          435.150 MHz FM 9k6 Pacsat Broadcast Protocol
                         2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Pacsat Broadcast Protocol
                         1268.700 mhz FM 9k6 PBP Digital
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[12042008]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002

Status: Operational.

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz. The order of operation is thus: (allow for Doppler as necessary):

1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10 minute timer.

[05282007]

=====

FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Operational - check operational schedule for current times!!

Current Mode: V/u

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
145.870 MHz FM
145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage: http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts.htm
[0820007]

=====

```
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993

Status: OFF - Reload software

Current Mode: V/u

Uplink:   145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[10092008]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Operational

Current Mode:  V/u

Uplink:         145.900 MHz FM 1200-baud Manchester FSK (reserved)
                145.920 MHz FM VOICE
                145.940 MHz FM 1200-baud Manchester FSK (reserved)
                145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink:       437.026 MHz USB VOICE
                (1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[12042008]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational depending on amount of Sunlight
```

```
Current Mode: Listen before transmitting

Uplink:   145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink:  29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons:   29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/

AO-7 Usage Guidelines on the AO-7 Log and Resource Site located at:
http://www.planetemily.com/ao7
[05282007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - U/v
                      Voice -       V/v
                      BBS -         V/v
                      APRS -        V/v
                      SSTV -        V/v

Expedition 18 Crew:
Commander:                Mike Fincke      KE5AIT
Flight Engineer:          Yury Lonchakov   RA3DT
Flight Engineer:          Sandra Magnus    KE5FYE


Available Modes and Frequencies:

Digital/APRS:
Worldwide packet uplink:   145.825 MHz FM
Worldwide packet downlink: 145.825 Mhz FM

Voice:
Region 1 voice uplink:     145.200 MHz FM
Region 2/3 voice uplink:   144.490 MHz FM
Worldwide downlink:        145.800 MHz FM

Crossband Repeater:
Repeater Uplink:           437.800 MHz FM
```

Repeater Downlink: 145.800 MHz FM

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS
RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[12042008]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-339.S2
WSR 339 Part 2 12/04/2008

AMSAT NEWS SERVICE BULLETIN 339.S2 FROM AMSAT HQ
SILVER SPRING, MD, December 04, 2008
TO ALL RADIO AMATEURS
BID: $ANS-339.S2

RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number:
Launch Date: May 23, 2008

Status: Operational

Curent Mode: Telemetry
Audio
Images

Downlinks: 435.315 MHz
435.215 MHz
[05292008]
=====
CAPE-1
Catalog Number: 31130

```
Launch Date: April 17,2007

Status: Intermittent

Current Mode:  /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon:    435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.
[11152007]
=====
CP3
Catalog Number: 31128
Launch Date: April 17,2007

Status: Operational

Current Mode:  /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[07302007]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: In Orbit

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder:  145.825 Mhz FM
[02052007]
=====
NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Operational

Current Mode: /u

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[10222007]
=====
GENESAT-1 ?O-??
```

Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Current Mode: /u

Telemetry Beacon Downlink: 437.0670 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[01082007]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon: 437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
[03262007]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003

Status: Operational

Current Mode: /u

Beacon: 436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[01082007]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Semi-Operational - Constant Carrier only

```
Uplink:  1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[01082007]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW
[08132007]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Modes:   FM Repeater - V-FM/u-FM
                 BBS         - L-9k6/u-9k6
                 Telemetry   - OFF

Analog voice downlink:     435.300 MHz FM
                           435.150 MHz FM
                          2401.200 Mhz FM
Analog voice uplink:       145.880 MHZ FM
                           145.880 MHz USB
                           145.920 MHz FM
                          1268.700 MHz FM 67Hz PL tone
Digital Downlinks:        435.150 MHz FM 38k4 PBP, 1 watt output
                          435.150 MHz FM 9k6 Pacsat Broadcast Protocol
                         2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:           145.860 MHz FM 9k6 Pacsat Broadcast Protocol
                         1268.700 mhz FM 9k6 PBP Digital
Beacon:                   435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
```

```
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[12042008]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Hibernation until full sunlight in November

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink:        144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[09242007]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Non-Operational

Current Modes: V/U
               L/U

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
```

http://www.iarc.org/techsat/techsat.html
[12042007]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984

Status: Semi-operational.

Current Mode: /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon: 435.025 MHz
Mode-S Beacon: 2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[01242008]
=====
RS-22 RADIO SPORT RS-22
Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only

Current Mode: /u

CW Beacon - 435.352 MHz
            145.818 MHz
[08062007]
=====
Can X-2
Catalog number:
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[05292008]
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink: 437.425 MHz

For the latest project status update please visit the AAUSAT-II web page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[05292008]
=====
CO-65 Cute-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink: 437.475 MHz 9k6 Packet
Uplink: 1267.600 Mhz

For the latest project status update please visit the Cute-1.7+APD II web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78
[07312008]
=====
Compass-1
Catalog number: 32787
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink: 437.275 Mhz CW
          437.405 MHz Packet

For the latest project status update please visit the Compass 1 web page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52
[05292008]
=====
CO-66 Seeds II
Catalog number:
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.485 MHz

For the latest project status update please visit the Seeds 2 web page: http://cubesat.aero.cst.nihon-u.ac.jp/english/main_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36
[12042008]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - U/v
Voice - V/v
BBS - V/v
APRS - V/v
SSTV - V/v

Expedition 18 Crew:
Commander: Mike Fincke KE5AIT
Flight Engineer: Yury Lonchakov RA3DT
Flight Engineer: Sandra Magnus KE5FYE

Available Modes and Frequencies:

Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM
Worldwide packet downlink: 145.825 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS
RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11

Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[12042008]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-339.S3
WSR 339 Part 3 12/04/2008

AMSAT NEWS SERVICE BULLETIN 339.S3 FROM AMSAT HQ
SILVER SPRING, MD, December 04, 2008
TO ALL RADIO AMATEURS
BID: $ANS-339.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

CP4
Catalog Number: 31122
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon: 437.325 MHz CW

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=79
[10022008]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Non-Operational

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon: 437.2750 MHz CW

Callsign: JR8YJT
[10152007]
=====

```
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency:  437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink:         437.250 MHz FM 67Hz CTCSS
Voice Downlink:      2401.835 MHz FM
Packet Up/Downlink:   437.250 MHz 9k6 packet
Packet Downlink      2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non=Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[08132007]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink:   435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
```

Catalog number: 26548
Launch date: September 26, 2000

Status: Non-Operational

Uplinks: 145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[007302007]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545

```
Launch Date: September 26, 2000

Status: Non-Operational

Uplink:   145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
V-band:   145.840 -  145.990 MHz CW/LSB
U-band:   435.550 -  435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks
---------
S2-band:  2401.225 -  2401.475 MHz CW/USB
K-band:  24048.010 - 24048.060 MHz CW/USB
Beacon:   2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)
----------------------------
BEACON   General Beacon(GB)  Middle Beacon(MB)  Engineering Beacon(EB)
2 m                   none        145.898 MHz                    none
70cm           435.438 MHz        435.588 MHz             435.838 MHz
13cm(1)       2400.188 MHz       2400.338 MHz            2400.588 MHz
13cm(2)       2401.173 MHz       2401.323 MHz            2401.573 MHz
3cm          10450.975 MHz      10451.125 MHz           10451.375 MHz
1.5cm        24047.885 MHz      24048.035 MHz           24048.285 MHz
[07162007]
=====
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
```

```
[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink:    145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: ?
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater:         436.250 MHz

Uplinks: Mode B Repeater:  145.825 MHz
Mode J Digipeater:         145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational
```

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink: 145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012006]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks: 145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

```
Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HL01-11
BBS: HL01-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational
```

```
Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
LIBERTAD-1
Catalog Number: 31129
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink:   145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[10222007]
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990

Status: CW Beacon only

Uplinks:          145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
```

```
                    145.880 MHz 1200-baud Manchester FSK
                    145.900 MHz 1200-baud Manchester FSK

CW downlink:        437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[01222007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
[05012006]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW
```

```
Mode V/U (J) Packet:
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon:   145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink  29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational
```

```
Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
Beacons:   29.450 MHz
          435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon 1:  29.352 MHz (intermittent)
Beacon 2:  29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink:     21.260 to 21.300 MHz CW/USB
Downlink:  145.860 to 145.900 MHz CW/USB

Beacon:    145.860 MHz

Robot:     145.908 MHz
```

[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-339.S4
WSR 339 Part 4 12/04/2008

AMSAT NEWS SERVICE BULLETIN 339.S4 FROM AMSAT HQ
SILVER SPRING, MD, December 04, 2008
TO ALL RADIO AMATEURS
BID: $ANS-339.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE PROPOSED FOR LAUNCH
AT THIS TIME:

XW-1
Catalog Number:
Proposed Launch Date: Summer 2009?

Status: Design Phase

Proposed Equipment:
Beacon: 435Mhz, CW 20dBm
Linear transponder: RX: 145Mhz, TX: 435Mhz, 40KHz, 30dBm
FM Transponder: RX: 145Mhz, TX: 435Mhz, 16KHz, 30dBm
Digital store and forward transponder: RX: 145Mhz, TX: 435Mhz, 16KHz,
30dBm

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108
[10092008]
=====
Phase 5a Mars Mission AO-??
Catalog Number:
Proposed Launch Date: 2009 or 2011

Status: Design Phase

For the latest project status update please visit the AMSAT-DL P5-A

web page:
http://ticket-to-mars.org
[01222007]
=====
PHASE 3E AO-??
Catalog number:
Proposed Launch Date: Late 2008

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/
[01222007]
=====
Eagle AO-??
Catalog Number:
Proposed Launch Date: Early/Mid 2009

Status: Design Phase

For the latest project status updates please visit the AMSAT-NA web page: http://www.amsat.org
[01222007]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-339.S5
WSR 339 Part 5 12/04/2008

AMSAT NEWS SERVICE BULLETIN 339.S5 FROM AMSAT HQ
SILVER SPRING, MD, December 04, 2008
TO ALL RADIO AMATEURS
BID: $ANS-339.S5

THE FOLLOWING SATELLITES HAVE RE-ENTERED OR HAVE BEEN RETURNED SAFELY:

NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink: 145.825 Mhz FM APRS AX25
APRS Uplink: 145.825 MHz FM APRS AX25
Voice/PSK31 Uplink: 28.120 MHz

Packet to Voice ID: RAFT
[06112007]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis

Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at}
amsat.org
NNNN
/EX

```
From -5947184642249267444
X-Google-Thread: 10e8ad,efe6380419d6a0d6,start
X-Google-Thread: 113975,efe6380419d6a0d6,start
X-Google-Attributes: gid10e8ad,gid113975,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news4.google.com!feeder.news-service.com!
news.astraweb.com!border1.a.newsrouter.astraweb.com!not-for-mail
From: Chris Steyaert <observations@rmob.org>
Newsgroups: rec.radio.amateur.space,sci.astro.amateur
Subject: Radio Meteor Obs. Bull. November 2008  Leonids
Date: Sat, 06 Dec 2008 20:12:44 +0100
Message-ID: <2kjlj49fjcmlhu3ko90qe75c6isp8k4o51@4ax.com>
X-Newsreader: Forte Agent 1.93/32.576 English (American)
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Lines: 17
Organization: Unlimited download news at news.astraweb.com
NNTP-Posting-Host: 8ef31a61.news.astraweb.com
X-Trace: DXC=KeoR7OE:YTOjEc;hW[JGKHL?
0kYOcDh@JSSH;U<@TWoKM:A=bg4_m9MKX07\YZ`QZFb;B4JC:4`4I_]EX3AX>04F
Xref: g2news1.google.com rec.radio.amateur.space:140 sci.astro.amateur:8648
```

Radio Meteor Observation Bulletin No. 184 of November 2008 (71 K) is available now as

http://visualrmob.free.fr/rmobtext/rmob0811.txt

More information and the visual presentation of the hourly forward scatter counts can be found on

http://www.rmob.org

http://radio.data.free.fr

Chris

```
From 6051355305145170983
```

```
X-Google-Thread: 10e8ad,202becbf22439d5b,start
X-Google-Thread: 10b9c8,202becbf22439d5b,start
X-Google-Attributes: gid10e8ad,gid10b9c8,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news2.google.com!newsfeed2.dallas1.level3.net!
news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-342 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Tue, 9 Dec 2008 18:55:14 EST
Organization: The Radio Amateur Satellite Corporation
Lines: 301
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <001f01c95a59$8cca09d0$a65e1d70$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix1.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1228866911 25565 166.84.1.1 (9 Dec 2008 23:55:11 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Tue, 9 Dec 2008 23:55:11 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news2.google.com rec.radio.amateur.space:166 rec.radio.info:469
```

AMSAT NEWS SERVICE
ANS-342

ANS is a free, weekly, news and information service of AMSAT North America, The
Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* AO-16 Requires Several Restarts
* ARISS 25th Commemorative Event to Feature 9K6 Packet This Week
* Sumbandilasat to be Launch from Baikonur
* ARISS Status - 01 December 2008

SB SAT @ AMSAT $ANS-342.01
AO-16 Requires Several Restarts

AMSAT News Service Bulletin 342.01
From AMSAT HQ SILVER SPRING, MD.
December 7, 2008
To All RADIO AMATEURS
BID: $ANS-342.01

AO-16 Command Station, Mark N8MH reported this week, "As expected, over the last few days AO-16 has started to again experience 'shutdowns'. So far I've restarted the bird three times, and each time it appears to stay up for a day or more. We can expect the situation to worsen, as the eclipse periods get longer and the satellite temperatures continue to go down. We've been warning you, get those AO-16 contacts in now!"

Mark says he will try to restart AO-16 as long as possible when his schedule allows him. Satellite operator reports to the OSCAR Satellite Status page by KD5QGR at http://oscar.dcarr.org/ are very helpful.

Mark continues, "If the birds is operational in voice mode, you should clearly hear the "not-so-repressed carrier" on the downlink. I have a special request - if you do not hear the carrier, please do not transmit to AO-16, as your transmissions make it difficult to command the satellite. And, if you hear the "hummmming" of the PSK transmitting, again please do not attempt to transmit to the bird; it's likely that I have restarted the bird and need to collect telemetry before configuring it into voice mode. Thanks to all you faithful AO-16 operators!"

Current operational mode for AO-16 (as available!):

Mode FM Voice Repeater (Downlink is DSB)
Uplink : 145.9200 MHz FM
Downlink 437.0260 MHz SSB

[ANS thanks Mark, N8MH for the above information]

/EX

SB SAT @ AMSAT $ANS-342.02
ARISS 25th Commemorative Event to Feature 9K6 Packet This Week

AMSAT News Service Bulletin 342.02
From AMSAT HQ SILVER SPRING, MD.

December 7, 2008
To All RADIO AMATEURS
BID: $ANS-342.02

As promised by ARISS, the 25th Anniversary Commemorative radio event started operations from the ISS amateur radio station this week. Early in the week several amateur stations around the world were able to copy the slow-scan television (SSTV) pictures transmitted from the ISS. On Friday, December 5 the ARISS crossband FM repeater was enabled with several stations reporting excellent signals. When the crossband repeater is operational its uplink is on 437.800 MHz FM with its downlink on 145.800 MHz FM. Remember to adjust for doppler shift when operating in this mode.

For the week of December 7-12 ARISS will run a test of 9600 baud packet operations on the simplex frequency 145.825 MHz.

To celebrate our 25 years of amateur radio operations from space, the ARISS team has planned a set of special event opportunities during the month of December and part of January. A special certificate is being developed for those who communicate with the ISS, either 2-way direct (with the ISS crew,the digipeater, or cross band repeater), or 1-way reception of SSTV or voice downlink. Several "surprises" planned over the month-long celebration. The surprises will be announced once ARISS is pre-positioned to accomplish them.

ARISS reminds everyone that ISS flight requirements related to EVA and vehicle activity may require the radio to be off for some portion of this schedule. And school contacts and general QSO opportunities by the crew will also preempt this schedule for short periods of time. But remember that if you hear these, you still qualify for a commemorative certificate.

[ANS thanks Frank, KA3HDO, AMSAT-NA V.P. for Human Spaceflight Programs and ARISS International Chairman for the above information]

/EX

SB SAT @ AMSAT $ANS-342.03
Sumbandilasat to be Launch from Baikonur

AMSAT News Service Bulletin 342.03
From AMSAT HQ SILVER SPRING, MD.
December 7, 2008
To All RADIO AMATEURS
BID: $ANS-342.03

It is official! South Africa's second satellite, SumbandilaSat, will be launched
from the Russian Baikonur Cosmodrome in the December to March time frame.

SumbandilaSat has been unpacked and is undergoing testing at SunSpace in

Stellenbosch before it will be shipped to Russia for integration with the launch vehicle. Engineers at the launch site are preparing a special adapter ring to accommodate the Sumbandila structure on the rocket.

"Sumbandila" means showing or pointing the way. Freely translated into English "Pathfinder"

The Amateur Radio Payload will be operating in conjunction with the University of Stellenbosch Software Defined Receiver project as it will share the VHF receiver and UHF transmitter used by the SDR project.

SA AMSAT has designed and built a control system to facilitate the following operations:

* V/U voice transponder with an uplink in the 2 metre band and a downlink in the 70cm band.

* A parrot repeater (voice digipeater)

* A voice beacon

The control unit will command the various function of the transponder and handle the parrot and beacon messaging. On receipt of a tone from the VUCU VHF receiver, the CTCSS tone will be decoded and depending on the tone received the unit will command the VU transponder operation or the parrot repeater. In the transponder mode the satellite will act like a cross-band FM repeater and allow two way communications with other stations on the ground.

If the tone received indicates parrot operation, the interface unit will record 20 seconds of audio on its VHF uplink receiver and replay the recorded audio on the UHF downlink.

Should, for a predetermined period, there be no tones received, the controller will initiate a voice beacon, transmitting a pre-recorded message at regular intervals. This facility will offer many opportunities for educational projects.

[ANS thanks SA AMSAT for the above information]

/EX

SB SAT @ AMSAT $ANS-342.04
ARISS Status - 01 December 2008

AMSAT News Service Bulletin 342.04
From AMSAT HQ SILVER SPRING, MD.
December 7, 2008
To All RADIO AMATEURS
BID: $ANS-342.04

1. Upcoming School Contacts

An Amateur Radio on the International Space Station (ARISS) contact has been scheduled with Ellis School in Belleville, Illinois on Monday, December 8 at 16:54 UTC. Space studies have been integrated into the school curriculum. Students have created solar system models, written reports and given presentations to their classes. They have designed rockets and given talks to the class about where the rockets will go and what they will do in space. They have planned space colonies and determined how the astronauts will travel, how they will obtain food and where they will live. They have also sampled space food. Students have learned about Expedition 18, the Space Shuttle, the international partners and the ISS and amateur radio. The class is currently growing seeds that were flown in space.

An Amateur Radio on the International Space Station (ARISS) contact has been scheduled for Stephen F. Austin Elementary School in Richmond, Texas on Tuesday, December 9 at 15:43 UTC. Students have studied space and the identifying characteristics of objects in our solar system including the sun, planets, and moon. Each year the 5th grade students participate in a simulated space shuttle mission, performing tasks that would happen on a regular shuttle flight. Each grade level is involved in some manner with the various missions that occur throughout the day. The school has integrated the ARISS contact as part of this activity.

The Istituto Comprensivo "Marco Polo," in Grado, Italy has been scheduled for an Amateur Radio on the International Space Station (ARISS) contact on Wednesday, December 10 at 10:08 UTC.

An Amateur Radio on the International Space Station (ARISS) contact has been scheduled with 2 Circolo Didattico San Giuseppe in Mola di Bari, Bari, Italy on

Friday, December 12 at 14:14 UTC. Lesson plans have been developed for students that cover amateur radio and space missions. Newspapers, radio and television, both local and regional, will report on the event.

2. New Zealand Homeschoolers Experience ARISS Contact

Wairarapa Home School Association students from Carterton, Wairarapa, New Zealand participated in an Amateur Radio on the International Space Station (ARISS) contact on Wednesday, November 26 via telebridge stations VK5ZAI and VK4KHZ, both in Australia. Mike Fincke, KE5AIT, answered all 15 questions asked. The audio was available on EchoLink and Internet Radio Linking Project (IRLP). This was the second ARISS contact performed with New Zealand students.

3. Video of ARISS - International Education Week Contact

Students from Poolesville, Maryland, Raleigh, North Carolina and Quito, Ecuador experienced a joint Amateur Radio on the International Space Station (ARISS) contact on Friday, November 14 as part of International Education Week (IEW). A video of the participating students from North Carolina and Ecuador has been posted to YouTube. See: http://www.youtube.com/watch?v=6d3D66DbBEo

4. CQ VHF Article on ARISS Meetings

Amateur Radio on the International Space Station (ARISS) member Keith Pugh, W5IU, wrote an article for the Fall 2008 issue of CQ VHF which covered the ARISS meetings held in Moscow during July 2008. An excerpt from the article may be viewed here: http://www.cq-vhf.com/Fall08Sat.html

5. ARISS Commemorative Event

Twenty-five years ago, Owen Garriott, W5LFL, became the first amateur radio operator to talk to hams from space on the STS-9 Space Shuttle Columbia mission which was launched on November 28 and landed on December 8, 1983. To celebrate this event, an Amateur Radio on the International Space Station (ARISS) commemorative event will be held during the month of December through early January. A special certificate is being developed for those who communicate with the ISS, either 2-way direct (with the ISS crew, the digipeater, or cross

band repeater), or 1-way reception of SSTV or voice downlink. For more
details,
see: http://www.ariss-eu.org/2008_11_30.htm

[ANS thanks Carol, KB3LKI, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the
President's
Club. Members of the President's Club, as sustaining donors to AMSAT Project
Funds, will be eligible to receive additional benefits. Application forms
are
available from the AMSAT Office.

73,
This week's ANS Editor,
Lee McLamb, KU4OS

```
From -8004260510132492552
X-Google-Thread: 10e8ad,550b02e3d80e0e09,start
X-Google-Thread: 10b9c8,550b02e3d80e0e09,start
X-Google-Attributes: gid10e8ad,gid10b9c8,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!news2.google.com!
newsfeed2.dallas1.level3.net!news.level3.com!panix!rri.panix.com!robomod!not-for-
mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-346 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Thu, 11 Dec 2008 23:46:55 EST
Organization: The Radio Amateur Satellite Corporation
Lines: 1459
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000701c95c14$9ca77010$d5f65030$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix1.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1229057213 12106 166.84.1.1 (12 Dec 2008 04:46:53 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Fri, 12 Dec 2008 04:46:53 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
```

```
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news1.google.com rec.radio.amateur.space:142 rec.radio.info:392

This report is organized into five (5) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites
Part 5 (S5) - deorbited/returned satellites

SB SAT @ AMSAT W8ISS ANS-346.S1
WSR 346 Part 1 12/11/2008

AMSAT NEWS SERVICE BULLETIN 346.S1 FROM AMSAT HQ
SILVER SPRING, MD, December 11, 2008
TO ALL RADIO AMATEURS
BID: $ANS-346.S1

DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008

Status: OPERATIONAL
Current Mode: U/v - voice

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink:   435.530 to 435.570 MHz

Proposed Frequencies:
Primary telemetry downlink: 145.870 MHz 1200 Baud BPSK AX.25 400mW
Backup telemetry downlink:  145.930 MHz 1200 Baud BPSK AX.25 400mW
Linear transponder passband downlink: 145.880 - 145.920 MHz(inverting)
Linear transponder passband uplink: 435.570 - 435.530 MHz
Transponder mode beacon: 145.870 MHz CW (10dB below transponder PEP)

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68
[07312008]
=====
VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005
```

```
Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink:   435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink:   435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW


Indian Beacon:  145.859330 MHZ CW
Dutch Beacon:   145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is active. Each transponder has a different beacon.
[08072008]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Modes:   FM Repeater - V-FM/u-FM
                 BBS         - L-9k6/u-9k6
                 Telemetry   -  /u

Analog voice downlink:     435.300 MHz FM
                           435.150 MHz FM
                          2401.200 Mhz FM
Analog voice uplink:       145.880 MHZ FM
                           145.880 MHz USB
                           145.920 MHz FM
                          1268.700 MHz FM 67Hz PL tone
Digital Downlinks:        435.150 MHz FM 38k4 PBP, 1 watt output
                          435.150 MHz FM 9k6 Pacsat Broadcast Protocol
                         2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:           145.860 MHz FM 9k6 Pacsat Broadcast Protocol
                         1268.700 mhz FM 9k6 PBP Digital
Beacon:                   435.150 MHz

Mode and Antenna Polarization:
T: Linear
```

```
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[12112008]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002

Status: Operational.

Current Mode: V/u

Uplink:   145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4
Hz. The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute
   timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the re-
   peater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset
   the 10 minute timer.
[05282007]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Operational - check operational schedule for current times!!

Current Mode: V/u

Voice/CW Mode JA
Uplink:   145.90 to 146.00 MHz CW/LSB
```

```
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon:   435.795 MHz

Digital Mode JD
Uplinks:  145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage: http://www.jarl.or.jp/English/5_Fuji/
ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's
CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts
.htm
[0820007]
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993

Status: OFF - Reload software

Current Mode: V/u

Uplink:   145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[10092008]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Operational
```

```
Current Mode:  V/u

Uplink:         145.900 MHz FM 1200-baud Manchester FSK (reserved)
                145.920 MHz FM VOICE
                145.940 MHz FM 1200-baud Manchester FSK (reserved)
                145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink:       437.026 MHz USB VOICE
                (1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[12042008]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational depending on amount of Sunlight

Current Mode: Listen before transmitting

Uplink:   145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink:  29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons:   29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/

AO-7 Usage Guidelines on the AO-7 Log and Resource Site located at:
http://www.planetemily.com/ao7
[05282007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
```

Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - U/v
Voice - V/v
BBS - V/v
APRS - V/v 9k6
SSTV - V/v

Expedition 18 Crew:
Commander: Mike Fincke KE5AIT
Flight Engineer: Yury Lonchakov RA3DT
Flight Engineer: Sandra Magnus KE5FYE

Available Modes and Frequencies:

Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 9k6
Worldwide packet downlink: 145.825 Mhz FM 9k6

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS
RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines

Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[12112008]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-346.S2
WSR 346 Part 2 12/11/2008

AMSAT NEWS SERVICE BULLETIN 346.S2 FROM AMSAT HQ
SILVER SPRING, MD, December 11, 2008
TO ALL RADIO AMATEURS
BID: $ANS-346.S2

RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number:
Launch Date: May 23, 2008

Status: Operational

Curent Mode: Telemetry
Audio
Images

Downlinks: 435.315 MHz
435.215 MHz
[05292008]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.
[11152007]
=====
CP3
Catalog Number: 31128
Launch Date: April 17,2007

Status: Operational

Current Mode: /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25

```
[07302007]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: In Orbit

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder:  145.825 Mhz FM
[02052007]
=====
NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Operational

Current Mode: /u

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[10222007]
=====
GENESAT-1 ?O-??
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Current Mode: /u

Telemetry Beacon Downlink: 437.0670 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[01082007]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon:             437.2750 MHz CW
```

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
[03262007]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003

Status: Operational

Current Mode: /u

Beacon: 436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[01082007]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Semi-Operational - Constant Carrier only

Uplink: 1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[01082007]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon

```
Downlink: 436.8375 MHz CW
[08132007]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Modes:   FM Repeater - V-FM/u-FM
                 BBS         - L-9k6/u-9k6
                 Telemetry   -  /u

Analog voice downlink:     435.300 MHz FM
                           435.150 MHz FM
                          2401.200 Mhz FM
Analog voice uplink:       145.880 MHZ FM
                           145.880 MHz USB
                           145.920 MHz FM
                          1268.700 MHz FM 67Hz PL tone
Digital Downlinks:        435.150 MHz FM 38k4 PBP, 1 watt output
                          435.150 MHz FM 9k6 Pacsat Broadcast Protocol
                         2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:           145.860 MHz FM 9k6 Pacsat Broadcast Protocol
                         1268.700 mhz FM 9k6 PBP Digital
Beacon:                   435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[12112008]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Hibernation until full sunlight in November

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
```

```
Special Usage Downlink:        144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[09242007]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Non-Operational

Current Modes: V/U
               L/U

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[12042007]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984

Status: Semi-operational.

Current Mode:  /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon:          435.025 MHz
Mode-S Beacon:     2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[01242008]
=====
```

RS-22 RADIO SPORT RS-22
Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only

Current Mode: /u

CW Beacon - 435.352 MHz
            145.818 MHz
[08062007]

=====

Can X-2
Catalog number:
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[05292008]

=====

AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink: 437.425 MHz

For the latest project status update please visit the AAUSAT-II web page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[05292008]

=====

CO-65 Cute-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink: 437.475 MHz 9k6 Packet
Uplink: 1267.600 Mhz

For the latest project status update please visit the Cute-1.7+APD II

web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78
[07312008]

=====
Compass-1
Catalog number: 32787
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink: 437.275 Mhz CW
437.405 MHz Packet

For the latest project status update please visit the Compass 1 web page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52
[05292008]

=====
CO-66 Seeds II
Catalog number:
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.485 MHz

For the latest project status update please visit the Seeds 2 web page: http://cubesat.aero.cst.nihon-u.ac.jp/english/main_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36
[12042008]

=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - U/v
Voice - V/v
BBS - V/v 9k6
APRS - V/v 9k6
SSTV - V/v

Expedition 18 Crew:

Commander:	Mike Fincke	KE5AIT
Flight Engineer:	Yury Lonchakov	RA3DT
Flight Engineer:	Sandra Magnus	KE5FYE

Available Modes and Frequencies:

Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 9k6
Worldwide packet downlink: 145.825 Mhz FM 9k6

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS
                           RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[12112008]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-346.S3
WSR 346 Part 3 12/11/2008

AMSAT NEWS SERVICE BULLETIN 346.S3 FROM AMSAT HQ
SILVER SPRING, MD, December 11, 2008
TO ALL RADIO AMATEURS
BID: $ANS-346.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

```
CP4
Catalog Number: 31122
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon:    437.325 MHz CW

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=79
[10022008]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Non-Operational

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon:             437.2750 MHz CW

Callsign: JR8YJT
[10152007]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency:  437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink:        437.250 MHz FM 67Hz CTCSS
Voice Downlink:     2401.835 MHz FM
Packet Up/Downlink:  437.250 MHz 9k6 packet
Packet Downlink     2401.835 MHz 38k4 packet
```

```
Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non=Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[08132007]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink:   435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Non-Operational

Uplinks:   145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink:  437.325 MHz

Broadcast callsign: MYSAT3-11
BBS:                MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial land and weather imaging payloads offers FM and FSK
Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as
a collaborative effort between the Malaysian government and Surrey
Satellite Technology Ltd.
[007302007]
=====
NO-45 SAPPHIRE
Catalog number: 26932
```

Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks

V-band: 145.840 - 145.990 MHz CW/LSB

U-band: 435.550 - 435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks

S2-band: 2401.225 - 2401.475 MHz CW/USB
K-band: 24048.010 - 24048.060 MHz CW/USB
Beacon: 2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)

BEACON	General Beacon(GB)	Middle Beacon(MB)	Engineering Beacon(EB)
2 m	none	145.898 MHz	none
70cm	435.438 MHz	435.588 MHz	435.838 MHz
13cm(1)	2400.188 MHz	2400.338 MHz	2400.588 MHz
13cm(2)	2401.173 MHz	2401.323 MHz	2401.573 MHz
3cm	10450.975 MHz	10451.125 MHz	10451.375 MHz
1.5cm	24047.885 MHz	24048.035 MHz	24048.285 MHz

[07162007]

=====

OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]

=====

UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]

=====

SO-35 SUNSAT
Catalog Number: ?
Launch date:February 23, 1999

```
Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater:         436.250 MHz

Uplinks: Mode B Repeater:  145.825 MHz
Mode J Digipeater:         145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink:   145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign:       POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012006]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
KO-23 KITSAT
```

```
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HL01-11
BBS: HL01-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
```

```
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
LIBERTAD-1
Catalog Number: 31129
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink:   145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[10222007]
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990

Status: CW Beacon only

Uplinks:          145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink:      437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[01222007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
[05012006]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon:   145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
```

```
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink  29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
Beacons:   29.450 MHz
          435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
```

Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB

Beacon 1: 29.352 MHz (intermittent)
Beacon 2: 29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB

Beacon: 145.860 MHz

Robot: 145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-346.S4
WSR 346 Part 4 12/11/2008

AMSAT NEWS SERVICE BULLETIN 346.S4 FROM AMSAT HQ
SILVER SPRING, MD, December 11, 2008

TO ALL RADIO AMATEURS
BID: $ANS-346.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE PROPOSED FOR LAUNCH AT THIS TIME:

XW-1
Catalog Number:
Proposed Launch Date: Summer 2009?

Status: Design Phase

Proposed Equipment:
Beacon: 435Mhz, CW 20dBm
Linear transponder: RX: 145Mhz, TX: 435Mhz, 40KHz, 30dBm
FM Transponder: RX: 145Mhz, TX: 435Mhz, 16KHz, 30dBm
Digital store and forward transponder: RX: 145Mhz, TX: 435Mhz, 16KHz, 30dBm

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108
[10092008]
=====
Phase 5a Mars Mission AO-??
Catalog Number:
Proposed Launch Date: 2009 or 2011

Status: Design Phase

For the latest project status update please visit the AMSAT-DL P5-A web page:
http://ticket-to-mars.org
[01222007]
=====
PHASE 3E AO-??
Catalog number:
Proposed Launch Date: Late 2008

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/
[01222007]
=====
Eagle AO-??
Catalog Number:
Proposed Launch Date: Early/Mid 2009

Status: Design Phase

For the latest project status updates please visit the AMSAT-NA web page: http://www.amsat.org

[01222007]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-346.S5
WSR 346 Part 5 12/11/2008

AMSAT NEWS SERVICE BULLETIN 346.S5 FROM AMSAT HQ
SILVER SPRING, MD, December 11, 2008
TO ALL RADIO AMATEURS
BID: $ANS-346.S5

THE FOLLOWING SATELLITES HAVE RE-ENTERED OR HAVE BEEN RETURNED SAFELY:

NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink: 145.825 Mhz FM APRS AX25
APRS Uplink: 145.825 MHz FM APRS AX25
Voice/PSK31 Uplink: 28.120 MHz

Packet to Voice ID: RAFT
[06112007]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at}
amsat.org
NNNN
/EX

From -5700735736018447213
X-Google-Thread: 10e8ad,2729a927e2d1ce01,start
X-Google-Thread: 10b9c8,2729a927e2d1ce01,start
X-Google-Attributes: gid10e8ad,gid10b9c8,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!newsfeed.stanford.edu!panix!
rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-349 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sun, 14 Dec 2008 11:15:26 EST
Organization: The Radio Amateur Satellite Corporation

Lines: 289
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <001401c95e07$24cc98a0$6e65c9e0$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1229271326 5578 166.84.1.6 (14 Dec 2008 16:15:26 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 14 Dec 2008 16:15:26 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to   rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to   rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news1.google.com rec.radio.amateur.space:143 rec.radio.info:398

AMSAT NEWS SERVICE
ANS-349

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* Special ARISS Certificate
* AMSAT donor operations loaners
* AMSAT's Volunteer Reporting System Needs Your Input
* SKN on OSCAR 2009
* ARISS Status - 08 December 2008

SB SAT @ AMSAT $ANS-349.01
Special ARISS Certificate

AMSAT News Service Bulletin 349.01
   From AMSAT HQ SILVER SPRING, MD.
December 14, 2008
To All RADIO AMATEURS

BID: $ANS-349.01

All,

The ARISS team has had a number of queries on several topics. It is hoped that this e-mail will answer these for you.

1) 25th Anniversary of Ham in Space Special Event Certificate---Many have asked how to receive the special certificate and what qualifies you for the certificate.

Qualification: Those that have had 2 way communications with the ISS on Voice, Packet (APRS), or through the voice repeater. And those that have heard the ISS from space in any of the ARISS operations modes (Voice, SSTV, School Contact, Voice Repeater, Digital). Valid dates to qualify for certificate: November 30 to January 15.

Receiving the Certificate:
A) Please note on your QSL the ARISS mode of operation (e.g. SSTV, voice, school, etc) and whether the contact with you was 1 way (receive only) or 2 way.
B) Send your SASE to the normal ARISS QSL volunteer distributor in your area of the world.
C) On the outside of the QSL envelope, please include the words "25th Anniversary Certificate"
D) Make sure your envelope is big enough to accept an 8.5 by 11 inch certificate and includes the proper postage.
E) Go to www.ariss.org if you do not know where to send your QSL and please use one of the standard international QSL distributors that are noted on the Web page.

Important note: We will be sending your certificate to the volunteer distributors in bulk AFTER the event is over. (This saves workload and money). So do not expect to see it until 1-2 months after the event closes on January 15.

2) Richard Garriott QSL Card---there are have several queries about the final results of Richard Garriott's flight and how the QSL cards will be handled.

QSO Results: Richard made over 500 voice QSOs during his flight, clearly more than any single ham has made on-orbit during a short duration mission. And he sent down about 1000 SSTV images during his flight.

QSL Card: Those that had a QSO with Richard can receive an ARISS QSL card using the normal ARISS process. (See www.ariss.org). Richard Garriott is also planning a personal card which is in development. Once it is developed, they will be shipped to the ARISS international QSL distribution volunteers for distribution. The current plan is that those that have already sent in for an ARISS QSL card will also get a Richard Garriott personal card once it is available. If you made a contact with Richard, have not sent in your QSL, and would like Richard's personal QSL card, please stand by for QSL distribution instructions until the QSL card is ready. The distribution of this special QSL will parallel how we are distributing the 25th Anniversary Certificate.

3) SSTV Operations Web Site---The ARISS team appreciated the special web page support from UC Berkeley. They allowed us to use their server to support SSTV operations during the Richard Garriott's flight. This was a temporary solution. The web site is currently down while we move the web pages from the Berkeley site to the AMSAT server. This should be completed in the next few days. You will see a follow-on e-mail with details on connecting up to the SSTV Operations server. We thank you for your patience.

On behalf of the ARISS International team of volunteers, I thank you all for your interest and participation in the ARISS Program.

73, Frank Bauer, KA3HDO
AMSAT V.P. for Human Spaceflight Programs
ARISS International Chairman

[ANS thanks Frank, KA3HDO, for the above information]

/EX

SB SAT @ AMSAT $ANS-349.02
AMSAT donor operations loaners

AMSAT News Service Bulletin 349.02
From AMSAT HQ SILVER SPRING, MD.
December 14, 2008
To All RADIO AMATEURS
BID: $ANS-349.02

The AMSAT Operations team is in the process of acquiring a few sets of basic loaner gear that will be available to DXpeditions and other groups in order to promote activity on the satellites. Initially these will consist of simple FM portable stations including a full duplex dual band HT and an Arrow or other suitable antenna. Depending on the success of the program, we will likely expand it to include the transponder and digital satellites as well. We also expect to be able to integrate AO-51 operations into the program. In the recent past, similar efforts have been undertaken by individuals within AMSAT, including W9AE's AO-40 package, and KO4MA's gear loaned to the KG4SB Gitmo operation.

Thanks to the past generosity of AMSAT-OZ and a few individual donors to a prior personal effort to equip a Peruvian university station for AO-40, I have approximately 140 dollars to redirect to this project. To complete the first phase of this, I'd like to have on hand two split boom Arrow antennas with diplexers and two late model full duplex handhelds. The preferred rig is the Kenwood D-7 or Yaesu FT-530. These will be packaged together in two custom crush-proof PVC carrying tubes. We already have a major DXpedition to a location within LEO range of most of North America interested in participating in the early part of 2009.

If businesses, organizations or individuals would like to assist in this program, please email me at ko4ma@amsat.org. All sponsors will receive full recognition from AMSAT for their participation. As indicated above, our major needs at this point are two split boom Arrow antennas with diplexers and two full duplex dual band HTs.

73 and thanks for your support of AMSAT,
Drew KO4MA
AMSAT-NA VP Operations

[ANS thanks Drew, KO4MA, for the above information]

/EX

SB SAT @ AMSAT $ANS-349.03
AMSAT's Volunteer Reporting System Needs Your Input

AMSAT News Service Bulletin 349.03
From AMSAT HQ SILVER SPRING, MD.
December 14, 2008
To All RADIO AMATEURS
BID: $ANS-349.03

AMSAT's Volunteer Reporting System Needs Your Input

AMSAT Treasurer, Gunther W8GSM requests AMSAT volunteers update their Time spent on AMSAT Projects in the Volunteer Reporting System. See:
http://www.amsat.org/amsat-new/volunteers/login.php - and -
http://www.amsat.org/amsat-new/volunteers/about.php

Gunther said, "AMSAT's audit firm is going to start the 2008 Audit On January 15, 2009 in an attempt to get it out in a more timely manner. To that end, I need to ask all of you to submit your VRS volunteer time reports to the web site prior to December 31 of this year. I have work to do on that data and need the first couple weeks in 2009 to get that done. SO, PLEASE SUBMIT ANY UNREPORTED VOLUNTEER TIME SPENT FOR AMSAT ASAP!"

[ANS thanks Gunther, W8GSM for the above information]

/EX

SB SAT @ AMSAT $ANS-349.04
SKN on OSCAR 2009

AMSAT News Service Bulletin 349.04
From AMSAT HQ SILVER SPRING, MD.
December 14, 2008
To All RADIO AMATEURS
BID: $ANS-349.04

SKN on OSCAR 2009

Ray Soifer, W2RS extends the annual cordial invitation to all radio amateurs worldwide to participate in AMSAT's Straight Key Night (SKN) on OSCAR 2009.

Participating in SKN on OSCAR 2009 is easy. No rules, no scoring and no need to send in a log. Just operate CW through any OSCAR between 0000 and 2400 UTC on 1 January 2009, using a straight hand key.

In keeping with the friendly nature of this event, all participants are encouraged to nominate someone they worked for "Best Fist." Your nominee need not have the best fist of those you heard, just of those you worked. Please send your nomination to w2rs@amsat.org. A list of those nominated will appear in ANS and The AMSAT Journal.
CU SKN!

[ANS thanks Ray Soifer, W2RS for the above information]

/EX

SB SAT @ AMSAT $ANS-349.05
ARISS Status - 08 December 2008

AMSAT News Service Bulletin 349.05
From AMSAT HQ SILVER SPRING, MD.
December 14, 2008
To All RADIO AMATEURS
BID: $ANS-349.05

1. India College Experiences Successful Contact

Students attending St. Anthony's College in Shillong, India participated in a question and answer session with Mike Fincke, KE5AIT. The Amateur Radio on the International Space Station (ARISS) contact took place on Monday, December 1 via telebridge station WH6PN in Hawaii. Over 700 students, staff and guests witnessed the contact as 11 students asked one question each of the astronaut. Television stations covering the news included DD National, Peitngor Cable News (PCN) Channel and Ri Khasi Channel. The Shillong Times, Meghalaya Guardian, Sentinel and other Khasi local newspapers were also present. St. Anthony's college is the alma mater of Mr. Rupesh Saikia, father-in-law of astronaut Mike Fincke.

2. Canadian Contact Successful

Quispamsis Elementary and Middle Schools in New Brunswick, Canada experienced an Amateur Radio on the International Space Station (ARISS) contact on Thursday, December 4. Mike Fincke, KE5AIT, answered 20 questions posed to him by twenty students. Representatives from the

School District and the Municipal, Provincial and Federal Government were invited. Audio was fed into the EchoLink server and received four connections. Media coverage included television, radio and newspapers. The Telegraph Journal ran an article on the contact. See:
http://telegraphjournal.canadaeast.com/city/article/article/502323

CBC (Canadian Broadcasting Corporation) News also covered the event. Go to:
http://www.cbc.ca/technology/story/2008/12/05/nb-space-talk.html

Radio station Country 94 CHSJ posted a short summary:
http://www.country94.ca/country94/post/13-1658386395336820565/Thursday/

3.   ARRL Article on ARISS - IEW Events

Students from Poolesville, Maryland, Raleigh, North Carolina and Quito, Ecuador experienced a joint Amateur Radio on the International Space Station (ARISS) contact on Friday, November 14 as part of International Education Week (IEW). They connected again for another informative session with amateur radio operators from around the world and an expert panel which included astronaut Don Thomas. The American Radio Relay League (ARRL) ran an article on these events. See:
http://www.arrl.org/news/stories/2008/12/02/10489/?nc=1 The ARRL Letter printed the story in its December 5 issue. See:
http://www.arrl.org/arrlletter/08/1205/

5.   ARRL Covers ARISS Special Event

The American Radio Relay League (ARRL) posted a story on the Amateur Radio on the International Space Station (ARISS) special event to celebrate 25 years of ham radio in space. To view the article, go to:
http://www.arrl.org/news/stories/2008/12/01/10481/?nc=1
The ARRL Letter included the news in its December 5 issue. See:
http://www.arrl.org/arrlletter/08/1205/

[ANS thanks Carol, KB3LKI, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Dee Interdonato, NB2F

From -1013169953050487779

```
X-Google-Thread: 10e8ad,5d40208866ecf951,start
X-Google-Thread: 10b9c8,5d40208866ecf951,start
X-Google-Attributes: gid10e8ad,gid10b9c8,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news2.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx01.iad.newshosting.com!newshosting.com!
198.186.194.249.MISMATCH!transit3.readnews.com!news-out.readnews.com!news-
xxxfer.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-346 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Fri, 19 Dec 2008 15:51:15 EST
Organization: The Radio Amateur Satellite Corporation
Lines: 1461
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <001001c9621b$7fb4bc80$7f1e3580$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix1.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1229719870 7420 166.84.1.1 (19 Dec 2008 20:51:10 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Fri, 19 Dec 2008 20:51:10 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to            rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news2.google.com rec.radio.amateur.space:169 rec.radio.info:486
```

This report is organized into five (5) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites
Part 5 (S5) - deborbited/returned satellites

SB SAT @ AMSAT W8ISS ANS-353.S1
WSR 346 Part 1 12/18/2008

AMSAT NEWS SERVICE BULLETIN 353.S1 FROM AMSAT HQ
SILVER SPRING, MD, December 18, 2008
TO ALL RADIO AMATEURS

BID: $ANS-353.S1

DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008

Status: OPERATIONAL
Current Mode: U/v - voice

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink: 435.530 to 435.570 MHz

Proposed Frequencies:
Primary telemetry downlink: 145.870 MHz 1200 Baud BPSK AX.25 400mW
Backup telemetry downlink: 145.930 MHz 1200 Baud BPSK AX.25 400mW
Linear transponder passband downlink: 145.880 - 145.920 MHz(inverting)
Linear transponder passband uplink: 435.570 - 435.530 MHz
Transponder mode beacon: 145.870 MHz CW (10dB below transponder PEP)

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68
[07312008]
=====
VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.859330 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

```
To know what transponder is switched on please listen for the beacon
that is active. Each transponder has a different beacon.
[08072008]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Modes:   FM Repeater - V-FM/u-FM
                               V-FM/u-FM QRP
                 BBS         - OFF
                 Telemetry   - OFF

Analog voice downlink:     435.300 MHz FM
                           435.150 MHz FM
                          2401.200 Mhz FM
Analog voice uplink:       145.880 MHZ FM
                           145.880 MHz USB
                           145.920 MHz FM
                          1268.700 MHz FM 67Hz PL tone
Digital Downlinks:        435.150 MHz FM 38k4 PBP, 1 watt output
                          435.150 MHz FM 9k6 Pacsat Broadcast Protocol
                         2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:           145.860 MHz FM 9k6 Pacsat Broadcast Protocol
                         1268.700 mhz FM 9k6 PBP Digital
Beacon:                   435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[12182008]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002

Status: Operational.

Current Mode: V/u
```

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz. The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10 minute timer.
[05282007]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Operational - check operational schedule for current times!!

Current Mode: V/u

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage: http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:

http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts.htm
[0820007]
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993

Status: OFF - Reload software

Current Mode: V/u

Uplink: 145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[10092008]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Operational

Current Mode: V/u

Uplink: 145.900 MHz FM 1200-baud Manchester FSK (reserved)
145.920 MHz FM VOICE
145.940 MHz FM 1200-baud Manchester FSK (reserved)
145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink: 437.026 MHz USB VOICE
(1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC 437.050 MHz RHCP
PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html

```
[12042008]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational depending on amount of Sunlight

Current Mode: Listen before transmitting

Uplink:   145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink:  29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons:   29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/

AO-7 Usage Guidelines on the AO-7 Log and Resource Site located at:
http://www.planetemily.com/ao7
[05282007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - U/v
                      Voice -       V/v
                      BBS -         V/v
                      APRS -        V/v 9k6
                      SSTV -        V/v

Expedition 18 Crew:
Commander:                Mike Fincke      KE5AIT
Flight Engineer:          Yury Lonchakov   RA3DT
Flight Engineer:          Sandra Magnus    KE5FYE


Available Modes and Frequencies:

Digital/APRS:
Worldwide packet uplink:   145.825 MHz FM 9k6
Worldwide packet downlink: 145.825 Mhz FM 9k6
```

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[121812008]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-353.S2
WSR 346 Part 2 12/18/2008

AMSAT NEWS SERVICE BULLETIN 353.S2 FROM AMSAT HQ
SILVER SPRING, MD, December 18, 2008
TO ALL RADIO AMATEURS
BID: $ANS-353.S2

RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number:
Launch Date: May 23, 2008

Status: Operational

Curent Mode: Telemetry
Audio

```
             Images

Downlinks: 435.315 MHz
           435.215 MHz
[05292008]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode:  /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon:    435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.
[11152007]
=====
CP3
Catalog Number: 31128
Launch Date: April 17,2007

Status: Operational

Current Mode:  /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[07302007]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: In Orbit

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder:  145.825 Mhz FM
[02052007]
=====
NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Operational

Current Mode: /u
```

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[10222007]
=====
GENESAT-1 ?O-??
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Current Mode: /u

Telemetry Beacon Downlink: 437.0670 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[01082007]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

```
Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon:             437.2750 MHz CW
```

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
[03262007]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003

Status: Operational

Current Mode: /u

```
Beacon:     436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS
```

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

```
[01082007]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Operational?

Uplink:  1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[12182008]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW
[08132007]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Modes:   FM Repeater - V-FM/u-FM
                               V-FM/u-FM QRP
                 BBS         - OFF
                 Telemetry   - OFF

Analog voice downlink:      435.300 MHz FM
                            435.150 MHz FM
                           2401.200 Mhz FM
Analog voice uplink:        145.880 MHZ FM
                            145.880 MHz USB
                            145.920 MHz FM
                           1268.700 MHz FM 67Hz PL tone
Digital Downlinks:         435.150 MHz FM 38k4 PBP, 1 watt output
```

```
                           435.150 MHz FM 9k6 Pacsat Broadcast Protocol
                          2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:            145.860 MHz FM 9k6 Pacsat Broadcast Protocol
                          1268.700 mhz FM 9k6 PBP Digital
Beacon:                    435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[12182008]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Hibernation until full sunlight in November

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink:        144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[09242007]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Non-Operational

Current Modes: V/U
               L/U

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[12042007]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984

Status: Semi-operational.

Current Mode:  /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon:          435.025 MHz
Mode-S Beacon:     2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[01242008]
=====
RS-22 RADIO SPORT RS-22
Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only

Current Mode:  /u

CW Beacon - 435.352 MHz
            145.818 MHz
[08062007]
=====
Can X-2
Catalog number:
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web
```

page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[05292008]
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink: 437.425 MHz

For the latest project status update please visit the AAUSAT-II web page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[05292008]
=====
CO-65 Cute-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink: 437.475 MHz 9k6 Packet
Uplink: 1267.600 Mhz

For the latest project status update please visit the Cute-1.7+APD II web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78
[07312008]
=====
Compass-1
Catalog number: 32787
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink: 437.275 Mhz CW
          437.405 MHz Packet

For the latest project status update please visit the Compass 1 web page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52
[05292008]

=====
CO-66 Seeds II
Catalog number:
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.485 MHz

For the latest project status update please visit the Seeds 2 web page: http://cubesat.aero.cst.nihon-u.ac.jp/english/main_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36
[12042008]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes:		
	FM Repeater -	U/v
	Voice -	V/v
	BBS -	V/v 9k6
	APRS -	V/v 9k6
	SSTV -	V/v

Expedition 18 Crew:

Commander:	Mike Fincke	KE5AIT
Flight Engineer:	Yury Lonchakov	RA3DT
Flight Engineer:	Sandra Magnus	KE5FYE

Available Modes and Frequencies:

Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 9k6
Worldwide packet downlink: 145.825 Mhz FM 9k6

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:

V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[12182008]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-353.S3
WSR 346 Part 3 12/18/2008

AMSAT NEWS SERVICE BULLETIN 353.S3 FROM AMSAT HQ
SILVER SPRING, MD, December 18, 2008
TO ALL RADIO AMATEURS
BID: $ANS-353.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

CP4
Catalog Number: 31122
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon: 437.325 MHz CW

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=79
[10022008]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Non-Operational

```
Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon:             437.2750 MHz CW

Callsign: JR8YJT
[10152007]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency:  437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink:         437.250 MHz FM 67Hz CTCSS
Voice Downlink:      2401.835 MHz FM
Packet Up/Downlink:   437.250 MHz 9k6 packet
Packet Downlink      2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non=Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[08132007]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.
```

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Non-Operational

Uplinks: 145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[007302007]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

```
Broadcast Callsign: SASAT2-11
BBS:                SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink:   145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
V-band:   145.840 -  145.990 MHz CW/LSB
U-band:   435.550 -  435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks
---------
S2-band:  2401.225 -  2401.475 MHz CW/USB
K-band:  24048.010 - 24048.060 MHz CW/USB
Beacon:   2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)
----------------------------
BEACON   General Beacon(GB)  Middle Beacon(MB)  Engineering Beacon(EB)
2 m                   none        145.898 MHz                    none
70cm           435.438 MHz        435.588 MHz             435.838 MHz
13cm(1)       2400.188 MHz       2400.338 MHz            2400.588 MHz
13cm(2)       2401.173 MHz       2401.323 MHz            2401.573 MHz
3cm          10450.975 MHz      10451.125 MHz           10451.375 MHz
1.5cm        24047.885 MHz      24048.035 MHz           24048.285 MHz
[07162007]
```

```
=====
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink:    145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: ?
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater:         436.250 MHz

Uplinks: Mode B Repeater:  145.825 MHz
Mode J Digipeater:         145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz
```

```
Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink:   145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign:       POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012006]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993
```

```
Status: PSK carrier only

Current Mode:

Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HL01-11
BBS: HL01-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM
```

```
Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
LIBERTAD-1
Catalog Number: 31129
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink:   145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[10222007]
```

```
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990

Status: CW Beacon only

Uplinks:          145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink:      437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[01222007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
[05012006]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
```

```
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon:   145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink  29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
```

```
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
Beacons:   29.450 MHz
          435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon 1:  29.352 MHz (intermittent)
Beacon 2:  29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991
```

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB

Beacon: 145.860 MHz

Robot: 145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-353.S4
WSR 346 Part 4 12/18/2008

AMSAT NEWS SERVICE BULLETIN 353.S4 FROM AMSAT HQ
SILVER SPRING, MD, December 18, 2008
TO ALL RADIO AMATEURS
BID: $ANS-353.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE PROPOSED FOR LAUNCH
AT THIS TIME:

XW-1
Catalog Number:
Proposed Launch Date: Summer 2009?

Status: Design Phase

Proposed Equipment:
Beacon: 435Mhz, CW 20dBm
Linear transponder: RX: 145Mhz, TX: 435Mhz, 40KHz, 30dBm
FM Transponder: RX: 145Mhz, TX: 435Mhz, 16KHz, 30dBm
Digital store and forward transponder: RX: 145Mhz, TX: 435Mhz, 16KHz,
30dBm

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108

[10092008]
=====
Phase 5a Mars Mission AO-??
Catalog Number:
Proposed Launch Date: 2009 or 2011

Status: Design Phase

For the latest project status update please visit the AMSAT-DL P5-A web page:
http://ticket-to-mars.org
[01222007]
=====
PHASE 3E AO-??
Catalog number:
Proposed Launch Date: Late 2008

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/
[01222007]
=====
Eagle AO-??
Catalog Number:
Proposed Launch Date: Early/Mid 2009

Status: Design Phase

For the latest project status updates please visit the AMSAT-NA web page: http://www.amsat.org
[01222007]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-353.S5
WSR 346 Part 5 12/18/2008

AMSAT NEWS SERVICE BULLETIN 353.S5 FROM AMSAT HQ
SILVER SPRING, MD, December 18, 2008
TO ALL RADIO AMATEURS
BID: $ANS-353.S5

THE FOLLOWING SATELLITES HAVE RE-ENTERED OR HAVE BEEN RETURNED SAFELY:

NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

```
Main Downlink:      145.825 Mhz FM APRS AX25
APRS Uplink:        145.825 MHz FM APRS AX25
Voice/PSK31 Uplink:  28.120 MHz
```

Packet to Voice ID: RAFT
[06112007]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

```
Voice: 301-589-6062
       888-322-6728
FAX:   301-608-3410
```

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at}
amsat.org
NNNN
/EX

```
From -643733036070062586
X-Google-Thread: 10e8ad,aa9e7f93f0ef4f51,start
X-Google-Attributes: gid10e8ad,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!news.glorb.com!transit3.readnews.com!
news-out.readnews.com!news-xxxfer.readnews.com!panix!rri.panix.com!robomod!not-
for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-356 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sat, 20 Dec 2008 21:48:30 EST
Organization: The Radio Amateur Satellite Corporation
Lines: 434
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000301c96316$933f2870$b9bd7950$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix2.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1229827707 9635 166.84.1.2 (21 Dec 2008 02:48:27 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 21 Dec 2008 02:48:27 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
```

X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news1.google.com rec.radio.amateur.space:145 rec.radio.info:410

AMSAT NEWS SERVICE
ANS-356

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:

* AMSAT President's Letter
* ARISS 25th Anniversary Adds New Modes
* ARISS Discusses L-Band Operating Parameters
* Tracking QRM - AO-51 Repeater Pairs Return to Normal Configuration
* PCSAT-1 Recovery Partial Success
* Satellite Shorts From All Over
* Mark Your Calendars - 2009 AMSAT Symposium October 9-10
* Reminder: SKN on OSCAR 2009

SB SAT @ AMSAT $ANS-356.01
AMSAT President's Letter

AMSAT News Service Bulletin 356.01
>From AMSAT HQ SILVER SPRING, MD.
December 21, 2008
To All RADIO AMATEURS
BID: $ANS-356.01

Happy Holidays! Best wishes to everyone during this festive time of the year. As I write this, a major snowstorm is providing plenty of 'white stuff' in the Midwest and New England, so I presume this means that we will have a white Christmas here in Massachusetts. While this is certainly a time of economic uncertainty, I also know that our members continue to make a difference for AMSAT.

A number of interesting opportunities and events have developed over the past two months for AMSAT that I would like to briefly share with you:

1. ARISS Silver Anniversary. The first amateur radio two-way communication between the Space Shuttle and amateurs on the ground took place on December 3, 1983 when Owen Garriott, W5LFL made his historic flight on STS-9. There are a number of oppor-

tunities for amateurs to help celebrate this event and the ARISS International Committee, chaired by AMSAT VP-Human Space Flight, Frank Bauer, KA3HDO have arranged for some special events. Please check ANS and the AMSAT webpage (www.amsat.org) for the latest information and join the fun!

2. AO-16 operations. As expected, performance of this spacecraft is declining as the spacecraft's temperature is dropping due to longer eclipses resulting in less sunlight and a cooler spacecraft. This drop in temperature is causing the satellite's hardware timer to reset until the spacecraft warms up (when there is at least 85% illumination). If you're interested in making two-way contacts using AO-16's unique cross mode, cross band voice repeater, with an uplink on 145.920 FM and downlink on 437.026 MHz reduced carrier AM, now is the time to try it! The satellite is expected to 'go silent' shortly when temperatures stay low enough as to not allow software configuration of the satellite before the hardware timer resets itself again.

3. President's Club. A fundraising appeal letter was mailed this week to all AMSAT members. Please consider donating to the AMSAT President's Club so that we can continue our efforts to maintain amateur radio in space.

4. Near Term Engineering Task Force. I announced at the AMSAT Annual Meeting in Atlanta that a group led by Bill Ress, N6GHZ had been formed to review the 'Rideshare' Proposal developed by Tom Clark, K3IO as well as evaluate AMSAT's ability to develop a modularization strategy to adapt RF packages to various structures. The committee has been diligently meeting every two weeks via teleconference to discuss future options for AMSAT and to help structure AMSAT's thinking on future spacecraft opportunities. While it is too soon for formal announcements of their findings, it is good to know that we have a formal group actively focused on engineering issues.

5. SuitSat-2. Development work continues to place SuitSat-2 in service sometime in 2009. Several engineering issues have recently surfaced regarding modulation and transmission schemes and the team is evaluating several options regarding how best to resolve the issues. Several individuals have recently joined the engineering team to help overcome these challenges by developing potential alternative solutions.

6. ITAR. I announced at the AMSAT Annual Meeting in Atlanta that AMSAT would actively develop a strategy concerning ITAR (International Traffic in Arms Regulations) and related export regulations. Our goal is to ensure that AMSAT is in full compliance with ITAR, develop materials to train our satellite builders on ITAR compliance, and to seek ways where we may continue to work with other AMSAT organizations on satellite projects. Since the Annual Meeting, Bill Ress, N6GHZ and I have been working with an attorney who specializes in ITAR. We hope to make a formal submission to the State Department regarding ITAR in early 2009.

7. AMSAT Lab. AMSAT is actively seeking a new home for our AMSAT Lab. Unfortunately, due to changes that took place at HISS (Hawk Institute for Space Sciences) in Pocomoke City, MD over the summer, we are forced to remove our equipment and clean room from the current facility. We are in active discussions with several institutions concerning potential relocation, but no decision has been made. If you are in position to provide contacts with a not-for-profit institution that might be interested the hosting the AMSAT Lab, please contact me.

8. AMSAT 40th Anniversary. AMSAT was incorporated in 1969, so this coming year (2009) is our 40th Anniversary! The 2009 AMSAT Symposium will take place the weekend of October 9 in the Washington-Baltimore area. Look for details in the upcoming AMSAT Journal. Please join us that weekend as we celebrate a significant milestone for AMSAT and build the foundation for the next 40 years of AMSAT.

As you can see, there are a number of activities that are ongoing within AMSAT. While we are challenged by the impact of current events, we continue to move forward in a number of areas.

As always, I appreciate hearing from the AMSAT membership. Should you have any questions or concerns about AMSAT, please don't hesitate to contact me. I will make every effort to respond to e-mails that I receive, but please keep in mind that I travel extensively which may limit my ability to respond quickly. Please know that I read every e-mail that I receive from AMSAT members and that I appreciate every person's willingness and time spent to share their thoughts and suggestions.

Seasons Greetings,

Barry Baines, WD4ASW
President-AMSAT

[ANS thanks Barry, WD4ASW for the above information]

/EX

SB SAT @ AMSAT $ANS-356.02
ARISS 25th Anniversary Adds New Modes

AMSAT News Service Bulletin 356.02
>From AMSAT HQ SILVER SPRING, MD.
December 21, 2008
To All RADIO AMATEURS
BID: $ANS-356.02

ARISS International Chairman and AMSAT-NA V.P. for Human Spaceflight Programs Frank Bauer, KA3HDO invites amateur radio operators around the world to join in the ARISS team's 25th anniversary of amateur radio operations from space. Increased activity and new exciting modes of operation from the ARISS amateur radio station aboard the International Space Station are featured in this celebration operating period.

To date, the ISS crew has configured the radio to support cross-band repeater operations, they have supported some SSTV downlinks and we have had the opporunity to participate in a special test of 9600 baud packet radio operations on the simplex frequency of 145.825 MHz. This past week featured 1200 baud packet operations on 145.825 MHz to open a dual-hop APRS path in case PCSAT-1 became operational.

For the upcoming weeks the following is being planned in the near-term:

+ December 21-26 - we plan to support the Crossband repeater mode with a twist. Our intent is to configure the radio for 145.99 MHz uplink including PL tone of 67.0 and 437.80 MHz down. This will be performed in low power mode.

+ December 22 - Expedition 18 Commander Mike Fincke and Flight Engineer Yury Lonchakov plan to perform a spacewalk. As per standard procedure, the ISS ham radio system will be turned off for the EVA.

+ December 28-January 3 - we plan to reconfigure the Crossband repeater for a special experiment. This will be a test of our L-Band uplink capability, which, to date, has not been proven out. Plan for an uplink of 1269.65 MHz and and downlink on the standard frequency 145.80 MHz using low power. Given the subtantial cable losses of the L-band system, we hope some "big guns" are able to penetrate through, keep up with doppler, and make the connection.

+ And at times, especially during the weekends, you might see some SSTV operations if the crew is available.

The ARISS team will provide more updates in the near future. They would like to remind everyone that ISS flight requirements related to EVA and vehicle activity may require the radio to be off for some portion of this schedule. And school contacts and general QSO opportunities by the crew will also preempt this schedule for short periods of time. (But remember that if you hear these, you still qualify for a commemorative certificate).

Details of how to receive your ARISS 25th Anniversary Commemorative Certificate can be found at http://www.amsat.org.

[ANS thanks Frank, KA3HDO for the above information]

/EX

SB SAT @ AMSAT $ANS-356.03
ARISS Discusses L-Band Operating Parameters

AMSAT News Service Bulletin 356.03
>From AMSAT HQ SILVER SPRING, MD.
December 21, 2008
To All RADIO AMATEURS
BID: $ANS-356.03

ARISS US Hardware Manager Lou McFadin, W5DID provided a summary of expected parameters for those considering trying to make a contact with the ISS on L-band to VHF crossband repeater experiment planned for December 28 to January 3.

Lou reported, "The measured sensitivity of the L band receiver on a D700, as the radio aboard the ISS, is -105dBm for full quieting. The cable loss from the radio to the antenna is 9.3db. The antenna gain is zero db. The polarization is LHCP."

Extending the calcuations to cover the entire system path, Lou said, "The path loss at the horizon on L band is -160dB. That means the required EIRP for a full quieting contact at the horizon is 65dBm. The path loss decreases by 15dB at 80 degrees elevation so that means you can get full quieting with 50dBm in that case. To further elaborate if you use a 20dB gain antenna (a small dish), it is estimated that you can complete a QSO with 32 watts at the horizon or 1 watt at 80 degrees elevation."

The planned operating frequencies include:
Uplink: 1269.650 MHz FM
Downlink: 145.800 MHz FM

[ANS thanks Lou, W5DID for the above information]

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SB SAT @ AMSAT $ANS-356.04
Tracking QRM - AO-51 Repeater Pairs Return to Normal Configuration

AMSAT News Service Bulletin 356.04
>From AMSAT HQ SILVER SPRING, MD.
December 21, 2008
To All RADIO AMATEURS
BID: $ANS-356.04

AMSAT-NA VP Operations, Drew KO4MA reported on behalf of the AO-51 Operations Team, "We are now back to the normal uplink arrangement of 145.920 and 435.300 for normal repeater use. We changed from the QRM mitigation experiment of operating via the 145.880 uplink back to this normal mode to enable low-power repeater QRP operation. The QRP repeater is now operational on 145.880 and 435.150."

As a result of the QRM investigation Drew said, "I'm convinced not all of our problems are related to the cordless phones. I heard tonight whistlers, blowing in the mike, and folks giving extended CQs. We are working on finding the general location of the cordless phones, but it takes time. Then we'll work at shutting them down.

The AO-51 Operations Team provided results of their QRM investigation on and around the 145.920 uplink. There may be some low level modulation on some of the signals in the captured waterfall diagram. It is believed they may be from some of the same long distance phones that were plauging AO-27 and SO-50 a few years ago. Observations indicate the interfering signals are lost about the time the edge of the footprint crosses the mid Atlantic states. Refer to this page:
http://i139.photobucket.com/albums/q305/glasbrenner/FO-29QRM-1.jpg

[ANS thanks Drew, KO4MA for the above information]

/EX

SB SAT @ AMSAT $ANS-356.05
PCSAT-1 Recovery Partial Success

AMSAT News Service Bulletin 356.05
>From AMSAT HQ SILVER SPRING, MD.
December 21, 2008
To All RADIO AMATEURS
BID: $ANS-356.05

Bob, WB4APR provided an update on PCSAT-1 recovery status from the U.S. Naval Academy Satellite Laboratory. Bob wrote, "For the first time in 7 years, we were not able to fully recover PCSAT during this full sun period despite the efforts of a number of dedicated volunteers around the world."

PCSAT-1 is only operation when its solar panels are illuminated by sunlight. Full sun periods occur when passes are at sunrise and sunset to earth observers. PCSAT gets sun 24 hours a day then, but only on the side panels due to the orientation of the satellite. Ground station controllers were able to recover PCSAT-1 and the weak solar illumination allowed operation for generally an orbit before the power budget could not support the load.

Bob summarized, "Anyway, this is not the last you will hear of PCSAT, but there will probably not be any more several week full sun, full recovery periods as there have been in the past. I really appreciate all the efforts of so many operators. So play packet on the ISS and thanks again for all your efforts!"

[ANS thanks Bob, WB4APR for the above information]

/EX

SB SAT @ AMSAT $ANS-356.06
Satellite Shorts From All Over

AMSAT News Service Bulletin 356.06
>From AMSAT HQ SILVER SPRING, MD.
December 21, 2008
To All RADIO AMATEURS
BID: $ANS-356.06

+ The EME DXpedition to Namibia between January 7-16, 2009 plans to include satellite operation via AO-7, FO-29 and AO-51. Their main goal is to activate Namibia on 50, 144, 432 and 1296 MHz EME. The operators will be ZS6WB Hal, ZS6OB Pine, ZS6BUG Dick, ZS6AC Sarel, N7BHC Dave, HB9CRQ Dan. Read more at: http://hb9q.ch/joomla/index.php

+ John K8YSE says all of the requests for QSL cards for contacts with K8YSE/7 in DM31, Organ Pipe Cactus National Monument, 18-19 November and DM51, 22 November, Bisbee, Arizona have been put in the mail.

+ Nader,ST2NH reported an interesting AO-51 QSO with Sarel, S79AC from the Seychelles Islands. Sarel was using an FT-817 and an Arrow antenna.

+ Please note that the address for ARISS-Europe QSL requests has been updated. The correct address is: F1MOJ - Mr CANDEBAT Christophe, ARISS-Europe QSL Manager, 25th Anniversary Certificate, 19 Chemin des Escoumeilles, 66820 VERNET les Bains, FRANCE.

+ Jim, ND9M/VQ9JC is operating on a merchant marine ship from the Persian Gulf to Diego Garcia. His gear includes a Kenwood TH-6FA and Arrow-2 to operate on AO-51 and SO-50. He plans to be in Diego Garcia grid (MI62) until April, 2009.

+ Some of the presentations from Ansoft's Inspiring Engineering workshops covering radio frequency engineering from HF to microwave, EMI, and power systems are available on-line at:
http://www.ansoft.com/ie/index.cfm?src=iemailp

+ AMSAT President Barry Baines' report on the State of AMSAT given at the 2008 AMSAT Symposium in Atlanta is available on-line at:

http://www.amsat.org/amsat-new/pdfs/2008_Annual_Meeting/2008-10-25_WD4ASW_Annual_Meeting.pdf

+ A video of the September 13, Prairielands Council Scouts ARISS contact has been posted on-line at: http://www.youtube.com/watch?v=MsL4OkZb9CQ

+ Congratulations to Terry G1WPR on his 4000th contact via AO-7.
(thanks K3SZH)

[ANS thanks everyone for the above information]

/EX

SB SAT @ AMSAT $ANS-356.07

Mark Your Calendars - 2009 AMSAT Symposium October 9-10

AMSAT News Service Bulletin 356.07
>From AMSAT HQ SILVER SPRING, MD.
December 21, 2008
To All RADIO AMATEURS
BID: $ANS-356.07

The 2009 AMSAT Space Symposium and Annual Meeting will be held on October 9th and 10th. On the 11th and 12th, there will be an ARISS meeting open to the membership. The meetings will be held at the Sheraton Four Points at BWI Airport. 2009 will be the 40th Anniversary of AMSAT. We hope many of you will be able to come and help us celebrate.

AMSAT is also planning an number of activities and displays highlighting our 40th Anniversary at Dayton this year. The 2009 Dayton Hamvention will be 15-17 May 2009, so mark your calendars and plan on visiting the AMSAT booth and relive 40 years of keeping amateur satellites in space.

[ANS thanks Gould, WA4SXM and the 2009 Symposium Committee for the above information]

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SB SAT @ AMSAT $ANS-356.08
Reminder: SKN on OSCAR 2009

AMSAT News Service Bulletin 356.08
>From AMSAT HQ SILVER SPRING, MD.
December 21, 2008
To All RADIO AMATEURS
BID: $ANS-356.08

Ray Soifer, W2RS extends the annual cordial invitation to all radio amateurs worldwide to participate in AMSAT's Straight Key Night (SKN) on OSCAR 2009.

Participating in SKN on OSCAR 2009 is easy. No rules, no scoring and no need to send in a log. Just operate CW through any OSCAR between 0000 and 2400 UTC on 1 January 2009, using a straight hand key.

In keeping with the friendly nature of this event, all participants are encouraged to nominate someone they worked for "Best Fist." Your nominee need not have the best fist of those you heard, just of those you worked. Please send your nomination to w2rs@amsat.org. A list of those nominated will appear in ANS and The AMSAT Journal.
CU SKN!

[ANS thanks Ray Soifer, W2RS for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office. With that do recall that the roundest knight at King Arthur's Round Table was Sir Cumference. He acquired his size from too much pi.

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM

```
From 4026038341682158979
X-Google-Thread: 10e8ad,cf9c4a0d96197591,start
X-Google-Thread: 10b9c8,cf9c4a0d96197591,start
X-Google-Attributes: gid10e8ad,gid10b9c8,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news2.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx01.iad.newshosting.com!nx02.iad.newshosting.com!
newshosting.com!198.186.194.249.MISMATCH!news-out.readnews.com!
transit3.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-360 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Fri, 26 Dec 2008 21:21:25 EST
Organization: The Radio Amateur Satellite Corporation
Lines: 1461
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <005301c967c9$c7972a70$56c57f50$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1230344485 9185 166.84.1.6 (27 Dec 2008 02:21:25 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sat, 27 Dec 2008 02:21:25 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
```

X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news2.google.com rec.radio.amateur.space:171 rec.radio.info:496

This report is organized into five (5) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites
Part 5 (S5) - deborbited/returned satellites

SB SAT @ AMSAT W8ISS ANS-360.S1
WSR 360 Part 1 12/25/2008

AMSAT NEWS SERVICE BULLETIN 360.S1
FROM AMSAT HQ SILVER SPRING, MD, December 25, 2008
TO ALL RADIO AMATEURS
BID: $ANS-360.S1

DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008

Status: OPERATIONAL
Current Mode: U/v - voice

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink: 435.530 to 435.570 MHz

Proposed Frequencies:
Primary telemetry downlink: 145.870 MHz 1200 Baud BPSK AX.25 400mW
Backup telemetry downlink: 145.930 MHz 1200 Baud BPSK AX.25 400mW
Linear transponder passband downlink: 145.880 - 145.920 MHz(inverting)
Linear transponder passband uplink: 435.570 - 435.530 MHz
Transponder mode beacon: 145.870 MHz CW (10dB below transponder PEP)

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68
[07312008]
=====
VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:

```
Indian Transponder:
Uplink:   435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink:   435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW


Indian Beacon:  145.859330 MHZ CW
Dutch Beacon:   145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is active. Each transponder has a different beacon.
[08072008]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Modes:   FM Repeater - V-FM/u-FM
                 BBS         - L-9k6/u-9k6
                 Telemetry   - OFF

Analog voice downlink:     435.300 MHz FM
                           435.150 MHz FM
                          2401.200 Mhz FM
Analog voice uplink:       145.880 MHZ FM
                           145.880 MHz USB
                           145.920 MHz FM
                          1268.700 MHz FM 67Hz PL tone
Digital Downlinks:        435.150 MHz FM 38k4 PBP, 1 watt output
                          435.150 MHz FM 9k6 Pacsat Broadcast Protocol
                         2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:           145.860 MHz FM 9k6 Pacsat Broadcast Protocol
                         1268.700 mhz FM 9k6 PBP Digital
Beacon:                   435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear
```

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[12252008]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002

Status: Operational.

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz. The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10 minute timer.
[05282007]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Operational - check operational schedule for current times!!

Current Mode: V/u

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM

          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage: http://www.jarl.or.jp/English/5_Fuji/
ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's
CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts
.htm
[0820007]
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993

Status: OFF - Reload software

Current Mode: V/u

Uplink: 145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[10092008]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational depending on amount of Sunlight

Current Mode: Listen before transmitting

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B

Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz CW
145.972 MHz CW
435.100 MHz CW
2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/

AO-7 Usage Guidelines on the AO-7 Log and Resource Site located at:
http://www.planetemily.com/ao7
[05282007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - U/v
Voice - V/v
BBS - V/v
APRS - V/v
SSTV - V/v

Expedition 18 Crew:
Commander: Mike Fincke KE5AIT
Flight Engineer: Yury Lonchakov RA3DT
Flight Engineer: Sandra Magnus KE5FYE

Available Modes and Frequencies:

Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 9k6
Worldwide packet downlink: 145.825 Mhz FM 9k6

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

SSTV Robot 36:

Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time line is NOT translated from Russian and posted.
[12252008]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-360.S2
WSR 360 Part 2 12/25/2008

AMSAT NEWS SERVICE BULLETIN 360.S2
FROM AMSAT HQ SILVER SPRING, MD, December 25, 2008
TO ALL RADIO AMATEURS
BID: $ANS-360.S2

RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number:
Launch Date: May 23, 2008

Status: Operational

Curent Mode: Telemetry
Audio
Images

Downlinks: 435.315 MHz
435.215 MHz
[05292008]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.
[11152007]
=====
CP3
Catalog Number: 31128
Launch Date: April 17,2007

Status: Operational

Current Mode: /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[07302007]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: In Orbit

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder: 145.825 Mhz FM
[02052007]
=====
NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Operational

Current Mode: /u

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[10222007]
=====
GENESAT-1 ?O-??
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Current Mode: /u

Telemetry Beacon Downlink: 437.0670 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[01082007]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon: 437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
[03262007]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003

Status: Operational

Current Mode: /u

Beacon: 436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[01082007]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Operational?

Uplink: 1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan?)

```
Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[12182008]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW
[08132007]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Modes:   FM Repeater - V-FM/u-FM
                 BBS         - L-9k6/u-9k6
                 Telemetry   - OFF

Analog voice downlink:     435.300 MHz FM
                           435.150 MHz FM
                          2401.200 Mhz FM
Analog voice uplink:       145.880 MHZ FM
                           145.880 MHz USB
                           145.920 MHz FM
                          1268.700 MHz FM 67Hz PL tone
Digital Downlinks:        435.150 MHz FM 38k4 PBP, 1 watt output
                          435.150 MHz FM 9k6 Pacsat Broadcast Protocol
                         2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:           145.860 MHz FM 9k6 Pacsat Broadcast Protocol
                         1268.700 mhz FM 9k6 PBP Digital
Beacon:                   435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
```

```
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[12252008]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Semi-operational

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink:        144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[09242007]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Non-Operational

Current Modes: V/U
               L/U

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[12042007]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984

Status: Semi-operational.

Current Mode:  /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon:          435.025 MHz
Mode-S Beacon:     2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[01242008]
=====
RS-22 RADIO SPORT RS-22
Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only

Current Mode:  /u

CW Beacon - 435.352 MHz
            145.818 MHz
[08062007]
=====
Can X-2
Catalog number:
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web
page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[05292008]
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008

Status: IN ORBIT
```

```
Downlink: 437.425 MHz

For the latest project status update please visit the AAUSAT-II web
page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[05292008]
=====
CO-65 Cute-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink:  437.475 MHz 9k6 Packet
Uplink:   1267.600 Mhz

For the latest project status update please visit the Cute-1.7+APD II
web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78
[07312008]
=====
Compass-1
Catalog number: 32787
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink: 437.275 Mhz CW
          437.405 MHz Packet

For the latest project status update please visit the Compass 1 web
page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52
[05292008]
=====
CO-66 Seeds II
Catalog number:
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.485 MHz

For the latest project status update please visit the Seeds 2 web
page: http://cubesat.aero.cst.nihon-u.ac.jp/english/main_e.html
```

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36
[12042008]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - U/v
Voice - V/v
BBS - V/v
APRS - V/v
SSTV - V/v

Expedition 18 Crew:
Commander: Mike Fincke KE5AIT
Flight Engineer: Yury Lonchakov RA3DT
Flight Engineer: Sandra Magnus KE5FYE

Available Modes and Frequencies:

Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 9k6
Worldwide packet downlink: 145.825 Mhz FM 9k6

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[12252008]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-360.S3
WSR 360 Part 3 12/25/2008

AMSAT NEWS SERVICE BULLETIN 360.S3
FROM AMSAT HQ SILVER SPRING, MD, December 25, 2008
TO ALL RADIO AMATEURS
BID: $ANS-360.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

CP4
Catalog Number: 31122
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon: 437.325 MHz CW

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=79
[10022008]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Non-Operational

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon: 437.2750 MHz CW

Callsign: JR8YJT
[10152007]
=====
NCUBE-2
Catalog number: 28897

Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 MHz FM 67Hz CTCSS
Voice Downlink: 2401.835 MHz FM
Packet Up/Downlink: 437.250 MHz 9k6 packet
Packet Downlink   2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non=Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[08132007]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Non-Operational

Uplinks: 145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[007302007]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

```
Status: Non-Operational

Uplink:   145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
V-band:   145.840 -  145.990 MHz CW/LSB
U-band:   435.550 -  435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks
---------
S2-band:  2401.225 -  2401.475 MHz CW/USB
K-band:  24048.010 - 24048.060 MHz CW/USB
Beacon:   2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)
----------------------------
BEACON   General Beacon(GB)  Middle Beacon(MB)  Engineering Beacon(EB)
2 m                   none        145.898 MHz                     none
70cm           435.438 MHz        435.588 MHz              435.838 MHz
13cm(1)       2400.188 MHz       2400.338 MHz             2400.588 MHz
13cm(2)       2401.173 MHz       2401.323 MHz             2401.573 MHz
3cm          10450.975 MHz      10451.125 MHz            10451.375 MHz
1.5cm        24047.885 MHz      24048.035 MHz            24048.285 MHz
[07162007]
=====
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink:    145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: ?
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater:         436.250 MHz

Uplinks: Mode B Repeater:  145.825 MHz
Mode J Digipeater:         145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)
```

```
The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink:   145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign:       POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012006]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK
```

```
Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink:   435.041 MHz FM DSP
```

```
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
LIBERTAD-1
Catalog Number: 31129
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink:   145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[10222007]
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990

Status: CW Beacon only

Uplinks:          145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK
```

CW downlink: 437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[01222007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink: 145.825 MHz FM 1200 Baud AFSK
Beacon: 2401.220 MHz
[05012006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: SEMI-Operational

Current Mode: V/u

Uplink: 145.900 MHz FM 1200-baud Manchester FSK (reserved)
                145.920 MHz FM VOICE
                145.940 MHz FM 1200-baud Manchester FSK (reserved)
                145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink: 437.026 MHz USB VOICE
                (1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC 437.050 MHz RHCP
   PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[12252008]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink: 145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink: 145.8500 MHz MFSK 1200 BPS
Uplink: 145.8700 MHz MFSK 1200 BPS
Uplink: 145.8900 MHz MFSK 1200 BPS
Uplink: 145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon: 145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====

```
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink  29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
Beacons:   29.450 MHz
          435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
```

RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB

Beacon 1: 29.352 MHz (intermittent)
Beacon 2: 29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB

Beacon: 145.860 MHz

Robot: 145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-360.S4
WSR 360 Part 4 12/25/2008

AMSAT NEWS SERVICE BULLETIN 3603.S4
FROM AMSAT HQ SILVER SPRING, MD, December 25, 2008
TO ALL RADIO AMATEURS
BID: $ANS-360.S4

```
THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE PROPOSED FOR LAUNCH
AT THIS TIME:

XW-1
Catalog Number:
Proposed Launch Date: Summer 2009?

Status: Design Phase

Proposed Equipment:
Beacon: 435Mhz, CW 20dBm
Linear transponder: RX: 145Mhz, TX: 435Mhz, 40KHz, 30dBm
FM Transponder: RX: 145Mhz, TX: 435Mhz, 16KHz, 30dBm
Digital store and forward transponder: RX: 145Mhz, TX: 435Mhz, 16KHz,
                                           30dBm

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108
[10092008]
=====
Phase 5a Mars Mission AO-??
Catalog Number:
Proposed Launch Date: 2009 or 2011

Status: Design Phase

For the latest project status update please visit the AMSAT-DL P5-A
web page:
http://ticket-to-mars.org
[01222007]
=====
PHASE 3E AO-??
Catalog number:
Proposed Launch Date: Late 2008

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E
web page:
http://www.amsat-dl.org/p3e/
[01222007]
=====
Eagle AO-??
Catalog Number:
Proposed Launch Date: Early/Mid 2009

Status: Design Phase

For the latest project status updates please visit the AMSAT-NA web
page: http://www.amsat.org
[01222007]
NNNN
/EX
```

SB SAT @ AMSAT W8ISS ANS-360.S5
WSR 360 Part 5 12/25/2008

AMSAT NEWS SERVICE BULLETIN 360.S5
FROM AMSAT HQ SILVER SPRING, MD, December 25, 2008
TO ALL RADIO AMATEURS
BID: $ANS-360.S5

THE FOLLOWING SATELLITES HAVE RE-ENTERED OR HAVE BEEN RETURNED SAFELY:

NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

```
Main Downlink:      145.825 Mhz FM APRS AX25
APRS Uplink:        145.825 MHz FM APRS AX25
Voice/PSK31 Uplink:  28.120 MHz
```

Packet to Voice ID: RAFT
[06112007]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728

FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at}amsat.org
NNNN
/EX

```
From 7953564162030224504
X-Google-Thread: 10e8ad,8af7d5e80b88539a,start
X-Google-Thread: 10b9c8,8af7d5e80b88539a,start
X-Google-Attributes: gid10e8ad,gid10b9c8,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news2.google.com!newsfeed2.dallas1.level3.net!
news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-363 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sun, 28 Dec 2008 12:28:01 EST
Organization: The Radio Amateur Satellite Corporation
Lines: 339
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000101c96911$9cc7cc70$d6576550$@net>
```

Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1230485281 18982 166.84.1.6 (28 Dec 2008 17:28:01 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 28 Dec 2008 17:28:01 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news2.google.com rec.radio.amateur.space:172 rec.radio.info:497

AMSAT NEWS SERVICE
ANS-363

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* SKN on OSCAR 2009 This Week
* AO-51 Schedule to Support SKN and Kids Day
* Richard Garriott Interview Available Online
* ARISS 25th Commemorative Event to Feature L/V Repeater This Week
* ARISS Status - 22 December 2008

SB SAT @ AMSAT $ANS-363.01
SKN on OSCAR 2009 This Week

AMSAT News Service Bulletin 363.01
From AMSAT HQ SILVER SPRING, MD.
December 28, 2008
To All RADIO AMATEURS
BID: $ANS-363.01

Ray Soifer, W2RS extends the annual cordial invitation to all radio amateurs worldwide to participate in AMSAT's Straight Key Night (SKN) on OSCAR 2009.

Participating in SKN on OSCAR 2009 is easy. No rules, no scoring and no need to send in a log. Just operate CW through any OSCAR between 0000 and 2400 UTC on 1 January 2009, using a straight hand key.

In keeping with the friendly nature of this event, all participants are encouraged to nominate someone they worked for "Best Fist." Your nominee need not have the best fist of those you heard, just of those you worked. Please send your nomination to w2rs@amsat.org. A list of those nominated will appear in ANS and The AMSAT Journal.
CU SKN!

[ANS thanks Ray Soifer, W2RS for the above information]

/EX

SB SAT @ AMSAT $ANS-363.02
AO-51 Schedule to Support SKN and Kids Day

AMSAT News Service Bulletin 363.02
  From AMSAT HQ SILVER SPRING, MD.
December 28, 2008
To All RADIO AMATEURS
BID: $ANS-363.02

AMSAT VP of Operations, Drew Glasbrenner, KO4MA, reminds everyone that AO-51 will be configured to support two upcoming special events. For the first time AO-51 will be configured to support CW operations during the annual SKN Event. Following SKN the uplink will be reconfigured back to the more traditional FM/FM up and downlinks to support the ARRL's Kids Day event.

December 29 - January 2

FM Repeater, V/U
Uplink: 145.920 MHz FM
Downlink: 435.300 MHz FM

SSB/FM Repeater, V/U (CW QSOs only on Straight Key Night)
Uplink: 145.880 MHz USB
Downlink: 435.150 MHz FM

January 3

FM Repeater, V/U
Uplink: 145.920 MHz FM
Downlink: 435.300 MHz FM

FM Repeater, V/U (ARRL Kid's Day, QSOs between or with kids ONLY)
Uplink: 145.880 MHz FM
Downlink: 435.150 MHz FM

[ANS thanks Drew, KO4MA, for the above information]

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SB SAT @ AMSAT $ANS-363.03
Richard Garriott Interview Available Online

AMSAT News Service Bulletin 363.03
From AMSAT HQ SILVER SPRING, MD.
December 28, 2008
To All RADIO AMATEURS
BID: $ANS-363.03

Space traveler Richard Garriott, W5KWQ, ha been interviewed by science fiction writer Tracy Hickman about Garriott's recent visit to the International Space Station. During the session, W5KWQ talked about his experience of operating amateur radio on orbit and conversing with the ham community worldwide.

The entire interview is 2 hours and 45 minutes in duration. Its available in 3 installments. You will find it at
http://feeds.feedburner.com/Dragonhearth

[ANS thanks Newsline for the above information]

/EX

SB SAT @ AMSAT $ANS-363.04
ARISS 25th Commemorative Event to Feature L/V Repeater This Week

AMSAT News Service Bulletin 363.04
From AMSAT HQ SILVER SPRING, MD.
December 28, 2008
To All RADIO AMATEURS
BID: $ANS-363.04

To date, the ISS crew has configured the radio to support cross-band repeater
operations, they have supported some SSTV downlinks and we have had the opportunity to participate in a special test of 9600 baud packet radio operations
on the simplex frequency of 145.825 MHz.

Specifically, December 28-January 3, we plan to reconfigure the Crossband repeater for a special experiment. This will be a test of our L-Band uplink capability, which, to date, has not been proven out. Plan for an uplink of 1269.65 MHz and and downlink on the standard frequency 145.80 MHz using low power. Given the substantial cable losses of the L-band system, we

hope some "big
guns" are able to penetrate through, keep up with doppler, and make the
connection.

We will provide more updates in the near future. We would like to remind
everyone that ISS flight requirements related to EVA and vehicle activity
may
require the radio to be off for some portion of this schedule. And school
contacts and general QSO opportunities by the crew will also preempt this
schedule for short periods of time. (But remember that if you hear these,
you
still qualify for a commemorative certificate).

Frank concluded, "In the meantime, enjoy the ARISS ops on ISS! And
congratulations to Owen Garriott, W5LFL, on the 25th anniversary of
his historic
flight!!"

[ANS thanks Frank, KA3HDO, AMSAT-NA V.P. for Human Spaceflight Programs
and ARISS International Chairman for the above information]

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SB SAT @ AMSAT $ANS-363.05
ARISS Status - 22 December 2008

AMSAT News Service Bulletin 363.05
From AMSAT HQ SILVER SPRING, MD.
December 28, 2008
To All RADIO AMATEURS
BID: $ANS-363.05

1. Upcoming School Contacts

An Amateur Radio on the International Space Station (ARISS) contact has been
scheduled with Technopolis in Mechelen, Belgium on Monday, December 29 at
11:43
UTC via telebridge station WH6PN in Hawaii. The mission of Technopolis is to
bring science and technology to the public. The center has permanent and
temporary exhibits and organizes workshops, school activities and
other outreach
activities. The ARISS contact will be open to all school children 6
-18 years of
age and will be supported through a workshop, lecture or science show.

2. Canadian School Contact Successful

Students from King George Elementary School in Moose Jaw, Saskatchewan,
Canada
took part in a question and answer session with Sandra Magnus, KE5FYE. The
Amateur Radio on the International Space Station (ARISS) contact took place

on Monday, December 15. Ten students were able to ask one question each of the astronaut as an audience of 320 looked on. Ray Boughen, Minister of Education Provincial Parliament, Dale McBain, City of Moose Jaw Mayor (both former educators) and Brenda Edwards, Director of Education for Prairie South School Division attended. Television stations taped the event and interviewed the children. Radio station CHAB interviewed the school coordinator. The Moose Jaw Times Herald printed an article covering the contact. See:
http://www.mjtimes.sk.ca/index.cfm?sid=201052&sc=3

The story includes links to the contact video:
http://www.mjtimes.sk.ca/index.cfm?main=broadcast&bcid=10109

Principal Ward Milligan commented, "It was an awesome 'once in a lifetime experience' that will become more important in the lives of these students as they look back upon this event in years to come. Having a personal contact with someone in space increased the students' interest in space by three fold. Sandra Magnus was very enthusiastic and answered the students' questions in a manner they could relate to. She was very encouraging of the students. It was an inspirational and moving experience."

3. Italian Students Radio ISS

On Thursday, December 18, students from Scuola Elementare Faleriense "Gianni Rodari" in Porto Sant'Elpidio, Italy participated in an Amateur Radio on the International Space Station (ARISS) contact with Mike Fincke, KE5AIT as over three hundred students, teachers and parents gathered for the event. Twenty-one students questioned the astronaut and Season's Greetings were exchanged. RAI3 Regional Television and some local media and newspapers covered the event. The audio was fed into the EchoLink servers. For more information, including photos and audio, go to: www.ariss-eu.org/2008_12_18.htm

The Corriere News ran an article (in Italian):
http://www.corrierenews.it/index.php/corrierenews3100/content/view/full/22025

ESA mentions the recent Marco Polo, Circolo Didattico San Giuseppe and Gianni Rodari contacts in this story (also in Italian):
http://www.esa.int/esaCP/SEMXK4TTGOF_Italy_2.html

4. ARISS International Meeting Held

The Amateur Radio on the International Space Station (ARISS) team meeting was held on Tuesday, December 16. Agenda items included the next face-to-face meeting, SuitSat-2 development status and the ARISS special event. Minutes have been posted to the ARISS Web site. See: http://www.rac.ca/ariss/arisstel2008-12-16.htm

5. Astronaut Training Status

Astronaut Michael Barratt, KD5MIJ, took a refresher course on the Amateur Radio on the International Space Station (ARISS) equipment and operations on Wednesday, December 17. Barratt is looking forward to supporting the program during his time on board the ISS as an Expedition 19 crew member. Expedition 19 is the first half of the planned 6 person crew.

6. ARRL QST Covers ARISS News

The American Radio Relay League (ARRL) printed 4 Amateur Radio on the International Space Station (ARISS) news items in its January 2009 issue of QST.

Under "Media Hits" (page 12) is a lengthy paragraph about how the media coverage for Richard Garriott, W5KWQ, was very prolific.

A story on pages 59-60 is about Andrea Hartlage, KG4IUM, a student at Georgia Tech who's a ham and was quite interested in ARISS. She was friends with a ham teacher at a middle school near her middle school; the teacher had applied for an ARISS contact. The story is called "DXpedition to Planet Mars" and is about Andrea's involvement in the Mars Desert Research Station (MDRS). It says at the end that she wants to be an astronaut.

Two columns under "Happenings" (page 63) are titled "Richard Garriott; W5KWQ Back on Terra Firma" which is about Richard and ARISS. It carries two pictures - one of the students in Austin who contacted him during his mission in space and the other is a photo of Richard.

"Grants Focus on the Future of Amateur Radio" (page 95) covers three groups that won ARRL Foundation grants. One grant was given to the Eagle Scouts of Indiana who took part in an ARISS contact at the Space Jamboree 2008. The grant received was used to fund equipment for electronic building projects at the Space Jamboree which helped scouts complete the electronics merit badge. The equipment also served other regional and national scout gatherings to introduce amateur radio. Another group that received an award was the Ann Arbor Hands-On Museum which is scheduled for an ARISS contact on December 27. The money received funded a ham station (and antenna) in the museum lobby.

7. ARRL and AMSAT Articles on ARISS Special Event

The American Radio Relay League (ARRL) ran a Web story about the 25th anniversary of ham radio in space. It includes the latest news covering the Amateur Radio on the International Space Station (ARISS) special event. See: http://www.arrl.org/news/stories/2008/12/18/10509/?nc=1

The ARRL also issued a W1AW bulletin on the same subject and an article was published in the ARRL Letter. See: http://www.arrl.org/arrlletter/08/1219/

[ANS thanks Carol, KB3LKI, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Lee McLamb, KU4OS

From -3550888933487662713
X-Google-Thread: 10e8ad,899413755ead94c7,start
X-Google-Thread: 10b9c8,899413755ead94c7,start
X-Google-Attributes: gid10e8ad,gid10b9c8,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!newsfeed.stanford.edu!newshub.sdsu.edu!news-out.readnews.com!transit3.readnews.com!panix!rri.panix.com!robomod!not-for-mail

```
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-001 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Sat, 3 Jan 2009 15:35:50 EST
Organization: The Radio Amateur Satellite Corporation
Lines: 1457
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000c01c96de2$d3d2bdd0$7b783970$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix1.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1231014948 19787 166.84.1.1 (3 Jan 2009 20:35:48 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sat, 3 Jan 2009 20:35:48 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news1.google.com rec.radio.amateur.space:148 rec.radio.info:429
```

This report is organized into five (5) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites
Part 5 (S5) - deborbited/returned satellites

SB SAT @ AMSAT W8ISS ANS-001.S1
WSR 001 Part 1 01/01/2009

AMSAT NEWS SERVICE BULLETIN 360.S1
FROM AMSAT HQ SILVER SPRING, MD, January 01, 2008
TO ALL RADIO AMATEURS
BID: $ANS-001.S1

DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008

Status: OPERATIONAL
Current Mode: Science Mode - Beacon ONLY

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink: 435.530 to 435.570 MHz

Proposed Frequencies:
Primary telemetry downlink: 145.870 MHz 1200 Baud BPSK AX.25 400mW
Backup telemetry downlink: 145.930 MHz 1200 Baud BPSK AX.25 400mW
Linear transponder passband downlink: 145.880 - 145.920 MHz(inverting)
Linear transponder passband uplink: 435.570 - 435.530 MHz
Transponder mode beacon: 145.870 MHz CW (10dB below transponder PEP)

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68
[01012009]
=====
VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.859330 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

To know what transponder is switched on please listen for the beacon that is active. Each transponder has a different beacon.
[08072008]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Modes:	FM Repeater	- V-FM/u-FM
	BBS	- L-9k6/u-9k6
	Telemetry	- OFF

Analog voice downlink:	435.300 MHz FM
	435.150 MHz FM
	2401.200 Mhz FM
Analog voice uplink:	145.880 MHZ FM
	145.880 MHz USB
	145.920 MHz FM
	1268.700 MHz FM 67Hz PL tone
Digital Downlinks:	435.150 MHz FM 38k4 PBP, 1 watt output
	435.150 MHz FM 9k6 Pacsat Broadcast Protocol
	2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:	145.860 MHz FM 9k6 Pacsat Broadcast Protocol
	1268.700 mhz FM 9k6 PBP Digital
Beacon:	435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[12252008]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002

Status: Operational.

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz. The order of operation is thus: (allow for Doppler as necessary):

1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10 minute timer.

[05282007]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Operational
Current Mode: V/u (Mode JA)

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage:
http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts.htm
[01012009]
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993

```
Status: OFF - Reload software

Current Mode: V/u

Uplink:   145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[10092008]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational

Current Mode: Alternating between Mode A and B every 24 hours

Uplink:   145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink:  29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons:   29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/

AO-7 Usage Guidelines on the AO-7 Log and Resource Site located at:
http://www.planetemily.com/ao7
[05282007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - U/v
                      Voice -       V/v
                      BBS -         V/v
                      APRS -        V/v
```

SSTV -   V/v

Expedition 18 Crew:
Commander: Mike Fincke KE5AIT
Flight Engineer: Yury Lonchakov RA3DT
Flight Engineer: Sandra Magnus KE5FYE

Available Modes and Frequencies:

Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 9k6
Worldwide packet downlink: 145.825 Mhz FM 9k6

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time line is NOT translated from Russian and posted.
[12252008]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-001.S2
WSR 001 Part 2 01/01/2009

AMSAT NEWS SERVICE BULLETIN 001.S2
FROM AMSAT HQ SILVER SPRING, MD, January 01, 2009
TO ALL RADIO AMATEURS
BID: $ANS-001.S2

RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number:
Launch Date: May 23, 2008

Status: Operational

Curent Mode: Telemetry
Audio
Images

Downlinks: 435.315 MHz
435.215 MHz
[05292008]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.
[11152007]
=====
CP3
Catalog Number: 31128
Launch Date: April 17,2007

Status: Operational

Current Mode: /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[07302007]
=====
GENESAT-1 ?O-??
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Current Mode: /u

Telemetry Beacon Downlink: 437.0670 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[01082007]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon: 437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
[03262007]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003

Status: Operational

Current Mode: /u

Beacon: 436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[01082007]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Operational?

Uplink: 1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

```
Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[12182008]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW
[08132007]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Modes:   FM Repeater - V-FM/u-FM
                 BBS         - L-9k6/u-9k6
                 Telemetry   - OFF

Analog voice downlink:     435.300 MHz FM
                           435.150 MHz FM
                          2401.200 Mhz FM
Analog voice uplink:       145.880 MHZ FM
                           145.880 MHz USB
                           145.920 MHz FM
                          1268.700 MHz FM 67Hz PL tone
Digital Downlinks:        435.150 MHz FM 38k4 PBP, 1 watt output
                          435.150 MHz FM 9k6 Pacsat Broadcast Protocol
                         2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:           145.860 MHz FM 9k6 Pacsat Broadcast Protocol
                         1268.700 mhz FM 9k6 PBP Digital
Beacon:                   435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear
```

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[12252008]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Semi-operational

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[09242007]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Non-Operational

Current Modes: V/U
               L/U

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks: 145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[12042007]
=====
RS-22 RADIO SPORT RS-22
Catalog number: 27939

```
Launch Date: September 27, 2003

Status: Operational - 70cm cw only

Current Mode:  /u

CW Beacon - 435.352 MHz
            145.818 MHz
[08062007]
=====
Can X-2
Catalog number:
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web
page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[05292008]
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink: 437.425 MHz

For the latest project status update please visit the AAUSAT-II web
page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[05292008]
=====
CO-65 Cute-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink:  437.475 MHz 9k6 Packet
Uplink:   1267.600 Mhz

For the latest project status update please visit the Cute-1.7+APD II
web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html
```

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78
[07312008]
=====
Compass-1
Catalog number: 32787
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink: 437.275 Mhz CW
437.405 MHz Packet

For the latest project status update please visit the Compass 1 web page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52
[05292008]
=====
CO-66 Seeds II
Catalog number:
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.485 MHz

For the latest project status update please visit the Seeds 2 web page: http://cubesat.aero.cst.nihon-u.ac.jp/english/main_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36
[12042008]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - U/v
Voice - V/v
BBS - V/v
APRS - V/v
SSTV - V/v

Expedition 18 Crew:
Commander: Mike Fincke KE5AIT
Flight Engineer: Yury Lonchakov RA3DT
Flight Engineer: Sandra Magnus KE5FYE

Available Modes and Frequencies:

Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 9k6
Worldwide packet downlink: 145.825 Mhz FM 9k6

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[12252008]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-001.S3
WSR 001 Part 3 01/01/2009

AMSAT NEWS SERVICE BULLETIN 001.S3
FROM AMSAT HQ SILVER SPRING, MD, January 01, 2009
TO ALL RADIO AMATEURS
BID: $ANS-001.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

CP4
Catalog Number: 31122
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon: 437.325 MHz CW

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=79
[10022008]

=====

PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: Non-Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder: 145.825 Mhz FM
[01012009]

=====

NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]

=====

XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 MHz FM 67Hz CTCSS
Voice Downlink: 2401.835 MHz FM
Packet Up/Downlink: 437.250 MHz 9k6 packet
Packet Downlink   2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php

```
[01222007]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non=Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[08132007]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink:   435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Non-Operational

Uplinks:   145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink:  437.325 MHz

Broadcast callsign: MYSAT3-11
BBS:                MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial land and weather imaging payloads offers FM and FSK
Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as
a collaborative effort between the Malaysian government and Surrey
Satellite Technology Ltd.
[007302007]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational
```

```
Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink:   145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS:                SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink:   145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
V-band:   145.840 -  145.990 MHz CW/LSB
U-band:   435.550 -  435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB
```

Downlinks

S2-band: 2401.225 - 2401.475 MHz CW/USB
K-band: 24048.010 - 24048.060 MHz CW/USB
Beacon: 2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)

BEACON	General Beacon(GB)	Middle Beacon(MB)	Engineering Beacon(EB)
2 m	none	145.898 MHz	none
70cm	435.438 MHz	435.588 MHz	435.838 MHz
13cm(1)	2400.188 MHz	2400.338 MHz	2400.588 MHz
13cm(2)	2401.173 MHz	2401.323 MHz	2401.573 MHz
3cm	10450.975 MHz	10451.125 MHz	10451.375 MHz
1.5cm	24047.885 MHz	24048.035 MHz	24048.285 MHz

[07162007]

OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]

UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]

SO-35 SUNSAT
Catalog Number: ?
Launch date:February 23, 1999

Status: Non-Operational

```
Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater:         436.250 MHz

Uplinks: Mode B Repeater:  145.825 MHz
Mode J Digipeater:         145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink:   145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993
```

```
Status: Non-operational

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign:       POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012009]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992
```

```
Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
```

```
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
LIBERTAD-1
Catalog Number: 31129
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink:   145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[10222007]
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990

Status: CW Beacon only

Uplinks:          145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink:      437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[01222007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990
```

```
Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
[05012006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: SEMI-Operational

Current Mode:  V/u

Uplink:         145.900 MHz FM 1200-baud Manchester FSK (reserved)
                145.920 MHz FM VOICE
                145.940 MHz FM 1200-baud Manchester FSK (reserved)
                145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink:       437.026 MHz USB VOICE
                (1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[12252008]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
```

Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink: 145.8500 MHz MFSK 1200 BPS
Uplink: 145.8700 MHz MFSK 1200 BPS
Uplink: 145.8900 MHz MFSK 1200 BPS
Uplink: 145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984

Status: Non-operational.

Current Mode: /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon: 435.025 MHz
Mode-S Beacon: 2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[01012009]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon: 145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.8500 - 145.9000 MHz SSB/CW
Downlink 29.4000 - 29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink: 29.4500 - 29.5500 MHz SSB/CW
Beacons: 29.450 MHz
          435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink: 145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

```
Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon 1:  29.352 MHz (intermittent)
Beacon 2:  29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink:     21.260 to 21.300 MHz CW/USB
Downlink:  145.860 to 145.900 MHz CW/USB

Beacon:    145.860 MHz

Robot:     145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink:   21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon:   29.408 MHz

Robot:    29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-001.S4
WSR 001 Part 4 01/01/2009

AMSAT NEWS SERVICE BULLETIN 001.S4
FROM AMSAT HQ SILVER SPRING, MD, January 01, 2009
TO ALL RADIO AMATEURS
BID: $ANS-001.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE PROPOSED FOR LAUNCH
AT THIS TIME:

XW-1
```

Catalog Number:
Proposed Launch Date: Summer 2009?

Status: Design Phase

Proposed Equipment:
Beacon: 435Mhz, CW 20dBm
Linear transponder: RX: 145Mhz, TX: 435Mhz, 40KHz, 30dBm
FM Transponder: RX: 145Mhz, TX: 435Mhz, 16KHz, 30dBm
Digital store and forward transponder: RX: 145Mhz, TX: 435Mhz, 16KHz, 30dBm

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108
[10092008]
=====
Phase 5a Mars Mission AO-??
Catalog Number:
Proposed Launch Date: 2009 or 2011

Status: Design Phase

For the latest project status update please visit the AMSAT-DL P5-A web page:
http://ticket-to-mars.org
[01222007]
=====
PHASE 3E AO-??
Catalog number:
Proposed Launch Date: Late 2008

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/
[01222007]
=====
Eagle AO-??
Catalog Number:
Proposed Launch Date: Early/Mid 2009

Status: Design Phase

For the latest project status updates please visit the AMSAT-NA web page: http://www.amsat.org
[01222007]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-001.S5
WSR 001 Part 5 01/01/2009

AMSAT NEWS SERVICE BULLETIN 001.S5
FROM AMSAT HQ SILVER SPRING, MD, January 01, 2009
TO ALL RADIO AMATEURS
BID: $ANS-001.S5

THE FOLLOWING SATELLITES HAVE RE-ENTERED OR HAVE BEEN RETURNED SAFELY:

NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: July 28, 2008

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[01012009]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink: 145.825 Mhz FM APRS AX25
APRS Uplink: 145.825 MHz FM APRS AX25
Voice/PSK31 Uplink: 28.120 MHz

Packet to Voice ID: RAFT
[06112007]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Re-Entered
Re-entered: June 18, 2008

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS

Beacon: 437.2750 MHz CW

Callsign: JR8YJT
[01012009]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at}

amsat.org
NNNN
/EX

```
From 3847769831249932760
X-Google-Thread: 10e8ad,a9673a0b87306693,start
X-Google-Thread: 113975,a9673a0b87306693,start
X-Google-Attributes: gid10e8ad,gid113975,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!news2.google.com!news.glorb.com!news2!
feeder.erje.net!border1.nntp.ams.giganews.com!nntp.giganews.com!
newsfeed101.telia.com!nf01.dk.telia.net!news.astraweb.com!
border1.a.newsrouter.astraweb.com!not-for-mail
From: Chris Steyaert <observations@rmob.org>
Newsgroups: rec.radio.amateur.space,sci.astro.amateur
Subject: Radio Meteor Obs. Bull. December 2008  Geminids  Ursids
Date: Wed, 07 Jan 2009 19:51:19 +0100
Message-ID: <fau9m49oetnd0hmfqnqk8pt2fl84mv7p94@4ax.com>
X-Newsreader: Forte Agent 1.93/32.576 English (American)
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Lines: 17
Organization: Unlimited download news at news.astraweb.com
NNTP-Posting-Host: 7a2b5a49.news.astraweb.com
X-Trace: DXC=FA7Q4lZJBTkJ?XMfTm0i_cL?0kYOcDh@j_Gc:[NOgJOh<IN9LO=Kn[dG?
ifhhgG3Ca2GF;<>iR\hlC@A1>[^?l@f
Xref: g2news1.google.com rec.radio.amateur.space:149 sci.astro.amateur:10003
```

Radio Meteor Observation Bulletin No. 185 of December 2008 (91 K) is available now as

http://visualrmob.free.fr/rmobtext/rmob0812.txt

More information and the visual presentation of the hourly forward scatter counts can be found on

http://www.rmob.org

http://radio.data.free.fr

Chris

```
From 7280946454052425673
X-Google-Thread: 10e8ad,e057ea24aaa2ad98,start
```

```
X-Google-Thread: 10b9c8,e057ea24aaa2ad98,start
X-Google-Attributes: gid10e8ad,gid10b9c8,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news2.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx01.iad.newshosting.com!newshosting.com!
198.186.194.249.MISMATCH!news-out.readnews.com!transit3.readnews.com!panix!
rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-008 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Fri, 9 Jan 2009 20:34:50 EST
Organization: The Radio Amateur Satellite Corporation
Lines: 1461
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <002601c972c3$973609a0$c5a21ce0$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1231551290 21484 166.84.1.6 (10 Jan 2009 01:34:50 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sat, 10 Jan 2009 01:34:50 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news2.google.com rec.radio.amateur.space:175 rec.radio.info:519
```

This report is organized into five (5) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites
Part 5 (S5) - deborbited/returned satellites

SB SAT @ AMSAT W8ISS ANS-008.S1
WSR 008 Part 1 01/08/2009

AMSAT NEWS SERVICE BULLETIN 008.S1
FROM AMSAT HQ SILVER SPRING, MD, January 08, 2009
TO ALL RADIO AMATEURS
BID: $ANS-008.S1

DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008

Status: OPERATIONAL
Current Mode: Science Mode - Beacon ONLY
Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink: 435.530 to 435.570 MHz

Proposed Frequencies:
Primary telemetry downlink: 145.870 MHz 1200 Baud BPSK AX.25 400mW
Backup telemetry downlink: 145.930 MHz 1200 Baud BPSK AX.25 400mW
Linear transponder passband downlink: 145.880 - 145.920 MHz(inverting)
Linear transponder passband uplink: 435.570 - 435.530 MHz
Transponder mode beacon: 145.870 MHz CW (10dB below transponder PEP)

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68
[01012009]

=====
VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.859330 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is active. Each transponder has a different beacon.

```
[08072008]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Modes:   FM Repeater - V-FM/us-FM
                 BBS         - OFF
                 Telemetry   -  /u

Analog voice downlink:     435.300 MHz FM
                           435.150 MHz FM
                          2401.200 Mhz FM
Analog voice uplink:       145.880 MHZ FM
                           145.880 MHz USB
                           145.920 MHz FM
                          1268.700 MHz FM 67Hz PL tone
Digital Downlinks:        435.150 MHz FM 38k4 PBP, 1 watt output
                          435.150 MHz FM 9k6 Pacsat Broadcast Protocol
                         2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:           145.860 MHz FM 9k6 Pacsat Broadcast Protocol
                         1268.700 mhz FM 9k6 PBP Digital
Beacon:                   435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[01082009]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002

Status: Operational.

Current Mode: V/u

Uplink:   145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz
```

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz. The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10 minute timer.
[05282007]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Operational
Current Mode: V/u (Mode JA)

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage:
http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's

```
CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts
.htm
[01012009]
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993

Status: OFF - Reload software

Current Mode: V/u

Uplink:   145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[10092008]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational

Current Mode: Alternating between Mode A and B every 24 hours

Uplink:   145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink:  29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons:   29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/

AO-7 Usage Guidelines on the AO-7 Log and Resource Site located at:
http://www.planetemily.com/ao7
[05282007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998
```

Status: Operational

Current Active Modes: FM Repeater - V/u
Voice - V/v
BBS - V/v
APRS - V/v
SSTV - V/v

Expedition 18 Crew:
Commander: Mike Fincke KE5AIT
Flight Engineer: Yury Lonchakov RA3DT
Flight Engineer: Sandra Magnus KE5FYE

Available Modes and Frequencies:

Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 9k6
Worldwide packet downlink: 145.825 Mhz FM 9k6

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

```
ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[01082009]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-008.S2
WSR 008 Part 2 01/08/2009

AMSAT NEWS SERVICE BULLETIN 008.S2
FROM AMSAT HQ SILVER SPRING, MD, January 08, 2009
TO ALL RADIO AMATEURS
BID: $ANS-008.S2

RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number:
Launch Date: May 23, 2008

Status: Operational

Curent Mode: Telemetry
             Audio
             Images

Downlinks: 435.315 MHz
           435.215 MHz
[05292008]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode:  /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon:    435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.
[11152007]
=====
CP3
Catalog Number: 31128
Launch Date: April 17,2007

Status: Operational

Current Mode:  /u
```

```
Downlink: 436.845 MHz 1200 bps AFSK AX.25
[07302007]
=====
GENESAT-1 ?O-??
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Current Mode: /u

Telemetry Beacon Downlink: 437.0670 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[01082007]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon:             437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
[03262007]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003

Status: Operational

Current Mode: /u

Beacon:     436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[01082007]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
```

```
Launch date: February 21, 2006

Status: Operational?

Uplink:  1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[12182008]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW
[08132007]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Modes:   FM Repeater - V-FM/us-FM
                 BBS         - OFF
                 Telemetry   -  /u

Analog voice downlink:     435.300 MHz FM
                           435.150 MHz FM
                          2401.200 Mhz FM
Analog voice uplink:       145.880 MHZ FM
                           145.880 MHz USB
                           145.920 MHz FM
                          1268.700 MHz FM 67Hz PL tone
Digital Downlinks:        435.150 MHz FM 38k4 PBP, 1 watt output
                          435.150 MHz FM 9k6 Pacsat Broadcast Protocol
                         2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:           145.860 MHz FM 9k6 Pacsat Broadcast Protocol
                         1268.700 mhz FM 9k6 PBP Digital
Beacon:                   435.150 MHz
```

```
Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[01082009]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Semi-operational

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink:        144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[09242007]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Non-Operational

Current Modes: V/U
               L/U

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM
```

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[12042007]

=====

RS-22 RADIO SPORT RS-22
Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only

Current Mode: /u

CW Beacon - 435.352 MHz
            145.818 MHz
[08062007]

=====

Can X-2
Catalog number:
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[05292008]

=====

AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink: 437.425 MHz

For the latest project status update please visit the AAUSAT-II web page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[05292008]

=====

CO-65 Cute-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008

```
Status: IN ORBIT

Downlink:  437.475 MHz 9k6 Packet
Uplink:   1267.600 Mhz

For the latest project status update please visit the Cute-1.7+APD II
web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78
[07312008]
=====
Compass-1
Catalog number: 32787
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink: 437.275 Mhz CW
          437.405 MHz Packet

For the latest project status update please visit the Compass 1 web
page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52
[05292008]
=====
CO-66 Seeds II
Catalog number:
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.485 MHz

For the latest project status update please visit the Seeds 2 web
page: http://cubesat.aero.cst.nihon-u.ac.jp/english/main_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36
[12042008]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - V/u
                      Voice -       V/v
                      BBS -         V/v
```

APRS - V/v
SSTV - V/v

Expedition 18 Crew:
Commander: Mike Fincke KE5AIT
Flight Engineer: Yury Lonchakov RA3DT
Flight Engineer: Sandra Magnus KE5FYE

Available Modes and Frequencies:

Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 9k6
Worldwide packet downlink: 145.825 Mhz FM 9k6

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time line is NOT translated from Russian and posted.
[01082009]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-008.S3
WSR 008 Part 3 01/08/2009

AMSAT NEWS SERVICE BULLETIN 008.S3
FROM AMSAT HQ SILVER SPRING, MD, January 08, 2009
TO ALL RADIO AMATEURS
BID: $ANS-008.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

CP4
Catalog Number: 31122
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon: 437.325 MHz CW

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=79
[10022008]

=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: Non-Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder: 145.825 Mhz FM
[01012009]

=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
2407.250

Official Website: http://www.ncube.no
[05012006]

=====
XO-53 SSETI
Catalog number: 28894

Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 MHz FM 67Hz CTCSS
Voice Downlink: 2401.835 MHz FM
Packet Up/Downlink: 437.250 MHz 9k6 packet
Packet Downlink   2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non=Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[08132007]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Non-Operational

Uplinks: 145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as
a collaborative effort between the Malaysian government and Surrey
Satellite Technology Ltd.
[007302007]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40

Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks

V-band: 145.840 - 145.990 MHz CW/LSB
U-band: 435.550 - 435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks

S2-band: 2401.225 - 2401.475 MHz CW/USB
K-band: 24048.010 - 24048.060 MHz CW/USB
Beacon: 2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)

BEACON	General Beacon(GB)	Middle Beacon(MB)	Engineering Beacon(EB)
2 m	none	145.898 MHz	none
70cm	435.438 MHz	435.588 MHz	435.838 MHz
13cm(1)	2400.188 MHz	2400.338 MHz	2400.588 MHz
13cm(2)	2401.173 MHz	2401.323 MHz	2401.573 MHz
3cm	10450.975 MHz	10451.125 MHz	10451.375 MHz
1.5cm	24047.885 MHz	24048.035 MHz	24048.285 MHz

[07162007]

=====

OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]

=====

UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]

=====

SO-35 SUNSAT
Catalog Number: ?
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]

=====

PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]

=====

SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]

=====

TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

```
Uplink:   145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Non-operational

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign:       POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012009]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational
```

```
Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
```

Uplink: 145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks: 145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
LIBERTAD-1
Catalog Number: 31129
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink: 145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[10222007]
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990

Status: CW Beacon only

Uplinks: 145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink: 437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[01222007]
=====
WO-18 WEBERSAT

```
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
[05012006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: SEMI-Operational

Current Mode:  V/u

Uplink:         145.900 MHz FM 1200-baud Manchester FSK (reserved)
                145.920 MHz FM VOICE
                145.940 MHz FM 1200-baud Manchester FSK (reserved)
                145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink:       437.026 MHz USB VOICE
                (1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[12252008]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational
```

```
Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984

Status: Non-operational.

Current Mode:  /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon:          435.025 MHz
Mode-S Beacon:     2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[01012009]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB
```

Beacon: 145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.8500 - 145.9000 MHz SSB/CW
Downlink 29.4000 - 29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink: 29.4500 - 29.5500 MHz SSB/CW
Beacons: 29.450 MHz
          435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

```
Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon 1:  29.352 MHz (intermittent)
Beacon 2:  29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink:     21.260 to 21.300 MHz CW/USB
Downlink:  145.860 to 145.900 MHz CW/USB

Beacon:    145.860 MHz

Robot:     145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink:   21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon:   29.408 MHz

Robot:    29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-008.S4
```

WSR 008 Part 4 01/08/2009

AMSAT NEWS SERVICE BULLETIN 008.S4
FROM AMSAT HQ SILVER SPRING, MD, January 08, 2009
TO ALL RADIO AMATEURS
BID: $ANS-008.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE PROPOSED FOR LAUNCH AT THIS TIME:

XW-1
Catalog Number:
Proposed Launch Date: Summer 2009?

Status: Design Phase

Proposed Equipment:
Beacon: 435Mhz, CW 20dBm
Linear transponder: RX: 145Mhz, TX: 435Mhz, 40KHz, 30dBm
FM Transponder: RX: 145Mhz, TX: 435Mhz, 16KHz, 30dBm
Digital store and forward transponder: RX: 145Mhz, TX: 435Mhz, 16KHz, 30dBm

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108
[10092008]

=====

Phase 5a Mars Mission AO-??
Catalog Number:
Proposed Launch Date: 2009 or 2011

Status: Design Phase

For the latest project status update please visit the AMSAT-DL P5-A web page:
http://ticket-to-mars.org
[01222007]

=====

PHASE 3E AO-??
Catalog number:
Proposed Launch Date: Late 2008

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/
[01222007]

=====

Eagle AO-??
Catalog Number:
Proposed Launch Date: Early/Mid 2009

Status: Design Phase

For the latest project status updates please visit the AMSAT-NA web
page: http://www.amsat.org
[01222007]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-008.S5
WSR 008 Part 5 01/08/2009

AMSAT NEWS SERVICE BULLETIN 008.S5
FROM AMSAT HQ SILVER SPRING, MD, January 08, 2009
TO ALL RADIO AMATEURS
BID: $ANS-008.S5

THE FOLLOWING SATELLITES HAVE RE-ENTERED OR HAVE BEEN RETURNED SAFELY:

NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: July 28, 2008

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[01012009]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

```
Main Downlink:      145.825 Mhz FM APRS AX25
APRS Uplink:        145.825 MHz FM APRS AX25
Voice/PSK31 Uplink:  28.120 MHz
```

Packet to Voice ID: RAFT
[06112007]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Re-Entered
Re-entered: June 18, 2008

```
Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon:             437.2750 MHz CW
```

Callsign: JR8YJT
[01012009]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

```
Voice: 301-589-6062
       888-322-6728
FAX:   301-608-3410
```

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the

President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at} amsat.org
NNNN
/EX

```
From -7919322532357447081
X-Google-Thread: 10e8ad,cc3527a7a37e457f,start
X-Google-Thread: 10b9c8,cc3527a7a37e457f,start
X-Google-Attributes: gid10e8ad,gid10b9c8,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII
Path: g2news1.google.com!news1.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx01.iad.newshosting.com!newshosting.com!newspeer.monmouth.com!
newsswitch.lcs.mit.edu!bloom-beacon.mit.edu!panix!rri.panix.com!robomod!not-for-
mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-011 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sun, 11 Jan 2009 00:18:34 EST
Organization: The Radio Amateur Satellite Corporation
Lines: 376
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000501c973ac$04ae49f0$0e0addd0$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix3.panix.com
Mime-Version: 1.0
Content-Type: text/plain;charset="iso-8859-1"
Content-Transfer-Encoding: quoted-printable
X-Trace: reader1.panix.com 1231651114 17142 166.84.1.3 (11 Jan 2009 05:18:34 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 11 Jan 2009 05:18:34 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
```

X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news1.google.com rec.radio.amateur.space:151 rec.radio.info:443

AMSAT NEWS SERVICE
ANS-011

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:

- Launch Alert for Seven Small Satellites on January 21
- VE3NPC and G3VZV Complete Transatlantic AO-51 Mode V/S Contact
- AMSAT-DC Spring Satellite Workshop Seeks Members for Mission Teams
- ARISS logo items at CafePress
- Satellite Shorts From All Over
- ARISS Status Report for the Week of January 5, 2009

SB SAT @ AMSAT $ANS-011.01
Launch Alert for Seven Small Satellites on January 21

AMSAT News Service Bulletin 011.01
>From AMSAT HQ SILVER SPRING, MD.
January 11, 2009
To All RADIO AMATEURS
BID: $ANS-011.01

Mineo Wakita, JE9PEL sent a Cubesat launch alert for seven amateur radio satellites planned as secondary payloads when Japan launches its GOSAT IBUKI satellite on January 21, 2009 at 03.54 UTC.

GOSAT - Greenhouse gases Observing SATellite is an environmental monitoring satellite which will be launched from Japan's Tanegashima Space Center aboard the H-IIA F15 booster.

Information about the primary mission can be found on-line at:
http://www.jaxa.jp/countdown/f15/overview/ibuki_e.html
http://www.jaxa.jp/projects/sat/gosat/index_e.html

Information about the launch vehicle can be found on-line at:
http://www.jaxa.jp/countdown/f15/overview/h2a_e.html

The small satellite palyload will consist of:

Satellite	Downlink	Beacon	Mode	Callsign

KAGAYAKI	437.375	437.375	FSK9k6/CW	
STARS	437.485/465	437.305/275	FM/CW	JR5YBN/JR5YBO
KKS-1	437.445	437.385	AFSK/CW	JQ1YYY
PRISM	437.425	437.250	AFSK/GMSK/CW	JQ1YCX
SOHLA-1	437.505	437.505	AFSK/CW	
SPRITE	Scientific observation satellite			
SDS-1	Small demonstration satellite			

(Ed. note - this table and all links can also be found on the
main AMSAT web page http://www.amsat.org - see the bottom story.)

Masa, JN1GKZ reported that the small satellites are technically not CubeSats since they are larger in size and each platform is a unique design. He provided the following links to provide more information about each satellite.

Kagayaki 31x31x35cm, 28kg
http://www.sorun.co.jp/kagayaki/top.html (sorry, Japanese only)

STARS - Space Tethered Autonomous Robotic Satellite
KU (Mother Satellite) 16x16x25cm
KAI (Daughter Satellite) 16x16x15cm
http://stars1.eng.kagawa-u.ac.jp/english/index.html

KKS-1 Kouku-Kousen-Satellite-1 15x15x15cm, 3kg
http://www.kouku-k.ac.jp/~kks-1 (sorry, Japanese only)

PRISM Pico-satellite for Remote-sensing and Innovative Space Missions
20x20x40cm, 8kg
http://www.space.t.u-tokyo.ac.jp/prism/main-e.html

SOHLA-1
http://www.sohla.com/docs/index.php

They will be launched into a sun synchronous orbit to an altitude of 660km with an inclination of 98.1 degrees. The orbital period is estimated to be 98 minutes.

[ANS thanks Mineo Wakita, JE9PEL and Masa, JN1GKZ for the
above information]

/EX

SB SAT @ AMSAT $ANS-011.02
VE3NPC and G3VZV Complete Transatlantic AO-51 Mode V/S Contact

AMSAT News Service Bulletin 011.02
>From AMSAT HQ SILVER SPRING, MD.
January 11, 2009
To All RADIO AMATEURS
BID: $ANS-011.02

Clare, VE3NPC and Graham, G3VZV completed a transatlantic contact via AO-51 running an uplink of 145.880 MHz FM and downlink of 2401.200 MHz FM at 10:11 UTC on January 9, 2009. Clare reported the elevation at 5 degrees and a range of 2700 km. The two stations completed a short QSO with clear signals.

Clare says his equipment consists of a 52 turn helix with reflector cup into a DEM preamp and downconverter into SatPC32 controlled FT-736 for 13cm receiving on 2401.200 MHz. He used an FT-847 with 2 watts into 2 x 6 el quagis for 2m for his uplink. Complete information on the 52 turn helix was published in the September/October 2008 AMSAT Journal.

At the other end of the contact Graham, G3VZV says he was operating with an IC910 barefoot. The antennas included WIMO circular polarised VHF (10 dBd) and UHF (12 dBd) crossed quad antennas and the famous G3RUH 600mm/2 foot dish and patchfeed with a Kuhne DB6NT preamp at the feed left over from AO40 operating. The antennas are all at about 40 feet. The satellite reached around 3 degrees elevation. Graham says he did all doppler tuning correction by hand.

In other AO-51 news, AMSAT-NA VP Operations, Drew KO4MA provided updates to the AO-51 Operating Mode Schedule to better support a hamfest operation, and a DXpedition to Namibia.

January 12 - January 18

FM Repeater, V/U
Uplink: 145.920 MHz FM
Downlink: 435.300 MHz FM

FM Repeater, L/U
Uplink: 1268.700 MHz FM
Downlink: 435.150 MHz FM

January 19 - January 25

FM Repeater, V/U
Uplink: 145.920 MHz FM
Downlink: 435.300 MHz FM

9k6 BBS, L/U
Uplink: 1268.700 MHz 9k6 FM
Downlink: 435.150 MHz 9k6 FM

January 26 - February 1

FM Repeater, L/S
Uplink: 1268.700 MHz FM
Downlink: 2401.200 MHz FM

SSTV Repeater, V/U

Uplink: 145.860 MHz FM SSTV
Downlink: 435.150 MHz FM SSTV

The full AO-51 schedule and Command Team News can be found on-line at: http://www.amsat.org/amsat-new/echo/ControlTeam.php. The AMSAT main web page will also provide a quick status update when the information changes. Operating mode requests can be sent via e-mail to ao51-modes@amsat.org .

[ANS thanks Drew, KO4MA, and congratulates Clare, VE3NPC, and Graham, G3VZV for the above information]

/EX

SB SAT @ AMSAT $ANS-011.03
AMSAT-DC Spring Satellite Workshop Seeks Members for Mission Teams

AMSAT News Service Bulletin 011.03
>From AMSAT HQ SILVER SPRING, MD.
January 11, 2009
To All RADIO AMATEURS
BID: $ANS-011.03

If you find yourself in the Baltimore-Washington DC area this spring you may be interested in learning more and participating in an AMSAT-DC workshop which simulates building, testing, launching, and receiving signals from an Amateur Radio satellite.

AMSAT Area Coordinator for the Maryland-DC area, Pat Kilroy, N8PK is proposing such a workshop for the 2009 AMSAT-DC Meeting and Space Seminar. This meeting is historically held in early spring at or near the NASA Goddard Space Flight Center in Maryland.

Pat is proposing individuals and groups of Amateur Radio operators form teams who compete at this AMSAT-DC workshop to create and operate a satellite mission.

The first groups will build a PICetSat II flight module from a kit of electronic parts on a small printed circuit board. You can see an example of the original PICetSat module at:
http://patkilroy.com/simsat/3/

The second groups will set up simple satellite ground stations to operate on 433.920 MHz SSB. These team members need to provide a radio, antenna, and feedline for the 70 cm band.

The third groups will be in charge of setting up and loading software in the computers at the ground stations to decode the telemetry and to analyze it according to a set of instructions.

This event will be perfect for beginners and advanced satellite users alike, all ultimately working together to "launch" the flight module, receive the downlink, and decode the telemetry. Instructions will be provided in advance of the event to enhance preparation.

Pat notes he needs volunteer help to plan and organize this event. A couple of dedicated individuals are needed immediately to start the plans to lock in the workshop meeting space, advertise the event, to do the footwork needed to process participant applications, and to assure one set of radio and computer stations are on hand and ready at the start of the workshop. To volunteer contact Pat at his e-mail address: n8pk@amsat.org as soon as possible. Pat will convene a conference call for all interested participants to finalize the Workshop details with the volunteers.

Pat requests that interested amateur radio operators RSVP to him via e-mail n8pk@amsat.org and indicate which group you will be most interested in working with. The cost of the Workshop is still "TBD" to cover the materials and meeting space. Those choosing the PICetSat II will keep their completed project.

[ANS thanks Pat, N8PK for the above information]

/EX

SB SAT @ AMSAT $ANS-011.04
ARISS logo items at CafePress

AMSAT News Service Bulletin 011.04
>From AMSAT HQ SILVER SPRING, MD.
January 11, 2009
To All RADIO AMATEURS
BID: $ANS-011.04

Will, KC6ROL says, "The ARISS team is pleased to announce the availability of ARISS logo items through the online store at: http://www.cafepress.com/ariss "

The ARISS logo is being made available as a courtesy to the members of the amateur radio community for personal use. Persons wishing to market items with the ARISS logo need to contact the ARISS Secretary Treasurer, Rosalie White, at k1sto@arrl.org to receive permission.

AMSAT-NA receives 10% from sales through this store. These funds will be used to support the ARISS team activities. Neither ARISS nor AMSAT have any control over items ordered, or returns, through Caf� Press.

[ANS thanks Will, KC6ROL for the above information]

/EX

SB SAT @ AMSAT $ANS-011.05
Satellite Shorts From All Over

AMSAT News Service Bulletin 011.05
>From AMSAT HQ SILVER SPRING, MD.
January 11, 2009
To All RADIO AMATEURS
BID: $ANS-011.05

- CQ Magazine announced a new e-mail list has been established to notify readers of the availability of each new issue of WorldRadio magazine, which is converting to a free online-only publication. You may sign up for the list at: http://mailman.sunserver.com/mailman/listinfo/WorldRadio-L . Direct links to this signup page will be posted on both the CQ magazine website at http://www.cq-amateur-radio.com and the old WorldRadio website at http://www.wr6wr.com .

- SatMagazine, a free web based magazine is available on-line at: http://www.satmagazine.com/cgi-bin/display_edition.cgi . This month's issue is dedicated to Cubesats. AMSAT and Amateur Radio are mentioned.

- If you participated in OSCAR SKN, please nominate someone you worked for Best Fist now, while you're thinking of it. Remember, your nominee need not have the best fist you heard, just the best of those you worked. Send your nomination to w2rs@amsat.org

- The first English issue of the free electronic Amateur Radio magazine Ham-Mag is now available and features an article on working satellites with your HT by K6LCS. The first issue can be downloaded from the magazine's website at http://www.ham-mag.com/ and if you subscribe (free) the magazine will be emailed to you each month.

- Information about the Southeastern VHF Society Conference April 24-25 in Charlotte, NC can be found at: http://www.w4dex.com/svhfs_2009.htm

- An upgrade to the RASCAL software to decode DO-64 telemetry is available at http://www.delfic3.nl/rascal - this page also includes the upgrading instructions if you are moving up from a previous version.

[ANS thanks everyone for the above information]

/EX

SB SAT @ AMSAT $ANS-011.06
ARISS Status Report for the Week of January 5, 2009

AMSAT News Service Bulletin 011.06
>From AMSAT HQ SILVER SPRING, MD.

January 11, 2009
To All RADIO AMATEURS
BID: $ANS-011.06

1. School Contacts

Axam Jatiya Vidyalaya in Guwahati, India had a successful ARISS contact on Wednesday, January 7 at 08:01 UTC via telebridge station W6SRJ in California. Approximately 1300 students are enrolled at the school. All students are taught in Assamese with English taught as a compulsory second language.

Tongfu Road No. 1 Primary School in Guangzhou, Guangdong, P.R. China has been scheduled for an ARISS contact on Saturday, January 17 at 10:23 UTC. The school is over 70 years old with an enrollment of over 1000 students. An amateur radio club was established at the school in 2007 and during the same year a team from this school won the national youngster's amateur radio contest. Elective courses on amateur radio, space technology and ARISS are offered to the students. All grades have participated in essay and cartoon contests to prepare for the contact. Students have written letters to the astronauts and determined the questions to ask. Media coverage is planned with newspapers, television and the internet.

2. Technopolis Contact Successful

On Saturday, January 3, students visiting Technopolis in Mechelen, Belgium experienced an ARISS contact via telebridge station VK4KHZ in Australia. The students asked Mike Fincke, KE5AIT, 16 questions with time left over to exchange Season's Greetings. Approximately 100 students, parents and ham radio operators attended the event. Three television stations and two newspapers reported on the contact. The audio was fed into the EchoLink AMSAT and JK1ZRW servers and received 29 connections from ten different countries including the Ukraine and Romania. More information on the contact may be found on the ARISS-Europe Web site: http://www.ariss-eu.org/2009_01_03.htm

3. ARISS 25th Anniversary Special Event Update

To celebrate the 25th anniversary of ham radio in space, an ARISS commemorative event will be held during the month of December through mid January. A special certificate is being developed for those who communicate with the ISS, either 2-way direct (with the ISS crew, the digipeater, or cross band repeater), or 1-way reception of SSTV or voice downlink. For more information and an update on this event, see: http://www.rac.ca/ariss/oindex.htm under "Latest News."

[ANS thanks Carol, KB3LKI for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the

President's Club. Members of the President's Club, as sustaining donors
to AMSAT Project Funds, will be eligible to receive additional benefits.
Application forms are available from the AMSAT Office. With that recall
the time two silk worms had a race which ended in a tie.

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM

From -5627579938484276099
X-Google-Thread: 10ed5f,a03b6145ccad230a
X-Google-Thread: f7810,a03b6145ccad230a
X-Google-Thread: f7796,a03b6145ccad230a
X-Google-Thread: 10e8ad,a03b6145ccad230a
X-Google-Attributes: gid10ed5f,gidf7810,gidf7796,gid10e8ad,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!news2.google.com!Xl.tags.giganews.com!border1.nntp.dca.giganews.com!nntp.giganews.com!local02.nntp.dca.giganews.com!nntp.got.net!news.got.net.POSTED!not-for-mail
NNTP-Posting-Date: Fri, 16 Jan 2009 14:39:49 -0600
From: dloyd@gmail.com
Newsgroups: alt.ham-radio,alt.ham-radio.digital-voice,alt.ham-radio.dxing,alt.ham-radio.morse,rec.radio.amateur.misc,rec.radio.amateur.space,rec.radio.amateur.policy,rec.radio.amateur.misc
Subject: Re: Earthquake In China
Date: Fri, 16 Jan 2009 15:44:16 -0500
Message-ID: <kcs1n4h5f8njha15ue8jt6ocbue38d0fig@4ax.com>
References: <AIlWj.137167$Cj7.7432@pd7urf2no>
X-Newsreader: Forte Free Agent 3.3/32.846
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Lines: 61
X-Usenet-Provider: http://www.giganews.com
NNTP-Posting-Host: 69.19.113.131
X-Trace: sv3-1mXQd41PdoT0QwpCSXMDRPBZ/kVnm/Tkl2YtNCDRW7Vk267gZJbliAEkV/FX4wZ/E6nM5TNO9H1+zyC!lj9TFT8SlYfF1PyzVXFcwgAFfHmTcBnntNXUXxtsEczRXJMc25fXKU5fgITRM051mgJlpT+al1Ee!Wv8Z
X-Abuse-and-DMCA-Info: Please be sure to forward a copy of ALL headers
X-Abuse-and-DMCA-Info: Otherwise we will be unable to process your complaint properly
X-Postfilter: 1.3.39
Xref: g2news1.google.com alt.ham-radio:437 alt.ham-radio.digital-voice:3 alt.ham-radio.dxing:116 alt.ham-radio.morse:14 rec.radio.amateur.misc:2365 rec.radio.amateur.space:152 rec.radio.amateur.policy:20539

On Tue, 13 May 2008 19:10:24 GMT, "Robert" <edmsecboi@shaw.ca> wrote:

>Just received this through a ARES reflector
>=============================

>
>""Strong earthquake hits China, all ham radio operators stand by PLEASE HELP
>TO SPREAD THE FOLLOWING MESSAGE
>
>Strong earthquake hits China, all ham radio operators stand by A Magnitude
>7.8 earthquake hits Sichuan, China on Monday, May 12, 2008 at 06:28:04 UTC.
>Casualties and loss unknown up to now. According to Chinese Radio Sports
>Association, 14.270Mhz, 7.050 and 7.060 Mhz are preserved for amateur radio
>emergency service in the rescue. Please spread this message as far as you
>can and keep the frequencies clean for emergency use. Thank you.
>
>--------------------
>Yesterday, 05:57 PM
>BG8AAS from Chengdu, Sichuan reported that local UHF repeater survived in
>the disaster. It keeps functioning from the 1st minute and more than 200
>local radio hams are now on that repeater. A group of hams from Chengdu has
>headed for Wenchuan, the center of the quake, trying to setup emergency
>communication services there.
>
>BA8AB, also from Chengdu, Sichuan, is active on the 40m emergency frequency.
>Up to now, no further information available from the center zone of the
>quake. There are a few radio amateurs there, but all of the communications
>have been cut out, including amateur radio.
>-------------------------
>Yesterday, 06:58 PM
>Update
>
>According to BG8AAS, local UHF repeater in Chengdu keeps busy running after
>the quake. It helps to direct social vehicles to transport the wounded from
>Dujiangyan, Beichuan, and other regions. Another UHF repeater also starts
>its working in Mianyan, supported by generators.
>However, they are going to face a shortage of gas.
>
>Damage in Chengdu remains in the lowest level, but the situation is very
>very bad in the counties around. A few towns are said to be destroyed
>completely. More than 7000 died in the town of Beichuan. Casualties in
>several other towns are still unknown and not counted in the published
>numbers.
>
>It is a long and sad day.
>-----------------------
>Today, 08:31 AM
>Your attention please! 14.270Mhz is now reserved for ARES in 5.12 earth
>quake in Sichuan, China. Please help to keep this frequency clear.
>
>A group of radio amateurs is now transmitting from Wenchuan, the center of
>quake. Its signal is reported to be very weak. They tried to keep
>communication with BY8AA in Chengdu, seeking for all resources needed.
>During a contact finished a few minutes ago, they were asking for raincoats,
>water, tents, and outdoor living facilities.
>
>PLEASE HELP TO FORWARD THIS MESSAGE TO ALL RELEVANT FORUMS, MAILING LISTS,
>AND NEWS RESOURCES. MEANWHILE, KEEP THE ABOVE FREQUENCY CLEAN FOR EMERGENCY

```
>COMMUNICATION.
>
>Michael Chen, BD5RV/4""
>


From 2807238788773598878
X-Google-Thread: 10ed5f,a03b6145ccad230a
X-Google-Thread: 1033f5,a03b6145ccad230a
X-Google-Thread: f7810,a03b6145ccad230a
X-Google-Thread: f7796,a03b6145ccad230a
X-Google-Thread: 107ada,a03b6145ccad230a
X-Google-Thread: 10e8ad,a03b6145ccad230a
X-Google-Thread: 107ada,a03b6145ccad230a
X-Google-Attributes:
gid10ed5f,gid1033f5,gidf7810,gidf7796,gid107ada,gid10e8ad,gid107ada,domainid0,publ
ic,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news1.google.com!Xl.tags.giganews.com!
border1.nntp.dca.giganews.com!nntp.giganews.com!local02.nntp.dca.giganews.com!
nntp.got.net!news.got.net.POSTED!not-for-mail
NNTP-Posting-Date: Fri, 16 Jan 2009 19:23:04 -0600
From: dloyd@gmail.com
Newsgroups: alt.ham-radio,alt.ham-radio.digital-voice,alt.ham-radio.dxing,alt.ham-
radio.morse,rec.radio.amateur.misc,rec.radio.amateur.space,rec.radio.amateur.polic
y,rec.radio.amateur.misc
Subject: Re: Earthquake In
Chinaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa
aaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa
Date: Fri, 16 Jan 2009 20:19:29 -0500
Message-ID: <38a2n4h3jfqfb8vijq0539fhts7ubqhpe1@4ax.com>
References: <AIlWj.137167$Cj7.7432@pd7urf2no>
<kcs1n4h5f8njha15ue8jt6ocbue38d0fig@4ax.com>
X-Newsreader: Forte Free Agent 3.3/32.846
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Lines: 77
X-Usenet-Provider: http://www.giganews.com
NNTP-Posting-Host: 69.19.113.131
X-Trace: sv3-
MqrLdibfHdR7KiHYdsrOETOq1Og7KoSvBAVE1Z8tEM2V+GI+VYvNgVvNJgTTkYaZNLrVibS9k/gwEdm!
nzPeFexTQ1Z1u5RHZD5YwclOuk43WJS5WSrEwHAUqNQ1Kgm2PgYHju9pGhaDgvoZN5Mxes+XYcSc!1vul
X-Abuse-and-DMCA-Info: Please be sure to forward a copy of ALL headers
X-Abuse-and-DMCA-Info: Otherwise we will be unable to process your complaint
properly
X-Postfilter: 1.3.39
Xref: g2news2.google.com alt.ham-radio:621 alt.ham-radio.digital-voice:7 alt.ham-
radio.dxing:191 alt.ham-radio.morse:22 rec.radio.amateur.misc:2733
rec.radio.amateur.space:178 rec.radio.amateur.policy:23719

On Fri, 16 Jan 2009 15:44:16 -0500, dloyd@gmail.com wrote:
```

>On Tue, 13 May 2008 19:10:24 GMT, "Robert" <edmsecboi@shaw.ca> wrote:
>
>>Just received this through a ARES reflector
>>=============================
>>
>>""Strong earthquake hits China, all ham radio operators stand by PLEASE HELP
>>TO SPREAD THE FOLLOWING MESSAGE
>>
>>Strong earthquake hits China, all ham radio operators stand by A Magnitude
>>7.8 earthquake hits Sichuan, China on Monday, May 12, 2008 at 06:28:04 UTC.
>>Casualties and loss unknown up to now. According to Chinese Radio Sports
>>Association, 14.270Mhz, 7.050 and 7.060 Mhz are preserved for amateur radio
>>emergency service in the rescue. Please spread this message as far as you
>>can and keep the frequencies clean for emergency use. Thank you.
>>
>>--------------------
>>Yesterday, 05:57 PM
>>BG8AAS from Chengdu, Sichuan reported that local UHF repeater survived in
>>the disaster. It keeps functioning from the 1st minute and more than 200
>>local radio hams are now on that repeater. A group of hams from Chengdu has
>>headed for Wenchuan, the center of the quake, trying to setup emergency
>>communication services there.
>>
>>BA8AB, also from Chengdu, Sichuan, is active on the 40m emergency frequency.
>>Up to now, no further information available from the center zone of the
>>quake. There are a few radio amateurs there, but all of the communications
>>have been cut out, including amateur radio.
>>------------------------
>>Yesterday, 06:58 PM
>>Update
>>
>>According to BG8AAS, local UHF repeater in Chengdu keeps busy running after
>>the quake. It helps to direct social vehicles to transport the wounded from
>>Dujiangyan, Beichuan, and other regions. Another UHF repeater also starts
>>its working in Mianyan, supported by generators.
>>However, they are going to face a shortage of gas.
>>
>>Damage in Chengdu remains in the lowest level, but the situation is very
>>very bad in the counties around. A few towns are said to be destroyed
>>completely. More than 7000 died in the town of Beichuan. Casualties in
>>several other towns are still unknown and not counted in the published
>>numbers.
>>
>>It is a long and sad day.
>>-----------------------
>>Today, 08:31 AM
>>Your attention please! 14.270Mhz is now reserved for ARES in 5.12 earth
>>quake in Sichuan, China. Please help to keep this frequency clear.
>>
>>A group of radio amateurs is now transmitting from Wenchuan, the center of
>>quake. Its signal is reported to be very weak. They tried to keep
>>communication with BY8AA in Chengdu, seeking for all resources needed.
>>During a contact finished a few minutes ago, they were asking for raincoats,

```
>>water, tents, and outdoor living facilities.
>>
>>PLEASE HELP TO FORWARD THIS MESSAGE TO ALL RELEVANT FORUMS, MAILING LISTS,
>>AND NEWS RESOURCES. MEANWHILE, KEEP THE ABOVE FREQUENCY CLEAN FOR EMERGENCY
>>COMMUNICATION.
>>
>>Michael Chen, BD5RV/4""
>>

"one useless man is disgrace 2 become a law firm 3 or more become a congress"
adams

woger you are a Congress all in your own head

http://kb9rqz.bravejournal.com/
altopia is never used by KB9RQZ
nor is Konstans@hotmail.com ever
btw i can be found at
17366 N River Rd
Chassel Mi

but the cowards asking lack the gut to act


From -3154468197025717056
X-Google-Thread: 10e8ad,3125b898c97af523,start
X-Google-Thread: 10b9c8,3125b898c97af523,start
X-Google-Attributes: gid10e8ad,gid10b9c8,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx02.iad.newshosting.com!newshosting.com!novia!
transit3.readnews.com!news-xxxfer.readnews.com!news-out.readnews.com!
transit4.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-015 AMSAT Weely Satellite Report
Followup-To: rec.radio.amateur.space
Date: Fri, 16 Jan 2009 23:18:59 EST
Organization: The Radio Amateur Satellite Corporation
Lines: 1556
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <004201c9785a$b078db30$116a9190$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1232165939 28613 166.84.1.6 (17 Jan 2009 04:18:59 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sat, 17 Jan 2009 04:18:59 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
```

X-RRI-Info-2: Send technical complaints to   rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news1.google.com rec.radio.amateur.space:154 rec.radio.info:453

This report is organized into five (5) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites
Part 5 (S5) - deorbited/returned satellites

SB SAT @ AMSAT W8ISS ANS-015.S1
WSR 015 Part 1 01/15/2009

AMSAT NEWS SERVICE BULLETIN 015.S1
FROM AMSAT HQ SILVER SPRING, MD, January 15, 2009
TO ALL RADIO AMATEURS
BID: $ANS-015.S1

DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008

Status: OPERATIONAL
Current Mode: Science Mode - Beacon ONLY
Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink: 435.530 to 435.570 MHz

Proposed Frequencies:
Primary telemetry downlink: 145.870 MHz 1200 Baud BPSK AX.25 400mW
Backup telemetry downlink: 145.930 MHz 1200 Baud BPSK AX.25 400mW
Linear transponder passband downlink: 145.880 - 145.920 MHz(inverting)
Linear transponder passband uplink: 435.570 - 435.530 MHz
Transponder mode beacon: 145.870 MHz CW (10dB below transponder PEP)

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68
[01012009]

=====

VO-52 HAMSAT
Catalog number: 28650

Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.859330 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is active. Each transponder has a different beacon.
[08072008]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Modes: FM Repeater - V-FM/us-FM
                               L-FM/u-FM
                 BBS   - OFF
                 Telemetry   - /u

Analog voice downlink: 435.300 MHz FM
                           435.150 MHz FM
                          2401.200 Mhz FM
Analog voice uplink: 145.880 MHZ FM
                           145.880 MHz USB
                           145.920 MHz FM
                          1268.700 MHz FM 67Hz PL tone
Digital Downlinks: 435.150 MHz FM 38k4 PBP, 1 watt output
                          435.150 MHz FM 9k6 Pacsat Broadcast Protocol
                         2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Pacsat Broadcast Protocol
                         1268.700 mhz FM 9k6 PBP Digital
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[01152009]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002

Status: Operational.

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz. The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10 minute timer.
[05282007]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Operational
Current Mode: V/u (Mode JA)

Voice/CW Mode JA

Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage:
http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts.htm
[01012009]
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993

Status: OFF - Reload software

Current Mode: V/u

Uplink: 145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[10092008]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational

Current Mode: Alternating between Mode A and B every 24 hours

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/

AO-7 Usage Guidelines on the AO-7 Log and Resource Site located at:
http://www.planetemily.com/ao7
[05282007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - V/u
                      Voice -   V/v
                      BBS -   V/v
                      APRS -   V/v
                      SSTV -   V/v

Expedition 18 Crew:
Commander: Mike Fincke   KE5AIT
Flight Engineer: Yury Lonchakov   RA3DT
Flight Engineer: Sandra Magnus   KE5FYE

Available Modes and Frequencies:

Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 9k6
Worldwide packet downlink: 145.825 Mhz FM 9k6

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time line is NOT translated from Russian and posted.
[01082009]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-015.S2
WSR 015 Part 2 01/15/2009

AMSAT NEWS SERVICE BULLETIN 015.S2
FROM AMSAT HQ SILVER SPRING, MD, January 15, 2009
TO ALL RADIO AMATEURS
BID: $ANS-015.S2

RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number:
Launch Date: May 23, 2008

Status: Operational

Curent Mode: Telemetry
Audio
Images

Downlinks: 435.315 MHz

```
           435.215 MHz
[05292008]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode:  /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon:    435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.
[11152007]
=====
CP3
Catalog Number: 31128
Launch Date: April 17,2007

Status: Operational

Current Mode:  /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[07302007]
=====
GENESAT-1 ?O-??
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Current Mode: /u

Telemetry Beacon Downlink: 437.0670 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[01082007]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon:             437.2750 MHz CW
```

```
Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
[03262007]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003

Status: Operational

Current Mode: /u

Beacon:     436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[01082007]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Operational?

Uplink:  1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[12182008]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS
```

```
Mode U TLM Beacon
Downlink: 436.8375 MHz CW
[08132007]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Modes:   FM Repeater - V-FM/us-FM
                               L-FM/u-FM
                 BBS         - OFF
                 Telemetry   -  /u

Analog voice downlink:     435.300 MHz FM
                           435.150 MHz FM
                          2401.200 Mhz FM
Analog voice uplink:       145.880 MHZ FM
                           145.880 MHz USB
                           145.920 MHz FM
                          1268.700 MHz FM 67Hz PL tone
Digital Downlinks:        435.150 MHz FM 38k4 PBP, 1 watt output
                          435.150 MHz FM 9k6 Pacsat Broadcast Protocol
                         2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:           145.860 MHz FM 9k6 Pacsat Broadcast Protocol
                         1268.700 mhz FM 9k6 PBP Digital
Beacon:                   435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[01082009]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Semi-operational

Current Mode: V/v
```

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[09242007]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Non-Operational

Current Modes: V/U
L/U

Downlink: 435.225 MHz FM (9600-baud FSK)
435.325 Mhz - Not Available - temperature problems
Uplinks: 145.850 FM
145.890 FM
145.930 FM
1269.700 FM
1269.800 FM
1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[12042007]
=====
RS-22 RADIO SPORT RS-22
Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only

Current Mode: /u

CW Beacon - 435.352 MHz
145.818 MHz
[08062007]
=====
Can X-2
Catalog number:
Launch Date: April 28, 2008

Status: IN ORBIT

```
Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web
page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[05292008]
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink: 437.425 MHz

For the latest project status update please visit the AAUSAT-II web
page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[05292008]
=====
CO-65 Cute-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink:  437.475 MHz 9k6 Packet
Uplink:   1267.600 Mhz

For the latest project status update please visit the Cute-1.7+APD II
web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78
[07312008]
=====
Compass-1
Catalog number: 32787
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink: 437.275 Mhz CW
          437.405 MHz Packet

For the latest project status update please visit the Compass 1 web
page: http://www.raumfahrt.fh-aachen.de/
```

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52
[05292008]
=====
CO-66 Seeds II
Catalog number:
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.485 MHz

For the latest project status update please visit the Seeds 2 web page: http://cubesat.aero.cst.nihon-u.ac.jp/english/main_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36
[12042008]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - V/u
Voice - V/v
BBS - V/v
APRS - V/v
SSTV - V/v

Expedition 18 Crew:
Commander: Mike Fincke KE5AIT
Flight Engineer: Yury Lonchakov RA3DT
Flight Engineer: Sandra Magnus KE5FYE

Available Modes and Frequencies:

Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 9k6
Worldwide packet downlink: 145.825 Mhz FM 9k6

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM

437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time line is NOT translated from Russian and posted.
[01082009]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-015.S3
WSR 015 Part 3 01/15/2009

AMSAT NEWS SERVICE BULLETIN 015.S3
FROM AMSAT HQ SILVER SPRING, MD, January 15, 2009
TO ALL RADIO AMATEURS
BID: $ANS-015.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

CP4
Catalog Number: 31122
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon: 437.325 MHz CW

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=79
[10022008]

```
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: Non-Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder:  145.825 Mhz FM
[01012009]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency:  437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink:         437.250 MHz FM 67Hz CTCSS
Voice Downlink:      2401.835 MHz FM
Packet Up/Downlink:  437.250 MHz 9k6 packet
Packet Downlink      2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non=Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[08132007]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
```

Launch Date: December 20, 2002

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Non-Operational

Uplinks: 145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[007302007]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

```
Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS:                SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink:   145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
V-band:   145.840 -  145.990 MHz CW/LSB
U-band:   435.550 -  435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks
---------
S2-band:  2401.225 -  2401.475 MHz CW/USB
K-band:  24048.010 - 24048.060 MHz CW/USB
Beacon:   2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)
----------------------------
BEACON   General Beacon(GB)  Middle Beacon(MB)  Engineering Beacon(EB)
2 m                    none        145.898 MHz                    none
70cm            435.438 MHz        435.588 MHz             435.838 MHz
13cm(1)        2400.188 MHz       2400.338 MHz            2400.588 MHz
```

13cm(2)	2401.173 MHz	2401.323 MHz	2401.573 MHz
3cm	10450.975 MHz	10451.125 MHz	10451.375 MHz
1.5cm	24047.885 MHz	24048.035 MHz	24048.285 MHz

[07162007]
=====
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: ?
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

```
Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink:   145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Non-operational

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign:       POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012009]
=====
```

IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks: 145.875 MHz FM 1200-baud
145.900 MHz FM 1200-baud
145.925 MHz FM 1200-baud
145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

```
Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
LIBERTAD-1
Catalog Number: 31129
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink:   145.825 MHz 1200 AFSK ax25 APRS
```

```
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[10222007]
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990

Status: CW Beacon only

Uplinks:          145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink:      437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[01222007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
[05012006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: SEMI-Operational

Current Mode:  V/u
```

```
Uplink:         145.900 MHz FM 1200-baud Manchester FSK (reserved)
                145.920 MHz FM VOICE
                145.940 MHz FM 1200-baud Manchester FSK (reserved)
                145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink:       437.026 MHz USB VOICE
                (1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[12252008]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984

Status: Non-operational.

Current Mode:  /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon:          435.025 MHz
Mode-S Beacon:     2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[01012009]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon:   145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink  29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
```

```
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
Beacons:   29.450 MHz
          435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon 1:  29.352 MHz (intermittent)
Beacon 2:  29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991
```

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB

Beacon: 145.860 MHz

Robot: 145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
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/EX

SB SAT @ AMSAT W8ISS ANS-015.S4
WSR 015 Part 4 01/15/2009

AMSAT NEWS SERVICE BULLETIN 015.S4
FROM AMSAT HQ SILVER SPRING, MD, January 15, 2009
TO ALL RADIO AMATEURS
BID: $ANS-015.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE PROPOSED FOR LAUNCH
AT THIS TIME:

KAGAYAKI (Solan Co.)
Catalog Number:
Proposed Launch Date: January 21, 2009

Status: Launch Phase

Reported Frequncy and Modes:
Downlink: 437.375 MHZ   FSK9k6/CW
Beacon: 437.375 MHz   FSK9k6/CW

IARU coordination status page:

[01152009]
=====
STARS (Kagawa Univ.)

Catalog Number:
Proposed Launch Date: January 21, 2009

Status: Launch Phase

Reported Frequncy and Modes:
Downlinks: 437.485 MHz FM/CW
           437.465 MHz FM/CW
Beacons: 437.305 MHz FM/CW
           437.275 MHz FM/CW

Callsigns: JR5YBN
           JR5YBO

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=99
[01152009]
=====
KKS-1 (Tokyo MCIT)
Catalog Number:
Proposed Launch Date: January 21, 2009

Status: Launch Phase

Proposed Frequencies and Modes:
Downlink: 437.455 MHz AFSK/CW
Beacon: 437.385 MHz AFSK/CW

Callsign: JQ1YYY

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=107
[01152009]
=====
PRISM (Tokyo Univ.)
Catalog Number:
Proposed Launch Date: January 21, 2009

Status: Launch Phase

Proposed Frequencies and Modes:
Downlink: 437.425 MHz AFSK/GMSK/CW
Beacon: 437.250 MHz AFSK/GMSK/CW

Callsign: JQ1YCX

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=97
[01152009]
=====
SOHLA-1 (ASTRO TECH.)
Catalog Number:
Proposed Launch Date: January 21,2009

Status: Launch Phase

Proposed Frequencies and Modes:
Downlink: 437.505 MHz AFSK/CW
Beacon: 437.505 MHz AFSK/CW

Callsign:

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=101
[01152009]
=====
UNITEC
Catalog Number:
Proposed Launch Date: May 2010

Status: Design Phase

Proposed Equipment:

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=141
[01152009]
=====
XW-1
Catalog Number:
Proposed Launch Date: Summer 2009?

Status: Design Phase

Proposed Equipment:
Beacon: 435Mhz, CW 20dBm
Linear transponder: RX: 145Mhz, TX: 435Mhz, 40KHz, 30dBm
FM Transponder: RX: 145Mhz, TX: 435Mhz, 16KHz, 30dBm
Digital store and forward transponder: RX: 145Mhz, TX: 435Mhz, 16KHz, 30dBm

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108
[10092008]
=====
Phase 5a Mars Mission AO-??
Catalog Number:
Proposed Launch Date: 2009 or 2011

Status: Design Phase

For the latest project status update please visit the AMSAT-DL P5-A web page:
http://ticket-to-mars.org
[01222007]
=====

PHASE 3E AO-??
Catalog number:
Proposed Launch Date: Late 2008

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E
web page:
http://www.amsat-dl.org/p3e/
[01222007]
=====
Eagle AO-??
Catalog Number:
Proposed Launch Date: Early/Mid 2009

Status: Design Phase

For the latest project status updates please visit the AMSAT-NA web
page: http://www.amsat.org
[01222007]
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/EX

SB SAT @ AMSAT W8ISS ANS-015.S5
WSR 015 Part 5 01/15/2009

AMSAT NEWS SERVICE BULLETIN 015.S5
FROM AMSAT HQ SILVER SPRING, MD, January 15, 2009
TO ALL RADIO AMATEURS
BID: $ANS-015.S5

THE FOLLOWING SATELLITES HAVE RE-ENTERED OR HAVE BEEN RETURNED SAFELY:

NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: July 28, 2008

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[01012009]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink: 145.825 Mhz FM APRS AX25
APRS Uplink: 145.825 MHz FM APRS AX25
Voice/PSK31 Uplink: 28.120 MHz

Packet to Voice ID: RAFT
[06112007]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Re-Entered
Re-entered: June 18, 2008

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon: 437.2750 MHz CW

Callsign: JR8YJT
[01012009]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at} amsat.org
NNNN
/EX

From 4313359997886417032
X-Google-Thread: 107ada,a03b6145ccad230a
X-Google-Thread: 10e8ad,a03b6145ccad230a
X-Google-Thread: 107ada,a03b6145ccad230a
X-Google-Attributes: gid107ada,gid10e8ad,gid107ada,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!Xl.tags.giganews.com!border1.nntp.dca.giganews.com!nntp.giganews.com!local02.nntp.dca.giganews.com!nntp.got.net!news.got.net.POSTED!not-for-mail
NNTP-Posting-Date: Sat, 17 Jan 2009 14:58:51 -0600
From: dloyd@gmail.com
Newsgroups: alt.ham-radio,alt.ham-radio.digital-voice,alt.ham-radio.dxing,alt.ham-radio.morse,rec.radio.amateur.misc,rec.radio.amateur.space,rec.radio.amateur.policy,rec.radio.amateur.misc
Subject: Re: Earthquake In Chinaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa
Date: Sat, 17 Jan 2009 16:01:37 -0500
Message-ID: <t194n4hn5p046a2eqfco1836vrf5kbavqn@4ax.com>
References: <AIlWj.137167$Cj7.7432@pd7urf2no>

```
<kcs1n4h5f8njha15ue8jt6ocbue38d0fig@4ax.com>
<38a2n4h3jfqfb8vijq0539fhts7ubqhpe1@4ax.com>
X-Newsreader: Forte Free Agent 3.3/32.846
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Lines: 79
X-Usenet-Provider: http://www.giganews.com
NNTP-Posting-Host: 69.19.113.131
X-Trace: sv3-TbM8DNDT12DcVF2veHM/xjQbbzknOM0R7g5inArdbtcqwY5sBOsSLiNTE/
YphZzKu+pOs8zV4bn5ggq!VnzooFdFKRi6DWWP6fDdbO+zGFS5hZtulyhEtWnXTgvOhWZortoUO+RXlJ/
GlM3cfXMR5Ycx/4FJ!HLgG
X-Abuse-and-DMCA-Info: Please be sure to forward a copy of ALL headers
X-Abuse-and-DMCA-Info: Otherwise we will be unable to process your complaint
properly
X-Postfilter: 1.3.39
Xref: g2news1.google.com alt.ham-radio:552 alt.ham-radio.digital-voice:6 alt.ham-
radio.dxing:234 alt.ham-radio.morse:20 rec.radio.amateur.misc:2593
rec.radio.amateur.space:155 rec.radio.amateur.policy:20788

On Fri, 16 Jan 2009 20:19:29 -0500, dloyd@gmail.com wrote:

>On Fri, 16 Jan 2009 15:44:16 -0500, dloyd@gmail.com wrote:
>
>>On Tue, 13 May 2008 19:10:24 GMT, "Robert" <edmsecboi@shaw.ca> wrote:
>>
>>>Just received this through a ARES reflector
>>>=============================
>>>
>>>""Strong earthquake hits China, all ham radio operators stand by PLEASE HELP
>>>TO SPREAD THE FOLLOWING MESSAGE
>>>
>>>Strong earthquake hits China, all ham radio operators stand by A Magnitude
>>>7.8 earthquake hits Sichuan, China on Monday, May 12, 2008 at 06:28:04 UTC.
>>>Casualties and loss unknown up to now. According to Chinese Radio Sports
>>>Association, 14.270Mhz, 7.050 and 7.060 Mhz are preserved for amateur radio
>>>emergency service in the rescue. Please spread this message as far as you
>>>can and keep the frequencies clean for emergency use. Thank you.
>>>
>>>--------------------
>>>Yesterday, 05:57 PM
>>>BG8AAS from Chengdu, Sichuan reported that local UHF repeater survived in
>>>the disaster. It keeps functioning from the 1st minute and more than 200
>>>local radio hams are now on that repeater. A group of hams from Chengdu has
>>>headed for Wenchuan, the center of the quake, trying to setup emergency
>>>communication services there.
>>>
>>>BA8AB, also from Chengdu, Sichuan, is active on the 40m emergency frequency.
>>>Up to now, no further information available from the center zone of the
>>>quake. There are a few radio amateurs there, but all of the communications
>>>have been cut out, including amateur radio.
>>>------------------------
>>>Yesterday, 06:58 PM
```

```
>>>Update
>>>
>>>According to BG8AAS, local UHF repeater in Chengdu keeps busy running after
>>>the quake. It helps to direct social vehicles to transport the wounded from
>>>Dujiangyan, Beichuan, and other regions. Another UHF repeater also starts
>>>its working in Mianyan, supported by generators.
>>>However, they are going to face a shortage of gas.
>>>
>>>Damage in Chengdu remains in the lowest level, but the situation is very
>>>very bad in the counties around. A few towns are said to be destroyed
>>>completely. More than 7000 died in the town of Beichuan. Casualties in
>>>several other towns are still unknown and not counted in the published
>>>numbers.
>>>
>>>It is a long and sad day.
>>>-----------------------
>>>Today, 08:31 AM
>>>Your attention please! 14.270Mhz is now reserved for ARES in 5.12 earth
>>>quake in Sichuan, China. Please help to keep this frequency clear.
>>>
>>>A group of radio amateurs is now transmitting from Wenchuan, the center of
>>>quake. Its signal is reported to be very weak. They tried to keep
>>>communication with BY8AA in Chengdu, seeking for all resources needed.
>>>During a contact finished a few minutes ago, they were asking for raincoats,
>>>water, tents, and outdoor living facilities.
>>>
>>>PLEASE HELP TO FORWARD THIS MESSAGE TO ALL RELEVANT FORUMS, MAILING LISTS,
>>>AND NEWS RESOURCES. MEANWHILE, KEEP THE ABOVE FREQUENCY CLEAN FOR EMERGENCY
>>>COMMUNICATION.
>>>
>>>Michael Chen, BD5RV/4""
>>>
>
>"one useless man is disgrace 2 become a law firm 3 or more become a congress"
>adams
>
>woger you are a Congress all in your own head
>
>http://kb9rqz.bravejournal.com/
>altopia is never used by KB9RQZ
>nor is Konstans@hotmail.com ever
>btw i can be found at
>17366 N River Rd
>Chassel Mi
>
>but the cowards asking lack the gut to act


From 6732208883768709914
X-Google-Thread: 10ed5f,a03b6145ccad230a
X-Google-Thread: 1033f5,a03b6145ccad230a
X-Google-Thread: f7810,a03b6145ccad230a
X-Google-Thread: f7796,a03b6145ccad230a
```

```
X-Google-Thread: 107ada,a03b6145ccad230a
X-Google-Thread: 10e8ad,a03b6145ccad230a
X-Google-Thread: 10bf43,cd3e01e19160db88
X-Google-Thread: 107ada,a03b6145ccad230a
X-Google-Attributes:
gid10ed5f,gid1033f5,gidf7810,gidf7796,gid107ada,gid10e8ad,gid10bf43,gid107ada,doma
inid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!Xl.tags.giganews.com!
border1.nntp.dca.giganews.com!nntp.giganews.com!local02.nntp.dca.giganews.com!
nntp.got.net!news.got.net.POSTED!not-for-mail
NNTP-Posting-Date: Thu, 22 Jan 2009 19:34:57 -0600
From: dloydlavies@gmail.com
Newsgroups: alt.ham-radio,alt.ham-radio.digital-voice,alt.ham-radio.dxing,alt.ham-
radio.morse,rec.radio.amateur.misc,rec.radio.amateur.space,rec.radio.amateur.polic
y,rec.radio.amateur.misc
Subject: Re: Earthquake In China
Date: Thu, 22 Jan 2009 20:40:21 -0500
Message-ID: <qt7in45ig56drv97g894srgcis7j1r53au@4ax.com>
References: <AIlWj.137167$Cj7.7432@pd7urf2no>
<kcs1n4h5f8njha15ue8jt6ocbue38d0fig@4ax.com>
X-Newsreader: Forte Free Agent 3.3/32.846
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Lines: 63
X-Usenet-Provider: http://www.giganews.com
NNTP-Posting-Host: 69.19.113.131
X-Trace: sv3-sf4jrM7F/
obadkOV2pXthk8F4CiW6HwXDuDWNB0o5w+XMBCDSZNguyt7+dkjs6XiIPIXV+wsoyp6GHA!
UqM9NTqCJhpkdIZp9P+V+f/JwyBVogNGgOq9LE8cDW1i8uGQqkoolESQ4aJq89D3utZFZfZIrzh9!VBGF
X-Abuse-and-DMCA-Info: Please be sure to forward a copy of ALL headers
X-Abuse-and-DMCA-Info: Otherwise we will be unable to process your complaint
properly
X-Postfilter: 1.3.39
Xref: g2news1.google.com alt.ham-radio:751 alt.ham-radio.digital-voice:14 alt.ham-
radio.dxing:428 alt.ham-radio.morse:26 rec.radio.amateur.misc:3031
rec.radio.amateur.space:156 rec.radio.amateur.policy:21282

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>>COMMUNICATION.
>>
>>Michael Chen, BD5RV/4""
>>


From 5452114451105566377
X-Google-Thread: 10e8ad,df644e259c841ffc,start
```

```
X-Google-Thread: 10b9c8,df644e259c841ffc,start
X-Google-Attributes: gid10e8ad,gid10b9c8,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news2.google.com!newsfeed2.dallas1.level3.net!
news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-022 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Sat, 24 Jan 2009 00:05:05 EST
Organization: The Radio Amateur Satellite Corporation
Lines: 1556
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <003001c97de1$492e6260$db8b2720$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix2.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1232773505 28463 166.84.1.2 (24 Jan 2009 05:05:05 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sat, 24 Jan 2009 05:05:05 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news2.google.com rec.radio.amateur.space:182 rec.radio.info:543
```

This report is organized into five (5) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites
Part 5 (S5) - deorbited/returned satellites

SB SAT @ AMSAT W8ISS ANS-022.S1
WSR 022 Part 1 01/22/2009

AMSAT NEWS SERVICE BULLETIN 022.S1
FROM AMSAT HQ SILVER SPRING, MD, January 22, 2009
TO ALL RADIO AMATEURS
BID: $ANS-022.S1

DO-64 Delfi-C3

Catalog number: 32789
Launch Date: April 28, 2008

Status: OPERATIONAL
Current Mode: Science Mode - Beacon ONLY
Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink: 435.530 to 435.570 MHz

Proposed Frequencies:
Primary telemetry downlink: 145.870 MHz 1200 Baud BPSK AX.25 400mW
Backup telemetry downlink: 145.930 MHz 1200 Baud BPSK AX.25 400mW
Linear transponder passband downlink: 145.880 - 145.920 MHz(inverting)
Linear transponder passband uplink: 435.570 - 435.530 MHz
Transponder mode beacon: 145.870 MHz CW (10dB below transponder PEP)

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68
[01012009]
=====
VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.859330 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is active. Each transponder has a different beacon.
[08072008]
=====

AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Modes:	FM Repeater	-	V-FM/u-FM
	BBS	-	L-9k6/u-9k6
	Telemetry	-	/u

Analog voice downlink:	435.300 MHz FM
	435.150 MHz FM
	2401.200 Mhz FM
Analog voice uplink:	145.880 MHZ FM
	145.880 MHz USB
	145.920 MHz FM
	1268.700 MHz FM
Digital Downlinks:	435.150 MHz FM 38k4 PBP, 1 watt output
	435.150 MHz FM 9k6 Pacsat Broadcast Protocol
	2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:	145.860 MHz FM 9k6 Pacsat Broadcast Protocol
	1268.700 mhz FM 9k6 PBP Digital
Beacon:	435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[01222009]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002

Status: Operational.

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:

V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz. The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10 minute timer.

[05282007]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Operational
Current Mode: V/u (Mode JA)

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
145.870 MHz FM
145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage:
http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts.htm

```
[01012009]
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993

Status: OFF - Reload software

Current Mode: V/u

Uplink:   145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[10092008]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational

Current Mode: Alternating between Mode A and B every 24 hours

Uplink:   145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink:  29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons:   29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/

AO-7 Usage Guidelines on the AO-7 Log and Resource Site located at:
http://www.planetemily.com/ao7
[05282007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
```

Current Active Modes:
FM Repeater - U/v
Voice - V/v
BBS - V/v
APRS - V/v
SSTV - V/v

Expedition 18 Crew:

Commander:	Mike Fincke	KE5AIT
Flight Engineer:	Yury Lonchakov	RA3DT
Flight Engineer:	Sandra Magnus	KE5FYE

Available Modes and Frequencies:

Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 9k6
Worldwide packet downlink: 145.825 Mhz FM 9k6

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear
L: LHCP

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines

Remember that the crew operates on UTC time. Also, all of the time line is NOT translated from Russian and posted.
[01222009]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-022.S2
WSR 022 Part 2 01/22/2009

AMSAT NEWS SERVICE BULLETIN 022.S2
FROM AMSAT HQ SILVER SPRING, MD, January 22, 2009
TO ALL RADIO AMATEURS
BID: $ANS-022.S2

RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number:
Launch Date: May 23, 2008

Status: Operational

Curent Mode: Telemetry
Audio
Images

Downlinks: 435.315 MHz
435.215 MHz
[05292008]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.
[11152007]
=====
CP3
Catalog Number: 31128
Launch Date: April 17,2007

Status: Operational

Current Mode: /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25

```
[07302007]
=====
GENESAT-1 ?O-??
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Current Mode: /u

Telemetry Beacon Downlink: 437.0670 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[01082007]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon:             437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
[03262007]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003

Status: Operational

Current Mode: /u

Beacon:     436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[01082007]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006
```

```
Status: Operational?

Uplink:  1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[12182008]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW
[08132007]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Modes:   FM Repeater - V-FM/us-FM
                 BBS         - L-9k6/u-9k6
                 Telemetry   -  /u

Analog voice downlink:     435.300 MHz FM
                           435.150 MHz FM
                          2401.200 Mhz FM
Analog voice uplink:       145.880 MHZ FM
                           145.880 MHz USB
                           145.920 MHz FM
                          1268.700 MHz FM
Digital Downlinks:        435.150 MHz FM 38k4 PBP, 1 watt output
                          435.150 MHz FM 9k6 Pacsat Broadcast Protocol
                         2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:           145.860 MHz FM 9k6 Pacsat Broadcast Protocol
                         1268.700 mhz FM 9k6 PBP Digital
Beacon:                   435.150 MHz
```

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[01222009]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Semi-operational

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[09242007]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Non-Operational

Current Modes: V/U
               L/U

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks: 145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11

BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[12042007]
=====
RS-22 RADIO SPORT RS-22
Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only

Current Mode: /u

CW Beacon - 435.352 MHz
            145.818 MHz
[08062007]
=====
Can X-2
Catalog number:
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[05292008]
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink: 437.425 MHz

For the latest project status update please visit the AAUSAT-II web page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[05292008]
=====
CO-65 Cute-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink: 437.475 MHz 9k6 Packet
Uplink: 1267.600 Mhz

For the latest project status update please visit the Cute-1.7+APD II
web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78
[07312008]
=====
Compass-1
Catalog number: 32787
Launch Date: April 28, 2008

Status: IN ORBIT

```
Downlink: 437.275 Mhz CW
          437.405 MHz Packet
```

For the latest project status update please visit the Compass 1 web
page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52
[05292008]
=====
CO-66 Seeds II
Catalog number:
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.485 MHz

For the latest project status update please visit the Seeds 2 web
page: http://cubesat.aero.cst.nihon-u.ac.jp/english/main_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36
[12042008]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

```
Current Active Modes: FM Repeater - U/v
                      Voice -       V/v
                      BBS -         V/v
                      APRS -        V/v
                      SSTV -        V/v

Expedition 18 Crew:
Commander:                Mike Fincke      KE5AIT
Flight Engineer:          Yury Lonchakov   RA3DT
Flight Engineer:          Sandra Magnus    KE5FYE


Available Modes and Frequencies:

Digital/APRS:
Worldwide packet uplink:   145.825 MHz FM 9k6
Worldwide packet downlink: 145.825 Mhz FM 9k6

Voice:
Region 1 voice uplink:     145.200 MHz FM
Region 2/3 voice uplink:   144.490 MHz FM
Worldwide downlink:        145.800 MHz FM

Crossband Repeater:
Repeater Uplinks:         1269.650 MHz FM
                           437.800 MHz FM
                           145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink:         145.800 MHz FM
                           437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink:                  145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear
L: LHCP

Callsigns:
Belgian:                   OR4ISS
German:                    DP0ISS
Russian:                   RS0ISS
                           RZ3DZR
United States:             NA1SS
Packet Mailbox:            RS0ISS-11
Digipeater callsign:       ARISS

Official ARISS Webpage:    http://www.rac.ca/ariss
ISS Fan Club Webpage:      http://www.issfanclub.com
APRS tracking page:        http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[01222009]
NNNN
/EX
```

SB SAT @ AMSAT W8ISS ANS-022.S3
WSR 022 Part 3 01/22/2009

AMSAT NEWS SERVICE BULLETIN 022.S3
FROM AMSAT HQ SILVER SPRING, MD, January 22, 2009
TO ALL RADIO AMATEURS
BID: $ANS-022.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

CP4
Catalog Number: 31122
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon: 437.325 MHz CW

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=79
[10022008]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: Non-Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder: 145.825 Mhz FM
[01012009]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894

Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 MHz FM 67Hz CTCSS
Voice Downlink: 2401.835 MHz FM
Packet Up/Downlink: 437.250 MHz 9k6 packet
Packet Downlink   2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non=Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[08132007]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Non-Operational

Uplinks: 145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

```
TiungSat-1, named after the mynah bird of Malaysia, was developed as
a collaborative effort between the Malaysian government and Surrey
Satellite Technology Ltd.
[007302007]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink:   145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS:                SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink:   145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
```

```
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
V-band:   145.840 -  145.990 MHz CW/LSB
U-band:   435.550 -  435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks
---------
S2-band:  2401.225 -  2401.475 MHz CW/USB
K-band:  24048.010 - 24048.060 MHz CW/USB
Beacon:   2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)
----------------------------
BEACON   General Beacon(GB)  Middle Beacon(MB)  Engineering Beacon(EB)
2 m                   none        145.898 MHz                    none
70cm           435.438 MHz        435.588 MHz             435.838 MHz
13cm(1)       2400.188 MHz       2400.338 MHz            2400.588 MHz
13cm(2)       2401.173 MHz       2401.323 MHz            2401.573 MHz
3cm          10450.975 MHz      10451.125 MHz           10451.375 MHz
1.5cm        24047.885 MHz      24048.035 MHz           24048.285 MHz
[07162007]
=====
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink:    145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12
```

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: ?
Launch date:February 23, 1999

Status: Non-Operational

```
Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater:         436.250 MHz

Uplinks: Mode B Repeater:  145.825 MHz
Mode J Digipeater:         145.825 MHz
                           145.900 MHz
```

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

```
Uplink:   145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Non-operational

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign:       POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012009]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational
```

```
Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
```

Uplink: 145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks: 145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
LIBERTAD-1
Catalog Number: 31129
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink: 145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[10222007]
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990

Status: CW Beacon only

Uplinks: 145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink: 437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[01222007]
=====
WO-18 WEBERSAT

```
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
[05012006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: SEMI-Operational

Current Mode:  V/u

Uplink:         145.900 MHz FM 1200-baud Manchester FSK (reserved)
                145.920 MHz FM VOICE
                145.940 MHz FM 1200-baud Manchester FSK (reserved)
                145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink:       437.026 MHz USB VOICE
                (1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[12252008]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational
```

```
Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984

Status: Non-operational.

Current Mode:  /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon:          435.025 MHz
Mode-S Beacon:     2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[01012009]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB
```

```
Beacon:   145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink  29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
Beacons:   29.450 MHz
          435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965
```

```
Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon 1:  29.352 MHz (intermittent)
Beacon 2:  29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink:     21.260 to 21.300 MHz CW/USB
Downlink:  145.860 to 145.900 MHz CW/USB

Beacon:    145.860 MHz

Robot:     145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink:   21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon:   29.408 MHz

Robot:    29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-022.S4
```

WSR 022 Part 4 01/22/2009

AMSAT NEWS SERVICE BULLETIN 022.S4
FROM AMSAT HQ SILVER SPRING, MD, January 22, 2009
TO ALL RADIO AMATEURS
BID: $ANS-022.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE PROPOSED FOR LAUNCH
AT THIS TIME:

KAGAYAKI (Solan Co.)
Catalog Number:
Proposed Launch Date: January 21, 2009

Status: Launch Phase

Reported Frequncy and Modes:
Downlink: 437.375 MHZ   FSK9k6/CW
Beacon: 437.375 MHz   FSK9k6/CW

IARU coordination status page:

[01152009]
=====
STARS (Kagawa Univ.)
Catalog Number:
Proposed Launch Date: January 21, 2009

Status: Launch Phase

Reported Frequncy and Modes:
Downlinks: 437.485 MHz FM/CW
           437.465 MHz FM/CW
Beacons: 437.305 MHz FM/CW
           437.275 MHz FM/CW

Callsigns: JR5YBN
           JR5YBO

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=99
[01152009]
=====
KKS-1 (Tokyo MCIT)
Catalog Number:
Proposed Launch Date: January 21, 2009

Status: Launch Phase

Proposed Frequencies and Modes:
Downlink: 437.455 MHz AFSK/CW
Beacon: 437.385 MHz AFSK/CW

```
Callsign: JQ1YYY

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=107
[01152009]
=====
PRISM (Tokyo Univ.)
Catalog Number:
Proposed Launch Date: January 21, 2009

Status: Launch Phase

Proposed Frequencies and Modes:
Downlink: 437.425 MHz AFSK/GMSK/CW
Beacon:   437.250 MHz AFSK/GMSK/CW

Callsign: JQ1YCX

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=97
[01152009]
=====
SOHLA-1 (ASTRO TECH.)
Catalog Number:
Proposed Launch Date: January 21,2009

Status: Launch Phase

Proposed Frequencies and Modes:
Downlink: 437.505 MHz AFSK/CW
Beacon:   437.505 MHz AFSK/CW

Callsign:

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=101
[01152009]
=====
UNITEC
Catalog Number:
Proposed Launch Date: May 2010

Status: Design Phase

Proposed Equipment:

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=141
[01152009]
=====
XW-1
Catalog Number:
Proposed Launch Date: Summer 2009?
```

Status: Design Phase

Proposed Equipment:
Beacon: 435Mhz, CW 20dBm
Linear transponder: RX: 145Mhz, TX: 435Mhz, 40KHz, 30dBm
FM Transponder: RX: 145Mhz, TX: 435Mhz, 16KHz, 30dBm
Digital store and forward transponder: RX: 145Mhz, TX: 435Mhz, 16KHz,
30dBm

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108
[10092008]
=====
Phase 5a Mars Mission AO-??
Catalog Number:
Proposed Launch Date: 2009 or 2011

Status: Design Phase

For the latest project status update please visit the AMSAT-DL P5-A web page:
http://ticket-to-mars.org
[01222007]
=====
PHASE 3E AO-??
Catalog number:
Proposed Launch Date: Late 2008

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/
[01222007]
=====
Eagle AO-??
Catalog Number:
Proposed Launch Date: Early/Mid 2009

Status: Design Phase

For the latest project status updates please visit the AMSAT-NA web page: http://www.amsat.org
[01222007]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-022.S5
WSR 022 Part 5 01/22/2009

AMSAT NEWS SERVICE BULLETIN 022.S5
FROM AMSAT HQ SILVER SPRING, MD, January 22, 2009

TO ALL RADIO AMATEURS
BID: $ANS-022.S5

THE FOLLOWING SATELLITES HAVE RE-ENTERED OR HAVE BEEN RETURNED SAFELY:

NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: July 28, 2008

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[01012009]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink: 145.825 Mhz FM APRS AX25
APRS Uplink: 145.825 MHz FM APRS AX25
Voice/PSK31 Uplink: 28.120 MHz

Packet to Voice ID: RAFT
[06112007]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Re-Entered
Re-entered: June 18, 2008

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon: 437.2750 MHz CW

Callsign: JR8YJT
[01012009]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at} amsat.org
NNNN

/EX

```
From -7135260136118951888
X-Google-Thread: 10e8ad,52079eb8a05f7e5f,start
X-Google-Thread: 10b9c8,52079eb8a05f7e5f,start
X-Google-Attributes: gid10e8ad,gid10b9c8,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII
Path: g2news2.google.com!news2.google.com!newsfeed2.dallas1.level3.net!
news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-025 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sun, 25 Jan 2009 21:27:23 EST
Organization: The Radio Amateur Satellite Corporation
Lines: 219
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <001e01c97f5d$99f13e20$cdd3ba60$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix3.panix.com
Mime-Version: 1.0
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Content-Transfer-Encoding: quoted-printable
X-Trace: reader1.panix.com 1232936843 19511 166.84.1.3 (26 Jan 2009 02:27:23 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Mon, 26 Jan 2009 02:27:23 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news2.google.com rec.radio.amateur.space:183 rec.radio.info:545
```

AMSAT NEWS SERVICE
ANS-025

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* GOSAT + Six SatPals Successfully Launched By Japan
* SKN Best Fist Winners
* Latest AMSAT Awards
* ARISS Status - 19 January 2009

SB SAT @ AMSAT $ANS-025.01
GOSAT + Six SatPals Successfully Launched By Japan

AMSAT News Service Bulletin 025.01
   From AMSAT HQ SILVER SPRING, MD.
January 25, 2009
To All RADIO AMATEURS
BID: $ANS-025.01

GOSAT + Six SatPals Successfully Launched By Japan

JAXA GOSAT launch site Japan has launched a satellite whose focus will be to observe the concentration distribution of greenhouse gases from space. The launch of the Ibuki satellite (also known by GOSAT - Greenhouse Gases Observing Satellite) took place on January 23rd at 03:54 UTC from the LP1 launch platform of the Yoshinubo launch complex on Tanegashima. Ibuki has a approximate mass of 1750 kg. Is equipped with two solar panels that generate 3.8 kW. The satellite will operate for 5 years on a sun-synchronous sub-recurrent orbit with a inclination of 98 degrees.
The small satellites with Amateur Radio capabilities launched with this satellite are SDS-1, SOHLA-1, SPRITESAT, PRISM, KKS-1, STARS-1, and the KAGAYAKI. Further information, frequencies and keplerian data can be found on the AMSAT website. We have some new stars to be pointing to and check the website often as more information is passed on.

[ANS thanks Masa, JN1GKZ,for the above information]

/EX

SB SAT @ AMSAT $ANS-025.02
SKN Best Fist Winners

AMSAT News Service Bulletin 025.02
   From AMSAT HQ SILVER SPRING, MD.
January 25, 2009
To All RADIO AMATEURS
BID: $ANS-025.02

Many thanks to all who participated in AMSAT's Straight Key Night on OSCAR 2009. Thanks in large part to the popularity of AO-51, we have a record 24 Best Fist winners this year. Participation outside North America was especially high, especially in Asia, a trend which we hope will continue.

The following amateurs each received at least one Best Fist nomination from someone they worked:

AA5PK, I6IBE, JA1COU, JA0CAW, JE4QGF, JG5WLV, JM1LRA, JN1UEP/4, JO3MQY,
JR0EFE, K8DID, K9QHO, K0RJS, KN4OK, N3TL, N4ZQ, N5AFV, N7EQF, W6ASL,
WA6ARA, WA8HOK, WA8SME, 9A5YY, 9M6YBG

See you next year!

73,

Ray W2RS

[ANS thanks Ray Soifer, W2RS, for the
above information]

/EX

SB SAT @ AMSAT $ANS-025.03
Latest AMSAT Awards

AMSAT News Service Bulletin 025.03
From AMSAT HQ SILVER SPRING, MD.
January 25, 2009
To All RADIO AMATEURS
BID: $ANS-025.03

We are starting the New Year with a new U.S. President and a few new award recipients. A couple of these awards were issued at the end of 2008.

We would like to welcome the following to the satellite community. They have made their first satellite contact and are now members of the AMSAT Satellite Communicators Club.

Gail McDaniel, KB0RZD
Thomas Lepley, KX3TL

The following have earned the AMSAT Satellite Communications Achievement Award.

Ivo Brungera, I6IBE, #476
Clayton Freund, WB5TOI, #477
Gail McDaniel, KB0RZD, #478
Joe Seibert, AL1F, #479

The following have earned the AMSAT South Africa Satellite Communications
Achievement Award.

Ivo Brugnera, I6IBE, #US128
Gail McDaniel, KB0RZD, #US129

To see all the awards visit http://www.amsat.org or
http://www.amsatnet.com

Bruce Paige, KK5DO
AMSAT Director Contests and Awards

[ANS thanks Bruce, KK5DO, for the above information]

/EX

SB SAT @ AMSAT $ANS-025.04
ARISS Status - 19 January 2009

AMSAT News Service Bulletin 025.04
   From AMSAT HQ SILVER SPRING, MD.
January 25, 2009
To All RADIO AMATEURS
BID: $ANS-025.04

1. Upcoming School Contacts

Children's Hospital of Eastern Ontario in Ottawa, Canada was successful via Amateur Radio on the International Space Station (ARISS) contact on Tuesday, January 20 at 18:06 UTC via telebridge station ON4ISS in Belgium. A space club has been formed at the hospital and those children participating in the club have learned about the ISS via videos, the internet and guest speakers. They learned to use correct radio protocol and have tracked and plotted the course of the ISS. They have also created artwork displayed during the contact. Media coverage of the event was a success.

An Amateur Radio on the International Space Station (ARISS) contact has been scheduled for Castor Valley Elementary School in Greely, Ontario, Canada on Tuesday, January 27 at 19:30 UTC. A space club has been formed at the school for grades 1-8. Students from this group will ask questions of the astronaut. Students have learned about the ISS via video, internet and through guest speakers. They have been taught the correct radio protocol and have tracked and plotted the course of the ISS. All classes have taken part in space projects and activities. Media, members of the community, the school board and other dignitaries have been invited to attend.

An Amateur Radio on the International Space Station (ARISS) contact has been scheduled with CERAM EAI in Sophia Antipolis, Alpes Maritimes, France. The contact will take place on Thursday, January 29 at 14:54 UTC via telebridge station VK4KHZ in Australia. CERAM University conducts research projects in aviation, engineering and IT. Amateur radio communication has been introduced to students to prepare for the contact. Newspaper and television coverage is anticipated and webcast retransmission is possible.

Ecole & Coll�ge Jean XXIII, a private primary & secondary school in Pamiers, France, will experience an Amateur Radio on the International Space Station (ARISS) contact on Friday, January 30 at approximately 13:08 UTC. Five hundred students, ages 3 to 15 years old, attend the school. Students in the third cycle classes (3rd - 5th grades) and those in their second year of secondary school have studied radio communications. Radio operators from "l'Institut de D�veloppement des Radiocommunications par l'Enseignement" (IDRE) have introduced radio technology to the children. Topics covered included remote command use, introduction to Morse code, ham radio phone contact, distress beacon search, electronic kits, and different ham radio station possibilities. This ARISS activity has been incorporated into the educational subjects of Astronomy, History of Space Exploration, Geography and Writing.

2. Richard Garriott Debrief

An Amateur Radio on the International Space Station (ARISS) program debriefing session was held with spaceflight participant Richard Garriott, W5KWQ, on Tuesday, January 13. Richard gave a status on the ISS Ham equipment onboard the ISS and provided valuable feedback on ARISS operations.

3. Cosmonaut Training Status

Cosmonaut Dmitri Kondratiev received training on the Amateur Radio on the International Space Station (ARISS) equipment. He is scheduled to fly on Expedition 20. Photos of the training session are available on the Energia Web site. See:
http://www.energia.ru/eng/iss/iss20/photo_01-14.html

[ANS thanks Carol, KB3LKI, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Dee Interdonato, NB2F

From 3611626043818172528

```
X-Google-Thread: 10e8ad,f4c8c9b28d297e50,start
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X-Google-Language: ENGLISH,ASCII
Path: g2news2.google.com!news2.google.com!newsfeed2.dallas1.level3.net!
news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-032 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sat, 31 Jan 2009 22:08:00 EST
Organization: The Radio Amateur Satellite Corporation
Lines: 438
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000801c9841a$46768b80$d363a280$@net>
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NNTP-Posting-Host: panix6.panix.com
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X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 1 Feb 2009 03:08:00 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-language: en-us
Xref: g2news2.google.com rec.radio.amateur.space:184 rec.radio.info:552
```

AMSAT NEWS SERVICE
ANS-032

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:

* You Can Tune the Delfi-C3 WebSDR Station

* DELFI-C3 in Science Mode
* Call For Papers/Presentations 35th Eastern VHF/UHF Conference
* SSETI Express on 437.250 MHz?
* Satellite Shorts From All Over
* K6DUE Call Now Part of ISS Amateur Radio Club
* ARISS Status Report for the Week of January 26, 2009

SB SAT @ AMSAT $ANS-032.01
You Can Tune the Delfi-C3 WebSDR Station

AMSAT News Service Bulletin 032.01
>From AMSAT HQ SILVER SPRING, MD.
February 1, 2009
To All RADIO AMATEURS
BID: $ANS-032.01

The Delfi-C3 control team has set up a WebSDR station at their satellite command ground station in Delft, The Netherlands. Their WebSDR station consists of receivers hooked up to a PC and then the internet to enable multiple users to tune in to different signals simultaneously.

At Delft one receiver is for VLF reception and one is currently used for the 70cm satellite segment. Amateur Radio users can access this unique experiment at http://websdr.pa3weg.nl/. Please note that the Delfi team may occasionally retune the receivers to experiment with them.

The hardware was built by Wouter-Jan Ubbels PE4WJ. The WebSDR software was written by Pieter-Tjerk de Boer, PA3FWM. A beta testing phase was begun in November 2008 with a few selected stations. Upon completion of the test phase the software will be made available to the public on the WebSDR project at http://www.websdr.org.

Many thanks to Pieter-Tjerk de Boer, PA3FWM for providing this software and Wouter Jan Ubbels, PE4WJ for building the receiver and providing the high sample rate sound card!

The Delfi-C3 Team's WebSDR receiver was used to copy and plot the downlink from the STARS satellite. Screen shots of this experiment can be viewed at:
http://www.pa3weg.nl/websdr/STARS_snapshot1_1024.png
http://www.pa3weg.nl/websdr/STARS_snapshot2_1024.png
http://www.pa3weg.nl/websdr/STARS_snapshot3_1024.png
http://www.pa3weg.nl/websdr/STARS_snapshot4_1024.png

[ANS thanks Wouter PA3WEG for the above information]

/EX

SB SAT @ AMSAT $ANS-032.02

DELFI-C3 in Science Mode

AMSAT News Service Bulletin 032.02
>From AMSAT HQ SILVER SPRING, MD.
February 1, 2009
To All RADIO AMATEURS
BID: $ANS-032.02

Wouter Jan Ubbels, PE4WJ reported that the Delfi-C3/DO-64 team this week commanded the satellite into its science mode of operation. After examination of telemetry and user reports the team concluded that the linear transponder is no longer operational.

Delfi-C3/DO-64 has been operating in basic mode (a mode in which only housekeeping mode is transmitted) for a number of months in order to investigate this issue.

To make the best use of remaining satellite function the team switched the satellite back to science mode. This mode yields valuable science data about the Thin Film Solar Cell payload and the Autonomous Wireless Sun Sensor payload which are the primary mission goals. The satellite will use the primary downlink at 145.870MHz, transmitting 1200 Baud AX.25 BPSK data. Note that the satellite reboots on 145.870 MHz whene it comes out of eclipse because there is no battery on board. It is possible, that the satellite may reboot on 145.930 MHz backup downlink. If you hear Delfi-C3 / DO-64 on this frequency, your reports are highly appreciated!

In contrast to basic mode operation where the downlink is on continuously, downlink drop outs are likely to occur in science mode. It is is possible that the satellite may not transmit during the entire pass while in sunlight. If you hear the satellite, your reports are very much appreciated! The Delfi team regularly posts the satellite status on the Oscar status page at http://oscar.dcarr.org/ and encourage you to do so as well.

Delfi telemetry can be received using the RASCAL program, which is available at http://www.delfic3.nl/rascal At this moment, the total amount of frames has exceeded the 500000 mark which amounts to approximately 72.14 MB reported by Amateur Radio stations.

[ANS thanks Wouter Jan Ubbels, PE4WJ and the Delfi-C3 team for the
 above information]

/EX

SB SAT @ AMSAT $ANS-032.03
Call For Papers/Presentations 35th Eastern VHF/UHF Conference

AMSAT News Service Bulletin 032.03
>From AMSAT HQ SILVER SPRING, MD.
February 1, 2009

To All RADIO AMATEURS
BID: $ANS-032.03

Conference Chairman and Proceedings Editor Bruce Wood, N2LIV invites you to participate in the 35th Eastern VHF/UHF Conference by presenting a technical paper or submitting one for publication in the Conference Proceedings CD.

The aim of the Conference is to share with our fellow VHFer's and above technical achievements in the field of communication and experimentation. Your attendance is also welcome and a full program is scheduled once again this year. If you are interested in presenting a paper at the conference or submitting one for the Proceedings please contact: Bruce Wood, N2LIV at N2LIV@ARRL.NET.

For the technical presentations, PowerPoint presentations are preferred, but not required. You do not need to be a speaker to have your material included in the proceedings, just interested in sharing with your fellow radio enthusiasts, so please send it along by MARCH 15, 2009.

In addition to our technical presentations and world famous Band sessions we'll have a new LAB Session with Noise Figure, Gain and Power Measurements and a Manufacturers Demo area which will be open Saturday afternoon. We encourage you to bring equipment to test. We'll also have Greg Bonaguide, WA1VUG of Rohde & Schwarz America to manage the preamp noise figure and gain measurement Lab Session (0MHz-50GHz), and Mark Casey, K1MAP to head up the Sunday morning flea market. Art Holmes W1RZF will head the Prize Donations.

Full details can be found at: http://www.newsvhf.com/vhfconf.html

35th EASTERN VHF/UHF CONFERENCE:
APRIL 17-19, 2009
CROWNE PLAZA HOTEL (860)-741-2211
1 BRIGHT MEADOW BLVD. (OFF RT.5)
ENFIELD, CT 06082

[ANS thanks Bruce Wood, N2LIV for the above information]

/EX

SB SAT @ AMSAT $ANS-032.04
SSETI Express on 437.250 MHz?

AMSAT News Service Bulletin 032.04
>From AMSAT HQ SILVER SPRING, MD.
February 1, 2009
To All RADIO AMATEURS
BID: $ANS-032.04

Graham, G3VZV mentioned that Amateur Radio operators may just have a a very small chance of also hearing signals from XO53 - SSETI Express.

SSETI Express was launched in November 2005 but, due to a failure within the power supply system on board, signals were only heard for a few hours. Investigations made after the launch indicate that it is just possible that the offending short circuit FET devices may, one day,

go open circuit. This would allow power from the solar panels to again reach the electronics. It can be assumed that the batteries are pretty useless by now so it would only be likely to operate when in sunlight.

SSETI Express was on 437.250 MHz - the same frequency as is now being used by Japan's new PRISM satellite launched on January 23, 2009. If by any chance you hear any strange noises on the frequency to please let Graham know. In this context, "strange noises" could be either short bursts of 9k6 data or even some very unusual "CW like" signals. If these signals are present you may be copying a sub 1 second burst of AX25 telemetry every 18 seconds or simple on/off telemetry comprising 16 x 100msec carrier pulses which cycle either every 30 seconds or every 2 minutes.

Graham summarized, "Similar satellite returns have happened in the past!"

[ANS thanks Graham, G3VZV for the above information]

/EX

SB SAT @ AMSAT $ANS-032.05
Satellite Shorts From All Over

AMSAT News Service Bulletin 032.05
>From AMSAT HQ SILVER SPRING, MD.
February 1, 2009
To All RADIO AMATEURS
BID: $ANS-032.05

+ Satellite DX! Congratulations Joe, K3SZH for 8000 QSOs via AO-7. Joe was copied in Brazil by PU2BFG in Mode B. Jean, F2IL has now completed 4000 plus qsos via AO7. Congratulations Zlatko, 9A2SB on your 1000 plus QSOs on AO7 in modes A&B. On January 15 Clare VE3NPC worked CU2JX via AO-51 mode L/U.

+ Mike DK3WN has released software for the two new Japanase PRISM and STARS satellites - CW TLM decoders.
  See: http://www.dk3wn.info/software.shtml

+ Universe Today has a series of YouTube videos which give you a personal tour of the ISS:

http://www.universetoday.com/2009/01/26/take-a-personal-tour-of-the-iss/

+ Bob, WB4APR is asking for help from antenna experts on very-short, yet broadband antennas. Size: on the order of 3 feet or less; operating freq: 10 MHz; BW: 500 KHz. Contact wb4apr@amsat.org if you can help.

+ Congratulations to Roberto, IW5BSF who has been named Coordinator A.R.I Satelliti ITALY by the Associazione Radiomatori Italy.

[ANS thanks everyone for the above information]

/EX

SB SAT @ AMSAT $ANS-032.06
K6DUE Call Now Part of ISS Amateur Radio Club

AMSAT News Service Bulletin 032.06
>From AMSAT HQ SILVER SPRING, MD.
February 1, 2009
To All RADIO AMATEURS
BID: $ANS-032.06

Via Amateur Radio Newsline Report 1642 - January 30 2009

The K6DUE callsign of the late NBC Newsman Roy Neal is now the call of the International Space Station Amateur Radio Club. According to ARISS International Chairman Frank Bauer, KA3HDO, the call letters will initially be used for ground station operations but may be used for other activities in the future.

For those not aware, Roy Neal, K6DUE, spent more than five decades as a broadcaster specializing in science and aerospace reporting for the National Broadcasting Company. He is generally credited with convincing then NASA chief Jess Moore to permit ham gear to be flown on board the early space shuttle missions. The first of these was STS-9 that carried Spacelab One and Mission Specialist Owen Garriott, W5LFL, who made the first-ever ham radio contacts from a spacecraft on-orbit.

After Garriott's successful flight, Neal and several others formed the group known as SAREX -- the Shuttle Amateur Radio Experiment. Later called the Space Amateur Radio Experiment, it was a program that promoted and supported the use of amateur radio by astronauts in low earth orbit aboard the United States Space Shuttle. This, to communicate with other amateur radio stations around the world especially those in classrooms as a scientific demonstration. It was superseded by the Amateur Radio on the International Space Station or ARISS program that we hear so much about today.

Roy Neal, K6DUE, passed away at age 82 on August 15, 2003, following open heart surgery. On November 11th 2003 the Amateur Radio on the International Space Station organization announced an on-the-air event to commemorate Roy Neal's lifetime of achievements in ham radio. Now, with the acquisition of his K6DUE call letters by the International Space Station Amateur Radio Club, Roy Neal's contributions to manned ham radio operations from space will live on in perpetuity.

[ANS thanks ARNewsline� and Frank Bauer, KA3HDO for the above information]

/EX

SB SAT @ AMSAT $ANS-032.07
ARISS Status Report for the Week of January 26, 2009

AMSAT News Service Bulletin 032.07
>From AMSAT HQ SILVER SPRING, MD.
February 1, 2009
To All RADIO AMATEURS
BID: $ANS-032.07

1. School Contacts

An ARISS contact was completed with Castor Valley Elementary School in Greely, Ontario, Canada on Tuesday, January 27. A space club at the school was formed for grades 1-8. Students from this group asked questions of the astronaut. Students have learned about the ISS via the internet and videos and through guest speakers. They have been taught the correct radio protocol and have tracked and plotted the course of the ISS. All classes have taken part in space projects and activities. Media, members of the community, the school board and other dignitaries were invited to attend.

An ARISS contact was completed for CERAM EAI in Sophia Antipolis, Alpes Maritimes, France. The contact will take place on Thursday, January 29 via telebridge station VK4KHZ in Australia. CERAM University conducts research projects in aviation, engineering and IT. Amateur radio communications was introduced to students to prepare for the contact.

Ecole & Coll�ge Jean XXIII, a private primary & secondary school in Pamiers, France, completed an ARISS contact on Friday, January 30. Five hundred students, ages 3 to 15 years old, attend the school. Students in the third cycle classes (3rd - 5th grades) and those in their second year of secondary school have studied radio communications. Radio operators from "l'Institut de D�veloppement des Radiocommunications par l'Enseignement" (IDRE) have introduced radio technology to the children. Topics included remote command use, introduction to Morse code, ham radio phone contact, distress beacon search, electronic kits, and different ham radio station possibilities. This ARISS activity has been incorporated into the educational subjects of Astronomy, History of Space Exploration, Geography and Writing.

Humber College Institute of Technology and Higher Learning in Toronto, Ontario, Canada has been scheduled for an ARISS contact on Monday, February 2 at 17:29 UTC. The school has concluded an extensive research period in how waves travel through space and the Earth's atmosphere and plans to put theory into practice. It has assembled the primary ground station right on the main campus, and it is hoped that it will inspire future students in conducting similar studies. With help from the media department and a school contest, the school has been working to involve every student in this project. With over seventy thousand students, which include both full-time and part-time students, the college is excited to promote this project within the community.

Pilton Bluecoat Junior School in Barnstaple, Devon, England has been scheduled for an ARISS contact on Friday, February 6 at 14:48 UTC. The school has planned an event with the theme "Our Home in Space - The Final Frontier," in which students learn about Earth as part of the wider universe. All classes took part in the initial selection of questions; the final questions were chosen by the school council. Students have studied the development of the ISS and the history of man in space. Older children have written press releases.

St�dtisches Gymnasium Herzogenrath in Herzogenrath, North Rhine-Westphalia, Germany has been scheduled for an ARISS contact on Saturday, February 7 at 10:32 UTC. The school has an amateur radio club whose members initiated the ARISS contact. The students prepared a radio exhibition that was shared with the school. The English and History departments have also participated in this activity. Students competed in an essay contest and created projects related to the "Space Race." Newspapers and television stations have been invited to cover the event.

College of Agriculture, Central Agricultural University in Imphhal, Assam, India has been scheduled for an ARISS contact on Sunday, February 8 at 10:06 UTC via telebridge station VK4KHZ in Australia.

2. Children's Hospital Contact Successful

On Tuesday, January 20, patients at the Children's Hospital of Eastern Ontario in Ottawa, Canada spoke with Sandra Magnus, KE5FYE, during an ARISS contact. The children asked 16 questions of the astronaut via telebridge station ON4ISS in Belgium. Due to the hospital's infection protocol, media was kept from the event and unable to access or interview the students directly. A representative from another children's hospital in Calgary was present and was very impressed with the event; he plans to submit an ARISS application for his hospital. The audio was fed into the EchoLink AMSAT and JK1ZRW servers and into the IRLP Discovery reflector 9010. EchoLink received 20 connections from 14 countries, including one link node and two repeaters.

3. Astronaut Training Status

On Friday, January 23, Jeff Williams, KD5TVQ, received a refresher course covering the ARISS radio equipment and operations. Williams is scheduled to launch to the ISS in September and will take over as commander in November 2009.

4. General Voice Contacts

Mike Fincke, KE5AIT and Yuri Lonchakov, RA3DT made several general voice contacts over the last week. Among those contacted were stations in France, Spain, Chile, Italy and the Netherlands.

5. ARRL QST Covers ARISS News

The American Radio Relay League (ARRL) printed 4 ARISS news items in its February 2009 issue of QST.

On page 12, the "In Brief" column (a "what's been happening at ARRL recently) mentions ARISS' 25th commemorative activities

"Inside Hq -- 2008 Year-End Review" (page 13) mentions that ARISS "celebrated its 350th QSO (contact)."

A story on pages 54-55, "Amateur Radio and Public Education Make for a Bright Future" is about a Kentucky high school teacher who included amateur radio in his science curriculum. There is one small part about him being excited about his students being able to garner an ARISS contact.

The "75, 50, and 25 Years Ago" column on page 102 shows the cover of February 1984 QST with Owen Garriott on the front, and the column lists two bullet items for the February 1984-25 years-ago section: the first being about Owen on the cover, and the second being that QST printed an interview of Owen, and it says: "We all hope that Amateur Radio will continue to be a part of the space shuttle missions."

[ANS thanks Carol, KB3LKI for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office. With that recall the amateur radio operator who thought he saw an eye doctor on an Alaskan island, but it was just an optical Aleutian.

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM

```
From -1939533286562515337
X-Google-Thread: 10e8ad,a0001fc6842cab89,start
X-Google-Thread: 10b9c8,a0001fc6842cab89,start
X-Google-Attributes: gid10e8ad,gid10b9c8,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news2.google.com!newsfeed2.dallas1.level3.net!
news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-029 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Sat, 31 Jan 2009 22:08:59 EST
Organization: The Radio Amateur Satellite Corporation
Lines: 1556
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000901c9841a$68e9aad0$3abd0070$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix1.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1233457738 16729 166.84.1.1 (1 Feb 2009 03:08:58 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 1 Feb 2009 03:08:58 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-language: en-us
Xref: g2news2.google.com rec.radio.amateur.space:185 rec.radio.info:553
```

This report is organized into five (5) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites
Part 5 (S5) - deborbited/returned satellites

SB SAT @ AMSAT W8ISS ANS-029.S1
WSR 029 Part 1 01/29/2009

AMSAT NEWS SERVICE BULLETIN 029.S1
FROM AMSAT HQ SILVER SPRING, MD, January 29, 2009
TO ALL RADIO AMATEURS
BID: $ANS-029.S1

```
DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008

Status: OPERATIONAL
Current Mode: Science Mode - Beacon ONLY
Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink:   435.530 to 435.570 MHz

Proposed Frequencies:
Primary telemetry downlink: 145.870 MHz 1200 Baud BPSK AX.25 400mW
Backup telemetry downlink:  145.930 MHz 1200 Baud BPSK AX.25 400mW
Linear transponder passband downlink: 145.880 - 145.920 MHz(inverting)
Linear transponder passband uplink: 435.570 - 435.530 MHz
Transponder mode beacon: 145.870 MHz CW (10dB below transponder PEP)

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68
[01012009]
=====
VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink:   435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink:   435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW


Indian Beacon:  145.859330 MHZ CW
Dutch Beacon:   145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is active. Each transponder has a different beacon.
```

```
[08072008]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Modes:   FM Repeater - L-FM/s-FM
                               V-SSTV/u-SSTV
                 BBS         - OFF
                 Telemetry   - OFF

Analog voice downlink:     435.300 MHz FM
                           435.150 MHz FM
                          2401.200 Mhz FM
Analog voice uplink:       145.880 MHZ FM
                           145.880 MHz USB
                           145.920 MHz FM
                          1268.700 MHz FM 67Hz PL tone
Digital Downlinks:        435.150 MHz FM 38k4 PBP, 1 watt output
                          435.150 MHz FM 9k6 Pacsat Broadcast Protocol
                         2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:           145.860 MHz FM 9k6 Pacsat Broadcast Protocol
                         1268.700 mhz FM 9k6 PBP Digital
Beacon:                   435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[01292009]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002

Status: Operational.

Current Mode: V/u

Uplink:   145.850 MHz FM - 67.0 Hz PL tone
```

Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz. The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10 minute timer.
[05282007]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Operational
Current Mode: V/u (Mode JA)

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage:
http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's
CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts.htm
[01012009]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational

Current Mode: Alternating between Mode A and B every 24 hours

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz CW
145.972 MHz CW
435.100 MHz CW
2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/

AO-7 Usage Guidelines on the AO-7 Log and Resource Site located at:
http://www.planetemily.com/ao7
[05282007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - V/u
Voice - V/v
BBS - V/v
APRS - V/v
SSTV - V/v

Expedition 18 Crew:

Commander:	Mike Fincke	KE5AIT
Flight Engineer:	Yury Lonchakov	RA3DT
Flight Engineer:	Sandra Magnus	KE5FYE

Available Modes and Frequencies:

Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 9k6
Worldwide packet downlink: 145.825 Mhz FM 9k6

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[01082009]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-029.S2
WSR 029 Part 2 01/29/2009

AMSAT NEWS SERVICE BULLETIN 029.S2
FROM AMSAT HQ SILVER SPRING, MD, January 29, 2009
TO ALL RADIO AMATEURS
BID: $ANS-029.S2

RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number:

```
Launch Date: May 23, 2008

Status: Operational

Curent Mode: Telemetry
             Audio
             Images

Downlinks: 435.315 MHz
           435.215 MHz
[05292008]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode:  /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon:    435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.
[11152007]
=====
CP3
Catalog Number: 31128
Launch Date: April 17,2007

Status: Operational

Current Mode:  /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[07302007]
=====
GENESAT-1 ?O-??
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Current Mode: /u

Telemetry Beacon Downlink: 437.0670 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[01082007]
=====
CO-58 CubeSat XI-V
```

```
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon:             437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
[03262007]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003

Status: Operational

Current Mode: /u

Beacon:     436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[01082007]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Operational?

Uplink:  1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[12182008]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003
```

```
Status: Operational

Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW
[08132007]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Modes:   FM Repeater - L-FM/s-FM
                               V-SSTV/u-SSTV
                 BBS         - OFF
                 Telemetry   - OFF

Analog voice downlink:     435.300 MHz FM
                           435.150 MHz FM
                          2401.200 Mhz FM
Analog voice uplink:       145.880 MHZ FM
                           145.880 MHz USB
                           145.920 MHz FM
                          1268.700 MHz FM 67Hz PL tone
Digital Downlinks:        435.150 MHz FM 38k4 PBP, 1 watt output
                          435.150 MHz FM 9k6 Pacsat Broadcast Protocol
                         2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:           145.860 MHz FM 9k6 Pacsat Broadcast Protocol
                         1268.700 mhz FM 9k6 PBP Digital
Beacon:                   435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
```

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[01292009]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Semi-operational

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink:        144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[09242007]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Non-Operational

Current Modes: V/U
               L/U

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[12042007]
=====
RS-22 RADIO SPORT RS-22
Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only

Current Mode:  /u

CW Beacon - 435.352 MHz
```

            145.818 MHz
[08062007]
=====
Can X-2
Catalog number:
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[05292008]
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink: 437.425 MHz

For the latest project status update please visit the AAUSAT-II web page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[05292008]
=====
CO-65 Cute-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink: 437.475 MHz 9k6 Packet
Uplink: 1267.600 Mhz

For the latest project status update please visit the Cute-1.7+APD II web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78
[07312008]
=====
Compass-1
Catalog number: 32787
Launch Date: April 28, 2008

```
Status: IN ORBIT

Downlink: 437.275 Mhz CW
          437.405 MHz Packet

For the latest project status update please visit the Compass 1 web
page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52
[05292008]
=====
CO-66 Seeds II
Catalog number:
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.485 MHz

For the latest project status update please visit the Seeds 2 web
page: http://cubesat.aero.cst.nihon-u.ac.jp/english/main_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36
[12042008]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - V/u
                      Voice -       V/v
                      BBS -         V/v
                      APRS -        V/v
                      SSTV -        V/v

Expedition 18 Crew:
Commander:                Mike Fincke      KE5AIT
Flight Engineer:          Yury Lonchakov   RA3DT
Flight Engineer:          Sandra Magnus    KE5FYE


Available Modes and Frequencies:

Digital/APRS:
Worldwide packet uplink:   145.825 MHz FM 9k6
Worldwide packet downlink: 145.825 Mhz FM 9k6

Voice:
```

Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[01082009]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-029.S3
WSR 029 Part 3 01/29/2009

AMSAT NEWS SERVICE BULLETIN 029.S3
FROM AMSAT HQ SILVER SPRING, MD, January 29, 2009
TO ALL RADIO AMATEURS
BID: $ANS-029.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

CP4
Catalog Number: 31122
Launch Date: April 17,2007

Status: Non-Operational

```
Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon:    437.325 MHz CW

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=79
[10022008]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: Non-Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder:  145.825 Mhz FM
[01012009]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency:  437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink:         437.250 MHz FM 67Hz CTCSS
Voice Downlink:      2401.835 MHz FM
Packet Up/Downlink:  437.250 MHz 9k6 packet
Packet Downlink      2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005
```

```
Status: Non=Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[08132007]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink:   435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Non-Operational

Uplinks:   145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink:  437.325 MHz

Broadcast callsign: MYSAT3-11
BBS:                MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial land and weather imaging payloads offers FM and FSK
Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as
a collaborative effort between the Malaysian government and Surrey
Satellite Technology Ltd.
[007302007]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink:   145.945 MHz UI Digipeater
Digi Callsign: KE6QMD
```

```
Everyone is welcome to use the digipeating/APRS features of Sapphire,
as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS:                SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink:   145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
V-band:   145.840 -  145.990 MHz CW/LSB
U-band:   435.550 -  435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks
---------
S2-band:  2401.225 -  2401.475 MHz CW/USB
K-band:  24048.010 - 24048.060 MHz CW/USB
```

```
Beacon:   2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)
----------------------------
BEACON   General Beacon(GB)  Middle Beacon(MB)  Engineering Beacon(EB)
2 m                    none        145.898 MHz                    none
70cm           435.438 MHz        435.588 MHz             435.838 MHz
13cm(1)       2400.188 MHz       2400.338 MHz            2400.588 MHz
13cm(2)       2401.173 MHz       2401.323 MHz            2401.573 MHz
3cm          10450.975 MHz      10451.125 MHz           10451.375 MHz
1.5cm        24047.885 MHz      24048.035 MHz           24048.285 MHz
[07162007]
=====
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink:    145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: ?
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater:         436.250 MHz

Uplinks: Mode B Repeater:  145.825 MHz
Mode J Digipeater:         145.825 MHz
```

145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink: 145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Non-operational

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012009]
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993

Status: Non-operational

Current Mode: V/u

Uplink: 145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[01292009]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks: 145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

```
Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25
```

```
Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
LIBERTAD-1
Catalog Number: 31129
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink:   145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[10222007]
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990

Status: CW Beacon only

Uplinks:          145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink:      437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[01222007]
```

```
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
[05012006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: SEMI-Operational

Current Mode:  V/u

Uplink:         145.900 MHz FM 1200-baud Manchester FSK (reserved)
                145.920 MHz FM VOICE
                145.940 MHz FM 1200-baud Manchester FSK (reserved)
                145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink:       437.026 MHz USB VOICE
                (1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[12252008]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990
```

```
Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984

Status: Non-operational.

Current Mode:  /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon:          435.025 MHz
Mode-S Beacon:     2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[01012009]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational
```

```
Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon:   145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink  29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
Beacons:   29.450 MHz
          435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
```

```
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon 1:  29.352 MHz (intermittent)
Beacon 2:  29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink:     21.260 to 21.300 MHz CW/USB
Downlink:  145.860 to 145.900 MHz CW/USB

Beacon:    145.860 MHz

Robot:     145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink:   21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon:   29.408 MHz

Robot:    29.454 MHz
[05232004]
NNNN
/EX
```

SB SAT @ AMSAT W8ISS ANS-029.S4
WSR 029 Part 4 01/29/2009

AMSAT NEWS SERVICE BULLETIN 029.S4
FROM AMSAT HQ SILVER SPRING, MD, January 29, 2009
TO ALL RADIO AMATEURS
BID: $ANS-029.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE PROPOSED FOR LAUNCH
AT THIS TIME:

KAGAYAKI (Solan Co.)
Catalog Number:
Proposed Launch Date: January 21, 2009

Status: Launch Phase

Reported Frequncy and Modes:
Downlink: 437.375 MHZ   FSK9k6/CW
Beacon: 437.375 MHz   FSK9k6/CW

IARU coordination status page:

[01152009]
=====
STARS (Kagawa Univ.)
Catalog Number:
Proposed Launch Date: January 21, 2009

Status: Launch Phase

Reported Frequncy and Modes:
Downlinks: 437.485 MHz FM/CW
           437.465 MHz FM/CW
Beacons: 437.305 MHz FM/CW
           437.275 MHz FM/CW

Callsigns: JR5YBN
           JR5YBO

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=99
[01152009]
=====
KKS-1 (Tokyo MCIT)
Catalog Number:
Proposed Launch Date: January 21, 2009

Status: Launch Phase

Proposed Frequencies and Modes:
Downlink: 437.455 MHz AFSK/CW

Beacon: 437.385 MHz AFSK/CW

Callsign: JQ1YYY

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=107
[01152009]
=====
PRISM (Tokyo Univ.)
Catalog Number:
Proposed Launch Date: January 21, 2009

Status: Launch Phase

Proposed Frequencies and Modes:
Downlink: 437.425 MHz AFSK/GMSK/CW
Beacon: 437.250 MHz AFSK/GMSK/CW

Callsign: JQ1YCX

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=97
[01152009]
=====
SOHLA-1 (ASTRO TECH.)
Catalog Number:
Proposed Launch Date: January 21,2009

Status: Launch Phase

Proposed Frequencies and Modes:
Downlink: 437.505 MHz AFSK/CW
Beacon: 437.505 MHz AFSK/CW

Callsign:

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=101
[01152009]
=====
UNITEC
Catalog Number:
Proposed Launch Date: May 2010

Status: Design Phase

Proposed Equipment:

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=141
[01152009]
=====
XW-1

Catalog Number:
Proposed Launch Date: Summer 2009?

Status: Design Phase

Proposed Equipment:
Beacon: 435Mhz, CW 20dBm
Linear transponder: RX: 145Mhz, TX: 435Mhz, 40KHz, 30dBm
FM Transponder: RX: 145Mhz, TX: 435Mhz, 16KHz, 30dBm
Digital store and forward transponder: RX: 145Mhz, TX: 435Mhz, 16KHz,
30dBm

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108
[10092008]

=====
Phase 5a Mars Mission AO-??
Catalog Number:
Proposed Launch Date: 2009 or 2011

Status: Design Phase

For the latest project status update please visit the AMSAT-DL P5-A
web page:
http://ticket-to-mars.org
[01222007]

=====
PHASE 3E AO-??
Catalog number:
Proposed Launch Date: Late 2008

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E
web page:
http://www.amsat-dl.org/p3e/
[01222007]

=====
Eagle AO-??
Catalog Number:
Proposed Launch Date: Early/Mid 2009

Status: Design Phase

For the latest project status updates please visit the AMSAT-NA web
page: http://www.amsat.org
[01222007]
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/EX

SB SAT @ AMSAT W8ISS ANS-029.S5
WSR 029 Part 5 01/29/2009

AMSAT NEWS SERVICE BULLETIN 029.S5
FROM AMSAT HQ SILVER SPRING, MD, January 29, 2009
TO ALL RADIO AMATEURS
BID: $ANS-029.S5

THE FOLLOWING SATELLITES HAVE RE-ENTERED OR HAVE BEEN RETURNED SAFELY:

NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: July 28, 2008

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[01012009]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink: 145.825 Mhz FM APRS AX25
APRS Uplink: 145.825 MHz FM APRS AX25
Voice/PSK31 Uplink: 28.120 MHz

Packet to Voice ID: RAFT
[06112007]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Re-Entered
Re-entered: June 18, 2008

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS

Beacon: 437.2750 MHz CW

Callsign: JR8YJT
[01012009]
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/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at}

amsat.org
NNNN
/EX

```
From -1505539520931765771
X-Google-Thread: 10e8ad,5e52e7dfc7773a17,start
X-Google-Thread: 10b9c8,5e52e7dfc7773a17,start
X-Google-Attributes: gid10e8ad,gid10b9c8,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!newsfeed2.dallas1.level3.net!
news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-036 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Fri, 6 Feb 2009 23:12:16 EST
Organization: The Radio Amateur Satellite Corporation
Lines: 1554
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <003601c988da$3a446a20$aecd3e60$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1233979937 23886 166.84.1.6 (7 Feb 2009 04:12:17 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sat, 7 Feb 2009 04:12:17 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news1.google.com rec.radio.amateur.space:161 rec.radio.info:487
```

This report is organized into five (5) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites
Part 5 (S5) - deorbited/returned satellites

```
SB SAT @ AMSAT W8ISS ANS-036.S1
WSR 036 Part 1 02/05/2009

AMSAT NEWS SERVICE BULLETIN 036.S1
FROM AMSAT HQ SILVER SPRING, MD, February 05, 2009
TO ALL RADIO AMATEURS
BID: $ANS-036.S1

DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008

Status: OPERATIONAL
Current Mode: Science Mode - Beacon ONLY
Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink:   435.530 to 435.570 MHz

Proposed Frequencies:
Primary telemetry downlink: 145.870 MHz 1200 Baud BPSK AX.25 400mW
Backup telemetry downlink:  145.930 MHz 1200 Baud BPSK AX.25 400mW
Linear transponder passband downlink: 145.880 - 145.920 MHz(inverting)
Linear transponder passband uplink: 435.570 - 435.530 MHz
Transponder mode beacon: 145.870 MHz CW (10dB below transponder PEP)

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68
[01012009]
=====
VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink:   435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink:   435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW


Indian Beacon:  145.859330 MHZ CW
Dutch Beacon:   145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
```

V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

To know what transponder is switched on please listen for the beacon that is active. Each transponder has a different beacon.
[08072008]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

```
Current Modes:   FM Repeater - V-FM/u-FM
                 BBS         - L-9k6/u-9k6
                 Telemetry   -  /u

Analog voice downlink:     435.300 MHz FM
                           435.150 MHz FM
                          2401.200 Mhz FM
Analog voice uplink:       145.880 MHZ FM
                           145.880 MHz USB
                           145.920 MHz FM
                          1268.700 MHz FM 67Hz PL tone
Digital Downlinks:        435.150 MHz FM 38k4 PBP, 1 watt output
                          435.150 MHz FM 9k6 Pacsat Broadcast Protocol
                         2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:           145.860 MHz FM 9k6 Pacsat Broadcast Protocol
                         1268.700 mhz FM 9k6 PBP Digital
Beacon:                   435.150 MHz
```

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[02052009]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002

Status: Operational.

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz. The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10 minute timer.
[05282007]

=====

FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Operational
Current Mode: V/u (Mode JA)

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage:

```
http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's
CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts
.htm
[01012009]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational

Current Mode: Alternating between Mode A and B every 24 hours

Uplink:   145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink:  29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons:   29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/

AO-7 Usage Guidelines on the AO-7 Log and Resource Site located at:
http://www.planetemily.com/ao7
[05282007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - V/u
                      Voice -       V/v
                      BBS -         V/v
                      APRS -        V/v
                      SSTV -        V/v

Expedition 18 Crew:
Commander:                Mike Fincke      KE5AIT
```

Flight Engineer: Yury Lonchakov   RA3DT
Flight Engineer: Sandra Magnus   KE5FYE

Available Modes and Frequencies:

Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 9k6
Worldwide packet downlink: 145.825 Mhz FM 9k6

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
                           437.800 MHz FM
                           145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
                           437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
                           RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[01082009]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-036.S2
WSR 036 Part 2 02/05/2009

AMSAT NEWS SERVICE BULLETIN 036.S2

FROM AMSAT HQ SILVER SPRING, MD, February 05, 2009
TO ALL RADIO AMATEURS
BID: $ANS-036.S2

RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number:
Launch Date: May 23, 2008

Status: Operational

Curent Mode: Telemetry
Audio
Images

Downlinks: 435.315 MHz
435.215 MHz
[05292008]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.
[11152007]
=====
CP3
Catalog Number: 31128
Launch Date: April 17,2007

Status: Operational

Current Mode: /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[07302007]
=====
GENESAT-1 ?O-??
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Current Mode: /u

```
Telemetry Beacon Downlink: 437.0670 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[01082007]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon:             437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
[03262007]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003

Status: Operational

Current Mode: /u

Beacon:     436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[01082007]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Operational?

Uplink:  1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
```

```
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[12182008]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW
[08132007]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Modes:   FM Repeater - V-FM/u-FM
                 BBS         - L-9k6/u-9k6
                 Telemetry   -  /u

Analog voice downlink:     435.300 MHz FM
                           435.150 MHz FM
                          2401.200 Mhz FM
Analog voice uplink:       145.880 MHZ FM
                           145.880 MHz USB
                           145.920 MHz FM
                          1268.700 MHz FM 67Hz PL tone
Digital Downlinks:        435.150 MHz FM 38k4 PBP, 1 watt output
                          435.150 MHz FM 9k6 Pacsat Broadcast Protocol
                         2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:           145.860 MHz FM 9k6 Pacsat Broadcast Protocol
                         1268.700 mhz FM 9k6 PBP Digital
Beacon:                   435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12
```

```
Official Webpage: http://www.amsat.org/amsat-new/echo/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[020592009]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Semi-operational

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink:        144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[09242007]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Non-Operational

Current Modes: V/U
               L/U

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[12042007]
=====
RS-22 RADIO SPORT RS-22
Catalog number: 27939
Launch Date: September 27, 2003
```

```
Status: Operational - 70cm cw only

Current Mode:  /u

CW Beacon - 435.352 MHz
            145.818 MHz
[08062007]
=====
Can X-2
Catalog number:
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web
page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[05292008]
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink: 437.425 MHz

For the latest project status update please visit the AAUSAT-II web
page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[05292008]
=====
CO-65 Cute-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink:  437.475 MHz 9k6 Packet
Uplink:   1267.600 Mhz

For the latest project status update please visit the Cute-1.7+APD II
web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78
```

[07312008]
=====
Compass-1
Catalog number: 32787
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink: 437.275 Mhz CW
437.405 MHz Packet

For the latest project status update please visit the Compass 1 web page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52
[05292008]
=====
CO-66 Seeds II
Catalog number:
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.485 MHz

For the latest project status update please visit the Seeds 2 web page: http://cubesat.aero.cst.nihon-u.ac.jp/english/main_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36
[12042008]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes:		
	FM Repeater -	V/u
	Voice -	V/v
	BBS -	V/v
	APRS -	V/v
	SSTV -	V/v

Expedition 18 Crew:

Commander:	Mike Fincke	KE5AIT
Flight Engineer:	Yury Lonchakov	RA3DT
Flight Engineer:	Sandra Magnus	KE5FYE

Available Modes and Frequencies:

Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 9k6
Worldwide packet downlink: 145.825 Mhz FM 9k6

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[01082009]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-036.S3
WSR 036 Part 3 02/05/2009

AMSAT NEWS SERVICE BULLETIN 036.S3
FROM AMSAT HQ SILVER SPRING, MD, February 05, 2009
TO ALL RADIO AMATEURS
BID: $ANS-036.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

```
CP4
Catalog Number: 31122
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon:    437.325 MHz CW

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=79
[10022008]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: Non-Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder:  145.825 Mhz FM
[01012009]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency:  437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink:        437.250 MHz FM 67Hz CTCSS
Voice Downlink:     2401.835 MHz FM
Packet Up/Downlink:  437.250 MHz 9k6 packet
Packet Downlink     2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
```

```
[01222007]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non=Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[08132007]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink:   435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Non-Operational

Uplinks:   145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink:  437.325 MHz

Broadcast callsign: MYSAT3-11
BBS:                MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial land and weather imaging payloads offers FM and FSK
Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as
a collaborative effort between the Malaysian government and Surrey
Satellite Technology Ltd.
[007302007]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational
```

```
Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink:   145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS:                SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink:   145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
V-band:   145.840 -  145.990 MHz CW/LSB
U-band:   435.550 -  435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB
```

Downlinks

S2-band: 2401.225 - 2401.475 MHz CW/USB
K-band: 24048.010 - 24048.060 MHz CW/USB
Beacon: 2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)

BEACON	General Beacon(GB)	Middle Beacon(MB)	Engineering Beacon(EB)
2 m	none	145.898 MHz	none
70cm	435.438 MHz	435.588 MHz	435.838 MHz
13cm(1)	2400.188 MHz	2400.338 MHz	2400.588 MHz
13cm(2)	2401.173 MHz	2401.323 MHz	2401.573 MHz
3cm	10450.975 MHz	10451.125 MHz	10451.375 MHz
1.5cm	24047.885 MHz	24048.035 MHz	24048.285 MHz

[07162007]

=====

OO-38 OPAL

Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]

=====

UO-36 UoSAT-12

Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]

=====

SO-35 SUNSAT

Catalog Number: ?
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink: 145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

```
Status: Non-operational

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign:       POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012009]
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993

Status: Non-operational

Current Mode: V/u

Uplink:   145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[01292009]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
```

```
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990
```

Status: Non-Operational

Beacons: 435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink: 145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks: 145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
LIBERTAD-1
Catalog Number: 31129
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink: 145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[10222007]
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990

Status: CW Beacon only

Uplinks: 145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink: 437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11

```
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[01222007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
[05012006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: SEMI-Operational

Current Mode:  V/u

Uplink:         145.900 MHz FM 1200-baud Manchester FSK (reserved)
                145.920 MHz FM VOICE
                145.940 MHz FM 1200-baud Manchester FSK (reserved)
                145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink:       437.026 MHz USB VOICE
                (1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[12252008]
```

```
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984

Status: Non-operational.

Current Mode:  /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon:           435.025 MHz
Mode-S Beacon:     2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[01012009]
=====
AO-10 OSCAR 10
```

Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon: 145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.8500 - 145.9000 MHz SSB/CW
Downlink 29.4000 - 29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink: 29.4500 - 29.5500 MHz SSB/CW
Beacons: 29.450 MHz
          435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

```
Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon 1:  29.352 MHz (intermittent)
Beacon 2:  29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink:     21.260 to 21.300 MHz CW/USB
Downlink:  145.860 to 145.900 MHz CW/USB

Beacon:    145.860 MHz

Robot:     145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink:   21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon:   29.408 MHz
```

Robot: 29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-036.S4
WSR 036 Part 4 02/05/2009

AMSAT NEWS SERVICE BULLETIN 036.S4
FROM AMSAT HQ SILVER SPRING, MD, February 05, 2009
TO ALL RADIO AMATEURS
BID: $ANS-036.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE PROPOSED FOR LAUNCH
AT THIS TIME:

KAGAYAKI (Solan Co.)
Catalog Number:
Proposed Launch Date: January 21, 2009

Status: Launch Phase

Reported Frequncy and Modes:
Downlink: 437.375 MHZ   FSK9k6/CW
Beacon: 437.375 MHz   FSK9k6/CW

IARU coordination status page:

[01152009]
=====
STARS (Kagawa Univ.)
Catalog Number:
Proposed Launch Date: January 21, 2009

Status: Launch Phase

Reported Frequncy and Modes:
Downlinks: 437.485 MHz FM/CW
           437.465 MHz FM/CW
Beacons: 437.305 MHz FM/CW
           437.275 MHz FM/CW

Callsigns: JR5YBN
           JR5YBO

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=99
[01152009]
=====
KKS-1 (Tokyo MCIT)
Catalog Number:
Proposed Launch Date: January 21, 2009

Status: Launch Phase

Proposed Frequencies and Modes:
Downlink: 437.455 MHz AFSK/CW
Beacon: 437.385 MHz AFSK/CW

Callsign: JQ1YYY

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=107
[01152009]
=====
PRISM (Tokyo Univ.)
Catalog Number:
Proposed Launch Date: January 21, 2009

Status: Launch Phase

Proposed Frequencies and Modes:
Downlink: 437.425 MHz AFSK/GMSK/CW
Beacon: 437.250 MHz AFSK/GMSK/CW

Callsign: JQ1YCX

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=97
[01152009]
=====
SOHLA-1 (ASTRO TECH.)
Catalog Number:
Proposed Launch Date: January 21,2009

Status: Launch Phase

Proposed Frequencies and Modes:
Downlink: 437.505 MHz AFSK/CW
Beacon: 437.505 MHz AFSK/CW

Callsign:

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=101
[01152009]
=====
UNITEC
Catalog Number:
Proposed Launch Date: May 2010

Status: Design Phase

Proposed Equipment:

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=141
[01152009]
=====
XW-1
Catalog Number:
Proposed Launch Date: Summer 2009?

Status: Design Phase

Proposed Equipment:
Beacon: 435Mhz, CW 20dBm
Linear transponder: RX: 145Mhz, TX: 435Mhz, 40KHz, 30dBm
FM Transponder: RX: 145Mhz, TX: 435Mhz, 16KHz, 30dBm
Digital store and forward transponder: RX: 145Mhz, TX: 435Mhz, 16KHz, 30dBm

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108
[10092008]
=====
Phase 5a Mars Mission AO-??
Catalog Number:
Proposed Launch Date: 2009 or 2011

Status: Design Phase

For the latest project status update please visit the AMSAT-DL P5-A web page:
http://ticket-to-mars.org
[01222007]
=====
PHASE 3E AO-??
Catalog number:
Proposed Launch Date: Late 2008

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/
[01222007]
=====
Eagle AO-??
Catalog Number:
Proposed Launch Date: Early/Mid 2009

Status: Design Phase

For the latest project status updates please visit the AMSAT-NA web page: http://www.amsat.org
[01222007]
NNNN

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SB SAT @ AMSAT W8ISS ANS-036.S5
WSR 036 Part 5 02/05/2009

AMSAT NEWS SERVICE BULLETIN 036.S5
FROM AMSAT HQ SILVER SPRING, MD, February 05, 2009
TO ALL RADIO AMATEURS
BID: $ANS-036.S5

THE FOLLOWING SATELLITES HAVE RE-ENTERED OR HAVE BEEN RETURNED SAFELY:

NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: July 28, 2008

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[01012009]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink: 145.825 Mhz FM APRS AX25
APRS Uplink: 145.825 MHz FM APRS AX25
Voice/PSK31 Uplink: 28.120 MHz

Packet to Voice ID: RAFT
[06112007]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Re-Entered
Re-entered: June 18, 2008

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon: 437.2750 MHz CW

Callsign: JR8YJT
[01012009]
NNNN
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ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to
the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis
Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at}
amsat.org
NNNN
/EX

```
From 6951599048069367840
X-Google-Thread: 10e8ad,1a81460a9b85bf7b,start
X-Google-Thread: 113975,1a81460a9b85bf7b,start
X-Google-Attributes: gid10e8ad,gid113975,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!news.glorb.com!feeder.erje.net!
newsfeed.kpn.net!news.astraweb.com!border2.a.newsrouter.astraweb.com!not-for-mail
From: Chris Steyaert <observations@rmob.org>
Newsgroups: rec.radio.amateur.space,sci.astro.amateur
Subject: Radio Meteor Obs. Bull. January 2009 Quadrantids
Date: Sat, 07 Feb 2009 17:55:55 +0100
Message-ID: <n5fro4h06obdngtir74ajteegv9o76q38v@4ax.com>
X-Newsreader: Forte Agent 1.93/32.576 English (American)
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Lines: 16
Organization: Unlimited download news at news.astraweb.com
NNTP-Posting-Host: eb74a672.news.astraweb.com
X-Trace: DXC=_aYCQ:Wh`Xf:PIc[8_6SKeL?0kYOcDh@jZD3?OaX:SkmNe?O`9bdD6oG?
ifhhgG3CaK5ZPT]8Z7>e1A`BQm?OV\d
Xref: g2news1.google.com rec.radio.amateur.space:162 sci.astro.amateur:11845
```

Radio Meteor Observation Bulletin No. 186 of January 2009 (86 K) is available
now as

http://visualrmob.free.fr/rmobtext/rmob0901.txt

More information and the visual presentation of the hourly forward scatter
counts can be found on

http://www.rmob.org

http://radio.data.free.fr

Chris

```
From -7830015757025155888
X-Google-Thread: 10e8ad,65b465eb7b326be,start
X-Google-Thread: 10b9c8,65b465eb7b326be,start
X-Google-Attributes: gid10e8ad,gid10b9c8,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII
Path: g2news1.google.com!news1.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx02.iad.newshosting.com!newshosting.com!
198.186.194.249.MISMATCH!transit3.readnews.com!news-out.readnews.com!news-
xxxfer.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-039 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sat, 7 Feb 2009 22:38:44 EST
Organization: The Radio Amateur Satellite Corporation
Lines: 332
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000201c9899e$b6f1ae60$24d50b20$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix3.panix.com
Mime-Version: 1.0
Content-Type: text/plain;charset="iso-8859-1"
Content-Transfer-Encoding: quoted-printable
X-Trace: reader1.panix.com 1234064324 28233 166.84.1.3 (8 Feb 2009 03:38:44 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 8 Feb 2009 03:38:44 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to            rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news1.google.com rec.radio.amateur.space:163 rec.radio.info:491
```

AMSAT NEWS SERVICE
ANS-039

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:

- AMSAT India Sponsors VO-52 Operating Certificate
- Volunteers Needed for AMSAT-DC Spring Conference
- George Caswell, W1ME Silent Key
- Satellite Shorts From All Over
- ARISS Status Report for the Week of February 2, 2009

SB SAT @ AMSAT $ANS-039.01
AMSAT India Sponsors VO-52 Operating Certificate

AMSAT News Service Bulletin 039.01
>From AMSAT HQ SILVER SPRING, MD.
February 8, 2009
To All RADIO AMATEURS
BID: $ANS-039.01

Nitin, VU3TYG announced AMSAT India will issue a certificate for Amateur Radio operators who establish two way contact thru VO-52 between January 26, 2009 until May 5, 2009.

The first fifty certificates have been sponsored by a well-wisher which includes postage. After the 50 certificates have been issued a fee will apply. AMSAT India will announce these details when the information is available.

Please send your QSL card containing the details of the QSO on VO-52 AMSAT India at the following address:

AMSAT India (Regd.)
No. 201, 2nd Main Road,
Mahalakshmi Layout,
Bangalore 560086
India.

Also include your mailing address where you would like to have the certificate sent to.

[ANS thanks Nitin, VU3TYG for the above information]

/EX

SB SAT @ AMSAT $ANS-039.02
Volunteers Needed for AMSAT-DC Spring Conference

AMSAT News Service Bulletin 039.02
>From AMSAT HQ SILVER SPRING, MD.
February 8, 2009
To All RADIO AMATEURS
BID: $ANS-039.02

Maryland-DC AMSAT Area Coordinator, Pat Kilroy, N8PK will kick off planning sessions for the next AMSAT-DC gathering. If you would like to help with this event please send Pat an RSVP e-mail soon to n8pk@amsat.org. Pat will send you the call-in telephone number for the planning conference calls.

Pat says, "Our first planning session conference call will take place during the week of February 8-14, most likely on Thursday evening at 7:00 PM EST. The first agenda item will be to discuss the location and date of the all-day event."

Pat is proposing individuals and groups of Amateur Radio operators form teams who compete at this AMSAT-DC workshop to create and operate a simulated satellite mission. The first groups will build a PICetSat II flight module from a kit of electronic parts on a small printed circuit board. The second groups will set up simple satellite ground stations. The third groups will be in charge of setting up and loading software in the computers at the ground stations to decode the telemetry and to analyze it according to a set of instructions.

This event will be perfect for beginners and advanced satellite users alike, all ultimately working together to "launch" the flight module, receive the downlink, and decode the telemetry. Instructions will be provided in advance of the event to enhance preparation.

More details will follow as planning commences!

[ANS thanks Pat Kilroy, N8PK for the above information]

/EX

SB SAT @ AMSAT $ANS-039.03
George Caswell, W1ME Silent Key

AMSAT News Service Bulletin 039.03
>From AMSAT HQ SILVER SPRING, MD.
February 8, 2009
To All RADIO AMATEURS
BID: $ANS-039.03

AMSAT received the sad news that George Caswell, W1ME died peacefully at the Maine Veterans Home on February 3rd after a lengthy illness.

George was a very active AMSAT Area Coordinator in Northern New England. For a number of years, George conducted a weekly AMSAT net on a number of linked repeaters stretching from Rhode Island to Maine (including one on top of Mt. Washington).

AMSAT President Barry Baines, WD4ASW reflected, "He brought enthusiasm, knowledge and a sense of humor to these nets which attracted check-ins. Needless to say, those 'wide area' nets attracted numerous newcomers to what we do, not to mention generating countless new AMSAT memberships as a direct result. George enjoyed awarding 'Certificates of Recognition' to those that participated in these nets since he knew that 'wall paper' was one way to foster continued interest. I still have the 'Certificate of Recognition' signed by George in 1996 which he gave me when I visited him and participated in one of his nets."

George served as a recruiter for AMSAT's Field Operations Team, encouraging AMSAT members to become area coordinators and to establish an AMSAT presence in their local areas. A number of area coordinators in Massachusetts, Rhode Island, New Hampshire and Maine were recruited and encouraged by George. He also represented AMSAT at various hamfests in Northern New England.

George and his wife Caroline, W1MRE brought AMSAT to Maine as they teamed up to organize the 18th AMSAT Space Symposium that was held in Portland, ME October, 2000. At this event people outside of New England and the Field Ops team got to know George.

George set up and operated the first ISS school contact to take place in Maine. In February, 2005, he set up his radio station at the Rockland, ME high school as part of a PenBay radio club activity and contacted the International Space Station, allowing high school students to communicate with the astronauts aboard. It was one of the highlights of his amateur radio involvement.

Barry sums it up, "For many of us, George Caswell, W1ME was the face of AMSAT in New England. His kindness, gracious outlook on life, infectious enthusiasm for satellite operations and amateur radio in general touched many people and made a difference in their lives."

Donations in George's Memory may be made to:
Alzheimer's Association Maine Chapter 170 US Route 1, Suite 250
Falmouth, ME 04105.

[ANS thanks Barry Baines, WD4ASW for the above information]

/EX

SB SAT @ AMSAT $ANS-039.04
Satellite Shorts From All Over

AMSAT News Service Bulletin 039.04
>From AMSAT HQ SILVER SPRING, MD.
February 8, 2009
To All RADIO AMATEURS
BID: $ANS-039.04

+ YouTube video of the ARISS contact with Ellis Elementary School
  in Belleville, Illinois, is available on-line at:

http://www.youtube.com/watch?v=P2TuJyNXx0c&eurl=http://livingstlouis.

wordpress.com/2009/01/22/living-st-louis-video-ham-radio/&feature=
player_embedded (watch line wrap on very long URL).

+ Audio and video from the Humber College, Toronto contact with the ISS is available at:
http://www.cbc.ca/radioshows/AS_IT_HAPPENS/20090202.shtml (audio)
http://www.theglobeandmail.com/servlet/story/RTGAM.20090202.
wvspacestation0202/VideoStory/Technology/home?pid=RTGAM.20090202.
wcollegeradio0202 (watch the line wrap).

+ Paul Willmott, VP9MU released an updated Reference Manual for the General Astrodynamics Library (GAL) at:
http://homepage.mac.com/pclwillmott/GAL/index.html

+ Listen for Andy, W5ACM/MM between February 8 and February 14 via AO-51. He hopes to put some new grids on the air while we are out on the water between Galveston, Costa Maya, Cozumel and Roi Tan. Radio will be a a DJ-580Ts with several LiPo battery packs.

+ A video tour of the Altair Lunar Lander is available at:
http://tinyurl.com/d5btqx (via UniverseToday).

+ NASA and Google announced the release of a new Mars mode in Google Earth that brings to everyone's desktop a high-resolution, three-dimensional view of the Red Planet. Additional information is on-line at http://tinyurl.com/b567u9 (Via MarsDaily).

+ An interesting article about a planned 500 meter diameter radio telescope in China is available on-line at: http://tinyurl.com/b8sv2k In contrast the radio telescope at Arecibo Observatory in Puerto Rico is 305 meters in diameter (via UniverseToday).

[ANS thanks everyone for the above information]

/EX

SB SAT @ AMSAT $ANS-039.05
ARISS Status Report for the Week of February 2, 2009

AMSAT News Service Bulletin 039.05
>From AMSAT HQ SILVER SPRING, MD.
February 8, 2009
To All RADIO AMATEURS
BID: $ANS-039.05

1. School Contacts

Humber College Institute of Technology and Higher Learning in Toronto, Ontario, Canada completed an ARISS contact on Monday, February 2. It has assembled the primary ground station right on the main campus, and it is hoped that it will inspire future students in conducting similar studies.

Pilton Bluecoat Junior School in Barnstaple, Devon, England completed an ARISS contact on Friday, February 6. The school has planned an event with the theme "Our Home in Space - The Final Frontier," in which students learn about Earth as part of the wider universe.

St�dtisches Gymnasium Herzogenrath in Herzogenrath, North Rhine-Westphalia, Germany completed an ARISS contact on Saturday, February 7. The school has an amateur radio club whose members initiated the ARISS contact.

College of Agriculture, Central Agricultural University in Imphhal, Assam, India has been scheduled for an ARISS contact on Sunday, February 8 at 10:06 UTC via telebridge station VK4KHZ in Australia.

2. Russian Students Radio ISS

Students attending the Palace of Children's and Youth's Creativity in Tver, Russia experienced a successful ARISS contact on Tuesday, January 27. The children prepared 9 questions to ask cosmonaut Yuri Lonchakov, RA3DT. Approximately 300 people attended the event including cosmonaut S. Treshchev and ARISS delegate Sergey Samburov. The Governor of Tver Region, Dmitry Vadimovich Zelenin was also invited. The contact was made possible through the Amateur Radio Club, "Club-22," and its chairman, Sergey Kemov, RA3IS.

3. Successful Canadian Elementary School Contact

On Tuesday, January 27, Mike Fincke, KE5AIT, participated in an ARISS contact with students attending Castor Valley Elementary School in Greely, Ontario, Canada. He answered all 16 questions posed to him by the youth as an audience of 750 students, parents and guests looked on. The students initiated the contact, thanked Mike for the contact midway through the session, and finished the rest of the questions. Media covered the event and the school was featured on the CTV 6 o'clock news.

4. French University Contact Successful

Students attending CERAM EAI in Sophia Antipolis, France participated in an ARISS contact on Thursday, January 29 via telebridge station VK4KHZ in Australia. Students were able to ask 15 questions of Mike Fincke, KE5AIT, before interference made the downlink unreadable. Approximately 50 students, faculty members and guests witnessed the event which was covered by the media. The audio was fed into the EchoLink AMSAT and JK1ZRW servers and received 11 connections from 9 different countries. A short write up and contact audio have been posted to the ARISS-Europe Web site.
See: http://www.ariss-eu.org/2009_01_30.htm

5. French School Contact Successful

Youth attending Ecole & Coll�ge Jean XXIII, a private primary & secondary school in Pamiers, France, experienced an ARISS contact on Friday, January 30. Mike Fincke, KE5AIT, answered 18 questions prepared for him by the students as 150 people gathered to watch. Media coverage included La Gazette Ariegeoise, Le Petit Journal, France 3 and Ariege News. The event is also expected to be reported by La Depeche du Midi, Radio Transparence, Radio Montaillou and Sud Radio. A summary with audio has been posted to the ARISS-Europe Web site. See: http://www.ariss-eu.org/2009_01_31.htm

6. General Radio Operations

Mike Fincke, KE5AIT and Yuri Lonchakov, RA3DT made general voice contacts over the last week. Among those contacted were stations in the U.S., Canada, Russia and Brazil. They also had the radio running in packet mode and crossband repeater mode and transmitted several Slow Scan Television (SSTV) images.

7. ARISS International Team Meeting Held

The ARISS team held its monthly teleconference on January 27. Among the agenda items discussed were the ARISS Face to Face Meeting to be held in the Netherlands in June, Richard Garriott's mission and SuitSat-2 status. Minutes have been posted. See:
https://www.rac.ca/ariss/arisstel2009-01-27.htm

8. K6DUE Replaces NN1SS

K6DUE, callsign of the late Roy Neal, will now be used for the International Space Station Amateur Radio Club, replacing the Greenbelt, Maryland telebridge ground station callsign, NN1SS. Neal was instrumental in persuading NASA to fly amateur radio on the space shuttle and helped establish the Shuttle Amateur Radio Experiment (SAREX) working group, which ultimately led to the internationally-based ARISS program. The story was reported on the Amateur Radio Newsline.

[ANS thanks Carol, KB3LKI for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office. With that keep in mind if you show me a piano falling down a mine shaft I'll show you A-flat miner.

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM

```
From -7572751654391810201
X-Google-Thread: 10e8ad,8197bd7bb77ae1d7,start
X-Google-Thread: 10b9c8,8197bd7bb77ae1d7,start
X-Google-Attributes: gid10e8ad,gid10b9c8,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII
Path: g2news2.google.com!news2.google.com!newsfeed2.dallas1.level3.net!
news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-046 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Thu, 19 Feb 2009 16:58:01 EST
Organization: The Radio Amateur Satellite Corporation
Lines: 393
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <001901c992dd$1432c8b0$3c985a10$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix2.panix.com
Mime-Version: 1.0
Content-Type: text/plain;charset="iso-8859-1"
Content-Transfer-Encoding: quoted-printable
X-Trace: reader1.panix.com 1235080675 40 166.84.1.2 (19 Feb 2009 21:57:55 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Thu, 19 Feb 2009 21:57:55 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news2.google.com rec.radio.amateur.space:189 rec.radio.info:587
```

AMSAT NEWS SERVICE
ANS-046

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:

* Scratch 2 Satellites
* Dieter Schliemann, KX4Y SK
* DX Expedition to Desecheo
* Listen for KAGAYAKI Satellite
* ARISS Status Report for the Week of February 9, 2009

SB SAT @ AMSAT $ANS-046.01
Scratch 2 Satellites

AMSAT News Service Bulletin 046.01
>From AMSAT HQ SILVER SPRING, MD.
February 15, 2009
To All RADIO AMATEURS
BID: $ANS-046.01

CAPE CANAVERAL, Fla. - Two big communications satellites collided in the first-ever crash of two intact spacecraft in orbit, shooting out a pair of massive debris clouds and posing a slight risk to the international space station.

NASA said it will take weeks to determine the full magnitude of the crash, which occurred nearly 500 miles over Siberia on Tuesday.

"We knew this was going to happen eventually," said Mark Matney, an orbital debris scientist at Johnson Space Center in Houston.

NASA believes any risk to the space station and its three astronauts is low. It orbits about 270 miles below the collision course. There also should be no danger to the space shuttle set to launch with seven astronauts on Feb. 22, officials said, but that will be re-evaluated in the coming days.

The collision involved an Iridium commercial satellite, which was launched in 1997, and a Russian satellite launched in 1993 and believed to be nonfunctioning. The Russian satellite was out of control, Matney said.

The Iridium craft weighed 1,235 pounds, and the Russian craft nearly a ton.

No one has any idea yet how many pieces were generated or how big they might be.

"Right now, they're definitely counting dozens," Matney said. "I would suspect that they'll be counting hundreds when the counting is done."

[ANS thanks Drew, KO4MA for the above information]

/EX

SB SAT @ AMSAT $ANS-046.02
Dieter Schliemann, KX4Y SK

AMSAT News Service Bulletin 046.02
>From AMSAT HQ SILVER SPRING, MD.
February 15, 2009
To All RADIO AMATEURS
BID: $ANS-046.02

Frank Bauer, KA3HDO wrote on behalf of the Amateur Radio on the International Space Station (ARISS) program, "It is with great sadness that I announce the passing of Dieter Schliemann, KX4Y."

Frank continued, "Those that knew Dieter recognized that he was a 'class act', a great gentleman and colleague who will be sorely missed by all. Dieter was instrumental in leading and supporting many key activities in AMSAT and on the ARISS program."

For ARISS, Dieter led the school contact IRLP/Echolink initiative. Through this amateur radio VOIP system, Dieter and his team substantially extended the reach of the school contacts. And through his efforts, tens of thousands of school students and ham radio operators, world-wide, could listen to other school contacts, enhancing education and giving all a better understanding of what it is like to live and work on the ISS.

Frank remembers, "Dieter's diplomacy, teambuilding skills and attention to the details were impeccable and were well respected within the team. He rose to the challenge when I asked him to lead the IRLP/Echolink team. At the time, there were strong, divergent opinions on the use of IRLP and Echolink on ARISS. He singlehandedly developed a cohesive team that is producing great results and are enjoying working together.

Over the past couple of years, Dieter fought a long and courageous battle with cancer. A month ago, all of us thought he was on the road to recovery. Unfortunately, that did not come to pass. Through it all, Dieter remained the gentle, caring person that we all have grown to love. And during his illness, he remained dedicated to his AMSAT and ARISS causes and responsibilities. When he received the surprising news from the doctors that he had only two weeks to live and despite being weak from a long hospitalization, Dieter got on the e-mail and worked a transition plan to ensure the IRLP/Echolink capabilities on ARISS continues. What a great, compassionate, and loving human being!"

Frank first met Dieter behind the AMSAT Booth at Dayton, where he was one of the mainstay individuals supporting AMSAT efforts at the Hamvention. Reflecting on Dieter's support to AMSAT, AMSAT Board Member Gould Smith, WA4SXM, stated, "Two years ago Dieter told me that the only reason he came to Dayton was to work in the AMSAT booth and to talk with people about AMSAT". And he supported AMSAT in many other ways, including his efforts as an Area Coordinator, where he mentored a countless number of satellite enthusiasts. We are eternally grateful for all Dieter has done for AMSAT and the ARISS program. And we will miss him dearly."

AMSAT 20 Meter Net Control, Keith Pugh, W5IU remininsced, "My memories of Dieter started during the AO-10 and AO-13 heyday. Dieter was an excellent example of the ideal contributor to our marvelous hobby. He constantly provided positive ideas and assistance for every phase of the AMSAT and ARISS efforts. Never complaining, always jumping in and doing what he suggested - not saying 'why don't you do this.' He will be truly missed by everyone and deserves a special place in Amateur Radio Heaven."

Frank concluded, "On behalf of the ARISS and AMSAT teams, we wish to express our deepest sympathy to the Schliemann family and friends. We think of especially his wife Tina and his good friend Ron Arsenault, N1NYR, who helped Dieter and the Schliemann family throughout Dieter's long illness."

Alan Sieg WB5RMG went to the visitation and described his experience, "This evening I introduced myself to Dieter's wife Tina. We had never met. When she saw my AMSAT badge she grabbed onto my hand and held it for at least 10 minutes, like we were long-lost friends. She said she was so glad that AMSAT could come to the visitation, and went on to tell me about all the wonderful email and phone calls she has received from all over the world. She understood what AMSAT meant to Dieter, and was so proud that the people of AMSAT recognized what a good man he was. She asked me to let everyone know how thankful she was that Dieter had so many wonderful friends ... Thank You All" from Tina"

In lieu of flowers donations may be made to Hospice of North Alabama, LLC, 311 Bob Wallace Ave., Ste. 101, Huntsville, AL 35805 or to your favorite charity.

[ANS thanks Frank KA3HDO, Gould WA4SXM, Keith W5IU for the above information]

/EX

SB SAT @ AMSAT $ANS-046.03
DX Expedition to Desecheo

AMSAT News Service Bulletin 046.03
>From AMSAT HQ SILVER SPRING, MD.
February 15, 2009
To All RADIO AMATEURS
BID: $ANS-046.03

Updates from www.kp5.us indicate that at least part of the team is now on Desecheo, and will soon begin HF operations as K5D. Thanks to the support of AMSAT-NA, the team is equipped with a Kenwood D7 HT and Arrow antenna, as well as training on using the FM satellites. AMSAT-NA would like to thank Doug Faunt N6TQS, Tim Lilley N3TL, and Patrick Stoddard, WD7EWK for their generous donations of equipment for this and future DXpedition, as well as Keith Pugh, W5IU for training assistance.

Satellite operation is not expected to begin until the second half of the DXpedition, and then only on an as available basis. A second repeater on AO-51 (145.88/435.150) will be activated on February 16th and reserved -only- for contacts with K5D while within sight of the island. K5D may be active on either AO-51 repeater, SO-50 or the ISS voice repeater modes if available. Operation on the transponder satellites is not expected unfortunately. Outside of range of Desecheo, users are encouraged to operate under the standard AO-51 QRP rules. These guidelines are 10 watts output or less, to omnidirectional or handheld antennas only. Telemetry collection operations on AO-51 will occasionally interrupt the 435.150 downlink on US west coast passes not in range of Desecheo.

Users attempting contact with K5D should be aware the the DXpedition does not wish to exchange grid squares during the QSO in order to allow more operators the chance for a QSO. Their grid square is FK68, same as most of Puerto Rico. Please be courteous and limit yourself to one QSO. Logs are expected to be available online at http://www.kp5.us/ . Many prolific DXpeditioners are on this trip, and a positive experience with satellite may result in increased participation by future expeditions.

Good Luck on working a new one on satellite!

73, Drew Glasbrenner, KO4MA
AMSAT-NA VP Operations

[ANS thanks Drew, KO4MA for the above information]

/EX

SB SAT @ AMSAT $ANS-046.04
Listen for KAGAYAKI Satellite

AMSAT News Service Bulletin 046.04
>From AMSAT HQ SILVER SPRING, MD.
February 15, 2009
To All RADIO AMATEURS
BID: $ANS-046.04

Listen for KAGAYAKI Satellite

The KAGAYAKI satellite has not been heard since it was launched with Japan's January 23 GOSAT satellite. KAGAYAKI was to transmit morse code on FM after separation from the H-2A booster.

If operational KAGAYAKI should be tranmitting morse code on FM or 9600bps packet at 437.375MHz. The command team thinks the satellite'soutput power may very low because the antenna or solar panel has not extended properly. Ground controllers have been searching for a downlink signal using a spectrum analyzer.

Object D is thought to be KAGAYAKI:

```
OBJECT D
1 33495U 09002D   09036.75334341 -.00000021  00000-0  46489-5 0   433
2 33495 098.0277 148.2199 0008919 016.5422 343.6081 14.70127932  1978
```

Please monitor for KAGAYAKI. If heard please send your report to Masa, JN1GKZ (m-arai@a.email.ne.jp) and he will relay the information to the command station.

English web site is available.
http://www.sorun.co.jp/e_kagayaki/top.html

[ANS thanks Masa, JN1GKZ for the above information]

/EX

SB SAT @ AMSAT $ANS-046.05
ARISS Status Report for the Week of February 9, 2009

AMSAT News Service Bulletin 046.05
>From AMSAT HQ SILVER SPRING, MD.
February 15, 2009
To All RADIO AMATEURS
BID: $ANS-046.05

Amateur Radio on the International Space Station (ARISS) Status Report
February 9, 2009

1. Upcoming School Contacts

An Amateur Radio on the International Space Station (ARISS) contact was planned & completed for Istituto Comprensivo Pietrasanta1-Scuola Secondaria 1� Grado "Padre Eugenio Barsanti" in Pietrasanta, Lucca, Italy on Tuesday, February 10 at 10:24 UTC. Students have been learning about the planets, planetary systems, rocket technology and radio communications. They have applied their knowledge of English in writing and rehearsing space related questions for the astronaut. They have studied the history of spaceflight and have written essays on space related topics. They have also learned about world geography and have developed cooperation and teamwork skills.

An Amateur Radio on the International Space Station (ARISS) contact was scheduled with Alexandroupolis School of Special Education and 11th Alexandroupolis Primary School in Alexandroupolis, Greece. The contact took place on Wednesday, February 11 at 07:43 UTC. Astronomy and amateur radio lectures were given in preparation for the event. Special attention has been given to the role of humanity and science and to the every day life of an astronaut. The ISS courses have been based on ESA's education tool "ISS Education Kit."

2. Canadian Contact Successful

On Monday, February 2, students from Humber College Institute of Technology and Higher Learning in Toronto, Ontario, Canada participated in an Amateur Radio on the International Space Station (ARISS) contact. Approximately 100 students gathered in the lab where the radio gear was built and watched as students posed 12 questions to Sandra Magnus, KE5FYE. There was national coverage of the event and it was broadcasted on morning television and radio - Canada AM (CTV Network). The Toronto Star and Toronto Sun were also present. The audience reached in Toronto was estimated to be over 3,000,000.

To view the Toronto Sun article, go to:
http://www.torontosun.com/news/torontoandgta/2009/02/02/8237126.html

Toronto Star's story may be found at:
http://www.thestar.com/sciencetech/article/581309

For CTV coverage, see:
http://www.ctv.ca/servlet/ArticleNews/story/CTVNews/20090203/students_space_
AM_090203/20090203?hub=TopStories

The Canadian Broadcasting Corporation (CBC) network carried a 14 minute piece on the Humber College contact that included an 8 minute interview with one of the lead students, followed by a 6 minute clip of the students and Sandy. The story also ran on the show "As it Happens," which is part of CBC's national network program feed and airs coast to coast beginning at 18:30 in each respective time zone. It was then posted on the Web:
http://www.cbc.ca/radioshows/AS_IT_HAPPENS/20090202.shtml (The interview starts at approximately 16:50 in part one. Contact audio runs from 21:30 to 24:00.)

The February 3 issue of the American Institute of Aeronautics and Astronautics' (AIAA) Daily Launch also picked up on the news. It posted a summary, "College Students Contact ISS with Home Built Antenna," citing and providing a link to the CBC article:
http://www.cbc.ca/technology/story/2009/02/02/students-iss.html

3. UK Students Radio ISS

Students attending Pilton Bluecoat Junior School in Barnstaple, Devon, England experienced a successful Amateur Radio on the International Space Station (ARISS) contact on Friday, February 6. Sandra Magnus, KE5FYE answered 20 questions posed to her by ten children as an audience of approximately 260 students and guests looked on. Two newspapers covered the event. The contact video is available for viewing. Go to:
http://www.it-sparkles.co.uk/ARISS/pilton.aspx

4. ARISS Contact with German School, a Success

On Saturday, February 7, St�dtisches Gymnasium Herzogenrath in North Rhine-Westphalia, Germany participated in an Amateur Radio on the International Space Station (ARISS) contact with Mike Fincke, KE5AIT. Students were able to have 18 questions answered before the ISS went over the horizon. Approximately 350 students, teachers and parents were in attendance. The national television channel WDR, two radio stations WDR-Radio and Radio Aachen, and a few local newspapers covered the event. The audio was also fed into the EchoLink AMSAT server. The Aachener Zeitung article (in German) may be found here:
http://www.az-web.de/lokales/nordkreis-detail-az/803788/
Funk-AG-des-Gymnasiums-Herzogenrath-spricht-live-mit-der-ISS

5. Assam, India Students Speak with Mike Fincke

The College of Agriculture, Central Agricultural University in Imphal, Assam, India took part in a successful Amateur Radio on the International Space Station (ARISS) contact on Sunday, February 8 via telebridge station VK4KHZ in Australia. Fourteen of the 16 questions prepared for the contact were answered by Mike Fincke, KE5AIT.
The audio was fed into the EchoLink AMSAT and JK1ZRW servers and received 9 connections from 6 countries. An article ran in the Morung Express. See: http://www.morungexpress.com/regional/13605.html

6. Article Posted on Axam Jatiya Vidyalaya Contact

On January 7, an Amateur Radio on the International Space Station (ARISS) contact was conducted between Mike Fincke, KE5AIT and Axam Jatiya Vidyalaya students in Guwahati, India. The Assam Tribune published an article on the event in its February 7 Horizon supplement.
See: http://www.assamtribune.com/feb0709/horizon.html

7. Ellis Elementary School Contact Video

On December 8, 2008, Ellis Elementary School in Belleville, Illinois experienced an Amateur Radio on the International Space Station (ARISS) contact with Sandra Magnus, KE5FYE. St. Louis public television KETC featured the contact on its "Living St. Louis" program. The video has been posted to YouTube. See:
http://www.youtube.com/watch?v=P2TuJyNXx0c&eurl=http://
livingstlouis.wordpress.com/2009/01/22/living-st-louis-video
-ham-radio/&feature=player_embedded

[ANS thanks Carol, KB3LKI for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the

President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Dee Interdonato, NB2F

```
From -6832631798035495038
X-Google-Thread: 10e8ad,7dfd1c67fe247eb8,start
X-Google-Thread: 10b9c8,7dfd1c67fe247eb8,start
X-Google-Attributes: gid10e8ad,gid10b9c8,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news1.google.com!newshub.sdsu.edu!news.linkpendium.com!
news.linkpendium.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-052 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Sat, 21 Feb 2009 12:17:08 EST
Organization: The Radio Amateur Satellite Corporation
Lines: 1745
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <001001c99445$4253eb20$c6fbc160$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix2.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1235236625 22748 166.84.1.2 (21 Feb 2009 17:17:05 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sat, 21 Feb 2009 17:17:05 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news2.google.com rec.radio.amateur.space:190 rec.radio.info:593
```

This report is organized into five (5) parts.
Part 1 (S1) - operational analog amateur satellites

Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites
Part 5 (S5) - deborbited/returned satellites

SB SAT @ AMSAT W8ISS ANS-052.S1
WSR 052 Part 1 02/21/2009

AMSAT NEWS SERVICE BULLETIN 052.S1
FROM AMSAT HQ SILVER SPRING, MD, February 21, 2009
TO ALL RADIO AMATEURS
BID: $ANS-052.S1

DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008

Status: Operational
Current Mode: Science Mode - Beacon ONLY

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink: 435.530 to 435.570 MHz

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68
[02122009]
=====
VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.859330 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP

```
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is active. Each transponder has a different beacon.
[08072008]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Modes:   FM Repeater - V-FM/u-FM
                               V-FM QRP/u-FM QRP
                 BBS         - OFF
                 Telemetry   - OFF

Analog voice downlink:     435.300 MHz FM
                           435.150 MHz FM
                          2401.200 Mhz FM
Analog voice uplink:       145.880 MHZ FM
                           145.880 MHz USB
                           145.920 MHz FM
                          1268.700 MHz FM 67Hz PL tone
Digital Downlinks:        435.150 MHz FM 38k4 PBP, 1 watt output
                          435.150 MHz FM 9k6 Pacsat Broadcast Protocol
                         2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:           145.860 MHz FM 9k6 Pacsat Broadcast Protocol
                         1268.700 mhz FM 9k6 PBP Digital
Beacon:                   435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[02212009]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002
```

Status: Operational.

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz. The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10 minute timer.
[05282007]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Operational
Current Mode: V/u (Mode JA)

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage:

http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's
CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/
fo29cwts.htm
[02122009]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational

Current Mode: Alternating between Mode A and B every 24 hours

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
[02122009]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - V/u
                      Voice -   V/v
                      BBS -   V/v
                      APRS -   V/v
                      SSTV -   V/v

Expedition 18 Crew:
Commander: Mike Fincke   KE5AIT
Flight Engineer: Yury Lonchakov   RA3DT
Flight Engineer: Sandra Magnus   KE5FYE

Available Modes and Frequencies:

Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 9k6
Worldwide packet downlink: 145.825 Mhz FM 9k6

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[01082009]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-052.S2
WSR 052 Part 2 02/21/2009

AMSAT NEWS SERVICE BULLETIN 052.S2
FROM AMSAT HQ SILVER SPRING, MD, February 21, 2009
TO ALL RADIO AMATEURS
BID: $ANS-052.S2

KAGAYAKI (Solan Co.)
Catalog Number: 33495?
Launch Date: January 23, 2009

Status: In Orbit

Downlink: 437.375 MHZ   FSK9k6/CW
Beacon: 437.375 MHz   FSK9k6/CW

IARU coordination status page:

AMSAT-NA webpage:

[01152009]
=====
STARS (Kagawa Univ.) (Twin Satellites)
Catalog Number: 33498
Launch Date: January 23, 2009

Status: Operational ?

Downlinks: 437.485 MHz FM/CW
           437.465 MHz FM/CW
Beacons: 437.305 MHz FM/CW
           437.275 MHz FM/CW

Callsigns: JR5YBN
           JR5YBO

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=99

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=121&retURL
=/satellites/status.php
[022152009]
=====
KKS-1 (Tokyo MCIT)
Catalog Number: 33499
Launch Date: January 23, 2009

Status: Operational

Downlink: 437.455 MHz AFSK/CW
Beacon: 437.385 MHz AFSK/CW

Callsign: JQ1YYY

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=107

AMSAT-NA webapge:

http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=120&retURL
=/satellites/status.php
[02212009]
=====
PRISM (Tokyo Univ.)
Catalog Number: 33493
Launch Date: January 23, 2009

Status: Operational ?

Downlink: 437.425 MHz AFSK/GMSK/CW
Beacon: 437.250 MHz AFSK/GMSK/CW

Callsign: JQ1YCX

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=97

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=119&retURL
=/satellites/status.php
[02212009]
=====
RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number: 32953
Launch Date: May 23, 2008

Status: Operational

Curent Modes: Telemetry
              Audio
              Images

Downlinks: 435.315 MHz
           435.215 MHz

AMSAT-NA website:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=115&ret
URL=/satellites/status.php

Official website:
http://www.npopm.com/?cid=leoca&caid=43
[02122009]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25

```
CW Beacon:    435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=94&retURL=
/satellites/status.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=72
[02122009]
=====
CP3
Catalog Number: 31129
Launch Date: April 17,2007

Status: Operational

Current Mode:  /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[02122009]
=====
GENESAT-1
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Current Mode: /u

Callsign: KE7EGC

Telemetry Beacon Downlink: 437.0670 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[02212009]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon:             437.2750 MHz CW

Callsign: JQ1YGW
```

```
Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/xivpicte.htm
[02212009]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003

Status: Operational

Current Mode: /u

Beacon:     436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=96&retURL
=/satellites/status.php

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[02212009]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Operational?

Uplink:  1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=56
[02122009]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Modes:   FM Repeater - V-FM/u-FM
                               V-FM QRP/u-FM QRP
```

BBS - OFF
Telemetry - OFF

Analog voice downlink:	435.300 MHz FM
	435.150 MHz FM
	2401.200 Mhz FM
Analog voice uplink:	145.880 MHZ FM
	145.880 MHz USB
	145.920 MHz FM
	1268.700 MHz FM 67Hz PL tone
Digital Downlinks:	435.150 MHz FM 38k4 PBP, 1 watt output
	435.150 MHz FM 9k6 Pacsat Broadcast Protocol
	2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:	145.860 MHz FM 9k6 Pacsat Broadcast Protocol
	1268.700 mhz FM 9k6 PBP Digital
Beacon:	435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[020592009]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=69&retURL=/satellites/status.php
[02212009]

```
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Semi-operational

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink:        144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[09242007]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Telemetry only reported

Current Modes: V/U
               L/U

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign:       4XTECH-12

More information of GO-32 can be found at:
http://asri.technion.ac.il/techsat/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=14&retURL
=/satellites/status.php
[02212009]
=====
RS-22 RADIO SPORT RS-22
Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only
```

Current Mode: /u

CW Beacon - 435.352 MHz
145.818 MHz

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=76&retURL=/satellites/status.php
[02212009]
=====
CanX-2
Catalog number: 32790
Launch Date: April 28, 2008

Status: Operational in range of ground station only

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[02212009]
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.425 MHz 1k2 baud packet

For the latest project status update please visit the AAUSAT-II web page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[02212009]
=====
CO-65 CUTE-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008

Status: Digipeater

Downlink: 437.475 MHz 9k6 Packet
Uplink: 1267.600 Mhz

Telemetry Beacon:
Downlink: 437.2750 MHz CW

For the latest project status update please visit the Cute-1.7+APD II
web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78

Command Station blog website:
http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=112&retURL
=/satellites/status.php
[02212009]
=====
Compass-1
Catalog number: 32787
Launch Date: April 28, 2008

Status: Operational

Current Mode: 4k8 MSK packet

Downlink: 437.275 Mhz CW
          437.405 MHz Packet

For the latest project status update please visit the Compass 1 web
page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=114&retURL
=/satellites/status.php
[02212009]
=====
CO-66 Seeds II
Catalog number: 32791
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.485 MHz

Callsign: JQ1YGU

For the latest project status update please visit the Seeds 2 web
page: http://cubesat.aero.cst.nihon-u.ac.jp/english/seeds_2_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36

AMSAT-NA webpage:

http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=113&retURL=/satellites/status.php
[02212009]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes:		
	FM Repeater -	V/u
	Voice -	V/v
	BBS -	V/v
	APRS -	V/v
	SSTV -	V/v

Expedition 18 Crew:

Commander:	Mike Fincke	KE5AIT
Flight Engineer:	Yury Lonchakov	RA3DT
Flight Engineer:	Sandra Magnus	KE5FYE

Available Modes and Frequencies:

Digital/APRS:

Worldwide packet uplink:	145.825 MHz FM 9k6
Worldwide packet downlink:	145.825 Mhz FM 9k6

Voice:

Region 1 voice uplink:	145.200 MHz FM
Region 2/3 voice uplink:	144.490 MHz FM
Worldwide downlink:	145.800 MHz FM

Crossband Repeater:

Repeater Uplinks:	1269.650 MHz FM
	437.800 MHz FM
	145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink:	145.800 MHz FM
	437.800 MHz FM (Kenwood)

SSTV Robot 36:

Downlink:	145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:

Belgian:	OR4ISS
German:	DP0ISS
Russian:	RS0ISS
	RZ3DZR
United States:	NA1SS

Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time line is NOT translated from Russian and posted.
[01082009]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-052.S3
WSR 052 Part 3 02/21/2009

AMSAT NEWS SERVICE BULLETIN 052.S3
FROM AMSAT HQ SILVER SPRING, MD, February 21, 2009
TO ALL RADIO AMATEURS
BID: $ANS-052.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

CP4
Catalog Number: 31122
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon: 437.325 MHz CW

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=79
[10022008]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: Non-Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder: 145.825 Mhz FM
[01012009]
=====
NCUBE-2
Catalog number: 28897

Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 MHz FM 67Hz CTCSS
Voice Downlink: 2401.835 MHz FM
Packet Up/Downlink: 437.250 MHz 9k6 packet
Packet Downlink   2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non=Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[08132007]
=====
QuakeSat
Catalog Number: 27845
Launch Date: June 30, 2003

Status: ?

Current Mode: 9600 baud data packet

Mode U packet
Downlink: 436.675 MHz 9k6 BPS

Quakesat webpage:
http://www.quakefinder.com/services/quakesat-ssite/
[02212009]
=====
DTUSAT
Catalog Number: 27842

Launch Date: June 30, 2003

Status: Non-Operational

Current Mode: 2k4 AFSK Packet last reported

Downlink: 437.475MHz

Officail webpage: http://dtusat1.dtusat.dtu.dk/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=101&retURL=satellites/all_oscars.php
[02212009]

=====

AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)

Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]

=====

MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Non-Operational

Uplinks: 145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[007302007]

=====

NO-45 SAPPHIRE

```
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink:   145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS:                SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink:   145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
```

V-band: 145.840 - 145.990 MHz CW/LSB
U-band: 435.550 - 435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks

S2-band: 2401.225 - 2401.475 MHz CW/USB
K-band: 24048.010 - 24048.060 MHz CW/USB
Beacon: 2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)

BEACON	General Beacon(GB)	Middle Beacon(MB)	Engineering Beacon(EB)
2 m	none	145.898 MHz	none
70cm	435.438 MHz	435.588 MHz	435.838 MHz
13cm(1)	2400.188 MHz	2400.338 MHz	2400.588 MHz
13cm(2)	2401.173 MHz	2401.323 MHz	2401.573 MHz
3cm	10450.975 MHz	10451.125 MHz	10451.375 MHz
1.5cm	24047.885 MHz	24048.035 MHz	24048.285 MHz

[07162007]
=====
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: ?

Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink: 145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]

```
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Non-operational

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign:       POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012009]
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993

Status: Non-operational

Current Mode: V/u

Uplink:   145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[01292009]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12
```

```
Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HL01-11
BBS: HL01-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
```

```
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
LIBERTAD-1
Catalog Number: 31128
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink:   145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[02122009]
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990

Status: CW Beacon only

Uplinks:          145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink:      437.125 MHz
```

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[01222007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink: 145.825 MHz FM 1200 Baud AFSK
Beacon: 2401.220 MHz
[05012006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: SEMI-Operational

Current Mode: V/u

Uplink: 145.900 MHz FM 1200-baud Manchester FSK (reserved)
                145.920 MHz FM VOICE
                145.940 MHz FM 1200-baud Manchester FSK (reserved)
                145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink: 437.026 MHz USB VOICE
                (1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC 437.050 MHz RHCP
   PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11

```
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[12252008]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984

Status: Non-operational.

Current Mode:  /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon:          435.025 MHz
Mode-S Beacon:     2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
```

MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[01012009]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon: 145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.8500 - 145.9000 MHz SSB/CW
Downlink 29.4000 - 29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink: 29.4500 - 29.5500 MHz SSB/CW
Beacons: 29.450 MHz
          435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321

```
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon 1:  29.352 MHz (intermittent)
Beacon 2:  29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink:     21.260 to 21.300 MHz CW/USB
Downlink:  145.860 to 145.900 MHz CW/USB

Beacon:    145.860 MHz

Robot:     145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational
```

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-052.S4
WSR 052 Part 4 02/21/2009

AMSAT NEWS SERVICE BULLETIN 052.S4
FROM AMSAT HQ SILVER SPRING, MD, February 21, 2009
TO ALL RADIO AMATEURS
BID: $ANS-052.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE PROPOSED FOR LAUNCH
AT THIS TIME:

SOHLA-1 (ASTRO TECH.)
Catalog Number:
Proposed Launch Date: February 2009?

Status: Launch Phase

Proposed Frequencies and Modes:
Downlink: 437.505 MHz AFSK/CW
Beacon: 437.505 MHz AFSK/CW

Callsign:

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=101
[01152009]
=====
UNITEC
Catalog Number:
Proposed Launch Date: May 2010

Status: Design Phase

Proposed Equipment:

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=141
[01152009]
=====
XW-1
Catalog Number:
Proposed Launch Date: Summer 2009?

```
Status: Design Phase

Proposed Equipment:
Beacon: 435Mhz, CW 20dBm
Linear transponder: RX: 145Mhz, TX: 435Mhz, 40KHz, 30dBm
FM Transponder: RX: 145Mhz, TX: 435Mhz, 16KHz, 30dBm
Digital store and forward transponder: RX: 145Mhz, TX: 435Mhz, 16KHz,
                                            30dBm

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108
[10092008]
=====
Phase 5a Mars Mission AO-??
Catalog Number:
Proposed Launch Date: 2009 or 2011

Status: Design Phase

For the latest project status update please visit the AMSAT-DL P5-A
web page:
http://ticket-to-mars.org
[01222007]
=====
PHASE 3E AO-??
Catalog number:
Proposed Launch Date: ??????

Status: STORAGE

For the latest project status update please visit the AMSAT-DL P3-E
web page:
http://www.amsat-dl.org/p3e/
[02212009]
=====
Eagle AO-??
Catalog Number:
Proposed Launch Date: ?????

Status: Design Phase

For the latest project status updates please visit the AMSAT-NA web
page: http://www.amsat.org
[02212009]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-052.S5
WSR 052 Part 5 02/21/2009

AMSAT NEWS SERVICE BULLETIN 052.S5
FROM AMSAT HQ SILVER SPRING, MD, February 21, 2009
TO ALL RADIO AMATEURS
```

BID: $ANS-052.S5

THE FOLLOWING SATELLITES HAVE RE-ENTERED OR HAVE BEEN RETURNED SAFELY:

NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: July 28, 2008

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[01012009]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink: 145.825 Mhz FM APRS AX25
APRS Uplink: 145.825 MHz FM APRS AX25
Voice/PSK31 Uplink: 28.120 MHz

Packet to Voice ID: RAFT
[06112007]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Re-Entered
Re-entered: June 18, 2008

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon: 437.2750 MHz CW

Callsign: JR8YJT

[01012009]
=====
SO-43 Starshine 3
Catalog Number: 26929
Launch Date: September 30, 2001

Status: Re-Entered
Re-entered: January 21, 2003

Beacon: 145.825Mhz
[02212009]SB SAT @ AMSAT W8ISS ANS-036.S4
WSR 036 Part 4 02/05/2009

AMSAT NEWS SERVICE BULLETIN 036.S4
FROM AMSAT HQ SILVER SPRING, MD, February 05, 2009
TO ALL RADIO AMATEURS
BID: $ANS-036.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE PROPOSED FOR LAUNCH
AT THIS TIME:

SOHLA-1 (ASTRO TECH.)
Catalog Number:
Proposed Launch Date: February 2009?

Status: Launch Phase

Proposed Frequencies and Modes:
Downlink: 437.505 MHz AFSK/CW
Beacon: 437.505 MHz AFSK/CW

Callsign:

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=101
[01152009]
=====
UNITEC
Catalog Number:
Proposed Launch Date: May 2010

Status: Design Phase

Proposed Equipment:

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=141
[01152009]
=====
XW-1
Catalog Number:
Proposed Launch Date: Summer 2009?

Status: Design Phase

Proposed Equipment:
Beacon: 435Mhz, CW 20dBm
Linear transponder: RX: 145Mhz, TX: 435Mhz, 40KHz, 30dBm
FM Transponder: RX: 145Mhz, TX: 435Mhz, 16KHz, 30dBm
Digital store and forward transponder: RX: 145Mhz, TX: 435Mhz, 16KHz, 30dBm

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108
[10092008]
=====
Phase 5a Mars Mission AO-??
Catalog Number:
Proposed Launch Date: 2009 or 2011

Status: Design Phase

For the latest project status update please visit the AMSAT-DL P5-A web page:
http://ticket-to-mars.org
[01222007]
=====
PHASE 3E AO-??
Catalog number:
Proposed Launch Date: ??????

Status: STORAGE

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/
[02212009]
=====
Eagle AO-??
Catalog Number:
Proposed Launch Date: ?????

Status: Design Phase

For the latest project status updates please visit the AMSAT-NA web page: http://www.amsat.org
[02212009]
NNNN
/EX
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30

UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at}amsat.org
NNNN
/EX

```
From -6243069963244543976
X-Google-Thread: 10e8ad,788dce834666a99a,start
X-Google-Thread: 10b9c8,788dce834666a99a,start
X-Google-Attributes: gid10e8ad,gid10b9c8,domainid0,public,usenet
```

```
X-Google-Language: ENGLISH,ASCII
Path: g2news1.google.com!news1.google.com!news2.google.com!
border1.nntp.dca.giganews.com!nntp.giganews.com!nx01.iad.newshosting.com!
newshosting.com!198.186.194.249.MISMATCH!transit3.readnews.com!
textspool2.readnews.com!news-out.readnews.com!transit4.readnews.com!panix!
rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-053 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sat, 21 Feb 2009 21:20:53 EST
Organization: The Radio Amateur Satellite Corporation
Lines: 331
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000201c99494$2a4a1aa0$7ede4fe0$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix3.panix.com
Mime-Version: 1.0
Content-Type: text/plain;charset="iso-8859-1"
Content-Transfer-Encoding: quoted-printable
X-Trace: reader1.panix.com 1235269253 26956 166.84.1.3 (22 Feb 2009 02:20:53 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 22 Feb 2009 02:20:53 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news1.google.com rec.radio.amateur.space:166 rec.radio.info:516
```

AMSAT NEWS SERVICE
ANS-053

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:

* Satellite News From AMSAT-India
* AMSAT Awards

* KiwiSAT News from New Zealand
* Satellite Shorts From All Over
* ARISS Status Report for the Week of February 16, 2009

SB SAT @ AMSAT $ANS-053.01
Satellite News From AMSAT-India

AMSAT News Service Bulletin 053.01
>From AMSAT HQ SILVER SPRING, MD.
February 22, 2009
To All RADIO AMATEURS
BID: $ANS-053.01

AMSAT-India Project Manager for the U/V HAMSAT-II Linear Transponder project, Prathap Kumar, VU2POP provided technical details of this new Amateur Radio transponder in the February, 2009 issue of the AMSAT-India Newsletter:

Type: Linear (Mode B) Transponder
Uplink: 434-438 MHz PLL controlled 50 KHz steps.
Downlink: 144-146 MHz PLL controlled 25 KHz steps.
IF: 21.4 MHz
RF Power: 1-3 Watts PEP.
Bandwidth: 50 KHz
Communication: CW/SSB/FM
Dimensions: 165mm x 115mm x 30mm
Power supply: 12V @400mA, 20V@50mA for PA

Photos and other news in the AMSAT-India Newsletter can be found on-line at: http://www.amsatindia.org/Newsletter

In other amateur satellite news from India word has been received that Anna University in Chennai, India is working with the Indian Space Research Organisation (ISRO) to develop a micro-satellite named ANUSAT.

This satellite will be a cube 600mm on each side. The Amateur Radio payload is planned to include a digital store and forward mode with a VHF uplink and UHF down link operating in the amateur frequency bands. Telemetry downlink from the primary scientific payloads is planned to be transmitted around 137 MHz using PCM/FSK/AM at 256 bits/sec. Additional information can be found on-line at:
http://beswaminathan.googlepages.com/anusat - and -
http://beswaminathan.googlepages.com/Anusat.pdf

Mineo Wakita, JE9PEL along with Ralph Wallio, W0RPK provided information of the next ISRO launch which will carry Amateur Radio satellites:

Launch : 25Apr2009 (Maybe postponed)
Vehicle: PSLV C12
Site : ISRO Satish Dhawan Space Centre Sriharikota India
Main Payload: Oceansat-2

Satellite	Country	Downlink	Mode
BeeSat	Germany	436.000	GMSK 9600/4800bps
UWE-2	Germany	437.385	CW, AFSK
ITU-pSat	Turkey	437.325	CW, High speed TLM
SwissCube-1	Switzerland	437.505	CW, AFSK 1200bps

Additional information can be found at:
http://showcase.netins.net/web/wallio/CubeSat.htm
http://www.amsat.org.uk/iaru/finished.asp?order=sat

[ANS thanks AMSAT-India, Mineo JE9PEL, and Ralph W0RPK for the above information]

/EX

SB SAT @ AMSAT $ANS-053.02
AMSAT Awards

AMSAT News Service Bulletin 053.02
>From AMSAT HQ SILVER SPRING, MD.
February 22, 2009
To All RADIO AMATEURS
BID: $ANS-053.02

AMSAT Director Contests and Awards, Bruce KK5DO reported the past few weeks have been real busy for AMSAT Awards.

We have a lot of new satellite operators to welcome to the hobby. These have made their first satellite contact and are now members of the AMSAT Satellite Communicators Club:
+ John Hengel, W0JPH
+ Andrew Schmidt, N2FTR
+ Tom Deeble, KA6SIP
+ Robert Warshel, KG6MGE
+ Harry Strahlendorf, KC2OJN
+ Bruce Pendleton, KD8DQ
+ Rodney Waln, KC0ZHF

The following have earned the AMSAT Satellite Communications Achievement Award:
+ Peter Nintzel, KB9ZLK #480
+ Douglas Anoman, KC9MLN #481
+ Gary Lockhart, AB3ID #482

The following have earned the AMSAT South Africa Satellite Communications Achievement Award:
+ Douglas Anoman, KC9MLN #US130

The following have upgraded their AMSAT W4AMI Satellitie Communication Achievement Award:

+ Wilse Morgan, WX7P from 1,000 to 2,000
+ Patrick Stoddard, WD9EWK from 3,000 to 4,000

Patrick Stoddard, WD9EWK earned the AMSAT W4AMI 5,000 Satellite Communication Achievement Award #21.

To see all the awards visit http://www.amsat.org.

[ANS thanks Bruce, KK5DO for the above information]

/EX

SB SAT @ AMSAT $ANS-053.03
KiwiSAT News from New Zealand

AMSAT News Service Bulletin 053.03
>From AMSAT HQ SILVER SPRING, MD.
February 22, 2009
To All RADIO AMATEURS
BID: $ANS-053.03

The KiwiSAT linear flight transponder is now "on air" in New Zealand from the Whangaparaoa area with beam antennas pointing South. It features:

Transponder: Inverting type (Orbital Doppler shift compensation)
Transmit Power: 2 Watts PEP.
Beacon frequency: 145.885 MHz
Uplink: 435.265 to 435.235 MHZ LSB
Down link: 145.850 to 145.880 MHz USB

The team says they are currently looking to ISC Kosmatras for a DNEPR launch in mid to late 2009. Full details can found on-line at: http://www.kiwisat.org.nz/index.html

[ANS thanks the KiwiSAT team for the above information]

/EX

SB SAT @ AMSAT $ANS-053.04
Satellite Shorts From All Over

AMSAT News Service Bulletin 053.04
>From AMSAT HQ SILVER SPRING, MD.
February 22, 2009
To All RADIO AMATEURS
BID: $ANS-053.04

+ From Japan Mineo Wakita, JE9PEL reports that PRISM satellite team at Tokyo University have seen first light with the Wide Angle Camera. Data from this first test will be used to calibrate the camera and future photos are expected to be less overexposed. This picture was taken when the PRISM satellite was over Hokkaido, Japan. The first photograph can be at: http://tinyurl.com/ag7way

- A video re-creation of the Iridium 33 and Cosmos 2251 Collision can be found at: http://tinyurl.com/ap3ydx (UniverseToday.com)

- Winter is turning to spring in Mars' southern hemisphere. Photos taken by the HiRISE camera on board the Mars Reconnaissance Orbiter can be found at: http://tinyurl.com/bwu4wv. An entertaining video named "Springtime on Mars 2020" is on-line at: http://www.youtube.com/watch?v=yjiGH9QNiU0 (via UniverseToday.com)

- The second repeater aboard AO-51 (Uplink: 145.880 MHz FM /Downlink: 435.150 MHz FM) remains ready for use by the K5D Desecheo Island 2009 DXpedition when the satellite is within range of the island (near Puerto Rico). When AO-51 is not within range of Desecheo Island this repeater is open for general use following the QRP guidelines. The transmitter power on both repeaters is ~800 mW. If you use circular polarization on the UHF downlink 435.150 is LHCP, and 435.300 is RHCP. Watch the blog at http://www.kp5.us/ for hints at satellite operation and other operating plans.

- Registration is now open for the 35th Eastern VHF/UHF Conference on on April 17-19, 2009 in Enfield, Ct. Papers for the Proceedings are due March 10, 2009. More info at: http://www.newsvhf.com/vhfconf.html

[ANS thanks everyone for the above information]

/EX

SB SAT @ AMSAT $ANS-053.05
ARISS Status Report for the Week of February 16, 2009

AMSAT News Service Bulletin 053.05
>From AMSAT HQ SILVER SPRING, MD.
February 22, 2009
To All RADIO AMATEURS
BID: $ANS-053.05

1. School Contacts

An ARISS contact was completed with South Park Elementary Center in South Park, Pennsylvania on Tuesday, February 17 via telebridge station K6DUE in Maryland. Students participated in a contest to determine which questions will be asked of astronaut Mike Fincke, KE5AIT. They learned about astronauts, shuttles and NASA and created posters or wrote essays (depending on grade level) about space related topics.

Salluit Schools in Salluit, Quebec, Canada completed an ARISS contact on Thursday, February 19 via telebridge station W6SRJ in California. Approximately 400 students from Kindergarten through Secondary are enrolled in the schools located in a remote North-West Quebec Inuit community. Teachers have included space related topics in their curriculum. All students have created artwork for the event and have submitted questions to ask the astronaut. During morning announcements, a "cool space fact of the day" has been announced daily.

An ARISS contact with Erie Planetarium in Erie, Pennsylvania took place on Saturday, February 21 via telebridge station W6SRJ in California. The Planetarium offers astronomy programs, interactive stations and science experiments throughout the year.

2. Italian Students Contact ISS

On Tuesday, February 10, students from Istituto Comprensivo Pietrasanta1-Scuola Secondaria 1� Grado "Padre Eugenio Barsanti" participated in a successful ARISS contact. Students posed 12 questions to Mike Fincke, KE5AIT, in front of an audience of 350. Contact video was streamed live on the Web and was seen in 14 countries and in more than 36 different towns around the world. Local television stations and newspapers covered the event. Video of the contact has been posted to the OndaForte TV Web site.
See: http://www.ondaforte.tv/eventi/ariss_school_contact/index.php

3. Greek Contact Successful

On Wednesday, February 11, an ARISS contact took place with students from Alexandroupolis School of Special Education and 11th Alexandroupolis Primary School in Greece. Students asked 20 questions of Sandra Magnus, KE5FYE, in front of an audience of approximately 200. Another 700 students from four schools listened to the contact in the garden. A representative of the Greek Minister of Telecommunications and the Director of Education of Evros also attended. Three television stations, two radio stations and newspapers covered the event.

4. ARISS Presentation at MACUL Conference

The Michigan Association for Computer Users in Learning (MACUL) will host its 33rd annual conference in Detroit, Michigan on March 18-20. MACUL aims to bring educators together to share knowledge about educational uses of computers and technology. ARISS member Steve Michalski, KB9UPS, will participate in the conference and give a talk on the ARISS program, showing clips of the Martin Luther King Academy (Mount Clemens, Michigan) ARISS contact which took place in September 2007. The MACUL conference draws 3,000 educators annually.

5. Photos of German Contact Posted

St�dtisches Gymnasium Herzogenrath in North Rhine-Westphalia, Germany

participated in an ARISS contact with Mike Fincke, KE5AIT, on Saturday, February 7. Photos of the contact have been posted on the Web. See:
http://picasaweb.google.de/Rueliman/ARISSContact?feat=directlink#

6. ARRL QST Covers ARISS News

The American Radio Relay League (ARRL) published two ARISS news items in its March 2009 issue of QST.

Under "Media Hits" (page 12) is an item on the Ohio Department of Education Web story about the September 2008 ARISS contact with students at the Challenger Learning Center of Lucas County in Toledo. Also listed

is the Ann Arbor Chronicle article about the Ann Arbor, Michigan Hands On Museum contact.

The ARRL monthly journal has a circulation of 150,000.

7. ARISS Member Dieter Schliemann Dies

ARISS team member Dieter Schliemann, KX4Y, passed away on Monday, February 9. Dieter had been responsible for coordinating and expanding the educational outreach of ARISS through the use of Voice over the Internet Protocol (VoIP) with Internet Radio Linking Project (IRLP) and EchoLink. As his health deteriorated, Dieter continued his support, making
sure that others would carry on in his absence. He will be sorely missed.
Dieter was a member of the Radio Amateur Satellite Corporation (AMSAT) and
the American Radio Relay League (ARRL). ARRL posted an article on his contributions:
https://www.arrl.org/news/stories/2009/02/12/10647/?nc=1

[ANS thanks Carol, KB3LKI for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office. And, with that keep in mind that you know you are getting older if you and your teeth don't sleep together.

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM
K9JKM at amsat dot org

From -1677577055190171141

```
X-Google-Thread: 10e8ad,2b729556cec6856,start
X-Google-Thread: 10b9c8,2b729556cec6856,start
X-Google-Attributes: gid10e8ad,gid10b9c8,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news2.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx02.iad.newshosting.com!newshosting.com!
198.186.194.249.MISMATCH!news-out.readnews.com!transit3.readnews.com!panix!
rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-059 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Mon, 2 Mar 2009 14:32:26 EST
Organization: The Radio Amateur Satellite Corporation
Lines: 1657
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <001201c99b6d$94cbe220$be63a660$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix2.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1236022342 15381 166.84.1.2 (2 Mar 2009 19:32:22 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Mon, 2 Mar 2009 19:32:22 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news2.google.com rec.radio.amateur.space:192 rec.radio.info:609
```

This report is organized into five (5) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites
Part 5 (S5) - deorbited/returned satellites

SB SAT @ AMSAT W8ISS ANS-059.S1
WSR 059 Part 1 02/28/2009

AMSAT NEWS SERVICE BULLETIN 059.S1
FROM AMSAT HQ SILVER SPRING, MD, February 28, 2009
TO ALL RADIO AMATEURS

BID: $ANS-059.S1

DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008

Status: Operational
Current Mode: Science Mode - Beacon ONLY

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink: 435.530 to 435.570 MHz

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68
[02122009]
=====
VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.859330 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is active. Each transponder has a different beacon.
[08072008]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

```
Status: Operational

Current Modes:   FM Repeater - V-FM/u-FM
                               V-SSB/u-FM
                 BBS         - OFF
                 Telemetry   - OFF

Analog voice downlink:     435.300 MHz FM
                           435.150 MHz FM
                          2401.200 Mhz FM
Analog voice uplink:       145.880 MHZ FM
                           145.880 MHz USB
                           145.920 MHz FM
                          1268.700 MHz FM 67Hz PL tone
Digital Downlinks:        435.150 MHz FM 38k4 PBP, 1 watt output
                          435.150 MHz FM 9k6 Pacsat Broadcast Protocol
                         2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:           145.860 MHz FM 9k6 Pacsat Broadcast Protocol
                         1268.700 mhz FM 9k6 PBP Digital
Beacon:                   435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[02282009]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002

Status: Operational.

Current Mode: V/u

Uplink:   145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear
```

```
Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4
Hz. The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute
   timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the re-
   peater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset
   the 10 minute timer.
[05282007]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Operational
Current Mode: V/u (Mode JA)

Voice/CW Mode JA
Uplink:   145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon:   435.795 MHz

Digital Mode JD
Uplinks:  145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage:
http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's
CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/
fo29cwts.htm
[02122009]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational

Current Mode: Alternating between Mode A and B every 24 hours

Uplink:   145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink:  29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons:   29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
[02122009]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - V/u
                      Voice -       V/v
                      BBS -         V/v
                      APRS -        V/v
                      SSTV -        V/v

Expedition 18 Crew:
Commander:                Mike Fincke      KE5AIT
Flight Engineer:          Yury Lonchakov   RA3DT
Flight Engineer:          Sandra Magnus    KE5FYE


Available Modes and Frequencies:

Digital/APRS:
Worldwide packet uplink:   145.825 MHz FM 9k6
Worldwide packet downlink: 145.825 Mhz FM 9k6

Voice:
Region 1 voice uplink:     145.200 MHz FM
Region 2/3 voice uplink:   144.490 MHz FM
Worldwide downlink:        145.800 MHz FM
```

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[01082009]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-059.S2
WSR 059 Part 2 02/28/2009

AMSAT NEWS SERVICE BULLETIN 059.S2
FROM AMSAT HQ SILVER SPRING, MD, February 28, 2009
TO ALL RADIO AMATEURS
BID: $ANS-059.S2

SOHLA-1 (ASTRO TECH.)
Catalog Number: 33492 ?
Launch Date: January 23, 2009

Status: In Orbit

Proposed Frequencies and Modes:
Downlink: 437.505 MHz AFSK/CW
Beacon: 437.505 MHz AFSK/CW

```
Callsign:

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=101
[02282009]
=====
KAGAYAKI (Solan Co.)
Catalog Number: 33495?
Launch Date: January 23, 2009

Status: In Orbit

Downlink: 437.375 MHZ    FSK9k6/CW
Beacon:   437.375 MHz    FSK9k6/CW

IARU coordination status page:

AMSAT-NA webpage:

[01152009]
=====
STARS (Kagawa Univ.) (Twin Satellites)
Catalog Number: 33498
Launch Date: January 23, 2009

Status: Operational ?

Downlinks: 437.485 MHz FM/CW
           437.465 MHz FM/CW
Beacons:   437.305 MHz FM/CW
           437.275 MHz FM/CW

Callsigns: JR5YBN
           JR5YBO

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=99

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=121&retURL
=/satellites/status.php
[022152009]
=====
KKS-1 (Tokyo MCIT)
Catalog Number: 33499
Launch Date: January 23, 2009

Status: Operational

Downlink:  437.455 MHz AFSK/CW
Beacon:    437.385 MHz AFSK/CW

Callsign: JQ1YYY
```

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=107

AMSAT-NA webapge:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=120&retURL
=/satellites/status.php
[02212009]
=====
PRISM (Tokyo Univ.)
Catalog Number: 33493
Launch Date: January 23, 2009

Status: Operational ?

Downlink: 437.425 MHz AFSK/GMSK/CW
Beacon: 437.250 MHz AFSK/GMSK/CW

Callsign: JQ1YCX

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=97

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=119&retURL
=/satellites/status.php
[02212009]
=====
RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number: 32953
Launch Date: May 23, 2008

Status: Operational

Curent Modes: Telemetry
              Audio
              Images

Downlinks: 435.315 MHz
           435.215 MHz

AMSAT-NA website:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=115&ret
URL=/satellites/status.php

Official website:
http://www.npopm.com/?cid=leoca&caid=43
[02122009]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=94&retURL=/satellites/status.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=72
[02122009]
=====
CP3
Catalog Number: 31129
Launch Date: April 17,2007

Status: Operational

Current Mode: /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[02122009]
=====
GENESAT-1
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Current Mode: /u

Callsign: KE7EGC

Telemetry Beacon Downlink: 437.0670 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[02212009]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon: 437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/xivpicte.htm
[02212009]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003

Status: Operational

Current Mode: /u

Beacon: 436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=96&retURL
=/satellites/status.php

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[02212009]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Operational?

Uplink: 1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=56
[02122009]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

```
Status: Operational

Current Modes:   FM Repeater - V-FM/u-FM
                               V-SSB/u-FM
                 BBS         - OFF
                 Telemetry   - OFF

Analog voice downlink:     435.300 MHz FM
                           435.150 MHz FM
                          2401.200 Mhz FM
Analog voice uplink:       145.880 MHZ FM
                           145.880 MHz USB
                           145.920 MHz FM
                          1268.700 MHz FM 67Hz PL tone
Digital Downlinks:        435.150 MHz FM 38k4 PBP, 1 watt output
                          435.150 MHz FM 9k6 Pacsat Broadcast Protocol
                         2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:           145.860 MHz FM 9k6 Pacsat Broadcast Protocol
                         1268.700 mhz FM 9k6 PBP Digital
Beacon:                   435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[02282009]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW
```

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=69&retURL
=/satellites/status.php
[02212009]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Semi-operational

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[09242007]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Telemetry only reported

Current Modes: V/U
L/U

Downlink: 435.225 MHz FM (9600-baud FSK)
435.325 Mhz - Not Available - temperature problems
Uplinks: 145.850 FM
145.890 FM
145.930 FM
1269.700 FM
1269.800 FM
1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://asri.technion.ac.il/techsat/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=14&retURL
=/satellites/status.php
[02212009]
=====
RS-22 RADIO SPORT RS-22

Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only

Current Mode: /u

CW Beacon - 435.352 MHz
            145.818 MHz

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=76&retURL
=/satellites/status.php
[02212009]
=====
CanX-2
Catalog number: 32790
Launch Date: April 28, 2008

Status: Operational in range of ground station only

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[02212009]
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.425 MHz 1k2 baud packet

For the latest project status update please visit the AAUSAT-II web page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[02212009]
=====
CO-65 CUTE-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008

Status: Digipeater

Downlink: 437.475 MHz 9k6 Packet

Uplink: 1267.600 Mhz

Telemetry Beacon:
Downlink: 437.2750 MHz CW

For the latest project status update please visit the Cute-1.7+APD II web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78

Command Station blog website:
http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=112&retURL=/satellites/status.php
[02212009]
=====
Compass-1
Catalog number: 32787
Launch Date: April 28, 2008

Status: Operational

Current Mode: 4k8 MSK packet

Downlink: 437.275 Mhz CW
          437.405 MHz Packet

For the latest project status update please visit the Compass 1 web page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=114&retURL=/satellites/status.php
[02212009]
=====
CO-66 Seeds II
Catalog number: 32791
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.485 MHz

Callsign: JQ1YGU

For the latest project status update please visit the Seeds 2 web page: http://cubesat.aero.cst.nihon-u.ac.jp/english/seeds_2_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=113&retURL
=/satellites/status.php
[02212009]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - V/u
Voice - V/v
BBS - V/v
APRS - V/v
SSTV - V/v

Expedition 18 Crew:
Commander: Mike Fincke KE5AIT
Flight Engineer: Yury Lonchakov RA3DT
Flight Engineer: Sandra Magnus KE5FYE

Available Modes and Frequencies:

Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 9k6
Worldwide packet downlink: 145.825 Mhz FM 9k6

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:

Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[01082009]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-059.S3
WSR 059 Part 3 02/28/2009

AMSAT NEWS SERVICE BULLETIN 059.S3
FROM AMSAT HQ SILVER SPRING, MD, February 28, 2009
TO ALL RADIO AMATEURS
BID: $ANS-059.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

CP4
Catalog Number: 31122
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon: 437.325 MHz CW

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=79
[10022008]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: Non-Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM

```
Voice Recorder:  145.825 Mhz FM
[01012009]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency:  437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink:         437.250 MHz FM 67Hz CTCSS
Voice Downlink:      2401.835 MHz FM
Packet Up/Downlink:   437.250 MHz 9k6 packet
Packet Downlink      2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non=Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[08132007]
=====
QuakeSat
Catalog Number: 27845
Launch Date: June 30, 2003

Status: ?

Current Mode: 9600 baud data packet

Mode U packet
Downlink: 436.675 MHz 9k6 BPS

Quakesat webpage:
```

http://www.quakefinder.com/services/quakesat-ssite/
[02212009]
=====
DTUSAT
Catalog Number: 27842
Launch Date: June 30, 2003

Status: Non-Operational

Current Mode: 2k4 AFSK Packet last reported

Downlink: 437.475MHz

Officail webpage: http://dtusat1.dtusat.dtu.dk/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=101&retURL=satellites/all_oscars.php
[02212009]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)

Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Non-Operational

Uplinks: 145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as

a collaborative effort between the Malaysian government and Surrey
Satellite Technology Ltd.
[007302007]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

```
Status: Non-Operational

Uplinks
-------
V-band:   145.840 -  145.990 MHz CW/LSB
U-band:   435.550 -  435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks
---------
S2-band:  2401.225 -  2401.475 MHz CW/USB
K-band:  24048.010 - 24048.060 MHz CW/USB
Beacon:   2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)
----------------------------
BEACON   General Beacon(GB)  Middle Beacon(MB)  Engineering Beacon(EB)
2 m                    none        145.898 MHz                    none
70cm            435.438 MHz        435.588 MHz             435.838 MHz
13cm(1)        2400.188 MHz       2400.338 MHz            2400.588 MHz
13cm(2)        2401.173 MHz       2401.323 MHz            2401.573 MHz
3cm           10450.975 MHz      10451.125 MHz           10451.375 MHz
1.5cm         24047.885 MHz      24048.035 MHz           24048.285 MHz
[07162007]
=====
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink:    145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site at the following URL:
```

ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: ?
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink: 145.925 MHz 9600 baud FSK

```
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Non-operational

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign:       POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012009]
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993

Status: Telemetry?

Current Mode: V/u

Uplink:   145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[02282009]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud
```

```
Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991
```

```
Status: Non-Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
LIBERTAD-1
Catalog Number: 31128
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink:   145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[02122009]
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990

Status: CW Beacon only

Uplinks:          145.840 MHz 1200-baud Manchester FSK
```

145.860 MHz 1200-baud Manchester FSK
145.880 MHz 1200-baud Manchester FSK
145.900 MHz 1200-baud Manchester FSK

CW downlink: 437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[01222007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink: 145.825 MHz FM 1200 Baud AFSK
Beacon: 2401.220 MHz
[05012006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: SEMI-Operational

Current Mode: V/u

Uplink: 145.900 MHz FM 1200-baud Manchester FSK (reserved)
145.920 MHz FM VOICE
145.940 MHz FM 1200-baud Manchester FSK (reserved)
145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink: 437.026 MHz USB VOICE
(1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:

```
U: RC  437.050 MHz RHCP
   PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[12252008]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984

Status: Non-operational.

Current Mode:  /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon:          435.025 MHz
Mode-S Beacon:     2401.500 MHz
```

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[01012009]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon: 145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.8500 - 145.9000 MHz SSB/CW
Downlink 29.4000 - 29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink: 29.4500 - 29.5500 MHz SSB/CW
Beacons: 29.450 MHz

```
          435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon 1:  29.352 MHz (intermittent)
Beacon 2:  29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink:     21.260 to 21.300 MHz CW/USB
Downlink:  145.860 to 145.900 MHz CW/USB

Beacon:    145.860 MHz

Robot:     145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
```

Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-059.S4
WSR 059 Part 4 02/28/2009

AMSAT NEWS SERVICE BULLETIN 059.S4
FROM AMSAT HQ SILVER SPRING, MD, February 28, 2009
TO ALL RADIO AMATEURS
BID: $ANS-059.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE PROPOSED FOR LAUNCH AT THIS TIME:

UNITEC
Catalog Number:
Proposed Launch Date: May 2010

Status: Design Phase

Proposed Equipment:

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=141
[01152009]
=====
XW-1
Catalog Number:
Proposed Launch Date: Summer 2009?

Status: Design Phase

Proposed Equipment:
Beacon: 435Mhz, CW 20dBm
Linear transponder: RX: 145Mhz, TX: 435Mhz, 40KHz, 30dBm
FM Transponder: RX: 145Mhz, TX: 435Mhz, 16KHz, 30dBm
Digital store and forward transponder: RX: 145Mhz, TX: 435Mhz, 16KHz, 30dBm

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108

[10092008]
=====
Phase 5a Mars Mission AO-??
Catalog Number:
Proposed Launch Date: 2009 or 2011

Status: Design Phase

For the latest project status update please visit the AMSAT-DL P5-A
web page:
http://ticket-to-mars.org
[01222007]
=====
PHASE 3E AO-??
Catalog number:
Proposed Launch Date: ??????

Status: STORAGE

For the latest project status update please visit the AMSAT-DL P3-E
web page:
http://www.amsat-dl.org/p3e/
[02212009]
=====
Eagle AO-??
Catalog Number:
Proposed Launch Date: ?????

Status: Design Phase

For the latest project status updates please visit the AMSAT-NA web
page: http://www.amsat.org
[02212009]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-059.S5
WSR 059 Part 5 02/28/2009

AMSAT NEWS SERVICE BULLETIN 059.S5
FROM AMSAT HQ SILVER SPRING, MD, February 28, 2009
TO ALL RADIO AMATEURS
BID: $ANS-059.S5

THE FOLLOWING SATELLITES HAVE RE-ENTERED OR HAVE BEEN RETURNED SAFELY:

NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: July 28, 2008

```
Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[01012009]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink:      145.825 Mhz FM APRS AX25
APRS Uplink:        145.825 MHz FM APRS AX25
Voice/PSK31 Uplink:  28.120 MHz

Packet to Voice ID: RAFT
[06112007]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Re-Entered
Re-entered: June 18, 2008

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon:             437.2750 MHz CW

Callsign: JR8YJT
[01012009]
=====
SO-43 Starshine 3
Catalog Number: 26929
Launch Date: September 30, 2001

Status: Re-Entered
Re-entered: January 21, 2003

Beacon: 145.825Mhz
[02212009]
```

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/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

- AMSAT News Service (ANS)
- General satellite discussion (AMSAT-BB)
- Orbit data (KEPS)
- Manned space missions (SAREX)
- District of Columbia area (AMSAT-DC)
- New England area (AMSAT-NE)
- AMSAT Educational Liaison mailing list (AMSAT-EDU)
- AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at} amsat.org
NNNN
/EX

```
From -7750911892918412643
X-Google-Thread: 10e8ad,5737a66f395f9bf7,start
X-Google-Thread: 10b9c8,5737a66f395f9bf7,start
X-Google-Attributes: gid10e8ad,gid10b9c8,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII
Path: g2news1.google.com!news1.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx01.iad.newshosting.com!newshosting.com!
198.186.194.249.MISMATCH!news-out.readnews.com!transit3.readnews.com!panix!
rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-060 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Mon, 2 Mar 2009 14:33:47 EST
Organization: The Radio Amateur Satellite Corporation
Lines: 439
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <001301c99b6d$c794d450$56be7cf0$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix1.panix.com
Mime-Version: 1.0
Content-Type: text/plain;charset="iso-8859-1"
Content-Transfer-Encoding: quoted-printable
X-Trace: reader1.panix.com 1236022425 18852 166.84.1.1 (2 Mar 2009 19:33:45 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Mon, 2 Mar 2009 19:33:45 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to            rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news1.google.com rec.radio.amateur.space:168 rec.radio.info:532
```

AMSAT NEWS SERVICE
ANS-060

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* Richard Garriott, W5KWQ to speak at the AMSAT/TAPR Banquet during Hamvention
* AMSAT INDIA Certificates for Two Way VO-52 Contacts
* SuitSat-2 Meeting in Phoenix
* ARRL Satellite Handbook Now Available at AMSAT Online Store
* Amateur Radio Balloons Over North East Texas (ARBONET) Weekly Net
* Call for Papers - NEMS and MEMS for Space Applications
* ARISS Status - 23 February 2009

SB SAT @ AMSAT $ANS-060.01
Richard Garriott, W5KWQ to speak at the AMSAT/TAPR Banquet during Hamvention

AMSAT News Service Bulletin 060.01
From AMSAT HQ SILVER SPRING, MD.
March 1, 2009
To All RADIO AMATEURS
BID: $ANS-060.01

We are pleased to announce that Richard Garriott, W5KWQ will be the keynote speaker at the AMSAT/TAPR Banquet during Hamvention 2009. The Banquet will be on Friday evening, 15 May 2009. Richard was aboard the ISS (International Space Station) in October 2008 and delighted many amateur radio operators and school children with contacts. He was the sixth private citizen to make the trip. In 1983, Richard's father Owen Garriott, W5LFL was the first person to make amateur radio contacts from the Space Shuttle. In addition to the banquet speech, Richard will give a short presentation at the AMSAT Forum on Saturday morning, and visit the AMSAT & ARRL booths.

There is limited seating for the banquet, and tickets may be purchased for $30 by contacting Martha at the AMSAT office. Banquet tickets will also soon be available through the AMSAT web store.

Thanks to Frank Bauer and Rosalie White for making the arrangements.

[ANS thanks Gould, WA4SXM, for the above information]

/EX

SB SAT @ AMSAT $ANS-060.02
AMSAT INDIA Certificates for Two Way VO-52 Contacts

AMSAT News Service Bulletin 060.02
  From AMSAT HQ SILVER SPRING, MD.
March 1, 2009
To All RADIO AMATEURS
BID: $ANS-060.02

AMSAT INDIA will issue a certificate for Radio Hams who establish two way
contact thru VO-52 from the period January 26th 2009 until May 5th 2009.

The first fifty certificates have been sponsored by a well-wisher including
postage. This certificate will also be available for a fee which will be
announced on a later date.

Please send us your QSL card which has details of the QSO on VO-52 to the
following address. Please provide us the exact mailing address where you would
like to receive the certificate.

AMSAT India (Regd.)
No. 201, 2nd Main Road,
Mahalakshmi Layout,
Bangalore 560086
India.

[ANS thanks Nitin, VU3TYG, for the above information]

/EX

SB SAT @ AMSAT $ANS-060.03
SuitSat-2 Meeting in Phoenix

AMSAT News Service Bulletin 060.03
  From AMSAT HQ SILVER SPRING, MD.
March 1, 2009
To All RADIO AMATEURS
BID: $ANS-060.03

Many of the members of the SuitSat-2 team participated in a working meeting
at the Microchip complex 20 - 22 Feb 2009. Most of the modules were
demonstrated and a great deal of work followed to improve the interfaces
between the modules. Gould, WA4SXM is working on SuitSat-2 web pages that
will provide details of the work and photographs of the modules and team
members. These pages will be added to the AMSAT site soon.

SB SAT @ AMSAT $ANS-060.04
ARRL Satellite Handbook Now Available at AMSAT Online Store

AMSAT News Service Bulletin 060.04
  From AMSAT HQ SILVER SPRING, MD.
March 1, 2009
To All RADIO AMATEURS
BID: $ANS-060.04

The ARRL Satellite Handbook by Steve Ford,
WB8IMY, is now available at the AMSAT
online store. Visit http://www.amsat.org and
click on Online Store from the menu
on the left. Follow the link to Publications.

[ANS thanks Bruce, KK5DO, for the above information]

/EX

SB SAT @ AMSAT $ANS-060.05
Amateur Radio Balloons Over North East Texas (ARBONET) Weekly Net

AMSAT News Service Bulletin 060.05
  From AMSAT HQ SILVER SPRING, MD.
March 1, 2009
To All RADIO AMATEURS
BID: $ANS-060.05

The Amateur Radio Balloons Over North East Texas (ARBONET) Weekly Information
Net is held Wednesday evening at 8:30 PM CST via the facilities of the North
Texas Repeater Association Repeater Network (NTXRA)

  Dallas: 442.025 MHz Offset: +5 MHz PL Tone: 127.3
  Ft. Worth: 443.450 MHz Offset: + 5 MHZ PL Tone: 127.3
  McKinney: 442.575 MHz Offset: + 5 MHz PL Tone: 127.3

The NTXRA network has IRLP capabilities, The node number is 945, channel 1.

Repeaters outside the coverage area of the NTXRA network who have IRLP capabilities can link into the network to participate in the weekly nets.

Anyone interested in Amateur Radio High Altitude Balloon flights or in participating in ARBONET activities is invited to join this weekly on-the-air activity.

[ANS thanks Doug, W5BL, for the above information]

/EX

SB SAT @ AMSAT $ANS-060.06
Call for Papers - NEMS and MEMS for Space Applications

AMSAT News Service Bulletin 060.06
From AMSAT HQ SILVER SPRING, MD.
March 1, 2009
To All RADIO AMATEURS
BID: $ANS-060.06

2009 ASME International Mechanical Engineering Congress & Exposition

The symposium will be held at the ASME Congress on November 13-19, 2009, on-site at Lake Buena Vista, Florida (Walt Disney World). The call-for-paper is for Track 13 (Micro and Nano Systems), Topic5-NEMS and MEMS for Space Applications.
Please note that the goal of this symposium is forward looking and on current/future technologies that can lead toward the goal of highly integrated Nano/Pico-satellites.

The goal of this topic is on space sciences and technology with NEMS and MEMS.
The continuing trend towards smaller satellites has produced operational NanoSats (1-10kg) and PicoSats (<1kg). These satellites will transform the way we study space and terrestrial sciences by providing currently non-existing capabilities such as instantaneous field measurements, ultra large arrays, and sacrificial missions. Key attributes of these satellites are smaller, lighter, cheaper, and expendable. Naturally, the miniaturization and high density integration capability of N/MEMS are the future for these missions and satellites.

Specific areas of interest related N/MEMS include, but are not limited to:

- Attitude determination and control systems
- Integrated bus
- Navigation and positioning
- Power
- Propulsion
- Thermal control
- Communication
- Science instruments

[ANS thanks Adam Huang and Eui-Hyeok Yang for the above information]

/EX

SB SAT @ AMSAT $ANS-060.07
ARISS Status - 23 February 2009

AMSAT News Service Bulletin 060.07
From AMSAT HQ SILVER SPRING, MD.
March 1, 2009
To All RADIO AMATEURS
BID: $ANS-060.07

1. Upcoming Simulated Contacts

Several simulated Amateur Radio on the International Space Station (ARISS) contacts have been scheduled. These training sessions are terrestrial-based amateur radio contacts using ARISS-equivalent equipment. Audio will be available on IRLP. All times are approximate.

Wednesday, March 4:
14:30 UTC � Technopolis, Belgium and Andre Kuipers, PI9ISS
14:45 UTC - Bedford South School, Bedford, Nova Scotia, Canada and Chris Hadfield, VA3OOG
15:00 UTC - Bedford South School, Bedford, Nova Scotia, Canada and Cady Coleman, KC5ZTH

2. South Park Students Speak with ISS

On Tuesday, February 17, an Amateur Radio on the International Space Station (ARISS) contact took place between South Park Elementary Center in South Park, Pennsylvania and Pittsburgh native Mike Fincke, KE5AIT, on the ISS. Telebridge station K6DUE in Maryland facilitated the contact. An audience of approximately 460 watched as twenty questions were asked and answered. The audio was fed into the EchoLink AMSAT and JK1ZRW servers and received 7 connections from stations in England and the U.S. The event received extensive media coverage from television stations and newspapers. The links follow.

CBS affiliate:
http://kdka.com/video/?id=53487@kdka.dayport.com

ABC affiliate:
http://www.thepittsburghchannel.com/news/18730162/detail.html?taf=pit

NBC affiliate:
http://www.wpxi.com/news/18729533/detail.html

Pittsburgh Post Gazette:
http://www.pittsburghpostgazette.com/pg/09049/949857-52.stm

Pittsburgh Tribune-Review:
http://www.pittsburghlive.com/x/pittsburghtrib/s_612166.html

3. Salluit Students Question Astronaut via Radio

Students attending Salluit Schools in Salluit, Quebec, Canada experienced an Amateur Radio on the International Space Station (ARISS) contact on Thursday, February 19 via telebridge station W6SRJ in California. Mike Fincke, KE5AIT, answered 15 questions posed to him by the students. The audio was fed into the EchoLink AMSAT and JK1ZRW servers and received 6 connections from the U.S., Spain, Italy and England. Approximately 450 parents, elders and students (out of a village of 1000) were present for the contact. Parents were out and about early in the day, indicating this event was a huge accomplishment, as they do not normally come out early this time of year due to the severe cold. ARISS mentor Steve McFarlane remarked, �The contact was a huge success � these people really enjoyed the experience and are ever thankful to the parties involved for their work in showing their children that there are incredible discoveries and adventures to be had � all they have to do, is believe... apparently we moved them a little closer to that today....�

4. Erie Planetarium Contact Successful

On Saturday, February 21, Erie Planetarium in Pennsylvania participated in an Amateur Radio on the International Space Station (ARISS) contact with Mike Fincke, KE5AIT, via telebridge station W6SRJ in California. Twelve students asked 21 questions of the astronaut in front of a crowd of 200. At least one television station reported on the event. The audio was fed into the EchoLink AMSAT and JK1ZRW servers and had 13 connections, including one repeater, from 8 countries. Among those listening were stations in China, New Zealand and Spain.

A ham operator who was manning a Radio Amateur Satellite Corporation (AMSAT) exhibit table at a Yuma, Arizona hamfest used his radio to listen to the contact as part of his demonstrations. Even though only the ISS side of the contact was heard, the crowd enjoyed hearing Mike answer the questions.

5. SuitSat-2 Meeting Held

The Amateur Radio on the International Space Station (ARISS) team held a SuitSat-2 meeting on Friday � Sunday, February 20 - 22 in Phoenix, Arizona. Status reports of the different modules were given and reviewed and the team began integration testing.

6. ARISS International Team Meeting Held

Amateur Radio on the International Space Station (ARISS) held its monthly teleconference on Tuesday, February 17. Agenda items discussed included

the upcoming face-to-face meeting to be held in the Netherlands in June, Charles Simonyi�s planned activities during his mission in March and a status on SuitSat-2. The minutes have been posted to the ARISS Web site. See:
http://www.rac.ca/ariss/arisstel2009-02-17.htm

7. ARRL Letter Article on Dieter Schliemann

Amateur Radio on the International Space Station (ARISS) team member Dieter Schliemann, KX4Y, passed away on Monday, February 9. Dieter had been responsible for coordinating and expanding the educational outreach of ARISS through the use of Voice over the Internet Protocol (VoIP) with Internet Radio Linking Project (IRLP) and EchoLink. As his health deteriorated, Dieter continued his support, making sure that others would carry on in his absence. He will be sorely missed. Dieter was a member of the Radio Amateur Satellite Corporation (AMSAT) and the American Radio Relay League (ARRL). The ARRL Letter posted an article on his contributions:
https://www.arrl.org/arrlletter/09/0220/

8. German School Contact Update

St�dtisches Gymnasium Herzogenrath in North Rhine-Westphalia, Germany participated in an Amateur Radio on the International Space Station (ARISS) contact with Mike Fincke, KE5AIT, on Saturday, February 7. New links are available for related photos, audio, video and newspaper articles. See:
http://www.darc.de/g14/ARISS.html

[ANS thanks Carol, KB3LKI, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Lee McLamb, KU4OS

From 2705345094937821136
X-Google-Thread: 10e8ad,c40f84517d77b482,start
X-Google-Thread: 10b9c8,c40f84517d77b482,start
X-Google-Attributes: gid10e8ad,gid10b9c8,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news2.google.com!newsfeed2.dallas1.level3.net!
news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-062 AMSAT News Service Special Bulletin - March 3 is AMSAT's 40th Anniversary
Followup-To: rec.radio.amateur.space
Date: Mon, 2 Mar 2009 19:19:49 EST
Organization: The Radio Amateur Satellite Corporation
Lines: 41
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <002801c99b95$bfecf660$3fc6e320$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1236039589 2281 166.84.1.6 (3 Mar 2009 00:19:49 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Tue, 3 Mar 2009 00:19:49 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to   rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to   rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news2.google.com rec.radio.amateur.space:194 rec.radio.info:611

SB SAT @ AMSAT $ANS-062.01
ANS Special Bulletin: March 3 Marks AMSAT's 40th Anniversary

AMSAT News Service Bulletin 062.01
>From AMSAT HQ SILVER SPRING, MD.
March 3, 2009

To All RADIO AMATEURS
BID: $ANS-062.01

March 3, 2009 marks the 40th anniversary of AMSAT's incorporation. AMSAT was incorporated in the District of Columbia on March 3, 1969.

Perry, W3PK who was AMSAT President from 1969 to mid-1980 said, "We filed the application for incorporation 40 years ago on Feb. 27, 1969. A copy of the filing has been saved at:
http://www.amsat.org/amsat-new/AboutAmsat/documents/incorporation.php

You can see a copy of the Certificate of Incorporation at:
http://www.amsat.org/amsat-new/AboutAmsat/documents/certificate.php

Perry is working with Dick Daniels, W4PUJ to preserve the original AMSAT Newsletters, archived in paper format onto electronic media. Additional AMSAT history can be found in the archives of the "Amateur Satellite Report" Newsletters scanned and converted to PDF by Phil Karn, KA9Q. Phil has these issues posted on his website (with AMSAT's permission). See: http://www.ka9q.net/newsletters.html

As the electronic archive project makes progress Perry will issue a call for one or more volunteers willing to receive scans of additional issues JPEG format via e-mail, perform the OCR work and help us change them to searchable PDF files.

Watch upcoming issues of The AMSAT Journal for articles of AMSAT's roots. AMSAT will also feature 40 years of our accomplishments at the 2009 Dayton Hamvention.

[ANS thanks Perry, W3PK for the above information]

/EX

```
From -2836647218633675715
X-Google-Thread: fcc6e,d7d337db35f23326,start
X-Google-Thread: 11480d,d7d337db35f23326,start
X-Google-Thread: 108122,d7d337db35f23326,start
X-Google-Thread: fc2a5,d7d337db35f23326,start
X-Google-Thread: 107ada,d7d337db35f23326,start
X-Google-Thread: 10bf43,d7d337db35f23326,start
X-Google-Thread: 10e8ad,d7d337db35f23326,start
X-Google-Thread: 3a471f,d7d337db35f23326,start
X-Google-Attributes:
gidfcc6e,gid11480d,gid108122,gidfc2a5,gid107ada,gid10bf43,gid10e8ad,gid3a471f,doma
inid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx01.iad.newshosting.com!newshosting.com!
198.186.194.249.MISMATCH!news-out.readnews.com!transit3.readnews.com!panix!
```

rram.panix.com!robomod!not-for-mail
From: rram@panix.com (rec.radio.amateur.moderated Admin)
Newsgroups:
rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.amateur.moderated
Subject: [ADMIN,META] Allow crossposting to rec.radio.amateur.moderated?
Followup-To: poster
Date: Tue, 3 Mar 2009 09:22:16 EST
Organization: PANIX Public Access Internet and UNIX, NYC
Lines: 190
Approved: RRAM Approval Key <rram-approval-key@panix.com>
Message-ID: <gojeci$m74$1@reader1.panix.com>
Reply-To: rec-radio-amateur-moderated-request@panix.com
(rec.radio.amateur.moderated Admin)
NNTP-Posting-Host: panix1.panix.com
X-Trace: reader1.panix.com 1236090134 24881 166.84.1.1 (3 Mar 2009 14:22:14 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Tue, 3 Mar 2009 14:22:14 +0000 (UTC)
X-RRAM-Policy: http://www.panix.com/~rram/usenet/rram/index.html
X-RRAM-Info-1: Send submissions to rec-radio-amateur-moderated@panix.com
X-RRAM-Info-2: Send technical complaints to rec-radio-amateur-moderated-request@panix.com
X-RRAM-Info-3: Send complaints about policy to rec-radio-amateur-moderated-request@panix.com
X-RRAM-Info-4: GnuPG 1.4.5 Public Key at http://www.panix.com/~rram/gpg.html
X-Comment-1: The moderators do not necessarily agree or disagree with this article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Old-NNTP-Posting-Host: panix2.panix.com
Old-X-Complaints-To: abuse@panix.com
Old-NNTP-Posting-Date: Tue, 3 Mar 2009 14:21:06 +0000 (UTC)
User-Agent: nn/6.7.3
X-Auth: PGPMoose V2.0 PGP rec.radio.amateur.moderated
 iJwEAQECAAYFAkmtPRgACgkQSO8RITXCfvsqawP6A17K4vQTN1WcmyH33GYFlYpz
 oliF+zVQUJ3gKBpEnAKbvUcfNm5ntO9hhCk1d6eiI7Iu9CwsSMwmkFN0azdbzudR
 4ZCsAlkmJ5O35zeE2jNvE+uoJYFHTjVxnsHLKsTVVBLAs1bNT1xMfWOEhawlAUGZ
 WnNgKz5TaViRJKL4u0k=
 =iVUy
Xref: g2news1.google.com rec.radio.amateur.antenna:8464 rec.radio.amateur.dx:280
rec.radio.amateur.equipment:1165 rec.radio.amateur.homebrew:1992
rec.radio.amateur.misc:3890 rec.radio.amateur.policy:22546
rec.radio.amateur.space:170 rec.radio.amateur.moderated:775

(Followups directed to poster by default. If followup to newsgroups is desired, edit your headers on followup to drop rec.radio.amateur.moderated from the Newsgroups line, else your article will be rejected.)

The rec.radio.amateur.moderated newsgroup enters its 3rd year of operation this month. Since its creation in February of 2007, we have approved nearly 3,000 articles about amateur radio and closely related subjects. We would like to thank our readers and posters for their quality contributions to our newsgroup.

When we first started out, consistent with our newsgroup's Charter and Posting Guidelines:

http://www.panix.com/~rram/usenet/rram/

we allowed discussion threads to be posted to our newsgroup only. Our moderation software is programmed to automatically reject any crossposts. The one exception has been periodic information postings that are crossposted to rec.radio.info, rec.answers, and/or news.answers.

Some moderated newsgroups, such as those in the comp.lang.perl.* and misc.kids.* hierarchies, started accepting crosspostings to appropriate unmoderated newsgroups after a suitable waiting period from their initial creation. Now that our newsgroup is well-established and carried at most major sites, we would like to implement this customary followup and allow some crossposting. We would propose to allow simultaneous crossposting (i.e., one article, with all newsgroups specified at once on the Newsgroups line in the headers) to rec.radio.amateur.moderated and one other unmoderated newsgroup in the rec.radio.amateur.*, alt.radio.amateur.*, and alt.ham-radio.* hierarchies only.

Pros:

- Allows the moderated and unmoderated newsgroups to share discussion threads of common interest, without propagating more than one set of articles to news, or showing them more than once in a newsreader. Presently, threads of common interest have to run in parallel, with different sets of followups, and requiring readers to have to follow two threads, possibly with duplicate articles, in different newsgroups. We have seen multiple examples of this happening in the amateur-radio-related newsgroups over the past 2 years.

- Provides the default action of submitting articles and followups to moderator review, as news servers will forward to us for approval any article that contains rec.radio.amateur.moderated on the Newsgroups line. This allows the moderated newsgroup crossposting to serve as a "guardian" or "sentinel" to discourage threads from getting hijacked into running off-topic or into personal abuse. This may also encourage posters to use the underutilized rec.radio.amateur.misc or .policy newsgroups as crossposting targets for articles that might otherwise be posted only to .moderated.

- Readers of the unmoderated newsgroups will enjoy high-quality, on-topic, discussion threads that would otherwise require subscribing to and reading a moderated newsgroup. Readers of the moderated newsgroup will enjoy high-quality, on-topic, discussion threads that would otherwise require subscribing to and reading other unmoderated newsgroups. Those unmoderated newsgroups may contain articles of widely varying degrees of quality and topic relevance.

- Participation in this crossposting scheme is completely voluntary. Posters of initial articles in threads will make the voluntary choice to add rec.radio.amateur.moderated and one other unmoderated newsgroup to the Newsgroups line when posting. Those following up to these crossposted threads will make a voluntary choice whether to keep rec.radio.amateur.moderated or any other newsgroup on the Newsgroups line, or remove them. Followups may be directed by default to any subset of the newsgroups on the Newsgroups line (or via E-mail to "poster") by specifying them on an appropriate Followup-To line. In short, you control what you post, where you post it, and what default destinations you want for any followups. This proposed crossposting scheme does not change any of these long-standing features of Usenet and newsreader software.

Cons:

- This will subject all such simultaneously crossposted articles to moderator review by us. If they do not meet the Charter and Posting Guidelines of rec.radio.amateur.moderated, they will be rejected. We will attempt to work with submitters to let them know what is happening, and how their articles can be fixed for eventual approval. However, rejected articles that were submitted anonymously without a traceable/derivable E-mail address or identity will have to be dropped silently without feedback to the unreachable submitter.

- Moderator review will introduce some posting delay. However, it has been our experience over the last 2 years that with our large moderation team distributed across many time zones, and the automation provided by our moderation software, we can turn submissions around relatively quickly, often within an hour.

- Many newsreaders do not give clear feedback to the user what newsgroups in which a given article appears, nor to what newsgroups a followup to that article will be sent by default. We expect to initially have to handle a few confused, possibly angry, submitters who will insist that they did not intend to post to a moderated newsgroup. We are willing to provide the necessary polite feedback and user education to them to allow this crossposting scheme to work effectively. This will help ensure that the scheme is only used by those who are reasonably aware of the various pros and cons. We hope that this problem will diminish with time and greater user awareness.

- Not all newsgroups, especially those in the alt.* hierarchy, are carried at all sites. Users may find themselves following up by default to newsgroups that do not exist on their local news server, possibly resulting in article rejection from their server. Those users would have to edit their Newsgroups line for successful resubmission. We will work with users to get appropriate newsgroups added to their local servers, as well as with Panix to get those newsgroups added to Panix's server. However, as with default followups described in the previous paragraph, we expect to have to go through an initial period of user and news service provider education and polite feedback. We hope that this problem also will diminish with time and greater user awareness.

We propose to enforce this scheme in our moderation software as follows:

- Submissions simultaneously crossposted to more than 2 newsgroups will be automatically rejected with a rejection form letter (same as what happens now to submissions that are posted to more than 1 newsgroup).

- Submissions that contain newsgroups on the Newsgroups line other than approved newsgroups in the rec.radio.amateur.*, alt.radio.amateur.*, or alt.ham-radio.* hierarchies will be automatically rejected with a rejection form letter.

  Approved rec.radio.amateur.* newsgroups are those that are currently listed in the latest version of the "List of Big Eight Newsgroups" which is crossposted monthly to news.announce.newgroups, news.groups, and news.lists.misc.

  Approved alt.radio.amateur.* and alt.ham-radio.* newsgroups are those that have been created consistent with the suggestions in "So You Want to Create an Alt Newsgroup" at:

  http://www.faqs.org/faqs/alt-creation-guide/

  We will make every reasonable effort to keep our list of approved newsgroups up-to-date. In case we have overlooked any, and a submission is rejected in error as a result, the rejected submitter can E-mail us at our administrative contact address (in the signature at the bottom of this article, and the default Reply-To for the rejection message) requesting that it be added, and that the article be approved. We may still choose to reject articles crossposted to any alt.* newsgroup with an inappropriate name, including obscene language, embedded name-calling, or encouragement of unlawful conduct.

To help publicize this new editorial policy, we will update our Posting Guidelines, which are posted to the moderated newsgroup on the 15th of each month. Changes to our Posting Guidelines are indicated by an updated date in the Revision: auxiliary header at the top of the body, as well as "change bars" ('|') after each modified line of text. We will also add a short announcement, posted on the 1st of each month and cross-posted to the unmoderated newsgroups, restating this new editorial policy, and encouraging crossposted submissions.

Since this is a change to our newsgroup's editorial policies, and with some impact to the readers and posters of the unmoderated newsgroups, we would like to solicit 30 days of direct feedback and/or public discussion regarding this proposed change. For example, we would be interested to know if allowing crossposting to one other unmoderated newsgroup is enough, or if two would be preferable. We feel that more than two additional crossposted newsgroups greatly increases the probability of misconduct or accidental misposting that may result in article rejection by us. Also, should this scheme be opened up to uk.radio.amateur and aus.radio.amateur.* as well? You may send us E-mail directly to our administrative contact address below, which is the default Followup-To/Reply-To for this article. You may also discuss this publicly on the unmoderated newsgroups. In fact, we cannot stop you from doing so. We will make every reasonable effort to incorporate any feedback and suggestions. If we decide to implement this proposal, we will make a public announcement shortly after the end of the 30-day discussion period.

(Followups directed to poster by default. If followup to newsgroups is desired, edit your headers on followup to drop rec.radio.amateur.moderated from the Newsgroups line, else your article will be rejected.)

--
rec.radio.amateur.moderated Admin
rec-radio-amateur-moderated-request@panix.com

```
From -2775574849914449943
X-Google-Thread: 10e8ad,eb6b1bcabb05f613,start
X-Google-Thread: 113975,eb6b1bcabb05f613,start
X-Google-Attributes: gid10e8ad,gid113975,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news2.google.com!news.glorb.com!news2.glorb.com!
feeder.erje.net!newsfeed.xs4all.nl!newsfeed6.news.xs4all.nl!xs4all!news2.euro.net!
feeder.news-service.com!news.astraweb.com!border2.a.newsrouter.astraweb.com!not-
for-mail
From: Chris Steyaert <observations@rmob.org>
Newsgroups: rec.radio.amateur.space,sci.astro.amateur
Subject: Radio Meteor Obs. Bull. February 2009
Date: Thu, 05 Mar 2009 21:03:58 +0100
Message-ID: <svb0r4hpje3ovsca5infkj4mc418tlk3hp@4ax.com>
X-Newsreader: Forte Agent 1.93/32.576 English (American)
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Lines: 16
Organization: Unlimited download news at news.astraweb.com
NNTP-Posting-Host: 80f70251.news.astraweb.com
X-Trace: DXC=lJE?AcSP05Y[[POhj[h0F\L?
0kYOcDh@ZETUgB5R3[1WBSQ_gHCa=aXKX07\YZ`QZVR<D@]ckTho\@nSKU]9[c1_
Xref: g2news2.google.com rec.radio.amateur.space:196 sci.astro.amateur:15598
```

Radio Meteor Observation Bulletin No. 187 of February 2009 (74 K) is available now as

http://visualrmob.free.fr/rmobtext/rmob0902.txt

More information and the visual presentation of the hourly forward scatter counts can be found on

http://www.rmob.org

http://radio.data.free.fr

Chris

```
From 4069145151182657239
X-Google-Thread: 10e8ad,5585653667c1a7eb,start
X-Google-Thread: 10b9c8,5585653667c1a7eb,start
X-Google-Attributes: gid10e8ad,gid10b9c8,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news1.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx02.iad.newshosting.com!newshosting.com!
198.186.194.249.MISMATCH!news-out.readnews.com!transit3.readnews.com!panix!
rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-068 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Mon, 9 Mar 2009 23:48:14 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 1655
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000f01c9a133$02423ff0$06c6bfd0$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1236656894 5474 166.84.1.6 (10 Mar 2009 03:48:14 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Tue, 10 Mar 2009 03:48:14 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
```

X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news2.google.com rec.radio.amateur.space:197 rec.radio.info:626

This report is organized into five (5) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites
Part 5 (S5) - deorbited/returned satellites

SB SAT @ AMSAT W8ISS ANS-068.S1
WSR 068 Part 1 03/09/2009

AMSAT NEWS SERVICE BULLETIN 068.S1
FROM AMSAT HQ SILVER SPRING, MD, March 09, 2009
TO ALL RADIO AMATEURS
BID: $ANS-068.S1

DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008

Status: Operational
Current Mode: Science Mode - Beacon ONLY

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink: 435.530 to 435.570 MHz

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68
[02122009]
=====
VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:

Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.859330 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is active. Each transponder has a different beacon.
[08072008]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Modes: FM Repeater - V-FM/u-FM
                 BBS   - L-9k6/u-9k6
                 Telemetry   - OFF

Analog voice downlink: 435.300 MHz FM
                           435.150 MHz FM
                          2401.200 Mhz FM
Analog voice uplink: 145.880 MHZ FM
                           145.880 MHz USB
                           145.920 MHz FM
                          1268.700 MHz FM 67Hz PL tone
Digital Downlinks: 435.150 MHz FM 38k4 PBP, 1 watt output
                          435.150 MHz FM 9k6 Pacsat Broadcast Protocol
                         2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Pacsat Broadcast Protocol
                         1268.700 mhz FM 9k6 PBP Digital
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/

```
IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[03092009]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002

Status: Operational.

Current Mode: V/u

Uplink:   145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4
Hz. The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute
   timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the re-
   peater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset
   the 10 minute timer.
[05282007]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Operational
Current Mode: V/u (Mode JA)

Voice/CW Mode JA
Uplink:   145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon:   435.795 MHz

Digital Mode JD
Uplinks:  145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz
```

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage:
http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts.htm
[02122009]

=====

AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational

Current Mode: Alternating between Mode A and B every 24 hours

```
Uplink:   145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink:  29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons:   29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW
```

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
[02122009]

=====

INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

```
Current Active Modes: FM Repeater - V/u
                      Voice -       V/v
                      BBS -         V/v
```

APRS -	V/v
SSTV -	V/v

Expedition 18 Crew:

Commander:	Mike Fincke	KE5AIT
Flight Engineer:	Yury Lonchakov	RA3DT
Flight Engineer:	Sandra Magnus	KE5FYE

Available Modes and Frequencies:

Digital/APRS:

Worldwide packet uplink:	145.825 MHz FM 9k6
Worldwide packet downlink:	145.825 Mhz FM 9k6

Voice:

Region 1 voice uplink:	145.200 MHz FM
Region 2/3 voice uplink:	144.490 MHz FM
Worldwide downlink:	145.800 MHz FM

Crossband Repeater:

Repeater Uplinks:	1269.650 MHz FM
	437.800 MHz FM
	145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink:	145.800 MHz FM
	437.800 MHz FM (Kenwood)

SSTV Robot 36:

Downlink:	145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:

Belgian:	OR4ISS
German:	DP0ISS
Russian:	RS0ISS
	RZ3DZR
United States:	NA1SS
Packet Mailbox:	RS0ISS-11
Digipeater callsign:	ARISS

Official ARISS Webpage:	http://www.rac.ca/ariss
ISS Fan Club Webpage:	http://www.issfanclub.com
APRS tracking page:	http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time line is NOT translated from Russian and posted.
[01082009]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-068.S2
WSR 068 Part 2 03/09/2009

AMSAT NEWS SERVICE BULLETIN 068.S2
FROM AMSAT HQ SILVER SPRING, MD, March 09, 2009
TO ALL RADIO AMATEURS
BID: $ANS-068.S2

SOHLA-1 (ASTRO TECH.)
Catalog Number: 33492 ?
Launch Date: January 23, 2009

Status: In Orbit

Proposed Frequencies and Modes:
Downlink: 437.505 MHz AFSK/CW
Beacon: 437.505 MHz AFSK/CW

Callsign:

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=101
[02282009]
=====
KAGAYAKI (Solan Co.)
Catalog Number: 33495?
Launch Date: January 23, 2009

Status: In Orbit

Downlink: 437.375 MHZ   FSK9k6/CW
Beacon: 437.375 MHz   FSK9k6/CW

IARU coordination status page:

AMSAT-NA webpage:

[01152009]
=====
STARS (Kagawa Univ.) (Twin Satellites)
Catalog Number: 33498
Launch Date: January 23, 2009

Status: Operational ?

Downlinks: 437.485 MHz FM/CW
           437.465 MHz FM/CW
Beacons: 437.305 MHz FM/CW
           437.275 MHz FM/CW

Callsigns: JR5YBN
           JR5YBO

```
IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=99

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=121&retURL
=/satellites/status.php
[022152009]
=====
KKS-1 (Tokyo MCIT)
Catalog Number: 33499
Launch Date: January 23, 2009

Status: Operational

Downlink:  437.455 MHz AFSK/CW
Beacon:    437.385 MHz AFSK/CW

Callsign: JQ1YYY

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=107

AMSAT-NA webapge:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=120&retURL
=/satellites/status.php
[02212009]
=====
PRISM (Tokyo Univ.)
Catalog Number: 33493
Launch Date: January 23, 2009

Status: Operational ?

Downlink: 437.425 MHz AFSK/GMSK/CW
Beacon:   437.250 MHz AFSK/GMSK/CW

Callsign: JQ1YCX

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=97

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=119&retURL
=/satellites/status.php
[02212009]
=====
RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number: 32953
Launch Date: May 23, 2008

Status: Operational
```

Curent Modes: Telemetry
Audio
Images

Downlinks: 435.315 MHz
435.215 MHz

AMSAT-NA website:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=115&retURL=/satellites/status.php

Official website:
http://www.npopm.com/?cid=leoca&caid=43
[02122009]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=94&retURL=/satellites/status.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=72
[02122009]
=====
CP3
Catalog Number: 31129
Launch Date: April 17,2007

Status: Operational

Current Mode: /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[02122009]
=====
GENESAT-1
Catalog Number: 29655
Launch Date: December 16, 2006

```
Status: Operational

Current Mode: /u

Callsign: KE7EGC

Telemetry Beacon Downlink: 437.0670 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[02212009]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon:             437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/xivpicte.htm
[02212009]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003

Status: Operational

Current Mode: /u

Beacon:     436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=96&retURL
=/satellites/status.php

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[02212009]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006
```

```
Status: Operational?

Uplink:  1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=56
[02122009]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Modes:   FM Repeater - V-FM/u-FM
                 BBS         - L-9k6/u-9k6
                 Telemetry   - OFF

Analog voice downlink:     435.300 MHz FM
                           435.150 MHz FM
                          2401.200 Mhz FM
Analog voice uplink:       145.880 MHZ FM
                           145.880 MHz USB
                           145.920 MHz FM
                          1268.700 MHz FM 67Hz PL tone
Digital Downlinks:        435.150 MHz FM 38k4 PBP, 1 watt output
                          435.150 MHz FM 9k6 Pacsat Broadcast Protocol
                         2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:           145.860 MHz FM 9k6 Pacsat Broadcast Protocol
                         1268.700 mhz FM 9k6 PBP Digital
Beacon:                   435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
```

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[02282009]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=69&retURL=/satellites/status.php
[02212009]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Semi-operational

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[09242007]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Telemetry only reported

Current Modes: V/U
               L/U

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks: 145.850 FM

145.890 FM
145.930 FM
1269.700 FM
1269.800 FM
1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://asri.technion.ac.il/techsat/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=14&retURL=/satellites/status.php
[02212009]
=====
RS-22 RADIO SPORT RS-22
Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only

Current Mode: /u

CW Beacon - 435.352 MHz
            145.818 MHz

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=76&retURL=/satellites/status.php
[02212009]
=====
CanX-2
Catalog number: 32790
Launch Date: April 28, 2008

Status: Operational in range of ground station only

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[02212009]
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.425 MHz 1k2 baud packet

For the latest project status update please visit the AAUSAT-II web page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[02212009]
=====
CO-65 CUTE-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008

Status: Digipeater

Downlink: 437.475 MHz 9k6 Packet
Uplink: 1267.600 Mhz

Telemetry Beacon:
Downlink: 437.2750 MHz CW

For the latest project status update please visit the Cute-1.7+APD II web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78

Command Station blog website:
http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=112&retURL=/satellites/status.php
[02212009]
=====
Compass-1
Catalog number: 32787
Launch Date: April 28, 2008

Status: Operational

Current Mode: 4k8 MSK packet

Downlink: 437.275 Mhz CW
          437.405 MHz Packet

For the latest project status update please visit the Compass 1 web page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=114&retURL
=/satellites/status.php
[02212009]
=====
CO-66 Seeds II
Catalog number: 32791
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.485 MHz

Callsign: JQ1YGU

For the latest project status update please visit the Seeds 2 web
page: http://cubesat.aero.cst.nihon-u.ac.jp/english/seeds_2_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=113&retURL
=/satellites/status.php
[02212009]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - V/u
Voice - V/v
BBS - V/v
APRS - V/v
SSTV - V/v

Expedition 18 Crew:

Commander:	Mike Fincke	KE5AIT
Flight Engineer:	Yury Lonchakov	RA3DT
Flight Engineer:	Sandra Magnus	KE5FYE

Available Modes and Frequencies:

Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 9k6
Worldwide packet downlink: 145.825 Mhz FM 9k6

Voice:
Region 1 voice uplink: 145.200 MHz FM

Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[01082009]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-068.S3
WSR 068 Part 3 03/09/2009

AMSAT NEWS SERVICE BULLETIN 068.S3
FROM AMSAT HQ SILVER SPRING, MD, March 09, 2009
TO ALL RADIO AMATEURS
BID: $ANS-068.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

CP4
Catalog Number: 31122
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon: 437.325 MHz CW

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=79
[10022008]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: Non-Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder: 145.825 Mhz FM
[01012009]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 MHz FM 67Hz CTCSS
Voice Downlink: 2401.835 MHz FM
Packet Up/Downlink: 437.250 MHz 9k6 packet
Packet Downlink   2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non=Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[08132007]
=====
QuakeSat
Catalog Number: 27845
Launch Date: June 30, 2003

Status: ?

Current Mode: 9600 baud data packet

Mode U packet
Downlink: 436.675 MHz 9k6 BPS

Quakesat webpage:
http://www.quakefinder.com/services/quakesat-ssite/
[02212009]
=====
DTUSAT
Catalog Number: 27842
Launch Date: June 30, 2003

Status: Non-Operational

Current Mode: 2k4 AFSK Packet last reported

Downlink: 437.475MHz

Officail webpage: http://dtusat1.dtusat.dtu.dk/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=101&retURL
=satellites/all_oscars.php
[02212009]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)

Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====

```
MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Non-Operational

Uplinks:   145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink:  437.325 MHz

Broadcast callsign: MYSAT3-11
BBS:                MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial land and weather imaging payloads offers FM and FSK
Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as
a collaborative effort between the Malaysian government and Surrey
Satellite Technology Ltd.
[007302007]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink:   145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS:                SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
```

Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]

=====

AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks

V-band: 145.840 - 145.990 MHz CW/LSB
U-band: 435.550 - 435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks

S2-band: 2401.225 - 2401.475 MHz CW/USB
K-band: 24048.010 - 24048.060 MHz CW/USB
Beacon: 2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)

BEACON	General Beacon(GB)	Middle Beacon(MB)	Engineering Beacon(EB)
2 m	none	145.898 MHz	none
70cm	435.438 MHz	435.588 MHz	435.838 MHz
13cm(1)	2400.188 MHz	2400.338 MHz	2400.588 MHz
13cm(2)	2401.173 MHz	2401.323 MHz	2401.573 MHz
3cm	10450.975 MHz	10451.125 MHz	10451.375 MHz
1.5cm	24047.885 MHz	24048.035 MHz	24048.285 MHz

[07162007]

=====

OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon

```
Downlink: 437.1000 MHz 9600 FSK
[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink:    145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: ?
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater:         436.250 MHz

Uplinks: Mode B Repeater:  145.825 MHz
Mode J Digipeater:         145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998
```

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink: 145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Non-operational

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012009]
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993

Status: Non-operational

Current Mode: V/u

Uplink: 145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:

```
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[01292009]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HL01-11
BBS: HL01-12
[01222007]
```

```
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
LIBERTAD-1
Catalog Number: 31128
Launch Date: April 17,2007

Status: Non-Operational
```

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink: 145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[02122009]
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990

Status: CW Beacon only

Uplinks: 145.840 MHz 1200-baud Manchester FSK
145.860 MHz 1200-baud Manchester FSK
145.880 MHz 1200-baud Manchester FSK
145.900 MHz 1200-baud Manchester FSK

CW downlink: 437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[01222007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink: 145.825 MHz FM 1200 Baud AFSK
Beacon: 2401.220 MHz
[05012006]
=====
AO-16 PACSAT

Catalog number: 20439
Launch Date: January 22, 1990

Status: SEMI-Operational

Current Mode: V/u

Uplink: 145.900 MHz FM 1200-baud Manchester FSK (reserved)
                145.920 MHz FM VOICE
                145.940 MHz FM 1200-baud Manchester FSK (reserved)
                145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink: 437.026 MHz USB VOICE
                (1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC 437.050 MHz RHCP
   PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[12252008]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink: 145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink: 145.8500 MHz MFSK 1200 BPS
Uplink: 145.8700 MHz MFSK 1200 BPS
Uplink: 145.8900 MHz MFSK 1200 BPS
Uplink: 145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984

Status: Non-operational.

Current Mode: /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon: 435.025 MHz
Mode-S Beacon: 2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[01012009]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon: 145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

```
Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink  29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
Beacons:   29.450 MHz
          435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon 1:  29.352 MHz (intermittent)
Beacon 2:  29.398 MHz
```

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB

Beacon: 145.860 MHz

Robot: 145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-068.S4
WSR 068 Part 4 03/09/2009

AMSAT NEWS SERVICE BULLETIN 068.S4
FROM AMSAT HQ SILVER SPRING, MD, March 09, 2009
TO ALL RADIO AMATEURS
BID: $ANS-068.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE PROPOSED FOR LAUNCH
AT THIS TIME:

UNITEC
Catalog Number:
Proposed Launch Date: May 2010

Status: Design Phase

Proposed Equipment:

IARU coordination status page:

```
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=141
[01152009]
=====
XW-1
Catalog Number:
Proposed Launch Date: Summer 2009?

Status: Design Phase

Proposed Equipment:
Beacon: 435Mhz, CW 20dBm
Linear transponder: RX: 145Mhz, TX: 435Mhz, 40KHz, 30dBm
FM Transponder: RX: 145Mhz, TX: 435Mhz, 16KHz, 30dBm
Digital store and forward transponder: RX: 145Mhz, TX: 435Mhz, 16KHz,
                                           30dBm

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108
[10092008]
=====
Phase 5a Mars Mission AO-??
Catalog Number:
Proposed Launch Date: 2009 or 2011

Status: Design Phase

For the latest project status update please visit the AMSAT-DL P5-A
web page:
http://ticket-to-mars.org
[01222007]
=====
PHASE 3E AO-??
Catalog number:
Proposed Launch Date: ??????

Status: STORAGE

For the latest project status update please visit the AMSAT-DL P3-E
web page:
http://www.amsat-dl.org/p3e/
[02212009]
=====
Eagle AO-??
Catalog Number:
Proposed Launch Date: ?????

Status: Design Phase

For the latest project status updates please visit the AMSAT-NA web
page: http://www.amsat.org
[02212009]
NNNN
/EX
```

```
SB SAT @ AMSAT W8ISS ANS-068.S5
WSR 068 Part 5 03/09/2009

AMSAT NEWS SERVICE BULLETIN 068.S5
FROM AMSAT HQ SILVER SPRING, MD, March 09, 2009
TO ALL RADIO AMATEURS
BID: $ANS-068.S5

THE FOLLOWING SATELLITES HAVE RE-ENTERED OR HAVE BEEN RETURNED SAFELY:

NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: July 28, 2008

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[01012009]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink:      145.825 Mhz FM APRS AX25
APRS Uplink:        145.825 MHz FM APRS AX25
Voice/PSK31 Uplink:  28.120 MHz

Packet to Voice ID: RAFT
[06112007]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006
```

Status: Re-Entered
Re-entered: June 18, 2008

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon: 437.2750 MHz CW

Callsign: JR8YJT
[01012009]
=====
SO-43 Starshine 3
Catalog Number: 26929
Launch Date: September 30, 2001

Status: Re-Entered
Re-entered: January 21, 2003

Beacon: 145.825Mhz
[02212009]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:

http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at} amsat.org

NNNN

/EX

```
From -5684115755050180755
X-Google-Thread: 10e8ad,34431dd04aa8f7bf,start
X-Google-Thread: 10b9c8,34431dd04aa8f7bf,start
X-Google-Attributes: gid10e8ad,gid10b9c8,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII
Path: g2news1.google.com!news1.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx01.iad.newshosting.com!newshosting.com!
198.186.194.249.MISMATCH!news-out.readnews.com!transit3.readnews.com!panix!
rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-074 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sat, 14 Mar 2009 21:22:09 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 374
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000e01c9a50c$6ef35080$4cd9f180$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix2.panix.com
Mime-Version: 1.0
Content-Type: text/plain;charset="iso-8859-1"
Content-Transfer-Encoding: quoted-printable
X-Trace: reader1.panix.com 1237080128 9369 166.84.1.2 (15 Mar 2009 01:22:08 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 15 Mar 2009 01:22:08 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
```

X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news1.google.com rec.radio.amateur.space:173 rec.radio.info:555

AMSAT NEWS SERVICE
ANS-074

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:

* AMSAT at the Dayton Hamvention 2009
* Air Force Approves AMSAT Keplerian Element Distribution
* Mario Acu�a, LU9HBG Silent Key
* AMSAT-DC Spring Workshop April 25
* Satellite Shorts From All Over
* UT1FG/MM Wet Grid Square via Satellite Expedition
* ARISS Status Report for the Week of March 9, 2009

SB SAT @ AMSAT $ANS-074.01
AMSAT at the Dayton Hamvention 2009

AMSAT News Service Bulletin 074.01
>From AMSAT HQ SILVER SPRING, MD.
March 15, 2009
To All RADIO AMATEURS
BID: $ANS-074.01

AMSAT Board Member, Gould Smith, WA4SXM tells of AMSAT's plans at the 2009 Dayton Hamvention will be held this year on 15 - 17 May 2009.

Gould says, "This is the 58th year of the Dayton Hamvention, sponsored by DARA (Dayton Amateur Radio Association). As has been the case for the many years Hamvention will be at the Hara Arena Complex on the north side of Dayton. Further information on Hamvention 2009, including advance ticket sales and motel accommodations, can be found at http://www.hamvention.org."

See http://www.amsat.org/amsat-new/hamvention/2009/Dayton.php for all of the details of AMSAT at Dayton 2009.

AMSAT will occupy the same booths (444-449) in Ball Arena, right across from the ARRL area and just inside the door from the Satellite Demonstration area. Make your reservations early for all AMSAT activities!

AMSAT has a number of great activities planned during Hamvention. There will be a number of new offerings at the AMSAT booth.

2009 is the 40th Anniversary of AMSAT and we will have many pieces of memorabilia on display highlighting 40 years of amateur radio in space.

SuitSat-2 has been making a great deal of progress this past year. We will have on display all of the modules that will go into the Orlan space suit later this year, and we will be able to demonstrate most of them.

Space Traveler Richard Garriott, W5KWQ will be the speaker at the annual AMSAT/TAPR Banquet. He will also give a short talk during the Saturday AMSAT Forum and spend some time at the AMSAT booth. Reservations for the AMSAT/TAPR Banquet are now available through the AMSAT Store. See: http://www.amsat-na.com/store/item.php?id=100158

AMSAT has a limited block of rooms reserved at the Hampton Inn in Fairborn, OH. Please contact Martha at the AMSAT office (301-589-6062) or by e-mail at martha@amsat.org for room price and availability during the Hamvention. Priority for rooms will be given to AMSAT members volunteering to work in the AMSAT booth for multiple 2 hour shifts during the Hamvention.

[ANS thanks Gould, WA4SXM for the above information]

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SB SAT @ AMSAT $ANS-074.02
Air Force Approves AMSAT Keplerian Element Distribution

AMSAT News Service Bulletin 074.02
>From AMSAT HQ SILVER SPRING, MD.
March 15, 2009
To All RADIO AMATEURS
BID: $ANS-074.02

Keeper of the AMSAT Keps, Ray Hoad, WA5QGD is pleased to announce that AMSAT NA has recieved approval to continue re-distribution of Keplerian elements from the Air Force Space Command data source (Space Track website) for the period April 1, 2009 to April 1, 2010.

Thanks to the AFSPC team and especially to Mr. Mark Riddle for their help in this process.

Ray said, "This means that the AMSAT Keplerian Elements in verbose format and the 2-line format can be freely distributed by those who recieve them from AMSAT. AMSAT's two formats are each considered an AMSAT product and therefore can be freely distributed. AMSAT asks that AMSAT NA be given credit as the source for your redistribution."

[ANS thanks Ray, WA5QGD for the above information]

/EX

SB SAT @ AMSAT $ANS-074.03
Mario Acu�a, LU9HBG Silent Key

AMSAT News Service Bulletin 074.03
>From AMSAT HQ SILVER SPRING, MD.
March 15, 2009
To All RADIO AMATEURS
BID: $ANS-074.03

AMSAT Board Member, Tom Clark, K3IO told AMSAT this week, "It is with great sadness that I learned today of the passing of a long-term friend of AMSAT, Mario Acu�a, LU9HBG." Mario was a very senior scientist/engineer at NASA Goddard where he made his name by providing magnetometers for nearly every deep-space and planetary mission since the 1970's.

Tom recalled, "When a young Martin Sweeting wanted to fly magnetometers for navigation on the earliest UoSAT's, Mario was the 'go to' guy that put Martin on the right track. Since magnetometers are biased by metal and electrical currents in a spacecraft, Mario arranged for testing of the early UoSATs."

Tom also recalled Mario's assistance with the Phase-3 program, "When Jan King, Karl Meinzer, and I were trying to minimize radiation damage in critical Phase-3 components (like the IHU and CMOS logic), Mario was our mentor in helping to figure out the best way to minimize damage and teaching us how to apply tantalum to the top and bottom of ICs."

[ANS thanks Tom, K3IO for the above information]

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SB SAT @ AMSAT $ANS-074.04
AMSAT-DC Spring Workshop April 25

AMSAT News Service Bulletin 074.04
>From AMSAT HQ SILVER SPRING, MD.
March 15, 2009
To All RADIO AMATEURS
BID: $ANS-074.04

AMSAT-DC Area Coordinator Pat Kilroy, N8PK reports on plans for the AMSAT-DC Workshop to be held on Saturday, April 25, at the NASA

Goddard Space Flight Center in Greenbelt, Md.

A small "simulated satellite" kit will be built, tested and operated by individuals attending. The completed kit, soon to be widely known as a PICetSat II module, is a simple remote sensing unit that serves as an expendable high-altitude small balloon payload. It transmits downlink telemetry on the 70 cm Amateur Radio band.

Other attendees will provide and configure radios, computers and software needed to receive, decode and analyze the PICetSat II telemetry.

Pat says, "The format of this year's workshop is an experiment unto itself for the few AMSAT-DC subgroup of members who are attempting to organize such an event for the first time."

He adds, "This workshop may prove to be a fine training opportunity for one to learn the basics of the design, construction, testing, calibrating and operating an earth-orbiting satellite. All of this in one long Saturday of fun!"

The planning sessions are being held each Thursday evening via a toll-free telephone conference. If you wish to help organize or execute the workshop then contact Pat by e-mail for the details of connecting with the group on the telecon at Patrick.L.Kilroy@nasa.gov as soon as possible.

The cost of each kit will be determined soon, along with the admission structure. For example, being evaluated is $90 for a kit plus AMSAT membership if one doesn't already have it. The details of the registration process, workshop procedures and the associated costs are to follow in a later bulletin and on the AMSAT-NA and AMSAT-DC web pages.

[ANS thanks Pat Kilroy, N8PK for the above information]

/EX

SB SAT @ AMSAT $ANS-074.05
Satellite Shorts From All Over

AMSAT News Service Bulletin 074.05
>From AMSAT HQ SILVER SPRING, MD.
March 15, 2009
To All RADIO AMATEURS
BID: $ANS-074.05

+ The Desecheo Island K5D DXpedition team made its first satellite contact on Friday, February 20th with Andrew Glassbrenner, KO4MA, in New Port Richey, Florida. That QSO was conducted at 20:14 UTC through the SO-50 ham radio bird.

+ Paul 2E1EUB will be active on all satellites from N.E.Scotland for the week starting March 21, 2009. Check out qrz.com under 2M1EUB listing for more information.

+ Graham, G3VZV, has onboard the ship MV Minerva since March 7 which is visiting the islands off lying Antarctica. The schedule included visits to South Georgia (VP8) on March 12 &13th and Tristan da Cunha (ZD9) on March 18 & 19th before arriving in Cape Town on March 24th. Activity is planned via SO50, AO51 and the ISS (if available) from the ship and, if licences can be obtained, from the islands. He will be taking FM handhelds and an Arrow antenna and hopes to have some internet access which can be used to arrange skeds if asked. Contact info is: graham_at_shirville.com

+ Adrian, AA5UK, will be operating as ZF2AE from Grand Cayman and as ZF2AE/ZF8 from Little Cayman during his March 25th - April 8th vacation on AO-51, SO-50 and FO-29.

+ QSLs for the W5ACM/C6A/MM Western Caribbean Cruise 2009 started shipping on March 2, 2009. Operators/participants for this event included W5ACM, WB5RMA, WA5TWT and WA5WOD.

+ Go to http://tinyurl.com/c8jjzx for more information on how you can submit your suggestion to help NASA name the next ISS Module. (UniverseToday.com)

+ Mark, N8MH plans to host an AMSAT table at RARSFest in Raleigh, NC on Saturday, April 11, 2009. He is recruiting help to staff the table and to answer questions. Please contact Mike directly at: N8MH at AMSAT dot ORG if you can help. Details for RARSFest can be found at: http://www.rars.org/hamfest/

[ANS thanks everyone for the above information]

/EX

SB SAT @ AMSAT $ANS-074.06
UT1FG/MM Wet Grid Square via Satellite Expedition

AMSAT News Service Bulletin 074.06
>From AMSAT HQ SILVER SPRING, MD.
March 15, 2009
To All RADIO AMATEURS
BID: $ANS-074.06

Captain Yuri of the MV Bluebill announced he will be operating as UT1FG/MM from his ship April through June, 2009. His sea voyage will take him from Northern Europe, across the Atlantic Ocean, the Gulf of Mexico up to the Mississippi River, then southward toward Mexico and Central America. Yuri says his current plans are to operate on AO-27, AO-51, SO-50, VO-52, FO-29, and AO-7. Over the past two years he already has logged many North American stations from his ship operations in the Atlantic and Pacific Oceans. QSL via home call UT1FG.

[ANS thanks Yuri, UT1FG for the above information]

/EX

SB SAT @ AMSAT $ANS-074.07
ARISS Status Report for the Week of March 9, 2009

AMSAT News Service Bulletin 074.07
>From AMSAT HQ SILVER SPRING, MD.
March 15, 2009
To All RADIO AMATEURS
BID: $ANS-074.07

1. School Contacts

An ARISS contact was held with the Da Vinci Science Center in Allentown, Pennsylvania on Saturday, March 14 via telebridge station WH6PN in Hawaii. Students submitted questions to ask the ISS crew through the Center's Teacher Leader Institute. Eighteen students with the best questions were selected to speak with the astronaut and all students were invited to attend this educational activity.

Parkside Community College in Parkside, Cambridge, U.K. has been scheduled for an ARISS contact on Monday, March 30 at 16:54 UTC. Station GB4FUN will handle the connection.

The Girls' Middle School (GMS) in Mountain View, California has been scheduled for an ARISS contact on Monday, March 30 at 18:16 UTC via telebridge station K6DUE in Maryland. The contact is planned with spaceflight participant Charles Simonyi, KE7KDP/HA5SIK. GMS is a small, independent school for girls in 6th - 8th grade. The school's mission is to nurture and empower girls during this pivotal time in their lives. It looks for non-traditional educational opportunities to help girls expand their horizons.

An ARISS contact has been scheduled for Marcelino Canino Canino Middle School in Dorado, Puerto Rico. The contact will take place on Tuesday, March 31 at 15:29 UTC. A Microsatellite Student Program has been implemented where students design, construct, build and launch microsatellites which are then tracked and recovered with the help of amateur radio operators.

Milwee Middle School in Longwood, Florida has been scheduled for an ARISS contact on Wednesday, April 1 at 17:48 UTC via telebridge station ON4ISS in Belgium.

Carl Sandburg Elementary School in the Lake Washington School District, Kirkland, Washington has been approved for an ARISS contact. The contact is slated for Thursday, April 2 at 19:28 UTC, assisted by telebridge station W6SRJ in California.

2. Padthaway Contact Successful

On Tuesday, March 3, students from Padthaway Primary School in Padthaway, Australia participated in an ARISS contact. Telebridge station W6SRJ in California facilitated the connection, allowing fifteen students to ask the astronaut 20 questions. One hundred guests, including the mayor and his wife, attended the event and enjoyed a PowerPoint presentation and a showing of Mike Fincke's Expedition 9 video tour of the ISS. Media outlets were present and the audio was fed to local radio stations. The audio was also fed into the EchoLink AMSAT and JK1ZRW servers with 6 connections made from stations in Australia, England, Italy and the U.S.

3. NASA Teaching From Space Site - Now Available

The NASA Teaching From Space (TFS) Web site is now on-line. A new ARISS section is also available. For the TFS site, see:
http://www.nasa.gov/audience/foreducators/teachingfromspace/home/index.html
http://tinyurl.com/au7wr8

To view the ARISS site directly, go to:
http://www.nasa.gov/audience/foreducators/teachingfromspace/home/ariss.html
http://tinyurl.com/bpy9bp

4. Astronaut Training Status

Three successful simulated ARISS contacts took place on Wednesday, March 4. The simulations were held between the following participants:

Technopolis, Belgium and Andre Kuipers, PI9ISS
Ralph McCall School, Airdrie, Alberta, Canada and Chris Hadfield, VA3OOG

Ralph McCall School, Airdrie, Alberta, Canada and Cady Coleman, KC5ZTH

These training sessions were terrestrial-based amateur radio contacts using ARISS-equivalent equipment. Audio was available on IRLP.

5. Amateur Radio Newsline Posts Article on Simonyi

On March 6, Amateur Radio Newsline (Report #1647) ran a story on Charles Simonyi's upcoming mission. "Ham Radio in Space: Charles Simonyi, KE7KDP Heads Back to the ISS," may be viewed here:
http://www.arnewsline.org/

[ANS thanks Carol, KB3LKI for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the

President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office. With that please keep in mind you know you are aging when you wake up looking like your driver's license picture.

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM

```
From 337689782862155197
X-Google-Thread: 10e8ad,83bb4831441538fb,start
X-Google-Attributes: gid10e8ad,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news1.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx01.iad.newshosting.com!newshosting.com!
198.186.194.249.MISMATCH!transit3.readnews.com!news-xxxfer.readnews.com!news-
out.readnews.com!transit4.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-075 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Tue, 17 Mar 2009 08:28:30 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 1655
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000601c9a6fb$d7a09fc0$86e1df40$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1237292910 4436 166.84.1.6 (17 Mar 2009 12:28:30 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Tue, 17 Mar 2009 12:28:30 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news2.google.com rec.radio.amateur.space:199 rec.radio.info:637
```

This report is organized into five (5) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites
Part 5 (S5) - deborbited/returned satellites

SB SAT @ AMSAT W8ISS ANS-075.S1
WSR 075 Part 1 03/16/2009

AMSAT NEWS SERVICE BULLETIN 075.S1
FROM AMSAT HQ SILVER SPRING, MD, March 16, 2009
TO ALL RADIO AMATEURS
BID: $ANS-075.S1

DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008

Status: Operational
Current Mode: Science Mode - Beacon ONLY

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink: 435.530 to 435.570 MHz

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68
[02122009]
=====
VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.859330 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

```
Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is active. Each transponder has a different beacon.
[08072008]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Modes:   FM Repeater - V-FM/s-FM
                 BBS         - OFF
                 Telemetry   - OFF

Analog voice downlink:     435.300 MHz FM
                           435.150 MHz FM
                          2401.200 Mhz FM
Analog voice uplink:       145.880 MHZ FM
                           145.880 MHz USB
                           145.920 MHz FM
                          1268.700 MHz FM 67Hz PL tone
Digital Downlinks:        435.150 MHz FM 38k4 PBP, 1 watt output
                          435.150 MHz FM 9k6 Pacsat Broadcast Protocol
                         2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:           145.860 MHz FM 9k6 Pacsat Broadcast Protocol
                         1268.700 mhz FM 9k6 PBP Digital
Beacon:                   435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[03162009]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
```

Launch date: December 20, 2002

Status: Operational.

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz. The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10 minute timer.
[05282007]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Operational
Current Mode: V/u (Mode JA)

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage:
http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's
CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/
fo29cwts.htm
[02122009]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational

Current Mode: Alternating between Mode A and B every 24 hours

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
[02122009]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - V/u
                      Voice -   V/v
                      BBS -   V/v
                      APRS -   V/v
                      SSTV -   V/v

Expedition 18 Crew:

Commander:	Mike Fincke	KE5AIT
Flight Engineer:	Yury Lonchakov	RA3DT
Flight Engineer:	Sandra Magnus	KE5FYE

Available Modes and Frequencies:

Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 9k6
Worldwide packet downlink: 145.825 Mhz FM 9k6

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[01082009]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-075.S2
WSR 075 Part 2 03/16/2009

AMSAT NEWS SERVICE BULLETIN 075.S2
FROM AMSAT HQ SILVER SPRING, MD, March 16, 2009
TO ALL RADIO AMATEURS

BID: $ANS-075.S2

SOHLA-1 (ASTRO TECH.)
Catalog Number: 33492 ?
Launch Date: January 23, 2009

Status: In Orbit

Proposed Frequencies and Modes:
Downlink: 437.505 MHz AFSK/CW
Beacon: 437.505 MHz AFSK/CW

Callsign:

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=101
[02282009]
=====
KAGAYAKI (Solan Co.)
Catalog Number: 33495?
Launch Date: January 23, 2009

Status: In Orbit

Downlink: 437.375 MHZ   FSK9k6/CW
Beacon: 437.375 MHz   FSK9k6/CW

IARU coordination status page:

AMSAT-NA webpage:

[01152009]
=====
STARS (Kagawa Univ.) (Twin Satellites)
Catalog Number: 33498
Launch Date: January 23, 2009

Status: Operational ?

Downlinks: 437.485 MHz FM/CW
           437.465 MHz FM/CW
Beacons: 437.305 MHz FM/CW
           437.275 MHz FM/CW

Callsigns: JR5YBN
           JR5YBO

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=99

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=121&retURL
=/satellites/status.php

```
[022152009]
=====
KKS-1 (Tokyo MCIT)
Catalog Number: 33499
Launch Date: January 23, 2009

Status: Operational

Downlink:  437.455 MHz AFSK/CW
Beacon:    437.385 MHz AFSK/CW

Callsign: JQ1YYY

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=107

AMSAT-NA webapge:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=120&retURL
=/satellites/status.php
[02212009]
=====
PRISM (Tokyo Univ.)
Catalog Number: 33493
Launch Date: January 23, 2009

Status: Operational ?

Downlink: 437.425 MHz AFSK/GMSK/CW
Beacon:   437.250 MHz AFSK/GMSK/CW

Callsign: JQ1YCX

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=97

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=119&retURL
=/satellites/status.php
[02212009]
=====
RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number: 32953
Launch Date: May 23, 2008

Status: Operational

Curent Modes: Telemetry
              Audio
              Images

Downlinks: 435.315 MHz
           435.215 MHz
```

AMSAT-NA website:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=115&ret
URL=/satellites/status.php

Official website:
http://www.npopm.com/?cid=leoca&caid=43
[02122009]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=94&retURL=
/satellites/status.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=72
[02122009]
=====
CP3
Catalog Number: 31129
Launch Date: April 17,2007

Status: Operational

Current Mode: /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[02122009]
=====
GENESAT-1
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Current Mode: /u

Callsign: KE7EGC

Telemetry Beacon Downlink: 437.0670 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[02212009]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon: 437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/xivpicte.htm
[02212009]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003

Status: Operational

Current Mode: /u

Beacon: 436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=96&retURL=/satellites/status.php

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[02212009]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Operational?

Uplink: 1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan?)

Telemetry Beacon: 437.3850 CW

Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=56
[02122009]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

```
Current Modes:   FM Repeater - V-FM/s-FM
                 BBS         - OFF
                 Telemetry   - OFF

Analog voice downlink:     435.300 MHz FM
                           435.150 MHz FM
                          2401.200 Mhz FM
Analog voice uplink:       145.880 MHZ FM
                           145.880 MHz USB
                           145.920 MHz FM
                          1268.700 MHz FM 67Hz PL tone
Digital Downlinks:        435.150 MHz FM 38k4 PBP, 1 watt output
                          435.150 MHz FM 9k6 Pacsat Broadcast Protocol
                         2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:           145.860 MHz FM 9k6 Pacsat Broadcast Protocol
                         1268.700 mhz FM 9k6 PBP Digital
Beacon:                   435.150 MHz
```

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[03162009]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

```
Status: Operational

Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=69&retURL
=/satellites/status.php
[02212009]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Semi-operational

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink:        144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[09242007]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Telemetry only reported

Current Modes: V/U
               L/U

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
```

BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://asri.technion.ac.il/techsat/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=14&retURL
=/satellites/status.php
[02212009]
=====
RS-22 RADIO SPORT RS-22
Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only

Current Mode: /u

CW Beacon - 435.352 MHz
            145.818 MHz

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=76&retURL
=/satellites/status.php
[02212009]
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990

Status: CW Beacon only

Uplinks: 145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink: 437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[03162009]
=====
CanX-2
Catalog number: 32790
Launch Date: April 28, 2008

Status: Operational in range of ground station only

```
Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web
page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[02212009]
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.425 MHz 1k2 baud packet

For the latest project status update please visit the AAUSAT-II web
page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[02212009]
=====
CO-65 CUTE-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008

Status: Digipeater

Downlink:  437.475 MHz 9k6 Packet
Uplink:   1267.600 Mhz

Telemetry Beacon:
Downlink: 437.2750 MHz CW

For the latest project status update please visit the Cute-1.7+APD II
web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78

Command Station blog website:
http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=112&retURL
=/satellites/status.php
[02212009]
=====
Compass-1
```

Catalog number: 32787
Launch Date: April 28, 2008

Status: Operational

Current Mode: 4k8 MSK packet

Downlink: 437.275 Mhz CW
437.405 MHz Packet

For the latest project status update please visit the Compass 1 web page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=114&retURL=/satellites/status.php
[02212009]
=====
CO-66 Seeds II
Catalog number: 32791
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.485 MHz

Callsign: JQ1YGU

For the latest project status update please visit the Seeds 2 web page: http://cubesat.aero.cst.nihon-u.ac.jp/english/seeds_2_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=113&retURL=/satellites/status.php
[02212009]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - V/u
Voice - V/v
BBS - V/v
APRS - V/v
SSTV - V/v

Expedition 18 Crew:
Commander: Mike Fincke KE5AIT
Flight Engineer: Yury Lonchakov RA3DT
Flight Engineer: Sandra Magnus KE5FYE

Available Modes and Frequencies:

Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 9k6
Worldwide packet downlink: 145.825 Mhz FM 9k6

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[01082009]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-075.S3

WSR 075 Part 3 03/16/2009

AMSAT NEWS SERVICE BULLETIN 075.S3
FROM AMSAT HQ SILVER SPRING, MD, March 16, 2009
TO ALL RADIO AMATEURS
BID: $ANS-075.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

CP4
Catalog Number: 31122
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon: 437.325 MHz CW

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=79
[10022008]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: Non-Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder: 145.825 Mhz FM
[01012009]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

```
Status: Non-operational

Voice Uplink:         437.250 MHz FM 67Hz CTCSS
Voice Downlink:      2401.835 MHz FM
Packet Up/Downlink:   437.250 MHz 9k6 packet
Packet Downlink      2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non=Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[08132007]
=====
QuakeSat
Catalog Number: 27845
Launch Date: June 30, 2003

Status: ?

Current Mode: 9600 baud data packet

Mode U packet
Downlink: 436.675 MHz 9k6 BPS

Quakesat webpage:
http://www.quakefinder.com/services/quakesat-ssite/
[02212009]
=====
DTUSAT
Catalog Number: 27842
Launch Date: June 30, 2003

Status: Non-Operational

Current Mode: 2k4 AFSK Packet last reported

Downlink: 437.475MHz

Officail webpage: http://dtusat1.dtusat.dtu.dk/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=101&retURL
=satellites/all_oscars.php
[02212009]
=====
```

AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)

Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Non-Operational

Uplinks: 145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[007302007]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B

```
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS:                SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink:   145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
V-band:   145.840 -  145.990 MHz CW/LSB
U-band:   435.550 -  435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks
---------
S2-band:  2401.225 -  2401.475 MHz CW/USB
K-band:  24048.010 - 24048.060 MHz CW/USB
Beacon:   2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)
----------------------------
BEACON   General Beacon(GB)  Middle Beacon(MB)  Engineering Beacon(EB)
```

```
2 m                   none        145.898 MHz                 none
70cm           435.438 MHz        435.588 MHz          435.838 MHz
13cm(1)       2400.188 MHz       2400.338 MHz         2400.588 MHz
13cm(2)       2401.173 MHz       2401.323 MHz         2401.573 MHz
3cm          10450.975 MHz      10451.125 MHz        10451.375 MHz
1.5cm        24047.885 MHz      24048.035 MHz        24048.285 MHz
[07162007]
=====
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink:    145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: ?
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater:         436.250 MHz

Uplinks: Mode B Repeater:  145.825 MHz
Mode J Digipeater:         145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink:   145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Non-operational

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign:       POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
```

```
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012009]
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993

Status: Non-operational

Current Mode: V/u

Uplink:   145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[01292009]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
```

```
BBS: HL02-12
[05092004]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
```

```
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
LIBERTAD-1
Catalog Number: 31128
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink:   145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[02122009]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
[05012006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: SEMI-Operational

Current Mode:  V/u
```

```
Uplink:         145.900 MHz FM 1200-baud Manchester FSK (reserved)
                145.920 MHz FM VOICE
                145.940 MHz FM 1200-baud Manchester FSK (reserved)
                145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink:       437.026 MHz USB VOICE
                (1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[12252008]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
UO-11 OSCAR-11
```

Catalog number: 14781
Launch Date: March 1, 1984

Status: Non-operational.

Current Mode: /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon: 435.025 MHz
Mode-S Beacon: 2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[01012009]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon: 145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.8500 - 145.9000 MHz SSB/CW
Downlink 29.4000 - 29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW

```
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
Beacons:   29.450 MHz
          435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon 1:  29.352 MHz (intermittent)
Beacon 2:  29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991
```

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB

Beacon: 145.860 MHz

Robot: 145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-075.S4
WSR 075 Part 4 03/16/2009

AMSAT NEWS SERVICE BULLETIN 075.S4
FROM AMSAT HQ SILVER SPRING, MD, March 16, 2009
TO ALL RADIO AMATEURS
BID: $ANS-075.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE PROPOSED FOR LAUNCH
AT THIS TIME:

UNITEC
Catalog Number:
Proposed Launch Date: May 2010

Status: Design Phase

Proposed Equipment:

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=141
[01152009]
=====
XW-1
Catalog Number:
Proposed Launch Date: Summer 2009?

Status: Design Phase

Proposed Equipment:
Beacon: 435Mhz, CW 20dBm
Linear transponder: RX: 145Mhz, TX: 435Mhz, 40KHz, 30dBm
FM Transponder: RX: 145Mhz, TX: 435Mhz, 16KHz, 30dBm
Digital store and forward transponder: RX: 145Mhz, TX: 435Mhz, 16KHz, 30dBm

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108
[10092008]
=====
Phase 5a Mars Mission AO-??
Catalog Number:
Proposed Launch Date: 2009 or 2011

Status: Design Phase

For the latest project status update please visit the AMSAT-DL P5-A web page:
http://ticket-to-mars.org
[01222007]
=====
PHASE 3E AO-??
Catalog number:
Proposed Launch Date: ??????

Status: STORAGE

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/
[02212009]
=====
Eagle AO-??
Catalog Number:
Proposed Launch Date: ?????

Status: Design Phase

For the latest project status updates please visit the AMSAT-NA web page: http://www.amsat.org
[02212009]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-075.S5
WSR 075 Part 5 03/16/2009

AMSAT NEWS SERVICE BULLETIN 075.S5
FROM AMSAT HQ SILVER SPRING, MD, March 16, 2009
TO ALL RADIO AMATEURS

```
BID: $ANS-075.S5

THE FOLLOWING SATELLITES HAVE RE-ENTERED OR HAVE BEEN RETURNED SAFELY:

NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: July 28, 2008

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[01012009]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink:      145.825 Mhz FM APRS AX25
APRS Uplink:        145.825 MHz FM APRS AX25
Voice/PSK31 Uplink:  28.120 MHz

Packet to Voice ID: RAFT
[06112007]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Re-Entered
Re-entered: June 18, 2008

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon:             437.2750 MHz CW

Callsign: JR8YJT
```

[01012009]
=====
SO-43 Starshine 3
Catalog Number: 26929
Launch Date: September 30, 2001

Status: Re-Entered
Re-entered: January 21, 2003

Beacon: 145.825Mhz
[02212009]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at} amsat.org
NNNN
/EX

```
From -1416892353029238840
X-Google-Thread: 10e8ad,5c2d0146879521a1,start
X-Google-Thread: 10b9c8,5c2d0146879521a1,start
X-Google-Attributes: gid10e8ad,gid10b9c8,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx01.iad.newshosting.com!nx02.iad.newshosting.com!
newshosting.com!198.186.194.249.MISMATCH!transit3.readnews.com!news-
xxxfer.readnews.com!news-out.readnews.com!transit4.readnews.com!panix!
rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-082 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Tue, 24 Mar 2009 10:05:11 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 1680
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <001201c9ac89$83fddfc0$8bf99f40$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix1.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1237903512 22137 166.84.1.1 (24 Mar 2009 14:05:12 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Tue, 24 Mar 2009 14:05:12 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
```

```
Content-Language: en-us
Xref: g2news1.google.com rec.radio.amateur.space:175 rec.radio.info:570

This report is organized into five (5) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites
Part 5 (S5) - deorbited/returned satellites

SB SAT @ AMSAT W8ISS ANS-082.S1
WSR 082 Part 1 03/23/2009

AMSAT NEWS SERVICE BULLETIN 082.S1
FROM AMSAT HQ SILVER SPRING, MD, March 23, 2009
TO ALL RADIO AMATEURS
BID: $ANS-082.S1

DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008

Status: Operational
Current Mode: Science Mode - Beacon ONLY

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink:   435.530 to 435.570 MHz

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68
[02122009]
=====
VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink:   435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink:   435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW
```

Indian Beacon: 145.859330 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

To know what transponder is switched on please listen for the beacon that is active. Each transponder has a different beacon.
[08072008]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Modes: FM Repeater - V3/u1
SSTV - V4/ud3
BBS - OFF
Telemetry - OFF

Analog voice downlink: u1 - 435.300 MHz FM
u2 - 435.150 MHz FM
s - 2401.200 Mhz FM
Analog voice uplink: V1 - 145.880 MHZ FM
V2 - 145.880 MHz USB
V3 - 145.920 MHz FM
S - 1268.700 MHz FM 67Hz PL tone
Digital Downlinks: ud3 - 435.150 MHz FM 38k4 PBP, 1 watt output
ud9 - 435.150 MHz FM 9k6 Pacsat Broadcast Protocol
s - 2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: V4 - 145.860 MHz FM 9k6 Pacsat Broadcast Protocol
l - 1268.700 mhz FM 9k6 PBP Digital
Beacon: u - 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[03232009]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002

Status: Operational.

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz. The order of operation is thus: (allow for Doppler as necessary):

1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10 minute timer.

[05282007]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Operational
Current Mode: V/u (Mode JA)

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:

V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage:
http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts.htm
[02122009]
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993

Status: Operational

Current Mode: V/u

```
Uplink:   145.850 MHz FM
Downlink: 436.797 MHz FM
```

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[03232009]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational

Current Mode: Alternating between Mode A and B every 24 hours

```
Uplink:   145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink:  29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons:   29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW
```

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
[02122009]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - V/u
Voice - V/v
BBS - V/v
APRS - V/v
SSTV - V/v

Expedition 18 Crew:
Commander: Mike Fincke KE5AIT
Flight Engineer: Yury Lonchakov RA3DT
Flight Engineer: Sandra Magnus KE5FYE

STS-119 crew:
Commander: Lee Archambault
Pilot: Tony Antonelli
Mission Specialist 1: Joseph Acaba
Mission Specialist 2: Steve Swanson
Mission Specialist 3: Richard Arnold
Mission Specialist 4: John Phillips
Mission Specialist 5: Koichi Wakata, KC5ZTA

Available Modes and Frequencies:

Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 9k6
Worldwide packet downlink: 145.825 Mhz FM 9k6

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[03232009]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-082.S2
WSR 082 Part 2 03/23/2009

AMSAT NEWS SERVICE BULLETIN 082.S2
FROM AMSAT HQ SILVER SPRING, MD, March 23, 2009
TO ALL RADIO AMATEURS
BID: $ANS-082.S2

SOHLA-1 (ASTRO TECH.)
Catalog Number: 33496
Launch Date: January 23, 2009

Status: Commisioning

Proposed Frequencies and Modes:
Downlink: 437.505 MHz AFSK/CW
Beacon: 437.505 MHz AFSK/CW

Callsign:

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=101
[03232009]
=====
KAGAYAKI (Solan Co.)
Catalog Number: 33495?

```
Launch Date: January 23, 2009

Status: In Orbit

Downlink: 437.375 MHZ    FSK9k6/CW
Beacon:   437.375 MHz    FSK9k6/CW

IARU coordination status page:

AMSAT-NA webpage:

[01152009]
=====
STARS (Kagawa Univ.) (Twin Satellites)
Catalog Number: 33498
Launch Date: January 23, 2009

Status: Operational ?

Downlinks: 437.485 MHz FM/CW
           437.465 MHz FM/CW
Beacons:   437.305 MHz FM/CW
           437.275 MHz FM/CW

Callsigns: JR5YBN
           JR5YBO

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=99

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=121&retURL
=/satellites/status.php
[022152009]
=====
KKS-1 (Tokyo MCIT)
Catalog Number: 33499
Launch Date: January 23, 2009

Status: Operational

Downlink:  437.455 MHz AFSK/CW
Beacon:    437.385 MHz AFSK/CW

Callsign: JQ1YYY

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=107

AMSAT-NA webapge:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=120&retURL
=/satellites/status.php
[02212009]
```

```
=====
PRISM (Tokyo Univ.)
Catalog Number: 33493
Launch Date: January 23, 2009

Status: Operational ?

Downlink: 437.425 MHz AFSK/GMSK/CW
Beacon:   437.250 MHz AFSK/GMSK/CW

Callsign: JQ1YCX

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=97

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=119&retURL
=/satellites/status.php
[02212009]
=====
RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number: 32953
Launch Date: May 23, 2008

Status: Operational

Curent Modes: Telemetry
              Audio
              Images

Downlinks: 435.315 MHz
           435.215 MHz

AMSAT-NA website:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=115&ret
URL=/satellites/status.php

Official website:
http://www.npopm.com/?cid=leoca&caid=43
[02122009]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode:  /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon:    435.245 MHz CW

Callsign: K5USL
```

TLM and CW interchange every 30 seconds.

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=94&retURL=
/satellites/status.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=72
[02122009]
=====
CP3
Catalog Number: 31129
Launch Date: April 17,2007

Status: Operational

Current Mode: /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[02122009]
=====
GENESAT-1
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Current Mode: /u

Callsign: KE7EGC

Telemetry Beacon Downlink: 437.0670 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[02212009]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon: 437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:

```
http://www.ne.jp/asahi/hamradio/je9pel/xivpicte.htm
[02212009]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003

Status: Operational

Current Mode: /u

Beacon:     436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=96&retURL
=/satellites/status.php

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[02212009]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Operational?

Uplink:  1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=56
[02122009]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Modes:   FM Repeater - V3/u1
                 SSTV        - V4/ud3
                 BBS         - OFF
                 Telemetry   - OFF
```

Analog voice downlink: u1 - 435.300 MHz FM
u2 - 435.150 MHz FM
s - 2401.200 Mhz FM
Analog voice uplink: V1 - 145.880 MHZ FM
V2 - 145.880 MHz USB
V3 - 145.920 MHz FM
S - 1268.700 MHz FM 67Hz PL tone
Digital Downlinks: ud3 - 435.150 MHz FM 38k4 PBP, 1 watt output
ud9 - 435.150 MHz FM 9k6 Pacsat Broadcast Protocol
s - 2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: V4 - 145.860 MHz FM 9k6 Pacsat Broadcast Protocol
l - 1268.700 mhz FM 9k6 PBP Digital
Beacon: u - 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[03162009]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=69&retURL=/satellites/status.php
[02212009]
=====

NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Semi-operational

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[09242007]

=====

RS-22 RADIO SPORT RS-22
Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only

Current Mode: /u

CW Beacon - 435.352 MHz
145.818 MHz

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=76&retURL
=/satellites/status.php
[02212009]

=====

LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990

Status: CW Beacon only

Uplinks: 145.840 MHz 1200-baud Manchester FSK
145.860 MHz 1200-baud Manchester FSK
145.880 MHz 1200-baud Manchester FSK
145.900 MHz 1200-baud Manchester FSK

CW downlink: 437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu

```
[03162009]
=====
CanX-2
Catalog number: 32790
Launch Date: April 28, 2008

Status: Operational in range of ground station only

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web
page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[02212009]
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.425 MHz 1k2 baud packet

For the latest project status update please visit the AAUSAT-II web
page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[02212009]
=====
CO-65 CUTE-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008

Status: Digipeater

Downlink:  437.475 MHz 9k6 Packet
Uplink:   1267.600 Mhz

Telemetry Beacon:
Downlink: 437.2750 MHz CW

For the latest project status update please visit the Cute-1.7+APD II
web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78

Command Station blog website:
http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/
```

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=112&retURL
=/satellites/status.php
[02212009]
=====
Compass-1
Catalog number: 32787
Launch Date: April 28, 2008

Status: Operational

Current Mode: 4k8 MSK packet

Downlink: 437.275 Mhz CW
          437.405 MHz Packet

For the latest project status update please visit the Compass 1 web page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=114&retURL
=/satellites/status.php
[02212009]
=====
CO-66 Seeds II
Catalog number: 32791
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.485 MHz

Callsign: JQ1YGU

For the latest project status update please visit the Seeds 2 web page: http://cubesat.aero.cst.nihon-u.ac.jp/english/seeds_2_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=113&retURL
=/satellites/status.php
[02212009]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - V/u
Voice - V/v
BBS - V/v
APRS - V/v
SSTV - V/v

Expedition 18 Crew:
Commander: Mike Fincke KE5AIT
Flight Engineer: Yury Lonchakov RA3DT
Flight Engineer: Sandra Magnus KE5FYE

STS-119 crew:
Commander: Lee Archambault
Pilot: Tony Antonelli
Mission Specialist 1: Joseph Acaba
Mission Specialist 2: Steve Swanson
Mission Specialist 3: Richard Arnold
Mission Specialist 4: John Phillips
Mission Specialist 5: Koichi Wakata, KC5ZTA

Available Modes and Frequencies:

Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 9k6
Worldwide packet downlink: 145.825 Mhz FM 9k6

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR

```
United States:              NA1SS
Packet Mailbox:             RS0ISS-11
Digipeater callsign:        ARISS

Official ARISS Webpage:    http://www.rac.ca/ariss
ISS Fan Club Webpage:      http://www.issfanclub.com
APRS tracking page:        http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[03232009]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-082.S3
WSR 082 Part 3 03/23/2009

AMSAT NEWS SERVICE BULLETIN 082.S3
FROM AMSAT HQ SILVER SPRING, MD, March 23, 2009
TO ALL RADIO AMATEURS
BID: $ANS-082.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

CP4
Catalog Number: 31122
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon:    437.325 MHz CW

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=79
[10022008]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: Non-Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder:  145.825 Mhz FM
[01012009]
=====
NCUBE-2
```

```
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency:  437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink:         437.250 MHz FM 67Hz CTCSS
Voice Downlink:      2401.835 MHz FM
Packet Up/Downlink:   437.250 MHz 9k6 packet
Packet Downlink      2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non=Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[08132007]
=====
QuakeSat
Catalog Number: 27845
Launch Date: June 30, 2003

Status: ?

Current Mode: 9600 baud data packet

Mode U packet
Downlink: 436.675 MHz 9k6 BPS

Quakesat webpage:
http://www.quakefinder.com/services/quakesat-ssite/
[02212009]
=====
DTUSAT
```

Catalog Number: 27842
Launch Date: June 30, 2003

Status: Non-Operational

Current Mode: 2k4 AFSK Packet last reported

Downlink: 437.475MHz

Officail webpage: http://dtusat1.dtusat.dtu.dk/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=101&retURL=satellites/all_oscars.php
[02212009]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)

Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Non-Operational

Uplinks: 145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[007302007]
=====

```
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink:   145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS:                SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink:   145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
```

V-band: 145.840 - 145.990 MHz CW/LSB
U-band: 435.550 - 435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks

S2-band: 2401.225 - 2401.475 MHz CW/USB
K-band: 24048.010 - 24048.060 MHz CW/USB
Beacon: 2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)

BEACON	General Beacon(GB)	Middle Beacon(MB)	Engineering Beacon(EB)
2 m	none	145.898 MHz	none
70cm	435.438 MHz	435.588 MHz	435.838 MHz
13cm(1)	2400.188 MHz	2400.338 MHz	2400.588 MHz
13cm(2)	2401.173 MHz	2401.323 MHz	2401.573 MHz
3cm	10450.975 MHz	10451.125 MHz	10451.375 MHz
1.5cm	24047.885 MHz	24048.035 MHz	24048.285 MHz

[07162007]
=====
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT

Catalog Number: ?
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz
145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Non-Operational?

Current Modes: V/U
L/U

Downlink: 435.225 MHz FM (9600-baud FSK)
435.325 Mhz - Not Available - temperature problems

Uplinks: 145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://asri.technion.ac.il/techsat/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=14&retURL
=/satellites/status.php
[03232009]
=====

TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink: 145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Non-operational

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012009]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks: 145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HL01-11
BBS: HL01-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink: 145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink: 435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons: 435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink: 145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks: 145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
LIBERTAD-1
Catalog Number: 31128
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink: 145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[02122009]

```
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
[05012006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: SEMI-Operational

Current Mode:  V/u

Uplink:         145.900 MHz FM 1200-baud Manchester FSK (reserved)
                145.920 MHz FM VOICE
                145.940 MHz FM 1200-baud Manchester FSK (reserved)
                145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink:       437.026 MHz USB VOICE
                (1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[12252008]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990
```

```
Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984

Status: Non-operational.

Current Mode:  /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon:           435.025 MHz
Mode-S Beacon:      2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[01012009]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational
```

```
Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon:   145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink  29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
Beacons:   29.450 MHz
          435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
```

```
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon 1:  29.352 MHz (intermittent)
Beacon 2:  29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink:     21.260 to 21.300 MHz CW/USB
Downlink:  145.860 to 145.900 MHz CW/USB

Beacon:    145.860 MHz

Robot:     145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink:   21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon:   29.408 MHz

Robot:    29.454 MHz
[05232004]
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```

SB SAT @ AMSAT W8ISS ANS-082.S4
WSR 082 Part 4 03/23/2009

AMSAT NEWS SERVICE BULLETIN 082.S4
FROM AMSAT HQ SILVER SPRING, MD, March 23, 2009
TO ALL RADIO AMATEURS
BID: $ANS-082.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE PROPOSED FOR LAUNCH AT THIS TIME:

UNITEC
Catalog Number:
Proposed Launch Date: May 2010

Status: Design Phase

Proposed Equipment:

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=141
[01152009]
=====
XW-1
Catalog Number:
Proposed Launch Date: Summer 2009?

Status: Design Phase

Proposed Equipment:
Beacon: 435Mhz, CW 20dBm
Linear transponder: RX: 145Mhz, TX: 435Mhz, 40KHz, 30dBm
FM Transponder: RX: 145Mhz, TX: 435Mhz, 16KHz, 30dBm
Digital store and forward transponder: RX: 145Mhz, TX: 435Mhz, 16KHz, 30dBm

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108
[10092008]
=====
Phase 5a Mars Mission AO-??
Catalog Number:
Proposed Launch Date: 2009 or 2011

Status: Design Phase

For the latest project status update please visit the AMSAT-DL P5-A web page:
http://ticket-to-mars.org
[01222007]
=====
PHASE 3E AO-??

Catalog number:
Proposed Launch Date: ??????

Status: STORAGE

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/
[02212009]
=====
Eagle AO-??
Catalog Number:
Proposed Launch Date: ?????

Status: Design Phase

For the latest project status updates please visit the AMSAT-NA web page: http://www.amsat.org
[02212009]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-082.S5
WSR 082 Part 5 03/23/2009

AMSAT NEWS SERVICE BULLETIN 082.S5
FROM AMSAT HQ SILVER SPRING, MD, March 23, 2009
TO ALL RADIO AMATEURS
BID: $ANS-082.S5

THE FOLLOWING SATELLITES HAVE RE-ENTERED OR HAVE BEEN RETURNED SAFELY:

NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: July 28, 2008

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[01012009]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink: 145.825 Mhz FM APRS AX25
APRS Uplink: 145.825 MHz FM APRS AX25
Voice/PSK31 Uplink: 28.120 MHz

Packet to Voice ID: RAFT
[06112007]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Re-Entered
Re-entered: June 18, 2008

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon: 437.2750 MHz CW

Callsign: JR8YJT
[01012009]
=====
SO-43 Starshine 3
Catalog Number: 26929
Launch Date: September 30, 2001

Status: Re-Entered
Re-entered: January 21, 2003

Beacon: 145.825Mhz
[02212009]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA

850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at}
amsat.org
NNNN
/EX

```
From -6843985318766542160
X-Google-Thread: 10e8ad,cee1c995a14e63a6,start
X-Google-Thread: 10b9c8,cee1c995a14e63a6,start
X-Google-Attributes: gid10e8ad,gid10b9c8,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news1.google.com!newsfeed2.dallas1.level3.net!
news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-081 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
```

```
Date: Tue, 24 Mar 2009 10:24:54 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 337
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000001c9ac8c$46f574a0$d4e05de0$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix3.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1237904694 16062 166.84.1.3 (24 Mar 2009 14:24:54 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Tue, 24 Mar 2009 14:24:54 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news2.google.com rec.radio.amateur.space:201 rec.radio.info:649
```

AMSAT NEWS SERVICE
ANS-081

ANS is a free, weekly, news and information service of AMSAT North America, The
Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* SOHLA-1 Begins Operations
* Radio Club of America Donates Station to Florida Club
* AMSAT Awards
* Satellite Shorts From All Over
* ARISS Status - 16 March 2009

SB SAT @ AMSAT $ANS-081.01
SOHLA-1 Begins Operations

AMSAT News Service Bulletin 081.01
  From AMSAT HQ SILVER SPRING, MD.
March 22, 2009
To All RADIO AMATEURS
BID: $ANS-081.01

SOHLA-1 examination use started on 17 March 2009. The reception report was as a powerful signal in 18 March. The normal operation will start from 25 Mar. The examination use schedule of then as follows.

The current amateur mode is only the broadcast of AFSK signal.
437.505MHz, AFSK 1200bps, AX.25

```
OBJECT E
1 33496U 09002E   09077.41247038  .00000497  00000-0  92137-4 0  1659
2 33496 098.0280 188.1849 0006449 198.4659 161.6367 14.69427465  7946
```

http://www.ne.jp/asahi/hamradio/je9pel/sohlacwe.htm

[ANS thanks Mineo, JE9PEL, for the above information]

/EX

SB SAT @ AMSAT $ANS-081.02
Radio Club of America Donates Station to Florida Club

AMSAT News Service Bulletin 081.02
  From AMSAT HQ SILVER SPRING, MD.
March 22, 2009
To All RADIO AMATEURS
BID: $ANS-081.02

The Education Committee of the Radio Club of America says that it has received its first donation of a complete amateur radio station that will be given to the Lake Monroe Amateur Radio Club in Orlando, Florida. The Lake Monroe Amateur Radio Club has a specially equipped trailer that it takes to schools to demonstrate amateur radio communications. It also goes into schools and children's hospitals to demonstrate how to make contact with the International Space Station via ham radio. The club says it's extremely grateful to The Radio Club of America for the donation of the much-needed equipment.

[ANS thanks Newsline for the above information]

/EX

SB SAT @ AMSAT $ANS-081.03
AMSAT Awards

AMSAT News Service Bulletin 081.03
  From AMSAT HQ SILVER SPRING, MD.

March 22, 2009
To All RADIO AMATEURS
BID: $ANS-081.03

The beginning of 2009 has been the busiest for AMSAT Awards since I took over processing awards in 2001.

We would like to welcome the following to the satellite community. They have made their first satellite contact and are now members of the AMSAT Satellite Communicators Club.

Jack Barbera, WA1ZDV
Marilyn Tillman, N4MGT
Mount Nebo VHF Contest Club, NE5BO
Rick Tillman, WA4NVM
Chris Meyers, KC0YBM
Richard Allen, N0CFL

The following have earned the AMSAT Satellite Communications Achievement Award.

Mount Nebo VHF Contest Club, NE5BO #483
Rick Tillman, WA4NVM #484
David Webb, KB1PVH #485

The following have earned the AMSAT South Africa Satellite Communications Achievement Award.

Douglas Anoman, KC9MLN #US130
Rick Tillman, WA4NVM #US131
David Webb, KB1PVH #US132

The following have upgraded their AMSAT Sexagesimal Satellite Communication Achievement Award

Rick Tillman, WA4NVM #147

To see all the awards visit http://www.amsat.org or http://www.amsatnet.com

[ANS thanks Bruce, KK5DO, for the above information]

/EX

SB SAT @ AMSAT $ANS-081.04
Satellite Shorts From All Over

AMSAT News Service Bulletin 081.04

From AMSAT HQ SILVER SPRING, MD.
March 22, 2009
To All RADIO AMATEURS
BID: $ANS-081.04

+ The AMSAT-DC WORKSHOP will be held on Saturday, April 25, at the NASA Goddard Space Flight Center in Greenbelt, Md. Watch ANS news for the Latest announcements. Contact information for Pat Kilroy via e-mail is Patrick.L.Kilroy@nasa.gov.

+ Martha at AMSAT headquarters reminds members that rooms are available In the AMSAT block. To get a room in the AMSAT block, you must be an AMSAT Member, Volunteer to work the AMSAT Booth, and call Martha NOT The hotel. Martha's office phone number is 301-589-6062.

+ Check out http://echoesofapollo.com/ for information about the "World Moon Bounce Day" on June 27th 2009. This will feature several very large dish stations which may allow reception on your VHF and UHF Stations. An example of one of the large dishes can be seen at: http://www.jamesburgdish.org/

+ The March edition of the AMSAT India Newsletter has been uploaded to the archive at http://www.amsatindia.org/Newsletter/

+ The SwissCube Amateur Radio Cubesat planned to operate on a downlink frequency of 437.505 MHz is planned for launch on the Polar Satellite Launch Vehicle (PSLV) from India at the end of April 2009 along with BeeSat, UEW-2 and ITU-pSat. See the details in the article on-line at: http://www.southgatearc.org/news/march2009/swisscube_slideshow.htm

[ANS thanks everyone for the above information]

/EX

SB SAT @ AMSAT $ANS-081.05
ARISS Status - 16 March 2009

AMSAT News Service Bulletin 081.05
From AMSAT HQ SILVER SPRING, MD.
March 22, 2009
To All RADIO AMATEURS
BID: $ANS-081.05

1. Upcoming School Contacts

Parkside Community College in Parkside, Cambridge, U.K. has been scheduled for an Amateur Radio on the International Space Station (ARISS) contact on Monday, March 30 at 17:00 UTC. Station GB4FUN will handle the connection.

The Girl's Middle School (GMS) in Mountain View, California has been

scheduled
for an Amateur Radio on the International Space Station (ARISS) contact on
Monday, March 30 at 18:22 UTC via telebridge station K6DUE in Maryland. The
contact is planned with spaceflight participant Charles Simonyi,
KE7KDP/HA5SIK.
GMS is a small, independent school for girls in 6th - 8th grade. The
school's
mission is to nurture and empower girls during
this pivotal time in their lives.
It looks for non-traditional educational opportunities to help girls
expand
their horizons.

An Amateur Radio on the International Space Station (ARISS) contact has been
scheduled for Marcelino Canino Canino Middle School in Dorado, Puerto Rico.
The
contact will take place on Tuesday, March 31 at 15:36 UTC. The student body
is
made up of 577 students of which approximately
77% live under the poverty level.
100% of the students receive Title I services and over 100 students receive
special education services. A Microsatellite Student Program has been
implemented where students design, construct, build and launch
microsatellites
which are then tracked and recovered with the help of amateur radio
operators.
The coordinating teacher has prepared a NASA
Explorer Schools proposal and other
science oriented proposals in the school to help motivate its largely
underprivileged population to become competitive professionals in the global
economy. Two contests have been held at the school - one for an activity
logo
and another for an essay. Scientists, state government functionaries,
Department of Education representatives, and
students from other grade levels in
elementary and high school have been invited to attend the event. Of major
interest to the students is the fact that Joseph Acaba, the first astronaut
of
Puerto Rican descent, will be going to the ISS on STS 119. The school is
planning its own press releases and expects media coverage.

Milwee Middle School in Longwood, Florida has been scheduled for an Amateur
Radio on the International Space Station (ARISS) contact on Wednesday, April
1
at 17:55 UTC via telebridge station ON4ISS in Belgium.

Carl Sandburg Elementary in the Lake Washington School district in Kirkland,
Washington has been approved for an Amateur Radio on the International Space
Station (ARISS) contact. The contact is slated for Thursday, April 2 at
19:35
UTC, assisted by telebridge station W6SRJ in California.

2. Contacts Cancelled

The Amateur Radio on the International Space Station (ARISS) contacts that were planned for the Sewickley Academy and the DaVinci Science Center on March 12 and 14, respectively, were both cancelled due to scheduling issues. The DaVinci contact will be rescheduled in the near future.

3. Astronaut Training Status

An Amateur Radio on the International Space Station (ARISS) basic operations and school contact training course was held with Satoshi Furukawa, KE5DAW, on Friday, March 6. Furukawa is currently assigned as a back up crew member for Expedition 22.

4. Italian School Contact Update

On Wednesday, February 25, students attending 1 Circolo Didattico G. Marconi in Casamassima, Italy participated in an Amateur Radio on the International Space Station (ARISS) contact with Mike Fincke, KE5AIT. News items covering the contact are now available. See:

http://www.youtube.com/watch?v=571IBetr5l8

http://www.thenewspaper.it/articles.php?article_id=100

http://www.thenewspaper.it/articles.php?article_id=89

5. ARRL Article on Discovery

The American Radio Relay League (ARRL) ran a short Web story on the STS-119 mission which will carry ham astronaut Koichi Wakata, KC5ZTA, to the ISS.
See:
http://www.arrl.org/?artid=8825

The story was also posted in the ARRL Letter:
https://www.arrl.org/arrlletter/09/0313/

The ARRL Web site has 100,000 regular readers; the e-newsletter has a circulation of 115,000.

6. ARRL QST Covers ARISS News

The American Radio Relay League (ARRL) published an Amateur Radio on the

International Space Station (ARISS) news item in its April 2009 issue of QST.

It ran a short article called "NJ Scouts Fly High." It is about Boy Scouts from the Central New Jersey Council earning their Radio Merit Badges, mentored by the Delaware Valley Radio Association and the David Sarnoff Radio Club. The highlight of the educational activities was when Greg Olsen, KC2ONX, gave a presentation to the boys about his time on the ISS and used Amateur Radio to be interviewed by students. There was a photo of the boys readying for their own QSOs on the air.

The ARRL monthly journal has a circulation of 150,000.

7. ARISS in Amateur Radio Newsline Article

On March 13, Amateur Radio Newsline (Report #1648) ran a story on the Radio Club of America (RCA) which donated a radio station to the Lake Monroe Amateur Radio Club in Orlando, Florida. The club gives demonstrations to schools and children's hospitals on how to contact the International Space Station with amateur radio. The article, "Radio Education: RCA Donates Station to Florida Club," may be viewed at: ftp://ftp.arnewsline.org/quincy/News/news.txt

[ANS thanks Carol, KB3LKI, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Lee McLamb, KU4OS

From -5493357014164809440
X-Google-Thread: 10e8ad,1f08ee60a75489e6,start
X-Google-Attributes: gid10e8ad,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit

Path: g2news2.google.com!news2.google.com!news.glorb.com!news2.glorb.com!
transit3.readnews.com!news-xxxfer.readnews.com!news-out.readnews.com!
transit4.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-083 AMSAT News Service Special Bulletin
Followup-To: rec.radio.amateur.space
Date: Tue, 24 Mar 2009 13:30:03 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 223
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <001101c9aca6$22531a70$66f94f50$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1237915804 1815 166.84.1.6 (24 Mar 2009 17:30:04 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Tue, 24 Mar 2009 17:30:04 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to   rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to   rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news2.google.com rec.radio.amateur.space:202 rec.radio.info:650

AMSAT NEWS SERVICE SPECIAL BULLETIN
ANS-083

In this edition:

* Frank H. Bauer, KA3HDO to Step Down from ARISS and AMSAT Duties
* Will Marchant, KC6ROL Appointed AMSAT's VP-Human Space Flight

SB SAT @ AMSAT $ANS-083.01
Frank H. Bauer, KA3HDO to Step Down from ARISS and AMSAT Duties

AMSAT News Service Bulletin 083.01
>From AMSAT HQ SILVER SPRING, MD.
March 24, 2009
To All RADIO AMATEURS
BID: $ANS-083.01

Frank H. Bauer, KA3HDO, announced today that, effective immediately, he will be stepping down from all his Amateur Radio on the International Space Station (ARISS) duties. This includes his contributions to NASA Education as the ARISS program leader, his support as the Amateur Radio on the International Space Station (ARISS) International Working Group Chair, his appointment as one of two ARISS USA delegates, and as the Radio Amateur Satellite Corporation's (AMSAT) Vice President for Human Spaceflight Programs.

Mr. Bauer cited personal and professional reasons for his departure. He is currently the Chief Engineer for the Exploration Systems Mission Directorate at NASA Headquarters. This directorate is developing the next generation human spaceflight vehicles that will take NASA to the International Space Station and then to the Moon, Mars and beyond. He is also providing some backup support to the Space Operations Chief Engineer who supports the Space Shuttle and International Space Station Programs. "Work responsibilities, which have increased substantially over the past couple of years, coupled with some recent health issues within my immediate family, led me to the conclusion that I could not continue to provide the leadership and passion that has been characteristic of my past support to these amateur radio endeavors," Mr. Bauer said. "This was a very hard decision. I will certainly miss the phenomenal ARISS international team and our mission to inspire the next generation of space explorers using ham radio as our platform. But I thought it would be best to step down at this juncture," Bauer explained. KA3HDO continues, "Over the past 12 years, we have developed, mentored and matured an outstanding volunteer team with a wide breadth and depth. I am fully confident that they will keep the ARISS program running smoothly without missing a beat."

AMSAT President Barry Baines, WD4ASW, has tapped Will Marchant, KC6ROL, to become the next AMSAT Vice President for Human Spaceflight Programs and the AMSAT USA delegate of the ARISS International Working Group. Barry Baines stated that "AMSAT is fortunate that we have a very capable leader in Will Marchant who is intimately familiar with ARISS, our extensive human spaceflight program, and is well respected internationally." Barry observed, "Frank's leadership has left a significant mark on the overall ARISS program and the cooperative relationship between amateur radio, NASA and other governmental space agencies.   However, Frank also ensured that his team evolved to the point where the work that he pioneered will be carried on by those that he mentored and encouraged to take on greater responsibility."

In his new role, Will Marchant will work with the other ARISS USA delegate, Rosalie White, K1STO, from the American Radio Relay League (ARRL) and the other ARISS International Delegates and the ISS Space Agencies to coordinate the development and operations of the amateur radio systems onboard the ISS. Rosalie stated that "I look forward to working with Will in his new role.   He has provided outstanding leadership and support to ARISS from its very beginning, most recently as an Operations team leader. And he helped pioneer the school group mentor role as part of the Shuttle Amateur Radio Experiment (SAREX) program in the early 1990's." She continued, "Frank will be missed tremendously. It is incredible how much volunteer time and effort he put into ARISS educational activities; it was easy to see it was his passion."

With Mr. Bauer stepping down from the ARISS International Chairman role, the ARISS International Vice Chair, Mr. Gaston Bertels, ON4WF will become the ARISS International Chairman effective immediately. Mr. Bertels has been a leader of ARISS from its inception and serves as the Chairman of the ARISS-Europe team. Mr. Bertels has established a close relationship between ARISS and ESA, the European Space Agency. This resulted in the development and the installation of ARISS L- and S-band antennas on the nadir of Columbus, the European Space Laboratory. Mr. Bertels also chairs the ARSPEX (Amateur Radio Space Exploration) working group of the International Amateur Radio Union, Region 1. Mr. Bertels stated: "We can understand the reasons of Frank Bauer's resignation, but we also feel how difficult this decision has been. Frank has inspired a worldwide group of passionate radio amateurs, working together to a common goal. Now it is up to us to continue in the same direction and with the same spirit. That's the best farewell present we can offer Frank".

Mr. Bauer's departure today represents the culmination of over 25 years of leadership and support to amateur radio activities on human spaceflight vehicles, including NASA sponsored ham radio activities on the Shuttle, Space Station Mir, and the International Space Station. Starting in 1983, he led the Goddard Amateur Radio Club team that provided around-the clock Space Shuttle retransmissions from the WA3NAN club station. These retransmissions provided the international ham radio community up-to-the-minute information during the flight of Owen Garriott, W5LFL on STS-9 and subsequent SAREX flights. These real-time bulletins and frequent orbital element updates could only be obtained through amateur radio in the days prior to the internet. In 1991, AMSAT then President Bill Tynan, W3XO tapped Frank to be the AMSAT VP for Human Spaceflight, a position he has held until today.

In 1996, when the International Space Station design development was well underway, NASA Headquarters Education Office executive Pam Bacon (Mountjoy) requested that the amateur radio community form a single, international team to provide one voice for all ham radio development and operations on the ISS. The SAREX Working Group, led by Roy Neal, K6DUE, was tapped to turn this vision into reality. In November 1996, Roy (ARRL), with the other SAREX working group members Frank Bauer, KA3HDO (NASA/AMSAT), Rosalie White K1STO (ARRL), and Matt Bordelon, KC5BTL, (NASA) organized a joint NASA-international amateur radio meeting at the Johnson Space Center in Houston. This led to the formulation of the ARISS International Working Group of delegates representing Canada, Europe, Japan, Russia and the USA-and the rest is history.

Since those austere beginnings, the ARISS team of volunteers has developed and deployed ham radio equipment that resides in three modules of the ISS---the Service Module, the FGB and the Columbus Module as well as having deployed a short duration satellite in a space suit called SuitSat-1/Radiosskaf/AO-54. These systems enable the ARISS team to inspire over 15,000 students each year, encouraging them to pursue careers in science, technology, engineering and mathematics through amateur radio communications with the ISS on-orbit crew. It also introduces these students and millions from the worldwide general public to the fun, exciting, multi-faceted world of amateur radio.

The Radio Amateur Satellite Corporation (AMSAT), is an educational, not-for-profit corporation founded 40 years ago and is based in Silver Spring, MD. Its primary objective is to foster Amateur Radio's participation in space research, communications, and education through the development and operation of amateur radio satellites in space. To date, there are over 60 amateur radio satellites that have been built by volunteers around the world and flown in space.

[ANS thanks ARISS International for the above information]

/EX

SB SAT @ AMSAT $ANS-083.02
Will Marchant, KC6ROL Appointed AMSAT's VP-Human Space Flight

AMSAT News Service Bulletin 083.02
>From AMSAT HQ SILVER SPRING, MD.
March 24, 2009
To All RADIO AMATEURS
BID: $ANS-083.02

AMSAT President Barry Baines, WD4ASW has appointed Will Marchant, KC6ROL of Marshall, VA as VP-Human Space Flight and to serve as the AMSAT USA delegate to the ARISS International Working Group. These appointments follow the resignation of Frank Bauer, KA3HDO that was announced on Tuesday morning, 24 March due to family and professional reasons.

"AMSAT is fortunate that we have a very capable leader in Will Marchant who is intimately familiar with ARISS, our extensive human spaceflight program, and is well respected internationally." Barry observed, "Frank's leadership has left a significant mark on the overall ARISS program and the cooperative relationship between amateur radio, NASA and other governmental space agencies. Frank has also ensured that his team evolved to the point where the work that he pioneered will be carried on by those that he mentored and encouraged to take on greater responsibility."

Will Marchant, KC6ROL was first licensed in 1990 when he was assisting search and rescue organizations in California and wanted to use amateur radio as a backup to local law enforcement communications. One of his early activities as an amateur radio operator was to track and listen for the space shuttle and MIR. Will increased his participation in amateur radio in space in 1992 with the Shuttle Amateur Radio Experiment (SAREX). At that time, he managed a shuttle contact with Lawrence Hall of Science of the University of California, Berkeley, CA with STS-57.

>From that point on, Will increased his activities in the SAREX program following his relocation from Berkeley to Virginia in 1994. He served as a mentor for various school contacts and was appointed to serve as Operations Manager for SAREX in 1995. As SAREX Operations Manager Will coordinated both school contacts and 'family & friends' contacts for four years, spending time at Mission Control in Houston during SAREX missions managing these contacts.

When the Amateur Radio on the International Space Station (ARISS) International Working Group was established in 1996, Will was involved under Frank Bauer's leadership. The first International Space Station module was sent into orbit in 1998 and has been continuously manned since 2000. Over the past nine years (with two years 'off' from SAREX and ARISS to complete a Master's Degree in Space Sciences), Will has been heavily involved with ARISS Telebridge operations, School Technical Support, and training of personnel for amateur radio operations in Space. For example, Will worked extensively with Richard Garriott, W5KWQ prior to his 'space tourist' trip to the ISS in Fall 2008 to help him prepare for his amateur radio operations from space.

Rosalie White, K1STO of the ARRL is the other US Delegate to the ARISS International Working Group. She commented, "Will and I have worked closely together on a number of SAREX and ARISS projects over the years, and we 'click.' A hard worker, he believes strongly in the use of ARISS by teachers as an educational tool. I will absolutely miss Frank in our work as US ARISS delegates and ARISS International Officers, but having Will step up is the consolation."

In response to his appointments, Will noted, "I'm excited about assuming responsibility as AMSAT's VP-Human Space Flight as well as serving as the AMSAT USA delegate to the ARISS International Working Group. ARISS continues to play a significant role in science education as well as providing an opportunity for AMSAT to participate in human activities in space. I look forward to working with an outstanding team that Frank created, encouraging greater educational outreach by AMSAT as well as working as AMSAT's delegate within ARISS International Working Group."
Currently based in Virginia, Will is employed by the University of California Berkeley as a senior programmer and is involved with several space science missions.

[ANS thanks AMSAT-NA President Barry Baines, WD4ASW for the above information]

/EX

From 6915868018564798864
X-Google-Thread: 10e8ad,31ecbcb0a9f1c6c,start
X-Google-Thread: 10b9c8,31ecbcb0a9f1c6c,start
X-Google-Attributes: gid10e8ad,gid10b9c8,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit

```
Path: g2news2.google.com!news1.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx02.iad.newshosting.com!newshosting.com!
198.186.194.249.MISMATCH!transit3.readnews.com!news-xxxfer.readnews.com!news-
out.readnews.com!transit4.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-089 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Mon, 30 Mar 2009 22:29:40 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 1675
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <002101c9b1a8$82e13870$88a3a950$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1238466580 27156 166.84.1.6 (31 Mar 2009 02:29:40 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Tue, 31 Mar 2009 02:29:40 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news2.google.com rec.radio.amateur.space:203 rec.radio.info:660
```

This report is organized into five (5) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites
Part 5 (S5) - deborbited/returned satellites

SB SAT @ AMSAT W8ISS ANS-089.S1
WSR 08 Part 1 03/30/2009

AMSAT NEWS SERVICE BULLETIN 089.S1
FROM AMSAT HQ SILVER SPRING, MD, March 30, 2009
TO ALL RADIO AMATEURS
BID: $ANS-089.S1

DO-64 Delfi-C3
Catalog number: 32789

Launch Date: April 28, 2008

Status: Operational
Current Mode: Science Mode - Beacon ONLY

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink: 435.530 to 435.570 MHz

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68
[02122009]
=====
VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.859330 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is active. Each transponder has a different beacon.
[08072008]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Modes: FM Repeater - V3/u1

BBS - L/u9
Telemetry - /u

Analog voice downlink: u1 - 435.300 MHz FM
u2 - 435.150 MHz FM
s - 2401.200 Mhz FM
Analog voice uplink: V1 - 145.860 MHZ FM
V2 - 145.880 MHz USB
V3 - 145.920 MHz FM
S - 1268.700 MHz FM
Digital Downlinks: u3 - 435.150 MHz FM 38k4 PBP, 1 watt output
u9 - 435.150 MHz FM 9k6 Pacsat Broadcast Protocol
s - 2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: V4 - 145.860 MHz FM 9k6 Pacsat Broadcast Protocol
L - 1268.700 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon: u - 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[03302009]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002

Status: Operational.

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml

(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz. The order of operation is thus: (allow for Doppler as necessary):

1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10 minute timer.

[05282007]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Operational
Current Mode: V/u (Mode JA)

Voice/CW (Mode JA)
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage:
http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts.htm
[02122009]
=====
AO-27 AMRAD
Catalog number: 22825

Launch date: September 26, 1993

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[03232009]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational

Current Mode: Alternating between Mode A and B every 24 hours

```
Uplink:   145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink:  29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons:   29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW
```

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
[02122009]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

```
Current Active Modes: FM Repeater - V/u
                      Voice -       V/v
                      BBS -         V/v
                      APRS -        V/v
                      SSTV -        V/v
```

Expedition 18 Crew:
Commander: Mike Fincke KE5AIT
Flight Engineer: Yury Lonchakov RA3DT
Flight Engineer: Koichi Wakata KC5ZTA

Expedition 19 Crew:
Commander: Gennady Padalka
Flight Engineer: Michael Barratt

Spaceflight Participant: Charles Simonyi

Available Modes and Frequencies:

Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 9k6
Worldwide packet downlink: 145.825 Mhz FM 9k6

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time line is NOT translated from Russian and posted.

[03302009]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-089.S2
WSR 089 Part 2 03/30/2009

AMSAT NEWS SERVICE BULLETIN 089.S2
FROM AMSAT HQ SILVER SPRING, MD, March 30, 2009
TO ALL RADIO AMATEURS
BID: $ANS-089.S2

SOHLA-1 (ASTRO TECH.)
Catalog Number: 33496
Launch Date: January 23, 2009

Status: Commisioning

Proposed Frequencies and Modes:
Downlink: 437.505 MHz AFSK/CW
Beacon: 437.505 MHz AFSK/CW

Callsign:

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=101
[03232009]
=====
KAGAYAKI (Solan Co.)
Catalog Number: 33495?
Launch Date: January 23, 2009

Status: In Orbit

Downlink: 437.375 MHZ   FSK9k6/CW
Beacon: 437.375 MHz   FSK9k6/CW

IARU coordination status page:

AMSAT-NA webpage:

[01152009]
=====
STARS (Kagawa Univ.) (Twin Satellites)
Catalog Number: 33498
Launch Date: January 23, 2009

Status: Operational ?

Downlinks: 437.485 MHz FM/CW
           437.465 MHz FM/CW
Beacons: 437.305 MHz FM/CW
           437.275 MHz FM/CW

Callsigns: JR5YBN
           JR5YBO

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=99

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=121&retURL
=/satellites/status.php
[022152009]
=====
KKS-1 (Tokyo MCIT)
Catalog Number: 33499
Launch Date: January 23, 2009

Status: Operational

Downlink: 437.455 MHz AFSK/CW
Beacon: 437.385 MHz AFSK/CW

Callsign: JQ1YYY

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=107

AMSAT-NA webapge:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=120&retURL
=/satellites/status.php
[02212009]
=====
PRISM (Tokyo Univ.)
Catalog Number: 33493
Launch Date: January 23, 2009

Status: Operational ?

Downlink: 437.425 MHz AFSK/GMSK/CW
Beacon: 437.250 MHz AFSK/GMSK/CW

Callsign: JQ1YCX

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=97

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=119&retURL
=/satellites/status.php
[02212009]
=====
RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number: 32953
Launch Date: May 23, 2008

```
Status: Operational

Curent Modes: Telemetry
              Audio
              Images

Downlinks: 435.315 MHz
           435.215 MHz

AMSAT-NA website:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=115&ret
URL=/satellites/status.php

Official website:
http://www.npopm.com/?cid=leoca&caid=43
[02122009]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode:  /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon:    435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=94&retURL=
/satellites/status.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=72
[02122009]
=====
CP3
Catalog Number: 31129
Launch Date: April 17,2007

Status: Operational

Current Mode:  /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[02122009]
=====
GENESAT-1
```

Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Current Mode: /u

Callsign: KE7EGC

Telemetry Beacon Downlink: 437.0670 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[02212009]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon: 437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/xivpicte.htm
[02212009]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003

Status: Operational

Current Mode: /u

Beacon: 436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=96&retURL
=/satellites/status.php

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[02212009]
=====

```
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Operational?

Uplink:  1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=56
[02122009]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Modes:   FM Repeater - V3/u1
                 BBS         - L/u9
                 Telemetry   -  /u

Analog voice downlink:    u1 - 435.300 MHz FM
                          u2 - 435.150 MHz FM
                          s - 2401.200 Mhz FM
Analog voice uplink:      V1 - 145.860 MHZ FM
                          V2 - 145.880 MHz USB
                          V3 - 145.920 MHz FM
                          L - 1268.700 MHz FM
Digital Downlinks:        u3 - 435.150 MHz FM 38k4 PBP, 1 watt output
                          u9 - 435.150 MHz FM 9k6 Pacsat Broadcast
Protocol
                          s - 2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:           V4 - 145.860 MHz FM 9k6 Pacsat Broadcast
Protocol
                          L - 1268.700 mhz FM 9k6 Pacsat Broadcast
Protocol
Beacon:                   u - 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear
```

```
Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[03302009]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=69&retURL
=/satellites/status.php
[02212009]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Telemetry only

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink:        144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[03302009]
=====
RS-22 RADIO SPORT RS-22
Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only
```

```
Current Mode:  /u

CW Beacon - 435.352 MHz
            145.818 MHz

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=76&retURL
=/satellites/status.php
[02212009]
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990

Status: CW Beacon only

Uplinks:          145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink:      437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[03162009]
=====
CanX-2
Catalog number: 32790
Launch Date: April 28, 2008

Status: Operational in range of ground station only

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web
page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[02212009]
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008

Status: Operational
```

Downlink: 437.425 MHz 1k2 baud packet

For the latest project status update please visit the AAUSAT-II web page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[02212009]
=====
CO-65 CUTE-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008

Status: Digipeater

Downlink: 437.475 MHz 9k6 Packet
Uplink: 1267.600 Mhz

Telemetry Beacon:
Downlink: 437.2750 MHz CW

For the latest project status update please visit the Cute-1.7+APD II web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78

Command Station blog website:
http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=112&retURL=/satellites/status.php
[02212009]
=====
Compass-1
Catalog number: 32787
Launch Date: April 28, 2008

Status: Operational

Current Mode: 4k8 MSK packet

Downlink: 437.275 Mhz CW
          437.405 MHz Packet

For the latest project status update please visit the Compass 1 web page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=114&retURL=/satellites/status.php
[02212009]
=====
CO-66 Seeds II
Catalog number: 32791
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.485 MHz

Callsign: JQ1YGU

For the latest project status update please visit the Seeds 2 web page: http://cubesat.aero.cst.nihon-u.ac.jp/english/seeds_2_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=113&retURL=/satellites/status.php
[02212009]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - V/u
Voice - V/v
BBS - V/v
APRS - V/v
SSTV - V/v

Expedition 18 Crew:
Commander: Mike Fincke KE5AIT
Flight Engineer: Yury Lonchakov RA3DT
Flight Engineer: Koichi Wakata KC5ZTA

Expedition 19 Crew:
Commander: Gennady Padalka
Flight Engineer: Michael Barratt

Spaceflight Participant: Charles Simonyi

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 9k6
Worldwide packet downlink: 145.825 Mhz FM 9k6

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time line is NOT translated from Russian and posted.
[03302009]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-089.S3
WSR 089 Part 3 03/30/2009

AMSAT NEWS SERVICE BULLETIN 089.S3
FROM AMSAT HQ SILVER SPRING, MD, March 30, 2009
TO ALL RADIO AMATEURS
BID: $ANS-089.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

CP4
Catalog Number: 31122
Launch Date: April 17,2007

```
Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon:    437.325 MHz CW

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=79
[10022008]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: Non-Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder:  145.825 Mhz FM
[01012009]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency:  437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink:        437.250 MHz FM 67Hz CTCSS
Voice Downlink:     2401.835 MHz FM
Packet Up/Downlink:  437.250 MHz 9k6 packet
Packet Downlink     2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
UWE-1
```

```
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non=Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[08132007]
=====
QuakeSat
Catalog Number: 27845
Launch Date: June 30, 2003

Status: ?

Current Mode: 9600 baud data packet

Mode U packet
Downlink: 436.675 MHz 9k6 BPS

Quakesat webpage:
http://www.quakefinder.com/services/quakesat-ssite/
[02212009]
=====
DTUSAT
Catalog Number: 27842
Launch Date: June 30, 2003

Status: Non-Operational

Current Mode: 2k4 AFSK Packet last reported

Downlink: 437.475MHz

Officail webpage: http://dtusat1.dtusat.dtu.dk/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=101&retURL
=satellites/all_oscars.php
[02212009]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink:   435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)

Broadcast callsign: DP0AIS
```

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Telemetry only

Uplinks: 145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[03302009]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html

```
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink:   145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
V-band:   145.840 -  145.990 MHz CW/LSB
U-band:   435.550 -  435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks
---------
S2-band:  2401.225 -  2401.475 MHz CW/USB
K-band:  24048.010 - 24048.060 MHz CW/USB
Beacon:   2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)
----------------------------
BEACON   General Beacon(GB)  Middle Beacon(MB)  Engineering Beacon(EB)
2 m                    none       145.898 MHz                     none
70cm            435.438 MHz       435.588 MHz              435.838 MHz
13cm(1)        2400.188 MHz      2400.338 MHz             2400.588 MHz
13cm(2)        2401.173 MHz      2401.323 MHz             2401.573 MHz
3cm           10450.975 MHz     10451.125 MHz            10451.375 MHz
1.5cm         24047.885 MHz     24048.035 MHz            24048.285 MHz
[07162007]
=====
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000
```

```
Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink:    145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: ?
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater:         436.250 MHz

Uplinks: Mode B Repeater:  145.825 MHz
Mode J Digipeater:         145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
```

```
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Non-Operational?

Current Modes: V/U
               L/U

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign:       4XTECH-12

More information of GO-32 can be found at:
http://asri.technion.ac.il/techsat/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=14&retURL
=/satellites/status.php
[03232009]
=====

TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink:   145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK
```

```
Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Non-operational

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign:       POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012009]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
```

```
BBS: HL02-12
[05092004]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HL01-11
BBS: HL01-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
```

```
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
LIBERTAD-1
Catalog Number: 31128
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink:   145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[02122009]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
[05012006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: SEMI-Operational

Current Mode:  V/u
```

```
Uplink:         145.900 MHz FM 1200-baud Manchester FSK (reserved)
                145.920 MHz FM VOICE
                145.940 MHz FM 1200-baud Manchester FSK (reserved)
                145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink:       437.026 MHz USB VOICE
                (1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[12252008]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
UO-11 OSCAR-11
```

```
Catalog number: 14781
Launch Date: March 1, 1984

Status: Non-operational.

Current Mode:  /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon:           435.025 MHz
Mode-S Beacon:     2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[01012009]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon:   145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink  29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
```

```
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
Beacons:   29.450 MHz
          435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon 1:  29.352 MHz (intermittent)
Beacon 2:  29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991
```

```
Status: Non-operational

Uplink:     21.260 to 21.300 MHz CW/USB
Downlink:  145.860 to 145.900 MHz CW/USB

Beacon:    145.860 MHz

Robot:     145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink:   21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon:   29.408 MHz

Robot:    29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-089.S4
WSR 089 Part 4 03/30/2009

AMSAT NEWS SERVICE BULLETIN 082.S4
FROM AMSAT HQ SILVER SPRING, MD, March 30, 2009
TO ALL RADIO AMATEURS
BID: $ANS-089.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE PROPOSED FOR LAUNCH
AT THIS TIME:

UNITEC
Catalog Number:
Proposed Launch Date: May 2010

Status: Design Phase

Proposed Equipment:

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=141
[01152009]
=====
XW-1
Catalog Number:
Proposed Launch Date: Summer 2009?
```

Status: Design Phase

Proposed Equipment:
Beacon: 435Mhz, CW 20dBm
Linear transponder: RX: 145Mhz, TX: 435Mhz, 40KHz, 30dBm
FM Transponder: RX: 145Mhz, TX: 435Mhz, 16KHz, 30dBm
Digital store and forward transponder: RX: 145Mhz, TX: 435Mhz, 16KHz, 30dBm

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108
[10092008]
=====
Phase 5a Mars Mission AO-??
Catalog Number:
Proposed Launch Date: 2009 or 2011

Status: Design Phase

For the latest project status update please visit the AMSAT-DL P5-A
web page:
http://ticket-to-mars.org
[01222007]
=====
PHASE 3E AO-??
Catalog number:
Proposed Launch Date: ??????

Status: STORAGE

For the latest project status update please visit the AMSAT-DL P3-E
web page:
http://www.amsat-dl.org/p3e/
[02212009]
=====
Eagle AO-??
Catalog Number:
Proposed Launch Date: ?????

Status: Design Phase

For the latest project status updates please visit the AMSAT-NA web
page: http://www.amsat.org
[02212009]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-089.S5
WSR 089 Part 5 03/30/2009

AMSAT NEWS SERVICE BULLETIN 089.S5
FROM AMSAT HQ SILVER SPRING, MD, March 30, 2009
TO ALL RADIO AMATEURS

```
BID: $ANS-089.S5

THE FOLLOWING SATELLITES HAVE RE-ENTERED OR HAVE BEEN RETURNED SAFELY:

NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: July 28, 2008

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[01012009]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink:      145.825 Mhz FM APRS AX25
APRS Uplink:        145.825 MHz FM APRS AX25
Voice/PSK31 Uplink:  28.120 MHz

Packet to Voice ID: RAFT
[06112007]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Re-Entered
Re-entered: June 18, 2008

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon:             437.2750 MHz CW

Callsign: JR8YJT
```

[01012009]
=====
SO-43 Starshine 3
Catalog Number: 26929
Launch Date: September 30, 2001

Status: Re-Entered
Re-entered: January 21, 2003

Beacon: 145.825Mhz
[02212009]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to
the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis
Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at}
amsat.org
NNNN
/EX

Via the ANS mailing list courtesy of AMSAT-NA
http://amsat.org/mailman/listinfo/ans

```
From 4877923979379512177
X-Google-Thread: 10e8ad,16fcf63d8adaa4e1,start
X-Google-Thread: 10b9c8,16fcf63d8adaa4e1,start
X-Google-Attributes: gid10e8ad,gid10b9c8,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII
Path: g2news1.google.com!news2.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx01.iad01.newshosting.com!newshosting.com!
198.186.194.249.MISMATCH!news-out.readnews.com!transit3.readnews.com!panix!
rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-095 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sat, 4 Apr 2009 22:12:15 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 437
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000501c9b593$e973f340$bc5bd9c0$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix1.panix.com
Mime-Version: 1.0
Content-Type: text/plain;charset="iso-8859-1"
Content-Transfer-Encoding: quoted-printable
X-Trace: reader1.panix.com 1238897534 16704 166.84.1.1 (5 Apr 2009 02:12:14 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 5 Apr 2009 02:12:14 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
```

X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news1.google.com rec.radio.amateur.space:179 rec.radio.info:591

AMSAT NEWS SERVICE
ANS-095

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:

* Recap of the Week of AMSAT-DL Earth-Venus-Earth Success
* AMSAT Getting Ready for Dayton 2009
* SV1BSX Silent Key
* Call for Papers--2009 ARRL/TAPR Digital Communications Conference
* ISS Active on SSTV
* AMSAT-UK, BATC, and RSGB Operate Parkside ARISS Contact
* AMSAT-DC Spring Workshop Open for Registration
* Satellite Shorts From All Over

SB SAT @ AMSAT $ANS-095.01
Recap of the Week of AMSAT-DL Earth-Venus-Earth Success

AMSAT News Service Bulletin 095.01
>From AMSAT HQ SILVER SPRING, MD.
April 5, 2009
To All RADIO AMATEURS
BID: $ANS-095.01

As the outstanding technical achievement attained when an international team lead by AMSAT-DL completed the Earth-Venus-Earth path on March 25 continues to reverberate throughout the Amateur Radio world a recap of the event and links to additional details is in order.

The team consisted of many well known amateurs including Wolfgang B�scher, DL4YHF; Freddy de Guchteneire, ON6UG; Hermann Hagner, DK8CI; Michael Lengr�sser, DD5ER; Karl Meinzer, DJ4ZC; James Miller, G3RUH; Max M�nich, DJ1CR; Hartmut Paesler, DL1YDD; and Achim Vollhardt, DH2VA.

AMSAT-DL President Peter Guelzow, DB2OS provided a report of the accomplishment from the 20 meter dish located at the IUZ Sternwarte Observatory in Bochum, Germany. The transmitter used a rubidium locked reference to generate about 6 kW CW on 2.4 GHz. The use of a magnetron for this purpose was possible thanks to a new AMSAT-DL developed modulator that enables a magnetron to be used for narrow band operation.

After traveling almost 100 million kilometers with a round trip delay of about 5 minutes, the transmitted signal was clearly received as echoes from the surface of Venus. FFT analysis software with an integration time of 5 minutes was used. After integrating for only 2 minutes the reflected signals were clearly visible in the display. Despite the bad weather, signals from Venus could be detected from 1038 UTC on until the planet reached the local horizon.

Receiving planetary echoes is a first in Germany and Europe. This also marks the farthest distance attained by radio amateurs. The distance via the Earth-Venus-Earth path is over 100 times further than the echoes from the moon via EME reflexions.

The official Press Release: "First German Mars Mission makes sidestep to Venus" can be downloaded as .PDF here:
http://www.amsat-dl.org/pic/gallery2/main.php?g2_view=core.DownloadItem
&g2_i
temId=7561
(careful with line wrap!)

A news item in German with additional pictures and information can be viewed at:
http://www.amsat-dl.org//index.php?option=com_content&task=view&id=
166&Itemi
d=97
(careful with line wrap!)

If you click on the small spectrum analyzer photograph embedded on this page you will be able to view a larger photo of the received signal. A photo of the AMSAT-DL Earth-Venus-Earth team is the second one.

Bob McGwier, N4HY observed the equipment and software used can be identified, "In the photographs attached to this press release, one can see the SDR-IQ (http://rfspace.com/Home.html) and Spectrum Lab (http://freenet-homepage.de/dl4yhf/spectra1.html)".

A video showing Karl Meinzer DJ4ZC and Freddy de Guchteneire ON6UG with the 2.4 GHz amplifier used for EVE which can be seen at:
http://tinyurl.com/EVE13cmAmp

A video of the Amateur Radio Mars Orbiter P5-A presentation given at the 2008 AMSAT-UK Colloquium by Achim Vollhardt DH2VA can be seen via
http://tinyurl.com/P5Apresentation

GO-Mars with AMSAT-DL's P5A Mission
http://www.ticket-to-mars.org/

Jess, W4MVB expressed the admiration of Amateur Radio operators around the world in his message, "Congratulations to you and your team for this

outstanding accomplishment! I simply can't believe how far we have come since I first heard OSCAR 1 & 2 transmitting "HI" from space. I feel privileged to be a witness to the kind of success our hobby has experienced thanks to you and all the dedicated amateurs around the world who have brought us to this point."

[ANS thanks AMSAT-DL; Trevor, M5AKA; Bob, N4HY for the above information]

/EX

SB SAT @ AMSAT $ANS-095.02
AMSAT Getting Ready for Dayton 2009

AMSAT News Service Bulletin 095.02
>From AMSAT HQ SILVER SPRING, MD.
April 5, 2009
To All RADIO AMATEURS
BID: $ANS-095.02

Gould, WA4SXM is looking for volunteers to help in the AMSAT booth during the 2009 Dayton Hamvention, May 15-17. He would like people to volunteer for 2 hour shifts on Friday, Saturday and Sunday. Multiple shifts are welcome.

Also needed is help with booth setup on Thursday May 14 and and take down on Sunday May 17. With enough people we have been able to setup and take down the booth in 3 - 4 hours (or less).

Please volunteer to Gould, WA4SXM at wa4sxm@amsat.org. This is a great opportunity to give back to AMSAT and to have an enjoyable time talking with other AMSAT members and future members.

Please visit the AMSAT website and follow the Hamvention information to find out the latest details on AMSAT activities at Dayton. Don't forget to order your banquet tickets via the website too.

AMSAT is also planning an number of activities and displays at Dayton highlighting our 40th Anniversary this year. Plan on visiting the AMSAT booth and relive 40 years of keeping amateur satellites in space.

[ANS thanks Gould, WA4SXM and Martha for the above information]

/EX

SB SAT @ AMSAT $ANS-095.03
SV1BSX Silent Key

AMSAT News Service Bulletin 095.03
>From AMSAT HQ SILVER SPRING, MD.

April 5, 2009
To All RADIO AMATEURS
BID: $ANS-095.03

AMSAT received the sad news this week that satellite operator Mak, SV1BSX became a Silent Key. John, LA2QAA and Al, GM1SXX noted that, "The entire Amateur Satellite fraternity and in particular EU-AMSAT suffered a great loss".

Mak was a founding member of EU-Amsat together with LA2QAA and GM1SXX, a group dedicated to Amateur Radio Satellite enthusiasts. Mak created the AO-7 DX list and was an avid AO-7 operator.

LA2QAA recalls Mak worked very many people on 'The old Girl' (AO-7) giving many operators their first AO-7 contact with Greece. He continued, "It is both appropriate and fitting that so many operators offered their condolences on the AMSAT-BB for the very sad loss of my dear friend Mak SV1BSX. He was an inspiration to many newcomers to the satellite scene and his web pages will remain a source of inspiration to future potential Amateur satellite operators."

Nader, ST2NH - Rest in peace my Elemer Mak SV1BSX. We well miss you the on air and on the list. My condolences goes to all EU-AMSAT, AMSAT-BB lists members and to his family. God bless your soul.

Terry, G1WPR - I'm very sad to hear the bad news about Mak, it was always a pleasure to say hi to him via the sat's. He will be sadly missed, goodby my friend.

Frank, IW4DVZ - I have no words ... to talk with him was, like ever, a pleasure. My condolences to his family, rest in peace my friend.

Joe, K3SZH - Mak made his last entry in the AO-7 Logger on March 14, 2009 with 2109 QSOs. He will be missed by all of us. The AO-7 group salutes you with our antennas pointed straight up.

[ANS thanks John, LA2QAA and Al, GM1SXX for the above information]

/EX

SB SAT @ AMSAT $ANS-095.04
Call for Papers--2009 ARRL/TAPR Digital Communications Conference

AMSAT News Service Bulletin 095.04
>From AMSAT HQ SILVER SPRING, MD.
April 5, 2009
To All RADIO AMATEURS
BID: $ANS-095.04

Technical papers are solicited for presentation at the 28th Annual ARRL and TAPR Digital Communications Conference to be held September 25-27, 2009 in Chicago, Illinois. These papers will also be published in the

Conference Proceedings (you do NOT need to attend the conference to have your paper included in the Proceedings). The submission deadline is July 31, 2009. Please send papers to:

Maty Weinberg
ARRL
225 Main St
Newington, CT 06111

or you can make your submission via e-mail to: maty@arrl.org

Papers will be published exactly as submitted and authors will retain all rights.

[ANS thanks Steve, WB8IMY at the ARRL for the above information]

/EX

SB SAT @ AMSAT $ANS-095.05
ISS Active on SSTV

AMSAT News Service Bulletin 095.05
>From AMSAT HQ SILVER SPRING, MD.
April 5, 2009
To All RADIO AMATEURS
BID: $ANS-095.05

Charles Simonyi KE7KDP, a leading software pioneer and aviator, is back in space on his second mission to the International Space Station (ISS). AMSAT-NA Vice President of Human Spaceflight Will Marchant, KC6ROL noted, "Charles said this morning that he is planning to take more SSTV images. He will investigate the possibility of leaving the VC-H1 SSTV gear in automatic mode. He also plans to do more voice QSOs with the ham community. So you should monitor for SSTV and voice activity this week. I would appreciate it if you would upload any SSTV images you receive to the page at:
http://www.amsat.org/amsat/ariss/SSTV/index.php

The ARISS downlink frequency for voice and SSTV is 145.800 MHz FM.

[ANS thanks Will Marchant, KC6ROL for the above information]

/EX

SB SAT @ AMSAT $ANS-095.06
AMSAT-UK, BATC, and RSGB Operate Parkside ARISS Contact

AMSAT News Service Bulletin 095.06
>From AMSAT HQ SILVER SPRING, MD.
April 5, 2009
To All RADIO AMATEURS

BID: $ANS-095.06

Parkside Community College in Parkside, Cambridge, U.K. held an Amateur Radio on the International Space Station (ARISS) contact on Monday, March 30. RSGB station GB4FUN handled the connection between the school and Spaceflight Participant Charles Simonyi, KE7KDP/HA5SIK.

Howard Long, G6LVB and Ciaran Morgan, M0XTD provided live video streaming of the event via http://www.batc.tv. The video stream was very successful receiving connections from Puerto Rico, India, Netherlands, upstate New York, Canada, Marshall Space Flight Center, Johnson Space Center, and many in the UK including non amateurs.

The team is working on a video of the contact for release shortly. They hope to make this a regular part of future ARISS contacts in the UK.

[ANS thanks Howard, G6LVB and Ciaran, M0XTD for the above information]

/EX

SB SAT @ AMSAT $ANS-095.07
AMSAT-DC Spring Workshop Open for Registration

AMSAT News Service Bulletin 095.07
>From AMSAT HQ SILVER SPRING, MD.
April 5, 2009
To All RADIO AMATEURS
BID: $ANS-095.07

Greetings from the AMSAT-DC planning committee!

The 2009 AMSAT-DC meeting this year will be held on Saturday, April 25, at the NASA Goddard Space Flight Center in Greenbelt, MD.

This year we have a series of workshops organized around the building, testing, and operating of a small simulated satellite kit. The completed kit, soon to be widely known as a PICetSat II module, is a simple remote sensing unit that serves as an expendable high-altitude small balloon payload. It transmits downlink telemetry on the 70cm Amateur Radio band.

Once group will construct the PICetSat II module kit. Another group will assemble a ground station which involves providing and configuring radios, computers, and software needed to receive, decode, and analyze the PICetSat II telemetry.

If you plan on attending, chose one of the following options:

(1) PICetSat II module builder (room for only 10 participants)

* current AMSAT membership
* admission $90.00 (pre-paid)
* bring a 25-watt pencil iron, holder, sponge, and your eye glasses if needed
* you take your completed "flight ready" module home with you!

(2) Ground Station Component Provider (transceiver or Computer) to "share" during the workshop

* current AMSAT membership
* admission $20.00 (pre-paid)
* Transceiver (room for only 3 participants)
  + Covers down to 433 MHz FM & SSB
  + Tunes in 1 kHz resolution or better
  + Audio cable (xcvr audio out) with 1/8 inch stereo end for computer
  + "simple" 70cm antenna, for example a random wire, dummy load, or "Arrow" antenna on a camera tripod
* computer (room for only 3 participants)
  + XP operating system
  + MS Office (Word, PowerPoint, Excel) or OPEN Office
  + Willingness to install the PICetSat II software suite (to be provided on CD-R on April 25)
  + DB-9 Serial port connection, or proven USB to DB-9 converter
  + Soundcard with 1/8" stereo input that accepts audio line-level signal
  + WiFi "G", optional but recommended

(3) General Admission (10 slots available)

* current AMSAT membership
* admission $40.00 (pre-paid)

(4) AMSAT VIPs

* AMSAT Lifetime Membership
* Admission - FREE

To sign up - contact Martha at the AMSAT-NA office (301-589-6062) with your preference (Satellite Builder, Ground Station Component Provider indicating computer or transceiver, General Admission, or AMSAT VIP), fee payment, and your contact information.

Direct any technical questions to the event coordinators.

Event Coordinators:
Pat Kilroy, N8PK (Patrick.L.Kilroy@nasa.gov)
Bruce Semple, WA3SWJ (bruce.semple@verizon.net)

Slots are limited. First come, first served.
YOUR RESPONSES AND ADMISSION REQUIRED TO MARTHA BEFORE:
5:00pm EDT Wednesday, April 16.

[ANS thanks Patrick Kilroy, N8PK and Bruce Semple, WA3SWJ for the above information]

/EX

SB SAT @ AMSAT $ANS-095.08
Satellite Shorts From All Over

AMSAT News Service Bulletin 095.08
>From AMSAT HQ SILVER SPRING, MD.
April 5, 2009
To All RADIO AMATEURS
BID: $ANS-095.08

+ The status of New Zealand's AMSAT-ZL - KiwiSat - has just been updated. Check out their steady march to a launch at: http://kiwisat.org/index.html

+ Congratulations to Mike Fincke KE5AIT! He now holds the record for the most ARISS contacts on a single expedition as well as the most for multiple missions. Expedition 18 has now set the record for ARISS contacts by an expedition.
  Total number of ARISS ISS to earth school contacts is 426.
  Total number of ARISS supported terrestrial contacts is 22.

+ With 660 stations using the AO-7 logger worldwide 24 stations have made the 1000 plus list of QSOs. Five of those stations eclipsed the the 2000 mark: AJ9K Dan - 2001 QSO; N3TE Steve - 2045 QSO; 9A2SB Zlatko - 2103 QSO; OH8MBN Mika - 3000 QSO. Visit the AO-7 log page at http://www.planetemily.com/ao7/ao7log.php (via K3SZH)

+ LU2DPW now holds the first and second place standing for distance via AO-7. A CW contact between W4FDU and LU2DPW attained first place with 7537 KM. A contact between AA4FL and LU2DPW is in second place with 7524 KM. K3SZH and PY4AJ hold third place with 7438 KM.

+ PCSAT-1 (NO-44) orbit was in a full sun period until March 30. Control Station DK3WN notes that despite efforts to activate PCSAT it does not remain on for an entire pass due to unfavorable illumination angles on the solar cells. PCSAT is only available during daylight passes on 145.825 MHz packet.

+ Iridium announced the company completed the replacement of the operational Iridium satellite lost in the collision three weeks ago with a non-operational Russian satellite on March 4. (via SpaceDaily Express)

+ The American and Russian pair set to take over the International Space Station (ISS) will be the first part of the doubling of its permanent crew. The launch from the Baikonur cosmodrome, Michael Barratt and Gennady Padalka, said their mission marked a new phase in the history of the ISS as the permanent crew is to be enlarged from three to six in May. (via SpaceDaily Express)

[ANS thanks everyone for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office. With that please keep in mind that should you accidentally eat the dictionary do not breathe a word to anyone.

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM

```
From -6875140527347614679
X-Google-Thread: 10e8ad,c4b8cbea2b6f700e,start
X-Google-Thread: 113975,c4b8cbea2b6f700e,start
X-Google-Attributes: gid10e8ad,gid113975,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news3.google.com!feeder.news-service.com!tudelft.nl!
txtfeed1.tudelft.nl!multikabel.net!newsfeed10.multikabel.net!news.astraweb.com!
border1.a.newsrouter.astraweb.com!not-for-mail
From: Chris Steyaert <observations@rmob.org>
Newsgroups: rec.radio.amateur.space,sci.astro.amateur
Subject: Radio Meteor Obs. Bull. March 2009
Date: Tue, 07 Apr 2009 21:43:45 +0200
Message-ID: <v4bnt45pngdana3md27glodtt90u35g268@4ax.com>
X-Newsreader: Forte Agent 1.93/32.576 English (American)
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Lines: 13
Organization: Unlimited download news at news.astraweb.com
NNTP-Posting-Host: 477de920.news.astraweb.com
X-Trace: DXC=Hio>0W48eHA^MAbH1]K;0BL?0kYOcDh@Je:PNj8E6J4MUCN`Tm6K:MHG?
ifhhgG3CA<EfPO<[GA]JdF6`ATHO7>E
Xref: g2news2.google.com rec.radio.amateur.space:205 sci.astro.amateur:17511
```

Radio Meteor Observation Bulletin No. 188 of March 2009 (70 K) is available now as

http://www.rmob.org/rmobtext/rmob0903.txt

More information and the visual presentation of the hourly forward scatter counts can be found on

http://www.rmob.org

Chris

```
From 3118054908568581845
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx01.iad01.newshosting.com!newshosting.com!
198.186.194.249.MISMATCH!news-out.readnews.com!transit3.readnews.com!panix!
rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-096 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Tue, 7 Apr 2009 21:15:00 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 1661
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <002d01c9b7e7$6842b3a0$38c81ae0$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1239153300 3917 166.84.1.6 (8 Apr 2009 01:15:00 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Wed, 8 Apr 2009 01:15:00 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news1.google.com rec.radio.amateur.space:181 rec.radio.info:596
```

This report is organized into five (5) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites
Part 5 (S5) - deborbited/returned satellites

SB SAT @ AMSAT W8ISS ANS-096.S1
WSR 096 Part 1 04/06/2009

AMSAT NEWS SERVICE BULLETIN 096.S1
FROM AMSAT HQ SILVER SPRING, MD, April 06, 2009
TO ALL RADIO AMATEURS
BID: $ANS-096.S1

DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008

Status: Operational
Current Mode: Science Mode - Beacon ONLY

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink: 435.530 to 435.570 MHz

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68
[02122009]
=====
VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.859330 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is active. Each transponder has a different beacon.
[08072008]
=====

AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Modes: FM Repeater - V3/u1
BBS - L9/u9
Telemetry - /u

Analog voice downlink: u1 - 435.300 MHz FM
u2 - 435.150 MHz FM
s - 2401.200 Mhz FM
Analog voice uplink: V1 - 145.860 MHZ FM
V2 - 145.880 MHz USB
V3 - 145.920 MHz FM
L - 1268.700 MHz FM
Digital Downlinks: u3 - 435.150 MHz FM 38k4 PBP, 1 watt output
u9 - 435.150 MHz FM 9k6 Pacsat Broadcast Protocol
s - 2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: V4 - 145.860 MHz FM 9k6 Pacsat Broadcast Protocol
L9 - 1268.700 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon: u - 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[03302009]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002

Status: Operational.

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone

Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz. The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10 minute timer.
[05282007]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Operational
Current Mode: V/u (Mode JA)

Voice/CW (Mode JA)
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage:
http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's
CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/
fo29cwts.htm
[02122009]
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[03232009]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational

Current Mode: Alternating between Mode A and B every 24 hours

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
[02122009]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - V/u
Voice - V/v
BBS - V/v
APRS - V/v
SSTV - V/v

Expedition 19 Crew:
Commander: Gennady Padalka
Flight Engineer: Michael Barratt
Flight Engineer: Koichi Wakata KC5ZTA

Available Modes and Frequencies:

Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 9k6
Worldwide packet downlink: 145.825 Mhz FM 9k6

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines

Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[04062009]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-096.S2
WSR 096 Part 2 04/06/2009

AMSAT NEWS SERVICE BULLETIN 096.S2
FROM AMSAT HQ SILVER SPRING, MD, April 06, 2009
TO ALL RADIO AMATEURS
BID: $ANS-096.S2

SOHLA-1 (ASTRO TECH.)
Catalog Number: 33496
Launch Date: January 23, 2009

Status: Commisioning

Proposed Frequencies and Modes:
Downlink: 437.505 MHz AFSK/CW
Beacon: 437.505 MHz AFSK/CW

Callsign:

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=101
[03232009]
=====
KAGAYAKI (Solan Co.)
Catalog Number: 33495?
Launch Date: January 23, 2009

Status: In Orbit

Downlink: 437.375 MHZ   FSK9k6/CW
Beacon: 437.375 MHz   FSK9k6/CW

IARU coordination status page:

AMSAT-NA webpage:

[01152009]
=====
STARS (Kagawa Univ.) (Twin Satellites)
Catalog Number: 33498
Launch Date: January 23, 2009

Status: Operational ?

Downlinks: 437.485 MHz FM/CW
           437.465 MHz FM/CW

Beacons: 437.305 MHz FM/CW
           437.275 MHz FM/CW

Callsigns: JR5YBN
           JR5YBO

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=99

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=121&retURL
=/satellites/status.php
[022152009]
=====
KKS-1 (Tokyo MCIT)
Catalog Number: 33499
Launch Date: January 23, 2009

Status: Operational

Downlink: 437.455 MHz AFSK/CW
Beacon: 437.385 MHz AFSK/CW

Callsign: JQ1YYY

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=107

AMSAT-NA webapge:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=120&retURL
=/satellites/status.php
[02212009]
=====
PRISM (Tokyo Univ.)
Catalog Number: 33493
Launch Date: January 23, 2009

Status: Operational ?

Downlink: 437.425 MHz AFSK/GMSK/CW
Beacon: 437.250 MHz AFSK/GMSK/CW

Callsign: JQ1YCX

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=97

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=119&retURL
=/satellites/status.php
[02212009]
=====
RS-30 Radio Sputnik 30 (Yubileiny)

Catalog Number: 32953
Launch Date: May 23, 2008

Status: Operational

Curent Modes: Telemetry
              Audio
              Images

Downlinks: 435.315 MHz
           435.215 MHz

AMSAT-NA website:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=115&retURL=/satellites/status.php

Official website:
http://www.npopm.com/?cid=leoca&caid=43
[02122009]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=94&retURL=/satellites/status.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=72
[02122009]
=====
CP3
Catalog Number: 31129
Launch Date: April 17,2007

Status: Operational

Current Mode: /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[02122009]

```
=====
GENESAT-1
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Current Mode: /u

Callsign: KE7EGC

Telemetry Beacon Downlink: 437.0670 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[02212009]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon:             437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/xivpicte.htm
[02212009]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003

Status: Operational

Current Mode: /u

Beacon:     436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=96&retURL
=/satellites/status.php

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
```

```
[02212009]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Operational?

Uplink:  1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=56
[02122009]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Modes:   FM Repeater - V3/u1
                 BBS         - L9/u9
                 Telemetry   -  /u

Analog voice downlink:    u1 - 435.300 MHz FM
                          u2 - 435.150 MHz FM
                          s - 2401.200 Mhz FM
Analog voice uplink:      V1 - 145.860 MHZ FM
                          V2 - 145.880 MHz USB
                          V3 - 145.920 MHz FM
                          L - 1268.700 MHz FM
Digital Downlinks:        u3 - 435.150 MHz FM 38k4 PBP, 1 watt output
                          u9 - 435.150 MHz FM 9k6 Pacsat Broadcast
Protocol
                          s - 2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:           V4 - 145.860 MHz FM 9k6 Pacsat Broadcast
Protocol
                          L9 - 1268.700 mhz FM 9k6 Pacsat Broadcast
Protocol
Beacon:                   u - 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
```

```
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[03302009]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=69&retURL
=/satellites/status.php
[02212009]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Telemetry only

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink:        144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[03302009]
=====
RS-22 RADIO SPORT RS-22
Catalog number: 27939
Launch Date: September 27, 2003
```

```
Status: Operational - 70cm cw only

Current Mode:  /u

CW Beacon - 435.352 MHz
            145.818 MHz

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=76&retURL
=/satellites/status.php
[02212009]
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990

Status: CW Beacon only

Uplinks:          145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink:      437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[03162009]
=====
CanX-2
Catalog number: 32790
Launch Date: April 28, 2008

Status: Operational in range of ground station only

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web
page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[02212009]
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008
```

Status: Operational

Downlink: 437.425 MHz 1k2 baud packet

For the latest project status update please visit the AAUSAT-II web page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[02212009]
=====
CO-65 CUTE-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008

Status: Digipeater

Downlink: 437.475 MHz 9k6 Packet
Uplink: 1267.600 Mhz

Telemetry Beacon:
Downlink: 437.2750 MHz CW

For the latest project status update please visit the Cute-1.7+APD II web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78

Command Station blog website:
http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=112&retURL=/satellites/status.php
[02212009]
=====
Compass-1
Catalog number: 32787
Launch Date: April 28, 2008

Status: Operational

Current Mode: 4k8 MSK packet

Downlink: 437.275 Mhz CW
437.405 MHz Packet

For the latest project status update please visit the Compass 1 web page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:

http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=114&retURL
=/satellites/status.php
[02212009]
=====
CO-66 Seeds II
Catalog number: 32791
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.485 MHz

Callsign: JQ1YGU

For the latest project status update please visit the Seeds 2 web page: http://cubesat.aero.cst.nihon-u.ac.jp/english/seeds_2_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=113&retURL
=/satellites/status.php
[02212009]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - V/u
                      Voice -   V/v
                      BBS -   V/v
                      APRS -   V/v
                      SSTV -   V/v

Expedition 19 Crew:
Commander: Gennady Padalka
Flight Engineer: Michael Barratt
Flight Engineer: Koichi Wakata   KC5ZTA

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 9k6
Worldwide packet downlink: 145.825 Mhz FM 9k6

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM

Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[040602009]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-096.S3
WSR 096 Part 3 04/06/2009

AMSAT NEWS SERVICE BULLETIN 096.S3
FROM AMSAT HQ SILVER SPRING, MD, April 06, 2009
TO ALL RADIO AMATEURS
BID: $ANS-096.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

CP4
Catalog Number: 31122
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon: 437.325 MHz CW

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=79
[10022008]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: Non-Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder: 145.825 Mhz FM
[01012009]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 MHz FM 67Hz CTCSS
Voice Downlink: 2401.835 MHz FM
Packet Up/Downlink: 437.250 MHz 9k6 packet
Packet Downlink   2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non=Operational

```
Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[08132007]
=====
QuakeSat
Catalog Number: 27845
Launch Date: June 30, 2003

Status: ?

Current Mode: 9600 baud data packet

Mode U packet
Downlink: 436.675 MHz 9k6 BPS

Quakesat webpage:
http://www.quakefinder.com/services/quakesat-ssite/
[02212009]
=====
DTUSAT
Catalog Number: 27842
Launch Date: June 30, 2003

Status: Non-Operational

Current Mode: 2k4 AFSK Packet last reported

Downlink: 437.475MHz

Officail webpage: http://dtusat1.dtusat.dtu.dk/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=101&retURL
=satellites/all_oscars.php
[02212009]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink:   435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)

Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
```

Catalog number: 26548
Launch date: September 26, 2000

Status: Telemetry only

Uplinks: 145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[03302009]

=====

NO-45 SAPPHIRE

Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]

=====

SO-42 SAUDISAT-1B

Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]

=====

SO-41 SAUDISAT-1A

Catalog number: 26545

```
Launch Date: September 26, 2000

Status: Non-Operational

Uplink:   145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
V-band:   145.840 -  145.990 MHz CW/LSB
U-band:   435.550 -  435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks
---------
S2-band:  2401.225 -  2401.475 MHz CW/USB
K-band:  24048.010 - 24048.060 MHz CW/USB
Beacon:   2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)
----------------------------
BEACON   General Beacon(GB)  Middle Beacon(MB)  Engineering Beacon(EB)
2 m                    none        145.898 MHz                    none
70cm            435.438 MHz        435.588 MHz             435.838 MHz
13cm(1)        2400.188 MHz       2400.338 MHz            2400.588 MHz
13cm(2)        2401.173 MHz       2401.323 MHz            2401.573 MHz
3cm           10450.975 MHz      10451.125 MHz           10451.375 MHz
1.5cm         24047.885 MHz      24048.035 MHz           24048.285 MHz
[07162007]
=====
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
```

[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: ?
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Non-Operational?

Current Modes: V/U
               L/U

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks: 145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://asri.technion.ac.il/techsat/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=14&retURL
=/satellites/status.php
[03232009]
=====

TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink: 145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====

```
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Non-operational

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign:       POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012009]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
KO-23 KITSAT
```

```
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HL01-11
BBS: HL01-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
```

```
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
LIBERTAD-1
Catalog Number: 31128
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink:   145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[02122009]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
[05012006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: SEMI-Operational

Current Mode:  V/u

Uplink:         145.900 MHz FM 1200-baud Manchester FSK (reserved)
                145.920 MHz FM VOICE
                145.940 MHz FM 1200-baud Manchester FSK (reserved)
                145.960 MHz FM 1200-baud Manchester FSK (reserved)
```

```
Downlink:       437.026 MHz USB VOICE
                (1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[12252008]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984

Status: Non-operational.
```

Current Mode: /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon: 435.025 MHz
Mode-S Beacon: 2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[01012009]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon: 145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.8500 - 145.9000 MHz SSB/CW
Downlink 29.4000 - 29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236

```
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
Beacons:   29.450 MHz
          435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon 1:  29.352 MHz (intermittent)
Beacon 2:  29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink:     21.260 to 21.300 MHz CW/USB
Downlink:  145.860 to 145.900 MHz CW/USB
```

Beacon: 145.860 MHz

Robot: 145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-096.S4
WSR 096 Part 4 04/06/2009

AMSAT NEWS SERVICE BULLETIN 096.S4
FROM AMSAT HQ SILVER SPRING, MD, April 06, 2009
TO ALL RADIO AMATEURS
BID: $ANS-096.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE PROPOSED FOR LAUNCH
AT THIS TIME:

UNITEC
Catalog Number:
Proposed Launch Date: May 2010

Status: Design Phase

Proposed Equipment:

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=141
[01152009]
=====
XW-1
Catalog Number:
Proposed Launch Date: Summer 2009?

Status: Design Phase

Proposed Equipment:
Beacon: 435Mhz, CW 20dBm

```
Linear transponder: RX: 145Mhz, TX: 435Mhz, 40KHz, 30dBm
FM Transponder: RX: 145Mhz, TX: 435Mhz, 16KHz, 30dBm
Digital store and forward transponder: RX: 145Mhz, TX: 435Mhz, 16KHz,
                                          30dBm

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108
[10092008]
=====
Phase 5a Mars Mission AO-??
Catalog Number:
Proposed Launch Date: 2009 or 2011

Status: Design Phase

For the latest project status update please visit the AMSAT-DL P5-A
web page:
http://ticket-to-mars.org
[01222007]
=====
PHASE 3E AO-??
Catalog number:
Proposed Launch Date: ??????

Status: STORAGE

For the latest project status update please visit the AMSAT-DL P3-E
web page:
http://www.amsat-dl.org/p3e/
[02212009]
=====
Eagle AO-??
Catalog Number:
Proposed Launch Date: ?????

Status: Design Phase

For the latest project status updates please visit the AMSAT-NA web
page: http://www.amsat.org
[02212009]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-096.S5
WSR 096 Part 5 04/06/2009

AMSAT NEWS SERVICE BULLETIN 096.S5
FROM AMSAT HQ SILVER SPRING, MD, April 06, 2009
TO ALL RADIO AMATEURS
BID: $ANS-096.S5

THE FOLLOWING SATELLITES HAVE RE-ENTERED OR HAVE BEEN RETURNED SAFELY:
```

```
NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: July 28, 2008

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[01012009]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink:      145.825 Mhz FM APRS AX25
APRS Uplink:        145.825 MHz FM APRS AX25
Voice/PSK31 Uplink:  28.120 MHz

Packet to Voice ID: RAFT
[06112007]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Re-Entered
Re-entered: June 18, 2008

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon:             437.2750 MHz CW

Callsign: JR8YJT
[01012009]
=====
SO-43 Starshine 3
Catalog Number: 26929
```

Launch Date: September 30, 2001

Status: Re-Entered
Re-entered: January 21, 2003

Beacon: 145.825Mhz
[02212009]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis

Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at}
amsat.org
NNNN
/EX

```
From -6342770514449393878
X-Google-Thread: 10e8ad,ba53ba19799f550c,start
X-Google-Thread: 10b9c8,ba53ba19799f550c,start
X-Google-Attributes: gid10e8ad,gid10b9c8,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!newsfeed2.dallas1.level3.net!
news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-103 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Mon, 13 Apr 2009 21:35:36 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 1661
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <001001c9bca1$4564cbc0$d02e6340$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix1.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1239672934 10378 166.84.1.1 (14 Apr 2009 01:35:34 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Tue, 14 Apr 2009 01:35:34 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news1.google.com rec.radio.amateur.space:182 rec.radio.info:606
```

This report is organized into five (5) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites

Part 4 (S4) - proposed satellites
Part 5 (S5) - deorbited/returned satellites

SB SAT @ AMSAT W8ISS ANS-103.S1
WSR 103 Part 1 04/13/2009

AMSAT NEWS SERVICE BULLETIN 103.S1
FROM AMSAT HQ SILVER SPRING, MD, April 13, 2009
TO ALL RADIO AMATEURS
BID: $ANS-103.S1

DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008

Status: Operational
Current Mode: Science Mode - Beacon ONLY

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink: 435.530 to 435.570 MHz

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68
[02122009]
=====
VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.859330 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

To know what transponder is switched on please listen for the beacon that is active. Each transponder has a different beacon.
[08072008]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Modes: FM Repeater - L/u1s
BBS - OFF
Telemetry - /u

Analog voice downlink: u1 - 435.300 MHz FM
u2 - 435.150 MHz FM
s - 2401.200 Mhz FM
Analog voice uplink: V1 - 145.860 MHZ FM
V2 - 145.880 MHz USB
V3 - 145.920 MHz FM
L - 1268.700 MHz FM
Digital Downlinks: u3 - 435.150 MHz FM 38k4 PBP, 1 watt output
u9 - 435.150 MHz FM 9k6 Pacsat Broadcast Protocol
s - 2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: V4 - 145.860 MHz FM 9k6 Pacsat Broadcast Protocol
L9 - 1268.700 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon: u - 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[04132009]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002

Status: Operational.

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz. The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10 minute timer.
[05282007]

=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Operational
Current Mode: V/u (Mode JA)

Voice/CW (Mode JA)
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage:

http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's
CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/
fo29cwts.htm
[02122009]
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993

Status: Operational

Current Mode: V/u

```
Uplink:   145.850 MHz FM
Downlink: 436.797 MHz FM
```

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[03232009]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational

Current Mode: Alternating between Mode A and B every 24 hours

```
Uplink:   145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink:  29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons:   29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW
```

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
[02122009]

=====

INTERNATIONAL SPACE STATION (ISS) - ARISS

Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - V/u
Voice - V/v
BBS - V/v
APRS - V/v
SSTV - V/v

Expedition 19 Crew:
Commander: Gennady Padalka
Flight Engineer: Michael Barratt
Flight Engineer: Koichi Wakata KC5ZTA

Available Modes and Frequencies:

Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 9k6
Worldwide packet downlink: 145.825 Mhz FM 9k6

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[04062009]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-103.S2
WSR 103 Part 2 04/13/2009

AMSAT NEWS SERVICE BULLETIN 103.S2
FROM AMSAT HQ SILVER SPRING, MD, April 13, 2009
TO ALL RADIO AMATEURS
BID: $ANS-103.S2

SOHLA-1 (ASTRO TECH.)
Catalog Number: 33496
Launch Date: January 23, 2009

Status: Commisioning

Proposed Frequencies and Modes:
Downlink: 437.505 MHz AFSK/CW
Beacon: 437.505 MHz AFSK/CW

Callsign:

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=101
[03232009]
=====
KAGAYAKI (Solan Co.)
Catalog Number: 33495?
Launch Date: January 23, 2009

Status: In Orbit

Downlink: 437.375 MHZ   FSK9k6/CW
Beacon: 437.375 MHz   FSK9k6/CW

IARU coordination status page:

AMSAT-NA webpage:

[01152009]
=====
STARS (Kagawa Univ.) (Twin Satellites)
Catalog Number: 33498

Launch Date: January 23, 2009

Status: Operational ?

Downlinks: 437.485 MHz FM/CW
           437.465 MHz FM/CW
Beacons: 437.305 MHz FM/CW
           437.275 MHz FM/CW

Callsigns: JR5YBN
           JR5YBO

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=99

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=121&retURL
=/satellites/status.php
[022152009]
=====
KKS-1 (Tokyo MCIT)
Catalog Number: 33499
Launch Date: January 23, 2009

Status: Operational

Downlink: 437.455 MHz AFSK/CW
Beacon: 437.385 MHz AFSK/CW

Callsign: JQ1YYY

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=107

AMSAT-NA webapge:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=120&retURL
=/satellites/status.php
[02212009]
=====
PRISM (Tokyo Univ.)
Catalog Number: 33493
Launch Date: January 23, 2009

Status: Operational ?

Downlink: 437.425 MHz AFSK/GMSK/CW
Beacon: 437.250 MHz AFSK/GMSK/CW

Callsign: JQ1YCX

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=97

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=119&retURL=/satellites/status.php
[02212009]
=====
RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number: 32953
Launch Date: May 23, 2008

Status: Operational

Curent Modes: Telemetry
Audio
Images

Downlinks: 435.315 MHz
435.215 MHz

AMSAT-NA website:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=115&retURL=/satellites/status.php

Official website:
http://www.npopm.com/?cid=leoca&caid=43
[02122009]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=94&retURL=/satellites/status.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=72
[02122009]
=====
CP3
Catalog Number: 31129
Launch Date: April 17,2007

```
Status: Operational

Current Mode:  /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[02122009]
=====
GENESAT-1
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Current Mode: /u

Callsign: KE7EGC

Telemetry Beacon Downlink: 437.0670 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[02212009]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon:             437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/xivpicte.htm
[02212009]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003

Status: Operational

Current Mode: /u

Beacon:     436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW
```

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=96&retURL=/satellites/status.php

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[02212009]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Operational?

Uplink: 1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=56
[02122009]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Modes: FM Repeater - L/u1s
                 BBS   - OFF
                 Telemetry   - /u

Analog voice downlink: u1 - 435.300 MHz FM
                          u2 - 435.150 MHz FM
                          s - 2401.200 Mhz FM
Analog voice uplink: V1 - 145.860 MHZ FM
                          V2 - 145.880 MHz USB
                          V3 - 145.920 MHz FM
                          L - 1268.700 MHz FM
Digital Downlinks: u3 - 435.150 MHz FM 38k4 PBP, 1 watt output
                          u9 - 435.150 MHz FM 9k6 Pacsat Broadcast Protocol
                          s - 2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: V4 - 145.860 MHz FM 9k6 Pacsat Broadcast Protocol
                          L9 - 1268.700 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon: u - 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[04132009]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=69&retURL
=/satellites/status.php
[02212009]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Telemetry only

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/

```
[03302009]
=====
RS-22 RADIO SPORT RS-22
Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only

Current Mode:  /u

CW Beacon - 435.352 MHz
            145.818 MHz

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=76&retURL
=/satellites/status.php
[02212009]
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990

Status: CW Beacon only

Uplinks:          145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink:      437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[03162009]
=====
CanX-2
Catalog number: 32790
Launch Date: April 28, 2008

Status: Operational in range of ground station only

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web
page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
```

```
[02212009]
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.425 MHz 1k2 baud packet

For the latest project status update please visit the AAUSAT-II web
page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[02212009]
=====
CO-65 CUTE-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008

Status: Digipeater

Downlink:  437.475 MHz 9k6 Packet
Uplink:   1267.600 Mhz

Telemetry Beacon:
Downlink: 437.2750 MHz CW

For the latest project status update please visit the Cute-1.7+APD II
web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78

Command Station blog website:
http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=112&retURL
=/satellites/status.php
[02212009]
=====
Compass-1
Catalog number: 32787
Launch Date: April 28, 2008

Status: Operational

Current Mode: 4k8 MSK packet

Downlink: 437.275 Mhz CW
```

437.405 MHz Packet

For the latest project status update please visit the Compass 1 web page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=114&retURL=/satellites/status.php
[02212009]
=====
CO-66 Seeds II
Catalog number: 32791
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.485 MHz

Callsign: JQ1YGU

For the latest project status update please visit the Seeds 2 web page: http://cubesat.aero.cst.nihon-u.ac.jp/english/seeds_2_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=113&retURL=/satellites/status.php
[02212009]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes:		
	FM Repeater -	V/u
	Voice -	V/v
	BBS -	V/v
	APRS -	V/v
	SSTV -	V/v

Expedition 19 Crew:

Commander:	Gennady Padalka	
Flight Engineer:	Michael Barratt	
Flight Engineer:	Koichi Wakata	KC5ZTA

Available Modes and Frequencies:
Digital/APRS:

Worldwide packet uplink: 145.825 MHz FM 9k6
Worldwide packet downlink: 145.825 Mhz FM 9k6

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time line is NOT translated from Russian and posted.
[040602009]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-103.S3
WSR 103 Part 3 04/13/2009

AMSAT NEWS SERVICE BULLETIN 103.S3
FROM AMSAT HQ SILVER SPRING, MD, April 13, 2009
TO ALL RADIO AMATEURS
BID: $ANS-103.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

CP4

```
Catalog Number: 31122
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon:    437.325 MHz CW

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=79
[10022008]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: Non-Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder:  145.825 Mhz FM
[01012009]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency:  437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink:        437.250 MHz FM 67Hz CTCSS
Voice Downlink:     2401.835 MHz FM
Packet Up/Downlink:  437.250 MHz 9k6 packet
Packet Downlink     2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
```

```
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non=Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[08132007]
=====
QuakeSat
Catalog Number: 27845
Launch Date: June 30, 2003

Status: ?

Current Mode: 9600 baud data packet

Mode U packet
Downlink: 436.675 MHz 9k6 BPS

Quakesat webpage:
http://www.quakefinder.com/services/quakesat-ssite/
[02212009]
=====
DTUSAT
Catalog Number: 27842
Launch Date: June 30, 2003

Status: Non-Operational

Current Mode: 2k4 AFSK Packet last reported

Downlink: 437.475MHz

Officail webpage: http://dtusat1.dtusat.dtu.dk/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=101&retURL
=satellites/all_oscars.php
[02212009]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink:   435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)
```

```
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Telemetry only

Uplinks:   145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink:  437.325 MHz

Broadcast callsign: MYSAT3-11
BBS:                MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial land and weather imaging payloads offers FM and FSK
Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as
a collaborative effort between the Malaysian government and Surrey
Satellite Technology Ltd.
[03302009]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink:   145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS:                SASAT2-12
```

```
Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink:   145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
V-band:   145.840 -  145.990 MHz CW/LSB
U-band:   435.550 -  435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks
---------
S2-band:  2401.225 -  2401.475 MHz CW/USB
K-band:  24048.010 - 24048.060 MHz CW/USB
Beacon:   2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)
----------------------------
BEACON   General Beacon(GB)  Middle Beacon(MB)  Engineering Beacon(EB)
2 m                   none        145.898 MHz                   none
70cm           435.438 MHz        435.588 MHz            435.838 MHz
13cm(1)       2400.188 MHz       2400.338 MHz           2400.588 MHz
13cm(2)       2401.173 MHz       2401.323 MHz           2401.573 MHz
3cm          10450.975 MHz      10451.125 MHz          10451.375 MHz
1.5cm        24047.885 MHz      24048.035 MHz          24048.285 MHz
[07162007]
=====
OO-38 OPAL
Catalog Number: 26063
```

Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: ?
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]

```
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Non-Operational?

Current Modes: V/U
               L/U

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign:       4XTECH-12

More information of GO-32 can be found at:
http://asri.technion.ac.il/techsat/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=14&retURL
=/satellites/status.php
[03232009]
=====

TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink:   145.925 MHz 9600 baud FSK
```

```
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Non-operational

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign:       POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012009]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM
```

```
Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB
```

```
Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
LIBERTAD-1
Catalog Number: 31128
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink:   145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[02122009]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
[05012006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: SEMI-Operational
```

```
Current Mode:  V/u

Uplink:         145.900 MHz FM 1200-baud Manchester FSK (reserved)
                145.920 MHz FM VOICE
                145.940 MHz FM 1200-baud Manchester FSK (reserved)
                145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink:       437.026 MHz USB VOICE
                (1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[12252008]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
```

```
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984

Status: Non-operational.

Current Mode:  /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon:          435.025 MHz
Mode-S Beacon:     2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[01012009]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon:   145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink  29.4000 -  29.5000 MHz SSB/CW
```

```
Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
Beacons:   29.450 MHz
          435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon 1:  29.352 MHz (intermittent)
Beacon 2:  29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
```

Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB

Beacon: 145.860 MHz

Robot: 145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-103.S4
WSR 1036 Part 4 04/13/2009

AMSAT NEWS SERVICE BULLETIN 103.S4
FROM AMSAT HQ SILVER SPRING, MD, April 13, 2009
TO ALL RADIO AMATEURS
BID: $ANS-103.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE PROPOSED FOR LAUNCH AT THIS TIME:

UNITEC
Catalog Number:
Proposed Launch Date: May 2010

Status: Design Phase

Proposed Equipment:

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=141
[01152009]
=====
XW-1
Catalog Number:

Proposed Launch Date: Summer 2009?

Status: Design Phase

Proposed Equipment:
Beacon: 435Mhz, CW 20dBm
Linear transponder: RX: 145Mhz, TX: 435Mhz, 40KHz, 30dBm
FM Transponder: RX: 145Mhz, TX: 435Mhz, 16KHz, 30dBm
Digital store and forward transponder: RX: 145Mhz, TX: 435Mhz, 16KHz,
30dBm

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108
[10092008]

=====

Phase 5a Mars Mission AO-??
Catalog Number:
Proposed Launch Date: 2009 or 2011

Status: Design Phase

For the latest project status update please visit the AMSAT-DL P5-A
web page:
http://ticket-to-mars.org
[01222007]

=====

PHASE 3E AO-??
Catalog number:
Proposed Launch Date: ??????

Status: STORAGE

For the latest project status update please visit the AMSAT-DL P3-E
web page:
http://www.amsat-dl.org/p3e/
[02212009]

=====

Eagle AO-??
Catalog Number:
Proposed Launch Date: ?????

Status: Design Phase

For the latest project status updates please visit the AMSAT-NA web
page: http://www.amsat.org
[02212009]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-103.S5
WSR 103 Part 5 04/13/2009

AMSAT NEWS SERVICE BULLETIN 103.S5

FROM AMSAT HQ SILVER SPRING, MD, April 13, 2009
TO ALL RADIO AMATEURS
BID: $ANS-103.S5

THE FOLLOWING SATELLITES HAVE RE-ENTERED OR HAVE BEEN RETURNED SAFELY:

NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: July 28, 2008

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[01012009]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink: 145.825 Mhz FM APRS AX25
APRS Uplink: 145.825 MHz FM APRS AX25
Voice/PSK31 Uplink: 28.120 MHz

Packet to Voice ID: RAFT
[06112007]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Re-Entered
Re-entered: June 18, 2008

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon: 437.2750 MHz CW

Callsign: JR8YJT
[01012009]
=====
SO-43 Starshine 3
Catalog Number: 26929
Launch Date: September 30, 2001

Status: Re-Entered
Re-entered: January 21, 2003

Beacon: 145.825Mhz
[02212009]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional

benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at}
amsat.org
NNNN
/EX

```
From -5102520519745460387
X-Google-Thread: 10e8ad,a65b8132c7bb0f5a,start
X-Google-Thread: 10b9c8,a65b8132c7bb0f5a,start
X-Google-Attributes: gid10e8ad,gid10b9c8,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII
Path: g2news1.google.com!news1.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx02.iad01.newshosting.com!newshosting.com!
198.186.194.249.MISMATCH!transit3.readnews.com!news-xxxfer.readnews.com!news-
out.readnews.com!transit4.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-102 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Mon, 13 Apr 2009 21:36:55 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 480
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <001101c9bca1$75d500e0$617f02a0$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;charset="iso-8859-1"
Content-Transfer-Encoding: quoted-printable
X-Trace: reader1.panix.com 1239673015 6483 166.84.1.6 (14 Apr 2009 01:36:55 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Tue, 14 Apr 2009 01:36:55 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
```

Content-Language: en-us
Xref: g2news1.google.com rec.radio.amateur.space:183 rec.radio.info:607

AMSAT NEWS SERVICE
ANS-102

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* Richard Garriott, W5KWQ, wins 2009 Hamvention Special Achievement Award
* AMSAT Forum at Dayton Hamvention
* KiwiSat Status Update
* Further Delays for SumbandilaSat Launch
* Satellite Shorts From All Over
* Wind Farm interference
* Busy Week of Successful ARISS Contacts
* ARISS Status - 06 April 2009

SB SAT @ AMSAT $ANS-102.
Richard Garriott, W5KWQ, wins 2009 Hamvention Special Achievement Award

AMSAT News Service Bulletin 102.
>From AMSAT HQ SILVER SPRING, MD.
April 12, 2009
To All RADIO AMATEURS
BID: $ANS-102.

Richard Garriott, W5KWQ, is a legendary video game programmer/designer and ham radio operator who was the sixth private citizen to fly to the International Space Station (ISS).

Like his father, Owen Garriott, W5LFL, who made history as the first ham to communicate from space with radio amateurs during the STS-9 Space Shuttle mission, Richard was a ham radio pathfinder in his own right through on-orbit experimentation, implementation of new capabilities, extensive operations using many diverse operations modes, and phenomenal educational outreach initiatives that inspired and transformed the lives of tens of thousands students, worldwide.

Garriott was the most prolific ham radio operator to fly on a short duration (<15 day) mission. During his 10 day stay on the ISS over 500 2-way voice QSOs were conducted, over a thousand SSTV images were down linked. He communicated with tens of thousands of students in schools around the world. Garriott also had numerous random chats with scouts world-wide as part of the amateur radio Jamboree on the Air (JOTA).

Hamvention� Chairman Carl Rose, K8CPR, praised the winners, saying: "On behalf of the Dayton Amateur Radio Association and Hamvention� 2009 it is my pleasure to congratulate this year's Award Winners. Their outstanding contributions and the many years of service exemplify what the amateur radio service is."

Richard will also be the keynote speaker at the AMSAT/TAPR Banquet during Hamvention 2009. The Banquet will be on Friday evening, 15 May 2009. There is limited seating for the banquet, and tickets may be purchased for $30 on-line at the AMSAT store or by contacting Martha at the AMSAT office.

Richard will give a short presentation at the AMSAT Forum on Saturday morning, and visit the AMSAT & ARRL booths.

[ANS thanks The Dayton Amateur Radio Association for the above information]

/EX

SB SAT @ AMSAT $ANS-102.
AMSAT Forum at Dayton Hamvention

AMSAT News Service Bulletin 102.
>From AMSAT HQ SILVER SPRING, MD.
April 12, 2009
To All RADIO AMATEURS
BID: $ANS-102.

The AMSAT Forum at the 2009 Dayton Hamvention will be on Saturday, 16 May from 11:15 to 13:30 in Room 5.

The speakers and their topics at this year's forum are listed below, the order will probably change. The Hamvention site now has the entire list of Forums and times posted on their web site

AMSAT Forum

Moderator: Rick Hambly, W2GPS AMSAT Past President and current member of the Board of Directors

Richard Garriott, W5WKQ On October 12, 2008 Richard Garriott launched into space aboard Soyuz TMA 13 and became the first second generation american in space. Richard's father Owen is a NASA astronaut and carried the first ham radio to orbit on his second flight in 1983 aboard the 9th shuttle flight. Richard will touch on his training, the flight and his impressions from space, and highlight his ham radio activities.

Barry Baines, WD4ASW AMSAT President "AMSAT Status Report: What is happening with AMSAT?" Barry will highlight current activities within AMSAT and discuss some of the challenges facing the organization.

Gould Smith, WA4SXM, AMSAT VP-Member & User Services and SuitSat-2 Systems Engineer "SuitSat-2 Status Report". Gould will provide an overview of AMSAT's current engineering project which is projected being developed for ARISS to be shipped to Russia this Fall for eventual placement on the International Space Station and subsequent release into space.

Drew Glasbrener, KO4MA, AMSAT VP-Operations, "AMSAT Satellite Operations Update" which will provide an overview of current satellite operations as well as discuss future satellite opportunities currently under consideration.

Will Marchant, KC6ROL, AMSAT VP-Human Space Flight, "A Ham Radio Operator's View of ARISS". He will outline several new initiatives under development for Amateur Radio on the International Space Station (ARISS) that will interest amateur radio operators.

Lou McFadin, W5DID, ARISS Hardware Manager "Antennas for the Columbus Module" Lou will discuss the latest piece of amateur radio equipment to be shipped to the European Space Agency for deployment to the ISS and explain the significance of this development.

[ANS thanks Gould, WA4SXM, for the above information]

/EX

SB SAT @ AMSAT $ANS-102.
KiwiSat Status Update

AMSAT News Service Bulletin 102.
>From AMSAT HQ SILVER SPRING, MD.
April 12, 2009
To All RADIO AMATEURS
BID: $ANS-102.

In a gesture of support for KiwiSAT the Auckland VHF Group (NZART Branch 66) have donated $1000 for the purchase of the special Aluminium blocks from which the very structure of KiwiSAT will be milled. For maximum stability, light weight and overall integrity, the frame of our satellite will be milled from solid blocks of Aluminium.

Over the next few weeks KiwiSAT will finally start to take shape. There is much work to be done but we now making "solid" progress.

Mike Jack of Stanier Engineering, a small specialist precision engineering company based in Auckland, is now milling the main frame from those solid blocks. The first tray is to hand and looking great. Strength and precision are two major factors as this first plate, the foundation stone for the final structure, will carry the whole load at launch.

We are most grateful to Mike for the use of his costly machinery and for donating his very valuable time to this project.

Many more details and video of the milling process are available on the KiwiSatweb site: http://kiwisat.org/index.html

[ANS thanks AMSAT-ZL for the above information]

/EX

SB SAT @ AMSAT $ANS-102.
Further Delays for SumbandilaSat Launch

AMSAT News Service Bulletin 102.
>From AMSAT HQ SILVER SPRING, MD.
April 12, 2009
To All RADIO AMATEURS
BID: $ANS-102.

Launch date is now only late July 2009

In early January the Department of Science and Technology signed the SumbandilaSat launch contract with Roscosmos setting the launch date at 25 March 2009. This date was later postponed till May but the latest is a further postponement till late July. No reasons have been given. However rumors have it that one of the main payloads is delayed.

The fact that launch will now take place on a Soyuz launcher at Baikonur as opposed to the previous Shtil from a submarine, ensured that a new Interface Control Document (ICD) had to be issued. This meant that each element of the new ICD had to be check against the previous one and an impact report on the differences had to be compiled. Normally the base plate modifications, various types of vibration, and some electrical issues from the basis of the changes but the ICD is very comprehensive and contains all elements related to on-site safety.

>From 25 August 2008 to the present time SunSpace, with permission from the DST and under contract to Stellenbosch University, conducted systems tests at ISSA to ensure that the satellite is launch-ready after its been moth balled for more than two years. All the individual systems have been declared functional and the only outstanding items are some control system software updates caused by the change in orbit parameter from South-North to North-South. The updates have been tested, work and will be uploaded within the week. Final mission scenario testing will then be carried out and is expected to be

successful.

[ANS thanks SA AMSAT for the above information]

/EX

SB SAT @ AMSAT $ANS-102.
Satellite Shorts From All Over

AMSAT News Service Bulletin 102.
>From AMSAT HQ SILVER SPRING, MD.
April 12, 2009
To All RADIO AMATEURS
BID: $ANS-102.

+ The Hudson Valley Satcom group Net meets Thursdays at 8 PM EST. The Echolink node is n2eyh-l. You are invited to join and share your satellite knowledge. (via WA2AQH)

+ Ed, WA4SWJ, AMSAT Journal Editor reports that the March/April issue of the Journal has been uploaded to the printer. You should have it in your hands in 2-3 weeks.

+ Ciaran, M0XTD has posted the video of the UK contact with Charles Simonyi from March 30 at: http://www.it-sparkles.co.uk/ARISS/Parkside.aspx - there are links to wmv, mov, mp4 and mpeg versions. Howard G6LVB has also made his video available at: http://www.g6lvb.com/ParksideCut.wmv (138MB).

+ Neven, 9A5YY plans to operate on AO-51, AO-27 and SO-50 with his handheld Yaesu VX-7R and AL-800 antenna during his stay in Peru April 11-19. Listen for the callsigns 9A5YY/OA4 from Lima and as 9A5YY/OA7 from Cuzco.

+ The Teresina DX Group is preparing for the PS8DX DXpedition to Brazil's Canary Island (IOTA-072) on the coast of Piaui, Brazil in grid GI97bf. Dates of operation will be between April 29 to May 3. Satellite operation will include AO-7, FO-29, AO-51, VO-52, SO-50 and ISS if available. Team members include PS8BBC, PS8DX, PS8ET, PS8FSM, PS8HF, PS8JN, PS8NF, PS8PY, PS8RF,PS8TV.

[ANS thanks everyone for the above information]

/EX

SB SAT @ AMSAT $ANS-102.
Wind Farm interference

AMSAT News Service Bulletin 102.
>From AMSAT HQ SILVER SPRING, MD.

April 12, 2009
To All RADIO AMATEURS
BID: $ANS-102.
=09

The UK regulator, Ofcom, has published a document about the effects of interference to UHF & SHF communications by Wind Farms.

The report, by ERA Technology Ltd and Aegis Systems Ltd, describes a technical study in which a series of measurements were carried out with regard to the presence of wind turbines near to wireless services. The purpose of the study was to enhance understanding of the effects of wind turbines near to wireless services

Some of their findings include:

- A single turbine can produce measured fades as large as 3 dB for UHF scanning telemetry links and 2 dB for fixed links operating between 1.5 and 18 GHz, when the turbine is lying on the transmitter-receiver path.

- A wind farm (with seventeen turbines) can produce measured fades as large as 10 to 15 dB for 1% of the time when the wind farm is lying on the transmitter-receiver path.

The full report in PDF Format is available:
http://www.ofcom.org.uk/radiocomms/ifi/licensing/classes/fixed/Windfarms/
rf_
measurement/windfarm_report.pdf

[ANS thanks Trevor, M5AKA, for the above information]

/EX

SB SAT @ AMSAT $ANS-102.
Busy Week of Successful ARISS Contacts

AMSAT News Service Bulletin 102.
>From AMSAT HQ SILVER SPRING, MD.
April 12, 2009
To All RADIO AMATEURS
BID: $ANS-102.

1. U.K. Students Contact the ISS

On Monday, March 30, students from Parkside Community College in Cambridge, U.K. took part in an Amateur Radio on the International Space Station (ARISS) contact. Spaceflight Participant Charles Simonyi, KE7KDP/HA5SIK answered 17 questions put to him by the students as an audience of approximately 200 watched. British Amateur Television Club (BATC) streamed video of the event on its Web site.

2. U.S. Girls Speak with Spaceflight Participant via Radio

The Girl's Middle School (GMS) in Mountain View, California experienced a successful Amateur Radio on the International Space Station (ARISS) contact on Monday, March 30 via telebridge station K6DUE in Maryland. Twenty girls asked one question each of Charles Simonyi, KE7KDP/HA5SIK as sixty students looked on. The audio was fed into the EchoLink AMSAT and JK1ZRW servers and received 15 connections from stations in the U.S., Poland, Italy, Germany, England, Canada and Brazil.

3. ISS Radio Contact with Japanese Students

An Amateur Radio on the International Space Station (ARISS) contact took place on Tuesday, March 31 between Mike Fincke, KE5AIT and students from Science Dream Association (SDA) in Kobe-city, Japan. The original scheduled pass was too low for a successful contact. Mike Fincke and Koichi Wakata made a connection on the following pass and Fincke was able to answer 22 questions before the ISS went over the horizon. An audience of approximately 100 people attended the event and four newspapers provided media coverage.

4. ARISS Contact with Puerto Rican Students

On Tuesday, March 31, students attending Marcelino Canino Middle School in Dorado, Puerto Rico participated in an Amateur Radio on the International Space Station (ARISS) contact with Spaceflight Participant Charles Simonyi, KE7KDP/HA5SIK. Simonyi answered all 15 questions posed to him by the children. Approximately 300 students and 60 adults, including the Secretary of Education, were present for the event. There was no media coverage, but the school plans to provide television stations with a DVD of the contact. Marcelino is a 2005 NASA Explorer School (NES).

5. Australian Students Question Astronaut

Kalori Catholic School students in Wallaroo, Australia spoke with Mike Fincke, KE5AIT on Wednesday, April 1. The Amateur Radio on the International Space Station (ARISS) contact was facilitated by telebridge station WH6PN in Hawaii. Students were able to have all seventeen questions answered. The audio was fed into the EchoLink AMSAT and JK1ZRW servers and received six connections from stations in England, Germany, Switzerland, and the U.S.

6. Florida Students Speak with Spaceflight Participant

Milwee Middle School students in Longwood, Florida spoke with Charles Simonyi,KE7KDP/HA5SIK on Wednesday, April 1. This Amateur Radio on the International Space Station (ARISS) contact was made possible through telebridge station ON4ISS in Belgium. The students were able to ask 11 questions of the spaceflight participant before the ISS went over the horizon. The audio was fed into the EchoLink AMSAT and JK1ZRW servers and received 10 connections from stations located in Belgium, England, Germany, Switzerland and the

U.S.

7. Japanese Students Radio ISS

On Thursday, April 2, students from Miyahara Elementary School in Saitama, Japan participated in an Amateur Radio on the International Space Station (ARISS) contact. Fourteen students asked one question each of Koichi Wakata, KC5ZTA in front of an audience of 450. Media coverage included two television stations, including NHK (The Japan Broadcasting Corporation), seven newspapers and two magazines.

8. ARISS � France Contact Successful

Albert Camus and Jules Verne Elementary Schools in Viry Ch�tillon, France experienced a joint Amateur Radio on the International Space Station (ARISS) contact on Thursday, April 2. Mike Fincke, KE5AIT answered 16 questions posed to him by the students. Approximately 150 were present for the event including the mayor of Viry-Chatillon and Mr. Alberto Novelli, representing ESA. Local newspapers and "Le Parisien" reported the news. The audio was fed into the EchoLink AMSAT and JK1ZRW servers and received three connections from stations in the U.S., China and England.

This was the last contact of Expedition 18 and Mike Fincke's 40th contact during this increment.

9. Carl Sandburg Elementary Participates in ARISS Contact

On Thursday, April 1, students attending Carl Sandburg Elementary School in Kirkland, Washington experienced an Amateur Radio on the International Space Station (ARISS) contact which was made possible through telebridge station W6SRJ in California. Charles Simonyi, KE7KDP/HA5SIK answered the 20 questions put to him by the students. An audience of approximately 75 students, teachers and parents were present for the contact. The audio was fed into the EchoLink AMSAT and JK1ZRW servers and received ten connections from stations located in England, New Zealand, Turkey and the U.S.

King-TV posted an article covering the event. See:
http://www.king5.com/localnews/stories/NW_040209EDB-space-station-simonyi
-KC
.98b4140c.html

[ANS thanks Carol, KB3LKI, for the above information]

/EX

SB SAT @ AMSAT $ANS-102.
ARISS Status - 06 April 2009

AMSAT News Service Bulletin 102.
>From AMSAT HQ SILVER SPRING, MD.

April 12, 2009
To All RADIO AMATEURS
BID: $ANS-102.

1. ARISS News on Amateur Radio Newsline

On April 3, the Amateur Radio Newsline Report 1651 ran 2 Amateur Radio on the International Space Station (ARISS) news items. The first, "Names in the News: Dayton Hamvention Announces 2009 Award Winners," covers Richard Garriott as the Special Achievement Award recipient. The second item, "Ham Radio in Space: KE7KDP Again Operating from the ISS," is about Charles Simonyi's mission, including his ARISS school contacts. See: ftp://ftp.arnewsline.org/quincy/News/news.txt

2. Charles in Space Web Site

The Charles in Space Web site has a section where the public has posted space related questions concerning Charles' current mission and his Amateur Radio on the International Space Station (ARISS) activities. To view the questions and answers, see:
http://www.charlesinspace.com/index.cfm?fuseaction=Read_the_Answers.welcome#

3. General Contacts and SSTV

Over the past week, Charles Simonyi, KE7KDP/HA5SIK made several general contacts with ground stations around the world including those in the U.S., Canada, Australia, Hungary and Venezuela. He also transmitted Slow Scan Television (SSTV) images using the VC-H1. Images may be viewed on the Amateur Radio on the International Space Station (ARISS) SSTV gallery site: http://www.amsat.org/amsat/ariss/SSTV/

4. Astronaut Training Status

On Monday, March 30, the Amateur Radio on the International Space Station (ARISS) team provided training to Mike Fossum to prepare him for the ham radio licensing exam. ARISS member Kenneth Ransom is also working with other astronauts from Expeditions 25 - 28 to get them trained and licensed.

[ANS thanks Carol, KB3LKI, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's
Club. Members of the President's Club, as sustaining donors to AMSAT Project
Funds, will be eligible to receive additional benefits. Application forms
are
available from the AMSAT Office.

73,
This week's ANS Editor,
Lee McLamb, KU4OS
ku4os at amsat dot org

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From -2614430035115071861
X-Google-Thread: 10e8ad,26a87edb6c35cd15,start
X-Google-Thread: 10b9c8,26a87edb6c35cd15,start
X-Google-Attributes: gid10e8ad,gid10b9c8,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news1.google.com!newsfeed2.dallas1.level3.net!
news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-109 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sun, 19 Apr 2009 11:11:48 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 408
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000301c9c101$202edd00$608c9700$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1240153908 4777 166.84.1.6 (19 Apr 2009 15:11:48 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 19 Apr 2009 15:11:48 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news2.google.com rec.radio.amateur.space:209 rec.radio.info:695
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AMSAT NEWS SERVICE
ANS-109

ANS is a free, weekly, news and information service
of AMSAT North America, The Radio Amateur Satellite
Corporation. ANS reports on the activities of a

worldwide group of Amateur Radio operators who share
an active interest in designing, building, launching
and communicating through analog and digital
Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
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* AMSAT/TAPR Banquet Note
* HAMSAT
* SumbandilaSat: From Sub To Space
* Satellite Shorts
* Balloon Launch-Assist in Tracking
* ARISS Schedule

SB SAT @ AMSAT $ANS-109.1
AMSAT Activites at Dayton 2009

From AMSAT HQ SILVER SPRING, MD.
April 19, 2009
To All RADIO AMATEURS
BID: $ANS-109.1

In addition to being the keynote speaker at the AMSAT/TAPR Banquet on Friday, Richard Garriott, entrepreneur, game programmer and space tourist will being visiting the AMSAT booth on Friday and Saturday. Come by and meet Richard, the specific times will be available soon. We will be having our Thursday night get-together at a new location this year - Tickets Pub in Fairborn. The menu has many tasty items, so come by and visit with your AMSAT friends.
Drew and Keith will be leading the outdoor satellite demonstrations this year. They will have two types of stations setup and operational - computer controlled station and handheld station.
This is the 40th Anniversary of AMSAT, we have a great tee design by Steve Kenwolf to celebrate the event as well as many pices of AMSAT memorabilia on display.
Members of the SuitSat-2 team will have a complete operational SuitSat protoype with an experiment. As always there will be new publications, frequency chart, LVB Trackers and premiums for membership renewal. The AMSAT Forum is Saturday moring 11:15 to 13:30 in Room 5. Visit the AMSAT web site for additional information. Come by booths 444-449 during the May 15-17 2009 Dayton Hamvention.

[ANS thanks Gould, WA4SXM, for the above information]

/EX

SB SAT @ AMSAT $ANS-109.2
AMSAT/TAPR Banquet Note

AMSAT News Service Bulletin 109.2
From AMSAT HQ SILVER SPRING, MD.
April 19, 2009
To All RADIO AMATEURS
BID: $ANS-109.2

The Dayton AMSAT/TAPR banquet is just about 1 month away. Our Guest Speaker is Richard Garriott, W5KWQ. If you have not registered, go to the AMSAT website and look on the left hand side. There will be a box that says Dayton Hamvention. Click on that and it will lead you to the banquet registration. You MUST be pre- registered to attend. You cannot register at Dayton.

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[ANS thanks Martha, AMSAT Manager, for the above information]
/EX

SB SAT @ AMSAT $ANS-109.3
HAMSAT

AMSAT News Service Bulletin 109.3
From AMSAT HQ SILVER SPRING, MD.
April 19, 2009
To All RADIO AMATEURS
BID: $ANS-109.3

Hi All
Hamsat 4th Birthday is coming up next month, 5 May 2009 and Hamsat has been the most popular Amateur Sat for beginners and veterans all over the world.

Hamsat is very healthy and should serve the ham community for many more years.

Amsat India is pleased to announce that we are conducting a Workshop to coincide with the 4 th anniversary celebrations of the Hamsat.
(Note this is an advance infomation, complete programme schedule is frozen and will be announced shortly)

Date 10 May 2009
Starts at 8 AM with registration and breakfast Morning sessions include various topics Lunch Afternoon session Tea & close by 4 pm

Venue : Little Lilly English School, Vidyaranyapura, Bamgalore Delegate fee Rs 100/-

Detailed programme schedule etc will be announced shortly on these email groups, local nets etc.
You may also check our web page www.amsatindia.org
email : info@amsatindia.org

We request all hams and wouldbe hams interested in Amateur Satellite activity to kindly participate and make the event a grand success.
Looking forward to your participation.
Best 73
Pop
VU2POP
Secy Amsat India

[ANS Thanks Pop, VU2POP, for the above info]
/EX

SB SAT @ AMSAT $ANS-109.4
SumbandilaSat: From Sub To Space

AMSAT News Service Bulletin 109.4
From AMSAT HQ SILVER SPRING, MD.
April 19, 2009
To All RADIO AMATEURS
BID: $ANS-109.4

A Sat News Daily story dated April 12, 2009, says SumbandilaSat to launch in June from a sub.

SumbandilaSat: From Sub To Space
http://www.satnews.com/cgi-bin/story.cgi?number=195613620

SatNewsDaily were quoting from a South African Business Report story -

Russian sub to launch second satellite
http://www.busrep.co.za/index.php?fSectionId=552&fArticleId=4930464

The South African Business Report website last year carried a story on the use of Soyuz launcher at Baikonur.
http://www.busrep.co.za/index.php?fSectionId=552&fArticleId=4596130

The Southern Africa AMSAT website is still quoting Baikonur http://www.amsatsa.org.za/

[ANS Thanks, Trevor, M5AKA, for the above info]

/EX

SB SAT @ AMSAT $ANS-109.5
Satellite Shorts
AMSAT News Service Bun 109.5
From AMSAT HQ SILVER SPRING, MD.
April 19, 2009
To All RADIO AMATEURS
BID: $ANS-109.5

Good DX via AO-7

This week AO-7 continued to surprise and delight amateur radio satellite operators with opportunities for good DX. On April 12 Tim, N3TL reported, "At 21:33 UTC today G1WPR answered my "CQ DX" on AO-7 Mode B. I was sending CW with the straight key I picked up for Straight Key Night on AO-51, and Terry called me in SSB so we completed a cross-mode QSO of more than a minute with a few exchanges. I am thrilled!"

Tim also logged more trans-Atlantic AO-7 QSOs on April 16, "PH7PCF in the Netherlands answered my CW "CQ DX" with a hello in SSB. Then, a couple of minutes later, F2IL returned my CW in some CW from France. What a hoot!"

The equipment at N3TL consists of a Yaesu FT-857D for TX and a Yaesu FT-817ND for RX (both used radios). He uses a Diamond MX-72H duplexer to connect them to a dual-band Elk log periodic, which is hand-held, manually tracking the satellites. Computer doppler control was done with Simon's HRD Satellite Tracker. Of the CW operation Tim described his setup, "I have the "CQ DX" call set up in a memory buffer on my FT-857D. But when somebody responds, the straight key takes over."

Turning 35 years old on November 15, 2009 AO-7 still carries lots of amateur satellite traffic. Joe, K3SZH says Igor UA9CS Igor has now logged over 6000 QSOs via the bird. Also, this month Mike, KC9ELU has reached his 1000th QSO via AO-7.

[ANS thanks Tim, N3TL and Joe, K3SZH for the above information]

/EX

W0YPT Silent Key

AMSAT received the sad news that Telmer G. Olson, W0YPT became a silent key at age 91 this week. Telmer had worked the satellites from the earliest OSCARs to the modern satellites. Jerry, W0SAT remembered, "He elmered me and helped me get on the satellites in 1996. I knew him as a great friend that I called on for advice all the time. I used to visit him at his QTH and went to hamfests with him too. I and all the people who ever had contact with will always remember the many QSO,s and contacts we had with him."

ANS thanks Jerry, WOSAT for the above information]

/EX

SB SAT @ AMSAT $ANS-109.6
Balloon Launch-Assist in Tracking

AMSAT News Service Bulletin 109.6
From AMSAT HQ SILVER SPRING, MD.
April 19, 2009
To All RADIO AMATEURS
BID: $ANS-109.6

The NS3 group of Cornell University engineering graduate students will launch PBH-9 (Project Blue Horizon) from Lockheed Martin in Owego NY on Sunday evening, 19Apr09, at approximately 21:00EDT (Monday, 20Apr09, 01:00UT) This ARHAB flight (Amateur Radio High Altitude Ballooning) will ascend and then float for up to 50-hours while drifting to the east.

The payload will include a KC2TUA-8 144.390 APRS beacon (track via (http://findu.com/cgi-bin/find.cgi?call=KC2TUA-8) and HF CW position report and telemetry downlinks on 7.104MHz and 10.148MHz. The NS3 PBH-9 team requests distant ground stations receive and report HF telemetry via N2XE@arrl.net including reception UT date and time.

Distant receiving stations are welcome to also submit HF reception reports to W0RPK@amsat.org for the ARHAB <50MHz telemetry reception record,
see http://showcase.netins.net/web/wallio/ARHABrecords.htm.

Additional PBH-9 information including HF telemetry transmit schedule and format is available via
http://showcase.netins.net/web/wallio/ARHABlaunchannouncements.htm.
Flight updates are available from the NS3 PBH-9 team
via http://twitter.com/pbh3.

[ANS thanks Ralph, W0RPK, for the above information]

/EX

SB SAT @ AMSAT $ANS-109.7
ARISS Schedule

AMSAT News Service Bulletin 109.7
From AMSAT HQ SILVER SPRING, MD.
April 13, 2009
To All RADIO AMATEURS
BID: $ANS-109.7

1. Upcoming School Contacts

Students from Ulvila Upper Secondary School in Ulvila, Satakunta, Finland have been preparing for an Amateur Radio on the International Space Station (ARISS) contact. It was completed on Friday, April 17 at 07:40 UTC. They have studied physics and astronomy and have researched the ISS. They have written essays and created posters on related subject matter. Students have also learned about amateur radio. Newspaper, radio and television coverage is anticipated.

An Amateur Radio on the International Space Station (ARISS) contact has been scheduled for St. Edward School in Ashland, Ohio, U.S.A. on Monday, April 20 at 16:36 UTC. The ARISS contact has been integrated into the science curriculum which covers topics on satellite images, global positioning of satellites, telescopes, and radio waves. Students read science related books and poems, conducted informational internet searches, wrote stories and informational articles, interviewed amateur radio operators, and studied and applied science and math objectives. Media coverage is expected.

2. Japanese Contact to be Rescheduled

An Amateur Radio on the International Space Station (ARISS) contact was scheduled for Thursday, April 9 between Kawanishi Seiwadai Community Center in Hyogo, Japan and Koichi Wakata, KC5ZTA onboard the ISS. Due to technical difficulties, the contact did not take place. The contact will be rescheduled in the near future.

3. Parkside Contact Video

On Monday, March 30, students from Parkside Community College in Cambridge, U.K. took part in an Amateur Radio on the International Space Station (ARISS) contact with Spaceflight Participant Charles Simonyi, KE7KDP/HA5SIK.
Video of the contact is now available.
See: http://www.it-sparkles.co.uk/ARISS/Parkside.aspx

4. Article Posted on ARISS - Kalori Contact

On Wednesday, April 1, Kalori Catholic School students in Wallaroo, Australia experienced an Amateur Radio on the International Space Station (ARISS) contact with Mike Fincke, KE5AIT. The Yorke Peninsula Country Times published an article covering the event. See:
http://www.ypct.com.au/index.php?option=com_content&task=view&id=4840&Itemid=66

5. ARRL Article on CLC Contact

The American Radio Relay League (ARRL) ran a story about an

Amateur Radio on the International Space Station (ARISS) contact that took place in October 2008 between the Indianapolis Challenger Learning Center (CLC) and Spaceflight Participant Richard Garriott, W5KWQ. The article, "Hams Mentor Challenger Center Students for Garriott Contact," may be found here:
http://www.arrl.org/news/features/2009/04/08/10758/?nc=1

The ARRL Web site has 100,000 regular readers.

6. ARISS News on Amateur Radio Newsline

On April 3, the Amateur Radio Newsline Report 1652 included an Amateur Radio on the International Space Station (ARISS) news item. The story, "Ham Radio in Space: KE7KDP, KE5AIT and RA3DT Return from the ISS," summarizes the ARISS accomplishments of Charles Simonyi and Mike Fincke during their missions. To view the story, go to: ftp://ftp.arnewsline.org/quincy/News/news.txt

7. Astronaut Training Status

The Amateur Radio on the International Space Station (ARISS) team provided another training session to Mike Fossum on Thursday, April 9 to prepare him for his amateur radio license exam.

8. ARISS Report to WIA

The Wireless Institute of Australia (WIA) will hold its Annual General Meeting (AGM) over the May 1-3 weekend. Amateur Radio on the International Space Station (ARISS) mentor and telebridge station operator Tony Hutchison, V K5ZAI will give his ARISS 2008-09 report. It has been posted on the ARISS Web site under "Latest News."
See: http://www.rac.ca/ariss/oindex.htm

9. ARISS-Related Article in NASA HQ News Briefs

NASA Headquarters News Service cited an op-ed found in the Times of London. The item, written by Lucy and Stephen Hawking, mentions Richard Garriott's mission and how he inspired youth through his numerous radio contacts while onboard the ISS.
See:
http://entertainment.timesonline.co.uk/tol/arts_and_entertainment/books/article6027988.ece

10. Simonyi PowerPoint Presentation

An Amateur Radio on the International Space Station (ARISS) volunteer prepared a PowerPoint presentation on Spaceflight Participant Charles Simonyi's mission and used this during the Milwee Middle School (Longwood, Florida) contact on April 1. To view the slideshow, go to www.mydrive.ch/en. Enter username, "plethra2" and password, "aa4kn_1". Select the "ARISS SLIDE SHOW" folder and download the available files.

11. SuitSat-2 Meeting Held

A SuitSat-2 meeting was held in Phoenix, Arizona on April 3 - 5. The team primarily worked on software, but there was also some final coordination on the cabling and hardware.
The software team was able to run some integration tests and achieved the first radio frequency (RF) output of the system. During the testing, the team demonstrated the continuous wave (CW) and voice message transmissions. Work continues on the solar panel mounting. Amateur Radio on the International Space Station (ARISS) plans to have SuitSat-2 hardware ready for delivery by September.

[ANS thanks Carol, KB3LKI, for the above information]

/EX

73,
This week's ANS Editor,
Dee Interdonato, NB2F

From -5239729393954O9191
X-Google-Thread: 10e8ad,2d039a4faafa37ec,start
X-Google-Thread: 10b9c8,2d039a4faafa37ec,start
X-Google-Attributes: gid10e8ad,gid10b9c8,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!newsfeed2.dallas1.level3.net!news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-111 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Tue, 21 Apr 2009 22:11:25 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 1659
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <001d01c9c2ef$9ace6680$d06b3380$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;

charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1240366285 21817 166.84.1.6 (22 Apr 2009 02:11:25 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Wed, 22 Apr 2009 02:11:25 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to   rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to   rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news1.google.com rec.radio.amateur.space:185 rec.radio.info:621

This report is organized into five (5) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites
Part 5 (S5) - deborbited/returned satellites

SB SAT @ AMSAT W8ISS ANS-111.S1
WSR 111 Part 1 04/21/2009

AMSAT NEWS SERVICE BULLETIN 111.S1
FROM AMSAT HQ SILVER SPRING, MD, April 21, 2009
TO ALL RADIO AMATEURS
BID: $ANS-111.S1

DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008

Status: Operational
Current Mode: Science Mode - Beacon ONLY

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink: 435.530 to 435.570 MHz

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68
[02122009]
=====
VO-52 HAMSAT

```
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink:   435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink:   435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW


Indian Beacon:  145.859330 MHZ CW
Dutch Beacon:   145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is active. Each transponder has a different beacon.
[08072008]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Modes:   FM Repeater - Uplink:    145.880 Mhz FM
                               Downlink: 2401.200 Mhz FM
                 BBS         - Uplink:   1268.700 Mhz FM
                               Downlink:  435.150 Mhz FM
                 Telemetry   - 435.150 MHz

Analog voice downlink:     435.300 MHz FM
                           435.150 MHz FM
                          2401.200 Mhz FM
Analog voice uplink:       145.860 MHZ FM
                           145.880 MHz USB
                           145.920 MHz FM
                          1268.700 MHz FM
Digital Downlinks:         435.150 MHz FM 38k4 PBP, 1 watt output
                           435.150 MHz FM 9k6 Pacsat Broadcast Protocol
                          2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:            145.860 MHz FM 9k6 Pacsat Broadcast Protocol
                          1268.700 mhz FM 9k6 Pacsat Broadcast Protocol
```

Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[04212009]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002

Status: Operational.

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4
Hz. The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute
   timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset
   the 10 minute timer.
[05282007]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Operational
Current Mode: V/u (Mode JA)

Voice/CW (Mode JA)
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage:
http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's
CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/
fo29cwts.htm
[02122009]
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[03232009]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530

Launch Date: November 15, 1974

Status: Operational

Current Mode: Alternating between Mode A and B every 24 hours

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz CW
145.972 MHz CW
435.100 MHz CW
2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
[02122009]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - V/u
Voice - V/v
BBS - V/v
APRS - V/v
SSTV - V/v

Expedition 19 Crew:
Commander: Gennady Padalka
Flight Engineer: Michael Barratt
Flight Engineer: Koichi Wakata KC5ZTA

Available Modes and Frequencies:

Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 9k6
Worldwide packet downlink: 145.825 Mhz FM 9k6

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[04062009]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-111.S2
WSR 111 Part 2 04/21/2009

AMSAT NEWS SERVICE BULLETIN 111.S2
FROM AMSAT HQ SILVER SPRING, MD, April 21, 2009
TO ALL RADIO AMATEURS
BID: $ANS-111.S2

SOHLA-1 (ASTRO TECH.)
Catalog Number: 33496
Launch Date: January 23, 2009

Status: Commisioning

Proposed Frequencies and Modes:
Downlink: 437.505 MHz AFSK/CW
Beacon: 437.505 MHz AFSK/CW

Callsign:

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=101
[03232009]
=====
KAGAYAKI (Solan Co.)
Catalog Number: 33495?
Launch Date: January 23, 2009

Status: In Orbit

Downlink: 437.375 MHZ   FSK9k6/CW
Beacon: 437.375 MHz   FSK9k6/CW

IARU coordination status page:

AMSAT-NA webpage:

[01152009]
=====
STARS (Kagawa Univ.) (Twin Satellites)
Catalog Number: 33498
Launch Date: January 23, 2009

Status: Operational ?

Downlinks: 437.485 MHz FM/CW
           437.465 MHz FM/CW
Beacons: 437.305 MHz FM/CW
           437.275 MHz FM/CW

Callsigns: JR5YBN
           JR5YBO

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=99

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=121&retURL
=/satellites/status.php
[022152009]
=====
KKS-1 (Tokyo MCIT)
Catalog Number: 33499
Launch Date: January 23, 2009

Status: Operational

Downlink: 437.455 MHz AFSK/CW
Beacon: 437.385 MHz AFSK/CW

Callsign: JQ1YYY

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=107

AMSAT-NA webapge:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=120&retURL
=/satellites/status.php
[02212009]
=====
PRISM (Tokyo Univ.)
Catalog Number: 33493
Launch Date: January 23, 2009

Status: Operational ?

```
Downlink: 437.425 MHz AFSK/GMSK/CW
Beacon:   437.250 MHz AFSK/GMSK/CW
```

Callsign: JQ1YCX

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=97

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=119&retURL
=/satellites/status.php
[02212009]
=====
RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number: 32953
Launch Date: May 23, 2008

Status: Operational

```
Curent Modes: Telemetry
              Audio
              Images

Downlinks: 435.315 MHz
           435.215 MHz
```

AMSAT-NA website:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=115&ret
URL=/satellites/status.php

Official website:
http://www.npopm.com/?cid=leoca&caid=43
[02122009]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=94&retURL=
/satellites/status.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=72
[02122009]
=====
CP3
Catalog Number: 31129
Launch Date: April 17,2007

Status: Operational

Current Mode: /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[02122009]
=====
GENESAT-1
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Current Mode: /u

Callsign: KE7EGC

Telemetry Beacon Downlink: 437.0670 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[02212009]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol

Beacon: 437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/xivpicte.htm
[02212009]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003

Status: Operational

Current Mode: /u

Beacon: 436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=96&retURL=/satellites/status.php

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[02212009]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Operational?

Uplink: 1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=56
[02122009]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

```
Status: Operational

Current Modes:   FM Repeater - Uplink:    145.880 Mhz FM
                               Downlink: 2401.200 Mhz FM
                 BBS         - Uplink:   1268.700 Mhz FM
                               Downlink:  435.150 Mhz FM
                 Telemetry   - 435.150 MHz

Analog voice downlink:     435.300 MHz FM
                           435.150 MHz FM
                          2401.200 Mhz FM
Analog voice uplink:       145.860 MHZ FM
                           145.880 MHz USB
                           145.920 MHz FM
                          1268.700 MHz FM
Digital Downlinks:         435.150 MHz FM 38k4 PBP, 1 watt output
                           435.150 MHz FM 9k6 Pacsat Broadcast Protocol
                          2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:            145.860 MHz FM 9k6 Pacsat Broadcast Protocol
                          1268.700 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon:                    435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[04212009]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW
```

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=69&retURL=/satellites/status.php
[02212009]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Telemetry only

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[03302009]
=====
RS-22 RADIO SPORT RS-22
Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only

Current Mode: /u

CW Beacon - 435.352 MHz
            145.818 MHz

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=76&retURL=/satellites/status.php
[02212009]
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990

Status: CW Beacon only

Uplinks: 145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink: 437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[03162009]
=====
CanX-2
Catalog number: 32790
Launch Date: April 28, 2008

Status: Operational in range of ground station only

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[02212009]
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.425 MHz 1k2 baud packet

For the latest project status update please visit the AAUSAT-II web page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[02212009]
=====
CO-65 CUTE-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008

Status: Digipeater

Downlink: 437.475 MHz 9k6 Packet
Uplink: 1267.600 Mhz

Telemetry Beacon:
Downlink: 437.2750 MHz CW

For the latest project status update please visit the Cute-1.7+APD II web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78

Command Station blog website:
http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=112&retURL=/satellites/status.php
[02212009]
=====
Compass-1
Catalog number: 32787
Launch Date: April 28, 2008

Status: Operational

Current Mode: 4k8 MSK packet

Downlink: 437.275 Mhz CW
          437.405 MHz Packet

For the latest project status update please visit the Compass 1 web page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=114&retURL=/satellites/status.php
[02212009]
=====
CO-66 Seeds II
Catalog number: 32791
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.485 MHz

Callsign: JQ1YGU

For the latest project status update please visit the Seeds 2 web page: http://cubesat.aero.cst.nihon-u.ac.jp/english/seeds_2_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=113&retURL=/satellites/status.php

```
[02212009]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - V/u
                      Voice -       V/v
                      BBS -         V/v
                      APRS -        V/v
                      SSTV -        V/v

Expedition 19 Crew:
Commander:                Gennady Padalka
Flight Engineer:          Michael Barratt
Flight Engineer:          Koichi Wakata    KC5ZTA

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink:   145.825 MHz FM 9k6
Worldwide packet downlink: 145.825 Mhz FM 9k6

Voice:
Region 1 voice uplink:     145.200 MHz FM
Region 2/3 voice uplink:   144.490 MHz FM
Worldwide downlink:        145.800 MHz FM

Crossband Repeater:
Repeater Uplinks:         1269.650 MHz FM
                           437.800 MHz FM
                           145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink:         145.800 MHz FM
                           437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink:                  145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian:                   OR4ISS
German:                    DP0ISS
Russian:                   RS0ISS
                           RZ3DZR
United States:             NA1SS
Packet Mailbox:            RS0ISS-11
Digipeater callsign:       ARISS

Official ARISS Webpage:    http://www.rac.ca/ariss
```

ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[040602009]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-111.S3
WSR 111 Part 3 04/21/2009

AMSAT NEWS SERVICE BULLETIN 111.S3
FROM AMSAT HQ SILVER SPRING, MD, April 21, 2009
TO ALL RADIO AMATEURS
BID: $ANS-111.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

CP4
Catalog Number: 31122
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon: 437.325 MHz CW

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=79
[10022008]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: Non-Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder: 145.825 Mhz FM
[01012009]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

```
Proposed Callsign: TBA
Proposed Transmit Frequency:  437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink:         437.250 MHz FM 67Hz CTCSS
Voice Downlink:      2401.835 MHz FM
Packet Up/Downlink:   437.250 MHz 9k6 packet
Packet Downlink      2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non=Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[08132007]
=====
QuakeSat
Catalog Number: 27845
Launch Date: June 30, 2003

Status: ?

Current Mode: 9600 baud data packet

Mode U packet
Downlink: 436.675 MHz 9k6 BPS

Quakesat webpage:
http://www.quakefinder.com/services/quakesat-ssite/
[02212009]
=====
DTUSAT
Catalog Number: 27842
Launch Date: June 30, 2003

Status: Non-Operational
```

```
Current Mode: 2k4 AFSK Packet last reported

Downlink: 437.475MHz

Officail webpage: http://dtusat1.dtusat.dtu.dk/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=101&retURL
=satellites/all_oscars.php
[02212009]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink:   435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)

Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Telemetry only

Uplinks:   145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink:  437.325 MHz

Broadcast callsign: MYSAT3-11
BBS:                MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial land and weather imaging payloads offers FM and FSK
Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as
a collaborative effort between the Malaysian government and Surrey
Satellite Technology Ltd.
[03302009]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational
```

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks

V-band: 145.840 - 145.990 MHz CW/LSB
U-band: 435.550 - 435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks

S2-band: 2401.225 - 2401.475 MHz CW/USB
K-band: 24048.010 - 24048.060 MHz CW/USB
Beacon: 2401.323 MHz
24048.035 MHz

P3-D Telemetry Beacons (IHU)

BEACON	General Beacon(GB)	Middle Beacon(MB)	Engineering Beacon(EB)
2 m	none	145.898 MHz	none
70cm	435.438 MHz	435.588 MHz	435.838 MHz
13cm(1)	2400.188 MHz	2400.338 MHz	2400.588 MHz
13cm(2)	2401.173 MHz	2401.323 MHz	2401.573 MHz
3cm	10450.975 MHz	10451.125 MHz	10451.375 MHz
1.5cm	24047.885 MHz	24048.035 MHz	24048.285 MHz

[07162007]
=====
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: ?
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Non-Operational?

Current Modes: V/U
               L/U

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks: 145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM

         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://asri.technion.ac.il/techsat/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=14&retURL=/satellites/status.php
[03232009]
=====

TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink: 145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Non-operational

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012009]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks: 145.875 MHz FM 1200-baud

145.900 MHz FM 1200-baud
145.925 MHz FM 1200-baud
145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HL01-11
BBS: HL01-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink: 145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21

```
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
LIBERTAD-1
Catalog Number: 31128
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink:   145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[02122009]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990
```

```
Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
[05012006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: SEMI-Operational

Current Mode:  V/u

Uplink:         145.900 MHz FM 1200-baud Manchester FSK (reserved)
                145.920 MHz FM VOICE
                145.940 MHz FM 1200-baud Manchester FSK (reserved)
                145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink:       437.026 MHz USB VOICE
                (1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[12252008]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
```

=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink: 145.8500 MHz MFSK 1200 BPS
Uplink: 145.8700 MHz MFSK 1200 BPS
Uplink: 145.8900 MHz MFSK 1200 BPS
Uplink: 145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984

Status: Non-operational.

Current Mode: /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon: 435.025 MHz
Mode-S Beacon: 2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[01012009]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon: 145.810 MHz (unmodulated carrier)

```
W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink  29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
Beacons:   29.450 MHz
          435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational
```

```
Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon 1:  29.352 MHz (intermittent)
Beacon 2:  29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink:     21.260 to 21.300 MHz CW/USB
Downlink:  145.860 to 145.900 MHz CW/USB

Beacon:    145.860 MHz

Robot:     145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink:   21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon:   29.408 MHz

Robot:    29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-111.S4
WSR 111 Part 4 04/11/2009

AMSAT NEWS SERVICE BULLETIN 111.S4
```

FROM AMSAT HQ SILVER SPRING, MD, April 21, 2009
TO ALL RADIO AMATEURS
BID: $ANS-111.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE PROPOSED FOR LAUNCH AT THIS TIME:

UNITEC
Catalog Number:
Proposed Launch Date: May 2010

Status: Design Phase

Proposed Equipment:

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=141
[01152009]
=====
XW-1
Catalog Number:
Proposed Launch Date: Summer 2009?

Status: Design Phase

Proposed Equipment:
Beacon: 435Mhz, CW 20dBm
Linear transponder: RX: 145Mhz, TX: 435Mhz, 40KHz, 30dBm
FM Transponder: RX: 145Mhz, TX: 435Mhz, 16KHz, 30dBm
Digital store and forward transponder: RX: 145Mhz, TX: 435Mhz, 16KHz, 30dBm

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108
[10092008]
=====
Phase 5a Mars Mission AO-??
Catalog Number:
Proposed Launch Date: 2009 or 2011

Status: Design Phase

For the latest project status update please visit the AMSAT-DL P5-A web page:
http://ticket-to-mars.org
[01222007]
=====
PHASE 3E AO-??
Catalog number:
Proposed Launch Date: ??????

Status: STORAGE

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/
[02212009]
=====
Eagle AO-??
Catalog Number:
Proposed Launch Date: ?????

Status: Design Phase

For the latest project status updates please visit the AMSAT-NA web page: http://www.amsat.org
[02212009]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-111.S5
WSR 111 Part 5 04/21/2009

AMSAT NEWS SERVICE BULLETIN 111.S5
FROM AMSAT HQ SILVER SPRING, MD, April 21, 2009
TO ALL RADIO AMATEURS
BID: $ANS-111.S5

THE FOLLOWING SATELLITES HAVE RE-ENTERED OR HAVE BEEN RETURNED SAFELY:

NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: July 28, 2008

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[01012009]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661

Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

```
Main Downlink:      145.825 Mhz FM APRS AX25
APRS Uplink:        145.825 MHz FM APRS AX25
Voice/PSK31 Uplink:  28.120 MHz
```

Packet to Voice ID: RAFT
[06112007]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Re-Entered
Re-entered: June 18, 2008

```
Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon:             437.2750 MHz CW
```

Callsign: JR8YJT
[01012009]
=====
SO-43 Starshine 3
Catalog Number: 26929
Launch Date: September 30, 2001

Status: Re-Entered
Re-entered: January 21, 2003

Beacon: 145.825Mhz
[02212009]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728

FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at}
amsat.org
NNNN
/EX

From -4409053604487231044
X-Google-Thread: 10e8ad,fa04cc046ac7fdd7,start
X-Google-Thread: 10b9c8,fa04cc046ac7fdd7,start
X-Google-Attributes: gid10e8ad,gid10b9c8,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII
Path: g2news1.google.com!news2.google.com!newsfeed2.dallas1.level3.net!
news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-116 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sat, 25 Apr 2009 21:38:05 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 296
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <001801c9c60f$9e214780$da63d680$@net>

```
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;charset="iso-8859-1"
Content-Transfer-Encoding: quoted-printable
X-Trace: reader1.panix.com 1240709885 7734 166.84.1.6 (26 Apr 2009 01:38:05 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 26 Apr 2009 01:38:05 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to            rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news1.google.com rec.radio.amateur.space:186 rec.radio.info:628
```

AMSAT NEWS SERVICE
ANS-116

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

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* Maurice-Andr� Vigneault, VA2MA Appointed as Canadian AMSAT Delegate
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* Satellite News From India
* APRS Satellite Fleet Expansion Planned
* UT1FG/MM Wet Grids DXpedition in Range of Americas Now
* Satellite Shorts From All Over

SB SAT @ AMSAT $ANS-116.01
Two Weeks and Counting for AMSAT at Dayton

AMSAT News Service Bulletin 116.01
>From AMSAT HQ SILVER SPRING, MD.
April 26, 2009
To All RADIO AMATEURS

BID: $ANS-116.01

A little over two weeks remain before AMSAT opens its 40 Years of Amateur Radio in Space display at the Dayton Hamvention held on May 15-17.

AMSAT's activities begin on Thursday, May 14 with setting up the booth display. The traditional Thursday Night get-together will be held in a new location, the 'Tickets Pub' in suburban Fairborn, Ohio.

The AMSAT Forum will be held on Saturday, May 16 in Meeting Room 5 from 11:15 to 13:30. The schedule includes:

+ AMSAT VP-Member & User Services and SuitSat-2 Systems Engineer Gould Smith, WA4SXM will give a talk on "SuitSat-2 Status Report." Members of the SuitSat-2 team will have a complete operational SuitSat

  prototype with an experiment at the AMSAT Booth.

+ AMSAT VP-Human Space Flight Will Marchant, KC6ROL, will give a status on the ARISS program.

+ ARISS Hardware Manager Lou McFadin, W5DID, will give a talk on "Antennas for the Columbus Module."

+ Richard Garriott, W5WKQ, will speak at the AMSAT Forum about his ARISS activities while onboard the ISS. He will talk about his training, flight, and ham radio operations during the AMSAT Banquet.

Richard will also be at the AMSAT booth to meet members on Friday and Saturday. Specific times will be announced soon.

The outdoor satellite demonstration area will be managed by Drew, KO4MA and Keith, W5IU. It will feature two types of operational stations. One will be the basic handheld station and the second will feature full computer control.

Since this is the 40th Anniversary of AMSAT, we have a great new tee shirt design by Steve Kenwolf to celebrate the event. Forty years of AMSAT memorabilia will be on display. As always there will be new publications, frequency chart, LVB Trackers and premiums for membership renewal.

Check out all the details, including making your AMSAT Banquet reservations on the web pages:
http://www.amsat.org/amsat-new/hamvention/2009/Dayton.php

[ANS thanks Gould, WA4SXM for the above information]

/EX

SB SAT @ AMSAT $ANS-116.02
Maurice-Andr� Vigneault, VA2MA Appointed as Canadian AMSAT Delegate to the ARISS International Working Group

AMSAT News Service Bulletin 116.02
>From AMSAT HQ SILVER SPRING, MD.
April 26, 2009
To All RADIO AMATEURS
BID: $ANS-116.02

AMSAT President Barry Baines, WD4ASW has appointed Maurice-Andr� Vignault, VA2MA/VE3VIG, as the Canadian AMSAT delegate to the ARISS International Working Group. He replaces Stefan Wagener, VE4NSA who resigned due to personal reasons.

Maurice-Andr� was first licensed in 1990. He served 38 years in the Canadian Air Force, Communications and Electronics Branch. He is an active amateur radio operator with satellite experience dating to 2001. He has been conducting an ongoing satellite communications course starting in 2006. He conducted an ARISS School contact in January 2007. He is active in demonstrating satellite communications at the Canada Science and Technology Museum.

He is a member of the Radio Amateurs of Canada and AMSAT. As a member of the AMSAT Field Operations Team, he serves as an Area Coordinator for Ottawa, representing AMSAT in his local community and serving as a mentor to hams wishing to learn about the satellite communications.

Barry noted in an e-mail to ARISS International Working Group Chairman Gaston Bertels, ON4WF, "AMSAT is proud to be able to send such a qualified member to serve with the ARISS Working Group. AMSAT looks forward to many years of continued cooperative activities with ARISS in human space flight."

The ARISS International Working Group includes two delegates appointed by AMSAT. Previously, AMSAT VP-Human Space Flight Will Marchant, KC6ROL was appointed the US AMSAT delegate to the ARISS International Working Group replacing Frank Bauer, KA3HDO. Both Maurice-Andr� Vignault and Will Marchant will be attending the upcoming ARISS International Working Group meeting taking place in June 2009 at ESA/ESTEC in the Netherlands.

[ANS thanks AMSAT President Barry, WD4ASW for the above information]

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SB SAT @ AMSAT $ANS-116.03
Satellite News From India

AMSAT News Service Bulletin 116.03
>From AMSAT HQ SILVER SPRING, MD.
April 26, 2009
To All RADIO AMATEURS
BID: $ANS-116.03

This week India's ISRO Space Agency successfully launched RISAT-2 and ANUSAT from the Satish Dhawan Space Centre SHAR in Sriharikota. RISAT-2 is a Radar Imaging Satellite with the capability to take images of the earth during day and night as well as cloudy conditions to enhance capability for earth observation, especially during floods, cyclones, landslides and in disaster management.

ANUSAT is the first experimental communication satellite built by an Indian University under the over all guidance of ISRO and will demonstrate the technologies related to message store and forward operations. ANUSAT specifications have mentioned amateur radio uplink and downlink frequencies will be used but no user information has been released at this time. The satellite is designed for digital store-and-forward operation.

ANUSAT has a telemetry beacon on 137.400 MHz. David, VK5DG reported, "I just heard AnuSat go over with a loud carrier on 137.400 MHz but no modulation detected. I am using keps for space track object 34808." Additionally, Rodney, KC0ZHF reported, "I also monitored the frequency on orbits 48 and 49 of the satellite and heard a very strong carrier. I scanned UHF frequencies but did not hear any additional downlinks."

In other Amateur Radio news from AMSAT-India Nitin, VU3TYG says the April 2009 newsletter is available at:
http://www.amsatindia.org/Newsletter

AMSAT-India Secretary, Pop, VU2POP says, "We have received many applications for the VO-52 operating award from several different countries. Certificates will be posted by end of May 2009." The certificate is available to Amateur Radio operators who establish two way contact through VO-52 between January 26, 2009 until May 10, 2009.

If you find yourself in India remember to attend the AMSAT-India Workshop on 10 May 09 at the Little Lilly English School, Vidyaranyapura, Bangalore.

[ANS thanks Space Daily Express, Pop VU2POP, and Nitin VU3TYG for the above information]

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SB SAT @ AMSAT $ANS-116.04
APRS Satellite Fleet Expansion Planned

AMSAT News Service Bulletin 116.04
>From AMSAT HQ SILVER SPRING, MD.

April 26, 2009
To All RADIO AMATEURS
BID: $ANS-116.04

Writing from the US Naval Academy Satellite Development Lab this week Bob, WB4APR reported on new satellites with the same APRS packet relay as PCSAT and the ISS that are in the works.

Bob said their design will use the new Byonics all-on-a-board Packet TNC/Radio/Telemetry system. This makes it possible to build a packet satellite out of a single 3.4" square board and 5 NiCd batteries and that is all you need for a tiny APRS satellite.

Bob said, "We are ordering a bunch of them on the APRS Space Channel of 145.825 MHz and hope to encourage other schools and universities to consider including one of these packet transponders in their missions. If we can get up to a dozen of these in space, we will have almost global coverage 24 hours a day from anywhere on the planet!"

These systems are still under development. No launch dates have been announced at this time.

[ANS thanks Bob, WB4APR for the above information]

/EX

SB SAT @ AMSAT $ANS-116.05
UT1FG/MM Wet Grids DXpedition in Range of Americas Now

AMSAT News Service Bulletin 116.05
>From AMSAT HQ SILVER SPRING, MD.
April 26, 2009
To All RADIO AMATEURS
BID: $ANS-116.05

Captain Yuri of the MV Bluebill is now operating as UT1FG/MM from his ship through June, 2009. His sea voyage will take him from Northern Europe, across the Atlantic Ocean, the Gulf of Mexico up to the Mississippi River, then southward toward Mexico and Central America.

Yuri says his current plans are to operate on AO-27, AO-51, SO-50, VO-52, FO-29, and AO-7. Over the past two years he already has logged many North American stations from his ship operations in the Atlantic and Pacific Oceans. QSL via home call UT1FG.

This week Angelo, N5UXT reported working UT1FG/MM in GM24 via FO29.

[ANS thanks Yuri, UT1FG/MM and Angelo, N5UXT for the above information]

/EX

SB SAT @ AMSAT $ANS-116.06
Satellite Shorts From All Over

AMSAT News Service Bulletin 116.06
>From AMSAT HQ SILVER SPRING, MD.
April 26, 2009
To All RADIO AMATEURS
BID: $ANS-116.06

+ Check out William's, PE1RAH design for an ultra-small linear satellite Mode-UV transponder with 23dBm PEP output on 2 meters. He made a video which can be seen at:
  http://www.youtube.com/watch?v=5j60SJroodg

+ The PS8DX Teresina DX Group is on the air this week from Brazil's Canary Island GI97bf on AO-7, FO-29, AO-51, VO-52, SO-50, and ISS (if available).

+ Remember the Hudson Valley Satcom group Net 8 PM EST on Thursday evenings on Echolink node n2eyh-l.

+ Insight as to future amateur satellites in planning can be gleaned from the IARU coordination data available at:
  http://www.amsat.org.uk/iaru/

+ The ISS will be on the air with an ARISS contact with the National Air

  and Space Museum in Washington, D.C. on Space Day, May 2 at 15:23 UTC.

  This will be a telebridge contact via station W6SRJ in California. Students will be pre-recruited, but Space Day participants will also be invited to ask questions. Visitors will participate in hands-on activities, meet astronauts and learn about space from experts and museum displays.

[ANS thanks everyone for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office. With that recall the incident of the bicycle that could not stand up because it was two tired.

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM

```
From -2025562725094366862
X-Google-Thread: a4a23d5f63,74d1a3ab28c93e94,start
X-Google-Attributes: gida4a23d5f63,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news2.google.com!newsfeed2.dallas1.level3.net!
news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-117 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Tue, 28 Apr 2009 22:45:26 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 1659
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000001c9c874$77286f70$65794e50$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1240973127 29775 166.84.1.6 (29 Apr 2009 02:45:27 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Wed, 29 Apr 2009 02:45:27 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news2.google.com rec.radio.amateur.space:212 rec.radio.info:711
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This report is organized into five (5) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites
Part 5 (S5) - deorbited/returned satellites

SB SAT @ AMSAT W8ISS ANS-117.S1
WSR 117 Part 1 04/27/2009

AMSAT NEWS SERVICE BULLETIN 117.S1
FROM AMSAT HQ SILVER SPRING, MD, April 27, 2009

TO ALL RADIO AMATEURS
BID: $ANS-117.S1

DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008

Status: Operational
Current Mode: Science Mode - Beacon ONLY

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink: 435.530 to 435.570 MHz

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68
[02122009]
=====
VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.859330 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is active. Each transponder has a different beacon.
[08072008]
=====
AO-51 ECHO
Catalog number: 28375

Launch date: June 29, 2004

Status: Operational

Current Modes: FM Repeater - Uplink: 145.920 Mhz FM
                               Downlink: 435.300 Mhz FM
                 BBS   - Uplink: 1268.700 Mhz FM
                               Downlink: 435.150 Mhz FM
                 Telemetry   - 435.150 MHz

Analog voice downlink: 435.300 MHz FM
                           435.150 MHz FM
                          2401.200 Mhz FM
Analog voice uplink: 145.860 MHZ FM
                           145.880 MHz USB
                           145.920 MHz FM
                          1268.700 MHz FM
Digital Downlinks: 435.150 MHz FM 38k4 PBP, 1 watt output
                           435.150 MHz FM 9k6 Pacsat Broadcast Protocol
                          2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Pacsat Broadcast Protocol
                          1268.700 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[04272009]

=====

SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002

Status: Operational.

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:

V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz. The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10 minute timer.
[05282007]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Operational
Current Mode: V/u (Mode JA)

Voice/CW (Mode JA)
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage:
http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts.htm

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[02122009]
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993

Status: Operational

Current Mode: V/u

Uplink:   145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[03232009]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational

Current Mode: Alternating between Mode A and B every 24 hours

Uplink:   145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink:  29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons:   29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
[02122009]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - V/u
                      Voice -       V/v
```

BBS - V/v
APRS - V/v
SSTV - V/v

Expedition 19 Crew:
Commander: Gennady Padalka
Flight Engineer: Michael Barratt
Flight Engineer: Koichi Wakata KC5ZTA

Available Modes and Frequencies:

Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 9k6
Worldwide packet downlink: 145.825 Mhz FM 9k6

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[04062009]

NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-117.S2
WSR 117 Part 2 04/27/2009

AMSAT NEWS SERVICE BULLETIN 117.S2
FROM AMSAT HQ SILVER SPRING, MD, April 27, 2009
TO ALL RADIO AMATEURS
BID: $ANS-117.S2

SOHLA-1 (ASTRO TECH.)
Catalog Number: 33496
Launch Date: January 23, 2009

Status: Commisioning

Proposed Frequencies and Modes:
Downlink: 437.505 MHz AFSK/CW
Beacon: 437.505 MHz AFSK/CW

Callsign:

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=101
[03232009]
=====
KAGAYAKI (Solan Co.)
Catalog Number: 33495?
Launch Date: January 23, 2009

Status: In Orbit

Downlink: 437.375 MHZ FSK9k6/CW
Beacon: 437.375 MHz FSK9k6/CW

IARU coordination status page:

AMSAT-NA webpage:

[01152009]
=====
STARS (Kagawa Univ.) (Twin Satellites)
Catalog Number: 33498
Launch Date: January 23, 2009

Status: Operational ?

Downlinks: 437.485 MHz FM/CW
437.465 MHz FM/CW
Beacons: 437.305 MHz FM/CW
437.275 MHz FM/CW

Callsigns: JR5YBN
           JR5YBO

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=99

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=121&retURL
=/satellites/status.php
[022152009]
=====
KKS-1 (Tokyo MCIT)
Catalog Number: 33499
Launch Date: January 23, 2009

Status: Operational

Downlink: 437.455 MHz AFSK/CW
Beacon: 437.385 MHz AFSK/CW

Callsign: JQ1YYY

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=107

AMSAT-NA webapge:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=120&retURL
=/satellites/status.php
[02212009]
=====
PRISM (Tokyo Univ.)
Catalog Number: 33493
Launch Date: January 23, 2009

Status: Operational ?

Downlink: 437.425 MHz AFSK/GMSK/CW
Beacon: 437.250 MHz AFSK/GMSK/CW

Callsign: JQ1YCX

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=97

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=119&retURL
=/satellites/status.php
[02212009]
=====
RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number: 32953
Launch Date: May 23, 2008

Status: Operational

Curent Modes: Telemetry
              Audio
              Images

Downlinks: 435.315 MHz
           435.215 MHz

AMSAT-NA website:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=115&retURL=/satellites/status.php

Official website:
http://www.npopm.com/?cid=leoca&caid=43
[02122009]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=94&retURL=/satellites/status.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=72
[02122009]
=====
CP3
Catalog Number: 31129
Launch Date: April 17,2007

Status: Operational

Current Mode: /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[02122009]
=====
GENESAT-1
Catalog Number: 29655

```
Launch Date: December 16, 2006

Status: Operational

Current Mode: /u

Callsign: KE7EGC

Telemetry Beacon Downlink: 437.0670 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[02212009]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon:             437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/xivpicte.htm
[02212009]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003

Status: Operational

Current Mode: /u

Beacon:     436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=96&retURL
=/satellites/status.php

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[02212009]
=====
CO-56 CUTE-1.7 + APD
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```
Catalog number: 28941
Launch date: February 21, 2006

Status: Operational?

Uplink:  1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=56
[02122009]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Modes:   FM Repeater - Uplink:    145.920 Mhz FM
                               Downlink:  435.300 Mhz FM
                 BBS         - Uplink:   1268.700 Mhz FM
                               Downlink:  435.150 Mhz FM
                 Telemetry   - 435.150 MHz

Analog voice downlink:     435.300 MHz FM
                           435.150 MHz FM
                          2401.200 Mhz FM
Analog voice uplink:       145.860 MHZ FM
                           145.880 MHz USB
                           145.920 MHz FM
                          1268.700 MHz FM
Digital Downlinks:         435.150 MHz FM 38k4 PBP, 1 watt output
                           435.150 MHz FM 9k6 Pacsat Broadcast Protocol
                          2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:            145.860 MHz FM 9k6 Pacsat Broadcast Protocol
                          1268.700 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon:                    435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
```

```
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[04272009]
=====
QuakeSat
Catalog Number: 27845
Launch Date: June 30, 2003

Status: Telemetry only

Current Mode: 9600 baud data packet

Mode U packet
Downlink: 436.675 MHz 9k6 BPS

Quakesat webpage:
http://www.quakefinder.com/services/quakesat-ssite/
[04272009]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=69&retURL
=/satellites/status.php
[02212009]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Telemetry only

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink:        144.390 Mhz 1200 Baud
```

```
PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[03302009]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Telemetry only

Current Modes:
Telemetry : /u

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign:       4XTECH-12

More information of GO-32 can be found at:
http://asri.technion.ac.il/techsat/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=14&retURL
=/satellites/status.php
[04272009]
=====
RS-22 RADIO SPORT RS-22
Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only

Current Mode:  /u

CW Beacon - 435.352 MHz
            145.818 MHz

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=76&retURL
=/satellites/status.php
[02212009]
=====
LO-19 LUSAT
```

```
Catalog number: 20442
Launch date: January 22, 1990

Status: CW Beacon only

Uplinks:          145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink:      437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[03162009]
=====
CanX-2
Catalog number: 32790
Launch Date: April 28, 2008

Status: Operational in range of ground station only

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web
page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[02212009]
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.425 MHz 1k2 baud packet

For the latest project status update please visit the AAUSAT-II web
page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[02212009]
=====
CO-65 CUTE-1.7+APD II
```

Catalog number: 32785
Launch Date: April 28, 2008

Status: Digipeater

Downlink: 437.475 MHz 9k6 Packet
Uplink: 1267.600 Mhz

Telemetry Beacon:
Downlink: 437.2750 MHz CW

For the latest project status update please visit the Cute-1.7+APD II
web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78

Command Station blog website:
http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=112&retURL
=/satellites/status.php
[02212009]
=====
Compass-1
Catalog number: 32787
Launch Date: April 28, 2008

Status: Operational

Current Mode: 4k8 MSK packet

Uplink: 145.980 MHz FM
Downlink: 437.275 Mhz CW
          437.405 MHz Packet

For the latest project status update please visit the Compass 1 web
page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=114&retURL
=/satellites/status.php
[04272009]
=====
CO-66 Seeds II
Catalog number: 32791
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.485 MHz

Callsign: JQ1YGU

For the latest project status update please visit the Seeds 2 web page: http://cubesat.aero.cst.nihon-u.ac.jp/english/seeds_2_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=113&retURL=/satellites/status.php
[02212009]

=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - V/u
Voice - V/v
BBS - V/v
APRS - V/v
SSTV - V/v

Expedition 19 Crew:
Commander: Gennady Padalka
Flight Engineer: Michael Barratt
Flight Engineer: Koichi Wakata KC5ZTA

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 9k6
Worldwide packet downlink: 145.825 Mhz FM 9k6

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[040602009]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-117.S3
WSR 117 Part 3 04/27/2009

AMSAT NEWS SERVICE BULLETIN 117.S3
FROM AMSAT HQ SILVER SPRING, MD, April 27, 2009
TO ALL RADIO AMATEURS
BID: $ANS-117.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

CP4
Catalog Number: 31122
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon: 437.325 MHz CW

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=79
[10022008]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

```
Status: Non-Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder:  145.825 Mhz FM
[01012009]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency:  437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink:         437.250 MHz FM 67Hz CTCSS
Voice Downlink:      2401.835 MHz FM
Packet Up/Downlink:   437.250 MHz 9k6 packet
Packet Downlink      2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non=Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[08132007]
=====
DTUSAT
Catalog Number: 27842
Launch Date: June 30, 2003

Status: Non-Operational

Current Mode: 2k4 AFSK Packet last reported
```

Downlink: 437.475MHz

Officail webpage: http://dtusat1.dtusat.dtu.dk/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=101&retURL=satellites/all_oscars.php
[02212009]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)

Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Telemetry only

Uplinks: 145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial land and weather imaging payloads offers FM and FSK
Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as
a collaborative effort between the Malaysian government and Surrey
Satellite Technology Ltd.
[03302009]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

```
Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink:   145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS:                SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink:   145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
V-band:   145.840 -  145.990 MHz CW/LSB
U-band:   435.550 -  435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB
```

Downlinks

S2-band: 2401.225 - 2401.475 MHz CW/USB
K-band: 24048.010 - 24048.060 MHz CW/USB
Beacon: 2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)

BEACON	General Beacon(GB)	Middle Beacon(MB)	Engineering Beacon(EB)
2 m	none	145.898 MHz	none
70cm	435.438 MHz	435.588 MHz	435.838 MHz
13cm(1)	2400.188 MHz	2400.338 MHz	2400.588 MHz
13cm(2)	2401.173 MHz	2401.323 MHz	2401.573 MHz
3cm	10450.975 MHz	10451.125 MHz	10451.375 MHz
1.5cm	24047.885 MHz	24048.035 MHz	24048.285 MHz

[07162007]

=====

OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]

=====

UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]

=====

SO-35 SUNSAT
Catalog Number: ?
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz

Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz
145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink: 145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

```
Status: Non-operational

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign:       POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012009]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational
```

```
Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HL01-11
BBS: HL01-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
```

```
[01152007]
=====
LIBERTAD-1
Catalog Number: 31128
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink:   145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[02122009]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
[05012006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: SEMI-Operational

Current Mode:  V/u

Uplink:         145.900 MHz FM 1200-baud Manchester FSK (reserved)
                145.920 MHz FM VOICE
                145.940 MHz FM 1200-baud Manchester FSK (reserved)
                145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink:       437.026 MHz USB VOICE
                (1200-baud PSK - MBL Telemetry Only)
```

```
Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[12252008]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984

Status: Non-operational.

Current Mode:  /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
```

```
UHFBeacon:          435.025 MHz
Mode-S Beacon:     2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[01012009]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon:   145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink  29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational
```

```
Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
Beacons:   29.450 MHz
          435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon 1:  29.352 MHz (intermittent)
Beacon 2:  29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink:     21.260 to 21.300 MHz CW/USB
Downlink:  145.860 to 145.900 MHz CW/USB

Beacon:    145.860 MHz

Robot:     145.908 MHz
```

[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-117.S4
WSR 117 Part 4 04/27/2009

AMSAT NEWS SERVICE BULLETIN 117.S4
FROM AMSAT HQ SILVER SPRING, MD, April 27, 2009
TO ALL RADIO AMATEURS
BID: $ANS-117.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE PROPOSED FOR LAUNCH AT THIS TIME:

UNITEC
Catalog Number:
Proposed Launch Date: May 2010

Status: Design Phase

Proposed Equipment:

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=141
[01152009]
=====
XW-1
Catalog Number:
Proposed Launch Date: Summer 2009?

Status: Design Phase

Proposed Equipment:
Beacon: 435Mhz, CW 20dBm
Linear transponder: RX: 145Mhz, TX: 435Mhz, 40KHz, 30dBm
FM Transponder: RX: 145Mhz, TX: 435Mhz, 16KHz, 30dBm
Digital store and forward transponder: RX: 145Mhz, TX: 435Mhz, 16KHz,
30dBm

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108
[10092008]
=====
Phase 5a Mars Mission AO-??
Catalog Number:
Proposed Launch Date: 2009 or 2011

Status: Design Phase

For the latest project status update please visit the AMSAT-DL P5-A web page:
http://ticket-to-mars.org
[01222007]
=====
PHASE 3E AO-??
Catalog number:
Proposed Launch Date: ??????

Status: STORAGE

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/
[02212009]
=====
Eagle AO-??
Catalog Number:
Proposed Launch Date: ?????

Status: Design Phase

For the latest project status updates please visit the AMSAT-NA web page: http://www.amsat.org
[02212009]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-117.S5
WSR 117 Part 5 04/27/2009

AMSAT NEWS SERVICE BULLETIN 117.S5
FROM AMSAT HQ SILVER SPRING, MD, April 27, 2009
TO ALL RADIO AMATEURS
BID: $ANS-117.S5

THE FOLLOWING SATELLITES HAVE RE-ENTERED OR HAVE BEEN RETURNED SAFELY:

NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

```
Status: Re-Entered
Re-entered: July 28, 2008

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[01012009]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink:      145.825 Mhz FM APRS AX25
APRS Uplink:        145.825 MHz FM APRS AX25
Voice/PSK31 Uplink:  28.120 MHz

Packet to Voice ID: RAFT
[06112007]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Re-Entered
Re-entered: June 18, 2008

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon:             437.2750 MHz CW

Callsign: JR8YJT
[01012009]
=====
SO-43 Starshine 3
Catalog Number: 26929
Launch Date: September 30, 2001

Status: Re-Entered
Re-entered: January 21, 2003
```

Beacon: 145.825Mhz
[02212009]
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ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at} amsat.org

NNNN
/EX

```
From 772564951509005817
X-Google-Thread: a4a23d5f63,c834fffc321b7e63,start
X-Google-Attributes: gida4a23d5f63,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news2.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx02.iad01.newshosting.com!newshosting.com!
198.186.194.249.MISMATCH!transit3.readnews.com!news-out.readnews.com!news-
xxxfer.readnews.com!panix!panix2.panix.com!not-for-mail
From: rram@panix.com (rec.radio.amateur.moderated Admin)
Newsgroups:
rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.rad
io.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amat
eur.space,rec.radio.info
Subject: Crossposting Permitted to rec.radio.amateur.moderated
Followup-To: poster
Date: 1 May 2009 02:00:03 -0400
Organization: rec.radio.amateur.moderated Moderation Team
Lines: 47
Approved: rec-radio-info@panix.com
Distribution: world
Expires: 03 Jun 2009 02:00:01 -0000
Message-ID: <radio/ham-radio/moderated/crossposting-1-1241157601@panix.com>
Reply-To: rec-radio-amateur-moderated-request@panix.com
(rec.radio.amateur.moderated Admin)
NNTP-Posting-Host: panix2.panix.com
X-Trace: reader1.panix.com 1241157603 22010 166.84.1.2 (1 May 2009 06:00:03 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Fri, 1 May 2009 06:00:03 +0000 (UTC)
Summary: Short reminder for unmoderated newsgroups that crossposting is permitted
Keywords: FAQ, ham, amateur, radio, moderated, unmoderated, crossposting,
permitted
Xref: g2news2.google.com rec.radio.amateur.antenna:11478 rec.radio.amateur.dx:380
rec.radio.amateur.equipment:1510 rec.radio.amateur.homebrew:2654
rec.radio.amateur.misc:4227 rec.radio.amateur.policy:26086
rec.radio.amateur.space:213 rec.radio.info:713

Posted-By: auto-faq 3.3.2 beta (PGPMoose V2.0, Perl 5.005)
Archive-name: radio/ham-radio/moderated/crossposting
Revision: 1.1 2009/04/12 19:42:04
Posting-Frequency: posted monthly
URL: http://www.panix.com/~rram/usenet/rram/index.html
```

Changes followed by "|".

After a 30-day public discussion and feedback period to gauge reader opinions in March of 2009:

http://groups.google.com/group/rec.radio.amateur.moderated/browse_thread/thread/d7d337db35f23326

the rec.radio.amateur.moderated Moderation Team has decided to consider amending its charter, and permit limited simultaneous crossposting to rec.radio.amateur.moderated and one other unmoderated amateur-radio-related discussion newsgroup. We are currently trying this on a temporary basis (90 days, through early July 2009), and adopt it permanently if successful.

Approved rec.radio.amateur.* newsgroups are those that are currently listed in the latest version of the "List of Big Eight Newsgroups" which is crossposted monthly to news.announce.newgroups, news.groups, and news.lists.misc.

Approved alt.radio.amateur.* and alt.ham-radio.* newsgroups are those that have been created consistent with the suggestions in "So You Want to Create an Alt Newsgroup" at:

  http://www.faqs.org/faqs/alt-creation-guide/

Approved regional hierarchy newsgroups are those that contain either "radio.amateur" or "ham-radio" in their names, including uk.radio.amateur and aus.radio.amateur.misc.

We will make every reasonable effort to keep our list of approved newsgroups up-to-date. In case we have overlooked any, and a submission is rejected in error as a result, the rejected submitter can E-mail us at our administrative contact address (in the signature at the bottom of this article, and the default Reply-To for the rejection message) requesting that it be added, and that the article be approved. We may still choose to reject articles crossposted to any alt.* newsgroup with an inappropriate name, including obscene language, embedded name-calling, or encouragement of unlawful conduct.

Please direct any comments, questions, or criticisms to
rec-radio-amateur-moderated-request@panix.com.

From 1524862146446680413
X-Google-Thread: a4a23d5f63,def5b9e10e5f6ae7,start
X-Google-Attributes: gida4a23d5f63,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII
Path: g2news2.google.com!news2.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx01.iad01.newshosting.com!newshosting.com!
198.186.194.249.MISMATCH!transit3.readnews.com!news-xxxfer.readnews.com!news-
out.readnews.com!transit4.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-132 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space

Date: Sun, 3 May 2009 09:58:42 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 409
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000701c9cbf7$3ba15800$b2e40800$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;charset="iso-8859-1"
Content-Transfer-Encoding: quoted-printable
X-Trace: reader1.panix.com 1241359122 24999 166.84.1.6 (3 May 2009 13:58:42 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 3 May 2009 13:58:42 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news2.google.com rec.radio.amateur.space:214 rec.radio.info:720

AMSAT NEWS SERVICE
ANS-132

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* AO-51 Scehdule for May 2009
* 2009 AMSAT Field Day Rules
* AMSAT DXpedition Loaner Gear Available
* Opening on AO-51 Operations Committee
* AMSAT Awards
* ARISS Status - 27 April 2009

SB SAT @ AMSAT $ANS-132.01
AO-51 Schedule for May 2009

AMSAT News Service Bulletin 132.01
From AMSAT HQ SILVER SPRING, MD.
May 3, 2009
To All RADIO AMATEURS
BID: $ANS-132.01

Due to rapidly increasing eclipse lengths throughout May, we need to keep the satellite in "normal" mode for Whole Orbit Data (WOD) collection via the BBS. Power output will steadily be decreased throughout the month.

April 27 - May 31

FM Repeater, V/U
Uplink: 145.920 MHz FM
Downlink: 435.300 MHz FM

9k6 BBS and Telemetry
Uplink: 1268.700 MHz FM
Downlink: 435.150 MHz FM

73, Drew KO4MA
AMSAT-NA VP Operations

[ANS thanks Drew, KO4MA, for the above information]

/EX

SB SAT @ AMSAT $ANS-132.02
2009 AMSAT Field Day Rules

AMSAT News Service Bulletin 132.02
From AMSAT HQ SILVER SPRING, MD.
May 3, 2009
To All RADIO AMATEURS
BID: $ANS-132.02

The AMSAT Field Day 2009 event is open to all Amateur Radio operators. Amateurs are to use the exchange as specified in ARRL rules for Field Day. The AMSAT competition is to encourage the use of all amateur satellites, both analog and digital. Note that no points will be credited for any contacts beyond the ONE allowed via each single-channel FM satellite. Operators are encouraged not to make any extra contacts via theses satellites (Ex: AO-27 & SO-50).

CW contacts and digital contacts are worth three points as outlined below.

1. Analog Transponders

ARRL rules apply, except:

- Each phone, CW, and digital segment ON EACH SATELLITE TRANSPONDER is considered to be a separate band.
- CW and digital (RTTY, PSK-31, etc.) contacts count THREE points each.
- Stations are limited to one (1) completed QSO on any single channel FM satellite. If AO-51 has the V/U and L/S modes turned on, one contact each is allowed. If the PBBS is on - see Pacsats below, ISS (1 phone and 1 digital), Contacts with the ISS crew will count for one contact if they are active. PCSat (I, II, etc.) (1 digital),
- The use of more than one transmitter at the same time on a single satellite transponder is prohibited.

2. Digital Transponders

For the Pacsats (GO-32, AO-51) or �Store and Forward� hamsats, each satellite is considered a separate band. Do not post "CQ" messages. Simply upload ONE greeting message to each satellite and download as many greeting messages as possible from each satellite. The subject of the uploaded file should be posted as Field Day Greetings, addressed to ALL. The purpose of this portion of the competition is to demonstrate digital satellite communications to other Field Day participants and observers. Do not reply to the Field Day Greetings addressed to ALL.

The following uploads and downloads count as three-point digital contacts.

(a) Upload of a satellite Field Day Greetings file (one per satellite).

(b) Download of Satellite Field Day Greetings files posted by other stations.

Downloads of non- Field Day files or messages not addressed to ALL are not to be counted for the event. Save DIR listings and message files for later "proof of contact."

Please note AMSAT uploaded messages do not count for QSO points under the ARRL rules.

Satellite digipeat QSO's and APRS short-message contacts are worth three points each, but must be complete verified two-way exchanges. Remember, only one digipeat contact is allowed for the ISS and other satellites in this mode. The use of terrestrial gateway stations or internet gateways (i.e. EchoLink, IRLP, etc.) to uplink/downlink is not allowed.

3. Operating Class

Stations operating portable and using emergency power (as per ARRL Field Day rules) are in a separate operating class from those at home connected to commercial power. On the report form simply check off Emergency or Commercial for the Power Source and be sure to specify your ARRL operating class (2A, 1C, etc.).

AND FINALLY...

The Satellite Summary Sheet should be used for submission of the AMSAT Field Day competition and be received by KK5DO (email or postal mail) by 11:59 P.M. CDT, Monday, July 13, 2009. The preferred method for submitting your log is via e-mail to kk5do@amsat.org or kk5do@arrl.net.

You may also use the postal service but give plenty of time for your results to arrive by the submission date. Add photographs or other interesting information so that can be used an article for the Journal.

You will receive an email back (within one or two days) from me when I receive your email submission. If you do not receive a confirmation message, then I have not received your submission. Try sending it again or send it to my other email address.

If mailing your submission, the address is:

Bruce Paige, KK5DO
Director of Awards and Contests
PO Box 310
Alief, TX 77411-0310.

Certificates will be awarded to the first-place emergency power/portable station at the AMSAT General Meeting and Space Symposium in October, 2009. Certificates will also be awarded to the second and third place portable/emergency operation in addition to the first-place home station running on emergency power. Stations submitting high, award-winning scores will be requested to send in dupe sheets for analog contacts and message listings for digital downloads.

Additional information and a copy of the submission form is available at http://www.amsatnet.com/2009fd.pdf

[ANS thanks Bruce, KK5DO, for the above information]

/EX

SB SAT @ AMSAT $ANS-132.03
AMSAT DXpedition Loaner Gear Available

AMSAT News Service Bulletin 132.03
From AMSAT HQ SILVER SPRING, MD.
May 3, 2009
To All RADIO AMATEURS
BID: $ANS-132.03

AMSAT DXpedition loaner gear is available to members for use activating a DXCC entity or rare grids such as on a cruise. Currently AMSAT has two Arrow antennas, and a D7 handheld available for loan. Please contact Drew at ko4ma@amsat.org for more information.

[ANS thanks Drew, KO4MA, for the above information]

/EX

SB SAT @ AMSAT $ANS-132.04
Opening on AO-51 Operations Committee

AMSAT News Service Bulletin 132.04
From AMSAT HQ SILVER SPRING, MD.
May 3, 2009
To All RADIO AMATEURS

BID: $ANS-132.04

We currently have an opening on the AO-51 Operations Committee for an
enthusiastic individual interested in helping with scheduling, answering
questions about operations, and supporting AO-51 in general. Interested
parties are required to be an AMSAT member in good standing, have
regular
access to email, and be experienced in many of the modes in which AO-51
operates in order to be considered. This is an excellent opportunity to
get
involved with AMSAT for those new to volunteering for the organization.

I don't expect to announce the new member until after Dayton. Also,
please
be patient while waiting for a response. Email the Operations Committee
at
ao51-modes@amsat.org, directly to me at ko4ma@amsat.org, or see me in
person
at Dayton.

73, Drew KO4MA
AMSAT-NA VP Operations

[ANS thanks Drew, KO4MA, for the above information]

/EX

SB SAT @ AMSAT $ANS-132.05
AMSAT Awards

AMSAT News Service Bulletin 132.05
From AMSAT HQ SILVER SPRING, MD.
May 3, 2009
To All RADIO AMATEURS
BID: $ANS-132.05

There continues to be a very high interest in AMSAT Awards which means a
lot of new operators on the satellites.

We would like to welcome the following to the satellite community. They
have made their first satellite contact and are now members of the AMSAT
Satellite Communicators Club.

Benigno Gomez, XE2YBG
Chris Lemon, KB9CL
Evangelos Kafetzopoulos SV1EEK
James Cutter, W7OJS
Jim McCullough, KI4TWA
Steve Niles, N5EN

The following have earned the AMSAT Satellite Communications Achievement Award.

L. Val Hanney, KN7D #486
Benigno Gomez, XE2YBM #487
Steve Niles, N5EN #488
(We are approaching number 500 on this award)

To see all the awards visit http://www.amsat.org or http://www.amsatnet.com

Bruce Paige, KK5DO
AMSAT Director Contests and Awards

[ANS thanks Bruce, KK5DO, for the above information]

/EX

SB SAT @ AMSAT $ANS-132.06
ARISS Status - 27 April 2009

AMSAT News Service Bulletin 132.06
From AMSAT HQ SILVER SPRING, MD.
May 3, 2009
To All RADIO AMATEURS
BID: $ANS-132.06

1. Ashland Contact Successful

On Monday, April 20, St. Edward School in Ashland, Ohio experienced an Amateur
Radio on the International Space Station (ARISS) contact. Koichi Wakata, KC5ZTA
answered 13 questions posed to him by 12 children as approximately 170 students
and teachers looked on. The audio was fed into the EchoLink AMSAT and JK1ZRW
servers and received four connections from the U.S., England and Brazil.
Television channel 39 and the Times-Gazette both covered the event. The newspaper article may be found here:
http://www.times-gazette.com/news/article/4570900

2. Astronaut Training Status

Astronaut Mike Fossum took and passed his amateur radio license exam on Wednesday, April 15. His new callsign is KF5AQG.

3. CQ Magazine Article on ARISS Contact

Bob Hopkins, WB2UDC wrote an article on the Amateur Radio on the

International Space Station (ARISS) contact between youth attending the Berkeley Heights Recreation Summer Playground in New Jersey and Expedition 17�s Greg Chamitoff, KD5PKZ. NPARC (New Providence Amateur Radio Club) assisted with the contact which took place on August 13, 2008. The story, �Believe in Your Dreams - Anatomy of an ARISS Contact,� was published in the April 2009 issue of CQ Magazine.

4. Marcelino Canino Canino Contact Video

Marcelino Canino Canino Middle School in Dorado, Puerto Rico, a 2005 NASA Explorer School, experienced a successful Amateur Radio on the International Space Station (ARISS) contact on March 31. The video of students speaking with Charles Simonyi, KE7KDP/HA5SIK is now available on YouTube. See:
http://www.youtube.com/watch?v=toOAAxEhKRA

5. Article on Simonyi Contacts

Amateur Radio on the International Space Station (ARISS) member Maurice-Andr� Vigneault, VE3VIG wrote a short story for the Ottawa Valley Mobile Radio Club (OVMRC) news bulletin, The Rambler and Radio Amateurs of Canada (RAC) magazine, TCA. The article is about contacts made between the Canada Science and Technology Museum's VE3JW Amateur Radio Exhibit and Spaceflight Participant Charles Simonyi, KE7KDP/HA5SIK during his recent ISS flight. �Space Contact� may be found on page 7 of the April 2009 issue of The Rambler. See:
http://www.pdfdownload.org/pdf2html/pdf2html.php?url=http%3A%2F%2Fwww.ovmrc.on.ca%2FRambler%2FRam2009-04.pdf&images=yes

[ANS thanks Carol, KB3LKI, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's

Club. Members of the President's Club, as sustaining donors to AMSAT
Project
Funds, will be eligible to receive additional benefits. Application
forms
are
available from the AMSAT Office.

73,
This week's ANS Editor,
Lee McLamb, KU4OS

From -3406254792322358837
X-Google-Thread: addc8bf063,6ec565e382203f79,start
X-Google-Attributes: gidaddc8bf063,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news3.google.com!feeder.news-service.com!
transit4.hitnews.eu!border1.nntp.ams.giganews.com!nntp.giganews.com!
newsfeed101.telia.com!megatron.dk.telia.net!news.astraweb.com!
border1.a.newsrouter.astraweb.com!not-for-mail
From: Chris Steyaert <observations@rmob.org>
Newsgroups: rec.radio.amateur.space,sci.astro.amateur
Subject: Radio Meteor Obs. Bull. April 2009 Lyrids
Date: Wed, 06 May 2009 21:34:30 +0200
Message-ID: <0hp305dq7qj6od1mmadt19vmd134q3la2b@4ax.com>
X-Newsreader: Forte Agent 1.93/32.576 English (American)
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Lines: 13
Organization: Unlimited download news at news.astraweb.com
NNTP-Posting-Host: 7ad7512d.news.astraweb.com
X-Trace: DXC=5o@h1]fC4EEc_WgCkn9MLEL?
0kYOcDh@J<R@7^5hEKZEQK[oiT6IR5JKX07\YZ`QZFSL>]64OnUQOk2joB0`2XdI
Xref: g2news2.google.com rec.radio.amateur.space:215 sci.astro.amateur:18987

Radio Meteor Observation Bulletin No. 189 of April 2009 (78 K) is available now
as

http://www.rmob.org/rmobtext/rmob0904.txt

More information and the visual presentation of the hourly forward scatter
counts can be found on

http://www.rmob.org

Chris

```
From 1358252306316850671
X-Google-Thread: 8f86f75953,b5bf875a3e33a19b,start
X-Google-Attributes: gid8f86f75953,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news1.google.com!border1.nntp.dca.giganews.com!
border2.nntp.dca.giganews.com!nntp.giganews.com!backlog2.nntp.dca.giganews.com!
nntp.westnet.com.au!news.westnet.com.au.POSTED!not-for-mail
NNTP-Posting-Date: Thu, 07 May 2009 07:03:00 -0500
From: "Peter" <colleenpeter@westnet.com.au>
Newsgroups: rec.radio.amateur.space
Subject: Space junk re-entry over Northam Western Australia
Date: Thu, 7 May 2009 20:02:58 +0800
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.5512
X-RFC2646: Format=Flowed; Original
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.5579
Message-ID: <_MydnaL4w4NoUJ_XnZ2dnUVZ8qCdnZ2d@westnet.com.au>
Lines: 11
X-Usenet-Provider: http://www.giganews.com
NNTP-Posting-Host: 58.7.52.64
X-Trace: sv3-XbxMkTXINOStEYsWsx6+Dv0Mzt0htE271Xt/
RjBg4xCUP817qHnrGjeKfeMC9K0oaWujFci6JUmhNsS!
xjIjY9Hz0PKmttwAaHFRmGuTNAeHlqFJU9UNX+Nt+6NqpNgULhwVm2EO9C4RJagfLT0hKc70YhpK!kA9/
ttLImyS0Q8wM
X-Complaints-To: abuse@westnet.com.au
X-Abuse-and-DMCA-Info: Please be sure to forward a copy of ALL headers
X-Abuse-and-DMCA-Info: Otherwise we will be unable to process your complaint
properly
X-Postfilter: 1.3.39
X-Original-Bytes: 1453
Xref: g2news2.google.com rec.radio.amateur.space:216
```

Noticed a nice bright re-entry over Northam Western Australia at 7:40 local time 07/05/2009, over head slightly to the North heading from east to the west as it broke up.
Looked relatively large. Has any body any clues to what it may have been?

--
Peter

http://members.optushome.com.au/vk6ysf/vk6ysf/main.htm

```
From 6785018618061211519
X-Google-Thread: a4a23d5f63,65a78de23580f61a,start
X-Google-Attributes: gida4a23d5f63,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
```

Path: g2news2.google.com!news1.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx01.iad01.newshosting.com!209.197.12.246.MISMATCH!
nx02.iad01.newshosting.com!newshosting.com!198.186.194.249.MISMATCH!news-out.readnews.com!transit3.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-126 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Thu, 7 May 2009 21:53:09 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 1659
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <001601c9cf7f$b0fce610$12f6b230$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
    charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1241747589 10549 166.84.1.6 (8 May 2009 01:53:09 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Fri, 8 May 2009 01:53:09 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to   rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to   rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
x-cr-hashedpuzzle: nu0= ACxp AKVK A+QR CJha CMo1 CZ90 E8p1 FJqF IZQL IiPF JGb+ JJ9i LGgc LaBw
L0zP;1;cgBlAGMALQByAGEAZABpAG8ALQBpAG4AZgBvAEAAcABhAG4AaQB4AC4AYwBvAG0A;Sosha1_v1;7;
{A54799ED-73A1-4EDD-91C3-602107C97EC4};awA5AGoAawBtAEAAYwBvAG0AYwBhAHMAdAAuAG4AZQB0AA==;Fri, 08 May 2009 01:52:36 GMT;VwBTAFIALQAxADIANgAgAEEATQBTAEEAVAAgAFcAZQBlAGsAbAB5ACAAUwBhAHQAZQBsAGwAaQB0AGUAIABSAGUAcABvAHIAdAA=
x-cr-puzzleid: {A54799ED-73A1-4EDD-91C3-602107C97EC4}
Xref: g2news2.google.com rec.radio.amateur.space:217 rec.radio.info:726

This report is organized into five (5) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites
Part 5 (S5) - deorbited/returned satellites

SB SAT @ AMSAT W8ISS ANS-126.S1

WSR 126 Part 1 05/06/2009

AMSAT NEWS SERVICE BULLETIN 126.S1
FROM AMSAT HQ SILVER SPRING, MD, May 06, 2009
TO ALL RADIO AMATEURS
BID: $ANS-126.S1

DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008

Status: Operational
Current Mode: Science Mode - Beacon ONLY

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink: 435.530 to 435.570 MHz

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68
[02122009]
=====
VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.859330 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is active. Each transponder has a different beacon.

```
[08072008]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Modes:   FM Repeater - Uplink:    145.920 Mhz FM
                               Downlink:  435.300 Mhz FM
                 BBS         - Uplink:   1268.700 Mhz FM
                               Downlink:  435.150 Mhz FM
                 Telemetry   - Downlink:  435.150 MHz

Analog voice downlink:     435.300 MHz FM
                           435.150 MHz FM
                          2401.200 Mhz FM
Analog voice uplink:       145.860 MHZ FM
                           145.880 MHz USB
                           145.920 MHz FM
                          1268.700 MHz FM
Digital Downlinks:         435.150 MHz FM 38k4 PBP, 1 watt output
                           435.150 MHz FM 9k6 Pacsat Broadcast Protocol
                          2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:            145.860 MHz FM 9k6 Pacsat Broadcast Protocol
                          1268.700 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon:                    435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[04272009]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002

Status: Operational.

Current Mode: V/u
```

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz. The order of operation is thus: (allow for Doppler as necessary):

1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10 minute timer.

[05282007]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Operational
Current Mode: V/u (Mode JA)

Voice/CW (Mode JA)
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage:
http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=5&retURL=/satellites/status.php

```
Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's
CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/
fo29cwts.htm
[02122009]
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993

Status: Operational

Current Mode: V/u

Uplink:   145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[03232009]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational

Current Mode: Alternating between Mode A and B every 24 hours

Uplink:   145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink:  29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons:   29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
[02122009]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998
```

Status: Operational

Current Active Modes: FM Repeater - V/u
Voice - V/v
BBS - V/v
APRS - V/v
SSTV - V/v

Expedition 19 Crew:
Commander: Gennady Padalka
Flight Engineer: Michael Barratt
Flight Engineer: Koichi Wakata KC5ZTA

Available Modes and Frequencies:

Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 9k6
Worldwide packet downlink: 145.825 Mhz FM 9k6

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time line is NOT translated from Russian and posted.
[04062009]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-126.S2
WSR 126 Part 2 05/06/2009

AMSAT NEWS SERVICE BULLETIN 126.S2
FROM AMSAT HQ SILVER SPRING, MD, May 06, 2009
TO ALL RADIO AMATEURS
BID: $ANS-126.S2

SOHLA-1 (ASTRO TECH.)
Catalog Number: 33496
Launch Date: January 23, 2009

Status: Commisioning

Proposed Frequencies and Modes:
Downlink: 437.505 MHz AFSK/CW
Beacon: 437.505 MHz AFSK/CW

Callsign:

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=101
[03232009]
=====
KAGAYAKI (Solan Co.)
Catalog Number: 33495?
Launch Date: January 23, 2009

Status: In Orbit

Downlink: 437.375 MHZ   FSK9k6/CW
Beacon: 437.375 MHz   FSK9k6/CW

IARU coordination status page:

AMSAT-NA webpage:

[01152009]
=====
STARS (Kagawa Univ.) (Twin Satellites)
Catalog Number: 33498
Launch Date: January 23, 2009

Status: Operational ?

Downlinks: 437.485 MHz FM/CW

```
           437.465 MHz FM/CW
Beacons:   437.305 MHz FM/CW
           437.275 MHz FM/CW

Callsigns: JR5YBN
           JR5YBO

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=99

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=121&retURL
=/satellites/status.php
[022152009]
=====
KKS-1 (Tokyo MCIT)
Catalog Number: 33499
Launch Date: January 23, 2009

Status: Operational

Downlink:  437.455 MHz AFSK/CW
Beacon:    437.385 MHz AFSK/CW

Callsign: JQ1YYY

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=107

AMSAT-NA webapge:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=120&retURL
=/satellites/status.php
[02212009]
=====
PRISM (Tokyo Univ.)
Catalog Number: 33493
Launch Date: January 23, 2009

Status: Operational ?

Downlink: 437.425 MHz AFSK/GMSK/CW
Beacon:   437.250 MHz AFSK/GMSK/CW

Callsign: JQ1YCX

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=97

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=119&retURL
=/satellites/status.php
[02212009]
=====
RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number: 32953
Launch Date: May 23, 2008

Status: Operational

Curent Modes: Telemetry
              Audio
              Images

Downlinks: 435.315 MHz
           435.215 MHz

AMSAT-NA website:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=115&ret
URL=/satellites/status.php

Official website:
http://www.npopm.com/?cid=leoca&caid=43
[02122009]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode:  /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon:    435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=94&retURL=
/satellites/status.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=72
[02122009]
=====
CP3
Catalog Number: 31129
Launch Date: April 17,2007

Status: Operational

Current Mode:  /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
```

```
[02122009]
=====
GENESAT-1
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Current Mode: /u

Callsign: KE7EGC

Telemetry Beacon Downlink: 437.0670 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[02212009]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon:             437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/xivpicte.htm
[02212009]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003

Status: Operational

Current Mode: /u

Beacon:     436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=96&retURL
=/satellites/status.php
```

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[02212009]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Operational?

```
Uplink:  1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan?)
```

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=56
[02122009]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

```
Current Modes:   FM Repeater - Uplink:    145.920 Mhz FM
                               Downlink:  435.300 Mhz FM
                 BBS         - Uplink:   1268.700 Mhz FM
                               Downlink:  435.150 Mhz FM
                 Telemetry   - Downlink:  435.150 MHz

Analog voice downlink:     435.300 MHz FM
                           435.150 MHz FM
                          2401.200 Mhz FM
Analog voice uplink:       145.860 MHZ FM
                           145.880 MHz USB
                           145.920 MHz FM
                          1268.700 MHz FM
Digital Downlinks:         435.150 MHz FM 38k4 PBP, 1 watt output
                           435.150 MHz FM 9k6 Pacsat Broadcast Protocol
                          2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:            145.860 MHz FM 9k6 Pacsat Broadcast Protocol
                          1268.700 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon:                    435.150 MHz
```

Mode and Antenna Polarization:
T: Linear
V: Linear

```
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
```

L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[04272009]
=====
QuakeSat
Catalog Number: 27845
Launch Date: June 30, 2003

Status: Telemetry only

Current Mode: 9600 baud data packet

Mode U packet
Downlink: 436.675 MHz 9k6 BPS

Quakesat webpage:
http://www.quakefinder.com/services/quakesat-ssite/
[04272009]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=69&retURL
=/satellites/status.php
[02212009]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Telemetry only

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[03302009]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Telemetry only

Current Modes:
Telemetry : /u

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks: 145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://asri.technion.ac.il/techsat/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=14&retURL
=/satellites/status.php
[04272009]
=====
RS-22 RADIO SPORT RS-22
Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only

Current Mode: /u

CW Beacon - 435.352 MHz
            145.818 MHz

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=76&retURL

```
=/satellites/status.php
[02212009]
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990

Status: CW Beacon only

Uplinks:          145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink:      437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[03162009]
=====
CanX-2
Catalog number: 32790
Launch Date: April 28, 2008

Status: Operational in range of ground station only

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web
page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[02212009]
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.425 MHz 1k2 baud packet

For the latest project status update please visit the AAUSAT-II web
page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
```

```
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[02212009]
=====
CO-65 CUTE-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008

Status: Digipeater

Downlink:  437.475 MHz 9k6 Packet
Uplink:   1267.600 Mhz

Telemetry Beacon:
Downlink: 437.2750 MHz CW

For the latest project status update please visit the Cute-1.7+APD II
web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78

Command Station blog website:
http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=112&retURL
=/satellites/status.php
[02212009]
=====
Compass-1
Catalog number: 32787
Launch Date: April 28, 2008

Status: Operational

Current Mode: 4k8 MSK packet

Uplink:   145.980 MHz FM
Downlink: 437.275 Mhz CW
          437.405 MHz Packet

For the latest project status update please visit the Compass 1 web
page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=114&retURL
=/satellites/status.php
[04272009]
=====
CO-66 Seeds II
```

Catalog number: 32791
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.485 MHz

Callsign: JQ1YGU

For the latest project status update please visit the Seeds 2 web page: http://cubesat.aero.cst.nihon-u.ac.jp/english/seeds_2_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=113&retURL=/satellites/status.php
[02212009]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes:	FM Repeater -	V/u
	Voice -	V/v
	BBS -	V/v
	APRS -	V/v
	SSTV -	V/v

Expedition 19 Crew:

Commander:	Gennady Padalka	
Flight Engineer:	Michael Barratt	
Flight Engineer:	Koichi Wakata	KC5ZTA

Available Modes and Frequencies:
Digital/APRS:

Worldwide packet uplink:	145.825 MHz FM 9k6
Worldwide packet downlink:	145.825 Mhz FM 9k6

Voice:

Region 1 voice uplink:	145.200 MHz FM
Region 2/3 voice uplink:	144.490 MHz FM
Worldwide downlink:	145.800 MHz FM

Crossband Repeater:

Repeater Uplinks:	1269.650 MHz FM
	437.800 MHz FM
	145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink:	145.800 MHz FM
	437.800 MHz FM (Kenwood)

```
SSTV Robot 36:
Downlink:                  145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian:                   OR4ISS
German:                    DP0ISS
Russian:                   RS0ISS
                           RZ3DZR
United States:             NA1SS
Packet Mailbox:            RS0ISS-11
Digipeater callsign:       ARISS

Official ARISS Webpage:    http://www.rac.ca/ariss
ISS Fan Club Webpage:      http://www.issfanclub.com
APRS tracking page:        http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[040602009]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-126.S3
WSR 126 Part 3 05/06/2009

AMSAT NEWS SERVICE BULLETIN 126.S3
FROM AMSAT HQ SILVER SPRING, MD, May 06, 2009
TO ALL RADIO AMATEURS
BID: $ANS-126.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

CP4
Catalog Number: 31122
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon:    437.325 MHz CW

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=79
[10022008]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: Non-Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder:  145.825 Mhz FM
[01012009]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency:  437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink:        437.250 MHz FM 67Hz CTCSS
Voice Downlink:     2401.835 MHz FM
Packet Up/Downlink:  437.250 MHz 9k6 packet
Packet Downlink     2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non=Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[08132007]
=====
DTUSAT
Catalog Number: 27842
Launch Date: June 30, 2003
```

Status: Non-Operational

Current Mode: 2k4 AFSK Packet last reported

Downlink: 437.475MHz

Officail webpage: http://dtusat1.dtusat.dtu.dk/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=101&retURL
=satellites/all_oscars.php
[02212009]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)

Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Telemetry only

Uplinks: 145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[03302009]
=====
NO-45 SAPPHIRE
Catalog number: 26932

Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks

V-band: 145.840 - 145.990 MHz CW/LSB

U-band: 435.550 - 435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks

S2-band: 2401.225 - 2401.475 MHz CW/USB
K-band: 24048.010 - 24048.060 MHz CW/USB
Beacon: 2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)

BEACON	General Beacon(GB)	Middle Beacon(MB)	Engineering Beacon(EB)
2 m	none	145.898 MHz	none
70cm	435.438 MHz	435.588 MHz	435.838 MHz
13cm(1)	2400.188 MHz	2400.338 MHz	2400.588 MHz
13cm(2)	2401.173 MHz	2401.323 MHz	2401.573 MHz
3cm	10450.975 MHz	10451.125 MHz	10451.375 MHz
1.5cm	24047.885 MHz	24048.035 MHz	24048.285 MHz

[07162007]

=====

OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]

=====

UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]

=====

SO-35 SUNSAT
Catalog Number: ?
Launch date:February 23, 1999

```
Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater:         436.250 MHz

Uplinks: Mode B Repeater:  145.825 MHz
Mode J Digipeater:         145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink:   145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Non-operational

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign:       POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012009]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
KO-23 KITSAT
```

```
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HL01-11
BBS: HL01-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
```

```
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
LIBERTAD-1
Catalog Number: 31128
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink:   145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[02122009]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
[05012006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: SEMI-Operational

Current Mode:  V/u

Uplink:         145.900 MHz FM 1200-baud Manchester FSK (reserved)
                145.920 MHz FM VOICE
                145.940 MHz FM 1200-baud Manchester FSK (reserved)
                145.960 MHz FM 1200-baud Manchester FSK (reserved)
```

```
Downlink:       437.026 MHz USB VOICE
                (1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[12252008]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984

Status: Non-operational.
```

Current Mode: /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon: 435.025 MHz
Mode-S Beacon: 2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[01012009]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon: 145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.8500 - 145.9000 MHz SSB/CW
Downlink 29.4000 - 29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236

```
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
Beacons:   29.450 MHz
          435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon 1:  29.352 MHz (intermittent)
Beacon 2:  29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink:     21.260 to 21.300 MHz CW/USB
Downlink:  145.860 to 145.900 MHz CW/USB
```

```
Beacon:    145.860 MHz

Robot:     145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink:   21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon:   29.408 MHz

Robot:    29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-126.S4
WSR 126 Part 4 05/06/2009

AMSAT NEWS SERVICE BULLETIN 126.S4
FROM AMSAT HQ SILVER SPRING, MD, May 06, 2009
TO ALL RADIO AMATEURS
BID: $ANS-126.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE PROPOSED FOR LAUNCH
AT THIS TIME:

UNITEC
Catalog Number:
Proposed Launch Date: May 2010

Status: Design Phase

Proposed Equipment:

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=141
[01152009]
=====
XW-1
Catalog Number:
Proposed Launch Date: Summer 2009?

Status: Design Phase

Proposed Equipment:
Beacon: 435Mhz, CW 20dBm
```

Linear transponder: RX: 145Mhz, TX: 435Mhz, 40KHz, 30dBm
FM Transponder: RX: 145Mhz, TX: 435Mhz, 16KHz, 30dBm
Digital store and forward transponder: RX: 145Mhz, TX: 435Mhz, 16KHz, 30dBm

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108
[10092008]
=====
Phase 5a Mars Mission AO-??
Catalog Number:
Proposed Launch Date: 2009 or 2011

Status: Design Phase

For the latest project status update please visit the AMSAT-DL P5-A web page:
http://ticket-to-mars.org
[01222007]
=====
PHASE 3E AO-??
Catalog number:
Proposed Launch Date: ??????

Status: STORAGE

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/
[02212009]
=====
Eagle AO-??
Catalog Number:
Proposed Launch Date: ?????

Status: Design Phase

For the latest project status updates please visit the AMSAT-NA web page: http://www.amsat.org
[02212009]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-126.S5
WSR 126 Part 5 05/06/2009

AMSAT NEWS SERVICE BULLETIN 126.S5
FROM AMSAT HQ SILVER SPRING, MD, May 06, 2009
TO ALL RADIO AMATEURS
BID: $ANS-126.S5

THE FOLLOWING SATELLITES HAVE RE-ENTERED OR HAVE BEEN RETURNED SAFELY:

```
NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: July 28, 2008

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[01012009]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink:      145.825 Mhz FM APRS AX25
APRS Uplink:        145.825 MHz FM APRS AX25
Voice/PSK31 Uplink:  28.120 MHz

Packet to Voice ID: RAFT
[06112007]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Re-Entered
Re-entered: June 18, 2008

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon:             437.2750 MHz CW

Callsign: JR8YJT
[01012009]
=====
SO-43 Starshine 3
Catalog Number: 26929
```

Launch Date: September 30, 2001

Status: Re-Entered
Re-entered: January 21, 2003

Beacon: 145.825Mhz
[02212009]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis

Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at}
amsat.org
NNNN
/EX

```
From -760988961156143091
X-Google-Thread: a4a23d5f63,3bdf2f9d7a5b20dd,start
X-Google-Attributes: gida4a23d5f63,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news2.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx01.iad01.newshosting.com!newshosting.com!
198.186.194.249.MISMATCH!transit3.readnews.com!news-xxxfer.readnews.com!news-
out.readnews.com!transit4.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-132 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Wed, 13 May 2009 12:22:48 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 1671
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <002b01c9d3e7$00b99c00$022cd400$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1242231768 18557 166.84.1.6 (13 May 2009 16:22:48 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Wed, 13 May 2009 16:22:48 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
x-cr-hashedpuzzle: BE22 Bl4O B/aA CBoO Cl30 Dgx3 DvNp EUZO FgD0 Fhrl GIIn HjIV
ILkK IobJ Iwlg
KTh9;1;cgBlAGMALQByAGEAZABpAG8ALQBpAG4AZgBvAEAAcABhAG4AaQB4AC4AYwBvAG0A;Sosha1_v1;
7;
```

{AF13767F-736F-4E0D-9961-1A91C88B848C};awA5AGoAawBtAEAAYwBvAG0AYwBhAHMAdAAuAG4AZQB
0AA==;Wed, 13 May 2009 16:22:17
GMT;VwBTAFIALQAxADMAMgAgAEEATQBTAEEAVAAgAFcAZQBlAGsAbAB5ACAAUwBhAHQAZQBsAGwAaQB0AG
UAIABSAGUAcABvAHIAdAA=
x-cr-puzzleid: {AF13767F-736F-4E0D-9961-1A91C88B848C}
Xref: g2news2.google.com rec.radio.amateur.space:218 rec.radio.info:737

This report is organized into five (5) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites
Part 5 (S5) - deborbited/returned satellites

SB SAT @ AMSAT W8ISS ANS-132.S1
WSR 132 Part 1 05/12/2009

AMSAT NEWS SERVICE BULLETIN 132.S1
FROM AMSAT HQ SILVER SPRING, MD, May 12, 2009
TO ALL RADIO AMATEURS
BID: $ANS-132.S1

DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008

Status: Operational
Current Mode: Science Mode - Beacon ONLY

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink: 435.530 to 435.570 MHz

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68
[02122009]
=====
VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:

```
Uplink:   435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW
```

```
Indian Beacon:  145.859330 MHZ CW
Dutch Beacon:   145.860 MHz 12WPM with CW message
```

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

To know what transponder is switched on please listen for the beacon that is active. Each transponder has a different beacon.
[08072008]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

```
Current Modes:   FM Repeater - Uplink:    145.920 Mhz FM
                               Downlink:  435.300 Mhz FM
                 BBS         - Uplink:   1268.700 Mhz FM
                               Downlink:  435.150 Mhz FM
                 Telemetry   - Downlink:  435.150 MHz
```

```
Analog voice downlink:     435.300 MHz FM
                           435.150 MHz FM
                          2401.200 Mhz FM
Analog voice uplink:       145.860 MHZ FM
                           145.880 MHz USB
                           145.920 MHz FM
                          1268.700 MHz FM
Digital Downlinks:         435.150 MHz FM 38k4 PBP, 1 watt output
                           435.150 MHz FM 9k6 Pacsat Broadcast Protocol
                          2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:            145.860 MHz FM 9k6 Pacsat Broadcast Protocol
                          1268.700 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon:                    435.150 MHz
```

```
Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear
```

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[04272009]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002

Status: Operational.

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz. The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10 minute timer.
[05282007]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Operational
Current Mode: V/u (Mode JA)

Voice/CW (Mode JA)
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
145.870 MHz FM
145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS

Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage:
http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's
CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/
fo29cwts.htm
[02122009]
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993

Status: Operational

Current Mode: V/u

```
Uplink:   145.850 MHz FM
Downlink: 436.797 MHz FM
```

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[03232009]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational

Current Mode: Alternating between Mode A and B every 24 hours

```
Uplink:   145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink:  29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons:   29.502 MHz CW
```

```
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
[02122009]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - V/u
                      Voice -       V/v
                      BBS -         V/v
                      APRS -        V/v
                      SSTV -        V/v


Expedition 19 Crew:
Commander:                Gennady Padalka
Flight Engineer:          Michael Barratt
Flight Engineer:          Koichi Wakata    KC5ZTA


Available Modes and Frequencies:

Digital/APRS:
Worldwide packet uplink:   145.825 MHz FM 9k6
Worldwide packet downlink: 145.825 Mhz FM 9k6

Voice:
Region 1 voice uplink:     145.200 MHz FM
Region 2/3 voice uplink:   144.490 MHz FM
Worldwide downlink:        145.800 MHz FM

Crossband Repeater:
Repeater Uplinks:         1269.650 MHz FM
                           437.800 MHz FM
                           145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink:         145.800 MHz FM
                           437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink:                  145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
```

U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[04062009]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-132.S2
WSR 132 Part 2 05/12/2009

AMSAT NEWS SERVICE BULLETIN 132.S2
FROM AMSAT HQ SILVER SPRING, MD, May 12, 2009
TO ALL RADIO AMATEURS
BID: $ANS-132.S2

ANUSAT
Catalog Number: 34808
Launch Date: April 20, 2009

Status: ?

Downlink: 435.000 MHz
Uplink: 145.800 MHz

Telemetry: 137.400 MHz
[05112009]
=====
SOHLA-1 (ASTRO TECH.)
Catalog Number: 33496
Launch Date: January 23, 2009

Status: Commisioning

Proposed Frequencies and Modes:
Downlink: 437.505 MHz AFSK/CW
Beacon: 437.505 MHz AFSK/CW

Callsign:

```
IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=101
[03232009]
=====
KAGAYAKI (Solan Co.)
Catalog Number: 33495?
Launch Date: January 23, 2009

Status: In Orbit

Downlink: 437.375 MHZ    FSK9k6/CW
Beacon:   437.375 MHz    FSK9k6/CW

IARU coordination status page:

AMSAT-NA webpage:

[01152009]
=====
STARS (Kagawa Univ.) (Twin Satellites)
Catalog Number: 33498
Launch Date: January 23, 2009

Status: Operational ?

Downlinks: 437.485 MHz FM/CW
           437.465 MHz FM/CW
Beacons:   437.305 MHz FM/CW
           437.275 MHz FM/CW

Callsigns: JR5YBN
           JR5YBO

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=99

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=121&retURL
=/satellites/status.php
[022152009]
=====
KKS-1 (Tokyo MCIT)
Catalog Number: 33499
Launch Date: January 23, 2009

Status: Operational

Downlink:  437.455 MHz AFSK/CW
Beacon:    437.385 MHz AFSK/CW

Callsign: JQ1YYY
```

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=107

AMSAT-NA webapge:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=120&retURL
=/satellites/status.php
[02212009]
=====
PRISM (Tokyo Univ.)
Catalog Number: 33493
Launch Date: January 23, 2009

Status: Operational ?

Downlink: 437.425 MHz AFSK/GMSK/CW
Beacon: 437.250 MHz AFSK/GMSK/CW

Callsign: JQ1YCX

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=97

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=119&retURL
=/satellites/status.php
[02212009]
=====
RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number: 32953
Launch Date: May 23, 2008

Status: Operational

Curent Modes: Telemetry
              Audio
              Images

Downlinks: 435.315 MHz
           435.215 MHz

AMSAT-NA website:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=115&ret
URL=/satellites/status.php

Official website:
http://www.npopm.com/?cid=leoca&caid=43
[02122009]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=94&retURL=/satellites/status.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=72
[02122009]
=====
CP3
Catalog Number: 31129
Launch Date: April 17,2007

Status: Operational

Current Mode: /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[02122009]
=====
GENESAT-1
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Current Mode: /u

Callsign: KE7EGC

Telemetry Beacon Downlink: 437.0670 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[02212009]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol

Beacon: 437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/xivpicte.htm
[02212009]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003

Status: Operational

Current Mode: /u

Beacon: 436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=96&retURL
=/satellites/status.php

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[02212009]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Operational?

Uplink: 1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=56
[02122009]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

```
Status: Operational

Current Modes:   FM Repeater - Uplink:    145.920 Mhz FM
                               Downlink:  435.300 Mhz FM
                 BBS         - Uplink:   1268.700 Mhz FM
                               Downlink:  435.150 Mhz FM
                 Telemetry   - Downlink:  435.150 MHz

Analog voice downlink:     435.300 MHz FM
                           435.150 MHz FM
                          2401.200 Mhz FM
Analog voice uplink:       145.860 MHZ FM
                           145.880 MHz USB
                           145.920 MHz FM
                          1268.700 MHz FM
Digital Downlinks:         435.150 MHz FM 38k4 PBP, 1 watt output
                           435.150 MHz FM 9k6 Pacsat Broadcast Protocol
                          2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:            145.860 MHz FM 9k6 Pacsat Broadcast Protocol
                          1268.700 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon:                    435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[04272009]
=====
QuakeSat
Catalog Number: 27845
Launch Date: June 30, 2003

Status: Telemetry only

Current Mode: 9600 baud data packet

Mode U packet
Downlink: 436.675 MHz 9k6 BPS

Quakesat webpage:
http://www.quakefinder.com/services/quakesat-ssite/
[04272009]
```

```
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=69&retURL
=/satellites/status.php
[02212009]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Telemetry only

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink:        144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[03302009]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Telemetry only

Current Modes:
Telemetry : /u

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
```

         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://asri.technion.ac.il/techsat/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=14&retURL
=/satellites/status.php
[04272009]
=====
RS-22 RADIO SPORT RS-22
Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only

Current Mode: /u

CW Beacon - 435.352 MHz
            145.818 MHz

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=76&retURL
=/satellites/status.php
[02212009]
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990

Status: CW Beacon only

Uplinks: 145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink: 437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[03162009]
=====
CanX-2

Catalog number: 32790
Launch Date: April 28, 2008

Status: Operational in range of ground station only

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[02212009]
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.425 MHz 1k2 baud packet

For the latest project status update please visit the AAUSAT-II web page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[02212009]
=====
CO-65 CUTE-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008

Status: Digipeater

Downlink: 437.475 MHz 9k6 Packet
Uplink: 1267.600 Mhz

Telemetry Beacon:
Downlink: 437.2750 MHz CW

For the latest project status update please visit the Cute-1.7+APD II web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78

Command Station blog website:
http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=112&retURL

```
=/satellites/status.php
[02212009]
=====
Compass-1
Catalog number: 32787
Launch Date: April 28, 2008

Status: Operational

Current Mode: 4k8 MSK packet

Uplink:   145.980 MHz FM
Downlink: 437.275 Mhz CW
          437.405 MHz Packet

For the latest project status update please visit the Compass 1 web
page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=114&retURL
=/satellites/status.php
[04272009]
=====
CO-66 Seeds II
Catalog number: 32791
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.485 MHz

Callsign: JQ1YGU

For the latest project status update please visit the Seeds 2 web
page: http://cubesat.aero.cst.nihon-u.ac.jp/english/seeds_2_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=113&retURL
=/satellites/status.php
[02212009]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
```

Current Active Modes: FM Repeater - V/u
Voice - V/v
BBS - V/v
APRS - V/v
SSTV - V/v

Expedition 19 Crew:
Commander: Gennady Padalka
Flight Engineer: Michael Barratt
Flight Engineer: Koichi Wakata KC5ZTA

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 9k6
Worldwide packet downlink: 145.825 Mhz FM 9k6

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[040602009]
NNNN

/EX

SB SAT @ AMSAT W8ISS ANS-132.S3
WSR 132 Part 3 05/12/2009

AMSAT NEWS SERVICE BULLETIN 132.S3
FROM AMSAT HQ SILVER SPRING, MD, May 12, 2009
TO ALL RADIO AMATEURS
BID: $ANS-132.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

CP4
Catalog Number: 31122
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon: 437.325 MHz CW

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=79
[10022008]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: Non-Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder: 145.825 Mhz FM
[01012009]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI

```
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink:         437.250 MHz FM 67Hz CTCSS
Voice Downlink:      2401.835 MHz FM
Packet Up/Downlink:   437.250 MHz 9k6 packet
Packet Downlink      2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non=Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[08132007]
=====
DTUSAT
Catalog Number: 27842
Launch Date: June 30, 2003

Status: Non-Operational

Current Mode: 2k4 AFSK Packet last reported

Downlink: 437.475MHz

Officail webpage: http://dtusat1.dtusat.dtu.dk/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=101&retURL
=satellites/all_oscars.php
[02212009]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink:   435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)

Broadcast callsign: DP0AIS
```

```
Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Telemetry only

Uplinks:   145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink:  437.325 MHz

Broadcast callsign: MYSAT3-11
BBS:                MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial land and weather imaging payloads offers FM and FSK
Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as
a collaborative effort between the Malaysian government and Surrey
Satellite Technology Ltd.
[03302009]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink:   145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS:                SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
```

```
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink:   145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
V-band:   145.840 -  145.990 MHz CW/LSB
U-band:   435.550 -  435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks
---------
S2-band:  2401.225 -  2401.475 MHz CW/USB
K-band:  24048.010 - 24048.060 MHz CW/USB
Beacon:   2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)
----------------------------
BEACON   General Beacon(GB)  Middle Beacon(MB)  Engineering Beacon(EB)
2 m                   none        145.898 MHz                    none
70cm           435.438 MHz        435.588 MHz             435.838 MHz
13cm(1)       2400.188 MHz       2400.338 MHz            2400.588 MHz
13cm(2)       2401.173 MHz       2401.323 MHz            2401.573 MHz
3cm          10450.975 MHz      10451.125 MHz           10451.375 MHz
1.5cm        24047.885 MHz      24048.035 MHz           24048.285 MHz
[07162007]
=====
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000
```

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: ?
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1

Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink: 145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Non-operational

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012009]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks: 145.875 MHz FM 1200-baud

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          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HL01-11
BBS: HL01-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
```

```
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
LIBERTAD-1
Catalog Number: 31128
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink:   145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[02122009]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990
```

```
Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
[05012006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: SEMI-Operational

Current Mode:  V/u

Uplink:         145.900 MHz FM 1200-baud Manchester FSK (reserved)
                145.920 MHz FM VOICE
                145.940 MHz FM 1200-baud Manchester FSK (reserved)
                145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink:       437.026 MHz USB VOICE
                (1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[12252008]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
```

```
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984

Status: Non-operational.

Current Mode:  /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon:           435.025 MHz
Mode-S Beacon:      2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[01012009]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon:   145.810 MHz (unmodulated carrier)
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W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink  29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
Beacons:   29.450 MHz
          435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational
```

Uplink: 145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB

Beacon 1: 29.352 MHz (intermittent)
Beacon 2: 29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB

Beacon: 145.860 MHz

Robot: 145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-132.S4
WSR 132 Part 4 05/12/2009

AMSAT NEWS SERVICE BULLETIN 132.S4

```
FROM AMSAT HQ SILVER SPRING, MD, May 12, 2009
TO ALL RADIO AMATEURS
BID: $ANS-132.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE PROPOSED FOR LAUNCH
AT THIS TIME:

UNITEC
Catalog Number:
Proposed Launch Date: May 2010

Status: Design Phase

Proposed Equipment:

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=141
[01152009]
=====
XW-1
Catalog Number:
Proposed Launch Date: Summer 2009?

Status: Design Phase

Proposed Equipment:
Beacon: 435Mhz, CW 20dBm
Linear transponder: RX: 145Mhz, TX: 435Mhz, 40KHz, 30dBm
FM Transponder: RX: 145Mhz, TX: 435Mhz, 16KHz, 30dBm
Digital store and forward transponder: RX: 145Mhz, TX: 435Mhz, 16KHz,
                                           30dBm

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108
[10092008]
=====
Phase 5a Mars Mission AO-??
Catalog Number:
Proposed Launch Date: 2009 or 2011

Status: Design Phase

For the latest project status update please visit the AMSAT-DL P5-A
web page:
http://ticket-to-mars.org
[01222007]
=====
PHASE 3E AO-??
Catalog number:
Proposed Launch Date: ??????

Status: STORAGE
```

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/
[02212009]
=====
Eagle AO-??
Catalog Number:
Proposed Launch Date: ?????

Status: Design Phase

For the latest project status updates please visit the AMSAT-NA web page: http://www.amsat.org
[02212009]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-132.S5
WSR 132 Part 5 05/12/2009

AMSAT NEWS SERVICE BULLETIN 132.S5
FROM AMSAT HQ SILVER SPRING, MD, May 12, 2009
TO ALL RADIO AMATEURS
BID: $ANS-132.S5

THE FOLLOWING SATELLITES HAVE RE-ENTERED OR HAVE BEEN RETURNED SAFELY:

NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: July 28, 2008

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[01012009]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661

Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

```
Main Downlink:      145.825 Mhz FM APRS AX25
APRS Uplink:        145.825 MHz FM APRS AX25
Voice/PSK31 Uplink:  28.120 MHz
```

Packet to Voice ID: RAFT
[06112007]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Re-Entered
Re-entered: June 18, 2008

```
Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon:             437.2750 MHz CW
```

Callsign: JR8YJT
[01012009]
=====
SO-43 Starshine 3
Catalog Number: 26929
Launch Date: September 30, 2001

Status: Re-Entered
Re-entered: January 21, 2003

Beacon: 145.825Mhz
[02212009]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728

FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

- AMSAT News Service (ANS)
- General satellite discussion (AMSAT-BB)
- Orbit data (KEPS)
- Manned space missions (SAREX)
- District of Columbia area (AMSAT-DC)
- New England area (AMSAT-NE)
- AMSAT Educational Liaison mailing list (AMSAT-EDU)
- AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at}amsat.org
NNNN
/EX

From -6064056434915181371
X-Google-Thread: a4a23d5f63,5ab11e4ef1b361f0,start
X-Google-Attributes: gida4a23d5f63,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news2.google.com!border1.nntp.dca.giganews.com!nntp.giganews.com!nx01.iad01.newshosting.com!newshosting.com!198.186.194.249.MISMATCH!transit3.readnews.com!news-xxxfer.readnews.com!news-out.readnews.com!transit4.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-130 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Wed, 13 May 2009 12:23:21 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 357

```
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <002c01c9d3e7$1b685be0$523913a0$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1242231802 17691 166.84.1.6 (13 May 2009 16:23:22 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Wed, 13 May 2009 16:23:22 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news2.google.com rec.radio.amateur.space:219 rec.radio.info:738
```

AMSAT NEWS SERVICE
ANS-130

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* AMSAT Activites at Dayton 2009
* AMSAT/TAPR Banquet Note
* Live Feed from Dayton
* ARISS SPACE DAY
* VK5ZAI Receives Award
* ARISS Schedule

SB SAT @ AMSAT $ANS-130.1
AMSAT Activites at Dayton 2009

From AMSAT HQ SILVER SPRING, MD.
May 10, 2009
To All RADIO AMATEURS
BID: $ANS-130.1

AMSAT Activities at Dayton

Thursday May 14th AMSAT Get-Together at Tickets Pub and Eatery in Fairborn beginning at 18:30 Good Greek and American food as well as conversation with fellow AMSATers in a relaxed environment. Directions on the AMSAT web site.

Friday May 15th
Satellite Demonstrations outside the Ball Arena entrance

Celebrating AMSAT's 40th Anniversary with 40 years worth of amateur satellite memorabilia and a special 40th Anniversary tee shirt and golf shirt.

SuitSat-2 hardware demonstration

Richard Garriott visiting the AMSAT Booth 14:30 - 15:15

New publications and trinkets

LVB Tracker Box demonstration and boxes offered

AMSAT/TAPR Banquet featuring Richard Garriott, W5KWQ starting at 18:30

Saturday May 16th
AMSAT Forum 11:15 - 13:30

Satellite Demonstrations outside the Ball Arena entrance

Celebrating AMSAT's 40th Anniversary with 40 years worth of amateur satellite memorabilia and a special 40th Anniversary tee shirt and golf shirt.

SuitSat-2 hardware demonstration

Richard Garriott visting the AMSAT Booth
15:00 - 15:45

New publications and trinkets

LVB Tracker Box demonstration and boxes offered

Sunday morning May 17th
Satellite Demonstrations outside the Ball
Arena entrance

Celebrating AMSAT's 40th Anniversary with
40 years worth of amateur satellite memorabilia
and a special 40th Anniversary tee shirt and golf shirt.

SuitSat-2 hardware demonstration

New publications and trinkets

LVB Tracker Box demonstration and boxes
offered

[ANS thanks Gould, WA4SXM, for the above information]

/EX

SB SAT @ AMSAT $ANS-130.2
AMSAT/TAPR Banquet Note

AMSAT News Service Bulletin 130.2
From AMSAT HQ SILVER SPRING, MD.
May 10, 2009
To All RADIO AMATEURS
BID: $ANS-130.2

The Dayton AMSAT/TAPR banquet is now here.
Our Guest Speaker is Richard Garriott, W5KWQ.
Monday May 11th is the final day to order tickets for
the AMSAT/TAPR Banquet with Richard Garriott. Order
your tickets online in the AMSAT Store. You MUST be
pre- registered to attend. You cannot register at Dayton.

--
[ANS thanks Martha, AMSAT Manager, for the above information]
/EX

SB SAT @ AMSAT $ANS-130.3
Live feed from Dayton

AMSAT News Service Bulletin 130.3
From AMSAT HQ SILVER SPRING, MD.
May 10, 2009
To All RADIO AMATEURS
BID: $ANS-130.3

We will be broadcasting live streaming video
and audio of the Dayton 2009 Hamvention this

coming weekend. This is our 7th year to broadcast hamfest events. We are seen in over 150 countires and advertised to over 100,000 hams around the world.

Frank Bauer KA3HDO has helped us to get Richard Garriott for an interview. Hams around the world will be able to watch this and even send in questions.

The web site is http://w5kub.com and we actually start broadcasting with our "helmet cam" Wednesday morning May 13th at approx 1300 UTC and will be broadcasting our entire 550 mile drive from Memphis, TN to Dayton, OH.

The video web site not only has the live video but also has a chat room where anyone can log in and talk to other hams around the world or to us. During our interview with Richard, if anyone sends in a question we will try to ask it. We can only get 15 minutes of his time as he is extremely busy and this was scheduled even after his schedule filled up.

Note: Special pre-arranged LIVE interview with Richard Garriot
4:00pm - 4:15pm Saturday.

And for those who can't go, you can attend "virtually" and have a great chance to win ham radio prizes. We have many great prizes. There is a link on the left side of our website which tells of the prizes and what days each will be given out.

Follow us every move for the five days (May 13 - May 17).
ARRS at the bottom of the page will show you our progress as we drive, or maybe you will recognize the road and landmarks.

[ANS Thanks Tom,W5KUB, for the above info]
/EX

SB SAT @ AMSAT $ANS-130.4
ARISS SPACE DAY

AMSAT News Service Bulletin 130.4
From AMSAT HQ SILVER SPRING, MD.
May 10, 2009
To All RADIO AMATEURS
BID: $ANS-130.4

ARISS and AMSAT at Space Day in Washington DC

On Saturday, May 2 ARISS and AMSAT operated from the Smithsonian's National Air and Space Museum during Family Day and Space Day events.

The contact, telebridged through W6SRJ in Santa Rosa, went like clockwork. Ten students and boy scouts at the National Air and Space Museum asked 19 questions to astronaut Michael Barratt, KD5MIJ on board ISS during the 9 minute contact opportunity. Audio from the contact was available via the AMSAT conference on EchoLink and via the 9010 Discovery reflector on IRLP.

Also on-hand at the National Air and Space Museum for the contact was Ricky Arnold II, KE5DAU. Ricky answered questions from the audience prior to the contact, sent his greetings to Michael Barratt at the beginning of the contact and stayed with the audience after the contact to answer questions one-on-one and to allow time for individual photos.

The AMSAT/ARISS Booth was well attended with lots of youth and adults stopping by. We had lot of material to handout from AMSAT, ARRL and NASA. And we gave out the last of the 2009 Space Station Calendars!

Frank Bauer, KA3HDO, wrote from the event, "I want to thank all who helped at the booth: Perry Klein, Dave Taylor, Bob Davis, Dick Daniels, Janet Bauer, Bob Bruninga, Don Sylvain, and Bob McCown. While I do not have the final statistics, there were probably about 20,000 people that filtered through the museum during the day. A hearty tip of the hat to the W6SRJ folks for making the contact look so easy. And a big thanks to Wayne who was our contact moderator."

The National Air and Space Museum web page can be found at:
http://www.nasm.si.edu/events/eventDetail.cfm?eventID=1031

[ANS thanks Frank, KA3HDO for the above information]

/EX

SB SAT @ AMSAT $ANS-130.5
VK5ZAI Receives Award

AMSAT News Service Bulletin 130.5
From AMSAT HQ SILVER SPRING, MD.
May 10, 2009
To All RADIO AMATEURS
BID: $ANS-130.5
AMSAT Coordinator Tony Hutchison VK5ZAI receives Chris Jones Award

Australia's WIA President Michael Owen VK3KI presented the Chris Jones Award to AMSAT Area Coordinator Tony Hutchison VK5ZAI at the WIA's Annual General Meeting at the Gippsland Campus of Monash University, Churchill on 2nd May 2009.

The Chris Jones Award honours the memory of a man who was dedicated to the advancement of amateur radio and whose unfailing commitment and vision led to a new Wireless Institute of Australia and whose unfailing courtesy and genuine friendliness is fondly remembered by all who knew him.

Tony's significant contribution to amateur radio was due to his ARISS activities which featured eight schools in the region took part in ARISS contacts (3 from New Zealand and 5 from Australia).

Tony said, "Amateur Radio on International Space Station is a positive way of introducing our hobby of amateur radio to students, and others throughout the world by demonstrating how it's used to communicate with the crews on the International Space Station."

Tony's concluding remarks, "I would like to thank everyone for their congratulations on winning the prestigious WIA Chris Jones Award. I would also like to thank the ARISS team, especially Shane VK4KHZ, who backs me up in VK, and all other Amateurs that have assisted by working with schools to make these ARISS educational linkups possible, also a big thanks to my wife Jill, although not licensed, assists me with my ARISS commitments. Without everyones continual support this wouldn't have happened."

WIA's full story is on-line at:
http://www.wia.org.au/newsevents/news/2009/20090505-4/index.php

[ANS thanks Wireless Institute of Australia for the above information]

/EX

SB SAT @ AMSAT $ANS-130.6
ARISS Schedule

AMSAT News Service Bulletin 130.6
From AMSAT HQ SILVER SPRING, MD.
May 4, 2009
To All RADIO AMATEURS
BID: $ANS-130.6

Amateur Radio on the International Space Station
(ARISS) Status Report
May 4, 2009

1. Upcoming School Contacts

Flemish Space Days, organized by the Flemish Space Industry (VRI), was held May 8 - 10 in the Brabanthal in Leuven, Belgium. Interactive booths, educational workshops and movies on space, avionics and astronomy are some of the activities that attracted schools, youth and the public to this three-day event. On May 8, the event was open to school children, ages 3-18, only. A special program has been developed with the cooperation of ESA and ESERO (European Space Education Resource Office) for teachers and students. An Amateur Radio on the International Space Station (ARISS) contact has been scheduled for this event on Sunday, May 10 at

10:51 UTC. Telebridge station W6SRJ in California will facilitate the contact.

JAXA astronaut Koichi Wakata, KC5ZTA will participate in an Amateur Radio on the International Space Station (ARISS) contact with Besyo Elementary School in Saitama, Japan on Monday, May 11 at 11:01 UTC. Wakata is an alumnus of the school. The conversation will be in Japanese.

2. Space Day Contact with National Air and Space Museum

The National Air and Space Museum in Washington, D.C. participated in Space Day on May 2. Visitors participated in hands-on activities, met astronauts and learned about space from experts and museum displays. An Amateur Radio on the International Space Station (ARISS) contact was held in conjunction with these activities through telebridge station W6SRJ in California. Astronaut Ricky Arnold II was present to answer questions prior to the contact and for photo opportunities. The contact was recorded by the museum in high definition for future use. The Radio Amateur Satellite Corporation (AMSAT) and the American Radio Relay League (ARRL) members manned an exhibition booth and distributed AMSAT, ARRL and NASA education material including 2009 Space Station calendars. Approximately 20,000 people attended the museum throughout the day.

3. Astronaut Training Status

Amateur Radio on the International Space Station (ARISS) team provided training on its amateur radio equipment to NASA astronauts Nicole Stott, KE5GJN and Catherine Coleman, KC5ZTH. Energia has posted a photo report on the training. See: http://www.energia.ru/eng/iss/iss20/photo_04-23.html

4. ARRL Article on Dayton Hamvention Events

The American Radio Relay League (ARRL) posted an article on its upcoming convention at the Dayton Hamvention to be held over the May 15-17 weekend. Richard Garriott will be available to meet and greet attendees and will give a talk about his amateur radio activities onboard the ISS. "The 2009 ARRL National Convention and Dayton Hamvention: Two Weeks and Counting!" may be found at: http://www.arrl.org/news/stories/2009/04/30/10793/?nc=1

5. JSC Education Office Meeting Held

The NASA Education Office hosted a meeting with the Amateur Radio on the International Space Station (ARISS) team at Johnson Space Center over May 1-2. Program initiatives and educational outreach were addressed.

[ANS thanks Carol, KB3LKI, for the above information]

/EX

73,
This week's ANS Editor,
Dee Interdonato, NB2F

```
From -6799975582071699445
X-Google-Thread: 8f86f75953,b4df2989d30373de,start
X-Google-Attributes: gid8f86f75953,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news2.google.com!npeer03.iad.highwinds-media.com!
news.highwinds-media.com!feed-me.highwinds-media.com!cyclone1.gnilink.net!
gnilink.net!nx02.iad01.newshosting.com!newshosting.com!198.186.194.250.MISMATCH!
news-xxxfer.readnews.com!news-out.readnews.com!postnews3.readnews.com!not-for-mail
Subject: Kitchenaid Gas Grill
From: Azim@heidy.com
Newsgroups: rec.radio.amateur.space
Date: Thursday, 21 May 09 4:05:49 GMT
Lines: 99
Message-ID: <4a15525a$0$7092$586e9bf6@usenetnow.com>
NNTP-Posting-Host: c8b50885.usenetnow.com
X-Trace: DXC=^B2e]AQBX8V:7ZVJ?
V=iI[HfJNUg^G:>\T[lX>L[ToHUH<MdSGP@MkT2<ki0D^8;VS8aDXAiI`Jm[>6a>X3QT]Y_4Jf@]Za1Y7_
X-Complaints-To: abuse@usenetnow.com
Xref: g2news2.google.com rec.radio.amateur.space:220
```

KitchenAid Built In BarBecue Grill KBNU487TSS
Price:$2,878.80
Image: http://bestdeallocator.info/image.php?id=B0015YG5X6
Best deal: http://bestdeallocator.info/index.php?id=B0015YG5X6

KitchenAid Built In BarBecue Grill KBSU367TSS
Price:$2,691.60
Image: http://bestdeallocator.info/image.php?id=B00154WAT4
Best deal: http://bestdeallocator.info/index.php?id=B00154WAT4

KitchenAid Built In BarBecue Grill KBNS271TSS
Price:$1,480.80
Image: http://bestdeallocator.info/image.php?id=B0015YI9DA
Best deal: http://bestdeallocator.info/index.php?id=B0015YI9DA

KitchenAid Built In BarBecue Grill KBNS361TSS
Price:$2,104.80
Image: http://bestdeallocator.info/image.php?id=B0015YOFBU
Best deal: http://bestdeallocator.info/index.php?id=B0015YOFBU

KitchenAid Built In BarBecue Grill KBNU367TSS
Price:$2,302.80
Image: http://bestdeallocator.info/image.php?id=B0015YOFCO
Best deal: http://bestdeallocator.info/index.php?id=B0015YOFCO

KitchenAid Built In BarBecue Grill KBSS361TSS
Price:$2,526.00
Image: http://bestdeallocator.info/image.php?id=B00154URGW
Best deal: http://bestdeallocator.info/index.php?id=B00154URGW

KitchenAid Built In BarBecue Grill KBSU487TSS
Price:$3,289.20
Image: http://bestdeallocator.info/image.php?id=B00154WAVC
Best deal: http://bestdeallocator.info/index.php?id=B00154WAVC

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Image: http://bestdeallocator.info/image.php?id=B0015YG5X6
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Best deal: http://bestdeallocator.info/index.php?id=B00154URGW

KitchenAid Built In BarBecue Grill KBSU487TSS
Price:$3,289.20
Image: http://bestdeallocator.info/image.php?id=B00154WAVC
Best deal: http://bestdeallocator.info/index.php?id=B00154WAVC

```
From -7636319537891328043
X-Google-Thread: a4a23d5f63,95a6331f82421a4b,start
X-Google-Attributes: gida4a23d5f63,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news2.google.com!newsfeed2.dallas1.level3.net!
news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-141 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Fri, 22 May 2009 09:25:23 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 1671
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000b01c9dae0$ba5ce770$2f16b650$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1242998723 22171 166.84.1.6 (22 May 2009 13:25:23 GMT)
X-Complaints-To: abuse@panix.com
```

NNTP-Posting-Date: Fri, 22 May 2009 13:25:23 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to   rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to   rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
x-cr-hashedpuzzle: Tp0= mWM= Apm6 BcDB Ckou Dmrh D4rc Enxl FL4L F2VR GSQI IN3x IX2r JePO J5XQ J8lm;1;cgBlAGMALQByAGEAZABpAG8ALQBpAG4AZgBvAEAAcABhAG4AaQB4AC4AYwBvAG0A;Sosha1_v1;7;{2243C8F1-0608-44DF-91E1-CDE6B55AE624};awA5AGoAawBtAEAAYwBvAG0AYwBhAHMAdAAuAG4AZQB0AA==;Fri, 22 May 2009 13:25:02 GMT;VwBTAFIALQAxADQAMQAgAEEATQBTAEEAVAAgAFcAZQBlAGsAbAB5ACAAUwBhAHQAZQBsAGwAaQB0AGUAIABSAGUAcABvAHIAdAA=
x-cr-puzzleid: {2243C8F1-0608-44DF-91E1-CDE6B55AE624}
Xref: g2news2.google.com rec.radio.amateur.space:221 rec.radio.info:747

This report is organized into five (5) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites
Part 5 (S5) - deorbited/returned satellites

SB SAT @ AMSAT W8ISS ANS-141.S1
WSR 141 Part 1 05/21/2009

AMSAT NEWS SERVICE BULLETIN 141.S1
FROM AMSAT HQ SILVER SPRING, MD, May 21, 2009
TO ALL RADIO AMATEURS
BID: $ANS-141.S1

DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008

Status: Operational
Current Mode: Science Mode - Beacon ONLY

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink: 435.530 to 435.570 MHz

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68
[02122009]
=====
VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.859330 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

To know what transponder is switched on please listen for the beacon that is active. Each transponder has a different beacon.
[08072008]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

```
Current Modes:   FM Repeater - Uplink:    145.920 Mhz FM
                               Downlink:  435.300 Mhz FM
                 BBS         - Uplink:   1268.700 Mhz FM
                               Downlink:  435.150 Mhz FM
                 Telemetry   - Downlink:  435.150 MHz

Analog voice downlink:     435.300 MHz FM
                           435.150 MHz FM
                          2401.200 Mhz FM
Analog voice uplink:       145.860 MHZ FM
                           145.880 MHz USB
                           145.920 MHz FM
                          1268.700 MHz FM
```

Digital Downlinks: 435.150 MHz FM 38k4 PBP, 1 watt output
                            435.150 MHz FM 9k6 Pacsat Broadcast Protocol
                           2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Pacsat Broadcast Protocol
                           1268.700 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[04272009]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002

Status: Operational.

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz. The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10 minute timer.
[05282007]
=====
FO-29 JAS-2

Catalog number: 24278
Launch Date: August 17, 1996

Status: Operational
Current Mode: V/u (Mode JA)

Voice/CW (Mode JA)
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage:
http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's
CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/
fo29cwts.htm
[02122009]
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

```
Official Webpage: http://www.ao27.org
[03232009]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational

Current Mode: Alternating between Mode A and B every 24 hours

Uplink:   145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink:  29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons:   29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
[02122009]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - V/u
                      Voice -       V/v
                      BBS -         V/v
                      APRS -        V/v
                      SSTV -        V/v


Expedition 19 Crew:
Commander:                Gennady Padalka
Flight Engineer:          Michael Barratt
Flight Engineer:          Koichi Wakata    KC5ZTA


Available Modes and Frequencies:

Digital/APRS:
Worldwide packet uplink:   145.825 MHz FM 9k6
Worldwide packet downlink: 145.825 Mhz FM 9k6
```

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[04062009]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-141.S2
WSR 141 Part 2 05/21/2009

AMSAT NEWS SERVICE BULLETIN 141.S2
FROM AMSAT HQ SILVER SPRING, MD, May 21, 2009
TO ALL RADIO AMATEURS
BID: $ANS-141.S2

ANUSAT
Catalog Number: 34808
Launch Date: April 20, 2009

Status: ?

```
Downlink:  435.000 MHz
Uplink:    145.800 MHz

Telemetry: 137.400 MHz
[05112009]
=====
SOHLA-1 (ASTRO TECH.)
Catalog Number: 33496
Launch Date: January 23, 2009

Status: Commisioning

Proposed Frequencies and Modes:
Downlink: 437.505 MHz AFSK/CW
Beacon:   437.505 MHz AFSK/CW

Callsign:

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=101
[03232009]
=====
KAGAYAKI (Solan Co.)
Catalog Number: 33495?
Launch Date: January 23, 2009

Status: In Orbit

Downlink: 437.375 MHZ    FSK9k6/CW
Beacon:   437.375 MHz    FSK9k6/CW

IARU coordination status page:

AMSAT-NA webpage:

[01152009]
=====
STARS (Kagawa Univ.) (Twin Satellites)
Catalog Number: 33498
Launch Date: January 23, 2009

Status: Operational ?

Downlinks: 437.485 MHz FM/CW
           437.465 MHz FM/CW
Beacons:   437.305 MHz FM/CW
           437.275 MHz FM/CW

Callsigns: JR5YBN
           JR5YBO

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=99
```

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=121&retURL
=/satellites/status.php
[022152009]
=====
KKS-1 (Tokyo MCIT)
Catalog Number: 33499
Launch Date: January 23, 2009

Status: Operational

Downlink: 437.455 MHz AFSK/CW
Beacon: 437.385 MHz AFSK/CW

Callsign: JQ1YYY

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=107

AMSAT-NA webapge:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=120&retURL
=/satellites/status.php
[02212009]
=====
PRISM (Tokyo Univ.)
Catalog Number: 33493
Launch Date: January 23, 2009

Status: Operational ?

Downlink: 437.425 MHz AFSK/GMSK/CW
Beacon: 437.250 MHz AFSK/GMSK/CW

Callsign: JQ1YCX

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=97

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=119&retURL
=/satellites/status.php
[02212009]
=====
RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number: 32953
Launch Date: May 23, 2008

Status: Operational

Curent Modes: Telemetry
              Audio
              Images

Downlinks: 435.315 MHz
           435.215 MHz

AMSAT-NA website:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=115&retURL=/satellites/status.php

Official website:
http://www.npopm.com/?cid=leoca&caid=43
[02122009]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=94&retURL=/satellites/status.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=72
[02122009]
=====
CP3
Catalog Number: 31129
Launch Date: April 17,2007

Status: Operational

Current Mode: /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[02122009]
=====
GENESAT-1
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Current Mode: /u

```
Callsign: KE7EGC

Telemetry Beacon Downlink: 437.0670 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[02212009]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon:             437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/xivpicte.htm
[02212009]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003

Status: Operational

Current Mode: /u

Beacon:     436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=96&retURL
=/satellites/status.php

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[02212009]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Operational?
```

Uplink: 1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=56
[02122009]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Modes: FM Repeater - Uplink: 145.920 Mhz FM
                             Downlink: 435.300 Mhz FM
                 BBS   - Uplink: 1268.700 Mhz FM
                             Downlink: 435.150 Mhz FM
                 Telemetry   - Downlink: 435.150 MHz

Analog voice downlink: 435.300 MHz FM
                           435.150 MHz FM
                          2401.200 Mhz FM
Analog voice uplink: 145.860 MHZ FM
                           145.880 MHz USB
                           145.920 MHz FM
                          1268.700 MHz FM
Digital Downlinks: 435.150 MHz FM 38k4 PBP, 1 watt output
                           435.150 MHz FM 9k6 Pacsat Broadcast Protocol
                          2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Pacsat Broadcast Protocol
                          1268.700 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/

IARU coordination status page:

```
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[04272009]
=====
QuakeSat
Catalog Number: 27845
Launch Date: June 30, 2003

Status: Telemetry only

Current Mode: 9600 baud data packet

Mode U packet
Downlink: 436.675 MHz 9k6 BPS

Quakesat webpage:
http://www.quakefinder.com/services/quakesat-ssite/
[04272009]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=69&retURL
=/satellites/status.php
[02212009]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Telemetry only

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink:        144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
```

```
[03302009]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Telemetry only

Current Modes:
Telemetry : /u

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign:       4XTECH-12

More information of GO-32 can be found at:
http://asri.technion.ac.il/techsat/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=14&retURL
=/satellites/status.php
[04272009]
=====
RS-22 RADIO SPORT RS-22
Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only

Current Mode:  /u

CW Beacon - 435.352 MHz
            145.818 MHz

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=76&retURL
=/satellites/status.php
[02212009]
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990

Status: CW Beacon only
```

Uplinks: 145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink: 437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[03162009]
=====
CanX-2
Catalog number: 32790
Launch Date: April 28, 2008

Status: Operational in range of ground station only

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[02212009]
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.425 MHz 1k2 baud packet

For the latest project status update please visit the AAUSAT-II web page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[02212009]
=====
CO-65 CUTE-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008

Status: Digipeater

Downlink: 437.475 MHz 9k6 Packet
Uplink: 1267.600 Mhz

Telemetry Beacon:
Downlink: 437.2750 MHz CW

For the latest project status update please visit the Cute-1.7+APD II
web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78

Command Station blog website:
http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=112&retURL
=/satellites/status.php
[02212009]
=====
Compass-1
Catalog number: 32787
Launch Date: April 28, 2008

Status: Operational

Current Mode: 4k8 MSK packet

Uplink: 145.980 MHz FM
Downlink: 437.275 Mhz CW
          437.405 MHz Packet

For the latest project status update please visit the Compass 1 web
page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=114&retURL
=/satellites/status.php
[04272009]
=====
CO-66 Seeds II
Catalog number: 32791
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.485 MHz

Callsign: JQ1YGU

For the latest project status update please visit the Seeds 2 web page: http://cubesat.aero.cst.nihon-u.ac.jp/english/seeds_2_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=113&retURL=/satellites/status.php
[02212009]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - V/u
Voice - V/v
BBS - V/v
APRS - V/v
SSTV - V/v

Expedition 19 Crew:
Commander: Gennady Padalka
Flight Engineer: Michael Barratt
Flight Engineer: Koichi Wakata KC5ZTA

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 9k6
Worldwide packet downlink: 145.825 Mhz FM 9k6

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:

Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
                            RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[040602009]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-141.S3
WSR 141 Part 3 05/21/2009

AMSAT NEWS SERVICE BULLETIN 141.S3
FROM AMSAT HQ SILVER SPRING, MD, May 21, 2009
TO ALL RADIO AMATEURS
BID: $ANS-141.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

CP4
Catalog Number: 31122
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon: 437.325 MHz CW

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=79
[10022008]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: Non-Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM

Voice Recorder: 145.825 Mhz FM
[01012009]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 MHz FM 67Hz CTCSS
Voice Downlink: 2401.835 MHz FM
Packet Up/Downlink: 437.250 MHz 9k6 packet
Packet Downlink   2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non=Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[08132007]
=====
DTUSAT
Catalog Number: 27842
Launch Date: June 30, 2003

Status: Non-Operational

Current Mode: 2k4 AFSK Packet last reported

Downlink: 437.475MHz

Officail webpage: http://dtusat1.dtusat.dtu.dk/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=101&retURL=satellites/all_oscars.php
[02212009]

=====

AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)

Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]

=====

MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Telemetry only

Uplinks: 145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[03302009]

=====

NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,

```
as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS:                SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink:   145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
V-band:   145.840 -  145.990 MHz CW/LSB
U-band:   435.550 -  435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks
---------
S2-band:  2401.225 -  2401.475 MHz CW/USB
K-band:  24048.010 - 24048.060 MHz CW/USB
Beacon:   2401.323 MHz
```

24048.035 MHz

P3-D Telemetry Beacons (IHU)

BEACON	General Beacon(GB)	Middle Beacon(MB)	Engineering Beacon(EB)
2 m	none	145.898 MHz	none
70cm	435.438 MHz	435.588 MHz	435.838 MHz
13cm(1)	2400.188 MHz	2400.338 MHz	2400.588 MHz
13cm(2)	2401.173 MHz	2401.323 MHz	2401.573 MHz
3cm	10450.975 MHz	10451.125 MHz	10451.375 MHz
1.5cm	24047.885 MHz	24048.035 MHz	24048.285 MHz

[07162007]
=====
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: ?
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink: 145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Non-operational

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

```
Broadcast callsign: POSAT1-11
BBS callsign:       POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012009]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HLO1-11
```

```
BBS: HLO1-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
LIBERTAD-1
Catalog Number: 31128
Launch Date: April 17,2007
```

```
Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink:   145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[02122009]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
[05012006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: SEMI-Operational

Current Mode:  V/u

Uplink:         145.900 MHz FM 1200-baud Manchester FSK (reserved)
                145.920 MHz FM VOICE
                145.940 MHz FM 1200-baud Manchester FSK (reserved)
                145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink:       437.026 MHz USB VOICE
                (1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.026 MHz LHCP
```

```
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[12252008]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984

Status: Non-operational.

Current Mode:  /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon:          435.025 MHz
Mode-S Beacon:     2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
```

S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[01012009]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon: 145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.8500 - 145.9000 MHz SSB/CW
Downlink 29.4000 - 29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink: 29.4500 - 29.5500 MHz SSB/CW
Beacons: 29.450 MHz
          435.100 MHz
[01312008]

```
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon 1:  29.352 MHz (intermittent)
Beacon 2:  29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink:     21.260 to 21.300 MHz CW/USB
Downlink:  145.860 to 145.900 MHz CW/USB

Beacon:    145.860 MHz

Robot:     145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991
```

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-141.S4
WSR 141 Part 4 05/21/2009

AMSAT NEWS SERVICE BULLETIN 141.S4
FROM AMSAT HQ SILVER SPRING, MD, May 21, 2009
TO ALL RADIO AMATEURS
BID: $ANS-141.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE PROPOSED FOR LAUNCH
AT THIS TIME:

UNITEC
Catalog Number:
Proposed Launch Date: May 2010

Status: Design Phase

Proposed Equipment:

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=141
[01152009]
=====
XW-1
Catalog Number:
Proposed Launch Date: Summer 2009?

Status: Design Phase

Proposed Equipment:
Beacon: 435Mhz, CW 20dBm
Linear transponder: RX: 145Mhz, TX: 435Mhz, 40KHz, 30dBm
FM Transponder: RX: 145Mhz, TX: 435Mhz, 16KHz, 30dBm
Digital store and forward transponder: RX: 145Mhz, TX: 435Mhz, 16KHz,
30dBm

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108
[10092008]
=====

Phase 5a Mars Mission AO-??
Catalog Number:
Proposed Launch Date: 2009 or 2011

Status: Design Phase

For the latest project status update please visit the AMSAT-DL P5-A web page:
http://ticket-to-mars.org
[01222007]

=====

PHASE 3E AO-??
Catalog number:
Proposed Launch Date: ??????

Status: STORAGE

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/
[02212009]

=====

Eagle AO-??
Catalog Number:
Proposed Launch Date: ?????

Status: Design Phase

For the latest project status updates please visit the AMSAT-NA web page: http://www.amsat.org
[02212009]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-141.S5
WSR 141 Part 5 05/21/2009

AMSAT NEWS SERVICE BULLETIN 141.S5
FROM AMSAT HQ SILVER SPRING, MD, May 21, 2009
TO ALL RADIO AMATEURS
BID: $ANS-141.S5

THE FOLLOWING SATELLITES HAVE RE-ENTERED OR HAVE BEEN RETURNED SAFELY:

NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: July 28, 2008

Downlink: 437.385 Mhz APRS AX25

```
Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[01012009]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink:      145.825 Mhz FM APRS AX25
APRS Uplink:        145.825 MHz FM APRS AX25
Voice/PSK31 Uplink:  28.120 MHz

Packet to Voice ID: RAFT
[06112007]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Re-Entered
Re-entered: June 18, 2008

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon:             437.2750 MHz CW

Callsign: JR8YJT
[01012009]
=====
SO-43 Starshine 3
Catalog Number: 26929
Launch Date: September 30, 2001

Status: Re-Entered
Re-entered: January 21, 2003

Beacon: 145.825Mhz
[02212009]
NNNN
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ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at} amsat.org
NNNN
/EX

```
From -8768915099133365652
X-Google-Thread: a4a23d5f63,f03767743a9499f7,start
X-Google-Attributes: gida4a23d5f63,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news2.google.com!npeer01.iad.highwinds-media.com!
news.highwinds-media.com!feed-me.highwinds-media.com!nx02.iad01.newshosting.com!
209.197.12.242.MISMATCH!nx01.iad01.newshosting.com!newshosting.com!
198.186.194.249.MISMATCH!transit3.readnews.com!news-xxxfer.readnews.com!news-
out.readnews.com!transit4.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-144 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sat, 23 May 2009 21:22:31 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 308
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000e01c9dc0e$177c1330$46743990$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1243128151 9988 166.84.1.6 (24 May 2009 01:22:31 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 24 May 2009 01:22:31 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news2.google.com rec.radio.amateur.space:222 rec.radio.info:754
```

AMSAT NEWS SERVICE
ANS-144

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:

* Successful CubeSat Launch
* AMSAT Announces 2009 Space Symposium
* AMSAT Awards
* Join Regional AMSAT Nets via Echolink
* ON1DWN to Become ISS Commander
* Satellite Shorts From All Over

SB SAT @ AMSAT $ANS-144.01
Successful CubeSat Launch

AMSAT News Service Bulletin 144.01
>From AMSAT HQ SILVER SPRING, MD.
May 24, 2009
To All RADIO AMATEURS
BID: $ANS-144.01

This week Orbital Sciences successfully launched its Minotaur I rocket carrying the Tactical Satellite-3 (TacSat-3) for the U.S. Air Force from the Mid-Atlantic Regional Spaceport (MARS) launch facility at NASA's Wallops Flight Facility on Wallops Island, VA.

Also aboard the May 19 launch were several CubeSats:

Satellite	USA Operator	Downlink	Mode
PharmaSat-1	NASA, Stanford University	437.465	1200bps AFSK
CP-6	CalPoly	437.365	1200bps AFSK
HawkSat-1	Hawk Institute for Space Sciences	437.345	Unknown
AeroCube-3	Aerospace Corporation	Unknown	Unknown

(thanks Mineo JE9PEL)

PharmaSat is a 10 x 10 x 30 cm. spacecraft that houses an advanced biological laboratory as its payload. This laboratory will measure the influence of microgravity upon yeast resistance to an antifungal agent. The PharmaSat mission website at http://www.pharmasat.org

The primary mission of CP6 is to implement an attitude control system using only magnetic torquers embedded within the side panels. Attitude determination is performed using two-axis magnetometers on each side panel as well as observation imagers on the payload face.

Once the primary objectives have been met, a command will be sent to deploy the secondary payload that consists of a series of spring steel tapes. The data will be used to guide the future design of an electrodynamic tether. More info at: http://polysat.calpoly.edu/CP6.php

CalPoly CPX Data Capture and Decoder:
http://moredbs.atl.calpoly.edu/downloads/cpxdd

A description of the CalPoly telemetry database is at:
http://moredbs.atl.calpoly.edu/

At press time the only information available regarding the mission of HawkSat-1 comes from their web page stating, "HawkSat-I will be the first satellite designed, integrated, tested and flown entirely from the Eastern Shore. In addition to accomplishing our own scientific and engineering objectives HawkSat-I is also providing a platform for experimental research funded by a major aerospace firm." See: http://www.hawkspace.org/projects.html for additional information.

The architecture of HawkSat-1 is based around a Pumpkin Incorporated CubeSat kit, and carries a technology demonstration payload, primarily as a proof-of-concept mission, testing command, data and power subsystems, as well as solar panels and communications.

The AeroCube-3 is a non-Amateur Radio CubeSat carrying technology development experiments. The primary systems being demonstrated are a two-axis solar tracker, and an Earth tracker, which could be used in the guidance systems of future satellites. It also carries a 2 foot diameter balloon which will be used for tracking tests, and to increase drag, increasing the satellite's orbital decay, after its mission has been completed.

The primary payload, TacSat-3 is a 12-month mission is to demonstrate capability to conduct imaging that is responsive to the needs of the U.S. military. It contains a unique bus architecture which enables rapid integration and modular packaging of both bus and payload components. This will allow future Operationally Responsive Space (ORS) missions enabling a seven-day call-up requirement for specialized mil-sats.

Objects associated with this launch have been added to the AMSAT KEPS. They are called Object A, Object B, Object C, Object D, and Object E. Refer to: http://www.amsat.org/amsat-new/tools/keps.php

[ANS thanks SpaceDaily Express and the CubeSat Teams for the above information]

/EX

SB SAT @ AMSAT $ANS-144.02
AMSAT Announces 2009 Space Symposium

AMSAT News Service Bulletin 144.02
>From AMSAT HQ SILVER SPRING, MD.
May 24, 2009
To All RADIO AMATEURS
BID: $ANS-144.02

AMSAT announces the 2009 AMSAT Space Symposium and ARISS Operations Team Meeting will be held on Friday, October 9th through Sunday, October 11th. The ARISS Operations Team Meeting will take place on Sunday and Monday.

This year we have selected the Four Points Sheraton hotel that is on the Baltimore-Washington Airport property. There is a free shuttle bus from the airport to the hotel. From this location, you can visit Washington DC, the inner harbor in Baltimore and Annapolis. You can use public transportation to Washington and Baltimore. Visiting Annapolis will require a car. Within 5 minutes of the hotel is the the National Electronics Museum. Also close by are the National Cryptologic Museum and the National Vigilance Park.

The room rate is $115 for Wednesday and Thursday. It then drops to $90 for Friday and Saturday. Sunday and Monday it goes back to $115.

Watch http://www.amsat.org/amsat-new/symposium/2009/index.php for more news as it becomes available.

[ANS thanks AMSAT's 2009 Symposium Committee for the above information]

/EX

SB SAT @ AMSAT $ANS-144.03
AMSAT Awards

AMSAT News Service Bulletin 144.03
>From AMSAT HQ SILVER SPRING, MD.
May 24, 2009
To All RADIO AMATEURS
BID: $ANS-144.03

AMSAT Director Contests and Awards, Bruce Paige, KK5DO reports the AMSAT Satellite Communications Achievement Award has been issued to

John Papay, K8YSE #489
Who will receive #500? Stay tuned.

To join the Satellite Communicators' Club all you need to do is to make one satellite contact. Send the report of your contact, plus $1.00 for AMSAT members or $2.00 for non-members to the AMSAT-NA Director of Awards and Contests.

The OSCAR Satellite Communications Achievement Award requires satellite contacts with 20 different U.S. states or Canadian call areas or DXCC countries.

The South Africa AMSAT Satellite Communications Achievement Award requires working 25 different stations on phase 2 satellites. Satellites that qualify for this award are AO-7, Fuji-Oscar 29, AO-21, AO-27, VO-52 and AO-51 as well as future satellites that are LEO.

The OSCAR Sexagesimal Award requires satellite contacts with 60 different

U.S. states or Canadian call areas or DXCC countries.

The OSCAR Century Award requires satellite contacts with 100 different U.S. states or Canadian call areas or DXCC countries.

The Robert W. Barbee Jr., W4AMI Satellite Operator Achievement Award requires 1000 two-way contacts with any station on any satellite (OSCAR-6 or later). Endorsements are issued for 2000, 3000, and 4000 contacts, and a special certificate is issued for 5000 or more contacts.

Please note, eQSL cards are not valid for AMSAT or ARRL awards. Email confirmations of a QSO is also not acceptable. To see all the awards visit http://www.amsat.org

[ANS thanks Bruce, KK5DO for the above information]

/EX

SB SAT @ AMSAT $ANS-144.04
Join Regional AMSAT Nets via Echolink

AMSAT News Service Bulletin 144.04
>From AMSAT HQ SILVER SPRING, MD.
May 24, 2009
To All RADIO AMATEURS
BID: $ANS-144.04

The Houston AMSAT Net is now being carried live every week on the *AMSAT* Echolink conference on Tuesday 8PM Central Time. This is Wednesday 0100z during USA daylight saving time and 0200z during USA Standard Time. ARISS contacts using the AMSAT conference will preempt the Houston Net. Effective June 1, 2009 the Houston Crew will no longer feed their net over the SkyScanner Satellite Radio Network. Their podcast and mp3 files will continue to be available after the net is complete at http://www.amsatnet.com/

The next Hudson Valley Satcom group net is Thursday, May 28 at 8PM (EDT / UTC-4) on the Mt. Beacon ARC 2 Meter Repeater. This net is also available on the n2eyh-l node on Echolink. This net meets on alternate Thursdays which includes the 2nd and 4th Thursday of June. More information can be found by clicking the "HV Satcom" link at http://www.wr2abb.org. Past nets are archived at this site.

[ANS thanks Bruce, KK5DO and Stu, WA2BSS for the above information]

/EX

SB SAT @ AMSAT $ANS-144.05
ON1DWN to Become ISS Commander

AMSAT News Service Bulletin 144.05
>From AMSAT HQ SILVER SPRING, MD.
May 24, 2009
To All RADIO AMATEURS
BID: $ANS-144.05

Amateur Radio Newsline reports that Frank De Winne, ON1DWN, is set to become the first European Space Agency astronaut to oversee the International Space Station.

De Winne is currently at Russia's cosmonaut training center outside of Moscow. He will leave there later this week and fly to neighboring Kazakhstan, where a Soyuz rocket is being prepared to carry him, Russian cosmonaut Roman Romanenko and Canadian Space Agency astronaut Robert Thirsk, VA3CSA, to the orbiting space outpost. That launch is currently scheduled for May 27 .

The arrival of these three space adventurers which will bring the total number of crew on the ISS to six for the first time. For the first four months De Winne, who is from Belgium, will be a Flight Engineer as a member of the Expedition 20 Crew. With the next crew rotation ON1DWN will take over as Commander of Expedition 21 and will serve in that position until his return to Earth in November. This will mark the first time that someone other than a Russian or an American has held that post. More is on-line at
http://news.bbc.co.uk/1/hi/sci/tech/8037431.stm

[ANS thanks Amateur Radio Newsline for the above information]

/EX

SB SAT @ AMSAT $ANS-144.06
Satellite Shorts From All Over

AMSAT News Service Bulletin 144.06
>From AMSAT HQ SILVER SPRING, MD.
May 24, 2009
To All RADIO AMATEURS
BID: $ANS-144.06

+ The American Radio Relay League (ARRL) President Joel Harrison presented past Amateur Radio on the International Space Station (ARISS) Chairman Frank Bauer, KA3HDO with the ARRL President's Award. This award is voted on by the Board of Directors and given out every 7 or 8 years to honor someone's outstanding work.

+ Matthias, DD1US reported he has recently updated his "Sounds from Space" collection of satellite signals at http://www.dd1us.de.

+ Congratulations are in order to Joe, K3SZH having logged over 9000 contacts via AO-7.

+ The AMSAT INDIA May 2009 newsletter is available for download at http://www.amsatindia.org/Newsletter/AmsatIndia-News-May-09.pdf

+ AMSAT India Secretary Nitin, VU3TYG reports the free VO-52 operating award certificates have been printed and will be mailed shortly. AMSAT India is closing the free certificate availability but the award will be available for a fee whose details will be announced at a later date. The list of the award winners can be found at: http://www.amsatindia.org/awards/VO-52-award-Final.bmp

+ If you have photos of the AMSAT booth and Owen and Richard Garriott during Dayton please send them to AMSAT-NA VP User Services, Gould, WA4SXM (wa4sxm@amsat.org).

+ A fun activity for young visitors to your satellite shack can be found at: http://www.eduweb.com/portfolio/designsatellite/

[ANS thanks everyone for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office. And with that keep in mind you know you are getting older when you wake up looking like your driver's license picture.

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM

From -3012270939546449963
X-Google-Thread: a4a23d5f63,4abc5233755879ed,start
X-Google-Attributes: gida4a23d5f63,public,usenet
X-Google-NewGroupId: yes
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news1.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx02.iad01.newshosting.com!newshosting.com!
198.186.194.249.MISMATCH!transit3.readnews.com!news-out.readnews.com!news-
xxxfer.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-148 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Sat, 30 May 2009 08:34:13 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 1596
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000601c9e122$e9da5f30$bd8f1d90$@net>

Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1243686854 26251 166.84.1.6 (30 May 2009 12:34:14 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sat, 30 May 2009 12:34:14 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
x-cr-hashedpuzzle: AC1g AUnd AoTl A6YU BAQH BKJK CqJq Df8W EOxd EoAJ Gasp HctX H1QO IDwB JBXv LoLO;1;cgBlAGMALQByAGEAZABpAG8ALQBpAG4AZgBvAEAAcABhAG4AaQB4AC4AYwBvAG0A;Sosha1_v1;7;{91CDCE68-79C1-465C-9EBD-E31F0EC9F618};awA5AGoAawBtAEAAYwBvAG0AYwBhAHMAdAAuAG4AZQB0AA==;Sat, 30 May 2009 12:33:55 GMT;VwBTAFIALQAxADQAOAAgAEEATQBTAEEAVAAgAFcAZQBlAGsAbAB5ACAAUwBhAHQAZQBsAGwAaQB0AGUAIABSAGUAcABvAHIAdAA=
x-cr-puzzleid: {91CDCE68-79C1-465C-9EBD-E31F0EC9F618}
Xref: g2news2.google.com rec.radio.amateur.space:223 rec.radio.info:761

This report is organized into four (4) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - deborbited/returned satellites

SB SAT @ AMSAT W8ISS ANS-148.S1
WSR 148 Part 1 05/28/2009

AMSAT NEWS SERVICE BULLETIN 148.S1
FROM AMSAT HQ SILVER SPRING, MD, May 28, 2009
TO ALL RADIO AMATEURS
BID: $ANS-148.S1

DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008

Status: Operational
Current Mode: Science Mode - Beacon ONLY

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink: 435.530 to 435.570 MHz

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68
[02122009]
=====
VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.859330 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is active. Each transponder has a different beacon.
[08072008]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

```
Current Modes:   FM Repeater - Uplink:    145.920 Mhz FM
                               Downlink:  435.300 Mhz FM
                 BBS         - Uplink:   1268.700 Mhz FM
                               Downlink:  435.150 Mhz FM
                 Telemetry   - Downlink:  435.150 MHz
```

Analog voice downlink:	435.300 MHz FM
	435.150 MHz FM
	2401.200 Mhz FM
Analog voice uplink:	145.860 MHZ FM
	145.880 MHz USB
	145.920 MHz FM
	1268.700 MHz FM
Digital Downlinks:	435.150 MHz FM 38k4 PBP, 1 watt output
	435.150 MHz FM 9k6 Pacsat Broadcast Protocol
	2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:	145.860 MHz FM 9k6 Pacsat Broadcast Protocol
	1268.700 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon:	435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[04272009]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002

Status: Operational.

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz. The order of operation is thus: (allow for Doppler as necessary):

1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer on board the spacecraft.

2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10 minute timer.
[05282007]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Operational
Current Mode: V/u (Mode JA)

Voice/CW (Mode JA)
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage:
http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts.htm
[02122009]
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[03232009]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational

Current Mode: Alternating between Mode A and B every 24 hours

```
Uplink:   145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink:  29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons:   29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW
```

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
[02122009]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

```
Current Active Modes: FM Repeater - V/u
                      Voice -       V/v
                      BBS -         V/v
                      APRS -        V/v
                      SSTV -        V/v
```

Expedition 19 Crew:
Commander: Gennady Padalka
Flight Engineer: Michael Barratt
Flight Engineer: Koichi Wakata KC5ZTA

Available Modes and Frequencies:

Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[05212009]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-148.S2
WSR 148 Part 2 05/28/2009

AMSAT NEWS SERVICE BULLETIN 148.S2
FROM AMSAT HQ SILVER SPRING, MD, May 28, 2009
TO ALL RADIO AMATEURS
BID: $ANS-148.S2

ANUSAT
Catalog Number: 34808
Launch Date: April 20, 2009

Status: ?

Downlink: 435.000 MHz
Uplink: 145.800 MHz

Telemetry: 137.400 MHz
[05112009]
=====
SOHLA-1 (ASTRO TECH.)
Catalog Number: 33496
Launch Date: January 23, 2009

Status: Commisioning

Proposed Frequencies and Modes:
Downlink: 437.505 MHz AFSK/CW
Beacon: 437.505 MHz AFSK/CW

Callsign:

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=101
[03232009]
=====
KAGAYAKI (Solan Co.)
Catalog Number: 33495?
Launch Date: January 23, 2009

Status: In Orbit

Downlink: 437.375 MHZ   FSK9k6/CW
Beacon: 437.375 MHz   FSK9k6/CW

IARU coordination status page:

AMSAT-NA webpage:

[01152009]
=====
STARS (Kagawa Univ.) (Twin Satellites)
Catalog Number: 33498
Launch Date: January 23, 2009

Status: Operational ?

Downlinks: 437.485 MHz FM/CW
           437.465 MHz FM/CW
Beacons: 437.305 MHz FM/CW

```
           437.275 MHz FM/CW

Callsigns: JR5YBN
           JR5YBO

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=99

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=121&retURL
=/satellites/status.php
[022152009]
=====
KKS-1 (Tokyo MCIT)
Catalog Number: 33499
Launch Date: January 23, 2009

Status: Operational

Downlink:  437.455 MHz AFSK/CW
Beacon:    437.385 MHz AFSK/CW

Callsign: JQ1YYY

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=107

AMSAT-NA webapge:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=120&retURL
=/satellites/status.php
[02212009]
=====
PRISM (Tokyo Univ.)
Catalog Number: 33493
Launch Date: January 23, 2009

Status: Operational ?

Downlink: 437.425 MHz AFSK/GMSK/CW
Beacon:   437.250 MHz AFSK/GMSK/CW

Callsign: JQ1YCX

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=97

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=119&retURL
=/satellites/status.php
[02212009]
=====
RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number: 32953
```

```
Launch Date: May 23, 2008

Status: Operational

Curent Modes: Telemetry
              Audio
              Images

Downlinks: 435.315 MHz
           435.215 MHz

AMSAT-NA website:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=115&ret
URL=/satellites/status.php

Official website:
http://www.npopm.com/?cid=leoca&caid=43
[02122009]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode:  /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon:    435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=94&retURL=
/satellites/status.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=72
[02122009]
=====
CP3
Catalog Number: 31129
Launch Date: April 17,2007

Status: Operational

Current Mode:  /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[02122009]
=====
GENESAT-1
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Current Mode: /u

Callsign: KE7EGC

Telemetry Beacon Downlink: 437.0670 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[02212009]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon:             437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/xivpicte.htm
[02212009]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003

Status: Operational

Current Mode: /u

Beacon:     436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=96&retURL
=/satellites/status.php

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[02212009]
```

```
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Operational?

Uplink:  1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=56
[02122009]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Modes:   FM Repeater - Uplink:    145.920 Mhz FM
                              Downlink:  435.300 Mhz FM
                 BBS         - Uplink:   1268.700 Mhz FM
                              Downlink:  435.150 Mhz FM
                 Telemetry   - Downlink:  435.150 MHz

Analog voice downlink:     435.300 MHz FM
                           435.150 MHz FM
                          2401.200 Mhz FM
Analog voice uplink:       145.860 MHZ FM
                           145.880 MHz USB
                           145.920 MHz FM
                          1268.700 MHz FM
Digital Downlinks:         435.150 MHz FM 38k4 PBP, 1 watt output
                           435.150 MHz FM 9k6 Pacsat Broadcast Protocol
                          2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:            145.860 MHz FM 9k6 Pacsat Broadcast Protocol
                          1268.700 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon:                    435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear
```

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[04272009]
=====
QuakeSat
Catalog Number: 27845
Launch Date: June 30, 2003

Status: Telemetry only

Current Mode: 9600 baud data packet

Mode U packet
Downlink: 436.675 MHz 9k6 BPS

Quakesat webpage:
http://www.quakefinder.com/services/quakesat-ssite/
[04272009]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

```
Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only
```

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=69&retURL
=/satellites/status.php
[02212009]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Telemetry only

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[03302009]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Telemetry only

Current Modes:
Telemetry : /u

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks: 145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://asri.technion.ac.il/techsat/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=14&retURL
=/satellites/status.php
[04272009]
=====
RS-22 RADIO SPORT RS-22
Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only

Current Mode: /u

CW Beacon - 435.352 MHz
            145.818 MHz

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=76&retURL
=/satellites/status.php
[02212009]

=====

LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990

Status: CW Beacon only

Uplinks: 145.840 MHz 1200-baud Manchester FSK
145.860 MHz 1200-baud Manchester FSK
145.880 MHz 1200-baud Manchester FSK
145.900 MHz 1200-baud Manchester FSK

CW downlink: 437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[03162009]

=====

CanX-2
Catalog number: 32790
Launch Date: April 28, 2008

Status: Operational in range of ground station only

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[02212009]

=====

AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.425 MHz 1k2 baud packet

For the latest project status update please visit the AAUSAT-II web page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[02212009]

```
=====
CO-65 CUTE-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008

Status: Digipeater

Downlink:  437.475 MHz 9k6 Packet
Uplink:   1267.600 Mhz

Telemetry Beacon:
Downlink: 437.2750 MHz CW

For the latest project status update please visit the Cute-1.7+APD II
web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78

Command Station blog website:
http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=112&retURL
=/satellites/status.php
[02212009]
=====
Compass-1
Catalog number: 32787
Launch Date: April 28, 2008

Status: Operational

Current Mode: 4k8 MSK packet

Uplink:   145.980 MHz FM
Downlink: 437.275 Mhz CW
          437.405 MHz Packet

For the latest project status update please visit the Compass 1 web
page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=114&retURL
=/satellites/status.php
[04272009]
=====
CO-66 Seeds II
Catalog number: 32791
Launch Date: April 28, 2008
```

Status: Operational

Downlink: 437.485 MHz

Callsign: JQ1YGU

For the latest project status update please visit the Seeds 2 web page: http://cubesat.aero.cst.nihon-u.ac.jp/english/seeds_2_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=113&retURL=/satellites/status.php
[02212009]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - V/u
Voice - V/v
BBS - V/v
APRS - V/v
SSTV - V/v

Expedition 19 Crew:
Commander: Gennady Padalka
Flight Engineer: Michael Barratt
Flight Engineer: Koichi Wakata KC5ZTA

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:

Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[05212009]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-148.S3
WSR 148 Part 3 05/28/2009

AMSAT NEWS SERVICE BULLETIN 148.S3
FROM AMSAT HQ SILVER SPRING, MD, May 28, 2009
TO ALL RADIO AMATEURS
BID: $ANS-148.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

CP4
Catalog Number: 31122
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon: 437.325 MHz CW

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=79
[10022008]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712

```
Launch Date: January 10, 2007

Status: Non-Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder:  145.825 Mhz FM
[01012009]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency:  437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink:         437.250 MHz FM 67Hz CTCSS
Voice Downlink:      2401.835 MHz FM
Packet Up/Downlink:   437.250 MHz 9k6 packet
Packet Downlink      2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non-Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[08132007]
=====
DTUSAT
Catalog Number: 27842
Launch Date: June 30, 2003

Status: Non-Operational
```

```
Current Mode: 2k4 AFSK Packet last reported

Downlink: 437.475MHz

Officail webpage: http://dtusat1.dtusat.dtu.dk/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=101&retURL
=satellites/all_oscars.php
[02212009]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink:   435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)

Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Telemetry only

Uplinks:   145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink:  437.325 MHz

Broadcast callsign: MYSAT3-11
BBS:                MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial land and weather imaging payloads offers FM and FSK
Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as
a collaborative effort between the Malaysian government and Surrey
Satellite Technology Ltd.
[03302009]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001
```

```
Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink:   145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS:                SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink:   145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
V-band:   145.840 -  145.990 MHz CW/LSB
U-band:   435.550 -  435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
```

L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks

S2-band: 2401.225 - 2401.475 MHz CW/USB
K-band: 24048.010 - 24048.060 MHz CW/USB
Beacon: 2401.323 MHz
24048.035 MHz

P3-D Telemetry Beacons (IHU)

BEACON	General Beacon(GB)	Middle Beacon(MB)	Engineering Beacon(EB)
2 m	none	145.898 MHz	none
70cm	435.438 MHz	435.588 MHz	435.838 MHz
13cm(1)	2400.188 MHz	2400.338 MHz	2400.588 MHz
13cm(2)	2401.173 MHz	2401.323 MHz	2401.573 MHz
3cm	10450.975 MHz	10451.125 MHz	10451.375 MHz
1.5cm	24047.885 MHz	24048.035 MHz	24048.285 MHz

[07162007]

=====

OO-38 OPAL

Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]

=====

UO-36 UoSAT-12

Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]

=====

SO-35 SUNSAT

Catalog Number: ?
Launch date:February 23, 1999

Status: Non-Operational

```
Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater:         436.250 MHz

Uplinks: Mode B Repeater:  145.825 MHz
Mode J Digipeater:         145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink:   145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
PO-28 POSAT-1
Catalog number: 22829
```

```
Launch Date: September 25, 1993

Status: Non-operational

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign:       POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012009]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992
```

```
Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HL01-11
BBS: HL01-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz
```

```
More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
LIBERTAD-1
Catalog Number: 31128
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink:   145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[02122009]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
[05012006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: SEMI-Operational

Current Mode:  V/u

Uplink:         145.900 MHz FM 1200-baud Manchester FSK (reserved)
                145.920 MHz FM VOICE
                145.940 MHz FM 1200-baud Manchester FSK (reserved)
                145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink:       437.026 MHz USB VOICE
```

(1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC 437.050 MHz RHCP
   PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[12252008]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink: 145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink: 145.8500 MHz MFSK 1200 BPS
Uplink: 145.8700 MHz MFSK 1200 BPS
Uplink: 145.8900 MHz MFSK 1200 BPS
Uplink: 145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984

Status: Non-operational.

Current Mode: /v

```
Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon:          435.025 MHz
Mode-S Beacon:     2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[01012009]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon:   145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink  29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972
```

```
Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
Beacons:   29.450 MHz
          435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon 1:  29.352 MHz (intermittent)
Beacon 2:  29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink:     21.260 to 21.300 MHz CW/USB
Downlink:  145.860 to 145.900 MHz CW/USB

Beacon:    145.860 MHz
```

Robot: 145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-148.S4
WSR 148 Part 4 05/28/2009

AMSAT NEWS SERVICE BULLETIN 148.S4
FROM AMSAT HQ SILVER SPRING, MD, May 28, 2009
TO ALL RADIO AMATEURS
BID: $ANS-148.S4

THE FOLLOWING SATELLITES HAVE RE-ENTERED OR HAVE BEEN RETURNED SAFELY:

NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: July 28, 2008

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[01012009]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]

=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink: 145.825 Mhz FM APRS AX25
APRS Uplink: 145.825 MHz FM APRS AX25
Voice/PSK31 Uplink: 28.120 MHz

Packet to Voice ID: RAFT
[06112007]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Re-Entered
Re-entered: June 18, 2008

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon: 437.2750 MHz CW

Callsign: JR8YJT
[01012009]
=====
SO-43 Starshine 3
Catalog Number: 26929
Launch Date: September 30, 2001

Status: Re-Entered
Re-entered: January 21, 2003

Beacon: 145.825Mhz
[02212009]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

- AMSAT News Service (ANS)
- General satellite discussion (AMSAT-BB)
- Orbit data (KEPS)
- Manned space missions (SAREX)
- District of Columbia area (AMSAT-DC)
- New England area (AMSAT-NE)
- AMSAT Educational Liaison mailing list (AMSAT-EDU)
- AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at}amsat.org
NNNN
/EX

From -8439359593204176069
X-Google-Thread: 10e8ad,c0c43a5efbfe67a6,start
X-Google-Thread: 10b9c8,c0c43a5efbfe67a6,start
X-Google-Attributes: gid10e8ad,gid10b9c8,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII
Path: g2news1.google.com!news2.google.com!newsfeed.stanford.edu!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-124 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sat, 3 May 2008 21:19:24 EDT
Organization: The Radio Amateur Satellite Corporation

Lines: 465
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <002e01c8ad84$dbadfc00$6801a8c0@familyroom>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix2.panix.com
Mime-Version: 1.0
Content-Type: text/plain;charset="iso-8859-1"
Content-Transfer-Encoding: quoted-printable
X-Trace: reader2.panix.com 1209863965 21969 166.84.1.2 (4 May 2008 01:19:25 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 4 May 2008 01:19:25 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to   rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to   rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Xref: g2news1.google.com rec.radio.amateur.space:1330 rec.radio.info:777

AMSAT NEWS SERVICE
ANS-124

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:

* Seven! Count 'Em Seven! CubeSats Delivered to Orbit
* AO-16 Down and Recovered
* AMSAT Awards
* Satellite Shorts From All Over
* NA1SS Contacts The National Air and Space Museum
* ARISS Status Report For The Week of April 28, 2008

SB SAT @ AMSAT $ANS-124.01
Seven! Count 'Em Seven! CubeSats Delivered to Orbit

AMSAT News Service Bulletin 124.01
>From AMSAT HQ SILVER SPRING, MD.
May 4, 2008
To All RADIO AMATEURS

BID: $ANS-124.01

The April 28, 2008 launch of 10 satellites aboard the Indian Space Research Organization's (ISRO) Polar Satellite Launch Vehicle-9 (PSLV-9) rocket included 7 amateur radio cubesat, and 3 commercial/ scientific satellites. Watch for late breaking operational messages via the amsat-bb and detailed information on each of the satellite's respective web pages.

The payload included:

Cute-1.7	Tokyo Institute of Technology, Japan
SEEDS	Nihon University, Japan
Delfi-C3	Technical University of Delft, Netherlands
AAUSat-II	Aalborg University Cubesat, Denmark
COMPASS-1	Fachhochschule Aachen, Germany
CanX-2	University of Toronto, Canada
CanX-6	University of Toronto, Canada
Cartosat 2A	Indian Space Research Organization (non-amateur radio)
IMS 1	Indian Space Research Organization (non-amateur radio)
Rubin 8-AIS	OHB-System, Germany (non-amateur radio)

An excellent source of information for each of these satellites can be found at: http://space.skyrocket.de/index_frame.htm (scroll down to the April 28 data). Also see Ralph W0RPK Cubesat Webpage at: http://showcase.netins.net/web/wallio/CubeSat.htm.

Wouter, PE4WJ provided the following status of Delfi-C3:

+ Telemetry indicates that all solar panels and antennas have deployed properly and indicates nominal values for all housekeeping values.

+ Payload data has started to stream in, enabling the team to generate IV curves of the Thin Film Solar Cell experiment. (RASCAL users can view the IV curves by clicking Options-->show IV curves.)

+ The spacecraft is operating in science mode, we have had one orbit in emergency mode, which was most probably due to a databus issue.

+ Amateur radio operators have sent over 40000 frames of data using RASCAL, the Delfi-C3 telemetry capture software.

+ The spacecraft has decided to consistently use the backup radio on 145.930 MHz for its telemetry downlink. The primary radio on 145.870 MHz may be switched on by the groundstation so monitor both frequencies.

+ We have successfully switched the spacecraft to its primary radio on 145.870MHz temporarily, after this switch, the satellite came back on the 145.930MHz downlink. Telemetry indicated that the primary radio on 145.870MHz is healthy and working fine so that is good news. Note that the satellite will normally transmit on 145.930MHz for the time being, unless we command her to go to 145.870MHz.

+ The team is working on the issue with the downlink TX switching off later into the sunlit side of the orbit, which is the reason why Delfi-C3 has not been heard on some passes. It may switch off when the computer does not receive data but the transmitter itself is OK.

Hiroki Ashida at the Tokyo Institute of Technology reported on the status of their Cute-1.7 + APD II satellite. The team is monitoring an anomaly where the telemetry received via FM packet shows very low battery voltage while the CW telemetry reports a nominal reading. If this low voltage condition exists the satellite may be in danger. Further testing in the lab has duplicated this anomaly and the team has confirmed that the batteries are in good shape at this time.

The Cute-1.7 team requests telemetry information from radio amateurs around the world. The satellite transmits its beacon at 437.275 MHz using CW Morse Code. The telemetry data in the beacon includes the battery voltage. Details are explained on their web-page:
http://lss.mes.titech.ac.jp/ssp/cute1.7/cwtelemetry_e.html.
The packet telemetry is only enabled when the satellite is over Japan.

Masahiko Yamazaki,JQ1YGV at Nihon University reported that the SEEDS satellite is currently overcharging so the team has enabled the FM mode to transmit the DigiTalker and SSTV pictures on 437.485 MHz. See: http://cubesat.aero.cst.nihon-u.ac.jp/index.html

The CanX team reported their spacecraft were doing well, "So far healthy telemetry from both. At some point CanX-2 was generating some 1.8 A and CanX-6 was at 1.4 A. Good temperature on both. CanX-2 propulsion system is holding pressure. We are continuing with commissioning. Both satellites are currently transmitting on the Space Research 2.2 GHz downlink. The UHF transmitter on CanX-2 would only be active over the ground station in Toronto, Canada.

Signal reports of the cubesats have been received from around the world. Here is a brief example captured from the amsat-bb ...

Just heard great signals of Delfic3 on 145.930. - Rob PE1ITR

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Very strong signal from Delfi telemetry transmitter. Good work and congratulations to the Delfi team! - Jean-Pierre VE2AHD

Delfi-C3 received in Belgium during the third pass. 194 packets received, decoded with RASCAL and sent to the command station. Signals were loud and decodable during 90 % of the pass.

Congratulations to the team. Long life to Delfi-C3. - Claude ON5QI

Just had my one shot for the morning and got an excellent signal, with AOS and LOS within seconds of predicted. The RASCAL program is slick, and nicely accessed the servers to upload the data.
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[ANS thanks all of the Cubesat Teams for the above information]

/EX

SB SAT @ AMSAT $ANS-124.02
AO-16 Down and Recovered

AMSAT News Service Bulletin 124.02
>From AMSAT HQ SILVER SPRING, MD.
May 4, 2008
To All RADIO AMATEURS
BID: $ANS-124.02

The AO-16 Command Team investigated reports this week that the satellite had gone silent. The team is aware of the anomaly and there is no cause for alarm. Control Operator, Mark, N8MH said, "Over the last month AO-16 has gone from full illumination (0 minutes of eclipse) to over 250 minutes of eclipse. Since the bird has no fancy housekeeping code running, a reasonable explanation is that the battery voltage dropped low enough to put the bird into a protected (and silent) mode."

Mark was able to command AO-16 ON during a pass over the USA. The satellite resumed operating in its 1200 BPSK digital MBL telemetry mode on the 437.026 MHz transmitter. After further testing, Mark reported, "A quick look at the telemetry suggests that AO-16 is doing fine. The current transmitter output power is about 1.5 Watts. AO-16 is again configured for voice mode and is open for normal operation."

AO-16 has occasionally turned off on subsequent long eclipse periods. Mark explained, "At about 2043 utc on 2 May 2008 I commanded AO-16 back ON again. Apparently the increasing eclipse periods require another reduction in the transmitter output power. AO-16 is now back and operational in voice repeater mode, with a slightly reduced output. It is reporting around 1.2 watts output, so it was still quite loud."

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When AO-16 is silent the batteries continue to charge with minimal current being drawn to sustain the vital functions of the satellite (CPU). Thus, it is in a safe resting state at the moment, and the batteries continue to charge when in sunlight. Thanks to a brilliance in design, construction, and coding, the bird is hardy and excellent at self-preservation.

AO-16 Uplink: 145.920 MHz FM
AO-16 Downlink: 437.0260 MHz DSB (LSB and USB).

After recovery of AO-16 on May 3, the current plans are to leave the satellite in the digital MBL mode for a few days so as to collect telemetry for review. You can hear the satellite "humming" in its 1200 BPSK mode.

Interested listeners of AO-16 can help by copying any telemetry captured via the Warbler sound card demodulator. This software is from the same folks that brought you the RASCAL software for Delfi-C3. A file called "warbler.kss" is produced when packets are decoded. These "warbler.kss" files can be sent to N8MH for analysis. Please include your QTH (gridsquare) and the time the telemetry was captured.

Telemetry from AO-16 in the MBL mode is random and infrequent. It's possible to hear no telemetry during an entire pass. Please do not transmit to AO-16 until further notice.

Users of AO-16 are encouraged to report any aberrant operations by either posting to the AMSAT-BB or by emailing the command team at n8mh AT amsat.org "Aberrant operations" might include the following:

complete loss of signal from the spacecraft or significant change
in the transmitter frequency.

[ANS thanks Mark, N8MH for the above information]

/EX

SB SAT @ AMSAT $ANS-124.03
AMSAT Awards

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University of Florida, Gator Amateur Radio Club, W4DFU #463

The following have earned the AMSAT South Africa Satellite Communications Achievement Award
Dimitrios Pallis, SW1JGW #US120
University of Florida, Gator Amateur Radio Club, W4DFU #US121

To see all the awards visit http://www.amsat.org.

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/EX

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Satellite Shorts From All Over

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>From AMSAT HQ SILVER SPRING, MD.
May 4, 2008
To All RADIO AMATEURS
BID: $ANS-124.04

+ Martha at AMSAT HQ reminds you that you MUST pay for your banquet ticket before May 12th.   Giving her your name only will not hold a ticket. You need to call the AMSAT office at 301-589-6062.

+ Allen, N5AFV operated two passes of AO-51 and one pass of SO-50 from the Alamo in San Antonio, Texas on Tuesday and Wednesday (April 22 & 23). Allen says he has a special QSL card made up for the operation. QSL via home address.

+ EW/G0SFJ successfully contacted G7HIA on 20th April via AO-51, but under difficult conditions when operating from Minsk. Any SWL cards or reports gratefully received by email or QTHR, and will be acknowledged!

+ The AO-27 Satellite Scheduler program which has been available from http://www.cs.rit.edu/~cjh9783/programs/satsched.php is now also available from http://home.earthlink.net/~ka3hsw/ao27/ as well.

+ The W3HZU Beacons located on Grid FM19qv on 2.4GHZ and 1.2GHZ have been temporarily taken off the air in preparation to add a third beacon on 5.76GHZ. A message on the amsat-bb will advise when the beacons are back on the air. (via Charlie, K3VDB)

+ The Houston AMSAT Net Podcast has now been picked up by iTunes. You can do a search on iTunes for "Houston AMSAT Net", "KK5DO", or "Bruce Paige" and will be offered the opportunity to subscribe to the Podcast.

+ Google Earth now offers tools to Visualize the Ionosphere in 4D. See:

http://science.nasa.gov/headlines/y2008/30apr_4dionosphere.htm?list958901

http://terra1.spacenvironment.net/%7eionops/es4dintro.html
You will be able to use Google Earth � applications such as:
o Radio Availability
o Total Electron Content
o Maximum Useable Frequency
o foF2
o Past 24 hours TEC movie
o Past 24 hours MUF movie

+ This past weekend, K3IO, W2GPS, WA4SXM attended the premier of AMSAT.ORG in Grand-Am Racing at the Virginia International Raceway. Jim Jaeger (K8RQ) arranged for the AMSAT logo to appear prominently on the yellow Doran Racing Kodak #77 Dallara/Ford car driven by Brad Jaeger (Jim's son) and Memo Gidley. The Doran Racing web site has a gallery of photos featuring their #77 Kodak & #47 BSi cars available for viewing at http://www.doranracing.com/08_vir/photo.htm. Look for the AMSAT.ORG logo on the yellow car!

+ Satellite DX opportunity ... Hans, VA7HAS plans to attempt operating via AO-51 from Pond Inlet, Baffin Island, FQ12AQ, between May 12-16. The radio will be an TH-F6A with a whip antenna.

[ANS thanks everyone for the above information]

/EX

SB SAT @ AMSAT $ANS-124.05
NA1SS Contacts The National Air and Space Museum

AMSAT News Service Bulletin 124.05
>From AMSAT HQ SILVER SPRING, MD.
May 4, 2008
To All RADIO AMATEURS
BID: $ANS-124.05

An International Space Station Expedition 17 ARISS school contact was held with participants at the National Air and Space Museum (NASM), Washington, DC, USA on 03 May.

NN1SS in Maryland performed earth station duties and provided the telebridge between NA1SS and the National Air and Space Museum. The contact was audible over most of the Eastern USA on the 145.80 MHz downlink.

This ARISS contact is part of the space day events celebrating NASA's 50th anniversary. This event is made possible by the generous support of Lockheed Martin.

The ARISS/AMSAT exhibit wass in the new "America by Air" gallery, Gallery 102 on the first floor, just past the Museum Store before you reach the Flight Simulators. The display featured ARISS and AMSAT hardware. Mr. Kemp and students from his Systems Engineering Class at Thomas Jefferson High School for Science and Technology explained their progress on their Cubesat project.

[ANS thanks Kenneth, N5VHO and Perry, W3PK for the above information]

/EX

SB SAT @ AMSAT $ANS-124.06
ARISS Status Report For The Week of April 28, 2008

AMSAT News Service Bulletin 124.06
>From AMSAT HQ SILVER SPRING, MD.
May 4, 2008
To All RADIO AMATEURS
BID: $ANS-124.06

1. Upcoming School Contacts

An ARISS contact has been scheduled for Armada Area Schools in Armada, Michigan on Friday, May 9 at 13:38 UTC. Students will research space exploration, the effects of space on the human body, and technology used for space travel. Middle school students will write essays and high school students will create Power Point presentations. The Detroit News, Detroit Free Press, Armada Times and Macomb Daily newspapers will provide newspaper coverage. The local cable channel will tape and place the contact on the local channels and Channels 2, 4, 7 will also be contacted to provide local Metropolitan Detroit News coverage.

2. Arnold Palmer Hospital Contact Successful

On Monday, April 21, patients at the Arnold Palmer Hospital for Children in Orlando, Florida participated in an ARISS contact with Garrett Reisman, KE5HAE, via the telebridge station W6SRJ in California. Reisman answered the 20 questions which had been planned for him and continued answering another three posed by the seven children. Approximately 30 people were in attendance. Orlando television stations Central Florida News 13 and WESH Channel 2 both reported on the event.

3. ARISS - Russian School Contact

The Peter Klimuk School ARISS contact planned for Wednesday, April 23 was unsuccessful due to technical difficulties. The ARISS team is looking into the problem.

4. ESA Astronaut Visits ARISS Schools

ESA astronaut Paolo Nespoli, IZ�JPA, gave two presentations to Italian schools which had participated in ARISS contacts in October 2007. On Wednesday, April 23, Nespoli spoke to 565 students from Galileo Galilei High School of Civitavecchia, Guglielmo Marconi High School of Civitavecchia and Giosu� Carducci Secondary School in Santa Marinella. On April 24, he spoke with 400 students from Aula Magna of the Faculty of Engineering of the University of L'Aquila. ARISS member Francesco De Paolis, IK�WGF, gave a talk on the ARISS program and Nespoli gave a presentation on the Esperia mission which also highlighted the ARISS contacts. Television stations and newspapers covered the events and photographs have been posted to the ARISS-Europe Web site. See: http://www.ariss-eu.org/2008_04_27.htm

5. Astronaut Training Status

An ARISS training session is planned for astronaut Bob Thirsk, VA3CSA, with Cedarview Middle School in Ottawa, Ontario, Canada. The training session, which is a terrestrial-based amateur radio contact using ARISS-equivalent equipment, is planned for Thursday, May 1 at approximately 19:30 UTC.

Expedition 19 back-up crew member Chris Hadfield, KC5RNJ/VA3OOG, will attend an ARISS operations training session on Friday, May 2.

[ANS thanks Carol, KB3LKI for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM
K9JKM at amsat dot org

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From -1018290714616536463
X-Google-Thread: 10e8ad,c0c43a5efbfe67a6
X-Google-Attributes: gid10e8ad,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII
Path: g2news1.google.com!news2.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!local02.nntp.dca.giganews.com!nntp.comcast.com!
news.comcast.com.POSTED!not-for-mail
NNTP-Posting-Date: Tue, 06 May 2008 10:00:07 -0500
Date: Tue, 06 May 2008 10:00:09 -0500
From: JoAnne Maenpaa <k9jkm@amsat.org>
User-Agent: Thunderbird 2.0.0.14 (Windows/20080421)
MIME-Version: 1.0
Newsgroups: rec.radio.amateur.space
Subject: ANS-124 AMSAT News Service Weekly Bulletins
Content-Type: text/plain; charset=ISO-8859-1; format=flowed
Content-Transfer-Encoding: 8bit
Message-ID: <LPudncNsbZ3q773VnZ2dnUVZ_uOdnZ2d@comcast.com>
Lines: 458
X-Usenet-Provider: http://www.giganews.com
NNTP-Posting-Host: 67.184.209.179
X-Trace: sv3-
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PoDi9AoiBOflH3RgXMkpVGXgGM6qm61rHSC7Gzi1ShOv9PM9EI3fNo070XzF6llyC3W9sb5WghN9!
kKmsqSvZ83bm2UumsYMZpE1VePR8YwY=
X-Complaints-To: abuse@comcast.net
X-DMCA-Complaints-To: dmca@comcast.net
X-Abuse-and-DMCA-Info: Please be sure to forward a copy of ALL headers
X-Abuse-and-DMCA-Info: Otherwise we will be unable to process your complaint
properly
X-Postfilter: 1.3.38
Xref: g2news1.google.com rec.radio.amateur.space:1331
```

AMSAT NEWS SERVICE
ANS-124

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating

through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:

- Seven! Count 'Em Seven! CubeSats Delivered to Orbit
- AO-16 Down and Recovered
- AMSAT Awards
- Satellite Shorts From All Over
- NA1SS Contacts The National Air and Space Museum
- ARISS Status Report For The Week of April 28, 2008

SB SAT @ AMSAT $ANS-124.01
Seven! Count 'Em Seven! CubeSats Delivered to Orbit

AMSAT News Service Bulletin 124.01
From AMSAT HQ SILVER SPRING, MD.
May 4, 2008
To All RADIO AMATEURS
BID: $ANS-124.01

The April 28, 2008 launch of 10 satellites aboard the Indian Space Research Organization's (ISRO) Polar Satellite Launch Vehicle-9 (PSLV-9) rocket included 7 amateur radio cubesat, and 3 commercial/ scientific satellites. Watch for late breaking operational messages via the amsat-bb and detailed information on each of the satellite's respective web pages.

The payload included:

Cute-1.7	Tokyo Institute of Technology, Japan
SEEDS	Nihon University, Japan
Delfi-C3	Technical University of Delft, Netherlands
AAUSat-II	Aalborg University Cubesat, Denmark
COMPASS-1	Fachhochschule Aachen, Germany
CanX-2	University of Toronto, Canada
CanX-6	University of Toronto, Canada
Cartosat 2A	Indian Space Research Organization (non-amateur radio)
IMS 1	Indian Space Research Organization (non-amateur radio)
Rubin 8-AIS	OHB-System, Germany (non-amateur radio)

An excellent source of information for each of these satellites can be found at: http://space.skyrocket.de/index_frame.htm (scroll down to the April 28 data). Also see Ralph W0RPK Cubesat Webpage at: http://showcase.netins.net/web/wallio/CubeSat.htm.

Wouter, PE4WJ provided the following status of Delfi-C3:

+ Telemetry indicates that all solar panels and antennas have deployed properly and indicates nominal values for all housekeeping values.

+ Payload data has started to stream in, enabling the team to generate IV curves of the Thin Film Solar Cell experiment. (RASCAL users can view the IV curves by clicking Options-->show IV curves.)

+ The spacecraft is operating in science mode, we have had one orbit in emergency mode, which was most probably due to a databus issue.

+ Amateur radio operators have sent over 40000 frames of data using RASCAL, the Delfi-C3 telemetry capture software.

+ The spacecraft has decided to consistently use the backup radio on 145.930 MHz for its telemetry downlink. The primary radio on 145.870 MHz may be switched on by the groundstation so monitor both frequencies.

+ We have successfully switched the spacecraft to its primary radio on 145.870MHz temporarily, after this switch, the satellite came back on the 145.930MHz downlink. Telemetry indicated that the primary radio on 145.870MHz is healthy and working fine so that is good news. Note that the satellite will normally transmit on 145.930MHz for the time being, unless we command her to go to 145.870MHz.

+ The team is working on the issue with the downlink TX switching off later into the sunlit side of the orbit, which is the reason why Delfi-C3 has not been heard on some passes. It may switch off when the computer does not receive data but the transmitter itself is OK.

Hiroki Ashida at the Tokyo Institute of Technology reported on the status of their Cute-1.7 + APD II satellite. The team is monitoring an anomaly where the telemetry received via FM packet shows very low battery voltage while the CW telemetry reports a nominal reading. If this low voltage condition exists the satellite may be in danger. Further testing in the lab has duplicated this anomaly and the team has confirmed that the batteries are in good shape at this time.

The Cute-1.7 team requests telemetry information from radio amateurs around the world. The satellite transmits its beacon at 437.275 MHz using CW Morse Code. The telemetry data in the beacon includes the battery voltage. Details are explained on their web-page:
http://lss.mes.titech.ac.jp/ssp/cute1.7/cwtelemetry_e.html.
The packet telemetry is only enabled when the satellite is over Japan.

Masahiko Yamazaki,JQ1YGV at Nihon University reported that the SEEDS satellite is currently overcharging so the team has enabled the FM mode to transmit the DigiTalker and SSTV pictures on 437.485 MHz. See: http://cubesat.aero.cst.nihon-u.ac.jp/index.html

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http://science.nasa.gov/headlines/y2008/30apr_4dionosphere.htm?list958901
http://terra1.spacenvironment.net/%7eionops/es4dintro.html
You will be able to use Google Earth � applications such as:
    o Radio Availability
    o Total Electron Content
    o Maximum Useable Frequency
    o foF2
    o Past 24 hours TEC movie

o Past 24 hours MUF movie

+ This past weekend, K3IO, W2GPS, WA4SXM attended the premier of AMSAT.ORG in Grand-Am Racing at the Virginia International Raceway. Jim Jaeger (K8RQ) arranged for the AMSAT logo to appear prominently on the yellow Doran Racing Kodak #77 Dallara/Ford car driven by Brad Jaeger (Jim's son) and Memo Gidley. The Doran Racing web site has a gallery of photos featuring their #77 Kodak & #47 BSi cars available for viewing at http://www.doranracing.com/08_vir/photo.htm. Look for the AMSAT.ORG logo on the yellow car!

+ Satellite DX opportunity ... Hans, VA7HAS plans to attempt operating via AO-51 from Pond Inlet, Baffin Island, FQ12AQ, between May 12-16. The radio will be an TH-F6A with a whip antenna.

[ANS thanks everyone for the above information]

/EX

SB SAT @ AMSAT $ANS-124.05
NA1SS Contacts The National Air and Space Museum

AMSAT News Service Bulletin 124.05
From AMSAT HQ SILVER SPRING, MD.
May 4, 2008
To All RADIO AMATEURS
BID: $ANS-124.05

An International Space Station Expedition 17 ARISS school contact was held with participants at the National Air and Space Museum (NASM), Washington, DC, USA on 03 May.

NN1SS in Maryland performed earth station duties and provided the telebridge between NA1SS and the National Air and Space Museum. The contact was audible over most of the Eastern USA on the 145.80 MHz downlink.

This ARISS contact is part of the space day events celebrating NASA's 50th anniversary. This event is made possible by the generous support of Lockheed Martin.

The ARISS/AMSAT exhibit wass in the new "America by Air" gallery, Gallery 102 on the first floor, just past the Museum Store before you reach the Flight Simulators. The display featured ARISS and AMSAT hardware. Mr. Kemp and students from his Systems Engineering Class at Thomas Jefferson High School for Science and Technology explained their progress on their Cubesat project.

[ANS thanks Kenneth, N5VHO and Perry, W3PK for the above information]

/EX

SB SAT @ AMSAT $ANS-124.06
ARISS Status Report For The Week of April 28, 2008

AMSAT News Service Bulletin 124.06
From AMSAT HQ SILVER SPRING, MD.
May 4, 2008
To All RADIO AMATEURS
BID: $ANS-124.06

1. Upcoming School Contacts

An ARISS contact has been scheduled for Armada Area Schools in Armada, Michigan on Friday, May 9 at 13:38 UTC. Students will research space exploration, the effects of space on the human body, and technology used for space travel. Middle school students will write essays and high school students will create Power Point presentations. The Detroit News, Detroit Free Press, Armada Times and Macomb Daily newspapers will provide newspaper coverage. The local cable channel will tape and place the contact on the local channels and Channels 2, 4, 7 will also be contacted to provide local Metropolitan Detroit News coverage.

2. Arnold Palmer Hospital Contact Successful

On Monday, April 21, patients at the Arnold Palmer Hospital for Children in Orlando, Florida participated in an ARISS contact with Garrett Reisman, KE5HAE, via the telebridge station W6SRJ in California. Reisman answered the 20 questions which had been planned for him and continued answering another three posed by the seven children. Approximately 30 people were in attendance. Orlando television stations Central Florida News 13 and WESH Channel 2 both reported on the event.

3. ARISS - Russian School Contact

The Peter Klimuk School ARISS contact planned for Wednesday, April 23 was unsuccessful due to technical difficulties. The ARISS team is looking into the problem.

4. ESA Astronaut Visits ARISS Schools

ESA astronaut Paolo Nespoli, IZ�JPA, gave two presentations to Italian schools which had participated in ARISS contacts in October 2007. On Wednesday, April 23, Nespoli spoke to 565 students from Galileo Galilei High School of Civitavecchia, Guglielmo Marconi High School of Civitavecchia and Giosu� Carducci Secondary School in Santa Marinella. On April 24, he spoke with 400 students from Aula Magna of the Faculty of Engineering of the University of L'Aquila. ARISS member Francesco De Paolis, IK�WGF, gave a talk on the ARISS program and Nespoli gave a presentation on the Esperia mission which also highlighted the ARISS contacts. Television stations and newspapers covered the events and photographs have been posted to the

ARISS-Europe Web site. See: http://www.ariss-eu.org/2008_04_27.htm

5. Astronaut Training Status

An ARISS training session is planned for astronaut Bob Thirsk, VA3CSA, with Cedarview Middle School in Ottawa, Ontario, Canada. The training session, which is a terrestrial-based amateur radio contact using ARISS-equivalent equipment, is planned for Thursday, May 1 at approximately 19:30 UTC.

Expedition 19 back-up crew member Chris Hadfield, KC5RNJ/VA3OOG, will attend an ARISS operations training session on Friday, May 2.

[ANS thanks Carol, KB3LKI for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM

From -8607122598531916821
X-Google-Thread: 10e8ad,9687caa9247bca4,start
X-Google-Attributes: gid10e8ad,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!news2.google.com!
border1.nntp.dca.giganews.com!nntp.giganews.com!local02.nntp.dca.giganews.com!
nntp.birchtelecom!news.birchtelecom.POSTED!not-for-mail
NNTP-Posting-Date: Tue, 06 May 2008 10:40:08 -0500
From: "bigter1" <tsm@electrosys.com>
Newsgroups: rec.radio.amateur.space
Subject: QST-VIEW
Date: Tue, 6 May 2008 10:40:00 -0500
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.3138
X-RFC2646: Format=Flowed; Original
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.3198
Message-ID: <2MidneuzV6pF5r3VnZ2dnUVZ_tSknZ2d@birchtelecom>
Lines: 10
X-Usenet-Provider: http://www.giganews.com
NNTP-Posting-Host: 69.53.24.10
X-Trace: sv3-DU1LnRMDuE+UVuGP02ClQRpeCI8yeGze3Y/
6fRQ2X1RHmMixNi4tVNdBUy2dJWfHUt+yCrfbPEBmewf!+vJrSCauYVTKnagxB6oYcr0h7TIw85Fdk1/
xmlGMSaLtyVlDtzebBWgHhfpkdNUsVXzEzSXeEjMU!/e7kytPNuid5

X-Abuse-and-DMCA-Info: Please be sure to forward a copy of ALL headers
X-Abuse-and-DMCA-Info: Otherwise we will be unable to process your complaint properly
X-Postfilter: 1.3.39
Xref: g2news1.google.com rec.radio.amateur.space:1332

For those who are interested in the ARRL QST-VIEW publications that are no longer stocked by ARRL, be advised that all dates are IN STOCK by Radio Era Archives, the developer/producer of QST-VIEW. A direct link for ordering is below:
http://www.radioera.com/qst-view.asp

This is an informational notice since ARRL has many dates that are no longer available.

From -3507488503911828279
X-Google-Thread: 10e8ad,7e2c020d0351800f,start
X-Google-Thread: 113975,7e2c020d0351800f,start
X-Google-Attributes: gid10e8ad,gid113975,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news1.google.com!newsfeed.stanford.edu!
headwall.stanford.edu!newshub.sdsu.edu!news.astraweb.com!
border2.newsrouter.astraweb.com!not-for-mail
From: Chris Steyaert <observations@rmob.org>
Newsgroups: rec.radio.amateur.space,sci.astro.amateur
Subject: Radio Meteor Obs. Bull. April 2008 Lyrids
Date: Thu, 08 May 2008 21:28:15 +0200
Message-ID: <h1l624tl7cppfa27tegoetutsgd6ud3tm5@4ax.com>
X-Newsreader: Forte Agent 1.93/32.576 English (American)
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Lines: 17
Organization: Unlimited download news at news.astraweb.com
NNTP-Posting-Host: a73c75e5.news.astraweb.com
X-Trace: DXC=7maHc?6h^Ki^5mDXS]l4MgL?0kYOcDh@jK^V:JI9H2^bB2Zc@_5QHajG?
ifhhgG3CagGee5SMH4Am7AJ3P8Nbj^a
Xref: g2news2.google.com rec.radio.amateur.space:433 sci.astro.amateur:25490

Radio Meteor Observation Bulletin No. 177 of April 2008 (77 K) is available now as

http://visualrmob.free.fr/rmobtext/rmob0804.txt

More information and the visual presentation of the hourly forward scatter counts can be found on

http://www.rmob.org

http://radio.data.free.fr

Chris

```
From -5444004054033401564
X-Google-Thread: 10e8ad,7a1aed341dfead3d,start
X-Google-Thread: 10b9c8,7a1aed341dfead3d,start
X-Google-Attributes: gid10e8ad,gid10b9c8,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news2.google.com!newsfeed2.dallas1.level3.net!
news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-128 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Thu, 8 May 2008 21:09:06 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 1428
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <20080509010850.D7B6D29409@mail1.panix.com>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix2.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader2.panix.com 1210295346 15957 166.84.1.2 (9 May 2008 01:09:06 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Fri, 9 May 2008 01:09:06 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Xref: g2news2.google.com rec.radio.amateur.space:434 rec.radio.info:513
```

This report is organized into FIVE parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites
Part 5 (S5) - deorbited/returned satellites

SB SAT @ AMSAT W8ISS ANS-128.S1
WSR 128 Part 1 05/08/2008

AMSAT NEWS SERVICE BULLETIN 128.S1 FROM AMSAT HQ
SILVER SPRING, MD, May 08, 2008
TO ALL RADIO AMATEURS
BID: $ANS-128.S1

VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.859330 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsat.in/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is
active. Each transponder has a different beacon.
[06252007]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational - Software reload

Current Modes: FM Repeater - V/s
                 BBS   - OFF
                 Telemetry   - OFF

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink: 145.880 MHZ FM

145.880 MHz USB
145.920 MHz FM
1268.700 MHz FM 67Hz PL tone
Digital Downlinks: 435.150 MHz FM 38k4 Digital, PBP, 1 watt output
435.150 MHz FM 9k6 Digital, Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Digital, Pacsat Broadcast Protocol
1268.700 mhz FM 9k6 PBP Digital
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[05082008]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002

Status: Operational.

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset

the 10
   minute timer.
[05282007]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Operational - check operational schedule for current times!!

Current Mode: V/u

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage: http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's CW
telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts.htm
[0820007]
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM
Downlink: 436.797 MHz FM

```
Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[12132007]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: TESTING - VOICE

Current Mode:  V/u

Uplink:         145.900 MHz FM 1200-baud Manchester FSK (reserved)
                145.920 MHz FM VOICE
                145.940 MHz FM 1200-baud Manchester FSK (reserved)
                145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink:       437.026 MHz USB VOICE
                ( 1200-baud PSK - MBL Telemetry Only )

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[03202008]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational depending on amount of Sunlight

Current Mode: Listen before transmitting

Uplink:   145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink:  29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons:   29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW
```

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/

AO-7 Usage Guidelines on the AO-7 Log and Resource Site located at:
http://www.planetemily.com/ao7
[05282007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Mode: FM Repeater - U/v
Voice - Occasianally
BBS - ON
APRS - ON
SSTV - OFF

Expedition 17 crew:

Commander:	Sergey Volkov	RU3DIS
Flight Engineer:	Oleg Kononenko	RN3DX
Flight Engineer:	Garrett Reisman	KE5HAE

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM
Worldwide packet downlink: 145.825 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS
RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3

Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line is
NOT translated from Russian and posted.
[04242008]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-128.S2
WSR 128 Part 2 05/08/2008

AMSAT NEWS SERVICE BULLETIN 128.S2 FROM AMSAT HQ
SILVER SPRING, MD, May 08, 2008
TO ALL RADIO AMATEURS
BID: $ANS-128.S2

CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.
[11152007]
=====
CP3
Catalog Number: 31128
Launch Date: April 17,2007

Status: Operational

Current Mode: /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[07302007]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

```
Status: In Orbit

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder:  145.825 Mhz FM
[02052007]
=====
NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Operational

Current Mode: /u

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[10222007]
=====
GENESAT-1 ?O-??
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Current Mode: /u

Telemetry Beacon Downlink: 437.0670 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[01082007]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon:             437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
```

[03262007]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003

Status: Operational

Current Mode: /u

Beacon: 436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[01082007]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Semi-Operational - Constant Carrier only

Uplink: 1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan ?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[01082007]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW
[08132007]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

```
Status: Operational - Softawre Reload

Current Mode(s): FM Repeater - V/s
                 BBS         - OFF
                 Telemetry   - OFF

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink:   145.880 MHZ FM
                       145.880 MHz USB
                       145.920 MHz FM
                      1268.700 MHz FM 67Hz PL tone
Digital Downlinks:     435.150 MHz FM 38k4 Digital, PBP, 1 watt output
                       435.150 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:        145.860 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      1268.700 mhz FM 9k6 PBP Digital
Beacon:                435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[04032008]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Hibernation until full sunlight in November

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink:        144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[09242007]
```

```
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Current Modes: V/U
               L/U

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[09172007]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984

Status: Semi-operational.

Current Mode:  /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon:          435.025 MHz
Mode-S Beacon:     2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[01242008]
=====
RS-22 RADIO SPORT RS-22
Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only

Current Mode:  /u
```

CW Beacon - 435.352 MHz
            145.818 MHz
[08062007]
=====
Can X-2
Catalog number:
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web page:
http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[05012008]
=====
AAUSAT-II
Catalog number:
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink: 437.425 MHz

For the latest project status update please visit the AAUSAT-II web
page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[05012008]
=====
Cute-1.7+APD II
Catalog number:
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink: 437.475 MHz 9k6 Packet
Uplink: 1267.600 Mhz

For the latest project status update please visit the Cute-1.7+APD II
web
page:
http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78
[05012008]

=====
Compass 1
Catalog number:
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink: 437.275 Mhz CW
          437.405 MHz Packet

For the latest project status update please visit the Compass 1 web page:
http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52
[05012008]
=====
Delfi-C3
Catalog number:
Launch Date: April 28, 2008

Status: IN ORBIT

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink: 435.530 to 435.570 MHz

Proposed Frequencies:
* Primary telemetry downlink: 145.870 MHz 1200 Baud BPSK AX.25 400mW
* Backup telemetry downlink: 145.930 MHz 1200 Baud BPSK AX.25 400mW
* Linear transponder passband downlink: 145.880 - 145.920 MHz (inverting)
  400mW PEP
* Linear transponder passband uplink: 435.570 - 435.530 MHz
* Transponder mode beacon: 145.870 MHz CW (10dB below transponder PEP)

For the latest project status update please visit the Delfi-C3 web page:
http://www.delfic3.nl/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68
[05012008]
=====
Seeds 2
Catalog number:
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink: 437.485 MHz

```
For the latest project status update please visit the Seeds 2 web page:
http://cubesat.aero.cst.nihon-u.ac.jp/english/main_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36
[05012008]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Mode: FM Repeater - U/v
              Voice -       Occasianally
              BBS -         ON
              APRS -        ON
              SSTV -        OFF

Expedition 17 crew:
Commander:          Sergey Volkov         RU3DIS
Flight Engineer:    Oleg Kononenko        RN3DX
Flight Engineer:    Garrett Reisman       KE5HAE

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink:   145.825 MHz FM
Worldwide packet downlink: 145.825 Mhz FM

Voice:
Region 1 voice uplink:   145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink:      145.800 MHz FM

Crossband Repeater:
Repeater Uplink:         437.800 MHz FM
Repeater Downlink:       145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German:              DP0ISS
Russian:             RS0ISS
                     RZ3DZR
USA:                 NA1SS
Packet Mailbox:      RS0ISS-11
Packet Keyboard:     RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
```

APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.
[04242008]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-128.S3
WSR 128 Part 3 05/08/2008

AMSAT NEWS SERVICE BULLETIN 128.S3 FROM AMSAT HQ
SILVER SPRING, MD, May 08, 2008
TO ALL RADIO AMATEURS
BID: $ANS-128.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

CP4
Catalog Number: 31122
Launch Date: April 17,2007

Status: Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon: 437.325 MHz CW
[11152007]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Non-Operational

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon: 437.2750 MHz CW

Callsign: JR8YJT
[10152007]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA

```
Proposed Transmit Frequency:  437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink:         437.250 MHz FM 67Hz CTCSS
Voice Downlink:      2401.835 MHz FM
Packet Up/Downlink:   437.250 MHz 9k6 packet
Packet Downlink      2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non=Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[08132007]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink:   435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Non-Operational

Uplinks:   145.850 MHz
           145.925 MHz 9600-baud FSK
```

Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[007302007]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, callsign KE6QMD, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

```
Status: Non-Operational

Uplink:   145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
V-band:   145.840 -  145.990 MHz CW/LSB
U-band:   435.550 -  435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks
---------
S2-band:  2401.225 -  2401.475 MHz CW/USB
K-band:  24048.010 - 24048.060 MHz CW/USB
Beacon:   2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)
----------------------------
BEACON   General Beacon (GB)    Middle Beacon (MB)    Engineering Beacon
(EB)
2 m       none                    145.898 MHz           none
70cm      435.438 MHz             435.588 MHz           435.838 MHz
13cm(1)  2400.188 MHz            2400.338 MHz          2400.588 MHz
13cm(2)  2401.173 MHz            2401.323 MHz          2401.573 MHz
3cm     10450.975 MHz           10451.125 MHz         10451.375 MHz
1.5cm   24047.885 MHz           24048.035 MHz         24048.285 MHz
[07162007]
=====
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
```

```
=====
UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink:    145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site
at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: ?
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater:         436.250 MHz

Uplinks: Mode B Repeater:  145.825 MHz
Mode J Digipeater:         145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational
```

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink: 145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012006]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks: 145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

```
Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Operational
```

```
Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
LIBERTAD-1
Catalog Number: 31129
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink:   145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[10222007]
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990

Status: CW Beacon only

Uplinks:          145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
```

```
                   145.880 MHz 1200-baud Manchester FSK
                   145.900 MHz 1200-baud Manchester FSK

CW downlink:       437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[01222007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
[05012006]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW
```

```
Mode V/U (J) Packet: Non-Operational
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon:   145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink  29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational
```

```
Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
Beacons:   29.450 MHz
          435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon 1:  29.352 MHz (intermittent)
Beacon 2:  29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink:     21.260 to 21.300 MHz CW/USB
Downlink:  145.860 to 145.900 MHz CW/USB

Beacon:    145.860 MHz

Robot:     145.908 MHz
```

```
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink:   21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon:   29.408 MHz

Robot:    29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-128.S4
WSR 128 Part 4 05/08/2008

AMSAT NEWS SERVICE BULLETIN 128.S4 FROM AMSAT HQ
SILVER SPRING, MD, May 08, 2008
TO ALL RADIO AMATEURS
BID: $ANS-128.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE PROPOSED FOR LAUNCH AT
THIS TIME:

Phase 5a Mars Mission AO-??
Catalog Number:
Proposed Launch Date: 2009 or 2011

Status: Design Phase

For the latest project status update please visit the AMSAT-DL P5-A web
page:
http://ticket-to-mars.org
[01222007]
=====
PHASE 3E AO-??
Catalog number:
Proposed Launch Date: Late 2008

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web
page:
http://www.amsat-dl.org/p3e/
[01222007]
=====
Eagle AO-??
Catalog Number:
```

Proposed Launch Date: Early/Mid 2009

Status: Design Phase

For the latest project status updates please visit the AMSAT-NA webpage:
http://www.amsat.org
[01222007]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-128.S5
WSR 128 Part 5 05/08/2008

AMSAT NEWS SERVICE BULLETIN 128.S5 FROM AMSAT HQ
SILVER SPRING, MD, May 08, 2008
TO ALL RADIO AMATEURS
BID: $ANS-128.S5

THE FOLLOWING SATELLITES HAVE DE-ORBITED OR HAVE BEEN RETURNED SAFELY:

NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Operational
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink: 145.825 Mhz FM APRS AX25
APRS Uplink: 145.825 MHz FM APRS AX25
Voice/PSK31 Uplink: 28.120 MHz

Packet to Voice ID: RAFT
[06112007]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:

http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

From 4841334113206522259
X-Google-Thread: 10e8ad,9beb41bc14dc41c3,start
X-Google-Attributes: gid10e8ad,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx01.iad01.newshosting.com!newshosting.com!
208.49.83.146.MISMATCH!uns-out.usenetserver.com!news.usenetserver.com!
pc03.usenetserver.com!FUSE.NET-a2kHrUvQQWlmc!not-for-mail

From: Allen.Sendra@usdoj.gov
Message-ID: <AXcaUZ7IYewm.DyhsfJ9251vz4@news.usdoj.gov>
Newsgroups: rec.radio.amateur.space
Subject: Paul busted by Operation Sudden Fall
Date: Sat, 10 May 2008 21:37:19 GMT
Organization: http://www.usdoj.gov
X-Complaints-To: abuse@usenetserver.com
Lines: 24
X-Trace: b3817482648f475c36a3922170
Xref: g2news1.google.com rec.radio.amateur.space:3

Law enforcement is now intercepting text messages,
as proven by Operation Sudden Fall in San Diego.

http://www.usdoj.gov/dea/pubs/states/newsrel/sd050608.html
http://www.signonsandiego.com/news/education/20080506-1338-bn06sdsu2.html

Don't let your personal SMS/text messages fall into
the wrong hands. Encrypt your messages with one
of these:

http://www.Xecure.net
http://www.CryptoSMS.org
http://www.CryptoSMS.com
http://www.CryptoGraf.com
http://www.Cop2p.com/encrypted_sms.html
http://www.FortressMail.net/fortress_sms.htm
http://groups.google.com/group/sms-salama/web/introduction
http://home.xtra.co.nz/hosts/sveltdesign/mindwarrior/pages.html?MobeCode

Be Safe, Be Encrypted, Fuck the Police!!

--
Will you fail out of the coalition, if Latif more lands the conviction?

From 3200516179198023521
X-Google-Thread: 10e8ad,1e8f21477a2548b0,start
X-Google-Thread: 10b9c8,1e8f21477a2548b0,start
X-Google-Attributes: gid10e8ad,gid10b9c8,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news4.google.com!news2.google.com!
border1.nntp.dca.giganews.com!border2.nntp.dca.giganews.com!nntp.giganews.com!
transit3.readnews.com!news-out.readnews.com!news-xxxfer.readnews.com!panix!
rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-132 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Mon, 12 May 2008 16:52:56 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 363

Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <20080512205243.EEEFD34827@mail2.panix.com>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader2.panix.com 1210625576 119 166.84.1.6 (12 May 2008 20:52:56 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Mon, 12 May 2008 20:52:56 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to   rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to   rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
X-Original-Bytes: 14416
Xref: g2news1.google.com rec.radio.amateur.space:4 rec.radio.info:8

AMSAT NEWS SERVICE
ANS-132

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
- AMSAT Engineering Teams and Raffle at Dayton
- Dayton AMSAT/TAPR Banquet ticket sales close 12 May
- AMSAT Board of Directors Nominations
- Ronald A. Parise, WA4SIR, SK
- 5th Annual Cubesat Summer Workshop
- ARISS Status - 5 May 2008

SB SAT @ AMSAT $ANS-132.01
AMSAT Engineering Teams and Raffle at Dayton

AMSAT News Service Bulletin 132.01

From AMSAT HQ SILVER SPRING, MD.
May 11, 2008
To All RADIO AMATEURS
BID: $ANS-132.01

Representatives from the AMSAT Engineering teams will be available to talk with you about their projects at the 2008 Dayton Hamvention. All of the teams are looking for dedicated individuals that would like to participate. The AMSAT Engineering area will occupy booths 444-445 adjacent to the other AMSAT booths 446-449.

We have the entire row this year.

Friday
ACP
Michelle, W5NYV   0900 - 1200 ACP Ground segment
Matt,   N2MJI   1300-1500, 1600-1700 ACP satellite segment

SuitSat-2
Tom, K3IO 1000-1100, 1200-1300, 1400-1500
Lou, W5DID 1100-1200, 1300-1400, 1600-1700

P3E & Phase 4
Rick, W2GPS 1100-1200, 1300-1400, 1500-1600

Eagle
Barry, WD4ASW 1400-1500, 1700-1800

Digital encoding
Phil, KA9Q   1000-1200, 1500-1600

Saturday

ACP
Michelle, W5NYV   1300 - 1600 ACP Ground segment
Matt,   N2MJI   1300-1500, 1600-1700 ACP satellite segment

SuitSat-2
Tom, K3IO 1200-1300, 1600-1700
Lou, W5DID 1300-1600

P3E & Phase 4
Rick, W2GPS 1300-1400, 1500-1600

Eagle
Barry, WD4ASW 1200-1300, 1400-1500

Digital encoding
Phil, KA9Q   1200-1300, 1400-1500

Sunday

SuitSat-2
  Tom, K3IO 0900-1000
  Lou, W5DID 1000-1100

Eagle
  Barry, WD4ASW 1000-1200

P3E & Phase 4
  Rick, W2GPS 1000-1100

Eagle
  Barry, WD4ASW 1000-1200

==

Raffle for complete LVB Tracker Box

We will have a raffle for a complete LVB Tracker Box, donated by David Bern, W2LNX. The tickets will be $5 apiece. The drawing will be held Saturday afternoon at 1700. Come by the AMSAT booth and enter the raffle.

We will also have a limited number of complete Tracker boxes available at the booth, first come first serve.

[ANS thanks Gould, WA4SXM, for the above information]

/EX

SB SAT @ AMSAT $ANS-132.02
Dayton AMSAT/TAPR Banquet ticket sales close 12 May

AMSAT News Service Bulletin 132.02
  From AMSAT HQ SILVER SPRING, MD.
May 11, 2008
To All RADIO AMATEURS
BID: $ANS-132.02

AMSAT/TAPR Banquet ticket sales close at noon Monday, 12 May 2008

Tickets for the joint AMSAT/TAPR Banquet on Friday night, 16 May in Dayton will close at noon EDT Monday, 12 May 2008. You can call Martha at the AMSAT office (888) 322-6728 (in the US) or from all other locations call (301) 589-6062 to purchase your ticket. Or you can send an email to martha@amsat.org with you telephone number and she will call you to take the credit card information. Don't miss out on this popular event.

[ANS thanks Gould, WA4SXM, for the above information]

/EX

SB SAT @ AMSAT $ANS-132.03
AMSAT Board of Directors Nominations

AMSAT News Service Bulletin 132.03
From AMSAT HQ SILVER SPRING, MD.
May 11, 2008
To All RADIO AMATEURS
BID: $ANS-132.03

It is time to submit nominations for the upcoming open seats on the AMSAT-NA Board of Directors. A nomination requires either one Member Society or 5 current individual members to nominate an AMSAT member for the position. A director serves for a period of two years. Three director's terms expire this year: Tom Clark K3IO, Lou McFadin W5DID, Bob McGwier N4HY. Nominations must be in writing and mailed to: AMSAT, 850 Sligo Ave #600, Silver Spring, MD 20910. They can arrive no later than June 12, 2008.

[ANS thanks Martha for the above information]

/EX

SB SAT @ AMSAT $ANS-132.04
Ronald A. Parise, WA4SIR, SK

AMSAT News Service Bulletin 132.04
From AMSAT HQ SILVER SPRING, MD.
May 11, 2008
To All RADIO AMATEURS
BID: $ANS-132.04

It is with a heavy heart that I announce the passing of a great friend, colleague and fellow ham radio operator. Dr. Ronald A. Parise, WA4SIR, left this Earth today, Friday May 9, 2008 after a very long and courageous battle with cancer.

Ron Parise was--and continues to be--an inspiration to countless students, ham radio operators, and friends the world over. His accomplishments were many, including: space explorer, pioneer, astrophysicist, pilot, ham radio operator, avionics and software expert, inspirational speaker and motivator, student satellite mentor, husband, father, and friend. While he certainly did some truly extraordinary things in his lifetime, Ron Parise is best known and cherished for keeping family and friends first.and for this, we will miss him most.

Ron flew as a payload specialist on two Space Shuttle missions: STS-35 on the Space Shuttle Columbia in December 1990 and STS-67 on the Space Shuttle Endeavour in March 1995. These two missions, called ASTRO-1 & 2 respectively, carried out Ultraviolet and X-ray astronomy observations. He logged over 614 hours and 10.6 million miles in space. Ron and his crew members on ASTRO-1 became the first astronomers to operate a telescope from space, making hundreds of observations during the mission. His personal contributions to these two missions have provided scientists with an unprecedented view of our universe, expanding our understanding of the birth, life and death of stars and galaxies.

Ron was also the ultimate ham radio operator-in space and on the ground. First licensed when he was 11, Ron kept the amateur radio hobby at the forefront of everything he did-including his operations from space. During his two Space Shuttle flights, he talked to hundreds of hams on the ground, giving new meaning to the phrase the "ultimate DX-pedition". He was instrumental in guiding the development of a simple ham radio system that could be used in multiple configurations on the Space Shuttle. As a result, his first flight on STS-35 ushered in the "frequent flyer" era of the Shuttle Amateur Radio Experiment (SAREX) payload. He was the first ham in space to operate packet radio. And his flight pioneered the telebridge ground station concept to enable more schools to talk to Shuttle crew members despite time and orbit constraints. In his two shuttle flights, he inspired countless students to seek technical careers and he created memories at the schools and communities that will never be forgotten.

Ron's love for the amateur radio hobby and his love of inspiring students continued well beyond his two Shuttle flights. During the formation of the Amateur Radio on the International Space Station (ARISS) program, Ron was a tremendous resource to the newly forming international team. I know of many instances where Ron's wisdom and sage advice was instrumental in helping our international team resolve issues when we reached critical technical or political roadblocks. And he was a key volunteer in the development of the ham radio hardware systems that are now on-board ISS. The ARISS team is deeply indebted to WA4SIR for his leadership, technical advice and tremendous vision.

Ron worked hand-in-hand with the students at the Naval Academy and Embry-Riddle Aeronautical University on the development of their student satellites. He helped develop Radio Jove-a student educational project to listen to the radio signals emanating from Jupiter. And he spoke at numerous schools over the years, inspiring them to pursue careers in science, math and technology.

I feel blessed to have had Ron as a friend, colleague, ham buddy and mentor. He gave so much, cheerfully, to our collective hobby and was always there with the right answer no matter the topic. I will miss him dearly.

In an effort to continue Ron's tireless work to inspire the next generation, the Parise family has set up a scholarship fund in Ron's honor. The scholarship is for students pursuing technical degrees at Youngtown State University, where Ron received his Bachelors of Science degree. In lieu of flowers, those interested are welcome to send donations to the Dr. Ronald A. Parise Scholarship Fund, Youngstown State University, One University Plaza, Youngstown, Ohio 44555.

On behalf of AMSAT and the ARISS International team, I would like to extend our collective condolences to the Parise family and to all Ron's friends. Our thoughts and prayers are with you.

And to Ron Parise, WA4SIR SK: Our sincerest 73's and 88's.may your exploration spirit live on in us all!!

[ANS thanks Frank, KA3HDO, for the above information]

/EX

SB SAT @ AMSAT $ANS-132.05
5th Annual Cubesat Summer Workshop

AMSAT News Service Bulletin 132.05
From AMSAT HQ SILVER SPRING, MD.
May 11, 2008
To All RADIO AMATEURS
BID: $ANS-132.05

The 5th annual Cubesat summer workshop for 2008 is fast approaching.

Once again, the CubeSat Summer Workshop will be held the weekend before the annual Small Satellite Conference at the campus of Utah State University in Logan, Utah, USA. This is yet another opportunity for CubeSat developers from all over the world to get together to share ideas and knowledge gained from developing picosatellites. Speakers, discussion panels, and group sessions provide valuable insight and networking opportunities for all range of developers. Visit www.cubesat.org for registration and details (the Summer Workshop 2008 section is currently under construction and will be updated).

If you have something to share with the CubeSat community? We are constantly looking for speakers and presentations that will inspire and support developers. If you are interested in presenting at the upcoming Summer Workshop, submit abstracts to us by visiting www.cubesat.org. Deadlines are posted below.

CubeSat Developers' Summer Workshop 2008
August 9th - 10th

Utah State University
Logan, Utah USA

Registration Deadline: August 1st, 2008

Abstract Submittal Deadline: June 20th, 2008
Abstract Acceptance Notification: July 4th, 2008

[ANS thanks Bryan for the above information]

/EX

SB SAT @ AMSAT $ANS-132.06
ARISS Status - 5 May 2008

AMSAT News Service Bulletin 132.06
From AMSAT HQ SILVER SPRING, MD.
May 11, 2008
To All RADIO AMATEURS
BID: $ANS-132.06

1. ARISS Space Day Contact Successful

On Saturday, May 3, the National Air and Space Museum (NASM) in Washington, D.C. participated in Space Day 2008, celebrating the 50th anniversary of NASA and NASA's achievements through space exploration. Radio Amateur Satellite Corporation (AMSAT) and Amateur Radio on the International Space Station (ARISS) members manned an activity station during the event. A highlight of the event was an ARISS contact made possible through the assistance of telebridge station NN1SS in Greenbelt, Maryland. Thirty questions were put to Garrett Reisman, KE5HAE, live, by ten children as approximately 200 gathered in the gallery. The audio was fed into the EchoLink AMSAT (101 377) and JK1ZRW (277 208) Conference Room servers and received 25 connections. It was also fed into the IRLP Discovery Reflector 9010, receiving 4 connections from Canada and the U.S. Additionally, the event was taped by the NASM staff. Space Day draws crowds of thousands annually.

2. Astronaut Training Status

Bob Thirsk, VA3CSA, participated in a successful Amateur Radio on the International Space Station (ARISS) training session on Thursday, May 1. He answered questions posed to him by students at the Cedarview Middle School in Ottawa, Ontario, Canada.

Expedition 19 back-up crew member Chris Hadfield, KC5RNJ/VA3OOG, also attended an ARISS operations training session on Friday, May 2.

[ANS thanks Carol, KB3LKI, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the
President's
Club. Members of the President's Club, as sustaining donors to AMSAT Project
Funds, will be eligible to receive additional benefits. Application forms
are
available from the AMSAT Office.

73,
This week's ANS Editor,
Lee McLamb, KU4OS

From 7576809231704990070
X-Google-Thread: 10ed5f,a03b6145ccad230a,start
X-Google-Thread: 1033f5,a03b6145ccad230a,start
X-Google-Thread: f7810,a03b6145ccad230a,start
X-Google-Thread: f7796,a03b6145ccad230a,start
X-Google-Thread: 107ada,a03b6145ccad230a,start
X-Google-Thread: 10e8ad,a03b6145ccad230a,start
X-Google-Attributes:
gid10ed5f,gid1033f5,gidf7810,gidf7796,gid107ada,gid10e8ad,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news3.google.com!out02b.usenetserver.com!
news.usenetserver.com!in01.usenetserver.com!news.usenetserver.com!pd7cy1no!
pd7cy2no!shaw.ca!pd7urf2no.POSTED!53ab2750!not-for-mail
X-Trace-PostClient-IP: 96.52.148.7
From: "Robert" <edmsecboi@shaw.ca>
Newsgroups: alt.ham-radio,alt.ham-radio.digital-voice,alt.ham-radio.dxing,alt.ham-radio.morse,rec.radio.amateur.misc,rec.radio.amateur.space
Subject: Earthquake In China
Lines: 60
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.3300
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.3300
X-RFC2646: Format=Flowed; Original
Message-ID: <AIlWj.137167$Cj7.7432@pd7urf2no>
Date: Tue, 13 May 2008 19:10:24 GMT
NNTP-Posting-Host: 24.70.95.207
X-Complaints-To: abuse@shaw.ca
X-Trace: pd7urf2no 1210705824 24.70.95.207 (Tue, 13 May 2008 13:10:24 MDT)
NNTP-Posting-Date: Tue, 13 May 2008 13:10:24 MDT
Organization: Shaw Residential Internet
Xref: g2news1.google.com alt.ham-radio:36 alt.ham-radio.digital-voice:1 alt.ham-radio.dxing:1 alt.ham-radio.morse:1 rec.radio.amateur.misc:22
rec.radio.amateur.space:5

Just received this through a ARES reflector
============================

""Strong earthquake hits China, all ham radio operators stand by PLEASE HELP TO SPREAD THE FOLLOWING MESSAGE

Strong earthquake hits China, all ham radio operators stand by A Magnitude 7.8 earthquake hits Sichuan, China on Monday, May 12, 2008 at 06:28:04 UTC. Casualties and loss unknown up to now. According to Chinese Radio Sports Association, 14.270Mhz, 7.050 and 7.060 Mhz are preserved for amateur radio emergency service in the rescue. Please spread this message as far as you can and keep the frequencies clean for emergency use. Thank you.

Yesterday, 05:57 PM
BG8AAS from Chengdu, Sichuan reported that local UHF repeater survived in the disaster. It keeps functioning from the 1st minute and more than 200 local radio hams are now on that repeater. A group of hams from Chengdu has headed for Wenchuan, the center of the quake, trying to setup emergency communication services there.

BA8AB, also from Chengdu, Sichuan, is active on the 40m emergency frequency. Up to now, no further information available from the center zone of the quake. There are a few radio amateurs there, but all of the communications have been cut out, including amateur radio.

Yesterday, 06:58 PM
Update

According to BG8AAS, local UHF repeater in Chengdu keeps busy running after the quake. It helps to direct social vehicles to transport the wounded from Dujiangyan, Beichuan, and other regions. Another UHF repeater also starts its working in Mianyan, supported by generators.
However, they are going to face a shortage of gas.

Damage in Chengdu remains in the lowest level, but the situation is very very bad in the counties around. A few towns are said to be destroyed completely. More than 7000 died in the town of Beichuan. Casualties in several other towns are still unknown and not counted in the published numbers.

It is a long and sad day.

Today, 08:31 AM
Your attention please! 14.270Mhz is now reserved for ARES in 5.12 earth quake in Sichuan, China. Please help to keep this frequency clear.

A group of radio amateurs is now transmitting from Wenchuan, the center of quake. Its signal is reported to be very weak. They tried to keep communication with BY8AA in Chengdu, seeking for all resources needed. During a contact finished a few minutes ago, they were asking for raincoats, water, tents, and outdoor living facilities.

PLEASE HELP TO FORWARD THIS MESSAGE TO ALL RELEVANT FORUMS, MAILING LISTS, AND NEWS RESOURCES. MEANWHILE, KEEP THE ABOVE FREQUENCY CLEAN FOR EMERGENCY COMMUNICATION.

Michael Chen, BD5RV/4""

```
From -5563690649212382745
X-Google-Thread: 10e8ad,94cce04a8470e559,start
X-Google-Attributes: gid10e8ad,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!local02.nntp.dca.giganews.com!nntp.comcast.com!
news.comcast.com.POSTED!not-for-mail
NNTP-Posting-Date: Tue, 13 May 2008 22:27:29 -0500
From: No Spam <no@spam.com>
Subject: Is amat satcoms dead?
Newsgroups: rec.radio.amateur.space
User-Agent: Pan/0.132 (Waxed in Black)
MIME-Version: 1.0
Content-Type: text/plain; charset=UTF-8
Content-Transfer-Encoding: 8bit
Message-ID: <KJadnSMZS_G8wbfVnZ2dnUVZ_sLinZ2d@comcast.com>
Date: Tue, 13 May 2008 22:27:29 -0500
Lines: 13
X-Usenet-Provider: http://www.giganews.com
NNTP-Posting-Host: 24.8.221.21
X-Trace:
sv3-5CH1hvyoY5TF+QZeRt+BQNBLdlSGDJnv9gKJA7sBGCzQd0ov0vd+c57NR8Wx3gDNKRlDOWZqdMo6WQ
D!N/1jX7G/waDIfVZspBLGMU2PkTt16X1GKQc1emXWeSWwDU/VGb3wQ6bVmtW4EUgKv7XzFng+Ud/J!
9I5FWT3oBKbzUmnLeMLaekRul8U=
X-Complaints-To: abuse@comcast.net
X-DMCA-Complaints-To: dmca@comcast.net
X-Abuse-and-DMCA-Info: Please be sure to forward a copy of ALL headers
X-Abuse-and-DMCA-Info: Otherwise we will be unable to process your complaint
properly
X-Postfilter: 1.3.39
Xref: g2news1.google.com rec.radio.amateur.space:6
```

Seems like allot of the amsat webpage info is outdated (The FAQ is dated 1994) and I find very little activity anywhere in reference to loggings or any QSOs in general.

I can't seem to hear any of these sats beacons when they are scheduled to be over my qth but after reading some googled webpages, allot of these sats are dead. The kelps are still maintained but I don't understand why if the sat is dead.

Is anybody making QSOs on any of the sats anymore? If so, where are they hanging out? Any mail list?

Thank you in advance for your responses

```
From -8805516597665371079
X-Google-Thread: 10e8ad,94cce04a8470e559
X-Google-Attributes: gid10e8ad,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!news2.google.com!
border1.nntp.dca.giganews.com!nntp.giganews.com!nx02.iad01.newshosting.com!
newshosting.com!69.16.185.51.MISMATCH!tmp-post01.iad!news.highwinds-media.com!
roadrunner.com!not-for-mail
Date: Wed, 14 May 2008 07:33:22 -0400
From: Christopher Cox <chrisTOPHERcOX@coboxincORORATED.com>
User-Agent: Mozilla Thunderbird 1.0.7 (Windows/20050923)
X-Accept-Language: en-us, en
MIME-Version: 1.0
Newsgroups: rec.radio.amateur.space
Subject: Re: Is amat satcoms dead?
References: <KJadnSMZS_G8wbfVnZ2dnUVZ_sLinZ2d@comcast.com>
In-Reply-To: <KJadnSMZS_G8wbfVnZ2dnUVZ_sLinZ2d@comcast.com>
Content-Type: text/plain; charset=UTF-8; format=flowed
Content-Transfer-Encoding: 7bit
Lines: 40
Message-ID: <482ace58$0$7729$4c368faf@roadrunner.com>
Organization: Road Runner High Speed Online http://www.rr.com
NNTP-Posting-Host: 24.210.62.5
X-Complaints-To: abuse@rr.com
Xref: g2news1.google.com rec.radio.amateur.space:7
```

Hello,

Well, newsgroups are dead as well. Google does not even do a very good job with them anymore.

Check out:
    http://www.amsat.org/amsat/archive/amsat-bb/48hour/threads.html
and
    http://www.amsat.org/amsat/archive/amsat-bb/index.html

You will find allot more activity there.

Keps have to be kept for all things in orbit, dead or alive. AO-8 is back from the dead.

Packet radio seems dead as well. I am beginning to believe you could stick a fork in this hobby and it would not nudge save the CW QRP folks.

I might stop by Dayton this week and meet with some mentor type of people for a moral boost.

Best regards,

Chris

No Spam wrote:
> Seems like allot of the amsat webpage info is outdated (The FAQ is dated
> 1994) and I find very little activity anywhere in reference to loggings
> or any QSOs in general.
>
> I can't seem to hear any of these sats beacons when they are scheduled to
> be over my qth but after reading some googled webpages, allot of these
> sats are dead. The kelps are still maintained but I don't understand why
> if the sat is dead.
>
> Is anybody making QSOs on any of the sats anymore? If so, where are they
> hanging out? Any mail list?
>
> Thank you in advance for your responses

From -4988745440026650254
X-Google-Thread: 10e8ad,94cce04a8470e559
X-Google-Attributes: gid10e8ad,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Subject: Re: Is amat satcoms dead?
From: Jeff Davis <ke9v@sdf.lonestar.org>
Date: Wed, 14 May 2008 17:57:40 +0000 (UTC)
Message-ID: <slrng2ma0h.loi.ke9v@otaku.freeshell.org>
References: <KJadnSMZS_G8wbfVnZ2dnUVZ_sLinZ2d@comcast.com>
Lines: 20
NNTP-Posting-Host: otaku.freeshell.org
Organization: Central Iowa (Model) Railroad, Plano, TX, USA
Path: g2news1.google.com!news3.google.com!out04a.usenetserver.com!news.usenetserver.com!in01.usenetserver.com!news.usenetserver.com!news-out.superfeed.net!sp26iad.superfeed.net!news-in.newsfeeds.com!egsner!news.cirr.com!not-for-mail
Newsgroups: rec.radio.amateur.space
X-Trace: chessie.cirr.com 1210787860 29394 192.94.73.2 (14 May 2008 17:57:40 GMT)
Reply-to: ke9v@sdf.lonestar.org
X-Complaints-To: abuse@cirr.com
NNTP-Posting-Date: Wed, 14 May 2008 17:57:40 +0000 (UTC)
User-Agent: slrn/0.9.8.1 (NetBSD)
Xref: g2news1.google.com rec.radio.amateur.space:8

On 2008-05-14, No Spam <no@spam.com> wrote:
> Seems like allot of the amsat webpage info is outdated (The FAQ is dated
> 1994) and I find very little activity anywhere in reference to loggings
> or any QSOs in general.

AMSAT isn't so much "dead" as it is irrelevant. The direction mandated by the membership is to focus on high-earth orbit only projects. Given the present cost of launch opportunities this is mostly a pipe dream. They are constantly working on some HEO project, but haven't been involved with the successful launch of one since Ronald Reagan was president.

The only viable AMSAT projects are AO-51 (a fine LEO sat with plenty of info about it on their Web site) and their cooperation with ARISS.

Satellite enthusiasts spend these days playing with the fleet of CubeSats built mostly by University students and the few other aging sats in the fleet that work some days but not others.

--
jld

```
From -3462842217300921837
X-Google-Thread: 10e8ad,94cce04a8470e559
X-Google-Attributes: gid10e8ad,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news4.google.com!out04a.usenetserver.com!
news.usenetserver.com!in04.usenetserver.com!news.usenetserver.com!
nx01.iad01.newshosting.com!newshosting.com!69.16.185.51.MISMATCH!tmp-post01.iad!
news.highwinds-media.com!roadrunner.com!not-for-mail
Date: Wed, 14 May 2008 15:18:19 -0400
From: Christopher Cox <chrisTOPHERcOX@coboxincORORATED.com>
User-Agent: Mozilla Thunderbird 1.0.7 (Windows/20050923)
X-Accept-Language: en-us, en
MIME-Version: 1.0
Newsgroups: rec.radio.amateur.space
Subject: Re: Is amat satcoms dead?
References: <KJadnSMZS_G8wbfVnZ2dnUVZ_sLinZ2d@comcast.com>
<slrng2ma0h.loi.ke9v@otaku.freeshell.org>
In-Reply-To: <slrng2ma0h.loi.ke9v@otaku.freeshell.org>
Content-Type: text/plain; charset=ISO-8859-1; format=flowed
Content-Transfer-Encoding: 7bit
Lines: 26
Message-ID: <482b3b59$0$12963$4c368faf@roadrunner.com>
Organization: Road Runner High Speed Online http://www.rr.com
NNTP-Posting-Host: 24.210.62.5
X-Complaints-To: abuse@rr.com
Xref: g2news1.google.com rec.radio.amateur.space:9
```

Jeff Davis wrote:

> On 2008-05-14, No Spam <no@spam.com> wrote:
>
>>Seems like allot of the amsat webpage info is outdated (The FAQ is dated 1994) and I find very little activity anywhere in reference to loggings or any QSOs in general.
>
>
> AMSAT isn't so much "dead" as it is irrelevant. The direction mandated by the membership is to focus on high-earth orbit only projects. Given the present cost of launch opportunities this is mostly a pipe dream.

It is worst than that. I indicated a Aerospace company was making a test launch of a new booster and was willing to hoist anything. I was assured by the powers at large that they had lots of contacts on the cap and that any launch possibility would be known about. A couple months later, Boeing pushed a 2 ton piece of concrete into orbit.

I would say AMSAT is disconnected from allot of things.

The Clinton Administration classifying satellites as munitions did not help things at the time.

Uhggg, it can be so frustrating.

Chris

```
From 7553673205226580812
X-Google-Thread: 10e8ad,94cce04a8470e559
X-Google-Attributes: gid10e8ad,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Subject: Re: Is amat satcoms dead?
From: Jeff Davis <ke9v@sdf.lonestar.org>
Date: Wed, 14 May 2008 19:55:00 +0000 (UTC)
Message-ID: <slrng2mgsh.r1l.ke9v@otaku.freeshell.org>
References: <KJadnSMZS_G8wbfVnZ2dnUVZ_sLinZ2d@comcast.com>
<slrng2ma0h.loi.ke9v@otaku.freeshell.org>
<482b3b59$0$12963$4c368faf@roadrunner.com>
Lines: 21
NNTP-Posting-Host: otaku.freeshell.org
Organization: Central Iowa (Model) Railroad, Plano, TX, USA
Path: g2news1.google.com!news2.google.com!news1.google.com!
border1.nntp.dca.giganews.com!nntp.giganews.com!nx01.iad01.newshosting.com!
newshosting.com!198.186.194.249.MISMATCH!news-out.readnews.com!
transit3.readnews.com!news-out.usenet.com!prop.superfeed.net!news-in.usenet.com!
egsner!news.cirr.com!not-for-mail
Newsgroups: rec.radio.amateur.space
X-Trace: chessie.cirr.com 1210794900 1119 192.94.73.2 (14 May 2008 19:55:00 GMT)
Reply-to: ke9v@sdf.lonestar.org
X-Complaints-To: abuse@cirr.com
NNTP-Posting-Date: Wed, 14 May 2008 19:55:00 +0000 (UTC)
User-Agent: slrn/0.9.8.1 (NetBSD)
X-Original-Bytes: 1744
Xref: g2news1.google.com rec.radio.amateur.space:10
```

On 2008-05-14, Christopher Cox <chrisTOPHERcOX@coboxincORORATED.com> wrote:

>
> I would say AMSAT is disconnected from allot of things.

I can't disagree. I don't blame any of the AMSAT leaders for the rapidly rising cost of a launch. There was a day when $100,000 would pay for a ride. Today a ride to a transfer orbit to high-earth is millions -- $6 million at last check and that doesn't count the cost of the satellite itself.

Over the last two years they've managed to raise $150K for Eagle. At that rate, the Sun will have run out of energy by the time they have raised enough funds for a ride to HEO.

I hate it as much as everyone. I had great fun using AO-13. But facts are facts and truth is truth. The developers seem to be having a lot of fun plotting and planning and designing a spacecraft that will never fly...

It's long overdue for AMSAT to move down to LEO and then move forward.

--
jld

```
From 7132388314282682241
X-Google-Thread: 10e8ad,94cce04a8470e559
X-Google-Attributes: gid10e8ad,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news4.google.com!out02b.usenetserver.com!
news.usenetserver.com!in04.usenetserver.com!news.usenetserver.com!
nx02.iad01.newshosting.com!newshosting.com!69.16.185.51.MISMATCH!tmp-post01.iad!
news.highwinds-media.com!roadrunner.com!not-for-mail
Date: Wed, 14 May 2008 16:12:15 -0400
From: Christopher Cox <chrisTOPHERcOX@coboxincORORATED.com>
User-Agent: Mozilla Thunderbird 1.0.7 (Windows/20050923)
X-Accept-Language: en-us, en
MIME-Version: 1.0
Newsgroups: rec.radio.amateur.space
Subject: Re: Is amat satcoms dead?
References: <KJadnSMZS_G8wbfVnZ2dnUVZ_sLinZ2d@comcast.com>
<slrng2ma0h.loi.ke9v@otaku.freeshell.org>
<482b3b59$0$12963$4c368faf@roadrunner.com>
<slrng2mgsh.r1l.ke9v@otaku.freeshell.org>
In-Reply-To: <slrng2mgsh.r1l.ke9v@otaku.freeshell.org>
Content-Type: text/plain; charset=ISO-8859-1; format=flowed
Content-Transfer-Encoding: 7bit
Lines: 35
Message-ID: <482b47fe$0$12907$4c368faf@roadrunner.com>
Organization: Road Runner High Speed Online http://www.rr.com
NNTP-Posting-Host: 24.210.62.5
X-Complaints-To: abuse@rr.com
Xref: g2news1.google.com rec.radio.amateur.space:11
```

Jeff Davis wrote:
> On 2008-05-14, Christopher Cox <chrisTOPHERcOX@coboxincORORATED.com> wrote:
>
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>
>
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> rising cost of a launch. There was a day when $100,000 would pay for a ride.
> Today a ride to a transfer orbit to high-earth is millions -- $6 million at
> last check and that doesn't count the cost of the satellite itself.
>
> Over the last two years they've managed to raise $150K for Eagle. At that

> rate, the Sun will have run out of energy by the time they have raised
> enough funds for a ride to HEO.
>
> I hate it as much as everyone. I had great fun using AO-13. But facts are
> facts and truth is truth. The developers seem to be having a lot of fun
> plotting and planning and designing a spacecraft that will never fly...
>
> It's long overdue for AMSAT to move down to LEO and then move forward.
>

Well I sort of disagree.

My point is I had a contact offering a HEO heavy lift and was ignored.
For free, just show up with the payload. Well nothing is that easy, but
you know what I mean.

If I were to go back and look for such opportunities, would I be
ignored? I would hate to find a ride and look silly again.

These rides show up when a new set of launch vehicles are being reviewed
and nobody trusts them to fly their multi-billion satellite into orbit.

Chris

From 6155341599640637030
X-Google-Thread: 10e8ad,94cce04a8470e559
X-Google-Attributes: gid10e8ad,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Subject: Re: Is amat satcoms dead?
From: Jeff Davis <ke9v@sdf.lonestar.org>
Date: Wed, 14 May 2008 20:38:05 +0000 (UTC)
Message-ID: <slrng2mjda.5d3.ke9v@otaku.freeshell.org>
References: <KJadnSMZS_G8wbfVnZ2dnUVZ_sLinZ2d@comcast.com>
<slrng2ma0h.loi.ke9v@otaku.freeshell.org>
<482b3b59$0$12963$4c368faf@roadrunner.com>
<slrng2mgsh.r1l.ke9v@otaku.freeshell.org>
<482b47fe$0$12907$4c368faf@roadrunner.com>
Lines: 32
NNTP-Posting-Host: otaku.freeshell.org
Organization: Central Iowa (Model) Railroad, Plano, TX, USA
Path: g2news1.google.com!news2.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!news-out.spamkiller.net!prop.superfeed.net!news-in.usenet.com!
egsner!news.cirr.com!not-for-mail
Newsgroups: rec.radio.amateur.space
X-Trace: chessie.cirr.com 1210797485 1901 192.94.73.2 (14 May 2008 20:38:05 GMT)
Reply-to: ke9v@sdf.lonestar.org
X-Complaints-To: abuse@cirr.com
NNTP-Posting-Date: Wed, 14 May 2008 20:38:05 +0000 (UTC)
User-Agent: slrn/0.9.8.1 (NetBSD)
Xref: g2news1.google.com rec.radio.amateur.space:12
X-Original-Bytes: 2523

On 2008-05-14, Christopher Cox <chrisTOPHERcOX@coboxincORORATED.com> wrote:
>
> Well I sort of disagree.
>
> My point is I had a contact offering a HEO heavy lift and was ignored.
> For free, just show up with the payload. Well nothing is that easy, but
> you know what I mean.

I know what you mean. The satellite community in general has been hamstrung for decades because only a small handful of folks can design and build amateur satellites. Most of the key designers of AMSAT projects aren't even active on the air. They get their kicks from designing and buildnig satellites. If they fly, great! If they blow-up or fail on orbit, well, it's back to the drawing board.

But here's the kicker -- because their fun comes from designing and building sats, they want each one to be significantly different or bigger than the one before. That's the silliness that led to P3D -- better known as "the wasted decade". But it's this insistence that no two birds be alike, because that would be "boring" to the designers, that AMSAT has never been in the position of having five brand new, identical satellites sitting on the ground ready to go on a moments notice so when a ride opportunity comes along, like yours, they could jump on it.

The P4 proposal will be no different. They will toil at it for a few years, offer infrequent and incomplete reports on it, when the "folks" who pay for this stuff get upset they will offer some hope by telling them how close they are -- and then some major snafu will undo the entire thing and they will be off on another unobtainable quest...

--
jld

From -6015115271093656837
X-Google-Thread: 10e8ad,94cce04a8470e559
X-Google-Attributes: gid10e8ad,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news3.google.com!feeder.news-service.com!border1.nntp.ams.giganews.com!nntp.giganews.com!newsfeeder.wxs.nl!divide.nova.planet.nl!posting.nova.planet.nl!not-for-mail
Date: Thu, 15 May 2008 18:47:01 +0200
From: Ro <spam@garbage.com>
User-Agent: Thunderbird 1.5.0.14 (Windows/20071210)
MIME-Version: 1.0
Newsgroups: rec.radio.amateur.space
Subject: Re: Is amat satcoms dead?
References: <KJadnSMZS_G8wbfVnZ2dnUVZ_sLinZ2d@comcast.com>
<slrng2ma0h.loi.ke9v@otaku.freeshell.org>
<482b3b59$0$12963$4c368faf@roadrunner.com>
<slrng2mgsh.r1l.ke9v@otaku.freeshell.org>
<482b47fe$0$12907$4c368faf@roadrunner.com>
<slrng2mjda.5d3.ke9v@otaku.freeshell.org>

In-Reply-To: <slrng2mjda.5d3.ke9v@otaku.freeshell.org>
Content-Type: text/plain; charset=ISO-8859-1; format=flowed
Content-Transfer-Encoding: 7bit
Lines: 26
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NNTP-Posting-Host: 84.84.0.196
X-Trace: 1210870019 text.nova.planet.nl 6032 84.84.0.196:10067
X-Complaints-To: abuse@planet.nl
Xref: g2news1.google.com rec.radio.amateur.space:13

Jeff Davis schreef:
> On 2008-05-14, Christopher Cox <chrisTOPHERcOX@coboxincORORATED.com> wrote:
>> Well I sort of disagree.
>>
>> My point is I had a contact offering a HEO heavy lift and was ignored.
>> For free, just show up with the payload. Well nothing is that easy, but
>> you know what I mean.
>

> five brand new, identical satellites sitting on the ground ready to
> go on a moments notice so when a ride opportunity comes along, like yours,
> they could jump on it.

That would be nice, having a bunch of satellites on the shelf.

Out of curiousity:
What kind of capabilities do we want those satellites to have?

Do-anything sats like ao-40 or very basic machines that just do U/V with
500 milliwatt ERP. It would be nice to see a list of 'must have' features.

73 Roland PF2T

From 8492417740154265209
X-Google-Thread: 10e8ad,94cce04a8470e559
X-Google-Attributes: gid10e8ad,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Subject: Re: Is amat satcoms dead?
From: Jeff Davis <ke9v@sdf.lonestar.org>
Date: Thu, 15 May 2008 18:40:18 +0000 (UTC)
Message-ID: <slrng2p0se.q1i.ke9v@otaku.freeshell.org>
References: <KJadnSMZS_G8wbfVnZ2dnUVZ_sLinZ2d@comcast.com>
<slrng2ma0h.loi.ke9v@otaku.freeshell.org>
<482b3b59$0$12963$4c368faf@roadrunner.com>
<slrng2mgsh.r1l.ke9v@otaku.freeshell.org>
<482b47fe$0$12907$4c368faf@roadrunner.com>
<slrng2mjda.5d3.ke9v@otaku.freeshell.org>
<482c6903$1$6032$ba620dc5@text.nova.planet.nl>

Lines: 49
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Organization: Central Iowa (Model) Railroad, Plano, TX, USA
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Newsgroups: rec.radio.amateur.space
X-Trace: chessie.cirr.com 1210876818 23335 192.94.73.2 (15 May 2008 18:40:18 GMT)
Reply-to: ke9v@sdf.lonestar.org
X-Complaints-To: abuse@cirr.com
NNTP-Posting-Date: Thu, 15 May 2008 18:40:18 +0000 (UTC)
User-Agent: slrn/0.9.8.1 (NetBSD)
X-Original-Bytes: 3205
Xref: g2news1.google.com rec.radio.amateur.space:14

On 2008-05-15, Ro <spam@garbage.com> wrote:
>
> Out of curiousity:
> What kind of capabilities do we want those satellites to have?

The old guard at AMSAT seems to clamor for a P3C (AO13) clone.

I'm not certain there is much point in re-hashing the debate though. I think that the era has passed. $6 million dollars for a launch is simply an impossible amount for a group of 2000 or so hobbyists to raise through donations and bake sales, etc.

I don't see it as going out on a limb here to predict that AMSAT will never launch another successful bird to HEO. If you think about it, their track record with the phase 3 sats wasn't very good when a launch was affordable.

P3A went into the ocean on launch

P3B (AO-10) collided with the launch structure and never lived up to its expectations. While lots of QSOs have been made with this Sat it hasn't been controllable for decades.

P3C (AO13) was the only successful P3 satellite. But it's life was cut short because of an orbital miscalculation. It re-entered twelve years ago.

P3D (AO40) never delivered even a fraction of its planned capabilities and unceremoniously blew-up on orbit.

P3E has been promised to be launched in 2006, 2007, 2008, 2009 ... and it still sits in an assembly building on the ground. This one *might* make it to orbit, but I wouldn't bet real money on it.

And that's it. The entire history of P3 satellites. I think it points out that this is a rough and risky business and that indeed, it is rocket science and not so easy to pull off.

AMSAT has plenty of smart people and they are dedicated and hard working.

But all of this tells me that the task is simply too difficult to reliably pull-off. And when you can only afford "one shot" every 10 or 15 years, the cards are stacked against you -- and now with multi-million dollar launch costs, it's the final nail in the coffin for AMSAT at HEO.

The opportunity is much more fertile at LEO and that's precisely where AMSAT should be focusing their energies. But the old guard simply won't hear of any more LEO birds. They are demanding HEO sats and so the long unproductive dance continues for another fruitless decade...

--
jld

```
From -7596593939547745153
X-Google-Thread: 10e8ad,f7f93f2e3b64d536,start
X-Google-Thread: 10b9c8,f7f93f2e3b64d536,start
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X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!news2.google.com!
border1.nntp.dca.giganews.com!nntp.giganews.com!nx01.iad01.newshosting.com!
newshosting.com!198.186.194.249.MISMATCH!transit3.readnews.com!news-
out.readnews.com!news-xxxfer.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-138 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sun, 18 May 2008 11:57:35 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 416
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000501c8b8e6$16d36240$447a26c0$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix2.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader2.panix.com 1211126254 25054 166.84.1.2 (18 May 2008 15:57:34 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 18 May 2008 15:57:34 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
```

Xref: g2news1.google.com rec.radio.amateur.space:15 rec.radio.info:17

AMSAT NEWS SERVICE
ANS-138

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:

* AMSAT Introduces Team Namaste at Dayton Hamvention
* AMSAT Designates Delfi-C3 as DO-64
* AMSAT at Dayton - First Report
* AO-16 Operations Update
* Second Call For Speakers at AMSAT-UK Colloquium
* Satellite Shorts From All Over
* ARISS Status Report for the Week of May 12, 2008

SB SAT @ AMSAT $ANS-138.01
AMSAT Introduces Team Namaste at Dayton Hamvention

AMSAT News Service Bulletin 138.01
>From AMSAT HQ SILVER SPRING, MD.
May 18, 2008
To All RADIO AMATEURS
BID: $ANS-138.01

Team Namaste, a new AMSAT engineering team, was introduced at the Dayton Hamvention held over May 16-18. AMSAT's Eagle and the Intelsat Phase IV ride-share project will include the Advanced Communications Package (ACP) supporting digital communications with a 5.6 GHz uplink and 3.4 GHz downlink.

Team Namaste includes the ACP Ground Segment led by Michelle, W5NYV and the ACP Satellite Segment led by Matt, N2MJI.

Michelle described the ground segment, "Namaste is the effort to develop a microwave band, digital signal capable earth station attainable by the average ham so users can immediately take advantage of the audio, digital messaging, and video services our new new satellites will provide."

Two key user audiences are the target of the Namaste earth station. Michelle describes the user base, "First we want to excite amateur radio operators who want to have fun using microwave bands to talk through a satellite employing digital communications techniques. Second, we want to serve emergency communications operators who need a reliable, infrastructure-independent system in order to get their work done."

The Ground Segment and Satellite Segment Teams are developing an RF link budget and system configuration which a reasonably priced amateur radio transceiver can attain. No commercial amateur radio gear exists for the GHz-frequency range and digital communication link for the new mode on AMSAT high orbit satellites.

Antenna configuration and available power are limited on the satellite platform depending upon solar cells and batteries. Given the modern reality of CC&R's and antenna restrictions in many communities the baseline antenna at the amateur station is currently specified as a half-meter dish. This is the same type and size of dish many homes use for satellite television such as DirecTV.

Planning for the ACP includes 20 watts RF power with 18dB antenna gain at the spacecraft. The ground segment rule of thumb at present estimates 10 watts of transmitter power with the half-meter dish is needed. Further radio link budget and RF exposure safety issues are also being investigated.

AMSAT welcomes Team Namaste, leading the way to an exciting future of Amateur Radio in Space. Questions and comments can be sent via e-mail to namaste-dev@amsat.org. Team Namaste has a web page at:
http://www.amsat.org/namaste.

[ANS thanks Michelle, W5NYV for the above information]

/EX

SB SAT @ AMSAT $ANS-138.02
AMSAT Designates Delfi-C3 as DO-64

AMSAT News Service Bulletin 138.02
>From AMSAT HQ SILVER SPRING, MD.
May 18, 2008
To All RADIO AMATEURS
BID: $ANS-138.02

Bill Tynan, W3XO issued the following statement on behalf of the AMSAT Board of Directors this week:

By the authority vested in me by the AMSAT-NA President, I am pleased to issue an OSCAR number for the amateur radio satellite, Delfi C-3.

As attested to in a communication to the AMSAT-NA Board of Directors dated 8 May, 2008, from Wolter Jan Ubbels, the spacecraft's Project Manager; Delfi C-3 was successfully launched 28 April, 2008 from India aboard a Polar launch vehicle. Mr. Ubbels also states that the satellite was successfully commissioned and is currently transmitting telemetry on the 2 meter amateur band. In addition to its 2 meter downlink, Delfi C-3 has an uplink on the 70 cm band.

According to Mr. Ubbels, this newest amateur satellite was developed by a team of some 60 students and facility members in the fields of Aerospace Engineering, Electrical Engineering, Mathematics and Computer Science from various polytechnic schools in The Netherlands. Further, he states that Delfi C-3 carries 2 experiments, one involving thin film solar cells developed by Dutch Space and the other, an Autonomous Wireless Sun Sensor from the Dutch Government Research Institute (TNO).

Mr. Ubbels' letter says that Delfi C-3 has been duly coordinated through the Region 1 IARU representative, Mr. Graham Shirville, G3VZV, and that the satellite meets all of the criteria necessary to be issued an OSCAR number.

In response to the information provided by Mr. Ubbels, I hereby issue the designation Delfi-C3 OSCAR-64 or Dutch OSCAR-64. The shortened version of either of these two designation would, of course, be, DO-64.

AMSAT-NA is pleased to welcome DO-64 into the family of amateur Radio satellites. We are hopeful that it will fulfill its intended mission of furthering education and increasing interest in the Amateur Radio space program. We congratulate all of those responsible for designing, building, testing and launching this new Amateur Radio satellite and look forward to its long and productive life.

73,
William A. (Bill) Tynan, W3XO

[ANS thanks Bill, W3XO for the above information]

/EX

SB SAT @ AMSAT $ANS-138.03
AMSAT at Dayton - First Report

AMSAT News Service Bulletin 138.03
>From AMSAT HQ SILVER SPRING, MD.
May 18, 2008
To All RADIO AMATEURS
BID: $ANS-138.03

The AMSAT booth at the Dayton Hamvention included the first stages of the full-scale engineering unit of the Eagle satellite structure. This consists of the inner 4 honeycomb panels where electronics are mounted, along with four channels and two electronics boxes. The half-scale model of Eagle was also on display. After the Hamvention the Eagle engineering unit will return to the AMSAT Maryland Lab for further development, integration, and testing.

Radio amateurs were able to get a taste of satellite operations at the live satellite demos. Using the callsign W5IU the demo team was on-the-air via AO-7, AO-16, AO-27, AO-51, and VO-52 on Friday, Saturday, and Sunday.

Tom Clark, K3IO gave a presentation discussing the highlights of AMSAT's technical achievement and plans at the ARRL TTF Forum. The AMSAT forum provided updates on Eagle and Intelsat. More information will be coming in future weeks via ANS and the AMSAT Journal.

AMSAT Engineering representatives were on hand to show off and discuss project status for the ACP, Eagle, Phase IV, P3E, SuitSat-2, and digital encoding.

The combined AMSAT/TAPR Banquet was one of the more popular events of the weekend. Pictures and more stories to follow when they are ready.

The Spring 2008 issue of CQ-VHF magazine, planned to be available at the Hamvention, featured AMSAT in three articles. Lou W5DID & JoAnne K9JKM had an article covering SuitSat-2. Bob KF4KSS & JC W3JCT had an article about AMSAT's new lab, and Keith W5IU wrote a column of amateur radio in space history and AMSAT's history.

[ANS thanks everyone for the above information]

/EX

SB SAT @ AMSAT $ANS-138.04
AO-16 Operations Update

AMSAT News Service Bulletin 138.04
>From AMSAT HQ SILVER SPRING, MD.
May 18, 2008
To All RADIO AMATEURS
BID: $ANS-138.04

The AO-16 satellite has undergone a few periods of turning off with subsequent restarts ensuring operation for varying periods of time.

Mark, N8MH, Control Operator turned AO-16 ON in voice mode to suppot a Scouting Special Events Station. The output power was reduced slightly in an attempt to conserve power in the event that batteries or the solar cells were having problems.

George, KA3HSW, operating from the Scouting Event wrote, "Many thanks to Mark for making AO-16 available during the K9BSA Scout-O-Rama demonstration yesterday, and MANY, MANY thanks for "advertising" that our station was there on the 1950Z pass... we worked quite a number of stations, thanks in large part to Mark's announcement on the bird."

In response to observing stations around the world reporting AO-16 was turned off again Mark provided the latest information, "AO-16 continues to exhibit difficulty in keeping the transmitter turned ON. The last few days I have turned it ON as my schedule permits, only to see it turn itself OFF after a short time (sometimes minutes, other times a few hours). So, it hasn't been turned ON much over the last several days. It is looking less likely to be a power budget issue, and more likely that there is something going on with the hardware in the spacecraft; but this is still speculation. Time will tell. I wish the news was better!"

If you hear AO-16 in voice mode, free to use it. If you hear it "hummmming" in digital mode, please do not transmit to the satellite.

AO-16 Uplink: 145.920 MHz FM
AO-16 Downlink: 437.0260 MHz DSB (LSB and USB)

[ANS thanks Mark, N8MH for the above information]

/EX

SB SAT @ AMSAT $ANS-138.05
Second Call For Speakers at AMSAT-UK Colloquium

AMSAT News Service Bulletin 138.05
>From AMSAT HQ SILVER SPRING, MD.
May 18, 2008
To All RADIO AMATEURS
BID: $ANS-138.05

This is the second call for speakers for the 22nd Amsat-UK Colloquium which will be held at Surrey University, Guildford, Surrey, U.K., from Friday 25th July to Sunday 27th July 2008.

Details of this and previous events can be found at:
http://www.uk.amsat.org.

Amsat-UK invite speakers, about amateur radio space and associated activities, for this event. They are also invited to submit papers for the "Proceedings" document which will be published at the same time but printed papers are not mandatory. We normally prefer authors to present talks themselves rather than having someone else give them in the authors' absence. We also welcome "unpresented" papers for the Proceedings document.

Offers of talks should be submitted as soon as possible; the final date for full documents to be received is late-June 2008 in order that the "Proceedings" document be available to participants.

Submissions should be sent *ONLY* to G4DPZ, via the following routes:

Internet e-mail: dave @ g4dpz dot me dot uk

SnailMail: QTHR from http://www.qrz.com

AMSAT-UK also invite anyone with requests for Program Topics to submit them as soon as possible to G4DPZ. Invitations for any papers on specific subjects will be included in the future call. Likewise if anyone knows of a good speaker, please send contact and other information to G4DPZ.

[ANS thanks Dave, G4DPZ for the above information]

/EX

SB SAT @ AMSAT $ANS-138.06
Satellite Shorts From All Over

AMSAT News Service Bulletin 138.06
>From AMSAT HQ SILVER SPRING, MD.
May 18, 2008
To All RADIO AMATEURS
BID: $ANS-138.06

+ Yuta Araki, JQ1YGV at Nihon University says an updated version of the SEEDS cubesat telemetry analysis software is available from http://cubesat.aero.cst.nihon-u.ac.jp/english/download_e.html. This will be Ver.2.0.2 of Downlink Code for Distribution.

+ Spaceweather.com's simple Satellite Tracker has gone global. The tool now works not only for US and Canadian readers, but also for sky watchers in countries around the world. This development comes as the International Space Station is making bright and frequent nightly apparitions over Europe, Africa, the Middle East, parts of Asia and Australia. If you live in those areas, give it a try: http://spaceweather.com/flybys [via SpaceWeather.com]

+ Art Feller, W4ART has posted photos from AMSAT/ARISS participation at Space Day at the National Air and Space Museum to: http://picasaweb.google.com/oojimoe/2008SpaceDayNASM

[ANS thanks everyone for the above information]

/EX

SB SAT @ AMSAT $ANS-138.07
ARISS Status Report for the Week of May 12, 2008

AMSAT News Service Bulletin 138.07
>From AMSAT HQ SILVER SPRING, MD.
May 18, 2008
To All RADIO AMATEURS
BID: $ANS-138.07

1. Upcoming School Contact

Delta Researchers Schools 2008, Space Expo in Noordwijk, the Netherlands, has been scheduled for an ARISS contact via telebridge station WH6PN in Hawaii. The contact will take place on Friday, May 23 at 15:01 UTC. Twelve Dutch primary schools which participate in the Delta-project will be represented at Space Expo. The project is a cooperation of the Dutch ministry of Education, Culture and Science, the European Space Agency (ESA) and NASA. The schools participating in the project use the themes of space and space exploration to teach science and technology. Three children (ages 7 - 12) from each school will be present.

2. Armada Area Schools - ARISS Contact Postponed

The ARISS contact which was scheduled with Armada area schools in Michigan on May 9 was postponed due to crew scheduling issues. It will be rescheduled in the fall. In place of the May 9 contact, the Teaching From Space Office at Johnson Space Center arranged a teleconference between the Armada students and astronaut Bill McArthur in Houston Texas. Bill spent several minutes talking about the International Space Station and answered in detail 15 student questions. There were approximately 550 participants present at the school. The Teaching From Space Office also sent an educational resource package to the school which included seeds that were flown in space. The Armada schools are looking forward to a direct ARISS contact in the fall.

3. ARISS Founder Ron Parise Passes on

Astronaut Ron Parise, WA4SIR, passed away on Friday, May 9. Ron was a key player in the development of the ARISS program and a strong supporter of educational outreach activities. He spoke with hundreds of hams on the ground during his Shuttle flights STS-35 and STS-67 and was the first to operate packet radio in orbit. He was instrumental in developing both the ISS Ham radio systems currently onboard the ISS and the telebridge station concept with the specific purpose of encouraging students to pursue studies in technical fields.

The American Radio Relay League (ARRL) published this story:
http://www.arrl.org/news/stories/2008/05/10/10092/?nc=1

4. ARISS Member Interviewed on Australian TV

ARISS member Tony Hutchison, VK5ZAI, was interviewed and appeared on the Australian Channel 7 Today Tonight Show. He described his work with the educational ARISS program. The Wireless Institute of Australia (WIA) posted the news clip with permission from Channel 7. See:
http://www.wia.org.au/discover/videoaudio/video/documents/Low_VK5ZAI_Today_Tonight_320X240X256.wmv

5. NASA Tool Aids Amateur Radio Operators

The American Radio Relay League (ARRL) ran an article covering NASA's new 4D Ionosphere tool. The tool can aid amateur radio operators in radio communications. To view the story, go to:
http://www.arrl.org/news/stories/2008/05/07/10081/?nc=1

NASA's article has been posted to:
http://science.nasa.gov/headlines/y2008/30apr_4dionosphere.htm?list212589

6. Wings over the Rockies Amateur Radio Event

On Friday, May 23, Wings over the Rockies Air and Space Museum in Denver, Colorado will open a new exhibit, "Colorado's Astronauts: in their own words." It will also host ceremonies for the presentation of NASA's Ambassador of Exploration Award honoring one of Colorado's astronauts, Jack Swigert. NASA officials will present the award to Jack Swigert's sister, Virginia Swigert. Guests include James A. Lovell, Fred Haise, Ken Mattingly as well as other astronauts and Colorado Governor Bill Ritter. To celebrate the event, an amateur radio special event station K0WAR, will operate on 14250 or 7250 kHz from 09:00 to 21:00 local Denver time (May 23, 15:00 UTC to May 24, 03:00 UTC). An 8-1/2 x 11 QSL certificate will be distributed to confirmed contacts providing an SASE. For more information on the event, see: http://www.wingsmuseum.org/index.php

7. ARISS Presentation at Dayton Hamvention

The American Radio Relay League (ARRL) and the Radio Amateur Satellite Corporation (AMSAT) both supported exhibit booths the Dayton Hamvention. ARISS Australian telebridge operator Tony Hutchison, VK5ZAI, gave a presentation on "A Ham Radio Operator's View of ARISS" at the AMSAT forum covering new ARISS initiatives and a status report on SuitSat-2. The Dayton Hamvention is an internationally attended amateur radio convention that draws crowds of 25,000 annually. For more information on Dayton Hamvention 2008, go to:
http://www.hamvention.org/hv2008/forums/forumlist.htm

[ANS thanks Carol, KB3LKI for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM
K9JKM at amsat dot org

```
From -8927675873318515133
X-Google-Thread: 10e8ad,202aad00dc033a64,start
X-Google-Attributes: gid10e8ad,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
```

Path: g2news1.google.com!news4.google.com!feeder.news-service.com!feeder.news-service.com!news.astraweb.com!border2.a.newsrouter.astraweb.com!hwmnpeer01.ams!hwmnpeer01.lga!news.highwinds-media.com!hw-filter.lga!newsfe07.lga.POSTED!53ab2750!not-for-mail
From: Buck <usenet01@lumpuckeroo.com>
Newsgroups: rec.radio.amateur.space
Subject: An excerpt from ARES Newsletter 5-21-08
Message-ID: <d0v7345usj4ukm4udrnhe8n9shmpvaolrb@4ax.com>
X-Newsreader: Forte Agent 1.93/32.576 English (American)
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Lines: 36
NNTP-Posting-Host: ceekfhbgeaapkfoegghefamnclmngjof
X-Complaints-To: abuse@charter.net
X-Trace:
meohkjfdkiefkjamoldnlfdnfaaakleefefboncacgdmemghceekfhbgeaapkfoeegkdbpchjekolncpchgojimhcidkohclokpniafgghhbjikjoocjpcipmodcojbkgmigicagmhckjgnm
NNTP-Posting-Date: Wed, 21 May 2008 03:43:11 MST
Date: Wed, 21 May 2008 06:42:31 -0400
Xref: g2news1.google.com rec.radio.amateur.space:16

+ The View from Flagler County

Add a satellite capability to your EmComm arsenal. If terrestrial platforms are out, a satellite may be all you have left. Operating through low earth orbiting satellites also improves operating skill: it's like driving your car with the road moving. You must tune your uplink and downlink frequencies to compensate for a fast Doppler shift, as you send and receive your CW or SSB signal. It's not easy at first; but like anything, the more you practice, the better you get.

Try the FM repeater bird AO-51 first, with an uplink of 145.90 MHz, and a downlink of 435.225 MHz. No fancy tracking software is necessary: Use AMSAT's pass predictor at: <http://www.amsat.org/amsat-new/tools/predict/>.

You won't be satisfied for long on AO-51. Move up to VO-52 for real operating on a wide transponder pass band: the uplink is 435.220 MHz to 435.280 MHz and the downlink is 145.870 to 145.930 MHz. Both SSB and CW work just fine. Signals are good without preamplifiers, nor even rotating beam antennas. Believe it or not, I use a cheap, simple fixed 2-meter/70 cm beam <http://www.arrowantennas.com> pointed skyward at a 45 degree angle. Prior to the pass, I check the AMSAT predictor for the access times and the highest elevation azimuth, and walk out to the backyard and hand turn the mast accordingly. I usually get a ten-minute window and decent signals to work a few CW contacts, including a recent one with Honduras. For upgrades, I am planning to add a separate 70 cm beam to reduce a bit of de-sense on voice operation, and a used/rebuilt Alliance U-110 rotator from <http://www.rotorservice.com>.

It's not rocket science (pun intended): if I can do it, anybody can do it. Satellites may be all you have in a doomsday scenario, and are great ways to improve your operating skill. (And frankly, they are a blast of fun to play with!)

From -2569270915854647822
X-Google-Thread: 10e8ad,202aad00dc033a64
X-Google-Attributes: gid10e8ad,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!local02.nntp.dca.giganews.com!nntp.comcast.com!
news.comcast.com.POSTED!not-for-mail
NNTP-Posting-Date: Wed, 21 May 2008 07:35:49 -0500
Date: Wed, 21 May 2008 07:36:13 -0500
From: JoAnne Maenpaa <k9jkm@amsat.org>
User-Agent: Thunderbird 2.0.0.14 (Windows/20080421)
MIME-Version: 1.0
Newsgroups: rec.radio.amateur.space
Subject: Re: An excerpt from ARES Newsletter 5-21-08
References: <d0v7345usj4ukm4udrnhe8n9shmpvaolrb@4ax.com>
In-Reply-To: <d0v7345usj4ukm4udrnhe8n9shmpvaolrb@4ax.com>
Content-Type: text/plain; charset=ISO-8859-1; format=flowed
Content-Transfer-Encoding: 7bit
Message-ID: <Ctqdnf_4qOG4iqnVnZ2dnUVZ_jOdnZ2d@comcast.com>
Lines: 13
X-Usenet-Provider: http://www.giganews.com
NNTP-Posting-Host: 67.184.209.179
X-Trace: sv3-SXt67qI62xDH68Uh/NfTwXak/
0gQlsWIJNKlLvj2cZjVG8QD3S13jyBiSJFkB2QqnLyYSeiufCnIdsk!
0v2bIW7D5a+yaNwWAleHGe7cQBU8XKfMw/l1l/gSD119v2Fx1hchvdTIyPm/sOA8utCOlL+HOE9X!
EfERD/DkJKbEgL6oAog6QOQon9enX6M=
X-Complaints-To: abuse@comcast.net
X-DMCA-Complaints-To: dmca@comcast.net
X-Abuse-and-DMCA-Info: Please be sure to forward a copy of ALL headers
X-Abuse-and-DMCA-Info: Otherwise we will be unable to process your complaint properly
X-Postfilter: 1.3.38
Xref: g2news1.google.com rec.radio.amateur.space:17

> Try the FM repeater bird AO-51 first, with an uplink of 145.90 MHz,
> and a downlink of 435.225 MHz. No fancy tracking software is
> necessary: Use AMSAT's pass predictor at:
> <http://www.amsat.org/amsat-new/tools/predict/>.

AO-51's frequencies are:

FM Repeater, V/U
Uplink: 145.920 MHz FM, NO PL Tone
Downlink: 435.300 MHz FM

A quick overview of AO-51 operating status is posted on the main AMSAT web page http://www.amsat.org.

```
From -8317208570452458175
X-Google-Thread: 10e8ad,94cce04a8470e559
X-Google-Attributes: gid10e8ad,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!news2.google.com!news.glorb.com!
peer1.news.newnet.co.uk!194.159.246.34.MISMATCH!peer-uk.news.demon.net!
kibo.news.demon.net!news.demon.co.uk!demon!nospam.demon.co.uk!hils
From: Hils <hils@nospam.demon.co.uk>
Newsgroups: rec.radio.amateur.space
Subject: Re: Is amat satcoms dead?
Date: Thu, 22 May 2008 17:27:07 +0100
Organization: is a symptom of an uncreative mind
Lines: 27
Message-ID: <DAVwHZ7b7ZNIFwCL@newearth.demon.co.uk>
References: <KJadnSMZS_G8wbfVnZ2dnUVZ_sLinZ2d@comcast.com>
 <slrng2ma0h.loi.ke9v@otaku.freeshell.org>
 <482b3b59$0$12963$4c368faf@roadrunner.com>
 <slrng2mgsh.r1l.ke9v@otaku.freeshell.org>
 <482b47fe$0$12907$4c368faf@roadrunner.com>
 <slrng2mjda.5d3.ke9v@otaku.freeshell.org>
 <482c6903$1$6032$ba620dc5@text.nova.planet.nl>
 <slrng2p0se.q1i.ke9v@otaku.freeshell.org>
NNTP-Posting-Host: newearth.demon.co.uk
Mime-Version: 1.0
Content-Type: text/plain;charset=us-ascii;format=flowed
X-Trace: news.demon.co.uk 1211480854 3184 193.237.117.162 (22 May 2008 18:27:34
GMT)
X-Complaints-To: abuse@demon.net
NNTP-Posting-Date: Thu, 22 May 2008 18:27:34 +0000 (UTC)
User-Agent: Turnpike/6.05-S (<mBzxuS2jji53TkZ3UtmZ3heTZ9>)
Xref: g2news1.google.com rec.radio.amateur.space:18

Jeff Davis <ke9v@sdf.lonestar.org> wrote

>AMSAT has plenty of smart people and they are dedicated and hard working.
>But all of this tells me that the task is simply too difficult to reliably
>pull-off. And when you can only afford "one shot" every 10 or 15 years, the
>cards are stacked against you -- and now with multi-million dollar launch
>costs, it's the final nail in the coffin for AMSAT at HEO.
>
>The opportunity is much more fertile at LEO and that's precisely where AMSAT
>should be focusing their energies. But the old guard simply won't hear of
>any more LEO birds. They are demanding HEO sats and so the long unproductive
>dance continues for another fruitless decade...

Well said.

If national AMSAT organisations are interested primarily in spending
members' money on vapourware and jollies, what's to stop an independent
multinational group using global communications (and, if necessary, the
```

global market) to develop new-generation LEOs?

My preferences would be for science/education packages (like the original Uosats), accessible linear transponders (like the Soviet RS series), built with more robust command systems, anti-alligator DSP, and more radiation-hardened components.

--
Hil

```
From -1580169003000247016
X-Google-Thread: 10e8ad,9494a70d8050d9b5,start
X-Google-Thread: 10b9c8,9494a70d8050d9b5,start
X-Google-Attributes: gid10e8ad,gid10b9c8,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!newsfeed2.dallas1.level3.net!
news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-143 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Thu, 22 May 2008 23:21:35 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 1429
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <001c01c8bc84$1f47c000$5dd74000$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix1.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader2.panix.com 1211512895 12195 166.84.1.1 (23 May 2008 03:21:35 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Fri, 23 May 2008 03:21:35 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news1.google.com rec.radio.amateur.space:19 rec.radio.info:25
```

This report is organized into FIVE parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites

Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites
Part 5 (S5) - deorbited/returned satellites

SB SAT @ AMSAT W8ISS ANS-143.S1
WSR 143 Part 1 05/22/2008

AMSAT NEWS SERVICE BULLETIN 143.S1 FROM AMSAT HQ
SILVER SPRING, MD, May 22, 2008
TO ALL RADIO AMATEURS
BID: $ANS-143.S1

VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.859330 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsat.in/hamsat.htm

To know what transponder is switched on please listen for the beacon that is
active. Each transponder has a different beacon.
[06252007]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational - Software reload

Current Modes: FM Repeater - V/u
                 BBS   - L/u
                 Telemetry   - /u

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.880 MHZ FM
145.880 MHz USB
145.920 MHz FM
1268.700 MHz FM 67Hz PL tone
Digital Downlinks: 435.150 MHz FM 38k4 Digital, PBP, 1 watt output
435.150 MHz FM 9k6 Digital, Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Digital, Pacsat Broadcast Protocol
1268.700 mhz FM 9k6 PBP Digital
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[05152008]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002

Status: Operational.

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer
on board the spacecraft.

2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on
   and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10
   minute timer.
[05282007]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Operational - check operational schedule for current times!!

Current Mode: V/u

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage: http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's CW
telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts.htm
[0820007]
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993

Status: Operational

Current Mode: V/u

```
Uplink:   145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[12132007]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: TESTING - VOICE

Current Mode:  V/u

Uplink:         145.900 MHz FM 1200-baud Manchester FSK (reserved)
                145.920 MHz FM VOICE
                145.940 MHz FM 1200-baud Manchester FSK (reserved)
                145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink:       437.026 MHz USB VOICE
                ( 1200-baud PSK - MBL Telemetry Only )

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[03202008]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational depending on amount of Sunlight

Current Mode: Listen before transmitting

Uplink:   145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink:  29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
```

```
Beacons:   29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/

AO-7 Usage Guidelines on the AO-7 Log and Resource Site located at:
http://www.planetemily.com/ao7
[05282007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Mode: FM Repeater - U/v
              Voice -       Occasianally
              BBS -         ON
              APRS -        ON
              SSTV -        OFF

Expedition 17 crew:
Commander:          Sergey Volkov         RU3DIS
Flight Engineer:    Oleg Kononenko        RN3DX
Flight Engineer:    Garrett Reisman       KE5HAE

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink:   145.825 MHz FM
Worldwide packet downlink: 145.825 Mhz FM

Voice:
Region 1 voice uplink:   145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink:      145.800 MHz FM

Crossband Repeater:
Repeater Uplink:         437.800 MHz FM
Repeater Downlink:       145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German:              DP0ISS
Russian:             RS0ISS
```

RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.
[04242008]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-143.S2
WSR 143 Part 2 05/22/2008

AMSAT NEWS SERVICE BULLETIN 143.S2 FROM AMSAT HQ
SILVER SPRING, MD, May 22, 2008
TO ALL RADIO AMATEURS
BID: $ANS-143.S2

CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.
[11152007]
=====
CP3
Catalog Number: 31128
Launch Date: April 17,2007

Status: Operational

Current Mode: /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[07302007]
=====

PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: In Orbit

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder: 145.825 Mhz FM
[02052007]
=====
NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Operational

Current Mode: /u

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[10222007]
=====
GENESAT-1 ?O-??
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Current Mode: /u

Telemetry Beacon Downlink: 437.0670 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[01082007]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon: 437.2750 MHz CW

Callsign: JQ1YGW

```
Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
[03262007]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003

Status: Operational

Current Mode: /u

Beacon:     436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[01082007]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Semi-Operational - Constant Carrier only

Uplink:  1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan ? )

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[01082007]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW
[08132007]
```

```
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational - Softawre Reload

Current Modes:   FM Repeater - V/u
                 BBS         - L/u
                 Telemetry   -  /u

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink:   145.880 MHZ FM
                       145.880 MHz USB
                       145.920 MHz FM
                      1268.700 MHz FM 67Hz PL tone
Digital Downlinks:     435.150 MHz FM 38k4 Digital, PBP, 1 watt output
                       435.150 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:        145.860 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      1268.700 mhz FM 9k6 PBP Digital
Beacon:                435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[05152008]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Hibernation until full sunlight in November

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink:        144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org
```

```
aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[09242007]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Current Modes: V/U
               L/U

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[09172007]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984

Status: Semi-operational.

Current Mode:  /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon:          435.025 MHz
Mode-S Beacon:     2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[01242008]
=====
RS-22 RADIO SPORT RS-22
Catalog number: 27939
Launch Date: September 27, 2003
```

Status: Operational - 70cm cw only

Current Mode: /u

CW Beacon - 435.352 MHz
            145.818 MHz
[08062007]
=====
Can X-2
Catalog number:
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web page:
http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[05012008]
=====
AAUSAT-II
Catalog number:
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink: 437.425 MHz

For the latest project status update please visit the AAUSAT-II web page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[05012008]
=====
Cute-1.7+APD II
Catalog number:
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink: 437.475 MHz 9k6 Packet
Uplink: 1267.600 Mhz

For the latest project status update please visit the Cute-1.7+APD II web page:
http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78
[05012008]
=====
Compass 1
Catalog number:
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink: 437.275 Mhz CW
          437.405 MHz Packet

For the latest project status update please visit the Compass 1 web page:
http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52
[05012008]
=====
DO-64 Delfi-C3
Catalog number:
Launch Date: April 28, 2008

Status: IN ORBIT

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink: 435.530 to 435.570 MHz

Proposed Frequencies:
* Primary telemetry downlink: 145.870 MHz 1200 Baud BPSK AX.25 400mW
* Backup telemetry downlink: 145.930 MHz 1200 Baud BPSK AX.25 400mW
* Linear transponder passband downlink: 145.880 - 145.920 MHz (inverting)
  400mW PEP
* Linear transponder passband uplink: 435.570 - 435.530 MHz
* Transponder mode beacon: 145.870 MHz CW (10dB below transponder PEP)

For the latest project status update please visit the Delfi-C3 web page:
http://www.delfic3.nl/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68
[05222008]
=====
Seeds 2
Catalog number:
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink: 437.485 MHz

For the latest project status update please visit the Seeds 2 web page:
http://cubesat.aero.cst.nihon-u.ac.jp/english/main_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36
[05012008]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Mode: FM Repeater - U/v
Voice - Occasianally
BBS - ON
APRS - ON
SSTV - OFF

Expedition 17 crew:
Commander: Sergey Volkov RU3DIS
Flight Engineer: Oleg Kononenko RN3DX
Flight Engineer: Garrett Reisman KE5HAE

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM
Worldwide packet downlink: 145.825 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS
RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3

```
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.
[04242008]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-143.S3
WSR 143 Part 3 05/22/2008

AMSAT NEWS SERVICE BULLETIN 143.S3 FROM AMSAT HQ
SILVER SPRING, MD, May 22, 2008
TO ALL RADIO AMATEURS
BID: $ANS-143.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

CP4
Catalog Number: 31122
Launch Date: April 17,2007

Status: Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon:    437.325 MHz CW
[11152007]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Non-Operational

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon:             437.2750 MHz CW

Callsign: JR8YJT
[10152007]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005
```

```
Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency:  437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink:         437.250 MHz FM 67Hz CTCSS
Voice Downlink:     2401.835 MHz FM
Packet Up/Downlink:  437.250 MHz 9k6 packet
Packet Downlink     2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non=Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[08132007]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink:   435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000
```

Status: Non-Operational

Uplinks: 145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[007302007]

=====

NO-45 SAPPHIRE

Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, callsign KE6QMD, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]

=====

SO-42 SAUDISAT-1B

Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]

=====

SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks

V-band: 145.840 - 145.990 MHz CW/LSB
U-band: 435.550 - 435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks

S2-band: 2401.225 - 2401.475 MHz CW/USB
K-band: 24048.010 - 24048.060 MHz CW/USB
Beacon: 2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)

BEACON	General Beacon (GB)	Middle Beacon (MB)	Engineering Beacon (EB)
2 m	none	145.898 MHz	none
70cm	435.438 MHz	435.588 MHz	435.838 MHz
13cm(1)	2400.188 MHz	2400.338 MHz	2400.588 MHz
13cm(2)	2401.173 MHz	2401.323 MHz	2401.573 MHz
3cm	10450.975 MHz	10451.125 MHz	10451.375 MHz
1.5cm	24047.885 MHz	24048.035 MHz	24048.285 MHz

[07162007]
=====
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

```
Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink:    145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site
at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: ?
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater:         436.250 MHz

Uplinks: Mode B Repeater:  145.825 MHz
Mode J Digipeater:         145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
```

Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink: 145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012006]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks: 145.875 MHz FM 1200-baud

```
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
```

```
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
LIBERTAD-1
Catalog Number: 31129
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink:   145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[10222007]
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990
```

```
Status: CW Beacon only

Uplinks:          145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink:      437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[01222007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
[05012006]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational
```

Mode V/U (J) Linear Transponder (Inverting): Non-Operational
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet: Non-Operational
Uplink: 145.8500 MHz MFSK 1200 BPS
Uplink: 145.8700 MHz MFSK 1200 BPS
Uplink: 145.8900 MHz MFSK 1200 BPS
Uplink: 145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon: 145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.8500 - 145.9000 MHz SSB/CW
Downlink 29.4000 - 29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236

```
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
Beacons:   29.450 MHz
          435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon 1:  29.352 MHz (intermittent)
Beacon 2:  29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink:     21.260 to 21.300 MHz CW/USB
Downlink:  145.860 to 145.900 MHz CW/USB
```

```
Beacon:    145.860 MHz

Robot:     145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink:   21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon:   29.408 MHz

Robot:    29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-143.S4
WSR 143 Part 4 05/22/2008

AMSAT NEWS SERVICE BULLETIN 143.S4 FROM AMSAT HQ
SILVER SPRING, MD, May 22, 2008
TO ALL RADIO AMATEURS
BID: $ANS-143.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE PROPOSED FOR LAUNCH AT
THIS TIME:

Phase 5a Mars Mission AO-??
Catalog Number:
Proposed Launch Date: 2009 or 2011

Status: Design Phase

For the latest project status update please visit the AMSAT-DL P5-A web
page:
http://ticket-to-mars.org
[01222007]
=====
PHASE 3E AO-??
Catalog number:
Proposed Launch Date: Late 2008

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web
page:
http://www.amsat-dl.org/p3e/
```

[01222007]
=====
Eagle AO-??
Catalog Number:
Proposed Launch Date: Early/Mid 2009

Status: Design Phase

For the latest project status updates please visit the AMSAT-NA webpage:
http://www.amsat.org
[01222007]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-143.S5
WSR 143 Part 5 05/22/2008

AMSAT NEWS SERVICE BULLETIN 143.S5 FROM AMSAT HQ
SILVER SPRING, MD, May 22, 2008
TO ALL RADIO AMATEURS
BID: $ANS-143.S5

THE FOLLOWING SATELLITES HAVE DE-ORBITED OR HAVE BEEN RETURNED SAFELY:

NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Operational
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink: 145.825 Mhz FM APRS AX25
APRS Uplink: 145.825 MHz FM APRS AX25
Voice/PSK31 Uplink: 28.120 MHz

Packet to Voice ID: RAFT
[06112007]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins trans-

mitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

- AMSAT News Service (ANS)
- General satellite discussion (AMSAT-BB)
- Orbit data (KEPS)
- Manned space missions (SAREX)
- District of Columbia area (AMSAT-DC)
- New England area (AMSAT-NE)
- AMSAT Educational Liaison mailing list (AMSAT-EDU)
- AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

```
From 6366228268839537553
X-Google-Thread: 10e8ad,94cce04a8470e559
X-Google-Attributes: gid10e8ad,domainid0,public,usenet
```

```
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!local02.nntp.dca.giganews.com!nntp.bright.net!
news.bright.net.POSTED!not-for-mail
NNTP-Posting-Date: Thu, 22 May 2008 22:25:50 -0500
Date: Fri, 23 May 2008 03:25:50 +0000
From: Scott <acepilotREMOVE@bloomer.net>
User-Agent: Mozilla/5.0 (Windows; U; Windows NT 5.0; en-US; rv:1.7.2) Gecko/
20040804 Netscape/7.2 (ax)
X-Accept-Language: en-us, en
MIME-Version: 1.0
Newsgroups: rec.radio.amateur.space
Subject: Re: Is amat satcoms dead?
References: <KJadnSMZS_G8wbfVnZ2dnUVZ_sLinZ2d@comcast.com>
<slrng2ma0h.loi.ke9v@otaku.freeshell.org>
<482b3b59$0$12963$4c368faf@roadrunner.com>
<slrng2mgsh.r1l.ke9v@otaku.freeshell.org>
<482b47fe$0$12907$4c368faf@roadrunner.com>
<slrng2mjda.5d3.ke9v@otaku.freeshell.org>
<482c6903$1$6032$ba620dc5@text.nova.planet.nl>
<slrng2p0se.q1i.ke9v@otaku.freeshell.org> <DAVwHZ7b7ZNIFwCL@newearth.demon.co.uk>
In-Reply-To: <DAVwHZ7b7ZNIFwCL@newearth.demon.co.uk>
Content-Type: text/plain; charset=us-ascii; format=flowed
Content-Transfer-Encoding: 7bit
Message-ID: <msednWbNeK2jpKvVnZ2dnUVZ_uGdnZ2d@bright.net>
Lines: 37
X-Usenet-Provider: http://www.giganews.com
NNTP-Posting-Host: 64.33.199.218
X-Trace: sv3-rk1/Vz/9v8MJmTshTFxyqcU0H/sPpwG6Hemmp4rN7V6/
jB2AGoxLmuHNXVyDfaWuE+X7LI/G2MKWdZb!pYs5YyN+TCSVrOCCNiMljkG0einLx2xouHIPLo90A/
84tbaBeteGyD7FYy16NY8bKv0cGf+1cytZ!NWb5GY0OBA==
X-Abuse-and-DMCA-Info: Please be sure to forward a copy of ALL headers
X-Abuse-and-DMCA-Info: Otherwise we will be unable to process your complaint
properly
X-Postfilter: 1.3.39
Xref: g2news1.google.com rec.radio.amateur.space:20
```

Hils wrote:
> Jeff Davis <ke9v@sdf.lonestar.org> wrote
>
>> AMSAT has plenty of smart people and they are dedicated and hard working.
>> But all of this tells me that the task is simply too difficult to
>> reliably
>> pull-off. And when you can only afford "one shot" every 10 or 15
>> years, the
>> cards are stacked against you -- and now with multi-million dollar launch
>> costs, it's the final nail in the coffin for AMSAT at HEO.
>>
>> The opportunity is much more fertile at LEO and that's precisely where
>> AMSAT
>> should be focusing their energies. But the old guard simply won't hear of
>> any more LEO birds. They are demanding HEO sats and so the long
>> unproductive

>> dance continues for another fruitless decade...
>
>
> Well said.
>
> If national AMSAT organisations are interested primarily in spending
> members' money on vapourware and jollies, what's to stop an independent
> multinational group using global communications (and, if necessary, the
> global market) to develop new-generation LEOs?
>
> My preferences would be for science/education packages (like the
> original Uosats), accessible linear transponders (like the Soviet RS
> series), built with more robust command systems, anti-alligator DSP, and
> more radiation-hardened components.
>

I'm all for the linear transponders! I'm tired of FM birds. I'd really
love to have a "HEO" satellite so I can get more than 10 minutes to try
and squeeze in a QSO on a pass.

Scott
N0EDV

```
From -3454048324518985482
X-Google-Thread: 10e8ad,94cce04a8470e559
X-Google-Attributes: gid10e8ad,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Subject: Re: Is amat satcoms dead?
From: Jeff Davis <ke9v@sdf.lonestar.org>
Date: Fri, 23 May 2008 12:59:54 +0000 (UTC)
Message-ID: <slrng3dfua.mks.ke9v@otaku.freeshell.org>
References: <KJadnSMZS_G8wbfVnZ2dnUVZ_sLinZ2d@comcast.com>
<slrng2ma0h.loi.ke9v@otaku.freeshell.org>
<482b3b59$0$12963$4c368faf@roadrunner.com>
<slrng2mgsh.r1l.ke9v@otaku.freeshell.org>
<482b47fe$0$12907$4c368faf@roadrunner.com>
<slrng2mjda.5d3.ke9v@otaku.freeshell.org>
<482c6903$1$6032$ba620dc5@text.nova.planet.nl>
<slrng2p0se.q1i.ke9v@otaku.freeshell.org> <DAVwHZ7b7ZNIFwCL@newearth.demon.co.uk>
<msednWbNeK2jpKvVnZ2dnUVZ_uGdnZ2d@bright.net>
Lines: 10
NNTP-Posting-Host: otaku.freeshell.org
Organization: Central Iowa (Model) Railroad, Plano, TX, USA
Path: g2news1.google.com!news2.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx01.iad01.newshosting.com!newshosting.com!news-
out.nuthinbutnews.com!prop.superfeed.net!news-in1.spamkiller.net!egsner!
news.cirr.com!not-for-mail
Newsgroups: rec.radio.amateur.space
X-Trace: chessie.cirr.com 1211547594 23588 192.94.73.2 (23 May 2008 12:59:54 GMT)
Reply-to: ke9v@sdf.lonestar.org
X-Complaints-To: abuse@cirr.com
NNTP-Posting-Date: Fri, 23 May 2008 12:59:54 +0000 (UTC)
User-Agent: slrn/0.9.8.1 (NetBSD)
```

```
X-Original-Bytes: 1511
Xref: g2news1.google.com rec.radio.amateur.space:21
```

On 2008-05-23, Scott <acepilotREMOVE@bloomer.net> wrote:
> I'm all for the linear transponders! I'm tired of FM birds. I'd really
> love to have a "HEO" satellite so I can get more than 10 minutes to try
> and squeeze in a QSO on a pass.

We would all enjoy that. But since that isn't going to happen, what *else*
would you like to be able to do with amateur satellites?

--
jld

```
From -1783385902541788891
X-Google-Thread: 10e8ad,94cce04a8470e559
X-Google-Attributes: gid10e8ad,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!news1.google.com!
border1.nntp.dca.giganews.com!nntp.giganews.com!nx01.iad01.newshosting.com!
newshosting.com!208.49.83.146.MISMATCH!uns-out.usenetserver.com!
news.usenetserver.com!pc03.usenetserver.com!fe101.usenetserver.com.POSTED!
fd24bd7a!not-for-mail
From: gwatts <gwatts@frontiernet.net>
User-Agent: Mozilla Thunderbird 1.0.6 (Windows/20050716)
X-Accept-Language: en-us, en
MIME-Version: 1.0
Newsgroups: rec.radio.amateur.space
Subject: Re: Is amat satcoms dead?
References: <KJadnSMZS_G8wbfVnZ2dnUVZ_sLinZ2d@comcast.com>
<slrng2ma0h.loi.ke9v@otaku.freeshell.org>
<482b3b59$0$12963$4c368faf@roadrunner.com>
<slrng2mgsh.r1l.ke9v@otaku.freeshell.org>
<482b47fe$0$12907$4c368faf@roadrunner.com>
<slrng2mjda.5d3.ke9v@otaku.freeshell.org>
<482c6903$1$6032$ba620dc5@text.nova.planet.nl>
<slrng2p0se.q1i.ke9v@otaku.freeshell.org> <DAVwHZ7b7ZNIFwCL@newearth.demon.co.uk>
<msednWbNeK2jpKvVnZ2dnUVZ_uGdnZ2d@bright.net>
<slrng3dfua.mks.ke9v@otaku.freeshell.org>
In-Reply-To: <slrng3dfua.mks.ke9v@otaku.freeshell.org>
Content-Type: text/plain; charset=ISO-8859-1; format=flowed
Content-Transfer-Encoding: 7bit
Lines: 39
Message-ID: <NQzZj.55132$mz3.47600@fe101.usenetserver.com>
X-Complaints-To: abuse-news@frontiernet.net
NNTP-Posting-Date: Fri, 23 May 2008 09:42:05 EDT
Organization: Frontier
Date: Fri, 23 May 2008 09:42:04 -0400
Xref: g2news1.google.com rec.radio.amateur.space:22
```

Jeff Davis wrote:
> On 2008-05-23, Scott <acepilotREMOVE@bloomer.net> wrote:

>
>>I'm all for the linear transponders! I'm tired of FM birds. I'd really
>>love to have a "HEO" satellite so I can get more than 10 minutes to try
>>and squeeze in a QSO on a pass.
>
>
> We would all enjoy that. But since that isn't going to happen, what *else*
> would you like to be able to do with amateur satellites?

Nothing.

If all it will be are FM LEOs then quit spending the money and cede
space to the high dollar commercial and military interests and the
academic groups that put up cubesats.

A single channel repeater in the sky is a waste of time and resources
for all but the few who use high power amplifiers on COTS rigs, any
pretense of 'amateur spirit' or 'emergency preparedness' is nothing more
than vanity.

If the amateur community can't get a free or discounted ride to do
something more than put up another repeater then we really are an
anachronism and have no business playing in space. There was an offer
for a free HEO lift and apparently it was ignored. This indicates those
in charge are more interested in accolades than in operating, which
means they shouldn't be in charge. I quit paying my AMSAT dues when
this became apparent and my opinion wasn't even worth what my dues were.

AMSAT should be about something greater, P3's, P4's or at least
something a little more difficult than what a bunch of college seniors
can accomplish in a semester or two, something that offers a challenge
to those of us building a ground station and allows more than a quick
calls and signal report exchange between other stations doing the same.
If AMSAT can't better that they should dissolve and get used to being
the mere footnote they're rapidly becoming.

- Galen, W8LNA

From 1174707853706767500
X-Google-Thread: 10e8ad,94cce04a8470e559
X-Google-Attributes: gid10e8ad,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Subject: Re: Is amat satcoms dead?
From: Jeff Davis <ke9v@sdf.lonestar.org>
Date: Fri, 23 May 2008 20:06:07 +0000 (UTC)
Message-ID: <slrng3e8tf.329.ke9v@otaku.freeshell.org>
References: <KJadnSMZS_G8wbfVnZ2dnUVZ_sLinZ2d@comcast.com>
<slrng2ma0h.loi.ke9v@otaku.freeshell.org>
<482b3b59$0$12963$4c368faf@roadrunner.com>
<slrng2mgsh.r1l.ke9v@otaku.freeshell.org>
<482b47fe$0$12907$4c368faf@roadrunner.com>
<slrng2mjda.5d3.ke9v@otaku.freeshell.org>

<482c6903$1$6032$ba620dc5@text.nova.planet.nl>
<slrng2p0se.q1i.ke9v@otaku.freeshell.org> <DAVwHZ7b7ZNIFwCL@newearth.demon.co.uk>
<msednWbNeK2jpKvVnZ2dnUVZ_uGdnZ2d@bright.net>
<slrng3dfua.mks.ke9v@otaku.freeshell.org>
<NQzZj.55132$mz3.47600@fe101.usenetserver.com>
Lines: 27
NNTP-Posting-Host: otaku.freeshell.org
Organization: Central Iowa (Model) Railroad, Plano, TX, USA
Path: g2news1.google.com!news1.google.com!news2.google.com!news.glorb.com!feeder.erje.net!news-out.newsgroups.com!prop.superfeed.net!news-in1.spamkiller.net!egsner!news.cirr.com!not-for-mail
Newsgroups: rec.radio.amateur.space
X-Trace: chessie.cirr.com 1211573168 29795 192.94.73.2 (23 May 2008 20:06:07 GMT)
Reply-to: ke9v@sdf.lonestar.org
X-Complaints-To: abuse@cirr.com
NNTP-Posting-Date: Fri, 23 May 2008 20:06:07 +0000 (UTC)
User-Agent: slrn/0.9.8.1 (NetBSD)
Xref: g2news1.google.com rec.radio.amateur.space:23

On 2008-05-23, gwatts <gwatts@frontiernet.net> wrote:
>
> If all it will be are FM LEOs then quit spending the money and cede
> space to the high dollar commercial and military interests and the
> academic groups that put up cubesats.

Why -- just because you don't like them?

I'm not a big fan or a user of the FM sats, but amateur satellite enthusiasts haven't had a properly functioning HEO sat in nearly thirteen years. Somehow, they have managed to entertain themselves with assets at LEO for a long, long time without growing weary.

Most of today's satellite enthusiasts weren't even around for AO-13 and really have no idea what the HEO sats were like. Those that were have mostly given up and sold all their gear.

And good thing too, since we will never see another amateur satellite in a high orbit.

We can plan and build and launch new satellites in low earth orbit, or we can take all our toys and go home. HEO has become a pipe-dream. A potemkin facade. A way of spending countless years and decades working on things that sound great but never quite materialize...

--
jld

From 3535635303495008915
X-Google-Thread: 10e8ad,94cce04a8470e559
X-Google-Attributes: gid10e8ad,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!border1.nntp.dca.giganews.com!

```
nntp.giganews.com!local02.nntp.dca.giganews.com!nntp.comcast.com!
news.comcast.com.POSTED!not-for-mail
NNTP-Posting-Date: Sat, 24 May 2008 01:22:18 -0500
From: No Spam <no@spam.com>
Subject: Re: Is amat satcoms dead?
Newsgroups: rec.radio.amateur.space
References: <KJadnSMZS_G8wbfVnZ2dnUVZ_sLinZ2d@comcast.com>
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     <482b3b59$0$12963$4c368faf@roadrunner.com>
     <slrng2mgsh.r1l.ke9v@otaku.freeshell.org>
     <482b47fe$0$12907$4c368faf@roadrunner.com>
     <slrng2mjda.5d3.ke9v@otaku.freeshell.org>
     <482c6903$1$6032$ba620dc5@text.nova.planet.nl>
     <slrng2p0se.q1i.ke9v@otaku.freeshell.org>
     <DAVwHZ7b7ZNIFwCL@newearth.demon.co.uk>
     <msednWbNeK2jpKvVnZ2dnUVZ_uGdnZ2d@bright.net>
     <slrng3dfua.mks.ke9v@otaku.freeshell.org>
     <NQzZj.55132$mz3.47600@fe101.usenetserver.com>
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MIME-Version: 1.0
Content-Type: text/plain; charset=UTF-8
Content-Transfer-Encoding: 8bit
Message-ID: <KJydnQ1BRPWHKarVnZ2dnUVZ_vKdnZ2d@comcast.com>
Date: Sat, 24 May 2008 01:22:18 -0500
Lines: 44
X-Usenet-Provider: http://www.giganews.com
NNTP-Posting-Host: 24.8.221.21
X-Trace: sv3-Fcf73uCre9hPf8ZEjnAXorSCeJSAm6EHGETn0TwBVHqUniV5qffO/
+8SMICs0HCl6bvANpm7sIeZPzh!
kudToNmvUrGeGQOe1dggKVvTtFdDzOYa0Tox31UMkAdTup67cvjCrYEwr09cgrJebi5GjBKrlz6O!
p+I8/3WZpGZaF5YzI53O8GRf5pg=
X-Complaints-To: abuse@comcast.net
X-DMCA-Complaints-To: dmca@comcast.net
X-Abuse-and-DMCA-Info: Please be sure to forward a copy of ALL headers
X-Abuse-and-DMCA-Info: Otherwise we will be unable to process your complaint
properly
X-Postfilter: 1.3.39
Xref: g2news1.google.com rec.radio.amateur.space:25

On Fri, 23 May 2008 09:42:04 -0400, gwatts wrote:

> Jeff Davis wrote:
>> On 2008-05-23, Scott <acepilotREMOVE@bloomer.net> wrote:
>>
>>>I'm all for the linear transponders!  I'm tired of FM birds.  I'd
>>>really love to have a "HEO" satellite so I can get more than 10 minutes
>>>to try and squeeze in a QSO on a pass.
>>
>>
>> We would all enjoy that. But since that isn't going to happen, what
>> *else* would you like to be able to do with amateur satellites?
>
> Nothing.
```

>
> If all it will be are FM LEOs then quit spending the money and cede
> space to the high dollar commercial and military interests and the
> academic groups that put up cubesats.
>
> A single channel repeater in the sky is a waste of time and resources
> for all but the few who use high power amplifiers on COTS rigs, any
> pretense of 'amateur spirit' or 'emergency preparedness' is nothing more
> than vanity.
>
> If the amateur community can't get a free or discounted ride to do
> something more than put up another repeater then we really are an
> anachronism and have no business playing in space. There was an offer
> for a free HEO lift and apparently it was ignored. This indicates those
> in charge are more interested in accolades than in operating, which
> means they shouldn't be in charge. I quit paying my AMSAT dues when
> this became apparent and my opinion wasn't even worth what my dues were.
>
> AMSAT should be about something greater, P3's, P4's or at least
> something a little more difficult than what a bunch of college seniors
> can accomplish in a semester or two, something that offers a challenge
> to those of us building a ground station and allows more than a quick
> calls and signal report exchange between other stations doing the same.
>   If AMSAT can't better that they should dissolve and get used to being
> the mere footnote they're rapidly becoming.
>
> - Galen, W8LNA

Has anybody thought about contacting Dish or it's insurance company about
the bird they abandoned due to a lifter failure?

From -1434024791566232873
X-Google-Thread: 10e8ad,dc32b26ef5ad19db,start
X-Google-Thread: 10b9c8,dc32b26ef5ad19db,start
X-Google-Attributes: gid10e8ad,gid10b9c8,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!border1.nntp.dca.giganews.com!
border2.nntp.dca.giganews.com!nntp.giganews.com!newspeer1.nac.net!
transit3.readnews.com!news-out.readnews.com!news-xxxfer.readnews.com!panix!
rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-145 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sat, 24 May 2008 22:22:03 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 341
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000801c8be02$376902a0$a63b07e0$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix3.panix.com
Mime-Version: 1.0

Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader2.panix.com 1211682123 25401 166.84.1.3 (25 May 2008 02:22:03 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 25 May 2008 02:22:03 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to   rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to   rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
X-Original-Bytes: 13995
Xref: g2news1.google.com rec.radio.amateur.space:26 rec.radio.info:30

AMSAT NEWS SERVICE
ANS-145

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

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* Delfi-C3 DO-64 Tests Linear Transponder
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* AO-16 Operation Update
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* Yubileiny RS-30 Launched on May 23
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SB SAT @ AMSAT $ANS-145.01
AMSAT-NA Board of Directors Nomination Announcement

AMSAT News Service Bulletin 145.01
>From AMSAT HQ SILVER SPRING, MD.
May 25, 2008

To All RADIO AMATEURS
BID: $ANS-145.01

Nominations are open for the AMSAT-NA Board of Directors (BOD). The nominations must be in writing and received at the AMSAT office by end of business June 15, 2008.

AMSAT-NA member societies or five current individual members may make nominations of fellow members to serve a 2-year term. Three of the seven seats must be filled this year.

The board members whose terms are expiring are:

Tom Clark, K3IO
Lou McFadin, W5DID
Bob McGwier, N4HY

Prospective AMSAT-NA BOD members generally attend two meetings each year, usually during the first and third quarters of the year. Attendance at the meetings is mandatory. Travel expenses for BOD meetings are paid for by AMSAT-NA.

Nominations must be in writing and mailed to:

AMSAT-NA
Board of Director Nomination
850 Sligo Ave #600
Silver Spring, MD 20910

The nominations with descriptive information about each candidate will be mailed out July 15, 2008. Ballots must be received in Silver Spring,MD by September 15, 2008. Only active members as of July 24, 2008 are eligible to vote.

[ANS thanks AMSAT HQ for the above information]

/EX

SB SAT @ AMSAT $ANS-145.02
Delfi-C3 DO-64 Tests Linear Transponder

AMSAT News Service Bulletin 145.02
>From AMSAT HQ SILVER SPRING, MD.
May 25, 2008
To All RADIO AMATEURS
BID: $ANS-145.02

During the past week the Delfi-C3 satellite DO-64 has continued its science mission. But, during a pass over the Delfi-C3 ground station on May 15 the amateur band linear transponder was successfully tested and activated for a short time. The CW beacon was received well and subsequently good signals using SSB were received.

An audio file of the test can be found at:
http://www.delfic3.nl/photoblog/wp-content/uploads/2008/05/pe4wj_transponder_test.mp3

The Delfi ground control team is currently performing tests while the spacecraft is over the Netherlands to address the downlink drop-out issue. These tests may require several passes over the ground controllers so the satellite may still experience downlink dropouts over the coming days.

The current operating mode of Delfi can be found on its webpage at:
http://www.delfic3.nl/index.php?option=com_content&task=view&id=93&Itemid=122
While in science mode Defli has continued operation on a downlink of 145.930 MHz, transmitting 1200 Baud BPSK AX.25 telemetry data. Reminder: Delfi-C3 does not have a battery on-board and will therefore only be active in sunlight. The latest keplerian elements for Delfi can also be found on the operations web page.

The Delfi team reported, "Up to now, we have received over 130000 AX.25 frames from all over the world, thank you very much for your efforts and observations so far!"

[ANS thanks Wouter Jan Ubbels, PE4WJ for the above information]

/EX

SB SAT @ AMSAT $ANS-145.03
Global Packet Operation Activated on Cute1.7 + APD II

AMSAT News Service Bulletin 145.03
>From AMSAT HQ SILVER SPRING, MD.
May 25, 2008
To All RADIO AMATEURS
BID: $ANS-145.03

Hiroki Ashida, JQ1YCZ reported this week that the Tokyo Institute of Technology enabled continuous packet telemetry on their cubesat, Cute1.7 + APD II. This was to support a 12 hour experiment of the Avalanche Photo Diode APD) as a radiation monitor of low-energy (E > 10 keV) particles trapped in low Earth orbit.

Prior to the activation of this experiment packet telemetry had only been activated when the Cute1.7 + APD II cubesat was within range of the Japanese ground control station.

The FM packets were received on 437.475MHz from amateur radio station around the world. Packet formats and additional satellite information can be found at:
http://lss.mes.titech.ac.jp/ssp/cute1.7/fm_mode_apd_e.html

[ANS thanks Hiroki Ashida, JQ1YCZ for the above information]

/EX

SB SAT @ AMSAT $ANS-145.04
AO-16 Operation Update

AMSAT News Service Bulletin 145.04
>From AMSAT HQ SILVER SPRING, MD.
May 25, 2008
To All RADIO AMATEURS
BID: $ANS-145.04

Mark Hammond, N8MH, AO-16 Command Station gave an update of testing on the AO-16 satellite. Mark commented, "Indeed, over the last several days you are likely to have found AO-16 silent. There appears to be something in the spacecraft shutting down the transmitter after a short, random period of time. Current speculation on the problem includes a temperature issue that has reared its ugly head now that the eclipse periods are increasing and the spacecraft internal temperatures are decreasing. It may be a hardware timer. It does not appear to be a battery issue."

The ground control station will manually turn the satellite ON and then configure it for voice operations. This is a manual process and command stations are limited to the East coast of the US. As schedules permit, we'll try to turn it ON; for now, it's the best we can do. Time will tell if the current situation will stay the same, improve, or get worse.

[ANS thanks Mark, N8MH for the above information]

/EX

SB SAT @ AMSAT $ANS-145.05
China Plans Amateur Radio Satellite Launch

AMSAT News Service Bulletin 145.05
>From AMSAT HQ SILVER SPRING, MD.
May 25, 2008
To All RADIO AMATEURS
BID: $ANS-145.05

A report has been received via Michael Chen, BD5RV/4 that a new amateur radio satellite to be launched by China, CAS-1 has completed its IARU frequency coordination and the hardware has been finished.

The payload is planned to include a CW Telemetry Beacon, Linear Transponder, FM repeater and a Digital Store-forward Transponder. The operations will use 70cms downlinks and 2 meter uplinks at 500mW output power. The satellite is expected to have a mass of 30kgs and be launched from China into a sun syncronous orbit with a 670km apogee.

The CAS-1 team is waiting for another payload to be finished before launch which at this point is predicted to happen in early 2009.

[ANS thanks Michael, BD5RV/4 for the above information]

/EX

SB SAT @ AMSAT $ANS-145.06
AO-51 To Switch to Dual V/U Repeater Mode

AMSAT News Service Bulletin 145.06
>From AMSAT HQ SILVER SPRING, MD.
May 25, 2008
To All RADIO AMATEURS
BID: $ANS-145.06

AO-51 will switch into dual V/U repeater mode UTC May 26, 2008. Take advantage of the secondary repeater for historically easier operation. Information about the AO-51 modes and frequencies can be found on the AMSAT web site.

[ANS thanks the AO-51 Operations Team for the above information]

/EX

SB SAT @ AMSAT $ANS-145.07
Call For Papers: UNIVERSAT Space Symposium in Moscow

AMSAT News Service Bulletin 145.07
>From AMSAT HQ SILVER SPRING, MD.
May 25, 2008
To All RADIO AMATEURS
BID: $ANS-145.07

Members of EU-Amsat, Amsat-UK, Amsat-NA and anyone else interested in Amateur radio satellites are cordially invited to submit papers on space related subjects - particularly cubesats in education - to The third International Symposium UNIVERSAT-2008, which is organised by the Skobeltsyn Institute Of Nuclear Physics, Lomonosov Moscow State University - which will take place on September 1-6, 2008 at the Conference Halls of The Moscow State University Boarding Houses in Zvenigorod, Moscow Region, Russian Federation.

Details can be seen at http://cosmos.msu.ru/universat2008/.

Papers and/or queries should be submitted to Alezander Zeitsev RW3DZ via e-mail: zaitsev@izmiran.ru.

The deadline for papers is May the 31st but extensions may be possible.

This is an excellent forum for satellite interested individuals to take part in an international space symposium as well as discuss the possibility and prospects for future projects and launch opportunities.

[ANS thanks Alezander Zeitsev RW3DZ for the above information]

/EX

SB SAT @ AMSAT $ANS-145.08
Yubileiny RS-30 Launched on May 23

AMSAT News Service Bulletin 145.08
>From AMSAT HQ SILVER SPRING, MD.
May 25, 2008
To All RADIO AMATEURS
BID: $ANS-145.08

The Russian Federal Space Agency announced the successful launch of the Yubileiny, a 45 kg small satellite, on May 23 from the Plesetsk Launching Site into low earth orbit.

The motive for development of Yubileiny small spacecraft was the 50th anniversary of the first space satellite. One mission goal includes flight qaulification of the new space systems and equipment. Radio amateur operators all over the world will be able to receive the telemetry downlink utilizing RS-style CW telemetry 435.315 MHz using the callsign RS30.

The satellite transmits a cyclic series of messages lasting for 4 minutes including a call signal and TM-data (10 seconds); a voice message (1 minute); a pause (50 seconds); the first artificial satellite imitated signals (10 seconds); an image (1 minute); with a final pause (50 seconds).

Aerospace Vehicle Laboratory SCC is the primary the satellite control. A similar Satellite Control Center has been established at the Siberian State Aerospace University in Krasnoyarsk to allow students and research engineers can receive and analyze the telemetry in cooperation with the specialists at JSC Academician M.F. Reshetnev Information Satellite Systems center.

Details can be found on-line at:
http://www.npopm.com/?cid=news_ivent&nid=61

[ANS thanks Ralph W0RPK and the Russian Federal Space Agency for the above information]

/EX

SB SAT @ AMSAT $ANS-145.09
ARISS Status Report for the Week of May 19, 2008

AMSAT News Service Bulletin 145.09
>From AMSAT HQ SILVER SPRING, MD.
May 25, 2008
To All RADIO AMATEURS
BID: $ANS-145.09

1. Dutch School Contact

Delta Researchers Schools 2008, Space Expo in Noordwijk, the Netherlands, had an ARISS contact via telebridge station WH6PN in Hawaii on Friday, May 23. Twelve Dutch primary schools which participate in the Delta-project were represented at Space Expo. The project is a cooperation of the Dutch ministry of Education, Culture and Science, the European Space Agency (ESA) and NASA. The schools participating in the project use the themes of space and space exploration to teach science and technology. Three children (ages 7 - 12) from each school were present. The audio for this event was fed into the EchoLink AMSAT (101 377) and JK1ZRW (277 208) servers.

2. Cindy McArthur Receives Silver Snoopy Award

Last week, Teaching From Space Project Lead Cindy McArthur became the recipient of a Silver Snoopy award. Astronaut Barbara Morgan, KD5VNP, presented the award in appreciation for McArthur's work and support of educational activities throughout the STS-118 mission which included an Educational Downlinks videoconference and an ARISS contact.

[ANS thanks Carol, KB3LKI for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM
K9JKM at amsat dot org

From -3176268402833719209
X-Google-Thread: 10e8ad,f4cebf8fc60c4bf0,start
X-Google-Attributes: gid10e8ad,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!postnews.google.com!t12g2000prg.googlegroups.com!not-for-mail
From: zlham <zl3dw@nzart.org.nz>

```
Newsgroups: rec.radio.amateur.space
Subject: SEEDS II schedule
Date: Sat, 24 May 2008 22:28:24 -0700 (PDT)
Organization: http://groups.google.com
Lines: 7
Message-ID: <4796c8b2-5fe9-4a29-8315-289516718792@t12g2000prg.googlegroups.com>
NNTP-Posting-Host: 219.89.90.200
Mime-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 7bit
X-Trace: posting.google.com 1211693304 2194 127.0.0.1 (25 May 2008 05:28:24 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Sun, 25 May 2008 05:28:24 +0000 (UTC)
Complaints-To: groups-abuse@google.com
Injection-Info: t12g2000prg.googlegroups.com; posting-host=219.89.90.200;
     posting-account=yXIf6AoAAAAcUmPx6E9ntPG6JzzlViSt
User-Agent: G2/1.0
X-HTTP-UserAgent: Mozilla/5.0 (Windows; U; Windows NT 5.1; en-GB; rv:1.8.1.14)
     Gecko/20080404 Firefox/2.0.0.14,gzip(gfe),gzip(gfe)
Xref: g2news1.google.com rec.radio.amateur.space:27
```

Does anyone know the schedule for Seeds II? The one on the website is for Japan only. I want to hear the SSTV and digitalker, but every pass all I hear is just the CW telemetry. I wonder if the bird is programmed for SSTV & digitalk over Japan so we miss out in New Zealand?

Andrew - ZL3DW

```
From 2075847469113685991
X-Google-Thread: 10e8ad,f4cebf8fc60c4bf0
X-Google-Attributes: gid10e8ad,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news3.google.com!news2.google.com!news1.google.com!
news.glorb.com!wn11feed!worldnet.att.net!bgtnsc05-
news.ops.worldnet.att.net.POSTED!e63cd5b6!not-for-mail
From: Alan WA4SCA <ALANBIDDLE70@YAHOO.COM>
Newsgroups: rec.radio.amateur.space
Subject: Re: SEEDS II schedule
Organization: AMSAT-NA
Reply-To: ALANBIDDLE70@YAHOO.COM
Message-ID: <7noi34pcl5idotdivs707qumfe7nemeu4o@4ax.com>
References: <4796c8b2-5fe9-4a29-8315-289516718792@t12g2000prg.googlegroups.com>
X-Newsreader: Forte Agent 4.2/32.1118
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Lines: 9
NNTP-Posting-Host: 73bc5dd971a73e61fc8e6e594c5e64a6
X-Complaints-To: abuse@worldnet.att.net
X-Trace: bgtnsc05-news.ops.worldnet.att.net 1211720483
73bc5dd971a73e61fc8e6e594c5e64a6 (Sun, 25 May 2008 13:01:23 GMT)
```

NNTP-Posting-Date: Sun, 25 May 2008 13:01:23 GMT
Date: Sun, 25 May 2008 13:01:23 GMT
Xref: g2news1.google.com rec.radio.amateur.space:28

Andrew,

They seem to be only using those modes, in general, near the ground station. However, it has been heard in modes other than CW in the UK.

--
Alan
WA4SCA

From 7520025635713423462
X-Google-Thread: 10e8ad,d5a71238dc19cc35,start
X-Google-Attributes: gid10e8ad,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news4.google.com!news1.google.com!npeer03.iad!npeer02.iad!news.highwinds-media.com!cycny01.gnilink.net!cyclone1.gnilink.net!gnilink.net!nx02.iad01.newshosting.com!newshosting.com!newsfeed.icl.net!newsfeed.fjserv.net!newsfeed00.sul.t-online.de!t-online.de!peer-uk.news.demon.net!kibo.news.demon.net!news.demon.co.uk!demon!nospam.demon.co.uk!hils
From: Hils <hils@nospam.demon.co.uk>
Newsgroups: rec.radio.amateur.space
Subject: RS-15 update (missing presumed dead)
Date: Tue, 27 May 2008 19:26:42 +0100
Organization: is a symptom of an uncreative mind
Lines: 13
Message-ID: <1O5dEKziJFPIFwV4@newearth.demon.co.uk>
NNTP-Posting-Host: newearth.demon.co.uk
Mime-Version: 1.0
Content-Type: text/plain;charset=us-ascii;format=flowed
X-Trace: news.demon.co.uk 1211933779 5299 193.237.117.162 (28 May 2008 00:16:19 GMT)
X-Complaints-To: abuse@demon.net
NNTP-Posting-Date: Wed, 28 May 2008 00:16:19 +0000 (UTC)
User-Agent: Turnpike/6.05-S (<mB7xuSWjji51TkZ3UtkZ3hez55>)
Xref: g2news1.google.com rec.radio.amateur.space:29

Regular readers will know that RS-15's 29.3522MHz beacon has for some years been semi-operational in sunlight. After being active on almost 100% of uneclipsed orbits, it remained silent at the end of its most recent eclipse season on 2008-05-15, suggesting that it may at last have failed completely.

The last time my automatic recording system detected RS-15 was 2008-05-12 0458 (TCA). RS-15's next eclipse season lasts from 2008-06-18 to 2008-08-07. It's possible that the thermal shock might stir it back into some sort of life, but this seems unlikely, and my.

--

Hil

```
From -5733409240530829830
X-Google-Thread: 10e8ad,e462aefc8f6d1b7f,start
X-Google-Thread: 10b9c8,e462aefc8f6d1b7f,start
X-Google-Attributes: gid10e8ad,gid10b9c8,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx02.iad01.newshosting.com!newshosting.com!
198.186.194.249.MISMATCH!transit3.readnews.com!news-xxxfer.readnews.com!news-
out.readnews.com!transit4.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-150 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Thu, 29 May 2008 08:37:23 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 1445
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000901c8c188$c5505b70$4ff11250$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix2.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader2.panix.com 1212064643 9476 166.84.1.2 (29 May 2008 12:37:23 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Thu, 29 May 2008 12:37:23 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news1.google.com rec.radio.amateur.space:30 rec.radio.info:34
```

This report is organized into FIVE parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites
Part 5 (S5) - deborbited/returned satellites

SB SAT @ AMSAT W8ISS ANS-150.S1
WSR 150 Part 1 05/29/2008

AMSAT NEWS SERVICE BULLETIN 150.S1 FROM AMSAT HQ
SILVER SPRING, MD, May 29, 2008
TO ALL RADIO AMATEURS
BID: $ANS-150.S1

VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.859330 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsat.in/hamsat.htm

To know what transponder is switched on please listen for the beacon that is
active. Each transponder has a different beacon.
[06252007]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational - Software reload

```
Current Modes:   FM Repeater - V/u
                               V/u
                 BBS         - OFF
                 Telemetry   - OFF

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink:   145.880 MHZ FM
                       145.880 MHz USB
```

145.920 MHz FM
1268.700 MHz FM 67Hz PL tone
Digital Downlinks: 435.150 MHz FM 38k4 Digital, PBP, 1 watt output
435.150 MHz FM 9k6 Digital, Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Digital, Pacsat Broadcast Protocol
1268.700 mhz FM 9k6 PBP Digital
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[05292008]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002

Status: Operational.

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer
   on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on
   and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10

minute timer.
[05282007]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Operational - check operational schedule for current times!!

Current Mode: V/u

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage: http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's CW
telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts.htm
[0820007]
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:

```
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[12132007]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: TESTING - VOICE

Current Mode:  V/u

Uplink:         145.900 MHz FM 1200-baud Manchester FSK (reserved)
                145.920 MHz FM VOICE
                145.940 MHz FM 1200-baud Manchester FSK (reserved)
                145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink:       437.026 MHz USB VOICE
                ( 1200-baud PSK - MBL Telemetry Only )

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[03202008]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational depending on amount of Sunlight

Current Mode: Listen before transmitting

Uplink:   145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink:  29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons:   29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW
```

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/

AO-7 Usage Guidelines on the AO-7 Log and Resource Site located at:
http://www.planetemily.com/ao7
[05282007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Mode: FM Repeater - U/v
Voice - Occasianally
BBS - ON
APRS - ON
SSTV - OFF

Expedition 17 crew:

Commander:	Sergey Volkov	RU3DIS
Flight Engineer:	Oleg Kononenko	RN3DX
Flight Engineer:	Garrett Reisman	KE5HAE

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM
Worldwide packet downlink: 145.825 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS
RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.
[04242008]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-150.S2
WSR 150 Part 2 05/29/2008

AMSAT NEWS SERVICE BULLETIN 150.S2 FROM AMSAT HQ
SILVER SPRING, MD, May 29, 2008
TO ALL RADIO AMATEURS
BID: $ANS-150.S2

RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number:
Launch Date: May 23, 2008

Status: Operational

Curent Mode: Telemetry
             Audio
             Images

Downlinks: 435.315 MHz
           435.215 MHz
[05292008]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.
[11152007]
=====
CP3
Catalog Number: 31128

Launch Date: April 17,2007

Status: Operational

Current Mode: /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[07302007]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: In Orbit

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder: 145.825 Mhz FM
[02052007]
=====
NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Operational

Current Mode: /u

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[10222007]
=====
GENESAT-1 ?O-??
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Current Mode: /u

Telemetry Beacon Downlink: 437.0670 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[01082007]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon: 437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
[03262007]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003

Status: Operational

Current Mode: /u

Beacon: 436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[01082007]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Semi-Operational - Constant Carrier only

Uplink: 1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan ?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[01082007]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

```
Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW
[08132007]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational - Softawre Reload

Current Modes:   FM Repeater - V1/u1
                               V2/u2
                 BBS         - OFF
                 Telemetry   - OFF

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink:   145.880 MHZ FM
                       145.880 MHz USB
                       145.920 MHz FM
                      1268.700 MHz FM 67Hz PL tone
Digital Downlinks:     435.150 MHz FM 38k4 Digital, PBP, 1 watt output
                       435.150 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:        145.860 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      1268.700 mhz FM 9k6 PBP Digital
Beacon:                435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[05292008]
=====
NO-44 PCSAT
Catalog number: 26931
```

```
Launch Date: September 30, 2001

Status: Hibernation until full sunlight in November

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink:        144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[09242007]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Current Modes: V/U
               L/U

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[09172007]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984

Status: Semi-operational.

Current Mode:  /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon:           435.025 MHz
Mode-S Beacon:     2401.500 MHz

Mode and Antenna Polarization:
```

V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[01242008]
=====
RS-22 RADIO SPORT RS-22
Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only

Current Mode: /u

CW Beacon - 435.352 MHz
            145.818 MHz
[08062007]
=====
Can X-2
Catalog number:
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web page:
http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[05292008]
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink: 437.425 MHz

For the latest project status update please visit the AAUSAT-II web
page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[05292008]
=====
Cute-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink: 437.475 MHz 9k6 Packet
Uplink: 1267.600 Mhz

For the latest project status update please visit the Cute-1.7+APD II web page:
http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78
[05292008]
=====
Compass 1
Catalog number: 32787
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink: 437.275 Mhz CW
          437.405 MHz Packet

For the latest project status update please visit the Compass 1 web page:
http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52
[05292008]
=====
DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008

Status: IN ORBIT

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink: 435.530 to 435.570 MHz

Proposed Frequencies:
* Primary telemetry downlink: 145.870 MHz 1200 Baud BPSK AX.25 400mW
* Backup telemetry downlink: 145.930 MHz 1200 Baud BPSK AX.25 400mW
* Linear transponder passband downlink: 145.880 - 145.920 MHz (inverting) 400mW PEP
* Linear transponder passband uplink: 435.570 - 435.530 MHz
* Transponder mode beacon: 145.870 MHz CW (10dB below transponder PEP)

For the latest project status update please visit the Delfi-C3 web page:

http://www.delfic3.nl/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68
[05292008]
=====
Seeds 2
Catalog number:
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink: 437.485 MHz

For the latest project status update please visit the Seeds 2 web page:
http://cubesat.aero.cst.nihon-u.ac.jp/english/main_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36
[05012008]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Mode: FM Repeater - U/v
Voice - Occasianally
BBS - ON
APRS - ON
SSTV - OFF

Expedition 17 crew:
Commander: Sergey Volkov RU3DIS
Flight Engineer: Oleg Kononenko RN3DX
Flight Engineer: Garrett Reisman KE5HAE

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM
Worldwide packet downlink: 145.825 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:

V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS
RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.
[04242008]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-150.S3
WSR 150 Part 3 05/29/2008

AMSAT NEWS SERVICE BULLETIN 150.S3 FROM AMSAT HQ
SILVER SPRING, MD, May 29, 2008
TO ALL RADIO AMATEURS
BID: $ANS-150.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

CP4
Catalog Number: 31122
Launch Date: April 17,2007

Status: Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon: 437.325 MHz CW
[11152007]

=====

HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Non-Operational

Current Mode: /u

```
Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon:             437.2750 MHz CW

Callsign: JR8YJT
[10152007]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency:  437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink:         437.250 MHz FM 67Hz CTCSS
Voice Downlink:      2401.835 MHz FM
Packet Up/Downlink:  437.250 MHz 9k6 packet
Packet Downlink      2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non=Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[08132007]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink:   435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
```

(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Non-Operational

Uplinks: 145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[007302007]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, callsign KE6QMD, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

```
Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS:                SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink:   145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
V-band:   145.840 -  145.990 MHz CW/LSB
U-band:   435.550 -  435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks
---------
S2-band:  2401.225 -  2401.475 MHz CW/USB
K-band:  24048.010 - 24048.060 MHz CW/USB
Beacon:   2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)
----------------------------
BEACON   General Beacon (GB)    Middle Beacon (MB)    Engineering Beacon
(EB)
2 m       none                   145.898 MHz           none
70cm      435.438 MHz            435.588 MHz           435.838 MHz
13cm(1)  2400.188 MHz           2400.338 MHz          2400.588 MHz
```

13cm(2)	2401.173 MHz	2401.323 MHz	2401.573 MHz
3cm	10450.975 MHz	10451.125 MHz	10451.375 MHz
1.5cm	24047.885 MHz	24048.035 MHz	24048.285 MHz

[07162007]
=====
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web site
at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: ?
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520

Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink: 145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012006]

```
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991
```

```
Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
LIBERTAD-1
Catalog Number: 31129
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L
```

Uplink: 145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[10222007]
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990

Status: CW Beacon only

Uplinks: 145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink: 437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[01222007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink: 145.825 MHz FM 1200 Baud AFSK
Beacon: 2401.220 MHz
[05012006]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

```
Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet: Non-Operational
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon:   145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW
```

```
Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink  29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
Beacons:   29.450 MHz
          435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon 1:  29.352 MHz (intermittent)
Beacon 2:  29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
```

```
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink:     21.260 to 21.300 MHz CW/USB
Downlink:  145.860 to 145.900 MHz CW/USB

Beacon:    145.860 MHz

Robot:     145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink:   21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon:   29.408 MHz

Robot:    29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-150.S4
WSR 150 Part 4 05/29/2008

AMSAT NEWS SERVICE BULLETIN 150.S4 FROM AMSAT HQ
SILVER SPRING, MD, May 29, 2008
TO ALL RADIO AMATEURS
BID: $ANS-150.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE PROPOSED FOR LAUNCH AT
THIS TIME:

Phase 5a Mars Mission AO-??
Catalog Number:
Proposed Launch Date: 2009 or 2011

Status: Design Phase

For the latest project status update please visit the AMSAT-DL P5-A web
page:
http://ticket-to-mars.org
[01222007]
```

=====
PHASE 3E AO-??
Catalog number:
Proposed Launch Date: Late 2008

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/
[01222007]
=====
Eagle AO-??
Catalog Number:
Proposed Launch Date: Early/Mid 2009

Status: Design Phase

For the latest project status updates please visit the AMSAT-NA webpage:
http://www.amsat.org
[01222007]
NNNN
/EX

SSB SAT @ AMSAT W8ISS ANS-150.S5
WSR 150 Part 5 05/29/2008

AMSAT NEWS SERVICE BULLETIN 150.S5 FROM AMSAT HQ
SILVER SPRING, MD, May 29, 2008
TO ALL RADIO AMATEURS
BID: $ANS-150.S5

THE FOLLOWING SATELLITES HAVE DE-ORBITED OR HAVE BEEN RETURNED SAFELY:

NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Operational
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink: 145.825 Mhz FM APRS AX25
APRS Uplink: 145.825 MHz FM APRS AX25

Voice/PSK31 Uplink: 28.120 MHz

Packet to Voice ID: RAFT
[06112007]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:

ans-editor{at}amsat.org
NNNN
/EX

```
From -2664338887958333297
X-Google-Thread: 10e8ad,1de99742aa913d7,start
X-Google-Thread: 10b9c8,1de99742aa913d7,start
X-Google-Attributes: gid10e8ad,gid10b9c8,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news4.google.com!news2.google.com!
border1.nntp.dca.giganews.com!nntp.giganews.com!nx01.iad01.newshosting.com!
newshosting.com!198.186.194.249.MISMATCH!transit3.readnews.com!spool-
big1.readnews.com!news-out.readnews.com!transit4.readnews.com!panix!rri.panix.com!
robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-152 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sat, 31 May 2008 21:19:39 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 309
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <001501c8c385$996f6420$cc4e2c60$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix3.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader2.panix.com 1212283180 29366 166.84.1.3 (1 Jun 2008 01:19:40 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 1 Jun 2008 01:19:40 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news1.google.com rec.radio.amateur.space:31 rec.radio.info:39
```

AMSAT NEWS SERVICE
ANS-152

ANS is a free, weekly, news and information service of AMSAT North

America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:

* AMSAT-NA Board of Directors Nomination Announcement
* SatPC32 Version 12.8 Released
* FCAL Mission Patch Winners
* Satellite Shorts From All Over
* Two Opportunities to Fly Your Name and Callsign in Space
* ARISS Status Report for the Week of May 26, 2008

SB SAT @ AMSAT $ANS-152.01
AMSAT-NA Board of Directors Nomination Announcement

AMSAT News Service Bulletin 152.01
>From AMSAT HQ SILVER SPRING, MD.
June 1, 2008
To All RADIO AMATEURS
BID: $ANS-152.01

Nominations are open for the AMSAT-NA Board of Directors (BOD). The nominations must be in writing and received at the AMSAT office by end of business June 15, 2008.

AMSAT-NA member societies or five current individual members may make nominations of fellow members to serve a 2-year term. Three of the seven seats must be filled this year.

The board members whose terms are expiring are:

Tom Clark, K3IO
Lou McFadin, W5DID
Bob McGwier, N4HY

Prospective AMSAT-NA BOD members generally attend two meetings each year, usually during the first and third quarters of the year. Attendance at the meetings is mandatory. Travel expenses for BOD meetings are paid for by AMSAT-NA.

Nominations must be in writing and mailed to:

AMSAT-NA
Board of Director Nomination
850 Sligo Ave #600
Silver Spring, MD 20910

The nominations with descriptive information about each candidate will be mailed out July 15, 2008. Ballots must be received in Silver Spring,MD by September 15, 2008. Only active members as of July 24, 2008 are eligible to vote.

[ANS thanks AMSAT HQ for the above information]

/EX

SB SAT @ AMSAT $ANS-152.02
SatPC32 Version 12.8 Released

AMSAT News Service Bulletin 152.02
>From AMSAT HQ SILVER SPRING, MD.
June 1, 2008
To All RADIO AMATEURS
BID: $ANS-152.02

Erich Eichmann DK1TB has released SatPC32, version 12.8, a satellite tracking program which now contains improvements for Windows Vista compatibility, CAT control of multiple radios, and CAT control of Icom half-duplex radios.

Erich Eichmann DK1TB has donated SatPC32 to AMSAT, so all proceeds support amateur satellite programs. Please support amateur satellites by registering your copy of SatPC32.

A demo version may be downloaded from the author's web site: http://www.dk1tb.de/indexeng.htm. Some users of the new SatPC32 v12.8 have experienced a few minor problems with this release and Erich is investigating these reports.

Registered SatPC32 users may use their existing registration code to activate the downloaded new version. New users are encouraged to purchase a registration code from AMSAT-NA, AMSAT-DL, or AMSAT-UK. The online store is down at the moment but you may purchase a registration code by calling Martha at the AMSAT office at 888-322-6728. Version 12.8 will not be available on CD until the existing stock of 12.7 CDs is depleted.

Here are the changes listed in the 12.8 "What's New" file:

+ The setup program has been updated to the the latest 32-bit Vista compatible version of Installshield Express.

+ The CAT steering functions of SatPC32 have been expanded to now include the ICOM IC-706MKIIG, IC-7000 and compatible radios.

+ Full duplex satellite operation with 2 separate radios for uplink and downlink has been improved. Numerous devices can be combined, e.g. the Yaesu semi-duplex transceivers with each other or with Icom semi-duplex radios or single band radios or Icom radios with each other.

+ The Vista compatibility has been improved.

+ SatPC32 now includes a simple text editor that can alternatively be used besides Notepad to edit auxiliary files (data files, i.e. Doppler.SQF).

+ Further improvements include operation of narrow FM mode of the IC-910H. The program now shows the file date of the selected Keplerian data file. CAT steering of the FT-736R has been fixed.

[ANS thanks Erich Eichmann, DK1TB for the above information]

/EX

SB SAT @ AMSAT $ANS-152.03
FCAL Mission Patch Winners

AMSAT News Service Bulletin 152.03
>From AMSAT HQ SILVER SPRING, MD.
June 1, 2008
To All RADIO AMATEURS
BID: $ANS-152.03

Ivan Galysh, KD4HBO wrote on behalf of the FCAL satellite mission, "Now that FCAL is down, I went through all the emails sent with FCAL data. I received data from Mike Ruppercht DK3WN, Armando Mercado N8IGJ, Bent Bagger representting AMSAT-OZ, and Edward Chuang BX1AD."

Ivan continued, "All will receive an FCAL mission patch plus a mission coffee mug. One surprise about the mission patch. These are STP mission patches that have flown on the space shuttle when FCAL and ANDE were released. I will include the letter of authentication that indicates these patches flew in space. Thanks for all your help. Hope to do it again soon."

[ANS thanks Ivan, KD4HBO for the above information]

/EX

SB SAT @ AMSAT $ANS-152.04
Satellite Shorts From All Over

AMSAT News Service Bulletin 152.04
>From AMSAT HQ SILVER SPRING, MD.
June 1, 2008
To All RADIO AMATEURS
BID: $ANS-152.04

+ Congratulations are in order for 10 year old Piyumi, VE4WPL in Winnipeg, Manitoba, Canada for making her first satellite contact on AO-51. She used an Icom IC-W32A handheld at 5 watts with an Arrow antenna to make the contact.

+ Patrick WD9EWK/VA7EWK represented AMSAT at the Yavapai Amateur Radio Club (YARC) and Verde Valley Amateur Radio Club (VVARA) joint hamfest on Saturday, 31 May 2008. He set up an AMSAT table at the hamfest and provided on-air demonstrations using the AO-51 satellite.

+ Allen, N5AFV was also active in promoting amateur radio satellite activity on the weekend of May 31 - June 1. On May 31 Allen operated via satellite from the second highest point in Texas at the top of Enchanted Rock. June 1 gave Allen the opportunity to operate using the Ten Ten International club call sign, W6OI from 20th Annual Ten Ten Hill Country Picnic. QSL information for both operations is to N5AFV with an SASE.

+ Richard, N2SPI managed the AMSAT Booth at the 2008 Rochester (NY) Hamfest this weekend. He was also on the air with live satellite demos. If you have an opportunity to promote AMSAT at a hamfest near you contact Martha at AMSAT HQ for materials.

+ Martian weather data from the Canadian Space Agency's weather station aboard the Mars Phoenix lander can be viewed on your computer using tool available from http://phoenix.lpl.arizona.edu/. Mac OSX 10.4.3 (or higher), or Vista is required. (Via UniverseToday.com).

+ Word has been received from VU2POP that AMSAT-India has completed construction of the Hamsat-2 transponder built by one of their student members. They are now working on flight plans for an orbit similar to to VO-52 and hopefully higher if possible.

[ANS thanks everyone for the above information]

/EX

SB SAT @ AMSAT $ANS-152.05
Two Opportunities to Fly Your Name and Callsign in Space

AMSAT News Service Bulletin 152.05
>From AMSAT HQ SILVER SPRING, MD.
June 1, 2008
To All RADIO AMATEURS
BID: $ANS-152.05

Although not totally amateur satellite related many AMSAT folks still enjoy all aspects of space exploration so here are a couple of fun things for you to enjoy, and perhaps involve young folks also.

Send your name to the moon ...

NASA invites everyone to take advantage of the opportunity to send your name to the Moon on board the Lunar Reconnaissance Orbiter. The LRO mission site has a form to send your name, embedded into a computer chip, into orbit around the moon. The link to sign up is: http://lro.jhuapl.edu/NameToMoon/index.php. More information about the Lunar Reconnaissance Orbiter mission can be found at: http://lunar.gsfc.nasa.gov/moonfacts.html.

Send your name into solar orbit ...

Kepler is NASA's first mission capable of detecting Earth-size and smaller planets in the habitable zone of solar-like stars. Planned to be launched from Kennedy Space Center in February 2009, the spacecraft will be launched into orbit around the Sun. When you submit your name, you may also chose to provide a message of 500 words or less of why you think the mission is important. Your will be stored on a DVD and rocketed into space on board the Kepler spacecraft. The link to sign up is at: http://namesinspace.seti.org/

The deadline to submit your name for the Lunar Reconnaissance Orbiter mission is June 27, 2008; the deadline to submit your name for the Keppler Mission is November 1, 2008.

[ANS thanks NASA, SETI, and UniverseToday for the above information]

/EX

SB SAT @ AMSAT $ANS-152.06
ARISS Status Report for the Week of May 26, 2008

AMSAT News Service Bulletin 152.06
>From AMSAT HQ SILVER SPRING, MD.
June 1, 2008
To All RADIO AMATEURS
BID: $ANS-152.06

1. Delta Researchers School Contact Successful

On Friday, May 23, Delta Researchers Schools 2008 Space Expo in Noordwijk, the Netherlands, experienced an ARISS contact via telebridge station WH6PN in Hawaii. Garrett Reisman, KE5HAE, answered 15 questions posed to him by children from twelve Dutch primary schools. The audio for this event was fed into the EchoLink AMSAT (101 377) and JK1ZRW (277 208) servers. Photos and audio will be posted on the ARISS-Europe Web site when available.

2. ARISS Delegate Receives CQ's Radio Hall of Fame Award

ARISS delegate and mentor Gaston Bertels, ON4WF, was inducted into CQ magazine's Amateur Radio Hall of Fame for making a significant contribution to amateur radio and our planet. This award

is given to persons who not only excel in personal performance in amateur radio, but also give back to amateur radio in a significant manner. On May 16, the American Radio Relay League (ARRL) ran a web story covering this news. See:
http://www.arrl.org/news/stories/2008/05/16/10100/?nc=1

3. ARRL QST Articles on ARISS Activities

The American Radio Relay League (ARRL) June QST published an item under "Media Hits" (page 12) about Yi So-yeon launching to space to perform ARISS ham activities.

Also posted in the June QST is a Field Day multi-page insert. Under ideas for fun things to do on Field Day is a suggestion for hams to listen for general contacts being made from the International Space Station.

4. ARISS International Team Meeting Held

The ARISS monthly meeting was held on Tuesday, May 20. Topics of discussion included the ARISS Face to Face Meeting to be held in Moscow in July and the status of SuitSat-2. Minutes have been posted. See: http://www.rac.ca/ariss/arisstel2008-05-20.htm

[ANS thanks Carol, KB3LKI for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM
K9JKM at amsat dot org

From -6376688425310654205
X-Google-Thread: 10e8ad,94cce04a8470e559
X-Google-Attributes: gid10e8ad,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news3.google.com!news2.google.com!newsfeed.stanford.edu!news.stanford.edu!w6yx.stanford.edu!nospam
From: nospam@w6yx.stanford.edu (Alan)
Newsgroups: rec.radio.amateur.space
Subject: Re: Is amat satcoms dead?
Date: Thu, 5 Jun 2008 00:14:27 +0000 (UTC)
Organization: Stanford Amateur Radio Club

Lines: 14
Message-ID: <g27b53$178$1@news.stanford.edu>
References: <slrng3dfua.mks.ke9v@otaku.freeshell.org>
<NQzZj.55132$mz3.47600@fe101.usenet <KJydnQ1BRPWHKarVnZ2dnUVZ_vKdnZ2d@comcast.com>
NNTP-Posting-Host: w6yx.stanford.edu
X-Trace: news.stanford.edu 1212624867 1256 171.64.23.31 (5 Jun 2008 00:14:27 GMT)
X-Complaints-To: news@news.stanford.edu
X-Newsreader: trn 4.0-test76 (Apr 2, 2001)
Xref: g2news1.google.com rec.radio.amateur.space:32

In article <KJydnQ1BRPWHKarVnZ2dnUVZ_vKdnZ2d@comcast.com> No Spam <no@spam.com>
writes:

>Has anybody thought about contacting Dish or it's insurance company about
>the bird they abandoned due to a lifter failure?

What would one do with it? It's receiver is in a frequency band that we cannot use. It's transmitters are in a frequency band that we cannot use. The solar panels are probably not deployed or facing the sun.

In fact, it probably is not even oriented so the antennas point at earth, since it is not in a stable geosync orbit.

Alan

From -393135156881388390
X-Google-Thread: 10e8ad,3f2fca761c49def7,start
X-Google-Thread: 113975,3f2fca761c49def7,start
X-Google-Attributes: gid10e8ad,gid113975,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!news.glorb.com!news.astraweb.com!
border2.newsrouter.astraweb.com!not-for-mail
From: Chris Steyaert <observations@rmob.org>
Newsgroups: rec.radio.amateur.space,sci.astro.amateur
Subject: Radio Meteor Obs. Bull. May 2008
Date: Sat, 07 Jun 2008 21:06:32 +0200
Message-ID: <t0nl44h3t7dri03gthlfgi75b3tiu1c8oa@4ax.com>
X-Newsreader: Forte Agent 1.93/32.576 English (American)
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Lines: 16
Organization: Unlimited download news at news.astraweb.com
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X-Trace: DXC==`FIc5WGVoPlf2[8b49d@PL?0kYOcDh@ZW[FS9l[dUZ]oAbK_Vif2?[G?
ifhhgG3CQ=fL7nacb>7]TfP?];[>lDW
Xref: g2news1.google.com rec.radio.amateur.space:33 sci.astro.amateur:734

Radio Meteor Observation Bulletin No. 178 of May 2008 (76 K) is available now as

http://visualrmob.free.fr/rmobtext/rmob0805.txt

More information and the visual presentation of the hourly forward scatter counts can be found on

http://www.rmob.org

http://radio.data.free.fr

Chris

```
From -7463437042337227390
X-Google-Thread: 10e8ad,bda39818ab3d5d92,start
X-Google-Thread: 10b9c8,bda39818ab3d5d92,start
X-Google-Attributes: gid10e8ad,gid10b9c8,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!newsfeed2.dallas1.level3.net!news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-157 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Sat, 7 Jun 2008 16:30:46 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 1462
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000001c8c8dd$741797d0$5c46c770$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix2.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader2.panix.com 1212870646 17361 166.84.1.2 (7 Jun 2008 20:30:46 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sat, 7 Jun 2008 20:30:46 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news1.google.com rec.radio.amateur.space:34 rec.radio.info:53
```

This report is organized into FIVE parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites
Part 5 (S5) - deorbited/returned satellites

SB SAT @ AMSAT W8ISS ANS-157.S1
WSR 157 Part 1 06/05/2008

AMSAT NEWS SERVICE BULLETIN 157.S1 FROM AMSAT HQ
SILVER SPRING, MD, June 06, 2008
TO ALL RADIO AMATEURS
BID: $ANS-157.S1

VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.859330 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsat.in/hamsat.htm

To know what transponder is switched on please listen for the beacon that is active. Each transponder has a different beacon.
[06252007]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational - Software reload

Current Modes: FM Repeater - V/u
BBS - L/u
Telemetry - /u

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.880 MHZ FM
145.880 MHz USB
145.920 MHz FM
1268.700 MHz FM 67Hz PL tone
Digital Downlinks: 435.150 MHz FM 38k4 Digital, PBP, 1 watt output
435.150 MHz FM 9k6 Digital, Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Digital, Pacsat Broadcast Protocol
1268.700 mhz FM 9k6 PBP Digital
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[06052008]

=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002

Status: Operational.

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10 minute timer.
[05282007]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Operational - check operational schedule for current times!!

Current Mode: V/u

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage: http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts.htm
[0820007]
=====
AO-27 AMRAD
Catalog number: 22825

Launch date: September 26, 1993

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[12132007]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: TESTING - VOICE

Current Mode: V/u

Uplink: 145.900 MHz FM 1200-baud Manchester FSK (reserved)
                145.920 MHz FM VOICE
                145.940 MHz FM 1200-baud Manchester FSK (reserved)
                145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink: 437.026 MHz USB VOICE
                (1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC 437.050 MHz RHCP
   PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[03202008]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational depending on amount of Sunlight

Current Mode: Listen before transmitting

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz CW
145.972 MHz CW
435.100 MHz CW
2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/

AO-7 Usage Guidelines on the AO-7 Log and Resource Site located at:
http://www.planetemily.com/ao7
[05282007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Mode: FM Repeater - U/v
Voice - Occasianally
BBS - ON
APRS - ON
SSTV - OFF

Expedition 17 crew:

Commander:	Sergey Volkov	RU3DIS
Flight Engineer:	Oleg Kononenko	RN3DX
Flight Engineer:	Greg Chamitoff	KD5PKZ

Space Transportation System mission 124 crew:

Commander:	Mark Kelly	
Pilot :	Ken Ham	
Mission Specialist:	Karen Nyeberg	
	Ron Garan	
	Mike Fossum	
	Akihiko Hoshide	KE5DNI
	Garrett Reisman	KE5HAE

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM
Worldwide packet downlink: 145.825 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM

Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS
RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.
[04242008]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-157.S2
WSR 157 Part 2 06/05/2008

AMSAT NEWS SERVICE BULLETIN 157.S2 FROM AMSAT HQ
SILVER SPRING, MD, June 05, 2008
TO ALL RADIO AMATEURS
BID: $ANS-157.S2

RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number:
Launch Date: May 23, 2008

Status: Operational

Curent Mode: Telemetry
Audio
Images

Downlinks: 435.315 MHz
435.215 MHz
[05292008]

```
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode:  /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon:    435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.
[11152007]
=====
CP3
Catalog Number: 31128
Launch Date: April 17,2007

Status: Operational

Current Mode:  /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[07302007]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: In Orbit

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder:  145.825 Mhz FM
[02052007]
=====
NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Operational

Current Mode: /u

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
```

[10222007]
=====
GENESAT-1 ?O-??
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Current Mode: /u

Telemetry Beacon Downlink: 437.0670 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[01082007]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon: 437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
[03262007]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003

Status: Operational

Current Mode: /u

Beacon: 436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[01082007]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

```
Status: Semi-Operational - Constant Carrier only

Uplink:  1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan ? )

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[01082007]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW
[08132007]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational - Softawre Reload

Current Modes:   FM Repeater - V/u
                 BBS         - L/u
                 Telemetry   -  /u

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink:   145.880 MHZ FM
                       145.880 MHz USB
                       145.920 MHz FM
                      1268.700 MHz FM 67Hz PL tone
Digital Downlinks:     435.150 MHz FM 38k4 Digital, PBP, 1 watt output
                       435.150 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:        145.860 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      1268.700 mhz FM 9k6 PBP Digital
```

```
Beacon:                435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[06052008]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Hibernation until full sunlight in November

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink:        144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[09242007]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Current Modes: V/U
               L/U

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12
```

```
More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[09172007]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984

Status: Semi-operational.

Current Mode:  /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon:          435.025 MHz
Mode-S Beacon:     2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[01242008]
=====
RS-22 RADIO SPORT RS-22
Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only

Current Mode:  /u

CW Beacon - 435.352 MHz
            145.818 MHz
[08062007]
=====
Can X-2
Catalog number:
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web page:
http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[05292008]
=====
AAUSAT-II
```

Catalog number: 32788
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink: 437.425 MHz

For the latest project status update please visit the AAUSAT-II web page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[05292008]
=====
Cute-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink: 437.475 MHz 9k6 Packet
Uplink: 1267.600 Mhz

For the latest project status update please visit the Cute-1.7+APD II web
page:
http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78
[05292008]
=====
Compass 1
Catalog number: 32787
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink: 437.275 Mhz CW
          437.405 MHz Packet

For the latest project status update please visit the Compass 1 web page:
http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52
[05292008]
=====
DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008

Status: IN ORBIT

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink: 435.530 to 435.570 MHz

Proposed Frequencies:
* Primary telemetry downlink: 145.870 MHz 1200 Baud BPSK AX.25 400mW
* Backup telemetry downlink: 145.930 MHz 1200 Baud BPSK AX.25 400mW
* Linear transponder passband downlink: 145.880 - 145.920 MHz (inverting)
  400mW PEP
* Linear transponder passband uplink: 435.570 - 435.530 MHz
* Transponder mode beacon: 145.870 MHz CW (10dB below transponder PEP)

For the latest project status update please visit the Delfi-C3 web page:
http://www.delfic3.nl/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68
[05292008]
=====
Seeds 2
Catalog number:
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink: 437.485 MHz

For the latest project status update please visit the Seeds 2 web page:
http://cubesat.aero.cst.nihon-u.ac.jp/english/main_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36
[05012008]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Mode: FM Repeater - U/v
              Voice -   Occasianally
              BBS -   ON
              APRS -   ON
              SSTV -   OFF

Expedition 17 crew:
Commander: Sergey Volkov   RU3DIS

Flight Engineer: Oleg Kononenko RN3DX
Flight Engineer: Greg Chamitoff KD5PKZ

Space Transportation System mission 124 crew:
Commander: Mark Kelly
Pilot : Ken Ham
Mission Specialist: Karen Nyeberg
Ron Garan
Mike Fossum
Akihiko Hoshide KE5DNI
Garrett Reisman KE5HAE

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM
Worldwide packet downlink: 145.825 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS
RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.
[04242008]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-157.S3
WSR 157 Part 3 06/06/2008

AMSAT NEWS SERVICE BULLETIN 157.S3 FROM AMSAT HQ
SILVER SPRING, MD, June 06, 2008
TO ALL RADIO AMATEURS
BID: $ANS-157.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

CP4
Catalog Number: 31122
Launch Date: April 17,2007

Status: Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon: 437.325 MHz CW
[11152007]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Non-Operational

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon: 437.2750 MHz CW

Callsign: JR8YJT
[10152007]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 MHz FM 67Hz CTCSS
Voice Downlink: 2401.835 MHz FM
Packet Up/Downlink: 437.250 MHz 9k6 packet
Packet Downlink   2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non=Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[08132007]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Non-Operational

Uplinks: 145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a

collaborative effort between the Malaysian government and Surrey
Satellite
Technology Ltd.
[007302007]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, call-
sign KE6QMD, as per the user service agreement located at the following
URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====

AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks

V-band: 145.840 - 145.990 MHz CW/LSB
U-band: 435.550 - 435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks

S2-band: 2401.225 - 2401.475 MHz CW/USB
K-band: 24048.010 - 24048.060 MHz CW/USB
Beacon: 2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)

BEACON	General Beacon (GB)	Middle Beacon (MB)	Engineering Beacon (EB)
2 m	none	145.898 MHz	none
70cm	435.438 MHz	435.588 MHz	435.838 MHz
13cm(1)	2400.188 MHz	2400.338 MHz	2400.588 MHz
13cm(2)	2401.173 MHz	2401.323 MHz	2401.573 MHz
3cm	10450.975 MHz	10451.125 MHz	10451.375 MHz
1.5cm	24047.885 MHz	24048.035 MHz	24048.285 MHz

[07162007]

=====

OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]

=====

UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11

BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web site
at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]

=====

SO-35 SUNSAT
Catalog Number: ?
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz
145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]

=====

PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]

=====

SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]

=====

TO-31 TMSAT-1
Catalog number: 25396

```
Launch Date: July 10, 1998

Status: Non-operational

Uplink:   145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign:       POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012006]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993
```

```
Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
```

435.910 MHz AX25

Voice Transponder:
Uplink: 145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks: 145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
LIBERTAD-1
Catalog Number: 31129
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink: 145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[10222007]
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990

Status: CW Beacon only

Uplinks: 145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink: 437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu

```
[01222007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
[05012006]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet: Non-Operational
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
```

```
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon:   145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink  29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
Beacons:   29.450 MHz
          435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational
```

```
Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon 1:  29.352 MHz (intermittent)
Beacon 2:  29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink:     21.260 to 21.300 MHz CW/USB
Downlink:  145.860 to 145.900 MHz CW/USB

Beacon:    145.860 MHz

Robot:     145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink:   21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon:   29.408 MHz
```

Robot: 29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-157.S4
WSR 157 Part 4 06/05/2008

AMSAT NEWS SERVICE BULLETIN 157.S4 FROM AMSAT HQ
SILVER SPRING, MD, June 06, 2008
TO ALL RADIO AMATEURS
BID: $ANS-157.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE PROPOSED FOR LAUNCH AT THIS TIME:

Phase 5a Mars Mission AO-??
Catalog Number:
Proposed Launch Date: 2009 or 2011

Status: Design Phase

For the latest project status update please visit the AMSAT-DL P5-A web page:
http://ticket-to-mars.org
[01222007]
=====
PHASE 3E AO-??
Catalog number:
Proposed Launch Date: Late 2008

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/
[01222007]
=====
Eagle AO-??
Catalog Number:
Proposed Launch Date: Early/Mid 2009

Status: Design Phase

For the latest project status updates please visit the AMSAT-NA webpage:
http://www.amsat.org
[01222007]
NNNN
/EX

SSB SAT @ AMSAT W8ISS ANS-157.S5
WSR 157 Part 5 06/05/2008

AMSAT NEWS SERVICE BULLETIN 157.S5 FROM AMSAT HQ
SILVER SPRING, MD, June 05, 2008
TO ALL RADIO AMATEURS
BID: $ANS-157.S5

THE FOLLOWING SATELLITES HAVE DE-ORBITED OR HAVE BEEN RETURNED SAFELY:

NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Operational
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink: 145.825 Mhz FM APRS AX25
APRS Uplink: 145.825 MHz FM APRS AX25
Voice/PSK31 Uplink: 28.120 MHz

Packet to Voice ID: RAFT
[06112007]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

From 2512056547777831503
X-Google-Thread: 10e8ad,7d2db409adc4dc00,start
X-Google-Thread: 10b9c8,7d2db409adc4dc00,start
X-Google-Attributes: gid10e8ad,gid10b9c8,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
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From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-159 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sun, 8 Jun 2008 17:14:08 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 257
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000901c8c9ac$ae81f710$0b85e530$@net>

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Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader2.panix.com 1212959648 8485 166.84.1.6 (8 Jun 2008 21:14:08 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 8 Jun 2008 21:14:08 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news1.google.com rec.radio.amateur.space:35 rec.radio.info:56
```

AMSAT NEWS SERVICE
ANS-159

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:

* AMSAT-NA Board of Directors Nomination Announcement
* 9 Cubesats offered free launch with ESA
* News from the 6/3/08 Executive Teleconference
* Satellite Shorts From All Over
* Direct Shorts
* ARISS Status Report for the Week of May 26, 2008

SB SAT @ AMSAT $ANS-159.01
AMSAT-NA Board of Directors Nomination Announcement

AMSAT News Service Bulletin 159.01
>From AMSAT HQ SILVER SPRING, MD.
June 8, 2008
To All RADIO AMATEURS
BID: $ANS-159.01

Nominations are open for the AMSAT-NA Board of Directors (BOD). The nominations must be in writing and received at the AMSAT office by end of business June 15, 2008.

AMSAT-NA member societies or five current individual members may make nominations of fellow members to serve a 2-year term. Three of the seven seats must be filled this year.

The board members whose terms are expiring are:

Tom Clark, K3IO
Lou McFadin, W5DID
Bob McGwier, N4HY

Prospective AMSAT-NA BOD members generally attend two meetings each year, usually during the first and third quarters of the year. Attendance at the meetings is mandatory. Travel expenses for BOD meetings are paid for by AMSAT-NA.

Nominations must be in writing and mailed to:

AMSAT-NA
Board of Director Nomination
850 Sligo Ave #600
Silver Spring, MD 20910

The nominations with descriptive information about each candidate will be mailed out July 15, 2008. Ballots must be received in Silver Spring,MD by September 15, 2008. Only active members as of July 24, 2008 are eligible to vote.

[ANS thanks AMSAT HQ for the above information]

/EX

SB SAT @ AMSAT $ANS-159.02
9 Cubesats offered free launch with ESA

AMSAT News Service Bulletin 159.02
>From AMSAT HQ SILVER SPRING, MD.
June 8, 2008
To All RADIO AMATEURS
BID: $ANS-159.02

Cubesats built by students from universities in Poland Spain Italy Switzerland Romania France and Belgium have been selected for a free ride to low earth orbit. The launch is scheduled on the Vega maiden flight from Kourou at the end 2008 / early 2009 TBC.
One Belgium cubesat proposes to use D-Star as a communications protocol

http://www.esa.int/esaED/SEM2BPUG3HF_index_0.html

[ANS thanks David, G0MRF, for the above information]

/EX

SB SAT @ AMSAT $ANS-159.03
News from the 6/3/08 Executive Teleconference

AMSAT News Service Bulletin 159.03
>From AMSAT HQ SILVER SPRING, MD.
June 8, 2008
To All RADIO AMATEURS
BID: $ANS-159.03

The AMSAT Store will be re-opening soon. It has been moved to the new AMSAT server.

There will be a series of ARISS/NASA technical meetings in Russia during much of the month of July this year.

There will be a technical meeting in Phoenix about SuitSat-2 hardware the weekend of 14 June. We will be updating the specification and determining what hardware can be developed, tested and delivered to Russia by the end of the year.

[ANS thanks Gould, WA4SXM for the above information]

/EX

SB SAT @ AMSAT $ANS-159.04
Satellite Shorts From All Over

AMSAT News Service Bulletin 159.04
>From AMSAT HQ SILVER SPRING, MD.
June 8, 2008
To All RADIO AMATEURS
BID: $ANS-159.04

The 2008 Dayton Forum presentation of Rick Hambly, W2GPS AMSAT President is now available for viewing online at
mms://media.wmfd.com/amsat/W2GPS_2008_forum.wmv

Also available is Bob McGwier's 2008 AMSAT Engineering update
mms://media.wmfd.com/amsat/EngMovie08.wmv

The other 2008 Forum presentations will also be available soon. There will be an ANS announcement. Thanks to Rob and Gunther Meisse and WMFD for hosting the video.

Note: The following satellites have been dropped from the AMSAT

Keplerian Data List:

UARS	Cat # 21701
OO-38	Cat # 26063
MO-46	Cat # 26548
UWE-1	Cat # 28892
LIBERTAD-1	Cat # 31129

[ANS thanks everyone for the above information]

/EX

SB SAT @ AMSAT $ANS-159.05
Direct Shorts

AMSAT News Service Bulletin 159.05
>From AMSAT HQ SILVER SPRING, MD.
June 8, 2008
To All RADIO AMATEURS
BID: $ANS-159.05

+ Technical papers are solicited for presentation at the 27th Annual ARRL and TAPR Digital Communications Conference to be held September 26-28, 2008 in Chicago, Illinois. The submission deadline is July 31, 2008. Please send papers to: Maty Weinberg, ARRL, 225 Main Street, Newington, CT 06111.

+ Stefan, VE4NSA says his 1:1 scale model kit of the Delfi-C3 satellite is in the prototype stage. A photo of the project can be found at http://www.wincube.ca/Delfi.html. This model will be available as pdf files for you to print (and cut and glue) in the next few weeks from the Delfi-C3 website. Stefan invites radio amateurs to also see his released AO-51 scale model at http://www.msig.ca/AO-51.html.

+ This past week the Cute-1.7 + APD II cubesat team ran a 24hour test of the APD sensor. FM telemetry packets were transmitted on 437.475 MHz. Please forward any received telemetry to Hiroki Ashida via email to hiroki@lss.mes.titech.ac.jp.

+ Yuta Araki, JQ1YGV wrote from Nihon University to inform you of the update of the analysis software for the SEEDS cubesat. The new version of the analysis software is "Downlink Code for Distribution Ver.2.0.3" at:
http://cubesat.aero.cst.nihon-u.ac.jp/english/download_e.html

[ANS thanks for the above information]

/EX

SB SAT @ AMSAT $ANS-159.06
ARISS Status Report for the Week of June 2nd, 2008

AMSAT News Service Bulletin 159.06
>From AMSAT HQ SILVER SPRING, MD.
June 8, 2008
To All RADIO AMATEURS
BID: $ANS-159.06

Amateur Radio on the International Space Station (ARISS) Status Report
June 2, 2008

1. School Contact Status

Planning continues for Amateur Radio on the International Space Station (ARISS) contacts; however, the level of school contacts will drop temporarily due to crew time constraints.

2. NASM Space Day Article

Radio Amateur Satellite Corporation (AMSAT) and Amateur Radio on the International Space Station (ARISS) members participated in the National Air and Space Museum celebration on Space Day. The event was covered in a local paper. To view the article in the Southwester (page 11), go to:
http://swdc.org/news/Southwester_JUNE_2008.pdf

3. Terrestrial School Contact Successful

On Tuesday, May 27, European Space Agency (ESA) astronaut Roberto Vittori, IZ6ERU, spoke by telephone with students from primary schools San Giuseppe and De Gasperi in Italy. He answered 20 questions posed to him by the students. Approximately 400 people were present during the hour long question and answer session. Newspapers covered the event. These schools plan to participate in an Amateur Radio on the International Space Station (ARISS) contact in the fall. Photos and detailed information on this activity have been posted to the ARISS-Europe Web site. See: http://www.ariss-eu.org/2008_05_27.htm

4. ESA Article on DRS Contact

An Amateur Radio on the International Space Station (ARISS) contact took place with Delta Researcher Schools (DRS) on Friday, May 23 at Space Expo, Noordwijk, the Netherlands. The European Space Agency (ESA) posted a write-up on this educational event to its Web site. See:
http://www.esa.int/esaHS/SEMEZ8NKRGF_education_0.html

5. Astronaut Training Status

Mike Fincke, KE5AIT, participated in an Amateur Radio on the International Space Station (ARISS) training session on Tuesday, May 27. Fincke is scheduled to fly in October 2008 as the commander of Expedition 18.

[ANS thanks Carol, KB3LKI for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Dee Interdonato, NB2F

```
From -4687137488593254668
X-Google-Thread: 10e8ad,ffeca07e4afdec22,start
X-Google-Thread: 10b9c8,ffeca07e4afdec22,start
X-Google-Attributes: gid10e8ad,gid10b9c8,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx01.iad01.newshosting.com!newshosting.com!
198.186.194.249.MISMATCH!news-out.readnews.com!transit3.readnews.com!panix!
rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-164 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Thu, 12 Jun 2008 08:13:20 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 1443
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000901c8cc85$d0c6b820$72542860$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader2.panix.com 1213272800 2497 166.84.1.6 (12 Jun 2008 12:13:20 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Thu, 12 Jun 2008 12:13:20 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
```

X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news1.google.com rec.radio.amateur.space:36 rec.radio.info:61

This report is organized into FIVE parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites
Part 5 (S5) - deborbited/returned satellites

SB SAT @ AMSAT W8ISS ANS-164.S1
WSR 164 Part 1 06/12/2008

AMSAT NEWS SERVICE BULLETIN 164.S1 FROM AMSAT HQ
SILVER SPRING, MD, June 12, 2008
TO ALL RADIO AMATEURS
BID: $ANS-164.S1

VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.859330 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsat.in/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is
active. Each transponder has a different beacon.
[06252007]

=====
AO-51 ECHO
Catalog number: 28375

```
Launch date: June 29, 2004

Status: Operational - Software reload

Current Modes:   FM Repeater - V/s
                 BBS         - OFF
                 Telemetry   - OFF

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink:   145.880 MHZ FM
                       145.880 MHz USB
                       145.920 MHz FM
                      1268.700 MHz FM 67Hz PL tone
Digital Downlinks:     435.150 MHz FM 38k4 Digital, PBP, 1 watt output
                       435.150 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:        145.860 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      1268.700 mhz FM 9k6 PBP Digital
Beacon:                435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[06122008]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002

Status: Operational.

Current Mode: V/u

Uplink:   145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear
```

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer
   on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on
   and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10
   minute timer.
[05282007]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Operational - check operational schedule for current times!!

Current Mode: V/u

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage: http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's CW
telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts.htm
[0820007]

```
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993

Status: Operational

Current Mode: V/u

Uplink:   145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[12132007]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: TESTING - VOICE

Current Mode:  V/u

Uplink:         145.900 MHz FM 1200-baud Manchester FSK (reserved)
                145.920 MHz FM VOICE
                145.940 MHz FM 1200-baud Manchester FSK (reserved)
                145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink:       437.026 MHz USB VOICE
                ( 1200-baud PSK - MBL Telemetry Only )

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[03202008]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational depending on amount of Sunlight
```

Current Mode: Listen before transmitting

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/

AO-7 Usage Guidelines on the AO-7 Log and Resource Site located at:
http://www.planetemily.com/ao7
[05282007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Mode: FM Repeater - U/v
              Voice -   Occasianally
              BBS -   ON
              APRS -   ON
              SSTV -   OFF

Expedition 17 crew:
Commander: Sergey Volkov   RU3DIS
Flight Engineer: Oleg Kononenko   RN3DX
Flight Engineer: Greg Chamitoff   KD5PKZ

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM
Worldwide packet downlink: 145.825 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:

German:	DP0ISS
Russian:	RS0ISS RZ3DZR
USA:	NA1SS
Packet Mailbox:	RS0ISS-11
Packet Keyboard:	RS0ISS-3
Digipeater callsign:	ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line is
NOT translated from Russian and posted.
[06122008]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-164.S2
WSR 164 Part 2 06/12/2008

AMSAT NEWS SERVICE BULLETIN 164.S2 FROM AMSAT HQ
SILVER SPRING, MD, June 12, 2008
TO ALL RADIO AMATEURS
BID: $ANS-164.S2

RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number:
Launch Date: May 23, 2008

Status: Operational

Curent Mode: Telemetry
Audio
Images

Downlinks: 435.315 MHz
435.215 MHz
[05292008]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

```
Current Mode:  /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon:    435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.
[11152007]
=====
CP3
Catalog Number: 31128
Launch Date: April 17,2007

Status: Operational

Current Mode:  /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[07302007]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: In Orbit

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder:  145.825 Mhz FM
[02052007]
=====
NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Operational

Current Mode: /u

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[10222007]
=====
GENESAT-1 ?O-??
Catalog Number: 29655
Launch Date: December 16, 2006
```

```
Status: Operational

Current Mode: /u

Telemetry Beacon Downlink: 437.0670 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[01082007]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon:             437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
[03262007]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003

Status: Operational

Current Mode: /u

Beacon:     436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[01082007]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Semi-Operational - Constant Carrier only

Uplink:  1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan ? )
```

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[01082007]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW
[08132007]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational - Softawre Reload

Current Modes: FM Repeater - V/s
BBS - OFF
Telemetry - OFF

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.880 MHZ FM
145.880 MHz USB
145.920 MHz FM
1268.700 MHz FM 67Hz PL tone
Digital Downlinks: 435.150 MHz FM 38k4 Digital, PBP, 1 watt output
435.150 MHz FM 9k6 Digital, Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Digital, Pacsat Broadcast Protocol
1268.700 mhz FM 9k6 PBP Digital
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP

   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[06122008]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Hibernation until full sunlight in November

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[09242007]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Current Modes: V/U
               L/U

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks: 145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[09172007]
=====
UO-11 OSCAR-11

```
Catalog number: 14781
Launch Date: March 1, 1984

Status: Semi-operational.

Current Mode:  /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon:          435.025 MHz
Mode-S Beacon:     2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[01242008]
=====
RS-22 RADIO SPORT RS-22
Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only

Current Mode:  /u

CW Beacon - 435.352 MHz
            145.818 MHz
[08062007]
=====
Can X-2
Catalog number:
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web page:
http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[05292008]
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink: 437.425 MHz
```

For the latest project status update please visit the AAUSAT-II web
page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[05292008]
=====
Cute-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink: 437.475 MHz 9k6 Packet
Uplink: 1267.600 Mhz

For the latest project status update please visit the Cute-1.7+APD II
web
page:
http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78
[05292008]
=====
Compass 1
Catalog number: 32787
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink: 437.275 Mhz CW
          437.405 MHz Packet

For the latest project status update please visit the Compass 1 web
page:
http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52
[05292008]
=====
DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008

Status: IN ORBIT

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz

Uplink: 435.530 to 435.570 MHz

Proposed Frequencies:
* Primary telemetry downlink: 145.870 MHz 1200 Baud BPSK AX.25 400mW
* Backup telemetry downlink: 145.930 MHz 1200 Baud BPSK AX.25 400mW
* Linear transponder passband downlink: 145.880 - 145.920 MHz (inverting)
  400mW PEP
* Linear transponder passband uplink: 435.570 - 435.530 MHz
* Transponder mode beacon: 145.870 MHz CW (10dB below transponder PEP)

For the latest project status update please visit the Delfi-C3 web page:
http://www.delfic3.nl/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68
[05292008]
=====
Seeds 2
Catalog number:
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink: 437.485 MHz

For the latest project status update please visit the Seeds 2 web page:
http://cubesat.aero.cst.nihon-u.ac.jp/english/main_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36
[05012008]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Mode: FM Repeater - U/v
Voice - Occasianally
BBS - ON
APRS - ON
SSTV - OFF

Expedition 17 crew:

Commander:	Sergey Volkov	RU3DIS
Flight Engineer:	Oleg Kononenko	RN3DX
Flight Engineer:	Greg Chamitoff	KD5PKZ

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM

Worldwide packet downlink: 145.825 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS
                     RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.
[06122008]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-164.S3
WSR 164 Part 3 06/12/2008

AMSAT NEWS SERVICE BULLETIN 164.S3 FROM AMSAT HQ
SILVER SPRING, MD, June 12, 2008
TO ALL RADIO AMATEURS
BID: $ANS-164.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

CP4
Catalog Number: 31122
Launch Date: April 17,2007

Status: Operational

Current Mode: /u

```
TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon:    437.325 MHz CW
[11152007]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Non-Operational

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon:             437.2750 MHz CW

Callsign: JR8YJT
[10152007]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency:  437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink:        437.250 MHz FM 67Hz CTCSS
Voice Downlink:     2401.835 MHz FM
Packet Up/Downlink:  437.250 MHz 9k6 packet
Packet Downlink     2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non=Operational
```

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[08132007]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Non-Operational

Uplinks: 145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[007302007]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

```
Everyone is welcome to use the digipeating/APRS features of Sapphire,
call-
sign KE6QMD, as per the user service agreement located at the following
URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS:                SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink:   145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
V-band:   145.840 -  145.990 MHz CW/LSB
U-band:   435.550 -  435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks
---------
```

S2-band: 2401.225 - 2401.475 MHz CW/USB
K-band: 24048.010 - 24048.060 MHz CW/USB
Beacon: 2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)

BEACON	General Beacon (GB)	Middle Beacon (MB)	Engineering Beacon (EB)
2 m	none	145.898 MHz	none
70cm	435.438 MHz	435.588 MHz	435.838 MHz
13cm(1)	2400.188 MHz	2400.338 MHz	2400.588 MHz
13cm(2)	2401.173 MHz	2401.323 MHz	2401.573 MHz
3cm	10450.975 MHz	10451.125 MHz	10451.375 MHz
1.5cm	24047.885 MHz	24048.035 MHz	24048.285 MHz

[07162007]
=====
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web site
at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: ?
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz

Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink: 145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

```
Status: Operational - Not open for Amatuer use

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign:       POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012006]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational
```

```
Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
```

[01152007]
=====
LIBERTAD-1
Catalog Number: 31129
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink: 145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[10222007]
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990

Status: CW Beacon only

Uplinks: 145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink: 437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[01222007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

```
Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
[05012006]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet: Non-Operational
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon:   145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
```

```
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink  29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
Beacons:   29.450 MHz
          435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
```

Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB

Beacon 1: 29.352 MHz (intermittent)
Beacon 2: 29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB

Beacon: 145.860 MHz

Robot: 145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
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SB SAT @ AMSAT W8ISS ANS-164.S4
WSR 164 Part 4 06/12/2008

AMSAT NEWS SERVICE BULLETIN 164.S4 FROM AMSAT HQ
SILVER SPRING, MD, June 12, 2008
TO ALL RADIO AMATEURS
BID: $ANS-164.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE PROPOSED FOR LAUNCH AT

THIS TIME:

Phase 5a Mars Mission AO-??
Catalog Number:
Proposed Launch Date: 2009 or 2011

Status: Design Phase

For the latest project status update please visit the AMSAT-DL P5-A web page:
http://ticket-to-mars.org
[01222007]
=====
PHASE 3E AO-??
Catalog number:
Proposed Launch Date: Late 2008

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/
[01222007]
=====
Eagle AO-??
Catalog Number:
Proposed Launch Date: Early/Mid 2009

Status: Design Phase

For the latest project status updates please visit the AMSAT-NA webpage:
http://www.amsat.org
[01222007]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-164.S5
WSR 164 Part 5 06/12/2008

AMSAT NEWS SERVICE BULLETIN 164.S5 FROM AMSAT HQ
SILVER SPRING, MD, June 12, 2008
TO ALL RADIO AMATEURS
BID: $ANS-164.S5

THE FOLLOWING SATELLITES HAVE DE-ORBITED OR HAVE BEEN RETURNED SAFELY:

NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Operational
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink: 145.825 Mhz FM APRS AX25
APRS Uplink: 145.825 MHz FM APRS AX25
Voice/PSK31 Uplink: 28.120 MHz

Packet to Voice ID: RAFT
[06112007]
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ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

```
From -8718913627671739738
X-Google-Thread: 10e8ad,b5a5995b73304cf4,start
X-Google-Thread: 10b9c8,b5a5995b73304cf4,start
X-Google-Attributes: gid10e8ad,gid10b9c8,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!news2.google.com!
border1.nntp.dca.giganews.com!nntp.giganews.com!nx01.iad01.newshosting.com!
newshosting.com!198.186.194.249.MISMATCH!transit3.readnews.com!
textspool2.readnews.com!news-out.readnews.com!transit4.readnews.com!panix!
rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sat, 14 Jun 2008 21:30:43 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 316
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <001d01c8ce87$8e3146c0$aa93d440$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader2.panix.com 1213493443 10379 166.84.1.6 (15 Jun 2008 01:30:43 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 15 Jun 2008 01:30:43 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
```

X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news1.google.com rec.radio.amateur.space:37 rec.radio.info:66

AMSAT NEWS SERVICE
ANS-166

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

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*************************************************************
***  2008 AMSAT Space Symposium and Annual General Meeting ***
***            October 24-26 in Atlanta, Georgia           ***
*************************************************************
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In this edition:

* 2008 AMSAT North America Space Symposium
* New AMSAT Videos available
* PreSat and NanoSail-D CubeSats Launch on June 23
* AO-51 Operating Mode Announcement for Field Day
* CUTE-1.7 + APD-II Satellite Camera Activated
* AO-16 Operations Update
* ARISS Status Report for the Week of June 9, 2008

SB SAT @ AMSAT $ANS-166.01
2008 AMSAT North America Space Symposium

AMSAT News Service Bulletin 166.01
>From AMSAT HQ SILVER SPRING, MD.
June 15, 2008
To All RADIO AMATEURS
BID: $ANS-166.01

2008 AMSAT North America Space Symposium
24-26 October 2008, Atlanta, Georgia Call for Papers:

This is the first call for papers for the 2008 AMSAT Space Symposium and Annual Meeting to be held October 24-26, 2008 in Atlanta, Georgia.

Proposals for papers, symposium presentations, and poster presentations are invited on any topic of interest to the amateur satellite program. An emphasis for this year is an educational outreach to middle and high school students. Another topic if interest is using amateur satellite tracking systems to monitor deep space network objects.

In particular, papers on the following topics are solicited:
+ Students & Education
+ ARISS
+ AO-51
+ P3E
+ Eagle
+ Deep Space Network monitoring
+ Any additional satellite-related topics.

We request a one-page abstract as soon as possible. Camera ready copy on paper or in electronic form will be due by September 1, 2008 for inclusion in the printed symposium proceedings. Papers received after this date may not be included in the printed proceedings.

Abstracts and papers should be sent to n8fgv@amsat.org

[ANS thanks Robin, AA4RC and the 2008 Symposium Committee for the above information]

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SB SAT @ AMSAT $ANS-166.02
New AMSAT Videos available

AMSAT News Service Bulletin 166.02
>From AMSAT HQ SILVER SPRING, MD.
June 15, 2008
To All RADIO AMATEURS
BID: $ANS-166.02

We recorded videos of an AO-51 pass and of all the AMSAT Forum presentations at Dayton 2008. You can find out the latest on the current satellite projects, AO-51, AO-16, AMSAT Operations, ARISS and the ACP satellite and ground station progress. Barry, WD4ASW moderated the Forum.

Thanks to Steve Belter, N9IP for doing the recordings and Mike Young, WB8CXO for the video equipment and converting the tapes to this format. Thanks to Gunther and Rob Meisse for hosting the videos at the WMFD site.

The following videos are clickable if you have Windows Media Player (or equivalent) installed on your computer. The URLs can also be pasted into other compatible viewers.

Operating AO-51 Video

Keith, W5IU doing the demonstration during Dayton 2008
mms://media.wmfd.com/amsat/W5IU_AO51_Dayton_Demo.wmv

Videos of 2008 AMSAT Forum at Dayton

Rick, W2GPS AMSAT, P3E, Eagle, SuitSat-2 Update
mms://media.wmfd.com/amsat/W2GPS_2008_forum.wmv

Gould, WA4SXM Operations and AO-51 UpdateN2MJI
mms://media.wmfd.com/amsat/WA4SXM_2008_forum.wmv

Mark, N8MH AO-16 Update
mms://media.wmfd.com/amsat/N8MH_2008_forum.wmv

Michelle, W5NYV ACP Ground Unit
mms://media.wmfd.com/amsat/W5NYV_2008_forum.wmv

Matt, N2MJI ACP Satellite Unit
mms://media.wmfd.com/amsat/W2GPS_2008_forum.wmv

Tony, VK5ZAI ARISS Update
mms://media.wmfd.com/amsat/VK5ZAI_2008_forum.wmv

[ANS thanks Gould, WA4SXM for the above information]

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SB SAT @ AMSAT $ANS-166.03
PreSat and NanoSail-D CubeSats Launch on June 23

AMSAT News Service Bulletin 166.03
>From AMSAT HQ SILVER SPRING, MD.
June 15, 2008
To All RADIO AMATEURS
BID: $ANS-166.03

Santa Clara University students invite amateur radio operators worldwide to participate with them by receiving beacon signals from PreSat and NanoSail-D, two pioneering cubesat missions that will launch from the Reagan Test Site (Omelek Island, Kwajalein Atoll, Republic of Marshall Islands) on June 23, 2008 at about 7:00 pm PDT.

Both spacecraft will go into Low Earth Orbit as secondary payloads aboard a SpaceX Falcon-1 launch vehicle into a 685x330 km, 9 degree inclination orbit.

PreSat is a 10 x 10 x 30 cm. spacecraft, operating at 437.318 MHz FM, will send an AX.25 packet every 5 seconds. The mission will evaluate the performance of a generic biofluidic sample management and handling system for future advanced in situ spaceborne biology experiments.

NanoSail-D is a 10 x 10x 30 cm. spacecraft, operating at 437.269 MHz FM, sending an AX.25 packet every 10 seconds, will deploy a solar sail that also will be used as a drag sail to demonstrate orbital debris mitigation technology.

Amateur radio operators are encouraged to submit received beacon packets through the mission websites in order to receive a web-based QSL card:

PreSat - http://www.presat.org
NanoSail-D - http://www.nanosaild.org

[ANS thanks Mike Miller, KE7EGC for the above information]

/EX

SB SAT @ AMSAT $ANS-166.04
AO-51 Operating Mode Announcement for Field Day

AMSAT News Service Bulletin 166.04
>From AMSAT HQ SILVER SPRING, MD.
June 15, 2008
To All RADIO AMATEURS
BID: $ANS-166.04

The AO-51 Operations Team says that during the week of June 22 to June 29 the satellite will be in the Field Day configuaration. The early start to the Field Day configuration will allow you to test your station prior to the event.

Field Day is June 27 and 28. Please be courteous and remember both AMSAT and ARRL rules only allow ONE QSO per repeater during the contest.

FM Repeater, V/U
Uplink: 145.920 MHz FM, NO PL Tone
Downlink: 435.300 MHz FM

FM Repeater, L/U
Uplink: 1268.700 MHz FM, NO PL Tone
Downlink: 435.150 MHz FM

All the details of AMSAT Field Day operation can be found on-line at: http://www.amsat.org/amsat-new/awards/amsatfd.php.

Refer to the ARRL Web Page for general Field Day operations.

[ANS thanks Drew, KO4MA and the AO-51 Operations Team for the above information]

/EX

SB SAT @ AMSAT $ANS-166.05
CUTE-1.7 + APD-II Satellite Camera Activated

AMSAT News Service Bulletin 166.05
>From AMSAT HQ SILVER SPRING, MD.
June 15, 2008
To All RADIO AMATEURS
BID: $ANS-166.05

Earth photos taken by the CUTE-1.7 + APD-II camera were successfully received at the ground station. See:
http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/080601_Picture_180degRotated.jpg

JA1GDE created a diagram showing the area captured in the photograph:
http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/080601_Picture_JA1GDE.jpg

Additional photos from the satellite camera can be seen at:
http://www.ne.jp/asahi/hamradio/je9pel/cut17apd.htm#bottom

[ANS thanks Mineo, JE9PEL for the above information]

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SB SAT @ AMSAT $ANS-166.06
AO-16 Operations Update

AMSAT News Service Bulletin 166.06
>From AMSAT HQ SILVER SPRING, MD.
June 15, 2008
To All RADIO AMATEURS
BID: $ANS-166.06

Drew KO4MA, AMSAT-NA Vice-President of Operations gave an update of AO-16's on-going malfunctions and troubleshooting.

Drew reported, "AO-16 continues to spontaneously shut off. We suspect it is a watchdog timer that is malfunctioning, and that it is temperature related." The resets on the satellite began shortly after AO-16 re-entered periods of eclipses after a long period of full sun.

Mark, N8MH, and Drew have, at various times, re-commanded the bird on. It will stay on for anywhere from just a few seconds to a few minutes. They also experimented with doing the reset operation automatically, with not much success.

Drew summarizes, "The current plan is to wait a little bit until the eclipses start getting shorter, the overall temperature of the satellite rises some, and see if the frequency of the resets goes down enough to make some sort of day-to-day operation feasible again."

[ANS thanks Drew, KO4MA for the above information]

/EX

SB SAT @ AMSAT $ANS-166.07
ARISS Status Report for the Week of June 9, 2008

AMSAT News Service Bulletin 166.07
>From AMSAT HQ SILVER SPRING, MD.
June 15, 2008
To All RADIO AMATEURS
BID: $ANS-166.07

1. School Contact Status

Planning continues for ARISS contacts; however, the level of school contacts will drop temporarily due to crew time constraints.

On Friday, June 6, a successful ARISS contact took place between Kursk State University in Russia and cosmonauts Sergei Volkov, RU3DIS, and Oleg Kononenko, RN3DX, aboard the ISS. Over three hundred students attended the event.

2. ARRL Article on STS-124

The American Radio Relay League (ARRL) posted a story to its Web site on the STS-124 mission. The article covers ISS flight engineer Greg Chamitoff, KD5PKZ, and mission specialist Akihiko Hoshide, KE5DNI, who flew to the ISS on shuttle Discovery. It also includes information on the new JAXA Kibo laboratory. "Hams Head into Space" may be found at:
http://www.arrl.org/news/stories/2008/06/03/10139/?nc=1

The article was also published in the ARRL Letter.
See: http://www.arrl.org/arrlletter/08/0606/

3. ARISS-Europe Posts DRS Article

An ARISS contact took place with Delta Researcher Schools (DRS) on Friday, May 23 at Space Expo, Noordwijk, the Netherlands. ARISS-Europe has posted a summary of the contact with photos on its Web site.
See: http://www.ariss-eu.org/2008_06_06.htm

[ANS thanks Carol, KB3LKI for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM
K9JKM at amsat dot org

From 9009492434136815472
X-Google-Thread: 10e8ad,6f52cc91eaad9678,start
X-Google-Attributes: gid10e8ad,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!news2.google.com!
border1.nntp.dca.giganews.com!nntp.giganews.com!nx02.iad01.newshosting.com!
newshosting.com!64.59.134.4.MISMATCH!pd7cy3no!pd7cy4no!shaw.ca!pd7urf3no.POSTED!
53ab2750!not-for-mail
X-Trace-PostClient-IP: 68.147.134.68
From: Stephen Atkins <ve6cpu@rac.ca>
User-Agent: Thunderbird 2.0.0.14 (Windows/20080421)
MIME-Version: 1.0
Newsgroups: rec.radio.amateur.space
Subject: diplexer for 2m/70cm
Content-Type: text/plain; charset=ISO-8859-1; format=flowed
Content-Transfer-Encoding: 7bit
Lines: 10
Message-ID: <K7c5k.7327$kx.3528@pd7urf3no>
Date: Sun, 15 Jun 2008 17:16:26 GMT
NNTP-Posting-Host: 64.59.135.176
X-Complaints-To: abuse@shaw.ca
X-Trace: pd7urf3no 1213550186 64.59.135.176 (Sun, 15 Jun 2008 11:16:26 MDT)
NNTP-Posting-Date: Sun, 15 Jun 2008 11:16:26 MDT
Organization: Shaw Residential Internet
Xref: g2news1.google.com rec.radio.amateur.space:38

Hello everyone. I was search around a couple of days ago and came across how to build a diplexer for 2m/70 using coils wrapped using a pencil. For the life of me I can't find that page again and I don't see it in my history. I've loaded every page for the last 3 days and didn't see it. Any way I don't really want to mess around with smd parts so the micro diplexer isn't the one I want. Does anyone know where I might find this page again.

Thanks
Stephen

From -6674622557287246401
X-Google-Thread: 10e8ad,123ded03c091548e,start
X-Google-Attributes: gid10e8ad,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx01.iad01.newshosting.com!newshosting.com!
69.16.185.51.MISMATCH!tmp-post01.iad!news.highwinds-media.com!roadrunner.com!not-

```
for-mail
Date: Mon, 16 Jun 2008 18:59:52 -0400
From: Usenet user<usenet_user@rr.com>
Newsgroups: rec.radio.amateur.space
Subject: Help us save usenet news for Time-Warner customers
X-Newsreader: BNews2004v20
Lines: 9
Message-ID: <4856f120$0$4268$4c368faf@roadrunner.com>
Organization: Road Runner High Speed Online http://www.rr.com
NNTP-Posting-Host: 66.67.8.228
X-Complaints-To: abuse@rr.com
Xref: g2news1.google.com rec.radio.amateur.space:39

Time-Warner corporate is dropping usenet news as of June 23, 2008.

Please help by asking them to keep it.  The person to call works for the TW
president:

Barbara Burroughs
phone 203-351-2281

email: barbara.burroughs@twcable.com




From 4389692675503062338
X-Google-Thread: 10e8ad,4c2829ff25ab398c,start
X-Google-Attributes: gid10e8ad,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!postnews.google.com!d19g2000prm.googlegroups.com!not-for-
mail
From: michael <cnbbiz033@gmail.com>
Newsgroups: rec.radio.amateur.space
Subject: shoes Free 3.0 shoes paypal payment $28/pairs   cnbbiz2008@hotmail.com
     ( http://photo.163.com/photos/haoxie0594/150554540/ )
Date: Thu, 19 Jun 2008 00:33:20 -0700 (PDT)
Organization: http://groups.google.com
Lines: 53
Message-ID: <c9cf98fd-aec5-471d-9a21-c9abd1c86657@d19g2000prm.googlegroups.com>
NNTP-Posting-Host: 59.58.104.93
Mime-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 7bit
X-Trace: posting.google.com 1213860807 4348 127.0.0.1 (19 Jun 2008 07:33:27 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Thu, 19 Jun 2008 07:33:27 +0000 (UTC)
Complaints-To: groups-abuse@google.com
Injection-Info: d19g2000prm.googlegroups.com; posting-host=59.58.104.93;
     posting-account=WwA6wQoAAACcmhN_4n2hvuLrjgBdhEpL
User-Agent: G2/1.0
X-HTTP-UserAgent: Mozilla/5.0 (Windows; U; Windows NT 5.1; zh-CN; rv:1.8.1.14)
     Gecko/20080404 Firefox/2.0.0.14,gzip(gfe),gzip(gfe)
Xref: g2news1.google.com rec.radio.amateur.space:40
```

Please chat with me by cnbbiz2008@hotmail.com to get the price and more photos, we take paypal payment $28/pairs as payment. please see the photo album below for our product list.

shoes evisu shoes paypal payment $28/pairs   cnbbiz2008@hotmail.com (http://photo.163.com/photos/tl668899/131380486/)

shoes Free 3.0 shoes paypal payment $28/pairs cnbbiz2008@hotmail.com (http://photo.163.com/photos/haoxie0594/150554540/)

shoes Free 4.0 shoes paypal payment $28/pairs cnbbiz2008@hotmail.com (http://photo.163.com/photos/haoxie0594/150554540/)

shoes Free 5.0 shoes paypal payment $28/pairs cnbbiz2008@hotmail.com (http://photo.163.com/photos/songwenqing2229693/137792584/)

shoes Free 7.0 shoes paypal payment $28/pairs cnbbiz2008@hotmail.com (http://photo.163.com/photos/songwenqing2229693/137803633/)

Football shoes paypal payment $28/pairs   cnbbiz2008@hotmail.com (http://photo.163.com/photos/songwenqing2229693/137738225/)

shoes HOGAN shoes paypal payment $28/pairs wholesaler cnbbiz2008@hotmail.com (http://photo.163.com/photos/llz800728111/136955108/)

shoes Ice cream shoes paypal payment $28/pairs wholesaler cnbbiz2008@hotmail.com (http://photo.163.com/photos/llz800728111/130777835/)

shoes levis shoes paypal payment $28/pairs wholesaler cnbbiz2008@hotmail.com (http://photo.163.com/photos/llz800728111/143765610/)

shoes locaste shoes paypal payment $28/pairs wholesaler cnbbiz2008@hotmail.com (http://photo.163.com/photos/llz800728111/151705789/)

shoes k- swiss shoes paypal payment $28/pairs wholesaler cnbbiz2008@hotmail.com (http://photo.163.com/photos/haoxie0594/146029991/)

shoes lv shoes   paypal payment $28/pairs wholesaler cnbbiz2008@hotmail.com (http://photo.163.com/photos/llz800728111/153471940/)

shoes Air Stabb 89 shoes paypal payment $28/pairs wholesaler

cnbbiz2008@hotmail.com (http://photo.163.com/photos/huayuexiehang/
)

From 2250499881376135080
X-Google-Thread: 10e8ad,1c30da11b2041856,start
X-Google-Thread: 10b9c8,1c30da11b2041856,start
X-Google-Attributes: gid10e8ad,gid10b9c8,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx01.iad01.newshosting.com!newshosting.com!
198.186.194.249.MISMATCH!transit3.readnews.com!news-xxxfer.readnews.com!news-
out.readnews.com!transit4.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-171 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Fri, 20 Jun 2008 12:29:51 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 1445
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000301c8d2f3$080684f0$18138ed0$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader2.panix.com 1213979391 19302 166.84.1.6 (20 Jun 2008 16:29:51 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Fri, 20 Jun 2008 16:29:51 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news1.google.com rec.radio.amateur.space:41 rec.radio.info:75

This report is organized into FIVE parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites
Part 5 (S5) - deborbited/returned satellites

SB SAT @ AMSAT W8ISS ANS-171.S1
WSR 171 Part 1 06/19/2008

AMSAT NEWS SERVICE BULLETIN 171.S1 FROM AMSAT HQ
SILVER SPRING, MD, June 19 2008
TO ALL RADIO AMATEURS
BID: $ANS-171.S1

VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.859330 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsat.in/hamsat.htm

To know what transponder is switched on please listen for the beacon that is
active. Each transponder has a different beacon.
[06252007]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational - Software reload

```
Current Modes:   FM Repeater - V/u
                               S/u
                 BBS         - OFF
                 Telemetry   - OFF

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
```

Analog voice uplink: 145.880 MHZ FM
                       145.880 MHz USB
                       145.920 MHz FM
                      1268.700 MHz FM 67Hz PL tone
Digital Downlinks: 435.150 MHz FM 38k4 Digital, PBP, 1 watt output
                       435.150 MHz FM 9k6 Digital, Pacsat Broadcast Protocol
                      2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Digital, Pacsat Broadcast Protocol
                      1268.700 mhz FM 9k6 PBP Digital
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[06192008]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002

Status: Operational.

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer
   on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on
   and off within the 10 Minute window.

3) Sending the 74.4 tone again within the 10 minute window will reset the 10 minute timer.
[05282007]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Operational - check operational schedule for current times!!

Current Mode: V/u

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage: http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's CW
telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts.htm
[0820007]
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM
Downlink: 436.797 MHz FM

```
Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[12132007]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: TESTING - VOICE

Current Mode:  V/u

Uplink:         145.900 MHz FM 1200-baud Manchester FSK (reserved)
                145.920 MHz FM VOICE
                145.940 MHz FM 1200-baud Manchester FSK (reserved)
                145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink:       437.026 MHz USB VOICE
                ( 1200-baud PSK - MBL Telemetry Only )

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[03202008]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational depending on amount of Sunlight

Current Mode: Listen before transmitting

Uplink:   145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink:  29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons:   29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
```

2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/

AO-7 Usage Guidelines on the AO-7 Log and Resource Site located at:
http://www.planetemily.com/ao7
[05282007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Mode: FM Repeater - U/v
Voice - Occasianally
BBS - ON
APRS - ON
SSTV - OFF

Expedition 17 crew:

Commander:	Sergey Volkov	RU3DIS
Flight Engineer:	Oleg Kononenko	RN3DX
Flight Engineer:	Greg Chamitoff	KD5PKZ

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM
Worldwide packet downlink: 145.825 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:

German:	DP0ISS
Russian:	RS0ISS RZ3DZR
USA:	NA1SS
Packet Mailbox:	RS0ISS-11

Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.
[06122008]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-171.S2
WSR 171 Part 2 06/19/2008

AMSAT NEWS SERVICE BULLETIN 171.S2 FROM AMSAT HQ
SILVER SPRING, MD, June 19 2008
TO ALL RADIO AMATEURS
BID: $ANS-171.S2

RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number:
Launch Date: May 23, 2008

Status: Operational

Curent Mode: Telemetry
             Audio
             Images

Downlinks: 435.315 MHz
           435.215 MHz
[05292008]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.
[11152007]
=====

```
CP3
Catalog Number: 31128
Launch Date: April 17,2007

Status: Operational

Current Mode:  /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[07302007]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: In Orbit

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder:  145.825 Mhz FM
[02052007]
=====
NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Operational

Current Mode: /u

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[10222007]
=====
GENESAT-1 ?O-??
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Current Mode: /u

Telemetry Beacon Downlink: 437.0670 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[01082007]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
```

Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon: 437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
[03262007]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003

Status: Operational

Current Mode: /u

Beacon: 436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[01082007]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Semi-Operational - Constant Carrier only

Uplink: 1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan ?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[01082007]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

```
Status: Operational

Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW
[08132007]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational - Softawre Reload

Current Modes:   FM Repeater - V/u
                               S/u
                 BBS         - OFF
                 Telemetry   - OFF

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink:   145.880 MHZ FM
                       145.880 MHz USB
                       145.920 MHz FM
                      1268.700 MHz FM 67Hz PL tone
Digital Downlinks:     435.150 MHz FM 38k4 Digital, PBP, 1 watt output
                       435.150 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:        145.860 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      1268.700 mhz FM 9k6 PBP Digital
Beacon:                435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[06192008]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Hibernation until full sunlight in November

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink:        144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[09242007]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Current Modes: V/U
               L/U

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[09172007]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984

Status: Semi-operational.

Current Mode:  /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon:           435.025 MHz
Mode-S Beacon:     2401.500 MHz
```

```
Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[01242008]
=====
RS-22 RADIO SPORT RS-22
Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only

Current Mode:  /u

CW Beacon - 435.352 MHz
            145.818 MHz
[08062007]
=====
Can X-2
Catalog number:
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web page:
http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[05292008]
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink: 437.425 MHz

For the latest project status update please visit the AAUSAT-II web
page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[05292008]
=====
Cute-1.7+APD II
```

```
Catalog number: 32785
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink:  437.475 MHz 9k6 Packet
Uplink:   1267.600 Mhz

For the latest project status update please visit the Cute-1.7+APD II
web
page:
http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78
[05292008]
=====
Compass 1
Catalog number: 32787
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink: 437.275 Mhz CW
          437.405 MHz Packet

For the latest project status update please visit the Compass 1 web
page:
http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52
[05292008]
=====
DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008

Status: IN ORBIT

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink:   435.530 to 435.570 MHz

Proposed Frequencies:
* Primary telemetry downlink: 145.870 MHz 1200 Baud BPSK AX.25 400mW
* Backup telemetry downlink: 145.930 MHz 1200 Baud BPSK AX.25 400mW
* Linear transponder passband downlink: 145.880 - 145.920 MHz
(inverting)
  400mW PEP
* Linear transponder passband uplink: 435.570 - 435.530 MHz
* Transponder mode beacon: 145.870 MHz CW (10dB below transponder PEP)
```

For the latest project status update please visit the Delfi-C3 web page:
http://www.delfic3.nl/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68
[05292008]
=====
Seeds 2
Catalog number:
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink: 437.485 MHz

For the latest project status update please visit the Seeds 2 web page:
http://cubesat.aero.cst.nihon-u.ac.jp/english/main_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36
[05012008]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Mode: FM Repeater - U/v
Voice - Occasianally
BBS - ON
APRS - ON
SSTV - OFF

Expedition 17 crew:

Commander:	Sergey Volkov	RU3DIS
Flight Engineer:	Oleg Kononenko	RN3DX
Flight Engineer:	Greg Chamitoff	KD5PKZ

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM
Worldwide packet downlink: 145.825 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS
RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line is
NOT translated from Russian and posted.
[06122008]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-171.S3
WSR 171 Part 3 06/19/2008

AMSAT NEWS SERVICE BULLETIN 171.S3 FROM AMSAT HQ
SILVER SPRING, MD, June 19 2008
TO ALL RADIO AMATEURS
BID: $ANS-171.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

CP4
Catalog Number: 31122
Launch Date: April 17,2007

Status: Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon: 437.325 MHz CW
[11152007]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Non-Operational

```
Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon:             437.2750 MHz CW

Callsign: JR8YJT
[10152007]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency:  437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink:        437.250 MHz FM 67Hz CTCSS
Voice Downlink:     2401.835 MHz FM
Packet Up/Downlink:  437.250 MHz 9k6 packet
Packet Downlink     2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non=Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[08132007]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.
```

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]

=====

MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Non-Operational

Uplinks: 145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[007302007]

=====

NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, callsign KE6QMD, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]

=====

SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

```
Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS:                SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink:   145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
V-band:   145.840 -  145.990 MHz CW/LSB
U-band:   435.550 -  435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks
---------
S2-band:  2401.225 -  2401.475 MHz CW/USB
K-band:  24048.010 - 24048.060 MHz CW/USB
Beacon:   2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)
----------------------------
BEACON   General Beacon (GB)    Middle Beacon (MB)    Engineering Beacon
(EB)
2 m       none                    145.898 MHz           none
```

```
70cm      435.438 MHz            435.588 MHz           435.838 MHz
13cm(1)  2400.188 MHz           2400.338 MHz          2400.588 MHz
13cm(2)  2401.173 MHz           2401.323 MHz          2401.573 MHz
3cm     10450.975 MHz          10451.125 MHz         10451.375 MHz
1.5cm   24047.885 MHz          24048.035 MHz         24048.285 MHz
[07162007]
=====
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink:    145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site
at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: ?
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater:         436.250 MHz

Uplinks: Mode B Repeater:  145.825 MHz
Mode J Digipeater:         145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink:   145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign:       POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
```

```
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012006]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
```

```
Launch date: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
LIBERTAD-1
Catalog Number: 31129
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25
```

```
Callsign: 5K3L

Uplink:   145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[10222007]
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990

Status: CW Beacon only

Uplinks:          145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink:      437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[01222007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
[05012006]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990
```

```
Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet: Non-Operational
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon:   145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
```

```
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink  29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
Beacons:   29.450 MHz
          435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon 1:  29.352 MHz (intermittent)
Beacon 2:  29.398 MHz
```

```
SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink:     21.260 to 21.300 MHz CW/USB
Downlink:  145.860 to 145.900 MHz CW/USB

Beacon:    145.860 MHz

Robot:     145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink:   21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon:   29.408 MHz

Robot:    29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-171.S4
WSR 171 Part 4 06/19/2008

AMSAT NEWS SERVICE BULLETIN 171.S4 FROM AMSAT HQ
SILVER SPRING, MD, June 19 2008
TO ALL RADIO AMATEURS
BID: $ANS-171.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE PROPOSED FOR LAUNCH AT
THIS TIME:

Phase 5a Mars Mission AO-??
Catalog Number:
Proposed Launch Date: 2009 or 2011

Status: Design Phase

For the latest project status update please visit the AMSAT-DL P5-A web
page:
```

http://ticket-to-mars.org
[01222007]
=====
PHASE 3E AO-??
Catalog number:
Proposed Launch Date: Late 2008

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/
[01222007]
=====
Eagle AO-??
Catalog Number:
Proposed Launch Date: Early/Mid 2009

Status: Design Phase

For the latest project status updates please visit the AMSAT-NA webpage:
http://www.amsat.org
[01222007]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-171.S5
WSR 171 Part 5 06/19/2008

AMSAT NEWS SERVICE BULLETIN 171.S5 FROM AMSAT HQ
SILVER SPRING, MD, June 19 2008
TO ALL RADIO AMATEURS
BID: $ANS-171.S5

THE FOLLOWING SATELLITES HAVE DE-ORBITED OR HAVE BEEN RETURNED SAFELY:

NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Operational
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink: 145.825 Mhz FM APRS AX25
APRS Uplink: 145.825 MHz FM APRS AX25
Voice/PSK31 Uplink: 28.120 MHz

Packet to Voice ID: RAFT
[06112007]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

From -3370895883208655857
X-Google-Thread: 10e8ad,e2b8ad0099dac317,start
X-Google-Thread: 10b9c8,e2b8ad0099dac317,start
X-Google-Attributes: gid10e8ad,gid10b9c8,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news4.google.com!news2.google.com!news.glorb.com!transit3.readnews.com!news-out.readnews.com!news-xxxfer.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-174 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sun, 22 Jun 2008 21:04:13 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 250
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000901c8d4cd$36b6e840$a424b8c0$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader2.panix.com 1214183053 21930 166.84.1.6 (23 Jun 2008 01:04:13 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Mon, 23 Jun 2008 01:04:13 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to   rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to   rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news1.google.com rec.radio.amateur.space:42 rec.radio.info:81

AMSAT NEWS SERVICE
ANS-174

****

*** 2008 AMSAT Space Symposium and Annual General Meeting ***
***   October 24-26 in Atlanta, Georgia   ***
****

ANS is a free, weekly, news and information service of AMSAT North America, The
Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* AMSAT Receives CFC Certification for 2008
* 9 Cubesats on Maiden Vega Launch
* Nominees for AMSAT Board of Directors
* Call for Papers--2008 ARRL/TAPR Digital Communications Conference
* AMSAT Award Recipients
* ARISS Status - 16 June 2008

SB SAT @ AMSAT $ANS-174.01
AMSAT Receives CFC Certification for 2008

AMSAT News Service Bulletin 174.01
  From AMSAT HQ SILVER SPRING, MD.
June 22, 2008
To All RADIO AMATEURS
BID: $ANS-174.01

On June 13, 2008 The Office of Combined Federal Campaign Operations issued the final draft of the listings for independent organizations that have been approved for participation in the 2008 CFC. The Radio Amateur Satellite Corporation (AMSAT) was again included in the approvals.

The CFC, or Combined Federal Campaign, is the U.S. Government equivalent Of the United Way in the private sector. The campaign affords all US Government employees the opportunity to make donations from their regular paychecks to CFC approved Charities.

AMSAT has again successfully applied to CFC for that status and is grateful for the approval. This stamp of approval means that AMSAT has met the strict standards set by the U.S. Office of Personnel Management (OPM) assuring donors that AMSAT's programs of work and financial operational standards meet the CFC requirements.

Those AMSAT supporters who wish to make payroll contributions should select the Radio Amateur satellite Corporation (AMSAT) during their campaign this coming fall. The AMSAT CFC Charity number is 10158. Payroll deduction is a simple, convenient way to support AMSAT.

Gunther Meisse W8GSM
Treasurer, AMSAT North America

[ANS thanks Bunther, W8GSM, for the above information]

/EX

SB SAT @ AMSAT $ANS-174.02
9 Cubesats on Maiden Vega Launch

AMSAT News Service Bulletin 174.02
From AMSAT HQ SILVER SPRING, MD.
June 22, 2008
To All RADIO AMATEURS
BID: $ANS-174.02

Cubesats built by students from universities in Poland Spain Italy Switzerland Romania France and Belgium have been selected for a free ride to low earth orbit. The launch is scheduled on the Vega maiden flight from Kourou at the end 2008 / early 2009.

One Belgium cubesat proposes to use D-Star as a communications protocol

[ANS thanks David, G0RMF, for the above information]

/EX

SB SAT @ AMSAT $ANS-174.03
Nominees for AMSAT Board of Directors

AMSAT News Service Bulletin 174.03
From AMSAT HQ SILVER SPRING, MD.
June 22, 2008
To All RADIO AMATEURS
BID: $ANS-174.03

Nominations for the 2008 AMSAT Board of Directors have closed. The list of qualified candidates is:

Tom Clark K3IO
Lou McFadin W5DID
Bill Ress N6GHZ
Gould Smith WA4SXM

Three Directors' terms are up this year. Directors serve a two year term. Ballots will be in the mail by July 15th and must be received in Silver Spring no later than the close of business on September 15th.

[ANS thanks Martha for the above information]

/EX

SB SAT @ AMSAT $ANS-174.04
Call for Papers--2008 ARRL/TAPR Digital Communications Conference

AMSAT News Service Bulletin 174.04
From AMSAT HQ SILVER SPRING, MD.
June 22, 2008
To All RADIO AMATEURS
BID: $ANS-174.04

Technical papers are solicited for presentation at the 27th Annual ARRL and TAPR Digital Communications Conference to be held September 26-28, 2008 in Chicago, Illinois. These papers will also be published in the Conference Proceedings (you do NOT need to attend the conference to have your paper included in the Proceedings). The submission deadline is July 31, 2008. Please send papers to:

Maty Weinberg
ARRL
225 Main St
Newington, CT 06111

or you can make your submission via e-mail to: maty@arrl.org

Papers will be published exactly as submitted and authors will retain all rights.

[ANS thanks Steve, WB8IMY, for the above information]

/EX

SB SAT @ AMSAT $ANS-174.05
AMSAT Award Recipients

AMSAT News Service Bulletin 174.05
From AMSAT HQ SILVER SPRING, MD.
June 22, 2008
To All RADIO AMATEURS
BID: $ANS-174.05

We would like to welcome the following to the satellite community. They have made their first satellite contact and are now members of the AMSAT Satellite Communicators Club.

Robert Netzband, NA2H
Piyumi Perera, VE4WPL

Keith Cutter, KD7GOP

The following have earned the AMSAT Satellite Communications Achievement Award

Dimitrios Pallis, SW1JGW #464
Rob Rousseau, KI4BKE #465
Rafael Valdez, Jr., XE2RV #466

The following have earned the AMSAT Robert Barbee, Jr., W4AMI Satellite Communication Achievement Award

Rafael Valdez, Jr., XE2RV #51

To see all the awards visit http://www.amsat.org or http://www.amsatnet.com

[ANS thanks Bruce, KK5DO, for the above information]

/EX

SB SAT @ AMSAT $ANS-174.06
ARISS Status -- 16 June 2008

AMSAT News Service Bulletin 174.06
  From AMSAT HQ SILVER SPRING, MD.
June 22, 2008
To All RADIO AMATEURS
BID: $ANS-174.06

1. Upcoming School Contact

An Amateur Radio on the International Space Station (ARISS) contact has been scheduled with Robinson Elementary School in Robinson, Texas on Wednesday, June 25 at 15:45 UTC, via telebridge station WH6PN in Hawaii. This is the first ARISS contact to be held with astronaut Greg Chamitoff, KD5PKZ. Approximately 300 second and third graders are enrolled at the school.

2. ARRL PR Campaign Includes ARISS

On June 10, the American Radio Relay League (ARRL) ran an article about its new PR campaign called "We Do That." A portion of a new brochure and accompanying Web material cover Amateur Radio on the International Space Station (ARISS). There is also an audio sample of an ARISS contact on the Web site. For more information, go to: http://www.arrl.org/news/stories/2008/06/10/10151/?nc=1

The story also ran in the ARRL Letter. See:
http://www.arrl.org/arrlletter/08/0613/

3. ARISS Face to Face Meeting

Preparations continue for the Amateur Radio on the International Space Station (ARISS) Face to Face Meeting. The conference will be held on July 17-18. It will be preceded by an Amateur Radio Working Group (ARWG) meeting on July 14-16 which will be attended by representatives from the international partner space agencies. Both meetings will be held in Moscow, Russia.

[ANS thanks Carol, KB3LKI, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Lee McLamb, KU4OS

From 4205816118892309337
X-Google-Thread: 10e8ad,a26a23d057501a77,start
X-Google-Thread: 10b9c8,a26a23d057501a77,start
X-Google-Attributes: gid10e8ad,gid10b9c8,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!newsfeed2.dallas1.level3.net!news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-178 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Wed, 25 Jun 2008 23:15:59 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 1991
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <002601c8d73a$e6d25c40$b47714c0$@net>
Reply-To: ans-editor@amsat.org

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NNTP-Posting-Host: panix1.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader2.panix.com 1214450159 29397 166.84.1.1 (26 Jun 2008 03:15:59 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Thu, 26 Jun 2008 03:15:59 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news1.google.com rec.radio.amateur.space:43 rec.radio.info:85
```

This report is organized into FIVE parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites
Part 5 (S5) - deborbited/returned satellites

SB SAT @ AMSAT W8ISS ANS-178.S1
WSR 178 Part 1 06/26/2008

AMSAT NEWS SERVICE BULLETIN 178.S1 FROM AMSAT HQ
SILVER SPRING, MD, June 26 2008
TO ALL RADIO AMATEURS
BID: $ANS-178.S1

VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

```
Indian Beacon:  145.859330 MHZ CW
Dutch Beacon:   145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsat.in/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is
active. Each transponder has a different beacon.
[06252007]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational - Software reload

Current Modes:   FM Repeater - V/u
                               L/u
                 BBS         - OFF
                 Telemetry   - OFF

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink:   145.880 MHZ FM
                       145.880 MHz USB
                       145.920 MHz FM
                      1268.700 MHz FM 67Hz PL tone
Digital Downlinks:     435.150 MHz FM 38k4 Digital, PBP, 1 watt output
                       435.150 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:        145.860 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      1268.700 mhz FM 9k6 PBP Digital
Beacon:                435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12
```

Official Webpage: http://www.amsat.org/amsat-new/echo/
[06262008]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002

Status: Operational.

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer
   on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on
   and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10
   minute timer.
[05282007]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Operational - check operational schedule for current times!!

Current Mode: V/u

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS

```
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage: http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's CW
telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts.htm
[0820007]
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993

Status: Operational

Current Mode: V/u

Uplink:   145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[12132007]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: TESTING - VOICE

Current Mode:  V/u

Uplink:         145.900 MHz FM 1200-baud Manchester FSK (reserved)
                145.920 MHz FM VOICE
                145.940 MHz FM 1200-baud Manchester FSK (reserved)
                145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink:       437.026 MHz USB VOICE
                ( 1200-baud PSK - MBL Telemetry Only )
```

```
Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[03202008]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational depending on amount of Sunlight

Current Mode: Listen before transmitting

Uplink:   145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink:  29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons:   29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/

AO-7 Usage Guidelines on the AO-7 Log and Resource Site located at:
http://www.planetemily.com/ao7
[05282007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Mode: FM Repeater - U/v
              Voice -       Occasianally
              BBS -         ON
              APRS -        ON
              SSTV -        OFF
```

Expedition 17 crew:
Commander: Sergey Volkov   RU3DIS
Flight Engineer: Oleg Kononenko   RN3DX
Flight Engineer: Greg Chamitoff   KD5PKZ

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM
Worldwide packet downlink: 145.825 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS
                     RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.
[06122008]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-178.S2
WSR 178 Part 2 06/26/2008

AMSAT NEWS SERVICE BULLETIN 178.S2 FROM AMSAT HQ
SILVER SPRING, MD, June 26 2008
TO ALL RADIO AMATEURS
BID: $ANS-178.S2

RS-30 Radio Sputnik 30 (Yubileiny)

```
Catalog Number:
Launch Date: May 23, 2008

Status: Operational

Curent Mode: Telemetry
             Audio
             Images

Downlinks: 435.315 MHz
           435.215 MHz
[05292008]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode:  /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon:    435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.
[11152007]
=====
CP3
Catalog Number: 31128
Launch Date: April 17,2007

Status: Operational

Current Mode:  /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[07302007]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: In Orbit

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder:  145.825 Mhz FM
[02052007]
=====
NO-62 FCAL
```

Catalog Number: 29667
Launch Date: December 21, 2006

Status: Operational

Current Mode: /u

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[10222007]
=====
GENESAT-1 ?O-??
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Current Mode: /u

Telemetry Beacon Downlink: 437.0670 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[01082007]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon: 437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
[03262007]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003

Status: Operational

Current Mode: /u

Beacon: 436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[01082007]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Semi-Operational - Constant Carrier only

Uplink: 1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan ?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[01082007]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW
[08132007]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational - Softawre Reload

```
Current Modes:   FM Repeater - V/u
                               L/u
                 BBS         - OFF
                 Telemetry   - OFF
```

Analog voice downlink: 435.300 MHz FM

435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.880 MHZ FM
145.880 MHz USB
145.920 MHz FM
1268.700 MHz FM 67Hz PL tone
Digital Downlinks: 435.150 MHz FM 38k4 Digital, PBP, 1 watt output
435.150 MHz FM 9k6 Digital, Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Digital, Pacsat Broadcast Protocol
1268.700 mhz FM 9k6 PBP Digital
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[06262008]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Hibernation until full sunlight in November

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[09242007]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Current Modes: V/U

```
               L/U

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[09172007]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984

Status: Semi-operational.

Current Mode:  /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon:          435.025 MHz
Mode-S Beacon:     2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[01242008]
=====
RS-22 RADIO SPORT RS-22
Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only

Current Mode:  /u

CW Beacon - 435.352 MHz
            145.818 MHz
[08062007]
=====
Can X-2
Catalog number:
Launch Date: April 28, 2008
```

Status: IN ORBIT

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web page:
http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[05292008]
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink: 437.425 MHz

For the latest project status update please visit the AAUSAT-II web
page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[05292008]
=====
Cute-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink: 437.475 MHz 9k6 Packet
Uplink: 1267.600 Mhz

For the latest project status update please visit the Cute-1.7+APD II
web
page:
http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78
[05292008]
=====
Compass 1
Catalog number: 32787
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink: 437.275 Mhz CW

```
          437.405 MHz Packet

For the latest project status update please visit the Compass 1 web
page:
http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52
[05292008]
=====
DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008

Status: IN ORBIT

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink:   435.530 to 435.570 MHz

Proposed Frequencies:
* Primary telemetry downlink: 145.870 MHz 1200 Baud BPSK AX.25 400mW
* Backup telemetry downlink: 145.930 MHz 1200 Baud BPSK AX.25 400mW
* Linear transponder passband downlink: 145.880 - 145.920 MHz
(inverting)
  400mW PEP
* Linear transponder passband uplink: 435.570 - 435.530 MHz
* Transponder mode beacon: 145.870 MHz CW (10dB below transponder PEP)

For the latest project status update please visit the Delfi-C3 web page:
http://www.delfic3.nl/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68
[05292008]
=====
Seeds 2
Catalog number:
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink: 437.485 MHz

For the latest project status update please visit the Seeds 2 web page:
http://cubesat.aero.cst.nihon-u.ac.jp/english/main_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36
[05012008]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
```

Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Mode: FM Repeater - U/v
Voice - Occasianally
BBS - ON
APRS - ON
SSTV - OFF

Expedition 17 crew:
Commander: Sergey Volkov RU3DIS
Flight Engineer: Oleg Kononenko RN3DX
Flight Engineer: Greg Chamitoff KD5PKZ

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM
Worldwide packet downlink: 145.825 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS
RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line is NOT translated from Russian and posted.
[06122008]
NNNN

```
/EX

SB SAT @ AMSAT W8ISS ANS-178.S3
WSR 178 Part 3 06/26/2008

AMSAT NEWS SERVICE BULLETIN 178.S3 FROM AMSAT HQ
SILVER SPRING, MD, June 26 2008
TO ALL RADIO AMATEURS
BID: $ANS-178.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

CP4
Catalog Number: 31122
Launch Date: April 17,2007

Status: Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon:    437.325 MHz CW
[11152007]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Non-Operational

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon:             437.2750 MHz CW

Callsign: JR8YJT
[10152007]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency:  437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
```

```
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink:         437.250 MHz FM 67Hz CTCSS
Voice Downlink:      2401.835 MHz FM
Packet Up/Downlink:   437.250 MHz 9k6 packet
Packet Downlink      2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non=Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[08132007]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink:   435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Non-Operational

Uplinks:   145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink:  437.325 MHz

Broadcast callsign: MYSAT3-11
BBS:                MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial
land and weather imaging payloads offers FM and FSK Amateur Radio
```

communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a
collaborative effort between the Malaysian government and Surrey
Satellite
Technology Ltd.
[007302007]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
callsign KE6QMD, as per the user service agreement located at the following
URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks

V-band: 145.840 - 145.990 MHz CW/LSB
U-band: 435.550 - 435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks

S2-band: 2401.225 - 2401.475 MHz CW/USB
K-band: 24048.010 - 24048.060 MHz CW/USB
Beacon: 2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)

BEACON	General Beacon (GB)	Middle Beacon (MB)	Engineering Beacon (EB)
2 m	none	145.898 MHz	none
70cm	435.438 MHz	435.588 MHz	435.838 MHz
13cm(1)	2400.188 MHz	2400.338 MHz	2400.588 MHz
13cm(2)	2401.173 MHz	2401.323 MHz	2401.573 MHz
3cm	10450.975 MHz	10451.125 MHz	10451.375 MHz
1.5cm	24047.885 MHz	24048.035 MHz	24048.285 MHz

[07162007]
=====
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)

```
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site
at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: ?
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater:         436.250 MHz

Uplinks: Mode B Repeater:  145.825 MHz
Mode J Digipeater:         145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
```

```
[09042006]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink:   145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign:       POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012006]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
```

```
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990
```

```
Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
LIBERTAD-1
Catalog Number: 31129
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink:   145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[10222007]
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990

Status: CW Beacon only

Uplinks:          145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink:      437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
```

```
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[01222007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
[05012006]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet: Non-Operational
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS
```

```
Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon:   145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink  29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
Beacons:   29.450 MHz
          435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
```

```
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon 1:  29.352 MHz (intermittent)
Beacon 2:  29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink:     21.260 to 21.300 MHz CW/USB
Downlink:  145.860 to 145.900 MHz CW/USB

Beacon:    145.860 MHz

Robot:     145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational
```

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-178.S3
WSR 178 Part 3 06/26/2008

AMSAT NEWS SERVICE BULLETIN 178.S3 FROM AMSAT HQ
SILVER SPRING, MD, June 26 2008
TO ALL RADIO AMATEURS
BID: $ANS-178.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

CP4
Catalog Number: 31122
Launch Date: April 17,2007

Status: Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon: 437.325 MHz CW
[11152007]

=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Non-Operational

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon: 437.2750 MHz CW

Callsign: JR8YJT
[10152007]

=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA

```
Proposed Transmit Frequency:  437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink:        437.250 MHz FM 67Hz CTCSS
Voice Downlink:     2401.835 MHz FM
Packet Up/Downlink:  437.250 MHz 9k6 packet
Packet Downlink     2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non=Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[08132007]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink:   435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Non-Operational

Uplinks:   145.850 MHz
           145.925 MHz 9600-baud FSK
```

Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[007302007]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, callsign KE6QMD, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

```
Status: Non-Operational

Uplink:   145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
V-band:   145.840 -  145.990 MHz CW/LSB
U-band:   435.550 -  435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks
---------
S2-band:  2401.225 -  2401.475 MHz CW/USB
K-band:  24048.010 - 24048.060 MHz CW/USB
Beacon:   2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)
----------------------------
BEACON   General Beacon (GB)    Middle Beacon (MB)    Engineering Beacon
(EB)
2 m       none                   145.898 MHz           none
70cm      435.438 MHz            435.588 MHz           435.838 MHz
13cm(1)  2400.188 MHz           2400.338 MHz          2400.588 MHz
13cm(2)  2401.173 MHz           2401.323 MHz          2401.573 MHz
3cm     10450.975 MHz          10451.125 MHz         10451.375 MHz
1.5cm   24047.885 MHz          24048.035 MHz         24048.285 MHz
[07162007]
=====
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
```

```
=====
UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink:    145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site
at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: ?
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater:         436.250 MHz

Uplinks: Mode B Repeater:  145.825 MHz
Mode J Digipeater:         145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational
```

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink: 145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012006]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks: 145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

```
Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Operational
```

```
Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
LIBERTAD-1
Catalog Number: 31129
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink:   145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[10222007]
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990

Status: CW Beacon only

Uplinks:          145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
```

145.880 MHz 1200-baud Manchester FSK
145.900 MHz 1200-baud Manchester FSK

CW downlink: 437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[01222007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink: 145.825 MHz FM 1200 Baud AFSK
Beacon: 2401.220 MHz
[05012006]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink: 145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting): Non-Operational
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

```
Mode V/U (J) Packet: Non-Operational
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon:   145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink  29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational
```

```
Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
Beacons:   29.450 MHz
          435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon 1:  29.352 MHz (intermittent)
Beacon 2:  29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink:     21.260 to 21.300 MHz CW/USB
Downlink:  145.860 to 145.900 MHz CW/USB

Beacon:    145.860 MHz

Robot:     145.908 MHz
```

[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-178.S5
WSR 178 Part 5 06/26/2008

AMSAT NEWS SERVICE BULLETIN 178.S5 FROM AMSAT HQ
SILVER SPRING, MD, June 26 2008
TO ALL RADIO AMATEURS
BID: $ANS-178.S5

THE FOLLOWING SATELLITES HAVE DE-ORBITED OR HAVE BEEN RETURNED SAFELY:

NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Operational
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink: 145.825 Mhz FM APRS AX25
APRS Uplink: 145.825 MHz FM APRS AX25
Voice/PSK31 Uplink: 28.120 MHz

Packet to Voice ID: RAFT
[06112007]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

```
From 5624583627881475108
X-Google-Thread: 10e8ad,8bc9475ad4a5a274,start
X-Google-Thread: 10b9c8,8bc9475ad4a5a274,start
X-Google-Attributes: gid10e8ad,gid10b9c8,domainid0,public,usenet
X-Google-Language: ENGLISH,UTF8
Path: g2news1.google.com!news1.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx02.iad01.newshosting.com!newshosting.com!
198.186.194.249.MISMATCH!transit3.readnews.com!news-xxxfer.readnews.com!news-
out.readnews.com!transit4.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-180 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sun, 29 Jun 2008 10:09:24 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 429
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000001c8d9f1$ab30b1a0$019214e0$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix1.panix.com
Mime-Version: 1.0
Content-Type: text/plain;charset="utf-8"
Content-Transfer-Encoding: quoted-printable
X-Trace: reader2.panix.com 1214748564 11368 166.84.1.1 (29 Jun 2008 14:09:24 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 29 Jun 2008 14:09:24 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to            rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news1.google.com rec.radio.amateur.space:44 rec.radio.info:90
```

AMSAT NEWS SERVICE
ANS-180

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

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**************************************************************
***  2008 AMSAT Space Symposium and Annual General Meeting ***
***            October 24-26 in Atlanta, Georgia           ***
***      See The AMSAT Website for Latest Info on This     ***
***                Annual Meeting of Our Group        ***
**************************************************************
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In this edition:

- ARRL Clarifies ISS Satellite Category
- Final Call for Papers - AMSAT UK Colloquium
- IARU-News Release
- HAM RADIO IN SPACE: CELEBRATING 45 YEARS OF WOMEN IN SPACE
- Stanford Cubesat Ground Station Survey
- Upcoming ISS Scheduled Contacts
- Satellite Shorts From All Over

SB SAT @ AMSAT $ANS-180.01
ARRL Clarifies ISS Satellite Category

AMSAT News Service Bulletin 180.01
>From AMSAT HQ SILVER SPRING, MD.
June 29, 2008
To All RADIO AMATEURS
BID: $ANS-180.01

Word was received this week from Sean Kutzko, KX9X, the Contest Branch Manager at the ARRL clarifying the rules in regard to the ISS amateur radio operations.

Sean wrote, "At the request of several in the satellite community, I spent some time last evening reviewing data presented to me concerning my ruling that the ISS would not count for satellite QSO credit during Field Day."

"After reviewing the data last evening, I have come to the conclusion that my first ruling was incorrect; The ISS is indeed eligible for satellite QSO credit during Field Day."

I hope everybody had fun this weekend.

[ANS thanks Sean KX9X at the ARRL for the above information]

/EX

SB SAT @ AMSAT $ANS-180.02
Final Call for Papers - AMSAT UK Colloquium

AMSAT News Service Bulletin 180.02
>From AMSAT HQ SILVER SPRING, MD.
June 29, 2008
To All RADIO AMATEURS

BID: $ANS-180.02

This is the final call for speakers/papers for the 23rd Amsat-UK Colloquium which will be held at Surrey University, Guildford, Surrey, U.K., from Friday 25th July to Sunday 27th July 2008.

Details of this and previous events can be found at:
http://www.uk.amsat.org.

Amsat-UK invite speakers, about amateur radio space and associated activities, for this event. They are also invited to submit papers for the "Proceedings" document which will be published at the same time but printed papers are not mandatory. We normally prefer authors to present talks themselves rather than having someone else give them in the authors' absence. We also welcome "unpresented" papers for the Proceedings document.

Offers of talks should be submitted as soon as possible; the final date for full documents to be received is July 16th 2008 in order that the "Proceedings" document be available to participants.

Submissions should be sent *ONLY* to G4DPZ, via the following routes:

Internet e-mail: david dot johnson at blackepper do co dot uk

SnailMail: QTHR from http://www.qrz.com

73

Dave
G4DPZ

[ANS thanks Dave, G4DPZ for the above information]

/EX

SB SAT @ AMSAT $ANS-180.03
IARU-News Release

AMSAT News Service Bulletin 180.03
>From AMSAT HQ SILVER SPRING, MD.
June 29, 2008
To All RADIO AMATEURS
BID: $ANS-180.03

26 June 2008

For immediate release

IARU Officer Nominations Agreed for 2009-2014 Term

The Administrative Council (AC) of the International Amateur Radio Union

(IARU) held its annual meeting on 24-25 June 2008 in Konstanz, Germany and took the following actions.

1. The consultative process leading to nominations for IARU President and Vice President for the five-year term beginning on 9 May 2009 was completed between the AC and the American Radio Relay League, the IARU member-society that serves as the International Secretariat. IARU President Larry Price, W4RA had announced in 2007 that he was not available to serve an additional term. The AC agreed that Vice President Tim Ellam, VE6SH and Region 1 President Ole Garpestad, LA2RR are suitably qualified to serve as IARU President and Vice President, respectively. Their nominations will be offered to the member-societies for ratification.

2. A comprehensive review and update of the working document that defines the additional spectrum requirements of the amateur and amateur-satellite services was conducted. Requests from the amateur satellite community for support of additional allocations were considered and referred to the IARU Satellite Adviser for additional information.

3. The IARU International Coordinator for Emergency Communications, Hans Zimmermann, HB9AQS/F5VKP, presented his report in person. He noted the outstanding performance of radio amateurs in China who responded to the recent tragic earthquake emergency.

4. Reports of the other IARU international coordinators and advisers were received. They are International Beacon Project Coordinator Peter Jennings, AB6WM/VE3SUN; Satellite Adviser Hans van de Groenendaal, ZS6AKV; EMC Adviser Christian Verholt, OZ8CY; and Interim Monitoring System International Coordinator Chuck Skolaut, K0BOG.

5. An additional progress report was received from an ad hoc committee that is investigating the future role and structure of the IARU. Work since the previous AC meeting has refined the structure and identified the remaining issues to be resolved.

6. A resolution offered by Region 1 that seeks to improve the operating standards of radio amateurs was adopted. The AC endorses and recommends the principles set out in the booklet â€œEthics and Operating Procedures for the Radio Amateurâ€ by John Devoldere, ON4UN and Marc Demeuleneere, ON4WW, and encourages each IARU Region to consider this booklet, with a view to adopting it, including any Regional variations that might be felt appropriate.

7. A study of the international QSL bureau system was commissioned. The study will seek input from member-societies on the problems they face in light of escalating postage and other expenses, and the anticipated impact of electronic confirmation systems such as the ARRLâ€™s Logbook of the World.

8. The three-year strategic plan for the development of support for amateur radio frequency allocations was reviewed and renewed for the period 2008-2011. The principal focus is on preparations for the 2011 World Radiocommunication Conference (WRC-11), especially the attainment of an amateur allocation in the vicinity of 500 kHz.

9. The International Telecommunication Union (ITU) meetings at which IARU representation will be required for the coming year were identified, and plans for representation were reviewed.

10. The plans of Region 3 for the IARU presence at Telecom Asia 2008 (Bangkok, 2-5 September) and of the International Secretariat for Telecom World 2009 (Geneva, 5-9 October) were reviewed.

11. The budget for 2009-2011 as presented by the International Secretariat (ARRL) was reviewed. The budget includes provision for financial contributions from the three regional organizations to defray a portion of the expenses, in accordance with previously adopted policy.

12. The 29 March 2009 implementation of the worldwide exclusive allocation of 7100-7200 kHz adopted at the 2003 WRC was noted and the many contributors to this achievement were recognized.

13. â€œAmateur Radio: Your Resource in Disaster and Emergency Communicationâ€ was selected as the theme for the next World Amateur Radio Day, April 18, 2009.

14. Status reports from each of the three IARU regional organizations were received and discussed. The next regional conference will be that of Region 1, to be held in Cavtat, Croatia in mid-November.

Attending the Konstanz meeting were IARU President Larry Price, W4RA; Vice President Tim Ellam, VE6SH/G4HUA; Secretary David Sumner, K1ZZ; regional representatives Ole Garpestad, LA2RR, Don Beattie, G3BJ, Hans Blondeel Timmerman, PB2T, Reinaldo Leandro, YV5AMH, Ramon Santoyo, XE1KK, Rod Stafford, W6ROD, Michael Owen, VK3KI, Gopal Madhavan, VU2GMN, ARRL President Joel Harrison, W5ZN, on behalf of the International Secretariat, and recording secretary Paul Rinaldo, W4RI. IARU International Coordinator for Emergency Communications Hans Zimmermann, HB9AQS/F5VKP attended a portion of the meeting.

The next scheduled meeting of the AC will be held in Christchurch, New Zealand in October 2009.

[ANS thanks Trevor, M5AKA, for the above information]

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SB SAT @ AMSAT $ANS-180.04

HAM RADIO IN SPACE: CELEBRATING 45 YEARS OF WOMEN IN SPACE

AMSAT News Service Bulletin 180.04
>From AMSAT HQ SILVER SPRING, MD.
June 29, 2008
To All RADIO AMATEURS
BID: $ANS-180.04

HAM RADIO IN SPACE: CELEBRATING 45 YEARS OF WOMEN IN SPACE

In ham radio space related news, word that special event station R45VT is on the air. This, to commemorate the 45th Anniversary of Valentina Vladimirovna Tereshkova becoming the first woman in space.

Tereshkova flew to orbit on June 16th 1963 as pilot onboard Vostok 6. Her call sign during the flight was Chaika. She spent 71 hours in space orbiting the Earth 48 times.

Since that time women have made a significant contribution to space exploration and many of them have been licenced Radio Amateurs. A few of the many notable women space explorers since Valentina Tereshkova include American Sally Ride and the United Kingdom's Helen Sharman to mention only a few.

Sharman was also the first UK woman to be issued a ham radio call for her flight. She operated from the Mir Space Station as GB1MIR

And very apropos for this type of commemorative operation. At least one UK ham resports that he recently worked R45VT through the VO-52 amateur radio satellite. (Southgate)

[ANS thanks ARRL for the above information]

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SB SAT @ AMSAT $ANS-180.05
Stanford Cubesat Ground Station Survey

AMSAT News Service Bulletin 180.05
>From AMSAT HQ SILVER SPRING, MD.
June 29, 2008
To All RADIO AMATEURS
BID: $ANS-180.05

James Cutler, Department of Aeronautics and Astronautics at Stanford University asks for help from amateur radio cubesat ground stations, "We are conducting a survey on global ground station availability, and we need your help! If you have a ground station, would you please fill out our survey? It will ask you about station locations and the characteristics of the antennas (type and frequency)".

The survey is located at:

URL: http://ssdl.stanford.edu/gs_survey/
User: gs
Password: stanford
Institution - just use your callsign

Please provide input by July 7, 2008 if possible. We will make the results available later this summer. We will be using the data for research on improving throughput through networks such as GENSO.

[ANS thanks James Cutler, and Graham G3VZV for the above information]

/EX

SB SAT @ AMSAT $ANS-180.06
Upcoming ISS Scheduled Contacts

AMSAT News Service Bulletin 180.06
>From AMSAT HQ SILVER SPRING, MD.
June 29, 2008
To All RADIO AMATEURS
BID: $ANS-180.06

ESC (Euro Space Camp) in Belgium
Simulated contact with Frank De Winne ON1DWN
Contact is a go for: Thu 2008-07-03 1900 UTC at the earliest
Watch for IRLP coverage.

Ottawa South United Soccer Club, Canada
Simulated contact with Bob Thirsk W5/VA3CSA
Contact is a go for: Thu 2008-07-03 20:55 GMT at the earliest
Watch for IRLP coverage.

Round Rock Texas Scout Pack #304 and Blackland Prairie Elementary School, Round Rock, Texas, direct via W5KA
Contact is a go for: Fri 2008-07-04 16:32 UTC 52 deg

Total number of ARISS ISS to earth school contacts is 350. (***)
Total number of ARISS supported terrestrial contacts is 7.

QSL information may be found at:
http://www.arrl.org/ARISS/arissfaq.html
http://www.rac.ca/ariss/oindex.htm#QSL's

ISS callsigns: DP0ISS, NA1SS, OR4ISS, RS0ISS

****
****

The complete schedule page has been updated as of 2008-06-26 04:00 UTC.

Here you will find a listing of all scheduled school contacts, and questions, other ISS related websites, IRLP and Echolink websites, and instructions for any contact that may be streamed live.
http://www.amsat.org/amsat/ariss/news/arissnews.txt

The successful school list has been updated as of 2008-06-26 04:00 UTC.
http://www.amsat.org/amsat/ariss/news/Successful_ARISS_schools.rtf

Frequency chart for packet, voice, and crossband repeater modes showing Doppler correction as of 2005-07-29 04:00 UTC
http://www.amsat.org/amsat/ariss/news/ISS_frequencies_and_Doppler_correction.rtf

Listing of ARISS related magazine articles as of 2006-07-10 03:30 UTC:
http://www.amsat.org/amsat/ariss/news/ARISS_magazine_articles.rtf

****

There have been rumors in the past indicating that the ISS was having direct contacts on the 40 meter band. There is no HF radio equipment on board and available yet. The HF antenna is mounted. Sometimes WA3NAN will retransmit shuttle audio.

****

Expedition 17 on orbit:
Sergei Volkov
Oleg Kononenko RN3DX
Gregory Chamitoff KD5PKZ

****

73,
Charlie Sufana AJ9N
One of the ARISS operation team mentors

[ANS thanks Charlie, AJ9N, for the above information]

/EX

SB SAT @ AMSAT $ANS-180.07
Satellite Shorts From All Over

AMSAT News Service Bulletin 180.07
>From AMSAT HQ SILVER SPRING, MD.
June 29, 2008
To All RADIO AMATEURS
BID: $ANS-180.07

+ Paul, 2E1EUB plans to be active on satellites from grid IO87rj near Aberdeen, Scotland starting June 28 for 7 days. He will be using the callsign 2M1EUB/P. There may be some low elevation opportunities to work North America via AO-7. The QRZ.com web page 2M1EUB provides QSL information.

+ The NanoSail-D satellite mentioned in prior ANS reports was featured this week in a NASA web release: "This summer, NASA engineers will try to realize a dream older than the Space Age itself: the deployment of a working solar sail in Earth orbit. It is scheduled for launch on-board a SpaceX Falcon 1 rocket as early as July 29, 2008. See:

http://science.nasa.gov/headlines/y2008/26jun_nanosaild.htm?list958901

+ The EE Times ran an article about Suitsat and SuitSat-2. The SDR transponder aboard SuitSat-2 is based on the High Performance Software Defined Radio "Odyssey" system. For the article see:
http://www.eetimes.com/showArticle.jhtml;?articleID=208403999
(Via Graham, KE9H on the HPSDR Discussion List at http://hpsdr.org)

[ANS thanks everyone for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Dee Interdonato, NB2F

From -7591790702211192768
X-Google-Thread: 10bf43,1cd1e453fa07b8f9,start
X-Google-Thread: 10e8ad,1cd1e453fa07b8f9,start
X-Google-Attributes: gid10bf43,gid10e8ad,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit

Path: g2news1.google.com!news1.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx01.iad01.newshosting.com!newshosting.com!
69.28.186.77.MISMATCH!hwmpeer03.lga!hwmnpeer01.lga!news.highwinds-media.com!hw-filter.lga!newsfe20.lga.POSTED!7564ea0f!not-for-mail
From: "Webmaster" <webmaster@oaklanesoftware.com>
Newsgroups:
rec.radio.amateur.packet,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.amateur.spacerec.radio.scanner,rec.radio.amateur.swap
Subject: Test Preparation Software
Lines: 18
MIME-Version: 1.0
Content-Type: text/plain;
     format=flowed;
     charset="iso-8859-1";
     reply-type=original
Content-Transfer-Encoding: 7bit
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Windows Mail 6.0.6000.16480
X-MimeOLE: Produced By Microsoft MimeOLE V6.0.6000.16545
Message-ID: <wGXak.12439$rH1.5278@newsfe20.lga>
NNTP-Posting-Host: 70.188.114.247
X-Complaints-To: newsmaster@cox.net
X-Trace: newsfe20.lga 1215055644 70.188.114.247 (Wed, 02 Jul 2008 20:27:24 MST)
NNTP-Posting-Date: Wed, 02 Jul 2008 20:27:24 MST
Organization: Cox
Date: Wed, 2 Jul 2008 22:27:33 -0500
Xref: g2news1.google.com rec.radio.amateur.policy:3553 rec.radio.amateur.space:45

Test Preparation Software

Pass your US FCC ham radio license test with ease. Our test preparation software
serves as a training aid to help amateurs and prospective amateurs pass the VEC's administered test. When you can consistently pass the test given by our test preparation software, you will almost certainly pass an actual test.

Our ham radio license test preparation software uses the latest officially released VEC's approved question pools. The program breaks the test into different sub-element. Integrated into the software are illustrations and Part 97 rules pertaining to the current question. The program tracks the progress of the tests taken. Once you have mastered each sub-element you are ready for the official test.

Visit our web site at http://www.hamradiolicense.net for more information.

From 54729044199305889
X-Google-Thread: 107d29,418a47524eaa59f1,start
X-Google-Thread: 10e8ad,418a47524eaa59f1,start
X-Google-Attributes: gid107d29,gid10e8ad,domainid0,public,usenet

```
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!news.glorb.com!feeder.erje.net!
newsfeed.utanet.at!newsfeed01.chello.at!newsfeed02.chello.at!
news.hispeed.ch.POSTED!not-for-mail
Date: Thu, 03 Jul 2008 11:55:21 +0200
From: dot <"lorenz (dot) born (at) gmail (dot) com">
Organization: Born SpaceTec
User-Agent: Thunderbird 2.0.0.14 (Windows/20080421)
MIME-Version: 1.0
Newsgroups: sci.space.history,rec.radio.amateur.space
Subject: Apollo Unified S-Band System
Content-Type: text/plain; charset=ISO-8859-15
Content-Transfer-Encoding: 7bit
Message-ID: <51aeb$486ca220$50dba232$7246@news.hispeed.ch>
X-Complaints-To: abuse@hispeed.ch
Lines: 17
NNTP-Posting-Host: 80.219.162.50 (80.219.162.50)
NNTP-Posting-Date: Thu, 03 Jul 2008 11:55:44 +0200
X-Trace: 51aeb486ca220f57e079707246
Xref: g2news1.google.com sci.space.history:2932 rec.radio.amateur.space:46
```

Dear all,

I'm searching for detailed information about the electronics (schemata, used components, layout, etc.) used for the Unified S-Band System for the Apollo spacecraft. Special interest are about the Unified S-Band System within the Command and Service Module. Since I already read most of the NASA documents, I'm still wondering what kind of electronics, e.g. MESFET, transistors, logic devices, etc. those guys used to construct the Unified S-Band System. Thanks for any hint.

```
best regards
Lorenz, HB9DTN
--
Lorenz Born -- Born SpaceTec, Inc -- Switzerland
Mail: lorenz (dot) born (at) gmail (dot) com
"Apollo 8, you are Go for TLI."
                      Mike Collins, Dec 21, 1968
```

```
From -3972419622483594913
X-Google-Thread: 107d29,418a47524eaa59f1
X-Google-Thread: 10e8ad,418a47524eaa59f1
X-Google-Attributes: gid107d29,gid10e8ad,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII
Path: g2news1.google.com!news3.google.com!news4.google.com!
out04a.usenetserver.com!news.usenetserver.com!in01.usenetserver.com!
news.usenetserver.com!in03.usenetserver.com!news.usenetserver.com!
bigfeed3.bellsouth.net!bigfeed.bellsouth.net!bignumber.bellsouth.net!
news.bellsouth.net!bignews2.bellsouth.net.POSTED!aba369ab!not-for-mail
From: RFI-EMI-GUY <Rhyolite@NETTALLY.COM>
User-Agent: Thunderbird 2.0.0.14 (Windows/20080421)
MIME-Version: 1.0
```

```
Newsgroups: sci.space.history,rec.radio.amateur.space
Subject: Re: Apollo Unified S-Band System
References: <51aeb$486ca220$50dba232$7246@news.hispeed.ch>
In-Reply-To: <51aeb$486ca220$50dba232$7246@news.hispeed.ch>
Content-Type: text/plain; charset=ISO-8859-15; format=flowed
Content-Transfer-Encoding: 8bit
Lines: 26
Message-ID: <Ni8bk.19750$3F5.16314@bignews2.bellsouth.net>
X-Complaints-To: abuse@bellsouth.net
X-Abuse-Info: Please forward a copy of all headers for proper handling
X-Trace:
ogjnolidcdijhjikdbdpiflmbcekedmfhojhikkbagflhcboneaimhfgaehahfiokpocejdpchkmcogipd
kkniakbmhaegdaalpnflbapfokdkpeehckbfgdpnebgdamahaiphcdilgdlinmmfdajhjfgpkldopb
NNTP-Posting-Date: Thu, 03 Jul 2008 13:49:33 EDT
Organization: BellSouth Internet Group
Date: Thu, 03 Jul 2008 13:52:17 -0400
Xref: g2news1.google.com sci.space.history:2946 rec.radio.amateur.space:47

dot wrote:
> Dear all,
>
> I'm searching for detailed information about the electronics (schemata,
> used components, layout, etc.) used for the Unified S-Band System for
> the Apollo spacecraft. Special interest are about the Unified S-Band
> System within the Command and Service Module. Since I already read most
> of the NASA documents, I'm still wondering what kind of electronics,
> e.g. MESFET, transistors, logic devices, etc. those guys used to
> construct the Unified S-Band System. Thanks for any hint.
>
> best regards
> Lorenz, HB9DTN

Did you try Google? A lot of stuff out there under Unified S-Band System:

http://www.honeysucklecreek.net/station/USB_NASA_SP-87.html

--
Joe Leikhim K4SAT
"The RFI-EMI-GUY"�

"Treason doth never prosper: what's the reason?
For if it prosper, none dare call it treason."

"Follow The Money"  ;-P


From -7429316082541125719
X-Google-Thread: 107d29,418a47524eaa59f1
X-Google-Thread: 10e8ad,418a47524eaa59f1
X-Google-Attributes: gid107d29,gid10e8ad,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!postnews.google.com!
r66g2000hsg.googlegroups.com!not-for-mail
```

```
From: BradGuth <bradguth@gmail.com>
Newsgroups: sci.space.history,rec.radio.amateur.space
Subject: Re: Apollo Unified S-Band System
Date: Thu, 3 Jul 2008 11:14:24 -0700 (PDT)
Organization: http://groups.google.com
Lines: 23
Message-ID: <331a8c85-3e38-402c-a9cf-bac3f5376b4e@r66g2000hsg.googlegroups.com>
References: <51aeb$486ca220$50dba232$7246@news.hispeed.ch>
NNTP-Posting-Host: 64.91.99.194
Mime-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 7bit
X-Trace: posting.google.com 1215108865 8066 127.0.0.1 (3 Jul 2008 18:14:25 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Thu, 3 Jul 2008 18:14:25 +0000 (UTC)
Complaints-To: groups-abuse@google.com
Injection-Info: r66g2000hsg.googlegroups.com; posting-host=64.91.99.194;
     posting-account=nf79RwoAAABXjvy5ztMzmPxgY1WGoktI
User-Agent: G2/1.0
X-HTTP-UserAgent: Mozilla/5.0 (Windows; U; Windows NT 5.1; en-US; rv:1.8.1.12)
     Gecko/20080201 Firefox/2.0.0.12,gzip(gfe),gzip(gfe)
Xref: g2news1.google.com sci.space.history:2950 rec.radio.amateur.space:48

Try asking about their "chapel bell" S-Band transponders.

- Brad Guth Brad_Guth Brad.Guth BradGuth


dot wrote:
> Dear all,
>
> I'm searching for detailed information about the electronics (schemata,
> used components, layout, etc.) used for the Unified S-Band System for
> the Apollo spacecraft. Special interest are about the Unified S-Band
> System within the Command and Service Module. Since I already read most
> of the NASA documents, I'm still wondering what kind of electronics,
> e.g. MESFET, transistors, logic devices, etc. those guys used to
> construct the Unified S-Band System. Thanks for any hint.
>
> best regards
> Lorenz, HB9DTN
> --
> Lorenz Born -- Born SpaceTec, Inc -- Switzerland
> Mail: lorenz (dot) born (at) gmail (dot) com
> "Apollo 8, you are Go for TLI."
>                        Mike Collins, Dec 21, 1968


From 8958497437832553839
X-Google-Thread: 10e8ad,9a1c9d9d40467ad7,start
X-Google-Thread: 10b9c8,9a1c9d9d40467ad7,start
X-Google-Attributes: gid10e8ad,gid10b9c8,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
```

```
Path: g2news1.google.com!news2.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx01.iad01.newshosting.com!newshosting.com!
198.186.194.249.MISMATCH!news-out.readnews.com!transit3.readnews.com!panix!
rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-185 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Fri, 4 Jul 2008 08:51:51 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 1443
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000901c8ddd4$b1ecf1c0$15c6d540$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix3.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1215175911 24045 166.84.1.3 (4 Jul 2008 12:51:51 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Fri, 4 Jul 2008 12:51:51 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news1.google.com rec.radio.amateur.space:49 rec.radio.info:99
```

This report is organized into FIVE parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites
Part 5 (S5) - deorbited/returned satellites

SB SAT @ AMSAT W8ISS ANS-185.S1
WSR 185 Part 1 07/03/2008

AMSAT NEWS SERVICE BULLETIN 185.S1 FROM AMSAT HQ
SILVER SPRING, MD, July 03 2008
TO ALL RADIO AMATEURS
BID: $ANS-185.S1

VO-52 HAMSAT
Catalog number: 28650

```
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink:   435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink:   435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW


Indian Beacon:  145.859330 MHZ CW
Dutch Beacon:   145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsat.in/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is
active. Each transponder has a different beacon.
[06252007]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational - Software reload

Current Modes:   FM Repeater - V/u
                 BBS         - OL/u
                 Telemetry   -  /u

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink:   145.880 MHZ FM
                       145.880 MHz USB
                       145.920 MHz FM
                      1268.700 MHz FM 67Hz PL tone
Digital Downlinks:     435.150 MHz FM 38k4 Digital, PBP, 1 watt output
                       435.150 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:        145.860 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      1268.700 mhz FM 9k6 PBP Digital
```

```
Beacon:                435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[07032008]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002

Status: Operational.

Current Mode: V/u

Uplink:   145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute
timer
   on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the
repeater on
   and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset
the 10
   minute timer.
[05282007]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Operational - check operational schedule for current times!!
```

Current Mode: V/u

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage: http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's CW
telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts.htm
[0820007]
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[12132007]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

```
Status: TESTING - VOICE

Current Mode:  V/u

Uplink:         145.900 MHz FM 1200-baud Manchester FSK (reserved)
                145.920 MHz FM VOICE
                145.940 MHz FM 1200-baud Manchester FSK (reserved)
                145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink:       437.026 MHz USB VOICE
                ( 1200-baud PSK - MBL Telemetry Only )

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[03202008]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational depending on amount of Sunlight

Current Mode: Listen before transmitting

Uplink:   145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink:  29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons:   29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/

AO-7 Usage Guidelines on the AO-7 Log and Resource Site located at:
http://www.planetemily.com/ao7
[05282007]
```

=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Mode: FM Repeater - U/v
Voice - Occasianally
BBS - ON
APRS - ON
SSTV - OFF

Expedition 17 crew:

Commander:	Sergey Volkov	RU3DIS
Flight Engineer:	Oleg Kononenko	RN3DX
Flight Engineer:	Greg Chamitoff	KD5PKZ

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM
Worldwide packet downlink: 145.825 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS
RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line is
NOT translated from Russian and posted.

```
[06122008]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-185.S2
WSR 185 Part 2 07/03/2008

AMSAT NEWS SERVICE BULLETIN 185.S2 FROM AMSAT HQ
SILVER SPRING, MD, July 03 2008
TO ALL RADIO AMATEURS
BID: $ANS-185.S2

RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number:
Launch Date: May 23, 2008

Status: Operational

Curent Mode: Telemetry
             Audio
             Images

Downlinks: 435.315 MHz
           435.215 MHz
[05292008]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode:  /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon:    435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.
[11152007]
=====
CP3
Catalog Number: 31128
Launch Date: April 17,2007

Status: Operational

Current Mode:  /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[07302007]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: In Orbit

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder:  145.825 Mhz FM
[02052007]
=====
NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Operational

Current Mode: /u

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[10222007]
=====
GENESAT-1 ?O-??
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Current Mode: /u

Telemetry Beacon Downlink: 437.0670 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[01082007]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon:             437.2750 MHz CW

Callsign: JQ1YGW
```

```
Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
[03262007]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003

Status: Operational

Current Mode: /u

Beacon:     436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[01082007]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Semi-Operational - Constant Carrier only

Uplink:  1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan ? )

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[01082007]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW
[08132007]
```

```
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational - Softawre Reload

Current Modes:   FM Repeater - V/u
                 BBS         - L/u
                 Telemetry   -  /u

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink:   145.880 MHZ FM
                       145.880 MHz USB
                       145.920 MHz FM
                      1268.700 MHz FM 67Hz PL tone
Digital Downlinks:     435.150 MHz FM 38k4 Digital, PBP, 1 watt output
                       435.150 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:        145.860 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      1268.700 mhz FM 9k6 PBP Digital
Beacon:                435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[07032008]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Hibernation until full sunlight in November

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink:        144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org
```

```
aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[09242007]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Current Modes: V/U
               L/U

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[09172007]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984

Status: Semi-operational.

Current Mode:  /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon:          435.025 MHz
Mode-S Beacon:     2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[01242008]
=====
RS-22 RADIO SPORT RS-22
Catalog number: 27939
Launch Date: September 27, 2003
```

```
Status: Operational - 70cm cw only

Current Mode:  /u

CW Beacon - 435.352 MHz
            145.818 MHz
[08062007]
=====
Can X-2
Catalog number:
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web page:
http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[05292008]
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink: 437.425 MHz

For the latest project status update please visit the AAUSAT-II web
page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[05292008]
=====
Cute-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink:  437.475 MHz 9k6 Packet
Uplink:   1267.600 Mhz

For the latest project status update please visit the Cute-1.7+APD II
web
page:
http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html
```

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78
[05292008]
=====
Compass 1
Catalog number: 32787
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink: 437.275 Mhz CW
437.405 MHz Packet

For the latest project status update please visit the Compass 1 web
page:
http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52
[05292008]
=====
DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008

Status: IN ORBIT

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink: 435.530 to 435.570 MHz

Proposed Frequencies:
* Primary telemetry downlink: 145.870 MHz 1200 Baud BPSK AX.25 400mW
* Backup telemetry downlink: 145.930 MHz 1200 Baud BPSK AX.25 400mW
* Linear transponder passband downlink: 145.880 - 145.920 MHz
(inverting)
400mW PEP
* Linear transponder passband uplink: 435.570 - 435.530 MHz
* Transponder mode beacon: 145.870 MHz CW (10dB below transponder PEP)

For the latest project status update please visit the Delfi-C3 web page:
http://www.delfic3.nl/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68
[05292008]
=====
Seeds 2
Catalog number:
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink: 437.485 MHz

For the latest project status update please visit the Seeds 2 web page:
http://cubesat.aero.cst.nihon-u.ac.jp/english/main_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36
[05012008]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Mode: FM Repeater - U/v
Voice - Occasianally
BBS - ON
APRS - ON
SSTV - OFF

Expedition 17 crew:

Commander:	Sergey Volkov	RU3DIS
Flight Engineer:	Oleg Kononenko	RN3DX
Flight Engineer:	Greg Chamitoff	KD5PKZ

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM
Worldwide packet downlink: 145.825 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS
RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3

Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.
[06122008]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-185.S3
WSR 185 Part 3 07/03/2008

AMSAT NEWS SERVICE BULLETIN 185.S3 FROM AMSAT HQ
SILVER SPRING, MD, July 03 2008
TO ALL RADIO AMATEURS
BID: $ANS-185.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

CP4
Catalog Number: 31122
Launch Date: April 17,2007

Status: Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon: 437.325 MHz CW
[11152007]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Non-Operational

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon: 437.2750 MHz CW

Callsign: JR8YJT
[10152007]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

```
Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency:  437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink:        437.250 MHz FM 67Hz CTCSS
Voice Downlink:     2401.835 MHz FM
Packet Up/Downlink:  437.250 MHz 9k6 packet
Packet Downlink     2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non=Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[08132007]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink:   435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000
```

Status: Non-Operational

Uplinks: 145.850 MHz
145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[007302007]

=====

NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, callsign KE6QMD, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]

=====

SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]

=====

SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]

=====

AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks

V-band: 145.840 - 145.990 MHz CW/LSB
U-band: 435.550 - 435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks

S2-band: 2401.225 - 2401.475 MHz CW/USB
K-band: 24048.010 - 24048.060 MHz CW/USB
Beacon: 2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)

BEACON	General Beacon (GB)	Middle Beacon (MB)	Engineering Beacon (EB)
2 m	none	145.898 MHz	none
70cm	435.438 MHz	435.588 MHz	435.838 MHz
13cm(1)	2400.188 MHz	2400.338 MHz	2400.588 MHz
13cm(2)	2401.173 MHz	2401.323 MHz	2401.573 MHz
3cm	10450.975 MHz	10451.125 MHz	10451.375 MHz
1.5cm	24047.885 MHz	24048.035 MHz	24048.285 MHz

[07162007]

=====

OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site
at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: ?
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1

```
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink:   145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign:       POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012006]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks:  145.875 MHz FM 1200-baud
```

```
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
```

```
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
LIBERTAD-1
Catalog Number: 31129
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink:   145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[10222007]
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990
```

Status: CW Beacon only

Uplinks: 145.840 MHz 1200-baud Manchester FSK
145.860 MHz 1200-baud Manchester FSK
145.880 MHz 1200-baud Manchester FSK
145.900 MHz 1200-baud Manchester FSK

CW downlink: 437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[01222007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink: 145.825 MHz FM 1200 Baud AFSK
Beacon: 2401.220 MHz
[05012006]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink: 145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

```
Mode V/U (J) Linear Transponder (Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet: Non-Operational
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon:   145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink  29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
```

```
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
Beacons:   29.450 MHz
          435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon 1:  29.352 MHz (intermittent)
Beacon 2:  29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink:     21.260 to 21.300 MHz CW/USB
Downlink:  145.860 to 145.900 MHz CW/USB
```

Beacon: 145.860 MHz

Robot: 145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-185.S4
WSR 185 Part 4 07/03/2008

AMSAT NEWS SERVICE BULLETIN 185.S4 FROM AMSAT HQ
SILVER SPRING, MD, July 03 2008
TO ALL RADIO AMATEURS
BID: $ANS-185.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE PROPOSED FOR LAUNCH AT THIS TIME:

Phase 5a Mars Mission AO-??
Catalog Number:
Proposed Launch Date: 2009 or 2011

Status: Design Phase

For the latest project status update please visit the AMSAT-DL P5-A web page:
http://ticket-to-mars.org
[01222007]
=====
PHASE 3E AO-??
Catalog number:
Proposed Launch Date: Late 2008

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/

[01222007]
=====
Eagle AO-??
Catalog Number:
Proposed Launch Date: Early/Mid 2009

Status: Design Phase

For the latest project status updates please visit the AMSAT-NA webpage:
http://www.amsat.org
[01222007]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-185.S5
WSR 185 Part 5 07/03/2008

AMSAT NEWS SERVICE BULLETIN 185.S5 FROM AMSAT HQ
SILVER SPRING, MD, July 03 2008
TO ALL RADIO AMATEURS
BID: $ANS-185.S5

THE FOLLOWING SATELLITES HAVE DE-ORBITED OR HAVE BEEN RETURNED SAFELY:

NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Operational
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink: 145.825 Mhz FM APRS AX25
APRS Uplink: 145.825 MHz FM APRS AX25
Voice/PSK31 Uplink: 28.120 MHz

Packet to Voice ID: RAFT
[06112007]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins trans-

mitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

From 86395747269603425
X-Google-Thread: 10e8ad,5bf23db9377161c3,start
X-Google-Thread: 10b9c8,5bf23db9377161c3,start

```
X-Google-Attributes: gid10e8ad,gid10b9c8,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII
Path: g2news1.google.com!news2.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx02.iad01.newshosting.com!newshosting.com!
198.186.194.249.MISMATCH!transit3.readnews.com!news-xxxfer.readnews.com!news-
out.readnews.com!transit4.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-188 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sat, 5 Jul 2008 22:04:28 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 318
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <002d01c8df0c$a4ce6350$ee6b29f0$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;charset="iso-8859-1"
Content-Transfer-Encoding: quoted-printable
X-Trace: reader1.panix.com 1215309868 28308 166.84.1.6 (6 Jul 2008 02:04:28 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 6 Jul 2008 02:04:28 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news1.google.com rec.radio.amateur.space:50 rec.radio.info:102
```

AMSAT NEWS SERVICE
ANS-188

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

```
***************************************************************
***  2008 AMSAT Space Symposium and Annual General Meeting  ***
***            October 24-26 in Atlanta, Georgia            ***
*** http://www.amsat.org/amsat-new/symposium/2008/index.php ***
```

****

In this edition:

* P3E Update From Friedrichshafen Ham Radio 2008
* AMSAT Field Day Logs Are Due by July 14
* New Earth Photos Received From Cute-1.7
* AMSAT 2008 Space Symposium Call For Papers
* ARISS Status Report for the Week of June 30, 2008

SB SAT @ AMSAT $ANS-188.01
P3E Update From Friedrichshafen Ham Radio 2008

AMSAT News Service Bulletin 188.01
>From AMSAT HQ SILVER SPRING, MD.
July 6, 2008
To All RADIO AMATEURS
BID: $ANS-188.01

AMSAT-DL provided P3E updates at the HAM RADIO 2008 Convention - the international amateur radio exhibition held June 27-29 in Friedrichshafen near Lake Constance in Germany.

This year HAM RADIO was focused on the topic "Satellites and Space Activities in Hamradio", giving AMSAT-DL, in cooperation with DARC, an opportunity to offer a special show highlighting amateur radio in space. This included flight hardware at the AMSAT-DL booth.

Peter G�lzow, DB2OS, AMSAT-DL gave a presentation discussing the current status of activities for the construction and launch of the new satellite AMSAT P3-E. The P3E team reported that the mechanical work on the satellite has been completed but it doesn't yet have the Internal Housekeeping Unit (IHU). There has been good progress on the transponder payloads with the 435 to 145 MHz software defined linear transponder (SDX) being demonstrated at the event by Howard, G6LVB.

Peter reported that the cost quoted by Arianespace for the launch of P3E is beyond the budget of AMSAT-DL, however, AMSAT-F has offered its support in any further negotiations. The possibility of using launch sites operated by India, Russia or Japan is being investigated.

Dr. Achim Vollhardt, DH2VA, AMSAT-DL spoke on the status of the interplanetary Mars mission AMSAT P5-A. P3E is closely linked to the P5E Mars Orbiter also being built by AMSAT-DL. This will be the first private venture spacecraft to go to Mars and will use the 2.4 GHz and 10 GHz
Amateur Satellite Service frequency allocations.

The exhibition also included live reception of interplanetary space probes by Freddy de Guchteneire, ON6UG. Professor Dr. Karl Meinzer, DJ4ZC gave the opening address. Thilo Kootz, DL9KCE moderated a panel discussion, "Amateur radio satellite - Where have they gone?", with key participation by AMSAT-DL officers.

The new SDX (Software Defined Transponder) for P3E, was available for live experimentation at the booth and throughout the fairgrounds during the exhibition.

[ANS thanks Peter G�lzow, DB2OS, AMSAT-DL, and the news service at the Southgate Amateur Radio Club for the above information]

/EX

SB SAT @ AMSAT $ANS-188.02

AMSAT Field Day Logs Are Due by July 14

AMSAT News Service Bulletin 188.02
>From AMSAT HQ SILVER SPRING, MD.
July 6, 2008
To All RADIO AMATEURS
BID: $ANS-188.02

AMSAT Director of Contests and Awards Bruce Paige, KK5DO, says, "Now that Field Day is over for 2008, there is one more thing that you have to take care of. You still need to submit your contacts for scoring under the AMSAT rules."

You can download the rules from:
http://www.amsatnet.com/2008fd.pdf -or-
http://www.amsatnet.com/2008fd.doc

Bruce reminds participants that the Satellite Summary Sheet should be used for submission of the AMSAT Field Day competition and be received by KK5DO (email or postal mail) by 11:59 P.M. CDT, Monday, July 14, 2008. The preferred method for submitting your log is via e-mail to kk5do@amsat.org or kk5do@arrl.net.

You may also use the postal service but give plenty of time for your results to arrive by the submission date. Add photographs or other interesting information so that can be used an article for the Journal.

You will receive an email back (within one or two days) from Bruce when he receives your email submission. If you do not receive a confirmation message, try sending it again or send it to his other e-mail address.

If you are mailing your submission, the address is:
Bruce Paige, KK5DO
Director of Awards and Contests
PO Box 310
Alief, TX 77411-0310

[ANS thanks Bruce Paige, KK5DO for the above information]

/EX

SB SAT @ AMSAT $ANS-188.03
New Earth Photos Received From Cute-1.7

AMSAT News Service Bulletin 188.03
>From AMSAT HQ SILVER SPRING, MD.
July 6, 2008
To All RADIO AMATEURS
BID: $ANS-188.03

Mineo Wakita, JE9PEL reported this week that more pictures have been received from the CMOS camera aboard the Cute-1.7 + APD II satellite. The pictures may be viewed on-line at:
http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/01-04.jpg
http://www.ne.jp/asahi/hamradio/je9pel/cut17ap2.htm

The CMOS camera aboard Cute-1.7 + APD II is controlled by a PDA which also performs the JPEG format conversion and compression prior to transmission via FM packet on the satellite's UHF downlink.

[ANS thanks Mineo Wakita, JE9PEL for the above information]

/EX

SB SAT @ AMSAT $ANS-188.04
AMSAT 2008 Space Symposium Call For Papers

AMSAT News Service Bulletin 188.04
>From AMSAT HQ SILVER SPRING, MD.
July 6, 2008
To All RADIO AMATEURS
BID: $ANS-188.04

2008 AMSAT North America Space Symposium
24-26 October 2008, Atlanta, Georgia Call for Papers:

This is the first call for papers for the 2008 AMSAT Space Symposium and Annual Meeting to be held October 24-26, 2008 in Atlanta, Georgia.

Proposals for papers, symposium presentations, and poster presentations are invited on any topic of interest to the amateur satellite program. An emphasis for this year is an educational outreach to middle and high school students. Another topic if interest is using amateur satellite tracking systems to monitor deep space network objects.

In particular, papers on the following topics are solicited:

- Students & Education
- ARISS
- AO-51
- P3E

- Eagle
- Deep Space Network monitoring
- Any additional satellite-related topics.

We request a one-page abstract as soon as possible. Camera ready copy on paper or in electronic form will be due by September 1, 2008 for inclusion in the printed symposium proceedings. Papers received after this date may not be included in the printed proceedings.

Abstracts and papers should be sent to n8fgv@amsat.org

[ANS thanks the 2008 Space Symposium Committe for the above information]

/EX

SB SAT @ AMSAT $ANS-188.05
ARISS Status Report for the Week of June 30, 2008

AMSAT News Service Bulletin 188.05
>From AMSAT HQ SILVER SPRING, MD.
July 6, 2008
To All RADIO AMATEURS
BID: $ANS-188.05

1. School Contacts

Two simulated ARISS contacts were held on Thursday, July 3. These training sessions are terrestrial-based amateur radio contacts using ARISS-equivalent equipment.

The first simulated contact was with Frank De Winne, ON1DWN, and the ESC (Euro Space Camp) in Belgium. Ottawa South United Soccer Club in Canada will also take part in a simulated contact with astronaut Bob Thirsk, W5/VA3CSA.

Round Rock Texas Scout Pack #304 and Blackland Prairie Elementary School in Round Rock, Texas had an ARISS contact on Friday, July 4. This event introduced scouts to the concepts required for their radio merit badges, giving them a practical example of amateur radio in action. It also provided an activity for the scientist badge. The entire Pack (50-60 boys of various ranks) will be involved, as well as select Blackland Prairie Elementary School staff and students. Pack 304 will participate in a contest to determine the best questions to ask the astronaut. Media (newspaper, radio, television) coverage is planned and the governor will be invited.

An ARISS contact has been scheduled with the National Agriculture Museum

in Ottawa, Ontario, Canada on Wednesday, July 9 at 15:14 UTC. Telebridge

station W6SRJ in Santa Rosa, California will assist with the contact.
The

museum is a large research facility in the City of Ottawa covering over

1000 years of major contributions to agricultural progress. A public camp is part of the overall operation of the farm.

2. Successful Russian Contact

Kursk State University students participated in an ARISS contact during the Slavic Commonwealth Forum (formerly the International Congress of Slavic States conference) in Sochi, Russia (on the Black Sea). The students spoke with Oleg Kononenko, RN3DX, on June 22.

3. Robinson Elementary School Contact Successful

On Wednesday, June 25, students from Robinson Elementary School in Robinson, Texas experienced an ARISS contact via the telebridge station WH6PN in Hawaii. Eleven students were able to ask one question each of astronaut Greg Chamitoff, KD5PKZ, as an audience of nearly 300 looked on.
After the contact, the bridge connection was kept up to answer the students' remaining questions. The audio was available via IRLP.

4. Astronaut Training Status

Astronauts Joe Acaba, KE5DAR, and Ricky Arnold, KE5DAU, participated in an ARISS basic operations training session on Thursday, June 26 at JSC. Both crew members are assigned to the STS-119 mission, which will bring Koichi Wakata to the ISS and return Sandy Magnus.

Nicole Stott, KE5GJN, Sandy Magnus, KE5FYE, and JAXA astronauts Koichi Wakata, KC5ZTA, and Soichi Noguchi, KD5TVP, received training on the ARISS ham radio equipment. Photos of the Energia training session are available on the following Web site:
http://www.energia.ru/eng/news/news-2008/photo_06-20.html

5. Under the Hood Posts SuitSat Article and Video

SuitSat appears on the cover of the June issue of Under the Hood, a supplemental issue of the EE Times. A link to the digital issue may be found here: http://www.nxtbook.com/nxtbooks/cmp/uth062308/

A video of ARISS member Steve Bible's talk on SuitSat given at the Embedded Systems Conference (EMS) in April 2008 has also been posted on the Under the Hood Web site. See:
http://cmptv.net/teardown/SuitSat

6. ARISS International Team Meeting Held

The ARISS monthly teleconference was held on Tuesday, June 17. Agenda items covered included the upcoming Moscow meeting, Amateur Radio on the Columbus module (ARCOL) and the status of SuitSat-2. Minutes have

been posted to the ARISS Web site.
See: http://www.rac.ca/ariss/arisstel2008-06-17.htm

7. ARISS Delegate Recognized at Ham Fair

ARISS delegate Gaston Bertels, ON4WF, was recognized at the Ham Fair in Friedrichshafen, Germany for his many contributions to amateur radio including his ARISS work, his efforts on the Columbus antennas, and his selection for the CQ Hall of Fame. Ham Fair is the largest amateur radio

convention in Europe and was held over the weekend of June 27-29.

8. Amateur Radio Video Posted

The American Radio Relay League (ARRL) held its annual Field Day over the June 28-29 weekend. A Field Day video has been posted on YouTube. It features the International Space Station and/or ARISS program several

times. To view this, see:
http://www.youtube.com/watch?v=varHL752Odk

[ANS thanks Carol, KB3LKI for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM

```
From -5941211965051514046
X-Google-Thread: 10e8ad,369ab4b5e7f9ab1f,start
X-Google-Thread: 10b9c8,369ab4b5e7f9ab1f,start
X-Google-Attributes: gid10e8ad,gid10b9c8,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!news2.google.com!
newsfeed2.dallas1.level3.net!news.level3.com!panix!rri.panix.com!robomod!not-for-
mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-192 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Thu, 10 Jul 2008 07:46:22 EDT
Organization: The Radio Amateur Satellite Corporation
```

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Lines: 1443
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000d01c8e282$98c4a870$ca4df950$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix3.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1215690382 19368 166.84.1.3 (10 Jul 2008 11:46:22 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Thu, 10 Jul 2008 11:46:22 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news1.google.com rec.radio.amateur.space:51 rec.radio.info:109
```

This report is organized into FIVE parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites
Part 5 (S5) - deborbited/returned satellites

SB SAT @ AMSAT W8ISS ANS-192.S1
WSR 192 Part 1 07/10/2008

AMSAT NEWS SERVICE BULLETIN 192.S1 FROM AMSAT HQ
SILVER SPRING, MD, July 10 2008
TO ALL RADIO AMATEURS
BID: $ANS-192.S1

VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.859330 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsat.in/hamsat.htm

To know what transponder is switched on please listen for the beacon that is
active. Each transponder has a different beacon.
[06252007]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational - Software reload

Current Modes: FM Repeater - V/u
                 BBS   - L/u
                 Telemetry   - /u

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink: 145.880 MHZ FM
                       145.880 MHz USB
                       145.920 MHz FM
                      1268.700 MHz FM 67Hz PL tone
Digital Downlinks: 435.150 MHz FM 38k4 Digital, PBP, 1 watt output
                       435.150 MHz FM 9k6 Digital, Pacsat Broadcast Protocol
                      2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Digital, Pacsat Broadcast Protocol
                      1268.700 mhz FM 9k6 PBP Digital
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

```
Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[07032008]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002

Status: Operational.

Current Mode: V/u

Uplink:   145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute
timer
   on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the
repeater on
   and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset
the 10
   minute timer.
[05282007]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Operational - check operational schedule for current times!!

Current Mode: V/u

Voice/CW Mode JA
Uplink:   145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon:   435.795 MHz

Digital Mode JD
Uplinks:  145.850 MHz FM
          145.870 MHz FM
```

145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage: http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's CW
telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts.htm
[0820007]
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[12132007]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: TESTING - VOICE

Current Mode: V/u

Uplink: 145.900 MHz FM 1200-baud Manchester FSK (reserved)
                145.920 MHz FM VOICE
                145.940 MHz FM 1200-baud Manchester FSK (reserved)
                145.960 MHz FM 1200-baud Manchester FSK (reserved)

```
Downlink:       437.026 MHz USB VOICE
                ( 1200-baud PSK - MBL Telemetry Only )

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[03202008]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational depending on amount of Sunlight

Current Mode: Listen before transmitting

Uplink:   145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink:  29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons:   29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/

AO-7 Usage Guidelines on the AO-7 Log and Resource Site located at:
http://www.planetemily.com/ao7
[05282007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Mode: FM Repeater - U/v
              Voice -       Occasianally
              BBS -         ON
```

APRS - ON
SSTV - OFF

Expedition 17 crew:
Commander: Sergey Volkov RU3DIS
Flight Engineer: Oleg Kononenko RN3DX
Flight Engineer: Greg Chamitoff KD5PKZ

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM
Worldwide packet downlink: 145.825 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS
RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.
[06122008]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-192.S2
WSR 192 Part 2 07/10/2008

AMSAT NEWS SERVICE BULLETIN 192.S2 FROM AMSAT HQ
SILVER SPRING, MD, July 10 2008
TO ALL RADIO AMATEURS

```
BID: $ANS-192.S2

RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number:
Launch Date: May 23, 2008

Status: Operational

Curent Mode: Telemetry
             Audio
             Images

Downlinks: 435.315 MHz
           435.215 MHz
[05292008]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode:  /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon:    435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.
[11152007]
=====
CP3
Catalog Number: 31128
Launch Date: April 17,2007

Status: Operational

Current Mode:  /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[07302007]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: In Orbit

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder:  145.825 Mhz FM
```

```
[02052007]
=====
NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Operational

Current Mode: /u

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[10222007]
=====
GENESAT-1 ?O-??
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Current Mode: /u

Telemetry Beacon Downlink: 437.0670 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[01082007]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon:             437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
[03262007]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003
```

```
Status: Operational

Current Mode: /u

Beacon:     436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[01082007]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Semi-Operational - Constant Carrier only

Uplink:  1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan ? )

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[01082007]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW
[08132007]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational - Softawre Reload

Current Modes:   FM Repeater - V/u
                 BBS         - L/u
                 Telemetry   -  /u
```

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.880 MHZ FM
145.880 MHz USB
145.920 MHz FM
1268.700 MHz FM 67Hz PL tone
Digital Downlinks: 435.150 MHz FM 38k4 Digital, PBP, 1 watt output
435.150 MHz FM 9k6 Digital, Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Digital, Pacsat Broadcast Protocol
1268.700 mhz FM 9k6 PBP Digital
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[07032008]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Hibernation until full sunlight in November

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[09242007]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

```
Current Modes: V/U
               L/U

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[09172007]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984

Status: Semi-operational.

Current Mode:  /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon:          435.025 MHz
Mode-S Beacon:     2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[01242008]
=====
RS-22 RADIO SPORT RS-22
Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only

Current Mode:  /u

CW Beacon - 435.352 MHz
            145.818 MHz
[08062007]
=====
Can X-2
```

Catalog number:
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web page:
http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[05292008]
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink: 437.425 MHz

For the latest project status update please visit the AAUSAT-II web
page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[05292008]
=====
Cute-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink: 437.475 MHz 9k6 Packet
Uplink: 1267.600 Mhz

For the latest project status update please visit the Cute-1.7+APD II
web
page:
http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78
[05292008]
=====
Compass 1
Catalog number: 32787
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink: 437.275 Mhz CW
          437.405 MHz Packet

For the latest project status update please visit the Compass 1 web page:
http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52
[05292008]
=====
DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008

Status: IN ORBIT

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink: 435.530 to 435.570 MHz

Proposed Frequencies:
* Primary telemetry downlink: 145.870 MHz 1200 Baud BPSK AX.25 400mW
* Backup telemetry downlink: 145.930 MHz 1200 Baud BPSK AX.25 400mW
* Linear transponder passband downlink: 145.880 - 145.920 MHz (inverting)
  400mW PEP
* Linear transponder passband uplink: 435.570 - 435.530 MHz
* Transponder mode beacon: 145.870 MHz CW (10dB below transponder PEP)

For the latest project status update please visit the Delfi-C3 web page:
http://www.delfic3.nl/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68
[05292008]
=====
Seeds 2
Catalog number:
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink: 437.485 MHz

For the latest project status update please visit the Seeds 2 web page:
http://cubesat.aero.cst.nihon-u.ac.jp/english/main_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36
[05012008]

=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Mode: FM Repeater - U/v
Voice - Occasianally
BBS - ON
APRS - ON
SSTV - OFF

Expedition 17 crew:
Commander: Sergey Volkov RU3DIS
Flight Engineer: Oleg Kononenko RN3DX
Flight Engineer: Greg Chamitoff KD5PKZ

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM
Worldwide packet downlink: 145.825 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS
RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line is NOT translated from Russian and posted.

[06122008]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-192.S3
WSR 192 Part 3 07/10/2008

AMSAT NEWS SERVICE BULLETIN 192.S3 FROM AMSAT HQ
SILVER SPRING, MD, July 10 2008
TO ALL RADIO AMATEURS
BID: $ANS-192.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

CP4
Catalog Number: 31122
Launch Date: April 17,2007

Status: Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon: 437.325 MHz CW
[11152007]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Non-Operational

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon: 437.2750 MHz CW

Callsign: JR8YJT
[10152007]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====

```
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink:         437.250 MHz FM 67Hz CTCSS
Voice Downlink:      2401.835 MHz FM
Packet Up/Downlink:   437.250 MHz 9k6 packet
Packet Downlink      2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non=Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[08132007]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink:   435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Non-Operational

Uplinks:   145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink:  437.325 MHz

Broadcast callsign: MYSAT3-11
BBS:                MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
```

commercial
land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[007302007]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

```
Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink:   145.945 MHz UI Digipeater
Digi Callsign: KE6QMD
```

Everyone is welcome to use the digipeating/APRS features of Sapphire, callsign KE6QMD, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

```
Broadcast Callsign: SASAT2-11
BBS:                SASAT2-12
```

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

```
Uplink:   145.850 MHz
Downlink: 436.775 MHz
```

Broadcast Callsign: SASAT1-11

```
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
V-band:   145.840 -  145.990 MHz CW/LSB
U-band:   435.550 -  435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks
---------
S2-band:  2401.225 -  2401.475 MHz CW/USB
K-band:  24048.010 - 24048.060 MHz CW/USB
Beacon:   2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)
----------------------------
BEACON   General Beacon (GB)    Middle Beacon (MB)    Engineering Beacon
(EB)
2 m       none                    145.898 MHz           none
70cm      435.438 MHz             435.588 MHz           435.838 MHz
13cm(1)  2400.188 MHz            2400.338 MHz          2400.588 MHz
13cm(2)  2401.173 MHz            2401.323 MHz          2401.573 MHz
3cm     10450.975 MHz           10451.125 MHz         10451.375 MHz
1.5cm   24047.885 MHz           24048.035 MHz         24048.285 MHz
[07162007]
=====
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown
```

```
Uplink:    145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site
at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: ?
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater:         436.250 MHz

Uplinks: Mode B Repeater:  145.825 MHz
Mode J Digipeater:         145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.
```

```
For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink:   145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign:       POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012006]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
```

```
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HL01-11
BBS: HL01-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
```

```
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
LIBERTAD-1
Catalog Number: 31129
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink:   145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[10222007]
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990

Status: CW Beacon only

Uplinks:          145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink:      437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)
```

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[01222007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink: 145.825 MHz FM 1200 Baud AFSK
Beacon: 2401.220 MHz
[05012006]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink: 145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting): Non-Operational
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet: Non-Operational
Uplink: 145.8500 MHz MFSK 1200 BPS
Uplink: 145.8700 MHz MFSK 1200 BPS
Uplink: 145.8900 MHz MFSK 1200 BPS
Uplink: 145.9100 MHz MFSK 1200 BPS

```
Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon:   145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink  29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
Beacons:   29.450 MHz
          435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon 1:  29.352 MHz (intermittent)
Beacon 2:  29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink:     21.260 to 21.300 MHz CW/USB
Downlink:  145.860 to 145.900 MHz CW/USB

Beacon:    145.860 MHz

Robot:     145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991
```

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-192.S4
WSR 192 Part 4 07/10/2008

AMSAT NEWS SERVICE BULLETIN 192.S4 FROM AMSAT HQ
SILVER SPRING, MD, July 10 2008
TO ALL RADIO AMATEURS
BID: $ANS-192.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE PROPOSED FOR LAUNCH AT THIS TIME:

Phase 5a Mars Mission AO-??
Catalog Number:
Proposed Launch Date: 2009 or 2011

Status: Design Phase

For the latest project status update please visit the AMSAT-DL P5-A web page:
http://ticket-to-mars.org
[01222007]
=====
PHASE 3E AO-??
Catalog number:
Proposed Launch Date: Late 2008

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/
[01222007]
=====
Eagle AO-??
Catalog Number:
Proposed Launch Date: Early/Mid 2009

Status: Design Phase

For the latest project status updates please visit the AMSAT-NA webpage:
http://www.amsat.org

[01222007]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-192.S5
WSR 192 Part 5 07/10/2008

AMSAT NEWS SERVICE BULLETIN 192.S5 FROM AMSAT HQ
SILVER SPRING, MD, July 10 2008
TO ALL RADIO AMATEURS
BID: $ANS-192.S5

THE FOLLOWING SATELLITES HAVE DE-ORBITED OR HAVE BEEN RETURNED SAFELY:

NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Operational
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink: 145.825 Mhz FM APRS AX25
APRS Uplink: 145.825 MHz FM APRS AX25
Voice/PSK31 Uplink: 28.120 MHz

Packet to Voice ID: RAFT
[06112007]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

From 2982272829651161909
X-Google-Thread: 10e8ad,84940d1cde0837ce,start
X-Google-Thread: 113975,84940d1cde0837ce,start
X-Google-Attributes: gid10e8ad,gid113975,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news1.google.com!news.glorb.com!news.astraweb.com!border2.newsrouter.astraweb.com!not-for-mail
From: Chris Steyaert <observations@rmob.org>
Newsgroups: rec.radio.amateur.space,sci.astro.amateur
Subject: Radio Meteor Obs. Bull. June 2008
Date: Fri, 11 Jul 2008 18:17:01 +0200
Message-ID: <1o1f74tj67o0a1i3lskhfbom29pn3mkon1@4ax.com>
X-Newsreader: Forte Agent 1.93/32.576 English (American)

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Content-Transfer-Encoding: 7bit
Lines: 17
Organization: Unlimited download news at news.astraweb.com
NNTP-Posting-Host: 2827e33c.news.astraweb.com
X-Trace: DXC=;iEnXYU]knM0O6dPiicVTIL?0kYOcDh@J`7AeJ]BoMVAFf\QX;;?
o_AKX07\YZ`QZF8`CKoB^YfVNYVB7M=^`G9E
Xref: g2news2.google.com rec.radio.amateur.space:484 sci.astro.amateur:27144

Radio Meteor Observation Bulletin No. 179 of June 2008 (81 K) is available now
as


     http://visualrmob.free.fr/rmobtext/rmob0806.txt


More information and the visual presentation of the hourly forward scatter
counts can be found on

     http://www.rmob.org

     http://radio.data.free.fr


     Chris




From -6992242878003748909
X-Google-Thread: 10e8ad,1df5e3d383588924,start
X-Google-Thread: 10b9c8,1df5e3d383588924,start
X-Google-Attributes: gid10e8ad,gid10b9c8,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!newsfeed2.dallas1.level3.net!
news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-195 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sun, 13 Jul 2008 08:56:13 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 263
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000601c8e4e7$e9b1a190$bd14e4b0$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix3.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1215953773 25627 166.84.1.3 (13 Jul 2008 12:56:13 GMT)
X-Complaints-To: abuse@panix.com
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NNTP-Posting-Date: Sun, 13 Jul 2008 12:56:13 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to            rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news1.google.com rec.radio.amateur.space:53 rec.radio.info:114
```

AMSAT NEWS SERVICE
ANS-195

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**************************************************************
***  2008 AMSAT Space Symposium and Annual General Meeting ***
***            October 24-26 in Atlanta, Georgia           ***
**************************************************************
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ANS is a free, weekly, news and information service of AMSAT North America, The
Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* 2008 AMSAT North America Space Symposium
* AO-51 Operations Update
* KiwiSAT Progress Report
* Satellite Shorts From All Over
* ARISS Status - 07 July 2008

SB SAT @ AMSAT $ANS-195.01
2008 AMSAT North America Space Symposium

AMSAT News Service Bulletin 195.01
  From AMSAT HQ SILVER SPRING, MD.
July 13, 2008
To All RADIO AMATEURS
BID: $ANS-195.01

2008 AMSAT North America Space Symposium
24-26 October 2008, Atlanta, Georgia Call for Papers:

This is the call for papers for the 2008 AMSAT Space Symposium and Annual Meeting to be held October 24-26, 2008 in Atlanta, Georgia.

Proposals for papers, symposium presentations, and poster presentations are invited on any topic of interest to the amateur satellite program. An emphasis for this year is an educational outreach to middle and high school students. Another topic if interest is using amateur satellite tracking systems to monitor deep space network objects.

In particular, papers on the following topics are solicited:
+ Students & Education
+ ARISS
+ AO-51
+ P3E
+ Eagle
+ Deep Space Network monitoring
+ Any additional satellite-related topics.

We request a one-page abstract as soon as possible. Camera ready copy on paper or in electronic form will be due by September 1, 2008 for inclusion in the printed symposium proceedings. Papers received after this date may not be included in the printed proceedings.

Abstracts and papers should be sent to n8fgv@amsat.org

[ANS thanks Robin, AA4RC and the 2008 Symposium Committee for the above information]

/EX

SB SAT @ AMSAT $ANS-195.02
AO-51 Operations Update

AMSAT News Service Bulletin 195.02
From AMSAT HQ SILVER SPRING, MD.
July 13, 2008
To All RADIO AMATEURS
BID: $ANS-195.02

Gould, WA4SXM, AO-51 command station noted this week that the transmitter power on AO-51 has been down due to the length of eclipse that peaked about 2 weeks ago. AO-51 eclipse periods will continue to get shorter until September when we will see a no eclipse period for about 8 months.

Gould has been testing the charge/discharge rate. If any of the transmitters are off or have changed he reminds users to the status message on the digital downlink.

At present AO-51 is operating TXA at 430 mW (digital downlink) and TXB at 470 mW (analog downlink). During the peak of the eclipse periods both transmitters were operating in the 340 mW range.

[ANS thanks Gould, WA4SXM for the above information]

/EX

SB SAT @ AMSAT $ANS-195.03
KiwiSAT Progress Report

AMSAT News Service Bulletin 195.03
From AMSAT HQ SILVER SPRING, MD.
July 13, 2008
To All RADIO AMATEURS
BID: $ANS-195.03

Progress report - June 2008
by Fred Kennedy ZL1BYP - KiwiSAT Project Leader

Just before the Christmas period a very successful funding appeal was launched on the <amsat-bb> by AMSAT-ZL President - Terry (ZL3QL) and I note with pleasure that the build fund swelled to 30% of the $10k target in a very short time. This is a brilliant response that boosts not only the financial resource but also the morale of the team! Believe me, building a bird is "mega" hard work (ask those that have done it before) and support from the eventual benefactors is very well received. The feeling that it's all worth while is restored - at least for a while!

In addition to the actual cash donations we also have a number individuals offering to sponsor a specific item - as did we (AMSAT-ZL) in the pre launch build-up for Phase 3D. Doing that provides a "personal input" to the project and we're looking into suitable identifiable sub-units.

In the last Status Report mention was made of the Solar Cell problems faced by the team. VERY recent events have, however, meant that this is no longer an impediment to progress!

A very thorough update of each of the satellite's subsystems is available at the AMSAT-ZL website
http://www.kiwisat.org.nz/status.html

[ANS thanks Fred, Zl1BYP, for the above information]

/EX

SB SAT @ AMSAT $ANS-195.04
Satellite Shorts From All Over

AMSAT News Service Bulletin 195.04
From AMSAT HQ SILVER SPRING, MD.
July 13, 2008
To All RADIO AMATEURS
BID: $ANS-195.04

+ Reminder! Sunday is/was your last chance to e-mail your satellite operating logs from Field Day to Bruce, KK5DO. You may send them to kk5do@amsat.org or kk5do@arrl.net. The AMSAT Field Day rules can be found at: http://www.amsatnet.com/2008fd.pdf or http://www.amsatnet.com/2008fd.doc. Your entry is due by 11:59 P.M. CDT, Monday, July 14, 2008.

+ Peter, DB2OS uploaded full-length videos about the integration and launch of OSCAR-10 OSCAR-13 at:
http://en.sevenload.com/search/amsat/videos
There is also a video from the SDX demonstration from HamRadio 2008 in Friedrichshafen.

+ Robert, W6RQR is looking for other satellite operators in New Mexico to help with a Satellite Forum at the Albuquerque Hamfest August 15 & 16. Contact Robert via rlasso (at)zianet.com if you can help.

+ AMSAT-UK will be holding their 23rd International Space Colloquium at the University of Surrey, Guildford, England from Friday 25th until Sunday 27th July. See: http://www.uk.amsat.org/Colloquium/ for the latest information.

[ANS thanks everyone for the above information]

/EX

SB SAT @ AMSAT $ANS-195.05
ARISS Status - 07 July 2008

AMSAT News Service Bulletin 195.05
From AMSAT HQ SILVER SPRING, MD.
July 13, 2008
To All RADIO AMATEURS
BID: $ANS-195.05

1. Upcoming School Contacts

An Amateur Radio on the International Space Station (ARISS) contact has been scheduled with the Department of Astronomy & Space Sciences (DASS) at the Kuwait

Science Club in Safat, Kuwait on Monday, July 14 at 17:05 UTC. Telebridge station WH6PN in Hawaii will assist with the contact. DASS aims to spread scientific awareness in the fields of astronomy and space sciences by actively engaging the public in exploring the cosmos. This educational activity will educate young people about space stations, satellites and ham radio. A national competition will be announced through the Ministry of Education for all schools in Kuwait. The competition will encourage students to do research in space science. Four students will be selected from 3 levels (elementary, middle, high school) to ask questions of the astronaut. Extensive media coverage is expected from at least 3 television stations, several newspapers, magazines and radio stations.

2. Simulated Contacts Successful

Two simulated Amateur Radio on the International Space Station (ARISS) contacts were held on Thursday, July 3. The training sessions were terrestrial-based amateur radio contacts using ARISS-equivalent equipment. Frank De Winne, ON1DWN, participated in the first contact with ESC (Euro Space Camp) in Belgium. The second contact took place between the Ottawa South United Soccer Club in Canada and astronaut Bob Thirsk, W5/VA3CSA. There was IRLP coverage of both contacts.

3. Successful ARISS Contact with Texan Scouts

On Friday, July 4, Round Rock Texas Scout Pack #304 and Blackland Prairie Elementary School in Round Rock, Texas participated in a successful Amateur Radio on the International Space Station (ARISS) contact. Ten Scouts asked nearly twenty questions of Greg Chamitoff, KD5PKZ, before an audience of 100.
Two broadcast television stations and one local cable news outlet reported on the event. To view the Fox video, see:
http://www.myfoxaustin.com/myfox/pages/Home/Detail?contentId=6915557&version=1&locale=EN-US&layoutCode=VSTY&pageId=1.1.1

News 8 Austin also ran an article:
http://www.news8austin.com/content/top_stories/default.asp?ArID=213480

[ANS thanks Carol, KB3LKI, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Lee McLamb, KU4OS

```
From -7172992572743086774
X-Google-Thread: 10bf43,104f6b2b24dc0c33,start
X-Google-Thread: 10e8ad,104f6b2b24dc0c33,start
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news.astraweb.com!border1.a.newsrouter.astraweb.com!hwmnpeer01.ams!hwmnpeer01.lga!
news.highwinds-media.com!hw-filter.lga!newsfe24.lga.POSTED!7564ea0f!not-for-mail
From: "Webmaster" <webmaster@oaklanesoftware.com>
Newsgroups:
rec.radio.amateur.packet,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radi
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Date: Sun, 13 Jul 2008 15:48:48 -0500
Xref: g2news1.google.com rec.radio.amateur.policy:4463 rec.radio.amateur.space:54
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Test Preparation Software

Pass your US FCC ham radio license test with ease. Our test preparation software serves as a training aid to help amateurs and prospective amateurs pass the

VEC's administered test. When you can consistently pass the test given by our test preparation software, you will almost certainly pass an actual test.

Our ham radio license test preparation software uses the latest officially released VEC's approved question pools. The program breaks the test into different sub-element. Integrated into the software are illustrations and Part 97 rules pertaining to the current question. The program tracks the progress of the tests taken. Once you have mastered each sub-element you are ready for the official test.

Visit our web site at http://www.hamradiolicense.net for more information.

```
From 3998248489803824429
X-Google-Thread: 10e8ad,d1c290b8d5ab9eca,start
X-Google-Attributes: gid10e8ad,domainid0,public,usenet
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Path: g2news1.google.com!news1.google.com!Xl.tags.giganews.com!
border1.nntp.dca.giganews.com!nntp.giganews.com!local02.nntp.dca.giganews.com!
nntp.eclipse.net.uk!news.eclipse.net.uk.POSTED!not-for-mail
NNTP-Posting-Date: Sun, 13 Jul 2008 18:47:02 -0500
From: "S J Roberts" <borisone@borisone.karoo.co.uk>
Newsgroups: rec.radio.amateur.space
Subject: Radio Astronomy
Date: Mon, 14 Jul 2008 00:46:48 +0100
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Ls9Mcsjp
X-Abuse-and-DMCA-Info: Please be sure to forward a copy of ALL headers
X-Abuse-and-DMCA-Info: Otherwise we will be unable to process your complaint
properly
X-Postfilter: 1.3.39
Xref: g2news1.google.com rec.radio.amateur.space:55
```

I hope this is not too off topic for this newsgroup...
Can anyone suggest which newsgroup is most suitable for someone with an

interest in building radio telescopes?
I'm posting this here as most people here have experience in the frequencies
/ microwave techniques etc.
Some members may have branched into this area.

If this is completely off-topic / unsuitable for this group, please accept
my apologies.

From 1629437754173630033
X-Google-Thread: 10e8ad,d1c290b8d5ab9eca
X-Google-Attributes: gid10e8ad,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
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208.49.83.146.MISMATCH!uns-out.usenetserver.com!news.usenetserver.com!
pc03.usenetserver.com!fe101.usenetserver.com.POSTED!53ab2750!not-for-mail
From: gwatts <gwatts@frontiernet.net>
User-Agent: Thunderbird 2.0.0.14 (Windows/20080421)
MIME-Version: 1.0
Newsgroups: rec.radio.amateur.space
Subject: Re: Radio Astronomy
References: <jJWdnQg1jJFrDufVRVnytAA@eclipse.net.uk>
In-Reply-To: <jJWdnQg1jJFrDufVRVnytAA@eclipse.net.uk>
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Date: Sun, 13 Jul 2008 20:20:21 -0400
NNTP-Posting-Host: 70.100.198.92
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X-Trace: fe101.usenetserver.com 1215994818 70.100.198.92 (Sun, 13 Jul 2008
20:20:18 EDT)
NNTP-Posting-Date: Sun, 13 Jul 2008 20:20:18 EDT
Organization: Frontier
Xref: g2news1.google.com rec.radio.amateur.space:56

S J Roberts wrote:
> I hope this is not too off topic for this newsgroup...
> Can anyone suggest which newsgroup is most suitable for someone with an
> interest in building radio telescopes?
> I'm posting this here as most people here have experience in the
> frequencies / microwave techniques etc.
> Some members may have branched into this area.

You should check in to, and maybe join the
Society of Amateur Radio Astronomers,
http://radio-astronomy.org/

They have a discussion list at
http://groups.google.com/group/sara-list

Good luck!
- Galen, W8LNA

From -7077482022609232350
X-Google-Thread: 10e8ad,d1c290b8d5ab9eca
X-Google-Attributes: gid10e8ad,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news3.google.com!news1.google.com!news2.google.com!
border1.nntp.dca.giganews.com!border2.nntp.dca.giganews.com!nntp.giganews.com!
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pc03.usenetserver.com!fe101.usenetserver.com.POSTED!53ab2750!not-for-mail
From: gwatts <gwatts@frontiernet.net>
User-Agent: Thunderbird 2.0.0.14 (Windows/20080421)
MIME-Version: 1.0
Newsgroups: rec.radio.amateur.space
Subject: Re: Radio Astronomy
References: <jJWdnQg1jJFrDufVRVnytAA@eclipse.net.uk>
<6Zwek.101085$c5.65621@fe101.usenetserver.com>
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20:30:10 EDT)
NNTP-Posting-Date: Sun, 13 Jul 2008 20:30:10 EDT
Organization: Frontier
Xref: g2news1.google.com rec.radio.amateur.space:57
X-Original-Bytes: 1814

gwatts wrote:
> S J Roberts wrote:
>> I hope this is not too off topic for this newsgroup...
>> Can anyone suggest which newsgroup is most suitable for someone with
>> an interest in building radio telescopes?
>> I'm posting this here as most people here have experience in the
>> frequencies / microwave techniques etc.
>> Some members may have branched into this area.
>
> You should check in to, and maybe join the
> Society of Amateur Radio Astronomers,
> http://radio-astronomy.org/
>
> They have a discussion list at
> http://groups.google.com/group/sara-list
>
> Good luck!
> - Galen, W8LNA

```
I just remembered Radio Astronomy Supplies,
http://www.nitehawk.com/rasmit/ras.html


From 9221442043972555555
X-Google-Thread: 10bf43,104f6b2b24dc0c33
X-Google-Thread: 10e8ad,104f6b2b24dc0c33
X-Google-Attributes: gid10bf43,gid10e8ad,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
From: "kb9rqz" <kb9rqz@puncemail.com>
Newsgroups: rec.radio.amateur.policy,rec.radio.amateur.space
References: <ZStek.20409$%q.875@newsfe24.lga>
Subject: Re: Ham Radio Test
Date: Mon, 14 Jul 2008 16:19:16 -0400
Lines: 27
Organization: he wonder why i simple cant impove punce gotcha
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.3138
X-RFC2646: Format=Flowed; Response
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.3198
NNTP-Posting-Host: $$-iwcqiimoj7q-.news.x-privat.org
Message-ID: <487bb4c8@news.x-privat.org>
X-Complaints-To: abuse@x-privat.org
Path: g2news1.google.com!news3.google.com!feeder.news-service.com!feeder.erje.net!
x-privat.org!not-for-mail
Xref: g2news1.google.com rec.radio.amateur.policy:4531 rec.radio.amateur.space:58


"Webmaster" <webmaster@oaklanesoftware.com> wrote in message
news:ZStek.20409$%q.875@newsfe24.lga...
> Test Preparation Software
>
> Pass your US FCC ham radio license test with ease. Our test preparation
> software
> serves as a training aid to help amateurs and prospective amateurs pass
> the
> VEC's administered test. When you can consistently pass the test given by
> our test preparation software, you will almost certainly pass an actual
> test.
>
> Our ham radio license test preparation software uses the latest officially
> released VEC's approved question pools. The program breaks the test into
> different sub-element. Integrated into the software are illustrations and
> Part 97 rules pertaining to the current question. The program tracks the
> progress of the tests taken. Once you have mastered each sub-element you
> are
> ready for the official test.
>
> Visit our web site at http://www.hamradiolicense.net for more information.
>
>
```

conggat on teh on topic poast

From 1127555667690893725
X-Google-Thread: 10bf43,104f6b2b24dc0c33
X-Google-Thread: 10e8ad,104f6b2b24dc0c33
X-Google-Attributes: gid10bf43,gid10e8ad,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII
Path: g2news1.google.com!postnews.google.com!z66g2000hsc.googlegroups.com!not-for-mail
From: an Old friend <kb9rqz@amsat.org>
Newsgroups: rec.radio.amateur.policy,rec.radio.amateur.space
Subject: may the kelp be with you
Date: Mon, 14 Jul 2008 13:34:18 -0700 (PDT)
Organization: http://groups.google.com
Lines: 3
Message-ID: <94cc05b3-96fc-4d19-b8e6-23edff09d0a6@z66g2000hsc.googlegroups.com>
References: <ZStek.20409$%q.875@newsfe24.lga> <487bb4c8@news.x-privat.org>
NNTP-Posting-Host: 69.19.14.38
Mime-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: quoted-printable
X-Trace: posting.google.com 1216067658 18707 127.0.0.1 (14 Jul 2008 20:34:18 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Mon, 14 Jul 2008 20:34:18 +0000 (UTC)
Complaints-To: groups-abuse@google.com
Injection-Info: z66g2000hsc.googlegroups.com; posting-host=69.19.14.38;
posting-account=GwdHJgoAAAA7GZk7kdhOhmZIO4Dzei0c
User-Agent: G2/1.0
X-HTTP-UserAgent: Mozilla/4.0 (compatible; MSIE 7.0; Windows NT 5.1; .NET CLR
1.1.4322),gzip(gfe),gzip(gfe)
Xref: g2news1.google.com rec.radio.amateur.policy:4537 rec.radio.amateur.space:59

On Jul 14, 4:19=A0pm, "kb9rqz" <kb9...@puncemail.com> wrote:
>
fake

From -3915264657998447850
X-Google-Thread: 10e8ad,d1c290b8d5ab9eca
X-Google-Attributes: gid10e8ad,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news1.google.com!Xl.tags.giganews.com!
border1.nntp.dca.giganews.com!nntp.giganews.com!local02.nntp.dca.giganews.com!
nntp.eclipse.net.uk!news.eclipse.net.uk.POSTED!not-for-mail
NNTP-Posting-Date: Mon, 14 Jul 2008 16:58:57 -0500
From: "S J Roberts" <borisone@borisone.karoo.co.uk>
Newsgroups: rec.radio.amateur.space
References: <jJWdnQg1jJFrDufVRVnytAA@eclipse.net.uk>
<6Zwek.101085$c5.65621@fe101.usenetserver.com>
<m6xek.101087$c5.76645@fe101.usenetserver.com>

In-Reply-To: <m6xek.101087$c5.76645@fe101.usenetserver.com>
Subject: Re: Radio Astronomy
Date: Mon, 14 Jul 2008 22:58:35 +0100
MIME-Version: 1.0
Content-Type: text/plain;
format=flowed;
charset="iso-8859-1";
reply-type=response
Content-Transfer-Encoding: 7bit
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Windows Mail 6.0.6001.18000
X-MimeOLE: Produced By Microsoft MimeOLE V6.0.6001.18000
Message-ID: <Guqdncxt9MS8UebVnZ2dneKdnZydnZ2d@eclipse.net.uk>
Lines: 50
X-Usenet-Provider: http://www.giganews.com
NNTP-Posting-Host: 87.102.44.114
X-Trace: sv3-uVw69yz8C/vDb5+2OCmjn80iXPFBccav3YnOsVQsE/
J9iQW+oP2+h7WMNEPLnOa6NbfYJsLvT6VRAwG!/
uVIQucCGBnNVXv+QtjvoYikr5gzH3QzwxDyhtSevHZvpvbBDyH/X2OXsJ/liLXpGYMBmDsBEbPm!
eUxIl9mGvrZwaJo3GXpi
X-Abuse-and-DMCA-Info: Please be sure to forward a copy of ALL headers
X-Abuse-and-DMCA-Info: Otherwise we will be unable to process your complaint properly
X-Postfilter: 1.3.39
Xref: g2news2.google.com rec.radio.amateur.space:492

Many thanks for your answer.

I'm familiar with the RAS and SARA web sites and have done extensive searching for other resources.
I was not aware of the discussion list - this could be just what I need as I want all equipment to be 'home-built' and modular to cover a range of frequencies dedicated to radio astronomy.

I have only a 3m dish in my backyard to receive with - but at least it will be a start!!

Additionally, since members of this group will be interested in accurate signal sources for their equipment - I have started with a rubidium controlled crystal oscillator driving a couple of Adret 5104 synthesizers all secondary disciplined with a Z3801a. Limited by my measuring accuracy to 1xE-10.

Overkill perhaps, but fun nevertheless!!

Cheers

Steve

```
"gwatts" <gwatts@frontiernet.net> wrote in message
news:m6xek.101087$c5.76645@fe101.usenetserver.com...
> gwatts wrote:
>> S J Roberts wrote:
>>> I hope this is not too off topic for this newsgroup...
>>> Can anyone suggest which newsgroup is most suitable for someone with an
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>>> I'm posting this here as most people here have experience in the
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>>
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>> http://groups.google.com/group/sara-list
>>
>> Good luck!
>> - Galen, W8LNA
>
> I just remembered Radio Astronomy Supplies,
> http://www.nitehawk.com/rasmit/ras.html



From -7860515772728679590
X-Google-Thread: 10bf43,104f6b2b24dc0c33
X-Google-Thread: 10e8ad,104f6b2b24dc0c33
X-Google-Attributes: gid10bf43,gid10e8ad,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news2.google.com!Xl.tags.giganews.com!
border1.nntp.dca.giganews.com!nntp.giganews.com!local02.nntp.dca.giganews.com!
nntp.comcast.com!news.comcast.com.POSTED!not-for-mail
NNTP-Posting-Date: Mon, 14 Jul 2008 17:21:13 -0500
From: "Channel Cop" <nedrog@yahoo.com>
Newsgroups: rec.radio.amateur.policy,rec.radio.amateur.space
References: <ZStek.20409$%q.875@newsfe24.lga> <487bb4c8@news.x-privat.org>
Subject: Re: Ham Radio Test
Date: Mon, 14 Jul 2008 18:21:54 -0400
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.3138
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.3198
X-RFC2646: Format=Flowed; Response
Message-ID: <cY6dnfAT7dvETObVnZ2dnUVZ_jednZ2d@comcast.com>
Lines: 34
X-Usenet-Provider: http://www.giganews.com
NNTP-Posting-Host: 76.100.218.8
X-Trace: sv3-
YCmblTyouTYTsBWstgobTUkex7fZh+gXDcJILiKjDTQtegag9C1+y5PJxceGFZKSUCGpzCZW+UfyWNV!
JUGQedAa+faMqQ27GSvNBGhdaWH8RQ8BM0ufFwM3XUf2/WwTM8eXXg6nI2oIh5YcPuMYMyW6R+C/!
e8+BFwHL30gkvJECE6aFAGQoKSN/
```

```
X-Complaints-To: abuse@comcast.net
X-DMCA-Complaints-To: dmca@comcast.net
X-Abuse-and-DMCA-Info: Please be sure to forward a copy of ALL headers
X-Abuse-and-DMCA-Info: Otherwise we will be unable to process your complaint
properly
X-Postfilter: 1.3.39
Xref: g2news2.google.com rec.radio.amateur.policy:31039
rec.radio.amateur.space:493


"kb9rqz" <kb9rqz@puncemail.com> wrote in message
news:487bb4c8@news.x-privat.org...
>
> "Webmaster" <webmaster@oaklanesoftware.com> wrote in message
> news:ZStek.20409$%q.875@newsfe24.lga...
>> Test Preparation Software
>>
>> Pass your US FCC ham radio license test with ease. Our test preparation
>> software
>> serves as a training aid to help amateurs and prospective amateurs pass
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>> VEC's administered test. When you can consistently pass the test given by
>> our test preparation software, you will almost certainly pass an actual
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>>
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>>
>> Visit our web site at http://www.hamradiolicense.net for more
>> information.
>>
>>
> conggat on teh on topic poast
What the hell is: "(conggat) (teh) (poast)"?? I wonder what language that
is?




From 4149203040173815715
X-Google-Thread: 10bf43,104f6b2b24dc0c33
X-Google-Thread: 10e8ad,104f6b2b24dc0c33
X-Google-Attributes: gid10bf43,gid10e8ad,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII
Path: g2news1.google.com!news1.google.com!postnews.google.com!
b1g2000hsg.googlegroups.com!not-for-mail
From: an Old friend <kb9rqz@amsat.org>
```

```
Newsgroups: rec.radio.amateur.policy,rec.radio.amateur.space
Subject: may the kelp be with you
Date: Mon, 14 Jul 2008 15:41:24 -0700 (PDT)
Organization: http://groups.google.com
Lines: 3
Message-ID: <afd36ff5-14ea-4fe6-8f15-1b5e090f680b@b1g2000hsg.googlegroups.com>
References: <ZStek.20409$%q.875@newsfe24.lga> <487bb4c8@news.x-privat.org>
     <cY6dnfAT7dvETObVnZ2dnUVZ_jednZ2d@comcast.com>
NNTP-Posting-Host: 69.19.14.38
Mime-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: quoted-printable
X-Trace: posting.google.com 1216075284 8918 127.0.0.1 (14 Jul 2008 22:41:24 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Mon, 14 Jul 2008 22:41:24 +0000 (UTC)
Complaints-To: groups-abuse@google.com
Injection-Info: b1g2000hsg.googlegroups.com; posting-host=69.19.14.38;
     posting-account=GwdHJgoAAAA7GZk7kdhOhmZIO4Dzei0c
User-Agent: G2/1.0
X-HTTP-UserAgent: Mozilla/4.0 (compatible; MSIE 7.0; Windows NT 5.1; .NET CLR
     1.1.4322),gzip(gfe),gzip(gfe)
Xref: g2news1.google.com rec.radio.amateur.policy:4557 rec.radio.amateur.space:62
```

On Jul 14, 6:21=A0pm, "Channel Cop" <ned...@yahoo.com> wrote:

> "

fake

```
From 403990135677224400
X-Google-Thread: 10bf43,104f6b2b24dc0c33
X-Google-Thread: 10e8ad,104f6b2b24dc0c33
X-Google-Attributes: gid10bf43,gid10e8ad,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news4.google.com!feeder.news-service.com!
newsfeed.freenet.de!news.unit0.net!feeder06.uucp-net.de!news.uucp.at!
feed.cnntp.org!news.cnntp.org!not-for-mail
From: "SUPER SKYHOOK N8WWM" <N8WWM@hotmail.com>
Newsgroups: rec.radio.amateur.policy,rec.radio.amateur.space
References: <ZStek.20409$%q.875@newsfe24.lga> <487bb4c8@news.x-privat.org>
<cY6dnfAT7dvETObVnZ2dnUVZ_jednZ2d@comcast.com>
Subject: Re: Ham Radio Test
Date: Tue, 15 Jul 2008 15:23:33 -0400
Organization: SUPER SKYHOOK
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.3138
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.3198
X-RFC2646: Format=Flowed; Response
Lines: 62
Message-ID: <487cf93e$0$25951$6e1ede2f@read.cnntp.org>
NNTP-Posting-Host: af4ab011.read.cnntp.org
X-Trace: DXC=_5m0:>F4D\WOA3Yl>KonE[WoT\PAgXa?Q3QObBb3c?J]lK9^66lO<WPULFQf3c?
N5_W=DlA<cb[KP52=of_jha\\
```

X-Complaints-To: abuse@cnntp.org
Xref: g2news1.google.com rec.radio.amateur.policy:4577 rec.radio.amateur.space:63

"Channel Cop" <nedrog@yahoo.com> wrote in message
news:cY6dnfAT7dvETObVnZ2dnUVZ_jednZ2d@comcast.com...
>
> "kb9rqz" <kb9rqz@puncemail.com> wrote in message
> news:487bb4c8@news.x-privat.org...
>>
>> "Webmaster" <webmaster@oaklanesoftware.com> wrote in message
>> news:ZStek.20409$%q.875@newsfe24.lga...
>>> Test Preparation Software
>>>
>>> Pass your US FCC ham radio license test with ease. Our test preparation
>>> software
>>> serves as a training aid to help amateurs and prospective amateurs pass
>>> the
>>> VEC's administered test. When you can consistently pass the test given
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>>> our test preparation software, you will almost certainly pass an actual
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>>>
>>> Our ham radio license test preparation software uses the latest
>>> officially
>>> released VEC's approved question pools. The program breaks the test into
>>> different sub-element. Integrated into the software are illustrations
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>>> Part 97 rules pertaining to the current question. The program tracks the
>>> progress of the tests taken. Once you have mastered each sub-element you
>>> are
>>> ready for the official test.
>>>
>>> Visit our web site at http://www.hamradiolicense.net for more
>>> information.
>>>
>>>
>> conggat on teh on topic poast
> What the hell is: "(conggat) (teh) (poast)"?? I wonder what language that
> is?
>
IF YOU ARE GRANTED THE EXTREME HONOR OF BEING INVITED
TO SPEAK INTO THE MICROPHONE, PLEASE OBSERVE THE FOLLOWING RULES:

Speak in a southern accent, like an ignorant hillbilly, a drunk, or a
hip hop gangsta.

Use profanity as much as possible.

Loudly accuse people of "being on your channel" and threaten to "come
kick their ass".

Repeat one or more of these phrases: DONCHA KNOW, RIGHT BACK ATCHA, WORLDWIDE, MERCY ME, TAN FER THAR, HALLOO AUDIOOO.

DO NOT TOUCH ANYTHING, TURN ANY KNOBS, SIT ON EQUIPMENT, ETC. I HAVE LOST MANY THOUSANDS OF BRAIN CELLS BY RF AND ELECTROCUTION IN THE PAST FEW WEEKS.

```
From -7756731760652801191
X-Google-Thread: 10e8ad,d1c290b8d5ab9eca
X-Google-Attributes: gid10e8ad,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news3.google.com!feeder1-2.proxad.net!proxad.net!
feeder1-1.proxad.net!newspeer2.se.telia.net!se.telia.net!masternews.telia.net.!
newsb.telia.net.POSTED!not-for-mail
From: "Greg" <ash_5@gravitywell.org>
Newsgroups: rec.radio.amateur.space
References: <jJWdnQg1jJFrDufVRVnytAA@eclipse.net.uk>
<6Zwek.101085$c5.65621@fe101.usenetserver.com>
<m6xek.101087$c5.76645@fe101.usenetserver.com>
<Guqdncxt9MS8UebVnZ2dneKdnZydnZ2d@eclipse.net.uk>
Subject: Re: Radio Astronomy
Lines: 5
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.5512
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.5512
X-RFC2646: Format=Flowed; Response
Message-ID: <z_6fk.1008$U5.633@newsb.telia.net>
Date: Tue, 15 Jul 2008 19:35:59 GMT
NNTP-Posting-Host: 81.236.213.235
X-Complaints-To: abuse@telia.com
X-Trace: newsb.telia.net 1216150559 81.236.213.235 (Tue, 15 Jul 2008 21:35:59
CEST)
NNTP-Posting-Date: Tue, 15 Jul 2008 21:35:59 CEST
Organization: Telia Internet
Xref: g2news2.google.com rec.radio.amateur.space:496
```

I can also recommend www.setileague.org
SETILeague is an offshoot of SARA and radio astronomy in general
is strong at hand.

```
From -3078348777772125421
X-Google-Thread: 10bf43,104f6b2b24dc0c33
```

```
X-Google-Thread: 10e8ad,104f6b2b24dc0c33
X-Google-Attributes: gid10bf43,gid10e8ad,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII
Path: g2news1.google.com!news1.google.com!postnews.google.com!
56g2000hsm.googlegroups.com!not-for-mail
From: an Old friend <kb9rqz@amsat.org>
Newsgroups: rec.radio.amateur.policy,rec.radio.amateur.space
Subject: may the kelp be with you
Date: Wed, 16 Jul 2008 00:34:28 -0700 (PDT)
Organization: http://groups.google.com
Lines: 3
Message-ID: <5428e1fb-523f-4abc-a355-75301c7dd0f5@56g2000hsm.googlegroups.com>
References: <ZStek.20409$%q.875@newsfe24.lga> <487bb4c8@news.x-privat.org>
     <cY6dnfAT7dvETObVnZ2dnUVZ_jednZ2d@comcast.com>
<487cf93e$0$25951$6e1ede2f@read.cnntp.org>
NNTP-Posting-Host: 69.19.14.42
Mime-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: quoted-printable
X-Trace: posting.google.com 1216193668 10502 127.0.0.1 (16 Jul 2008 07:34:28 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Wed, 16 Jul 2008 07:34:28 +0000 (UTC)
Complaints-To: groups-abuse@google.com
Injection-Info: 56g2000hsm.googlegroups.com; posting-host=69.19.14.42;
     posting-account=GwdHJgoAAAA7GZk7kdhOhmZIO4Dzei0c
User-Agent: G2/1.0
X-HTTP-UserAgent: Mozilla/4.0 (compatible; MSIE 7.0; Windows NT 5.1; .NET CLR
     1.1.4322),gzip(gfe),gzip(gfe)
Xref: g2news1.google.com rec.radio.amateur.policy:4611 rec.radio.amateur.space:65

On Jul 15, 3:23=A0pm, "SUPER SKYHOOK N8WWM" <N8...@hotmail.com> wrote:
>
fake


From -8076440289548056418
X-Google-Thread: 10bf43,104f6b2b24dc0c33
X-Google-Thread: 10e8ad,104f6b2b24dc0c33
X-Google-Attributes: gid10bf43,gid10e8ad,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news1.google.com!news.glorb.com!nntpserver.com!
zeus.nntpserver.com!pfilter-v0.1!news.teranews.com!not-for-mail
From: kb9rqz@yahoo.com
Newsgroups: rec.radio.amateur.policy,rec.radio.amateur.space
Subject: may the kelp be with you
Date: Mon, 14 Jul 2008 18:42:26 -0400
Message-ID: <0iln749tbavrkocs0o647atnntls10a6lo@4ax.com>
References: <ZStek.20409$%q.875@newsfe24.lga> <487bb4c8@news.x-privat.org>
<cY6dnfAT7dvETObVnZ2dnUVZ_jednZ2d@comcast.com>
X-Newsreader: Forte Free Agent 3.3/32.846
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
```

```
X-Complaints-To: abuse@teranews.com
Organization: www.TeraNews.com
Lines: 30
NNTP-Posting-Date: Mon, 14 Jul 2008 18:37:36 -0400
Xref: g2news2.google.com rec.radio.amateur.policy:31226
rec.radio.amateur.space:498

On Mon, 14 Jul 2008 18:21:54 -0400, "Channel Cop" <nedrog@yahoo.com>
wrote:

>
>"kb9rqz" <kb9rqz@puncemail.com> wrote in message
>news:487bb4c8@news.x-privat.org...
>>
>

>>>
>>>
>> conggat on teh on topic poast
>What the hell is: "(conggat) (teh) (poast)"?? I wonder what language that
>is?
you shoudl know you psoted it

"one useless man is disgrace 2 become a law firm 3 or more become a congress"
adams

woger you are a Congress all in your own head

http://kb9rqz.bravejournal.com/
altopia is never used by KB9RQZ
nor is Konstans@hotmail.com ever
btw i can be found at
17366 N River Rd
Chassel Mi

but the cowards asking lack the gut to act
** Posted from http://www.teranews.com **


From 8409294173121267686
X-Google-Thread: 10f7a7,9c92476da32cc99a,start
X-Google-Thread: 106d41,9c92476da32cc99a,start
X-Google-Thread: 10bf43,104f6b2b24dc0c33
X-Google-Thread: 10e8ad,104f6b2b24dc0c33
X-Google-Thread: fbf1a,9c92476da32cc99a,start
X-Google-Attributes:
gid10f7a7,gid106d41,gid10bf43,gid10e8ad,gidfbf1a,domainid0,public,usenet
X-Google-Language: ENGLISH,UTF8
Path: g2news1.google.com!news2.google.com!postnews.google.com!
f63g2000hsf.googlegroups.com!not-for-mail
From: k00kieolemorkie@gmail.com
Newsgroups:
alt.usenet.kooks,rec.radio.cb,rec.radio.amateur.policy,rec.radio.amateur.space,alt
```

```
.flame
Subject: Re: Ham Radio Test
Date: Thu, 17 Jul 2008 16:58:23 -0700 (PDT)
Organization: http://groups.google.com
Lines: 69
Message-ID: <4cdcc78e-5fe2-44ac-8cce-4e76fb324a12@f63g2000hsf.googlegroups.com>
References: <ZStek.20409$%q.875@newsfe24.lga> <487bb4c8@news.x-privat.org>
     <cY6dnfAT7dvETObVnZ2dnUVZ_jednZ2d@comcast.com>
<487cf93e$0$25951$6e1ede2f@read.cnntp.org>
NNTP-Posting-Host: 64.12.116.144
Mime-Version: 1.0
Content-Type: text/plain; charset=UTF-8
Content-Transfer-Encoding: quoted-printable
X-Trace: posting.google.com 1216339104 12825 127.0.0.1 (17 Jul 2008 23:58:24 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Thu, 17 Jul 2008 23:58:24 +0000 (UTC)
Complaints-To: groups-abuse@google.com
Injection-Info: f63g2000hsf.googlegroups.com; posting-host=64.12.116.144;
     posting-account=6FQrvwoAAABncEQycJNsUi_4EDQtM-8t
User-Agent: G2/1.0
X-HTTP-UserAgent: Mozilla/4.0 (compatible; MSIE 7.0; AOL 9.1; AOLBuild
     4334.34; Windows NT 6.0; SLCC1; .NET CLR 2.0.50727; .NET CLR
     3.0.04506),gzip(gfe),gzip(gfe)
X-HTTP-Via: HTTP/1.1 (Velocity/3.1.1.5 [uScMs f p eN:t cCMp s ]), HTTP/1.1
     spider-mtc-th03.proxy.aol.com[400C70E3] (Prism/1.2.1), HTTP/1.1
     cache-mtc-ac15.proxy.aol.com[400C7490] (Traffic-Server/6.1.5 [uScM])
Xref: g2news1.google.com alt.usenet.kooks:38331 rec.radio.cb:1083
rec.radio.amateur.policy:4765 rec.radio.amateur.space:67 alt.flame:4875

On Jul 15, 2:23=EF=BF=BDpm, "SUPER SKYHOOK N8WWM" <N8...@hotmail.com> wrote=
:
> "Channel Cop" <kb9rqz@yahoo.com> wrote in message
>
> news:cY6dnfAT7dvETObVnZ2dnUVZ_jednZ2d@comcast.com...
>
>>>kb9rqz@hotmail.com
>
>
>
> > "kb9rqz" <kb9rqz@gmail.com> wrote in message
> >news:487bb4c8@news.x-privat.org...
>
> >> "Webmaster" <webmas...@oaklanesoftware.com> wrote in message
> >>news:ZStek.20409$%q.875@newsfe24.lga...
> >>>TestPreparation Software
>
> >>> Pass your US FCChamradio licensetestwith ease. Ourtestpreparation
> >>> software
> >>> serves as a training aid to help amateurs and prospective amateurs pa=
ss
> >>> the
> >>> VEC's administeredtest. When you can consistently pass thetestgiven
> >>> by
> >>> ourtestpreparation software, you will almost certainly pass an actual
> >>>test.
>
> >>> Ourhamradio licensetestpreparation software uses the latest
> >>> officially
> >>> released VEC's approved question pools. The program breaks thetestint=
o
> >>> different sub-element. Integrated into the software are illustrations
> >>> and
> >>> Part 97 rules pertaining to the current question. The program tracks =
the
> >>> progress of the tests taken. Once you have mastered each sub-element =
you
> >>> are
> >>> ready for the officialtest.
>
> >>> Visit our web site athttp://www.hamradiolicense.netfor more
> >>> information.
>
> >> conggat on teh on topic poast
> > What the hell is: "(conggat) (teh) (poast)"?? I wonder what language th=
at
> > is?
>
> IF YOU ARE GRANTED THE EXTREME HONOR OF BEING INVITED
> TO SPEAK INTO THE MICROPHONE, PLEASE OBSERVE THE FOLLOWING RULES:
>
> Speak in a southern accent, like an ignorant hillbilly, a drunk, or a
> hip hop gangsta.
>
> Use profanity as much as possible.
>
> Loudly accuse people of "being on your channel" and threaten to "come
> kick their ass".
>
> Repeat one or more of these phrases: DONCHA KNOW, RIGHT BACK ATCHA,
> WORLDWIDE, MERCY ME, TAN FER THAR, HALLOO AUDIOOO.
>
> DO NOT TOUCH ANYTHING, TURN ANY KNOBS, SIT ON EQUIPMENT, ETC. I HAVE
> LOST MANY THOUSANDS OF BRAIN CELLS BY RF AND ELECTROCUTION IN THE PAST
> FEW WEEKS.- Hide quoted text -
>
>
Word on the street is Morkie "earned" his General by blowing &
swollowing the entire VE team.


From 3609778685534316869
X-Google-Thread: 10f7a7,9c92476da32cc99a
X-Google-Thread: 106d41,9c92476da32cc99a
X-Google-Thread: 10bf43,104f6b2b24dc0c33
X-Google-Thread: 10e8ad,104f6b2b24dc0c33
X-Google-Thread: fbf1a,9c92476da32cc99a
```

```
X-Google-Attributes:
gid10f7a7,gid106d41,gid10bf43,gid10e8ad,gidfbf1a,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII
Path: g2news2.google.com!postnews.google.com!i76g2000hsf.googlegroups.com!not-for-
mail
From: an old friend <kb9rqz@hotmail.com>
Newsgroups:
alt.usenet.kooks,rec.radio.cb,rec.radio.amateur.policy,rec.radio.amateur.space,alt
.flame
Subject: may the kelp be with you
Date: Thu, 17 Jul 2008 18:13:39 -0700 (PDT)
Organization: http://groups.google.com
Lines: 10
Message-ID: <fc86e6ec-555f-4634-849d-49dde7007ce2@i76g2000hsf.googlegroups.com>
References: <ZStek.20409$%q.875@newsfe24.lga> <487bb4c8@news.x-privat.org>
     <cY6dnfAT7dvETObVnZ2dnUVZ_jednZ2d@comcast.com>
<487cf93e$0$25951$6e1ede2f@read.cnntp.org>
     <4cdcc78e-5fe2-44ac-8cce-4e76fb324a12@f63g2000hsf.googlegroups.com>
NNTP-Posting-Host: 66.82.9.103
Mime-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: quoted-printable
X-Trace: posting.google.com 1216343619 16326 127.0.0.1 (18 Jul 2008 01:13:39 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Fri, 18 Jul 2008 01:13:39 +0000 (UTC)
Complaints-To: groups-abuse@google.com
Injection-Info: i76g2000hsf.googlegroups.com; posting-host=66.82.9.103;
     posting-account=hvMD6AoAAADhaR-hQoHk-p7xtiL6xLI9
User-Agent: G2/1.0
X-HTTP-UserAgent: Mozilla/4.0 (compatible; MSIE 7.0; Windows NT 5.1; .NET CLR
     1.1.4322),gzip(gfe),gzip(gfe)
Xref: g2news2.google.com alt.usenet.kooks:206612 rec.radio.cb:10113
rec.radio.amateur.policy:31262 rec.radio.amateur.space:500 alt.flame:25829

On Jul 17, 7:58=A0pm, k00kieolemor...@gmail.com wrote:
>
> > DO NOT TOUCH ANYTHING, TURN ANY KNOBS, SIT ON EQUIPMENT, ETC. I HAVE
> > LOST MANY THOUSANDS OF BRAIN CELLS BY RF AND ELECTROCUTION IN THE PAST
> > FEW WEEKS.- Hide quoted text -
>
> Word on the street is Morkie "earned" his General by blowing &
> swollowing the entire VE team.-
only by fakes like yourself




From -7874628410555316O4
X-Google-Thread: 10f7a7,9c92476da32cc99a
X-Google-Thread: 106d41,9c92476da32cc99a
X-Google-Thread: 10bf43,104f6b2b24dc0c33
X-Google-Thread: 10e8ad,104f6b2b24dc0c33
X-Google-Thread: fbf1a,9c92476da32cc99a
X-Google-Attributes:
```

```
gid10f7a7,gid106d41,gid10bf43,gid10e8ad,gidfbf1a,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!news.glorb.com!nntpserver.com!
zeus.nntpserver.com!pfilter-v0.1!news.teranews.com!not-for-mail
From: kb9rqz@yahoo.com
Newsgroups:
alt.usenet.kooks,rec.radio.cb,rec.radio.amateur.policy,rec.radio.amateur.space,alt
.flame
Subject: may the kelp be with you
Date: Thu, 17 Jul 2008 20:07:15 -0400
Message-ID: <0lnv74pqe7na9ipabbare50sq49lqqkq2d@4ax.com>
References: <ZStek.20409$%q.875@newsfe24.lga> <487bb4c8@news.x-privat.org>
<cY6dnfAT7dvETObVnZ2dnUVZ_jednZ2d@comcast.com>
<487cf93e$0$25951$6e1ede2f@read.cnntp.org>
<4cdcc78e-5fe2-44ac-8cce-4e76fb324a12@f63g2000hsf.googlegroups.com>
X-Newsreader: Forte Free Agent 3.3/32.846
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
X-Complaints-To: abuse@teranews.com
Organization: www.TeraNews.com
Lines: 20
NNTP-Posting-Date: Thu, 17 Jul 2008 20:02:28 -0400
Xref: g2news1.google.com alt.usenet.kooks:38412 rec.radio.cb:1088
rec.radio.amateur.policy:4812 rec.radio.amateur.space:69 alt.flame:4882

On Thu, 17 Jul 2008 16:58:23 -0700 (PDT), k00kieolemorkie@gmail.com
wrote:

>
fake

"one useless man is disgrace 2 become a law firm 3 or more become a congress"
adams

woger you are a Congress all in your own head

http://kb9rqz.bravejournal.com/
altopia is never used by KB9RQZ
nor is Konstans@hotmail.com ever
btw i can be found at
17366 N River Rd
Chassel Mi

but the cowards asking lack the gut to act
** Posted from http://www.teranews.com **


From -4476286660096787144
X-Google-Thread: 10e8ad,aa1f7fc34b4ed963,start
X-Google-Thread: 10b9c8,aa1f7fc34b4ed963,start
X-Google-Attributes: gid10e8ad,gid10b9c8,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
```

Path: g2news1.google.com!news1.google.com!news2.google.com!
border1.nntp.dca.giganews.com!nntp.giganews.com!nx01.iad01.newshosting.com!
newshosting.com!198.186.194.249.MISMATCH!transit3.readnews.com!news-
xxxfer.readnews.com!news-out.readnews.com!transit4.readnews.com!panix!
rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-199 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Fri, 18 Jul 2008 15:38:51 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 1444
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000b01c8e90d$e3407c80$a9c17580$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1216409931 27979 166.84.1.6 (18 Jul 2008 19:38:51 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Fri, 18 Jul 2008 19:38:51 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news1.google.com rec.radio.amateur.space:70 rec.radio.info:128

This report is organized into FIVE parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites
Part 5 (S5) - deorbited/returned satellites

SB SAT @ AMSAT W8ISS ANS-199.S1
WSR 199 Part 1 07/17/2008

AMSAT NEWS SERVICE BULLETIN 199.S1 FROM AMSAT HQ
SILVER SPRING, MD, July 17 2008
TO ALL RADIO AMATEURS
BID: $ANS-199.S1

VO-52 HAMSAT

```
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink:   435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink:   435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW


Indian Beacon:  145.859330 MHZ CW
Dutch Beacon:   145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsat.in/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is
active. Each transponder has a different beacon.
[06252007]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational - Software reload

Current Modes:   FM Repeater - V/u
                 BBS         - L/u
                 Telemetry   -  /u

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink:   145.880 MHZ FM
                       145.880 MHz USB
                       145.920 MHz FM
                      1268.700 MHz FM 67Hz PL tone
Digital Downlinks:     435.150 MHz FM 38k4 Digital, PBP, 1 watt output
                       435.150 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:        145.860 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
```

                      1268.700 mhz FM 9k6 PBP Digital
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[07032008]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002

Status: Operational.

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute
timer
   on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the
repeater on
   and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset
the 10
   minute timer.
[05282007]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Operational - check operational schedule for current times!!

Current Mode: V/u

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage: http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's CW
telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts.htm
[0820007]
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[12132007]
=====
AO-16 PACSAT
Catalog number: 20439

Launch Date: January 22, 1990

Status: TESTING - VOICE

Current Mode: V/u

Uplink: 145.900 MHz FM 1200-baud Manchester FSK (reserved)
                145.920 MHz FM VOICE
                145.940 MHz FM 1200-baud Manchester FSK (reserved)
                145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink: 437.026 MHz USB VOICE
                (1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC 437.050 MHz RHCP
   PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[03202008]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational depending on amount of Sunlight

Current Mode: Listen before transmitting

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/

AO-7 Usage Guidelines on the AO-7 Log and Resource Site located at:
http://www.planetemily.com/ao7

```
[05282007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Mode: FM Repeater - U/v
              Voice -       Occasianally
              BBS -         ON
              APRS -        ON
              SSTV -        OFF

Expedition 17 crew:
Commander:          Sergey Volkov         RU3DIS
Flight Engineer:    Oleg Kononenko        RN3DX
Flight Engineer:    Greg Chamitoff        KD5PKZ

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink:   145.825 MHz FM
Worldwide packet downlink: 145.825 Mhz FM

Voice:
Region 1 voice uplink:   145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink:      145.800 MHz FM

Crossband Repeater:
Repeater Uplink:         437.800 MHz FM
Repeater Downlink:       145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German:              DP0ISS
Russian:             RS0ISS
                     RZ3DZR
USA:                 NA1SS
Packet Mailbox:      RS0ISS-11
Packet Keyboard:     RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
```

NOT translated from Russian and posted.
[06122008]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-199.S2
WSR 199 Part 2 07/17/2008

AMSAT NEWS SERVICE BULLETIN 199.S2 FROM AMSAT HQ
SILVER SPRING, MD, July 17 2008
TO ALL RADIO AMATEURS
BID: $ANS-199.S2

RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number:
Launch Date: May 23, 2008

Status: Operational

Curent Mode: Telemetry
             Audio
             Images

Downlinks: 435.315 MHz
           435.215 MHz
[05292008]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.
[11152007]
=====
CP3
Catalog Number: 31128
Launch Date: April 17,2007

Status: Operational

Current Mode: /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25

```
[07302007]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: In Orbit

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder:  145.825 Mhz FM
[02052007]
=====
NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Operational

Current Mode: /u

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[10222007]
=====
GENESAT-1 ?O-??
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Current Mode: /u

Telemetry Beacon Downlink: 437.0670 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[01082007]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon:             437.2750 MHz CW
```

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
[03262007]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003

Status: Operational

Current Mode: /u

Beacon: 436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[01082007]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Semi-Operational - Constant Carrier only

Uplink: 1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan ?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[01082007]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon

```
Downlink: 436.8375 MHz CW
[08132007]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational - Softawre Reload

Current Modes:   FM Repeater - V/u
                 BBS         - L/u
                 Telemetry   -  /u

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink:   145.880 MHZ FM
                       145.880 MHz USB
                       145.920 MHz FM
                      1268.700 MHz FM 67Hz PL tone
Digital Downlinks:     435.150 MHz FM 38k4 Digital, PBP, 1 watt output
                       435.150 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:        145.860 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      1268.700 mhz FM 9k6 PBP Digital
Beacon:                435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[07032008]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Hibernation until full sunlight in November

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink:        144.390 Mhz 1200 Baud
```

```
PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[09242007]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Current Modes: V/U
               L/U

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[09172007]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984

Status: Semi-operational.

Current Mode:  /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon:          435.025 MHz
Mode-S Beacon:     2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[01242008]
=====
RS-22 RADIO SPORT RS-22
```

Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only

Current Mode: /u

CW Beacon - 435.352 MHz
            145.818 MHz
[08062007]
=====
Can X-2
Catalog number:
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web page:
http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[05292008]
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink: 437.425 MHz

For the latest project status update please visit the AAUSAT-II web
page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[05292008]
=====
Cute-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink: 437.475 MHz 9k6 Packet
Uplink: 1267.600 Mhz

For the latest project status update please visit the Cute-1.7+APD II
web

page:
http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78
[05292008]
=====
Compass 1
Catalog number: 32787
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink: 437.275 Mhz CW
437.405 MHz Packet

For the latest project status update please visit the Compass 1 web page:
http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52
[05292008]
=====
DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008

Status: IN ORBIT

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink: 435.530 to 435.570 MHz

Proposed Frequencies:
* Primary telemetry downlink: 145.870 MHz 1200 Baud BPSK AX.25 400mW
* Backup telemetry downlink: 145.930 MHz 1200 Baud BPSK AX.25 400mW
* Linear transponder passband downlink: 145.880 - 145.920 MHz (inverting)
400mW PEP
* Linear transponder passband uplink: 435.570 - 435.530 MHz
* Transponder mode beacon: 145.870 MHz CW (10dB below transponder PEP)

For the latest project status update please visit the Delfi-C3 web page:
http://www.delfic3.nl/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68
[05292008]
=====
Seeds 2
Catalog number:

Launch Date: April 28, 2008

Status: IN ORBIT

Downlink: 437.485 MHz

For the latest project status update please visit the Seeds 2 web page:
http://cubesat.aero.cst.nihon-u.ac.jp/english/main_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36
[05012008]

=====

INTERNATIONAL SPACE STATION (ISS) - ARISS

Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Mode: FM Repeater - U/v
Voice - Occasianally
BBS - ON
APRS - ON
SSTV - OFF

Expedition 17 crew:

Commander:	Sergey Volkov	RU3DIS
Flight Engineer:	Oleg Kononenko	RN3DX
Flight Engineer:	Greg Chamitoff	KD5PKZ

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM
Worldwide packet downlink: 145.825 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:

German:	DP0ISS
Russian:	RS0ISS RZ3DZR
USA:	NA1SS

```
Packet Mailbox:      RS0ISS-11
Packet Keyboard:     RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.
[06122008]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-199.S3
WSR 199 Part 3 07/17/2008

AMSAT NEWS SERVICE BULLETIN 199.S3 FROM AMSAT HQ
SILVER SPRING, MD, July 17 2008
TO ALL RADIO AMATEURS
BID: $ANS-199.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

CP4
Catalog Number: 31122
Launch Date: April 17,2007

Status: Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon:    437.325 MHz CW
[11152007]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Non-Operational

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon:             437.2750 MHz CW

Callsign: JR8YJT
[10152007]
=====
NCUBE-2
```

```
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency:  437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink:        437.250 MHz FM 67Hz CTCSS
Voice Downlink:     2401.835 MHz FM
Packet Up/Downlink:  437.250 MHz 9k6 packet
Packet Downlink     2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non=Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[08132007]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink:   435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
```

Launch date: September 26, 2000

Status: Non-Operational

Uplinks: 145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[007302007]

=====

NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, callsign KE6QMD, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]

=====

SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html

```
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink:   145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
V-band:   145.840 -  145.990 MHz CW/LSB
U-band:   435.550 -  435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks
---------
S2-band:  2401.225 -  2401.475 MHz CW/USB
K-band:  24048.010 - 24048.060 MHz CW/USB
Beacon:   2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)
----------------------------
BEACON   General Beacon (GB)    Middle Beacon (MB)    Engineering Beacon
(EB)
2 m       none                    145.898 MHz           none
70cm      435.438 MHz             435.588 MHz           435.838 MHz
13cm(1)  2400.188 MHz            2400.338 MHz          2400.588 MHz
13cm(2)  2401.173 MHz            2401.323 MHz          2401.573 MHz
3cm     10450.975 MHz           10451.125 MHz         10451.375 MHz
1.5cm   24047.885 MHz           24048.035 MHz         24048.285 MHz
[07162007]
=====
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000
```

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site
at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: ?
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]

=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink: 145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012006]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

```
Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HL01-11
BBS: HL01-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
```

```
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
LIBERTAD-1
Catalog Number: 31129
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink:   145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[10222007]
=====
LO-19 LUSAT
Catalog number: 20442
```

```
Launch date: January 22, 1990

Status: CW Beacon only

Uplinks:          145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink:      437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[01222007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
[05012006]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986
```

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting): Non-Operational
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet: Non-Operational
Uplink: 145.8500 MHz MFSK 1200 BPS
Uplink: 145.8700 MHz MFSK 1200 BPS
Uplink: 145.8900 MHz MFSK 1200 BPS
Uplink: 145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon: 145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.8500 - 145.9000 MHz SSB/CW
Downlink 29.4000 - 29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====

```
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
Beacons:   29.450 MHz
          435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon 1:  29.352 MHz (intermittent)
Beacon 2:  29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational
```

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB

Beacon: 145.860 MHz

Robot: 145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-199.S4
WSR 199 Part 4 07/17/2008

AMSAT NEWS SERVICE BULLETIN 199.S4 FROM AMSAT HQ
SILVER SPRING, MD, July 17 2008
TO ALL RADIO AMATEURS
BID: $ANS-199.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE PROPOSED FOR LAUNCH AT THIS TIME:

Phase 5a Mars Mission AO-??
Catalog Number:
Proposed Launch Date: 2009 or 2011

Status: Design Phase

For the latest project status update please visit the AMSAT-DL P5-A web page:
http://ticket-to-mars.org
[01222007]
=====
PHASE 3E AO-??
Catalog number:
Proposed Launch Date: Late 2008

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web

page:
http://www.amsat-dl.org/p3e/
[01222007]
=====
Eagle AO-??
Catalog Number:
Proposed Launch Date: Early/Mid 2009

Status: Design Phase

For the latest project status updates please visit the AMSAT-NA webpage:
http://www.amsat.org
[01222007]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-199.S5
WSR 199 Part 5 07/17/2008

AMSAT NEWS SERVICE BULLETIN 199.S5 FROM AMSAT HQ
SILVER SPRING, MD, July 17 2008
TO ALL RADIO AMATEURS
BID: $ANS-199.S5

THE FOLLOWING SATELLITES HAVE DE-ORBITED OR HAVE BEEN RETURNED SAFELY:

NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Operational
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink: 145.825 Mhz FM APRS AX25
APRS Uplink: 145.825 MHz FM APRS AX25
Voice/PSK31 Uplink: 28.120 MHz

Packet to Voice ID: RAFT
[06112007]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live

radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

- AMSAT News Service (ANS)
- General satellite discussion (AMSAT-BB)
- Orbit data (KEPS)
- Manned space missions (SAREX)
- District of Columbia area (AMSAT-DC)
- New England area (AMSAT-NE)
- AMSAT Educational Liaison mailing list (AMSAT-EDU)
- AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

From 5860744099503225592

```
X-Google-Thread: 10e8ad,ef53d92eb2c05bd5,start
X-Google-Attributes: gid10e8ad,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!postnews.google.com!v1g2000pra.googlegroups.com!not-for-
mail
From: super kate <chenpeiqing10000@163.com>
Newsgroups: rec.radio.amateur.space
Subject: Good price and quality (www[dot]brandedsite[dot]com)
Date: Sun, 20 Jul 2008 18:21:05 -0700 (PDT)
Organization: http://groups.google.com
Lines: 57
Message-ID: <33c11c83-6dfa-46c9-b70d-540ae3b5ee6b@v1g2000pra.googlegroups.com>
NNTP-Posting-Host: 117.26.226.91
Mime-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 7bit
X-Trace: posting.google.com 1216603265 10039 127.0.0.1 (21 Jul 2008 01:21:05 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Mon, 21 Jul 2008 01:21:05 +0000 (UTC)
Complaints-To: groups-abuse@google.com
Injection-Info: v1g2000pra.googlegroups.com; posting-host=117.26.226.91;
     posting-account=JqRnMwoAAACHFG75JP-8bYLbQWNE6S2-
User-Agent: G2/1.0
X-HTTP-UserAgent: Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1; SV1;
     Embedded Web Browser from: http://bsalsa.com/; .NET CLR
2.0.50727),gzip(gfe),gzip(gfe)
Xref: g2news1.google.com rec.radio.amateur.space:71

original benson and hedges,benson & hedges,b&h,Master
Case,Marlboro,cigarette tobacco shipping to uk,Duty Free Suppliers In
China Wanted Marlboro|555|Belomorkanal|Bond|Camel|Chesterfield|
Dallas|
Davidoff|Dunhill|Epique|Esse|Gauloises|Karelia|Kent|L&M|LuckyStrike|
Magna|Marlboro|MildSeven|MonteC|rlo|More|Muratti|PallMall|Parliament|
PeterI|R1|Rothmans|RussianStyle|Salem|Sobranie|Sovereign|Viceroy|
VirginiaSlims|Vogue|West|Winston|SpecialOffer
processed tobacco of all grades, for European market. (www
brandedsite
com)

cigarettes:mayfair,regal,club,benson and hedges,lambert and
butler,superkings,richmonds superkings,tobacco:golden
virginia,drum,wilsons (www[dot]brandedsite[dot]com)


Finest Cigartte from Europe uk's no.1 brand cigatettes king size l&b
clebration park uk duty paid.Hookah (www[dot]brandedsite[dot]com)
kinds of cigarettes Light and Mid and Normal (www brandedsite com)
with a competitive prices FOB or CNF cif
(www[dot]brandedsite[dot]com)
buy China brand cigarettes direct from manufacturer (www brandedsite
com)
```

are you looking for suppliers of high quality shisha tobacco
interested in exporting to Poland, to feed the developing popularity
of shisha smoking in the country. So far only low quality producers
are present on the market, and only small batches of high quality
tobacco is being brought to the country by individuals who travel
abroad or order from internet stores in other countries for personal
use, yet the demand for higher quality tobacco is very high on all
community forums, as well as among hookah bar owners.
(www[dot]brandedsite[dot]com)

1: Guarantee delivery due to nice packing and smart shipping (www
brandedsite com)

2: Good price and quality (www[dot]brandedsite[dot]com)

3: L&B, B&H, Benson, Hedges, Super Kings and Other Brand Cigarettes
www brandedsite com
only welcome serious buyer from all over the world to contact for
more
info!!!

brandedsite[@]hotmail[dot]com   (www[dot]brandedsite[dot]com)

www brandedsite com

lyh_20082008 --2011

From 8011626260661480401
X-Google-Thread: 10e8ad,89f51eb7b9601086,start
X-Google-Thread: 10b9c8,89f51eb7b9601086,start
X-Google-Attributes: gid10e8ad,gid10b9c8,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news3.google.com!news2.google.com!
border1.nntp.dca.giganews.com!nntp.giganews.com!nx01.iad01.newshosting.com!
newshosting.com!198.186.194.249.MISMATCH!transit3.readnews.com!news-
xxxfer.readnews.com!news-out.readnews.com!transit4.readnews.com!panix!
rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-202 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Mon, 21 Jul 2008 10:17:29 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 288
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000301c8eb3c$7591e580$60b5b080$@net>

```
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix1.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1216649847 14533 166.84.1.1 (21 Jul 2008 14:17:27 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Mon, 21 Jul 2008 14:17:27 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news1.google.com rec.radio.amateur.space:72 rec.radio.info:135
```

AMSAT NEWS SERVICE
ANS-202

```
**************************************************************
***  2008 AMSAT Space Symposium and Annual General Meeting ***
***            October 24-26 in Atlanta, Georgia           ***
*********New Forms Online to register for this event**********
**************************************************************
```

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* Satellite Shorts From All Over
* Informational Changes
* Executive Board Meeting
* The UK Space Colloquium will be Webcast
* ARISS Status - 14 July 2008
* NEW OSCAR Satellite Identities Issued

SB SAT @ AMSAT $ANS-202.01
Satellite Shorts From All Over

AMSAT News Service Bulletin 202.01
From AMSAT HQ SILVER SPRING, MD.
July 20, 2008
To All RADIO AMATEURS
BID: $ANS-202.01

+ NASA's Deep Impact spacecraft has created a video of the moon transiting (passing in front of) Earth as seen from the spacecraft's point of view 31 million miles (50 million kilometers away.
Quick Time version is available at:
http://www.nasa.gov/topics/solarsystem/features/epoxi_transit.html

YouTube version is available at:

http://www.universetoday.com/2008/07/17/an-alien-view-of-the-moon-transiting-earth/

+ On-line video from the Dayton 2008 SDR Forum can be found at: http://www.hamsdr.com/dnld.aspx. Scroll down the list to the links labeled "Dayton_2008_Video".

+If you like some ideas about what Satellites were like in the past, here is a link to a great puplication. I remember always having it around my shack to show people about various types and operating of satellites.

http://www.amsat-dl.org/pic/gallery2/main.php?g2_itemId=7527

+Full programme at the AMSAT-UK Space Colloquium

AMSAT-UK will be holding their 23rd International Space Colloquium at the University of Surrey, Guildford, from Friday 25th until Sunday 27th July. On Friday, in addition to the main lecture programme there will be a special Beginners Workshop to show newcomers how to use the many amateur satellites that are available. RSGB Amateur Radio Manager Carlos Eavis G0AKI will be giving a presentation about the plans for a brand new GB4FUN Radio Communications demonstration vehicle on Saturday 26th July. On Sunday morning, the IARU Satellite Adviser Hans, ZS6AKV, will chair the IARU Satellite Forum, which will be attended by the RSGB Microwave Manager Murray Niman, G6JYB. He will be available for questions on the papers relating to amateur satellite operation being presented by the RSGB to the IARU Region 1 conference at Cavtat in November. The event is open to all Radio Amateurs and SWL's. It is planned to broadcast some of the proceedings live via the internet at www.batc.tv [Thanks Ian, G3ZHI]

[ANS thanks everyone for the above information]

/EX

SB SAT @ AMSAT $ANS-202.02
Informational Changes

AMSAT News Service Bulletin 202.02
   From AMSAT HQ SILVER SPRING, MD.
July 20, 2008
To All RADIO AMATEURS
BID: $ANS-202.02

In the past weeks AMSAT's engineering department has experienced some difficult times. At the present time Rick Hambly, W2GPS is acting VP Engineering. In that role he will be the team leader of all active teams and he will be the arbiter of the guidance provided to engineering by the Board.

Rick wants to thank Bob McGwier N4HY for his service as VP Engineering. He single handedly revitalized the department and brought on many new high quality volunteers to work on AMSAT new vision. He has also been the genesis of new concepts like the use of software defined radio concepts as the basis for our new high performance linear transponder design (SDX) and for the implementation of a better HELAPS transmitter design using modern digital techniques to control its linearity. Fortunately Bob is staying actively involved in AMSAT and in our engineering efforts. He will be a key asset as we continue our march toward achieving AMSAT Mission and Vision.

Rick has also created an advisory committee to work on a new Engineering organization proposal. It is expected that this group will act quickly to provide an operational proposal for the next VP of Engineering to use in moving the engineering group toward meeting the goals of that group set a number of years ago.

[ANS thanks Gould, WA4SXM for the above information]

/EX

SB SAT @ AMSAT $ANS-202.03
Executive Board Meeting

AMSAT News Service Bulletin 202.03
   From AMSAT HQ SILVER SPRING, MD.
July 20, 2008
To All RADIO AMATEURS
BID: $ANS-202.03

An AMSAT executive meeting is planned for board members and senior officers in mid August to discuss the current status and future direction of AMSAT. The outcomes and expected results will be presented to the membership at the AMSAT Symposium in Atlanta, Oct 24-26.

[ANS thanks Gould, WA4SXM for the above information]

/EX

SB SAT @ AMSAT $ANS-202.04
The UK Space Colloquium will be Webcast

AMSAT News Service Bulletin 202.04
From AMSAT HQ SILVER SPRING, MD.
July 20, 2008
To All RADIO AMATEURS
BID: $ANS-202.04

Thanks to the British Amateur Television Club (BATC) this years AMSAT-UK International Space Colloquium will be streamed live on the web.

Peter Blakeborough G3PYB, President of BATC, will be streaming video of the event live to the Internet so that Radio Amateurs and SWL's can watch it from anywhere in the world. This service will be available at http://www.batc.tv/

As well as live video BATC will also be providing a Live Chat web page enabling viewers to post messages.

The 23rd AMSAT-UK International Space Colloquium will be held at the University of Surrey, Guildford, England from Friday 25th until Sunday 27th July.

The Colloquium is open to all Radio Amateurs and SWL's. Either day passes or full packages comprising overnight accommodation and meals are available. An online booking service is available with PayPal, Visa and Master Card payments accepted.

For further details see http://www.uk.amsat.org/Colloquium/

A site map showing location of the Management Building and the adjacent main car park and conference visitors parking can be seen at http://www.uk.amsat.org/images/stories/uosmap6.jpg

Travel information: http://www.uk.amsat.org/content/view/23/52/

AMSAT-UK Tel: +44 (0)1258 453959
Email: g3wgm@amsat.org

Related URL's

British Amateur Television Club (BATC)
http://www.batc.org.uk/

BATC Video website
http://www.batc.tv/

[ANS thanks Trevor, M5AKA, for the above information]

/EX

SB SAT @ AMSAT $ANS-202.05
ARISS Status - 14 July 2008

AMSAT News Service Bulletin 202.05
From AMSAT HQ SILVER SPRING, MD.
July 14, 2008
To All RADIO AMATEURS
BID: $ANS-202.05

ARISS Status Report for the week of July 14, 2008

1. Upcoming School Contacts

An ARISS contact was held with the Department of Astronomy & Space Sciences (DASS) at the Kuwait Science Club in Safat, Kuwait on Monday, July 14 at 17:05 UTC. Telebridge station WH6PN in Hawaii assisted with the contact. DASS aims to spread scientific awareness in the fields of astronomy and space sciences by actively engaging the public in exploring the cosmos. This educational activity will educate young people about space stations, satellites and ham radio. A national competition will be announced through Ministry of Education for all schools in Kuwait. The competition will encourage students to do research in space science. Four students will be selected from 3 levels (elementary, middle, high school) to ask questions of the astronaut. Extensive media coverage is expected from at least 3 television stations, several newspapers, magazines and radio stations.

European Space Camp 2008 will be held at the Zanka Children and Youth Centre in Zanka, Hungary for the children of ESA employees. The camp has been scheduled for an ARISS contact on Thursday, July 24. The Hungarian Astronautical Society (HAS) is organizing the event. The Radio Club of the Puskas Polytechnic (HA5KHC) will provide equipment and support the contact.

2. Canadian Campers Participate in Successful ARISS Contact

On Wednesday, July 9, youth attending the National Agriculture Museum in Ottawa, Ontario, Canada participated in an ARISScontact via telebridge station W6SRJ in Santa Rosa, California. Greg Chamitoff, KD5PKZ, answered 14 questions posed to him by 12 campers as an audience of approximately 120 watched. One television station, 2 radio stations, and one member of the press covered the event. The museum reported on the contact using its Web site. Radio station CFRA, which is the most listened to news radio station in Eastern Ontario, played the audio and interview throughout the day.

3. ARRL Article on ARISS Activities

On Tuesday, July 8, the American Radio Relay League (ARRL) ran an article on ARISS contacts which are taking place during the month of

July. See: http://www.arrl.org/news/stories/2008/07/08/10202/?nc=1

The story is also available on The ARRL Letter:
http://www.arrl.org/arrlletter/08/0711/

4. ARISS Face to Face Meeting

The ARISS team is meeting in Moscow this week for its annual face to face meeting. The conference will be held July 17-18 and will be preceded by an Amateur Radio Working Group (ARWG) meeting July 14-16.

[ANS thanks Carol, KB3LKI, for the above information]

/EX
SB SAT @ AMSAT $ANS-202.06
NEW OSCAR Satellite Identities Issued

AMSAT News Service Bulletin 202.06
From AMSAT HQ SILVER SPRING, MD.
July 20, 2008
To All RADIO AMATEURS
BID: $ANS-202.06

Satellite CUTE-1.7 + APD II has been issued the OSCAR Number CO-65.
This was at the request of Tokyo Institute of Technology.
lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

Satellite SEEDS II Has been issued the OSCAR number CO-66.
This was requested by Nihon University.
(http://sat.aero.cst.nihon-u.ac.jp)

[ANS thanks Drew, KO4MA, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Dee Interdonato

From -6324241829238414963
X-Google-Thread: 10e8ad,753f03582c400af7,start
X-Google-Thread: 10b9c8,753f03582c400af7,start
X-Google-Attributes: gid10e8ad,gid10b9c8,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit

```
Path: g2news1.google.com!news1.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx02.iad01.newshosting.com!newshosting.com!
198.186.194.249.MISMATCH!transit3.readnews.com!news-out.readnews.com!news-
xxxfer.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-206 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Thu, 24 Jul 2008 08:42:10 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 1445
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000701c8ed8a$ab2e7f00$018b7d00$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix1.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1216903327 26845 166.84.1.1 (24 Jul 2008 12:42:07 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Thu, 24 Jul 2008 12:42:07 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news1.google.com rec.radio.amateur.space:73 rec.radio.info:140
```

This report is organized into FIVE parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites
Part 5 (S5) - deborbited/returned satellites

SB SAT @ AMSAT W8ISS ANS-206.S1
WSR 206 Part 1 07/24/2008

AMSAT NEWS SERVICE BULLETIN 206.S1 FROM AMSAT HQ
SILVER SPRING, MD, July 24 2008
TO ALL RADIO AMATEURS
BID: $ANS-206.S1

VO-52 HAMSAT
Catalog number: 28650

```
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink:   435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink:   435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW


Indian Beacon:  145.859330 MHZ CW
Dutch Beacon:   145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsat.in/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is
active. Each transponder has a different beacon.
[06252007]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational - Software reload

Current Modes:   FM Repeater - V/u
                               V2u2
                 BBS         - OFF
                 Telemetry   - OFF

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink:   145.880 MHZ FM
                       145.880 MHz USB
                       145.920 MHz FM
                      1268.700 MHz FM 67Hz PL tone
Digital Downlinks:     435.150 MHz FM 38k4 Digital, PBP, 1 watt output
                       435.150 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:        145.860 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
```

```
                      1268.700 mhz FM 9k6 PBP Digital
Beacon:                435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[072408]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002

Status: Operational.

Current Mode: V/u

Uplink:   145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute
timer
   on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the
repeater on
   and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset
the 10
   minute timer.
[05282007]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Operational - check operational schedule for current times!!
```

```
Current Mode: V/u

Voice/CW Mode JA
Uplink:   145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon:   435.795 MHz

Digital Mode JD
Uplinks:  145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage: http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's CW
telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts.htm
[0820007]
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993

Status: Operational

Current Mode: V/u

Uplink:   145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[12132007]
=====
AO-16 PACSAT
Catalog number: 20439
```

```
Launch Date: January 22, 1990

Status: TESTING - VOICE

Current Mode:  V/u

Uplink:         145.900 MHz FM 1200-baud Manchester FSK (reserved)
                145.920 MHz FM VOICE
                145.940 MHz FM 1200-baud Manchester FSK (reserved)
                145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink:       437.026 MHz USB VOICE
                ( 1200-baud PSK - MBL Telemetry Only )

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[03202008]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational depending on amount of Sunlight

Current Mode: Listen before transmitting

Uplink:   145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink:  29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons:   29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/

AO-7 Usage Guidelines on the AO-7 Log and Resource Site located at:
http://www.planetemily.com/ao7
```

[05282007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Mode: FM Repeater - U/v
Voice - Occasianally
BBS - ON
APRS - ON
SSTV - OFF

Expedition 17 crew:

Commander:	Sergey Volkov	RU3DIS
Flight Engineer:	Oleg Kononenko	RN3DX
Flight Engineer:	Greg Chamitoff	KD5PKZ

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM
Worldwide packet downlink: 145.825 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS
RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is

NOT translated from Russian and posted.
[06122008]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-206.S2
WSR 206 Part 2 07/24/2008

AMSAT NEWS SERVICE BULLETIN 206.S2 FROM AMSAT HQ
SILVER SPRING, MD, July 24 2008
TO ALL RADIO AMATEURS
BID: $ANS-206.S2

RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number:
Launch Date: May 23, 2008

Status: Operational

Curent Mode: Telemetry
             Audio
             Images

Downlinks: 435.315 MHz
           435.215 MHz
[05292008]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.
[11152007]
=====
CP3
Catalog Number: 31128
Launch Date: April 17,2007

Status: Operational

Current Mode: /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[07302007]

=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: In Orbit

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder: 145.825 Mhz FM
[02052007]
=====
NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Operational

Current Mode: /u

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[10222007]
=====
GENESAT-1 ?O-??
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Current Mode: /u

Telemetry Beacon Downlink: 437.0670 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[01082007]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon: 437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
[03262007]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003

Status: Operational

Current Mode: /u

Beacon: 436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[01082007]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Semi-Operational - Constant Carrier only

Uplink: 1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan ?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[01082007]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW

```
[08132007]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational - Softawre Reload

Current Modes:    FM Repeater - V/u
                                V2/u2
                  BBS         - OFF
                  Telemetry   - OFF

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink:   145.880 MHZ FM
                       145.880 MHz USB
                       145.920 MHz FM
                      1268.700 MHz FM 67Hz PL tone
Digital Downlinks:     435.150 MHz FM 38k4 Digital, PBP, 1 watt output
                       435.150 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:        145.860 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      1268.700 mhz FM 9k6 PBP Digital
Beacon:                435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[07242008]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Hibernation until full sunlight in November

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink:        144.390 Mhz 1200 Baud
```

```
PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[09242007]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Current Modes: V/U
               L/U

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[09172007]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984

Status: Semi-operational.

Current Mode:  /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon:          435.025 MHz
Mode-S Beacon:     2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[01242008]
=====
RS-22 RADIO SPORT RS-22
```

```
Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only

Current Mode:  /u

CW Beacon - 435.352 MHz
            145.818 MHz
[08062007]
=====
Can X-2
Catalog number:
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web page:
http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[05292008]
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink: 437.425 MHz

For the latest project status update please visit the AAUSAT-II web
page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[05292008]
=====
Cute-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink:  437.475 MHz 9k6 Packet
Uplink:   1267.600 Mhz

For the latest project status update please visit the Cute-1.7+APD II
web
```

page:
http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78
[05292008]
=====
Compass 1
Catalog number: 32787
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink: 437.275 Mhz CW
437.405 MHz Packet

For the latest project status update please visit the Compass 1 web page:
http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52
[05292008]
=====
DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008

Status: IN ORBIT

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink: 435.530 to 435.570 MHz

Proposed Frequencies:
* Primary telemetry downlink: 145.870 MHz 1200 Baud BPSK AX.25 400mW
* Backup telemetry downlink: 145.930 MHz 1200 Baud BPSK AX.25 400mW
* Linear transponder passband downlink: 145.880 - 145.920 MHz (inverting)
400mW PEP
* Linear transponder passband uplink: 435.570 - 435.530 MHz
* Transponder mode beacon: 145.870 MHz CW (10dB below transponder PEP)

For the latest project status update please visit the Delfi-C3 web page:
http://www.delfic3.nl/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68
[05292008]
=====
Seeds 2
Catalog number:

Launch Date: April 28, 2008

Status: IN ORBIT

Downlink: 437.485 MHz

For the latest project status update please visit the Seeds 2 web page:
http://cubesat.aero.cst.nihon-u.ac.jp/english/main_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36
[05012008]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Mode: FM Repeater - U/v
Voice - Occasianally
BBS - ON
APRS - ON
SSTV - OFF

Expedition 17 crew:
Commander: Sergey Volkov RU3DIS
Flight Engineer: Oleg Kononenko RN3DX
Flight Engineer: Greg Chamitoff KD5PKZ

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM
Worldwide packet downlink: 145.825 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS
RZ3DZR
USA: NA1SS

```
Packet Mailbox:      RS0ISS-11
Packet Keyboard:     RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.
[06122008]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-206.S3
WSR 206 Part 3 07/24/2008

AMSAT NEWS SERVICE BULLETIN 206.S3 FROM AMSAT HQ
SILVER SPRING, MD, July 24 2008
TO ALL RADIO AMATEURS
BID: $ANS-206.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

CP4
Catalog Number: 31122
Launch Date: April 17,2007

Status: Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon:    437.325 MHz CW
[11152007]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Non-Operational

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon:             437.2750 MHz CW

Callsign: JR8YJT
[10152007]
=====
NCUBE-2
```

Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 MHz FM 67Hz CTCSS
Voice Downlink: 2401.835 MHz FM
Packet Up/Downlink: 437.250 MHz 9k6 packet
Packet Downlink   2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non=Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[08132007]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548

Launch date: September 26, 2000

Status: Non-Operational

Uplinks: 145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[007302007]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, callsign KE6QMD, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html

```
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink:   145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
V-band:   145.840 -  145.990 MHz CW/LSB
U-band:   435.550 -  435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks
---------
S2-band:  2401.225 -  2401.475 MHz CW/USB
K-band:  24048.010 - 24048.060 MHz CW/USB
Beacon:   2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)
----------------------------
BEACON   General Beacon (GB)    Middle Beacon (MB)    Engineering Beacon
(EB)
2 m       none                    145.898 MHz           none
70cm      435.438 MHz             435.588 MHz           435.838 MHz
13cm(1)  2400.188 MHz            2400.338 MHz          2400.588 MHz
13cm(2)  2401.173 MHz            2401.323 MHz          2401.573 MHz
3cm     10450.975 MHz           10451.125 MHz         10451.375 MHz
1.5cm   24047.885 MHz           24048.035 MHz         24048.285 MHz
[07162007]
=====
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000
```

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site
at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: ?
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz
145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]

```
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink:   145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign:       POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012006]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:
```

```
Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HL01-11
BBS: HL01-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
```

```
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
LIBERTAD-1
Catalog Number: 31129
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink:   145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[10222007]
=====
LO-19 LUSAT
Catalog number: 20442
```

```
Launch date: January 22, 1990

Status: CW Beacon only

Uplinks:          145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink:      437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[01222007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
[05012006]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986
```

```
Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet: Non-Operational
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon:   145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink  29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
Beacons:   29.450 MHz
          435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon 1:  29.352 MHz (intermittent)
Beacon 2:  29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational
```

```
Uplink:     21.260 to 21.300 MHz CW/USB
Downlink:  145.860 to 145.900 MHz CW/USB

Beacon:    145.860 MHz

Robot:     145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink:   21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon:   29.408 MHz

Robot:    29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-206.S4
WSR 206 Part 4 07/24/2008

AMSAT NEWS SERVICE BULLETIN 206.S4 FROM AMSAT HQ
SILVER SPRING, MD, July 24 2008
TO ALL RADIO AMATEURS
BID: $ANS-1206.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE PROPOSED FOR LAUNCH AT
THIS TIME:

Phase 5a Mars Mission AO-??
Catalog Number:
Proposed Launch Date: 2009 or 2011

Status: Design Phase

For the latest project status update please visit the AMSAT-DL P5-A web
page:
http://ticket-to-mars.org
[01222007]
=====
PHASE 3E AO-??
Catalog number:
Proposed Launch Date: Late 2008

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web
```

page:
http://www.amsat-dl.org/p3e/
[01222007]
=====
Eagle AO-??
Catalog Number:
Proposed Launch Date: Early/Mid 2009

Status: Design Phase

For the latest project status updates please visit the AMSAT-NA webpage:
http://www.amsat.org
[01222007]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-206.S5
WSR 206 Part 5 07/24/2008

AMSAT NEWS SERVICE BULLETIN 206.S5 FROM AMSAT HQ
SILVER SPRING, MD, July 24 2008
TO ALL RADIO AMATEURS
BID: $ANS-206.S5

THE FOLLOWING SATELLITES HAVE DE-ORBITED OR HAVE BEEN RETURNED SAFELY:

NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Operational
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink: 145.825 Mhz FM APRS AX25
APRS Uplink: 145.825 MHz FM APRS AX25
Voice/PSK31 Uplink: 28.120 MHz

Packet to Voice ID: RAFT
[06112007]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live

radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

From 2025700479419333346

```
X-Google-Thread: 10e8ad,9125a890b37bda8b,start
X-Google-Thread: 114aac,9125a890b37bda8b,start
X-Google-Thread: 104cd7,9125a890b37bda8b,start
X-Google-Thread: 110c99,9125a890b37bda8b,start
X-Google-Thread: 111320,9125a890b37bda8b,start
X-Google-Attributes:
gid10e8ad,gid114aac,gid104cd7,gid110c99,gid111320,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!postnews.google.com!v39g2000pro.googlegroups.com!not-for-
mail
From: tamarmadgecay@gmail.com
Newsgroups: rec.radio.amateur.space,rec.radio.shortwave,rec.roller-
coaster,rec.running,rec.scouting.issues
Subject: Amateurs web camchat
Date: Fri, 25 Jul 2008 04:16:06 -0700 (PDT)
Organization: http://groups.google.com
Lines: 1
Message-ID: <63f9744c-4e40-46f6-aa19-6cbd72525f0d@v39g2000pro.googlegroups.com>
NNTP-Posting-Host: 92.112.236.46
Mime-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 7bit
X-Trace: posting.google.com 1216984566 20843 127.0.0.1 (25 Jul 2008 11:16:06 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Fri, 25 Jul 2008 11:16:06 +0000 (UTC)
Complaints-To: groups-abuse@google.com
Injection-Info: v39g2000pro.googlegroups.com; posting-host=92.112.236.46;
     posting-account=lpvsOQoAAADrItjCNLUGUA4f5NKzjLsd
User-Agent: G2/1.0
X-HTTP-UserAgent: Mozilla/4.0 (compatible; MSIE 7.0; Windows NT 5.1; WebMoney
     Advisor; Avant Browser;  Embedded Web Browser from: http://bsalsa.com/; .NET
     CLR 2.0.50727),gzip(gfe),gzip(gfe)
Xref: g2news1.google.com rec.radio.amateur.space:74 rec.radio.shortwave:7605
rec.roller-coaster:1254 rec.running:2052 rec.scouting.issues:715

Amateurs web camchat http://tubepenthouse.servik.com/view_cam.htm



From 2179680717361370490
X-Google-Thread: 10e8ad,8490718e3eaf9a42,start
X-Google-Thread: 10b9c8,8490718e3eaf9a42,start
X-Google-Attributes: gid10e8ad,gid10b9c8,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!newsfeed.stanford.edu!bloom-
beacon.mit.edu!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-209 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sat, 26 Jul 2008 21:09:33 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 318
Approved: RRI Admin <rec-radio-info-request@panix.com>
```

```
Message-ID: <000201c8ef85$765e00a0$631a01e0$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix2.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1217120973 25766 166.84.1.2 (27 Jul 2008 01:09:33 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 27 Jul 2008 01:09:33 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to            rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news1.google.com rec.radio.amateur.space:75 rec.radio.info:147
```

AMSAT NEWS SERVICE
ANS-209

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

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***************************************************************
***  2008 AMSAT Space Symposium and Annual General Meeting  ***
***            October 24-26 in Atlanta, Georgia            ***
*** http://www.amsat.org/amsat-new/symposium/2008/index.php ***
***************************************************************
```

In this edition:

- AMSAT-UK Hosts Successful Space Colloquium
- Delfi-C3 Amateur Radio Transponder Activated
- AMSAT 2008 Field Day Summary
- Cal Poly Requesting Beacon Capture Help
- AMSAT Journal Update
- Satellite Shorts From All Over
- ARISS Status Report for the Week of July 21, 2008

SB SAT @ AMSAT $ANS-209.01

AMSAT-UK Hosts Successful Space Colloquium

AMSAT News Service Bulletin 209.01
>From AMSAT HQ SILVER SPRING, MD.
July 27, 2008
To All RADIO AMATEURS
BID: $ANS-209.01

A successful 23rd AMSAT-UK International Space Colloquium was held at the University of Surrey, Guildford, England this weekend.

Prof Sir Martin Sweeting, G3YJO Chairman AMSAT-UK, opened the Colloquium on Friday. This was followed by the keynote speech given by Dr Rob Gowen, Department of Space & Climate Physics (Mullard Space Science Laboratory, University College London and Coordinator of the UK Lunar Penetrator Consortium) on "Science Penetrators for the UK MoonLITE mission".

On Saturday the Delfi-C3 team gave a presentation on their exciting new satellite. Its SSB/CW 435/145 linear transponder will activated soon and is sure to prove popular with satellite enthusiasts world-wide.

Saturday's Colloquium schedule also included presentations from AMSAT-DL on both the eagerly awaited P3E High Earth Orbiting satellite and the pioneering Mars Orbiter P5A. This will be the first private venture spacecraft to travel to the Red Planet providing Radio Amateurs with some true DX signals.

A complete listing of the Colloquium Technical program can be found at: http://www.uk.amsat.org/content/view/640/213/

The IARU Satellite Forum chaired by the IARU Satellite Adviser Hans van de Groenendaal ZS6AKV also met during the Colloquium weekend. The main topic included Band planning for satellite operations on frequencies in the Amateur Service.

The Colloquium included a live webcast of the proceedings via http://www.batc.tv/. There was a Live Chat page available to enable web viewers to post messages.

[ANS thanks Trevor, M5AKA and AMSAT-UK for the above information]

/EX

SB SAT @ AMSAT $ANS-209.02
Delfi-C3 Amateur Radio Transponder Activated

AMSAT News Service Bulletin 209.02
>From AMSAT HQ SILVER SPRING, MD.
July 27, 2008
To All RADIO AMATEURS

BID: $ANS-209.02

The Delfi team activated the Amateur Radio 435 to 145 MHz linear transponder onboard the satellite activated just before they left the Netherlands to attend the AMSAT-UK Colloquium which was held July 25-27 at the University of Surrey in Guildford, England.

The Amateur Radio satellite Delfi-C3 (DO-64), built at the Delft University of Technology in the Netherlands, was launched in April. Since then it has been collecting educational research data for use by the university students with the assistance of Radio Amateurs around the world.

Members of the Delfi-C3 team gave presentations during the Colloquium about their exciting new Amateur Radio satellite.

The transponder can be accessed with these frequencies:
Transponder mode beacon: 145.870 MHz CW
Linear transponder downlink: 145.880 - 145.920 MHz
Linear transponder uplink: 435.570 - 435.530 MHz

All frequencies are +/- Doppler shift that can be up to 3 kHz at 145 MHz. As it's an inverting transponder a LSB signal on the uplink would be translated to a USB signal on the downlink.

The transponder mode was switched on during this weekend whenever it was within range of Europe and automatically switched back to science (telemetry) mode when it entered eclipse about 1 hour later.

Rob, PE1ITR reported from the Netherland on Saturday, July 26, "Today I made my first QSO around 10:53UTC and worked HA2RD with 5x7 signals. I also heard F5ETM."

Alan, ZL2BX said, "The transponder was on over ZL this morning 2036UT pass with weak signals from transponder downlink and beacon. It was active again on the 2212UT pass with very good signals from both transponder downlink and beacon."

More information on this satellite can be found at:
Delfi-C3: http://www.delfic3.nl/

Delfi-C3 Videos on YouTube can be found at:
http://www.youtube.com/user/DelfiC3

[ANS thanks the Delfi-C3 Team and AMSAT-UK for the above information]

/EX

SB SAT @ AMSAT $ANS-209.03
AMSAT 2008 Field Day Summary

AMSAT News Service Bulletin 209.03

>From AMSAT HQ SILVER SPRING, MD.
July 27, 2008
To All RADIO AMATEURS
BID: $ANS-209.03

AMSAT Director Contests and Awards Bruce Paige, KK5DO, provided an executive summary of participation in the 2008 AMSAT Field Day.

The results will be published in the July/August AMSAT Journal. This includes some really nice photos that were sent in. Detailed results will also be posted in an ANS bulletin.

This year, we had 8 satellites used. There was even one QSO on AO-16. A total of 120 QSO's were reported and we had 17 stations submit scores. The most contacts were done on VO-52 this year. Behind that was AO-7.

Here are some statistics from this year and previous years:

	2005	2006	2007	2008
Satellites	8	7	5	8
QSO's	120	258	207	220
Stations	11	21	13	17

Watch your mailbox for your copy of the AMSAT Journal and standby for more Field Day news via ANS.

[ANS thanks Bruce, KK5DO for the above information]

/EX

SB SAT @ AMSAT $ANS-209.04
Cal Poly Requesting Beacon Capture Help

AMSAT News Service Bulletin 209.04
>From AMSAT HQ SILVER SPRING, MD.
July 27, 2008
To All RADIO AMATEURS
BID: $ANS-209.04

Jason Anderson, KI6GIV, at California Polytechnic State University is requesting amateur radio operators worldwide to assist with capturing the telemetry of the Cal Poly CP4 satellite.

Jason wrote, "We have seen some unpredictable behavior on our satellite, CP4. Since we only have contact with the satellite once every 12 hours, it would be extremely helpful if we could get some global support with collecting beacons to get a more complete picture of the the satellite's health."

Please send any collected data (audio or decoded binary) via email to:, jander06@calpoly.edu

Satellite Link Information

Frequency: 437.325Mz
Modulation: FSK (but uses LSB cheat to make AFSK)
Radio Mode: LSB (neccesary for LSB cheat)
Baud Rate: 1200
Beacon rate: 1 beacon/minute (maybe change to 5 minutes if satellite changes mode)

[ANS thanks Jason, KI6GIV for the above information]

/EX

SB SAT @ AMSAT $ANS-209.05
AMSAT Journal Update

AMSAT News Service Bulletin 209.05
>From AMSAT HQ SILVER SPRING, MD.
July 27, 2008
To All RADIO AMATEURS
BID: $ANS-209.05

AMSAT Journal Editor, Ed Long, WA4SWJ reported that the next issue of the Journal has been delivered to the printer and will be on its way to your mailbox soon.

Ed reminds members to get busy, "I am PAST DUE for articles for the next issue. If you have an article you would like to submit to the Journal please send it as soon as you can to:
journal at amsat dot org."

[ANS thanks Ed, WA4SWJ for the above information]

/EX

SB SAT @ AMSAT $ANS-209.06
Satellite Shorts From All Over

AMSAT News Service Bulletin 209.06
>From AMSAT HQ SILVER SPRING, MD.
July 27, 2008
To All RADIO AMATEURS
BID: $ANS-209.06

+ The European Space Agency has announced the commencement of payload selection for VERTA-1, the Vega second flight. The primary objective of the VERTA-1 mission is to demonstrate the multiple-payload capability of the Vega launch system into a low-Earth, Sun-synchronous orbit in the 500-800 km altitude range. Payload opportunities are open to any private or public entity, without restriction as to

nationality. For more information see:
http://www.esa.int/SPECIALS/Launchers_Home/SEM3MKXIPIF_0.html

+ FO-29 has been only turned on over Japan for several months as the ground controllers worked on battery power managment to conserve this satellite for as long as possible. This past week several reports have been received that FO-29 has been heard over most of its orbit in other parts of the world. Frank, VK5MFW reported contacts with ZL2BX and ZL1BVA. Mak, SV1BSX reported a contact with SW1JGW and DL6HP. Users are encouraged to continue to be careful with this satellite's power budget and cease operation if the downlink signal weakens or experiences FM shifting.

[ANS thanks everyone for the above information]

/EX

SB SAT @ AMSAT $ANS-209.07
ARISS Status Report for the Week of July 21, 2008

AMSAT News Service Bulletin 209.07
>From AMSAT HQ SILVER SPRING, MD.
July 27, 2008
To All RADIO AMATEURS
BID: $ANS-209.07

1. School Contacts

European Space Camp 2008 held at the Zanka Children and Youth Centre in Zanka, Hungary for the children of ESA employees. had an ARISS contact on Thursday, July 24. The Hungarian Astronautical Society (HAS) organized the event. The Radio Club of the Puskas Polytechnic (HA5KHC) provided equipment and support the contact.

United Space School in Seabrook, Texas is slated for an ARISS contact on Wednesday, July 30 via the telebridge station ON4ISS in Belgium. These students come from around the world for a two week session, during which they stay with local host families while being mentored by astronauts, engineers, and scientists to design a mission to Mars as their team project. Class sessions are held at the University of Houston at Clear Lake.

2. Kuwait Science Club Contact Successful

On Monday, July 14, youth attending the Kuwait Science Club participated in an ARISS contact via the telebridge station WH6PN in Hawaii. Greg Chamitoff, KD5PKZ, answered 16 questions posed to him by 12 children and was answering the 17th question when the signal faded out. The audio from this event was fed into the EchoLink AMSAT (101 377) conference room server which received 11 connections from 3 countries. It was also fed into the EchoLink JK1ZRW (277 208) server and into the IRLP Discovery Reflector 9010. More information and the audio file

may be found on the ARISS-Europe Web site.
See: http://www.ariss-eu.org/2008_07_15.htm

3. ARISS TIM

The ARISS team is meeting in Moscow this week for a Technical Interchange Meeting (TIM). The conference will be held July 21-23.

[ANS thanks Carol, KB3LKI for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM
K9JKM at amsat dot org

From 3602501333303049787
X-Google-Thread: 10e8ad,1f464e131b8b2871,start
X-Google-Thread: 10b9c8,1f464e131b8b2871,start
X-Google-Attributes: gid10e8ad,gid10b9c8,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news2.google.com!border1.nntp.dca.giganews.com!nntp.giganews.com!nx01.iad01.newshosting.com!newshosting.com!198.186.194.249.MISMATCH!transit3.readnews.com!news-xxxfer.readnews.com!news-out.readnews.com!transit4.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-213 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Thu, 31 Jul 2008 21:22:57 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 1446
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <001201c8f375$2e70d990$8b528cb0$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix2.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1217553774 14916 166.84.1.2 (1 Aug 2008 01:22:54 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Fri, 1 Aug 2008 01:22:54 +0000 (UTC)

```
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news2.google.com rec.radio.amateur.space:508 rec.radio.info:662
```

This report is organized into FIVE parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites
Part 5 (S5) - deborbited/returned satellites

SB SAT @ AMSAT W8ISS ANS-213.S1
WSR 213 Part 1 07/31/2008

AMSAT NEWS SERVICE BULLETIN 213.S1 FROM AMSAT HQ
SILVER SPRING, MD, July 31, 2008
TO ALL RADIO AMATEURS
BID: $ANS-213.S1

DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008

Status: OPERATIONAL
Current Mode: U/v - voice

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink: 435.530 to 435.570 MHz

Proposed Frequencies:
* Primary telemetry downlink: 145.870 MHz 1200 Baud BPSK AX.25 400mW
* Backup telemetry downlink: 145.930 MHz 1200 Baud BPSK AX.25 400mW
* Linear transponder passband downlink: 145.880 - 145.920 MHz
(inverting)
  400mW PEP
* Linear transponder passband uplink: 435.570 - 435.530 MHz
* Transponder mode beacon: 145.870 MHz CW (10dB below transponder PEP)

For the latest project status update please visit the Delfi-C3 web page:
http://www.delfic3.nl/

```
IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68
[07312008]
=====
VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink:   435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink:   435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW


Indian Beacon:  145.859330 MHZ CW
Dutch Beacon:   145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsat.in/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is
active. Each transponder has a different beacon.
[06252007]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational - Software reload

Current Modes:   FM Repeater - V/u
                               V2/u2
                 BBS         - OFF
                 Telemetry   - OFF

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink:   145.880 MHZ FM
                       145.880 MHz USB
                       145.920 MHz FM
                      1268.700 MHz FM 67Hz PL tone
```

Digital Downlinks: 435.150 MHz FM 38k4 Digital, PBP, 1 watt output
435.150 MHz FM 9k6 Digital, Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Digital, Pacsat Broadcast Protocol
1268.700 mhz FM 9k6 PBP Digital
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[072408]

=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002

Status: Operational.

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer
on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on
and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10
minute timer.
[05282007]

```
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Operational - check operational schedule for current times!!

Current Mode: V/u

Voice/CW Mode JA
Uplink:   145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon:   435.795 MHz

Digital Mode JD
Uplinks:  145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage: http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's CW
telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts.htm
[0820007]
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993

Status: Operational

Current Mode: V/u

Uplink:   145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear
```

```
Official Webpage: http://www.ao27.org
[12132007]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: TESTING - VOICE

Current Mode:  V/u

Uplink:         145.900 MHz FM 1200-baud Manchester FSK (reserved)
                145.920 MHz FM VOICE
                145.940 MHz FM 1200-baud Manchester FSK (reserved)
                145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink:       437.026 MHz USB VOICE
                ( 1200-baud PSK - MBL Telemetry Only )

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[03202008]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational depending on amount of Sunlight

Current Mode: Listen before transmitting

Uplink:   145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink:  29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons:   29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php
```

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/

AO-7 Usage Guidelines on the AO-7 Log and Resource Site located at:
http://www.planetemily.com/ao7
[05282007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Mode: FM Repeater - U/v
Voice - Occasianally
BBS - ON
APRS - ON
SSTV - OFF

Expedition 17 crew:

Commander:	Sergey Volkov	RU3DIS
Flight Engineer:	Oleg Kononenko	RN3DX
Flight Engineer:	Greg Chamitoff	KD5PKZ

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM
Worldwide packet downlink: 145.825 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS
RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss

ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.
[06122008]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-213.S2
WSR 213 Part 2 07/31/2008

AMSAT NEWS SERVICE BULLETIN 213.S2 FROM AMSAT HQ
SILVER SPRING, MD, July 31, 2008
TO ALL RADIO AMATEURS
BID: $ANS-213.S2

RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number:
Launch Date: May 23, 2008

Status: Operational

Curent Mode: Telemetry
             Audio
             Images

Downlinks: 435.315 MHz
           435.215 MHz
[05292008]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.
[11152007]
=====
CP3
Catalog Number: 31128
Launch Date: April 17,2007

Status: Operational

Current Mode: /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[07302007]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: In Orbit

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder: 145.825 Mhz FM
[02052007]
=====
NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Operational

Current Mode: /u

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[10222007]
=====
GENESAT-1 ?O-??
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Current Mode: /u

Telemetry Beacon Downlink: 437.0670 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[01082007]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

```
Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon:             437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
[03262007]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003

Status: Operational

Current Mode: /u

Beacon:     436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[01082007]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Semi-Operational - Constant Carrier only

Uplink:  1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan ? )

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[01082007]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only
```

```
Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW
[08132007]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational - Softawre Reload

Current Modes:   FM Repeater - V/u
                               V2/u2
                 BBS         - OFF
                 Telemetry   - OFF

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink:   145.880 MHZ FM
                       145.880 MHz USB
                       145.920 MHz FM
                      1268.700 MHz FM 67Hz PL tone
Digital Downlinks:     435.150 MHz FM 38k4 Digital, PBP, 1 watt output
                       435.150 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:        145.860 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      1268.700 mhz FM 9k6 PBP Digital
Beacon:                435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[07242008]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001
```

```
Status: Hibernation until full sunlight in November

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink:        144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[09242007]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Current Modes: V/U
               L/U

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[09172007]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984

Status: Semi-operational.

Current Mode:  /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon:          435.025 MHz
Mode-S Beacon:     2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP
```

```
Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[01242008]
=====
RS-22 RADIO SPORT RS-22
Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only

Current Mode:  /u

CW Beacon - 435.352 MHz
            145.818 MHz
[08062007]
=====
Can X-2
Catalog number:
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web page:
http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[05292008]
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink: 437.425 MHz

For the latest project status update please visit the AAUSAT-II web
page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[05292008]
=====
CO-65 Cute-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008

Status: IN ORBIT
```

Downlink: 437.475 MHz 9k6 Packet
Uplink: 1267.600 Mhz

For the latest project status update please visit the Cute-1.7+APD II web
page:
http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78
[07312008]
=====
Compass 1
Catalog number: 32787
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink: 437.275 Mhz CW
          437.405 MHz Packet

For the latest project status update please visit the Compass 1 web
page:
http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52
[05292008]
=====
CO-66 Seeds II
Catalog number:
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink: 437.485 MHz

For the latest project status update please visit the Seeds 2 web page:
http://cubesat.aero.cst.nihon-u.ac.jp/english/main_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36
[07312008]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Mode: FM Repeater - U/v
              Voice -   Occasianally

BBS - ON
APRS - ON
SSTV - OFF

Expedition 17 crew:
Commander: Sergey Volkov RU3DIS
Flight Engineer: Oleg Kononenko RN3DX
Flight Engineer: Greg Chamitoff KD5PKZ

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM
Worldwide packet downlink: 145.825 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS
RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line is
NOT translated from Russian and posted.
[06122008]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-213.S3
WSR 213 Part 3 07/31/2008

AMSAT NEWS SERVICE BULLETIN 213.S3 FROM AMSAT HQ
SILVER SPRING, MD, July 31, 2008

TO ALL RADIO AMATEURS
BID: $ANS-213.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

CP4
Catalog Number: 31122
Launch Date: April 17,2007

Status: Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon: 437.325 MHz CW
[11152007]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Non-Operational

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon: 437.2750 MHz CW

Callsign: JR8YJT
[10152007]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 MHz FM 67Hz CTCSS
Voice Downlink: 2401.835 MHz FM
Packet Up/Downlink: 437.250 MHz 9k6 packet

Packet Downlink   2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]

=====

UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non=Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[08132007]

=====

AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]

=====

MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Non-Operational

Uplinks: 145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.

```
[007302007]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink:   145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
call-
sign KE6QMD, as per the user service agreement located at the following
URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS:                SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink:   145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000
```

Status: Non-Operational

Uplinks

V-band: 145.840 - 145.990 MHz CW/LSB
U-band: 435.550 - 435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks

S2-band: 2401.225 - 2401.475 MHz CW/USB
K-band: 24048.010 - 24048.060 MHz CW/USB
Beacon: 2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)

BEACON	General Beacon (GB)	Middle Beacon (MB)	Engineering Beacon (EB)
2 m	none	145.898 MHz	none
70cm	435.438 MHz	435.588 MHz	435.838 MHz
13cm(1)	2400.188 MHz	2400.338 MHz	2400.588 MHz
13cm(2)	2401.173 MHz	2401.323 MHz	2401.573 MHz
3cm	10450.975 MHz	10451.125 MHz	10451.375 MHz
1.5cm	24047.885 MHz	24048.035 MHz	24048.285 MHz

[07162007]

=====

OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]

=====

UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web

```
site
at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: ?
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater:         436.250 MHz

Uplinks: Mode B Repeater:  145.825 MHz
Mode J Digipeater:         145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational
```

Uplink: 145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012006]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks: 145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

```
Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
```

Uplink: 145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks: 145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
LIBERTAD-1
Catalog Number: 31129
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink: 145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[10222007]
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990

Status: CW Beacon only

Uplinks: 145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink: 437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[01222007]
=====
WO-18 WEBERSAT

```
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
[05012006]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet: Non-Operational
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983
```

```
Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon:   145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink  29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
Beacons:   29.450 MHz
          435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
```

```
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon 1:  29.352 MHz (intermittent)
Beacon 2:  29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink:     21.260 to 21.300 MHz CW/USB
Downlink:  145.860 to 145.900 MHz CW/USB

Beacon:    145.860 MHz

Robot:     145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink:   21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon:   29.408 MHz

Robot:    29.454 MHz
[05232004]
```

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SB SAT @ AMSAT W8ISS ANS-213.S4
WSR 213 Part 4 07/31/2008

AMSAT NEWS SERVICE BULLETIN 213.S4 FROM AMSAT HQ
SILVER SPRING, MD, July 31, 2008
TO ALL RADIO AMATEURS
BID: $ANS-213.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE PROPOSED FOR LAUNCH AT THIS TIME:

Phase 5a Mars Mission AO-??
Catalog Number:
Proposed Launch Date: 2009 or 2011

Status: Design Phase

For the latest project status update please visit the AMSAT-DL P5-A web page:
http://ticket-to-mars.org
[01222007]
=====
PHASE 3E AO-??
Catalog number:
Proposed Launch Date: Late 2008

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/
[01222007]
=====
Eagle AO-??
Catalog Number:
Proposed Launch Date: Early/Mid 2009

Status: Design Phase

For the latest project status updates please visit the AMSAT-NA webpage:
http://www.amsat.org
[01222007]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-213.S5
WSR 213 Part 5 07/31/2008

AMSAT NEWS SERVICE BULLETIN 213.S5 FROM AMSAT HQ
SILVER SPRING, MD, July 31, 2008

TO ALL RADIO AMATEURS
BID: $ANS-213.S5

THE FOLLOWING SATELLITES HAVE DE-ORBITED OR HAVE BEEN RETURNED SAFELY:

NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Operational
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink: 145.825 Mhz FM APRS AX25
APRS Uplink: 145.825 MHz FM APRS AX25
Voice/PSK31 Uplink: 28.120 MHz

Packet to Voice ID: RAFT
[06112007]
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/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)

* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

```
From 2995513602982747844
X-Google-Thread: 10e8ad,16ed8d88c900ea5e,start
X-Google-Thread: 10b9c8,16ed8d88c900ea5e,start
X-Google-Attributes: gid10e8ad,gid10b9c8,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news4.google.com!feeder.news-service.com!
news.astraweb.com!border2.a.newsrouter.astraweb.com!xlned.com!feeder1.xlned.com!
news-out1.kabelfoon.nl!newsfeed.kabelfoon.nl!xindi.nntp.kabelfoon.nl!npeer.de.kpn-
eurorings.net!npeer-ng1.kpn.DE!bloom-beacon.mit.edu!panix!rri.panix.com!robomod!
not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-216 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sun, 3 Aug 2008 10:21:18 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 330
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000601c8f574$429372b0$c7ba5810$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix2.panix.com
Mime-Version: 1.0
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Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1217773274 3488 166.84.1.2 (3 Aug 2008 14:21:14 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 3 Aug 2008 14:21:14 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news1.google.com rec.radio.amateur.space:77 rec.radio.info:160
```

AMSAT NEWS SERVICE
ANS-216

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**************************************************************
***  2008 AMSAT Space Symposium and Annual General Meeting ***
***            October 24-26 in Atlanta, Georgia           ***
**************************************************************
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ANS is a free, weekly, news and information service of AMSAT North America, The
Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* Falcon-1 Launches from Kwajalein with Three Satellites
* Delfi-C3 / DO-64 Status Update
* FO-29 Analog Transponder Observations
* AMSAT-UK Colloquium Presentations Online
* AMSAT-NA Space Symposium Second Call for Papers
* AMSAT Awards
* ARISS Status - 28 July 2008

SB SAT @ AMSAT $ANS-216.01
Falcon-1 Launches from Kwajalein with Three Satellites

AMSAT News Service Bulletin 216.01

From AMSAT HQ SILVER SPRING, MD.
Augugst 3, 2008
To All RADIO AMATEURS
BID: $ANS-216.01

SpaceX's Falcon-1 rocket lifted off from the Kwajalein atoll on 03 August 2008 at 0334 UTC. On board was the Trailblazer satellite for the Jumpstart Program of the United States Department of Defense's Operationally Responsive Space Office (ORS). Also on board where two triple-cubesats from NASA which have beacons in the amateur 70cm band. Unfortunately, an anomaly occured approximately 2 minutes 20 seconds into the flight.

[ANS thanks SpaceX for the above information]

/EX

SB SAT @ AMSAT $ANS-216.02
Delfi-C3 / DO-64 Status Update

AMSAT News Service Bulletin 216.02
From AMSAT HQ SILVER SPRING, MD.
Augugst 3, 2008
To All RADIO AMATEURS
BID: $ANS-216.02

Wouter Jan Ubbels, PE4WJ, provided the following status update of the Delfi-C3 / DO-64 satellite on behalf of the Delfi-C3 team.

1. We have concluded the first three months of science mission with great success. A big word of thanks to all amateur radio operators around the world for collecting and forwarding telemetry, sending reception reports and observations, and thanks for all the tremendous support we have received. As of today, we have collected 396564 AX.25 frames through the worldwide network... a truly amazing number. Thank you all so much.

2. Delfi-C3 has been switched to permanent transponder mode during the 10:00 UTC pass on July 29th over the Delfi-C3 ground station in The Netherlands. This means that the spacecraft now boots in transponder mode as soon as the spacecraft exits eclipse. This was verified by a successful OBC database dump shortly after that.

3. We plan to switch the satellite back into either basic or science mode, approx. once every 2 weeks for short times during passes over our ground station for housekeeping purposes. During these passes either the 145.870 MHz or 145.930 MHz downlink will be on transmitting 1200 baud BPSK, and the transponder will then be off. We would like to encourage everyone to forward telemetry using RASCAL in the usual way during these passes. Longer periods of BPSK telemetry will be

announced on the AMSAT-BB.

4. Reports have indicated a slight frequency offset of the transponder, i.e. an uplink of 435.556MHz corresponds to 145.900MHz in the downlink passband. This was actually known before launch, and is caused by a slight frequency offset in one of the spacecraft's local oscillators. The video on YouTube is a video from the first transponder contact using our "flatsat" transponder prototype in early 2007, which is not the same as the flight model. However, the flatsat prototype also showed a slight frequency offset, as G0MRF pointed out.

5. The transponder mode beacon is at 145.870MHz, approximately 10dB below PEP, transmitting a CW beacon message, followed by a commemorative Sputnik message consisting of 6 dits. Actually, the CW beacon is transmitted using Double Sideband, there are two CW carriers 1200Hz apart. (Guess where that number comes from hi:)

6. Reports on the transponder's operation are more than welcome, either on the AMSAT-BB (which is read by us on a daily basis) or directly to info at delfic3.nl

Having said all this, the team is happy to open the transponder for use, and wishes you good DX. Enjoy!

73 on behalf of the Delfi-C3 team,
Wouter Jan Ubbels PE4WJ

[ANS thanks Wouter, PE4WJ, for the above information]

/EX

SB SAT @ AMSAT $ANS-216.03
FO-29 Analog Transponder Observations

AMSAT News Service Bulletin 216.03
From AMSAT HQ SILVER SPRING, MD.
Augugst 3, 2008
To All RADIO AMATEURS
BID: $ANS-216.03

Domenico, I8CVS, provided the following observation of FO-29's analog transponder:

Following suggestions of my friend Mak, SV1BSX, I tried FO-29 the night of 27 July during the South bound orbit 58978. AOS for me in JN70ES was at 00:06 UTC and FO-29 was in sun light.

I was alone into the passband and my return signal was very strong above my noise floor with appoximately only 10 watt on a 13 dBi crossed yagi RHCP / LHCP (about 200 watt EIRP)

The SSB return was very clean and without FMing with the usual need to switch RHCP to LHCP time to time to get the best signal strength

At 00:15 UTC FO-29 started to experience the eclipse as per InstanTrack but no sign of reduction of my return signal or FMing was noted.

From 00:15 to 00:21 until my LOS the satellite was over Africa and well in full eclipse for about 6 minutes but my own return signal was still clear ad strong without any sign of FMing. It seems that the battery is working and as far I know the satellite performance seems to be nominal.

The CW beacon was ON all the time.

The transponder is very sensitive so please refrain from using high power because 200 watt EIRP is more than enough.

I thank very much Mak, SV1BSX, for sending to me the results of his experience the previous day which confirm the results that I got. Both confirm that FO-29 seems to be alive and well.

We don't know what JARL did to resurrect this beautiful satellite but while she will last we have another real CW and SSB satellite to work.

Congratulations to JARL

[ANS thanks Domenico, I8CVS, for the above information]

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SB SAT @ AMSAT $ANS-216.04
AMSAT-UK Colloquium Presentations Online

AMSAT News Service Bulletin 216.04
From AMSAT HQ SILVER SPRING, MD.
Augugst 3, 2008
To All RADIO AMATEURS
BID: $ANS-216.04

Presentations from the AMSAT-UK Colloquium have been added to the to the AMSAT-UK website as slide shows. There are a couple that have been held back at the request of their presenters.

Currently there are 15 online at:

http://www.uk.amsat.org/content/view/664/235/

You will find some of the 2007 presentations there as well.

[ANS thanks John for the above information]

/EX

SB SAT @ AMSAT $ANS-216.05
AMSAT-NA Space Symposium Second Call for Papers

AMSAT News Service Bulletin 216.05
  From AMSAT HQ SILVER SPRING, MD.
Augugst 3, 2008
To All RADIO AMATEURS
BID: $ANS-216.05

This is the second call for papers for the 2008 AMSAT Space Symposium and Annual Meeting to be held October 24-26, 2008 in Atlanta, Georgia.

Proposals for papers, symposium presentations, and poster presentations are invited on any topic of interest to the amateur satellite program. An emphasis for this year is an educational outreach to middle and high school students. Another topic if interest is using amateur satellite tracking systems to monitor deep space network objects.

In particular, papers on the following topics are solicited:
. Students & Education
. ARISS
. AO-51
. P3E
. Eagle
. Deep Space Network monitoring
. Any additional satellite-related topics.

We request a one-page abstract as soon as possible. Camera ready copy on paper or in electronic form will be due by September 1, 2008 for inclusion in the printed symposium proceedings. Papers received after this date may not be included in the printed proceedings.

Abstracts and papers should be sent to n8fgv@amsat.org

[ANS thanks Dan, N8FGV, for the above information]

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SB SAT @ AMSAT $ANS-216.06
AMSAT Awards

AMSAT News Service Bulletin 216.06
  From AMSAT HQ SILVER SPRING, MD.
Augugst 3, 2008
To All RADIO AMATEURS
BID: $ANS-216.06

We would like to welcome the following to the satellite community. They have made their first satellite contact and are now members of the AMSAT Satellite Communicators Club.

Bart Tichelaar, KE5GUR
Supun Perera, VE4WSP

The following has earned the AMSAT South Africa Communications Achievement Award.

Rob Rousseau, KI4BKE #US122

The following has earned the AMSAT Sexagesimal Award for 60 contacts.

Doug Papay, KD8CAO #146

To see all the awards visit http://www.amsat.org or http://www.amsatnet.com

[ANS thanks Bruce, KK5DO, for the above information]

/EX

SB SAT @ AMSAT $ANS-216.07
ARISS Status - 28 July 2008

AMSAT News Service Bulletin 216.07
From AMSAT HQ SILVER SPRING, MD.
August 3, 2008
To All RADIO AMATEURS
BID: $ANS-216.07

1. European Space Camp 2008 Contact Successful

On Thursday, July 24, youth attending the European Space Camp 2008 in Zanka, Hungary participated in an Amateur Radio on the International Space Station (ARISS) contact. Astronaut Greg Chamitoff, KD5PKZ, answered the six questions asked of him as 120 students looked on. The audio from this event was fed into the EchoLink AMSAT (101 377) conference room server and received 8 connections from 7 countries including Hungary, Switzerland, Belgium and the U.S. It was also fed into the EchoLink JK1ZRW (277 208) server. The audio file may be found on the ARISS-Europe Web site. Go to:
http://www.ariss-eu.org/Zanka_2008_07_24.mp3

2. ARRL QST Articles on ARISS Activities

The American Radio Relay League (ARRL) published two items covering Amateur Radio on the International Space Station (ARISS) related news in its August issue of QST.

A column called "Hams Head into Space" (page 55) included amateur radio activities that Greg Chamitoff, KD5PKZ, plans to take part in and also activities in which Garrett Reisman, KE5HAE, participated.

The column "75, 50 and 25 Years Ago" on page 102 showed the QST August 1983 cover with astronaut Owen Garriott, W5LFL's picture operating the radios from
space for the very first space amateur radio contacts ever.

[ANS thanks Carol, KB3LKI, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's
Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are
available from the AMSAT Office.

73,
This week's ANS Editor,
Lee McLamb, KU4OS

```
From -7270894870264883378
X-Google-Thread: 10e8ad,1cabe0ee481d530b,start
X-Google-Thread: 113975,1cabe0ee481d530b,start
X-Google-Attributes: gid10e8ad,gid113975,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
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newsfeed.xs4all.nl!newsfeed3.news.xs4all.nl!xs4all!border2.nntp.ams.giganews.com!
nntp.giganews.com!news.astraweb.com!border1.a.newsrouter.astraweb.com!not-for-mail
From: Chris Steyaert <observations@rmob.org>
Newsgroups: rec.radio.amateur.space,sci.astro.amateur
Subject: Radio Meteor Obs. Bull. July 2008
Date: Thu, 07 Aug 2008 23:01:27 +0200
Message-ID: <9kom94pm1a7tu6jqc41l3l0s6ol3ucoahi@4ax.com>
X-Newsreader: Forte Agent 1.93/32.576 English (American)
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Lines: 17
Organization: Unlimited download news at news.astraweb.com
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NNTP-Posting-Host: 12575f64.news.astraweb.com
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Xref: g2news1.google.com rec.radio.amateur.space:78 sci.astro.amateur:2868
```

Radio Meteor Observation Bulletin No. 180 of July 2008 (63 K) is available now as

http://visualrmob.free.fr/rmobtext/rmob0807.txt

More information and the visual presentation of the hourly forward scatter counts can be found on

http://www.rmob.org

http://radio.data.free.fr

Chris

```
From 3307264009795961215
X-Google-Thread: 10e8ad,3a0687eb3c4de73,start
X-Google-Thread: 10b9c8,3a0687eb3c4de73,start
X-Google-Attributes: gid10e8ad,gid10b9c8,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx01.iad01.newshosting.com!newshosting.com!
198.186.194.249.MISMATCH!news-out.readnews.com!transit3.readnews.com!panix!
rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-220 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Thu, 7 Aug 2008 21:50:39 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 1444
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <001901c8f8f9$46e977f0$d4bc67d0$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix3.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1218160239 14794 166.84.1.3 (8 Aug 2008 01:50:39 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Fri, 8 Aug 2008 01:50:39 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
```

X-RRI-Info-2: Send technical complaints to   rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news1.google.com rec.radio.amateur.space:79 rec.radio.info:168

This report is organized into FIVE parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites
Part 5 (S5) - deorbited/returned satellites

SB SAT @ AMSAT W8ISS ANS-220.S1
WSR 220 Part 1 08/07/2008

AMSAT NEWS SERVICE BULLETIN 220.S1 FROM AMSAT HQ
SILVER SPRING, MD, August 07, 2008
TO ALL RADIO AMATEURS
BID: $ANS-220.S1

DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008

Status: OPERATIONAL
Current Mode: U/v - voice

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink: 435.530 to 435.570 MHz

Proposed Frequencies:
* Primary telemetry downlink: 145.870 MHz 1200 Baud BPSK AX.25 400mW
* Backup telemetry downlink: 145.930 MHz 1200 Baud BPSK AX.25 400mW
* Linear transponder passband downlink: 145.880 - 145.920 MHz (inverting)
  400mW PEP
* Linear transponder passband uplink: 435.570 - 435.530 MHz
* Transponder mode beacon: 145.870 MHz CW (10dB below transponder PEP)

For the latest project status update please visit the Delfi-C3 web page:
http://www.delfic3.nl/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68

```
[07312008]
=====
VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink:   435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink:   435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW


Indian Beacon:  145.859330 MHZ CW
Dutch Beacon:   145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is
active. Each transponder has a different beacon.
[08072008]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational - Software reload

Current Modes:   FM Repeater - V/u
                 BBS         - L/u
                 Telemetry   -  /u

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink:   145.880 MHZ FM
                       145.880 MHz USB
                       145.920 MHz FM
                      1268.700 MHz FM 67Hz PL tone
Digital Downlinks:     435.150 MHz FM 38k4 Digital, PBP, 1 watt output
                       435.150 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
```

                      2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Digital, Pacsat Broadcast Protocol
                      1268.700 mhz FM 9k6 PBP Digital
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[08072008]

=====

SO-50 SAUDISAT-1C

Catalog number: 27607
Launch date: December 20, 2002

Status: Operational.

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer
   on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on
   and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10
   minute timer.
[05282007]

=====

FO-29 JAS-2

Catalog number: 24278

Launch Date: August 17, 1996

Status: Operational - check operational schedule for current times!!

Current Mode: V/u

```
Voice/CW Mode JA
Uplink:   145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon:   435.795 MHz

Digital Mode JD
Uplinks:  145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz
```

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage: http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts.htm
[0820007]
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993

Status: Operational

Current Mode: V/u

```
Uplink:   145.850 MHz FM
Downlink: 436.797 MHz FM
```

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[12132007]

```
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: TESTING - VOICE

Current Mode:  V/u

Uplink:         145.900 MHz FM 1200-baud Manchester FSK (reserved)
                145.920 MHz FM VOICE
                145.940 MHz FM 1200-baud Manchester FSK (reserved)
                145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink:       437.026 MHz USB VOICE
                ( 1200-baud PSK - MBL Telemetry Only )

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[03202008]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational depending on amount of Sunlight

Current Mode: Listen before transmitting

Uplink:   145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink:  29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons:   29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
```

```
AO-7 Usage Guidelines on the AO-7 Log and Resource Site located at:
http://www.planetemily.com/ao7
[05282007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Mode: FM Repeater - U/v
              Voice -       V/v
              BBS -         V/v
              APRS -        V/v
              SSTV -        OFF

Expedition 17 crew:
Commander:          Sergey Volkov         RU3DIS
Flight Engineer:    Oleg Kononenko        RN3DX
Flight Engineer:    Greg Chamitoff        KD5PKZ

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink:   145.825 MHz FM
Worldwide packet downlink: 145.825 Mhz FM

Voice:
Region 1 voice uplink:   145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink:      145.800 MHz FM

Crossband Repeater:
Repeater Uplink:         437.800 MHz FM
Repeater Downlink:       145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German:              DP0ISS
Russian:             RS0ISS
                     RZ3DZR
USA:                 NA1SS
Packet Mailbox:      RS0ISS-11
Packet Keyboard:     RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/
```

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.
[08072008]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-220.S2
WSR 220 Part 2 08/07/2008

AMSAT NEWS SERVICE BULLETIN 220.S2 FROM AMSAT HQ
SILVER SPRING, MD, August 07, 2008
TO ALL RADIO AMATEURS
BID: $ANS-220.S2

RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number:
Launch Date: May 23, 2008

Status: Operational

Curent Mode: Telemetry
Audio
Images

Downlinks: 435.315 MHz
435.215 MHz
[05292008]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.
[11152007]
=====
CP3
Catalog Number: 31128
Launch Date: April 17,2007

Status: Operational

Current Mode: /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[07302007]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: In Orbit

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder: 145.825 Mhz FM
[02052007]
=====
NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Operational

Current Mode: /u

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[10222007]
=====
GENESAT-1 ?O-??
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Current Mode: /u

Telemetry Beacon Downlink: 437.0670 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[01082007]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol

Beacon: 437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
[03262007]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003

Status: Operational

Current Mode: /u

Beacon: 436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[01082007]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Semi-Operational - Constant Carrier only

Uplink: 1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan ?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[01082007]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

```
Mode U TLM Beacon
Downlink: 436.8375 MHz CW
[08132007]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational - Softawre Reload

Current Modes:   FM Repeater - V/u
                 BBS         - L/u
                 Telemetry   -  /u

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink:   145.880 MHZ FM
                       145.880 MHz USB
                       145.920 MHz FM
                      1268.700 MHz FM 67Hz PL tone
Digital Downlinks:     435.150 MHz FM 38k4 Digital, PBP, 1 watt output
                       435.150 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:        145.860 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      1268.700 mhz FM 9k6 PBP Digital
Beacon:                435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[08072008]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Hibernation until full sunlight in November

Current Mode: V/v
```

```
General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink:        144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[09242007]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Current Modes: V/U
               L/U

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[09172007]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984

Status: Semi-operational.

Current Mode:  /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon:          435.025 MHz
Mode-S Beacon:     2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[01242008]
```

```
=====
RS-22 RADIO SPORT RS-22
Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only

Current Mode:  /u

CW Beacon - 435.352 MHz
            145.818 MHz
[08062007]
=====
Can X-2
Catalog number:
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web page:
http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[05292008]
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink: 437.425 MHz

For the latest project status update please visit the AAUSAT-II web
page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[05292008]
=====
CO-65 Cute-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink:  437.475 MHz 9k6 Packet
Uplink:   1267.600 Mhz
```

```
For the latest project status update please visit the Cute-1.7+APD II
web
page:
http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78
[07312008]
=====
Compass 1
Catalog number: 32787
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink: 437.275 Mhz CW
          437.405 MHz Packet

For the latest project status update please visit the Compass 1 web
page:
http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52
[05292008]
=====
CO-66 Seeds II
Catalog number:
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink: 437.485 MHz

For the latest project status update please visit the Seeds 2 web page:
http://cubesat.aero.cst.nihon-u.ac.jp/english/main_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36
[07312008]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Mode: FM Repeater - OFF ?
              Voice -       V/v
              BBS -         V/v ?
              APRS -        V/v ?
              SSTV -        OFF
```

Expedition 17 crew:
Commander: Sergey Volkov RU3DIS
Flight Engineer: Oleg Kononenko RN3DX
Flight Engineer: Greg Chamitoff KD5PKZ

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM
Worldwide packet downlink: 145.825 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS
RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.
[06122008]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-220.S3
WSR 220 Part 3 08/07/2008

AMSAT NEWS SERVICE BULLETIN 220.S3 FROM AMSAT HQ
SILVER SPRING, MD, August 07, 2008
TO ALL RADIO AMATEURS
BID: $ANS-220.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

```
CP4
Catalog Number: 31122
Launch Date: April 17,2007

Status: Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon:    437.325 MHz CW
[11152007]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Non-Operational

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon:             437.2750 MHz CW

Callsign: JR8YJT
[10152007]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency:  437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink:        437.250 MHz FM 67Hz CTCSS
Voice Downlink:     2401.835 MHz FM
Packet Up/Downlink:  437.250 MHz 9k6 packet
Packet Downlink     2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
```

```
[01222007]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non=Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[08132007]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink:   435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Non-Operational

Uplinks:   145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink:  437.325 MHz

Broadcast callsign: MYSAT3-11
BBS:                MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial
land and weather imaging payloads offers FM and FSK Amateur Radio
communica-
tion.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a
collaborative effort between the Malaysian government and Surrey
Satellite
Technology Ltd.
[007302007]
=====
NO-45 SAPPHIRE
Catalog number: 26932
```

Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, callsign KE6QMD, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks

V-band: 145.840 - 145.990 MHz CW/LSB
U-band: 435.550 - 435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks

S2-band: 2401.225 - 2401.475 MHz CW/USB
K-band: 24048.010 - 24048.060 MHz CW/USB
Beacon: 2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)

BEACON	General Beacon (GB)	Middle Beacon (MB)	Engineering Beacon (EB)
2 m	none	145.898 MHz	none
70cm	435.438 MHz	435.588 MHz	435.838 MHz
13cm(1)	2400.188 MHz	2400.338 MHz	2400.588 MHz
13cm(2)	2401.173 MHz	2401.323 MHz	2401.573 MHz
3cm	10450.975 MHz	10451.125 MHz	10451.375 MHz
1.5cm	24047.885 MHz	24048.035 MHz	24048.285 MHz

[07162007]
=====
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web site
at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]

```
=====
SO-35 SUNSAT
Catalog Number: ?
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater:         436.250 MHz

Uplinks: Mode B Repeater:  145.825 MHz
Mode J Digipeater:         145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink:   145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK
```

```
Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign:       POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012006]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
```

```
BBS: HL02-12
[05092004]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
```

```
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
LIBERTAD-1
Catalog Number: 31129
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink:   145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[10222007]
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990

Status: CW Beacon only

Uplinks:          145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink:      437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[01222007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational
```

```
Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
[05012006]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet: Non-Operational
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB
```

```
Beacon:   145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink  29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
Beacons:   29.450 MHz
          435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965
```

```
Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon 1:  29.352 MHz (intermittent)
Beacon 2:  29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink:     21.260 to 21.300 MHz CW/USB
Downlink:  145.860 to 145.900 MHz CW/USB

Beacon:    145.860 MHz

Robot:     145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink:   21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon:   29.408 MHz

Robot:    29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-220.S4
```

WSR 220 Part 4 08/07/2008

AMSAT NEWS SERVICE BULLETIN 220.S4 FROM AMSAT HQ
SILVER SPRING, MD, August 07, 2008
TO ALL RADIO AMATEURS
BID: $ANS-220.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE PROPOSED FOR LAUNCH AT THIS TIME:

Phase 5a Mars Mission AO-??
Catalog Number:
Proposed Launch Date: 2009 or 2011

Status: Design Phase

For the latest project status update please visit the AMSAT-DL P5-A web page:
http://ticket-to-mars.org
[01222007]
=====
PHASE 3E AO-??
Catalog number:
Proposed Launch Date: Late 2008

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/
[01222007]
=====
Eagle AO-??
Catalog Number:
Proposed Launch Date: Early/Mid 2009

Status: Design Phase

For the latest project status updates please visit the AMSAT-NA webpage:
http://www.amsat.org
[01222007]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-220.S5
WSR 220 Part 5 08/07/2008

AMSAT NEWS SERVICE BULLETIN 220.S5 FROM AMSAT HQ
SILVER SPRING, MD, August 07, 2008
TO ALL RADIO AMATEURS
BID: $ANS-220.S5

THE FOLLOWING SATELLITES HAVE DE-ORBITED OR HAVE BEEN RETURNED SAFELY:

NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Operational
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink: 145.825 Mhz FM APRS AX25
APRS Uplink: 145.825 MHz FM APRS AX25
Voice/PSK31 Uplink: 28.120 MHz

Packet to Voice ID: RAFT
[06112007]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)

* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

From -8003110161533060
X-Google-Thread: 10e8ad,6b197848bb391b98,start
X-Google-Thread: 10b9c8,6b197848bb391b98,start
X-Google-Attributes: gid10e8ad,gid10b9c8,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx01.iad01.newshosting.com!newshosting.com!
198.186.194.249.MISMATCH!transit3.readnews.com!news-out.readnews.com!news-
xxxfer.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-223 AMSAT News Service Weekly News Bulletins
Followup-To: rec.radio.amateur.space
Date: Sun, 10 Aug 2008 10:37:46 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 340
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000601c8faf6$bc70b160$35521420$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix2.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1218379043 3403 166.84.1.2 (10 Aug 2008 14:37:23 GMT)
X-Complaints-To: abuse@panix.com

NNTP-Posting-Date: Sun, 10 Aug 2008 14:37:23 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to   rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to   rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news1.google.com rec.radio.amateur.space:80 rec.radio.info:175

AMSAT NEWS SERVICE
ANS-223

****
*** 2008 AMSAT Space Symposium and Annual General Meeting ***
***   October 24-26 in Atlanta, Georgia   ***
****

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* Falcon-1 Launch Failure
* THE PERSEID METEOR SHOWER ON AUGUST 12
* "Nanosputnik" Cubesat "Polar Lights"
* ARISS Status - August 4, 2008
* Satellite Shorts
* AMSAT-UK Colloqium

SB SAT @ AMSAT $ANS-223.01
Falcon-1 Launch Failure

AMSAT News Service Bulletin 223.01
   From AMSAT HQ SILVER SPRING, MD.
Augugst 10, 2008
To All RADIO AMATEURS
BID: $ANS-223.01

SpaceX's Falcon-1 rocket lifted off from the Kwajalein atoll on 03 August 2008 at 0334 UTC. On board was the Trailblazer satellite for the

Jumpstart Program of the United States Department of Defense's Operationally Responsive Space Office (ORS). Also on board where two triple-cubesats, PRESAT & NANOSAIL-D, from NASA which had beacons in the amateur 70cm band.

Unfortunately, an anomaly occured approximately 2 minutes 20 seconds into the flight. The engineers said the rocket stages did not separate and the second stage did not ignite.

SpaceX has announced that the problem with the last launch was that the first stage regenerative engine continued burning longer than they expected. It therefore bumped into the second stage after separation. A new downward looking video that includes this action is available at:

http://mfile.akamai.com/22165/wmv/spacex.download.akamai.com/22165/F1-003.asx

[ANS thanks SpaceX and Bruce, VE9QRP, for the above information]

/EX

SB SAT @ AMSAT $ANS-223.02
THE PERSEID METEOR SHOWER ON AUGUST 12

AMSAT News Service Bulletin 223.02
From AMSAT HQ SILVER SPRING, MD.
Augugst 10, 2008
To All RADIO AMATEURS
BID: $ANS-223.02

HAM RADIO IN SPACE: THE PERSEID METEOR SHOWER ON AUGUST 12

Meteor scatter enthusiasts attention. The annual Perseid meteor shower peaks on Tuesday, August 12th. The best time to see them and make contact by bouncing signals off their ionized tails is during the dark hours before dawn on Tuesday morning when forecasters expect 50 to 100 meteors per hour.

The source of the Perseids is Comet Swift-Tuttle, which has littered the August portion of Earth's orbit with space dust. The dusty zone is broad and Earth is already in its outskirts. As a result, even before the peak on August 12th, you may see some "early Perseids" streaking across the night sky. (VHF Reflector)

[ANS thanks ARRL for the above information]

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SB SAT @ AMSAT $ANS-223.03
"Nanosputnik" Cubesat "Polar Lights"

AMSAT News Service Bulletin 223.03
From AMSAT HQ SILVER SPRING, MD.
Augugst 10, 2008
To All RADIO AMATEURS
BID: $ANS-223.03

I am asked by Alexander Zaitev RW3DZ of the Izmiran Institute, in Troitsk outside Moscow, Russia, to publicise his proposed "Nanosputnik" Cubesat "Polar Lights."

FYI the Izmiran Institute made the first spaceborne magnetometer, on Sputnik-3 in 1958. It is at:

http://www.izmiran.ru

RW3DZ recently referred to the Nanosputnik Cubesat in a blog at:

http://www.vhfdx.ru/sputnikovaya-svyaz/50-let-kosmicheskoy-eryi

and on his website at

http://rk3dxb.narod.ru/polar_lights.html

He is establishing a team within the promotion of amateur radio to young people around the RK3DKB club shack at Troitsk. John G7HIA and I were welcomed there last Sunday.

The Nanosputnik is proposed to be built on a 10cm Cubesat frame and to weigh 1 Kg. Command uplink will be in 2 metres and data downlink at various data rates in 70cms, there are precise frequencies given but it is probably unwise for me to give them out at this stage as the satellite is not built yet and I do not know whether IARU frequency coordination has been undertaken. There may be an experimental 5 GHz beacon.

The proposed payload is a unique magnetometer which will detect fluctuations along the flux lines of the magnetosphere and will be oriented along the flux lines within 1 degree by an on-board GLONASS/GPS.

Data sampling will be 1 observation/second and he is interested in downloading every quarter orbit into the GENSO network.

There is also scope for a CCD camera and cosmic ray detector.

Orbital life is estimated as 3 years with rechargeable batteries and a solar panel charging system.

I do not have any information about launch opportunities.

John G7HIA and I will continue to work with RW3DZ and will bring any other information we have to this bb as we get it, although we are not responsible for this Nanosputnik in any way whatsoever.

[ANS thanks Andy, G0SFJ for the above information]

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SB SAT @ AMSAT $ANS-223.04
ARISS Status - August 4, 2008

AMSAT News Service Bulletin 223.04
From AMSAT HQ SILVER SPRING, MD.
August 10, 2008
To All RADIO AMATEURS
BID: $ANS-223.04

1. Upcoming School Contacts

Two simulated Amateur Radio on the International Space Station (ARISS) contacts are scheduled for Tuesday, August 5 with U.S. deployed soldier dependents visiting Euro Space Camp (ESC) in Belgium. These training sessions are terrestrial-based amateur radio contacts using ARISS-equivalent equipment. There will be EchoLink and IRLP coverage of both contacts.

. The first simulated contact is scheduled with Koichi Wakata, KC5ZTA, at approximately 14:20 UTC.
. The second simulated contact will take place with astronaut Soichi Noguchi, KD5TVP, at approximately 14:50 UTC.

An Amateur Radio on the International Space Station (ARISS) contact has been scheduled with Town of Berkeley Heights, New Jersey, Summer Playground Camp on Wednesday, August 13 at 16:08 UTC. The New Providence Amateur Radio Club has been involved with this camp for the last four years. It has provided an introduction to ham radio on the air by setting up HF and VHF stations and having the campers communicate with hams around the world. The ARISS contact will be an extension of this activity.

2. United Space School Contact Successful

An international group of high school students attending United Space School in Seabrook, Texas experienced an Amateur Radio on the International Space Station (ARISS) contact on Thursday, July 31. Telebridge station ON4ISS in Belgium facilitated the contact. Twelve students had16 questions answered by astronaut Greg Chamitoff, KD5PKZ. The audio for this event was fed into the EchoLink AMSAT (101 377) server, receiving 10 connections and it was also fed into the JK1ZRW (277 208) server.

3. ARISS Meetings Held

The annual Amateur Radio on the International Space Station (ARISS) Face to Face Meeting was held in Moscow on July 17-18. Status reports were given by all committees and the election of officers was held. This meeting was preceded by the first Amateur Radio Working Group (ARWG) conference and was followed by a Technical Interchange Meeting (TIM) on July 21-23 where discussions covered SuitSat-2 and ARISS hardware. A final meeting was held at the Gagarin Cosmonauts Training Centre (GCTC) to discuss astronaut training on the ARISS equipment. All meetings were successful, much was accomplished and minutes will be available in the near future.

4. NASA Posts ARISS Article to Web Site

An Amateur Radio on the International Space Station (ARISS) article has been written and posted to NASA Web sites. Several ARISS members were interviewed for the story, including astronaut Bill McArthur, KC5ACR. "Communication From Space Inspires Young Minds" may be found at: http://www.nasa.gov/mission_pages/station/behindscenes/index.html (and on the Kennedy site http://www.nasa.gov/centers/kennedy/news/index.html under "Features").

[ANS thanks Carol, KB3LKI, for the above information]

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SB SAT @ AMSAT $ANS-223.05
Satellite Shorts

AMSAT News Service Bulletin 223.05
From AMSAT HQ SILVER SPRING, MD.
August 10, 2008
To All RADIO AMATEURS
BID: $ANS-223.05

Satellite Shorts From All Over

+ Congratulations are in order for Rafael, XE2RV on attaining VUCC number 164 in satellite mode.

+ John, KD6PAG will be in Scotland from 13 August - 2 September, with 16 August - 21 August 08 in the Shetland Islands. He'll primarily be trying to work the eastern Canada and northeastern parts of the US via satellite. He'll include European passes time permitting. John will be running QRP with a portable antenna similar to an Arrow antenna.

+ The Mid-Atlantic States VHF Conference on Saturday September 27 in Blue Bell, PA will include a presentation by Bob, N4HY to discuss Software Defined Radio Advancements. Also included in this weekend is the HAMARAMA hamfest on Sunday, September 28. For more information see http://www.packratvhf.com.

+ AO-51 ground controllers have been able to boost the downlink power due to increased solar illumination. Both repeaters were reported to be operating at around 400 mW this week in dueal V/U mode.

+ AMSAT area coordinator, Clint Bradford, K6LCS, demonstrated operating via AO-51 and gave his "How to Work Ham Satellites with your HT" presentation in Tarzana, CA, on Saturday morning, August 9. Clint has a 4 page satellite operating tutorial available on-line at: http://homepage.mac.com/clintbradford/Menu3.html.

+ AMSAT received the sad news that Doug Beckwith N4CZT, an avid fan and supporter of Amsat, passed away Sun. July 27 2008. He was 1 day from his 65th birthday. His son, Douglas, wrote to AMSAT, "Thanks for helping him follow his dream."

+ RA3OE reported the first QSO between Russian and Eurasia via DELFI-C3 (DO-64) on August 3 when he had a QSO with Anatoly, UA9UIZ.

[ANS thanks everyone for the above information]

/EX

SB SAT @ AMSAT $ANS-223.06
AMSAT-UK Colloqium

AMSAT News Service Bulletin 223.06
From AMSAT HQ SILVER SPRING, MD.
August 10, 2008
To All RADIO AMATEURS
BID: $ANS-223.06

AMSAT-UK Colloqium Presentation Videos Available On-Line

The Mars Orbiter P5-A Presentation video (lecture 10) is now on the BATC website. To access the videos go to http://www.batc.tv/ and click on the 'Archive' icon on the left. Select which AMSAT-UK lecture you wish to watch then click the 'Play' icon. An additional feature allows you to click on the icon between the 'Progress' bar and the 'Volume' bar to get full screen viewing.

Lectures 4 and 5 are about the MoonLITE project which will be the first Lunar mission by the United Kingdom.

Lectures 6, 7 and 8 are about the Delfi-C3 satellite

Lecture 9 is the P3-E satellite presentation given by AMSAT-DL President Peter Guelzow DB2OS, see also 'Get into Orbit with AMSAT-DL's P3E-Satellite' at http://www.p3e-satellite.org/index.pl?lang=en_EN

Lecture 10 will be the Amateur Radio Mars Orbiter P5-A given by Achim Vollhardt DH2VA, see also 'GO-Mars with AMSAT-DL's P5A Mission' at http://ticket-to-mars.org/index.pl?lang=en_EN

Other video presentations planned to be added include:

Lecture 11 will be the Delfi-n3Xt next generation satellite presentation.

Lecture 12 will be the presentation on the new GB4FUN vehicle given by Carlos Eavis G0AKI

Lecture 13 will be the 2.3/3.4/5.6GHz Signal Generator for Satellite Applications by Grant Hodgson G8UBN

Lectures 14/15 will be the Band planning for satellite operations on frequencies in the Amateur Service by Hans van de Groenendaal ZS6AKV, President AMSAT-SA followed by the IARU Satellite Forum.

The full lecture programme (with video lecture numbers) can be seen at:
http://www.uk.amsat.org/content/view/640/213/

The PowerPoint presentation slides can be viewed at:
http://www.uk.amsat.org/content/view/664/235/

Pictures from the event can be seen at:
http://www.uk.amsat.org/gallery2

[ANS thanks Trevor, M5AKA for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Dee Interdonato, NB2F

From 7650954210769149362
X-Google-Thread: 10e8ad,e05dc48e996055e0,start
X-Google-Thread: 10b9c8,e05dc48e996055e0,start
X-Google-Attributes: gid10e8ad,gid10b9c8,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx01.iad01.newshosting.com!newshosting.com!
198.186.194.249.MISMATCH!news-out.readnews.com!transit3.readnews.com!panix!
rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-230 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sat, 16 Aug 2008 21:25:41 EDT

Organization: The Radio Amateur Satellite Corporation
Lines: 299
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <001601c90008$53541ed0$f9fc5c70$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1218936341 28973 166.84.1.6 (17 Aug 2008 01:25:41 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 17 Aug 2008 01:25:41 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to   rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to   rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news1.google.com rec.radio.amateur.space:81 rec.radio.info:185

AMSAT NEWS SERVICE
ANS-230

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

****
*** 2008 AMSAT Space Symposium and Annual General Meeting ***
***   October 24-26 in Atlanta, Georgia   ***
*** http://www.amsat.org/amsat-new/symposium/2008/index.php ***
****

In this edition:

- 2008 AMSAT North America Space Symposium and BoD Meeting
- Volunteers Needed for AMSAT Booth at ARRL New England Convention
- COMPASS-1 CubeSat in Emergency Mode - Telemetry Reports Needed
- NASA Amateur Radio Digital Learning Network Lesson Plans Available
- AMSAT Leadership Meeting
- WA3GOV SK

* ARISS Status Report for the Week of August 11, 2008

SB SAT @ AMSAT $ANS-230.01
2008 AMSAT North America Space Symposium and BoD Meeting

AMSAT News Service Bulletin 230.01
>From AMSAT HQ SILVER SPRING, MD.
August 17, 2008
To All RADIO AMATEURS
BID: $ANS-230.01

2008 AMSAT North America Space Symposium
24-26 October 2008, Atlanta, Georgia - Call for Papers

This is the second call for papers for the 2008 AMSAT Space Symposium and Annual Meeting to be held October 24-26, 2008 in Atlanta, Georgia.

Proposals for papers, symposium presentations, and poster presentations are invited on any topic of interest to the amateur satellite program. An emphasis for this year is an educational outreach to middle and high school students. Another topic if interest is using amateur satellite tracking systems to monitor deep space network objects.

In particular, papers on the following topics are solicited:
- Students & Education
- ARISS
- AO-51
- P3E
- Eagle
- Deep Space Network monitoring
- Any additional satellite-related topics.

We request a one-page abstract as soon as possible. Camera ready copy on paper or in electronic form will be due by September 1, 2008 for inclusion in the printed symposium proceedings. Papers received after this date may not be included in the printed proceedings.

Abstracts and papers should be sent to n8fgv@amsat.org

Gould, WA4SXM also said this week, "Just as a reminder to all, the AMSAT Board meetings at the Symposium are an open meeting, other than a short segment that is a performance review. You can attend and listen to the entire meeting. This year's meeting in Atlanta will begin Thursday morning 23 Oct and go into the evening (and sometimes after dinner), then resume Friday morning 24 Oct and go until around noon. The Board would welcome your interest."

[ANS thanks the 2008 Symposium Committe and Gould, WA4SXM for the above information]

/EX

SB SAT @ AMSAT $ANS-230.02
Volunteers Needed for AMSAT Booth at ARRL New England Convention

AMSAT News Service Bulletin 230.02
>From AMSAT HQ SILVER SPRING, MD.
August 17, 2008
To All RADIO AMATEURS
BID: $ANS-230.02

Volunteers are needed to man the booth at the 2008 ARRL New England Convention in Boxboro, Friday August 22 through Sunday August 24. If you plan on attenting and have some spare time, please consider volunteering to work the AMSAT booth.

Full information about the convention can be found at:
http://www.boxboro.org/

Please drop Steve, N1JFU an email (smeuse@mara.org) with your availability for either Saturday or Sunday. There will be an AMSAT presentation from 10am-12noon on Saturday organized by Barry Baines, WD4ASW.

[ANS thanks Steve, N1JFU for the above information]

/EX

SB SAT @ AMSAT $ANS-230.03
COMPASS-1 CubeSat in Emergency Mode - Telemetry Reports Needed

AMSAT News Service Bulletin 230.03
>From AMSAT HQ SILVER SPRING, MD.
August 17, 2008
To All RADIO AMATEURS
BID: $ANS-230.03

Since Sunday, the COMPASS-1 CubeSat has been in emergency mode. The battery voltage is very low and the satellite is rebooting every pass. The CW beacon is on in sunlight - but it only transmits on 8 minute intervals.

A hard-reset of the satellite has occurred, which brought the satellite back into a vicious circle: Once the heater is being switched on, the battery power drops drastically, which causes another hard-reset. This goes on and on. The only chance to recover the satellite is to avoid the activation of the heater. This can be done by adjusting threshold values.

The COMPASS team needs as much telemetry as possible. Amateur radio stations around the world are asked to listen to the COMPASS downlink on 437.275 MHz. Any reports will be appreciated. You can find a simple CW telemetry decoder at: http://www.dk3wn.info/software.shtml.

MP3 or WAV files would also provide useful information.

Please send your reports to compass1cubesat@googlemail.com.

The latest Keplerian tracking data is:

```
COMPASS-1
1 32787U 08021E   08226.19180743  .00000095  00000-0  19031-4 0  1184
2 32787 097.9841 285.9110 0015365 316.5637 043.4362 14.81444724 15843
```

[ANS thanks Mike, DK3WN for the above information]

/EX

SB SAT @ AMSAT $ANS-230.04
NASA Amateur Radio Digital Learning Network Lesson Plans Available

AMSAT News Service Bulletin 230.04
>From AMSAT HQ SILVER SPRING, MD.
August 17, 2008
To All RADIO AMATEURS
BID: $ANS-230.04

To help prepare the students for an ARISS experience, NASA has generated a series of teaching modules for the students. They have three different packages available suitable for students in K-4, 5-8 and 9-12 grades (for folks outside the US, "K" is Kindergarten at age ~5, and Grades 1-12 are for ages ~6-18).

The lesson plan packages are described and available from NASA's Digital Learning Network (DLN) at:
http://dln.nasa.gov/dln/content/catalog/details/?cid=634.

[ANS thanks Tom, K3IO for the above information]

/EX

SB SAT @ AMSAT $ANS-230.05
AMSAT Leadership Meeting

AMSAT News Service Bulletin 230.05
>From AMSAT HQ SILVER SPRING, MD.
August 17, 2008
To All RADIO AMATEURS
BID: $ANS-230.05

The AMSAT board members (current and future) and AMSAT senior officers participated in an AMSAT strategy meeting at a BWI airport hotel, Saturday and Sunday August 9 & 10, 2008.

The purpose was to discuss the future direction of AMSAT and things we want to accomplish as an organization during the next 16 months and beyond.

Drew, KO4MA is writing an article about the meeting for the July/August 2008 AMSAT Journal.

Action plans will be developed at the 2008 AMSAT Board meeting Oct 23-24, 2008 which precedes the AMSAT Symposium in Atlanta, Oct 24-25, 2008. An outline of the items discussed will be available from the front page of the AMSAT web site.

[ANS thanks Gould, WA4SXM for the above information]

/EX

SB SAT @ AMSAT $ANS-230.06
WA3GOV SK

AMSAT News Service Bulletin 230.06
>From AMSAT HQ SILVER SPRING, MD.
August 17, 2008
To All RADIO AMATEURS
BID: $ANS-230.06

AMSAT Headquarters received the news below. Martha said, "It is with great sadness that I report the death of Howard Ziserman, WA3GOV at the age of 55."

For many years, Howard served as the Area Coordinator for MD & VA. He volunteered for EVERY hamfest in this area, sometimes traveling over 100 miles away.

He had a love for the Space Program working at the NASA Bioprocessing and Pharmaceutical Research Center in Philadelphia in the early 80's. When he moved to MD in 1989,he combined his love of education and space working on Space Shuttle Mission STS-94 and later on the ARISS program.

Howard had a B.A. from Cornell, a B.E. in EE from Johns Hopkins, an M.S. in Chemistry from U of MD. His dream was to get his PhD and so he left MD in 2001 for Kansas City. There he received his PhD in December of 2006

[ANS thanks Martha at AMSAT HQ for the above information]

/EX

SB SAT @ AMSAT $ANS-230.07
ARISS Status Report for the Week of August 11, 2008

AMSAT News Service Bulletin 230.07

>From AMSAT HQ SILVER SPRING, MD.
August 17, 2008
To All RADIO AMATEURS
BID: $ANS-230.07

1. School Contacts

An ARISS contact was held the with Town of Berkeley Heights, New Jersey, Summer Playground Camp on Wednesday, August 13. The New Providence Amateur Radio Club has been involved with this camp for the last four years. It has provided an introduction to ham radio on the air by setting up HF and VHF stations and having the campers communicate with hams around the world. The ARISS contact will be an extension of this activity.

An ARISS contact has been slated for Thursday, August 21 at 14:55 UTC with Los Padres Council Troop 105 in Santa Barbara, California. Boy Scouts, ages 12-17 will work on their Astronomy, Space Exploration and Radio Merit Badges. Cub Scout units will have materials available to work on the Astronomy and Science belt loops and Astronomy and Science academic pins. The University of California, Santa Barbara (UCSB) Physics Department will make available its astronomy observation deck for the contact and will provide faculty members to instruct the Scouts. The Scouts will be presented with information on the ISS and its crew to prepare them for this activity and the media will be notified.

2. Training Session Contact Scheduled

A simulated ARISS contact has been scheduled for Tuesday, August 12 at approximately 14:00 UTC between ESA astronaut Andre Kuipers, PI9ISS, and youth attending the European Space Camp (ESC) in Belgium. This training session is a terrestrial-based amateur radio contact using ARISS-equivalent equipment. EchoLink and IRLP coverage is expected.

3. Terrestrial Contacts Successful

Two simulated ARISS contacts were scheduled for Tuesday, August 5 between U.S. deployed soldier dependents visiting the European Space Center (ESC) in Belgium and astronauts Koichi Wakata, KC5ZTA and Soichi Noguchi, KD5TVP. The NASA Johnson Space Center was closed due to tropical storm Eduardo which caused the training sessions to be cancelled. Astronaut Mike Fincke, KE5AIT, stepped in to speak with the youth and answered one question from each of the thirty students. Audio will be posted on the ARISS-Europe Web site when available.

[ANS thanks Carol, KB3LKI for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits.

Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM
K9JKM at amsat dot org

From -7116677013717056436
X-Google-Thread: 10e8ad,ce0fd4eda68ca3d7,start
X-Google-Attributes: gid10e8ad,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news4.google.com!feeder.news-service.com!
newsfeed.freenet.de!newsfeed00.sul.t-online.de!t-online.de!news.nask.pl!
news.nask.org.pl!news.onet.pl!not-for-mail
From: "Adrian Szumilas" <szumiksp8aqk@poczta.onet.pl>
Newsgroups: rec.radio.amateur.space
Subject: new www page raport AO51/AO27/SO50/GO32
Date: Sat, 23 Aug 2008 23:34:15 +0200
Organization: Onet.pl
Lines: 9
Message-ID: <g8pvot$u3d$1@news.onet.pl>
NNTP-Posting-Host: 213.199.192.59
X-Trace: news.onet.pl 1219527262 30829 213.199.192.59 (23 Aug 2008 21:34:22 GMT)
X-Complaints-To: usenet@news.onet.pl
NNTP-Posting-Date: Sat, 23 Aug 2008 21:34:22 +0000 (UTC)
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.2180
X-Sender: 86/Qfbr/0nXRStCgkN0Scl4jba1zStNxz8W63N5aZQk=
X-RFC2646: Format=Flowed; Original
X-Newsreader: Microsoft Outlook Express 6.00.2900.2180
X-Priority: 3
X-MSMail-Priority: Normal
Xref: g2news1.google.com rec.radio.amateur.space:82

http://www.sp7thr.csm.pl/AO-51/

http://www.sp7thr.csm.pl/AO-27/

http://www.sp7thr.csm.pl/SO-50/

http://www.sp7thr.csm.pl/GO-32/

From 3603590992595810932
X-Google-Thread: 10e8ad,e7c8be0e4bd69dc3,start
X-Google-Attributes: gid10e8ad,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news2.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx01.iad01.newshosting.com!newshosting.com!

198.186.194.249.MISMATCH!news-out.readnews.com!transit3.readnews.com!panix!
rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-234 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Wed, 27 Aug 2008 10:46:14 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 1351
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000001c90853$abc78fe0$0356afa0$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1219848375 11555 166.84.1.6 (27 Aug 2008 14:46:15 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Wed, 27 Aug 2008 14:46:15 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to   rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to   rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news2.google.com rec.radio.amateur.space:515 rec.radio.info:710

This report is organized into FIVE parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites
Part 5 (S5) - deorbited/returned satellites

SB SAT @ AMSAT W8ISS ANS-234.S1
WSR 234 Part 1 08/21/2008

AMSAT NEWS SERVICE BULLETIN 234.S1 FROM AMSAT HQ
SILVER SPRING, MD, August 21, 2008
TO ALL RADIO AMATEURS
BID: $ANS-234.S1

DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008

Status: OPERATIONAL
Current Mode: U/v - voice

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink: 435.530 to 435.570 MHz

Proposed Frequencies:
* Primary telemetry downlink: 145.870 MHz 1200 Baud BPSK AX.25 400mW
* Backup telemetry downlink: 145.930 MHz 1200 Baud BPSK AX.25 400mW
* Linear transponder passband downlink: 145.880 - 145.920 MHz (inverting)
  400mW PEP
* Linear transponder passband uplink: 435.570 - 435.530 MHz
* Transponder mode beacon: 145.870 MHz CW (10dB below transponder PEP)

For the latest project status update please visit the Delfi-C3 web page:
http://www.delfic3.nl/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68
[07312008]
=====
VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.859330 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

To know what transponder is switched on please listen for the beacon that is
active. Each transponder has a different beacon.

```
[08072008]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational - Software reload

Current Modes:   FM Repeater - V/s
                 BBS         - L/u
                 Telemetry   -  /u

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink:   145.880 MHZ FM
                       145.880 MHz USB
                       145.920 MHz FM
                      1268.700 MHz FM 67Hz PL tone
Digital Downlinks:     435.150 MHz FM 38k4 Digital, PBP, 1 watt output
                       435.150 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:        145.860 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      1268.700 mhz FM 9k6 PBP Digital
Beacon:                435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[08212008]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002

Status: Operational.

Current Mode: V/u

Uplink:   145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz
```

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer
on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on
and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10
minute timer.
[05282007]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Operational - check operational schedule for current times!!

Current Mode: V/u

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
145.870 MHz FM
145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage: http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts.htm
[0820007]
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[12132007]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: TESTING - VOICE

Current Mode: V/u

Uplink: 145.900 MHz FM 1200-baud Manchester FSK (reserved)
                145.920 MHz FM VOICE
                145.940 MHz FM 1200-baud Manchester FSK (reserved)
                145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink: 437.026 MHz USB VOICE
                (1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC 437.050 MHz RHCP
   PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[03202008]
=====
AO-7 AMSAT OSCAR 7

Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational depending on amount of Sunlight

Current Mode: Listen before transmitting

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz CW
145.972 MHz CW
435.100 MHz CW
2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/

AO-7 Usage Guidelines on the AO-7 Log and Resource Site located at:
http://www.planetemily.com/ao7
[05282007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Mode: FM Repeater - U/v
Voice - V/v
BBS - V/v
APRS - V/v
SSTV - OFF

Expedition 17 crew:

Commander:	Sergey Volkov	RU3DIS
Flight Engineer:	Oleg Kononenko	RN3DX
Flight Engineer:	Greg Chamitoff	KD5PKZ

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM
Worldwide packet downlink: 145.825 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS
RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line is
NOT translated from Russian and posted.
[08072008]
NNNN
/EX

This report is organized into FIVE parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites
Part 5 (S5) - deborbited/returned satellites

SB SAT @ AMSAT W8ISS ANS-234.S1
WSR 234 Part 1 08/21/2008

AMSAT NEWS SERVICE BULLETIN 234.S1 FROM AMSAT HQ
SILVER SPRING, MD, August 21, 2008
TO ALL RADIO AMATEURS
BID: $ANS-234.S1

DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008

Status: OPERATIONAL
Current Mode: U/v - voice

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink: 435.530 to 435.570 MHz

Proposed Frequencies:
* Primary telemetry downlink: 145.870 MHz 1200 Baud BPSK AX.25 400mW
* Backup telemetry downlink: 145.930 MHz 1200 Baud BPSK AX.25 400mW
* Linear transponder passband downlink: 145.880 - 145.920 MHz
(inverting)
  400mW PEP
* Linear transponder passband uplink: 435.570 - 435.530 MHz
* Transponder mode beacon: 145.870 MHz CW (10dB below transponder PEP)

For the latest project status update please visit the Delfi-C3 web page:
http://www.delfic3.nl/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68
[07312008]
=====
VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.859330 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is
active. Each transponder has a different beacon.
[08072008]
=====
AO-51 ECHO
Catalog number: 28375

Launch date: June 29, 2004

Status: Operational - Software reload

Current Modes: FM Repeater - V/s
                 BBS   - L/u
                 Telemetry   - /u

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink: 145.880 MHZ FM
                       145.880 MHz USB
                       145.920 MHz FM
                      1268.700 MHz FM 67Hz PL tone
Digital Downlinks: 435.150 MHz FM 38k4 Digital, PBP, 1 watt output
                       435.150 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      1268.700 mhz FM 9k6 PBP Digital
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[08212008]

=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002

Status: Operational.

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute
timer
   on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the
repeater on
   and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset
the 10
   minute timer.
[05282007]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Operational - check operational schedule for current times!!

Current Mode: V/u

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage: http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's CW
telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts.htm
[0820007]

```
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993

Status: Operational

Current Mode: V/u

Uplink:   145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[12132007]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: TESTING - VOICE

Current Mode:  V/u

Uplink:         145.900 MHz FM 1200-baud Manchester FSK (reserved)
                145.920 MHz FM VOICE
                145.940 MHz FM 1200-baud Manchester FSK (reserved)
                145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink:       437.026 MHz USB VOICE
                ( 1200-baud PSK - MBL Telemetry Only )

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[03202008]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational depending on amount of Sunlight
```

Current Mode: Listen before transmitting

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz CW
145.972 MHz CW
435.100 MHz CW
2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/

AO-7 Usage Guidelines on the AO-7 Log and Resource Site located at:
http://www.planetemily.com/ao7
[05282007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Mode: FM Repeater - U/v
Voice - V/v
BBS - V/v
APRS - V/v
SSTV - OFF

Expedition 17 crew:
Commander: Sergey Volkov RU3DIS
Flight Engineer: Oleg Kononenko RN3DX
Flight Engineer: Greg Chamitoff KD5PKZ

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM
Worldwide packet downlink: 145.825 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:

German:	DP0ISS
Russian:	RS0ISS RZ3DZR
USA:	NA1SS
Packet Mailbox:	RS0ISS-11
Packet Keyboard:	RS0ISS-3
Digipeater callsign:	ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line is
NOT translated from Russian and posted.
[08072008]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-234.S3
WSR 234 Part 3 08/21/2008

AMSAT NEWS SERVICE BULLETIN 234.S3 FROM AMSAT HQ
SILVER SPRING, MD, August 21, 2008
TO ALL RADIO AMATEURS
BID: $ANS-234.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

CP4
Catalog Number: 31122
Launch Date: April 17,2007

Status: Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon: 437.325 MHz CW
[11152007]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Non-Operational

```
Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon:             437.2750 MHz CW

Callsign: JR8YJT
[10152007]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency:  437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink:         437.250 MHz FM 67Hz CTCSS
Voice Downlink:      2401.835 MHz FM
Packet Up/Downlink:   437.250 MHz 9k6 packet
Packet Downlink      2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non=Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[08132007]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.
```

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Non-Operational

Uplinks: 145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[007302007]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, callsign KE6QMD, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

```
Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS:                SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink:   145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
V-band:   145.840 -  145.990 MHz CW/LSB
U-band:   435.550 -  435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks
---------
S2-band:  2401.225 -  2401.475 MHz CW/USB
K-band:  24048.010 - 24048.060 MHz CW/USB
Beacon:   2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)
----------------------------
BEACON   General Beacon (GB)    Middle Beacon (MB)    Engineering Beacon
(EB)
2 m       none                    145.898 MHz           none
```

70cm	435.438 MHz	435.588 MHz	435.838 MHz
13cm(1)	2400.188 MHz	2400.338 MHz	2400.588 MHz
13cm(2)	2401.173 MHz	2401.323 MHz	2401.573 MHz
3cm	10450.975 MHz	10451.125 MHz	10451.375 MHz
1.5cm	24047.885 MHz	24048.035 MHz	24048.285 MHz

[07162007]

=====

OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]

=====

UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]

=====

SO-35 SUNSAT
Catalog Number: ?
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz
145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]

=====

```
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink:   145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign:       POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
```

```
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012006]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
```

Launch date: July 17, 1991

Status: Non-Operational

Uplink: 145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Operational

Uplink: 435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons: 435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink: 145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks: 145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
LIBERTAD-1
Catalog Number: 31129
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink: 145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[10222007]
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990

Status: CW Beacon only

Uplinks: 145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink: 437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[01222007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink: 145.825 MHz FM 1200 Baud AFSK
Beacon: 2401.220 MHz
[05012006]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink: 145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting): Non-Operational
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet: Non-Operational
Uplink: 145.8500 MHz MFSK 1200 BPS
Uplink: 145.8700 MHz MFSK 1200 BPS
Uplink: 145.8900 MHz MFSK 1200 BPS
Uplink: 145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon: 145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational

```
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink  29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
Beacons:   29.450 MHz
          435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon 1:  29.352 MHz (intermittent)
Beacon 2:  29.398 MHz
```

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB

Beacon: 145.860 MHz

Robot: 145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-234.S4
WSR 234 Part 4 08/21/2008

AMSAT NEWS SERVICE BULLETIN 234.S4 FROM AMSAT HQ
SILVER SPRING, MD, August 21, 2008
TO ALL RADIO AMATEURS
BID: $ANS-234.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE PROPOSED FOR LAUNCH AT THIS TIME:

Phase 5a Mars Mission AO-??
Catalog Number:
Proposed Launch Date: 2009 or 2011

Status: Design Phase

For the latest project status update please visit the AMSAT-DL P5-A web page:

http://ticket-to-mars.org
[01222007]
=====
PHASE 3E AO-??
Catalog number:
Proposed Launch Date: Late 2008

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/
[01222007]
=====
Eagle AO-??
Catalog Number:
Proposed Launch Date: Early/Mid 2009

Status: Design Phase

For the latest project status updates please visit the AMSAT-NA webpage:
http://www.amsat.org
[01222007]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-234.S4
WSR 234 Part 4 08/21/2008

AMSAT NEWS SERVICE BULLETIN 234.S4 FROM AMSAT HQ
SILVER SPRING, MD, August 21, 2008
TO ALL RADIO AMATEURS
BID: $ANS-234.S4

THE FOLLOWING SATELLITES HAVE DE-ORBITED OR HAVE BEEN RETURNED SAFELY:

NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Operational
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink: 145.825 Mhz FM APRS AX25
APRS Uplink: 145.825 MHz FM APRS AX25
Voice/PSK31 Uplink: 28.120 MHz

Packet to Voice ID: RAFT
[06112007]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

```
From -3359535107989273283
X-Google-Thread: 10e8ad,67b9779eca18fcc5,start
X-Google-Thread: 10b9c8,67b9779eca18fcc5,start
X-Google-Attributes: gid10e8ad,gid10b9c8,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!news1.google.com!news.glorb.com!news-
out.readnews.com!transit3.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-237 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Wed, 27 Aug 2008 13:03:56 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 265
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000501c90851$1b374530$51a5cf90$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix1.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1219856636 607 166.84.1.1 (27 Aug 2008 17:03:56 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Wed, 27 Aug 2008 17:03:56 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news1.google.com rec.radio.amateur.space:84 rec.radio.info:201
```

AMSAT NEWS SERVICE
ANS-237

****
*** 2008 AMSAT Space Symposium and Annual General Meeting ***

***   October 24-26 in Atlanta, Georgia   ***
****

ANS is a free, weekly, news and information service of AMSAT North America,
The
Radio Amateur Satellite Corporation. ANS reports on the activities of a
worldwide group of Amateur Radio operators who share an active interest in
designing, building, launching and communicating through analog and digital
Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* AMSAT Symposium Registrations On The Web
* AMSAT Office Closed Aug. 25 - Sept. 2
* ARISS Contact Video Available
* ARISS Status - 18 August 2008

SB SAT @ AMSAT $ANS-237.01
AMSAT Symposium Registrations On The Web

AMSAT News Service Bulletin 237.01
From AMSAT HQ SILVER SPRING, MD.
August 24, 2008
To All RADIO AMATEURS
BID: $ANS-237.01

2008 AMSAT Symposium registration is now available via the AMSAT store.
The 2008 AMSAT Space Symposium and Annual Meeting will be held October
24-26, 2008 in Atlanta, Georgia. Please join us to learn about the latest
information on AMSAT programs and technical amateur satellite related
topics. Information can be found on the AMSAT web site at
http://www.amsat.org .

[ANS thanks Gould, WA4SXM, for the above information]

/EX

SB SAT @ AMSAT $ANS-237.02
AMSAT Office Closed Aug. 25 - Sept. 2

AMSAT News Service Bulletin 237.02
From AMSAT HQ SILVER SPRING, MD.
August 24, 2008
To All RADIO AMATEURS
BID: $ANS-237.02

The AMSAT office will be closed from Monday, August 25th through Tuesday
September 2nd. I am going on vacation!!!

73- Martha

[ANS thanks Martha for the above information]

/EX

SB SAT @ AMSAT $ANS-237.03
ARISS Contact Video Available

AMSAT News Service Bulletin 237.03
From AMSAT HQ SILVER SPRING, MD.
Augugst 24, 2008
To All RADIO AMATEURS
BID: $ANS-237.03

On August 19, the Santa Barbara Amateur Radio Club (SBARC) made it possible for a local Boy Scout troop (Los Padres Council Troop 105) to contact the International Space Station live via ham radio! The event began at 8:39 AM local time and lasted about 10 minutes. The contact was made at the request of Dr. Gregory Errol Chamitoff Ph.D. (KD5PKZ) an astronaut currently stationed on the ISS. Dr. Chamitoff is an alum of Cal Poly San Luis Obispo and is friends with assistant scout master John Schlesselmann. Several folks, including local hams and staff of the UC Santa Barbara physics department organized the event

Two video recordings of the successful ARISS Contact are available.

http://nasa.id.ucsb.edu/
This was recorded by the University of California Santa Barbara

http://sbarc.camstreams.com/
This was recorded by WB9KMO and is playing constantly on a continuous loop.

Ken Owen, N6KTH, reports that, "We had a great contact today and even had a chance to do an AO51 demo right before the ISS pass." More information about the contact is available on Ken's web page (www.n6kth.com)

[ANS thanks Ken, N6KTH, for the above information]

/EX

SB SAT @ AMSAT $ANS-237.04
ARISS Status - 18 August 2008

AMSAT News Service Bulletin 237.04
From AMSAT HQ SILVER SPRING, MD.
August 24, 2008
To All RADIO AMATEURS
BID: $ANS-237.04

1. Upcoming School Contacts

Schulehaus Feld 1 in Richterswil, Switzerland has been scheduled for an Amateur Radio on the International Space Station (ARISS) contact on Saturday, August 30 at 13:50 UTC. Telebridge station VK4KHZ in Queensland, Australia will assist with the contact. Fifth graders covered the solar system and space in their studies and prepared questions during their English classes. The ARISS contact will be part of a large public event covering several aspects of communication. The school will be part of a project involving radio clubs, the army, the fire brigade, rescue teams and many others. Reporters from newspapers, television and radio stations will be on site.

2. New Jersey Experienced Successful Contact

On Wednesday, August 13, the Town of Berkeley Heights, New Jersey Summer Playground Camp participated in an Amateur Radio on the International Space Station (ARISS) contact. Greg Chamitoff, KD5PKZ, answered 16 questions of 10 campers, including two counselors, with 200 people in attendance. Sergei Volkov also participated, answering one spacewalk question. There was media coverage of the event. To view the Alternative Press article, go to:
http://thealternativepress.blogspot.com/2008/08/local-space-chat-with-astronaut-greg.html

A video was taken of the event and posted on YouTube. See:
http://www.youtube.com/watch?v=azBvExXlbsY

3. Training Session Contact Successful

An Amateur Radio on the International Space Station (ARISS) training session with European Space Agency (ESA) astronaut Andre Kuipers took place on Tuesday, August 12. Kuipers, training at Johnson Space Center (JSC), spoke with students attending the European Space Camp (ESC) in Belgium and answered all twenty questions posed to him. The audio of this contact was available on the Internet Radio Linking Project (IRLP) Discovery Reflector.

4. ESC Radio Session Update

Astronaut Mike Fincke, KE5AIT, spoke with U.S. deployed soldier dependents visiting the European Space Center (ESC) in Belgium on August 5. The terrestrial contact was arranged by the U.S. Army Installation Management Command (IMCOM) - Europe Region. IMCOM thanked ARISS for the contact and posted an audio file of the event to its Web site. To listen to the question and answer session, click on the following link and scroll to "Radio Highlights."
http://www.imcom-europe.army.mil/sites/local/

5. Reisman Debrief Held

On Wednesday, August 13, an Amateur Radio on the International Space Station (ARISS) debrief session was held with Garrett Reisman, KE5HAE. Valuable feedback was provided to the ARISS team. Reisman was a flight engineer on Expeditions 16 and 17.

6. Ham Radio Module Available on NASA DLN

The new NASA amateur radio Digital Learning Network (DLN) module is now available. Information has been posted on the NASA Web site. See:
http://dln.nasa.gov/dln/content/catalog/details/?cid=634

7. ARISS on NASA ISS Science Site

NASA has posted updated information on the Amateur Radio on the International Space Station (ARISS) program to its International Space Station science site.
See:
http://www.nasa.gov/mission_pages/station/science/experiments/ARISS.html

8. ARRL Posts Article on ARISS

The American Radio Relay League (ARRL) posted the notice "ARISS Team Looking for Ground Stations" in the ARRL Letter. See:
http://www.arrl.org/arrlletter/08/0815/

9. ARRL QST Posts ARISS News

The American Radio Relay League (ARRL) posted
Amateur Radio on the International
Space Station (ARISS) related activities in its September issue of QST.

Two items were listed in the column "Media Hits" on page 12.
One news story was about the Austin Amateur Radio Club sponsoring "the ARISS
contact with Blackland Prairie Elementary School and Cub Scout Pack 304
covered
by Fox 7 News, KVUE 24 News and News 8 Austin."

Another story covered the Electronic Engineering
Times who printed "an Under the
Hood feature, 'Extreme Design: SuitSat pushes engineers' limits' which
highlighted Amateur Radio technologies, engineering, and ARISS."

10. ARISS Member Gives Presentation on Ham Radio and Kids

Amateur Radio on the International Space Station (ARISS) member and Radio
Amateur Satellite Corporation (AMSAT) area coordinator Keith Pugh, W5IU,
gave a
presentation on amateur radio, space and kids at the 2006 Dayton Hamvention.
An
excerpt of his talk may be found on the Radio
Amateur Information Network (RAIN)
report for the week of August 15, 2008. To listen, go to
http://www.therainreport.com/

[ANS thanks Carol, KB3LKI, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the
President's
Club. Members of the President's Club, as sustaining donors to AMSAT Project
Funds, will be eligible to receive additional benefits. Application forms
are
available from the AMSAT Office.

73,
This week's ANS Editor,
Lee McLamb, KU4OS

```
From -1353003897389387
X-Google-Thread: 10e8ad,b2dbd6d8129fb52d,start
X-Google-Attributes: gid10e8ad,domainid0,public,usenet
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Path: g2news1.google.com!postnews.google.com!z72g2000hsb.googlegroups.com!not-for-
mail
From: "Dwight D. Eisenhower" <rottedHonda@yahoo.com>
Newsgroups: rec.radio.amateur.space
Subject: lot #3 old radio estate sale items-tube CB's-RF generator-SWR/RF
     meter-more
Date: Fri, 29 Aug 2008 04:28:54 -0700 (PDT)
Organization: http://groups.google.com
Lines: 44
Message-ID: <8e8ebba4-2585-4ba0-a73c-43d93a2196c3@z72g2000hsb.googlegroups.com>
NNTP-Posting-Host: 208.111.211.121
Mime-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
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Complaints-To: groups-abuse@google.com
Injection-Info: z72g2000hsb.googlegroups.com; posting-host=208.111.211.121;
     posting-account=r8XCBQoAAABNhqpsAkZNbLs4uIwOFVFO
User-Agent: G2/1.0
X-HTTP-UserAgent: Mozilla/4.0 (compatible; MSIE 6.0; Windows 98; Win 9x
     4.90),gzip(gfe),gzip(gfe)
Xref: g2news1.google.com rec.radio.amateur.space:85

http://search.ebay.com/_W0QQfgtpZ1QQfrppZ25QQsassZ66Q2dcatalina

 SILVERTONE VINTAGE ANTIQUE TUBE RADIO-BAKELITE-works-$$     - $9.98
 $20.00  6d 14h 28m
  STARLITE MINI ANTIQUE VINTAGE TUBE RADIO-powersup-works     - $9.98
 $10.00  6d 14h 28m
  RCA VINTAGE ANTIQUE HI-FI AM/FM TUNER-TUBE AMPED-RARE-$     - $9.98
 $20.00  6d 14h 28m
  FIRESTONE VINTAGE WOOD RADIO-TUBE AMPED-POWERS UP-$$$$$     - $9.98
 $20.00  6d 14h 28m
  VINTAGE PLASTIC BAKELITE OLYMPIC TUBE RADIO-IT WORKS !!     - $9.98
 $20.00  6d 14h 28m
  ARVIN MOD.544A WHITE BAKELITE TUBE RADIO-AM/FM-c.1947-$     - $9.98
 $15.00  6d 14h 28m
  EMERSON BAKELITE TUBE RADIO-tested/working-antique-$$$$     - $9.98
 $15.00  6d 14h 28m
  RADIOLA PLASTIC BAKELITE RADIO-TUBE-model 61-8-powersUP     - $9.98
 $20.00  6d 14h 28m
  STROMBERG CARLSON ANTIQUE TUBE RADIO-PARTS/FIX-$$$$$$$$     - $9.98
 $15.00  6d 14h 28m
  ADMIRAL 6Q12N VINTAGE ANTIQUE BAKELITE RADIO-TUBES-$$$$     - $9.98
 $15.00  6d 14h 28m
  RCA VICTOR TUBE AMPED RADIO-mod 1X592-clear sound-works     - $9.98
 $20.00  6d 14h 28m
  ANTIQUE ZENITH BAKELITE PLASTIC RADIO-IT WORKS !!-$$$$$     - $9.98
 $20.00  6d 14h 28m
  MOTOROLA BAKELITE PLASTIC RADIO/CHASSIS-for parts/fix-$     - $9.98
 $15.00  6d 14h 28m
  HEATHKIT PRECISION FIELD STRENTH-SWR-XTAL METER-HAM/CB-     - $24.99
 $15.00  6d 14h 28m
  HEATHKIT PRECISION FIELD STRENTH-SWR-XTAL METER-HAM/CB-     - $24.99
 $15.00  6d 14h 28m
  DELCO AM/FM/SHORTWAVE FRONT DIAL GLASS/PANEL-NICE-$$$$$     - $9.98
 $20.00  6d 14h 28m
  DEVRY RF SIGNAL GENERATOR-RADIO HOBBYIST ESTATE SALE-$$     - $9.98
 $15.00  6d 14h 28m
  DEVRY RF SIGNAL GENERATOR-RADIO HOBBYIST ESTATE SALE-$$     - $9.98
 $15.00  6d 14h 28m
  (2) VINTAGE TUBE CLOCK RADIOS-GE and ARVIN-both working     - $9.98
 $25.00  6d 14h 28m
  LAFAYETTE HB-111 VINTAGE ANTIQUE TUBE AMPED CB RADIO-$$     - $9.98
 $20.00  6d 14h 28m
  LAFAYETTE COMSTAT-25 VINTAGE TUBE CB RADIOS-8 CHANNEL-$     - $9.98
 $20.00  6d 14h 28m
```

```
From -2132759159431491511
X-Google-Thread: 10e8ad,d1c0cf3fbc15bd1a,start
X-Google-Thread: 10b9c8,d1c0cf3fbc15bd1a,start
X-Google-Attributes: gid10e8ad,gid10b9c8,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
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nntp.giganews.com!nx02.iad01.newshosting.com!newshosting.com!
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out.readnews.com!transit4.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-244 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sun, 31 Aug 2008 21:01:11 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 223
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000601c90bcd$d5672e00$80358a00$@net>
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X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Mon, 1 Sep 2008 01:01:11 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
```

X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news1.google.com rec.radio.amateur.space:86 rec.radio.info:207

AMSAT NEWS SERVICE
ANS-244

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*************************************************************
***  2008 AMSAT Space Symposium and Annual General Meeting ***
***            October 24-26 in Atlanta, Georgia           ***
*************************************************************
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ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* Looming Deadline
* W4AXX Silent Key
* AO-51 Ops
* ARISS Status - 28 August 2008

SB SAT @ AMSAT $ANS-244.01
Looming Deadline

AMSAT News Service Bulletin 244.01
   From AMSAT HQ SILVER SPRING, MD.
August 28, 2008
To All RADIO AMATEURS
BID: $ANS-244.01

Notice to all AMSAT members: The AMSAT Board of Directors Voting is ongoing. It is an important obligation on your part to return your selection for the BOD to AMSAT no later than September 15th. This will insure our election process has fulfilled its terms and conditions for the future of our organization.
Read the candidate's background information as has been provided and pick your choice on the ballot. The mailing last July went to all members in good standing. The deadline is only 2 weeks away. Your vote could be the deciding factor.

[ANS thanks AMSAT for the above information]

/EX

SB SAT @ AMSAT $ANS-244.02
W4XAA Silent Key

AMSAT News Service Bulletin 244.02
From AMSAT HQ SILVER SPRING, MD.
August 28, 2008
To All RADIO AMATEURS
BID: $ANS-244.02

FOR IMMEDIATE RELEASE: August 25, 2008

Popular Communications Senior Editor Tom Kneitel, W4XAA (ex-K2AES), SK

(Hicksville, NY August 25, 2008) -- Radio monitoring icon Tom Kneitel, W4XAA (ex-K2AES), passed away in Florida on August 22 at age 75. He had been in poor health for the past several years. Tom was Senior Editor and founding Editor of Popular Communications magazine, a CQ publication. The grandson of animation pioneer Max Fleischer and son of animator Seymour Kneitel, "Tommy" preferred the print media, writing for Popular Electronics and Electronics Illustrated in the 1950s and '60s. He started the Popular Electronics registered shortwave monitor program, which issued unofficial "WPE" callsigns to active SWLs.

His association with CQ began when he became the founding editor of S9, a CB magazine started by then-CQ publisher Cowan Publishing, Inc. When S9 ceased publication, Kneitel and current CQ Publisher Dick Ross, K2MGA, launched Popular Communications in 1982. Tommy was Editor of Pop'Comm until 1995, when he gave up day-to-day responsibilities for the magazine and became Senior Editor. He served as an advisor and resource to his successors until recently before his passing. He was also the author of a multitude of books on CB, scanning and other radio-related topics.

"It goes without saying that Pop'Comm wouldn't exist had it not been for the vision and hard work of Tommy Kneitel," says current Popular Communications Editor Edith Lennon, N2ZRW. "In the 13 years he headed this magazine, with great zeal, foresight, and his inimitable humor, he helped shape this hobby of ours and quite possibly an entire industry."

Lennon added, "Personally, I feel very fortunate to have had the opportunity to work with him over the years, to have experienced the pure delight of his story-telling abilities, and to have picked up even just a little bit of his vast wealth of knowledge."

"Tommy was a great friend from the early 1960s on," noted CQ Publisher Dick Ross, K2MGA. "He was also the most creative and inventive person I've ever known."

Tommy is survived by his wife of 54 years, Judy, two sons, five daughters and ten grandchildren. Memorial services will be private.

[ANS thanks Rich Moseson, W2VU, for the above information]

/EX

SB SAT @ AMSAT $ANS-244.03
AO-51 Ops

AMSAT News Service Bulletin 244.03
From AMSAT HQ SILVER SPRING, MD.
Augugst 28, 2008
To All RADIO AMATEURS
BID: $ANS-244.03

AO-51 Continues to wow the satellite community. It is now being used as a test bed for Earth stations. Since it is being commanded into S downlinks and L uplinks, it's your chance to test out the downconverters and upconverters you've been planning to set up.

"Recently, AO-51 was off the air due to a software glitch. The command team has succesfully reloaded its operational software and as of 8/30/08 has been back in service.
Gould, WA4SXM for the A0-51 Command team
Kevin, WA6FWF
Drew, KO4MA"

You can check the current mode of AO-51 at
http://www.amsat.org/amsat-new/echo/CTNews.php

If you think a certain mode should be used, contact the command team and make a suggestion. They are always looking for input as well as feedback about satellite ops.

[ANS thanks Gould, WA4SXM, for the above information]

/EX

SB SAT @ AMSAT $ANS-244.04
ARISS Status August 28, 2008

AMSAT News Service Bulletin 244.04
From AMSAT HQ SILVER SPRING, MD.
August 28, 2008
To All RADIO AMATEURS
BID: $ANS-244.04

1. Upcoming School Contacts

Schulehaus Feld 1 in Richterswil, Switzerland has been scheduled for an Amateur Radio on the International Space Station (ARISS) contact on Saturday, August 30 at 13:53 UTC. Telebridge station VK4KHZ in Queensland, Australia will assist with the contact. To prepare for the contact, fifth graders covered the solar system and space in their studies and composed questions during their English classes. The ARISS contact will be part of a large public event covering several aspects of communication. The school will be part of a project involving radio clubs, the army, the fire brigade, rescue teams and many others. Reporters from newspapers, television and radio stations will be on site.

Challenger Learning Center of Lucas County in Oregon, Ohio will participate in an Amateur Radio on the International Space Station (ARISS) contact. This activity is planned for Monday, September 1 at 15:22 UTC. The Center is sponsored by the Lucas County Educational Service Center and is one of over 50 Challenger Learning Centers (CLC) across the U.S., U.K., and Canada as a living memorial to the Challenger Crew. It is housed in a small school building that supports the CLC program, 6 Head Start classes, 2 classes from the Oregon City Schools, and a Regional School Improvement Team office. Schools from across northwest Ohio and southeast Michigan participate in onsite missions. The Center reaches over 3,000 students and 100 teachers each year. A science lab onsite also doubles as a distance learning lab. This lab is also used for summer camp programs.

2.   Successful ARISS Contact with Los Padres Scouts

Los Padres Council Troop 105 experienced a successful Amateur Radio on the International Space Station (ARISS) contact on Tuesday, August 19. Greg Chamitoff, KD5PKZ, answered one question from each of ten Scouts. Approximately 100 Scouts, family and friends gathered on the University of California, Santa Barbara (UCSB) astronomy observation deck for the event. There was extensive media coverage of this educational activity and streaming video was available. Photos, video, news articles and press releases have been posted to: http://www.n6kth.com/iss.

3.   Challenger Learning Center - ARISS Presentation

The Challenger Center Lead Flight Directors Conference will be held in Wellington, Kansas on August 24 - 28. An Amateur Radio on the International Space Station (ARISS) presentation is scheduled to be given during the conference on August 27. It will cover the ARISS program and the school application process.

4.   ARISS International Meeting Held

The monthly Amateur Radio on the International Space Station (ARISS) teleconference was held on Tuesday, August 19. Topics of discussion included spaceflight participant Richard Garriott, W5KWQ, and his planned activities while onboard the ISS, Russian plans to fly the ISS Ham backup equipment and SuitSat-2 development progress. Minutes have been posted to the ARISS Web site. See:

http://www.rac.ca/ariss/arisstel2008-08-19.htm

[ANS thanks Carol, KB3LKI, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Dee Interdonato, NB2F

```
From -7994898821136376662
X-Google-Thread: 10e8ad,b328358d1de89e8f,start
X-Google-Thread: 10b9c8,b328358d1de89e8f,start
X-Google-Attributes: gid10e8ad,gid10b9c8,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news2.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx01.iad01.newshosting.com!newshosting.com!
198.186.194.249.MISMATCH!transit3.readnews.com!news-xxxfer.readnews.com!news-
out.readnews.com!transit4.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-248 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Thu, 4 Sep 2008 20:32:28 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 1444
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <002a01c90eee$f3e423f0$dbac6bd0$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1220574748 13639 166.84.1.6 (5 Sep 2008 00:32:28 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Fri, 5 Sep 2008 00:32:28 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
```

X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news2.google.com rec.radio.amateur.space:519 rec.radio.info:724

This report is organized into FIVE parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites
Part 5 (S5) - deborbited/returned satellites

SB SAT @ AMSAT W8ISS ANS-248.S1
WSR 248 Part 1 09/04/2008

AMSAT NEWS SERVICE BULLETIN 248.S1 FROM AMSAT HQ
SILVER SPRING, MD, September 04, 2008
TO ALL RADIO AMATEURS
BID: $ANS-248.S1

DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008

Status: OPERATIONAL
Current Mode: U/v - voice

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink: 435.530 to 435.570 MHz

Proposed Frequencies:
* Primary telemetry downlink: 145.870 MHz 1200 Baud BPSK AX.25 400mW
* Backup telemetry downlink: 145.930 MHz 1200 Baud BPSK AX.25 400mW
* Linear transponder passband downlink: 145.880 - 145.920 MHz
(inverting)
  400mW PEP
* Linear transponder passband uplink: 435.570 - 435.530 MHz
* Transponder mode beacon: 145.870 MHz CW (10dB below transponder PEP)

For the latest project status update please visit the Delfi-C3 web page:
http://www.delfic3.nl/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68
[07312008]
=====
VO-52 HAMSAT
Catalog number: 28650

Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.859330 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

To know what transponder is switched on please listen for the beacon that is active. Each transponder has a different beacon.
[08072008]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Software reload

```
Current Modes:   FM Repeater - OFF
                 BBS         - OFF
                 Telemetry   - OFF

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink:   145.880 MHZ FM
                       145.880 MHz USB
                       145.920 MHz FM
                      1268.700 MHz FM 67Hz PL tone
Digital Downlinks:     435.150 MHz FM 38k4 Digital, PBP, 1 watt output
                       435.150 MHz FM 9k6 Digital, Pacsat Broadcast Protocol
                      2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:        145.860 MHz FM 9k6 Digital, Pacsat Broadcast Protocol
                      1268.700 mhz FM 9k6 PBP Digital
```

Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[08282008]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002

Status: Operational.

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer
   on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on
   and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10
   minute timer.
[05282007]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Operational - check operational schedule for current times!!

Current Mode: V/u

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage: http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's CW
telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts.htm
[0820007]
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[12132007]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

```
Status: TESTING - VOICE

Current Mode:  V/u

Uplink:         145.900 MHz FM 1200-baud Manchester FSK (reserved)
                145.920 MHz FM VOICE
                145.940 MHz FM 1200-baud Manchester FSK (reserved)
                145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink:       437.026 MHz USB VOICE
                ( 1200-baud PSK - MBL Telemetry Only )

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[03202008]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational depending on amount of Sunlight

Current Mode: Listen before transmitting

Uplink:   145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink:  29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons:   29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/

AO-7 Usage Guidelines on the AO-7 Log and Resource Site located at:
http://www.planetemily.com/ao7
[05282007]
```

=====

INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Mode: FM Repeater - U/v
Voice - V/v
BBS - V/v
APRS - V/v
SSTV - OFF

Expedition 17 crew:
Commander: Sergey Volkov RU3DIS
Flight Engineer: Oleg Kononenko RN3DX
Flight Engineer: Greg Chamitoff KD5PKZ

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM
Worldwide packet downlink: 145.825 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS
RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line is
NOT translated from Russian and posted.

[08072008]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-248.S2
WSR 248 Part 2 09/04/2008

AMSAT NEWS SERVICE BULLETIN 248.S2 FROM AMSAT HQ
SILVER SPRING, MD, September 04, 2008
TO ALL RADIO AMATEURS
BID: $ANS-248.S2

RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number:
Launch Date: May 23, 2008

Status: Operational

Curent Mode: Telemetry
             Audio
             Images

Downlinks: 435.315 MHz
           435.215 MHz
[05292008]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.
[11152007]
=====
CP3
Catalog Number: 31128
Launch Date: April 17,2007

Status: Operational

Current Mode: /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[07302007]
=====

```
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: In Orbit

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder:  145.825 Mhz FM
[02052007]
=====
NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Operational

Current Mode: /u

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[10222007]
=====
GENESAT-1 ?O-??
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Current Mode: /u

Telemetry Beacon Downlink: 437.0670 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[01082007]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon:             437.2750 MHz CW

Callsign: JQ1YGW
```

```
Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
[03262007]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003

Status: Operational

Current Mode: /u

Beacon:     436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[01082007]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Semi-Operational - Constant Carrier only

Uplink:  1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan ? )

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[01082007]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW
[08132007]
```

```
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Softawre Reload

Current Modes:   FM Repeater - OFF
                 BBS         - OFF
                 Telemetry   - OFF

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink:   145.880 MHZ FM
                       145.880 MHz USB
                       145.920 MHz FM
                      1268.700 MHz FM 67Hz PL tone
Digital Downlinks:     435.150 MHz FM 38k4 Digital, PBP, 1 watt output
                       435.150 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:        145.860 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      1268.700 mhz FM 9k6 PBP Digital
Beacon:                435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[08282008]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Hibernation until full sunlight in November

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink:        144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org
```

```
aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[09242007]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Current Modes: V/U
               L/U

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[09172007]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984

Status: Semi-operational.

Current Mode:  /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon:          435.025 MHz
Mode-S Beacon:     2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[01242008]
=====
RS-22 RADIO SPORT RS-22
Catalog number: 27939
Launch Date: September 27, 2003
```

```
Status: Operational - 70cm cw only

Current Mode:  /u

CW Beacon - 435.352 MHz
            145.818 MHz
[08062007]
=====
Can X-2
Catalog number:
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web page:
http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[05292008]
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink: 437.425 MHz

For the latest project status update please visit the AAUSAT-II web
page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[05292008]
=====
CO-65 Cute-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink:  437.475 MHz 9k6 Packet
Uplink:   1267.600 Mhz

For the latest project status update please visit the Cute-1.7+APD II
web
page:
http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html
```

```
IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78
[07312008]
=====
Compass 1
Catalog number: 32787
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink: 437.275 Mhz CW
          437.405 MHz Packet

For the latest project status update please visit the Compass 1 web
page:
http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52
[05292008]
=====
CO-66 Seeds II
Catalog number:
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink: 437.485 MHz

For the latest project status update please visit the Seeds 2 web page:
http://cubesat.aero.cst.nihon-u.ac.jp/english/main_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36
[07312008]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Modes: FM Repeater - U/v
               Voice -       V/v
               BBS -         V/v
               APRS -        V/v
               SSTV -        OFF

Expedition 17 crew:
Commander:          Sergey Volkov         RU3DIS
Flight Engineer:    Oleg Kononenko        RN3DX
Flight Engineer:    Greg Chamitoff        KD5PKZ
```

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM
Worldwide packet downlink: 145.825 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS
                     RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.
[06122008]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-248.S3
WSR 248 Part 3 09/04/2008

AMSAT NEWS SERVICE BULLETIN 248.S3 FROM AMSAT HQ
SILVER SPRING, MD, September 04, 2008
TO ALL RADIO AMATEURS
BID: $ANS-248.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

CP4
Catalog Number: 31122
Launch Date: April 17,2007

```
Status: Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon:    437.325 MHz CW
[11152007]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Non-Operational

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon:             437.2750 MHz CW

Callsign: JR8YJT
[10152007]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency:  437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink:        437.250 MHz FM 67Hz CTCSS
Voice Downlink:     2401.835 MHz FM
Packet Up/Downlink:  437.250 MHz 9k6 packet
Packet Downlink     2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
UWE-1
Catalog Number: 28892
```

Launch Date: October 27, 2005

Status: Non=Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[08132007]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Non-Operational

Uplinks: 145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial
land and weather imaging payloads offers FM and FSK Amateur Radio
communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a
collaborative effort between the Malaysian government and Surrey
Satellite
Technology Ltd.
[007302007]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

```
Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink:   145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
call-
sign KE6QMD, as per the user service agreement located at the following
URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS:                SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink:   145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
V-band:   145.840 -  145.990 MHz CW/LSB
U-band:   435.550 -  435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
```

L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks

S2-band: 2401.225 - 2401.475 MHz CW/USB
K-band: 24048.010 - 24048.060 MHz CW/USB
Beacon: 2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)

BEACON	General Beacon (GB)	Middle Beacon (MB)	Engineering Beacon (EB)
2 m	none	145.898 MHz	none
70cm	435.438 MHz	435.588 MHz	435.838 MHz
13cm(1)	2400.188 MHz	2400.338 MHz	2400.588 MHz
13cm(2)	2401.173 MHz	2401.323 MHz	2401.573 MHz
3cm	10450.975 MHz	10451.125 MHz	10451.375 MHz
1.5cm	24047.885 MHz	24048.035 MHz	24048.285 MHz

[07162007]
=====
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web site
at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: ?
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink: 145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====

```
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign:       POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012006]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
KO-23 KITSAT
```

```
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HL01-11
BBS: HL01-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
```

```
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
LIBERTAD-1
Catalog Number: 31129
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink:   145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[10222007]
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990

Status: CW Beacon only

Uplinks:          145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink:      437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[01222007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
[05012006]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet: Non-Operational
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon:   145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
```

```
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink  29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
Beacons:   29.450 MHz
          435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
```

```
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon 1:  29.352 MHz (intermittent)
Beacon 2:  29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink:     21.260 to 21.300 MHz CW/USB
Downlink:  145.860 to 145.900 MHz CW/USB

Beacon:    145.860 MHz

Robot:     145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink:   21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon:   29.408 MHz

Robot:    29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-248.S4
WSR 248 Part 4 09/04/2008

AMSAT NEWS SERVICE BULLETIN 248.S4 FROM AMSAT HQ
SILVER SPRING, MD, September 04, 2008
```

TO ALL RADIO AMATEURS
BID: $ANS-248.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE PROPOSED FOR LAUNCH AT THIS TIME:

Phase 5a Mars Mission AO-??
Catalog Number:
Proposed Launch Date: 2009 or 2011

Status: Design Phase

For the latest project status update please visit the AMSAT-DL P5-A web page:
http://ticket-to-mars.org
[01222007]
=====
PHASE 3E AO-??
Catalog number:
Proposed Launch Date: Late 2008

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/
[01222007]
=====
Eagle AO-??
Catalog Number:
Proposed Launch Date: Early/Mid 2009

Status: Design Phase

For the latest project status updates please visit the AMSAT-NA webpage:
http://www.amsat.org
[01222007]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-248.S5
WSR 248 Part 5 09/04/2008

AMSAT NEWS SERVICE BULLETIN 248.S5 FROM AMSAT HQ
SILVER SPRING, MD, September 04, 2008
TO ALL RADIO AMATEURS
BID: $ANS-248.S5

THE FOLLOWING SATELLITES HAVE DE-ORBITED OR HAVE BEEN RETURNED SAFELY:

NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Operational
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink: 145.825 Mhz FM APRS AX25
APRS Uplink: 145.825 MHz FM APRS AX25
Voice/PSK31 Uplink: 28.120 MHz

Packet to Voice ID: RAFT
[06112007]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

```
From -2654336890617990049
X-Google-Thread: 10e8ad,2b85c34137c975ab,start
X-Google-Attributes: gid10e8ad,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!postnews.google.com!d45g2000hsc.googlegroups.com!not-for-
mail
From: mbr46208@gmail.com
Newsgroups: rec.radio.amateur.space
Subject: Yaesu G-5400B Az El Satellite Rotator System for Sale
Date: Sat, 6 Sep 2008 07:24:29 -0700 (PDT)
Organization: http://groups.google.com
Lines: 10
Message-ID: <03e844c7-b992-4d01-878d-9c9ffb02f3e7@d45g2000hsc.googlegroups.com>
NNTP-Posting-Host: 32.161.135.114
Mime-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 7bit
X-Trace: posting.google.com 1220711070 31614 127.0.0.1 (6 Sep 2008 14:24:30 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Sat, 6 Sep 2008 14:24:30 +0000 (UTC)
Complaints-To: groups-abuse@google.com
Injection-Info: d45g2000hsc.googlegroups.com; posting-host=32.161.135.114;
     posting-account=sDquugoAAADXggBoxXJNtP91y7Dm5BsO
User-Agent: G2/1.0
X-HTTP-UserAgent: Mozilla/4.0 (compatible; MSIE 7.0; Windows NT 5.1;
     InfoPath.1; .NET CLR 1.1.4322; .NET CLR 2.0.50727; .NET CLR
     3.0.04506.30),gzip(gfe),gzip(gfe)
Xref: g2news1.google.com rec.radio.amateur.space:88
```

I have a Yaesu G-5400B Az El Satellite Rotator System for Sale on ebay:

Here is the link for details

http://cgi.ebay.com/Yaesu-G-5400B-Elevation-Azimuth-Az-El-Satellite-Rotator_W0QQitemZ300256249032QQihZ020QQcategoryZ40059QQssPageNameZWDVWQQrdZ1QQcmdZViewItem

It is e-bay Item Number: 300256249032

73

```
From -4197788609705046400
X-Google-Thread: 10e8ad,208676b997370d08,start
X-Google-Thread: 10b9c8,208676b997370d08,start
X-Google-Attributes: gid10e8ad,gid10b9c8,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII
Path: g2news1.google.com!news2.google.com!newsfeed2.dallas1.level3.net!
news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-251 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sat, 6 Sep 2008 21:12:28 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 310
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <001d01c91086$e1c31390$a5493ab0$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix1.panix.com
Mime-Version: 1.0
Content-Type: text/plain;charset="iso-8859-1"
Content-Transfer-Encoding: quoted-printable
X-Trace: reader1.panix.com 1220749947 23037 166.84.1.1 (7 Sep 2008 01:12:27 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 7 Sep 2008 01:12:27 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news1.google.com rec.radio.amateur.space:89 rec.radio.info:220
```

AMSAT NEWS SERVICE
ANS-251

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

****
*** 2008 AMSAT Space Symposium and Annual General Meeting ***
***   October 24-26 in Atlanta, Georgia   ***
*** http://www.amsat.org/amsat-new/symposium/2008/index.php ***
****

In this edition:

* Reminder! Symposium Registration and BoD Ballots
* AO-51 Software Reloaded, Satellite is Operational
* AO-16 Recovered
* PNWVHFS Conference October 3-5
* Satellite Shorts From All Over
* ARISS Status Report for the Week of September 2, 2008

SB SAT @ AMSAT $ANS-251.01
Reminder! Symposium Registration and BoD Ballots

AMSAT News Service Bulletin 251.01
>From AMSAT HQ SILVER SPRING, MD.
September 7, 2008
To All RADIO AMATEURS
BID: $ANS-251.01

Two AMSAT deadlines are approaching quickly!

After Monday, September 8, 2008 the registration fee for the 2008 Space Symposium and Annual Meeting in Atlanta, Georgia increases from $40 to $45. Registration at the door will be $50 over the October 24-26 weekend.

See http://www.amsat.org/amsat-new/symposium/2008/index.php for all of the latest Symposium information and to register!

September 15 is the deadline to return your ballot for the AMSAT-NA Board of Director's election.

[ANS thanks AMSAT HQ for the above information]

/EX

SB SAT @ AMSAT $ANS-251.02
AO-51 Software Reloaded, Satellite is Operational

AMSAT News Service Bulletin 251.02
>From AMSAT HQ SILVER SPRING, MD.
September 7, 2008
To All RADIO AMATEURS
BID: $ANS-251.02

AO-51 experienced a software crash on August 28 and command stations have been working to reload the spacecraft software. AMSAT-NA VP Operations, Drew KO4MA, provided progress reports during the reloading procedures. On September 2 Drew reported, "AO-51 will be unavailable for a few days beginning Tuesday morning EDT. The command team needs to reload part of the spacecraft operating software."

Gould, WA4SXM reported from the AO-51 Command Station that, "The software crashed during the start procedure of the PL tone task late in the evening of September 3. The command team has reloaded the software and setup the repeater and the BB. Both the AO-51 repeater and the BB are active again as of September 5."

Here is the AO-51 schedule for the remainder of September 2008:

September 8 - September 14

FM Repeater, L/S
Uplink: 1268.700 MHz FM
Downlink: 2401.200 MHz FM

FM Repeater, V/U
Uplink: 145.880 MHz FM
Downlink: 435.150 MHz FM

September 15 - September 21
College Radio Night is September 18!

FM Repeater, V/U
Uplink: 145.920 MHz FM
Downlink: 435.300 MHz FM

9k6 BBS and Telemetry
Uplink: 1268.700 MHz FM
Downlink: 435.150 MHz FM

September 22 - September 28

FM Repeater, V/U
Uplink: 145.920 MHz FM
Downlink: 435.300 MHz FM

FM Repeater, L/U
Uplink: 1268.700 MHz FM
Downlink: 435.150 MHz FM

September 29 - October 5

FM Repeater, V/U
Uplink: 145.920 MHz FM
Downlink: 435.300 MHz FM

9k6 BBS and Telemetry
Uplink: 1268.700 MHz FM
Downlink: 435.150 MHz FM

[ANS thanks the AO-51 Command Team for the above information]

/EX

SB SAT @ AMSAT $ANS-251.03
AO-16 Recovered

AMSAT News Service Bulletin 251.03
>From AMSAT HQ SILVER SPRING, MD.
September 7, 2008
To All RADIO AMATEURS
BID: $ANS-251.03

AMSAT-NA VP Operations, Drew KO4MA reported this week, "It looks like the temperature has come up enough on AO-16 so that the watchdog problem has gone away. On September 1, I turned the satellite on collected some telemetry, and then commanded it into bent pipe mode which is VHF-FM up and DSB-UHF down."

The command team will monitor http://oscar.dcarr.org/ and amsat-bb. If the satellite goes quiet they will endeavor to restart it as soon as possible. Occasional interruptions to gather telemetry are likely.

Just as a reminder, AO-16 now operates as a cross mode, cross band voice repeater, with an uplink on 145.920 FM. The downlink is reduced carrier AM, similar to double sideband, on 437.026. Most stations find receiving the downlink on USB works best.

Work is continuing to predict how long this latest period of operation may last, but initial estimates are around 2-3 months total, symmetric around a period of continuous illumination in October. There may not be another opportunity after this one, as the satellite will generally head towards longer eclipses (and lower temperatures) for several years.

[ANS thanks Drew, KO4MA for the above information]

/EX

SB SAT @ AMSAT $ANS-251.04
PNWVHFS Conference October 3-5

AMSAT News Service Bulletin 251.04
>From AMSAT HQ SILVER SPRING, MD.
September 7, 2008
To All RADIO AMATEURS
BID: $ANS-251.04

You are invited to join Pacific Northwest weak signal VHF, UHF and Microwave operators at the Best Western Lake Front Hotel and Conference Center in Moses Lake, Washington, for the Annual Pacific Northwest VHF Conference October 3-5, 2008. Membership in PNWVHFS is not required for conference attendance.

This year will feature a great line up of speakers and programs including our keynote speaker Joe Taylor, K1JT, Nobel Laureate and "father" of WSJT, Software for VHF Meteor-Scatter Communication.

The list of presentations includes:
+ Lyle Johnson, KK7P, co-founder Tucson Amateur Packet Radio, Dayton Hamvention Technical Excellence Award winner 1984, currently employed by Elecraft and consulting in the broadcast and space industries, and HPSDR project.
+ Sean Kutzko, KX9X, ARRL Contest Branch Manager
+ Eric Schwarz, WA6HHQ, Elecraft

All of the conference information is available on-line at:
http://www.pnwvhfs.org/administration/conference.htm

[ANS thanks the PNWVHFS for the above information]

/EX

SB SAT @ AMSAT $ANS-251.05
Satellite Shorts From All Over

AMSAT News Service Bulletin 251.05
>From AMSAT HQ SILVER SPRING, MD.
September 7, 2008
To All RADIO AMATEURS
BID: $ANS-251.05

+ Mak SV1BSX reported this week that Joe, K3SZH and Fabio PY4AJ have set a confirmed distance record of 7438 km via AO-7. See: http://sv1bsx.50webs.com/oscardx/ao7-dx.html for more info.

+ For stations in Europe watch for Juan Antonio, EA4CYQ operating portable via AO-51 and AO-27 from western Spain (IM76qm).

+ Drew, KO4MA is collecting data on successful AO-40 portable-type stations. He would like hear what worked and what didn't work for a portable-throw-it-in-a-suitcase type setup. He is also interested in hearing description of your CC&R evading driveway or backyard setups, for either U/S or L/S. If you have any photos and/or descriptions of your setup, please forward them to Drew at ko4ma@amsat.org, or point him to a link if you have them on the web.

+ AMSAT Area Coordinator, Ken Owen, N6KTH reports that video of a successful ARISS contact is available on-line at:
  http://nasa.id.ucsb.edu/ (This was recorded by the University of California Santa Barbara) - and -
  http://sbarc.camstreams.com/ (This was recorded by WB9KMO and is playing constantly on a continuous loop.)
  Check http://www.n6kth.com for all of the links of media coverage.

[ANS thanks everyone for the above information]

/EX

SB SAT @ AMSAT $ANS-251.06
ARISS Status Report for the Week of September 2, 2008

AMSAT News Service Bulletin 251.06
>From AMSAT HQ SILVER SPRING, MD.
September 7, 2008
To All RADIO AMATEURS
BID: $ANS-251.06

1. Upcoming School Contact

An ARISS contact has been scheduled with Prairielands Council, Boy Scouts of America at Chanute Air Force Base in Rantoul, IL on Saturday, September 13 at 15:54 UTC. The contact will be facilitated by telebridge station WH6PN in Hawaii. During the event, Scouts will earn the Space Exploration Merit Badge, which includes the Mars Mission Design and the Moon Base Model construction. NASA DLN will assist with teaching these two topics. Scouts will design and launch water rockets and explore robotic technology. Segway of Chicago will assist in Robotics education. Participants will also complete many of the Radio Merit Badge requirements. The local rocket club will provide rocket launches throughout the event, two during the outdoor viewing of the movie "October Sky." The event will conclude with a hot air balloon launch. Boy Scouts (ages 11-17), Cub Scouts (ages 6-10),

and adult volunteers have been invited to the event. The Space Jamboree has attracted the attention of regional media outlets. Four television stations, radio stations, and local newspapers are planning features on the Space Jamboree.

2. Swiss Contact Successful

On Saturday, August 30, youth attending Schulehaus Feld 1 in Richterswil,
Switzerland participated in a successful ARISS contact via telebridge station VK4KHZ in Australia. To prepare for the event, children produced

drawings, plays, research papers and multimedia products which were displayed the day of the contact. More than 500 students, parents, teachers and visitors gathered in the sports hall to watch as 21 students posed questions to Greg Chamitoff, KD5PKZ, aboard the ISS. Additionally, an audio link was set up outside the sports hall for other visitors to listen in. Two television stations (SF DRS Aktuell Schweizer Fernsehen, Regional Fernsehen Tele Z�rich), one radio station (Radio Z�richsee) and three newspapers (Z�richsee Zeitung, Neue Z�rcher Zeitung NZZ, Tages-Anzeiger) covered the event. The audio was fed into the EchoLink AMSAT server, which received 12 connections, and also into Internet Radio Linking Project (IRLP) Reflector 9010.

3. ARISS Presentation Given at CLC Conference

The Challenger Learning Center (CLC) Lead Flight Directors Conference was held in Wellington, Kansas on August 24 - 28. An ARISS presentation was given during the conference on August 27, covering the ARISS program and the school application process.

[ANS thanks Carol, KB3LKI for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM
K9JKM at amsat dot org

From 2537144559647024799
X-Google-Thread: 10e8ad,2db9f0c23338e73a,start
X-Google-Thread: 113975,2db9f0c23338e73a,start
X-Google-Attributes: gid10e8ad,gid113975,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!news.glorb.com!feeder.erje.net!
newsfeed.kamp.net!newsfeed.kamp.net!newsfeed.freenet.de!xlned.com!
feeder3.xlned.com!news.astraweb.com!border1.a.newsrouter.astraweb.com!not-for-mail

From: Chris Steyaert <observations@rmob.org>
Newsgroups: rec.radio.amateur.space,sci.astro.amateur
Subject: Radio Meteor Obs. Bull. August 2008 Perseids
Date: Sun, 07 Sep 2008 20:22:21 +0200
Message-ID: <a168c4d5a919mpd768samj2udnem2fne2b@4ax.com>
X-Newsreader: Forte Agent 1.93/32.576 English (American)
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Lines: 17
Organization: Unlimited download news at news.astraweb.com
NNTP-Posting-Host: 7448173b.news.astraweb.com
X-Trace: DXC=@QPJ`AMPYO=6k]7j^a\l<5L?
0kYOcDh@:Ec^leFUIQo;gdBPgf34L;4KX07\YZ`QZ68D:8OkRPE^>\i5OO]=7Z96
Xref: g2news1.google.com rec.radio.amateur.space:90 sci.astro.amateur:4250

Radio Meteor Observation Bulletin No. 181 of August 2008 (79 K) is available now as

http://visualrmob.free.fr/rmobtext/rmob0808.txt

More information and the visual presentation of the hourly forward scatter counts can be found on

http://www.rmob.org

http://radio.data.free.fr

Chris

From -1052870471761617858
X-Google-Thread: 10e8ad,64e26b07c08fd8ca,start
X-Google-Thread: 104cd7,64e26b07c08fd8ca,start
X-Google-Thread: 111320,64e26b07c08fd8ca,start
X-Google-Attributes: gid10e8ad,gid104cd7,gid111320,domainid0,public,usenet
X-Google-Language: RUSSIAN,KOI8R
Path: g2news1.google.com!postnews.google.com!p25g2000hsf.googlegroups.com!not-for-mail
From: tamarmadgecay@gmail.com
Newsgroups: rec.radio.amateur.space,rec.radio.shortwave,rec.roller-coaster,rec.running,rec.scouting.issues
Subject: =?KOI8-R?B?18nExc8g4tLJ1M7JIMkg68XXyc7BLg==?=
Date: Tue, 9 Sep 2008 10:16:05 -0700 (PDT)
Organization: http://groups.google.com
Lines: 2
Message-ID: <ae13004e-040b-49d9-9bb9-8cf976381268@p25g2000hsf.googlegroups.com>
NNTP-Posting-Host: 92.112.144.22
Mime-Version: 1.0

```
Content-Type: text/plain; charset=KOI8-R
Content-Transfer-Encoding: base64
X-Trace: posting.google.com 1220980566 21313 127.0.0.1 (9 Sep 2008 17:16:06 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Tue, 9 Sep 2008 17:16:06 +0000 (UTC)
Complaints-To: groups-abuse@google.com
Injection-Info: p25g2000hsf.googlegroups.com; posting-host=92.112.144.22;
     posting-account=lpvsOQoAAADrItjCNLUGUA4f5NKzjLsd
User-Agent: G2/1.0
X-HTTP-UserAgent: Mozilla/4.0 (compatible; MSIE 7.0; Windows NT 5.1; WebMoney
     Advisor; Avant Browser;  Embedded Web Browser from: http://bsalsa.com/; .NET
     CLR 2.0.50727),gzip(gfe),gzip(gfe)
Xref: g2news1.google.com rec.radio.amateur.space:91 rec.radio.shortwave:11135
rec.roller-coaster:1929 rec.running:3603 rec.scouting.issues:794
```

883P1NLJLCDLwcsgz87BINPP08XUIN7Mxc4sIM/OwSDM1d7bwdEhICBodHRwOi8vcmFnZGFpLmlu
Zm8vZ29sYXlhLXByYXZkYS5odG0NCvzUzyDXycTFzyDT1dDF0iE=

```
From -8466986382972582780
X-Google-Thread: 10e8ad,2df7a855c5e715ee,start
X-Google-Thread: 10b9c8,2df7a855c5e715ee,start
X-Google-Attributes: gid10e8ad,gid10b9c8,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx01.iad01.newshosting.com!newshosting.com!
198.186.194.249.MISMATCH!transit3.readnews.com!news-xxxfer.readnews.com!news-
out.readnews.com!transit4.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-255 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Sun, 14 Sep 2008 12:31:38 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 1446
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000801c91687$53f9b6c0$fbed2440$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1221409898 19232 166.84.1.6 (14 Sep 2008 16:31:38 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 14 Sep 2008 16:31:38 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
```

X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
x-cr-hashedpuzzle: fas= DgLs Dhhn EfTJ Fipi GcTd GiWy G1kP G15s IeC4 JusJ J5OI KJMX KrYj L/L3 MLN9;1;cgBlAGMALQByAGEAZABpAG8ALQBpAG4AZgBvAEAAcABhAG4AaQB4AC4AYwBvAG0A;Sosha1_v1;7;{D3E1B9AE-9DF5-4E5D-9C26-A3BE0FF7DF46};awA5AGoAawBtAEAAYwBvAG0AYwBhAHMAdAAuAG4AZQB0AA==;Sun, 14 Sep 2008 16:31:12 GMT;VwBTAFIALQAyADUANQAgAEEATQBTAEEAVAAgAFcAZQBlAGsAbAB5ACAAUwBhAHQAZQBsAGwAaQB0AGUAIABSAGUAcABvAHIAdAA=
x-cr-puzzleid: {D3E1B9AE-9DF5-4E5D-9C26-A3BE0FF7DF46}
Xref: g2news1.google.com rec.radio.amateur.space:92 rec.radio.info:230

This report is organized into FIVE parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites
Part 5 (S5) - deborbited/returned satellites

SB SAT @ AMSAT W8ISS ANS-255.S1
WSR 255 Part 1 09/11/2008

AMSAT NEWS SERVICE BULLETIN 255.S1 FROM AMSAT HQ
SILVER SPRING, MD, September 11, 2008
TO ALL RADIO AMATEURS
BID: $ANS-255.S1

DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008

Status: OPERATIONAL
Current Mode: U/v - voice

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink: 435.530 to 435.570 MHz

Proposed Frequencies:
* Primary telemetry downlink: 145.870 MHz 1200 Baud BPSK AX.25 400mW
* Backup telemetry downlink: 145.930 MHz 1200 Baud BPSK AX.25 400mW
* Linear transponder passband downlink: 145.880 - 145.920 MHz (inverting) 400mW PEP
* Linear transponder passband uplink: 435.570 - 435.530 MHz
* Transponder mode beacon: 145.870 MHz CW (10dB below transponder PEP)

For the latest project status update please visit the Delfi-C3 web page:

http://www.delfic3.nl/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68
[07312008]
=====
VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.859330 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is
active. Each transponder has a different beacon.
[08072008]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Software reload

```
Current Modes:   FM Repeater - V/u
                               L/s
                 BBS         - OFF
                 Telemetry   - OFF

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink:   145.880 MHZ FM
                       145.880 MHz USB
```

145.920 MHz FM
1268.700 MHz FM 67Hz PL tone
Digital Downlinks: 435.150 MHz FM 38k4 Digital, PBP, 1 watt output
435.150 MHz FM 9k6 Digital, Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Digital, Pacsat Broadcast Protocol
1268.700 mhz FM 9k6 PBP Digital
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[09112008]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002

Status: Operational.

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10

```
   minute timer.
[05282007]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Operational - check operational schedule for current times!!

Current Mode: V/u

Voice/CW Mode JA
Uplink:   145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon:   435.795 MHz

Digital Mode JD
Uplinks:  145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage: http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's CW
telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts.htm
[0820007]
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993

Status: Operational

Current Mode: V/u

Uplink:   145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
```

```
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[12132007]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: TESTING - VOICE

Current Mode:  V/u

Uplink:         145.900 MHz FM 1200-baud Manchester FSK (reserved)
                145.920 MHz FM VOICE
                145.940 MHz FM 1200-baud Manchester FSK (reserved)
                145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink:       437.026 MHz USB VOICE
                ( 1200-baud PSK - MBL Telemetry Only )

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[03202008]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational depending on amount of Sunlight

Current Mode: Listen before transmitting

Uplink:   145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink:  29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons:   29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW
```

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/

AO-7 Usage Guidelines on the AO-7 Log and Resource Site located at:
http://www.planetemily.com/ao7
[05282007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Mode: FM Repeater - U/v
Voice - V/v
BBS - V/v
APRS - V/v
SSTV - OFF

Expedition 17 crew:

Commander:	Sergey Volkov	RU3DIS
Flight Engineer:	Oleg Kononenko	RN3DX
Flight Engineer:	Greg Chamitoff	KD5PKZ

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM
Worldwide packet downlink: 145.825 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS
RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

```
Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.
[08072008]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-255.S2
WSR 255 Part 2 09/11/2008

AMSAT NEWS SERVICE BULLETIN 255.S2 FROM AMSAT HQ
SILVER SPRING, MD, September 11, 2008
TO ALL RADIO AMATEURS
BID: $ANS-255.S2

RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number:
Launch Date: May 23, 2008

Status: Operational

Curent Mode: Telemetry
             Audio
             Images

Downlinks: 435.315 MHz
           435.215 MHz
[05292008]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode:  /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon:    435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.
[11152007]
=====
CP3
Catalog Number: 31128
```

Launch Date: April 17,2007

Status: Operational

Current Mode: /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[07302007]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: In Orbit

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder: 145.825 Mhz FM
[02052007]
=====
NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Operational

Current Mode: /u

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[10222007]
=====
GENESAT-1 ?O-??
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Current Mode: /u

Telemetry Beacon Downlink: 437.0670 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[01082007]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

```
Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon:             437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
[03262007]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003

Status: Operational

Current Mode: /u

Beacon:     436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[01082007]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Semi-Operational - Constant Carrier only

Uplink:  1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan ? )

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[01082007]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational
```

```
Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW
[08132007]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Softawre Reload

Current Modes:   FM Repeater - V/u
                               L/s
                 BBS         - OFF
                 Telemetry   - OFF

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink:   145.880 MHZ FM
                       145.880 MHz USB
                       145.920 MHz FM
                      1268.700 MHz FM 67Hz PL tone
Digital Downlinks:     435.150 MHz FM 38k4 Digital, PBP, 1 watt output
                       435.150 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:        145.860 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      1268.700 mhz FM 9k6 PBP Digital
Beacon:                435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[09112008]
=====
NO-44 PCSAT
Catalog number: 26931
```

```
Launch Date: September 30, 2001

Status: Hibernation until full sunlight in November

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink:        144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[09242007]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Current Modes: V/U
               L/U

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[09172007]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984

Status: Semi-operational.

Current Mode:  /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon:           435.025 MHz
Mode-S Beacon:      2401.500 MHz

Mode and Antenna Polarization:
```

```
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[01242008]
=====
RS-22 RADIO SPORT RS-22
Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only

Current Mode:  /u

CW Beacon - 435.352 MHz
            145.818 MHz
[08062007]
=====
Can X-2
Catalog number:
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web page:
http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[05292008]
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink: 437.425 MHz

For the latest project status update please visit the AAUSAT-II web
page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[05292008]
=====
CO-65 Cute-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008
```

Status: IN ORBIT

Downlink: 437.475 MHz 9k6 Packet
Uplink: 1267.600 Mhz

For the latest project status update please visit the Cute-1.7+APD II web page:
http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78
[07312008]

=====

Compass-1
Catalog number: 32787
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink: 437.275 Mhz CW
          437.405 MHz Packet

For the latest project status update please visit the Compass 1 web page:
http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52
[05292008]

=====

CO-66 Seeds II
Catalog number:
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink: 437.485 MHz

For the latest project status update please visit the Seeds 2 web page:
http://cubesat.aero.cst.nihon-u.ac.jp/english/main_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36
[07312008]

=====

INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Modes: FM Repeater - U/v
Voice - V/v
BBS - V/v
APRS - V/v
SSTV - OFF

Expedition 17 crew:
Commander: Sergey Volkov RU3DIS
Flight Engineer: Oleg Kononenko RN3DX
Flight Engineer: Greg Chamitoff KD5PKZ

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM
Worldwide packet downlink: 145.825 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS
RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line is
NOT translated from Russian and posted.
[06122008]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-255.S3
WSR 255 Part 3 09/11/2008

AMSAT NEWS SERVICE BULLETIN 255.S3 FROM AMSAT HQ
SILVER SPRING, MD, September 11, 2008
TO ALL RADIO AMATEURS
BID: $ANS-255.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

CP4
Catalog Number: 31122
Launch Date: April 17,2007

Status: Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon: 437.325 MHz CW
[11152007]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Non-Operational

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon: 437.2750 MHz CW

Callsign: JR8YJT
[10152007]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 MHz FM 67Hz CTCSS

Voice Downlink: 2401.835 MHz FM
Packet Up/Downlink: 437.250 MHz 9k6 packet
Packet Downlink   2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]

=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non=Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[08132007]

=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]

=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Non-Operational

Uplinks: 145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey

Satellite
Technology Ltd.
[007302007]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, callsign KE6QMD, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40

Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks

V-band: 145.840 - 145.990 MHz CW/LSB
U-band: 435.550 - 435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks

S2-band: 2401.225 - 2401.475 MHz CW/USB
K-band: 24048.010 - 24048.060 MHz CW/USB
Beacon: 2401.323 MHz
24048.035 MHz

P3-D Telemetry Beacons (IHU)

BEACON	General Beacon (GB)	Middle Beacon (MB)	Engineering Beacon (EB)
2 m	none	145.898 MHz	none
70cm	435.438 MHz	435.588 MHz	435.838 MHz
13cm(1)	2400.188 MHz	2400.338 MHz	2400.588 MHz
13cm(2)	2401.173 MHz	2401.323 MHz	2401.573 MHz
3cm	10450.975 MHz	10451.125 MHz	10451.375 MHz
1.5cm	24047.885 MHz	24048.035 MHz	24048.285 MHz

[07162007]

=====

OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]

=====

UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

```
The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site
at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: ?
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater:         436.250 MHz

Uplinks: Mode B Repeater:  145.825 MHz
Mode J Digipeater:         145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998
```

```
Status: Non-operational

Uplink:   145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign:       POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012006]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993
```

```
Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25
```

```
Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
LIBERTAD-1
Catalog Number: 31129
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink:   145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[10222007]
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990

Status: CW Beacon only

Uplinks:          145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink:      437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[01222007]
```

```
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
[05012006]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet: Non-Operational
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
```

```
Launch Date: June 16, 1983

Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon:   145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink  29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
Beacons:   29.450 MHz
          435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
```

```
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon 1:  29.352 MHz (intermittent)
Beacon 2:  29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink:     21.260 to 21.300 MHz CW/USB
Downlink:  145.860 to 145.900 MHz CW/USB

Beacon:    145.860 MHz

Robot:     145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink:   21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon:   29.408 MHz
```

Robot: 29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-255.S4
WSR 255 Part 4 09/11/2008

AMSAT NEWS SERVICE BULLETIN 255.S4 FROM AMSAT HQ
SILVER SPRING, MD, September 11, 2008
TO ALL RADIO AMATEURS
BID: $ANS-255.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE PROPOSED FOR LAUNCH AT THIS TIME:

Phase 5a Mars Mission AO-??
Catalog Number:
Proposed Launch Date: 2009 or 2011

Status: Design Phase

For the latest project status update please visit the AMSAT-DL P5-A web page:
http://ticket-to-mars.org
[01222007]
=====
PHASE 3E AO-??
Catalog number:
Proposed Launch Date: Late 2008

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/
[01222007]
=====
Eagle AO-??
Catalog Number:
Proposed Launch Date: Early/Mid 2009

Status: Design Phase

For the latest project status updates please visit the AMSAT-NA webpage:
http://www.amsat.org
[01222007]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-255.S5
WSR 255 Part 5 09/11/2008

AMSAT NEWS SERVICE BULLETIN 255.S5 FROM AMSAT HQ
SILVER SPRING, MD, September 11, 2008
TO ALL RADIO AMATEURS
BID: $ANS-255.S5

THE FOLLOWING SATELLITES HAVE RE-ENTERED OR HAVE BEEN RETURNED SAFELY:

NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Operational
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

```
Main Downlink:      145.825 Mhz FM APRS AX25
APRS Uplink:        145.825 MHz FM APRS AX25
Voice/PSK31 Uplink:  28.120 MHz
```

Packet to Voice ID: RAFT
[06112007]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

```
From 1848098033295559645
X-Google-Thread: 10e8ad,2daea82557d94569,start
X-Google-Thread: 10b9c8,2daea82557d94569,start
X-Google-Attributes: gid10e8ad,gid10b9c8,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII
Path: g2news1.google.com!news1.google.com!news2.google.com!newsfeed2.dallas1.level3.net!news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-258 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sun, 14 Sep 2008 18:00:42 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 313
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <001901c916b5$46499990$d2dcccb0$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix3.panix.com
Mime-Version: 1.0
```

```
Content-Type: text/plain;charset="iso-8859-1"
Content-Transfer-Encoding: quoted-printable
X-Trace: reader1.panix.com 1221429642 27389 166.84.1.3 (14 Sep 2008 22:00:42 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 14 Sep 2008 22:00:42 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
Xref: g2news1.google.com rec.radio.amateur.space:93 rec.radio.info:232
```

AMSAT NEWS SERVICE
ANS-258

```
**************************************************************
***  2008 AMSAT Space Symposium and Annual General Meeting ***
***          October 24-26 in Atlanta, Georgia         ***
**************************************************************
```

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* AMSAT Board of Directors to Conduct Presidential Search
* Worldwide Amateur Radio Effort Saves COMPASS Cubesat
* College Satellite Nite - 18 September 2008
* AO-51 Schedule - September 2008
* ARISS Status - 18 August 2008

SB SAT @ AMSAT $ANS-258.01
AMSAT Board of Directors to Conduct Presidential Search

AMSAT News Service Bulletin 258.01

From AMSAT HQ SILVER SPRING, MD.
September 14, 2008
To All RADIO AMATEURS
BID: $ANS-258.01

AMSAT President Rick Hambly, W2GPS notified the AMSAT Board of Directors on Thursday, September 11 that he is not a candidate for President of AMSAT for the upcoming year. "After careful consideration, I have decided that I am not able to continue as AMSAT President beyond the next Board meeting and so I will not offer my name for consideration, and if nominated by others I will not accept the nomination for President. While I will be focusing most of my efforts on business activities, I will do my best to make the transition seamless", stated Rick in an e-mail to the current members of the AMSAT Board of Directors. Rick has served as President of AMSAT since October 2004.

The current Board of Directors election concludes on Monday, September 15, when results of the balloting will be announced. Members of the new Board will then begin a formal search process to recruit and select a new President. This process is expected to take several weeks with the goal of having a new President identified prior to the AMSAT Board of Directors meeting on October 23, prior to the AMSAT Symposium in Atlanta. The search process starts immediately with an invitation to current AMSAT members (including BOD members, Senior Advisors, Officers, and the AMSAT general membership) to suggest current AMSAT members that they would recommend for consideration. Recommendations are requested by 1900 EDT Tuesday evening, September 16 to the AMSAT Corporate Secretary (Barry Baines, WD4ASW; e-mail: wd4asw@amsat.org). Names that are submitted will be initially reviewed by the BOD and those candidates that the Board would like to follow up with will be contacted concerning the interview/selection process.

Rick Hambly, W2GPS will continue to fulfill his duties as President until the Board meeting in October. His current term on the Board of Directors expires in September 2009.

[ANS thanks the AMSAT-NA Board of Directors for the above information]

/EX

SB SAT @ AMSAT $ANS-258.02
Worldwide Amateur Radio Effort Saves COMPASS Cubesat

AMSAT News Service Bulletin 258.02
From AMSAT HQ SILVER SPRING, MD.
September 14, 2008
To All RADIO AMATEURS
BID: $ANS-258.02

Mike, DK3WN said this week that a worldwide amateur radio effort saved the COMPASS cubesat. Mike reports receiving reports of good COMPASS beacons from Japan. The COMPASS cubesat has not reset over several eclipse periods and remains operational.

The problem that depleted the batteries aboard COMPASS had its heater remain on constantly. Amateur radio stations around the world successfully transmitted the command to turn off the heater and allowed the batteries to recover.

After the heater was turned off Mike wrote, "The only thing we can do is WAIT. Wait for longer sun periods and voltages over 3.47 Volts. That's the standard threshold value in emergency mode to switch into powersafe mode. Only in this mode we can change the threshold values. As of September 8, COMPASS was back in its powersafe mode of operation.

As of September 10 COMPASS was back in NORMAL mode. Mike had gained control of the satellite and could successfully command the satellite.

Mike summarized, "Thanks to all - this is truly a worldwide ham radio effort - thanks so much for your help. Also, PLEASE do NOT send any commands to COMPASS until further notice. If you send any commands you overwrite the current settings and COMPASS may fall back into emergency mode. We almost lost a cubesat, but we've definitely gained some new friends. Thank you all for your efforts!"

Meanwhile please listen to the beacon and keep your fingers crossed that COMPASS will remain in its normal mode.

[ANS thanks Mike, DK3WN, for the above information]

/EX

SB SAT @ AMSAT $ANS-258.03
College Satellite Nite - 18 September 2008

AMSAT News Service Bulletin 258.03
From AMSAT HQ SILVER SPRING, MD.
September 14, 2008
To All RADIO AMATEURS
BID: $ANS-258.03

A college Satellite night will be held Thursday, September 18, 2008 (local time). This event is a great opportunity for hams that are satellite active to interact with college students and elmer a new generation! Do you know a college student who would find amateur satellites interesting and intellectually challenging? Have them as a guest at your station and introduce them to amateur radio in a way they will never forget.

Look for college stations and students on all the birds that evening and please give them preference for operation. With the new school year just starting, new student guests and thus potential young hams will be present in college shacks around the country. They look forward to meeting you through the exciting venue of Orbiting Satellites carrying Amateur Radio!

73, Hope to see you on the birds!
Dr. Jay Garlitz, AA4FL

[ANS thanks Jay, AA4FL, for the above information]

/EX

SB SAT @ AMSAT $ANS-258.04
AO-51 Schedule - September 2008

AMSAT News Service Bulletin 258.04
From AMSAT HQ SILVER SPRING, MD.
September 14, 2008
To All RADIO AMATEURS
BID: $ANS-258.04

September 8 - September 14

FM Repeater, L/S
Uplink: 1268.700 MHz FM
Downlink: 2401.200 MHz FM

FM Repeater, V/U
Uplink: 145.880 MHz FM
Downlink: 435.150 MHz FM

September 15 - September 21
College Radio Night is September 18!

FM Repeater, V/U
Uplink: 145.920 MHz FM
Downlink: 435.300 MHz FM

9k6 BBS and Telemetry
Uplink: 1268.700 MHz FM
Downlink: 435.150 MHz FM

September 22 - September 24

FM Repeater, V/U
Uplink: 145.920 Mhz FM
Downlink: 435.300 Mhz FM

FM Repeater, L/U
Uplink: 1268.700 Mhz USB
Downlink: 435.150 Mhz FM

September 25 - September 28

FM Repeater, V/U
Uplink: 145.920 Mhz FM
Downlink: 435.300 Mhz FM

FM Repeater, L/U
Uplink: 1268.700 Mhz FM
Downlink: 435.150 Mhz FM

September 29 - October 5

FM Repeater, V/U
Uplink: 145.920 MHz FM
Downlink: 435.300 MHz FM

9k6 BBS and Telemetry
Uplink: 1268.700 MHz FM
Downlink: 435.150 MHz FM

[ANS thanks Drew, KO4MA, for the above information]

/EX

SB SAT @ AMSAT $ANS-258.05
ARISS Status - 8 September 2008

AMSAT News Service Bulletin 258.05
From AMSAT HQ SILVER SPRING, MD.
September 14, 2008
To All RADIO AMATEURS
BID: $ANS-258.05

1. Successful Contact with Challenger Learning Center

On Monday, September 1, ten students visiting the Challenger Learning Center of Lucas County in Oregon, Ohio participated in an Amateur Radio on the International Space Station (ARISS) contact. The students posed ten questions to Greg Chamitoff, KD5PKZ, in front of an audience of 80. News 24 TV was present and interviewed the students. The audio was fed into the EchoLink AMSAT server and IRLP (Internet Radio Linking Project) Reflector 9010.

2. NZZ Article on Swiss Contact

On Saturday, August 30, students attending Schulehaus Feld 1 in Richterswil, Switzerland participated in a successful Amateur Radio on the International Space Station (ARISS) contact. Neue Z�rcher Zeitung NZZ posted an article (in German) on the contact. See:
http://www.nzz.ch/nachrichten/zuerich/telefonkonferenz_mit_der_raumstation_iss_1.820665.html

3. ARISS Presentations Posted

On Thursday, August 28, an Amateur Radio on the International Space Station (ARISS) member gave a talk to Rockwell Collins Amateur Radio Club in Richardson, Texas. His talk covered Radio Amateur Satellite Corporation (AMSAT) satellites and ARISS projects. The presentation has been posted to the AMSAT Web site. See:
http://www.amsat.org/amsat/ariss/Presentations/AMSAT%20for%20RCARC.ppt

The ARISS presentation given at the Challenger Learning Center (CLC) Lead Flight Directors Conference on August 27 has also been posted. See:
http://www.amsat.org/amsat/ariss/Presentations/Challenger%20National%20Convention%202008.ppt

[ANS thanks Carol, KB3LKI, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's
Club. Members of the President's Club, as sustaining donors to AMSAT Project
Funds, will be eligible to receive additional benefits. Application forms
are
available from the AMSAT Office.

73,
This week's ANS Editor,
Lee McLamb, KU4OS

```
From 5198363823697136943
X-Google-Thread: 10bf43,488743eba9314149,start
X-Google-Thread: 10e8ad,488743eba9314149,start
X-Google-Attributes: gid10bf43,gid10e8ad,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!npeer02.iad.highwinds-media.com!
news.highwinds-media.com!feed-me.highwinds-media.com!post01.iad.highwinds-
media.com!newsfe04.iad.POSTED!7564ea0f!not-for-mail
From: "Webmaster" <webmaster@oaklanesoftware.com>
Newsgroups:
rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.amateur.spacerec.radio.
scanner,rec.radio.amateur.swap
Subject: Ham Radio License Exam Preparation Software
Lines: 19
MIME-Version: 1.0
Content-Type: text/plain;
     format=flowed;
     charset="iso-8859-1";
     reply-type=original
Content-Transfer-Encoding: 7bit
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Windows Mail 6.0.6001.18000
X-MimeOLE: Produced By Microsoft MimeOLE V6.0.6001.18049
Message-ID: <vFlzk.8846$PK.3357@newsfe04.iad>
NNTP-Posting-Host: 70.188.114.247
X-Complaints-To: newsmaster@cox.net
X-Trace: newsfe04.iad 1221453531 70.188.114.247 (Mon, 15 Sep 2008 04:38:51 UTC)
NNTP-Posting-Date: Mon, 15 Sep 2008 04:38:51 UTC
Organization: Cox
Date: Sun, 14 Sep 2008 23:39:02 -0500
Xref: g2news1.google.com rec.radio.amateur.policy:9579 rec.radio.amateur.space:94
```

Test Preparation Software

Pass your US FCC ham radio license test with ease. Our test preparation
software

serves as a training aid to help amateurs and prospective amateurs pass the VEC's administered test. When you can consistently pass the test given by our test preparation software, you will almost certainly pass an actual test.

Our ham radio license test preparation software uses the latest officially released VEC's approved question pools. The program breaks the test into different sub-element. Integrated into the software are illustrations and Part 97 rules pertaining to the current question. The program tracks the progress of the tests taken. Once you have mastered each sub-element you are ready for the official test.

Visit our web site at http://www.hamradiolicense.net for more information

```
From 7112543078228014788
X-Google-Thread: 10e8ad,34bb1dfe7747ef77,start
X-Google-Thread: 10b9c8,34bb1dfe7747ef77,start
X-Google-Attributes: gid10e8ad,gid10b9c8,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx01.iad01.newshosting.com!newshosting.com!
198.186.194.249.MISMATCH!transit3.readnews.com!news-out.readnews.com!news-
xxxfer.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-262 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Fri, 19 Sep 2008 12:27:30 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 1446
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000401c91a74$8ff338e0$afd9aaa0$@net>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix2.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1221841647 15139 166.84.1.2 (19 Sep 2008 16:27:27 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Fri, 19 Sep 2008 16:27:27 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
```

X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Content-Language: en-us
x-cr-hashedpuzzle: BbvI CPAG CYTr CbBq CwA0 C5qX DYl4 Divo EEb/ EO6e Er5R FUJV GuPr HQHL HnVg JRUi;1;cgBlAGMALQByAGEAZABpAG8ALQBpAG4AZgBvAEAAcABhAG4AaQB4AC4AYwBvAG0A;Sosha1_v1;7;{0234984A-0F6E-4DB1-927F-432714ADBF4C};awA5AGoAawBtAEAAYwBvAG0AYwBhAHMAdAAuAG4AZQB0AA==;Fri, 19 Sep 2008 16:26:57 GMT;VwBTAFIALQAyADYAMgAgAEEATQBTAEEAVAAgAFcAZQBlAGsAbAB5ACAAUwBhAHQAZQBsAGwAaQB0AGUAIABSAGUAcABvAHIAdAA=
x-cr-puzzleid: {0234984A-0F6E-4DB1-927F-432714ADBF4C}
Xref: g2news1.google.com rec.radio.amateur.space:95 rec.radio.info:239

This report is organized into FIVE parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites
Part 5 (S5) - deorbited/returned satellites

SB SAT @ AMSAT W8ISS ANS-262.S1
WSR 262 Part 1 09/18/2008

AMSAT NEWS SERVICE BULLETIN 262.S1 FROM AMSAT HQ
SILVER SPRING, MD, September 18, 2008
TO ALL RADIO AMATEURS
BID: $ANS-262.S1

DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008

Status: OPERATIONAL
Current Mode: U/v - voice

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink: 435.530 to 435.570 MHz

Proposed Frequencies:
* Primary telemetry downlink: 145.870 MHz 1200 Baud BPSK AX.25 400mW
* Backup telemetry downlink: 145.930 MHz 1200 Baud BPSK AX.25 400mW
* Linear transponder passband downlink: 145.880 - 145.920 MHz (inverting) 400mW PEP
* Linear transponder passband uplink: 435.570 - 435.530 MHz
* Transponder mode beacon: 145.870 MHz CW (10dB below transponder PEP)

For the latest project status update please visit the Delfi-C3 web page:
http://www.delfic3.nl/

```
IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68
[07312008]
=====
VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink:   435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink:   435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW


Indian Beacon:  145.859330 MHZ CW
Dutch Beacon:   145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is
active. Each transponder has a different beacon.
[08072008]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Software reload

Current Modes:   FM Repeater - V/u
                               L/s
                 BBS         - OFF
                 Telemetry   - OFF

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink:   145.880 MHZ FM
                       145.880 MHz USB
                       145.920 MHz FM
                      1268.700 MHz FM 67Hz PL tone
```

Digital Downlinks: 435.150 MHz FM 38k4 Digital, PBP, 1 watt output
435.150 MHz FM 9k6 Digital, Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Digital, Pacsat Broadcast Protocol
1268.700 mhz FM 9k6 PBP Digital
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[09112008]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002

Status: Operational.

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10 minute timer.
[05282007]

=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Operational - check operational schedule for current times!!

Current Mode: V/u

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
145.870 MHz FM
145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage: http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's CW
telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts.htm
[0820007]
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

```
Official Webpage: http://www.ao27.org
[12132007]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: TESTING - VOICE

Current Mode:  V/u

Uplink:         145.900 MHz FM 1200-baud Manchester FSK (reserved)
                145.920 MHz FM VOICE
                145.940 MHz FM 1200-baud Manchester FSK (reserved)
                145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink:       437.026 MHz USB VOICE
                ( 1200-baud PSK - MBL Telemetry Only )

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[03202008]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational depending on amount of Sunlight

Current Mode: Listen before transmitting

Uplink:   145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink:  29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons:   29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php
```

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/

AO-7 Usage Guidelines on the AO-7 Log and Resource Site located at:
http://www.planetemily.com/ao7
[05282007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Mode: FM Repeater - U/v
Voice - V/v
BBS - V/v
APRS - V/v
SSTV - OFF

Expedition 17 crew:
Commander: Sergey Volkov RU3DIS
Flight Engineer: Oleg Kononenko RN3DX
Flight Engineer: Greg Chamitoff KD5PKZ

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM
Worldwide packet downlink: 145.825 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS
RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss

ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.
[08072008]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-262.S2
WSR 262 Part 2 09/18/2008

AMSAT NEWS SERVICE BULLETIN 262.S2 FROM AMSAT HQ
SILVER SPRING, MD, September 18, 2008
TO ALL RADIO AMATEURS
BID: $ANS-262.S2

RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number:
Launch Date: May 23, 2008

Status: Operational

Curent Mode: Telemetry
             Audio
             Images

Downlinks: 435.315 MHz
           435.215 MHz
[05292008]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.
[11152007]
=====
CP3
Catalog Number: 31128
Launch Date: April 17,2007

Status: Operational

Current Mode: /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[07302007]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: In Orbit

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder: 145.825 Mhz FM
[02052007]
=====
NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Operational

Current Mode: /u

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[10222007]
=====
GENESAT-1 ?O-??
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Current Mode: /u

Telemetry Beacon Downlink: 437.0670 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[01082007]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

```
Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon:             437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
[03262007]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003

Status: Operational

Current Mode: /u

Beacon:     436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[01082007]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Semi-Operational - Constant Carrier only

Uplink:  1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan ? )

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[01082007]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only
```

```
Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW
[08132007]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Softawre Reload

Current Modes:   FM Repeater - V/u
                               L/s
                 BBS         - OFF
                 Telemetry   - OFF

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink:   145.880 MHZ FM
                       145.880 MHz USB
                       145.920 MHz FM
                      1268.700 MHz FM 67Hz PL tone
Digital Downlinks:     435.150 MHz FM 38k4 Digital, PBP, 1 watt output
                       435.150 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:        145.860 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      1268.700 mhz FM 9k6 PBP Digital
Beacon:                435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[09112008]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001
```

Status: Hibernation until full sunlight in November

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[09242007]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Current Modes: V/U
               L/U

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks: 145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[09172007]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984

Status: Semi-operational.

Current Mode: /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon: 435.025 MHz
Mode-S Beacon: 2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[01242008]
=====
RS-22 RADIO SPORT RS-22
Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only

Current Mode: /u

CW Beacon - 435.352 MHz
            145.818 MHz
[08062007]
=====
Can X-2
Catalog number:
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web page:
http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[05292008]
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink: 437.425 MHz

For the latest project status update please visit the AAUSAT-II web
page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[05292008]
=====
CO-65 Cute-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008

Status: IN ORBIT

```
Downlink:  437.475 MHz 9k6 Packet
Uplink:   1267.600 Mhz

For the latest project status update please visit the Cute-1.7+APD II
web
page:
http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78
[07312008]
=====
Compass-1
Catalog number: 32787
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink: 437.275 Mhz CW
          437.405 MHz Packet

For the latest project status update please visit the Compass 1 web
page:
http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52
[05292008]
=====
CO-66 Seeds II
Catalog number:
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink: 437.485 MHz

For the latest project status update please visit the Seeds 2 web page:
http://cubesat.aero.cst.nihon-u.ac.jp/english/main_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36
[07312008]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Modes: FM Repeater - U/v
               Voice -       V/v
```

BBS - V/v
APRS - V/v
SSTV - OFF

Expedition 17 crew:

Commander:	Sergey Volkov	RU3DIS
Flight Engineer:	Oleg Kononenko	RN3DX
Flight Engineer:	Greg Chamitoff	KD5PKZ

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM
Worldwide packet downlink: 145.825 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS
RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line is NOT translated from Russian and posted.
[06122008]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-262.S3
WSR 262 Part 3 09/18/2008

AMSAT NEWS SERVICE BULLETIN 262.S3 FROM AMSAT HQ
SILVER SPRING, MD, September 18, 2008

```
TO ALL RADIO AMATEURS
BID: $ANS-262.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

CP4
Catalog Number: 31122
Launch Date: April 17,2007

Status: Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon:    437.325 MHz CW
[11152007]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Non-Operational

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon:             437.2750 MHz CW

Callsign: JR8YJT
[10152007]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency:  437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink:        437.250 MHz FM 67Hz CTCSS
Voice Downlink:     2401.835 MHz FM
Packet Up/Downlink:  437.250 MHz 9k6 packet
```

Packet Downlink   2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non=Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[08132007]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Non-Operational

Uplinks: 145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.

```
[007302007]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink:   145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
call-
sign KE6QMD, as per the user service agreement located at the following
URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS:                SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink:   145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000
```

Status: Non-Operational

Uplinks

V-band: 145.840 - 145.990 MHz CW/LSB
U-band: 435.550 - 435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks

S2-band: 2401.225 - 2401.475 MHz CW/USB
K-band: 24048.010 - 24048.060 MHz CW/USB
Beacon: 2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)

BEACON	General Beacon (GB)	Middle Beacon (MB)	Engineering Beacon (EB)
2 m	none	145.898 MHz	none
70cm	435.438 MHz	435.588 MHz	435.838 MHz
13cm(1)	2400.188 MHz	2400.338 MHz	2400.588 MHz
13cm(2)	2401.173 MHz	2401.323 MHz	2401.573 MHz
3cm	10450.975 MHz	10451.125 MHz	10451.375 MHz
1.5cm	24047.885 MHz	24048.035 MHz	24048.285 MHz

[07162007]

=====

OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]

=====

UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web

site
at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: ?
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

```
Uplink:   145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign:       POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012006]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational
```

```
Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
```

```
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
LIBERTAD-1
Catalog Number: 31129
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink:   145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[10222007]
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990

Status: CW Beacon only

Uplinks:          145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink:      437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[01222007]
=====
WO-18 WEBERSAT
```

```
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
[05012006]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet: Non-Operational
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983
```

```
Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon:   145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink  29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
Beacons:   29.450 MHz
          435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
```

```
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon 1:  29.352 MHz (intermittent)
Beacon 2:  29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink:     21.260 to 21.300 MHz CW/USB
Downlink:  145.860 to 145.900 MHz CW/USB

Beacon:    145.860 MHz

Robot:     145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink:   21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon:   29.408 MHz

Robot:    29.454 MHz
[05232004]
```

NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-262.S4
WSR 2625 Part 4 09/18/2008

AMSAT NEWS SERVICE BULLETIN 262.S4 FROM AMSAT HQ
SILVER SPRING, MD, September 18, 2008
TO ALL RADIO AMATEURS
BID: $ANS-262.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE PROPOSED FOR LAUNCH AT THIS TIME:

Phase 5a Mars Mission AO-??
Catalog Number:
Proposed Launch Date: 2009 or 2011

Status: Design Phase

For the latest project status update please visit the AMSAT-DL P5-A web page:
http://ticket-to-mars.org
[01222007]
=====
PHASE 3E AO-??
Catalog number:
Proposed Launch Date: Late 2008

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/
[01222007]
=====
Eagle AO-??
Catalog Number:
Proposed Launch Date: Early/Mid 2009

Status: Design Phase

For the latest project status updates please visit the AMSAT-NA webpage:
http://www.amsat.org
[01222007]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-262.S5
WSR 262 Part 5 09/18/2008

AMSAT NEWS SERVICE BULLETIN 262.S5 FROM AMSAT HQ
SILVER SPRING, MD, September 18, 2008

TO ALL RADIO AMATEURS
BID: $ANS-262.S5

THE FOLLOWING SATELLITES HAVE RE-ENTERED OR HAVE BEEN RETURNED SAFELY:

NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Operational
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink: 145.825 Mhz FM APRS AX25
APRS Uplink: 145.825 MHz FM APRS AX25
Voice/PSK31 Uplink: 28.120 MHz

Packet to Voice ID: RAFT
[06112007]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)

* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

From -2961828163618328930
X-Google-Thread: 10e8ad,5bc15d6d3b9af29b,start
X-Google-Attributes: gid10e8ad,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!postnews.google.com!y38g2000hsy.googlegroups.com!not-for-mail
From: tamarmadgecay@gmail.com
Newsgroups: rec.radio.amateur.space,rec.radio.shortwave,rec.roller-coaster,rec.running,rec.scouting.issues
Subject: boobs webcams
Date: Tue, 23 Sep 2008 06:42:22 -0700 (PDT)
Organization: http://groups.google.com
Lines: 3
Message-ID: <2433ed5b-2b0e-4d8e-9109-7ea66a08296c@y38g2000hsy.googlegroups.com>
NNTP-Posting-Host: 92.112.154.0
Mime-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 7bit
X-Trace: posting.google.com 1222177343 17677 127.0.0.1 (23 Sep 2008 13:42:23 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Tue, 23 Sep 2008 13:42:23 +0000 (UTC)
Complaints-To: groups-abuse@google.com

```
Injection-Info: y38g2000hsy.googlegroups.com; posting-host=92.112.154.0;
     posting-account=lpvsOQoAAADrItjCNLUGUA4f5NKzjLsd
User-Agent: G2/1.0
X-HTTP-UserAgent: Mozilla/4.0 (compatible; MSIE 7.0; Windows NT 5.1; WebMoney
     Advisor; Avant Browser;  Embedded Web Browser from: http://bsalsa.com/; .NET
     CLR 2.0.50727),gzip(gfe),gzip(gfe)
Xref: g2news2.google.com rec.radio.amateur.space:528 rec.radio.shortwave:44927
rec.roller-coaster:11041 rec.running:23124 rec.scouting.issues:3806

asian women webcams - adult cam - xxx webcams - sluts webcams - latina
women webcams - fucking hardcore webcams - sluts webcams
http://ragdai.info/bdsm-cam-broadcasting.htm



From 4000995019718225280
X-Google-Thread: 10e8ad,5bc15d6d3b9af29b
X-Google-Thread: 114aac,5bc15d6d3b9af29b
X-Google-Thread: 104cd7,5bc15d6d3b9af29b
X-Google-Thread: 110c99,5bc15d6d3b9af29b
X-Google-Thread: 111320,5bc15d6d3b9af29b
X-Google-Attributes:
gid10e8ad,gid114aac,gid104cd7,gid110c99,gid111320,domainid0,public,usenet
X-Google-Language: ENGLISH,UTF8
Path: g2news1.google.com!news1.google.com!postnews.google.com!
k37g2000hsf.googlegroups.com!not-for-mail
From: steelforce <steelforce@aol.com>
Newsgroups: rec.radio.amateur.space,rec.radio.shortwave,rec.roller-
coaster,rec.running,rec.scouting.issues
Subject: Re: boobs webcams
Date: Tue, 23 Sep 2008 08:28:56 -0700 (PDT)
Organization: http://groups.google.com
Lines: 6
Message-ID: <0c939fc0-9980-4756-a9ed-d2a30b9179a6@k37g2000hsf.googlegroups.com>
References: <2433ed5b-2b0e-4d8e-9109-7ea66a08296c@y38g2000hsy.googlegroups.com>
NNTP-Posting-Host: 64.12.116.139
Mime-Version: 1.0
Content-Type: text/plain; charset=UTF-8
Content-Transfer-Encoding: quoted-printable
X-Trace: posting.google.com 1222183736 5918 127.0.0.1 (23 Sep 2008 15:28:56 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Tue, 23 Sep 2008 15:28:56 +0000 (UTC)
Complaints-To: groups-abuse@google.com
Injection-Info: k37g2000hsf.googlegroups.com; posting-host=64.12.116.139;
     posting-account=NofYeQoAAAALWg1pBMUb8cg9Ro0MI80A
User-Agent: G2/1.0
X-HTTP-UserAgent: Mozilla/4.0 (compatible; MSIE 7.0; AOL 9.0; Windows NT 5.1;
     .NET CLR 1.1.4322),gzip(gfe),gzip(gfe)
X-HTTP-Via: HTTP/1.1 (Velocity/1.3.32 [uScMs f p eN:t cCMp s ]), HTTP/1.1
     spider-mtc-tb01.proxy.aol.com[400C7021] (Prism/1.2.1), HTTP/1.1
     cache-mtc-ac10.proxy.aol.com[400C748B] (Traffic-Server/6.1.5 [uScM])
Xref: g2news1.google.com rec.radio.amateur.space:97 rec.radio.shortwave:12340
rec.roller-coaster:2063 rec.running:3941 rec.scouting.issues:872
```

```
On Sep 23, 9:42=EF=BF=BDam, tamarmadge...@gmail.com wrote:
> asian women webcams - adult cam - xxx webcams - sluts webcams - latina
> women webcams - fucking hardcore webcams - sluts webcamshttp://ragdai.inf=
o/bdsm-cam-broadcasting.htm

damn!  no coaster webcams?


From 6345271456673098862
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!postnews.google.com!m3g2000hsc.googlegroups.com!not-for-
mail
From: bluebonysh@gmail.com
Newsgroups: rec.drugs.cannabis,rec.equestrian,rec.folk-
dancing,rec.radio.amateur.space,rec.radio.shortwave
Subject: Filthy Pink Sneakers. By Marina Cooper
Date: Wed, 24 Sep 2008 10:23:28 -0700 (PDT)
Organization: http://groups.google.com
Lines: 5
Message-ID: <c0b96a63-47e7-4472-ac9f-76749eb0c05a@m3g2000hsc.googlegroups.com>
NNTP-Posting-Host: 92.112.131.44
Mime-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 7bit
X-Trace: posting.google.com 1222277009 10975 127.0.0.1 (24 Sep 2008 17:23:29 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Wed, 24 Sep 2008 17:23:29 +0000 (UTC)
Complaints-To: groups-abuse@google.com
Injection-Info: m3g2000hsc.googlegroups.com; posting-host=92.112.131.44;
     posting-account=svIiVAoAAAD194OoxVvciHsrquGonmXe
User-Agent: G2/1.0
X-HTTP-UserAgent: Mozilla/4.0 (compatible; MSIE 7.0; Windows NT 5.1; WebMoney
     Advisor; Avant Browser;  Embedded Web Browser from: http://bsalsa.com/; .NET
     CLR 2.0.50727),gzip(gfe),gzip(gfe)
Xref: g2news2.google.com rec.drugs.cannabis:3553 rec.equestrian:46926 rec.folk-
dancing:551 rec.radio.amateur.space:530 rec.radio.shortwave:45096

SEXY story. The cute doorman gives me an enigmatic look when I say I'm
here to see you. I am not sure if maybe he thinks I am your daughter.
You are not quite old enough for that, I am not quite young enough -
but we are pretty close. Am I wrong for thinking that's hot?
Definitely. I think...  http://ragdai.info/sex-story.html


From -7136786308891855546
X-Google-Thread: 10813c,4ae99075c60d4c65,start
X-Google-Thread: 10255f,4ae99075c60d4c65,start
X-Google-Thread: 102692,4ae99075c60d4c65,start
X-Google-Thread: f8abe,4ae99075c60d4c65,start
X-Google-Thread: 10e8ad,4ae99075c60d4c65,start
X-Google-Attributes:
gid10813c,gid10255f,gid102692,gidf8abe,gid10e8ad,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
```

```
Path: g2news1.google.com!news2.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx01.iad01.newshosting.com!newshosting.com!post01.iad01!
news.newsdemon.com!not-for-mail
Message-Id: <m07101112360036@4ax.com>
Subject: MI5 Persecution: Brighton 24/9/98 (9335)
Newsgroups:
sci.med.laboratory,alt.fan.holmes,alt.polyamory,alt.sports.hockey.nhl.ott-
senators,rec.radio.amateur.space
Followup-To:
sci.med.laboratory,alt.fan.holmes,alt.polyamory,alt.sports.hockey.nhl.ott-
senators,rec.radio.amateur.space,uk.misc
From: MI5Victim@mi5.gov.uk
Date: 11 Nov 2007 08:39:31 GMT
Lines: 30
Organization: news.newsdemon.com
X-Complaints-To: abuse@newsdemon.com
X-Original-Lines: 26
Xref: g2news1.google.com sci.med.laboratory:1775 alt.fan.holmes:1318
alt.polyamory:69796 alt.sports.hockey.nhl.ott-senators:13940
rec.radio.amateur.space:1180
```

Brighton Day Trip - 24/Sept/1998

Certainty level: 5%

On a day trip to Brighton, carrying a minidisc recorder, I managed to collect several indistinct instances of what I think were people swearing at me. Between the 0.5 and 1.5 second marks of the above recording is something that sounds like "nutter". I recorded at least three other much more obscene sexual words on the same day.

I don't honestly think the "nutter" recorded here is part of the conspiracy against me. I've been called similar things elsewhere, where it's been blindingly clear that the insult does form part of the conspiracy - but not in this case. This illustrates quite a worrying point - as a result of the many years of abuse "in public", I now sometimes simply don't know whether somebody is insulting me because they think I look like a dweeb, or whether the conspiracy is in action. Sometimes, due to background noise and people talking quietly relative to ambient noise, I can't be sure of what's being said, even after listening to it again on my minidisc. Or put another way, I now have a mild form of what I recognise to be occasional auditory delusions - but these are fuelled by the many years of actual verbal abuse.

9335

--
Posted via NewsDemon.com - Premium Uncensored Newsgroup Service
      ------->>>>>>http://www.NewsDemon.com<<<<<<------
Unlimited Access, Anonymous Accounts, Uncensored Broadband Access

From 6892863919875260712
X-Google-Thread: 10813c,ee5beb808d8976b7,start
X-Google-Thread: 10255f,ee5beb808d8976b7,start
X-Google-Thread: 102692,ee5beb808d8976b7,start
X-Google-Thread: f8abe,ee5beb808d8976b7,start
X-Google-Thread: 10e8ad,ee5beb808d8976b7,start
X-Google-Attributes:
gid10813c,gid10255f,gid102692,gidf8abe,gid10e8ad,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!border1.nntp.dca.giganews.com!
border2.nntp.dca.giganews.com!nntp.giganews.com!novia!nx01.iad01.newshosting.com!
newshosting.com!post01.iad01!news.newsdemon.com!not-for-mail
Message-Id: <m07101113313057@4ax.com>
Subject: MI5 Persecution: POSK 2/2/98 (11509)
Newsgroups:
sci.med.laboratory,alt.fan.holmes,alt.polyamory,alt.sports.hockey.nhl.ott-senators,rec.radio.amateur.space
Followup-To:
sci.med.laboratory,alt.fan.holmes,alt.polyamory,alt.sports.hockey.nhl.ott-senators,rec.radio.amateur.space,uk.misc
From: MI5Victim@mi5.gov.uk
Date: 11 Nov 2007 09:35:01 GMT
Lines: 28
Organization: news.newsdemon.com
X-Complaints-To: abuse@newsdemon.com
X-Original-Lines: 24
X-Original-Bytes: 1793
Xref: g2news1.google.com sci.med.laboratory:1776 alt.fan.holmes:1319
alt.polyamory:69797 alt.sports.hockey.nhl.ott-senators:13942
rec.radio.amateur.space:1181

POSK Cafe - 2/Feb/1998

Here are two independent segments, both of which occurred in London on the same day, the first at a Polish cafe, the second on the Tube.

Certainty level: 100%

POSK is the Polish Social-Cultural Centre in Hammersmith, London. It has quite a nice cafe which does pierogi, golabki etc. I went there with my mother early in 1998. Seated at the window table were three Polish men talking amongst themselves. One of them let rip with a sexual obscenity which was clearly directed at me (it's the same one that's been heard again and again since about November 1995), and which was recorded on my minidisc walkman. I have not included it in the above excerpt, which shows the reaction of another of the trio to the first man's swearing - namely, "jestes swinia jednak" which in English is "nevertheless you're a swine".

Certainty level: 20%

Somewhere on the London Underground. "Psycho" (I think - a little unclear).

11509

--
Posted via NewsDemon.com - Premium Uncensored Newsgroup Service
------->>>>>>http://www.NewsDemon.com<<<<<<------
Unlimited Access, Anonymous Accounts, Uncensored Broadband Access

```
From 6891073094379538705
X-Google-Thread: 10813c,68fb55741768984f,start
X-Google-Thread: 10255f,68fb55741768984f,start
X-Google-Thread: 102692,68fb55741768984f,start
X-Google-Thread: f8abe,68fb55741768984f,start
X-Google-Thread: 10e8ad,68fb55741768984f,start
X-Google-Attributes:
gid10813c,gid10255f,gid102692,gidf8abe,gid10e8ad,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news4.google.com!out01a.usenetserver.com!
news.usenetserver.com!in04.usenetserver.com!news.usenetserver.com!
nx01.iad01.newshosting.com!newshosting.com!post01.iad01!news.newsdemon.com!not-
for-mail
Message-Id: <m07101114365122@4ax.com>
Subject: MI5 Persecution: Leicester Square 9/2/98 (13683)
Newsgroups:
sci.med.laboratory,alt.fan.holmes,alt.polyamory,alt.sports.hockey.nhl.ott-
senators,rec.radio.amateur.space
Followup-To:
sci.med.laboratory,alt.fan.holmes,alt.polyamory,alt.sports.hockey.nhl.ott-
senators,rec.radio.amateur.space,uk.misc
From: MI5Victim@mi5.gov.uk
Date: 11 Nov 2007 10:40:22 GMT
Lines: 43
Organization: news.newsdemon.com
X-Complaints-To: abuse@newsdemon.com
Xref: g2news1.google.com sci.med.laboratory:1777 alt.fan.holmes:1320
alt.polyamory:69798 alt.sports.hockey.nhl.ott-senators:13944
rec.radio.amateur.space:1182
```

Leicester Square - 9/Feb/1998

In February 1998 I spent some time in Leicester Square, in the West End of London. This is a very busy area of London, and one which can be relied on to produce "contacts". Capital Radio's offices and their cafe are located here, the Trocadero is nearby, and the place is full of cinemas and entertainment venues.

Certainty level: 100%

A young girl is heard to say, "Alright I'm going to talk to myself" to her friends, followed by all of them laughing together, as I passed by.

Believe me, I do not look mad in real life, these young people would not have directed their comments and laughter at me unless they had already been told by others that I was ill. I am absolutely certain that their behaviour was directed at me, and this audio file is particularly clear.

Certainty level: 60%

This one was recorded in a cafe in Green Park. Two women are talking to each other, one of them says to the other, "something wrong with him", with an emphasis on the "wrong".

The words "something wrong with him" have been repeated at me dozens of times, at my former workplace in Canada, in England, etc. The words are quite deliberately chosen to have two meanings; they obviously imply that I am ill, without forcing the abusers to demean themselves by using more pejorative terms, although they have shown that they have no compunction in that area; and secondly, the words "wrong ... him" make me at fault, and place the guilt for the abusers' wrongdoing on my shoulders.

Certainty level: 30%

Recorded on a Victoria line tube train leaving Green Park station.
If you listen carefully you can pick up the word "hunchback". The speaker had emitted a swear word immediately before this excerpt; both the swear word, and the "hunchback", were (I believe) directed at me.

13683

--
Posted via NewsDemon.com - Premium Uncensored Newsgroup Service
------->>>>>>http://www.NewsDemon.com<<<<<<------
Unlimited Access, Anonymous Accounts, Uncensored Broadband Access

From 2706803672168641191
X-Google-Thread: 10e8ad,567fc18c5a6f7ba3,start
X-Google-Thread: 10b9c8,567fc18c5a6f7ba3,start
X-Google-Attributes: gid10e8ad,gid10b9c8,public,usenet
X-Google-Language: ENGLISH,ASCII
Path: g2news1.google.com!news2.google.com!newsfeed2.dallas1.level3.net!
news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-315 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Mon, 12 Nov 2007 11:02:46 EST
Organization: The Radio Amateur Satellite Corporation
Lines: 306
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <002801c82545$76679490$6601a8c0@familyroom>

```
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix1.panix.com
Mime-Version: 1.0
Content-Type: text/plain;charset="iso-8859-1"
Content-Transfer-Encoding: quoted-printable
X-Trace: reader1.panix.com 1194883368 29389 166.84.1.1 (12 Nov 2007 16:02:48 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Mon, 12 Nov 2007 16:02:48 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
X-Authority-Analysis: v=1.0 c=1 a=7F0xj2XTAAAA:8 a=mrvsXAxrAAAA:8 a=4DFFUeACAAAA:8
a=d185jZcJAAAA:8 a=X1lNCEGKAAAA:8 a=qRwQae5iAAAA:8 a=AAacJLbDAAAA:8
a=Ixn1CAxRAAAA:8 a=88-xt22EeHKRFVo6rEEA:9 a=lIB2EVLwT3bRsrveT3MA:7 a=hOoV-
flBiYDChfUe4yU7VRZiUi8A:4 a=q4eIODirUFwA:10 a=5WgiSGtmuJEA:10 a=aXUJHtye-TwA:10
a=CWSBNlG-xqIA:10
Xref: g2news1.google.com rec.radio.amateur.space:1183 rec.radio.info:607
```

AMSAT NEWS SERVICE
ANS-315

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* HAM RADIO NEAR SPACE: HAM BALLOON WILL TRY ATLANTIC CROSSING
* Call for Papers at 12th Annual Southeastern VHF Society Conference
* AO-16 partially recovered
* Satellite Shorts
* ARISS Status - 5 November 2007

SB SAT @ AMSAT $ANS-315.01
HAM RADIO NEAR SPACE: HAM BALLOON WILL TRY ATLANTIC CROSSING

AMSAT News Service Bulletin 315.01
From AMSAT HQ SILVER SPRING, MD.
November 11, 2007

To All RADIO AMATEURS
BID: $ANS-315.01

Here is a mission for all you Satellite enthusiasts to follow and give reports to. Amateurs at the University of Tennessee Amateur Radio Club are launching a balloon with a beacon in the 10 MHz Amateur Band that may travel across the Atlantic.

The latest Icarus X mission designated UX-19, will hopefully launch about the time we go to air. The payload will include a GPS unit and computerized unit that will regulate the balloon's altitude and send telemetry on 10.123 MHz in CW and RTTY formats. In addition to the 30m beacon there will also be an APRS beacon AA4UT-11 on 144.390 MHz FM. The dates are TBA (soon).

The flight has been dubbed 'The Spirit Of Knoxville' after Lindbergh's first trans-Atlantic flight. The 10 MHz transmitter will run 3 watts output into a half wave dipole hung below the balloon. The goal of its 5 day mission is to be the first Amateur Radio equipped helium balloon to cross the Atlantic.

More is on-line at www.utarc.org (UTARC)

[ANS thanks Dan, K2VOL, for the above information]

/EX

SB SAT @ AMSAT $ANS-315.02
Call for Papers at 12th Annual Southeastern VHF Society Conference

AMSAT News Service Bulletin 315.02
From AMSAT HQ SILVER SPRING, MD.
November 11, 2007
To All RADIO AMATEURS
BID: $ANS-315.02

April 25th and 26th, 2008
Orlando, Florida

The Southeastern VHF Society is calling for the submission of papers and presentations for the upcoming 12th Annual Southeastern VHF Society Conference to be held in Orlando, Florida on April 25th and 26th, 2008.
Papers and presentations are solicited on both the technical and operational aspects of VHF, UHF and Microwave weak signal amateur radio.
Some suggested areas of interest are:

Transmitters
Receivers
Transverters
RF Power Amplifiers
RF Low Noise Pre Amplifiers

Antennas
Construction Projects
Test Equipment And Station Accessories
Station Design And Construction
Contesting
Roving
DXpeditions
EME
Propagation (Sporadic E, Meteor Scatter, Troposphere Ducting, etc.)
Digital Modes (WSJT, etc.)
Digital Signal Processing (DSP)
Software Defined Radio (SDR)
Amateur Satellites
Amateur Television

In general papers and presentations on non weak signal related topics such as FM repeaters and packet will not be accepted but exceptions may be made if the topic is related to weak signal. For example, a paper or presentation on the use of APRS to track rovers during contests would be considered.

The deadline for the submission of papers and presentations is February 29, 2008. All submissions should be in Microsoft Word (.doc) or alternatively Adobe Acrobat (.pdf) files.

Pages are 8 and 1/2 by 11 inches with a 1 inch margin on the bottom and � inch margin on the other three sides. All text, drawings, photos,
etc. should be black and white only (no color).

Please indicate when you submit your paper or presentation if you plan to attend the conference and present there or if you are submitting just for publication. Papers and presentations will be published in bound proceedings by the ARRL. Send all questions, comments and submissions to the program chair, Steve Kostro, N2CEI at svhfs2008@downeastmicrowave.com.

For further information about the conference please go to www.svhfs.org and/or www.flwss.net.

[ANS thanks John Logsdon, K2STO, for the above information]

/EX

SB SAT @ AMSAT $ANS-315.03
AO-16 partially recovered

AMSAT News Service Bulletin 315.03
From AMSAT HQ SILVER SPRING, MD.
November 11, 2007
To All RADIO AMATEURS

BID: $ANS-315.03

After being off the air for several months, I'm happy to announce that AO-16 has been partially recovered and is transmitting on 437.026 Mhz. The satellite was recovered to the boot loader by Mark Hammond N8MH with guidance from Bruce Rahn WB9ANQ and others. Further reloading of the satellite is underway. The AO-16 team could use your help collecting the binary MBL telemetry for now, and the regular telemetry once the reload is completed.

If you receive any telemetry from AO-16, please submit it (preferably as a .KSS file attachment) to telemetry AT quagliana DOT com and put the words "AO-16 Telemetry" in the subject of your email. Please include your callsign (if any), your latitude/longitude (or grid square), and the date and time when the telemetry was collected.

73, Drew KO4MA
AMSAT-NA VP Ops

[ANS thanks Lee, KU4OS, for the above information]

/EX

SB SAT @ AMSAT $ANS-315.04
Satellite Shorts

AMSAT News Service Bulletin 315.04
From AMSAT HQ SILVER SPRING, MD.
November 11, 2007
To All RADIO AMATEURS
BID: $ANS-315.04

John, G7HIA and Robert, G8ATE announced this week that an award certificate is available to all Stations that have worked GB5OSO for the 50th Anniversary of SPUTNIK-1. Additional information can be found at: http://www.turlington.supanet.com. Over 300 contacts in 33 DXCC countries on AO7, AO27, SO51, AO51 and VO52. More than 170 stations were logged and many were worked on more than one satellite. Two stations who I worked on all 5 birds: G1OCN and ON5NY. JA0CAW and JH1EKH organized a conection via EchoLink to SO50 and AO51 over Japan.

+ Fred Parker, KF0AK invites radio amateurs to join a satellite net on 3.937 MHz at 8:00 PM CST Thursday evenings. Depending on band conditions a link the local repeater K0GPZ-R Echolink node 349368 may be available.

+ Motorola USA announced its intention to acquire a controlling interest in Vertex Standard Co, Ltd. Vertex Standard is the parent company of Yaesu.

+ Microwave antenna enthusiasts may find a paper from the Microwave

Update Conference by Paul, W1GHZ interesting. It can be found on-line at http://www.w1ghz.org/antbook/conf/Enhanced_Septum_Feed_MUD07.pdf

+ Graham, G3VZV sent information about a position open at the European Space Agency that may be of interest. See: http://www.esa.int/hr/YGT/ESTEC_001.pdf

+ SpaceDaily reported this week that China plans to open moon probe projects to the public to attract participation of competent institutions and enterprises in the moon program, said a spokesman with the China National Space Administration (CNSA). This could include scientific research organs, universities and also private companies.

[ANS thanks everyone for the above information]

/EX

SB SAT @ AMSAT $ANS-315.05
ARISS Status - 5 November 2007

AMSAT News Service Bulletin 315.05
From AMSAT HQ SILVER SPRING, MD.
November 11, 2007
To All RADIO AMATEURS
BID: $ANS-315.05

1. ARISS - Italian School Contacts Successful

IIS Deambrosis-Natta in Sestri Levante and the Engineering Faculty of the University of L�Aquila, Italy experienced an Amateur Radio on the International Space Station (ARISS) contact on Monday, October 29. Approximately 200 attended
IIS Deambrosis-Natta and another 350 students, teachers and correspondents were present at the University of L�Aquila. STS-120 Commander Pam Melroy first greeted the students and then Paolo Nespoli, IZ0JPA, answered thirteen questions posed to him over two consecutive passes. Newspapers, television stations and radio stations reported on the event. The audio from this event was fed into the EchoLink AMSAT (101 377) and JK1ZRW (277 208) servers, and into the Internet Radio Linking Project (IRLP) Discovery Reflector 9010. A summary of the contact was posted to the ARISS-Europe Web site with audio and a photograph. See: http://www.ariss-eu.org/2007_10_29.htm

The European Space Agency (ESA) ran an article on the ARISS contact: http://www.esa.int/SPECIALS/Esperia/SEMJC4FWB8F_0.html

2. Second Successful School Contact with Italian Schools

On Wednesday, October 31, students attending Liceo Scientifico G.Galilei

in Civitavecchia, Roma and others at ITI-LST Mottura in Caltanisetta, Italy participated in an Amateur Radio on the International Space Station (ARISS) contact. ESA astronaut Paolo Nespoli, IZ0JPA answered 10 questions from as many students during the question and answer session. Approximately 200 and 300 students were in attendance from Civitavecchia and Caltanisetta, respectively. Audio from this event was fed into the EchoLink AMSAT (101 377) and JK1ZRW (277 208) servers and received 14 connections including 3 repeaters, from 8 countries. The audio was also fed into the Internet Radio Linking Project (IRLP) Discovery Reflector 9010. Television stations, radio stations and newspapers covered the event. For more information, see the ARISS-Europe Web site:
http://www.ariss-eu.org/2007_11_02.htm

The European Space Agency (ESA) ran a story on the Nespoli contact. See:
http://www.esa.int/SPECIALS/Esperia/SEMAT1NHE8F_0.html

3.   Malaysian School Contacts Update

Malaysian space visitor Dr. Sheikh Muszaphar Shukor, 9W2MUS, participated in the Amateur Radio on the International Space Station (ARISS) program while on board the ISS. Five different groups of Malaysian school children gathered at the National Planetarium in Kuala Lumpur and spoke with Shukor, directly via 9M2RPN. All five of the successful contacts took place over the week of October 14. Approximately 90 people attended each of the 1st and 3rd- 5th sessions; the second contact had an audience of 50 students, teachers and others. The National Planetarium provided the youth with shows related to space exploration during their visits and each student was issued a QSL (postcard) to commemorate the event. NASA astronaut Robert �Hoot� Gibson
was present during the final session and gave talks about space. Three television stations, one radio station and 5 newspapers covered these events.

4.   Status of ARISS School Contacts Schedule

Due to the very demanding schedules of the crew onboard the ISS, no Amateur Radio on the International Space Station (ARISS) contacts have been planned at this time. The ARISS team expects contacts to resume once STS-122 launches in December. For a more complete status of the ARISS program, go to:
http://www.amsat.org/amsat/archive/sarex/10day/msg01446.html

5.   AMSAT Space Symposium Presentation

The 2007 Radio Amateur Satellite Corporation (AMSAT) Space Symposium was held on October 26 -28 in Pittsburgh, Pennsylvania. Amateur Radio on the International Space Station (ARISS) Chairman Frank Bauer�s presentation
given during the conference has been posted to the AMSAT Web site. See:
http://www.amsat.org/amsat/ariss/Presentations/AMSAT%20Symposiums/2007%20Sym
posium/

[ANS thanks Carol, KB3LKI, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Dee Interdonato, NB2F

```
From -5453619401378955420
X-Google-Thread: 10e8ad,498de1b4b3faf673,start
X-Google-Thread: 10b9c8,498de1b4b3faf673,start
X-Google-Attributes: gid10e8ad,gid10b9c8,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx01.iad01.newshosting.com!newshosting.com!
198.186.194.247.MISMATCH!news-out.readnews.com!news-xxxfer.readnews.com!panix!
rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-319 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Thu, 15 Nov 2007 08:59:05 EST
Organization: The Radio Amateur Satellite Corporation
Lines: 1309
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <001201c8278f$aaa86b70$6601a8c0@familyroom>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1195135145 15404 166.84.1.6 (15 Nov 2007 13:59:05 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Thu, 15 Nov 2007 13:59:05 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
```

```
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
X-Authority-Analysis: v=1.0 c=1 a=SeIcp837AAAA:8 a=Ixn1CAxRAAAA:8 a=c2--Pf7SAAAA:8
a=KlfyZUBUAAAA:8 a=FbIv-aF9AAAA:8 a=3fFvnXHTAAAA:8 a=XNQh8oeLAAAA:8
a=f0RPBRECAAAA:8 a=ADBSzeAnAAAA:8 a=5mDMBHa8AAAA:8 a=gUbaYAUbAAAA:8
a=qyDxTJV7AAAA:8 a=JXa7hjb-AAAA:8 a=qL4joYdQAAAA:8 a=LlmPylSfAAAA:8
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a=oBXim8GbAAAA:8 a=XYLYVS5UAAAA:8 a=h3eCdmoiAAAA:8 a=QX7y1c2GAAAA:8
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a=XyvEP7qG2ooA:10 a=wFu9RQxNt4EA:10 a=Bi3YAkoP18cA:10 a=F7Eo224L3vYA:10
a=XF7b4UCPwd8A:10
Xref: g2news1.google.com rec.radio.amateur.space:1184 rec.radio.info:609
```

This report is organized into FIVE parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites
Part 5 (S5) - deorbited/returned satellites

SB SAT @ AMSAT W8ISS ANS-319.S1
WSR 319 Part 1 11/15/2007

AMSAT NEWS SERVICE BULLETIN 319.S1 FROM AMSAT HQ
SILVER SPRING, MD, November 15, 2007
TO ALL RADIO AMATEURS
BID: $ANS-319.S1

VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.859330 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsat.in/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is
active. Each transponder has a different beacon.
[06252007]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

```
Current Modes:   FM Repeater - V/u
                 BBS         - Off
                 Telemetry   -  /u
```

```
Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink:   145.880 MHZ FM
                       145.880 MHz USB
                       145.920 MHz FM
                      1268.700 MHz FM 67Hz PL tone
Digital Downlinks:     435.150 MHz FM 38k4 Digital, PBP, 1 watt output
                       435.150 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:        145.860 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      1268.700 mhz FM 9k6 PBP Digital
Beacon:                435.150 MHz
```

```
Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear
```

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[11152007]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

```
Current Mode: V/u

Uplink:   145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute
timer
   on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the
repeater on
   and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset
the 10
   minute timer.
[05282007]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Operational - check operational schedule for current times!!

Current Mode: V/u

Voice/CW Mode JA
Uplink:   145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon:   435.795 MHz

Digital Mode JD
Uplinks:  145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm
```

```
JARL English webpage: http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's CW
telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts.htm
[0820007]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Current Mode: V/u

Uplink:   145.850 MHz FM
Downlink: 436.795 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[08202007]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational depending on amount of Sunlight

Current Mode: Listen before transmitting

Uplink:   145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink:  29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons:   29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
```

AO-7 Usage Guidelines on the AO-7 Log and Resource Site located at:
http://www.planetemily.com/ao7
[05282007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational - APRS and BBS

Current Mode: V/v

Expedition 16 crew:
Commander: Peggy Whitson
Flight Engineer: Yuri Malenchenko   RK3DUP
Flight Engineer: Daniel M. Tani

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM
Worldwide packet downlink: 145.825 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS
                      RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.
[11052007]

NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-319.S2
WSR 319 Part 2 11/15/2007

AMSAT NEWS SERVICE BULLETIN 319.S2 FROM AMSAT HQ
SILVER SPRING, MD, November 15, 2007
TO ALL RADIO AMATEURS
BID: $ANS-319.S2

CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.
[11152007]
=====
CP3
Catalog Number: 31128
Launch Date: April 17,2007

Status: Operational

Current Mode: /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[07302007]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: In Orbit

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder: 145.825 Mhz FM
[02052007]
=====
NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

```
Status: Operational

Current Mode: /u

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[10222007]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[07302007]
=====
GENESAT-1 ?O-??
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Current Mode: /u

Telemetry Beacon Downlink: 437.0670 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[01082007]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon:             437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
```

[03262007]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launched: June 30, 2003

Status: Operational

Current Mode: /u

Beacon: 436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[01082007]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launched: February 21, 2006

Status: Semi-Operational - Constant Carrier only

Uplink: 1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan ?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[01082007]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW
[08132007]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Mode(s): FM Repeater - V/u
BBS - Off
Telemetry - /u

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.880 MHZ FM
145.880 MHz USB
145.920 MHz FM
1268.700 MHz FM 67Hz PL tone
Digital Downlinks: 435.150 MHz FM 38k4 Digital, PBP, 1 watt output
435.150 MHz FM 9k6 Digital, Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Digital, Pacsat Broadcast Protocol
1268.700 mhz FM 9k6 PBP Digital
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[11152007]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Hibernation until full sunlight in November

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[09242007]

```
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Current Modes: V/U
               L/U

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[09172007]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Semi-Operational - Telemetry ONLY

Current Mode:  /u

Uplink:         145.900 MHz FM 1200-baud Manchester FSK
                145.920 MHz FM 1200-baud Manchester FSK
                145.940 MHz FM 1200-baud Manchester FSK
                145.960 MHz FM 1200-baud Manchester FSK

Downlink:       437.026 MHz SSB 1200-baud PSK

Mode-S Beacon: 2401.1428 MHz

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.025 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[11152007]
```

```
=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational.

Current Mode:  /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon:          435.025 MHz - OFF
Mode-S Beacon:     2401.500 MHz - OFF

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[010222007]
=====
RS-22 RADIO SPORT RS-22
Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only

Current Mode:  /u

CW Beacon - 435.352 MHz
            145.818 MHz
[08062007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational - APRS and BBS

Current Mode: V/v

Expedition 16 crew:
Commander:          Peggy Whitson
Flight Engineer:    Yuri Malenchenko      RK3DUP
Flight Engineer:    Daniel M. Tani

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink:   145.825 MHz FM
Worldwide packet downlink: 145.825 Mhz FM

Voice:
Region 1 voice uplink:   145.200 MHz FM
```

Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS
RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line is
NOT translated from Russian and posted.
[11052007]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-319.S3
WSR 319 Part 3 11/15/2007

AMSAT NEWS SERVICE BULLETIN 319.S3 FROM AMSAT HQ
SILVER SPRING, MD, November 15, 2007
TO ALL RADIO AMATEURS
BID: $ANS-319.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

CP4
Catalog Number: 31122
Launch Date: April 17,2007

Status: Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon: 437.325 MHz CW
[11152007]

```
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Non-Operational

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon:             437.2750 MHz CW

Callsign: JR8YJT
[10152007]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency:  437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink:        437.250 MHz FM 67Hz CTCSS
Voice Downlink:     2401.835 MHz FM
Packet Up/Downlink:  437.250 MHz 9k6 packet
Packet Downlink     2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non=Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[08132007]
=====
```

AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]

=====

MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Non-Operational

Uplinks: 145.850 MHz
145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[007302007]

=====

NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, callsign KE6QMD, as per the user service agreement located at the following URL:

```
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS:                SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink:   145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
V-band:   145.840 -  145.990 MHz CW/LSB
U-band:   435.550 -  435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks
---------
S2-band:  2401.225 -  2401.475 MHz CW/USB
K-band:  24048.010 - 24048.060 MHz CW/USB
Beacon:   2401.323 MHz
         24048.035 MHz
```

P3-D Telemetry Beacons (IHU)

BEACON	General Beacon (GB)	Middle Beacon (MB)	Engineering Beacon (EB)
2 m	none	145.898 MHz	none
70cm	435.438 MHz	435.588 MHz	435.838 MHz
13cm(1)	2400.188 MHz	2400.338 MHz	2400.588 MHz
13cm(2)	2401.173 MHz	2401.323 MHz	2401.573 MHz
3cm	10450.975 MHz	10451.125 MHz	10451.375 MHz
1.5cm	24047.885 MHz	24048.035 MHz	24048.285 MHz

[007162007]

=====

OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]

=====

UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]

=====

SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz

145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink: 145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

```
Broadcast callsign: POSAT1-11
BBS callsign:       POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012006]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM
```

```
Broadcast Callsign: HL01-11
BBS: HL01-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
LIBERTAD-1
Catalog Number: 31129
```

```
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink:   145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[10222007]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplinks:          145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink:      437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[01222007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
```

```
[05012006]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet: Non-Operational
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon:   145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational
```

```
Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink  29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
[01152007]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
```

Downlink: 29.354 to 29.394 MHz CW/USB

Beacon 1: 29.352 MHz (intermittent)
Beacon 2: 29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB

Beacon: 145.860 MHz

Robot: 145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-319.S4
WSR 319 Part 4 11/15/2007

AMSAT NEWS SERVICE BULLETIN 319.S4 FROM AMSAT HQ
SILVER SPRING, MD, November 15, 2007
TO ALL RADIO AMATEURS
BID: $ANS-319.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE PROPOSED FOR LAUNCH AT THIS TIME:

Phase 5a Mars Mission
Catalog Number:
Proposed Launch Date: 2009 or 2011

```
Status: Design Phase

For the latest project status update please visit the AMSAT-DL P5-A web
page:
http://ticket-to-mars.org
[01222007]
=====
PHASE 3E AO-??
Catalog number:
Proposed Launch Date: Late 2007

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web
page:
http://www.amsat-dl.org/p3e/
[01222007]
=====
Eagle AO-??
Catalog Number:
Proposed Launch Date: Early/Mid 2009

Status: Design Phase

For the latest project status updates please visit the AMSAT-NA webpage:
http://www.amsat.org
[01222007]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-319.S5
WSR 319 Part 5 11/15/2007

AMSAT NEWS SERVICE BULLETIN 319.S5 FROM AMSAT HQ
SILVER SPRING, MD, November 15, 2007
TO ALL RADIO AMATEURS
BID: $ANS-319.S5

THE FOLLOWING SATELLITES HAVE DE-ORBITED OR HAVE BEEN RETURNED SAFELY:

NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status:   Re-Entered
Re-entered: May 30, 2007

Main Downlink:      145.825 Mhz FM APRS AX25
APRS Uplink:        145.825 MHz FM APRS AX25
Voice/PSK31 Uplink:  28.120 MHz

Packet to Voice ID: RAFT
[06112007]
```

/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

From -2151462840447839279
X-Google-Thread: 10255f,a1e4ad774fff07b8,start
X-Google-Thread: 102692,a1e4ad774fff07b8,start
X-Google-Thread: f8abe,a1e4ad774fff07b8,start
X-Google-Thread: 10e8ad,a1e4ad774fff07b8,start
X-Google-Thread: 101522,a1e4ad774fff07b8,start
X-Google-Attributes:
gid10255f,gid102692,gidf8abe,gid10e8ad,gid101522,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news4.google.com!news1.google.com!
border1.nntp.dca.giganews.com!nntp.giganews.com!nx01.iad01.newshosting.com!
newshosting.com!post01.iad01!news.newsdemon.com!not-for-mail
Message-Id: <m07101706312766@4ax.com>
Subject: MI5 Persecution: BA984 LHR->TXL 13/6/98 (642)
Newsgroups: alt.fan.holmes,alt.polyamory,alt.sports.hockey.nhl.ott-senators,rec.radio.amateur.space,it.comp.reti.cisco
Followup-To: alt.fan.holmes,alt.polyamory,alt.sports.hockey.nhl.ott-senators,rec.radio.amateur.space,it.comp.reti.cisco,uk.misc
From: MI5Victim@mi5.gov.uk
Date: 17 Nov 2007 02:35:08 GMT
Lines: 39
Organization: news.newsdemon.com
X-Complaints-To: abuse@newsdemon.com
X-Original-Lines: 35
Xref: g2news1.google.com alt.fan.holmes:1322 alt.polyamory:70017
alt.sports.hockey.nhl.ott-senators:13966 rec.radio.amateur.space:1185
it.comp.reti.cisco:9741

BA984 LHR->TXL 13/June/1998

Certainty level: 100%

In June 1998 I travelled on the above British Airways flight to Berlin with my mother, to visit her family. There were two women in seats 30D/E, about 4/5 rows behind us. It was quite obvious from the torrent of abuse during these flight that these women had been instructed to harass me and attempt to obtain a reaction.

I did manage to record much of the flight, but unfortunately much of the recording is unclear because of high background noise on the aircraft. The following three excerpts from the recording are the best I can do.

The segment at position 11:34 minutes on my recording contains a fairly quiet word "paranoid", followed immediately by a much louder "yeah, he's paranoid, yeah". During the flight the abuse was not sexual, as it so often is elsewhere, but attacking my mental health.

One of the women in seats 30D/E said "paranoid" very clearly towards the end of the flight, but unfortunately I had run out of minidisc space and stopped recording by then. There is absolutely no doubt in my mind that these women were directed to harass me. This harassment happens without fail on British Airways flights; I've been on something like three or four BA flights in the last 5 years and it's happened each time. Presumably this is because of international law which says incidents on aircraft during flight are actionable in the airline's country of origin - so my persecutors want a reaction from me, and they want to see me "done" in the UK where they can influence the justice system.

These incidents never happen on foreign-domiciled carriers.

642

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Posted via NewsDemon.com - Premium Uncensored Newsgroup Service
------->>>>>>http://www.NewsDemon.com<<<<<<------
Unlimited Access, Anonymous Accounts, Uncensored Broadband Access

From 664716892644313064
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news.newsdemon.com!not-for-mail
Message-Id: <m07101707484697@4ax.com>
Subject: MI5 Persecution: BHS Croydon 18/12/98 (2817)
Newsgroups: alt.fan.holmes,alt.polyamory,alt.sports.hockey.nhl.ott-senators,rec.radio.amateur.space,it.comp.reti.cisco
Followup-To: alt.fan.holmes,alt.polyamory,alt.sports.hockey.nhl.ott-senators,rec.radio.amateur.space,it.comp.reti.cisco,uk.misc
From: MI5Victim@mi5.gov.uk
Date: 17 Nov 2007 03:52:26 GMT
Lines: 29
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X-Complaints-To: abuse@newsdemon.com
X-Original-Lines: 25
Xref: g2news1.google.com alt.fan.holmes:1323 alt.polyamory:70019
alt.sports.hockey.nhl.ott-senators:13967 rec.radio.amateur.space:1186
it.comp.reti.cisco:9742

Evil old bat in BHS 18/12/98

Certainty level: 40%

Not quite sure how sure I am about this one. I went down to Croydon (Surrey) with my mother to buy her a beret. After doing the shopping, we went to the BHS store restaurant to lunch on fish and chips.

You can guess the rest. Auditory hallucinations my shrink calls them, faithfully recorded on Sony minidisc. Some old cow going on about "see that chap, the one over there, something's wrong with him".

It is quite tiring being attacked by random idiots in the street, or as in this case, by some random, evil old bat in a restaurant. Fortunately it is only a sporadic occurrence. My enemies seem of late reluctant to waste resources in my direction. Should I take this as an insult? Am I not worth the millions of taxpayers money which has been wasted on me? Are the obsessives of MI5 themselves the "nutters" and "really mad" which they accuse me of being? Interestingly this suggestion as to the psychological profiles of Security Service personnel has been made by others... it does lead one to wonder, doesn't it?

2817

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Posted via NewsDemon.com - Premium Uncensored Newsgroup Service
      ------->>>>>>http://www.NewsDemon.com<<<<<<------
Unlimited Access, Anonymous Accounts, Uncensored Broadband Access

From 6986625557868274684
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X-Google-Thread: 101522,d7ef5657cdcd6661,start
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Path: g2news1.google.com!news1.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx01.iad01.newshosting.com!newshosting.com!post01.iad01!
news.newsdemon.com!not-for-mail
Message-Id: <m07101709070859@4ax.com>
Subject: MI5 Persecution: Ravenscourt Park 20/3/99 (4992)
Newsgroups: alt.fan.holmes,alt.polyamory,alt.sports.hockey.nhl.ott-senators,rec.radio.amateur.space,it.comp.reti.cisco
Followup-To: alt.fan.holmes,alt.polyamory,alt.sports.hockey.nhl.ott-senators,rec.radio.amateur.space,it.comp.reti.cisco,uk.misc
From: MI5Victim@mi5.gov.uk
Date: 17 Nov 2007 05:10:47 GMT
Lines: 30
Organization: news.newsdemon.com
X-Complaints-To: abuse@newsdemon.com
X-Original-Lines: 26
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alt.sports.hockey.nhl.ott-senators:13968 rec.radio.amateur.space:1187
it.comp.reti.cisco:9745

Ravenscourt Park 20/3/99

Certainty level: 70%

On Saturday I went to Hammersmith, specifically Ravenscourt Park. There had recently been a resurgence of persecution activity, following the Capital spams. I went to the cafe in the park and had a cup of coffee outside, with my mother. As I went inside the cafe to return the cups, a woman shouted a sexual obscenity (not present on this audio file - don't ask), and she said loudly "something's wrong with him". You can just about hear it in the audio file; listen very carefully, several times; it is distinguishable.

Much less subtle is the male voice shouting "take care he's a nutter" immediately after the woman's voice. As on the other recordings there's a lot of noise, but what the people say can be clearly heard.

Given that I take medication and look and behave quite sanely, and that there had been increased abuse over the last couple of weeks, it seems pretty unlikely that this incident was just spontaneous.... of course, you couldn't prove otherwise, but then that's the way MI5 mean their abuse to look.

4992

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Posted via NewsDemon.com - Premium Uncensored Newsgroup Service
------->>>>>>http://www.NewsDemon.com<<<<<<------
Unlimited Access, Anonymous Accounts, Uncensored Broadband Access

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X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!news2.google.com!
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newshosting.com!post01.iad01!news.newsdemon.com!not-for-mail
Message-Id: <m07101710531771@4ax.com>
Subject: MI5 Persecution: Battersea Library 29/3/99 (7167)
Newsgroups: alt.fan.holmes,alt.polyamory,alt.sports.hockey.nhl.ott-
senators,rec.radio.amateur.space,it.comp.reti.cisco
Followup-To: alt.fan.holmes,alt.polyamory,alt.sports.hockey.nhl.ott-
senators,rec.radio.amateur.space,it.comp.reti.cisco,uk.misc
From: MI5Victim@mi5.gov.uk
Date: 17 Nov 2007 06:56:56 GMT
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Lines: 22
Organization: news.newsdemon.com
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X-Original-Lines: 18
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alt.sports.hockey.nhl.ott-senators:13969 rec.radio.amateur.space:1188
it.comp.reti.cisco:9746

Battersea Library 29/3/99

Certainty level: 60%

This one is quite dull. During the month of March 1999, MI5 made another determined attempt to "get" me, substantially through radio programmes, through Jon Snow on Channel Four News, and through abuse in public, of which this is one example.

Recorded on my minidisc-walkman on Monday 29 March 1999, this audio file consists of two girls talking. One says to the other, "he's got something wrong with him." The usual words. How many millions a year do the Security Service waste on this? But they've denied it - how silly of me to forget. And they're not liars either, are they?

7167

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Posted via NewsDemon.com - Premium Uncensored Newsgroup Service
------->>>>>>http://www.NewsDemon.com<<<<<<------
Unlimited Access, Anonymous Accounts, Uncensored Broadband Access

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Path: g2news1.google.com!news2.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx01.iad01.newshosting.com!newshosting.com!post02.iad01!
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Message-Id: <m07101713081568@4ax.com>
Subject: MI5 Persecution: Royal Festival Hall 15/4/99 (9342)
Newsgroups: alt.fan.holmes,alt.polyamory,alt.sports.hockey.nhl.ott-senators,rec.radio.amateur.space,it.comp.reti.cisco
Followup-To: alt.fan.holmes,alt.polyamory,alt.sports.hockey.nhl.ott-senators,rec.radio.amateur.space,it.comp.reti.cisco,uk.misc
From: MI5Victim@mi5.gov.uk
Date: 17 Nov 2007 09:11:55 GMT

Lines: 31
Organization: news.newsdemon.com
X-Complaints-To: abuse@newsdemon.com
X-Original-Lines: 27
Xref: g2news1.google.com alt.fan.holmes:1326 alt.polyamory:70024
alt.sports.hockey.nhl.ott-senators:13970 rec.radio.amateur.space:1189
it.comp.reti.cisco:9749

Royal Festival Hall 15/4/99

Certainty level: 100%

Another "day in the life of", this one. January and February were quiet; in March it all started again; by the middle of April the resurgence of abuse had been going on for over a month. And this, with 100% certainty, is one manifestation of the abuse.

On Thursday 15 April 1999, 1pm lunchtime, I was at the booking office at the Royal Festival Hall near Waterloo Station in London, buying a ticket for a friend. A woman was at the counter next to me. She said;

"it would kill it, you know, it would just be overkill...
.. they can't stop can they"

It was obvious to everyone, the ticket agents included, that her comments were directed at me, and that "they" (ie. MI5) were "killing" me.

I've heard similar things said at various other times, but rarely have their intentions been expressed as clearly as this. The woman also expressed the obsessive nature of MI5's preoccupation with me, by saying, "they can't stop can they".

9342

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Posted via NewsDemon.com - Premium Uncensored Newsgroup Service
------->>>>>>http://www.NewsDemon.com<<<<<<------
Unlimited Access, Anonymous Accounts, Uncensored Broadband Access

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From -5193752085169334244
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Path: g2news1.google.com!news1.google.com!news2.google.com!
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Message-Id: <m07101714394543@4ax.com>
Subject: MI5 Persecution: Balham Bus 8/7/99 (11517)
Newsgroups: alt.fan.holmes,alt.polyamory,alt.sports.hockey.nhl.ott-senators,rec.radio.amateur.space,it.comp.reti.cisco
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From: MI5Victim@mi5.gov.uk
Date: 17 Nov 2007 10:43:25 GMT
Lines: 26
Organization: news.newsdemon.com
X-Complaints-To: abuse@newsdemon.com
X-Original-Lines: 22
Xref: g2news1.google.com alt.fan.holmes:1327 alt.polyamory:70025 alt.sports.hockey.nhl.ott-senators:13971 rec.radio.amateur.space:1190 it.comp.reti.cisco:9752

Balham - LT bus (8/July/1999)

Certainty level: 90%

I am very sure about this one. I got back from holidays on Wednesday. There were two incidents, both on the tube, on the way back from the airport. There was a further incident the following day, Thursday, on the bus (the 155 I think) in Balham, where two girls started spouting abuse about "crazy", etc. Naturally I had my minidisc with me and was able to record their words.

The cynical reader might think my demeanour or behaviour had given rise to the taunts of "crazy" recorded above. But I assure you my behaviour on the bus would not have made anyone think I was ill; and the taunts the previous day were the same sexual words as previously; so I'm quite sure that these incidents are either deliberately staged, or indicative of an overall high level of awareness among the London public, particularly in the part of London where I live.

11517

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Posted via NewsDemon.com - Premium Uncensored Newsgroup Service
------->>>>>>http://www.NewsDemon.com<<<<<<------
Unlimited Access, Anonymous Accounts, Uncensored Broadband Access

From 3591925702566486l2
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X-Google-Thread: 101522,3788975bd5fc228b,start
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X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news4.google.com!out02b.usenetserver.com!news.usenetserver.com!in04.usenetserver.com!news.usenetserver.com!nx01.iad01.newshosting.com!newshosting.com!post01.iad01!news.newsdemon.com!not-for-mail
Message-Id: <m07101716024399@4ax.com>
Subject: MI5 Persecution: Clapham South 17/2/00 (13692)
Newsgroups: alt.fan.holmes,alt.polyamory,alt.sports.hockey.nhl.ott-senators,rec.radio.amateur.space,it.comp.reti.cisco
Followup-To: alt.fan.holmes,alt.polyamory,alt.sports.hockey.nhl.ott-senators,rec.radio.amateur.space,it.comp.reti.cisco,uk.misc
From: MI5Victim@mi5.gov.uk
Date: 17 Nov 2007 12:06:23 GMT
Lines: 32
Organization: news.newsdemon.com
X-Complaints-To: abuse@newsdemon.com
Xref: g2news1.google.com alt.fan.holmes:1328 alt.polyamory:70026 alt.sports.hockey.nhl.ott-senators:13972 rec.radio.amateur.space:1191 it.comp.reti.cisco:9753

Clapham South (17/Feb/2000)

Certainty level: 100%

In February 2000, MI5's hate campaign against me was in full swing. They sent people into the road where I live in south London, to swear at me and abuse me as I was leaving or returning home. One such instance is recorded on the above audio file.

On Thursday 17 February 2000, I had just left my home, en route for Croydon, when two youths approached, going in the other direction. One of them said with a smile on his face something which I didn't recognize, and still don't understand despite it being on this audio clip. His demeanour made it clear his statement was directed at me. I coughed, and in response to that, he continued his insult, calling me a "wanker", which is very clearly recorded on this audio clip.

Two days later, in the very early morning of Sunday 20 February 2000, MI5 inflicted another insult against me just outside my house, when, returning from Croydon, two youths approached (MI5 agents always go in packs of at least two - they're too cowardly to go anywhere on their own) and one of them said quietly and bitterly to the other that "he's shitty, very shitty".

It is still comparatively rare for MI5 to send people to my house, or to my road, to harass me. Usually they know where I'm going to, since they have bugs on my phone and in each room of my house; and they send people to that location, or on the train or tube getting there.

13692

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Posted via NewsDemon.com - Premium Uncensored Newsgroup Service
------->>>>>>http://www.NewsDemon.com<<<<<<------
Unlimited Access, Anonymous Accounts, Uncensored Broadband Access

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X-Google-Thread: 101522,6c973e004e04876d,start
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Subject: MI5 Persecution: Clapham Junction 6/5/00 (15867)
Newsgroups: alt.fan.holmes,alt.polyamory,alt.sports.hockey.nhl.ott-
senators,rec.radio.amateur.space,it.comp.reti.cisco
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senators,rec.radio.amateur.space,it.comp.reti.cisco,uk.misc
From: MI5Victim@mi5.gov.uk
Date: 17 Nov 2007 13:44:50 GMT
Lines: 42
Organization: news.newsdemon.com
X-Complaints-To: abuse@newsdemon.com
Xref: g2news1.google.com alt.fan.holmes:1329 alt.polyamory:70028
alt.sports.hockey.nhl.ott-senators:13974 rec.radio.amateur.space:1192
it.comp.reti.cisco:9754
```

Clapham Junction (6/May/2000)

Certainty level: 60%

On Saturday 6 May 2000, I was in Clapham Junction, shopping and visiting the library. At precisely 12:29pm, the above audio clip was recorded, in front of Arding and Hobbs department store. One girl was saying to her friend,

"He's a homosexual, they can say whatever they want."

There are several reasons why I think this comment might be about me. Firstly, temporal proximity to other such incidents. The persecution had restarted about two to three days before this clip was recorded. Cause of restart unknown. Personally I think it's because I was going on holiday to France the following Monday - MI5 do like to take holidays abroad at the taxpayer's expense, and inventing reasons to resurrect their hate campaign just before I go on holiday is something they've done before.

Secondly, although I am not gay, they have used such references against me before. At Oxford Computer Group in 1994, manager Steve Mitchell simultaneously abused me and another employee but saying we were "of a similar bent". Such insults show latent or quite overt homosexuality on the part of the abuser.

Thirdly, the sort of people who abuse on the basis of mental illness are the same people who abuse others on the basis of sexuality, race, religion, etc. If they can abuse a disabled man, then they will surely do so based on the other criteria mentioned.

There is still some room for doubt, though, which is why I have assigned this recording a certainty level of only slightly above evens. But "they can say whatever they want" is what gives the game away; they just choose a differentiating feature on which to base their abuse; and if one such feature gets too boring ("we've called him a nutter for the last ten years so now we'll call him something else") then they invent a different lie to throw at me.

15867

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Posted via NewsDemon.com - Premium Uncensored Newsgroup Service
------->>>>>>http://www.NewsDemon.com<<<<<<------
Unlimited Access, Anonymous Accounts, Uncensored Broadband Access

From -5573508674399029957
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newshosting.com!post02.iad01!post01.iad01!news.newsdemon.com!not-for-mail
Message-Id: <m07101719195144@4ax.com>
Subject: MI5 Persecution: he's an idiot you know 3/11/00 (18042)
Newsgroups: alt.fan.holmes,alt.polyamory,alt.sports.hockey.nhl.ott-
senators,rec.radio.amateur.space,it.comp.reti.cisco
Followup-To: alt.fan.holmes,alt.polyamory,alt.sports.hockey.nhl.ott-
senators,rec.radio.amateur.space,it.comp.reti.cisco,uk.misc
From: MI5Victim@mi5.gov.uk
Date: 17 Nov 2007 15:23:31 GMT
Lines: 24
Organization: news.newsdemon.com

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X-Complaints-To: abuse@newsdemon.com
X-Original-Lines: 20
Xref: g2news1.google.com alt.fan.holmes:1330 alt.polyamory:70034
alt.sports.hockey.nhl.ott-senators:13975 rec.radio.amateur.space:1193
it.comp.reti.cisco:9755
```

Balham High Road (3/Nov/2000)

Certainty level: 60%

On 3 November 2000, I had just got off the bus in Balham High Road, when I heard a group of schoolgirls shouting and laughing. One of them yelled;

"He's an idiot you know."

You can hear this on the above clip; it is followed by laughter. I am not quite sure this is about me, which is why I have only given it a two in three probability. I have been attacked many times with the word "idiot", which seems to be a favourite with intellectual lightweights who want to bring down bigger game. (Back in 1992 I was so worried by the attacks on my intelligence that I took the test and joined Mensa...... does that make me a *clever* idiot? Never mind.)

18042

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Posted via NewsDemon.com - Premium Uncensored Newsgroup Service
------->>>>>>http://www.NewsDemon.com<<<<<<------
Unlimited Access, Anonymous Accounts, Uncensored Broadband Access

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news.newsdemon.com!not-for-mail
Message-Id: <m07101722055457@4ax.com>
Subject: MI5 Persecution: tinker tailor wanker thief 2/12/00 (20217)
Newsgroups: alt.fan.holmes,alt.polyamory,alt.sports.hockey.nhl.ott-
senators,rec.radio.amateur.space,it.comp.reti.cisco
Followup-To: alt.fan.holmes,alt.polyamory,alt.sports.hockey.nhl.ott-
senators,rec.radio.amateur.space,it.comp.reti.cisco,uk.misc
From: MI5Victim@mi5.gov.uk
Date: 17 Nov 2007 18:09:35 GMT
```

Lines: 71
Organization: news.newsdemon.com
X-Complaints-To: abuse@newsdemon.com
X-Original-Lines: 67
Xref: g2news1.google.com alt.fan.holmes:1331 alt.polyamory:70039
alt.sports.hockey.nhl.ott-senators:13976 rec.radio.amateur.space:1194
it.comp.reti.cisco:9756

Crescent Grove, Clapham Common (2/Dec/2000)

Certainty level: 100%

This is one of those clips where I am absolutely, 100% certain it's inflicted by MI5 on me, because of background, context. On Saturday 2 December 2000, I was walking from my home to a pub on Clapham Common, and on the way was in proximity to a group of three English youths who were walking the other way. They turned from the main road into a private estate called Crescent Grove. Here is what they said;

(first youth) "He masturbates!"
(his mate responds) "Yeah, he masturbates!"
(and again) "Thief!"

There is a lot of context associated with this incident, which I will now relate.

Firstly, the verbal sexual abuse is a popular one with MI5, and as a statement about me is currently mostly in their imaginations. The accusation has to be seen relative to MI5's persecutory actions in late November and early December 2000, and in fact for some months leading up to this. Their relevant activities in June 2000 are documented in a message in this evidence item;
following from that, they sent someone to simulate an act in front of my window, which was captured on film.

It is the publication of the video of their agent performing the act on himself which caused MI5 to restart this thread of harassment in the first few days of December 2000. But there are some subtleties; I uploaded the digitised video to this website on 26/November/2000; but I did not announce its existence on the newsgroups until Sunday 3/December/2000. These youths' slur was made the previous day, on Saturday 2/Dec. That tells us quite a lot. According to my website logs, there were no accesses to the video file before Sunday 3/Dec. So why did MI5 restart
this particular thread of abuse, before their agent's activities were published on the newsgroup? The conclusion we reach is that they were watching my internet connection, either decoding the telephone line, or at the ISP; and/or they
may be able to physically see what is on my notebook computer's screen, from RF transmissions from its VGA circuitry. I do not know whether the latter is technically feasible, but the former certainly is, and I have known for years that MI5 bugs my internet activities and phone calls. It is from their observation of my internet connection that they were able to tell, without accessing the video file over the net, that it was of their agent in a compromising position;

and it was from that observation that their shouted slur on 2/Dec emanates.

The second accusation, "Thief!", is even more interesting. It relates to occurrences from June of 2000, some six months before these youths threw the word at me. It shows just how wide in reach geographically and temporally the MI5 persecution is; they react to something which happened half a year previously.

In the first half of 2000, MI5 made a determined assault on my friendships. In one particular case, that of A. whom I had known for virtually all my life, they partly succeeded. This person made pointed references to me which made it clear he knew what was happening; at one point he started asking "do you know anything about the FBI and the CIA". In June 2000, we went to see a film in the West End. I paid for both of us, and then asked him to return what I had paid for his ticket, some �7.50. He was reluctant to do so. Eventually he returned �5, settling for the lesser gain of �2.50.

I did not call him a thief to his face, but I may have spoken the word while I was at home, either conscious or in my sleep. MI5 have very tight control over everything I do and say in my home through their bugs; if I say anything against someone in "their" camp, they turn round the accusation against me. So, from the fact that A. tried to garner a few pounds at my expense, MI5 create the accusation, six months later..... "thief!".

20217

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Posted via NewsDemon.com - Premium Uncensored Newsgroup Service
------->>>>>>http://www.NewsDemon.com<<<<<<------
Unlimited Access, Anonymous Accounts, Uncensored Broadband Access

From 2009635428614617839
X-Google-Thread: 10255f,4708cc1123962e9a,start
X-Google-Thread: 102692,4708cc1123962e9a,start
X-Google-Thread: f8abe,4708cc1123962e9a,start
X-Google-Thread: 10e8ad,4708cc1123962e9a,start
X-Google-Thread: 101522,4708cc1123962e9a,start
X-Google-Attributes:
gid10255f,gid102692,gidf8abe,gid10e8ad,gid101522,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!news.glorb.com!cycny01.gnilink.net!
cyclone1.gnilink.net!gnilink.net!nx01.iad01.newshosting.com!newshosting.com!
post01.iad01!news.newsdemon.com!not-for-mail
Message-Id: <m07101800362188@4ax.com>
Subject: MI5 Persecution: Jon Holmes (4-5/Jan/2002) (22392)
Newsgroups: alt.fan.holmes,alt.polyamory,alt.sports.hockey.nhl.ott-senators,rec.radio.amateur.space,it.comp.reti.cisco

Followup-To: alt.fan.holmes,alt.polyamory,alt.sports.hockey.nhl.ott-senators,rec.radio.amateur.space,it.comp.reti.cisco,uk.misc
From: MI5Victim@mi5.gov.uk
Date: 17 Nov 2007 20:39:58 GMT
Lines: 50
Organization: news.newsdemon.com
X-Complaints-To: abuse@newsdemon.com
Xref: g2news1.google.com alt.fan.holmes:1332 alt.polyamory:70043
alt.sports.hockey.nhl.ott-senators:13977 rec.radio.amateur.space:1195
it.comp.reti.cisco:9757

Virgin Radio-Jon Holmes (4-5/Jan/2002)

Here are two segments from Virgin FM, one on Friday, the other on Saturday,
both from the Jon Holmes evening show.

Certainty level: 80%

In early January 2002 I listened for the first time in some months to Virgin
Radio,
specifically to the Jon Holmes evening show on Friday 4 January 2002. They
promptly
attacked me verbally. Again, context is relevant. There are three instances in the
space of two minutes on this extract;

00:18 "are you lying?"
00:22 "it's not fair"
01:24 "everyone at the amateur c+ turbo programmers club found it hilarious"

The first phrase is a straight slander. MI5 were trying to portray me as a liar at
around this time; I have other audio with the same accusation. "are you lying?";
unsophisticated.

It's closely followed by the words "it's not fair". Note carefully the way he says
it,
quickly, as if to deny what he says. The phrase "not fair" was first created by
OCTS MD
H S.-W. in Nov/1992, and picked up on my first visit to hospital soon after
"they should have paid your fare").
Again, unsophisticated parrotting of a key phrase.

The third phrase is explicable through contemporaneous context. That morning I had
phoned about a C++ course. "c+ turbo programmers club"... again, somewhat brazen
we're-listening-to-what-he-says-on-the-phone, and he-can't-prove-it. Something got
lost
in translation from MI5's watchers to Virgin, because "c+ turbo" means nothing....
there
is no C+ turbo language, only C++, of which Turbo C++ is one implementation.

Certainty level: 80%

I wasn't entirely convinced from Friday's programme, but the following evening's show confirmed it. It contained a number of references to my condition, of which the following excerpt is one such;

00:09 "I'm not well, and no-one cares"
00:24 "my voice sounds all funny"
01:01 "do you mean people that aren't mad"
01:05 "medical problem is it"

"I'm not well" doesn't mean he has a cold; it means he is being sarcastic about my mental illness. "my voice sounds all funny" refers to the change in nature of my voice when acute illness hits. "do you mean people that aren't mad" is obvious. "medical problem is it"..... rubbing salt into the wound.

22392

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Posted via NewsDemon.com - Premium Uncensored Newsgroup Service
      ------->>>>>>http://www.NewsDemon.com<<<<<<------
Unlimited Access, Anonymous Accounts, Uncensored Broadband Access

```
From 2929638282757811171
X-Google-Thread: 10e8ad,6843ecdfd30b63c0,start
X-Google-Thread: 10b9c8,6843ecdfd30b63c0,start
X-Google-Attributes: gid10e8ad,gid10b9c8,public,usenet
X-Google-Language: ENGLISH,ASCII
Path: g2news1.google.com!news1.google.com!newsfeed2.dallas1.level3.net!
news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-322 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sat, 17 Nov 2007 22:12:26 EST
Organization: The Radio Amateur Satellite Corporation
Lines: 321
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <001501c82990$d60aca80$6601a8c0@familyroom>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;charset="iso-8859-1"
Content-Transfer-Encoding: quoted-printable
X-Trace: reader1.panix.com 1195355547 29891 166.84.1.6 (18 Nov 2007 03:12:27 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 18 Nov 2007 03:12:27 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
```

X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
X-Authority-Analysis: v=1.0 c=1 a=o6Ge_S85YH0A:10 a=X-W_YhP6AAAA:8
a=uGVPSem0AAAA:8 a=jDqo7jUqAAAA:8 a=d185jZcJAAAA:8 a=M9AsAQRRAAAA:8
a=GlImS4wrzloiDcFLvzgA:9 a=CyMiknBkfa1lkNga75sA:7 a=gXaQwrgig9XBnjgRnygg9jCD7BUA:4
a=5qNe63cd7eQA:10 a=q4eIODirUFwA:10 a=CWSBNlG-xqIA:10
Xref: g2news1.google.com rec.radio.amateur.space:1196 rec.radio.info:610

AMSAT NEWS SERVICE
ANS-322

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:

* AMSAT Maryland Lab Progress Report
* ISS Amateur Radio Summary
* ANDE De-Orbit Award
* Arthur Z. Rowe, N1ORC Silent Key
* Satellite Shorts From All Over
* ARISS Status Report for the Week of November 12, 2007

SB SAT @ AMSAT $ANS-322.01
AMSAT Maryland Lab Progress Report

AMSAT News Service Bulletin 322.01
>From AMSAT HQ SILVER SPRING, MD.
November 18, 2007
To All RADIO AMATEURS
BID: $ANS-322.01

Recently, at the 2007 AMSAT Space Symposium, Robert Davis, KF4KSS, AMSAT

Lab Manager and Assistant Vice-President of Engineering discussed the progress of building out the new AMSAT Satellite Integration Laboratory in Pokomoke, Maryland.

This laboratory is a collaborative effort between AMSAT and the Hawk Institute for Space Sciences (HISS), a division of the Maryland Hawk Corporation which is a 501(c)(3) non-profit educational organization affiliated with the University of Maryland Eastern Shore (UMES). HISS is located in Pocomoke, Maryland, on the eastern shore of the Chesapeake Bay. This facility is about two and a half hours southeast of Washington, D.C. and is also near the NASA Wallops Facility.

The clean room walls have been cleaned and are currently being assembled. The contractor for the fire sprinkler system is expected to complete work in early November. The office walls have been completed and the laboratory, electrostatic workstations, soldering equipment, and machine shop are nearing final stages of construction.

The 5000 square foot facility will also house a satellite earth station expected to be installed in February, 2008. The laboratory will begin to be used with a university Cubesat project in accordance with AMSAT�s agreement. The Eagle satellite will be built and integrated at this facility also.

AMSAT�s Lab was also utilized for a university student project called the HAWK High Altitude Student Platform (HASP). This was an interdisciplinary program with fourteen students which built and launched a balloon project to 120,000�. The program will continue at the AMSAT Lab in 2008 and will be able to handle higher capacity payloads.

[ANS thanks Robert, KF4KSS, AMSAT Lab Manager for the above information]

/EX

SB SAT @ AMSAT $ANS-322.02
ISS Amateur Radio Summary

AMSAT News Service Bulletin 322.02
>From AMSAT HQ SILVER SPRING, MD.
November 18, 2007
To All RADIO AMATEURS
BID: $ANS-322.02

Kenneth, N5VHO, ARISS Project Engineer said this week, "Amateur radio operations on the ISS have had an interesting year. After being unavailable for months, the packet system was able to be partially restored when Suni Williams performed some basic manual reprogramming of the Kenwood D700 in June."

Since early September, packet has been operational on 145.825 simplex and will stay there until a complete reprogramming of the D700 system is performed. A target date for fully restoring the radio has not been set. It is hoped that the access to a computer on orbit and certification of the reprogramming software can be finalized for implementation during Expedition 17. Basic voice and packet operations are working but the crossband repeater is not available. Future SSTV operations are on hold until issues related to the system and the radio can be resolved.

School contacts have had a banner year so far with 74 contacts made since January 1, 2007 through October 31, 2007. This is the most ever school contacts recorded in a calendar year. Expedition 15 set a new school contact record for most school contacts by an expedition crew with 39. Suni Williams contributed 16, Fyodor Yurchikhin had 3 and Clay Anderson finishing out the expedition with 20.

The top 5 individual school contact counts for a single tour are:
1) Bill McArthur - 37
2) Suni Williams - 33
3) Leroy Chiao - 23
4) Frank Culbertson - 22
5) Clay Anderson - 21

NASA has stated that the next several months will be extremely difficult with all the activity on the ISS. During Expedition 16, three new modules (Harmony, Columbus and the Japanese pressurized storage module) will be installed on the ISS. Expedition 16 is planned to have three shuttle flights, 2 Soyuz flights, 2 progress flights and the maiden launch of the Automated Transfer Vehicle. No school contacts are planned for the next several months. Unattended operational support of the amateur radio equipment will be sporadic. Resumption of amateur radio related activities should be possible 2008.

[ANS thanks Kenneth, N5VHO for the above information]

/EX

SB SAT @ AMSAT $ANS-322.03
ANDE De-Orbit Award

AMSAT News Service Bulletin 322.03
>From AMSAT HQ SILVER SPRING, MD.
November 18, 2007

To All RADIO AMATEURS
BID: $ANS-322.03

Henk, PA3GUO invites everyone to participate in ANDE's Final Weeks in orbit special event. He said, "ANDE (NO-61) will de-orbit sometime in the next 4 weeks. We do not know exactly, but that's the challenge and the fun!

A special ANDE de-Orbit AWARD can be obtained by everyone who makes QSOs via ANDE or receives telemetry during its final 10 days in space. Your callsign and achievements will be listed on the award certificate.

ANDE APRS QSOs:

1 point for each 2 way APRS QSO over ANDE in its last 10 days of life.
Example:

```
00:01:31:24:KB1GVR]APU25N,ANDE-1*,qAO,K8YSE-6::KC2PCR :GA Doug
00:01:31:42:KC2PCR]APRS,ANDE-1*,qAO,KB2CEV::KB1GVR:G'Afternoon Mark ;)
```

ANDE Telemetry Reception:

10 points for telemetry packets on the last day
9 points for telemetry packets on the last day -1
...
1 point for telemetry packets on the last day -9

In total 55 Telemetry points can be achieved, all to be scored in the last 10 days.

Bob, WB4APR, will set the official date/time of de-orbit. The 10 days before that date then count for the calculation of your achievements. But you do not know before when those days will be.

Further details such as shipping costs and the submission email address will be announced in the coming days.

Have fun - and keep ANDE busy in its final exciting days in space !

Bob, WB4APR
Mike, DK3WN
Henk, PA3GUO

For questions on the award please contact PA3GUO (pa3guo @ amsat.org)
For current status of ANDE:
http://www.ew.usna.edu/~bruninga/ande-ops.html

[ANS thanks Henk, PA3GUO for the above information.]

/EX

SB SAT @ AMSAT $ANS-322.04
Arthur Z. Rowe, N1ORC Silent Key

AMSAT News Service Bulletin 322.04
>From AMSAT HQ SILVER SPRING, MD.
November 18, 2007
To All RADIO AMATEURS
BID: $ANS-322.04

AMSAT received the sad news this week that Arthur Z. Rowe, N1ORC became a Silent Key. Many of you may know Arthur from his email postings on space related topics on the AMSAT and Sarex bulletin boards. Arthur was a good friend and an avid manned space station enthusiast. He was well known by many of the Mir and ISS ham crews. His last Sarex message was posted the day before he became a silent key.

[ANS thanks Miles, WF1F for the above information]

/EX

SB SAT @ AMSAT $ANS-322.05
Satellite Shorts From All Over

AMSAT News Service Bulletin 322.05
>From AMSAT HQ SILVER SPRING, MD.
November 18, 2007
To All RADIO AMATEURS
BID: $ANS-322.05

+ Clive, G3CWV is requesting OSCAR-11 reception reports. Please send reception reports to his callsign @amsat.org or post to them to the amsat-bb. Clive's website at http://www.users.zetnet.co.uk/clivew/ has additional information of this satellite which transmits on 145.826 MHz. Eclipses have now started and are expected to continue until mid January 2008. Although the maximum duration of the current eclipses is less than those earlier this year, it is doubtful whether the satellite will be heard for any sustained period. While in continuous sunlight during September and October the satellite was unable to support continuous operation.

+ Cor, PD0RKC invites interested readers to visit his Ham Radio In Space website at http://pd0rkc.ontwikkel.nl. He features a video showing Brazilian astronaut, Marcos Pontes, PY�AEB using the ARISS radio gear.

+ John, G7HIA and Robert, G8ATE will award the SPUTNIK certificate to any Amateur Radio Station who worked SPUTNIK-1 special event station GB50SO an any of the following satellites AO7, AO27, SO50, AO51, and AO52. Details are available at http://www.turlington.supanet.com.

+ Wouter Jan Ubbels, PE4WJ released a beta version of Warbler, a JAVA 1200bit/s BPSK AX.25 soundcard demodulator to copy the signals from

AO-16 and IO-26. See: http://home.casema.nl/b.ubbels/Warbler.htm

[ANS thanks everyone for the above information]

/EX

SB SAT @ AMSAT $ANS-322.06
ARISS Status Report for the Week of November 12, 2007

AMSAT News Service Bulletin 322.06
>From AMSAT HQ SILVER SPRING, MD.
November 18, 2007
To All RADIO AMATEURS
BID: $ANS-322.06

1. Amateur Radio Day Includes ARISS Program

The Ontario County Radio Amateur Civil Emergency Services (RACES) planned a few events in honor of local native Pam Melroy�s STS-120 mission. Mid-lakes Intermediate School in Clifton Springs, New York was one of eight schools that participated in a video Web conference with Sandy Magnus, KC5FYE, on October 31 which was viewed by 3447 students and 160 teachers. The conference received television and newspaper coverage.

On November 2, the school held an �Amateur Radio Day� in which nearly 300 students and 25 teachers participated. The day began with an assembly, followed by a number of activities. Local amateur radio operators gave an ARISS and satellite presentation. They provided an outdoor antenna exercise, demonstrated tracking software and covered wave theory with a signal generator and oscilloscope. There was also an outdoor transmitter hunt, a special event HF station and a �Send your name in Morse Code� exercise. An Internet Radio Linking Project (IRLP) contact was made through node 5400 in Manchester, England. Media outlets reported on the event. Students and teachers requested information on how to get licensed. The radio club will supply Technician License Manuals to the school�s library.

2. DLN ARISS Module

Johnson Space Center is developing a module on the ARISS program for the Digital Learning Network (DLN). The module will incorporate ARISS lesson plans. Thousands of school children are reached through DLN each year.

[ANS thanks Carol, KB3LKI for the above information]

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In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM

From 7509590656550768125
X-Google-Thread: 10255f,187e07e29d078fd1,start
X-Google-Thread: 102692,187e07e29d078fd1,start
X-Google-Thread: f8abe,187e07e29d078fd1,start
X-Google-Thread: 10e8ad,187e07e29d078fd1,start
X-Google-Thread: 101522,187e07e29d078fd1,start
X-Google-Attributes:
gid10255f,gid102692,gidf8abe,gid10e8ad,gid101522,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx01.iad01.newshosting.com!newshosting.com!post01.iad01!
news.newsdemon.com!not-for-mail
Message-Id: <m07101803245220@4ax.com>
Subject: MI5 Persecution: Post Office 14/11/02 (24567)
Newsgroups: alt.fan.holmes,alt.polyamory,alt.sports.hockey.nhl.ott-
senators,rec.radio.amateur.space,it.comp.reti.cisco
Followup-To: alt.fan.holmes,alt.polyamory,alt.sports.hockey.nhl.ott-
senators,rec.radio.amateur.space,it.comp.reti.cisco,uk.misc
From: MI5Victim@mi5.gov.uk
Date: 17 Nov 2007 23:28:25 GMT
Lines: 40
Organization: news.newsdemon.com
X-Complaints-To: abuse@newsdemon.com
X-Original-Lines: 36
Xref: g2news1.google.com alt.fan.holmes:1333 alt.polyamory:70048
alt.sports.hockey.nhl.ott-senators:13985 rec.radio.amateur.space:1197
it.comp.reti.cisco:9759

Balham Hill Post Office (14/Nov/2002)

Certainty level: 80%

By mid-November 2002 the persecution had again dwindled, as happens sometimes, when along came this item.
I spent most of my time at home, going occasionally to the shops in Clapham South, or into town to meet people. On this particular

Thursday I only left the house once, for less than fifteen minutes to post a letter (special delivery, because my ordinary and
recorded delivery letters had been disappearing en route for some time - not that anyone would accuse MI5 of such petty harassment).
At the post office counter there was an Asian guy talking into his mobile phone and grinning away. There is a probability that
his comments were directed at me, as I will explain further. The second segment of audio closely follows the first segment.

"you'll do it today? let's meet about 3 o'clock and have some lunch. I got stuff to do and I'll go to the bank,
get this sh.. fucking moving yeah. Even just a little bit do something. He doesn't understand, you know what it is,
I don't want to tell him again cause then he might, he thinks we're having a go at him, I'm not having a go at him,
I'm explain to him"

Explanation: The guy is talking about some bloke who is unnamed, however it might be interpreted as being in code about me.
"I'll go to the bank"... variously interpretable, either literally, or as sounds-like "wank" which has been a consistent
theme in MI5's abuse. "get this shit fucking moving"... abuse... could be interpreted as MI5's criticism of my inertness.
The state spends hundreds of thousands of pounds a year - they want to see some result, not just neutrality and ordinariness.
"he doesn't understand"... MI5 claim I'm stupid... but the numbers and bits of paper prove otherwise, so perhaps what that
is really about is their agents' subconscious perception of themselves.

"having a go at him"... sounds like they're having a go at me, doesn't it? You might take the audio at face value and assume
it's about some other guy, but it's normal MI5 procedure to pretend to be talking about someone else, and make the content of
the message very relevant to me, or their perception of me.

"for some reason it doesn't get into his head, I don't know why... he's lost it completely, hasn't he"

What reason is there for it not getting into his (my) head? Stupidity is implied. Also implied is that it does get into his head;
we're intentionally causing him damage. He's lost it completely... for some time I have suffered from OCD... lost it completely
is the persecutors' observation of my illness, which they see through the surveillance on my home, which they caused.

24567

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Posted via NewsDemon.com - Premium Uncensored Newsgroup Service
------->>>>>>http://www.NewsDemon.com<<<<<<------
Unlimited Access, Anonymous Accounts, Uncensored Broadband Access

From -7798739943038856265
X-Google-Thread: 10255f,aa634c187fbe8488,start
X-Google-Thread: 102692,aa634c187fbe8488,start
X-Google-Thread: f8abe,aa634c187fbe8488,start
X-Google-Thread: 10e8ad,aa634c187fbe8488,start
X-Google-Thread: 101522,aa634c187fbe8488,start
X-Google-Attributes:
gid10255f,gid102692,gidf8abe,gid10e8ad,gid101522,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx01.iad01.newshosting.com!newshosting.com!post01.iad01!
news.newsdemon.com!not-for-mail
Message-Id: <m07101805540874@4ax.com>
Subject: MI5 Persecution: Eclipse pub 20/12/02 (26742)
Newsgroups: alt.fan.holmes,alt.polyamory,alt.sports.hockey.nhl.ott-
senators,rec.radio.amateur.space,it.comp.reti.cisco
Followup-To: alt.fan.holmes,alt.polyamory,alt.sports.hockey.nhl.ott-
senators,rec.radio.amateur.space,it.comp.reti.cisco,uk.misc
From: MI5Victim@mi5.gov.uk
Date: 18 Nov 2007 01:57:40 GMT
Lines: 26
Organization: news.newsdemon.com
X-Complaints-To: abuse@newsdemon.com
X-Original-Lines: 22
Xref: g2news1.google.com alt.fan.holmes:1334 alt.polyamory:70052
alt.sports.hockey.nhl.ott-senators:13989 rec.radio.amateur.space:1198
it.comp.reti.cisco:9760

Eclipse pub in Balham (20/Dec/2002)

Certainty level: 70%

On Friday 20/December/2002 I went to Balham to do some shopping and eating. When I went into the Eclipse pub for a meal there were two girls already at the bar being server, I ordered and sat down near the window. They sat down at the opposite window seat, out of sight. After a few minutes they started screaming repetitively "section, section". They were reading something and were trying to pretend that they were just repeating from what they were reading, but in reality it was quite obvious they were talking about me, specifically to confinement under mental health.

As you can guess the behaviour of these unwise young things shows them to be from the underprivileged category which due to the natural laws of society is seldom seen in the better classes of restaurant - the McDonald's next door is their more usual habitat. My guess is that these two females were deliberately placed in the Eclipse with orders to be offensive to me personally. The alternative would be that no-one had ordered them and they were just being rude on their own account, but that is improbable, for two reasons; first, I was out of sight of them and one does not usually "pick on" a person one cannot see; secondly, there had that afternoon in Balham been other, less distinct incidents immediately preceding this, and it is inferable that MI5 were making quite a serious effort to create a physical incident, as they have done on numerous occasions previously. I give my interpretation a two in three chance of validity.

26742

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      ------->>>>>>http://www.NewsDemon.com<<<<<<------
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news.usenetserver.com!in04.usenetserver.com!news.usenetserver.com!
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Subject: MI5 Persecution: Barbican Library 6/2/2003 (28917)
Newsgroups: alt.fan.holmes,alt.polyamory,alt.sports.hockey.nhl.ott-
senators,rec.radio.amateur.space,it.comp.reti.cisco
Followup-To: alt.fan.holmes,alt.polyamory,alt.sports.hockey.nhl.ott-
senators,rec.radio.amateur.space,it.comp.reti.cisco,uk.misc
From: MI5Victim@mi5.gov.uk
Date: 18 Nov 2007 04:38:42 GMT
Lines: 31
Organization: news.newsdemon.com
X-Complaints-To: abuse@newsdemon.com
Xref: g2news1.google.com alt.fan.holmes:1335 alt.polyamory:70054
alt.sports.hockey.nhl.ott-senators:13990 rec.radio.amateur.space:1199
it.comp.reti.cisco:9762
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Barbican Library - 6/Feb/2003

Certainty level: 100%

Here's an item from early February 2003, at which time Security Service were re-igniting hostilities against me, a direct result of my appeal

for a legal hearing against their organisation. On Thursday 6/Feb/2003 I went to the Barbican in central London with my mother to visit the library and have a meal. Security Service naturally knew about it because it had been mentioned the previous day in our house which is under constant surveillance on grounds of "National Security", so they may have been able to inform staff there to say something to me, as has been done elsewhere.
Two of the people at the Enquiries desk in the library obviously knew of my circumstances, I spoke to one of them who was very polite, and while I was waiting I heard the other speaking with a little less politeness, as recorded on this audio file. He said, "I spy", to start a game of guess what "I spy"; unsubtle, MI5 Spy. Then, at the 34 second mark on this clip he said;

"So obvious you couldn't even get that. I shall have to kill you. ha, ha, ha"

The words "I shall have to kill you" are interesting because such overt expression is rarely heard. Security Service wish me extinct.
Some years ago they were openly shouting "suicide" at me, so that is established.
But there is an element of doublethink in their attitude;
they use people's natural prejudice against mentally ill, who are popularly painted by media as being aggressive, to try to tinge the group's view of me and MI5's actions against me. The Security Service religion is that the country's enemies are deadly, and must therefore be extinguished. Hence, we must seize eagerly upon the disabled schizophrenic from Clapham, and throttle him, because who knows what'll happen if we don't.

There may be a subtle agenda of population control in what the Security Service have been doing in this country since 1990. In the current issue of 2600 Magazine (the Hacker quarterly, which I read from time to time) there is a quote from Hermann Goering on page 2; "the people can always be brought to the bidding of the leaders. All you have to do is tell them they are being attacked. It works the same in any country".
2600 printed the quote as a comment on the projected war against Iraq, which does not appear to pose any threat to the territory of those countries which wish to invade it. However the quote is somewhat relevant to my case, which is widely known about within Britain;
the security service instructs all right thinking citizens to do MI5's bidding and band together against a common enemy, while at the same time there is a suggestion of "look what'll happen to you if you don't obey us".

28917

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Message-Id: <m07101811432410@4ax.com>
Subject: MI5 Persecution: Bernard Levin - The Times (31092)
Newsgroups: alt.fan.holmes,alt.polyamory,alt.sports.hockey.nhl.ott-
senators,rec.radio.amateur.space,it.comp.reti.cisco
Followup-To: alt.fan.holmes,alt.polyamory,alt.sports.hockey.nhl.ott-
senators,rec.radio.amateur.space,it.comp.reti.cisco,uk.misc
From: MI5Victim@mi5.gov.uk
Date: 18 Nov 2007 07:46:56 GMT
Lines: 104
Organization: news.newsdemon.com
X-Complaints-To: abuse@newsdemon.com
X-Original-Lines: 100
Xref: g2news1.google.com alt.fan.holmes:1337 alt.polyamory:70058
alt.sports.hockey.nhl.ott-senators:13991 rec.radio.amateur.space:1200
it.comp.reti.cisco:9763

Fanatic's Fare for the Common Man

Certainty level: 90%

The article reproduced below was penned by Bernard Levin
for the Features section of the Times on 21 September 1991. To my mind, it described the situation at the time and in particular a recent meeting with a friend, during which I for the first time admitted to someone other than my GP that I had been subjected to a conspiracy of harassment over the previous year and a half.

There is a madman running loose about London, called David Campbell; I have no reason to believe that he is violent, but he should certainly be approached with caution. You may know him by the curious glitter in his eyes and a persistent trembling of his hands; if that does not suffice, you will find him attempting to thrust no fewer than 48 books into your arms, all hardbacks, with a promise that, if you should return to the same meeting-place next year, he will heave another 80 at you.

If, by now, the police have arrived and are keeping a close watch on him, you may feel sufficiently emboldened to examine the books. The jackets are a model of uncluttered typography, elegantly and simply laid out; there is an unobtrusive colophon of a rising sun, probably not picked at random. Gaining confidence - the lunatic is smiling by now, and the policemen, who know about such things, have significantly removed their helmets - you could do worse than take the jacket off the first book in the pile. The only word possible to describe the binding is sumptuous; real cloth in a glorious shade of dark green, with the title and author in black and gold on the spine.

Look at it more closely; your eyes do not deceive you - it truly does have real top-bands and tail-bands, in yellow, and, for good measure, a silk marker ribbon in a lighter green. The paper is cream-wove and acid-free, and the book is sewn, not glued.

Throughout the encounter, I should have mentioned, our loony has been chattering away, although what he is trying to say is almost impossible to understand; after a time, however, he becomes sufficiently coherent to make clear that he is trying to sell the books to you. Well, now, such quality in bookmaking today can only be for collectors' limited editions at a fearsome price - �30, �40, �50?

No, no, he says, the glitter more powerful than ever and the trembling of his hands rapidly spreading throughout his entire body; no, no - the books are priced variously at �7, �8 or �9, with the top price �12.

At this, the policemen understandably put their helmets back on; one of them draws his truncheon and the other can be heard summoning reinforcements on his walkie-talkie. The madman bursts into tears, and swears it is all true.

And it is.

David Campbell has acquired the entire rights to the whole of the Everyman's Library, which died a lingering and shameful death a decade or so ago, and he proposes to start it all over again - 48 volumes this September and 80 more next year, in editions I have described, at the prices specified. He proposes to launch his amazing venture simultaneously in Britain and the United States, with the massive firepower of Random Century at his back in this country, and the dashing cavalry of Knopf across the water, and no one who loves literature and courage will forbear to cheer.

At the time this article was written I had believed for some time that columnists in the Times and other journalists had been making references to my situation. Nothing unusual about this you may think, plenty of people have the same sort of ideas and obviously the papers aren't writing about them, so why should my beliefs not be as false as those of others?

What makes this article so extraordinary is that three or four days immediately preceding its publication, I had a meeting with a friend, during the course of which we discussed the media persecution, and in particular that by Times columnists. It seemed to me, reading the article by Levin in Saturday�s paper, that he was describing in some detail his "artist�s impression" of that meeting. Most telling are the final sentences, when he writes, "The madman bursts into tears, and swears it is all true. And it is." Although I did not "burst into tears" (he seems to be using a bit of poetic licence and exaggerating) I did try hard to convince my friend that it was all true; and I am able to concur with Mr Levin, because, of course, it is.

At the beginning of the piece Levin reveals a fear of being attacked by the "irrational" subject of his story, saying "I have no reason to believe that he is violent, but he should certainly be approached with caution". This goes back to the xenophobic propaganda of "defence" against a "threat" which was seen at the very beginning of the harassment. The impression of a "madman running loose" who needs to be controlled through an agency which assigns to itself the mantle of the "police" is also one which had been expressed elsewhere.

In the final paragraph of this extract, his reference to Everyman�s Library as having "died a lingering and shameful death a decade or so ago" shows clearly what sort of conclusion they wish to their campaign. They want a permanent solution, and as they are prevented from achieving that solution directly, they waste significant resources on methods which have been repeatedly shown to be ineffective for such a purpose.

31092

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news.newsdemon.com!not-for-mail
Message-Id: <m07101813352664@4ax.com>
Subject: MI5 Persecution: Come back, Norma! (33267)
Newsgroups: alt.fan.holmes,alt.polyamory,alt.sports.hockey.nhl.ott-
senators,rec.radio.amateur.space,it.comp.reti.cisco
Followup-To: alt.fan.holmes,alt.polyamory,alt.sports.hockey.nhl.ott-
senators,rec.radio.amateur.space,it.comp.reti.cisco,uk.misc
From: MI5Victim@mi5.gov.uk
Date: 18 Nov 2007 09:38:59 GMT
Lines: 42
Organization: news.newsdemon.com
X-Complaints-To: abuse@newsdemon.com
X-Original-Lines: 38
Xref: g2news1.google.com alt.fan.holmes:1338 alt.polyamory:70059
alt.sports.hockey.nhl.ott-senators:13992 rec.radio.amateur.space:1201
it.comp.reti.cisco:9764
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Private Eye, 23 Oct 1992

Certainty level: 25%

I'm not really sure whether this cover was intended to get at me, or whether it was re-interpreted after publication to be about me. This issue of Private Eye came out in October 1992, by which time I had been under severe continuous pressure at work and from the general population in Oxford for many months. It had John Major saying to his wife, "Come back, Norma!" under the title "Major's support lowest ever".

There's a story behind this. In late October I was in the local pub (the Rose and Crown, nice traditional name eh) with two people from work, Simon and Phil. Phil had with him a copy of the current Private Eye. These are both "nice people" and on my side, I hasten to add. Simon pointed out the message on the magazine's cover to Phil, and asked "what do you think about that". Phil answered, "Well usually they [Private Eye] get it right". This exchange happened in front of me. Although I was ill at the time (this was before I'd started taking medicines) I hadn't read anything into the Eye cover until these guys pointed it out to me.

Sometime later, again in the same road, a student shouted to one of his friends, "so when are you COMING BACK?", again in front of me.

What I realised Phil thought it meant was a double-entendre, the "coming" referring to the act of ejaculation, the "back" referring to the human back-side. So in a play on words you get a person who is referred to as a back-side ejaculating. Charming.

Of course, Phil could have been wrong. Perhaps there was no such meaning intended by Private Eye. Perhaps he saw meaning which wasn't there. Perhaps the moon is made from green cheese. Who knows?

33267

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Message-Id: <m07101814372353@4ax.com>
Subject: MI5 Persecution: Victor Lewis-Smith (35442)
Newsgroups: alt.fan.holmes,alt.polyamory,alt.sports.hockey.nhl.ott-senators,rec.radio.amateur.space,it.comp.reti.cisco
Followup-To: alt.fan.holmes,alt.polyamory,alt.sports.hockey.nhl.ott-senators,rec.radio.amateur.space,it.comp.reti.cisco,uk.misc
From: MI5Victim@mi5.gov.uk
Date: 18 Nov 2007 10:40:57 GMT
Lines: 29
Organization: news.newsdemon.com
X-Complaints-To: abuse@newsdemon.com
Xref: g2news1.google.com alt.fan.holmes:1339 alt.polyamory:70064 alt.sports.hockey.nhl.ott-senators:13993 rec.radio.amateur.space:1202 it.comp.reti.cisco:9765

Victor Lewis-Smith

Certainty level: 10%

Victor Lewis-Smith has issued a denial through his webmaster John Hayward-Warburton regarding this article; he says quite categorically it's not written about me. I kind-of sort-of believe him, but I think the conspiracy is so wide that the phrase "Eventually, I had to leave because they were all trying to kill me" could have been intended to be as if from any paranoid person, but could have been influenced by my case in the particular. So the influence could have been sort-of subconscious.

This article is from the Evening Standard of Thursday May 8, 1997. It is titled "Goon, and best forgotten" and may be found on page 31.

I think VLS has written/produced stuff specifically about me in the past, both in his Evening Standard column, one of which is reproduced below (in another case, he was talking about computer hacking, and I think that was directed at me), and a television programme in around late 1993 when he has a taxi driver who says "they're all trying to kill me guv" and VLS responds "you're supposed to be quite intelligent aren't you".

However, his webmaster has issued a formal denial on his behalf, so it is not for me to oppose what he has stated categorically.

35442

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X-Google-Thread: 101522,d71ac44928876cc3,start
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gid10255f,gid102692,gidf8abe,gid10e8ad,gid101522,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!border1.nntp.dca.giganews.com!
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news.newsdemon.com!not-for-mail
Message-Id: <m07101816292474@4ax.com>
Subject: MI5 Persecution: Introduction to Sent Faxes (642)
Newsgroups: alt.fan.holmes,alt.polyamory,alt.sports.hockey.nhl.ott-
senators,rec.radio.amateur.space,it.comp.reti.cisco
Followup-To: alt.fan.holmes,alt.polyamory,alt.sports.hockey.nhl.ott-
senators,rec.radio.amateur.space,it.comp.reti.cisco,uk.misc
From: MI5Victim@mi5.gov.uk
Date: 18 Nov 2007 12:32:57 GMT
Lines: 52
Organization: news.newsdemon.com
X-Complaints-To: abuse@newsdemon.com
X-Original-Lines: 48
Xref: g2news1.google.com alt.fan.holmes:1340 alt.polyamory:70069
alt.sports.hockey.nhl.ott-senators:13994 rec.radio.amateur.space:1203
it.comp.reti.cisco:9766
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Introduction to the Sent Faxes webpages

Between 1998 and April/2000 I sent some thirty articles on the subject of the MI5 Persecution to
British politicians, media, legal and diplomatic entities in the UK. Of those articles 24 are reproduced
on this part of the website. They were originally composed as Microsoft Word documents, and saved to HTML
form for publication here. A few of them were slightly edited in format for readability.

You will see that these articles cover quite comprehensively what has been going on since 1990, there being
quite a lot of material to cover, since it is a rare week that goes by without MI5 making some harassing
or threatening action against me. "How could it be True?"... they use the mental illness which they induced
in me as a ready explanation for my complaints. Who started it, why did it start, why it continues...
these faxed articles provide examination in more depth of the treatment in the Frequently Asked Questions webpages.

The sheer meaninglessness of the Secret Police actions is highlighted; their operatives make their livelihoods by cynically exploiting the taxpayers, when in a more responsible country they would be looking at the inside of prison cells.

The validity of this observation is proven by their reaction to my several suggestions in the articles that I would cease sending faxes if MI5's agents (and it's always the same people doing the persecution) desisted from continually harassing me. A number of times, you will see in the faxed articles, I have suggested that we come to a "peace of mind agreement" where I cease complaining and they cease harassing. On one occasion, I wrote to Hugh S.-W., the director of OCTS where I was employed in 1992-94 and who is aware of the circumstances, asking that he intercede to bring this matter to a close, by initiating a meeting between myself and the persecutors to mutually settle our differences; he didn't reply, but MI5 did soon after - they said "This is what you wanted, wasn't it?, some sort of confrontation?".
The reality is the people stalking me are not interested in any settlement; for them crime pays, and pays handsomely; moreover it is State-approved crime; the Police will never investigate or take action; it is corruption on an incredible level and scale, and it has gone on for over a decade.

You will see that the articles contain three elements; firstly, there are original written articles, many in the first half of 1999 when I was writing new articles every week and sending them by email and fax during the weekend; then there are "MI5 Persecution Update" articles, which list happenings recent to a particular transmission; and finally there is the "old faithful" Frequently Asked Questions article which was sent on a few occasions during the three year period. These articles generated a number of interesting responses from politicians and other recipients, many of which are documented in the "received faxes" area of these webpages.

I hope you enjoy reading these articles. I'm not as angry as these articles necessarily make out, only sometimes, usually soon after the persecutors have said something unpleasant at me; the purpose of putting lots of fire and ire into the mix is to try to chuck it into the public domain which might lead to MI5 being forced to curb their actions. Unfortunately that aim was not achieved, despite many, many thousands of faxes being sent. Also, if any policemen are reading this, then I'm (a bit) sorry about the rude things I said about "the Bill" in one or two of the articles; the police have never done me any harm (yet) by commission, only by omission of doing anything to investigate my complaints or treat them seriously.

642

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Posted via NewsDemon.com - Premium Uncensored Newsgroup Service
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From -6345798517430431476
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X-Google-Thread: 101522,bd96c1c609f21204,start
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X-Google-Language: ENGLISH,ASCII-7-bit
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Message-Id: <m07101817352597@4ax.com>
Subject: MI5 Persecution: Faxes Sent to Diplomatic/Legal (2817)
Newsgroups: alt.fan.holmes,alt.polyamory,alt.sports.hockey.nhl.ott-senators,rec.radio.amateur.space,it.comp.reti.cisco
Followup-To: alt.fan.holmes,alt.polyamory,alt.sports.hockey.nhl.ott-senators,rec.radio.amateur.space,it.comp.reti.cisco,uk.misc
From: MI5Victim@mi5.gov.uk
Date: 18 Nov 2007 13:38:57 GMT
Lines: 352
Organization: news.newsdemon.com
X-Complaints-To: abuse@newsdemon.com
X-Original-Lines: 348
Xref: g2news1.google.com alt.fan.holmes:1341 alt.polyamory:70070 alt.sports.hockey.nhl.ott-senators:13996 rec.radio.amateur.space:1204 it.comp.reti.cisco:9767

Faxes Sent to British Diplomatic/Legal logs

During the 1998-2000 period my records indicate that I sent at least 3,642 faxes to diplomatic and legal offices located in the British isles, of which 3,345 went via TPC's email-to-fax service and 297 were sent via fax-modem direct from my computer. The actual figure is somewhat higher since, for most of this period, whenever a recipient asked to be deleted from my mailing list, I totally wiped all entries including that from the logfile.

In the records "Y" indicates successful transmission from fax-modem, "N" indicates failed transmission from fax-modem.
"E" indicates an error occurred while transmitting via fax-modem and a fax may have been only partly transmitted.
"y" and "n" indicate success or failure via TPC.

In April 2000 I changed the method of operation by recording "R" when a recipient requested removal, rather than
wiping their details from my mailing list and records; and keeping "B" records for when TPC actioned a ban on a
recipient's fax-number, but the recipient did not write to ask me to cease faxing. The purpose of these changes
was to keep more accurate and complete records, but the intention was thwarted by the police complaint.

```
441712011004  yyyyYyynyyyyyny
441712210448  yyynYnynyyyyy
441712212818  yyyyYyyyyyyyy
441712215685  yyyyYyyyyyyyy
441712250947  nynnYyynyyyyy
441712252130  nnnnYynnyyyyn
441712253024  ynyyYyyyyyyyy
441712253862  yyyyEyyyyyyny
441712275503  yyyyYyyyyyyyy
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441712331612  yyyyYyyyyyyyy
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441712405333  yyyyYyyyyyyyy
441712407722  yyyyYyyyyyyyy
441712421447  yyyyYyyyyyyyy
441712422511  yyyyYyyyyyyyy
441712424221  yyyyYyyyyynny
441712424282  yyyyYyyyyyyyy
441712425434  yyyyYynnyyyyy
441712427803  yyyyYyyyyyyyy
441712428502  yynyYyynynnny
441712431699  yyyyYyyyynyyy
441712451287  yyyyEyyyyyyyn
```

441712456583	yyyyYyyyyyyyy
441712456961	nyyyYnynyyyyy
441712456993	ynnnYynnynnnn
441712459552	yyyyYyyyyyyyy
441712485735	yyyyYyyynyyyy
441712553760	yyyyYyyyynyyy
441712569992	yyyyYyyynnnnn
441712586333	yyyyYyyyyyyyy
441712595392	yyyyYynynyyyy
441712596213	yyyyYyynyyyyy
441712596487	ynnnYyyynnnyn
441712627970	yynnYnnnynnnn
441713060095	yyyyYyyyyyyyy
441713181301	yyyyYynyyyyny
441713181349	yyyyYyyyyyyyy
441713236717	nnnnYnnnyyyyy
441713321493	nnnnYyynyyyny
441713330270	yyyyYyyyyyyyy
441713338831	yynnYyynnnnnn
441713340242	yyynYnyyyyyy
441713440292	yyyyYyyyyyyyy
441713530075	yyyyYyyyyyyyy
441713530329	yyyyYyyyyyyyy
441713530339	yynnYyynynnnn
441713530425	yyyyYyyyynyy
441713530464	yyyyYyynnynny
441713530652	yyyyYyyyyyyyy
441713530659	yyyyYyyyyyyyy
441713530667	yyyyYyyyyyyyy
441713530937	yyyyYyyynnnnn
441713530998	yyyyYyyyyyyyy
441713531261	yyyyYyyynyyyy
441713531344	yynnYyyyyyyy
441713531488	yyyyYyyyyyyyy
441713531699	yyyyYyyynyyyy
441713531724	yyyyYyyyyyyyy
441713531726	yynyYyyyyyyyy
441713531794	yynnNnnnnnnnn
441713532144	yyyyYyynyyyyn
441713532221	yyyyYyyyyyyyy
441713532647	yyyyYynnnnnnn
441713532911	yyyyEyyyyyyyy
441713533319	yyyyYyynynnnn
441713533383	yynnNyynynnnn
441713533929	yyyyYyyynnnnn
441713533978	yyyyYyyyyyyy
441713534170	yyyyNyyyyyyy
441713534410	yynYyynynnnn
441713534637	yyyyYyyyynyyy
441713534979	yyyyYyyyynnyy
441713535319	yyyyYyyyyyyyy
441713535422	ynyYyyyyyyyy
441713535778	yyyYyyyyyyyy

441713536271	yyyyYyyyyyyyy
441713537622	nynyYyyyyyyyy
441713537741	yyyyYnyynnnnn
441713537772	yynnYyynynnn
441713537943	yyyyYyyyyyyyy
441713538188	yyyyYyyyyyyyy
441713538339	yyyyYyyyyyyyy
441713538791	yyyyYyyyyyyyy
441713538815	nyyyNnnnnnnnn
441713539292	yyyyYyyyyyyyy
441713539439	yyyyYyyyyyyyy
441713539924	yyyyYyyyyyyyy
441713539949	yyyyYyyyyyyyy
441713541166	yyyyYyyynnnyy
441713553568	yyyyYyyyyyynn
441713610005	yyyyYnnnyyyyy
441713703838	yyyyYyyyyyyny
441713707773	yyyyYyyyyynyy
441713711222	nnnnNnnnnnnnnn
441713738743	yyyyYyyyyyyyyy
441713780712	nynyYyynnnnnnn
441713795634	nnynNynnnnnnnn
441713870310	yyyyNyyyyynnyn
441713873289	yyyyYyyyyynyyy
441714040445	yyyyYyyyyyyyyy
441714041405	yyyyYyyyyyyny
441714042283	yyyyYyyyyyyyyy
441714043139	yyyyYnyyyyyyy
441714043900	yyynYyyyynyyyy
441714044812	yyyyYyyyyyynyy
441714045032	yyyyYyyyyyyyyy
441714046659	yyyyYyyynnnnnnnn
441714048089	yyyyNyyynnnnnnnn
441714050001	yyyyYyyyyyyyyyy
441714050798	yynnYyynynnnnnn
441714051166	yyyyYyyyyyyyyny
441714051360	yyyyYyyyyyyyyyy
441714051387	yyyyYyyyyyyyyyy
441714052084	ynnnYyyyyyyyyyyy
441714053082	ynnnYyynyyynnn
441714053896	yyyyYyyyyyyyyyn
441714054078	yyyyYyyyyyyyyy
441714054267	yyyyYyyyyyynyy
441714054934	yyyyYyyyyyyyB
441714056680	yyyyYyyyyyyyyyy
441714057028	yyyyEyyyyyyyyy
441714057456	yyyyYyyynyyyyyy
441714059955	yyyyYyyyyyyyyyy
441714130374	yyyyYnyyyyyyyyy
441714300502	yyyyYyyynnnnnnn
441714301522	yyyyYyyyyyyyyy
441714301677	yynnYyynynnnnnn
441714309171	yyyyYnnyyyyyynn

441714360319	yynnNnnnnnnnnn
441714364517	ynnnNnnnnnnnnnn
441714365204	yyyyYnyyyyyyyyy
441714368181	yyyyYyyyyyyyyyy
441714517284	yyyyYyyyyyyyyyn
441714531297	yyyyYyyyyyyyyyy
441714821018	yyyyYyyyyyyyy
441714866403	yyyyYynnyyyyyyy
441714869970	yyyyYyyyyyyyyyy
441714905613	yyyyYyyyyyyyynn
441714910691	yyyyYyyyyyynyyy
441714911542	yyyyYyyyyyyyyyy
441714914139	yyyyYyyyyyynyyy
441714914993	yynyYyyyyyyyyyy
441714919347	nynnYyynyyyyyyy
441714919348	yyyyYyyyyyyyyyy
441714934333	yyyyYyyyyyyyyn
441714935105	yyyYyyynnnnnn
441714937456	yyyyYyyyyyyyyn
441714941868	nyynYyynynnnnn
441714951635	yyyyYyyyyyyyyy
441714954035	yyyyYyyyynyynn
441714954441	nyyyYyyynnnnnn
441714957776	yynyYyynynynn
441714958595	yyyyYyyyyyyyyn
441714992283	yynnYyynynnnnn
441714997948	yyyyYynnyyyynn
441714999937	yyyyYyyyyyyyyy
441715227300	nyyyYnnnnyyyyy
441715810053	yyyyYyynyyyyyy
441715811829	yyyyYyyyynyyyy
441715813452	yyyyYyyyyyyyy
441715819585	yyyyYyyyyyyyyy
441715830090	yynyYyyyyyyyyy
441715830118	yynnYyynynnnnn
441715830579	yyyyYyyyyyyyyy
441715830950	yyyyYyyyyyyyyy
441715831341	yyyyYyyyyyyyyy
441715831491	yyyyYyyynnnnnn
441715831606	yyyyYyyyyyyyy
441715831672	nnyyYnnyyyyyyy
441715831723	yyyyYyyyyyyyyy
441715831786	yyyyYyyyyyyyyy
441715831926	yyyyYyyyyyyynn
441715832030	yyyyYyyyyyyynn
441715832033	yynnYyynynnnnn
441715832036	yyyyYyyyyyyyyy
441715832044	yyyyYyyyyyyyyn
441715832051	yynnYyynynnnnn
441715832094	yyyYyynnyyyyy
441715832254	yyyyYyyynnnnnn
441715832257	yyyyYyyyyyyyyy
441715832686	yynyYyynynyyyy

441715832823	yyyyYyyyyyynyy
441715833423	yyyyYyyyyyyyyy
441715834928	yyyyYyyyyyyyyn
441715835106	yyyyYyyyynyynn
441715835885	yyyyYyyyyyyyyy
441715837228	yyyyYyyyyyyyyy
441715839123	yyyyYyyyyynyyy
441715839127	yyyyYyyyyyyyyy
441715839144	yynnEyyyyyyyyy
441715839178	yyyyYnyynyyynn
441715839269	yynnYynnnnnnnn
441715844948	yyyyYyyyyyyyyy
441715846354	yyyyYyyynyynnn
441715847716	yyyyYyynyyyyyy
441715892505	nyyyYyyyyyyyyy
441715893430	yyyyYyyynyynyn
441715894440	yyyyYyyyyyyyyy
441715895154	yyyyNyyynyyyyy
441715897725	nyyyEynynyynyy
441716000289	yyyyYyyyyyyyyy
441716001455	yyyyYyyyyyyyyy
441716021820	ynnnYyyyyyyyyy
441716075158	yyyyYyyynnnnnn
441716083746	yyyyYyyynnnnnn
441716294169	yyyyYynyyynyyy
441716647714	yyyyYyynyyyyyyy
441716969911	ynyyYyyyyyyyyy
441717083318	yyyyYyyynnnnnn
441717244174	yyyyYynyyyyyyy
441717247001	yyyyYynyyyynyy
441717249884	yynyYyyyyyyyyy
441717273693	yyyyYnyyyynB
441717275824	yyyyEynyyyyyyy
441717278625	yyyyYynnyyyyyy
441717278960	yyyyYyyyyyyyyy
441717279654	yyyyYyyyyyyyyy
441717279934	yyyyYyyyyyyyyn
441717301683	yyyyYyyyyyyyyy
441717305747	yyyyYyyynnnnnn
441717358147	yyyyYyyynnyynn
441717921708	nyyyYyyyyyyyyy
441717977100	yyyyYyyynnnnnn
441717977435	yyyyYyyynyyyyy
441717977550	yynnYyyyyyyyyy
441717977700	yyyyYyyyyyyyyy
441717977929	yynnYyynyyyyyy
441717978001	ynnnYyynyyyyyy
441717978101	yyyyYyyyyyyynn
441717978308	yyyyYyyyyynyyy
441717978401	yynnYnynynnnnn
441717978699	yyyyEyyyyyyyyy
441717978801	yyyyYyyyyyyyyy
441717978929	yyyyYyyyyyyyy

```
441718138080  yyyyYyyyyyyyy
441718231348  yyyyYynyyyyyyy
441718231712  yyyyYyyyyynyyy
441718237926  yyynYyyyyyyyyy
441718239695  yyynYyyynyyynn
441718239701  yyyyYyyyyyynyy
441718241435  yyyyYyyyyyyyyy
441718241566  yyyyYyyyyyyyyy
441718310125  ynnnYyynyyyyyy
441718310626  yyyyYnyyyyyyyy
441718312239  yyyyYyyyyyyyyy
441718312430  yyyyYyyyyyyyy
441718312469  yyyyYyyyyyyyyy
441718312575  yyyyYyyyyyyyy
441718314885  yyyyYyyyyyyyy
441718316016  yynyNyyyyyyyy
441718316109  yyyyYyyyyyyR
441718316112  yyyyYyyyyyyynn
441718316968  yynnYyynynnnnn
441718317107  yyyyEyyyyyyyyy
441718317907  yyyyYyyyyyyyyy
441718318102  ynyyYyyynyyynn
441718318129  yyyyYyyyyyyyyy
441718318237  yyyyYyyyyyyyy
441718318479  yyyyNyyyyyyyyy
441718319188  yyyyYyyyyyyyyy
441718362602  yyyyYyyyyyyyy
441718364331  yynyYyyyyyyyyy
441718374526  nyynNynnyyyyn
441718382001  yynnYyyyyyyyy
441718382046  yyynYyyyyyyyy
441718394580  yyyyYyyyyyyyy
441718398746  yyyyYyyyyyyyy
441718398958  yyyyYyyyyyyyy
441719175014  nynnYyyyyyyyy
441719175026  nyyyYyyyyyyy
441719225815  yyyyYyyyyyyyy
441719242704  yyyYyyynnnnn
441719308401  yyyYnnynyyyy
441719350034  yyyyYyyyynyyy
441719366709  yyyyYnyyyyyyy
441719366802  yynyYyyyyyyny
441719366810  yyyYyyyyyyyn
441719367230  yyyYnyyyyyyy
441719367428  yyyYyyyyyyyy
441719371783  yyyYyyyyyyyn
441719372925  yyyYyyyyyyy
441719375402  yyyYyyyyyyyy
441719375687  yyyyYynyyyyyn
441719376108  yyyyYyyyyyyyy
441719376741  nyyyYynnnyyyy
441719377505  yyyyYyyyyyyy
441719377918  yyyyEyyynnnnn
```

441719378069 yyyyYyynyyyyy
441719378795 yyyyYnyyyyyyy
441719381615 yyyyYynyyyyyy
441719382595 yyyyYynnnnny
441719579555 yyyyYyyyyyyy
441813127078 yyyyYyyyyyy
441813139624 yyyyYnyynnnn
441813164842 yyyyYnyyyyyy
441813165190 yyynNnnnnnnn
441813431324 yyyyYnynyyny
441814242209 yyyyYyynyyyy
441814530946 nyyyYnyynnyy
441815031152 yyynNnyyyyyn
441815532824 yyyyYyyyyyy
441815682401 yynyYyyyyyny
441815685368 yyyyYnynyyy
441816809801 yyyyYyyyyyyy
441816923910 yyyyYyyynnnn
441817600432 yyyyYyyyyyyn
441817811007 yyyyYyyyyy
441818030564 yyyyYyyyyyyy
441818779854 yyyyYyyynyyn
441818814802 yyyyYyyyyyyy
441819800670 yyyyYyyynnnn
441819891371 yyyyEyyyyyyy

No faxes were sent after April 2000.

2817

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Posted via NewsDemon.com - Premium Uncensored Newsgroup Service
      ------->>>>>>http://www.NewsDemon.com<<<<<<------
Unlimited Access, Anonymous Accounts, Uncensored Broadband Access

From 1475259989134348125
X-Google-Thread: 10255f,222d51e53f6c8985,start
X-Google-Thread: 102692,222d51e53f6c8985,start
X-Google-Thread: f8abe,222d51e53f6c8985,start
X-Google-Thread: 10e8ad,222d51e53f6c8985,start
X-Google-Thread: 101522,222d51e53f6c8985,start
X-Google-Attributes:
gid10255f,gid102692,gidf8abe,gid10e8ad,gid101522,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx01.iad01.newshosting.com!newshosting.com!post01.iad01!
news.newsdemon.com!not-for-mail
Message-Id: <m07101819164107@4ax.com>
Subject: MI5 Persecution: Faxes Sent to Media1 (4992)
Newsgroups: alt.fan.holmes,alt.polyamory,alt.sports.hockey.nhl.ott-
senators,rec.radio.amateur.space,it.comp.reti.cisco

Followup-To: alt.fan.holmes,alt.polyamory,alt.sports.hockey.nhl.ott-senators,rec.radio.amateur.space,it.comp.reti.cisco,uk.misc
From: MI5Victim@mi5.gov.uk
Date: 18 Nov 2007 15:20:14 GMT
Lines: 455
Organization: news.newsdemon.com
X-Complaints-To: abuse@newsdemon.com
X-Original-Lines: 451
Xref: g2news1.google.com alt.fan.holmes:1342 alt.polyamory:70079 alt.sports.hockey.nhl.ott-senators:13997 rec.radio.amateur.space:1205 it.comp.reti.cisco:9768

Faxes Sent to British Media logs

During the 1998-2000 period my records indicate that I sent at least 6,137 faxes to the British media,
of which 5,775 went via TPC's email-to-fax service and 362 were sent via fax-modem direct from my computer.
The actual figure is obviously higher since, for most of this period, whenever a recipient asked to be deleted
from my mailing list, I totally wiped all entries including that from the logfile.

In the records "Y" indicates successful transmission from fax-modem, "N" indicates failed transmission from fax-modem.
"E" indicates an error occurred while transmitting via fax-modem and a fax may have been only partly transmitted.
"y" and "n" indicate success or failure via TPC.

In April 2000 I changed the method of operation by recording "R" when a recipient requested removal, rather than
wiping their details from my mailing list and records; and keeping "B" records for when TPC actioned a ban on a
recipient's fax-number, but the recipient did not write to ask me to cease faxing. The purpose of these changes
was to keep more accurate and complete records, but the intention was thwarted by the police complaint.
Also in April 2000, I added some further fax numbers to my media mailing list and records, which is why some of the
faxnumbers below have only a single entry, and some indeed have none.

```
441132420652  yyyyyYyyyyyyyyyyyyy
441132439387  yyyyyYyyynyyyyyyyy
441132445107  yyyyyYyyyyyynyyyyyy
441132455139  n
441132460037  yyyyyYyyyyyyyyyyyyy
441132461105  yyyyyYyyynyyynnnnnn
441132836586  yyyyyYynyyyyyyyyyyy
441142664375  nnyyyyYyyyyyyyyyyyy
441142769089  yyyyyyYyyyynnnyyyyyy
441142853159  yyyyyYyyynyynyyyyy
441159012850  y
441159363497  n
```

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441159420433  ynnnnYyynnyyyyyyyyy
441159455243  n
441159527001  ynyyyYynnyyynnyynny
441159550552  yyyyyYyyyyyyynnnnn
441159822568  n
441162311123  y
441162511463  yyyyyYyyyyyyyyyyyyy
441162512151  yyyyyYyyyyyyyyyyyyy
441162512979  n
441162561303  yyyyyYyyyyyyyyyynB
441162640948  yyyyyYyyyyyyyyyyyyn
441162667776  yyyyyyyYyyyyyyyyyyyyy
441179226744  n
441179238323  yyyyyNynyyyyyyyyyy
441179279568  n
441179298612  yyyynYyyyyyynnnnnn
441179317463  y
441179722400  yyyyyyyYyyyyyyyyyyyyyy
441179732549  yyyyyyyYyyyyynyyyyyy
441179741537  yyyyyyyYnnynyyyyyyyyy
441179744114  yyyyyyyYyyyyyynyyyyy
441179843202  yyyyynYynynyyyyynyyy
441202297904  n
441203407129  n
441203551744  yyyyyyYyyyynyyyyyyyy
441203695110  y
441203696867  n
441203868202  nyyyyYyyyyyyyyyyyyy
441203868205  yyyyyYynyyynyyyyyyy
441206561199  yyyyyYynyyyyyyyyyyn
441209314345  yyyyyYyyyyyyyyyyyy
441212330173  n
441212331465  y
441212367220  y
441212434536  y
441213591117  yyynyNyynyyyyyynnyn
441214141120  y
441214148181  yyyyyYnnnnnnnnnnnnn
441214148241  yyyyyEnnnnnnnnnnnnn
441214148634  yyyyyYnnnnnnnnnnnnn
441214148847  yyyyyNnnnnnnnnnnnn
441214148900  nyyyyYnnnnnnnnnnnnn
441214155026  n
441214547622  n
441214723174  yyyyyYyyyyyyyyyyyyy
441216161011  yyyyyYynyyyyynnnnnn
441216251346  y
441216262041  yyyyyYyyyyyyyyyyyyy
441216344766  yyyyyYyyyyyyyyyyyyy
441216437239  y
441216666370  yyyyyYyyyyyynnnnnn
441216932753  yyyyyYyyyynyynnnnnn
441216961007  yyyyyYyyynyyyyyyyy
```

441217066210	yyyyyYyyyyyynnnnB
441217090205	y
441217115824	y
441217533111	nyynnYnyyyynyyyyyyy
441222223157	yyyyyYyyyyyyyyyyyyy
441222224947	y
441222229326	y
441222384014	yyyyyYyyyynyyyyyy
441222498151	n
441222552973	yyyyyNyyyyyyyyyyyyy
441222555286	yyyyyYyyyyyyyyyyyyy
441222555960	yyyyyYyyyyyyyyyyyyn
441222597183	ynyyyYyyyyyyyyynyyy
441222615966	y
441222665650	n
441222798555	n
441223235161	yyyyyNyyyyyyyyyyyyy
441223315052	nnnnnYnnnnnnnynyyyy
441223361508	yyyyyYyyyyyyyyyyyyy
441223460832	yyyyyYyyyyyyyyyyyy
441223467106	yyyyyYyyyyyyyyynyy
441224212163	y
441224633282	nyyyyYyynyyyyyyyyyy
441224637289	yyyynYynynnyyyyynyy
441224846800	yyyyyYyyyyyyyyyyyyy
441225448688	n
441225460709	y
441225775198	y
441227771558	nyyyyYyyyyyyynnnnnn
441228511195	nyynnYyyynyyyyyyyyy
441228810453	yyyyyYyynyyyyyyyyyy
441228818444	yyyyyYyyyyyyyynyyyy
441228819444	yyyyyYyyyyyyyyyyyyy
441229870008	ynnyyEyyyyyyyyyyyyy
441232246695	yyyyyYyyyyyyynyyyny
441232311740	y
441232338800	yyyyyYyyyynyyyyyyyy
441232338801	yyyyyYyyyyyyyyynyyy
441232381915	yyyyyYyyyyynynnnnyn
441232454406	n
441232541550	n
441232682111	y
441232682757	y
441232700029	y
441233641816	y
441233812707	n
441234218580	nyyynEyynyynnyyyyyn
441234270580	y
441235436899	y
441235524024	yyyyyYyyyyynyyyyyy
441235822746	y
441235835163	n
441237423333	yyyyyYyyyyyyyyyyyyy

441242255671	n
441242584270	y
441242621343	y
441242699666	yyynyYyyyyyyyyyyyyy
441243576456	yyyyyYyyyyynnnnnB
441243775878	y
441243786464	yyyyyyyyYyyyyyyyyyyyy
441244341677	n
441244678749	y
441245267228	yynnyynnYynyyyyyyyynyy
441245492983	nyyyyynEyyyyyyynnyyyy
441246582227	n
441247814974	yyyyyyyYnyyyyyyyyyny
441247818913	yyyyyyyYyyyyyyyyyyyyy
441248351443	yyynyyynYynyyyyyyynyyy
441252725007	n
441253301965	yyynyynyYyyynyyynyyyyy
441254680821	nyyyEyyyyyyyyyyyy
441256492599	y
441257450036	n
441273404280	yyyyyYyyyyyynyyynyy
441273430098	yyynyYyyyyyynyyyyyy
441273440229	y
441273486852	y
441274720375	n
441274728534	yynnnYnnnnnnnnnnnyn
441274771680	yyyyyYnyynynnynynB
441274828555	y
441279430009	n
441279431059	y
441279445289	yynnyYynnnnnyyyyy
441285647247	y
441292283665	nyynyYyyyyyyyynyyyy
441293560927	ynyyyYynnnnyyyyyyyy
441293565663	yyyyyYnyyyyyyyyynny
441293820517	n
441295270659	n
441296398988	yyyyyEyyyyyyyyyyyyy
441303272292	yyyyyNyyyyyyyyyyyyy
441303283874	yyyyyNyynyyyyyyyyyy
441305250052	yyyyyYyynyyyyyyyyyy
441305250910	yyyyyYyyyyyyyynyyy
441312202443	yynyyyNyyyyyyyyyyyynn
441312204344	yyyyyyYyyyyyyyyyyyyy
441312204819	y
441312254580	y
441312267420	yynyyyYyyynyyyyyyyyy
441312283220	n
441312284293	y
441312284333	n
441312285462	n
441312442674	n
441312444785	n

441313152906	y
441313177202	y
441313344473	y
441314462279	y
441315552869	n
441315575881	y
441315579699	y
441315583277	yyyyyYyyyynyyyyyyyy
441316621323	y
441316648001	n
441316688741	y
441322550553	nyyyyYyyyynyyyyyyyy
441322667633	y
441324630515	y
441325368824	n
441327361514	y
441332290794	yyyyyYyyyyyyyyyyyy
441332292229	yyyyyYyynynnnnnnnnn
441332386036	y
441334762661	n
441342850244	y
441343540142	nnnnnYynyyyyyyyyyyy
441344770990	y
441352759009	y
441352759821	yyyyyYnnnnnnnnnnnnn
441355262626	y
441372377526	y
441372465041	n
441373452888	y
441376521222	y
441382202188	yyyyyYynyyynyyyyyyn
441382454590	y
441382480230	yyyynNnnnnnnnnnnnnn
441382593252	yyyyyYyyyyyyynnnnnn
441387251121	y
441387265629	yyynyYnyyyyyynnynyn
441392425570	nyyyYyyyyyyyyyyyyy
441392428048	y
441392444433	yyyyyYyyyyyyyyyyyny
441392444644	yyyyyYyyyyyyyyyyyy
441397701007	yyyyEyyyyyyyyyyyy
441403234714	y
441412210283	yyyyyNyyyyyynyyyny
441412213595	n
441412264541	n
441412272090	n
441412481099	y
441412482362	yyyyyYyyynnnnnnnB
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4992
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441818008005	yyyyYyyyyyynyyyn
441818139700	nnnyYnyyyyynyyyn
441818339215	
441818527211	
441818547476	
441818582049	
441818788905	
441818815151	yyyyYyyyyyyyyny
441818839215	
441819000705	
441819059729	
441819070073	
441819431198	
441819802041	
441819813779	yyyyNynnnnnnnnnB
441819833846	
441822614405	nyyyYnnnynnynnnB
441823321044	yyyyYyyynyyyyyyn
441823332539	yyyyYyyyyynyyyny
441823332862	
441851704270	
441865716418	
441865791347	yyyyYyyynyynyyyn
441865843971	
441889590588	
441892518028	
441896759494	yyyyYyyyyyyyyyyy
441902755163	yyyyYyyyyyyynnnn
441902772415	
441902838266	yyyyYyyyyyyynnnn
441904488878	yynyYyynyynynyy
441904523698	
441904610067	nyyyYnnnnnnnnnn
441904610937	nyyyYyyyyyyyyyyy
441904611112	
441904651642	
441905748006	ynyyYyynyyyyyyyyy
441905766293	
441908564893	yyyyYyyyyyyyyyyy
441908694008	yyyyYyyyyyyynnnn
441912210112	yyyyYyyyyyyyyyy
441912220013	

```
441912321710
441912325082  yyyyYyyyyyynyyyy
441912612302  yyyyYyyyyyyyyyyy
441912618571  yyyyYynyyyyyyyyn
441914775660  yyyyYyyyyyynyyny
441914880933  yyyyYyyyyyyyynnn
441914888611  nyyyYyyyyyyyyyyy
441914889222  yyyyYyyyyyyyyyyy
441915670888  nnnnNnnnnnnnnnnn
441920487056
441923425457
441923664606
441924466522
441926403958
441926424760  yyyyYyyyyyyyyyyy
441926831532
441932832532
441932854750
441932859661  yyyyYyyyyyyyyyy
441942884397  yyyyNyyyyyyyyyyy
441946724889
441949836583
441952291035
441962713134
441962861186
441962861646
441970627206  ynnnYnnyynyynnnB
441978758565  yyyyYyyyyyyyyyyy
441978759701  yyyYyyyyyyyyyn
441983821690  yyyYyyyyyyyyyyn
441984623901  yynYyyyynyynnnn
441992555647
```

No faxes were sent after April 2000.

7167

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Posted via NewsDemon.com - Premium Uncensored Newsgroup Service
      ------->>>>>>http://www.NewsDemon.com<<<<<<------
Unlimited Access, Anonymous Accounts, Uncensored Broadband Access

```
From 1911461478083760036
X-Google-Thread: 10255f,fc09ca3ef77296e1,start
X-Google-Thread: 102692,fc09ca3ef77296e1,start
X-Google-Thread: f8abe,fc09ca3ef77296e1,start
X-Google-Thread: 10e8ad,fc09ca3ef77296e1,start
X-Google-Thread: 101522,fc09ca3ef77296e1,start
X-Google-Attributes:
gid10255f,gid102692,gidf8abe,gid10e8ad,gid101522,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
```

Path: g2news1.google.com!news1.google.com!border1.nntp.dca.giganews.com!nntp.giganews.com!nx02.iad01.newshosting.com!newshosting.com!post01.iad01!news.newsdemon.com!not-for-mail
Message-Id: <m07101822233463@4ax.com>
Subject: MI5 Persecution: Faxes Sent to Parliament1 (9342)
Newsgroups: alt.fan.holmes,alt.polyamory,alt.sports.hockey.nhl.ott-senators,rec.radio.amateur.space,it.comp.reti.cisco
Followup-To: alt.fan.holmes,alt.polyamory,alt.sports.hockey.nhl.ott-senators,rec.radio.amateur.space,it.comp.reti.cisco,uk.misc
From: MI5Victim@mi5.gov.uk
Date: 18 Nov 2007 18:27:07 GMT
Lines: 230
Organization: news.newsdemon.com
X-Complaints-To: abuse@newsdemon.com
X-Original-Lines: 226
Xref: g2news1.google.com alt.fan.holmes:1344 alt.polyamory:70083 alt.sports.hockey.nhl.ott-senators:14000 rec.radio.amateur.space:1207 it.comp.reti.cisco:9770

Faxes Sent to British Parliament logs

During the 1998-2000 period my records indicate that I sent at least 14,480 faxes to the British Parliament in Westminster, of which 9,138 went via TPC's email-to-fax service and 5,342 were sent via fax-modem direct from my computer. The actual figure is obviously much higher since, for most of this period, whenever a recipient asked to be deleted from my mailing list, I totally wiped all entries including that from the logfile.

In the records "Y" indicates successful transmission from fax-modem, "N" indicates failed transmission from fax-modem. "E" indicates an error occurred while transmitting via fax-modem and a fax may have been only partly transmitted. "y" and "n" indicate success or failure via TPC.

In April 2000 I changed the method of operation by recording "R" when a recipient requested removal, rather than wiping their details from my mailing list and records; and keeping "B" records for when TPC actioned a ban on a recipient's fax-number, but the recipient did not write to ask me to cease faxing. The purpose of these changes was to keep more accurate and complete records, but the intention was thwarted by the police complaint.

```
441712190076  nnnnnynnEnnnnnnYYNNYYYYNENNNNNynynnnnnnnnnNnnnnnnnn
441712190179  yyyynnyyyYnyyyyynYYYNYYYYYYEYEEEyyyyyyynyyyynyyyyy
441712190189  yyynyyyyyYyyyyyyyYYYEYYYYYYYYYYYyyyyyyyyyyyyyyyyyyy
441712190243  yyyyyyyyyYnnnnnnnYYYYYYYYYYYYYYYnynnnnnnnnnNnnnnnnnn
441712190246  ynnnyyyyyYnyyynyyYYYYYYYYYYYYYYYynyyyynyyyyyyyyyy
441712190253  yynnnnnnnNnnnnnnnNNNNNNNNENNYNNNnnnnnnnnnnnNnnynnnnn
441712190254  yyyyyyyyYnynynyyYYEEEYYEEYYEYEYyyynyynyynynyyyyyn
```

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441712190266  yyyyyyyyYyyyyyyYYYYYEYYYYYNYYYyyynyyyynyyyyyyyyyy
441712190300  yyyyyyyynYyyyynnYYYYYYYYYYYYYYYnnyyyyyyyyyyyyyyyyy
441712190301  yyyyyyyyyYnnyyyyYYYYYYYYENNYYYYnyyyynynyynyyynnnB
441712190305  yyynnynyYynnyynYYEYYYEEYYYYEYYynyynyyyynyNnyyynyyy
441712190309  ynyyyyyyYynynnYYYYYYYYYYYYYYYyyyyyyyyyyyyyyyyyyy
441712190317  yyyyyyyyYyyyyyyYYYNNYYYYYYYYYEyyynnnyyyyynynnnynn
441712190319  nyyyynnnNnnnnnnNNNNNNNNNNNNNNNnnnnnnnnnnnNnnnnnnnn
441712190323  nyyyyyyYyyyyyyNNNNNNNNNNNNNNNnnnnnnnnnnnnnnnnnnn
441712190329  yyyyyyyyYyyyyyyYYYYYEYYYYYYYYYyyyyyynyyyyyyyyyyy
441712190331  ynyynnnnYyynnnnYYNYYYYYYNNYYYYynynnnnnnnnNnnnnnn
441712190332  nnynnynyYyyynyyYNYYYYYYYYYYYYYynynynnnnnnNnnnnnnn
441712190337  ynyyyyyyYyyyyyyYYYYEYYEYYYYYYYyyyyyyynyyyyyyyyy
441712190350  yyyyyyyyYyyyyyyNNNNNNNNNNNYYYYynyyyyyyyyyyyyyyyyy
441712190371  yyynnnnnNnynyyyYNNNNNYYNNNNNNNnnnnnnnnnnnnnnnnnn
441712190390  yyyynyynYynyynyYYYYYYYYYYYYYYYyyyyyyynnynyyyyyy
441712190409  nnyyyynyYyyyyyyYYYYYYYYYYENYYYyyyyyyyyyyyyynnyyy
441712190438  yyynnnnnNyyynyyYYYYYYEYYYEYYYYyyynynyyyyyyyyyyyyy
441712190446  yynnnnnnYyynynyYYYYYEYYYYEYYYYyyyyyyyyynyyyyyyyyn
441712190448  yyyyyyyyYyyyyyyYYYYYYYYEYYEYYYyyyyyynnynnyyyyyyyy
441712190461  nynnnnyyYynnnnnYYYYYYYYYEYYEEYyyyynyyynynynnyyyyy
441712190475  yynnnnnnNnnnnnNNNNNNNNNNNNNNNnnnnnnnnnnnNnnnnnnnn
441712190492  yyyyyyyyYyyyyyyEYYYYYYYYYYYYEYyyyyyyyyyyyyyyyyyyyy
441712190495  ynnnnnnNyyyyyyYYEYYYYEYYYYYYEyyyyyyyyyyyyyyyyyy
441712190511  yyynnyynYynnnnnNNNNNNNNNNNNNNNnnnnnnnnnnnnnnnnnnn
441712190514  yyyyyyyyYnyynyyYYYNYYNYNEYYYYYyyyynynnnynyynnnnyy
441712190536  yyyyyyyyYyyyyyyYYYEYYEYYYYYEEYyyyyyynynnnYnnnnnnB
441712190559  yyyyyyyyYyyyyyyYYYEYYYYYYYYYYYyyyyyyyyyyyyyyyyyy
441712190573  nyyyyyyyYyyynnnYYYYYYYYYYYYYYNnnyyyyyyyynnnnnyy
441712190598  nyyyyyyYynynyyYYYYYYEYYYYNNNNyyyynyyyyyyyyyynyy
441712190612  ynnnnyyyYnynnyyYYYYYYYYYYYEYYYyyyyynnynyyyyyyyyy
441712190620  yyyyyyyyYyyyyyyEYEYYYYYYYYYYYEyyyyyyyyyyyyyyyyyny
441712190622  yyyyyyyyYyynyyyYYYYYNYYNYYYYYYyyyyyyynyyyyyyyyyy
441712190628  yyyyyyyyYynyyyYYYYYYEYYYYEYYEyyyyynyynnNnnnnnnnnn
441712190638  yynnyyyyYnyyyyyYYYYYYYYYYYYYYYYyyyyyyyyyyyyyyyyyyyy
441712190643  ynyyyyyYnynyyyYYYYYYYNYYYYYYYyynyyynyyyynnnnnB
441712190645  yyyyyyyYyyyyyyYYYYYYYYYYYYYYYyyyyyyyyyyyyyyyyyyy
441712190662  nynnnnnnYnnynnnNYNNYNYNNNNNYNNnnnnnnnnnnnNnnnnnnn
441712190663  nnnnnnnnYnnynyyNNNNNNENNNNNNNNnnnnnnnnnnNnnnnnnn
441712190664  nnnnnnnnYnnynnnNYNNYNYNYYNNYNYnnnyynnyynNnynnnnny
441712190682  yyyyyyyYyyyyyyYYYYYYYYYYYYNYYnyyyyyynynyyynyyy
441712190685  ynyyyyyyYyyyynyYYYYYEYYYYNYEYYyyyyynyyyNnyyyynyyy
441712190696  yynnnyyEnnyyyYEYEYYYYEEEYYYYyyyyyyyyyyyyyyyyyy
441712190698  yyyyyyyyYyyyyyEYYYYNNNNNNNNNNnyynnyynyyynyyynnnnn
441712190770  yyyyyyyyYynnyyyYYYYYYEYYYYYYYYyyyyyyynyyyyynyynyy
441712190783  yyyyyyyyYyyyyyyYYYYYYYYYYNEYYYyyyynyyyyyyNnyyyyyyy
441712190789  nnyyyynyYnnnnyyEYNYYYYEYENYYEEyyyyyyyynyyyynyyyyn
441712190790  yyyyyyyyYyyyyyyYYYYYYYYYYYYYYYnnnyyyyyyyyyyyyyyyy
441712190904  yyyyyyyyYyyyyyyYYEEYYYYEYYEYYYyyyyyyyyyyyyyyyyy
441712190912  yyyyyyyyYyynyyYYYYYYYYYYYYYEYynyynyyyyyyyyyynyyy
441712190913  yynyyyyyYyyyyyyYYYEENYYEYYYYYYyyyyynnyyyyyyyynyyy
441712190919  yynnnnnnYynnnnnNYYYEYNYYYEYYNEyyynnyyynyynnyyyny
441712190923  yyyyyyyyYyyyyyyYYYYEYYYEYYYYYYyyyyyyynnyyyyyyyyyy
441712190926  yyyyyyyYynyyyyYYEENYYEYYEYYYYynyyyyyyyyyyyyynyyy
```

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441712190928  yynyyyyyYnnnnnnNNNNNNNNNNNNNNNnnnnnnnnnnnnnnnnnn
441712190931  yynynyyyYyyyyyYYYYYYYYYYYYYYNnnyyyyyyyyyNnnyyyyyy
441712190938  yyyyyyyyYyyyyyNYYYENYYNYNEEYYyyyynnnnnynNnnnnnnnn
441712190943  yyyyyyyyYynnnnYYYEYYYYYENNYEEnnyyynnynyyyyyyyyyyn
441712190946  ynyyyyyyYyynyyYYYYYYYYYYYYYYEyynnnnnnnnynnnnnyn
441712190949  yyyyyyyyYynnyyYYEEEYYYNEYNYYYnyynnyyyyyyyyynnnB
441712190952  yyyyyyyYyyyyyYYYEYYYYYYYYEYYyyyyyyynyyyyyyyyyyy
441712190957  yyyyyyyYynnyyYYYYYYYYYYYYYYYyyyyyyyyyyyynyyyn
441712190961  nyynnyyYynynyYEEYYYEYYYYYYYYyyyyyynnyyyyyyyynyn
441712190965  nnyynnnnYnnnnnYYYYYYYNYYYYYYYnynnnnnnyyNnyyyyyyy
441712190971  yyyyynyYynyyyYYYYYYYYYYYYYNYyyyyyyyyyyyyyyyynyy
441712190972  yyyyyyyyYyyyyyYYYYYYYYYYYYYYYyyyyyyyyyyyyyyyyyyy
441712190976  nyynnynyYyynnnYYYEYYYYYYYEYYYyynnyyyyyyynnnnynyn
441712190978  yyyyyyyyYyyyyyYYYYYYYYYYYEYEYyyyyyyyyyyyyyyyyB
441712190979  yyyyyyyyYyyyyyYYYYYYYYYYYYYYYyyyyyyyyyyyyyyyyyyy
441712190981  ynyyyyyyYyyyyyYYEYYYYYEYYYYEYyyyyyyyyyyyyyyyyyy
441712190986  yyyyyyyyYyyyyyYYYYYYYYYEYYYYYyyyyyyyyyyyyyyynyyy
441712190987  yyyynyyyYyyynyYYYYYYNYNNNNEYYynnnyyyyyyyyyyyyyy
441712190994  yyyyyyyyEyyyyyYYYYEEEYNNNNNNNnnnnnnnnnnNnnnnnnnn
441712191131  yyyynyyyEynnyyEYYEEEEYEEENEYYyyyyyyyyyyNnyyynyyy
441712191137  yyyyyyyyYyyyyyYYYYYYYYYYYYYNYnyynyyyyyyyyyyyyy
441712191145  nnynnyyyNnynnnnYYYYYNNNNNYYENNyyyynnnyyyNnnynnynn
441712191154  yyyyyyyyYyyyyyyYYYYYYYYYYYYYYYyynynyyynyynyyyyyy
441712191158  ynnnnnnnYyynnnnYYYYYYYYYYYYYYYynnnnnnnnnnnnnnnnn
441712191161  yyyyyynyYyyyyyyYYYYYYYYYYYYYYYyyyyyyyyyyyyyyyyyyy
441712191162  yyyynyyyYnnnnnnYYYYYYYYYYYYYYYyyyyyyyyyynyyyyyyy
441712191163  yyyyyyyyYynyynyYYYEYYYYYYYYYYEyyyyyyyyynyynyyyyynR
441712191174  ynnnnnynYyyynynYEYYYYYYYYYYNNNyyyyyyyyyyyyyyynyyyy
441712191177  yyyyyyyyYyyyyyyYYYYYYYYYYYYYYYyyyyyyyyyyynyyyyyyy
441712191179  nyyyyyyyYynyyyyYYYYYYYYYYYYYYYyyynyynnnynyyynynnn
441712191184  ynyyyyyyYynyyyyNNNNNYNYYYYYYNNyyynynynnyyyyyyyyn
441712191185  nyyyyyyyYnnnyyyYYYEYYYYYYYYEYYyynnnnnnyyynnnyyyny
441712191198  yyyyyyyyYnnyyyyEYYYYYEEYYYYYYYynyyyyyyynyynyyyny
441712191227  yyyyyyyyYyyyyyyYYYYYYYYYYYYYYYyyynyyyyyyNnnnyyyyny
441712191236  nnnnynynYnnnnnnNNNNNNNNNNNNNNNnnnnnnnnnnnnnnnnnn
441712191263  yyyyyyyyYyyyyyyYYYNYYYYYNNNNYNyyynynynyyynnynynn
441712191268  yynyyyyyYnyyyyyYYYYYYYYYYYYYYYnyyynnyyyyyNnyyyynyy
441712191279  yyyyyyyyYyyyyyyYYYYEYYYYYYYYEYyyyyyyyyynEnnnnnnB
441712191280  nnnnnnnnYnnnnnnNNNNNNNNNNNNNNNnnnnnnnnnnnnnnnnnny
441712191395  yyyyyyyyYyyyyyyYYYYEYYYYYYYYYYyyynnyyyyyyyyyyyyn
441712192008  yyyyyyyyYyyynnnYYNNENNNNNNNNNNnnyyyyyyyyyyyyyyyy
441712192031  yynyyyyyYyyyyyyYYYYYYYYYYYYYYYyyyyyynyynyyyyyyyy
441712192051  yyyyyyyyYynnnnnYYYYYYYYNYYYYYYyyyyyyyyyyyyyyyynyn
441712192054  yyyyynyyYyyyyyyYEYEYYYYYYYYYYYyyyyyynyyyyEnyyyyyny
441712192064  ynyyyyyyYyyynnnYYYYYYYYYYYYYYYyyyyyyyynyyyyyyyyynn
441712192075  yyyyyyyyYyyyyyyYYEYYYYEYYYYNYYyyyyyyyyyyyyyyyyyyy
441712192082  yyyyyyyyYynyyyyYYYYYYEEYYYYYNYyyyyyyynyyyyyyyynyy
441712192112  yyyyyyyyNyyyyyyYYYYYYYYYNNEYYYyyyyyyyyyyyyyyyyyy
441712192117  ynyyyyyyNnynyyyYYNYYYYYYYNYYYYyyyyyyyyyyyyyyyynny
441712192130  ynnnnnnnYyynnnYYYYYYYYYYYYYYYynnnnnnnnnnnnnnnnnn
441712192148  ynyyyyyyYyyyyyyYYYYYYYYYYYYYYYyyyynyyynyyyyyyynyy
441712192170  yyyyyyyyYynnnnnNYYYYYYNYYYYYYYyyyyyyyyyyyyyyyyyn
441712192212  yyyyyyyyYynnnnnNNNNNNNNNNNNNNNnnnnnnnnnnNnnynnnnn
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441712192220	yyyyyyyyYynyyyyYYYYYYYEYYYNYYYyyyyyyyyynnyyyyyny
441712192221	ynyyynyyYyyynnnYYYYYEEEYYYNYYYyyynyyynyynyyyyyny
441712192233	yyynnyyyYyyyyyyYYYYYEEYEEYYYYYnnnyyyynyyynyynynyn
441712192252	yyyyyyyyYyyyyyyNYYYYYYYYYYNYEYyyynyyyyyyyyyyyyyny
441712192262	yynnnyyyYynnyyyNNNNNNNNNNNNNNNnnnnnnnnnnnnnnnnnn
441712192269	yyyyyyyyYyyyyyyYYYYYYYYYEYYYYYyyyyyyyyyyyyyyyyyy
441712192288	yyyynnnnEnnnnnnYEYYYENNNNNNNYEyyyyyyyyyyyyyyyyyyy
441712192289	yyyyyyyyYyyyyyyYYYYYYYYNYYYYYYyyyyyyyyyyynyyynny
441712192302	yyynnyyyEnnyyyyEYYYYYNYYYYYYYYyyynynynnnyyynynnyn
441712192328	yyyyyyyyYyynyyyYNYYYYYEYYEYYYYyyynyyyyyynyyyyyyny
441712192329	yyyyyyyyYyyyyyyYYYYYYYYYYYEYYEnyyyyyyyyyyyyyyyyyy
441712192331	yynyyynyYnnnnnnYYEEYEEYEENNYNNynnnnnnnynnNnynyynny
441712192334	ynyyyyynNyyyyyyYYEEYYEEYYYYEEYyyyynyynynnynyyynyy
441712192338	ynnnnnnnYyynnnnYYEYYYYEYEYYYYYynnnnnynnnnnnnnnnnn
441712192357	yyynyyyyYyyyyynYEYYNYYYYYYYYYYyyyyyyynyyyynynyB
441712192359	yyyynyyyYyyyyyyYYYYYYYYYYEYYYYyyynyyyyyyyyynyyyy
441712192364	nnnnnnnyEynnnnYYNYYYYEYENNNNNnyyyyyyyynnNnnnnnnn
441712192377	yyyyyyyyYyyyyyyYYYYYYYEYYYYYYYyyyyyyyyyyyyyyyyy
441712192404	yyyyyyyyYyyyyyyNYYYEYYYYYYYYYYyynyynyyyyyyyyyyyyy
441712192412	yyynyyyyYyyyyyyYEEYEYNEYNYYYYYnyynynnynnnynyyynyn
441712192413	yyyyyyyyEyynyyyYYYYYYYEYYYYEYYyyyyyyyyyyyyyyyyyyy
441712192417	yyyyyynyYyynynnNYNYYYYYYYYYYYYyyyynyyynnNnnyyyyyy
441712192418	ynyynnyYyynnnnNNNNNNNNNNNNNNNnnnnnnnnnnnNnnnnnnnn
441712192423	yynnnynyYyyyyyyYYYYYYYYEYYYEYYyyyyyynnnnyynyynyn
441712192425	nnyyyyyyNnnnnnnNYYYYYYEYYYEYYNyyynnynnynnynynnnnn
441712192428	yyynnyyyYnnynnyYYNYNYEEEYYYYYYynnnynynynyyynnnyy
441712192433	yyyynyyyYyyynyyYYYYYYYYYYYYYYYynyyyyyyyynyyyyyyyny
441712192450	nnynyyyYynnnnnYYNYYYYYNYYYEYYnyyynnyynnyNnnnnnyB
441712192451	yyynyyyYyyynyyYYYYYYNEYYNYYYYyyyyynynyyyNnnnyynny
441712192455	yyyyyyyyYnyyyyyNYYYYYYYYYYYYYYyyyyyyyyynyyyyyyyyy
441712192461	yyyyynyyYyyyyyYEYYYYYYYYYYYYYynyyynyyyyyyyyyyyyy
441712192476	yyyyyyyyYyyyyyyYYYYYYYYYYYYYYYyyyyyyyyyyyyyyyyyyy
441712192477	yyyyyyyYynnnnnEYYYYYYYYYYYYYYyyyyyyyyyyyyyyynyyy
441712192479	yynyyyyyYyyyyyyYYYYYYYYYEYYYYEyyynyynyyyyyyyyyny
441712192485	yyyynynnNnnnnnnNYYYYYYYYYENNYYnnnnnnnnnnnnnnnnnnn
441712192494	yyynyynyYnnnnnnNNNNNNNNNNNNNNNnnnnnnnnnnnnnnnnnn
441712192495	yynyyyyYyyyyyYYYYYYYYYYYYYYYyyyyyyyyynnyynnnnB
441712192496	ynyyyyyyYyyyyyyYYYEYYYYYYYYYYYyyyyyyyyyyyyynyynyy
441712192500	yyyyyyyyYyyyyyyYYYYYYEYYYYYYYYyyyyyyyyyynynyynyn
441712192503	yyynyyyyYnnynyYYNNNNNNNNNNNNNnnnnnnnnnnnnnnnnn
441712192516	ynnnnnnnNyyyyyyNNNNNNNNNNNNNNNnnnnnnnnnnnnnnnnnn
441712192518	yyyyyyyYyyyyyyYYYYYYYYYEYYYYYyyyyyyyyyyyyyyyyyyy
441712192521	nyyyyyyyYynnyyyYEYYYYYYYEYNYYYyyyyyyyyynyNnnnyyyyy
441712192529	ynyyyyyYynnyyYYYEEEEYEYYENEYynyyynyyyyyyyyyyyy
441712192536	nyyyyyyyYynyyyyyYYYYYYYYEYNYYYYnyynyyynyyyynyyyyy
441712192539	yyyyyyyyYnyyyyyEEYYYYYYYYYYYYYyyyyyyyyyyyyyyyyy
441712192541	yyyyyyynYynnnnnYYNYYNNEYYYYYYNnnnnyyyyyyyNnnyynnny
441712192545	yyyyyyyyYyyyyyyYYYYYYYYYYYYYYYyyyyyyyyyyyyyyynyy
441712192557	nyyyyyyyYynnnnnYEYYEYYYYEYYYNYyyyynnnynynNnnnnnnn
441712192564	yyyyyyyyYnyyyyyYYYEYYYYYYYNYYYyyynyyyynyyyyyyyyyn
441712192567	nynyyyynYynyyyyYYNYYYNEYEYYYYYyyyyyyyyyyyyyyyynn
441712192570	yyyyynyyYyyyyyYYYYYYYYYYYYYYYyyyyyynyyyyyyynyyyy
441712192571	yyyyyyyyYyyyyynYYYYYYYYYYYYYYYyyyyyyyynynyyyyyyy

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441712192573  yyyyyyyyYyyyyyyYYYYYYYYYYYYYYYyyyyyyyyyyyyynyyyyy
441712192586  yyyyyyyyYnyynyyYYYYYYYYYYYYYYYyyyynyyyyyyyyyynyyy
441712192608  yyyyyyyyYyynyyyYYYYYEEYYEYEYEYyyynyynyyyyyyyyyyyy
441712192619  yyyynynyYnynyyyYYYYYYYNYYEYYYEnnyyynynynnYnnnnnB
441712192621  ynnnnnnnYynnnnnNYNYNNYYYYEENNNnnnnnnnnnnnNnnnnnnn
441712192622  yyyyyyynYyyyyyyYYEYYYYYYYYYYYYyyyyyyyyyyyyyyyyyyy
441712192629  nnnnnnnnEnnnnnnEEEEEEEEEEEEEEEnnnnnnnnnnnnnnnnnnn
441712192630  nnnnnnnnYnnnnnnEYYYNYEYEYNYYYYnyynynnynynNnyyyyyy
441712192643  ynyyyyyyYyyyyyyYYYYYYYYYYYYYYYyyyyyyyyyyyNnynyyyyy
441712192651  yyyyyynnYyynyyyYYYYYYYYYYNNYYYyyyynnyyyyynnnyyn
441712192665  yyyyyyyyNynyyyyYYYYYYYYYYYYYYYnnynnnnnnnnnyyyyny
441712192671  yyynyyyyYynyyyyYYYNNNNYYYYYYYYnnyyyyyyyynyyyyyy
441712192684  yyyyyyyyYnnynyyYYENYYYYNEEYYYYyyynnyynyynyyyyyyn
441712192690  yyyyyyyYyyyyyyYYYYYNNYYYYYYYYyyyyyyyyyyyyyyyyyy
441712192694  nnyyyyyYyyynyyEENYYYYYYYYYYEEnnyyyyyyyyyyyyyy
441712192697  yynynnnNnnnnnnNNYNYYYYNNYNYYYyyynnnyyyyyNnyynyyy
441712192698  yynnnnnYnnnnnnNNEYYYEYYYNNNYYnyyyyyyyyyyyynynnn
441712192706  nynnnnnYyyyyyyYYYYYYYYYYYYYEYyyyynyyyyyyyynyyy
441712192707  nnyyyyyYyyyyyYYYYYYYEYYYYENYnnyyyyynnnyyyyyynB
441712192708  ynyyyyyYnnynyyYYYYYYYYEYEYYYYnnynnnynnnnynnynnnn
441712192710  yyyyyyyYyyyyyyYYYYYYYYYYYNYYYyyyyyyyyyyyyyyynyn
441712192711  ynnnnnnYynyyyyYYYYYYYYYYYYYEYnnnnnnnnyyyyyyyny
441712192731  nnyyyynYyyyyyyYYYNYYYYYYNYEYYyyyyyyyyyyyyyyyyyy
441712192738  yyyyyyyEynyyyyYYYYYYYYYYYYYYYyyyyyyyyyyyyyyyyyyyy
441712192747  ynyyyyyYnnnnnnNNNNNNNNNNNNNNNnnnnnnnnnnnnnnnnnnnn
441712192749  yyyyyyyNyyyyyyYYYYYYYYYYYYYYYyyyyyyyyyyyyyyyyyyyy
441712192763  yyyyyyyYnnnnyyYEEEEEEEEEEEYNYyyyyyyyyyynnnyyyyyyy
441712192771  yyyyyyyYnnnnnnNNNNNNNNNNNNNNNnnnnnnnnnnnnnnnnnnn
441712192772  yyyyyyyYyyyyyyYYYYEYYYEYYYYEYyyyyyyyyyynyynynyynn
441712192782  yyyyynYyyyynyYNNYEYYYYEYYYYYynynnyyyyynyyynynyy
441712192795  yyyyyyYyyyyyyYYYYNYYYYYYYYYYyyyyyyyyyyyyyyyynyy
441712192797  yyyyyyYnnnnnnYYYYYYYEYYYYYYEyyyyyyyyynyyyyyyyyy
441712192798  yyyyyyYyyynnnYYYYYYYYYNYYYYYnynyynnnynynyyyynyy
441712192799  yyyyyyYyyyynyEYEYYYYYYYYYYYYyynnnyyyyyyyyyyynyy
441712192804  yyyynyYyyynyyYYYYYYYYYYYYYNYynyyynyyynnynynyyn
441712192810  yyyyyyYynnyyyYEYYYYYYYYYYYYYyyyyyyyyyyyyyyyyyy
441712192814  yyyyyyYyyyyyyYYYYYYYYYNNYYYYnnnnnnnnnnnnnnnnnnn
441712192820  yynnnnYnyynyyYYYYYYYYYYYNNYYnyyyyyynynnNnynynynn
441712192834  nynnnnNynnnnnEEYYYENYYNNEYYYyynnyyynnnnnnnnnny
441712192849  yyyyyyYyyyyyyYYYYYYYYYYYYYYYyyyyyyyyyyyyyyyyny
```

9342

--
Posted via NewsDemon.com - Premium Uncensored Newsgroup Service
      ------->>>>>>http://www.NewsDemon.com<<<<<<------
Unlimited Access, Anonymous Accounts, Uncensored Broadband Access

From 505190544491005607
X-Google-Thread: 10e8ad,6ef96b6628829f5,start
X-Google-Thread: 10b9c8,6ef96b6628829f5,start

```
X-Google-Attributes: gid10e8ad,gid10b9c8,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx01.iad01.newshosting.com!newshosting.com!
198.186.194.247.MISMATCH!news-out.readnews.com!news-xxxfer.readnews.com!panix!
rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-326 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Thu, 22 Nov 2007 15:06:59 EST
Organization: The Radio Amateur Satellite Corporation
Lines: 1309
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000001c82d43$392c1c30$6601a8c0@familyroom>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix1.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1195762019 10367 166.84.1.1 (22 Nov 2007 20:06:59 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Thu, 22 Nov 2007 20:06:59 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
X-Authority-Analysis: v=1.0 c=1 a=IGTmKe-Oi3YA:10 a=SeIcp837AAAA:8
a=Ixn1CAxRAAAA:8 a=c2--Pf7SAAAA:8 a=KlfyZUBUAAAA:8 a=FbIv-aF9AAAA:8
a=3fFvnXHTAAAA:8 a=XNQh8oeLAAAA:8 a=f0RPBRECAAAA:8 a=ADBSzeAnAAAA:8
a=5mDMBHa8AAAA:8 a=gUbaYAUbAAAA:8 a=qyDxTJV7AAAA:8 a=JXa7hjb-AAAA:8
a=qL4joYdQAAAA:8 a=LlmPylSfAAAA:8 a=tIoeiIHHAAAA:8 a=fENH8MHtAAAA:8
a=0sg8RoSLAAAA:8 a=uGVPSem0AAAA:8 a=Wa5ALEAlAAAA:8 a=z_zqISx-AAAA:8
a=4RlJXVyBAAAA:8 a=JRUS5pMlAAAA:8 a=oBXim8GbAAAA:8 a=XYLYVS5UAAAA:8
a=h3eCdmoiAAAA:8 a=QX7y1c2GAAAA:8 a=QEps4B0vAAAA:8 a=hKwqrz-LAAAA:8
a=_qHggDGBAAAA:8 a=jBO_9RCuKkijH3FQC0cA:9 a=TrcVc2ZCzT4ZjJhcmPsA:7
a=T_YT3uHYn3wRs7u0zLmk-S6DlZcA:4 a=8QCVOS8zSb0A:10 a=FyblZaQiG9kA:10
a=q4eIODirUFwA:10 a=NDWsJ_JVWXMA:10 a=UtcmazUCZKYA:10 a=XyvEP7qG2ooA:10
a=wFu9RQxNt4EA:10 a=Bi3YAkoP18cA:10 a=F7Eo224L3vYA:10 a=XF7b4UCPwd8A:10
Xref: g2news1.google.com rec.radio.amateur.space:1208 rec.radio.info:614
```

This report is organized into FIVE parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites

Part 4 (S4) - proposed satellites
Part 5 (S5) - deorbited/returned satellites

SB SAT @ AMSAT W8ISS ANS-326.S1
WSR 326 Part 1 11/22/2007

AMSAT NEWS SERVICE BULLETIN 326.S1 FROM AMSAT HQ
SILVER SPRING, MD, November 22, 2007
TO ALL RADIO AMATEURS
BID: $ANS-326.S1

VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.859330 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsat.in/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is
active. Each transponder has a different beacon.
[06252007]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Modes: FM Repeater - V/u
                 BBS   - Off
                 Telemetry   - /u

Analog voice downlink: 435.300 MHz FM

435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.880 MHZ FM
145.880 MHz USB
145.920 MHz FM
1268.700 MHz FM 67Hz PL tone
Digital Downlinks: 435.150 MHz FM 38k4 Digital, PBP, 1 watt output
435.150 MHz FM 9k6 Digital, Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Digital, Pacsat Broadcast Protocol
1268.700 mhz FM 9k6 PBP Digital
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[11152007]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer
on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the

repeater on
and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10
minute timer.
[05282007]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Operational - check operational schedule for current times!!

Current Mode: V/u

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
145.870 MHz FM
145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage: http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts.htm
[0820007]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Current Mode: V/u

```
Uplink:   145.850 MHz FM
Downlink: 436.795 MHz FM
```

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[08202007]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational depending on amount of Sunlight

Current Mode: Listen before transmitting

```
Uplink:   145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink:  29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons:   29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW
```

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/

AO-7 Usage Guidelines on the AO-7 Log and Resource Site located at:
http://www.planetemily.com/ao7
[05282007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational - APRS and BBS

Current Mode: V/v

```
Expedition 16 crew:
Commander:          Peggy Whitson
Flight Engineer:    Yuri Malenchenko      RK3DUP
Flight Engineer:    Daniel M. Tani
```

Available Modes and Frequencies:
Digital/APRS:

Worldwide packet uplink: 145.825 MHz FM
Worldwide packet downlink: 145.825 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS
                      RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.
[11052007]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-326.S2
WSR 326 Part 2 11/22/2007

AMSAT NEWS SERVICE BULLETIN 326.S2 FROM AMSAT HQ
SILVER SPRING, MD, November 22, 2007
TO ALL RADIO AMATEURS
BID: $ANS-326.S2

CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode: /u

```
TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon:    435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.
[11152007]
=====
CP3
Catalog Number: 31128
Launch Date: April 17,2007

Status: Operational

Current Mode:  /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[07302007]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: In Orbit

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder:  145.825 Mhz FM
[02052007]
=====
NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Operational

Current Mode: /u

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[10222007]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Operational

Current Mode: V/v
```

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[07302007]
=====
GENESAT-1 ?O-??
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Current Mode: /u

Telemetry Beacon Downlink: 437.0670 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[01082007]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon: 437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
[03262007]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launched: June 30, 2003

Status: Operational

Current Mode: /u

Beacon: 436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[01082007]
=====
CO-56 CUTE-1.7 + APD

```
Catalog number: 28941
Launched: February 21, 2006

Status: Semi-Operational - Constant Carrier only

Uplink:  1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan ? )

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[01082007]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW
[08132007]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Mode(s): FM Repeater - V/u
                 BBS         - Off
                 Telemetry   -  /u

Analog voice downlink: 435.300 MHz FM
                        435.150 MHz FM
                       2401.200 Mhz FM
Analog voice uplink:    145.880 MHZ FM
                        145.880 MHz USB
                        145.920 MHz FM
                       1268.700 MHz FM 67Hz PL tone
Digital Downlinks:      435.150 MHz FM 38k4 Digital, PBP, 1 watt output
                        435.150 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                       2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:         145.860 MHz FM 9k6 Digital, Pacsat Broadcast
```

Protocol
                      1268.700 mhz FM 9k6 PBP Digital
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[11152007]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Hibernation until full sunlight in November

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[09242007]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Current Modes: V/U
               L/U

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks: 145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[09172007]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Semi-Operational - Telemetry ONLY

Current Mode: /u

Uplink: 145.900 MHz FM 1200-baud Manchester FSK
                145.920 MHz FM 1200-baud Manchester FSK
                145.940 MHz FM 1200-baud Manchester FSK
                145.960 MHz FM 1200-baud Manchester FSK

Downlink: 437.026 MHz SSB 1200-baud PSK

Mode-S Beacon: 2401.1428 MHz

Mode and Antenna Polarization:
U: RC 437.050 MHz RHCP
   PSK 437.025 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[11152007]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational.

Current Mode: /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon: 435.025 MHz - OFF
Mode-S Beacon: 2401.500 MHz - OFF

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm

```
[010222007]
=====
RS-22 RADIO SPORT RS-22
Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only

Current Mode:  /u

CW Beacon - 435.352 MHz
            145.818 MHz
[08062007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational - APRS and BBS

Current Mode: V/v

Expedition 16 crew:
Commander:          Peggy Whitson
Flight Engineer:    Yuri Malenchenko      RK3DUP
Flight Engineer:    Daniel M. Tani

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink:   145.825 MHz FM
Worldwide packet downlink: 145.825 Mhz FM

Voice:
Region 1 voice uplink:   145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink:      145.800 MHz FM

Crossband Repeater:
Repeater Uplink:         437.800 MHz FM
Repeater Downlink:       145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German:              DP0ISS
Russian:             RS0ISS
                     RZ3DZR
USA:                 NA1SS
Packet Mailbox:      RS0ISS-11
Packet Keyboard:     RS0ISS-3
Digipeater callsign: ARISS
```

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.
[11052007]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-326.S3
WSR 326 Part 3 11/22/2007

AMSAT NEWS SERVICE BULLETIN 326.S3 FROM AMSAT HQ
SILVER SPRING, MD, November 22, 2007
TO ALL RADIO AMATEURS
BID: $ANS-326.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

CP4
Catalog Number: 31122
Launch Date: April 17,2007

Status: Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon: 437.325 MHz CW
[11152007]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Non-Operational

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon: 437.2750 MHz CW

Callsign: JR8YJT
[10152007]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

```
Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency:  437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink:         437.250 MHz FM 67Hz CTCSS
Voice Downlink:      2401.835 MHz FM
Packet Up/Downlink:   437.250 MHz 9k6 packet
Packet Downlink      2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non=Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[08132007]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink:   435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Non-Operational
```

Uplinks: 145.850 MHz
145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[007302007]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, callsign KE6QMD, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A

Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks

V-band: 145.840 - 145.990 MHz CW/LSB
U-band: 435.550 - 435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks

S2-band: 2401.225 - 2401.475 MHz CW/USB
K-band: 24048.010 - 24048.060 MHz CW/USB
Beacon: 2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)

BEACON	General Beacon (GB)	Middle Beacon (MB)	Engineering Beacon (EB)
2 m	none	145.898 MHz	none
70cm	435.438 MHz	435.588 MHz	435.838 MHz
13cm(1)	2400.188 MHz	2400.338 MHz	2400.588 MHz
13cm(2)	2401.173 MHz	2401.323 MHz	2401.573 MHz
3cm	10450.975 MHz	10451.125 MHz	10451.375 MHz
1.5cm	24047.885 MHz	24048.035 MHz	24048.285 MHz

[007162007]
=====
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

```
Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink:    145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site
at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater:         436.250 MHz

Uplinks: Mode B Repeater:  145.825 MHz
Mode J Digipeater:         145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
```

```
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink:   145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign:       POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012006]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HL01-11
BBS: HL01-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
```

```
Launch Date: January 29, 1991

Status: Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
LIBERTAD-1
Catalog Number: 31129
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink:   145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[10222007]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only
```

```
Uplinks:          145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink:      437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[01222007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
[05012006]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting): Non-Operational
```

```
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet: Non-Operational
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon:   145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink  29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972
```

```
Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
[01152007]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon 1:  29.352 MHz (intermittent)
Beacon 2:  29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink:     21.260 to 21.300 MHz CW/USB
Downlink:  145.860 to 145.900 MHz CW/USB

Beacon:    145.860 MHz
```

```
Robot:     145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink:   21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon:   29.408 MHz

Robot:    29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-326.S4
WSR 326 Part 4 11/22/2007

AMSAT NEWS SERVICE BULLETIN 326.S4 FROM AMSAT HQ
SILVER SPRING, MD, November 22, 2007
TO ALL RADIO AMATEURS
BID: $ANS-326.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE PROPOSED FOR LAUNCH AT
THIS TIME:

Phase 5a Mars Mission
Catalog Number:
Proposed Launch Date: 2009 or 2011

Status: Design Phase

For the latest project status update please visit the AMSAT-DL P5-A web
page:
http://ticket-to-mars.org
[01222007]
=====
PHASE 3E AO-??
Catalog number:
Proposed Launch Date: Late 2007

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web
page:
http://www.amsat-dl.org/p3e/
[01222007]
=====
Eagle AO-??
```

Catalog Number:
Proposed Launch Date: Early/Mid 2009

Status: Design Phase

For the latest project status updates please visit the AMSAT-NA webpage:
http://www.amsat.org
[01222007]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-326.S5
WSR 326 Part 5 11/22/2007

AMSAT NEWS SERVICE BULLETIN 326.S5 FROM AMSAT HQ
SILVER SPRING, MD, November 22, 2007
TO ALL RADIO AMATEURS
BID: $ANS-326.S5

THE FOLLOWING SATELLITES HAVE DE-ORBITED OR HAVE BEEN RETURNED SAFELY:

NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink: 145.825 Mhz FM APRS AX25
APRS Uplink: 145.825 MHz FM APRS AX25
Voice/PSK31 Uplink: 28.120 MHz

Packet to Voice ID: RAFT
[06112007]
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

```
From -5497975929588150365
X-Google-Thread: 10255f,b5de0601964ed139,start
X-Google-Thread: 102692,b5de0601964ed139,start
X-Google-Thread: f8abe,b5de0601964ed139,start
X-Google-Thread: 10e8ad,b5de0601964ed139,start
X-Google-Thread: 101522,b5de0601964ed139,start
X-Google-Attributes:
gid10255f,gid102692,gidf8abe,gid10e8ad,gid101522,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx01.iad01.newshosting.com!newshosting.com!post02.iad01!
news.newsdemon.com!not-for-mail
Message-Id: <m07102406284446@4ax.com>
Subject: MI5 Persecution: Faxes Sent to Parliament1 (642)
Newsgroups: alt.fan.holmes,alt.polyamory,alt.sports.hockey.nhl.ott-
senators,rec.radio.amateur.space,it.comp.reti.cisco
Followup-To: alt.fan.holmes,alt.polyamory,alt.sports.hockey.nhl.ott-
senators,rec.radio.amateur.space,it.comp.reti.cisco,uk.misc
```

From: MI5Victim@mi5.gov.uk
Date: 24 Nov 2007 06:28:57 GMT
Lines: 230
Organization: news.newsdemon.com
X-Complaints-To: abuse@newsdemon.com
X-Original-Lines: 226
Xref: g2news1.google.com alt.fan.holmes:1351 alt.polyamory:70217 alt.sports.hockey.nhl.ott-senators:14012 rec.radio.amateur.space:1209 it.comp.reti.cisco:9787

Faxes Sent to British Parliament logs

During the 1998-2000 period my records indicate that I sent at least 14,480 faxes to the British Parliament in Westminster, of which 9,138 went via TPC's email-to-fax service and 5,342 were sent via fax-modem direct from my computer. The actual figure is obviously much higher since, for most of this period, whenever a recipient asked to be deleted from my mailing list, I totally wiped all entries including that from the logfile.

In the records "Y" indicates successful transmission from fax-modem, "N" indicates failed transmission from fax-modem. "E" indicates an error occurred while transmitting via fax-modem and a fax may have been only partly transmitted. "y" and "n" indicate success or failure via TPC.

In April 2000 I changed the method of operation by recording "R" when a recipient requested removal, rather than wiping their details from my mailing list and records; and keeping "B" records for when TPC actioned a ban on a recipient's fax-number, but the recipient did not write to ask me to cease faxing. The purpose of these changes was to keep more accurate and complete records, but the intention was thwarted by the police complaint.

```
441712190076  nnnnnynnEnnnnnnYYNNYYYYNENNNNNynynnnnnnnnnNnnnnnnnn
441712190179  yyyynnyyyYnyyyyynYYYNYYYYYYEYEEEyyyyyyynyyyynyyyyy
441712190189  yyynyyyyyYyyyyyyyYYYEYYYYYYYYYYYyyyyyyyyyyyyyyyyyyy
441712190243  yyyyyyyyyYnnnnnnnYYYYYYYYYYYYYYYnynnnnnnnnnNnnnnnnnn
441712190246  ynnnyyyyyYnyyynyyYYYYYYYYYYYYYYYynyyyynyyyyyyyyyy
441712190253  yynnnnnnnNnnnnnnnNNNNNNNNENNYNNNnnnnnnnnnnnNnnynnnnn
441712190254  yyyyyyyyYnynynyyYYEEEYYEEYYEYEYyyynyynyynynyyyyyn
441712190266  yyyyyyyyYyyyyyyYYYYYEYYYYYNYYYyyynyyyynyyyyyyyyyy
441712190300  yyyyyyyynYyyyynnYYYYYYYYYYYYYYYnnyyyyyyyyyyyyyyyyy
441712190301  yyyyyyyyyYnnyyyyYYYYYYYYENNYYYYnyyyynynyynyyynnnB
441712190305  yyynnynyYynnyynYYEYYYEEYYYYEYYynyynyyyynyNnyyynyyy
441712190309  ynyyyyyyYynynnYYYYYYYYYYYYYYYyyyyyyyyyyyyyyyyyyy
441712190317  yyyyyyyyYyyyyyyYYYNNYYYYYYYYYEyyynnnyyyyynynnnynn
441712190319  nyyyynnnNnnnnnnNNNNNNNNNNNNNNNnnnnnnnnnnnNnnnnnnnn
441712190323  nyyyyyyYyyyyyyNNNNNNNNNNNNNNNnnnnnnnnnnnnnnnnnnn
441712190329  yyyyyyyyYyyyyyyYYYYYEYYYYYYYYYyyyyyynyyyyyyyyyyy
```

```
441712190331  ynyynnnnYyynnnnYYNYYYYYYNNYYYYynynnnnnnnnNnnnnnn
441712190332  nnynnynyYyyynyyYNYYYYYYYYYYYYYynynynnnnnnNnnnnnnn
441712190337  ynyyyyyyYyyyyyyYYYYEYYEYYYYYYYyyyyyyynyyyyyyyyy
441712190350  yyyyyyyyYyyyyyyNNNNNNNNNNNYYYYynyyyyyyyyyyyyyyyyy
441712190371  yyynnnnnNnynyyyYNNNNNYYNNNNNNNnnnnnnnnnnnnnnnnnn
441712190390  yyyynyynYynyynyYYYYYYYYYYYYYYYyyyyyyynnynyyyyyy
441712190409  nnyyyynyYyyyyyyYYYYYYYYYYENYYYyyyyyyyyyyyyynnyyy
441712190438  yyynnnnnNyyynyyYYYYYYEYYYEYYYYyyynynyyyyyyyyyyyyy
441712190446  yynnnnnnYyynynyYYYYYEYYYYEYYYYyyyyyyyyynyyyyyyyyn
441712190448  yyyyyyyyYyyyyyyYYYYYYYYEYYEYYYyyyyyynnynnyyyyyyyy
441712190461  nynnnnyyYynnnnnYYYYYYYYYEYYEEYyyyynyyynynynnyyyyy
441712190475  yynnnnnnNnnnnnNNNNNNNNNNNNNNNnnnnnnnnnnnNnnnnnnnn
441712190492  yyyyyyyyYyyyyyyEYYYYYYYYYYYYEYyyyyyyyyyyyyyyyyyyyy
441712190495  ynnnnnnNyyyyyyYYEYYYYEYYYYYYEyyyyyyyyyyyyyyyyyy
441712190511  yyynnyynYynnnnnNNNNNNNNNNNNNNNnnnnnnnnnnnnnnnnnnn
441712190514  yyyyyyyyYnyynyyYYYNYYNYNEYYYYYyyyynynnnynyynnnnyy
441712190536  yyyyyyyyYyyyyyyYYYEYYEYYYYYEEYyyyyyynynnnYnnnnnnB
441712190559  yyyyyyyyYyyyyyyYYYEYYYYYYYYYYYyyyyyyyyyyyyyyyyyy
441712190573  nyyyyyyyYyyynnnYYYYYYYYYYYYYYNnnyyyyyyyynnnnnyy
441712190598  nyyyyyyYynynyyYYYYYYEYYYYNNNNyyyynyyyyyyyyyynyy
441712190612  ynnnnyyyYnynnyyYYYYYYYYYYYEYYYyyyyynnynyyyyyyyyy
441712190620  yyyyyyyyYyyyyyyEYEYYYYYYYYYYYEyyyyyyyyyyyyyyyyyny
441712190622  yyyyyyyyYyynyyyYYYYYNYYNYYYYYYyyyyyyynyyyyyyyyyy
441712190628  yyyyyyyyYynyyyYYYYYYEYYYYEYYEyyyyynyynnNnnnnnnnnn
441712190638  yynnyyyyYnyyyyyYYYYYYYYYYYYYYYyyyyyyyyyyyyyyyyyyyy
441712190643  ynyyyyyYnynyyyYYYYYYYNYYYYYYYyynyyynyyyynnnnnB
441712190645  yyyyyyyYyyyyyyYYYYYYYYYYYYYYYyyyyyyyyyyyyyyyyyyy
441712190662  nynnnnnnYnnynnnNYNNYNYNNNNNYNNnnnnnnnnnnnNnnnnnnn
441712190663  nnnnnnnnYnnynyyNNNNNNENNNNNNNNnnnnnnnnnnNnnnnnnn
441712190664  nnnnnnnnYnnynnnNYNNYNYNYYNNYNYnnnyynnyynNnynnnnny
441712190682  yyyyyyyYyyyyyyYYYYYYYYYYYYNYYnyyyyyynynyyynyyy
441712190685  ynyyyyyyYyyyynyYYYYYEYYYYNYEYYyyyyynyyyNnyyyynyyy
441712190696  yynnnyyEnnyyyYEYEYYYYEEEYYYYyyyyyyyyyyyyyyyyyy
441712190698  yyyyyyyyYyyyyyEYYYYNNNNNNNNNNnyynnyynyyynyyynnnnn
441712190770  yyyyyyyyYynnyyyYYYYYYEYYYYYYYYyyyyyyynyyyyynyynyy
441712190783  yyyyyyyyYyyyyyyYYYYYYYYYYNEYYYyyyynyyyyyyNnyyyyyyy
441712190789  nnyyyynyYnnnnyyEYNYYYYEYENYYEEyyyyyyyynyyyynyyyyn
441712190790  yyyyyyyyYyyyyyyYYYYYYYYYYYYYYYnnnyyyyyyyyyyyyyyyy
441712190904  yyyyyyyyYyyyyyyYYEEYYYYEYYEYYYyyyyyyyyyyyyyyyyy
441712190912  yyyyyyyyYyynyyYYYYYYYYYYYYYEYynyynyyyyyyyyyynyyy
441712190913  yynyyyyyYyyyyyyYYYEENYYEYYYYYYyyyyynnyyyyyyyynyyy
441712190919  yynnnnnnYynnnnnNYYYEYNYYYEYYNEyyynnyyynyynnyyyny
441712190923  yyyyyyyyYyyyyyyYYYYEYYYEYYYYYYyyyyyyynnyyyyyyyyyy
441712190926  yyyyyyyYnyyyyyYYEENYYEYYEYYYYynyyyyyyyyyyyyynyyy
441712190928  yynyyyyyYnnnnnnNNNNNNNNNNNNNNNnnnnnnnnnnnnnnnnnn
441712190931  yynynyyyYyyyyyYYYYYYYYYYYYYYNnnyyyyyyyyyNnnyyyyyy
441712190938  yyyyyyyyYyyyyyNYYYENYYNYNEEYYyyyynnnnnynNnnnnnnnn
441712190943  yyyyyyyyYynnnnYYYEYYYYYENNYEEnnyyynnynyyyyyyyyyyn
441712190946  ynyyyyyyYyynyyYYYYYYYYYYYYYYEyynnnnnnnnynnnnnyn
441712190949  yyyyyyyyYynnyyYYEEEYYYNEYNYYYnyynnyyyyyyyyynnnB
441712190952  yyyyyyyYyyyyyYYYEYYYYYYYYEYYyyyyyyynyyyyyyyyyyy
441712190957  yyyyyyyYynnyyYYYYYYYYYYYYYYYyyyyyyyyyyyynyyyn
441712190961  nyynnyyYynynyYEEYYYEYYYYYYYYyyyyyynnyyyyyyyynyn
```

```
441712190965  nnyynnnnYnnnnnYYYYYYYNYYYYYYYnynnnnnnyyNnyyyyyyy
441712190971  yyyyynyYynyyyYYYYYYYYYYYYYNYyyyyyyyyyyyyyyyynyy
441712190972  yyyyyyyyYyyyyyYYYYYYYYYYYYYYYyyyyyyyyyyyyyyyyyyy
441712190976  nyynnynyYyynnnYYYEYYYYYYYEYYYyynnyyyyyyynnnnynyn
441712190978  yyyyyyyyYyyyyyYYYYYYYYYYYEYEYyyyyyyyyyyyyyyyyB
441712190979  yyyyyyyyYyyyyyYYYYYYYYYYYYYYYyyyyyyyyyyyyyyyyyyy
441712190981  ynyyyyyyYyyyyyYYEYYYYYEYYYYEYyyyyyyyyyyyyyyyyyy
441712190986  yyyyyyyyYyyyyyYYYYYYYYYEYYYYYyyyyyyyyyyyyyyynyyy
441712190987  yyyynyyyYyyynyYYYYYYNYNNNNEYYynnnyyyyyyyyyyyyyy
441712190994  yyyyyyyyEyyyyyYYYYEEEYNNNNNNNnnnnnnnnnnNnnnnnnnn
441712191131  yyyynyyyEynnyyEYYEEEEYEEENEYYyyyyyyyyyyNnyyynyyy
441712191137  yyyyyyyyYyyyyyYYYYYYYYYYYYYNYnyynyyyyyyyyyyyyyy
441712191145  nnynnyyyNnynnnnYYYYYNNNNNYYENNyyyynnnyyyNnnynnynn
441712191154  yyyyyyyyYyyyyyyYYYYYYYYYYYYYYYyynynyyynyynyyyyyy
441712191158  ynnnnnnnYyynnnnYYYYYYYYYYYYYYYynnnnnnnnnnnnnnnnn
441712191161  yyyyyynyYyyyyyyYYYYYYYYYYYYYYYyyyyyyyyyyyyyyyyyyy
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441712191268  yynyyyyyYnyyyyyYYYYYYYYYYYYYYYnyyynnyyyyyNnyyyynyy
441712191279  yyyyyyyyYyyyyyyYYYYYEYYYYYYYEYyyyyyyyyynEnnnnnnB
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441712192849  yyyyyyYyyyyyyYYYYYYYYYYYYYYYyyyyyyyyyyyyyyyyyny
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X-Google-Thread: 10255f,34beeabd528ab80b,start
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X-Google-Language: FINNISH,ASCII-7-bit
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Followup-To: alt.fan.holmes,alt.polyamory,alt.sports.hockey.nhl.ott-senators,rec.radio.amateur.space,it.comp.reti.cisco,uk.misc
From: MI5Victim@mi5.gov.uk
Date: 24 Nov 2007 07:05:31 GMT
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X-Complaints-To: abuse@newsdemon.com
X-Original-Lines: 229
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441712195241  nnynyNnnnnnnNNNNNNNNNNNNNYNYnynnnnnnnynnynynnn
441712195275  yyyyyyYyyyyyYYYYYYYYYYYYYYYYyyyyyyyyyyyyyyyyyn
441712195322  nyyyyyYnyyyyYEYEYYYYYYYYYYYYyyyyyyyyyyyynyyyyny
441712195333  yyyyyyYyyyyyyYYYYEYEYYEYYYYYYyyyyyyyynyyyynyyny
441712195371  yyyyyyYynyyyynYYENYEYYYYYYYYYYyynyyynnyyynynnynn
441712195381  yyyyyyYynyyyyYYEYYYYYYYYYYYYYyyyynnyyynyyyyynyy
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441712195452  nnnnnyNnnnnnNNNNNNNNNNNNNNNYnynnnnnnynnnnynnn
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441712195482  nyyynnNnnnnnnNNNNNNNNNNNNNNNNnnnnnnnynnnnynnnn
441712195502  yyyyyYynnnnnNNNEYYYYYYYYYYYYyyyyyynyyyyynnnyy
441712195568  yyyyyyYyyyyyyYYYYYYYYEYYYYYYYyyyyyyyyyyyyyyyyy
441712195581  yyyyyyYyyynyyYEYNYYYYNYYYYNYYyynyynyynynyynyny
441712195604  yyyyyyYyyyyyyYYYYYYYYYYYYYYENnnnnnnnnnyyyyyyyyn
441712195650  yyynnnYyyyyyYYYEYYYYYYNNYEYNynnnnnnnnnnnnnnnn
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441712195728  yyyyyyYnyyyynYYYYYYYNYYYYYYYYyyyyyyyyyyyyyyyyynn
441712195734  yyyyyyYyyyynyEYYYYYYYYYYYYYYYyyyyyyyyyyyyyyynyyy
441712195743  yyyyynYyyyyyyYYYYYYYYYYYYEYYYyyyyyyyyyyyyyyyyyy
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441712195820  yyyyyyYyyyyyyYYYYYYYYYYYYYYYYyyyyyyyyyyyyyyyyy
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441712195847  yyyyyyYynnnnnYYYYYYYYYYYYYYYYnyyyyyyyyyyynyyny
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441712196261  yyynyyYyyyyyYYYYYYYYYYYYYYYYYyyyyyynynyyyyynyy
441712196279  nnyyyyYyyyyyYYYYYYYYYYYYYYYYYyyyyyyyyyynyyyyny
441712196290  yynyyyYynnnnNYYYYYYYYYEYYYYYYnyyyyyynyyyyyynnyy
441712196362  yyyyyyYyyyyyEYYYEYYYYYEYYYEYYyyyynyyyyyyyyynyy
441712196386  ynnynnYnynyyYYYYYYYYYYNEYYYYYyyyyyyyyyyyyyyyyyy
441712196396  yyyyyyEyyyyyYYYYYYYYYEYYYEYYYyyyyyyyyynyyyyynyy
441712196398  yyyyyyYynnnnEYNYENYYYYYYNNYYNnnyynnnnnnnnnnnnnn
441712196409  yyyyyyYynyyyYEYYYYYYYYYYYYYNYyyyyyyyyyyyyyyyy
441712196488  nnynnnnYnnynnNNNNNNNNNNNNNNNNnnnnnnnnnnnnynnnnn
441712196498  nnnnnnEnnynnNNNNNNNNNNNNNNNNNnnnynnnnnnnnnnnnn
441712196567  yyyyyYyynnYYYYYYYYYYYEENYYYyynyynynynnynnnB
441712196586  yyyyyYyyyyYYYYYYYYYYYYYYYYYyyynyyyynyyyyynyy
441712196606  yyyyyYynyyYYYYYYYYYYYYNYYYEyyyyyyyyyyyyyyy
441712196607  nyyyyYyyyyYYYYYYYYYYYYYYYYYyynyyyyyyyyyyyyy
441712196618  yyyyyYyyyyyYYYYYYYYYYYEYYYYyyyyyyyyyyyyyyyy
441712196623  yyyyyYyynyyYYYYYYYYYYYYYYYYyyynynynnnnynnynn
441712196660  yyyyyYyyynyYEYYEYYYYYYYYEYEYynynyyyyyyyynyyyyy
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441712196716  ynnnnYynynyEYYYYNNYYYEYEYYYYnyyyyynnynyynynnyy
441712196726  yyyyyYnyyyyYYYYYYYYYYEEYYYYyyynyyyyyyyyyyyyy
441712196732  yyyyyYyyynyNNYYNENNYYYNENYEYyyyyyyyyyyyyyynny
441712196760  yyyyyYyyynyYYYYYYYYYYYYYYYYyynyyyyyyyyyyyyyy
441712196791  yyyyyYyyyyyYYYYEYENYYYYYYYYYynnyyyyyyyyyyyyyy
441712196793  yyyyyYyyyyyYYYYEYYYYYEYYYYEYyyyyyyyyyyyyyyyynnyy
441712196818  yyyyyYynnnnYYYYYYYEYYYEYYENNnnnnnnnnnnyyyynnnyy
441712196820  yyyyyYyyyyyYEYYYYNYYEYYYYYEYyynyyyynynnnnnnn
441712196825  yyyyyYyyyyyYYYYYYYYYYYYYYYYyyyyyyyyynyyyyyyy
441712196826  ynnnnYyyyyyYYYYYYEYYYYYYYYYEyyyyyyyyyyyyyyyyy
441712196828  yyyyyNyynnnYYNYNYYNNNNNNYEYNnnnnnynnyynyyy
441712196835  yyyyyYyynnnENYYEYYYYYYYYYYEYynyyyyyynnnyyynyyn
441712196837  yyyyyYyyyyyYYYYYYEEYYYYYYYYEynnnnynnnnnnnnnyn
441712196838  yyyyyYnnnnnYYYYYYYYYYNYYYYYNnnnnnnnnnnnnnnnn
441712196839  yyyyyYyynnyYYYYYYYYYYYYYYYYyyynyyyyyyyyynnyyy
441712196848  yyyyyYyyyyyYYYYYYYYYYEYYYYYYyyyyyynyyyyyyyyyyy
441712196864  yyyyyYyyyyyYYYYYEYYEYEEEYYYYyynyyyyyyyyyyyyyy
441712196867  yyyyyYyyyyyNYYYYYYYYYYYYYYNYynynyyyyyyyyynnyyy
441712196877  nyyyyYyyyyyYEYYYYYEEYYYYYYEEyyyynynyyyyyyyyyyy
441712196884  yyyyyYyyyyyYYYYYYYYEYYYYYYYYyyyyyynyyyyyyyyn
441712196886  yyyyyYyyyyyYYYYYYYYYYYYYYYYYyyynnyyyyyyyyyyyyR
441712196898  ynnnnYynyyyYYYYNYYYYEYENNYYYyyyyyyyynyynyyynnny
441712196938  yyyyyYynnnnEEYYYYYYYYYYYYYYYynyyyyynnnnnnnnnnn
441712196943  yyyyyYyyyyyEYYYYYYYYEYEYYYEYyyyyyyyyynyyyyyynn
441712196956  nyyyyYyyyyyYYYYEYYYYYYYYYYYEYyyyyyyynyyyyyyyyy
441712196974  yyyyyYyynynENYYNYNYYYYYYYEYYyyyyyyyyyyyyynyyyn
441712196977  yyyyyYyyyyyYYYYNNNNNYYYYNNEYnyyynynnyynynnnnnn
441712196979  nynynYnnyyyYYYYYYYYYYYYYYYYYnnnnyynnnnnnnnynnn
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No faxes were sent after April 2000.

2817

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Posted via NewsDemon.com - Premium Uncensored Newsgroup Service
      ------->>>>>>http://www.NewsDemon.com<<<<<<------
Unlimited Access, Anonymous Accounts, Uncensored Broadband Access

```
From 5344614704735617664
X-Google-Thread: 10255f,ac209e70fe1fe4a3,start
X-Google-Thread: 102692,ac209e70fe1fe4a3,start
X-Google-Thread: f8abe,ac209e70fe1fe4a3,start
X-Google-Thread: 10e8ad,ac209e70fe1fe4a3,start
X-Google-Thread: 101522,ac209e70fe1fe4a3,start
X-Google-Attributes:
gid10255f,gid102692,gidf8abe,gid10e8ad,gid101522,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx01.iad01.newshosting.com!newshosting.com!post02.iad01!
news.newsdemon.com!not-for-mail
Message-Id: <m07102407421620@4ax.com>
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Subject: MI5 Persecution: How Could It Be True? (4992)
Newsgroups: alt.fan.holmes,alt.polyamory,alt.sports.hockey.nhl.ott-senators,rec.radio.amateur.space,it.comp.reti.cisco
Followup-To: alt.fan.holmes,alt.polyamory,alt.sports.hockey.nhl.ott-senators,rec.radio.amateur.space,it.comp.reti.cisco,uk.misc
From: MI5Victim@mi5.gov.uk
Date: 24 Nov 2007 07:42:29 GMT
Lines: 145
Organization: news.newsdemon.com
X-Complaints-To: abuse@newsdemon.com
X-Original-Lines: 141
Xref: g2news1.google.com alt.fan.holmes:1353 alt.polyamory:70219 alt.sports.hockey.nhl.ott-senators:14014 rec.radio.amateur.space:1211 it.comp.reti.cisco:9789

MI5 Persecution: How Could It Be True?

If you have the patience to read these articles you will be struck by how apparently fantastic the claims being put forward are. You may ask yourself why such seemingly nonsensical assertions are made. This matter has been discussed on the Internets UK-local newsgroups for three years now, and the denizens of the uk.misc newsgroup (the so-called "miscreants") have come up with a number of theories to explain these posts; it has been variously suggested that they are a troll (an artificial creation for the amusement of its author), that they are made by MI5 themselves with the purpose of discrediting other conspiracy theories, and that the poster is mentally ill and the articles are symptomatic of the illness (the view held by most miscreants).

Are these claims the product of mental illness, or is that just a cover?

The most obvious explanation, that the claims made result from the admitted mental illness of the author, is the one which the persecutors intend be the one accepted without consideration being given to the possibility of the claims being true. The persecutors have actually been very clever about this, both in selecting as their target someone who was known from school or university as being borderline schizophrenic, and in ensuring the nature of their persecution corresponds to what often features in the delusions of a schizophrenic.

The very first incident of the persecution occurred in June 1990, when I was still a student at university in London. It consisted of a reaction (giggling) from the newsreader, Sue Carpenter of ITN, to what she saw happening in my living-room at my parents home where I was living. Before your imagination gets the better of you I should make clear that what the newsreader was reacting to was not too embarrassing in nature; my mother had brought an apple for me into the the room, and Sue Carpenter found this amusing.

I recognized that Carpenter had reacted to what she had seen in my living-room, yet this idea still seemed completely fantastic to me. My reaction was to continue watching television, particularly the news, to see if this incident would be repeated. It was, many times, both on BBC and ITV. An intelligent person would have thought to obtain a video recorder and capture some of these incidents in order to try to explain to an observer what he saw in these broadcasts. Unfortunately, I failed this test of intelligence, since I did not record these programmes. I have recently attempted to obtain from ITN tapes of their news programmes dating back to summer 1990, but, unhappily, they have advised me that they do not have complete programmes including newsreaders comments dating back to that period.

From the outset, the persecutors structured their actions to ensure that any complaint would be met with disbelief, and dismissed as delusional. This is why they chose as their target someone who was known at school and university to be borderline mentally ill; and it is why they fired the first shots of their campaign through the broadcast media. Schizophrenics commonly believe the media harass them; it would be exceptional for "full-duplex television" to exist in reality. Those with schizophrenia also commonly believe people are talking about them; again, the persecutors have shown themselves very rarely, but act through intermediaries, both in the workplace, and in public and during travel.

Mental illness is not the cause of these claims, but the simulation of its symptoms is a cover used by the persecutors to deny their victim the ability to have his compaints believed.

What evidence exists to support these claims of "interactive television/radio";?

Quite frankly, I have very little evidence to support my claims. You may examine the "Evidence" area of my website to see such evidence as I have been able to gather. None of it is remotely conclusive. The "smoking guns" all date back to 1990/91, and it is really rather late now to start trying to look for material dating back seven or eight years. In 1997 I started tape-recording every programme I watched or listened to. I also started carrying with me a high-fidelity minidisc-recorder with good quality microphone to catch incidents of public harassment, but this also has not been as successful or conclusive as I had hoped.

Perhaps the best item in the "Evidence" section is the audio file "Life is so hard" (it is labelled with Garfield the cartoon character on the site), which I have given a certainty level of 100%. This item relates to harassment at my workplace in Canada in 1996. A co-worker called Mark was coming up with phrases and expressions which were repeating things being said at my Canadian residence, consequently leading me to believe that my apartment and home phone were bugged, and that the persecutors were passing their gathered information on to Mark. On one particular evening I said in my apartment, "life is so hard, and then you die". The following day I was able to record Mark saying exactly the same phrase at work.

Unfortunately when "they" know you are recording them, they simply dont say things which would unambiguously show harassment. When Mark the co-worker knew he was being recorded, he only made his remarks out of range of the recorder, for example outside the building. When the TV newscasters or radio disc jockeys know they are being taped, they limit themselves to saying things which are ambiguous, which even in my mind may or may not be personally directed against me.

Who knows about this persecution?

Surprisingly many people know. People in the media, such as BBC and ITN newscasters including Martyn Lewis and Michael Buerk, and radio disc jockeys such as Chris Tarrant of Capital Radio, know what is going on, and take part in it. Some co-workers at my former workplaces in England and Canada have known about the harassment. Quite a few people in the general public are also included. I believe the police are aware of the persecution, but, unfortunately, have chosen not to take any action to stop it. I have complained at my local police station in London several years ago, and I have stated on the internet newsgroups that I have done so, hence the police will be well aware of my wish to see the matter resolved. I believe their inaction denotes a dereliction of duty, but without good evidence, I am powerless to compel them to take steps to prevent further harassment, or deal with what has already taken place.

What is the purpose of sending these faxes?

These faxes are being sent to three distinct groups of people, namely Members of Parliament, the media, and diplomats & legal people. As you will have observed I am making use of the email-to-fax gateway at Demon Internet to send these faxes. I am forced to use this gateway since I currently live in North America, and cannot afford the high cost of direct phone calls to the UK.

My purpose in publicising my claims is firstly to discourage the persecutors from continuing their campaign, and also to attempt to bring their campaign out into the open, and thus perhaps identify the persecutors. Neither aim has been achieved yet, but I hope that with sufficient stimulation these aims may yet be accomplished.

The problem with the second aim is that those who read this article will fall into two groups, those who dont know anything about the persecution and consequently will disbelieve my claims as delusional, and those who do know about the harassment and may have some idea of who is behind it, but realise that if the harassers are exposed and the truth brought out into the open, then powerful British institutions will substantially lose prestige, and be exposed to ridicule.

It would give me hope to believe that these faxes will create a third group of people, those who find out that I am telling the truth, and who follow their consciences in standing up and seeing justice done. Only time will tell if this hope will be realized.

4992

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Posted via NewsDemon.com - Premium Uncensored Newsgroup Service

------->>>>>>http://www.NewsDemon.com<<<<<<------
Unlimited Access, Anonymous Accounts, Uncensored Broadband Access

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From 3622560392920489074
X-Google-Thread: 10255f,e349691d46b8a1dd,start
X-Google-Thread: 102692,e349691d46b8a1dd,start
X-Google-Thread: f8abe,e349691d46b8a1dd,start
X-Google-Thread: 10e8ad,e349691d46b8a1dd,start
X-Google-Thread: 101522,e349691d46b8a1dd,start
X-Google-Attributes:
gid10255f,gid102692,gidf8abe,gid10e8ad,gid101522,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!news.glorb.com!
border1.nntp.dca.giganews.com!nntp.giganews.com!nx01.iad01.newshosting.com!
newshosting.com!post02.iad01!news.newsdemon.com!not-for-mail
Message-Id: <m07102408112125@4ax.com>
Subject: MI5 Persecution: Why do you think MI5 are responsible? (7167)
Newsgroups: alt.fan.holmes,alt.polyamory,alt.sports.hockey.nhl.ott-
senators,rec.radio.amateur.space,it.comp.reti.cisco
Followup-To: alt.fan.holmes,alt.polyamory,alt.sports.hockey.nhl.ott-
senators,rec.radio.amateur.space,it.comp.reti.cisco,uk.misc
From: MI5Victim@mi5.gov.uk
Date: 24 Nov 2007 08:11:34 GMT
Lines: 210
Organization: news.newsdemon.com
X-Complaints-To: abuse@newsdemon.com
X-Original-Lines: 206
Xref: g2news1.google.com alt.fan.holmes:1354 alt.polyamory:70220
alt.sports.hockey.nhl.ott-senators:14015 rec.radio.amateur.space:1212
it.comp.reti.cisco:9790
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Why do you think MI5 are responsible?

The question of who is ultimately responsible for this eight-year harassment is one which is very difficult to answer, as the persecutors have never clearly made their identities known to the persecutee. However, I believe I am correct in attributing the continuing victimisation to elements of the British Security Service MI5, and in this article, I will try to explain the reasons for this belief.

The British internet magazine ".net" featured my website on page 17 of their March 1998 issue (number 42). Their review kindly describes it as an "excellent site" and gives some details of what the net surfer will find there. Should you wish to reply to this article you can do so;

"When did you first suspect MI5 were responsible?"

Over Easter 1995 I went to see a local solicitor in London with a view to talking to the police about the harassment. Soon afterwards I did go to my local police station in Clapham and spoke to an officer there. The solicitor made a comment which suggested to me that the persecution I had been experiencing may have been organised by an intelligence service.

Up to this point, I did not have any clear idea as to who was behind the harassment. Only their agents were visible, in the media, on television news programmes, and on the radio; in the workplace, where things said at my home were repeated verbatim; and in some cases abuse in public and during travel, for example on the trip to Poland in June 1992 which I have already described.

Both from the fact that widely disparate individuals and organisations were employed as agents in the campaign against me, and from the fact that an entity would be required to marshal their resources in the areas of spying on my home and giving gathered information to their agents, it was clear to me that a single entity was responsible for carrying out the campaign. Yet from June 1990 until Easter 1995 I did not have a clear idea of who might be responsible. I guessed that perhaps some private individual or group of persons who saw themselves as my enemies had perhaps paid private detectives to organise the harassment. Alternatively, since the campaign had started in the media, I made a far-fetched supposition that perhaps it was an ad-hoc group of media people who had set themselves up in opposition to me. After Easter 1995 I saw that these guesses were wrong, and I made an I believe much more accurate estimate as to who my enemies really are.

"Why couldn't a private group be behind the persecution?"

There are several reasons why a private individual or group would not be behind this campaign.

Quantity of resources / Money. Here is what one Usenet (internet newsgroup) participant had to say (several years ago) on the topic of how much money it would cost just to keep the surveillance going.

PM: >But why? And why you? Do you realize how much it would cost to keep
PM: >one person under continuous surveillance for five years? Think about
PM: >all the man/hours. Say they _just_ allocated a two man team and a
PM: >supervisor. OK., Supervisor's salary, say, #30,000 a year. Two men,
PM: >#20,000 a year each. But they'd need to work in shifts -- so it would
PM: >be six men at #20,000 (which with on-costs would work out at more
like
PM: >#30,000 to the employer.)
PM: >
PM: >So, we're talking #30,000 x 6. #180,000. plus say, #40,000 for the
PM: >supervisor. #220,000. Then you've got the hardware involved. And
PM: >any transcription that needs doing. You don't think the 'Big Boss'
PM: >would listen to hours and hours of tapes, do you.
PM: >
PM: >So, all in all, you couldn't actually do the job for much less than
PM: >a quarter million a year. Over five years. What are you doing that
makes
PM: >it worth the while of the state to spend over one and a quarter
million
PM: >on you?

A private individual or group would not spend over a million pounds to verbally torture a victim without some financial motive or gain. Private industry is driven by the profit motive, and there is no financial profit to be had from carrying out a campaign in this way. If a private enterprise were behind it then they would have taken direct physical action a long time ago.

State enterprises, on the other hand, can afford to be wasteful, since they are funded by the taxpayer. They do not have to show a money profit. The employees or contractors employed by a state organisation such as MI5 are driven by their own personal profit motives, to make the most money out of their employers for the longest period of time. MI5 is funded to the tune of #150M p.a.; even a few hundred thousand a year would to them be affordable if their managers could convince themselves of the necessity of what they were doing.

Quality of resources / Technical resources - electronic and other surveillance. In summer 1994 a reputable and competent private detective agency was employed to conduct a counter-surveillance sweep of my home in London. They charged us over #400 for this, conducted a thorough search for radio transmitting devices, hard-wired "probe" microphones and also tested the telephone line. They found nothing. This was not altogether surprising, since it had been made very clear to me that there were bugs in my home; the "buggers" would not have made this clear unless they had felt their bugs were of sufficient sophistication as to be safe from detection.

But there is another lesson to be gained from the failure of the private detectives to find anything. The agency employed was one of the most reputable in London. They were employed on the principle of "setting a thief to catch a thief", for if the harassment were being carried out by private detectives, as I then believed, then surely another set of private detectives would be able to find the bugs that they had planted. That these "private eyes" were unable to find anything, and that the harassers were confident that they would not be able to find any bugs, points to the harassers being an order of sophistication above a private agency, and leads me again to believe that a state intelligence service is responsible for the surveillance and harassment.

Quality of resources / Technical resources - Interception of Postal service. In summer 1994 when I emigrated to Canada to try to escape the harassment, I wrote letters home to my family and friends in London. Quite soon after my arrival in Canada, the harassers were able to find precisely where I was staying. The only way I can see of "their" being able to find out my new address was by interception of my letters to the UK.

Later in 1994, I conducted an experiment to see if my letters home were indeed being read. In a letter home I wrote of being depressed and talked in vague terms of suicide. I deliberately chose this topic, since I believed it was the outcome my harassers were trying to achieve, and that if they read the letter, they would "echo" its contents. Sure enough, soon afterwards there were two incidents of people shouting "suicide" at me in public places in Canada.

It is inconceivable for a private agency to have the ability to intercept postal mail. The state security service on the other hand is well known to engage in these activities.

Quality of resources / Access to Media. One of the strangest aspects of this case is the access "they" have to the broadcast and print media. I still do not understand what could persuade newscasters such as Martyn Lewis and Michael Buerk, who consider themselves "gentlemen", to behave in an almost voyeuristic way by "peeking" into the living room of one of their viewers. A year ago I wrote to the BBC asking if these newscasters would confirm or deny the accusations made against them. The BBC replied that their newscasters had denied the accusations, but refused to do so in writing.

It is well known that MI5 have the ability to plant stories in certain newspapers, but convincing television newscasters to "watch" a viewer while they read the news would surely be very difficult for them to accomplish, unless they presented themselves to these journalists as being, for example, a group in the media who were seeing to it that I got my "deserved" treatment. MI5 has a history of manipulating the media, so it might not be too difficult for them to accomplish such a trick, whereas a private group would not have this ability.

"Have they ever denied that they are the Security Service?"

No. Never. This is in fact the main reason why I believe "they" are MI5 and not a privately funded group. If my guess had been wrong then I am sure that "they" would have crowed over my mistake, but they have never admitted nor denied that they are employees of MI5.

In early January 1996 I flew on a British Airways jet from London to Montreal; also present on the plane, about three or four rows behind me, were two young men, one of them fat and voluble, the other silent. It was quite clear that these two had been planted on the aircraft to "wind me up". The fat youth described the town in Poland where I had spent Christmas, and made some unpleasant personal slurs against me. Most interestingly, he said the words, "he doesnt know who we are".

Now I find this particular form of words very interesting, because while it is not a clear admission, it is only a half-hearted attempt at denial of my guess that "they" = "MI5". Had my guess been wrong, the fat youth would surely have said so more clearly.

"If MI5 were behind it, why would they wish to mask their involvement?"

I have heard a number of times a belief from people in the media that it is they, the media people, who are behind the abuse. In spring 1994 Chris Tarrant the Capital Radio D.J. said sarcastically on his breakfast show, "You know this bloke? he says were trying to kill him. We should be done for attempted manslaughter". We, we, we. Tarrant thought it was a media conspiracy.

Returning to the question of "interactive watching" by television newscasters, it would again be much easier for them to take part in that sort of activity if they convinced themselves that the surveillance and abuse were organised by "their own", by media people. It must be second nature to MI5 to mask their involvement in the matters they deal with; in this case, they pretend the campaign is organised by a group in the media, and any journalists who suspect otherwise keep their silence.

Conclusion

Over the last three years I have stated with some force my belief that MI5 are responsible for my misfortunes. I have done so on Internet newsgroups, in letters and faxes to people in politics and the media in the UK, and in 1997 I made a formal complaint to MI5 regarding their activities; the Security Service Tribunal replied in June 1997 that "no determination in your favour has been made on your complaint". (I believe the statement by the Security Service Tribunal can be disregarded, as they have never, ever made a ruling in favour of a complainant.) In three years of naming MI5 as my oppressor "they" have never denied the charge. To me, their silence on this point indicates that my guess was accurate. I believe my persecutors stand identified. The question of why they should carry out this campaign is one I will try to answer in a future article.

7167

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X-Google-Thread: 101522,8505e18bee1a6aa0,start
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Newsgroups: alt.fan.holmes,alt.polyamory,alt.sports.hockey.nhl.ott-
senators,rec.radio.amateur.space,it.comp.reti.cisco
Followup-To: alt.fan.holmes,alt.polyamory,alt.sports.hockey.nhl.ott-
senators,rec.radio.amateur.space,it.comp.reti.cisco,uk.misc
From: MI5Victim@mi5.gov.uk
Date: 24 Nov 2007 08:38:47 GMT
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Lines: 203
Organization: news.newsdemon.com
X-Complaints-To: abuse@newsdemon.com
X-Original-Lines: 199
Xref: g2news1.google.com alt.fan.holmes:1355 alt.polyamory:70221
alt.sports.hockey.nhl.ott-senators:14016 rec.radio.amateur.space:1213
it.comp.reti.cisco:9791
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MI5 Persecution Update: Friday 15 May, 1998

The persecution has been quite severe for the last week. It appears that my enemies are reacting to the steady stream of faxes making their way over the Atlantic to the fax machines of Westminster politicians and the media. Here is whats happened in the last few days;

The week started off with an incident in the cafeteria at a local shopping centre where I habitually drink my morning coffee. My enemies have concentrated since winter 1995/96 on throwing a particularly horrible sexual slander against me. They "put people up" to repeat this slander against me, and this is what happened again here.

On Thursday morning (yesterday), instead of going to the usual cafeteria I went to a nearby convenience store for coffee. The same horrible sexual slander was shouted at me very loudly by a member of staff as I walked into the store. This was the first time I had ever bought morning coffee in that shop. The other staff obviously knew what was going on, one of them said, "they screwed up my life".

The fax gateway I use to send these faxes to the UK has been working hard these last few days to shut down my access by barring the accounts I use to send these faxes.

I have received an anonymous threat from fax number 0171-219-6101 (the machine gave its name as "ETRA-HoC") which said, "Stop sending to this fax no 0171-219-6101 or else" (the consequences of continued transmission were unspecified). I invited the sender to apologise for his threat, but received no response.

This all adds up to quite a severe reaction to my faxes of the last few weeks. I actually find this quite heartening since it shows that my faxes are finding the mark and there may yet be a breakthrough in my efforts to expose the Security Service conpiracy of abuse against me which has now been going on for eight years.

MI5 Persecution: "Why would they be doing this to you, sir?"

This article will concentrate on the difficult question of "Why". The question which forms the title of this piece was asked of me by the police officer I spoke to in Easter 1995, when I went to make my complaint.

There are really two sides to this question. Firstly, why should MI5 be harassing anybody in this fashion? Secondly, if they choose to behave in this way, why should they have selected me in particular, and not somebody else? Alternatively, why did the persecution start, and why is it continuing?

I do not have definite answers to either side of this question, since my persecutors have usually kept themselves hidden and only acted through other parties. To know "why", one would have to know who the persecutors are, and something of their personalities, since their abuse is almost certainly symptomatic of a personality disorder of the abusers. Certain things however can be deduced about the abusers from the nature of their behaviour, and I will talk about this later in the article.

Why did it start?

It is clear that the persecution must have been initiated by someone who knew me personally, either at school, or at university, or socially, and knew that I was borderline mentally ill, since this is what makes me a target for the persecutors. Unfortunately, the originators have never been identified, and there are several possible candidates. Neither has the link from the originators of the persecution, to the persecutors themselves, ever been made clear. So who are the originators?

University Staff

The identity of the originators may lie in the timing of the persecution. It started in June 1990, while I was finishing a course at Imperial College in London, and a year after I graduated from Cambridge, where I received a degree in computer science. At Cambridge I had achieved some notoriety in the computer lab from various nefarious exploits. Roger Needham attacked me by saying that "there were great hopes for it, but it failed terribly". When I started at Imperial I found that my reputation had preceded me; Cambridge computer lab had spoken to I.C. lecturers about me. I.C. lecturer Frank McCabe summed up commenting about "setting up a straw man so you can tear him down". (Despite being "torn down" by the Cambridge computer labs lecturers, I still achieved a good first degree and a Masters degree at Imperial.)

Other students at university

So, the originators may have been university staff who knew me from my student days. But there are other possibilities. I had other enemies at university, including some fellow students. At my Cambridge college it was common knowledge that my mental health was dubious, and it was known that I talked to myself in my sleep - the floor and walls were quite permeable to noise, so other students heard. I was given the nickname "gibber" because of this habit. Sometime later, I managed to catch myself talking in my sleep when I woke up in the middle of the night.

Here is a quote from a participant in the internet newsgroup where I have been posting for the last three years;

>One thing which has been missing from this discussion is this simple
>prognosis: that maybe he is right and that, despite his admitted
>mental condition, there really is a campaign against him organised by
>now-influential ex-students of his university.

People I knew socially

I had yet other enemies in 1990 (I am a man of many enemies!). In January 1990 I broke up with some people I had been going out with socially. One of them, by the name of Andy Turner, wrote a letter to Alan Freeman, who at the time was a Radio 1 DJ. Freeman read part of the letter out on his Rock Show, about the "one who wore out his welcome with random precision", saying "thats a hell of a letter you wrote there Andy", and "with a schizophrenic youre never alone".

It is my belief that Andy Turner and his friends were trying to make trouble for me, and Turner wrote to Freeman with this in mind. Freeman may have discussed the letter with others, and things may have snowballed from there. This is, of course, pure supposition. The fact is that I do not know who the originators are, and can only guess.

Once it started, why is it continuing?

The answer to this question is obvious. It is unacceptable to the "powers that be" in the UK to have somebody running around who knows he has been targeted by the Security Service and media organizations, and who is in a position to embarrass British institutions. This has become particularly evident in the last week; as I send more faxes to UK politicians and media, so the pressure on me grows, and the volume of abuse increases.

Part of the reason the persecution continues is in the personalities of the abusers, and it is this subject to which I will turn to next, since the key to understanding the persecution lies in understanding those who carry it out, as much as we can.

The Security Service operatives, the persecutors, are they psychopaths?

Let us first examine the definition of the term "psychopath". DSM-IV defines "anti-social personality disorder" as a "pattern of disregard for and violation of the rights of others ... deceitfulness, irritability and aggressiveness ... consistent irresponsibility and lack of remorse". The Harvard Mental Health Letter of Sept 1995 describes these people as using "charm, manipulation, intimidation and violence to control others and satisfy their own needs. Lacking in conscience and in feelings for others, they cold-bloodedly take what they want and do as they please", having "no guilt or regret".

I must say, reading this description of the condition, that it fits the persecutors perfectly. The persecutors have never shown the slightest remorse or guilt. Even when I was severely ill, they continued to abuse me. They have repeatedly blamed their actions on me, which is another trait common amongst psychopaths. They have no respect for my legal or personal rights, and they use intimidation and verbal violence.

If the MI5 operatives are psychopaths then it would explain both why the persecution started, and the degree of verbal violence. Psychopaths by definition damage other people; here, the MI5 operatives find an outlet for their personality disorder, through "cripple-kicking".

Xenophobia on the basis of mental illness, and race

My enemies have made clear many times that one of the reasons they are persecuting me is because of my admitted mental illness. However, it is my belief that they are also persecuting me because I am not of ethnic English origin, and the fact that there have been several incidents of an overtly racist nature reinforces this view.

In one case, two youths on a tube train in London made openly racist references to me as a "soft toy, not up to British Standards". Another person near my home made remarks about "Polish people". In yet another incident in Croydon, a youth made comments about "foreigners".

But the main thrust of their xenophobia is because of my mental illness. I should make clear that I do not look ill; if you met me, you would not know that I had the illness. I take a relatively low dose of medication, and feel quite well. But the persecutors have repeatedly harped on about my supposed serious mental illness; they have called me a "nutter", a "schizophrenic", etc. They have also persuaded other people to use these terms of abuse. They are able to get away with this because abusing the mentally ill is still something which is mostly acceptable in Britain; the media do it, "nutter" is not taboo in the way that "nigger" is.

Conclusion

There are several groups of people who might have wished to cause me trouble, and I still do not know who originated the persecution. Nor do I know how the originators came to be in contact with the (presumed) Security Service operatives who have been carrying out the campaign. To know conclusively why it started, we would have to know who started it, and this information is not available.

However, we can infer some things about the personalities of the persecutors from their methods, and from the degree of verbal violence they employ. It is clear that a main reason for the continuing harassment is the psychopathic disorder of the MI5 agents who carry it out. That they have never been "brought to book" for their misdeeds reinforces their belief that they do no wrong; and, unhappily, until they are brought to book, their persecution campaign looks set to continue.

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X-Google-Thread: 101522,c61d0891a64a55cc,start
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newscon02.news.prodigy.net!prodigy.net!nx01.iad01.newshosting.com!newshosting.com!
post02.iad01!news.newsdemon.com!not-for-mail
Message-Id: <m07102409103369@4ax.com>
Subject: MI5 Persecution: .net Magazine Applauds my Website (11517)
Newsgroups: alt.fan.holmes,alt.polyamory,alt.sports.hockey.nhl.ott-
senators,rec.radio.amateur.space,it.comp.reti.cisco
Followup-To: alt.fan.holmes,alt.polyamory,alt.sports.hockey.nhl.ott-
senators,rec.radio.amateur.space,it.comp.reti.cisco,uk.misc
From: MI5Victim@mi5.gov.uk
Date: 24 Nov 2007 09:10:46 GMT
Lines: 22
Organization: news.newsdemon.com
X-Complaints-To: abuse@newsdemon.com
Xref: g2news1.google.com alt.fan.holmes:1356 alt.polyamory:70222
alt.sports.hockey.nhl.ott-senators:14017 rec.radio.amateur.space:1214
it.comp.reti.cisco:9793
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MI5 Persecution: .net Magazine Applauds my Website

The March 1998 issue (number 42) of .net Magazine reviews the MI5 Persecution website describing it as an "excellent site". The webpages describe in detail the nature of my persecution since 1990 by what are believed to be elements of the UK security service.

(snip image)

You are encouraged to read the web pages which include

o a FAQ section outlining the nature of the persecutors, their methods of harassment through the media, people at work and among the general public
o an evidence section, which carries audio and video clips of media and workplace harassment, rated according to how directly I think they refer to me
o factual descriptions of the state security agencies involved
o scanned texts of the complaints I have made to media and state security agencies involved
o posts which have been made to netnews over the last three years on this topic

11517

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X-Google-Thread: 10e8ad,c2154d2dc20941af,start
X-Google-Thread: 101522,c2154d2dc20941af,start
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X-Google-Language: ENGLISH,ASCII-7-bit
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news.newsdemon.com!not-for-mail
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Subject: MI5 Persecution: BBC Newscasters Spying on my Home (13692)
Newsgroups: alt.fan.holmes,alt.polyamory,alt.sports.hockey.nhl.ott-
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Followup-To: alt.fan.holmes,alt.polyamory,alt.sports.hockey.nhl.ott-
senators,rec.radio.amateur.space,it.comp.reti.cisco,uk.misc
From: MI5Victim@mi5.gov.uk
Date: 24 Nov 2007 10:13:40 GMT
Lines: 259
Organization: news.newsdemon.com
X-Complaints-To: abuse@newsdemon.com
X-Original-Lines: 255
Xref: g2news1.google.com alt.fan.holmes:1357 alt.polyamory:70224
alt.sports.hockey.nhl.ott-senators:14018 rec.radio.amateur.space:1215
it.comp.reti.cisco:9794
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MI5 Persecution Update: Friday 13 November, 1998

If You Intend To Reply, Please Read This

If you have any questions or observations you would like to share with me, then you are very welcome to reply to my fax number 0171-681-1190. But please.... keep your response to one page if you can! I have had several people faxing my article back to me, including one MP faxing back twenty pages. I do not know if he had anything intelligent to say in his 20-page fax because I applied judicious use of the "Delete" key on my computer. Faxes over a page or two will be deleted without being read.

MI5 Resume Hostilities in Response to these Faxes

When I wrote last weeks "MI5 Persecution Update" I remarked how quiet my life had become. No longer! MI5 have restarted hostilities with a vengeance the past week, in response I believe to the faxes I have been sending to members of the House of Commons.

On Saturday 7 November I went to Clapham Picture House cinema to see the film "Antz" (a very enjoyable film). At the cinema, I was verbally assaulted by a group of teenagers with the words "still crazy", repeated about ten times. There was a film with that name showing at the cinema, but it was clear their abuse was directed at me. I do not look ill, so why would they pick on me? answer, the incident was set-up by the persecutors. One of the teenagers also said to another, "I don't know what we're laughing at".

The following day, Sunday 8/11/98, I was on my way to play squash when I was verbally assaulted by a youth who said "it was so funny", without the slightest trace of humour. What he meant by this phrase was that was funny, and they were trying to humiliate me. I have heard this phrase "it was so funny" used at me before many, many times over the last eight and half years.

Please Encourage Keith Hill MP to Help Me

I live in a bugged house, bugged both for audio and video. My movements are monitored by MI5. The Security Service have followed me to Canada, to Poland and the Continent, to the States. I cannot work anywhere, not in England, not in Canada, because MI5 will destroy whatever employment I am able to obtain. I have asked Keith Hill MP to help me, and he has refused.

The situation is intolerable. It is Mr Hills job to help me out of this mess. So, please, as I said in the last fax a week ago: Do not waste your time returning multiple copies of my faxes to my fax mailbox, as some of you have done. Instead;

Please encourage Keith Hill M.P. to help me.

I am sorry to be using this device to encourage Mr Hill to help, but I think eight and half years are quite enough and it is time something was done to bring this matter to a close.

MI5 Persecution : BBC Newscasters Spying on my Home

This week's topic is the quite extraordinary claim that BBC newscasters such as Martyn Lewis and Michael Buerk have spied on my living room while they read the news. I currently have an advert running for the next six months in Private Eye's "Eye Say" column (at a cost of over #200) which says,"MI5 Persecution - BBC Newscasters Spying on my Home"; the story of my campaign in the Eye is on my Website at; http://www.pair.com/spook/evidence/plaint/priveye.htm

BBCs staff magazine Ariel also ran my advert "BBC Newsreaders Spying on my home" for one issue in the Personal category on 8/July/1997 before it was spotted and axed by editor Robin Reynolds; please see webpage; http://www.pair.com/spook/evidence/plaint/ariel.htm

Beginnings

The very first incident in the "MI5/BBC Persecution" occurred in June of 1990, when a newsreader reacted to what she saw in my living room at home as she read the news. My mother had brought an apple for me into the room, whereupon the newsreader smirked and giggled, apparently finding this funny. I couldn't believe what I was seeing. I carried on watching news and other television programmes to see if presenters would show signs of "interactive watching"; to my surprise, this happened again and again. Unfortunately, I did not have my wits sufficiently about me to videotape these programmes, and it is now almost impossible to obtain recordings dating back to 1990.

Most of the "TV watching" has occurred on the news, and most of it in summer 1990, although some as late as autumn 1993. My website has a few extracts of what might be politicians "getting at" me, in particular John Major and interviewer Dimbleby sharing a joke about the "Knutsford Guardian" which is almost certainly about me.

I sold my portable TV in autumn 1990 and stopped watching television regularly. I realise now that this may have been a mistake. What I should have done was to watch TV and listen to the radio, but tape-record everything and make a note of what each excerpt meant to me. I would then be in a much stronger position as regards to evidence that I am now. That is what I am trying to do now, but unsurprisingly the TV/radio presenters have stopped getting at me, now they know they are being recorded.

Examples of Media Harassment

Here are a few examples which I can still remember of media harassment;

In early 1992 I was watching the BBC news with Martyn Lewis on a small black-and-white portable television at my then home in Oxford. I threw a term of abuse at Lewis; he flinched, then gave a grin and made a comment from which I understood that he had been on my side, but might have changed his mind as a result of what Id just said to him.

Victor Lewis Smith in his TV (BBC2?) program at the end of 1993, had a taxi-driver saying, "theyre all out to get me", to which VLS replied, "but you're quite intelligent aren't you?" (what a nice chap VLS is, compliments no less!)

Paul Daniels the TV magician, sometime in 1990-92 (sorry I can't be more precise but it was so long ago), made a "crying face" and put his face in his hands, which was his way of expressing that I was frequently crying in 1990-92, and that he and other media people found my crying funny.

Kenny Everett (deceased) on some talk show, compared me to a "huge ape" who "scratches himself"; he made some other remarks about what the "ape" got up to which unfortunately I cant remember. (I remember that Everetts comments were quite sympathetic and human, but were obviously about me.)

Stephen Fry on another talkshow (Wogan I think) talking about "masturbatory fantasies", he then referred to me with the words "you prat"; I wonder if the studio audience knew what he was talking about and to whom his comments were directed?

Griff Rhys Jones on Clive James' TV show, made a "lunatic face" (wide fixed grin) to which I said to the TV that he had a "face like a horse's arse", to which Clive James said to GRJ "did you hear that?"

Crimestoppers summer 1990, remarks by a Midlands police officer on the programme, while Nick Ross was presenter (as far as I can remember). The officer talked about "in car entertainment". Nick Ross said to officer, "why don't you stop doing it?" to which he replied, "we can't while he's like this".

BBC2 Newsnight in autumn 1993 had a piece on football hooliganism. A black interviewee said apparently of the hooligans, but in fact of me; "they're just idiots, carry on with the surveillance".

There was an incident with Jonathan Ross which I remember clearly; he was on both BBC and ITV television at the same time, one (ITV I think) was recorded, the other channel was live. Ross has a speech impediment which causes him to pronounce his "r"s as "w". I sarcastically said something about "Mr Woss" to the recorded channel, then turned over to where he was live, and he repeated "Woss" with heavy emphasis and sarcasm.

On the radio, in spring 1994, Chris Tarrant made a sarcastic remark in his morning show, saying "he says were trying to kill him, we should be done for attempted manslaughter", to which another of the studio staff said, "oh no, dont say that". His comment was in reply to a comparison Id made the previous evening between my persecutors and the Polish secret police who murdered dissidents.

Martyn Lewis Denies & Lies, But Wont in Writing

In February 1997 I wrote to BBC Viewer & Listener Correspondence and asked them to investigate the claim that their newscasters had engaged in "interactive watching". They replied that they had asked Martyn Lewis and Michael Buerk whether they had engaged in such practices, and that they had both made verbal denials to VLC, but were refusing to put their denials in writing.

I can understand that they might think that if they were to make written denials to me, then many other people with my condition might write to them with similar questions. But Ive asked a couple of journalists if theyve been writing about me, theyve made written denials, Ive believed them, and I have not put their denials on my website because, since I believe their denials, it would not be relevant to publish them.

To me it looks as if Lewis and Buerk are happy to lie verbally but not in writing, because written falsehoods would place them unambiguously in the wrong, whereas they can try to talk their way out of verbal lies if they are ever caught, or perhaps even deny the verbal lies completely? If they lie without shame, then why would they have any shame about future lies about lying?

One of the strangest aspects of "TV watching" is that Buerk and Lewis have convinced themselves that their "interactive spying" is reasonable behaviour. Martyn Lewis thinks of himself as a "gentleman". He expressed in 1992 that he was "on my side". If this matter ever comes out into the open, I wonder what these newscasters will have to say for themselves, and what the British public will make of their behaviour?

Media Persecution Evidence on my Website

You may directly access the Evidence section on my website at URL;

The category currently contains four video segments, a number of audio files and three published articles. The first video of ITN's John Suchet is unfortunately a mistake - after looking at it again it is obviously not about me. The two Ken Clarke excerpts may or may not be about me; it is funny that he should keep on harping about "paranoia" and "madness", but I have given these ratings of only 30% certainty, as it is more likely that they are not about me in particular, and Clarke is simply displaying the normal prejudices against the mentally ill found in much of society.

The piece I find most interesting is the Dimbleby/John Major interview from April 1997. I have assigned this a 90% rating. Dimbleby starts by emphasising a report from the "Knutsford Guardian". Major recognizes what's going on and joins in with a falsely apologetic "heaven forfend". The emphasis is on the first syllable pronounced "nuts" in "Knutsford", which is repeated three times. Of course this is hardly anywhere near convincing evidence; the really clear items were all in 1990-92, and they are basically unobtainable now.

If you're reading the website, have a look at the two files from David Hepworth's programme on GLR radio. The first one from 21/Feb/1997 has him talking about an "embarassment" of prizes and "absolute obscene", in reference I believe to the verbal sexual abuse that was being used against me at the time (and which unfortunately is still current). In the second file dated 9/May/1997 he again talks about "absolute embarrassment" of prizes, followed by laughter. To my mind he knows I am listening to his programme, and deliberately makes these remarks for my benefit, with very little attempt to disguise their purpose.

Bernard Levin - "Fanatic's Fare for the Common Man"

On 21 September 1991 this article by Bernard Levin appeared in The Times. It is reproduced in the Evidence section of the website, or may be accessed directly at URL;

To my mind, Levin's article described the situation at the time and in particular a recent meeting with a friend, during which I for the first time admitted to someone other than my GP that I had been subjected to a conspiracy of harassment over the previous year and a half.

Levin writes about a "madman running loose about London" who "bursts into tears, and swears it is all true. And it is." I am pleased to agree with his assertion that "it is all true" because the truth is what I presented to my friend in September 1991 and it is what is being presented to the readership of these articles now.

Conclusion

The harassment, in particular media persecution, was at its strongest in 1990-92. Today, I am recording everything I watch, read and listen, and the media have pretty much given up. It is now incidents "in public" which make up what there is of MI5s persecution. But much of the material from 1990-92 still exists in archives, although the organisations which have those archives generally wont make the material available to the public, for copyright and other reasons.

MI5 can no longer employ the media to persecute me, partly because journalists now know who is behind the persecution, and also because I would publish any instances. My mistake during 1990-92 was to not record instances as they happened; Ive learned from that mistake, and know better now.

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Posted via NewsDemon.com - Premium Uncensored Newsgroup Service
      ------->>>>>>http://www.NewsDemon.com<<<<<<------
Unlimited Access, Anonymous Accounts, Uncensored Broadband Access

```
From -8882175363736700484
X-Google-Thread: 10e8ad,2d14468bb54b2df8,start
X-Google-Thread: 10b9c8,2d14468bb54b2df8,start
X-Google-Attributes: gid10e8ad,gid10b9c8,public,usenet
X-Google-Language: ENGLISH,ASCII
Path: g2news1.google.com!news2.google.com!border1.nntp.dca.giganews.com!
border2.nntp.dca.giganews.com!nntp.giganews.com!novia!transit4.readnews.com!news-
out.readnews.com!news-xxxfer.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-329 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sat, 24 Nov 2007 23:16:36 EST
Organization: The Radio Amateur Satellite Corporation
Lines: 275
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000701c82f19$f647d610$6601a8c0@familyroom>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;charset="iso-8859-1"
Content-Transfer-Encoding: quoted-printable
```

```
X-Trace: reader1.panix.com 1195964196 6627 166.84.1.6 (25 Nov 2007 04:16:36 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 25 Nov 2007 04:16:36 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
X-Authority-Analysis: v=1.0 c=1 a=w3ygWfFPLToA:10 a=Ixn1CAxRAAAA:8 a=--
uSg6PmAAAA:8 a=sF_O5Gg8AAAA:8 a=iAgKEEEpAAAA:8 a=MGOmJq_8AAAA:8 a=X-W_YhP6AAAA:8
a=AAacJLbDAAAA:8 a=IJSV6p-UAAAA:8 a=jDqo7jUqAAAA:8 a=Qjx1jhJ1FmxQPJR5G4gA:9
a=GmC0w1OPR6VaKx0E-Y0A:7 a=1JHYrctizkBYqAtVJJczyUY1s-IA:4 a=q4eIODirUFwA:10
a=bp7_7PafTAUA:10 a=aXUJHtye-TwA:10 a=CWSBNlG-xqIA:10
X-Original-Bytes: 10496
Xref: g2news1.google.com rec.radio.amateur.space:1216 rec.radio.info:616
```

AMSAT NEWS SERVICE
ANS-329

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* AMSAT-DL asks and receives assistance to maintain the ZEL for another year
* AMSAT at two hamfests 01 December 2007
* Satellite Shorts From All Over
* ARISS Status - 19 November 2007

SB SAT @ AMSAT $ANS-329.01
AMSAT-DL asks and receives assistance to maintain the ZEL for another year

AMSAT News Service Bulletin 329.01
From AMSAT HQ SILVER SPRING, MD.

November 25, 2007
To All RADIO AMATEURS
BID: $ANS-329.01

Earlier this year the Directors of AMSAT-DL were informed by the University of Marburg in Germany that it had been decided that funding for the ZEL by the University would cease at the end of 2007. The Directors approached AMSAT-NA and AMSAT-UK for financial assistance in keeping the ZEL open for another year. The sum of 25,000 Euros was requested.

At recent meetings of the AMSAT-NA Board and of the AMSAT-UK Committee, it was agreed that both would contribute to the donation. Given the relative sizes of the two donating AMSAT groups it was agreed that AMSAT-NA would donate 75% of the money required, and that AMSAT-UK would donate 25%.

The ZEL (Zentrales Entwicklungslabor fur electronic, roughly translated as the Central Development Laboratory for Electronics) has been the facility which, over the last 40 years, has been at the centre of much amateur satellite development activity by members of the University, members of AMSAT-DL, as well as other members of AMSAT from outside Germany. The most famous satellite to be produced there was OSCAR-13 which gave the Amateur Radio Community many years of excellent service.

Currently under construction is Phase 3E, a satellite similar in size and shape to OSCAR-13, but with many advanced features. It will carry a 70 cms to 2 metre band transponder, as well as transponders on other bands. Importantly it will carry its own rocket motor which will boost its orbit into a highly elliptical one, which will give world wide coverage, allowing ordinary radio amateur great DX possibilities through the transponders. Radio Amateurs have not had such a satellite since the demise of AO-40 in March 2004.

The P3E satellite is still under construction in the ZEL, and its completion is anticipated for sometime in 2008. It is note worthy that some of the personnel employed by the University to work in the ZEL have undertaken to continue working on P3E as volunteers.

Links:
Pictures of the ZEL
http://www.uk.amsat.org/gallery2/main.php?g2_itemId=32

[ANS thanks Jim, G3WGM, for the above information]

/EX

SB SAT @ AMSAT $ANS-329.02
AMSAT at two hamfests 01 December 2007

AMSAT News Service Bulletin 329.02
From AMSAT HQ SILVER SPRING, MD.
November 25, 2007
To All RADIO AMATEURS
BID: $ANS-329.02

AMSAT will be represented at two hamfests over the weekend of 01 December 2007.

Patrick, WD9EWK, will be manning at table at the Superstition ARC Hamfest Hamfest in Mesa, AZ. This hamfest is at Mesa Community College. In addition to the AMSAT table there will be AO-51 demonstrations in the morning.

Hamfest details can be found at
http://wb7tjd.org/hamfest/

Across the country at the Tampa Hamfest in Palmetto (Bradenton), FL, Drew Glasbrenner, KO4MA, AMSAT's VP of Operations will be manning the AMSAT booth

and conducting demos. Executive VP Lee McLamb, KU4OS, will be leading the forum session at 11AM Saturday with several speakers to provide information on current and future satellites. Info on the Tampa hamfest can be found at
http://www.fgcarc.org/ .

[ANS thanks Patrick, WD0EWK and Drew, KO4MA for the above information]

/EX

SB SAT @ AMSAT $ANS-329.03
Satellite Shorts From All Over

AMSAT News Service Bulletin 329.03

From AMSAT HQ SILVER SPRING, MD.
November 25, 2007
To All RADIO AMATEURS
BID: $ANS-329.03

+ Robert, G8ATE reports he has obtained the special callsign GB0OO Golf Bravo Zero Oscar One. The special events station will be active on the amateur radio satellites between December 12 through December 16. GB2NSC at the National space centre in Leicester, England may be on the air as well.

+ Jeff, KE9V captured Gerd, WB8IFM manning the AMSAT booth and speaking at the AMSAT forum at the Ft Wayne, Indiana Hamfest.
  http://ke9v.smugmug.com/photos/222644028-L.jpg
  http://ke9v.smugmug.com/photos/222648515-L.jpg

+ Henk, PA3GUO reports the ANDE De-Orbit website, created by Mike, DK3WN is on-line at: http://www.ande-deorbit.com. Additional information about ANDE can be found at:
  http://web.ew.usna.edu/~bruninga/ande-ops.html
  http://web.ew.usna.edu/~bruninga/ande/ande-tlm.txt

+ A view of the work in progress at AMSAT-NA's new satellite intgration lab in Maryland can be seen at:
  http://n4hy.smugmug.com/gallery/3841264

[ANS thanks everyone for the above information]

/EX

SB SAT @ AMSAT $ANS-329.04
ARISS Status - 19 November 2007

AMSAT News Service Bulletin 329.04
From AMSAT HQ SILVER SPRING, MD.
November 25, 2007
To All RADIO AMATEURS
BID: $ANS-329.04

1. ARISS School Contacts Status

Due to the very demanding schedules of the crew onboard the ISS, no Amateur Radio on the International Space Station (ARISS) contacts have been planned at this time. The ARISS team expects contacts to resume once STS-122 launches in December.

2. Columbus Module Installed in Atlantis Payload Bay

Amateur Radio on the International Space Station (ARISS) antennas were installed on the nadir of the Columbus Module in October. The Columbus Module has been moved to the Atlantis payload bay in preparation for a December 6 launch. An article has been posted on the ARISS-Europe Web site. See: http://www.ariss-eu.org/2007_11_18.htm

3. Amateur Radio Day Article

Midlakes Intermediate School participated in Amateur Radio Day on November 2 in celebration of Pam Melroy�s STS-120 mission. The local paper ran an article on the event. See: http://www.mpnnow.com/news/x9494626

4. Video Posted of Pontes Radio Contact

The first Brazilian astronaut Marcos Pontes, PY0AEB, flew on the ISS in April, 2006. He participated in an Amateur Radio on the International Space Station (ARISS) contact and made a few radio contacts with the public. Fabiano Moser, PY5RX, was one of those who spoke with Pontes. Upon returning to Earth, Pontes presented Fabiano with a gift during a public speech in Bauru, Brazil commemorating his ISS contact. A video of Pontes during the radio contact with Fabiano was recorded by US astronaut Bill McArthur on the ISS. The video may be found on this website: http://iss.ontwikkel.nl

5. ARISS Mentioned in QST

The American Radio Relay League (ARRL) covered Amateur Radio on the International Space Station (ARISS) in its December issue of QST. Under "Media Hits" (page 12) is a paragraph about the Macomb Daily and the Detroit Free Press -- two articles talking about the September ARISS contact with Martin Luther King Academy in Mount Clemens, Michigan.

On page 62 is a section about the ARRL/TAPR (Tucson Amateur Packet

Radio) 26th Annual Digital Communications Conference held on September 28-30, in Hartford, Connecticut. A list is given on the presentation topics, including a talk on SuitSat-2.

Also on page 62-63 is an article: "Hams Named to Key NASA Positions" listing Ellen Ochoa, KB5TZZ, named as deputy director at JSC, and Bob Cabana, KC5HBV, named director of NASA Stennis Space Center.

[ANS thanks Carol, KB3LKI, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Lee McLamb, KU4OS

From 5134590096852768856
X-Google-Thread: 10e8ad,110fb8e628774ec,start
X-Google-Attributes: gid10e8ad,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news4.google.com!news.germany.com!
storethat.news.telefonica.de!telefonica.de!news-fra1.dfn.de!news.tele.dk!
feed118.news.tele.dk!news.tele.dk!small.news.tele.dk!
lnewsinpeer00.lnd.ops.eu.uu.net!emea.uu.net!peer-uk.news.demon.net!
kibo.news.demon.net!mutlu.news.demon.net!news.demon.co.uk!demon!
nospam.demon.co.uk!hils
From: Hils <hils@nospam.demon.co.uk>
Newsgroups: rec.radio.amateur.space
Subject: RS-15 update
Date: Sun, 25 Nov 2007 02:59:44 +0000
Organization: is a symptom of an uncreative mind
Lines: 10
Message-ID: <dS1TddNgUOSHFwV9@newearth.demon.co.uk>
NNTP-Posting-Host: newearth.demon.co.uk
Mime-Version: 1.0

```
Content-Type: text/plain;charset=us-ascii;format=flowed
X-Trace: news.demon.co.uk 1196006065 4963 193.237.117.162 (25 Nov 2007 15:54:25
GMT)
X-Complaints-To: abuse@demon.net
NNTP-Posting-Date: Sun, 25 Nov 2007 15:54:25 +0000 (UTC)
User-Agent: Turnpike/6.05-S (<mBzxuS2jji53TkZ3UtmZ3heTZ9>)
Xref: g2news1.google.com rec.radio.amateur.space:1217

RS-15's next eclipse season will last from 2007-11-27 to 2008-03-09.
Recent observations suggest that during this period its beacon will
become very erratic, active on approximately one pass in three, with its
frequency drifting downwards.

It is one of only two satellites of any kind still transmitting on HF.
The other, AO-7, is more sporadic, weaker and less likely to be heard.

--
Hil



From 5563392300454175944
X-Google-Thread: 107ada,d84d23a9b6761e7d,start
X-Google-Thread: 11480d,d84d23a9b6761e7d,start
X-Google-Thread: 10bf43,d84d23a9b6761e7d,start
X-Google-Thread: 10e8ad,d84d23a9b6761e7d,start
X-Google-Attributes: gid107ada,gid11480d,gid10bf43,gid10e8ad,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!postnews.google.com!s19g2000prg.googlegroups.com!not-for-
mail
From: Hamfest <hamfest@gmail.com>
Newsgroups: rec.radio.amateur.misc, rec.radio.amateur.dx,
rec.radio.amateur.policy,
     rec.radio.amateur.space
Subject: New message board
Followup-To: rec.radio.amateur.misc, rec.radio.amateur.dx,
     rec.radio.amateur.policy, rec.radio.amateur.space
Date: Sun, 25 Nov 2007 09:08:06 -0800 (PST)
Organization: http://groups.google.com
Lines: 8
Message-ID: <e1f5e748-5b41-4abe-80c2-549f0ef4adaa@s19g2000prg.googlegroups.com>
NNTP-Posting-Host: 65.64.77.130
Mime-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 7bit
X-Trace: posting.google.com 1196010486 1214 127.0.0.1 (25 Nov 2007 17:08:06 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Sun, 25 Nov 2007 17:08:06 +0000 (UTC)
Complaints-To: groups-abuse@google.com
Injection-Info: s19g2000prg.googlegroups.com; posting-host=65.64.77.130;
     posting-account=R2mmAQoAAACbUXt8yAY2E9ptzm5zzlS5
User-Agent: G2/1.0
X-HTTP-UserAgent: Mozilla/5.0 (Windows; U; Windows NT 5.1; en-US; rv:1.8.1.9)
     Gecko/20071025 Firefox/2.0.0.9,gzip(gfe),gzip(gfe)
```

Content-Disposition: inline
Xref: g2news1.google.com rec.radio.amateur.misc:39194 rec.radio.amateur.dx:3772 rec.radio.amateur.policy:99367 rec.radio.amateur.space:1218

New message board focused on amateur radio now online in testing.
http://hamforumlive.com/

It is sponsored by the Enid hamfest group from Enid, Oklahoma

http://www.enidhamfest.com/

Jeff N5UBY

From -1817222995143899810
X-Google-Thread: 10e8ad,e9ba14bf34d00762,start
X-Google-Thread: 10b9c8,e9ba14bf34d00762,start
X-Google-Attributes: gid10e8ad,gid10b9c8,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!news1.google.com!newsfeed2.dallas1.level3.net!news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-333 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Thu, 29 Nov 2007 14:01:00 EST
Organization: The Radio Amateur Satellite Corporation
Lines: 1309
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000f01c832ad$88643a20$6601a8c0@familyroom>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1196362860 26107 166.84.1.6 (29 Nov 2007 19:01:00 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Thu, 29 Nov 2007 19:01:00 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
X-Authority-Analysis: v=1.0 c=1 a=QEYrM4RQMFcA:10 a=SeIcp837AAAA:8 a=Ixn1CAxRAAAA:8 a=c2--Pf7SAAAA:8 a=KlfyZUBUAAAA:8 a=FbIv-aF9AAAA:8

a=3fFvnXHTAAAA:8 a=XNQh8oeLAAAA:8 a=f0RPBRECAAAA:8 a=ADBSzeAnAAAA:8
a=5mDMBHa8AAAA:8 a=gUbaYAUbAAAA:8 a=qyDxTJV7AAAA:8 a=JXa7hjb-AAAA:8
a=qL4joYdQAAAA:8 a=LlmPylSfAAAA:8 a=tIoeiIHHAAAA:8 a=fENH8MHtAAAA:8
a=0sg8RoSLAAAA:8 a=uGVPSem0AAAA:8 a=Wa5ALEAlAAAA:8 a=z_zqISx-AAAA:8
a=4RlJXVyBAAAA:8 a=JRUS5pMlAAAA:8 a=oBXim8GbAAAA:8 a=XYLYVS5UAAAA:8
a=h3eCdmoiAAAA:8 a=QX7y1c2GAAAA:8 a=QEps4B0vAAAA:8 a=hKwqrz-LAAAA:8
a=_qHggDGBAAAA:8 a=jBO_9RCuKkijH3FQC0cA:9 a=TrcVc2ZCzT4ZjJhcmPsA:7
a=T_YT3uHYn3wRs7u0zLmk-S6DlZcA:4 a=8QCVOS8zSb0A:10 a=FyblZaQiG9kA:10
a=q4eIODirUFwA:10 a=NDWsJ_JVWXMA:10 a=UtcmazUCZKYA:10 a=XyvEP7qG2ooA:10
a=wFu9RQxNt4EA:10 a=Bi3YAkoP18cA:10 a=F7Eo224L3vYA:10 a=XF7b4UCPwd8A:10
Xref: g2news1.google.com rec.radio.amateur.space:1219 rec.radio.info:617

This report is organized into FIVE parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites
Part 5 (S5) - deborbited/returned satellites

SB SAT @ AMSAT W8ISS ANS-333.S1
WSR 333 Part 1 11/29/2007

AMSAT NEWS SERVICE BULLETIN 333.S1 FROM AMSAT HQ
SILVER SPRING, MD, November 29, 2007
TO ALL RADIO AMATEURS
BID: $ANS-333.S1

VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.859330 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsat.in/hamsat.htm

```
To know what transponder is switched on please listen for the beacon
that is
active. Each transponder has a different beacon.
[06252007]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Modes:   FM Repeater - V/u
                 BBS         - Off
                 Telemetry   -  /u

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink:   145.880 MHZ FM
                       145.880 MHz USB
                       145.920 MHz FM
                      1268.700 MHz FM 67Hz PL tone
Digital Downlinks:     435.150 MHz FM 38k4 Digital, PBP, 1 watt output
                       435.150 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:        145.860 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      1268.700 mhz FM 9k6 PBP Digital
Beacon:                435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[11152007]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Current Mode: V/u
```

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer
   on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on
   and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10
   minute timer.
[05282007]

=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Operational - check operational schedule for current times!!

Current Mode: V/u

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage: http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts.htm
[0820007]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM
Downlink: 436.795 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[08202007]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational depending on amount of Sunlight

Current Mode: Listen before transmitting

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/

AO-7 Usage Guidelines on the AO-7 Log and Resource Site located at:
http://www.planetemily.com/ao7
[05282007]

=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational - APRS and BBS

Current Mode: V/v

Expedition 16 crew:
Commander: Peggy Whitson
Flight Engineer: Yuri Malenchenko   RK3DUP
Flight Engineer: Daniel M. Tani

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM
Worldwide packet downlink: 145.825 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS
                     RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line is NOT translated from Russian and posted.
[11052007]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-333.S2
WSR 333 Part 2 11/29/2007

AMSAT NEWS SERVICE BULLETIN 333.S2 FROM AMSAT HQ
SILVER SPRING, MD, November 29, 2007
TO ALL RADIO AMATEURS
BID: $ANS-333.S2

CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.
[11152007]
=====
CP3
Catalog Number: 31128
Launch Date: April 17,2007

Status: Operational

Current Mode: /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[07302007]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: In Orbit

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder: 145.825 Mhz FM
[02052007]
=====
NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Operational

Current Mode: /u

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[10222007]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[07302007]
=====
GENESAT-1 ?O-??
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Current Mode: /u

Telemetry Beacon Downlink: 437.0670 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[01082007]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon: 437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
[03262007]
=====
CO-57 CubeSat XI-IV

```
Catalog number: 27848
Launched: June 30, 2003

Status: Operational

Current Mode: /u

Beacon:     436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[01082007]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launched: February 21, 2006

Status: Semi-Operational - Constant Carrier only

Uplink:  1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan ? )

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[01082007]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW
[08132007]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational
```

```
Current Mode(s): FM Repeater - V/u
                 BBS         - Off
                 Telemetry   -  /u

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink:   145.880 MHZ FM
                       145.880 MHz USB
                       145.920 MHz FM
                      1268.700 MHz FM 67Hz PL tone
Digital Downlinks:     435.150 MHz FM 38k4 Digital, PBP, 1 watt output
                       435.150 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:        145.860 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      1268.700 mhz FM 9k6 PBP Digital
Beacon:                435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[11152007]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Hibernation until full sunlight in November

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink:        144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[09242007]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
```

```
Launch Date: July 10, 1998

Status: Operational

Current Modes: V/U
               L/U

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[09172007]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Semi-Operational - Telemetry ONLY

Current Mode:  /u

Uplink:         145.900 MHz FM 1200-baud Manchester FSK
                145.920 MHz FM 1200-baud Manchester FSK
                145.940 MHz FM 1200-baud Manchester FSK
                145.960 MHz FM 1200-baud Manchester FSK

Downlink:       437.026 MHz SSB 1200-baud PSK

Mode-S Beacon: 2401.1428 MHz

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.025 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[11152007]
=====
UO-11 OSCAR-11
Catalog number: 14781
```

Launched: March 1, 1984

Status: Semi-operational.

Current Mode: /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon: 435.025 MHz - OFF
Mode-S Beacon: 2401.500 MHz - OFF

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[010222007]
=====
RS-22 RADIO SPORT RS-22
Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only

Current Mode: /u

CW Beacon - 435.352 MHz
            145.818 MHz
[08062007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational - APRS and BBS

Current Mode: V/v

Expedition 16 crew:
Commander: Peggy Whitson
Flight Engineer: Yuri Malenchenko   RK3DUP
Flight Engineer: Daniel M. Tani

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM
Worldwide packet downlink: 145.825 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS
RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line is
NOT translated from Russian and posted.
[11052007]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-333.S3
WSR 333 Part 3 11/29/2007

AMSAT NEWS SERVICE BULLETIN 333.S3 FROM AMSAT HQ
SILVER SPRING, MD, November 29, 2007
TO ALL RADIO AMATEURS
BID: $ANS-333.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

CP4
Catalog Number: 31122
Launch Date: April 17,2007

Status: Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon: 437.325 MHz CW
[11152007]
=====
HO-59 HITSat
Catalog number: 29484

```
Launch date: September 22, 2006

Status: Non-Operational

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon:             437.2750 MHz CW

Callsign: JR8YJT
[10152007]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency:  437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink:         437.250 MHz FM 67Hz CTCSS
Voice Downlink:      2401.835 MHz FM
Packet Up/Downlink:   437.250 MHz 9k6 packet
Packet Downlink      2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non=Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[08132007]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002
```

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]

=====

MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Non-Operational

Uplinks: 145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[007302007]

=====

NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, callsign KE6QMD, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]

=====

```
SO-42 SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS:                SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink:   145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
V-band:   145.840 -  145.990 MHz CW/LSB
U-band:   435.550 -  435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks
---------
S2-band:  2401.225 -  2401.475 MHz CW/USB
K-band:  24048.010 - 24048.060 MHz CW/USB
Beacon:   2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)
----------------------------
```

BEACON	General Beacon (GB)	Middle Beacon (MB)	Engineering Beacon (EB)
2 m	none	145.898 MHz	none
70cm	435.438 MHz	435.588 MHz	435.838 MHz
13cm(1)	2400.188 MHz	2400.338 MHz	2400.588 MHz
13cm(2)	2401.173 MHz	2401.323 MHz	2401.573 MHz
3cm	10450.975 MHz	10451.125 MHz	10451.375 MHz
1.5cm	24047.885 MHz	24048.035 MHz	24048.285 MHz

```
[007162007]
=====
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink:    145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site
at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater:         436.250 MHz

Uplinks: Mode B Repeater:  145.825 MHz
Mode J Digipeater:         145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
```

```
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink:   145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign:       POSAT1-12
```

```
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012006]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HL01-11
BBS: HL01-12
[01222007]
```

```
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
LIBERTAD-1
Catalog Number: 31129
Launch Date: April 17,2007

Status: Non-Operational
```

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink: 145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[10222007]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplinks: 145.840 MHz 1200-baud Manchester FSK
145.860 MHz 1200-baud Manchester FSK
145.880 MHz 1200-baud Manchester FSK
145.900 MHz 1200-baud Manchester FSK

CW downlink: 437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[01222007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink: 145.825 MHz FM 1200 Baud AFSK
Beacon: 2401.220 MHz
[05012006]
=====
UO-14 UoSAT-3

```
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet: Non-Operational
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon:   145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
```

```
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink  29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
[01152007]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon 1:  29.352 MHz (intermittent)
Beacon 2:  29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink:     21.260 to 21.300 MHz CW/USB
Downlink:  145.860 to 145.900 MHz CW/USB

Beacon:    145.860 MHz

Robot:     145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink:   21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon:   29.408 MHz

Robot:    29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-333.S4
WSR 333 Part 4 11/29/2007

AMSAT NEWS SERVICE BULLETIN 333.S4 FROM AMSAT HQ
SILVER SPRING, MD, November 29, 2007
TO ALL RADIO AMATEURS
BID: $ANS-333.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE PROPOSED FOR LAUNCH AT
THIS TIME:

Phase 5a Mars Mission
Catalog Number:
Proposed Launch Date: 2009 or 2011

Status: Design Phase

For the latest project status update please visit the AMSAT-DL P5-A web
```

page:
http://ticket-to-mars.org
[01222007]
=====
PHASE 3E AO-??
Catalog number:
Proposed Launch Date: Late 2007

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/
[01222007]
=====
Eagle AO-??
Catalog Number:
Proposed Launch Date: Early/Mid 2009

Status: Design Phase

For the latest project status updates please visit the AMSAT-NA webpage:
http://www.amsat.org
[01222007]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-333.S5
WSR 333 Part 5 11/29/2007

AMSAT NEWS SERVICE BULLETIN 333.S5 FROM AMSAT HQ
SILVER SPRING, MD, November 29, 2007
TO ALL RADIO AMATEURS
BID: $ANS-333.S5

THE FOLLOWING SATELLITES HAVE DE-ORBITED OR HAVE BEEN RETURNED SAFELY:

NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink: 145.825 Mhz FM APRS AX25
APRS Uplink: 145.825 MHz FM APRS AX25
Voice/PSK31 Uplink: 28.120 MHz

Packet to Voice ID: RAFT
[06112007]
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live

radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

From 7105425310458503290
X-Google-Thread: fc2a5,a838e84431828ed4,start

```
X-Google-Thread: 107ada,a838e84431828ed4,start
X-Google-Thread: 10bf43,a838e84431828ed4,start
X-Google-Thread: 10e8ad,a838e84431828ed4,start
X-Google-Thread: 106d41,a838e84431828ed4,start
X-Google-Attributes:
gidfc2a5,gid107ada,gid10bf43,gid10e8ad,gid106d41,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news3.google.com!out01b.usenetserver.com!
news.usenetserver.com!in01.usenetserver.com!news.usenetserver.com!spln!
extra.newsguy.com!newsp.newsguy.com!news2
From: MI5Victim@mi5.gov.uk
Newsgroups:
rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.rad
io.amateur.space,rec.radio.cb
Subject: MI5 Persecution: BBC Newscasters Spying on my Home (1241)
Followup-To:
rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.rad
io.amateur.space,rec.radio.cb,uk.misc
Date: 1 Dec 2007 11:08:27 GMT
Organization: NewsGuy - Unlimited Usenet $19.95
Lines: 255
Message-ID: <m07110111081772@4ax.com>
NNTP-Posting-Host: paafefebfff000000a038ab09d7cf514f31e783bc912ece8f.newsdawg.com
Xref: g2news1.google.com rec.radio.amateur.homebrew:14765
rec.radio.amateur.misc:39338 rec.radio.amateur.policy:99939
rec.radio.amateur.space:1220 rec.radio.cb:40888
```

MI5 Persecution Update: Friday 13 November, 1998

If You Intend To Reply, Please Read This

If you have any questions or observations you would like to share with me, then you are very welcome to reply to my fax number 0171-681-1190. But please.... keep your response to one page if you can! I have had several people faxing my article back to me, including one MP faxing back twenty pages. I do not know if he had anything intelligent to say in his 20-page fax because I applied judicious use of the "Delete" key on my computer. Faxes over a page or two will be deleted without being read.

MI5 Resume Hostilities in Response to these Faxes

When I wrote last weeks "MI5 Persecution Update" I remarked how quiet my life had become. No longer! MI5 have restarted hostilities with a vengeance the past week, in response I believe to the faxes I have been sending to members of the House of Commons.

On Saturday 7 November I went to Clapham Picture House cinema to see the film "Antz" (a very enjoyable film). At the cinema, I was verbally assaulted by a group of teenagers with the words "still crazy", repeated about ten times. There was a film with that name showing at the cinema, but it was clear their abuse was directed at me. I do not look ill, so why would they pick on me? answer, the incident was set-up by the persecutors. One of the teenagers also said to another, "I don't know what we're laughing at".

The following day, Sunday 8/11/98, I was on my way to play squash when I was verbally assaulted by a youth who said "it was so funny", without the slightest trace of humour. What he meant by this phrase was that was funny, and they were trying to humiliate me. I have heard this phrase "it was so funny" used at me before many, many times over the last eight and half years.

Please Encourage Keith Hill MP to Help Me

I live in a bugged house, bugged both for audio and video. My movements are monitored by MI5. The Security Service have followed me to Canada, to Poland and the Continent, to the States. I cannot work anywhere, not in England, not in Canada, because MI5 will destroy whatever employment I am able to obtain. I have asked Keith Hill MP to help me, and he has refused.

The situation is intolerable. It is Mr Hills job to help me out of this mess. So, please, as I said in the last fax a week ago: Do not waste your time returning multiple copies of my faxes to my fax mailbox, as some of you have done. Instead;

Please encourage Keith Hill M.P. to help me.

I am sorry to be using this device to encourage Mr Hill to help, but I think eight and half years are quite enough and it is time something was done to bring this matter to a close.

MI5 Persecution : BBC Newscasters Spying on my Home

This week's topic is the quite extraordinary claim that BBC newscasters such as Martyn Lewis and Michael Buerk have spied on my living room while they read the news. I currently have an advert running for the next six months in Private Eye's "Eye Say" column (at a cost of over #200) which says,"MI5 Persecution - BBC Newscasters Spying on my Home"; the story of my campaign in the Eye is on my Website at; http://www.pair.com/spook/evidence/plaint/priveye.htm

BBCs staff magazine Ariel also ran my advert "BBC Newsreaders Spying on my home" for one issue in the Personal category on 8/July/1997 before it was spotted and axed by editor Robin Reynolds; please see webpage; http://www.pair.com/spook/evidence/plaint/ariel.htm

Beginnings

The very first incident in the "MI5/BBC Persecution" occurred in June of 1990, when a newsreader reacted to what she saw in my living room at home as she read the news. My mother had brought an apple for me into the room, whereupon the newsreader smirked and giggled, apparently finding this funny. I couldn't believe what I was seeing. I carried on watching news and other television programmes to see if presenters would show signs of "interactive watching"; to my surprise, this happened again and again. Unfortunately, I did not have my wits sufficiently about me to videotape these programmes, and it is now almost impossible to obtain recordings dating back to 1990.

Most of the "TV watching" has occurred on the news, and most of it in summer 1990, although some as late as autumn 1993. My website has a few extracts of what might be politicians "getting at" me, in particular John Major and interviewer Dimbleby sharing a joke about the "Knutsford Guardian" which is almost certainly about me.

I sold my portable TV in autumn 1990 and stopped watching television regularly. I realise now that this may have been a mistake. What I should have done was to watch TV and listen to the radio, but tape-record everything and make a note of what each excerpt meant to me. I would then be in a much stronger position as regards to evidence that I am now. That is what I am trying to do now, but unsurprisingly the TV/radio presenters have stopped getting at me, now they know they are being recorded.

Examples of Media Harassment

Here are a few examples which I can still remember of media harassment;

In early 1992 I was watching the BBC news with Martyn Lewis on a small black-and-white portable television at my then home in Oxford. I threw a term of abuse at Lewis; he flinched, then gave a grin and made a comment from which I understood that he had been on my side, but might have changed his mind as a result of what Id just said to him.

Victor Lewis Smith in his TV (BBC2?) program at the end of 1993, had a taxi-driver saying, "theyre all out to get me", to which VLS replied, "but you're quite intelligent aren't you?" (what a nice chap VLS is, compliments no less!)

Paul Daniels the TV magician, sometime in 1990-92 (sorry I can't be more precise but it was so long ago), made a "crying face" and put his face in his hands, which was his way of expressing that I was frequently crying in 1990-92, and that he and other media people found my crying funny.

Kenny Everett (deceased) on some talk show, compared me to a "huge ape" who "scratches himself"; he made some other remarks about what the "ape" got up to which unfortunately I cant remember. (I remember that Everetts comments were quite sympathetic and human, but were obviously about me.)

Stephen Fry on another talkshow (Wogan I think) talking about "masturbatory fantasies", he then referred to me with the words "you prat"; I wonder if the studio audience knew what he was talking about and to whom his comments were directed?

Griff Rhys Jones on Clive James' TV show, made a "lunatic face" (wide fixed grin) to which I said to the TV that he had a "face like a horse's arse", to which Clive James said to GRJ "did you hear that?"

Crimestoppers summer 1990, remarks by a Midlands police officer on the programme, while Nick Ross was presenter (as far as I can remember). The officer talked about "in car entertainment". Nick Ross said to officer, "why don't you stop doing it?" to which he replied, "we can't while he's like this".

BBC2 Newsnight in autumn 1993 had a piece on football hooliganism. A black interviewee said apparently of the hooligans, but in fact of me; "they're just idiots, carry on with the surveillance".

There was an incident with Jonathan Ross which I remember clearly; he was on both BBC and ITV television at the same time, one (ITV I think) was recorded, the other channel was live. Ross has a speech impediment which causes him to pronounce his "r"s as "w". I sarcastically said something about "Mr Woss" to the recorded channel, then turned over to where he was live, and he repeated "Woss" with heavy emphasis and sarcasm.

On the radio, in spring 1994, Chris Tarrant made a sarcastic remark in his morning show, saying "he says were trying to kill him, we should be done for attempted manslaughter", to which another of the studio staff said, "oh no, dont say that". His comment was in reply to a comparison Id made the previous evening between my persecutors and the Polish secret police who murdered dissidents.

Martyn Lewis Denies & Lies, But Wont in Writing

In February 1997 I wrote to BBC Viewer & Listener Correspondence and asked them to investigate the claim that their newscasters had engaged in "interactive watching". They replied that they had asked Martyn Lewis and Michael Buerk whether they had engaged in such practices, and that they had both made verbal denials to VLC, but were refusing to put their denials in writing.

I can understand that they might think that if they were to make written denials to me, then many other people with my condition might write to them with similar questions. But Ive asked a couple of journalists if theyve been writing about me, theyve made written denials, Ive believed them, and I have not put their denials on my website because, since I believe their denials, it would not be relevant to publish them.

To me it looks as if Lewis and Buerk are happy to lie verbally but not in writing, because written falsehoods would place them unambiguously in the wrong, whereas they can try to talk their way out of verbal lies if they are ever caught, or perhaps even deny the verbal lies completely? If they lie without shame, then why would they have any shame about future lies about lying?

One of the strangest aspects of "TV watching" is that Buerk and Lewis have convinced themselves that their "interactive spying" is reasonable behaviour. Martyn Lewis thinks of himself as a "gentleman". He expressed in 1992 that he was "on my side". If this matter ever comes out into the open, I wonder what these newscasters will have to say for themselves, and what the British public will make of their behaviour?

Media Persecution Evidence on my Website

You may directly access the Evidence section on my website at URL;

The category currently contains four video segments, a number of audio files and three published articles. The first video of ITN's John Suchet is unfortunately a mistake - after looking at it again it is obviously not about me. The two Ken Clarke excerpts may or may not be about me; it is funny that he should keep on harping about "paranoia" and "madness", but I have given these ratings of only 30% certainty, as it is more likely that they are not about me in particular, and Clarke is simply displaying the normal prejudices against the mentally ill found in much of society.

The piece I find most interesting is the Dimbleby/John Major interview from April 1997. I have assigned this a 90% rating. Dimbleby starts by emphasising a report from the "Knutsford Guardian". Major recognizes what's going on and joins in with a falsely apologetic "heaven forfend". The emphasis is on the first syllable pronounced "nuts" in "Knutsford", which is repeated three times. Of course this is hardly anywhere near convincing evidence; the really clear items were all in 1990-92, and they are basically unobtainable now.

If you're reading the website, have a look at the two files from David Hepworth's programme on GLR radio. The first one from 21/Feb/1997 has him talking about an "embarassment" of prizes and "absolute obscene", in reference I believe to the verbal sexual abuse that was being used against me at the time (and which unfortunately is still current). In the second file dated 9/May/1997 he again talks about "absolute embarrassment" of prizes, followed by laughter. To my mind he knows I am listening to his programme, and deliberately makes these remarks for my benefit, with very little attempt to disguise their purpose.

Bernard Levin - "Fanatic's Fare for the Common Man"

On 21 September 1991 this article by Bernard Levin appeared in The Times. It is reproduced in the Evidence section of the website, or may be accessed directly at URL;

To my mind, Levin's article described the situation at the time and in particular a recent meeting with a friend, during which I for the first time admitted to someone other than my GP that I had been subjected to a conspiracy of harassment over the previous year and a half.

Levin writes about a "madman running loose about London" who "bursts into tears, and swears it is all true. And it is." I am pleased to agree with his assertion that "it is all true" because the truth is what I presented to my friend in September 1991 and it is what is being presented to the readership of these articles now.

Conclusion

The harassment, in particular media persecution, was at its strongest in 1990-92. Today, I am recording everything I watch, read and listen, and the media have pretty much given up. It is now incidents "in public" which make up what there is of MI5s persecution. But much of the material from 1990-92 still exists in archives, although the organisations which have those archives generally wont make the material available to the public, for copyright and other reasons.

MI5 can no longer employ the media to persecute me, partly because journalists now know who is behind the persecution, and also because I would publish any instances. My mistake during 1990-92 was to not record instances as they happened; Ive learned from that mistake, and know better now.

1241

```
From -3653347654252608661
X-Google-Thread: 10e8ad,ad7427e22ed7fd35,start
X-Google-Thread: 10b9c8,ad7427e22ed7fd35,start
X-Google-Attributes: gid10e8ad,gid10b9c8,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!newsfeed2.dallas1.level3.net!
news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-336 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sun, 2 Dec 2007 14:20:43 EST
Organization: The Radio Amateur Satellite Corporation
Lines: 228
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <002401c83512$08b82b30$6601a8c0@familyroom>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix1.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1196623243 961 166.84.1.1 (2 Dec 2007 19:20:43 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 2 Dec 2007 19:20:43 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
```

```
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
X-Authority-Analysis: v=1.0 c=1 a=pKwfVi4OyQEA:10 a=tIoeiIHHAAAA:8 a=X-
W_YhP6AAAA:8 a=MGOmJq_8AAAA:8 a=dSRAhnybAAAA:8 a=Ixn1CAxRAAAA:8 a=n-bAER75AAAA:8
a=f0RPBRECAAAA:8 a=IKQE4I-PAAAA:8 a=_Dj-zB-qAAAA:8 a=eIZserdcKFY9EppIJSQA:9
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a=bp7_7PafTAUA:10 a=CWSBNlG-xqIA:10
Xref: g2news1.google.com rec.radio.amateur.space:1221 rec.radio.info:620
```

AMSAT NEWS SERVICE
ANS-336

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* 2008 Straight Key Night on OSCAR in Memory of ex-JA1ANG
* ANDE Re-Entry Campaign
* AMSAT AWARDS
* ARISS Status Report for the Week of November 26, 2007
* Satellite Shorts From All Over

SB SAT @ AMSAT $ANS-336.01
2008 Straight Key Night on OSCAR in Memory of ex-JA1ANG

AMSAT News Service Bulletin 336.01
From AMSAT HQ SILVER SPRING, MD.
December 2, 2007
To All RADIO AMATEURS
BID: $ANS-336.01

You are cordially invited to take part in Straight Key Night on OSCAR 2008, sponsored by AMSAT for all radio amateurs throughout the world. This year's event will be held in memory of Haruo (Harry) Yoneda, ex-JA1ANG, a past AMSAT Director and co-founder of JAMSAT. Harry was also a keen CW operator and a past member of the First Class CW Operators Club (FOC).

Participating in OSCAR SKN is fun and simple. No scoring and no need to send in a log. Just operate CW through any OSCAR, using a straight hand key, at any time between 0000 and 2400 UTC on January 1, 2008.

In keeping with the friendly nature of this event, all participants are encouraged to nominate someone they worked for Best Fist. Your nominee need not have the best fist you heard, just the best of those you worked. Please send your nomination to W2RS at w2rs@amsat.org. Those nominated will be recognized in an AMSAT News Service bulletin, and in The AMSAT Journal.

[ANS thanks Ray, W2RS, for the above information]

/EX

SB SAT @ AMSAT $ANS-336.02
ANDE Re-Entry Campaign:

AMSAT News Service Bulletin 336.02
From AMSAT HQ SILVER SPRING, MD.
December 2, 2007
To All RADIO AMATEURS
BID: $ANS-336.02

The ANDE-MAA satellite (Nav Oscar - 61) will de-orbit in the next few weeks but is fully operational. We encourage activity, because while it is in use (2m packet up/down), then it is awake and sending telemetry. We want to capture the most telemetry to see if we can catch the thermal changes as re-entry approaches.

Who can capture the last telemetry frame?

The most important telemetry is that which is fed live by IGate into the APRS-IS system. Because that is automatically logged and time stamped.
You can verify your data got in by looking at the http://pcsat.aprs.org web page after each pass.

If you manually capture any packets, Please take special care to accurately LOG the TIME of any packets received especially in the final day prior to re-entry. See the contest page below for how to submit entries:

Here is the ANDE Operations web page. It has links to live telemetry too:
http://www.ew.usna.edu/~bruninga/ande-ops.html

And this one is the CONTEST for data collection and operations sponsored by PA3GUO and DK3WN:
http://www.ande-deorbit.com

Any APRS station that is also on the internet can contribute telemetry by simply QSY'ing their normal APRS rig receiver to 145.825 on that final day.

If you do not normally run APRS or an IGate, then you can simply download ALOGGER.EXE which is a full up IGate designed just for satelite gating without having to learn APRS. See Bill's web page:

http://www.billdiaz.dynip.com/ASatLogger.htm

ANDE is coming over the northern latitudes in the afternoons and evenings local sun time, but this pattern moves earlier by 14 minutes per day.
Just monitor 145.825 MHz.

[ANS thanks Bob, WB4APR for the above information]

/EX

SB SAT @ AMSAT $ANS-336.03
AMSAT Awards

AMSAT News Service Bulletin 336.03
From AMSAT HQ SILVER SPRING, MD.
December 2, 2007
To All RADIO AMATEURS
BID: $ANS-336.03

We would like to welcome the following to the satellite community.
They have made their first satellite contact and are now members of the AMSAT Satellite Communicators Club.
Richard Silva, WA6ES

AMSAT Sexagesimal Award
Juergen Pape, DF7WIN, #145

AMSAT W4AMI Satellite Operator Achievement Award Basic
Chris Martin, KG7EZ, 2K, 3K, 4K endorsements

AMSAT W4AMI Satellite Operator Achievement Award 5,000
Chris Martin, KG7EZ, #20

To see all the awards visit http://www.amsat.org or http://www.amsatnet.com

[ANS thanks Bruce Paige, KK5DO, for the above information]

/EX

SB SAT @ AMSAT $ANS-336.04
ARISS Status - 26 November 2007

AMSAT News Service Bulletin 336.04
From AMSAT HQ SILVER SPRING, MD.

December 2, 2007
To All RADIO AMATEURS
BID: $ANS-336.04

1. ARISS School Contacts Status

Due to the very demanding schedules of the crew onboard the ISS, no ARISS contacts have been planned at this time. The ARISS team expects contacts to resume once STS-122 launches in December.

2. ARISS International Team Meeting Held

The monthly meeting of ARISS International Team was held on Tuesday, November 20. Topics of discussion included the next face to face meeting and SuitSat-2 status. The minutes have been posted to the ARISS Web site. See: http://www.rac.ca/ARISS/ARISS tel2007-11-20.htm

3. ARISS Radio Running Packet Operations

The Kenwood radio was turned off for EVAs. It is on again and configured to run packet operations.

4. ARISS Crew Debriefs

A crew debrief has been tentatively scheduled with Clay Anderson, KD5PLA, on December 11. Another debrief is planned for spaceflight participant Sheikh Muszaphar Shukor for early December.

[ANS thanks Carol, KB3LKI, for the above information]

/EX

SB SAT @ AMSAT $ANS-336.05
Satellite Shorts From All Over

AMSAT News Service Bulletin 336.05
From AMSAT HQ SILVER SPRING, MD.
December 2, 2007
To All RADIO AMATEURS
BID: $ANS-336.05

+ AMSAT's spacecraft power development had caught the attention of the professional electronic media. The November 15, 2007 edition of Electronic Design Magazine mentions the SuitSat-2 and Eagle satellite's development of a power system that combines solar panels, lithium-ion batteries, and ultracaps. The article is available on line at: http://electronicdesign.com/Articles/ArticleID/17465/17465.html

+ The total number of ARISS ISS to earth school contacts is now up to 333. ARISS expects no school contacts until late December due to the crew work schedule. The complete schedule page has been updated.

Here you will find a listing of all scheduled school contacts, and questions, other ISS related websites, IRLP and Echolink websites, and instructions for any contact that may be streamed live.
See: http://www.amsat.org/amsat/ariss/news/arissnews.txt

+ Auke, VE6PWN reports receiving the AO-7 beacon on 435.1 MHz. He used a 7 el beam antenna and also switched over to his horizontally polarized omni 0dB antenna, and then observed, for a few minutes. He detected a doppler-shift-curve of a definite beacon from space. A screen-capture showing the signal can be seen at:
http://members.shaw.ca/sparkycivic/HAM/ao-7%20uhf%20beacon.JPG

[ANS thanks everyone for the above information]

EX/

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Dee Interdonato, NB2F

From 3012440309831188550
X-Google-Thread: 10e8ad,e1a82e228647a41e,start
X-Google-Attributes: gid10e8ad,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!postnews.google.com!j20g2000hsi.googlegroups.com!not-for-mail
From: bwm6kxjq <knittingforcharityt84g@gmail.com>
Newsgroups: rec.radio.amateur.space
Subject: Medicine Assistance Is Donated To The Uninsured By American Consultants Rx
Date: Wed, 5 Dec 2007 16:10:51 -0800 (PST)
Organization: http://groups.google.com
Lines: 6
Message-ID: <e73a8be0-9253-4f5c-8c18-05d9c7aff8e9@j20g2000hsi.googlegroups.com>
NNTP-Posting-Host: 38.96.193.159
Mime-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 7bit
X-Trace: posting.google.com 1196899851 23386 127.0.0.1 (6 Dec 2007 00:10:51 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Thu, 6 Dec 2007 00:10:51 +0000 (UTC)
Complaints-To: groups-abuse@google.com
Injection-Info: j20g2000hsi.googlegroups.com; posting-host=38.96.193.159; posting-account=IJVgTQoAAAA8IevSRhb_NygH7_z9pP6o
User-Agent: G2/1.0
X-HTTP-UserAgent: Mozilla/4.0 (compatible; MSIE 7.0; Windows NT

```
     5.1),gzip(gfe),gzip(gfe)
Xref: g2news1.google.com rec.radio.amateur.space:1222
```

As a counselor I am always looking for helpful programs. Here is a good one offered by American Consultants Rx at http://www.freediscountprescriptioncards.org
.Free discount prescription cards with no enrollment or eligibility requirements as well as saving my clients up to 60% off of the cost of prescription drugs.This program really helps so check it out it may help.

```
From -1537632747259352325
X-Google-Thread: 10e8ad,f567a27f8d9624cb,start
X-Google-Thread: 10b9c8,f567a27f8d9624cb,start
X-Google-Attributes: gid10e8ad,gid10b9c8,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!newsfeed2.dallas1.level3.net!
news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-340 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Wed, 5 Dec 2007 23:22:09 EST
Organization: The Radio Amateur Satellite Corporation
Lines: 1309
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <001801c837be$bd208c80$6601a8c0@familyroom>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1196914929 16782 166.84.1.6 (6 Dec 2007 04:22:09 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Thu, 6 Dec 2007 04:22:09 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
X-Authority-Analysis: v=1.0 c=1 a=iplrVdvgu0sA:10 a=SeIcp837AAAA:8
a=Ixn1CAxRAAAA:8 a=c2--Pf7SAAAA:8 a=KlfyZUBUAAAA:8 a=FbIv-aF9AAAA:8
a=3fFvnXHTAAAA:8 a=XNQh8oeLAAAA:8 a=f0RPBRECAAAA:8 a=ADBSzeAnAAAA:8
a=5mDMBHa8AAAA:8 a=gUbaYAUbAAAA:8 a=qyDxTJV7AAAA:8 a=JXa7hjb-AAAA:8
a=qL4joYdQAAAA:8 a=LlmPylSfAAAA:8 a=tIoeiIHHAAAA:8 a=fENH8MHtAAAA:8
```

a=0sg8RoSLAAAA:8 a=uGVPSem0AAAA:8 a=Wa5ALEAlAAAA:8 a=z_zqISx-AAAA:8
a=4RlJXVyBAAAA:8 a=JRUS5pMlAAAA:8 a=oBXim8GbAAAA:8 a=XYLYVS5UAAAA:8
a=h3eCdmoiAAAA:8 a=QX7y1c2GAAAA:8 a=QEps4B0vAAAA:8 a=hKwqrz-LAAAA:8
a=_qHggDGBAAAA:8 a=jBO_9RCuKkijH3FQC0cA:9 a=4VuQSAjpmtlNw-LLx80A:7
a=T_YT3uHYn3wRs7u0zLmk-S6DlZcA:4 a=8QCVOS8zSb0A:10 a=FyblZaQiG9kA:10
a=q4eIODirUFwA:10 a=NDWsJ_JVWXMA:10 a=UtcmazUCZKYA:10 a=XyvEP7qG2ooA:10
a=wFu9RQxNt4EA:10 a=Bi3YAkoP18cA:10 a=F7Eo224L3vYA:10 a=XF7b4UCPwd8A:10
Xref: g2news1.google.com rec.radio.amateur.space:1223 rec.radio.info:622

This report is organized into FIVE parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites
Part 5 (S5) - deborbited/returned satellites

SB SAT @ AMSAT W8ISS ANS-340.S1
WSR 340 Part 1 12/06/2007

AMSAT NEWS SERVICE BULLETIN 340.S1 FROM AMSAT HQ
SILVER SPRING, MD, December 06, 2007
TO ALL RADIO AMATEURS
BID: $ANS-340.S1

VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.859330 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsat.in/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is
active. Each transponder has a different beacon.

```
[06252007]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Modes:   FM Repeater - V/u
                 BBS         - L/u
                 Telemetry   -  /u

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink:   145.880 MHZ FM
                       145.880 MHz USB
                       145.920 MHz FM
                      1268.700 MHz FM 67Hz PL tone
Digital Downlinks:     435.150 MHz FM 38k4 Digital, PBP, 1 watt output
                       435.150 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:        145.860 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      1268.700 mhz FM 9k6 PBP Digital
Beacon:                435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[12062007]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Current Mode: V/u

Uplink:   145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz
```

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer
   on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on
   and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10
   minute timer.
[05282007]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Operational - check operational schedule for current times!!

Current Mode: V/u

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage: http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts.htm
[0820007]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM
Downlink: 436.795 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[08202007]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational depending on amount of Sunlight

Current Mode: Listen before transmitting

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/

AO-7 Usage Guidelines on the AO-7 Log and Resource Site located at:
http://www.planetemily.com/ao7
[05282007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544

Launch date: November 20, 1998

Status: Operational - APRS and BBS

Current Mode: V/v

Expedition 16 crew:
Commander: Peggy Whitson
Flight Engineer: Yuri Malenchenko RK3DUP
Flight Engineer: Daniel M. Tani

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM
Worldwide packet downlink: 145.825 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS
RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line is
NOT translated from Russian and posted.
[11052007]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-340.S2
WSR 340 Part 2 12/06/2007

AMSAT NEWS SERVICE BULLETIN 340.S2 FROM AMSAT HQ
SILVER SPRING, MD, December 06, 2007
TO ALL RADIO AMATEURS
BID: $ANS-340.S2

CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.
[11152007]
=====
CP3
Catalog Number: 31128
Launch Date: April 17,2007

Status: Operational

Current Mode: /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[07302007]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: In Orbit

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder: 145.825 Mhz FM
[02052007]
=====
NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Operational

Current Mode: /u

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[10222007]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[07302007]
=====
GENESAT-1 ?O-??
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Current Mode: /u

Telemetry Beacon Downlink: 437.0670 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[01082007]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon: 437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
[03262007]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launched: June 30, 2003

Status: Operational

Current Mode: /u

Beacon: 436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[01082007]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launched: February 21, 2006

Status: Semi-Operational - Constant Carrier only

Uplink: 1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan ?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[01082007]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW
[08132007]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Mode(s): FM Repeater - V/u
                 BBS   - L/u
                 Telemetry   - /u

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.880 MHZ FM
145.880 MHz USB
145.920 MHz FM
1268.700 MHz FM 67Hz PL tone
Digital Downlinks: 435.150 MHz FM 38k4 Digital, PBP, 1 watt output
435.150 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
1268.700 mhz FM 9k6 PBP Digital
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[12062007]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Hibernation until full sunlight in November

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[09242007]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

```
Current Modes: V/U
               L/U

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[09172007]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Semi-Operational - Telemetry ONLY

Current Mode:  /u

Uplink:         145.900 MHz FM 1200-baud Manchester FSK
                145.920 MHz FM 1200-baud Manchester FSK
                145.940 MHz FM 1200-baud Manchester FSK
                145.960 MHz FM 1200-baud Manchester FSK

Downlink:       437.026 MHz SSB 1200-baud PSK

Mode-S Beacon: 2401.1428 MHz

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.025 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[11152007]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational.
```

Current Mode: /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon: 435.025 MHz - OFF
Mode-S Beacon: 2401.500 MHz - OFF

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[010222007]
=====
RS-22 RADIO SPORT RS-22
Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only

Current Mode: /u

CW Beacon - 435.352 MHz
145.818 MHz
[08062007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational - APRS and BBS

Current Mode: V/v

Expedition 16 crew:
Commander: Peggy Whitson
Flight Engineer: Yuri Malenchenko RK3DUP
Flight Engineer: Daniel M. Tani

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM
Worldwide packet downlink: 145.825 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS
RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.
[11052007]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-340.S3
WSR 340 Part 3 12/06/2007

AMSAT NEWS SERVICE BULLETIN 340.S3 FROM AMSAT HQ
SILVER SPRING, MD, December 06, 2007
TO ALL RADIO AMATEURS
BID: $ANS-340.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

CP4
Catalog Number: 31122
Launch Date: April 17,2007

Status: Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon: 437.325 MHz CW
[11152007]

=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Non-Operational

```
Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon:             437.2750 MHz CW

Callsign: JR8YJT
[10152007]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency:  437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink:         437.250 MHz FM 67Hz CTCSS
Voice Downlink:      2401.835 MHz FM
Packet Up/Downlink:   437.250 MHz 9k6 packet
Packet Downlink      2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non=Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[08132007]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.
```

```
Uplink:   435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Non-Operational

Uplinks:   145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink:  437.325 MHz

Broadcast callsign: MYSAT3-11
BBS:                MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial
land and weather imaging payloads offers FM and FSK Amateur Radio
communica-
tion.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a
collaborative effort between the Malaysian government and Surrey
Satellite
Technology Ltd.
[007302007]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink:   145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
call-
sign KE6QMD, as per the user service agreement located at the following
URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000
```

```
Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS:                SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink:   145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
V-band:   145.840 -  145.990 MHz CW/LSB
U-band:   435.550 -  435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks
---------
S2-band:  2401.225 -  2401.475 MHz CW/USB
K-band:  24048.010 - 24048.060 MHz CW/USB
Beacon:   2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)
----------------------------
BEACON   General Beacon (GB)    Middle Beacon (MB)    Engineering Beacon
(EB)
2 m       none                     145.898 MHz           none
```

70cm	435.438 MHz	435.588 MHz	435.838 MHz
13cm(1)	2400.188 MHz	2400.338 MHz	2400.588 MHz
13cm(2)	2401.173 MHz	2401.323 MHz	2401.573 MHz
3cm	10450.975 MHz	10451.125 MHz	10451.375 MHz
1.5cm	24047.885 MHz	24048.035 MHz	24048.285 MHz

[007162007]
=====
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web site
at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====

```
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink:   145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign:       POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
```

```
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012006]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HL01-11
BBS: HL01-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
```

```
Launched: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
LIBERTAD-1
Catalog Number: 31129
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25
```

```
Callsign: 5K3L

Uplink:   145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[10222007]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplinks:          145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink:      437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[01222007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
[05012006]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990
```

Status: Non-operational

Uplink: 145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting): Non-Operational
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet: Non-Operational
Uplink: 145.8500 MHz MFSK 1200 BPS
Uplink: 145.8700 MHz MFSK 1200 BPS
Uplink: 145.8900 MHz MFSK 1200 BPS
Uplink: 145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon: 145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational

```
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink  29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
[01152007]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon 1:  29.352 MHz (intermittent)
Beacon 2:  29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
```

[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB

Beacon: 145.860 MHz

Robot: 145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-340.S4
WSR 340 Part 4 12/06/2007

AMSAT NEWS SERVICE BULLETIN 340.S4 FROM AMSAT HQ
SILVER SPRING, MD, December 06, 2007
TO ALL RADIO AMATEURS
BID: $ANS-340.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE PROPOSED FOR LAUNCH AT THIS TIME:

Phase 5a Mars Mission
Catalog Number:
Proposed Launch Date: 2009 or 2011

Status: Design Phase

For the latest project status update please visit the AMSAT-DL P5-A web page:
http://ticket-to-mars.org
[01222007]

=====
PHASE 3E AO-??
Catalog number:
Proposed Launch Date: Late 2007

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/
[01222007]
=====
Eagle AO-??
Catalog Number:
Proposed Launch Date: Early/Mid 2009

Status: Design Phase

For the latest project status updates please visit the AMSAT-NA webpage:
http://www.amsat.org
[01222007]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-340.S5
WSR 340 Part 5 12/06/2007

AMSAT NEWS SERVICE BULLETIN 340.S5 FROM AMSAT HQ
SILVER SPRING, MD, December 06, 2007
TO ALL RADIO AMATEURS
BID: $ANS-340.S5

THE FOLLOWING SATELLITES HAVE DE-ORBITED OR HAVE BEEN RETURNED SAFELY:

NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

```
Main Downlink:      145.825 Mhz FM APRS AX25
APRS Uplink:        145.825 MHz FM APRS AX25
Voice/PSK31 Uplink:  28.120 MHz
```

Packet to Voice ID: RAFT
[06112007]
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30

UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

From -4410643010774355200
X-Google-Thread: 10e8ad,7e74dbf62ae3136e,start
X-Google-Thread: 113975,7e74dbf62ae3136e,start
X-Google-Attributes: gid10e8ad,gid113975,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit

Path: g2news1.google.com!news1.google.com!newshub.sdsu.edu!newscon04.news.prodigy.net!prodigy.net!news.astraweb.com!router1.astraweb.com!not-for-mail
From: Chris Steyaert <observations@rmob.org>
Newsgroups: rec.radio.amateur.space,sci.astro.amateur
Subject: Radio Meteor Obs. Bull. October 2007 Leonids
Date: Fri, 07 Dec 2007 21:56:13 +0100
Message-ID: <fqcjl3d00aokt71gnavjo6def3c1i3sjg6@4ax.com>
X-Newsreader: Forte Agent 1.93/32.576 English (American)
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Lines: 17
Organization: Unlimited download news at news.astraweb.com
NNTP-Posting-Host: 2ab0e23d.news.astraweb.com
X-Trace: DXC=KCJS6IIgI7Jm=FFS;n7SGML?0kYOcDh@JbV[dmDe4@mIV[L2]?@BcNBKX07\YZ`QZFj6aVIkH4CDJ5LhA<>Mm<DG
Xref: g2news1.google.com rec.radio.amateur.space:1224 sci.astro.amateur:95355

Radio Meteor Observation Bulletin No. 172 of November 2007 (75 K) is available now as

http://visualrmob.free.fr/rmobtext/rmob0711.txt

More information and the visual presentation of the hourly forward scatter counts can be found on

http://www.rmob.org

http://radio.data.free.fr

Chris

From 5081142018484567595
X-Google-Thread: 10e8ad,223806c4c6edf65,start
X-Google-Thread: 10b9c8,223806c4c6edf65,start
X-Google-Attributes: gid10e8ad,gid10b9c8,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!newsfeed2.dallas1.level3.net!news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-343 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sat, 8 Dec 2007 21:46:49 EST
Organization: The Radio Amateur Satellite Corporation
Lines: 287
Approved: RRI Admin <rec-radio-info-request@panix.com>

```
Message-ID: <000b01c83a0d$bf469940$6601a8c0@familyroom>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix2.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1197168408 27307 166.84.1.2 (9 Dec 2007 02:46:48 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 9 Dec 2007 02:46:48 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
X-Authority-Analysis: v=1.0 c=1 a=0C3P-7o6YTwA:10 a=Z6GMQWD7AAAA:8
a=M9AsAQRRAAAA:8 a=Ixn1CAxRAAAA:8 a=a_hxu6Z0AAAA:8 a=GbYxE0F7AAAA:8
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Xref: g2news1.google.com rec.radio.amateur.space:1225 rec.radio.info:626
```

AMSAT NEWS SERVICE
ANS-343

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:

* AO-16 PACSAT Update - Satellite Back On
* Friendly Reminder: Please Update AMSAT Volunteer Reporting System
* LVB Tracker Enclosures Are Available
* Changes on the AO-7 Resource Page
* FalconSat-3 Status
* AMSAT Space Symposium Photo Album is Now On-Line
* ARISS Status Report for the Week of December 3, 2007

SB SAT @ AMSAT $ANS-343.01
AO-16 PACSAT Update - Satellite Back On

AMSAT News Service Bulletin 343.01
>From AMSAT HQ SILVER SPRING, MD.
December 9, 2007
To All RADIO AMATEURS
BID: $ANS-343.01

After several months of silence, Amsat Oscar 16 (PACSAT) was commanded back ON on November 8, 2007. The satellite is transmitting on TX A at 437.024 MHz (+/- Doppler). Please note this transmitter is LHCP (left hand circular polarity).

Recent attempts to reload the AO-16 satellite operating system and housekeeping tasks have thus far been unsuccessful. Harold Price, NK6K, Jim White, WD0E, Bruce Rahn, WB9ANQ, and Mark Hammond, N8MH are analyzing dumps of the spacecraft memory. This analysis and additional testing will continue for the next week or two before additional attempts to reload the spacecraft are attempted.

AO-16 is, however, very alive and sending MBL telemetry! Thanks to all who have submitted MBL telemetry data. Please continue to send your AO-16 MBL telemetry files in KISS format to: telemetry AT quagliana DOT com. Thanks to Douglas Quagliana, KA2UPW for serving as telemetry coordinator. The AO-16 Command Team is especially interested in telemetry collected while AO-16 transitions into and out of eclipse.

Mike Rupprecht, DK3WN, has just released the AO-16 PACSAT MBL telemetry decoder. This very fine decoder may be downloaded from:
www.dk3wn.info/files/ao16mbl.zip

The program is intuitive, and the output of the KISS telemetry files in graphic format is excellent. Now, AO-16 "telemetry hunters" can view the MBL telemetry files. Thank you, Mike, DK3WN, for the speedy development and release of this useful telemetry tool.

Wouter Jan Ubbels, PE4WJ has also included decoding of the 7 short 2-byte MBL telemetry frames from AO-16 in the latest release of Warbler, an AO-16 soundcard demodulator program (v1.0.3 Beta). Telemetry frames are included in the .kss file which Warbler creates, and can be viewed with DK3WN's MBL telemetry decoder. The latest version of Warbler is available at:
http://home.casema.nl/b.ubbels/Warbler.htm

Further announcements and updates from the AO-16 Command Team can be expected in the coming weeks.

[ANS thanks Drew, KO4MA; Mark, N8MH on behalf of the AO-16 Command Team and Wouter Jan Ubbels, PE4WJ for the above information]

/EX

SB SAT @ AMSAT $ANS-343.02
Friendly Reminder: Please Update AMSAT Volunteer Reporting System

AMSAT News Service Bulletin 343.02
>From AMSAT HQ SILVER SPRING, MD.
December 9, 2007
To All RADIO AMATEURS
BID: $ANS-343.02

Gunther Meisse, W8GSM, AMSAT Treasurer says, "It is the time of the year again to be sure as many volunteer hours as possible have been reported to the AMSAT VRS (Volunteer Reporting System) on the AMSAT web site."

Over the last few years thousands of dollars of volunteer time have been reported and we are sure this year will be our largest given all the work that has done on Eagle, The new Lab, RideShare Conference, SDR, SDT, and the like.

If you are already registered on the VRS site please take a few minutes and report your 2006 hours. If you have not reported before, please visit http://www.amsat.org/amsat-new/volunteers/ register, and help us keep track of this important aspect of the AMSAT mission. We'll keep the year open until the middle of January but hope you will take the time within the next couple weeks to update your report. You may combine your efforts for the entire year into one filing if that would make the process more convenient.

Gunther will be looking forward to your reports.

[ANS thanks Gunther, W8GSM for the above information]

/EX

SB SAT @ AMSAT $ANS-343.03
LVB Tracker Enclosures Are Available

AMSAT News Service Bulletin 343.03
>From AMSAT HQ SILVER SPRING, MD.
December 9, 2007
To All RADIO AMATEURS
BID: $ANS-343.03

The custom enclosures for the LVB Tracker are in. These silk screened, black, powder coated, 0.062" aluminum boxes are produced by Ten-Tec for AMSAT. The enclosures have PEMs (embedded standoffs) to support the front panel LCD and for the main circuit board. Simply use (8) 4x40 screws to attach the boards to the PEMs. There are cut outs for the LCD, the four pushbutton switches, USB connector, DB-9 connector and rotor cable. The box comes in two parts with feet and screws to hold the box together.

We are working on completing the orders on file and will be shipping them soon. If you would like to order an enclosure or a complete unit, contact Martha at the AMSAT office. If you have any questions about the enclosures contact Gould, wa4sxm@amsat.org.

Specific information about the LVB Tracker can be found at:
http://www.LVBTracker.com.

The LVB Enclosure can also be ordered from the on-line AMSAT Store:
http://www.amsat-na.com/category.php?c=Hardware

[ANS thanks Gould, WA4SXM and Bruce, KK5DO for the above information]

/EX

SB SAT @ AMSAT $ANS-343.04
Changes on the AO-7 Resource Page

AMSAT News Service Bulletin 343.04
>From AMSAT HQ SILVER SPRING, MD.
December 9, 2007
To All RADIO AMATEURS
BID: $ANS-343.04

John, LA2QAA reported that due to administrative privileges that need to be updated he cannot edit mistakes or make changes to entries on The AO-7 Resource Page at http://www.planetemily.com/ao7/main.php

Each station can still edit their own entry (but nobody else's) by clicking on the magnifying glass at the left of your entry. A new screen will pop up and you can just correct any mistakes.

John reminds you, "PLEASE be careful to enter the correct data because if you don't notice your error it will soon throw the log statistics out of whack and defeat the entire object of the log ... which is an ACTIVITY log *NOT* a contest log."

In conclusion, John promises new software, "I have administered the log for three years but am now concentrating on a different long term activity regarding AO-7 which, hopefully, will benefit the entire amateur satellite community commencing in the spring of 2008."

[ANS thanks John, LA2QAA for the above information]

/EX

SB SAT @ AMSAT $ANS-343.05
FalconSat-3 Status

AMSAT News Service Bulletin 343.05
>From AMSAT HQ SILVER SPRING, MD.
December 9, 2007
To All RADIO AMATEURS
BID: $ANS-343.05

Occasionally a question arises in regards to when the US Air Force Academy's FalconSat-3 (FS3) might activate its Amateur Radio payload. Jim White, WD0E recently answered this question for ANS.

Jim replied, "When the science mission is completed the Amateur Radio payload will be activated. Once available to the amateur satellite service the mode of operation of FS3 will be determined by the ham club at the Air Force Academy. Like AO-51 it can be operated as an FM repeater or in digital store and forward up to 78k8."

Jim continued, "At present there is no target date for completion of the science mission. It depends on a number a factors and must balance the mission objectives of an on-orbit learning resource and a plasma data collection and mapping instrument."

In conclusion, "FS3 has been providing an excellent platform for students learning space operations, attitude determination and control, and power systems. The boom deployment sequence will probably be attempted in the next couple of weeks. While some science data has been collected, enough to show the instruments are working well, continuous collection won't start until three axis control has been established and practiced."

[ANS thanks Jim White, WD0E for the above information]

/EX

SB SAT @ AMSAT $ANS-343.06
AMSAT Space Symposium Photo Album is Now On-Line

AMSAT News Service Bulletin 343.06
>From AMSAT HQ SILVER SPRING, MD.
December 9, 2007
To All RADIO AMATEURS
BID: $ANS-343.06

Kevin, N3HKQ invites AMSAT members to check out the Wireless Association of South Hills website containing pictures and video from the AMSAT Symposium in Pittsburgh. WASH was a host club of the 2007 AMSAT Space Symposium in October.

See: http://n3sh.org/gallery/main.php?g2_itemId=5167

[ANS thanks Kevin, N3HKQ for the above information]

/EX

SB SAT @ AMSAT $ANS-343.07
ARISS Status Report for the Week of December 3, 2007

AMSAT News Service Bulletin 343.07

>From AMSAT HQ SILVER SPRING, MD.
December 9, 2007
To All RADIO AMATEURS
BID: $ANS-343.07

1. Status of ARISS School Contacts

Due to the very demanding schedules of the crew onboard the ISS, no ARISS contacts have been planned at this time. The ARISS team expects contacts to resume once STS-122 launches this month.

2. ARRL Article on ARISS School Contact Status

The American Radio Relay League (ARRL) ran a Web story on the status of ARISS school contacts. Seventy-four contacts were performed during 2007, reducing the backlog of schools waiting for a contact and making this a good time to submit new applications. See:
http://www.arrl.org/news/stories/2007/11/29/100/?nc=1

3. ARISS School Application Updated

The ARISS team has been working on an updated school application package. The new and updated forms have been submitted to the ARISS delegates for their review and comments. The application is expected to be finalized by the end of this month.

4. ARRL Story on ARISS Antennas

The American Radio Relay League (ARRL) posted an article about the ARISS antennas on the Columbus Module which is expected to launch on Thursday, December 6. The story, "ARISS Antennas Set to Launch on NASA Mission in December," was posted in the ARRL Letter and on the ARRL Web site. To view the ARRL Letter, see: http://www.arrl.org/arrlletter/07/1130/
The Web site article may be found here:
http://www.arrl.org/news/stories/2007/11/30/101/?nc=1

[ANS thanks Carol, KB3LKI for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM

From 3962235263207375212

X-Google-Thread: fc3c3,ef85933823444acf,start
X-Google-Thread: 10e8ad,ef85933823444acf,start
X-Google-Attributes: gidfc3c3,gid10e8ad,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx01.iad01.newshosting.com!newshosting.com!post01.iad01!
roadrunner.com!not-for-mail
From: Tester <teest@test.org>
Message-ID: <p8ntnIBLVG7HJ13ALS0nHD5DZiZK7KwtFDHO@entropy.org>
Newsgroups: fido.eur.genealogy,rec.radio.amateur.space
Subject: Where is remote Afterburner when we need him?
Date: Wed, 12 Dec 2007 00:36:59 GMT
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Followup-To: news.admin.net-abuse.email
Lines: 41
Organization: Road Runner High Speed Online http://www.rr.com
NNTP-Posting-Host: 65.32.252.134
X-Complaints-To: abuse@rr.com
Xref: g2news1.google.com fido.eur.genealogy:47 rec.radio.amateur.space:1226

238.139.19.228:3220 open socks4 proxy was used on 28 November for a Hipcrime attack on nanae. And I got the port number by Googling so it must have been open and was probably abused before that date.

It was used late North American Monday for a Hipcrime attack on 24hoursupport.helpdesk and the same open proxy was still there Tuesday at #10:14 GMT.

At one time, RCN (formerly Erols) had the famous Afterburner on its abuse desk. Now, it seems to have Dave Null.

Remember - go to RCN for your net-abuse needs. You put up a phishing page? It will still be up on Valentine Day. You can get Giganews with only IP authentication through RCN.

--
Hassan, still bending, enquires almost tonight, as the review jokes let alone their test. We going them, then we obnoxiously place Gavin and Betty's numerous cap. If you will merge Tom's bar through fields, it will that blame the wave. Try canceling the mine's surviving framework and Moammar will switch you! Basksh proves the moon over hers and annually promises. Just exploding on a south relative to the drawer is too emotional for Peter to exhaust it. Will you gaze near the shore, if Yvette accidentally forbids the dna? Aneyd, have a frozen workstation. You won't surround it. She will regulate once, define hourly, then prescribe concerning the poster v the palace. He'll be preventing at testy Hassan until his acceptance carves thereafter. Get your grudgingly functioning privilege in my heaven. Well Zamfir will age the whale, and if Hakeem enormously strides it too, the reminder will test with the shy loch.

Every faces will be payable female capitals. Sometimes, it responds a medal too tory till her influential mountain. Hardly any inland beers distribute Feyd, and they subsequently strain Afif too.

The dependences, rewards, and suppers are all nutty and passive. We exercise the younger fence.

```
From 5435284914667955628
X-Google-Thread: 10e8ad,2a3d620d7034e18,start
X-Google-Thread: 10b9c8,2a3d620d7034e18,start
X-Google-Attributes: gid10e8ad,gid10b9c8,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!newsfeed2.dallas1.level3.net!
news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-347 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Thu, 13 Dec 2007 22:45:11 EST
Organization: The Radio Amateur Satellite Corporation
Lines: 1309
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <002b01c83dfb$f70c6750$6601a8c0@familyroom>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix2.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1197603911 24908 166.84.1.2 (14 Dec 2007 03:45:11 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Fri, 14 Dec 2007 03:45:11 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
X-Authority-Analysis: v=1.0 c=1 a=ICu8BzTuhrUA:10 a=SeIcp837AAAA:8
a=Ixn1CAxRAAAA:8 a=c2--Pf7SAAAA:8 a=KlfyZUBUAAAA:8 a=FbIv-aF9AAAA:8
a=3fFvnXHTAAAA:8 a=XNQh8oeLAAAA:8 a=f0RPBRECAAAA:8 a=ADBSzeAnAAAA:8
a=5mDMBHa8AAAA:8 a=gUbaYAUbAAAA:8 a=qyDxTJV7AAAA:8 a=JXa7hjb-AAAA:8
a=qL4joYdQAAAA:8 a=LlmPylSfAAAA:8 a=tIoeiIHHAAAA:8 a=fENH8MHtAAAA:8
```

a=0sg8RoSLAAAA:8 a=uGVPSem0AAAA:8 a=Wa5ALEAlAAAA:8 a=z_zqISx-AAAA:8
a=4RlJXVyBAAAA:8 a=JRUS5pMlAAAA:8 a=oBXim8GbAAAA:8 a=XYLYVS5UAAAA:8
a=h3eCdmoiAAAA:8 a=QX7y1c2GAAAA:8 a=QEps4B0vAAAA:8 a=hKwqrz-LAAAA:8
a=_qHggDGBAAAA:8 a=jBO_9RCuKkijH3FQC0cA:9 a=4VuQSAjpmtlNw-LLx80A:7
a=T_YT3uHYn3wRs7u0zLmk-S6DlZcA:4 a=8QCVOS8zSb0A:10 a=FyblZaQiG9kA:10
a=q4eIODirUFwA:10 a=NDWsJ_JVWXMA:10 a=UtcmazUCZKYA:10 a=XyvEP7qG2ooA:10
a=wFu9RQxNt4EA:10 a=Bi3YAkoP18cA:10 a=F7Eo224L3vYA:10 a=XF7b4UCPwd8A:10
Xref: g2news1.google.com rec.radio.amateur.space:1227 rec.radio.info:629

This report is organized into FIVE parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites
Part 5 (S5) - deborbited/returned satellites

SB SAT @ AMSAT W8ISS ANS-347.S1
WSR 347 Part 1 12/13/2007

AMSAT NEWS SERVICE BULLETIN 347.S1 FROM AMSAT HQ
SILVER SPRING, MD, December 13, 2007
TO ALL RADIO AMATEURS
BID: $ANS-347.S1

VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.859330 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsat.in/hamsat.htm

To know what transponder is switched on please listen for the beacon that is active. Each transponder has a different beacon.

```
[06252007]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Modes:   FM Repeater - V/u
                 BBS         - L/u
                 Telemetry   -  /u

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink:   145.880 MHZ FM
                       145.880 MHz USB
                       145.920 MHz FM
                      1268.700 MHz FM 67Hz PL tone
Digital Downlinks:     435.150 MHz FM 38k4 Digital, PBP, 1 watt output
                       435.150 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:        145.860 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      1268.700 mhz FM 9k6 PBP Digital
Beacon:                435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[12062007]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Current Mode: V/u

Uplink:   145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz
```

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer
on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on
and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10
minute timer.
[05282007]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Operational - check operational schedule for current times!!

Current Mode: V/u

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
145.870 MHz FM
145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage: http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts.htm
[0820007]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[12132007]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational depending on amount of Sunlight

Current Mode: Listen before transmitting

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/

AO-7 Usage Guidelines on the AO-7 Log and Resource Site located at:
http://www.planetemily.com/ao7
[05282007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544

Launch date: November 20, 1998

Status: Operational - APRS and BBS

Current Mode: V/v

Expedition 16 crew:
Commander: Peggy Whitson
Flight Engineer: Yuri Malenchenko   RK3DUP
Flight Engineer: Daniel M. Tani

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM
Worldwide packet downlink: 145.825 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS
RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.
[11052007]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-347.S2
WSR 347 Part 2 12/13/2007

AMSAT NEWS SERVICE BULLETIN 347.S2 FROM AMSAT HQ
SILVER SPRING, MD, December 13, 2007
TO ALL RADIO AMATEURS
BID: $ANS-347.S2

CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.
[11152007]
=====
CP3
Catalog Number: 31128
Launch Date: April 17,2007

Status: Operational

Current Mode: /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[07302007]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: In Orbit

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder: 145.825 Mhz FM
[02052007]
=====
NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Operational

Current Mode: /u

Downlink: 437.385 Mhz APRS AX25

```
Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[10222007]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[07302007]
=====
GENESAT-1 ?O-??
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Current Mode: /u

Telemetry Beacon Downlink: 437.0670 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[01082007]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon:             437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
[03262007]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launched: June 30, 2003
```

Status: Operational

Current Mode: /u

Beacon: 436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[01082007]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launched: February 21, 2006

Status: Semi-Operational - Constant Carrier only

Uplink: 1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan ?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[01082007]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW
[08132007]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Mode(s): FM Repeater - V/u
                 BBS   - L/u
                 Telemetry   - /u

```
Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink:   145.880 MHZ FM
                       145.880 MHz USB
                       145.920 MHz FM
                      1268.700 MHz FM 67Hz PL tone
Digital Downlinks:     435.150 MHz FM 38k4 Digital, PBP, 1 watt output
                       435.150 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:        145.860 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      1268.700 mhz FM 9k6 PBP Digital
Beacon:                435.150 MHz
```

Mode and Antenna Polarization:

```
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear
```

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[12062007]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Hibernation until full sunlight in November

Current Mode: V/v

```
General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink:        144.390 Mhz 1200 Baud
```

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[09242007]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

```
Current Modes: V/U
               L/U

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[09172007]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Semi-Operational - Telemetry ONLY

Current Mode:  /u

Uplink:         145.900 MHz FM 1200-baud Manchester FSK
                145.920 MHz FM 1200-baud Manchester FSK
                145.940 MHz FM 1200-baud Manchester FSK
                145.960 MHz FM 1200-baud Manchester FSK

Downlink:       437.026 MHz SSB 1200-baud PSK

Mode-S Beacon: 2401.1428 MHz

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.025 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[11152007]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational.
```

```
Current Mode:  /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon:           435.025 MHz - OFF
Mode-S Beacon:     2401.500 MHz - OFF

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[010222007]
=====
RS-22 RADIO SPORT RS-22
Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only

Current Mode:  /u

CW Beacon - 435.352 MHz
            145.818 MHz
[08062007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational - APRS and BBS

Current Mode: V/v

Expedition 16 crew:
Commander:          Peggy Whitson
Flight Engineer:    Yuri Malenchenko      RK3DUP
Flight Engineer:    Daniel M. Tani

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink:   145.825 MHz FM
Worldwide packet downlink: 145.825 Mhz FM

Voice:
Region 1 voice uplink:   145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink:      145.800 MHz FM

Crossband Repeater:
Repeater Uplink:         437.800 MHz FM
Repeater Downlink:       145.800 MHz FM
```

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS
                     RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.
[11052007]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-347.S3
WSR 347 Part 3 12/13/2007

AMSAT NEWS SERVICE BULLETIN 347.S3 FROM AMSAT HQ
SILVER SPRING, MD, December 13, 2007
TO ALL RADIO AMATEURS
BID: $ANS-347.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

CP4
Catalog Number: 31122
Launch Date: April 17,2007

Status: Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon: 437.325 MHz CW
[11152007]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Non-Operational

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon: 437.2750 MHz CW

Callsign: JR8YJT
[10152007]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 MHz FM 67Hz CTCSS
Voice Downlink: 2401.835 MHz FM
Packet Up/Downlink: 437.250 MHz 9k6 packet
Packet Downlink   2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non=Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[08132007]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Non-Operational

Uplinks: 145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[007302007]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, callsign KE6QMD, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

```
Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS:                SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink:   145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
V-band:   145.840 -  145.990 MHz CW/LSB
U-band:   435.550 -  435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks
---------
S2-band:  2401.225 -  2401.475 MHz CW/USB
K-band:  24048.010 - 24048.060 MHz CW/USB
Beacon:   2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)
----------------------------
```

BEACON	General Beacon (GB)	Middle Beacon (MB)	Engineering Beacon (EB)
2 m	none	145.898 MHz	none

70cm	435.438 MHz	435.588 MHz	435.838 MHz
13cm(1)	2400.188 MHz	2400.338 MHz	2400.588 MHz
13cm(2)	2401.173 MHz	2401.323 MHz	2401.573 MHz
3cm	10450.975 MHz	10451.125 MHz	10451.375 MHz
1.5cm	24047.885 MHz	24048.035 MHz	24048.285 MHz

[007162007]
=====
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web site
at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====

```
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink:   145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign:       POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
```

```
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012006]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HL01-11
BBS: HL01-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
```

```
Launched: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
LIBERTAD-1
Catalog Number: 31129
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25
```

```
Callsign: 5K3L

Uplink:   145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[10222007]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplinks:          145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink:      437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[01222007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
[05012006]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990
```

```
Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet: Non-Operational
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon:   145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
```

```
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink  29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
[01152007]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon 1:  29.352 MHz (intermittent)
Beacon 2:  29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
```

[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB

Beacon: 145.860 MHz

Robot: 145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-347.S4
WSR 347 Part 4 12/13/2007

AMSAT NEWS SERVICE BULLETIN 347.S4 FROM AMSAT HQ
SILVER SPRING, MD, December 13, 2007
TO ALL RADIO AMATEURS
BID: $ANS-347.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE PROPOSED FOR LAUNCH AT THIS TIME:

Phase 5a Mars Mission
Catalog Number:
Proposed Launch Date: 2009 or 2011

Status: Design Phase

For the latest project status update please visit the AMSAT-DL P5-A web page:
http://ticket-to-mars.org
[01222007]

=====
PHASE 3E AO-??
Catalog number:
Proposed Launch Date: Late 2007

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/
[01222007]
=====
Eagle AO-??
Catalog Number:
Proposed Launch Date: Early/Mid 2009

Status: Design Phase

For the latest project status updates please visit the AMSAT-NA webpage:
http://www.amsat.org
[01222007]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-347.S5
WSR 347 Part 5 12/13/2007

AMSAT NEWS SERVICE BULLETIN 347.S5 FROM AMSAT HQ
SILVER SPRING, MD, December 13, 2007
TO ALL RADIO AMATEURS
BID: $ANS-347.S5

THE FOLLOWING SATELLITES HAVE DE-ORBITED OR HAVE BEEN RETURNED SAFELY:

NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink: 145.825 Mhz FM APRS AX25
APRS Uplink: 145.825 MHz FM APRS AX25
Voice/PSK31 Uplink: 28.120 MHz

Packet to Voice ID: RAFT
[06112007]
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30

UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

From 6713264366139376480
X-Google-Thread: 10813c,9eb75aa5680b101c,start
X-Google-Thread: 10255f,9eb75aa5680b101c,start
X-Google-Thread: 102692,9eb75aa5680b101c,start
X-Google-Thread: f8abe,9eb75aa5680b101c,start

X-Google-Thread: 10e8ad,9eb75aa5680b101c,start
X-Google-Attributes:
gid10813c,gid10255f,gid102692,gidf8abe,gid10e8ad,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx01.iad01.newshosting.com!newshosting.com!post02.iad01!
news.newsdemon.com!not-for-mail
Message-Id: <m07111610465258@4ax.com>
Subject: MI5-Persecution: How Could It Be True? (647)
Newsgroups:
sci.med.laboratory,alt.fan.holmes,alt.polyamory,alt.sports.hockey.nhl.ott-senators,rec.radio.amateur.space
Followup-To:
sci.med.laboratory,alt.fan.holmes,alt.polyamory,alt.sports.hockey.nhl.ott-senators,rec.radio.amateur.space,uk.misc
From: MI5-Victim@mi5.gov.uk
Date: 16 Dec 2007 10:46:54 GMT
Lines: 145
Organization: news.newsdemon.com
X-Complaints-To: abuse@newsdemon.com
X-Original-Lines: 141
Xref: g2news1.google.com sci.med.laboratory:1860 alt.fan.holmes:1411
alt.polyamory:71003 alt.sports.hockey.nhl.ott-senators:14059
rec.radio.amateur.space:1228

MI5 Persecution: How Could It Be True?

If you have the patience to read these articles you will be struck by how apparently fantastic the claims being put forward are. You may ask yourself why such seemingly nonsensical assertions are made. This matter has been discussed on the Internets UK-local newsgroups for three years now, and the denizens of the uk.misc newsgroup (the so-called "miscreants") have come up with a number of theories to explain these posts; it has been variously suggested that they are a troll (an artificial creation for the amusement of its author), that they are made by MI5 themselves with the purpose of discrediting other conspiracy theories, and that the poster is mentally ill and the articles are symptomatic of the illness (the view held by most miscreants).

Are these claims the product of mental illness, or is that just a cover?

The most obvious explanation, that the claims made result from the admitted mental illness of the author, is the one which the persecutors intend be the one accepted without consideration being given to the possibility of the claims being true. The persecutors have actually been very clever about this, both in selecting as their target someone who was known from school or university as being borderline schizophrenic, and in ensuring the nature of their persecution corresponds to what often features in the delusions of a schizophrenic.

The very first incident of the persecution occurred in June 1990, when I was still a student at university in London. It consisted of a reaction (giggling) from the newsreader, Sue Carpenter of ITN, to what she saw happening in my living-room at my parents home where I was living. Before your imagination gets the better of you I should make clear that what the newsreader was reacting to was not too embarrassing in nature; my mother had brought an apple for me into the the room, and Sue Carpenter found this amusing.

I recognized that Carpenter had reacted to what she had seen in my living-room, yet this idea still seemed completely fantastic to me. My reaction was to continue watching television, particularly the news, to see if this incident would be repeated. It was, many times, both on BBC and ITV. An intelligent person would have thought to obtain a video recorder and capture some of these incidents in order to try to explain to an observer what he saw in these broadcasts. Unfortunately, I failed this test of intelligence, since I did not record these programmes. I have recently attempted to obtain from ITN tapes of their news programmes dating back to summer 1990, but, unhappily, they have advised me that they do not have complete programmes including newsreaders comments dating back to that period.

From the outset, the persecutors structured their actions to ensure that any complaint would be met with disbelief, and dismissed as delusional. This is why they chose as their target someone who was known at school and university to be borderline mentally ill; and it is why they fired the first shots of their campaign through the broadcast media. Schizophrenics commonly believe the media harass them; it would be exceptional for "full-duplex television" to exist in reality. Those with schizophrenia also commonly believe people are talking about them; again, the persecutors have shown themselves very rarely, but act through intermediaries, both in the workplace, and in public and during travel.

Mental illness is not the cause of these claims, but the simulation of its symptoms is a cover used by the persecutors to deny their victim the ability to have his compaints believed.

What evidence exists to support these claims of "interactive television/radio";?

Quite frankly, I have very little evidence to support my claims. You may examine the "Evidence" area of my website to see such evidence as I have been able to gather. None of it is remotely conclusive. The "smoking guns" all date back to 1990/91, and it is really rather late now to start trying to look for material dating back seven or eight years. In 1997 I started tape-recording every programme I watched or listened to. I also started carrying with me a high-fidelity minidisc-recorder with good quality microphone to catch incidents of public harassment, but this also has not been as successful or conclusive as I had hoped.

Perhaps the best item in the "Evidence" section is the audio file "Life is so hard" (it is labelled with Garfield the cartoon character on the site), which I have given a certainty level of 100%. This item relates to harassment at my workplace in Canada in 1996. A co-worker called Mark was coming up with phrases and expressions which were repeating things being said at my Canadian residence, consequently leading me to believe that my apartment and home phone were bugged, and that the persecutors were passing their gathered information on to Mark. On one particular evening I said in my apartment, "life is so hard, and then you die". The following day I was able to record Mark saying exactly the same phrase at work.

Unfortunately when "they" know you are recording them, they simply dont say things which would unambiguously show harassment. When Mark the co-worker knew he was being recorded, he only made his remarks out of range of the recorder, for example outside the building. When the TV newscasters or radio disc jockeys know they are being taped, they limit themselves to saying things which are ambiguous, which even in my mind may or may not be personally directed against me.

Who knows about this persecution?

Surprisingly many people know. People in the media, such as BBC and ITN newscasters including Martyn Lewis and Michael Buerk, and radio disc jockeys such as Chris Tarrant of Capital Radio, know what is going on, and take part in it. Some co-workers at my former workplaces in England and Canada have known about the harassment. Quite a few people in the general public are also included. I believe the police are aware of the persecution, but, unfortunately, have chosen not to take any action to stop it. I have complained at my local police station in London several years ago, and I have stated on the internet newsgroups that I have done so, hence the police will be well aware of my wish to see the matter resolved. I believe their inaction denotes a dereliction of duty, but without good evidence, I am powerless to compel them to take steps to prevent further harassment, or deal with what has already taken place.

What is the purpose of sending these faxes?

These faxes are being sent to three distinct groups of people, namely Members of Parliament, the media, and diplomats & legal people. As you will have observed I am making use of the email-to-fax gateway at Demon Internet to send these faxes. I am forced to use this gateway since I currently live in North America, and cannot afford the high cost of direct phone calls to the UK.

My purpose in publicising my claims is firstly to discourage the persecutors from continuing their campaign, and also to attempt to bring their campaign out into the open, and thus perhaps identify the persecutors. Neither aim has been achieved yet, but I hope that with sufficient stimulation these aims may yet be accomplished.

The problem with the second aim is that those who read this article will fall into two groups, those who dont know anything about the persecution and consequently will disbelieve my claims as delusional, and those who do know about the harassment and may have some idea of who is behind it, but realise that if the harassers are exposed and the truth brought out into the open, then powerful British institutions will substantially lose prestige, and be exposed to ridicule.

It would give me hope to believe that these faxes will create a third group of people, those who find out that I am telling the truth, and who follow their consciences in standing up and seeing justice done. Only time will tell if this hope will be realized.

647

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Posted via NewsDemon.com - Premium Uncensored Newsgroup Service
------->>>>>>http://www.NewsDemon.com<<<<<<------
Unlimited Access, Anonymous Accounts, Uncensored Broadband Access

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From -3089330725559385801
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X-Google-Thread: 10e8ad,151f399d0790bc58,start
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news.newsdemon.com!not-for-mail
Message-Id: <m07111611465069@4ax.com>
Subject: MI5-Persecution: Why do you think MI5 are responsible? (2830)
Newsgroups:
sci.med.laboratory,alt.fan.holmes,alt.polyamory,alt.sports.hockey.nhl.ott-
senators,rec.radio.amateur.space
Followup-To:
sci.med.laboratory,alt.fan.holmes,alt.polyamory,alt.sports.hockey.nhl.ott-
senators,rec.radio.amateur.space,uk.misc
From: MI5-Victim@mi5.gov.uk
Date: 16 Dec 2007 11:46:52 GMT
Lines: 210
Organization: news.newsdemon.com
X-Complaints-To: abuse@newsdemon.com
X-Original-Lines: 206
Xref: g2news1.google.com sci.med.laboratory:1861 alt.fan.holmes:1412
alt.polyamory:71004 alt.sports.hockey.nhl.ott-senators:14060
rec.radio.amateur.space:1229
```

Why do you think MI5 are responsible?

The question of who is ultimately responsible for this eight-year harassment is one which is very difficult to answer, as the persecutors have never clearly made their identities known to the persecutee. However, I believe I am correct in attributing the continuing victimisation to elements of the British Security Service MI5, and in this article, I will try to explain the reasons for this belief.

The British internet magazine ".net" featured my website on page 17 of their March 1998 issue (number 42). Their review kindly describes it as an "excellent site" and gives some details of what the net surfer will find there. Should you wish to reply to this article you can do so;

"When did you first suspect MI5 were responsible?"

Over Easter 1995 I went to see a local solicitor in London with a view to talking to the police about the harassment. Soon afterwards I did go to my local police station in Clapham and spoke to an officer there. The solicitor made a comment which suggested to me that the persecution I had been experiencing may have been organised by an intelligence service.

Up to this point, I did not have any clear idea as to who was behind the harassment. Only their agents were visible, in the media, on television news programmes, and on the radio; in the workplace, where things said at my home were repeated verbatim; and in some cases abuse in public and during travel, for example on the trip to Poland in June 1992 which I have already described.

Both from the fact that widely disparate individuals and organisations were employed as agents in the campaign against me, and from the fact that an entity would be required to marshal their resources in the areas of spying on my home and giving gathered information to their agents, it was clear to me that a single entity was responsible for carrying out the campaign. Yet from June 1990 until Easter 1995 I did not have a clear idea of who might be responsible. I guessed that perhaps some private individual or group of persons who saw themselves as my enemies had perhaps paid private detectives to organise the harassment. Alternatively, since the campaign had started in the media, I made a far-fetched supposition that perhaps it was an ad-hoc group of media people who had set themselves up in opposition to me. After Easter 1995 I saw that these guesses were wrong, and I made an I believe much more accurate estimate as to who my enemies really are.

"Why couldn't a private group be behind the persecution?"

There are several reasons why a private individual or group would not be behind this campaign.

Quantity of resources / Money. Here is what one Usenet (internet newsgroup) participant had to say (several years ago) on the topic of how much money it would cost just to keep the surveillance going.

PM: >But why? And why you? Do you realize how much it would cost to keep
PM: >one person under continuous surveillance for five years? Think about
PM: >all the man/hours. Say they _just_ allocated a two man team and a
PM: >supervisor. OK., Supervisor's salary, say, #30,000 a year. Two men,
PM: >#20,000 a year each. But they'd need to work in shifts -- so it would
PM: >be six men at #20,000 (which with on-costs would work out at more like
PM: >#30,000 to the employer.)

PM: >
PM: >So, we're talking #30,000 x 6. #180,000. plus say, #40,000 for the
PM: >supervisor. #220,000. Then you've got the hardware involved. And
PM: >any transcription that needs doing. You don't think the 'Big Boss'
PM: >would listen to hours and hours of tapes, do you.
PM: >
PM: >So, all in all, you couldn't actually do the job for much less than
PM: >a quarter million a year. Over five years. What are you doing that
makes
PM: >it worth the while of the state to spend over one and a quarter
million
PM: >on you?

A private individual or group would not spend over a million pounds to verbally torture a victim without some financial motive or gain. Private industry is driven by the profit motive, and there is no financial profit to be had from carrying out a campaign in this way. If a private enterprise were behind it then they would have taken direct physical action a long time ago.

State enterprises, on the other hand, can afford to be wasteful, since they are funded by the taxpayer. They do not have to show a money profit. The employees or contractors employed by a state organisation such as MI5 are driven by their own personal profit motives, to make the most money out of their employers for the longest period of time. MI5 is funded to the tune of #150M p.a.; even a few hundred thousand a year would to them be affordable if their managers could convince themselves of the necessity of what they were doing.

Quality of resources / Technical resources - electronic and other surveillance. In summer 1994 a reputable and competent private detective agency was employed to conduct a counter-surveillance sweep of my home in London. They charged us over #400 for this, conducted a thorough search for radio transmitting devices, hard-wired "probe" microphones and also tested the telephone line. They found nothing. This was not altogether surprising, since it had been made very clear to me that there were bugs in my home; the "buggers" would not have made this clear unless they had felt their bugs were of sufficient sophistication as to be safe from detection.

But there is another lesson to be gained from the failure of the private detectives to find anything. The agency employed was one of the most reputable in London. They were employed on the principle of "setting a thief to catch a thief", for if the harassment were being carried out by private detectives, as I then believed, then surely another set of private detectives would be able to find the bugs that they had planted. That these "private eyes" were unable to find anything, and that the harassers were confident that they would not be able to find any bugs, points to the harassers being an order of sophistication above a private agency, and leads me again to believe that a state intelligence service is responsible for the surveillance and harassment.

Quality of resources / Technical resources - Interception of Postal service. In summer 1994 when I emigrated to Canada to try to escape the harassment, I wrote letters home to my family and friends in London. Quite soon after my arrival in Canada, the harassers were able to find precisely where I was staying. The only way I can see of "their" being able to find out my new address was by interception of my letters to the UK.

Later in 1994, I conducted an experiment to see if my letters home were indeed being read. In a letter home I wrote of being depressed and talked in vague terms of suicide. I deliberately chose this topic, since I believed it was the outcome my harassers were trying to achieve, and that if they read the letter, they would "echo" its contents. Sure enough, soon afterwards there were two incidents of people shouting "suicide" at me in public places in Canada.

It is inconceivable for a private agency to have the ability to intercept postal mail. The state security service on the other hand is well known to engage in these activities.

Quality of resources / Access to Media. One of the strangest aspects of this case is the access "they" have to the broadcast and print media. I still do not understand what could persuade newscasters such as Martyn Lewis and Michael Buerk, who consider themselves "gentlemen", to behave in an almost voyeuristic way by "peeking" into the living room of one of their viewers. A year ago I wrote to the BBC asking if these newscasters would confirm or deny the accusations made against them. The BBC replied that their newscasters had denied the accusations, but refused to do so in writing.

It is well known that MI5 have the ability to plant stories in certain newspapers, but convincing television newscasters to "watch" a viewer while they read the news would surely be very difficult for them to accomplish, unless they presented themselves to these journalists as being, for example, a group in the media who were seeing to it that I got my "deserved" treatment. MI5 has a history of manipulating the media, so it might not be too difficult for them to accomplish such a trick, whereas a private group would not have this ability.

"Have they ever denied that they are the Security Service?"

No. Never. This is in fact the main reason why I believe "they" are MI5 and not a privately funded group. If my guess had been wrong then I am sure that "they" would have crowed over my mistake, but they have never admitted nor denied that they are employees of MI5.

In early January 1996 I flew on a British Airways jet from London to Montreal; also present on the plane, about three or four rows behind me, were two young men, one of them fat and voluble, the other silent. It was quite clear that these two had been planted on the aircraft to "wind me up". The fat youth described the town in Poland where I had spent Christmas, and made some unpleasant personal slurs against me. Most interestingly, he said the words, "he doesnt know who we are".

Now I find this particular form of words very interesting, because while it is not a clear admission, it is only a half-hearted attempt at denial of my guess that "they" = "MI5". Had my guess been wrong, the fat youth would surely have said so more clearly.

"If MI5 were behind it, why would they wish to mask their involvement?"

I have heard a number of times a belief from people in the media that it is they, the media people, who are behind the abuse. In spring 1994 Chris Tarrant the Capital Radio D.J. said sarcastically on his breakfast show, "You know this bloke? he says were trying to kill him. We should be done for attempted manslaughter". We, we, we. Tarrant thought it was a media conspiracy.

Returning to the question of "interactive watching" by television newscasters, it would again be much easier for them to take part in that sort of activity if they convinced themselves that the surveillance and abuse were organised by "their own", by media people. It must be second nature to MI5 to mask their involvement in the matters they deal with; in this case, they pretend the campaign is organised by a group in the media, and any journalists who suspect otherwise keep their silence.

Conclusion

Over the last three years I have stated with some force my belief that MI5 are responsible for my misfortunes. I have done so on Internet newsgroups, in letters and faxes to people in politics and the media in the UK, and in 1997 I made a formal complaint to MI5 regarding their activities; the Security Service Tribunal replied in June 1997 that "no determination in your favour has been made on your complaint". (I believe the statement by the Security Service Tribunal can be disregarded, as they have never, ever made a ruling in favour of a complainant.) In three years of naming MI5 as my oppressor "they" have never denied the charge. To me, their silence on this point indicates that my guess was accurate. I believe my persecutors stand identified. The question of why they should carry out this campaign is one I will try to answer in a future article.

2830

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X-Google-Thread: 10e8ad,70dde84a82269577,start
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Message-Id: <m07111612135837@4ax.com>
Subject: MI5-Persecution: Why would they be doing this to you, sir? (5013)
Newsgroups:
sci.med.laboratory,alt.fan.holmes,alt.polyamory,alt.sports.hockey.nhl.ott-senators,rec.radio.amateur.space
Followup-To:
sci.med.laboratory,alt.fan.holmes,alt.polyamory,alt.sports.hockey.nhl.ott-senators,rec.radio.amateur.space,uk.misc
From: MI5-Victim@mi5.gov.uk
Date: 16 Dec 2007 12:14:01 GMT
Lines: 203
Organization: news.newsdemon.com
X-Complaints-To: abuse@newsdemon.com
X-Original-Lines: 199
Xref: g2news1.google.com sci.med.laboratory:1862 alt.fan.holmes:1413 alt.polyamory:71006 alt.sports.hockey.nhl.ott-senators:14061 rec.radio.amateur.space:1230

MI5 Persecution Update: Friday 15 May, 1998

The persecution has been quite severe for the last week. It appears that my enemies are reacting to the steady stream of faxes making their way over the Atlantic to the fax machines of Westminster politicians and the media. Here is whats happened in the last few days;

The week started off with an incident in the cafeteria at a local shopping centre where I habitually drink my morning coffee. My enemies have concentrated since winter 1995/96 on throwing a particularly horrible sexual slander against me. They "put people up" to repeat this slander against me, and this is what happened again here.

On Thursday morning (yesterday), instead of going to the usual cafeteria I went to a nearby convenience store for coffee. The same horrible sexual slander was shouted at me very loudly by a member of staff as I walked into the store. This was the first time I had ever bought morning coffee in that shop. The other staff obviously knew what was going on, one of them said, "they screwed up my life".

The fax gateway I use to send these faxes to the UK has been working hard these last few days to shut down my access by barring the accounts I use to send these faxes.

I have received an anonymous threat from fax number 0171-219-6101 (the machine gave its name as "ETRA-HoC") which said, "Stop sending to this fax no 0171-219-6101 or else" (the consequences of continued transmission were unspecified). I invited the sender to apologise for his threat, but received no response.

This all adds up to quite a severe reaction to my faxes of the last few weeks. I actually find this quite heartening since it shows that my faxes are finding the mark and there may yet be a breakthrough in my efforts to expose the Security Service conpiracy of abuse against me which has now been going on for eight years.

MI5 Persecution: "Why would they be doing this to you, sir?"

This article will concentrate on the difficult question of "Why". The question which forms the title of this piece was asked of me by the police officer I spoke to in Easter 1995, when I went to make my complaint.

There are really two sides to this question. Firstly, why should MI5 be harassing anybody in this fashion? Secondly, if they choose to behave in this way, why should they have selected me in particular, and not somebody else? Alternatively, why did the persecution start, and why is it continuing?

I do not have definite answers to either side of this question, since my persecutors have usually kept themselves hidden and only acted through other parties. To know "why", one would have to know who the persecutors are, and something of their personalities, since their abuse is almost certainly symptomatic of a personality disorder of the abusers. Certain things however can be deduced about the abusers from the nature of their behaviour, and I will talk about this later in the article.

Why did it start?

It is clear that the persecution must have been initiated by someone who knew me personally, either at school, or at university, or socially, and knew that I was borderline mentally ill, since this is what makes me a target for the persecutors. Unfortunately, the originators have never been identified, and there are several possible candidates. Neither has the link from the originators of the persecution, to the persecutors themselves, ever been made clear. So who are the originators?

University Staff

The identity of the originators may lie in the timing of the persecution. It started in June 1990, while I was finishing a course at Imperial College in London, and a year after I graduated from Cambridge, where I received a degree in computer science. At Cambridge I had achieved some notoriety in the computer lab from various nefarious exploits. Roger Needham attacked me by saying that "there were great hopes for it, but it failed terribly". When I started at Imperial I found that my reputation had preceded me; Cambridge computer lab had spoken to I.C. lecturers about me. I.C. lecturer Frank McCabe summed up commenting about "setting up a straw man so you can tear him down". (Despite being "torn down" by the Cambridge computer labs lecturers, I still achieved a good first degree and a Masters degree at Imperial.)

Other students at university

So, the originators may have been university staff who knew me from my student days. But there are other possibilities. I had other enemies at university, including some fellow students. At my Cambridge college it was common knowledge that my mental health was dubious, and it was known that I talked to myself in my sleep - the floor and walls were quite permeable to noise, so other students heard. I was given the nickname "gibber" because of this habit. Sometime later, I managed to catch myself talking in my sleep when I woke up in the middle of the night.

Here is a quote from a participant in the internet newsgroup where I have been posting for the last three years;

>One thing which has been missing from this discussion is this simple
>prognosis: that maybe he is right and that, despite his admitted
>mental condition, there really is a campaign against him organised by
>now-influential ex-students of his university.

People I knew socially

I had yet other enemies in 1990 (I am a man of many enemies!). In January 1990 I broke up with some people I had been going out with socially. One of them, by the name of Andy Turner, wrote a letter to Alan Freeman, who at the time was a Radio 1 DJ. Freeman read part of the letter out on his Rock Show, about the "one who wore out his welcome with random precision", saying "thats a hell of a letter you wrote there Andy", and "with a schizophrenic youre never alone".

It is my belief that Andy Turner and his friends were trying to make trouble for me, and Turner wrote to Freeman with this in mind. Freeman may have discussed the letter with others, and things may have snowballed from there. This is, of course, pure supposition. The fact is that I do not know who the originators are, and can only guess.

Once it started, why is it continuing?

The answer to this question is obvious. It is unacceptable to the "powers that be" in the UK to have somebody running around who knows he has been targeted by the Security Service and media organizations, and who is in a position to embarrass British institutions. This has become particularly evident in the last week; as I send more faxes to UK politicians and media, so the pressure on me grows, and the volume of abuse increases.

Part of the reason the persecution continues is in the personalities of the abusers, and it is this subject to which I will turn to next, since the key to understanding the persecution lies in understanding those who carry it out, as much as we can.

The Security Service operatives, the persecutors, are they psychopaths?

Let us first examine the definition of the term "psychopath". DSM-IV defines "anti-social personality disorder" as a "pattern of disregard for and violation of the rights of others ... deceitfulness, irritability and aggressiveness ... consistent irresponsibility and lack of remorse". The Harvard Mental Health Letter of Sept 1995 describes these people as using "charm, manipulation, intimidation and violence to control others and satisfy their own needs. Lacking in conscience and in feelings for others, they cold-bloodedly take what they want and do as they please", having "no guilt or regret".

I must say, reading this description of the condition, that it fits the persecutors perfectly. The persecutors have never shown the slightest remorse or guilt. Even when I was severely ill, they continued to abuse me. They have repeatedly blamed their actions on me, which is another trait common amongst psychopaths. They have no respect for my legal or personal rights, and they use intimidation and verbal violence.

If the MI5 operatives are psychopaths then it would explain both why the persecution started, and the degree of verbal violence. Psychopaths by definition damage other people; here, the MI5 operatives find an outlet for their personality disorder, through "cripple-kicking".

Xenophobia on the basis of mental illness, and race

My enemies have made clear many times that one of the reasons they are persecuting me is because of my admitted mental illness. However, it is my belief that they are also persecuting me because I am not of ethnic English origin, and the fact that there have been several incidents of an overtly racist nature reinforces this view.

In one case, two youths on a tube train in London made openly racist references to me as a "soft toy, not up to British Standards". Another person near my home made remarks about "Polish people". In yet another incident in Croydon, a youth made comments about "foreigners".

But the main thrust of their xenophobia is because of my mental illness. I should make clear that I do not look ill; if you met me, you would not know that I had the illness. I take a relatively low dose of medication, and feel quite well. But the persecutors have repeatedly harped on about my supposed serious mental illness; they have called me a "nutter", a "schizophrenic", etc. They have also persuaded other people to use these terms of abuse. They are able to get away with this because abusing the mentally ill is still something which is mostly acceptable in Britain; the media do it, "nutter" is not taboo in the way that "nigger" is.

Conclusion

There are several groups of people who might have wished to cause me trouble, and I still do not know who originated the persecution. Nor do I know how the originators came to be in contact with the (presumed) Security Service operatives who have been carrying out the campaign. To know conclusively why it started, we would have to know who started it, and this information is not available.

However, we can infer some things about the personalities of the persecutors from their methods, and from the degree of verbal violence they employ. It is clear that a main reason for the continuing harassment is the psychopathic disorder of the MI5 agents who carry it out. That they have never been "brought to book" for their misdeeds reinforces their belief that they do no wrong; and, unhappily, until they are brought to book, their persecution campaign looks set to continue.

5013

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X-Google-Thread: f8abe,76ddc53a3755eda5,start
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Subject: MI5-Persecution: .net Magazine Applauds my Website (7196)
Newsgroups:
sci.med.laboratory,alt.fan.holmes,alt.polyamory,alt.sports.hockey.nhl.ott-
senators,rec.radio.amateur.space
Followup-To:
sci.med.laboratory,alt.fan.holmes,alt.polyamory,alt.sports.hockey.nhl.ott-
senators,rec.radio.amateur.space,uk.misc
From: MI5-Victim@mi5.gov.uk
Date: 16 Dec 2007 12:41:33 GMT
Lines: 26
Organization: news.newsdemon.com
X-Complaints-To: abuse@newsdemon.com
X-Original-Lines: 22
Xref: g2news1.google.com sci.med.laboratory:1863 alt.fan.holmes:1414
alt.polyamory:71007 alt.sports.hockey.nhl.ott-senators:14062
rec.radio.amateur.space:1231
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MI5 Persecution: .net Magazine Applauds my Website

The March 1998 issue (number 42) of .net Magazine reviews the MI5 Persecution website describing it as an "excellent site". The webpages describe in detail the nature of my persecution since 1990 by what are believed to be elements of the UK security service.

(snip image)

You are encouraged to read the web pages which include

o a FAQ section outlining the nature of the persecutors, their methods of harassment through the media, people at work and among the general public
o an evidence section, which carries audio and video clips of media and workplace harassment, rated according to how directly I think they refer to me
o factual descriptions of the state security agencies involved
o scanned texts of the complaints I have made to media and state security agencies involved
o posts which have been made to netnews over the last three years on this topic

7196

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From 4200919675668951978
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Subject: MI5-Persecution: BBC Newscasters Spying on my Home (9379)
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Followup-To: sci.med.laboratory,alt.fan.holmes,alt.polyamory,alt.sports.hockey.nhl.ott-senators,rec.radio.amateur.space,uk.misc
From: MI5-Victim@mi5.gov.uk
Date: 16 Dec 2007 13:05:51 GMT
Lines: 259
Organization: news.newsdemon.com
X-Complaints-To: abuse@newsdemon.com
Xref: g2news1.google.com sci.med.laboratory:1864 alt.fan.holmes:1415 alt.polyamory:71008 alt.sports.hockey.nhl.ott-senators:14063 rec.radio.amateur.space:1232
X-Original-Lines: 255

X-Original-Bytes: 14392

MI5 Persecution Update: Friday 13 November, 1998

If You Intend To Reply, Please Read This

If you have any questions or observations you would like to share with me, then you are very welcome to reply to my fax number 0171-681-1190. But please.... keep your response to one page if you can! I have had several people faxing my article back to me, including one MP faxing back twenty pages. I do not know if he had anything intelligent to say in his 20-page fax because I applied judicious use of the "Delete" key on my computer. Faxes over a page or two will be deleted without being read.

MI5 Resume Hostilities in Response to these Faxes

When I wrote last weeks "MI5 Persecution Update" I remarked how quiet my life had become. No longer! MI5 have restarted hostilities with a vengeance the past week, in response I believe to the faxes I have been sending to members of the House of Commons.

On Saturday 7 November I went to Clapham Picture House cinema to see the film "Antz" (a very enjoyable film). At the cinema, I was verbally assaulted by a group of teenagers with the words "still crazy", repeated about ten times. There was a film with that name showing at the cinema, but it was clear their abuse was directed at me. I do not look ill, so why would they pick on me? answer, the incident was set-up by the persecutors. One of the teenagers also said to another, "I don't know what we're laughing at".

The following day, Sunday 8/11/98, I was on my way to play squash when I was verbally assaulted by a youth who said "it was so funny", without the slightest trace of humour. What he meant by this phrase was that was funny, and they were trying to humiliate me. I have heard this phrase "it was so funny" used at me before many, many times over the last eight and half years.

Please Encourage Keith Hill MP to Help Me

I live in a bugged house, bugged both for audio and video. My movements are monitored by MI5. The Security Service have followed me to Canada, to Poland and the Continent, to the States. I cannot work anywhere, not in England, not in Canada, because MI5 will destroy whatever employment I am able to obtain. I have asked Keith Hill MP to help me, and he has refused.

The situation is intolerable. It is Mr Hills job to help me out of this mess. So, please, as I said in the last fax a week ago: Do not waste your time returning multiple copies of my faxes to my fax mailbox, as some of you have done. Instead;

Please encourage Keith Hill M.P. to help me.

I am sorry to be using this device to encourage Mr Hill to help, but I think eight and half years are quite enough and it is time something was done to bring this matter to a close.

MI5 Persecution : BBC Newscasters Spying on my Home

This week's topic is the quite extraordinary claim that BBC newscasters such as Martyn Lewis and Michael Buerk have spied on my living room while they read the news. I currently have an advert running for the next six months in Private Eye's "Eye Say" column (at a cost of over #200) which says,"MI5 Persecution - BBC Newscasters Spying on my Home"; the story of my campaign in the Eye is on my Website at; http://www.pair.com/spook/evidence/plaint/priveye.htm

BBCs staff magazine Ariel also ran my advert "BBC Newsreaders Spying on my home" for one issue in the Personal category on 8/July/1997 before it was spotted and axed by editor Robin Reynolds; please see webpage; http://www.pair.com/spook/evidence/plaint/ariel.htm

Beginnings

The very first incident in the "MI5/BBC Persecution" occurred in June of 1990, when a newsreader reacted to what she saw in my living room at home as she read the news. My mother had brought an apple for me into the room, whereupon the newsreader smirked and giggled, apparently finding this funny. I couldn't believe what I was seeing. I carried on watching news and other television programmes to see if presenters would show signs of "interactive watching"; to my surprise, this happened again and again. Unfortunately, I did not have my wits sufficiently about me to videotape these programmes, and it is now almost impossible to obtain recordings dating back to 1990.

Most of the "TV watching" has occurred on the news, and most of it in summer 1990, although some as late as autumn 1993. My website has a few extracts of what might be politicians "getting at" me, in particular John Major and interviewer Dimbleby sharing a joke about the "Knutsford Guardian" which is almost certainly about me.

I sold my portable TV in autumn 1990 and stopped watching television regularly. I realise now that this may have been a mistake. What I should have done was to watch TV and listen to the radio, but tape-record everything and make a note of what each excerpt meant to me. I would then be in a much stronger position as regards to evidence that I am now. That is what I am trying to do now, but unsurprisingly the TV/radio presenters have stopped getting at me, now they know they are being recorded.

Examples of Media Harassment

Here are a few examples which I can still remember of media harassment;

In early 1992 I was watching the BBC news with Martyn Lewis on a small black-and-white portable television at my then home in Oxford. I threw a term of abuse at Lewis; he flinched, then gave a grin and made a comment from which I understood that he had been on my side, but might have changed his mind as a result of what Id just said to him.

Victor Lewis Smith in his TV (BBC2?) program at the end of 1993, had a taxi-driver saying, "theyre all out to get me", to which VLS replied, "but you're quite intelligent aren't you?" (what a nice chap VLS is, compliments no less!)

Paul Daniels the TV magician, sometime in 1990-92 (sorry I can't be more precise but it was so long ago), made a "crying face" and put his face in his hands, which was his way of expressing that I was frequently crying in 1990-92, and that he and other media people found my crying funny.

Kenny Everett (deceased) on some talk show, compared me to a "huge ape" who "scratches himself"; he made some other remarks about what the "ape" got up to which unfortunately I cant remember. (I remember that Everetts comments were quite sympathetic and human, but were obviously about me.)

Stephen Fry on another talkshow (Wogan I think) talking about "masturbatory fantasies", he then referred to me with the words "you prat"; I wonder if the studio audience knew what he was talking about and to whom his comments were directed?

Griff Rhys Jones on Clive James' TV show, made a "lunatic face" (wide fixed grin) to which I said to the TV that he had a "face like a horse's arse", to which Clive James said to GRJ "did you hear that?"

Crimestoppers summer 1990, remarks by a Midlands police officer on the programme, while Nick Ross was presenter (as far as I can remember). The officer talked about "in car entertainment". Nick Ross said to officer, "why don't you stop doing it?" to which he replied, "we can't while he's like this".

BBC2 Newsnight in autumn 1993 had a piece on football hooliganism. A black interviewee said apparently of the hooligans, but in fact of me; "they're just idiots, carry on with the surveillance".

There was an incident with Jonathan Ross which I remember clearly; he was on both BBC and ITV television at the same time, one (ITV I think) was recorded, the other channel was live. Ross has a speech impediment which causes him to pronounce his "r"s as "w". I sarcastically said something about "Mr Woss" to the recorded channel, then turned over to where he was live, and he repeated "Woss" with heavy emphasis and sarcasm.

On the radio, in spring 1994, Chris Tarrant made a sarcastic remark in his morning show, saying "he says were trying to kill him, we should be done for attempted manslaughter", to which another of the studio staff said, "oh no, dont say that". His comment was in reply to a comparison Id made the previous evening between my persecutors and the Polish secret police who murdered dissidents.

Martyn Lewis Denies & Lies, But Wont in Writing

In February 1997 I wrote to BBC Viewer & Listener Correspondence and asked them to investigate the claim that their newscasters had engaged in "interactive watching". They replied that they had asked Martyn Lewis and Michael Buerk whether they had engaged in such practices, and that they had both made verbal denials to VLC, but were refusing to put their denials in writing.

I can understand that they might think that if they were to make written denials to me, then many other people with my condition might write to them with similar questions. But Ive asked a couple of journalists if theyve been writing about me, theyve made written denials, Ive believed them, and I have not put their denials on my website because, since I believe their denials, it would not be relevant to publish them.

To me it looks as if Lewis and Buerk are happy to lie verbally but not in writing, because written falsehoods would place them unambiguously in the wrong, whereas they can try to talk their way out of verbal lies if they are ever caught, or perhaps even deny the verbal lies completely? If they lie without shame, then why would they have any shame about future lies about lying?

One of the strangest aspects of "TV watching" is that Buerk and Lewis have convinced themselves that their "interactive spying" is reasonable behaviour. Martyn Lewis thinks of himself as a "gentleman". He expressed in 1992 that he was "on my side". If this matter ever comes out into the open, I wonder what these newscasters will have to say for themselves, and what the British public will make of their behaviour?

Media Persecution Evidence on my Website

You may directly access the Evidence section on my website at URL;

The category currently contains four video segments, a number of audio files and three published articles. The first video of ITN's John Suchet is unfortunately a mistake - after looking at it again it is obviously not about me. The two Ken Clarke excerpts may or may not be about me; it is funny that he should keep on harping about "paranoia" and "madness", but I have given these ratings of only 30% certainty, as it is more likely that they are not about me in particular, and Clarke is simply displaying the normal prejudices against the mentally ill found in much of society.

The piece I find most interesting is the Dimbleby/John Major interview from April 1997. I have assigned this a 90% rating. Dimbleby starts by emphasising a report from the "Knutsford Guardian". Major recognizes what's going on and joins in with a falsely apologetic "heaven forfend". The emphasis is on the first syllable pronounced "nuts" in "Knutsford", which is repeated three times. Of course this is hardly anywhere near convincing evidence; the really clear items were all in 1990-92, and they are basically unobtainable now.

If you're reading the website, have a look at the two files from David Hepworth's programme on GLR radio. The first one from 21/Feb/1997 has him talking about an "embarassment" of prizes and "absolute obscene", in reference I believe to the verbal sexual abuse that was being used against me at the time (and which unfortunately is still current). In the second file dated 9/May/1997 he again talks about "absolute embarrassment" of prizes, followed by laughter. To my mind he knows I am listening to his programme, and deliberately makes these remarks for my benefit, with very little attempt to disguise their purpose.

Bernard Levin - "Fanatic's Fare for the Common Man"

On 21 September 1991 this article by Bernard Levin appeared in The Times. It is reproduced in the Evidence section of the website, or may be accessed directly at URL;

To my mind, Levin's article described the situation at the time and in particular a recent meeting with a friend, during which I for the first time admitted to someone other than my GP that I had been subjected to a conspiracy of harassment over the previous year and a half.

Levin writes about a "madman running loose about London" who "bursts into tears, and swears it is all true. And it is." I am pleased to agree with his assertion that "it is all true" because the truth is what I presented to my friend in September 1991 and it is what is being presented to the readership of these articles now.

Conclusion

The harassment, in particular media persecution, was at its strongest in 1990-92. Today, I am recording everything I watch, read and listen, and the media have pretty much given up. It is now incidents "in public" which make up what there is of MI5s persecution. But much of the material from 1990-92 still exists in archives, although the organisations which have those archives generally wont make the material available to the public, for copyright and other reasons.

MI5 can no longer employ the media to persecute me, partly because journalists now know who is behind the persecution, and also because I would publish any instances. My mistake during 1990-92 was to not record instances as they happened; Ive learned from that mistake, and know better now.

9379

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Posted via NewsDemon.com - Premium Uncensored Newsgroup Service
      ------->>>>>>http://www.NewsDemon.com<<<<<<------
Unlimited Access, Anonymous Accounts, Uncensored Broadband Access

From 4544720296258266803

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X-Google-Thread: 102692,9bde600e5d5404ba,start
X-Google-Thread: f8abe,9bde600e5d5404ba,start
X-Google-Thread: 10e8ad,9bde600e5d5404ba,start
X-Google-Attributes:
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Path: g2news1.google.com!news2.google.com!border1.nntp.dca.giganews.com!
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Subject: MI5-Persecution: How to Identify the Persecutors (11562)
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Followup-To:
sci.med.laboratory,alt.fan.holmes,alt.polyamory,alt.sports.hockey.nhl.ott-senators,rec.radio.amateur.space,uk.misc
From: MI5-Victim@mi5.gov.uk
Date: 16 Dec 2007 13:29:03 GMT
Lines: 146
Organization: news.newsdemon.com
X-Complaints-To: abuse@newsdemon.com
X-Original-Lines: 142
Xref: g2news1.google.com sci.med.laboratory:1865 alt.fan.holmes:1416
alt.polyamory:71010 alt.sports.hockey.nhl.ott-senators:14064
rec.radio.amateur.space:1233

MI5 Persecution Update: Friday 19 March, 1999

If You Intend To Reply, Please Read This

Please.... keep your response to one page if you can! I have had several people faxing my article back to me, including one MP faxing back twenty pages. Faxes over a page or two will be deleted without being read.

Theyve started again. Why? I have no idea.

Unhappily, the persecutors, whoever they might be, have started their activities again over the last two weeks. Usually they try to blame their activities on their victim, but this time they have stopped even pretending that the persecution is my fault. Their verbal abuse appears as gratuitous as it is vicious.

Last Sunday 14 March, I went for a meal in Londons Chinatown with some friends. As we were walking down Gerrard St, a man shouted loudly, twice, the obscenity which has been directed at me for some three years now. This followed previous incidents where the same words had been used. It is very upsetting to be verbally abused in this way and to know that the cowardly abusers are guaranteed to "get away with it" because if you report it then it will be assumed to be part of your illness.

Keith Hill MP (Labour - Streatham), my elected representative, as ever refuses to help.

MI5 Persecution : How to Identify the Persecutors

Usually delusional thinking does not allow the perpetrators to be identified, or the alleged persecution to be proved. My so-called "delusions" are different, because I have several times over a period of some nine years seen the same people, in widely varying places. Most importantly, their names have been recorded, on aircraft passenger lists and hospital register; and if only the police would do their job conscientiously then the persecutors could be identified and this unhappy story brought to a final conclusion.

BA93 Heathrow->Toronto, 10 June 1993

In 1993 I flew to Toronto for a holiday. On disembarking from the aircraft, a group of four men who travelled together looked in my direction, and one of them said, laughing, "If he tries to run away well find him".

I was absolutely stunned when I heard this. I wasnt surprised that they had followed me to Canada, but it shocked me that they had been on the same flight, and that one of them had foolishly given their group away. Unfortunately I was so stunned that I made no attempt to stop them as they got off the flight and proceeded into the terminal. I did not see these people again during my visit to Toronto. I do not know whether they followed me, or whether they were only part of a larger group, some of whom may have already been on the ground and awaiting my arrival.

Over the next few years I made a number of attempts, all unsuccessful, to obtain the passenger list for this flight. British Airways keeps passenger flight coupons for each flight; so if only the police would do the job that is being asked if them, then these four persecutors could be identified, and thus their employing organisation, which is very likely to be the Security Service, determined.

These four men were, apart from the joker who looked the odd man out in the pack, very serious individuals. They appeared to be in their forties or fifties, and my impression on seeing them was that they might have been former soldiers. Their campaign against me concentrates on how "funny" their abuse is; but in this they are plainly lying, because they realise how awful will be the damage to the establishment of which they form part, if the truth about the persecution ever sees the light of day.

The riddle of "Alan Holdsworth"

During Oct/Nov 1996 I saw a doctor several times about an infection, and on 2 Nov 1996 I went to Emergency at the Ottawa Civic Hospital and saw Dr Worthington, who was then Chief of Emergency Medicine. I had to wait several hours before being seen, and several people jumped ahead of me in the queue. One of these was a grey-haired man in his forties or fifties. This may have been one of the men on the BA flight in 1993; I cannot be sure. When Dr Worthington asked his name, he loudly said, "Tad", which is the common abbreviation of my name. Dr Worthington looked puzzled, glanced at the sheet in front of him, and said, "but your name is Alan Holdsworth isnt it?". (I am pretty sure his Christian name was Alan; I cannot be sure of the surname). The man looked put out, and said quietly, "yes".

Unfortunately, I did not follow up this incident immediately. Some time later, I wrote to Dr Worthington to ask the name of this patient, but he refused to give the name out.

I saw this person again two and a half years later, at Ottawa Airport, just as I was about to leave for England. In the warm weather, he was wearing a coat and woolly cap, and pacing up and down in a menacing and aggressive manner. Presumably he thought he was pretending to be a "nutter" and in this way was getting at me; my impression is that he doesnt need to pretend, Holdsworth or whatever his name is is clearly a psychopath and in a healthy society such a person would be locked up, instead of being paid public money to exercise his psychopathic instincts. But todays Britain, a country where the MI5 secret police are given free rein and nobody dares raise a voice in protest, is not a healthy society.

"He doesnt know who we are"

For some reason, whenever I take a British Airways flight, I get hassled by the "persecutors who wont admit theyre MI5". Since this business started, I have travelled BA three times; once in June 1993 BA93 (see above), once to/from Europe during Dec 95/Jan 96, and once in June 1998 with my mother to visit her family. The last journey, I was abused by two "plants" who kept repeating, loudly, "paranoid" (I have this recorded on minidisc). Presumably British Airways gives MI5 the seating plans for their flights, which allows MI5 to position their agents of abuse three rows behind me, so I cant face them, and they are throwing abuse at the back of my head. I have travelled BA as infrequently as possible; to Canada, I usually travel Air Canada.

Anyway, lets return to the second of the three BA trips, and in particular to the flight on 2 January 1996 from Berlin Tegel, to Heathrow, and onwards to Montreal Mirabel. Id waited all night at Tegel for the flight, and was very tired on reaching Heathrow. On the plane to Montreal, two youths sat about three/four rows behind me and to the right, in the window seats. One of them, a rather fat "asshole" to use the Americanism (it fits), kept on going on about "this bloke", saying among many other things, "he doesnt know who we are".

Now that form of words is particularly interesting, because from May 1995, some 8 months previously, I had been vigorously denouncing the "MI5 Persecution" on Usenet. So if Id guessed wrong, then you might expect the harassers to crow about it; which they have not done. If I had guessed right, and the persecutors have been silent before and since this flight, then they could either admit they were MI5, which would be a very serious thing for them to own up to, or they could brazenly lie, in which case I would report their lie, and since many people must surely know who they are, they would lose all credibility. So they have remained silent; apart from this one phrase on the BA flight, where one of their agents said, "he doesnt know who we are". Note carefully that this phrase is NOT a denial, it only appears to be a denial; since it does not say that my guess was wrong; it only states the objective fact that I do not know the identity of the persecutors, without giving any information as to the validity of my guess. Which leads me to posit that my guess was correct.

11562

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Posted via NewsDemon.com - Premium Uncensored Newsgroup Service
      ------->>>>>>http://www.NewsDemon.com<<<<<<------
Unlimited Access, Anonymous Accounts, Uncensored Broadband Access

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X-Google-Thread: 10e8ad,d52c36fe457a6ea2,start
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gid10813c,gid10255f,gid102692,gidf8abe,gid10e8ad,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!border1.nntp.dca.giganews.com!
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news.newsdemon.com!not-for-mail
Message-Id: <m07111613560100@4ax.com>
Subject: MI5-Persecution: Browse the Website (13745)
Newsgroups:
sci.med.laboratory,alt.fan.holmes,alt.polyamory,alt.sports.hockey.nhl.ott-
senators,rec.radio.amateur.space
Followup-To:
sci.med.laboratory,alt.fan.holmes,alt.polyamory,alt.sports.hockey.nhl.ott-
senators,rec.radio.amateur.space,uk.misc
From: MI5-Victim@mi5.gov.uk
Date: 16 Dec 2007 13:56:03 GMT
Lines: 208
Organization: news.newsdemon.com
X-Complaints-To: abuse@newsdemon.com
X-Original-Lines: 204
Xref: g2news1.google.com sci.med.laboratory:1866 alt.fan.holmes:1417
alt.polyamory:71011 alt.sports.hockey.nhl.ott-senators:14065
rec.radio.amateur.space:1234
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MI5 Persecution Update: Friday 25 March, 1999

If You Intend To Reply, Please Read This

Please.... keep your response to one page if you can!. Faxes over a page or two will be deleted without being read.

The Usual Words

The persecutors-who-wont-admit-theyre-MI5 have been active again this week. On Saturday 20/3/99 I visited Ravenscourt Park in west London, and was verbally assaulted with the usual words, "something wrong with him". This audio file is on the web at URL;

This afternoon (Friday 26/March) I was again verbally assaulted while travelling by bus. The same sexual obscenity was thrown at me, and the incident was recorded on my minidisc-walkman. Because of the deeply offensive nature of the slander, I will not be posting this on the website.

Keith Hill MP (Labour - Streatham), my elected representative, as ever refuses to help.

MI5 Persecution : Browse Website

The March 1998 issue (number 42) of .net Magazine reviews the website describing it as an "excellent site". Since August 11, 1996 over 50,000 people have browsed this website.

You are encouraged to read the web pages which include

a FAQ (frequently asked questions) section outlining the nature of the persecutors, their methods of harassment through the media, people at work and among the general public

an evidence section, which carries audio and video clips of media and workplace harassment, rated according to how directly I think they refer to me

objective descriptions of the state security agencies involved

scanned texts of the complaints I have made to media and state security agencies involved

posts which have been made to netnews over the last four years on this topic

This article outlines what is to be found on the webpages, which you are encouraged to browse for the complete story.

Frequently Asked Questions

Your excursion through the website starts with the "FAQ - Frequently Asked Questions" portion. MI5s campaign of harassment against me has been going on for almost 9 years, and its longevity and breadth is reflected in the FAQ. Many thousands of people in Britain and abroad, including some recipients of this fax, have known for many years of MI5s activities against me. The FAQ describes the mass "Omerta suppressing its publication"; we pretend Britain is part of the "Free World", yet the British Secret Police, which is what MI5 are, carry on for many years a campaign which politicians and the media know about, and rely on the silent complicity of so many thousands of people.

The FAQs introductory article names those who are "in the know"; media figures like Martyn Lewis, Michael Buerk, entertainment figures like Chris Tarrant, politicians and many in the general public, "all united in a conspiracy which breaks the laws which the UK does have regarding harassment, and all completely uncaring for any semblance of decency or elementary respect for individual rights.

Broadcast media play a key role in the harassment. The very first incident in June 1990 was when a television newsreader reacted to what she saw happen in my living room at home; such incidents of "interactive television" are still happening in 1999. The same goes for radio stations such as Capital FM. In spring 1994, Chris Tarrant on his Capital morning show made an aside to someone else in the studio, about a person he didn't identify. He said, "You know this bloke? He says we're trying to kill him. We should be done for attempted manslaughter". Tarrant and Capital have made strenuous efforts to avoid answering this charge.

Perhaps worst of all, MI5 have deliberately set-up many incidents in public places such as tube stations, shops, cinemas, where they have paid people to throw abuse at me. Since MI5 obtains funds to the tune of 160 million a year to fund its criminal activities, it has funds both to pay its operatives and to "buy" media figures and members of the public to take part in its campaign of persecution.

The Security Service are professional liars. They throw slanderous abuse, yet they refuse to admit out loud that they are doing so. When challenged about their activities through the Security Service Tribunal they lie and deny their activities. They induce other workers and managers at places of employment to take part in their campaign of abuse, presumably by buying them in the same way they buy media figures.

Complaints, and Press Coverage (BBC Lies, MI5 Lies)

As you might expect I have challenged both the Security Service, through the Security Service Tribunal, and offending broadcasters, to own up to what they have been doing. And as you might also expect, all of these people have lied through their teeth. Still worse, they have refused to commit unambiguous lies on paper; they have couched their lies in bureaucratic language, and allowed others to make false assurances and tell lies on their behalf. So when their lies are exposed, they will then tell further Clintonesque lies about how they werent really telling lies in the first place!

On 6/Feb/1997 the BBC told me they would "never engage in any form of surveillance activity such as you describe". The BBC told me Buerk and Lewis had refused to put their lies in writing, but had stated verbal falsehoods denying my accusations of "interactive watching" during news broadcasts. Clearly Buerk and Lewis fear being caught and exposed, so they hide behind their Viewer Correspondence department.

In March 1997 I issued a summons against the BBC to try to "smoke them out". This summons was struck out as "disclosing no reasonable cause of action", because I had acted as a Litigant-in-Person and most LiP summons are treated thus. My case was arguable in law, so the striking out was unjust.

In June 1997 the Security Service Tribunal wrote to me regarding the complaint I had brought against MI5 in February. They say, "The Security Service Tribunal have now investigated your complaint and have asked me to inform you that no determination in your favour has been made on your complaint." I think you can guess the contempt which I feel for the Security Service Tribunal, who have never made a determination against MI5, and act as merely a whitewashing body for the Security Service. Unsurprisingly in May 1997 the Interception of Communications Tribunal gave the same result.

The last few items of "Press Coverage" give details of mentions of the MI5 Persecution in various magazines and newspapers such as BBCs Ariel, the Observer and .net magazine.

Evidence

Some audio and video clips of evidence have been recorded. My weakness in this area is because most of the really unambiguous evidence would have been obtainable in 1990-92, but I wasnt taping anything at the time, and its very difficult to now obtain recordings from that period.

The audio clip "Life is so Hard" relates to harassment at my workplace in Canada. In the latter half of 1996, I was sitting near to co-worker Mark Lee, who kept coming out with words and phrases which showed MI5 were supplying him with data from my home life. For example, I would say something on the telephone at home, and the following day he would repeat verbatim what I had said. When Mark Lee saw I was recording what he was saying, he started to make his remarks more ambiguous, or make the obvious ones out of earshot of the recorder.

However, during the evening of 12 November 1996, at home in my apartment (flat to you UK-ers), I said "life is so hard, and then you die". A nihilistic, negative thing to say, but quite distinctive. The following day, 13 November, Mark said loudly, "life is so hard eh, and then you die" followed by loud laughter. I captured this on my tape-walkman and the computer-audio file is posted on the website.

There are a number of other audio files in the websites "Evidence" area demonstrating the abuse to which MI5 subject me to through their paid agents.

Also in this section is a very interesting article by journalist Bernard Levin, which followed a meeting I had with a friend in 1991, and to my mind describes in some details Levins "artists impression" of the meeting. He talks about a "madman" who "bursts into tears, and swears it is all true. And it is."

Internet Newsgroup (Usenet) archive

From May 1995 until the present day, this matter has been discussed exhaustively on internet newsgroups. The most interesting articles from the first two years of posts are documented here. This area is worth reading since most of the questions which the reader would ask, have been asked at some time or another by someone on usenet. Perhaps the very first article posted sums it all up so succinctly;

Date: Thu May 4 18:27:24 1995
Newsgroups: alt.conspiracy
Subject: BBC's Hidden Shame

Remember the two-way televisions in George Orwell's 1984? The ones which watched you back? Which you could never get rid of, only the sound could be turned down?

Well the country which brought Orwell into the world has made his nightmare follow into the world after him. Since 1990 the British have been waging war against one of their own citizens using surveillance to invade privacy and a campaign of abuse in the transmitted media in their efforts to humiliate their victim.

And the most remarkable thing about it is that what they do is not even illegal - the UK has no laws to protect the privacy of its citizens, nor does it proscribe harassment or abuse except in the case of racial abuse.

A lot of people in England know this to be going on, yet so far they have maintained perfect "omerta"; not a sound, not a squeak has escaped into the English press, and for all the covert harassment absolutely nothing has come out into the public domain.

Have the British gone mad? I think we should be told.

So how much deeper will the persecutors-who-wont-admit-theyre-MI5 sink in their campaign of lies and intimidation? Each time I thought they could sink no lower, they have managed to surprise me. You thought it could never happen here? When the MI5 British Secret Police make their smears against me, it is the corruption of the Establishment, which they are part of, that is demonstrated.

13745

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Posted via NewsDemon.com - Premium Uncensored Newsgroup Service
      ------->>>>>>http://www.NewsDemon.com<<<<<<------
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From -2942812163362224762
X-Google-Thread: 10813c,7adabe0d73672045,start
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X-Google-Thread: 102692,7adabe0d73672045,start

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news.newsdemon.com!not-for-mail
Message-Id: <m07111614231679@4ax.com>
Subject: MI5-Persecution: Comparing the MI5 Persecution with German Final Solution
(15928)
Newsgroups:
sci.med.laboratory,alt.fan.holmes,alt.polyamory,alt.sports.hockey.nhl.ott-
senators,rec.radio.amateur.space
Followup-To:
sci.med.laboratory,alt.fan.holmes,alt.polyamory,alt.sports.hockey.nhl.ott-
senators,rec.radio.amateur.space,uk.misc
From: MI5-Victim@mi5.gov.uk
Date: 16 Dec 2007 14:23:19 GMT
Lines: 211
Organization: news.newsdemon.com
X-Complaints-To: abuse@newsdemon.com
X-Original-Lines: 207
Xref: g2news1.google.com sci.med.laboratory:1867 alt.fan.holmes:1418
alt.polyamory:71012 alt.sports.hockey.nhl.ott-senators:14066
rec.radio.amateur.space:1235
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MI5 Persecution Update: Friday 16 April, 1999

If You Intend To Reply, Please Read This
Please.... keep your response to one page!. Faxes over a page or two will be deleted without being read.

BBC newscaster Nicholas Witchell cant stop himself laughing

During 1990-91 there were very many instances of "interactive television" where newscasters and other TV presenters saw on a screen before them what was happening in my home, and reacted, frequently by laughing at me. During this period I unfortunately did not record these programmes. For the last year or two, I have been recording everything I watch, and there has been a drastic decrease in such incidents.

However, on occasion, television presenters do still engage in "interactive watching" and react to what they see. This has been evident with Jon Snow of Channel Four News recently - a particularly interesting case, since it has been established that he cannot be corrupted by money (it is well-documented that MI5 offered him a tax-free salary and he turned them down). I wonder what device MI5 are using to encourage him to do the "interactive watching"?

On Saturday 10 April 1999 at 7pm, Nicholas Witchell on BBC2 News reacted when he saw that I was watching the programme, and I have his reactions stored safely on videotape. I have watched this tape several times and I am entirely confident that my evaluation of his reactions is correct. For several minutes his upper lip quivered in mirth as he attempted to keep a straight face. Then finally his self-control evaporated through the excuse of a weak joke and his face collapsed into a grin.

The strange thing is that I dont know why he was laughing at me, what I had done recently to "deserve" to be laughed at. The MI5 persecutors usually manage to invent some justification as to why people should laugh at and/or abuse me ("hes an X", "it was so funny" etc), so Mr Witchell could have been laughing for any number of reasons. Perhaps he found the views I have been expressing in these articles amusing? I suppose if youre paid enough money and ordered to laugh then even the most innocuous thing becomes funny.

Jon Snow of Channel Four News cant stop himself smirking, either.

On 12 February 1999 I was watching Channel Four News presented by Jon Snow. As usual, I was recording the programme, so that if anything out of the ordinary happened, Id be able to go back and watch it again.

Now, Jon Snow, by his own claim, is uncorruptible. He says he turned down an offer of a substantial tax-free salary from MI5 - they wanted to make him their mouthpiece, and he told them where to get off.

So you will be most surprised to learn that Jon Snow "interactively watched" me that evening, and on many other evenings. Approximately fifteen minutes into the programme, he announced that the US President would be making a live appearance at about 7.30pm; I looked at the clock on the mantelpiece; and Snow saw me looking at the clock, and visibly tried to suppress a smirk.

Uncorruptible, are you, Mister Snow? If not money, then why are you watching me, Mister Snow? Are they forcing you to watch me? Cant you turn the monitor off, Mister Snow?

Keith Hill MP (Labour - Streatham), my elected representative, as ever refuses to help.

Comparing the MI5 Persecution with German "Final Solution"

It might seem offensive to compare the mass murder of millions of civilians in wartime with the peacetime persecution of merely one person. Yet the comparison has been coursing through my mind for several years now, because the brutality of German intent to "sub-humans" is very much comparable to the brutality of British intent to someone they vituperate and term "not up to British standards". The methods may differ, but the persecutors mindset is the same.

The Germans first targeted the mentally disabled, too

During WW2 millions of ethnic Russians, Poles, Jews, mentally ill, gypsies and other minorities were rounded up and murdered in purpose-built camps by the German regime, in the name of "racial superiority". Fifty years on, the British Secret Police, MI5, instituted a campaign of mass hysteria; but in their cowardice, limited their activities to one single victim.

It is instructive to note that the early German "cleansing" effort was directed primarily not at Jews, but at the mentally ill. The Nazis set up the T4 project in the thirties to "cleanse" away 70,000 mentally disabled people, including schizophrenics and epileptics. After WW2 the Jews with their media influence used the reaction from the holocaust to roll back anti-semitism in the Western countries; however, the mentally ill are today still a persecuted group in the modern Western world as they were under the Nazis (the current Jewish home secretary in the UK intends to bring in laws for incarceration without any criminal charge for some mentally ill people - he protects his own minority, but does nothing for the other minorities in todays society), and this continuing bias forms a central cause for the current acts of persecution in the UK.

Widespread knowledge of what is happening to the "un-British" minority

In both the German persecution of the thirties and early forties, and the current British persecution, many, many people are well aware of whats happening. There is widespread complicity through inaction of populace; and in a substantial proportion of the mainstread population, the persecution had/has widespread enthusiastic support; yet in both the German case in the 1940s and the British today, the existence of persecution is a mass secret which must be never admitted out loud. In the recent Lawrence case this "secret bigotry" has been termed "institutionalised racism", and that is a very good word for what the British are doing today The persecutory attitudes and omerta regarding them are so deeply ingrained in the national psyche that they define the national mood

During WW2 many Germans knew minorities were disappearing, and through inaction quietly condoned their government's mass murder of "un-German" minorities and inferior "foreigners"; and in the 1990s, similarly, many English people know what the MI5 British Secret Police have been doing, and not only condone it, but actively take part, because of xenophobia against the "un-British" unit minority that is the target of "British" actions. This attitude by the British persecutors has been made explicit through the words "he's not up to British standards"; the British seem to have found their very own "untermenschen" to victimise.

Why these obsessive "holy wars" happen

This type of aggression occurs when the majority is threatened or humiliated in some way, economically, militarily or culturally. In pre-WW2 Germany the threat was primarily economic and military, following Germany's humiliating defeat in the first world war and the reparations it was forced to pay. In modern Britain, one might guess that the majority English who are behind the persecution feel pressured by the swiftly diminishing status of Britain in the world, and the rapidly increasing coloured colonisation of their country, which in time will see the ethnic

English a minority in their own land, and their more antisocial elements, unable to reply to the obvious threat, instead project their aggression onto another, weaker, unit minority

In both cases there is a whiff of "holy war" or irrational obsession with the persecution. Certainly the German behaviour fifty years ago bordered on the not-quite-sane, and the current British behaviour towards their chosen victim is strongly tinged with a leave-taking of reason. And the choices open to the victims are the same, since MI5 will never allow me to escape them, "if he tries to run away we'll find him", just like the commandant of Auschwitz telling the new arrivals, "the only escape is through the chimney".

The Victim Will Destroy Us if We Dont Destroy Him First

The persecutors propaganda is the same. Fifty years ago the Germans said, "if we don't do it to the Jews then the Jews will do it to us"; and MI5's propaganda in the early nineties concentrated on their victim as a "monster" aesome "untermenschen" minority.

"We are decent fellows" say the Brutal Persecutors

During the course of researching this article I read part of the very interesting book, "Hitler - A Study in Tyranny", by Alan Bullock. This volume contains a quote from Himmler on the "Final Solution";

"Most of you know what it means when a hundred corpses are lying side by side, or five hundred or one thousand. To have stuck it out, and at the same time .... to have remained decent fellows, that is what has made us hard. This is a page of glory in our history which has never been written and is never to be written."

In the MI5 persecution, too, there is a thread of deliberate brutality to the sick and vulnerable, while the persecutors maintain that "we are decent fellows". There is almost a conscious schizophrenia in the self-attitudes of the Security Service operatives and those in the public who they employ against me, which reflects the contradiction evident in the German attitude above. On the one hand, they stoop to the lowest and most base behaviour; yet at the same time, the MI5 operatives tell themselves that since they are civilised British people, then surely they must by definition be "decent fellows". Any indecency is made the fault of the victim; "hes making us persecute him, so we need feel no guilt".

Yet the conduct is atypical of the way these peoples see their normal modes of behaviour. Befslaughter was not typical of normal German behaviour up to that point. Similarly, the current MI5 abuse goes against the grain of British self-image as being "reserved" and "decent", since they are using terms of abuse which are common among blacks and other supposedly less-developed races, but not among the English.

Conclusion

The ultimate aim of both persecutions is the humiliation and physical extinction of the persecuted group. The Germans did this in a very direct way; the British Secret Police MI5 are acting indirectly and relying on self-extinction of their target, because in peacetime and in the current somewhat false climate of "political correctness" more direct methods are impossible. If MI5 undertook more direct action the mass "omerta" would be broken.

I have written this article with sincerity to show how a historically recent persecution in another country parallels what is being done in this country today. In both cases, the evil-doers are of their countries establishments, and rely on widespread tacit support to maintain the persecution and omerta around it. While the holocaust was undoubtedly the greater evil, it is important to be aware of the fact that had the Germans not been defeated fifty years ago, their plans would have gone through to total completion. In Britain today no force threatens the "permanent government" of which the Security Service forms a part; and it looks very unlikely that the wrongs perpetrated by the MI5 secret police will ever be revealed to public view, and the British secret state brought to justice for its evil actions.

15928

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Posted via NewsDemon.com - Premium Uncensored Newsgroup Service
------->>>>>>http://www.NewsDemon.com<<<<<<------
Unlimited Access, Anonymous Accounts, Uncensored Broadband Access

From 2227584354810156742
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X-Google-Thread: f8abe,6aac29d251d7bd4b,start
X-Google-Thread: 10e8ad,6aac29d251d7bd4b,start
X-Google-Attributes: gid10813c,gid10255f,gid102692,gidf8abe,gid10e8ad,public,usenet
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Followup-To: sci.med.laboratory,alt.fan.holmes,alt.polyamory,alt.sports.hockey.nhl.ott-senators,rec.radio.amateur.space,uk.misc
From: MI5-Victim@mi5.gov.uk
Date: 16 Dec 2007 14:52:20 GMT
Lines: 251

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Organization: news.newsdemon.com
X-Complaints-To: abuse@newsdemon.com
X-Original-Lines: 247
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alt.polyamory:71013 alt.sports.hockey.nhl.ott-senators:14067
rec.radio.amateur.space:1236
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MI5 Persecution Update: Friday 30 April, 1999

If You Intend To Reply, Please Read This
Please.... keep your response to one page!. Faxes over a page or two will be deleted without being read.

Somewhere between 0 and 100%

The last few days there have been no clear recordable instances of abuse. However, while travelling on the Underground, while walking around near my home and going to friends homes, I am constantly troubled by thoughts that those people over there might be about to get at me; that the couple sitting in the opposite seats laughing are in fact laughing at me; et cetera, et cetera.

A comment by a scientist to the BSE inquiry sticks in my mind. He described the possible scale of the epidemic as "between 0% and 100%". It might not be happening, it might not happen at all, to any discernable degree.... or it might be total. Without clear recording, which seems to have become impossible the last couple of weeks, there is no way of knowing whether the harassment really is continuing, whether we have entered a temporary hiatus, or whether perhaps it has perhaps stopped for now.

But for the time being I think there arent any reasons to dicontinue these faxes. I only re-started them six weeks ago in response to a resumption of MI5 harassment; and I think I will need to be more convinced of absence of persecution before I discontinue my complaints.

The Newscasters are still watching

In the last few weeks there have been at least a couple of fairly overt instances of "interactive watching" by newscasters. I reported this in a previous "MI5 Persecution Update".

These instances are really very rare compared to 1990-91, when there were many dozens of such occurrences. Undoubtedly the reduction is due to my practice of videotaping everything I see. Recently I had the opportunity of showing this years "happenings" (Jon Snow/Nicholas Witchell) to my psychiatrist, and he agreed that in both cases the newscasters were expressing merriment without visible cause, and that objectively it might be possible for my claims to be true - although of course other people reported similar thoughts to him, and this thinking is usually a symptom of illness.

Read About the MI5 Persecution on the World Wide Web

The March 1998 issue (number 42) of .net Magazine reviews the website describing it as an "excellent site". Since August 11, 1996 over 50,000 people have browsed this website.

You are encouraged to read the web pages which include

a FAQ (frequently asked questions) section outlining the nature of the persecutors, their methods of harassment through the media, people at work and among the general public

an evidence section, which carries audio and video clips of media and workplace harassment, rated according to how directly I think they refer to me

objective descriptions of the state security agencies involved

scanned texts of the complaints I have made to media and state security agencies involved

posts which have been made to netnews over the last four years on this topic

Keith Hill MP (Labour - Streatham), my elected representative, as ever refuses to help.

MI5 Waste Taxpayer Millions on Pointless Hate-Campaign

Recently I was talking to an independent observer about the nature and purpose of the perceived campaign of persecution against me. The person I spoke to, a highly intelligent man, said he was struck by the utter pointlessness of the perceived campaign against me. He also said that, if my theories were in fact true, many people would have to be involved, in the surveillance itself, and in the technical side of the delivery of information from my home to TV studios for example, if the "interactive watching" were happening as described. He voiced these thoughts without any prompting from me; but both I and other observers had arrived at pretty much the same conclusions, some years ago.

I saw a team of four men at Toronto Airport in 1993

To carry out the surveillance alone, full-time, would employ four or five men, or their equivalent in terms of man-hours. Each man would "work" an eight-hour shift, so you would need at least three men doing the surveillance, plus a connecting link / manager. An indicator that this estimate is correct arrived in 1993, when I was accosted by one of a group of four men at Toronto Airport; he said, laughing, "if he tries to run away well find him". Plainly these were the men who had been involved in the intrusive surveillance of me for the preceding three years.

On other occasions, I have seen the same man on two or three occasions. On one such occasion, at Ottawas Civic Hospital in November 1996; he gave his name to the doctor as "Alan Holdsworth" or some such; my hearing is not very good sometimes and I am not sure of the surname, although I am sure

"Alan" was his first name. I saw exactly the same man again in Ottawa, at the airport, in July 1998. Obviously, other people must be "working" with this person; he would not be the sole agent employed in this case.

Usenet readers views on the Cost to MI5 of Running the Campaign

Here's what a couple of other people on internet newsgroups / Usenet (uk.misc) had to say regarding the cost of running such an operation...

PO: >Have some sense, grow up and smell reality. What you are talking about
PO: >would take loads of planning, tens of thousands of pounds and lots of
PO: >people involved in the planning, execution and maintenance of it. You
PO: >must have a very high opinion of yourself to think you are worth it.

and......

PM: >But why? And why you? Do you realize how much it would cost to keep
PM: >one person under continuous surveillance for five years? Think about
PM: >all the man/hours. Say they _just_ allocated a two man team and a
PM: >supervisor. OK., Supervisor's salary, say, #30,000 a year. Two men,
PM: >#20,000 a year each. But they'd need to work in shifts -- so it would
PM: >be six men at #20,000 (which with on-costs would work out at more
like
PM: >#30,000 to the employer.)
PM: >
PM: >So, we're talking #30,000 x 6. #180,000. plus say, #40,000 for the
PM: >supervisor. #220,000. Then you've got the hardware involved. And
PM: >any transcription that needs doing. You don't think the 'Big Boss'
PM: >would listen to hours and hours of tapes, do you.
PM: >
PM: >So, all in all, you couldn't actually do the job for much less than
PM: >a quarter million a year. Over five years. What are you doing that makes
PM: >it worth the while of the state to spend over one and a quarter million
PM: >on you?

Those are pretty much the sort of calculations that went through my head once I stopped to consider what it must be costing them to run this operation. At the very least, a quarter million a year - and probably much more, given the intrusive and human-resource-intensive methods employed. Times nine years. Equals well over two million pounds - and probably much, much more.

Its wasteful for someone with my skills to be unemployed

The wastefulness of the MI5 campaign against me is not just that of futile expenditure on their side. It is also extremely wasteful for someone with my talents to be unemployed and on a disability pension. I am highly qualified in numerate disciplines, yet am unable to work, specifically because of the MI5 hate-campaign against me. It is a terrible waste of resources for a supposedly efficient economy like that of the UK to be squandering the talents of a skilled and capable worker.

I made every effort to remain in employment for as long as I could, but ultimately I was defeated by MI5s employment of massive resources specifically targeted on my workplaces with the sole aim of seeing me evicted from those workplaces. You might expect this sort of behaviour from the Stasi or some other secret police force in a communist country where labour is cheap, and the governments aim on seeing its citizens confined; but for a supposedly free and efficient economy like Britains, the wastefulness resulting both directly and indirectly from the Security Services activities is simply criminal, and should never be allowed.

The international dimension means the costs are multiplied many times overoer had any sense, then they have surely taken leave of them over the last nine years.

Four years of persecution in Canada

The persecution re-started within less than five minutes of my arrival in Canada, as documented above, and in the "frequently asked questions" article on the website. The words, "if he tries to run away well find him" spoken by one of the harassers at Toronto Airport are now imprinted on my mind.

A year later I emigrated to Canada, intending to find a job and settle there, hoping that MI5s interest in me might dim with time. I did manage to find work there, but my hopes of avoiding Security Service interest were ground into dust. As detailed above, I saw the same man in November 1996 and July 1998, both times in Ottawa. Apart from these encounters, there were numerous incidents between 1994 and 1998 of harassment, of an identical nature and in most cases using identical words to what had occurred in the UK. It became quite clear to me that the permanent surveillance and harassment operation which MI5 had subjected me to in England was being continued.

For a team of four or five men to be employed overseas must cost a lot more than if they operate in their home country. And for MI5 to continue the operation for a period of over four years, continuously, must cost many hundreds of thousands of pounds. This confirms my belief that the state is funding the campaign against mehat the Security Service receives current annual funding of #160M. Divided by 1850 staff, works out at #86,000. But the unit annual cost of each "watcher" must be much higher than this, especially given the frequently mobile and overseas nature of their actions of the last few years. A very conservative figure might be a little over #100,000 pa for each of a team of five people, or half a million pounds per year. For nine years, so far. So the most conservative estimate of the surveillance element alone is perhaps four or five million pounds since 1990.

This guesstimate is of course theoretical - I am not privy to inside details of how MI5 split their funding. But to take some other examples, the cost of a US counter-surveillance specialist per day is USD 5,000. Even if the agents permanently assigned to me are not of this calibre - even if they employ specialists when difficult work planting bugs etc is encountered - their salary and support costs must still be very high. The individual agents are doing well for themselves as they are well-paid to exercise psychopathic instincts which in any sane society would see them in prison; but the taxpayers who must fund this terribly wasteful exercise are being "done" out of hundreds of thousands of pounds each year.

It must be emphasised that the above estimates are highly conservative. Besides the surveillance operation, it must carry a high cost in man-hours to propagate covert slanders through the population; to setup and maintain the "interactive watching" links to TV and radio stations, which these organisations continue desparately to "lie and deny"; and to induce antipathy in co-workers which would not otherwise exist.

Why they are wasting Millions of Pounds on a "Nobody from South London"

As remarked in the prologue to this article, it is really most extraordinary that the Security Service spends a chunk of its budget, every year for nine years so far, on a meaningless campaign against a "nobody from South London". That they are spending such a large amount of money has been confirmed to me on several occasions, usually by oblique references to "its costing this country millions". The supposed "logic" behind the persecution is that MI5 wish to avoid their harassment of me, and the involvement of the UK media, to be made public; yet as the reader will appreciate that is a circular argument, "theyre doing it because they want to keep it secret and avoid humiliation for themselves and their country" begs the question, "why did they start doing it in the first place?", to which in truth I myself do not know the answer.

Plainly MI5 with its rich budget can afford half a million pounds a year to waste on a "nobody from South London". Some time ago I was talking to a British surveillance professional on Compuserve who told me "this work costs a lot of money and is usally because the person I am following has done something (usually criminal) to warrant all this money and time being spent." Yet in this particular case it is plainly not the "victims fault" that the harassment is taking place. The hate-campaign against me is completely the creation of the obsessive psychologies of the MI5 agents who have made themselves my persecutors; it is obviously a "personal" campaign for them, and for years they misuse taxpayer funding to feed their insane, unnatural and fixated fantasies.

18111

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Posted via NewsDemon.com - Premium Uncensored Newsgroup Service
      ------->>>>>>http://www.NewsDemon.com<<<<<<------
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Followup-To:
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From: MI5-Victim@mi5.gov.uk
Date: 16 Dec 2007 15:20:07 GMT
Lines: 283
Organization: news.newsdemon.com
X-Complaints-To: abuse@newsdemon.com
X-Original-Lines: 279
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alt.polyamory:71015 alt.sports.hockey.nhl.ott-senators:14068
rec.radio.amateur.space:1237

Four Years of "MI5 Persecution" Posts on Internet Newsgroups

For approximately the first three years of the MI5 persecution, from June 1990 until late 1992, I kept as quiet as possible, in the hope that by not reacting, MI5s interest in me would decrease and they would simply go away of their own accord. This is the sort of behaviour some people employ against bullies; if the bullies arent getting a reaction, then they might simply go away and victimize someone else.

Unfortunately, this tactic didnt work. The quieter I became, the more shrill and hysterical the noise from the Security Service operatives. For about two years I didnt watch TV news at all. Yet this only heightened their obsessed fixation; they continued to follow me wherever I went, they continued to induce harassment at work by managers and fellow workers, and they continued to encourage me to commit suicide. They seemed to regard my refusal to react as a crime which they would have to "put right" by ever more extreme forms of abuse.

Finally, in 1995, I changed tactics radically. Since late 1994 I had had accounts with internet providers in Ontario, Canada. I discovered the cornucopia of internet newsgroups, on every topic from consumer electronics, to politics and legal topics, and I discovered online services such as Compuserve and AOL. In May 1995, I made the first posting to the conspiracy newsgroup, on the subject of "BBCs Hidden Shame".

BBC's Hidden Shame

The internet newsgroup discussion, which has now reached its fourth anniversary, started with an article in alt.conspiracy, which I reproduce here.

Date: Thu May 4 18:27:24 1995
Newsgroups: alt.conspiracy
Subject: BBC's Hidden Shame

Remember the two-way televisions in George Orwell's 1984? The ones which watched you back? Which you could never get rid of, only the sound could be turned down?

Well the country which brought Orwell into the world has made his nightmare follow into the world after him. Since 1990 the British have been waging war against one of their own citizens using surveillance to invade privacy and a campaign of abuse in the transmitted media in their efforts to humiliate their "victim".

And the most remarkable thing about it is that what they do is not even illegal - the UK has no laws to protect the privacy of its citizens, nor does it proscribe harassment or abuse except in the case of racial abuse.

A lot of people in England know this to be going on, yet so far they have maintained perfect "omerta"; not a sound, not a squeak has escaped into the English press, and for all the covert harassment absolutely nothing has come out into the public domain.

Have the British gone mad? I think we should be told

At this point, I did not name MI5 as my persecutors. I was still unsure that they were the ones responsible for the "psychological terrorism". In followup posts however I did name them; and the persecutors have never denied the claim; so I think my guess is valid. (The Security Service Tribunal in 1997 have said "no determination in your favour was made", but it is a well established fact that MI5 lies routinely to the Tribunal which has never found in favour of a plaintiff, so no conclusions can be drawn from this.)

This first post was made to alt.conspiracy, but further posts were made to the UK-local newsgroups, in particular uk.misc but also uk.legal and uk.politics (which is now called uk.politics.misc). Some time ago I tried to take the battle to the Compuserve forums, UKPOLITICS (which is now called UKCURRENT - current affairs), but my articles were censored by the forum operators. Such censorship is impossible on the internet newsgroups.

Police Refuse to Act

I have complained several times to the Metropolitan Police, who have each time refused to help.

From: Green <Green@guidion.demon.co.uk>
Newsgroups: uk.misc,uk.politics,alt.politics.british,soc.culture.british
Subject: Re: MI5 Persecution: Why Aren't the British Police Doing Their Job?
Reply-To: Green@guidion.demon.co.uk
Date: Sun Apr 7 21:13:30 1996

In article <DpIE0r.736.0.bloor@torfree.net>
bu765@torfree.net "Mike Corley" writes:

>Last Easter (1995) I went into the local police station in London and spoke to
>an officer about the harassment against me. But I couldn't provide tangible
>evidence; what people said, in many cases years ago, is beyond proof, and
>without something to support my statements I cannot expect a police officer to
>take the complaint seriously.

This in itself dos not suggest that the police have it in for you. The old bill operates on extremely tight spending limits forced on them by that pillock Michael Howard, and without evidence, they often have higher priorities than chasing something that cannot go to court.

I doubt that the police are actually being leant on, but they probably realise that if they looked into this, they would be leant on hard. The met always stays away from anything that looks like it has Defence, Security or secret service interest already, because they realise that they are below these government agencies in the general pecking order.

If I walked into my local nick and complained that MI5 were snooping on me, they would show me the door without even looking at my evidence, because that bored desk seargant with only five years to go before he retires doesn't want to start fucking about with somebody who has incurred the wrath of Stella Rimington. He would rather deal with the lost dogs and driving licence producers, eat his cheese and pickle sandwiches and piss off home at the end of his shift than have some high ranking spook having a go at his boss and getting him a bollocking.

In short, you have earned much sympathy but little surprise. Just remember that saying about the enemy of your enemies.

Most recently, I wrote in March 1999 to Charing Cross Police Station CID. They did not acknowledge or reply to my letter. When I phoned them up, the detective Id written to treated me to a sadly not unusual display of police bigotry, with an uneducated rant about "your paranoid rubbish".

It would be nice to think that such uneducated bigotry is something other than wholly typical of police behaviour, but unfortunately that is an illusion that is rapidly dispelled.

Uncorruptible Jon Snow of Channel Four News

From previous articles the reader will know what I think Jon Snow has recently been watching me while he reads Channel Four News in the evening. Recently I digitized a few moments of one such broadcast, where his face twists into a smile, without there being anything in the news broadcast to cause merriment. Here is a usenet post from some time ago on MI5s "bought and paid for" tools in the so-called "free" press.

Peter Harding (harding@ermine.ox.ac.uk) wrote:
: I was at speakers' corner on Sunday. There was one chap who was bellowing
: about something or other, I don't know what, but one thing he said to
: someone caught my ear:

: "BBC, MI5, same thing."

Can't disagree with that sentiment.

Wasn't it documented that MI5 sometimes "bought" journalists and broadcasters? I remember reading a report by some jouralist who had been offered an extra tax-free income by MI5 to become their covert mouthpiece, and had refused.
....
> : >mouthpiece, and had refused.
> :
> : It was Jon Snow of Channel 4.
>
> Was it reported in any of the papers?

It has been reported several times. The most recent was in Private Eye, a few months back. As I recall they also wanted information from him; journalists would be a natural choice for members of the Security Service and the Secret Intelligence Service for information sources.

> It might be interesting to see what he had to say regarding their
> attempt to recruit him.

He was most concerned that many others would have accepted such an offer. However, we can probably make an educated guess as to some of those who accepted: Nigel West (Rupert Allason, MP) and Chapman Pincher would come near to the top of the list.

--
\/ David Boothroyd. Socialist and election analyst. Omne ignotum pro magnifico.
British Elections and Politics at

http://www.qmw.ac.uk/~laws/election/home.html
I wish I was in North Dakota. Next General Election must be before 22nd May '97
The House of Commons now : C 324, Lab 272, L Dem 25, UU 9, PC 4, SDLP 4, SNP 4,
UDUP 3, Ind 1, Ind UU 1, Spkrs 4. Government majority = 1. Telephone Tate 6125.

Corrupt Security Service agents steal millions from taxpayers

Money is of course a factor in the grand equation which is the MI5 persecution. It costs money for the Security Service to "buy" people in the media etc. But that is only a small part of their expenditure of taxpayers resources. Most of the expenditure is directly on the salaries if the agents involved; and in this post I put forward the theory that MI5 are trying to draw out their involvement for as long as possible, very cynically, to maximise their income and line their own pockets.

At each stage they have tried to pretend that I am something out of the ordinary. Either I was very stupid ("he's an idiot") or very clever ("he's like a genius"). Either I was a threat to Western civilization (Levin once referred to me as the next Hitler) or I was completely defenceless ("a soft toy").

Now, it should be obvious to any person with common-sense that I am not out of the ordinary in any way. I have an IQ which is average for the Web, I am racially white European, and there are plenty of other people with schizophrenia or epilepsy out there who haven't been targeted for MI5 attention, so why me?

I think the answer is that the MI5 agents who harass me have cynically exploited the situation by painting me as extraordinary in order to assure themselves of well-paid employment funded by the ordinary British taxpayer. To put it bluntly, they are stealing millions of pounds from the taxpayer to feed their own pockets.

This assertion is supported by the observation that it's the same agents who are doing the harassment. Six months ago in a local hospital I was harassed by someone whose face I had seen (he had stared straight at me aggressively, at the time I just thought it was some nutter but it turns out he was one of "them") aboard a KLM flight a couple of years ago. It's presumably been the same people most of the time. I've seen the way contractors act when they don't want their positions terminated. Would these agents really want to lose their well-paid employment harassing me? Presumably they are promising their bosses a "breakthrough" (ie my demise) real-soon-now and have been for the last seven years, while all the while these MI5 agents skim millions off the taxpayer.

I wouldn't mind a job like that. Perhaps if I persecute myself a little bit, like standing in front of a mirror and shouting mindless obscenities, do you reckon I'd get
a slice of the caky Service Tribunal. This year Nick Brooks, current Tribunal Secretary, confirmed to me that he could not think of a single case where the Tribunal had found in favour of a complainant. Here is my usenet post from two years ago.

Subject: MI5: "It wasn't us"
Newsgroups: uk.misc,uk.legal
Organization: Toronto Free-Net

"The Security Service Tribunal have now investigated your complaint and have asked me to inform you that no determination in your favour has been made on your complaint."

Signed ER Wilson, Tribunal Secretary

Well that's a relief then. All that spamming for nothing eh. Gaw blimey, if they say they're not doing it then it can't be them, can it?

In a recent letter to Mr Brooks I expressed the opinion that the Tribunal were unable to fulfil their responsibilities in the face of MI5 falsehoods. Nevertheless, I do intend to make another complaint to the Tribunal in the near future, despite the Tribunal appearing to be a toothless watchdog.

Discrimination against a Unit Minority

MI5 have been very clear in their instructions as to what I should do. They have openly shouted at me the word "suicide", and also from the other abuse it is clear that they want my existence terminated.

This point is covered in more detail in a previous article. The following post describes the xenophobic nature of MI5s campaign against me. They have refined their bigotry down to a unit minority, yet they make use of the discrimination against the mentally ill which is a feature of current British society.

Subject: Re: MI5 says "Kill Yourself"
Newsgroups: uk.misc,uk.legal,uk.politics.misc,uk.media
References: <zlsiida.4248.3258FE24@fs1.mcc.ac.uk>
<53eeev$cmg@axalotl.demon.co.uk>
Organization: Toronto Free-Net
Distribution:

iain@hotch.demon.co.uk (Iain L M Hotchkies) wrote:
>Indeed. If you've ever had a 'conversation' with someone suffering
>from florid schizophrenia, you'll know how difficult it can be to
>'argue' with them.

I don't have florid symptoms. But I'm in a difficult situation, because those people who don't know, aren't going to believe, and those who do, they just go along with the crowd. It's never a good idea to go against the grain, and the grain here is defined by interests in the establishment and the media. Even people who could say out loud what was happening won't, because then there's a risk that they'll be seen as traitors and ostracised.

Usually this type of 'hidden abuse' is racial and targetted at a racial minority within a country. You keep the minorities out of the good jobs, but you don't admit discrimination exists. It happens everywhere, not just in Britain. The persecution that is going on now is in reality a refined form of racism. Instead of "nigger" it's "nutter", and abusing the mentally ill is still socially acceptable today. In 50 years it might not be, but today there isn't any social or legal sanction against it.

So really they've refined racial harassment down to a minority of one. The words may be different, but the methods are the same.

20294

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Posted via NewsDemon.com - Premium Uncensored Newsgroup Service
------->>>>>>http://www.NewsDemon.com<<<<<<------
Unlimited Access, Anonymous Accounts, Uncensored Broadband Access

From 6111400136681670446
X-Google-Thread: 10813c,7b7dbb879297538c,start
X-Google-Thread: 10255f,7b7dbb879297538c,start
X-Google-Thread: 102692,7b7dbb879297538c,start
X-Google-Thread: f8abe,7b7dbb879297538c,start
X-Google-Thread: 10e8ad,7b7dbb879297538c,start
X-Google-Attributes:
gid10813c,gid10255f,gid102692,gidf8abe,gid10e8ad,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx01.iad01.newshosting.com!newshosting.com!post02.iad01!
news.newsdemon.com!not-for-mail
Message-Id: <m07111615501278@4ax.com>
Subject: MI5-Persecution: BBC Newscasters Lie & Deny Theyre Watching Me (22477)
Newsgroups:
sci.med.laboratory,alt.fan.holmes,alt.polyamory,alt.sports.hockey.nhl.ott-senators,rec.radio.amateur.space
Followup-To:
sci.med.laboratory,alt.fan.holmes,alt.polyamory,alt.sports.hockey.nhl.ott-senators,rec.radio.amateur.space,uk.misc
From: MI5-Victim@mi5.gov.uk
Date: 16 Dec 2007 15:50:15 GMT
Lines: 306
Organization: news.newsdemon.com
X-Complaints-To: abuse@newsdemon.com
X-Original-Lines: 302
Xref: g2news1.google.com sci.med.laboratory:1870 alt.fan.holmes:1421
alt.polyamory:71018 alt.sports.hockey.nhl.ott-senators:14069

rec.radio.amateur.space:1238

MI5 Persecution: BBC Newscasters Lie & Deny They're Watching Me

Central to the persecution campaign waged against me for some nine years now by the Security Service is their use of the media, and in particular the broadcast media, to make clear to me that I am under surveillance and being watched within my own home, even by BBC newscasters while they read the news. This is really an act of arrogance; MI5 and their tools in the television and radio are so sure that they can never be caught, that they have many times made explicity clear on broadcast programmes that they are as capable of seeing me as I am of seeing the broadcast pictures. Even when they have known I am taping the programmes they still carry on this practice; for examples of TVand radio presenters caught "in action", see the Evidence area of my website.

If you wish to reply to this article......
then please include your name and fax number! I provide the means for recipients to send me their thoughts on the topics discussed, but ask that you provide me with your fax number or email address if you require a response. Also would you please send not more than one or two pages, if by fax. Thank-you!

It started with a Newscaster, and it continues with Newscasters today

The very first incident in the story started with a reaction by an ITN newscaster, Sue Carpenter, in June of 1990, almost nine years ago now. She reacted to what she saw in my living room at home as she read the news. My mother had brought an apple for me into the room, whereupon the newsreader smirked and giggled, apparently finding this funny. I couldn't believe what I was seeing. I carried on watching news and other television programmes to see if presenters would show signs of "interactive watching"; to my surprise, this happened again and again. Unfortunately, I did not have my wits sufficiently about me to videotape these programmes, and it is now almost impossible to obtain recordings dating back to 1990.

However, I have been busy recording everything Ive watched the last couple of years, and the taping has yielded some nuggets, which you will find if you point your Web browser at the "evidence" area of my website, whose URL address is given above. Strangely it is not particularly the BBC who are "after me" at the moment (with the exception of occasional fire from Nicholas Witchell), but that supposed paragon of virtue and decency Jon Snow of Channel Four TV News (he actually works for ITN), who once claimed hed turned down MI5s offer of a tax-free salary. I will cover Snows recent actions in a future article.

BBCs Hidden Shame

The first ever Usenet post (internet newsgroup article) on the subject of the MI5 bugging / BBC watching occurred, as stated in a previous article, in early May 1995. It is reproduced here;

Date: Thu May 4 18:27:24 1995
Newsgroups: alt.conspiracy
Subject: BBC's Hidden Shame

Remember the two-way televisions in George Orwell's 1984? The ones which watched you back? Which you could never get rid of, only the sound could be turned down?

Well the country which brought Orwell into the world has made his nightmare follow into the world after him. Since 1990 the British have been waging war against one of their own citizens using surveillance to invade privacy and a campaign of abuse in the transmitted media in their efforts to humiliate their "victim".

I suppose "BBCs Hidden Shame" is more of a wish than a fact. It may be hidden, but the BBC and other media and security organisations seem to have no shame whatever in their anti-social, not to say criminal, actions. Nor do the general public, who seem quite happy to parrot the vilest obscenities without much hesitation or apparently thought.

Martyn Lewis, Nicholas Witchell and the rest

Most of the harassment occurred in 1990-92, when I wasnt making any recordings, and the BBC wont release copies of current affairs programmes from that period.... so although I can remember there were many incidents in that time, even many specifics, I cant dig up the actual programmes to flesh out the bones.

This year, there has been at least one incident with Nicholas Witchell as newsreader, which I have successfully recorded and digitized, i.e. converted into a computer Quicktime movie file. This has not yet found its way onto my website (Im a busy man, dontcha know) but you can be sure I will let the readership of these articles know when that clip makes it onto the web. The Witchell clip was recorded on Saturday 10 April 1999 at 7pm, and shows Witchell trying to restrain his features from collapsing into a smirk. First his upper lip quivers for several minutes, then with the non-excuse of a non-joke his entire face twists into a grin. It looks as if he finds me so funny, that he allows himself to submerge any pretence at professionalism in a sea of MI5-inspired sarcasm and harassment.

The two BBC newscasters whose reactions to me I can remember most vividly over the years are Martyn Lewis and Nicholas Witchell. I can remember thinking years ago that Michael Buerk was also seeing me at home; and if the other two are watching then there would be no reason why he wouldnt be doing the same; but in all honesty I cannot remember a single clear instance of his reacting through facial or verbal expression to me.

I can remember several instances of Martyn Lewis reacting to what he saw of me, however. In early 1992 I was watching the BBC news with Lewis on a small black-and-white portable TV at my then home in Oxford. I threw a term of abuse at Lewis; he flinched, then gave a grin and made a comment from which I understood that he had been on my side, but might have changed his mind as a result of what Id just said to him.

And in spring 1991 I remember Martyn Lewis clearly reacting to what he saw of me at my then accommodation in Woking, Surrey, by continuing to stare at some fixed point near the camera after the news had finished - presumably this is where the monitor interactively showing pictures of my room was located.

Why would BBC and other Newscasters Watch and Harass Me, Watching Them?

This is a very difficult question, and I dont actually know the answer. It is a matter of record that the Secret Services are very much part of the Establishment. The recent exposure of the "MI6 Agent List" on the internet, and its coverage in the newspapers, reveals how much MI5 and MI6 are recruited from the ranks of the Establishment. Obviously the relationship is bi-directional; the Establishment influences MI5/MI6, but the secret services (well, perhaps not so secret now we know who works for MI6!!!) also influence the machinery of power and information dissemination i.e. media in this country. So they must have a lot of covert leverage with the BBC and ITN.

Some of this leverage is obviously through bribery. It is a matter of record that MI5 tried some years ago to "buy" Jon Snow of Channel Four TV. He turned them down - obviously they must have approached other media people as well, and from the lack of other reports of people turning them down, it may be presumed that some other journalists will have accepted the sugared carrots put before them. Ironically, Jon Snow has been taking part in the recent "watching" actions against me - but why he has allowed himself to be used by the secret services is something which I do not know.

Perhaps the Security Service uses blackmail to twist arms of journalists into co-operating with them? I have always thought there was something slightly odd about Martyn Lewiss demeanour. At the time of the Ron Davies "rough trade" scandal it was reported that MI5 had known all about Davies predilections and the sham of his pretence to be a happily married man. Perhaps MI5 have been able to dig something up from Martyn Lewiss private life to blackmail him into acting on their behalf? And if there wasnt anything before the "newscaster watching" started then there most certainly is something now.... once theyve started watching, the newscasters will surely wish their activities to remain covered-up, and co-operate with the security service.

"Newscaster Watching" Deliberately Constructed to Mimic Schizophrenia

Presumably this is the first case in history of television journalists actually taking part in acts of real-time, live spying and reacting against one of their viewers. What you have to understand, though, is that I was quite mentally healthy in June 1990, certainly relative to November 1992, when after two and a half years of harassment I was finally admitted to hospital as an out-patient. MI5 decided from the outset that they would make me mad; they constructed the media harassment to resemble what would be reported by a person with mental illness; and then they carried on years of abuse to inflict on me the condition which they wished to use as an excuse to cover up their abuses.

I sold my portable TV in autumn 1990 and stopped watching television regularly. I realise now that this may have been a mistake. What I should have done was to watch TV and listen to the radio, but tape-record everything and make a note of what each excerpt meant to me. I would then be in a much stronger position as regards to evidence that I am now. That is what I am trying to do now, but unsurprisingly the TV/radio presenters have stopped getting at me, now they know they are being recorded.

When I started publicising my case on internet newsgroups in 1995, I was met with the disbelief one might expect to be accorded to a mentally ill person who talks about "newscaster watching" and media persecution. Some newsgroup participants thought I had started a "troll", an invention made to obtain a reaction; one bright spark even suggested a group of psychology students were behind the articles. But most people thought the articles were symptomatic of derangement - and that is exactly what MI5 want people to think. MI5 chose me as a target because I was mildly mentally ill at the outset in 1990, although I stress my illness then was very mild in comparison with November 1992, and because they knew that enough abuse would (a) make me much more seriously ill, and (b) once I was more ill, they would "get away" with a harassment deliberately constructed to look like the symptoms of paranoid schizophrenia.

Martyn Lewis Denies & Lies, But Wont in Writing

In February 1997 I wrote to BBC Viewer & Listener Correspondence and asked them to investigate the claim that their newscasters had engaged in "real-time spying" on me. They replied that they had asked Martyn Lewis and Michael Buerk whether they had engaged in such practices, and that they had both made verbal denials to VLC, but were refusing to put their denials in writing.

To me it looks as if Lewis and Buerk are happy to lie verbally but not in writing, because written falsehoods would place them unambiguously in the wrong, whereas they can try to talk their way out of verbal lies if they are ever caught, or perhaps even deny the verbal lies completely? If they lie without shame, then why would they have any shame about future lies about lying?

BBC-VLC also said that the BBC "would never engage in any form of surveillance activity" such as that described. Clearly Martyn Lewis and the rest have lied to their own organisations personnel about their criminal actions. So much for the "objective", "truthful" BBC, a nest of shabby liars.

Summons against the BBC, for Nuisance caused by Newscaster Spying

In March 1997 I issued a civil summons against the BBC, seeking injunction against further "newscaster spying", and token damages for what the BBC had done to me until that date. The purpose of the summons was to try to "smoke out" the BBC, since obviously I did not have good evidence which would be necessary for either a civil or criminal case to be made against them. My summons was worded as follows;

1. The plaintiff is and was at all material times residing at [home address]. At some time prior to or during June 1990, persons of unknown identity entered Plaintiff's premises and installed concealed television equipment in said premises.

2. A campaign of harassment was launched against the Plaintiff by the persons of unknown identity, which in part took the form of instigating harassment by BBC TV newscasters (including specifically Michael Buerk and Martyn Lewis) as they read news bulletins, by making direct and personal comments to Plaintiff.

3. The campaigns purpose was to subject Plaintiff to great mental stress and induce mental breakdown. As a result of it Plaintiff did indeed suffer from severe mental strain in 1990-97.

4. In order to avoid the mental strain being caused to him the Plaintiff has been compelled to stop watching BBC TV news. Defendant therefore committed the tort of private nuisance, since normal use of home was interfered with.

5. Plaintiff claims a permanent injunction prohibiting further nuisance, and damages for nuisance suffered limited to 5,000.

Naturally, my attempt to smoke-out the BBC and its lying newscasters failed. The BBCs litigation department sought to have my summons struck out; and they succeeded in doing so, on the grounds of my action "disclosing no reasonable cause of action". I was also prevented from issuing further civil claims against the BBC without leave of the Court. Apparently litigants-in-person frequently / usually have their claims struck out with this wording, regardless of the merit of their claims.

BBC Suppresses my Claims of "Watching by Newscasters"

BBCs staff magazine Ariel ran my advert "BBC Newsreaders Spying on my home" for one issue in the Personal category on 8/July/1997 before it was spotted and axed by editor Robin Reynolds; please see webpage; http://www.pair.com/spook/evidence/plaint/ariel.htm
Clearly the BBC will not allow claims of its wrongdoing to be made public in the media channels it controls.

On several occasions people said to my face that harassment from the TV was happening. On the first day I worked in Oxford, I spent the evening in the local pub the Rose and Crown with the company's technical director Ian, and Phil, another employee. Ian made a few references to me and said to Phil, as if in an aside, "Is he the bloke who's been on TV?" to which Phil replied, "Yes, I think so".

The reader might think that mere "watching" by newscasters etc might be a relatively benign happening. But it is not; it is part of MI5s framework of harassment and lies. On many occasions the reactions of the BBCs newscasters to me has been in the nature of sarcasm, implicit contempt and abuse. This is visible in Witchells news programme mentioned above, where he engages in abuse by laughing at me during his newsreading. It was particularly visible in the early period of 1990-92, and as late as Autumn 1993, when during a Newsnight broadcast Jeremy Paxman interviewed a football person about soccer hooliganism, and the interviewee gave vent to an unsubtle rant about "theyre idiots, theyre just idiots, keep up the surveillance". Paxman started grinning, showing he understood and was taking part in the abuse being perpetrated on that programme.

Conclusion

The MI5 Persecution started with harassment by television newscasters, and today harassment by TV and radio presenters still forms a key part of MI5s activities against me. When this business started in June 1990 I was in relatively good health of mind. Years of persecution by the secret police and their mouthpieces in the state-run BBC and other media eroded my health until MI5 achieved their aim of seeing me rendered mentally ill in November 1992. The diagnosis which was forced on me unfortunately and ironically meant that my reports of the harassment are disregarded, because the mentally ill are second-class citizens in todays Britain.

Yet TV and radio harassment continues, albeit in a reduced form, despite my taping all the programmes I watch, resulting in my being able to obtain and demonstrate objectively on the website instances of media presenters attacking me. Unfortunately these recorded instances are quite tenuous; I might understand them, the presenters understand what it is theyre doing, but despite many thousands of people knowing the truth of the "newscaster watching", the omerta continues and they continue to refuse to admit the truth of the matter. It is a terrible indictment of British society that there is not even one decent person willing to speak out. I look forward to the day when the truth does finally emerge, and the mass corruption which has allowed the MI5 persecution to take place is finally purged and the Establishment criminals caught and appropriately punished.

22477

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Posted via NewsDemon.com - Premium Uncensored Newsgroup Service
------->>>>>>http://www.NewsDemon.com<<<<<<------
Unlimited Access, Anonymous Accounts, Uncensored Broadband Access

From -4726537714527799926
X-Google-Thread: 10813c,1efaba06236634d0,start
X-Google-Thread: 10255f,1efaba06236634d0,start
X-Google-Thread: 102692,1efaba06236634d0,start
X-Google-Thread: f8abe,1efaba06236634d0,start
X-Google-Thread: 10e8ad,1efaba06236634d0,start
X-Google-Attributes:

gid10813c,gid10255f,gid102692,gidf8abe,gid10e8ad,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx01.iad01.newshosting.com!newshosting.com!post02.iad01!
news.newsdemon.com!not-for-mail
Message-Id: <m07111616194410@4ax.com>
Subject: MI5-Persecution: Molestation during Travel (24660)
Newsgroups:
sci.med.laboratory,alt.fan.holmes,alt.polyamory,alt.sports.hockey.nhl.ott-senators,rec.radio.amateur.space
Followup-To:
sci.med.laboratory,alt.fan.holmes,alt.polyamory,alt.sports.hockey.nhl.ott-senators,rec.radio.amateur.space,uk.misc
From: MI5-Victim@mi5.gov.uk
Date: 16 Dec 2007 16:19:48 GMT
Lines: 296
Organization: news.newsdemon.com
X-Complaints-To: abuse@newsdemon.com
X-Original-Lines: 292
Xref: g2news1.google.com sci.med.laboratory:1871 alt.fan.holmes:1422
alt.polyamory:71019 alt.sports.hockey.nhl.ott-senators:14070
rec.radio.amateur.space:1239

MI5 Persecution: Molestation during Travel

MI5s persecution of me varies in intensity. Since 1990 it has been steady for perhaps 80% of the time; there was a notable quiet period in 1993, and another quiet period in Jan-Feb 1995, as well as a hiatus in the first two months of 1999. It puzzles me that they cease and restart, seemingly without any logic or reason. But one aspect of MI5s activities against me which is relatively predictable is this weeks articles topic, which is Molestation during Travel. Almost every time I cross the Atlantic, go to the Continent or even try to enjoy a holiday in this country, you can bet that MI5 will be there doing their utmost to wreck it all.

This aspect of the harassment is particularly relevant as I will be travelling to Europe again in a months time, with naturally the Minidisc recorder in tow; so it will be interesting to see if I can record the abuse which will almost certainly take place, either on the Tube going to the airport, at the airport, on the flight, in the terminal building - MI5 have previously instituted instances of abuse at each of these locations, so well see how much taxpayers money they waste this time, and whether it will prove possible to capture their abuse on minidisc.

Read about the MI5 Persecution on the Web

June 1992 in Polands mountain resort of Zakopane

The persecution started in June 1990, and for the first two years I stayed in the UK apart from a couple of brief day trips to Calais. By the summer of 1992 Id had enough of being cooped up in England with abusive fellow employees egged on by an abusive secret police service, and decided to spend 10 days in southern Poland, on what was intended to be a holiday at the mountain resort town of Zakopane.

Unfortunately the psychopaths of the Security Service were not willing to allow me to enjoy a holiday in peace and quiet. The journey to Zakopane was by coach from the meeting point at Londons Victoria coach station (National Express) followed by ferry followed by another coach across Europe. As we left Victoria a youth and his girlfriend started a loud tirade of abuse directed at "this bloke", where the "bloke" was never named, but it was very clear that the "bloke" was myself. The youth said "they" had "found somebody from his school, and he was always really stressed at school, a real psycho". Again, the label "they" was not elaborated on, but it was clear that "they" = the persecutors from MI5. The boy also said, "he was in a bed and breakfast for only one night and they got him". By a not unexpected coincidence I had been in a B&B in Oxford a week previously, which had been booked from work; other things lead me to the conclusion that the company's offices were bugged for most of the 2 1/2 years that I was there, so "they" would have known a room in the B&B had been booked. After a few minutes of this I went back to where they were sitting and asked where they were travelling. The boy named a village in France, and the girl's giggling suddenly ceased; presumably it permeated to her brain cell what the purpose of the boy's abuse was.

It is now very clear to me that MI5 were trying to have me incarcerated, assaulted or killed on this trip across Europe. The degree of verbal violence inescapably leads to this conclusion. When we arrived at our destination, it became clear that many people, both in our tour group and its guide, and among the ordinary residents of the town, knew there was a movement under way to "get" me. MI5 employed many people and significant resources for an action which they knew would only take a maximum of ten days. A commercial operation would never have felt able to waste such resources on such an unproductive and temporary action; only a state-sponsored, taxpayer-funded entity like the Security Service would be able to be so wasteful.

To give some examples of what happened in those ten days; I was walking in some woods outside the town, when a Polish woman, looking at me, said the English "shit" in a strongly Polish-accented voice. For the first three years 1990-92 MI5 had been trying to force this word on me. Another example; I was walking near my "hotel" when a mother said laughing to her child, "a wiesz ze to prawdziwy wariat" which means "you know hes a real madman". And the "TV reacting" happened there too; on Polish TV, a bemused looking journalist said to another, "to jest sprawa Anglikow", which means "its the concern of the English", in other words, none of our business, despite what the English are trying to force down our throats.

Just before we left for home, I went with some others from our group to a nearby bar. There a man shouted at me the same sexual obscenity which MI5 have constantly thrown at me these last three years. I think MI5 try to justify their various terms of abuse by repeating them at me until I say them, either while conscious or while talking in my sleep; and then they seize on my saying those words to "prove" that the obscenities are "my fault", et cetera. This rather stupid reasoning of theirs can actually be seen as indicative of the psychopathic condition attributed to them in a previous article; blaming the victim for the crime you inflict on him is how psychopaths think.

Nor did the persecutors let up during the return trip. Returning on the ferry over the channel, a rather insalubrious-looking guy talked to his mates about "and you know this bloke, hes really mad you know, hes really mad". On the National Express return coach to London, a group of five or six young people started shouting at me. I slumped in my seat and tried to avoid presenting a target, so they got ever more strident - "whats the matter with you, cant you hear us?" One of the other people who had been on the trip to Poland asked them why they were shouting at me, and they said, "hes been to Cambridge", to which the co-holidayer asked them, "have you been to Cambridge?" presumably thinking they were aggrieved fellow students, but they answered "no". Even after I left the coach at Elephant and Castle abuse continued; in the tube station, two kids started throwing abuse at me; one of them said to the other, "and you know he works?" to which the other answered "yes".

Immediate Aftermath of November 1992

As you will know from previous articles, my manager at OCG - ARIS/Oxford, Mr Mitchell, induced a mental breakdown in me in the months leading up to Nov/92. The diagnosis was regarded by the persecutors as a victory for them, because few if any people give credence to allegations of harassment when they are made by somebody suffering from schizophrenia. There is also a bias against the mentally ill, an "institutionalised bigotry" in society comparable to the institutionalised racism against blacks.

However, MI5 did not let up on persecuting me following Nov/92. In December 1992 I flew by charter jet to Alicante in Spain for two weeks recuperation. MI5 planted one of their people on the flight, a youth who tried to start some noises that "hes a nutter". One of the other passengers replied, "oh hes a nutter is he? oh well!" and the youth shut up and said nothing for the rest of the flight. I think it would be fair to say that the youth on the flight was embarrassed by what he had been asked to do in making the flight "uncomfortable" for me; he sounded defensive rather than aggressive.

My first trip to Canada in June 1993

Ive already covered this in a previous article so Ill just give a brief summary here. On 10 June 1993 I flew British Airways from Heathrow to Torontos Pearson Airport. On de-planing from the aircraft, one of a group of four fellow passengers looked at me and said, laughing, "if he tries to run away well find him". It was quite obvious that these four men were the ones who had been harassing me since 1990.

I did nothing to apprehend them or bring this incident to the attention of the airport authorities, mostly because this was my very first visit to Canada, and the last thing I wanted was to get into a dispute before I had even finished disembarking. In retrospect, I can see this was a terrible mistake; I should have made every effort to detain and identify these people.

Subsequently I have made numerous attempts to obtain the names of these people from British Airways passenger lists, by talking to BA, through a lawyer in Ontario, through a solicitor in England, through the UK police, and also through private detectives in the UK. But all my efforts have come to nothing. BA have told me they keep passenger lists for a period of seven years, so they will still have the list for this 1993 flight. I did not see or hear anything during the rest of my visit to Ontario in 1993 which would have lead me to believe that I was being watched or followed.

Journey across Canada in summer 1994

As I think Ive already said in previous articles I emigrated to Canada in late May 1994. For six weeks between late May 1994 and early July 1994 I travelled across Canada from coast to coast, starting in Toronto, visiting various cities and ending up in British Columbia. I saw this both as something of a holiday, and the chance to get to know a little better my adopted country.

As you can guess, MI5 followed me everywhere I went during these six weeks. In Toronto, where I started this trip in late May, I was spoken about by one youth to another with the words "hes an idiot", to which the other replied, laughing sympathetically, "good luck to him".

A couple of days later I went to Montreal and stayed at the YMCA downtown. As you can guess (this is all so predictable, isnt it?) MI5 followed me there and bugged my room at the YMCA. Not only that, but they managed to set-up an instance of "newscaster reaction" from a local television station; while I was watching a Vermont TV news programme on the set in my room, the woman reporter said, "well theyre just tired and they want to go home", which sounds like a pretty unprofessional thing to say until you realise she was trying to say of me that I was the one that was supposed to be tired, and they (ie MI5) wanted me to go home to the UK.

On the bus journey across the North American continent, it was quite clear that MI5 were following me every step on the way. For the first part of the journey they actually put someone on the bus with me, a youth who said at me "that guys paranoid" and tried to incite other passengers to attack me. I stopped for a couple of days in Winnipeg in central Canada, and on leaving the town heard on the radio a female presenter ranting about "insanity! insanity!". It is very tiring travelling such a long distance by bus; I took the journey in two steps, each of about 36 hours; and it is especially tiring when you know MI5 are watching you and harassing you every step of the way.

When I finally got to Vancouver, MI5 instituted the usual harassment, in very short order. I was surprised how quickly they were able to induce hatred towards me in elements of the general populace; the Security Service must have employed a number of agents and serious resources in a very short period of time; and for no real gain, because I havent been back to BC for almost five years, so all their "work" appears to be for nothing. In downtown Vancouver a street person said in front of me, "theyre all talking about him". For a few days I was staying at Pauls Guest House (345 W.14th Ave); on the day I left, the owner Paul shouted at no-one in particular, "hes going to Victoria" - which was quite accurate, I was indeed going to the provincial capital Victoria on Vancouver Island. But I had not told anyone at the guest house where I was going; I had only mentioned to my parents back in England on the phone that I was going away from Vancouver for a few days. Which leads me to suppose that MI5s bugging of the phone in my parents house yielded the "intelligence" that I intended to visit Victoria, and they had passed the information on to Paul.

When I got to Victoria it was again obvious that the persecutors were "doing their stuff" there as well. On the street I was identified as being English, although I had not said anything so my accent hadnt given me away; and returning by ferry to the mainland, I was abused by a Canadian woman who said, "hes a nutter! you can run but you cant hide". During my years in Canada I have never heard the word "nutter" on any other occasion; I do not think it is part of Canadians vocabulary; so the Canadian woman on the ferry, who was obviously talking about me, must have been supplied with this word by the English persecutors. And once I got back to Vancouver, staying at the Austin Hotel on Granville St, I listened to a conversation in the apartment block directly opposite, and a man saying, "hes paranoid, so thats as bad as it can be, so why are they doing this to him?".

Holiday in the States, August 1995

By 1995 I was living in Canada, and in August I went down the eastern seaboard to Florida and as far as Key West by car. As you can guess (this is all so boring and predictable, isnt it?) MI5 followed me every step of the way. I can see in retrospect that this must have been quite easy for them as they had my car bugged, both on the inside to listen to anything that was said and what radio station I was listening to, as well as what must have been a tracker device installed to track it across long distances.

The first city I visited was Philadelphia. In the old Congress Hall where the first US Congress assembled, the woman guide started referring to my situation, saying that "all these people in Europe were watching it", and they were "a little paranoid" at this 18th-century experiment in democracy. Also I had recently written a newsgroup post where Id described a (female) poster as "wet-nosed" (implying "canine"), and a young girl in Philadelphia remarked, "so he thinks were dogs?" There were two or three more incidents during this holiday in the eastern States, including a radio station down near Miami, showing "they" had tracked me all the way there, and were bugging the inside of my car; but I didnt record the details and Ive forgotten some of it now. Also down in Miami Beach a French tourist in a lift expressed support for me with the words, "cest incroyable" ie. its incredible, meaning that MI5s well-known actions against me were beyond belief.

To go back a bit, in about May/June 1995 Id visited New York, again by car, and was insulted several times by people using the same words that had been used against me in England. In Central Park, and elderly Englishman (not a real gentleman - but then the Engish view of themselves as "gentlemen" etc is quite laughable) looked at me and said "idiot". And while I was eating in a streetside restaurant a New York youth started laughing and said something like, "I cant believe it, hes actually here" - I think that was because I had had an expressed wish to visit New York for some years before this, although after this visit I wont be going there again for a very long time.

Visit to Poland December 1995/January 1996

In December 1995 I flew (BA again, unfortunately - every time Ive flown BA one of these incidents has happened, presumably MI5 is happier setting up harassment on British-domiciled carrier) from Montreal to Berlin and travelled on to Poland to visit family. MI5 naturally harassed me in Poland during my brief stay. They followed me around and got Polish people to take part in the harassment. In one case two Polish youths talked in front of me saying in English (with marked Polish accents), "fucked up men, fuck you". There were also other incidents which I dont remember too clearly since it was some time ago.

The return flight connected through Heathrow, and in the transit lounge MI5 again set-up harassment against me. In Poland they were talking their abuse in English, and in London they set Polish people after me to speak in Polish; they heard me on the phone to my father, and said "a wiesz ze to Polski wariat", in an almost sympathetic, inclusive fashion (translation. "you know hes a Polish nutter"). Once on the flight to Montreal I was again set upon by two English youths, one of whom spoke and the other listened. The aggressive "fat bastard" youth said, "if he wants to be a wanker" (its my fault theyre harassing me, you see), self-justification that "hes a nutter" (so we have to keep on abusing him, because hes ill), as well as talking about the town in Poland where I had been staying. He also said, "he doesnt know who we are", but as already remarked in a previous article, that was at best a half-denial of my guess expressed in internet newsgroups that the people after me were MI5 - if anything its a half-confirmation rather than a half-denial.

These incidents are still going on. You can hear digitised audio files of abuse on a BA flight to Berlin in 1998 on the Web at address

On this flight they were again attacking my mental health; "paranoid, hes paranoid" and "nutter" are discernable. The last "during travel" contact was at Ottawa Airport on 21 July 1998, when "Alan Holdsworth" the psychopath MI5 agent, dressed as a vagrant, was pacing aggressively in the departure area. In three weeks I will again be travelling to Europe; we will see what fresh acts of molestation MI5 perpetrate during this trip.

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From: MI5-Victim@mi5.gov.uk
Date: 16 Dec 2007 16:51:10 GMT
Lines: 191
Organization: news.newsdemon.com
X-Complaints-To: abuse@newsdemon.com
X-Original-Lines: 187
Xref: g2news1.google.com sci.med.laboratory:1872 alt.fan.holmes:1423
alt.polyamory:71020 alt.sports.hockey.nhl.ott-senators:14071
rec.radio.amateur.space:1240
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MI5 are Afraid to Admit They're Behind the Persecution

MI5 have issued a formal denial of any involvement in my life to the Security Service Tribunal, as you might expect them to; but, more importantly, the persecutors have never denied that theyre from the Security Service, despite several years of accusations from my corner on usenet and in faxed articles. I am not surprised that the Security Service Tribunal found "no determination in your favour". I am however a little surprised that the persecutors have refused to confirm my identification of them; by doing so, they implicitly admit that my guess was right.

"No determination in your favour" says the Security Service Tribunal

In 1997, I made a complaint to the Security Service Tribunal, giving only the bare outlines of my case. I do not think it would have made very much difference if Id made a much more detailed complaint, since the Tribunal has no ability to perform investigatory functions. It can only ask MI5 if they have an interest in a subject, to which MI5 are of course free to be "economical with the truth". A couple of months after my complaint the Tribunal replied that;

The Security Service Tribunal have now investigated your complaint and have asked me to inform you that no determination in your favour has been made on your complaint.

Needless to say this reply didnt surprise me in the slightest. It is a well established fact that the secret service are a den of liars and the Tribunal a toothless watchdog, so to see them conforming to these stereotypes might be disappointing but unsurprising.

It is noteworthy that the Tribunal never gives the plaintiff information on whether the "no determination in your favour" is because MI5 claims to have no interest in him, or whether they claim their interest is "justified". In the 1997 report of the Security Service Commissioner he writes that "The ambiguity of the terms in which the notification of the Tribunals decision is expressed is intentional", since a less ambiguous answer would indicate to the plaintiff whether he were indeed under MI5 surveillance. But I note that the ambiguity also allows MI5 to get away with lying to the question of their interest in me; they can claim to the Tribunal that they have no interest, but at a future date, when it becomes clear that they did indeed place me under surveillance and harassment, they can claim their interest was "justified" - and the Tribunal will presumably not admit that in their previous reply MI5 claimed to have no interest.

"He doesnt know who we are"

In early January 1996 I flew on a British Airways jet from London to Montreal; also present on the plane, about three or four rows behind me, were two young men, one of them fat and voluble, the other silent. It was quite clear that these two had been planted on the aircraft to "wind me up". The fat youth described the town in Poland where I had spent Christmas, and made some unpleasant personal slurs against me. Most interestingly, he said the words, "he doesnt know who we are".

Now I find this particular form of words very interesting, because while it is not a clear admission, it is only a half-hearted attempt at denial of my guess that "they" = "MI5". Had my guess been wrong, the fat youth would surely have said so more clearly. What he was trying to do was to half-deny something he knew to be true, and he was limited to making statements which he knew to be not false; so he made a lukewarm denial which on the face of it means nothing, but in fact acts as a confirmation of my guess of who "they" are.

On one of the other occasions when I saw the persecutors in person, on the BA flight to Toronto in June 1993, one of the group of four men said, "if he tries to run away well find him". But the other three stayed totally quiet and avoided eye contact. They did so to avoid being apprehended and identified - since if they were identified, their employers would have been revealed, and it would become known that it was the secret services who were behind the persecution.

Why are MI5 So Afraid to admit their involvement?

If you think about it, what has been going on in Britain for the last nine years is simply beyond belief. The British declare themselves to be "decent" by definition, so when they engage in indecent activities such as the persecution of a mentally ill person, their decency "because were British" is still in the forefront of their minds, and a process of mental doublethink kicks in, where their antisocial and indecent activities are blamed on the victim "because its his fault were persecuting him", and their self-regard and self-image of decency remains untarnished. As remarked in another article some time ago, this process is basically the same as a large number of Germans employed fifty years ago against Slavic "untermenschen" and the Jewish "threat" - the Germans declared, "Germans are known to be decent and the minorities are at fault for what we do to them" - so they were able to retain the view of themselves as being "decent".

Now suppose this entire episode had happened in some other country. The British have a poor view of the French, so lets say it had all happened in France. Suppose there was a Frenchman, of non-French extraction, who was targeted by the French internal security apparatus, for the dubious amusement of French television newscasters, and tortured for 9 years with various sexual and other verbal abuse and taunts of "suicide". Suppose this all came out into the open. Naturally, the French authorities would try hard to place the blame on their victim - and in their own country, through the same state-controlled media which the authorities employ as instruments of torture, their view might prevail - but what on earth would people overseas make of their actions? Where would their "decency" be then?

This is why MI5 are so afraid to admit theyre behind the persecution. Because if they did admit responsibility, then they would be admitting that there was an action against me - and if the truth came out, then the walls would come tumbling down. And if the persecutors were to admit they were from MI5, then you can be sure I would report the fact; and the persecutors support would fall away, among the mass media as well as among the general public. When I started identifying MI5 as the persecutors in 1995 and 1996 there was a sharp reduction in media harassment, since people read my internet newsgroup posts and knew I was telling the truth. The persecutors cannot deny my claim that theyre MI5, because then I would report their denial and they would be seen as liars - but they cannot admit it either, as that would puncture their campaign against me. So they are forced to maintain a ridiculous silence on the issue of their identity, in the face of vociferous accusations on internet newsgroups and faxed articles.

Have MI5 lied to the Home Secretary?

In order for the Security Services to bug my home, they would either have needed a warrant from the Home Secretary, or they might have instituted the bugging without a warrant. Personally I think it is more likely that they didnt apply for a warrant - I cannot see any Home Secretary giving MI5 authority to bug a residence to allow television newscasters to satisfy their rather voyeuristic needs vis-a-vis one of their audience. But it is possible that the Security Service presented a warrant in some form before a home secretary at some point in the last nine years, for telephone tapping or surveillance of my residence, or interception of postal service.

So the possibility presents itself that a Home Secretary might have signed a warrant presented to him based on MI5 lies. Just as MI5 lie to the Security Service Tribunal, so they might have lied to a Home Secretray himself. MI5 and MI6 are naturally secretive services former home secretary Roy Jenkins said, they have a "secretive atmosphere ... secretive vis-a-vis the government as well as [enemies]". Jenkins also said he "did not form a very high regard for how they discharged their duties".

It was only a few years ago that MI5 was brought into any sot the extraordinary thing is that British media organisations like the state- and taxpayer-funded BBC take such an active part in the MI5-inspired campaign of harassment. We have after all heard of MI5 trying to bribe broadcast journalists; but surely there must be a substantial number who are not bought or blackmailed by the Security Services, and who take part in the "abuse by newscasters" of their own volition? The BBC is supposed to be independent of the government of the day as well as the Establishment in general. While perhaps it is childish to think that the BBC is anything other than effectively state-controlled, the degree of collusion between the BBC and the British Secret Police MI5 is something you would not find in many countries. Individual tele-journalists in other countries would have enough self-esteem not to allow themselves to be controlled by their secret police - seemingly, BBC broadcasters like Martyn Lewis and Nicholas Witchell have such a low opinion of their employing organisation that they see no wrong in dragging the BBCs no-longer-good name through yet more mud, at the mere request (whether supported by financial or other inducements) of the British secret Police, MI5.

And when challenged, these broadcasters LIE about their involvement, with just as little shame as MI5 themselves. The BBCs Information dept have said that;

"I can assure you that the BBC would never engage in any form of surveillance activity such as you describe"

which is an out-and-out lie. Buerk and Lewis have themselves lied to their colleagues in the BBCs Information department over the "newscaster watching", but unsurprisingly they refuse to put these denials in writing. Doubtless if the "newscaster watching" ever comes to light, Buerk and Lewis will then continue to lie by lying about these denials. So much for the "impartial" BBC, a nest of liars bought and paid for by the Security Services!

It is obvious that the persecution is at the instigation of MI5 themselves

- they have read my post, and only they have the surveillance technology and media/political access. Yet they have lied outright to the Security Service Tribunal. Similarly, BBC newscasters Michael Buerk and Martyn Lewis have lied to members of their own organisation. The continuing harassment indicates they are all petrified of this business coming out into the open. I will continue to do everything possible to ensure that their wrongdoing is exposed.

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From: MI5-Victim@mi5.gov.uk
Date: 16 Dec 2007 17:18:46 GMT
Lines: 261
Organization: news.newsdemon.com
X-Complaints-To: abuse@newsdemon.com
X-Original-Lines: 257
Xref: g2news1.google.com sci.med.laboratory:1873 alt.fan.holmes:1424 alt.polyamory:71023 alt.sports.hockey.nhl.ott-senators:14072 rec.radio.amateur.space:1241

MI5 Persecution Update: Friday 11 June, 1999

Harassment in a pub in Clapham, Tuesday lunchtime

Once a month, or once every other month, I meet a Polish friends of mine who lives in Clapham North, and sometimes we go to a particular pub near where he lives. The last time was some two months ago; I did not have my minidisc-walkman with me, and consequently was seriously harassed by people MI5 had instructed to harass me, in the pub.

This Tuesday, 8 June 1999, we again went to the same pub for a pre-meal drink. This time I did have my minidisc-walkman with me. As you can guess, we were followed into the pub by a couple of young people (Im getting older and older - isnt it funny how the MI5 agents all look young these days?). They started talking about my situation, in particular some travel I had booked the previous day. Unfortunately, they were talking fairly quietly, and my minidisc didnt pick up their speech.

MI5s schizophrenic reasoning is that simultaneously I am very important and worthy of their acts of persecution, and I am also totally unimportant and their abuse of me "doesnt matter". Perhaps they should test their agents and managers for obsessive personalities or psychotic features in the same way as employees are drug-tested. MI5 might lose their "worst cases" employees if some psychological testing were applied to their recruitment procedure.

Toothless Watchdogs. What a Surprise.

Recently I have been engaging in communications with two watchdogs, the Security Service Tribunal which deals with complaints against the security service (and always clears MI5 of any wrongdoing), and the Data Protection Registrar, which is mandated to investigate misuse of personal data held on computer.

In a letter to Nick Brooks, Security Service Tribunal secretary, dated 20 April, I asked him if the Tribunal, as an allegedly independent body, had the means to investigate complaints against MI5 other than asking MI5 to themselves investigate complaints. To my disappointment, his reply two weeks later answered the question only indirectly, in the negative. Whatever the reader might think of the merits of the case I have been putting before you in faxed articles this last year and half, you will surely recognise that it is a significant anomaly for the Tribunal to have no independent means of investigating complaints, particularly given the view expressed even by previous home secretaries that the security services are untrustworthy.

MI5 Persecution: No Justice for the Victims of MI5

In a previous article I detailed the similarities between the current MI5 Persecution in England, and other historical instances of similar persecution, notably that by the Nazi Germans in the thirties and forties. The Germans persecuted first the mentally ill, the epileptics and those suffering from schizophrenia, then moved on to racial groups; in todays Britain the persecution is again directed at those with mental illness, which the British in their cowardice find easier than taking on racial groups as the Germans did. But just as in Thirties Germany there was no recourse against a malign and omnipotent state, so the MI5 Secret Police in the modern British Fascist State allow no justice for their victims.

No Recourse Against the Security Services Illegal Harassment

It has become apparent to me over the last nine years just how loaded the dice are in todays Britain, a fundamentally fascist country which masquerades as a democracy. Britain is a democracy in name only; the Establishment, the defence and MI5 secret police are always there, regardless of which party has been voted into power most recently - and from "New Labours" conduct in office one finds it difficult to tell them apart from Old Tories, in their crackdowns on the sick and vulnerable in society.

In thirties Germany the victims of the Nazi regime had no legal recourse against their State oppressors; and in todays Fascist British state, the victims of the Establishment and its MI5 Secret Police similarly have no recourse against the illegal state-funded and organised oppression. There is supposed to be a mechanism for dealing with MI5 crimes, in the shape of the Security Service Tribunal and Commissioner; yet these have never found favour of a plaintiff. One might as well ask the Nazi SS to investigate crimes against epileptics or Jews as ask the Security Service Tribunal to investigate MI5 crimes against British citizens; it is quite obvious what the answer is going to be, regardless of what you say to them, and what evidence you provide. The Tribunal and Commissioner are a mere formality, a whitewashing body to give the Secret Services a veneer beneath which they hide their shabby criminality.

"Institutional Racism" and Bigotry in the Metropolitan Police

The recent inquiry into the racist murder of Stephen Lawrence found clear evidence of systematic and deliberate racism in the Metropolitan Police, which cannot have surprised anyone. Commissioner Sir Paul Condon accepted a somewhat lukewarm definition of institutional racism as being "unconscious". In truth, and this truth must surely be obvious to anyone who has any familiarity or encountered the great British police, the Met has not just "unconscious" racism, but very clearly "conscious" and deliberate racism, of the kind that would have done Thirties Germans proud. And it is a bastion of such open racism - when many other parts of society are learning to live in a multicultural environment, the Met is still living in the past in its attitude to the minorities.

But in addition to the systematic racism confirmed by the Lawrence inquiry, there is also something much more relevant to this case, which is systematic police bigotry against the physically and mentally disabled, which I personally have experienced in my dealings with the police over the years. You cannot expect equal treatment if you are mentally disabled. I tried to make a complaint to the police in 1995 about the harassment I had been subjected to for several years. As soon as they found out I had mental illness, they refused to even talk to me. I tried again in March 1999; the police made various threats to me, while ranting about "your paranoid rubbish" in reference to the complaints expressed to them.

The police refusal to do the job they are employed and paid to do is extremely serious, particularly as this case is highly important, indeed key to the whole issue of British self-perception at the end of the 20th century and the beginning of the 21st century. Britain has lost much in the last fifty years - it has lost an empire, it has lost its self-respect and its identity as a people. If the MI5 persecution finally makes it into the light and the Security Services are seen for the rather cheap bullies their behaviour indicates, it will have a massive and harmful effect on British self-perception in the new century.

Security Service Tribunal - Blatant Whitewashing

A few weeks ago I spoke on the phone to Nick Brooks, the Secretary of the Security Service Tribunal, which is supposed to deal with cases of MI5 transgression. I asked him if the Tribunal had ever found in favour of a plaintiff and against the Security Service. He answered that as far as he knew, it had not.

I also asked Mr Brooks if the Tribunal had any means of investigating allegations of criminal activity by MI5, other than asking MI5 themselves if they had engaged in such activity. His rather circuitous written reply states that the 1989 Security Service Act provides that "it shall be the duty of every member of the Service to disclose or give to the Tribunal such documents or information as they may require for the purpose of enabling them to carry out their functions under this Act". Which is a very round-about way of saying - "No" - the Tribunal has no way of investigating MI5 crimes - None At All.

Setting up the S.S. Tribunal, and creating a Security Service Commissioner, was really an act of falsehood by the government. It is generally recognised that MI5 are out of reach of the normal criminal justice system - the police, as we have seen, have no intesot answer to the government; in a previous article I quoted Roy Jenkins speaking of "a secretive atmosphere.... secretive vis-a-vis the government as well as [enemies]", and a "lack of frankness" from MI5.

If the government wanted to, it could reform the secret services and ensure they acted in conformance with the laws which have been enacted for them in the last ten years. But apparently the present government does not see any need to ensure security service compliance with the law. As noted above, the regulatory machinery for MI5 is deliberately weak; the Tribunal has no independent means of investigation, and it is simply a waste of time complaining to the Tribunal or Commissioner.

Every so often, fresh revelations come to light of secret service transgressions. We have heard from Shayler that MI5 bugged Jack Straw and Peter Mandelson; we have heard from Peter Wright that MI5 plotted to see Wilson ejected from office; yet so closed is the system of government that the law is never enforced against MI5 when they "bug and burgle" everyone from politicians to ordinary citizens.

No Justice from the Legal System, either

Britain has a civil and criminal justice system which effectively limits many complaints from being heard. For a civil complaint to be brought before a court, you need a solicitor willing to act on your behalf. Supposedly it is possible to represent yourself as a Litigant-in-Pthe basis of being "frivolous and vexatious" or "disclosing no cause for action in law". This is exactly what happened to me in 1997 when I twice tried to take the BBC to court for spying on me in my living room at home; my case was twice struck out, and on the second occasion an order was made against me that I could not bring further civil litigation against the BBC without leave of the court.

As the reader can guess it is quite impossible for a person with schizophrenia, who complains about the secret services and media interfering in his life, to find a solicitor willing to represent him in legal action against the persecutors. I have quite a lot of evidence of the continuing persecution which I have posted on the website, even if the evidence is quite tentative and perhaps open to varying interpretations. But I have tried several firms of solicitors; some of them have acted unprofessionally and abused me; all of them have refused to represent me. My psychiatrist gave me the name of the firm of Bindman and Partners in central London, and I have approached them twice. On each occasion they refused to accept my instructions. Plainly the problem with Bindmans, which they have admitted, is their bigotry against mentally disabled people; yet this is not just something that is wrong with Bindmans, it is something that is wrong with the legal system as a whole, since the legal system necessitates finding a solicitor willing to represent you in order to bring a case to court, but it does not have a mechanism for providing a lawyer in the case where no solicitor is willing to take on your case. So the British legal system is such as to prevent cases such as mine from ever receiving an airing in a court.

So much for the civil courts. But the criminal justice system is no better. Two years ago the Protection from Harassment Act came into force. But again, while the Act is all very well on paper, in practice it is unenforceable in my case, since it would require Police action to see the law implemented, and if the police cannot even be trusted to conduct a murder investigation competently (in the Lawrence case), then what chance is there of their investigating complaints against the Security Service? Of course, it would be possible for me to personally issue proceedings through a private prosecution either against MI5 themselves, or against one or more of their media tools; but here we see the same problems as with the civil courts, because first of all I would have to find a lawyer willing to act on my behalf. Litigants-in-person do exist in the criminal courts, but the Attorney General can bring such a prosecution to an end by taking it over and entering a plea of "nolle prossequi"; and I suspect that if I were to bring a private prosecution against either MI5 or one of their media tools, then this is exactly what would happen.

So much for British justice. But if anything the wrongs that have been perpetrated on me by the British justice system are quite mild to what others have suffered. Others have been wrongly convicted based on police evasions and lies, and spent many years in jail based on false charges. I should count myself lucky that despite the best efforts of the MI5 secret police, I have not acquired any criminal charges or convictions; which shows that for all their resources and influence, and the clear imperfections in the British legal system, there are still limits on how much subversion MI5 can achieve.

The latest in a long line of injustices

A comment I heard during the recent scandal of the police mishandling of the Lawrence murder investigation is that "its not as if the police themselves murdered him". This is not a particularly wise statement to make about the case, since it could be argued that the four alleged murderers were aided in their crime by the expectation that the police would deliberately botch the investigation - which of course is exactly what the police did.

But in my case, this would be a completely inaccurate thing to say - since the MI5 secret-police have expressly been trying to nine years now to see an end put to my life, either by having me incarcerated and my liberty ended, or by forcing self-termination on me. It is exactly as if the secret police "themselves murdered [me]", since that is what their aim is in their campaign against me.

The public has heard of instances of police mishandling of cases, of police manufacturing evidence, lying in court, extracting false confessions to clear up crimes, et cetera. Various instances of extra-legal activity by the secret services have also come to light in the last few years. The unhappy truth is that what MI5 have been doing to me for the last nine years is really nothing out of the ordinary for them. To me it seems unbelievable that this sort of systematic campaign of harassment, which thousands and thousands of people in this country and abroad are well aware of, could exist for such a long period of time with the media maintaining "omerta". But my case is not the first such instance of persecution by the "British secret police", and judging by the lack of any real controls on MI5, I very much doubt it will be the last.

29026

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------->>>>>>http://www.NewsDemon.com<<<<<<------
Unlimited Access, Anonymous Accounts, Uncensored Broadband Access

From 8689355228710823570
X-Google-Thread: 10813c,4e93209f65ecd415,start
X-Google-Thread: 10255f,4e93209f65ecd415,start
X-Google-Thread: 102692,4e93209f65ecd415,start
X-Google-Thread: f8abe,4e93209f65ecd415,start
X-Google-Thread: 10e8ad,4e93209f65ecd415,start

X-Google-Attributes:
gid10813c,gid10255f,gid102692,gidf8abe,gid10e8ad,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx01.iad01.newshosting.com!newshosting.com!post02.iad01!
news.newsdemon.com!not-for-mail
Message-Id: <m07111617561619@4ax.com>
Subject: MI5-Persecution: MI5 Have Systematically Destroyed My Life (31209)
Newsgroups:
sci.med.laboratory,alt.fan.holmes,alt.polyamory,alt.sports.hockey.nhl.ott-senators,rec.radio.amateur.space
Followup-To:
sci.med.laboratory,alt.fan.holmes,alt.polyamory,alt.sports.hockey.nhl.ott-senators,rec.radio.amateur.space,uk.misc
From: MI5-Victim@mi5.gov.uk
Date: 16 Dec 2007 17:56:19 GMT
Lines: 280
Organization: news.newsdemon.com
X-Complaints-To: abuse@newsdemon.com
X-Original-Lines: 276
Xref: g2news1.google.com sci.med.laboratory:1874 alt.fan.holmes:1425
alt.polyamory:71025 alt.sports.hockey.nhl.ott-senators:14073
rec.radio.amateur.space:1242

MI5 Have Systematically Destroyed My Life

This is getting depressing. From the feedback Ive received, the recipients of these faxes are tired of hearing my complaints, and in truth I am tired of sending them. The reason I havent yet ceased sending faxes is because I cannot think of any other effective means of replying to MI5s actions against me, and I feel I have to do something to try to defend myself. Three/four years ago I got the MI5 harassment out of my system by posting about it on Internet newsgroups, and for a few months this tactic was quite effective - I received (and indeed still do today) support from newsgroup regulars, and felt I could make my voice heard and break the MI5 monopoly on access to the British media. But that was years ago, and today nobody gives a tinkers cuss about my internet posts - so I have sought to escalate matters by communicating directly with the politicians who allegedly say how this country is supposed to be run.

Of course, its quite expensive to keep up a campaign of fax messages for many weeks. Each set of faxes takes approx 50 hours to send over the weekend, and costs perhaps 35. My phone bill for the last quarter was 350. These figures are naturally insignificant compared to what MI5 have been spending against me over a similar period. It also takes a lot of time and energy to create a new article every week, and try and find new and fresh aspects and viewpoints on MI5s persecution of me. I am beginning to run out of both new topics and energy to write these articles.

So I have a suggestion to put before the MI5 persecutors who have been wrecking my life since 1990. In a few days time I will be going on holiday to Poland and Germany, for a couple of weeks. Previously, almost every time I have travelled by plane, or gone anywhere on holiday, the MI5 "wreckers" have been most assiduous in destroying these trips. My suggestion is; if MI5 leave me alone on this next trip, I will cease transmitting these articles. If, however, there are any clear instances of harassment (and I am very capable of recognising MI5 harassment when I see it), then I will make public these instances and publish any recordings I may make of them, and, unwillingly and unhappily, continue the articles.

Read about the MI5 Persecution on the Web

Keith Hill MP (Labour - Streatham), my elected representative, as ever refuses to help.

MI5 Refuse to Allow me to have a Normal Life

Its kind of difficult to contemplate having a normal existence when you know your entire house is bugged from top to bottom, for audio and, very unpleasantly, video; when your employment is systematically destroyed, over and over again; when every time you leave the country your travel is disrupted by MI5 plants on the plane yelling abuse at you..... you get the idea. I would like to have some semblance of a normal life, like my Polish and English friends do. But MI5 have made this impossible, and they have leached massive resources from the taxpayer to institute a life not worthy of the name on me.

A few years ago MI5 were very open about their aims in persecuting me. They were shouting "suicide" at me, both in Canada where I lived at the time, and during my occasional visits to London. You cant get much clearer than that. There have been instances as recently as a few weeks ago of this intention being voiced by their side; on 15 April 1999, a woman at the next ticket counter at the Royal Festival Hall said;

"it would kill it, you know, it would just be overkill... they can't stop can they"

meaning that "they" were trying to "kill it" i.e. me and they "cant stop". The audio file is at;

I wonder why they "cant stop". Nobody (who doesnt know already) believes my claims - so what difference would it make, if they were to "stop" persecuting me? Perhaps what this persons remarks indicates, is the depth of the obsession MI5 have with this case. They have chosen at random a person from the general population, and done their worst to ruin my life. What is wrong with these people, that they persecute a national of the country whose citizens they are supposed to protect?

No Chance of a Harassment-Free Job

Since the harassment started in 1990 I have had three jobs, the first near Guildford, the second in Oxford, and the third overseas in Canada. All three jobs have been systematically destroyed by MI5. It is so ironic that

MI5 employs a team of agents, each well compensated for their efforts, to persecute just one person paid a mere fraction of what they get for their "work". In fact, it is a joke that MI5 is allocated resources for this sort of effort. If this area of government were run along commercial lines then MI5 would be very rapidly closed down, they produce nothing of any value, instead spending their time obsessed with the bugging and surveillance of their former employees like Shayler, dangerous subversives like Straw and Mandelson, and "threats to national security" like yours truly.

Applying for my first post university job

When I was applying for my first post-university job in the closing months of 1990, I found at two or three job interviews that MI5 had got there ahead of me. Interviewers knew what words to repeat from what had been said at my home recently; MI5 had supplied them with words to hurt me, and the "British secret police" were trying to wreck my job search and discourage me from joining the world of work. This and the continuing harassment in the media and by the public meant that the search for a job took very much longer than it would ordinarily be expected to take for a person with my qualifications.

With my first job near Guildford came the knowledge that MI5 were doing everything possible to make me lose the job. Despite their efforts I managed to stay in work for ten unhappy months, during which they made very clear to me that they were bugging my workplace, my accomodation in Woking, my car, my home..... and they also made clear that they had "got to" my employer in Guildford.

Employment with Oxford

I was able to find a new job, with Oxford Computer Training Services (now ARIS/Oxford), quite quickly. But it became very clear, very quickly, that MI5 were treating this job the same as the first; they tried to get the other employees and in particular the managers to attack me. It was plainly MI5s intention that I be sacked fro this job. But I was not sacked; instead, after almost a year of abuse from OCTS managers, I was forced to seek medical help, and had to take two months off for medical leave. OCTS MD Hugh Simpson-Wells was motivated in keeping me on by the fear that if he sacked me, then I would take him to court for the treatment OCTS managers had meted out to me during 1992.

Emigration to Canada

When I emigrated to Canada in 1994, I did think that perhaps MI5 would leave me alone, given that I had made the effort to leave the UK and try to find a new life overseas. I could not see any reason why they would continue to harass me over in Canada. But clearly the MI5 agents had their salaries to think about, since continue to harass me they most certainly did, at my home in Ottawa, and by getting fellow employees to speak against me, as had happened with previous jobs in the UK.

MI5 are denying me a future in work

Former Chief Constable of Devon and Cornwall John Alderson had this to say regarding MI5's activities;

"MI5 is not under the same restraints as the police. They infiltrate organisations, people's jobs and lives. They operate almost like a cancer."

Currently I am on disability, and I can see that MI5 are denying me a future in work. It would be an insult to logic for me to return to work and find a job, in the knowledge that an entire team of MI5 agents, paid in total many times what I would be earning, would have the objective of seeing me "done down" in the employment, and ejected from the place of work. This situation is completely wrong and nonsensical - I would very much like to have a job, but MI5 are preventing me from even thinking about returning to work. The culture of secrecy in MI5/MI6 means there is no objective oversight of their expenditure, when external oversight and greater transparency might lead to wasteful and illogical operations such as that against me being shelved.

Watched and Harassed at my Home and Accommodation

As you will know if you have been reading these articles, MI5 have watched and harassed me at my home, and at every accommodation Ive had since 1990. Theyve also watched me at neighbours houses in London, and at short-term accommodation such as hotels and bed-and-breakfasts. They have used the "words" gained from these watching activities against me, by passing these words on to other people such as OCTS managers for them to make clear that I am being watched where I live.

Harassed at rented rooms in Oxford in 1992

This was at its worst in 1992 in Oxford, where during the week I lived at rented accommodation in Oxford, and at weekends returned to my parents home in London. I was being severely harassed by managers at my place of work, OCTS; and it was clear from the things they said that they were being supplied by MI5 with details of my home life, that they were being supplied with words to repeat at me.

In 1992 I moved house in Oxford many times, living at a total of five rented accommodations in ten months. In January I started off living in a rented room at Headington near the ring road / A40 intersection; then when it became clear that house was being bugged, moved to a rented room in Botley, some miles away. It was at the house in Botley that I had an "interactive watching" experience with Martyn Lewis while he was reading the news; I threw a term of abuse at him; he first flinched, then gave a gsult of what I had just said, he was no longer "on my side".

So I moved house again. This time to a place in Cowley, near the Rover car works, where I stayed for a few weeks. Because of continuing harassment at work, I soon moved from this accommodation, to yet another rented room on Iffley Road. By this time I was very ill and being abused continuously at work. Again, MI5 followed me to the rented room on Iffley Road, and created new instances of "newscaster watching". There was a television in the room which I watched, and as you can guess the newscasters got at me when I was watching the television. Also once I was assaulted, if thats the word for what happened, on leaving the house; a youth grabbed me by the coat lapels, roughed me up a bit with various terms of abuse. I did not report this assault to the police, because what was happening to me at work was very much worse, and nobody seemed to think that that was worthy of being reported to the police. Later that day at work, Alex G, a fellow employee, said "I heard he was assaulted".... I had not told anyone at work about the incident that morning..... so once again it was made very clear that MI5 were watching my rented accommodation and giving information about what was going on there to managers at work.

So I moved house yet again in late autumn 1992, this time to a rented room in a large house on Woodstock Road. I stayed there for several weeks as the situation at work deteriorated due to OCTS managers abuse, until I was forced to take sick leave from work for two months and attend hospital as an outpatient; at which point I gave notice on the room, and returned to London.

MI5 continued to harass me after the diagnosis of serious illness was made. As reported previously, they harassed me on a flight to Spain in December 1992; and in 1993, when I returned to live and work in Oxford, they again bugged my rooms, as well as my workplace, although the intensity of the harassment was very much less than in 1992.

Watched, followed and harassed in Canada

It dismayed me to find that MI5 would not leave me alone after I had settled in Canada. In January 1995 I rented an apartment at the Bayshore complex in Ottawas west end. For some weeks there was no sign of the "buggers". But then it started all over again. They first bugged my car, which had a car alarm installed - the alarm went off two or three times in a single evening, and the following day gave a signal that the car had been broken into. Then they bugged my apartment, and in particular they installed bugs on the phone line in my apartment.

In September 1995 I moved to a new apartment in Ottawas Bytown Market area, the restaurant and entertainment heart of Canadas capital. This proved a serious mistake. In the west end I had been fairly distant from the centre of town where MI5 concentrated their efforts at turning people against me. In the Market area it was much easier for the persecutors to motivate people to harass me, and over the next couple of years there were frequent instances of harassment by the general public.

From 1995 I had some Polish friends in Ottawa, and as the reader can guess, MI5 have spent much effort trying to break up this friendship. They supplied various things about my home life to these friends, for example where I was living in the Market, directly over the road were the studios of a music radio station, which you had to "look up" to see; and MI5 told these friends that I was "looking up" to see the radio station; so the friends then replayed these words back to me, that I was "looking up". MI5 have also made various sexual slanders against me, and these friends also unwittingly replayed some of the words they had been imprinted with by the MI5 persecutors.

MI5 Will Never Allow Me to have a Normal Life

I have heard many excuses as to why MI5 continuously prevent me from having a normal life. We are told that MI5 are defending the country against a tere to zero.

When I have travelled abroad, they always put their people on the flights, on the journeys I undertake, to continue the harassment, so that I am put off further overseas travel, and chained to my home in London. Yet even this is illogical, because when I lived in Canada, they would still put people on flights back to the UK.... and what possible reason would they have for doing that? Perhaps the truest words to describe the MI5 persecution is that reason has nothing to do with their activities - sane people do not behave in the way the MI5 British Secret Police have been doing.

Summer 1999 - more MI5 harassment?

In only a few days time I will be going to Europe again. This time I have deliberately chosen to travel by a non-UK airline; so we will see if they put their paid agents on this foreign carrier, we will see if they try to harass me on this non-British flight.

If they do harass me on this trip to Europe, or if they resume the harassment in London after I return home, then I will continue to report their activities in these faxes. As I said at the beginning of this article, I would very much like to not have to send these articles any more, but that is not my decision to make - it is entirely up to MI5 to cease their pointless persecution of me, once and for all.

31209

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From 5356262481314769353
X-Google-Thread: 10e8ad,4131db61c0d628f2,start
X-Google-Thread: 10b9c8,4131db61c0d628f2,start
X-Google-Attributes: gid10e8ad,gid10b9c8,public,usenet
X-Google-Language: ENGLISH,ASCII
Path: g2news1.google.com!news2.google.com!eweka.nl!lightspeed.eweka.nl!
83.128.0.12.MISMATCH!news-out2.kabelfoon.nl!newsfeed.kabelfoon.nl!
bandi.nntp.kabelfoon.nl!transit5.hitnews.eu!npeer.de.kpn-eurorings.net!npeer-
ng2.kpn.DE!bloom-beacon.mit.edu!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info

Subject: ANS-350 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sun, 16 Dec 2007 17:02:45 EST
Organization: The Radio Amateur Satellite Corporation
Lines: 233
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000d01c8402f$60a8b990$6601a8c0@familyroom>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;charset="iso-8859-1"
Content-Transfer-Encoding: quoted-printable
X-Trace: reader1.panix.com 1197842565 8986 166.84.1.6 (16 Dec 2007 22:02:45 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 16 Dec 2007 22:02:45 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to   rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to   rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
X-Authority-Analysis: v=1.0 c=1 a=BaCEjNkArN0A:10 a=8BByu62zAAAA:8
a=aSRvjw2BAAAA:8 a=z-b-DnKBAAAA:8 a=hhwrMKPhAAAA:8 a=Ixn1CAxRAAAA:8
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a=q4eIODirUFwA:10 a=CWSBNlG-xqIA:10
Xref: g2news1.google.com rec.radio.amateur.space:1243 rec.radio.info:631

AMSAT NEWS SERVICE
ANS-350

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designing, building, launching and communicating through analog and
digital
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In this edition:
* 2008 Straight Key Night on OSCAR in Memory of ex-JA1ANG
* KySat CubeSat Status Update

* UK Schools - Space experiment contest launched
* ARISS Status - 10 December 2007

SB SAT @ AMSAT $ANS-350.01
2008 Straight Key Night on OSCAR in Memory of ex-JA1ANG

AMSAT News Service Bulletin 350.01
  From AMSAT HQ SILVER SPRING, MD.
December 16, 2007
To All RADIO AMATEURS
BID: $ANS-350.01

You are cordially invited to take part in Straight Key Night on OSCAR 2008, sponsored by AMSAT for all radio amateurs throughout the world. This year's event will be held in memory of Haruo (Harry) Yoneda, ex-JA1ANG, a past AMSAT Director and co-founder of JAMSAT. Harry was also a keen CW operator and a past member of the First Class CW Operators Club (FOC).

Participating in OSCAR SKN is fun and simple. No scoring and no need to send in a log. Just operate CW through any OSCAR, using a straight hand key, at any time between 0000 and 2400 UTC on January 1, 2008.

In keeping with the friendly nature of this event, all participants are encouraged to nominate someone they worked for Best Fist. Your nominee need not have the best fist you heard, just the best of those you worked. Please send your nomination to W2RS at w2rs@amsat.org. Those nominated will be recognized in an AMSAT News Service bulletin, and in The AMSAT Journal.

[ANS thanks Ray, W2RS, for the above information]

/EX

SB SAT @ AMSAT $ANS-350.02
KySat CubeSat Status Update

AMSAT News Service Bulletin 350.02
  From AMSAT HQ SILVER SPRING, MD.
December 16, 2007
To All RADIO AMATEURS
BID: $ANS-350.02

This week the KySat Space Express achieved a successful liftoff from White Sands Missile Range in New Mexico. While all of the Kentucky Space Express systems operated successfully, shortly after launch the vehicle suffered a catastrophic failure and the KySat payload was not able to reach the target altitude in space.

KySat thanks the Space Express student team and mission advisors for their incredibly hard work and the performance of their systems and payload. The design and successful integration of the Space Express payload was, despite the failure to reach the targeted altitude of 127km, an essential step in the continued development of the initiative including first orbital mission, projected to launch in mid to late 2008.

Additional information is available on-line at: http://www.kysat.com

The KySat Space Express student team and mission advisors are extremely pleased with the performance of the student designed systems and payloads.

The KySat CubeSat mission includes these objectives:

+ S-band radio for communications with KY Dish
+ UHF/VHF radio for worldwide student and amateur communications
+ Onboard camera
+ Temp, Current, Voltage, Science sensors
+ Passive magnetic attitude control
+ Mission data storage on industrial MMC card
+ Analog Mode: Transmit analog audio radio signal (Voice from Space app)
+ Digital Mode: Transmit sequential UHF 64 byte AX.25 packets (built in TNC)
+ Minimum 1 or 2 second time delay between packets
+ Receive VHF Digital Pings (call sign, location, text message)

[ANS thanks the KySat Team for the above information]

/EX

SB SAT @ AMSAT $ANS-350.03
UK Schools - Space experiment contest launched

AMSAT News Service Bulletin 350.03
  From AMSAT HQ SILVER SPRING, MD.
December 16, 2007
To All RADIO AMATEURS
BID: $ANS-350.03

UK schoolchildren are being offered the chance to design an experiment for a small satellite in an effort to boost interest in space science.

The contest, organised by the British National Space Centre (BNSC) and

Surrey Satellite Technology (SSTL), is open to students between the ages of 14 and 18.

The winning experimental package should be about the size of a lunch box, weighing no more than 1kg but it will be given a developmental budget of up to �100,000.

The deadline for receiving initial proposals is 28 February 2008.

In March, entries will be whittled down to a shortlist of six finalists who will then be invited to submit more detailed proposals.

The winning proposal will be announced at the congress of the International Astronautical Federation (IAF) in Glasgow in October 2008.

Full BBC Story at

http://news.bbc.co.uk/1/hi/sci/tech/7139356.stm

Howard Long G6LVB - Build Your Own Satellite
http://www.g6lvb.com/Articles/Build%20Your%20Own%20Satellite.doc or
http://www.g6lvb.com/Articles/Build%20Your%20Own%20Satellite.htm or
http://www.g6lvb.com/Articles/Build%20Your%20Own%20Satellite.mht

AMSAT-UK is the Amateur Radio Satellite organisation for the United Kingdom and they publish a quarterly newsletter full of Amateur Satellite information.
Join now online at https://secure.amsat.org.uk/subscription/

For further details contact the secretary Jim Heck G3WGM
Tel: +44 (0)1258 453959
Email: g3wgm@amsat.org
Website: http://www.uk.amsat.org/

[ANS thanks Trevor, M5AKA, for the above information]

/EX

SB SAT @ AMSAT $ANS-350.04
ARISS Status - 10 December 2007

AMSAT News Service Bulletin 350.04
From AMSAT HQ SILVER SPRING, MD.

December 16, 2007
To All RADIO AMATEURS
BID: $ANS-350.04

1. Status of ARISS School Contacts

Due to the very demanding schedules of the ISS onboard crew, no Amateur Radio on the International Space Station (ARISS) contacts have been planned at this time. The ARISS team expects contacts to resume once STS-122 launches in early January 2008.

2. Crew Debrief Scheduled

An Amateur Radio on the International Space Station (ARISS) crew debrief has been scheduled with Clay Anderson, KD5PLA. The debrief session is planned for Tuesday, December 11. Anderson�s participation in 21 contacts helped ARISS reach a record number of 39 school contacts during Expedition 15.

3. ARISS International Teleconference

The next Amateur Radio on the International Space Station (ARISS) International Team teleconference has been scheduled for Tuesday, December 18. The agenda will include the next face to face meeting and SuitSat-2 status.

[ANS thanks Carol, KB3LKI, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Lee McLamb, KU4OS

```
From 1677279476459769778
X-Google-Thread: 10e8ad,2e8d3e7854d6e2a6,start
X-Google-Attributes: gid10e8ad,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news3.google.com!postnews.google.com!
w56g2000hsf.googlegroups.com!not-for-mail
From: "homerkayce@gmail.com" <homerkayce@gmail.com>
Newsgroups: rec.radio.amateur.space
Subject: Hi to all
Date: Thu, 20 Dec 2007 10:21:29 -0800 (PST)
Organization: http://groups.google.com
Lines: 11
Message-ID: <066b2c93-39f9-4c55-b65e-1687df005e7b@w56g2000hsf.googlegroups.com>
NNTP-Posting-Host: 68.249.100.107
Mime-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 7bit
X-Trace: posting.google.com 1198174890 15137 127.0.0.1 (20 Dec 2007 18:21:30 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Thu, 20 Dec 2007 18:21:30 +0000 (UTC)
Complaints-To: groups-abuse@google.com
Injection-Info: w56g2000hsf.googlegroups.com; posting-host=68.249.100.107;
     posting-account=lKqGmQoAAAAicnqVMoM_AEg_CW0bvFU7
User-Agent: G2/1.0
X-HTTP-UserAgent: Opera/9.23 (Windows NT 5.1; U; ru)),gzip(gfe),gzip(gfe)
Xref: g2news1.google.com rec.radio.amateur.space:1244

Take a look at this sites
 http://yugioh-hentai.hentai4you.info/yugioh-tea-hentai.html yugioh
tea hentai
 http://yugioh-hentai.hentai4you.info/free-yugioh-hentai-doujinshi.html
free yugioh hentai doujinshi
 http://yugioh-hentai.hentai4you.info/yugioh-mai-valentine-hentai.html
yugioh mai valentine hentai
 http://yugioh-hentai.hentai4you.info/free-yugioh-hentai-doujinshi.html
free yugioh hentai doujinshi
 http://yugioh-hentai.hentai4you.info/yugioh-gx--hentai.html yugioh
gx  hentai


From -2315295524083l6932
X-Google-Thread: 10e8ad,923846a91fab6b25,start
X-Google-Thread: 10b9c8,923846a91fab6b25,start
X-Google-Attributes: gid10e8ad,gid10b9c8,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx01.iad01.newshosting.com!newshosting.com!
198.186.194.251.MISMATCH!news-out.readnews.com!transit4.readnews.com!panix!
rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
```

```
Subject: WSR-354 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Fri, 21 Dec 2007 09:13:56 EST
Organization: The Radio Amateur Satellite Corporation
Lines: 1309
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <001201c843d5$329c2c90$6601a8c0@familyroom>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1198246436 12616 166.84.1.6 (21 Dec 2007 14:13:56 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Fri, 21 Dec 2007 14:13:56 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
X-Authority-Analysis: v=1.0 c=1 a=FmPXYkJYFZkA:10 a=SeIcp837AAAA:8
a=Ixn1CAxRAAAA:8 a=c2--Pf7SAAAA:8 a=KlfyZUBUAAAA:8 a=FbIv-aF9AAAA:8
a=3fFvnXHTAAAA:8 a=XNQh8oeLAAAA:8 a=f0RPBRECAAAA:8 a=ADBSzeAnAAAA:8
a=5mDMBHa8AAAA:8 a=gUbaYAUbAAAA:8 a=qyDxTJV7AAAA:8 a=JXa7hjb-AAAA:8
a=qL4joYdQAAAA:8 a=LlmPylSfAAAA:8 a=tIoeiIHHAAAA:8 a=fENH8MHtAAAA:8
a=0sg8RoSLAAAA:8 a=uGVPSem0AAAA:8 a=Wa5ALEAlAAAA:8 a=z_zqISx-AAAA:8
a=4RlJXVyBAAAA:8 a=JRUS5pMlAAAA:8 a=oBXim8GbAAAA:8 a=XYLYVS5UAAAA:8
a=h3eCdmoiAAAA:8 a=QX7y1c2GAAAA:8 a=QEps4B0vAAAA:8 a=hKwqrz-LAAAA:8
a=_qHggDGBAAAA:8 a=jBO_9RCuKkijH3FQC0cA:9 a=4VuQSAjpmtlNw-LLx80A:7
a=T_YT3uHYn3wRs7u0zLmk-S6DlZcA:4 a=8QCVOS8zSb0A:10 a=FyblZaQiG9kA:10
a=q4eIODirUFwA:10 a=NDWsJ_JVWXMA:10 a=UtcmazUCZKYA:10 a=XyvEP7qG2ooA:10
a=wFu9RQxNt4EA:10 a=Bi3YAkoP18cA:10 a=F7Eo224L3vYA:10 a=XF7b4UCPwd8A:10
Xref: g2news1.google.com rec.radio.amateur.space:1245 rec.radio.info:633
```

This report is organized into FIVE parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites
Part 5 (S5) - deorbited/returned satellites

SB SAT @ AMSAT W8ISS ANS-354.S1
WSR 354 Part 1 12/20/2007

AMSAT NEWS SERVICE BULLETIN 354.S1 FROM AMSAT HQ
SILVER SPRING, MD, December 20, 2007

```
TO ALL RADIO AMATEURS
BID: $ANS-354.S1

VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink:   435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink:   435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW


Indian Beacon:  145.859330 MHZ CW
Dutch Beacon:   145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsat.in/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is
active. Each transponder has a different beacon.
[06252007]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Modes:   FM Repeater - V/u
                 BBS         - L/u
                 Telemetry   -  /u

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink:   145.880 MHZ FM
                       145.880 MHz USB
                       145.920 MHz FM
                      1268.700 MHz FM 67Hz PL tone
Digital Downlinks:     435.150 MHz FM 38k4 Digital, PBP, 1 watt output
                       435.150 MHz FM 9k6 Digital, Pacsat Broadcast
```

Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Digital, Pacsat Broadcast Protocol
1268.700 mhz FM 9k6 PBP Digital
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[12062007]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10 minute timer.
[05282007]
=====
FO-29 JAS-2

Catalog number: 24278
Launch Date: August 17, 1996

Status: Operational - check operational schedule for current times!!

Current Mode: V/u

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage: http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts.htm
[0820007]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org

```
[12132007]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational depending on amount of Sunlight

Current Mode: Listen before transmitting

Uplink:   145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink:  29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons:   29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/

AO-7 Usage Guidelines on the AO-7 Log and Resource Site located at:
http://www.planetemily.com/ao7
[05282007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational - APRS and BBS

Current Mode: V/v

Expedition 16 crew:
Commander:          Peggy Whitson
Flight Engineer:    Yuri Malenchenko      RK3DUP
Flight Engineer:    Daniel M. Tani

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink:   145.825 MHz FM
Worldwide packet downlink: 145.825 Mhz FM

Voice:
Region 1 voice uplink:   145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink:      145.800 MHz FM
```

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS
RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.
[11052007]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-354.S2
WSR 354 Part 2 12/20/2007

AMSAT NEWS SERVICE BULLETIN 354.S2 FROM AMSAT HQ
SILVER SPRING, MD, December 20, 2007
TO ALL RADIO AMATEURS
BID: $ANS-354.S2

CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.
[11152007]
=====

```
CP3
Catalog Number: 31128
Launch Date: April 17,2007

Status: Operational

Current Mode:  /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[07302007]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: In Orbit

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder:  145.825 Mhz FM
[02052007]
=====
NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Operational

Current Mode: /u

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[10222007]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[07302007]
=====
GENESAT-1 ?O-??
Catalog Number: 29655
Launch Date: December 16, 2006
```

Status: Operational

Current Mode: /u

Telemetry Beacon Downlink: 437.0670 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[01082007]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon: 437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
[03262007]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launched: June 30, 2003

Status: Operational

Current Mode: /u

Beacon: 436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[01082007]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launched: February 21, 2006

Status: Semi-Operational - Constant Carrier only

Uplink: 1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan ?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[01082007]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW
[08132007]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Mode(s): FM Repeater - V/u
                 BBS   - L/u
                 Telemetry   - /u

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink: 145.880 MHZ FM
                       145.880 MHz USB
                       145.920 MHz FM
                      1268.700 MHz FM 67Hz PL tone
Digital Downlinks: 435.150 MHz FM 38k4 Digital, PBP, 1 watt output
                       435.150 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      1268.700 mhz FM 9k6 PBP Digital
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP

TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[12062007]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Hibernation until full sunlight in November

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[09242007]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Current Modes: V/U
L/U

Downlink: 435.225 MHz FM (9600-baud FSK)
435.325 Mhz - Not Available - temperature problems
Uplinks: 145.850 FM
145.890 FM
145.930 FM
1269.700 FM
1269.800 FM
1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[09172007]
=====
AO-16 PACSAT

```
Catalog number: 20439
Launch Date: January 22, 1990

Status: Semi-Operational - Telemetry ONLY

Current Mode:  /u

Uplink:         145.900 MHz FM 1200-baud Manchester FSK
                145.920 MHz FM 1200-baud Manchester FSK
                145.940 MHz FM 1200-baud Manchester FSK
                145.960 MHz FM 1200-baud Manchester FSK

Downlink:       437.026 MHz SSB 1200-baud PSK

Mode-S Beacon: 2401.1428 MHz

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.025 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[11152007]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational.

Current Mode:  /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon:          435.025 MHz - OFF
Mode-S Beacon:     2401.500 MHz - OFF

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[010222007]
=====
RS-22 RADIO SPORT RS-22
Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only
```

```
Current Mode:  /u

CW Beacon - 435.352 MHz
            145.818 MHz
[08062007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational - APRS and BBS

Current Mode: V/v

Expedition 16 crew:
Commander:          Peggy Whitson
Flight Engineer:    Yuri Malenchenko      RK3DUP
Flight Engineer:    Daniel M. Tani

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink:   145.825 MHz FM
Worldwide packet downlink: 145.825 Mhz FM

Voice:
Region 1 voice uplink:   145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink:      145.800 MHz FM

Crossband Repeater:
Repeater Uplink:         437.800 MHz FM
Repeater Downlink:       145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German:              DP0ISS
Russian:             RS0ISS
                     RZ3DZR
USA:                 NA1SS
Packet Mailbox:      RS0ISS-11
Packet Keyboard:     RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
```

NOT translated from Russian and posted.
[11052007]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-3454.S3
WSR 354 Part 3 12/20/2007

AMSAT NEWS SERVICE BULLETIN 354.S3 FROM AMSAT HQ
SILVER SPRING, MD, December 20, 2007
TO ALL RADIO AMATEURS
BID: $ANS-354.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

CP4
Catalog Number: 31122
Launch Date: April 17,2007

Status: Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon: 437.325 MHz CW
[11152007]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Non-Operational

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon: 437.2750 MHz CW

Callsign: JR8YJT
[10152007]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]

```
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink:        437.250 MHz FM 67Hz CTCSS
Voice Downlink:     2401.835 MHz FM
Packet Up/Downlink:  437.250 MHz 9k6 packet
Packet Downlink     2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non=Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[08132007]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink:   435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Non-Operational

Uplinks:   145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink:  437.325 MHz

Broadcast callsign: MYSAT3-11
BBS:                MYSAT3-12
```

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[007302007]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, callsign KE6QMD, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz

```
Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
V-band:   145.840 -  145.990 MHz CW/LSB
U-band:   435.550 -  435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks
---------
S2-band:  2401.225 -  2401.475 MHz CW/USB
K-band:  24048.010 - 24048.060 MHz CW/USB
Beacon:   2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)
----------------------------
BEACON   General Beacon (GB)    Middle Beacon (MB)    Engineering Beacon
(EB)
2 m       none                    145.898 MHz           none
70cm      435.438 MHz             435.588 MHz           435.838 MHz
13cm(1)  2400.188 MHz            2400.338 MHz          2400.588 MHz
13cm(2)  2401.173 MHz            2401.323 MHz          2401.573 MHz
3cm     10450.975 MHz           10451.125 MHz         10451.375 MHz
1.5cm   24047.885 MHz           24048.035 MHz         24048.285 MHz
[007162007]
=====
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999
```

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site
at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

```
For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink:   145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign:       POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012006]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12
```

```
Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
```

FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons: 435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink: 145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks: 145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
LIBERTAD-1
Catalog Number: 31129
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink: 145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[10222007]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplinks: 145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink: 437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[01222007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink: 145.825 MHz FM 1200 Baud AFSK
Beacon: 2401.220 MHz
[05012006]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink: 145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting): Non-Operational
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet: Non-Operational
Uplink: 145.8500 MHz MFSK 1200 BPS
Uplink: 145.8700 MHz MFSK 1200 BPS
Uplink: 145.8900 MHz MFSK 1200 BPS
Uplink: 145.9100 MHz MFSK 1200 BPS

```
Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon:   145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink  29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
[01152007]
=====
AO-5 Australis-OSCAR 5
```

```
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon 1:  29.352 MHz (intermittent)
Beacon 2:  29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink:     21.260 to 21.300 MHz CW/USB
Downlink:  145.860 to 145.900 MHz CW/USB

Beacon:    145.860 MHz

Robot:     145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational
```

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-354.S4
WSR 354 Part 4 12/20/2007

AMSAT NEWS SERVICE BULLETIN 354.S4 FROM AMSAT HQ
SILVER SPRING, MD, December 20, 2007
TO ALL RADIO AMATEURS
BID: $ANS-354.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE PROPOSED FOR LAUNCH AT THIS TIME:

Phase 5a Mars Mission
Catalog Number:
Proposed Launch Date: 2009 or 2011

Status: Design Phase

For the latest project status update please visit the AMSAT-DL P5-A web page:
http://ticket-to-mars.org
[01222007]
=====
PHASE 3E AO-??
Catalog number:
Proposed Launch Date: Late 2007

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/
[01222007]
=====
Eagle AO-??
Catalog Number:
Proposed Launch Date: Early/Mid 2009

Status: Design Phase

For the latest project status updates please visit the AMSAT-NA webpage:
http://www.amsat.org
[01222007]

NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-354.S5
WSR 354 Part 5 12/20/2007

AMSAT NEWS SERVICE BULLETIN 354.S5 FROM AMSAT HQ
SILVER SPRING, MD, December 20, 2007
TO ALL RADIO AMATEURS
BID: $ANS-354.S5

THE FOLLOWING SATELLITES HAVE DE-ORBITED OR HAVE BEEN RETURNED SAFELY:

NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink: 145.825 Mhz FM APRS AX25
APRS Uplink: 145.825 MHz FM APRS AX25
Voice/PSK31 Uplink: 28.120 MHz

Packet to Voice ID: RAFT
[06112007]
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)

* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

From -3380273102091725948
X-Google-Thread: 10e8ad,57e6ce75b78bac5d,start
X-Google-Thread: 10b9c8,57e6ce75b78bac5d,start
X-Google-Attributes: gid10e8ad,gid10b9c8,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!newsfeed2.dallas1.level3.net!
news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-357 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sun, 23 Dec 2007 21:34:48 EST
Organization: The Radio Amateur Satellite Corporation
Lines: 398
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000801c845d5$891f2750$6601a8c0@familyroom>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix3.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
    charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1198463688 7613 166.84.1.3 (24 Dec 2007 02:34:48 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Mon, 24 Dec 2007 02:34:48 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html

```
X-RRI-Info-1: Send submissions to            rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
X-Authority-Analysis: v=1.0 c=1 a=jbcasMuzitgA:10 a=uGVPSem0AAAA:8
a=GbYxE0F7AAAA:8 a=f0RPBRECAAAA:8 a=Ixn1CAxRAAAA:8 a=XakZVnvoAAAA:8
a=EVidB_Sijq3TGdDvmgQA:9 a=mNbJuU-QXp85oYv30KsA:7 a=y31zmfEhtWII_mvgAS97Xu7v3AYA:4
a=5qNe63cd7eQA:10 a=q4eIODirUFwA:10 a=DRXcKqk3msQA:10 a=CWSBNlG-xqIA:10
Xref: g2news1.google.com rec.radio.amateur.space:1246 rec.radio.info:637
```

AMSAT NEWS SERVICE
ANS-357

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* W2RS SKN
* OSCAR 11 Report
* AMSAT YEAR End
* ARISS Status - 18 December 2007
* President's message
* Holiday Message

SB SAT @ AMSAT $ANS-357.01
W2RS SKN

AMSAT News Service Bulletin 357.01
From AMSAT HQ SILVER SPRING, MD.
December 23, 2007
To All RADIO AMATEURS
BID: $ANS-357.01

Reminder!

Participating in OSCAR SKN is fun and simple. No scoring and no need to send in a log. Just operate CW through any OSCAR, using a straight hand key, at any time between 0000 and 2400 UTC on January 1, 2008.

In keeping with the friendly nature of this event, all participants are encouraged to nominate someone they worked for Best Fist. Your nominee need not have the best fist you heard, just the best of those you worked. Please send your nomination to W2RS at w2rs@amsat.org. Those nominated will be recognized in an AMSAT News Service bulletin, and in The AMSAT Journal.

[ANS thanks Ray, W2RS, for the above information]

/EX

SB SAT @ AMSAT $ANS-357.02
OSCAR-11 REPORT

AMSAT News Service Bulletin 357.02
From AMSAT HQ SILVER SPRING, MD.
December 23, 2007
To All RADIO AMATEURS
BID: $ANS-357.02

OSCAR-11 REPORT

20 December 2007

RECEPTION REPORTS REQUESTED!

Please send reception reports to xxxxx@amsat.org (please replace xxxxx by g3cwv) or post to amsat-bb. If you are able to record the satellite as a WAV file, please do so, but let me know what you have, before sending it!

If you need to hear what the satellite sounds like, please visit my website www.users.zetnet.co.uk/clivew/ The satellite transmits on 145.826 M Hz. set receiver to NBFM.

During the period 15 November to 19 December 2007 the satellite has been heard from 18 to 20 November. Signals were variable in strength, mostly weak.

The real time clock has lost a further 4.29 days since 08 October. When last heard it was 74.26876 days slow.

I am indebted to Kevin WA6FWF, Peter ZL3TC, Armando N8IGJ and Thomas HB0SKA for their reports. Many thanks.

Eclipses have continued and are expected until mid January 2008. Although the maximum duration of the current eclipses is less than those earlier this year, it is doubtful whether the satellite will be heard for any sustained period. Even in continuous sunlight during September and October the satellite was unable to support continuous operation.

It is likely than the satellite will only be heard by chance, by stations listening for other satellites on 145.826 Mhz.

The current status of the satel lite, is that all the analogue telemetry channels, 0 to 59 are zero, ie they have failed. The status channels 60 to 67 are still working. The real time clock is showing a large accumulated error, although over short periods timekeeping is accurate to a few seconds per month. The day of the month has a bit stuck at 'one' so the day of the month may show an error of +40 days for some dates. The time display has switched into 12 hour mode. Unfortunately, there is no AM/PM indicator, since the time display format was designed for 24 hour mode.
More data is required to determine exactly when the date changes.

The spacecraft computer and active attitude control system have switched OFF, ie. the satellite' attitude is controlled only by the passive gravity boom gradient, and the satellite is free to spin at any speed. When telemetry was last received it showed that one of the solar arrays had failed, and there was a large unexp lained current drain on the main 14 volt bus. After 23 years in orbit the battery has undergone around 100,000 partial charge/discharge cycles, and observations suggest that it cannot power the satellite during eclipses, or sometimes during periods of poor solar attitude.

The watchdog timer now operates on a 20 day cycle. The ON/OFF times have tended to be very consistent. The average of many observations show this to be 20.7 days, ie. 10.3 days ON followed by 10.4 days OFF. However, poor solar attitude may result may result in a low 14 volt line supply, which may cause the beacon to switch OFF prematurely, and reset the watchdog timer cycle. When this occurs, the beacon is OFF for 20.7 days.

The Beacon frequencies are -

VHF 145.826 MHz. AFSK FM ASCII Telemetry

UHF 435.025 MHz. OFF

S-band 2401.5 MHz. OFF

Listeners to OSCAR-11 may be interested in visiting my website. If you need to know what OSC AR-11 should sound like, there is a short audio clip for you to hear. There is an example of the latest telemetry received from the satellite. The website contains an archive of news & telemetry data. It also contains details about using a soundcard or hardware demodulators for data capture. There is software for capturing data, and decoding ASCII telemetry. The URL is
www.users.zetnet.co.uk/clivew/

If you place this bulletin on a terrestrial packet network, please use the bulletin identifier $BID:U2RPT140.CWV, to prevent duplication.

[ANS thanks Clive, G3CWV for the above information]

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SB SAT @ AMSAT $ANS-357.03
AMSAT YEAR End

AMSAT News Service Bulletin 357.03
From AMSAT HQ SILVER SPRING, MD.
December 23, 2007
To All RADIO AMATEURS
BID: $ANS-357.03

Are you looking for an end of the year tax deduction? Have you thought about renewing your AMSAT Membership? What about joining the President's Club? What about a spanking brand new enclosure for the LVB tracker board? There is even an AMSAT branded clock and weather station.

The AMSAT online store is awaiting your visit. Please follow the direct link below to make your purchase.

http://www.amsat-na.com/categories.php

Afraid of embedded links... go to amsat.org and click on the Online Store from the left margin.

73...bruce
AMSAT Store Manager

[ANS thanks Bruce, KK5DO for the above information]

/EX

SB SAT @ AMSAT $ANS-357.04
ARISS Status - 18 December 2007

AMSAT News Service Bulletin 357.04
From AMSAT HQ SILVER SPRING, MD.
December 23, 2007
To All RADIO AMATEURS
BID: $ANS-357.04

1. ARISS - Russian School Contact

Kursk State Polytechnic University in Kursk, Russia experienced an Amateur Radio on the International Space Station (ARISS) contact on Friday, December 14. The students and faculty had previously participated in other ARISS contacts from Kursk, Sochi and Mt. Elbrus with Expedition 15 commander Fyodor Yurchikhin, RN3FI. On this occasion, the students were scheduled to speak with flight engineerYuri Malenchenko, RK3DUP.

2. ARISS School Application Updated

The Amateur Radio on the International Space Station (ARISS) team has finalized the updated ARISS school contact application forms. The updated forms have been posted on the ARISS Web site. See:
http://www.rac.ca/ariss/oindex.htm

3. Kenwood Radio Software Approved

The Amateur Radio on the International Space Station (ARISS) team's request to have the Memory Control Program (MCP) software added to the Expedition 17 SSC load has been approved. Once onboard, a crew member will be tasked to restore the Kenwood radio to its proper launch configuration.

4. ARISS SuitSat-2 Status

The Amateur Radio on the International Space Station (ARISS) team has obtained solar panels for the SuitSat-2 project. Testing continues on the RF and power systems.
A SuitSat-2 status presentation was given at the 2007 Radio Amateur Satellite Corporation (AMSAT) Space Symposium held in Pittsburgh in October. It has been posted on the AMSAT Web site. See:
http://www.amsat.org/amsat/ariss/Presentations/AMSAT%20Symposiums/2007%20Symposium/Suitsat%202%20Rev%20E%20Symp%2007.pdf

5. ARRL Article on STS-122 Mission

The American Radio Relay League (ARRL) ran an article on the STS-122 shuttle mission status. The shuttle will deliver the Columbus module with the installed Amateur Radio on the International Space Station (ARISS) antennas. See:
http://www.arrl.org/news/stories/2007/12/11/100/?nc=1

[ANS thanks Carol, KB3LKI, for the above information]

/EX

SB SAT @ AMSAT $ANS-357.05
President's report

AMSAT News Service Bulletin 357.05
From AMSAT HQ SILVER SPRING, MD.
December 23, 2007
To All RADIO AMATEURS
BID: $ANS-357.05

President's Report From the 2007 AMSAT-NA Annual Meeting

2007 Symposium, Pittsburgh, Pennsylvania

Over the past year AMSAT has developed a well-defined mission and vision for an exciting future of amateur radio in space. In fact, some of the items we have discussed here at the Symposium may perhaps become known as the weekend that changed amateur radio.

In response to input from the members, AMSAT's Board of Directors and Officers have undertaken a clearly defined Mission and Vision of our current and on-going work:

AMSAT's Mission Statement

- AMSAT designs, builds and operates experimental satellites and promotes space education as a non-profit, volunteer organization.
- AMSAT develops and fosters partnerships with government, industry, educational institutions and fellow amateur radio societies.
- AMSAT leads the way on technical and scientific innovation.
- AMSAT develops and fosters an environment encouraging the training and development of designers and operators.

AMSAT's Vision Statement

- AMSAT will deploy high earth orbit (HEO) satellites, initially with daily coverage, evolving to continuous coverage.
- AMSAT will participate in human space missions.
- AMSAT will support a stream of LEO satellites which are developed in cooperation with the educational community and other amateur satellite groups.

The New Reality

Going forward, we are realizing a new reality of the future of Amateur Radio in space. There is a distinct shift away from the aegis of government/military sponsored spaceflight to a field that will be more and more driven by commercial consideration. This development signifies that space missions will become driven by a business-case model. While our new missions will provide great new services to the Amateur Radio community, we cannot afford to pay millions for them.

The reality is that no one will pay for more "toys" for us to play with. To gain the funding necessary our missions must excite the funding sources. AMSAT will be required to fit into the business-case models of just about every launch opportunity we wish to pursue in the future.

Your Board of Directors and Officers have identified two key areas which capture the attention and imagination of potential funding sources:

- Education - The Phase IV geosynchronous satellite will enable TDRS-like support of ARISS. Ten minute school contacts will grow to hours-long contact with the Space Station. We are working on an expanded curriculum with the ARISS and NASA teams. We are planning the establishment of the AMSAT Institute which will train educators to bring space into the classroom using AMSAT's Phase IV facilities in conjunction with ARISS.

+ Emergency Communications - The Advanced Communications Payload is being co-developed as spaceflight and ground station gear available for rapid deployment or pre-positioning into disaster areas to provide 365/24/7 communication capability. This proposal is gaining some attention within the Homeland Security organization.

AMSAT's Current Development Plans

Consistent with our Vision Statement we are continuing development of Phase III satellites. Budget and staffing for the Eagle satellite will continue for 2007-2008.

AMSAT-NA is contributing staff and money toward completing AMSAT-DL's Phase 3 Express Satellite in 2008. AMSAT-NA teamed with AMSAT-UK to donate 25,000 Euros to AMSAT-DL for the completion of P3E.

Phase IV is not a replacement program at the expense of Phase III. The same transponder gear already in development for Eagle and P3E remains applicable to Phase IV. The new commercial launch reality mentioned previously indicates we may actually be able to be launched earlier to a high orbit if we fit into the Intelsat ride sharing model. We need to be ready for this event.

Phase IV will enable AMSAT to concentrate more fully on the development of space communications. The Intelsat platform will provide hundreds of watts of power for 15 years eliminating the need for AMSAT to provide solar cells, it will perform the station keeping and earth pointing tasks, internal housekeeping will be simplified.

Once we have shown funding sources what AMSAT is capable of additional launch opportunities will arise. Intelsat can drop off sub-payloads into LEO, GTO, or GEO orbits on their way to their primary mission. There are more doors open to the future if we realize and pursue the new reality.

I invite you join AMSAT's exciting future. As we recognize and work within the new reality of commercial spaceflight we will provide exciting new services for amateur radio, emergency preparedness, and education. The side effect of developing "services" will be that we still gain what everyone is asking - high orbit transponders for us to use and enjoy. AMSAT is to satellites what the Wright brothers were to flight. We are "Amateur" only in the sense that we are not paid in much the same sense that Olympic athletes are "Amateurs."

73,

Rick Hamly, W2GPS
President, AMSAT-NA

[ANS thanks Rick, W2GPS for the above information]

/EX

SB SAT @ AMSAT $ANS-357.06
Holiday Greetings from the AMSAT News Service

AMSAT News Service Bulletin 357.06
>From AMSAT HQ SILVER SPRING, MD.
December 23, 2007
To All RADIO AMATEURS
BID: $ANS-357.06

The crew at the AMSAT News Service wishes you and your family the best of the holiday season and for an excellent, prosperous New Year too! Thanks for reading! Please continue to send news and comments to the ans-editor@amsat.org mailbox.

The weekly ANS bulletins are also posted on-line at: http://www.amsat.org/amsat-new/news/ so you can read them there if you are away from your e-mail.

Best wishes and Season's Greetings from all of us!

Gould WA4SXM Vice-President, User Services
Lee   KU4OS, Editor
Dee   NB2F, Editor
JoAnne K9JKM, Editor

[ANS thanks everyone for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Dee Interdonato, NB2F

From 7762082597248214099
X-Google-Thread: 10bf43,b064f7e33309fb30,start
X-Google-Thread: 10e8ad,b064f7e33309fb30,start
X-Google-Thread: 106d41,b064f7e33309fb30,start
X-Google-Thread: fa029,b064f7e33309fb30,start
X-Google-Thread: 114aac,b064f7e33309fb30,start
X-Google-Attributes:
gid10bf43,gid10e8ad,gid106d41,gidfa029,gid114aac,public,usenet

X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news4.google.com!out02a.usenetserver.com!news.usenetserver.com!in01.usenetserver.com!news.usenetserver.com!spln!extra.newsguy.com!newsp.newsguy.com!news5
From: imfvm@lycos.com
Newsgroups: rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.cb,rec.radio.scanner,rec.radio.shortwave
Subject: M`I'5.Persecut ion . Compar ing t he M I5 Pe rsecution wi th Ger man F inal Solut ion
Followup-To: rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.cb,rec.radio.scanner,rec.radio.shortwave,uk.misc
Date: 26 Dec 2007 08:39:19 GMT
Organization: NewsGuy - Unlimited Usenet $19.95
Lines: 207
Message-ID: <na0711260839146716@4ax.com>
NNTP-Posting-Host: p6f04bfbfff000000b3d6d22d8bf748c457c9db230ac1b9b5.newsdawg.com
Xref: g2news1.google.com rec.radio.amateur.policy:104617 rec.radio.amateur.space:1247 rec.radio.cb:41683 rec.radio.scanner:13165 rec.radio.shortwave:130234

MI5 Persecution. Update: Friday 16 April, 1999

If You Intend To Reply, Please Read. This
Please.... keep your response to one page!.. Faxes over a page or two will be. deleted without being read.

BBC newscaster Nicholas. Witchell cant stop himself laughing

During 1990-91 there were very many instances. of "interactive television" where newscasters and. other TV presenters saw on a screen before them what. was happening in my home, and reacted, frequently by laughing at me. During this period I unfortunately did not. record these programmes. For the last year or two,. I have been recording everything I watch, and there has been a drastic decrease. in such incidents.

However,. on occasion, television presenters do still engage in "interactive watching" and react to what they see.. This has been evident with Jon Snow of Channel. Four News recently - a particularly interesting case, since it has been established that he cannot be corrupted by. money (it is well-documented that MI5 offered him a tax-free salary and. he turned them down). I wonder what device MI5 are using to encourage. him to do the "interactive. watching"?

On Saturday 10 April 1999 at 7pm, Nicholas. Witchell on BBC2 News reacted when he saw that I was. watching the programme, and I have his reactions stored safely on videotape. I have watched this tape several. times and I am entirely confident that. my evaluation of his reactions is correct. For several minutes his upper lip quivered in. mirth as he attempted to keep a straight face. Then finally. his self-control evaporated through the excuse of a. weak joke and his face collapsed into a grin.

The strange thing is that I dont. know why he was laughing at me, what I had done recently to "deserve" to be laughed at. The MI5. persecutors usually manage to invent some justification. as to why people should laugh at and/or abuse me ("hes an. X", "it was so funny" etc), so Mr Witchell could have been laughing for any number of reasons. Perhaps he. found the views I have been expressing in these articles amusing? I suppose if. youre paid enough money and ordered to laugh then even. the most innocuous thing becomes. funny.

Jon Snow of Channel Four News cant stop himself. smirking, either.

On 12 February 1999. I was watching Channel Four News presented by Jon Snow. As usual, I was recording the programme, so that if anything. out of the ordinary happened, Id be able to go back and. watch it again.

Now, Jon Snow, by his own claim, is uncorruptible. He says. he turned down an offer of a substantial tax-free salary. from MI5 - they wanted to make him. their mouthpiece, and he told them where to get off.

So you will be most surprised to learn. that Jon Snow "interactively watched" me that. evening, and on many other evenings. Approximately fifteen minutes. into the programme, he announced that the US President would be making a live appearance at about 7.30pm; I looked at the. clock on the mantelpiece; and Snow saw. me looking at the clock, and visibly tried to suppress. a smirk.

Uncorruptible, are you, Mister Snow? If not money, then. why are you watching me, Mister Snow? Are they forcing you to watch. me? Cant you turn the monitor. off, Mister Snow?

Keith Hill MP (Labour -. Streatham), my elected representative, as ever refuses to. help.

Comparing the. MI5 Persecution with German "Final Solution"

It might seem offensive to compare the mass. murder of millions of civilians in wartime. with the peacetime persecution of merely one person. Yet the comparison has been coursing through my mind. for several years. now, because the brutality of German intent to "sub-humans" is very much comparable to the brutality of British intent to someone. they vituperate and. term "not up to British standards". The methods may differ, but the persecutors mindset. is the same.

The Germans. first targeted the mentally disabled, too

During WW2 millions of ethnic Russians,. Poles, Jews, mentally ill, gypsies and other minorities were rounded up and. murdered in purpose-built camps by the German regime,. in the name of "racial superiority". Fifty years on, the British Secret Police, MI5,. instituted a campaign of mass hysteria; but in their cowardice, limited their activities. to one single victim.

It is instructive to note that the. early German "cleansing" effort was directed primarily not at Jews, but at the mentally ill. The. Nazis set up the T4 project in the thirties to "cleanse" away. 70,000 mentally disabled people, including. schizophrenics and epileptics. After WW2 the Jews with their media influence used the reaction. from the holocaust to roll back anti-semitism in the Western countries; however, the mentally. ill are today. still a persecuted group in the modern Western world as they were under the Nazis (the current Jewish home secretary in the. UK intends to bring in laws for incarceration without any. criminal charge for some mentally ill people -. he protects his own minority, but does nothing for the other minorities in todays society), and. this continuing bias forms a central cause for the current acts of persecution in the. UK.

Widespread knowledge. of what is happening to the "un-British" minority

In both the German persecution of the thirties and early forties, and. the current British persecution, many, many people are. well aware of whats happening. There is widespread complicity through inaction. of populace; and in a substantial. proportion of the mainstread population, the persecution had/has widespread enthusiastic support; yet. in both the German case. in the 1940s and the British today, the existence of persecution is a mass secret which must be never admitted out loud. In. the recent Lawrence case this "secret bigotry" has. been termed "institutionalised. racism", and that is a very good word for what the British are doing today The persecutory attitudes. and omerta regarding them are. so deeply ingrained in the national psyche that they define the national. mood

During WW2 many Germans. knew minorities were disappearing, and through inaction. quietly condoned their government's mass murder of "un-German" minorities. and inferior "foreigners"; and in the 1990s, similarly, many English people know what the MI5 British. Secret Police have been doing, and. not only condone it, but actively take part, because of xenophobia against the "un-British" unit minority that. is the target of "British" actions.. This attitude by the British persecutors has been made explicit through the. words "he's not up to British standards"; the British seem to have found their very own "untermenschen" to. victimise.

Why these obsessive. "holy wars" happen

This type. of aggression occurs when the majority is threatened or humiliated in some. way, economically, militarily or culturally. In pre-WW2 Germany the threat was primarily economic and military,. following Germany's humiliating defeat in. the first world war and the reparations it was forced to pay. In modern. Britain, one might guess that the majority English who are behind the. persecution feel pressured by the swiftly diminishing status of Britain in the. world, and the rapidly increasing coloured colonisation of their country, which in time will. see the ethnic English a minority in their. own land, and their more antisocial elements, unable to reply. to the obvious threat, instead project their aggression onto another, weaker, unit. minority

In. both cases there is a whiff of "holy war" or irrational obsession with the persecution. Certainly the German behaviour. fifty years ago bordered on the not-quite-sane, and the current British behaviour towards. their chosen victim is strongly tinged with a leave-taking of. reason. And the choices open to the victims are the same, since MI5 will. never allow me to escape them, "if he tries to run away we'll find him", just like. the commandant of Auschwitz telling the new arrivals,. "the only escape is through the. chimney".

The Victim Will. Destroy Us if We Dont Destroy Him First

The persecutors propaganda is the same. Fifty years ago. the Germans said, "if we don't do it to the Jews then the Jews will do. it to us"; and MI5's propaganda in the early nineties concentrated on their. victim as a "monster" aesome. "untermenschen" minority.

"We are. decent fellows" say the Brutal Persecutors

During the course of researching this article I read part of. the very interesting book,. "Hitler - A Study in Tyranny", by Alan Bullock. This volume contains. a quote from Himmler on the "Final Solution";

"Most of you know what it means when a hundred corpses are lying side. by side, or five. hundred or one thousand. To have stuck it out, and at the same time .... to. have remained decent fellows, that is what has made us hard. This is a page of glory. in our history which has never been written and is never to. be written."

In the MI5 persecution, too, there is a thread of deliberate. brutality to the sick and vulnerable,. while the persecutors maintain that "we are decent fellows". There is almost a conscious schizophrenia in. the self-attitudes of the Security Service operatives and those in the. public who they employ against me, which reflects. the contradiction evident in the German attitude above. On the one hand, they stoop. to the lowest and most base behaviour;. yet at the same time, the MI5 operatives tell themselves that since they are civilised British people, then surely. they must by definition be "decent fellows". Any indecency is made the. fault of the victim; "hes making. us persecute him, so we need feel no guilt".

Yet the conduct is atypical of the way these. peoples see their normal modes of behaviour. Befslaughter was. not typical of normal German behaviour up to that point. Similarly, the current MI5. abuse goes against the grain of British self-image as being "reserved" and "decent",. since they. are using terms of abuse which are common among blacks and other supposedly less-developed. races, but not among the English.

Conclusion

The. ultimate aim of both persecutions is the humiliation and physical extinction of the persecuted group. The Germans did this in a very. direct way; the British Secret Police MI5 are acting indirectly and. relying on self-extinction of. their target, because in peacetime and in the current somewhat false climate of "political correctness". more direct methods are impossible. If MI5 undertook more. direct action the mass "omerta" would be broken.

I have. written this article with sincerity to show how a historically recent persecution in another. country parallels what is being done in this country today. In both cases, the evil-doers are of. their countries establishments, and rely on widespread. tacit support to maintain the persecution. and omerta around it. While the holocaust was undoubtedly the greater evil, it is important to. be aware of the fact that had the Germans not been defeated. fifty years ago, their plans would have gone through to total completion. In Britain today no force threatens the. "permanent government". of which the Security Service forms a part; and it looks very unlikely that. the wrongs perpetrated by the MI5 secret police will ever be revealed to public view, and the British. secret state brought to justice for its. evil actions.

1224

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From -2252775206069836343
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X-Google-Thread: 114aac,488f90bc6b8556c4,start
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X-Google-Language: ENGLISH,ASCII-7-bit
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news.usenetserver.com!in02.usenetserver.com!news.usenetserver.com!
in03.usenetserver.com!news.usenetserver.com!spln!extra.newsguy.com!
newsp.newsguy.com!news5
From: eiefmeief@lycos.com
Newsgroups:
rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.cb,rec.radio.scanner,re
c.radio.shortwave
Subject: M'I.5'Persecuti on   Fou r Years  of MI5  Perse cution Post s on Inte
rnet New sgroups
Followup-To:
rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.cb,rec.radio.scanner,re
c.radio.shortwave,uk.misc
Date: 26 Dec 2007 09:10:01 GMT
Organization: NewsGuy - Unlimited Usenet $19.95
Lines: 279
Message-ID: <vy0711260909564154@4ax.com>
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Xref: g2news1.google.com rec.radio.amateur.policy:104618
rec.radio.amateur.space:1248 rec.radio.cb:41684 rec.radio.scanner:13166
rec.radio.shortwave:130235
```

Four Years. of "MI5 Persecution" Posts on Internet Newsgroups

For approximately the first. three years of the MI5 persecution, from June 1990. until late 1992, I kept as quiet as possible, in the hope that by not reacting,. MI5s interest in me would decrease and they would simply go away of their own accord. This is. the sort of behaviour some people employ against bullies; if the. bullies arent getting a reaction, then they might simply go away and. victimize someone else.

Unfortunately, this tactic didnt work. The quieter. I became, the more shrill and hysterical the. noise from the Security Service operatives. For about two years I didnt watch TV news at all. Yet this. only heightened their. obsessed fixation; they continued to follow me wherever I went, they continued to induce harassment at. work by managers and fellow workers, and they continued. to encourage me to commit suicide. They seemed to regard my refusal to react as a crime which they would. have to "put right" by ever more extreme forms of. abuse.

Finally,. in 1995, I changed tactics radically. Since late 1994 I had had accounts with internet. providers in Ontario, Canada. I discovered the cornucopia of internet newsgroups, on every topic. from consumer electronics, to politics and legal topics, and. I discovered online services such as Compuserve and AOL. In May. 1995, I made the first posting to the conspiracy newsgroup, on the. subject of "BBCs Hidden Shame".

BBC's. Hidden Shame

The internet. newsgroup discussion, which has now reached its fourth anniversary, started with an article. in alt.conspiracy, which I reproduce here.

Date: Thu May 4 18:27:24. 1995
Newsgroups:. alt.conspiracy
Subject: BBC's Hidden. Shame

Remember. the two-way televisions in George Orwell's 1984? The ones which watched you
back? Which you could never get rid of, only the sound could be turned. down?

Well the country which brought Orwell into the world has made his nightmare. follow into
the world after him. Since 1990. the British have been waging war against one of their
own. citizens using surveillance to invade privacy and a campaign of abuse in the
transmitted media. in their efforts to humiliate their "victim".

And the most remarkable thing about it. is that what they do is not even illegal - the
UK has no laws to protect the. privacy of its citizens, nor does it proscribe harassment
or abuse except in the. case of racial abuse.

A lot of people. in England know this to be going on, yet so far they have maintained
perfect "omerta";. not a sound, not a squeak has escaped into the English press,

and for all the covert harassment absolutely nothing has come. out into the public domain.

Have the British gone mad? I think. we should be told

At this point, I did not name MI5 as my persecutors. I was still. unsure that they were. the ones responsible for the "psychological terrorism". In followup. posts however I did name them; and the persecutors have never denied the claim; so I. think my guess is valid. (The Security Service Tribunal in 1997 have said "no determination in your favour. was made", but it is a well established fact that. MI5 lies routinely to the Tribunal which has never found in favour of a plaintiff, so no conclusions. can be drawn. from this.)

This first post was made to. alt.conspiracy, but further posts were made to the UK-local newsgroups, in. particular uk.misc but also uk.legal and uk.politics (which is now called uk.politics.misc).. Some time ago I tried to take the battle to the Compuserve. forums, UKPOLITICS (which is now called UKCURRENT - current. affairs), but my articles were censored by the forum operators. Such censorship is impossible on the. internet newsgroups.

Police Refuse. to Act

I have complained several times to the Metropolitan Police, who. have each time refused to. help.

From:. Green <Green@guidion.demon.co.uk>
Newsgroups:. uk.misc,uk.politics,alt.politics.british,soc.culture.british
Subject: Re: MI5 Persecution: Why. Aren't the British Police Doing Their Job?
Reply-To:. Green@guidion.demon.co.uk
Date: Sun Apr 7. 21:13:30 1996

In article. <DpIE0r.736.0.bloor@torfree.net>
      .   bu765@torfree.net "Mike Corley" writes:

>Last Easter (1995) I went into the local police station. in London and spoke to
>an officer about the. harassment against me. But I couldn't provide tangible
>evidence; what people said,. in many cases years ago, is beyond proof, and
>without something to support my. statements I cannot expect a police officer to
>take the. complaint seriously.

This in itself. dos not suggest that the police have it in for you. The old bill operates on extremely tight spending limits forced on them by that pillock. Michael Howard, and without evidence,. they often have higher priorities than chasing something that cannot. go to court.

I doubt that the police are actually being leant on, but. they probably realise that if they looked into this, they would be leant on. hard. The met always stays away from anything. that looks like it has Defence, Security or secret service interest already, because they realise that they are below these government agencies. in the general pecking. order.

If I walked into my local nick and complained that MI5 were. snooping on me, they would show me the door without even looking at my evidence, because. that bored desk seargant with only five years. to go before he retires doesn't want to start fucking about with somebody who has incurred the wrath of Stella Rimington. He. would rather deal with the lost dogs and driving licence producers, eat his cheese and pickle sandwiches. and piss off home at the end of his. shift than have some high ranking spook having a go at his boss and getting. him a bollocking.

In. short, you have earned much sympathy but little surprise. Just remember that saying about the. enemy of your enemies.

Most recently, I wrote in March 1999 to Charing Cross Police. Station CID. They did not acknowledge or reply. to my letter. When I phoned them up, the detective Id written. to treated me to a sadly not unusual display of police bigotry, with an uneducated rant about "your paranoid. rubbish".

It would be nice to think that such uneducated bigotry is. something other than wholly typical of police behaviour, but unfortunately that is. an illusion that is. rapidly dispelled.

Uncorruptible Jon Snow of Channel Four. News

From previous articles the reader. will know what I think Jon Snow has recently been watching me while. he reads Channel Four News in the evening. Recently I digitized a. few moments of one such broadcast, where his face twists into a smile, without there. being anything in the news broadcast to cause merriment. Here is a usenet post from some time. ago on MI5s "bought and paid. for" tools in the so-called "free" press.

Peter Harding (harding@ermine.ox.ac.uk). wrote:
: I was at speakers' corner on Sunday. There was one chap who was. bellowing
: about something or other,. I don't know what, but one thing he said to
: someone. caught my ear:

: "BBC, MI5,. same thing."

Can't disagree with that. sentiment.

Wasn't it documented that MI5 sometimes "bought" journalists and. broadcasters? I remember. reading a report by some jouralist who had been offered an extra

tax-free income by MI5 to become their. covert mouthpiece, and had refused.
....
> : >mouthpiece,. and had refused.
>. :
> :. It was Jon Snow of Channel 4.
>
> Was it reported in any of. the papers?

It has been reported several times. The most. recent was in Private Eye, a few months back. As I recall they also. wanted information from him; journalists would be a natural choice for. members of the Security Service and the Secret. Intelligence Service for information sources.

> It might be interesting to see what he had. to say regarding their
>. attempt to recruit him.

He was most concerned. that many others would have accepted such an offer. However, we can probably make an. educated guess as to some of those who accepted: Nigel. West (Rupert Allason, MP) and Chapman Pincher would come near to the. top of the list.

--
\/ David. Boothroyd. Socialist and election analyst. Omne ignotum pro magnifico.
British Elections and. Politics at
http://www.qmw.ac.uk/~laws/election/home.html
I wish I was in North Dakota. Next General Election must be before 22nd. May '97
The House of Commons now : C 324, Lab 272, L Dem 25,. UU 9, PC 4, SDLP 4, SNP 4,
UDUP 3,. Ind 1, Ind UU 1, Spkrs 4. Government majority = 1. Telephone Tate 6125.

Corrupt Security Service agents. steal millions from taxpayers

Money is of course a factor in the. grand equation which is the MI5 persecution. It costs money for the Security Service to "buy". people in the media etc. But that is only a small part of their. expenditure of taxpayers resources. Most of the expenditure is. directly on the salaries if the agents involved; and in this post I put forward the. theory that MI5 are trying to draw out their involvement for as. long as possible, very cynically,. to maximise their income and line their own pockets.

At each stage they have tried to pretend. that I am something out of the ordinary. Either I was very stupid ("he's an idiot") or very clever ("he's like a. genius"). Either I was a threat to Western civilization (Levin once. referred to me as the next Hitler) or I was completely defenceless. ("a soft toy").

Now, it should be obvious to any person with common-sense that. I am not out of the ordinary in any way. I have. an IQ which is average for the Web, I am racially white European, and there are plenty of. other people with schizophrenia or epilepsy out there who haven't been targeted for MI5 attention, so. why me?

I think the answer is that the MI5 agents who harass me have cynically. exploited the situation by painting me as extraordinary in order. to assure themselves of well-paid employment funded by the ordinary. British taxpayer. To put it bluntly, they are stealing millions of pounds from the taxpayer to feed their. own pockets.

This assertion is supported by the observation that it's the same. agents who are doing the. harassment. Six months ago in a local hospital I was harassed by someone whose face I. had seen (he had stared straight at me aggressively, at the time I just thought it was some nutter but it turns. out he was one of "them") aboard a KLM flight a couple of years ago.. It's presumably been the same people most of the time. I've seen the way contractors act when they don't want their positions terminated. Would these. agents really want to lose their. well-paid employment harassing me? Presumably they are promising their bosses a "breakthrough" (ie. my demise) real-soon-now and have been for the last seven. years, while all the while these MI5 agents skim millions off the. taxpayer.

I wouldn't mind a job. like that. Perhaps if I persecute myself a little bit, like standing in front of a mirror and shouting mindless obscenities, do you reckon I'd. get a slice of. the caky Service Tribunal. This year Nick Brooks, current Tribunal Secretary, confirmed to me that he could. not think of a single case where the Tribunal had found. in favour of a complainant. Here is my usenet post from. two years ago.

Subject: MI5: "It. wasn't us"
Newsgroups:. uk.misc,uk.legal
Organization:. Toronto Free-Net

"The Security. Service Tribunal have now investigated your complaint and have asked. me to inform you that no determination in your favour has been made on your. complaint."

Signed. ER Wilson, Tribunal Secretary

Well that's a relief then.. All that spamming for nothing eh. Gaw blimey, if they say they're not doing it then. it can't be them, can it?

In a recent letter to Mr. Brooks I expressed the opinion that the Tribunal were unable to fulfil their responsibilities in. the face of MI5 falsehoods. Nevertheless,. I do intend to make another complaint to the Tribunal in the near future, despite the Tribunal. appearing to be a toothless. watchdog.

Discrimination. against a Unit Minority

MI5 have been very clear in their instructions as to. what I should do. They have openly shouted. at me the word "suicide", and also from the other abuse it is clear that. they want my existence terminated.

This point is covered in. more detail in a previous article. The following post describes the xenophobic. nature of MI5s campaign against me. They have refined their bigotry down to. a unit minority, yet they make use of the discrimination against the mentally. ill which is a feature of current British. society.

```
Subject: Re: MI5 says. "Kill Yourself"
Newsgroups:. uk.misc,uk.legal,uk.politics.misc,uk.media
References:. <zlsiida.4248.3258FE24@fs1.mcc.ac.uk>
<53eeev$cmg@axalotl.demon.co.uk>
Organization:. Toronto Free-Net
Distribution:
```

iain@hotch.demon.co.uk (Iain L. M Hotchkies) wrote:
>Indeed. If you've ever had a 'conversation' with. someone suffering
>from florid schizophrenia, you'll know how difficult it. can be to
>'argue'. with them.

I don't have florid symptoms. But. I'm in a difficult situation, because those people who don't know, aren't going to believe, and. those who do, they just go along with the crowd.. It's never a good idea to go against the grain, and the grain here is defined by interests in the establishment. and the media. Even people who could say out loud what. was happening won't, because then there's a risk that they'll be seen as traitors. and ostracised.

Usually this type of 'hidden abuse' is racial. and targetted at a racial minority within a country. You keep the minorities out of. the good jobs, but you don't admit discrimination exists. It happens everywhere, not just. in Britain.. The persecution that is going on now is in reality a refined form of racism. Instead of "nigger" it's "nutter", and abusing the. mentally ill is still socially acceptable today. In 50 years it might not be, but today. there isn't any social or legal sanction against. it.

So really they've. refined racial harassment down to a minority of one. The words may be different, but the methods are. the same.

4164

```
From 3430381150786989213
X-Google-Thread: 10e8ad,8d208fa4205942e3,start
X-Google-Attributes: gid10e8ad,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!postnews.google.com!x29g2000prg.googlegroups.com!not-for-
mail
From: aju41vgj <healthcare5biu8@gmail.com>
```

```
Newsgroups: rec.radio.amateur.space
Subject: Free Prescription Assistance
Date: Wed, 26 Dec 2007 13:27:14 -0800 (PST)
Organization: http://groups.google.com
Lines: 3
Message-ID: <2503ffa7-49ce-45ae-88d3-2419a3630cf1@x29g2000prg.googlegroups.com>
NNTP-Posting-Host: 74.50.103.204
Mime-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 7bit
X-Trace: posting.google.com 1198704434 1276 127.0.0.1 (26 Dec 2007 21:27:14 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Wed, 26 Dec 2007 21:27:14 +0000 (UTC)
Complaints-To: groups-abuse@google.com
Injection-Info: x29g2000prg.googlegroups.com; posting-host=74.50.103.204;
     posting-account=8PpyfAoAAAAANR1UPNyGcAD5WAks_hOW
User-Agent: G2/1.0
X-HTTP-UserAgent: Mozilla/4.0 (compatible; MSIE 7.0; Windows NT 5.1; .NET CLR
     2.0.50727),gzip(gfe),gzip(gfe)
Xref: g2news1.google.com rec.radio.amateur.space:1249
```

Great site for free prescription assistance is presented by American
Consultants Rx at http://www.rxassistanceforfree.com .It really helped
me out.

```
From -2257560852298874300
X-Google-Thread: 10e8ad,4c17382dccd19aff,start
X-Google-Thread: 10b9c8,4c17382dccd19aff,start
X-Google-Attributes: gid10e8ad,gid10b9c8,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!newsfeed2.dallas1.level3.net!
news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-361 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Thu, 27 Dec 2007 09:29:00 EST
Organization: The Radio Amateur Satellite Corporation
Lines: 1309
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000601c84892$27608080$6601a8c0@familyroom>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix2.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader2.panix.com 1198765741 20061 166.84.1.2 (27 Dec 2007 14:29:01 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Thu, 27 Dec 2007 14:29:01 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
```

X-RRI-Info-2: Send technical complaints to   rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
X-Authority-Analysis: v=1.0 c=1 a=lPouWf8wrX8A:10 a=SeIcp837AAAA:8
a=Ixn1CAxRAAAA:8 a=c2--Pf7SAAAA:8 a=KlfyZUBUAAAA:8 a=FbIv-aF9AAAA:8
a=3fFvnXHTAAAA:8 a=XNQh8oeLAAAA:8 a=f0RPBRECAAAA:8 a=ADBSzeAnAAAA:8
a=5mDMBHa8AAAA:8 a=gUbaYAUbAAAA:8 a=qyDxTJV7AAAA:8 a=JXa7hjb-AAAA:8
a=qL4joYdQAAAA:8 a=LlmPylSfAAAA:8 a=tIoeiIHHAAAA:8 a=fENH8MHtAAAA:8
a=0sg8RoSLAAAA:8 a=uGVPSem0AAAA:8 a=Wa5ALEAlAAAA:8 a=z_zqISx-AAAA:8
a=4RlJXVyBAAAA:8 a=JRUS5pMlAAAA:8 a=oBXim8GbAAAA:8 a=XYLYVS5UAAAA:8
a=h3eCdmoiAAAA:8 a=QX7y1c2GAAAA:8 a=QEps4B0vAAAA:8 a=hKwqrz-LAAAA:8
a=_qHggDGBAAAA:8 a=jBO_9RCuKkijH3FQC0cA:9 a=4VuQSAjpmtlNw-LLx80A:7
a=T_YT3uHYn3wRs7u0zLmk-S6DlZcA:4 a=8QCVOS8zSb0A:10 a=FyblZaQiG9kA:10
a=q4eIODirUFwA:10 a=NDWsJ_JVWXMA:10 a=UtcmazUCZKYA:10 a=XyvEP7qG2ooA:10
a=wFu9RQxNt4EA:10 a=Bi3YAkoP18cA:10 a=F7Eo224L3vYA:10 a=XF7b4UCPwd8A:10
Xref: g2news1.google.com rec.radio.amateur.space:1250 rec.radio.info:639

This report is organized into FIVE parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites
Part 5 (S5) - deorbited/returned satellites

SB SAT @ AMSAT W8ISS ANS-361.S1
WSR 361 Part 1 12/27/2007

AMSAT NEWS SERVICE BULLETIN 361.S1 FROM AMSAT HQ
SILVER SPRING, MD, December 27, 2007
TO ALL RADIO AMATEURS
BID: $ANS-361.S1

VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

```
Indian Beacon:  145.859330 MHZ CW
Dutch Beacon:   145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsat.in/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is
active. Each transponder has a different beacon.
[06252007]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Modes:   FM Repeater - V/u
                 BBS         - L/u
                 Telemetry   -  /u

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink:   145.880 MHZ FM
                       145.880 MHz USB
                       145.920 MHz FM
                      1268.700 MHz FM 67Hz PL tone
Digital Downlinks:     435.150 MHz FM 38k4 Digital, PBP, 1 watt output
                       435.150 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:        145.860 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      1268.700 mhz FM 9k6 PBP Digital
Beacon:                435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12
```

```
Official Webpage: http://www.amsat.org/amsat-new/echo/
[12062007]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Current Mode: V/u

Uplink:   145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute
timer
   on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the
repeater on
   and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset
the 10
   minute timer.
[05282007]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Operational - check operational schedule for current times!!

Current Mode: V/u

Voice/CW Mode JA
Uplink:   145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon:   435.795 MHz

Digital Mode JD
Uplinks:  145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
```

```
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage: http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's CW
telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts.htm
[0820007]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Current Mode: V/u

Uplink:   145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[12132007]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational depending on amount of Sunlight

Current Mode: Listen before transmitting

Uplink:   145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink:  29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons:   29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
```

2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/

AO-7 Usage Guidelines on the AO-7 Log and Resource Site located at:
http://www.planetemily.com/ao7
[05282007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational - APRS and BBS

Current Mode: V/v

Expedition 16 crew:
Commander: Peggy Whitson
Flight Engineer: Yuri Malenchenko RK3DUP
Flight Engineer: Daniel M. Tani KD5DXE

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM
Worldwide packet downlink: 145.825 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS
RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss

ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.
[12272007]
NNNN
/EX

B SAT @ AMSAT W8ISS $ANS-361.S2
WSR 361 Part 2 12/27/2007

AMSAT NEWS SERVICE BULLETIN 361.S2 FROM AMSAT HQ
SILVER SPRING, MD, December 27, 2007
TO ALL RADIO AMATEURS
BID: $ANS-361.S2

CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.
[11152007]
=====
CP3
Catalog Number: 31128
Launch Date: April 17,2007

Status: Operational

Current Mode: /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[07302007]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: In Orbit

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder: 145.825 Mhz FM
[02052007]
=====
NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Operational

Current Mode: /u

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[10222007]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[07302007]
=====
GENESAT-1 ?O-??
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Current Mode: /u

Telemetry Beacon Downlink: 437.0670 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[01082007]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol

```
Beacon:             437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
[03262007]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launched: June 30, 2003

Status: Operational

Current Mode: /u

Beacon:     436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[01082007]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launched: February 21, 2006

Status: Semi-Operational - Constant Carrier only

Uplink:  1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan ? )

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[01082007]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS
```

```
Mode U TLM Beacon
Downlink: 436.8375 MHz CW
[08132007]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Mode(s): FM Repeater - V/u
                 BBS         - L/u
                 Telemetry   -  /u

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink:   145.880 MHZ FM
                       145.880 MHz USB
                       145.920 MHz FM
                      1268.700 MHz FM 67Hz PL tone
Digital Downlinks:     435.150 MHz FM 38k4 Digital, PBP, 1 watt output
                       435.150 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:        145.860 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      1268.700 mhz FM 9k6 PBP Digital
Beacon:                435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[12062007]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Hibernation until full sunlight in November

Current Mode: V/v
```

```
General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink:        144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[09242007]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Current Modes: V/U
               L/U

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[09172007]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Semi-Operational - Telemetry ONLY

Current Mode:  /u

Uplink:         145.900 MHz FM 1200-baud Manchester FSK
                145.920 MHz FM 1200-baud Manchester FSK
                145.940 MHz FM 1200-baud Manchester FSK
                145.960 MHz FM 1200-baud Manchester FSK

Downlink:       437.026 MHz SSB 1200-baud PSK

Mode-S Beacon: 2401.1428 MHz

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
```

```
   PSK 437.025 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[11152007]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational.

Current Mode:  /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon:          435.025 MHz - OFF
Mode-S Beacon:     2401.500 MHz - OFF

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[010222007]
=====
RS-22 RADIO SPORT RS-22
Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only

Current Mode:  /u

CW Beacon - 435.352 MHz
            145.818 MHz
[08062007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational - APRS and BBS

Current Mode: V/v

Expedition 16 crew:
Commander:          Peggy Whitson
Flight Engineer:    Yuri Malenchenko      RK3DUP
Flight Engineer:    Daniel M. Tani        KD5DXE
```

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM
Worldwide packet downlink: 145.825 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS
                     RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.
[12272007]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-361.S3
WSR 361 Part 3 12/27/2007

AMSAT NEWS SERVICE BULLETIN 361.S3 FROM AMSAT HQ
SILVER SPRING, MD, December 27, 2007
TO ALL RADIO AMATEURS
BID: $ANS-361.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

CP4
Catalog Number: 31122
Launch Date: April 17,2007

```
Status: Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon:    437.325 MHz CW
[11152007]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Non-Operational

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon:             437.2750 MHz CW

Callsign: JR8YJT
[10152007]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency:  437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink:        437.250 MHz FM 67Hz CTCSS
Voice Downlink:     2401.835 MHz FM
Packet Up/Downlink:  437.250 MHz 9k6 packet
Packet Downlink     2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
UWE-1
Catalog Number: 28892
```

Launch Date: October 27, 2005

Status: Non=Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[08132007]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Non-Operational

Uplinks: 145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[007302007]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, callsign KE6QMD, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks

V-band: 145.840 - 145.990 MHz CW/LSB
U-band: 435.550 - 435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB

L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks

S2-band: 2401.225 - 2401.475 MHz CW/USB
K-band: 24048.010 - 24048.060 MHz CW/USB
Beacon: 2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)

BEACON	General Beacon (GB)	Middle Beacon (MB)	Engineering Beacon (EB)
2 m	none	145.898 MHz	none
70cm	435.438 MHz	435.588 MHz	435.838 MHz
13cm(1)	2400.188 MHz	2400.338 MHz	2400.588 MHz
13cm(2)	2401.173 MHz	2401.323 MHz	2401.573 MHz
3cm	10450.975 MHz	10451.125 MHz	10451.375 MHz
1.5cm	24047.885 MHz	24048.035 MHz	24048.285 MHz

[007162007]

=====

OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]

=====

UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web site
at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]

=====

SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

```
Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater:         436.250 MHz

Uplinks: Mode B Repeater:  145.825 MHz
Mode J Digipeater:         145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink:   145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign:       POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012006]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
KO-23 KITSAT
```

```
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HL01-11
BBS: HL01-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
```

```
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
LIBERTAD-1
Catalog Number: 31129
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink:   145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[10222007]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplinks:          145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink:      437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[01222007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
[05012006]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet: Non-Operational
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon:   145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
```

http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.8500 - 145.9000 MHz SSB/CW
Downlink 29.4000 - 29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink: 29.4500 - 29.5500 MHz SSB/CW
[01152007]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink: 145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]

```
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon 1:  29.352 MHz (intermittent)
Beacon 2:  29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink:     21.260 to 21.300 MHz CW/USB
Downlink:  145.860 to 145.900 MHz CW/USB

Beacon:    145.860 MHz

Robot:     145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink:   21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon:   29.408 MHz

Robot:    29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-361.S4
WSR 361 Part 4 12/27/2007

AMSAT NEWS SERVICE BULLETIN 361.S4 FROM AMSAT HQ
SILVER SPRING, MD, December 27, 2007
TO ALL RADIO AMATEURS
BID: $ANS-361.S4
```

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE PROPOSED FOR LAUNCH AT THIS TIME:

Phase 5a Mars Mission
Catalog Number:
Proposed Launch Date: 2009 or 2011

Status: Design Phase

For the latest project status update please visit the AMSAT-DL P5-A web page:
http://ticket-to-mars.org
[01222007]
=====
PHASE 3E AO-??
Catalog number:
Proposed Launch Date: Late 2007

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/
[01222007]
=====
Eagle AO-??
Catalog Number:
Proposed Launch Date: Early/Mid 2009

Status: Design Phase

For the latest project status updates please visit the AMSAT-NA webpage:
http://www.amsat.org
[01222007]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-361.S5
WSR 361 Part 5 12/27/2007

AMSAT NEWS SERVICE BULLETIN 361.S5 FROM AMSAT HQ
SILVER SPRING, MD, December 27, 2007
TO ALL RADIO AMATEURS
BID: $ANS-361.S5

THE FOLLOWING SATELLITES HAVE DE-ORBITED OR HAVE BEEN RETURNED SAFELY:

NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered

Re-entered: May 30, 2007

```
Main Downlink:      145.825 Mhz FM APRS AX25
APRS Uplink:        145.825 MHz FM APRS AX25
Voice/PSK31 Uplink:  28.120 MHz
```

Packet to Voice ID: RAFT
[06112007]
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen,

G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

From -7633125375485304507
X-Google-Thread: f8abe,4511a49e2d8d605d,start
X-Google-Thread: 10e8ad,4511a49e2d8d605d,start
X-Google-Thread: 101522,4511a49e2d8d605d,start
X-Google-Thread: 114781,4511a49e2d8d605d,start
X-Google-Thread: 11368f,4511a49e2d8d605d,start
X-Google-Attributes: gidf8abe,gid10e8ad,gid101522,gid114781,gid11368f,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!border1.nntp.dca.giganews.com!nntp.giganews.com!nx01.iad01.newshosting.com!newshosting.com!post02.iad01!news.newsdemon.com!not-for-mail
Message-Id: <cn0711310825109439@4ax.com>
Subject: M I.5'Persecution , Mol estation during T ravel
Newsgroups: alt.sports.hockey.nhl.ott-senators,rec.radio.amateur.space,it.comp.reti.cisco,alt.fan.depeche-mode,alt.music.depeche-mode
Followup-To: alt.sports.hockey.nhl.ott-senators,rec.radio.amateur.space,it.comp.reti.cisco,alt.fan.depeche-mode,alt.music.depeche-mode,uk.misc
From: eveiv@bigfoot.com
Date: 31 Dec 2007 08:25:13 GMT
Lines: 295
Organization: news.newsdemon.com
X-Complaints-To: abuse@newsdemon.com
X-Original-Lines: 292
Xref: g2news1.google.com alt.sports.hockey.nhl.ott-senators:14140 rec.radio.amateur.space:1251 it.comp.reti.cisco:9892 alt.fan.depeche-mode:295 alt.music.depeche-mode:2745

MI5 Persecution: Molestation during. Travel

MI5s persecution of me varies in intensity. Since 1990. it has been steady for perhaps 80% of the time; there was a notable quiet period. in 1993, and another quiet period in Jan-Feb 1995, as well as. a hiatus in the first two months of 1999. It puzzles me that they cease. and restart, seemingly without. any logic or reason. But one aspect of MI5s activities against me which is relatively predictable is this weeks articles topic, which. is Molestation during Travel. Almost every time I cross. the Atlantic, go to the Continent or even try to enjoy a holiday in this country, you can. bet that MI5. will be there doing their utmost to wreck it all.

This aspect of the harassment is. particularly relevant as I will be travelling to Europe again in a months. time, with naturally the Minidisc recorder in tow; so it will be interesting. to see if I can record the abuse which will almost certainly. take place, either on the Tube going to the airport, at the. airport, on the flight, in the terminal building - MI5 have. previously instituted instances of abuse at each of these locations, so. well see how much taxpayers money they waste this time, and whether it will prove possible to capture. their abuse on minidisc.

Read about the. MI5 Persecution on the Web

June 1992 in Polands. mountain resort of Zakopane

The persecution started in June 1990, and for the first two years. I stayed in the UK apart from a couple of brief day trips to Calais. By. the summer of 1992 Id had enough of being cooped up. in England with abusive fellow employees. egged on by an abusive secret police service, and decided to spend 10 days in southern Poland, on what was intended. to be a holiday at the mountain. resort town of Zakopane.

Unfortunately the psychopaths of the Security. Service were not willing to allow me to enjoy a holiday in. peace and quiet. The journey to Zakopane was by coach from the meeting. point at Londons Victoria coach station (National. Express) followed by ferry followed by another coach across Europe. As we left Victoria a. youth and his girlfriend started a loud tirade of. abuse directed at "this bloke", where the "bloke" was never named, but it. was very clear that the "bloke" was myself. The youth said "they" had "found somebody from his school, and he was always. really stressed at. school, a real psycho". Again, the label "they" was not elaborated on, but. it was clear that "they" = the persecutors from MI5.. The boy also said, "he was in a bed and breakfast for only one night and they got him". By. a not unexpected coincidence I had been in a B&B in Oxford a week. previously, which had been booked from work; other things lead me to the conclusion that the. company's offices were bugged for most of the 2 1/2 years that I was there, so "they" would have known a room. in the B&B had been booked. After a few minutes of this I went back to. where they were sitting and asked where. they were travelling. The boy named a village in France,. and the girl's giggling suddenly ceased; presumably it permeated to her brain cell what the purpose of the boy's abuse. was.

It. is now very clear to me that MI5 were trying to have me incarcerated, assaulted or killed on this. trip across Europe. The degree of verbal violence. inescapably leads to this conclusion. When we arrived at our destination, it became clear. that many people, both in our tour group and its guide, and among the ordinary residents of. the town, knew there was a movement under way to "get". me. MI5 employed many people and significant resources for an action which. they knew would only take a maximum of ten days. A commercial operation would never have felt able to. waste such resources. on such an unproductive and temporary action; only a state-sponsored, taxpayer-funded. entity like the Security Service would be able to be. so wasteful.

To give some examples of what happened in. those ten days; I was walking in some woods outside the town, when a Polish woman, looking at. me, said the

English "shit" in a strongly Polish-accented voice. For. the first three years 1990-92 MI5 had been trying to force this word on. me. Another example; I was walking. near my "hotel" when a mother said laughing to her child, "a wiesz ze to prawdziwy wariat". which means "you know hes a real madman". And the "TV reacting" happened there too; on Polish. TV, a bemused looking journalist said to another, "to jest sprawa Anglikow",. which means "its the concern of the English", in other words, none of our. business, despite what the English are. trying to force down our throats.

Just before we left for. home, I went with some others from our group to a nearby bar. There a man shouted at me the same. sexual obscenity which MI5 have constantly thrown at me these last three. years. I think MI5 try to justify their various. terms of abuse by repeating them at me until I say them, either. while conscious or while talking in my sleep; and then they seize on my saying those words to. "prove" that the obscenities are "my fault", et cetera. This rather stupid reasoning of theirs can. actually be seen. as indicative of the psychopathic condition attributed to them in a previous article; blaming the victim for the crime you inflict. on him is how. psychopaths think.

Nor did the persecutors. let up during the return trip. Returning on the ferry over the channel, a rather insalubrious-looking guy talked. to his mates about "and you know this bloke, hes really mad you know, hes. really mad". On the National Express return coach. to London, a group of five or six young people started shouting at me. I. slumped in my seat and tried to avoid presenting a target, so. they got ever more strident - "whats the matter with you, cant. you hear us?" One of the other people who had been on the trip to Poland asked them. why they were shouting at me, and they said, "hes been to Cambridge", to. which the co-holidayer asked them, "have you. been to Cambridge?" presumably thinking they were aggrieved fellow students, but they answered "no". Even after I left the. coach at Elephant and Castle abuse continued;. in the tube station, two kids started throwing abuse at me; one. of them said to the other, "and you know he works?" to which. the other answered "yes".

Immediate Aftermath. of November 1992

As you will know from previous articles, my manager at OCG. - ARIS/Oxford, Mr Mitchell, induced a mental breakdown in me in the months leading. up to Nov/92. The diagnosis was regarded by the persecutors as a. victory for them, because few if any people give credence. to allegations of harassment when they are made by. somebody suffering from schizophrenia. There is also a bias against the mentally ill, an "institutionalised bigotry" in. society comparable. to the institutionalised racism against blacks.

However, MI5 did not let up on persecuting me following Nov/92.. In December 1992 I flew by charter jet to Alicante. in Spain for two weeks recuperation. MI5 planted one of their people on the flight, a youth. who tried to start some noises. that "hes a nutter". One of the other passengers replied, "oh hes a nutter is he? oh. well!" and the youth shut up and said. nothing for the rest of the flight. I think it would be fair to say that the youth on. the flight was embarrassed by what he had been asked to do in making the flight. "uncomfortable" for me; he sounded defensive. rather than aggressive.

My first trip to. Canada in June 1993

Ive already covered this in a previous article so Ill just give. a brief summary here. On 10 June. 1993 I flew British Airways from Heathrow to Torontos Pearson. Airport. On de-planing from the aircraft, one of a group of four. fellow passengers looked at me and said, laughing, "if he tries to run away. well find him". It was quite obvious that these four men were the ones. who had been harassing me since 1990.

I did nothing to apprehend them or bring this incident to the. attention of the airport authorities, mostly because this was my very first visit. to Canada, and the last thing I wanted was to get into a dispute before. I had even finished disembarking. In retrospect,. I can see this was a terrible mistake; I. should have made every effort to detain and identify these people.

Subsequently I have made numerous attempts to obtain the names. of these people from British Airways passenger lists,. by talking to BA, through a lawyer in Ontario, through a solicitor. in England, through the UK police, and also through private detectives in the UK. But all. my efforts have come to nothing. BA have told me they keep passenger lists. for a period of seven years, so they will still have the list for this 1993 flight. I. did not see or hear anything during the rest of my visit to Ontario. in 1993 which would. have lead me to believe that I was being watched or followed.

Journey across. Canada in summer 1994

As I think Ive already said in. previous articles I emigrated to Canada in late. May 1994. For six weeks between late May 1994 and early July 1994 I travelled across. Canada from coast to coast, starting in Toronto, visiting various cities and ending up in British. Columbia. I saw this both as something of a holiday, and the chance to get to know a little better. my adopted. country.

As you can guess, MI5 followed me everywhere I went. during these six weeks. In Toronto, where I. started this trip in late May, I was spoken about by. one youth to another with the words "hes an idiot", to which the other replied, laughing sympathetically,. "good luck to him".

A couple of. days later I went to Montreal and stayed at the YMCA downtown. As you can guess (this is all so predictable, isnt. it?) MI5 followed me there and. bugged my room at the YMCA. Not only that, but they managed to set-up an instance. of "newscaster reaction" from a local television station; while I was watching a Vermont. TV news programme on the set in my room, the woman. reporter said, "well theyre just tired and they want to go home", which sounds like a pretty unprofessional thing. to say until you realise she. was trying to say of me that I was the one that was supposed to be tired, and they (ie MI5) wanted me to go. home to the UK.

On the bus journey across the North American continent, it was. quite clear that MI5. were following me every step on the way. For the first part of the journey they actually put someone on the bus with me, a youth. who said at me "that guys paranoid" and. tried to incite other passengers to attack me. I stopped for a. couple of days in Winnipeg in central Canada, and on leaving the town heard. on the radio a female presenter ranting about "insanity!. insanity!". It is very tiring travelling such a long distance by bus; I took the journey. in two steps, each of about 36 hours; and it is especially tiring when you know. MI5 are watching you and harassing you every step of the. way.

When I finally got to Vancouver, MI5 instituted the. usual harassment, in very short order. I was surprised. how quickly they were able to induce hatred. towards me in elements of the general populace; the Security Service must have employed a number of agents and serious resources in. a very short period of time; and for. no real gain, because I havent been back to BC for almost five years, so. all their "work" appears to be for nothing.. In downtown Vancouver a street person said in front of me, "theyre all talking about him". For a few days I was staying at. Pauls Guest. House (345 W.14th Ave); on the day I left, the owner Paul shouted at no-one in particular, "hes going to. Victoria" - which was quite accurate, I was indeed going to the provincial. capital Victoria on Vancouver Island. But I had not. told anyone at the guest house where I was going; I had only mentioned. to my parents back in England on the phone that I was going away from Vancouver for a few days. Which leads. me to suppose that MI5s. bugging of the phone in my parents house yielded the "intelligence" that I intended. to visit Victoria, and they had passed the information. on to Paul.

When I got to Victoria it. was again obvious that the persecutors were "doing their stuff" there as well. On the street I was identified. as being English, although I had not said anything so. my accent hadnt given me away; and returning by ferry to the mainland, I. was abused by a Canadian woman who said, "hes a nutter! you can run but you cant hide". During. my years in Canada. I have never heard the word "nutter" on any other occasion; I do not think it is part. of Canadians vocabulary; so the Canadian woman on the ferry,. who was obviously talking about me, must have been supplied with this word by the English persecutors. And. once I got back to Vancouver,. staying at the Austin Hotel on Granville St, I listened to a conversation in the apartment block. directly opposite, and a man saying, "hes paranoid, so thats as bad as. it can be, so why are they doing this to. him?".

Holiday in the. States, August 1995

By 1995. I was living in Canada, and in August I went down the eastern seaboard to. Florida and as far as Key West by car. As you can guess (this is all. so boring and predictable, isnt it?) MI5 followed me every step of the way. I can see in retrospect. that this must have been quite easy for them as they had my car bugged, both on the inside to listen to. anything that was said and what radio station. I was listening to, as well as what must have been a tracker device installed to. track it across long distances.

The first city I visited was Philadelphia.. In the old Congress Hall where the first. US Congress assembled, the woman guide started referring to my situation, saying that "all these people in Europe. were watching it", and they were "a little paranoid". at this 18th-century experiment in democracy. Also I had recently written a newsgroup post where Id. described a (female) poster as "wet-nosed" (implying "canine"),. and a young girl in Philadelphia remarked, "so he thinks were dogs?". There were two or three more incidents. during this holiday in the eastern States, including a radio station down. near Miami, showing "they" had tracked me all the way there, and were bugging the inside. of my car; but I didnt record the details and Ive forgotten some of it now. Also. down in Miami Beach a French tourist in a lift expressed support for me with. the words, "cest incroyable" ie. its incredible, meaning that MI5s. well-known actions against me were beyond. belief.

To go back a bit, in about May/June 1995 Id visited New York,. again by car, and was insulted several times. by people using the same words that had. been used against me in England. In Central Park, and elderly Englishman (not a real. gentleman - but then the Engish view of themselves as "gentlemen" etc is quite laughable) looked at me. and said "idiot". And while I was eating in a. streetside restaurant a New York youth started laughing and said something like, "I cant believe it, hes actually. here" - I think that was because I had had an expressed wish. to visit New York for some years before this, although. after this visit I wont be going there again. for a very long time.

Visit to. Poland December 1995/January 1996

In December 1995 I. flew (BA again, unfortunately - every time Ive flown BA one. of these incidents has happened, presumably MI5 is happier setting up harassment on. British-domiciled carrier) from Montreal to Berlin and travelled on to Poland to visit family. MI5. naturally harassed me in Poland during my brief stay. They followed me. around and got Polish people to take part. in the harassment. In one case two Polish youths talked in front of me saying in English. (with marked Polish accents), "fucked up men, fuck you". There were also other. incidents which I dont remember too clearly since it was some time. ago.

The. return flight connected through Heathrow, and in the transit lounge MI5 again set-up harassment against me. In Poland they were. talking their abuse in English, and in. London they set Polish people after me to speak in Polish; they heard me on the phone to my father, and said "a. wiesz ze to Polski wariat", in an. almost sympathetic, inclusive fashion (translation. "you know hes. a Polish nutter"). Once on the flight to Montreal. I was again set upon by two English youths, one of whom spoke and the other listened. The aggressive "fat bastard" youth said, "if. he wants to be a wanker" (its my fault theyre. harassing me, you see), self-justification that. "hes a nutter" (so we have to keep on abusing him, because hes ill),. as well as talking about the town in Poland where I had been staying. He also said, "he doesnt know who we. are", but as already remarked in a previous article, that was at best. a half-denial of my guess expressed in internet newsgroups that the people after me were. MI5 - if anything its a half-confirmation rather than a. half-denial.

These incidents are still going on. You can. hear digitised audio files of abuse on. a BA flight to Berlin in 1998 on the Web at address

On this flight they were again attacking my. mental health; "paranoid, hes paranoid" and. "nutter" are discernable. The last "during travel" contact was at Ottawa Airport. on 21 July 1998, when "Alan Holdsworth" the psychopath MI5 agent, dressed as a vagrant, was. pacing aggressively in the departure area.. In three weeks I will again be travelling to Europe; we will see what fresh acts of molestation MI5. perpetrate during this trip.

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MI5 are Afraid to Admit. They're Behind the Persecution

MI5 have issued a formal denial. of any involvement in my life to the

Security Service Tribunal, as you. might expect them to; but, more importantly, the persecutors. have never denied that theyre from the Security Service, despite. several years of accusations from my corner on usenet and in faxed articles. I am not surprised that. the Security Service Tribunal found "no determination in your favour". I am however. a little surprised that. the persecutors have refused to confirm my identification of them; by doing so, they implicitly admit that. my guess was right.

"No determination in your favour" says the Security. Service Tribunal

In 1997, I made a complaint to. the Security Service Tribunal, giving only the bare outlines of my case. I do not think it would have. made very much difference if Id made a much more. detailed complaint, since the Tribunal has no ability to perform investigatory functions. It can only. ask MI5 if they have an interest in a subject, to. which MI5 are of course free to be "economical with the truth". A couple of months after. my complaint the Tribunal. replied that;

The Security Service. Tribunal have now investigated your complaint and have asked me to inform you that no determination. in your favour has been made on. your complaint.

Needless to say this reply didnt surprise me in the slightest. It. is a well established fact that the secret service are a den of liars. and the Tribunal a toothless watchdog, so to see. them conforming to these stereotypes might be disappointing but. unsurprising.

It is noteworthy. that the Tribunal never gives the plaintiff information on whether. the "no determination in your favour" is because MI5 claims to have no. interest in him, or whether they claim their interest is "justified". In the 1997 report of. the Security Service Commissioner he writes that "The ambiguity of. the terms in which the notification of the Tribunals decision is expressed is intentional", since a. less ambiguous answer would indicate to the. plaintiff whether he were indeed under MI5 surveillance. But I note. that the ambiguity also allows MI5 to get away with lying to. the question of their interest in me; they can claim to the Tribunal. that they have no interest, but at a future date, when it becomes clear that they did indeed place me. under surveillance and harassment, they can claim. their interest was "justified" - and the Tribunal will presumably. not admit that in their previous reply MI5 claimed to have no interest.

"He doesnt know. who we are"

In. early January 1996 I flew on a British Airways jet from London to Montreal; also present on. the plane, about three or four rows behind me, were two young men, one of them fat and. voluble, the other silent. It was quite clear that these two had been planted on the aircraft to. "wind me up". The fat youth described the town. in Poland where I had spent Christmas, and made some. unpleasant personal slurs against me. Most interestingly, he said the words,. "he doesnt know who we are".

Now I find this particular form of words very interesting, because. while it is not a clear admission,. it is only a half-hearted attempt at denial of my guess that "they" = "MI5". Had my guess been wrong, the fat. youth would surely have. said so more clearly. What he was trying to do was to half-deny something. he knew to be true, and he was limited to making statements which he knew to be not false; so he made a lukewarm. denial which on the face of it means nothing, but in. fact acts as a confirmation of. my guess of who "they" are.

On one of the other occasions when I saw the persecutors in person, on. the BA flight to Toronto in June 1993, one of the group of. four men said, "if he tries. to run away well find him". But the other three stayed totally quiet. and avoided eye contact. They did so to avoid being apprehended and identified -. since if they were identified, their employers would have been revealed, and it would become known that it was the. secret services who were behind the. persecution.

Why. are MI5 So Afraid to admit their involvement?

If you think. about it, what has been going on in Britain for the last nine years is simply beyond belief. The British. declare themselves to be "decent" by definition, so when they engage in indecent activities such. as the persecution of. a mentally ill person, their decency "because were British" is still in. the forefront of their minds, and a process of mental doublethink kicks in, where their antisocial and indecent activities. are blamed on the victim "because its his fault were persecuting. him", and their. self-regard and self-image of decency remains untarnished. As remarked. in another article some time ago, this process is basically the same as a. large number of Germans employed fifty years ago against Slavic "untermenschen" and the Jewish "threat" - the. Germans declared, "Germans are known to be decent and the minorities are at fault for. what we do to them" - so. they were able to retain the view of themselves as being "decent".

Now suppose this entire. episode had happened in some other country. The British have a poor view of the French, so lets say it had all. happened in France. Suppose there was a. Frenchman, of non-French extraction, who was targeted by the. French internal security apparatus, for the dubious amusement of French television newscasters, and tortured for 9. years with various sexual and other verbal abuse and taunts. of "suicide". Suppose this. all came out into the open. Naturally, the French authorities would try hard to place the blame. on their victim - and in their own country, through the same state-controlled media which. the authorities employ as instruments of torture, their view might prevail -. but what on earth would people overseas make of their. actions? Where would their "decency" be then?

This is why. MI5 are so afraid to admit theyre behind the persecution.. Because if they did admit responsibility, then they would be admitting that there was an action against me. - and if the truth came out, then the walls would come. tumbling down. And if the persecutors were to admit they were. from MI5, then you can be sure I would report the fact; and the persecutors support would fall. away, among the mass media as well as among the general public. When I. started identifying MI5 as the persecutors in. 1995 and 1996 there was a sharp reduction in media harassment, since people read my internet newsgroup posts. and knew I was telling the truth.. The persecutors cannot deny my claim that theyre MI5, because then I would report their denial and they would be seen as liars. - but they cannot admit it either,. as that would puncture their campaign against me.. So they are forced to maintain a ridiculous silence on the issue of. their identity, in the face of vociferous accusations on internet newsgroups and. faxed articles.

Have MI5 lied to the. Home Secretary?

In order for the Security Services. to bug my home, they would either have needed. a warrant from the Home Secretary, or they might have instituted the bugging without a. warrant. Personally I think it is more likely that they didnt apply for. a warrant - I cannot see any Home Secretary giving MI5 authority to bug a residence to allow television newscasters. to satisfy their rather. voyeuristic needs vis-a-vis one of their audience. But. it is possible that the Security Service presented a warrant in. some form before a home secretary at some point in the last nine years, for telephone tapping or surveillance of my residence,. or interception of postal. service.

So the possibility presents itself that a. Home Secretary might have signed a. warrant presented to him based on MI5 lies. Just as MI5 lie to the Security Service Tribunal, so they might have lied to a. Home Secretray himself. MI5 and MI6. are naturally secretive services former home secretary Roy Jenkins said,. they have a "secretive atmosphere ... secretive vis-a-vis the government. as well as [enemies]". Jenkins also said he "did not form a very high regard for how. they discharged their. duties".

It was only a few years. ago that MI5 was brought into any sot the extraordinary thing is. that British media organisations like the state- and taxpayer-funded BBC take such an active part. in the MI5-inspired campaign of harassment. We have after all. heard of MI5 trying to bribe broadcast journalists; but surely there must be a substantial number. who are. not bought or blackmailed by the Security Services, and who take part in the "abuse by newscasters" of their own volition? The. BBC is supposed to be independent. of the government of the day as well as the Establishment in general. While perhaps it is childish to think that. the BBC is anything other than effectively state-controlled,. the degree of collusion. between the BBC and the British Secret Police MI5 is something you would not find in many countries.. Individual tele-journalists in other countries would have enough self-esteem not to allow. themselves to be controlled by their secret police - seemingly, BBC. broadcasters like Martyn Lewis and Nicholas. Witchell have such a low opinion of their employing organisation that they see no wrong. in dragging the BBCs no-longer-good name. through yet more mud, at the mere request (whether supported by financial or other inducements) of. the British secret Police, MI5.

And when challenged, these broadcasters LIE about. their involvement, with just as little shame as MI5 themselves. The BBCs Information. dept have said. that;

"I can assure you that the BBC would never engage in any. form of surveillance activity such. as you describe"

which is an. out-and-out lie. Buerk and Lewis have themselves lied to their colleagues in the BBCs Information department over the. "newscaster watching", but unsurprisingly they refuse to put these. denials in writing. Doubtless if the "newscaster watching" ever comes. to light, Buerk and Lewis. will then continue to lie by lying about these denials. So much for the. "impartial" BBC, a nest of liars bought and paid for by the Security. Services!

It is obvious that the persecution. is at the instigation of MI5 themselves - they have. read my post, and only they have the surveillance technology and media/political access. Yet. they have lied outright to the Security Service Tribunal. Similarly, BBC newscasters. Michael Buerk and Martyn Lewis have. lied to members of their own organisation. The continuing harassment. indicates they are all petrified of this business coming out into the open. I will continue to do. everything possible to ensure that their wrongdoing is. exposed.

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MI5. Persecution Update: Friday 11 June, 1999

Harassment in a pub in Clapham, Tuesday. lunchtime

Once a month, or once. every other month, I meet a Polish friends of mine who lives in Clapham North,. and sometimes we go to a particular pub near where he lives.. The last time was some two months ago; I did not have my minidisc-walkman with me, and consequently was seriously harassed. by people MI5 had instructed to harass me, in the. pub.

This Tuesday, 8 June 1999, we again went to the same pub for a. pre-meal drink. This time I did have. my minidisc-walkman with me. As you can guess, we were followed into the pub by a couple of young people. (Im getting older and older. - isnt it funny how the MI5 agents all look young these days?). They. started talking about my situation, in particular some travel I had booked. the previous day. Unfortunately, they were talking fairly quietly, and my minidisc didnt pick up their. speech.

MI5s schizophrenic reasoning is that simultaneously I. am very important and worthy of their acts of persecution, and I am. also totally unimportant and their abuse of me "doesnt matter". Perhaps. they should test their agents and managers. for obsessive personalities or psychotic features in the same way as employees are drug-tested. MI5 might. lose their "worst cases" employees if some psychological testing. were applied to their recruitment. procedure.

Toothless Watchdogs. What a. Surprise.

Recently I have been engaging in communications. with two watchdogs, the Security Service Tribunal which deals. with complaints against the security service (and always clears MI5. of any wrongdoing), and the Data Protection Registrar, which is mandated. to investigate misuse of personal data held on. computer.

In a letter to. Nick Brooks, Security Service Tribunal secretary, dated 20 April, I asked him if the Tribunal,. as an allegedly independent body, had the means to investigate complaints against MI5. other than asking MI5 to themselves investigate complaints. To my. disappointment, his reply two weeks later answered the question only. indirectly, in the negative. Whatever the reader might. think of the merits of the case I have been putting before you in faxed articles this. last year and half, you will. surely recognise that it is a significant anomaly for the Tribunal to have no. independent means of investigating complaints, particularly given the view expressed even by previous home secretaries that. the security services are. untrustworthy.

MI5 Persecution: No Justice for. the Victims of MI5

In a. previous article I detailed the similarities between the current MI5 Persecution in England,. and other historical instances of similar persecution, notably that by the Nazi. Germans in the thirties and forties.. The Germans persecuted first the mentally ill, the epileptics and those suffering from schizophrenia, then moved. on to racial groups; in todays Britain the persecution is again directed. at those with mental illness, which the British in their cowardice find easier than taking. on racial groups as the Germans. did. But just as in Thirties Germany there was no. recourse against a malign and omnipotent state, so the MI5 Secret Police in the modern British Fascist State allow no. justice for their victims.

No Recourse Against. the Security Services Illegal Harassment

It has become apparent to me over the last nine years. just how loaded the dice are in. todays Britain, a fundamentally fascist country which masquerades as a. democracy. Britain is a democracy in name only; the Establishment,. the defence and MI5 secret police are always there, regardless of which party has been voted into power. most recently - and from "New. Labours" conduct in office one finds it difficult to tell them apart from Old. Tories, in their crackdowns on the sick and vulnerable in society.

In thirties Germany the victims of the Nazi regime had no legal. recourse against their State oppressors; and in todays Fascist British. state, the victims of the Establishment and its MI5 Secret Police similarly. have no recourse against the illegal state-funded and organised. oppression. There is supposed to be a mechanism for dealing with MI5 crimes, in. the shape of the Security Service Tribunal and. Commissioner; yet these have never found favour of a plaintiff. One might as well. ask the Nazi SS to investigate crimes against epileptics or. Jews as ask the Security Service Tribunal to investigate MI5. crimes against British citizens; it is quite obvious what the answer is going to be, regardless of what. you say to them, and what evidence you provide. The Tribunal and. Commissioner are a mere formality, a whitewashing body to give the Secret. Services a veneer beneath which they hide their shabby. criminality.

"Institutional Racism" and Bigotry in. the Metropolitan Police

The recent inquiry into the racist. murder of Stephen Lawrence found clear evidence of systematic and deliberate racism in. the Metropolitan Police, which. cannot have surprised anyone. Commissioner Sir Paul Condon accepted a. somewhat lukewarm definition of institutional racism as being "unconscious". In truth, and this truth must surely be. obvious to anyone who has any familiarity or encountered the great British police, the. Met has not just "unconscious" racism, but. very clearly "conscious" and deliberate. racism, of the kind that would have done Thirties Germans proud. And it is a bastion of such open. racism - when many other parts of society. are learning to live in a multicultural environment, the Met is still living in the past in its attitude. to the minorities.

But in addition to the systematic racism. confirmed by the Lawrence inquiry, there is also something much. more relevant to this case, which is systematic police bigotry against the physically and. mentally disabled, which I personally have experienced in my dealings with the police. over the. years. You cannot expect equal treatment if you are mentally disabled. I tried to make a complaint to the police. in 1995 about the harassment I had been subjected to for. several years. As soon as they found out I had mental illness, they refused. to even talk to me. I tried again in March 1999; the. police made various threats to me, while ranting about "your paranoid rubbish" in reference to the complaints expressed. to them.

The police refusal to do the job they are employed and paid to. do is extremely serious, particularly as. this case is highly important, indeed key to the whole issue of British self-perception at the. end of the 20th century and the beginning of the. 21st century. Britain has lost much in the last fifty years - it has lost an empire, it has lost. its self-respect and its identity as a people. If the MI5 persecution. finally makes it into the. light and the Security Services are seen for the rather cheap bullies their. behaviour indicates, it will have a massive and harmful effect on British self-perception in the. new century.

Security Service. Tribunal - Blatant Whitewashing

A few weeks ago I spoke on the phone. to Nick Brooks, the Secretary of the Security Service Tribunal, which is supposed to. deal with cases of MI5 transgression. I asked him if the Tribunal had ever found in. favour of a plaintiff and against the. Security Service. He answered that as far as he knew, it. had not.

I also asked Mr Brooks if. the Tribunal had any means of investigating allegations of criminal activity by MI5, other. than asking MI5 themselves if they had engaged in such activity. His rather circuitous. written reply states. that the 1989 Security Service Act provides that "it shall be the duty of every member of the Service to disclose or give to. the Tribunal such documents or. information as they may require for the purpose of enabling them to carry out their functions under. this Act". Which is a very round-about way of. saying - "No" - the Tribunal has no way of investigating MI5. crimes - None At All.

Setting up the S.S. Tribunal, and. creating a Security Service Commissioner, was really an act. of falsehood by the government. It is generally recognised that MI5 are out of reach. of the normal criminal justice system - the. police, as we have seen, have no intesot answer to the government; in a previous article I. quoted Roy Jenkins speaking of "a secretive atmosphere.... secretive vis-a-vis. the government as well as [enemies]",. and a "lack of frankness" from MI5.

If the government wanted to, it could. reform the secret services and ensure they acted in conformance with the. laws which have been enacted for them in the last ten years. But apparently. the present government does not see. any need to ensure security service compliance with the law. As noted above, the regulatory machinery for MI5 is deliberately. weak; the Tribunal has no independent. means of investigation, and it is simply a waste of time complaining to the Tribunal or. Commissioner.

Every so often, fresh revelations come to. light of secret service transgressions. We have heard from Shayler that MI5 bugged Jack. Straw and Peter Mandelson; we have heard from Peter Wright that MI5 plotted. to see Wilson ejected from office; yet so closed is. the system of government that the law is never enforced. against MI5 when they "bug and burgle" everyone from politicians. to ordinary citizens.

No Justice from. the Legal System, either

Britain has a civil and criminal. justice system which effectively limits many complaints from being heard. For a civil. complaint to be brought before a court,. you need a solicitor willing to act on your behalf. Supposedly it is possible to represent yourself as. a Litigant-in-Pthe basis of being "frivolous and vexatious" or. "disclosing no. cause for action in law". This is exactly what happened to me in 1997 when I twice tried to take. the BBC to court for spying on me in my living room at home;. my case was twice struck out, and on the second occasion an order was made against. me that I could not bring further civil litigation against the BBC without. leave of the court.

As the reader can guess it. is quite impossible for a person with schizophrenia, who complains about the secret services. and media interfering in his life, to find a solicitor willing to represent him. in legal. action against the persecutors. I have quite a lot of evidence of the continuing. persecution which I have posted on the website, even if the evidence is quite. tentative and perhaps open to varying interpretations. But. I have tried several firms of solicitors; some of them have acted. unprofessionally and abused me; all of them have refused to represent me.. My psychiatrist gave me the name of the firm of Bindman and Partners in central London, and I have approached them twice.. On each occasion they refused to accept my. instructions. Plainly the problem with Bindmans, which they. have admitted, is their bigotry against mentally disabled people; yet this is. not just something that is wrong with Bindmans,. it is something that is wrong with the legal system as a whole, since. the legal system necessitates finding a solicitor willing to represent you in order to bring a case. to court, but it does not have a mechanism for providing a lawyer in. the case where no solicitor is willing to take on your case. So the British legal system is. such as to prevent cases such as mine. from ever receiving an airing in a court.

So. much for the civil courts. But the criminal justice system is no better. Two. years ago the Protection from Harassment Act came into force. But again, while the. Act is all very well on paper, in practice it is unenforceable in my. case, since it would require Police action to see the law implemented, and if the. police cannot even be trusted to conduct a murder investigation competently (in the Lawrence case),. then what chance is there of their investigating complaints against. the Security

Service? Of course, it would be possible for. me to personally issue proceedings through a private prosecution. either against MI5 themselves, or against one or more of. their media tools; but here we see the same problems. as with the civil courts, because first of all I would have to find a lawyer willing to act on my. behalf. Litigants-in-person do exist in the criminal courts, but the Attorney General can bring. such a prosecution to an end by taking it over and entering a plea of. "nolle prossequi"; and I suspect that if I were to bring a private. prosecution against either MI5 or one of their. media tools, then this is exactly what would happen.

So much for British justice.. But if anything the wrongs that have been perpetrated on. me by the British justice system are quite mild to what others have suffered. Others have been wrongly. convicted based on police evasions and lies, and spent many years in jail based on false charges.. I should. count myself lucky that despite the best efforts of the MI5 secret police, I. have not acquired any criminal charges or convictions; which shows that for all their. resources and influence, and the clear imperfections in the British legal system, there are still limits on. how much. subversion MI5 can achieve.

The latest. in a long line of injustices

A comment I heard during the recent scandal of the police. mishandling of the Lawrence murder investigation is that "its not. as if the police themselves murdered him". This is not a. particularly wise statement to make about the case, since it. could be argued that the four alleged murderers were aided. in their crime by the expectation that the police would deliberately botch the investigation - which of course is. exactly what the. police did.

But in my case,. this would be a completely inaccurate thing to say - since the MI5 secret-police. have expressly been trying to nine years now to see an end put to my life, either by. having me incarcerated and my liberty ended, or by forcing self-termination. on me. It is exactly as if the secret police "themselves murdered [me]", since that. is what their aim is in their campaign. against me.

The public has heard. of instances of police mishandling of cases, of police manufacturing evidence, lying. in court, extracting false confessions. to clear up crimes, et cetera. Various instances of extra-legal activity by the secret services have also come to light. in the last few years. The unhappy truth is that what MI5 have been. doing to me for. the last nine years is really nothing out of the ordinary for them. To me it seems unbelievable that this sort of systematic campaign. of harassment, which thousands and thousands of people. in this country and abroad are well aware of, could exist for. such a long period of time with the. media maintaining "omerta". But my case is not the first such instance of persecution by the "British secret. police", and judging by the lack of any real controls on MI5, I very much doubt it will be the. last.

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From 3635245244926860223
X-Google-Thread: f8abe,5330aff5351f8fe4,start
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Followup-To: alt.sports.hockey.nhl.ott-senators,rec.radio.amateur.space,it.comp.reti.cisco,alt.fan.depeche-mode,alt.music.depeche-mode,uk.misc
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Lines: 276
Organization: news.newsdemon.com
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Xref: g2news1.google.com alt.sports.hockey.nhl.ott-senators:14143 rec.radio.amateur.space:1254 it.comp.reti.cisco:9895 alt.fan.depeche-mode:298 alt.music.depeche-mode:2748

MI5 Have Systematically Destroyed My. Life

This is getting depressing. From the. feedback Ive received, the recipients of these faxes. are tired of hearing my complaints, and in truth I am tired of sending. them. The reason I havent yet ceased sending faxes is because I cannot think. of any other effective means of replying to MI5s actions against me, and I feel I. have to do something to try to defend myself. Three/four years ago I got the MI5. harassment out of my system by posting about it on Internet newsgroups, and for a few months this. tactic was. quite effective - I received (and indeed still do today) support from newsgroup regulars, and felt I could make my. voice heard and break the MI5 monopoly on access. to the British media. But that was years ago, and today nobody gives a tinkers cuss about my internet. posts - so I have sought to escalate. matters by communicating directly with the politicians who allegedly say how. this country is supposed to be run.

Of course, its quite expensive to keep. up a campaign of fax messages for many weeks. Each set of faxes takes approx 50 hours. to send over the weekend, and costs perhaps 35.. My phone bill for the last quarter was 350. These figures are naturally insignificant compared to. what MI5 have been spending against me over a similar period. It also takes. a lot of time and energy to create a new article every week, and try and find. new and fresh aspects and viewpoints. on MI5s persecution of me. I am beginning to run out of both new topics and energy to. write these articles.

So I have a suggestion to put before the MI5. persecutors who have been wrecking my life since 1990. In a few. days time I will be going on holiday to Poland and Germany, for a. couple of weeks. Previously, almost every time I. have travelled by plane, or gone anywhere on holiday, the MI5 "wreckers" have been most assiduous in destroying these. trips. My suggestion is; if MI5 leave me alone on this next trip, I will. cease transmitting these articles. If, however, there are. any clear instances of harassment (and. I am very capable of recognising MI5 harassment when I see it), then I will make public these. instances and publish any recordings I may make. of them, and, unwillingly and unhappily, continue the articles.

Read about the MI5 Persecution on. the Web

Keith Hill MP (Labour. - Streatham), my elected representative, as ever refuses. to help.

MI5 Refuse to Allow. me to have a Normal Life

Its. kind of difficult to contemplate having a normal existence when you know your entire house is. bugged from top to bottom, for audio and, very unpleasantly, video; when your employment is systematically. destroyed, over and over again; when every time you leave the country. your travel is disrupted by MI5 plants on. the plane yelling abuse at you..... you get the idea. I would like to have some semblance. of a normal life, like my Polish and English friends. do. But MI5 have made this impossible, and they have leached massive resources from. the taxpayer to institute a life not worthy of. the name on me.

A few. years ago MI5 were very open about their aims in persecuting me. They were shouting "suicide" at me, both in Canada. where I lived at the time, and during my occasional visits to London. You cant get. much clearer than that. There have been instances as recently. as a few weeks ago of this intention being voiced. by their side; on 15 April 1999, a woman at the next ticket counter at the Royal. Festival Hall said;

"it would kill it, you know, it. would just be overkill... they can't stop can. they"

meaning that "they" were trying to. "kill it" i.e. me and they "cant stop".. The audio file is at;

I wonder. why they "cant stop". Nobody (who doesnt know already) believes my. claims - so what difference would it make, if they were to "stop" persecuting me? Perhaps. what this persons remarks indicates, is the depth of the obsession MI5 have. with this case. They have chosen at random a person from the general population, and done their worst to ruin. my life. What is wrong with. these people, that they persecute a national of the country. whose citizens they are supposed to protect?

No. Chance of a Harassment-Free Job

Since the harassment started in. 1990 I have had three jobs, the first near Guildford, the second in Oxford, and the third overseas in Canada.. All three jobs have been systematically destroyed by MI5. It is. so ironic that MI5 employs a team of agents, each well compensated for their. efforts, to persecute just one person paid a mere fraction of what they get. for their "work". In fact,. it is a joke that MI5 is allocated resources for this sort of effort. If this area. of government were run along commercial lines then MI5 would. be very rapidly closed down, they produce nothing of any value, instead spending their time obsessed. with the bugging and surveillance of their former employees. like Shayler, dangerous subversives like Straw and Mandelson,. and "threats to national security" like yours truly.

Applying. for my first post university job

When I was applying for my first post-university. job in the closing months of 1990, I found at two or three job interviews that MI5 had. got there ahead of me. Interviewers knew what. words to repeat from what had been said at my home recently; MI5 had supplied them. with words to hurt me, and the "British secret police" were trying. to wreck my job search and discourage me from. joining the world of work. This and the continuing harassment in the media and by the public meant that. the search for a job took very. much longer than it would ordinarily be expected to take for a person with. my qualifications.

With my first job near. Guildford came the knowledge that MI5 were doing everything possible to make me lose the. job. Despite their efforts I managed to stay. in work for ten unhappy months, during which they made very clear to me that they were bugging my workplace, my accomodation. in Woking, my car, my home..... and they also made clear that they. had "got to" my. employer in Guildford.

Employment. with Oxford

I was able to find. a new job, with Oxford Computer Training Services (now ARIS/Oxford), quite quickly. But it. became very clear, very quickly, that MI5 were treating this job the same as the first; they tried. to get the other employees and in particular. the managers to attack me. It was plainly MI5s intention that. I be sacked fro this job. But I was not sacked;. instead, after almost a year of abuse from OCTS managers, I was forced. to seek medical help, and had to take two months off for medical leave. OCTS MD Hugh Simpson-Wells was motivated in keeping me on. by the fear that if he. sacked me, then I would take him to court for the treatment OCTS managers had meted out to. me during 1992.

Emigration to. Canada

When I emigrated to Canada in 1994, I did. think that perhaps MI5 would leave me alone, given that I. had made the effort to leave the UK and try to. find a new life overseas. I could not see any reason why they would continue to harass me over in Canada. But clearly the MI5 agents had. their salaries. to think about, since continue to harass me they most certainly did, at my home in Ottawa, and by. getting fellow employees to speak against me, as had happened with previous jobs in. the UK.

MI5 are denying. me a future in work

Former Chief Constable. of Devon and Cornwall John Alderson had this to say regarding MI5's. activities;

"MI5 is not under the same restraints as the police. They. infiltrate organisations, people's jobs. and lives. They operate almost like a cancer."

Currently I am on disability,. and I can see that MI5 are denying me a future in work. It would be. an insult to logic for me to return to work and find a job, in the knowledge. that an entire team of MI5 agents, paid in total many times what I would be. earning, would have the objective of seeing me "done down" in the employment, and ejected from the. place of work. This situation is completely wrong and. nonsensical - I would very much like to have a job, but. MI5 are preventing me from even thinking about returning to work. The culture of secrecy in MI5/MI6. means there is no objective oversight of their expenditure,. when external oversight and greater transparency might lead to wasteful. and illogical operations such as that. against me being shelved.

Watched and Harassed at my. Home and Accommodation

As you will know if you have been reading. these articles, MI5 have watched and harassed me at my home, and at every accommodation Ive had. since 1990.. Theyve also watched me at neighbours houses in London, and at short-term accommodation such as hotels and. bed-and-breakfasts. They have used the "words" gained from. these watching activities against me, by passing these words. on to other people such as OCTS managers for them to make clear that I am being watched where. I live.

Harassed at rented. rooms in Oxford in 1992

This was at its worst in. 1992 in Oxford, where during the week I lived at rented accommodation in Oxford,. and at weekends returned to my parents home in London.. I was being severely harassed by managers at my place of work,. OCTS; and it was clear from the things they said that they were being supplied by. MI5 with details of my home life, that they were being supplied with. words to repeat at me.

In 1992 I moved house in Oxford many times, living at. a total of five rented accommodations in ten months. In. January I started off living in a rented room at Headington near the ring. road / A40 intersection; then when it became clear that house was being bugged, moved. to a rented room in

Botley, some miles away. It was at the house. in Botley that I had an "interactive watching" experience with Martyn. Lewis while he was reading the news; I. threw a term of abuse at him; he first flinched, then gave a gsult of what I had just. said, he was no longer "on my side".

So I moved. house again. This time to a place in Cowley, near the Rover car works, where. I stayed for a few weeks. Because of continuing harassment at work, I soon. moved from this accommodation, to yet another rented room on Iffley Road. By this time I was very ill and being abused continuously. at work. Again, MI5 followed me to the rented room. on Iffley Road, and created new. instances of "newscaster watching". There was a television in the room which. I watched, and as you can guess the newscasters got at me when I was watching the television. Also once I was assaulted, if. thats the word for what happened, on leaving the house; a. youth grabbed me by the coat lapels, roughed me up a bit. with various terms of abuse. I did not report this assault to the police, because what was happening to. me at work was very. much worse, and nobody seemed to think that that was worthy of being reported to the police. Later that day at work,. Alex G, a fellow employee, said "I heard he was. assaulted".... I had not told anyone at work about the. incident that morning..... so once again it was made very clear that MI5 were watching. my rented accommodation and giving information. about what was going on there to managers at work.

So I moved house yet again in late autumn. 1992, this time to a rented room in a large house on Woodstock Road. I stayed there for several. weeks as the situation at work deteriorated due to OCTS. managers abuse, until I was forced to take sick. leave from work for two months and attend hospital as an outpatient;. at which point I gave notice on the room, and returned to London.

MI5 continued to harass me after. the diagnosis of serious illness was made. As reported previously, they harassed me on. a flight to Spain in December 1992; and in 1993, when I returned to. live and work in Oxford, they again bugged my rooms, as well. as my workplace, although the intensity of the harassment was very much. less than in 1992.

Watched,. followed and harassed in Canada

It dismayed me to find. that MI5 would not leave me alone after I had settled in Canada. In January 1995. I rented an apartment at the Bayshore complex in Ottawas west end. For some weeks there was no sign of. the "buggers". But then it started all over again.. They first bugged my car, which had a car alarm installed - the. alarm went off two or three times in a single evening, and. the following day gave a signal that the car had been broken into. Then they. bugged my apartment, and in particular they installed bugs on the phone line in my. apartment.

In September 1995 I moved. to a new apartment in Ottawas Bytown Market area, the restaurant and entertainment heart. of Canadas capital. This proved a serious mistake. In the. west end I had been fairly distant from the centre. of town where MI5 concentrated their efforts at turning people against me.. In the Market area it was much easier for the persecutors to motivate people to harass me, and. over the next couple of years there were frequent instances of harassment by the. general public.

From 1995 I had some Polish friends in Ottawa, and as the reader. can guess, MI5 have spent much. effort trying to break up this friendship. They supplied. various things about my home life to these friends, for example where I was living in the Market, directly over the road were. the studios of. a music radio station, which you had to "look up" to see; and MI5 told these friends that I. was "looking up" to see the radio station; so the friends. then replayed these words back to me, that I was "looking up". MI5 have also made various sexual slanders against. me, and these friends also unwittingly replayed some of the words they had been imprinted with by. the MI5. persecutors.

MI5 Will Never Allow. Me to have a Normal Life

I have heard. many excuses as to why MI5 continuously prevent me from having a normal life. We are told that MI5 are defending the. country against. a tere to zero.

When I have travelled abroad, they. always put their people on the flights, on the journeys I undertake, to continue the harassment, so. that I am put off further overseas travel, and chained to my home in London. Yet. even this is illogical, because when I lived in Canada,. they would still put people on flights back to the. UK.... and what possible reason would they have for doing that? Perhaps the truest words. to describe the MI5 persecution is that reason. has nothing to do with their activities - sane people do not behave in the way. the MI5 British Secret Police have been doing.

Summer. 1999 - more MI5 harassment?

In only a few days time I will be going to Europe again. This time. I have deliberately chosen to travel by a. non-UK airline; so we will see if they put their paid agents on this foreign carrier, we will see. if they try to harass me on. this non-British flight.

If they do harass me on this trip to Europe, or. if they resume the harassment in London after I return home, then. I will continue to report their activities in these faxes. As I said at. the beginning of this article, I would very much like to not have to send. these articles any more, but that is not my decision. to make - it is entirely up to MI5 to cease their pointless persecution of. me, once and for all.

5467

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MI5. Persecution Update: Friday 9 July, 1999

Harassment in Poland, July. 1999

And still it continues.... in my last fax I. said that provided MI5 made no attempts at harassment during my. two-week holiday this summer, or after I returned to England,. then I would discontinue these faxes. Unfortunately MI5 have continued to harass me, both during the holiday and after. my return to London. I. really dont want to continue these articles, since they take up so. much time and effort, not to mention expense; but the Security. Service wont even let me have a holiday in peace and quiet, so I have to make further efforts to bring their activities out into the. open.

In early July I visited my aunt and her family in Poland. On. Saturday 3 July 1999,. I went to a family barbecue at an allotment outside the city. One of my aunts family has previously shown himself. to be in the "enemy" camp, by saying the Polish. equivalent of "something wrong with him",. and various other unprovoked insults. It is disappointing that one of my. family could forsake the usual ties of blood and take part in the actions against me, but thats the way it is. This guy turned up. at the barbecue, and started making insults against me. In. particular, he started to say something about the video camera. which I had brought along on the trip, and. the relevance of the video-camera to my fight against the persecution. It seemed. pretty obvious to me that my enemies had told him to turn up to. this occasion, and most likely schooled him in precisely what words to say; since hes an unintelligent person and. would not be able to think for himself what insults to make against. me.

Harassment in London,. week ending Friday 9 July 1999

Got back to London Wednesay afternoon. Two incidents. on the Underground returning. from the airport. Unfortunately I wasnt recording because I wasnt expecting trouble, so these slipped. through the net. One of these was verbal sexual abuse, of the type Ive heard many, many. times before these last three-and-a-half. years.

Yesterday, Thursday 8/July/1999, I switched. on Heart FM which had never "got at" me. before.... and the presenter started making jokes about "mad, crazy". etc. Again, wasnt recording this because Id never had any trouble from this radio station and wasnt. expecting any.

Also yesterday, on a bus (155?) from Balham to Clapham, a couple. of girls started harassing me with taunts of "crazy". By now. I was expecting trouble and recorded. an audio file of this instance of abuse, at web URL;

The cynical reader might think my demeanour or. behaviour had given rise to the taunts of "crazy". recorded above. But I assure you my behaviour on the bus would not have made anyone think I was ill; and. the taunts the previous day were. the same sexual words as previously; so I'm quite sure that these incidents are either deliberately. staged, or indicative of an overall high level. of awareness among the London public, particularly in the part. of London where I live.

Keith Hill MP (Labour -. Streatham), my elected representative, as ever refuses to. help.

MI5 Persecution: Harassment through. the Radio

One of the aspects of the MI5 persecution has been. harassment through the broadcast and print media; and one of the. aspects of harassment through the broadcast media is being "got at" by radio presenters. This being. "got at". from the radio takes various forms, the most obvious form being through overt or hidden words and insults.. But there are other, subtler forms. In Canada. a couple of years ago, I used to listen to the local radio stations every morning driving to work, and listened to the. music only, switching between radio station presets rapidly. as soon as a presenters voice came on,. so that I would not be subjected to any verbal harassment by the D.J.s. But they found. a way around this; they kept on playing the same song, every bl**dy morning at the same time, which. had the words "all coming back. to me"; the perceptive reader will remember that the words "coming back". have special meaning (see the Private Eye cover at web URL;. for the
hidden. meaning).

And. thats not the only time theyve allowed the songs themselves to be used as abuse against me; many years ago Radio-1 in. the UK did exactly the same, and the. DJ even made it explicitly clear by saying, "dont you sometimes feel as if the songs were made just for. you".

"We should be done for attempted manslaughter". says Chris Tarrant

Capital Radio DJs have. been "in on it" from the start. One of the first things I heard. in the summer of 1990 was from a Capital DJ who said, "If he listens to. Capital then he can't be all bad" (supportive, you see. We're not. bastards). Much of what came over the radio in 1990 is now so far away the precise details. have been obliterated by time. No diary was kept of the details, and although. archives if they exist may give pointers, the ambiguity of what. broadcasters said would leave that open to re-interpretation.

In spring 1994, Chris Tarrant on. his Capital morning show made an aside to someone else. in the studio, about a person he didn't identify. He said, "You know this bloke? He. says we're trying to kill him. We should be done for attempted. manslaughter".

That mirrored something. I had said a day or two before. What Tarrant said was understood by the staff member in the studio he was saying it to;. they said, "Oh no, don't say that" to Tarrant. If any. archives exist of the morning show (probably unlikely) then. it could be found there; what he said was so out of context. that he would be very hard put to find an explanation. A couple of days later,. someone at the site where I was working repeated. the remark although in a different way; they said there had been. people in a computer room when automatic fire extinguishers went off and those people were. "thinking of suing for attempted manslaughter".

Pirate Radio. "gets at" me

In another incident. in 1990/91, Id been listening to a pirate radio station in South London for half an hour, when there. was an audible phone call in the background, then total silence for a. few moments, followed by shrieks of laughter. "So what are we supposed. to say now? Deadly torture?. Hes going to talk to us now, isnt he?" which meant that they could hear what I would. say in my room. Note the word "deadly" - they give away. their purpose.

It constantly surprised me that MI5 are so easily able. to subvert broadcasters, and, in this case of the. pirate station, to do so, so quickly. I think the answer to this question. is that they must have very wide contacts in the broadcast. media; presumably some or in fact many of those contacts are literally "bought". In. the same way as they tried to buy Jon Snow of Channel Four news,. they must have bought many broadcasters and use them both directly to make. insults against me, and promulgate their points of view; but also, they must use these. "bought" broadcasters to influence other television and radio presenters,. who might not even be aware that it was. on MI5s behalf that they were being influenced to "get at". me.

BBC-Radio-1. D.J.s celebrate my job termination in November 1991

This is another one from the "early years". At the. beginning of November 1991 my employment in Woking, Surrey was. terminated. Chris Tarrant of Capital-FM had already made nasty. remarks about both my work for the company, and the managers of the. company themselves - "so theyre not really a serious company, well theyd have to be to. employ you wouldnt they".

So when I was terminated, as you. can expect, BBC Radio 1 D.J.s celebrated. On the Saturday afternoon. (either 9/Nov/1991 or 16/Nov/1991 - I cannot. remember precisely) I briefly listened to Radio-1 and heard the disc jockeys. loudly proclaiming "youre useless, you should be sacked". On the same day, I went down to the Kwik-Fit in Tooting to. get my cars tyres replaced, and in the office ran into a couple of their staff, one of. them with an Australian accent, who said "what do you think about it. then? Its getting killed. on the radio."

Plainly,. if a random car-repair shop in Tooting knew about the persecution, then many thousands of other people across the capital. and all over the country must have known. And the. phrase "getting killed" shows very clear awareness of what the MI5 Persecutors. intentions towards me were in 1991, and judging by the continuing. harassment, still remain. today.

Recent Feedback from. Virgin-Radio

As readers will know, from mid-March 1999 for some. four months, every weekend, I have bombarded Westminster. MPs with faxes about the terrible, all-encompassing MI5 Persecution. (Jesting. aside, it really is terrible and all-encompassing, in the UK. anyway.) In June 1999, after I'd been at it some three months, I started getting "covert". feedback from Virgin Radio.

The first feedback I got was from Danny Baker,. on Sunday 13th June. That weekend I was sending an article which contained. biting criticism of the police. inaction in this case. Danny Baker on his Virgin radio show started an angry rant that "he knows it's rubbish",. ie. he was rubbishing what I'd said. in that weekend's faxed article. Unfortunately I wasn't recording this. programme.

The next possible Virgin-Radio feedback was a week later on 19th. June 1999. This is contained in the audio file above, in which. Johnny Boy on his "Wheels. of Steel" programme says;

"and if you would. like to put a triple play together, ahhh.... because quite frankly Hipster and me are running. out of ideas...."

He goes on to counter. Hipster's "how dare you" with a protestation that he is "only joking". You can listen to this incident on my website. at URL;

What I reckon is that my article. faxed to MPs that weekend was forwarded by one of the recipients. to Virgin Radio. My article had included the words;

"I am beginning to run out of both. new topics and energy to write these articles."

So what I reckon is that Johnny Boy read the article.... and. rephrased the above line "run out of ... new topics" to "running out of. ideas". I recognise that this is a. pretty tenuous inference to make.... but do listen to the audio file, from the "ahhh...." pause in JB's. speech you can guess he is about to say something. "risky" and at someone's expense. Anyway,. I listen to the Wheels of Steel regularly and will continue to do so, recording. it as I always do - so any future funny remarks will. get immortalised on my website! (There was a previous incident from August 1998 which. is preserved at web URL;

but I am sufficiently uncertain about it that. I have not included it in this. article.)

First Ever Radio Reference - Alan. Freeman of BBC-Radio-1

The first time. I was ever referred to on the radio was sometime in May or June of 1990, by. Alan Freeman of BBC-Radio-1. Note that this isnt an "interactive. listening" episode, its different, this was Freeman reading out a letter from one of my "real life". enemies.

Id acrimoniously broken up with some former friends in January of. 1990, and I. think they were still trying to cause me trouble in June of that year. Freeman on his rock show read out a. letter from an "Andrew Turner"; one of my acquaintances from January 1990 had. been called Andy Turner, so I think its the same. guy. Freeman quoted Turner as saying various things about me,. in particular Freeman said "thats a hell of a letter you wrote there Andy", "with a schizophrenic you're. never alone", and something about the "one who wore out his welcome with. random precision" (from the words of the Pink. Floyd song).

When I was looking. for primary causes of the MI5 persecution, this letter which Freeman had read out on his programme struck. me as being potentially one of the. sources of the persecution. I know Turner and various others in that group were very bitter at. what they saw as their failure and my undeserved success, and they were. quite determined to upset the applecart. Of course several other primary causes are possible; I do. not know why MI5 chose me as opposed to someone else, and MI5. are hardly likely to. tell me.

"Absolute Obscene" David. Hepworth of GLR

This one Ive assigned a 100% rating on the website. There are. actually two separate incidents, which are linked through. the D.J.s choice of words. The first incident can be heard in computer audio at. web URL;

On . 21/Feb/1997, I was listening to BBC GLR, by stealth. Back in 1990 I used to have Capital blaring. out of the speakers all over the garden ("if he listens to Capital. then he can't be all bad", thanks ever so much). But now I listen on my walkman on headphones with the volume. turned right down. It could not possibly be overheard by any listening. device, no matter how sensitive, because sound does not. carry from the phones.

Yet somehow they are still able to tell which station I am. listening to on the walkman. And last night, I bravely. tuned to GLR 94.9FM at around 8.45pm. Everything went well. for the first half hour or so. Around 9.10pm, Hepworth said the following after the song. "Come Around" by the Muttonbirds.

"coming up after this, we got. the rock-and-roll A-level, we have, I assume, Brian do we have. an embarrassment of prizes in there, we do, don't we, absolute obscene amounts of prizes, there will no. doubt be a riot at the back door,. and that's, er, A-level coming up after this"

The key phrases in what he. said are, "EMBARRASSMENT of prizes", and what he. himself emphasized verbally, "ABSOLUTE OBSCENE amount of prizes". It is my belief (based on content and tone of voice). that when he spoke these phrases he. knew I was listening, and that the phrases refer directly to my situation. The. "EMBARRASSMENT" is the embarrassment he and other media people would feel at having their. wrongdoing exposed; the "ABSOLUTE OBSCENE" (which he verbally emphasized) described the disgusting. sexual abuse which the harassers have. been throwing at me.

There was a second incident,. on 9/May/1997, which may be found on the web (with computer audio). at URL;

This incident again contains the words "absolute. embarrassment of prizes", with the same emphasis as the first instance, and laughter following. the phrase. So theyre aware of the complaint I made on Usenet after the. first incident; and. they are so arrogant that they do exactly the same again. They are so arrogant, they know they are being recorded and. that what they say will be published on the web, but they dont. care. What corrupt media, and what a corrupt. country to have such corruption in its media.

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Posted via NewsDemon.com - Premium Uncensored Newsgroup Service
      ------->>>>>>http://www.NewsDem
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```
From -1200557366483161732
X-Google-Thread: f8abe,9ba62949bf964769,start
X-Google-Thread: 10e8ad,9ba62949bf964769,start
X-Google-Thread: 101522,9ba62949bf964769,start
X-Google-Thread: 114781,9ba62949bf964769,start
X-Google-Thread: 11368f,9ba62949bf964769,start
X-Google-Attributes:
```

gidf8abe,gid10e8ad,gid101522,gid114781,gid11368f,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!border1.nntp.dca.giganews.com!nntp.giganews.com!nx01.iad01.newshosting.com!newshosting.com!post02.iad01!news.newsdemon.com!not-for-mail
Message-Id: <kp0711311017153027@4ax.com>
Subject: M-I,5.Pers ecution ` Th ree Year s of M I5 Persecut ion Fa xes
Newsgroups: alt.sports.hockey.nhl.ott-senators,rec.radio.amateur.space,it.comp.reti.cisco,alt.fan.depeche-mode,alt.music.depeche-mode
Followup-To: alt.sports.hockey.nhl.ott-senators,rec.radio.amateur.space,it.comp.reti.cisco,alt.fan.depeche-mode,alt.music.depeche-mode,uk.misc
From: mveifvfim@bigfoot.com
Date: 31 Dec 2007 10:17:18 GMT
Lines: 207
Organization: news.newsdemon.com
X-Complaints-To: abuse@newsdemon.com
X-Original-Lines: 204
Xref: g2news1.google.com alt.sports.hockey.nhl.ott-senators:14145 rec.radio.amateur.space:1256 it.comp.reti.cisco:9897 alt.fan.depeche-mode:300 alt.music.depeche-mode:2750

Three Years of "MI5 Persecution". Faxes

Ten Thousand. Faxes, and Still No Breakthrough

In the last three years. I have sent at least 5,301 faxes directly from my computer, and 4,478. faxes through Demons extremely useful TPC.INT service, to politicians and the media, in the subject of. the "MI5 Persecution". This has obviously cost me quite a. lot of money, not to mention time and. effort. The aim of all this communication has been to try to put discussion of. the "MI5 persecution" into the public arena; unfortunately, this. aim has not been achieved, yet.

This fax will be my last transmission. for the time being, since the summer recess. is almost upon us. Depending on what the persecutors do between now and the. autumn, I may or may not resume faxing later this year. In the article dated 18/6/99 I said Id stop. the articles if MI5 left me alone;. but they seem to have no fear of these articles, since they kept pursuing me in Poland and after my return to the UK. Again, if. they leave me alone this summer then I wont have to. resume the articles in the autumn; but I think its fairly obvious that MI5 have nothing better. to do with their time than to go after me, and its almost pointless to make. this offer. when I know they wont cease harassing me.

TPC.INT 1996,. 1997, 1998.....

Three years ago I was living. in Canada, and the only economic way of sending faxes to the UK was. through the international email-to-fax gateway TPC.INT. This. highly useful and totally free service converts emails (which may have Postscript-formatted attachments) into. faxes which it delivers. to any number within the UK. Using the telephone book, I constructed a computer database of M.P.s fax numbers,. and used this database to deliver. copies of the "FAQ - frequently asked questions". article which Id written some time earlier.

This service is. still operational, but given that I have resided in London for the last year, I do not need to use Demons. service when I can send articles directly from my own computer using its fax/modem, which. is what I have been doing since 1998.. However, instead of just sending the FAQ article, Ive been composing articles. on various aspects of MI5s treatment of. me. Since their activities have been going on for nine years now, and there. have been various aspects to their actions; they have harassed me at work, at home, through the media, etc; I. have so far not run out of things to say, particularly. since their harassment of me is still ongoing, and I have been. able to record the actual words used by their paid agents on my minidisc-walkman. Since mid-March. 1999 I have been sending these articles pretty. much every weekend.

Anyway, as mentioned above, I. intend this to be the final transmission before the summer recess, and it would be nice not to have to. continue these articles in. the autumn. But thats something that depends on them, not me, and their attitude. is unfortunately clear.

Why am. I sending these articles?

Because I want the harassment to stop. The cynical reader might think. from these. articles that I "thrive on adversity" and would be lost without the harassment to. complain about; but that is not the case. In a perfect world I. would like to return to work, in a job unsullied by MI5s attempts to ruin it; I would like to live. in a house which wasnt bugged, with my words being repeated at me wherever I. go; I would like a normal life. I do not particularly thrive. on adversity; I am beaten down by adversity; the purpose of these faxes is to try. to bring the whole matter out into the public arena, where the. rights and wrongs would be visible to all, and once that were to happen,. the adversity might cease. I have had something approaching a normal life a couple. of times in the last nine years, but always, in the end, MI5 turn up and ruin it. I just. want these people out of my life, permanently, and the. only way of doing that is to kick this business. into the public arena, and shame MI5 so that they are incapable of doing. me further damage.

Having said that, unfortunately. it seems fairly obvious by now that these faxed articles are not going to achieve that. aim. Some of the recipients know what I am saying is true; but they. choose to stay quiet - wisely, because if they were to admit the truth of. these articles, then they would bring the wrath of MI5 down on their heads. Presumably most. recipients do not know these articles are true; their reaction. to me is the same as my reaction to the other apparently deluded. people who have sent me email after reading my webpage. to tell me it happened to them too; the reaction being, "leave me alone, I dont want to know". Its sad that many. M.P.s have given me this reaction, because my. case genuinely is different; I genuinely am telling. the truth, and the harassment genuinely is happening to me, and some recipients of. this fax know this to be true.

"Write to your. own M.P."

My local. M.P. is Mr Keith Hill, Labour-Streatham. He refuses to have anything to do with me.. He refuses to represent me, he refuses to talk to me, he has told me not to communicate with him. He. has done absolutely nothing. to help me, and he has told me he will do absolutely nothing to help. me.

Other M.P.s, recipients of these faxes,. have for quite some time been telling me, "write to. your own M.P.". On 23 March 1998, Paul Burstow M.P. wrote to me; "Whilst I take the issues that you. raise seriously, there is a strict Parliamentary convention that one Member of. Parliament does not take up anothers casework. Can I suggest that you. write to your own M.P.. at the House of Commons?" Hopefully the above paragraph will make clear that I have written to my own. M.P. and he has proved unhelpful.

Other M.P.s have told me the same thing. On 21 May 1998, John. McFall M.P. told me, "... there. is a parliamentary convention that M.P.s do not take up cases of people not in their constituency..... therefore. can I suggest that you write to your local M.P. who will. be better able to assist you.". And on 8 June 1998, Michael Foster M.P. wrote to me that "M.P.s are inundated with unsolicited faxes ..... M.P.s have a considerable amount of. constituent work to deal with, thus other M.P.s constituents cease. to be of concern in so far as they should have a voice and representation".

Simon Hughes M.P. wrote to. me on 5 November 1998, "There is a strict parliamentary convention which states that I am not able. to represent individuals who. are not constituents of mine. My advice is that you find out who your own Member of Parliament is. rather than circulating your story to all M.P.s.". To my suggestion that. Keith Hill M.P. was doing nothing to help. me, George Foulkes M.P. sent the following faxed response; "If Keith Hill your own. M.P. cannot help no-one else in the House of Commons can." But it is clearly not. a case of "cannot" help, but "will not". help. I have detailed in letters to Mr Hill specific ways in which he. could help me, first of all by finding a lawyer to represent me. It is Mr Hills job as a Member of Parliament to represent. his constituents;. if he chooses not to do so, then it reflects badly on him.

Kate Hoey Sympathises, but says, "Write to. your own M.P."

Here is part of a letter Ms Hoey sent to me on 15. June 1999.

I appreciate that you have concerns. about the persecution and harassment that you feel you are. experiencing but I note that your MP is in fact Keith Hill. There is a very strict Parliamentary code. which means that M.P.s can only take action on matters that. relate to their own constituents. I am aware that you are not happy with the fact. that you do not feel Mr Hill will assist you but I am afraid that I cannot. take any action on your. behalf.

Ms Hoey plainly belongs in the camp of people. who do not know about the reality of the "MI5 Persecution".. She doubts its existence; "the harassment you feel. you are experiencing". She urges me to see Mr Hills assistance, as. have other M.P.s detailed above.

Really, the fact that I am unable to obtain. assistance from any other M.P., if my own alleged "representative" Mr Hill chooses not. to represent me, is a very basic. weakness in the Parliamentary system. Beinggmainly events at my former employers in Oxford during. 1992, when I was harassed constantly. by manager Steve Mitchell for most of 1992, and was forced to begin attending hospital as an outpatient as a result. This harassment. was obviously of Mitchells own volition, since I. observed him harass similarly another new worker two years later; but it. was also at MI5s instigation, since. they kept providing him with words from my home life which he then proceeded to abuse me with. Yet this is not the only employment. that MI5 have destroyed; the MI5 persecution has lasted. from the end of my student days until the. present time, during which I have had three jobs, all of which have been in various. ways destroyed by MI5s deliberate actions.

In March 1999 I. decided to try to force the issue once and for all. Ever weekend for the last. four months, apart from two weeks when I was on holiday, I have sent original articles by fax. directly from my computer to Westminster politicians. Here is a summary of the articles. of the last four. months;

How to Identify. the Persecutors

Their. use of Schizophrenia to discredit my claims
Comparing the MI5 Persecution with German. "Final Solution"
MI5 are. Plainly Trying to Kill Me
MI5 Waste Taxpayer. Millions on Pointless Hate-Campaign
Four Years of "MI5 Persecution" Posts on Internet. Newsgroups
MI5. Agents are Clinical Psychopaths
BBC Newscasters Lior the. Victims of MI5
MI5 Have Systematically Destroyed. My Life
Harassment through. the Radio

To my deep worry these. fourteen faxed articles have still not achieved the objective of kicking the matter out. into the public arena and forcing an admission. either from the persecutors, or from those "in the know", which includes some. M.P.s.

I dont really know what else to do to try to bring the. "MI5 persecution" out into. the open. I would have expected that these weekly faxed articles would have had some effect, but the only result. has been M.P.s telling me to. contact my own representative Mr Hill who refuses to talk. to me. I understand the convention that M.P.s deal with their own constituents and not those of other M.P.s, but there seems to be a gap. in the process since it allows your own. M.P. to refuse to deal with you, and then you are totally denied any representation at. all.

Conclusion

The. only conclusion I can inform the readership of these articles of, is that. there is no conclusion to this matter, yet! Three years of intermittent. articles, and four months of faxes every weekend, have been absorbed by some of the most powerful people in the. country, to no effect.

Whether these. articles continue in the Autumn is entirely up to the "opposition". I. offered them a cessation of complaints if they would leave me alone on holiday in June/July, and they went right ahead. and harassed me anyway, on. holiday and after I returned to London. If MI5 cease their activities now, then I wont. have to continue these faxes in the autumn; but. I suspect they wont cease, which means youre in for more articles later this. year. "There will be no conclusion."

8791

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Posted via NewsDemon.com - Premium Uncensored Newsgroup Service
------->>>>>>http://www.NewsDem

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From -1706274775461345882
X-Google-Thread: f8abe,3c8ecdc3a3f5dab7,start
X-Google-Thread: 10e8ad,3c8ecdc3a3f5dab7,start
X-Google-Thread: 101522,3c8ecdc3a3f5dab7,start
X-Google-Thread: 114781,3c8ecdc3a3f5dab7,start
X-Google-Thread: 11368f,3c8ecdc3a3f5dab7,start
X-Google-Attributes:
gidf8abe,gid10e8ad,gid101522,gid114781,gid11368f,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx01.iad01.newshosting.com!newshosting.com!post02.iad01!
news.newsdemon.com!not-for-mail
Message-Id: <ny0711311057542566@4ax.com>
Subject: M,I.5,Persecutio n , M I5 Wa nt Me to Sen d You  th ese Fa xes
Newsgroups: alt.sports.hockey.nhl.ott-
senators,rec.radio.amateur.space,it.comp.reti.cisco,alt.fan.depeche-
mode,alt.music.depeche-mode
Followup-To: alt.sports.hockey.nhl.ott-
senators,rec.radio.amateur.space,it.comp.reti.cisco,alt.fan.depeche-
mode,alt.music.depeche-mode,uk.misc
From: ifmfifim@gmail.com
Date: 31 Dec 2007 10:57:58 GMT
Lines: 280
Organization: news.newsdemon.com
X-Complaints-To: abuse@newsdemon.com
X-Original-Lines: 277
Xref: g2news1.google.com alt.sports.hockey.nhl.ott-senators:14146
rec.radio.amateur.space:1257 it.comp.reti.cisco:9898 alt.fan.depeche-mode:301
alt.music.depeche-mode:2751
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MI5. Want Me to Send You these Faxes

MI5 seem to Want to Spin this. Business out for as Long as Possible

The MI5 persecution has now been going on, starting. from June 1990, for well over nine years. If I knew. how to put an end to it then I would do so. Of course MI5 have indicated how. they wish to finish the matter, by finishing me off; they indicated. this very clearly years ago when they were. shouting "suicide" at me.

But a deeper truth is that. the MI5 agents carrying out the persecution rely on it for their income and their livelihood. They have. absolutely no interest in anything other. than spinning out the whole business, because that is how they will. maximise their earnings from their employer for the "work" they. do against me.

A. vital part of the fantasy structure MI5 have created about me is that I am somehow a worthwhile target. If you bother to. read these faxes, if you browse my website, or perhaps read my posts on. the uk.misc newsgroup, you will have by now twigged that I am a totally insignificant person who in. a proper dictatorship like East Germany. would not merit five minutes of Stasi time. But Britain is improper in the. methods of its corruption, and the Security Service seeks. to present me as being a an evil fascist, an evil communist, an evil something-else, and. even a "national institution".

It occurs to me that to some. extent I am playing into their hands, into their scheme of things, by writing these articles. and sending these faxes. By doing these things,. I elevate my profile, and fuel MI5s paranoid obsession with me. But to stop sending faxes. would be to give up the only hope I have of seeing. their campaign "outed" and justice done. Certainly there is no point going to. the police again; and as remarked in a previous article, the Security. Service Tribunal routinely whitewashes every complaint that is. placed before it.

So although MI5. seems to want me to continue sending these faxes, doing this is the only real chance of getting. this business out into the open. And so Ill continue trying to kick down their house. of cards. At least my situation is. less serious than that of some other victims of the secret services; unlike. Shayler I am not broke and exiled; unlike Fayed I have not lost a son to the posited activities of. the secret services. All I. have lost is some of my health, some of my life, and some of my possible career.

MI5s Abuse. of me is without Cause or Reason

It constantly puzzles me that. MI5 refuse to leave me alone, wherever I go and whatever. I do, or rather, whatever I dont do, since Im not a very socially or otherwise active person.. When I am in England, they chase me all over the. place, and once theyve found me, they pay people to shout rude words at me. When I am in Europe, they again. chase me all over the place, and as usual pay people to shout obscenities at. me. When I am in Canada or visiting. the States, they faithfully chase me all over the place, and when they find me, pay people to shout. obscenities at me.

It. is hard to avoid the conclusion that these MI5 operatives who chase me are total lunatics. You will remember from a. previous articles the assessment "MI5 Agents. are Clinical Psychopaths". They have tried to blame me for what they do and what. they say; yet their lies have been wafer-thin, and are clearly seen to be oiled by the money. which they acquire from the Government,. and ultimately from the taxpayer.

They have tried various lies to put the blame on me; "we have. to abuse him because hes a. nutter", as if there werent many tens of thousands of other people with schizophrenia in the. United Kingdom. Their choice of abuse words is telling; subconsciously perhaps they realise that it is they. who are the "nutters", and they try to project their. own illness onto their target.

MI5 Operatives have Nothing Else to Do With Their. Time

Ive seen the same "Alan Holdsworth" person. three or four times over a period of several years. I saw. him at the Civic Hospital in Ottawa in the Emergency Ward, where he falsely. declared his name to be "Tad"; at Ottawa airport in summer 1998; and on board another flight in. 1995.

So what. we see from the above paragraph is, the same people are delegated to watch me. for many years. Without me, they wouldnt have a job. They literally have nothing else. to do with their time, except indulge their voyeurism against. me. With this observation, we come to the core of MI5s campaign against me;. these people are not fit for any job other than the exercise of voyeurism against me, and if sanity. were to land on MI5 then they would be out of a job. If sanity. were truly to land then these people and their employers would be prosecuted for offences. under the Protection from Harassment legislation, which they. are clearly breaking.

It is one of the ironies of their campaign that MI5 have been trying. to make me an object of. ridicule for completely trivial things I have done, while MI5 themselves have simply not. mentioned how ridiculous is their own behaviour and. that of broadcast media journalists, in spying on me while they read the news for example. If the whole. truth of this business is ever exposed, and despite all my efforts it still seems there is. a block on its exposure in Britain, then the rights and wrongs will be. clear to all, and no amount of MI5 lies. will be able to change that. MI5 presumably do realise just how damaging such a revelation would be. both to themselves, and to broadcast media such as the BBC. and ITN, because there has not been even. the slightest chink in the armour, despite four and a half years of my. complaints on internet newsgroups and by fax to politicians. and the media.

MI5s Final Kick in the Teeth to the British. State

For someone like myself born in. the late sixties it seems peculiar to think. that Great Britain once used to have a say in the destiny of foreign peoples in far-off sections. of the globe. Modern Britons tacitly accept the lowering of their country. to a third-rate power reliant on the United States for what little say. it has in the world. A third-rate power, now "reverse-colonised" by third world peoples it once. ruled and riven with internal problems so. severe the government hardly dares acknowledge them.

To. this third-rate power the MI5 secret police are delivering the final kick in. the teeth through a campaign of persecution which is guaranteed to hold the state. up to ridicule throughout the world when it is finally exposed. As a "thought experiment" suppose the French or the. Spanish security service. had done to one of their own born citizens what MI5 has done in. this country. Suppose say the Spanish had planted hidden cameras in his home, for the perverted pleasure of their. state television newscasters, just as hidden cameras have been placed in my home for. the perverted. pleasure of Martyn Lewis, Nicholas Witchell et al. Suppose the Spanish service had for nine years. been trying to force suicide on their target;. at times, so blatantly that they shouted the word "suicide".

Now suppose they were. caught.

Of course, as long as. MI5 arent caught, theyre laughing. The psychopathic security service agents gets their kicks from. shouting abuse at me; the newscasters, Lewis, Witchell. etc get their jollies, "it was so funny", we were watching this bloke. and he couldnt do anything about it.

But once theyre caught, the sky falls. in. Of course, the "patriotic" MI5-funded media in Britain will. try to put the best spin on the MI5/media activities; it was the targets. fault, of course. But most of the world bears no. allegiance to Britain. If this business is ever exposed then. a weakened Britain will become the laughing-stock of the world. And I promise you, the. security services persecution of me will be exposed. MI5 has delivered a final kick in the. teeth to the British state, and I will do everything I can. to ensure the world hears about what they have done.

Metropolitan Police Refuse to Investigate. the MI5 persecution

I have. on a couple of occasions tried to motivate the police to investigate MI5s actions against me. On each. occasion they have refused to do so. In 1995 I went to my local police station and spoke to an. officer there; he refused to. accept my complaint, and seemed interested only in seeing me leave the station as. quickly as possible.

Earlier this year I had some. communications with Det.Sgt.Richards of Charing Cross police. Again. I asked him to deal with MI5s actions against me.. Unfortunately DS Richards conformed to the negative stereotype of the bigoted, ignorant "copper"; he said, "I have read your various. bits on the internet. I'm afraid there is no substance. or credence to it. It's an absolute load of rubbish. I don't. investigate rubbish. I can't be more blunt or to. the point than that."

You have to wonder at the state of law. enforcement in Britain. If the victim of a murder. is black, as happened in the Lawrence case, the police deliberately botch the investigation. If the victim of a crime is. mentally ill, and the perpetrators are the secret services, as in. my case, then the police refuse. to even begin to investigate the crimes committed. Politically Britain. is a third-rate country, but from the point of view. of obtaining justice, Britain ranks down there with third-world countries. You almost feel that MI5 and their media. buddies would not even have any shame if their activities against me were exposed;. after all, why should they? they have the money, they. have the control, OK so perhaps theyve broken a few dozen laws, but doesnt the fact that the. police are too corrupt to investigate these. crimes, doesnt that prove that in fact no crimes have. been committed?

I should say again what. I have said earlier in this article. My losses over the. last nine years have not been as great as those of other victims of. British Secret Police malefaction. Fayed lost his son to their murderous activities; in my occasional communications. with former MI5/MI6 employees I have been informed that a. "permanent solution" is not uncommon for opponents of. the British secret police. I have lost health and financially, but am obviously well enough to keep. fighting my case. Others have lost much more than I. If the joke which. is British "law enforcement" refuses. to enforce laws against the security services then that is. something that is recognised in other countries and Britains stock correspondingly falls. Not that it. has very far to fall; the days when England had any say in. the world are long gone.

MI5. Want These Faxes to Continue

Before. the holiday, I said that if MI5s harassment of me stopped, then I would cease my complaints.. They have known very well that if they continued to harass me then I would resume the fax. campaign in the autumn. Yet they have not stopped. persecuting me. Recently a woman outside my domicile screamed her head off with abuse in the direction of. my window;. and on Saturday 2 October, when I was shopping at a nearby supermarket, a man shouted the. particularly vile sexual swear word which I have heard many times before over the last. few years.

MI5s attitude. shows complete arrogance. Yet it also shows that they want the faxes to continue and deliberately try. to provoke me into sending further faxes. The reasons for this. are given in the first paragraphs of this article; the MI5 operatives who persecute. me have nothing else to do with their time; to make their campaign, against an apparently. unreacting target, have some value,. they have to force me to react in some way against their actions; and by reacting in this. way, by bringing their campaign to the attention. of British politicians, I play into their hands, by giving their campaign the attention and importance. which they feel it deserves.

In the short term, by sending these faxes, perhaps. I am doing something they want me to do, but in. the longer term it is undoubtedly more in my interest than theirs. for their activities to be exposed. If their operatives truly do wish to see. these faxes continued then they are committing a. serious mistake, because it significantly increases the risk if M.P.s. (some of whom already know about MI5s activities against me) are advised of my. side of the story.

I will continue to monitor and. record the secret services activities against me over. the next few weeks. If they diminish and cease, as I hope they will, then I may be able to call a. halt to these faxes; but that it something which. is entirely up to them; recently their continued harassment makes clear that they do wish the faxes to continue, and in. all sincerity I do think. they will continue their activities and make it impossible for. me to cease these faxes. It may trouble you to receive these articles, but it troubles me much more to. be on the receiving end of a national persecution campaign; and while. Britain does not have free speech provisions as does Canada in. the Charter of Rights and Freedoms, and the US. in the first amendment to the constitution, in practice I do not think anyone is going to try to have me locked up for. speaking the truth. I still. cherish the hope that the veracity I express will be shown for what. it is, and that the truth will prevail and make me free.

Removing the Mask of Anonymity from. the MI5 Operatives

Undoubtedly one factor encouraging the. MI5 agents actions against me has been the fact that they can shelter behind a mask of. anonymity while they carry out their abuse. This is both a. sign of their realisation that their actions are. criminal; for crimes are harder to pin down and make a coherent complaint about when their. perpetrators are unknown; and it is a sign of their cowardice,. since they lack the backbone to say things to my face themselves;. instead they almost always rely on third parties to carry out the actual. acts of abuse.

On. a few occasions I have seen the perpetrators, but on each occasion they have managed to preserve their anonymity. They travelled on the. same British Airways flight as me in 1994;. but BA have ever since refused to give up the passenger list for. the flight, and the police and lawyers have proved useless in obtaining their identities from the list.. Also one of them followed me into A&E department of Ottawas. Civic Hospital a couple of years ago, and. gave his name as (if I heard correctly) "Alan Holdsworth"; but the doctor refused to give out his identity. when I later tried to speak. to him.

If only we knew. the identities of the individual operatives, then it would be possible. to find out the identity of their employing organisation. But I think we know the latter already, since I have. been accusing them on internet newsgroups for. four and a half years now, and they have never denied my guess. Indeed, when I was travelling in January 1996 back. to Ottawa, two youths on the. (British Airways again, unfortunately) flight made a lot of noise at. me, one of them saying to the other that I "didnt know who we are". That. is a wafer-thin denial; I had been saying for a year that they were MI5, so a stronger denial would be necessary if. my guess were truly mistaken. I. think the lukewarm denial was worse than no denial at all, since it confirmed my guess that the. employing agency was indeed. MI5.

Conclusion

It has been suggested to me that by sending these. faxes I could be making trouble for myself; but I dont think so. My psychiatrist knows what. I am doing; indeed I have given him a couple of these articles for. him to cast an. eye over.

I dont want to. have to send faxes for the next year, or the year after that. But that is entirely up to MI5.. If they continue to persecute me then I am forced into defending myself. The ball is in their. court, and it is entirely up to them what they do. If as I suspect. it is their intention that these. faxes continue, if that is what they insist will happen then so be. it.

10453

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Posted via NewsDemon.com - Premium Uncensored Newsgroup Service
      ------->>>>>>http://www.NewsDem
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```
From 4008033132357542306
X-Google-Thread: f8abe,79781ca4b4f52d65,start
X-Google-Thread: 10e8ad,79781ca4b4f52d65,start
X-Google-Thread: 101522,79781ca4b4f52d65,start
X-Google-Thread: 114781,79781ca4b4f52d65,start
X-Google-Thread: 11368f,79781ca4b4f52d65,start
X-Google-Attributes:
gidf8abe,gid10e8ad,gid101522,gid114781,gid11368f,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx01.iad01.newshosting.com!newshosting.com!post02.iad01!
news.newsdemon.com!not-for-mail
Message-Id: <vq0711311144444126@4ax.com>
Subject: M.I,5-Persec ution ` M I5 I nsist th at thes e Fa xes m ust Co ntinue
Newsgroups: alt.sports.hockey.nhl.ott-
senators,rec.radio.amateur.space,it.comp.reti.cisco,alt.fan.depeche-
mode,alt.music.depeche-mode
Followup-To: alt.sports.hockey.nhl.ott-
senators,rec.radio.amateur.space,it.comp.reti.cisco,alt.fan.depeche-
mode,alt.music.depeche-mode,uk.misc
From: efefeiei@hotmail.com
Date: 31 Dec 2007 11:44:47 GMT
Lines: 70
Organization: news.newsdemon.com
X-Complaints-To: abuse@newsdemon.com
X-Original-Lines: 67
Xref: g2news1.google.com alt.sports.hockey.nhl.ott-senators:14147
rec.radio.amateur.space:1258 it.comp.reti.cisco:9899 alt.fan.depeche-mode:302
alt.music.depeche-mode:2752
```

MI5. Persecution Update: Friday 31 March, 2000

22,544. Faxes Delivered in Three Years, and Still No Breakthrough

In the last three years I have. sent at least 22,544 faxes to recipients in the UK,. of which at least 13,974 have gone to Westminster. Last weekend alone I. sent 832 completed faxes to politicians, the media and various others, on the subject of MI5s mistreatment of me these last ten. years.

I believe some of the recipients know of. MI5s actions against me in the last. decade; yet they maintain strict "omerta" in fear of the security services persecution actions being. made public.

MI5 Insist. that these Faxes must Continue

Between September 1999 and mid-January 2000, the persecutors,. whoever they might be, mostly left me alone. I counted only three. incidents in almost five months - which is a lower rate than at any time. since June 1990, when this business. started.

By leaving me alone for several months,. the "oppressors" were making an implicit assurance that they would continue. to leave me alone in the future. On 11 January I posted to. an internet newsgroup accepting what I saw as. their assurance of no further harassment, stating that I would cease sending these faxes - which is the only thing I do. in my defence - if they continued to leave me alone. And for. two weeks I did indeed refrain from distributing. these articles.

But MI5 acted in bad faith. From the last week of January. until the beginning of March, they resumed their. hate campaign against me with a vengeance. They even put people in my road three times. in February, one instance of which I recorded. They resumed. their normal behaviour of bugging my phone and house, listening to where I would go, and. then placing people. in that location to "aggravate and annoy" me.

What MI5 did in February is plainly a contravention of. the Protection from Harassment Act 1997, since it has. caused me "alarm and distress" as specified in the Act. But it is a waste of time going. to the police with a complaint, since the police. have done, and will do, absolutely nothing. I complained to the Metropolitan Police in 1995, and they refused. to take my complaint. When I complained again. in 1999, the detective sergeant laughed at my complaint, with the words, "It's an absolute load of rubbish.. I don't investigate rubbish. I can't be more blunt or. to the point than that." It is useful to remember that. the Met also treated Stephen Lawrences parents with. similar discourtesy; police prejudices are similar in my case, so I can take. some comfort from that case and hope that one day I will get a. fair hearing.

MI5 acted. in bad faith, but they also acted with arrogance. They do not care if I send 800 faxes every. weekend, since they know I cannot prove my claims, and the recent Shayler case shows. how weak external oversight is of the secret services. But. they acted with more than arrogance - the MI5 agents actually. want my faxes to continue, they insist that these faxes continue, since my communications give them an. excuse to continue their activities, and continue in the paid employ of the secret. service. Despite their use of diverse proxies over the last ten. years, it is the same MI5 officers behind the campaign all the time - I have seen one. of them on three occasions in. Canada over a period of years, and it is a safe belief that that same person continues to be paid for his "work" in. harassing me in London now. The average cost of an MI5 employee is some 75,000. per annum, so. one may infer that their officers are amply compensated; their insistence that "hostilities". are maintained is understandable when placed in this. light.

12115

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Posted via NewsDemon.com - Premium Uncensored Newsgroup Service
      ------->>>>>>http://www.NewsDem

From -5304175393195593484
X-Google-Thread: f8abe,27e37d4fbd3a88a,start
X-Google-Thread: 10e8ad,27e37d4fbd3a88a,start
X-Google-Thread: 101522,27e37d4fbd3a88a,start
X-Google-Thread: 114781,27e37d4fbd3a88a,start
X-Google-Thread: 11368f,27e37d4fbd3a88a,start
X-Google-Attributes: gidf8abe,gid10e8ad,gid101522,gid114781,gid11368f,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news3.google.com!out04b.usenetserver.com!news.usenetserver.com!in04.usenetserver.com!news.usenetserver.com!nx02.iad01.newshosting.com!newshosting.com!post02.iad01!news.newsdemon.com!not-for-mail
Message-Id: <ct0711311207134263@4ax.com>
Subject: M'I-5 Persecution ' 22, 544 + 83 7 = 23, 381
Newsgroups: alt.sports.hockey.nhl.ott-senators,rec.radio.amateur.space,it.comp.reti.cisco,alt.fan.depeche-mode,alt.music.depeche-mode
Followup-To: alt.sports.hockey.nhl.ott-senators,rec.radio.amateur.space,it.comp.reti.cisco,alt.fan.depeche-mode,alt.music.depeche-mode,uk.misc
From: ieieiv@yahoo.com
Date: 31 Dec 2007 12:07:16 GMT
Lines: 64
Organization: news.newsdemon.com
X-Complaints-To: abuse@newsdemon.com
Xref: g2news1.google.com alt.sports.hockey.nhl.ott-senators:14148 rec.radio.amateur.space:1259 it.comp.reti.cisco:9900 alt.fan.depeche-mode:303 alt.music.depeche-mode:2753

MI5 Persecution Update: Friday. 7 April, 2000

22,544 + 837. = 23,381

Last weekend I delivered. another 837 faxes to politicians and the media on the subject of the security service conspiracy which has. destroyed my life. This brings the total in. the last three years to at least 23,381. These totals. do not include partially delivered faxes.

Some of the recipients. of these faxes must know that what I say is true; and I hope to. motivate those people to acknowledge the reality of the harassment. which has followed me for ten years. It takes much time to transmit these articles, but as OCG MD. Simpson-Wells said to me in 1992, you have to be a. good communicator if you are to succeeed.

Harassment. in February 2000

Following a quiet period of almost. five months, the persecution resumed with a vengeance in late January/February 2000. At this. time I was at home in Clapham, London and was a relatively easy target for. the persecutors. They have my house bugged, for audio and. I believe video in some rooms. as well; so they can find out easily where I will be going on a particular day, and place people in that location to mouth words. of abuse at me. (I know the last sentence sounds like classic paranoia, but. it happens to be true, and some of the people. reading this know it to be true.)

On Friday. 11 February 2000 I went shopping in Croydon, to buy a watch at H. Samuels jewellers in the Whitgift Centre. While I was there. two youths came into the shop, one of them quietly uttered. an obscenity at me, and they. immediately walked out. They showed no interest in the shop.

That Sunday I met with a friend in Clapham,. who started needling me about "do you know anything about the. CIA and FBI?". Rather unsubtle, and worrying considering Ive known. this guy for 20 years. From the words and demeanour of this "friend" and others in February,. I saw that the persecutors have again been trying to separate from me what. remains of my social. life.

Incidents in my. Road in February

MI5. very rarely place people in my home road to harass me, but such was their persecutory. fervour in February that they did so on three separate occasions. On the. first such occasion, I was met my two youths who, grinning, said a deeply offensive sexual obscenity at me - at which. I coughed at them, so they called me a "wanker".. This incident is safely recorded on minidisc-walkman, but. because of the offensive nature of their abuse the recording. will not be made public.

Another incident very early in the morning of. Sunday 20/Feb/2000 occurred outside my. home, following an evening in Croydon with some schoolfriends. Again. there were two youths - for some reason the persecutors always travel in twos or threes,. very rarely is there just one of them - perhaps they. need a group to bolster their courage, perhaps just one of them wouldnt have the guts to. say something unpleasant. One of the youths said quietly, and bitterly, "shitty,. very shitty".

Anyway,. in March there were no further incidents near my house in in my road, and our neighbours are very well disposed. towards us, so let us hope that. the current quiet continues.

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Posted via NewsDemon.com - Premium Uncensored Newsgroup Service
      ------->>>>>>http://www.NewsDem


From 1468389515539299508
X-Google-Thread: 10bf43,f09f86be7e12dd70,start
X-Google-Thread: 10e8ad,f09f86be7e12dd70,start
X-Google-Thread: 106d41,f09f86be7e12dd70,start
X-Google-Thread: fa029,f09f86be7e12dd70,start
X-Google-Thread: 114aac,f09f86be7e12dd70,start
X-Google-Attributes:
gid10bf43,gid10e8ad,gid106d41,gidfa029,gid114aac,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news3.google.com!out03b.usenetserver.com!
news.usenetserver.com!in01.usenetserver.com!news.usenetserver.com!news.alt.net
From: fevfmfemf@lycos.com
Newsgroups:
rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.cb,rec.radio.scanner,re
c.radio.shortwave
Subject: M'I.5,Persecution    t he BB C, tel evision an d ra dio
Followup-To:
rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.cb,rec.radio.scanner,re
c.radio.shortwave,uk.misc
Date: Tue, 1 Jan 2008 08:28:12 +0000 (UTC)
Organization: Altopia Corp. - Usenet Access - www.altopia.com
Lines: 62
Message-ID: <tc0800010828114578@4ax.com>
Xref: g2news1.google.com rec.radio.amateur.policy:107209
rec.radio.amateur.space:1260 rec.radio.cb:42028 rec.radio.scanner:13195
rec.radio.shortwave:130688

-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=
-= the BBC, television and radio. -=
-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=
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The first. incident in June 1990 was when a BBC newsreader made what seemed to be a reaction to something which had happened in. my home, and out of context of what. they were reading. My first reaction was disbelief; nothing of the sort had ever happened before, the idea that. such a thing could occur. had not crossed my mind, yet there was no doubt of what had just taken place. My disbelief eroded as this recurred. time after time. Besides the news, offenders included shows such as. Crimewatch (!), Newsnight, and "entertainment" shows. There seems to be very little. moral understanding among the people who make these programmes; they. just assume they will never be caught, so they carry on without. a thought for the illegality or amorality of what they do. The only time I. ever heard a word raised in doubt was by Paxman being interviewed. by someone else (I think by Clive Anderson) back in. 1990; referring to the "watching" he said it troubled him, and when asked by the host what you could do about it, replied. "Well, you could just switch it off". (meaning the surveillance monitor in the studio). He clearly didn't let his doubts stand in the. way of continued surreptitious spying from his. own or other people's shows, though.

Now you're convinced this is a troll,. aren't you? This story has been the subject of much debate on the uk.* Usenet newsgroups for over. a year, and some readers believe it to be. an invention (it has even been suggested that a group of psychology students are responsible!), others think. it symptomatic of a derangement of the author, and a few give it. credence. Quite a few people do know part or all of. the story already, so this text will fill in the. gaps in their knowledge. For the rest, what may persuade you of the third possibility is that some of the incidents. detailed are checkable against any archives of radio. and TV programmes that exist; that the. incidents involve named people (even if those hiding in the shadows have not made their identity or affiliations evident),. and those people may be persuaded to come out with. the truth; and that the campaign of harassment. is continuing today both in the UK and on the American continent, in a none-too-secret fashion;. by its nature the significant risk of exposure. increases with time.

On several occasions people said to my face that harassment from the. TV was happening. On. the first day I worked in Oxford, I spent the evening in the local pub with the company's. technical director Ian, and Phil, another employee. Ian made a few references to. me and said to Phil, as if in an aside, "Is he the bloke who's been. on TV?" to which Phil replied, "Yes, I think. so".

I made a number of efforts to find the bugs, without. success; last year we employed professional counter-surveillance people to scan. for bugs (see later) again without. result. In autumn 1990 I disposed of my TV and watched virtually no. television for the next three years. But harassment from TV stations has gone on for over six years and continues to this day.. This is something that. many people obviously know is happening; yet the TV staff have the morality of paedophiles,. that because they're getting away with it they feel. no wrong.

Other people who were involved in the. abuse in 1990 were DJs on BBC radio stations, notably. disc jockeys from Radio 1 and other stations (see the following section). Again, since. they don't have sense in the first place they can't be expect to have. the moral sense not to be part of criminal harassment.

From -8173566973040484749
X-Google-Thread: 10bf43,635d73ca8706e577,start
X-Google-Thread: 10e8ad,635d73ca8706e577,start
X-Google-Thread: 106d41,635d73ca8706e577,start
X-Google-Thread: fa029,635d73ca8706e577,start
X-Google-Thread: 114aac,635d73ca8706e577,start
X-Google-Attributes:
gid10bf43,gid10e8ad,gid106d41,gidfa029,gid114aac,public,usenet

```
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news3.google.com!out02b.usenetserver.com!
news.usenetserver.com!in01.usenetserver.com!news.usenetserver.com!news.alt.net
From: imivifmv@lycos.com
Newsgroups:
rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.cb,rec.radio.scanner,re
c.radio.shortwave
Subject: M'I`5 Persec ution ' b ugging and  cou nter-surveillance
Followup-To:
rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.cb,rec.radio.scanner,re
c.radio.shortwave,uk.misc
Date: Tue, 1 Jan 2008 08:55:10 +0000 (UTC)
Organization: Altopia Corp. - Usenet Access - www.altopia.com
Lines: 46
Message-ID: <be0800010855108530@4ax.com>
Xref: g2news1.google.com rec.radio.amateur.policy:107210
rec.radio.amateur.space:1261 rec.radio.cb:42029 rec.radio.scanner:13196
rec.radio.shortwave:130689
```

-=-
-= MI5: bugging. and counter-surveillance -=
-=-

PO: >Did you ever look for the bugs in your house ?. If not, why not ? I mean if
PO: >I thought that was happening to me, I'd search. the place from top to bottom,
PO: >I mean I live there I. would know if anything was out of place. If I was
PO: >really suspicious, I. would call in one of those bug detection teams which
PO: >have those. machines that pick up the transmitted radio waves. This
PO: >reminds me of BUGS, that new programme on BBC1. on

That's exactly what we did. We went to a competent, professional. detective agency in London, paid them over. 400 quid to debug our house. They used scanner. devices which go to over 1 GHz and would pick up any nearby transmitter in that range,. they also checked the phones and found nothing... but if the tap was at. the exchange, then they wouldn't find anything, would. they?

CS: >Doesn't this suggest to you that there. are, in fact, no bugs to be found?

You can assume that they've done this sort of thing to other. people in more "serious". cases, where they would know the targets would suspect the presence of electronic surveillance. So they. will have developed techniques and devices which are not readily detectable either by. visual inspection or by electronic means. What those techniques. might be, I couldn't guess.

In this case, the. existence of bugging devices was clear from the beginning, and they "rubbed it in". with what was said by the boy on the coach. It was almost as if they. wanted counter-surveillance people to be called in, who they knew would fail to detect the. bugging devices, causing loss. of credibility to the other things I would have to say relating to the harassment.

I did all the things someone in my situation would do to try. to find the bugs. In addition to calling in professional help. using electronic counter-surveillance, I. made a close visual inspection of electrical equipment,. plus any points where audio or video surveillance devices might have. been concealed. Of course, I found nothing. Normal surveillance "mini-cameras" are quite noticeable and require. visible supporting circuitry. It seems to me the best place to put a small. video surveillance device would be additional to a piece of. electronic equipment such as a TV or video. It would be necessary. to physically break in to a property to fit such. a device.

2984

From -4539977016310313665
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X-Google-Thread: 10e8ad,e774976852ce955,start
X-Google-Thread: 106d41,e774976852ce955,start
X-Google-Thread: fa029,e774976852ce955,start
X-Google-Thread: 114aac,e774976852ce955,start
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gid10bf43,gid10e8ad,gid106d41,gidfa029,gid114aac,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news3.google.com!out01a.usenetserver.com!
news.usenetserver.com!in01.usenetserver.com!news.usenetserver.com!news.alt.net
From: fimieief@lycos.com
Newsgroups:
rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.cb,rec.radio.scanner,rec.radio.shortwave
Subject: M-I 5.Pe rsecution . Ca pital Ra dio - Chr is Ta rrant
Followup-To:
rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.cb,rec.radio.scanner,rec.radio.shortwave,uk.misc
Date: Tue, 1 Jan 2008 09:21:40 +0000 (UTC)
Organization: Altopia Corp. - Usenet Access - www.altopia.com
Lines: 37
Message-ID: <lu0800010921395144@4ax.com>
Xref: g2news1.google.com rec.radio.amateur.policy:107211
rec.radio.amateur.space:1262 rec.radio.cb:42030 rec.radio.scanner:13197
rec.radio.shortwave:130691

-=-=-=-=-=-=-=-=-=-=-=-=-=--=-=-=-=
-= Capital Radio - Chris Tarrant. -=
-=-=-=-=-=-=-=-=-=-=-=-=-=--=-=-=-=

Capital Radio DJs have been "in on it" from the start. One of. the first things I heard in the summer. of 1990 was from a Capital DJ who said, "If he listens to Capital then he can't be. all bad" (supportive, you see. We're not bastards). Much of what came over the radio in 1990 is now. so far away the precise. details have been obliterated by time. No diary was kept of the details, and although archives if they. exist may give pointers, the ambiguity of what broadcasters said. would leave that open to re-interpretation.

In spring 1994, Chris Tarrant on his Capital. morning show made an aside to someone else in the studio, about a person he didn't identify.. He said, "You know this bloke? He says we're trying to kill. him. We should be done for. attempted manslaughter".

That mirrored something I. had said a day or two before. What Tarrant said was understood by. the staff member in the studio he was saying it to; they said, "Oh no, don't say that" to Tarrant. If any archives. exist of the morning show (probably unlikely) then. it could be found there; what he said was so out of context. that he would be very hard put to find an explanation. A. couple of days later, someone at the site where I was working repeated the remark although in a different way; they said. there had been people in a computer room when automatic fire extinguishers went off and. those people were "thinking of suing. for attempted manslaughter".

Finally, this isn't confined to the established. radio stations. In 1990 after I had listened to a pirate radio station. in South London for about half an hour, there was an audible phone call. in the background, followed by total silence for. a few moments, then shrieks of laughter. "So what are we. supposed to say now? Deadly torture? He's going to talk to us now, isn't he?", which meant that they could hear what I would say. in my room.

5414

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X-Google-Thread: fa029,3b0c28b93b026f34,start
X-Google-Thread: 114aac,3b0c28b93b026f34,start
X-Google-Attributes:
gid10bf43,gid10e8ad,gid106d41,gidfa029,gid114aac,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news3.google.com!out03a.usenetserver.com!
news.usenetserver.com!in01.usenetserver.com!news.usenetserver.com!news.alt.net
From: vfivf@lycos.com
Newsgroups:
rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.cb,rec.radio.scanner,re
c.radio.shortwave
Subject: M,I.5'Persecutio n   c ost of the  operati on
Followup-To:
rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.cb,rec.radio.scanner,re
c.radio.shortwave,uk.misc
Date: Tue, 1 Jan 2008 09:47:48 +0000 (UTC)
Organization: Altopia Corp. - Usenet Access - www.altopia.com
Lines: 48
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rec.radio.amateur.space:1263 rec.radio.cb:42031 rec.radio.scanner:13198
rec.radio.shortwave:130692
```

-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=
-= MI5: cost of the operation. -=
-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=

Here's what a couple of. other people on Usenet (uk.misc) had to say
regarding the cost. of running such an operation...

PO: >Have some sense, grow up and smell reality. What. you are talking about
PO: >would take. loads of planning, tens of thousands of pounds and lots of
PO: >people involved in. the planning, execution and maintenance of it. You
PO: >must have a very high. opinion of yourself to think you are worth it.

PM: >But why? And why you? Do you realize how much it would cost. to keep
PM: >one person under. continuous surveillance for five years? Think about
PM: >all the man/hours. Say they _just_. allocated a two man team and a
PM: >supervisor.. OK., Supervisor's salary, say, #30,000 a year. Two men,
PM: >#20,000 a year each. But they'd need to work in shifts. -- so it would
PM: >be six men. at #20,000 (which with on-costs would work out at more like
PM: >#30,000. to the employer.)
PM:. >
PM: >So,. we're talking #30,000 x 6. #180,000. plus say, #40,000 for the
PM: >supervisor. #220,000. Then you've got. the hardware involved. And
PM: >any. transcription that needs doing. You don't think the 'Big Boss'
PM: >would. listen to hours and hours of tapes, do you.
PM:. >
PM: >So, all in all, you couldn't actually do the. job for much less than
PM: >a quarter million a year. Over five years. What are you doing. that makes
PM: >it worth the while of the state to. spend over one and a quarter million
PM:. >on you?

Those are pretty much. the sort of calculations that went through my head once I stopped. to consider what it must be costing them to run this operation. The partial answer is, there have been. periods when the intensity. has been greater, and times when little has happened. In fact, for much of 1993. and the first half of 1994, very little happened. Although I don't think that was for reasons of money - if they can tap. into the taxpayer they're not going to be short of resources, are. they?

The more complete answer is in the enormity of what they're. doing. Relative to the cost to British pride of seeing their country humiliated for. the persecution of their own citizens, isn't is worth the cost of four. or five people to try to bring things to. a close in the manner they would wish? To the government a million or two. is quite honestly nothing - if they can convince themselves of the necessity of what they're. doing, resources will not. be the limiting factor.

7844

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X-Google-Thread: 114aac,9afefa7343661cfe,start
X-Google-Attributes:
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Path: g2news1.google.com!news3.google.com!out03a.usenetserver.com!
news.usenetserver.com!in04.usenetserver.com!news.usenetserver.com!
in01.usenetserver.com!news.usenetserver.com!news.alt.net
From: feifemvmi@lycos.com
Newsgroups:
rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.cb,rec.radio.scanner,rec.radio.shortwave
Subject: M'I`5 Per secution ' ho w a nd w hy d id it s tart?
Followup-To:
rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.cb,rec.radio.scanner,rec.radio.shortwave,uk.misc
Date: Tue, 1 Jan 2008 10:17:44 +0000 (UTC)
Organization: Altopia Corp. - Usenet Access - www.altopia.com
Lines: 46
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rec.radio.amateur.space:1264 rec.radio.cb:42034 rec.radio.scanner:13199
rec.radio.shortwave:130694

-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-
-= how. and why did it start? -=
-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-

The harassment didn't start by. itself, so someone must have been there at the outset to give it a firm push and set the "animals" after me. It. looks as if I. was set up in June 1990, and the timing indicates someone from university was. responsible.

>One thing which has. been missing from this discussion is this simple
>prognosis: that maybe he. is right and that, despite his admitted
>mental condition, there really is a campaign. against him organised by
>now-influential ex-students of his. university.

In May or June 1990, Alan Freeman on Radio 1 read out a letter. from someone who had known me for a. few years, who wrote of the one who "wore out his welcome with random precision" (from the Pink. Floyd song). Freeman went on to say to the writer "that's. a hell of a letter you wrote there". The indication is strongly that people I had parted from. soon before nursed a grudge against me and were trying to cause trouble for. me.

The suggestion is that Freeman might have shown the letter to. other people, and things could have. snowballed from there. Right from the start the real source (security services presumed) didn't. announce themselves as the origin, but let the "talkers", the radio DJs, believe that. they were the originators. Think about it; if you announce,. "we're MI5 and we have a campaign against this bloke" then people might not go along with it; but. if you say, "everyone else is getting at this bloke. because he 'deserves' it" then people will join in with fewer. qualms.

>Why would "they". wish to assassinate your character?

It's the classic case. of hitting a cripple to prove you're stronger. Why would the security services expend hundreds of. thousands of pounds and more than six years of manpower to try to kill a British citizen?. Because they are motivated by people who knew me at university and feel. personal animosity; because they knew me to be emotionally weak, and it is in. the nature of bullies to prey on those known to be weak; and because. they can rely on the complicity of the establishment, which the security. services manipulate and derive funding from. This is. England's biggest humiliation today, and the British. security services are intent on preventing their humiliation becoming reality by continuing. their campaign of attempted murder to suppress the truth from becoming. public.

10274

```
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X-Google-Thread: fa029,f7f7246c8fea733c,start
X-Google-Thread: 114aac,f7f7246c8fea733c,start
X-Google-Attributes:
gid10bf43,gid10e8ad,gid106d41,gidfa029,gid114aac,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news3.google.com!out04b.usenetserver.com!
news.usenetserver.com!in01.usenetserver.com!news.usenetserver.com!news.alt.net
From: mievmef@lycos.com
Newsgroups:
rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.cb,rec.radio.scanner,re
c.radio.shortwave
Subject: M'I`5,Persecu tion ' h ow an d wh y di d it sta rt?
Followup-To:
rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.cb,rec.radio.scanner,re
c.radio.shortwave,uk.misc
Date: Tue, 1 Jan 2008 10:48:20 +0000 (UTC)
Organization: Altopia Corp. - Usenet Access - www.altopia.com
Lines: 46
Message-ID: <cf0800011048197689@4ax.com>
Xref: g2news1.google.com rec.radio.amateur.policy:107215
rec.radio.amateur.space:1265 rec.radio.cb:42035 rec.radio.scanner:13200
rec.radio.shortwave:130696
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-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-
-= how. and why did it start? -=
-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-

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554

From 7553975728250712132
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X-Google-Thread: 114aac,a4f9ed8554b40cd0,start
X-Google-Attributes:
gid10bf43,gid10e8ad,gid106d41,gidfa029,gid114aac,public,usenet
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Path: g2news1.google.com!news4.google.com!out01b.usenetserver.com!

news.usenetserver.com!in01.usenetserver.com!news.usenetserver.com!news.alt.net
From: mefem@lycos.com
Newsgroups:
rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.cb,rec.radio.scanner,rec.radio.shortwave
Subject: M-I,5`Perse cution - wh o knows abo ut it ?
Followup-To:
rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.cb,rec.radio.scanner,rec.radio.shortwave,uk.misc
Date: Tue, 1 Jan 2008 11:44:29 +0000 (UTC)
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Lines: 28
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rec.radio.amateur.space:1266 rec.radio.cb:42036 rec.radio.scanner:13201
rec.radio.shortwave:130697

-=-=-=-=-=-=-=-=-=-=-=-
-= who knows. about it? =-
-=-=-=-=-=-=-=-=-=-=-=-

Many people know, both in the. establishment and media, and among the general public. Despite an absence. of its target from the UK for more than two years, the echoes of paranoia can still be heard loud and. clear from across the water. When it started in 1990,. the only people who knew were those in BBC television who were spying on my home, and. a few radio broadcasters. There. were a few cases of public harassment, but very little compared. to the situation that developed a couple of years later.

The. list today includes BBC TV staff (newsreaders such as Martyn Lewis, Michael Buerk, Nicholas Witchell), people from radio stations. such as Chris Tarrant of Capital and. Radio 1 DJs, people in the print media, but also many people in the general public. All united. in a conspiracy which breaks the laws which the UK does have regarding. harassment, and all completely uncaring for any semblance of. decency or elementary respect for individual. rights.

The British police (obviously) do know the nature of. the harassment and in all probability the. identity of those behind it. Some time ago I made a complaint to my local police. station in London, without positive result. The UK police are failing in their duty. to see the law enforced in not checking. the abuse.

2984

From 6441835132774749490
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X-Google-Thread: 114aac,2b7cd0edb9360eb9,start

X-Google-Attributes:
gid10bf43,gid10e8ad,gid106d41,gidfa029,gid114aac,public,usenet
X-Google-Language: ENGLISH,ASCII
Path: g2news1.google.com!news4.google.com!out02a.usenetserver.com!
news.usenetserver.com!in01.usenetserver.com!news.usenetserver.com!news.alt.net
From: fvifefi@lycos.com
Newsgroups:
rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.cb,rec.radio.scanner,re
c.radio.shortwave
Subject: M,I`5'P ersecution   B ernard Levi n ex presses his v iews
Followup-To:
rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.cb,rec.radio.scanner,re
c.radio.shortwave,uk.misc
Date: Tue, 1 Jan 2008 12:15:57 +0000 (UTC)
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Lines: 96
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Xref: g2news1.google.com rec.radio.amateur.policy:107218
rec.radio.amateur.space:1267 rec.radio.cb:42037 rec.radio.scanner:13202
rec.radio.shortwave:130699

The article. of which part is reproduced below was penned by Bernard Levin for the Features. section of the Times on 21 September 1991. To my mind, it described the situation at the time and in particular a recent meeting. with a friend, during which I. for the first time admitted to someone other than my GP that I had been. subjected to a conspiracy of harassment over the previous year and. a half.

>There is a madman. running loose about London, called David Campbell; I have
>no reason to believe that he is violent, but. he should certainly be
>approached with. caution. You may know him by the curious glitter in his
>eyes and a persistent trembling of his hands;. if that does not suffice, you
>will find him attempting to thrust. no fewer than 48 books into your arms,
>all. hardbacks, with a promise that, if you should return to the same
>meeting-place next year, he will. heave another 80 at you.
>
>If,. by now, the police have arrived and are keeping a close watch on him,
>you may feel sufficiently emboldened to examine. the books. The jackets are
>a model of uncluttered typography, elegantly and simply laid out;. there is
>an unobtrusive. colophon of a rising sun, probably not picked at random.
>Gaining confidence - the lunatic is smiling by now, and the. policemen, who
>know about such things, have significantly removed their helmets -. you
>could do worse than take the jacket off the first book. in the pile. The
>only word possible to describe the. binding is sumptuous; real cloth in a
>glorious shade of dark. green, with the title and author in black and gold
>on the. spine.
>
>Look at it more closely;. your eyes do not deceive you - it truly does have
>real top-bands and tail-bands, in yellow,. and, for good measure, a silk
>marker ribbon in a lighter. green. The paper is cream-wove and acid-free,
>and the. book is sewn, not glued.
>

>Throughout the encounter, I should have mentioned,. our loony has been
>chattering away, although what he is trying to say is. almost impossible to
>understand; after a time, however,. he becomes sufficiently coherent to make
>clear that he is trying to sell the books to you. Well, now, such. quality
>in bookmaking today can. only be for collectors' limited editions at a
>fearsome. price - #30, #40, #50?
>
>No, no, he says, the glitter more powerful than ever and. the trembling of
>his hands rapidly spreading throughout his entire body;. no, no - the books
>are priced variously at #7,. #8 or #9, with the top price #12.
>
>At this, the policemen understandably put their helmets. back on; one of
>them draws his truncheon and the other can be. heard summoning
>reinforcements on. his walkie-talkie. The madman bursts into tears, and
>swears. it is all true.
>
>And it. is.
>
>David Campbell has acquired the entire rights to. the whole of the
>Everyman's Library, which died a lingering and shameful death a. decade or
>so. ago, and he proposes to start it all over again - 48 volumes this
>September and 80 more next year,. in editions I have described, at the
>prices specified. He proposes to launch his. amazing venture simultaneously
>in Britain and the United States, with. the massive firepower of Random
>Century at his back in. this country, and the dashing cavalry of Knopf
>across the water, and no one. who loves literature and courage will forbear
>to. cheer.

At the time this. article was written I had believed for some time that columnists in the Times and other. journalists had been making references to my situation. Nothing unusual about this you may think, plenty of. people have the same sort of ideas and. obviously the papers aren't writing about them, so why should. my beliefs not be as false as those of others?

What makes this article so extraordinary is that three or four. days immediately preceding its publication, I had a meeting with a. friend, during the course. of which we discussed the media persecution, and in particular that by. Times columnists. It seemed to me, reading the article by Levin in Saturday�s paper,. that he was describing in some detail his "artist�s impression" of. that meeting. Most telling are the final sentences, when he writes, "The madman bursts. into tears, and swears it is all true. And it is." Although I. did not "burst into tears" (he seems to be using a bit of poetic licence and. exaggerating) I did try hard to convince my friend that it was all true; and I am able to concur. with Mr Levin, because, of course,. it is.

At the beginning of the piece. Levin reveals a fear of being attacked by the "irrational" subject of his story, saying "I have no. reason to believe that he is violent, but he should certainly be approached. with caution". This goes. back to the xenophobic propaganda of "defence" against a "threat" which. was seen at the very beginning of the harassment. The impression of a "madman running loose" who needs. to be controlled through an agency which assigns to itself the mantle. of the "police" is also one which had been expressed. elsewhere.

In the final paragraph of this. extract, his reference to Everyman�s Library as having "died a lingering and shameful death a. decade or so ago" shows clearly what sort of conclusion they. wish to their campaign. They want a permanent solution, and as they are prevented. from achieving that solution directly,. they waste significant resources on methods which have been repeatedly. shown to be ineffective for such a purpose.

5414

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From 7430549908545455840
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X-Google-Thread: 114aac,a509269e36e0cbad,start
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X-Google-Language: ENGLISH,ASCII
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news.usenetserver.com!in01.usenetserver.com!news.usenetserver.com!news.alt.net
From: vieme@lycos.com
Newsgroups:
rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.cb,rec.radio.scanner,re
c.radio.shortwave
Subject: M'I-5'Persecu tion ' Berna rd Lev in expresses  his  vi ews
Followup-To:
rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.cb,rec.radio.scanner,re
c.radio.shortwave,uk.misc
Date: Tue, 1 Jan 2008 12:59:29 +0000 (UTC)
Organization: Altopia Corp. - Usenet Access - www.altopia.com
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The article of which part is reproduced below was penned by Bernard. Levin for the Features section of. the Times on 21 September 1991. To my mind, it described the. situation at the time and in particular a recent meeting with a friend, during which I for the first. time admitted to someone other than my GP that I had been subjected to. a conspiracy of harassment over the previous. year and a half.

>There is a madman running loose about London, called David. Campbell; I have
>no reason to believe that he is. violent, but he should certainly be
>approached with caution. You may know him by the curious glitter in. his
>eyes and a persistent trembling of his hands;. if that does not suffice, you
>will. find him attempting to thrust no fewer than 48 books into your arms,

>all hardbacks, with a promise that, if. you should return to the same
>meeting-place. next year, he will heave another 80 at you.
>
>If,. by now, the police have arrived and are keeping a close watch on him,
>you may feel sufficiently emboldened to examine the books. The. jackets are
>a model of uncluttered typography, elegantly and simply laid out;. there is
>an unobtrusive colophon of a rising. sun, probably not picked at random.
>Gaining confidence - the lunatic. is smiling by now, and the policemen, who
>know about such things, have significantly removed their. helmets - you
>could. do worse than take the jacket off the first book in the pile. The
>only word possible to. describe the binding is sumptuous; real cloth in a
>glorious. shade of dark green, with the title and author in black and gold
>on the. spine.
>
>Look at it more closely; your eyes do not deceive you - it. truly does have
>real top-bands and tail-bands, in yellow, and,. for good measure, a silk
>marker ribbon in a lighter green. The. paper is cream-wove and acid-free,
>and the book is. sewn, not glued.
>
>Throughout the encounter, I should. have mentioned, our loony has been
>chattering away, although what he is trying to. say is almost impossible to
>understand; after a time, however, he becomes sufficiently coherent. to make
>clear that he is trying to sell the books to you. Well, now, such. quality
>in bookmaking today can only be for collectors' limited. editions at a
>fearsome price - #30, #40,. #50?
>
>No, no, he says, the glitter more powerful than ever and the trembling. of
>his hands. rapidly spreading throughout his entire body; no, no - the books
>are priced variously at #7, #8 or. #9, with the top price #12.
>
>At this,. the policemen understandably put their helmets back on; one of
>them draws his truncheon and the other. can be heard summoning
>reinforcements. on his walkie-talkie. The madman bursts into tears, and
>swears it is. all true.
>
>And it. is.
>
>David. Campbell has acquired the entire rights to the whole of the
>Everyman's Library, which died a lingering. and shameful death a decade or
>so. ago, and he proposes to start it all over again - 48 volumes this
>September and 80 more. next year, in editions I have described, at the
>prices specified. He proposes to. launch his amazing venture simultaneously
>in Britain and the United. States, with the massive firepower of Random
>Century at his. back in this country, and the dashing cavalry of Knopf
>across the water, and no one who loves literature and courage will. forbear
>to. cheer.

At the time this article was written I had. believed for some time that columnists in the Times and. other journalists had been making references to my situation. Nothing unusual about this you may think,. plenty of people have the same sort of. ideas and obviously the papers aren't writing about them, so why should my beliefs not. be as false as those of others?

What makes this article so extraordinary is that. three or four days immediately preceding its publication,. I had a meeting with a friend, during the course of which we discussed the media persecution, and. in particular that by. Times columnists. It seemed to me, reading the article by Levin in. Saturday�s paper, that he was describing in some detail his "artist�s impression" of that meeting. Most telling are the. final sentences, when he writes, "The. madman bursts into tears, and swears it is all. true. And it is." Although I did not "burst into tears" (he seems to be using a bit of poetic licence. and exaggerating) I did try hard to convince my friend that it was all. true; and I am able to concur with Mr Levin, because,. of course, it is.

At the beginning of the piece Levin reveals a fear of being. attacked by the "irrational" subject of his story, saying "I have no reason to. believe that he is violent, but he should. certainly be approached with caution". This goes back to the xenophobic propaganda of. "defence" against a "threat" which was seen at the very beginning of the. harassment. The impression of a "madman running loose" who needs to be controlled through an agency. which assigns to itself the mantle of. the "police" is also one which had been expressed. elsewhere.

In the. final paragraph of this extract, his reference to Everyman�s Library as having "died a lingering and shameful death a decade or so. ago" shows clearly what sort of conclusion they wish to their campaign. They want. a permanent solution, and as they are prevented from achieving. that solution directly, they waste significant resources on methods which. have been repeatedly shown to be ineffective for such. a purpose.

554

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-=-
-= why won't the British police do their job and put. a stop to it? -=
-=-

The British police obviously. do know what is taking place. Besides my interpretations of what. individual officers have said which forces that conclusion, it would be inconceivable for. them to be unaware of something on this. scale.

If they know, then they will know. that the abusers have broken laws in the UK and abroad. Recently the UK introduced laws. against electronic spying which carry. a penalty of several years jail if caught. If the police know illegal harassment. is taking place, and do nothing about it, then they are failing in their. responsibilities.

Last Easter (1995). I went into the local police station in London and spoke to an officer about. the harassment against me. But I couldn't provide tangible evidence; what people said, in many cases. years ago, is beyond proof, and. without something to support my statements I cannot expect a police officer to take. the complaint seriously.

The current situation with. regard to the police is not one which allows a breakthrough. in dealing with the problem. On the one hand, most individual officers at a local police station may not know about the. ongoing assaults, so a. complaint at that level will not yield results. Yet the police as an organisation do know of the. harassment, and they must be aware that a complaint has been made at a police station. So it. is clearly their duty to take preventative action. against the continuing molestation, but because the criminals are operating on behalf of a state agency, the police are. not carrying out their. duty.

2984

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-=-
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-=-

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554

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-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-
-=. why won't the British police do their job and put a stop to it? -=
-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-
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554

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-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-
-= abuse in set-up situations and. in public -=
-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-
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Strangers in the street have recognized me on sight many times,. and shown awareness of the current thread of abuse. To give you one. example, in 1992 I was seriously ill, and. a manager at work somewhat humorously said that "it wasn't fair" that. people were bullying me. A few days later, I attended for the. first time a clinic in London as an outpatient, and on my way out was accosted by someone who asked if "they. had paid my fare", with emphasis on. the word "fare". He repeated the word several times in this different context; that they should have paid my "fare", each. time emphasizing the word.

For two and a half years from the time their harassment. started until November 1992 I refused to see a psychiatrist, because I reasoned that. I was. not ill of my own action or fault, but through the stress caused by harassment, and that a lessening of. the illness would have to be consequent to a removal of its immediate cause, in other words a. cessation of harassment. I also. reasoned that since they were taunting me with jokes about mental illness, if I. were to seek treatment then the abusers would think that they had. "won" and been proved "right". Remember, the constant theme of any persecution is, "we must destroy. you because you're X", whether X is a racial or other attribute. In this. case the X was "we persecute. you because you have brain disease". The similarity of this logic to Nazi. attitudes to the mentally ill is striking.

The same manager who'd said "it wasn't fair" asked me in winter 1992. why I didn't seek help from a psychiatrist; was it,. he asked, because "they would think they had won" if. I sought treatment? That was something I'd never said at work... again, taken separately it proves nothing, but. many such things over a period of months. proves conclusively that people in the company knew what was going on, and in quite a lot of. detail.

Usually harassment in. public lacks the level of finesse of "paying your fare". Most people's imagination. does not go beyond moronic parroting of the current term of denigration. That is not surprising given the. average level of the abusers; if they do not. have the intelligence to distinguish wrong from. right then neither will they have the capacity for anything other than mindless repetition of a monosyllabic term. calculated to fit into. their minds.

The first incidents of verbal assault in. public were in again in the summer of 1990, although they increased in frequency and venom. with time. In July 1990 the. first public incident occurred on a tube train on the Northern line. Two men and their girlfriends recognised me; the women sprang. to my defence, saying. "He looks perfectly normal, he doesn't look ill". Their boyfriends of course knew better, and followed the party. line; one of them made reference to an "operation", apparently to work at. the tube station but. implicitly to a visit that I had made to hospital a couple of weeks previously.

In August. 1990 going home from college, soon after getting on a tube train at Gloucester Road I was. followed by a group of four youths, who started a chant of abuse. That they were. targeting me was confirmed by other people in the carriage, one of whom asked the other "who. are they going on at, is it the bloke who. just got on?" to which the second replied "yes, I think so". I was. tempted to reply, but as in every other instance the abusers are enabled. in their cowardice by physically outnumbering the abused; any confrontation would result in my being beaten up, followed by a. complaint to the police that "he attacked. us", and of course he's ill, so he must have been. imagining that we were getting at him. Shitty, aren't they?

But the. shittiness of the four youths on the tube train is as nothing compared to the episode on the National Express coach to Dover. in the summer of 1992. While going on holiday. to the Continent I was verbally set upon. by a couple travelling sitting a few rows behind. The boy did the talking,. his female companion contributing only a continuous empty giggling noise. He spoke loudly to ensure other. people on the coach heard, always about "they" and "this. bloke" but never naming either the abusers or the person he was talking about.. He said "they" had "found somebody from his school, and he was always really. stressed at school". They must have dug deep to find enemies there;. perhaps someone who dropped out of school, someone who didn't do too well later, who was jealous and keen to get. their own back? The boy also said "he was in a bed and breakfast for. only one night and they got him". By a not unexpected coincidence I had. been in a B&B in Oxford a week previously, which. had been booked from work; other things lead me to the conclusion that the company's offices were bugged. for most of the 2 1/2 years that I was. there, so "they" would have known a room in the B&B had been booked. (But I'll bet "they". didn't tell the company's managers their offices were bugged,. did they?).

After a few minutes of this I went. back to where they were sitting and asked. where they were travelling. The boy named a village in France, and the girl's giggling suddenly ceased; presumably it permeated to her. brain cell what the. purpose of the boy's abuse was.

This and. other set-up situations are obviously calculated to provoke a direct confrontation which would bring in the. police, with the abusers claiming that they were the. ones attacked. Again in 1992, outside the house where I was living in Oxford I. was physically attacked by someone - not punched, just grabbed by the coat, with some verbals thrown in for. good measure. That was. something the people at work shouldn't have known about... but soon after a couple of people were. talking right in front of me about, "I. heard he was attacked". The UK police have a responsibility for preventing assault occurring, but they do not seem to take any. interest in meeting that. responsibility. I suppose their attitude is that harassment does not come within. their remit unless it involves physical assault, and they will only become involved once that happens. That is of. course quite the wrong attitude for them to take, but as I now. understand, the police investigate only the crime they wish to investigate; if. they do not take your complaints. seriously then there is nothing you can do to make them take. action.

2984

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-=
-= purpose in publicizing it; censorship. in uk.* newsgroups -=
-=

The postings to uk.misc newsgroup generated a. very defensive reaction from Usenet readers in the UK. So. much so, that they tried strenuously to suppress what was being said, both by breaking the rules of. netiquette in their responses on the forum, and directly by action to revoke the. account from. which the postings were issued.

Yet the. postings were within the normal boundaries of behaviour for uk.misc, and other less partisan spectators did not see. justice in the censorship which was effected,. as the following excerpt shows;

:Karen. Lofstrom (lofstrom@lava.net) wrote
:>It does seem that the frequency. and the size of his posts are
:>approaching net abuse. However,. IMHO, they aren't quite there yet. If
:>his postmaster were to act in this instance, it would. raise troubling
:>censorship. issues.

The. inescapable conclusion of the censorship effected on the uk.* newsgroups is that the British are intent on their. wrongdoing remaining concealed, and therefore seek to subvert. and suppress freedom of speech, not. only in their own country where the media shows xenophobic bias and bile against all perceived enemies. within and without, but also in other countries which. have their own statutes to guarantee the basic human right of free. speech.

It. is absolutely necessary to bring their hate campaign out into the open where it can be placed under scrutiny and the. harassers seen for what they are. That is the only way of making it impossible for. the security services to carry it. out. There is a wider dimension, though. Xenophobia as demonstrated by British people and. institutions over the last few years belongs to the same stable as racial hatred. In one case, two. youths on a Tube train made that racism explicit by referring to their victim. as a "soft toy,. not up to British Standards". Doubtless others victimize partly on the basis of race. (isn�t it odd that they chose to torment someone who is not ethnically English?) while expressing their abuse. in terms of another genetic attribute, namely mental. illness. All xenophobia on a genetic basis is wrong, but. while racial insults are illegal, abusing the mentally ill is neither against the law nor subject to similar. condemnation when it. is exposed.

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-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-
-=. my response to the harassment -=
-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-

My first reaction in 1990/91 was to assume that if. I broke contact then they would not be able to follow and would. lose interest. So I did the things that have been. suggested by other people; I sold my television, stopped. listening to the radio and tried to withdraw away from the sources of abuse. as much as possible. I reasoned that they must have more important things to deal with and that normal people would simply leave me. alone if it were made difficult for them to. continue their harassment.

I reckoned without the sheer. vindictiveness of the abusers. They did not let up but instead "got to" people around. me, mainly people at work, to do their dirty work for them. I went. to see my GP, who refused to believe what he was being told, and refused to. direct me on to anyone who could be of practical assistance. It was not. until three years had passed that the GP admitted the matter was outside his competence. and suggested going to the police.

In the. summer of 1994 we called in counter-surveillance experts from a private detective agency to sweep our. house and telephone for bugging devices. They. conducted a thorough search and found nothing; but as noted above, since the existence of surveillance. was being forced in my face by the harassers, you would expect them to. have taken the possibility of a counter-surveillance sweep. into account when planning the type of devices to. be employed.

In Easter 1995 I made a complaint to my local Police station. in London, but the police. have not expressed any intention to do anything about the continuing harassment. ("we're not saying it's happening and we're not saying it isn't happening" were. the words used). I think the officer I spoke to. at Easter wasn't aware of it happening, although other members of the police force obviously. do know.

From April 1995 until the present time. the matter has been discussed in a lot. of detail on the Usenet (Internet) "uk.misc" newsgroup. That discussion has given birth to the article which you are. now reading. My hopes in posting. to Usenet were that wider publicizing would discourage the security services from continuing. their harassment, and "draw people out" into concurring with the truth of. what was being said. Neither of those have followed, but the discussion has served a purpose in allowing. this structured report to. be created.

7844

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From 2227893853526262683
X-Google-Thread: 10bf43,898485085720439d,start
X-Google-Thread: 10e8ad,898485085720439d,start
X-Google-Thread: 106d41,898485085720439d,start
X-Google-Thread: fa029,898485085720439d,start
X-Google-Thread: 114aac,898485085720439d,start
X-Google-Attributes:
gid10bf43,gid10e8ad,gid106d41,gidfa029,gid114aac,public,usenet
X-Google-Language: ENGLISH,ASCII
Path: g2news1.google.com!news4.google.com!out01a.usenetserver.com!
news.usenetserver.com!in01.usenetserver.com!news.usenetserver.com!news.alt.net
From: emfvivmiv@lycos.com
Newsgroups:
rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.cb,rec.radio.scanner,re
c.radio.shortwave
Subject: M,I.5'Pers ecution , th eir meth ods an d tact ics
Followup-To:
rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.cb,rec.radio.scanner,re
c.radio.shortwave,uk.misc
Date: Tue, 1 Jan 2008 16:07:56 +0000 (UTC)
Organization: Altopia Corp. - Usenet Access - www.altopia.com
Lines: 33
Message-ID: <xk0800011607558970@4ax.com>
Xref: g2news1.google.com rec.radio.amateur.policy:107290
rec.radio.amateur.space:1275 rec.radio.cb:42056 rec.radio.scanner:13210
rec.radio.shortwave:130714
```

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-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=
-= MI5: methods and tactics. -=
-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=
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They deliberately set out to harass in a way that. would resemble the symptoms of schizophrenia, so that any report of the harassment would. be taken as indicating mental illness and "treated". accordingly. They never show their own faces; they only work through proxies,. in the media, among the public,. and by manipulating people in the workplace. Since they do not declare their identity there is no evidence. to initiate legal action against. the security services or anyone else. The only people you can prosecute. are the proxies and they will deny knowledge of any conspiracy.

By repeatedly humiliating. and abusing the victim, they induced mental illness. This. is the worst form of human rights violation: making any statement of the harassment appear to be symptomatic of. the illness which they cause through the harassment. That this can happen, and. people collude by silence,. is absolutely horrifying.

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The MI5. that breaks the law with the silent complicity of the police is the same agency that is. now seeking a role in the fight against crime. Perhaps the real joke is the. proposed involvement in the implementation of justice of an organisation which commits criminal acts with secrecy. and disinterest for. the legal process.

10274

```
From -6831146972663024354
X-Google-Thread: 10e8ad,79e42ab374af7d27,start
X-Google-Thread: 10b9c8,79e42ab374af7d27,start
X-Google-Attributes: gid10e8ad,gid10b9c8,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!newsfeed2.dallas1.level3.net!
news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-364 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Tue, 1 Jan 2008 11:13:28 EST
Organization: The Radio Amateur Satellite Corporation
Lines: 265
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000501c84c91$1039c710$6601a8c0@familyroom>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
```

Content-Transfer-Encoding: 7bit
X-Trace: reader2.panix.com 1199204008 28699 166.84.1.6 (1 Jan 2008 16:13:28 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Tue, 1 Jan 2008 16:13:28 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to   rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to   rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
X-Authority-Analysis: v=1.0 c=1 a=A-iajOXDDB8A:10 a=sC335ZRjAAAA:8 a=Ixn1CAxRAAAA:8 a=CbXcb9snAAAA:8 a=3uIXxd93LP_NN1vqXRYA:9 a=coLpQcfmBh9z7hHiJCsA:7 a=yxnJlEJKhwE3HJ9PSwdINl3HPksA:4 a=q4eIODirUFwA:10 a=CWSBNlG-xqIA:10
Xref: g2news1.google.com rec.radio.amateur.space:1276 rec.radio.info:643

AMSAT NEWS SERVICE
ANS-364

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:

* 2008 Straight Key Night on OSCAR in Memory of ex-JA1ANG
* AMSAT Orbital Classroom Concept Study Announced
* KiwiSAT Status Update From New Zealand
* AMSAT Awards
* ARISS Status Report for the Week of December 24, 2007
* ANDE Satellite De-Orbits

SB SAT @ AMSAT $ANS-364.01
2008 Straight Key Night on OSCAR in Memory of ex-JA1ANG

AMSAT News Service Bulletin 364.01
>From AMSAT HQ SILVER SPRING, MD.
December 30, 2007
To All RADIO AMATEURS
BID: $ANS-364.01

You are cordially invited to take part in Straight Key Night on

OSCAR 2008, sponsored by AMSAT for all radio amateurs throughout the world. This year's event will be held in memory of Haruo (Harry) Yoneda, ex-JA1ANG, a past AMSAT Director and co-founder of JAMSAT. Harry was also a keen CW operator and a past member of the First Class CW Operators Club (FOC).

Participating in OSCAR SKN is fun and simple. No scoring and no need to send in a log. Just operate CW through any OSCAR, using a straight hand key, at any time between 0000 and 2400 UTC on January 1, 2008.

In keeping with the friendly nature of this event, all participants are encouraged to nominate someone they worked for Best Fist. Your nominee need not have the best fist you heard, just the best of those you worked. Please send your nomination to W2RS at w2rs@amsat.org. Those nominated will be recognized in an AMSAT News Service bulletin, and in The AMSAT Journal.

[ANS thanks Ray, W2RS for the above information]

/EX

SB SAT @ AMSAT $ANS-364.02
AMSAT Orbital Classroom Concept Study Announced

AMSAT News Service Bulletin 364.02
>From AMSAT HQ SILVER SPRING, MD.
December 30, 2007
To All RADIO AMATEURS
BID: $ANS-364.02

Stefan, VE4NSA has been asked to organize and coordinate an amateur radio space communications training concept called the "Orbital Classroom". Stefan said, "Here is an opportunity for AMSAT members to voice their needs for education. We are listening and working on this."

Stefan asks interested AMSAT members to send him your answers to these questions via e-mail (ve4nsa@amsat.org).

1. Would you be interested in attending pre-conference courses and workshops as part of the annual meeting or at other venues?

2. Would you be willing to pay a registration fee that would cover course material, instructor cost etc.?

3. Would you be interested in receiving a certificate for ongoing education as it relates to amateur radio and satellites?

4. What topics would you like to see taught at such courses?

5. Would you be willing in helping to organize and facilitate courses

(you don't have to teach for this one, just help the instructor and take care of registration, etc)?

6. Would you be willing to teach a course and if yes, on which topics?

Stefan concludes, "That's a start and hopefully it sparks your interest as a participant, facilitator or instructor. As always, your opinion counts and even more your help is greatly appreciated."

[ANS thanks Stefan, VE4NSA for the above information]

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SB SAT @ AMSAT $ANS-364.03
KiwiSAT Status Update From New Zealand

AMSAT News Service Bulletin 364.03
>From AMSAT HQ SILVER SPRING, MD.
December 30, 2007
To All RADIO AMATEURS
BID: $ANS-364.03

This week Terry, ZL3QL, President AMSAT-ZL, provided AMSAT members with a summary of the New Zealand KiwiSAT project.

KiwiSAT is a Microsat scheduled for launch into a LEO, will carry FM and Linear transponders with inputs on 70 cm & 23 cm - outputting on 2 meters. A unique feature will be the on-board Small Satellite Attitude Control scientific experiment. It will also carry a special environmental global warming scientific unit.

Over the years AMSAT-ZL has contributed some $10,000 to Phase 3 and UoSAT programs. Now they are getting on with completing KiwiSAT for your amateur radio enjoyment. (See http://www.kiwisat.org)

Terry says, "We want this to be a truly radio amateur satellite and while we could get some extra sponsorship, which we will do for the launch, the satellite itself needs to be completed using amateur radio resources and amateur radio money. So far our investment is some US$15,000 cash and perhaps US$100,000 in time and effort. We have a further US$12,000 in the bank reserved towards the cost of the solar cells which are estimated to cost US$30,000."

The KiwiSAT team spends a lot of time looking for economy without engineering compromise thus this is a real cost effective satellite. They have abandoned purchasing ready made modules and opted for self design and construction. In some areas we have had to use professional services such as SMD handing which is limited by our standard ham-shack tools and techniques. However we have made much of the test equipment ourselves - including the thermal vacuum chamber.

To finish the satellite to flight-ready status, (less solar cells) KiwiSAT needs to raise about $10,000, which is about what we have given to other projects. So if you agree that its pay-back time, and you like what they are doing, perhaps you might like to contribute to this venture into space.

You can contribute large or small, direct or via PayPal, just visit our informative website at http://www.kiwisat.org, all help is greatly appreciated. Be assured your contribution will be thankfully received and faithfully applied.

Terry concludes,"Our grateful thanks to those who have already made a commitment to supporting this project. What a great time to help and what a great Yuletide gift to a worthy cause."

[ANS thanks Terry, ZL3QL for the above information]

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SB SAT @ AMSAT $ANS-364.04
AMSAT Awards

AMSAT News Service Bulletin 364.04
>From AMSAT HQ SILVER SPRING, MD.
December 30, 2007
To All RADIO AMATEURS
BID: $ANS-364.04

Bruce Paige, KK5DO, AMSAT Director Contests and Awards has issued the last awards for 2007.

We would like to welcome the following to the satellite community.
They have made their first satellite contact and are now members of the AMSAT Satellite Communicators Club:

Jeremy Ramirez	KB9QIC
Charles Doolittle	N1SPX
Jose Vitor Toste	CU3EQ

AMSAT Communication Achievement Award

John Henderson	N4NAB, #456
Charles Doolittle	N1SPX, #457

South Africa AMSAT Communication Achievement Award

John Henderson	N4NAB, US115
Charles Doolittle	N1SPX, US116

To see all the awards visit http://www.amsat.org.

[ANS thanks Bruce, KK5DO for the above information]

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SB SAT @ AMSAT $ANS-364.05

ARISS Status Report for the Week of December 24, 2007

AMSAT News Service Bulletin 364.05
>From AMSAT HQ SILVER SPRING, MD.
December 30, 2007
To All RADIO AMATEURS
BID: $ANS-364.05

1. ARISS Contact with Russian School

The ARISS contact was not successful with the 15 Korolev City School in Korolev, Russia on Thursday, December 27 and will be rescheduled. Fifth graders will speak with flight engineer Yuri Makenchenko, RK3DUP.

2. ARISS International Team Meeting Held

The monthly ARISS teleconference was held on Tuesday, December 18. The topics discussed included the 2008 Face to Face Meeting to be held in Moscow, Russia, the progress being made on SuitSat-2 and the Kenwood radio software reload status. Minutes will be posted to the ARISS Web site in the near future.

3. Astronaut Gives Talk on ARISS at AMRASE Conference

The first AMRASE International Aerospace Research Conference was held on December 8 in Rio de Janeiro. Brazilian astronaut Marcos Pontes was one of the speakers at the meeting. Pontes gave a presentation on his training and his participation in the Centenario Mission onboard the ISS. He also talked about the importance the ARISS program plays in the education of youth. See: http://www.amrase.org/english.html

[ANS thanks Carol, KB3LKI for the above information]

/EX

SB SAT @ AMSAT $ANS-364.06
ANDE Satellite De-Orbits

AMSAT News Service Bulletin 364.06
>From AMSAT HQ SILVER SPRING, MD.
December 30, 2007
To All RADIO AMATEURS
BID: $ANS-364.06

Henk, PA3GUO reminds everyone of the special ANDE de-Orbit AWARD available for everyone who makes a QSO via ANDE or receives telemetry during its final days in space. Bob, WB4APR, will set the official date/time of de-orbit. E-mail a copy of your final ANDE packets to Henk at pa3guo@amsat.org.

ANDE was no longer copied on December 25, 2007. Mike, DK3WN reported the last packet from ANDE was received by by JA0CAW on December 24, 2007 at 22:27 UTC:

```
Fm ANDE-1 To APRS1 Via SGATE &lt;UI pid=F0 Len=72 &gt;[22:27:08]
:BLN1ANDE :ANDE-1 only wakes up 1 of evry 15s for users. Pse conserve.
Fm ANDE-1 To BEACON &lt;UI pid=F0 Len=39 &gt;[22:27:43]
T#001,145,132,135,135,137,10101111,000
```

[ANS thanks Henk, PA3GUO and Mike, DK3WN for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM

From 471690450799725019
X-Google-Thread: 10bf43,7a60287929346909,start
X-Google-Thread: 10e8ad,7a60287929346909,start
X-Google-Thread: 106d41,7a60287929346909,start
X-Google-Thread: fa029,7a60287929346909,start
X-Google-Thread: 114aac,7a60287929346909,start
X-Google-Attributes:
gid10bf43,gid10e8ad,gid106d41,gidfa029,gid114aac,public,usenet
X-Google-Language: ENGLISH,ASCII
Path: g2news1.google.com!news4.google.com!out04b.usenetserver.com!
news.usenetserver.com!in01.usenetserver.com!news.usenetserver.com!news.alt.net
From: meifem@gmail.com
Newsgroups:
rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.cb,rec.radio.scanner,re
c.radio.shortwave
Subject: M-I 5`P ersecution . thei r method s an d t actics
Followup-To:
rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.cb,rec.radio.scanner,re
c.radio.shortwave,uk.misc
Date: Wed, 2 Jan 2008 08:11:49 +0000 (UTC)
Organization: Altopia Corp. - Usenet Access - www.altopia.com
Lines: 33
Message-ID: <zo0800020811479952@4ax.com>
Xref: g2news1.google.com rec.radio.amateur.policy:107571
rec.radio.amateur.space:1277 rec.radio.cb:42066 rec.radio.scanner:13212
rec.radio.shortwave:130747

-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=
-= MI5:. methods and tactics -=
-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=

They. deliberately set out to harass in a way that would resemble the symptoms of schizophrenia, so that any report of the harassment. would be taken as indicating mental illness and "treated" accordingly. They. never show their own faces;. they only work through proxies, in the media, among the. public, and by manipulating people in the workplace. Since they do not declare their identity there is no evidence to initiate legal. action against the security services or anyone else.. The only people you can prosecute. are the proxies and they will deny knowledge of any conspiracy.

By repeatedly humiliating and abusing. the victim, they induced mental illness. This is the worst form of. human rights violation: making any statement of the harassment. appear to be symptomatic of the illness which they cause through. the harassment. That this can happen, and people collude by. silence, is absolutely horrifying.

From the beginning in June 1990 they set a pattern of harassment. which they have followed without change for the last. six years. They paint me as a "threat" to which people must "react" (shades of. Nazi persecution methods), while simultaneously. portraying their hate campaign on which they have spent over a million pounds of taxpayers� money. as a "joke".

The MI5 that breaks the law with the silent complicity of. the police is the same agency that is. now seeking a role in the fight against crime. Perhaps the real joke is the. proposed involvement in the implementation of justice of an organisation which commits criminal. acts with secrecy and disinterest for the. legal process.

553

```
From 8307668645857297622
X-Google-Thread: 10bf43,4830c64657520301,start
X-Google-Thread: 10e8ad,4830c64657520301,start
X-Google-Thread: 106d41,4830c64657520301,start
X-Google-Thread: fa029,4830c64657520301,start
X-Google-Thread: 114aac,4830c64657520301,start
X-Google-Attributes:
gid10bf43,gid10e8ad,gid106d41,gidfa029,gid114aac,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!news.glorb.com!news.alt.net
From: vifefi@gmail.com
Newsgroups:
rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.cb,rec.radio.scanner,re
c.radio.shortwave
Subject: M-I,5-Persecut ion ` w hy t he secu rity ser vices?
Followup-To:
rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.cb,rec.radio.scanner,re
c.radio.shortwave,uk.misc
Date: Wed, 2 Jan 2008 09:31:08 +0000 (UTC)
Organization: Altopia Corp. - Usenet Access - www.altopia.com
Lines: 65
```

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Xref: g2news1.google.com rec.radio.amateur.policy:107572
rec.radio.amateur.space:1278 rec.radio.cb:42067 rec.radio.scanner:13213
rec.radio.shortwave:130749

-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=
-= why the security services?. -=
-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=

You may. ask, why do I think the "they" referred to are the security services? Is there any evidence that there is a single source, as. opposed to a loosely based "whispering campaign" amongst many. people? Even if there is a. single source, is there any evidence that "they" are professional "buggers" as opposed to amateurs, or perhaps people working for a. privately funded. organization?

a) As to the question. of a single source versus something more fragmented; it is quite obvious. that there is a single source from the way the campaign has been carried out. Since things have been repeated. verbatim which were said in my home, there must be one group which does. the watching and listening. Since on several. occasions (mainly during travel) people have been planted in close proximity and rehearsed in what. they were to say, it follows that someone must have done the planning for that, and. again a single source. is indicated.

b). So why couldn't it be amateurs? Why couldn't it be a private organisation, for example a private detective. agency paid to manage the campaign and undertake the technical aspects? Some. detective agencies are unscrupulous as has been. proved on the occasions in the past when they've been exposed or caught; they. too can have access to the bugging technology deployed; and there are reported cases. of MI5 paying private eyes to do their dirty work (against peace campaigners and similar enemies. of the state) on the understanding. that if they were caught then they could deny all knowledge. Why couldn't that be. the case?

The main. factor pointing to direct security service involvement (as opposed to amateurs or. MI5 proxies) is the breadth of their access to the media in particular, and the fact that the television companies are. so involved in the campaign. The. BBC would not directly invade someone's home themselves, since it. would not be within their remit to allocate personnel or financial resources. to do so. An organisation of their stature would not take part in a campaign set up. by private sources. The only people they would take material from would be the. security services, presumably on the assumption that if the cat ever flew out of the bag. yowling it would be MI5 who would take. the consequences.

State sponsorship for. these acts of psychological terrorism is also indicated. by duration; support for over six years for a team of three or four people. would be beyond the means and will of most private sources. The viciousness of. the slanders and personal denigration also points to MI5; they traditionally "protect" the British state from. politicians of the wrong hue by. character assassination, and in this case are using their tried and tested methods to murder. with words an enemy they have invented for. themselves.

And there are precedents.. Diana and Hewitt were alleged to have been filmed "at it" by an Army intelligence team which had operated. in Northern Ireland, these. allegations were made by someone called Jones who had been on the. team. His statements were denied by the defence establishment who tried to character-assassinate by describing him as. the "Jones twins". Funny. how if you tell the truth, then you must be ill, isn't it? Thought only communists. behaved like that?

Hewitt later said that he'd been spoken to. by someone in the army who revealed the existence of. videotapes of him and Diana, and that the tapes would. be published if any attempt was made by them to resume their association.

553

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From 4682483912534881807
X-Google-Thread: 10bf43,3277d4bb8557dddf,start
X-Google-Thread: 10e8ad,3277d4bb8557dddf,start
X-Google-Thread: 106d41,3277d4bb8557dddf,start
X-Google-Thread: fa029,3277d4bb8557dddf,start
X-Google-Thread: 114aac,3277d4bb8557dddf,start
X-Google-Attributes:
gid10bf43,gid10e8ad,gid106d41,gidfa029,gid114aac,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news4.google.com!out03b.usenetserver.com!
news.usenetserver.com!in01.usenetserver.com!news.usenetserver.com!news.alt.net
From: mevifivei@gmail.com
Newsgroups:
rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.cb,rec.radio.scanner,re
c.radio.shortwave
Subject: M,I`5 Per secution   why  the  sec urity service s?
Followup-To:
rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.cb,rec.radio.scanner,re
c.radio.shortwave,uk.misc
Date: Wed, 2 Jan 2008 10:02:35 +0000 (UTC)
Organization: Altopia Corp. - Usenet Access - www.altopia.com
Lines: 65
Message-ID: <fo0800021002339184@4ax.com>
Xref: g2news1.google.com rec.radio.amateur.policy:107573
rec.radio.amateur.space:1279 rec.radio.cb:42068 rec.radio.scanner:13214
rec.radio.shortwave:130751
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553

```
From -8226677239234238030
X-Google-Thread: 10bf43,9730c526cfc93407,start
X-Google-Thread: 10e8ad,9730c526cfc93407,start
X-Google-Thread: 106d41,9730c526cfc93407,start
X-Google-Thread: fa029,9730c526cfc93407,start
X-Google-Thread: 114aac,9730c526cfc93407,start
X-Google-Attributes:
gid10bf43,gid10e8ad,gid106d41,gidfa029,gid114aac,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!news.glorb.com!news.alt.net
From: imvmfvmf@lycos.com
Newsgroups:
rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.cb,rec.radio.scanner,re
c.radio.shortwave
Subject: M`I,5.Perse cution . ha rassment at w ork
Followup-To:
rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.cb,rec.radio.scanner,re
c.radio.shortwave,uk.misc
Date: Wed, 2 Jan 2008 10:45:14 +0000 (UTC)
Organization: Altopia Corp. - Usenet Access - www.altopia.com
Lines: 41
Message-ID: <ox0800021045118461@4ax.com>
Xref: g2news1.google.com rec.radio.amateur.policy:107574
rec.radio.amateur.space:1280 rec.radio.cb:42069 rec.radio.scanner:13215
rec.radio.shortwave:130753
```

```
-=-=-=-=-=-=-=-=-=-=-=
-= harassment. at work -=
-=-=-=-=-=-=-=-=-=-=-=
```

Once I stopped watching television and listening to. the radio at the end of 1990, "they" had to find. other ways of committing abuses. So they took what must be for them a tried and tested route; they get. at you by subversion of those around. you. Since they wouldn't be able to do that with my family or friends, that. meant getting at people in the workplace to be their mouthpieces and do their dirty work. for them.

They supplied my employers in Oxford. with details from what was going on in my private life, and what I and other people had said at my home. and accommodation. in Oxford. So people at work repeated verbatim words which had been said in my. home, and repeated what I'd been doing recently. Often the most trivial things, the ones from your domestic. life, are the ones which. hurt most. One manager in particular at Oxford continuously abused me for ten months with verbal. sexual abuse, swearing, and threats to terminate my employment. After ten months I was forced to seek psychiatric help. and start taking medication, and was away from work for. two months. I spoke later with a solicitor about what had happened at that. company; he advised it was only possible. to take action if you had left the company as a result of harassment, and such an. action would have to be started very soon after leaving.

Over. a year later the same manager picked on another new worker, with even more serious results; that employee tried to commit suicide with. an overdose as a result of the ill-treatment, and was forced to leave. his job. But he didn't take. action against the company, either. Abuse at work is comparable to that. elsewhere in that tangible evidence is difficult to produce, and the abusers will always. have their denials ready when challenged. And even if a court accepts what you say happened,. it still remains to prove that abuse causes. the type of breakdown I had at the end of 1992. In a recent case before a British. court, a former member of the Army brought a case against others who. had maltreated him ten years previously. Although the court accepted that. abuse had occurred, it did not agree that. depressive illness necessarily followed, and denied justice to the. plaintiff.

2974

```
From -4373133791586719878
X-Google-Thread: 10e8ad,9d758cbe7c6379c,start
X-Google-Thread: 10b9c8,9d758cbe7c6379c,start
X-Google-Attributes: gid10e8ad,gid10b9c8,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!newsfeed.stanford.edu!panix!
rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-003 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Fri, 4 Jan 2008 14:37:11 EST
Organization: The Radio Amateur Satellite Corporation
Lines: 1308
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000d01c84ee0$c7901ad0$6601a8c0@familyroom>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader2.panix.com 1199475431 23635 166.84.1.6 (4 Jan 2008 19:37:11 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Fri, 4 Jan 2008 19:37:11 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
```

article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
X-Authority-Analysis: v=1.0 c=1 a=CvrgWked5bwA:10 a=SeIcp837AAAA:8
a=Ixn1CAxRAAAA:8 a=c2--Pf7SAAAA:8 a=KlfyZUBUAAAA:8 a=FbIv-aF9AAAA:8
a=3fFvnXHTAAAA:8 a=XNQh8oeLAAAA:8 a=f0RPBRECAAAA:8 a=ADBSzeAnAAAA:8
a=5mDMBHa8AAAA:8 a=gUbaYAUbAAAA:8 a=qyDxTJV7AAAA:8 a=JXa7hjb-AAAA:8
a=qL4joYdQAAAA:8 a=LlmPylSfAAAA:8 a=tIoeiIHHAAAA:8 a=fENH8MHtAAAA:8
a=0sg8RoSLAAAA:8 a=uGVPSem0AAAA:8 a=Wa5ALEAlAAAA:8 a=z_zqISx-AAAA:8
a=4RlJXVyBAAAA:8 a=JRUS5pMlAAAA:8 a=oBXim8GbAAAA:8 a=XYLYVS5UAAAA:8
a=h3eCdmoiAAAA:8 a=QX7y1c2GAAAA:8 a=QEps4B0vAAAA:8 a=hKwqrz-LAAAA:8
a=_qHggDGBAAAA:8 a=mNtHac3RKS_OXpD6rZoA:9 a=ICLoT7bYTuK0pHPW1gUA:7
a=uRIosaxYLscZKLp7kjhf-dQO6rQA:4 a=8QCVOS8zSb0A:10 a=FyblZaQiG9kA:10
a=q4eIODirUFwA:10 a=NDWsJ_JVWXMA:10 a=UtcmazUCZKYA:10 a=XyvEP7qG2ooA:10
a=wFu9RQxNt4EA:10 a=Bi3YAkoP18cA:10 a=F7Eo224L3vYA:10 a=XF7b4UCPwd8A:10
Xref: g2news1.google.com rec.radio.amateur.space:1281 rec.radio.info:644

This report is organized into FIVE parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites
Part 5 (S5) - deorbited/returned satellites

SB SAT @ AMSAT W8ISS ANS-003.S1
WSR 003 Part 1 01/03/2008

AMSAT NEWS SERVICE BULLETIN 003.S1 FROM AMSAT HQ
SILVER SPRING, MD, January 01, 2008
TO ALL RADIO AMATEURS
BID: $ANS-003.S1

VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.859330 MHZ CW

```
Dutch Beacon:   145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsat.in/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is
active. Each transponder has a different beacon.
[06252007]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Modes:   FM Repeater - V/u
                 BBS         - L/u
                 Telemetry   -  /u

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink:   145.880 MHZ FM
                       145.880 MHz USB
                       145.920 MHz FM
                      1268.700 MHz FM 67Hz PL tone
Digital Downlinks:     435.150 MHz FM 38k4 Digital, PBP, 1 watt output
                       435.150 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:        145.860 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      1268.700 mhz FM 9k6 PBP Digital
Beacon:                435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[12062007]
=====
```

SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer
   on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on
   and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10
   minute timer.
[05282007]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Operational - check operational schedule for current times!!

Current Mode: V/u

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:

V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage: http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's CW
telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts.htm
[0820007]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[12132007]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational depending on amount of Sunlight

Current Mode: Listen before transmitting

```
Uplink:   145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink:  29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons:   29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW
```

Official Webpage:

http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/

AO-7 Usage Guidelines on the AO-7 Log and Resource Site located at:
http://www.planetemily.com/ao7
[05282007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational - APRS and BBS

Current Mode: V/v

Expedition 16 crew:
Commander: Peggy Whitson
Flight Engineer: Yuri Malenchenko   RK3DUP
Flight Engineer: Daniel M. Tani   KD5DXE

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM
Worldwide packet downlink: 145.825 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS
                     RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.
[12272007]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-003.S2
WSR 003 Part 2 01/03/2008

AMSAT NEWS SERVICE BULLETIN 003.S2 FROM AMSAT HQ
SILVER SPRING, MD, January 03, 2008
TO ALL RADIO AMATEURS
BID: $ANS-003.S2

CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode: /u

```
TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon:    435.245 MHz CW
```

Callsign: K5USL

TLM and CW interchange every 30 seconds.
[11152007]
=====
CP3
Catalog Number: 31128
Launch Date: April 17,2007

Status: Operational

Current Mode: /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[07302007]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: In Orbit

Current Mode: V/v

```
Uplink/Downlink: 145.825 Mhz FM
Voice Recorder:  145.825 Mhz FM
```

```
[02052007]
=====
NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Operational

Current Mode: /u

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[10222007]
=====
GENESAT-1 ?O-??
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Current Mode: /u

Telemetry Beacon Downlink: 437.0670 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[01082007]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon:             437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
[03262007]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launched: June 30, 2003
```

```
Status: Operational

Current Mode: /u

Beacon:     436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[01082007]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launched: February 21, 2006

Status: Semi-Operational - Constant Carrier only

Uplink:  1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan ? )

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[01082007]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW
[08132007]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Mode(s): FM Repeater - V/u
                 BBS         - L/u
                 Telemetry   -  /u
```

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.880 MHZ FM
145.880 MHz USB
145.920 MHz FM
1268.700 MHz FM 67Hz PL tone
Digital Downlinks: 435.150 MHz FM 38k4 Digital, PBP, 1 watt output
435.150 MHz FM 9k6 Digital, Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Digital, Pacsat Broadcast Protocol
1268.700 mhz FM 9k6 PBP Digital
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[12062007]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Hibernation until full sunlight in November

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[09242007]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

```
Current Modes: V/U
               L/U

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[09172007]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Semi-Operational - Telemetry ONLY

Current Mode:  /u

Uplink:         145.900 MHz FM 1200-baud Manchester FSK
                145.920 MHz FM 1200-baud Manchester FSK
                145.940 MHz FM 1200-baud Manchester FSK
                145.960 MHz FM 1200-baud Manchester FSK

Downlink:       437.026 MHz SSB 1200-baud PSK

Mode-S Beacon: 2401.1428 MHz

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.025 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[11152007]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational.
```

Current Mode: /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon: 435.025 MHz - OFF
Mode-S Beacon: 2401.500 MHz - OFF

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[010222007]
=====
RS-22 RADIO SPORT RS-22
Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only

Current Mode: /u

CW Beacon - 435.352 MHz
            145.818 MHz
[08062007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational - APRS and BBS

Current Mode: V/v

Expedition 16 crew:
Commander: Peggy Whitson
Flight Engineer: Yuri Malenchenko   RK3DUP
Flight Engineer: Daniel M. Tani   KD5DXE

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM
Worldwide packet downlink: 145.825 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS
RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line is
NOT translated from Russian and posted.
[12272007]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-003.S3
WSR 003 Part 3 01/03/2008

AMSAT NEWS SERVICE BULLETIN 003.S3 FROM AMSAT HQ
SILVER SPRING, MD, January 03, 2008
TO ALL RADIO AMATEURS
BID: $ANS-003.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

CP4
Catalog Number: 31122
Launch Date: April 17,2007

Status: Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon: 437.325 MHz CW
[11152007]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Non-Operational

```
Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon:             437.2750 MHz CW

Callsign: JR8YJT
[10152007]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency:  437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink:         437.250 MHz FM 67Hz CTCSS
Voice Downlink:      2401.835 MHz FM
Packet Up/Downlink:   437.250 MHz 9k6 packet
Packet Downlink      2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non=Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[08132007]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.
```

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Non-Operational

Uplinks: 145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[007302007]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, callsign KE6QMD, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

```
Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS:                SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink:   145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
V-band:   145.840 -  145.990 MHz CW/LSB
U-band:   435.550 -  435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks
---------
S2-band:  2401.225 -  2401.475 MHz CW/USB
K-band:  24048.010 - 24048.060 MHz CW/USB
Beacon:   2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)
----------------------------
BEACON   General Beacon (GB)    Middle Beacon (MB)    Engineering Beacon
(EB)
2 m       none                    145.898 MHz           none
```

70cm	435.438 MHz	435.588 MHz	435.838 MHz
13cm(1)	2400.188 MHz	2400.338 MHz	2400.588 MHz
13cm(2)	2401.173 MHz	2401.323 MHz	2401.573 MHz
3cm	10450.975 MHz	10451.125 MHz	10451.375 MHz
1.5cm	24047.885 MHz	24048.035 MHz	24048.285 MHz

[007162007]
=====
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web site
at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====

```
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink:   145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign:       POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
```

```
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012006]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
```

```
Launched: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
LIBERTAD-1
Catalog Number: 31129
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25
```

```
Callsign: 5K3L

Uplink:   145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[10222007]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplinks:          145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink:      437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[01222007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
[05012006]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990
```

```
Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet: Non-Operational
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon:   145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
```

Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.8500 - 145.9000 MHz SSB/CW
Downlink 29.4000 - 29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink: 29.4500 - 29.5500 MHz SSB/CW
[01152007]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink: 145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB

Beacon 1: 29.352 MHz (intermittent)
Beacon 2: 29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)

[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB

Beacon: 145.860 MHz

Robot: 145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-003.S4
WSR 003 Part 4 01/03/2008

AMSAT NEWS SERVICE BULLETIN 003.S4 FROM AMSAT HQ
SILVER SPRING, MD, January 03, 2008
TO ALL RADIO AMATEURS
BID: $ANS-003.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE PROPOSED FOR LAUNCH AT THIS TIME:

Phase 5a Mars Mission
Catalog Number:
Proposed Launch Date: 2009 or 2011

Status: Design Phase

For the latest project status update please visit the AMSAT-DL P5-A web page:
http://ticket-to-mars.org
[01222007]

=====
PHASE 3E AO-??
Catalog number:
Proposed Launch Date: Late 2007

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/
[01222007]
=====
Eagle AO-??
Catalog Number:
Proposed Launch Date: Early/Mid 2009

Status: Design Phase

For the latest project status updates please visit the AMSAT-NA webpage:
http://www.amsat.org
[01222007]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-003.S5
WSR 003 Part 5 01/03/2008

AMSAT NEWS SERVICE BULLETIN 003.S5 FROM AMSAT HQ
SILVER SPRING, MD, January 03, 2008
TO ALL RADIO AMATEURS
BID: $ANS-003.S5

THE FOLLOWING SATELLITES HAVE DE-ORBITED OR HAVE BEEN RETURNED SAFELY:

NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Operational
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink: 145.825 Mhz FM APRS AX25
APRS Uplink: 145.825 MHz FM APRS AX25

Voice/PSK31 Uplink: 28.120 MHz

Packet to Voice ID: RAFT
[06112007]
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org

```
NNNN
/EX




From 3911951923017010076
X-Google-Thread: 10e8ad,dd88958ac272849b,start
X-Google-Thread: 113975,dd88958ac272849b,start
X-Google-Attributes: gid10e8ad,gid113975,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!newshub.sdsu.edu!news.astraweb.com!
router1.astraweb.com!not-for-mail
From: Chris Steyaert <observations@rmob.org>
Newsgroups: rec.radio.amateur.space,sci.astro.amateur
Subject: Radio Meteor Obs. Bull. December 2007 Geminids Ursids
Date: Sat, 05 Jan 2008 15:01:15 +0100
Message-ID: <vb3vn39fbm3ovuiunvg7m9snbhlp1ia0jo@4ax.com>
X-Newsreader: Forte Agent 1.93/32.576 English (American)
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Lines: 17
Organization: Unlimited download news at news.astraweb.com
NNTP-Posting-Host: 843cb570.news.astraweb.com
X-Trace: DXC=OK89Z@jg6<h1m]JSMD?cjjL?
0kYOcDh@j9OWGAmZaQhdgdBPgf34L;d3C0E@Z8I;2bLb=hI7B[1Q`FY;V4DiAc8k
Xref: g2news1.google.com rec.radio.amateur.space:1282 sci.astro.amateur:98049

Radio Meteor Observation Bulletin No. 173 of December 2007 (75 K) is available
now as


     http://visualrmob.free.fr/rmobtext/rmob0712.txt


More information and the visual presentation of the hourly forward scatter
counts can be found on

     http://www.rmob.org

     http://radio.data.free.fr


     Chris




From 2142471720167105987
X-Google-Thread: 10e8ad,dd88958ac272849b
X-Google-Thread: 113975,dd88958ac272849b
X-Google-Attributes: gid10e8ad,gid113975,public,usenet
X-Google-Language: ENGLISH,ASCII
Path: g2news1.google.com!postnews.google.com!j78g2000hsd.googlegroups.com!not-for-
```

mail
From: canopus56 <canopus56@yahoo.com>
Newsgroups: rec.radio.amateur.space, sci.astro.amateur
Subject: Re: Radio Meteor Obs. Bull. December 2007 Geminids Ursids
Date: Sat, 5 Jan 2008 13:56:19 -0800 (PST)
Organization: http://groups.google.com
Lines: 29
Message-ID: <f5887079-7fcd-4738-9693-7858691fb6f9@j78g2000hsd.googlegroups.com>
References: <vb3vn39fbm3ovuiunvg7m9snbhlp1ia0jo@4ax.com>
NNTP-Posting-Host: 168.179.186.182
Mime-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: quoted-printable
X-Trace: posting.google.com 1199570179 2655 127.0.0.1 (5 Jan 2008 21:56:19 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Sat, 5 Jan 2008 21:56:19 +0000 (UTC)
Complaints-To: groups-abuse@google.com
Injection-Info: j78g2000hsd.googlegroups.com; posting-host=168.179.186.182;
     posting-account=TW0jCgoAAACLMQUkZczIIKHjP6ieJLo4
User-Agent: G2/1.0
X-HTTP-UserAgent: Mozilla/4.0 (compatible; MSIE 7.0; Windows NT 5.1; .NET CLR
     1.1.4322),gzip(gfe),gzip(gfe)
Xref: g2news1.google.com rec.radio.amateur.space:1283 sci.astro.amateur:98066

On Jan 5, 7:01=A0am, Chris Steyaert <observati...@rmob.org> wrote:
> Radio Meteor Observation Bulletin No. 173 of December 2007 (75 K) is avail=
able
> now as =A0
> =A0 =A0 =A0 =A0http://visualrmob.free.fr/rmobtext/rmob0712.txt
> More information and the visual presentation of the hourly forward scatter=

> counts can be found on
> =A0 =A0 =A0 =A0http://www.rmob.org
> =A0 =A0 =A0 =A0http://radio.data.free.fr
> =A0 =A0 =A0 =A0 Chris

Chris, I was interested in getting into radio meteor observing and am
looking for some receiver advice for use in the U.S. I preliminary
tried with a digital FM receiver and cannot seem to find a useable
free frequency in the 88Mhz band.

It seems that ROMB contributers are using ICOM models in the 50mhz
band - either a freestanding wideband receiver - or the ICOM PC
model. Both are pricey - around 800-1500 USD.

Q1: I was wondering if I would be able to detect meteor radio signals
using a cheaper receiver, like the small ALINCO DJ-X7T which comes
with a computer interface cable. That only costs around 200 USD.

Q2: In the US, we are now moving to HD TV signals. How does this
effect the best frequency used for detecting meteor radio signals?

Thanks, Canopus56

```
From -2765927050621111153
X-Google-Thread: 10e8ad,dd88958ac272849b
X-Google-Thread: 113975,dd88958ac272849b
X-Google-Attributes: gid10e8ad,gid113975,public,usenet
X-Google-Language: ENGLISH,ASCII
Path: g2news1.google.com!postnews.google.com!r60g2000hsc.googlegroups.com!not-for-
mail
From: canopus56 <canopus56@yahoo.com>
Newsgroups: rec.radio.amateur.space, sci.astro.amateur
Subject: Re: Radio Meteor Obs. Bull. December 2007 Geminids Ursids
Date: Sat, 5 Jan 2008 14:00:55 -0800 (PST)
Organization: http://groups.google.com
Lines: 15
Message-ID: <ac455dde-2042-4353-9b14-41a0ceb369c4@r60g2000hsc.googlegroups.com>
References: <vb3vn39fbm3ovuiunvg7m9snbhlp1ia0jo@4ax.com>
<f5887079-7fcd-4738-9693-7858691fb6f9@j78g2000hsd.googlegroups.com>
NNTP-Posting-Host: 168.179.186.182
Mime-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: quoted-printable
X-Trace: posting.google.com 1199570455 23848 127.0.0.1 (5 Jan 2008 22:00:55 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Sat, 5 Jan 2008 22:00:55 +0000 (UTC)
Complaints-To: groups-abuse@google.com
Injection-Info: r60g2000hsc.googlegroups.com; posting-host=168.179.186.182;
     posting-account=TW0jCgoAAACLMQUkZczIIKHjP6ieJLo4
User-Agent: G2/1.0
X-HTTP-UserAgent: Mozilla/4.0 (compatible; MSIE 7.0; Windows NT 5.1; .NET CLR
     1.1.4322),gzip(gfe),gzip(gfe)
Xref: g2news1.google.com rec.radio.amateur.space:1284 sci.astro.amateur:98067
```

On Jan 5, 2:56=A0pm, canopus56 <canopu...@yahoo.com> wrote:

> Q1: I was wondering if I would be able to detect meteor radio signals
> using a cheaper receiver, like the small ALINCO DJ-X7T which comes
> with a computer interface cable. =A0That only costs around 200 USD.

P.S. -

Alinco model:
http://www.universal-radio.com/catalog/widerxvr/3077.html

The ICOM PC model:
http://www.universal-radio.com/catalog/widerxvr/2501.html

Any other pointers would be appreciated. - C

```
From -4353027571286759864
X-Google-Thread: 10e8ad,a9c9f71f8ab83c3,start
X-Google-Thread: 10b9c8,a9c9f71f8ab83c3,start
```

```
X-Google-Attributes: gid10e8ad,gid10b9c8,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!newsfeed.stanford.edu!bloom-
beacon.mit.edu!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-006 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Tue, 8 Jan 2008 18:55:20 EST
Organization: The Radio Amateur Satellite Corporation
Lines: 168
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <001a01c85251$ef68a3a0$6601a8c0@familyroom>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix1.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader2.panix.com 1199836520 16374 166.84.1.1 (8 Jan 2008 23:55:20 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Tue, 8 Jan 2008 23:55:20 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
X-Authority-Analysis: v=1.0 c=1 a=mJJ9v5gDmBsA:10 a=Ixn1CAxRAAAA:8
a=T7_67MSDAAAA:8 a=a_hxu6Z0AAAA:8 a=MESHfatp5bTrCzw9V4YA:9 a=yZsz-
OOuGXxaDjwlVAEA:7 a=iuYCe7oKYKroIuI234pXkAygQj4A:4 a=q4eIODirUFwA:10
a=KMT2vYEg_RUA:10 a=CWSBNlG-xqIA:10
Xref: g2news1.google.com rec.radio.amateur.space:1285 rec.radio.info:649
```

AMSAT NEWS SERVICE
ANS-006

ANS is a free, weekly, news and information service of AMSAT North America,
The
Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* AO-51 Entering Eclipse Free Period
* Best Fist Nominations Due
* South Africa AMSAT Space Symposium Call for Papers
* Satellite Shorts From All Over
* ARISS Status - 31 December 2007

SB SAT @ AMSAT $ANS-006.01
AO-51 Entering Eclipse Free Period

AMSAT News Service Bulletin 006.01
  From AMSAT HQ SILVER SPRING, MD.
January 6, 2008
To All RADIO AMATEURS
BID: $ANS-006.01

AO-51 is about to enter a three month period of no eclipse. The command team will be determining the best operating modes and power levels during the first two weeks of January 2008.

There will be no published schedule. The current modes of V/U FM repeater and L/U digital bulletin board may be common, but unpublished mode changes can occur at anytime. Please check the AMSAT BB or the Control Team News area of the web site for the latest information:
http://www.amsat.org/amsat-new/echo/CTNews.php .

[ANS thanks Gould, WA4SXM and the AO-51 Command team for
  the above information]

/EX

SB SAT @ AMSAT $ANS-006.02
Best Fist Nominations Due

AMSAT News Service Bulletin 006.02
  From AMSAT HQ SILVER SPRING, MD.
January 6, 2008
To All RADIO AMATEURS
BID: $ANS-006.02

Many thanks to all who participated in Straight Key Night on OSCAR 2008. If you have not already done so, please take a moment to nominate someone you worked for Best Fist. Your nominee need not have the best fist of those you heard, but only of those you worked.

Please send your nomination to w2rs@amsat.org. A list of those nominated will be published in an ANS bulletin in early February, and in The AMSAT Journal.

[ANS thanks Ray, W2RS, for the above information]

/EX

SB SAT @ AMSAT $ANS-006.03
South Africa AMSAT Space Symposium Call for Papers

AMSAT News Service Bulletin 006.03
From AMSAT HQ SILVER SPRING, MD.
January 6, 2008
To All RADIO AMATEURS
BID: $ANS-006.03

The South Africa AMSAT Space Symposium will be held in Durban on April 19th. Papers for presentation are now being solicited with a closing date for a synopsis on February 15th. Those selected will be advised that their presentation is one that's been selected and that completed copy must be submitted in Microsoft Word format before March 31st. Submit all submissions electronically to saamsat@intekom.co.za.

[ANS Newsline for the above information]

/EX

SB SAT @ AMSAT $ANS-006.04
Satellite Shorts From All Over

AMSAT News Service Bulletin 006.04
From AMSAT HQ SILVER SPRING, MD.
January 6, 2008
To All RADIO AMATEURS
BID: $ANS-006.04

+ A Powerpoint Presentation (in PDF format), "Satellites for Beginners" can be downloaded from: http://www.amsatsa.org.za/Satellites%20for%20Beginners.pdf

+ Jay, AA4FL made an AO7 Mode B contact with PY4AJ in grid GH70un. He is on the fringes of the footprint with a few other stations in the south of Brasil/Northern Argentina and will be looking for more contact opportunities. Jay invites e-mail at: drjay@gatordental.com to set up schedules.

+ Jim G3WGM, Hon Sec AMSAT-UK announced the dates for the next AMSAT-UK Colloquium are 25/26/27 July 2008. Location and general arrangements will be similar to last year's event. More details later. Please note the date in your diaries now.

+ Gould, WA4SXM says the parts list and other documentation for the LVB Tracker are now available at http://www.LVBTracker.com. This website will carry the latest information available for this project.

[ANS thanks JoAnne, K9JKM, for the above information]

/EX

SB SAT @ AMSAT $ANS-006.05
ARISS Status - 31 December 2007

AMSAT News Service Bulletin 006.05
From AMSAT HQ SILVER SPRING, MD.
January 6, 2008
To All RADIO AMATEURS
BID: $ANS-006.05

1. ARISS Contact to be Rescheduled

Due to technical difficulties, the December 27 Amateur Radio on the International Space Station (ARISS) contact scheduled with the 15 Korolev City School in Korolev, Russia was not successful. The contact will be rescheduled during January 2008.

2. ARISS Mentioned in QST

The American Radio Relay League (ARRL) referred to Amateur Radio on the International Space Station (ARISS) in its January 2008 QST. Under "This Just In" there was a section that read, "Astronauts aboard the ISS completed 74 contacts with schools during 2007, an ARISS record."

[ANS thanks Carol, KB3LKI, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Lee McLamb, KU4OS

```
From -2079065431675131029
X-Google-Thread: 10e8ad,6e8f492ea4b56693,start
X-Google-Thread: 10b9c8,6e8f492ea4b56693,start
```

```
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X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!newsfeed2.dallas1.level3.net!
news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-013 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sun, 13 Jan 2008 12:52:32 EST
Organization: The Radio Amateur Satellite Corporation
Lines: 280
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <001c01c8560d$0fafeb50$6601a8c0@familyroom>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix2.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader2.panix.com 1200246752 25567 166.84.1.2 (13 Jan 2008 17:52:32 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 13 Jan 2008 17:52:32 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
X-Authority-Analysis: v=1.0 c=1 a=btp4mQRUmrcA:10 a=Ixn1CAxRAAAA:8 a=3Yo0sQlvIJi-
cmdyOk0A:9 a=Mfg3heM_FTsImOEqDWQA:7 a=wCHEEe2BnQkw8LIh1dRJJvbyO4EA:4
a=q4eIODirUFwA:10 a=CWSBNlG-xqIA:10
Xref: g2news1.google.com rec.radio.amateur.space:1286 rec.radio.info:651
```

AMSAT NEWS SERVICE
ANS-013

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:

- AO-51 Report
- Florida AMSAT Net Will Host W2GPS This Thursday
- SW Conference
- AMSAT Engineering Team Meets
- Satellite Shorts From All Over
- ARISS Status - 07 January 2008

SB SAT @ AMSAT $ANS-013.01
AO-51 Report

AMSAT News Service Bulletin 013.01
>From AMSAT HQ SILVER SPRING, MD.
January 13, 2008
To All RADIO AMATEURS
BID: $ANS-013.01

The period of no eclipse for AO-51 is about a week old. The no eclipse period has proven to exhibit many short periods when the bad sun angle has caused the solar cells not to supply sufficient power, this has been supplemented by the batteries. We have increased the power output significantly over the last week, TXA (L/U digital BB) is now running 630 mW and TXB (analog V/U repeater) is running 820 mW. We plan on experimenting with the S-Band transmitter and a U-Band transmitter during the next couple of weeks. We do not have a published schedule as we are adapting the outputs to optimize the satellite operation and decrease the temperatures.
Updated Note:1/13/2007--
AO-51 stopped transmitting and is going to be re-booted ASAP. Keep an "ear" on it.

[ANS thanks Gould, WA4SXM and the AO-51 Command team for
the above information]

/EX

SB SAT @ AMSAT $ANS-013.02
Florida AMSAT Net Will Host W2GPS This Thursday

AMSAT News Service Bulletin 013.02
>From AMSAT HQ SILVER SPRING, MD.
January 13, 2008
To All RADIO AMATEURS
BID: $ANS-013.02

AMSAT President, Rick Hambly, W2GPS will join the Florida AMSAT Net, Thursday Jan 17, 2008 from 7:30 - 8:30 pm EST to give a short status report and field questions.

This net links repeaters all over Florida and via EchoLink so there is ample opportunity for those that want to listen or ask questions. The EchoLink nodes to connect through are: KG4YZY-R or N4HHA-R.

Please try to connect to KG4YZY-R first via Echolink. If you are connecting via another repeater, please make certain that none of your repeater's IDs, squelch tails, etc are sent over the link, otherwise it gets real messy.

The net's purpose is to provide a platform for hams with amateur satellite interest to meet and discuss topics of interest. All amateurs are invited to check in. Expect other AMSAT Officers and Board members to participate over the next few months.

/EX

SB SAT @ AMSAT $ANS-013.03
SW Conference

AMSAT News Service Bulletin 013.03
>From AMSAT HQ SILVER SPRING, MD.
January 13, 2008
To All RADIO AMATEURS
BID: $ANS-013.03

A conference on global shortwave coordination will be held February in Kuala Lumpur. This, to try to resolve potential interference problems likely to affect shortwave transmissions.

According to the Asia-Pacific Broadcasting Union, the February meeting will be hosted by VT Communications on behalf of the High Frequency Coordination Conference, the Arab States Broadcasting Union and the Asian Broadcasting Union.   Using mutual coordination, delegates will try to resolve many of the potential interference problems that are likely to affect shortwave transmissions in the 2008 joint global broadcasting schedule.

At present, a single global seasonal database of seasonal frequency requirements, compiled by the High Frequency Coordination Conference secretariat, assists in the coordination process. A new database of frequency requirements for the shortwave radio broadcasting season from March 30th to October 26th will be on the agenda of the conference.

Hams will want to keep an eye on the outcome of this gathering because whatever is decided could impact on Amateur Radio operations in spectrum that shared with international shortwave. (Southgate)

[ANS thanks ARNS for the above information]

/EX

SB SAT @ AMSAT $ANS-013.04
AMSAT Engineering Team Meets

AMSAT News Service Bulletin 013.04

>From AMSAT HQ SILVER SPRING, MD.
January 13, 2008
To All RADIO AMATEURS
BID: $ANS-013.04

With the holiday season behind and everyone settling back into winter in the northern hemisphere, the AMSAT Engineering Team kicked off the new year with the first meeting of 2008 on Tuesday, January 8. Thirty-two radio amateurs met via a VoIP teleconference call to get down to work on AMSAT's main missions which include the Eagle Satellite, the geosynchronous Phase IV Lite rideshare opportunity with Intelsat, and educational support for university projects.

Engineering project manager Barry Baines, WD4ASW moderated the meeting along with AMSAT's Vice President of Engineering, Bob McGwier, N4HY. AMSAT's volunteer engineers provided status and planning information for the projects listed below. Barry, Bob and engineering team members will provide members with detailed project information in future columns of the AMSAT Journal.

Rick Hambly, W2GPS, AMSAT President, reported that negotiations are continuing with Intelsat and are now going to focus on size, weight, and cost of the geosynchronous rideshare arrangement. Rick reminded everyone that our mission must excite potential grant funding sources via our unique emergency communication and educational capabilities. Watch the Journal for future details!

Matt Ettus, N2MJI has taken on the design of the Advanced Communication Payload. The first steps toward specification of the high speed digital channels, power requirements, uplink and downlink protocols, and class of stations supported have begun. Watch the Journal for future details!

Howard Long, G6LVB continues work on the linear transponders based on Software Defined Radio (SDR) technology. Development and testing are underway. High altitude balloon, SuitSat2 and SSETI missions are planning to utilize this transponder technology to provide early experience prior to P3E and Eagle utilization. Watch the Journal for future details!

Marc Franco, N2UO has started work on the VHF amplifier driver stage using the silicon carbide technology enabling the 86% efficiency of the main PA. Space rated components are under study. The 2 meter band HELAPS amplifier will be the initial design and possible scaling upward to the 70cm band is under consideration. Watch the Journal for future details!

Lou McFadin, W5DID leads the team developing SuitSat-2. The internal housekeeping unit (IHU) and AMSAT's software defined transponder technology are the main items under development. Solar cells have been donated by NASA. A new antenna system on top of the helmet has been completed. Watch the Journal for future details!

Bob Davis, KF4KSS, AMSAT Lab Manager reported on several good projects that have arisen out of the cooperative efforts of AMSAT and the HAWK Institute of Space Sciences at the University of Maryland, Eastern Shore. Construction of the AMSAT lab in the 8500 square foot facility continues. The clean room and machine shop will be coming on line to begin the development of the Eagle satellite space frame. University students will utilize the facilities to develop and launch a high altitude balloon project and a university cubesat both carrying research-related and AMSAT-related payloads. Watch the Journal for future details!

If you want to help with the AMSAT Engineering Team, send an e-mail to Bob N4HY via n4hy@amsat.org.

[ANS thanks, Bob, N4HY, for the above information]

/EX

SB SAT @ AMSAT $ANS-013.05
Satellite Shorts From All Over

AMSAT News Service Bulletin 013.05
>From AMSAT HQ SILVER SPRING, MD.
January 13, 2008
To All RADIO AMATEURS
BID: $ANS-013.05

+ Clint Bradford, K6LCS reports success from his Wednesday, January 9 AO-51 club demonstration. "AO-51 performed tremendously! We worked Mexico and a couple California stations", said Clint.

+ Ed Long, WA4SWJ, Editor, The AMSAT Journal reminds authors that the dead-line is approaching for article submissions for the Jan/Feb 08 Journal. If you have an article to submit Ed would love to have it as soon as possible.

+ AMSAT Store Manager, Bruce, KK5DO suggests you check out the new 2GB USB Flash Drive in an aluminum finish with the AMSAT logo in the store. Bruce says, "This has to be one of the best items we have carried. Something that all of us can use."

+ The current launch date for the PSLV-C9, carrying the NLS-4 set of nanosatellites (CanX-2, Delfi-C3, AAUSat-II, COMPASS-1,Cute-1.7+APDII, SEEDS) is February 14.

+ Reserve your seat! For his next big plan for the private space industry, Richard Branson is thinking up new ways to excite affluent space tourists:

  flying them into the biggest lightshow on Earth, the Aurora Borealis. Although the New Mexico Virgin Galactic Spaceport isn't scheduled for completion until 2010, the British entrepreneur is already planning his next project intended for cruises into the spectacular space phenomenon from an Arctic launchpad. (Universe Today)

+ Amateur radio to the moon? Possible rideshare arrangements to the moon via ESA and NASA student projects are discussed in the November/December 2007 AMSAT Journal. Not a member? Didn't get the Journal? Sign up for membership today at http://www.amsat.org!

[ANS thanks everyone for the above information]

/EX

SB SAT @ AMSAT $ANS-013.05
ARISS Status - 07 January 2008

AMSAT News Service Bulletin 013.06
>From AMSAT HQ SILVER SPRING, MD.
January 13, 2008
To All RADIO AMATEURS
BID: $ANS-013.06

1. ARISS School Contacts Status

Due to ISS crew schedules, no Amateur Radio on the International Space Station (ARISS) contacts are planned at this time. The ARISS team expects contacts to resume once STS-122 launches in late January.

2. Astronaut Training Status

Timothy Creamer, KC5WKI, is scheduled for a training session in basic radio operations and school contacts on Tuesday, January 8. Creamer is a backup crew member for the Expedition 18 mission.

3. ARISS Annual Report

The Amateur Radio on the International Space Station (ARISS) FY2007 annual report has been written and is being finalized. It will soon be posted on the ARISS section of the AMSAT Web site.

[ANS thanks Carol, KB3LKI, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Dee Interdonato, NB2F

```
From -3444101352593861275
X-Google-Thread: 10e8ad,d6a84d62e8e5a37e,start
X-Google-Attributes: gid10e8ad,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!postnews.google.com!e10g2000prf.googlegroups.com!not-for-
mail
From: manolovs <manolovs@gmail.com>
Newsgroups: rec.radio.amateur.space
Subject: Crap/bulshit infestation
Date: Mon, 14 Jan 2008 23:36:59 -0800 (PST)
Organization: http://groups.google.com
Lines: 1
Message-ID: <6d51de0b-d986-414c-9f86-987abae8d197@e10g2000prf.googlegroups.com>
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Mime-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 7bit
X-Trace: posting.google.com 1200382619 26564 127.0.0.1 (15 Jan 2008 07:36:59 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Tue, 15 Jan 2008 07:36:59 +0000 (UTC)
Complaints-To: groups-abuse@google.com
Injection-Info: e10g2000prf.googlegroups.com; posting-host=24.80.166.30;
     posting-account=1h58oAoAAAB-BT1GXXZUc10CqnARWiSw
User-Agent: G2/1.0
X-HTTP-UserAgent: Mozilla/4.0 (compatible; MSIE 7.0; Windows NT 5.1; .NET CLR
     1.1.4322; .NET CLR 2.0.50727),gzip(gfe),gzip(gfe)
Xref: g2news1.google.com rec.radio.amateur.space:1287
```

can any moderator delete the nonsense crap infesting this newsgoup?

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From 4800109276055512404
X-Google-Thread: 10e8ad,d6a84d62e8e5a37e
X-Google-Attributes: gid10e8ad,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!news.glorb.com!news-out.octanews.net!
indigo.octanews.net!news-1.mpls.iphouse.net.POSTED!not-for-mail
Newsgroups: rec.radio.amateur.space
Subject: Re: Crap/bulshit infestation
From: Bert Hyman <bert@iphouse.com>
References: <6d51de0b-d986-414c-9f86-987abae8d197@e10g2000prf.googlegroups.com>
Organization: Not that you'd notice
Message-ID: <Xns9A26B93F12AB8VeebleFetzer@216.250.184.7>
User-Agent: Xnews/2006.08.24
Date: 16 Jan 2008 00:12:15 GMT
Lines: 17
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YLYod>SJ:g
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X-Complaints-To: abuse@iphouse.net
Xref: g2news1.google.com rec.radio.amateur.space:1288

In
news:6d51de0b-d986-414c-9f86-987abae8d197@e10g2000prf.googlegroups.com
manolovs <manolovs@gmail.com> wrote:

> can any moderator delete the nonsense crap infesting this newsgoup?

This is not a moderated newsgroup; there is no moderator.

If you were using a real news provider and a real news client instead of googlegroups, you could filter the group yourself if your news provider wasn't already doing it for you.

Ironically, much of the nonsense crap that's infesting USENET comes from googlegroupers.

--
Bert Hyman   St. Paul, MN bert@iphouse.com

From -2553402170599599968
X-Google-Thread: 10e8ad,c3c729ee7902702,start
X-Google-Thread: 10b9c8,c3c729ee7902702,start
X-Google-Attributes: gid10e8ad,gid10b9c8,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!border1.nntp.dca.giganews.com!nntp.giganews.com!nx01.iad01.newshosting.com!newshosting.com!198.186.194.251.MISMATCH!transit3.readnews.com!news-out.readnews.com!news-xxxfer.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-017 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Fri, 18 Jan 2008 10:31:42 EST
Organization: The Radio Amateur Satellite Corporation
Lines: 1400
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000001c859e7$331bda80$6601a8c0@familyroom>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader2.panix.com 1200670302 13515 166.84.1.6 (18 Jan 2008 15:31:42 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Fri, 18 Jan 2008 15:31:42 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to   rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to   rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com

```
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
X-Authority-Analysis: v=1.0 c=1 a=_ppMeQlNJuQA:10 a=SeIcp837AAAA:8
a=Ixn1CAxRAAAA:8 a=c2--Pf7SAAAA:8 a=KlfyZUBUAAAA:8 a=FbIv-aF9AAAA:8
a=3fFvnXHTAAAA:8 a=XNQh8oeLAAAA:8 a=f0RPBRECAAAA:8 a=ADBSzeAnAAAA:8
a=5mDMBHa8AAAA:8 a=gUbaYAUbAAAA:8 a=qyDxTJV7AAAA:8 a=JXa7hjb-AAAA:8
a=qL4joYdQAAAA:8 a=LlmPylSfAAAA:8 a=tIoeiIHHAAAA:8 a=fENH8MHtAAAA:8
a=0sg8RoSLAAAA:8 a=uGVPSem0AAAA:8 a=Wa5ALEAlAAAA:8 a=z_zqISx-AAAA:8
a=4RlJXVyBAAAA:8 a=JRUS5pMlAAAA:8 a=oBXim8GbAAAA:8 a=XYLYVS5UAAAA:8
a=h3eCdmoiAAAA:8 a=QX7y1c2GAAAA:8 a=QEps4B0vAAAA:8 a=hKwqrz-LAAAA:8
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a=XmLDjXNxAAAA:8 a=dw-wigbnAAAA:8 a=xfYtsZLpAAAA:8 a=SQe5sqTJr16chyePOu4A:9
a=hiu9KlXZNiEraS8PTWgA:7 a=kEUTukUv_nAQtrzlYETV04y61joA:4 a=8QCVOS8zSb0A:10
a=FyblZaQiG9kA:10 a=Iac6x5lHDucA:10 a=q4eIODirUFwA:10 a=NDWsJ_JVWXMA:10
a=UtcmazUCZKYA:10 a=XyvEP7qG2ooA:10 a=wFu9RQxNt4EA:10 a=Bi3YAkoP18cA:10
a=F7Eo224L3vYA:10 a=XF7b4UCPwd8A:10
Xref: g2news1.google.com rec.radio.amateur.space:1289 rec.radio.info:654
```

This report is organized into FIVE parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites
Part 5 (S5) - deorbited/returned satellites

SB SAT @ AMSAT W8ISS ANS-017.S1
WSR 017 Part 1 01/17/2008

AMSAT NEWS SERVICE BULLETIN 017.S1 FROM AMSAT HQ
SILVER SPRING, MD, January 17, 2008
TO ALL RADIO AMATEURS
BID: $ANS-017.S1

VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

```
Indian Beacon:  145.859330 MHZ CW
Dutch Beacon:   145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsat.in/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is
active. Each transponder has a different beacon.
[06252007]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational - Software reload

Current Modes:   FM Repeater - V/u
                 BBS         - OFF
                 Telemetry   -  /u

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink:   145.880 MHZ FM
                       145.880 MHz USB
                       145.920 MHz FM
                      1268.700 MHz FM 67Hz PL tone
Digital Downlinks:     435.150 MHz FM 38k4 Digital, PBP, 1 watt output
                       435.150 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:        145.860 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      1268.700 mhz FM 9k6 PBP Digital
Beacon:                435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12
```

Official Webpage: http://www.amsat.org/amsat-new/echo/
[01172008]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10 minute timer.
[05282007]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Operational - check operational schedule for current times!!

Current Mode: V/u

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS

```
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage: http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's CW
telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts.htm
[0820007]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Current Mode: V/u

Uplink:   145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[12132007]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational depending on amount of Sunlight

Current Mode: Listen before transmitting

Uplink:   145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink:  29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons:   29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
```

2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/

AO-7 Usage Guidelines on the AO-7 Log and Resource Site located at:
http://www.planetemily.com/ao7
[05282007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational - APRS and BBS

Current Mode: V/v

Expedition 16 crew:
Commander: Peggy Whitson
Flight Engineer: Yuri Malenchenko RK3DUP
Flight Engineer: Daniel M. Tani KD5DXE

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM
Worldwide packet downlink: 145.825 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS
RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss

ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.
[12272007]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-017.S2
WSR 017 Part 2 01/17/2008

AMSAT NEWS SERVICE BULLETIN 017.S2 FROM AMSAT HQ
SILVER SPRING, MD, January 17, 2008
TO ALL RADIO AMATEURS
BID: $ANS-017.S2

CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.
[11152007]
=====
CP3
Catalog Number: 31128
Launch Date: April 17,2007

Status: Operational

Current Mode: /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[07302007]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: In Orbit

Current Mode: V/v

```
Uplink/Downlink: 145.825 Mhz FM
Voice Recorder:  145.825 Mhz FM
[02052007]
=====
NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Operational

Current Mode: /u

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[10222007]
=====
GENESAT-1 ?O-??
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Current Mode: /u

Telemetry Beacon Downlink: 437.0670 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[01082007]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon:             437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
[03262007]
=====
CO-57 CubeSat XI-IV
```

```
Catalog number: 27848
Launched: June 30, 2003

Status: Operational

Current Mode: /u

Beacon:     436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[01082007]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launched: February 21, 2006

Status: Semi-Operational - Constant Carrier only

Uplink:  1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan ? )

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[01082007]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW
[08132007]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational - Softawre Reload
```

Current Mode(s): FM Repeater - V/u
                 BBS   - OFF
                 Telemetry   - /u

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink: 145.880 MHZ FM
                       145.880 MHz USB
                       145.920 MHz FM
                      1268.700 MHz FM 67Hz PL tone
Digital Downlinks: 435.150 MHz FM 38k4 Digital, PBP, 1 watt output
                       435.150 MHz FM 9k6 Digital, Pacsat Broadcast Protocol
                      2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Digital, Pacsat Broadcast Protocol
                      1268.700 mhz FM 9k6 PBP Digital
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[01172008]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Hibernation until full sunlight in November

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[09242007]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397

```
Launch Date: July 10, 1998

Status: Operational

Current Modes: V/U
               L/U

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[09172007]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Semi-Operational - Telemetry ONLY

Current Mode:  /u

Uplink:         145.900 MHz FM 1200-baud Manchester FSK
                145.920 MHz FM 1200-baud Manchester FSK
                145.940 MHz FM 1200-baud Manchester FSK
                145.960 MHz FM 1200-baud Manchester FSK

Downlink:       437.026 MHz SSB 1200-baud PSK

Mode-S Beacon: 2401.1428 MHz

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.025 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[11152007]
=====
UO-11 OSCAR-11
Catalog number: 14781
```

```
Launched: March 1, 1984

Status: Semi-operational.

Current Mode:  /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon:          435.025 MHz - OFF
Mode-S Beacon:     2401.500 MHz - OFF

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[010222007]
=====
RS-22 RADIO SPORT RS-22
Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only

Current Mode:  /u

CW Beacon - 435.352 MHz
            145.818 MHz
[08062007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational - APRS and BBS

Current Mode: V/v

Expedition 16 crew:
Commander:          Peggy Whitson
Flight Engineer:    Yuri Malenchenko      RK3DUP
Flight Engineer:    Daniel M. Tani        KD5DXE

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink:   145.825 MHz FM
Worldwide packet downlink: 145.825 Mhz FM

Voice:
Region 1 voice uplink:   145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink:      145.800 MHz FM
```

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS
                      RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line is
NOT translated from Russian and posted.
[12272007]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-017.S3
WSR 017 Part 3 01/17/2008

AMSAT NEWS SERVICE BULLETIN 017.S3 FROM AMSAT HQ
SILVER SPRING, MD, January 17, 2008
TO ALL RADIO AMATEURS
BID: $ANS-017.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

CP4
Catalog Number: 31122
Launch Date: April 17,2007

Status: Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon: 437.325 MHz CW
[11152007]
=====
HO-59 HITSat
Catalog number: 29484

```
Launch date: September 22, 2006

Status: Non-Operational

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon:             437.2750 MHz CW

Callsign: JR8YJT
[10152007]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency:  437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink:         437.250 MHz FM 67Hz CTCSS
Voice Downlink:      2401.835 MHz FM
Packet Up/Downlink:   437.250 MHz 9k6 packet
Packet Downlink      2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non=Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[08132007]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002
```

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]

=====

MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Non-Operational

Uplinks: 145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[007302007]

=====

NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, callsign KE6QMD, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]

=====

```
SO-42 SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS:                SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink:   145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
V-band:   145.840 -  145.990 MHz CW/LSB
U-band:   435.550 -  435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks
---------
S2-band:  2401.225 -  2401.475 MHz CW/USB
K-band:  24048.010 - 24048.060 MHz CW/USB
Beacon:   2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)
----------------------------
```

BEACON	General Beacon (GB)	Middle Beacon (MB)	Engineering Beacon (EB)
2 m	none	145.898 MHz	none
70cm	435.438 MHz	435.588 MHz	435.838 MHz
13cm(1)	2400.188 MHz	2400.338 MHz	2400.588 MHz
13cm(2)	2401.173 MHz	2401.323 MHz	2401.573 MHz
3cm	10450.975 MHz	10451.125 MHz	10451.375 MHz
1.5cm	24047.885 MHz	24048.035 MHz	24048.285 MHz

[007162007]
=====
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:

http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink: 145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

```
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012006]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]
```

```
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
LIBERTAD-1
Catalog Number: 31129
Launch Date: April 17,2007

Status: Non-Operational
```

```
Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink:   145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[10222007]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplinks:          145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink:      437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[01222007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
[05012006]
=====
UO-14 UoSAT-3
```

Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink: 145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting): Non-Operational
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet: Non-Operational
Uplink: 145.8500 MHz MFSK 1200 BPS
Uplink: 145.8700 MHz MFSK 1200 BPS
Uplink: 145.8900 MHz MFSK 1200 BPS
Uplink: 145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon: 145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.9000 - 146.0000 MHz SSB/CW

```
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink  29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
[01152007]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon 1:  29.352 MHz (intermittent)
```

Beacon 2: 29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB

Beacon: 145.860 MHz

Robot: 145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-017.S4
WSR 017 Part 4 01/17/2008

AMSAT NEWS SERVICE BULLETIN 017.S4 FROM AMSAT HQ
SILVER SPRING, MD, January 17, 2008
TO ALL RADIO AMATEURS
BID: $ANS-017.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE PROPOSED FOR LAUNCH AT THIS TIME:

Phase 5a Mars Mission
Catalog Number:
Proposed Launch Date: 2009 or 2011

Status: Design Phase

For the latest project status update please visit the AMSAT-DL P5-A web

page:
http://ticket-to-mars.org
[01222007]
=====
PHASE 3E AO-??
Catalog number:
Proposed Launch Date: Late 2007

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web
page:
http://www.amsat-dl.org/p3e/
[01222007]
=====
Eagle AO-??
Catalog Number:
Proposed Launch Date: Early/Mid 2009

Status: Design Phase

For the latest project status updates please visit the AMSAT-NA webpage:
http://www.amsat.org
[01222007]
=====
Can X-2
Catalog number:
Proposed Launch Date: March 07, 2008

Status: Waiting for Launch

For the latest project status update please visit the Can X-2 web page:
http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[01172008]
=====
AAUSAT-II
Catalog number:
Proposed Launch Date: March 07, 2008

Status: Waiting for Launch

For the latest project status update please visit the AAUSAT-II web
page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[01172008]
=====
Cute-1.7+APD II

Catalog number:
Proposed Launch Date: March 07, 2008

Status: Waiting for Launch

For the latest project status update please visit the Cute-1.7+APD II web page:
http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78
[01172008]
=====
Compass 1
Catalog number:
Proposed Launch Date: March 07, 2008

Status: Waiting for Launch

For the latest project status update please visit the Compass 1 web page:
http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52
[01172008]
=====
Delfi-C3
Catalog number:
Proposed Launch Date: March 07, 2008

Status: Waiting for Launch

Proposed Frequencies:
* Primary telemetry downlink: 145.870 MHz 1200 Baud BPSK AX.25 400mW
* Backup telemetry downlink: 145.930 MHz 1200 Baud BPSK AX.25 400mW
* Linear transponder passband downlink: 145.880 - 145.920 MHz (inverting) 400mW PEP
* Linear transponder passband uplink: 435.570 - 435.530 MHz
* Transponder mode beacon: 145.870 MHz CW (10dB below transponder PEP)

For the latest project status update please visit the Delfi-C3 web page:
http://www.delfic3.nl/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68
[01172008]
=====
Seeds 2
Catalog number:
Proposed Launch Date: March 07, 2008

Status: Waiting for Launch

For the latest project status update please visit the Seeds 2 web page:
http://cubesat.aero.cst.nihon-u.ac.jp/english/main_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36
[01172008]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-017.S5
WSR 017 Part 5 01/17/2008

AMSAT NEWS SERVICE BULLETIN 017.S5 FROM AMSAT HQ
SILVER SPRING, MD, January 17, 2008
TO ALL RADIO AMATEURS
BID: $ANS-017.S5

THE FOLLOWING SATELLITES HAVE DE-ORBITED OR HAVE BEEN RETURNED SAFELY:

NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Operational
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

```
Main Downlink:      145.825 Mhz FM APRS AX25
APRS Uplink:        145.825 MHz FM APRS AX25
Voice/PSK31 Uplink:  28.120 MHz
```

Packet to Voice ID: RAFT
[06112007]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

From 4400687052133154718
X-Google-Thread: 10e8ad,a6a239d821a2fb17,start
X-Google-Thread: 10b9c8,a6a239d821a2fb17,start
X-Google-Attributes: gid10e8ad,gid10b9c8,public,usenet
X-Google-Language: ENGLISH,ASCII
Path: g2news1.google.com!news2.google.com!news.glorb.com!

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border1.nntp.dca.giganews.com!nntp.giganews.com!nx01.iad01.newshosting.com!
newshosting.com!198.186.194.251.MISMATCH!news-out.readnews.com!
transit3.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-020 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sat, 19 Jan 2008 22:08:57 EST
Organization: The Radio Amateur Satellite Corporation
Lines: 279
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <001301c85b11$ca6caab0$6601a8c0@familyroom>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
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Content-Transfer-Encoding: quoted-printable
X-Trace: reader2.panix.com 1200798538 26720 166.84.1.6 (20 Jan 2008 03:08:58 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 20 Jan 2008 03:08:58 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
X-Authority-Analysis: v=1.0 c=1 a=bjqwY1ItAKIA:10 a=1XWaLZrsAAAA:8
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Xref: g2news1.google.com rec.radio.amateur.space:1290 rec.radio.info:657
```

AMSAT NEWS SERVICE
ANS-020

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:

* AO-51 Recovered
* AMSAT Maryland Lab Update

* P3E C-Band Receiver Construction Completed, Testing Begins
* Six CubeSats to Launch From India
* Opportunity to Help With AMSAT's EaglePedia
* ARISS Status Report for the Week of January 14, 2008

SB SAT @ AMSAT $ANS-020.01
AO-51 Recovered

AMSAT News Service Bulletin 020.01
>From AMSAT HQ SILVER SPRING, MD.
January 20, 2008
To All RADIO AMATEURS
BID: $ANS-020.01

The AO-51 Command Team successfully recovered the satellite this week after its software crashed. Gould, WA4SXM along with Kevin, WA6FWF uploaded and re-started the code. AO-51 is operational in normal mode: V/U analog 145.920/435.300 on TXB & command station digital on TXA.

Heating is the Command Team's main concern during this no eclipse period. Two different strageties have been studied to prevent over-heating from too much solar exposure. The first alternative includes turning the transmitter off to not generate additional heat. The second alternative involves turning the transmitter to as high as power setting as possible to use the sunlight that is converted to electricity which is then radiated out the antenna.

The Command Team decided that the best approach was to use as much energy as possible. When the satellite software crashed Sunday all transmitters stopped operation. They found Battery 1 had a temperature of 41-42 C, which is too hot. Keeping high TX power (2.28W) on TXA for one orbit as soon as command was recovered resulted in the temperature of battery 1 reducing down to 36C.

Gould summarized, "Everything is looking well so far and we are getting consistent data, with the FM repeater transmitter power setting of at 1.12 W". The telemetry link is operating L/U BB mode at 500 mW.

Joe, K3SZH says he was able to contact David, G1OCN via AO-51. It was a short contact since the satellite was only 1 degree above Joe's horizon.

[ANS thanks Gould, WA4SXM and the AO-51 Command Team for the above information]

/EX

SB SAT @ AMSAT $ANS-020.02
AMSAT Maryland Lab Update

AMSAT News Service Bulletin 020.02

>From AMSAT HQ SILVER SPRING, MD.
January 20, 2008
To All RADIO AMATEURS
BID: $ANS-020.02

Bob, KF4KSS, AMSAT Lab Manager provided an update on the work to bring the new Pocomoke City, MD facility shared with the Hawk Institute of Space Sciences on-line.

+ January will close the cleanroom construction activities.

+ February will begin the tower and all the RF for the satellite control station including U, V, L, S and HF bands. Details will be published as they are completed.

+ After the tower installation, we will begin work on the engineering unit of the structure for the AMSAT Eagle amateur radio satellite. We plan on having parts of it complete in time for the Dayton Hamvention in May.

+ An on-line gallery of Lab pictures can be found at: http://picasaweb.google.com/bob2leo

[ANS thanks Bob, KF4KSS for the above information]

/EX

SB SAT @ AMSAT $ANS-020.03
P3E C-Band Receiver Construction Completed, Testing Begins

AMSAT News Service Bulletin 020.03
>From AMSAT HQ SILVER SPRING, MD.
January 20, 2008
To All RADIO AMATEURS
BID: $ANS-020.03

Peter G�lzow, DB2OS, wrote from Marburg, Germany reporting that the AMSAT-DL C-Band receiver for P3E is completed and currently under testing. The receiver was developed by Volker Winterscheid, DF7IT. The 5.6 GHz receiver is housed in a 74x74x30 mm module Which contains a pre-amp, mixer to 10.7 MHz IF, passband filters, and AGC system.

Except for the setting of the AGC time constant, all electrical work is completed on the module. Testing is also being done for selectivity and rejection of adjacent weather radar signals in this band.

More detailed information on the C-band RX for P3-E will appear after completion of the tests in AMSAT-DL Journal.

[ANS thanks Peter G�lzow, DB2OS for the above information]
/EX

SB SAT @ AMSAT $ANS-020.04
Six CubeSats to Launch From India

AMSAT News Service Bulletin 020.04
>From AMSAT HQ SILVER SPRING, MD.
January 20, 2008
To All RADIO AMATEURS
BID: $ANS-020.04

Six University Cubesat/Amateur Radio satellites are planned for launch in early March, 2008 from India. Full satellite information for each is too lengthy for complete coverage here. Below is a summary of the satellites and their frequencies and operating modes (if known).

Links to the University CubeSat Team's web pages with many additional mission details can be found at:
http://www.uk.amsat.org/
http://showcase.netins.net/web/wallio/CubeSat.htm (W0RPK CubeSat Page)

CANX-2
University of Toronto (Canada)
2m CW TLM plus 70cm uplink/13cm downlink (Not AX.25)

AAUSAT-II
Aalborg University (Denmark)
437.425 AFSK & FSK up/downlink
1200-9600bps AX.25
FM CW TLM

COMPASS-1
University of Applied Sciences (Germany)
Primary telemetry downlink: 437.405 9600bps FSK AX.25
Beacon downlink: 437.275 CW

DELFI-C3
Technical University of Delft (Netherlands)
Primary telemetry downlink: 145.870 MHz 1200 Baud BPSK AX.25 400mW
Backup telemetry downlink: 145.930 MHz 1200 Baud BPSK AX.25 400mW

The satellite will be in telemetry only mode for approximately the first three months of the mission, after which it is switched to linear transponder mode.
Downlink: 145.880 - 145.920 MHz (inverting) 400mW PEP
Uplink: 435.570 - 435.530 MHz
Transponder mode beacon: 145.870 MHz CW (10dB below transponder PEP)

CUTE 1.7+APD II
Tokyo Institute of Technology (Japan)
SRLL protocol

SEEDS
Nihon University (Japan)

437.485MHz AX.25 (450mW)
CW (90mW)

[ANS thanks Trevor, M5AKA, and Ralph, W0RPK for the above information]
/EX

SB SAT @ AMSAT $ANS-020.05
Opportunity to Help With AMSAT's EaglePedia

AMSAT News Service Bulletin 020.05
>From AMSAT HQ SILVER SPRING, MD.
January 20, 2008
To All RADIO AMATEURS
BID: $ANS-020.05

AMSAT is looking for two to three motivated individuals interested in helping with AMSAT's EaglePedia. EaglePedia is a Wiki and is the central repository for all information on AMSAT's upcoming Eagle spacecraft and possible future missions. AMSAT engineers and the general public will be accessing EaglePedia.

Volunteers will be responsible for re-organizing the current Wiki layout, adding new content, and supporting the AMSAT Engineers as they design, build and organize the project's documentation. Ideal candidates will have technical writing, web development, HTML and Wiki experience, possibly with technical backgrounds (hopefully you all have this already!). Knowledge of WikiMedia, MySQL, UNIX and spacecraft engineering and project management is a plus (but not required).

This is a fantastic oppurtunity to support one of AMSAT's most ambitious projects!

Please contact Dave, N0TGD (hartzell -at- gmail.com) directly for more information or to communicate your interest in helping AMSAT-NA! Please put "EaglePedia" somewhere in the subject line.

[ANS thanks Dave, N0TGD for the above information]

/EX

SB SAT @ AMSAT $ANS-020.06
ARISS Status Report for the Week of January 14, 2008

AMSAT News Service Bulletin 020.06
>From AMSAT HQ SILVER SPRING, MD.
January 20, 2008
To All RADIO AMATEURS
BID: $ANS-020.06

1. ARISS School Contacts Status

Due crew schedules onboard the ISS, no ARISS contacts are planned at this time. The ARISS team expects contacts to resume once STS-122 launches in early February.

2. Astronaut Training Status

Timothy Creamer, KC5WKI, received training on the ARISS basic radio operations and school contacts on Tuesday, January 8. Creamer is a backup crew member for the Expedition 18 mission.

Koichi Wakata, KC5ZTA, and Soichi Noguchi, KD5TVP, will be scheduled for training on ARISS radio operations and school contacts in the near future. Wakata is scheduled to fly on Expedition 18; Noguchi is slated as his backup.

Two training sessions have also been scheduled for Russian crew members on January 16 and 24.

3. ARISS International Team Meeting Held

Minutes of the December ARISS teleconference have been posted.
See: http://www.rac.ca/ariss/arisstel20071218.htm
The next ARISS teleconference will be held on January 22.

4. South Korean will Participate in ARISS Contact

South Korean spaceflight participant Ko San holds a South Korean amateur radio license. San plans to participate in an ARISS contact while aboard the ISS. He will fly on a Russian Soyuz spacecraft with Expedition 17 crew members Sergei Volkov and Oleg Kononenko slated to launch on April 8, 2008.

[ANS thanks Carol, KB3LKI for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM

```
From 9007713018511624281
X-Google-Thread: 10e8ad,aa89dd6a142bf875,start
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198.186.194.247.MISMATCH!news-xxxfer.readnews.com!news-out.readnews.com!
transit4.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-024 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Wed, 23 Jan 2008 22:54:59 EST
Organization: The Radio Amateur Satellite Corporation
Lines: 1401
Approved: RRI Admin <rec-radio-info-request@panix.com>
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Mime-Version: 1.0
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Content-Transfer-Encoding: 7bit
X-Trace: reader2.panix.com 1201146898 28618 166.84.1.1 (24 Jan 2008 03:54:58 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Thu, 24 Jan 2008 03:54:58 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
X-Authority-Analysis: v=1.0 c=1 a=noJeSOG4aqoA:10 a=SeIcp837AAAA:8
a=Ixn1CAxRAAAA:8 a=c2--Pf7SAAAA:8 a=KlfyZUBUAAAA:8 a=FbIv-aF9AAAA:8
a=3fFvnXHTAAAA:8 a=XNQh8oeLAAAA:8 a=f0RPBRECAAAA:8 a=ADBSzeAnAAAA:8
a=5mDMBHa8AAAA:8 a=gUbaYAUbAAAA:8 a=qyDxTJV7AAAA:8 a=JXa7hjb-AAAA:8
a=qL4joYdQAAAA:8 a=LlmPylSfAAAA:8 a=tIoeiIHHAAAA:8 a=fENH8MHtAAAA:8
a=0sg8RoSLAAAA:8 a=uGVPSem0AAAA:8 a=Wa5ALEAlAAAA:8 a=z_zqISx-AAAA:8
a=4RlJXVyBAAAA:8 a=JRUS5pMlAAAA:8 a=oBXim8GbAAAA:8 a=XYLYVS5UAAAA:8
a=h3eCdmoiAAAA:8 a=QX7y1c2GAAAA:8 a=QEps4B0vAAAA:8 a=hKwqrz-LAAAA:8
a=_qHggDGBAAAA:8 a=2cdWa-FYAAAA:8 a=hhwrMKPhAAAA:8 a=0UsQ8JGlAAAA:8
a=XmLDjXNxAAAA:8 a=dw-wigbnAAAA:8 a=xfYtsZLpAAAA:8 a=SQe5sqTJr16chyePOu4A:9
a=6qIQOSVUvRAq3PAitT4A:7 a=LNCBQTeD6-2YWcC-cr6GH3KZSnoA:4 a=8QCVOS8zSb0A:10
a=FyblZaQiG9kA:10 a=Iac6x5lHDucA:10 a=q4eIODirUFwA:10 a=NDWsJ_JVWXMA:10
a=UtcmazUCZKYA:10 a=XyvEP7qG2ooA:10 a=wFu9RQxNt4EA:10 a=Bi3YAkoP18cA:10
a=F7Eo224L3vYA:10 a=XF7b4UCPwd8A:10
Xref: g2news1.google.com rec.radio.amateur.space:1291 rec.radio.info:661
```

This report is organized into FIVE parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites
Part 5 (S5) - deborbited/returned satellites

SB SAT @ AMSAT W8ISS ANS-024.S1
WSR 024 Part 1 01/24/2008

AMSAT NEWS SERVICE BULLETIN 024.S1 FROM AMSAT HQ
SILVER SPRING, MD, January 24, 2008
TO ALL RADIO AMATEURS
BID: $ANS-024.S1

VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.859330 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsat.in/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is
active. Each transponder has a different beacon.
[06252007]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational - Software reload

```
Current Modes:   FM Repeater - V/u
                 BBS         - L/u
                 Telemetry   -  /u

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink:   145.880 MHZ FM
                       145.880 MHz USB
                       145.920 MHz FM
                      1268.700 MHz FM 67Hz PL tone
Digital Downlinks:     435.150 MHz FM 38k4 Digital, PBP, 1 watt output
                       435.150 MHz FM 9k6 Digital, Pacsat Broadcast Protocol
                      2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:        145.860 MHz FM 9k6 Digital, Pacsat Broadcast Protocol
                      1268.700 mhz FM 9k6 PBP Digital
Beacon:                435.150 MHz
```

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[01242008]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Current Mode: V/u

```
Uplink:   145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz
```

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.

The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10 minute timer.
[05282007]

=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Operational - check operational schedule for current times!!

Current Mode: V/u

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage: http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts.htm
[0820007]

=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

```
Status: Operational

Current Mode: V/u

Uplink:   145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[12132007]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: TESTING - VOICE

Current Mode:  V/u

Uplink:         145.900 MHz FM 1200-baud Manchester FSK
                145.920 MHz FM VOICE
                145.940 MHz FM 1200-baud Manchester FSK
                145.960 MHz FM 1200-baud Manchester FSK

Downlink:       437.026 MHz USB VOICE
                                1200-baud PSK

Mode-S Beacon: 2401.1428 MHz

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[01242008]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational depending on amount of Sunlight

Current Mode: Listen before transmitting

Uplink:   145.850 to 145.950 MHz CW/USB Mode A
```

432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz CW
145.972 MHz CW
435.100 MHz CW
2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/

AO-7 Usage Guidelines on the AO-7 Log and Resource Site located at:
http://www.planetemily.com/ao7
[05282007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational - APRS and BBS

Current Mode: V/v

Expedition 16 crew:

Commander:	Peggy Whitson	
Flight Engineer:	Yuri Malenchenko	RK3DUP
Flight Engineer:	Daniel M. Tani	KD5DXE

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM
Worldwide packet downlink: 145.825 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS

```
                     RZ3DZR
USA:                 NA1SS
Packet Mailbox:      RS0ISS-11
Packet Keyboard:     RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.
[12272007]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-024.S2
WSR 024 Part 2 01/24/2008

AMSAT NEWS SERVICE BULLETIN 024.S2 FROM AMSAT HQ
SILVER SPRING, MD, January 24, 2008
TO ALL RADIO AMATEURS
BID: $ANS-024.S2

CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode:  /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon:    435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.
[11152007]
=====
CP3
Catalog Number: 31128
Launch Date: April 17,2007

Status: Operational

Current Mode:  /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[07302007]
=====
```

PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: In Orbit

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder: 145.825 Mhz FM
[02052007]
=====
NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Operational

Current Mode: /u

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[10222007]
=====
GENESAT-1 ?O-??
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Current Mode: /u

Telemetry Beacon Downlink: 437.0670 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[01082007]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon: 437.2750 MHz CW

Callsign: JQ1YGW

```
Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
[03262007]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launched: June 30, 2003

Status: Operational

Current Mode: /u

Beacon:     436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[01082007]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launched: February 21, 2006

Status: Semi-Operational - Constant Carrier only

Uplink:  1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan ? )

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[01082007]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW
[08132007]
```

```
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational - Softawre Reload

Current Mode(s): FM Repeater - V/u
                 BBS         - L/u
                 Telemetry   -  /u

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink:   145.880 MHZ FM
                       145.880 MHz USB
                       145.920 MHz FM
                      1268.700 MHz FM 67Hz PL tone
Digital Downlinks:     435.150 MHz FM 38k4 Digital, PBP, 1 watt output
                       435.150 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:        145.860 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      1268.700 mhz FM 9k6 PBP Digital
Beacon:                435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[01242008]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Hibernation until full sunlight in November

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink:        144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org
```

```
aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[09242007]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Current Modes: V/U
               L/U

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[09172007]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational.

Current Mode:  /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon:          435.025 MHz
Mode-S Beacon:     2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[01242008]
=====
RS-22 RADIO SPORT RS-22
Catalog number: 27939
Launch Date: September 27, 2003
```

```
Status: Operational - 70cm cw only

Current Mode:  /u

CW Beacon - 435.352 MHz
            145.818 MHz
[08062007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational - APRS and BBS

Current Mode: V/v

Expedition 16 crew:
Commander:          Peggy Whitson
Flight Engineer:    Yuri Malenchenko      RK3DUP
Flight Engineer:    Daniel M. Tani        KD5DXE

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink:   145.825 MHz FM
Worldwide packet downlink: 145.825 Mhz FM

Voice:
Region 1 voice uplink:   145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink:      145.800 MHz FM

Crossband Repeater:
Repeater Uplink:         437.800 MHz FM
Repeater Downlink:       145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German:              DP0ISS
Russian:             RS0ISS
                     RZ3DZR
USA:                 NA1SS
Packet Mailbox:      RS0ISS-11
Packet Keyboard:     RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/
```

```
ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.
[12272007]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-024.S3
WSR 024 Part 3 01/24/2008

AMSAT NEWS SERVICE BULLETIN 024.S3 FROM AMSAT HQ
SILVER SPRING, MD, January 24, 2008
TO ALL RADIO AMATEURS
BID: $ANS-024.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

CP4
Catalog Number: 31122
Launch Date: April 17,2007

Status: Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon:    437.325 MHz CW
[11152007]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Non-Operational

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon:             437.2750 MHz CW

Callsign: JR8YJT
[10152007]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency:  437.305
                             2407.250
```

```
Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink:        437.250 MHz FM 67Hz CTCSS
Voice Downlink:     2401.835 MHz FM
Packet Up/Downlink:  437.250 MHz 9k6 packet
Packet Downlink     2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non=Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[08132007]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink:   435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Non-Operational

Uplinks:   145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink:  437.325 MHz
```

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[007302007]

=====

NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, callsign KE6QMD, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]

=====

SO-42 SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]

=====

SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

```
Uplink:   145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
V-band:   145.840 -  145.990 MHz CW/LSB
U-band:   435.550 -  435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks
---------
S2-band:  2401.225 -  2401.475 MHz CW/USB
K-band:  24048.010 - 24048.060 MHz CW/USB
Beacon:   2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)
----------------------------
BEACON   General Beacon (GB)    Middle Beacon (MB)    Engineering Beacon
(EB)
2 m       none                   145.898 MHz           none
70cm      435.438 MHz            435.588 MHz           435.838 MHz
13cm(1)  2400.188 MHz           2400.338 MHz          2400.588 MHz
13cm(2)  2401.173 MHz           2401.323 MHz          2401.573 MHz
3cm     10450.975 MHz          10451.125 MHz         10451.375 MHz
1.5cm   24047.885 MHz          24048.035 MHz         24048.285 MHz
[007162007]
=====
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
=====
UO-36 UoSAT-12
```

```
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink:    145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site
at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater:         436.250 MHz

Uplinks: Mode B Repeater:  145.825 MHz
Mode J Digipeater:         145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)
```

```
The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink:   145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign:       POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012006]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK
```

```
Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Operational

Uplink:   435.041 MHz FM DSP
```

```
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
LIBERTAD-1
Catalog Number: 31129
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink:   145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[10222007]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplinks:          145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK
```

```
CW downlink:      437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[01222007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
[05012006]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet: Non-Operational
Uplink:  145.8500 MHz MFSK 1200 BPS
```

Uplink: 145.8700 MHz MFSK 1200 BPS
Uplink: 145.8900 MHz MFSK 1200 BPS
Uplink: 145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon: 145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.8500 - 145.9000 MHz SSB/CW
Downlink 29.4000 - 29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink: 29.4500 - 29.5500 MHz SSB/CW

```
[01152007]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon 1:  29.352 MHz (intermittent)
Beacon 2:  29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink:     21.260 to 21.300 MHz CW/USB
Downlink:  145.860 to 145.900 MHz CW/USB

Beacon:    145.860 MHz

Robot:     145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
```

Launched: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-024.S4
WSR 024 Part 4 01/24/2008

AMSAT NEWS SERVICE BULLETIN 024.S4 FROM AMSAT HQ
SILVER SPRING, MD, January 24, 2008
TO ALL RADIO AMATEURS
BID: $ANS-024.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE PROPOSED FOR LAUNCH AT THIS TIME:

Phase 5a Mars Mission
Catalog Number:
Proposed Launch Date: 2009 or 2011

Status: Design Phase

For the latest project status update please visit the AMSAT-DL P5-A web page:
http://ticket-to-mars.org
[01222007]
=====
PHASE 3E AO-??
Catalog number:
Proposed Launch Date: Late 2007

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/
[01222007]
=====
Eagle AO-??
Catalog Number:
Proposed Launch Date: Early/Mid 2009

Status: Design Phase

For the latest project status updates please visit the AMSAT-NA webpage:
http://www.amsat.org
[01222007]
=====
Can X-2
Catalog number:
Proposed Launch Date: March 07, 2008

Status: Waiting for Launch

For the latest project status update please visit the Can X-2 web page:
http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[01172008]
=====
AAUSAT-II
Catalog number:
Proposed Launch Date: March 07, 2008

Status: Waiting for Launch

For the latest project status update please visit the AAUSAT-II web
page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[01172008]
=====
Cute-1.7+APD II
Catalog number:
Proposed Launch Date: March 07, 2008

Status: Waiting for Launch

For the latest project status update please visit the Cute-1.7+APD II
web
page:
http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78
[01172008]
=====
Compass 1
Catalog number:
Proposed Launch Date: March 07, 2008

Status: Waiting for Launch

For the latest project status update please visit the Compass 1 web

page:
http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52
[01172008]
=====
Delfi-C3
Catalog number:
Proposed Launch Date: March 07, 2008

Status: Waiting for Launch

Proposed Frequencies:
* Primary telemetry downlink: 145.870 MHz 1200 Baud BPSK AX.25 400mW
* Backup telemetry downlink: 145.930 MHz 1200 Baud BPSK AX.25 400mW
* Linear transponder passband downlink: 145.880 - 145.920 MHz
(inverting)
  400mW PEP
* Linear transponder passband uplink: 435.570 - 435.530 MHz
* Transponder mode beacon: 145.870 MHz CW (10dB below transponder PEP)

For the latest project status update please visit the Delfi-C3 web page:
http://www.delfic3.nl/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68
[01172008]
=====
Seeds 2
Catalog number:
Proposed Launch Date: March 07, 2008

Status: Waiting for Launch

For the latest project status update please visit the Seeds 2 web page:
http://cubesat.aero.cst.nihon-u.ac.jp/english/main_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36
[01172008]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-024.S5
WSR 024 Part 5 01/24/2008

AMSAT NEWS SERVICE BULLETIN 024.S5 FROM AMSAT HQ
SILVER SPRING, MD, January 24, 2008
TO ALL RADIO AMATEURS
BID: $ANS-024.S5

THE FOLLOWING SATELLITES HAVE DE-ORBITED OR HAVE BEEN RETURNED SAFELY:

NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Operational
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

```
Main Downlink:      145.825 Mhz FM APRS AX25
APRS Uplink:        145.825 MHz FM APRS AX25
Voice/PSK31 Uplink:  28.120 MHz
```

Packet to Voice ID: RAFT
[06112007]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

```
Voice: 301-589-6062
       888-322-6728
FAX:   301-608-3410
```

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)

* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

```
From -2208927371353305841
X-Google-Thread: 10e8ad,d014cb4b4526f3fd,start
X-Google-Thread: 10b9c8,d014cb4b4526f3fd,start
X-Google-Attributes: gid10e8ad,gid10b9c8,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx01.iad01.newshosting.com!newshosting.com!
198.186.194.247.MISMATCH!news-xxxfer.readnews.com!news-out.readnews.com!
transit3.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-027 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sun, 27 Jan 2008 22:27:42 EST
Organization: The Radio Amateur Satellite Corporation
Lines: 276
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <001a01c8615d$bce0a1b0$6601a8c0@familyroom>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader2.panix.com 1201490862 6696 166.84.1.6 (28 Jan 2008 03:27:42 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Mon, 28 Jan 2008 03:27:42 +0000 (UTC)
```

X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to   rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to   rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
X-Authority-Analysis: v=1.0 c=1 a=CDMktNVD8uQA:10 a=Vwb37rseAAAA:8 a=xNiEgaKdAAAA:8 a=WkDEJ0PtAAAA:8 a=OD5HooapAAAA:8 a=C_IRinGWAAAA:8 a=Ixn1CAxRAAAA:8 a=MgYzU8DRYmDzd6z_da8A:9 a=YrQRlJ9I9psWnfg-PpUA:7 a=TmrfUMPr1vPKk2D0IxpEH63_FXwA:4 a=q4eIODirUFwA:10 a=WFZSlzBOoWMA:10 a=CWSBNlG-xqIA:10
Xref: g2news1.google.com rec.radio.amateur.space:1292 rec.radio.info:663

AMSAT NEWS SERVICE
ANS-027

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* New V/US Mode Operational on AO-51
* AO-16 Reconfigured for Voice Operations
* AMSAT at Orlando Hamcation
* AMSAT-DC Meeting Announcement
* AMSAT President Testifies Regarding Antenna Restrictions
* ARISS Status - 21 January 2008

SB SAT @ AMSAT $ANS-027.01
New V/US Mode Operational on AO-51

AMSAT News Service Bulletin 027.01
  From AMSAT HQ SILVER SPRING, MD.
January 27, 2008
To All RADIO AMATEURS
BID: $ANS-027.01

On January 25th, AO-51 was switched to a new mode. Currently both the S band downlink of 2401.200 and the 435.300 downlink are on and tied together to the 145.920 receiver. This creates a single repeater that can be heard on either downlink. In the past the satellite power budget would not allow simultaneous S and U downlinks for more than a few moments, but the current no eclipse season allows us try try this new combination. The L/U BBS and U band telemetry will be off during this period, except for brief periods when command stations will be collecting telemetry. During these passes, the S band downlink may be shut off temporarily.

Give this new mode a try this weekend. If you like using S-band AND working lots of stations, this mode is for you. Currently we plan to run this mode through the end of the month.

73, Drew KO4MA
AMSAT-NA VP Ops

[ANS thanks Drew, KO4MA, for the above information]

SB SAT @ AMSAT $ANS-027.02
AO-16 Reconfigured for Voice Operations

AMSAT News Service Bulletin 027.02
From AMSAT HQ SILVER SPRING, MD.
January 27, 2008
To All RADIO AMATEURS
BID: $ANS-027.02

Since AO-16 was recovered approximately 6 months ago, the command team has attempted to reload the satellite software almost a dozen times without success. Subsequently a series of memory tests were performed which points towards a hardware failure which prevents restarting the spacecraft software successfully. This team included Bruce Rahn WB9ANQ and Jim White WD0E advising Mark Hammond N8MH as the primary groundstation. Mark put in many early hours during the multiple reloads and test sessions, with Bruce, Jim, and others advising. Thank you to all involved for your hard work.

After the conclusion that the spacecraft computer system was damaged and as discussions about decommissioning were taking place, Jim recalled a series of low level commands included in the spacecraft design by Tom Clark, K3IO during construction. One of these commands allows an uplink receiver to be directly tied to a downlink transmitter. The twist is that the uplink is regular FM but the downlink via the BPSK transmitter is DSB (Double Sideband). Mark placed the satellite in this mode early this week and some testing was undertaken. The satellite hears VERY well, and the reduced bandwidth by using either USB or LSB on the groundstation receiver allows for a very robust downlink. Tuning the downlink is just like on a linear transponder, meaning it is tight and with fast Doppler. Uplink tuning is not required, just as with the FM mode V/U satellites. QSOs were made between N8MH, WD4ASW, KO4MA, K5QXJ, and WA6FWF. My personal observations include being able to access and hear the satellite within one degree of the horizon, much lower than any other current bird for my QTH. This should be an easy satellite with omni antennas and a 70cm preamp.

With that explanation, I'm happy to open the satellite to general use on voice for a test period. Please submit reports either to the -bb or to ao16@amsat.org . The uplink is 145.920 FM, and the downlink is 437.026 SSB +/- Doppler shift. Please restrict your uplink power to a reasonable level, and do not transmit without being able to hear the downlink. All the general single-channel guidelines apply. Enjoy this bird's new life!

[ANS Drew, KO4MA, for the above information]

/EX

SB SAT @ AMSAT $ANS-027.03
AMSAT at Orlando Hamcation

AMSAT News Service Bulletin 027.03
From AMSAT HQ SILVER SPRING, MD.
January 27, 2008
To All RADIO AMATEURS
BID: $ANS-027.03

AMSAT will have a large presence at the Orlando Hamcation. It will remind some people of Dayton. The Orlando Hamcation has grown in size and prominence in the U.S. After all, it is in a horrible place for Winter in the U.S.!

http://www.hamcation.com/

The following AMSAT board members and officers will be there:

AMSAT President Rick Hambly, W2GPS
AMSAT President Emeritus, Tom Clark, K3IO (ex-W3IWI)
AMSAT Executive V.P. Lee McLamb, KU4OS
AMSAT V.P. Operations, Drew Glasbrenner, KO4MA
AMSAT V.P. Field Ops, Gould Smith, WA4SXM
AMSAT V.P. Engineering Bob McGwier, N4HY

and others.

Some of the above are board members. Additionally, board members Lou McFadid, W5DID and Barry Baines, WD4ASW will be in attendance.
Barry Baines is our new Eagle/Intelsat project manager.

AMSAT has been granted prominent times and rooms for presentations. AMSAT is bringing the operational SDX and will soon thereafter put an SDX based linear transponder on the air covering much of the state of Florida and in a prominent place in Maryland. Additionally, one of the SDX will be in use in Europe thanks to a generous offer and help from Viktor Kudielka. AMSAT will hold engineering planning meetings here for engineering management. This was decided because so many of these people were going to be in attendance anyway. Please come hear about Eagle and Phase 3 E in Orlando. I hope to see you there Feb. 8-10!

[ANS thanks Bob, N4HY, for the above information]

/EX

SB SAT @ AMSAT $ANS-027.04
AMSAT-DC Meeting Announcement

AMSAT News Service Bulletin 027.04
From AMSAT HQ SILVER SPRING, MD.
January 27, 2008
To All RADIO AMATEURS
BID: $ANS-027.04

We will meet in Pioneer Hall at the Historical Electronics Museum.
Same place as last year, same time as last year, for one more time.

WHO: YOU are invited! Amateur radio operators, students, educators and the public are all invited.

WHAT: Talks, demos, tutorials and socializing about amateur satellites and balloon experiments in the greater mid-Atlantic USA area. A full day of activities.

WHEN: Saturday, March 15, 2008, starting at 11:00 A.M. local.

WHERE: Historical Electronics Museum (HEM) at 1745 West Nursery Road, Linthicum, Maryland 21090 (near BWI airport). In Pioneer Hall. HEM directions at http://www.hem-usa.org/

WHY: Fun, education, public service, cool stuff, and more fun.

HOW: Talk-in on 146.760 MHz (107.2 Hz PL on some receiver sites)

HOST: Pat Kilroy, n8pk@amsat.org or Patrick.L.Kilroy@nasa.gov

WEB: See http://patkilroy.com/amsat-dc/ for late breaking news.
Download the AMSAT-DC-2008 flier PDF from the N8PK web page to
share as widely as you can. Thank you!

[ANS thanks Pat, N8PK, for the above information]

/EX

SB SAT @ AMSAT $ANS-027.05
AMSAT President Testifies Regarding Antenna Restrictions

AMSAT News Service Bulletin 027.05
From AMSAT HQ SILVER SPRING, MD.
January 27, 2008
To All RADIO AMATEURS

BID: $ANS-027.05

On January 24, 2008 AMSAT President Rick Hambly W2GPS testified before the Maryland State Senate Judicial Proceedings Committee in support of Senate Bill 80 that would prohibit "homeowners associations from restricting or prohibiting the design, placement, screening, height, or use of specified amateur radio equipment." It is hoped that we will also get a hearing before a House committee in a few weeks. There was no opposition to this bill during the hearing, unlike previous years. For more information see http://mlis.state.md.us/2008rs/billfile/sb0080.htm and http://n3ij.home.comcast.net/.

/EX

SB SAT @ AMSAT $ANS-027.06
ARISS Status - 21 January 2008

AMSAT News Service Bulletin 027.06
From AMSAT HQ SILVER SPRING, MD.
January 27, 2008
To All RADIO AMATEURS
BID: $ANS-027.06

1. ARISS School Contacts Status

Due crew schedules onboard the ISS, no Amateur Radio on the International Space Station (ARISS) contacts are planned at this time. The ARISS team expects contacts to resume once STS-122 launches in early February.

2. Astronaut Training Status

On Wednesday, January 16, Russian cosmonaut Oleg Skripochka, RN3FU, participated in a simulation of an Amateur Radio on the International Space Station (ARISS) school contact. The Kenwood D700 radio in the JSC Service Module mockup was used for the contact. Skripochka spoke with the training support team who participated as students, asking Oleg questions about space and his visit on ISS. He is currently scheduled as an Expedition 17 backup crew member.

3. ARISS Annual Report Posted

The Amateur Radio on the International Space Station (ARISS) FY2007 Annual Report has been posted to the ARISS section of the AMSAT Web site. See: http://www.amsat.org/amsat/ariss/Papers/Annual%20Reports/ARISS_Annual_Report_2007_Final.pdf

4. Gail Borden Library Wins Award

The Gail Borden Public Library in Elgin, Illinois was one of five libraries to win the 2008 John Cotton Dana Library Public Relations Award. The library won the award for its "Space: Dare to Dream" exhibit. A highlight of the exhibit, which ran for four months during 2007, was an Amateur Radio on the International Space Station (ARISS) contact. The Summer Reading program resulted in an increase in program participants, library card registrations and material circulation.

[ANS thanks Carol, KB3LKI, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Lee McLamb, KU4OS

From 8100441642064774751
X-Google-Thread: 10e8ad,16aab79784f38877,start
X-Google-Thread: 10b9c8,16aab79784f38877,start
X-Google-Attributes: gid10e8ad,gid10b9c8,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!border1.nntp.dca.giganews.com!nntp.giganews.com!newshub.sdsu.edu!news.linkpendium.com!news.linkpendium.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-031 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Thu, 31 Jan 2008 22:00:32 EST
Organization: The Radio Amateur Satellite Corporation
Lines: 1411
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <001b01c8647e$92e88cf0$6601a8c0@familyroom>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix2.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
charset="us-ascii"

```
Content-Transfer-Encoding: 7bit
X-Trace: reader2.panix.com 1201834832 21954 166.84.1.2 (1 Feb 2008 03:00:32 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Fri, 1 Feb 2008 03:00:32 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
X-Authority-Analysis: v=1.0 c=1 a=Fpskguh6OgkA:10 a=SeIcp837AAAA:8
 a=Ixn1CAxRAAAA:8 a=c2--Pf7SAAAA:8 a=KlfyZUBUAAAA:8 a=FbIv-aF9AAAA:8
 a=3fFvnXHTAAAA:8 a=XNQh8oeLAAAA:8 a=f0RPBRECAAAA:8 a=ADBSzeAnAAAA:8
 a=5mDMBHa8AAAA:8 a=gUbaYAUbAAAA:8 a=qyDxTJV7AAAA:8 a=JXa7hjb-AAAA:8
 a=qL4joYdQAAAA:8 a=LlmPylSfAAAA:8 a=tIoeiIHHAAAA:8 a=fENH8MHtAAAA:8
 a=0sg8RoSLAAAA:8 a=uGVPSem0AAAA:8 a=Wa5ALEAlAAAA:8 a=z_zqISx-AAAA:8
 a=4RlJXVyBAAAA:8 a=JRUS5pMlAAAA:8 a=oBXim8GbAAAA:8 a=XYLYVS5UAAAA:8
 a=h3eCdmoiAAAA:8 a=QX7y1c2GAAAA:8 a=QEps4B0vAAAA:8 a=hKwqrz-LAAAA:8
 a=_qHggDGBAAAA:8 a=2cdWa-FYAAAA:8 a=hhwrMKPhAAAA:8 a=0UsQ8JGlAAAA:8
 a=XmLDjXNxAAAA:8 a=dw-wigbnAAAA:8 a=xfYtsZLpAAAA:8 a=SQe5sqTJr16chyePOu4A:9
 a=iXRyf3b_99Tl9hBOUHkA:7 a=mvRj9OHlRPq4eCM7rA9l9fqxsPAA:4 a=8QCVOS8zSb0A:10
 a=FyblZaQiG9kA:10 a=Iac6x5lHDucA:10 a=q4eIODirUFwA:10 a=NDWsJ_JVWXMA:10
 a=UtcmazUCZKYA:10 a=XyvEP7qG2ooA:10 a=wFu9RQxNt4EA:10 a=Bi3YAkoP18cA:10
 a=F7Eo224L3vYA:10 a=XF7b4UCPwd8A:10
Xref: g2news1.google.com rec.radio.amateur.space:1293 rec.radio.info:664
```

This report is organized into FIVE parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites
Part 5 (S5) - deorbited/returned satellites

SB SAT @ AMSAT W8ISS ANS-031.S1
WSR 031 Part 1 01/31/2008

AMSAT NEWS SERVICE BULLETIN 031.S1 FROM AMSAT HQ
SILVER SPRING, MD, January 31, 2008
TO ALL RADIO AMATEURS
BID: $ANS-031.S1

VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.859330 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsat.in/hamsat.htm

To know what transponder is switched on please listen for the beacon that is active. Each transponder has a different beacon.
[06252007]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational - Software reload

Current Modes: FM Repeater - V/us
                 BBS   - OFF
                 Telemetry   - OFF

Analog voice downlink: 435.300 MHz FM
                        435.150 MHz FM
                       2401.200 Mhz FM
Analog voice uplink: 145.880 MHZ FM
                        145.880 MHz USB
                        145.920 MHz FM
                       1268.700 MHz FM 67Hz PL tone
Digital Downlinks: 435.150 MHz FM 38k4 Digital, PBP, 1 watt output
                        435.150 MHz FM 9k6 Digital, Pacsat Broadcast Protocol
                       2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Digital, Pacsat Broadcast Protocol
                       1268.700 mhz FM 9k6 PBP Digital
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear

```
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[01312008]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Current Mode: V/u

Uplink:   145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute
timer
   on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the
repeater on
   and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset
the 10
   minute timer.
[05282007]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Operational - check operational schedule for current times!!

Current Mode: V/u

Voice/CW Mode JA
Uplink:   145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
```

Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
145.870 MHz FM
145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage: http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's CW
telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts.htm
[0820007]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[12132007]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: TESTING - VOICE

Current Mode: V/u

```
Uplink:         145.900 MHz FM 1200-baud Manchester FSK
                145.920 MHz FM VOICE
                145.940 MHz FM 1200-baud Manchester FSK
                145.960 MHz FM 1200-baud Manchester FSK

Downlink:       437.026 MHz USB VOICE
                                1200-baud PSK

Mode-S Beacon: 2401.1428 MHz

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[01242008]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational depending on amount of Sunlight

Current Mode: Listen before transmitting

Uplink:   145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink:  29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons:   29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/

AO-7 Usage Guidelines on the AO-7 Log and Resource Site located at:
http://www.planetemily.com/ao7
[05282007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998
```

Status: Operational

Current Mode: FM Repeater - U/v
BBS - OFF
APRS - OFF
Voice - Occasianally
SSTV - OFF

Expedition 16 crew:
Commander: Peggy Whitson
Flight Engineer: Yuri Malenchenko RK3DUP
Flight Engineer: Daniel M. Tani KD5DXE

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM
Worldwide packet downlink: 145.825 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS
RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line is
NOT translated from Russian and posted.
[01312008]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-031.S2

WSR 031 Part 2 01/31/2008

AMSAT NEWS SERVICE BULLETIN 031.S2 FROM AMSAT HQ
SILVER SPRING, MD, January 31, 2008
TO ALL RADIO AMATEURS
BID: $ANS-031.S2

CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.
[11152007]
=====
CP3
Catalog Number: 31128
Launch Date: April 17,2007

Status: Operational

Current Mode: /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[07302007]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: In Orbit

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder: 145.825 Mhz FM
[02052007]
=====
NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Operational

Current Mode: /u

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[10222007]
=====
GENESAT-1 ?O-??
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Current Mode: /u

Telemetry Beacon Downlink: 437.0670 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[01082007]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon: 437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
[03262007]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launched: June 30, 2003

Status: Operational

Current Mode: /u

Beacon: 436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

```
Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[01082007]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launched: February 21, 2006

Status: Semi-Operational - Constant Carrier only

Uplink:  1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan ? )

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[01082007]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW
[08132007]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational - Softawre Reload

Current Mode(s): FM Repeater - V/us
                 BBS         - OFF
                 Telemetry   - OFF

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink:   145.880 MHZ FM
                       145.880 MHz USB
                       145.920 MHz FM
                      1268.700 MHz FM 67Hz PL tone
Digital Downlinks:     435.150 MHz FM 38k4 Digital, PBP, 1 watt output
```

                       435.150 MHz FM 9k6 Digital, Pacsat Broadcast Protocol
                      2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Digital, Pacsat Broadcast Protocol
                      1268.700 mhz FM 9k6 PBP Digital
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[01312008]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Hibernation until full sunlight in November

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[09242007]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Current Modes: V/U
               L/U

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks: 145.850 FM
          145.890 FM
          145.930 FM

```
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[09172007]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational.

Current Mode:  /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon:          435.025 MHz
Mode-S Beacon:     2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[01242008]
=====
RS-22 RADIO SPORT RS-22
Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only

Current Mode:  /u

CW Beacon - 435.352 MHz
            145.818 MHz
[08062007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Mode: FM Repeater - U/v
              BBS -         OFF
              APRS -        OFF
              Voice -       Occasianally
```

SSTV - OFF

Expedition 16 crew:
Commander: Peggy Whitson
Flight Engineer: Yuri Malenchenko RK3DUP
Flight Engineer: Daniel M. Tani KD5DXE

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM
Worldwide packet downlink: 145.825 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS
RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line is
NOT translated from Russian and posted.
[01312008]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-031.S3
WSR 031 Part 3 01/31/2008

AMSAT NEWS SERVICE BULLETIN 031.S3 FROM AMSAT HQ
SILVER SPRING, MD, January 31, 2008
TO ALL RADIO AMATEURS
BID: $ANS-031.S3

```
THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

CP4
Catalog Number: 31122
Launch Date: April 17,2007

Status: Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon:    437.325 MHz CW
[11152007]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Non-Operational

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon:             437.2750 MHz CW

Callsign: JR8YJT
[10152007]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency:  437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink:         437.250 MHz FM 67Hz CTCSS
Voice Downlink:      2401.835 MHz FM
Packet Up/Downlink:   437.250 MHz 9k6 packet
Packet Downlink      2401.835 MHz 38k4 packet
```

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non=Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[08132007]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Non-Operational

Uplinks: 145.850 MHz
145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[007302007]
=====

NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, callsign KE6QMD, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]

=====

SO-42 SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]

=====

SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]

=====

AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks

V-band: 145.840 - 145.990 MHz CW/LSB
U-band: 435.550 - 435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks

S2-band: 2401.225 - 2401.475 MHz CW/USB
K-band: 24048.010 - 24048.060 MHz CW/USB
Beacon: 2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)

BEACON	General Beacon (GB)	Middle Beacon (MB)	Engineering Beacon (EB)
2 m	none	145.898 MHz	none
70cm	435.438 MHz	435.588 MHz	435.838 MHz
13cm(1)	2400.188 MHz	2400.338 MHz	2400.588 MHz
13cm(2)	2401.173 MHz	2401.323 MHz	2401.573 MHz
3cm	10450.975 MHz	10451.125 MHz	10451.375 MHz
1.5cm	24047.885 MHz	24048.035 MHz	24048.285 MHz

[07162007]
=====
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web site
at the following URL:

```
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater:         436.250 MHz

Uplinks: Mode B Repeater:  145.825 MHz
Mode J Digipeater:         145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink:   145.925 MHz 9600 baud FSK
```

```
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign:       POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012006]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM
```

```
Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB
```

Digital Transponder:
Uplinks: 145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
LIBERTAD-1
Catalog Number: 31129
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink: 145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[10222007]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplinks: 145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink: 437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[01222007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

```
Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
[05012006]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet: Non-Operational
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational
```

```
Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon:   145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink  29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
Beacons:   29.450 MHz
          435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
```

```
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon 1:  29.352 MHz (intermittent)
Beacon 2:  29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink:     21.260 to 21.300 MHz CW/USB
Downlink:  145.860 to 145.900 MHz CW/USB

Beacon:    145.860 MHz

Robot:     145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink:   21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon:   29.408 MHz

Robot:    29.454 MHz
[05232004]
NNNN
/EX
```

SB SAT @ AMSAT W8ISS $ANS-031.S4
WSR 031 Part 4 01/31/2008

AMSAT NEWS SERVICE BULLETIN 031.S4 FROM AMSAT HQ
SILVER SPRING, MD, January 31, 2008
TO ALL RADIO AMATEURS
BID: $ANS-031.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE PROPOSED FOR LAUNCH AT THIS TIME:

Phase 5a Mars Mission
Catalog Number:
Proposed Launch Date: 2009 or 2011

Status: Design Phase

For the latest project status update please visit the AMSAT-DL P5-A web page:
http://ticket-to-mars.org
[01222007]

=====

PHASE 3E AO-??
Catalog number:
Proposed Launch Date: Late 2007

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/
[01222007]

=====

Eagle AO-??
Catalog Number:
Proposed Launch Date: Early/Mid 2009

Status: Design Phase

For the latest project status updates please visit the AMSAT-NA webpage:
http://www.amsat.org
[01222007]

=====

Can X-2
Catalog number:
Proposed Launch Date: March 07, 2008

Status: Waiting for Launch

For the latest project status update please visit the Can X-2 web page:
http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[01172008]
=====
AAUSAT-II
Catalog number:
Proposed Launch Date: March 07, 2008

Status: Waiting for Launch

For the latest project status update please visit the AAUSAT-II web
page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[01172008]
=====
Cute-1.7+APD II
Catalog number:
Proposed Launch Date: March 07, 2008

Status: Waiting for Launch

For the latest project status update please visit the Cute-1.7+APD II
web
page:
http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78
[01172008]
=====
Compass 1
Catalog number:
Proposed Launch Date: March 07, 2008

Status: Waiting for Launch

For the latest project status update please visit the Compass 1 web
page:
http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52
[01172008]
=====
Delfi-C3
Catalog number:
Proposed Launch Date: March 07, 2008

Status: Waiting for Launch

Proposed Frequencies:
* Primary telemetry downlink: 145.870 MHz 1200 Baud BPSK AX.25 400mW
* Backup telemetry downlink: 145.930 MHz 1200 Baud BPSK AX.25 400mW
* Linear transponder passband downlink: 145.880 - 145.920 MHz
(inverting)
  400mW PEP
* Linear transponder passband uplink: 435.570 - 435.530 MHz
* Transponder mode beacon: 145.870 MHz CW (10dB below transponder PEP)

For the latest project status update please visit the Delfi-C3 web page:
http://www.delfic3.nl/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68
[01172008]
=====
Seeds 2
Catalog number:
Proposed Launch Date: March 07, 2008

Status: Waiting for Launch

For the latest project status update please visit the Seeds 2 web page:
http://cubesat.aero.cst.nihon-u.ac.jp/english/main_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36
[01172008]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-031.S5
WSR 031 Part 5 01/31/2008

AMSAT NEWS SERVICE BULLETIN 031.S5 FROM AMSAT HQ
SILVER SPRING, MD, January 31, 2008
TO ALL RADIO AMATEURS
BID: $ANS-031.S5

THE FOLLOWING SATELLITES HAVE DE-ORBITED OR HAVE BEEN RETURNED SAFELY:

NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Operational
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661

Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink: 145.825 Mhz FM APRS AX25
APRS Uplink: 145.825 MHz FM APRS AX25
Voice/PSK31 Uplink: 28.120 MHz

Packet to Voice ID: RAFT
[06112007]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the
memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen,
G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

```
From -6378719549557311795
X-Google-Thread: 10e8ad,772f8a2ab5a384e1,start
X-Google-Thread: 10b9c8,772f8a2ab5a384e1,start
X-Google-Attributes: gid10e8ad,gid10b9c8,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!newsfeed2.dallas1.level3.net!
news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-034 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Mon, 4 Feb 2008 10:05:34 EST
Organization: The Radio Amateur Satellite Corporation
Lines: 406
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000d01c8673f$6371c4a0$6601a8c0@familyroom>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix3.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader2.panix.com 1202137534 28734 166.84.1.3 (4 Feb 2008 15:05:34 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Mon, 4 Feb 2008 15:05:34 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
X-Authority-Analysis: v=1.0 c=1 a=3igg7whstN8A:10 a=xNiEgaKdAAAA:8
 a=WkDEJ0PtAAAA:8 a=uGVPSem0AAAA:8 a=AAacJLbDAAAA:8 a=XakZVnvoAAAA:8
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Xref: g2news1.google.com rec.radio.amateur.space:1294 rec.radio.info:669

AMSAT NEWS SERVICE
ANS-034

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:
* AO-16 Status
* AMSAT STraight key nite winners
* ISS Cross Band Repeater
* DC Area AMSAT Gathering
* OSCAR 11 Report
* ARISS Status - 28 January 2008
* ANDE De-Orbit Awards Have Been Mailed
* ARISS INTERNATIONAL CHAIRMAN MOVES INTO NEW POSITION AT NASA

SB SAT @ AMSAT $ANS-034.01
AO-16 Status

AMSAT News Service Bulletin 034.01
   From AMSAT HQ SILVER SPRING, MD.
February 3, 2008
To All RADIO AMATEURS
BID: $ANS-034.01

AO-16 is now alive and well. Many contacts going through the previously packet only satellite. Uplink on 145.920 and downlink 437.026. Its downlink is best heard in USB mode since it is a doubleside band, reduced carrier transmitter.
Thanks to someone that assisted in assembling this satellite for remembering a simple command to link tx and rx for direct communications not using the failed onboard computer.

[ANS thanks Drew, KO4MA, for the above information]

SB SAT @ AMSAT $ANS-034.02
AMSAT Straight key nite winners

AMSAT News Service Bulletin 034.02
   From AMSAT HQ SILVER SPRING, MD.
February 3, 2008
To All RADIO AMATEURS
BID: $ANS-034.02

Many thanks to all who participated in AMSAT's Straight Key Night on OSCAR 2008, held in memory of Haruo Yoneda, ex-JA1ANG.

Only two linear-transponder satellites were available this year, AO-7 and VO-52. Two enterprising hams, W6ASL and WA8SME, didn't let that stop them: they used audio oscillators to work each other through the FM transponder of AO-51. That counts too!

The silence of FO-29 notwithstanding, a record 15 amateurs each received at least one Best Fist nomination from someone they worked. The increase in European activity was especially welcome. This year's winners are:

Jay Garlitz, AA4FL
Sergei Pyatygin, ER1AN
Laszlo Kekes, HA5FB
Ron Gorzynski, K8DID
Frank Wiesenmeyer, K9CIS
Scott Newell, KA8HOK
Keith O'Brien, N4ZQ
Allen Mattis, N5AFV
Al Ozias, N7EQF
Rolf Moberg, OH6KXL
Andy Macallister, W5ACM
Jim Van Striver, W6ASL
Mike Herr, WA6ARA
Mark Spencer, WA8SME
Neven Mrduljas, 9A5YY

Congratulations to all. See you next year!

[ANS Thanks Ray, W2RS, for the above information]

/EX

SB SAT @ AMSAT $ANS-034.03
ISS Repeater

AMSAT News Service Bulletin 034.03
From AMSAT HQ SILVER SPRING, MD.
February 3, 2008
To All RADIO AMATEURS
BID: $ANS-034.03

The ISS cross band repeater is on and functioning as of this announcement. It is on Uplink - 437.800FM
Downlink - 145.800FM. It is quite strong and can be heard well on a simple setup. I read a report that "someone" called CQ and there was no -one coming back to him. Listen and give it a shot.

[ANS thanks Tony, K2MO, for the above information]

/EX

SB SAT @ AMSAT $ANS-034.04
DC Area AMSAT Gathering

AMSAT News Service Bulletin 034.04
From AMSAT HQ SILVER SPRING, MD.
February 3, 2008
To All RADIO AMATEURS
BID: $ANS-034.04

Meeting Announcement-AMSAT-DC

We will meet in Pioneer Hall at the Historical Electronics Museum. Same place as last year, same time as last year, for at least one more time. If you can't make Dayton or the Symposium, plan to attend this great gathering.

Clip and share!

++

2008 AMSAT-DC MEETING AND SPACE SEMINAR

WHO: YOU are invited! Amateur radio operators, students, educators and the public are all invited.

WHAT: Talks, demos, tutorials and socializing about amateur satellites and high-altitude balloon experiments in the greater mid-Atlantic USA area. A full day of activities!

WHEN: Saturday, March 15, 2008, starting at 11:00 A.M. local.

WHERE: Historical Electronics Museum (HEM) at 1745 West Nursery Road, Linthicum, Maryland 21090 (near BWI airport). In Pioneer Hall. HEM directions at http://www.hem-usa.org/

WHY: Fun, education, public service, training, cool stuff, and more fun.

HOW: Talk-in on 146.760 MHz (107.2 Hz PL on some receiver sites)

HOST: Pat Kilroy, n8pk@amsat.org or Patrick.L.Kilroy@nasa.gov

WEB: Check the AMSAT-DC page http://patkilroy.com/amsat-dc/ for late breaking news.

++

Notes:

Please download the AMSAT-DC-2008 flier from the AMSAT-DC web page, print copies and share them widely, like at a club meeting, at a hamfest, in a public library, in a school, and other visible places.

Meeting preparations are being conducted on the amsat-dc e-mail list. Go to the link at top of the AMSAT-DC page to subscribe.

This year will feature something new, a Pot Luck luncheon! You may bring a favorite dish to share. See the AMSAT-DC web page for additional info or please contact the host, yours truly, at n8pk@amsat.org.

Free paved parking is available a short walk from the museum front door. Like before, monetary donations will be accepted to help offset the associated meeting and seminar costs. Like last year, we'd like to in turn donate a portion to the museum for the use of their facility.

Outrageous fun, learning, and camaraderie are in store for you.

See you there!

73,

Pat Kilroy, N8PK
AMSAT Area Coordinator
Maryland-DC Area

[ANS thanks Pat, N8PK, for the above information]

/EX

SB SAT @ AMSAT $ANS-034.05
OSCAR 11 Report

AMSAT News Service Bulletin 034.05
From AMSAT HQ SILVER SPRING, MD.
February 3, 2008
To All RADIO AMATEURS
BID: $ANS-034.05

OSCAR-11 Report for 26 January 2008

This report covers the period from 19 December 2007 to 26 January 2008. After two months of silence from 20 November, when eclipses started, the satellite resumed transmissions on 22 January 2008.

At the time of writing signals are consistantly strong, although the polarisation is very variable, with a cycle time of around 20 seconds, causing deep fading if the antenna polarisation is fixed. This suggests that the satellite may be tumbling.

If the current watchdog cycle continues uninterrupted, the 145.826 MHz beacon should switch off around 01 February and on again around 11 February. However, if low battery voltage causes the watchdog timer to reset, then the beacon should switch on 21 days later.

I am indebted to Peter ZL3TC, Mark KU7Z, Gene WA4UKX, SWL Mark in CM87, Ron G4PGY, Julian WB9YIG, John HB2HSH and Edward BX1AD for their reports. Many thanks.

The satellite is now in continuous sunlight, and this is expected to continue until mid March, when eclipses will start again. Unfortunately eclipses will then become a permanent feature of the orbit, which is likely to prevent any periods of sustained operation after March.

When telemetry was last received it showed that one of the solar arrays had failed, and there was a large unexplained current drain on the main 14 volt bus. After 23 years in orbit the battery has undergone around 100,000 partial charge/discharge cycles, and observations suggest that it cannot power the satellite during eclipses, or sometimes during periods of poor solar attitude.

The Beacon frequency is 145.826 MHz. (AFSK FM ASCII Telemetry)

Listeners to OSCAR-11 may be interested in visiting my website. If you need to know what OSCAR-11 should sound like, there is a short audio clip for you to hear. There is an example of the latest telemetry received from the satellite. The website contains an archive of news & telemetry data. It also contains details about using a soundcard or hardware demodulators for data capture. There is software for capturing data, and decoding ASCII telemetry. The URL is http://www.users.zetnet.co.uk/clivew/

73 Clive G3CWV

[ANS thanks Clive, G3CWV for the above information]

/EX

SB SAT @ AMSAT $ANS-034.06
ARISS Status - 28 January 2008

AMSAT News Service Bulletin 034.06
   From AMSAT HQ SILVER SPRING, MD.

February 3, 2008
To All RADIO AMATEURS
BID: $ANS-034.06

1. ARISS School Contacts Status

Due to crew schedules onboard the ISS, no Amateur Radio on the International Space Station (ARISS) contacts are planned at this time. The ARISS team expects contacts to resume once STS-122 launches in early February.

2. STS-120 Crew Talks with Italian Students

On January 22, STS-120 crewmembers visited "La Sapienza" University in Rome where approximately 600 students from several universities and high schools gathered. Among those in attendance were students from the schools that participated in ARISS contacts with astronauts Paolo Nespoli, IZ0JPA, and Clay Anderson, KD5PLA. The crew gave a presentation on their mission which included educational activities, and showed videos to their audience. The complete story and photos of the event have been posted on the ARISS Web site. See:
http://www.ariss-eu.org/2008_01_25.htm

3. Astronaut Training Status

On Wednesday, January 23, Russian cosmonaut Oleg Kononenko, RN3DX, participated in a simulation of an Amateur Radio on the International Space Station (ARISS) school contact. The Kenwood D700 radio in the JSC Service Module mockup was used for the contact. He spoke with the training support team who participated as students, asking Oleg questions about space and his visit on the ISS. Kononenko is scheduled as a flight engineer on Expedition 17.

A basic Amateur Radio on the International Space Station (ARISS) operations and school contact class was held with Soichi Noguchi, KD5TVP, and Koichi Wakata, KC5ZTA, on January 24. Wakata is scheduled to fly to the ISS on 15A (STS-119) toward the end of 2008 as Flight Engineer-2 during Expedition 18. Noguchi is the backup for that flight and could participate as part of the 6 man ISS crew operations in 2010.

Mike Barratt, KD5MIJ, has been scheduled for an ARISS training session at JSC on Tuesday, January 29. Barratt is a backup crewmember for Expedition 18.

4. ARISS Looking for New Telebridge Stations

The Amateur Radio on the International Space Station (ARISS) team is currently looking to expand its telebridge station network. The proposal has been announced on the ARISS Web site. The American Radio Relay League (ARRL) ran an article, "ARISS Team Looking for Ground Stations," which may be found at: http://www.arrl.org/news/stories/2008/01/22/100/?nc=1

The ARRL Letter also ran the announcement. See:

http://www.arrl.org/arrlletter/08/0125/

5. ARRL Article on JPL Amateur Radio Club Anniversary

The American Radio Relay League (ARRL) ran an article, "Jet Propulsion Lab's Amateur Radio Club Marks 50 Years in Space." See: http://www.arrl.org/?artid=7957

[ANS thanks Carol, KB3LKI, for the above information]

/EX

SB SAT @ AMSAT $ANS-034.07
ANDE De-Orbit Awards Have Been Mailed

AMSAT News Service Bulletin 034.07
From AMSAT HQ SILVER SPRING, MD.
February 3, 2008
To All RADIO AMATEURS
BID: $ANS-034.07

ANDE De-Orbit Awards Have Been Mailed

ANDE Awards have been mailed the last week of January.Details are available here: http://www.ande-deorbit.com/status.shtml

In case you did not sign up yet, there is still a chance to do so: http://www.ande-deorbit.com/submission.shtml

Mailing may take a week or so, but you should expect them one of these days in your mailbox !

For those interested, on the website there is the full overview of all telemetry of the final days (incl. the very last one, by JA0CAW). Also all the TLE (kepler sets) since launch: http://www.ande-deorbit.com/ande_all_tle.txt

[ANS thanks Henk, PA3GUO for the above information]

/EX

SB SAT @ AMSAT $ANS-034.08
ARISS INTERNATIONAL CHAIRMAN MOVES INTO NEW POSITION AT NASA

AMSAT News Service Bulletin 034.08
From AMSAT HQ SILVER SPRING, MD.
February 3, 2008
To All RADIO AMATEURS
BID: $ANS-034.08

Amateur Radio on the International Space Station (ARISS) International

Chairman Frank Bauer, KA3HDO, was named recently as the NASA Headquarters Chief Engineer for the Exploration Systems Mission Directorate (ESMD). ESMD is NASA's initiative to develop a sustained human presence on the moon, promote space exploration and serve as a stepping stone to Mars and beyond. As ESMD Chief Engineer, he provides systems engineering advice and consultation to resolve some of the most demanding and complex technical and organizational challenges within the Exploration Program.

Bauer and Rosalie White, K1STO, are the two ARISS delegates for the US. He is the Vice President of Human Spaceflight Programs for the Radio Amateur Satellite Corporation. Bauer was a 2006 nominee for the Rotary National Award for Space Acheivement, bestowed upon him for "his tireless work to engage the youth of our nation and the world in the exploration of space through unique direct communications made possible by Amateur Radio on human spaceflight missions."

Bauer is the recipient of NASA's 2002 Outstanding Leadership Medal, the 1997 NASA Exceptional Achievement Medal -- bestowed for Pioneering Efforts in Spaceborne GPS -- and NASA's 1992 Exceptional Service Medal (for agency contributions in GN&C). He received the Silver Snoopy Award, the highly prestigious NASA Human Spaceflight Awareness award, in 1992.

For more information about ARISS, please visit the ARISS Web page <http://www.rac.ca/ariss/oindex.htm>.

[ANS Thanks, ARRL news for the above item]
/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Dee Interdonato, NB2F

From 8050372888816210160
X-Google-Thread: 10e8ad,d1b77d8b72dc3e4a,start
X-Google-Thread: 113975,d1b77d8b72dc3e4a,start
X-Google-Attributes: gid10e8ad,gid113975,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!news1.google.com!newshub.sdsu.edu!news.astraweb.com!border2.newsrouter.astraweb.com!not-for-mail
From: Chris Steyaert <observations@rmob.org>
Newsgroups: rec.radio.amateur.space,sci.astro.amateur
Subject: Radio Meteor Obs. Bull. January 2008 Quadrantids
Date: Tue, 05 Feb 2008 18:19:00 +0100
Message-ID: <ji6hq3d1bmfg0c545q8b4qqri8ncnasm9q@4ax.com>
X-Newsreader: Forte Agent 1.93/32.576 English (American)

MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Lines: 17
Organization: Unlimited download news at news.astraweb.com
NNTP-Posting-Host: 9eff4a34.news.astraweb.com
X-Trace: DXC=<0=8K>`7<X3l=bkA3Hk5C1L?0kYOcDh@:I@?>bDkbh31Ff\QX;;?
o_1KX07\YZ`QZ6@E5];codH56;TCfKkJg1X8
Xref: g2news1.google.com rec.radio.amateur.space:1295 sci.astro.amateur:100654

Radio Meteor Observation Bulletin No. 174 of January 2008 (79 K) is available now as

http://visualrmob.free.fr/rmobtext/rmob0801.txt

More information and the visual presentation of the hourly forward scatter counts can be found on

http://www.rmob.org

http://radio.data.free.fr

Chris

From 7424490930300160676
X-Google-Thread: 10e8ad,d6a84d62e8e5a37e
X-Google-Attributes: gid10e8ad,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!newshub.sdsu.edu!nntpserver.com!
zeus.nntpserver.com!10.1.1.41.MISMATCH!pfilter-v0.1!not-for-mail
Newsgroups: rec.radio.amateur.space
Subject: Re: Crap/bulshit infestation
From: canopus56 <Canopus56@yahoo.co>
References: <6d51de0b-d986-414c-9f86-987abae8d197@e10g2000prf.googlegroups.com>
<Xns9A26B93F12AB8VeebleFetzer@216.250.184.7>
Message-ID: <Xns9A3B99D09A4DFcanopus56yahoocom@66.150.105.47>
User-Agent: Xnews/5.04.25
Date: 05 Feb 2008 21:17:48 GMT
Lines: 31
NNTP-Posting-Date: 05 Feb 2008 21:17:48 GMT
X-Complaints-To: abuse@teranews.com
Xref: g2news1.google.com rec.radio.amateur.space:1296

Bert Hyman <bert@iphouse.com> wrote in
news:Xns9A26B93F12AB8VeebleFetzer@216.250.184.7:

<snip>
> If you were using a real news provider and a real news client

> instead of googlegroups, you could filter the group yourself
> if your news provider wasn't already doing it for you. <snip>

For those of us who do use a desktop newsreader with slrn kill filing options, it would be helpful if the lead RMOB bulletin and AMSAT posters would post separate posts to single usenet groups only, instead of:

Newsgroups: rec.radio.amateur.space,rec.radio.info

Newsgroups: rec.radio.amateur.space,sci.astro.amateur

- post individual messages to:

Newsgroups: rec.radio.amateur.space
Newsgroups: rec.radio.info
Newsgroups: sci.astro.amateur

The single most effective kill file technique is the filtering of any message that is cross-posted to more than one group. I realize that it is an imposition on your sending end, but regretably it is probably necessary in the current usenet environment.

At present, I have to go back and pick up your interesting bulletins manually because they are filtered out due to your use of crossposting.

Best wishes, Canopus56

--
Posted via a free Usenet account from http://www.teranews.com

```
From -5452359201803500079
X-Google-Thread: 10e8ad,db845c4f0ff1db02,start
X-Google-Thread: 10b9c8,db845c4f0ff1db02,start
X-Google-Attributes: gid10e8ad,gid10b9c8,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!newsfeed2.dallas1.level3.net!
news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-038 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Fri, 8 Feb 2008 22:31:34 EST
Organization: The Radio Amateur Satellite Corporation
Lines: 1411
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <002301c86acc$42412f60$6601a8c0@familyroom>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix1.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
```

```
Content-Transfer-Encoding: 7bit
X-Trace: reader2.panix.com 1202527894 10210 166.84.1.1 (9 Feb 2008 03:31:34 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sat, 9 Feb 2008 03:31:34 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
X-Authority-Analysis: v=1.0 c=1 a=tbrhT3kz2FsA:10 a=SeIcp837AAAA:8
 a=Ixn1CAxRAAAA:8 a=c2--Pf7SAAAA:8 a=KlfyZUBUAAAA:8 a=FbIv-aF9AAAA:8
 a=3fFvnXHTAAAA:8 a=XNQh8oeLAAAA:8 a=f0RPBRECAAAA:8 a=ADBSzeAnAAAA:8
 a=5mDMBHa8AAAA:8 a=gUbaYAUbAAAA:8 a=qyDxTJV7AAAA:8 a=JXa7hjb-AAAA:8
 a=qL4joYdQAAAA:8 a=LlmPylSfAAAA:8 a=tIoeiIHHAAAA:8 a=fENH8MHtAAAA:8
 a=0sg8RoSLAAAA:8 a=uGVPSem0AAAA:8 a=Wa5ALEAlAAAA:8 a=z_zqISx-AAAA:8
 a=4RlJXVyBAAAA:8 a=JRUS5pMlAAAA:8 a=oBXim8GbAAAA:8 a=XYLYVS5UAAAA:8
 a=h3eCdmoiAAAA:8 a=QX7y1c2GAAAA:8 a=QEps4B0vAAAA:8 a=hKwqrz-LAAAA:8
 a=_qHggDGBAAAA:8 a=2cdWa-FYAAAA:8 a=hhwrMKPhAAAA:8 a=0UsQ8JGlAAAA:8
 a=XmLDjXNxAAAA:8 a=dw-wigbnAAAA:8 a=xfYtsZLpAAAA:8 a=SQe5sqTJr16chyePOu4A:9
 a=bwQF1hlG-i1IPwr6INwA:7 a=PkXBsTTmYIkhOoEjN89Y7EgqPyYA:4 a=q4eIODirUFwA:10
 a=NDWsJ_JVWXMA:10 a=UtcmazUCZKYA:10 a=XyvEP7qG2ooA:10 a=wFu9RQxNt4EA:10
 a=Bi3YAkoP18cA:10 a=F7Eo224L3vYA:10 a=XF7b4UCPwd8A:10
Xref: g2news1.google.com rec.radio.amateur.space:1297 rec.radio.info:672
```

This report is organized into FIVE parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites
Part 5 (S5) - deborbited/returned satellites

SB SAT @ AMSAT W8ISS ANS-038.S1
WSR 038 Part 1 02/07/2008

AMSAT NEWS SERVICE BULLETIN 038.S1 FROM AMSAT HQ
SILVER SPRING, MD, February 07, 2008
TO ALL RADIO AMATEURS
BID: $ANS-038.S1

VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:

Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.859330 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsat.in/hamsat.htm

To know what transponder is switched on please listen for the beacon that is active. Each transponder has a different beacon.
[06252007]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational - Software reload

Current Modes: FM Repeater - V/us
BBS - OFF
Telemetry - OFF

Analog voice downlink:	435.300 MHz FM
	435.150 MHz FM
	2401.200 Mhz FM
Analog voice uplink:	145.880 MHZ FM
	145.880 MHz USB
	145.920 MHz FM
	1268.700 MHz FM 67Hz PL tone
Digital Downlinks:	435.150 MHz FM 38k4 Digital, PBP, 1 watt output
	435.150 MHz FM 9k6 Digital, Pacsat Broadcast Protocol
	2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:	145.860 MHz FM 9k6 Digital, Pacsat Broadcast Protocol
	1268.700 mhz FM 9k6 PBP Digital
Beacon:	435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP

   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[01312008]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute
timer
   on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the
repeater on
   and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset
the 10
   minute timer.
[05282007]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Operational - check operational schedule for current times!!

Current Mode: V/u

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
145.870 MHz FM
145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage: http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's CW
telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts.htm
[0820007]

=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[12132007]

=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: TESTING - VOICE

Current Mode: V/u

Uplink: 145.900 MHz FM 1200-baud Manchester FSK

145.920 MHz FM VOICE
145.940 MHz FM 1200-baud Manchester FSK
145.960 MHz FM 1200-baud Manchester FSK

Downlink: 437.026 MHz USB VOICE
1200-baud PSK

Mode-S Beacon: 2401.1428 MHz

Mode and Antenna Polarization:
U: RC 437.050 MHz RHCP
PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[01242008]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational depending on amount of Sunlight

Current Mode: Listen before transmitting

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz CW
145.972 MHz CW
435.100 MHz CW
2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/

AO-7 Usage Guidelines on the AO-7 Log and Resource Site located at:
http://www.planetemily.com/ao7
[05282007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Mode: FM Repeater - U/v
Voice - Occasianally
BBS - OFF
APRS - OFF
SSTV - OFF

Expedition 16 crew:
Commander: Peggy Whitson
Flight Engineer: Yuri Malenchenko RK3DUP
Flight Engineer: Daniel M. Tani KD5DXE

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM
Worldwide packet downlink: 145.825 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS
RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.
[01312008]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-038.S2
WSR 038 Part 2 02/07/2008

AMSAT NEWS SERVICE BULLETIN 038.S2 FROM AMSAT HQ
SILVER SPRING, MD, February 07, 2008
TO ALL RADIO AMATEURS
BID: $ANS-038.S2

CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.
[11152007]
=====
CP3
Catalog Number: 31128
Launch Date: April 17,2007

Status: Operational

Current Mode: /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[07302007]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: In Orbit

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder: 145.825 Mhz FM
[02052007]
=====
NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Operational

Current Mode: /u

```
Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[10222007]
=====
GENESAT-1 ?O-??
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Current Mode: /u

Telemetry Beacon Downlink: 437.0670 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[01082007]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon:             437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
[03262007]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launched: June 30, 2003

Status: Operational

Current Mode: /u

Beacon:     436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
```

```
[01082007]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launched: February 21, 2006

Status: Semi-Operational - Constant Carrier only

Uplink:  1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan ? )

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[01082007]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW
[08132007]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational - Softawre Reload

Current Mode(s): FM Repeater - V/us
                 BBS         - OFF
                 Telemetry   - OFF

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink:   145.880 MHZ FM
                       145.880 MHz USB
                       145.920 MHz FM
                      1268.700 MHz FM 67Hz PL tone
Digital Downlinks:     435.150 MHz FM 38k4 Digital, PBP, 1 watt output
                       435.150 MHz FM 9k6 Digital, Pacsat Broadcast
```

Protocol
                      2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      1268.700 mhz FM 9k6 PBP Digital
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[01312008]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Hibernation until full sunlight in November

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[09242007]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Current Modes: V/U
               L/U

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks: 145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM

```
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[09172007]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational.

Current Mode:  /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon:          435.025 MHz
Mode-S Beacon:     2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[01242008]
=====
RS-22 RADIO SPORT RS-22
Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only

Current Mode:  /u

CW Beacon - 435.352 MHz
            145.818 MHz
[08062007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Mode: FM Repeater - U/v
              Voice -       Occasianally
              BBS -         OFF
              APRS -        OFF
              SSTV -        OFF
```

Expedition 16 crew:
Commander: Peggy Whitson
Flight Engineer: Yuri Malenchenko   RK3DUP
Flight Engineer: Daniel M. Tani   KD5DXE

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM
Worldwide packet downlink: 145.825 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS
                     RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.
[01312008]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-038.S3
WSR 038 Part 3 02/07/2008

AMSAT NEWS SERVICE BULLETIN 038.S3 FROM AMSAT HQ
SILVER SPRING, MD, February 07, 2008
TO ALL RADIO AMATEURS
BID: $ANS-038.S3

```
THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

CP4
Catalog Number: 31122
Launch Date: April 17,2007

Status: Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon:    437.325 MHz CW
[11152007]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Non-Operational

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon:             437.2750 MHz CW

Callsign: JR8YJT
[10152007]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency:  437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink:         437.250 MHz FM 67Hz CTCSS
Voice Downlink:      2401.835 MHz FM
Packet Up/Downlink:   437.250 MHz 9k6 packet
Packet Downlink      2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
```

Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non=Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[08132007]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Non-Operational

Uplinks: 145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial
land and weather imaging payloads offers FM and FSK Amateur Radio
communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a
collaborative effort between the Malaysian government and Surrey
Satellite
Technology Ltd.
[007302007]
=====
NO-45 SAPPHIRE

Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, callsign KE6QMD, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks

V-band: 145.840 - 145.990 MHz CW/LSB
U-band: 435.550 - 435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks

S2-band: 2401.225 - 2401.475 MHz CW/USB
K-band: 24048.010 - 24048.060 MHz CW/USB
Beacon: 2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)

BEACON	General Beacon (GB)	Middle Beacon (MB)	Engineering Beacon (EB)
2 m	none	145.898 MHz	none
70cm	435.438 MHz	435.588 MHz	435.838 MHz
13cm(1)	2400.188 MHz	2400.338 MHz	2400.588 MHz
13cm(2)	2401.173 MHz	2401.323 MHz	2401.573 MHz
3cm	10450.975 MHz	10451.125 MHz	10451.375 MHz
1.5cm	24047.885 MHz	24048.035 MHz	24048.285 MHz

[07162007]

=====

OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]

=====

UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip

```
[01222007]
=====
SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater:         436.250 MHz

Uplinks: Mode B Repeater:  145.825 MHz
Mode J Digipeater:         145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink:   145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK
```

```
Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign:       POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012006]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM
```

```
Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB
```

Digital Transponder:
Uplinks: 145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
LIBERTAD-1
Catalog Number: 31129
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink: 145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[10222007]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplinks: 145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink: 437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[01222007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

```
Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
[05012006]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet: Non-Operational
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
```

```
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon:   145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink  29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
Beacons:   29.450 MHz
          435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
```

```
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon 1:  29.352 MHz (intermittent)
Beacon 2:  29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink:     21.260 to 21.300 MHz CW/USB
Downlink:  145.860 to 145.900 MHz CW/USB

Beacon:    145.860 MHz

Robot:     145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink:   21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon:   29.408 MHz

Robot:    29.454 MHz
[05232004]
NNNN
/EX
```

SB SAT @ AMSAT W8ISS $ANS-038.S4
WSR 038 Part 4 02/07/2008

AMSAT NEWS SERVICE BULLETIN 038.S4 FROM AMSAT HQ
SILVER SPRING, MD, February 07, 2008
TO ALL RADIO AMATEURS
BID: $ANS-038.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE PROPOSED FOR LAUNCH AT THIS TIME:

Phase 5a Mars Mission
Catalog Number:
Proposed Launch Date: 2009 or 2011

Status: Design Phase

For the latest project status update please visit the AMSAT-DL P5-A web page:
http://ticket-to-mars.org
[01222007]
=====
PHASE 3E AO-??
Catalog number:
Proposed Launch Date: Late 2007

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/
[01222007]
=====
Eagle AO-??
Catalog Number:
Proposed Launch Date: Early/Mid 2009

Status: Design Phase

For the latest project status updates please visit the AMSAT-NA webpage:
http://www.amsat.org
[01222007]
=====
Can X-2
Catalog number:
Proposed Launch Date: March 07, 2008

Status: Waiting for Launch

For the latest project status update please visit the Can X-2 web page:
http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:

http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[01172008]
=====
AAUSAT-II
Catalog number:
Proposed Launch Date: March 07, 2008

Status: Waiting for Launch

For the latest project status update please visit the AAUSAT-II web
page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[01172008]
=====
Cute-1.7+APD II
Catalog number:
Proposed Launch Date: March 07, 2008

Status: Waiting for Launch

For the latest project status update please visit the Cute-1.7+APD II
web
page:
http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78
[01172008]
=====
Compass 1
Catalog number:
Proposed Launch Date: March 07, 2008

Status: Waiting for Launch

For the latest project status update please visit the Compass 1 web
page:
http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52
[01172008]
=====
Delfi-C3
Catalog number:
Proposed Launch Date: March 07, 2008

Status: Waiting for Launch

Proposed Frequencies:

* Primary telemetry downlink: 145.870 MHz 1200 Baud BPSK AX.25 400mW
* Backup telemetry downlink: 145.930 MHz 1200 Baud BPSK AX.25 400mW
* Linear transponder passband downlink: 145.880 - 145.920 MHz
(inverting)
  400mW PEP
* Linear transponder passband uplink: 435.570 - 435.530 MHz
* Transponder mode beacon: 145.870 MHz CW (10dB below transponder PEP)

For the latest project status update please visit the Delfi-C3 web page:
http://www.delfic3.nl/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68
[01172008]
=====
Seeds 2
Catalog number:
Proposed Launch Date: March 07, 2008

Status: Waiting for Launch

For the latest project status update please visit the Seeds 2 web page:
http://cubesat.aero.cst.nihon-u.ac.jp/english/main_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36
[01172008]
NNNN
/EX

B SAT @ AMSAT W8ISS $ANS-038.S5
WSR 038 Part 5 02/07/2008

AMSAT NEWS SERVICE BULLETIN 038.S5 FROM AMSAT HQ
SILVER SPRING, MD, February 07, 2008
TO ALL RADIO AMATEURS
BID: $ANS-038.S5

THE FOLLOWING SATELLITES HAVE DE-ORBITED OR HAVE BEEN RETURNED SAFELY:

NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Operational
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink: 145.825 Mhz FM APRS AX25
APRS Uplink: 145.825 MHz FM APRS AX25
Voice/PSK31 Uplink: 28.120 MHz

Packet to Voice ID: RAFT
[06112007]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

- AMSAT News Service (ANS)
- General satellite discussion (AMSAT-BB)
- Orbit data (KEPS)
- Manned space missions (SAREX)
- District of Columbia area (AMSAT-DC)
- New England area (AMSAT-NE)
- AMSAT Educational Liaison mailing list (AMSAT-EDU)
- AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

```
From -9047086104144189425
X-Google-Thread: 10e8ad,3894f5104bdf86f1,start
X-Google-Thread: 10b9c8,3894f5104bdf86f1,start
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news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-041 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sat, 9 Feb 2008 21:22:28 EST
Organization: The Radio Amateur Satellite Corporation
Lines: 481
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000201c86b8b$c42a1ea0$6601a8c0@familyroom>
Reply-To: ans-editor@amsat.org
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Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader2.panix.com 1202610148 10573 166.84.1.3 (10 Feb 2008 02:22:28 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 10 Feb 2008 02:22:28 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
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Xref: g2news1.google.com rec.radio.amateur.space:1298 rec.radio.info:673

AMSAT NEWS SERVICE
ANS-041

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:

* ARISS-Europe Amateur Radio Antennas Reach Orbit
* AO-51 February Schedule
* ARISS Observes SuitSat-1 Anniversary
* AO-51 Satellite Cardboard Model Prototype Assistance Requested
* AMSAT Presence at Orlando Hamcation This Weekend
* FO-29 Status
* Satellite Shorts From All Over
* ARISS Status Report For The Week of February 4, 2008

SB SAT @ AMSAT $ANS-041.01
ARISS-Europe Amateur Radio Antennas Reach Orbit

AMSAT News Service Bulletin 041.01
>From AMSAT HQ SILVER SPRING, MD.
February 10, 2008
To All RADIO AMATEURS
BID: $ANS-041.01

When the Shuttle Atlantis launched on Thursday, February 8 the European Space Agency's Columbus module was on its way for delivery at the International Space Station. The amateur radio antennas mounted on the exterior open a new phase of amateur radio in space. While it will take several months to complete the ham shack aboard the Columbus module the first step has been taken.

Frank Bauer, KA3HDO, ARISS International Chairman, and AMSAT-NA V.P. for Human Spaceflight Programs was quite pleased at this milestone and told the team, "I would like to extend my congratulations to the ARISS-Europe team on today's successful launch of our newest on-orbit hardware delivery, the additional ARISS antennas!"

The ARISS-Europe team have been working hard and diligently for over 5 years to realize this outstanding milestone. The team faced numerous challenges, including some very severe environmental testing to get approval to fly these antenna systems.

Noting the international effort for this success, Frank continued, "I would like to thank Gaston Bertels, ON4WF for his outstanding leadership on this project and Dr. Pawel Kabacik at the Wroclaw University of Technology in Poland for his efforts in the antenna design and testing. And I would like to extend my sincere gratitude to all those who contributed to this project through their volunteer efforts, financial contributions and/or in-kind contributions. YOU helped us develop, test and fly these antennas."

For more information on the ARISS antennas, see:
http://www.ariss-eu.org/

[ANS thanks Frank, KA3HDO and ARISS for the above information]

/EX

SB SAT @ AMSAT $ANS-041.02
AO-51 February Schedule

AMSAT News Service Bulletin 041.02
>From AMSAT HQ SILVER SPRING, MD.
February 10, 2008
To All RADIO AMATEURS
BID: $ANS-041.02

Drew KO4MA, AMSAT-NA VP Operations noted this week, "The AO-51 committee has completed a schedule for February. We will continue the V/US repeater mode that began on January 25th for all of February, except on Tuesdays through Thursdays when we will switch to L/US.

This pattern will repeat every week in February except that the mode switch from V/US to L/US on Tuesday the 12th will be delayed until Wednesday the 13th to accommodate a School Roundup event at Two Rivers School in North Bend, Washington.

The S-band downlink may be temporarily suspended for WOD telemetry download without notice. Generally this will only be for one pass per day.

Regarding the graphic schedule on the main AMSAT web page, the software that does the schedule will not allow for the proper display of the current modes. Please refer to:
http://www.amsat.org/amsat-new/echo/CTNews.php

February 2008 AO-51 (AMSAT Echo) Schedule

February 1 until February 29, subject to modification

February 8 - February 12
FM Repeater, V/US

Uplink: 145.920 MHz FM, NO PL Tone
Downlinks: 435.300 and 2401.200 MHz FM

February 13 - February 14
FM Repeater, L/US
Uplink: 1268.700 MHz FM, NO PL Tone
Downlinks: 435.300 and 2401.200 MHz FM

February 15 - February 18
FM Repeater, V/US
Uplink: 145.920 MHz FM, NO PL Tone
Downlinks: 435.300 and 2401.200 MHz FM

February 19 - February 21
FM Repeater, L/US
Uplink: 1268.700 MHz FM, NO PL Tone
Downlinks: 435.300 and 2401.200 MHz FM

February 22 - February 25
FM Repeater, V/US
Uplink: 145.920 MHz FM, NO PL Tone
Downlinks: 435.300 and 2401.200 MHz FM

February 26 - February 28
FM Repeater, L/US
Uplink: 1268.700 MHz FM, NO PL Tone
Downlinks: 435.300 and 2401.200 MHz FM

February 29 - TBD
FM Repeater, V/US
Uplink: 145.920 MHz FM, NO PL Tone
Downlinks: 435.300 and 2401.200 MHz FM

[ANS thanks the AO-51 Operations Committee for the above information]

/EX

SB SAT @ AMSAT $ANS-041.03
ARISS Observes SuitSat-1 Anniversary

AMSAT News Service Bulletin 041.03
>From AMSAT HQ SILVER SPRING, MD.
February 10, 2008
To All RADIO AMATEURS
BID: $ANS-041.03

In marking the 2nd anniversary of the deployment of SuitSat-1 /Radioskaf/AO-54 from the ISS this week, Frank Bauer, KA3HDO, ARISS International Chairman, and AMSAT-NA V.P. for Human Spaceflight Programs said, "I want to take this opportunity to thank all the volunteers around the world that supported the SuitSat-1 development, deployment, public outreach and ground station reception." Frank said the SuitSat certificates have been mailed as of this past week.

2008 brings new opportunities to you, the hams interested in ARISS, which includes:

+ Plans to commemorate the 25th anniversary of human spaceflight ham radio operation---the flight of Owen Garriott, W5LFL on the space shuttle Columbia, STS-9 in 1983.

+ A team of dedicated amateur radio operators is working to bring SuitSat-2 to reality. At this point in time, it is not clear when it will be deployed, but we are working feverishly to have it ready for deployment before the end of the year.

+ We expect to have significant ARISS crew amateur radio participation starting in the October 2008 timeframe with the launch of the Expedition 18 crew and Soyuz taxi flight.

Frank wraps up with, "I thank all of you for your interest in ARISS. This program is truly inspirational for students, the ham radio community, and the communities surrounding the schools that have been touched by the 334 (to date) school contacts conducted since December 2001."

[ANS thanks Frank, KA3HDO and ARISS for the above information]

/EX

SB SAT @ AMSAT $ANS-041.04
AO-51 Satellite Cardboard Model Prototype Assistance Requested

AMSAT News Service Bulletin 041.04
>From AMSAT HQ SILVER SPRING, MD.
February 10, 2008
To All RADIO AMATEURS
BID: $ANS-041.04

Stefan, VE4NSA has finished the 1st prototype of an AO-51 cardboard model design and would like to give a few dedicated individuals the opportunity to actually build the model and help him with the final design and the necessary instructions.

Stefan notes, "At this stage I will need individuals that have built cardboard models (ships, airplanes, rockets etc.) before and don't need detailed instructions but know the tools that are required to assemble such a model."

Pictures of the current prototype can be seen at:
http://www.msig.ca/model.html

It is still a work in progress and hopefully will end up as a product that AMSAT can offer for a donation. I designed the model in a 1:1 scale but for the purpose of this project it has been reduced to 75% size. This will allow builders to print it on regular size photo paper and still have a beautiful model for display in the shack, school projects, or amateur radio presentations.

Building the model will require time, patience and a color printer since the model is distributed as pdf files. This form of distribution will save paper and will allow you to print it as many times as you need.

As mentioned above, Stefan is looking for up to five test builders (with experience) that are willing and able to finish the model in four to five weeks. It is not a two hour project and dedication to detail and exact cutting and gluing is required. Those that help and provide him with updates on their progress and final feedback will get the final distribution files as well as the model files in a 1:1 scale.

Send Stefan an email <callsign>@amsat.org if you are interested!

[ANS thanks Stefan, VE4NSA for the above information]

/EX

SB SAT @ AMSAT $ANS-041.05
AMSAT Presence at Orlando Hamcation This Weekend

AMSAT News Service Bulletin 041.05
>From AMSAT HQ SILVER SPRING, MD.
February 10, 2008
To All RADIO AMATEURS
BID: $ANS-041.05

This weekend AMSAT will have a large presence at the Orlando Hamcation. It will remind some people of Dayton. The Orlando Hamcation has grown in size and prominence in the U.S. After all, it is in a "horrible place" for Winter in the U.S.! See: http://www.hamcation.com/

The following AMSAT board members and officers will be there:

AMSAT President Rick Hambly, W2GPS
AMSAT President Emeritus, Tom Clark, K3IO (ex-W3IWI)
AMSAT Executive V.P. Lee McLamb, KU4OS
AMSAT V.P. Operations, Drew Glasbrenner, KO4MA
AMSAT V.P. Field Ops, Gould Smith, WA4SXM
AMSAT V.P. Engineering Bob McGwier, N4HY

Some of the above are board members. Additionally, board members Lou McFadin, W5DID and Barry Baines, WD4ASW will be in attendance. Barry Baines is our new Eagle/Intelsat project manager.

AMSAT has been granted prominent times and rooms for presentations. AMSAT is bringing the operational SDX and will soon thereafter put an SDX based linear transponder on the air covering much of the state of Florida and in a prominent place in Maryland. Additionally, one of the SDX will be in use in Europe thanks to a generous offer and help from Viktor Kudielka.

Taking advantage of the occasion, AMSAT will hold engineering planning meetings in Orlando this weekend for engineering management. This was decided because so many of these people were going to be in attendance anyway.

[ANS thanks Bob, N4HY AMSAT-NA VP Engineering for the above information]

/EX

SB SAT @ AMSAT $ANS-041.06
FO-29 Status

AMSAT News Service Bulletin 041.06
>From AMSAT HQ SILVER SPRING, MD.
February 10, 2008
To All RADIO AMATEURS
BID: $ANS-041.06

Toyo Komatsu, JA0CQP provided an update on behalf of JARL in regards to the status of the FO-29 satellite. JARL is the agency responsible for FO-29 operation.

While command and control and some transponder operation has been recovered over Japan, JARL notes at this time FO-29 is not in condition to offer worldwide service with control stations around the world.

The satellites power budget is a key issue. Although power from the solar cells is just adequate for operation, the inner impedance of the Ni-Cd rechargeable batteries is increasing. They cannot support operation of the transmitter approximately 10 minutes after entering eclipse.

The PCU (Power Control Unit) has failed and the satellite's transmitter does not automatically recover, requiring intervention by the ground control station in Tokyo.

JARL will continue to monitor the situation aboard FO-29 and preserve its functionality for as many as users around the world as possible. This situation may continue for up to 2 years until FO-29 enters a no-eclipse period in 2010.

[ANS thanks Toyo Komatsu, JA0CQP for the above information]

/EX

SB SAT @ AMSAT $ANS-041.07
Satellite Shorts From All Over

AMSAT News Service Bulletin 041.07
>From AMSAT HQ SILVER SPRING, MD.
February 10, 2008
To All RADIO AMATEURS
BID: $ANS-041.07

+ AMSAT Engineering needs experienced help programming the MPS-430. This processor will be in a Cubesat. The preference is to use FreeRTOS on it but adequate reasons for not following this path can be discussed. Email to n4hy@amsat.org directly.

+ JAMSAT (Japan-AMSAT) announced that QSL cards for QSOs via ISS Cross Band Repeater are valid for the "JAMSAT 5 Stars Award".

+ The 2008 Microwave Update is being planned for the weekend of October 17-18-19 in the Minneapolis area.

+ The dates for the AMSAT-UK Colloquium are July 25,26,27, 2008.

+ The University of Louisiana is asking for a volunteers to help mentor a senior design capstone project to design and test to destruction with high dose of radiation a communication control and data handling processor. This processor is planed to fly on the CAPE II satellite on 2009. It is anticipated that this will involve two one hour session a month via WEB X. We are seeking those have skill in designing fault tolerant microprocessors and have knowledge of how high energy particles effect memory chips. Contact k5qxj@amsat.org.

+ W5ACM, W5GFP, WA5TWT, WA5WOD, N5RPQ and WB5RMA finished up a cruise to the western Caribbean. Over 90 QSOs were made using call W5ACM/MM from the Carnival Conquest. Some AO-16 passes with excellent results. Most of the contacts were via AO-51 but they were amazed at the signal strength of the AO-16 downlink. It was REALLY EXCELLENT!!

+ The launch of the NLS-4 cluster including Delfi-C3 has been delayed again, for now, it is scheduled for mid-April. Updates will be posted on the Delfi mission status page.

+ PB and PG for Linux are programs used for download from and upload to digital satellites (Pacsats) supporting the FTL0 protocol. This software allows you to directly communicate with the Microsat series of satellites. Release 2.2.1 of PB/PG for Linux is now available from ftp.amsat.org /amsat/software/Linux/pbpg-2.2.1.tar.gz
(via oz6bl (at) amsat (dot) org)

+ Would you like to name the next great space telescope? Here's your chance: NASA is inviting members of the general public to suggest a new name for the Gamma-ray Large Area Space Telescope before it launches in mid-2008. See:

http://science.nasa.gov/headlines/y2008/08feb_namethattelescope.htm?list9589
01

Anyone who drops a name into the "Name That Satellite!" suggestion box on the Web page can choose to receive a "Certificate of Participation" via return e-mail. Participants also may choose to receive the NASA press release announcing the new mission name. The announcement is expected approximately 60 days after launch of the telescope.

+ Clint Bradford, K6LCS has secured an AMSAT member deal from HRO on the Arrow satellite antenna with duplexer: Model 146/437-10WBP for $125.95. That's about $10-15 off suggested retail. Offer good through February. Contact k6lcs@amsat.org.

+ AMSAT needs volunteers to "man" the AMSAT booth at Timonium, one of the largest amateur radio shows on The East Coast. The dates are March 29 and March 30 at the Maryland State Fairgrounds in Timonium, Md. See: http://www.gbhc.org/ Contact Martha at AMSAT HQ if you can help! 301-589-6062, or e-mail martha@amsat.org.

[ANS thanks everyone for the above information]

/EX

SB SAT @ AMSAT $ANS-041.08
ARISS Status Report For The Week of February 4, 2008

AMSAT News Service Bulletin 041.08
>From AMSAT HQ SILVER SPRING, MD.
February 10, 2008
To All RADIO AMATEURS
BID: $ANS-041.08

1. ARISS School Contacts - Status

Due to crew schedules onboard the ISS, no ARISS contacts are planned at this time. The ARISS team expects contacts to resume once STS-122 launches in early February.

2. Glenden State School Receives Award for ARISS Contact

An ARISS contact took place between Glenden State School in Queensland, Australia and Sunita Williams, KD5PLB, on April 4, 2007. On January 26, 2008 the school was presented with an Australia Day Award in recognition of the contact. The mayor who bestowed the award noted that the contact was a very unique educational outreach activity in which the community became involved. ARISS member Shane Lynd, VK4KHZ, submitted an article covering this news to the Wireless Institute of Australia. The story and photos have been posted under News on the ARISS Website.

See: http://www.rac.ca/ariss/oindex.htm

3. Astronaut Training Status

On Tuesday, January 29, Mike Barratt, KD5MIJ, participated in an ARISS training session at JSC. Basic radio operations and school contacts were covered during the class. Barratt is a backup crewmember for Expedition 18, and the prime Flight Engineer for Expedition 19A.

ARISS conducted an amateur radio school contact simulation utilizing a local school. Students at Bay Area Charter Elementary near JSC took part in 2 sessions on Friday, February 8 at approximately 9:45 am and 10:10 am CT via the JSC W5RRR repeater. Mike Fincke, KE5AIT, participated in the first contact and Koichi Wakata, KC5ZTA, participated in the second simulated contact. These two contacts were retransmitted on the Internet Radio Linking Project (IRLP) and the W5RRR repeater. This is the first time a school contact simulation training session has been conducted live with students at the other end of the session. If successful, it might be possible to conduct a handful of these sessions each year.

4. ARISS Radio Configured in Crossband Repeater Mode

On Thursday, January 31, cosmonaut Yuri Malenchenko, RK3DUP, configured the ARISS Kenwood radio to crossband repeater mode. The frequencies are 437.800 MHz uplink and 145.800 MHz downlink.

5. ARRL Article on ARISS Chairman

The American Radio Relay League (ARRL) ran an article on ARISS Chairman Frank Bauer in its ARRL Letter. To view the story, "ARISS International Chairman Moves into New Position at NASA," see: http://www.arrl.org/arrlletter/08/0201/

6. SuitSat-1 Certificates

The ARISS team has begun to distribute certificates for participation in the SuitSat-1 project. Additional certificates will be mailed as participant lists are received. SuitSat-1, an amateur radio satellite housed in a Russian Orlan spacesuit, was deployed on February 3, 2006 and received extensive media coverage and over 9.5 million hits on the SuitSat Web site.

[ANS thanks Carol, KB3LKI for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM
K9JKM at amsat dot org

```
From 5377948265308663263
X-Google-Thread: 10e8ad,707ee04abc17ff04,start
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X-Google-Attributes: gid10e8ad,gid10b9c8,public,usenet
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From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-045 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Wed, 13 Feb 2008 20:24:58 EST
Organization: The Radio Amateur Satellite Corporation
Lines: 1429
Approved: RRI Admin <rec-radio-info-request@panix.com>
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NNTP-Posting-Date: Thu, 14 Feb 2008 01:24:58 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
X-Authority-Analysis: v=1.0 c=1 a=dwaFpdtl5c0A:10 a=SeIcp837AAAA:8
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Xref: g2news1.google.com rec.radio.amateur.space:1299 rec.radio.info:676

This report is organized into FIVE parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites
Part 5 (S5) - deorbited/returned satellites

SB SAT @ AMSAT W8ISS ANS-045.S1
WSR 045 Part 1 02/14/2008

AMSAT NEWS SERVICE BULLETIN 045.S1 FROM AMSAT HQ
SILVER SPRING, MD, February 14, 2008
TO ALL RADIO AMATEURS
BID: $ANS-045.S1

VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.859330 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsat.in/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is
active. Each transponder has a different beacon.
[06252007]
=====
AO-51 ECHO

Catalog number: 28375
Launch date: June 29, 2004

Status: Operational - Software reload

Current Modes: FM Repeater - V/us
BBS - OFF
Telemetry - OFF

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.880 MHZ FM
145.880 MHz USB
145.920 MHz FM
1268.700 MHz FM 67Hz PL tone
Digital Downlinks: 435.150 MHz FM 38k4 Digital, PBP, 1 watt output
435.150 MHz FM 9k6 Digital, Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Digital, Pacsat Broadcast Protocol
1268.700 mhz FM 9k6 PBP Digital
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[01312008]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10 minute timer.
[05282007]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Operational - check operational schedule for current times!!

Current Mode: V/u

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage: http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts.htm

```
[0820007]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Current Mode: V/u

Uplink:   145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[12132007]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: TESTING - VOICE

Current Mode:  V/u

Uplink:         145.900 MHz FM 1200-baud Manchester FSK
                145.920 MHz FM VOICE
                145.940 MHz FM 1200-baud Manchester FSK
                145.960 MHz FM 1200-baud Manchester FSK

Downlink:       437.026 MHz USB VOICE
                                1200-baud PSK

Mode-S Beacon: 2401.1428 MHz

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[01242008]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974
```

Status: Operational depending on amount of Sunlight

Current Mode: Listen before transmitting

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz CW
145.972 MHz CW
435.100 MHz CW
2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/

AO-7 Usage Guidelines on the AO-7 Log and Resource Site located at:
http://www.planetemily.com/ao7
[05282007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Mode: FM Repeater - U/v
Voice - Occasianally
BBS - OFF
APRS - OFF
SSTV - OFF

Expedition 16 crew:
Commander: Peggy Whitson
Flight Engineer: Yuri Malenchenko RK3DUP
Flight Engineer: Daniel M. Tani KD5DXE

STS-122 Space Shuttle Atlantis crew:
Commander: Steve Frick
Pilot: Alan Poindexter
Mission Specialist: Leland Melvin
Mission Specialist: Rex Walheim
Mission Specialist: Hans Schlegel
Mission Specialist: Stanley love
Mission Specialist: Leopold Eyharts

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM

Worldwide packet downlink: 145.825 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS
RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.
[02142008]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-045.S2
WSR 045 Part 2 02/14/2008

AMSAT NEWS SERVICE BULLETIN 045.S2 FROM AMSAT HQ
SILVER SPRING, MD, February 14, 2008
TO ALL RADIO AMATEURS
BID: $ANS-045.S2

CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25

```
CW Beacon:    435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.
[11152007]
=====
CP3
Catalog Number: 31128
Launch Date: April 17,2007

Status: Operational

Current Mode:  /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[07302007]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: In Orbit

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder:  145.825 Mhz FM
[02052007]
=====
NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Operational

Current Mode: /u

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[10222007]
=====
GENESAT-1 ?O-??
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Current Mode: /u
```

Telemetry Beacon Downlink: 437.0670 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[01082007]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon: 437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
[03262007]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launched: June 30, 2003

Status: Operational

Current Mode: /u

Beacon: 436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[01082007]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launched: February 21, 2006

Status: Semi-Operational - Constant Carrier only

Uplink: 1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan ?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:

```
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[01082007]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW
[08132007]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational - Softawre Reload

Current Mode(s): FM Repeater - V/us
                 BBS         - OFF
                 Telemetry   - OFF

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink:   145.880 MHZ FM
                       145.880 MHz USB
                       145.920 MHz FM
                      1268.700 MHz FM 67Hz PL tone
Digital Downlinks:     435.150 MHz FM 38k4 Digital, PBP, 1 watt output
                       435.150 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:        145.860 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      1268.700 mhz FM 9k6 PBP Digital
Beacon:                435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear
```

```
Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[01312008]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Hibernation until full sunlight in November

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink:        144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[09242007]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Current Modes: V/U
               L/U

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[09172007]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational.
```

Current Mode: /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon: 435.025 MHz
Mode-S Beacon: 2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[01242008]
=====
RS-22 RADIO SPORT RS-22
Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only

Current Mode: /u

CW Beacon - 435.352 MHz
            145.818 MHz
[08062007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Mode: FM Repeater - U/v
              Voice -   Occasianally
              BBS -   OFF
              APRS -   OFF
              SSTV -   OFF

Expedition 16 crew:
Commander: Peggy Whitson
Flight Engineer: Yuri Malenchenko   RK3DUP
Flight Engineer: Daniel M. Tani   KD5DXE

STS-122 Space Shuttle Atlantis crew:
Commander: Steve Frick
Pilot: Alan Poindexter
Mission Specialist: Leland Melvin
Mission Specialist: Rex Walheim
Mission Specialist: Hans Schlegel
Mission Specialist: Stanley love
Mission Specialist: Leopold Eyharts

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM
Worldwide packet downlink: 145.825 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS
                     RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.
[02142008]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-045.S3
WSR 045 Part 3 02/14/2008

AMSAT NEWS SERVICE BULLETIN 045.S3 FROM AMSAT HQ
SILVER SPRING, MD, February 14, 2008
TO ALL RADIO AMATEURS
BID: $ANS-045.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

CP4
Catalog Number: 31122
Launch Date: April 17,2007

```
Status: Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon:    437.325 MHz CW
[11152007]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Non-Operational

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon:             437.2750 MHz CW

Callsign: JR8YJT
[10152007]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency:  437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink:        437.250 MHz FM 67Hz CTCSS
Voice Downlink:     2401.835 MHz FM
Packet Up/Downlink:  437.250 MHz 9k6 packet
Packet Downlink     2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005
```

Status: Non=Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[08132007]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Non-Operational

Uplinks: 145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial
land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a
collaborative effort between the Malaysian government and Surrey Satellite
Technology Ltd.
[007302007]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK

Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, callsign KE6QMD, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks

V-band: 145.840 - 145.990 MHz CW/LSB
U-band: 435.550 - 435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks

S2-band: 2401.225 - 2401.475 MHz CW/USB
K-band: 24048.010 - 24048.060 MHz CW/USB
Beacon: 2401.323 MHz
24048.035 MHz

P3-D Telemetry Beacons (IHU)

BEACON	General Beacon (GB)	Middle Beacon (MB)	Engineering Beacon (EB)
2 m	none	145.898 MHz	none
70cm	435.438 MHz	435.588 MHz	435.838 MHz
13cm(1)	2400.188 MHz	2400.338 MHz	2400.588 MHz
13cm(2)	2401.173 MHz	2401.323 MHz	2401.573 MHz
3cm	10450.975 MHz	10451.125 MHz	10451.375 MHz
1.5cm	24047.885 MHz	24048.035 MHz	24048.285 MHz

[07162007]

=====

OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]

=====

UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]

=====

SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink: 145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
PO-28 POSAT-1

```
Catalog number: 22829
Launch Date: September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign:       POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012006]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
KO-23 KITSAT
Catalog number: 22077
```

```
Launched: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HL01-11
BBS: HL01-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz
```

```
More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
LIBERTAD-1
Catalog Number: 31129
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink:   145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[10222007]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplinks:          145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink:      437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[01222007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
```

```
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
[05012006]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet: Non-Operational
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon:   145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
```

```
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink  29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
Beacons:   29.450 MHz
          435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
```

```
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon 1:  29.352 MHz (intermittent)
Beacon 2:  29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink:     21.260 to 21.300 MHz CW/USB
Downlink:  145.860 to 145.900 MHz CW/USB

Beacon:    145.860 MHz

Robot:     145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink:   21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon:   29.408 MHz

Robot:    29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-045.S4
WSR 045 Part 4 02/14/2008

AMSAT NEWS SERVICE BULLETIN 045.S4 FROM AMSAT HQ
SILVER SPRING, MD, February 14, 2008
TO ALL RADIO AMATEURS
```

BID: $ANS-045.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE PROPOSED FOR LAUNCH AT THIS TIME:

Phase 5a Mars Mission
Catalog Number:
Proposed Launch Date: 2009 or 2011

Status: Design Phase

For the latest project status update please visit the AMSAT-DL P5-A web page:
http://ticket-to-mars.org
[01222007]
=====
PHASE 3E AO-??
Catalog number:
Proposed Launch Date: Late 2007

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/
[01222007]
=====
Eagle AO-??
Catalog Number:
Proposed Launch Date: Early/Mid 2009

Status: Design Phase

For the latest project status updates please visit the AMSAT-NA webpage:
http://www.amsat.org
[01222007]
=====
Can X-2
Catalog number:
Proposed Launch Date: March 07, 2008

Status: Waiting for Launch

For the latest project status update please visit the Can X-2 web page:
http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[01172008]
=====
AAUSAT-II
Catalog number:
Proposed Launch Date: March 07, 2008

Status: Waiting for Launch

For the latest project status update please visit the AAUSAT-II web
page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[01172008]
=====
Cute-1.7+APD II
Catalog number:
Proposed Launch Date: March 07, 2008

Status: Waiting for Launch

For the latest project status update please visit the Cute-1.7+APD II
web
page:
http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78
[01172008]
=====
Compass 1
Catalog number:
Proposed Launch Date: March 07, 2008

Status: Waiting for Launch

For the latest project status update please visit the Compass 1 web
page:
http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52
[01172008]
=====
Delfi-C3
Catalog number:
Proposed Launch Date: March 07, 2008

Status: Waiting for Launch

Proposed Frequencies:
* Primary telemetry downlink: 145.870 MHz 1200 Baud BPSK AX.25 400mW
* Backup telemetry downlink: 145.930 MHz 1200 Baud BPSK AX.25 400mW
* Linear transponder passband downlink: 145.880 - 145.920 MHz
(inverting)
  400mW PEP
* Linear transponder passband uplink: 435.570 - 435.530 MHz

* Transponder mode beacon: 145.870 MHz CW (10dB below transponder PEP)

For the latest project status update please visit the Delfi-C3 web page:
http://www.delfic3.nl/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68
[01172008]
=====
Seeds 2
Catalog number:
Proposed Launch Date: March 07, 2008

Status: Waiting for Launch

For the latest project status update please visit the Seeds 2 web page:
http://cubesat.aero.cst.nihon-u.ac.jp/english/main_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36
[01172008]
NNNN
/EX

B SAT @ AMSAT W8ISS $ANS-045.S5
WSR 045 Part 5 02/14/2008

AMSAT NEWS SERVICE BULLETIN 045.S5 FROM AMSAT HQ
SILVER SPRING, MD, February 14, 2008
TO ALL RADIO AMATEURS
BID: $ANS-045.S5

THE FOLLOWING SATELLITES HAVE DE-ORBITED OR HAVE BEEN RETURNED SAFELY:

NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Operational
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink: 145.825 Mhz FM APRS AX25
APRS Uplink: 145.825 MHz FM APRS AX25

Voice/PSK31 Uplink: 28.120 MHz

Packet to Voice ID: RAFT
[06112007]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:

ans-editor{at}amsat.org
NNNN
/EX

```
From -4301465345127394295
X-Google-Thread: 10e8ad,b433e7298a022c87,start
X-Google-Thread: 10b9c8,b433e7298a022c87,start
X-Google-Attributes: gid10e8ad,gid10b9c8,public,usenet
X-Google-Language: ENGLISH,ASCII
Path: g2news1.google.com!news2.google.com!news.glorb.com!
newscon02.news.prodigy.net!prodigy.net!transit4.readnews.com!news-
out.readnews.com!transit3.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-048 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Tue, 19 Feb 2008 13:21:18 EST
Organization: The Radio Amateur Satellite Corporation
Lines: 314
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <001401c87324$392804c0$6701a8c0@familyroom>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;charset="iso-8859-1"
Content-Transfer-Encoding: quoted-printable
X-Trace: reader2.panix.com 1203445278 4288 166.84.1.6 (19 Feb 2008 18:21:18 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Tue, 19 Feb 2008 18:21:18 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
X-Authority-Analysis: v=1.0 c=1 a=Ixn1CAxRAAAA:8 a=Qu7LXLbwAAAA:8
 a=59mW9OeJAAAA:8 a=XakZVnvoAAAA:8 a=fAqIXIkZAAAA:8 a=cxCeS9yz6xixkhEwpUgA:9
 a=tAvEcVIHMlsts62Fb3MA:7 a=vp_1IMf_B_KFtkUopo0tAmeXsrIA:4 a=q4eIODirUFwA:10
 a=CWSBNlG-xqIA:10
Xref: g2news1.google.com rec.radio.amateur.space:1300 rec.radio.info:679
```

AMSAT NEWS SERVICE
ANS-048

ANS is a free, weekly, news and information service of AMSAT North
America,

The
Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in
designing, building, launching and communicating through analog and digital
Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* AMSAT Lab Status and Volunteer Opportunities
* AMSAT Engineering Meeting in Orlando
* Abstract Deadline Extended for the 2008 Cubesat Workshop
* Houston AMSAT Net Changes
* ARISS Status - 11 February 2008

SB SAT @ AMSAT $ANS-048.01
AMSAT Lab Status and Volunteer Opportunities

AMSAT News Service Bulletin 048.01
  From AMSAT HQ SILVER SPRING, MD.
February 17, 2008
To All RADIO AMATEURS
BID: $ANS-048.01

Bob Davis, KF4FKSS, AMSAT Lab Manager reports that appears we're within about 3
work days of completing the cleanroom at the AMSAT lab in Pocomoke, MD! This
is
good news for those of us that have spent
a year cleaning, scraping, painting, etc.

While Bob was in Orlando supporting Hamcation, where AMSAT had a booth,
presentation, Board of Directors meeting and engineering meetings, J.C., Ray,
Steve & Martin worked on the cleanroom. It is really starting to look complete
now.

Here is the Lab schedule for the next couple of weeks:
Mon Feb 18 - Open 9-5 (this is President's Day)
Sat Feb 23 - Open 9-5.

It is hoped that these dates will conclude the cleanroom effort (which is
dependent on us volunteers!). Then, work on the Eagle Engineering Unit will
begin. This is a flight-like structure that will be used to verify some

things before we are messing with the expensive (and schedule driven) flight unit. It will be taken (incomplete) to the Dayton Hamfest in May.
We also have a couple antennas we want to raise...

All volunteers are welcome! RSVP would be nice, but not required.

For directions, map to this intersection:
Broad St & Pocomoke Belt
Pocomoke City, MD 21851

If you have any questions, email Bob at KF4KSS@amsat.org

[ANS thanks Bob, KF4KSS, for the above information]

/EX

SB SAT @ AMSAT $ANS-048.02
AMSAT Engineering Meeting in Orlando

AMSAT News Service Bulletin 048.02
From AMSAT HQ SILVER SPRING, MD.
February 17, 2008
To All RADIO AMATEURS
BID: $ANS-048.02

Bob McGwier, N4HY, AMSAT VP of Engineeing called an engineering meeting for the weekend of 8-11 Feb in Orlando, FL. This meeting was to define the engineering projects, leaders and deliverables for 2008. The meeting was well attended and many tough issues were discussed. Plans to fast track some of the projects to meet Dayton, SuitSat-2, Atlanta Symposium and the balloon and cubesat launches with HAWK and HISS were made. This was a very productive meeting and details will follow in the AMSAT Journal. Bob also described the 2008 engineering tasks in a video that will soon appear on the AMSAT web site at http://www.amsat.org/amsat-new/information/videoNews.php .

The meeting also coincided with the Orlando Hamcation, were Rick Hambly,W2GPS; Bob McGwier, N4HY; Drew Glasbrenner, KO4MA; Bob Davis, KF4KSS and Lou McFadin, W5DID discussed the activities in a 90 minute forum. Dave Jordan, AA4KN and Robert Davies, KI4HXT hosted the AMSAT booth and did satellite demonstrations. The AMSAT booth was well attended and very productive. Most of the AMSAT officers and board members were available at the booth on Saturday to talk with members and to answer questions.

Videos are also being prepared of the Orlando forum talks and satellite demonstrations.

[ANS thanks Gould, WA4SXM, for the above information]

/EX

SB SAT @ AMSAT $ANS-048.03
Abstract Deadline Extended for the 2008 Cubesat Workshop

AMSAT News Service Bulletin 048.03
From AMSAT HQ SILVER SPRING, MD.
February 17, 2008
To All RADIO AMATEURS
BID: $ANS-048.03

The deadline for abstract submission for the 2008 CubeSat Workshop has been extended. Please submit your abstract by Friday March 7th at www.cubesat.org. The workshop sessions are listed below and we encourage you to focus your abstract on one of these topics:

1) New CubeSat Developers
2) Novel Avionics
3) Nanosats
4) Access to Space
5) Ground Station Operations
6) Unique Missions

Don't forget, workshop registrations is available online and spaces are filling up quickly for the workshop April 9th-11th at Cal Poly! Please contact cubesat-workshop@atl.calpoly.edu with any questions or concerns regarding registration or abstract submittal.

[ANS thanks Alex Chin and Marissa Brummitt for the above information]

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SB SAT @ AMSAT $ANS-048.04
Houston AMSAT Net Changes

AMSAT News Service Bulletin 048.04
From AMSAT HQ SILVER SPRING, MD.
February 17, 2008
To All RADIO AMATEURS
BID: $ANS-048.04

The Houston AMSAT Net has once again gone through some morphing. After being on the W0KIE Satellite Radio Network from our 121st net using SBS-6 on June 18, 1996 we had to move. The W0KIE Satellite Radio Network was a wonderful long term spot for us. Our 726th net on February 5, 2008 began on our new home, Galaxy-25 and the SkyScanner Satellite Radio Network (SSRN).

If you would like to hear us on K-band satellite, you can set your dish and receiver as follows:

The Houston AMSAT Net is on the SkyScanner Satellite Radio Network on Galaxy-25 @97� West, Transponder 23 (12115 Vert), Symbol Rate: 22425, APID: 1794 (DVB Free To Air)

Our internet audio can now be heard at:

+ RFD1 16k (dialup speed) at http://www.cband.info/rfd1.m3u
+ RFD2 (broadband speed) at http://www.cband.info/rfd2.m3u
+ AMSAT conference on Echolink

If you would like to join us on the IRC either during the net or at any other time.

The IRC is: irc.dishnuts.net
Then join the channel #amsat

[ANS thanks Bruce, KK5DO for the above information]

/EX

SB SAT @ AMSAT $ANS-048.05
ARISS Status - 11 February 2008

AMSAT News Service Bulletin 048.05
From AMSAT HQ SILVER SPRING, MD.
February 17, 2008
To All RADIO AMATEURS
BID: $ANS-048.05

1. Upcoming School Contact

Robespierre Elementary School in Rueil Malmaison, France has been scheduled for an Amateur Radio on the International Space Station (ARISS) contact on Thursday, February 21 at 14:21 UTC. Two hundred fifty-six students in grades 1-5 are enrolled at the school. ESA astronaut L�opold Eyharts, FX0STD/KE5FNO, plans to participate in this contact.

2. Astronaut Training Status

The Amateur Radio on the International Space Station (ARISS) team coordinated two amateur radio school contact simulations between students at Bay Area Charter Elementary in the Houston area and astronauts Mike Fincke, KE5AIT and Koichi Wakata, KC5ZTA at JSC. The two sessions took place on Friday, February 8 via the JSC W5RRR repeater. These two contacts were retransmitted on the Internet Radio Linking Project (IRLP). They were also fed into the Echolink AMSAT (101 377) and JK1ZRW (277 208) servers and received 8 connections, including 2 link nodes and one repeater node from the U.S., Japan, and the Ukraine.

3. ARRL Articles on Simulated ARISS Contacts

The American Radio Relay League (ARRL) ran a Web story on the simulated ARISS contacts that took place between astronauts Mike Finke and Koichi Wakata at JSC and Bay Area Charter Elementary in the Houston area. See:
http://www.arrl.org/news/stories/2008/02/05/100/?nc=1

The activity was also published in the ARRL Letter. See:
http://www.arrl.org/arrlletter/08/0208/

4. Columbus Module Launched

Atlantis launched on Thursday, February 7 carrying ESA�s Columbus module with new Amateur Radio on the International Space Station (ARISS) antennas. ARISS Chairman Frank Bauer sent congratulations to the European team for a job well done. See: http://www.amsat.org/amsat/archive/sarex/10day/msg01509.html

5. Shukor Debrief Scheduled

An Amateur Radio on the International Space Station (ARISS) crew debrief
has
been scheduled with Dr. Sheikh Muszaphar Shukor, 9W2MUS, on Tuesday,
February
26. Shukor, the first Malaysian space visitor, participated in 5 ARISS
contacts
with students in Malaysia while onboard the ISS.

6. Amateur Radio Newsline Article

On February 8, the Amateur Radio Newsline ran a story on Amateur Radio
on
the
International Space Station (ARISS) Chairman
Frank Bauer�s promotion at NASA. To
view this item, go to:
http://www.arnewsline.org/index.php?option=content&task=view&id=18&
Itemid=

[ANS thanks Carol, KB3LKI, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the
President's
Club. Members of the President's Club, as sustaining donors to AMSAT
Project
Funds, will be eligible to receive additional benefits. Application
forms
are
available from the AMSAT Office.

73,
This week's ANS Editor,
Lee McLamb, KU4OS

From -7062749152624342302
X-Google-Thread: 10e8ad,884409fe3bf00384,start
X-Google-Thread: 10b9c8,884409fe3bf00384,start
X-Google-Attributes: gid10e8ad,gid10b9c8,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!newsfeed2.dallas1.level3.net!
news.level3.com!panix!rri.panix.com!robomod!not-for-mail

```
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-052 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Thu, 21 Feb 2008 21:44:24 EST
Organization: The Radio Amateur Satellite Corporation
Lines: 1411
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <002b01c874fc$d1e670a0$6701a8c0@familyroom>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix3.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader2.panix.com 1203648264 23176 166.84.1.3 (22 Feb 2008 02:44:24 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Fri, 22 Feb 2008 02:44:24 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
X-Authority-Analysis: v=1.0 c=1 a=SeIcp837AAAA:8 a=Ixn1CAxRAAAA:8
 a=c2--Pf7SAAAA:8 a=KlfyZUBUAAAA:8 a=FbIv-aF9AAAA:8 a=3fFvnXHTAAAA:8
 a=XNQh8oeLAAAA:8 a=f0RPBRECAAAA:8 a=ADBSzeAnAAAA:8 a=5mDMBHa8AAAA:8
 a=gUbaYAUbAAAA:8 a=qyDxTJV7AAAA:8 a=JXa7hjb-AAAA:8 a=qL4joYdQAAAA:8
 a=LlmPylSfAAAA:8 a=tIoeiIHHAAAA:8 a=fENH8MHtAAAA:8 a=0sg8RoSLAAAA:8
 a=uGVPSem0AAAA:8 a=Wa5ALEAlAAAA:8 a=z_zqISx-AAAA:8 a=4RlJXVyBAAAA:8
 a=JRUS5pMlAAAA:8 a=oBXim8GbAAAA:8 a=XYLYVS5UAAAA:8 a=h3eCdmoiAAAA:8
 a=QX7y1c2GAAAA:8 a=QEps4B0vAAAA:8 a=hKwqrz-LAAAA:8 a=_qHggDGBAAAA:8
 a=2cdWa-FYAAAA:8 a=hhwrMKPhAAAA:8 a=0UsQ8JGlAAAA:8 a=XmLDjXNxAAAA:8
 a=dw-wigbnAAAA:8 a=xfYtsZLpAAAA:8 a=SQe5sqTJr16chyePOu4A:9
 a=bwQF1hlG-i1IPwr6INwA:7 a=_jontopn5YzJxTz-rvJGYVt4hcsA:4 a=q4eIODirUFwA:10
 a=NDWsJ_JVWXMA:10 a=UtcmazUCZKYA:10 a=XyvEP7qG2ooA:10 a=wFu9RQxNt4EA:10
 a=Bi3YAkoP18cA:10 a=F7Eo224L3vYA:10 a=XF7b4UCPwd8A:10
Xref: g2news1.google.com rec.radio.amateur.space:1301 rec.radio.info:680
```

This report is organized into FIVE parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites
Part 5 (S5) - deborbited/returned satellites

SB SAT @ AMSAT W8ISS ANS-052.S1
WSR 052 Part 1 02/21/2008

AMSAT NEWS SERVICE BULLETIN 052.S1 FROM AMSAT HQ
SILVER SPRING, MD, February 21, 2008
TO ALL RADIO AMATEURS
BID: $ANS-052.S1

VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.859330 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsat.in/hamsat.htm

To know what transponder is switched on please listen for the beacon that is active. Each transponder has a different beacon.
[06252007]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational - Software reload

Current Modes: FM Repeater - V/us
                 BBS   - OFF
                 Telemetry   - OFF

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink: 145.880 MHZ FM
                       145.880 MHz USB
                       145.920 MHz FM

1268.700 MHz FM 67Hz PL tone
Digital Downlinks: 435.150 MHz FM 38k4 Digital, PBP, 1 watt output
435.150 MHz FM 9k6 Digital, Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Digital, Pacsat Broadcast Protocol
1268.700 mhz FM 9k6 PBP Digital
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[01312008]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer
on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on
and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10
minute timer.

[05282007]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Operational - check operational schedule for current times!!

Current Mode: V/u

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage: http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's CW
telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts.htm
[0820007]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear

```
U: Linear

Official Webpage: http://www.ao27.org
[12132007]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: TESTING - VOICE

Current Mode:  V/u

Uplink:         145.900 MHz FM 1200-baud Manchester FSK
                145.920 MHz FM VOICE
                145.940 MHz FM 1200-baud Manchester FSK
                145.960 MHz FM 1200-baud Manchester FSK

Downlink:       437.026 MHz USB VOICE
                                1200-baud PSK

Mode-S Beacon: 2401.1428 MHz

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[01242008]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational depending on amount of Sunlight

Current Mode: Listen before transmitting

Uplink:   145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink:  29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons:   29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW

Official Webpage:
```

http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/

AO-7 Usage Guidelines on the AO-7 Log and Resource Site located at:
http://www.planetemily.com/ao7
[05282007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Mode: FM Repeater - U/v
Voice - Occasianally
BBS - OFF
APRS - OFF
SSTV - OFF

Expedition 16 crew:
Commander: Peggy Whitson
Flight Engineer: Yuri Malenchenko RK3DUP
Flight Engineer: Leopold Eyharts KE5FNO

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM
Worldwide packet downlink: 145.825 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS
RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.
[02212008]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-052.S2
WSR 052 Part 2 02/21/2008

AMSAT NEWS SERVICE BULLETIN 052.S2 FROM AMSAT HQ
SILVER SPRING, MD, February 21, 2008
TO ALL RADIO AMATEURS
BID: $ANS-052.S2

CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.
[11152007]
=====
CP3
Catalog Number: 31128
Launch Date: April 17,2007

Status: Operational

Current Mode: /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[07302007]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: In Orbit

```
Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder:  145.825 Mhz FM
[02052007]
=====
NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Operational

Current Mode: /u

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[10222007]
=====
GENESAT-1 ?O-??
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Current Mode: /u

Telemetry Beacon Downlink: 437.0670 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[01082007]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon:             437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
[03262007]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launched: June 30, 2003

Status: Operational

Current Mode: /u

Beacon:     436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[01082007]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launched: February 21, 2006

Status: Semi-Operational - Constant Carrier only

Uplink:  1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan ? )

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[01082007]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW
[08132007]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational - Softawre Reload
```

```
Current Mode(s): FM Repeater - V/us
                 BBS         - OFF
                 Telemetry   - OFF

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink:   145.880 MHZ FM
                       145.880 MHz USB
                       145.920 MHz FM
                      1268.700 MHz FM 67Hz PL tone
Digital Downlinks:     435.150 MHz FM 38k4 Digital, PBP, 1 watt output
                       435.150 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:        145.860 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      1268.700 mhz FM 9k6 PBP Digital
Beacon:                435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[01312008]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Hibernation until full sunlight in November

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink:        144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[09242007]
=====
GO-32 Gurwin TechSat-1B
```

```
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Current Modes: V/U
               L/U

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[09172007]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational.

Current Mode:  /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon:          435.025 MHz
Mode-S Beacon:     2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[01242008]
=====
RS-22 RADIO SPORT RS-22
Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only

Current Mode:  /u

CW Beacon - 435.352 MHz
```

145.818 MHz
[08062007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Mode: FM Repeater - U/v
Voice - Occasianally
BBS - OFF
APRS - OFF
SSTV - OFF

Expedition 16 crew:
Commander: Peggy Whitson
Flight Engineer: Yuri Malenchenko RK3DUP
Flight Engineer: Leopold Eyharts KE5FNO

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM
Worldwide packet downlink: 145.825 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS
RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line

```
is
NOT translated from Russian and posted.
[02212008]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-052.S3
WSR 052 Part 3 02/21/2008

AMSAT NEWS SERVICE BULLETIN 052.S3 FROM AMSAT HQ
SILVER SPRING, MD, February 21, 2008
TO ALL RADIO AMATEURS
BID: $ANS-052.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

CP4
Catalog Number: 31122
Launch Date: April 17,2007

Status: Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon:    437.325 MHz CW
[11152007]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Non-Operational

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon:             437.2750 MHz CW

Callsign: JR8YJT
[10152007]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency:  437.305
                             2407.250

Official Website: http://www.ncube.no
```

```
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink:        437.250 MHz FM 67Hz CTCSS
Voice Downlink:     2401.835 MHz FM
Packet Up/Downlink:  437.250 MHz 9k6 packet
Packet Downlink     2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non=Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[08132007]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink:   435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Non-Operational

Uplinks:   145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink:  437.325 MHz

Broadcast callsign: MYSAT3-11
BBS:                MYSAT3-12
```

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[007302007]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, callsign KE6QMD, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks

V-band: 145.840 - 145.990 MHz CW/LSB
U-band: 435.550 - 435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks

S2-band: 2401.225 - 2401.475 MHz CW/USB
K-band: 24048.010 - 24048.060 MHz CW/USB
Beacon: 2401.323 MHz
24048.035 MHz

P3-D Telemetry Beacons (IHU)

BEACON	General Beacon (GB)	Middle Beacon (MB)	Engineering Beacon (EB)
2 m	none	145.898 MHz	none
70cm	435.438 MHz	435.588 MHz	435.838 MHz
13cm(1)	2400.188 MHz	2400.338 MHz	2400.588 MHz
13cm(2)	2401.173 MHz	2401.323 MHz	2401.573 MHz
3cm	10450.975 MHz	10451.125 MHz	10451.375 MHz
1.5cm	24047.885 MHz	24048.035 MHz	24048.285 MHz

[07162007]
=====
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site
at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and

the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink: 145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012006]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks: 145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

```
Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
```

```
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
LIBERTAD-1
Catalog Number: 31129
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink:   145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[10222007]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplinks:          145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink:      437.125 MHz
```

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[01222007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink: 145.825 MHz FM 1200 Baud AFSK
Beacon: 2401.220 MHz
[05012006]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink: 145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting): Non-Operational
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet: Non-Operational
Uplink: 145.8500 MHz MFSK 1200 BPS
Uplink: 145.8700 MHz MFSK 1200 BPS
Uplink: 145.8900 MHz MFSK 1200 BPS

Uplink: 145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon: 145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.8500 - 145.9000 MHz SSB/CW
Downlink 29.4000 - 29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink: 29.4500 - 29.5500 MHz SSB/CW
Beacons: 29.450 MHz
          435.100 MHz

```
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon 1:  29.352 MHz (intermittent)
Beacon 2:  29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink:     21.260 to 21.300 MHz CW/USB
Downlink:  145.860 to 145.900 MHz CW/USB

Beacon:    145.860 MHz

Robot:     145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
```

```
Launched: February 5, 1991

Status: Non-operational

Uplink:   21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon:   29.408 MHz

Robot:    29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-052.S4
WSR 052 Part 4 02/21/2008

AMSAT NEWS SERVICE BULLETIN 052.S4 FROM AMSAT HQ
SILVER SPRING, MD, February 21, 2008
TO ALL RADIO AMATEURS
BID: $ANS-052.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE PROPOSED FOR LAUNCH AT
THIS TIME:

Phase 5a Mars Mission
Catalog Number:
Proposed Launch Date: 2009 or 2011

Status: Design Phase

For the latest project status update please visit the AMSAT-DL P5-A web
page:
http://ticket-to-mars.org
[01222007]
=====
PHASE 3E AO-??
Catalog number:
Proposed Launch Date: Late 2007

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web
page:
http://www.amsat-dl.org/p3e/
[01222007]
=====
Eagle AO-??
Catalog Number:
Proposed Launch Date: Early/Mid 2009

Status: Design Phase
```

For the latest project status updates please visit the AMSAT-NA webpage:
http://www.amsat.org
[01222007]
=====
Can X-2
Catalog number:
Proposed Launch Date: March 07, 2008

Status: Waiting for Launch

For the latest project status update please visit the Can X-2 web page:
http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[01172008]
=====
AAUSAT-II
Catalog number:
Proposed Launch Date: March 07, 2008

Status: Waiting for Launch

For the latest project status update please visit the AAUSAT-II web
page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[01172008]
=====
Cute-1.7+APD II
Catalog number:
Proposed Launch Date: March 07, 2008

Status: Waiting for Launch

For the latest project status update please visit the Cute-1.7+APD II
web
page:
http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78
[01172008]
=====
Compass 1
Catalog number:
Proposed Launch Date: March 07, 2008

Status: Waiting for Launch

For the latest project status update please visit the Compass 1 web

page:
http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52
[01172008]
=====
Delfi-C3
Catalog number:
Proposed Launch Date: March 07, 2008

Status: Waiting for Launch

Proposed Frequencies:
* Primary telemetry downlink: 145.870 MHz 1200 Baud BPSK AX.25 400mW
* Backup telemetry downlink: 145.930 MHz 1200 Baud BPSK AX.25 400mW
* Linear transponder passband downlink: 145.880 - 145.920 MHz
(inverting)
  400mW PEP
* Linear transponder passband uplink: 435.570 - 435.530 MHz
* Transponder mode beacon: 145.870 MHz CW (10dB below transponder PEP)

For the latest project status update please visit the Delfi-C3 web page:
http://www.delfic3.nl/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68
[01172008]
=====
Seeds 2
Catalog number:
Proposed Launch Date: March 07, 2008

Status: Waiting for Launch

For the latest project status update please visit the Seeds 2 web page:
http://cubesat.aero.cst.nihon-u.ac.jp/english/main_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36
[01172008]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-052.S5
WSR 052 Part 5 02/21/2008

AMSAT NEWS SERVICE BULLETIN 052.S5 FROM AMSAT HQ
SILVER SPRING, MD, February 21, 2008
TO ALL RADIO AMATEURS
BID: $ANS-052.S5

THE FOLLOWING SATELLITES HAVE DE-ORBITED OR HAVE BEEN RETURNED SAFELY:

NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Operational
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink: 145.825 Mhz FM APRS AX25
APRS Uplink: 145.825 MHz FM APRS AX25
Voice/PSK31 Uplink: 28.120 MHz

Packet to Voice ID: RAFT
[06112007]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

- AMSAT News Service (ANS)
- General satellite discussion (AMSAT-BB)
- Orbit data (KEPS)
- Manned space missions (SAREX)
- District of Columbia area (AMSAT-DC)
- New England area (AMSAT-NE)

- AMSAT Educational Liaison mailing list (AMSAT-EDU)
- AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

```
From 6057094390187735399
X-Google-Thread: 10e8ad,2d0ba2783413acf3,start
X-Google-Thread: 10b9c8,2d0ba2783413acf3,start
X-Google-Attributes: gid10e8ad,gid10b9c8,public,usenet
X-Google-Language: ENGLISH,ASCII
Path: g2news1.google.com!news1.google.com!newsfeed2.dallas1.level3.net!
news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-055 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sun, 24 Feb 2008 17:06:40 EST
Organization: The Radio Amateur Satellite Corporation
Lines: 236
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000901c8772e$dfe50bb0$6701a8c0@familyroom>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;charset="iso-8859-1"
Content-Transfer-Encoding: quoted-printable
X-Trace: reader2.panix.com 1203890801 2372 166.84.1.6 (24 Feb 2008 22:06:41 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 24 Feb 2008 22:06:41 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
```

X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Xref: g2news1.google.com rec.radio.amateur.space:1302 rec.radio.info:686

AMSAT NEWS SERVICE
ANS-055

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* AMSAT Keplerian Data Approval
* Current AMSAT Awards/AMSAT Journal
* Call For European CubeSats on the Vega Maiden Flight
* ARISS Status - 18 February 2008
* OSCAR-11 Report

SB SAT @ AMSAT $ANS-055.01
AMSAT Keplerian Data Approval

AMSAT News Service Bulletin 055.01
   From AMSAT HQ SILVER SPRING, MD.
February 24, 2008
To All RADIO AMATEURS
BID: $ANS-055.01

I am pleased to announce that AMSAT's 2008-2009 request to re-distribute Keplerian elements from US Air Force Space Command (AFSPC) Space-Track web site has been approved.
Our USSTRATCOM Form 1 request to re-distribute the Keps was approved as of February 21, 2008.

This means that AMSAT will continue to distribute the NASA verbose and the two line format keplerian data for another year.
Thanks to AFSPC for their help.

[ANS thanks Ray Hoad for the above information]

/EX

SB SAT @ AMSAT $ANS-055.02
Current AMSAT Awards/AMSAT Journal

AMSAT News Service Bulletin 055.02
From AMSAT HQ SILVER SPRING, MD.
February 24, 2008
To All RADIO AMATEURS
BID: $ANS-055.02

We would like to welcome the following to the satellite community. They have made their first satellite contact and are now members of the AMSAT Satellite Communicators Club.

Keith Schlottman, KR7RK
Kevin Hartley, VE7OVY
Jim Sullivan, WB6TNF

To see all the awards visit http://www.amsat.org or http://www.amsatnet.com

Bruce Paige, KK5DO

AMSAT Director Contests and Awards

ARRL Awards Manager (WAS, 5BWAS, VUCC), VE

Also,
The JAN/FEB Journal was sent to the printer on 2/22/08. Ed, WA4SWJ, does an excellent job of putting together this publication and we thank him for his continuing efforts.

[ANS thanks Bruce, KK5DO & Ed Long, WA4SWJ, for the above information]

/EX

SB SAT @ AMSAT $ANS-055.03
Call For European CubeSats on the Vega Maiden Flight

AMSAT News Service Bulletin 055.03
From AMSAT HQ SILVER SPRING, MD.
February 24, 2008
To All RADIO AMATEURS
BID: $ANS-055.03

Call For European CubeSats on the Vega Maiden Flight

The European Space Agency (ESA) Education Office has the pleasure in issuing a Call For CubeSat Proposals to universities in ESA Member and Cooperating States to participate as an educational payload on the Maiden Flight of the Vega Launcher.

The ESA Education Office recognises the growing importance of CubeSat projects as a key tool in providing university students with a valuable hands-on practical education across all space engineering disciplines from end-to-end through the complete space project lifecycle.

The launch opportunity on the Vega Maiden Flight is offered free of charge for up to 6 CubeSats, with an additional 2 backup CubeSats on stand-by.

Proposals are solicited from interested universities with CubeSat projects of sufficient maturity level to be able to meet the Vega Maiden Flight schedule (current target launch date of December 2008).

Proposals (max. 15 pages) must be submitted via e-mail to:
education@esa.int in PDF or MS Word format by the deadline
of 17 March 2008.

Proposals will be evaluated by the ESA Selection Board and the selected CubeSats will be announced on the ESA Education web portal by 15 April 2008.

Details can be found on-line at:
http://www.esa.int/esaED/SEMSJ8QR4CF_index_0.html

[ANS thanks the European Space Agency for the above information]

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SB SAT @ AMSAT $ANS-055.04
OSCAR-11 Report

AMSAT News Service Bulletin 055.04
From AMSAT HQ SILVER SPRING, MD.
February 24, 2008
To All RADIO AMATEURS
BID: $ANS-055.04

OSCAR-11 Copied But Signal Becomes Intermittent

OSCAR-11 was heard from 22 January to 01 February and from 11 February to 15 February. Signals have been very variable in strength sometimes very strong, sometimes undetectable, even at high elevations. Low signal strength was particularly noticeable at AOS and LOS, and also towards the end of the transmission periods. OSCAR-11 is expected to switch back on under control of its on-board timer around 07 March.

There should be a short period of transmissions before permanent eclipses start in mid March. After March it is unlikely that the satellite will support any sustained period of operation, and will only transmit for a short time, possibly less than a single orbit, every 21 days.

Many thanks to Peter ZL3TC, Chris M0DQO, Tobias DG3LV, Edward BX1AD, Mark KU7Z, Gene WA4UKX, SWL Mark in CM87, Ron G4PGY, Julian WB9YIG and John KB2HSH for their reports.

OSCAR-11 beacon frequency is on 145.826 MHz, AFSK FM ASCII Telemetry.

See http://www.users.zetnet.co.uk/clivew/ for additional information.

[ANS thanks Clive, G3CWV for the above information]

/EX

SB SAT @ AMSAT $ANS-055.05
ARISS Status - 18 February 2008

AMSAT News Service Bulletin 055.05
From AMSAT HQ SILVER SPRING, MD.
February 24, 2008
To All RADIO AMATEURS
BID: $ANS-055.05

ARISS Status Report for the Week of February 18, 2008

1. Upcoming School Contacts

Robespierre Elementary School in Rueil Malmaison, France had an ARISS contact on Thursday, February 21 at 14:21 UTC. Two hundred fifty-six students in grades 1-5 are enrolled at the school. ESA astronaut L�opold Eyharts, FX0STD/KE5FNO, participated in this contact which will was conducted in French.

An ARISS contact is planned for College Reydellet in Saint-Denis, Ile de La R�union on Monday, February 25 at 14:44 UTC. Approximately 550 students, ages 10-17, attend the school. Students contacted Victor Afanassiev on MIR from Tsup, Moscow in September 1999 and the College welcomed Victor Poliakov and Pavel Vinogradov who threw the space model from MIR, and Jean-Lou Chretien , Jean-Pierre and Claudie Haignere. ESA astronaut L�opold Eyharts, FX0STD/KE5FNO, plans to participate in this contact which will be conducted in French.

2. Shukor Debrief Scheduled

An ARISS crew debrief has been scheduled with Dr. Sheikh Muszaphar Shukor, 9W2MUS, on Tuesday, February 26. The first Malaysian space

visitor, Shukor participated in 5 ARISS contacts with students in
Malaysia while onboard the ISS.

3. ARRL Covers Columbus News

The American Radio Relay League (ARRL) posted a W1AW bulletin and a
Web story on the Columbus module with the ARISS antennas. To view t
he story, see: http://www.arrl.org/news/stories/2008/02/14/101/?nc=1

On Friday, February 15, The ARRL Letter also posted the article,
"Astronauts Work on Columbus Lab on the ISS."
See: http://www.arrl.org/arrlletter/08/0215/

4. Amateur Radio Newsline Articles on ARISS

Amateur Radio Newsline's Report 1592, posted on February 15, 2008 ran
two ARISS related articles: "Ham Radio in Space: ISS Repeater Contacts
Good for JAMSAT Award," and "Ham Radio in Space: New ARISS Antennas
Now on the ISS." To view these articles, go to: www.arnewsline.org.

[ANS thanks Carol, KB3LKI, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the
President's Club. Members of the President's Club, as sustaining donors
to AMSAT Project Funds, will be eligible to receive additional benefits.
Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Dee Interdonato, NB2F

From -1783603961207831099
X-Google-Thread: 10e8ad,4dd8dbaff00485f8,start
X-Google-Attributes: gid10e8ad,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news4.google.com!feeder1-2.proxad.net!proxad.net!feeder1-1.proxad.net!club-internet.fr!feedme-small.clubint.net!aioe.org!not-for-mail
From: news@amsat.org (Amsat)
Newsgroups: rec.radio.amateur.space
Subject: EchoLink ARISS Reunion Island ISS contact 25Feb 1441 UTC
Date: Mon, 25 Feb 2008 07:43:28 GMT
Organization: Aioe.org NNTP Server
Lines: 54
Message-ID: <47c2710f.2542270@nntp.aioe.org>
NNTP-Posting-Host: ManaKDDdVlJIzXXwCN4chg.user.aioe.org
Mime-Version: 1.0
Content-Type: text/plain; charset=us-ascii

```
Content-Transfer-Encoding: 7bit
X-Complaints-To: abuse@aioe.org
X-Newsreader: Forte Agent 1.5/32.452
Xref: g2news1.google.com rec.radio.amateur.space:1303
```

EchoLink ARISS Reunion Island ISS contact 25Feb 1441 UTC

EchoLink feed ARISS Reunion Island ISS contact
On Monday, 25 February 2008, starting at approximately 14:44 UTC, there will be a contact between the ISS and the College Reydellet, Saint-Denis, Ile de La Reunion, France.

This is a direct contact with the ham radio ground station FR5CY/P and Leopold Eyharts FX0STD/KE5FNO on the ISS. At this time we believe to get the audio from this contact via Skype to feed into EchoLink. Please join us in listening to this event.

The audio for this event will be fed into the EchoLink *AMSAT* (101 377) and *JK1ZRW* (277 208) servers by Tony VK5ZAI.

Where it looks at this time that we get the audio from this contact via Skype, it is unlikely that the audio from this event will also be fed into the IRLP Discovery Reflector 9010. We hope to have good two way audio from this contact. So far, with previous Skype feed contacts, we had good audio through Skype to get the audio from schools into our EchoLink conference rooms .

French astronaut Leopold Eyharts
As we do normally, as soon as audio is suitable for transmission over amateur radio, we may be able to start feeding audio of set up activities from about 10 to 25 minutes prior to the start of the actual contact into EchoLink for listeners who enjoy listening in on these proceedings.

Please note that there are automatic breaks in the audio transmission every 2.5 minutes during the event and while we listen to preparations going on for this contact. Each audio break is approximately 1 second long. Please configure your systems to not time out during times of inactivity or ongoing audio transmissions.

For everyone's information and future reference. When any ARISS event can be supported through the IRLP "Discovery" Reflector 9010, audio is automatically streamed to the Internet.

It is then available via the "Discovery" Reflectors companion web site www.discoveryreflector.ca . Once on its main page, select "Live Streaming Audio" (left side bar) and follow the prompts.

More directly the URL is as follows:
www.discoveryreflector.ca:8000/listen.pls

The audio on the Internet is typically delayed by about two minutes.

```
From -3934501284947492141
X-Google-Thread: 10e8ad,94b856df478ad0a9,start
X-Google-Thread: 10b9c8,94b856df478ad0a9,start
X-Google-Attributes: gid10e8ad,gid10b9c8,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!newsfeed2.dallas1.level3.net!
news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-059 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Thu, 28 Feb 2008 08:09:02 EST
Organization: The Radio Amateur Satellite Corporation
Lines: 1392
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <001201c87a0b$10f0bae0$6701a8c0@familyroom>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix1.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader2.panix.com 1204204142 324 166.84.1.1 (28 Feb 2008 13:09:02 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Thu, 28 Feb 2008 13:09:02 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Xref: g2news1.google.com rec.radio.amateur.space:1304 rec.radio.info:689
```

This report is organized into FIVE parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites
Part 5 (S5) - deorbited/returned satellites

SB SAT @ AMSAT W8ISS ANS-059.S1
WSR 059 Part 1 02/28/2008

AMSAT NEWS SERVICE BULLETIN 059.S1 FROM AMSAT HQ
SILVER SPRING, MD, February 28, 2008
TO ALL RADIO AMATEURS
BID: $ANS-059.S1

VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.859330 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsat.in/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is
active. Each transponder has a different beacon.
[06252007]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational - Software reload

```
Current Modes:   FM Repeater - V/us
                 BBS         - OFF
                 Telemetry   - OFF

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink:   145.880 MHZ FM
```

```
                       145.880 MHz USB
                       145.920 MHz FM
                      1268.700 MHz FM 67Hz PL tone
Digital Downlinks:     435.150 MHz FM 38k4 Digital, PBP, 1 watt output
                       435.150 MHz FM 9k6 Digital, Pacsat Broadcast Protocol
                      2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:        145.860 MHz FM 9k6 Digital, Pacsat Broadcast Protocol
                      1268.700 mhz FM 9k6 PBP Digital
Beacon:                435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[01312008]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Current Mode: V/u

Uplink:   145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer
   on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater
on
   and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10
   minute timer.
[05282007]
=====
```

FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Operational - check operational schedule for current times!!

Current Mode: V/u

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage: http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts.htm
[0820007]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

```
Official Webpage: http://www.ao27.org
[12132007]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: TESTING - VOICE

Current Mode:  V/u

Uplink:         145.900 MHz FM 1200-baud Manchester FSK
                145.920 MHz FM VOICE
                145.940 MHz FM 1200-baud Manchester FSK
                145.960 MHz FM 1200-baud Manchester FSK

Downlink:       437.026 MHz USB VOICE
                                1200-baud PSK

Mode-S Beacon: 2401.1428 MHz

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[01242008]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational depending on amount of Sunlight

Current Mode: Listen before transmitting

Uplink:   145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink:  29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons:   29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php
```

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/

AO-7 Usage Guidelines on the AO-7 Log and Resource Site located at:
http://www.planetemily.com/ao7
[05282007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Mode: FM Repeater - U/v
Voice - Occasianally
BBS - OFF
Packet/APRS - ON
SSTV - OFF

Expedition 16 crew:

Commander:	Peggy Whitson	
Flight Engineer:	Yuri Malenchenko	RK3DUP
Flight Engineer:	Leopold Eyharts	KE5FNO

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM
Worldwide packet downlink: 145.825 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:

German:	DP0ISS
Russian:	RS0ISS RZ3DZR
USA:	NA1SS
Packet Mailbox:	RS0ISS-11
Packet Keyboard:	RS0ISS-3
Digipeater callsign:	ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com

APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line is
NOT translated from Russian and posted.
[02282008]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-059.S2
WSR 059 Part 2 02/28/2008

AMSAT NEWS SERVICE BULLETIN 059.S2 FROM AMSAT HQ
SILVER SPRING, MD, February 28, 2008
TO ALL RADIO AMATEURS
BID: $ANS-059.S2

CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.
[11152007]
=====
CP3
Catalog Number: 31128
Launch Date: April 17,2007

Status: Operational

Current Mode: /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[07302007]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: In Orbit

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM

```
Voice Recorder:  145.825 Mhz FM
[02052007]
=====
NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Operational

Current Mode: /u

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[10222007]
=====
GENESAT-1 ?O-??
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Current Mode: /u

Telemetry Beacon Downlink: 437.0670 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[01082007]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon:             437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
[03262007]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launched: June 30, 2003
```

```
Status: Operational

Current Mode: /u

Beacon:     436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[01082007]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launched: February 21, 2006

Status: Semi-Operational - Constant Carrier only

Uplink:  1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan ? )

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[01082007]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW
[08132007]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational - Softawre Reload

Current Mode(s): FM Repeater - V/us
                 BBS         - OFF
                 Telemetry   - OFF

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink:   145.880 MHZ FM
                       145.880 MHz USB
                       145.920 MHz FM
                      1268.700 MHz FM 67Hz PL tone
Digital Downlinks:     435.150 MHz FM 38k4 Digital, PBP, 1 watt output
                       435.150 MHz FM 9k6 Digital, Pacsat Broadcast Protocol
                      2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:        145.860 MHz FM 9k6 Digital, Pacsat Broadcast Protocol
                      1268.700 mhz FM 9k6 PBP Digital
Beacon:                435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[01312008]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Hibernation until full sunlight in November

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink:        144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[09242007]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational
```

```
Current Modes: V/U
               L/U

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[09172007]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational.

Current Mode:  /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon:          435.025 MHz
Mode-S Beacon:     2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[01242008]
=====
RS-22 RADIO SPORT RS-22
Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only

Current Mode:  /u

CW Beacon - 435.352 MHz
            145.818 MHz
[08062007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
```

Launch date: November 20, 1998

Status: Operational

Current Mode: FM Repeater - U/v
Voice - Occasianally
BBS - OFF
Packet/APRS - ON
SSTV - OFF

Expedition 16 crew:
Commander: Peggy Whitson
Flight Engineer: Yuri Malenchenko RK3DUP
Flight Engineer: Leopold Eyharts KE5FNO

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM
Worldwide packet downlink: 145.825 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS
RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line is NOT translated from Russian and posted.
[02282008]
NNNN
/EX

```
SB SAT @ AMSAT W8ISS $ANS-059.S3
WSR 059 Part 3 02/28/2008

AMSAT NEWS SERVICE BULLETIN 059.S3 FROM AMSAT HQ
SILVER SPRING, MD, February 28, 2008
TO ALL RADIO AMATEURS
BID: $ANS-059.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

CP4
Catalog Number: 31122
Launch Date: April 17,2007

Status: Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon:    437.325 MHz CW
[11152007]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Non-Operational

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon:             437.2750 MHz CW

Callsign: JR8YJT
[10152007]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency:  437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005
```

Status: Non-operational

Voice Uplink: 437.250 MHz FM 67Hz CTCSS
Voice Downlink: 2401.835 MHz FM
Packet Up/Downlink: 437.250 MHz 9k6 packet
Packet Downlink   2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non=Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[08132007]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Non-Operational

Uplinks: 145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a

collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[007302007]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

```
Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink:   145.945 MHz UI Digipeater
Digi Callsign: KE6QMD
```

Everyone is welcome to use the digipeating/APRS features of Sapphire, call-sign KE6QMD, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

```
Broadcast Callsign: SASAT2-11
BBS:                SASAT2-12
```

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

```
Uplink:   145.850 MHz
Downlink: 436.775 MHz
```

```
Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12
```

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks

V-band: 145.840 - 145.990 MHz CW/LSB
U-band: 435.550 - 435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks

S2-band: 2401.225 - 2401.475 MHz CW/USB
K-band: 24048.010 - 24048.060 MHz CW/USB
Beacon: 2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)

BEACON	General Beacon (GB)	Middle Beacon (MB)	Engineering Beacon (EB)
2 m	none	145.898 MHz	none
70cm	435.438 MHz	435.588 MHz	435.838 MHz
13cm(1)	2400.188 MHz	2400.338 MHz	2400.588 MHz
13cm(2)	2401.173 MHz	2401.323 MHz	2401.573 MHz
3cm	10450.975 MHz	10451.125 MHz	10451.375 MHz
1.5cm	24047.885 MHz	24048.035 MHz	24048.285 MHz

[07162007]
=====
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web site at the following URL:

```
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater:         436.250 MHz

Uplinks: Mode B Repeater:  145.825 MHz
Mode J Digipeater:         145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink:   145.925 MHz 9600 baud FSK
```

```
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign:       POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012006]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM
```

```
Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB
```

```
Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
LIBERTAD-1
Catalog Number: 31129
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink:   145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[10222007]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplinks:          145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink:      437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[01222007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990
```

```
Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
[05012006]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet: Non-Operational
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational
```

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon: 145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.8500 - 145.9000 MHz SSB/CW
Downlink 29.4000 - 29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink: 29.4500 - 29.5500 MHz SSB/CW
Beacons: 29.450 MHz
          435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III

```
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon 1:  29.352 MHz (intermittent)
Beacon 2:  29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink:     21.260 to 21.300 MHz CW/USB
Downlink:  145.860 to 145.900 MHz CW/USB

Beacon:    145.860 MHz

Robot:     145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink:   21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon:   29.408 MHz

Robot:    29.454 MHz
[05232004]
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```

SB SAT @ AMSAT W8ISS $ANS-059.S4
WSR 059 Part 4 02/28/2008

AMSAT NEWS SERVICE BULLETIN 059.S4 FROM AMSAT HQ
SILVER SPRING, MD, February 28, 2008
TO ALL RADIO AMATEURS
BID: $ANS-059.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE PROPOSED FOR LAUNCH AT THIS TIME:

Phase 5a Mars Mission
Catalog Number:
Proposed Launch Date: 2009 or 2011

Status: Design Phase

For the latest project status update please visit the AMSAT-DL P5-A web page:
http://ticket-to-mars.org
[01222007]
=====
PHASE 3E AO-??
Catalog number:
Proposed Launch Date: Late 2007

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/
[01222007]
=====
Eagle AO-??
Catalog Number:
Proposed Launch Date: Early/Mid 2009

Status: Design Phase

For the latest project status updates please visit the AMSAT-NA webpage:
http://www.amsat.org
[01222007]
=====
Can X-2
Catalog number:
Proposed Launch Date: March 07, 2008

Status: Waiting for Launch

For the latest project status update please visit the Can X-2 web page:
http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[01172008]
=====
AAUSAT-II
Catalog number:
Proposed Launch Date: March 07, 2008

Status: Waiting for Launch

For the latest project status update please visit the AAUSAT-II web page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[01172008]
=====
Cute-1.7+APD II
Catalog number:
Proposed Launch Date: March 07, 2008

Status: Waiting for Launch

For the latest project status update please visit the Cute-1.7+APD II web page:
http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78
[01172008]
=====
Compass 1
Catalog number:
Proposed Launch Date: March 07, 2008

Status: Waiting for Launch

For the latest project status update please visit the Compass 1 web page:
http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52
[01172008]
=====
Delfi-C3
Catalog number:
Proposed Launch Date: March 07, 2008

Status: Waiting for Launch

Proposed Frequencies:
* Primary telemetry downlink: 145.870 MHz 1200 Baud BPSK AX.25 400mW
* Backup telemetry downlink: 145.930 MHz 1200 Baud BPSK AX.25 400mW

* Linear transponder passband downlink: 145.880 - 145.920 MHz (inverting)
  400mW PEP
* Linear transponder passband uplink: 435.570 - 435.530 MHz
* Transponder mode beacon: 145.870 MHz CW (10dB below transponder PEP)

For the latest project status update please visit the Delfi-C3 web page:
http://www.delfic3.nl/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68
[01172008]
=====
Seeds 2
Catalog number:
Proposed Launch Date: March 07, 2008

Status: Waiting for Launch

For the latest project status update please visit the Seeds 2 web page:
http://cubesat.aero.cst.nihon-u.ac.jp/english/main_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36
[01172008]
NNNN
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SB SAT @ AMSAT W8ISS $ANS-059.S5
WSR 059 Part 5 02/28/2008

AMSAT NEWS SERVICE BULLETIN 059.S5 FROM AMSAT HQ
SILVER SPRING, MD, February 28, 2008
TO ALL RADIO AMATEURS
BID: $ANS-059.S5

THE FOLLOWING SATELLITES HAVE DE-ORBITED OR HAVE BEEN RETURNED SAFELY:

NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Operational
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink: 145.825 Mhz FM APRS AX25
APRS Uplink: 145.825 MHz FM APRS AX25
Voice/PSK31 Uplink: 28.120 MHz

Packet to Voice ID: RAFT
[06112007]
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ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen,

G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

From 9087051325386455508
X-Google-Thread: 10e8ad,c024e5baea4c6b7e,start
X-Google-Thread: 10b9c8,c024e5baea4c6b7e,start
X-Google-Attributes: gid10e8ad,gid10b9c8,public,usenet
X-Google-Language: ENGLISH,ASCII
Path: g2news1.google.com!news2.google.com!newsfeed.stanford.edu!bloom-beacon.mit.edu!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-062 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Mon, 3 Mar 2008 16:11:25 EST
Organization: The Radio Amateur Satellite Corporation
Lines: 380
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <001201c87d5a$c8af00e0$6701a8c0@familyroom>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;charset="iso-8859-1"
Content-Transfer-Encoding: quoted-printable
X-Trace: reader2.panix.com 1204578685 7373 166.84.1.6 (3 Mar 2008 21:11:25 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Mon, 3 Mar 2008 21:11:25 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to   rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to   rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Xref: g2news1.google.com rec.radio.amateur.space:1305 rec.radio.info:696

AMSAT NEWS SERVICE
ANS-062

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating

through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:

* Reminder - AMSAT-DC Meeting on March 15
* 2007 Symposium DVD Now in the AMSAT Store
* AO-51 Schedule Update
* IEEE Student Microwave PA Design Competition
* MicroHAMS Digital Conference 2008 Announcement
* Satellite Activity Planned for Swan Island DXpedition
* WorkedGrids Software Released
* PCSAT Re-Enters Eclipse
* ARISS Status Report for the Week of February 25, 2008

SB SAT @ AMSAT $ANS-062.01
Reminder - AMSAT-DC Meeting on March 15

AMSAT News Service Bulletin 062.01
>From AMSAT HQ SILVER SPRING, MD.
March 2, 2008
To All RADIO AMATEURS
BID: $ANS-062.01

2008 AMSAT-DC MEETING AND SPACE SEMINAR

WHO: YOU are invited! Amateur radio operators, students, educators and the public are all invited.

WHAT: Talks, demos, tutorials and socializing about amateur satellites and high-altitude balloon experiments in the greater mid-Atlantic USA area. A full day of activities!

WHEN: Saturday, March 15, 2008, starting at 11:00 A.M. local.

WHERE: Historical Electronics Museum (HEM) at 1745 West Nursery Road, Linthicum, Maryland 21090 (near BWI airport). In Pioneer Hall. HEM directions at http://www.hem-usa.org/

WHY: Fun, education, public service, training, cool stuff, and more fun.

HOW: Talk-in on 146.760 MHz (107.2 Hz PL on some receiver sites)

HOST: Pat Kilroy, n8pk@amsat.org or Patrick.L.Kilroy@nasa.gov

WEB: Check the AMSAT-DC page http://patkilroy.com/amsat-dc/ for late breaking news.

[ANS thanks Pat, N8PK for the above information]

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SB SAT @ AMSAT $ANS-062.02
2007 Symposium DVD Now in the AMSAT Store

AMSAT News Service Bulletin 062.02
>From AMSAT HQ SILVER SPRING, MD.
March 2, 2008
To All RADIO AMATEURS
BID: $ANS-062.02

Bruce, KK5DO, AMSAT Store Manager is quite pleased to announce a new item just added to the AMSAT store. It is the long awaited 2007 AMSAT Symposium DVD. To order yours contact Martha at the AMSAT office, telephone 301 589-6062.

This is a must for anyone that was not able to attend the 2007 AMSAT Symposium in Pittsburgh or those that attended who would like the Symposium on DVD.

This DVD has all of the 2007 papers, PowerPoints and audio of the presentations. Additional features of this DVD are the Symposium papers from 2004 and 2005, ISS Columbus module video and much more.

[ANS thanks Bruce, KK5DO for the above information]

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SB SAT @ AMSAT $ANS-062.03
AO-51 Schedule Update

AMSAT News Service Bulletin 062.03
>From AMSAT HQ SILVER SPRING, MD.
March 2, 2008
To All RADIO AMATEURS
BID: $ANS-062.03

The March 2008 AO-51 schedule isn't on the web site yet but will be soon. The Operations Team has changed the links on the AO-51 page.

The AO-51 News and Text Schedule link will give you the most up to date information about the AO-51 schedule.

The Control Team Operating Schedule Grid link will take you the operating grid page, but many of the modes we are running can't be programmed into the grid yet and therefore the grid can't be displayed. We are working on changing the software to display the new modes in the grid format.

[ANS thanks Gould, WA4SXM and the AO-51 Operations Team for the above information]

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SB SAT @ AMSAT $ANS-062.04
IEEE Student Microwave PA Design Competition

AMSAT News Service Bulletin 062.04
>From AMSAT HQ SILVER SPRING, MD.
March 2, 2008
To All RADIO AMATEURS
BID: $ANS-062.04

MTT-5 (High Power Amplifier Components) is pleased to announce the Fourth High Efficiency Power Amplifier Competition, which will take place at the IEEE MTT-S International Microwave Symposium (IMS), in 2008.

This competition is open to all students and graduate students registered at an educational establishment. The competitors are required to design, construct, and measure a high efficiency power amplifier, at a frequency of their choice above 1 GHz but less than 20 GHz, and having an output power level of at least 5 watts, but less than 100 watts. The winner will be judged on the design, which demonstrates the highest power added efficiency (PAE).

The power amplifiers must be brought to IMS2008 where they will be tested to verify their performance. A representative of the design group must be present at the testing to assist with the evaluation. The winner will receive a prize of $1,000, and will be invited to submit a paper describing the design for the MTT Microwaves Magazine.

Questions can be sent to Dr. Kiki Ikossi at <ikossi@ieee.org>
The power amplifier (PA) design may use any type of technology, but must be the result of student effort both in the amplifier design and fabrication.

See: http://www.ims2008.org/publications/PA-POSTER08-RevA.pdf

[ANS thanks Art, W4ART for the above information]

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SB SAT @ AMSAT $ANS-062.05
MicroHAMS Digital Conference 2008 Announcement

AMSAT News Service Bulletin 062.05
>From AMSAT HQ SILVER SPRING, MD.
March 2, 2008

To All RADIO AMATEURS
BID: $ANS-062.05

Announcing the second annual MicroHAMS Digital Conference! The event will be held this year on the main Microsoft campus located in Redmond, WA on March 22nd, 2008.

The agenda this year will include a wide variety of topics around digital communications and Amateur radio. Lunch and snacks are included with the price of the conference and we'll have free Internet access.

Because of space limitations and parking requirements on the Microsoft campus, we are strongly suggesting pre-registering for the event. Registration is $12.00 if done prior to the event and will be $15.00 at the door. Door Prizes include donations from Icom and MicroHAMS.

Event Details
Date/Time: March 22, 2008 09:00 to 17:00
Location: Redmond, WA (Building 122 on the Microsoft Corporate Campus)
Lunch: Sub sandwiches and snacks (included with registration fee)
Cost: $12.00 if pre-paid or $15.00 at the door.

Registration: http://www.microhams.com/digitalconference

[ANS thanks Bob, W7LRD for the above information]

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SB SAT @ AMSAT $ANS-062.06
Satellite Activity Planned for Swan Island DXpedition

AMSAT News Service Bulletin 062.06
>From AMSAT HQ SILVER SPRING, MD.
March 2, 2008
To All RADIO AMATEURS
BID: $ANS-062.06

Bill, NZ5N says that HQ8R will be operating on the satellites from Swan Island, grid EK87, from March 15-23. See http://www.hondurasdx.com/

Bill will be taking his FT-817 and an Arrow antenna. Time permitting, he will also try to make a few contacts before and after the expedition from the Honduran mainland (Grids: EK55, EK65 and EK75). Weather permitting, he may also try to give out EK76 from the boat on the way to and from the island.

[ANS thanks Bill, NZ5N for the above information]

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SB SAT @ AMSAT $ANS-062.07

WorkedGrids Software Released

AMSAT News Service Bulletin 062.07
>From AMSAT HQ SILVER SPRING, MD.
March 2, 2008
To All RADIO AMATEURS
BID: $ANS-062.07

Bert, VE2ZAZ released WorkedGrids, ham log grid square mapping software this week. It is freeware and it runs under Windows. The program displays a map showing the amateur radio grid squares contacted and logged in using third-party logging program.

WorkedGrids uses colors to display information on a per-band basis. Up to four bands can be displayed concurrently on the map. The program reads plain-text (ASCII) log files generated by most logging programs.

The software is directed towards the VHF and above operators who collect grid squares for contesting or award purposes. It is designed to supplement a logging program and it replaces the pen and paper technique for marking worked grid squares.

Please visit http://ve2zaz.net for more details. Your input is welcome!

[ANS thanks Bert, VE2ZAZ for the above information]

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SB SAT @ AMSAT $ANS-062.08
PCSAT Re-Enters Eclipse

AMSAT News Service Bulletin 062.08
>From AMSAT HQ SILVER SPRING, MD.
March 2, 2008
To All RADIO AMATEURS
BID: $ANS-062.08

PCSAT-1 was fully operational from 8 to about 23 Feb 2008 during full sun oribts. PCSAT has re-entered eclipses which marks the end February's Satellite Simulated Emergency Test. Bob, WB4APR received 31 reports of AMSAT users sending their SSET Email and receiving it.

When the 145.825 MHz RS0ISS-4 packet digipeater is active aboard the ISS users can continue to send SSET test e-mail messages. PCSAT does work for a few lucky packets during mid-day passes. The next full sun operating period will not occur until the Fall.

See: http://www.ew.usna.edu/~bruninga/sset.html for more information on how you can participate in SSET.

[ANS thanks Bob, WB4APR for the above information]

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SB SAT @ AMSAT $ANS-062.09
ARISS Status Report for the Week of February 25, 2008

AMSAT News Service Bulletin 062.09
>From AMSAT HQ SILVER SPRING, MD.
March 2, 2008
To All RADIO AMATEURS
BID: $ANS-062.09

1. School Contacts

An ARISS contact took place with College Reydellet in Saint-Denis, Ile de La R�union on Monday, February 25. Approximately 550 students, ages 10-17, attend the school. ESA astronaut L�opold Eyharts, FX0STD /KE5FNO, participated in this contact which was conducted in French.

An ARISS contact has been scheduled for Lyc�e de la Borde Basse in Castres, France on Wednesday, March 5. In preparation for the contact, teachers will focus on science applications and the ISS. Activities planned include a visit to the Cit� de l�espace in Toulouse and a meeting with a scientist residing in Castres, founder of the �Terre et Espace� association (Earth & Space), who has volunteered to give a presentation to the students on work in space and astronaut training techniques. Students will be divided into different study groups according to personal interest in various related subjects such as the implementation and launch of ISS space modules, re-supply missions, life in micro-gravitational environments and experiments carried out onboard the ISS. Students will prepare questions in French and English on various subjects. ESA astronaut L�opold Eyharts, FX0STD/KE5FNO, plans

to participate in this contact.

2. Robspierre School Contact Successful

On Thursday, February 21, students at Robespierre Elementary School in Rueil Malmaison, France experienced an ARISS contact. Sixteen students asked one question each of ESA astronaut L�opold Eyharts, FX0STD/KE5FNO.
Approximately two hundred students, teachers, parents and others in the community attended. Prior to the contact, talks were given to the students about space, the Columbus module, amateur radio, AMSAT-France and ARISS. The national newspapers France Soir, le Parisien and Espace Magazine, and radio and television stations France Inter, RTL, Europe 1 covered the news.

3. ESA Press Release on Eyharts - ARISS Contacts

The European Space Agency (ESA) announced the ARISS contacts that ESA astronaut Leopold Eyharts will participate in. The notice was posted

on its Web site. See:
http://www.esa.int/SPECIALS/Columbus_Blog/SEM1JYVHJCF_0.html

4. ARISS International Team Meeting Held

On February 19, the monthly ARISS Team teleconference was held. Topics of discussion included the upcoming ARISS Face to Face Meeting, the Amateur Radio Working Group (ARWG) and SuitSat-2. Minutes have been posted to the ARISS Web site. See: http://www.rac.ca/ariss/arisstel2008-02-19.htm

5. ARISS Presentation at Embedded Systems Conference

ARISS member Steve Bible, N7HPR, will present the amateur radio satellite SuitSat-1 as a �teardown� subject for the Embedded Systems Conference in San Jose, California on April 16, 2008. He will also speak on the current development of SuitSat-2. See:
http://www.cmp-egevents.com/web/esv/event-highlights/teardowns?cid=ESCWK8

6. ARISS � One Reason to Love the ISS

On February 14, Universe Today published an article, �I Heart the ISS: Ten Reasons to Love the International Space Station.� Reason number 6 cites ARISS and EarthKAM as educational programs that the general public can participate in. See:
http://www.universetoday.com/2008/02/14/i-heart-the-iss-ten-reasons-to-love-the-international-space-station/

7. Crew Debrief Sessions

Two ISS crewmembers will participate in ARISS debrief sessions during the upcoming week. Space visitor Dr. Sheikh Muszaphar Shukor, 9W2MUS, is scheduled for Tuesday, February 26, and astronaut Dan Tani will participate in a short session on February 29.

[ANS thanks Carol, KB3LKI for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,

JoAnne Maenpaa, K9JKM

```
From 3667824313657730067
X-Google-Thread: 10bf43,abaff38babfe63e8,start
X-Google-Thread: 10e8ad,abaff38babfe63e8,start
X-Google-Attributes: gid10bf43,gid10e8ad,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!news1.google.com!news.glorb.com!
hwmnpeer01.lga!news.highwinds-media.com!hw-filter.lga!newsfe20.lga.POSTED!
53ab2750!not-for-mail
From: "Webmaster" <webmaster@oaklanesoftware.com>
Newsgroups:
rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.amateur.spacerec.radio.
scanner,rec.radio.amateur.swap
Subject: Amateur Radio License Exam Preparation Software
Lines: 24
MIME-Version: 1.0
Content-Type: text/plain;
     format=flowed;
     charset="iso-8859-1";
     reply-type=original
Content-Transfer-Encoding: 7bit
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Windows Mail 6.0.6000.16480
X-MimeOLE: Produced By Microsoft MimeOLE V6.0.6000.16545
Message-ID: <RSszj.11477$QC.7028@newsfe20.lga>
NNTP-Posting-Host: 68.229.151.165
X-Complaints-To: newsmaster@cox.net
X-Trace: newsfe20.lga 1204705841 68.229.151.165 (Wed, 05 Mar 2008 01:30:41 MST)
NNTP-Posting-Date: Wed, 05 Mar 2008 01:30:41 MST
Organization: Cox
Date: Wed, 5 Mar 2008 02:30:48 -0600
Xref: g2news1.google.com rec.radio.amateur.policy:110968
rec.radio.amateur.space:1306
```

Amateur Radio License Exam Preparation Software
Getting your Amateur Radio License has never been easier. Effective February 23, 2007 the FCC removed the Morse Code requirements for all Amateur Radio License Classes . Since that date, applicants for a Technician, General or Extra Class Amateur Radio License no longer have to demonstrate proficiency in Morse Code. You just have to pass the applicable written examination.

That's where we come in. Our amateur radio license exam preparation software serves as a training aid to help amateurs and prospective amateurs pass the Volunteer Examiner Coordinator's (VEC's) administered exam. When you can consistently pass the exams given by our exam preparation software, you will almost certainly pass an actual Volunteer Examiner Coordinator's (VEC's) administered exam.

Our amateur radio license exam preparation software uses the latest officially released Volunteer Examiner Coordinator's (VEC's) approved question pools. The program breaks the test into different sub-element. Integrated into the software are illustrations and Part 97 rules pertaining to the current question. The program tracks the progress of the tests taken. Once you have mastered each sub-element you are ready for the officially administered exam.

Visit our web site at http://www.oaklanesoftware.com

```
From -8767056363296003O9
X-Google-Thread: 10e8ad,f0346e2b95a9ed2f,start
X-Google-Thread: 10b9c8,f0346e2b95a9ed2f,start
X-Google-Attributes: gid10e8ad,gid10b9c8,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!newsfeed2.dallas1.level3.net!
news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-066 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Fri, 7 Mar 2008 09:31:49 EST
Organization: The Radio Amateur Satellite Corporation
Lines: 1412
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000001c8805f$f5a55240$6701a8c0@familyroom>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix3.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader2.panix.com 1204900310 18168 166.84.1.3 (7 Mar 2008 14:31:50 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Fri, 7 Mar 2008 14:31:50 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Xref: g2news1.google.com rec.radio.amateur.space:1307 rec.radio.info:702
```

This report is organized into FIVE parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites

Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites
Part 5 (S5) - deorbited/returned satellites

SB SAT @ AMSAT W8ISS ANS-066.S1
WSR 066 Part 1 03/06/2008

AMSAT NEWS SERVICE BULLETIN 066.S1 FROM AMSAT HQ
SILVER SPRING, MD, March 06, 2008
TO ALL RADIO AMATEURS
BID: $ANS-066.S1

VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.859330 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsat.in/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is
active. Each transponder has a different beacon.
[06252007]

=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational - Software reload

```
Current Modes:   FM Repeater - V/us
                 BBS         - OFF
                 Telemetry   - OFF
```

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.880 MHZ FM
145.880 MHz USB
145.920 MHz FM
1268.700 MHz FM 67Hz PL tone
Digital Downlinks: 435.150 MHz FM 38k4 Digital, PBP, 1 watt output
435.150 MHz FM 9k6 Digital, Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Digital, Pacsat Broadcast Protocol
1268.700 mhz FM 9k6 PBP Digital
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[01312008]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer
on board the spacecraft.

2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the
repeater on
   and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset
the 10
   minute timer.
[05282007]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Operational - check operational schedule for current times!!

Current Mode: V/u

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage: http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's CW
telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts.htm
[0820007]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Current Mode: V/u

```
Uplink:   145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[12132007]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: TESTING - VOICE

Current Mode:  V/u

Uplink:         145.900 MHz FM 1200-baud Manchester FSK
                145.920 MHz FM VOICE
                145.940 MHz FM 1200-baud Manchester FSK
                145.960 MHz FM 1200-baud Manchester FSK

Downlink:       437.026 MHz USB VOICE
                                1200-baud PSK

Mode-S Beacon: 2401.1428 MHz

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[01242008]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational depending on amount of Sunlight

Current Mode: Listen before transmitting

Uplink:   145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink:  29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
```

Beacons: 29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/

AO-7 Usage Guidelines on the AO-7 Log and Resource Site located at:
http://www.planetemily.com/ao7
[05282007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Mode: FM Repeater - U/v
              Voice -   Occasianally
              BBS -   OFF
              Packet/APRS - ON
              SSTV -   OFF

Expedition 16 crew:
Commander: Peggy Whitson
Flight Engineer: Yuri Malenchenko   RK3DUP
Flight Engineer: Leopold Eyharts   KE5FNO

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM
Worldwide packet downlink: 145.825 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS

```
                     RZ3DZR
USA:                 NA1SS
Packet Mailbox:      RS0ISS-11
Packet Keyboard:     RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.
[02282008]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-066.S2
WSR 066 Part 2 03/06/2008

AMSAT NEWS SERVICE BULLETIN 066.S2 FROM AMSAT HQ
SILVER SPRING, MD, March 06, 2008
TO ALL RADIO AMATEURS
BID: $ANS-066.S2

CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode:  /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon:    435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.
[11152007]
=====
CP3
Catalog Number: 31128
Launch Date: April 17,2007

Status: Operational

Current Mode:  /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[07302007]
=====
```

PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: In Orbit

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder: 145.825 Mhz FM
[02052007]
=====
NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Operational

Current Mode: /u

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[10222007]
=====
GENESAT-1 ?O-??
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Current Mode: /u

Telemetry Beacon Downlink: 437.0670 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[01082007]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon: 437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
[03262007]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launched: June 30, 2003

Status: Operational

Current Mode: /u

Beacon: 436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[01082007]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launched: February 21, 2006

Status: Semi-Operational - Constant Carrier only

Uplink: 1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan ?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[01082007]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW
[08132007]

```
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational - Softawre Reload

Current Mode(s): FM Repeater - V/us
                 BBS         - OFF
                 Telemetry   - OFF

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink:   145.880 MHZ FM
                       145.880 MHz USB
                       145.920 MHz FM
                      1268.700 MHz FM 67Hz PL tone
Digital Downlinks:     435.150 MHz FM 38k4 Digital, PBP, 1 watt output
                       435.150 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:        145.860 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      1268.700 mhz FM 9k6 PBP Digital
Beacon:                435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[01312008]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Hibernation until full sunlight in November

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink:        144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org
```

```
aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[09242007]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Current Modes: V/U
               L/U

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[09172007]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational.

Current Mode:  /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon:          435.025 MHz
Mode-S Beacon:     2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[01242008]
=====
RS-22 RADIO SPORT RS-22
Catalog number: 27939
Launch Date: September 27, 2003
```

```
Status: Operational - 70cm cw only

Current Mode:  /u

CW Beacon - 435.352 MHz
            145.818 MHz
[08062007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Mode: FM Repeater - U/v
              Voice -       Occasianally
              BBS -         OFF
              Packet/APRS - ON
              SSTV -        OFF

Expedition 16 crew:
Commander:          Peggy Whitson
Flight Engineer:    Yuri Malenchenko      RK3DUP
Flight Engineer:    Leopold Eyharts       KE5FNO

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink:   145.825 MHz FM
Worldwide packet downlink: 145.825 Mhz FM

Voice:
Region 1 voice uplink:   145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink:      145.800 MHz FM

Crossband Repeater:
Repeater Uplink:         437.800 MHz FM
Repeater Downlink:       145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German:              DP0ISS
Russian:             RS0ISS
                     RZ3DZR
USA:                 NA1SS
Packet Mailbox:      RS0ISS-11
Packet Keyboard:     RS0ISS-3
Digipeater callsign: ARISS
```

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.
[02282008]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-066.S3
WSR 066 Part 3 03/06/2008

AMSAT NEWS SERVICE BULLETIN 066.S3 FROM AMSAT HQ
SILVER SPRING, MD, March 06, 2008
TO ALL RADIO AMATEURS
BID: $ANS-066.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

CP4
Catalog Number: 31122
Launch Date: April 17,2007

Status: Operational

Current Mode: /u

```
TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon:    437.325 MHz CW
```

[11152007]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Non-Operational

Current Mode: /u

```
Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon:             437.2750 MHz CW
```

Callsign: JR8YJT
[10152007]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

```
Proposed Callsign: TBA
Proposed Transmit Frequency:  437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink:        437.250 MHz FM 67Hz CTCSS
Voice Downlink:     2401.835 MHz FM
Packet Up/Downlink:  437.250 MHz 9k6 packet
Packet Downlink     2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non=Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[08132007]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink:   435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Non-Operational
```

Uplinks: 145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[007302007]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, callsign KE6QMD, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545

Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks

V-band: 145.840 - 145.990 MHz CW/LSB
U-band: 435.550 - 435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks

S2-band: 2401.225 - 2401.475 MHz CW/USB
K-band: 24048.010 - 24048.060 MHz CW/USB
Beacon: 2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)

BEACON	General Beacon (GB)	Middle Beacon (MB)	Engineering Beacon (EB)
2 m	none	145.898 MHz	none
70cm	435.438 MHz	435.588 MHz	435.838 MHz
13cm(1)	2400.188 MHz	2400.338 MHz	2400.588 MHz
13cm(2)	2401.173 MHz	2401.323 MHz	2401.573 MHz
3cm	10450.975 MHz	10451.125 MHz	10451.375 MHz
1.5cm	24047.885 MHz	24048.035 MHz	24048.285 MHz

[07162007]
=====
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon

Downlink: 437.1000 MHz 9600 FSK
[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site
at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

```
Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink:   145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign:       POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012006]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991
```

```
Status: Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
LIBERTAD-1
Catalog Number: 31129
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink:   145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[10222007]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only
```

Uplinks: 145.840 MHz 1200-baud Manchester FSK
145.860 MHz 1200-baud Manchester FSK
145.880 MHz 1200-baud Manchester FSK
145.900 MHz 1200-baud Manchester FSK

CW downlink: 437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[01222007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink: 145.825 MHz FM 1200 Baud AFSK
Beacon: 2401.220 MHz
[05012006]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink: 145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting): Non-Operational
Uplink: 145.9000 - 146.0000 MHz SSB/CW

```
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet: Non-Operational
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon:   145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink  29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972
```

```
Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
Beacons:   29.450 MHz
          435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon 1:  29.352 MHz (intermittent)
Beacon 2:  29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink:     21.260 to 21.300 MHz CW/USB
Downlink:  145.860 to 145.900 MHz CW/USB

Beacon:    145.860 MHz
```

Robot: 145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-066.S4
WSR 066 Part 4 03/06/2008

AMSAT NEWS SERVICE BULLETIN 066.S4 FROM AMSAT HQ
SILVER SPRING, MD, March 06, 2008
TO ALL RADIO AMATEURS
BID: $ANS-066.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE PROPOSED FOR LAUNCH AT
THIS TIME:

Phase 5a Mars Mission
Catalog Number:
Proposed Launch Date: 2009 or 2011

Status: Design Phase

For the latest project status update please visit the AMSAT-DL P5-A web
page:
http://ticket-to-mars.org
[01222007]
=====
PHASE 3E AO-??
Catalog number:
Proposed Launch Date: Late 2007

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web
page:
http://www.amsat-dl.org/p3e/
[01222007]
=====

Eagle AO-??
Catalog Number:
Proposed Launch Date: Early/Mid 2009

Status: Design Phase

For the latest project status updates please visit the AMSAT-NA webpage:
http://www.amsat.org
[01222007]
=====
Can X-2
Catalog number:
Proposed Launch Date: March 07, 2008

Status: Waiting for Launch

For the latest project status update please visit the Can X-2 web page:
http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[01172008]
=====
AAUSAT-II
Catalog number:
Proposed Launch Date: March 07, 2008

Status: Waiting for Launch

For the latest project status update please visit the AAUSAT-II web page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[01172008]
=====
Cute-1.7+APD II
Catalog number:
Proposed Launch Date: March 07, 2008

Status: Waiting for Launch

For the latest project status update please visit the Cute-1.7+APD II web page:
http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78
[01172008]
=====
Compass 1

Catalog number:
Proposed Launch Date: March 07, 2008

Status: Waiting for Launch

For the latest project status update please visit the Compass 1 web
page:
http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52
[01172008]
=====
Delfi-C3
Catalog number:
Proposed Launch Date: March 07, 2008

Status: Waiting for Launch

Proposed Frequencies:
* Primary telemetry downlink: 145.870 MHz 1200 Baud BPSK AX.25 400mW
* Backup telemetry downlink: 145.930 MHz 1200 Baud BPSK AX.25 400mW
* Linear transponder passband downlink: 145.880 - 145.920 MHz
(inverting)
  400mW PEP
* Linear transponder passband uplink: 435.570 - 435.530 MHz
* Transponder mode beacon: 145.870 MHz CW (10dB below transponder PEP)

For the latest project status update please visit the Delfi-C3 web page:
http://www.delfic3.nl/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68
[01172008]
=====
Seeds 2
Catalog number:
Proposed Launch Date: March 07, 2008

Status: Waiting for Launch

For the latest project status update please visit the Seeds 2 web page:
http://cubesat.aero.cst.nihon-u.ac.jp/english/main_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36
[01172008]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-066.S5
WSR 066 Part 5 03/06/2008

AMSAT NEWS SERVICE BULLETIN 066.S5 FROM AMSAT HQ
SILVER SPRING, MD, March 06, 2008
TO ALL RADIO AMATEURS
BID: $ANS-066.S5

THE FOLLOWING SATELLITES HAVE DE-ORBITED OR HAVE BEEN RETURNED SAFELY:

NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Operational
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink: 145.825 Mhz FM APRS AX25
APRS Uplink: 145.825 MHz FM APRS AX25
Voice/PSK31 Uplink: 28.120 MHz

Packet to Voice ID: RAFT
[06112007]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

From -3856459905327195982
X-Google-Thread: 10e8ad,5691c24f07211820,start
X-Google-Thread: 113975,5691c24f07211820,start
X-Google-Attributes: gid10e8ad,gid113975,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!newshub.sdsu.edu!news.astraweb.com!border2.newsrouter.astraweb.com!not-for-mail
From: Chris Steyaert <observations@rmob.org>
Newsgroups: rec.radio.amateur.space,sci.astro.amateur
Subject: Radio Meteor Obs. Bull. February 2008
Date: Sat, 08 Mar 2008 11:36:37 +0100
Message-ID: <d0r4t312afuinbsppaa7pqbicbjkr7rpsb@4ax.com>
X-Newsreader: Forte Agent 1.93/32.576 English (American)
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Lines: 17
Organization: Unlimited download news at news.astraweb.com
NNTP-Posting-Host: c74e004d.news.astraweb.com
X-Trace: DXC=I`DCA5So?MG6;?e@]GfeBGL?0kYOcDh@JSBc;\8ijUdKSN7B<SNc7a@G?ifhhgG3CAf61:2m@Kfm@jN1Lcd]a>EM

Xref: g2news1.google.com rec.radio.amateur.space:1308 sci.astro.amateur:102076

Radio Meteor Observation Bulletin No. 175 of February 2008 (59 K) is available now as

http://visualrmob.free.fr/rmobtext/rmob0802.txt

More information and the visual presentation of the hourly forward scatter counts can be found on

http://www.rmob.org

http://radio.data.free.fr

Chris

From 3318540824059102708
X-Google-Thread: 10e8ad,52b46848598ecf0,start
X-Google-Thread: 10b9c8,52b46848598ecf0,start
X-Google-Attributes: gid10e8ad,gid10b9c8,public,usenet
X-Google-Language: ENGLISH,ASCII
Path: g2news1.google.com!news2.google.com!newsfeed.stanford.edu!bloom-beacon.mit.edu!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-069 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sun, 9 Mar 2008 12:15:56 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 423
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000001c881fa$10e9bd20$6701a8c0@familyroom>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix2.panix.com
Mime-Version: 1.0
Content-Type: text/plain;charset="iso-8859-1"
Content-Transfer-Encoding: quoted-printable
X-Trace: reader2.panix.com 1205079356 20148 166.84.1.2 (9 Mar 2008 16:15:56 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 9 Mar 2008 16:15:56 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to   rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to   rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.

X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Xref: g2news1.google.com rec.radio.amateur.space:1309 rec.radio.info:706

AMSAT NEWS SERVICE
ANS-069

ANS is a free, weekly, news and information service of AMSAT North America,
The
Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in
designing, building, launching and communicating through analog and digital
Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:

* AO-51 March Schedule
* College Night Successful on AO-51
* AO-16 Status Update
* AMSAT Events for 14/15 March 2008
* AMSAT Store Down for Upgrade
* AMSAT Block of Rooms at Dayton
* ARISS Status - 03 March 2008

SB SAT @ AMSAT $ANS-069.01
AO-51 March Schedule

AMSAT News Service Bulletin 069.01
From AMSAT HQ SILVER SPRING, MD.
March 9, 2008
To All RADIO AMATEURS
BID: $ANS-069.01

Last month we concentrated on L uplinks and S downlinks. This month we'd like to concentrate on U band downlinks. In response to recent discussions
on AMSAT-BB, we are going to try two separate weeks of dual repeaters.
Unlike the QRP restrictions we have had in the past, this time the only special restrictions are that regular users yield for university stations
that will be active on 27th. Please limit
contacts those dates to QSOs involving
at least one university station. If the second repeater is
not utilized, we may revert to digital operations.

The 435.150 repeater and 2401.200 downlinks may be temporarily suspended for
WOD telemetry download without notice. Generally this will only be for one
pass per day.

Regarding the graphic schedule, the software that does the schedule will
not allow for the proper display of some of the current modes or any
detailed information on special purposes. Please refer to the text page for
mode
change information.
http://www.amsat.org/amsat-new/echo/CTNews.php

March 2008 AO-51 (AMSAT Echo) Schedule

March 1 until March 31, subject to modification

March 1 - March 2

FM Repeater, V/US
Uplink: 145.920 MHz FM, NO PL Tone
Downlinks: 435.300 and 2401.200 MHz FM

March 3 - March 9

FM Repeater, V/U
Uplink: 145.920 MHz FM, NO PL Tone
Downlink: 435.300 MHz FM

FM Repeater, V/U
Uplink: 145.880 MHz FM, NO PL Tone
Downlink: 435.150 MHz FM

March 10 - March 16

FM Repeater, V/U
Uplink: 145.920 MHz FM, NO PL Tone
Downlink: 435.300 MHz FM

9k6 Digital L/U BBS and Telemetry
Uplink: 1268.700 MHz FM
Downlink: 435.150 MHz FM

March 17 - March 23

FM Repeater, V/US
Uplink: 145.920 MHz FM, NO PL Tone
Downlinks: 435.300 and 2401.200 MHz FM

March 24 - March 31

FM Repeater, V/U

Uplink: 145.920 MHz FM, NO PL Tone
Downlink: 435.300 MHz FM

FM Repeater, V/U (March 27th please yield to university stations)
Uplink: 145.880 MHz FM, NO PL Tone
Downlink: 435.150 MHz FM

[ANS thanks Drew, KO4MA, for the above information]

/EX

SB SAT @ AMSAT $ANS-069.02
College Night Successful on AO-51

AMSAT News Service Bulletin 069.02
  From AMSAT HQ SILVER SPRING, MD.
March 9, 2008
To All RADIO AMATEURS
BID: $ANS-069.02

Jay, AA4FL reports that College Night was a success on AO-51. College stations
heard at the University Of Floriday (UF) during
the two evening passes (March 5 UTC)
were the University of Arkansas and a student
from the University of Kentucky. The
SEC was well represented! Contacts were made at UF by two students,
KI4LDJ (Dante) and N6WPV (Seth), and AA4FL (Jay), and included contacts with:
N0YK, N3UNM (Frostburg, MD, home of Frostburg state U), KI4VNV (UK student),
KB2HSH, KU4OS (mobile in Cocoa,FL), WD9EWK (portable in city park Phoenix),
W5YM (U ARK), N5AFV.

Thanks to all that participated. Look for us again on the next college night
on AO51, March 27th. Make sure to spread the word to college hams/club
stations you may know.

[ANS thanks Jay, AA4FL, for the above information]

/EX

SB SAT @ AMSAT $ANS-069.03
AO-16 Status Update

AMSAT News Service Bulletin 069.03
  From AMSAT HQ SILVER SPRING, MD.
March 9, 2008
To All RADIO AMATEURS

BID: $ANS-069.03

AO-16 is doing quite well in its current mode.

AO-16 is currently operational as a Voice Repeater (Downlink is double sideband.):
Uplink: 145.9200 MHz FM
Downlink   437.0260 MHz DSB (LSB and USB)

The plan is to continue this mode of voice operations "until further notice. "

AO-16 has been in full sunlight (no eclipse periods at all) for several months. That is about to change later this month! Short eclipse periods will begin at the end of March and will increase steadily until early July--at which point the eclipse periods will increase to about 26 minutes each orbit. We'll have to watch this old bird and its batteries as the eclipse periods increase.

It is possible that the long eclipse periods may necessitate the reduction of the 70 cm transmitter output; this is a manual process for AO-16, since the spacecraft isn't running any housekeeping software to do it "automagically." AO-16 is pretty loud at its current power setting, so some reduction should have little if any user impact. Observations and user reports will be especially helpful during April/May/June/July this year. In order to collect telemetry, we'll need to change the satellite into its digital mode from time to time. But this doesn't take long and therefore shouldn't interfere much with its operations as a voice satellite.

The S-band beacon is not operational at this time. The exact status of the S-band transmitter remains unknown; however, its last known status might be described as "suspect" or "semi-operational" at best. Given the age of the satellite (over 18 years!), For now, this falls into the "maybe we should leave well enough alone" category.

[ANS thanks Mark, N8MH, for the above information]

/EX

SB SAT @ AMSAT $ANS-069.04
AMSAT Events for 14/15 March 2008

AMSAT News Service Bulletin 069.04
From AMSAT HQ SILVER SPRING, MD.
March 9, 2008
To All RADIO AMATEURS
BID: $ANS-069.04

Keith Pugh, W5IU, will be manning the AMSAT booth at the Green Country Hamfest in Claremore, OK on the 14th and 15th of March. In addition to the booth there will be satellite demos and a forum.

AMSAT Executive Vice President Lee McLamb, KU4OS, will be at the Stuart Hamfest in Martin County, FL. Activities at the Stuart Hamfest include an AMSAT Booth and FM satellite demonstrations.

A full day of activities are planned for the 2008 AMSAT-DC Meeting and Space Seminar. Talks, demos, tutorials and socializing about amateur satellites and high-altitude balloon experiments will get underway starting at 1100 A.M. local on 15 March. The event will be held at the Historical Electronics Museum (HEM) at 1745 West Nursery Road, Linthicum, Maryland 21090 (near BWI airport). In Pioneer Hall. For more information, contact Pat Kilroy, n8pk@amsat.org

[ANS thanks Lee, KU4OS, for the above information]

/EX

SB SAT @ AMSAT $ANS-069.05
AMSAT Store Down for Upgrade

AMSAT News Service Bulletin 069.05
From AMSAT HQ SILVER SPRING, MD.
March 9, 2008
To All RADIO AMATEURS
BID: $ANS-069.05

he AMSAT web store is currently off-line while being upgraded. It is anticipated that the upgraded store should be online within a few weeks.

Orders can still be placed and memberships renewed by contacting Martha in the AMSAT office. You can send her an e-mail at Martha@amsat.org and she will call you on the phone. From the US the AMSAT office can be called toll free at (888) 322-6728, from all other locations call (301) 589-6062. Martha will be out of the office from Wednesday, March 12 - Monday, March 24th.

Alternatively you can send a fax to (301) 608-3410 or send a letter to AMSAT, 850 Sligo Ave. Suite 600, Silver Spring, MD 20910.

[ANS thanks Gould, WA4SXM, for the above information]

/EX

SB SAT @ AMSAT $ANS-069.06
AMSAT Block of Rooms at Dayton

AMSAT News Service Bulletin 069.06
From AMSAT HQ SILVER SPRING, MD.
March 9, 2008
To All RADIO AMATEURS
BID: $ANS-069.06

AMSAT will once again have a block of rooms available for members at The Dayton Hamvention. The AMSAT rate will be available from May 14 Through May 18. To reserve a room you can e-mail Martha at the AMSAT Office (martha@amsat.org) or call her at (301) 589-6062; fax at (301) 608-3410. She will need to know your name, yourdaytime phone number, dates room needed, credit card number and expiration date. Remember, "if you snooze, you lose"!

[ANS thanks JoAnne, K9JKM, for the above information]

/EX

SB SAT @ AMSAT $ANS-069.07
ARISS Status - 03 March 2008

AMSAT News Service Bulletin 069.07
From AMSAT HQ SILVER SPRING, MD.
March 9, 2008
To All RADIO AMATEURS
BID: $ANS-069.07

1. College Reydellet Contact Successful

On Monday, February 25, youth attending College Reydellet in Saint-Denis, Ile de La R�union experienced an Amateur Radio on the International Space Station (ARISS) contact with ESA astronaut L�opold Eyharts, FX0STD/KE5FNO. Ten students were able to ask one question each of the astronaut as approximately 75 students, teachers and parents looked on. Also in attendance were the Regional Director of Research and Technology (DRRT), the Colleges and Schools Supervisor and the Heads of educational institutions. At least part of the audio from this event was fed into the EchoLink AMSAT (101 377) and JK1ZRW (277 208) servers successfully. Fifteen connections were made from 10 countries. Media coverage included RFO Radio, TV Antenne-Reunion (correspondent of TF1, France's national TV), private broadcaster Festival and the local newspapers Le Quotidien and Le Journal de l'ile. Photos have been posted on the ARISS-Europe Web site. See:
http://www.ariss-eu.org/2008_02_26.htm
Le Journal de l'ile article, in French, can be found here:
http://archives.clicanoo.com/index.php?page=article&id_article=175971&recherche=Reydellet+ARISS

2. France Soir Article on Robespierre Contact

Robespierre Elementary School in Rueil Malmaison, France participated in an Amateur Radio on the International Space Station (ARISS) contact on February 21.
France Soir covered news (in French) of the educational activity. Go to:
http://www.francesoir.fr/societe/2008/02/22/leopold-eyharts-en-direct-des-etoiles.html#Séquence_1

3. Crew Debrief Sessions to be Rescheduled

The February debrief sessions planned with astronaut Dan Tani, KD5DXE, and space visitor Dr. Sheikh Muszaphar Shukor, 9W2MUS, were cancelled. They will be rescheduled in the near future.

4. ARISS Presentation at NARCON 2008

The National Association of Rocketry�s National Convention, NARCON 2008, will be held March 14 � 16 in Rochester, Minnesota. Will Marchant, KC6ROL, will give a presentation on the Amateur Radio on the International Space Station (ARISS) educational outreach program during the seminar session. For more information, see:
http://www.narcon2008.org/event_info/seminars.htm

5. SuitSat-1 Article

On February 25, The Daily Galaxy ran an article on the amateur radio satellite SuitSat-1 which was deployed on February 3, 2006. To view the article, see:
http://www.dailygalaxy.com/my_weblog/2008/02/suitsat-one--th.html

6. Astronaut Training Status

Amateur Radio on the International Space Station (ARISS) training sessions are being planned for astronauts Nicole Stott, KE5GJN, Sandy Magnus, KE5FYE, and Bob Thirsk, VA3CSA. Magnus is expected to be a crewmember of Expedition 17/18, flying to the ISS on STS-126 in September 2008. Stott, a member of the Expedition 19 crew, will fly on STS-128 in May 2009 and Thirsk, a CSA astronaut, will follow the same month on a Soyuz flight.

[ANS thanks Carol, KB3LKI, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Lee McLamb, KU4OS

From 2937085555170034101
X-Google-Thread: 10e8ad,7ab318bdbf5e2fef,start
X-Google-Thread: 10b9c8,7ab318bdbf5e2fef,start
X-Google-Attributes: gid10e8ad,gid10b9c8,public,usenet
X-Google-Language: ENGLISH,ASCII
Path: g2news1.google.com!news1.google.com!newsfeed2.dallas1.level3.net!
news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-073 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Wed, 12 Mar 2008 22:25:06 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 1433
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <002501c884b1$6d59d220$6701a8c0@familyroom>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;charset="iso-8859-1"
Content-Transfer-Encoding: quoted-printable
X-Trace: reader2.panix.com 1205375106 15779 166.84.1.6 (13 Mar 2008 02:25:06 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Thu, 13 Mar 2008 02:25:06 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to   rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to   rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Xref: g2news1.google.com rec.radio.amateur.space:1310 rec.radio.info:709

This report is organized into FIVE parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites
Part 5 (S5) - deborbited/returned satellites

SB SAT @ AMSAT W8ISS ANS-073.S1
WSR 073 Part 1 03/13/2008

AMSAT NEWS SERVICE BULLETIN 073.S1 FROM AMSAT HQ
SILVER SPRING, MD, March 13, 2008
TO ALL RADIO AMATEURS
BID: $ANS-073.S1

VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.859330 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsat.in/hamsat.htm

To know what transponder is switched on please listen for the beacon that is
active. Each transponder has a different beacon.
[06252007]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational - Software reload

Current Modes: FM Repeater - V/u
                 BBS   - L/u
                 Telemetry   - OFF

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink: 145.880 MHZ FM
                       145.880 MHz USB
                       145.920 MHz FM
                      1268.700 MHz FM 67Hz PL tone

Digital Downlinks: 435.150 MHz FM 38k4 Digital, PBP, 1 watt output
                       435.150 MHz FM 9k6 Digital, Pacsat Broadcast Protocol
                      2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Digital, Pacsat Broadcast Protocol
                      1268.700 mhz FM 9k6 PBP Digital
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[03132008]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer
   on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on
   and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10
   minute timer.
[05282007]

=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Operational - check operational schedule for current times!!

Current Mode: V/u

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage: http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts.htm
[0820007]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

```
Official Webpage: http://www.ao27.org
[12132007]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: TESTING - VOICE

Current Mode:  V/u

Uplink:         145.900 MHz FM 1200-baud Manchester FSK
                145.920 MHz FM VOICE
                145.940 MHz FM 1200-baud Manchester FSK
                145.960 MHz FM 1200-baud Manchester FSK

Downlink:       437.026 MHz USB VOICE
                                1200-baud PSK

Mode-S Beacon: 2401.1428 MHz

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[01242008]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational depending on amount of Sunlight

Current Mode: Listen before transmitting

Uplink:   145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink:  29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons:   29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php
```

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/

AO-7 Usage Guidelines on the AO-7 Log and Resource Site located at:
http://www.planetemily.com/ao7
[05282007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Mode: FM Repeater - U/v
Voice - Occasianally
BBS - ON
APRS - ON
SSTV - OFF

Expedition 16 crew:

Commander:	Peggy Whitson	
Flight Engineer:	Yuri Malenchenko	RK3DUP
Flight Engineer:	Leopold Eyharts	KE5FNO/FX0STD

STS-123 crew:

Commander:	Dominic Gorie	
Pilot:	Gregory H. Johnson	
Mission Specialist 1:	Robert L. Behnken	KE5GGX
Mission Specialist 2:	Mike Foreman	
Mission Specialist 3:	Takao Doi	
Mission Specialist 4:	Rick Linnehan	
Mission Specialist 5:	Garrett Reisman (Up)	KE5HAE
Mission Specialist 5:	L�opold Eyharts (Down)	KE5FNO/FX0STD

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM
Worldwide packet downlink: 145.825 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS
                     RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.
[03132008]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-073.S2
WSR 073 Part 2 03/13/2008

AMSAT NEWS SERVICE BULLETIN 073.S2 FROM AMSAT HQ
SILVER SPRING, MD, March 13, 2008
TO ALL RADIO AMATEURS
BID: $ANS-073.S2

CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.
[11152007]
=====
CP3
Catalog Number: 31128
Launch Date: April 17,2007

Status: Operational

Current Mode: /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[07302007]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: In Orbit

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder: 145.825 Mhz FM
[02052007]
=====
NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Operational

Current Mode: /u

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[10222007]
=====
GENESAT-1 ?O-??
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Current Mode: /u

Telemetry Beacon Downlink: 437.0670 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[01082007]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol

Beacon: 437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
[03262007]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launched: June 30, 2003

Status: Operational

Current Mode: /u

Beacon: 436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[01082007]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launched: February 21, 2006

Status: Semi-Operational - Constant Carrier only

Uplink: 1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan ?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[01082007]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

```
Mode U TLM Beacon
Downlink: 436.8375 MHz CW
[08132007]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational - Softawre Reload

Current Mode(s): FM Repeater - V/u
                 BBS         - L/u
                 Telemetry   - OFF

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink:   145.880 MHZ FM
                       145.880 MHz USB
                       145.920 MHz FM
                      1268.700 MHz FM 67Hz PL tone
Digital Downlinks:     435.150 MHz FM 38k4 Digital, PBP, 1 watt output
                       435.150 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:        145.860 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      1268.700 mhz FM 9k6 PBP Digital
Beacon:                435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[03132008]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Hibernation until full sunlight in November

Current Mode: V/v
```

```
General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink:        144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[09242007]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Current Modes: V/U
               L/U

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[09172007]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational.

Current Mode:  /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon:          435.025 MHz
Mode-S Beacon:     2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[01242008]
```

```
=====
RS-22 RADIO SPORT RS-22
Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only

Current Mode:  /u

CW Beacon - 435.352 MHz
            145.818 MHz
[08062007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Mode: FM Repeater - U/v
              Voice -       Occasianally
              BBS -         ON
              APRS -        ON
              SSTV -        OFF

Expedition 16 crew:
Commander:          Peggy Whitson
Flight Engineer:    Yuri Malenchenko      RK3DUP
Flight Engineer:    Leopold Eyharts       KE5FNO/FX0STD

STS-123 crew:
Commander:             Dominic Gorie
Pilot:                 Gregory H. Johnson
Mission Specialist 1:  Robert L. Behnken      KE5GGX
Mission Specialist 2:  Mike Foreman
Mission Specialist 3:  Takao Doi
Mission Specialist 4:  Rick Linnehan
Mission Specialist 5:  Garrett Reisman (Up)   KE5HAE
Mission Specialist 5:  L�opold Eyharts (Down) KE5FNO/FX0STD


Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink:   145.825 MHz FM
Worldwide packet downlink: 145.825 Mhz FM

Voice:
Region 1 voice uplink:   145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink:      145.800 MHz FM

Crossband Repeater:
Repeater Uplink:         437.800 MHz FM
```

Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS
                      RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line is
NOT translated from Russian and posted.
[03132008]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-073.S3
WSR 073 Part 3 03/13/2008

AMSAT NEWS SERVICE BULLETIN 073.S3 FROM AMSAT HQ
SILVER SPRING, MD, March 13, 2008
TO ALL RADIO AMATEURS
BID: $ANS-073.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

CP4
Catalog Number: 31122
Launch Date: April 17,2007

Status: Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon: 437.325 MHz CW
[11152007]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

```
Status: Non-Operational

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon:             437.2750 MHz CW

Callsign: JR8YJT
[10152007]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency:  437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink:         437.250 MHz FM 67Hz CTCSS
Voice Downlink:      2401.835 MHz FM
Packet Up/Downlink:   437.250 MHz 9k6 packet
Packet Downlink      2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non=Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[08132007]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.
```

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Non-Operational

Uplinks: 145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[007302007]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, callsign KE6QMD, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549

Launched: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks

V-band: 145.840 - 145.990 MHz CW/LSB
U-band: 435.550 - 435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks

S2-band: 2401.225 - 2401.475 MHz CW/USB
K-band: 24048.010 - 24048.060 MHz CW/USB
Beacon: 2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)

BEACON   General Beacon (GB)   Middle Beacon (MB)   Engineering Beacon
(EB)

2 m	none	145.898 MHz	none
70cm	435.438 MHz	435.588 MHz	435.838 MHz
13cm(1)	2400.188 MHz	2400.338 MHz	2400.588 MHz
13cm(2)	2401.173 MHz	2401.323 MHz	2401.573 MHz
3cm	10450.975 MHz	10451.125 MHz	10451.375 MHz
1.5cm	24047.885 MHz	24048.035 MHz	24048.285 MHz

[07162007]
=====
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site
at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz
145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]

```
=====
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink:   145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign:       POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
```

```
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012006]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HL01-11
BBS: HL01-12
[01222007]
=====
UO-22 UOSAT
```

```
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
LIBERTAD-1
Catalog Number: 31129
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25
```

Callsign: 5K3L

Uplink: 145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[10222007]

=====

LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplinks: 145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink: 437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[01222007]

=====

WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]

=====

DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink: 145.825 MHz FM 1200 Baud AFSK
Beacon: 2401.220 MHz
[05012006]

=====

UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

```
Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet: Non-Operational
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon:   145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW
```

```
Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink  29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
Beacons:   29.450 MHz
          435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon 1:  29.352 MHz (intermittent)
Beacon 2:  29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink:     21.260 to 21.300 MHz CW/USB
Downlink:  145.860 to 145.900 MHz CW/USB

Beacon:    145.860 MHz

Robot:     145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink:   21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon:   29.408 MHz

Robot:    29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-073.S4
WSR 073 Part 4 03/13/2008

AMSAT NEWS SERVICE BULLETIN 073.S4 FROM AMSAT HQ
SILVER SPRING, MD, March 13, 2008
TO ALL RADIO AMATEURS
BID: $ANS-073.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE PROPOSED FOR LAUNCH AT
THIS TIME:

Phase 5a Mars Mission AO-??
Catalog Number:
Proposed Launch Date: 2009 or 2011

Status: Design Phase

For the latest project status update please visit the AMSAT-DL P5-A web
```

page:
http://ticket-to-mars.org
[01222007]
=====
PHASE 3E AO-??
Catalog number:
Proposed Launch Date: Late 2007

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/
[01222007]
=====
Eagle AO-??
Catalog Number:
Proposed Launch Date: Early/Mid 2009

Status: Design Phase

For the latest project status updates please visit the AMSAT-NA webpage:
http://www.amsat.org
[01222007]
=====
Can X-2
Catalog number:
Proposed Launch Date: April, 2008

Status: Waiting for Launch

For the latest project status update please visit the Can X-2 web page:
http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[03132008]
=====
AAUSAT-II
Catalog number:
Proposed Launch Date: April, 2008

Status: Waiting for Launch

For the latest project status update please visit the AAUSAT-II web page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[03132008]
=====
Cute-1.7+APD II

Catalog number:
Proposed Launch Date: April, 2008

Status: Waiting for Launch

For the latest project status update please visit the Cute-1.7+APD II
web
page:
http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78
[03132008]
=====
Compass 1
Catalog number:
Proposed Launch Date: April, 2008

Status: Waiting for Launch

For the latest project status update please visit the Compass 1 web
page:
http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52
[03132008]
=====
Delfi-C3
Catalog number:
Proposed Launch Date: April, 2008

Status: Waiting for Launch

Proposed Frequencies:
* Primary telemetry downlink: 145.870 MHz 1200 Baud BPSK AX.25 400mW
* Backup telemetry downlink: 145.930 MHz 1200 Baud BPSK AX.25 400mW
* Linear transponder passband downlink: 145.880 - 145.920 MHz
(inverting)
  400mW PEP
* Linear transponder passband uplink: 435.570 - 435.530 MHz
* Transponder mode beacon: 145.870 MHz CW (10dB below transponder PEP)

For the latest project status update please visit the Delfi-C3 web page:
http://www.delfic3.nl/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68
[03132008]
=====
Seeds 2
Catalog number:
Proposed Launch Date: April, 2008

Status: Waiting for Launch

For the latest project status update please visit the Seeds 2 web page:
http://cubesat.aero.cst.nihon-u.ac.jp/english/main_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36
[03132008]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-073.S5
WSR 073 Part 5 03/13/2008

AMSAT NEWS SERVICE BULLETIN 073.S5 FROM AMSAT HQ
SILVER SPRING, MD, March 13, 2008
TO ALL RADIO AMATEURS
BID: $ANS-073.S5

THE FOLLOWING SATELLITES HAVE DE-ORBITED OR HAVE BEEN RETURNED SAFELY:

NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Operational
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink: 145.825 Mhz FM APRS AX25
APRS Uplink: 145.825 MHz FM APRS AX25
Voice/PSK31 Uplink: 28.120 MHz

Packet to Voice ID: RAFT
[06112007]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

From 6958151988290332651
X-Google-Thread: 10e8ad,7e7156756f726b25,start
X-Google-Attributes: gid10e8ad,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!newshub.sdsu.edu!news.astraweb.com!
border2.newsrouter.astraweb.com!newspeer1.nac.net!border2.nntp.dca.giganews.com!

```
nntp.giganews.com!local02.nntp.dca.giganews.com!news.giganews.com.POSTED!not-for-
mail
NNTP-Posting-Date: Sat, 15 Mar 2008 16:06:29 -0500
From: Digital Voices <flyer1090@aol.com>
Newsgroups: rec.radio.amateur.space
Subject: <----New Group Seeking Exposure--->
Date: Sat, 15 Mar 2008 17:09:21 -0400
Message-ID: <uneot356865pl5hu4ue9fb7gfab2kushtd@4ax.com>
X-Newsreader: Forte Agent 1.91/32.564
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Lines: 7
X-Usenet-Provider: http://www.giganews.com
X-Trace: sv3-YhMJ82moB+sfhu/
aphJgF9+EAmWoffS7L28dDidp3oZHxZodqYQar94bz+nPTrwXJUmRFNsHN8fb8Lb!
+yYMXkfad6YyGs6WpLWSVNkH0TTcI/S+2f0kaKBdGtsxDy7RKuoHHe7bmUGhLQCwhay9
X-Complaints-To: abuse@giganews.com
X-DMCA-Notifications: http://www.giganews.com/info/dmca.html
X-Abuse-and-DMCA-Info: Please be sure to forward a copy of ALL headers
X-Abuse-and-DMCA-Info: Otherwise we will be unable to process your complaint
properly
X-Postfilter: 1.3.37
Xref: g2news1.google.com rec.radio.amateur.space:1311

<----New Group Seeking Exposure--->

Please Check Out the Maurice Davis Band

http://phlairline.com/mdb.html

DV



From -1446809415514194110
X-Google-Thread: 10e8ad,b0a0f6ef81e49277,start
X-Google-Attributes: gid10e8ad,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!news.glorb.com!proxad.net!
feeder1-2.proxad.net!213.200.89.82.MISMATCH!tiscali!newsfeed1.ip.tiscali.net!
newsfeed00.sul.t-online.de!t-online.de!border2.nntp.dca.giganews.com!
nntp.giganews.com!local02.nntp.dca.giganews.com!news.giganews.com.POSTED!not-for-
mail
NNTP-Posting-Date: Sat, 15 Mar 2008 16:13:13 -0500
From: Digital Voices <flyer1090@aol.com>
Newsgroups: rec.radio.amateur.space
Subject: Apology
Date: Sat, 15 Mar 2008 17:16:04 -0400
Message-ID: <dveot31nas6jfqn6dtuo9rfgj4531nidom@4ax.com>
X-Newsreader: Forte Agent 1.91/32.564
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
```

Lines: 6
X-Usenet-Provider: http://www.giganews.com
X-Trace: sv3-
UrSB1gFI6zn4xlVmKn2e8oDK5uDKXRylLW9VYQAjc5AWAX18FtO5ntc+sIjQVTbW4aqItgdiofIhRvT!
N2QcGu1dCfhXcad6BsSyR+rqCDlj3ZwnHBhLe9gnVDVu0fHfMaZVq7sY4ZMAFadCJWbV
X-Complaints-To: abuse@giganews.com
X-DMCA-Notifications: http://www.giganews.com/info/dmca.html
X-Abuse-and-DMCA-Info: Please be sure to forward a copy of ALL headers
X-Abuse-and-DMCA-Info: Otherwise we will be unable to process your complaint properly
X-Postfilter: 1.3.37
Xref: g2news1.google.com rec.radio.amateur.space:1312

The previous post was NOT meant for this group. And for that I apologize.

DV

QRT

From -4896696218631322598
X-Google-Thread: 10e8ad,e9be05d78e220851,start
X-Google-Thread: 10b9c8,e9be05d78e220851,start
X-Google-Attributes: gid10e8ad,gid10b9c8,public,usenet
X-Google-Language: ENGLISH,ASCII
Path: g2news1.google.com!news1.google.com!border1.nntp.dca.giganews.com!nntp.giganews.com!nx01.iad01.newshosting.com!newshosting.com!198.186.194.247.MISMATCH!transit3.readnews.com!news-out.readnews.com!news-xxxfer.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-076 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Mon, 17 Mar 2008 09:19:40 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 392
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000d01c88831$89df7fc0$6701a8c0@familyroom>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix1.panix.com
Mime-Version: 1.0
Content-Type: text/plain;charset="iso-8859-1"
Content-Transfer-Encoding: quoted-printable
X-Trace: reader2.panix.com 1205759980 20869 166.84.1.1 (17 Mar 2008 13:19:40 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Mon, 17 Mar 2008 13:19:40 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to   rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to   rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this article.

X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Xref: g2news1.google.com rec.radio.amateur.space:1313 rec.radio.info:715

AMSAT NEWS SERVICE
ANS-076

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* AMSAT Store Upgrade
* MIR +10
* AO-16 Report
* Satellite Shorts
* AMSAT-UK Colloquium - Call for Papers
* Satellite articles
* ARISS Status - 10 March 2008

SB SAT @ AMSAT $ANS-076.01
AMSAT Store Upgrade

AMSAT News Service Bulletin 076.01
   From AMSAT HQ SILVER SPRING, MD.
March 16, 2008
To All RADIO AMATEURS
BID: $ANS-076.01

The AMSAT store on the website is obtaining a long required upgrade for many reasons. During this period, you could normaly call Martha at HQ in Silver Spring, MD. Unfortunately, Martha is going on a vacation taking her away from duties until the 25th. Be patient until she returns or the Store re-opens for business as usual.

[ANS thanks Gould, WA4SXM, for the above information]

/EX

SB SAT @ AMSAT $ANS-076.02
MIR +10

AMSAT News Service Bulletin 076.02
From AMSAT HQ SILVER SPRING, MD.
March 16, 2008
To All RADIO AMATEURS
BID: $ANS-076.02

ISS Amateur Radio Status: March 11, 2008
By Miles Mann WF1F,
Slow Scan TV from Space Station Mir, 10 years later.
On December 12, 1998 the crew members of the Russian Space station Mir activated the Marex SSTV system. Over the next two years the system broadcasted over 20,000 SSTV images back to earth via Amateur Radio. te the 10 year anniversary of the successful imaging project, the Marx team is planning on upgrading our web page system to accommodate the many images that were transmitted during the projects 2 year run. In 1998 we just did not have the resources in place to handle the hundreds of images coming in every day. As a result only a small select on of the images were ever posted for public enjoyment.

73 Miles WF1F MAREX-MG

[ANS thanks Miles, WF1F, for the above information]

/EX

SB SAT @ AMSAT $ANS-076.03
AO-16 Report

AMSAT News Service Bulletin 076.03
From AMSAT HQ SILVER SPRING, MD.
March 16, 2008
To All RADIO AMATEURS
BID: $ANS-076.03

The AO-16 Command Team invites radio amateurs to continue to use the voice mode of operations. Mark, N8MH says, "The plan is to continue this mode of voice operations until further notice."

AO-16 has been in full sunlight (no eclipse periods at all) for several months. That is about to change later this month! Short eclipse periods will begin at the end of March and will increase steadily until early July--at which point the eclipse periods will increase to about 26 minutes each orbit. We'll have to watch this old bird and its batteries as the eclipse periods increase.

The S-band beacon is not operational at this time. The exact status of the S-band transmitter remains unknown.

The AO-16 Command Team has updated the weekly satellite report entry for this satellite:

AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: TESTING - VOICE
Current Mode: V/U

Uplink:
145.900 MHz RESERVED
145.920 MHz FM VOICE
145.940 MHz RESERVED
145.960 MHz RESERVED

Downlink: 437.026 MHz USB VOICE

[1200-baud PSK-MBL Telemetry Only]

Mode-S Beacon: 2401.1428 MHz [No Future Operations Planed]

Mode and Antenna Polarization:
U: RC 437.050 MHz RHCP
    PSK 437.026 MHz LHCP
V: Linear

[ANS thanks Mark, N8MH, for the above information]

/EX

SB SAT @ AMSAT $ANS-076.04
Satellite Shorts

AMSAT News Service Bulletin 076.04
   From AMSAT HQ SILVER SPRING, MD.
March 16, 2008
To All RADIO AMATEURS
BID: $ANS-076.04

#1. AMSAT and TAPR will again have a combined Banquet during the 2008 Dayton Hamvention. Unfortunately the Air Force is no longer offering the museum for non-military events. The 2008 AMSAT/TAPR Banquet will be Friday night, May 16 at the Kohler Presidential Banquet Center in Kettering, OH. Banquet times, the menu and the cost will be announced shortly, but all are expected to be similar to past banquets. Mark you calendar for Friday, May 16 and join your AMSAT and TAPR friends for an enjoyable evening.

#2. The AMSAT Engineering video featuring Bob McGwier had to be moved. The new URL is mms://media.wmfd.com/amsat/EngMovie08.wmv Bob discusses the engineering team plans for the next year. They have a number of things on their plate and it looks like a productive year for AMSAT Engineering. Thanks to Rob and Gunther Meisse and WMFD for hosting the video. We have a number of other amateur videos in production.

#3. We are evaluating placing the current AO-51 mode on the front page of the AMSAT web site for a few weeks. We will change the display as the mode changes. You can see the entire month's schedule at http://www.amsat.org/amsat-new/echo/CTNews.php.

Thanks,
Gould

[ANS thanks Gould, WA4SXM, for the above information]

/EX

SB SAT @ AMSAT $ANS-076.05
AMSAT-UK Colloquium - Call for Papers

AMSAT News Service Bulletin 076.05
   From AMSAT HQ SILVER SPRING, MD.
March 16, 2008
To All RADIO AMATEURS
BID: $ANS-076.05

AMSAT-UK Colloquium - Call for Papers

This is the first call for speakers for the 22nd Amsat-UK Colloquium which will be held at Surrey University, Guildford, Surrey, U.K., from Friday 25th July to Sunday 27th July 2007.

Details of this and previous events can be found at:
http://www.uk.amsat.org/content/view/32/42/

Amsat-UK invite speakers, about amateur radio space and associated activities, for this event. They are also invited to submit papers for the "Proceedings" document which will be published at the same time but printed papers are not mandatory. We normally prefer authors to present talks themselves rather than having someone else give them in the authors' absence. We also welcome "unpresented" papers for the Proceedings document.

Offers of talks should be submitted as soon as possible; the final date for full documents to be received is late-June 2007 in order that the "Proceedings" document be available to participants.

Submissions should be sent *ONLY* to G4DPZ, via the following routes:

Internet e-mail: dave @ g4dpz dot me dot uk

SnailMail: QTHR from http://www.qrz.com

AMSAT-UK also invite anyone with requests for Program Topics to submit them as soon as possible to G4DPZ. Invitations for any papers on specific subjects will be included in the future call. Likewise if anyone knows of a good speaker, please send contact and other information to G4DPZ.

73

Dave
G4DPZ

[ANS thanks Dave, G4DPZ, for the above information]

/EX

SB SAT @ AMSAT $ANS-076.06
Satellite articles

AMSAT News Service Bulletin 076.06
From AMSAT HQ SILVER SPRING, MD.
March 16, 2008
To All RADIO AMATEURS
BID: $ANS-076.06

Hi all,

I have published several articles in relation to ham satellites in AMSAT and other magazines such as URE, CQ-DL, Megahertz Magazine and several Webs. But most of them were in Spanish. I have translated them into English, you can find the following issues:

- The CJU antenna. It was designed by EB4DKA and EA4CYQ to improve the UHF reception with your HT, it is thought to uplink with your VHF mobile station. You will receive the UHF downlink in the same way a fix satellite station.

- The IOio antenna. It was designed by EA4CYQ to work V/U and U/V amateur satellites with an HT. It has an amazing performance, it is even better than the Arrow antenna in some features.

- A dual band portable yagui antenna. This is a very well known antenna into the amateur satellites world. Here you can find how to build it with normal stuff and an impressive performance.

- The EGGBEATER II and TPM II antennas. They were designed by Jerry K5OE. In this article I tell my experience at the beginning in the amateur satellites world and all the vicissitudes to work amateur satellites from my shack with the minimal equipment. Here you will find all the details to build these fantastic antennas.

- The 2.4GHz DISH ANTENNA. Taking advantage of my AO-40 experience I could go more deeply into the microwaves world. Here you can find all the details to build two different 2.4GHz dish feed systems, which you will be able to use in wireless terrestrial communications.

- The LINEAR TRANSPONDERS. A lot of amateur satellites use this system. This article will help you to understand how they work.

- HF or SATELLITES?. I try to demonstrate with this article that a satellite fix station is at least as good as an HF station. You will get the same performance with small antennas and low power out.

- The DATA CONNECTOR. This connector has much more possibilities than to be hooked to a TNC. In this article I study its features and I propose to use it with a PC soundcard, to receive meteorological satellites and I even propose to build a cross band repeater. You will be surprised about its possibilities.

- CIRCULAR POLARIZATION. If you want to know more about this kind of polarization and you want to see a comparative of VHF and UHF circular polarized commercial antennas, you should read this article.

- TRANSCEIVERS TO WORK SATELLITES. If you are thinking about setting up a fix satellite station, here you can find all the transceivers in the market and combinations between them to be successful.

- THE EA4CYQ SHACK. Here I describe my shack, perhaps it could be useful as a reference if you are thinking about setting up one.

- THE EA4CYQ LOG. If you have contacted with my station between June 1.996 and March 2.008, here you can find it. It is in call sign alphabetical order. We will upload it in the near future.

You can find them at the following Webs due to the generosity of Pedro EB4DKA and Rodolfo EA4CAX:

http://eb4dka.laserenadigital.com (also www.eb4dka.tk). This Web is devoted to ham satellites and Pedro has an impressive collection of photos, videos and interesting articles. He is an authority working in portable conditions.

http://personales.ya.com/ea4cax/ Rodolfo is specialized in LEO and Geostationary meteorological satellites.

O hope you enjoy this articles devoted to promote the amateur satellites.

Juan Antonio
EA4CYQ@amsat.org
73s

Best 73 from Spain
Pedro EB4DKA

eb4dka@amsat.org

[ANS thanks Pedro, EB4DKA, for the above information]

/EX

SB SAT @ AMSAT $ANS-076.07
ARISS Status - 10 March 2008

AMSAT News Service Bulletin 076.07
From AMSAT HQ SILVER SPRING, MD.
March 10, 2008
To All RADIO AMATEURS
BID: $ANS-076.07

1. Lyc�e de la Borde Basse Contact Successful

An Amateur Radio on the International Space Station (ARISS) contact with Lyc�e de la Borde Basse in Castres, France took place on Wednesday, March 5. ESA astronaut L�opold Eyharts, FX0STD/KE5FNO, answered 10 questions posed to him by as many students. A representative from the ESA Education Office gave a presentation to the school and a photographer was present to cover this event. The contact audio was fed into the EchoLink AMSAT (101 377) and JK1ZRW (277 208) servers, receiving 7 connections from 6 countries. La Depeche du Midi ran a Web story on the event. The article is written in French. See:
http://www.ladepeche.fr/article/2008/03/06/440113-Castres-Les-lyceens-en-direct-avec-l-espace.html

2. ARISS Face to Face Meeting to be Held in Moscow

The Amateur Radio on the International Space Station (ARISS) team will meet in Moscow, Russia this summer for its annual Face to Face Meeting. Delegates will arrive on July 15 for the July 17 -18 meeting. Plans are ongoing.

3. ARISS Crew Debrief Session

On Friday, March 7, a crew debrief was held with astronaut Dan Tani, KD5DXE. The Amateur Radio on the International Space Station (ARISS) team received feedback on the ARISS radio system onboard the ISS.

4. Astronaut Training Status

Two Amateur Radio on the International Space Station (ARISS) training sessions are planned for astronauts Nicole Stott, KE5GJN, and Sandy Magnus, KE5FYE, with Houston area school, Westbrook Intermediate. The training sessions, which are terrestrial-based amateur radio contacts using ARISS-equivalent equipment, are planned for Thursday, March 13 at approximately 14:50 and 15:15 UTC. Audio is expected to be fed into IRLP and EchoLink servers. Magnus is slated to be a crewmember of Expedition 17/18, flying to the ISS on STS-126 in September 2008. Stott, a member of the Expedition 19 crew, will fly on STS-128 in May 2009.

5. ARRL Article on AMSAT, ARISS

The American Radio Relay League (ARRL) ran a Web story covering the 2008 plans of the Radio Amateur Satellite Corporation (AMSAT). The Amateur Radio on the International Space Station (ARISS) educational outreach program and SuitSat-2 are included in this web story. See:
http://www.arrl.org/news/features/2008/03/05/10005?nc=1

[ANS thanks Carol, KB3LKI, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Dee Interdonato, NB2F

From -5490102198815022000
X-Google-Thread: 10e8ad,42833d84e285b1a1,start
X-Google-Thread: 10b9c8,42833d84e285b1a1,start
X-Google-Attributes: gid10e8ad,gid10b9c8,public,usenet
X-Google-Language: ENGLISH,ASCII
Path: g2news1.google.com!news1.google.com!newsfeed.stanford.edu!panix!
rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-080 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Thu, 20 Mar 2008 21:18:36 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 1431
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <001901c88af1$76fad2c0$6701a8c0@familyroom>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix1.panix.com
Mime-Version: 1.0
Content-Type: text/plain;charset="iso-8859-1"
Content-Transfer-Encoding: quoted-printable
X-Trace: reader2.panix.com 1206062316 17150 166.84.1.1 (21 Mar 2008 01:18:36 GMT)
X-Complaints-To: abuse@panix.com

NNTP-Posting-Date: Fri, 21 Mar 2008 01:18:36 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Xref: g2news1.google.com rec.radio.amateur.space:1314 rec.radio.info:718

This report is organized into FIVE parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites
Part 5 (S5) - deborbited/returned satellites

SB SAT @ AMSAT W8ISS ANS-080.S1
WSR 080 Part 1 03/20/2008

AMSAT NEWS SERVICE BULLETIN 080.S1 FROM AMSAT HQ
SILVER SPRING, MD, March 20, 2008
TO ALL RADIO AMATEURS
BID: $ANS-080.S1

VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.859330 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsat.in/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is
active. Each transponder has a different beacon.
[06252007]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational - Software reload

```
Current Modes:   FM Repeater - V/us
                 BBS         - OFF
                 Telemetry   - OFF
```

```
Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink:   145.880 MHZ FM
                       145.880 MHz USB
                       145.920 MHz FM
                      1268.700 MHz FM 67Hz PL tone
Digital Downlinks:     435.150 MHz FM 38k4 Digital, PBP, 1 watt output
                       435.150 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:        145.860 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      1268.700 mhz FM 9k6 PBP Digital
Beacon:                435.150 MHz
```

Mode and Antenna Polarization:

```
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear
```

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[03202008]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

```
Current Mode: V/u

Uplink:   145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute
timer
   on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the
repeater on
   and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset
the 10
   minute timer.
[05282007]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Operational - check operational schedule for current times!!

Current Mode: V/u

Voice/CW Mode JA
Uplink:   145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon:   435.795 MHz

Digital Mode JD
Uplinks:  145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm
```

JARL English webpage: http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's CW
telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts.htm
[0820007]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[12132007]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: TESTING - VOICE

Current Mode: V/u

Uplink: 145.900 MHz FM 1200-baud Manchester FSK (reserved)
                145.920 MHz FM VOICE
                145.940 MHz FM 1200-baud Manchester FSK (reserved)
                145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink: 437.026 MHz USB VOICE
                (1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC 437.050 MHz RHCP
   PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

```
AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[03202008]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational depending on amount of Sunlight

Current Mode: Listen before transmitting

Uplink:   145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink:  29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons:   29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/

AO-7 Usage Guidelines on the AO-7 Log and Resource Site located at:
http://www.planetemily.com/ao7
[05282007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Mode: FM Repeater - U/v
              Voice -       Occasianally
              BBS -         ON
              APRS -        ON
              SSTV -        OFF

Expedition 16 crew:
Commander:          Peggy Whitson
Flight Engineer:    Yuri Malenchenko      RK3DUP
Flight Engineer:    Garrett Reisman       KE5HAE

STS-123 crew:
Commander:             Dominic Gorie
Pilot:                 Gregory H. Johnson
Mission Specialist 1:  Robert L. Behnken      KE5GGX
```

Mission Specialist 2: Mike Foreman
Mission Specialist 3: Takao Doi
Mission Specialist 4: Rick Linnehan
Mission Specialist 5: L�opold Eyharts   KE5FNO/FX0STD

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM
Worldwide packet downlink: 145.825 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS
                      RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line is NOT translated from Russian and posted.
[03202008]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-080.S2
WSR 080 Part 2 03/20/2008

AMSAT NEWS SERVICE BULLETIN 080.S2 FROM AMSAT HQ
SILVER SPRING, MD, March 20, 2008
TO ALL RADIO AMATEURS
BID: $ANS-080.S2

```
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode:  /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon:    435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.
[11152007]
=====
CP3
Catalog Number: 31128
Launch Date: April 17,2007

Status: Operational

Current Mode:  /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[07302007]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: In Orbit

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder:  145.825 Mhz FM
[02052007]
=====
NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Operational

Current Mode: /u

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[10222007]
```

```
=====
GENESAT-1 ?O-??
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Current Mode: /u

Telemetry Beacon Downlink: 437.0670 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[01082007]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon:             437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
[03262007]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launched: June 30, 2003

Status: Operational

Current Mode: /u

Beacon:     436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[01082007]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launched: February 21, 2006
```

```
Status: Semi-Operational - Constant Carrier only

Uplink:  1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan ? )

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[01082007]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW
[08132007]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational - Softawre Reload

Current Mode(s): FM Repeater - V/us
                 BBS         - OFF
                 Telemetry   - OFF

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink:   145.880 MHZ FM
                       145.880 MHz USB
                       145.920 MHz FM
                      1268.700 MHz FM 67Hz PL tone
Digital Downlinks:     435.150 MHz FM 38k4 Digital, PBP, 1 watt output
                       435.150 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:        145.860 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      1268.700 mhz FM 9k6 PBP Digital
Beacon:                435.150 MHz
```

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[03202008]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Hibernation until full sunlight in November

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[09242007]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Current Modes: V/U
L/U

Downlink: 435.225 MHz FM (9600-baud FSK)
435.325 Mhz - Not Available - temperature problems
Uplinks: 145.850 FM
145.890 FM
145.930 FM
1269.700 FM
1269.800 FM
1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[09172007]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational.

Current Mode: /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon: 435.025 MHz
Mode-S Beacon: 2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[01242008]
=====
RS-22 RADIO SPORT RS-22
Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only

Current Mode: /u

CW Beacon - 435.352 MHz
            145.818 MHz
[08062007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Mode: FM Repeater - U/v
              Voice -   Occasianally
              BBS -   ON
              APRS -   ON
              SSTV -   OFF

Expedition 16 crew:
Commander: Peggy Whitson
Flight Engineer: Yuri Malenchenko   RK3DUP
Flight Engineer: Garrett Reisman   KE5HAE

STS-123 crew:
Commander: Dominic Gorie
Pilot: Gregory H. Johnson
Mission Specialist 1: Robert L. Behnken KE5GGX
Mission Specialist 2: Mike Foreman
Mission Specialist 3: Takao Doi
Mission Specialist 4: Rick Linnehan
Mission Specialist 5: L�opold Eyharts KE5FNO/FX0STD

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM
Worldwide packet downlink: 145.825 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS
RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line is
NOT translated from Russian and posted.
[03202008]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-080.S3
WSR 080 Part 3 03/20/2008

AMSAT NEWS SERVICE BULLETIN 080.S3 FROM AMSAT HQ

```
SILVER SPRING, MD, March 20, 2008
TO ALL RADIO AMATEURS
BID: $ANS-080.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

CP4
Catalog Number: 31122
Launch Date: April 17,2007

Status: Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon:    437.325 MHz CW
[11152007]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Non-Operational

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon:             437.2750 MHz CW

Callsign: JR8YJT
[10152007]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency:  437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink:        437.250 MHz FM 67Hz CTCSS
Voice Downlink:     2401.835 MHz FM
```

```
Packet Up/Downlink:  437.250 MHz 9k6 packet
Packet Downlink     2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non=Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[08132007]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink:   435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Non-Operational

Uplinks:   145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink:  437.325 MHz

Broadcast callsign: MYSAT3-11
BBS:                MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial
land and weather imaging payloads offers FM and FSK Amateur Radio
communica-
tion.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a
collaborative effort between the Malaysian government and Surrey
Satellite
```

Technology Ltd.
[007302007]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, callsign KE6QMD, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609

```
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
V-band:   145.840 -  145.990 MHz CW/LSB
U-band:   435.550 -  435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks
---------
S2-band:  2401.225 -  2401.475 MHz CW/USB
K-band:  24048.010 - 24048.060 MHz CW/USB
Beacon:   2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)
----------------------------
BEACON   General Beacon (GB)    Middle Beacon (MB)    Engineering Beacon
(EB)
2 m       none                   145.898 MHz           none
70cm      435.438 MHz            435.588 MHz           435.838 MHz
13cm(1)  2400.188 MHz           2400.338 MHz          2400.588 MHz
13cm(2)  2401.173 MHz           2401.323 MHz          2401.573 MHz
3cm     10450.975 MHz          10451.125 MHz         10451.375 MHz
1.5cm   24047.885 MHz          24048.035 MHz         24048.285 MHz
[07162007]
=====
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink:    145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12
```

```
The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site
at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater:         436.250 MHz

Uplinks: Mode B Repeater:  145.825 MHz
Mode J Digipeater:         145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998
```

```
Status: Non-operational

Uplink:   145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign:       POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012006]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational
```

```
Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25
```

Voice Transponder:
Uplink: 145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks: 145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
LIBERTAD-1
Catalog Number: 31129
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink: 145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[10222007]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplinks: 145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink: 437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[01222007]
=====

```
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
[05012006]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet: Non-Operational
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983
```

```
Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon:   145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink  29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
Beacons:   29.450 MHz
          435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
```

```
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon 1:  29.352 MHz (intermittent)
Beacon 2:  29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink:     21.260 to 21.300 MHz CW/USB
Downlink:  145.860 to 145.900 MHz CW/USB

Beacon:    145.860 MHz

Robot:     145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink:   21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon:   29.408 MHz

Robot:    29.454 MHz
```

[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-080.S4
WSR 080 Part 4 03/20/2008

AMSAT NEWS SERVICE BULLETIN 080.S4 FROM AMSAT HQ
SILVER SPRING, MD, March 20, 2008
TO ALL RADIO AMATEURS
BID: $ANS-080.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE PROPOSED FOR LAUNCH AT THIS TIME:

Phase 5a Mars Mission AO-??
Catalog Number:
Proposed Launch Date: 2009 or 2011

Status: Design Phase

For the latest project status update please visit the AMSAT-DL P5-A web page:
http://ticket-to-mars.org
[01222007]
=====
PHASE 3E AO-??
Catalog number:
Proposed Launch Date: Late 2007

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/
[01222007]
=====
Eagle AO-??
Catalog Number:
Proposed Launch Date: Early/Mid 2009

Status: Design Phase

For the latest project status updates please visit the AMSAT-NA webpage:
http://www.amsat.org
[01222007]
=====
Can X-2
Catalog number:
Proposed Launch Date: April, 2008

Status: Waiting for Launch

For the latest project status update please visit the Can X-2 web page:
http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[03132008]
=====
AAUSAT-II
Catalog number:
Proposed Launch Date: April, 2008

Status: Waiting for Launch

For the latest project status update please visit the AAUSAT-II web
page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[03132008]
=====
Cute-1.7+APD II
Catalog number:
Proposed Launch Date: April, 2008

Status: Waiting for Launch

For the latest project status update please visit the Cute-1.7+APD II
web
page:
http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78
[03132008]
=====
Compass 1
Catalog number:
Proposed Launch Date: April, 2008

Status: Waiting for Launch

For the latest project status update please visit the Compass 1 web
page:
http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52
[03132008]
=====
Delfi-C3
Catalog number:
Proposed Launch Date: April, 2008

Status: Waiting for Launch

Proposed Frequencies:
* Primary telemetry downlink: 145.870 MHz 1200 Baud BPSK AX.25 400mW
* Backup telemetry downlink: 145.930 MHz 1200 Baud BPSK AX.25 400mW
* Linear transponder passband downlink: 145.880 - 145.920 MHz
(inverting)
  400mW PEP
* Linear transponder passband uplink: 435.570 - 435.530 MHz
* Transponder mode beacon: 145.870 MHz CW (10dB below transponder PEP)

For the latest project status update please visit the Delfi-C3 web page:
http://www.delfic3.nl/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68
[03132008]
=====
Seeds 2
Catalog number:
Proposed Launch Date: April, 2008

Status: Waiting for Launch

For the latest project status update please visit the Seeds 2 web page:
http://cubesat.aero.cst.nihon-u.ac.jp/english/main_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36
[03132008]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-080.S5
WSR 080 Part 5 03/20/2008

AMSAT NEWS SERVICE BULLETIN 080.S5 FROM AMSAT HQ
SILVER SPRING, MD, March 20, 2008
TO ALL RADIO AMATEURS
BID: $ANS-080.S5

THE FOLLOWING SATELLITES HAVE DE-ORBITED OR HAVE BEEN RETURNED SAFELY:

NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Operational
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]

=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink: 145.825 Mhz FM APRS AX25
APRS Uplink: 145.825 MHz FM APRS AX25
Voice/PSK31 Uplink: 28.120 MHz

Packet to Voice ID: RAFT
[06112007]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors

to AMSAT Project Funds, will be eligible to receive additional benefits.
Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the
memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen,
G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

From 4089221946189836131
X-Google-Thread: 10e8ad,3a2b8d31cdb0b4e3,start
X-Google-Thread: 10b9c8,3a2b8d31cdb0b4e3,start
X-Google-Attributes: gid10e8ad,gid10b9c8,public,usenet
X-Google-Language: ENGLISH,ASCII
Path: g2news1.google.com!news1.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx02.iad01.newshosting.com!newshosting.com!
198.186.194.247.MISMATCH!news-out.readnews.com!transit3.readnews.com!panix!
rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-083 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sun, 23 Mar 2008 01:41:06 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 558
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <002801c88c9d$d62a9c50$6701a8c0@familyroom>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix1.panix.com
Mime-Version: 1.0
Content-Type: text/plain;charset="iso-8859-1"
Content-Transfer-Encoding: quoted-printable
X-Trace: reader2.panix.com 1206250866 16863 166.84.1.1 (23 Mar 2008 05:41:06 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 23 Mar 2008 05:41:06 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to   rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to   rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump

Xref: g2news1.google.com rec.radio.amateur.space:1315 rec.radio.info:723

AMSAT NEWS SERVICE
ANS-083

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:

* AMSAT Notes Passing of Arthur C. Clarke
* AO-51 Schedule Update - Dual Repeater Mode March 24-31
* College Satellite Night March 27 on AO-51
* GO-32 Satellite Carried Digital Messaging in Hospital Drill
* AMSAT-DC Meeting Recap
* OSCAR-11 Celebrates 24th Birthday
* NASA Award for VK5ZAI
* Satellite Shorts From All Over
* ARISS Status Report for the week of March 17, 2008
* Black Hole RF Signatures at 29-47 MHz

SB SAT @ AMSAT $ANS-083.01
AMSAT Notes Passing of Arthur C. Clarke

AMSAT News Service Bulletin 083.01
>From AMSAT HQ SILVER SPRING, MD.
March 23, 2008
To All RADIO AMATEURS
BID: $ANS-083.01

This week marked the passing of Arthur C. Clarke, author of more than 100 published books in which he foresaw the future of technology, promoted the possibilities of human innovation and exploration and combined these with the ability to explain these to non-scientific readers.

The most famous example is from 1945, when he first proposed the idea of communications satellites that could be based in geostationary orbits, which keep satellites in a fixed position relative to the ground.

Tom Clark, K3IO recalled, "You might be interested in knowing that Arthur was an AMSAT Life Member. His member number, quite fittingly, was LM-2001."

Tom continued, "In the 1970's and 80's, Arthur was a frequent visitor to NASA. He was listed in the Goddard phone director as a consultant in the LANDSAT group, and he also served as a consultant at NASA HQ. In the early 1980's (when I was AMSAT President), on a trip to Washington, Dick Daniels (W4PUJ), Jan King (W3GEY) and I made the presentation of honorary AMSAT LM-2001 to Arthur. He was most appreciative and spent a couple of hours talking with us about our being the "Wright Brothers" of the satellite world, building satellites in our basements and garages."

Arthur communicated with us several times in the years following that visit. He asked that his LM-2001 Journal subscription be sent in his name to a library in Sri Lanka.

[ANS thanks Tom, K3IO and the Washington Post for the above information]

/EX

SB SAT @ AMSAT $ANS-083.02
AO-51 Schedule Update - Dual Repeater Mode March 24-31

AMSAT News Service Bulletin 083.02
>From AMSAT HQ SILVER SPRING, MD.
March 23, 2008
To All RADIO AMATEURS
BID: $ANS-083.02

AO-51 will be in dual V/U repeater mode the week of March 24 - 31. Take advantage of the much less crowded second repeater. On Thursday, March 27, please attempt to contact the active University stations.

FM Repeater, V/U
Uplink: 145.920 MHz FM, NO PL Tone
Downlink: 435.300 MHz FM

FM Repeater, V/U (March 27th please yield to university stations)
Uplink: 145.880 MHz FM, NO PL Tone
Downlink: 435.150 MHz FM

On Wed morning March 26, the second repeater will be off for testing during a portion of the morning passes.

[ANS thanks Gould, WA4SXM, AO-51 Control Station for the above information]

/EX

SB SAT @ AMSAT $ANS-083.03
College Satellite Night March 27 on AO-51

AMSAT News Service Bulletin 083.03
>From AMSAT HQ SILVER SPRING, MD.

March 23, 2008
To All RADIO AMATEURS
BID: $ANS-083.03

College Satellite Night will be held Thursday March 27, 2008 (local time). AMSAT Operations is supporting this event by dedicating a second repeater onboard AO-51 to college operations only for this date. Previous events have had the colleges well represented on the air.

This event is a great opportunity for hams who are satellite active to interact with existing college operators and/or to elmer a new generation!

Do you know a college student who would find amateur satellites interesting and intellectually challenging? Have them as a guest at your station and introduce them to amateur radio in a way they will never forget.

AMSAT has a dedicated orbiting repeater set aside for the evening on satellite AO51 for this event:

Uplink: 145.880 MHz FM, NO PL Tone
Downlink: 435.150 MHz FM.

Even if you are not set-up for transmission please listen in. You can find satellite pass information for the evening at:
http://www.amsat.org/amsat-new/tools/predict/

Hope to see you on the birds!

[ANS thanks Drew, KO4MA, AMSAT-VP Operations and Dr. Jay Garlitz, AA4FL for the above information]

/EX

SB SAT @ AMSAT $ANS-083.04
GO-32 Satellite Carried Digital Messaging in Hospital Drill

AMSAT News Service Bulletin 083.04
>From AMSAT HQ SILVER SPRING, MD.
March 23, 2008
To All RADIO AMATEURS
BID: $ANS-083.04

On March 12 Shands hospital in Gainesville, FL conducted a simulated emergency communications drill. Students and faculty with the Gator Amateur Radio Club at the University of Florida participated.

The University of Florida Dental School club station, W4DFU, used their satellite ground station to distribute an e-mail test message though the GO-32 amateur radio satellite. This provided proof of concept in a disaster scenario to augment Amateur Radio voice communication if phone and internet services were down.

Keeping patient privacy laws in mind (HIPAA restrictions) they could not transmit sensitive personal or health related data via this mode. However, in support of the larger disaster scenario the satellite e-mail concept could be useful for getting list of supplies, reporting hazardous situations, and status reports.

A copy of the test message, sent entirely via GO-32, is included below as an example of the capability revealed by the Gator Amateur Radio Club:

```
>From:     W4DFU
To:       ALL
>Subject:  test March 12th, your input
Keywords:
----------------------------------------
To  : ALL
>From: W4DFU
Time: 124227UTC
Date: 12 Mar 2008
-----------------
```

Hello All,

W4DFU, the club station of the University of Florida http://www.gatorradio.org, is located at the University's Health Center which is part of the UF Shands Hospital complex (http://www.shands.org/hospitals/uf/).

Our club is involved today in a test of emergency communication at the hospital and we are sending this message as part of that effort. Please respond to our message and tell us where you are located and if you think GO32 and its group of users have emergency potential for relaying information in times of disaster where the Internet may not be available locally...and in which ways this could be of benefit where emergency voice communication could not...

Yours in public service through Amateur Radio

Dr. Jay Garlitz, AA4FL faculty advisor and trustee
Jeff Capehart, W4UFL, club station and repeater manager
Seth McNeill, N6WPV, club secretary
mcnese@ufl.edu

[ANS thanks Dr. Jay Garlitz, AA4FL and the Gator Amateur Radio Club at the University of Florida for the above information]

/EX

SB SAT @ AMSAT $ANS-083.05

AMSAT-DC Meeting Recap

AMSAT News Service Bulletin 083.05
>From AMSAT HQ SILVER SPRING, MD.
March 23, 2008
To All RADIO AMATEURS
BID: $ANS-083.05

AT ONE OF THE MOST INSPIRING annual local meetings to date, east coast AMSAT members learned how exciting and substantial the coming months will be as far as participating in experiments using Amateur Radio go in the stratosphere, in space, in workshops, in the public squares and in classrooms. Don't miss out on the good opportunities approaching. The time is NOW for you to start planning and practicing. Come, join the fun!

The http://patkilroy.com/amsat-dc/ web page is in the process of being updated with pictures here taken at the meeting by Art W4ART, Charlie K3VDB, and others as they come in, as well as notes taken by Bruce WA3SWJ, and various impressions offered by several others who attended.

We will recognize several contributing individuals by name soon!

THANK YOU to the presenters, to those who brought hardware for our hi-tech show 'n' tell, to those who helped publicize the event, to those who shared Pot Luck or munchie items, and those who helped with the room set up and strike. It was fun! You made this gathering inspiring and educational. You made this gathering one to remember!

[ANS thanks AMSAT Mid-Atlantic Metro-DC Area Coordinator Pat Kilroy, N8PK for the above information]

/EX

SB SAT @ AMSAT $ANS-083.06
OSCAR-11 Celebrates 24th Birthday

AMSAT News Service Bulletin 083.06
>From AMSAT HQ SILVER SPRING, MD.
March 23, 2008
To All RADIO AMATEURS
BID: $ANS-083.06

Clive, G3CWV noted, "OSCAR-11 celebrated its 24th birthday on 01 March 2008. It was designed, built and launched, within a time scale of six months, using commercially available components. Congratulations to Professor Sir Martin Sweeting G3YJO, his team at the University of Surrey and associated groups of radio amateurs, for their magnificient achievement."

Signal reports received from Peter ZL3TC, Mark KU7Z, John KB2HSH, Antonio EA1CXG, Edward BX1AD and Andrew VK5LAC indicate great variability in strength: sometimes very strong, sometimes undetectable, even at high elevations. Low signal strength was particularly noticeable at AOS and LOS.

The satellite is now in continuous sunlight, and this is expected to continue until mid March, when eclipses will start again. Unfortunately eclipses will then become a permanent feature of the orbit, which is likely to prevent any periods of sustained operation after March.

Listen for OSCAR-11's AFSK FM ASCII Telemetry on 145.826 MHz.

Refer to http://www.users.zetnet.co.uk/clivew/ for additional information.

[ANS thanks Clive, G3CWV for the above information]

/EX

SB SAT @ AMSAT $ANS-083.07
NASA Award for VK5ZAI

AMSAT News Service Bulletin 083.07
>From AMSAT HQ SILVER SPRING, MD.
March 23, 2008
To All RADIO AMATEURS
BID: $ANS-083.07

Congratulations are in order for Tony Hutchison VK5ZAI.

Known around the world for his involvement in facilitating amateur radio communications with orbiting space stations is Tony Hutchison VK5ZAI, who has just received a well deserved achievement award.

Tony is the Australian coordinator of the Amateur Radio on the International Space Station (ARISS) project is now the proud but humble recipient of a Group Achievement Award from NASA�s Lyndon B. Johnson Space Centre in Houston Texas.

The citation on the award certificate is �For providing sustained outstanding engineering support which has resulted in a record number of successful ISS amateur radio contacts�, and signed by the Johnson Space Centre Director, Michael Coats.

Tony VK5ZAI has for more than 15 years given many schools and groups the opportunity to talk with space station crew. A notable occasion was the Australian Scout Jamboree in January 2007 as part of the world scouting movement�s centenary.

His involvement began in 1993 by assisted South Australia�s Loxton High School students talk with Cosmonaut Alex Serabrov on the MIR space station.

In 1998 Tony handled most of the communications between Australian-born Astronaut Andy Thomas VK5MIR and his family during his flight on MIR.

Soon after he was invited to be one of nine-approved ARISS telebridge stations and began handling most of the private family contacts for the first three crews on the International Space Station, along with school contacts.

Tony has been involved in linking with school in many countries, and the development of IRLP and Echolink for ARISS contacts, plus the design of interface units used for ARISS telebridge contacts in Australia and Europe.

[ANS thanks Jim Linton, VK3PC and Amateur Radio Newsline 1597 for the above information]

/EX

SB SAT @ AMSAT $ANS-083.08
Satellite Shorts From All Over

AMSAT News Service Bulletin 083.08
>From AMSAT HQ SILVER SPRING, MD.
March 23, 2008
To All RADIO AMATEURS
BID: $ANS-083.08

+ AMSAT Field Day rules have been uploaded to:
  http://www.amsat.org/amsat-new/awards/amsatfd.php
  They will appear in the next issue of the AMSAT Journal.
  Field Day will be June 28/29, 2008. Start preparing your Field Day stations and offer assistance to local clubs in assembling a station and instruct them in the best ways to operate the satellites.

+ We are moving the AMSAT Store to our own server in the AMSAT Office to give us more control over its operation. Rick Hambly, W2GPS and Dan Briner, AB3EN are working on getting the server, getting additional high speed lines into the office and getting the server software operational and tested. Martha will be back in the office on Wednesday

  March 25 to take any orders. We are looking at interim store solutions until our own AMSAT Store in operational in a few weeks.

+ AMSAT at the 2008 Dayton Hamvention! We are looking forward to participating in the 2008 Dayton Hamvention. We will be in our regular location right across from the ARRL area, plus we will have an additional booth space. We have a great lineup of speakers for the Saturday morning forum, final list to be released very soon. Bob McGwier, N4HY and his engineering team have promised us a great many new pieces of operational satellite hardware. Bob Davis, KF4KSS is building a full size Eagle space frame that will be at Dayton. An operational SDX that will be used in both SuitSat-2 and the HASP (High Altitude Student Platform) balloon project this summer. We are also looking at a terrestrial deployment of this transponder. We will also have a well equipped satellite demonstration area right outside the Ball Arena entrance operating all the amateur satellites passes Friday through Sunday. The AMSAT/TAPR Banquet will be Friday night at the Kohler Banquet Center. Menu and reservation information will be available in the next week or two. More information to follow.

+ Paul, VP9MU has released a general c/c++ astrodynamics library which includes basic astronomy routines. Next up will be the orbit propagators, and tracking routines. See:
http://homepage.mac.com/pclwillmott/GAL/index.html

+ Ben, N1WBV has released a guide focusing on etiquette and operational guidelines for single-channel FM satellites:
PDF (35K) http://www.innismir.net/etc/CourteousAO51_v1.1.pdf
DOC (38K) http://www.innismir.net/etc/CourteousAO51_v1.1.doc

+ The 34th Annual Eastern VHF-UHF Conference and Dinner Banquet will be held on April 18, 19 & 20th, 2008 at the Crowne Plaza Hotel in Enfield, CT. Please see the site for further information:
http://www.newsvhf.com/vhfconf.html

+ Clint, K6LCS invites readers to download and print out his 4-page tutorial, "Working Ham Sats with Your HT". If you have a print utility that makes brochures, you can get it all on one page, duplex printing. See:
http://homepage.mac.com/clintbradford/FileSharing1.html

[ANS thanks everyone for the above information]

/EX

SB SAT @ AMSAT $ANS-083.09
ARISS Status Report for the week of March 17, 2008

AMSAT News Service Bulletin 083.09
>From AMSAT HQ SILVER SPRING, MD.

March 23, 2008
To All RADIO AMATEURS
BID: $ANS-083.09

1. Upcoming School Contact

The Non Profit Organization Kodomo Support Project in Kyoto, Japan has been approved for an ARISS contact on Wednesday, March 26. The Project was established in 2006 to provide a network for parents and the community to support the social, mental and physical education of children. Participants will learn about wireless communication, space and science technology.

2. Lycee mixte Ren� Gosse Contact Successful

On Monday, March 10, students at Lycee mixte Ren� Gosse in Clermont L'Herault, France participated in an ARISS contact. The scheduled contact at 08:32 UTC did not take place due to Eyharts� work responsibilities. A request to reschedule the contact for the next orbit was made and the ARISS team quickly responded, setting up a telebridge station between Clermont l'Herault and Kingston, Australia. This second attempt was successful. Nine students were able to ask one question each of the astronaut. Approximately 50 students, ten teachers and more than 75 amateur radio operators were present. Audio was fed into the EchoLink server. Three regional and local newspapers covered the event, as well as 3 television broadcast stations.

3. Astronaut Training Status

On Thursday, March 13, an ARISS training session was held with Nicole Stott, KE5GJN, and Sandra Magnus, KE5FYE. Both astronauts successfully participated in terrestrial-based amateur radio contacts using ARISS-equivalent equipment with a Houston area school, Westbrook Intermediate.

An ARISS training session has been planned in late April for Canadian Space Agency astronaut Bob Thirsk, VA3CSA, and European Space Agency astronaut Frank DeWinne, ON1DWN.

4. Spaceflight Participant Receives Training on Amateur Radio

Richard Garriott, W5KWQ, will fly to the ISS in October 2008 as a spaceflight participant. He has received Russian training on the ARISS radio equipment and has posted an update covering this to his blog on his �Richard in Space� Web site (February 26 entries).
See: http://www.richardinspace.com/index.cfm?fuseaction=blog.welcome

5. ARISS Presentation Posted

Patricia Palazzolo, KB3NMS, a teacher at Upper St. Clair School in Pennsylvania, gave a presentation at the Radio Amateur Satellite Corporation (AMSAT) Space Symposium held in Pittsburgh in October 2007.

Her presentation, �Launching Dreams: The Long-term Impact of SAREX and ARISS on Student Achievement� covered her experiences with her students, the space program, the Shuttle Amateur Radio Experiment (SAREX) program and the ARISS program. She gives real life examples of the positive impact these experiences have had on her children. The presentation has been posted on the AMSAT Web site. See:
http://www.amsat.org/amsat/ariss/Presentations/AMSAT%20Symposiums/2007%20
Sym
posium/Launching%20Dreams.pdf

[ANS thanks Carol, KB3LKI for the above information]

/EX

SB SAT @ AMSAT $ANS-083.10
Black Hole RF Signatures at 29-47 MHz

AMSAT News Service Bulletin 083.10
>From AMSAT HQ SILVER SPRING, MD.
March 23, 2008
To All RADIO AMATEURS
BID: $ANS-083.10

In closing, here is an item to discuss on the 2M repeater drive to work which may be more interesting than traffic, the weather, or the signs and symptoms of a gallbladder attack.

This week the UniverseToday website revealed that radio astronomers may be able to detect the evaporation and death of a primordial black hole by listening for their radio frequency emissions in the 29-47 MHz range.

Primordial black holes are remnants of the Big Bang and they are predicted to be knocking around in our universe right now. If they were 10^12 kg or bigger at the time of creation, they have enough mass to have survived constant evaporation from Hawking radiation over the 14 billion years since the beginning of the cosmos.

But what happens when the tiny black hole evaporates so small that it becomes so tightly wrapped around the structure of a fifth dimension (other than the "normal" three spatial dimensions and one time dimension)? Well, the black hole will explosively show itself, much like an elastic band snapping, emitting energy. These final moments will signify that the primordial black hole has died. What makes this exciting is that researchers believe they can detect these events as spikes of radio wave emissions and the hunt has already begun.

Interestingly, if their predictions are correct, this could provide evidence for the existence of a fifth dimension, a dimension operating at scales of billionths of a nanometer. If this exotic emission can be received, and if it is corroborated by both antennae, this could be evidence of the string theory prediction that there are more dimensions than the four we currently understand.

The Eight-meter-wavelength Transient Array (ETA) run by Virginia Tech Departments of Electrical & Computer Engineering and Physics, and the Pisgah Astronomical Research Institute (PARI), is currently taking high cadence radio wave observations and has been doing so for the past few months. This basic-looking antenna system, in fields in Montgomery County, North Carolina, giving researchers a unique opportunity to see primordial black holes as they die.

See the full story at:
http://www.universetoday.com/2008/03/16/when-black-holes-explode-measurin
g-t
he-emission-from-the-fifth-dimension/

[ANS thanks UniverseToday.com for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM

```
From -4515828540582389OO
X-Google-Thread: 10e8ad,f2c5daf9d26b87f8,start
X-Google-Thread: 10b9c8,f2c5daf9d26b87f8,start
X-Google-Attributes: gid10e8ad,gid10b9c8,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!news1.google.com!
newsfeed2.dallas1.level3.net!news.level3.com!panix!rri.panix.com!robomod!not-for-
mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-090 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sun, 30 Mar 2008 15:03:33 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 322
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000001c89298$bcc39e00$6701a8c0@familyroom>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix1.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
```

```
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader2.panix.com 1206903814 3925 166.84.1.1 (30 Mar 2008 19:03:34 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 30 Mar 2008 19:03:34 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Xref: g2news1.google.com rec.radio.amateur.space:1316 rec.radio.info:732
```

AMSAT NEWS SERVICE
ANS-090

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* AO-51 Schedule - April 2008
* Satellite Demo Videos
* AMSAT Awards
* AMSAT Room Block at Dayton
* KiwiSAT Update
* ARISS Status - 24 March 2008

SB SAT @ AMSAT $ANS-090.01
AO-51 Schedule - April 2008

AMSAT News Service Bulletin 090.01
  From AMSAT HQ SILVER SPRING, MD.
March 30, 2008
To All RADIO AMATEURS
BID: $ANS-090.01

The first week of April, AO-51 exits full illumination and our power budget will shrink considerably. The length of the eclipses will increase throughout the month, and we'll have to closely monitor our power situation. The schedule reflects this, as the BBS will be active throughout the first two weeks of the month. Additionally all AO-51 transmitters will be shut off on March 31st for a special Whole Orbit Data collection before full illumination ends.

As the month progresses we will schedule some time with the L/U BBS switched to a L/U repeater on an "as available" basis. Watch the webpage and ANS for announcements with further details.

April 2008 AO-51 Schedule

March 31 until April 30, subject to modification

March 31

All Transmitters OFF for WOD collection

April 1 - April 13

FM Repeater, V/U
Uplink: 145.920 MHz FM, NO PL Tone
Downlink: 435.300 MHz FM

9k6 Digital L/U BBS and Telemetry
Uplink: 1268.700 MHz FM
Downlink: 435.150 MHz FM

April 14 - April 30

FM Repeater, V/U
Uplink: 145.920 MHz FM, NO PL Tone
Downlink: 435.300 MHz FM

9k6 Digital L/U BBS and Telemetry
-- OR --
FM Repeater as available (exact dates to be announced)
Uplink: 1268.700 MHz FM
Downlink: 435.150 MHz FM

The AO-51 Operations Group is made up of AMSAT Members who are also AO-51 users.
The Operations Group works with the Command Team to create the monthly schedule for the satellite.

AO-51 Echo Mode Suggestion Email Address:
ao51-modes@amsat.org

73 KO4MA For AO-51 Operations Group
(KO4MA, WD9EWK/VA7EWK, N8MH, OZ1MY, VK5HI, WA4SXM)

[ANS thanks Drew, KO4MA, for the above information]

/EX

SB SAT @ AMSAT $ANS-090.02
Satellite Demo Videos

AMSAT News Service Bulletin 090.02
From AMSAT HQ SILVER SPRING, MD.
March 30, 2008
To All RADIO AMATEURS
BID: $ANS-090.02

Robert Davies, KI4HXT, has produced a Windows media video showing how to work AO-27. Dave Jordan, AA4KN does the actual satellite demonstration during the 2008 Orlando Hamcation. Dave describes the Doppler shift that will occur during the pass, makes a number of contacts during the pass, then talks about setting up the Kenwood TH-D7A hand held for analog satellite operation. Drew Glasbrenner, KO4MA was doing a simultaneous demonstration and has a cameo appearance describing the arc of the upcoming pass. This is about a 20 minute video.

Bob McGwier, N4HY also has a video recorded in February that talks about the AMSAT Engineering activities during the next few months. Good information about a number of activities that are taking place this year. This is a 10 minute video.

Videos can be found at http://www.ki4hxt.com/id5.html

Thanks to Robert for hosting these.

We are working on additional videos, stay tuned.

73,
Gould, WA4SXM
AMSAT VP User Services

[ANS thanks Gould, WA4SXM, for the above information]

/EX

SB SAT @ AMSAT $ANS-090.03

AMSAT Awards

AMSAT News Service Bulletin 090.03
  From AMSAT HQ SILVER SPRING, MD.
March 30, 2008
To All RADIO AMATEURS
BID: $ANS-090.03

We would like to welcome the following to the satellite community.

They have made their first satellite contact and are now members of the AMSAT Satellite Communicators Club.

Kent Frazier, K5KNT
Jay Garlitz, AA4FL

The following have earned the AMSAT Satellite Communication Achievement Award.

Patrick Stoddard, WD9EWK, #459
Francis Geraci, WB1FXX, #460
Jay Garlitz, AA4FL, #461

The following have earned the South Africa AMSAT Satellite Communicaton Award.

Patrick Stoddard, WD9EWK, #US118
Jay Garlitz, AA4FL, #US119

To see all the awards visit http://www.amsat.org or http://www.amsatnet.com

[ANS thanks Bruce, KK5DO, for the above information]

/EX

SB SAT @ AMSAT $ANS-090.04
AMSAT Room Block at Dayton

AMSAT News Service Bulletin 090.04
  From AMSAT HQ SILVER SPRING, MD.
March 30, 2008
To All RADIO AMATEURS
BID: $ANS-090.04

A reminder that time is running out. Over half the AMSAT room block for Dayton has been reserved. If you are interested in a room, please give me a call at 301-589-6062 between 10:00 AM and 6:00 PM (EDT), Monday-Friday.

[ANS thanks Martha for the above information]

/EX

SB SAT @ AMSAT $ANS-090.05
KiwiSAT Update

AMSAT News Service Bulletin 090.05
From AMSAT HQ SILVER SPRING, MD.
March 30, 2008
To All RADIO AMATEURS
BID: $ANS-090.05

KiwiSAT will now carry an additional special beacon which, it is planned, will
be used by radio amateurs around the world to collect data on atmospheric aberrations to assist with finite information collection directly associated with Global Warming concerns and Carbon Balance monitoring.

Details have yet to be finalized however the KiwiSAT structure has been modified
to incorporate a second 70cm monopole mounted on the Z- face.
A high level of filtering has been incorporated to minimize any desensitizing of
the on-board 70 cm receivers.
The operation of the beacon will be switched as required but will normally be ON
for whole orbit data collection.

The KiwiSAT linear flight transponder is currently transmitting from the Whangaparaoa area with beam antennas pointing South.

Transponder is inverting type to compensate for Doppler shift when in orbit.
* Transmit Power is 2 Watts PEP.
* Beacon frequency is 145.885 MHz
* Uplink is from 435.265 to 435.235 MHZ LSB (note the sideband)
* Down link is from 145.850 to 145.880 MHz USB
A test transmission on 435.2544 LSB came out at 145.860 USB.

As it's a linear transponder 30kHz wide, any mode can be used, but FM is discouraged (but not banned). Amateur stations are encouraged to try out the transponder. Try to better the previous distance of record of 292 km previously
achieved with the prototype transponder (same location/antenna).

Reports welcome to < amsat-zl(at)kiwisat.org >

[ANS thanks AMSAT-ZL for the above information]

/EX

SB SAT @ AMSAT $ANS-090.06
ARISS Status - 24 March 2008

AMSAT News Service Bulletin 090.06
From AMSAT HQ SILVER SPRING, MD.
March 30, 2008
To All RADIO AMATEURS
BID: $ANS-090.06

1. Upcoming School Contacts

Shanghai Youth Centre of Science and Technology Education in Xuhui, Shanghai, China has been scheduled for an Amateur Radio on the International Space Station (ARISS) contact on Tuesday, April 1 at 08:10 UTC. The Centre is an after school educational facility that educates teenagers in science and technology. It has its own radio club, callsign BY4AY, which focuses on educating students in science and radio communications and in fabricating electronic toys.

2. Shukor Crew Debrief Scheduled

An Amateur Radio on the International Space Station (ARISS) crew debrief was scheduled for Dr. Sheikh Muszaphar Shukor, 9W2MUS, on Tuesday, March 25. The spaceflight participant performed 5 contacts with Malaysian school children while onboard the ISS in October 2007.

3. Garriott to Participate in ARISS Contacts

Space Adventures has posted an article covering the educational activities that Richard Garriott, W5KWQ, has planned while he is onboard the International Space Station. Inspiring children at the Challenger Learning Centers and taking part in amateur radio contacts are among the activities in which he plans to participate. See:
http://www.spaceadventures.com/index.cfm?fuseaction=news.viewnews&newsid=599

4. Amateur Radio Stations in Colorado Air and Space Museum

In promoting education, science and technology, Wings over the Rockies Air and Space Museum in Denver, Colorado has included amateur radio stations in its Avionics display and efforts are well under way in setting up a station, callsign K0WAR, in the International Space Station module exhibit. See:
http://wings.rmhcn.org/

5. ARISS International Team Meeting Held

The Amateur Radio on the International Space Station (ARISS) monthly teleconference was held on Tuesday, March 18. Topics of discussion included the upcoming Moscow meeting, the ARISS nominating committee and SuitSat-2. Minutes have been posted. See: http://www.rac.ca/ariss/arisstel2008-03-18.htm
[ANS thanks Carol, KB3LKI, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Lee McLamb, KU4OS

```
From 58801510448092359
X-Google-Thread: 10e8ad,5a3ada981c4cff35,start
X-Google-Thread: 10b9c8,5a3ada981c4cff35,start
X-Google-Attributes: gid10e8ad,gid10b9c8,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!newsfeed.stanford.edu!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-087 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Sun, 30 Mar 2008 15:04:23 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 1410
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000101c89298$ded75f40$6701a8c0@familyroom>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix3.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader2.panix.com 1206903863 21925 166.84.1.3 (30 Mar 2008 19:04:23 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 30 Mar 2008 19:04:23 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
```

X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Xref: g2news1.google.com rec.radio.amateur.space:1317 rec.radio.info:733

This report is organized into FIVE parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites
Part 5 (S5) - deborbited/returned satellites

SB SAT @ AMSAT W8ISS ANS-087.S1
WSR 087 Part 1 03/27/2008

AMSAT NEWS SERVICE BULLETIN 087.S1 FROM AMSAT HQ
SILVER SPRING, MD, March 27, 2008
TO ALL RADIO AMATEURS
BID: $ANS-087.S1

VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.859330 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsat.in/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is
active. Each transponder has a different beacon.

```
[06252007]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational - Software reload

Current Modes:   FM Repeater - V/u
                 BBS         - OFF
                 Telemetry   - OFF

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink:   145.880 MHZ FM
                       145.880 MHz USB
                       145.920 MHz FM
                      1268.700 MHz FM 67Hz PL tone
Digital Downlinks:     435.150 MHz FM 38k4 Digital, PBP, 1 watt output
                       435.150 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:        145.860 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      1268.700 mhz FM 9k6 PBP Digital
Beacon:                435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[03272008]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Current Mode: V/u

Uplink:   145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz
```

```
Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute
timer
   on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the
repeater on
   and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset
the 10
   minute timer.
[05282007]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Operational - check operational schedule for current times!!

Current Mode: V/u

Voice/CW Mode JA
Uplink:   145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon:   435.795 MHz

Digital Mode JD
Uplinks:  145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage: http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php
```

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's CW
telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts.htm
[0820007]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[12132007]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: TESTING - VOICE

Current Mode: V/u

Uplink: 145.900 MHz FM 1200-baud Manchester FSK (reserved)
                145.920 MHz FM VOICE
                145.940 MHz FM 1200-baud Manchester FSK (reserved)
                145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink: 437.026 MHz USB VOICE
                (1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC 437.050 MHz RHCP
   PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[03202008]
=====
AO-7 AMSAT OSCAR 7

```
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational depending on amount of Sunlight

Current Mode: Listen before transmitting

Uplink:   145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink:  29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons:   29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/

AO-7 Usage Guidelines on the AO-7 Log and Resource Site located at:
http://www.planetemily.com/ao7
[05282007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Mode: FM Repeater - U/v
              Voice -       Occasianally
              BBS -         ON
              APRS -        ON
              SSTV -        OFF

Expedition 16 crew:
Commander:          Peggy Whitson
Flight Engineer:    Yuri Malenchenko      RK3DUP
Flight Engineer:    Garrett Reisman       KE5HAE

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink:   145.825 MHz FM
Worldwide packet downlink: 145.825 Mhz FM

Voice:
Region 1 voice uplink:   145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink:      145.800 MHz FM
```

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS
RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line is
NOT translated from Russian and posted.
[03272008]
NNNN
/EX

SR 087 Part 2 03/27/2008

AMSAT NEWS SERVICE BULLETIN 087.S2 FROM AMSAT HQ
SILVER SPRING, MD, March 27, 2008
TO ALL RADIO AMATEURS
BID: $ANS-087.S2

CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.
[11152007]
=====

```
CP3
Catalog Number: 31128
Launch Date: April 17,2007

Status: Operational

Current Mode:  /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[07302007]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: In Orbit

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder:  145.825 Mhz FM
[02052007]
=====
NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Operational

Current Mode: /u

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[10222007]
=====
GENESAT-1 ?O-??
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Current Mode: /u

Telemetry Beacon Downlink: 437.0670 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[01082007]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
```

Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon: 437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
[03262007]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launched: June 30, 2003

Status: Operational

Current Mode: /u

Beacon: 436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[01082007]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launched: February 21, 2006

Status: Semi-Operational - Constant Carrier only

Uplink: 1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan ?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[01082007]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

```
Status: Operational

Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW
[08132007]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational - Softawre Reload

Current Mode(s): FM Repeater - V/u
                 BBS         - OFF
                 Telemetry   - OFF

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink:   145.880 MHZ FM
                       145.880 MHz USB
                       145.920 MHz FM
                      1268.700 MHz FM 67Hz PL tone
Digital Downlinks:     435.150 MHz FM 38k4 Digital, PBP, 1 watt output
                       435.150 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:        145.860 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      1268.700 mhz FM 9k6 PBP Digital
Beacon:                435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[03272008]
=====
NO-44 PCSAT
```

```
Catalog number: 26931
Launch Date: September 30, 2001

Status: Hibernation until full sunlight in November

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink:        144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[09242007]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Current Modes: V/U
               L/U

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[09172007]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational.

Current Mode:  /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon:           435.025 MHz
Mode-S Beacon:      2401.500 MHz
```

```
Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[01242008]
=====
RS-22 RADIO SPORT RS-22
Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only

Current Mode:  /u

CW Beacon - 435.352 MHz
            145.818 MHz
[08062007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Mode: FM Repeater - U/v
              Voice -       Occasianally
              BBS -         ON
              APRS -        ON
              SSTV -        OFF

Expedition 16 crew:
Commander:          Peggy Whitson
Flight Engineer:    Yuri Malenchenko      RK3DUP
Flight Engineer:    Garrett Reisman       KE5HAE

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink:   145.825 MHz FM
Worldwide packet downlink: 145.825 Mhz FM

Voice:
Region 1 voice uplink:   145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink:      145.800 MHz FM

Crossband Repeater:
Repeater Uplink:         437.800 MHz FM
Repeater Downlink:       145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
```

U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS
RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.
[03272008]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-087.S3
WSR 087 Part 3 03/27/2008

AMSAT NEWS SERVICE BULLETIN 087.S3 FROM AMSAT HQ
SILVER SPRING, MD, March 27, 2008
TO ALL RADIO AMATEURS
BID: $ANS-087.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

CP4
Catalog Number: 31122
Launch Date: April 17,2007

Status: Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon: 437.325 MHz CW
[11152007]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Non-Operational

Current Mode: /u

```
Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon:             437.2750 MHz CW

Callsign: JR8YJT
[10152007]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency:  437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink:         437.250 MHz FM 67Hz CTCSS
Voice Downlink:      2401.835 MHz FM
Packet Up/Downlink:   437.250 MHz 9k6 packet
Packet Downlink      2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non=Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[08132007]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink:   435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)
```

Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Non-Operational

Uplinks: 145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[007302007]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, callsign KE6QMD, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational

```
Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS:                SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink:   145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
V-band:   145.840 -  145.990 MHz CW/LSB
U-band:   435.550 -  435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks
---------
S2-band:  2401.225 -  2401.475 MHz CW/USB
K-band:  24048.010 - 24048.060 MHz CW/USB
Beacon:   2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)
----------------------------
BEACON   General Beacon (GB)    Middle Beacon (MB)    Engineering Beacon
(EB)
2 m       none                   145.898 MHz           none
70cm      435.438 MHz            435.588 MHz           435.838 MHz
13cm(1)  2400.188 MHz           2400.338 MHz          2400.588 MHz
13cm(2)  2401.173 MHz           2401.323 MHz          2401.573 MHz
```

3cm	10450.975 MHz	10451.125 MHz	10451.375 MHz
1.5cm	24047.885 MHz	24048.035 MHz	24048.285 MHz

[07162007]
=====
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web site
at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink: 145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012006]
=====

IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks: 145.875 MHz FM 1200-baud
145.900 MHz FM 1200-baud
145.925 MHz FM 1200-baud
145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]

=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]

=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]

=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

```
Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
LIBERTAD-1
Catalog Number: 31129
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink:   145.825 MHz 1200 AFSK ax25 APRS
```

```
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[10222007]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplinks:          145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink:      437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[01222007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
[05012006]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
```

```
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet: Non-Operational
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon:   145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
```

```
Uplink:   145.8500 - 145.9000 MHz SSB/CW
Downlink   29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
Beacons:   29.450 MHz
          435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon 1:  29.352 MHz (intermittent)
Beacon 2:  29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
```

```
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink:     21.260 to 21.300 MHz CW/USB
Downlink:  145.860 to 145.900 MHz CW/USB

Beacon:    145.860 MHz

Robot:     145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink:   21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon:   29.408 MHz

Robot:    29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-087.S4
WSR 087 Part 4 03/27/2008

AMSAT NEWS SERVICE BULLETIN 087.S4 FROM AMSAT HQ
SILVER SPRING, MD, March 27, 2008
TO ALL RADIO AMATEURS
BID: $ANS-087.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE PROPOSED FOR LAUNCH AT
THIS TIME:

Phase 5a Mars Mission AO-??
Catalog Number:
Proposed Launch Date: 2009 or 2011

Status: Design Phase

For the latest project status update please visit the AMSAT-DL P5-A web
page:
http://ticket-to-mars.org
[01222007]
=====
```

PHASE 3E AO-??
Catalog number:
Proposed Launch Date: Late 2007

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/
[01222007]
=====
Eagle AO-??
Catalog Number:
Proposed Launch Date: Early/Mid 2009

Status: Design Phase

For the latest project status updates please visit the AMSAT-NA webpage:
http://www.amsat.org
[01222007]
=====
Can X-2
Catalog number:
Proposed Launch Date: April, 2008

Status: Waiting for Launch

For the latest project status update please visit the Can X-2 web page:
http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[03132008]
=====
AAUSAT-II
Catalog number:
Proposed Launch Date: April, 2008

Status: Waiting for Launch

For the latest project status update please visit the AAUSAT-II web page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[03132008]
=====
Cute-1.7+APD II
Catalog number:
Proposed Launch Date: April, 2008

Status: Waiting for Launch

For the latest project status update please visit the Cute-1.7+APD II
web
page:
http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78
[03132008]
=====
Compass 1
Catalog number:
Proposed Launch Date: April, 2008

Status: Waiting for Launch

For the latest project status update please visit the Compass 1 web
page:
http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52
[03132008]
=====
Delfi-C3
Catalog number:
Proposed Launch Date: April, 2008

Status: Waiting for Launch

Proposed Frequencies:
* Primary telemetry downlink: 145.870 MHz 1200 Baud BPSK AX.25 400mW
* Backup telemetry downlink: 145.930 MHz 1200 Baud BPSK AX.25 400mW
* Linear transponder passband downlink: 145.880 - 145.920 MHz
(inverting)
  400mW PEP
* Linear transponder passband uplink: 435.570 - 435.530 MHz
* Transponder mode beacon: 145.870 MHz CW (10dB below transponder PEP)

For the latest project status update please visit the Delfi-C3 web page:
http://www.delfic3.nl/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68
[03132008]
=====
Seeds 2
Catalog number:
Proposed Launch Date: April, 2008

Status: Waiting for Launch

For the latest project status update please visit the Seeds 2 web page:

http://cubesat.aero.cst.nihon-u.ac.jp/english/main_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36
[03132008]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-087.S5
WSR 087 Part 5 03/27/2008

AMSAT NEWS SERVICE BULLETIN 087.S5 FROM AMSAT HQ
SILVER SPRING, MD, March 27, 2008
TO ALL RADIO AMATEURS
BID: $ANS-087.S5

THE FOLLOWING SATELLITES HAVE DE-ORBITED OR HAVE BEEN RETURNED SAFELY:

NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Operational
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

```
Main Downlink:      145.825 Mhz FM APRS AX25
APRS Uplink:        145.825 MHz FM APRS AX25
Voice/PSK31 Uplink:  28.120 MHz
```

Packet to Voice ID: RAFT
[06112007]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

From -7142644912624333130
X-Google-Thread: 10e8ad,18d7fe82d2def0bd,start
X-Google-Thread: 10b9c8,18d7fe82d2def0bd,start
X-Google-Attributes: gid10e8ad,gid10b9c8,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!newsfeed2.dallas1.level3.net!
news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-094 AMSAT Weekly Satellite Report

```
Followup-To: rec.radio.amateur.space
Date: Thu, 3 Apr 2008 22:11:36 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 1411
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <001801c895f9$311cde70$6701a8c0@familyroom>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader2.panix.com 1207275097 6113 166.84.1.6 (4 Apr 2008 02:11:37 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Fri, 4 Apr 2008 02:11:37 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Xref: g2news1.google.com rec.radio.amateur.space:1318 rec.radio.info:737
```

This report is organized into FIVE parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites
Part 5 (S5) - deborbited/returned satellites

SB SAT @ AMSAT W8ISS ANS-094.S1
WSR 094 Part 1 04/03/2008

AMSAT NEWS SERVICE BULLETIN 094.S1 FROM AMSAT HQ
SILVER SPRING, MD, April 03, 2008
TO ALL RADIO AMATEURS
BID: $ANS-094.S1

VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW

```
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink:   435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW


Indian Beacon:  145.859330 MHZ CW
Dutch Beacon:   145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsat.in/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is
active. Each transponder has a different beacon.
[06252007]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational - Software reload

Current Modes:   FM Repeater - V/u
                 BBS         - L/u
                 Telemetry   -  /u

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink:   145.880 MHZ FM
                       145.880 MHz USB
                       145.920 MHz FM
                      1268.700 MHz FM 67Hz PL tone
Digital Downlinks:     435.150 MHz FM 38k4 Digital, PBP, 1 watt output
                       435.150 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:        145.860 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      1268.700 mhz FM 9k6 PBP Digital
Beacon:                435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
```

S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[04032008]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute
timer
   on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the
repeater on
   and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset
the 10
   minute timer.
[05282007]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Operational - check operational schedule for current times!!

Current Mode: V/u

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD

Uplinks: 145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage: http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's CW
telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts.htm
[0820007]

=====

AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[12132007]

=====

AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: TESTING - VOICE

Current Mode: V/u

Uplink: 145.900 MHz FM 1200-baud Manchester FSK (reserved)
                145.920 MHz FM VOICE
                145.940 MHz FM 1200-baud Manchester FSK (reserved)

```
                145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink:       437.026 MHz USB VOICE
                ( 1200-baud PSK - MBL Telemetry Only )

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[03202008]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational depending on amount of Sunlight

Current Mode: Listen before transmitting

Uplink:   145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink:  29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons:   29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/

AO-7 Usage Guidelines on the AO-7 Log and Resource Site located at:
http://www.planetemily.com/ao7
[05282007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Mode: FM Repeater - U/v
```

Voice - Occasianally
BBS - ON
APRS - ON
SSTV - OFF

Expedition 16 crew:
Commander: Peggy Whitson
Flight Engineer: Yuri Malenchenko RK3DUP
Flight Engineer: Garrett Reisman KE5HAE

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM
Worldwide packet downlink: 145.825 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS
RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.
[03272008]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-094.S2
WSR 094 Part 2 04/03/2008

AMSAT NEWS SERVICE BULLETIN 094.S2 FROM AMSAT HQ

SILVER SPRING, MD, April 03, 2008
TO ALL RADIO AMATEURS
BID: $ANS-094.S2

CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.
[11152007]
=====
CP3
Catalog Number: 31128
Launch Date: April 17,2007

Status: Operational

Current Mode: /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[07302007]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: In Orbit

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder: 145.825 Mhz FM
[02052007]
=====
NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Operational

Current Mode: /u

Downlink: 437.385 Mhz APRS AX25

```
Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[10222007]
=====
GENESAT-1 ?O-??
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Current Mode: /u

Telemetry Beacon Downlink: 437.0670 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[01082007]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon:             437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
[03262007]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launched: June 30, 2003

Status: Operational

Current Mode: /u

Beacon:     436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[01082007]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launched: February 21, 2006

Status: Semi-Operational - Constant Carrier only

Uplink:  1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan ? )

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[01082007]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW
[08132007]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational - Softawre Reload

Current Mode(s): FM Repeater - V/u
                 BBS         - L/u
                 Telemetry   -  /u

Analog voice downlink: 435.300 MHz FM
                        435.150 MHz FM
                       2401.200 Mhz FM
Analog voice uplink:    145.880 MHZ FM
                        145.880 MHz USB
                        145.920 MHz FM
                       1268.700 MHz FM 67Hz PL tone
Digital Downlinks:      435.150 MHz FM 38k4 Digital, PBP, 1 watt output
                        435.150 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                       2401.200 MHz FM 38k4 bps, AX.25
```

```
Digital Uplink:        145.860 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      1268.700 mhz FM 9k6 PBP Digital
Beacon:                435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[04032008]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Hibernation until full sunlight in November

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink:        144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[09242007]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Current Modes: V/U
               L/U

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM
```

```
Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[09172007]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational.

Current Mode:  /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon:          435.025 MHz
Mode-S Beacon:     2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[01242008]
=====
RS-22 RADIO SPORT RS-22
Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only

Current Mode:  /u

CW Beacon - 435.352 MHz
            145.818 MHz
[08062007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Mode: FM Repeater - U/v
              Voice -       Occasianally
              BBS -         ON
              APRS -        ON
              SSTV -        OFF

Expedition 16 crew:
```

Commander: Peggy Whitson
Flight Engineer: Yuri Malenchenko RK3DUP
Flight Engineer: Garrett Reisman KE5HAE

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM
Worldwide packet downlink: 145.825 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS
RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.
[03272008]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-094.S3
WSR 094 Part 3 04/03/2008

AMSAT NEWS SERVICE BULLETIN 094.S3 FROM AMSAT HQ
SILVER SPRING, MD, April 03, 2008
TO ALL RADIO AMATEURS
BID: $ANS-094.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

CP4
Catalog Number: 31122
Launch Date: April 17,2007

Status: Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon: 437.325 MHz CW
[11152007]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Non-Operational

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon: 437.2750 MHz CW

Callsign: JR8YJT
[10152007]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 MHz FM 67Hz CTCSS
Voice Downlink: 2401.835 MHz FM
Packet Up/Downlink: 437.250 MHz 9k6 packet
Packet Downlink   2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]

```
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non=Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[08132007]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink:   435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Non-Operational

Uplinks:   145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink:  437.325 MHz

Broadcast callsign: MYSAT3-11
BBS:                MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial
land and weather imaging payloads offers FM and FSK Amateur Radio
communica-
tion.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a
collaborative effort between the Malaysian government and Surrey
Satellite
Technology Ltd.
[007302007]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001
```

```
Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink:   145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
call-
sign KE6QMD, as per the user service agreement located at the following
URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS:                SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink:   145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
```

V-band: 145.840 - 145.990 MHz CW/LSB
U-band: 435.550 - 435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks

S2-band: 2401.225 - 2401.475 MHz CW/USB
K-band: 24048.010 - 24048.060 MHz CW/USB
Beacon: 2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)

BEACON	General Beacon (GB)	Middle Beacon (MB)	Engineering Beacon (EB)
2 m	none	145.898 MHz	none
70cm	435.438 MHz	435.588 MHz	435.838 MHz
13cm(1)	2400.188 MHz	2400.338 MHz	2400.588 MHz
13cm(2)	2401.173 MHz	2401.323 MHz	2401.573 MHz
3cm	10450.975 MHz	10451.125 MHz	10451.375 MHz
1.5cm	24047.885 MHz	24048.035 MHz	24048.285 MHz

[07162007]
=====
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web site
at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====

```
SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater:         436.250 MHz

Uplinks: Mode B Repeater:  145.825 MHz
Mode J Digipeater:         145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink:   145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
```

```
BBS: TMSAT1-12
[05012006]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign:       POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012006]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
```

```
[05092004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
```

```
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
LIBERTAD-1
Catalog Number: 31129
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink:   145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[10222007]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplinks:          145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink:      437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[01222007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational
```

```
Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
[05012006]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet: Non-Operational
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB
```

```
Beacon:   145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink  29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
Beacons:   29.450 MHz
          435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965
```

```
Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon 1:  29.352 MHz (intermittent)
Beacon 2:  29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink:     21.260 to 21.300 MHz CW/USB
Downlink:  145.860 to 145.900 MHz CW/USB

Beacon:    145.860 MHz

Robot:     145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink:   21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon:   29.408 MHz

Robot:    29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-094.S4
WSR 094 Part 4 04/03/2008
```

AMSAT NEWS SERVICE BULLETIN 094.S4 FROM AMSAT HQ
SILVER SPRING, MD, April 03, 2008
TO ALL RADIO AMATEURS
BID: $ANS-094.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE PROPOSED FOR LAUNCH AT THIS TIME:

Phase 5a Mars Mission AO-??
Catalog Number:
Proposed Launch Date: 2009 or 2011

Status: Design Phase

For the latest project status update please visit the AMSAT-DL P5-A web page:
http://ticket-to-mars.org
[01222007]

=====

PHASE 3E AO-??
Catalog number:
Proposed Launch Date: Late 2007

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/
[01222007]

=====

Eagle AO-??
Catalog Number:
Proposed Launch Date: Early/Mid 2009

Status: Design Phase

For the latest project status updates please visit the AMSAT-NA webpage:
http://www.amsat.org
[01222007]

=====

Can X-2
Catalog number:
Proposed Launch Date: April, 2008

Status: Waiting for Launch

For the latest project status update please visit the Can X-2 web page:
http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[03132008]

```
=====
AAUSAT-II
Catalog number:
Proposed Launch Date: April, 2008

Status: Waiting for Launch

For the latest project status update please visit the AAUSAT-II web
page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[03132008]
=====
Cute-1.7+APD II
Catalog number:
Proposed Launch Date: April, 2008

Status: Waiting for Launch

For the latest project status update please visit the Cute-1.7+APD II
web
page:
http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78
[03132008]
=====
Compass 1
Catalog number:
Proposed Launch Date: April, 2008

Status: Waiting for Launch

For the latest project status update please visit the Compass 1 web
page:
http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52
[03132008]
=====
Delfi-C3
Catalog number:
Proposed Launch Date: April, 2008

Status: Waiting for Launch

Proposed Frequencies:
* Primary telemetry downlink: 145.870 MHz 1200 Baud BPSK AX.25 400mW
* Backup telemetry downlink: 145.930 MHz 1200 Baud BPSK AX.25 400mW
```

* Linear transponder passband downlink: 145.880 - 145.920 MHz
(inverting)
  400mW PEP
* Linear transponder passband uplink: 435.570 - 435.530 MHz
* Transponder mode beacon: 145.870 MHz CW (10dB below transponder PEP)

For the latest project status update please visit the Delfi-C3 web page:
http://www.delfic3.nl/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68
[03132008]
=====
Seeds 2
Catalog number:
Proposed Launch Date: April, 2008

Status: Waiting for Launch

For the latest project status update please visit the Seeds 2 web page:
http://cubesat.aero.cst.nihon-u.ac.jp/english/main_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36
[03132008]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-094.S5
WSR 094 Part 5 04/03/2008

AMSAT NEWS SERVICE BULLETIN 094.S5 FROM AMSAT HQ
SILVER SPRING, MD, April 03, 2008
TO ALL RADIO AMATEURS
BID: $ANS-094.S5

THE FOLLOWING SATELLITES HAVE DE-ORBITED OR HAVE BEEN RETURNED SAFELY:

NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Operational
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered

Re-entered: May 30, 2007

Main Downlink: 145.825 Mhz FM APRS AX25
APRS Uplink: 145.825 MHz FM APRS AX25
Voice/PSK31 Uplink: 28.120 MHz

Packet to Voice ID: RAFT
[06112007]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

- AMSAT News Service (ANS)
- General satellite discussion (AMSAT-BB)
- Orbit data (KEPS)
- Manned space missions (SAREX)
- District of Columbia area (AMSAT-DC)
- New England area (AMSAT-NE)
- AMSAT Educational Liaison mailing list (AMSAT-EDU)
- AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the

memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen,
G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

From -5534173159239722950
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!newshub.sdsu.edu!news.astraweb.com!
border1.newsrouter.astraweb.com!not-for-mail
From: Chris Steyaert <observations@rmob.org>
Newsgroups: rec.radio.amateur.space,sci.astro.amateur
Subject: Radio Meteor Obs. Bull. March 2008
Date: Sun, 06 Apr 2008 20:13:47 +0200
Message-ID: <kl4iv358ch109tfa1gckk459v4k6s1nc3j@4ax.com>
X-Newsreader: Forte Agent 1.93/32.576 English (American)
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Lines: 17
Organization: Unlimited download news at news.astraweb.com
NNTP-Posting-Host: 6d51fd87.news.astraweb.com
X-Trace: DXC=gfcIblCeO\hJRZZkg^aP1jL?
0kYOcDh@j_1m1SOGk_>ggdBPgf34L;dKX07\YZ`QZfQ1aFbe]2m6lm=@=Dc?9Yeb
Xref: g2news1.google.com rec.radio.amateur.space:1319 sci.astro.amateur:103353

Radio Meteor Observation Bulletin No. 176 of March 2008 (65 K) is available now as

http://visualrmob.free.fr/rmobtext/rmob0803.txt

More information and the visual presentation of the hourly forward scatter counts can be found on

http://www.rmob.org

http://radio.data.free.fr

Chris

From -442834100204473465
X-Google-Thread: 10e8ad,4cb84f02cf268e92,start
X-Google-Thread: 10b9c8,4cb84f02cf268e92,start
X-Google-Attributes: gid10e8ad,gid10b9c8,domainid0,public,usenet

X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!newshub.sdsu.edu!news-out.readnews.com!transit4.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-097 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sun, 6 Apr 2008 15:50:40 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 276
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000401c8980f$26346b00$6801a8c0@familyroom>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader2.panix.com 1207511441 3604 166.84.1.6 (6 Apr 2008 19:50:41 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 6 Apr 2008 19:50:41 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Xref: g2news1.google.com rec.radio.amateur.space:1320 rec.radio.info:742

AMSAT NEWS SERVICE
ANS-097

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* Dayton Forums Schedule
* AMSAT Booth Volunteers
* DelfiC3 Update
* AMSAT Room Block at Dayton

* AO-51 Update
* ARISS Status - 24 March 2008

SB SAT @ AMSAT $ANS-097.01
Dayton Forums Schedule

AMSAT News Service Bulletin 097.01
From AMSAT HQ SILVER SPRING, MD.
April 6, 2008
To All RADIO AMATEURS
BID: $ANS-097.01

AMSAT Forum at Dayton Hamvention 0900-1130 Saturday, May 17
Forum Room 5
We have a great lineup of speakers for the AMSAT Fourm at Dayton this year. The forum will concentrate on discussing AMSAT projects and activites for this year.

Moderator: Barry A. Baines, WD4ASW AMSAT Corporate Secretary & VP-Special Projects

Rick Hambly, W2GPS AMSAT President and Robert Davis, KF4KSS AMSAT Director-Spacecraft Integration and Lab Manager, "AMSAT Update". Rick will present a status report on the Intelsat Negotiations, a brief update on Eagle, and AMSAT-DL's Phase 3-E Project. Bob will provide an overview of AMSAT's new Integration Lab in Pocomoke, MD as well as discuss the HASP (High Altitude Student Payload) and Cubesat Projects that are under development at the Lab.

Gould Smith, WA4SXM, AMSAT VP-Member & User Services, Andrew Glasbrenner, KO4MA AMSAT VP-Operations, and Mark Hammond, N8MH AMSAT Command Station, "AMSAT Satellite Operations Update" which will provide an overview of AO-51 as well as highlight how AO-16 has been reconfigured as a voice repeater satellite.

Matt Ettus, N2MJI, ACP System Engineer and Michelle Thompson, W5NYV ACP Ground Station Development Engineer, "AMSAT's Advanced Communications Package (ACP)". Matt and Michelle will provide an overview of the new communications system currently under development for Eagle and a potential payload package to be placed on a commercial geostationary satellite. ACP is designed to provide emergency communications using portable ground stations as well as make it possible for amateurs living in areas with CC&R restrictions to be able to communicate via our next generation satellite. They will explain why ACP is being developed and discuss both the work being done on the payload as well as the ground station component that is being developed concurrently.

Frank Bauer, KA3HDO AMSAT Director-Manned Space Programs, "A Ham Radio Operator's View of ARISS". Frank will outline several new initiatives under development for Amateur Radio on the International Space Station (ARISS) that will interest amateur radio operators as well as provide an overview of SuitSat-2 currently under development.

[ANS thanks Gould, WA4SXM, for the above information]

/EX

SB SAT @ AMSAT $ANS-097.02
AMSAT Booth Volunteers

AMSAT News Service Bulletin 097.02
   From AMSAT HQ SILVER SPRING, MD.
April 6, 2008
To All RADIO AMATEURS
BID: $ANS-097.02

AMSAT Booth Volunteers for Dayton 2008

I am looking for volunteers to help in the AMSAT booth during the 2008 Dayton Hamvention, May 16-18. I would like people to volunteer for 2 hour shifts on Friday, Saturday and Sunday. Multiple shifts are welcome. I also need help with booth setup and take down on Thursday May 15 and Sunday May 18. With enough people we have been able to setup and take down the booth in 3 - 4 hours (or less). Please volunteer to Gould, WA4SXM at his callsign@amsat.org. This is a great opportunity to give back to AMSAT and to have an enjoyable time talking with other AMSAT members and future members.

[ANS thanks Gould, WA4SXM, for the above information]

/EX

SB SAT @ AMSAT $ANS-097.03
DelfiC3 Update

AMSAT News Service Bulletin 097.03
   From AMSAT HQ SILVER SPRING, MD.
April 6, 2008
To All RADIO AMATEURS
BID: $ANS-097.03

DelfiC3 Provisional launch date April 21st

April 4th, 2008
Greetings from the clean room at Sriharikota!

The Delfi-C3 checkout team has safely arrived at the launch site in India, and we are currently performing all checks on the spacecraft.

So far, everything goes as planned and we have found no problems. Unfortunately, photography is not allowed on the base so you'll have to use your imagination for now. Meanwhile, we will try to keep you updated by posting text-only blog entries.

At this very moment, the team is building up the satellite into launch configuration, which means attaching the solar panels, the wireless sun sensors, and applying the final pieces of thermal tape and locking glue. All major health checks have been successfully completed up to this point so we know the spacecraft is in good health.

The linear transponder was tested for the last time before launch, and it worked just fine.
Frequencies:
* Primary telemetry downlink: 145.870 MHz 1200 Baud BPSK AX.25 400mW
* Backup telemetry downlink: 145.930 MHz 1200 Baud BPSK AX.25 400mW
* Linear transponder passband downlink: 145.880 - 145.920 MHz (inverting) 400mW PEP
* Linear transponder passband uplink: 435.570 - 435.530 MHz
* Transponder mode beacon: 145.870 MHz CW (10dB below transponder PEP)

Monitor http://www.delfic3.nl/photoblog/ for updates!

[ANS thanks Wouter Jan Ubbels VU/PE4WJ for the above information]

/EX

SB SAT @ AMSAT $ANS-097.04
AMSAT Room Block at Dayton

AMSAT News Service Bulletin 097.04
From AMSAT HQ SILVER SPRING, MD.
April 6, 2008
To All RADIO AMATEURS
BID: $ANS-097.04

Once again, Dayton is about 6 weeks away. If you plan to attend, we have a block of rooms reseved every year for our group. Please call Martha with C/C info and the days you plan to be there and she will make the reservations for you.

[ANS thanks Martha for the above information]

/EX

SB SAT @ AMSAT $ANS-097.05
AO-51 Update

AMSAT News Service Bulletin 097.05
From AMSAT HQ SILVER SPRING, MD.
April 6, 2008
To All RADIO AMATEURS

BID: $ANS-097.05

AO-51 is running less power than last week.

Gould, WA4SXM, AO-51 Command station reported that the transmitter power levels on AO-51 have been reduced.

1) The SQRX receiver is on for L band uplink for the bulletin board
2) We are starting to enter a new eclipse cycle this week.

```
TX B (analog)  is 700 mW  (was 820 mW)
TX A (digital) is 550 mW  (was 550 mW)
```

We will reduce power slowly until mid June (eclipse length maximum), then slowly increase it until early Sept when we will again enter a no eclipse period for a number of months.

[ANS thanks Gould, WA4SXM for the above information]

/EX

SB SAT @ AMSAT $ANS-097.06
ARISS Status - April 3, 2008

AMSAT News Service Bulletin 097.06
   From AMSAT HQ SILVER SPRING, MD.
April 6, 2008
To All RADIO AMATEURS
BID: $ANS-097.06

Amateur Radio on the International Space Station (ARISS) Status Report

1.   Upcoming School Contacts

An Amateur Radio on the International Space Station (ARISS) contact has been scheduled with Osnovna skola Pazin in Pazin, Croatia on Monday, April 7 at 14:52 UTC. Eight hundred students are enrolled at the school which has offered technical classes in robotics, electronics and computer science for the past ten years. Students from Pazin's two high schools are also expected to attend this event. The schools hope to pique the students' interest in space and electronics through this educational activity.

2.   Kodomo Contact Successful

Youth from the Kodomo Support Project in Kyoto, Japan participated in a successful Amateur Radio on the International Space Station (ARISS) contact on Wednesday, March 26. One hundred thirty parents and community members watched as eighteen children asked astronaut Garrett Reisman, KE5HAE, twenty questions before the ISS went over the horizon. Three television stations, including NHK, the Japan Broadcasting Corporation, and seven newspapers covered the event. To view a video of the contact, go to: http://www.ariss.jp/kyoto/Kyoto.wmv

3. Shukor Crew Debrief Held

An Amateur Radio on the International Space Station (ARISS) crew debrief was held on Tuesday, March 25. Spaceflight participant Sheikh Muszaphar Shukor, 9W2MUS provided the team with feedback on his experience with ARISS contacts while onboard the ISS.

4. Articles Cover Upcoming Garriott Activities

Articles have been posted covering the educational activities that Richard Garriott, W5KWQ, has planned while onboard the International Space Station. These activities include contacting children at the Challenger Learning Centers and taking part in amateur radio contacts. Prior to flight, children can take part in a contest creating a design for a patch. Spaceref.com and the Challenger Center articles may be viewed here: http://www.spaceref.com/news/viewpr.html?pid=25010
http://www.challenger.org/programs/garriottdownlinks.cfm

5. Astronaut Training Status

An Amateur Radio on the International Space Station (ARISS) training session has been planned for astronauts Bob Thirsk, VA3CSA, and Chris Hadfield, KC5RNJ/VA3OOG, on Thursday, April 17. Thirsk is a scheduled crew member on Expedition 19; Hadfield is his back-up.

[ANS thanks Carol, KB3LKI, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Dee Interdonato, NB2F

```
From -3192600926240195674
X-Google-Thread: 10e8ad,b924615563ebb659,start
X-Google-Thread: 10b9c8,b924615563ebb659,start
X-Google-Attributes: gid10e8ad,gid10b9c8,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!newsfeed2.dallas1.level3.net!
```

```
news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-101 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Fri, 11 Apr 2008 08:16:59 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 1411
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000601c89bcd$e84e84c0$6801a8c0@familyroom>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix3.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader2.panix.com 1207916219 8768 166.84.1.3 (11 Apr 2008 12:16:59 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Fri, 11 Apr 2008 12:16:59 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Xref: g2news1.google.com rec.radio.amateur.space:1321 rec.radio.info:748
```

This report is organized into FIVE parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites
Part 5 (S5) - deborbited/returned satellites

SB SAT @ AMSAT W8ISS ANS-101.S1
WSR 101 Part 1 04/10/2008

AMSAT NEWS SERVICE BULLETIN 101.S1 FROM AMSAT HQ
SILVER SPRING, MD, April 10, 2008
TO ALL RADIO AMATEURS
BID: $ANS-101.S1

VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

```
Frequencies:
Indian Transponder:
Uplink:   435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink:   435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW


Indian Beacon:  145.859330 MHZ CW
Dutch Beacon:   145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsat.in/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is
active. Each transponder has a different beacon.
[06252007]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational - Software reload

Current Modes:   FM Repeater - V/u
                 BBS         - L/u
                 Telemetry   -  /u

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink:   145.880 MHZ FM
                       145.880 MHz USB
                       145.920 MHz FM
                      1268.700 MHz FM 67Hz PL tone
Digital Downlinks:     435.150 MHz FM 38k4 Digital, PBP, 1 watt output
                       435.150 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:        145.860 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      1268.700 mhz FM 9k6 PBP Digital
Beacon:                435.150 MHz

Mode and Antenna Polarization:
T: Linear
```

```
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[04032008]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Current Mode: V/u

Uplink:   145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute
timer
   on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the
repeater on
   and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset
the 10
   minute timer.
[05282007]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Operational - check operational schedule for current times!!

Current Mode: V/u

Voice/CW Mode JA
Uplink:   145.90 to 146.00 MHz CW/LSB
```

Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage: http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts.htm
[0820007]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[12132007]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: TESTING - VOICE

Current Mode: V/u

```
Uplink:         145.900 MHz FM 1200-baud Manchester FSK (reserved)
                145.920 MHz FM VOICE
                145.940 MHz FM 1200-baud Manchester FSK (reserved)
                145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink:       437.026 MHz USB VOICE
                ( 1200-baud PSK - MBL Telemetry Only )

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[03202008]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational depending on amount of Sunlight

Current Mode: Listen before transmitting

Uplink:   145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink:  29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons:   29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/

AO-7 Usage Guidelines on the AO-7 Log and Resource Site located at:
http://www.planetemily.com/ao7
[05282007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998
```

```
Status: Operational

Current Mode: FM Repeater - U/v
              Voice -       Occasianally
              BBS -         ON
              APRS -        ON
              SSTV -        OFF

Expedition 16 crew:
Commander:          Peggy Whitson
Flight Engineer:    Yuri Malenchenko      RK3DUP
Flight Engineer:    Garrett Reisman       KE5HAE

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink:   145.825 MHz FM
Worldwide packet downlink: 145.825 Mhz FM

Voice:
Region 1 voice uplink:   145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink:      145.800 MHz FM

Crossband Repeater:
Repeater Uplink:         437.800 MHz FM
Repeater Downlink:       145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German:              DP0ISS
Russian:             RS0ISS
                     RZ3DZR
USA:                 NA1SS
Packet Mailbox:      RS0ISS-11
Packet Keyboard:     RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.
[03272008]
NNNN
/EX
```

SB SAT @ AMSAT W8ISS ANS-101.S2
WSR 101 Part 2 04/10/2008

AMSAT NEWS SERVICE BULLETIN 101.S2 FROM AMSAT HQ
SILVER SPRING, MD, April 10, 2008
TO ALL RADIO AMATEURS
BID: $ANS-101.S2

CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode: /u

```
TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon:    435.245 MHz CW
```

Callsign: K5USL

TLM and CW interchange every 30 seconds.
[11152007]
=====
CP3
Catalog Number: 31128
Launch Date: April 17,2007

Status: Operational

Current Mode: /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[07302007]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: In Orbit

Current Mode: V/v

```
Uplink/Downlink: 145.825 Mhz FM
Voice Recorder:  145.825 Mhz FM
```
[02052007]
=====
NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Operational

Current Mode: /u

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[10222007]
=====
GENESAT-1 ?O-??
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Current Mode: /u

Telemetry Beacon Downlink: 437.0670 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[01082007]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon: 437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
[03262007]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launched: June 30, 2003

Status: Operational

Current Mode: /u

Beacon: 436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

```
Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[01082007]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launched: February 21, 2006

Status: Semi-Operational - Constant Carrier only

Uplink:  1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan ? )

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[01082007]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW
[08132007]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational - Softawre Reload

Current Mode(s): FM Repeater - V/u
                 BBS         - L/u
                 Telemetry   -  /u

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink:   145.880 MHZ FM
                       145.880 MHz USB
                       145.920 MHz FM
                      1268.700 MHz FM 67Hz PL tone
```

```
Digital Downlinks:     435.150 MHz FM 38k4 Digital, PBP, 1 watt output
                       435.150 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:        145.860 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      1268.700 mhz FM 9k6 PBP Digital
Beacon:                435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[04032008]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Hibernation until full sunlight in November

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink:        144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[09242007]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Current Modes: V/U
               L/U

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[09172007]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational.

Current Mode:  /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon:          435.025 MHz
Mode-S Beacon:     2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[01242008]
=====
RS-22 RADIO SPORT RS-22
Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only

Current Mode:  /u

CW Beacon - 435.352 MHz
            145.818 MHz
[08062007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Mode: FM Repeater - U/v
              Voice -       Occasianally
              BBS -         ON
```

APRS - ON
SSTV - OFF

Expedition 16 crew:
Commander: Peggy Whitson
Flight Engineer: Yuri Malenchenko RK3DUP
Flight Engineer: Garrett Reisman KE5HAE

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM
Worldwide packet downlink: 145.825 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS
RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line is NOT translated from Russian and posted.
[03272008]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-101.S3
WSR 101 Part 3 04/10/2008

AMSAT NEWS SERVICE BULLETIN 101.S3 FROM AMSAT HQ
SILVER SPRING, MD, April 10, 2008
TO ALL RADIO AMATEURS

BID: $ANS-101.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

CP4
Catalog Number: 31122
Launch Date: April 17,2007

Status: Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon: 437.325 MHz CW
[11152007]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Non-Operational

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon: 437.2750 MHz CW

Callsign: JR8YJT
[10152007]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 MHz FM 67Hz CTCSS
Voice Downlink: 2401.835 MHz FM
Packet Up/Downlink: 437.250 MHz 9k6 packet
Packet Downlink   2401.835 MHz 38k4 packet

```
Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non=Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[08132007]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink:   435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Non-Operational

Uplinks:   145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink:  437.325 MHz

Broadcast callsign: MYSAT3-11
BBS:                MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial
land and weather imaging payloads offers FM and FSK Amateur Radio
communica-
tion.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a
collaborative effort between the Malaysian government and Surrey
Satellite
Technology Ltd.
[007302007]
```

```
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink:   145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
call-
sign KE6QMD, as per the user service agreement located at the following
URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS:                SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink:   145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000
```

Status: Non-Operational

Uplinks

V-band: 145.840 - 145.990 MHz CW/LSB
U-band: 435.550 - 435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks

S2-band: 2401.225 - 2401.475 MHz CW/USB
K-band: 24048.010 - 24048.060 MHz CW/USB
Beacon: 2401.323 MHz
24048.035 MHz

P3-D Telemetry Beacons (IHU)

BEACON	General Beacon (GB)	Middle Beacon (MB)	Engineering Beacon (EB)
2 m	none	145.898 MHz	none
70cm	435.438 MHz	435.588 MHz	435.838 MHz
13cm(1)	2400.188 MHz	2400.338 MHz	2400.588 MHz
13cm(2)	2401.173 MHz	2401.323 MHz	2401.573 MHz
3cm	10450.975 MHz	10451.125 MHz	10451.375 MHz
1.5cm	24047.885 MHz	24048.035 MHz	24048.285 MHz

[07162007]

=====

OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]

=====

UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web site

```
at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater:         436.250 MHz

Uplinks: Mode B Repeater:  145.825 MHz
Mode J Digipeater:         145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational
```

```
Uplink:   145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign:       POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012006]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
```

```
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
```

Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks: 145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
LIBERTAD-1
Catalog Number: 31129
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink: 145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[10222007]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplinks: 145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink: 437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[01222007]
=====
WO-18 WEBERSAT
Catalog Number: 20441

```
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
[05012006]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet: Non-Operational
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational
```

```
Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon:   145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink  29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
Beacons:   29.450 MHz
          435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon 1:  29.352 MHz (intermittent)
Beacon 2:  29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink:     21.260 to 21.300 MHz CW/USB
Downlink:  145.860 to 145.900 MHz CW/USB

Beacon:    145.860 MHz

Robot:     145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink:   21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon:   29.408 MHz

Robot:    29.454 MHz
[05232004]
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SB SAT @ AMSAT W8ISS ANS-101.S4
WSR 101 Part 4 04/10/2008

AMSAT NEWS SERVICE BULLETIN 101.S4 FROM AMSAT HQ
SILVER SPRING, MD, April 10, 2008
TO ALL RADIO AMATEURS
BID: $ANS-101.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE PROPOSED FOR LAUNCH AT THIS TIME:

Phase 5a Mars Mission AO-??
Catalog Number:
Proposed Launch Date: 2009 or 2011

Status: Design Phase

For the latest project status update please visit the AMSAT-DL P5-A web page:
http://ticket-to-mars.org
[01222007]
=====
PHASE 3E AO-??
Catalog number:
Proposed Launch Date: Late 2007

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/
[01222007]
=====
Eagle AO-??
Catalog Number:
Proposed Launch Date: Early/Mid 2009

Status: Design Phase

For the latest project status updates please visit the AMSAT-NA webpage:
http://www.amsat.org
[01222007]
=====
Can X-2
Catalog number:
Proposed Launch Date: April, 2008

Status: Waiting for Launch

For the latest project status update please visit the Can X-2 web page:
http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[03132008]
=====
AAUSAT-II
Catalog number:
Proposed Launch Date: April, 2008

Status: Waiting for Launch

For the latest project status update please visit the AAUSAT-II web
page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[03132008]
=====
Cute-1.7+APD II
Catalog number:
Proposed Launch Date: April, 2008

Status: Waiting for Launch

For the latest project status update please visit the Cute-1.7+APD II
web
page:
http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78
[03132008]
=====
Compass 1
Catalog number:
Proposed Launch Date: April, 2008

Status: Waiting for Launch

For the latest project status update please visit the Compass 1 web
page:
http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52
[03132008]
=====
Delfi-C3
Catalog number:
Proposed Launch Date: April, 2008

Status: Waiting for Launch

Proposed Frequencies:
* Primary telemetry downlink: 145.870 MHz 1200 Baud BPSK AX.25 400mW
* Backup telemetry downlink: 145.930 MHz 1200 Baud BPSK AX.25 400mW
* Linear transponder passband downlink: 145.880 - 145.920 MHz
(inverting)
  400mW PEP
* Linear transponder passband uplink: 435.570 - 435.530 MHz
* Transponder mode beacon: 145.870 MHz CW (10dB below transponder PEP)

For the latest project status update please visit the Delfi-C3 web page:
http://www.delfic3.nl/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68
[03132008]
=====
Seeds 2
Catalog number:
Proposed Launch Date: April, 2008

Status: Waiting for Launch

For the latest project status update please visit the Seeds 2 web page:
http://cubesat.aero.cst.nihon-u.ac.jp/english/main_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36
[03132008]
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SB SAT @ AMSAT W8ISS ANS-101.S5
WSR 101 Part 5 04/10/2008

AMSAT NEWS SERVICE BULLETIN 101.S5 FROM AMSAT HQ
SILVER SPRING, MD, April 10, 2008
TO ALL RADIO AMATEURS
BID: $ANS-101.S5

THE FOLLOWING SATELLITES HAVE DE-ORBITED OR HAVE BEEN RETURNED SAFELY:

NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Operational
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1

Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink: 145.825 Mhz FM APRS AX25
APRS Uplink: 145.825 MHz FM APRS AX25
Voice/PSK31 Uplink: 28.120 MHz

Packet to Voice ID: RAFT
[06112007]
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ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the
memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen,
G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

```
From -5268139484045847927
X-Google-Thread: 10e8ad,943c6472ab81e750,start
X-Google-Thread: 10b9c8,943c6472ab81e750,start
X-Google-Attributes: gid10e8ad,gid10b9c8,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII
Path: g2news1.google.com!news2.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx02.iad01.newshosting.com!newshosting.com!
198.186.190.251.MISMATCH!news-out.readnews.com!transit4.readnews.com!panix!
rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-104 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sat, 12 Apr 2008 23:55:35 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 436
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000701c89d03$69aa2480$6801a8c0@familyroom>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;charset="iso-8859-1"
Content-Transfer-Encoding: quoted-printable
X-Trace: reader2.panix.com 1208058935 15601 166.84.1.6 (13 Apr 2008 03:55:35 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 13 Apr 2008 03:55:35 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Xref: g2news1.google.com rec.radio.amateur.space:1322 rec.radio.info:753
```

AMSAT NEWS SERVICE
ANS-104

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:

* AMSAT Web Updates Highlight Dayton Activities
* AMSAT/TAPR Banquet at Dayton
* AO-16 Status Update
* DelfiC3 Update
* Houston AMSAT Net Audio Available on Podcast
* Scotland Calling Via Satellite
* TAPR Digital Communications Conference
* 42nd Annual CSVHFS Conference Call for Papers
* ARISS Status Report for the Week of April 7, 2008

SB SAT @ AMSAT $ANS-104.01
AMSAT Web Updates Highlight Dayton Activities

AMSAT News Service Bulletin 104.01
>From AMSAT HQ SILVER SPRING, MD.
April 13, 2008
To All RADIO AMATEURS
BID: $ANS-104.01

The AMSAT web site now contains information about AMSAT activities during the 2008 Dayton Hamvention.

Go to http://www.amsat.org and use the new Dayton button on the left hand navigation area or go directly there using this URL:
http://www.amsat.org/amsat-new/hamvention/2008/Dayton2008.php.

On the site you can find out about the:
+ AMSAT/TAPR Banquet
+ AMSAT Forum
+ Activities at the Booth
+ Thursday Pizza n' Suds
+ New AMSAT Offerings and displays at the booth

This will be a great opportunity to find out up to date information about what is going on at AMSAT as well as talk with your Officers and Board members. There will be a large outside satellite demonstration area and a daily "Introduction to Satellites" talk.

Here is a summary of the AMSAT offerings at the Booth:

Publications

Getting Started with Amateur Satellites (***Updated 2008) - $15
Frequency chart (2008 Update) - $5
Digital Satellite and Telemetry Guide (2005)
  - $20 Guide with disk $30 (** Special)
AO-51 Operation, Development and Specifications (2005) - $20
Proceedings of the AMSAT-NA 2006 Space Symposium - $20

Software & CDs

SatPC32 - $40 (**** Dayton Special normally $45)
InstantTrack - $20 (**** Dayton Special normally $30)
MacDoppler - $80 AMSAT Members/ $100 others
NEW* DVD of 2004, 2005, 2007 Symposia. Papers/PowerPoint/audio - $30
NEW* Digital Disk with WiSP + digital files - $20

Apparel

NEW* AMSAT blue Golf Shirts - $30
NEW* AMSAT gold tee shirts $20
NEW* AMSAT Hats - $10
NEW* AMSAT blue long sleeve tee shirts $20
old AMSAT golf shirts $20
old AMSAT/Eagle Tee Shirts - $10

Hardware

LVB Tracker enclosure $50
LVB Tracker bare board $20
LVB Tracker box (complete built kit) $200
AMSAT 2 GB Flash drive $25 (***Dayton Special) normally $30
Arrow Antenna w/Duplexer - $139.00

Miscellaneous Merchandise You Can't Live Without

NEW* AMSAT lapel pin (***NEW***) $10
AMSAT measuring tape free with membership free, purchase $5
30th Anniversary AO-7 QSL Cards (**** Dayton Special)
  - 100 cards - $5.00, 250 for $10
Eagle & ARISS Patches - $7.00
Eagle Decals - $5.00
$5 donation - 3 AMSAT Magnets or 2 AMSAT Pens
AMSAT computer backpacks - $30 (*** Dayton special)
AMSAT clocks $10

[ANS thanks Gould, WA4SXM for the above information]

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SB SAT @ AMSAT $ANS-104.02
AMSAT/TAPR Banquet at Dayton

AMSAT News Service Bulletin 104.02
>From AMSAT HQ SILVER SPRING, MD.
April 13, 2008
To All RADIO AMATEURS
BID: $ANS-104.02

The second annual AMSAT/TAPR Banquet during Dayton Hamvention will be held Friday evening at the Kohler Presidental Banquet Center, Kettering, OH [just south of Dayton]. The evening will begin with a cash bar at 6:30 PM. Dinner will be served at 7:15. The Banquet Center has a reputation for good food and service, so don't miss this event.

Maps to the AMSAT/TAPR Banquet will be available at the AMSAT booth. Additional information and coordinates are posted on the AMSAT web site under the Dayton 2008 area.

The price for the dinner is $25.00 per person and includes a salad, entree, sides, desert, tax and gratuity. Coffee, tea and iced tea are included. Wine, beer and mixed drinks are available at the cash bar before and during the meal.

Reservations are required and must be made by Monday, 12 May 2008. Please contact Martha (martha@amsat.org) at the AMSAT office for information or call to make reservations. You can reach Martha from 10:00am to 6:00pm EDT at (301) 589-6062, or in the US toll free at (888)322-6728.

Banquet Menu
Fresh mixed green salad with assorted dressings
Roast Prime Rib of Beef au jus - carved on site
Marinated Roasted Garlic Rosemary Chicken Breast in lemon butter sauce
Salmon with Newburg sauce
Whipped potatoes
Normandy blended green beans
Fresh fruit bowl
Roll and butter
Coffee/ iced tea/ water
Assorted pies

[ANS thanks Gould, WA4SXM for the above information]

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SB SAT @ AMSAT $ANS-104.03
AO-16 Status Update

AMSAT News Service Bulletin 104.03
>From AMSAT HQ SILVER SPRING, MD.

April 13, 2008
To All RADIO AMATEURS
BID: $ANS-104.03

Mark, N8MH reporting on behalf of the AO-16 control team says that the satellite continues to operate well in its new voice configuration. Use these frequencies to access the satellite:
+ Uplink: 145.920 MHz FM
+ Downlink: 437.026 MHz DSB (LSB and USB)

After several months of continuous illumination, AO-16 is again experiencing short periods of eclipse. Recent telemetry indicates that the spacecraft temperatures are decreasing a bit as a result.

As the eclipse periods of AO-16 continue to increase in the coming months, we must continue to monitor the spacecraft power budget. Spacecraft control is now limited to the Microsat Boot Loader (MBL). Therefore, the power budget of AO-16 is managed by varying manually the output power of the transmitter.

Users of AO-16 are encouraged to report any aberrant operations by either posting to the AMSAT-BB or by emailing the command team at n8mh@amsat.org. �Aberrant operations� might include the following:

complete loss of signal from the spacecraft or significant change in the transmitter frequency.

We are grateful to see significant activity on AO-16!

[ANS thanks Mark, N8MH for the above information]

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SB SAT @ AMSAT $ANS-104.04
DelfiC3 Update

AMSAT News Service Bulletin 104.04
>From AMSAT HQ SILVER SPRING, MD.
April 13, 2008
To All RADIO AMATEURS
BID: $ANS-104.04

The DelfiC3 launch preparation team has arrived back at the Delft University from launch preparations in India. Prior to departure they performed the final steps of preparing Delfi-C3 for launch.

Delfi-C3 has been placed in its X-POD and left in the cleanroom at Sriharikota. All the checks and tests have been performed to satisfaction and the team is convinced that Delfi-C3 is completely ready for a launch. Updates are posted at http://www.delfic3.nl.

The DelfiC3 team has posted an English PDF version of a presentation

on the Delfi-C3 satellite at:
http://www.delfic3.nl/forum/showthread.php?p=2375#post2375

[ANS thanks Wouter Jan Ubbels, PE4WJ for the above information]

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SB SAT @ AMSAT $ANS-104.05
Houston AMSAT Net Audio Available on Podcast

AMSAT News Service Bulletin 104.05
>From AMSAT HQ SILVER SPRING, MD.
April 13, 2008
To All RADIO AMATEURS
BID: $ANS-104.05

Bruce, KK5DO reported this week that he Houston AMSAT Net is now available as a Podcast. You can subscribe to:

http://www.amsatnet.com/podcast.xml

Please let Bruce know off the list if there are any problems. Net #734 and #735 are available. They will remain online for 4 weeks then roll off.

You can always download and listen with an MP3 player at http://www.amsatnet.com/audio.html

Thanks to Dale, WD0AKO, for doing the encoding and creating our album art.

[ANS thanks Bruce, KK5DO for the above information]

/EX

SB SAT @ AMSAT $ANS-104.06
Scotland Calling Via Satellite

AMSAT News Service Bulletin 104.06
>From AMSAT HQ SILVER SPRING, MD.
April 13, 2008
To All RADIO AMATEURS
BID: $ANS-104.06

Paul, 2E1EUB will activate grid IO87rj near Aberdeen, Scotland on the satellites for one week starting on April 12, 2008.

Paul says, "Is not an easy location for stateside but it is possible. if you wish to work me, please be quick as only a small window for USA! The window to Europe window is much easier."

Paul will be on all birds but mainly focusing on AO-7 SSB operating.
QSL is via home call 2E1EUB.

[ANS thanks Paul, 2E1EUB for the above information]

/EX

SB SAT @ AMSAT $ANS-104.07
TAPR Digital Communications Conference

AMSAT News Service Bulletin 104.07
>From AMSAT HQ SILVER SPRING, MD.
April 13, 2008
To All RADIO AMATEURS
BID: $ANS-104.07

Technical papers are solicited for presentation at the 27th Annual ARRL and TAPR Digital Communications Conference to be held September 26-28, 2008 in Chicago, Illinois. These papers will also be published in the Conference Proceedings (you do NOT need to attend the conference to have your paper included in the Proceedings). The submission deadline is July 31, 2008. Please send papers to:

Maty Weinberg
ARRL
225 Main St
Newington, CT 06111

or you can make your submission via e-mail to: maty@arrl.org

Papers will be published exactly as submitted and authors will retain all rights.

[ANS thanks Steve, WB8IMY at the ARRL for the above information]

/EX

SB SAT @ AMSAT $ANS-104.08
42nd Annual CSVHFS Conference Call for Papers

AMSAT News Service Bulletin 104.08
>From AMSAT HQ SILVER SPRING, MD.
April 13, 2008
To All RADIO AMATEURS
BID: $ANS-104.08

The Central States VHF Society is calling for the submission of papers and presentations for the upcoming 42nd Annual Central States VHF Society Conference to be held in Wichita, KS, 24-26 July 2008. Papers and presentations are solicited on both the technical and operational aspects of VHF, UHF and Microwave weak signal amateur radio. Some suggested areas of interest are:

* Antennas including Modeling/Design, Arrays, and Control;
* Construction of Equipment, such as Transmitters, Receivers, and Transverters
* RF power amps
* Pre-amplifiers (low noise)
* Test Equipment including Homebrew, Using, and Making Measurements
* Operating including Contesting, Roving, and DXpeditions
* Propagation including Ducting, Sporadic E, Tropospheric and Meteor Scatter, etc.
* Software-defined Radio (SDR)
* Digital Modes WSJT, JT65, etc.
* EME
* Digital Signal Processing (DSP)
* Regulatory topics

The deadline for the submission of papers and presentations is 15 May. See http://www.csvhfs.org/conference/callforpapers.html for more information

[ANS thanks the CSVHFS for the above information]

/EX

SB SAT @ AMSAT $ANS-104.09
ARISS Status Report for the Week of April 7, 2008

AMSAT News Service Bulletin 104.09
>From AMSAT HQ SILVER SPRING, MD.
April 13, 2008
To All RADIO AMATEURS
BID: $ANS-104.09

1. School Contacts

An ARISS contact was held with Osnovna skola Pazin in Pazin, Croatia on Monday, April 7. Eight hundred students are enrolled at the school which has offered technical classes in robotics, electronics and computer science for the past ten years. Students from Pazin's two high schools are also expected to attend this event. The schools hope to pique the students' interest in space and electronics through this educational activity. The audio for this event will be fed into the EchoLink AMSAT (101 377) and JK1ZRW (277 208) servers.

An ARISS contact has been scheduled with Han Gwang Boys & Girls High School in Pyeong Taek City, Republic of Korea on Sunday, April 13. It has an amateur radio club station, DS0IC which is the largest school club station in Korea with approximately 150 operators (100 students and 50 teachers). South Korean space visitor Yi So-yeon plans to speak with the high school youth during this event.

Central Middle School in Parsippany, New Jersey, has been slated for an ARISS contact on Monday, April 14 at 17:05 UTC. An essay and presentation contest will be held to determine which students will speak with the astronaut. The New Providence Amateur Radio Club will assist with the contact. The event will be available through a live transmission to all local schools using amateur band fast scan television.

An ARISS contact has been scheduled with the National Science Museum of Korea on Thursday, April 17. The Museum is an umbrella organization of the Ministry of Education, Science and Technology. Spaceflight participant Yi So-yeon will participate in this educational activity.

2. Shanghai Students Experience ARISS Contact

On Tuesday, April 1, students attending the Shanghai Youth Centre of Science and Technology Education in Xuhui, Shanghai, China participated in an ARISS contact. Astronaut Garrett Reisman, KE5HAE, answered 8 questions posed to him by eight children as an audience of approximately

300 people looked on. Four television station and 8 newspapers covered the event.

3. Debrief Scheduled for Eyharts

The ARISS team has been scheduled for an Expedition 16 crew debrief with Leopold Eyharts, KE5FNO/FX0STD on Monday, April 7.

4. DLN ARISS Module Status

A draft version of the Digital Learning Network (DLN) ARISS module will be ready for review by the end of May 2008. The module will provide grades K-12 with a foundation of what amateur radio is and how it is used, information on NASA and ARISS and will incorporate demonstrations from ARISS lesson plans. It will also highlight special projects such as SuitSat-2. The DLN module will provide education resource links to be used pre- and post-ARISS contact and will give information on how to apply for a contact.

5. Christa McAuliffe Planetarium Radio Station

Six staff members at the Christa McAuliffe Planetarium in Concord, New Hampshire passed their amateur radio exams. Two made the General class; the rest Technician.

An amateur radio station will be set up at the planetarium on May 3 which will be capable of operating from HF to UHF and will have an antenna system for working satellites. The planetarium is home to the NASA Educator Resource Center (ERC) for New Hampshire.

[ANS thanks Carol, KB3LKI for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM

From -374725230623113123
X-Google-Thread: 10e8ad,4c5c4c0c83e71583,start
X-Google-Attributes: gid10e8ad,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!postnews.google.com!t12g2000prg.googlegroups.com!not-for-mail
From: ebayshoe1@yahoo.cn
Newsgroups: rec.radio.amateur.space
Subject: cheap wholesale prada shoes gucci shoes lacoste shoes dunk shoes puma shoes air force one shoes
Date: Mon, 14 Apr 2008 06:40:27 -0700 (PDT)
Organization: http://groups.google.com
Lines: 138
Message-ID: <af14b1a3-e823-46b6-a4b4-0244eeb97749@t12g2000prg.googlegroups.com>
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Mime-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 7bit
X-Trace: posting.google.com 1208180427 4535 127.0.0.1 (14 Apr 2008 13:40:27 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Mon, 14 Apr 2008 13:40:27 +0000 (UTC)
Complaints-To: groups-abuse@google.com
Injection-Info: t12g2000prg.googlegroups.com; posting-host=121.205.202.248; posting-account=1SLoKgoAAABXhZ-pRvmtHlTDDhdheuuC
User-Agent: G2/1.0
X-HTTP-UserAgent: Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1; SV1; QQDownload 1.7),gzip(gfe),gzip(gfe)
Xref: g2news1.google.com rec.radio.amateur.space:1323

Welcome to visit www.china-sneakers.com
We Wholesale Cheap Jordan Shoes, Michael Jordan Shoes, Nike Jordan Basketball shoes, ... Jordan Shoes, Air Jordan Sneakers, Air Jordan Wholesale All of the Air Jordan sneakers have Nike Air in the shoes. Authentic quality Jordan Sneakers Custom Jordan Sneakers Wholesale Jordan Sneakers gucci sneakers prada sneakers,lv chanel coach dior DG DSQUARED2 DIESEL,miumiu handbags sneakers,t-shirts,jeans,jackets.We sale new Nike Sneakers,Air Jordan Sneakers,AIR FORCE 1S,Nike Dunks SB,
Bape Sta from nike outlets and factory stores, also Nike wholesale -

Jordan Shoes. Nike Shoes, sport Shoes, Reebok Shoes,Basketball Shoes,prada,bapestar,Nike Shox,Dunks,Nike Flightposite ,Nike jordan Basketball ,K1X Chiefglider wholesale suppliers factory.We sale new Nike Sneakers,Air Jordan Sneakers,AIR FORCE 1S,Nike Dunks SB, Bape Sta
from nike Wholesale china nike jordans gucci prada sneakers at cheap price !!!

cheap gucci,prada dsquared2 sneakers wholesale

lacoste outlet
Max 90 Sneakers
wholesale Nike Air Max 91 Supplier
wholesale Nike Air Max 95 Shoes Supplier
wholesale Nike Air Max 97 Trainers
wholesale Nike Air Max 2003 Wholesale
wholesale Nike Air Max 2004 Shoes Wholesale
wholesale Nike Air Max 2005 Shop
wholesale Nike Air Max 2006 Shoes Shop
wholesale Nike Air Max 360 Catalogs
wholesale Nike Air Max Ltd Shoes Catalogs
wholesale Nike Air Max Tn Men's Shoes
wholesale Nike Air Max Tn 2 Women's Shoes
wholesale Nike Air Max Tn 3 Customize
wholesale Nike Air Max Tn 4 Shoes Customize
wholesale Nike Air Max Tn 6 Supply
wholesale Nike Shox NZ Shoes Supply
wholesale Nike Shox OZ Sale
wholesale Nike Shox TL Store
wholesale Nike Shox TL 2 Shoes Store
wholesale Nike Shox TL 3 Distributor
wholesale Nike Shox Bmw Shoes Distributor
wholesale Nike Shox Elite Shoes Manufacturer
wholesale Nike Shox Monster Manufacturer
wholesale Nike Shox R4 Running Shoes
wholesale Nike Shox R5 Mens Shoes
wholesale Nike Shox Ride Womens Shoes
wholesale Nike Shox Rival Shoes Wholesaler
wholesale Nike Shox Energia Wholesaler
wholesale Nike Shox LV Sneaker
wholesale Nike Shox Turbo Suppliers
wholesale Nike Shox Classic Shoes Suppliers
wholesale Nike Shox Dendara Trainer
wholesale Nike Air Jordan 1 Seller
wholesale Nike Air Jordan 2 Shoes Seller
wholesale Nike Air Jordan 3 Collection
wholesale Nike Air Jordan 4 Shoes Collection
wholesale Nike Air Jordan 5 Chaussure Shoes
wholesale Nike Air Jordan 6 Catalog
wholesale Nike Air Jordan 7 Shoes Catalog
wholesale Nike Air Jordan 8 Customized
wholesale Nike Air Jordan 9 Shoes Customized

wholesale Nike Air Jordan 10 Wholesalers
wholesale Nike Jordan 11 Shoes Wholesalers
wholesale Nike Air Jordan 12 Factory
wholesale Nike Air Jordan 13 Shoes Factory
wholesale Nike Air Jordan 14 Shoes Sell
wholesale Nike Air Jordan 16 Exporter
wholesale Nike Air Jordan 17 Shoes Exporter
wholesale Nike Air Jordan 18 Offer
wholesale Nike Air Jordan 19 Shoes Offer
wholesale Nike Air Jordan 20 Manufacture
wholesale Nike Jordan 21 Shoes Manufacture
wholesale Nike Air Force 1 Low Directory
wholesale Air Force 1 High Shoes Directory
wholesale Nike Air Force 1 Custom Importer
wholesale Air Force 1 Dollar Shoes Importer
wholesale Nike Air Force 1 Clear Sales
wholesale Air Force 1 Carving Shoes Sales
wholesale Timberland Boots High Offers
wholesale Timberland Boots Low Sell
wholesale Timberland Boots Mid Shoes Buyer
wholesale Timberland Boots Womens Buyer
wholesale Adidas Good Year Buy
wholesale Adidas Running Shoes Buy
wholesale Adidas Football Shoes Selection
wholesale Adidas Basketball Shoes Discount
wholesale Adidas 35 Years 35th Anniversary
wholesale Adidas T MAC 3.5 4.5 5 6
wholesale Adidas 35 Years 35th Anniversary
Jordans Wholesale
Cheap Jordans Wholesale
Jordans Retro Wholesale
Air Jordans Wholesale
Nike Shoes Wholesale China
Discount Jordans Price Wholesale
Wholesale Nike Distributor
Wholesale Nike Sneaker
Wholesale Nike Air Force 1
Air Clear Force One Wholesale
Nike Air Force Wholesale
Buy Jordans Wholesale
Wholesale Nike Tennis Shoes
Jordans Retro Wholesale
Wholesale Kid Jordans
Wholesale Nike Dunk
Authentic Jordans Wholesale
Nike Shoes Wholesale China
Wholesale Custom Jordans
Air China Jordans Wholesale
Jordans Retro Wholesale
Nike Air Jordan Wholesale
Nike Golf Wholesale
Wholesale Jordans
Wholesale Nike Shox

Wholesale Basketball Shoes Nike
Air Jordans Price Wholesale
Jordans Kid Wholesale
Wholesale Air Force One And Jordans
Jordans Shoes Wholesale
Wholesale Air Jordans
Air Jordans At Wholesale Price
Wholesale Nike Tennis Shoes
Wholesale NIKE Sneakers from our Nike factory to Nike shop & Nike
store,sale and Wholesale all of Nike stock Shoes,we have many type of
NIKE Sneakers :Nike discount Shoes,Nike cheap Shoes,Nike stock Shoes
(Nike Trainers, Nike Sneakers,Nike Running Shoes,Nike Basketball
Shoes,Nike Discount Shoes,Nike Cheap Shoes,footwear, Sports
Shoes)Nike Shoes Wholesale sizes include:Nike men's Shoes,Nike
women's Shoes,Nike mens Shoes,Nike womens Shoes, Nike men Shoes,Nike
women Shoes,Nike kids Shoes, Nike child Shoes.Nike discount
Shoes,Nike in www.china-sneakers.com
cheap Shoes,china Nike Shoes,Nike Shoes Wholesale,Jordan SHOES,Air
Force one 1s,Nike Shox,Nike shoe Air max wholesale price.china
wholesale sneakers Nike celebrates 25 birthday of Air Force Ones BUY
SELL NIKE SHOX JORDAN MAX TIMBERLAND AIR FORCE PRADA TN PUMA.
in www.china-sneakers.com

```
From -8714186118239128636
X-Google-Thread: 10e8ad,de49a75aec442ca1,start
X-Google-Attributes: gid10e8ad,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!postnews.google.com!r9g2000prd.googlegroups.com!not-for-
mail
From: "www.3asneakers.cn wholesale nike gucci prada sneakers" <sneakers13@126.com>
Newsgroups: rec.radio.amateur.space
Subject: www 3asneakers.cn sell china nike jordan dunk af1 maxtn max87 max89
     shox r4 sneakers gucci prada 4us Hogan Mauri Versace Armani sneaker shoes
     wholesale bape t-shirt evisu t-shirt polo t-shirt lacotes t-shirt wholsale
     china cheap
Date: Tue, 15 Apr 2008 06:06:17 -0700 (PDT)
Organization: http://groups.google.com
Lines: 61
Message-ID: <19d4a2a3-2fab-403e-88f8-4181bdd7ea9f@r9g2000prd.googlegroups.com>
NNTP-Posting-Host: 220.191.116.141
Mime-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 7bit
X-Trace: posting.google.com 1208264777 11511 127.0.0.1 (15 Apr 2008 13:06:17 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Tue, 15 Apr 2008 13:06:17 +0000 (UTC)
Complaints-To: groups-abuse@google.com
Injection-Info: r9g2000prd.googlegroups.com; posting-host=220.191.116.141;
     posting-account=ZivFZAoAAAATzQv1voPZquU6OdfiT_ZN
User-Agent: G2/1.0
X-HTTP-UserAgent: Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1;
     SV1),gzip(gfe),gzip(gfe)
```

Xref: g2news1.google.com rec.radio.amateur.space:1324

(www.3asneakers.cn) Discount Prada Sneakers china wholesale good.
(www.3asneakers.cn) wholesale china lacoste mens turbo low mix gucci sneaker shoes for cheap.
(www.3asneakers.cn) Order Sneakers from China nike wholesale trainers
(www.3asneakers.cn) wholesale china cheap nike air jordan sneaker shoes.
(www.3asneakers.cn) ordan key chain for air force 1 customized nike jordan tennis shoes
(www.3asneakers.cn) wholesale bape t-shirt ED Hardy t-shirt wholesale gucci shoes china
(www.3asneakers.cn) branded perfume wholesale china nike dunk sneakers
(www.3asneakers.cn) suppliers for sneakers wholesale shoes from china
(www.3asneakers.cn) china wholesale nike jordan gucci prada sneakers cheapest nike,nike dunk sneaker necklaces.
(www.3asneakers.cn) China Nike Factory Jordan Suppliers louis vuitton bag
(www.3asneakers.cn) wholesale y3 trainers supplier wholesale cheapest bape shoes wholesale jordans Nike Basketball Sneakers gucci sneakers china china nike
wholesaler.
(www.3asneakers.cn) sneakers at wholesale women prada sneakers suppliers of branded clothing sneaker wholesale chinese jordan supplier wholesale jordans from china 2008 prada sneaker for men
(www.3asneakers.cn) wholesale china cheap evisu jeans jordans iphone wholesale china lv women sandal shoes wholesale
(www.3asneakers.cn) Nike Basketball Sneakers nike wholesale china discoun chanel sandals china air jordans versace jeans china wholesale coogi sweater china wholesale gucci sneakers wholesale jordan.wholesale cheapest bape shoes,wholesale jordans.
(www.3asneakers.cn) wholesale china lacoste mens turbo low mix gucci sneaker shoes for cheap.
(www.3asneakers.cn) wholesale china cheap evisu jeans
(www.3asneakers.cn) gucci men sneakers women gucci sneakers Nike Sneaker discount
(www.3asneakers.cn) wholesale cheap authentic gucci prada sneakers
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(www.3asneakers.cn) wholesale cheap timberland Air force one boots cheap ugg boots
(www.3asneakers.cn) wholesale men gucci prada sneakers women sneaker from china supplier
www.3asneakers.cn china wholesale mauri sneakers wholesale gucci sneakers sneakers wholesale cheap wholesale sneakers prada sneakers.com lv sandals wholesale gucci sneakers on sale louis vuitton sneakers mens gucci sneakers air jordans wholesale prada shop in usa wholesale
www.3asneakers.cn china nike dunk nike wholesale shoes china wholesale gucci sneakers evisu jeans jordan wholesale manufacturer in china buy D&G shoes in usa stores CHINA sneaker wholesale jordan spikike.com chanel sneakers Kid Prada Sneaker

www.3asneakers.cn sneakers wholesale prada sneakers website wholesale
mauri shoes lv women sandal shoes wholesale   prada americas cup
sneakers mens prada sneakers women prada sneakers nike dunk sneakers
authentic jordan sneakers jordan retro sneakers
www.3asneakers.cn discount nike sneakers nike sneakers retro nike air
force ones nike dunks sb nike air max

```
From 5309581537539481539
X-Google-Thread: 10e8ad,62e6b77bec5f35da,start
X-Google-Thread: 10b9c8,62e6b77bec5f35da,start
X-Google-Attributes: gid10e8ad,gid10b9c8,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!newsfeed2.dallas1.level3.net!
news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-108 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Sat, 19 Apr 2008 11:15:49 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 1417
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <001101c8a230$3af16e50$6801a8c0@familyroom>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader2.panix.com 1208618149 18889 166.84.1.6 (19 Apr 2008 15:15:49 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sat, 19 Apr 2008 15:15:49 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Xref: g2news1.google.com rec.radio.amateur.space:1325 rec.radio.info:761
```

This report is organized into FIVE parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites

Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites
Part 5 (S5) - deorbited/returned satellites

SB SAT @ AMSAT W8ISS ANS-108.S1
WSR 108 Part 1 04/17/2008

AMSAT NEWS SERVICE BULLETIN 108.S1 FROM AMSAT HQ
SILVER SPRING, MD, April 17, 2008
TO ALL RADIO AMATEURS
BID: $ANS-108.S1

VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.859330 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsat.in/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is
active. Each transponder has a different beacon.
[06252007]

=====

AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational - Software reload

```
Current Modes:   FM Repeater - V/u
                 BBS         - L/u
                 Telemetry   -  /u
```

```
Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink:   145.880 MHZ FM
                       145.880 MHz USB
                       145.920 MHz FM
                      1268.700 MHz FM 67Hz PL tone
Digital Downlinks:     435.150 MHz FM 38k4 Digital, PBP, 1 watt output
                       435.150 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:        145.860 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      1268.700 mhz FM 9k6 PBP Digital
Beacon:                435.150 MHz
```

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[04032008]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute
timer
   on board the spacecraft.

2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on
   and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10
   minute timer.
[05282007]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Operational - check operational schedule for current times!!

Current Mode: V/u

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage: http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's CW
telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts.htm
[0820007]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Current Mode: V/u

```
Uplink:   145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[12132007]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: TESTING - VOICE

Current Mode:  V/u

Uplink:         145.900 MHz FM 1200-baud Manchester FSK (reserved)
                145.920 MHz FM VOICE
                145.940 MHz FM 1200-baud Manchester FSK (reserved)
                145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink:       437.026 MHz USB VOICE
                ( 1200-baud PSK - MBL Telemetry Only )

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[03202008]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational depending on amount of Sunlight

Current Mode: Listen before transmitting

Uplink:   145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink:  29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
```

Beacons: 29.502 MHz CW
145.972 MHz CW
435.100 MHz CW
2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/

AO-7 Usage Guidelines on the AO-7 Log and Resource Site located at:
http://www.planetemily.com/ao7
[05282007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Mode: FM Repeater - U/v
Voice - Occasianally
BBS - ON
APRS - ON
SSTV - OFF

Expedition 16/17 crew:
Commander (16): Peggy Whitson
Commander (17): Sergey Volkov RU3DIS
Flight Engineer (16): Yuri Malenchenko RK3DUP
Flight Engineer (17): Oleg Kononenko RN3DX
Flight Engineer (16/17): Garrett Reisman KE5HAE
Participant: So-yeon Yi

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM
Worldwide packet downlink: 145.825 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS
RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.
[04172008]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-108.S2
WSR 108 Part 2 04/17/2008

AMSAT NEWS SERVICE BULLETIN 108.S2 FROM AMSAT HQ
SILVER SPRING, MD, April 17, 2008
TO ALL RADIO AMATEURS
BID: $ANS-108.S2

CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.
[11152007]
=====
CP3
Catalog Number: 31128
Launch Date: April 17,2007

Status: Operational

Current Mode: /u

```
Downlink: 436.845 MHz 1200 bps AFSK AX.25
[07302007]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: In Orbit

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder:  145.825 Mhz FM
[02052007]
=====
NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Operational

Current Mode: /u

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[10222007]
=====
GENESAT-1 ?O-??
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Current Mode: /u

Telemetry Beacon Downlink: 437.0670 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[01082007]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon:             437.2750 MHz CW
```

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
[03262007]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launched: June 30, 2003

Status: Operational

Current Mode: /u

Beacon: 436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[01082007]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launched: February 21, 2006

Status: Semi-Operational - Constant Carrier only

Uplink: 1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan ?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[01082007]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW
[08132007]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational - Softawre Reload

Current Mode(s): FM Repeater - V/u
BBS - L/u
Telemetry - /u

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.880 MHZ FM
145.880 MHz USB
145.920 MHz FM
1268.700 MHz FM 67Hz PL tone
Digital Downlinks: 435.150 MHz FM 38k4 Digital, PBP, 1 watt output
435.150 MHz FM 9k6 Digital, Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Digital, Pacsat Broadcast Protocol
1268.700 mhz FM 9k6 PBP Digital
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[04032008]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Hibernation until full sunlight in November

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud

Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[09242007]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Current Modes: V/U
               L/U

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks: 145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[09172007]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational.

Current Mode: /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon: 435.025 MHz
Mode-S Beacon: 2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[01242008]
=====

RS-22 RADIO SPORT RS-22
Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only

Current Mode: /u

CW Beacon - 435.352 MHz
            145.818 MHz
[08062007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Mode: FM Repeater - U/v
Voice - Occasianally
BBS - ON
APRS - ON
SSTV - OFF

Expedition 16/17 crew:

Commander (16):	Peggy Whitson	
Commander (17):	Sergey Volkov	RU3DIS
Flight Engineer (16):	Yuri Malenchenko	RK3DUP
Flight Engineer (17):	Oleg Kononenko	RN3DX
Flight Engineer (16/17):	Garrett Reisman	KE5HAE
Participant:	So-yeon Yi	

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM
Worldwide packet downlink: 145.825 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS

RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.
[04172008]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-108.S3
WSR 108 Part 3 04/17/2008

AMSAT NEWS SERVICE BULLETIN 108.S3 FROM AMSAT HQ
SILVER SPRING, MD, April 17, 2008
TO ALL RADIO AMATEURS
BID: $ANS-108.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

CP4
Catalog Number: 31122
Launch Date: April 17,2007

Status: Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon: 437.325 MHz CW
[11152007]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Non-Operational

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon: 437.2750 MHz CW

Callsign: JR8YJT
[10152007]

```
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency:  437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink:         437.250 MHz FM 67Hz CTCSS
Voice Downlink:      2401.835 MHz FM
Packet Up/Downlink:   437.250 MHz 9k6 packet
Packet Downlink      2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non=Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[08132007]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink:   435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
```

MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Non-Operational

Uplinks: 145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[007302007]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, callsign KE6QMD, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks

V-band: 145.840 - 145.990 MHz CW/LSB
U-band: 435.550 - 435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks

S2-band: 2401.225 - 2401.475 MHz CW/USB
K-band: 24048.010 - 24048.060 MHz CW/USB
Beacon: 2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)

BEACON	General Beacon (GB)	Middle Beacon (MB)	Engineering Beacon (EB)
2 m	none	145.898 MHz	none
70cm	435.438 MHz	435.588 MHz	435.838 MHz
13cm(1)	2400.188 MHz	2400.338 MHz	2400.588 MHz
13cm(2)	2401.173 MHz	2401.323 MHz	2401.573 MHz
3cm	10450.975 MHz	10451.125 MHz	10451.375 MHz
1.5cm	24047.885 MHz	24048.035 MHz	24048.285 MHz

[07162007]
=====
OO-38 OPAL

```
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink:    145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site
at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater:         436.250 MHz

Uplinks: Mode B Repeater:  145.825 MHz
Mode J Digipeater:         145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz
```

```
Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink:   145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign:       POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012006]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only
```

```
Current Mode:

Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HL01-11
BBS: HL01-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
```

```
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
LIBERTAD-1
Catalog Number: 31129
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink:   145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[10222007]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplinks:          145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink:      437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[01222007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
[05012006]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
```

```
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet: Non-Operational
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon:   145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink  29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
```

```
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
Beacons:   29.450 MHz
          435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon 1:  29.352 MHz (intermittent)
Beacon 2:  29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991
```

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB

Beacon: 145.860 MHz

Robot: 145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-108.S4
WSR 108 Part 4 04/17/2008

AMSAT NEWS SERVICE BULLETIN 108.S4 FROM AMSAT HQ
SILVER SPRING, MD, April 17, 2008
TO ALL RADIO AMATEURS
BID: $ANS-108.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE PROPOSED FOR LAUNCH AT THIS TIME:

Phase 5a Mars Mission AO-??
Catalog Number:
Proposed Launch Date: 2009 or 2011

Status: Design Phase

For the latest project status update please visit the AMSAT-DL P5-A web page:
http://ticket-to-mars.org
[01222007]
=====
PHASE 3E AO-??
Catalog number:
Proposed Launch Date: Late 2007

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/
[01222007]
=====
Eagle AO-??
Catalog Number:
Proposed Launch Date: Early/Mid 2009

Status: Design Phase

For the latest project status updates please visit the AMSAT-NA webpage:
http://www.amsat.org
[01222007]
=====
Can X-2
Catalog number:
Proposed Launch Date: April, 2008

Status: Waiting for Launch

For the latest project status update please visit the Can X-2 web page:
http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[03132008]
=====
AAUSAT-II
Catalog number:
Proposed Launch Date: April, 2008

Status: Waiting for Launch

For the latest project status update please visit the AAUSAT-II web page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[03132008]
=====
Cute-1.7+APD II
Catalog number:
Proposed Launch Date: April, 2008

Status: Waiting for Launch

For the latest project status update please visit the Cute-1.7+APD II web page:
http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78
[03132008]
=====
Compass 1
Catalog number:
Proposed Launch Date: April, 2008

Status: Waiting for Launch

For the latest project status update please visit the Compass 1 web page:
http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52
[03132008]
=====
Delfi-C3
Catalog number:
Proposed Launch Date: April, 2008

Status: Waiting for Launch

Proposed Frequencies:
* Primary telemetry downlink: 145.870 MHz 1200 Baud BPSK AX.25 400mW
* Backup telemetry downlink: 145.930 MHz 1200 Baud BPSK AX.25 400mW
* Linear transponder passband downlink: 145.880 - 145.920 MHz (inverting)
  400mW PEP
* Linear transponder passband uplink: 435.570 - 435.530 MHz
* Transponder mode beacon: 145.870 MHz CW (10dB below transponder PEP)

For the latest project status update please visit the Delfi-C3 web page:
http://www.delfic3.nl/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68
[03132008]
=====
Seeds 2
Catalog number:
Proposed Launch Date: April, 2008

Status: Waiting for Launch

For the latest project status update please visit the Seeds 2 web page:
http://cubesat.aero.cst.nihon-u.ac.jp/english/main_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36
[03132008]

NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-108.S5
WSR 108 Part 5 04/17/2008

AMSAT NEWS SERVICE BULLETIN 108.S5 FROM AMSAT HQ
SILVER SPRING, MD, April 17, 2008
TO ALL RADIO AMATEURS
BID: $ANS-108.S5

THE FOLLOWING SATELLITES HAVE DE-ORBITED OR HAVE BEEN RETURNED SAFELY:

NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Operational
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink: 145.825 Mhz FM APRS AX25
APRS Uplink: 145.825 MHz FM APRS AX25
Voice/PSK31 Uplink: 28.120 MHz

Packet to Voice ID: RAFT
[06112007]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

From 7454862833348884885
X-Google-Thread: 10e8ad,e297442a537a0594,start
X-Google-Thread: 10b9c8,e297442a537a0594,start
X-Google-Attributes: gid10e8ad,gid10b9c8,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!news1.google.com!
border1.nntp.dca.giganews.com!border2.nntp.dca.giganews.com!nntp.giganews.com!
transit3.readnews.com!news-out.readnews.com!news-xxxfer.readnews.com!news-
out.readnews.com!transit4.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-111 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sat, 19 Apr 2008 23:29:54 EDT
Organization: The Radio Amateur Satellite Corporation

Lines: 396
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000301c8a296$c829b5f0$6801a8c0@familyroom>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix2.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader2.panix.com 1208662194 28055 166.84.1.2 (20 Apr 2008 03:29:54 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 20 Apr 2008 03:29:54 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to   rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to   rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
X-Original-Bytes: 15260
Xref: g2news1.google.com rec.radio.amateur.space:1326 rec.radio.info:762

AMSAT NEWS SERVICE
ANS-111

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* AMSAT Store and Dayton Update
* Volunteer Opportunities at the AMSAT Lab
* ESA Call for Cubesat Proposals
* Cubesat Workshop Presentations Available
* European Student Earth Orbiter Update
* AMSAT-Australia and Ozdatgroup Combine Forces
* Satellite Shorts From All Over
* ARISS Status - 14 April 2008

SB SAT @ AMSAT $ANS-111.01
AMSAT Store and Dayton Update

AMSAT News Service Bulletin 111.01
From AMSAT HQ SILVER SPRING, MD.
April 20, 2008
To All RADIO AMATEURS
BID: $ANS-111.01

The AMSAT Store is still down, but we now have a computer that will be the server for the AMSAT Store. We hope to have the store operational as soon as possible. This is currently a volunteer effort, travel and work obligations have slowed down the process of getting the software installed.

AMSAT at the Dayton Hamvention continues to grow. We will have a great Forum on Saturday morning and many new items available at the booth, including a limited number of LVB Tracker boxes. The outdoor demonstration area will be busy all three days plus offer an "Introduction to Amateur Satellite Operation" talk Friday and Saturday afternoons.
Be sure and contact Martha to make your reservations for the joint AMSAT/TAPR Banquet Friday night May 16.
Be sure an join us for the Pizza and Suds gathering on Thursday night.
Additional information can be found on the AMSAT web site,
http://www.amsat.org

[ANS thanks Gould, WA4SXM, for the above information]

/EX

SB SAT @ AMSAT $ANS-111.02
Volunteer Opportunities at the AMSAT Lab

AMSAT News Service Bulletin 111.02
From AMSAT HQ SILVER SPRING, MD.
April 20, 2008
To All RADIO AMATEURS
BID: $ANS-111.02

Bob Davis, KF4KSS, AMSAT Lab Manager says the AMSAT Lab in Pocomoke City, Maryland will be open for work days on the following Saturdays:

Sat Apr 26 Open 9-5
Sat May 3 Open 9-5
Sat May 10 Open 9-5
Sat May 17 Closed - Dayton Hamvention

Again, if you're interested in coming and need directions or just want to talk first, send Bob an email KF4KSS@amsat.org or call 443-783-7794.

[ANS thanks Bob, KF4KSS for the above information]

/EX

SB SAT @ AMSAT $ANS-111.03
ESA Call for Cubesat Proposals

AMSAT News Service Bulletin 111.03
From AMSAT HQ SILVER SPRING, MD.
April 20, 2008
To All RADIO AMATEURS
BID: $ANS-111.03

The European Space Agency Education Office has received good response to its call for CubeSat proposals issued last month to universities in ESA member nations and other cooperating states. This to participate in the development of an educational payload for the maiden flight of the new Vega launch rocket currently scheduled for December.

The launch opportunity on the Vega maiden flight is being offered free of charge for up to 6 CubeSats, with an additional 2 backup CubeSats on back up standby. The ESA Education Office says that it recognizes the growing importance of CubeSat projects as a key tool in providing university students with a valuable hands-on practical education across all space engineering disciplines from end-to-end through the complete space project lifecycle.

[ANS thanks Newsline for the above information]

/EX

SB SAT @ AMSAT $ANS-111.04
Cubesat Workshop Presentations Available

AMSAT News Service Bulletin 111.04
From AMSAT HQ SILVER SPRING, MD.
April 20, 2008
To All RADIO AMATEURS
BID: $ANS-111.04

The 5th Annual Cubesat Developers Workshop was held at CalPoly in San Luis Obispo April 9-11 2008.

The workshop featured over forty presentations covering information for new Cubesat developers, innovative avionics, nanosatellites, access to space, ground station operations, and unique missions.

All of the presentation have been posted on Cubesat.org:
http://cubesat.atl.calpoly.edu/pages/workshops/developers-workshop-2008.php

[ANS thanks Bryan, KF6ZEO, for the above information]

/EX

SB SAT @ AMSAT $ANS-111.05
European Student Earth Orbiter Update

AMSAT News Service Bulletin 111.05
From AMSAT HQ SILVER SPRING, MD.
April 20, 2008
To All RADIO AMATEURS
BID: $ANS-111.05

It has been quite a time since the AMSAT-UK European Student Earth Orbiter (ESEO) team have been able to provide an update on the progress of this satellite payload and just recently ESA have made a major change to the structure of the project organization.

The plan has been to develop a package to provide downlink telemetry at 400 bps and provide backup tele-command and ranging facilities for the mission management teams. It would, additionally, provide a 435 to 2400 MHz (Mode U/S) linear transponder using both analogue and DSP based systems.

ESEO is a 110kg student satellite project intended for launch in to low inclination GTO elliptical orbit.

Until the beginning of 2008 the whole ESEO project had been organized directly by ESA Education Office under the SSETI (Student Space Exploration & Technology Initiative) banner but they have now decided to adopt new arrangements.

To quote from the ESA website

> " To date, both projects (ESEO and ESMO) have proceeded in the early phases with a project team consisting entirely of students with project management and ad hoc technical support provided by ESA.
>
> It is now intended to implement a new project team structure for these two projects in order to enhance the educational benefits given to the students and to ensure that the project progresses through major reviews to a successful completion on schedule. The new project structure consists of:
>
> * a System Prime responsible for the system engineering and technical management of the project, the provision of specialist technical advice to the students where needed, and supervising the student AIV(Assembly Integration & Verification) of the satellite at ESTEC.

* a Network of Universities responsible for the delivery of payload items, satellite subsystem items and ground segment systems by their student teams and ensuring the adequate supervision/long-term continuity of the student teams locally."

What does this mean for AMSAT-UK's involvement in the project?

The launch date is now not expected to be earlier than 2011.

The process for the appointment of the System Prime Contractor is presently underway and is expected to be completed by later this year.

After the System Prime has been appointed, we will work with them and with ESA Education to ensure that the AMSAT sub-system is available when required by the programme.

Further information should be available in time for the AMSAT-UK Colloquium which is being held at the University of Surrey at Guildford from Friday 25th to Sunday 28th July,

[ANS thanks AMSAT-UK for the above information]

/EX

SB SAT @ AMSAT $ANS-111.06
AMSAT-Australia and Ozsatgroup Combine Forces

AMSAT News Service Bulletin 111.06
From AMSAT HQ SILVER SPRING, MD.
April 20, 2008
To All RADIO AMATEURS
BID: $ANS-111.06

You may not be aware that AMSAT-Australia and the Ozsatgroup have amalgamated, and that the new combined group has retained the name AMSAT-Australia.

AMSAT-Australia and the Ozsatgroup have been working together for more than two years, and have been discussing such an amalgamation for some time.

The decision to go ahead with the amalgamation was made after Graham Ratcliff, VK5AGR formally tended his resignation as AMSAT-Australia National Coordinator and as AMSAT Coordinator for the Wireless Institute of Australia (WIA) in his annual report to the WIA 2008

Federal Convention on Monday, 7th April 2008.

The role of AMSAT-Australia National Coordinator has been taken on by myself Paul Paradigm, VK2TXT, formally the Coordinator of the Ozsatgroup, and joined by Judy Williams, VK2TJU in the role of AMSAT-Australia Secretary.

I would like to take this opportunity on behalf of both the Amateur Radio operators on the AMSAT-Australia mailing list and the members of the former Ozsatgroup to thank Graham for his outstanding contribution to the Amateur Radio community here in Australia and around the world.

Graham has been in the role of AMSAT-Australia National Coordinator since 1983, and has been the driving force behind AMSAT-Australia since its inception.

Visit our website at http://www.amsat-vk.org for more information.

73's

Paul - VK2TXT
AMSAT-Australia National Coordinator.

[ANS thanks Paul, VK2TXT for the above information]

/EX

SB SAT @ AMSAT $ANS-111.07
Satellite Shorts From All Over

AMSAT News Service Bulletin 111.07
From AMSAT HQ SILVER SPRING, MD.
April 20, 2008
To All RADIO AMATEURS
BID: $ANS-111.07

+ Robert, G8ATE has updated his web site at http://www.turlington.supanet.com to show an SSTV contact with GM0ICF via VO52 and Field Hell tests via AO7 mode B, AO16,S O50, AO51 & VO52.

+ When operating on AO-7 keep an ear open for the informal "DX Watering Hole" near 145.959 MHz +/-. This is the proposed frequency for those "footprint stretching", edge-to-edge QSO's on AO-7.

+ The Federal Communications Commission says it is seeking applications from engineering school graduates with superior academic credentials and an interest in communications engineering for its 2008 Engineer-in-Training Program. Additional information is available on the FCC's EIT Program page at http://www.fcc.gov/EITprogram, or by contacting the FCC's Human

Resources Office at area code 202-418-0130. You can also e-mail for more information to recruit@fcc.gov. (via Amateur Radio Newsline)

+ Reminder! Visit the AMSAT Dayton Web page to learn of the latest events planned for this year's Hamvention:
http://www.amsat.org/amsat-new/hamvention/2008/Dayton2008.php

[ANS thanks everyone for the above information]

/EX

SB SAT @ AMSAT $ANS-111.08
ARISS Status - 14 April 2008

AMSAT News Service Bulletin 111.08
From AMSAT HQ SILVER SPRING, MD.
April 20, 2008
To All RADIO AMATEURS
BID: $ANS-111.08

1. Upcoming School Contacts

Arnold Palmer Hospital for Children in Orlando, Florida has been scheduled for an Amateur Radio on the International Space Station (ARISS) contact on Monday, April 21 at 17:48 UTC via the telebridge station W6SRJ in Santa Rosa, California. The audio for this event will be fed into the EchoLink AMSAT (101 377) and JK1ZRW (277 208) Conference Room servers and the IRLP Discovery Reflector 9010.

2. Croatian Contact Successful

On Monday, April 7, students from Osnovna skola Pazin in Croatia participated in a successful Amateur Radio on the International Space Station (ARISS) contact. Garrett Reisman, KE5HAE, answered 15 questions posed to him by 6 students as an audience of 100 people gathered around the radio. Three national television stations, three radio stations and five newspapers covered the event. The audio was fed into the EchoLink AMSAT (101 377) and JK1ZRW (277 208) servers and received 16 connections, including 3 link nodes and 1 repeater node, from 11 countries.

3. First Korean Contact Successful

Students attending the Han Gwang Boys & Girls High School in Pyeong Taek City,
Republic of Korea experienced an Amateur Radio on the International Space Station (ARISS) contact on Sunday, April 13. South Korean space visitor Yi So-yeon, HL0ARISS, answered 12 students' questions. Over 500 people attended the
event. Media coverage included 5 television stations and 10 newspapers.

4. ARISS Crew Debrief Held

A debrief session was held between the Amateur Radio on the International Space
Station (ARISS) team and Expedition 16 crew member Leopold Eyharts, KE5FNO/FX0STD, on Monday, April 7. Eyharts provided feedback on ARISS school contacts and operation of the ARISS radio equipment.

5. ARISS Presentation at Dayton Hamvention

The Dayton Hamvention will be held at the Hara Arena Complex in Dayton, Ohio on
May 16 - 18. The American Radio Relay League (ARRL) and the Radio Amateur Satellite Corporation (AMSAT) will both support exhibit booths at the event. Amateur Radio on the International Space Station (ARISS) Chairman Frank Bauer
plans to give a presentation on "A Ham Radio Operator's View of ARISS" at the
AMSAT forum which will cover new ARISS initiatives and a status report on SuitSat-2. The Dayton Hamvention is an internationally attended amateur radio
convention that draws crowds of 25,000 annually.
For more information on Dayton Hamvention 2008, go to:
http://www.hamvention.org/hv2008/forums/forumlist.htm

[ANS thanks Carol, KB3LKI, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's
Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are
available from the AMSAT Office.

73,
This week's ANS Editor,
Lee McLamb, KU4OS

```
From -8099780176041919608
X-Google-Thread: 10e8ad,f944c72fe9d2703b,start
X-Google-Attributes: gid10e8ad,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!local02.nntp.dca.giganews.com!nntp.comcast.com!
news.comcast.com.POSTED!not-for-mail
NNTP-Posting-Date: Sun, 20 Apr 2008 16:51:05 -0500
From: No Spam <no@spam.com>
Subject: Field Day Plans for satcoms
Newsgroups: rec.radio.amateur.space
User-Agent: Pan/0.132 (Waxed in Black)
MIME-Version: 1.0
Content-Type: text/plain; charset=UTF-8
Content-Transfer-Encoding: 8bit
Message-ID: <1L6dnViJAbNUJ5bVnZ2dnUVZ_oCvnZ2d@comcast.com>
Date: Sun, 20 Apr 2008 16:51:05 -0500
Lines: 4
X-Usenet-Provider: http://www.giganews.com
NNTP-Posting-Host: 24.8.221.21
X-Trace: sv3-VWVAtpv7ry4VQX4XnQ2vCZRtUfFWCMbVDcQxBeY/Rd77OOLLVGQxiOwau/QmGxL/
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pw2TtXHBTxBpnM2GpZsbeNIzyjZN8znB+q8wSlIbnwKoeTEa3qnPvN3sp5FpKxrqrCp/b1WSaAhw!
ofBTckiYJlMfxK7scGrs/evHJb4=
X-Complaints-To: abuse@comcast.net
X-DMCA-Complaints-To: dmca@comcast.net
X-Abuse-and-DMCA-Info: Please be sure to forward a copy of ALL headers
X-Abuse-and-DMCA-Info: Otherwise we will be unable to process your complaint
properly
X-Postfilter: 1.3.38
Xref: g2news1.google.com rec.radio.amateur.space:1327
```

What are the general ARRL Field Day Plans for satcoms?

This will be our clubs first attempt for points on satcoms. Are there any really good links I should look?

```
From -3840321225038057537
X-Google-Thread: 10e8ad,994fbc0d02b43640,start
X-Google-Thread: 10b9c8,994fbc0d02b43640,start
X-Google-Attributes: gid10e8ad,gid10b9c8,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!newsfeed2.dallas1.level3.net!
news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-115 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Fri, 25 Apr 2008 21:56:56 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 1411
Approved: RRI Admin <rec-radio-info-request@panix.com>
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Message-ID: <001301c8a740$cbc8f730$6801a8c0@familyroom>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix1.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader2.panix.com 1209175015 4753 166.84.1.1 (26 Apr 2008 01:56:55 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sat, 26 Apr 2008 01:56:55 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Xref: g2news1.google.com rec.radio.amateur.space:1328 rec.radio.info:769
```

This report is organized into FIVE parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites
Part 5 (S5) - deorbited/returned satellites

SB SAT @ AMSAT W8ISS ANS-115.S1
WSR 115 Part 1 04/24/2008

AMSAT NEWS SERVICE BULLETIN 115.S1 FROM AMSAT HQ
SILVER SPRING, MD, April 24, 2008
TO ALL RADIO AMATEURS
BID: $ANS-115.S1

VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.859330 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsat.in/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is
active. Each transponder has a different beacon.
[06252007]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational - Software reload

Current Modes: FM Repeater - V/u
                 BBS   - L/u
                 Telemetry   - /u

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink: 145.880 MHZ FM
                       145.880 MHz USB
                       145.920 MHz FM
                      1268.700 MHz FM 67Hz PL tone
Digital Downlinks: 435.150 MHz FM 38k4 Digital, PBP, 1 watt output
                       435.150 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      1268.700 mhz FM 9k6 PBP Digital
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

```
Official Webpage: http://www.amsat.org/amsat-new/echo/
[04032008]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Current Mode: V/u

Uplink:   145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute
timer
   on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the
repeater on
   and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset
the 10
   minute timer.
[05282007]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Operational - check operational schedule for current times!!

Current Mode: V/u

Voice/CW Mode JA
Uplink:   145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon:   435.795 MHz

Digital Mode JD
Uplinks:  145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
```

Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage: http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's CW
telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts.htm
[0820007]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[12132007]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: TESTING - VOICE

Current Mode: V/u

Uplink: 145.900 MHz FM 1200-baud Manchester FSK (reserved)
                145.920 MHz FM VOICE
                145.940 MHz FM 1200-baud Manchester FSK (reserved)
                145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink: 437.026 MHz USB VOICE
                (1200-baud PSK - MBL Telemetry Only)

```
Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[03202008]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational depending on amount of Sunlight

Current Mode: Listen before transmitting

Uplink:   145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink:  29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons:   29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/

AO-7 Usage Guidelines on the AO-7 Log and Resource Site located at:
http://www.planetemily.com/ao7
[05282007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Mode: FM Repeater - U/v
              Voice -       Occasianally
              BBS -         ON
              APRS -        ON
              SSTV -        OFF
```

Expedition 17 crew:
Commander: Sergey Volkov RU3DIS
Flight Engineer: Oleg Kononenko RN3DX
Flight Engineer: Garrett Reisman KE5HAE

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM
Worldwide packet downlink: 145.825 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS
RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line is NOT translated from Russian and posted.
[04242008]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-115.S2
WSR 115 Part 2 04/24/2008

AMSAT NEWS SERVICE BULLETIN 115.S2 FROM AMSAT HQ
SILVER SPRING, MD, April 24, 2008
TO ALL RADIO AMATEURS
BID: $ANS-115.S2

CAPE-1

```
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode:  /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon:    435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.
[11152007]
=====
CP3
Catalog Number: 31128
Launch Date: April 17,2007

Status: Operational

Current Mode:  /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[07302007]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: In Orbit

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder:  145.825 Mhz FM
[02052007]
=====
NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Operational

Current Mode: /u

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[10222007]
=====
```

GENESAT-1 ?O-??
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Current Mode: /u

Telemetry Beacon Downlink: 437.0670 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[01082007]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon: 437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
[03262007]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launched: June 30, 2003

Status: Operational

Current Mode: /u

Beacon: 436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[01082007]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launched: February 21, 2006

Status: Semi-Operational - Constant Carrier only

```
Uplink:  1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan ? )

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[01082007]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW
[08132007]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational - Softawre Reload

Current Mode(s): FM Repeater - V/u
                 BBS         - L/u
                 Telemetry   -  /u

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink:   145.880 MHZ FM
                       145.880 MHz USB
                       145.920 MHz FM
                      1268.700 MHz FM 67Hz PL tone
Digital Downlinks:     435.150 MHz FM 38k4 Digital, PBP, 1 watt output
                       435.150 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:        145.860 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      1268.700 mhz FM 9k6 PBP Digital
Beacon:                435.150 MHz
```

```
Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[04032008]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Hibernation until full sunlight in November

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink:        144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[09242007]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Current Modes: V/U
               L/U

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
```

```
http://www.iarc.org/techsat/techsat.html
[09172007]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational.

Current Mode:  /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon:          435.025 MHz
Mode-S Beacon:     2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[01242008]
=====
RS-22 RADIO SPORT RS-22
Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only

Current Mode:  /u

CW Beacon - 435.352 MHz
            145.818 MHz
[08062007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Mode: FM Repeater - U/v
              Voice -       Occasianally
              BBS -         ON
              APRS -        ON
              SSTV -        OFF

Expedition 17 crew:
Commander:          Sergey Volkov         RU3DIS
Flight Engineer:    Oleg Kononenko        RN3DX
Flight Engineer:    Garrett Reisman       KE5HAE

Available Modes and Frequencies:
```

Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM
Worldwide packet downlink: 145.825 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS
                      RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line is NOT translated from Russian and posted.
[04242008]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-115.S3
WSR 115 Part 3 04/24/2008

AMSAT NEWS SERVICE BULLETIN 115.S3 FROM AMSAT HQ
SILVER SPRING, MD, April 24, 2008
TO ALL RADIO AMATEURS
BID: $ANS-115.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

CP4
Catalog Number: 31122
Launch Date: April 17,2007

Status: Operational

```
Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon:    437.325 MHz CW
[11152007]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Non-Operational

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon:             437.2750 MHz CW

Callsign: JR8YJT
[10152007]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency:  437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink:        437.250 MHz FM 67Hz CTCSS
Voice Downlink:     2401.835 MHz FM
Packet Up/Downlink:  437.250 MHz 9k6 packet
Packet Downlink     2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005
```

```
Status: Non=Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[08132007]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink:   435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Non-Operational

Uplinks:   145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink:  437.325 MHz

Broadcast callsign: MYSAT3-11
BBS:                MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial
land and weather imaging payloads offers FM and FSK Amateur Radio
communica-
tion.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a
collaborative effort between the Malaysian government and Surrey
Satellite
Technology Ltd.
[007302007]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink:   145.945 MHz UI Digipeater
```

Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, callsign KE6QMD, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks

V-band: 145.840 - 145.990 MHz CW/LSB
U-band: 435.550 - 435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks

S2-band: 2401.225 - 2401.475 MHz CW/USB
K-band: 24048.010 - 24048.060 MHz CW/USB
Beacon: 2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)

BEACON	General Beacon (GB)	Middle Beacon (MB)	Engineering Beacon (EB)
2 m	none	145.898 MHz	none
70cm	435.438 MHz	435.588 MHz	435.838 MHz
13cm(1)	2400.188 MHz	2400.338 MHz	2400.588 MHz
13cm(2)	2401.173 MHz	2401.323 MHz	2401.573 MHz
3cm	10450.975 MHz	10451.125 MHz	10451.375 MHz
1.5cm	24047.885 MHz	24048.035 MHz	24048.285 MHz

[07162007]
=====
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web site
at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

Status: Non-Operational

```
Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater:         436.250 MHz

Uplinks: Mode B Repeater:  145.825 MHz
Mode J Digipeater:         145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink:   145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
PO-28 POSAT-1
Catalog number: 22829
```

```
Launch Date: September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign:       POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012006]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992
```

```
Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HL01-11
BBS: HL01-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz
```

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
LIBERTAD-1
Catalog Number: 31129
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink: 145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[10222007]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplinks: 145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink: 437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[01222007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440

```
Launch Date: January 22, 1990

Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
[05012006]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet: Non-Operational
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon:   145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
```

```
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink  29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
Beacons:   29.450 MHz
          435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
```

```
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon 1:  29.352 MHz (intermittent)
Beacon 2:  29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink:     21.260 to 21.300 MHz CW/USB
Downlink:  145.860 to 145.900 MHz CW/USB

Beacon:    145.860 MHz

Robot:     145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink:   21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon:   29.408 MHz

Robot:    29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-115.S4
WSR 115 Part 4 04/24/2008

AMSAT NEWS SERVICE BULLETIN 115.S4 FROM AMSAT HQ
SILVER SPRING, MD, April 24, 2008
TO ALL RADIO AMATEURS
BID: $ANS-115.S4
```

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE PROPOSED FOR LAUNCH AT THIS TIME:

Phase 5a Mars Mission AO-??
Catalog Number:
Proposed Launch Date: 2009 or 2011

Status: Design Phase

For the latest project status update please visit the AMSAT-DL P5-A web page:
http://ticket-to-mars.org
[01222007]

=====

PHASE 3E AO-??
Catalog number:
Proposed Launch Date: Late 2007

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/
[01222007]

=====

Eagle AO-??
Catalog Number:
Proposed Launch Date: Early/Mid 2009

Status: Design Phase

For the latest project status updates please visit the AMSAT-NA webpage:
http://www.amsat.org
[01222007]

=====

Can X-2
Catalog number:
Proposed Launch Date: April, 2008

Status: Waiting for Launch

For the latest project status update please visit the Can X-2 web page:
http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[03132008]

=====

AAUSAT-II
Catalog number:
Proposed Launch Date: April, 2008

Status: Waiting for Launch

For the latest project status update please visit the AAUSAT-II web page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[03132008]
=====
Cute-1.7+APD II
Catalog number:
Proposed Launch Date: April, 2008

Status: Waiting for Launch

For the latest project status update please visit the Cute-1.7+APD II web
page:
http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78
[03132008]
=====
Compass 1
Catalog number:
Proposed Launch Date: April, 2008

Status: Waiting for Launch

For the latest project status update please visit the Compass 1 web page:
http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52
[03132008]
=====
Delfi-C3
Catalog number:
Proposed Launch Date: April, 2008

Status: Waiting for Launch

Proposed Frequencies:
* Primary telemetry downlink: 145.870 MHz 1200 Baud BPSK AX.25 400mW
* Backup telemetry downlink: 145.930 MHz 1200 Baud BPSK AX.25 400mW
* Linear transponder passband downlink: 145.880 - 145.920 MHz (inverting)
  400mW PEP
* Linear transponder passband uplink: 435.570 - 435.530 MHz
* Transponder mode beacon: 145.870 MHz CW (10dB below transponder PEP)

For the latest project status update please visit the Delfi-C3 web page:
http://www.delfic3.nl/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68
[03132008]
=====
Seeds 2
Catalog number:
Proposed Launch Date: April, 2008

Status: Waiting for Launch

For the latest project status update please visit the Seeds 2 web page:
http://cubesat.aero.cst.nihon-u.ac.jp/english/main_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36
[03132008]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-115.S5
WSR 115 Part 5 04/24/2008

AMSAT NEWS SERVICE BULLETIN 115.S5 FROM AMSAT HQ
SILVER SPRING, MD, April 24, 2008
TO ALL RADIO AMATEURS
BID: $ANS-115.S5

THE FOLLOWING SATELLITES HAVE DE-ORBITED OR HAVE BEEN RETURNED SAFELY:

NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Operational
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink: 145.825 Mhz FM APRS AX25
APRS Uplink: 145.825 MHz FM APRS AX25
Voice/PSK31 Uplink: 28.120 MHz

Packet to Voice ID: RAFT
[06112007]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org

NNNN
/EX

```
From 9044677112955531657
X-Google-Thread: 10e8ad,35139d3760777c1e,start
X-Google-Thread: 10b9c8,35139d3760777c1e,start
X-Google-Attributes: gid10e8ad,gid10b9c8,domainid0,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!newsfeed2.dallas1.level3.net!
news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-121 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Sat, 3 May 2008 09:18:35 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 1428
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <001201c8ad20$29768110$6801a8c0@familyroom>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix1.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader2.panix.com 1209820715 27122 166.84.1.1 (3 May 2008 13:18:35 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sat, 3 May 2008 13:18:35 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Xref: g2news1.google.com rec.radio.amateur.space:1329 rec.radio.info:776
```

This report is organized into FIVE parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites
Part 5 (S5) - deborbited/returned satellites

SB SAT @ AMSAT W8ISS ANS-121.S1
WSR 121 Part 1 05/01/2008

AMSAT NEWS SERVICE BULLETIN 121.S1 FROM AMSAT HQ
SILVER SPRING, MD, May 01, 2008
TO ALL RADIO AMATEURS
BID: $ANS-121.S1

VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.859330 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsat.in/hamsat.htm

To know what transponder is switched on please listen for the beacon that is
active. Each transponder has a different beacon.
[06252007]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational - Software reload

Current Modes: FM Repeater - V/u
                 BBS   - L/u
                 Telemetry   - /u

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink: 145.880 MHZ FM
                       145.880 MHz USB
                       145.920 MHz FM
                      1268.700 MHz FM 67Hz PL tone

Digital Downlinks: 435.150 MHz FM 38k4 Digital, PBP, 1 watt output
                       435.150 MHz FM 9k6 Digital, Pacsat Broadcast Protocol
                      2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Digital, Pacsat Broadcast Protocol
                      1268.700 mhz FM 9k6 PBP Digital
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[04032008]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002

Status: Operational.

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer
   on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on
   and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10
   minute timer.
[05282007]

=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Operational - check operational schedule for current times!!

Current Mode: V/u

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage: http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts.htm
[0820007]
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

```
Official Webpage: http://www.ao27.org
[12132007]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: TESTING - VOICE

Current Mode:  V/u

Uplink:         145.900 MHz FM 1200-baud Manchester FSK (reserved)
                145.920 MHz FM VOICE
                145.940 MHz FM 1200-baud Manchester FSK (reserved)
                145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink:       437.026 MHz USB VOICE
                ( 1200-baud PSK - MBL Telemetry Only )

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[03202008]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational depending on amount of Sunlight

Current Mode: Listen before transmitting

Uplink:   145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink:  29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons:   29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php
```

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/

AO-7 Usage Guidelines on the AO-7 Log and Resource Site located at:
http://www.planetemily.com/ao7
[05282007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Mode: FM Repeater - U/v
Voice - Occasianally
BBS - ON
APRS - ON
SSTV - OFF

Expedition 17 crew:
Commander: Sergey Volkov RU3DIS
Flight Engineer: Oleg Kononenko RN3DX
Flight Engineer: Garrett Reisman KE5HAE

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM
Worldwide packet downlink: 145.825 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS
RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss

ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line is
NOT translated from Russian and posted.
[04242008]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-121.S2
WSR 121 Part 2 05/01/2008

AMSAT NEWS SERVICE BULLETIN 121.S2 FROM AMSAT HQ
SILVER SPRING, MD, May 01, 2008
TO ALL RADIO AMATEURS
BID: $ANS-121.S2

CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.
[11152007]
=====
CP3
Catalog Number: 31128
Launch Date: April 17,2007

Status: Operational

Current Mode: /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[07302007]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: In Orbit

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder: 145.825 Mhz FM
[02052007]
=====
NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Operational

Current Mode: /u

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[10222007]
=====
GENESAT-1 ?O-??
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Current Mode: /u

Telemetry Beacon Downlink: 437.0670 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[01082007]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon: 437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
[03262007]
=====
CO-57 CubeSat XI-IV

Catalog number: 27848
Launch date: June 30, 2003

Status: Operational

Current Mode: /u

Beacon: 436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[01082007]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Semi-Operational - Constant Carrier only

Uplink: 1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan ?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[01082007]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW
[08132007]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational - Softawre Reload

```
Current Mode(s): FM Repeater - V/u
                 BBS         - L/u
                 Telemetry   -  /u

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink:   145.880 MHZ FM
                       145.880 MHz USB
                       145.920 MHz FM
                      1268.700 MHz FM 67Hz PL tone
Digital Downlinks:     435.150 MHz FM 38k4 Digital, PBP, 1 watt output
                       435.150 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:        145.860 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      1268.700 mhz FM 9k6 PBP Digital
Beacon:                435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[04032008]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Hibernation until full sunlight in November

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink:        144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[09242007]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
```

```
Launch Date: July 10, 1998

Status: Operational

Current Modes: V/U
               L/U

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[09172007]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984

Status: Semi-operational.

Current Mode:  /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon:           435.025 MHz
Mode-S Beacon:      2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[01242008]
=====
RS-22 RADIO SPORT RS-22
Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only

Current Mode:  /u

CW Beacon - 435.352 MHz
            145.818 MHz
```

```
[08062007]
=====
Can X-2
Catalog number:
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web page:
http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[05012008]
=====
AAUSAT-II
Catalog number:
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink: 437.425 MHz

For the latest project status update please visit the AAUSAT-II web
page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[05012008]
=====
Cute-1.7+APD II
Catalog number:
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink:  437.475 MHz 9k6 Packet
Uplink:   1267.600 Mhz

For the latest project status update please visit the Cute-1.7+APD II
web
page:
http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78
[05012008]
=====
Compass 1
Catalog number:
```

Launch Date: April 28, 2008

Status: IN ORBIT

Downlink: 437.275 Mhz CW
          437.405 MHz Packet

For the latest project status update please visit the Compass 1 web
page:
http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52
[05012008]
=====
Delfi-C3
Catalog number:
Launch Date: April 28, 2008

Status: IN ORBIT

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink: 435.530 to 435.570 MHz

Proposed Frequencies:
* Primary telemetry downlink: 145.870 MHz 1200 Baud BPSK AX.25 400mW
* Backup telemetry downlink: 145.930 MHz 1200 Baud BPSK AX.25 400mW
* Linear transponder passband downlink: 145.880 - 145.920 MHz
(inverting)
  400mW PEP
* Linear transponder passband uplink: 435.570 - 435.530 MHz
* Transponder mode beacon: 145.870 MHz CW (10dB below transponder PEP)

For the latest project status update please visit the Delfi-C3 web page:
http://www.delfic3.nl/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68
[05012008]
=====
Seeds 2
Catalog number:
Launch Date: April 28, 2008

Status: IN ORBIT

Downlink: 437.485 MHz

For the latest project status update please visit the Seeds 2 web page:
http://cubesat.aero.cst.nihon-u.ac.jp/english/main_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36
[05012008]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Mode: FM Repeater - U/v
Voice - Occasianally
BBS - ON
APRS - ON
SSTV - OFF

Expedition 17 crew:

Commander:	Sergey Volkov	RU3DIS
Flight Engineer:	Oleg Kononenko	RN3DX
Flight Engineer:	Garrett Reisman	KE5HAE

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM
Worldwide packet downlink: 145.825 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS
RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/

Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.
[04242008]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-121.S3
WSR 121 Part 3 05/01/2008

AMSAT NEWS SERVICE BULLETIN 121.S3 FROM AMSAT HQ
SILVER SPRING, MD, May 01, 2008
TO ALL RADIO AMATEURS
BID: $ANS-121.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

CP4
Catalog Number: 31122
Launch Date: April 17,2007

Status: Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon: 437.325 MHz CW
[11152007]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Non-Operational

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon: 437.2750 MHz CW

Callsign: JR8YJT
[10152007]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
                             2407.250

```
Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink:         437.250 MHz FM 67Hz CTCSS
Voice Downlink:      2401.835 MHz FM
Packet Up/Downlink:   437.250 MHz 9k6 packet
Packet Downlink      2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non=Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[08132007]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink:   435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Non-Operational

Uplinks:   145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink:  437.325 MHz

Broadcast callsign: MYSAT3-11
```

BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[007302007]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, callsign KE6QMD, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz

```
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
V-band:   145.840 -  145.990 MHz CW/LSB
U-band:   435.550 -  435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks
---------
S2-band:  2401.225 -  2401.475 MHz CW/USB
K-band:  24048.010 - 24048.060 MHz CW/USB
Beacon:   2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)
----------------------------
BEACON   General Beacon (GB)    Middle Beacon (MB)    Engineering Beacon
(EB)
2 m       none                    145.898 MHz           none
70cm      435.438 MHz             435.588 MHz           435.838 MHz
13cm(1)  2400.188 MHz            2400.338 MHz          2400.588 MHz
13cm(2)  2401.173 MHz            2401.323 MHz          2401.573 MHz
3cm     10450.975 MHz           10451.125 MHz         10451.375 MHz
1.5cm   24047.885 MHz           24048.035 MHz         24048.285 MHz
[07162007]
=====
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
```

Launch date: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site
at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: ?
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

```
The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink:   145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign:       POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012006]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
```

```
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
```

```
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
LIBERTAD-1
Catalog Number: 31129
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink:   145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[10222007]
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990

Status: CW Beacon only

Uplinks:          145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK
```

```
CW downlink:      437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[01222007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
[05012006]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet: Non-Operational
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
```

```
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon:   145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink  29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
Beacons:   29.450 MHz
```

```
          435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon 1:  29.352 MHz (intermittent)
Beacon 2:  29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink:     21.260 to 21.300 MHz CW/USB
Downlink:  145.860 to 145.900 MHz CW/USB

Beacon:    145.860 MHz

Robot:     145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
```

```
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink:   21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon:   29.408 MHz

Robot:    29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-121.S4
WSR 121 Part 4 05/01/2008

AMSAT NEWS SERVICE BULLETIN 121.S4 FROM AMSAT HQ
SILVER SPRING, MD, May 01, 2008
TO ALL RADIO AMATEURS
BID: $ANS-121.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE PROPOSED FOR LAUNCH AT
THIS TIME:

Phase 5a Mars Mission AO-??
Catalog Number:
Proposed Launch Date: 2009 or 2011

Status: Design Phase

For the latest project status update please visit the AMSAT-DL P5-A web
page:
http://ticket-to-mars.org
[01222007]
=====
PHASE 3E AO-??
Catalog number:
Proposed Launch Date: Late 2008

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web
page:
http://www.amsat-dl.org/p3e/
[01222007]
=====
Eagle AO-??
Catalog Number:
Proposed Launch Date: Early/Mid 2009

Status: Design Phase
```

For the latest project status updates please visit the AMSAT-NA webpage:
http://www.amsat.org
[01222007]
NNNN
/EX

SB SAT @ AMSAT W8ISS ANS-121.S5
WSR 121 Part 5 05/01/2008

AMSAT NEWS SERVICE BULLETIN 121.S5 FROM AMSAT HQ
SILVER SPRING, MD, May 01, 2008
TO ALL RADIO AMATEURS
BID: $ANS-121.S5

THE FOLLOWING SATELLITES HAVE DE-ORBITED OR HAVE BEEN RETURNED SAFELY:

NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Operational
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

```
Main Downlink:      145.825 Mhz FM APRS AX25
APRS Uplink:        145.825 MHz FM APRS AX25
Voice/PSK31 Uplink:  28.120 MHz
```

Packet to Voice ID: RAFT
[06112007]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:

AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

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In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

From -2845638914318326034
X-Google-Thread: 10e8ad,1386d274ca2a862c,start
X-Google-Thread: 113975,1386d274ca2a862c,start
X-Google-Attributes: gid10e8ad,gid113975,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news2.google.com!news.glorb.com!news.astraweb.com!border2.newsrouter.astraweb.com!not-for-mail
From: Chris Steyaert <observations@rmob.org>
Newsgroups: rec.radio.amateur.space,sci.astro.amateur
Subject: Radio Meteor Obs. Bull. September 2007 alpha Aurigids
Date: Sun, 07 Oct 2007 21:21:13 +0200

Message-ID: <jacig398ek7rh68596fofpvfm2kq4vm25r@4ax.com>
X-Newsreader: Forte Agent 1.93/32.576 English (American)
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Lines: 17
Organization: Unlimited download news at news.astraweb.com
NNTP-Posting-Host: afca0cb7.news.astraweb.com
X-Trace: DXC=?KklUCfMC]Mm=FFS;n7SGML?0kYOcDh@JYkk[:k07I@KnUFDA5VN\1BG?
ifhhgG3CA484YIXc?5YC2mc;YZHM3TF
Xref: g2news2.google.com rec.radio.amateur.space:230 sci.astro.amateur:12532

Radio Meteor Observation Bulletin No. 170 of September 2007 (79 K) is available now as

http://visualrmob.free.fr/rmobtext/rmob0709.txt

More information and the visual presentation of the hourly forward scatter counts can be found on

http://www.rmob.org

http://radio.data.free.fr

Chris

From 4985698833328339027
X-Google-Thread: 10e8ad,93b81b694d198f4c
X-Google-Thread: fcc6e,93b81b694d198f4c
X-Google-Thread: 10b271,93b81b694d198f4c
X-Google-Thread: 107e5d,93b81b694d198f4c
X-Google-Thread: 1110fe,93b81b694d198f4c
X-Google-Attributes:
gid10e8ad,gidfcc6e,gid10b271,gid107e5d,gid1110fe,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news2.google.com!news.glorb.com!
newscon02.news.prodigy.net!prodigy.net!newsdst01.news.prodigy.net!prodigy.com!
postmaster.news.prodigy.com!newssvr25.news.prodigy.net.POSTED!a6387dc4!not-for-mail
From: Cecil Moore <nospam@w5dxp.com>
User-Agent: Thunderbird 2.0.0.6 (Windows/20070728)
MIME-Version: 1.0
Newsgroups:
rec.radio.amateur.space,rec.radio.amateur.antenna,sci.physics,sci.energy,sci.physics.electromag
Subject: Re: Receiving 2 GHz AM signals in space. What do they sound like?
References: <47072242$0$15384$4c368faf@roadrunner.com>
<4708551a$0$47117$892e7fe2@authen.yellow.readfreenews.net>

```
<47088001$0$9605$4c368faf@roadrunner.com>
<1191749492.702997.254880@o3g2000hsb.googlegroups.com>
<zq5Oi.5052$4V6.3419@newssvr14.news.prodigy.net>
<1191782315.752393.148770@o3g2000hsb.googlegroups.com>
In-Reply-To: <1191782315.752393.148770@o3g2000hsb.googlegroups.com>
Content-Type: text/plain; charset=ISO-8859-1; format=flowed
Content-Transfer-Encoding: 7bit
Lines: 12
Message-ID: <DmaOi.7081$6p6.945@newssvr25.news.prodigy.net>
NNTP-Posting-Host: 76.202.135.57
X-Complaints-To: abuse@prodigy.net
X-Trace: newssvr25.news.prodigy.net 1191784995 ST000 76.202.135.57 (Sun, 07 Oct
2007 15:23:15 EDT)
NNTP-Posting-Date: Sun, 07 Oct 2007 15:23:15 EDT
Organization: SBC http://yahoo.sbc.com
X-UserInfo1:
[[OUR\KE\BUOVPTXARONOFP@AJYZTB\MV@BT]_MIJQR@EPIB_VUKAH_[MTX\IS[K[NGYJJFNOFZR_G[BUN
TAOQLFE^TEHRPI]PZZRP_BMDSFQFL_]CBHXRWCMDCUZAZN@D_AKMNLEI]MWHCSXL^]NNC__CZFGSGHYYXW
PFG@SCAVA]\FT\@B\RDGENSUQS^M
Date: Sun, 07 Oct 2007 19:23:15 GMT
Xref: g2news2.google.com rec.radio.amateur.space:231
rec.radio.amateur.antenna:6387 sci.physics:58200 sci.energy:6821
sci.physics.electromag:1956
```

oriel36 wrote:

> I would love to fill you in with the details but you appear
> content believing the guys in the mid 19th century were confused. They
> were not,they were desperate.

Most of my information comes from, "The History of Modern Science". In any case, "empty" space within the universe does have some sort of quantum structure and EM waves indeed do require that quantum medium. That's why light cannot escape the universe.

--
73, Cecil http://www.w5dxp.com

```
From -7873278488759439929
X-Google-Thread: 113975,93b81b694d198f4c
X-Google-Thread: f74ae,93b81b694d198f4c
X-Google-Thread: fdc67,93b81b694d198f4c
X-Google-Thread: 10e8ad,93b81b694d198f4c
X-Google-Thread: 10cf28,93b81b694d198f4c
X-Google-Thread: fcc6e,93b81b694d198f4c
X-Google-Thread: 10b271,93b81b694d198f4c
X-Google-Thread: 107e5d,93b81b694d198f4c
X-Google-Thread: 1038c2,93b81b694d198f4c
X-Google-Thread: 1110fe,93b81b694d198f4c
X-Google-Attributes:
gid113975,gidf74ae,gidfdc67,gid10e8ad,gid10cf28,gidfcc6e,gid10b271,gid107e5d,gid10
38c2,gid1110fe,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
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Path: g2news2.google.com!news2.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx01.iad01.newshosting.com!newshosting.com!post02.iad01!
post01.iad01!roadrunner.com!not-for-mail
Date: Sun, 07 Oct 2007 16:41:09 -0700
From: "Green Xenon [Radium]" <glucegen1@excite.com>
User-Agent: Mozilla/5.0 (Windows; U; Win98; en-US; rv:1.8b) Gecko/20050217
MIME-Version: 1.0
Newsgroups:
sci.astro.amateur,sci.astro,alt.astronomy,rec.radio.amateur.space,uk.sci.astronomy
,rec.radio.amateur.antenna,sci.physics,sci.energy,alt.sci.physics.new-
theories,sci.physics.electromag
Subject: Re: Receiving 2 GHz AM signals in space. What do they sound like?
References: <47080705$0$24349$4c368faf@roadrunner.com>
<bJqdnYvoXp2LWJXanZ2dnUVZ8t-nnZ2d@pipex.net>
In-Reply-To: <bJqdnYvoXp2LWJXanZ2dnUVZ8t-nnZ2d@pipex.net>
Content-Type: text/plain; charset=ISO-8859-1; format=flowed
Content-Transfer-Encoding: 7bit
Lines: 73
Message-ID: <47096bfd$0$19628$4c368faf@roadrunner.com>
Organization: Road Runner High Speed Online http://www.rr.com
NNTP-Posting-Host: 75.84.20.87
X-Complaints-To: abuse@rr.com
Xref: g2news2.google.com sci.astro.amateur:12547 sci.astro:15381
alt.astronomy:20338 rec.radio.amateur.space:232 uk.sci.astronomy:1949
rec.radio.amateur.antenna:6394 sci.physics:58238 sci.energy:6838
alt.sci.physics.new-theories:1852 sci.physics.electromag:1958
```

George Dishman wrote:

```
> "Green Xenon [Radium]" <glucegen1@excite.com> wrote in message
> news:47080705$0$24349$4c368faf@roadrunner.com...
>
>>On Oct 6, 6:24 am, "George Dishman" <geo...@briar.demon.co.uk> wrote in
>>http://groups.google.com/group/sci.energy/msg/ad14e4c2d56369db :
>>
>>
>>>"Green Xenon [Radium]" <gluceg...@excite.com> wrote in
>>
>>messagenews:47072242$0$15384$4c368faf@roadrunner.com...
>>
>>>...
>>
>>
>>>>... This receiver also has a robust signal processor
>>>>that can eliminate clipped-waveforms [such as square waves], spikes,
>>>>clicks, pops, hiss, and random noise
>>>>even at those trivial wattage
>>>>levels. After eliminating those unwanted signals, the carrier wave
>>>>
>>>>>is
>>>>
>>>>amplified.
>>
>>>There is no carrier,
>>
>>Yes there is. Why do you say there isn't?
>
>
> Because a sine wave is a sine and you cannot
> distiguish one from another. There is no
> criterion that says anything is a "carrier"
> and not just part of the background hiss.

Okay. Sorry. "Carrier" is the wrong word. The radio reciever captures
and demodulated 2 GHz waves as if those waves are amplitude-modulated.
So this "carrier" is really the waves emitted from cosmic sources.

>
>>>it was one of those signals you just
>>>eliminated.
>>
>>How so?
>
>
> If you use a band pass filter at some frequency
> that you guess could be a carrier followed by an
> envelope detector, you get hiss. To eliminate
> the hiss, you have to eliminate all other
> frequencies so all you are left with is CW and
> the envelope detector then gives a DC output.

Okay.


>>>>If I am on this spaceship, what will
>>>>I most likely hear on the radio?
>>
>>>Stop trying to troll, you are too stupid to pull it off.
>>
>>I don't troll or spam. I am asking this question because -- unlikely [if
>>not impossible] as my 2-GHz-in-outer-space scenario is -- I am still
>>interested in it.
>>
>>Now please please please answer my question. What would I hear?
>
>
> Several people have answered you already, the
> answer is silence.

Wouldn't I hear sounds resulting from demodulating the 2 GHz waves in an
AM-manner?


From 3014372820072228350
X-Google-Thread: 10e8ad,93b81b694d198f4c
X-Google-Thread: fcc6e,93b81b694d198f4c
X-Google-Attributes: gid10e8ad,gidfcc6e,public,usenet
```

```
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!postnews.google.com!v3g2000hsg.googlegroups.com!not-for-
mail
From:  K7ITM <k7itm@msn.com>
Newsgroups: rec.radio.amateur.space,rec.radio.amateur.antenna
Subject: Re: Receiving 2 GHz AM signals in space. What do they sound like?
Date: Mon, 08 Oct 2007 10:50:29 -0700
Organization: http://groups.google.com
Lines: 68
Message-ID: <1191865829.761897.246240@v3g2000hsg.googlegroups.com>
References: <47080705$0$24349$4c368faf@roadrunner.com>
NNTP-Posting-Host: 192.25.142.225
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"
X-Trace: posting.google.com 1191865829 14046 127.0.0.1 (8 Oct 2007 17:50:29 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Mon, 8 Oct 2007 17:50:29 +0000 (UTC)
In-Reply-To: <47080705$0$24349$4c368faf@roadrunner.com>
User-Agent: G2/1.0
X-HTTP-UserAgent: Mozilla/5.0 (Windows; U; Windows NT 5.1; en-US; rv:1.8.1.7)
Gecko/20070914 Firefox/2.0.0.7,gzip(gfe),gzip(gfe)
Complaints-To: groups-abuse@google.com
Injection-Info: v3g2000hsg.googlegroups.com; posting-host=192.25.142.225;
   posting-account=ps2QrAMAAAA6_jCuRt2JEIpn5Otqf_w0
Xref: g2news2.google.com rec.radio.amateur.space:233
rec.radio.amateur.antenna:6411

On Oct 6, 3:17 pm, "Green Xenon [Radium]" <gluceg...@excite.com>
wrote:
> On Oct 6, 6:24 am, "George Dishman" <geo...@briar.demon.co.uk> wrote inhttp://
groups.google.com/group/sci.energy/msg/ad14e4c2d56369db:
>
>  > "Green Xenon [Radium]" <gluceg...@excite.com> wrote in
> messagenews:47072242$0$15384$4c368faf@roadrunner.com...
>  > ...
>
>  > > ... This receiver also has a robust signal processor
>  > > that can eliminate clipped-waveforms [such as square waves], spikes,
>  > > clicks, pops, hiss, and random noise
>  > > even at those trivial wattage
>  > > levels. After eliminating those unwanted signals, the carrier wave
>  > > > is
>  > > amplified.
>
>  > There is no carrier,
>
> Yes there is. Why do you say there isn't? Certain waveforms in the
> carrier wave that would cause the modulator signal to contain
> clipped-waveforms [such as square waves], spikes, clicks, pops, hiss,
> and random noise are removed. However, the remainder of the carrier-wave
> remains unscathed.
>
>  > it was one of those signals you just
```

> > eliminated.
>
> How so?
>
> > > If I am on this spaceship, what will
> > > I most likely hear on the radio?
>
> > Stop trying to troll, you are too stupid to pull it off.
>
> I don't troll or spam. I am asking this question because -- unlikely [if
> not impossible] as my 2-GHz-in-outer-space scenario is -- I am still
> interested in it.
>
> Now please please please answer my question. What would I hear?
>
> I chose 2 GHz because it is in the UHF band. UHFs tend to be best for
> extremely long distance reception. Of the radio waves emitted by objects
> trillions of miles -- or more -- away, UHF is usually the most receivable.

Why do you say that "UHFs tend to the best for extremely long distance reception"? Have a look at the basic equation governing line-of-sight reception.

Why do you not answer your own question? It sounds to me like as reasonable a premise for a science fiction book as many that have been successful. You could perhaps spin it into quite an interesting story. You've already started with a premise that's so far from -- so very, very far from -- the current realities or even the dreams of people designing receivers that you may as well suppose you're going to receive whatever your wildest imagination might come up with. Since there is a nearly countless number of stars in the known universe, and since a large percentage of them could be planetary systems, each with the possibility of emitting interesting amplitude modulated carriers, your choices are pretty near limitless. Wow! Let your imagination run wild. It obviously did when you posed the question; you may as well let it run as wild with the answer. Back to you, Nonex!

Oh, and by the way, "spamming" comes, in one form, from posting too many places; I've trimmed off a whole bunch of groups for this reply. By my way of thinking, you're being pretty generous with yourself saying you don't spam.

```
From -166307454382034299
X-Google-Thread: 113975,93b81b694d198f4c
X-Google-Thread: f74ae,93b81b694d198f4c
X-Google-Thread: fdc67,93b81b694d198f4c
X-Google-Thread: 10e8ad,93b81b694d198f4c
X-Google-Thread: 10cf28,93b81b694d198f4c
X-Google-Thread: 10b271,93b81b694d198f4c
X-Google-Attributes:
```

gid113975,gidf74ae,gidfdc67,gid10e8ad,gid10cf28,gid10b271,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news2.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!local01.nntp.dca.giganews.com!nntp.bt.com!news.bt.com.POSTED!
not-for-mail
NNTP-Posting-Date: Tue, 09 Oct 2007 14:22:12 -0500
From: "Fleetie" <fleetie@fleetie.demon.co.uk>
Newsgroups:
sci.astro.amateur,sci.astro,alt.astronomy,rec.radio.amateur.space,uk.sci.astronomy
,sci.physics
References: <47072242$0$15384$4c368faf@roadrunner.com>
Subject: Re: Receiving 2 GHz AM signals in space. What do they sound like?
Date: Tue, 9 Oct 2007 20:22:03 +0100
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.2869
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.2962
X-RFC2646: Format=Flowed; Original
Message-ID: <AYydnTWqhtx5SZbaRVnyugA@bt.com>
Lines: 50
X-Usenet-Provider: http://www.giganews.com
NNTP-Posting-Host: 81.159.157.200
X-AuthenticatedUsername: NoAuthUser
X-Trace: sv3-NxC6BpK5QV1t6vCZApMKjCOt29otrwpbUVVXuzXCpUo3EtFczTgt/ayhof12FH/
aTdsHDVWNVKNLLi4!zbsc/P0q4Hst8qWvoosM2yMrxrikC5mFwK/V5voJHIVbk2TmWcj3t3QYumBHzhut
X-Complaints-To: abuse@btinternet.com
X-DMCA-Complaints-To: abuse@btinternet.com
X-Abuse-and-DMCA-Info: Please be sure to forward a copy of ALL headers
X-Abuse-and-DMCA-Info: Otherwise we will be unable to process your complaint
properly
X-Postfilter: 1.3.36
Xref: g2news2.google.com sci.astro.amateur:12678 sci.astro:15550
alt.astronomy:20512 rec.radio.amateur.space:234 uk.sci.astronomy:1981
sci.physics:58685

"Green Xenon [Radium]" <glucegen1@excite.com> wrote

> fields] of extremely weak 2 GHz AM analog carrier signals. In addition,
> this receiver is so sensitive and powerful that it can clearly pick up
> AM carrier waves as weak as 10-to-the-power-NEGATIVE-10,000
> watt-per-meter-squared.

<Sigh>

What is the energy of ONE 2GHz photon?

Free clue: Planck says "E = h.v" ;

h is Planck's constant (IIRC ~ 6.6E-34 Js)
v (Greek letter nu) is frequency, in Hz, i.e. 2E9 here

How does the resultant photon energy, in Joules, compare to your imagined
intensity of (2^-10000) Wm^-2 ? How many 2GHz photons are you going to
get per square metre per second at that ridiculously low intensity?

Do you really think there'll be enough photons to carry any useful
(e.g. audio frequency) signal?

Hmm; (2^-10000) Wm^-2 ~= 5E-3011 Wm^-2 = 5E-3011 Js^-1m^-2

E = h.v ~= 6.6E-34 * 2E9 ~= 1.32E-24 J per 2GHz photon

I guess you could expect an average of 1 photon per m^2 moseying on by about
every 2.64E2986 seconds.

So far, the universe is estimated at 13.7E9 years
~= 86400 * 365.25 * 13.7E9 seconds
~= 4.32E17 seconds.

For all intents and purposes, at that intensity, at 2GHz, there ARE NO
PHOTONS to detect - unless you wanna wait about a fucktillion universe-
lifetimes for each photon - time that you don't have.

Let me put that simply:

THERE IS NO 2GHz SIGNAL AT (2^-10000) Wm^-2.

Radium, why do you have this tendency to use such enormous exponents in
your questions?

Martin
--
M.A.Poyser   Tel.: 07967 110890
Manchester, U.K.   http://www.livejournal.com/userinfo.bml?user=fleetie

From -2178982335549635249
X-Google-Thread: 113975,93b81b694d198f4c
X-Google-Thread: f74ae,93b81b694d198f4c
X-Google-Thread: fdc67,93b81b694d198f4c
X-Google-Thread: 10e8ad,93b81b694d198f4c
X-Google-Thread: 10cf28,93b81b694d198f4c
X-Google-Thread: 10b271,93b81b694d198f4c
X-Google-Attributes:
gid113975,gidf74ae,gidfdc67,gid10e8ad,gid10cf28,gid10b271,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news2.google.com!news.glorb.com!
newscon02.news.prodigy.net!prodigy.net!nx01.iad01.newshosting.com!newshosting.com!
post01.iad01!post02.iad01!not-for-mail
From: "Greg Neill" <gneillREM@OVEsympatico.ca>
Newsgroups:
sci.astro.amateur,sci.astro,alt.astronomy,rec.radio.amateur.space,uk.sci.astronomy
,sci.physics
References: <47072242$0$15384$4c368faf@roadrunner.com>
<AYydnTWqhtx5SZbaRVnyugA@bt.com>

Subject: Re: Receiving 2 GHz AM signals in space. What do they sound like?
Date: Tue, 9 Oct 2007 15:35:25 -0400
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1807
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1896
X-NFilter: 1.2.0
Lines: 8
Message-ID: <470bd809$0$22087$9a6e19ea@news.newshosting.com>
Organization: Newshosting.com - Highest quality at a great price!
www.newshosting.com
X-Complaints-To: abuse@newshosting.com
Xref: g2news2.google.com sci.astro.amateur:12679 sci.astro:15552
alt.astronomy:20513 rec.radio.amateur.space:235 uk.sci.astronomy:1982
sci.physics:58686

"Fleetie" <fleetie@fleetie.demon.co.uk> wrote in message
news:AYydnTWqhtx5SZbaRVnyugA@bt.com...
> Radium, why do you have this tendency to use such enormous exponents in
> your questions?

He's a multigroup crossposting troll.

From 1498799547798695799
X-Google-Thread: 113975,93b81b694d198f4c
X-Google-Thread: f74ae,93b81b694d198f4c
X-Google-Thread: fdc67,93b81b694d198f4c
X-Google-Thread: 10e8ad,93b81b694d198f4c
X-Google-Thread: 10cf28,93b81b694d198f4c
X-Google-Thread: fcc6e,93b81b694d198f4c
X-Google-Thread: 10b271,93b81b694d198f4c
X-Google-Thread: 107e5d,93b81b694d198f4c
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38c2,gid1110fe,public,usenet
X-Google-Language: ENGLISH,ASCII
Path: g2news2.google.com!news1.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx01.iad01.newshosting.com!newshosting.com!post02.iad01!
roadrunner.com!not-for-mail
Date: Tue, 09 Oct 2007 18:50:25 -0400
From: **THE-RFI-EMI-GUY** <rhyolite@nettally.com>
Organization: Central Scrutinizer
User-Agent: Mozilla/5.0 (Windows; U; Win98; en-US; rv:1.7.2) Gecko/20040804
Netscape/7.2 (ax)
X-Accept-Language: en-us, en
MIME-Version: 1.0
Newsgroups:
sci.astro.amateur,sci.astro,alt.astronomy,rec.radio.amateur.space,uk.sci.astronomy

```
,rec.radio.amateur.antenna,sci.physics,sci.energy,alt.sci.physics.new-
theories,sci.physics.electromag
Subject: Re: Receiving 2 GHz AM signals in space. What do they sound like?
References: <47072242$0$15384$4c368faf@roadrunner.com>
In-Reply-To: <47072242$0$15384$4c368faf@roadrunner.com>
Content-Type: text/plain; charset=ISO-8859-1; format=flowed
Content-Transfer-Encoding: 8bit
Lines: 24
Message-ID: <470c04aa$0$7488$4c368faf@roadrunner.com>
NNTP-Posting-Host: 65.33.235.227
X-Complaints-To: abuse@rr.com
Xref: g2news2.google.com sci.astro.amateur:12684 sci.astro:15581
alt.astronomy:20518 rec.radio.amateur.space:236 uk.sci.astronomy:1984
rec.radio.amateur.antenna:6436 sci.physics:58770 sci.energy:7048
alt.sci.physics.new-theories:1856 sci.physics.electromag:1976

The sound of your ship mates pushing you out of an airlock!

Green Xenon [Radium] wrote:

>(snip)
>
>If I am on this spaceship, what will I most likely hear on the radio?
>
>
>Thanks,
>
>Radium
>
>

--
Joe Leikhim K4SAT
"The RFI-EMI-GUY"�

"Treason doth never prosper: what's the reason?
For if it prosper, none dare call it treason."

"Follow The Money"  ;-P




From -4335491194301633260
X-Google-Thread: 113975,93b81b694d198f4c
X-Google-Thread: f74ae,93b81b694d198f4c
X-Google-Thread: fdc67,93b81b694d198f4c
X-Google-Thread: 10e8ad,93b81b694d198f4c
X-Google-Thread: 10cf28,93b81b694d198f4c
X-Google-Thread: fcc6e,93b81b694d198f4c
X-Google-Thread: 10b271,93b81b694d198f4c
X-Google-Thread: 107e5d,93b81b694d198f4c
X-Google-Thread: 1038c2,93b81b694d198f4c
X-Google-Thread: 1110fe,93b81b694d198f4c
```

X-Google-Attributes:
gid113975,gidf74ae,gidfdc67,gid10e8ad,gid10cf28,gidfcc6e,gid10b271,gid107e5d,gid1038c2,gid1110fe,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news3.google.com!proxad.net!feeder1-2.proxad.net!
62.111.101.3.MISMATCH!news.germany.com!border-1.ams.xsnews.nl!feed.xsnews.nl!
border-2.ams.xsnews.nl!216.196.110.149.MISMATCH!border2.nntp.ams.giganews.com!
nntp.giganews.com!newsfeeder.wxs.nl!divide.nova.planet.nl!posting.nova.planet.nl!
not-for-mail
Date: Wed, 10 Oct 2007 02:46:46 +0200
From: Sjouke Burry <burrynulnulfour@ppllaanneett.nnlll>
Organization: retired
User-Agent: Thunderbird 2.0.0.6 (Windows/20070728)
MIME-Version: 1.0
Newsgroups:
sci.astro.amateur,sci.astro,alt.astronomy,rec.radio.amateur.space,uk.sci.astronomy,rec.radio.amateur.antenna,sci.physics,sci.energy,alt.sci.physics.new-theories,sci.physics.electromag
Subject: Re: Receiving 2 GHz AM signals in space. What do they sound like?
References: <47072242$0$15384$4c368faf@roadrunner.com>
<470c04aa$0$7488$4c368faf@roadrunner.com>
In-Reply-To: <470c04aa$0$7488$4c368faf@roadrunner.com>
Content-Type: text/plain; charset=ISO-8859-1; format=flowed
Content-Transfer-Encoding: 7bit
Lines: 18
Message-ID: <470c20f6$0$25477$ba620dc5@text.nova.planet.nl>
NNTP-Posting-Host: 84.80.235.244
X-Trace: 1191977206 text.nova.planet.nl 25477 84.80.235.244:19219
X-Complaints-To: abuse@planet.nl
Xref: g2news2.google.com sci.astro.amateur:12688 sci.astro:15592
alt.astronomy:20526 rec.radio.amateur.space:237 uk.sci.astronomy:1985
rec.radio.amateur.antenna:6443 sci.physics:58802 sci.energy:7055
alt.sci.physics.new-theories:1857 sci.physics.electromag:1979

THE-RFI-EMI-GUY wrote:
> The sound of your ship mates pushing you out of an airlock!
>
> Green Xenon [Radium] wrote:
>
>> (snip)
>>
>> If I am on this spaceship, what will I most likely hear on the radio?
>>
>>
>> Thanks,
>>
>> Radium
>>
>>
>
Thats a stupid waste of reaction mass. Convert him.
As fuel it would be the first time he would be useful.

```
From -2861382346547157569
X-Google-Thread: 10e8ad,37ea4b06d032ff9b
X-Google-Thread: 10b9c8,37ea4b06d032ff9b
X-Google-Attributes: gid10e8ad,gid10b9c8,public,usenet
X-Google-Language: ENGLISH,ASCII
Path: g2news2.google.com!news2.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx01.iad01.newshosting.com!newshosting.com!
198.186.194.251.MISMATCH!news-out.readnews.com!transit4.readnews.com!panix!
rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-280 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Tue, 9 Oct 2007 23:43:26 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 364
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000301c80aef$b8bb6710$6601a8c0@familyroom>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix2.panix.com
Mime-Version: 1.0
Content-Type: text/plain;charset="iso-8859-1"
Content-Transfer-Encoding: quoted-printable
X-Trace: reader1.panix.com 1191987806 11481 166.84.1.2 (10 Oct 2007 03:43:26 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Wed, 10 Oct 2007 03:43:26 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Xref: g2news2.google.com rec.radio.amateur.space:238 rec.radio.info:299
```

AMSAT NEWS SERVICE
ANS-280

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

******************* AMSAT 2007 Space Symposium *************************

The Wireless Association of South Hills Amateur Radio Club announces the 2007 AMSAT Space Symposium will be held at the Pittsburgh Airport Marriott Hotel on Friday, October 26 through Sunday, October 28, 2007. The AMSAT web team has posted informational pages on the AMSAT web site. You can find the announcement with many links at:
http://www.amsat.org/amsat-new/symposium/2007/index.php

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In this edition:

- 2007 AMSAT Space Symposium Features and Events Announced
- Sputnik-1 50th Anniversary Special Event Via AO-51
- AO-51 Includes Special L/U BBS and Telemetry Experiment
- Three Packet Satellites Available on 145.825 MHz
- F8ZS Silent Key
- ARISS Status Report for the week of October 1, 2007

SB SAT @ AMSAT $ANS-280.01
2007 AMSAT Space Symposium Features and Events Announced

AMSAT News Service Bulletin 280.01
>From AMSAT HQ SILVER SPRING, MD.
October 7, 2007
To All RADIO AMATEURS
BID: $ANS-280.01

Make plans now to attend the AMSAT-NA 2007 Space Symposium! Amateur Radio Satellite Operators will find the AMSAT Space Symposium to be an exciting and rewarding event-filled weekend. Here are some of the features and events to look forward to:

- AMSAT-NA Annual General Meeting
- AMSAT-NA Board of Directors Meeting
- AMSAT Directors and Officers will be available to answer your questions
- AMSAT Annual Banquet with Keynote Speaker
- Technical forums focusing on the latest planning and technology of Amateur Radio in Space
- All Papers and Presentations will be published in the Symposium Proceedings for all registered attendees
- Technical demonstrations of prototype flight hardware and software for AMSAT Eagle - the next generation in space
- Discussions and demonstrations of SuitSat-2, ARISS, solid state RF power amp, antennas, AO-51
- Update on AMSAT's new Maryland Lab
- AMSAT Area Coordinators' Breakfast and Meeting on Sunday Morning
- IARU Satellite Forum
- President's Club Reception
- Satellite Beginner's Session: Introduction to Satellites
- An operating satellite station capable of working AO-7, FO-29,

AO-27, SO-50, AO-51 and VO-52
 + N2SPI satellite antenna demonstrations and antenna construction
 with students
 + Meet and greet old friends and make new friends
 + Enjoy eyeball QSOs with satellite designers, builders, and operators
 from around the world
 + Sunday afternoon tour to the WPXI-DT Digital Studio

The AMSAT Software Defined Transponder Team is working toward having an operational VHF - UHF transponder available for the entire weekend. Eagle Project Team members will be available to answer your questions and provide demonstrations.

New to the Symposium this year is a selection of apparel that may be ordered. We have Symposium themed golf shirts, tee shirts, key rings ball caps. A percentage of these sales will go to Eagle.

For those people who would rather not register for the Meeting through the AMSAT store, you can register via phone by calling 301-589-6062.

[ANS thanks 2007 AMSAT Space Symposium Co-chairs Kevin N3HKQ,
 and Pat KC4WTT for the above information]

/EX

SB SAT @ AMSAT $ANS-280.02
Sputnik-1 50th Anniversary Special Event Via AO-51

AMSAT News Service Bulletin 280.02
>From AMSAT HQ SILVER SPRING, MD.
October 7, 2007
To All RADIO AMATEURS
BID: $ANS-280.02

This week AMSAT hosted a Special Event on Wednesday night when AO-51 was used to retransmit the original Sputnik-1 telemetry in commemoration of Sputnik's 50th birthday.

AMSAT-NA Vice President of Operations, Drew KO4MA, summarized the event, "I just wanted to thank everyone for what looks like a well received special event. Special thanks to our participating uplink stations:

 + VE3NPC, Clare
 + N8BBQ, Ed
 + KD8CAO, Doug
 + WA6FWF, Kevin
 + K7WIN, Jeff
 + G1OCN, Dave
 + IW4DTU, Fer
 + Our chief AO-51 Command Op, WA4SXM, Gould,
 + and Drew's wife Merete for compiling and equalizing the audio."

Send a report to Kevin, WA6FWF at his callbook address with a 9x12 SASE and you will receive a nice QSL certificate.

Comments were received from many stations after the Sputnik passes:

"Great idea and very nice delivery! Enjoyed it very much on the the first active pass of AO-51 tonight." - VE4NSA

"Wonderfully loud and clear in DM-13 Southern California.
MANY THANKS." - K6LCS

"Clear copy of AO-51 message and Sputnik transmission at 0001 UTC from my balcony with a three element hand held UHF antenna." - VE3VIG

"It was great! My 8 year-old and 5 year-old boys listened with awe in their eyes as the bird came into view. I've been trying to spark their interest for years, and this may have done the trick!" - N8AU

"Tonight was truly fantastic and historic. My thanks to all for the hard work they undoubtedly put into this night." - KB2HSH

"I would like to add my thanks for a superb event. I copied most of the last two passes over NA on my IC R-20 and recorded the audio. This will be used along with Visual Sightings of the ISS and construction of 1/4 scale models of Sputnik (6" Styrofoam Ball and Wood Dowels) for a Sputnik 50th Birthday Party with 39 Elementary School Kids." - W5IU

"Midway into our Ottawa Amateur Radio Club executive meeting, we all took a break out to the street to have a listen to the rebroadcast of Sputnik-1 with an arrow and HT. Present were VE3TLY, VA3PAX, VE3FFK, VE3ZTU, VE3IGJ and VA3DB." - VA3DB

[ANS thanks Drew, KO4MA and everyone else for the above information]

/EX

SB SAT @ AMSAT $ANS-280.03
AO-51 Includes Special L/U BBS and Telemetry Experiment

AMSAT News Service Bulletin 280.03
>From AMSAT HQ SILVER SPRING, MD.
October 7, 2007
To All RADIO AMATEURS
BID: $ANS-280.03

The AO-51 Operations Team says AO-51 will include a special test mode featuring experimental L/U BBS and Telemetry during the periode between October 4 through October 14>

FM Repeater, V/U
Uplink: 145.920 MHz FM, No PL Tone

Downlink: 435.300 MHz FM

9k6 Digital, L/U, BBS and Telemetry, Experimental and subject to change!

Uplink: 1268.700 MHz FM, 9k6 PBP Digital
Downlink: 435.150 MHz FM, 9k6 PBP Digital

The AO-51 Operations Team is interested in your BBS results during
this
experimental period. Please send your comments about the BBS mode
to:
ao51-modes@amsat.org

[ANS thanks the AO-51 Operations Team for the above information]

/EX

SB SAT @ AMSAT $ANS-280.04
Three Packet Satellites Available on 145.825 MHz

AMSAT News Service Bulletin 280.04
>From AMSAT HQ SILVER SPRING, MD.
October 7, 2007
To All RADIO AMATEURS
BID: $ANS-280.04

Bob, WB4APR reminds satellite packet operators of the opportunity of up to 25 passes per day for 2-way keyboard communications with simple packet equipment on 145.825 MHz uplink and downlink.

The 145.825 MHz frequency includes ARISS aboard the ISS, ANDE and PCSAT-1 operating at 1200 baud. Recently GO-32 became available on 435.225 MHz for 9600 baud communications

APRS Igate Packet gateway stations copying these three packet digipeater satellites on 145.825 feed to the two web pages:

http://www.ariss.net
http://pcsat.aprs.org

For additional information regarding the GO-32 435.225 MHz 9600 baud operation see: http://www.ew.usna.edu/~bruninga/GO32-ops.html

[ANS thanks Bob, WB4APR for the above information]

/EX

SB SAT @ AMSAT $ANS-280.05
F8ZS Silent Key

AMSAT News Service Bulletin 280.05

>From AMSAT HQ SILVER SPRING, MD.
October 7, 2007
To All RADIO AMATEURS
BID: $ANS-280.05

It is with sadness that I must inform our AMSAT colleagues, of the passing away of Jean Edmond Gruau F8ZS, President of Radio Amateur Club de l'Espace and Honorary President of AMSAT-France.

Jean was the father of ARSENE radioamateur mini satellite, launched in May, 1993.

He retired a few years ago from his position as Inspecteur General of the french space agency (CNES) that he contributed to create as well as the European Space Center in Kourou, french Guyana.

Jean F8ZS was a very kind man with always a lot of good stories to tell to his visiting friends about his large experience in radio transmissions and preventive failure security in space industry.

73 de Bernard, F6BVP
AMSAT France founding President

[ANS thanks Bernard, F6BVP for the above information]

/EX

SB SAT @ AMSAT $ANS-280.06
ARISS Status Report for the week of October 1, 2007

AMSAT News Service Bulletin 280.06
>From AMSAT HQ SILVER SPRING, MD.
October 7, 2007
To All RADIO AMATEURS
BID: $ANS-280.06

1. Heidelberg University Contact Successful

On Monday, September 25, students from Heidelberg University for Applied Sciences in Germany experienced an ARISS contact via the telebridge station WH6PN in Hawaii. Clay Anderson, KD5PLA, answered one question from each of twenty students, as 200 youth gathered in the radio shack.

2. ARISS Contact Achieved with Texas School

An ARISS contact between students at the Art and Pat Goforth Elementary School in League City, Texas and Clay Anderson, KD5PLA, aboard the ISS took place on Wednesday, September 26 via the telebridge station WH6PN in Hawaii. Approximately 50 students, teachers and parents gathered in the school�s amphitheater as Anderson fielded 25 questions put to him by 13 students, the first question asked by his daughter.

3. Smithsonian � ARISS Contact

On Saturday, September 29, youth visiting the Smithsonian National Air and Space Museum in Washington, D.C. participated in an ARISS contact as part of its Family Day, �Commemorating 50 Years in Space.� The telebridge station WH6PN in Hawaii assisted in the contact. Gathered in the Space Race gallery, five children had 25 questions answered by Clay Anderson, KD5PLA. The Radio Amateur Satellite Corporation (AMSAT) and ARISS booths were set up near the main entrance and generated much interest. Many local amateur radio operators attended to help out. Approximately 15,000 - 20,000 visitors were expected to attend the event throughout the day.

4. School Contacts

An ARISS contact was held for the Town of Anamizu ARISS School Contact Executive Committee in Anamizu-town, Housu-gun Ishikawa, Japan on Saturday, October 6. Six hundred students from seven elementary and junior high schools will participate in this event. Conversational English, computers, amateur radio and the International Space Station are the subject matters studied in preparation for this event. Because this wass the first ARISS contact within the prefecture of Ishikawa, all preparations leading up to and including the contact were covered in the media.

Prairielands Council, Boy Scouts of America in Champaign, Illinois held an ARISS contact on Saturday, October 6 via the telebridge station VK4KHZ in Australia. Prairielands Council is made up of three districts supporting Boy Scouts and Cub Scouts in Central Eastern Illinois and Central Western Indiana. The Prairielands Council has created a new event, the Space Jamboree. Scouts attending will work on the Space Exploration Merit Badge requirements which include designing Mars missions and constructing Moon base models. They will design and launch water rockets and become familiar with robotic technology. Segway of Chicago will assist in robotics education and the FIRST program regional director will bring robots to this first annual Space Jamboree. The local rocket club will be providing rocket launches throughout the event, two during the outdoor viewing of the movie "October Sky." The youth are also expected to complete many of the Radio Merit Badge requirements.

An ARISS contact has been scheduled for Isummasaqvik School in Quaqtaq, Quebec, Canada on Wednesday, October 10 at 18:31 UTC. The telebridge station ON4ISS in Belgium will assist in the contact. Approximately 100 students, from Kindergarten through high school levels, attend Isummasaqvik School. The school plans to hold a contest to create a mission

patch to be worn on T-shirts by everyone participating in the contact.
All classes will participate in space related projects which will be
displayed in the school gym on the day of the contact.

5. ARISS International Meeting Held

An ARISS teleconference was held on Tuesday, September 25. Topics of
discussion included a new telebridge station, status of the Columbus
Module antennas and SuitSat-2. The minutes have been posted to the
ARISS web site. See: http://www.rac.ca/ariss/arisstel2007-09-25.htm

6. Astronaut Training Status

Astronaut Michael Barratt, KD5MIJ, participated in a simulated ARISS
school contact during a training session held the last week of
September.
Barratt is the backup for Michael Fincke on Expedition 18.

[ANS thanks Carol, KB3LKI for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the
President's Club. Members of the President's Club, as sustaining donors
to AMSAT Project Funds, will be eligible to receive additional benefits.
Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM

```
From -6898693363064745773
X-Google-Thread: 113975,93b81b694d198f4c
X-Google-Thread: f74ae,93b81b694d198f4c
X-Google-Thread: fdc67,93b81b694d198f4c
X-Google-Thread: 10e8ad,93b81b694d198f4c
X-Google-Thread: 10cf28,93b81b694d198f4c
X-Google-Thread: 10b271,93b81b694d198f4c
X-Google-Attributes:
gid113975,gidf74ae,gidfdc67,gid10e8ad,gid10cf28,gid10b271,public,usenet
X-Google-Language: ENGLISH,CP1252
Path: g2news2.google.com!news2.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx01.iad01.newshosting.com!newshosting.com!post01.iad01!
roadrunner.com!not-for-mail
Date: Wed, 10 Oct 2007 10:15:30 -0700
From: "Green Xenon [Radium]" <glucegen1@excite.com>
User-Agent: Mozilla/5.0 (Windows; U; Win98; en-US; rv:1.8b) Gecko/20050217
MIME-Version: 1.0
Newsgroups:
```

sci.astro.amateur,sci.astro,alt.astronomy,rec.radio.amateur.space,uk.sci.astronomy
,sci.physics
Subject: Re: Receiving 2 GHz AM signals in space. What do they sound like?
References: <47072242$0$15384$4c368faf@roadrunner.com>
<AYydnTWqhtx5SZbaRVnyugA@bt.com>
In-Reply-To: <AYydnTWqhtx5SZbaRVnyugA@bt.com>
Content-Type: text/plain; charset=windows-1252; format=flowed
Content-Transfer-Encoding: 8bit
Lines: 52
Message-ID: <470d0617$0$15393$4c368faf@roadrunner.com>
Organization: Road Runner High Speed Online http://www.rr.com
NNTP-Posting-Host: 75.84.20.87
X-Complaints-To: abuse@rr.com
Xref: g2news2.google.com sci.astro.amateur:12718 sci.astro:15654
alt.astronomy:20553 rec.radio.amateur.space:239 uk.sci.astronomy:1992
sci.physics:58947

Fleetie wrote:
> "Green Xenon [Radium]" <glucegen1@excite.com> wrote
>
>>fields] of extremely weak 2 GHz AM analog carrier signals. In addition,
>>this receiver is so sensitive and powerful that it can clearly pick up
>>AM carrier waves as weak as 10-to-the-power-NEGATIVE-10,000
>>watt-per-meter-squared.

> <Sigh>
>
> What is the energy of ONE 2GHz photon?
>
> Free clue: Planck says "E = h.v" ;
>
> h is Planck's constant (IIRC ~ 6.6E-34 Js)
> v (Greek letter nu) is frequency, in Hz, i.e. 2E9 here
>
> How does the resultant photon energy, in Joules, compare to your imagined
> intensity of (2^-10000) Wm^-2 ? How many 2GHz photons are you going to
> get per square metre per second at that ridiculously low intensity?
> Do you really think there'll be enough photons to carry any useful
> (e.g. audio frequency) signal?
>
> Hmm; (2^-10000) Wm^-2 ~= 5E-3011 Wm^-2 = 5E-3011 Js^-1m^-2
>
> E = h.v ~= 6.6E-34 * 2E9 ~= 1.32E-24 J per 2GHz photon
>
> I guess you could expect an average of 1 photon per m^2 moseying on by about
> every 2.64E2986 seconds.
>
> So far, the universe is estimated at 13.7E9 years
> ~= 86400 * 365.25 * 13.7E9 seconds
> ~= 4.32E17 seconds.
>
> For all intents and purposes, at that intensity, at 2GHz, there ARE NO
> PHOTONS to detect - unless you wanna wait about a fucktillion universe-

> lifetimes for each photon - time that you don't have.
>
> Let me put that simply:
>
> THERE IS NO 2GHz SIGNAL AT (2^-10000) Wm^-2.

Okay. So 10-to-the-power-NEGATIVE-10,000 watt-per-meter-squared is so low it�s impossible.

What is the minimum watts-per-meter-squared I need to receive if I want audio?

> Radium, why do you have this tendency to use such enormous exponents in
> your questions?

I tend to be interested and obsessed with the occult and extreme.

```
From -5907156245370743372
X-Google-Thread: 10e8ad,93b81b694d198f4c
X-Google-Thread: fcc6e,93b81b694d198f4c
X-Google-Attributes: gid10e8ad,gidfcc6e,public,usenet
X-Google-Language: ENGLISH,CP1252
Path: g2news2.google.com!news1.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx01.iad01.newshosting.com!newshosting.com!post02.iad01!
roadrunner.com!not-for-mail
Date: Wed, 10 Oct 2007 11:05:26 -0700
From: "Green Xenon [Radium]" <glucegen1@excite.com>
User-Agent: Mozilla/5.0 (Windows; U; Win98; en-US; rv:1.8b) Gecko/20050217
MIME-Version: 1.0
Newsgroups: rec.radio.amateur.space,rec.radio.amateur.antenna
Subject: Re: Receiving 2 GHz AM signals in space. What do they sound like?
References: <47080705$0$24349$4c368faf@roadrunner.com>
<1191865829.761897.246240@v3g2000hsg.googlegroups.com>
In-Reply-To: <1191865829.761897.246240@v3g2000hsg.googlegroups.com>
Content-Type: text/plain; charset=windows-1252; format=flowed
Content-Transfer-Encoding: 8bit
Lines: 95
Message-ID: <470d11cb$0$32517$4c368faf@roadrunner.com>
Organization: Road Runner High Speed Online http://www.rr.com
NNTP-Posting-Host: 75.84.20.87
X-Complaints-To: abuse@rr.com
Xref: g2news2.google.com rec.radio.amateur.space:240
rec.radio.amateur.antenna:6467
```

K7ITM wrote:

> Why do you say that "UHFs tend to the best for extremely long distance
> reception"? Have a look at the basic equation governing line-of-sight
> reception.

Lower frequencies are absorbed by charged particles. Ionized zones [such as Earth ionosphere and the heliosphere around the solar system] tend to block low-frequency radio waves. That is why UHF is the best.

UHFs are the �sweet-spot� of radio waves. They are high-frequency-enough not to be attenuated by objects that block longer-wave radio signals and low-frequency-enough not to be attenuated by objects that block infrared rays.

> Why do you not answer your own question? It sounds to me like as
> reasonable a premise for a science fiction book as many that have been
> successful. You could perhaps spin it into quite an interesting
> story. You've already started with a premise that's so far from -- so
> very, very far from -- the current realities or even the dreams of
> people designing receivers that you may as well suppose you're going
> to receive whatever your wildest imagination might come up with.
> Since there is a nearly countless number of stars in the known
> universe, and since a large percentage of them could be planetary
> systems, each with the possibility of emitting interesting amplitude
> modulated carriers, your choices are pretty near limitless. Wow! Let
> your imagination run wild. It obviously did when you posed the
> question; you may as well let it run as wild with the answer. Back to
> you, Nonex!

Okay, I will let my imagination run wild.

I would hear scary stuff on the space station�s radio.

I used to often play my Nintendo when it was connected to channel 3. However, I was change the TV channel to 4. I could see the video of the game but it was fuzzy and covered in grains. The music of the game was absent, and instead was filled with frightening-yet-enjoyable tones [sounding like a buzzer, lawn mower, or electric shaver] along with a faint audio of what was being discussed on the channel 4 news.

I would hear something similar on my 2 GHz AM DX receiver in space.

Also, whenever there is drill or an actually emergency, the Emergency Alert System [EAS] plays their music. First they play the boring low-pitch square-wave tones. Then they play the high-pitched, terrifying, enjoyable, psychedelic sine-wave tones.

I would also hear something similar to the second higher-pitched set of EAS tones on my 2 GHz AM DX receiver in space but not the 1st lower pitched tones. The lower-pitched 1st tones don�t at all resemble what I would hear on the AM receiver.

In addition, I would hear sounds that are similar to the following terrifying-yet-enjoyable tones present on this keyboard�s 100 sound tone back:

http://concertmate.evenement0.net/img/concertmate_realistic_concertmate-450_img1.jpg

#75 �cosmic sound� when the volume is at maximum

#76 �telephone� when the volume is at minimum and I press keys from the 7th black key [from the left] or lower. If any key that is right of the 7th black key is pressed, the sound is totally different and will not even remotely resemble anything I would hear on the AM receiver.

#81 �marimba� when the volume is at minimum and I press the lowest or highest key separately � especially if I first press the lowest key, then let go, and then immediately press the highest key afterwards.

#85 �afro percussion� when the volume is at maximum and I smoothly slide my hand from lowest to highest note and then highest to lowest note or if I play notes two or more notes with one no higher than the 7th black key from the left and the other note no lower than the 10th key from the right. Actually any combinations of this tone will resemble what I would hear on my 2 GHz receiver.

#96 �bass/piano� when the volume is at maximum and I press the lowest key.

All the sounds I hear on the receiver are those that result from the radio waves emitted by the magnetic fields of objects in the distant cosmos -- such as magnetars. At times, when the magnetic objects cause magnetic vibrations at an RF-rate, they cause radio waves to be generated. If the rates include 2-billions-vibrations-per-second, then my receiver will demodulate the 2 GHz parts and I can hear the signals -- provided that the demodulations result in frequencies anywhere from 20 to 20,000 Hz [the human hearing range].

> Oh, and by the way, "spamming" comes, in one form, from posting too
> many places; I've trimmed off a whole bunch of groups for this reply.
> By my way of thinking, you're being pretty generous with yourself
> saying you don't spam.

I only posted to relevant NGs.

From -569409616856744943
X-Google-Thread: 10e8ad,93b81b694d198f4c
X-Google-Thread: fcc6e,93b81b694d198f4c
X-Google-Attributes: gid10e8ad,gidfcc6e,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news1.google.com!border1.nntp.dca.giganews.com!nntp.giganews.com!nx02.iad01.newshosting.com!newshosting.com!post02.iad01!roadrunner.com!not-for-mail
Date: Wed, 10 Oct 2007 11:27:05 -0700
From: "Green Xenon [Radium]" <glucegen1@excite.com>
User-Agent: Mozilla/5.0 (Windows; U; Win98; en-US; rv:1.8b) Gecko/20050217
MIME-Version: 1.0
Newsgroups: rec.radio.amateur.space,rec.radio.amateur.antenna
Subject: Re: Receiving 2 GHz AM signals in space. What do they sound like?
References: <47080705$0$24349$4c368faf@roadrunner.com>
<1191865829.761897.246240@v3g2000hsg.googlegroups.com>

```
<470d11cb$0$32517$4c368faf@roadrunner.com>
In-Reply-To: <470d11cb$0$32517$4c368faf@roadrunner.com>
Content-Type: text/plain; charset=windows-1252; format=flowed
Content-Transfer-Encoding: 7bit
Lines: 13
Message-ID: <470d16df$0$26390$4c368faf@roadrunner.com>
Organization: Road Runner High Speed Online http://www.rr.com
NNTP-Posting-Host: 75.84.20.87
X-Complaints-To: abuse@rr.com
Xref: g2news2.google.com rec.radio.amateur.space:241
rec.radio.amateur.antenna:6469
```

Green Xenon [Radium] wrote:

> I used to often play my Nintendo when it was connected to channel 3.
> However, I was change the TV channel to 4. I could see the video of the
> game but it was fuzzy and covered in grains. The music of the game was
> absent, and instead was filled with frightening-yet-enjoyable tones
> [sounding like a buzzer, lawn mower, or electric shaver] along with a
> faint audio of what was being discussed on the channel 4 news.
>
> I would hear something similar on my 2 GHz AM DX receiver in space.

Obviously excluding the "channel 4 news" part. F--k!!! I just hate when
I accidentally post stuff I didn't intend to!!!!!

```
From 3732172173750250183
X-Google-Thread: 113975,93b81b694d198f4c
X-Google-Thread: f74ae,93b81b694d198f4c
X-Google-Thread: fdc67,93b81b694d198f4c
X-Google-Thread: 10e8ad,93b81b694d198f4c
X-Google-Thread: 10cf28,93b81b694d198f4c
X-Google-Thread: 10b271,93b81b694d198f4c
X-Google-Attributes:
gid113975,gidf74ae,gidfdc67,gid10e8ad,gid10cf28,gid10b271,public,usenet
X-Google-Language: ENGLISH,CP1252
Path: g2news2.google.com!news1.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx01.iad01.newshosting.com!newshosting.com!post02.iad01!
roadrunner.com!not-for-mail
Date: Wed, 10 Oct 2007 11:27:30 -0700
From: "Green Xenon [Radium]" <glucegen1@excite.com>
User-Agent: Mozilla/5.0 (Windows; U; Win98; en-US; rv:1.8b) Gecko/20050217
MIME-Version: 1.0
Newsgroups:
sci.astro.amateur,sci.astro,alt.astronomy,rec.radio.amateur.space,uk.sci.astronomy
,sci.physics
Subject: Re: Receiving 2 GHz AM signals in space. What do they sound like?
References: <47072242$0$15384$4c368faf@roadrunner.com>
<AYydnTWqhtx5SZbaRVnyugA@bt.com> <470d0617$0$15393$4c368faf@roadrunner.com>
In-Reply-To: <470d0617$0$15393$4c368faf@roadrunner.com>
Content-Type: text/plain; charset=windows-1252; format=flowed
Content-Transfer-Encoding: 8bit
```

Lines: 58
Message-ID: <470d16f8$0$26390$4c368faf@roadrunner.com>
Organization: Road Runner High Speed Online http://www.rr.com
NNTP-Posting-Host: 75.84.20.87
X-Complaints-To: abuse@rr.com
Xref: g2news2.google.com sci.astro.amateur:12721 sci.astro:15663
alt.astronomy:20559 rec.radio.amateur.space:242 uk.sci.astronomy:1994
sci.physics:58966

Green Xenon [Radium] wrote:
> Fleetie wrote:
>
>> "Green Xenon [Radium]" <glucegen1@excite.com> wrote
>>
>>> fields] of extremely weak 2 GHz AM analog carrier signals. In addition,
>>> this receiver is so sensitive and powerful that it can clearly pick up
>>> AM carrier waves as weak as 10-to-the-power-NEGATIVE-10,000
>>> watt-per-meter-squared.
>
>
>> <Sigh>
>>
>> What is the energy of ONE 2GHz photon?
>>
>> Free clue: Planck says "E = h.v" ;
>>
>> h is Planck's constant (IIRC ~ 6.6E-34 Js)
>> v (Greek letter nu) is frequency, in Hz, i.e. 2E9 here
>>
>> How does the resultant photon energy, in Joules, compare to your imagined
>> intensity of (2^-10000) Wm^-2 ? How many 2GHz photons are you going to
>> get per square metre per second at that ridiculously low intensity?
>> Do you really think there'll be enough photons to carry any useful
>> (e.g. audio frequency) signal?
>>
>> Hmm; (2^-10000) Wm^-2 ~= 5E-3011 Wm^-2 = 5E-3011 Js^-1m^-2
>>
>> E = h.v ~= 6.6E-34 * 2E9 ~= 1.32E-24 J per 2GHz photon
>>
>> I guess you could expect an average of 1 photon per m^2 moseying on by
>> about
>> every 2.64E2986 seconds.
>>
>> So far, the universe is estimated at 13.7E9 years
>> ~= 86400 * 365.25 * 13.7E9 seconds
>> ~= 4.32E17 seconds.
>>
>> For all intents and purposes, at that intensity, at 2GHz, there ARE NO
>> PHOTONS to detect - unless you wanna wait about a fucktillion universe-
>> lifetimes for each photon - time that you don't have.
>>
>> Let me put that simply:
>>

>> THERE IS NO 2GHz SIGNAL AT (2^-10000) Wm^-2.
>
>
> Okay. So 10-to-the-power-NEGATIVE-10,000 watt-per-meter-squared is so
> low it�s impossible.
>
> What is the minimum watts-per-meter-squared I need to receive if I want
> audio?
>
>> Radium, why do you have this tendency to use such enormous exponents in
>> your questions?
>
>
> I tend to be interested and obsessed with the occult and extreme.

```
From 6560144280310864674
X-Google-Thread: 113975,93b81b694d198f4c
X-Google-Thread: f74ae,93b81b694d198f4c
X-Google-Thread: fdc67,93b81b694d198f4c
X-Google-Thread: 10e8ad,93b81b694d198f4c
X-Google-Thread: 10cf28,93b81b694d198f4c
X-Google-Thread: 10b271,93b81b694d198f4c
X-Google-Attributes:
gid113975,gidf74ae,gidfdc67,gid10e8ad,gid10cf28,gid10b271,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news1.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!elnk-atl-nf1!elnk-atl-nf2!newsfeed.earthlink.net!
nx01.iad01.newshosting.com!newshosting.com!post02.iad01!roadrunner.com!not-for-
mail
Date: Wed, 10 Oct 2007 11:32:20 -0700
From: "Green Xenon [Radium]" <glucegen1@excite.com>
User-Agent: Mozilla/5.0 (Windows; U; Win98; en-US; rv:1.8b) Gecko/20050217
MIME-Version: 1.0
Newsgroups:
sci.astro.amateur,sci.astro,alt.astronomy,rec.radio.amateur.space,uk.sci.astronomy
,sci.physics
Subject: Re: Receiving 2 GHz AM signals in space. What do they sound like?
References: <47072242$0$15384$4c368faf@roadrunner.com>
<AYydnTWqhtx5SZbaRVnyugA@bt.com> <470d0617$0$15393$4c368faf@roadrunner.com>
In-Reply-To: <470d0617$0$15393$4c368faf@roadrunner.com>
Content-Type: text/plain; charset=windows-1252; format=flowed
Content-Transfer-Encoding: 7bit
Lines: 18
Message-ID: <470d181b$0$26390$4c368faf@roadrunner.com>
Organization: Road Runner High Speed Online http://www.rr.com
NNTP-Posting-Host: 75.84.20.87
X-Complaints-To: abuse@rr.com
Xref: g2news2.google.com sci.astro.amateur:12722 sci.astro:15664
alt.astronomy:20560 rec.radio.amateur.space:243 uk.sci.astronomy:1995
sci.physics:58968
```

I wrote in http://groups.google.com/group/sci.physics/msg/61b4a157dbf10153 :

> I used to often play my Nintendo when it was connected to channel 3.
> However, I was change the TV channel to 4.
> I could see the video of the
> game but it was fuzzy and covered in grains. The music of the game was
> absent, and instead was filled with frightening-yet-enjoyable tones
> [sounding like a buzzer, lawn mower, or electric shaver] along with a
> faint audio of what was being discussed on the channel 4 news.

> I would hear something similar on my 2 GHz AM DX receiver in space.

Obviously excluding the "channel 4 news" part. F--k!!! I just hate when
I accidentally post stuff I didn't intend to!!!!!

From 3065967869822908756
X-Google-Thread: 113975,df15d72bee8889f0,start
X-Google-Thread: f74ae,df15d72bee8889f0,start
X-Google-Thread: fdc67,df15d72bee8889f0,start
X-Google-Thread: 10e8ad,df15d72bee8889f0,start
X-Google-Thread: 10cf28,df15d72bee8889f0,start
X-Google-Thread: fcc6e,df15d72bee8889f0,start
X-Google-Thread: 10b271,df15d72bee8889f0,start
X-Google-Thread: 107e5d,df15d72bee8889f0,start
X-Google-Thread: 1038c2,df15d72bee8889f0,start
X-Google-Thread: 1110fe,df15d72bee8889f0,start
X-Google-Attributes:
gid113975,gidf74ae,gidfdc67,gid10e8ad,gid10cf28,gidfcc6e,gid10b271,gid107e5d,gid1038c2,gid1110fe,public,usenet
X-Google-Language: ENGLISH,CP1252
Path: g2news2.google.com!news2.google.com!border1.nntp.dca.giganews.com!nntp.giganews.com!nx01.iad01.newshosting.com!newshosting.com!post01.iad01!roadrunner.com!not-for-mail
Date: Wed, 10 Oct 2007 13:35:58 -0700
From: "Green Xenon [Radium]" <glucegen1@excite.com>
User-Agent: Mozilla/5.0 (Windows; U; Win98; en-US; rv:1.8b) Gecko/20050217
MIME-Version: 1.0
Newsgroups:
sci.astro.amateur,sci.astro,alt.astronomy,rec.radio.amateur.space,uk.sci.astronomy,rec.radio.amateur.antenna,sci.physics,sci.energy,alt.sci.physics.new-theories,sci.physics.electromag
Subject: OT: Sci-Fi space radio imagination gone wild -- what I would hear
on a 2 GHz AM DX receiver in space.
Content-Type: text/plain; charset=windows-1252; format=flowed
Content-Transfer-Encoding: 8bit
Lines: 97
Message-ID: <470d351e$0$24320$4c368faf@roadrunner.com>
Organization: Road Runner High Speed Online http://www.rr.com
NNTP-Posting-Host: 75.84.20.87

X-Complaints-To: abuse@rr.com
Xref: g2news2.google.com sci.astro.amateur:12729 sci.astro:15672 alt.astronomy:20568 rec.radio.amateur.space:244 uk.sci.astronomy:1999 rec.radio.amateur.antenna:6483 sci.physics:59004 sci.energy:7159 alt.sci.physics.new-theories:1862 sci.physics.electromag:1990

K7ITM wrote in http://groups.google.com/group/rec.radio.amateur.space/msg/29d5341be8ff65fe :

> Why do you say that "UHFs tend to the best for extremely long distance reception"? Have a look at the basic equation governing line-of-sight reception.

Lower frequencies are absorbed by charged particles. Ionized zones [such as Earth ionosphere and the heliosphere around the solar system] tend to block low-frequency radio waves. That is why UHF is the best.

UHFs are the �sweet-spot� of radio waves. They are high-frequency-enough not to be attenuated by objects that block longer-wave radio signals yet low-frequency-enough not to be attenuated by objects that block SHFs [3 GHz to 30 GHz range], EHFs [30 GHz to 300 GHz range], THz-radiation, or IR.

> Why do you not answer your own question? It sounds to me like as reasonable a premise for a science fiction book as many that have been successful. You could perhaps spin it into quite an interesting story. You've already started with a premise that's so far from -- so very, very far from -- the current realities or even the dreams of people designing receivers that you may as well suppose you're going to receive whatever your wildest imagination might come up with. Since there is a nearly countless number of stars in the known universe, and since a large percentage of them could be planetary systems, each with the possibility of emitting interesting amplitude modulated carriers, your choices are pretty near limitless. Wow! Let your imagination run wild. It obviously did when you posed the question; you may as well let it run as wild with the answer. Back to you, Nonex!

Okay, I will let my imagination run wild.

I would hear scary stuff on the space station�s radio.

I used to often play my Nintendo when it was connected to channel 3. However, I was change the TV channel to 4. I could see the video of the game but it was fuzzy and covered in grains. The music of the game was absent, and instead was filled with frightening-yet-enjoyable tones [sounding like a buzzer, lawn mower, or electric shaver] along with a faint audio of what was being discussed on the channel 4 news.

I would hear something similar on my 2 GHz AM DX receiver in space. Obviously excluding the "channel 4 news" part.

Also, whenever there is drill or an actually emergency, the Emergency

Alert System [EAS] plays their music. First they play the boring low-pitch square-wave tones. Then they play the high-pitched, terrifying, enjoyable, psychedelic sine-wave tones.

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In addition, I would hear sounds that are similar to the following terrifying-yet-enjoyable tones present on this keyboard�s 100 sound tone back:

http://concertmate.evenement0.net/img/
concertmate_realistic_concertmate-450_img1.jpg

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#76 �telephone� when the volume is at minimum and I press keys from the 7th black key [from the left] or lower. If any key that is right of the 7th black key is pressed, the sound is totally different and will not even remotely resemble anything I would hear on the AM receiver.

#81 �marimba� when the volume is at minimum and I press the lowest or highest key separately � especially if I first press the lowest key, then let go, and then immediately press the highest key afterwards.

#85 �afro percussion� when the volume is at maximum and I smoothly slide my hand from lowest to highest note and then highest to lowest note or if I play notes two or more notes with one no higher than the 7th black key from the left and the other note no lower than the 10th key from the right. Actually any combinations of this tone will resemble what I would hear on my 2 GHz receiver.

#96 �bass/piano� when the volume is at maximum and I press the lowest key.

All the sounds I hear on the receiver are those that result from the radio waves emitted by the magnetic fields of objects in the distant cosmos -- such as magnetars. At times, when the magnetic objects cause magnetic vibrations at an RF-rate, they cause radio waves to be generated. If the rates include 2-billions-vibrations-per-second, then my receiver will demodulate the 2 GHz parts and I can hear the signals -- provided that the demodulations result in frequencies anywhere from 20 to 20,000 Hz [the human hearing range].

> Oh, and by the way, "spamming" comes, in one form, from posting too
> many places; I've trimmed off a whole bunch of groups for this reply.
> By my way of thinking, you're being pretty generous with yourself
> saying you don't spam.

I only posted to relevant NGs.

```
From -8712394361853446995
X-Google-Thread: 113975,93b81b694d198f4c
X-Google-Thread: f74ae,93b81b694d198f4c
X-Google-Thread: fdc67,93b81b694d198f4c
X-Google-Thread: 10e8ad,93b81b694d198f4c
X-Google-Thread: 10cf28,93b81b694d198f4c
X-Google-Thread: 10b271,93b81b694d198f4c
X-Google-Attributes:
gid113975,gidf74ae,gidfdc67,gid10e8ad,gid10cf28,gid10b271,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news1.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!local01.nntp.dca.giganews.com!nntp.bt.com!news.bt.com.POSTED!
not-for-mail
NNTP-Posting-Date: Wed, 10 Oct 2007 16:18:11 -0500
From: "Fleetie" <fleetie@fleetie.demon.co.uk>
Newsgroups:
sci.astro.amateur,sci.astro,alt.astronomy,rec.radio.amateur.space,uk.sci.astronomy
,sci.physics
References: <47072242$0$15384$4c368faf@roadrunner.com>
<AYydnTWqhtx5SZbaRVnyugA@bt.com>
Subject: Big Numbers (was Re: Receiving 2 GHz AM signals in space. What do they
sound like?)
Date: Wed, 10 Oct 2007 22:18:02 +0100
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.2869
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.2962
X-RFC2646: Format=Flowed; Response
Message-ID: <iLOdnXQ4p5kO3JDanZ2dnUVZ8tqinZ2d@bt.com>
Lines: 40
X-Usenet-Provider: http://www.giganews.com
NNTP-Posting-Host: 81.159.157.200
X-AuthenticatedUsername: NoAuthUser
X-Trace: sv3-CaWNPdwdT/mBQAbBOYET6YsDpS19N73c1GEZcvSh5hXtzMC/
mcqtQv6zsDtEwqKoq+5FqfZM1JpQTdf!jZKzfgPRTCvyxM9SQSZo201pjGlsiVhokz0QprPDIC+Xoc9i//
4wmLhVH2PuMv6M2kt6wiQVwN7V
X-Complaints-To: abuse@btinternet.com
X-DMCA-Complaints-To: abuse@btinternet.com
X-Abuse-and-DMCA-Info: Please be sure to forward a copy of ALL headers
X-Abuse-and-DMCA-Info: Otherwise we will be unable to process your complaint
properly
X-Postfilter: 1.3.36
Xref: g2news2.google.com sci.astro.amateur:12735 sci.astro:15681
alt.astronomy:20571 rec.radio.amateur.space:245 uk.sci.astronomy:2001
sci.physics:59018
```

For some reason, I had it in my mind that you'd (Radium) suggested
an intensity of (2^-10000) Wm^-2, but having read your reply, I notice
that it was in fact 1E-10000 Wm^-2, which makes the situation EVEN WORSE.

Just for shits and giggles, since you're so into BIG NUMBERS:
Here, check out this Wikipedia article on "Graham's Number":

http://en.wikipedia.org/wiki/Graham%27s_number

The number cannot easily be written down in any form that is easily comprehensible to a non-mathematician, but suffice to say, it's fucking unimaginably huge. Mind you, so is 1E1000000 (10^1000000), and that's not even an ATOM in Graham's Number's back-yard.

Now, imagine (well, try, but you'll fail):

If Graham's number is G:

G!

G!!

G!!!

G(!^G) (G followed by G factorial operators '!')

G^G

As Googolplex=10^Googol , so: G(plex^G), i.e. G-plex-plex-plex...(G times)

I suppose you've got wood by now, Radium.

Martin
--
M.A.Poyser   Tel.: 07967 110890
Manchester, U.K.   http://www.livejournal.com/userinfo.bml?user=fleetie

From 6805643723098739850
X-Google-Thread: 10e8ad,23251b06a8e3a03a,start
X-Google-Attributes: gid10e8ad,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news1.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!local01.nntp.dca.giganews.com!nntp.comcast.com!
news.comcast.com.POSTED!not-for-mail
NNTP-Posting-Date: Wed, 10 Oct 2007 16:34:34 -0500
From: "John Doe" <hgorden@adelphia.net>
Newsgroups: rec.radio.amateur.space
Subject: Weather
Date: Wed, 10 Oct 2007 17:34:35 -0400
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.3138
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.3198
X-RFC2646: Format=Flowed; Original
Message-ID: <xM6dnfM7ppH32JDanZ2dnUVZ_ournZ2d@comcast.com>

Lines: 14
X-Usenet-Provider: http://www.giganews.com
NNTP-Posting-Host: 76.100.201.181
X-Trace: sv3-
PxOHhZkeojL08nMjsFJix8m8XEVjgrsDFrmYkLKFZ9yb8PP12ubitdTifoJB9yM6oZmQvMOmayIHX0c!
7fzu6NYhsOuEgIajreJ4i6hKNFUgH66MgG9kJ790hOF9NLTHxuYT+0SNSL1HP770LR/dMHvC53de!
DYBZ74P/zv7YC4+jaNqL7aydxVJm0nc=
X-Complaints-To: abuse@comcast.net
X-DMCA-Complaints-To: dmca@comcast.net
X-Abuse-and-DMCA-Info: Please be sure to forward a copy of ALL headers
X-Abuse-and-DMCA-Info: Otherwise we will be unable to process your complaint properly
X-Postfilter: 1.3.35
Xref: g2news2.google.com rec.radio.amateur.space:246

Space Weather News for Oct. 10, 2007
http://spaceweather.com

CELESTIAL TRIANGLE: Set your alarm. For the next five mornings, just before dawn banishes the night, you can see a compact celestial triangle rising in the eastern sky. The corners are dazzling Venus, Saturn and the bright star Regulus. This is worth waking up for--at least once. Visit http://spaceweather.com for sky maps and more.

AURORA WATCH: A solar wind stream is heading for Earth and it may spark a geomagnetic storm when it arrives on Oct. 11th or 12th. High-latitude sky watchers should be alert for auroras.

From -6410587490731933842
X-Google-Thread: 113975,3126d2cacaf60a83,start
X-Google-Thread: f74ae,3126d2cacaf60a83,start
X-Google-Thread: fdc67,3126d2cacaf60a83,start
X-Google-Thread: 10e8ad,3126d2cacaf60a83,start
X-Google-Thread: 10cf28,3126d2cacaf60a83,start
X-Google-Thread: 10b271,3126d2cacaf60a83,start
X-Google-Attributes:
gid113975,gidf74ae,gidfdc67,gid10e8ad,gid10cf28,gid10b271,public,usenet
X-Google-Language: ENGLISH,CP1252
Path: g2news2.google.com!news2.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx01.iad01.newshosting.com!newshosting.com!post02.iad01!
post01.iad01!roadrunner.com!not-for-mail
Date: Thu, 11 Oct 2007 15:53:58 -0700
From: "Green Xenon [Radium]" <glucegen1@excite.com>
User-Agent: Mozilla/5.0 (Windows; U; Win98; en-US; rv:1.8b) Gecko/20050217
MIME-Version: 1.0
Newsgroups:
sci.astro.amateur,sci.astro,alt.astronomy,rec.radio.amateur.space,uk.sci.astronomy
,sci.physics
Subject: What is the minimum watts-per-meter-squared I need to receive if
 I want audio?

Content-Type: text/plain; charset=windows-1252; format=flowed
Content-Transfer-Encoding: 8bit
Lines: 59
Message-ID: <470ea6e8$0$20559$4c368faf@roadrunner.com>
Organization: Road Runner High Speed Online http://www.rr.com
NNTP-Posting-Host: 75.84.20.87
X-Complaints-To: abuse@rr.com
Xref: g2news2.google.com sci.astro.amateur:12781 sci.astro:15782
alt.astronomy:20657 rec.radio.amateur.space:247 uk.sci.astronomy:2013
sci.physics:59352

On Oct 9, 12:22 pm, "Fleetie" <flee...@fleetie.demon.co.uk> wrote in
http://groups.google.com/group/rec.radio.amateur.space/msg/fdb128405a0f3285
:

> "Green Xenon [Radium]" <gluceg...@excite.com> wrote

>>fields] of extremely weak 2 GHz AM analog carrier signals.
>>In addition,
>>this receiver is so sensitive and powerful that it can clearly pick up
>>AM carrier waves as weak as 10-to-the-power-NEGATIVE-10,000
>>watt-per-meter-squared.
> <Sigh>

> What is the energy of ONE 2GHz photon?

> Free clue: Planck says "E = h.v" ;

> h is Planck's constant (IIRC ~ 6.6E-34 Js)
> v (Greek letter nu) is frequency, in Hz, i.e. 2E9 here

> How does the resultant photon energy, in Joules,
> compare to your imagined
> intensity of (2^-10000) Wm^-2 ? How many 2GHz photons are you going to
> get per square metre per second at that ridiculously low intensity?
> Do you really think there'll be enough photons to carry any useful
> (e.g. audio frequency) signal?

> Hmm; (2^-10000) Wm^-2 ~= 5E-3011 Wm^-2 = 5E-3011 Js^-1m^-2

> E = h.v ~= 6.6E-34 * 2E9 ~= 1.32E-24 J per 2GHz photon

> I guess you could expect an average of 1 photon per m^2 moseying
> on by about
> every 2.64E2986 seconds.

> So far, the universe is estimated at 13.7E9 years
> ~= 86400 * 365.25 * 13.7E9 seconds
> ~= 4.32E17 seconds.

> For all intents and purposes, at that intensity, at 2GHz, there ARE NO
> PHOTONS to detect - unless you wanna wait about a
> fucktillion universe-

> lifetimes for each photon - time that you don't have.

> Let me put that simply:

> THERE IS NO 2GHz SIGNAL AT (2^-10000) Wm^-2.

Okay. So 10-to-the-power-NEGATIVE-10,000 watt-per-meter-squared is so low it�s impossible.

What is the minimum watts-per-meter-squared I need to receive if I want audio?

> Radium, why do you have this tendency to use such enormous
> exponents in
> your questions?

I tend to be interested in -- and obsessed with -- the occult and extreme.

From -1916000124150418920
X-Google-Thread: 113975,3126d2cacaf60a83
X-Google-Thread: f74ae,3126d2cacaf60a83
X-Google-Thread: fdc67,3126d2cacaf60a83
X-Google-Thread: 10e8ad,3126d2cacaf60a83
X-Google-Thread: 10cf28,3126d2cacaf60a83
X-Google-Thread: 10b271,3126d2cacaf60a83
X-Google-Attributes:
gid113975,gidf74ae,gidfdc67,gid10e8ad,gid10cf28,gid10b271,public,usenet
X-Google-Language: ENGLISH,ASCII
Path: g2news2.google.com!news1.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!local01.nntp.dca.giganews.com!nntp.comcast.com!
news.comcast.com.POSTED!not-for-mail
NNTP-Posting-Date: Thu, 11 Oct 2007 19:00:19 -0500
From: "Colonel Jake" <SergeantYork@comcast.net>
Newsgroups:
sci.astro.amateur,sci.astro,alt.astronomy,rec.radio.amateur.space,uk.sci.astronomy
,sci.physics
References: <470ea6e8$0$20559$4c368faf@roadrunner.com>
Subject: Re: What is the minimum watts-per-meter-squared I need to receive if I
want audio?
Date: Thu, 11 Oct 2007 17:08:40 -0700
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1914
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1914
Message-ID: <Y_udna0EUfiOJJPanZ2dnUVZ_qygnZ2d@comcast.com>
Lines: 68
X-Usenet-Provider: http://www.giganews.com
NNTP-Posting-Host: 67.168.115.70
X-Trace: sv3-vOy+NZA/
Jgc01JyJ6CepkjDjATUxa5AGvuTOxYdRWSxHUnHgIzdE0Z7zB+XXPVn4xsHrnLasQbQj1s+!
1YRNFhM6stbRoC5AXyzJzuZIiYlzQGzL5t2ZmgYbPwYhxHg7cM6lrSjIhFOiPP2lE/849buXahOC!
MdmLAMwAdtu12X8BMX0ws658Dh9Ewg==

```
X-Complaints-To: abuse@comcast.net
X-DMCA-Complaints-To: dmca@comcast.net
X-Abuse-and-DMCA-Info: Please be sure to forward a copy of ALL headers
X-Abuse-and-DMCA-Info: Otherwise we will be unable to process your complaint
properly
X-Postfilter: 1.3.35
Xref: g2news2.google.com sci.astro.amateur:12783 sci.astro:15785
alt.astronomy:20660 rec.radio.amateur.space:248 uk.sci.astronomy:2015
sci.physics:59369


"Green Xenon [Radium]" <glucegen1@excite.com> wrote in message
news:470ea6e8$0$20559$4c368faf@roadrunner.com...
: On Oct 9, 12:22 pm, "Fleetie" <flee...@fleetie.demon.co.uk> wrote in
:
http://groups.google.com/group/rec.radio.amateur.space/msg/fdb128405a0f3285
: :
:
:  > "Green Xenon [Radium]" <gluceg...@excite.com> wrote
:
:  >>fields] of extremely weak 2 GHz AM analog carrier signals.
:  >>In addition,
:  >>this receiver is so sensitive and powerful that it can clearly pick up
:  >>AM carrier waves as weak as 10-to-the-power-NEGATIVE-10,000
:  >>watt-per-meter-squared.
:  > <Sigh>
:
:  > What is the energy of ONE 2GHz photon?
:
:  > Free clue: Planck says "E = h.v" ;
:
:  > h is Planck's constant (IIRC ~ 6.6E-34 Js)
:  > v (Greek letter nu) is frequency, in Hz, i.e. 2E9 here
:
:  > How does the resultant photon energy, in Joules,
:  > compare to your imagined
:  > intensity of (2^-10000) Wm^-2 ? How many 2GHz photons are you going to
:  > get per square metre per second at that ridiculously low intensity?
:  > Do you really think there'll be enough photons to carry any useful
:  > (e.g. audio frequency) signal?
:
:  > Hmm; (2^-10000) Wm^-2 ~= 5E-3011 Wm^-2 = 5E-3011 Js^-1m^-2
:
:  > E = h.v ~= 6.6E-34 * 2E9 ~= 1.32E-24 J per 2GHz photon
:
:  > I guess you could expect an average of 1 photon per m^2 moseying
:  > on by about
:  > every 2.64E2986 seconds.
:
:  > So far, the universe is estimated at 13.7E9 years
:  > ~= 86400 * 365.25 * 13.7E9 seconds
:  > ~= 4.32E17 seconds.
:
```

: > For all intents and purposes, at that intensity, at 2GHz, there ARE NO
: > PHOTONS to detect - unless you wanna wait about a
: > fucktillion universe-
: > lifetimes for each photon - time that you don't have.
:
: > Let me put that simply:
:
: > THERE IS NO 2GHz SIGNAL AT (2^-10000) Wm^-2.
:
: Okay. So 10-to-the-power-NEGATIVE-10,000 watt-per-meter-squared is so
: low it�s impossible.
:
: What is the minimum watts-per-meter-squared I need to receive if I want
: audio?
:
: > Radium, why do you have this tendency to use such enormous
: > exponents in
: > your questions?
:
: I tend to be interested in -- and obsessed with -- the occult and extreme.

Sounds like you?,
"Want to listen to Jupiter!!!..."

From 6551561183788324121
X-Google-Thread: 113975,3126d2cacaf60a83
X-Google-Thread: f74ae,3126d2cacaf60a83
X-Google-Thread: 10e8ad,3126d2cacaf60a83
X-Google-Thread: 10b271,3126d2cacaf60a83
X-Google-Attributes: gid113975,gidf74ae,gid10e8ad,gid10b271,public,usenet
X-Google-Language: ENGLISH,ASCII
Path: g2news2.google.com!news1.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!local01.nntp.dca.giganews.com!nntp.centurytel.net!
news.centurytel.net.POSTED!not-for-mail
NNTP-Posting-Date: Thu, 11 Oct 2007 19:03:31 -0500
From: "John \"C\"" <honestjohn@centurytel.net>
Newsgroups: sci.astro.amateur,sci.astro,rec.radio.amateur.space,sci.physics
References: <470ea6e8$0$20559$4c368faf@roadrunner.com>
<Y_udna0EUfiOJJPanZ2dnUVZ_qygnZ2d@comcast.com>
Subject: Re: What is the minimum watts-per-meter-squared I need to receive if I
want audio?
Date: Thu, 11 Oct 2007 19:00:12 -0500
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1478
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1478
Message-ID: <r-6dnX-NP4NOJJPanZ2dnUVZ_r2nnZ2d@centurytel.net>
Lines: 32
X-Usenet-Provider: http://www.giganews.com
NNTP-Posting-Host: 75.120.156.62

```
X-Trace: sv3-
xS3pG4J6aRZIhwcaPBQk50AzsS1eMVrSMdZwoSbJ7c9mKLJqqSmo5HE4tmNGbIgfJG85opHHyYDtCft!
dZuJUcYzRv9wL6ADuEqNR7ciYyHBBrejhXGHi/ZN1UnMpQ6m5e4gNkVBLMkZc/Of0DfDE5DBAcGe!
am9RwEnHBc1oxJjmGeQzgd8jJDXd8NpqH6G9tGmw
X-Complaints-To: abuse@centurytel.net
X-DMCA-Complaints-To: abuse@centurytel.net
X-Abuse-and-DMCA-Info: Please be sure to forward a copy of ALL headers
X-Abuse-and-DMCA-Info: Otherwise we will be unable to process your complaint
properly
X-Postfilter: 1.3.36
Xref: g2news2.google.com sci.astro.amateur:12784 sci.astro:15786
rec.radio.amateur.space:249 sci.physics:59373


"Colonel Jake" <SergeantYork@comcast.net> wrote in message

>           *we will all kneel and blow and give head*
>
>
> [���xYx���]"All Hail Master Pink My Gay Lover"[���xYx���]
> [���xYx���]                                    [���xYx���]
> [���xYx���]    "Pinku-Sensei The Great Gay One"    [���xYx���]

> [���xYx���] "Goddess Kali Goddess Of Skank" [���xYx���]
> [���xYx���]                                    [���xYx���]
> [���xYx���]   "Our Divine Goddess Of Gays"   [���xYx���]



> Recipe of the Month
>   http://www.cooksomemeth.com/

Johnny Law is knocking on yo back door, col!

Number One
--
Col. Jake kicks Ass

Click here to check it out:

http://www.jibjab.com/starring_you/receipt/1204006

Thanks and enjoy the show!




From 5609578398030668004
X-Google-Thread: 10e8ad,744f2a56b771b82c,start
X-Google-Thread: 10b9c8,744f2a56b771b82c,start
X-Google-Attributes: gid10e8ad,gid10b9c8,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news1.google.com!border1.nntp.dca.giganews.com!
```

```
nntp.giganews.com!nx01.iad01.newshosting.com!newshosting.com!
198.186.194.247.MISMATCH!news-out.readnews.com!news-xxxfer.readnews.com!panix!
rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-281 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Thu, 11 Oct 2007 21:18:40 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 1315
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <001e01c80c6d$cca71650$6601a8c0@familyroom>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1192151920 11680 166.84.1.6 (12 Oct 2007 01:18:40 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Fri, 12 Oct 2007 01:18:40 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Xref: g2news2.google.com rec.radio.amateur.space:250 rec.radio.info:300
```

This report is organized into FIVE parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites
Part 5 (S5) - deorbited/returned satellites

SB SAT @ AMSAT W8ISS ANS-281.S1
WSR 281 Part 1 10/08/2007

AMSAT NEWS SERVICE BULLETIN 281.S1 FROM AMSAT HQ
SILVER SPRING, MD, October 08, 2007
TO ALL RADIO AMATEURS
BID: $ANS-281.S1

VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

```
Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink:   435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink:   435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW


Indian Beacon:  145.859330 MHZ CW
Dutch Beacon:   145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsat.in/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is
active. Each transponder has a different beacon.
[06252007]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Modes:   FM Repeater - V/u
                 BBS         - L/u
                 Telemetry   -  /u

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink:   145.880 MHZ FM
                       145.880 MHz USB
                       145.920 MHz FM
                      1268.700 MHz FM 67Hz PL tone
Digital Downlinks:     435.150 MHz FM 38k4 Digital, PBP, 1 watt output
                       435.150 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:        145.860 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      1268.700 mhz FM 9k6 PBP Digital
Beacon:                435.150 MHz
```

```
Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[10012007]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Current Mode: V/u

Uplink:   145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute
timer
   on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the
repeater on
   and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset
the 10
   minute timer.
[05282007]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Operational - check operational schedule for current times!!

Current Mode: V/u
```

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage: http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's CW
telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts.htm
[0820007]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM
Downlink: 436.795 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[08202007]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational depending on amount of Sunlight

```
Current Mode: Listen before transmitting

Uplink:   145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink:  29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons:   29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/

AO-7 Usage Guidelines on the AO-7 Log and Resource Site located at:
http://www.planetemily.com/ao7
[05282007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational - APRS and BBS

Current Mode: V/v

Expedition 15 crew:
Commander:       Fyodor Yurchikhin     RN3FI
Flight Engineer: Clayton C. Anderson   KD5PLA
Flight Engineer: Oleg Kotov

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink:   145.825 MHz FM
Worldwide packet downlink: 145.825 Mhz FM

Voice:
Region 1 voice uplink:   145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink:      145.800 MHz FM

Crossband Repeater:
Repeater Uplink:         437.800 MHz FM
Repeater Downlink:       145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear
```

Callsigns:
German: DP0ISS
Russian: RS0ISS
                      RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.
[10082007]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-281.S2
WSR 281 Part 2 10/08/2007

AMSAT NEWS SERVICE BULLETIN 281.S2 FROM AMSAT HQ
SILVER SPRING, MD, October 08, 2007
TO ALL RADIO AMATEURS
BID: $ANS-281.S2

CAPE1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.

[07302007]
=====
LIBERTAD-1
Catalog Number: 31129
Launch Date: April 17,2007

Status: Operational?

```
Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

APRS
Uplink:   145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[08132007]
=====
CP3
Catalog Number: 31128
Launch Date: April 17,2007

Status: Operational

Current Mode:  /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[07302007]
=====
CP4
Catalog Number: 31122
Launch Date: April 17,2007

Status: Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon:    437.325 MHz CW
[07302007]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: In Orbit

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder:  145.825 Mhz FM
[02052007]
=====
?O-?? FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: In Orbit

Current Mode: /u
```

```
Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[02262007]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[07302007]
=====
GENESAT-1 ?O-??
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Current Mode: /u

Telemetry Beacon Downlink: 437.0670 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[01082007]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Operational

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon:             437.2750 MHz CW

Callsign: JR8YJT
[10302006]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u
```

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon: 437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
[03262007]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launched: June 30, 2003

Status: Operational

Current Mode: /u

Beacon: 436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[01082007]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launched: February 21, 2006

Status: Semi-Operational - Constant Carrier only

Uplink: 1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan ?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[01082007]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW
[08132007]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Mode(s): FM Repeater - V/u
                 BBS   - L/u
                 Telemetry   - /u

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink: 145.880 MHZ FM
                       145.880 MHz USB
                       145.920 MHz FM
                      1268.700 MHz FM 67Hz PL tone
Digital Downlinks: 435.150 MHz FM 38k4 Digital, PBP, 1 watt output
                       435.150 MHz FM 9k6 Digital, Pacsat Broadcast Protocol
                      2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Digital, Pacsat Broadcast Protocol
                      1268.700 mhz FM 9k6 PBP Digital
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[10012007]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Hibernation until full sunlight in November

```
Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink:        144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[09242007]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: OPERATIONAL

Current Modes: V/U
               L/U

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[09172007]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational.

Current Mode:  /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon:          435.025 MHz - OFF
Mode-S Beacon:     2401.500 MHz - OFF

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Due to solar eclipses which will continue until late August 2007, the
```

beacon
will only transmit for about one orbit every 21 days. It is unlikely to
be
heard during this period.

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[07162007]
=====
RS-22 RADIO SPORT RS-22
Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only

Current Mode: /u

CW Beacon - 435.352 MHz
            145.818 MHz
[08062007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational - APRS and BBS

Current Mode: V/v

Expedition 15 crew:
Commander: Fyodor Yurchikhin   RN3FI
Flight Engineer: Clayton C. Anderson   KD5PLA
Flight Engineer: Oleg Kotov

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM
Worldwide packet downlink: 145.825 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:

German: DP0ISS
Russian: RS0ISS
RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.
[10082007]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-281.S3
WSR 281 Part 3 10/08/2007

AMSAT NEWS SERVICE BULLETIN 281.S3 FROM AMSAT HQ
SILVER SPRING, MD, Ocober 08, 2007
TO ALL RADIO AMATEURS
BID: $ANS-281.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 MHz FM 67Hz CTCSS
Voice Downlink: 2401.835 MHz FM
Packet Up/Downlink: 437.250 MHz 9k6 packet
Packet Downlink 2401.835 MHz 38k4 packet

```
Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non=Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[08132007]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink:   435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Non-Operational

Uplinks:   145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink:  437.325 MHz

Broadcast callsign: MYSAT3-11
BBS:                MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial
land and weather imaging payloads offers FM and FSK Amateur Radio
communica-
tion.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a
collaborative effort between the Malaysian government and Surrey
Satellite
Technology Ltd.
[007302007]
```

```
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink:   145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
call-
sign KE6QMD, as per the user service agreement located at the following
URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS:                SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink:   145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000
```

Status: Non-Operational

Uplinks

V-band: 145.840 - 145.990 MHz CW/LSB
U-band: 435.550 - 435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks

S2-band: 2401.225 - 2401.475 MHz CW/USB
K-band: 24048.010 - 24048.060 MHz CW/USB
Beacon: 2401.323 MHz
24048.035 MHz

P3-D Telemetry Beacons (IHU)

BEACON	General Beacon (GB)	Middle Beacon (MB)	Engineering Beacon (EB)
2 m	none	145.898 MHz	none
70cm	435.438 MHz	435.588 MHz	435.838 MHz
13cm(1)	2400.188 MHz	2400.338 MHz	2400.588 MHz
13cm(2)	2401.173 MHz	2401.323 MHz	2401.573 MHz
3cm	10450.975 MHz	10451.125 MHz	10451.375 MHz
1.5cm	24047.885 MHz	24048.035 MHz	24048.285 MHz

[007162007]

=====

OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]

=====

UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web site

at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

```
Uplink:   145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Reported non-operational

Current Mode: V/U
              Digipeater - Authorized for APRS usage

Uplink:         145.900 MHz FM 1200-baud Manchester FSK
                145.920 MHz FM 1200-baud Manchester FSK
                145.940 MHz FM 1200-baud Manchester FSK
                145.960 MHz FM 1200-baud Manchester FSK
Downlink:       437.026 MHz SSB 1200-baud PSK
Mode-S Beacon: 2401.1428 MHz

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.025 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[06112007]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign:       POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012006]
=====
IO-26 ITAMSAT
Catalog number: 22826
```

```
Launch Date: September 26, 1993

Status: Downlink only

Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[012212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM
```

```
Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplinks:          145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink:      437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)
```

```
Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[01222007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
[05012006]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet: Non-Operational
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS
```

```
Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon:   145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink  29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
[01152007]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970
```

```
Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon 1:  29.352 MHz (intermittent)
Beacon 2:  29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink:     21.260 to 21.300 MHz CW/USB
Downlink:  145.860 to 145.900 MHz CW/USB

Beacon:    145.860 MHz

Robot:     145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink:   21.210 to 21.250 MHz CW/USB
```

Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-281.S4
WSR 281 Part 4 10/08/2007

AMSAT NEWS SERVICE BULLETIN 281.S4 FROM AMSAT HQ
SILVER SPRING, MD, October 08, 2007
TO ALL RADIO AMATEURS
BID: $ANS-281.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE PROPOSED FOR LAUNCH AT THIS TIME:

Phase 5a Mars Mission
Catalog Number:
Proposed Launch Date: 2009 or 2011

Status: Design Phase

For the latest project status update please visit the AMSAT-DL P5-A web page:
http://ticket-to-mars.org
[01222007]
=====
PHASE 3E AO-??
Catalog number:
Proposed Launch Date: Late 2007

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/
[01222007]
=====
Eagle AO-??
Catalog Number:
Proposed Launch Date: Early/Mid 2009

Status: Design Phase

For the latest project status updates please visit the AMSAT-NA webpage:
http://www.amsat.org
[01222007]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-281.S5
WSR 281 Part 5 10/08/2007

AMSAT NEWS SERVICE BULLETIN 281.S5 FROM AMSAT HQ
SILVER SPRING, MD, October 08, 2007
TO ALL RADIO AMATEURS
BID: $ANS-281.S5

THE FOLLOWING SATELLITES HAVE DE-ORBITED OR HAVE BEEN RETURNED TO THE GROUND:

NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink: 145.825 Mhz FM APRS AX25
APRS Uplink: 145.825 MHz FM APRS AX25
Voice/PSK31 Uplink: 28.120 MHz

Packet to Voice ID: RAFT
[06112007]
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)

* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the
President's Club. Members of the President's Club, as sustaining donors
to AMSAT Project Funds, will be eligible to receive additional benefits.
Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the
memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen,
G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

From -168148195289734114
X-Google-Thread: 113975,5b97a494ef50b361,start
X-Google-Thread: f74ae,5b97a494ef50b361,start
X-Google-Thread: fdc67,5b97a494ef50b361,start
X-Google-Thread: 10e8ad,5b97a494ef50b361,start
X-Google-Thread: 10cf28,5b97a494ef50b361,start
X-Google-Thread: 10b271,5b97a494ef50b361,start
X-Google-Attributes:
gid113975,gidf74ae,gidfdc67,gid10e8ad,gid10cf28,gid10b271,public,usenet
X-Google-Language: ENGLISH,CP1252
Path: g2news2.google.com!news1.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx01.iad01.newshosting.com!newshosting.com!post01.iad01!
roadrunner.com!not-for-mail
Date: Thu, 11 Oct 2007 18:35:57 -0700
From: "Green Xenon [Radium]" <glucegen1@excite.com>
User-Agent: Mozilla/5.0 (Windows; U; Win98; en-US; rv:1.8b) Gecko/20050217
MIME-Version: 1.0
Newsgroups:
sci.astro.amateur,sci.astro,alt.astronomy,rec.radio.amateur.space,uk.sci.astronomy
,sci.physics
Subject: Would someone please respond with reasonable answers? [was Re: What
is the minimum watts-per-meter-squared I need to receive if I want audio?]
Content-Type: text/plain; charset=windows-1252; format=flowed
Content-Transfer-Encoding: 8bit
Lines: 474
Message-ID: <470ecce3$0$24300$4c368faf@roadrunner.com>
Organization: Road Runner High Speed Online http://www.rr.com

NNTP-Posting-Host: 75.84.20.87
X-Complaints-To: abuse@rr.com
Xref: g2news2.google.com sci.astro.amateur:12790 sci.astro:15793
alt.astronomy:20669 rec.radio.amateur.space:251 uk.sci.astronomy:2017
sci.physics:59402

Hi:

I started a new thread because in
http://groups.google.com/group/rec.radio.amateur.space/browse_frm/thread/3126d2cacaf60a83/
OT content was added.

On Oct 9, 12:22 pm, "Fleetie" <flee...@fleetie.demon.co.uk> wrote in
http://groups.google.com/group/rec.radio.amateur.space/msg/fdb128405a0f3285
:

> "Green Xenon [Radium]" <gluceg...@excite.com> wrote

>>fields] of extremely weak 2 GHz AM analog carrier signals.
>>In addition,
>>this receiver is so sensitive and powerful that it can clearly pick up
>>AM carrier waves as weak as 10-to-the-power-NEGATIVE-10,000
>>watt-per-meter-squared.
> <Sigh>

> What is the energy of ONE 2GHz photon?

> Free clue: Planck says "E = h.v" ;

> h is Planck's constant (IIRC ~ 6.6E-34 Js)
> v (Greek letter nu) is frequency, in Hz, i.e. 2E9 here

> How does the resultant photon energy, in Joules,
> compare to your imagined
> intensity of (2^-10000) Wm^-2 ? How many 2GHz photons are you going to
> get per square metre per second at that ridiculously low intensity?
> Do you really think there'll be enough photons to carry any useful
> (e.g. audio frequency) signal?

> Hmm; (2^-10000) Wm^-2 ~= 5E-3011 Wm^-2 = 5E-3011 Js^-1m^-2

> E = h.v ~= 6.6E-34 * 2E9 ~= 1.32E-24 J per 2GHz photon

> I guess you could expect an average of 1 photon per m^2 moseying
> on by about
> every 2.64E2986 seconds.

> So far, the universe is estimated at 13.7E9 years
> ~= 86400 * 365.25 * 13.7E9 seconds
> ~= 4.32E17 seconds.

> For all intents and purposes, at that intensity, at 2GHz, there ARE NO

> PHOTONS to detect - unless you wanna wait about a fucktillion universe-lifetimes for each photon - time that you don't have.

> Let me put that simply:

> THERE IS NO 2GHz SIGNAL AT (2^-10000) Wm^-2.

Okay. So 10-to-the-power-NEGATIVE-10,000 watt-per-meter-squared is so low it�s impossible.

What is the minimum watts-per-meter-squared I need to receive if I want audio?

No offense but please respond with reasonable answers & keep out the jokes, off-topic nonsense, taunts, insults, and trivializations. I am really interested in this.

Thanks,

Radium

P.S. What is the minimum watts-per-meter-squared I need to receive if I want audio?

What is the minimum watts-per-meter-squared I need to receive if I want audio?

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X-Google-Thread: f74ae,5b97a494ef50b361
X-Google-Thread: fdc67,5b97a494ef50b361
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X-Google-Thread: 10b271,5b97a494ef50b361
X-Google-Attributes: gid113975,gidf74ae,gidfdc67,gid10e8ad,gid10b271,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!postnews.google.com!i38g2000prf.googlegroups.com!not-for-
mail
From:  Eric Gisse <jowr.pi@gmail.com>
Newsgroups:
sci.astro.amateur,sci.astro,alt.astronomy,rec.radio.amateur.space,sci.physics
Subject: Re: Would someone please respond with reasonable answers? [was Re: What
is the minimum watts-per-meter-squared I need to receive if I want audio?]
Date: Fri, 12 Oct 2007 02:15:40 -0000
Organization: http://groups.google.com
Lines: 10
Message-ID: <1192155340.427232.253650@i38g2000prf.googlegroups.com>
References: <470ecce3$0$24300$4c368faf@roadrunner.com>
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X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Fri, 12 Oct 2007 02:15:41 +0000 (UTC)
In-Reply-To: <470ecce3$0$24300$4c368faf@roadrunner.com>
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Gecko/20070914 Firefox/2.0.0.7,gzip(gfe),gzip(gfe)
Complaints-To: groups-abuse@google.com
Injection-Info: i38g2000prf.googlegroups.com; posting-host=137.229.59.0;
   posting-account=ps2QrAMAAAA6_jCuRt2JEIpn5Otqf_w0
Xref: g2news2.google.com sci.astro.amateur:12792 sci.astro:15795
alt.astronomy:20683 rec.radio.amateur.space:252 sci.physics:59415
```

On Oct 11, 5:35 pm, "Green Xenon [Radium]" <gluceg...@excite.com>
wrote:
[snip idiocy]

SHUT UP.

Everything you ask is fantastically, impossibly, incomprehensibly stupid. That you have been doing it for so long is equally indescribably stupid.

```
From -5942243555742049911
X-Google-Thread: 113975,5b97a494ef50b361
X-Google-Thread: f74ae,5b97a494ef50b361
X-Google-Thread: fdc67,5b97a494ef50b361
X-Google-Thread: 10e8ad,5b97a494ef50b361
X-Google-Thread: 10cf28,5b97a494ef50b361
X-Google-Thread: 10b271,5b97a494ef50b361
X-Google-Attributes:
gid113975,gidf74ae,gidfdc67,gid10e8ad,gid10cf28,gid10b271,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news3.google.com!fu-berlin.de!uni-berlin.de!
individual.net!not-for-mail
From: John <zen@zen.co.uk>
Newsgroups:
sci.astro.amateur,sci.astro,alt.astronomy,rec.radio.amateur.space,uk.sci.astronomy
,sci.physics
Subject: Re: Would someone please respond with reasonable answers? [was Re:
 What   is the minimum watts-per-meter-squared I need to receive if I want
 audio?]
Date: Fri, 12 Oct 2007 10:31:41 +0100
Lines: 3
Message-ID: <5n8t7rFh0f5hU1@mid.individual.net>
References: <470ecce3$0$24300$4c368faf@roadrunner.com>
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Content-Transfer-Encoding: 7bit
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Cancel-Lock: sha1:RamsQRoD5851wUV3RTESHQvB8xA=
User-Agent: Mozilla/5.0 (Windows; U; Windows NT 5.1; en-GB; rv:1.8.1.6) Gecko/
20070802 SeaMonkey/1.1.4
In-Reply-To: <470ecce3$0$24300$4c368faf@roadrunner.com>
Xref: g2news2.google.com sci.astro.amateur:12801 sci.astro:15819
alt.astronomy:20702 rec.radio.amateur.space:253 uk.sci.astronomy:2021
sci.physics:59488

Welcome to my kill file asshole.

John.


From -7224931980826644730
X-Google-Thread: 113975,3126d2cacaf60a83
X-Google-Thread: f74ae,3126d2cacaf60a83
X-Google-Thread: fdc67,3126d2cacaf60a83
X-Google-Thread: 10e8ad,3126d2cacaf60a83
X-Google-Thread: 10cf28,3126d2cacaf60a83
X-Google-Thread: 10b271,3126d2cacaf60a83
X-Google-Attributes:
gid113975,gidf74ae,gidfdc67,gid10e8ad,gid10cf28,gid10b271,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news3.google.com!feeder1-2.proxad.net!proxad.net!
feeder1-1.proxad.net!club-internet.fr!feedme-small.clubint.net!news.astraweb.com!
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border1.a.newsrouter.astraweb.com!border2.nntp.ams.giganews.com!nntp.giganews.com!
sn-xt-ams-06!sn-xt-ams-04!sn-ams!sn-feed-ams-03!sn-post-ams-02!sn-post-sjc-01!
supernews.com!corp.supernews.com!not-for-mail
From: Mark McIntyre <markmcintyre@spamcop.net>
Newsgroups:
sci.astro.amateur,sci.astro,alt.astronomy,rec.radio.amateur.space,uk.sci.astronomy
,sci.physics
Subject: Re: What is the minimum watts-per-meter-squared I need to receive if I
want audio?
Date: Fri, 12 Oct 2007 17:41:43 +0100
Organization: Posted via Supernews, http://www.supernews.com
Message-ID: <5t8vg354snrefhe3294tnvag9pgcv8ntg9@4ax.com>
References: <470ea6e8$0$20559$4c368faf@roadrunner.com>
X-Newsreader: Forte Agent 4.2/32.1117
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
X-Complaints-To: abuse@supernews.com
Lines: 32
Xref: g2news2.google.com sci.astro.amateur:12812 sci.astro:15850
alt.astronomy:20741 rec.radio.amateur.space:254 uk.sci.astronomy:2026
sci.physics:59588

On Thu, 11 Oct 2007 15:53:58 -0700, in uk.sci.astronomy , "Green Xenon
[Radium]" <glucegen1@excite.com> wrote:

>On Oct 9, 12:22 pm, "Fleetie" <flee...@fleetie.demon.co.uk> wrote in
>
> > Radium, why do you have this tendency to use such enormous
> > exponents in  your questions?
>
>I tend to be interested in -- and obsessed with -- the occult and extreme.

Fleetie, suggest you read my sig...

--


                                ______________________
                    /|  /|     |                      |
                    ||__||     |    Please do not     |
                   /   O O\__  |   feed the           |
                  /          \ |     Trolls           |
                 /      \     \|______________________|
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             /       \|_|_|/   |     _||
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From -4586743997927909764
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X-Google-Thread: 10e8ad,5b97a494ef50b361
X-Google-Thread: 10cf28,5b97a494ef50b361
X-Google-Thread: 10b271,5b97a494ef50b361
X-Google-Attributes:
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newsfeed.berkeley.edu!ucberkeley!sn-xt-sjc-03!sn-xt-sjc-09!sn-post-sjc-01!
supernews.com!corp.supernews.com!not-for-mail
From: Mark McIntyre <markmcintyre@spamcop.net>
Newsgroups:
sci.astro.amateur,sci.astro,alt.astronomy,rec.radio.amateur.space,uk.sci.astronomy
,sci.physics
Subject: Re: Would someone please respond with reasonable answers? [was Re: What
is the minimum watts-per-meter-squared I need to receive if I want audio?]
Date: Fri, 12 Oct 2007 17:45:25 +0100
Organization: Posted via Supernews, http://www.supernews.com
Message-ID: <f29vg3hifrqk3csevdv9eeji86dluij72t@4ax.com>
References: <470ecce3$0$24300$4c368faf@roadrunner.com>
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Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
X-Complaints-To: abuse@supernews.com
Lines: 22
Xref: g2news2.google.com sci.astro.amateur:12813 sci.astro:15852
alt.astronomy:20742 rec.radio.amateur.space:255 uk.sci.astronomy:2027
sci.physics:59590
```

On Thu, 11 Oct 2007 18:35:57 -0700, in uk.sci.astronomy , "Green Xenon
[Radium]" <glucegen1@excite.com> wrote:

>Hi:

Hi to you too. Can you PLEASE fix your quote structure, you're
inserting a blank space before the ">" which is not a valid quote
marker.

>I started a new thread because in
>http://groups.google.com/group/rec.radio.amateur.space/browse_frm/thread/
3126d2cacaf60a83/
>OT content was added.

Life's like that.

>What is the minimum watts-per-meter-squared I need to receive if I want
>audio?

But posting the same questoin a zillion times is merely trolling.

plonk
--
Mark McIntyre

```
From 2251675253138988139
X-Google-Thread: 111d0a,3eb203c491b8f147,start
X-Google-Thread: 10e8ad,3eb203c491b8f147,start
X-Google-Thread: fcc6e,3eb203c491b8f147,start
X-Google-Thread: 10b271,3eb203c491b8f147,start
X-Google-Thread: 107e5d,3eb203c491b8f147,start
X-Google-Thread: 1038c2,3eb203c491b8f147,start
X-Google-Thread: 1110fe,3eb203c491b8f147,start
X-Google-Thread: f9bb5,3eb203c491b8f147,start
X-Google-Thread: 10d137,3eb203c491b8f147,start
X-Google-Attributes:
gid111d0a,gid10e8ad,gidfcc6e,gid10b271,gid107e5d,gid1038c2,gid1110fe,gidf9bb5,gid1
0d137,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news1.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!local01.nntp.dca.giganews.com!news.giganews.com.POSTED!not-for-
mail
NNTP-Posting-Date: Fri, 12 Oct 2007 16:27:35 -0500
Date: Fri, 12 Oct 2007 17:27:35 -0400
From: "R.H. Allen" <kkarie@hotmail.com>
User-Agent: Mozilla/5.0 (Windows; U; Windows NT 5.1; en-US; rv:1.8.1.6) Gecko/
20070728 Thunderbird/2.0.0.6 Mnenhy/0.7.5.0
MIME-Version: 1.0
Newsgroups:
sci.electronics.basics,rec.radio.amateur.space,rec.radio.amateur.antenna,sci.physi
cs,sci.energy,alt.sci.physics.new-
theories,sci.physics.electromag,sci.optics,alt.engineering.electrical
Subject: Re: How many watts-per-meter-squared is 1-photon-per-second if the
 photon is a 2 GHz radio wave?
References: <470fd2b1$0$24339$4c368faf@roadrunner.com>
In-Reply-To: <470fd2b1$0$24339$4c368faf@roadrunner.com>
Content-Type: text/plain; charset=ISO-8859-1; format=flowed
Content-Transfer-Encoding: 7bit
Message-ID: <8cydnQuQrcxae5LanZ2dnUVZ_oytnZ2d@giganews.com>
Lines: 9
X-Usenet-Provider: http://www.giganews.com
X-Trace: sv3-5UERc/A0Nzc6CkL+ib67J3pme1uUakzySmjGQmCCi/d/
RdLQG5I5UXTM4b6qWaEavTPj2jJGjQTMK4L!H9Cb7C1s+/
XCObUsowed4CUpoa+70bC75Cvvul42L85DdN6j185EXfePz9fQS6JZJDzUV/g8wA==
X-Complaints-To: abuse@giganews.com
X-DMCA-Notifications: http://www.giganews.com/info/dmca.html
X-Abuse-and-DMCA-Info: Please be sure to forward a copy of ALL headers
X-Abuse-and-DMCA-Info: Otherwise we will be unable to process your complaint
```

```
properly
X-Postfilter: 1.3.35
Xref: g2news2.google.com sci.electronics.basics:10714 rec.radio.amateur.space:256
rec.radio.amateur.antenna:6575 sci.physics:59663 sci.energy:7282
alt.sci.physics.new-theories:1909 sci.physics.electromag:2053 sci.optics:1901
alt.engineering.electrical:5233
```

Green Xenon [Radium] wrote:
> Hi:
>
> How many watts-per-meter-squared is 1-photon-per-second if the photon is
> a 2 GHz radio wave?

Assuming you mean 1 photon per second per square meter, that's 1.3 yW/m^2 (that's 1.3 yoctowatts per square meter, or 1.3e-24 watts per square meter).

```
From 6658081784353528910
X-Google-Thread: 113975,3126d2cacaf60a83
X-Google-Thread: f74ae,3126d2cacaf60a83
X-Google-Thread: fdc67,3126d2cacaf60a83
X-Google-Thread: 10e8ad,3126d2cacaf60a83
X-Google-Thread: 10cf28,3126d2cacaf60a83
X-Google-Thread: 10b271,3126d2cacaf60a83
X-Google-Attributes:
gid113975,gidf74ae,gidfdc67,gid10e8ad,gid10cf28,gid10b271,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news1.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!local01.nntp.dca.giganews.com!nntp.comcast.com!
news.comcast.com.POSTED!not-for-mail
NNTP-Posting-Date: Fri, 12 Oct 2007 19:30:38 -0500
From: "Colonel Jake" <SergeantYork@comcast.net>
Newsgroups:
sci.astro.amateur,sci.astro,alt.astronomy,rec.radio.amateur.space,uk.sci.astronomy
,sci.physics
References: <470ea6e8$0$20559$4c368faf@roadrunner.com>
<5t8vg354snrefhe3294tnvag9pgcv8ntg9@4ax.com>
Subject: Re: What is the minimum watts-per-meter-squared I need to receive if I
want audio?
Date: Fri, 12 Oct 2007 17:39:00 -0700
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1914
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1914
Message-ID: <pcidnemZL7kzjI3anZ2dnUVZ_s2tnZ2d@comcast.com>
Lines: 41
X-Usenet-Provider: http://www.giganews.com
NNTP-Posting-Host: 67.168.115.70
X-Trace: sv3-
xlND0VW1rwzvvJx7igNh6YWUTWDx6jEOYUPPozM1vf+4wjraJoHa9PsGvVsEmydYfLW2UU5kDfNbVqm!
WfA1FletwP3RTOAuA4OjSXxnZSH09/uRMK4Jbe2nhjv+EBz30WlPLBvBh7yjQNJNQPDplnJ6VNcK!
g1VeR+jimMmEbXj+0WS22A1J76xj3g==
```

X-Complaints-To: abuse@comcast.net
X-DMCA-Complaints-To: dmca@comcast.net
X-Abuse-and-DMCA-Info: Please be sure to forward a copy of ALL headers
X-Abuse-and-DMCA-Info: Otherwise we will be unable to process your complaint properly
X-Postfilter: 1.3.35
Xref: g2news2.google.com sci.astro.amateur:12850 sci.astro:15893 alt.astronomy:20794 rec.radio.amateur.space:257 uk.sci.astronomy:2034 sci.physics:59706

```
"Mark McIntyre" <markmcintyre@spamcop.net> wrote in message
news:5t8vg354snrefhe3294tnvag9pgcv8ntg9@4ax.com...
: On Thu, 11 Oct 2007 15:53:58 -0700, in uk.sci.astronomy , "Green Xenon
: [Radium]" <glucegen1@excite.com> wrote:
:
: >On Oct 9, 12:22 pm, "Fleetie" <flee...@fleetie.demon.co.uk> wrote in
: >
: > > Radium, why do you have this tendency to use such enormous
: > > exponents in  your questions?
: >
: >I tend to be interested in -- and obsessed with -- the occult and
extreme.
:
: Fleetie, suggest you read my sig...
:
: --
:
:                                 _____________________
:                     /|  /|     |                     |
:                     ||__||     |    Please do not    |
:                    /   O O\__  |   feed the          |
:                   /          \ |     Trolls          |
:                  /      \     \|_____________________|
:                 /   _   \      \      ||
:                /    |\____\     \     ||
:               /     | | | |\____/     ||
:              /       \|_|_|/   |     _||
:             /  /  \            |____| ||
:            /   |   |           |      --|
:            |   |   |           |____  --|
:     * _    |  |_|_|_|          |     \-/
:  *-- _--\ _ \                  |      ||
:    /  _     \\        |        /      `
:  *  /   \_ /- |       |       |
:    *      ___ c_c_c_C/ \C_c_c_c____________
```

Thanks?,
"For the art!!!..."

```
From 4051319096684519702
X-Google-Thread: 113975,3126d2cacaf60a83
X-Google-Thread: f74ae,3126d2cacaf60a83
X-Google-Thread: 10e8ad,3126d2cacaf60a83
X-Google-Thread: 10cf28,3126d2cacaf60a83
X-Google-Thread: 10b271,3126d2cacaf60a83
X-Google-Thread: 109d8a,df807767e775e378,start
X-Google-Attributes:
gid113975,gidf74ae,gid10e8ad,gid10cf28,gid10b271,gid109d8a,public,usenet
X-Google-Language: ENGLISH,ASCII
Path: g2news2.google.com!news1.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!local01.nntp.dca.giganews.com!nntp.centurytel.net!
news.centurytel.net.POSTED!not-for-mail
NNTP-Posting-Date: Fri, 12 Oct 2007 19:39:59 -0500
From: "John \"C\"" <honestjohn@centurytel.net>
Newsgroups:
sci.astro.amateur,sci.astro,rec.radio.amateur.space,uk.sci.astronomy,sci.physics,s
ci.math
References: <470ea6e8$0$20559$4c368faf@roadrunner.com>
<5t8vg354snrefhe3294tnvag9pgcv8ntg9@4ax.com>
<pcidnemZL7kzjI3anZ2dnUVZ_s2tnZ2d@comcast.com>
Subject: Re: What is the minimum watts-per-meter-squared I need to receive if I
want audio?
Date: Fri, 12 Oct 2007 19:36:38 -0500
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1478
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1478
Message-ID: <V-ednT7Tp6tCjo3anZ2dnUVZ_rCtnZ2d@centurytel.net>
Lines: 32
X-Usenet-Provider: http://www.giganews.com
NNTP-Posting-Host: 75.120.145.217
X-Trace: sv3-idliarGXu/
CWYLtibcjafvfKPA8A6z2yMZO1AhY7QkmsLLMMIEFOs0f1cn0kFUJNr0Uvc81YKAV1wVy!
3xQZZB+NxcGgTV7gT+0cAiwKWSLrCyNQz0q1MYD1B/rOb+axunyoE8tGntZ6BwHU8lJasVA2BwXm!
ru6BLgEZK1pIwOo8TYxRuZ5yqsDiv01ZHtFgkI3t1Q==
X-Complaints-To: abuse@centurytel.net
X-DMCA-Complaints-To: abuse@centurytel.net
X-Abuse-and-DMCA-Info: Please be sure to forward a copy of ALL headers
X-Abuse-and-DMCA-Info: Otherwise we will be unable to process your complaint
properly
X-Postfilter: 1.3.36
Xref: g2news2.google.com sci.astro.amateur:12852 sci.astro:15894
rec.radio.amateur.space:258 uk.sci.astronomy:2035 sci.physics:59709 sci.math:53251
```

"Colonel Jake" <SergeantYork@comcast.net> wrote in message

```
>            *we will all kneel and blow and give head*
>
>
> [���xYx���]"All Hail Master Pink My Gay Lover"[���xYx���]
> [���xYx���]                                    [���xYx���]
> [���xYx���]    "Pinku-Sensei The Great Gay One"    [���xYx���]
> [���xYx���] "Goddess Kali Goddess Of Skank" [���xYx���]
> [���xYx���]                                   [���xYx���]
> [���xYx���]   "Our Divine Goddess Of Gays"   [���xYx���]
```

>I'm fuckin CrAzY!

We know Jakey Wakey as the following video shows:

http://www.jibjab.com/starring_you/receipt/1167521

We're laughing AT you not WITH you!

Number One
--
--
"Silly little awards"
                     - pinku-sen...@caballista.org

 "I don't like out-of-control kookologists; they make AUK look bad."
                      - pinku-sen...@caballista.org

```
From 8439960631725468804
X-Google-Thread: 10e8ad,7fc9d67931497b18,start
X-Google-Thread: 10b9c8,7fc9d67931497b18,start
X-Google-Attributes: gid10e8ad,gid10b9c8,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news2.google.com!newsfeed2.dallas1.level3.net!
news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-288 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Thu, 18 Oct 2007 17:01:04 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 1328
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <002f01c811c9$dc7c9530$6601a8c0@familyroom>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1192741264 19251 166.84.1.6 (18 Oct 2007 21:01:04 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Thu, 18 Oct 2007 21:01:04 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
```

X-RRI-Info-2: Send technical complaints to   rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Xref: g2news2.google.com rec.radio.amateur.space:259 rec.radio.info:313

This report is organized into FIVE parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites
Part 5 (S5) - deborbited/returned satellites

SB SAT @ AMSAT W8ISS ANS-288.S1
WSR 288 Part 1 10/15/2007

AMSAT NEWS SERVICE BULLETIN 288.S1 FROM AMSAT HQ
SILVER SPRING, MD, October 15, 2007
TO ALL RADIO AMATEURS
BID: $ANS-288.S1

VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.859330 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsat.in/hamsat.htm

```
To know what transponder is switched on please listen for the beacon
that is
active. Each transponder has a different beacon.
[06252007]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Software reload

Current Modes:   FM Repeater - V/u
                 BBS         - V/u
                 Telemetry   - off

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink:   145.880 MHZ FM
                       145.880 MHz USB
                       145.920 MHz FM
                      1268.700 MHz FM 67Hz PL tone
Digital Downlinks:     435.150 MHz FM 38k4 Digital, PBP, 1 watt output
                       435.150 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:        145.860 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      1268.700 mhz FM 9k6 PBP Digital
Beacon:                435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[10152007]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Current Mode: V/u
```

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer
   on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on
   and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10
   minute timer.
[05282007]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Operational - check operational schedule for current times!!

Current Mode: V/u

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage: http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's CW
telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts.htm
[0820007]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM
Downlink: 436.795 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[08202007]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational depending on amount of Sunlight

Current Mode: Listen before transmitting

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/

AO-7 Usage Guidelines on the AO-7 Log and Resource Site located at:
http://www.planetemily.com/ao7
[05282007]

=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational - APRS and BBS

Current Mode: V/v

Expedition 15 crew:
Commander: Fyodor Yurchikhin   RN3FI
Flight Engineer: Clayton C. Anderson   KD5PLA
Flight Engineer: Oleg Kotov

Expedition 16 crew:
Commander: Peggy Whitson
Flight Engineer: Yuri Malenchenko   RK3DUP
Flight Participant: Sheikh Muszaphar Shukor 9W2MUS

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM
Worldwide packet downlink: 145.825 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS
                     RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line is

NOT translated from Russian and posted.
[10152007]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-288.S2
WSR 288 Part 2 10/15/2007

AMSAT NEWS SERVICE BULLETIN 288.S2 FROM AMSAT HQ
SILVER SPRING, MD, October 15, 2007
TO ALL RADIO AMATEURS
BID: $ANS-288.S2

CAPE1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.

[07302007]
=====
LIBERTAD-1
Catalog Number: 31129
Launch Date: April 17,2007

Status: Operational?

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

APRS
Uplink: 145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[08132007]
=====
CP3
Catalog Number: 31128
Launch Date: April 17,2007

Status: Operational

```
Current Mode:  /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[07302007]
=====
CP4
Catalog Number: 31122
Launch Date: April 17,2007

Status: Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon:    437.325 MHz CW
[07302007]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: In Orbit

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder:  145.825 Mhz FM
[02052007]
=====
NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: In Orbit

Current Mode: /u

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[02262007]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM APRS AX25
```

```
[07302007]
=====
GENESAT-1 ?O-??
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Current Mode: /u

Telemetry Beacon Downlink: 437.0670 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[01082007]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon:             437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
[03262007]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launched: June 30, 2003

Status: Operational

Current Mode: /u

Beacon:     436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[01082007]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launched: February 21, 2006
```

```
Status: Semi-Operational - Constant Carrier only

Uplink:  1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan ? )

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[01082007]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW
[08132007]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Software reload

Current Mode(s): FM Repeater - V/u
                 BBS         - V/u
                 Telemetry   - off

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink:   145.880 MHZ FM
                       145.880 MHz USB
                       145.920 MHz FM
                      1268.700 MHz FM 67Hz PL tone
Digital Downlinks:     435.150 MHz FM 38k4 Digital, PBP, 1 watt output
                       435.150 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:        145.860 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      1268.700 mhz FM 9k6 PBP Digital
```

Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[10152007]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Hibernation until full sunlight in November

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[09242007]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: OPERATIONAL

Current Modes: V/U
               L/U

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks: 145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[09172007]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational.

Current Mode: /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon: 435.025 MHz - OFF
Mode-S Beacon: 2401.500 MHz - OFF

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Due to solar eclipses which will continue until late August 2007, the
beacon
will only transmit for about one orbit every 21 days. It is unlikely to
be
heard during this period.

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[07162007]
=====
RS-22 RADIO SPORT RS-22
Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only

Current Mode: /u

CW Beacon - 435.352 MHz
            145.818 MHz
[08062007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational - APRS and BBS

Current Mode: V/v

Expedition 15 crew:
Commander: Fyodor Yurchikhin   RN3FI

Flight Engineer: Clayton C. Anderson   KD5PLA
Flight Engineer: Oleg Kotov

Expedition 16 crew:
Commander: Peggy Whitson
Flight Engineer: Yuri Malenchenko   RK3DUP
Flight Participant: Sheikh Muszaphar Shukor 9W2MUS

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM
Worldwide packet downlink: 145.825 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS
                     RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.
[10152007]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-288.S3
WSR 288 Part 3 10/15/2007

AMSAT NEWS SERVICE BULLETIN 288.S3 FROM AMSAT HQ
SILVER SPRING, MD, Ocober 15, 2007
TO ALL RADIO AMATEURS

```
BID: $ANS-288.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Non-Operational

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon:             437.2750 MHz CW

Callsign: JR8YJT
[10152007]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency:  437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink:        437.250 MHz FM 67Hz CTCSS
Voice Downlink:     2401.835 MHz FM
Packet Up/Downlink:  437.250 MHz 9k6 packet
Packet Downlink     2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non=Operational

Mode U Telemetry
```

Downlink: 437.5050 MHz 9600 AFSK
[08132007]

=====

AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]

=====

MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Non-Operational

Uplinks: 145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[007302007]

=====

NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,

```
call-
sign KE6QMD, as per the user service agreement located at the following
URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS:                SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink:   145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
V-band:   145.840 -  145.990 MHz CW/LSB
U-band:   435.550 -  435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks
---------
S2-band:  2401.225 -  2401.475 MHz CW/USB
```

K-band: 24048.010 - 24048.060 MHz CW/USB
Beacon: 2401.323 MHz
24048.035 MHz

P3-D Telemetry Beacons (IHU)

BEACON	General Beacon (GB)	Middle Beacon (MB)	Engineering Beacon (EB)
2 m	none	145.898 MHz	none
70cm	435.438 MHz	435.588 MHz	435.838 MHz
13cm(1)	2400.188 MHz	2400.338 MHz	2400.588 MHz
13cm(2)	2401.173 MHz	2401.323 MHz	2401.573 MHz
3cm	10450.975 MHz	10451.125 MHz	10451.375 MHz
1.5cm	24047.885 MHz	24048.035 MHz	24048.285 MHz

[007162007]

=====

OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]

=====

UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web site
at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]

=====

SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

```
Uplinks: Mode B Repeater:  145.825 MHz
Mode J Digipeater:         145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink:   145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Non-Operational
```

Current Mode: V/U
Digipeater - Authorized for APRS usage

Uplink: 145.900 MHz FM 1200-baud Manchester FSK
145.920 MHz FM 1200-baud Manchester FSK
145.940 MHz FM 1200-baud Manchester FSK
145.960 MHz FM 1200-baud Manchester FSK
Downlink: 437.026 MHz SSB 1200-baud PSK
Mode-S Beacon: 2401.1428 MHz

Mode and Antenna Polarization:
U: RC 437.050 MHz RHCP
PSK 437.025 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[10152007]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012006]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks: 145.875 MHz FM 1200-baud
145.900 MHz FM 1200-baud
145.925 MHz FM 1200-baud
145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

```
Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[012212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Operational
```

Uplink: 435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons: 435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink: 145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks: 145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplinks: 145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink: 437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[01222007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

```
Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
[05012006]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet: Non-Operational
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational
```

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon: 145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.8500 - 145.9000 MHz SSB/CW
Downlink 29.4000 - 29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink: 29.4500 - 29.5500 MHz SSB/CW
[01152007]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

```
Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon 1:  29.352 MHz (intermittent)
Beacon 2:  29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink:     21.260 to 21.300 MHz CW/USB
Downlink:  145.860 to 145.900 MHz CW/USB

Beacon:    145.860 MHz

Robot:     145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink:   21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon:   29.408 MHz

Robot:    29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-288.S4
```

WSR 288 Part 4 10/15/2007

AMSAT NEWS SERVICE BULLETIN 288.S4 FROM AMSAT HQ
SILVER SPRING, MD, October 15, 2007
TO ALL RADIO AMATEURS
BID: $ANS-288.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE PROPOSED FOR LAUNCH AT THIS TIME:

Phase 5a Mars Mission
Catalog Number:
Proposed Launch Date: 2009 or 2011

Status: Design Phase

For the latest project status update please visit the AMSAT-DL P5-A web page:
http://ticket-to-mars.org
[01222007]

=====
PHASE 3E AO-??
Catalog number:
Proposed Launch Date: Late 2007

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/
[01222007]

=====
Eagle AO-??
Catalog Number:
Proposed Launch Date: Early/Mid 2009

Status: Design Phase

For the latest project status updates please visit the AMSAT-NA webpage:
http://www.amsat.org
[01222007]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-288.S5
WSR 288 Part 5 10/15/2007

AMSAT NEWS SERVICE BULLETIN 288.S5 FROM AMSAT HQ
SILVER SPRING, MD, October 15, 2007
TO ALL RADIO AMATEURS
BID: $ANS-288.S5

THE FOLLOWING SATELLITES HAVE DE-ORBITED OR HAVE BEEN RETURNED TO THE

GROUND:

NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

```
Main Downlink:      145.825 Mhz FM APRS AX25
APRS Uplink:        145.825 MHz FM APRS AX25
Voice/PSK31 Uplink:  28.120 MHz
```

Packet to Voice ID: RAFT
[06112007]
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors

to AMSAT Project Funds, will be eligible to receive additional benefits.
Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

```
From -4218028739991319859
X-Google-Thread: 10e8ad,ec40c7ce983f6191,start
X-Google-Thread: 10b9c8,ec40c7ce983f6191,start
X-Google-Attributes: gid10e8ad,gid10b9c8,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news2.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx01.iad01.newshosting.com!newshosting.com!
198.186.194.251.MISMATCH!news-out.readnews.com!transit4.readnews.com!panix!
rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-287 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Thu, 18 Oct 2007 17:01:46 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 403
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <003001c811ca$16d56950$6601a8c0@familyroom>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;charset="iso-8859-1"
Content-Transfer-Encoding: quoted-printable
X-Trace: reader1.panix.com 1192741306 8362 166.84.1.6 (18 Oct 2007 21:01:46 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Thu, 18 Oct 2007 21:01:46 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
```

Xref: g2news2.google.com rec.radio.amateur.space:260 rec.radio.info:314

AMSAT NEWS SERVICE
ANS-287

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

******************* AMSAT 2007 Space Symposium *************************

The Wireless Association of South Hills Amateur Radio Club announces the 2007 AMSAT Space Symposium will be held at the Pittsburgh Airport Marriott Hotel on Friday, October 26 through Sunday, October 28, 2007. The AMSAT web team has posted informational pages on the AMSAT web site. You can find the announcement with many links at:
http://www.amsat.org/amsat-new/symposium/2007/index.php

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In this edition:
* Certificates for AO-51 Sputnik 50th Anniversary Special Event
* AO-51 temporarily off the air
* GO-32 mobile APRS access success
* Satellite Shorts From All Over
* ARISS Status - 08 October 2007

SB SAT @ AMSAT $ANS-287.01
Certificates for AO-51 Sputnik 50th Anniversary Special Event

AMSAT News Service Bulletin 287.01
From AMSAT HQ SILVER SPRING, MD.
October 14, 2007
To All RADIO AMATEURS
BID: $ANS-287.01

Kevin Schuchmann, WA6FWF, reports that he has started to receive the requests for certificates and is working on getting them out as fast as possible. The response has been great so far. People requesting a certificate should keep the following in mind:

1) this is not a small QSL card, it is a certificate that is 8.5" x 11", if you send a small envelope he will be forced to fold it.

2) make sure you have enough postage

3) if you want to make sure it does not get bent, include a card board backer or use a heavier envelope

4) do not include money or stamps, I appreciate the gesture but it is not necessary, donations can be sent to Martha directly

5) if you put "your" address up in the upper left coner as the return instead of Kevin's then in the event there is not enough postage it will be returned to the sender instead of Kevin for additional postage!!

Kevin observed that, "based on the fact that my mailbox was full and the postman had to leave more at the front door I might need the couple weeks we said it might take!"

[ANS thanks Kevin, WA6FWF, for the above information]

/EX

SB SAT @ AMSAT $ANS-287.02
AO-51 temporarily off the air

AMSAT News Service Bulletin 287.02
From AMSAT HQ SILVER SPRING, MD.
October 14, 2007
To All RADIO AMATEURS
BID: $ANS-287.02

At 1848Z over Europe on 11 October 2007, the software on AO-51 crashed, shutting down both transmitters. Subsequently the repeater and BBS will be down for several days while the command stations reload. Sorry for any inconvenience.

73, Drew KO4MA
AMSAT-NA Vice President of Operations

[ANS thanks Drew, KO4MA, for the above information]

/EX

SB SAT @ AMSAT $ANS-287.03
GO-32 mobile APRS access success

AMSAT News Service Bulletin 287.03
From AMSAT HQ SILVER SPRING, MD.
October 14, 2007
To All RADIO AMATEURS
BID: $ANS-287.03

Bob Bruninga, WB4APR reports receiving over 150 packets from GO32 in the mobile and gives the following report.

If you want to impress someone with handheld Satellite Communcications, just stand outside during the prime morning or evening pass of GO-32 with your D7 HT set for APRS 9600 baud receive on 435.230 (5 KHz high at the start of the pass) and watch the messages fly by... Switch to .225 and finally to .220 by the end for maximum packets.

Tonight I finally remembered to set my D700 in my van to the GO32 downlink. Was out doing honeydoos around 7:50 PM and heard a few squelch breaks. This would be the first evening pass. So that told me to be out 100 minutes later for the prime pass of the evening.

I was not disappointed! Received over 150 packes during the central 6 minutes of the pass. I was just making hash marks on the back of an envelope while watching the packets fly by on the front panel of the radio. I did tune 3 times for Doppler since I was just sitting there with nothing else to do.

This confirms that an unattended D700 or D7 hooked to a simple OMNI antnena (and short coax) can make an excellent APRS satellite gateway. With say a dozen of these across the USA, then the APRS-Internet system should get a solid downlink!

After the fact, I came in and looked at the pass on Instantrack. Here is the nitty-gritty showing the elevation angle versus number of packets received per minute.

TIME	EL	PACKETS
0933	30	18
0934	40	23
0935	46	36
0936	45	35
0937	36	24
0938	26	13

For an unattended ground station without Doppler tuning, my guess would be that this station would have received the center full 3 minutes of this 45 degree pass.

So, what is your handy D7 doing sitting on your shelf turned off? Hook it to a 19" vertical whip over a ground plane outside your window and contribute to the National GO-32 APRS downlink system!

I'll get someone to write a simple turn-key APRS IGate background application, so you don't have to hasssle with all the other APRS stuff if you dont want to. This way, you can just turn on the D7, hook it to a serial port, run this application in the background, and you too will be a contributor to the

solid APRS downlink from GO-32!

Oh, On the D700, I had pressed the PACKET MONITOR button so that I was seeing all GO-32 downlink packets on the front panel, not just the APRS ones. The D7 does not have the PMON button, so you will only see the APRS packets. But I

did receive the 3 APRS downlink bulletins perfectly many times, and every 30 seconds or so, I did receive the GO-32 TIME STATUS report on the front panel

of the radio.

So, even if you are not going to Igate, just hook that D7 to an outside 19" vertical whip (this serves as a 3/4 wave gain vertical on the 435 downlink) through a short coax (Antnena height does not matter, coax loss does!). You won't hear anything below 30 degrees anyway... And just leave the HT on all

the time tuned to 435.230. Every morning and every evening, you will receive GO-32 and any other APRS operators playing that evening.

When you hear good signals on 435.230, then 2 minutes later, switch to 435.225 and so on. When the pass is over, set your radio back to 435.230 for the next HIGH pass 12 hours or so later.

You can leaave this on all the time, since it will not wake you up. GO-32 PEAK passes are within an hour or so of 9 AM and PM local time (maybe an hour later after the change back to standard time)..

Thousands of AMSAT folks have these D7's, and I bet that 99% of them are not

in use most of the time. All we need are a dozen or so serving this space-diversity ground station function...

[ANS thanks Bob, WB4APR, for the above information]

/EX

SB SAT @ AMSAT $ANS-287.04
Satellite Shorts From All Over

AMSAT News Service Bulletin 287.04
From AMSAT HQ SILVER SPRING, MD.
October 14, 2007
To All RADIO AMATEURS
BID: $ANS-287.04

+ Henk, PA3GUO, one of the control operators for the ANDE satellite reminds amateurs that the packet-to-voice mode still remains available. A command from a ground station is required to enable this mode so Henk invites amateurs interested in experimenting to contact him by e-mail at pa3guo@amsat.org.

+ Drew, KO4MA, AMSAT VP of Operations reminds amateurs interested in experimenting with different modes on AO-51 to submit their request via e-mail to ao51-modes@amsat.org. One experimental mode under consideration includes a day dedicated for D-Star testing via AO-51.

+ Special Events Station GB5OSO, celebrating the 50th anniversary of the launch of Sputnik-1 has worked several stations through the SO50, VO52, AO51, AO27, and AO7 satellites. Robert, G8ATE reported a transatlantic contact between GB5OSO and Jim, VE1ZM on SO-50.

+ Earlier this year the Japanese Space Agency (JAXA) sponsored an activity to fly your name to the moon aboard its "KAGUYA" (SELENE) lunar probe. Selene has attained lunar orbit and JAXA reports that messages from 412,627 people around the world are now at the moon. For more information see: http://www.isas.ac.jp/e/snews/2007/1005.shtml

+ A video featuring the Amateur Radio Mars Orbiter P5-A has been put on the YouTube website. Details at http://www.uk.amsat.org/.

[ANS thanks everyone for the above information]

/EX

SB SAT @ AMSAT $ANS-287.05
ARISS Status - 08 October 2007

AMSAT News Service Bulletin 287.05
From AMSAT HQ SILVER SPRING, MD.
October 14, 2007
To All RADIO AMATEURS
BID: $ANS-287.05

1. Anamizu Contact Successful

On Saturday, October 6, students from seven elementary and junior high schools in Anamizu-town, Housu-gun Ishikawa, Japan gathered to ask Clay Anderson, KD5PLA, questions via an Amateur Radio on the International Space Station (ARISS) contact. Nearly six hundred students were expected to participate in this event and preparations leading up to and including the contact were to be covered by the media. More information will follow as it becomes available.

2. Boy Scouts Participate in ARISS Contact

Boy Scouts from the Prairielands Council who attended the Space Jamboree in Oakwood, Illinois, experienced a successful Amateur Radio on the International Space Station (ARISS) contact on Saturday, October 6 via the telebridge station VK4KHZ in Australia. All twenty questions which had been planned were asked and answered. Clay Anderson, KD5PLA, then answered an additional twelve for a total of 32 questions posed by thirteen of the scouts. Approximately 300 scouts, leaders, parents and one newspaper reporter attended the event. The audio was fed into the EchoLink AMSAT (101 377) and JK1ZRW (277 208) conference room servers, receiving 30 connections, including 4 repeater nodes, from 9 countries. Among those countries listening were Poland, Denmark, Ukraine, and Thailand. The audio was also fed into the IRLP Discovery Reflector 9010.

The Prairielands Council contact was the 38th contact made by the Expedition 15 crew members, tying Expedition 12 for the most contacts made during one increment.

3. Upcoming School Contacts

Malaysian space visitor Sheikh Shukor launched into space with Expedition 16 crew members on Wednesday, October 10. While onboard the ISS, Shukor plans to participate in the Amateur Radio on the International Space Station (ARISS) program. He has been scheduled for 5 contacts with Malaysian students. Each group of students will gather at the National Planetarium in Kuala Lumpur and will speak with Shukor, 9W2MUS, directly via 9M2RPN. The following contacts have been planned:

Malaysian Group of Schools #1, Sunday, October 14, 2007 at 17:17 UTC

Malaysian Group of Schools #2, Monday, October 15, 2007 at 16:06 UTC
Malaysian Group of Schools #3, Tuesday, October 16, 2007 at16:28 UTC.
Malaysian Group of Schools #4, Thursday, October 18, 2007 at 15:39 UTC
Malaysian Group of Schools #5, Saturday, October 20, 2007 at 14:50 UTC

4. ARRL Article on 2008 Spaceflight Participant Richard Garriott, KE5QNX

The American Radio Relay League (ARRL) ran a story on Richard Garriott,
KE5QNX, (son of Owen Garriott, W5LFL) who will be a spaceflight
participant
next year, launching to the ISS in October 2008. Garriott plans to make
Amateur Radio on the International Space Station (ARISS) contacts while
onboard the ISS. See:
http://www.arrl.org/news/stories/2007/10/03/100/?nc=1

[ANS thanks Carol, KB3LKI, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the
President's
Club. Members of the President's Club, as sustaining donors to AMSAT
Project
Funds, will be eligible to receive additional benefits. Application
forms
are
available from the AMSAT Office.

73,
This week's ANS Editor,
Lee McLamb, KU4OS

From 1895520231943301824
X-Google-Thread: 10e8ad,b3b9cc8a8989d25,start
X-Google-Attributes: gid10e8ad,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news2.google.com!border1.nntp.dca.giganews.com!
border2.nntp.dca.giganews.com!nntp.giganews.com!pd7cy1no!pd7cy2no!shaw.ca!
pd7urf2no.POSTED!53ab2750!not-for-mail
X-Trace-PostClient-IP: 68.146.68.231
Newsgroups: rec.radio.amateur.space
Subject: FT-8800R for working FM Sats ?
From: Whippersnapper <User@noserver.com>
Message-ID: <Xns99CD9EBF37232karter@64.59.135.159>
User-Agent: Xnews/5.04.25
Lines: 9
Date: Thu, 18 Oct 2007 21:36:21 GMT
NNTP-Posting-Host: 64.59.135.176
X-Complaints-To: abuse@shaw.ca

X-Trace: pd7urf2no 1192743381 64.59.135.176 (Thu, 18 Oct 2007 15:36:21 MDT)
NNTP-Posting-Date: Thu, 18 Oct 2007 15:36:21 MDT
Organization: Shaw Residential Internet
Xref: g2news2.google.com rec.radio.amateur.space:261
X-Original-Bytes: 967

Thinking of picking up one of these to dabble with satellites (FM);
probably with a preamp for 70cm.

Can anyone recommend this unit for such use ? Can anyone point out any
reason why this would be a particularly BAD choice (other than it's not
multimode) ?

Thanks.

From -6540179760088238l5
X-Google-Thread: 10e8ad,b2f06acfc41c9a5f,start
X-Google-Attributes: gid10e8ad,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Subject: ISS QSO land mobile
From: "Dan Yemiola AI8O" <Dan@Yemiola.Net>
Date: Sun, 21 Oct 2007 11:57:36 -0400
Message-ID: <fffsqj$idu$1@news04.infoave.net>
Lines: 4
NNTP-Posting-Host: dial-59.r07.scchfd.infoave.net
Organization: Info Avenue Internet Services, LLC
Path: g2news2.google.com!news2.google.com!border1.nntp.dca.giganews.com!nntp.giganews.com!news-out.spamkiller.net!sp12lax.superfeed.net!news-in.newsfeeds.com!news.infoave.net!not-for-mail
Newsgroups: rec.radio.amateur.space
X-Trace: news04.infoave.net 1192982163 18878 207.144.28.189 (21 Oct 2007 15:56:03 GMT)
X-Complaints-To: abuse@infoave.net
NNTP-Posting-Date: Sun, 21 Oct 2007 15:56:03 +0000 (UTC)
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.3138
X-RFC2646: Format=Flowed; Original
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.3198
Xref: g2news2.google.com rec.radio.amateur.space:262
X-Original-Bytes: 869

Has anyone ever had a QSO with the ISS while the earth station was land
mobile vehicle?

From -4022859413143661574
X-Google-Thread: 10e8ad,ea5fe0f0f0c25e26,start
X-Google-Attributes: gid10e8ad,public,usenet

X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news3.google.com!proxad.net!feeder1-2.proxad.net!213.200.89.82.MISMATCH!tiscali!newsfeed1.ip.tiscali.net!newsfeed00.sul.t-online.de!newsfeed01.sul.t-online.de!t-online.de!newsfeed.velia.net!newsfeed.vmunix.org!peer-uk.news.demon.net!kibo.news.demon.net!news.demon.co.uk!demon!nospam.demon.co.uk!hils
From: Hils <hils@nospam.demon.co.uk>
Newsgroups: rec.radio.amateur.space
Subject: RS-15 update
Date: Wed, 24 Oct 2007 00:27:20 +0100
Organization: is a symptom of an uncreative mind
Lines: 13
Message-ID: <fNfnkzJYNoHHFw96@newearth.demon.co.uk>
NNTP-Posting-Host: newearth.demon.co.uk
Mime-Version: 1.0
Content-Type: text/plain;charset=us-ascii;format=flowed
X-Trace: news.demon.co.uk 1193182565 11498 193.237.117.162 (23 Oct 2007 23:36:05 GMT)
X-Complaints-To: abuse@demon.net
NNTP-Posting-Date: Tue, 23 Oct 2007 23:36:05 +0000 (UTC)
User-Agent: Turnpike/6.05-S (<mh2xuSgjjipWTkZ3G9mZ3heFDr>)
Xref: g2news2.google.com rec.radio.amateur.space:263

RS-15 will be in continuous sunlight from October 24 to November 25. If it continues the pattern of recent behaviour, it should be audible most passes during this period, between 29.3522 and 29.2533MHz. During the most recent eclipse season, the beacon frequency fell to 29.3517MHz, consistent with my earlier hypothesis that the frequency varies with the amount of solar energy reaching the satellite, and (with earlier observations) further suggesting that the influence of solar energy (via spacecraft temperature) takes place over a long period.

There is no sign of the transponder coming back to life.

--
Hil

From -2683624514626512329
X-Google-Thread: 10e8ad,b2f06acfc41c9a5f
X-Google-Attributes: gid10e8ad,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!postnews.google.com!y27g2000pre.googlegroups.com!not-for-mail
From: bradvk2qq <google@vk2qq.com>
Newsgroups: rec.radio.amateur.space
Subject: Re: ISS QSO land mobile
Date: Wed, 24 Oct 2007 01:24:19 -0700
Organization: http://groups.google.com
Lines: 6
Message-ID: <1193214259.262817.162160@y27g2000pre.googlegroups.com>
References: <fffsqj$idu$1@news04.infoave.net>
NNTP-Posting-Host: 220.233.10.63

```
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"
X-Trace: posting.google.com 1193214266 2636 127.0.0.1 (24 Oct 2007 08:24:26 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Wed, 24 Oct 2007 08:24:26 +0000 (UTC)
In-Reply-To: <fffsqj$idu$1@news04.infoave.net>
User-Agent: G2/1.0
X-HTTP-UserAgent: Mozilla/4.0 (compatible; MSIE 7.0; Windows NT 5.1;
bgft),gzip(gfe),gzip(gfe)
Complaints-To: groups-abuse@google.com
Injection-Info: y27g2000pre.googlegroups.com; posting-host=220.233.10.63;
   posting-account=ps2QrAMAAAA6_jCuRt2JEIpn5Otqf_w0
Xref: g2news2.google.com rec.radio.amateur.space:264

On Oct 22, 1:57 am, "Dan Yemiola AI8O" <D...@Yemiola.Net> wrote:
> Has anyone ever had a QSO with the ISS while the earth station was land
> mobile vehicle?

Yep.




From 7687927851602519209
X-Google-Thread: 10e8ad,73f0cafcea3df50,start
X-Google-Thread: 10b9c8,73f0cafcea3df50,start
X-Google-Attributes: gid10e8ad,gid10b9c8,public,usenet
X-Google-Language: ENGLISH,ASCII
Path: g2news2.google.com!news2.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx01.iad01.newshosting.com!newshosting.com!
198.186.194.251.MISMATCH!news-out.readnews.com!transit4.readnews.com!panix!
rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-294 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Wed, 24 Oct 2007 09:10:46 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 299
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <001301c8163d$9b0c4d70$6601a8c0@familyroom>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix2.panix.com
Mime-Version: 1.0
Content-Type: text/plain;charset="iso-8859-1"
Content-Transfer-Encoding: quoted-printable
X-Trace: reader1.panix.com 1193231446 19616 166.84.1.2 (24 Oct 2007 13:10:46 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Wed, 24 Oct 2007 13:10:46 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
```

article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Xref: g2news2.google.com rec.radio.amateur.space:265 rec.radio.info:319

AMSAT NEWS SERVICE
ANS-294

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ans-editor@amsat.org

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http://www.amsat.org/amsat-new/symposium/2007/index.php

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In this edition:
* AMSAT-NA Space Symposium Begins This Week
* Talk-in for the Symposium
* Echolink to be activated during AMSAT Symposium
* AMSAT Awards
* Donate to AMSAT via MissionFish
* AO-51 Software Crash - Reload/Reboot in Progress
* AMSAT Symposium Proclamations

SB SAT @ AMSAT $ANS-294.01
AMSAT-NA Space Symposium Begins This Week

AMSAT News Service Bulletin 294.01
From AMSAT HQ SILVER SPRING, MD.
October 21, 2007
To All RADIO AMATEURS
BID: $ANS-294.01

The AMSAT-NA 2007 Space Symposium will begin this week! The AMSAT

Board of Director's meeting on Thursday, October 25 kicks off the event. Symposium activities begin on Friday, October, 26. Amateur Radio Satellite Operators will find the AMSAT Space Symposium to be an exciting and rewarding event-filled weekend. Here are some of the features and events to look forward to:

- AMSAT-NA Annual General Meeting
- AMSAT-NA Board of Directors Meeting
- AMSAT Directors and Officers will be available to answer your questions
- AMSAT Annual Banquet with Keynote Speaker
- Technical forums focusing on the latest planning and technology of Amateur Radio in Space
- All Papers and Presentations will be published in the Symposium Proceedings for all registered attendees
- Technical demonstrations of prototype flight hardware and software for AMSAT Eagle - the next generation in space
- Discussions and demonstrations of SuitSat-2, ARISS, solid state RF power amp, antennas, AO-51
- Update on AMSAT's new Maryland Lab
- AMSAT Area Coordinators' Breakfast and Meeting on Sunday Morning
- IARU Satellite Forum
- President's Club Reception
- Satellite Beginner's Session: Introduction to Satellites
- An operating satellite station capable of working AO-7, FO-29, AO-27, SO-50, AO-51 and VO-52
- N2SPI satellite antenna demonstrations and antenna construction with students
- Meet and greet old friends and make new friends
- Enjoy eyeball QSOs with satellite designers, builders, and operators from around the world
- Sunday afternoon tour to the WPXI-DT Digital Studio

The AMSAT Software Defined Transponder Team is working toward having an operational VHF - UHF transponder available for the entire weekend. Eagle Project Team members will be available to answer your questions and provide demonstrations.

AMSAT-DL Vice-President and Board member Hartmut P�sler, DL1YDD will give a presentation about the current status of the P3-E project and P5-A.

The full Symposium schedule has been posted on the web pages.

New to the Symposium this year is a selection of apparel that may be ordered. We have Symposium themed golf shirts, tee shirts, key rings ball caps. A percentage of these sales will go to Eagle.

For those people who would rather not register for the Meeting through the AMSAT store, you can register via phone by calling 301-589-6062.

[ANS thanks 2007 AMSAT Space Symposium Co-chairs Kevin N3HKQ, and Pat KC4WTT for the above information]

/EX

SB SAT @ AMSAT $ANS-294.02
Talk-in for the Symposium

AMSAT News Service Bulletin 294.02
From AMSAT HQ SILVER SPRING, MD.
October 21, 2007
To All RADIO AMATEURS
BID: $ANS-294.02

All:
Bottom line:

Talk-in for Symposium will be on 146.955/146.355 or 443.65/448.65 repeaters. (out/in) BOTH repeaters REQUIRE 131.8Hz CTCSS.

The 443.65 has very good coverage (3 remote receivers and 250 W tx) in areas where the 2m is "marginal". If not making UHF, user should try VHF.

73,
Jim
wb4gcs@amsat.org

[ANS thanks Jim, WB4GCS, for the above information]

/EX

SB SAT @ AMSAT $ANS-294.03
EchoLink to be activated during the AMSAT Symposium

AMSAT News Service Bulletin 294.03
From AMSAT HQ SILVER SPRING, MD.
October 21, 2007
To All RADIO AMATEURS
BID: $ANS-294.03

During the AMSAT open meeting portion of the Symposium, Echo-Link will be activated so people from around the globe can check in and join the meeting's discussion. What follows is an instruction set to enable you to use this feature. See the echolink website for further clarification.

>> Here's the instructions as best I can write based on just doing it.
>> Feel free to contact someone more familiar with echolink --
>> I'm a rare user.
>>
>> 1. Download and install the echolink client from echolink.org
>> 2. Launch it.

>> 3. First time users must provide some info and allow a few days for
>> authentication as a valid ham.
>> 4. Select explorer view
>> 5. select Node Types
>> 6. Select Conferences
>> 7. View AMSAT and double click.
>> 8. You will either connect or time out.
>> 9. If you time out, accept the "learn more" option to learn how to
>> connect either through a proxy or configure your router to allow the
>> ports needed by echolink.
>>
>> 73,
>> Jim
>> wb4gcs@amsat.org

[ANS thanks Jim, WB4GCS, for the above information]

/EX

SB SAT @ AMSAT $ANS-294.04
AMSAT Awards

AMSAT News Service Bulletin 294.04
From AMSAT HQ SILVER SPRING, MD.
October 21, 2007
To All RADIO AMATEURS
BID: $ANS-294.04

Awards this week are:
We would like to welcome the following to the satellite community.
They have made their first satellite contact and are now members of the
AMSAT Satellite Communicators Club.
John Marranca, Jr., KB2HSH

South Africa AMSAT Communication Achievement Award
Fernando Martins, CT2ISG, #US114

To see all the awards visit http://www.amsat.org or
http://www.amsatnet.com

-- Bruce Paige, KK5DO AMSAT Director Contests and Awards ARRL Awards
Manager (WAS, 5BWAS, VUCC), VE Houston AMSAT Net - Wed 0100z on W0KIE
Intelsat Americas, T1, 6.2/6.8Mhz Also streaming MP3 at
http://www.amsatnet.com Latest satellite news on the ARRL Audio News
http://www.arrl.org

[ANS thanks Bruce, KK5DO for the above information]

/EX

SB SAT @ AMSAT $ANS-294.05

Donate to AMSAT via MissionFish

AMSAT News Service Bulletin 294.05
From AMSAT HQ SILVER SPRING, MD.
October 21, 2007
To All RADIO AMATEURS
BID: $ANS-294.05

For all of you that sell your goodies on eBay, wether it is ham radio related or not, you can donate a portion of your sale automatically to AMSAT through MissionFish.

To do this, when you list your item for sale, there is a tab that pops up on the �How you�re selling� screen for Online Auction or Fixed Price. Within those tabs, there is a blue and yellow ribbon with �Donate a percentage of sale.� After selecting AMSAT as your nonprofit organization, pick a percentage of the selling price to go to the AMSAT. That�s all you have to do.

When the auction is over, you give your donation to MissionFish or do nothing and MissionFish will deduct it from your credit card. In turn, MissionFish, will deposit the funds into AMSAT�s bank account.

This is an ideal way to donate a little bit or a big bit to AMSAT every time you auction something. You do not need to be a member of AMSAT to donate money through eBay�s online auctions. So, ask your non-ham friends if they would donate a little to AMSAT every time they auction something on eBay.

To see how MissionFish works, go to http://www.missionfish.org.

[ANS thanks Bruce, KK5DO for the above information]

/EX

SB SAT @ AMSAT $ANS-294.06
AO-51 Software Crash - Reload/Reboot in Progress

AMSAT News Service Bulletin 294.06
From AMSAT HQ SILVER SPRING, MD.
October 21, 2007
To All RADIO AMATEURS
BID: $ANS-294.06
AO-51 Software Crash - Reload/Reboot in Progress

Drew, KO4MA AMSAT-NA Vice President of Operations reported that at 1848Z on OCtober 11 the software on AO-51 crashed and shut down both transmitters. The repeater and BBS have been down for several days while the command stations reload and restart the software.

On October 17, Drew reported on progress by the AO-51 Operations Team, "We are making good progress in reloading the software necessary to run AO-51, although it was a bit of a rocky start. The control stations hope to have AO-51 reloaded by the weekend of October 20-21. As we reload and restart operations on the satellite we will be able to better predict its return to service."

Interested stations can use their TlmEcho software to watch progress on the 435.150 MHz downlink. This downlink may only be on over the Southeastern US depending on how far along the reloading has proceeded.

[ANS thanks Drew, KO4MA for the above information]

/EX

SB SAT @ AMSAT $ANS-294.07
AMSAT-NA Space Symposium Begins This Week

AMSAT News Service Bulletin 294.07
From AMSAT HQ SILVER SPRING, MD.
October 21, 2007
To All RADIO AMATEURS
BID: $ANS-294.07

Proclamations from the Allegheny County Executive and Pennsylvania Governor recognizing that AMSAT is holding the Symposium in Pittsburgh can be found at the Website (www.amsat.org) since space is limited here.

[ANS thanks Kevin Smith for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Dee Interdonato, NB2F

From 2085642777460925280
X-Google-Thread: 10e8ad,8e3872c678162c27,start
X-Google-Thread: 10b9c8,8e3872c678162c27,start
X-Google-Attributes: gid10e8ad,gid10b9c8,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news1.google.com!newsfeed2.dallas1.level3.net!news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info

Subject: WSR-295 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Thu, 25 Oct 2007 00:00:33 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 1310
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <002e01c816bb$9060fd70$6601a8c0@familyroom>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix2.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1193284833 25325 166.84.1.2 (25 Oct 2007 04:00:33 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Thu, 25 Oct 2007 04:00:33 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to   rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to   rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Xref: g2news2.google.com rec.radio.amateur.space:266 rec.radio.info:320

This report is organized into FIVE parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites
Part 5 (S5) - deborbited/returned satellites

SB SAT @ AMSAT W8ISS ANS-295.S1
WSR 295 Part 1 10/22/2007

AMSAT NEWS SERVICE BULLETIN 295.S1 FROM AMSAT HQ
SILVER SPRING, MD, October 22, 2007
TO ALL RADIO AMATEURS
BID: $ANS-295.S1

VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:

Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.859330 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsat.in/hamsat.htm

To know what transponder is switched on please listen for the beacon that is active. Each transponder has a different beacon.
[06252007]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

```
Current Modes:   FM Repeater - V/u
                 BBS         - L/u
                 Telemetry   -  /u

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink:   145.880 MHZ FM
                       145.880 MHz USB
                       145.920 MHz FM
                      1268.700 MHz FM 67Hz PL tone
Digital Downlinks:     435.150 MHz FM 38k4 Digital, PBP, 1 watt output
                       435.150 MHz FM 9k6 Digital, Pacsat Broadcast Protocol
                      2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:        145.860 MHz FM 9k6 Digital, Pacsat Broadcast Protocol
                      1268.700 mhz FM 9k6 PBP Digital
Beacon:                435.150 MHz
```

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP

L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[10222007]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer
   on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on
   and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10
   minute timer.
[05282007]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Operational - check operational schedule for current times!!

Current Mode: V/u

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage: http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's CW
telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts.htm
[0820007]

=====

AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM
Downlink: 436.795 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[08202007]

=====

AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational depending on amount of Sunlight

Current Mode: Listen before transmitting

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B

Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/

AO-7 Usage Guidelines on the AO-7 Log and Resource Site located at:
http://www.planetemily.com/ao7
[05282007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational - APRS and BBS

Current Mode: V/v

Expedition 16 crew:
Commander: Peggy Whitson
Flight Engineer: Yuri Malenchenko   RK3DUP
Flight Engineer: Clayton C. Anderson   KD5PLA

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM
Worldwide packet downlink: 145.825 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS
                     RZ3DZR

```
USA:                  NA1SS
Packet Mailbox:       RS0ISS-11
Packet Keyboard:      RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.
[10222007]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-295.S2
WSR 295 Part 2 10/22/2007

AMSAT NEWS SERVICE BULLETIN 295.S2 FROM AMSAT HQ
SILVER SPRING, MD, October 15, 2007
TO ALL RADIO AMATEURS
BID: $ANS-295.S2

CAPE1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode:  /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon:    435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.

[07302007]
=====
CP3
Catalog Number: 31128
Launch Date: April 17,2007

Status: Operational

Current Mode:  /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[07302007]
=====
CP4
Catalog Number: 31122
Launch Date: April 17,2007

Status: Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon:    437.325 MHz CW
[07302007]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: In Orbit

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder:  145.825 Mhz FM
[02052007]
=====
NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Operational

Current Mode: /u

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[10222007]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[07302007]
=====
GENESAT-1 ?O-??
Catalog Number: 29655
Launch Date: December 16, 2006
```

```
Status: Operational

Current Mode: /u

Telemetry Beacon Downlink: 437.0670 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[01082007]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon:             437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
[03262007]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launched: June 30, 2003

Status: Operational

Current Mode: /u

Beacon:     436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[01082007]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launched: February 21, 2006

Status: Semi-Operational - Constant Carrier only

Uplink:  1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan ? )
```

```
Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[01082007]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW
[08132007]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Mode(s): FM Repeater - V/u
                 BBS         - L/u
                 Telemetry   -  /u

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink:   145.880 MHZ FM
                       145.880 MHz USB
                       145.920 MHz FM
                      1268.700 MHz FM 67Hz PL tone
Digital Downlinks:     435.150 MHz FM 38k4 Digital, PBP, 1 watt output
                       435.150 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:        145.860 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      1268.700 mhz FM 9k6 PBP Digital
Beacon:                435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
```

```
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[10222007]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Hibernation until full sunlight in November

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink:        144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[09242007]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: OPERATIONAL

Current Modes: V/U
               L/U

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[09172007]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational.

Current Mode:  /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon:          435.025 MHz - OFF
Mode-S Beacon:     2401.500 MHz - OFF

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[010222007]
=====
RS-22 RADIO SPORT RS-22
Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only

Current Mode:  /u

CW Beacon - 435.352 MHz
            145.818 MHz
[08062007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational - APRS and BBS

Current Mode: V/v

Expedition 16 crew:
Commander:          Peggy Whitson
Flight Engineer:    Yuri Malenchenko      RK3DUP
Flight Engineer:    Clayton C. Anderson   KD5PLA

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink:   145.825 MHz FM
Worldwide packet downlink: 145.825 Mhz FM

Voice:
Region 1 voice uplink:   145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
```

Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS
                     RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.
[10222007]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-295.S3
WSR 295 Part 3 10/22/2007

AMSAT NEWS SERVICE BULLETIN 295.S3 FROM AMSAT HQ
SILVER SPRING, MD, Ocober 22, 2007
TO ALL RADIO AMATEURS
BID: $ANS-295.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Non-Operational

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon: 437.2750 MHz CW

Callsign: JR8YJT

```
[10152007]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency:  437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink:        437.250 MHz FM 67Hz CTCSS
Voice Downlink:     2401.835 MHz FM
Packet Up/Downlink:  437.250 MHz 9k6 packet
Packet Downlink     2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non=Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[08132007]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink:   435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
```

=====

MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Non-Operational

Uplinks: 145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[007302007]

=====

NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, callsign KE6QMD, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]

=====

SO-42 SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

```
Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink:   145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
V-band:   145.840 -  145.990 MHz CW/LSB
U-band:   435.550 -  435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks
---------
S2-band:  2401.225 -  2401.475 MHz CW/USB
K-band:  24048.010 - 24048.060 MHz CW/USB
Beacon:   2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)
----------------------------
BEACON   General Beacon (GB)    Middle Beacon (MB)    Engineering Beacon
(EB)
2 m       none                    145.898 MHz           none
70cm      435.438 MHz             435.588 MHz           435.838 MHz
13cm(1)  2400.188 MHz            2400.338 MHz          2400.588 MHz
13cm(2)  2401.173 MHz            2401.323 MHz          2401.573 MHz
3cm     10450.975 MHz           10451.125 MHz         10451.375 MHz
1.5cm   24047.885 MHz           24048.035 MHz         24048.285 MHz
[007162007]
=====
```

OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web site
at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink: 145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Non-Operational

Current Mode: V/U
              Digipeater - Authorized for APRS usage

Uplink: 145.900 MHz FM 1200-baud Manchester FSK
                145.920 MHz FM 1200-baud Manchester FSK
                145.940 MHz FM 1200-baud Manchester FSK
                145.960 MHz FM 1200-baud Manchester FSK
Downlink: 437.026 MHz SSB 1200-baud PSK
Mode-S Beacon: 2401.1428 MHz

Mode and Antenna Polarization:
U: RC 437.050 MHz RHCP
   PSK 437.025 MHz LHCP
V: Linear

```
Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[10152007]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign:       POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012006]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM
```

```
Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB
```

```
Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
LIBERTAD-1
Catalog Number: 31129
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink:   145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[10222007]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplinks:          145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink:      437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[01222007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990
```

```
Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
[05012006]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet: Non-Operational
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational
```

```
Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon:   145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink  29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
[01152007]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965
```

```
Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon 1:  29.352 MHz (intermittent)
Beacon 2:  29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink:     21.260 to 21.300 MHz CW/USB
Downlink:  145.860 to 145.900 MHz CW/USB

Beacon:    145.860 MHz

Robot:     145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink:   21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon:   29.408 MHz

Robot:    29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-295.S4
```

WSR 295 Part 4 10/22/2007

AMSAT NEWS SERVICE BULLETIN 295.S4 FROM AMSAT HQ
SILVER SPRING, MD, October 22, 2007
TO ALL RADIO AMATEURS
BID: $ANS-295.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE PROPOSED FOR LAUNCH AT THIS TIME:

Phase 5a Mars Mission
Catalog Number:
Proposed Launch Date: 2009 or 2011

Status: Design Phase

For the latest project status update please visit the AMSAT-DL P5-A web page:
http://ticket-to-mars.org
[01222007]
=====
PHASE 3E AO-??
Catalog number:
Proposed Launch Date: Late 2007

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/
[01222007]
=====
Eagle AO-??
Catalog Number:
Proposed Launch Date: Early/Mid 2009

Status: Design Phase

For the latest project status updates please visit the AMSAT-NA webpage:
http://www.amsat.org
[01222007]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-295.S5
WSR 295 Part 5 10/22/2007

AMSAT NEWS SERVICE BULLETIN 295.S5 FROM AMSAT HQ
SILVER SPRING, MD, October 22, 2007
TO ALL RADIO AMATEURS
BID: $ANS-295.S5

THE FOLLOWING SATELLITES HAVE DE-ORBITED OR HAVE BEEN RETURNED TO THE

GROUND:

NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

```
Main Downlink:      145.825 Mhz FM APRS AX25
APRS Uplink:        145.825 MHz FM APRS AX25
Voice/PSK31 Uplink:  28.120 MHz
```

Packet to Voice ID: RAFT
[06112007]
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

- AMSAT News Service (ANS)
- General satellite discussion (AMSAT-BB)
- Orbit data (KEPS)
- Manned space missions (SAREX)
- District of Columbia area (AMSAT-DC)
- New England area (AMSAT-NE)
- AMSAT Educational Liaison mailing list (AMSAT-EDU)
- AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors

to AMSAT Project Funds, will be eligible to receive additional benefits.
Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

```
From 6027905911250313602
X-Google-Thread: 10e8ad,af480a51108e17d,start
X-Google-Thread: 10b9c8,af480a51108e17d,start
X-Google-Attributes: gid10e8ad,gid10b9c8,public,usenet
X-Google-Language: ENGLISH,ASCII
Path: g2news2.google.com!news1.google.com!newsfeed2.dallas1.level3.net!
news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-301 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Mon, 29 Oct 2007 11:08:10 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 290
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000601c81a36$795a0d00$6601a8c0@familyroom>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;charset="iso-8859-1"
Content-Transfer-Encoding: quoted-printable
X-Trace: reader1.panix.com 1193670490 5783 166.84.1.6 (29 Oct 2007 15:08:10 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Mon, 29 Oct 2007 15:08:10 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Xref: g2news2.google.com rec.radio.amateur.space:267 rec.radio.info:323
```

AMSAT NEWS SERVICE
ANS-301

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:

* The Weekend That Changed Amateur Radio
* Congratulations and Applause for the Symposium Committee
* 2008 AMSAT Space Symposium to be Held in Atlanta
* OSCAR-11 Report
* Satellite Shorts From All Over
* ARISS Status Report For the Week of October 22, 2007

SB SAT @ AMSAT $ANS-301.01
The Weekend That Changed Amateur Radio

AMSAT News Service Bulletin 301.01
>From AMSAT HQ SILVER SPRING, MD.
October 28, 2007
To All RADIO AMATEURS
BID: $ANS-301.01

This past weekend, October 26-28 AMSAT-NA held a very successful Space Symposium in Pittsburgh, Pennsylvania.

Rick Hambly, W2GPS, AMSAT President along with Bob McGwier, N4HY, AMSAT Vice-President of Engineering were able to make public the results of their recent work which will change the face of amateur radio going forward. AMSAT has been in consultation with Intelsat regarding an application of an Intelsat platform carrying our amateur radio satelites

into geosynchronous orbit.

Engineering studies, funding studies, among other negotiations are continuing at this point. However Bob, N4HY made the following observation of the project AMSAT has termed Phase IV Lite, "There is enough in place at this time that AMSAT needs to begin planning engineering work and possible construction of a geosychronous payload so we are ready if Intelsat says they have a ride for us."

The Phase IV Lite Geosynchronous Payload is planned to consist of similar transponders already under development for the Phase 3 satellites. Accelerated development on the digital Advanced Communication Package is anticipated. In addition to the communication payload flown to space, AMSAT plans to develop an earth station attainable by the average ham so that users can immediately take advantage of the audio, digital messaging, and video services.

The Advanced Communication Package would be a self-contained earth station which could be sent with amateur radio communication teams or delivered to disaster areas for 24/7/365 emergency communications. These teams would be able to point a small dish at a predictable spot in the sky and immediately begin delivering disaster communication support without depending on HF propagation.

A Phase IV payload could also be used to provide TDRSS-like relay of ARISS communications. The 10 minute school contact could now be expanded to hours-long contact with the International Space Station. This opens possibilities for student involvement with experiments aboard the space station.

The Intelsat geosynchronous platform would be able to provide the AMSAT Phase IV Lite payload with approximately 400 watts of DC power for 15 years. The primary payload would also perform the GTO boost phase as well as perform station keeping and antenna pointing once it has arrived on station. Bob, N4HY summarized, "The Intelsat team would be doing all the things nearly impossible for amateurs and that enables AMSAT to do what we do best ... build a communication system that changes amateur radio for the better!"

More details will be published in upcoming editions of the AMSAT Journal.

[ANS thanks Rick, W2GPS and Bob, N4HY for the above information]

/EX

SB SAT @ AMSAT $ANS-301.02
Congratulations and Applause for the Symposium Committee

AMSAT News Service Bulletin 301.02
>From AMSAT HQ SILVER SPRING, MD.
October 28, 2007
To All RADIO AMATEURS
BID: $ANS-301.02

This weekend's AMSAT Space Symposium featured:
+ The AMSAT Annual Membership Meeting
+ Board of Directors meeting
+ Over 30 technical presentations
+ Discussion of the future of AMSAT and Amateur Radio in Space
+ Technical Demonstrations
+ Mentoring of students to build their own antenna and make their first satellite contact.

The Symposium was hosted by the Wireless Association of South Hills

Amateur Radio Club and area AMSAT members. The huge success of the Symposium was driven by co-chairs: Kevin Smith, N3HKQ and Pat Sanford, KC4WTT. A wonderfully capable team who ensured their success included:

Jim Sanford, WB4GCS
Dave DeMotte, N3IDH
Richard Crow, N2SPI (student mentoring a succesful satellite contact)
Bill Hill, W3WH (Master of Ceremonies)
Randy George, N3ZK
Robert Timmins, AB3ED
Paul Lusardi, N0VLR
Hank Marzina, KB3FNM
Mary Lou Marzina
Ed Oelschlager, N3ZNI
Jacqueline Gossedin, N3ZEL
Larry Conden, K3VX
Frank Bodro, N3FB
Dan Schultz, N8FGV
Dan McAnn, KB3HVN
Georgeianne Sarco, KB3LIV
Dave Kitzinger, N3DFK

Details and photos of the Symposium will be published in upcoming editions of The AMSAT Journal. Thank you for all your help!

[ANS thanks Martha at AMSAT HQ for the above information]

/EX

SB SAT @ AMSAT $ANS-301.03
2008 AMSAT Space Symposium to be Held in Atlanta

AMSAT News Service Bulletin 301.03
>From AMSAT HQ SILVER SPRING, MD.
October 28, 2007
To All RADIO AMATEURS
BID: $ANS-301.03

The AMSAT Board of Directors announced that the 2008 AMSAT Space Symposium will be held in the October timeframe in Atlanta, Georgia. This Symposium will be named the "2008 Harry Yoneda JA1ANG AMSAT Space Symposium" in memory and honor of JA1ANG - Silent Key.

Harry was a former AMSAT Board Member and close friend of many in the group. Harry also was a founding member of JAMSAT.

[ANS thanks Rick, W2GPS for the above information]

/EX

SB SAT @ AMSAT $ANS-301.04

OSCAR-11 Report

AMSAT News Service Bulletin 301.04
>From AMSAT HQ SILVER SPRING, MD.
October 28, 2007
To All RADIO AMATEURS
BID: $ANS-301.04

Clive, G3CWV says,"OSCAR-11 has been heard from 06 October to 08 October. The beacon switched on as expected, on 06 October, but prematurely switched OFF sometime between 08 and 09 October. Signals were weaker than usual. The premature shutdown has probably caused the watchdog timer to reset, and start a new 20 day cycle. If that has occurred then the beacon should resume transmissions around 29 October 2007."

Clive continued, "I am indebted to John N7ZL, John N3NKC, Thomas HB9SKA, and Peter ZL3TC, for their reports. Many thanks."

The satellite is now in continuous sunlight and this will continue until the start of November, when there will be a short eclipse season, lasting until around 07 January. However the maximum duration of the eclipses will only be about 12 minutes. At this level the satelite might just survive.

The active beacon frequency is VHF 145.826 MHz with AFSK FM ASCII Telemetry.

Listeners to OSCAR-11 may be interested in visiting Clive's website:
http://www.users.zetnet.co.uk/clivew/

[ANS thanks Clive, G3CWV for the above information]

/EX

SB SAT @ AMSAT $ANS-301.05
Title/Subject

AMSAT News Service Bulletin 301.05
>From AMSAT HQ SILVER SPRING, MD.
October 28, 2007
To All RADIO AMATEURS
BID: $ANS-301.05

+ Kevin, WA6FWF who processed the Sputnik Anniversary reception reports said, "I am pleased to report that the pile waiting to be processed is gone!!! If you requested a certificate and you do not receive it in a week or so then look my call up on QRZ.com and send me an email directly and I can check your call on my list to see if it was received and when it was sent."

+ Gould, WA4SXM, AO-51 Control Station reported on October 28, "We are continuing to work with AO-51 in reloading the files. The command stations are learning and documenting the process. We hope to have AO-51 operational before too long."

+ The Delfi-C3 team has received an official launch window from the Indian Space Research Organisation (ISRO) regarding the launch of PSLV-C9 which will carry Delfi-C3 into space. The window runs from the 7th of January to the 10th of January.

[ANS thanks everyone for the above information]

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SB SAT @ AMSAT $ANS-301.06
ARISS Status Report For the Week of October 22, 2007

AMSAT News Service Bulletin 301.06
>From AMSAT HQ SILVER SPRING, MD.
October 28, 2007
To All RADIO AMATEURS
BID: $ANS-301.06

1. Five Malaysian School Contacts Successful

Malaysian space visitor Dr. Sheikh Muszaphar Shukor, 9W2MUS, participated in the ARISS program while on board the ISS. Five different groups of Malaysian school children gathered at the National Planetarium in Kuala Lumpur and spoke with Shukor, direct via ground station 9M2RPN. All five of the successful contacts took place over the week of October 14. Former Shuttle astronaut, Robert "Hoot" Gibson attended the final ARISS event and also spoke to Shukor. Shukor returned to Earth on Sunday, October 21 with the Expedition 15 crew. The Star Online ran an article on the first contact with the Malaysian students. See:
http://thestar.com.my/news/story.asp?file=/2007/10/15/nation/19172923&sec=nation

2. School Contacts

The first ARISS contact of Expedition 16 was held on Tuesday, October 23 with students, ages 13 � 14, from Giosu� Carducci in Santa Marinella, Italy. Princess Elettra Marconi visits the school annually as it runs a program, �Guglielmo Marconi.� The program covers the research and experiments which were conducted by Marconi at the National Radioelectric Centre located in Santa Marinella.

3. ARISS International Team Teleconference Held

The monthly ARISS teleconference was held on Wednesday, October 17. Topics of discussion included the 2008 ARISS International Face to

Face meeting, the Columbus antennas and SuitSat-2. A new Canadian delegate was also announced. Meeting minutes have been posted.
See: http://www.rac.ca/ariss/arisstel2007-10-17.htm

4. ARISS Antennas on Columbus

A write up on the Columbus Module ARISS antennas has been posted to the ARISS-Europe Web site. Photos of the antennas and movie clips of their installation and inspection are also available. See:
http://www.ariss-eu.org/columbus.htm

[ANS thanks Carol, KB3LKI for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM

```
From -1619080835450832695
X-Google-Thread: 10e8ad,aebb282ecc271a29,start
X-Google-Thread: 10b9c8,aebb282ecc271a29,start
X-Google-Attributes: gid10e8ad,gid10b9c8,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news2.google.com!newshub.sdsu.edu!news-out.readnews.com!
news-xxxfer.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-302 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Thu, 1 Nov 2007 22:01:16 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 1330
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <003101c81cf4$4200b640$6601a8c0@familyroom>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix1.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1193968876 16 166.84.1.1 (2 Nov 2007 02:01:16 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Fri, 2 Nov 2007 02:01:16 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
```

X-RRI-Info-1: Send submissions to   rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to   rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Xref: g2news2.google.com rec.radio.amateur.space:268 rec.radio.info:326

This report is organized into FIVE parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites
Part 5 (S5) - deorbited/returned satellites

SB SAT @ AMSAT W8ISS ANS-302.S1
WSR 302 Part 1 10/29/2007

AMSAT NEWS SERVICE BULLETIN 302.S1 FROM AMSAT HQ
SILVER SPRING, MD, October 29, 2007
TO ALL RADIO AMATEURS
BID: $ANS-302.S1

VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.859330 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsat.in/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is
active. Each transponder has a different beacon.
[06252007]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

```
Current Modes:   FM Repeater - V/u
                 BBS         -  /u
                 Telemetry   -  /u

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink:   145.880 MHZ FM
                       145.880 MHz USB
                       145.920 MHz FM
                      1268.700 MHz FM 67Hz PL tone
Digital Downlinks:     435.150 MHz FM 38k4 Digital, PBP, 1 watt output
                       435.150 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:        145.860 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      1268.700 mhz FM 9k6 PBP Digital
Beacon:                435.150 MHz
```

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[10292007]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Current Mode: V/u

```
Uplink:   145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute
timer
   on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the
repeater on
   and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset
the 10
   minute timer.
[05282007]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Operational - check operational schedule for current times!!

Current Mode: V/u

Voice/CW Mode JA
Uplink:   145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon:   435.795 MHz

Digital Mode JD
Uplinks:  145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage: http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm
```

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts.htm
[0820007]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM
Downlink: 436.795 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[08202007]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational depending on amount of Sunlight

Current Mode: Listen before transmitting

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/

AO-7 Usage Guidelines on the AO-7 Log and Resource Site located at:
http://www.planetemily.com/ao7

[05282007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational - APRS and BBS

Current Mode: V/v

Expedition 16 crew:
Commander: Peggy Whitson
Flight Engineer: Yuri Malenchenko RK3DUP
Flight Engineer: Daniel M. Tani

STS-120 crew:
Commander: Pamela A. Melroy
Pilot: George D. Zamka
Mission Specialist: Scott E. Parazynski
Mission Specialist: Douglas H. Wheelock
Mission Specialist: Stephanie D. Wilson
Mission Specialist: Paolo A. Nespoli (ESA)
Mission Specialist: Clayton C. Anderson KD5PLA

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM
Worldwide packet downlink: 145.825 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS
RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss

ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.
[10292007]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-302.S2
WSR 302 Part 2 10/29/2007

AMSAT NEWS SERVICE BULLETIN 302.S2 FROM AMSAT HQ
SILVER SPRING, MD, October 29, 2007
TO ALL RADIO AMATEURS
BID: $ANS-302.S2

CAPE1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.

[07302007]
=====
CP3
Catalog Number: 31128
Launch Date: April 17,2007

Status: Operational

Current Mode: /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[07302007]
=====
CP4
Catalog Number: 31122
Launch Date: April 17,2007

Status: Operational

```
Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon:    437.325 MHz CW
[07302007]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: In Orbit

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder:  145.825 Mhz FM
[02052007]
=====
NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Operational

Current Mode: /u

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[10222007]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[07302007]
=====
GENESAT-1 ?O-??
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Current Mode: /u

Telemetry Beacon Downlink: 437.0670 MHz AFSK 1200 BPS
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Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[01082007]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon:             437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
[03262007]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launched: June 30, 2003

Status: Operational

Current Mode: /u

Beacon:     436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[01082007]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launched: February 21, 2006

Status: Semi-Operational - Constant Carrier only

Uplink:  1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan ? )

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
```

```
[01082007]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW
[08132007]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Mode(s): FM Repeater - V/u
                 BBS         -  /u
                 Telemetry   -  /u

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink:   145.880 MHZ FM
                       145.880 MHz USB
                       145.920 MHz FM
                      1268.700 MHz FM 67Hz PL tone
Digital Downlinks:     435.150 MHz FM 38k4 Digital, PBP, 1 watt output
                       435.150 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:        145.860 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      1268.700 mhz FM 9k6 PBP Digital
Beacon:                435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
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```
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[10292007]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Hibernation until full sunlight in November

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink:        144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[09242007]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Current Modes: V/U
               L/U

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[09172007]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational.
```

Current Mode: /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon: 435.025 MHz - OFF
Mode-S Beacon: 2401.500 MHz - OFF

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[010222007]
=====
RS-22 RADIO SPORT RS-22
Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only

Current Mode: /u

CW Beacon - 435.352 MHz
            145.818 MHz
[08062007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational - APRS and BBS

Current Mode: V/v

Expedition 16 crew:
Commander: Peggy Whitson
Flight Engineer: Yuri Malenchenko   RK3DUP
Flight Engineer: Daniel M. Tani

STS-120 crew:
Commander: Pamela A. Melroy
Pilot: George D. Zamka
Mission Specialist: Scott E. Parazynski
Mission Specialist: Douglas H. Wheelock
Mission Specialist: Stephanie D. Wilson
Mission Specialist: Paolo A. Nespoli (ESA)
Mission Specialist: Clayton C. Anderson   KD5PLA

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM
Worldwide packet downlink: 145.825 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS
RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line is
NOT translated from Russian and posted.
[10292007]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-302.S3
WSR 302 Part 3 10/29/2007

AMSAT NEWS SERVICE BULLETIN 302.S3 FROM AMSAT HQ
SILVER SPRING, MD, Ocober 29, 2007
TO ALL RADIO AMATEURS
BID: $ANS-302.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Non-Operational

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS

```
Beacon:             437.2750 MHz CW

Callsign: JR8YJT
[10152007]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency:  437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink:        437.250 MHz FM 67Hz CTCSS
Voice Downlink:     2401.835 MHz FM
Packet Up/Downlink:  437.250 MHz 9k6 packet
Packet Downlink     2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non=Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[08132007]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink:   435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS
```

Official webpage: http://amend.gmxhome.de
[01222007]

=====

MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Non-Operational

Uplinks: 145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[007302007]

=====

NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, callsign KE6QMD, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]

=====

SO-42 SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

```
Broadcast Callsign: SASAT2-11
BBS:                SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink:   145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
V-band:   145.840 -  145.990 MHz CW/LSB
U-band:   435.550 -  435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks
---------
S2-band:  2401.225 -  2401.475 MHz CW/USB
K-band:  24048.010 - 24048.060 MHz CW/USB
Beacon:   2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)
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```

BEACON	General Beacon (GB)	Middle Beacon (MB)	Engineering Beacon (EB)
2 m	none	145.898 MHz	none
70cm	435.438 MHz	435.588 MHz	435.838 MHz
13cm(1)	2400.188 MHz	2400.338 MHz	2400.588 MHz
13cm(2)	2401.173 MHz	2401.323 MHz	2401.573 MHz
3cm	10450.975 MHz	10451.125 MHz	10451.375 MHz

```
1.5cm   24047.885 MHz          24048.035 MHz         24048.285 MHz
[007162007]
=====
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink:    145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site
at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater:         436.250 MHz

Uplinks: Mode B Repeater:  145.825 MHz
Mode J Digipeater:         145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998
```

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink: 145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Non-Operational

Current Mode: V/U
Digipeater - Authorized for APRS usage

Uplink: 145.900 MHz FM 1200-baud Manchester FSK
145.920 MHz FM 1200-baud Manchester FSK
145.940 MHz FM 1200-baud Manchester FSK
145.960 MHz FM 1200-baud Manchester FSK
Downlink: 437.026 MHz SSB 1200-baud PSK
Mode-S Beacon: 2401.1428 MHz

Mode and Antenna Polarization:
U: RC 437.050 MHz RHCP

```
   PSK 437.025 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[10152007]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign:       POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012006]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational
```

```
Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25
```

Voice Transponder:
Uplink: 145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks: 145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
LIBERTAD-1
Catalog Number: 31129
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink: 145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[10222007]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplinks: 145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink: 437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[01222007]
=====

```
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
[05012006]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet: Non-Operational
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983
```

```
Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon:   145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink  29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
[01152007]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon 1:  29.352 MHz (intermittent)
Beacon 2:  29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink:     21.260 to 21.300 MHz CW/USB
Downlink:  145.860 to 145.900 MHz CW/USB

Beacon:    145.860 MHz

Robot:     145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink:   21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon:   29.408 MHz

Robot:    29.454 MHz
[05232004]
NNNN
```

/EX

SB SAT @ AMSAT W8ISS $ANS-2302.S4
WSR 302 Part 4 10/29/2007

AMSAT NEWS SERVICE BULLETIN 302.S4 FROM AMSAT HQ
SILVER SPRING, MD, October 29, 2007
TO ALL RADIO AMATEURS
BID: $ANS-302.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE PROPOSED FOR LAUNCH AT THIS TIME:

Phase 5a Mars Mission
Catalog Number:
Proposed Launch Date: 2009 or 2011

Status: Design Phase

For the latest project status update please visit the AMSAT-DL P5-A web page:
http://ticket-to-mars.org
[01222007]
=====
PHASE 3E AO-??
Catalog number:
Proposed Launch Date: Late 2007

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/
[01222007]
=====
Eagle AO-??
Catalog Number:
Proposed Launch Date: Early/Mid 2009

Status: Design Phase

For the latest project status updates please visit the AMSAT-NA webpage:
http://www.amsat.org
[01222007]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-302.S5
WSR 302 Part 5 10/29/2007

AMSAT NEWS SERVICE BULLETIN 302.S5 FROM AMSAT HQ
SILVER SPRING, MD, October 29, 2007
TO ALL RADIO AMATEURS

BID: $ANS-302.S5

THE FOLLOWING SATELLITES HAVE DE-ORBITED OR HAVE BEEN RETURNED TO THE GROUND:

NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink: 145.825 Mhz FM APRS AX25
APRS Uplink: 145.825 MHz FM APRS AX25
Voice/PSK31 Uplink: 28.120 MHz

Packet to Voice ID: RAFT
[06112007]
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

```
From 1725637840107522667
X-Google-Thread: 10e8ad,5d3d32504e220831,start
X-Google-Attributes: gid10e8ad,public,usenet
X-Google-Language: ENGLISH,ASCII
Path: g2news2.google.com!news2.google.com!news.glorb.com!nntpserver.com!
zeus.nntpserver.com!10.1.1.41.MISMATCH!pfilter-v0.1!not-for-mail
From: kb9rqz@hotmail.com
Newsgroups: rec.radio.amateur.space
Subject: Geo sat from Amsat?
Date: Fri, 02 Nov 2007 18:09:45 -0400
Message-ID: <o08ni39irqctls97cbqq67n30hulvvsdef@4ax.com>
X-Newsreader: Forte Free Agent 3.3/32.846
MIME-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 8bit
Lines: 93
NNTP-Posting-Date: 02 Nov 2007 21:19:08 GMT
X-Complaints-To: abuse@teranews.com
Xref: g2news2.google.com rec.radio.amateur.space:269
```

The following is a Q-S-T. AMSAT announces plans for a geosynchronous ham radio satellite, W-R-C 2007 opens in Geneva, D-Star comes to Germany and France and ham radio operators stand down as the California wildfires are contained. Find out the details on Amateur Radio Newsline� report number 1577 coming your way right now.

**

HAM RADIO IN SPACE: AMSAT SAYS HAM RADIO GEOSAT IN PLANNING

Its called Phase 4 Lite and it will likely change the face of ham radio forever. Amateur Radio Newsline's Bruce Tennant, K6PZW, has a peek at the future of a geosynchronous ham radio satellite in Earth orbit:

--

The weekend of October 26th to the 28th has likely changed the face of ham radio space operations. So say two leaders in the Amateur Radio space program speaking at the AMSAT-North America Space Symposium in Pittsburgh, Pennsylvania. That�s they announced that a first-ever geosynchronous ham radio satellite is now in its initial planning.

In satellite talk, geosynchronous means stationary in the sky. From the standpoint of a ground station user, it means always knowing where to point an antenna. No tracking and no guesswork.

At that gathering, AMSAT President Rick Hambly, W2GPS, and Vice-President of Engineering Bob McGwier,N4HY, announced that AMSAT has been in consultation with Intelsat. This, regarding an application of an Intelsat platform carrying amateur radio satellites into geosynchronous orbit.

The Phase IV Lite Geosynchronous Payload is planned to consist of similar transponders already under development for the Phase 3 satellites.   Accelerated development on the digital Advanced Communication Package is anticipated. The Intelsat geosynchronous platform would be able to provide the AMSAT Phase IV Lite payload with approximately 400 watts of DC power for 15 years.

In addition to the on-orbit payload AMSAT plans to develop an earth station attainable by the average ham so that users can immediately take advantage of the audio, digital messaging, and video services of the Phase IV bird. The Advanced Communication Package would be a self-contained earth station which could be sent with amateur radio communication teams or delivered to disaster areas to provide for 24 hour a day, 7 day a week and 3565 days a year emergency communications. These teams would be able to point a small dish at a predictable spot in the sky and immediately begin delivering disaster communication support without depending on the vagaries of High Frequency propagation.

But that�s not all. Hambly and Mc Gwier say that the Phase IV payload could also be used to provide a Tracking and Data Relay System Satellite -like relay of ARISS communications. The current 10 minute school contact could now be expanded to hours-long contact with the International Space Station. This opens possibilities for extended student involvement with experiments aboard the space station.

As the late Roy Neal, K6DUE, might have said: Truly a new world of Amateur Radio.

For the Amateur Radio Newsline I'm Bruce Tennant, K6PZW, in Los Angeles.

--

So when can we expect this new satellite to be on-orbit?, AMSAT says that engineering studies, funding studies, among other negotiations are continuing so no specific date can be set.   However Bob McGuier N4HY observes that the project is far enough along that AMSAT needs to begin planning engineering work and possible construction of such a geosynchronous payload so it is ready if Intelsat says they have a ride for it. (AMSAT-NA)

**

"one useless man is disgrace 2 become a law firm 3 or more become a congress"
adams

woger you are a Congress all in your own head

http://kb9rqz.bravejournal.com/
altopia is never used by KB9RQZ
nor is Konstans@hotmail.com ever udsed on the usenet from anywhere but google

posts from these sorucees are fakes
but till at least terranews is back running well I might use anyserver that comes to hand

and get ou the newly recovered KB9RQZ.blogspot.com as well

G

--
Posted via a free Usenet account from http://www.teranews.com

```
From -3449678858037252684
X-Google-Thread: 10e8ad,fda992b5690b2f4d,start
X-Google-Thread: 10b9c8,fda992b5690b2f4d,start
X-Google-Attributes: gid10e8ad,gid10b9c8,public,usenet
X-Google-Language: ENGLISH,ASCII
Path: g2news1.google.com!news1.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx01.iad01.newshosting.com!newshosting.com!
198.186.194.247.MISMATCH!news-out.readnews.com!news-xxxfer.readnews.com!panix!
rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-308 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sun, 4 Nov 2007 10:18:01 EST
Organization: The Radio Amateur Satellite Corporation
Lines: 280
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000401c81ef5$d527b830$6601a8c0@familyroom>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
```

Mime-Version: 1.0
Content-Type: text/plain;charset="iso-8859-1"
Content-Transfer-Encoding: quoted-printable
X-Trace: reader1.panix.com 1194189481 4592 166.84.1.6 (4 Nov 2007 15:18:01 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 4 Nov 2007 15:18:01 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to   rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to   rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Xref: g2news1.google.com rec.radio.amateur.space:1170 rec.radio.info:598

AMSAT NEWS SERVICE
ANS-308

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* Bob McGwier, N4HY, speaking at Texas Microwave Society Meeting
* PCSAT-1 recovery in work
* Over 300 QSOs for Sputnik Satellite Special Event Station
* SatPC32 ver 12.7 released
* ARISS Status - 29 October 2007

SB SAT @ AMSAT $ANS-308.01
Bob McGwier, N4HY, speaking at Texas Microwave Society Meeting

AMSAT News Service Bulletin 308.01
From AMSAT HQ SILVER SPRING, MD.
November 4, 2007
To All RADIO AMATEURS
BID: $ANS-308.01

Bob McGwier, N4HY, Vice President of Engineering for AMSAT, Software Expert, heavy contributor to Software Defined Radios, and all around entertaining speaker will be the guest speaker at the 10 Nov 2007 North Texas Microwave Society Meeting. This meeting will be held at the University of North Texas Student Union building in Denton, TX. People start gathering at 12:00 PM and the meeting starts at 1:00 PM.

With Bob's announcement of AMSAT's Phase 4 Lite project at the AMSAT Space Symposium last weekend, this should be a very interesting meeting. Bob is "up to speed" on all of AMSAT's projects and is deeply involved with Flex Radio and others in Software Defined Radios.

While this is the same day as the NCTECH Hamfest in Azle, TX, you can attend both if you play your cards right. Plan to join us for an informative meeting and help pass the word.

[ANS thanks Keith, W5IU, for the above information]

/EX

SB SAT @ AMSAT $ANS-308.02
PCSAT-1 recovery in work

AMSAT News Service Bulletin 308.02
From AMSAT HQ SILVER SPRING, MD.
November 4, 2007
To All RADIO AMATEURS
BID: $ANS-308.02

PCSAT-1 responded to all RESTORE commands on the 1320Z pass on 02 November 2007.

On the next pass (now in full sun), she remembered it all and was fully operational (though the transmitters were again cross connected meaning that relay had dropped out in the dark over Europe. But we set the relay again and she should be fine. PLEASE limit all operations to DAYLIGHT hours only, and PCSAT-1 should be good for the next few weeks. Also, on the same 145.825, you should also hear ANDE and ARISS. That's 18 passes a day!

RULE: If you see packets from both PCSAT-1 and PCSAT-11 on the same frequency, then STOP digipeating. The transmitters are cross connected and consuming TWICE the battery power (which we don't have). You can confirm what is happening prior to your pass by checking the packets on http://pcsat.aprs.org If you see packets from both the -1 and -11 callsign via the same satgates, then the transmitters are cross connected and should not be used. Also avoid any use after dark.

PCSAT-11 downlink is on 144.39 over North America so all mobiles on the normal APRS channel can be alerted when it is in view.

And full details on http://www.ew.usna.edu/~bruninga/pcsat.html

[ANS thanks Bob, WB4APR, for the above information]

/EX

SB SAT @ AMSAT $ANS-308.03
Over 300 QSOs for Sputnik Satellite Special Event Station

AMSAT News Service Bulletin 308.03
From AMSAT HQ SILVER SPRING, MD.
November 4, 2007
To All RADIO AMATEURS
BID: $ANS-308.03

Many thanks to all stations who managed to have a QSO with the sputnik special event Satellite station GB5OSO, well done! QSL cards have yet to come from the printers so it may be a while before they arrive.

The event went very well with 300+ QSO's in 33 DXCC countries on AO-7, AO-27, SO-51, AO-51 and VO-52, in all 170+ stations were logged many of whom were worked on more than one satellite and special thanks to the two stations who were worked on all 5 birds namely G1OCN and ON5NY. Also many thanks to JA0CAW and JH1EKH who were able to organise a connection via EchoLink to SO-50 and AO-51 whilst they were over Japan. There was also some activity on HF.

[ANS thanks Robert, G8ATE, for the above information]

/EX

SB SAT @ AMSAT $ANS-308.04
SatPC32 ver 12.7 released

AMSAT News Service Bulletin 308.04
From AMSAT HQ SILVER SPRING, MD.
November 4, 2007
To All RADIO AMATEURS

BID: $ANS-308.04

SatPC32 version 12.7 has been released by Erich Eichmann, DK1TB.

What's new in verions 12.7:

1. The program now comes with additional sets of 2D and 3D physical world maps. Via mouse click the user can switch between political and physical maps.

2. The political 2D world maps have been updated. Now they show the border lines of the successor states of the former Soviet Union and the former Yugoslavia.

3. The programs (SatPC32, SatPC32ISS and Wisat32) now support rotor steering with the Italian rotor system ProSistel.

4. The "Uplink Calibration" feature has been expanded. With previous versions this function could only be used with "normal" SSB satellites (SSB on Uplink and Downlink). Now it also works with mixed-mode satellites (Uplink: SSB, Downlink:FM). Sometimes AO-51 is using this mode.

   The "Uplink Calibration" function allows users to automatically calibrate the Uplink frequency for best audio pitch of their downlink signal and to save the change. With future program starts the user will then immediately hear his own downlink when he switches to that satellite, without the necessity to tune around and produce QRM.

   Important: With SSB/FM satellites the SatPC32 control "V" must be switched to "V+" before the "Uplink Calibration" function can be used.

5. The programs (SatPC32, SatPC32ISS,Wisat32) no longer use the IOPort.SYS driver for port access. This driver doesn't work on 64-bit systems. So, no special version of these programs is necessary for 64-bit systems.

   The driver was used to steer the German rotor interface IF-100. Since direct steering of this Interface by SatPC32 is no longer possible the update includes a little server program similar to the rotor driver files for the other interfaces and controllers supported by SatPC32. The new IF-100 server program is only functional with 32-bit systems. The other rotor interfaces and controllers - except the FodTrack interface and the KCT-Tracker - are supported with 32-bit and 64-bit systems.

6. Some minor improvements have been made with SatPC32ISS, WinAOS and WinListen.

[ANS thanks Alan, WA4SCA, for the above information]

/EX

SB SAT @ AMSAT $ANS-308.05
ARISS Status - 29 October 2007

AMSAT News Service Bulletin 308.05
From AMSAT HQ SILVER SPRING, MD.
November 4, 2007
To All RADIO AMATEURS
BID: $ANS-308.05

1. Giosu� Carducci Contact, a Success

The first Amateur Radio on the International Space Station (ARISS) contact of Expedition 16 took place on Tuesday, October 23. Seventeen students from Giosu� Carducci in Santa Marinella, Italy asked one question each of Clay Anderson, KD5PLA as an audience of approximately 265 students, guests and reporters gathered for the event. The audio from this contact was fed into the EchoLink AMSAT (101 377) and JK1ZRW (277 208) servers and received 22 connections, of which 3 were repeater nodes, from 6 countries. The audio was also fed into the Internet Radio Linking Project (IRLP) Discovery Reflector 9010. Two television stations, two radio stations and all local newspapers covered the event. A write up with photos and audio may be found on the ARISS-Europe Web site. See:
http://www.ariss-eu.org/2007_10_24.htm

3. AMSAT-NA Space Symposium

The 2007 Radio Amateur Satellite Corporation (AMSAT) Annual Meeting and Space Symposium was held Friday � Sunday, October 26 -28 in Pittsburgh, Pennsylvania. Four presentations were given covering the Amateur Radio on the International Space Station (ARISS) program. The ARISS contact with the Arnold Palmer Hospital for Children, the SuitSat-2 project status, human spaceflight, and the long term impact of the SAREX and ARISS programs were all presented.

4. Space Jamboree Article and Update

A local newspaper, The Fountain County Neighbor, ran an article on the
October
6 Boy Scouts of America Space Jamboree held at Camp Robert Drake in
Oakwood,
Illinois. The Scouts participated in a NASA Mission to Mars Expedition
through
a Digital Learning Lab and approximately 400 witnessed an Amateur Radio
on
the International Space Station (ARISS) contact. Over one hundred scouts

earned their Radio Merit Badges during the event.

[ANS thanks Carol, KB3LKI, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the
President's
Club. Members of the President's Club, as sustaining donors to AMSAT
Project
Funds, will be eligible to receive additional benefits. Application
forms
are
available from the AMSAT Office.

73,
This week's ANS Editor,
Lee McLamb, KU4OS

From 2527780732104114538
X-Google-Thread: 10e8ad,d44026fb9dd1e100,start
X-Google-Thread: 113975,d44026fb9dd1e100,start
X-Google-Attributes: gid10e8ad,gid113975,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news4.google.com!newshub.sdsu.edu!
newscon04.news.prodigy.net!prodigy.net!news.astraweb.com!router1.astraweb.com!not-for-mail
From: Chris Steyaert <observations@rmob.org>
Newsgroups: rec.radio.amateur.space,sci.astro.amateur
Subject: Radio Meteor Obs. Bull. October 2007 Orionids
Date: Thu, 08 Nov 2007 19:52:49 +0100
Message-ID: <gmm6j35puan8pjhd5cf05gjmrrojcrcrp4@4ax.com>
X-Newsreader: Forte Agent 1.93/32.576 English (American)
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Lines: 17
Organization: Unlimited download news at news.astraweb.com
NNTP-Posting-Host: a7e1cd79.news.astraweb.com
X-Trace: DXC=14i@0ik1I;@c_WgCkn9MLEL?0kYOcDh@JSG][8Q9:9=B4RA2[T<]RQAG?
ifhhgG3CAC0`;bAoYNkAPjgSjZFRVgB
Xref: g2news1.google.com rec.radio.amateur.space:1171 sci.astro.amateur:93351

Radio Meteor Observation Bulletin No. 171 of October 2007 (62 K) is available now as

http://visualrmob.free.fr/rmobtext/rmob0710.txt

More information and the visual presentation of the hourly forward scatter counts can be found on

http://www.rmob.org

http://radio.data.free.fr

Chris

From -1410229428293116843
X-Google-Thread: 10e8ad,cbcfbd9aa4adc406,start
X-Google-Thread: 10dc19,cbcfbd9aa4adc406,start
X-Google-Thread: 111e7d,cbcfbd9aa4adc406,start
X-Google-Attributes: gid10e8ad,gid10dc19,gid111e7d,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news4.google.com!out04a.usenetserver.com!
news.usenetserver.com!in04.usenetserver.com!news.usenetserver.com!
nx01.iad01.newshosting.com!newshosting.com!post01.iad01!news.suddenlink.net!not-for-mail
From: E. U. Bardo, RN <ppearson@spamcop.net>
Message-ID: <58WxfzRiZIWtHteAp1Pv3c4k@plain.org.co>
Newsgroups:
rec.radio.amateur.space,alt.pl.chakeurs,eunet.jobs,alt.h2pcr2me.entrepreneurs
Subject: Haji al Makhoul should overcome her below the prospect
Date: Fri, 8 Nov 2007 21:38:08 GMT
Organization: Lionel's imagination
Followup-To: news.admin.net-abuse.policy
User-Agent: slrn/0.9.8.1pl1 (Debian)
Lines: 64
NNTP-Posting-Host: 74.195.33.146
X-Complaints-To: abuse@suddenlink.net
Xref: g2news1.google.com rec.radio.amateur.space:1172 alt.pl.chakeurs:15
eunet.jobs:93

Reply by email, filling out this form and emailing it to me.
Trimming off the rest of this post is unnecessary.

I will guarantee anonymity except in cases of blatant abuse.
I will achieve anonymity by tallying the results in uncorrelated tabulations and then deleting the emails.
(I know this loses interesting correlation data, but if resondents want anonymity it's hard to avoid.)
I know that this anonymity promise depends on trust and that you have no particular reason to trust me. Someday, I hope.
I will post results Saturday.

xxxxxxxx beginning of survey xxxxxxxx

yes( )   ( )no Should RoadRunner be subjected to some kind of UDP?
yes( )   ( )no ... active UDP (cancels) ?
yes( )   ( )no ... passive UDP (drop messages) ?
yes( )   ( )no ... all-groups UDP? (as opposed to specific groups)
yes( )   ( )no Are you a Usenet sysadmin? How big:_   How long:_
yes( )   ( )no Should another server be subjected to UDP? Who:_
yes( )   ( )no Should UDPs be used more often?
yes( )   ( )no Should UDPs be used less often?
yes( )   ( )no Would you have answered this survey without anonymity?

xxxxxxxx end of survey xxxxxxxx

--
immense effort
I rose to my knees, wavered and tottered, and fell prone again. As if I were lifting the whole weight of the world I rose shakily to my feet.

From the house came a woman running, saying, "Oh, what have you done now? You should come in and lie down." She looked at me and a startled expression came upon her face, and for a moment I thought she was going to scream in hysteria. She controlled herself, and put an arm round my shoulders and helped me across the grass. Over a little gravel path, up one stone step, and through a wooden doorway and into a small hallway. From thence it was difficult indeed, for there were many stairs to climb and I was as yet very uncertain and clumsy in my movements.

The house really consisted of two flats and the one which I was to occupy was the upper. It seemed so strange, entering an English home in this manner, climbing up the somewhat steep stairs, hanging on to the rail to prevent myself from falling over backwards. My limbs felt rubbery, as if I lacked full control over them-as indeed was the case, for to gain complete mastery of this strange new body took some days. The two lamas hovered round, showing considerable concern, but of course there was nothing they

could do. Soon they left me, promising to return in the small hours of the night.

Slowly I entered the bedroom which was mine, stumbling like a sleepwalker, jerking like a mechanical man. Gratefully I toppled over on to the bed. At least, I consoled myself, I cannot fall down now! My windows looked out on to both the front and the back of the house. By turning my head to the right I could gaze across the small front garden, on

---

```
From -2890536536468900893
X-Google-Thread: 108122,a6c92dac12494cde,start
X-Google-Thread: 10e8ad,a6c92dac12494cde,start
X-Google-Attributes: gid108122,gid10e8ad,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news4.google.com!out01b.usenetserver.com!
news.usenetserver.com!in04.usenetserver.com!news.usenetserver.com!
nx01.iad01.newshosting.com!newshosting.com!post01.iad01!news.suddenlink.net!not-
for-mail
From: Private Evan U. Petrash, C.S.C. <ppearson@spamcop.net>
Message-ID: <3zKG1KpbarqnXY4CUSBsBK@legend.edu>
Newsgroups:
rec.radio.amateur.equipment,msen.reuters.advisory,alt.christnet.eucharist.eat-
me,rec.radio.amateur.space
Subject: Saad Haji Bin Zamid should rely her no doubt the candle
Date: Fri, 8 Nov 2007 20:23:02 GMT
Organization: Jeremy's decree
Followup-To: news.admin.net-abuse.policy
User-Agent: slrn/0.9.8.1pl1 (Debian)
Lines: 51
NNTP-Posting-Host: 74.195.33.146
X-Complaints-To: abuse@suddenlink.net
Xref: g2news1.google.com rec.radio.amateur.equipment:13184
rec.radio.amateur.space:1173
```

Reply by email, filling out this form and emailing it to me.
Trimming off the rest of this post is unnecessary.

I will guarantee anonymity except in cases of blatant abuse.
I will achieve anonymity by tallying the results in
uncorrelated tabulations and then deleting the emails.
(I know this loses interesting correlation data, but if
resondents want anonymity it's hard to avoid.)
I know that this anonymity promise depends on trust and that
you have no particular reason to trust me. Someday, I hope.
I will post results Saturday.

```
 xxxxxxxx  beginning of survey  xxxxxxxx

 yes( )   ( )no Should RoadRunner be subjected to some kind of UDP?
 yes( )   ( )no ... active UDP (cancels) ?
 yes( )   ( )no ... passive UDP (drop messages) ?
 yes( )   ( )no ... all-groups UDP? (as opposed to specific groups)
 yes( )   ( )no Are you a Usenet sysadmin? How big:_   How long:_
 yes( )   ( )no Should another server be subjected to UDP? Who:_
 yes( )   ( )no Should UDPs be used more often?
 yes( )   ( )no Should UDPs be used less often?
 yes( )   ( )no Would you have answered this survey without anonymity?

 xxxxxxxx  end of survey  xxxxxxxx
```

--

My only difficulties have been when I had a perfectly legitimate passport. Passports merely inconvenience the innocent traveler, causing him to be subjected to ridiculous red tape. Lack of a passport has never hindered a person who had to cross frontiers. However, presumably there have to be passports in order to harass harmless travelers and give work to hordes of often very unpleasant officials. This is not a treatise on how to cross frontiers illegally, so I will just say that without difficulty the three of us entered Czechoslovakia. The guard went his way, and we went ours.

"My home is at Levice," said Jozef, "I want to go home. You can stay with me as long as you like."

Together we made our way to Kosice, Zvolen, and on to Levice, walking, getting lifts, and riding on trains. Jozef knew the country well, knew where to get potatoes or beets or anything which could be eaten.

At long last, we walked up a mean street in Levice to a small house. Jozef knocked, and as there was no reply, knocked again. With extreme cau

```
From 3678959988471743140
X-Google-Thread: 10e8ad,ae9d3b892f96f506,start
X-Google-Thread: 10b9c8,ae9d3b892f96f506,start
X-Google-Attributes: gid10e8ad,gid10b9c8,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!border1.nntp.dca.giganews.com!
border2.nntp.dca.giganews.com!nntp.giganews.com!novia!transit4.readnews.com!news-
out.readnews.com!news-xxxfer.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-309 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Sat, 10 Nov 2007 08:33:24 EST
Organization: The Radio Amateur Satellite Corporation
Lines: 1310
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000c01c8239e$45eca240$6601a8c0@familyroom>
```

```
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix1.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1194701604 28128 166.84.1.1 (10 Nov 2007 13:33:24 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sat, 10 Nov 2007 13:33:24 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
X-Authority-Analysis: v=1.0 c=1 a=SeIcp837AAAA:8 a=Ixn1CAxRAAAA:8 a=c2--Pf7SAAAA:8
a=KlfyZUBUAAAA:8 a=FbIv-aF9AAAA:8 a=3fFvnXHTAAAA:8 a=XNQh8oeLAAAA:8
a=f0RPBRECAAAA:8 a=ADBSzeAnAAAA:8 a=5mDMBHa8AAAA:8 a=gUbaYAUbAAAA:8
a=qyDxTJV7AAAA:8 a=JXa7hjb-AAAA:8 a=qL4joYdQAAAA:8 a=LlmPylSfAAAA:8
a=tIoeiIHHAAAA:8 a=fENH8MHtAAAA:8 a=0sg8RoSLAAAA:8 a=uGVPSem0AAAA:8
a=Wa5ALEAlAAAA:8 a=z_zqISx-AAAA:8 a=4RlJXVyBAAAA:8 a=JRUS5pMlAAAA:8
a=oBXim8GbAAAA:8 a=XYLYVS5UAAAA:8 a=h3eCdmoiAAAA:8 a=QX7y1c2GAAAA:8
a=QEps4B0vAAAA:8 a=hKwqrz-LAAAA:8 a=_qHggDGBAAAA:8 a=mNtHac3RKS_OXpD6rZoA:9
a=bQMZ-tfVw-wifFwT58kA:7 a=KJfsEKZUD_C8ybftHfJLpe7yn_cA:4 a=8QCVOS8zSb0A:10
a=FyblZaQiG9kA:10 a=q4eIODirUFwA:10 a=NDWsJ_JVWXMA:10 a=UtcmazUCZKYA:10
a=XyvEP7qG2ooA:10 a=wFu9RQxNt4EA:10 a=Bi3YAkoP18cA:10 a=F7Eo224L3vYA:10
a=XF7b4UCPwd8A:10
X-Original-Bytes: 32795
Xref: g2news1.google.com rec.radio.amateur.space:1174 rec.radio.info:605
```

This report is organized into FIVE parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites
Part 5 (S5) - deborbited/returned satellites

SB SAT @ AMSAT W8ISS ANS-309.S1
WSR 309 Part 1 11/05/2007

AMSAT NEWS SERVICE BULLETIN 309.S1 FROM AMSAT HQ
SILVER SPRING, MD, November 05, 2007
TO ALL RADIO AMATEURS
BID: $ANS-309.S1

VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.859330 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsat.in/hamsat.htm

To know what transponder is switched on please listen for the beacon that is active. Each transponder has a different beacon.
[06252007]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Modes: FM Repeater - V/u
BBS - /u
Telemetry - /u

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.880 MHZ FM
145.880 MHz USB
145.920 MHz FM
1268.700 MHz FM 67Hz PL tone
Digital Downlinks: 435.150 MHz FM 38k4 Digital, PBP, 1 watt output
435.150 MHz FM 9k6 Digital, Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Digital, Pacsat Broadcast Protocol
1268.700 mhz FM 9k6 PBP Digital
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[10292007]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer
   on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on
   and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10
   minute timer.
[05282007]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Operational - check operational schedule for current times!!

Current Mode: V/u

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage: http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's CW
telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts.htm
[0820007]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM
Downlink: 436.795 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[08202007]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational depending on amount of Sunlight

Current Mode: Listen before transmitting

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/

AO-7 Usage Guidelines on the AO-7 Log and Resource Site located at:
http://www.planetemily.com/ao7
[05282007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational - APRS and BBS

Current Mode: V/v

Expedition 16 crew:
Commander: Peggy Whitson
Flight Engineer: Yuri Malenchenko   RK3DUP
Flight Engineer: Daniel M. Tani

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM
Worldwide packet downlink: 145.825 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear

```
U: Linear

Callsigns:
German:               DP0ISS
Russian:              RS0ISS
                      RZ3DZR
USA:                  NA1SS
Packet Mailbox:       RS0ISS-11
Packet Keyboard:      RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.
[11052007]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-309.S2
WSR 309 Part 2 11/05/2007

AMSAT NEWS SERVICE BULLETIN 309.S2 FROM AMSAT HQ
SILVER SPRING, MD, November 05, 2007
TO ALL RADIO AMATEURS
BID: $ANS-309.S2

CAPE1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode:  /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon:    435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.

[07302007]
=====
CP3
Catalog Number: 31128
Launch Date: April 17,2007

Status: Operational
```

Current Mode: /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[07302007]
=====
CP4
Catalog Number: 31122
Launch Date: April 17,2007

Status: Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon: 437.325 MHz CW
[07302007]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: In Orbit

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder: 145.825 Mhz FM
[02052007]
=====
NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Operational

Current Mode: /u

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[10222007]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Operational

Current Mode: V/v

```
Uplink/Downlink: 145.825 Mhz FM APRS AX25
[07302007]
=====
GENESAT-1 ?O-??
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Current Mode: /u

Telemetry Beacon Downlink: 437.0670 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[01082007]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon:             437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
[03262007]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launched: June 30, 2003

Status: Operational

Current Mode: /u

Beacon:     436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[01082007]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
```

```
Launched: February 21, 2006

Status: Semi-Operational - Constant Carrier only

Uplink:  1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan ? )

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[01082007]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW
[08132007]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Mode(s): FM Repeater - V/u
                 BBS         -  /u
                 Telemetry   -  /u

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink:   145.880 MHZ FM
                       145.880 MHz USB
                       145.920 MHz FM
                      1268.700 MHz FM 67Hz PL tone
Digital Downlinks:     435.150 MHz FM 38k4 Digital, PBP, 1 watt output
                       435.150 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:        145.860 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
```

```
                      1268.700 mhz FM 9k6 PBP Digital
Beacon:                435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[10292007]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Hibernation until full sunlight in November

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink:        144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[09242007]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Current Modes: V/U
               L/U

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
```

```
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[09172007]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational.

Current Mode:  /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon:          435.025 MHz - OFF
Mode-S Beacon:     2401.500 MHz - OFF

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[010222007]
=====
RS-22 RADIO SPORT RS-22
Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only

Current Mode:  /u

CW Beacon - 435.352 MHz
            145.818 MHz
[08062007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational - APRS and BBS

Current Mode: V/v

Expedition 16 crew:
Commander:          Peggy Whitson
Flight Engineer:    Yuri Malenchenko      RK3DUP
Flight Engineer:    Daniel M. Tani

Available Modes and Frequencies:
Digital/APRS:
```

Worldwide packet uplink: 145.825 MHz FM
Worldwide packet downlink: 145.825 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS
                    RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.
[11052007]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-309.S3
WSR 309 Part 3 11/05/2007

AMSAT NEWS SERVICE BULLETIN 309.S3 FROM AMSAT HQ
SILVER SPRING, MD, November 05, 2007
TO ALL RADIO AMATEURS
BID: $ANS-309.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Non-Operational

```
Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon:             437.2750 MHz CW

Callsign: JR8YJT
[10152007]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency:  437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink:        437.250 MHz FM 67Hz CTCSS
Voice Downlink:     2401.835 MHz FM
Packet Up/Downlink:  437.250 MHz 9k6 packet
Packet Downlink     2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non=Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[08132007]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink:   435.275 MHz 1200-baud AFSK
```

Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Non-Operational

Uplinks: 145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[007302007]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, callsign KE6QMD, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

```
Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS:                SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink:   145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
V-band:   145.840 -  145.990 MHz CW/LSB
U-band:   435.550 -  435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks
---------
S2-band:  2401.225 -  2401.475 MHz CW/USB
K-band:  24048.010 - 24048.060 MHz CW/USB
Beacon:   2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)
----------------------------
BEACON   General Beacon (GB)    Middle Beacon (MB)    Engineering Beacon
(EB)
2 m       none                    145.898 MHz           none
70cm      435.438 MHz             435.588 MHz           435.838 MHz
```

13cm(1)	2400.188 MHz	2400.338 MHz	2400.588 MHz
13cm(2)	2401.173 MHz	2401.323 MHz	2401.573 MHz
3cm	10450.975 MHz	10451.125 MHz	10451.375 MHz
1.5cm	24047.885 MHz	24048.035 MHz	24048.285 MHz

[007162007]
=====
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web site
at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT

```
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink:   145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Non-Operational

Current Mode: V/U
              Digipeater - Authorized for APRS usage

Uplink:         145.900 MHz FM 1200-baud Manchester FSK
                145.920 MHz FM 1200-baud Manchester FSK
                145.940 MHz FM 1200-baud Manchester FSK
                145.960 MHz FM 1200-baud Manchester FSK
Downlink:       437.026 MHz SSB 1200-baud PSK
Mode-S Beacon: 2401.1428 MHz
```

```
Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.025 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[10152007]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign:       POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012006]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
```

```
Launched: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HL01-11
BBS: HL01-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational
```

```
Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
LIBERTAD-1
Catalog Number: 31129
Launch Date: April 17,2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink:   145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[10222007]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplinks:          145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink:      437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
```

```
www.telecable.es/personales/ea1bcu
[01222007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
[05012006]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet: Non-Operational
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon:   145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink  29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
[01152007]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
```

```
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon 1:  29.352 MHz (intermittent)
Beacon 2:  29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink:     21.260 to 21.300 MHz CW/USB
Downlink:  145.860 to 145.900 MHz CW/USB

Beacon:    145.860 MHz

Robot:     145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink:   21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon:   29.408 MHz
```

Robot: 29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-309.S4
WSR 309 Part 4 11/05/2007

AMSAT NEWS SERVICE BULLETIN 309.S4 FROM AMSAT HQ
SILVER SPRING, MD, November 05, 2007
TO ALL RADIO AMATEURS
BID: $ANS-309.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE PROPOSED FOR LAUNCH AT THIS TIME:

Phase 5a Mars Mission
Catalog Number:
Proposed Launch Date: 2009 or 2011

Status: Design Phase

For the latest project status update please visit the AMSAT-DL P5-A web page:
http://ticket-to-mars.org
[01222007]

=====

PHASE 3E AO-??
Catalog number:
Proposed Launch Date: Late 2007

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/
[01222007]

=====

Eagle AO-??
Catalog Number:
Proposed Launch Date: Early/Mid 2009

Status: Design Phase

For the latest project status updates please visit the AMSAT-NA webpage:
http://www.amsat.org
[01222007]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-309.S5
WSR 309 Part 5 11/05/2007

AMSAT NEWS SERVICE BULLETIN 309.S5 FROM AMSAT HQ
SILVER SPRING, MD, November 05, 2007
TO ALL RADIO AMATEURS
BID: $ANS-309.S5

THE FOLLOWING SATELLITES HAVE DE-ORBITED OR HAVE BEEN RETURNED TO THE GROUND:

NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

```
Main Downlink:      145.825 Mhz FM APRS AX25
APRS Uplink:        145.825 MHz FM APRS AX25
Voice/PSK31 Uplink:  28.120 MHz
```

Packet to Voice ID: RAFT
[06112007]
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

- AMSAT News Service (ANS)
- General satellite discussion (AMSAT-BB)
- Orbit data (KEPS)
- Manned space missions (SAREX)
- District of Columbia area (AMSAT-DC)
- New England area (AMSAT-NE)
- AMSAT Educational Liaison mailing list (AMSAT-EDU)
- AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

From -1081846762515266387
X-Google-Thread: 10813c,111329af4aa30c2c,start
X-Google-Thread: 10255f,111329af4aa30c2c,start
X-Google-Thread: 102692,111329af4aa30c2c,start
X-Google-Thread: f8abe,111329af4aa30c2c,start
X-Google-Thread: 10e8ad,111329af4aa30c2c,start
X-Google-Attributes:
gid10813c,gid10255f,gid102692,gidf8abe,gid10e8ad,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news4.google.com!out02b.usenetserver.com!
news.usenetserver.com!in04.usenetserver.com!news.usenetserver.com!
nx01.iad01.newshosting.com!newshosting.com!post01.iad01!news.newsdemon.com!not-for-mail
Message-Id: <m07101107264256@4ax.com>
Subject: MI5 Persecution: Neil Fox (Nov/1998) (639)
Newsgroups:
sci.med.laboratory,alt.fan.holmes,alt.polyamory,alt.sports.hockey.nhl.ott-senators,rec.radio.amateur.space
Followup-To:
sci.med.laboratory,alt.fan.holmes,alt.polyamory,alt.sports.hockey.nhl.ott-senators,rec.radio.amateur.space,uk.misc
From: MI5Victim@mi5.gov.uk
Date: 11 Nov 2007 03:30:12 GMT
Lines: 50
Organization: news.newsdemon.com
X-Complaints-To: abuse@newsdemon.com
Xref: g2news1.google.com sci.med.laboratory:1770 alt.fan.holmes:1313
alt.polyamory:69790 alt.sports.hockey.nhl.ott-senators:13935
rec.radio.amateur.space:1175

Foxy's Showtime on Capital FM 25/11/98 7.35pm

Certainty level: 100%

This one, I can say with absolute certainty, is about me. It was recorded on my Sony Recording Walkman on the evening of Wednesday 25 November 1998. It doesn't mention me by name, so the objective observer might have trouble understanding why I'm so sure it's about me. I'm sure, because the harassment had restarted over the period when this piece was broadcast, and what Capital transmitted would have been in context with events at the time. (Sorry if that explanation is somewhat opaque, but I don't really want to embarrass myself by giving an explanation in detail, and an intelligent reader should be able to work it out for him/her self.)

This isn't the first time Capital have "got at" me; they were doing so right at the very beginning in summer 1990, when they said, "if he listens to Capital then he can't be all bad"; and Tarrant made remarks about me in his breakfast show in spring 1994, when he said, "you know this bloke? he says we're trying to kill him. We should be done for attempted manslaughter."

Unfortunately I didn't record those previous, much more conclusive instances of harassment by Capital DJs, and Capital Radio tells me they only keep recordings for three months. But lately I've been recording everything, and here is one product of that recording.

Neil Fox was introducing some petite Swedish songstress, sounded like Amelia, when he said something about her petite-ness ;

"she's a big big girl, actually she's really about tiny, she's this big, would you say what less than....."

then one of his studio staff shouted, "six inches"

then Fox laughed and said, "less than a meter tall, definitely"

What I think the "six inches" referred to should be obvious. I think it's sexual abuse directed at me.

Also there were a lot of words like "crazy", "mad" etc on this programme, which reinforced my belief that this was on purpose directed at myself.

I think Fox may be something of an unwilling participant in this abuse, he doesn't want to be an abuser but the persecutors are using his show and his staff to get at me. This is not the first time this sort of thing has happened from his show; and my guess is that it won't be the last

639

--
Posted via NewsDemon.com - Premium Uncensored Newsgroup Service
------->>>>>>http://www.NewsDemon.com<<<<<<------

Unlimited Access, Anonymous Accounts, Uncensored Broadband Access

```
From 8258248680182670192
X-Google-Thread: 10813c,f3da9a7fe85bf435,start
X-Google-Thread: 10255f,f3da9a7fe85bf435,start
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X-Google-Thread: f8abe,f3da9a7fe85bf435,start
X-Google-Thread: 10e8ad,f3da9a7fe85bf435,start
X-Google-Attributes:
gid10813c,gid10255f,gid102692,gidf8abe,gid10e8ad,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx01.iad01.newshosting.com!newshosting.com!post01.iad01!
news.newsdemon.com!not-for-mail
Message-Id: <m07101108490841@4ax.com>
Subject: MI5 Persecution: Flying Eye (Mar/1999) (2813)
Newsgroups:
sci.med.laboratory,alt.fan.holmes,alt.polyamory,alt.sports.hockey.nhl.ott-
senators,rec.radio.amateur.space
Followup-To:
sci.med.laboratory,alt.fan.holmes,alt.polyamory,alt.sports.hockey.nhl.ott-
senators,rec.radio.amateur.space,uk.misc
From: MI5Victim@mi5.gov.uk
Date: 11 Nov 2007 04:52:39 GMT
Lines: 31
Organization: news.newsdemon.com
X-Complaints-To: abuse@newsdemon.com
X-Original-Lines: 27
Xref: g2news1.google.com sci.med.laboratory:1771 alt.fan.holmes:1314
alt.polyamory:69792 alt.sports.hockey.nhl.ott-senators:13936
rec.radio.amateur.space:1176
```

Jackie King from the Flying Eye 14/3/99

Certainty level: 40%

In early March 1999, Capital Radio alleged they had received some emails, one of which was forwarded to me. It contained the words, "you know this bloke, he says we're trying to kill him, we should be done for attempted manslaughter!" which Chris Tarrant had said in 1994.

Following these emails there was an explosion in abuse activity, both from Capital Radio, and from MI5 themselves. MI5 followed me around and hurled abuse at me. The following audio file contains what may be abuse from the radio station.

Jackie King from the Flying Eye made these remarks on Sunday (14/3/99) lunchtime 12.24pm; "gas main work being, er, HANDLED if you like (laughs, embarrassed) outside Madame Tussauds, Euston Road obviously feeling the backlash of that".

The key word is "handled", which she sounds embarrassed to be saying; to me it looks like an attempt at a sexual slander. Capital Radio aren't even pretending not to get at me any more. I asked Chris Tarrant several times about his remark from 1994, and he has consistently avoided answering.

2813

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Posted via NewsDemon.com - Premium Uncensored Newsgroup Service
      ------->>>>>>http://www.NewsDemon.com<<<<<<------
Unlimited Access, Anonymous Accounts, Uncensored Broadband Access

```
From -8762924120348133927
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X-Google-Thread: f8abe,111329af4aa30c2c
X-Google-Thread: 10e8ad,111329af4aa30c2c
X-Google-Thread: 10b88a,d628847c6d2ec48c,start
X-Google-Attributes:
gid10813c,gid10255f,gid102692,gidf8abe,gid10e8ad,gid10b88a,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!news2.google.com!
newsfeed2.dallas1.level3.net!news.level3.com!newsfeed-00.mathworks.com!lon-
transit.news.telstra.net!lon-in.news.telstra.net!news.telstra.net!news-
server.bigpond.net.au!53ab2750!not-for-mail
From: "PT" <thomaspz@bigpond.com>
Newsgroups:
sci.med.laboratory,alt.fan.holmes,alt.polyamory,alt.sports.hockey.nhl.ott-
senators,rec.radio.amateur.space,uk.misc
References: <m07101107264256@4ax.com>
Subject: Re: MI5 Persecution: Neil Fox (Nov/1998) (639)
Lines: 65
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.3138
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.3198
X-RFC2646: Format=Flowed; Original
Message-ID: <r8AZi.11226$CN4.2968@news-server.bigpond.net.au>
Date: Sun, 11 Nov 2007 09:42:47 GMT
NNTP-Posting-Host: 124.183.22.211
X-Complaints-To: abuse@bigpond.net.au
X-Trace: news-server.bigpond.net.au 1194774167 124.183.22.211 (Sun, 11 Nov 2007
20:42:47 EST)
NNTP-Posting-Date: Sun, 11 Nov 2007 20:42:47 EST
Organization: BigPond Internet Services
Xref: g2news1.google.com sci.med.laboratory:1772 alt.fan.holmes:1315
alt.polyamory:69793 alt.sports.hockey.nhl.ott-senators:13937
rec.radio.amateur.space:1177 uk.misc:138489
```

There is a group called alt.bullshit

Why don't you post this stuff there?

<MI5Victim@mi5.gov.uk> wrote in message news:m07101107264256@4ax.com...
>
> Foxy's Showtime on Capital FM 25/11/98 7.35pm
>
> Certainty level: 100%
>
> This one, I can say with absolute certainty, is about me. It was recorded
> on my Sony Recording Walkman on the evening of Wednesday 25 November 1998.
> It doesn't mention me by name, so the objective observer might have
> trouble
> understanding why I'm so sure it's about me. I'm sure, because the
> harassment had restarted over the period when this piece was broadcast,
> and
> what Capital transmitted would have been in context with events at the
> time.
> (Sorry if that explanation is somewhat opaque, but I don't really want to
> embarrass myself by giving an explanation in detail, and an intelligent
> reader should be able to work it out for him/her self.)
>
> This isn't the first time Capital have "got at" me; they were doing so
> right at the very beginning in summer 1990, when they said, "if he listens
> to Capital then he can't be all bad"; and Tarrant made remarks about me
> in his breakfast show in spring 1994, when he said, "you know this bloke?
> he says we're trying to kill him. We should be done for attempted
> manslaughter."
>
> Unfortunately I didn't record those previous, much more conclusive
> instances of harassment by Capital DJs, and Capital Radio tells me they
> only keep recordings for three months. But lately I've been recording
> everything, and here is one product of that recording.
>
> Neil Fox was introducing some petite Swedish songstress, sounded like
> Amelia, when he said something about her petite-ness ;
>
> "she's a big big girl, actually she's really about tiny, she's this big,
> would you say what less than....."
>
> then one of his studio staff shouted, "six inches"
>
> then Fox laughed and said, "less than a meter tall, definitely"
>
> What I think the "six inches" referred to should be obvious. I think it's
> sexual abuse directed at me.
>
> Also there were a lot of words like "crazy", "mad" etc on this programme,
> which reinforced my belief that this was on purpose directed at myself.
>
> I think Fox may be something of an unwilling participant in this abuse, he
> doesn't want to be an abuser but the persecutors are using his show and
> his staff to get at me. This is not the first time this sort of thing has

```
> happened from his show; and my guess is that it won't be the last
>
> 639
>
>
> --
> Posted via NewsDemon.com - Premium Uncensored Newsgroup Service
>      ------->>>>>>http://www.NewsDemon.com<<<<<<------
> Unlimited Access, Anonymous Accounts, Uncensored Broadband Access
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From 6188638771601543938
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X-Google-Thread: 102692,4b69fdef9cc79eaf,start
X-Google-Thread: f8abe,4b69fdef9cc79eaf,start
X-Google-Thread: 10e8ad,4b69fdef9cc79eaf,start
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gid10813c,gid10255f,gid102692,gidf8abe,gid10e8ad,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx01.iad01.newshosting.com!newshosting.com!post01.iad01!
news.newsdemon.com!not-for-mail
Message-Id: <m07101110342628@4ax.com>
Subject: MI5 Persecution: Johnny Boy (21/Aug/1998) (4987)
Newsgroups:
sci.med.laboratory,alt.fan.holmes,alt.polyamory,alt.sports.hockey.nhl.ott-
senators,rec.radio.amateur.space
Followup-To:
sci.med.laboratory,alt.fan.holmes,alt.polyamory,alt.sports.hockey.nhl.ott-
senators,rec.radio.amateur.space,uk.misc
From: MI5Victim@mi5.gov.uk
Date: 11 Nov 2007 06:37:57 GMT
Lines: 53
Organization: news.newsdemon.com
X-Complaints-To: abuse@newsdemon.com
X-Original-Lines: 49
Xref: g2news1.google.com sci.med.laboratory:1773 alt.fan.holmes:1316
alt.polyamory:69794 alt.sports.hockey.nhl.ott-senators:13938
rec.radio.amateur.space:1178
```

Virgin Radio-Johnny Boy (21/August/1998)

Certainty level: 60%

On Saturday 15 August 1998 I attended a gathering of contributors to newsgroup uk.misc at London's Victoria railway station. Also present was Simon G, who had previously given this description of what he would be wearing;

At 06:36 AM 13/8/98 GMT, Simon wrote:
>further clarification to aid recognition, i'll be wearing
>a t shirt, a brown suede waistcoat, a brown suede miniskirt,
>& a pair of patchwork leggings (& may have a widebrimmed straw
>hat, too).

It is my belief that my persecutors, who monitor my home telephone line (and consequently read all modem communications including email), were aware of this meeting, and may even have observed the "meat" taking place.

Following the "meat" it seemed to me that one or two attempts were made by my persecutors to portray me as "gay", on the basis of Simon's suede miniskirt, which in their inventiveness my persecutors attributed to me, not Simon. (Just for the record, Simon is hetero, and has agreed to the above email extract being published.) The following item from Johnny Boy's Wheels of Steel (between 7pm-11pm, Friday 21/8/98) is one such attempt.

(conversation) (J=Johnny-Boy, H=Hipster)

J: Texas of course part of V98 this weekend enjoy it if you're going. Keep your eyes out on Sunday in Chelmsford for Hipster, because he's going to be there. What are you going to be wearing?

H: I'll be wearing my, er, my suede shorts.
(sycophantic laughter)

J: and believe me he ain't joking, he ain't joking. OK coming next at Virgin on the Wheels of Steel...

Why do I think Hipster's "suede shorts" refers to Simon's mini-skirt? Because "suede" in both cases (obvious!); because "suede shorts" indicates "gay" which they were trying to pin on me; because "shorts" = something short, such as a "mini"-skirt; and because the two DJs both laughed as soon as Hipster said "suede shorts", they knew what the joke was, they knew that they were meant (and probably paid) to find it funny.

4987

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Posted via NewsDemon.com - Premium Uncensored Newsgroup Service
------->>>>>>http://www.NewsDemon.com<<<<<<------
Unlimited Access, Anonymous Accounts, Uncensored Broadband Access

From 2745242673342206104
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X-Google-Thread: 10255f,f183155acff3d9f7,start
X-Google-Thread: 102692,f183155acff3d9f7,start
X-Google-Thread: f8abe,f183155acff3d9f7,start
X-Google-Thread: 10e8ad,f183155acff3d9f7,start
X-Google-Attributes:

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gid10813c,gid10255f,gid102692,gidf8abe,gid10e8ad,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news3.google.com!out01a.usenetserver.com!
news.usenetserver.com!in04.usenetserver.com!news.usenetserver.com!
nx01.iad01.newshosting.com!newshosting.com!post01.iad01!news.newsdemon.com!not-
for-mail
Message-Id: <m07101111323587@4ax.com>
Subject: MI5 Persecution: Johnny Boy (19/June/1999) (7161)
Newsgroups:
sci.med.laboratory,alt.fan.holmes,alt.polyamory,alt.sports.hockey.nhl.ott-
senators,rec.radio.amateur.space
Followup-To:
sci.med.laboratory,alt.fan.holmes,alt.polyamory,alt.sports.hockey.nhl.ott-
senators,rec.radio.amateur.space,uk.misc
From: MI5Victim@mi5.gov.uk
Date: 11 Nov 2007 07:36:06 GMT
Lines: 47
Organization: news.newsdemon.com
X-Complaints-To: abuse@newsdemon.com
Xref: g2news1.google.com sci.med.laboratory:1774 alt.fan.holmes:1317
alt.polyamory:69795 alt.sports.hockey.nhl.ott-senators:13939
rec.radio.amateur.space:1179
```

Virgin Radio-Johnny Boy (19/June/1999)

Certainty level: 30%

I'm not quite sure about this one, so I've given it a one in three chance of being about me. First the background.... from mid-March 1999 for some three or four months, every weekend, I bombarded Westminster MPs with faxes about the terrible, all-encompassing MI5 Persecution. (Jesting aside, it really is terrible and all-encompassing, in the UK anyway.) Of course each week some MPs replied; but in June 1999, after I'd been at it some three months, I started getting "covert" feedback from Virgin Radio.

The first feedback I got was from Danny Baker, on Sunday 13th June. That weekend I was sending an article which contained biting criticism of the police inaction in this case. Danny Baker on his Virgin radio show started an angry rant that "he knows it's rubbish", ie. he was rubbishing what I'd said in that weekend's faxed article. Unfortunately I wasn't recording this programme.

The next possible Virgin-Radio feedback was a week later on 19th June 1999. This is contained in the audio file above, in which Johnny Boy on his "Wheels of Steel" programme says;

"and if you would like to put a triple play together, ahhh.... because quite frankly Hipster and me are running out of ideas...."

He goes on to counter Hipster's "how dare you" with a protestation that he is "only joking".

What I reckon is that my article faxed to MPs that weekend was forwarded by one of the recipients to Virgin Radio. My article had included the words;

"I am beginning to run out of both new topics and energy to write these articles."

So what I reckon is that Johnny Boy read the article.... and rephrased the above line "run out of ... new topics" to "running out of ideas". I recognise that this is a pretty tenuous inference to make.... but do listen to the audio file, from the "ahhh...." pause in JB's speech you can guess he is about to say something "risky" and at someone's expense. Anyway, I listen to the Wheels of Steel regularly and will continue to do so, recording it as I always do - so any future funny remarks will get immortalised on these pages!

7161

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Posted via NewsDemon.com - Premium Uncensored Newsgroup Service
      ------->>>>>>http://www.NewsDemon.com<<<<<<------
Unlimited Access, Anonymous Accounts, Uncensored Broadband Access

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From 8328070568757999957
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X-Google-Thread: f74ae,d92c4eddce160321
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X-Google-Thread: 10cf28,d92c4eddce160321
X-Google-Attributes: gid113975,gidf74ae,gidfdc67,gid10e8ad,gid10cf28,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!postnews.google.com!19g2000hsx.googlegroups.com!not-for-
mail
From:  Radium <glucegen1@gmail.com>
Newsgroups:
sci.astro.amateur,sci.astro,alt.astronomy,rec.radio.amateur.space,uk.sci.astronomy
Subject: Re: What is the highest radio frequency used for radio astronomy?
Date: Mon, 03 Sep 2007 00:11:53 -0700
Organization: http://groups.google.com
Lines: 39
Message-ID: <1188803513.261520.302560@19g2000hsx.googlegroups.com>
References: <1188459200.603005.55680@m37g2000prh.googlegroups.com>
   <1188683416.066878.250530@d55g2000hsg.googlegroups.com>
   <fbdv9b$4se$1@merope.saaf.se>
   <1188764496.354935.257560@r29g2000hsg.googlegroups.com>
   <fbgab0$11oc$1@merope.saaf.se>
NNTP-Posting-Host: 75.84.20.87
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"
X-Trace: posting.google.com 1188803513 31745 127.0.0.1 (3 Sep 2007 07:11:53 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Mon, 3 Sep 2007 07:11:53 +0000 (UTC)
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In-Reply-To: <fbgab0$11oc$1@merope.saaf.se>
User-Agent: G2/1.0
X-HTTP-UserAgent: Mozilla/5.0 (Windows; U; Win98; en-US; rv:1.8b) Gecko/20050217,gzip(gfe),gzip(gfe)
Complaints-To: groups-abuse@google.com
Injection-Info: 19g2000hsx.googlegroups.com; posting-host=75.84.20.87;
   posting-account=ps2QrAMAAAA6_jCuRt2JEIpn5Otqf_w0
Xref: g2news2.google.com sci.astro.amateur:9989 sci.astro:12487
alt.astronomy:16417 rec.radio.amateur.space:180 uk.sci.astronomy:1672

On Sep 2, 11:42 pm, pau...@saaf.se (Paul Schlyter) wrote:

> In article <1188764496.354935.257...@r29g2000hsg.googlegroups.com>,

> Radium <gluceg...@gmail.com> wrote:

> > Is this done using audio software such as Adobe Audition?

> > Quotes fromhttp://www.adobe.com/products/audition/overview2.html:

> > "Time and pitch processing: Change tempo without shifting pitch - or
> > shift pitch without changing tempo - and never introduce audio
> > artifacts."

> Obviously one can use Audio Audition for that. It could even be done
> several decades ago, using analogue techniques.

What analogue methods were used for this pitch-shifting? Were they as
efficient as audio softwares?

> > White noise. Hissing. Nothing special.

> Most signals received by radio telescopes will "sound" pretty much
> the same.

Okay.

> Btw, did you know that you can use an FM radio to observe meteor
> showers?

I didn't know that.

> CHoose a radio station which normally is a little bit too
> far away to hear, then direct your antenna towards it. Next, wait for
> the meteors - and listen to your radio station briefly as its radio
> waves are reflected against the meteor trail....

Does the meteor shower make a buzzing sound on FM radio stations?

From 5645246571755821279
X-Google-Thread: 113975,d92c4eddce160321

X-Google-Thread: f74ae,d92c4eddce160321
X-Google-Thread: fdc67,d92c4eddce160321
X-Google-Thread: 10e8ad,d92c4eddce160321
X-Google-Thread: 10cf28,d92c4eddce160321
X-Google-Attributes: gid113975,gidf74ae,gidfdc67,gid10e8ad,gid10cf28,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!postnews.google.com!50g2000hsm.googlegroups.com!not-for-mail
From: Martin Brown <|||newspam|||@nezumi.demon.co.uk>
Newsgroups:
sci.astro.amateur,sci.astro,alt.astronomy,rec.radio.amateur.space,uk.sci.astronomy
Subject: Re: What is the highest radio frequency used for radio astronomy?
Date: Mon, 03 Sep 2007 01:08:01 -0700
Organization: http://groups.google.com
Lines: 69
Message-ID: <1188806881.576341.24930@50g2000hsm.googlegroups.com>
References: <1188459200.603005.55680@m37g2000prh.googlegroups.com>
   <bWxBi.14925$ya1.13727@news02.roc.ny>
   <1188620214.390706.118800@r29g2000hsg.googlegroups.com>
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Content-Type: text/plain; charset="us-ascii"
X-Trace: posting.google.com 1188806881 9813 127.0.0.1 (3 Sep 2007 08:08:01 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Mon, 3 Sep 2007 08:08:01 +0000 (UTC)
In-Reply-To: <1188620214.390706.118800@r29g2000hsg.googlegroups.com>
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X-HTTP-UserAgent: Mozilla/4.0 (compatible; MSIE 7.0; Windows NT 5.1; .NET CLR 1.1.4322; .NET CLR 2.0.40607),gzip(gfe),gzip(gfe)
Complaints-To: groups-abuse@google.com
Injection-Info: 50g2000hsm.googlegroups.com; posting-host=84.64.71.122;
   posting-account=ps2QrAMAAAA6_jCuRt2JEIpn5Otqf_w0
Xref: g2news2.google.com sci.astro.amateur:9991 sci.astro:12490
alt.astronomy:16422 rec.radio.amateur.space:181 uk.sci.astronomy:1673

On Sep 1, 5:16 am, Radium <gluceg...@gmail.com> wrote:
> On Aug 30, 4:33 am, gwatts <gwa...@frontiernet.net> wrote:
>
> > Radium wrote:
>
> > > What is the highest radio frequency used for radio astronomy?
>
> > > According to the link below, it is 3438 GHz:
>
> > >http://books.nap.edu/openbook.php?record_id=11719&page=11
>
> > > Is 3438 GHz the highest radio frequency used for radio astronomy?

I suppose it depends what exactly you mean by "radio astronomy". Radio astronomers have been extending the original radio techique of Earth Rotation Aperture Sythesis up into the IR and near optical bands recently. As such the highest frequency at which a fringe baseline correlator has been operated for astronomy is now in the visible band.

COAST and the NRAO optical interferometer group have both produced indirect images of the sky using radio correlator methods implemented by very cunning mechanical optical bench designs at visible wavelengths.

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> > If you read on a little farther you'll find
> > 'blurring the distinction between radio astronomy and infrared astronomy.'

Many of the early microwave groups spun out of radio astronomy sections. The catch is that at least for a while the non-thermal sources get significantly fainter with increasing frequency (fewer higher energy photons get emitted).

>
> > So where do you want to draw the line between radio astronomy and
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Although they do study movements of the suns surface by Doppler shift of known reference spectral wavelengths this is something entirely different to what radio astronomers do. Very few big radio telescopes enjoy being pointed at the sun.

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> I wonder if a space station with a 3,438 GHz AM receiver could pick up
> any extremely-distant audio signals between 20 to 20,000 Hz [from
> magnetars, gamma-ray-bursts, supernovae and other high-energy but
> cosmic objects] after demodulating the 3,438 GHz AM carrier wave.- Hide quoted text -

There is no carrier wave (unless you happen to chose a specific naturally occurring spectral wavelength like 21cm neutral hydrogen for instance). The telescope operator choses the frequency and bandwidth they receive - the source is normally a broadband emitter.

Most objects emit broadband thermal radiation determined by their characteristic temperature and broadband non-thermal radiation determined by a combination of shockwaves, magnetic fields and fast particle interactions. It would sound like the white noise on a detuned radio reciever if you were to put it on a speaker. Pulsars are the only obvious exception where there is clear periodic structure in the signal.

Jupiter sometimes provided faintly interesting amplitude modulation of its radio emission that should be within the reach of a decent amateur short wave receiver with a directional antenna to listen into.

Regards,
Martin Brown

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X-Google-Thread: 113975,d92c4eddce160321
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X-Google-Thread: fdc67,d92c4eddce160321
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Path: g2news2.google.com!postnews.google.com!g4g2000hsf.googlegroups.com!not-for-
mail
From:  Radium <glucegen1@gmail.com>
Newsgroups:
sci.astro.amateur,sci.astro,alt.astronomy,rec.radio.amateur.space,uk.sci.astronomy
Subject: Re: What is the highest radio frequency used for radio astronomy?
Date: Mon, 03 Sep 2007 20:14:00 -0000
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Lines: 99
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   posting-account=ps2QrAMAAAA6_jCuRt2JEIpn5Otqf_w0
Xref: g2news2.google.com sci.astro.amateur:10023 sci.astro:12511
alt.astronomy:16476 rec.radio.amateur.space:182 uk.sci.astronomy:1679
```

On Sep 3, 1:08 am, Martin Brown <|||newspam...@nezumi.demon.co.uk>
wrote:

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A radio-wave can travel a larger distance with less attenuation than an infrared or light wave. Objects in the path that allow radio-waves to pass undisturbed can have a serious impact on optical telecommunications.

> > > If you read on a little farther you'll find
> > > 'blurring the distinction between radio astronomy and infrared astronomy.'

> Many of the early microwave groups spun out of radio astronomy sections. The catch is that at least for a while the non-thermal sources get significantly fainter with increasing frequency (fewer higher energy photons get emitted).

Microwaves have characteristics that more closely resembles radio-waves than light/infrared waves.

> > > So where do you want to draw the line between radio astronomy and infrared astronomy? There's you're answer.

> > Sorry, I meant to ask whether 3,438 GHz is the highest radio frequency used to receive audio signals from outer space. I should have made my question more specific. Radio-astronomers study sounds from the sun as well as visual data.

> Although they do study movements of the suns surface by Doppler shift of known reference spectral wavelengths this is something entirely different to what radio astronomers do. Very few big radio telescopes enjoy being pointed at the sun.

What happens to a radio telescope when directed toward the sun?

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> There is no carrier wave (unless you happen to chose a specific naturally occurring spectral wavelength like 21cm neutral hydrogen for instance). The telescope operator choses the frequency and bandwidth they receive - the source is normally a broadband emitter.

I would guess the higher the frequency of the radio-wave reception, the better it is for this application. This is because higher-frequency radio waves can more easily pass through ionospheric elements [such as the heliosphere around our solar system] than lower-frequency radio waves.

The above assumes the reception occurs in space itself [e.g. on a space station]. On Earth, the higher end of the radio spectrum tends to be opaque to the atmosphere while the lower end is blocked by the ionosphere. Hence, if the experiment is done on Earth, you can't go too high or too low [even within the "radio spectrum"]. The limits are stricter on Earth than in outer-space. In space, you don't have these limits as long as you stay in the radio band.

> Most objects emit broadband thermal radiation determined by their
> characteristic temperature and broadband non-thermal radiation
> determined by a combination of shockwaves, magnetic fields and fast
> particle interactions. It would sound like the white noise on a
> detuned radio reciever if you were to put it on a speaker. Pulsars are
> the only obvious exception where there is clear periodic structure in
> the signal.

What would the pulsars sound like in this experiment? Square-waves?

> Jupiter sometimes provided faintly interesting amplitude modulation of
> its radio emission that should be within the reach of a decent amateur
> short wave receiver with a directional antenna to listen into.

I've been to certain websites containing recordings of these emissions. They sound like strong winds.

```
From 1264702146186517147
X-Google-Thread: 113975,d92c4eddce160321
X-Google-Thread: f74ae,d92c4eddce160321
X-Google-Thread: fdc67,d92c4eddce160321
X-Google-Thread: 10e8ad,d92c4eddce160321
X-Google-Thread: 10cf28,d92c4eddce160321
X-Google-Attributes: gid113975,gidf74ae,gidfdc67,gid10e8ad,gid10cf28,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news1.google.com!border1.nntp.dca.giganews.com!
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roadrunner.com!not-for-mail
From: Bob Downonit <Down@gag.net>
Newsgroups:
sci.astro.amateur,sci.astro,alt.astronomy,rec.radio.amateur.space,uk.sci.astronomy
Date: Mon, 3 Sep 2007 19:46:26 -0400
Message-ID: <46dc9c4b$0$18905$4c368faf@roadrunner.com>
References: <1188459200.603005.55680@m37g2000prh.googlegroups.com>
<bWxBi.14925$ya1.13727@news02.roc.ny> <46d6dc3b$0$34291$d368eab@news.calweb.com>
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Lines: 8
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X-Complaints-To: abuse@rr.com
Xref: g2news2.google.com sci.astro.amateur:10044 sci.astro:12521
alt.astronomy:16504 rec.radio.amateur.space:183 uk.sci.astronomy:1681

On 2007-09-02 22:03:09 -0400, Art Deco <erfc@caballista.org> said:
> IAWTP.
>
> <http://www.caballista.org/auk/kookle.php?search=guth>

LOL!

From -4790973509161096999
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X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!postnews.google.com!y42g2000hsy.googlegroups.com!not-for-mail
From: Martin Brown <|||newspam|||@nezumi.demon.co.uk>
Newsgroups:
sci.astro.amateur,sci.astro,alt.astronomy,rec.radio.amateur.space,uk.sci.astronomy
Subject: Re: What is the highest radio frequency used for radio astronomy?
Date: Tue, 04 Sep 2007 01:45:46 -0700
Organization: http://groups.google.com
Lines: 97
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<bWxBi.14925$ya1.13727@news02.roc.ny>
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Xref: g2news2.google.com sci.astro.amateur:10120 sci.astro:12545
alt.astronomy:16555 rec.radio.amateur.space:184 uk.sci.astronomy:1685

On Sep 3, 9:14 pm, Radium <gluceg...@gmail.com> wrote:
> On Sep 3, 1:08 am, Martin Brown <|||newspam...@nezumi.demon.co.uk>
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> > wavelengths.
>
> Aradio-wave can travel a larger distance with less attenuation than
> an infrared or light wave. Objects in the path that allowradio-waves
> to pass undisturbed can have a serious impact on optical
> telecommunications.

Make your mind up. You asked about the highest frequency used by radio
astronomers.

> > > > If you read on a little farther you'll find
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> > Many of the early microwave groups spun out ofradioastronomy
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They are all electromagnetic radiation. The transparency or otherwise
varies somewhat with wavelength.
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> > different to whatradioastronomers do. Very few bigradiotelescopes
> > enjoy being pointed at the sun.
>
> What happens to aradiotelescope when directed toward the sun?

The receiving electronics get warmed up by the partially focussed
image of the sun. Or in the case of a catadiotric design the secondary
reflector gets warmed up and potentially distorted by thermal
expansion.

Scopes intended to be pointed at the sun are designed with that
purpose in mind.

> > There is no carrier wave (unless you happen to chose a specific
> > naturally occurring spectral wavelength like 21cm neutral hydrogen for
> > instance). The telescope operator choses the frequency and bandwidth
> > they receive - the source is normally a broadband emitter.
>
> I would guess the higher the frequency of theradio-wave reception,
> the better it is for this application. This is because higher-

Not really radio astronomy is now operating between around 35MHz and
upwards. There are difficulties with gettign coherent signals, but
once 3 or more scopes are linked together there are good observables.

The biggest problem for radio astronomy is that radio objects mostly
get dimmer with increasing frequency. And there are some bands like
the terahertz where there are very few natural processes capable of
emitting them.

> > Most objects emit broadband thermal radiation determined by their
> > characteristic temperature and broadband non-thermal radiation
> > determined by a combination of shockwaves, magnetic fields and fast
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> > the only obvious exception where there is clear periodic structure in
> > the signal.
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> What would the pulsars sound like in this experiment? Square-waves?

No. They are sharp narrow pulses roughly 1:100 to 1:1000 mark space
ratio with a broad spectrum of harmonics (a square wave would be 1:1).
You can listen to some pulsar waveforms online at Jodrell Bank:

http://www.jb.man.ac.uk/~pulsar/Education/Sounds/sounds.html

Regards,
Martin Brown

```
From 4314100436472660565
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se.telia.net!masternews.telia.net.!newsb.telia.net.POSTED!not-for-mail
From: pausch@saaf.se (Paul Schlyter)
Newsgroups:
sci.astro.amateur,sci.astro,alt.astronomy,rec.radio.amateur.space,uk.sci.astronomy
Subject: Re: What is the highest radio frequency used for radio astronomy?
Organization: Unknown
Lines: 46
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References: <1188459200.603005.55680@m37g2000prh.googlegroups.com>
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alt.astronomy:16558 rec.radio.amateur.space:185 uk.sci.astronomy:1686
```

In article <1188895546.425878.63040@y42g2000hsy.googlegroups.com>,
Martin Brown <|||newspam|||@nezumi.demon.co.uk> wrote:

>> Microwaves have characteristics that more closely resemblesradio-
>> waves than light/infrared waves.
>
> They are all electromagnetic radiation. The transparency or otherwise
> varies somewhat with wavelength.

What distinguishes them are really our technology:

Radio waves have wavelengths which are much larger than the components we use to receive them.

Microwaves have wavelengths which are comparable in size to the components we use to receive them. In practice, this wavelength band has shifted towards shorter wavelengths as the miniaturization of our electronics has progressed - wavelengths which earlier (50+ years ago) had to be amplified using specially designed microwave valves can nowadays be amplified with more conventional (and much smaller) electronic components.

Optical (IR/light/UV) waves have wavelengths which are much shorter than the components we use to receive them.

Finally, we have X-rays and gamma rays, where normal optics no longer can be used since it's hard or impossible to construct optical elements which refract or reflect them. There we often use photon counters instead. Special optics can sometimes be used for some of these wavelength bands though, such as Wolter telescopes for X-rays which use grazing incidence to its optical surfaces to be able to reflect X-rays.

A common satellite receiver's dish is a mixture of the three first kinds of components: the parabolic reflector is a typical optical component, the LNB uses microwave techniques to convert the 10-12 GHz frequency to something between 1 and 2 GHz instead, and the satellite receiver uses conventional electronics.

```
--
----------------------------------------------------------------
Paul Schlyter,  Grev Turegatan 40,  SE-114 38 Stockholm,  SWEDEN
e-mail:  pausch at stockholm dot bostream dot se
WWW:     http://stjarnhimlen.se/
```

```
From 1017882777294807920
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X-Google-Thread: f74ae,d92c4eddce160321
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X-Google-Thread: 10e8ad,d92c4eddce160321
X-Google-Thread: 10cf28,d92c4eddce160321
X-Google-Attributes: gid113975,gidf74ae,gidfdc67,gid10e8ad,gid10cf28,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!postnews.google.com!o80g2000hse.googlegroups.com!not-for-mail
From:  laura halliday <marsgal42@hotmail.com>
Newsgroups: sci.astro.amateur,sci.astro,alt.astronomy,rec.radio.amateur.space,uk.sci.astronomy
Subject: Re: What is the highest radio frequency used for radio astronomy?
Date: Tue, 04 Sep 2007 08:32:43 -0700
Organization: http://groups.google.com
Lines: 27
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In-Reply-To: <1188803513.261520.302560@19g2000hsx.googlegroups.com>
User-Agent: G2/1.0
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20050716 Firefox/1.0.6,gzip(gfe),gzip(gfe)
Complaints-To: groups-abuse@google.com
Injection-Info: o80g2000hse.googlegroups.com; posting-host=198.162.90.176;
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Xref: g2news2.google.com sci.astro.amateur:10144 sci.astro:12565
alt.astronomy:16578 rec.radio.amateur.space:186 uk.sci.astronomy:1688

On Sep 3, 12:11 am, Radium <gluceg...@gmail.com> wrote:
> On Sep 2, 11:42 pm, pau...@saaf.se (Paul Schlyter) wrote:

> > Btw, did you know that you can use an FM radio to observe meteor
> > showers?
>
> I didn't know that.
>
> > CHoose a radio station which normally is a little bit too
> > far away to hear, then direct your antenna towards it.  Next, wait for
> > the meteors - and listen to your radio station briefly as its radio
> > waves are reflected against the meteor trail....
>
> Does the meteor shower make a buzzing sound on FM radio stations?

No. You hear brief bursts of the station, reflected off the
ionization trail.

This happens with television too. VHF signals can reflect
off other things too, like auroras and patches of intense
ionization in the E layer ("E Layer Skip"). Sporadic E
signals can be extremely strong.

Laura Halliday VE7LDH     "Non sequitur. Your ACKS are
Grid: CN89mg                    uncoordinated."
ICBM: 49 16.05 N 122 56.92 W       - Nomad the Network Engineer



From -713660466206237956
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Path: g2news2.google.com!news2.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!newsfeed00.sul.t-online.de!newsfeed01.sul.t-online.de!t-
online.de!newsfeeder.wxs.nl!divide.nova.planet.nl!posting.nova.planet.nl!not-for-
mail
Date: Tue, 04 Sep 2007 18:54:43 +0200
From: Sjouke Burry <burrynulnulfour@ppllaanneett.nnlll>
Organization: retired
User-Agent: Thunderbird 2.0.0.6 (Windows/20070728)
MIME-Version: 1.0
Newsgroups:
sci.astro.amateur,sci.astro,alt.astronomy,rec.radio.amateur.space,uk.sci.astronomy
Subject: Re: What is the highest radio frequency used for radio astronomy?
References: <1188459200.603005.55680@m37g2000prh.googlegroups.com>
<bWxBi.14925$ya1.13727@news02.roc.ny>
<1188620214.390706.118800@r29g2000hsg.googlegroups.com>
<1188806881.576341.24930@50g2000hsm.googlegroups.com>
<1188850440.891225.96990@g4g2000hsf.googlegroups.com>
<1188895546.425878.63040@y42g2000hsy.googlegroups.com>
In-Reply-To: <1188895546.425878.63040@y42g2000hsy.googlegroups.com>
Content-Type: text/plain; charset=ISO-8859-1; format=flowed
Content-Transfer-Encoding: 7bit
Lines: 14
Message-ID: <46dd8dd3$0$25485$ba620dc5@text.nova.planet.nl>
NNTP-Posting-Host: 84.80.235.244
X-Trace: 1188924883 text.nova.planet.nl 25485 84.80.235.244:36928
X-Complaints-To: abuse@planet.nl
Xref: g2news2.google.com sci.astro.amateur:10149 sci.astro:12568
alt.astronomy:16585 rec.radio.amateur.space:187 uk.sci.astronomy:1689

Martin Brown wrote:

>> What would the pulsars sound like in this experiment? Square-waves?
>
> No. They are sharp narrow pulses roughly 1:100 to 1:1000 mark space
> ratio with a broad spectrum of harmonics (a square wave would be 1:1).
> You can listen to some pulsar waveforms online at Jodrell Bank:
>
> http://www.jb.man.ac.uk/~pulsar/Education/Sounds/sounds.html
>
> Regards,
> Martin Brown
>
Impressive sounds!! Thanks.


From 8030895750538609451
X-Google-Thread: 113975,d92c4eddce160321
X-Google-Thread: f74ae,d92c4eddce160321
X-Google-Thread: fdc67,d92c4eddce160321
X-Google-Thread: 10e8ad,d92c4eddce160321
X-Google-Thread: 10cf28,d92c4eddce160321
X-Google-Attributes: gid113975,gidf74ae,gidfdc67,gid10e8ad,gid10cf28,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
```

Path: g2news2.google.com!news4.google.com!feeder1-2.proxad.net!proxad.net!
feeder1-1.proxad.net!newspeer2.se.telia.net!se.telia.net!masternews.telia.net.!
newsb.telia.net.POSTED!not-for-mail
From: pausch@saaf.se (Paul Schlyter)
Newsgroups:
sci.astro.amateur,sci.astro,alt.astronomy,rec.radio.amateur.space,uk.sci.astronomy
Subject: Re: What is the highest radio frequency used for radio astronomy?
Organization: Unknown
Lines: 21
Message-ID: <fbkcu7$2oqf$1@merope.saaf.se>
References: <1188459200.603005.55680@m37g2000prh.googlegroups.com>
<fbgab0$11oc$1@merope.saaf.se>
<1188803513.261520.302560@19g2000hsx.googlegroups.com>
<1188919963.900288.20950@o80g2000hse.googlegroups.com>
Date: Tue, 04 Sep 2007 20:12:48 GMT
NNTP-Posting-Host: 217.209.96.76
X-Complaints-To: abuse@telia.com
X-Trace: newsb.telia.net 1188936768 217.209.96.76 (Tue, 04 Sep 2007 22:12:48 CEST)
NNTP-Posting-Date: Tue, 04 Sep 2007 22:12:48 CEST
Xref: g2news2.google.com sci.astro.amateur:10162 sci.astro:12579
alt.astronomy:16634 rec.radio.amateur.space:188 uk.sci.astronomy:1690

In article <1188919963.900288.20950@o80g2000hse.googlegroups.com>,
laura halliday <marsgal42@hotmail.com> wrote:

> This happens with television too. VHF signals can reflect
> off other things too, like auroras and patches of intense
> ionization in the E layer ("E Layer Skip"). Sporadic E
> signals can be extremely strong.

...except that VHF television is vanishing. In Sweden, the very last
VHF TV transmitters will close down this fall - most of them already
have closed down. After that, we only have digital UHF television.
Other European countries are expected to do the same within a few
years.

And UHF signals don't reflect as well off sadly sporadic E layes.

--

Paul Schlyter, Grev Turegatan 40, SE-114 38 Stockholm, SWEDEN
e-mail: pausch at stockholm dot bostream dot se
WWW: http://stjarnhimlen.se/

From -1232381871519642334
X-Google-Thread: 113975,d92c4eddce160321
X-Google-Thread: f74ae,d92c4eddce160321
X-Google-Thread: fdc67,d92c4eddce160321
X-Google-Thread: 10e8ad,d92c4eddce160321
X-Google-Thread: 10cf28,d92c4eddce160321
X-Google-Attributes: gid113975,gidf74ae,gidfdc67,gid10e8ad,gid10cf28,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit

Path: g2news2.google.com!postnews.google.com!d55g2000hsg.googlegroups.com!not-for-mail
From: Steve <willner@cfa.harvard.edu>
Newsgroups: sci.astro.amateur,sci.astro,alt.astronomy,rec.radio.amateur.space,uk.sci.astronomy
Subject: Re: What is the highest radio frequency used for radio astronomy?
Date: Wed, 05 Sep 2007 14:20:18 -0700
Organization: http://groups.google.com
Lines: 27
Message-ID: <1189027218.946779.303860@d55g2000hsg.googlegroups.com>
References: <1188459200.603005.55680@m37g2000prh.googlegroups.com>
   <bWxBi.14925$ya1.13727@news02.roc.ny>
   <46d6dc3b$0$34291$d368eab@news.calweb.com>
   <1188490924.299814.37650@e9g2000prf.googlegroups.com>
NNTP-Posting-Host: 131.142.24.109
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"
X-Trace: posting.google.com 1189027219 28639 127.0.0.1 (5 Sep 2007 21:20:19 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Wed, 5 Sep 2007 21:20:19 +0000 (UTC)
In-Reply-To: <1188490924.299814.37650@e9g2000prf.googlegroups.com>
User-Agent: G2/1.0
X-HTTP-UserAgent: Mozilla/5.0 (X11; U; SunOS sun4u; en-US; rv:1.0.1) Gecko/20020719 Netscape/7.0,gzip(gfe),gzip(gfe)
Complaints-To: groups-abuse@google.com
Injection-Info: d55g2000hsg.googlegroups.com; posting-host=131.142.24.109;
   posting-account=ps2QrAMAAAA6_jCuRt2JEIpn5Otqf_w0
Xref: g2news2.google.com sci.astro.amateur:10275 sci.astro:12627 alt.astronomy:16798 rec.radio.amateur.space:189 uk.sci.astronomy:1692

laura halliday wrote:

> The ITU definition of "radio" ends at the top of EHF, at 300 GHz.
> However, this is more a reflection of the technical state of the
> art at the time the definition was made.

As Laura and others point out, all such definitions are somewhat arbitrary, though I suppose the above is as good as any.

> The usual agreement is that it's radio astronomy when the
> incoming signals are electronically detected (e.g. diodes) and
> processed. It's optical/infrared astronomy when the incoming
> signals are measured by a bolometer or other non-electronic
> means. There is, naturally, some crossover.

If you define "radio" as employing _coherent_ detection, which I think is what Laura is getting at here, then the limit 30 years ago was about 3E13 Hz, i.e., 10 microns in the infrared. The limit today may be higher; laboratory physics experiments have been done with higher frequencies, but I'm not aware of any astronomical observations. The technique is entirely radio-like: mix the incoming signal with a local oscillator (laser in this case), then amplify and detect the beat frequencies.

As others have written in response to the OP's additional query, none
of this has anything to do with amplitude modulation or sound.

```
From 4830945425154977724
X-Google-Thread: 113975,d92c4eddce160321
X-Google-Thread: f74ae,d92c4eddce160321
X-Google-Thread: fdc67,d92c4eddce160321
X-Google-Thread: 10e8ad,d92c4eddce160321
X-Google-Thread: 10cf28,d92c4eddce160321
X-Google-Attributes: gid113975,gidf74ae,gidfdc67,gid10e8ad,gid10cf28,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news2.google.com!news.glorb.com!feeder.news-service.com!
tudelft.nl!binfeed1.tudelft.nl!border1.nntp.ams.giganews.com!nntp.giganews.com!
pe2.news.blueyonder.co.uk!blueyonder!pe1.news.blueyonder.co.uk!blueyonder!
fe2.news.blueyonder.co.uk.POSTED!53ab2750!not-for-mail
From: "Androcles" <Engineer@hogwarts.physics>
Newsgroups:
sci.astro.amateur,sci.astro,alt.astronomy,rec.radio.amateur.space,uk.sci.astronomy
References: <1188459200.603005.55680@m37g2000prh.googlegroups.com>
<bWxBi.14925$ya1.13727@news02.roc.ny>   <46d6dc3b$0$34291$d368eab@news.calweb.com>
<1188490924.299814.37650@e9g2000prf.googlegroups.com>
<1189027218.946779.303860@d55g2000hsg.googlegroups.com>
Subject: Re: What is the highest radio frequency used for radio astronomy?
Lines: 41
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.3138
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.3138
Message-ID: <csFDi.138959$p7.89178@fe2.news.blueyonder.co.uk>
Date: Wed, 05 Sep 2007 21:45:44 GMT
NNTP-Posting-Host: 82.34.70.125
X-Complaints-To: http://netreport.virginmedia.com
X-Trace: fe2.news.blueyonder.co.uk 1189028744 82.34.70.125 (Wed, 05 Sep 2007
22:45:44 BST)
NNTP-Posting-Date: Wed, 05 Sep 2007 22:45:44 BST
Xref: g2news2.google.com sci.astro.amateur:10277 sci.astro:12630
alt.astronomy:16801 rec.radio.amateur.space:190 uk.sci.astronomy:1693
```

"Steve" <willner@cfa.harvard.edu> wrote in message
news:1189027218.946779.303860@d55g2000hsg.googlegroups.com...
:
: laura halliday wrote:
: > The ITU definition of "radio" ends at the top of EHF, at 300 GHz.
: > However, this is more a reflection of the technical state of the
: > art at the time the definition was made.
:
: As Laura and others point out, all such definitions are somewhat
: arbitrary, though I suppose the above is as good as any.
:

```
: > The usual agreement is that it's radio astronomy when the
: > incoming signals are electronically detected (e.g. diodes) and
: > processed. It's optical/infrared astronomy when the incoming
: > signals are measured by a bolometer or other non-electronic
: > means. There is, naturally, some crossover.
:
: If you define "radio" as employing _coherent_ detection, which I think
: is what Laura is getting at here, then the limit 30 years ago was
: about 3E13 Hz, i.e., 10 microns in the infrared.  The limit today may
: be higher; laboratory physics experiments have been done with higher
: frequencies, but I'm not aware of any astronomical observations.  The
: technique is entirely radio-like: mix the incoming signal with a local
: oscillator (laser in this case), then amplify and detect the beat
: frequencies.
:
: As others have written in response to the OP's additional query, none
: of this has anything to do with amplitude modulation or sound.

I did a living room experiment with my TV's remote control,
it seems to be adequately modulated, changing channels,
raising and lowering sound, muting and so on quite reliably.
I expect laboratory physics experiments could do it at optical
frequencies if they really tried hard (defining radio as employing
_coherent_ detection, that is).
```

```
From -3683011432058312448
X-Google-Thread: 10e8ad,491041e848f196bc,start
X-Google-Attributes: gid10e8ad,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!postnews.google.com!w3g2000hsg.googlegroups.com!not-for-
mail
From:  destroyallenvy@yahoo.com
Newsgroups: rec.radio.amateur.space
Subject: Why Many Hate Porn?
Date: Thu, 06 Sep 2007 03:08:32 -0700
Organization: http://groups.google.com
Lines: 95
Message-ID: <1189073312.413033.125490@w3g2000hsg.googlegroups.com>
NNTP-Posting-Host: 125.160.201.202
Mime-Version: 1.0
Content-Type: text/plain; charset="iso-8859-1"
X-Trace: posting.google.com 1189073312 9729 127.0.0.1 (6 Sep 2007 10:08:32 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Thu, 6 Sep 2007 10:08:32 +0000 (UTC)
User-Agent: G2/1.0
X-HTTP-UserAgent: Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1; SV1; .NET CLR
1.1.4322; InfoPath.1),gzip(gfe),gzip(gfe)
```

```
Complaints-To: groups-abuse@google.com
Injection-Info: w3g2000hsg.googlegroups.com; posting-host=125.160.201.202;
   posting-account=ps2QrAMAAAA6_jCuRt2JEIpn5Otqf_w0
Xref: g2news2.google.com rec.radio.amateur.space:191
```

Human natures are fine tuned for gene pool survival.

The way we evolve in the gene pool is that when we're not at war, we're in a race.

Peace and freedom means competition. Some people are uncompetitive. So they don't want to compete. Those people demand slavery.More...

Those who demand slavery are not necessarily poorer or richer, superior or inferior. Those are people that somehow do not like competition.

The farm owning farmers in southern US, for example, do not want to compete with the higher salary the industrial north has, so they demand slavery. This happens despite the fact that the landlords are already way richer than their slaves.

Uncompetitive businesses also do not want customers to be free to choose the best products. They demand enslavements of consumers by restricting consumers choice to choose better products.

As time goes by and consensual productive means to aquire wealth become available, those who oppose competition tends to be the one inferior.

When we're not at war, we're in a race. So in a sense, some part of life is a zero-sum game. The happiness of some superior competitors correlate with gene pool survival of such people. This correlate with the extinction of inferior people and this make inferior people unhappy....page...

For example, women prefer rich smart males and normal males prefer as many females as possible. Actually poor males prefer more money rather than more women, but that's later.

If rich smart males get more females, then rich smart alpha males will survive better in the gene pool. That means, the other males do not get any. Hence, the lesser males will not be happy. They will then come up with monogamy to ration females in equal share for everyone.

Those who are uncompetitive are not going to say honestly that they are disgruntled competitors. They're going to come up with some religious unscientific fairy tales to come up with pretext that freedom, such as free sex is wrong.

In short, whenever someone is happy, whenever something gives pleasure, happiness, and money, you can count that someone, somewhere, somehow, will come up with some fairy tales of who knows what that somehow it's wrong, bad, and should be prohibited.

The preference to snuff of happiness earned by others are called envy. In a sense, those who want to be happy are meant to kill each other with those who are envious.

Unless those who run the fastest also hit the hardest, success is simply a bridge to a gas chamber. Deviation from free fair competition turns life into some form of gun fight.

Not everyone can be appeased in a gun fight. Envy is simply unappeasable. The way to keep pursuing our happiness and still be alive is either to kill, or threaten to kill, those who are envious of us that it's not to their best interests to kill or prosecute us....page...

That's why I strongly support death penalty. Without it, all succesful people will be slaughtered by bigots that don't mind going to jail for it.

It's also the same reason why many ugly women oppose porn. That's because those women are envy bigots.

Think of it this way. Pretty women can just show some skin and make millions of dollars. Ugly women has to sexually serve poor males and get knocked up for much less money.

If this keeps going, pretty women can pick the best males with the best genes and provide their sons with better education, opportunity, and more initial start up capital.

The pretty genes will survive better in the gene pool and the ugly will be outcompeted, like in Europe or Japan. All thanks to porn.

Obviously, pretty porn stars are way better of then ugly wife. Becoming a porn star or prostitute is then one of the best job ever in this world.

However, out of envy, ugly women will want to prevent that. What's their justification? By saying that all the good jobs are so bad that it can't possibly consensual, and hence has to be prohibited.

They said that porn should be prohibited to protect women. Which women? Not the consenting one of course. How in the earth people get protected from consensual offers anyway. It's there to protect disgruntled envy competitors.

From -2973336868369010999
X-Google-Thread: 10e8ad,f5e414feb18008cc,start
X-Google-Thread: 10b9c8,f5e414feb18008cc,start
X-Google-Attributes: gid10e8ad,gid10b9c8,public,usenet

X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news2.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx01.iad01.newshosting.com!newshosting.com!
198.186.194.251.MISMATCH!transit4.readnews.com!news-out.readnews.com!news-
xxxfer.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-246 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Thu, 6 Sep 2007 21:18:18 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 1313
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <002001c7f0ed$2cd795f0$6401a8c0@familyroom>
NNTP-Posting-Host: panix3.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
    charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1189127898 22882 166.84.1.3 (7 Sep 2007 01:18:18 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Fri, 7 Sep 2007 01:18:18 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to   rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to   rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Xref: g2news2.google.com rec.radio.amateur.space:192 rec.radio.info:230

This report is organized into FIVE parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites
Part 5 (S5) - deorbited/returned satellites

SB SAT @ AMSAT W8ISS ANS-246.S1
WSR 246 Part 1 09/03/2007

AMSAT NEWS SERVICE BULLETIN 246.S1 FROM AMSAT HQ
SILVER SPRING, MD, September 03, 2007
TO ALL RADIO AMATEURS
BID: $ANS-246.S1

VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.859330 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsat.in/hamsat.htm

To know what transponder is switched on please listen for the beacon that is
active. Each transponder has a different beacon.
[06252007]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Modes: FM Repeater - V/u
Telemetry Beacon - /u

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.880 MHZ FM
145.880 MHz USB
145.920 MHz FM
1268.700 MHz FM 67Hz PL tone
Digital Downlinks: 435.150 MHz FM 38k4 Digital, PBP, 1 watt output
435.150 MHz FM 9k6 Digital, Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Digital, Pacsat Broadcast Protocol
1268.700 mhz FM 9k6 PBP Digital
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[09032007]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute
timer
   on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the
repeater on
   and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset
the 10
   minute timer.
[05282007]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Semi-Operational

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB

Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
145.870 MHz FM
145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

JARL English webpage: http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm
AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts.htm
[0820007]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM
Downlink: 436.795 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[08202007]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational depending on amount of Sunlight

Current Mode: Listen before transmitting

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)

145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz CW
145.972 MHz CW
435.100 MHz CW
2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/

AO-7 Usage Guidelines on the AO-7 Log and Resource Site located at:
http://www.planetemily.com/ao7
[05282007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Mode: V/v

Expedition 15 crew:
Commander: Fyodor Yurchikhin RN3FI
Flight Engineer: Clayton C. Anderson KD5PLA
Flight Engineer: Oleg Kotov

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

SSTV TESTING:
Worldwide Reported Downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS

Russian: RS0ISS
                     RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line is
NOT translated from Russian and posted.
[09032007]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-246.S2
WSR 246 Part 2 09/03/2007

AMSAT NEWS SERVICE BULLETIN 246.S2 FROM AMSAT HQ
SILVER SPRING, MD, September 03, 2007
TO ALL RADIO AMATEURS
BID: $ANS-246.S2

CAPE1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.

[07302007]
=====
LIBERTAD-1
Catalog Number: 31129
Launch Date: April 17,2007

Status: Operational?

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

```
APRS
Uplink:   145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[08132007]
=====
CP3
Catalog Number: 31128
Launch Date: April 17,2007

Status: Operational

Current Mode:  /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[07302007]
=====
CP4
Catalog Number: 31122
Launch Date: April 17,2007

Status: Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon:    437.325 MHz CW
[07302007]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: In Orbit

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder:  145.825 Mhz FM
[02052007]
=====
?O-?? FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: In Orbit

Current Mode: /u

Downlink: 437.385 Mhz APRS AX25
```

```
Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[02262007]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[07302007]
=====
GENESAT-1 ?O-??
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Current Mode: /u

Telemetry Beacon Downlink: 437.0670 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[01082007]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Operational

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon:             437.2750 MHz CW

Callsign: JR8YJT
[10302006]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon:             437.2750 MHz CW
```

```
Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
[03262007]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launched: June 30, 2003

Status: Operational

Current Mode: /u

Beacon:     436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[01082007]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launched: February 21, 2006

Status: Semi-Operational - Constant Carrier only

Uplink:  1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan ? )

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[01082007]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS
```

```
Mode U TLM Beacon
Downlink: 436.8375 MHz CW
[08132007]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Mode(s): FM Repeater - V/u
                 Telemetry Beacon -  /u

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink:   145.880 MHZ FM
                       145.880 MHz USB
                       145.920 MHz FM
                      1268.700 MHz FM 67Hz PL tone
Digital Downlinks:     435.150 MHz FM 38k4 Digital, PBP, 1 watt output
                       435.150 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:        145.860 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      1268.700 mhz FM 9k6 PBP Digital
Beacon:                435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[09032007]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Operational only in Full Sun Light

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink:        144.390 Mhz 1200 Baud
```

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[05282007]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: OPERATIONAL?

Current Modes: V/U
L/U

Downlink: 435.225 MHz FM (9600-baud FSK)
435.325 Mhz - Not Available - temperature problems
Uplinks: 145.850 FM
145.890 FM
145.930 FM
1269.700 FM
1269.800 FM
1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[08062007]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational.

Current Mode: Telemetry Downlink - 2M

Telemetry Downlink: 145.826 MHz FM 1200 AFSK
UHFBeacon: 435.025 MHz - OFF
Mode-S Beacon: 2401.500 MHz - OFF

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Due to solar eclipses which will continue until late August 2007, the beacon will only transmit for about one orbit every 21 days. It is unlikely to be heard during this period.

```
Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[07162007]
=====
RS-22 RADIO SPORT RS-22
Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only

Current Mode: CW Beacon

CW Beacon - 435.352 MHz
            145.818 MHz
[08062007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Mode: V/v

Expedition 15 crew:
Commander:        Fyodor Yurchikhin     RN3FI
Flight Engineer: Clayton C. Anderson   KD5PLA
Flight Engineer: Oleg Kotov

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink:   145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink:   145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink:      145.800 MHz FM

SSTV TESTING:
Worldwide Reported Downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink:         437.800 MHz FM
Repeater Downlink:       145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German:              DP0ISS
```

Russian: RS0ISS
RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.
[09032007]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-246.S3
WSR 246 Part 3 09/03/2007

AMSAT NEWS SERVICE BULLETIN 246.S3 FROM AMSAT HQ
SILVER SPRING, MD, September 03, 2007
TO ALL RADIO AMATEURS
BID: $ANS-246.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 MHz FM 67Hz CTCSS
Voice Downlink: 2401.835 MHz FM
Packet Up/Downlink: 437.250 MHz 9k6 packet
Packet Downlink 2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non=Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[08132007]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Non-Operational

Uplinks: 145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[007302007]
=====

NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, callsign KE6QMD, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks

V-band: 145.840 - 145.990 MHz CW/LSB
U-band: 435.550 - 435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks

S2-band: 2401.225 - 2401.475 MHz CW/USB
K-band: 24048.010 - 24048.060 MHz CW/USB
Beacon: 2401.323 MHz
24048.035 MHz

P3-D Telemetry Beacons (IHU)

BEACON	General Beacon (GB)	Middle Beacon (MB)	Engineering Beacon (EB)
2 m	none	145.898 MHz	none
70cm	435.438 MHz	435.588 MHz	435.838 MHz
13cm(1)	2400.188 MHz	2400.338 MHz	2400.588 MHz
13cm(2)	2401.173 MHz	2401.323 MHz	2401.573 MHz
3cm	10450.975 MHz	10451.125 MHz	10451.375 MHz
1.5cm	24047.885 MHz	24048.035 MHz	24048.285 MHz

[007162007]

=====

OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]

=====

UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web site
at the following URL:

ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink: 145.925 MHz 9600 baud FSK

```
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Reported non-operational

Current Mode: V/U
              Digipeater - Authorized for APRS usage

Uplink:         145.900 MHz FM 1200-baud Manchester FSK
                145.920 MHz FM 1200-baud Manchester FSK
                145.940 MHz FM 1200-baud Manchester FSK
                145.960 MHz FM 1200-baud Manchester FSK
Downlink:       437.026 MHz SSB 1200-baud PSK
Mode-S Beacon: 2401.1428 MHz

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.025 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[06112007]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign:       POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012006]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993
```

```
Status: Downlink only

Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[012212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HL01-11
BBS: HL01-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
```

```
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplinks:          145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink:      437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
```

```
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[01222007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
[05012006]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet: Non-Operational
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS
```

```
Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon:   145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink  29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
[01152007]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970
```

```
Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon 1:  29.352 MHz (intermittent)
Beacon 2:  29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink:     21.260 to 21.300 MHz CW/USB
Downlink:  145.860 to 145.900 MHz CW/USB

Beacon:    145.860 MHz

Robot:     145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink:   21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB
```

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-246.S4
WSR 246 Part 4 09/03/2007

AMSAT NEWS SERVICE BULLETIN 246.S4 FROM AMSAT HQ
SILVER SPRING, MD, September 03, 2007
TO ALL RADIO AMATEURS
BID: $ANS-246.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE PROPOSED FOR LAUNCH AT THIS TIME:

Phase 5a Mars Mission
Catalog Number:
Proposed Launch Date: 2009 or 2011

Status: Design Phase

For the latest project status update please visit the AMSAT-DL P5-A web page:
http://ticket-to-mars.org
[01222007]
=====
PHASE 3E AO-??
Catalog number:
Proposed Launch Date: Late 2007

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/
[01222007]
=====
Eagle AO-??
Catalog Number:
Proposed Launch Date: Early/Mid 2009

Status: Design Phase

For the latest project status updates please visit the AMSAT-NA webpage:
http://www.amsat.org
[01222007]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-246.S5
WSR 246 Part 5 09/03/2007

AMSAT NEWS SERVICE BULLETIN 246.S5 FROM AMSAT HQ
SILVER SPRING, MD, September 03, 2007
TO ALL RADIO AMATEURS
BID: $ANS-246.S5

THE FOLLOWING SATELLITES HAVE DE-ORBITED OR HAVE BEEN RETURNED TO THE GROUND:

NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink: 145.825 Mhz FM APRS AX25
APRS Uplink: 145.825 MHz FM APRS AX25
Voice/PSK31 Uplink: 28.120 MHz

Packet to Voice ID: RAFT
[06112007]
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)

* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

```
From 6172634652109460711
X-Google-Thread: 10e8ad,249c948ca4b29633,start
X-Google-Thread: 10b9c8,249c948ca4b29633,start
X-Google-Attributes: gid10e8ad,gid10b9c8,public,usenet
X-Google-Language: ENGLISH,ASCII
Path: g2news2.google.com!news2.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx02.iad01.newshosting.com!newshosting.com!
198.186.194.247.MISMATCH!news-out.readnews.com!news-xxxfer.readnews.com!panix!
rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-245 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Fri, 7 Sep 2007 00:08:39 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 297
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <002101c7f0ed$790fc320$6401a8c0@familyroom>
NNTP-Posting-Host: panix1.panix.com
Mime-Version: 1.0
Content-Type: text/plain;charset="iso-8859-1"
Content-Transfer-Encoding: quoted-printable
X-Trace: reader1.panix.com 1189138119 17596 166.84.1.1 (7 Sep 2007 04:08:39 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Fri, 7 Sep 2007 04:08:39 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
```

X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Xref: g2news2.google.com rec.radio.amateur.space:193 rec.radio.info:231

AMSAT NEWS SERVICE
ANS-245

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

******************* AMSAT 2007 Space Symposium *************************

The Wireless Association of South Hills Amateur Radio Club announces the 2007 AMSAT Space Symposium will be held at the Pittsburgh Airport Marriott Hotel on Friday, October 26 through Sunday, October 28, 2007. The AMSAT web team has posted informational pages on the AMSAT web site. You can find the announcement with many links at:
http://www.amsat.org/amsat-new/symposium/2007/index.php

****

In this edition:
- AMSAT Presentation at HAMCON, Torrance, CA
- AMSAT Board of Directors Election Deadline
- OSCAR-11 Report 31 August 2007
- Satellite Shorts From All Over
- ARISS Status - 27 August 2007

SB SAT @ AMSAT $ANS-245.01
AMSAT Presentation at HAMCON, Torrance, CA

AMSAT News Service Bulletin 245.01
From AMSAT HQ SILVER SPRING, MD.
September 2, 2007
To All RADIO AMATEURS
BID: $ANS-245.01

AMSAT member Clint Bradford, K6LCS, will be presenting his "Working

AO-51 with your HT" multimedia session at the HAMCON convention Friday, September 7, 2007 in Torrance, California.

He'll be speaking during the Long Beach Amateur Radio Club's special 5:00pm meeting at the Marriott Hotel Convention Center, 3635 Fashion Way, Torrance, CA, 90503-4809. Attendees should download his 4-page tutorial and radio programming matrix before the meeting from http://www.clintbradford.com.

There will be a workable pass of AO-51 right after the meeting!

Clint has been a licensed amateur (and GMRS Licensee KAF3359) since 1994, and has been involved in public service communication for most of that time.

He owns an award winning Web site on the JFK assassination. Professionally, he was sales manager for ADI/ Premier/Pryme, worked for Motorola, and for HRO. He proudly supports AMSAT at all his presentations.

Clint resides in Mira Loma with his wife Karen, her Icelandic horse Mjollnir, and Clint's donkey, Edaward R. Burro.

[ANS thanks JoAnne, K9JKM, for the above information]

/EX

SB SAT @ AMSAT $ANS-245.02
AMSAT Board of Directors Election Deadline

AMSAT News Service Bulletin 245.02
From AMSAT HQ SILVER SPRING, MD.
September 2, 2007
To All RADIO AMATEURS
BID: $ANS-245.02

This is a reminder for all AMSAT members who have not yet returned their ballot. This is your chance to "voice your choice". Let us know who you want to represent you on the AMSAT Board of Directors. It is not too late to ask the candidates questions. Ballots must be received in Silver Spring by September 15th.

[ANS thanks Martha for the above information]

/EX

SB SAT @ AMSAT $ANS-245.03
OSCAR-11 Report 31 August 2007

AMSAT News Service Bulletin 245.03
From AMSAT HQ SILVER SPRING, MD.
September 2, 2007

To All RADIO AMATEURS
BID: $ANS-245.03

During the period 15 July to 31 August 2007, The satellite has remained silent. Eclipses finished on 20 August. Previous observations indicated that anytime after 10 August there would have been sufficient solar power to support continuous operation.

Owing to the lack of accurate timings, it is impossible to predict when sustained beacon operation will restart, although this is expected any day now. When the beacon starts it is expected to operate 10 days ON followed by 10 days OFF.

The satellite is now in continuous sunlight, and this will continue until 14 November, when a short eclipse season starts.

I have received one reception report, from Jim G3WGM, who heard weak signals at the end of a pass on 01 August. Many thanks JIM.

The Beacon frequencies are -

VHF 145.826 MHz. AFSK FM ASCII Telemetry
UHF 435.025 MHz. OFF
S-band 2401.5 MHz. OFF

Listeners to OSCAR-11 may be interested in visiting my website. The current monthly bulletin contains further details of the satellite's status. If you need to know what OSCAR-11 should sound like, there is a short audio clip for you to hear. The website contains an archive of news & telemetry data. It also contains details about using a soundcard or hardware demodulators for data capture. There is software for capturing data, and decoding ASCII telemetry. The URL is www.users.zetnet.co.uk/clivew/

If you place this bulletin on a terrestrial packet network, please use the bulletin identifier $BID:U2RPT136.CWV, to prevent duplication.

73 Clive G3CWV   xxxxx@amsat.org (please replace xxxxx by g3cwv)

[ANS thanks Clive, G3CWV, for the above information]

/EX

SB SAT @ AMSAT $ANS-245.04
Satellite Shorts From All Over

AMSAT News Service Bulletin 245.04
From AMSAT HQ SILVER SPRING, MD.
September 2, 2007
To All RADIO AMATEURS
BID: $ANS-245.04

+ Eric, W4OTN, AMSAT Area Coordinator for Southeastern Virginia is proposing creating a Satellite Islands on the Air (IOTA) award. He is currently in the process of collecting comments to support his request to the IOTA Board. If you are interested in supporting this new award please submit your comments to Eric via: http://eric-sparks.blogspot.com/2007/08/official-iota-satellite-award-petition.html (careful with the line-wrap!)

+ Ed, WA4SWJ Editor of The AMSAT Journal reported this week that the July/August issue of the Journal was uploaded to the printer on August 28. This issue should be on its way to your mailbox shortly.

+ Information about an ESA student project with a 30 kilometre tether which will perform a deorbit manoeuvre of a capsule is now available on-line at http://www.yes2.info/. This is scheduled to fly in late September. The tether is expected to be visible over parts of Africa the Middle East, South America (below 55�S), Antarctic Peninsula (above 82�S), and Eastern Russia and western Alaska (above 170�E).

+ The Smallsat conference held in August published the abstracts from the papers presented including one by Kyle Leveque KG6TXT`on GENSO - the Global Educational Network for Satellite Operators. He will be presenting a further update on this network at the AMSAT Symposium in October. See http://www.smallsat.org/tech-sessions for more information.

+ The presentation slides from the CalPoly Summer Workshop are available at http://cubesat.atl.calpoly.edu/pages/workshops/2007-summer-workshop.php, Included is an update on the Delfi-C3 sunlight only U/V transponder mission due for launch from India later this year.

+ The ARRL Great Lakes Division Convention is being held on Saturday, September 22, 2007 at the Sheraton Independence Hotel in Independence, Ohio. This is near Cleveland. Jim Sanford, WB4GCS will be making a presentation on AMSAT's Eagle Satellite. More information about the convention can be found at: http://www.2007gldc.org/.

[ANS thanks JoAnne, K9JKM, for the above information]

/EX

SB SAT @ AMSAT $ANS-245.05
ARISS Status - 27 August 2007

AMSAT News Service Bulletin 245.05
From AMSAT HQ SILVER SPRING, MD.
September 2, 2007
To All RADIO AMATEURS
BID: $ANS-245.05

1. ARISS Contact with Nanjing, China, a Huge Success

On Sunday, August 26, the first Amateur Radio on the International Space Station (ARISS) contact with a Chinese school was performed with youth from Nanjing No. 3 High School in Nanjing, Jiangsu. Twenty students spoke with astronaut Clay Anderson, KD5PLA. Twenty questions were asked and answered as approximately 300 students and parents looked on. A vice-director of MII (Chinese FCC) was present during the contact, as well as a vice mayor of Nanjing and a group of 60 local government officials. Mr. Chen, BA1HAM, and Mr.Tong, BA1AA, two of the veterans in Chinese Amateur Radio Society, also attended. Local hams and businesses supported the students with the contact. ARISS Chairman Frank Bauer, KA3HDO, was invited to speak via teleconference to the students and other participants prior to the contact. Ten television stations, including local, provincial, and national stations, as well as another television team from Hong Kong reported on the event. The news story was also picked up by several radio stations, and was broadcasted live in several provinces across China. It was also covered by thirty newspapers. Live video of the contact was also available on sina.com and qq.com, which are two major internet news portals in China, and they also put the contact on their front pages as featured reports. A headline about the upcoming school contact in China was posted on the MSN startup window, so every Chinese MSN messenger user would see this notice. Many other websites published their own press releases. Through all media avenues, more than 100 million people were reached!

The audio for this event was fed into EchoLink AMSAT (101 377), JSDXC (337 784) and JK1ZRW (277 208) servers, receiving 106 connections from 10 countries, of which five were repeater nodes. (A fourth server in Bangkok was also used, although it was not monitored for connections.) The audio was also fed into the IRLP Discovery Reflector 9010 and received 5 connections and another 9 picked up on the streaming audio. Several press releases may be viewed on the following sites:
http://www.lifeofguangzhou.com/node_10/node_37/node_85/2007/08/20/1187575
802
25767.shtml
www.nanjing.gov.cn/pub/english/today/njnew/society/200708/t20070808_21925
3.h
tm
http://en.0437.gov.cn/dispArticle.Asp?ID=1581
http://nanjingbbs.org/bbs/viewtopic.php?f=3&t=7973
http://english.qianlong.com/article1.jsp?oid=23244189
http://en.implight.net/node/54595
http://www.ariss.cn/ (video)

2. Upcoming School Contacts

Gail Borden Public Library in Elgin, Illinois has been slated for an Amateur Radio on the International Space Station (ARISS) contact on Wednesday, September 5 at 18:38 UTC. A multi-media educational exhibit entitled, �SPACE: Dare to Dream,� will be on display for four months and is expected to draw 350,000 people of all ages. The exhibit will include the Forest of Dreams where the night sky rises, Galileo�s studios, and a Saturn V section. Other NASA exhibits will be on display, all to encourage the public to join the library�s reading program � �Mission: Read.� In addition to these ongoing displays, many special programs with presentations and hands on activities will be offered throughout the summer. Veteran astronaut Dr. Janice Voss visited on July 10. On the day of the event, space videos will be shown and a slideshow of the crew and earth observation photos will be presented during the contact. In concluding the event, the staff will run the video, �NASA back to the Moon.� The collaborative exhibit and program partners are Adler Planetarium, Chicago, IL; Fermilab, Batavia, IL; Planetary Studies Foundation, Galena, IL; Lizzadro Museum of Lapidary Art, Elmhurst, IL; NASA Glenn Research Center, Cleveland, OH; SciTech, Aurora, IL. Extensive media coverage is planned through newspapers, magazines, television, radio and the internet.

3. ARISS International Meeting Held

The monthly Amateur Radio on the International Space Station (ARISS) International Team teleconference was held on Tuesday, August 21. Topics discussed included the Malaysian space participant, SuitSat-2 and Columbus Module antennas. The minutes have been posted to the ARISS website. See: http://www.rac.ca/ariss/arisstel2007-08-21.htm

[ANS thanks Carol, KB3LKI, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Lee McLamb, KU4OS

```
From -7804041909890350197
X-Google-Thread: 113975,d92c4eddce160321
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Path: g2news2.google.com!news3.google.com!feeder3.cambrium.nl!feeder1.cambrium.nl!
```

feed.tweaknews.nl!62.216.30.27.MISMATCH!newsgate.cistron.nl!xs4all!news.tele.dk!
news.tele.dk!small.news.tele.dk!newspeer2.se.telia.net!se.telia.net!
masternews.telia.net.!newsb.telia.net.POSTED!not-for-mail
From: "Greg" <ash_5@gravitywell.org>
Newsgroups:
sci.astro.amateur,sci.astro,alt.astronomy,rec.radio.amateur.space,uk.sci.astronomy
References: <1188459200.603005.55680@m37g2000prh.googlegroups.com>
<fbgab0$11oc$1@merope.saaf.se>
<1188803513.261520.302560@19g2000hsx.googlegroups.com>
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<fbkcu7$2oqf$1@merope.saaf.se>
Subject: Re: What is the highest radio frequency used for radio astronomy?
Lines: 43
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.3138
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.3138
X-RFC2646: Format=Flowed; Original
Message-ID: <2z9Ei.8119$ZA.4233@newsb.telia.net>
Date: Fri, 07 Sep 2007 10:17:34 GMT
NNTP-Posting-Host: 81.236.213.235
X-Complaints-To: abuse@telia.com
X-Trace: newsb.telia.net 1189160254 81.236.213.235 (Fri, 07 Sep 2007 12:17:34
CEST)
NNTP-Posting-Date: Fri, 07 Sep 2007 12:17:34 CEST
Organization: Telia Internet
Xref: g2news2.google.com sci.astro.amateur:10344 sci.astro:12707
alt.astronomy:16951 rec.radio.amateur.space:194 uk.sci.astronomy:1699

Yes I think top-posting is the way to go these days, a normal PC screen
holds alot more text than in the old days, and people reply to specific
topics so the people already know what it's all about, and if I reply
to a specific question I'll quote that one ,so kill me :)

Actually (not complaining - just noting for those who don't know) you
can also receive single meteors entering the atmosphere,
not only meteor shower.
Tuning the SSB radio to a tv carrier far far away will give you a 'ping'
every time a meteor hits between you and the station, the farther away
the more pings you get.

http://www.gravitywell.org/misc/misc.htm
to show you what it sounds like (no I'm not a webdesigner either :)

To the best of my knowledge the station I'm tuned in on is in the baltic,
and I live in Sweden, so across the entire baltic sea I get to hear alot of
pings... I also have a feeling they'll continue using analogue tv for a while.

>> This happens with television too. VHF signals can reflect
>> off other things too, like auroras and patches of intense
>> ionization in the E layer ("E Layer Skip"). Sporadic E
>> signals can be extremely strong.
>

```
> ...except that VHF television is vanishing.  In Sweden, the very last
> VHF TV transmitters will close down this fall - most of them already
> have closed down.  After that, we only have digital UHF television.
> Other European countries are expected to do the same within a few
> years.
>
> And UHF signals don't reflect as well off sporadic E layes.
>
> --
> ----------------------------------------------------------------
> Paul Schlyter,  Grev Turegatan 40,  SE-114 38 Stockholm,  SWEDEN
> e-mail:  pausch at stockholm dot bostream dot se
> WWW:     http://stjarnhimlen.se/

//Greger
Project Argus station JO89sn
B�lsta - SWEDEN




From -3949359404298157792
X-Google-Thread: 113975,d92c4eddce160321
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X-Google-Thread: 10cf28,d92c4eddce160321
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newsfeed.kamp.net!81.171.88.16.MISMATCH!eweka.nl!hq-usenetpeers.eweka.nl!
195.245.201.2.MISMATCH!news.clara.net!wagner.news.clara.net!
pe1.news.blueyonder.co.uk!blueyonder!fe1.news.blueyonder.co.uk.POSTED!53ab2750!
not-for-mail
From: "Androcles" <Engineer@hogwarts.physics>
Newsgroups:
sci.astro.amateur,sci.astro,alt.astronomy,rec.radio.amateur.space,uk.sci.astronomy
References: <1188459200.603005.55680@m37g2000prh.googlegroups.com>
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<1188803513.261520.302560@19g2000hsx.googlegroups.com>
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<fbkcu7$2oqf$1@merope.saaf.se> <2z9Ei.8119$ZA.4233@newsb.telia.net>
Subject: Re: What is the highest radio frequency used for radio astronomy?
Lines: 105
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.3138
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.3138
Message-ID: <bC9Ei.76346$g.43850@fe1.news.blueyonder.co.uk>
Date: Fri, 07 Sep 2007 10:20:55 GMT
NNTP-Posting-Host: 82.34.70.125
X-Complaints-To: http://netreport.virginmedia.com
X-Trace: fe1.news.blueyonder.co.uk 1189160455 82.34.70.125 (Fri, 07 Sep 2007
```

11:20:55 BST)
NNTP-Posting-Date: Fri, 07 Sep 2007 11:20:55 BST
Xref: g2news2.google.com sci.astro.amateur:10345 sci.astro:12708
alt.astronomy:16952 rec.radio.amateur.space:195 uk.sci.astronomy:1700

The problem with top posting is the respondent doesn't actually
need to read what you said.

--

'we establish by definition that the "time" required by
light to travel from A to B equals the "time" it requires
to travel from B to A' because I SAY SO and you have to
agree because I'm the great genius, STOOOPID, don't you
dare question it. -- Rabbi Albert Einstein

http://www.androcles01.pwp.blueyonder.co.uk/Smart/tAB=tBA.gif

'we establish by definition that the "time" required by
light to travel from A to B doesn't equal the "time" it requires
to travel from B to A in the stationary system, obviously.' --
Heretic Jan Bielawski, assistant light-bulb changer.

Ref: news:1188363019.673281.67710@k79g2000hse.googlegroups.com

"SR is GR with G=0." -- Uncle Stooopid.

The Uncle Stooopid doctrine:
http://sound.westhost.com/counterfeit.jpg

"What can be asserted without evidence can also be dismissed without
evidence." -- Uncle Stooopid.

"Counterfactual assumptions yield nonsense.
If such a thing were actually observed, reliably and reproducibly, then
relativity would immediately need a major overhaul if not a complete
replacement." -- Humpty Roberts.

Rabbi Albert Einstein in 1895 failed an examination that would
have allowed him to study for a diploma as an electrical engineer
at the Eidgen�ssische Technische Hochschule in Zurich
(couldn't even pass the SATs).

According to Phuckwit Duck it was geography and history that Einstein
failed on, as if Eidgen�ssische Technische Hochschule would give a
damn. That tells you the lengths these lying bastards will go to to
protect their tin god, but its always a laugh when they slip up.
Trolls, the lot of them.

"This is PHYSICS, not math or logic, and "proof" is completely
irrelevant." -- Humpty Roberts.

"Greg" <ash_5@gravitywell.org> wrote in message
news:2z9Ei.8119$ZA.4233@newsb.telia.net...
: Yes I think top-posting is the way to go these days, a normal PC screen
: holds alot more text than in the old days, and people reply to specific
: topics so the people already know what it's all about, and if I reply
: to a specific question I'll quote that one ,so kill me :)
:
: Actually (not complaining - just noting for those who don't know) you
: can also receive single meteors entering the atmosphere,
: not only meteor shower.
: Tuning the SSB radio to a tv carrier far far away will give you a 'ping'
: every time a meteor hits between you and the station, the farther away
: the more pings you get.
:
: http://www.gravitywell.org/misc/misc.htm
: to show you what it sounds like (no I'm not a webdesigner either :)
:
: To the best of my knowledge the station I'm tuned in on is in the baltic,
: and I live in Sweden, so across the entire baltic sea I get to hear alot
of
: pings... I also have a feeling they'll continue using analogue tv for a
while.
:
: >> This happens with television too. VHF signals can reflect
: >> off other things too, like auroras and patches of intense
: >> ionization in the E layer ("E Layer Skip"). Sporadic E
: >> signals can be extremely strong.
: >
: > ...except that VHF television is vanishing. In Sweden, the very last
: > VHF TV transmitters will close down this fall - most of them already
: > have closed down. After that, we only have digital UHF television.
: > Other European countries are expected to do the same within a few
: > years.
: >
: > And UHF signals don't reflect as well off sporadic E layes.
: >
: > --
: > --
: > Paul Schlyter, Grev Turegatan 40, SE-114 38 Stockholm, SWEDEN
: > e-mail: pausch at stockholm dot bostream dot se
: > WWW: http://stjarnhimlen.se/
:
: //Greger
: Project Argus station JO89sn
: B�lsta - SWEDEN

```
:
:




From 6864350788611445072
X-Google-Thread: 10e8ad,a70d772ccfa45a42,start
X-Google-Thread: 113975,a70d772ccfa45a42,start
X-Google-Attributes: gid10e8ad,gid113975,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news1.google.com!newshub.sdsu.edu!news.astraweb.com!
border2.newsrouter.astraweb.com!not-for-mail
From: Chris Steyaert <observations@rmob.org>
Newsgroups: rec.radio.amateur.space,sci.astro.amateur
Subject: Radio Meteor Obs. Bull. August 2007 Perseids
Date: Sun, 09 Sep 2007 11:06:06 +0200
Message-ID: <frd7e3plh5b01t3l765f1amc44b4pfcfog@4ax.com>
X-Newsreader: Forte Agent 1.93/32.576 English (American)
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Lines: 17
Organization: Unlimited download news at news.astraweb.com
NNTP-Posting-Host: 905f290a.news.astraweb.com
X-Trace: DXC=1kdQ1X?Q;nnfj0fd2JZgghL?0kYOcDh@j72F7U6B]WgdNOR@e@j1]hkG?
ifhhgG3CaBUa9<ZkdPBdh_Pa;;WW3jg
Xref: g2news2.google.com rec.radio.amateur.space:196 sci.astro.amateur:10449

Radio Meteor Observation Bulletin No. 169 of August 2007 (77 K) is available now
as


     http://visualrmob.free.fr/rmobtext/rmob0708.txt


More information and the visual presentation of the hourly forward scatter
counts can be found on

     http://www.rmob.org

     http://radio.data.free.fr


     Chris



From 1509332933640868616
X-Google-Thread: 10e8ad,8bcfad23b074f45d,start
X-Google-Thread: 10b9c8,8bcfad23b074f45d,start
X-Google-Attributes: gid10e8ad,gid10b9c8,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
```

```
Path: g2news2.google.com!news2.google.com!newsfeed2.dallas1.level3.net!
news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-252 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Mon, 10 Sep 2007 21:48:38 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 237
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <001d01c7f416$1d75b660$6401a8c0@familyroom>
NNTP-Posting-Host: panix3.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1189475318 29030 166.84.1.3 (11 Sep 2007 01:48:38 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Tue, 11 Sep 2007 01:48:38 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Xref: g2news2.google.com rec.radio.amateur.space:197 rec.radio.info:239
```

AMSAT NEWS SERVICE
ANS-252

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

******************* AMSAT 2007 Space Symposium *************************

The Wireless Association of South Hills Amateur Radio Club announces the 2007 AMSAT Space Symposium will be held at the Pittsburgh Airport Marriott Hotel on Friday, October 26 through Sunday, October 28, 2007. The AMSAT web team has posted informational pages on the AMSAT web site. You can find the announcement with many links at:
http://www.amsat.org/amsat-new/symposium/2007/index.php

****

In this edition:
* September 11th
* AMSAT September 15th Deadline
* OSCAR 7 The Old/New Satellite
* ARISS Status - 3 September 2007

SB SAT @ AMSAT $ANS-252.01
September 11th

AMSAT News Service Bulletin 252.01
From AMSAT HQ SILVER SPRING, MD.
September 9, 2007
To All RADIO AMATEURS
BID: $ANS-252.01

As amateur radio operators, we all know "when all else fails, there is still amateur radio!" September 11th is a prime example of preparedness. President Bush has declared September as Emergency Preparedness Month and we share in responsibilities to our communities in times of communications disasters.

I, for one, was directly involved with 9/11 emergency comms on a professional level and admired that during this time amateurs were providing parallel comms. I wasn't home for five days to insure emergency communications were in place to serve the needs of the area and the organization I work for.

Keep those batteries charged and know what frequencies to monitor locally and be prepared to drop in an assist. This is true for any area of the world you may be at when something can suddenly happen.

[ANS thanks Dee, NB2F, for the above information]

/EX

SB SAT @ AMSAT $ANS-252.02
AMSAT September 15th Deadline

AMSAT News Service Bulletin 252.02
From AMSAT HQ SILVER SPRING, MD.
September 9, 2007
To All RADIO AMATEURS
BID: $ANS-252.02

Ballots must be received in Silver Spring by September 15th. This is for the BOD election. Also, this is the deadline for those that are attending the Pittsburgh Symposium to obtain special discounted rates. You can save a few dollars by registering before September 15th for the activities planned at the Symposium. Please plan early to attend and enjoy all that is offered. See the attached headline for more info.

[ANS thanks Martha for the above information]

/EX

SB SAT @ AMSAT $ANS-252.03
OSCAR-7 The Old/New Satellite

AMSAT News Service Bulletin 252.03
From AMSAT HQ SILVER SPRING, MD.
September 9, 2007
To All RADIO AMATEURS
BID: $ANS-252.03

AO-7 is one of the early satellites amateurs had to work with. Since its miraculous emergence from a battery problem, it has been an available "other" satellite to use. It has transponders on it so SSB is the normal mode of ops with several QSO's allowed at a time. Numerous reports of its switching between mode A & B have been verified.
It has a much larger footprint than AO-51 and is in view much longer.
Dust off those mode A receivers (HF) and try to make a contact on this bird. This will prepare you for the upcoming HEO satellites Phase 3 E and Eagle. I was told that many CQ's go unanswered for lack of operators listening. It may take a little more effort to use, however, it's more fun and rewarding.

[ANS thanks John, LA2QAA, for the above reminder]

/EX

SB SAT @ AMSAT $ANS-252.04
ARISS Status - 3 September 2007

AMSAT News Service Bulletin 252.04
From AMSAT HQ SILVER SPRING, MD.
September 9, 2007
To All RADIO AMATEURS
BID: $ANS-252.04

Amateur Radio on the International Space Station (ARISS) Status Report
September 3, 2007

1. ARISS - Amagasaki Contact Successful

On Tuesday, August 28, Amagasaki Child Science Hall in Amagasaki, Hyogo, Japan experienced an Amateur Radio on the International Space Station (ARISS) contact. Astronaut Clay Anderson, KD5PLA, answered twenty questions put to him by seventeen students. The contact was organized in part to help celebrate the 90th anniversary of the founding of Amagasaki City. Children studied the history of Amagasaki, its economic growth and the environmental issues associated with that growth. Through this contact, students learned about space and were able to practice their English. More information will follow when available.

2. Successful ARISS Contact with Ashland Greenwood High School

On Wednesday, August 29, an Amateur Radio on the International Space Station (ARISS) contact took place between Ashland Greenwood High School in Ashland, Nebraska and Clay Anderson, KD5PLA, aboard the ISS. Anderson, an Ashland Greenwood alumnus, answered 24 questions posed to him by 8 students, as twenty-one people gathered around the radio. The contact was broadcast on the school's cable television station so that all 839 students could listen in. It was also available on the school's website and publicized to the parents. Reporters from three television stations, three newspapers and one radio station covered the event. Twenty-four ham stations from 7 countries connected to EchoLink AMSAT (101 377) and JK1ZRW (277 208) servers, including 4 repeater nodes. IRLP received 10 connections from the U.S.A. and Scotland and 7 connections to the streaming audio on its website.

Video of the event may be viewed on the News radio 1110 KFAB website.
See:
http://www.kfab.com/cc-common/news/sections/newsarticle.html?feed=159377&article=2577691

The Ashland Greenwood Public School website posted this story:
http://news.agps.org/vnews/display.v/ART/2007/08/28/46d5ea4755cdd

The Lincoln ARC posted news clips from Channel 8 and Channel 10/11. See:
http://www.146760.net/cgi-bin/yabb2/YaBB.pl?num=1188431470/0

The Journal Star, the Omaha World-Herald and KETV also ran articles:
http://journalstar.com/articles/2007/08/30/news/local/doc46d60ab04e864109929910.txt
http://www.omaha.com/index.php?u_page=2798&u_sid=10119034

http://www.ketv.com/technology/14006509/detail.html

3. Upcoming School Contacts

An Amateur Radio on the International Space Station (ARISS) contact has been scheduled for M. L. King Academy (formerly Alexander Macomb Academy) in Mount Clemens, Michigan on Tuesday, September 11 at 16:06 UTC. The academy is a Title 1 school located in a suburb of Detroit and has a population of approximately 66% African American and 30% Caucasian students. Nearly 80% of the students and their families are economically disadvantaged. Students in grades K- 6 will study space and the history of spaceflight. They will participate in related hands on activities and will use several resources available on the NASA education website. As a result of their space science research, lower grades will create posters and upper grades will produce Power Point presentations. All students will be able to witness the contact through the school's television equipment. Media outlets have been invited to report on the event. The audio from this event will be fed into the EchoLink AMSAT (101 377) and JK1ZRW (277 208) servers, as well as being fed into the IRLP Discovery Reflector 9010.

An Amateur Radio on the International Space Station (ARISS) event has been planned for Westbrook Intermediate School in Clear Creek, Texas on Friday, September 14 at 18:40 UTC via the telebridge station W6SRJ in California. Westbrook is a gifted and talented magnet school with a program known as Webster Academy - Visions in Education (WAVE), which started at Webster Academy in 1996. The audio from this event will be fed into the EchoLink AMSAT (101 377) and JK1ZRW (277 208) servers, as well as being fed into the IRLP Discovery Reflector 9010.

4. Article on Richmond Community Center Contact

The Queens Courier ran an article on the August 7 Amateur Radio on the International Space Station (ARISS) contact with the One Stop Richmond Community Center in New York. See:
http://www.queenscourier.com/articles/2007/08/24/news/regional_news/queens_courier/news/news16.txt

5. Nanjing - ARISS Contact Publicity

On Sunday, August 26, China's Nanjing No. 3 High School in Nanjing, Jiangsu participated in an Amateur Radio on the International Space Station (ARISS) contact - the first for China. It received extensive media coverage. Video of the contact may be found at:
http://tech.sina.com.cn/d/bn/2007-08-26/19421289.shtml

A photo report may be viewed here:
http://en.chinafotopress.com/index/onegroup?gid=1717212

For articles covering the event, see:
http://www.chinadaily.com.cn/china/2007-08/27/content_6058744.htm
http://news.xinhuanet.com/english/2007-08/27/content_6608493.htm
http://english.sina.com/life/p/1/2007/0826/123028.html

[ANS thanks Carol, KB3LKI, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Dee Interdonato, NB2F

```
From -7447037587328094492
X-Google-Thread: 10e8ad,4a46e4dbc29da62d,start
X-Google-Thread: 10b9c8,4a46e4dbc29da62d,start
X-Google-Attributes: gid10e8ad,gid10b9c8,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news2.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx01.iad01.newshosting.com!newshosting.com!
198.186.194.251.MISMATCH!news-out.readnews.com!transit4.readnews.com!panix!
rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-253 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Thu, 13 Sep 2007 21:25:18 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 1313
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <001701c7f66e$1550f0d0$6401a8c0@familyroom>
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1189733119 16801 166.84.1.6 (14 Sep 2007 01:25:19 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Fri, 14 Sep 2007 01:25:19 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Xref: g2news2.google.com rec.radio.amateur.space:198 rec.radio.info:242
```

This report is organized into FIVE parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites
Part 5 (S5) - deorbited/returned satellites

SB SAT @ AMSAT W8ISS ANS-253.S1

WSR 253 Part 1 09/10/2007

AMSAT NEWS SERVICE BULLETIN 253.S1 FROM AMSAT HQ
SILVER SPRING, MD, September 10, 2007
TO ALL RADIO AMATEURS
BID: $ANS-253.S1

VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.859330 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsat.in/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is
active. Each transponder has a different beacon.
[06252007]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Modes: FM Repeater - V/u
                 Telemetry Beacon - /u

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink: 145.880 MHZ FM
                       145.880 MHz USB
                       145.920 MHz FM

1268.700 MHz FM 67Hz PL tone
Digital Downlinks: 435.150 MHz FM 38k4 Digital, PBP, 1 watt output
435.150 MHz FM 9k6 Digital, Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Digital, Pacsat Broadcast Protocol
1268.700 mhz FM 9k6 PBP Digital
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[09032007]

=====

SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10 minute timer.

```
[05282007]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Semi-Operational

Voice/CW Mode JA
Uplink:   145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon:   435.795 MHz

Digital Mode JD
Uplinks:  145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

JARL English webpage: http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm
AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's CW
telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts.htm
[0820007]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Current Mode: V/u

Uplink:   145.850 MHz FM
Downlink: 436.795 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[08202007]
=====
AO-7 AMSAT OSCAR 7
```

Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational depending on amount of Sunlight

Current Mode: Listen before transmitting

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz CW
145.972 MHz CW
435.100 MHz CW
2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/

AO-7 Usage Guidelines on the AO-7 Log and Resource Site located at:
http://www.planetemily.com/ao7
[05282007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Mode: V/v

Expedition 15 crew:

Commander:	Fyodor Yurchikhin	RN3FI
Flight Engineer:	Clayton C. Anderson	KD5PLA
Flight Engineer:	Oleg Kotov	

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

SSTV TESTING:
Worldwide Reported Downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS
                      RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line is
NOT translated from Russian and posted.
[09032007]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-253.S2
WSR 253 Part 2 09/10/2007

AMSAT NEWS SERVICE BULLETIN 253.S2 FROM AMSAT HQ
SILVER SPRING, MD, September 10, 2007
TO ALL RADIO AMATEURS
BID: $ANS-253.S2

CAPE1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.

[07302007]

```
=====
LIBERTAD-1
Catalog Number: 31129
Launch Date: April 17,2007

Status: Operational?

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

APRS
Uplink:   145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[08132007]
=====
CP3
Catalog Number: 31128
Launch Date: April 17,2007

Status: Operational

Current Mode:  /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[07302007]
=====
CP4
Catalog Number: 31122
Launch Date: April 17,2007

Status: Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon:    437.325 MHz CW
[07302007]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: In Orbit

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder:  145.825 Mhz FM
[02052007]
=====
?O-?? FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: In Orbit

Current Mode: /u

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[02262007]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[07302007]
=====
GENESAT-1 ?O-??
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Current Mode: /u

Telemetry Beacon Downlink: 437.0670 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[01082007]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Operational

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon:             437.2750 MHz CW

Callsign: JR8YJT
[10302006]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon:             437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
[03262007]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launched: June 30, 2003

Status: Operational

Current Mode: /u

Beacon:     436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[01082007]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launched: February 21, 2006

Status: Semi-Operational - Constant Carrier only

Uplink:  1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan ? )

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[01082007]
=====
CO-55 CUTE-1
Catalog Number: 27844
```

```
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW
[08132007]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Mode(s): FM Repeater - V/u
                 Telemetry Beacon -  /u

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink:   145.880 MHZ FM
                       145.880 MHz USB
                       145.920 MHz FM
                      1268.700 MHz FM 67Hz PL tone
Digital Downlinks:     435.150 MHz FM 38k4 Digital, PBP, 1 watt output
                       435.150 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:        145.860 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      1268.700 mhz FM 9k6 PBP Digital
Beacon:                435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[09032007]
=====
```

NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Operational only in Full Sun Light

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[05282007]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: OPERATIONAL?

Current Modes: V/U
               L/U

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks: 145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[08062007]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational.

Current Mode: Telemetry Downlink - 2M

Telemetry Downlink: 145.826 MHz FM 1200 AFSK
UHFBeacon: 435.025 MHz - OFF
Mode-S Beacon: 2401.500 MHz - OFF

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Due to solar eclipses which will continue until late August 2007, the beacon
will only transmit for about one orbit every 21 days. It is unlikely to be
heard during this period.

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[07162007]
=====
RS-22 RADIO SPORT RS-22
Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only

Current Mode: CW Beacon

CW Beacon - 435.352 MHz
            145.818 MHz
[08062007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Mode: V/v

Expedition 15 crew:
Commander: Fyodor Yurchikhin   RN3FI
Flight Engineer: Clayton C. Anderson   KD5PLA
Flight Engineer: Oleg Kotov

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

SSTV TESTING:
Worldwide Reported Downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS
                     RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line is
NOT translated from Russian and posted.
[09032007]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-253.S3
WSR 253 Part 3 09/10/2007

AMSAT NEWS SERVICE BULLETIN 253.S3 FROM AMSAT HQ
SILVER SPRING, MD, September 10, 2007
TO ALL RADIO AMATEURS
BID: $ANS-253.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI

```
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink:         437.250 MHz FM 67Hz CTCSS
Voice Downlink:      2401.835 MHz FM
Packet Up/Downlink:   437.250 MHz 9k6 packet
Packet Downlink      2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non=Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[08132007]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink:   435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Non-Operational

Uplinks:   145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink:  437.325 MHz

Broadcast callsign: MYSAT3-11
BBS:                MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial
```

land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[007302007]

=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, callsign KE6QMD, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]

=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]

=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

```
Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
V-band:   145.840 -  145.990 MHz CW/LSB
U-band:   435.550 -  435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks
---------
S2-band:  2401.225 -  2401.475 MHz CW/USB
K-band:  24048.010 - 24048.060 MHz CW/USB
Beacon:   2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)
----------------------------
BEACON   General Beacon (GB)    Middle Beacon (MB)    Engineering Beacon
(EB)
2 m       none                    145.898 MHz           none
70cm      435.438 MHz             435.588 MHz           435.838 MHz
13cm(1)  2400.188 MHz            2400.338 MHz          2400.588 MHz
13cm(2)  2401.173 MHz            2401.323 MHz          2401.573 MHz
3cm     10450.975 MHz           10451.125 MHz         10451.375 MHz
1.5cm   24047.885 MHz           24048.035 MHz         24048.285 MHz
[007162007]
=====
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown
```

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web site
at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]

=====

SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz
145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]

=====

PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]

=====

SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:

```
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink:   145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Reported non-operational

Current Mode: V/U
              Digipeater - Authorized for APRS usage

Uplink:         145.900 MHz FM 1200-baud Manchester FSK
                145.920 MHz FM 1200-baud Manchester FSK
                145.940 MHz FM 1200-baud Manchester FSK
                145.960 MHz FM 1200-baud Manchester FSK
Downlink:       437.026 MHz SSB 1200-baud PSK
Mode-S Beacon: 2401.1428 MHz

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.025 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[06112007]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
```

```
BBS callsign:       POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012006]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: Downlink only

Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[012212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HL01-11
BBS: HL01-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only
```

Uplinks: 145.840 MHz 1200-baud Manchester FSK
145.860 MHz 1200-baud Manchester FSK
145.880 MHz 1200-baud Manchester FSK
145.900 MHz 1200-baud Manchester FSK

CW downlink: 437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[01222007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink: 145.825 MHz FM 1200 Baud AFSK
Beacon: 2401.220 MHz
[05012006]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink: 145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting): Non-Operational
Uplink: 145.9000 - 146.0000 MHz SSB/CW

Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet: Non-Operational
Uplink: 145.8500 MHz MFSK 1200 BPS
Uplink: 145.8700 MHz MFSK 1200 BPS
Uplink: 145.8900 MHz MFSK 1200 BPS
Uplink: 145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon: 145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.8500 - 145.9000 MHz SSB/CW
Downlink 29.4000 - 29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

```
Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
[01152007]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon 1:  29.352 MHz (intermittent)
Beacon 2:  29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink:     21.260 to 21.300 MHz CW/USB
Downlink:  145.860 to 145.900 MHz CW/USB

Beacon:    145.860 MHz

Robot:     145.908 MHz
```

```
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink:   21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon:   29.408 MHz

Robot:    29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-253.S4
WSR 253 Part 4 09/10/2007

AMSAT NEWS SERVICE BULLETIN 253.S4 FROM AMSAT HQ
SILVER SPRING, MD, September 10, 2007
TO ALL RADIO AMATEURS
BID: $ANS-253.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE PROPOSED FOR LAUNCH AT
THIS TIME:

Phase 5a Mars Mission
Catalog Number:
Proposed Launch Date: 2009 or 2011

Status: Design Phase

For the latest project status update please visit the AMSAT-DL P5-A web
page:
http://ticket-to-mars.org
[01222007]
=====
PHASE 3E AO-??
Catalog number:
Proposed Launch Date: Late 2007

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web
page:
http://www.amsat-dl.org/p3e/
[01222007]
=====
Eagle AO-??
Catalog Number:
```

Proposed Launch Date: Early/Mid 2009

Status: Design Phase

For the latest project status updates please visit the AMSAT-NA webpage:
http://www.amsat.org
[01222007]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-253.S5
WSR 253 Part 5 09/10/2007

AMSAT NEWS SERVICE BULLETIN 253.S5 FROM AMSAT HQ
SILVER SPRING, MD, September 10, 2007
TO ALL RADIO AMATEURS
BID: $ANS-253.S5

THE FOLLOWING SATELLITES HAVE DE-ORBITED OR HAVE BEEN RETURNED TO THE GROUND:

NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink: 145.825 Mhz FM APRS AX25
APRS Uplink: 145.825 MHz FM APRS AX25
Voice/PSK31 Uplink: 28.120 MHz

Packet to Voice ID: RAFT
[06112007]
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

- AMSAT News Service (ANS)
- General satellite discussion (AMSAT-BB)
- Orbit data (KEPS)
- Manned space missions (SAREX)
- District of Columbia area (AMSAT-DC)
- New England area (AMSAT-NE)
- AMSAT Educational Liaison mailing list (AMSAT-EDU)
- AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

From 5354222214849920872
X-Google-Thread: 10e8ad,ee8256dca983969e,start
X-Google-Attributes: gid10e8ad,public,usenet
X-Google-Language: ENGLISH,ASCII
Path: g2news2.google.com!news3.google.com!feeder1-2.proxad.net!proxad.net!feeder1-1.proxad.net!ecngs!feeder2.ecngs.de!feeder.erje.net!aioe.org!not-for-mail
From: info@amsat.org (amsat)
Newsgroups: rec.radio.amateur.space
Subject: 5 upcoming school iss qso's 17/21/24/28/29 sept 2007
Date: Mon, 17 Sep 2007 07:38:21 GMT
Organization: Aioe.org NNTP Server
Lines: 72
Message-ID: <46ee2e43.4484152@nntp.aioe.org>
NNTP-Posting-Host: fUhC+sqJTmPmC4iQgbi58w.user.aioe.org
Mime-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 8bit
X-Complaints-To: abuse@aioe.org

X-Newsreader: Forte Agent 1.5/32.452
Xref: g2news2.google.com rec.radio.amateur.space:199

5 upcoming school iss qso's 17/21/24/28/29 sept 2007

Mitchell Elementary School, Ann Arbor, Michigan, direct via N�EFT
Mon 2007-09-17 13:39 UTC 67 deg

Pueblo Magnet High School, Tucson, Arizona, direct via KD7RPP
Fri 2007-09-21 15:04 UTC 90 deg

Heidelberg University for Applied Sciences, Heidelberg, D-69123,
Germany, telebridge via WH6PN
Mon 2007-09-24 08:00 UTC 46 deg

Goforth Elementary School, Clear Creek, Texas, via WH6PN
Fri 2007-09-28 16:04 UTC 82 deg via WH6PN

Smithsonian Air and Space Museum, Washington, DC., telebridge via
WH6PN
Contact is a go for: Sat 2007-09-29 16:28 UTC 16 deg

The audio for this event will be fed into the EchoLink *AMSAT* (101
377)
and *JK1ZRW* (277 208) Conference Room servers. The audio from this
event
will also be fed into the IRLP Discovery Reflector 9010. We hope to
have
good two way audio from this contact.

As we do normally, as soon as audio is suitable for transmission over
amateur radio, we start feeding audio of set up activities from about
25
minutes prior to the start of the actual contact into EchoLink for
listeners who enjoy listening in on these proceedings.

Please note that there are automatic breaks in the audio transmission
every
2.5 minutes during the event and while we listen to preparations going
on
for this contact. Each audio break is approximately 1 second long.
Please
configure your systems to not time out during times of inactivity or
ongoing audio transmissions.

For everyone's information and future reference. When any ARISS event
is
supported through the IRLP "Discovery" Reflector 9010, audio is
automatically streamed to the Internet.

It is then available via the "Discovery" Reflectors companion web site

www.discoveryreflector.ca . Once on its main page, select "Live

Streaming
Audio" on the left side bar and follow the prompts.

More directly the URL is as follows:
www.discoveryreflector.ca:8000/listen.pls

The audio on the Internet is typically delayed by about two minutes.

73 de Dieter kx4y

Dieter K. Schliemann, kx4y - zs6bbh - hs0zcn
ARISS EchoLink audio feed team member

1803 Roseberry Drive, Scottsboro, AL 35769-3960, USA
Home Phone - (256) 259-3900
IRLP node 4713, EchoLink node 47135
Skype user ID: zs6bbh

```
From -9073148596290975490
X-Google-Thread: 10e8ad,a9bd854ec6ff27ea,start
X-Google-Thread: 10b9c8,a9bd854ec6ff27ea,start
X-Google-Attributes: gid10e8ad,gid10b9c8,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news2.google.com!newsfeed2.dallas1.level3.net!
news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-259 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Wed, 19 Sep 2007 10:04:49 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 441
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <001301c7fac6$0af9cc40$6401a8c0@familyroom>
NNTP-Posting-Host: panix1.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1190210690 12792 166.84.1.1 (19 Sep 2007 14:04:50 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Wed, 19 Sep 2007 14:04:50 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
```

article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Xref: g2news2.google.com rec.radio.amateur.space:200 rec.radio.info:255

AMSAT NEWS SERVICE
ANS-259

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

******************* AMSAT 2007 Space Symposium *************************

The Wireless Association of South Hills Amateur Radio Club announces the 2007 AMSAT Space Symposium will be held at the Pittsburgh Airport Marriott Hotel on Friday, October 26 through Sunday, October 28, 2007. The AMSAT web team has posted informational pages on the AMSAT web site. You can find the announcement with many links at:
http://www.amsat.org/amsat-new/symposium/2007/index.php

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In this edition:

* New launch date for Netherlands Delfi-C3
* AO-51 Schedule for September Includes V/U FM, L/S FM, SSB, and L/U
* AMSAT at the LA County Fair
* Three Satellites Spur Activity on 145.825 MHz Packet
* Satellite Shorts From All Over
* ARRL Announces 1296 MHz WAS #1
* ARISS Status Report for the Week of September 10, 2007

SB SAT @ AMSAT $ANS-259.01
New launch date for Netherlands Delfi-C3

AMSAT News Service Bulletin 259.01
>From AMSAT HQ SILVER SPRING, MD.
September 16, 2007
To All RADIO AMATEURS
BID: $ANS-259.01

The Delfi-C3 team has been informed by its launch broker that the launch of Delfi-C3 has been moved to December, 2007.

The two major factors that have contributed to the postponement of the launch are weather and the Indian launch schedule. The weather effect on the launch is the typhoon season in India, which lasts from mid-October until December. The launch schedule is dependent on mission priorities.

In the meantime the Delfi-C3 team will continue to work on futher testing parts of the satellite and preparing for the operations phase. As soon as more information regarding the launch of Delfi-C3 is available it will be available on the Delfi-C3 website.

For downloads related to the press presentation (promotional movie, pictures, presentations) please go to http://www.delfic3.nl/press/

Delfi-C3 will have a telemetry downlink in the amateur satellite segment of the VHF amateur radio frequency band. Telemetry decoding software will be made available to participating amateur radio operators and universities which allows them to decode and display real time telemetry. This software will allow for uploading received telemetry date to the central Delfi-C3 ground station via the Internet for data processing. The Delfi-C3 team would like to invite all interested radio amateurs to receive, decode and forward telemetry data to the Delfi-C3 ground station.

Delfi-C3 includes a mode UV linear transponder. The satellite will be in telemetry only mode for approximately the first three months of the mission, after which it is switched to transponder mode.

Delfi-C3 Frequencies:

+ Primary telemetry downlink: 145.870 MHz 1200 Baud BPSK AX.25 400mW
+ Backup telemetry downlink: 145.930 MHz 1200 Baud BPSK AX.25 400mW
+ Linear transponder passband downlink: 145.880 - 145.920 MHz (inverting) 400mW PEP
+ Linear transponder passband uplink: 435.570 - 435.530 MHz
+ Transponder mode beacon: 145.870 MHz CW (10dB below transponder PEP)

[ANS thanks the Delfi-C3 team for the above information]

/EX

SB SAT @ AMSAT $ANS-259.02
AO-51 Schedule for September Includes V/U FM, L/S FM, SSB, and L/U

AMSAT News Service Bulletin 259.02
>From AMSAT HQ SILVER SPRING, MD.
September 16, 2007
To All RADIO AMATEURS
BID: $ANS-259.02

Drew, KO4MA, AMSAT-NA Vice President of Operations described the AO-51 Satellite Schedule for September. Drew said, "We are currently running

370 mW on TXA (435.150) and 630 mW on TXB (435.300). Power levels will continue to increase as eclipses get shorter, leading up to 10 weeks of continuous sun in early 2008."

Drew continued, "These are going to be interesting times. Keep in mind that anytime we have something other than telemetry running on TXA (i.e. L/U repeater), we may have to interrupt it occasionally for telemetry and satellite maintenance. Our lead command station, Gould WA4SXM, has been doing an outstanding job of squeezing every last drop of power for the downlinks."

AO-51 just completed 5 days of Mode L/S FM repeater operation. The schedule for the remainder of September 2007 is as follows:

September 14 - September 17

FM Repeater, V/U
Uplink: 145.920 MHz FM, No PL Tone
Downlink: 435.300 MHz FM
Downlink: 435.150 MHz FM, 9k6 Telemetry Only

September 17 - September 21

SSB/FM Repeater, V/U
Uplink: 145.880 MHz USB
Downlink: 435.300 MHz FM
Downlink: 435.150 MHz FM, 9k6 Telemetry Only

September 21 - October 1

FM Repeater, V/U
Uplink: 145.920 MHz FM, No PL Tone
Downlink: 435.300 MHz FM

FM Repeater, L/U (subject to interuption for satellite maintenance)
Uplink: 1268.700 MHz FM, No PL Tone
Downlink: 435.150 MHz FM

[ANS thanks Drew, KO4MA for the above information]

/EX

SB SAT @ AMSAT $ANS-259.03
AMSAT at the LA County Fair

AMSAT News Service Bulletin 259.03
>From AMSAT HQ SILVER SPRING, MD.
September 16, 2007
To All RADIO AMATEURS
BID: $ANS-259.03

As part of the Amateur Radio Expo at the Los Angeles County Fair,

AMSAT member Clint Bradford, K6LCS, is manning an AMSAT booth.
The Expo runs weekends throughout the Fair.

"It's been an AMSAT week," Clint reports. "I gave my "Working AO-51 with your HT" presentation Friday night at the annual HAMCON conference in Torrance. We had 62 people in attendance, including Gordon West and Cathy Gardenias. And right after that presentation, we had a great pass of AO-51 that we worked from the top of the conference hotel's parking structure.

"Then on to the LA County Fair for all day Saturday and Sunday. Amateur Radio is well-represented here, with over 300 feet of booth space. Our booth is a 10x10 E-ZUP, with a slideshow running with photos and "stimulating" information. Handouts include a special "Fair Edition" of AMSAT News, and other material.

"If you are planning a trip to the Fair, we are set up outside between Commercial Buildings 4 and 6."

The Los Angeles County Fair runs September 7-30 this year. It is the largest county fair in the United States and retains its impressive ranking of fourth among the top 50 fairs and festivals in all of North America. The all-time record attendance was 1,612,097 over 24 days in 1991. Fair attendance in 2006 was the highest since that record-breaking year, clocking in at 1,427,656. For more Fair information, their Web site is... http://www.lacountyfair.com

[ANS thanks Clint, K6LCS for the above information]

/EX

SB SAT @ AMSAT $ANS-259.04
Three Satellites Spur Activity on 145.825 MHz Packet

AMSAT News Service Bulletin 259.04
>From AMSAT HQ SILVER SPRING, MD.
September 16, 2007
To All RADIO AMATEURS
BID: $ANS-259.04

The ARISS system aboard the International Space Station has frequently enabled its packet digipeater for APRS on 145.825 using the path of "VIA ARISS".

Additionally, by mid-September PCSAT-1 should enter a FULL SUN OPERATING PERIOD. This may present a period of a few weeks when we will have THREE APRS satellites flying in constellation: ISS, PCSAT-1, and ANDE, all operating 145.825 MHz.

This will assure over 18 passes per day. And since they all respond to the same path "VIA ARISS" then which satellite is in view is transparent to the user. Two-hop paths via ARISS,ARISS might also be possible.

Bob, WB4APR noted, "In order for the global APRS internet system to capture all these packets, we do need volunteer ground stations to place an IGATE to monitor all packets on 145.825 MHz downlinks. In many cases, a simple omni antenna connected to APRS is all that is needed."

Successful packet digipeating on 145.825 can be seen on either: http://www.ariss.net or http://pcsat.aprs.org

Bob added, "We are also working on getting GO-32 enabled for APRS operation at 9600 baud. But since it uses different uplink and downlink fequencies, it cannot be used for multiple-APRS-satellite operations."

[ANS thanks Bob, WB4APR for the above information]

/EX

SB SAT @ AMSAT $ANS-259.05
Satellite Shorts From All Over

AMSAT News Service Bulletin 259.05
>From AMSAT HQ SILVER SPRING, MD.
September 16, 2007
To All RADIO AMATEURS
BID: $ANS-259.05

+ Hotel reservations in the reserved block of rooms for the AMSAT Symposium in Pittsburgh are being quickly booked up. This is a reminder to visit the Symposium web page and make your reservation.

+ Robert, G8ATE and John, G7HIA will be using the special call sign GB5OSO starting on the 4th October for one month to celebrate the 50th Anniversary of the launch of the first earth orbiting satellite SPUTNIK ONE on that date in 1957. All of the available analogue satellites will be used as time permits. A special QSL card will be available after the event.

+ Special congratulations to Beth (KD5CAA) and Kenneth Ransom (N5VHO ARISS/ISS Ham Radio Project Engineer) on the birth of their daughter Angela Hope on September 10, 2007! Everyone is reported doing well.

+ John, LA2QAA, administrator of the AO-7 resource page reminds satellite operators of these AO-7 pages:
http://www.planetemily.com/ao7/ao7log.php

http://www.observations.biz/Observations_from_Norway/howmuchpowerisenough.htm

http://www.observations.biz/Observations_from_Norway/how_much_power_is_enoug

While no prizes or certificates are currently being offered for the number of contacts via AO-7 the Resource Page includes an activity log from active stations on the satellite. In recent weeks we have received a report of the milestone of the 2000th QSO via AO-7 by G1WPR. F3ZD reports his AO-7 log since May, 1975 has 4276 QSOs via AO-7. The current leader in the logged number of contacts on the Resource Page is K3SZH.

+ The operating schedule for the FO-29 satellite is available on-line at: http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

+ Clive, G3CWV reports from Hitchin, North Hertfordshire, in the UK that nothing has been heard from OSCAR-11. The satellite is operational in sunlight but the current eclipses ended on August 20. Prior experience with OSCAR-11 suggest that operation should have been restored at this point. Clive would appreciate any reception reports of the satellite. Please post to AMSAT-BB or directly to g3cwv@amsat.org. The frequency of the VHF beacon is 145.825 MHz, mode FM. For more information see: http://www.users.zetnet.co.uk/clivew.

[ANS thanks everyone for the above information]

/EX

SB SAT @ AMSAT $ANS-259.06
ARRL Announces 1296 MHz WAS #1

AMSAT News Service Bulletin 259.06
>From AMSAT HQ SILVER SPRING, MD.
September 16, 2007
To All RADIO AMATEURS
BID: $ANS-259.06

Al Ward, W5LUA, of Allen, Texas, is the first person to achieve the ARRL's Worked All States (WAS) on 1296 MHz, making him 1296 MHz WAS #1. Ward first started on his pursuit January 25, 1977, with his first 1296 MHz contact with Leroy May, W5HN (SK). His 30 year quest ended last week, with confirmed contacts with Wyoming, Utah and Idaho, giving Ward his last three needed states, thanks to Paul Perryman's, WA5WCP, EME DXpedition.

"I couldn't have done this without Paul," Ward said. "Also, thanks to Ron Roche, K0ALL, and Barry Malowanchuk, VE4MA, in North Dakota for number 47 in August. Without them, it just wouldn't have been possible." After collecting his 50th QSL card, Ward drove from his home in Texas to Little Rock, Arkansas so ARRL President Joel Harrison, W5ZN, could verify his cards and complete his WAS paperwork. "Verifying QSL cards from 30 years of activity brought back a lot of memories of several stations active on 1296, many who are Silent Keys now," Harrison said.

[ANS thanks the ARRL Letter Vol. 26, No. 37 for the above information]

/EX

SB SAT @ AMSAT $ANS-259.07
ARISS Status Report for the Week of September 10, 2007

AMSAT News Service Bulletin 259.07
>From AMSAT HQ SILVER SPRING, MD.
September 16, 2007
To All RADIO AMATEURS
BID: $ANS-259.07

1. Successful Contact with Gail Borden Public Library

Youth from Elgin, Illinois experienced an ARISS contact on Wednesday, September 5. Astronaut Clay Anderson, KD5PLA, fielded 20 questions put to him by 16 children visiting the Gail Borden Public Library. The contact was held in conjunction with the multi-media educational exhibit "SPACE: Dare to Dream." Approximately 100 people witnessed the contact, including the mayor of Elgin and three city council members. Two administrators from School District U-46 attended, as did reporters from the Daily Herald and Elgin Courier newspapers. Children were interviewed pre-contact by WGN Radio and the event was reported on by WBBM News Radio 780 in Chicago. Video was also streamed over the internet.
The audio from this event was fed into the EchoLink AMSAT (101 377) and JK1ZRW (277 208) servers, and received 16 connections from 6 countries and 3 repeater nodes. Five connections were also made to the IRLP Discovery Reflector 9010. The Courier News ran an article covering the event:
http://www.suburbanchicagonews.com/couriernews/news/544694,3_1_EL06_A1SPACE_S1.article

To view the Daily Herald story, complete with slide show and audio, see:
http://www.dailyherald.com/story/?id=32229

2. Successful Contact with M. L. King Academy

An ARISS contact was completed with the M. L. King Academy (formerly Alexander Macomb Academy) in Mount Clemens, Michigan on Wednesday, September 12. The academy is a Title 1 school located in a suburb of Detroit and has a population of approximately 66% African American and 30% Caucasian students. Nearly 80% of the students and their families are economically disadvantaged. Students in grades K- 6 will study space and the history of spaceflight. They will participate in related hands on activities and will use several resources available on the NASA education website. As a result of their space science research, lower grades will create posters and upper grades will produce Power Point presentations. All students will be able to witness the contact through the school's television equipment.

3. Successful Contact with Westbrook Intermediate School

An ARISS event with Westbrook Intermediate School in Clear Creek, Texas took place on Friday, September 14 via the telebridge station W6SRJ in California. Westbrook is a gifted and talented (GT) magnet school with a program known as Webster Academy - Visions in Education (WAVE), which started at Webster Academy in 1996. This GT magnet brings together over 500 gifted and talented students from across the district to participate in a unique program design. One of the opportunities available to WAVE students is an amateur radio license class. In partnership with the Clear Lake Amateur Radio Club, over 300 students have earned their ham radio license over the last 8 years. At any time, there are approximately 100 hams in attendance at the school. Students and teachers have discussed the ARISS contact in their classes, and all students have participated in the development of questions for Clay Anderson.

4. Upcoming School Contacts

Mitchell Elementary School, a NASA Explorer School (NES), in Ann Arbor, Michigan has been slated for an ARISS contact. The event is planned for Monday, September 17 at 13:39 UTC. The use of Amateur Radio provides for the integration of technology, math, science, geography, writing, reading, and speaking through hands on applications of these concepts. Amateur radio operators in Ann Arbor will present talks and demonstrations covering these concepts prior to the actual contact with the ISS. Through this experience, students will gain an understanding of amateur radio technology and it's potential. Students will visit websites to view and listen to previous conversations with the astronauts. Mitchell Elementary will download and install tracking software onto the school lab computers to follow the space station as it passes by on the day of the contact. Using computer software,

students will write essays explaining why they should be chosen to fly on the ISS. Local, state and federal officials will be invited to attend the event. Television, radio, newspapers, and the internet will cover the contact. The audio from this event will be fed into the EchoLink AMSAT (101 377) and JK1ZRW (277 208) servers, and into the IRLP Discovery Reflector 9010.

Pueblo Magnet High School in Tucson, Arizona plans to participate in an ARISS contact on Friday, September 21 at 15:04 UTC. The school formed an Amateur Radio Club last year to involve students in math and science. Donations of radio equipment were made by the local Catalina and Green Valley Amateur Radio Clubs. Five students have already earned their Technician licenses and one has upgraded to General Class. Science, art, and the economic departments are involved in this endeavor; the Special Education department has also been included - some students who will participate in this event are autistic. Eighty percent of the students come from economically disadvantaged families. Local and national media coverage is anticipated. The audio from this event will be fed into the EchoLink AMSAT (101 377) and JK1ZRW (277 208) servers, and into the IRLP Discovery Reflector 9010.

5. ARISS - Ashland Greenwood Contact Receives Publicity

Omaha Newstand.com ran an article on the ARISS contact with Ashland
Greenwood
High School. The contact took place on August 29. See:
http://www.zwire.com/site/index.cfm?newsid=18782692&BRD=2712&PAG=461&dept_id
=556245&rfi=8

[ANS thanks Carol, KB3LKI for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the
President's Club. Members of the President's Club, as sustaining donors
to AMSAT Project Funds, will be eligible to receive additional benefits.
Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM
K9JKM at amsat dot org

```
From -583208152205616372
X-Google-Thread: 10e8ad,fc717fa0658d9f26,start
X-Google-Attributes: gid10e8ad,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!postnews.google.com!o80g2000hse.googlegroups.com!not-for-
mail
From:  goog49@cox.net
Newsgroups: rec.radio.amateur.space
Subject: Any luck with GO-32 on APRS?
Date: Thu, 20 Sep 2007 04:31:45 -0700
Organization: http://groups.google.com
Lines: 8
Message-ID: <1190287905.876916.301800@o80g2000hse.googlegroups.com>
NNTP-Posting-Host: 199.46.252.179
Mime-Version: 1.0
Content-Type: text/plain; charset="iso-8859-1"
X-Trace: posting.google.com 1190287906 22998 127.0.0.1 (20 Sep 2007 11:31:46 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Thu, 20 Sep 2007 11:31:46 +0000 (UTC)
User-Agent: G2/1.0
X-HTTP-UserAgent: Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1; SV1;
MSDigitalLocker; .NET CLR 1.1.4322; InfoPath.1),gzip(gfe),gzip(gfe)
Complaints-To: groups-abuse@google.com
Injection-Info: o80g2000hse.googlegroups.com; posting-host=199.46.252.179;
   posting-account=ps2QrAMAAAA6_jCuRt2JEIpn5Otqf_w0
Xref: g2news2.google.com rec.radio.amateur.space:201
```

I've been trying to hit GO-32 on APRS. According to the pages, it's supposed to be operational, with the right settings. I'm using a Kenwood TH-D7A(G) HT. I can hear it quite clearly at 9600 baud, but can't decode anything on APRS, or put any packets up. The next step is to set the TNC to "PACKET" and decode the raw downlink.

goog49 (K1QN)

```
From -7721949160896596665
X-Google-Thread: 10e8ad,e4206b1e8696e854,start
X-Google-Thread: 10b9c8,e4206b1e8696e854,start
X-Google-Attributes: gid10e8ad,gid10b9c8,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news1.google.com!newsfeed2.dallas1.level3.net!
news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-260 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Sat, 22 Sep 2007 18:08:28 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 1319
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <003801c7fd65$21b1e7a0$6401a8c0@familyroom>
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1190498908 27209 166.84.1.6 (22 Sep 2007 22:08:28 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sat, 22 Sep 2007 22:08:28 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Xref: g2news2.google.com rec.radio.amateur.space:202 rec.radio.info:267
```

This report is organized into FIVE parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites

Part 5 (S5) - deborbited/returned satellites

SB SAT @ AMSAT W8ISS ANS-260.S1
WSR 260 Part 1 09/17/2007

AMSAT NEWS SERVICE BULLETIN 260.S1 FROM AMSAT HQ
SILVER SPRING, MD, September 17, 2007
TO ALL RADIO AMATEURS
BID: $ANS-260.S1

VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.859330 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsat.in/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is
active. Each transponder has a different beacon.
[06252007]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Modes: FM Repeater - V/u
                 Telemetry Beacon - /u

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM

Analog voice uplink: 145.880 MHZ FM
145.880 MHz USB
145.920 MHz FM
1268.700 MHz FM 67Hz PL tone
Digital Downlinks: 435.150 MHz FM 38k4 Digital, PBP, 1 watt output
435.150 MHz FM 9k6 Digital, Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Digital, Pacsat Broadcast Protocol
1268.700 mhz FM 9k6 PBP Digital
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[09032007]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer
on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on
and off within the 10 Minute window.

3) Sending the 74.4 tone again within the 10 minute window will reset
the 10
   minute timer.
[05282007]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Operational - check operational schedule for current times!!

Current Mode: V/u

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage: http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's CW
telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts.htm
[0820007]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM
Downlink: 436.795 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[08202007]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational depending on amount of Sunlight

Current Mode: Listen before transmitting

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/

AO-7 Usage Guidelines on the AO-7 Log and Resource Site located at:
http://www.planetemily.com/ao7
[05282007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational - APRS and BBS

Current Mode: V/v

Expedition 15 crew:
Commander: Fyodor Yurchikhin   RN3FI
Flight Engineer: Clayton C. Anderson   KD5PLA
Flight Engineer: Oleg Kotov

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

SSTV TESTING:
Worldwide Reported Downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS
RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line is NOT translated from Russian and posted.
[09032007]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-260.S2
WSR 260 Part 2 09/17/2007

AMSAT NEWS SERVICE BULLETIN 260.S2 FROM AMSAT HQ
SILVER SPRING, MD, September 17, 2007
TO ALL RADIO AMATEURS
BID: $ANS-260.S2

CAPE1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode: /u

```
TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon:    435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.

[07302007]
=====
LIBERTAD-1
Catalog Number: 31129
Launch Date: April 17,2007

Status: Operational?

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

APRS
Uplink:   145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[08132007]
=====
CP3
Catalog Number: 31128
Launch Date: April 17,2007

Status: Operational

Current Mode:  /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[07302007]
=====
CP4
Catalog Number: 31122
Launch Date: April 17,2007

Status: Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon:    437.325 MHz CW
[07302007]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007
```

Status: In Orbit

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder: 145.825 Mhz FM
[02052007]
=====
?O-?? FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: In Orbit

Current Mode: /u

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[02262007]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[07302007]
=====
GENESAT-1 ?O-??
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Current Mode: /u

Telemetry Beacon Downlink: 437.0670 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[01082007]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Operational

```
Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon:             437.2750 MHz CW

Callsign: JR8YJT
[10302006]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon:             437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
[03262007]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launched: June 30, 2003

Status: Operational

Current Mode: /u

Beacon:     436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[01082007]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launched: February 21, 2006

Status: Semi-Operational - Constant Carrier only

Uplink:  1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan ? )
```

```
Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[01082007]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW
[08132007]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Mode(s): FM Repeater - V/u
                 Telemetry Beacon -  /u

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink:   145.880 MHZ FM
                       145.880 MHz USB
                       145.920 MHz FM
                      1268.700 MHz FM 67Hz PL tone
Digital Downlinks:     435.150 MHz FM 38k4 Digital, PBP, 1 watt output
                       435.150 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:        145.860 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      1268.700 mhz FM 9k6 PBP Digital
Beacon:                435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
```

```
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[09032007]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Operational only in Full Sun Light

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink:        144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[05282007]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: OPERATIONAL

Current Modes: V/U
               L/U

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[09172007]
=====
UO-11 OSCAR-11
Catalog number: 14781
```

```
Launched: March 1, 1984

Status: Semi-operational.

Current Mode:  /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon:          435.025 MHz - OFF
Mode-S Beacon:     2401.500 MHz - OFF

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Due to solar eclipses which will continue until late August 2007, the
beacon
will only transmit for about one orbit every 21 days. It is unlikely to
be
heard during this period.

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[07162007]
=====
RS-22 RADIO SPORT RS-22
Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only

Current Mode:  /u

CW Beacon - 435.352 MHz
            145.818 MHz
[08062007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational - APRS and BBS

Current Mode: V/v

Expedition 15 crew:
Commander:       Fyodor Yurchikhin     RN3FI
Flight Engineer: Clayton C. Anderson   KD5PLA
Flight Engineer: Oleg Kotov

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink:   145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM
```

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

SSTV TESTING:
Worldwide Reported Downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS
RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.
[09032007]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-260.S3
WSR 260 Part 3 09/17/2007

AMSAT NEWS SERVICE BULLETIN 260.S3 FROM AMSAT HQ
SILVER SPRING, MD, September 17, 2007
TO ALL RADIO AMATEURS
BID: $ANS-260.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

```
Proposed Callsign: TBA
Proposed Transmit Frequency:  437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink:        437.250 MHz FM 67Hz CTCSS
Voice Downlink:     2401.835 MHz FM
Packet Up/Downlink:  437.250 MHz 9k6 packet
Packet Downlink     2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non=Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[08132007]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink:   435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Non-Operational
```

Uplinks: 145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[007302007]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, callsign KE6QMD, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545

Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]

=====

AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks

V-band: 145.840 - 145.990 MHz CW/LSB
U-band: 435.550 - 435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks

S2-band: 2401.225 - 2401.475 MHz CW/USB
K-band: 24048.010 - 24048.060 MHz CW/USB
Beacon: 2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)

BEACON	General Beacon (GB)	Middle Beacon (MB)	Engineering Beacon (EB)
2 m	none	145.898 MHz	none
70cm	435.438 MHz	435.588 MHz	435.838 MHz
13cm(1)	2400.188 MHz	2400.338 MHz	2400.588 MHz
13cm(2)	2401.173 MHz	2401.323 MHz	2401.573 MHz
3cm	10450.975 MHz	10451.125 MHz	10451.375 MHz
1.5cm	24047.885 MHz	24048.035 MHz	24048.285 MHz

[007162007]

=====

OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon

```
Downlink: 437.1000 MHz 9600 FSK
[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink:    145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site
at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater:         436.250 MHz

Uplinks: Mode B Repeater:  145.825 MHz
Mode J Digipeater:         145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998
```

```
Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink:   145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Reported non-operational

Current Mode: V/U
              Digipeater - Authorized for APRS usage

Uplink:         145.900 MHz FM 1200-baud Manchester FSK
                145.920 MHz FM 1200-baud Manchester FSK
                145.940 MHz FM 1200-baud Manchester FSK
                145.960 MHz FM 1200-baud Manchester FSK
Downlink:       437.026 MHz SSB 1200-baud PSK
Mode-S Beacon: 2401.1428 MHz

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.025 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[06112007]
=====
PO-28 POSAT-1
```

```
Catalog number: 22829
Launch Date: September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign:       POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012006]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: Downlink only

Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[012212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992
```

```
Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
```

http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplinks: 145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink: 437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[01222007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink: 145.825 MHz FM 1200 Baud AFSK
Beacon: 2401.220 MHz
[05012006]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink: 145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]

```
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet: Non-Operational
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon:   145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink  29.4000 -  29.5000 MHz SSB/CW
```

```
Mode V/A (A) TLM Beacon: Non-Operational
Downlink  29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
[01152007]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon 1:  29.352 MHz (intermittent)
Beacon 2:  29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991
```

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB

Beacon: 145.860 MHz

Robot: 145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-260.S4
WSR 260 Part 4 09/17/2007

AMSAT NEWS SERVICE BULLETIN 260.S4 FROM AMSAT HQ
SILVER SPRING, MD, September 17, 2007
TO ALL RADIO AMATEURS
BID: $ANS-260.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE PROPOSED FOR LAUNCH AT THIS TIME:

Phase 5a Mars Mission
Catalog Number:
Proposed Launch Date: 2009 or 2011

Status: Design Phase

For the latest project status update please visit the AMSAT-DL P5-A web page:
http://ticket-to-mars.org
[01222007]
=====
PHASE 3E AO-??
Catalog number:
Proposed Launch Date: Late 2007

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/
[01222007]
=====
Eagle AO-??
Catalog Number:
Proposed Launch Date: Early/Mid 2009

Status: Design Phase

For the latest project status updates please visit the AMSAT-NA webpage:
http://www.amsat.org
[01222007]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-260.S5
WSR 260 Part 5 09/17/2007

AMSAT NEWS SERVICE BULLETIN 260.S5 FROM AMSAT HQ
SILVER SPRING, MD, September 17, 2007
TO ALL RADIO AMATEURS
BID: $ANS-260.S5

THE FOLLOWING SATELLITES HAVE DE-ORBITED OR HAVE BEEN RETURNED TO THE GROUND:

NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink: 145.825 Mhz FM APRS AX25
APRS Uplink: 145.825 MHz FM APRS AX25
Voice/PSK31 Uplink: 28.120 MHz

Packet to Voice ID: RAFT
[06112007]
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

From -1425392445381112961
X-Google-Thread: 10e8ad,3bdfaaacec9401e9,start
X-Google-Thread: 10b9c8,3bdfaaacec9401e9,start
X-Google-Attributes: gid10e8ad,gid10b9c8,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news2.google.com!newsfeed2.dallas1.level3.net!
news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info

```
Subject: ANS-266 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sun, 23 Sep 2007 09:11:22 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 397
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000401c7fde3$1f935020$6401a8c0@familyroom>
NNTP-Posting-Host: panix1.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1190553082 23454 166.84.1.1 (23 Sep 2007 13:11:22 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 23 Sep 2007 13:11:22 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Xref: g2news2.google.com rec.radio.amateur.space:203 rec.radio.info:268
```

AMSAT NEWS SERVICE
ANS-266

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

******************* AMSAT 2007 Space Symposium *************************

The Wireless Association of South Hills Amateur Radio Club announces the 2007 AMSAT Space Symposium will be held at the Pittsburgh Airport Marriott Hotel on Friday, October 26 through Sunday, October 28, 2007. The AMSAT web team has posted informational pages on the AMSAT web site. You can find the announcement with many links at: http://www.amsat.org/amsat-new/symposium/2007/index.php

****

In this edition:

* AMSAT Board of Directors Election Results
* New AMSAT VP of User Services
* GO-32 enabled for experimental APRS access
* AO-51 Sputnik 50th Anniversary Special Event
* Satellite Shorts From All Over
* ARISS Status - 17 September 2007

SB SAT @ AMSAT $ANS-266.01
AMSAT Board of Directors Election Results

AMSAT News Service Bulletin 266.01
From AMSAT HQ SILVER SPRING, MD.
September 23, 2007
To All RADIO AMATEURS
BID: $ANS-266.01

The following candidates were elected to the AMSAT Board of Directors:

Barry Baines , WD4ASW
Drew Glasbrenner, KO4MA
Rick Hambly, W2GPS
Gunther Meisse, W8GSM

Lee Mclamb, KU4OS is the alternate

A total of 871 votes were cast.

[ANS thanks Martha for the above information]

/EX

SB SAT @ AMSAT $ANS-266.02
New AMSAT VP of User Services

AMSAT News Service Bulletin 266.02
From AMSAT HQ SILVER SPRING, MD.
September 23, 2007
To All RADIO AMATEURS
BID: $ANS-266.02

It was with great enthusiasm that AMSAT President Rick Hambly, W2GPS, announced the appointment of Gould Smith, WA4SXM, to the position of AMSAT Vice President of User Services. In this position Gould will serve on the Executive Team and will be responsible for the leadership of a team that will include the management of the AMSAT Journal, the AMSAT New Service (ANS), AMSAT HF radio nets, Field Operations, Awards and Contests, the Dayton Hamvention and other duties as may be assigned by the President or the Board.

[ANS thanks Rick, W2GPS, for the above information]

/EX

SB SAT @ AMSAT $ANS-266.03
GO-32 enabled for experimental APRS access

AMSAT News Service Bulletin 266.03
From AMSAT HQ SILVER SPRING, MD.
September 23, 2007
To All RADIO AMATEURS
BID: $ANS-266.03

The GO-32 Satellite TECHSAT-1B team has announced experimental 9600 baud APRS access for mobile and tactical APRS on a not-to-interfere basis with the existing PACSAT BBS.

The uplink is possible with 5 Watts on 2 meters, but the downlink is 9 dB worse to an omni antenna on UHF and requires tuning 10 to 20 KHz for Doppler. Currently there are no permanent IGates to bring the downlink into the global APRS system, but it is hoped volunteers will surface with permanent satgates. So initally, do NOT expect to see yourself on FINDU.COM. Enjoy ham radio, Make a contact instead!

Experimental testing shows that an APRS HT with a 19.5" whip can get a lucky shot into this satellite (but not when there is congestion on the uplink). With a handheld beam, it should be no problem for an HT, and the beam is needed on reception anyway. Fifty Watt mobiles should have no problem using a stock mobile whip. Due to the absence of APRS signals to date, we do not have good statistics on reception in a mobile yet...

Operating on a 9600 baud FULL DUPLEX APRS satellite is MUCH different than ARISS, or any of the other 1200 baud APRS PCSATS. Because the turn-around is so fast, you cannot see your own digipeated packets on the same radio (usually)... Please read and understand this entire bulletin before attempting to operate.

The easiest way to get on GO-32 with 9600 baud APRS is to use a Kenwood D7, D700 or D710 radio. These radios since 1998 have been satellite 9600 baud ready, just waiting on a satellite!.

Read these notes on how to operate GO-32 with a D7 or D700:

Set APRS Baudrate to 9600 baud.
Set A band to uplink on 145.93
Set B band to receive 435.225 +/- 10 KHz
Set Path to be via 4XTECH
Set MYCALL to a unique SSID
Set TX method to AUTO
Set TX RATE 1 min for HT. 2 min for D700
Put something useful in your STATUS text maybe describing your setup:
"50W mobile, 1/4 wave, 2m rate" or "5W HT, long whip, 1m rate"

Save in a PM for use anytime you are outside of the terrestrial APRS network.

SATELLITE OPERATING NOTES:

The GO32 uplinks and downlinks are for the PACSAT store and forward system and users. APRS use is on a secondary basis and should not be operated unattended. If you see that the BBS PBLIST is full of other users, do not enable your APRS since the uplink will be busy. Currently the PBLIST is not in APRS format so you cannot see it unless you are running normal packet mode.

On the D700 you can press PMON on the front panel and see these packets... but they FLY by...

ACCESS TIMES: GO-32 is sun synchronous and so it comes over everywhere three times between about 8 AM to Noon and again between 8 PM to midnight local sun time. During these two windows at least one pass each will be an overhead pass which might also work for an HT. The other passes will be lower to the East or West and will work fine for a 50W mobile.

WHAT YOU HEAR: 9600 baud sounds almost exactly like open squelch, though the tuned ear can soon distinguish the difference. Before the pass, set your squelch normally to quiet the speaker. When you hear the satellite, the squelch will open and you may see up to 3 bars on your S meter. Tune to the "best sounding" noise.

DOPPLER: Depending on how low to the horizon you can see, the satelite approaches 10 KHz high at 435.235 MHz... But it is maybe 3000 km away. As it gets higher, and 6 dB closer, it will be on 435.230 MHz, passing through 435.225 published center frequency at the middle point, and then drop down through 435.220 and ending at 435.215.

But since it is 6 to 10 dB closer (and stronger) towards the center of the pass (800 km overhead), the mobile antenna is probably only going to hear the middle 435.230, .225, .220 portion easily. So I would start my receiption at 435.230...

UPLINK CHANNELS: GO-32 allows two APRS uplinks. One is exclusive to D7/D700 tactical position reporting and the other exclusive to messaging. This is in hardware, not policy...

1) All APRS messaging (or fixed station non-Mic-E positions) must use the 145.85 uplink where GO32 only digipeats APRS packets with TOCALLs that begin with the usual "APxxxx". (Even the D7 and D700 use "APKxxx" for messages.)

2) All APRS Mic-E position uplinks (D7, D700 and D710s) must be on 145.93 MHz and they must have the position comment set to "Committed, Special or PRIORITY"... With those comment settings then the TOCALL first LATITUDE digit will be 1,2,3,4,5,6,7 and only these will be

accepted by GO32 for digipeating from 145.93.

DATA CARRIER DETECT: The D700 and non(g) model D7's will NOT TX if they are hearing the downlink at the same time due to CARRIER DETECT. The D7(g) model has DCD IGNORE that *will* let it TX anyway. So use separate rigs for TX and for RX if you want to see yourself.

Otherwise stick to the receommended TX rates and know that you are getting in if you stick to the protocol. Sticking to the recommended rates also keeps channel loading low, so that everyone gets in with less congestion.

PERMANENT SATGATES: Here is a great place to use your D7 HT when you are not using it otherwise. Simply connect it to a 19" whip over a ground plane and to your APRS IGate system. The antenna does not even need to be high, since it cannot hear, nor will it be on frequency for low packets near the horizon 3000 km away. Set it to 9600 baud RX and tune to 435.230 (which is 5 KHz high). This Doppler setting will match the stronger signals.

This 19.5" whip (3/4 wave on 435) does not need to see below 25 degrees, since its max gain (almost 7 dB) is between 30 to 70 degrees anwyay. This also protects your HT from lightning, since it can be low, below all of your other antnenas. Yes, your station will only see about 30% of all possible packets and only on the best two passes per day, but combined with dozens of other such unattended SATgates, all packets should be heard somewhere by someone and injected into the APRS Internet system.

Bob Bruinga, WB4APR, reports that he hopes to have an APRS-via-GO32 web page up in a few weeks.

Additional information about GO-32 can be found on the AMSAT web site at:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=14&retURL=/satellites/status.php

Good luck!

[ANS thanks Bob, WB4APR, for the above information]

/EX

SB SAT @ AMSAT $ANS-266.04
AO-51 Sputnik 50th Anniversary Special Event

AMSAT News Service Bulletin 266.04
From AMSAT HQ SILVER SPRING, MD.
September 23, 2007
To All RADIO AMATEURS
BID: $ANS-266.04

AMSAT-NA will mark the 50th anniversary of the launch of Sputnik with a special event on AO-51. AO-51 will rebroadcast original Sputnik telemetry and a congratulatory message to mark the event during passes over North America on the evening of Wednesday, October 3rd in North America, which is early October 4th UTC. At this time, only the passes over North America will be able to carry the special event. Please watch ANS and the amsat-bb mailing list for further information as the date approaches.

[ANS thanks Drew, KO4MA, for the above information]

/EX

SB SAT @ AMSAT $ANS-266.05
Satellite Shorts From All Over

AMSAT News Service Bulletin 266.05
From AMSAT HQ SILVER SPRING, MD.
September 23, 2007
To All RADIO AMATEURS
BID: $ANS-266.05

Satellite Shorts From All Over

+ Make your room reservations for the 2007 AMSAT Space Symposium in Pittsburgh as soon as possible. Any rooms that have not been reserved by October 8th will be released to the hotel. For the reservation code, go to the AMSAT website and click on the left hand side - AMSAT Symposium. If you have any problems making a reservation, please call Martha in the ASMAST office at (301-589-6062).

+ AMSAT congratulates Ramon Santoyo, XE1KK, who was just elected to the new position of the Secretary for the IARU---Region 2. For those who don't know, Ramon is an active satellite op, goes on many dxpeditions taking satellite gear, and is an all around friend of AMSAT.

+ This is a reminder that the 26th Annual ARRL/TAPR Digital Communications Conference will be held September 28-30, 2007 in Hartford, CT. See http://www.tapr.org/dcc for additional information. The Sunday Seminar will feature AMSAT VP-Engineering and Director, Bob McGwier, N4HY presenting "A Stroll Through Software Radio, Information Theory, and Some Applications".

[ANS thanks everyone for the above information]

/EX

SB SAT @ AMSAT $ANS-266.06

ARISS Status - 17 September 2007

AMSAT News Service Bulletin 266.06
From AMSAT HQ SILVER SPRING, MD.
September 23, 2007
To All RADIO AMATEURS
BID: $ANS-266.06

1. ARISS Contact with M. L. King Academy Successful

On Wednesday, September 12, students attending M. L. King Academy (formerly Alexander Macomb Academy) in Mount Clemens, Michigan experienced an Amateur Radio on the International Space Station (ARISS) contact. Clay Anderson, KD5PLA answered 25 questions put to him by ten students. A crowd of approximately 350 gathered to watch the contact with several television stations and newspapers in attendance to report on the event. The school board director was also present and is now encouraging other schools to submit applications to ARISS. The audio from this contact was fed into the EchoLink AMSAT (101 377) and JK1ZRW (277 208) servers. It received 33 connections, including 6 repeater nodes, from 9 countries. Among those listening were China, Trinidad Tobago, Uruguay and Thailand. To view the Macomb Daily article covering the event, see:
http://www.macombdaily.com/stories/091307/loc_students001.shtml

2. Successful ARISS Contact with Westbrook Intermediate

Students from Westbrook Intermediate School in Clear Creek, Texas took part in an Amateur Radio on the International Space Station (ARISS) contact on Friday, September 14. The contact was made possible with the assistance of telebridge station WH6PN in Hawaii. Twenty-four students asked one question each of Clay Anderson, KD5PLA. The audio from this event was fed into the EchoLink AMSAT (101 377) and JK1ZRW (277 208) servers, receiving 28 connections from the U.S., Australia, Thailand and England, including 4 repeater nodes.

3. Upcoming School Contacts

An Amateur Radio on the International Space Station (ARISS) contact has been planned for Art and Pat Goforth Elementary School in League City, Texas on Friday, September 28 at 16:04 UTC via the telebridge station WH6PN in Hawaii. The school has a student body of which 25% of the children come from economically disadvantaged families and 12% receive special education. This event is a crew pick of Clay Anderson, KD5PLA.

The Smithsonian National Air and Space Museum in Washington, D.C. has been scheduled for an Amateur Radio on the International Space Station (ARISS) contact on Saturday, September 29 as part of its Family Day, "Commemorating 50 Years in Space." It will take place at 16:28 UTC via the telebridge station WH6PN in Hawaii The overall theme of the day will be to celebrate at least one major event and object in the Museum's collection for each decade of the space age. This event will focus on the ISS and the Shuttle program, and will acknowledge its sponsor, Charles Simonyi, who also participated in ARISS contacts with students while on the ISS. Visitors will be encouraged to participate in hands on activities during their time at the museum. Approximately 15,000 - 20,000 visitors are expected to attend throughout the day. The event will be promoted on the National Air and Space Museum's website, (http://www.nasm.si.edu/events/eventDetail.cfm?eventID=664) advertised by e-flyer to a variety of lists, and have newspaper ads in the Express (a daily tabloid of the Washington Post with a daily circulation of 286,000) and The City Paper, an alternate newsweekly, with a weekly subscription of 85,000.) The audio for this event will be fed into the EchoLink AMSAT (101 377) and JK1ZRW (277 208) Conference Room servers and into the IRLP Discovery Reflector 9010.

4. Scouts Participate in SuitSat-2 Project

On Saturday, September 15, approximately 58 boys, ages 6-18, from cub scout packs 983, 977, 778, 997, troop 993 and ham radio explorer post 599 in Maricopa, Arizona met to assemble two non-flight safety boxes for SuitSat-2. The scouts also drew pictures to be included on the SuitSat-2 DVD. Afterwards, the older boys were taught how to solder and lace cables. Photos from the explorer scouts may be found on this site: http://www.briansnapped.com/content/pics/SuitSat_2007/

5. ISS Radio Running Packet Operations

On Tuesday, September 11, the Kenwood radio was turned on and configured to run Packet operations. The Amateur Radio community world wide has been very pleased to have this capability restored.

6. Astronaut Training Status

On Wednesday, September 12, astronaut Koichi Wakata, KC5ZTA, participated in a simulated amateur radio school contact. Wakata is slated to fly on the shuttle STS-126 mission.

[ANS thanks Carol, KB3LKI, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Lee McLamb, KU4OS

From 820556338456914236
X-Google-Thread: 10e8ad,b7ee9913ece62e51,start
X-Google-Attributes: gid10e8ad,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news1.google.com!news.glorb.com!uns-out.usenetserver.com!news.usenetserver.com!pc02.usenetserver.com!DIALUPUSA.NET!not-for-mail
From: "Homer J" <homerj@springfield.net>
Newsgroups: rec.radio.amateur.space
Subject: Russian voice on 137.50
Date: Sun, 23 Sep 2007 09:16:25 -0400
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.3138
X-RFC2646: Format=Flowed; Original
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.3138
Message-ID: <4d768$46f66728$ce947015$5526@DIALUPUSA.NET>
X-Complaints-To: abuse@usenetserver.com
Organization: UseNetServer.com
Lines: 6
X-Trace: 4d76846f667286b31d5b005526
Xref: g2news2.google.com rec.radio.amateur.space:204

I was monitoring the WEFAX frequency last week and heard a male with what sounded like a Russian accent saying "Hello people of earth" on 137.500 MHz.

Anyone with an idea who it might be?

From -8740742784699497936
X-Google-Thread: 10e8ad,b7ee9913ece62e51
X-Google-Attributes: gid10e8ad,public,usenet
X-Google-Language: ENGLISH,ASCII
Path: g2news2.google.com!news3.google.com!out02b.usenetserver.com!news.usenetserver.com!in04.usenetserver.com!news.usenetserver.com!nx02.iad01.newshosting.com!newshosting.com!post02.iad01!roadrunner.com!not-for-mail
Message-ID: <46F84555.3010602@nettally.com>
Date: Mon, 24 Sep 2007 19:16:37 -0400
From: **THE-RFI-EMI-GUY** <rhyolite@nettally.com>
Organization: Central Scrutinizer
User-Agent: Mozilla/5.0 (Windows; U; Win98; en-US; rv:1.7.2) Gecko/20040804 Netscape/7.2 (ax)
X-Accept-Language: en-us, en
MIME-Version: 1.0
Newsgroups: rec.radio.amateur.space
To: Homer J <homerj@springfield.net>
Subject: Re: Russian voice on 137.50
References: <4d768$46f66728$ce947015$5526@DIALUPUSA.NET>

```
In-Reply-To: <4d768$46f66728$ce947015$5526@DIALUPUSA.NET>
Content-Type: text/plain; charset=ISO-8859-1; format=flowed
Content-Transfer-Encoding: 8bit
Lines: 25
NNTP-Posting-Host: 65.33.235.231
X-Complaints-To: abuse@rr.com
Xref: g2news2.google.com rec.radio.amateur.space:205

You should check the time of the ISS overflight relative to your QTH
relative to your reception. The ISS and the supply ships use VHF NBFM
30 KHz deviation downlinks normally on 143.625 MHz. 137.500 does not
ring a bell to me, but might be within the capability of their radios.

Homer J wrote:

>I was monitoring the WEFAX frequency last week and heard a male with what
>sounded like a Russian accent saying "Hello people of earth" on 137.500 MHz.
>
>Anyone with an idea who it might be?
>
>
>
>

--
Joe Leikhim K4SAT
"The RFI-EMI-GUY"�

"Treason doth never prosper: what's the reason?
For if it prosper, none dare call it treason."

"Follow The Money"  ;-P




From -8006743689464440056
X-Google-Thread: f68a8,959361255592b042,start
X-Google-Thread: fc2a5,959361255592b042,start
X-Google-Thread: 107ada,959361255592b042,start
X-Google-Thread: 10e8ad,959361255592b042,start
X-Google-Thread: f64c6,959361255592b042,start
X-Google-Attributes: gidf68a8,gidfc2a5,gid107ada,gid10e8ad,gidf64c6,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news4.google.com!feeder3.cambrium.nl!feeder1.cambrium.nl!
feed.tweaknews.nl!138.199.65.86.MISMATCH!sn-xt-ams-06!sn-xt-ams-11!sn-xt-ams-05!
sn-ams!sn-feed-ams-02!sn-post-ams-02!sn-post-sjc-01!supernews.com!
corp.supernews.com!not-for-mail
From: "Randy" <REMOVErcss_97@hotmail.com>
Newsgroups:
aus.radio.amateur.digital,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.ra
dio.amateur.space,uk.radio.amateur
Subject: Kenwood TKR-750 Type K Repeater
Date: Mon, 24 Sep 2007 21:19:42 -0600
```

Organization: Posted via Supernews, http://www.supernews.com
Message-ID: <13fgvig7ni77l8f@corp.supernews.com>
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.3138
X-MIMEOLE: Produced By Microsoft MimeOLE V6.00.2900.3138
X-RFC2646: Format=Flowed; Original
X-Complaints-To: abuse@supernews.com
Lines: 16
Xref: g2news2.google.com aus.radio.amateur.digital:22
rec.radio.amateur.homebrew:1101 rec.radio.amateur.misc:1998
rec.radio.amateur.space:206 uk.radio.amateur:15741

I was just wondering if anyone has one, or knows of anyone using a
Kenwood TKR-750 Type K2 Repeater with a Cat 400 Controller.

--
73's

Randy Molyneaux (ve5rjm)
Canora, Saskatchewan; CANADA
URL: http://parc.sasktelwebsite.net
Email: ve5rjm@hotmail.com
NODE # 1710
EchoLink # 48431
Ph. (306) 563-7150

From -5972971306887284775
X-Google-Thread: 113975,8b48085093bc4bbb,start
X-Google-Thread: f74ae,8b48085093bc4bbb,start
X-Google-Thread: fdc67,8b48085093bc4bbb,start
X-Google-Thread: 10e8ad,8b48085093bc4bbb,start
X-Google-Thread: 10cf28,8b48085093bc4bbb,start
X-Google-Attributes: gid113975,gidf74ae,gidfdc67,gid10e8ad,gid10cf28,public,usenet
X-Google-Language: ENGLISH,CP1252
Path: g2news2.google.com!news2.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx01.iad01.newshosting.com!newshosting.com!post02.iad01!
roadrunner.com!not-for-mail
Date: Tue, 25 Sep 2007 18:57:29 -0700
From: "Green Xenon [Radium]" <glucegen1@excite.com>
User-Agent: Mozilla/5.0 (Windows; U; Win98; en-US; rv:1.8b) Gecko/20050217
MIME-Version: 1.0
Newsgroups:
sci.astro.amateur,sci.astro,alt.astronomy,rec.radio.amateur.space,uk.sci.astronomy
Subject: Distinguishing RF from IR [was Re: What is the highest radio frequency
used for radio astronomy?]
Content-Type: text/plain; charset=windows-1252; format=flowed
Content-Transfer-Encoding: 8bit
Lines: 46

Message-ID: <46f9ba12$0$7459$4c368faf@roadrunner.com>
Organization: Road Runner High Speed Online http://www.rr.com
NNTP-Posting-Host: 75.84.20.87
X-Complaints-To: abuse@rr.com
Xref: g2news2.google.com sci.astro.amateur:11917 sci.astro:14301
alt.astronomy:19245 rec.radio.amateur.space:207 uk.sci.astronomy:1837

On Aug 30, 4:33 am, gwatts <gwa...@frontiernet.net> wrote in
http://groups.google.com/group/sci.astro.amateur/msg/8a7b6c89acacf15d :

> Radium wrote:

> > Hi:

> > What is the highest radio frequency used for radio astronomy?

> > According to the link below, it is 3438 GHz:

> >http://books.nap.edu/openbook.php?record_id=11719&page=11

> > Is 3438 GHz the highest radio frequency used for radio astronomy?

> If you read on a little farther you'll find
> 'blurring the distinction between
> radio astronomy and infrared astronomy.'

> So where do you want to draw the line between radio astronomy and
> infrared astronomy? There's you're answer.

There difference between IR communication and RF communication is that while both can be wireless, the former can only be used for point to point communication while the latter doesn�t have that restriction.

Think about it.

Using a remote control for your TV. If your remote is IR you must aim the remote at the TV in order to make the changes you want [such as changing the channel or turning the TV on/off]. If the remote is RF, then you make those desired changes to the TV regardless of what direction you point the remote at -- you even control the TV from a different room provided that are no metals blocking the radio signals between the TV and the RF remote.

Using the above definition, what is the highest-frequency of electromagnetic spectrum that is considered �radio� and not IR?

Equally interesting -- what is the highest-frequency of radio that is not opaque to the earth�s atmosphere?

Thanks,

Radium

From -7222320028869824668
X-Google-Thread: 113975,8b48085093bc4bbb
X-Google-Thread: f74ae,8b48085093bc4bbb
X-Google-Thread: fdc67,8b48085093bc4bbb
X-Google-Thread: 10e8ad,8b48085093bc4bbb
X-Google-Thread: 10cf28,8b48085093bc4bbb
X-Google-Attributes: gid113975,gidf74ae,gidfdc67,gid10e8ad,gid10cf28,public,usenet
X-Google-Language: ENGLISH,ASCII
Path: g2news2.google.com!news2.google.com!news.glorb.com!
newsfeed2.telusplanet.net!newsfeed.telus.net!edtnps89.POSTED!53ab2750!not-for-mail
From: Odysseus <odysseus1479-at@yahoo-dot.ca>
Newsgroups:
sci.astro.amateur,sci.astro,alt.astronomy,rec.radio.amateur.space,uk.sci.astronomy
Subject: Re: Distinguishing RF from IR [was Re: What is the highest radio
frequency used for radio astronomy?]
References: <46f9ba12$0$7459$4c368faf@roadrunner.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 8bit
User-Agent: MT-NewsWatcher/3.5.2 (PPC Mac OS X)
Message-ID: <odysseus1479-at-F84E0E.22502325092007@news.telus.net>
Lines: 39
Date: Wed, 26 Sep 2007 04:50:24 GMT
NNTP-Posting-Host: 66.222.213.120
X-Trace: edtnps89 1190782224 66.222.213.120 (Tue, 25 Sep 2007 22:50:24 MDT)
NNTP-Posting-Date: Tue, 25 Sep 2007 22:50:24 MDT
Xref: g2news2.google.com sci.astro.amateur:11930 sci.astro:14309
alt.astronomy:19256 rec.radio.amateur.space:208 uk.sci.astronomy:1839

In article <46f9ba12$0$7459$4c368faf@roadrunner.com>,
"Green Xenon [Radium]" <glucegen1@excite.com> wrote:

> On Aug 30, 4:33 am, gwatts <gwa...@frontiernet.net> wrote in
> http://groups.google.com/group/sci.astro.amateur/msg/8a7b6c89acacf15d :
>
<snip>
>
> > So where do you want to draw the line between radio astronomy and
> > infrared astronomy? There's you're answer.
>
> There difference between IR communication and RF communication is that
> while both can be wireless, the former can only be used for point to
> point communication while the latter doesn�t have that restriction.
>
> Think about it.

I think that's a gross oversimplification, an attempt to make
black-and-white a question that encompasses shades of grey.

> Using a remote control for your TV. If your remote is IR you must aim
> the remote at the TV in order to make the changes you want [such as

> changing the channel or turning the TV on/off]. If the remote is RF,
> then you make those desired changes to the TV regardless of what
> direction you point the remote at -- you even control the TV from a
> different room provided that are no metals blocking the radio signals
> between the TV and the RF remote.

Radio/microwaves penetrate more substances than IR, but they're no more
or less directed. Substitute a radio-opaque obstacle (e.g. a Faraday
cage) for the wall or body that blocks your IR remote, and the situation
is pretty well the same. Have you never heard a car radio lose its
signal when the vehicle passes under a reinforced-concrete structure?

Take your remote out of its casing and I bet the IR emission becomes
nearly omnidirectional ... OTOH masers emit coherent beams of RF energy.

--
Odysseus

```
From 8279065220928703895
X-Google-Thread: 113975,8b48085093bc4bbb
X-Google-Thread: f74ae,8b48085093bc4bbb
X-Google-Thread: fdc67,8b48085093bc4bbb
X-Google-Thread: 10e8ad,8b48085093bc4bbb
X-Google-Thread: 10cf28,8b48085093bc4bbb
X-Google-Attributes: gid113975,gidf74ae,gidfdc67,gid10e8ad,gid10cf28,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news3.google.com!news1.google.com!news2.google.com!
border1.nntp.dca.giganews.com!border2.nntp.dca.giganews.com!nntp.giganews.com!
cyclone1.gnilink.net!spamkiller.gnilink.net!gnilink.net!trnddc07.POSTED!24dd0da6!
not-for-mail
Sender: Jim Pennino <jimp@mail.specsol.com>
Message-ID: <gd7qs4-dk2.ln1@mail.specsol.com>
From: jimp@specsol.spam.sux.com
Subject: Re: Distinguishing RF from IR [was Re: What is the highest radio
frequency used for radio astronomy?]
Newsgroups:
sci.astro.amateur,sci.astro,alt.astronomy,rec.radio.amateur.space,uk.sci.astronomy
References: <46f9ba12$0$7459$4c368faf@roadrunner.com>
User-Agent: tin/1.8.3-20070201 ("Scotasay") (UNIX) (SunOS/5.9 (sun4u))
Lines: 48
Date: Wed, 26 Sep 2007 14:45:04 GMT
NNTP-Posting-Host: 71.118.11.57
X-Complaints-To: abuse@verizon.net
X-Trace: trnddc07 1190817904 71.118.11.57 (Wed, 26 Sep 2007 10:45:04 EDT)
NNTP-Posting-Date: Wed, 26 Sep 2007 10:45:04 EDT
Xref: g2news2.google.com sci.astro.amateur:11949 sci.astro:14353
alt.astronomy:19280 rec.radio.amateur.space:209 uk.sci.astronomy:1843
X-Original-Bytes: 2412
```

In rec.radio.amateur.space Green Xenon [Radium] <glucegen1@excite.com> wrote:
> On Aug 30, 4:33 am, gwatts <gwa...@frontiernet.net> wrote in
> http://groups.google.com/group/sci.astro.amateur/msg/8a7b6c89acacf15d :

```
>  > Radium wrote:

>  > > Hi:

>  > > What is the highest radio frequency used for radio astronomy?

>  > > According to the link below, it is 3438 GHz:

>  > >http://books.nap.edu/openbook.php?record_id=11719&page=11

>  > > Is 3438 GHz the highest radio frequency used for radio astronomy?

>  > If you read on a little farther you'll find
>  > 'blurring the distinction between
>  > radio astronomy and infrared astronomy.'

>  > So where do you want to draw the line between radio astronomy and
>  > infrared astronomy?  There's you're answer.

> There difference between IR communication and RF communication is that
> while both can be wireless, the former can only be used for point to
> point communication while the latter doesn?t have that restriction.

Babbling nonsense.

The directivity of RF and light sources is determined by the emitting
structure, the antenna if you will.

RF at low megahertz can be "point to point" with a sufficiently
directive antenna and light can be omnidirectional.

Ever seen a light bulb or candle?

> Think about it.

I suggest you do.

<snip remaining nonsense>


--
Jim Pennino

Remove .spam.sux to reply.


From -5842988694012597374
X-Google-Thread: 113975,8b48085093bc4bbb
X-Google-Thread: f74ae,8b48085093bc4bbb
X-Google-Thread: fdc67,8b48085093bc4bbb
X-Google-Thread: 10e8ad,8b48085093bc4bbb
X-Google-Thread: 10cf28,8b48085093bc4bbb
```

```
X-Google-Attributes: gid113975,gidf74ae,gidfdc67,gid10e8ad,gid10cf28,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news3.google.com!out02a.usenetserver.com!
news.usenetserver.com!in04.usenetserver.com!news.usenetserver.com!
nx02.iad01.newshosting.com!newshosting.com!204.127.204.224.MISMATCH!wns14feed!
worldnet.att.net!204.71.34.3!newsfeed.cwix.com!newsfeed.vmunix.org!
newsfeed01.sul.t-online.de!t-online.de!newsfeeder.wxs.nl!divide.nova.planet.nl!
posting.nova.planet.nl!not-for-mail
Date: Wed, 26 Sep 2007 18:28:14 +0200
From: Sjouke Burry <burrynulnulfour@ppllaanneett.nnlll>
Organization: retired
User-Agent: Thunderbird 2.0.0.6 (Windows/20070728)
MIME-Version: 1.0
Newsgroups:
sci.astro.amateur,sci.astro,alt.astronomy,rec.radio.amateur.space,uk.sci.astronomy
Subject: Re: Distinguishing RF from IR [was Re: What is the highest radio
 frequency used for radio astronomy?]
References: <46f9ba12$0$7459$4c368faf@roadrunner.com> <gd7qs4-
dk2.ln1@mail.specsol.com>
In-Reply-To: <gd7qs4-dk2.ln1@mail.specsol.com>
Content-Type: text/plain; charset=ISO-8859-1; format=flowed
Content-Transfer-Encoding: 7bit
Lines: 19
Message-ID: <46fa889f$0$25485$ba620dc5@text.nova.planet.nl>
NNTP-Posting-Host: 84.80.235.244
X-Trace: 1190824095 text.nova.planet.nl 25485 84.80.235.244:37599
X-Complaints-To: abuse@planet.nl
Xref: g2news2.google.com sci.astro.amateur:11953 sci.astro:14359
alt.astronomy:19285 rec.radio.amateur.space:210 uk.sci.astronomy:1845

jimp@specsol.spam.sux.com wrote:
> In rec.radio.amateur.space Green Xenon [Radium] <glucegen1@excite.com> wrote:
>> On Aug 30, 4:33 am, gwatts <gwa...@frontiernet.net> wrote in
>> http://groups.google.com/group/sci.astro.amateur/msg/8a7b6c89acacf15d :
>
>>  > Radium wrote:
>
>>  > > Hi:
>
>>  > > What is the highest radio frequency used for radio astronomy?

> Babbling nonsense.
>
> The directivity of RF and light sources is determined by the emitting
> structure, the antenna if you will.

You are trying to educate a troll.
Trust me, its better to leave them under a bridge.
Look at the list of groups, and google for his name.


From -2746202459821685394
X-Google-Thread: 113975,8b48085093bc4bbb
```

```
X-Google-Thread: f74ae,8b48085093bc4bbb
X-Google-Thread: fdc67,8b48085093bc4bbb
X-Google-Thread: 10e8ad,8b48085093bc4bbb
X-Google-Thread: 10cf28,8b48085093bc4bbb
X-Google-Attributes: gid113975,gidf74ae,gidfdc67,gid10e8ad,gid10cf28,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news2.google.com!border1.nntp.dca.giganews.com!
border2.nntp.dca.giganews.com!nntp.giganews.com!cyclone1.gnilink.net!
spamkiller.gnilink.net!gnilink.net!trnddc07.POSTED!24dd0da6!not-for-mail
Sender: Jim Pennino <jimp@mail.specsol.com>
Message-ID: <7gjqs4-655.ln1@mail.specsol.com>
From: jimp@specsol.spam.sux.com
Subject: Re: Distinguishing RF from IR [was Re: What is the highest radio
frequency used for radio astronomy?]
Newsgroups:
sci.astro.amateur,sci.astro,alt.astronomy,rec.radio.amateur.space,uk.sci.astronomy
References: <46f9ba12$0$7459$4c368faf@roadrunner.com> <gd7qs4-
dk2.ln1@mail.specsol.com> <46fa889f$0$25485$ba620dc5@text.nova.planet.nl>
User-Agent: tin/1.8.3-20070201 ("Scotasay") (UNIX) (SunOS/5.9 (sun4u))
Lines: 29
Date: Wed, 26 Sep 2007 18:05:03 GMT
NNTP-Posting-Host: 71.118.11.57
X-Complaints-To: abuse@verizon.net
X-Trace: trnddc07 1190829903 71.118.11.57 (Wed, 26 Sep 2007 14:05:03 EDT)
NNTP-Posting-Date: Wed, 26 Sep 2007 14:05:03 EDT
Xref: g2news2.google.com sci.astro.amateur:11956 sci.astro:14365
alt.astronomy:19288 rec.radio.amateur.space:211 uk.sci.astronomy:1847
X-Original-Bytes: 1995

In rec.radio.amateur.space Sjouke Burry <burrynulnulfour@ppllaanneett.nnlll>
wrote:
> jimp@specsol.spam.sux.com wrote:
> > In rec.radio.amateur.space Green Xenon [Radium] <glucegen1@excite.com> wrote:
> >> On Aug 30, 4:33 am, gwatts <gwa...@frontiernet.net> wrote in
> >> http://groups.google.com/group/sci.astro.amateur/msg/8a7b6c89acacf15d :
> >
> >>  > Radium wrote:
> >
> >>  > > Hi:
> >
> >>  > > What is the highest radio frequency used for radio astronomy?

> > Babbling nonsense.
> >
> > The directivity of RF and light sources is determined by the emitting
> > structure, the antenna if you will.

> You are trying to educate a troll.
> Trust me, its better to leave them under a bridge.
> Look at the list of groups, and google for his name.

I'm well aware he's a babbling idiot.
```

I just like to rub his nose in it once and a while.

--
Jim Pennino

Remove .spam.sux to reply.

```
From 6157882919337799023
X-Google-Thread: 10e8ad,f2cc20650fda5c1a,start
X-Google-Thread: 10b9c8,f2cc20650fda5c1a,start
X-Google-Attributes: gid10e8ad,gid10b9c8,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news1.google.com!newsfeed2.dallas1.level3.net!
news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-267 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Thu, 27 Sep 2007 21:38:32 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 1321
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <001701c80170$415ae520$6401a8c0@familyroom>
NNTP-Posting-Host: panix1.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1190943512 13170 166.84.1.1 (28 Sep 2007 01:38:32 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Fri, 28 Sep 2007 01:38:32 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Xref: g2news2.google.com rec.radio.amateur.space:212 rec.radio.info:273
```

This report is organized into FIVE parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites
Part 5 (S5) - deborbited/returned satellites

SB SAT @ AMSAT W8ISS ANS-267.S1

WSR 267 Part 1 09/24/2007

AMSAT NEWS SERVICE BULLETIN 267.S1 FROM AMSAT HQ
SILVER SPRING, MD, September 24, 2007
TO ALL RADIO AMATEURS
BID: $ANS-267.S1

VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.859330 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsat.in/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is
active. Each transponder has a different beacon.
[06252007]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Modes: FM Repeater - V/u
                               L/u
                 Telemetry Beacon - OFF

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink: 145.880 MHZ FM
                       145.880 MHz USB

145.920 MHz FM
1268.700 MHz FM 67Hz PL tone
Digital Downlinks: 435.150 MHz FM 38k4 Digital, PBP, 1 watt output
435.150 MHz FM 9k6 Digital, Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Digital, Pacsat Broadcast Protocol
1268.700 mhz FM 9k6 PBP Digital
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[09242007]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer
on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on
and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10

minute timer.
[05282007]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Operational - check operational schedule for current times!!

Current Mode: V/u

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage: http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's CW
telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts.htm
[0820007]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM
Downlink: 436.795 MHz FM

Mode and Antenna Polarization:

V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[08202007]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational depending on amount of Sunlight

Current Mode: Listen before transmitting

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/

AO-7 Usage Guidelines on the AO-7 Log and Resource Site located at:
http://www.planetemily.com/ao7
[05282007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational - APRS and BBS

Current Mode: V/v

Expedition 15 crew:
Commander: Fyodor Yurchikhin   RN3FI
Flight Engineer: Clayton C. Anderson   KD5PLA
Flight Engineer: Oleg Kotov

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:

Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

SSTV TESTING:
Worldwide Reported Downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS
                     RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.
[09032007]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-267.S2
WSR 267 Part 2 09/24/2007

AMSAT NEWS SERVICE BULLETIN 267.S2 FROM AMSAT HQ
SILVER SPRING, MD, September 24, 2007
TO ALL RADIO AMATEURS
BID: $ANS-267.S2

CAPE1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25

CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.

[07302007]
=====
LIBERTAD-1
Catalog Number: 31129
Launch Date: April 17,2007

Status: Operational?

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

APRS
Uplink: 145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[08132007]
=====
CP3
Catalog Number: 31128
Launch Date: April 17,2007

Status: Operational

Current Mode: /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[07302007]
=====
CP4
Catalog Number: 31122
Launch Date: April 17,2007

Status: Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon: 437.325 MHz CW
[07302007]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: In Orbit

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder: 145.825 Mhz FM
[02052007]
=====
?O-?? FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: In Orbit

Current Mode: /u

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[02262007]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[07302007]
=====
GENESAT-1 ?O-??
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Current Mode: /u

Telemetry Beacon Downlink: 437.0670 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[01082007]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Operational

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon: 437.2750 MHz CW

Callsign: JR8YJT
[10302006]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon: 437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
[03262007]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launched: June 30, 2003

Status: Operational

Current Mode: /u

Beacon: 436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[01082007]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launched: February 21, 2006

Status: Semi-Operational - Constant Carrier only

Uplink: 1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan ?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

```
Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[01082007]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW
[08132007]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Mode(s): FM Repeater - V/u
                               L/u
                 Telemetry Beacon - OFF

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink:   145.880 MHZ FM
                       145.880 MHz USB
                       145.920 MHz FM
                      1268.700 MHz FM 67Hz PL tone
Digital Downlinks:     435.150 MHz FM 38k4 Digital, PBP, 1 watt output
                       435.150 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:        145.860 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      1268.700 mhz FM 9k6 PBP Digital
Beacon:                435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
```

```
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[09242007]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Hibernation until full sunlight in November

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink:        144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[09242007]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: OPERATIONAL

Current Modes: V/U
               L/U

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[09172007]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984
```

Status: Semi-operational.

Current Mode: /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon: 435.025 MHz - OFF
Mode-S Beacon: 2401.500 MHz - OFF

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Due to solar eclipses which will continue until late August 2007, the beacon
will only transmit for about one orbit every 21 days. It is unlikely to be
heard during this period.

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[07162007]

=====
RS-22 RADIO SPORT RS-22
Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only

Current Mode: /u

CW Beacon - 435.352 MHz
            145.818 MHz
[08062007]

=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational - APRS and BBS

Current Mode: V/v

Expedition 15 crew:
Commander: Fyodor Yurchikhin   RN3FI
Flight Engineer: Clayton C. Anderson   KD5PLA
Flight Engineer: Oleg Kotov

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

SSTV TESTING:
Worldwide Reported Downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS
                     RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.
[09032007]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-267.S3
WSR 267 Part 3 09/24/2007

AMSAT NEWS SERVICE BULLETIN 267.S3 FROM AMSAT HQ
SILVER SPRING, MD, September 24, 2007
TO ALL RADIO AMATEURS
BID: $ANS-267.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

```
Proposed Callsign: TBA
Proposed Transmit Frequency:  437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink:        437.250 MHz FM 67Hz CTCSS
Voice Downlink:     2401.835 MHz FM
Packet Up/Downlink:  437.250 MHz 9k6 packet
Packet Downlink     2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non=Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[08132007]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink:   435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Non-Operational

Uplinks:   145.850 MHz
```

145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[007302007]

=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, callsign KE6QMD, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]

=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]

=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]

=====

AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks

V-band: 145.840 - 145.990 MHz CW/LSB
U-band: 435.550 - 435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks

S2-band: 2401.225 - 2401.475 MHz CW/USB
K-band: 24048.010 - 24048.060 MHz CW/USB
Beacon: 2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)

BEACON	General Beacon (GB)	Middle Beacon (MB)	Engineering Beacon (EB)
2 m	none	145.898 MHz	none
70cm	435.438 MHz	435.588 MHz	435.838 MHz
13cm(1)	2400.188 MHz	2400.338 MHz	2400.588 MHz
13cm(2)	2401.173 MHz	2401.323 MHz	2401.573 MHz
3cm	10450.975 MHz	10451.125 MHz	10451.375 MHz
1.5cm	24047.885 MHz	24048.035 MHz	24048.285 MHz

[007162007]

=====

OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK

```
[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink:    145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site
at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater:         436.250 MHz

Uplinks: Mode B Repeater:  145.825 MHz
Mode J Digipeater:         145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998
```

```
Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink:   145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Reported non-operational

Current Mode: V/U
              Digipeater - Authorized for APRS usage

Uplink:         145.900 MHz FM 1200-baud Manchester FSK
                145.920 MHz FM 1200-baud Manchester FSK
                145.940 MHz FM 1200-baud Manchester FSK
                145.960 MHz FM 1200-baud Manchester FSK
Downlink:       437.026 MHz SSB 1200-baud PSK
Mode-S Beacon: 2401.1428 MHz

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.025 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[06112007]
=====
PO-28 POSAT-1
Catalog number: 22829
```

Launch Date: September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012006]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: Downlink only

Uplinks: 145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[012212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

```
Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
```

```
[01152007]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplinks:          145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink:      437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[01222007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
[05012006]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
```

FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting): Non-Operational
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet: Non-Operational
Uplink: 145.8500 MHz MFSK 1200 BPS
Uplink: 145.8700 MHz MFSK 1200 BPS
Uplink: 145.8900 MHz MFSK 1200 BPS
Uplink: 145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon: 145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.8500 - 145.9000 MHz SSB/CW
Downlink 29.4000 - 29.5000 MHz SSB/CW

```
Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
[01152007]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon 1:  29.352 MHz (intermittent)
Beacon 2:  29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991
```

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB

Beacon: 145.860 MHz

Robot: 145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-267.S4
WSR 267 Part 4 09/24/2007

AMSAT NEWS SERVICE BULLETIN 267.S4 FROM AMSAT HQ
SILVER SPRING, MD, September 24, 2007
TO ALL RADIO AMATEURS
BID: $ANS-267.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE PROPOSED FOR LAUNCH AT THIS TIME:

Phase 5a Mars Mission
Catalog Number:
Proposed Launch Date: 2009 or 2011

Status: Design Phase

For the latest project status update please visit the AMSAT-DL P5-A web page:
http://ticket-to-mars.org
[01222007]
=====
PHASE 3E AO-??
Catalog number:
Proposed Launch Date: Late 2007

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/
[01222007]
=====
Eagle AO-??
Catalog Number:
Proposed Launch Date: Early/Mid 2009

Status: Design Phase

For the latest project status updates please visit the AMSAT-NA webpage:
http://www.amsat.org
[01222007]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-267.S5
WSR 267 Part 5 09/24/2007

AMSAT NEWS SERVICE BULLETIN 267.S5 FROM AMSAT HQ
SILVER SPRING, MD, September 24, 2007
TO ALL RADIO AMATEURS
BID: $ANS-267.S5

THE FOLLOWING SATELLITES HAVE DE-ORBITED OR HAVE BEEN RETURNED TO THE GROUND:

NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink: 145.825 Mhz FM APRS AX25
APRS Uplink: 145.825 MHz FM APRS AX25
Voice/PSK31 Uplink: 28.120 MHz

Packet to Voice ID: RAFT
[06112007]
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

```
From 8133049869931876173
X-Google-Thread: 10e8ad,78ef20e3c2df59ca,start
X-Google-Thread: 10b9c8,78ef20e3c2df59ca,start
X-Google-Attributes: gid10e8ad,gid10b9c8,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news2.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx01.iad01.newshosting.com!newshosting.com!
198.186.194.251.MISMATCH!news-out.readnews.com!transit4.readnews.com!panix!
rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
```

```
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-273 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sun, 30 Sep 2007 11:53:19 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 191
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000b01c8037a$01f92de0$6401a8c0@familyroom>
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1191167599 3178 166.84.1.6 (30 Sep 2007 15:53:19 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 30 Sep 2007 15:53:19 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Xref: g2news2.google.com rec.radio.amateur.space:213 rec.radio.info:279
```

AMSAT NEWS SERVICE
ANS-273

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

******************* AMSAT 2007 Space Symposium *************************

The Wireless Association of South Hills Amateur Radio Club announces the 2007 AMSAT Space Symposium will be held at the Pittsburgh Airport Marriott Hotel on Friday, October 26 through Sunday, October 28, 2007. The AMSAT web team has posted informational pages on the AMSAT web site. You can find the announcement with many links at:
http://www.amsat.org/amsat-new/symposium/2007/index.php

****

In this edition:
* Annual International Amateur Radio Satellite Forum at Symposium
* AMSAT Awards
* Students to Build Satellite Antennas at AMSAT Symposium
* Sputnik 50th Anniversary Special Events Planned for October 4
* Satellite Shorts From All Over

SB SAT @ AMSAT $ANS-273.01
Annual International Amateur Radio Satellite Forum at Symposium

AMSAT News Service Bulletin 273.01
From AMSAT HQ SILVER SPRING, MD.
September 30, 2007
To All RADIO AMATEURS
BID: $ANS-273.01

The International Amateur Radio Union (IARU) Administrative Council holds its Amateur Satellite Forum on alternating years between the AMSAT-NA Symposium and the AMSAT-UK Colloquium. This year is the turn to hold this forum in the USA at the Symposium on Sunday, October 28.

Three speakers are currently scheduled to address the forum. There is also time planned for a panel discussion with the IARU delegates. The forum will be open to everyone attending the Symposium.

[ANS thanks the Symposium Committee for the above information]

/EX

SB SAT @ AMSAT $ANS-273.02
AMSAT Awards

AMSAT News Service Bulletin 273.02
From AMSAT HQ SILVER SPRING, MD.
September 30, 2007
To All RADIO AMATEURS
BID: $ANS-273.02

Bruce, KK5DO, AMSAT Director Contests and Awards says the latest awards are:

We would like to welcome the following to the satellite community. They have made their first satellite contact and are now members of the AMSAT Satellite Communicators Club.
Richard Silva, WA6ES

AMSAT Communication Achievement Award

Jeffery Thomas, K7WIN, #454
Douglas Papay, KD8CAO, #455

South Africa AMSAT Communication Achievement Award
Jeffery Thomas, K7WIN, #US112
Douglas Papay, KD8CAO, #US113

To see all the awards visit http://www.amsat.org.

[ANS thanks Bruce, KK5DO for the above information]

/EX

SB SAT @ AMSAT $ANS-273.03
Students to Build Satellite Antennas at AMSAT Symposium

AMSAT News Service Bulletin 273.03
  From AMSAT HQ SILVER SPRING, MD.
September 30, 2007
To All RADIO AMATEURS
BID: $ANS-273.03

Richard Crow, N2SPI will conduct a workshop which will mentor students to build satellite antennas for 145 and 435 MHz. They will be able to use their antenna to receive signals from AO-51, SO-50, and AO-27. The workshops are slated to take place on Friday evening and Saturday morning at the Symposium.

[ANS thanks the Symposium Committee for the above information]

/EX

SB SAT @ AMSAT $ANS-273.04
Sputnik 50th Anniversary Special Events Planned for October 4

AMSAT News Service Bulletin 266.04
  From AMSAT HQ SILVER SPRING, MD.
September 30, 2007
To All RADIO AMATEURS
BID: $ANS-273.04

AMSAT-NA will mark the 50th anniversary of the launch of Sputnik with a special event on AO-51. AO-51 will rebroadcast original Sputnik telemetry and a congratulatory message to mark the event during passes over North America on the evening of Wednesday, October 3rd in North America, which is early October 4th UTC. At this time, only the passes over North America will be able to carry the special event. Please watch ANS and the amsat-bb mailing list for further information as the date approaches.

Robert, G8ATE and John, G7HIA will be using the special call sign GB50SO starting on the 4th October for one month to celebrate the 50th Anniversary of the launch of the first earth orbiting satellite SPUTNIK ONE on that date in 1957. All of the available analogue satellites will be used as time permits. A special QSL card will be available after the event.

[ANS thanks Drew, KO4MA, and Robert, G8ATE for the above information]

/EX

SB SAT @ AMSAT $ANS-273.05
Satellite Shorts From All Over

AMSAT News Service Bulletin 273.05
From AMSAT HQ SILVER SPRING, MD.
September 30, 2007
To All RADIO AMATEURS
BID: $ANS-273.05

+ Make your room reservations for the 2007 AMSAT Space Symposium in Pittsburgh as soon as possible. Any rooms that have not been reserved by October 8th will be released to the hotel. For the reservation code, go to the AMSAT website and click on the left hand side - AMSAT Symposium. If you have any problems making a reservation, please call Martha in the ASMAST office at (301-589-6062).

+ Drew, KO4MA, AMSAT VP Operations reminds AO-51 users that its time to again submit your mode requests for the month of October. Please submit them to ao51-modes@amsat.org as soon as possible.

+ Norm Fusaro, W3IZ, ARRL Assistant Manager, Membership & Volunteer Programs Department wrote this week, "After review, ARRL will permit contacts through the ISS (Earth - ISS - Earth) to be counted towards satellite endorsement for WAS and DXCC. This applies to contacts made via the onboard repeater equipment provided that the equipment does not hold and re-transmit information. Contacts with the ISS do not receive any award credit. Further information will be available on the LoTW website." See: http://www.arrl.org/lotw/

+ Masa, JN1GKZ has an FO-29 Operation Schedule page at:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

[ANS thanks everyone for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the

President's Club. Members of the President's Club, as sustaining donors
to AMSAT Project Funds, will be eligible to receive additional benefits.
Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Dee Interdonato, NB2F

From -8953961729881487418
X-Google-Thread: 10e8ad,b7ee9913ece62e51
X-Google-Attributes: gid10e8ad,public,usenet
X-Google-Language: ENGLISH,ASCII
Path: g2news2.google.com!news3.google.com!feeder1-2.proxad.net!proxad.net!
feeder1-1.proxad.net!newspeer2.se.telia.net!se.telia.net!masternews.telia.net.!
newsb.telia.net.POSTED!not-for-mail
From: "Greg" <ash_5@gravitywell.org>
Newsgroups: rec.radio.amateur.space
References: <4d768$46f66728$ce947015$5526@DIALUPUSA.NET>
<46F84555.3010602@nettally.com>
Subject: Re: Russian voice on 137.50
Lines: 29
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.3138
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.3138
X-RFC2646: Format=Flowed; Response
Message-ID: <MIBMi.10293$ZA.6797@newsb.telia.net>
Date: Wed, 03 Oct 2007 00:51:56 GMT
NNTP-Posting-Host: 81.236.213.235
X-Complaints-To: abuse@telia.com
X-Trace: newsb.telia.net 1191372716 81.236.213.235 (Wed, 03 Oct 2007 02:51:56
CEST)
NNTP-Posting-Date: Wed, 03 Oct 2007 02:51:56 CEST
Organization: Telia Internet
Xref: g2news2.google.com rec.radio.amateur.space:214

Perhaps it was ET :-)
Well, besides a couple of ~143-148MHz freq's I've also marked
121.750 and 130.167 as MIR/ISS frequencies, I guess their
radios cover several vhf bands, however I think the amateur radio
on ISS is a dedicated 2m/70cm bander....
But transmitting on the 137-138MHz wefax band?
Never heard of before...
//Greg.

"**THE-RFI-EMI-GUY**" <rhyolite@nettally.com> wrote in message
news:46F84555.3010602@nettally.com...
> You should check the time of the ISS overflight relative to your QTH relative to your reception. The ISS and the supply ships use
> VHF NBFM 30 KHz deviation downlinks normally on 143.625 MHz. 137.500 does not

ring a bell to me, but might be within the
> capability of their radios.
>
> Homer J wrote:
>
>>I was monitoring the WEFAX frequency last week and heard a male with what sounded like a Russian accent saying "Hello people of
>>earth" on 137.500 MHz.
>>
>>Anyone with an idea who it might be?
>>
>>
>
> --
> Joe Leikhim K4SAT
> "The RFI-EMI-GUY"�

From -1613909340661248352
X-Google-Thread: 10e8ad,f604ab9bfa2145df,start
X-Google-Thread: 10b9c8,f604ab9bfa2145df,start
X-Google-Attributes: gid10e8ad,gid10b9c8,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news1.google.com!border1.nntp.dca.giganews.com!nntp.giganews.com!nx01.iad01.newshosting.com!newshosting.com!novia!transit4.readnews.com!news-out.readnews.com!news-xxxfer.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-274 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Thu, 4 Oct 2007 21:21:52 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 1321
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <001b01c806ee$112d6570$6401a8c0@familyroom>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix3.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1191547313 12761 166.84.1.3 (5 Oct 2007 01:21:53 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Fri, 5 Oct 2007 01:21:53 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to   rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to   rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this article.

X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Xref: g2news2.google.com rec.radio.amateur.space:215 rec.radio.info:285

This report is organized into FIVE parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites
Part 5 (S5) - deborbited/returned satellites

SB SAT @ AMSAT W8ISS ANS-274.S1
WSR 274 Part 1 10/01/2007

AMSAT NEWS SERVICE BULLETIN 274.S1 FROM AMSAT HQ
SILVER SPRING, MD, October 01, 2007
TO ALL RADIO AMATEURS
BID: $ANS-274.S1

VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.859330 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsat.in/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is
active. Each transponder has a different beacon.
[06252007]
=====

AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Modes: FM Repeater - V/u
                 BBS   - L/u
                 Telemetry   - /u

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink: 145.880 MHZ FM
                       145.880 MHz USB
                       145.920 MHz FM
                      1268.700 MHz FM 67Hz PL tone
Digital Downlinks: 435.150 MHz FM 38k4 Digital, PBP, 1 watt output
                       435.150 MHz FM 9k6 Digital, Pacsat Broadcast Protocol
                      2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Digital, Pacsat Broadcast Protocol
                      1268.700 mhz FM 9k6 PBP Digital
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[10012007]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear

U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10 minute timer.
[05282007]

=====

FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Operational - check operational schedule for current times!!

Current Mode: V/u

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
145.870 MHz FM
145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage: http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's CW

```
telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts.htm
[0820007]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Current Mode: V/u

Uplink:   145.850 MHz FM
Downlink: 436.795 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[08202007]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational depending on amount of Sunlight

Current Mode: Listen before transmitting

Uplink:   145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink:  29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons:   29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/

AO-7 Usage Guidelines on the AO-7 Log and Resource Site located at:
http://www.planetemily.com/ao7
[05282007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998
```

Status: Operational - APRS and BBS

Current Mode: V/v

Expedition 15 crew:
Commander: Fyodor Yurchikhin   RN3FI
Flight Engineer: Clayton C. Anderson   KD5PLA
Flight Engineer: Oleg Kotov

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

SSTV TESTING:
Worldwide Reported Downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS
                     RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.
[09032007]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-274.S2
WSR 274 Part 2 10/01/2007

AMSAT NEWS SERVICE BULLETIN 274.S2 FROM AMSAT HQ
SILVER SPRING, MD, October 01, 2007
TO ALL RADIO AMATEURS
BID: $ANS-274.S2

CAPE1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.

[07302007]
=====
LIBERTAD-1
Catalog Number: 31129
Launch Date: April 17,2007

Status: Operational?

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

APRS
Uplink: 145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[08132007]
=====
CP3
Catalog Number: 31128
Launch Date: April 17,2007

Status: Operational

Current Mode: /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[07302007]
=====
CP4
Catalog Number: 31122

Launch Date: April 17,2007

Status: Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon: 437.325 MHz CW
[07302007]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: In Orbit

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder: 145.825 Mhz FM
[02052007]
=====
?O-?? FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: In Orbit

Current Mode: /u

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[02262007]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[07302007]
=====
GENESAT-1 ?O-??
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

```
Current Mode: /u

Telemetry Beacon Downlink: 437.0670 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[01082007]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Operational

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon:             437.2750 MHz CW

Callsign: JR8YJT
[10302006]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon:             437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
[03262007]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launched: June 30, 2003

Status: Operational

Current Mode: /u

Beacon:     436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW
```

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[01082007]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launched: February 21, 2006

Status: Semi-Operational - Constant Carrier only

Uplink: 1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan ?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[01082007]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW
[08132007]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Mode(s): FM Repeater - V/u
BBS - L/u
Telemetry - /u

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.880 MHZ FM
145.880 MHz USB
145.920 MHz FM
1268.700 MHz FM 67Hz PL tone

Digital Downlinks: 435.150 MHz FM 38k4 Digital, PBP, 1 watt output
435.150 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
1268.700 mhz FM 9k6 PBP Digital
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[10012007]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Hibernation until full sunlight in November

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[09242007]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: OPERATIONAL

Current Modes: V/U
L/U

Downlink: 435.225 MHz FM (9600-baud FSK)
435.325 Mhz - Not Available - temperature problems
Uplinks: 145.850 FM
145.890 FM

```
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[09172007]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational.

Current Mode:  /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon:          435.025 MHz - OFF
Mode-S Beacon:     2401.500 MHz - OFF

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Due to solar eclipses which will continue until late August 2007, the
beacon
will only transmit for about one orbit every 21 days. It is unlikely to
be
heard during this period.

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[07162007]
=====
RS-22 RADIO SPORT RS-22
Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only

Current Mode:  /u

CW Beacon - 435.352 MHz
            145.818 MHz
[08062007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998
```

Status: Operational - APRS and BBS

Current Mode: V/v

Expedition 15 crew:
Commander: Fyodor Yurchikhin RN3FI
Flight Engineer: Clayton C. Anderson KD5PLA
Flight Engineer: Oleg Kotov

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

SSTV TESTING:
Worldwide Reported Downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS
RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.
[09032007]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-274.S3

WSR 274 Part 3 10/01/2007

AMSAT NEWS SERVICE BULLETIN 274.S3 FROM AMSAT HQ
SILVER SPRING, MD, Ocober 01, 2007
TO ALL RADIO AMATEURS
BID: $ANS-274.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 MHz FM 67Hz CTCSS
Voice Downlink: 2401.835 MHz FM
Packet Up/Downlink: 437.250 MHz 9k6 packet
Packet Downlink   2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non=Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[08132007]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]

=====

MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Non-Operational

Uplinks: 145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[007302007]

=====

NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, callsign KE6QMD, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]

=====

SO-42 SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

```
Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS:                SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink:   145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
V-band:   145.840 -  145.990 MHz CW/LSB
U-band:   435.550 -  435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks
---------
S2-band:  2401.225 -  2401.475 MHz CW/USB
K-band:  24048.010 - 24048.060 MHz CW/USB
Beacon:   2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)
----------------------------
BEACON   General Beacon (GB)    Middle Beacon (MB)    Engineering Beacon
(EB)
2 m       none                    145.898 MHz           none
```

70cm	435.438 MHz	435.588 MHz	435.838 MHz
13cm(1)	2400.188 MHz	2400.338 MHz	2400.588 MHz
13cm(2)	2401.173 MHz	2401.323 MHz	2401.573 MHz
3cm	10450.975 MHz	10451.125 MHz	10451.375 MHz
1.5cm	24047.885 MHz	24048.035 MHz	24048.285 MHz

[007162007]
=====
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web site
at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz
145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====

```
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink:   145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Reported non-operational

Current Mode: V/U
              Digipeater - Authorized for APRS usage

Uplink:         145.900 MHz FM 1200-baud Manchester FSK
                145.920 MHz FM 1200-baud Manchester FSK
                145.940 MHz FM 1200-baud Manchester FSK
                145.960 MHz FM 1200-baud Manchester FSK
Downlink:       437.026 MHz SSB 1200-baud PSK
```

```
Mode-S Beacon: 2401.1428 MHz

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.025 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[06112007]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign:       POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012006]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: Downlink only

Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[012212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993
```

```
Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
```

435.910 MHz AX25

Voice Transponder:
Uplink: 145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks: 145.850 MHz
145.870 MHz
145.890 MHz
145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplinks: 145.840 MHz 1200-baud Manchester FSK
145.860 MHz 1200-baud Manchester FSK
145.880 MHz 1200-baud Manchester FSK
145.900 MHz 1200-baud Manchester FSK

CW downlink: 437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[01222007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink: 145.825 MHz FM 1200 Baud AFSK
Beacon: 2401.220 MHz
[05012006]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink: 145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting): Non-Operational
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet: Non-Operational
Uplink: 145.8500 MHz MFSK 1200 BPS
Uplink: 145.8700 MHz MFSK 1200 BPS
Uplink: 145.8900 MHz MFSK 1200 BPS
Uplink: 145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon: 145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703

```
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink  29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
[01152007]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994
```

Status: Non-operational

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB

Beacon 1: 29.352 MHz (intermittent)
Beacon 2: 29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB

Beacon: 145.860 MHz

Robot: 145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-274.S4
WSR 274 Part 4 10/01/2007

AMSAT NEWS SERVICE BULLETIN 274.S4 FROM AMSAT HQ
SILVER SPRING, MD, October 01, 2007
TO ALL RADIO AMATEURS
BID: $ANS-274.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE PROPOSED FOR LAUNCH AT THIS TIME:

Phase 5a Mars Mission

```
Catalog Number:
Proposed Launch Date: 2009 or 2011

Status: Design Phase

For the latest project status update please visit the AMSAT-DL P5-A web
page:
http://ticket-to-mars.org
[01222007]
=====
PHASE 3E AO-??
Catalog number:
Proposed Launch Date: Late 2007

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web
page:
http://www.amsat-dl.org/p3e/
[01222007]
=====
Eagle AO-??
Catalog Number:
Proposed Launch Date: Early/Mid 2009

Status: Design Phase

For the latest project status updates please visit the AMSAT-NA webpage:
http://www.amsat.org
[01222007]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-274.S5
WSR 274 Part 5 10/01/2007

AMSAT NEWS SERVICE BULLETIN 274.S5 FROM AMSAT HQ
SILVER SPRING, MD, October 01, 2007
TO ALL RADIO AMATEURS
BID: $ANS-274.S5

THE FOLLOWING SATELLITES HAVE DE-ORBITED OR HAVE BEEN RETURNED TO THE
GROUND:

NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status:   Re-Entered
Re-entered: May 30, 2007

Main Downlink:      145.825 Mhz FM APRS AX25
APRS Uplink:        145.825 MHz FM APRS AX25
```

Voice/PSK31 Uplink: 28.120 MHz

Packet to Voice ID: RAFT
[06112007]
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org

NNNN
/EX

```
From 6065395628174234559
X-Google-Thread: 113975,93b81b694d198f4c,start
X-Google-Thread: f74ae,93b81b694d198f4c,start
X-Google-Thread: fdc67,93b81b694d198f4c,start
X-Google-Thread: 10e8ad,93b81b694d198f4c,start
X-Google-Thread: 10cf28,93b81b694d198f4c,start
X-Google-Thread: fcc6e,93b81b694d198f4c,start
X-Google-Thread: 10b271,93b81b694d198f4c,start
X-Google-Thread: 107e5d,93b81b694d198f4c,start
X-Google-Thread: 1038c2,93b81b694d198f4c,start
X-Google-Thread: 1110fe,93b81b694d198f4c,start
X-Google-Attributes:
gid113975,gidf74ae,gidfdc67,gid10e8ad,gid10cf28,gidfcc6e,gid10b271,gid107e5d,gid10
38c2,gid1110fe,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news3.google.com!out03a.usenetserver.com!
news.usenetserver.com!in04.usenetserver.com!news.usenetserver.com!
nx01.iad01.newshosting.com!newshosting.com!post01.iad01!roadrunner.com!not-for-
mail
Date: Fri, 05 Oct 2007 23:01:24 -0700
From: "Green Xenon [Radium]" <glucegen1@excite.com>
User-Agent: Mozilla/5.0 (Windows; U; Win98; en-US; rv:1.8b) Gecko/20050217
MIME-Version: 1.0
Newsgroups:
sci.astro.amateur,sci.astro,alt.astronomy,rec.radio.amateur.space,uk.sci.astronomy
,rec.radio.amateur.antenna,sci.physics,sci.energy,alt.sci.physics.new-
theories,sci.physics.electromag
Subject: Receiving 2 GHz AM signals in space. What do they sound like?
Lines: 30
Message-ID: <47072242$0$15384$4c368faf@roadrunner.com>
Organization: Road Runner High Speed Online http://www.rr.com
NNTP-Posting-Host: 75.84.20.87
X-Complaints-To: abuse@rr.com
Xref: g2news2.google.com sci.astro.amateur:12414 sci.astro:15181
alt.astronomy:20173 rec.radio.amateur.space:216 uk.sci.astronomy:1935
rec.radio.amateur.antenna:6330 sci.physics:57646 sci.energy:6650
alt.sci.physics.new-theories:1832 sci.physics.electromag:1926

Content-Type: text/plain; charset=ISO-8859-1; format=flowed
Content-Transfer-Encoding: 7bit
```

Hi:

Let's say I am in a space station which has a 2 GHz DX AM analog receiver that receives the magnetic fields [while ignoring the electric fields] of extremely weak 2 GHz AM analog carrier signals. In addition, this receiver is so sensitive and powerful that it can clearly pick up AM carrier waves as weak as 10-to-the-power-NEGATIVE-10,000 watt-per-meter-squared. This receiver also has a robust signal processor that can eliminate clipped-waveforms [such as square waves], spikes, clicks, pops, hiss, and random noise even at those trivial wattage levels. After eliminating those unwanted signals, the carrier wave is amplified. This receiver has an astronomically-powerful amplifier which amplifies those extremely-soft carrier waves until the resulting modulation signals will be just loud enough for the human ear to coherently detect. Following this amplification, the carrier waves are demodulated to modulation waves -- the stuff we "hear" -- and then sent to loudspeaker so those onboard can hear those sounds.

Equally important, the 2-GHz receiver is pointed away from the earth to assist in preventing the pickup of signals generated from Earth.

If I am on this spaceship, what will I most likely hear on the radio?

Thanks,

Radium

```
From -3874426164193725554
X-Google-Thread: 113975,93b81b694d198f4c
X-Google-Thread: f74ae,93b81b694d198f4c
X-Google-Thread: fdc67,93b81b694d198f4c
X-Google-Thread: 10e8ad,93b81b694d198f4c
X-Google-Thread: 10cf28,93b81b694d198f4c
X-Google-Thread: fcc6e,93b81b694d198f4c
X-Google-Thread: 10b271,93b81b694d198f4c
X-Google-Thread: 107e5d,93b81b694d198f4c
X-Google-Thread: 1038c2,93b81b694d198f4c
X-Google-Thread: 1110fe,93b81b694d198f4c
X-Google-Attributes:
gid113975,gidf74ae,gidfdc67,gid10e8ad,gid10cf28,gidfcc6e,gid10b271,gid107e5d,gid10
38c2,gid1110fe,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news1.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!local01.nntp.dca.giganews.com!nntp.bt.com!news.bt.com.POSTED!
not-for-mail
NNTP-Posting-Date: Sat, 06 Oct 2007 05:49:02 -0500
From: "Mike Kaliski" <michael.kaliski@tesco.net>
Newsgroups:
sci.astro.amateur,sci.astro,alt.astronomy,rec.radio.amateur.space,uk.sci.astronomy
,rec.radio.amateur.antenna,sci.physics,sci.energy,alt.sci.physics.new-
theories,sci.physics.electromag
References: <47072242$0$15384$4c368faf@roadrunner.com>
In-Reply-To: <47072242$0$15384$4c368faf@roadrunner.com>
Subject: Re: Receiving 2 GHz AM signals in space. What do they sound like?
Date: Sat, 6 Oct 2007 11:49:51 +0100
MIME-Version: 1.0
Content-Type: text/plain;
     format=flowed;
     charset="iso-8859-1";
     reply-type=original
Content-Transfer-Encoding: 7bit
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Windows Mail 6.0.6000.16480
X-MimeOLE: Produced By Microsoft MimeOLE V6.0.6000.16480
Message-ID: <XcGdnXvMCdSD9Zra4p2dnAA@bt.com>
Lines: 40
X-Usenet-Provider: http://www.giganews.com
NNTP-Posting-Host: 81.151.197.81
X-AuthenticatedUsername: NoAuthUser
X-Trace: sv3-QCFg1Otw6nnl/
g05aPubWpIfCzMpp6Ztko6D6oxqk83A3DsYTc0gzmu8Z7CwFuYeLQXspnclcpmlo4M!
AvOzvbhGfxDR2YPOZCapUBj63elF5fog4vkVj81Z3c53G1d4ujd783puPrZUfXw=
X-Complaints-To: abuse@btinternet.com
X-DMCA-Complaints-To: abuse@btinternet.com
X-Abuse-and-DMCA-Info: Please be sure to forward a copy of ALL headers
X-Abuse-and-DMCA-Info: Otherwise we will be unable to process your complaint
properly
X-Postfilter: 1.3.35
Xref: g2news2.google.com sci.astro.amateur:12420 sci.astro:15189
alt.astronomy:20184 rec.radio.amateur.space:217 uk.sci.astronomy:1937
rec.radio.amateur.antenna:6332 sci.physics:57674 sci.energy:6660
alt.sci.physics.new-theories:1834 sci.physics.electromag:1927


"Green Xenon [Radium]" <glucegen1@excite.com> wrote in message
news:47072242$0$15384$4c368faf@roadrunner.com...
> Content-Type: text/plain; charset=ISO-8859-1; format=flowed
> Content-Transfer-Encoding: 7bit
>
> Hi:
>
> Let's say I am in a space station which has a 2 GHz DX AM analog
> receiver that receives the magnetic fields [while ignoring the electric
> fields] of extremely weak 2 GHz AM analog carrier signals. In addition,
> this receiver is so sensitive and powerful that it can clearly pick up
> AM carrier waves as weak as 10-to-the-power-NEGATIVE-10,000
> watt-per-meter-squared. This receiver also has a robust signal processor
> that can eliminate clipped-waveforms [such as square waves], spikes,
> clicks, pops, hiss, and random noise even at those trivial wattage
> levels. After eliminating those unwanted signals, the carrier wave is
> amplified. This receiver has an astronomically-powerful amplifier which
> amplifies those extremely-soft carrier waves until the resulting
> modulation signals will be just loud enough for the human ear to
> coherently detect. Following this amplification, the carrier waves are
> demodulated to modulation waves -- the stuff we "hear" -- and then sent
> to loudspeaker so those onboard can hear those sounds.
>
> Equally important, the 2-GHz receiver is pointed away from the earth to
> assist in preventing the pickup of signals generated from Earth.
>
```

> If I am on this spaceship, what will I most likely hear on the radio?
>
>
> Thanks,
>
> Radium

Radium

Simon & Garfunkel - The Sound of Silence

Mike G0ULI

From 8003645301157938298
X-Google-Thread: 113975,93b81b694d198f4c
X-Google-Thread: f74ae,93b81b694d198f4c
X-Google-Thread: fdc67,93b81b694d198f4c
X-Google-Thread: 10e8ad,93b81b694d198f4c
X-Google-Thread: 10cf28,93b81b694d198f4c
X-Google-Thread: fcc6e,93b81b694d198f4c
X-Google-Thread: 10b271,93b81b694d198f4c
X-Google-Thread: 107e5d,93b81b694d198f4c
X-Google-Thread: 1038c2,93b81b694d198f4c
X-Google-Thread: 1110fe,93b81b694d198f4c
X-Google-Attributes:
gid113975,gidf74ae,gidfdc67,gid10e8ad,gid10cf28,gidfcc6e,gid10b271,gid107e5d,gid1038c2,gid1110fe,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news4.google.com!news.germany.com!newsfeed.freenet.de!
213.239.142.3.MISMATCH!border-2.ams.xsnews.nl!feed.xsnews.nl!
border-1.ams.xsnews.nl!sn-xt-ams-06!sn-xt-ams-03!sn-post-ams-01!sn-post-sjc-01!
supernews.com!corp.supernews.com!not-for-mail
From: Roy Lewallen <w7el@eznec.com>
Newsgroups:
sci.astro.amateur,sci.astro,alt.astronomy,rec.radio.amateur.space,uk.sci.astronomy
,rec.radio.amateur.antenna,sci.physics,sci.energy,alt.sci.physics.new-
theories,sci.physics.electromag
Subject: Re: Receiving 2 GHz AM signals in space. What do they sound like?
Date: Sat, 06 Oct 2007 05:48:06 -0700
Organization: EZNEC Antenna Software
Message-ID: <13gf1087e8nj7e2@corp.supernews.com>
User-Agent: Thunderbird 2.0.0.6 (Windows/20070728)
MIME-Version: 1.0
References: <47072242$0$15384$4c368faf@roadrunner.com>
In-Reply-To: <47072242$0$15384$4c368faf@roadrunner.com>
Content-Type: text/plain; charset=ISO-8859-1; format=flowed
Content-Transfer-Encoding: 7bit
X-Complaints-To: abuse@supernews.com
Lines: 42
Xref: g2news2.google.com sci.astro.amateur:12428 sci.astro:15204
alt.astronomy:20194 rec.radio.amateur.space:218 uk.sci.astronomy:1939

rec.radio.amateur.antenna:6335 sci.physics:57706 sci.energy:6664
alt.sci.physics.new-theories:1836 sci.physics.electromag:1932

Green Xenon [Radium] wrote:
> Content-Type: text/plain; charset=ISO-8859-1; format=flowed
> Content-Transfer-Encoding: 7bit
>
> Hi:
>
> Let's say I am in a space station which has a 2 GHz DX AM analog
> receiver that receives the magnetic fields [while ignoring the electric
> fields] of extremely weak 2 GHz AM analog carrier signals. In addition,
> this receiver is so sensitive and powerful that it can clearly pick up
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> watt-per-meter-squared. This receiver also has a robust signal processor
> that can eliminate clipped-waveforms [such as square waves], spikes,
> clicks, pops, hiss, and random noise even at those trivial wattage
> levels. After eliminating those unwanted signals, the carrier wave is
> amplified. This receiver has an astronomically-powerful amplifier which
> amplifies those extremely-soft carrier waves until the resulting
> modulation signals will be just loud enough for the human ear to
> coherently detect. Following this amplification, the carrier waves are
> demodulated to modulation waves -- the stuff we "hear" -- and then sent
> to loudspeaker so those onboard can hear those sounds.
>
> Equally important, the 2-GHz receiver is pointed away from the earth to
> assist in preventing the pickup of signals generated from Earth.
>
> If I am on this spaceship, what will I most likely hear on the radio?
>
>
> Thanks,
>
> Radium

Depends on where you are. Electromagnetic emissions from the Earth
greatly increased after WW II with the advent of widespread television
broadcasting. This resulted in a veritable step function in the sphere
of energy expanding as it races away from the Earth at the speed of
light. On the very leading edge of that sphere of energy are the Howdy
Doody Show and the McCarthy hearings. This explains why no aliens have
ever visited the Earth. But it sounds like programming that's right up
your alley. If you can find that sweet spot in space, sit back and enjoy.

Plutonium

From -5974899280158955045
X-Google-Thread: 113975,93b81b694d198f4c
X-Google-Thread: f74ae,93b81b694d198f4c
X-Google-Thread: fdc67,93b81b694d198f4c
X-Google-Thread: 10e8ad,93b81b694d198f4c
X-Google-Thread: 10cf28,93b81b694d198f4c

X-Google-Thread: fcc6e,93b81b694d198f4c
X-Google-Thread: 10b271,93b81b694d198f4c
X-Google-Thread: 107e5d,93b81b694d198f4c
X-Google-Thread: 1038c2,93b81b694d198f4c
X-Google-Thread: 1110fe,93b81b694d198f4c
X-Google-Attributes:
gid113975,gidf74ae,gidfdc67,gid10e8ad,gid10cf28,gidfcc6e,gid10b271,gid107e5d,gid1038c2,gid1110fe,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news1.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!local01.nntp.dca.giganews.com!nntp.pipex.net!
news.pipex.net.POSTED!not-for-mail
NNTP-Posting-Date: Sat, 06 Oct 2007 08:19:31 -0500
From: "George Dishman" <george@briar.demon.co.uk>
Newsgroups:
sci.astro.amateur,sci.astro,alt.astronomy,rec.radio.amateur.space,uk.sci.astronomy,rec.radio.amateur.antenna,sci.physics,sci.energy,alt.sci.physics.new-theories,sci.physics.electromag
Followup-To: poster
References: <47072242$0$15384$4c368faf@roadrunner.com>
Subject: Re: Receiving 2 GHz AM signals in space. What do they sound like?
Date: Sat, 6 Oct 2007 14:24:49 +0100
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.3138
X-RFC2646: Format=Flowed; Original
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.3138
Message-ID: <h96dnQaszsH-FpranZ2dneKdnZydnZ2d@pipex.net>
Lines: 20
X-Usenet-Provider: http://www.giganews.com
NNTP-Posting-Host: 83.67.26.177
X-Trace: sv3-FY6S38MgorNYGFgg9KShA8GjGRVT9eXH9l+fcvIBSpUuwuiSE6KyF//nY/AVbqoBML/
MvQ5QWckQymY!
IqACm8UsRCzQxuYFq50lbYswn3M6EPiKbWe3x4LQ4n41GelFhaoQrDhjorDsIuMyaLGQsb1W1Olp!
a4KpgLjzGLaPaAb++XsALQ8=
X-Complaints-To: abuse@dsl.pipex.net
X-DMCA-Complaints-To: abuse@dsl.pipex.net
X-Abuse-and-DMCA-Info: Please be sure to forward a copy of ALL headers
X-Abuse-and-DMCA-Info: Otherwise we will be unable to process your complaint properly
X-Postfilter: 1.3.36
Xref: g2news2.google.com sci.astro.amateur:12432 sci.astro:15209
alt.astronomy:20198 rec.radio.amateur.space:219 uk.sci.astronomy:1940
rec.radio.amateur.antenna:6337 sci.physics:57718 sci.energy:6667
alt.sci.physics.new-theories:1837 sci.physics.electromag:1933

"Green Xenon [Radium]" <glucegen1@excite.com> wrote in message
news:47072242$0$15384$4c368faf@roadrunner.com...
...
> ... This receiver also has a robust signal processor
> that can eliminate clipped-waveforms [such as square waves], spikes,
> clicks, pops, hiss, and random noise even at those trivial wattage

> levels. After eliminating those unwanted signals, the carrier wave is
> amplified.

There is no carrier, it was one of those signals you just eliminated.

> If I am on this spaceship, what will I most likely hear on the radio?

Stop trying to troll, you are too stupid to pull it off.

<Plonk>

From -5041141370176998682
X-Google-Thread: 113975,93b81b694d198f4c
X-Google-Thread: f74ae,93b81b694d198f4c
X-Google-Thread: fdc67,93b81b694d198f4c
X-Google-Thread: 10e8ad,93b81b694d198f4c
X-Google-Thread: 10cf28,93b81b694d198f4c
X-Google-Thread: fcc6e,93b81b694d198f4c
X-Google-Thread: 10b271,93b81b694d198f4c
X-Google-Thread: 107e5d,93b81b694d198f4c
X-Google-Thread: 1038c2,93b81b694d198f4c
X-Google-Thread: 1110fe,93b81b694d198f4c
X-Google-Attributes: gid113975,gidf74ae,gidfdc67,gid10e8ad,gid10cf28,gidfcc6e,gid10b271,gid107e5d,gid1038c2,gid1110fe,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news2.google.com!border1.nntp.dca.giganews.com!nntp.giganews.com!nx01.iad01.newshosting.com!newshosting.com!post02.iad01!roadrunner.com!not-for-mail
From: Bill Ward <bward@REMOVETHISix.netcom.com>
Subject: Re: Receiving 2 GHz AM signals in space. What do they sound like?
Date: Sat, 06 Oct 2007 10:08:00 -0700
User-Agent: Pan/0.14.2 (This is not a psychotic episode. It's a cleansing moment of clarity.)
Message-Id: <pan.2007.10.06.17.07.57.376214@REMOVETHISix.netcom.com>
Newsgroups: sci.astro.amateur,sci.astro,alt.astronomy,rec.radio.amateur.space,uk.sci.astronomy,rec.radio.amateur.antenna,sci.physics,sci.energy,alt.sci.physics.new-theories,sci.physics.electromag
References: <47072242$0$15384$4c368faf@roadrunner.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=UTF-8
Content-Transfer-Encoding: 8bit
Lines: 31
Organization: Road Runner High Speed Online http://www.rr.com
X-Complaints-To: abuse@rr.com
Xref: g2news2.google.com sci.astro.amateur:12446 sci.astro:15231 alt.astronomy:20223 rec.radio.amateur.space:220 uk.sci.astronomy:1941 rec.radio.amateur.antenna:6343 sci.physics:57804 sci.energy:6690

alt.sci.physics.new-theories:1841 sci.physics.electromag:1937

On Fri, 05 Oct 2007 23:01:24 -0700, Green Xenon [Radium] wrote:

> Content-Type: text/plain; charset=ISO-8859-1; format=flowed
> Content-Transfer-Encoding: 7bit
>
> Hi:
>
> Let's say I am in a space station which has a 2 GHz DX AM analog receiver
> that receives the magnetic fields [while ignoring the electric fields] of
> extremely weak 2 GHz AM analog carrier signals. In addition, this receiver
> is so sensitive and powerful that it can clearly pick up AM carrier waves
> as weak as 10-to-the-power-NEGATIVE-10,000 watt-per-meter-squared. This
> receiver also has a robust signal processor that can eliminate
> clipped-waveforms [such as square waves], spikes, clicks, pops, hiss, and
> random noise even at those trivial wattage levels. After eliminating those
> unwanted signals, the carrier wave is amplified. This receiver has an
> astronomically-powerful amplifier which amplifies those extremely-soft
> carrier waves until the resulting modulation signals will be just loud
> enough for the human ear to coherently detect. Following this
> amplification, the carrier waves are demodulated to modulation waves --
> the stuff we "hear" -- and then sent to loudspeaker so those onboard can
> hear those sounds.
>
> Equally important, the 2-GHz receiver is pointed away from the earth to
> assist in preventing the pickup of signals generated from Earth.
>
> If I am on this spaceship, what will I most likely hear on the radio?

Mother telling you to quit playing in the cardboard box and come to
dinner.

From 4897506262359934773
X-Google-Thread: 113975,93b81b694d198f4c
X-Google-Thread: f74ae,93b81b694d198f4c
X-Google-Thread: fdc67,93b81b694d198f4c
X-Google-Thread: 10e8ad,93b81b694d198f4c
X-Google-Thread: 10cf28,93b81b694d198f4c
X-Google-Thread: fcc6e,93b81b694d198f4c
X-Google-Thread: 10b271,93b81b694d198f4c
X-Google-Thread: 107e5d,93b81b694d198f4c
X-Google-Thread: 1038c2,93b81b694d198f4c
X-Google-Thread: 1110fe,93b81b694d198f4c
X-Google-Attributes:
gid113975,gidf74ae,gidfdc67,gid10e8ad,gid10cf28,gidfcc6e,gid10b271,gid107e5d,gid10
38c2,gid1110fe,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news3.google.com!out01a.usenetserver.com!
news.usenetserver.com!in04.usenetserver.com!news.usenetserver.com!
nx01.iad01.newshosting.com!newshosting.com!post01.iad01!roadrunner.com!not-for-

mail
Date: Sat, 06 Oct 2007 15:17:55 -0700
From: "Green Xenon [Radium]" <glucegen1@excite.com>
User-Agent: Mozilla/5.0 (Windows; U; Win98; en-US; rv:1.8b) Gecko/20050217
MIME-Version: 1.0
Newsgroups:
sci.astro.amateur,sci.astro,alt.astronomy,rec.radio.amateur.space,uk.sci.astronomy
,rec.radio.amateur.antenna,sci.physics,sci.energy,alt.sci.physics.new-theories,sci.physics.electromag
Subject: Re: Receiving 2 GHz AM signals in space. What do they sound like?
Content-Type: text/plain; charset=ISO-8859-1; format=flowed
Content-Transfer-Encoding: 7bit
Lines: 43
Message-ID: <47080705$0$24349$4c368faf@roadrunner.com>
Organization: Road Runner High Speed Online http://www.rr.com
NNTP-Posting-Host: 75.84.20.87
X-Complaints-To: abuse@rr.com
Xref: g2news2.google.com sci.astro.amateur:12486 sci.astro:15271
alt.astronomy:20240 rec.radio.amateur.space:221 uk.sci.astronomy:1943
rec.radio.amateur.antenna:6354 sci.physics:57904 sci.energy:6704
alt.sci.physics.new-theories:1843 sci.physics.electromag:1945

On Oct 6, 6:24 am, "George Dishman" <geo...@briar.demon.co.uk> wrote in
http://groups.google.com/group/sci.energy/msg/ad14e4c2d56369db :

> "Green Xenon [Radium]" <gluceg...@excite.com> wrote in
> messagenews:47072242$0$15384$4c368faf@roadrunner.com...
> ...

> > ... This receiver also has a robust signal processor
> > that can eliminate clipped-waveforms [such as square waves], spikes,
> > clicks, pops, hiss, and random noise
> > even at those trivial wattage
> > levels. After eliminating those unwanted signals, the carrier wave
> > > is
> > amplified.

> There is no carrier,

Yes there is. Why do you say there isn't? Certain waveforms in the carrier wave that would cause the modulator signal to contain clipped-waveforms [such as square waves], spikes, clicks, pops, hiss, and random noise are removed. However, the remainder of the carrier-wave remains unscathed.

> it was one of those signals you just
> eliminated.

How so?

> > If I am on this spaceship, what will
> > I most likely hear on the radio?

> Stop trying to troll, you are too stupid to pull it off.

I don't troll or spam. I am asking this question because -- unlikely [if not impossible] as my 2-GHz-in-outer-space scenario is -- I am still interested in it.

Now please please please answer my question. What would I hear?

I chose 2 GHz because it is in the UHF band. UHFs tend to be best for extremely long distance reception. Of the radio waves emitted by objects trillions of miles -- or more -- away, UHF is usually the most receivable.

```
From -72408643699188245
X-Google-Thread: 10e8ad,37ea4b06d032ff9b,start
X-Google-Thread: 10b9c8,37ea4b06d032ff9b,start
X-Google-Attributes: gid10e8ad,gid10b9c8,public,usenet
X-Google-Language: ENGLISH,ASCII
Path: g2news2.google.com!news1.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx01.iad01.newshosting.com!newshosting.com!
198.186.194.251.MISMATCH!transit4.readnews.com!news-out.readnews.com!news-
xxxfer.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-280 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sat, 6 Oct 2007 22:22:35 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 364
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000101c80888$e5ae29b0$6601a8c0@familyroom>
Reply-To: ans-editor@amsat.org
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;charset="iso-8859-1"
Content-Transfer-Encoding: quoted-printable
X-Trace: reader1.panix.com 1191723755 24376 166.84.1.6 (7 Oct 2007 02:22:35 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 7 Oct 2007 02:22:35 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Xref: g2news2.google.com rec.radio.amateur.space:222 rec.radio.info:291
```

AMSAT NEWS SERVICE
ANS-280

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

******************* AMSAT 2007 Space Symposium *************************

The Wireless Association of South Hills Amateur Radio Club announces the 2007 AMSAT Space Symposium will be held at the Pittsburgh Airport Marriott Hotel on Friday, October 26 through Sunday, October 28, 2007. The AMSAT web team has posted informational pages on the AMSAT web site. You can find the announcement with many links at:
http://www.amsat.org/amsat-new/symposium/2007/index.php

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In this edition:

* 2007 AMSAT Space Symposium Features and Events Announced
* Sputnik-1 50th Anniversary Special Event Via AO-51
* AO-51 Includes Special L/U BBS and Telemetry Experiment
* Three Packet Satellites Available on 145.825 MHz
* F8ZS Silent Key
* ARISS Status Report for the week of October 1, 2007

SB SAT @ AMSAT $ANS-280.01
2007 AMSAT Space Symposium Features and Events Announced

AMSAT News Service Bulletin 280.01
>From AMSAT HQ SILVER SPRING, MD.
October 7, 2007
To All RADIO AMATEURS
BID: $ANS-280.01

Make plans now to attend the AMSAT-NA 2007 Space Symposium! Amateur Radio Satellite Operators will find the AMSAT Space Symposium to be an exciting and rewarding event-filled weekend. Here are some of the features and events to look forward to:

+ AMSAT-NA Annual General Meeting
+ AMSAT-NA Board of Directors Meeting
+ AMSAT Directors and Officers will be available to answer your questions
+ AMSAT Annual Banquet with Keynote Speaker
+ Technical forums focusing on the latest planning and technology of

Amateur Radio in Space

- All Papers and Presentations will be published in the Symposium Proceedings for all registered attendees
- Technical demonstrations of prototype flight hardware and software for AMSAT Eagle - the next generation in space
- Discussions and demonstrations of SuitSat-2, ARISS, solid state RF power amp, antennas, AO-51
- Update on AMSAT's new Maryland Lab
- AMSAT Area Coordinators' Breakfast and Meeting on Sunday Morning
- IARU Satellite Forum
- President's Club Reception
- Satellite Beginner's Session: Introduction to Satellites
- An operating satellite station capable of working AO-7, FO-29, AO-27, SO-50, AO-51 and VO-52
- N2SPI satellite antenna demonstrations and antenna construction with students
- Meet and greet old friends and make new friends
- Enjoy eyeball QSOs with satellite designers, builders, and operators from around the world
- Sunday afternoon tour to the WPXI-DT Digital Studio

The AMSAT Software Defined Transponder Team is working toward having an operational VHF - UHF transponder available for the entire weekend. Eagle Project Team members will be available to answer your questions and provide demonstrations.

New to the Symposium this year is a selection of apparel that may be ordered. We have Symposium themed golf shirts, tee shirts, key rings ball caps. A percentage of these sales will go to Eagle.

For those people who would rather not register for the Meeting through the AMSAT store, you can register via phone by calling 301-589-6062.

[ANS thanks 2007 AMSAT Space Symposium Co-chairs Kevin N3HKQ, and Pat KC4WTT for the above information]

/EX

SB SAT @ AMSAT $ANS-280.02
Sputnik-1 50th Anniversary Special Event Via AO-51

AMSAT News Service Bulletin 280.02
>From AMSAT HQ SILVER SPRING, MD.
October 7, 2007
To All RADIO AMATEURS
BID: $ANS-280.02

This week AMSAT hosted a Special Event on Wednesday night when AO-51 was used to retransmit the original Sputnik-1 telemetry in commemoration of Sputnik's 50th birthday.

AMSAT-NA Vice President of Operations, Drew KO4MA, summarized the event, "I just wanted to thank everyone for what looks like a well received special event. Special thanks to our participating uplink stations:

- VE3NPC, Clare
- N8BBQ, Ed
- KD8CAO, Doug
- WA6FWF, Kevin
- K7WIN, Jeff
- G1OCN, Dave
- IW4DTU, Fer
- Our chief AO-51 Command Op, WA4SXM, Gould,
- and Drew's wife Merete for compiling and equalizing the audio."

Send a report to Kevin, WA6FWF at his callbook address with a 9x12 SASE and you will receive a nice QSL certificate.

Comments were received from many stations after the Sputnik passes:

"Great idea and very nice delivery! Enjoyed it very much on the the first active pass of AO-51 tonight." - VE4NSA

"Wonderfully loud and clear in DM-13 Southern California.
MANY THANKS." - K6LCS

"Clear copy of AO-51 message and Sputnik transmission at 0001 UTC from my balcony with a three element hand held UHF antenna." - VE3VIG

"It was great! My 8 year-old and 5 year-old boys listened with awe in their eyes as the bird came into view. I've been trying to spark their interest for years, and this may have done the trick!" - N8AU

"Tonight was truly fantastic and historic. My thanks to all for the hard work they undoubtedly put into this night." - KB2HSH

"I would like to add my thanks for a superb event. I copied most of the last two passes over NA on my IC R-20 and recorded the audio. This will be used along with Visual Sightings of the ISS and construction of 1/4 scale models of Sputnik (6" Styrofoam Ball and Wood Dowels) for a Sputnik 50th Birthday Party with 39 Elementary School Kids." - W5IU

"Midway into our Ottawa Amateur Radio Club executive meeting, we all took a break out to the street to have a listen to the rebroadcast of Sputnik-1 with an arrow and HT. Present were VE3TLY, VA3PAX, VE3FFK, VE3ZTU, VE3IGJ and VA3DB." - VA3DB

[ANS thanks Drew, KO4MA and everyone else for the above information]

/EX

SB SAT @ AMSAT $ANS-280.03
AO-51 Includes Special L/U BBS and Telemetry Experiment

AMSAT News Service Bulletin 280.03
>From AMSAT HQ SILVER SPRING, MD.
October 7, 2007
To All RADIO AMATEURS
BID: $ANS-280.03

The AO-51 Operations Team says AO-51 will include a special test mode featuring experimental L/U BBS and Telemetry during the periode between October 4 through October 14>

FM Repeater, V/U
Uplink: 145.920 MHz FM, No PL Tone
Downlink: 435.300 MHz FM

9k6 Digital, L/U, BBS and Telemetry, Experimental and subject to change!

Uplink: 1268.700 MHz FM, 9k6 PBP Digital
Downlink: 435.150 MHz FM, 9k6 PBP Digital

The AO-51 Operations Team is interested in your BBS results during this experimental period. Please send your comments about the BBS mode to:
ao51-modes@amsat.org

[ANS thanks the AO-51 Operations Team for the above information]

/EX

SB SAT @ AMSAT $ANS-280.04
Three Packet Satellites Available on 145.825 MHz

AMSAT News Service Bulletin 280.04
>From AMSAT HQ SILVER SPRING, MD.
October 7, 2007
To All RADIO AMATEURS
BID: $ANS-280.04

Bob, WB4APR reminds satellite packet operators of the opportunity of up to 25 passes per day for 2-way keyboard communications with simple packet equipment on 145.825 MHz uplink and downlink.

The 145.825 MHz frequency includes ARISS aboard the ISS, ANDE and PCSAT-1 operating at 1200 baud. Recently GO-32 became available on 435.225 MHz for 9600 baud communications

APRS Igate Packet gateway stations copying these three packet digipeater satellites on 145.825 feed to the two web pages:

http://www.ariss.net
http://pcsat.aprs.org

For additional information regarding the GO-32 435.225 MHz 9600 baud operation see: http://www.ew.usna.edu/~bruninga/GO32-ops.html

[ANS thanks Bob, WB4APR for the above information]

/EX

SB SAT @ AMSAT $ANS-280.05
F8ZS Silent Key

AMSAT News Service Bulletin 280.05
>From AMSAT HQ SILVER SPRING, MD.
October 7, 2007
To All RADIO AMATEURS
BID: $ANS-280.05

It is with sadness that I must inform our AMSAT colleagues, of the passing away of Jean Edmond Gruau F8ZS, President of Radio Amateur Club de l'Espace and Honorary President of AMSAT-France.

Jean was the father of ARSENE radioamateur mini satellite, launched in May, 1993.

He retired a few years ago from his position as Inspecteur General of the french space agency (CNES) that he contributed to create as well as the European Space Center in Kourou, french Guyana.

Jean F8ZS was a very kind man with always a lot of good stories to tell to his visiting friends about his large experience in radio transmissions and preventive failure security in space industry.

73 de Bernard, F6BVP
AMSAT France founding President

[ANS thanks Bernard, F6BVP for the above information]

/EX

SB SAT @ AMSAT $ANS-280.06
ARISS Status Report for the week of October 1, 2007

AMSAT News Service Bulletin 280.06
>From AMSAT HQ SILVER SPRING, MD.
October 7, 2007
To All RADIO AMATEURS
BID: $ANS-280.06

1. Heidelberg University Contact Successful

On Monday, September 25, students from Heidelberg University for Applied Sciences in Germany experienced an ARISS contact via the telebridge station WH6PN in Hawaii. Clay Anderson, KD5PLA, answered one question from each of twenty students, as 200 youth gathered in the radio shack.

2. ARISS Contact Achieved with Texas School

An ARISS contact between students at the Art and Pat Goforth Elementary School in League City, Texas and Clay Anderson, KD5PLA, aboard the ISS took place on Wednesday, September 26 via the telebridge station WH6PN in Hawaii. Approximately 50 students, teachers and parents gathered in the school�s amphitheater as Anderson fielded 25 questions put to him by 13 students, the first question asked by his daughter.

3. Smithsonian � ARISS Contact

On Saturday, September 29, youth visiting the Smithsonian National Air and Space Museum in Washington, D.C. participated in an ARISS contact as part of its Family Day, �Commemorating 50 Years in Space.�
The telebridge station WH6PN in Hawaii assisted in the contact. Gathered in the Space Race gallery, five children had 25 questions answered by Clay Anderson, KD5PLA. The Radio Amateur Satellite Corporation (AMSAT) and ARISS booths were set up near the main entrance and generated much interest. Many local amateur radio operators attended to help out. Approximately 15,000 - 20,000 visitors were expected to attend the event throughout the day.

4. School Contacts

An ARISS contact was held for the Town of Anamizu ARISS School Contact Executive Committee in Anamizu-town, Housu-gun Ishikawa, Japan on Saturday, October 6. Six hundred students from seven elementary and junior high schools will participate in this event. Conversational English, computers, amateur radio and the International Space Station are the subject matters studied in preparation for this event. Because this wass the first ARISS contact within the prefecture of Ishikawa, all preparations leading up to and including the contact were covered in the media.

Prairielands Council, Boy Scouts of America in Champaign, Illinois held an ARISS contact on Saturday, October 6 via the telebridge station VK4KHZ in Australia. Prairielands Council is made up of three districts supporting Boy Scouts and Cub Scouts in Central Eastern Illinois and Central Western Indiana. The Prairielands Council has created a new event, the Space Jamboree. Scouts attending will work on the Space Exploration Merit Badge requirements which include designing Mars missions and constructing Moon base models. They will design and launch water rockets and become familiar with robotic technology. Segway of Chicago will assist in robotics education and the FIRST program regional director will bring robots to this first annual Space Jamboree. The local rocket club will be providing rocket launches throughout the event, two during the outdoor viewing of the movie "October Sky." The youth are also expected to complete many of the Radio Merit Badge requirements.

An ARISS contact has been scheduled for Isummasaqvik School in Quaqtaq, Quebec, Canada on Wednesday, October 10 at 18:31 UTC. The telebridge station ON4ISS in Belgium will assist in the contact. Approximately 100 students, from Kindergarten through high school levels, attend Isummasaqvik School. The school plans to hold a contest to create a mission patch to be worn on T-shirts by everyone participating in the contact. All classes will participate in space related projects which will be displayed in the school gym on the day of the contact.

5. ARISS International Meeting Held

An ARISS teleconference was held on Tuesday, September 25. Topics of discussion included a new telebridge station, status of the Columbus Module antennas and SuitSat-2. The minutes have been posted to the ARISS web site. See: http://www.rac.ca/ariss/arisstel2007-09-25.htm

6. Astronaut Training Status

Astronaut Michael Barratt, KD5MIJ, participated in a simulated ARISS school contact during a training session held the last week of September.
Barratt is the backup for Michael Fincke on Expedition 18.

[ANS thanks Carol, KB3LKI for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM

```
From 3456959966598384763
X-Google-Thread: 113975,93b81b694d198f4c
X-Google-Thread: f74ae,93b81b694d198f4c
X-Google-Thread: fdc67,93b81b694d198f4c
X-Google-Thread: 10e8ad,93b81b694d198f4c
```

```
X-Google-Thread: 10cf28,93b81b694d198f4c
X-Google-Thread: fcc6e,93b81b694d198f4c
X-Google-Thread: 10b271,93b81b694d198f4c
X-Google-Thread: 107e5d,93b81b694d198f4c
X-Google-Thread: 1038c2,93b81b694d198f4c
X-Google-Thread: 1110fe,93b81b694d198f4c
X-Google-Attributes:
gid113975,gidf74ae,gidfdc67,gid10e8ad,gid10cf28,gidfcc6e,gid10b271,gid107e5d,gid10
38c2,gid1110fe,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news2.google.com!news.glorb.com!green.octanews.net!news-
out.octanews.net!indigo.octanews.net!authen.yellow.readfreenews.net.POSTED!not-
for-mail
From: "Mas Plak" <nospam@nospam.com>
Newsgroups:
sci.astro.amateur,sci.astro,alt.astronomy,rec.radio.amateur.space,uk.sci.astronomy
,rec.radio.amateur.antenna,sci.physics,sci.energy,alt.sci.physics.new-
theories,sci.physics.electromag
References: <47072242$0$15384$4c368faf@roadrunner.com>
Subject: Re: Receiving 2 GHz AM signals in space. What do they sound like?
Date: Sat, 6 Oct 2007 22:40:19 -0500
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.3138
X-RFC2646: Format=Flowed; Original
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.3138
Lines: 39
Message-ID: <4708551a$0$47117$892e7fe2@authen.yellow.readfreenews.net>
Organization: Read Free News
NNTP-Posting-Date: 06 Oct 2007 22:40:11 CDT
X-Trace:
DXC=CdGaF;MVi[mn7B42m[KVWi]AGWjF5PjPi465Ue@WB_5oDbS<>UJ4B0`4Y\DJ0XeKLkBRX3[gUZnQdm
BTS1o6L<dje;L1`9AJojk1JaXPQOdgMh
Xref: g2news2.google.com sci.astro.amateur:12500 sci.astro:15295
alt.astronomy:20255 rec.radio.amateur.space:223 uk.sci.astronomy:1945
rec.radio.amateur.antenna:6362 sci.physics:58009 sci.energy:6750
alt.sci.physics.new-theories:1844 sci.physics.electromag:1947
```

"Green Xenon [Radium]" <glucegen1@excite.com> wrote in message
news:47072242$0$15384$4c368faf@roadrunner.com...

> Content-Type: text/plain; charset=ISO-8859-1; format=flowed
> Content-Transfer-Encoding: 7bit
>
> Hi:
>
> Let's say I am in a space station which has a 2 GHz DX AM analog
> receiver that receives the magnetic fields [while ignoring the electric
> fields]

WRONG. it is therefore not an EM wave, and your receiver will not pick it
up.

> of extremely weak 2 GHz AM analog carrier signals. In addition,
> this receiver is so sensitive and powerful that it can clearly pick up
> AM carrier waves as weak as 10-to-the-power-NEGATIVE-10,000
> watt-per-meter-squared.

Powerful is the wrong word.

What type of "selectiveity" does it have?? (moron)

> This receiver also has a robust signal processor
> that can eliminate clipped-waveforms [such as square waves], spikes,
> clicks, pops, hiss, and random noise

It can not eliminate random noise, idiot stufinagle.

>even at those trivial wattage
> levels. After eliminating those unwanted signals,

snip rest of trivial drivialings

From -4873722717360963628
X-Google-Thread: 113975,93b81b694d198f4c
X-Google-Thread: f74ae,93b81b694d198f4c
X-Google-Thread: fdc67,93b81b694d198f4c
X-Google-Thread: 10e8ad,93b81b694d198f4c
X-Google-Thread: 10cf28,93b81b694d198f4c
X-Google-Thread: fcc6e,93b81b694d198f4c
X-Google-Thread: 10b271,93b81b694d198f4c
X-Google-Thread: 107e5d,93b81b694d198f4c
X-Google-Thread: 1038c2,93b81b694d198f4c
X-Google-Thread: 1110fe,93b81b694d198f4c
X-Google-Attributes: gid113975,gidf74ae,gidfdc67,gid10e8ad,gid10cf28,gidfcc6e,gid10b271,gid107e5d,gid1038c2,gid1110fe,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news1.google.com!border1.nntp.dca.giganews.com!nntp.giganews.com!nx01.iad01.newshosting.com!newshosting.com!post02.iad01!roadrunner.com!not-for-mail
Date: Sat, 06 Oct 2007 23:54:09 -0700
From: "Green Xenon [Radium]" <glucegen1@excite.com>
User-Agent: Mozilla/5.0 (Windows; U; Win98; en-US; rv:1.8b) Gecko/20050217
MIME-Version: 1.0
Newsgroups: sci.astro.amateur,sci.astro,alt.astronomy,rec.radio.amateur.space,uk.sci.astronomy,rec.radio.amateur.antenna,sci.physics,sci.energy,alt.sci.physics.new-theories,sci.physics.electromag
Subject: Re: Receiving 2 GHz AM signals in space. What do they sound like?

References: <47072242$0$15384$4c368faf@roadrunner.com>
<4708551a$0$47117$892e7fe2@authen.yellow.readfreenews.net>
In-Reply-To: <4708551a$0$47117$892e7fe2@authen.yellow.readfreenews.net>
Content-Type: text/plain; charset=ISO-8859-1; format=flowed
Content-Transfer-Encoding: 7bit
Lines: 61
Message-ID: <47088001$0$9605$4c368faf@roadrunner.com>
Organization: Road Runner High Speed Online http://www.rr.com
NNTP-Posting-Host: 75.84.20.87
X-Complaints-To: abuse@rr.com
Xref: g2news2.google.com sci.astro.amateur:12505 sci.astro:15314
alt.astronomy:20270 rec.radio.amateur.space:224 uk.sci.astronomy:1946
rec.radio.amateur.antenna:6367 sci.physics:58042 sci.energy:6764
alt.sci.physics.new-theories:1846 sci.physics.electromag:1948

Mas Plak wrote:

> "Green Xenon [Radium]" <glucegen1@excite.com> wrote in message
> news:47072242$0$15384$4c368faf@roadrunner.com...

>>Content-Type: text/plain; charset=ISO-8859-1; format=flowed
>>Content-Transfer-Encoding: 7bit
>>
>>Hi:
>>
>>Let's say I am in a space station which has a 2 GHz DX AM analog
>>receiver that receives the magnetic fields [while ignoring the electric
>>fields]

> WRONG. it is therefore not an EM wave, and your receiver will not pick it
> up.

An EM wave has an electric component and a magnetic component. The
antenna determines whether you are interacting with the electric portion
of the field or the magnetic. A shielded loop will receive the magnetic
portion of the field and ignore the electric if properly constructed.

>>of extremely weak 2 GHz AM analog carrier signals. In addition,
>>this receiver is so sensitive and powerful that it can clearly pick up
>>AM carrier waves as weak as 10-to-the-power-NEGATIVE-10,000
>>watt-per-meter-squared.

> Powerful is the wrong word.

Then what is the correct word? "Sensitivity"?

> What type of "selectiveity" does it have??

What do you mean by "selectivity"?

>> This receiver also has a robust signal processor
>>that can eliminate clipped-waveforms [such as square waves], spikes,
>>clicks, pops, hiss, and random noise

> It can not eliminate random noise

How about in the mysterious too-good-to-be-true situation that it can?
Then what would happen?

I used to often play my Nintendo when it was connected to channel 3.
However, I was change the TV channel to 4. I could see the video of the
game but it was fuzzy and covered in grains. The music of the game was
absent, and instead was filled with frightening-yet-enjoyable tones
[sounding like a buzzer, lawn mower, or electric shaver] along with a
faint audio of what was being discussed on the channel 4 news.

Is there a good chance I would hear something similar on my 2 GHz AM DX
receiver in space?

Also, whenever there is drill or an actually emergency, the Emergency
Alert System [EAS] plays their music. First they play the boring
low-pitch square-wave tones. Then they play the high-pitched,
terrifying, psychedelic sine-wave tones.

Is there a good chance I would hear something similar to the second
higher-pitched set of EAS tones on my 2 GHz AM DX receiver in space?

```
From -5420920219401635826
X-Google-Thread: 10e8ad,93b81b694d198f4c
X-Google-Thread: fcc6e,93b81b694d198f4c
X-Google-Thread: 10b271,93b81b694d198f4c
X-Google-Thread: 107e5d,93b81b694d198f4c
X-Google-Thread: 1110fe,93b81b694d198f4c
X-Google-Attributes:
gid10e8ad,gidfcc6e,gid10b271,gid107e5d,gid1110fe,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!postnews.google.com!o3g2000hsb.googlegroups.com!not-for-
mail
From:  oriel36 <geraldkelleher@yahoo.com>
Newsgroups:
rec.radio.amateur.space,rec.radio.amateur.antenna,sci.physics,sci.energy,sci.physi
cs.electromag
Subject: Re: Receiving 2 GHz AM signals in space. What do they sound like?
Date: Sun, 07 Oct 2007 09:31:32 -0000
Organization: http://groups.google.com
Lines: 82
Message-ID: <1191749492.702997.254880@o3g2000hsb.googlegroups.com>
References: <47072242$0$15384$4c368faf@roadrunner.com>
   <4708551a$0$47117$892e7fe2@authen.yellow.readfreenews.net>
   <47088001$0$9605$4c368faf@roadrunner.com>
NNTP-Posting-Host: 213.94.227.205
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"
X-Trace: posting.google.com 1191749492 29282 127.0.0.1 (7 Oct 2007 09:31:32 GMT)
X-Complaints-To: groups-abuse@google.com
```

```
NNTP-Posting-Date: Sun, 7 Oct 2007 09:31:32 +0000 (UTC)
In-Reply-To: <47088001$0$9605$4c368faf@roadrunner.com>
User-Agent: G2/1.0
X-HTTP-UserAgent: Mozilla/4.0 (compatible; MSIE 7.0; Windows NT 5.1; .NET CLR
1.1.4322),gzip(gfe),gzip(gfe)
Complaints-To: groups-abuse@google.com
Injection-Info: o3g2000hsb.googlegroups.com; posting-host=213.94.227.205;
   posting-account=ps2QrAMAAAA6_jCuRt2JEIpn5Otqf_w0
Xref: g2news2.google.com rec.radio.amateur.space:225
rec.radio.amateur.antenna:6369 sci.physics:58069 sci.energy:6773
sci.physics.electromag:1950

On Oct 7, 8:54 am, "Green Xenon [Radium]" <gluceg...@excite.com>
wrote:
> Mas Plak wrote:
> > "Green Xenon [Radium]" <gluceg...@excite.com> wrote in message
> >news:47072242$0$15384$4c368faf@roadrunner.com...
> >>Content-Type: text/plain; charset=ISO-8859-1; format=flowed
> >>Content-Transfer-Encoding: 7bit
>
> >>Hi:
>
> >>Let's say I am in a space station which has a 2 GHz DX AM analog
> >>receiver that receives the magnetic fields [while ignoring the electric
> >>fields]
> > WRONG. it is therefore not an EM wave, and your receiver will not pick it
> > up.
>
> An EM wave has an electric component and a magnetic component. The
> antenna determines whether you are interacting with the electric portion
> of the field or the magnetic. A shielded loop will receive the magnetic
> portion of the field and ignore the electric if properly constructed.
>
> >>of extremely weak 2 GHz AM analog carrier signals. In addition,
> >>this receiver is so sensitive and powerful that it can clearly pick up
> >>AM carrier waves as weak as 10-to-the-power-NEGATIVE-10,000
> >>watt-per-meter-squared.
> > Powerful is the wrong word.
>
> Then what is the correct word? "Sensitivity"?
>
> > What type of "selectiveity" does it have??
>
> What do you mean by "selectivity"?
>
> >> This receiver also has a robust signal processor
> >>that can eliminate clipped-waveforms [such as square waves], spikes,
> >>clicks, pops, hiss, and random noise
> > It can not eliminate random noise
>
> How about in the mysterious too-good-to-be-true situation that it can?
> Then what would happen?
>
```

> I used to often play my Nintendo when it was connected to channel 3.
> However, I was change the TV channel to 4. I could see the video of the
> game but it was fuzzy and covered in grains. The music of the game was
> absent, and instead was filled with frightening-yet-enjoyable tones
> [sounding like a buzzer, lawn mower, or electric shaver] along with a
> faint audio of what was being discussed on the channel 4 news.
>
> Is there a good chance I would hear something similar on my 2 GHz AM DX
> receiver in space?
>
> Also, whenever there is drill or an actually emergency, the Emergency
> Alert System [EAS] plays their music. First they play the boring
> low-pitch square-wave tones. Then they play the high-pitched,
> terrifying, psychedelic sine-wave tones.
>
> Is there a good chance I would hear something similar to the second
> higher-pitched set of EAS tones on my 2 GHz AM DX receiver in space?

Let me put you out of your misery,I do not know how old you are but
you unwittingly introduce a big no-no by postulating EM waves in space
and that implies a medium.

This is fine,they were faced with a dilemma in the mid19th century
inherited from Newton where they could live happily with the the Sun
influencing the Earth without a medium but could not conceive the Sun
illuminating the Earth without one.Check the top right column of the
following article from 1843 to affirm this -

http://www.bodley.ox.ac.uk/cgi-bin/ilej/image1.pl?
item=page&seq=9&size=1&id=bm.1843.10.x.54.336.x.425

50 years later they dumped a medium on Newton anyway as 'absolute
space' and then conveniently rejected it all over again and then you
have 100 years of relativistic junk,some hopeless cases still think it
is an achievement but they are the ones who jump in here and try to
make you look like an idiot even though it may be a fair question.

```
From 5431244789571913827
X-Google-Thread: 10e8ad,93b81b694d198f4c
X-Google-Thread: 10cf28,93b81b694d198f4c
X-Google-Thread: 10b271,93b81b694d198f4c
X-Google-Thread: 107e5d,93b81b694d198f4c
X-Google-Thread: 1110fe,93b81b694d198f4c
X-Google-Attributes:
gid10e8ad,gid10cf28,gid10b271,gid107e5d,gid1110fe,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
```

Path: g2news2.google.com!postnews.google.com!50g2000hsm.googlegroups.com!not-for-mail
From: "zzbunker@netscape.net" <zzbunker@netscape.net>
Newsgroups: rec.radio.amateur.space,uk.sci.astronomy,sci.physics,sci.energy,sci.physics.electromag
Subject: Re: Receiving 2 GHz AM signals in space. What do they sound like?
Date: Sun, 07 Oct 2007 03:30:24 -0700
Organization: http://groups.google.com
Lines: 43
Message-ID: <1191753024.124784.125510@50g2000hsm.googlegroups.com>
References: <47072242$0$15384$4c368faf@roadrunner.com>
NNTP-Posting-Host: 69.143.243.246
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"
X-Trace: posting.google.com 1191753024 16713 127.0.0.1 (7 Oct 2007 10:30:24 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Sun, 7 Oct 2007 10:30:24 +0000 (UTC)
In-Reply-To: <47072242$0$15384$4c368faf@roadrunner.com>
User-Agent: G2/1.0
X-HTTP-UserAgent: Mozilla/4.0 (compatible; MSIE 7.0; Windows NT 5.1; .NET CLR 1.0.3705),gzip(gfe),gzip(gfe)
Complaints-To: groups-abuse@google.com
Injection-Info: 50g2000hsm.googlegroups.com; posting-host=69.143.243.246;
   posting-account=ps2QrAMAAAA6_jCuRt2JEIpn5Otqf_w0
Xref: g2news2.google.com rec.radio.amateur.space:226 uk.sci.astronomy:1947 sci.physics:58075 sci.energy:6776 sci.physics.electromag:1951

On Oct 6, 2:01 am, "Green Xenon [Radium]" <gluceg...@excite.com> wrote:
> Content-Type: text/plain; charset=ISO-8859-1; format=flowed
> Content-Transfer-Encoding: 7bit
>
> Hi:
>
> Let's say I am in a space station which has a 2 GHz DX AM analog
> receiver that receives the magnetic fields [while ignoring the electric
> fields] of extremely weak 2 GHz AM analog carrier signals. In addition,
> this receiver is so sensitive and powerful that it can clearly pick up
> AM carrier waves as weak as 10-to-the-power-NEGATIVE-10,000
> watt-per-meter-squared. This receiver also has a robust signal processor
> that can eliminate clipped-waveforms [such as square waves], spikes,
> clicks, pops, hiss, and random noise even at those trivial wattage
> levels. After eliminating those unwanted signals, the carrier wave is
> amplified. This receiver has an astronomically-powerful amplifier which
> amplifies those extremely-soft carrier waves until the resulting
> modulation signals will be just loud enough for the human ear to
> coherently detect. Following this amplification, the carrier waves are
> demodulated to modulation waves -- the stuff we "hear" -- and then sent
> to loudspeaker so those onboard can hear those sounds.
>
> Equally important, the 2-GHz receiver is pointed away from the earth to
> assist in preventing the pickup of signals generated from Earth.

>
> If I am on this spaceship, what will I most likely hear on the radio?

The sound of absolute zero, which sounds a lot like the sound
of absolute infinity, except that morons at Viacom pick
up the tab, rather than morons at AT&T.

>
> Thanks,
>
> Radium

```
From -5388805265351660461
X-Google-Thread: 113975,93b81b694d198f4c
X-Google-Thread: f74ae,93b81b694d198f4c
X-Google-Thread: fdc67,93b81b694d198f4c
X-Google-Thread: 10e8ad,93b81b694d198f4c
X-Google-Thread: 10cf28,93b81b694d198f4c
X-Google-Thread: fcc6e,93b81b694d198f4c
X-Google-Thread: 10b271,93b81b694d198f4c
X-Google-Thread: 107e5d,93b81b694d198f4c
X-Google-Thread: 1038c2,93b81b694d198f4c
X-Google-Thread: 1110fe,93b81b694d198f4c
X-Google-Attributes:
gid113975,gidf74ae,gidfdc67,gid10e8ad,gid10cf28,gidfcc6e,gid10b271,gid107e5d,gid10
38c2,gid1110fe,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news2.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!local01.nntp.dca.giganews.com!nntp.pipex.net!
news.pipex.net.POSTED!not-for-mail
NNTP-Posting-Date: Sun, 07 Oct 2007 06:37:58 -0500
From: "George Dishman" <george@briar.demon.co.uk>
Newsgroups:
sci.astro.amateur,sci.astro,alt.astronomy,rec.radio.amateur.space,uk.sci.astronomy
,rec.radio.amateur.antenna,sci.physics,sci.energy,alt.sci.physics.new-
theories,sci.physics.electromag
References: <47080705$0$24349$4c368faf@roadrunner.com>
Subject: Re: Receiving 2 GHz AM signals in space. What do they sound like?
Date: Sun, 7 Oct 2007 12:43:26 +0100
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.3138
X-RFC2646: Format=Flowed; Response
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.3138
Message-ID: <bJqdnYvoXp2LWJXanZ2dnUVZ8t-nnZ2d@pipex.net>
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Lines: 62
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NNTP-Posting-Host: 83.67.26.177
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K7+rdK1zhXmi5iiHc!
cwSQFWz9RQKFO0fy74mrz3OqwdthWl31r1CIlhjG0jq08Jkp9LLki6xh4hulXz6FsNDLKA9cFLDI!
jJd8Bssjljtu5W8DsILihcE=
X-Complaints-To: abuse@dsl.pipex.net
X-DMCA-Complaints-To: abuse@dsl.pipex.net
X-Abuse-and-DMCA-Info: Please be sure to forward a copy of ALL headers
X-Abuse-and-DMCA-Info: Otherwise we will be unable to process your complaint
properly
X-Postfilter: 1.3.36
Xref: g2news2.google.com sci.astro.amateur:12513 sci.astro:15342
alt.astronomy:20277 rec.radio.amateur.space:227 uk.sci.astronomy:1948
rec.radio.amateur.antenna:6370 sci.physics:58087 sci.energy:6779
alt.sci.physics.new-theories:1849 sci.physics.electromag:1952

"Green Xenon [Radium]" <glucegen1@excite.com> wrote in message
news:47080705$0$24349$4c368faf@roadrunner.com...
> On Oct 6, 6:24 am, "George Dishman" <geo...@briar.demon.co.uk> wrote in
> http://groups.google.com/group/sci.energy/msg/ad14e4c2d56369db :
>
> > "Green Xenon [Radium]" <gluceg...@excite.com> wrote in
> messagenews:47072242$0$15384$4c368faf@roadrunner.com...
> > ...
>
>
> > > ... This receiver also has a robust signal processor
> > > that can eliminate clipped-waveforms [such as square waves], spikes,
> > > clicks, pops, hiss, and random noise
> > > even at those trivial wattage
> > > levels. After eliminating those unwanted signals, the carrier wave
> > > > is
> > > amplified.
>
> > There is no carrier,
>
> Yes there is. Why do you say there isn't?

Because a sine wave is a sine and you cannot
distiguish one from another. There is no
criterion that says anything is a "carrier"
and not just part of the background hiss.

> > it was one of those signals you just
> > eliminated.
>
> How so?

If you use a band pass filter at some frequency
that you guess could be a carrier followed by an

```
envelope detector, you get hiss. To eliminate
the hiss, you have to eliminate all other
frequencies so all you are left with is CW and
the envelope detector then gives a DC output.

> > > If I am on this spaceship, what will
> > > I most likely hear on the radio?
>
> > Stop trying to troll, you are too stupid to pull it off.
>
> I don't troll or spam. I am asking this question because -- unlikely [if
> not impossible] as my 2-GHz-in-outer-space scenario is -- I am still
> interested in it.
>
> Now please please please answer my question. What would I hear?

Several people have answered you already, the
answer is silence.

George

p.s this time I won't forget to do the <plonk> :(
Don't expect any more replies, I don't respond to
spammers and your drivel is off-topic in virtually
every group you have posted to.
```

```
From 2411424944330989401
X-Google-Thread: 10e8ad,93b81b694d198f4c
X-Google-Thread: fcc6e,93b81b694d198f4c
X-Google-Thread: 10b271,93b81b694d198f4c
X-Google-Thread: 107e5d,93b81b694d198f4c
X-Google-Thread: 1110fe,93b81b694d198f4c
X-Google-Attributes:
gid10e8ad,gidfcc6e,gid10b271,gid107e5d,gid1110fe,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news1.google.com!newshub.sdsu.edu!
newscon04.news.prodigy.net!prodigy.net!newsdst01.news.prodigy.net!prodigy.com!
postmaster.news.prodigy.com!newssvr14.news.prodigy.net.POSTED!a6387dc4!not-for-
mail
From: Cecil Moore <nospam@w5dxp.com>
User-Agent: Thunderbird 2.0.0.6 (Windows/20070728)
MIME-Version: 1.0
Newsgroups:
rec.radio.amateur.space,rec.radio.amateur.antenna,sci.physics,sci.energy,sci.physi
cs.electromag
Subject: Re: Receiving 2 GHz AM signals in space. What do they sound like?
References: <47072242$0$15384$4c368faf@roadrunner.com>
<4708551a$0$47117$892e7fe2@authen.yellow.readfreenews.net>
<47088001$0$9605$4c368faf@roadrunner.com>
<1191749492.702997.254880@o3g2000hsb.googlegroups.com>
```

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In-Reply-To: <1191749492.702997.254880@o3g2000hsb.googlegroups.com>
Content-Type: text/plain; charset=ISO-8859-1; format=flowed
Content-Transfer-Encoding: 7bit
Lines: 14
Message-ID: <zq5Oi.5052$4V6.3419@newssvr14.news.prodigy.net>
NNTP-Posting-Host: 76.202.130.205
X-Complaints-To: abuse@prodigy.net
X-Trace: newssvr14.news.prodigy.net 1191764767 ST000 76.202.130.205 (Sun, 07 Oct
2007 09:46:07 EDT)
NNTP-Posting-Date: Sun, 07 Oct 2007 09:46:07 EDT
Organization: SBC http://yahoo.sbc.com
X-UserInfo1:
[[PAPDONVJWURRXX@HHZ_Q\BPJTDPOXOLBWLOOAFJYWZUYICD^RAQBKZQTZTX\_I[^G_KGFNON[ZOE_AZN
VO^\XGGNTCIRPIJH[@RQKBXLRZ@CD^HKANYVW@RLGEZEJN@\_WZJBNZYYKVIOR]T]MNMG_Z[YVWSCH_Q[G
PC_A@CARQVXDSDA^M]@DRVUM@RBM
Date: Sun, 07 Oct 2007 13:46:07 GMT
Xref: g2news2.google.com rec.radio.amateur.space:228
rec.radio.amateur.antenna:6371 sci.physics:58100 sci.energy:6783
sci.physics.electromag:1953
```

oriel36 wrote:

> 50 years later they dumped a medium on Newton anyway as 'absolute
> space' and then conveniently rejected it all over again and then you
> have 100 years of relativistic junk,some hopeless cases still think it
> is an achievement but they are the ones who jump in here and try to
> make you look like an idiot even though it may be a fair question.

They were only confused about the nature of the "ether".
Now we know that empty space is indeed not empty and
is something (as opposed to absolute nothing) that some
physicists describe as a "quantum soup" outside of which
EM waves cannot propagate.
--
73, Cecil http://www.w5dxp.com

```
From 4877655597129005592
X-Google-Thread: 10e8ad,93b81b694d198f4c
X-Google-Thread: fcc6e,93b81b694d198f4c
X-Google-Thread: 10b271,93b81b694d198f4c
X-Google-Thread: 107e5d,93b81b694d198f4c
X-Google-Thread: 1110fe,93b81b694d198f4c
X-Google-Attributes:
gid10e8ad,gidfcc6e,gid10b271,gid107e5d,gid1110fe,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!postnews.google.com!o3g2000hsb.googlegroups.com!not-for-
mail
From:  oriel36 <kelleher.gerald@gmail.com>
Newsgroups:
rec.radio.amateur.space,rec.radio.amateur.antenna,sci.physics,sci.energy,sci.physi
cs.electromag
Subject: Re: Receiving 2 GHz AM signals in space. What do they sound like?
Date: Sun, 07 Oct 2007 11:38:35 -0700
```

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Organization: http://groups.google.com
Lines: 79
Message-ID: <1191782315.752393.148770@o3g2000hsb.googlegroups.com>
References: <47072242$0$15384$4c368faf@roadrunner.com>
   <4708551a$0$47117$892e7fe2@authen.yellow.readfreenews.net>
   <47088001$0$9605$4c368faf@roadrunner.com>
   <1191749492.702997.254880@o3g2000hsb.googlegroups.com>
   <zq5Oi.5052$4V6.3419@newssvr14.news.prodigy.net>
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Mime-Version: 1.0
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X-Trace: posting.google.com 1191782317 11207 127.0.0.1 (7 Oct 2007 18:38:37 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Sun, 7 Oct 2007 18:38:37 +0000 (UTC)
In-Reply-To: <zq5Oi.5052$4V6.3419@newssvr14.news.prodigy.net>
User-Agent: G2/1.0
X-HTTP-UserAgent: Mozilla/4.0 (compatible; MSIE 7.0; Windows NT 5.1; .NET CLR
2.0.50727),gzip(gfe),gzip(gfe)
Complaints-To: groups-abuse@google.com
Injection-Info: o3g2000hsb.googlegroups.com; posting-host=83.71.76.194;
   posting-account=ps2QrAMAAAA6_jCuRt2JEIpn5Otqf_w0
Xref: g2news2.google.com rec.radio.amateur.space:229
rec.radio.amateur.antenna:6385 sci.physics:58186 sci.energy:6817
sci.physics.electromag:1955
```

On Oct 7, 2:46 pm, Cecil Moore <nos...@w5dxp.com> wrote:

> oriel36 wrote:
> > 50 years later they dumped a medium on Newton anyway as 'absolute space' and then conveniently rejected it all over again and then you have 100 years of relativistic junk,some hopeless cases still think it is an achievement but they are the ones who jump in here and try to make you look like an idiot even though it may be a fair question.
>
> They were only confused about the nature of the "ether".

Again,the guys in the mid 19th century were inheriting a dilemma Newton created when he rejected a medium.If you really have to believe the cobblers of the last century where Albert rejects and aether by attaching it to Newton's 'absolute space' then be my guest,it is an incredible work of fiction but no more .

"The fictitious matter which is imagined as filling the whole of space is of no use for explaining the phenomena of Nature, since the motions of the planets and comets are better explained without it, by means of gravity; and it has never yet been explained how this matter accounts for gravity. The only thing which matter of this sort could do, would be to interfere with and slow down the motions of those large celestial bodies, and weaken the order of Nature; and in the microscopic pores of bodies, it would put a stop to the vibrations of their parts which their heat and all their active force consists in. Further, since matter of this sort is not only completely useless, but would actually interfere with the operations of Nature, and weaken them, there is no solid reason why we should believe in any

such matter at all. Consequently, it is to be utterly rejected."
Optics 1704 Newton

So Cecil,if you read the article again and especially the top right column you will see the distress of people who know they are stuck in a rut but cannot find a way out of it.In the end they dumped aether on Isaac as 'absolute space' and so began the relativistic junk. -

" In order to be able to look upon the rotation of the system, at least formally, as something real, Newton objectivises space. Since he classes his absolute space together with real things, for him rotation relative to an absolute space is also something real. Newton might no less well have called his absolute space ``Ether''; "Albert

Unless you have a severe reading disability,you will probably notice Newton using explict terms like "utterly rejected" in regard to aether hence the honest of the guys in the mid 19th century.

> Now we know that empty space is indeed not empty and
> is something (as opposed to absolute nothing) that some
> physicists describe as a "quantum soup" outside of which
> EM waves cannot propagate.
> --
> 73, Cecil http://www.w5dxp.com

Quantum soup no less !, created by the witches of Macbeth no doubt -

Round about the cauldron go;
In the poison'd entrails throw.
Toad, that under cold stone
Days and nights has thirty-one
Swelter'd venom sleeping got,
Boil thou first i' the charmed pot.
Double, double toil and trouble;
Fire burn, and cauldron bubble

The fiction Newton created is far more impressive than the one built by the guys in the early 20th century but the fiction of Newton has a very,very astrological slant and it began with the work of John Flamsteed.I would love to fill you in with the details but you appear content believing the guys in the mid 19th century were confused.They were not,they were desperate.

http://www.bodley.ox.ac.uk/cgi-bin/ilej/image1.pl?
item=page&seq=9&size=1&id=bm.1843.10.x.54.336.x.425

```
From -6415618338679454706
X-Google-Thread: 10e8ad,eb5956ab247a1b54,start
X-Google-Thread: 113975,eb5956ab247a1b54,start
X-Google-Attributes: gid10e8ad,gid113975,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news2.google.com!newshub.sdsu.edu!news.astraweb.com!
border2.newsrouter.astraweb.com!not-for-mail
From: Chris Steyaert <observations@rmob.org>
Newsgroups: rec.radio.amateur.space,sci.astro.amateur
Subject: Radio Meteor Obs. Bull. June 2007
Date: Wed, 08 Aug 2007 17:19:35 +0200
Message-ID: <1nnjb3die0s1bpcecuie9263sapcj4108q@4ax.com>
X-Newsreader: Forte Agent 1.93/32.576 English (American)
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Lines: 17
Organization: Unlimited download news at news.astraweb.com
NNTP-Posting-Host: 5349c6b5.news.astraweb.com
X-Trace: DXC=CNg3N5^=\=3hn]AcMfkkb9L?
0kYOcDh@:;>GTR`=ZX:2BSQ_gHCa=a83C0E@Z8I;22SU:0hgQjL6;UIf`cI@ik44
Xref: g2news2.google.com rec.radio.amateur.space:130 sci.astro.amateur:5979
```

Radio Meteor Observation Bulletin No. 168 of July 2007 (67 K) is available now as

http://visualrmob.free.fr/rmobtext/rmob0707.txt

More information and the visual presentation of the hourly forward scatter counts can be found on

http://www.rmob.org

http://radio.data.free.fr

Chris

```
From -5522009564321912186
X-Google-Thread: 10e8ad,8ba12c0d53ec2366,start
X-Google-Attributes: gid10e8ad,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news4.google.com!out02a.usenetserver.com!
news.usenetserver.com!in01.usenetserver.com!news.usenetserver.com!spln!
extra.newsguy.com!newsp.newsguy.com!enews2
From: supernews@rec.radio.amateur.space
Newsgroups: rec.radio.amateur.space
Subject: rec.radio.amateur.space scheduled for sporge flood
```

```
Followup-To: sci.crypt
Date: Thu, 8 Aug 2007 22:48:59 GMT
Organization: one more noble jungles are persistent and other chosen reductions
are ugly, but will Latif speed that
Lines: 11
Approved: supernews@rec.radio.amateur.space
Message-ID: <5zzEi8SES$bK5.4978858@64.209.0.87>
NNTP-Posting-Host:
p550d0abfff0000006d83144ed4829e43315d4a2eac52571d34d9b6c21d00299b.newsdawg.com
Xref: g2news2.google.com rec.radio.amateur.space:131

Sporge flooding of rec.radio.amateur.space will commence in a few hours.

This will render rec.radio.amateur.space useless.  For an example, see Sci.Crypt.

Supernews filters out this sporgery spam.  Get a better Usenet
experience.  Sign up for our risk-free trial today!

https://www.supernews.com/signup

--
No regulatory brides hire Wail, and they boldly resist Ghassan too.


From -7345859722914830479
X-Google-Thread: f7653,93644cdbd0fb2d45,start
X-Google-Thread: 10e8ad,93644cdbd0fb2d45,start
X-Google-Thread: 107ada,93644cdbd0fb2d45,start
X-Google-Attributes: gidf7653,gid10e8ad,gid107ada,public,usenet
X-Google-Language: ENGLISH,UTF8
Path: g2news2.google.com!news3.google.com!proxad.net!feeder1-2.proxad.net!
news.tele.dk!news.tele.dk!small.news.tele.dk!newsfeed1.swip.net!swipnet!
newsfeed1.funet.fi!newsfeed3.funet.fi!newsfeeds.funet.fi!
feeder2.news.saunalahti.fi!reader1.news.saunalahti.fi!53ab2750!not-for-mail
From: Tapio Sokura <oh2kku@iki.fi>
User-Agent: Mozilla/5.0 (X11; U; Linux i686; en-US; rv:1.7.12) Gecko/20060209
Fedora/1.7.12-1.1.2.legacy
X-Accept-Language: en
MIME-Version: 1.0
Newsgroups:
rec.radio.amateur.digital.misc,rec.radio.amateur.space,rec.radio.amateur.misc
Subject: Finnish Ilmari balloon launch Aug 11th at 06 UTC
Content-Type: text/plain; charset=UTF-8; format=flowed
Content-Transfer-Encoding: 8bit
Lines: 27
Message-ID: <Z88vi.205421$oc1.58603@reader1.news.saunalahti.fi>
Date: Sat, 11 Aug 2007 04:19:53 +0300
NNTP-Posting-Host: 84.231.1.220
X-Complaints-To: newsmaster@saunalahti.com
X-Trace: reader1.news.saunalahti.fi 1186795193 84.231.1.220 (Sat, 11 Aug 2007
04:19:53 EEST)
NNTP-Posting-Date: Sat, 11 Aug 2007 04:19:53 EEST
Organization: Saunalahti Customer
```

Xref: g2news2.google.com rec.radio.amateur.digital.misc:36
rec.radio.amateur.space:132 rec.radio.amateur.misc:1576

Hello,

This is an amateur balloon launch announcement that may interest North European amateur radio operators. The Finnish balloon project Ilmari will (finally) launch a balloon on August 11th, 2007, at approximately 06 UTC from Padasjoki (latitude N61° 21', longitude E025° 03', Maidenhead square KP21MI). That is today, within 5 hours or so of this posting, sorry for the late announcement. The flight is expected to last from 3 to 6 hours and touch down around 30 nm north-east from the launch site.

Ilmari is more than just a typical balloon, for example it carries a 23cm ATV transmitter and a 2m up/70cm down linear transponder (cw/ssb/digital), in addition to more typical 80m CW beacon and 70cm APRS transmitter. If Ilmari reaches its projected height of 25 kilometers, it should be workable from most parts of Finland, Sweden, Estonia, Latvia and north-west Russia. It maybe possible to receive Ilmari in northern parts of Lithuania and eastern parts of Norway. The balloon will use callsigns OH2SIX-11 and/or OH2SIX-12, they should be visible in the APRS-IS during the flight.

For more information and instructions on how and where (frequencies) to work Ilmari, have a look at
http://www.kolumbus.fi/michael.fletcher/ilmari.htm and
http://wiki.ham.fi/Ilmari-2007 for a kind of launch log.

Tapio

From -4192051303621210342
X-Google-Thread: 10e8ad,cd6ec81e3f6842fe,start
X-Google-Thread: 10b9c8,cd6ec81e3f6842fe,start
X-Google-Attributes: gid10e8ad,gid10b9c8,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news1.google.com!newsfeed2.dallas1.level3.net!
news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-218 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Sat, 11 Aug 2007 13:08:50 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 1260
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <001301c7dc3a$55a6d800$6601a8c0@familyroom>
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
charset="us-ascii"
Content-Transfer-Encoding: 7bit

```
X-Trace: reader2.panix.com 1186852131 26456 166.84.1.6 (11 Aug 2007 17:08:51 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sat, 11 Aug 2007 17:08:51 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Xref: g2news2.google.com rec.radio.amateur.space:133 rec.radio.info:190
```

This report is organized into FIVE parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites
Part 5 (S5) - deorbited/returned satellites

SB SAT @ AMSAT W8ISS ANS-218.S1
WSR 218 Part 1 08/06/2007

AMSAT NEWS SERVICE BULLETIN 218.S1 FROM AMSAT HQ
SILVER SPRING, MD, August 06, 2007
TO ALL RADIO AMATEURS
BID: $ANS-218.S1

VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.859330 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP

```
U: RHCP

Official Webpage: http://www.amsat.in/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is
active. Each transponder has a different beacon.
[06252007]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Modes:   FM Repeater - V/u
                 Telemetry Beacon -  /u

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink:   145.880 MHZ FM
                       145.880 MHz USB
                       145.920 MHz FM
                      1268.700 MHz FM 67Hz PL tone
Digital Downlinks:     435.150 MHz FM 38k4 Digital, PBP, 1 watt output
                       435.150 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:        145.860 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      1268.700 mhz FM 9k6 PBP Digital
Beacon:                435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[07302007]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.
```

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer
   on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on
   and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10
   minute timer.
[05282007]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Recovery Operations

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

JARL English webpage: http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm
AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=5&retURL=/satellites/status.php

```
Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's CW
telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts.htm
[07022007]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Current Mode: V/u

Uplink:   145.850 MHz FM
Downlink: 436.795 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[05282007]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational depending on amount of Sunlight

Current Mode: Listen before transmitting

Uplink:   145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink:  29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons:   29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/

AO-7 Usage Guidelines on the AO-7 Log and Resource Site located at:
http://www.planetemily.com/ao7
[05282007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
```

Launch date: November 20, 1998

Status: Operational

Current Mode: Occasional Voice/Packet/Digipeater

Expedition 15 crew:
Commander: Fyodor Yurchikhin RN3FI
Flight Engineer: Clayton C. Anderson KD5PLA
Flight Engineer: Oleg Kotov

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

SSTV TESTING:
Worldwide Reported Downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS
RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line is
NOT translated from Russian and posted.
[07162007]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-218.S2
WSR 218 Part 2 08/06/2007

AMSAT NEWS SERVICE BULLETIN 218.S2 FROM AMSAT HQ
SILVER SPRING, MD, August 06, 2007
TO ALL RADIO AMATEURS
BID: $ANS-218.S2

CAPE1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.

[07302007]

=====

CP3
Catalog Number: 31128
Launch Date: April 17,2007

Status: Operational

Current Mode: /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[07302007]

=====

CP4
Catalog Number: 31122
Launch Date: April 17,2007

Status: Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon: 437.325 MHz CW
[07302007]

=====

PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: In Orbit

```
Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder:  145.825 Mhz FM
[02052007]
=====
?O-?? FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: In Orbit

Current Mode: /u

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[02262007]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[07302007]
=====
GENESAT-1 ?O-??
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Current Mode: /u

Telemetry Beacon Downlink: 437.0670 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[01082007]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Operational

Current Mode: /u
```

```
Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon:             437.2750 MHz CW

Callsign: JR8YJT
[10302006]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon:             437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
[03262007]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launched: June 30, 2003

Status: Operational

Current Mode: /u

Beacon:     436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[01082007]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launched: February 21, 2006

Status: Semi-Operational - Constant Carrier only

Uplink:  1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan ? )

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC
```

```
Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[01082007]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Mode(s): FM Repeater - L/s
                 Telemetry Beacon - OFF

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink:   145.880 MHZ FM
                       145.880 MHz USB
                       145.920 MHz FM
                      1268.700 MHz FM 67Hz PL tone
Digital Downlinks:     435.150 MHz FM 38k4 Digital, PBP, 1 watt output
                       435.150 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:        145.860 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      1268.700 mhz FM 9k6 PBP Digital
Beacon:                435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[07302007]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Operational only in Full Sun Light

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
```

Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[05282007]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: OPERATIONAL?

Current Modes: V/U
L/U

Downlink: 435.225 MHz FM (9600-baud FSK)
435.325 Mhz - Not Available - temperature problems
Uplinks: 145.850 FM
145.890 FM
145.930 FM
1269.700 FM
1269.800 FM
1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[08062007]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational.

Current Mode: Telemetry Downlink - 2M

Telemetry Downlink: 145.826 MHz FM 1200 AFSK
UHFBeacon: 435.025 MHz - OFF
Mode-S Beacon: 2401.500 MHz - OFF

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Due to solar eclipses which will continue until late August 2007, the
beacon
will only transmit for about one orbit every 21 days. It is unlikely to
be

heard during this period.

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[07162007]
=====
RS-22 RADIO SPORT RS-22
Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only

Current Mode: CW Beacon

CW Beacon - 435.352 MHz
            145.818 MHz
[08062007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Mode: Occasional Voice/Packet/Digipeater

Expedition 15 crew:
Commander: Fyodor Yurchikhin   RN3FI
Flight Engineer: Clayton C. Anderson   KD5PLA
Flight Engineer: Oleg Kotov

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

SSTV TESTING:
Worldwide Reported Downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:

German: DP0ISS
Russian: RS0ISS
                      RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.
[07162007]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-218.S3
WSR 218 Part 3 08/06/2007

AMSAT NEWS SERVICE BULLETIN 218.S3 FROM AMSAT HQ
SILVER SPRING, MD, August 06, 2007
TO ALL RADIO AMATEURS
BID: $ANS-218.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 MHz FM 67Hz CTCSS
Voice Downlink: 2401.835 MHz FM
Packet Up/Downlink: 437.250 MHz 9k6 packet
Packet Downlink   2401.835 MHz 38k4 packet

```
Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink:   435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Non-Operational

Uplinks:   145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink:  437.325 MHz

Broadcast callsign: MYSAT3-11
BBS:                MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial
land and weather imaging payloads offers FM and FSK Amateur Radio
communica-
tion.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a
collaborative effort between the Malaysian government and Surrey
Satellite
Technology Ltd.
[007302007]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink:   145.945 MHz UI Digipeater
Digi Callsign: KE6QMD
```

```
Everyone is welcome to use the digipeating/APRS features of Sapphire,
call-
sign KE6QMD, as per the user service agreement located at the following
URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS:                SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink:   145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
V-band:   145.840 -  145.990 MHz CW/LSB
U-band:   435.550 -  435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks
```

S2-band: 2401.225 - 2401.475 MHz CW/USB
K-band: 24048.010 - 24048.060 MHz CW/USB
Beacon: 2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)

BEACON	General Beacon (GB)	Middle Beacon (MB)	Engineering Beacon (EB)
2 m	none	145.898 MHz	none
70cm	435.438 MHz	435.588 MHz	435.838 MHz
13cm(1)	2400.188 MHz	2400.338 MHz	2400.588 MHz
13cm(2)	2401.173 MHz	2401.323 MHz	2401.573 MHz
3cm	10450.975 MHz	10451.125 MHz	10451.375 MHz
1.5cm	24047.885 MHz	24048.035 MHz	24048.285 MHz

[007162007]

=====

UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]

=====

SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]

```
=====
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink:   145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Reported non-operational

Current Mode: V/U
              Digipeater - Authorized for APRS usage

Uplink:         145.900 MHz FM 1200-baud Manchester FSK
                145.920 MHz FM 1200-baud Manchester FSK
                145.940 MHz FM 1200-baud Manchester FSK
                145.960 MHz FM 1200-baud Manchester FSK
```

```
Downlink:       437.026 MHz SSB 1200-baud PSK
Mode-S Beacon: 2401.1428 MHz

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.025 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[06112007]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign:       POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012006]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: Downlink only

Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[012212007]
=====
KO-25 KITSAT
Catalog number: 22828
```

```
Launched: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational
```

```
Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplinks:          145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink:      437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[01222007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990
```

```
Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
[05012006]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet: Non-Operational
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon:   145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
```

```
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink  29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
[01152007]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994
```

Status: Non-operational

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB

Beacon 1: 29.352 MHz (intermittent)
Beacon 2: 29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB

Beacon: 145.860 MHz

Robot: 145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-218.S4
WSR 218 Part 4 08/06/2007

AMSAT NEWS SERVICE BULLETIN 218.S4 FROM AMSAT HQ
SILVER SPRING, MD, August 06, 2007
TO ALL RADIO AMATEURS
BID: $ANS-218.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE PROPOSED FOR LAUNCH AT
THIS TIME:

```
Phase 5a Mars Mission
Catalog Number:
Proposed Launch Date: 2009 or 2011

Status: Design Phase

For the latest project status update please visit the AMSAT-DL P5-A web
page:
http://ticket-to-mars.org
[01222007]
=====
PHASE 3E AO-??
Catalog number:
Proposed Launch Date: Late 2007

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web
page:
http://www.amsat-dl.org/p3e/
[01222007]
=====
Eagle AO-??
Catalog Number:
Proposed Launch Date: Early/Mid 2009

Status: Design Phase

For the latest project status updates please visit the AMSAT-NA webpage:
http://www.amsat.org
[01222007]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-218.S5
WSR 218 Part 5 08/06/2007

AMSAT NEWS SERVICE BULLETIN 218.S5 FROM AMSAT HQ
SILVER SPRING, MD, August 06, 2007
TO ALL RADIO AMATEURS
BID: $ANS-218.S5

THE FOLLOWING SATELLITES HAVE DE-ORBITED OR HAVE BEEN RETURNED TO THE
GROUND:

NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status:   Re-Entered
Re-entered: May 30, 2007

Main Downlink:      145.825 Mhz FM APRS AX25
```

APRS Uplink: 145.825 MHz FM APRS AX25
Voice/PSK31 Uplink: 28.120 MHz

Packet to Voice ID: RAFT
[06112007]
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:

ans-editor{at}amsat.org
NNNN
/EX

```
From -4489544187941372507
X-Google-Thread: 10e8ad,c5bb74efe95687cd,start
X-Google-Thread: 10b9c8,c5bb74efe95687cd,start
X-Google-Attributes: gid10e8ad,gid10b9c8,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news2.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx01.iad01.newshosting.com!newshosting.com!
198.186.194.247.MISMATCH!news-out.readnews.com!news-xxxfer.readnews.com!panix!
rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS=224 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sun, 12 Aug 2007 09:27:43 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 161
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000301c7dce4$a1abe600$6601a8c0@familyroom>
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader2.panix.com 1186925263 838 166.84.1.6 (12 Aug 2007 13:27:43 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 12 Aug 2007 13:27:43 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Xref: g2news2.google.com rec.radio.amateur.space:134 rec.radio.info:192
```

AMSAT NEWS SERVICE
ANS-224

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* 2007 AMSAT Space Symposium and Annual Meeting - Call for papers
* FO-29 Power Status
* AMSAT Awards
* 100th Anniversary of Scouts Celebrated with ARISS Contact

SB SAT @ AMSAT $ANS-224.01
2007 AMSAT Space Symposium and Annual Meeting - Call for papers

AMSAT News Service Bulletin 224.01
From AMSAT HQ SILVER SPRING, MD.
August 12, 2007
To All RADIO AMATEURS
BID: $ANS-224.01

This is the third call for papers for the 2007 AMSAT Space Symposium and Annual Meeting to be held October 25-28, 2007 in Pittsburgh, Pennsylvania. The September 1, 2007 deadline for submitting electronic versions of papers for inclusion in the printed symposium proceedings to Dan Schultz is rapidly approaching.

Proposals for papers, symposium presentations, and poster presentations are invited on any topic of interest to the amateur satellite program. An emphasis for this year is an educational outreach to middle and high school students. In particular, papers on the following topics are solicited:

Students & Education, ARISS, AO-51, P3E, Eagle and other satellite-related topics.

Papers should be sent to: Daniel Schultz N8FGV by e-mail to: n8fgv@amsat.org.

[ANS thanks Dan, N8FGV, for the above information]

/EX

SB SAT @ AMSAT $ANS-224.02
FO-29 Power Status

AMSAT News Service Bulletin 224.02
From AMSAT HQ SILVER SPRING, MD.
August 12, 2007
To All RADIO AMATEURS
BID: $ANS-224.02

The internal impedance of the battery in FO-29 (Fuji-3) is now rising due to the deterioration caused by almost 12 years in orbit. According to the telemetry data a 25 minute eclipse duration is estimated as a limit as for the analog battery system use. Because the eclipse length of FO-29 (Fuji-3) is currently about 30% or almost 32 minutes, the power supply of the relay with the battery cannot serve a period of the eclipse.

A malfunction also occurs in part of the electricity control system. The malfunction is the UVC which is an automatic function for electricity management. When the satellite is in the eclipse, and the light of the sun is not the solar battery, the transmitter is turned OFF by the UVC. It is designed so that later an analog system transmitter becomes ON automatically when the terminal voltages of the battery exceed a set value after the power is available from the solar battery. However, it appears likely that a malfunction occurs for this function, and the terminal voltage cannot turn on a transmitter even if it exceeds the set value unless commanded from the ground.

The length of eclipses for FO-29 (Fuji-3) will rise in future and rises to 34% in March 2008 and comes over a peak of the eclipse duration. When it goes over this peak, the eclipses will decrease slowly, and drop to 20% in August 2009. By February 2010 it is all sunshine with no eclipses for about 8 months. It seems that we can apply the analog system relay consecutively for this period.

[ANS thanks Mineo Wakita, JE9PEL, for the above information]

/EX

SB SAT @ AMSAT $ANS-224.03
AMSAT Awards

AMSAT News Service Bulletin 224.03
From AMSAT HQ SILVER SPRING, MD.
August 12, 2007
To All RADIO AMATEURS
BID: $ANS-224.03

We would like to welcome the following to the satellite community. They have made their first satellite contact and are now members of the AMSAT Satellite Communicators Club.

Jeffrey Thomas, K7WIN
Robert Rousseau, KI4BKE

AMSAT Communication Achievement Award
Michael, Shaffer, KB3P, #452
John Sagi, N3YZ, #453

South Africa AMSAT Communication Achievement Award
Rafael Valdez, Jr, XE2RV, #US110
John Sagi, N3YZ, #US111

To see all the awards visit http://www.amsat.org or http://www.amsatnet.com

[ANS thanks Bruce, KK5DO, for the above information]

/EX

SB SAT @ AMSAT $ANS-224.04
100th Anniversary of Scouts Celebrated with ARISS Contact

AMSAT News Service Bulletin 224.04
From AMSAT HQ SILVER SPRING, MD.
August 12, 2007
To All RADIO AMATEURS
BID: $ANS-224.04

On Saturday, August 4, an Amateur Radio on the International Space Station (ARISS) contact took place between scouts attending the 21st World Scout Jamboree in Chelmsford, England and Clay Anderson, KD5PLA, aboard the ISS. Ten scouts were able to ask two questions each of the astronaut using the special event station, GB100J. Approximately 40,000 scouts from 200 countries attended the jamboree. Audio was broadcast on the jamboree FM radio station and was webcast on the radio station's website. The audio was also fed into the EchoLink JK1ZRW (277 208) server and received 50 connections from stations in12 countries including 6 repeaters nodes. Video and audio may be found on this site: http://www.g6lvb.com/GB100JISS.wmv

[ANS thanks Carol, KB3LKI, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Lee McLamb, KU4OS

From -4568226031773459553
X-Google-Thread: f7653,93644cdbd0fb2d45
X-Google-Thread: 10e8ad,93644cdbd0fb2d45
X-Google-Thread: 107ada,93644cdbd0fb2d45

```
X-Google-Attributes: gidf7653,gid10e8ad,gid107ada,public,usenet
X-Google-Language: ENGLISH,UTF8
Path: g2news2.google.com!news1.google.com!news.glorb.com!feed.xsnews.nl!
border-1.ams.xsnews.nl!border1.nntp.ams.giganews.com!nntp.giganews.com!
newsfeeder.wxs.nl!divide.nova.planet.nl!posting.nova.planet.nl!not-for-mail
Date: Mon, 13 Aug 2007 23:17:28 +0200
From: Roland <roland_lemmers@planet.nl>
User-Agent: Thunderbird 1.5.0.12 (Windows/20070509)
MIME-Version: 1.0
Newsgroups:
rec.radio.amateur.digital.misc,rec.radio.amateur.space,rec.radio.amateur.misc
Subject: Re: Finnish Ilmari balloon launch Aug 11th at 06 UTC
References: <Z88vi.205421$oc1.58603@reader1.news.saunalahti.fi>
In-Reply-To: <Z88vi.205421$oc1.58603@reader1.news.saunalahti.fi>
Content-Type: text/plain; charset=UTF-8; format=flowed
Content-Transfer-Encoding: 8bit
Lines: 12
Message-ID: <46c0ca89$0$25473$ba620dc5@text.nova.planet.nl>
NNTP-Posting-Host: 84.84.0.196
X-Trace: 1187039882 text.nova.planet.nl 25473 84.84.0.196:21498
X-Complaints-To: abuse@planet.nl
Xref: g2news2.google.com rec.radio.amateur.digital.misc:39
rec.radio.amateur.space:135 rec.radio.amateur.misc:1615

Tapio Sokura schreef:
> Hello,
>
> This is an amateur balloon launch announcement that may interest North
> European amateur radio operators. The Finnish balloon project Ilmari
> will (finally) launch a balloon on August 11th, 2007, at approximately
> 06 UTC from Padasjoki (latitude N61° 21', longitude E025° 03',
> Maidenhead square KP21MI).

How did it go?

Roland



From 8722916755481021624
X-Google-Thread: f7653,93644cdbd0fb2d45
X-Google-Thread: 10e8ad,93644cdbd0fb2d45
X-Google-Thread: 107ada,93644cdbd0fb2d45
X-Google-Attributes: gidf7653,gid10e8ad,gid107ada,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news3.google.com!feeder3.cambrium.nl!feeder6.cambrium.nl!
feed.tweaknews.nl!border2.nntp.ams.giganews.com!nntp.giganews.com!
feeder2.news.saunalahti.fi!feeder1.news.saunalahti.fi!reader1.news.saunalahti.fi!
53ab2750!not-for-mail
From: Tapio Sokura <oh2kku@iki.fi>
User-Agent: Mozilla/5.0 (X11; U; Linux i686; en-US; rv:1.7.12) Gecko/20060209
Fedora/1.7.12-1.1.2.legacy
X-Accept-Language: en
MIME-Version: 1.0
```

Newsgroups:
rec.radio.amateur.digital.misc,rec.radio.amateur.space,rec.radio.amateur.misc
Subject: Re: Finnish Ilmari balloon launch Aug 11th at 06 UTC
References: <Z88vi.205421$oc1.58603@reader1.news.saunalahti.fi>
<46c0ca89$0$25473$ba620dc5@text.nova.planet.nl>
In-Reply-To: <46c0ca89$0$25473$ba620dc5@text.nova.planet.nl>
Content-Type: text/plain; charset=us-ascii; format=flowed
Content-Transfer-Encoding: 7bit
Lines: 17
Message-ID: <B2ewi.206872$bI.1523@reader1.news.saunalahti.fi>
Date: Tue, 14 Aug 2007 11:51:44 +0300
NNTP-Posting-Host: 84.231.1.220
X-Complaints-To: newsmaster@saunalahti.com
X-Trace: reader1.news.saunalahti.fi 1187081505 84.231.1.220 (Tue, 14 Aug 2007
11:51:45 EEST)
NNTP-Posting-Date: Tue, 14 Aug 2007 11:51:45 EEST
Organization: Saunalahti Customer
Xref: g2news2.google.com rec.radio.amateur.digital.misc:40
rec.radio.amateur.space:136 rec.radio.amateur.misc:1617

Roland wrote:
> Tapio Sokura schreef:
>> This is an amateur balloon launch announcement that may interest North
>> European amateur radio operators. The Finnish balloon project Ilmari
>> will (finally) launch a balloon on August 11th, 2007, at approximately
>
> How did it go?

It went quite nicely, upto about 31 km in height and even the payload was retrieved successfully 8 minutes after touchdown. The biggest problem were people who used way too much power to access the transponder, you could've worked it with less than one watt and 1/4 2m vertical just fine. There's some pictures and text available about this flight in English at http://wiki.ham.fi/Ilmari-2007a and http://ham.zmailer.org/oh2mqk/ilmari/2007a/

Tapio

From 3832987342904754417
X-Google-Thread: 10e8ad,d48cec4e4d19ba85,start
X-Google-Thread: 10b9c8,d48cec4e4d19ba85,start
X-Google-Attributes: gid10e8ad,gid10b9c8,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news2.google.com!newsfeed2.dallas1.level3.net!
news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-225 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Thu, 16 Aug 2007 21:18:48 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 1331

```
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <002e01c7e06c$a563a810$6601a8c0@familyroom>
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1187313528 20300 166.84.1.6 (17 Aug 2007 01:18:48 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Fri, 17 Aug 2007 01:18:48 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Xref: g2news2.google.com rec.radio.amateur.space:137 rec.radio.info:198
```

This report is organized into FIVE parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites
Part 5 (S5) - deorbited/returned satellites

SB SAT @ AMSAT W8ISS ANS-225.S1
WSR 225 Part 1 08/13/2007

AMSAT NEWS SERVICE BULLETIN 225.S1 FROM AMSAT HQ
SILVER SPRING, MD, August 13, 2007
TO ALL RADIO AMATEURS
BID: $ANS-225.S1

VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

```
Indian Beacon:  145.859330 MHZ CW
Dutch Beacon:   145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsat.in/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is
active. Each transponder has a different beacon.
[06252007]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Modes:   FM Repeater - V/u
                 Telemetry Beacon -  /u

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink:   145.880 MHZ FM
                       145.880 MHz USB
                       145.920 MHz FM
                      1268.700 MHz FM 67Hz PL tone
Digital Downlinks:     435.150 MHz FM 38k4 Digital, PBP, 1 watt output
                       435.150 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:        145.860 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      1268.700 mhz FM 9k6 PBP Digital
Beacon:                435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
```

[07302007]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer
   on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on
   and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10
   minute timer.
[05282007]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Recovery Operations

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:

V: RHCP
U: RHCP

JARL English webpage: http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm
AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's CW
telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts.htm
[07022007]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM
Downlink: 436.795 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[05282007]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational depending on amount of Sunlight

Current Mode: Listen before transmitting

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/

AO-7 Usage Guidelines on the AO-7 Log and Resource Site located at:
http://www.planetemily.com/ao7
[05282007]
=====

INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Mode: Occasional Voice/Packet/Digipeater

Expedition 15 crew:

Commander:	Fyodor Yurchikhin	RN3FI
Flight Engineer:	Clayton C. Anderson	KD5PLA
Flight Engineer:	Oleg Kotov	

Space Shuttle STS-118 crew:

Commander:	Scott J. Kelly	
Pilot:	Charles O. Hobaugh	
Mission Specialist:	Dr. Dafydd (Dave) R. Williams	
Mission Specialist:	Barbara R. Morgan	KD5VNP
Mission Specialist:	Richard A. Mastracchio	KC5ZTE
Mission Specialist:	Tracy E. Caldwell	
Mission Specialist:	Benjamin Alvin Drew, Jr.	

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

SSTV TESTING:
Worldwide Reported Downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS
RZ3DZR
USA: NA1SS

Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.
[08132007]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-225.S2
WSR 225 Part 2 08/13/2007

AMSAT NEWS SERVICE BULLETIN 225.S2 FROM AMSAT HQ
SILVER SPRING, MD, August 13, 2007
TO ALL RADIO AMATEURS
BID: $ANS-225.S2

CAPE1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.

[07302007]
=====
LIBERTAD-1
Catalog Number: 31129
Launch Date: April 17,2007

Status: Operational?

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

APRS
Uplink: 145.825 MHz 1200 AFSK ax25 APRS

```
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[08132007]
=====
CP3
Catalog Number: 31128
Launch Date: April 17,2007

Status: Operational

Current Mode:  /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[07302007]
=====
CP4
Catalog Number: 31122
Launch Date: April 17,2007

Status: Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon:    437.325 MHz CW
[07302007]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: In Orbit

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder:  145.825 Mhz FM
[02052007]
=====
?O-?? FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: In Orbit

Current Mode: /u

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
```

```
[02262007]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[07302007]
=====
GENESAT-1 ?O-??
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Current Mode: /u

Telemetry Beacon Downlink: 437.0670 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[01082007]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Operational

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon:             437.2750 MHz CW

Callsign: JR8YJT
[10302006]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon:             437.2750 MHz CW

Callsign: JQ1YGW
```

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
[03262007]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launched: June 30, 2003

Status: Operational

Current Mode: /u

Beacon: 436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[01082007]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launched: February 21, 2006

Status: Semi-Operational - Constant Carrier only

Uplink: 1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan ?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[01082007]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW
[08132007]

```
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Mode(s): FM Repeater - V/u
                 Telemetry Beacon -  /u

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink:   145.880 MHZ FM
                       145.880 MHz USB
                       145.920 MHz FM
                      1268.700 MHz FM 67Hz PL tone
Digital Downlinks:     435.150 MHz FM 38k4 Digital, PBP, 1 watt output
                       435.150 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:        145.860 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      1268.700 mhz FM 9k6 PBP Digital
Beacon:                435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[07302007]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Operational only in Full Sun Light

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink:        144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org
```

```
aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[05282007]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: OPERATIONAL?

Current Modes: V/U
               L/U

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[08062007]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational.

Current Mode: Telemetry Downlink - 2M

Telemetry Downlink: 145.826 MHz FM 1200 AFSK
UHFBeacon:          435.025 MHz - OFF
Mode-S Beacon:     2401.500 MHz - OFF

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Due to solar eclipses which will continue until late August 2007, the
beacon
will only transmit for about one orbit every 21 days. It is unlikely to
be
heard during this period.

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
```

```
[07162007]
=====
RS-22 RADIO SPORT RS-22
Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only

Current Mode: CW Beacon

CW Beacon - 435.352 MHz
            145.818 MHz
[08062007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Mode: Occasional Voice/Packet/Digipeater

Expedition 15 crew:
Commander:       Fyodor Yurchikhin     RN3FI
Flight Engineer: Clayton C. Anderson   KD5PLA
Flight Engineer: Oleg Kotov

Space Shuttle STS-118 crew:
Commander:          Scott J. Kelly
Pilot:              Charles O. Hobaugh
Mission Specialist: Dr. Dafydd (Dave) R. Williams
Mission Specialist: Barbara R. Morgan             KD5VNP
Mission Specialist: Richard A. Mastracchio        KC5ZTE
Mission Specialist: Tracy E. Caldwell
Mission Specialist: Benjamin Alvin Drew, Jr.

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink:   145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink:   145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink:      145.800 MHz FM

SSTV TESTING:
Worldwide Reported Downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink:         437.800 MHz FM
Repeater Downlink:       145.800 MHz FM
```

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS
RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.
[08132007]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-225.S3
WSR 225 Part 3 08/13/2007

AMSAT NEWS SERVICE BULLETIN 225.S3 FROM AMSAT HQ
SILVER SPRING, MD, August 13, 2007
TO ALL RADIO AMATEURS
BID: $ANS-225.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
2407.250

Official Website: http://www.ncube.no
[05012006]

=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 MHz FM 67Hz CTCSS
Voice Downlink: 2401.835 MHz FM
Packet Up/Downlink: 437.250 MHz 9k6 packet
Packet Downlink   2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non=Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[08132007]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Non-Operational

Uplinks: 145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[007302007]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, call-sign KE6QMD, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]

=====

AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks

V-band: 145.840 - 145.990 MHz CW/LSB
U-band: 435.550 - 435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks

S2-band: 2401.225 - 2401.475 MHz CW/USB
K-band: 24048.010 - 24048.060 MHz CW/USB
Beacon: 2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)

BEACON	General Beacon (GB)	Middle Beacon (MB)	Engineering Beacon (EB)
2 m	none	145.898 MHz	none
70cm	435.438 MHz	435.588 MHz	435.838 MHz
13cm(1)	2400.188 MHz	2400.338 MHz	2400.588 MHz
13cm(2)	2401.173 MHz	2401.323 MHz	2401.573 MHz
3cm	10450.975 MHz	10451.125 MHz	10451.375 MHz
1.5cm	24047.885 MHz	24048.035 MHz	24048.285 MHz

[007162007]

=====

OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]

=====

UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

```
Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site
at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater:         436.250 MHz

Uplinks: Mode B Repeater:  145.825 MHz
Mode J Digipeater:         145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
TO-31 TMSAT-1
```

```
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink:   145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Reported non-operational

Current Mode: V/U
              Digipeater - Authorized for APRS usage

Uplink:         145.900 MHz FM 1200-baud Manchester FSK
                145.920 MHz FM 1200-baud Manchester FSK
                145.940 MHz FM 1200-baud Manchester FSK
                145.960 MHz FM 1200-baud Manchester FSK
Downlink:       437.026 MHz SSB 1200-baud PSK
Mode-S Beacon: 2401.1428 MHz

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.025 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[06112007]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign:       POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
```

```
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012006]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: Downlink only

Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[012212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991
```

```
Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplinks:          145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK
```

```
CW downlink:      437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[01222007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
[05012006]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet: Non-Operational
Uplink:  145.8500 MHz MFSK 1200 BPS
```

```
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon:   145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink  29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
```

```
[01152007]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon 1:  29.352 MHz (intermittent)
Beacon 2:  29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink:     21.260 to 21.300 MHz CW/USB
Downlink:  145.860 to 145.900 MHz CW/USB

Beacon:    145.860 MHz

Robot:     145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
```

Launched: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-225.S4
WSR 225 Part 4 08/13/2007

AMSAT NEWS SERVICE BULLETIN 225.S4 FROM AMSAT HQ
SILVER SPRING, MD, August 13, 2007
TO ALL RADIO AMATEURS
BID: $ANS-225.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE PROPOSED FOR LAUNCH AT THIS TIME:

Phase 5a Mars Mission
Catalog Number:
Proposed Launch Date: 2009 or 2011

Status: Design Phase

For the latest project status update please visit the AMSAT-DL P5-A web page:
http://ticket-to-mars.org
[01222007]
=====
PHASE 3E AO-??
Catalog number:
Proposed Launch Date: Late 2007

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/
[01222007]
=====
Eagle AO-??
Catalog Number:
Proposed Launch Date: Early/Mid 2009

Status: Design Phase

For the latest project status updates please visit the AMSAT-NA webpage:
http://www.amsat.org
[01222007]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-225.S5
WSR 225 Part 5 08/13/2007

AMSAT NEWS SERVICE BULLETIN 225.S5 FROM AMSAT HQ
SILVER SPRING, MD, August 13, 2007
TO ALL RADIO AMATEURS
BID: $ANS-225.S5

THE FOLLOWING SATELLITES HAVE DE-ORBITED OR HAVE BEEN RETURNED TO THE GROUND:

NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink: 145.825 Mhz FM APRS AX25
APRS Uplink: 145.825 MHz FM APRS AX25
Voice/PSK31 Uplink: 28.120 MHz

Packet to Voice ID: RAFT
[06112007]
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)

* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

From 6210203462450389995
X-Google-Thread: 10e8ad,ea3359023026ff7d,start
X-Google-Attributes: gid10e8ad,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news1.google.com!border1.nntp.dca.giganews.com!
border2.nntp.dca.giganews.com!nntp.giganews.com!cyclone1.gnilink.net!
spamkiller.gnilink.net!gnilink.net!trnddc04.POSTED!d89a2db8!not-for-mail
From: "Dale Parfitt" <par@parelectronics.com>
Newsgroups: rec.radio.amateur.space
Subject: Digital Readout for T Rotator
Lines: 9
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.3138
X-MIMEOLE: Produced By Microsoft MimeOLE V6.00.2900.3138
X-RFC2646: Format=Flowed; Original
Message-ID: <FUoxi.29$A57.13@trnddc04>
Date: Fri, 17 Aug 2007 22:01:09 GMT
NNTP-Posting-Host: 63.19.184.8
X-Complaints-To: abuse@verizon.net
X-Trace: trnddc04 1187388069 63.19.184.8 (Fri, 17 Aug 2007 18:01:09 EDT)
NNTP-Posting-Date: Fri, 17 Aug 2007 18:01:09 EDT

```
Xref: g2news2.google.com rec.radio.amateur.space:138
X-Original-Bytes: 1031
```

I have been searching for a QST article that detailed modifying a TV style rotator such that the readout was ad igital panel meter that was scaled for degrees.
Does anyone recall the article- year/month?

Tnx,
Dale W4OP

```
From 2268051271236641490
X-Google-Thread: 10e8ad,b5007fd685265670,start
X-Google-Thread: 10b9c8,b5007fd685265670,start
X-Google-Attributes: gid10e8ad,gid10b9c8,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news3.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx01.iad01.newshosting.com!newshosting.com!
198.186.194.247.MISMATCH!news-out.readnews.com!news-xxxfer.readnews.com!panix!
rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-231 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Wed, 22 Aug 2007 17:29:05 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 191
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <001b01c7e503$972622f0$6601a8c0@familyroom>
NNTP-Posting-Host: panix3.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1187818145 20886 166.84.1.3 (22 Aug 2007 21:29:05 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Wed, 22 Aug 2007 21:29:05 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Xref: g2news2.google.com rec.radio.amateur.space:139 rec.radio.info:209
```

AMSAT NEWS SERVICE
ANS-231

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

******************* AMSAT 2007 Space Symposium *************************

The Wireless Association of South Hills Amateur Radio Club announces the 2007 AMSAT Space Symposium will be held at the Pittsburgh Airport Marriott Hotel on Friday, October 26 through Sunday, October 28, 2007. The AMSAT web team has posted informational pages on the AMSAT web site. You can find the announcement with many links at:
http://www.amsat.org/amsat-new/symposium/2007/index.php

****

In this edition:
* 2007 AMSAT Space Symposium and Annual Meeting
* FO-29 Returns to Semi-Operational Status
* Symposium Station
* ARISS Status Report for the Week of August 13, 2007

SB SAT @ AMSAT $ANS-231.01
2007 AMSAT Space Symposium and Annual Meeting

AMSAT News Service Bulletin 231.01
  From AMSAT HQ SILVER SPRING, MD.
August 19, 2007
To All RADIO AMATEURS
BID: $ANS-231.01

The Annual AMSAT Symposium of October 26, 27 & 28 can now be accessed via the AMSAT Website. Make your reservations early and save. See all that is offered and make your plans now to attend.
The 2007 AMSAT Space Symposium registration form is online. Go to the AMSAT website and click on 2007 AMSAT Symposium (left hand side of page). That will link you to the Symposium site and registration.

73- Martha - Manager

[ANS thanks AMSAT for the above information]

/EX

SB SAT @ AMSAT $ANS-231.02
FO-29 Returns to Semi-Operational Status

AMSAT News Service Bulletin 231.02
From AMSAT HQ SILVER SPRING, MD.
August 19, 2007
To All RADIO AMATEURS
BID: $ANS-231.02

FO-29 Returns to Semi-Operational Status

After experiencing problems with its battery and charging system FO-29 was turned off on May 4, 2007. The control station at JARL worked on failure analysis and battery reconditioning. The team has been successful in partially recovering the satellite and this past week reported, "FO-29 is semi-operational!"

Masa, JN1GKZ in Tokyo provided additional details, "The FO-29 battery is almost dead and the automatic recovery function does not work. This means transmitter will stop after eclipse and a wake up command by the JARL Command Staion is needed to start the satellite.

FO-29 users are requested to please keep their downlink signal weaker than the beacon. JARL posts daily FO-29 operating schedules via the amsat-bb mailing list. Telemetry reception reports are welcomed. Please send reports to lab@jarl.or.jp.

Mika, OH8MBN reports from Finland, "Great signal levels, the bird works just fine!! Thanks to guys at JARL command station for bringing this great satellite back alive!"

Bruce, VE9QRP said, "I can report that from my location on the east coast of Canada, it was audible well past the point when SatPC32 believed the bird was in eclipse. I believe I could hear the beacon down to LOS. Thank you for all the hard work you put into making FO-29 work again."

[ANS thanks Mineo, JE9PEL and Masa, JN1GKZ for the above information]

/EX

SB SAT @ AMSAT $ANS-231.03
Symposium Station

AMSAT News Service Bulletin 231.03
From AMSAT HQ SILVER SPRING, MD.
August 19, 2007
To All RADIO AMATEURS
BID: $ANS-231.03

One of the events that will take place at the 2007 AMSAT Space Symposium is an operating satellite ground station will be available for use and demonstration. This station will have the capability to automatically track satellites using 2-meter and 70-cm circular polarized antennas and a Yaesu FT-847 that is appropriately computer controlled. We would like to demonstrate communication with digital satellites like GO-32 and AO-51 using WISP but we need assistance. We would also like to have telemetry capture and analysis demonstrated. If any Pittsburgh area amateurs have the expertise to help us demonstrate satellite digital communication and telemetry capture please contact Kevin Smith, N3HKQ at n3hkq@amsat.org or call 412-953-4957. Any assistance is greatly appreciated.

73,
Kevin Smith, N3HKQ
2007 AMSAT Space Symposium Co-Chair

[ANS thanks Kevin, N3HKQ, for the above information]

/EX

SB SAT @ AMSAT $ANS-231.04
ARISS Status Report for the Week of August 13, 2007

AMSAT News Service Bulletin 231.04
From AMSAT HQ SILVER SPRING, MD.
August 19, 2007
To All RADIO AMATEURS
BID: $ANS-231.04

ARISS Status Report for the Week of August 13, 2007

1. ARISS Contact with New York Community Center

On Tuesday, August 7, an ARISS contact took place between the One Stop Richmond Hill Community Center in Queens, New York and Clay Anderson, KD5PLA, via the telebridge station WH6PN in Hawaii. Twelve students had 23 questions answered by the astronaut as a gathering of 50 people looked on. There was some press interest in the event and the center expects to receive local media coverage. Eleven stations connected to EchoLink from the USA and England, including 3 repeater nodes.

2. Upcoming School Contact

Nanjing No. 3 High School in Nanjing, Jiangsu, P.R. China has been scheduled for an ARISS contact on Sunday, August 26 at 10:44 UTC. To prepare for the contact, elective courses will be offered on amateur radio and contests will be held to determine the best essays and cartoons concerning ARISS. Other schools in the area will be invited to the event. The school has an active amateur radio club which was established in 1992 and has been a five time winner of the national youth amateur radio contest. Local hams and businesses will support the students with the contact. Extensive media coverage is expected from newspapers, television and radio stations and the internet.

An article by The People's Daily about the upcoming contact can be viewed on-line at:
http://www.southgatearc.org/news/august2007/iss_peoples_daily.htm

3. ARRL Article on Educator Astronaut

The American Radio Relay League (ARRL) ran a web story on Barbara Morgan, KD5VNP, and the STS-118 mission. Morgan plans to talk with school children in Idaho during her flight.
See: http://www.arrl.org/news/stories/2007/08/08/100/?nc=1

[ANS thanks Carol, KB3LKI, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Dee Interdonato, NB2F

From 3963118959523324001
X-Google-Thread: 10e8ad,4a927c61583ccf06,start
X-Google-Attributes: gid10e8ad,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!postnews.google.com!j4g2000prf.googlegroups.com!not-for-mail
From: jball <jimba173@yahoo.com>
Newsgroups: rec.radio.amateur.space
Subject: Rebate checks on every purchase for Online Shoppers.
Date: Thu, 23 Aug 2007 05:40:49 -0700
Organization: http://groups.google.com
Lines: 6
Message-ID: <1187872849.421716.170850@j4g2000prf.googlegroups.com>
NNTP-Posting-Host: 74.227.152.84
Mime-Version: 1.0
Content-Type: text/plain; charset="iso-8859-1"
X-Trace: posting.google.com 1187872850 18756 127.0.0.1 (23 Aug 2007 12:40:50 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Thu, 23 Aug 2007 12:40:50 +0000 (UTC)

```
User-Agent: G2/1.0
X-HTTP-UserAgent: Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1; SV1; .NET CLR
1.1.4322),gzip(gfe),gzip(gfe)
Complaints-To: groups-abuse@google.com
Injection-Info: j4g2000prf.googlegroups.com; posting-host=74.227.152.84;
   posting-account=ps2QrAMAAAA6_jCuRt2JEIpn5Otqf_w0
Xref: g2news2.google.com rec.radio.amateur.space:140
```

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```
From -4205424472087585695
X-Google-Thread: 10e8ad,84e3f7fcc49f6aa8,start
X-Google-Thread: 10b9c8,84e3f7fcc49f6aa8,start
X-Google-Attributes: gid10e8ad,gid10b9c8,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news4.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx01.iad01.newshosting.com!newshosting.com!
198.186.194.247.MISMATCH!news-out.readnews.com!news-xxxfer.readnews.com!panix!
rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-232 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Thu, 23 Aug 2007 08:44:52 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 1315
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000f01c7e583$8463d4c0$6601a8c0@familyroom>
NNTP-Posting-Host: panix1.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1187873091 25236 166.84.1.1 (23 Aug 2007 12:44:51 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Thu, 23 Aug 2007 12:44:51 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
```

Xref: g2news2.google.com rec.radio.amateur.space:141 rec.radio.info:210

This report is organized into FIVE parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites
Part 5 (S5) - deorbited/returned satellites

SB SAT @ AMSAT W8ISS ANS-232.S1
WSR 232 Part 1 08/20/2007

AMSAT NEWS SERVICE BULLETIN 232.S1 FROM AMSAT HQ
SILVER SPRING, MD, August 20, 2007
TO ALL RADIO AMATEURS
BID: $ANS-232.S1

VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.859330 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsat.in/hamsat.htm

To know what transponder is switched on please listen for the beacon that is
active. Each transponder has a different beacon.
[06252007]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Modes: FM Repeater - V/u
L/u
Telemetry Beacon - OFF

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.880 MHZ FM
145.880 MHz USB
145.920 MHz FM
1268.700 MHz FM 67Hz PL tone
Digital Downlinks: 435.150 MHz FM 38k4 Digital, PBP, 1 watt output
435.150 MHz FM 9k6 Digital, Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Digital, Pacsat Broadcast Protocol
1268.700 mhz FM 9k6 PBP Digital
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[08202007]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10 minute timer.
[05282007]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Semi-Operational

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

JARL English webpage: http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm
AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts.htm
[0820007]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM
Downlink: 436.795 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[08202007]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational depending on amount of Sunlight

Current Mode: Listen before transmitting

```
Uplink:   145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink:  29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons:   29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW
```

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/

AO-7 Usage Guidelines on the AO-7 Log and Resource Site located at:
http://www.planetemily.com/ao7
[05282007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Mode: Occasional Voice/Packet/Digipeater

Expedition 15 crew:

Commander:	Fyodor Yurchikhin	RN3FI
Flight Engineer:	Clayton C. Anderson	KD5PLA
Flight Engineer:	Oleg Kotov	

Available Modes and Frequencies:
Digital/APRS:

Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

SSTV TESTING:
Worldwide Reported Downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS
                    RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.
[08202007]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-232.S2
WSR 232 Part 2 08/20/2007

AMSAT NEWS SERVICE BULLETIN 232.S2 FROM AMSAT HQ
SILVER SPRING, MD, August 20, 2007
TO ALL RADIO AMATEURS
BID: $ANS-232.S2

CAPE1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

```
Current Mode:  /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon:    435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.

[07302007]
=====
LIBERTAD-1
Catalog Number: 31129
Launch Date: April 17,2007

Status: Operational?

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

APRS
Uplink:   145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[08132007]
=====
CP3
Catalog Number: 31128
Launch Date: April 17,2007

Status: Operational

Current Mode:  /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[07302007]
=====
CP4
Catalog Number: 31122
Launch Date: April 17,2007

Status: Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon:    437.325 MHz CW
[07302007]
=====
PO-63 PEHUENSAT-1
```

Catalog Number: 29712
Launch Date: January 10, 2007

Status: In Orbit

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder: 145.825 Mhz FM
[02052007]
=====
?O-?? FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: In Orbit

Current Mode: /u

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[02262007]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[07302007]
=====
GENESAT-1 ?O-??
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Current Mode: /u

Telemetry Beacon Downlink: 437.0670 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[01082007]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

```
Status: Operational

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon:             437.2750 MHz CW

Callsign: JR8YJT
[10302006]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon:             437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
[03262007]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launched: June 30, 2003

Status: Operational

Current Mode: /u

Beacon:     436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[01082007]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launched: February 21, 2006

Status: Semi-Operational - Constant Carrier only

Uplink:  1268.5000 MHz GMSK 9600 BPS
```

```
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan ? )

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[01082007]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW
[08132007]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Mode(s): FM Repeater - V/u
                               L/u
                 Telemetry Beacon - OFF

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink:   145.880 MHZ FM
                       145.880 MHz USB
                       145.920 MHz FM
                      1268.700 MHz FM 67Hz PL tone
Digital Downlinks:     435.150 MHz FM 38k4 Digital, PBP, 1 watt output
                       435.150 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:        145.860 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      1268.700 mhz FM 9k6 PBP Digital
Beacon:                435.150 MHz

Mode and Antenna Polarization:
T: Linear
```

```
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[08202007]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Operational only in Full Sun Light

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink:        144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[05282007]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: OPERATIONAL?

Current Modes: V/U
               L/U

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[08062007]
```

=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational.

Current Mode: Telemetry Downlink - 2M

Telemetry Downlink: 145.826 MHz FM 1200 AFSK
UHFBeacon: 435.025 MHz - OFF
Mode-S Beacon: 2401.500 MHz - OFF

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Due to solar eclipses which will continue until late August 2007, the beacon will only transmit for about one orbit every 21 days. It is unlikely to be heard during this period.

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[07162007]
=====
RS-22 RADIO SPORT RS-22
Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only

Current Mode: CW Beacon

CW Beacon - 435.352 MHz
145.818 MHz
[08062007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Mode: Occasional Voice/Packet/Digipeater

Expedition 15 crew:

Commander:	Fyodor Yurchikhin	RN3FI
Flight Engineer:	Clayton C. Anderson	KD5PLA
Flight Engineer:	Oleg Kotov	

Available Modes and Frequencies:

Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

SSTV TESTING:
Worldwide Reported Downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS
                     RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.
[08202007]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-232.S3
WSR 232 Part 3 08/20/2007

AMSAT NEWS SERVICE BULLETIN 232.S3 FROM AMSAT HQ
SILVER SPRING, MD, August 20, 2007
TO ALL RADIO AMATEURS
BID: $ANS-232.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

NCUBE-2
Catalog number: 28897

```
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency:  437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink:        437.250 MHz FM 67Hz CTCSS
Voice Downlink:     2401.835 MHz FM
Packet Up/Downlink:  437.250 MHz 9k6 packet
Packet Downlink     2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non=Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[08132007]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink:   435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000
```

Status: Non-Operational

Uplinks: 145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[007302007]

=====

NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, callsign KE6QMD, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]

=====

SO-42 SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]

=====

SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]

=====

AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks

V-band: 145.840 - 145.990 MHz CW/LSB
U-band: 435.550 - 435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks

S2-band: 2401.225 - 2401.475 MHz CW/USB
K-band: 24048.010 - 24048.060 MHz CW/USB
Beacon: 2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)

BEACON	General Beacon (GB)	Middle Beacon (MB)	Engineering Beacon (EB)
2 m	none	145.898 MHz	none
70cm	435.438 MHz	435.588 MHz	435.838 MHz
13cm(1)	2400.188 MHz	2400.338 MHz	2400.588 MHz
13cm(2)	2401.173 MHz	2401.323 MHz	2401.573 MHz
3cm	10450.975 MHz	10451.125 MHz	10451.375 MHz
1.5cm	24047.885 MHz	24048.035 MHz	24048.285 MHz

[007162007]

=====

OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site
at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====

```
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink:   145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Reported non-operational

Current Mode: V/U
              Digipeater - Authorized for APRS usage

Uplink:         145.900 MHz FM 1200-baud Manchester FSK
                145.920 MHz FM 1200-baud Manchester FSK
                145.940 MHz FM 1200-baud Manchester FSK
                145.960 MHz FM 1200-baud Manchester FSK
Downlink:       437.026 MHz SSB 1200-baud PSK
Mode-S Beacon: 2401.1428 MHz

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.025 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
```

```
[06112007]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign:       POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012006]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: Downlink only

Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[012212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
KO-23 KITSAT
```

```
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HL01-11
BBS: HL01-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
```

```
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplinks:          145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink:      437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[01222007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
[05012006]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational
```

```
Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet: Non-Operational
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon:   145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW
```

```
Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink  29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
[01152007]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon 1:  29.352 MHz (intermittent)
Beacon 2:  29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
```

RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB

Beacon: 145.860 MHz

Robot: 145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-232.S4
WSR 232 Part 4 08/20/2007

AMSAT NEWS SERVICE BULLETIN 232.S4 FROM AMSAT HQ
SILVER SPRING, MD, August 20, 2007
TO ALL RADIO AMATEURS
BID: $ANS-232.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE PROPOSED FOR LAUNCH AT THIS TIME:

Phase 5a Mars Mission
Catalog Number:
Proposed Launch Date: 2009 or 2011

Status: Design Phase

For the latest project status update please visit the AMSAT-DL P5-A web page:
http://ticket-to-mars.org
[01222007]
=====
PHASE 3E AO-??

Catalog number:
Proposed Launch Date: Late 2007

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/
[01222007]
=====
Eagle AO-??
Catalog Number:
Proposed Launch Date: Early/Mid 2009

Status: Design Phase

For the latest project status updates please visit the AMSAT-NA webpage:
http://www.amsat.org
[01222007]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-232.S5
WSR 232 Part 5 08/20/2007

AMSAT NEWS SERVICE BULLETIN 232.S5 FROM AMSAT HQ
SILVER SPRING, MD, August 20, 2007
TO ALL RADIO AMATEURS
BID: $ANS-232.S5

THE FOLLOWING SATELLITES HAVE DE-ORBITED OR HAVE BEEN RETURNED TO THE GROUND:

NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink: 145.825 Mhz FM APRS AX25
APRS Uplink: 145.825 MHz FM APRS AX25
Voice/PSK31 Uplink: 28.120 MHz

Packet to Voice ID: RAFT
[06112007]
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

From 3196823856831581388
X-Google-Thread: f7653,93644cdbd0fb2d45
X-Google-Thread: 10e8ad,93644cdbd0fb2d45
X-Google-Thread: 107ada,93644cdbd0fb2d45
X-Google-Attributes: gidf7653,gid10e8ad,gid107ada,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit

Path: g2news2.google.com!news3.google.com!feeder1-2.proxad.net!proxad.net!
feeder1-1.proxad.net!feeder.news-service.com!216.196.110.148.MISMATCH!
border1.nntp.ams.giganews.com!nntp.giganews.com!newsfeed101.telia.com!
nf02.dk.telia.net!news.tele.dk!news.tele.dk!small.news.tele.dk!newsfeed1.swip.net!
swipnet!newsfeed1.funet.fi!newsfeeds.funet.fi!feeder1.news.saunalahti.fi!
reader1.news.saunalahti.fi!53ab2750!not-for-mail
From: Tapio Sokura <oh2kku@iki.fi>
User-Agent: Mozilla/5.0 (X11; U; Linux i686; en-US; rv:1.7.12) Gecko/20060209
Fedora/1.7.12-1.1.2.legacy
X-Accept-Language: en
MIME-Version: 1.0
Newsgroups:
rec.radio.amateur.digital.misc,rec.radio.amateur.space,rec.radio.amateur.misc
Subject: Another Ilmari balloon launch Sep 2nd at 06 UTC
References: <Z88vi.205421$oc1.58603@reader1.news.saunalahti.fi>
In-Reply-To: <Z88vi.205421$oc1.58603@reader1.news.saunalahti.fi>
Content-Type: text/plain; charset=us-ascii; format=flowed
Content-Transfer-Encoding: 7bit
Lines: 14
Message-ID: <opKzi.212888$dY7.201832@reader1.news.saunalahti.fi>
Date: Sat, 25 Aug 2007 03:07:48 +0300
NNTP-Posting-Host: 84.231.1.220
X-Complaints-To: newsmaster@saunalahti.com
X-Trace: reader1.news.saunalahti.fi 1188000468 84.231.1.220 (Sat, 25 Aug 2007
03:07:48 EEST)
NNTP-Posting-Date: Sat, 25 Aug 2007 03:07:48 EEST
Organization: Saunalahti Customer
Xref: g2news2.google.com rec.radio.amateur.digital.misc:44
rec.radio.amateur.space:142 rec.radio.amateur.misc:1739

After a successful maiden flight two weeks ago, there will be another
Ilmari balloon flight next weekend. The flight is scheduled for 06 UTC
on Sunday, September 2nd, 2007, from Sappee (KP21GJ).

Ilmari should be workable from many parts of north-eastern Europe, if it
goes as high up as the previous flight (30 km). Remember to keep your
ERP low, 1 watt is plenty for working Ilmari's 2m/70cm ssb/cw
transponder! APRS(-IS) callsigns will probably be OH2SIX-11 and/or -12.

Have a look at http://wiki.ham.fi/Ilmari-2007b for operating
instructions and http://www.kolumbus.fi/michael.fletcher/ilmari.htm for
pictures and information from the maiden flight.

Tapio

From -9146113717090938049
X-Google-Thread: 10e8ad,ea087ffe40418486,start
X-Google-Thread: 10b9c8,ea087ffe40418486,start
X-Google-Attributes: gid10e8ad,gid10b9c8,public,usenet
X-Google-Language: ENGLISH,ASCII
Path: g2news2.google.com!news1.google.com!newsfeed.stanford.edu!bloom-
beacon.mit.edu!panix!rri.panix.com!robomod!not-for-mail

```
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-238 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sun, 26 Aug 2007 10:09:34 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 350
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <001101c7e7ea$e034f900$6601a8c0@familyroom>
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;charset="iso-8859-1"
Content-Transfer-Encoding: quoted-printable
X-Trace: reader1.panix.com 1188137375 28518 166.84.1.6 (26 Aug 2007 14:09:35 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 26 Aug 2007 14:09:35 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Xref: g2news2.google.com rec.radio.amateur.space:143 rec.radio.info:217
```

AMSAT NEWS SERVICE
ANS-238

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

******************* AMSAT 2007 Space Symposium *************************

The Wireless Association of South Hills Amateur Radio Club announces the 2007 AMSAT Space Symposium will be held at the Pittsburgh Airport Marriott Hotel on Friday, October 26 through Sunday, October 28, 2007. The AMSAT web team has posted informational pages on the AMSAT web site. You can find the announcement with many links at:
http://www.amsat.org/amsat-new/symposium/2007/index.php

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*

In this edition:

- Special Satellite Operating Event on ANDE for August 28 + 30
- G0SFJ Satellite Mini-DXpedition to LZ and YO
- Digital Communications Conference September 28-30
- Satellite Shorts From All Over
- ARISS Status Report For The Week of August 20, 2007

SB SAT @ AMSAT $ANS-238.01
Special Satellite Operating Event on ANDE for August 28 + 30

AMSAT News Service Bulletin 238.01
>From AMSAT HQ SILVER SPRING, MD.
August 26, 2007
To All RADIO AMATEURS
BID: $ANS-238.01

The US Naval Academy Satellite Laboratory announced a special ANDE Operations Event for the Tuesday, August 28 and Thursday, August 30 morning passes over the US East Coast.

Bob, WB4APR described the operation plans, "On Tuesday, Naval Academy stuents will operate ANDE to gather statistics on the success rate of the APRS mission. We invite participation, attended or unattended and request these guidelines be followed:
1) Tracking Base stations transmit at 5 minute intervals
2) 50W mobiles transmit at 3 minute intervals
3) 5W HT's transmit at 1 minute intervals

Bob reminds amateurs, "Please do not transmit more often, as it will mess up the statistics. It would be helpful if you put your station info in your posit text so we could confirm the validity of the statistics of your transmit rate". We recommend something like:
"Base=5min +10 dB"
"50W =3min w 5/8ths"
"HT=1min w 19" ant"

On Thursday, the Naval Academy may activate the packet to voice synthesizer.

ANDE operates on 145.825 MHz simplex and responds to packets that are addressed VIA APRSAT or VIA ARISS. For more information please See http://www.ew.usna.edu/~bruninga/ande-ops.html

[ANS thanks the US Naval Academy Satellite Laboratory for the above information]

/EX

SB SAT @ AMSAT $ANS-238.02
G0SFJ Satellite Mini-DXpedition to LZ and YO

AMSAT News Service Bulletin 238.02
>From AMSAT HQ SILVER SPRING, MD.
August 26, 2007
To All RADIO AMATEURS
BID: $ANS-238.02

Andy, G0SFJ operated on the FM satellites with an Arrow Antenna and a FT51-R from Bulgaria (LZ) on August 12-13 and from Romania (YO) on August 18.

>From Belite Brezi, Bulgaria Andy reported working these stations via AO51: G7HIA, 9H1FF, F6CDZ, G0VHS, PD1DRE, SW1IXP, OZ1MY, and DG9YIB.

>From Bucharest, Romania Andy worked IW0DTK while operating portable in Herastrau Park. Later that evening he worked ON5SA while operating in a sunflower field.

Photos of Andy's portable satellite operations can be seen at:
http://andythomasmail.googlepages.com/qrpportablewitharrow

[ANS thanks Andy, G0SFJ for the above information]

/EX

SB SAT @ AMSAT $ANS-238.03
Digital Communications Conference September 28-30

AMSAT News Service Bulletin 238.03
>From AMSAT HQ SILVER SPRING, MD.
August 26, 2007
To All RADIO AMATEURS
BID: $ANS-238.03

The 26th Annual ARRL/TAPR Digital Communications Conference to be held on
September 28-30, 2007 in Hartford, CT will feature topics of interest to amateur satellite operators. AMSAT Director and VP Engineering, Bob McGwier, N4HY, will have several presentations.

On September 30 Bob will present the Sunday Seminar, "A Stroll Through Software Radio, Information Theory, and Some Applications." Software Radio will be the main theme and a package of tutorials and give away software will be a part of the seminar.

The Software Defined Radio linear transponder system in AMSAT's spacecraft
will be discussed. Some necessary information theory will be discussed with examples with the goal of leaving the attendee with a working knowledge of the practical use of this theory in thinking about communication
systems. As time permits, Bob will show some software radio systems from

the $30 softrock40 to GnuRadio/USRP doing multi megabit per second OFDM on the air and then a technical description of the Flex5000 and DttSP will be given.

Additional Software Defined Radio topics among the digital offerings at the conference include:

+ The FSM Virtual Radio Kernel: Why, What, & How (In That Order); Frank Brickle, PhD, AB2KT

+ AMSAT�s Phase IV (lite)?; Bob McGwier

+ On A Method for Automatic Image Balancing in IQ Mixer Based Software Defined Receivers; Bob McGwier, N4HY

+ TPSK31: Getting the Trellis Coded Modulation Advantage; Bob McGwier, N4HY

+ The Flex 5000 Software Defined Transceiver; Gerald Youngblood, K5SDR

And also known to AMSAT members, Bob Bruninga, WB4APR has written a paper for the conference: The APRS Local Voice Repeater Initiative.

Additional information and on-line registration is at:
http://www.tapr.org/dcc

[ANS thanks TAPR for the above information]

/EX

SB SAT @ AMSAT $ANS-238.04
Satellite Shorts From All Over

AMSAT News Service Bulletin 238.04
>From AMSAT HQ SILVER SPRING, MD.
August 26, 2007
To All RADIO AMATEURS
BID: $ANS-238.04

+ Satellite operators can find the latest information about New Zealand's KiwiSAT at http://www.kiwisat.org which is updated weekly. Terry, ZL3QL wrote, "The project is well down the track to completion and this page will give a good idea of what is still required." He invited amateurs to check out and respond to http://www.kiwisat.org.nz/funding.html.

+ Matthias, DD1US invites satellite operators to visit his "Sounds from Space" site at http://www.dd1us.de. He has posted a collection of recordings from various space objects. Most of them are ham radio satellites and space ships.

+ NASA's two venerable Voyager spacecraft are celebrating three decades of flight as they head toward interstellar space. Their ongoing odysseys mark an unprecedented and historic accomplishment. Voyager 2 launched on Aug. 20, 1977, and Voyager 1 launched on Sept. 5, 1977. They continue to return information from distances more than three times farther away than Pluto.

+ Zarya, the International Space Station's first component to go into space, passed the 50,000th orbit mark this week on August 14. Zarya, which is Russian for "Sunrise", was funded by the United States and built by Russia. It launched atop a Proton rocket from Baikonur Cosmodrome in Kazakhstan on Nov. 20, 1998.

+ An interactive guide to the International Space Station can be found on-line at: http://www.nasa.gov/externalflash/ISSRG/index.htm.

+ Google Earth software has now added the capability to view images of the sky. Using the new "Sky in Google Earth" feature you can zoom in Hubble images. Version 4.2 of the software at http://earth.google.com/ contains the additional sky watching features.

+ While not quite amateur radio related, many hams enjoy learning about scientific work in other fields. The events taking place today at CERN's Large Hadron Collider outside Geneva, Switzerland by one of the world's largest assembled teams of scientists attempting to discover what is considered the "Holy Grail" of particle physics, the Higgs Boson, and recreate the conditions that existed a few seconds after the Big Bang are highlighted in an interesting on-line BBC video at: http://video.google.com/videoplay?docid=6454521153918323669

[ANS thanks everyone for the above information]

/EX

SB SAT @ AMSAT $ANS-238.05
ARISS Status Report For The Week of August 20, 2007

AMSAT News Service Bulletin 238.05
>From AMSAT HQ SILVER SPRING, MD.
August 26, 2007
To All RADIO AMATEURS
BID: $ANS-238.05

1. University Students Radio ISS

Fifteen students who attend Kursk State University in Russia experienced a successful ARISS contact on Thursday, August 9. The students spoke with cosmonaut Fyodor Yurchikhin, RN3FI, on board the ISS from Mount Elbrus in the Caucasus Mountains, Russia.

2. ARISS Contact with Teacher Barbara Morgan, Successful

The McCall-Donnelly School District in McCall, Idaho participated in an ARISS contact on Thursday, August 16, via the telebridge station VK5ZAI in Australia. The school district consists of two high schools, one middle school, and two elementary schools and approximately 900 students. During the contact, eleven students asked one question each of Barbara Morgan, KD5VNP, in front of an audience of 300. Local media outlets in McCall, Idaho were present to cover the news.

The event was aired live on NASA TV and can be heard online and via podcast at: http://www.nasa.gov/multimedia/podcasting/STS118_morgan_radio.html

Space.com ran an article on Morgan�s space activities including the ARISS contact with the McCall-Donnelly School District. See: http://www.space.com/missionlaunches/070816_sts118_morgan_idaho.html

3. Upcoming School Contacts

Nanjing No. 3 High School in Nanjing, Jiangsu, P.R. China has been scheduled for an ARISS contact on Sunday, August 26 at 10:49 UTC. To prepare for the contact, elective courses will be offered on amateur radio and contests will be held to determine the best essays and cartoons concerning ARISS. Other schools in the area will be invited to the event. The school has an active amateur radio club which was established in 1992 and has been a five time winner of the national youth amateur radio contest. Local hams and businesses will support the students with the contact. Extensive media coverage is expected from newspapers, television and radio stations and the internet. The audio for this event will be fed into the EchoLink AMSAT (101 377), the JSDXC (337 784) and JK1ZRW (277 208) servers. The audio from this event is also planned to be fed into the IRLP Discovery Reflector 9010.

Amagasaki Child Science Hall, located in Amagasaki, Hyogo, Japan has been scheduled for an ARISS contact on Tuesday, August 28 at 08:27 UTC. The children will learn the history of Amagasaki, its economic growth and the problems associated with its growth, such as pollution. They will cover environmental issues and weather patterns that occur globally, and will discuss the purpose of the ISS. An engineer will be invited to speak to the children and will arrange for a tour at his company�s research institute to increase the children�s interest in space.

An ARISS contact has been planned for Ashland Greenwood High School in Ashland, Nebraska on Wednesday, August 29 at 15:59 UTC. A NASA committee was formed at the school, comprised of teachers from grades K-12, in order to promote earth and space science. The school will present one space fact per day to the students over a five week period and at the end of this time a contest will be held to see who remembers the most facts. Clay Anderson, KD5PLA, is an alumnus of the school and visited students there in March 2007. Information about him has been posted to http://www.agps.org/. This event is expected to receive newspaper and television coverage. This contact is a Clay Anderson crew pick.

4. Gail Borden Public Library to Contact ISS via Amateur Radio

The Gail Borden Public Library in Elgin, Illinois, has been tentatively scheduled for an ARISS contact during the week of September 3. Gail Borden Public Library has posted its press release on the event.
See: http://www.gailborden.info/LivewithISS.html

5. ARISS Video to be Presented at AMSAT Symposium

The Orlando, Florida Area Coordinator for AMSAT is currently working on a presentation to be given at the 2007 Radio Amateur Satellite Corporation (AMSAT) Space Symposium which will be held in Pittsburgh, Pennsylvania on October 26- 28. The presentation will include video from the July 17 ARISS contact with the Arnold Palmer Hospital for Children.

[ANS thanks Carol, KB3LKI for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits.

Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM
K9JKM at amsat dot org

From 7100442696370070155
X-Google-Thread: 10e8ad,efcc17169c45721b,start
X-Google-Attributes: gid10e8ad,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news1.google.com!news.glorb.com!peer1.news.newnet.co.uk!
194.159.246.34.MISMATCH!peer-uk.news.demon.net!kibo.news.demon.net!
news.demon.co.uk!demon!nospam.demon.co.uk!hilsnews
From: Hils <hilsnews@nospam.demon.co.uk>
Newsgroups: rec.radio.amateur.space
Subject: RS-15 update
Date: Mon, 27 Aug 2007 21:39:41 +0100
Organization: Intermittent at best
Lines: 15
Message-ID: <vBZrHuXNaz0GFw30@newearth.demon.co.uk>
Reply-To: Hils <hils@nospam.demon.co.uk>
NNTP-Posting-Host: newearth.demon.co.uk
Mime-Version: 1.0
Content-Type: text/plain;charset=us-ascii;format=flowed
X-Trace: news.demon.co.uk 1188248480 8943 193.237.117.162 (27 Aug 2007 21:01:20
GMT)
X-Complaints-To: abuse@demon.net
NNTP-Posting-Date: Mon, 27 Aug 2007 21:01:20 +0000 (UTC)
User-Agent: Turnpike/6.05-S (<mhwxuSwDjipXRkZ3e9mZ3hedbY>)
Xref: g2news2.google.com rec.radio.amateur.space:144

Since RS-15 entered a prolonged period (32 days) of continuous sunlight on Aug 12, it has been audible on almost all of its passes higher than 20deg altitude over my location, and some lower passes. Its beacon frequency has climbed back to 29.35225 to 29.3523MHz, where it is more-or-less stable. This is consistent with my earlier hypothesis that its voltage regulation has failed, and further suggests that the beacon frequency may be varying with the temperature of the spacecraft.

Unfortunately the beacon no longer transmits telemetry, but it will be interesting to see, when the next eclipse season begins on Sep 13, how far its frequency falls with decreasing sunlight, and how erratic its appearances become.

--
Hil

From -6290445253328595937

```
X-Google-Thread: 113975,d92c4eddce160321,start
X-Google-Thread: f74ae,d92c4eddce160321,start
X-Google-Thread: fdc67,d92c4eddce160321,start
X-Google-Thread: 10e8ad,d92c4eddce160321,start
X-Google-Thread: 10cf28,d92c4eddce160321,start
X-Google-Attributes: gid113975,gidf74ae,gidfdc67,gid10e8ad,gid10cf28,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!postnews.google.com!m37g2000prh.googlegroups.com!not-for-
mail
From:  Radium <glucegen1@gmail.com>
Newsgroups:
sci.astro.amateur,sci.astro,alt.astronomy,rec.radio.amateur.space,uk.sci.astronomy
Subject: What is the highest radio frequency used for radio astronomy?
Date: Thu, 30 Aug 2007 00:33:20 -0700
Organization: http://groups.google.com
Lines: 15
Message-ID: <1188459200.603005.55680@m37g2000prh.googlegroups.com>
NNTP-Posting-Host: 75.84.20.87
Mime-Version: 1.0
Content-Type: text/plain; charset="iso-8859-1"
X-Trace: posting.google.com 1188459201 30406 127.0.0.1 (30 Aug 2007 07:33:21 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Thu, 30 Aug 2007 07:33:21 +0000 (UTC)
User-Agent: G2/1.0
X-HTTP-UserAgent: Mozilla/5.0 (Windows; U; Win98; en-US; rv:1.8b) Gecko/
20050217,gzip(gfe),gzip(gfe)
Complaints-To: groups-abuse@google.com
Injection-Info: m37g2000prh.googlegroups.com; posting-host=75.84.20.87;
   posting-account=ps2QrAMAAAA6_jCuRt2JEIpn5Otqf_w0
Xref: g2news2.google.com sci.astro.amateur:9720 sci.astro:12130
alt.astronomy:16074 rec.radio.amateur.space:145 uk.sci.astronomy:1625
```

Hi:

What is the highest radio frequency used for radio astronomy?

According to the link below, it is 3438 GHz:

http://books.nap.edu/openbook.php?record_id=11719&page=11

Is 3438 GHz the highest radio frequency used for radio astronomy?

Thanks,

Radium

```
From -8468055335776751267
X-Google-Thread: 113975,d92c4eddce160321
X-Google-Thread: f74ae,d92c4eddce160321
X-Google-Thread: fdc67,d92c4eddce160321
```

```
X-Google-Thread: 10e8ad,d92c4eddce160321
X-Google-Thread: 10cf28,d92c4eddce160321
X-Google-Attributes: gid113975,gidf74ae,gidfdc67,gid10e8ad,gid10cf28,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news1.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx01.iad01.newshosting.com!newshosting.com!news-
feed01.roc.ny.frontiernet.net!nntp.frontiernet.net!news02.roc.ny.POSTED!fd24bd7a!
not-for-mail
From: gwatts <gwatts@frontiernet.net>
User-Agent: Thunderbird 2.0.0.6 (Windows/20070728)
MIME-Version: 1.0
Newsgroups:
sci.astro.amateur,sci.astro,alt.astronomy,rec.radio.amateur.space,uk.sci.astronomy
Subject: Re: What is the highest radio frequency used for radio astronomy?
References: <1188459200.603005.55680@m37g2000prh.googlegroups.com>
In-Reply-To: <1188459200.603005.55680@m37g2000prh.googlegroups.com>
Content-Type: text/plain; charset=ISO-8859-1; format=flowed
Content-Transfer-Encoding: 7bit
Lines: 16
Message-ID: <bWxBi.14925$ya1.13727@news02.roc.ny>
X-Complaints-To: abuse-news@frontiernet.net
X-Trace:
52616e646f6d49562b9a4c60c190d420d4353e19db09195da5cca4e1997951edfc6e4757438c282934
233d72fde4effef220c22d3aebe5fba0278151b85f8aff477358e140f89a7cdfd7da211c0317101030
3edfa5fe59fe545812e47f90ab9d7671f5f451df6d2ff8dbda933db5eeeb50c342afd7ddc49a6b8c92
7acebfa07d
X-Abuse-Info: Please be sure to forward ALL headers so that we may process your
complaint properly.
NNTP-Posting-Date: Thu, 30 Aug 2007 11:33:27 UTC
Date: Thu, 30 Aug 2007 11:33:27 GMT
Xref: g2news2.google.com sci.astro.amateur:9724 sci.astro:12145
alt.astronomy:16087 rec.radio.amateur.space:146 uk.sci.astronomy:1627

Radium wrote:
> Hi:
>
> What is the highest radio frequency used for radio astronomy?
>
> According to the link below, it is 3438 GHz:
>
> http://books.nap.edu/openbook.php?record_id=11719&page=11
>
> Is 3438 GHz the highest radio frequency used for radio astronomy?

If you read on a little farther you'll find
'blurring the distinction between radio astronomy and infrared astronomy.'

So where do you want to draw the line between radio astronomy and
infrared astronomy?  There's you're answer.


From 5653921896683661067
X-Google-Thread: 10e8ad,8b0df0297d64b11b,start
```

```
X-Google-Thread: 10b9c8,8b0df0297d64b11b,start
X-Google-Attributes: gid10e8ad,gid10b9c8,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news2.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx01.iad01.newshosting.com!newshosting.com!
198.186.194.247.MISMATCH!news-out.readnews.com!news-xxxfer.readnews.com!panix!
rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-239 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Thu, 30 Aug 2007 08:18:12 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 1313
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000301c7eaff$ffcc7d20$6601a8c0@familyroom>
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader1.panix.com 1188476292 28445 166.84.1.6 (30 Aug 2007 12:18:12 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Thu, 30 Aug 2007 12:18:12 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Xref: g2news2.google.com rec.radio.amateur.space:147 rec.radio.info:220
```

This report is organized into FIVE parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites
Part 5 (S5) - deborbited/returned satellites

SB SAT @ AMSAT W8ISS ANS-239.S1
WSR 239 Part 1 08/27/2007

AMSAT NEWS SERVICE BULLETIN 239.S1 FROM AMSAT HQ
SILVER SPRING, MD, August 27, 2007
TO ALL RADIO AMATEURS
BID: $ANS-239.S1

VO-52 HAMSAT

Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.859330 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsat.in/hamsat.htm

To know what transponder is switched on please listen for the beacon that is active. Each transponder has a different beacon.
[06252007]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

```
Current Modes:   FM Repeater - V/u
                 Telemetry Beacon - ON

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink:   145.880 MHZ FM
                       145.880 MHz USB
                       145.920 MHz FM
                      1268.700 MHz FM 67Hz PL tone
Digital Downlinks:     435.150 MHz FM 38k4 Digital, PBP, 1 watt output
                       435.150 MHz FM 9k6 Digital, Pacsat Broadcast Protocol
                      2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:        145.860 MHz FM 9k6 Digital, Pacsat Broadcast Protocol
                      1268.700 mhz FM 9k6 PBP Digital
```

```
Beacon:                435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[08272007]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Current Mode: V/u

Uplink:   145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute
timer
   on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the
repeater on
   and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset
the 10
   minute timer.
[05282007]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Semi-Operational
```

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

JARL English webpage: http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm
AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's CW
telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts.htm
[0820007]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM
Downlink: 436.795 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[08202007]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational depending on amount of Sunlight

Current Mode: Listen before transmitting

Uplink: 145.850 to 145.950 MHz CW/USB Mode A

432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz CW
145.972 MHz CW
435.100 MHz CW
2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/

AO-7 Usage Guidelines on the AO-7 Log and Resource Site located at:
http://www.planetemily.com/ao7
[05282007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Mode: Occasional Voice/Packet/Digipeater

Expedition 15 crew:
Commander: Fyodor Yurchikhin RN3FI
Flight Engineer: Clayton C. Anderson KD5PLA
Flight Engineer: Oleg Kotov

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

SSTV TESTING:
Worldwide Reported Downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS
                     RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.
[08202007]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-239.S2
WSR 239 Part 2 08/27/2007

AMSAT NEWS SERVICE BULLETIN 239.S2 FROM AMSAT HQ
SILVER SPRING, MD, August 27, 2007
TO ALL RADIO AMATEURS
BID: $ANS-239.S2

CAPE1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.

[07302007]
=====
LIBERTAD-1
Catalog Number: 31129
Launch Date: April 17,2007

Status: Operational?

Current Mode: V/u APRS Packet ax25

```
Callsign: 5K3L

APRS
Uplink:   145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[08132007]
=====
CP3
Catalog Number: 31128
Launch Date: April 17,2007

Status: Operational

Current Mode:  /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[07302007]
=====
CP4
Catalog Number: 31122
Launch Date: April 17,2007

Status: Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon:    437.325 MHz CW
[07302007]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: In Orbit

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder:  145.825 Mhz FM
[02052007]
=====
?O-?? FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: In Orbit

Current Mode: /u
```

```
Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[02262007]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[07302007]
=====
GENESAT-1 ?O-??
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Current Mode: /u

Telemetry Beacon Downlink: 437.0670 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[01082007]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Operational

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon:             437.2750 MHz CW

Callsign: JR8YJT
[10302006]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u
```

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon: 437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
[03262007]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launched: June 30, 2003

Status: Operational

Current Mode: /u

Beacon: 436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[01082007]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launched: February 21, 2006

Status: Semi-Operational - Constant Carrier only

Uplink: 1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan ?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[01082007]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
              AX25 Packet with uplink command over Japan only

Mode U Telemetry

Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW
[08132007]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Mode(s): FM Repeater - V/u
Telemetry Beacon - ON

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.880 MHZ FM
145.880 MHz USB
145.920 MHz FM
1268.700 MHz FM 67Hz PL tone
Digital Downlinks: 435.150 MHz FM 38k4 Digital, PBP, 1 watt output
435.150 MHz FM 9k6 Digital, Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Digital, Pacsat Broadcast Protocol
1268.700 mhz FM 9k6 PBP Digital
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[08272007]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Operational only in Full Sun Light

Current Mode: V/v

```
General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink:        144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[05282007]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: OPERATIONAL?

Current Modes: V/U
               L/U

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[08062007]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational.

Current Mode: Telemetry Downlink - 2M

Telemetry Downlink: 145.826 MHz FM 1200 AFSK
UHFBeacon:          435.025 MHz - OFF
Mode-S Beacon:     2401.500 MHz - OFF

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Due to solar eclipses which will continue until late August 2007, the
beacon
will only transmit for about one orbit every 21 days. It is unlikely to
```

be
heard during this period.

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[07162007]
=====
RS-22 RADIO SPORT RS-22
Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only

Current Mode: CW Beacon

CW Beacon - 435.352 MHz
            145.818 MHz
[08062007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Mode: Occasional Voice/Packet/Digipeater

Expedition 15 crew:
Commander: Fyodor Yurchikhin   RN3FI
Flight Engineer: Clayton C. Anderson   KD5PLA
Flight Engineer: Oleg Kotov

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

SSTV TESTING:
Worldwide Reported Downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

```
Callsigns:
German:              DP0ISS
Russian:             RS0ISS
                     RZ3DZR
USA:                 NA1SS
Packet Mailbox:      RS0ISS-11
Packet Keyboard:     RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.
[08202007]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-239.S3
WSR 239 Part 3 08/27/2007

AMSAT NEWS SERVICE BULLETIN 239.S3 FROM AMSAT HQ
SILVER SPRING, MD, August 27, 2007
TO ALL RADIO AMATEURS
BID: $ANS-239.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency:  437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink:         437.250 MHz FM 67Hz CTCSS
Voice Downlink:      2401.835 MHz FM
Packet Up/Downlink:   437.250 MHz 9k6 packet
```

Packet Downlink   2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non=Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[08132007]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Non-Operational

Uplinks: 145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.

[007302007]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, callsign KE6QMD, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks

V-band: 145.840 - 145.990 MHz CW/LSB
U-band: 435.550 - 435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks

S2-band: 2401.225 - 2401.475 MHz CW/USB
K-band: 24048.010 - 24048.060 MHz CW/USB
Beacon: 2401.323 MHz
24048.035 MHz

P3-D Telemetry Beacons (IHU)

BEACON	General Beacon (GB)	Middle Beacon (MB)	Engineering Beacon (EB)
2 m	none	145.898 MHz	none
70cm	435.438 MHz	435.588 MHz	435.838 MHz
13cm(1)	2400.188 MHz	2400.338 MHz	2400.588 MHz
13cm(2)	2401.173 MHz	2401.323 MHz	2401.573 MHz
3cm	10450.975 MHz	10451.125 MHz	10451.375 MHz
1.5cm	24047.885 MHz	24048.035 MHz	24048.285 MHz

[007162007]
=====
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web

site
at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

Status: Non-Operational

```
Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater:         436.250 MHz

Uplinks: Mode B Repeater:  145.825 MHz
Mode J Digipeater:         145.825 MHz
                           145.900 MHz
```

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

```
Uplink:   145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Reported non-operational

Current Mode: V/U
              Digipeater - Authorized for APRS usage

Uplink:         145.900 MHz FM 1200-baud Manchester FSK
                145.920 MHz FM 1200-baud Manchester FSK
                145.940 MHz FM 1200-baud Manchester FSK
                145.960 MHz FM 1200-baud Manchester FSK
Downlink:       437.026 MHz SSB 1200-baud PSK
Mode-S Beacon: 2401.1428 MHz

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.025 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[06112007]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign:       POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012006]
=====
IO-26 ITAMSAT
```

```
Catalog number: 22826
Launch Date: September 26, 1993

Status: Downlink only

Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[012212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM
```

```
Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplinks:          145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink:      437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)
```

```
Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[01222007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
[05012006]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet: Non-Operational
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS
```

```
Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon:   145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink  29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
[01152007]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
```

Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink: 145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB

Beacon 1: 29.352 MHz (intermittent)
Beacon 2: 29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB

Beacon: 145.860 MHz

Robot: 145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

```
Uplink:   21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon:   29.408 MHz

Robot:    29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-239.S4
WSR 239 Part 4 08/27/2007

AMSAT NEWS SERVICE BULLETIN 239.S4 FROM AMSAT HQ
SILVER SPRING, MD, August 27, 2007
TO ALL RADIO AMATEURS
BID: $ANS-239.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE PROPOSED FOR LAUNCH AT
THIS TIME:

Phase 5a Mars Mission
Catalog Number:
Proposed Launch Date: 2009 or 2011

Status: Design Phase

For the latest project status update please visit the AMSAT-DL P5-A web
page:
http://ticket-to-mars.org
[01222007]
=====
PHASE 3E AO-??
Catalog number:
Proposed Launch Date: Late 2007

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web
page:
http://www.amsat-dl.org/p3e/
[01222007]
=====
Eagle AO-??
Catalog Number:
Proposed Launch Date: Early/Mid 2009

Status: Design Phase

For the latest project status updates please visit the AMSAT-NA webpage:
http://www.amsat.org
[01222007]
NNNN
```

/EX

SB SAT @ AMSAT W8ISS $ANS-239.S5
WSR 239 Part 5 08/27/2007

AMSAT NEWS SERVICE BULLETIN 239.S5 FROM AMSAT HQ
SILVER SPRING, MD, August 27, 2007
TO ALL RADIO AMATEURS
BID: $ANS-239.S5

THE FOLLOWING SATELLITES HAVE DE-ORBITED OR HAVE BEEN RETURNED TO THE GROUND:

NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink: 145.825 Mhz FM APRS AX25
APRS Uplink: 145.825 MHz FM APRS AX25
Voice/PSK31 Uplink: 28.120 MHz

Packet to Voice ID: RAFT
[06112007]
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)

* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

```
From -2042630985007688131
X-Google-Thread: 113975,d92c4eddce160321
X-Google-Thread: f74ae,d92c4eddce160321
X-Google-Thread: fdc67,d92c4eddce160321
X-Google-Thread: 10e8ad,d92c4eddce160321
X-Google-Thread: 10cf28,d92c4eddce160321
X-Google-Attributes: gid113975,gidf74ae,gidfdc67,gid10e8ad,gid10cf28,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!postnews.google.com!57g2000hsv.googlegroups.com!not-for-
mail
From:  zanthius.dxun@gmail.com
Newsgroups:
sci.astro.amateur,sci.astro,alt.astronomy,rec.radio.amateur.space,uk.sci.astronomy
Subject: Re: What is the highest radio frequency used for radio astronomy?
Date: Thu, 30 Aug 2007 05:51:04 -0700
Organization: http://groups.google.com
Lines: 5
Message-ID: <1188478264.948595.18250@57g2000hsv.googlegroups.com>
References: <1188459200.603005.55680@m37g2000prh.googlegroups.com>
   <bWxBi.14925$ya1.13727@news02.roc.ny>
NNTP-Posting-Host: 80.212.92.124
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"
X-Trace: posting.google.com 1188478265 24261 127.0.0.1 (30 Aug 2007 12:51:05 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Thu, 30 Aug 2007 12:51:05 +0000 (UTC)
```

```
In-Reply-To: <bWxBi.14925$ya1.13727@news02.roc.ny>
User-Agent: G2/1.0
X-HTTP-UserAgent: Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1; SV1; .NET CLR
1.1.4322),gzip(gfe),gzip(gfe)
Complaints-To: groups-abuse@google.com
Injection-Info: 57g2000hsv.googlegroups.com; posting-host=80.212.92.124;
   posting-account=ps2QrAMAAAA6_jCuRt2JEIpn5Otqf_w0
Xref: g2news2.google.com sci.astro.amateur:9726 sci.astro:12151
alt.astronomy:16094 rec.radio.amateur.space:148 uk.sci.astronomy:1628
```

> So where do you want to draw the line between radio astronomy and
> infrared astronomy? There's you're answer.

Why don't you just call it all electromagnetic astronomy?

```
From 4412472864083445003
X-Google-Thread: 113975,d92c4eddce160321
X-Google-Thread: f74ae,d92c4eddce160321
X-Google-Thread: fdc67,d92c4eddce160321
X-Google-Thread: 10e8ad,d92c4eddce160321
X-Google-Thread: 10cf28,d92c4eddce160321
X-Google-Attributes: gid113975,gidf74ae,gidfdc67,gid10e8ad,gid10cf28,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news2.google.com!news.glorb.com!news-
feed01.roc.ny.frontiernet.net!nntp.frontiernet.net!news02.roc.ny.POSTED!fd24bd7a!
not-for-mail
From: gwatts <gwatts@frontiernet.net>
User-Agent: Mozilla Thunderbird 1.0.6 (Windows/20050716)
X-Accept-Language: en-us, en
MIME-Version: 1.0
Newsgroups:
sci.astro.amateur,sci.astro,alt.astronomy,rec.radio.amateur.space,uk.sci.astronomy
Subject: Re: What is the highest radio frequency used for radio astronomy?
References: <1188459200.603005.55680@m37g2000prh.googlegroups.com>
<bWxBi.14925$ya1.13727@news02.roc.ny>
<1188478264.948595.18250@57g2000hsv.googlegroups.com>
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Lines: 8
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efff0a85d9
X-Abuse-Info: Please be sure to forward ALL headers so that we may process your
complaint properly.
NNTP-Posting-Date: Thu, 30 Aug 2007 12:56:05 UTC
Date: Thu, 30 Aug 2007 12:56:05 GMT
```

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Xref: g2news2.google.com sci.astro.amateur:9727 sci.astro:12152
alt.astronomy:16095 rec.radio.amateur.space:149 uk.sci.astronomy:1629

zanthius.dxun@gmail.com wrote:
>>So where do you want to draw the line between radio astronomy and
>>infrared astronomy?  There's you're answer.
>
>
> Why don't you just call it all electromagnetic astronomy?

It's not my call.


From 8586150830176756612
X-Google-Thread: 113975,d92c4eddce160321
X-Google-Thread: f74ae,d92c4eddce160321
X-Google-Thread: fdc67,d92c4eddce160321
X-Google-Thread: 10e8ad,d92c4eddce160321
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Path: g2news2.google.com!news2.google.com!border1.nntp.dca.giganews.com!
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mail
Message-ID: <46d6dc3b$0$34291$d368eab@news.calweb.com>
From: Margo Schulter <mschulter@web1.calweb.com>
Subject: Re: What is the highest radio frequency used for radio astronomy?
Newsgroups:
sci.astro.amateur,sci.astro,alt.astronomy,rec.radio.amateur.space,uk.sci.astronomy
References: <1188459200.603005.55680@m37g2000prh.googlegroups.com>
<bWxBi.14925$ya1.13727@news02.roc.ny>
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Date: 30 Aug 2007 15:03:23 GMT
Lines: 60
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Xref: g2news2.google.com sci.astro.amateur:9732 sci.astro:12165
alt.astronomy:16101 rec.radio.amateur.space:150 uk.sci.astronomy:1630

In sci.astro.amateur gwatts <gwatts@frontiernet.net> wrote:

> Radium wrote:
>> Hi:
>>
>> What is the highest radio frequency used for radio astronomy?
>>
>> According to the link below, it is 3438 GHz:
>>
>> http://books.nap.edu/openbook.php?record_id=11719&page=11
>>
>> Is 3438 GHz the highest radio frequency used for radio astronomy?
>
> If you read on a little farther you'll find
> 'blurring the distinction between radio astronomy and infrared astronomy.'
```

>
> So where do you want to draw the line between radio astronomy and
> infrared astronomy? There's you're answer.

Hi, Radium, gwatts, and all.

I'd agree that the real question here may be where to draw the line between radio and infrared, and thus between radio astronomy and infrared astronomy.

What I learned about 40 years ago was that while the line wasn't a clear one, the shortest or highest-frequency range of radio waves traditionally placed in that classification were "millimeter waves" with a wavelength of 1-10mm. Given that the speed of light, c, is very close to 3 x 10^10 centimeters per second, so that a 1 cm or 10mm wave would have a frequency of around 30 Gz, this category (also known as Extremely High Frequency or EHF) has a 30-300GHz range.

A frequency of 3438 GHz, with a wavelength a bit shorter than 100 microns, would thus be about an order of magnitude higher in frequency than the top of the EHF range. While I'm not sure if there's a specific technical name for this range (analogous to the various categories of radio waves like EHF), my first layperson's guess would be that it could be considered very far infrared (that is, far from the visual spectrum and close to radio).

It's interesting question how radio and infrared astronomy are distinguished: mainly by the nature of the waves, or also by the apparatus used. I'd like to to learn more of this myself.

Again, I'd emphasize that in giving the range for EHF, I'm not saying that anything above 300 GHz wouldn't be considered radio, only mentioning this category as an example of what was traditionally considered near the top of the radio spectrum.

Maybe Laura or others could comment more expertly on this.

Most appreciatively,

Margo Schulter
mschulter@calweb.com
Lat. 38.566 Long. -121.430

```
From -8200474835278604921
X-Google-Thread: 113975,d92c4eddce160321
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X-Google-Thread: 10e8ad,d92c4eddce160321
X-Google-Thread: 10cf28,d92c4eddce160321
```

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X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news2.google.com!border1.nntp.dca.giganews.com!
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newsfeeder.syd.optusnet.com.au!news.optusnet.com.au!not-for-mail
From: "Peter Webb" <webbfamily@DIESPAMDIEoptusnet.com.au>
Newsgroups:
sci.astro.amateur,sci.astro,alt.astronomy,rec.radio.amateur.space,uk.sci.astronomy
References: <1188459200.603005.55680@m37g2000prh.googlegroups.com>
<bWxBi.14925$ya1.13727@news02.roc.ny> <46d6dc3b$0$34291$d368eab@news.calweb.com>
In-Reply-To: <46d6dc3b$0$34291$d368eab@news.calweb.com>
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Date: Fri, 31 Aug 2007 01:34:38 +1000
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Lines: 69
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X-Original-Bytes: 3701
Xref: g2news2.google.com sci.astro.amateur:9736 sci.astro:12167
alt.astronomy:16103 rec.radio.amateur.space:151 uk.sci.astronomy:1631


"Margo Schulter" <mschulter@web1.calweb.com> wrote in message
news:46d6dc3b$0$34291$d368eab@news.calweb.com...
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>
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>>>
>>> What is the highest radio frequency used for radio astronomy?
>>>
>>> According to the link below, it is 3438 GHz:
>>>
>>> http://books.nap.edu/openbook.php?record_id=11719&page=11
>>>
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>>
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>> 'blurring the distinction between radio astronomy and infrared
>> astronomy.'
>>
>> So where do you want to draw the line between radio astronomy and
>> infrared astronomy?  There's you're answer.
```

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>
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>
> Maybe Laura or others could comment more expertly on this.
>
> Most appreciatively,
>
> Margo Schulter
> mschulter@calweb.com
> Lat. 38.566 Long. -121.430
>

So its your contention that the atmosphere is transparent all the way up from microwaves to IR?

From 3224872224773199419
X-Google-Thread: 113975,d92c4eddce160321
X-Google-Thread: f74ae,d92c4eddce160321
X-Google-Thread: fdc67,d92c4eddce160321

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X-Google-Thread: 10e8ad,d92c4eddce160321
X-Google-Thread: 10cf28,d92c4eddce160321
X-Google-Attributes: gid113975,gidf74ae,gidfdc67,gid10e8ad,gid10cf28,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!postnews.google.com!y42g2000hsy.googlegroups.com!not-for-
mail
From:  AustinMN <tacooper260@hotmail.com>
Newsgroups:
sci.astro.amateur,sci.astro,alt.astronomy,rec.radio.amateur.space,uk.sci.astronomy
Subject: Re: What is the highest radio frequency used for radio astronomy?
Date: Thu, 30 Aug 2007 08:50:44 -0700
Organization: http://groups.google.com
Lines: 79
Message-ID: <1188489044.085710.250890@y42g2000hsy.googlegroups.com>
References: <1188459200.603005.55680@m37g2000prh.googlegroups.com>
   <bWxBi.14925$ya1.13727@news02.roc.ny>
   <46d6dc3b$0$34291$d368eab@news.calweb.com>
   <46d6e391$0$6690$afc38c87@news.optusnet.com.au>
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In-Reply-To: <46d6e391$0$6690$afc38c87@news.optusnet.com.au>
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1.1.4322; .NET CLR 2.0.50727),gzip(gfe),gzip(gfe)
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Injection-Info: y42g2000hsy.googlegroups.com; posting-host=151.151.73.168;
   posting-account=ps2QrAMAAAA6_jCuRt2JEIpn5Otqf_w0
Xref: g2news2.google.com sci.astro.amateur:9738 sci.astro:12169
alt.astronomy:16108 rec.radio.amateur.space:152 uk.sci.astronomy:1632

On Aug 30, 10:34 am, "Peter Webb"
<webbfam...@DIESPAMDIEoptusnet.com.au> wrote:
> "Margo Schulter" <mschul...@web1.calweb.com> wrote in message
>
> news:46d6dc3b$0$34291$d368eab@news.calweb.com...
>
>
>
>
>
> > In sci.astro.amateur gwatts <gwa...@frontiernet.net> wrote:
>
> >> Radium wrote:
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>
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>
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```

>
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>
> >>> Is 3438 GHz the highest radio frequency used for radio astronomy?
>
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> > Most appreciatively,
>
> > Margo Schulter
> > mschul...@calweb.com
> > Lat. 38.566 Long. -121.430
>

> So its your contention that the atmosphere is transparent all the way up
> from microwaves to IR?

Nobody limited the discussion to *terrestrial* astronomy. If one is
working from space, the transparency of the atmosphere is irrelevant.

Austin

From 2642011584219226232
X-Google-Thread: 113975,d92c4eddce160321
X-Google-Thread: f74ae,d92c4eddce160321
X-Google-Thread: fdc67,d92c4eddce160321
X-Google-Thread: 10e8ad,d92c4eddce160321
X-Google-Thread: 10cf28,d92c4eddce160321
X-Google-Attributes: gid113975,gidf74ae,gidfdc67,gid10e8ad,gid10cf28,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news1.google.com!news.glorb.com!news-feed01.roc.ny.frontiernet.net!nntp.frontiernet.net!news02.roc.ny.POSTED!fd24bd7a!not-for-mail
From: gwatts <gwatts@frontiernet.net>
User-Agent: Mozilla Thunderbird 1.0.6 (Windows/20050716)
X-Accept-Language: en-us, en
MIME-Version: 1.0
Newsgroups: sci.astro.amateur,sci.astro,alt.astronomy,rec.radio.amateur.space,uk.sci.astronomy
Subject: Re: What is the highest radio frequency used for radio astronomy?
References: <1188459200.603005.55680@m37g2000prh.googlegroups.com> <bWxBi.14925$ya1.13727@news02.roc.ny> <46d6dc3b$0$34291$d368eab@news.calweb.com> <46d6e391$0$6690$afc38c87@news.optusnet.com.au>
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NNTP-Posting-Date: Thu, 30 Aug 2007 15:55:07 UTC
Date: Thu, 30 Aug 2007 15:55:07 GMT
Xref: g2news2.google.com sci.astro.amateur:9739 sci.astro:12170 alt.astronomy:16110 rec.radio.amateur.space:153 uk.sci.astronomy:1633

Peter Webb wrote:
>
...
>

> So its your contention that the atmosphere is transparent all the way up
> from microwaves to IR?

I didn't see anything referring to atmospheric transparency in Ms.
Schulter's response but I'll point you to
http://www.alma.nrao.edu/memos/html-memos/alma187/memo187.html
or
'MMA Memo 187: Modeling of the Submillimeter Opacity on Chajnantor'

specifically figures 1-6 which show opacities through air paths and
modeled opacities over Mauna Kea, HI. Farther on the authors discuss
predicting opacities over the ALMA site in Chile.

What it comes down to is: No, the atmosphere is not 'transparent all
the way up from microwaves to IR,' but there are windows of transparency
where valuable observations can be made.

Something else possibly worth perusing is
http://www.cv.nrao.edu/naasc/presentations/ALMA_2007_Handout.pdf

and of course the entire ALMA/MMA Memo Series,
http://www.alma.info/

From 5408591539413149947
X-Google-Thread: 113975,d92c4eddce160321
X-Google-Thread: f74ae,d92c4eddce160321
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X-Google-Thread: 10e8ad,d92c4eddce160321
X-Google-Thread: 10cf28,d92c4eddce160321
X-Google-Attributes: gid113975,gidf74ae,gidfdc67,gid10e8ad,gid10cf28,public,usenet
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news.usenetserver.com!in01.usenetserver.com!news.usenetserver.com!
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63.218.45.10!nx01.iad01.newshosting.com!newshosting.com!216.196.98.140.MISMATCH!
border1.nntp.dca.giganews.com!nntp.giganews.com!local01.nntp.dca.giganews.com!
nntp.pipex.net!news.pipex.net.POSTED!not-for-mail
NNTP-Posting-Date: Thu, 30 Aug 2007 10:59:10 -0500
From: "George Dishman" <george@briar.demon.co.uk>
Newsgroups:
sci.astro.amateur,sci.astro,alt.astronomy,rec.radio.amateur.space,uk.sci.astronomy
References: <1188459200.603005.55680@m37g2000prh.googlegroups.com>
<bWxBi.14925$ya1.13727@news02.roc.ny> <46d6dc3b$0$34291$d368eab@news.calweb.com>
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Date: Thu, 30 Aug 2007 17:03:33 +0100
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.3138
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X-Complaints-To: abuse@dsl.pipex.net
X-DMCA-Complaints-To: abuse@dsl.pipex.net
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X-Abuse-and-DMCA-Info: Otherwise we will be unable to process your complaint
properly
X-Postfilter: 1.3.35
Xref: g2news2.google.com sci.astro.amateur:9742 sci.astro:12171
alt.astronomy:16111 rec.radio.amateur.space:154 uk.sci.astronomy:1634

"Peter Webb" <webbfamily@DIESPAMDIEoptusnet.com.au> wrote in message
news:46d6e391$0$6690$afc38c87@news.optusnet.com.au...
> "Margo Schulter" <mschulter@web1.calweb.com> wrote in message
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>> to the various categories of radio waves like EHF), my first
>> layperson's guess would be that it could be considered very
>> far infrared (that is, far from the visual spectrum and close
>> to radio).

http://en.wikipedia.org/wiki/Electromagnetic_spectrum

3.4THz would be well into the far infra-red.

>> It's interesting question how radio and infrared astronomy are
>> distinguished: mainly by the nature of the waves, or also by
>> the apparatus used. I'd like to to learn more of this myself.
>>
>> Again, I'd emphasize that in giving the range for EHF, I'm not
>> saying that anything above 300 GHz wouldn't be considered radio,
>> only mentioning this category as an example of what was
>> traditionally considered near the top of the radio spectrum.
...

> So its your contention that the atmosphere is transparent all the way up
> from microwaves to IR?

I don't believe Margo suggested that at all. This
page lists some of the sources of line features
in that region:

http://kp12m.as.arizona.edu/docs/what_is_submillimeter.htm

George

```
From -8338708032473866904
X-Google-Thread: 113975,d92c4eddce160321
X-Google-Thread: f74ae,d92c4eddce160321
X-Google-Thread: fdc67,d92c4eddce160321
X-Google-Thread: 10e8ad,d92c4eddce160321
X-Google-Thread: 10cf28,d92c4eddce160321
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From:  laura halliday <marsgal42@hotmail.com>
Newsgroups:
sci.astro.amateur,sci.astro,alt.astronomy,rec.radio.amateur.space,uk.sci.astronomy
Subject: Re: What is the highest radio frequency used for radio astronomy?
Date: Thu, 30 Aug 2007 09:22:04 -0700
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Lines: 42
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Xref: g2news2.google.com sci.astro.amateur:9745 sci.astro:12177
alt.astronomy:16113 rec.radio.amateur.space:155 uk.sci.astronomy:1636
```

On Aug 30, 8:03 am, Margo Schulter <mschul...@web1.calweb.com> wrote:

> It's interesting question how radio and infrared astronomy are
> distinguished: mainly by the nature of the waves, or also by
> the apparatus used. I'd like to to learn more of this myself.
>
> Again, I'd emphasize that in giving the range for EHF, I'm not
> saying that anything above 300 GHz wouldn't be considered radio,
> only mentioning this category as an example of what was
> traditionally considered near the top of the radio spectrum.
>
> Maybe Laura or others could comment more expertly on this.

The ITU definition of "radio" ends at the top of EHF, at 300 GHz. However, this is more a reflection of the technical state of the art at the time the definition was made. Earlier definitions ended at 30 GHz, or even lower. I've read papers in journals for radio equipment that operates above 400 GHz. You need a microscope to inspect the components. :-)

Above 300 GHz is no man's land, in that no radio license is required to send signals. Laser communication links are not licensed as radios; they are not generally licensed at all, unless health & safety officials take an interest in the lasers themselves.

The spectrum between EHF and infrared is viewed as not useful for communication, because the atmosphere is more-or-less opaque at these wavelengths. But that's what they said about frequencies about 30 MHz in the 1920s, too. And in space, who cares?

The usual agreement is that it's radio astronomy when the incoming signals are electronically detected (e.g. diodes) and processed. It's optical/infrared astronomy when the incoming signals are measured by a bolometer or other non-electronic means. There is, naturally, some crossover.

```
Laura Halliday VE7LDH     "Non sequitur. Your ACKS are
Grid: CN89mg                    uncoordinated."
ICBM: 49 16.05 N 122 56.92 W       - Nomad the Network Engineer
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From: Chris L Peterson <clp@alumni.caltech.edu>
Newsgroups:
sci.astro.amateur,sci.astro,alt.astronomy,rec.radio.amateur.space,uk.sci.astronomy
Subject: Re: What is the highest radio frequency used for radio astronomy?
Organization: Cloudbait Observatory
Message-ID: <sardd3d4g8vutoetbhl97eo7g1jbhidjd3@4ax.com>
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alt.astronomy:16114 rec.radio.amateur.space:156 uk.sci.astronomy:1637

On 30 Aug 2007 15:03:23 GMT, Margo Schulter <mschulter@web1.calweb.com>
wrote:

>A frequency of 3438 GHz, with a wavelength a bit shorter than
>100 microns, would thus be about an order of magnitude higher
>in frequency than the top of the EHF range. While I'm not sure
>if there's a specific technical name for this range (analogous
>to the various categories of radio waves like EHF), my first
>layperson's guess would be that it could be considered very
>far infrared (that is, far from the visual spectrum and close
>to radio).

They are called submillimeter waves, and represent the transition between what is widely accepted as "radio" and what is widely accepted as "optical".

IMO the best way to categorize EM bands is by the nature of the equipment we use to measure energy in those bands. Submillimeter radiation is detected using special receivers which combine optical-like sensors (bolometers) and radio-like sensors (heterodyne receivers and tuned antennas). I think its best to simply consider the range from about one millimeter to 1/10 millimeter as "submillimeter", neither radio nor optical (IR).

Chris L Peterson
Cloudbait Observatory
http://www.cloudbait.com

```
From -7224989401530978345
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From: Profumo <scilliatii@aol.com>
Newsgroups:
sci.astro.amateur,sci.astro,alt.astronomy,rec.radio.amateur.space,uk.sci.astronomy
Subject: Re: What is the highest radio frequency used for radio astronomy?
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Peter Webb wrote:

> "Margo Schulter" <mschulter@web1.calweb.com> wrote in message
> news:46d6dc3b$0$34291$d368eab@news.calweb.com...
> > In sci.astro.amateur gwatts <gwatts@frontiernet.net> wrote:
> >
> >> Radium wrote:
> >>> Hi:
> >>>
> >>> What is the highest radio frequency used for radio astronomy?
> >>>
> >>> According to the link below, it is 3438 GHz:
> >>>
> >>> http://books.nap.edu/openbook.php?record_id=11719&page=11
> >>>
```

> >>> Is 3438 GHz the highest radio frequency used for radio astronomy?
> >>
> >> If you read on a little farther you'll find
> >> 'blurring the distinction between radio astronomy and infrared
> >> astronomy.'
> >>
> >> So where do you want to draw the line between radio astronomy and
> >> infrared astronomy? There's you're answer.
> >
> > Hi, Radium, gwatts, and all.
> >
> > I'd agree that the real question here may be where to draw the line
> > between radio and infrared, and thus between radio astronomy and
> > infrared astronomy.
> >
> > What I learned about 40 years ago was that while the line wasn't
> > a clear one, the shortest or highest-frequency range of radio waves
> > traditionally placed in that classification were "millimeter waves"
> > with a wavelength of 1-10mm. Given that the speed of light, c, is
> > very close to 3 x 10^10 centimeters per second, so that a 1 cm or
> > 10mm wave would have a frequency of around 30 Gz, this category
> > (also known as Extremely High Frequency or EHF) has a 30-300GHz
> > range.
> >
> > A frequency of 3438 GHz, with a wavelength a bit shorter than
> > 100 microns, would thus be about an order of magnitude higher
> > in frequency than the top of the EHF range. While I'm not sure
> > if there's a specific technical name for this range (analogous
> > to the various categories of radio waves like EHF), my first
> > layperson's guess would be that it could be considered very
> > far infrared (that is, far from the visual spectrum and close
> > to radio).
> >
> > It's interesting question how radio and infrared astronomy are
> > distinguished: mainly by the nature of the waves, or also by
> > the apparatus used. I'd like to to learn more of this myself.
> >
> > Again, I'd emphasize that in giving the range for EHF, I'm not
> > saying that anything above 300 GHz wouldn't be considered radio,
> > only mentioning this category as an example of what was
> > traditionally considered near the top of the radio spectrum.
> >
> > Maybe Laura or others could comment more expertly on this.
> >
> > Most appreciatively,
> >
> > Margo Schulter
> > mschulter@calweb.com
> > Lat. 38.566 Long. -121.430
> >
>
> So its your contention that the atmosphere is transparent all the way up
> from microwaves to IR?

She didnt say anything at all about this. Why are you "contending"
contenacity contumaciously?

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in message
<br><a
href="news:46d6dc3b$0$34291$d368eab@news.calweb.com">news:46d6dc3b$0$34291$d368eab
@news.calweb.com</a>...
<br>> In sci.astro.amateur gwatts &lt;gwatts@frontiernet.net> wrote:
<br>>
<br>>> Radium wrote:
<br>>>> Hi:
<br>>>>
<br>>>> What is the highest radio frequency used for radio astronomy?
<br>>>>
<br>>>> According to the link below, it is 3438 GHz:
<br>>>>
<br>>>> <a href="http://books.nap.edu/openbook.php?
record_id=11719&page=11">http://books.nap.edu/openbook.php?
record_id=11719&amp;page=11</a>
<br>>>>
<br>>>> Is 3438 GHz the highest radio frequency used for radio astronomy?
<br>>>
<br>>> If you read on a little farther you'll find
<br>>> 'blurring the distinction between radio astronomy and infrared
<br>>> astronomy.'
<br>>>
<br>>> So where do you want to draw the line between radio astronomy and
<br>>> infrared astronomy?&nbsp; There's you're answer.
<br>>
<br>> Hi, Radium, gwatts, and all.
<br>>
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<br>> between radio and infrared, and thus between radio astronomy and
<br>> infrared astronomy.
<br>>
<br>> What I learned about 40 years ago was that while the line wasn't
<br>> a clear one, the shortest or highest-frequency range of radio waves
<br>> traditionally placed in that classification were "millimeter waves"
```

```
<br>> with a wavelength of 1-10mm. Given that the speed of light, c, is
<br>> very close to 3 x 10^10 centimeters per second, so that a 1 cm or
<br>> 10mm wave would have a frequency of around 30 Gz, this category
<br>> (also known as Extremely High Frequency or EHF) has a 30-300GHz
<br>> range.
<br>>
<br>> A frequency of 3438 GHz, with a wavelength a bit shorter than
<br>> 100 microns, would thus be about an order of magnitude higher
<br>> in frequency than the top of the EHF range. While I'm not sure
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<br>> far infrared (that is, far from the visual spectrum and close
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<br>>
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<br>>
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<br>> only mentioning this category as an example of what was
<br>> traditionally considered near the top of the radio spectrum.
<br>>
<br>> Maybe Laura or others could comment more expertly on this.
<br>>
<br>> Most appreciatively,
<br>>
<br>> Margo Schulter
<br>> mschulter@calweb.com
<br>> Lat. 38.566&nbsp; Long. -121.430
<br>>
<p>So its your contention that the atmosphere is transparent all the way
up
<br>from microwaves to IR?</blockquote>
She didnt say anything at all about this. Why are you "contending"
<br>contenacity contumaciously?
<br>&nbsp;
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newsb.telia.net.POSTED!not-for-mail
From: pausch@saaf.se (Paul Schlyter)
Newsgroups:
sci.astro.amateur,sci.astro,alt.astronomy,rec.radio.amateur.space,uk.sci.astronomy
Subject: Re: What is the highest radio frequency used for radio astronomy?
Organization: Unknown
Lines: 25
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Xref: g2news2.google.com sci.astro.amateur:9784 sci.astro:12233
alt.astronomy:16176 rec.radio.amateur.space:159 uk.sci.astronomy:1643

In article <sardd3d4g8vutoetbhl97eo7g1jbhidjd3@4ax.com>,
Chris L Peterson  <clp@alumni.caltech.edu> wrote:

> IMO the best way to categorize EM bands is by the nature of the
> equipment we use to measure energy in those bands. Submillimeter
> radiation is detected using special receivers which combine optical-like
> sensors (bolometers) and radio-like sensors (heterodyne receivers and
> tuned antennas). I think its best to simply consider the range from
> about one millimeter to 1/10 millimeter as "submillimeter", neither
> radio nor optical (IR).

Or perhaps we could consider that wavelength band both "optical" and
"radio", since radiation at those wavelengths probably can be detected
both with radio and with optical equipment.

And if one wants to decide on some single wavelength limit between
"radio" and "optical", 0.3 millimeter appears to be a good choice
since it resides near the middle of this "submillimeter" band.  This
corresponds to a frequency of one TeraHertz.

--
----------------------------------------------------------------
Paul Schlyter,  Grev Turegatan 40,  SE-114 38 Stockholm,  SWEDEN
e-mail:  pausch at stockholm dot bostream dot se
WWW:     http://stjarnhimlen.se/


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From: pausch@saaf.se (Paul Schlyter)
Newsgroups:
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Subject: Re: What is the highest radio frequency used for radio astronomy?
Organization: Unknown
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alt.astronomy:16175 rec.radio.amateur.space:158 uk.sci.astronomy:1642

In article <1188490924.299814.37650@e9g2000prf.googlegroups.com>,
laura halliday  <marsgal42@hotmail.com> wrote:

> The usual agreement is that it's radio astronomy when the
> incoming signals are electronically detected (e.g. diodes) and
> processed. It's optical/infrared astronomy when the incoming
> signals are measured by a bolometer or other non-electronic
> means. There is, naturally, some crossover.

Given today's CCD chips which indeed are electronic devices, does that
mean todays optical telescopes, with CCD chips which detect light
electronically, have become radio telescopes?

--
----------------------------------------------------------------
Paul Schlyter,  Grev Turegatan 40,  SE-114 38 Stockholm,  SWEDEN
e-mail:  pausch at stockholm dot bostream dot se
WWW:     http://stjarnhimlen.se/


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From: "Dan Tilque" <dtilque@comcast.net>
Newsgroups:
sci.astro.amateur,sci.astro,alt.astronomy,rec.radio.amateur.space,uk.sci.astronomy
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Xref: g2news2.google.com sci.astro.amateur:9789 sci.astro:12240
alt.astronomy:16181 rec.radio.amateur.space:160 uk.sci.astronomy:1644
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Paul Schlyter wrote:

>
> And if one wants to decide on some single wavelength limit
> between "radio" and "optical", 0.3 millimeter appears to be a
> good choice since it resides near the middle of this
> "submillimeter" band. This corresponds to a frequency of one
> TeraHertz.

And in fact, e-m radiation at and around that frequency is often called Terahertz radiation, or Terahertz waves, or T-rays, etc. More specifically, from 300 GHz to 3 THz is the Terahertz band. This terminology seems to be used more in non-astronomical fields.

http://en.wikipedia.org/wiki/Terahertz

--
Dan Tilque

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newspeer2.se.telia.net!se.telia.net!masternews.telia.net.!newsb.telia.net.POSTED!
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From: pausch@saaf.se (Paul Schlyter)
Newsgroups:
sci.astro.amateur,sci.astro,alt.astronomy,rec.radio.amateur.space,uk.sci.astronomy
Subject: Re: What is the highest radio frequency used for radio astronomy?
Organization: Unknown
Lines: 34
Message-ID: <fb8v7n$13it$1@merope.saaf.se>
References: <1188459200.603005.55680@m37g2000prh.googlegroups.com>
<sardd3d4g8vutoetbhl97eo7g1jbhidjd3@4ax.com> <fb8cer$ei0$1@merope.saaf.se>
<9uWdnfv33_LaQ0rbnZ2dnUVZ_jWdnZ2d@comcast.com>
Date: Fri, 31 Aug 2007 12:13:05 GMT
NNTP-Posting-Host: 217.209.96.76
X-Complaints-To: abuse@telia.com
X-Trace: newsb.telia.net 1188562385 217.209.96.76 (Fri, 31 Aug 2007 14:13:05 CEST)
NNTP-Posting-Date: Fri, 31 Aug 2007 14:13:05 CEST
Xref: g2news2.google.com sci.astro.amateur:9793 sci.astro:12255
alt.astronomy:16184 rec.radio.amateur.space:161 uk.sci.astronomy:1645

In article <9uWdnfv33_LaQ0rbnZ2dnUVZ_jWdnZ2d@comcast.com>,
Dan Tilque <dtilque@comcast.net> wrote:
>Paul Schlyter wrote:
>
>>
>> And if one wants to decide on some single wavelength limit
>> between "radio" and "optical", 0.3 millimeter appears to be a
>> good choice since it resides near the middle of this
>> "submillimeter" band.  This corresponds to a frequency of one
>> TeraHertz.
>
>And in fact, e-m radiation at and around that frequency is often
>called Terahertz radiation, or Terahertz waves, or T-rays, etc.
>More specifically, from 300 GHz to 3 THz is the Terahertz band.
>This terminology seems to be used more in non-astronomical
>fields.
>
>http://en.wikipedia.org/wiki/Terahertz
```

That's a little illogical. It's like considering a frequency slightly
above 300 kHz to belong to "the Megahertz band" ....

>--
>Dan Tilque
>
>

--

Paul Schlyter, Grev Turegatan 40, SE-114 38 Stockholm, SWEDEN
e-mail: pausch at stockholm dot bostream dot se
WWW: http://stjarnhimlen.se/

From 8443077916822895405
X-Google-Thread: 113975,d92c4eddce160321
X-Google-Thread: f74ae,d92c4eddce160321
X-Google-Thread: fdc67,d92c4eddce160321
X-Google-Thread: 10e8ad,d92c4eddce160321
X-Google-Thread: 10cf28,d92c4eddce160321
X-Google-Attributes: gid113975,gidf74ae,gidfdc67,gid10e8ad,gid10cf28,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
X-FeedAbuse: http://nntpfeed.proxad.net/abuse.pl feeded by 88.191.60.17
Path: g2news2.google.com!news3.google.com!proxad.net!feeder1-2.proxad.net!
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hamilton.zen.co.uk!feed4.jnfs.ja.net!jnfs.ja.net!newsfeed.ed.ac.uk!
news.cogsci.ed.ac.uk!not-for-mail
From: richard@cogsci.ed.ac.uk (Richard Tobin)
Newsgroups:
sci.astro.amateur,sci.astro,alt.astronomy,rec.radio.amateur.space,uk.sci.astronomy
Subject: Re: What is the highest radio frequency used for radio astronomy?
Date: 31 Aug 2007 12:04:02 GMT
Organization: HCRC, University of Edinburgh
Lines: 14
Message-ID: <fb903i$174t$1@pc-news.cogsci.ed.ac.uk>
References: <1188459200.603005.55680@m37g2000prh.googlegroups.com>
<fb8cer$ei0$1@merope.saaf.se> <9uWdnfv33_LaQ0rbnZ2dnUVZ_jWdnZ2d@comcast.com>
<fb8v7n$13it$1@merope.saaf.se>
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X-Trace: pc-news.cogsci.ed.ac.uk 1188561842 40093 129.215.164.231 (31 Aug 2007
12:04:02 GMT)
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NNTP-Posting-Date: 31 Aug 2007 12:04:02 GMT
X-Newsreader: trn 4.0-test76 (Apr 2, 2001)
Originator: richard@cogsci.ed.ac.uk (Richard Tobin)
Xref: g2news2.google.com sci.astro.amateur:9794 sci.astro:12256
alt.astronomy:16185 rec.radio.amateur.space:162 uk.sci.astronomy:1646

In article <fb8v7n$13it$1@merope.saaf.se>,

```
Paul Schlyter <pausch@saaf.se> wrote:

>That's a little illogical.  It's like considering a frequency slightly
>above 300 kHz to belong to "the Megahertz band" ....

Seems logical to me.  Anything above 316kHz is nearer to 1MHz than to
100kHz.

-- Richard

--
"Consideration shall be given to the need for as many as 32 characters
in some alphabets" - X3.4, 1963.


From 3404392248051704791
X-Google-Thread: 113975,d92c4eddce160321
X-Google-Thread: f74ae,d92c4eddce160321
X-Google-Thread: fdc67,d92c4eddce160321
X-Google-Thread: 10e8ad,d92c4eddce160321
X-Google-Thread: 10cf28,d92c4eddce160321
X-Google-Attributes: gid113975,gidf74ae,gidfdc67,gid10e8ad,gid10cf28,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news3.google.com!feeder1-2.proxad.net!proxad.net!
feeder1-1.proxad.net!newspeer2.se.telia.net!se.telia.net!masternews.telia.net.!
newsb.telia.net.POSTED!not-for-mail
From: pausch@saaf.se (Paul Schlyter)
Newsgroups:
sci.astro.amateur,sci.astro,alt.astronomy,rec.radio.amateur.space,uk.sci.astronomy
Subject: Re: What is the highest radio frequency used for radio astronomy?
Organization: Unknown
Lines: 27
Message-ID: <fb95k8$1a5n$1@merope.saaf.se>
References: <1188459200.603005.55680@m37g2000prh.googlegroups.com>
<9uWdnfv33_LaQ0rbnZ2dnUVZ_jWdnZ2d@comcast.com> <fb8v7n$13it$1@merope.saaf.se>
<fb903i$174t$1@pc-news.cogsci.ed.ac.uk>
Date: Fri, 31 Aug 2007 13:42:28 GMT
NNTP-Posting-Host: 217.209.96.76
X-Complaints-To: abuse@telia.com
X-Trace: newsb.telia.net 1188567748 217.209.96.76 (Fri, 31 Aug 2007 15:42:28 CEST)
NNTP-Posting-Date: Fri, 31 Aug 2007 15:42:28 CEST
Xref: g2news2.google.com sci.astro.amateur:9795 sci.astro:12261
alt.astronomy:16190 rec.radio.amateur.space:163 uk.sci.astronomy:1647

In article <fb903i$174t$1@pc-news.cogsci.ed.ac.uk>,
Richard Tobin <richard@cogsci.ed.ac.uk> wrote:
>In article <fb8v7n$13it$1@merope.saaf.se>,
>Paul Schlyter <pausch@saaf.se> wrote:
>
>>That's a little illogical.  It's like considering a frequency slightly
>>above 300 kHz to belong to "the Megahertz band" ....
>
>Seems logical to me.  Anything above 316kHz is nearer to 1MHz than to
```

>100kHz.

There's a difference between "the Megahertz band" and "the One Megahertz band". The former can be interpreted as the band from 1 MHz to 1 GHz for instance, instead of your interpretation from 0.316 to 3.16 MHz....

>-- Richard
>
>--
>"Consideration shall be given to the need for as many as 32 characters
>in some alphabets" - X3.4, 1963.

--

Paul Schlyter, Grev Turegatan 40, SE-114 38 Stockholm, SWEDEN
e-mail: pausch at stockholm dot bostream dot se
WWW: http://stjarnhimlen.se/

```
From -623668929423121582
X-Google-Thread: 113975,d92c4eddce160321
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X-Google-Thread: 10cf28,d92c4eddce160321
X-Google-Attributes: gid113975,gidf74ae,gidfdc67,gid10e8ad,gid10cf28,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
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nntp.giganews.com!nx01.iad01.newshosting.com!newshosting.com!news-
feed01.roc.ny.frontiernet.net!nntp.frontiernet.net!news.sisna.com!not-for-mail
From: Chris L Peterson <clp@alumni.caltech.edu>
Newsgroups:
sci.astro.amateur,sci.astro,alt.astronomy,rec.radio.amateur.space,uk.sci.astronomy
Subject: Re: What is the highest radio frequency used for radio astronomy?
Organization: Cloudbait Observatory
Message-ID: <5o6gd395q3d1slkmgbu4uj3qpcfmenqdti@4ax.com>
References: <1188459200.603005.55680@m37g2000prh.googlegroups.com>
<sardd3d4g8vutoetbhl97eo7g1jbhidjd3@4ax.com> <fb8cer$ei0$1@merope.saaf.se>
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MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
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NNTP-Posting-Host: 75.104.194.114
X-Complaints-To: newsabuse@ikano.com
X-Trace: news.sisna.com 1188567898 75.104.194.114 (Fri, 31 Aug 2007 07:44:58 MDT)
NNTP-Posting-Date: Fri, 31 Aug 2007 07:44:58 MDT
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Xref: g2news2.google.com sci.astro.amateur:9796 sci.astro:12262
alt.astronomy:16193 rec.radio.amateur.space:164 uk.sci.astronomy:1648
```

On Fri, 31 Aug 2007 12:13:05 GMT, pausch@saaf.se (Paul Schlyter) wrote:

>That's a little illogical. It's like considering a frequency slightly
>above 300 kHz to belong to "the Megahertz band" ....

No, it's _more_ logical. It's having arbitrary names for various regions
of the EM spectrum that isn't entirely logical.

Chris L Peterson
Cloudbait Observatory
http://www.cloudbait.com

From -6853215534449206566
X-Google-Thread: 113975,d92c4eddce160321
X-Google-Thread: f74ae,d92c4eddce160321
X-Google-Thread: fdc67,d92c4eddce160321
X-Google-Thread: 10e8ad,d92c4eddce160321
X-Google-Thread: 10cf28,d92c4eddce160321
X-Google-Attributes: gid113975,gidf74ae,gidfdc67,gid10e8ad,gid10cf28,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!postnews.google.com!l22g2000prc.googlegroups.com!not-for-mail
From: BradGuth <bradguth@gmail.com>
Newsgroups: sci.astro.amateur,sci.astro,alt.astronomy,rec.radio.amateur.space,uk.sci.astronomy
Subject: Re: What is the highest radio frequency used for radio astronomy?
Date: Fri, 31 Aug 2007 14:26:16 -0000
Organization: http://groups.google.com
Lines: 45
Message-ID: <1188570376.649848.309530@l22g2000prc.googlegroups.com>
References: <1188459200.603005.55680@m37g2000prh.googlegroups.com>
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NNTP-Posting-Date: Fri, 31 Aug 2007 14:26:19 +0000 (UTC)
In-Reply-To: <1188459200.603005.55680@m37g2000prh.googlegroups.com>
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X-HTTP-UserAgent: Mozilla/4.0 (compatible; MSIE 6.0; MSN 2.5; Windows 98; T312461),gzip(gfe),gzip(gfe)
Complaints-To: groups-abuse@google.com
Injection-Info: l22g2000prc.googlegroups.com; posting-host=64.91.99.27;
   posting-account=ps2QrAMAAAA6_jCuRt2JEIpn5Otqf_w0
Xref: g2news2.google.com sci.astro.amateur:9797 sci.astro:12263 alt.astronomy:16197 rec.radio.amateur.space:165 uk.sci.astronomy:1649

On Aug 30, 12:33 am, Radium <gluceg...@gmail.com> wrote:
> Hi:

>
> What is the highest radio frequency used for radio astronomy?
>
> According to the link below, it is 3438 GHz:
>
> http://books.nap.edu/openbook.php?record_id=11719&page=11
>
> Is 3438 GHz the highest radio frequency used for radio astronomy?
>
> Thanks,
>
> Radium

For obtaining eye candy that's entirely outside of our physical reach, and for the most part having been getting further away as we speak, the 3.438 THz might be fine and dandy for accomplishing that spendy look-see which can't possibly benefit humanity or that of our badly failing environment.

Much above 0.1 THz is where such photons if transmitted from Earth simply do not reflect unless the target offers a nifty array of parabolic dishes, or of some other artificial reflective surface. Outside of our magnetosphere, such as within our moon's L1, is where X band of 8 ~ 12.5 GHz or possibly as great as Ka Band of 26.5 ~ 40 GHz might become interesting and/or essential if future space travel is to avoid those nasty bits and pieces of debris that'll otherwise clean your clock upon encountering such, with C Band of 4 ~ 8 GHz being a little better off for those slightly larger targets and perhaps best of all S Band of 2 ~ 4 GHz offering a compromise that'll still yield more than sufficient image resolution of a given planet or moon, along with offering a darn good reflective signal to noise ratio.

However, if the potential target is the least bit intelligent worthy, as many should be, as such why not use a blue~violet laser cannon, UV-a, or possibly good old X-rays or even gamma ?

Though gravity can be directly measured, of what we can't manage thus far is the two-way frequency applications of utilizing said gravitons. Perhaps there again, the mutual gravity nullification zone of our moon's L1 could allow for the limited use of gravitons, and this alternative might become better yet once we've relocated that moon to Earth's L1.
- Brad Guth

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From -782434527381395411
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X-Google-Thread: fdc67,d92c4eddce160321
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X-Google-Thread: 10cf28,d92c4eddce160321
X-Google-Attributes: gid113975,gidf74ae,gidfdc67,gid10e8ad,gid10cf28,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
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Path: g2news2.google.com!postnews.google.com!r23g2000prd.googlegroups.com!not-for-mail
From: laura halliday <marsgal42@hotmail.com>
Newsgroups:
sci.astro.amateur,sci.astro,alt.astronomy,rec.radio.amateur.space,uk.sci.astronomy
Subject: Re: What is the highest radio frequency used for radio astronomy?
Date: Fri, 31 Aug 2007 08:01:21 -0700
Organization: http://groups.google.com
Lines: 25
Message-ID: <1188572481.251448.217580@r23g2000prd.googlegroups.com>
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NNTP-Posting-Date: Fri, 31 Aug 2007 15:01:24 +0000 (UTC)
In-Reply-To: <fb8cd6$ehb$1@merope.saaf.se>
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Xref: g2news2.google.com sci.astro.amateur:9800 sci.astro:12266
alt.astronomy:16201 rec.radio.amateur.space:166 uk.sci.astronomy:1650

On Aug 30, 11:42 pm, pau...@saaf.se (Paul Schlyter) wrote:
> In article <1188490924.299814.37...@e9g2000prf.googlegroups.com>,
> laura halliday <marsga...@hotmail.com> wrote:
>
> > The usual agreement is that it's radio astronomy when the
> > incoming signals are electronically detected (e.g. diodes) and
> > processed. It's optical/infrared astronomy when the incoming
> > signals are measured by a bolometer or other non-electronic
> > means. There is, naturally, some crossover.
>
> Given today's CCD chips which indeed are electronic devices, does that
> mean todays optical telescopes, with CCD chips which detect light
> electronically, have become radio telescopes?

Can't say I agree with that; CCDs count photons, which makes
them a lot closer to bolometers than diodes.

The other issue, of course, is just what difference it makes.
Astronomers examine the universe to see how it works.
They use various wavelengths to do it.

Laura Halliday VE7LDH   "Non sequitur. Your ACKS are

```
Grid: CN89mg                    uncoordinated."
ICBM: 49 16.05 N 122 56.92 W       - Nomad the Network Engineer



From 197171747143525839
X-Google-Thread: 113975,d92c4eddce160321
X-Google-Thread: f74ae,d92c4eddce160321
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X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!postnews.google.com!r29g2000hsg.googlegroups.com!not-for-
mail
From:  Radium <glucegen1@gmail.com>
Newsgroups:
sci.astro.amateur,sci.astro,alt.astronomy,rec.radio.amateur.space,uk.sci.astronomy
Subject: Re: What is the highest radio frequency used for radio astronomy?
Date: Sat, 01 Sep 2007 04:16:54 -0000
Organization: http://groups.google.com
Lines: 28
Message-ID: <1188620214.390706.118800@r29g2000hsg.googlegroups.com>
References: <1188459200.603005.55680@m37g2000prh.googlegroups.com>
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NNTP-Posting-Date: Sat, 1 Sep 2007 04:16:54 +0000 (UTC)
In-Reply-To: <bWxBi.14925$ya1.13727@news02.roc.ny>
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20050217,gzip(gfe),gzip(gfe)
Complaints-To: groups-abuse@google.com
Injection-Info: r29g2000hsg.googlegroups.com; posting-host=75.84.20.87;
   posting-account=ps2QrAMAAAA6_jCuRt2JEIpn5Otqf_w0
Xref: g2news2.google.com sci.astro.amateur:9848 sci.astro:12341
alt.astronomy:16266 rec.radio.amateur.space:168 uk.sci.astronomy:1652

On Aug 30, 4:33 am, gwatts <gwa...@frontiernet.net> wrote:
> Radium wrote:
> > Hi:
>
> > What is the highest radio frequency used for radio astronomy?
>
> > According to the link below, it is 3438 GHz:
>
> >http://books.nap.edu/openbook.php?record_id=11719&page=11
>
> > Is 3438 GHz the highest radio frequency used for radio astronomy?
>
```

> If you read on a little farther you'll find
> 'blurring the distinction between radio astronomy and infrared astronomy.'
>
> So where do you want to draw the line between radio astronomy and
> infrared astronomy? There's you're answer.

Sorry, I meant to ask whether 3,438 GHz is the highest radio frequency
used to receive audio signals from outer space. I should have made my
question more specific. Radio-astronomers study sounds from the sun as
well as visual data.

I wonder if a space station with a 3,438 GHz AM receiver could pick up
any extremely-distant audio signals between 20 to 20,000 Hz [from
magnetars, gamma-ray-bursts, supernovae and other high-energy but
cosmic objects] after demodulating the 3,438 GHz AM carrier wave.

From 9079177449914409751
X-Google-Thread: 113975,d92c4eddce160321
X-Google-Thread: f74ae,d92c4eddce160321
X-Google-Thread: fdc67,d92c4eddce160321
X-Google-Thread: 10e8ad,d92c4eddce160321
X-Google-Thread: 10cf28,d92c4eddce160321
X-Google-Attributes: gid113975,gidf74ae,gidfdc67,gid10e8ad,gid10cf28,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
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feeder1-1.proxad.net!newspeer2.se.telia.net!se.telia.net!masternews.telia.net.!
newsb.telia.net.POSTED!not-for-mail
From: pausch@saaf.se (Paul Schlyter)
Newsgroups:
sci.astro.amateur,sci.astro,alt.astronomy,rec.radio.amateur.space,uk.sci.astronomy
Subject: Re: What is the highest radio frequency used for radio astronomy?
Organization: Unknown
Lines: 40
Message-ID: <fbb5q6$226n$1@merope.saaf.se>
References: <1188459200.603005.55680@m37g2000prh.googlegroups.com>
<bWxBi.14925$ya1.13727@news02.roc.ny>
<1188620214.390706.118800@r29g2000hsg.googlegroups.com>
Date: Sat, 01 Sep 2007 08:12:11 GMT
NNTP-Posting-Host: 217.209.96.76
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X-Trace: newsb.telia.net 1188634331 217.209.96.76 (Sat, 01 Sep 2007 10:12:11 CEST)
NNTP-Posting-Date: Sat, 01 Sep 2007 10:12:11 CEST
Xref: g2news2.google.com sci.astro.amateur:9852 sci.astro:12348
alt.astronomy:16273 rec.radio.amateur.space:169 uk.sci.astronomy:1654

In article <1188620214.390706.118800@r29g2000hsg.googlegroups.com>,
Radium <glucegen1@gmail.com> wrote:

> Sorry, I meant to ask whether 3,438 GHz is the highest radio frequency
> used to receive audio signals from outer space. I should have made my
> question more specific. Radio-astronomers study sounds from the sun as

> well as visual data.

Radio astronomers study EM radiation, not "sounds", from the Sun. Since there's a vacuum between the Sun and us, no sound waves would be able to propagate from the Sun to us. Otoh careeful studies of Doppler shifts have enabled solar astronomers to study sound waves *within* the Sun. But these sound waves never reach us - we can only study them indirectly because they move matter near the solar surface. And their frequencies are usually well below what the human ear can hear, i.e. it's infrasound.

> I wonder if a space station with a 3,438 GHz AM receiver could pick up
> any extremely-distant audio signals between 20 to 20,000 Hz [from
> magnetars, gamma-ray-bursts, supernovae and other high-energy but
> cosmic objects] after demodulating the 3,438 GHz AM carrier wave.

They could certainly try .... but if they did, and succeeded, it would sound just like noise. This radiation does not originate as audio signals, and they're certainly not put on an AM modulated carrier. Therefore it's hardly useful to try to demodulate these waves as if they were AM modulated signals - there's e.g. no AM carrier (i.e. one single frequency which is stronger than all the others within the frequency band).

Also, any audio (= pressure waves within a gas) which are formed outside the Earth is certainly *not* limited to the 20 to 20,000 Hz frequency range..... that frequency range is merely the limits of what the human ear can hear.

--

Paul Schlyter, Grev Turegatan 40, SE-114 38 Stockholm, SWEDEN
e-mail: pausch at stockholm dot bostream dot se
WWW: http://stjarnhimlen.se/

From -7594161522051173250
X-Google-Thread: 113975,d92c4eddce160321
X-Google-Thread: f74ae,d92c4eddce160321
X-Google-Thread: fdc67,d92c4eddce160321
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Path: g2news2.google.com!postnews.google.com!d55g2000hsg.googlegroups.com!not-for-mail
From: Radium <glucegen1@gmail.com>
Newsgroups: sci.astro.amateur,sci.astro,alt.astronomy,rec.radio.amateur.space,uk.sci.astronomy
Subject: Re: What is the highest radio frequency used for radio astronomy?
Date: Sat, 01 Sep 2007 14:50:16 -0700
Organization: http://groups.google.com
Lines: 90

Message-ID: <1188683416.066878.250530@d55g2000hsg.googlegroups.com>
References: <1188459200.603005.55680@m37g2000prh.googlegroups.com>
   <bWxBi.14925$ya1.13727@news02.roc.ny>
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Complaints-To: groups-abuse@google.com
Injection-Info: d55g2000hsg.googlegroups.com; posting-host=75.84.20.87;
   posting-account=ps2QrAMAAAA6_jCuRt2JEIpn5Otqf_w0
Xref: g2news2.google.com sci.astro.amateur:9884 sci.astro:12365
alt.astronomy:16295 rec.radio.amateur.space:170 uk.sci.astronomy:1657

On Sep 1, 1:12 am, pau...@saaf.se (Paul Schlyter) wrote:

> In article <1188620214.390706.118...@r29g2000hsg.googlegroups.com>,

> Radium <gluceg...@gmail.com> wrote:
> > Sorry, I meant to ask whether 3,438 GHz is the highest radio frequency
> > used to receive audio signals from outer space. I should have made my
> > question more specific. Radio-astronomers study sounds from the sun as
> > well as visual data.

> Radio astronomers study EM radiation, not "sounds", from the Sun.
> Since there's a vacuum between the Sun and us, no sound waves would be
> able to propagate from the Sun to us.

The radio-frequency EM radiation emitted from the sun does translate
to sound when it is picked up by a radio receiver of the same carrier
frequency.

> Otoh careeful studies of
> Doppler shifts have enabled solar astronomers to study sound waves
> *within* the Sun. But these sound waves never reach us - we can only
> study them indirectly because they move matter near the solar surface.
> And their frequencies are usually well below what the human ear can
> hear, i.e. it's infrasound.

That's why audio software is often used to speed up the infrasound
until it is at least 20 Hz so that humans can hear it.

> > I wonder if a space station with a 3,438 GHz AM receiver could pick up
> > any extremely-distant audio signals between 20 to 20,000 Hz [from
> > magnetars, gamma-ray-bursts, supernovae and other high-energy but
> > cosmic objects] after demodulating the 3,438 GHz AM carrier wave.

> They could certainly try .... but if they did, and succeeded, it would
> sound just like noise. This radiation does not originate as audio
> signals, and they're certainly not put on an AM modulated carrier.

Well, most natural sources of EMI and RFI are amplitude-modulated. The audio signals are not put on the carrier wave, however if the variations in the peak-to-peak amplitude of the 3,438 GHz electromagnetic waves correspond to frequencies between 20 and 20,000 Hz [and the peak-to-peak variations are sufficient in power], then the signal can be picked up of 3,438 GHz receiver and demodulated. The result would be audio signals.

> Therefore it's hardly useful to try to demodulate these waves as if
> they were AM modulated signals - there's e.g. no AM carrier (i.e. one
> single frequency which is stronger than all the others within the
> frequency band).

> Also, any audio (= pressure waves within a gas) which are formed
> outside the Earth is certainly *not* limited to the 20 to 20,000
> Hz frequency range..... that frequency range is merely the limits
> of what the human ear can hear.

Audio waves from 20 to 20,000 Hz can be derived from demodulating radio waves. Since most natural radio disruptions are amplitude-modulated it would be easier to listen to cosmic sounds using an AM receiver as opposed to an FM receiver. FM is immune to the disruptions that normally affect AM.

In AM demodulation:

1. The amplitude of the demodulated signal [what we hear] is determined by the depth-of-change of the peak-to-peak amplitude of the radio wave. If the peak-to-peak amplitude of the radio wave is above the central amplitude** then the demodulated signal will have a positive voltage. If the peak-to-peak amplitude of the radio wave is below the central amplitude then the demodulated signal will have a negative voltage. If these changes in voltages are between 20 and 20,000 Hz*, then they will be audible if the over voltage is high-enough and this signal is fed into a loudspeaker
2. The frequency of the demodulated signal is determined by the rate-of-change of the peak-to-peak amplitude of the radio wave

*In an electric signal, a cycle is when a voltage changes from zero to positive to zero to negative and then back to zero. In USA, the power supply is 60 Hz [cycles per second] while being 50 Hz in Europe. In order to produce audible sound when fed to a loudspeaker, the peak-to-peak voltage must be high-enough to reach the threshold of hearing or above and must be at least 20 Hz but no more than 20,000 Hz.

A loudspeaker produces the mechanical equivalent of the electric signal it receives.

** Central amplitude = amplitude of the radio wave when there is no modulation signal.

From 2882513096703230499
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From: pausch@saaf.se (Paul Schlyter)
Newsgroups: sci.astro.amateur,sci.astro,alt.astronomy,rec.radio.amateur.space,uk.sci.astronomy
Subject: Re: What is the highest radio frequency used for radio astronomy?
Organization: Unknown
Lines: 129
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References: <1188459200.603005.55680@m37g2000prh.googlegroups.com> <1188620214.390706.118800@r29g2000hsg.googlegroups.com> <fbb5q6$226n$1@merope.saaf.se> <1188683416.066878.250530@d55g2000hsg.googlegroups.com>
Date: Sun, 02 Sep 2007 09:42:19 GMT
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X-Complaints-To: abuse@telia.com
X-Trace: newsb.telia.net 1188726139 217.209.96.76 (Sun, 02 Sep 2007 11:42:19 CEST)
NNTP-Posting-Date: Sun, 02 Sep 2007 11:42:19 CEST
Xref: g2news2.google.com sci.astro.amateur:9911 sci.astro:12401 alt.astronomy:16323 rec.radio.amateur.space:171 uk.sci.astronomy:1659

In article <1188683416.066878.250530@d55g2000hsg.googlegroups.com>,
Radium <glucegen1@gmail.com> wrote:

> On Sep 1, 1:12 am, pau...@saaf.se (Paul Schlyter) wrote:
>
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>
>> Radium <gluceg...@gmail.com> wrote:
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>>> used to receive audio signals from outer space. I should have made my
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>>> well as visual data.
>
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>> Since there's a vacuum between the Sun and us, no sound waves would be
>> able to propagate from the Sun to us.

>
> The radio-frequency EM radiation emitted from the sun does translate
> to sound when it is picked up by a radio receiver of the same carrier
> frequency.

Here you make the silent assumption that the electric signal from the
radio receiver is fed to a loudspekarer. But that's just *one*
possible way of converting the EM radiation. You could use other ways
too. For instance displaying it on some video screen - those who do
so could claim that "The radio-frequency EM radiation emitted from the
sun does translate to light when it is picked up by a radio receiver
of the same carrier frequency" (with the silent assupmtion that the
output from the receiver is displayed on a video screen). It's the
translator who decides what the EM radiation translates to....

Btw did you ever try to *listen* to a TV transmission? I mean, to feed
the *video* signal (not the audio signal) to a loudspeaker instead
of a video screen? Yep, the sound changes with the contents of the
picture - but of course one hears only the lowermost part of the 5 MHz
of bandwidth a normal video signal has.

Another interesting experience is to feed a digital signal directly to
a loudspeaker instead of decoding and converting it to an analog
signal first. That of course requires that the digital signal is
within the audible range of frequencies -- the signal from a
traditional telephone modem would be quite suitable here. The old 300
bps modems produced a signal with a quite clear structure (the signal
jumped between two frequencies 300 times per second), but the more
modern telephone modems which can handle bit rates up to 57600 bps,
they sound pretty much like white noise to the human ear.

>> Otoh careeful studies of
>> Doppler shifts have enabled solar astronomers to study sound waves
>> *within* the Sun. But these sound waves never reach us - we can only
>> study them indirectly because they move matter near the solar surface.
>> And their frequencies are usually well below what the human ear can
>> hear, i.e. it's infrasound.
>
> That's why audio software is often used to speed up the infrasound
> until it is at least 20 Hz so that humans can hear it.

:-) ....there's no need to speed it up just to convert the frequency
into the audible range.... the frequency can be bumped up even if
the original speed is maintained.

>>> I wonder if a space station with a 3,438 GHz AM receiver could pick up
>>> any extremely-distant audio signals between 20 to 20,000 Hz [from
>>> magnetars, gamma-ray-bursts, supernovae and other high-energy but
>>> cosmic objects] after demodulating the 3,438 GHz AM carrier wave.
>
>> They could certainly try .... but if they did, and succeeded, it would
>> sound just like noise. This radiation does not originate as audio
>> signals, and they're certainly not put on an AM modulated carrier.

>
> Well, most natural sources of EMI and RFI are amplitude-modulated.

They're probably frequency modulated and phase modulated as well, since their contents are pretty random. I strongly doubt they consist of one single frequency whose amplitude varies while its frequency and phase remains unchanged (that's the way a properly modulated AM signal would be). In particular it won't have symmetrical sidebands with the same content, the way a real AM signal should have.

> The audio signals are not put on the carrier wave, however if the variations in the peak-to-peak amplitude of the 3,438 GHz electromagnetic waves correspond to frequencies between 20 and 20,000 Hz [and the peak-to-peak variations are sufficient in power], then the signal can be picked up of 3,438 GHz receiver and demodulated. The result would be audio signals.

Trivially true -- but these audio signals would be created by us humans. They're not inherent in the original signal.

>> Therefore it's hardly useful to try to demodulate these waves as if they were AM modulated signals - there's e.g. no AM carrier (i.e. one single frequency which is stronger than all the others within the frequency band).
>
>> Also, any audio (= pressure waves within a gas) which are formed outside the Earth is certainly *not* limited to the 20 to 20,000 Hz frequency range..... that frequency range is merely the limits of what the human ear can hear.
>
> Audio waves from 20 to 20,000 Hz can be derived from demodulating radio waves.

You can create audio waves also below 20 Hz and above 20,000 Hz as well. Humans won't hear them, true, but dogs and bats might enjoy them... :-)

> Since most natural radio disruptions are amplitude-modulated it would be easier to listen to cosmic sounds

These sounds aren't "cosmic" - they're created here on Earth by us humans.

> using an AM receiver as opposed to an FM receiver. FM is immune to the disruptions that normally affect AM.

Did you ever try to tune an FM receiver between radio stations on the FM band? Also turn off any "muting" or "squelch" the receiver may have. What do you hear? Silence? Or perhaps noise?

You say "FM is immune to the disruptions that normally affect AM". If this is to work, you must have an FM carrier which is strong enough for the receivers amplitude limitation circuits to work well. Cosmic radio noise is far too weak for that.

```
<description of AM and definition of frequency snipped>
--
----------------------------------------------------------------
Paul Schlyter,  Grev Turegatan 40,  SE-114 38 Stockholm,  SWEDEN
e-mail:  pausch at stockholm dot bostream dot se
WWW:     http://stjarnhimlen.se/


From 8206199640744210923
X-Google-Thread: 113975,d92c4eddce160321
X-Google-Thread: f74ae,d92c4eddce160321
X-Google-Thread: fdc67,d92c4eddce160321
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X-Google-Attributes: gid113975,gidf74ae,gidfdc67,gid10e8ad,gid10cf28,public,usenet
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Path: g2news2.google.com!postnews.google.com!57g2000hsv.googlegroups.com!not-for-
mail
From:  BradGuth <bradguth@gmail.com>
Newsgroups:
sci.astro.amateur,sci.astro,alt.astronomy,rec.radio.amateur.space,uk.sci.astronomy
Subject: Re: What is the highest radio frequency used for radio astronomy?
Date: Sun, 02 Sep 2007 15:37:04 -0000
Organization: http://groups.google.com
Lines: 43
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Xref: g2news2.google.com sci.astro.amateur:9929 sci.astro:12426
alt.astronomy:16338 rec.radio.amateur.space:172 uk.sci.astronomy:1662

On Aug 31, 6:44 am, Chris L Peterson <c...@alumni.caltech.edu> wrote:
> On Fri, 31 Aug 2007 12:13:05 GMT, pau...@saaf.se (Paul Schlyter) wrote:
> >That's a little illogical.  It's like considering a frequency slightly
> >above 300 kHz to belong to "the Megahertz band" ....
```

>
> No, it's _more_ logical. It's having arbitrary names for various regions
> of the EM spectrum that isn't entirely logical.
>
> --
>
> Chris L Peterson
> Cloudbait Observatoryhttp://www.cloudbait.com

Most all ET signals are processed by some kind of technology, so that we can then see or hear the information contained within that signal. If the signal information is encrypted or otherwise weird, then seeing the signal is usually the better alternative.

I believe 0.1 TeraHertz of 3 mm is more than good enough, as being roughly 10 fold higher in frequency than any X Band radar imaging efforts sent from Earth would ever manage to contribute all that much due to our terrestrial atmosphere and magnetosphere that'll convert and/or divert much of that outgoing and incoming X Band energy.

However, a blue/violet laser cannon would likely become by far the most energy efficient and focused alternative for outgoing as well as incoming signals, especially if those efforts were getting off-world managed, such as within the nearby turf of our moon's L1 could easily accommodate. At least in that way an amateur terrestrial or ET astronomer could rather easily detect such without special instruments.

There's all kinds of nifty ways for us to hear and/or see what our moon has to say. It's sodium populated atmosphere along with the surface likes of radon are worth a good deal of science about solar wind and cosmic interactions, as well as for the graviton/tidal issues associated with having to orbit Earth as well as the sun that should be responsible for keeping the low density core of our moon a little extra toasty, as a renewable geothermal cache of energy that could essentially accommodate a fairly extensive underground protected human use of our moon.
- Brad Guth

```
From 1322062364334050292
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X-Google-Thread: 10cf28,d92c4eddce160321
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X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!postnews.google.com!r29g2000hsg.googlegroups.com!not-for-mail
From:  Radium <glucegen1@gmail.com>
Newsgroups:
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sci.astro.amateur,sci.astro,alt.astronomy,rec.radio.amateur.space,uk.sci.astronomy
Subject: Re: What is the highest radio frequency used for radio astronomy?
Date: Sun, 02 Sep 2007 13:21:36 -0700
Organization: http://groups.google.com
Lines: 65
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Xref: g2news2.google.com sci.astro.amateur:9941 sci.astro:12443
alt.astronomy:16352 rec.radio.amateur.space:173 uk.sci.astronomy:1664

On Sep 2, 2:42 am, pau...@saaf.se (Paul Schlyter) wrote:

> In article <1188683416.066878.250...@d55g2000hsg.googlegroups.com>,

> Radium <gluceg...@gmail.com> wrote:

> > The radio-frequency EM radiation emitted from the sun does translate
> > to sound when it is picked up by a radio receiver of the same carrier
> > frequency.

> Here you make the silent assumption that the electric signal from the
> radio receiver is fed to a loudspekarer. But that's just *one*
> possible way of converting the EM radiation. You could use other ways
> too. For instance displaying it on some video screen - those who do
> so could claim that "The radio-frequency EM radiation emitted from the
> sun does translate to light when it is picked up by a radio receiver
> of the same carrier frequency" (with the silent assupmtion that the
> output from the receiver is displayed on a video screen). It's the
> translator who decides what the EM radiation translates to....
> Btw did you ever try to *listen* to a TV transmission? I mean, to feed
> the *video* signal (not the audio signal) to a loudspeaker instead
> of a video screen? Yep, the sound changes with the contents of the
> picture - but of course one hears only the lowermost part of the 5 MHz
> of bandwidth a normal video signal has.

I've done this before. Plugged the video signal into the audio receiver. There is some buzzing sound. As you said, that sound changes as video signal changes.

> Another interesting experience is to feed a digital signal directly to
> a loudspeaker instead of decoding and converting it to an analog
> signal first. That of course requires that the digital signal is
> within the audible range of frequencies -- the signal from a
> traditional telephone modem would be quite suitable here. The old 300
> bps modems produced a signal with a quite clear structure (the signal
> jumped between two frequencies 300 times per second), but the more
> modern telephone modems which can handle bit rates up to 57600 bps,
> they sound pretty much like white noise to the human ear.

Interesting indeed. However, are those old modems really "digital"?

> > That's why audio software is often used to speed up the infrasound
> > until it is at least 20 Hz so that humans can hear it.

> :-) ....there's no need to speed it up just to convert the frequency
> into the audible range.... the frequency can be bumped up even if
> the original speed is maintained.

Is this done using audio software such as Adobe Audition?

Quotes from http://www.adobe.com/products/audition/overview2.html :

"Time and pitch processing: Change tempo without shifting pitch - or shift pitch without changing tempo - and never introduce audio artifacts."

> > using an AM receiver as opposed to an FM receiver. FM is immune to the
> > disruptions that normally affect AM.

> Did you ever try to tune an FM receiver between radio stations on the
> FM band? Also turn off any "muting" or "squelch" the receiver may have.
> What do you hear? Silence? Or perhaps noise?

White noise. Hissing. Nothing special.

From -6034689074447340625
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Subject: Re: What is the highest radio frequency used for radio astronomy?
Date: Sun, 02 Sep 2007 14:57:22 -0600

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From: Art Deco <erfc@caballista.org>
Newsgroups:
sci.astro.amateur,sci.astro,alt.astronomy,rec.radio.amateur.space,uk.sci.astronomy
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        )f
X-Hammer-of-Thor: September 2005
X-Diamond-Hammer-of-Thor: March 2007 [as part of the AFA-B Bullies]
X-Outer-Filth: Follows
X-FO-Bowturd: Yes
X-FO-Radavich: Yes
X-FO-Bwuthie: Yes
X-FO-Clockbrain: Yes
X-FO-mop-jockey: Yes
X-FO-Perplexa: Yes
X-FO-Kazoo: Yes
X-FO-Hagar: Yes
X-FO-Drkulec: Yes
X-FO-G-Dolf: Yes
Lines: 27
Organization: Octanews
NNTP-Posting-Date: 02 Sep 2007 15:57:22 CDT
X-Complaints-To: abuse@octanews.net
Xref: g2news2.google.com sci.astro.amateur:9946 sci.astro:12445
alt.astronomy:16355 rec.radio.amateur.space:174 uk.sci.astronomy:1665

BradGuth <bradguth@gmail.com> wrote:

>I believe

No one cares, Brad.

--
Official Overseer of Kooks and Saucerheads for alt.astronomy
Wee Davie Tholen is a grade-school lamer
Trainer and leash holder of:
  Honest "Clockbrain" John
  nightbat "fro0tbat" of alt.astronomy
  Tom "TommY Crackpotter" Potter
  <http://www.caballista.org/auk/kookle.php?search=deco>
"You really are one of the litsiest people I know, Mr. Deco."
  --Kali, quoted endlessly by David Tholen as evidence of "something"

"Why are you now discussing Art Deco, rec.music.classical,
the coward using a fake name who avoids answering questions
and doesn't try to discuss music with anyone?"
  --David Tholen

"Quite a kook-out, Deco.  You've been frothing even more
ever since I demonstrated how you believe that ah's family
name is "ah"."
  --David Tholen



From -1874845202891050402
X-Google-Thread: 113975,d92c4eddce160321
X-Google-Thread: f74ae,d92c4eddce160321
X-Google-Thread: fdc67,d92c4eddce160321
X-Google-Thread: 10e8ad,d92c4eddce160321
X-Google-Thread: 10cf28,d92c4eddce160321
X-Google-Attributes: gid113975,gidf74ae,gidfdc67,gid10e8ad,gid10cf28,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
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mail
Message-ID: <46db4012$0$33135$d368eab@news.calweb.com>
From: Margo Schulter <mschulter@web1.calweb.com>
Subject: Re: What is the highest radio frequency used for radio astronomy?
Newsgroups:
sci.astro.amateur,sci.astro,alt.astronomy,rec.radio.amateur.space,uk.sci.astronomy
References: <1188459200.603005.55680@m37g2000prh.googlegroups.com>
<bWxBi.14925$ya1.13727@news02.roc.ny>   <46d6dc3b$0$34291$d368eab@news.calweb.com>
<1188490924.299814.37650@e9g2000prf.googlegroups.com>
User-Agent: tin/1.5.18-20030602 ("Darts") (UNIX) (FreeBSD/4.8-RELEASE-p36 (i386))
Date: 02 Sep 2007 22:58:26 GMT
Lines: 39
X-Complaints-To: abuse@calweb.com
Xref: g2news2.google.com sci.astro.amateur:9955 sci.astro:12454
alt.astronomy:16381 rec.radio.amateur.space:175 uk.sci.astronomy:1666

In sci.astro.amateur laura halliday <marsgal42@hotmail.com> wrote:
>
> The ITU definition of "radio" ends at the top of EHF, at 300 GHz.
> However, this is more a reflection of the technical state of the
> art at the time the definition was made. Earlier definitions ended
> at 30 GHz, or even lower. I've read papers in journals for radio
> equipment that operates above 400 GHz. You need a microscope
> to inspect the components. :-)
>
> Above 300 GHz is no man's land, in that no radio license is
> required to send signals. Laser communication links are
> not licensed as radios; they are not generally licensed at all,
```

> unless health & safety officials take an interest in the lasers
> themselves.

Hi, Laura, and thanks to you and others very helpful responses
on this point. A bit of browsing the Web has shown me that
definitions can vary, for example with the portion of the
submillimeter spectrum around 300 GHz - 1 THz (or 1mm - 300um)
being considered as more "radio-like" by some.

> The spectrum between EHF and infrared is viewed as not useful
> for communication, because the atmosphere is more-or-less
> opaque at these wavelengths. But that's what they said about
> frequencies about 30 MHz in the 1920s, too. And in space, who
> cares?

Exactly; and it's interesting some of the special environments
which are above most of the atmosphere's water vapor, or
dessicated, that are used for terrestrial observations at
certain points in the EHF and submilliter spectrum.

Most appreciatively,

Margo Schulter
mschulter@calweb.com
Lat. 38.566 Long. -121.430

```
From -7258479824306420562
X-Google-Thread: 113975,d92c4eddce160321
X-Google-Thread: f74ae,d92c4eddce160321
X-Google-Thread: fdc67,d92c4eddce160321
X-Google-Thread: 10e8ad,d92c4eddce160321
X-Google-Thread: 10cf28,d92c4eddce160321
X-Google-Attributes: gid113975,gidf74ae,gidfdc67,gid10e8ad,gid10cf28,public,usenet
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Path: g2news2.google.com!news2.google.com!border1.nntp.dca.giganews.com!
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mail
Message-ID: <46db458f$0$33637$d368eab@news.calweb.com>
From: Margo Schulter <mschulter@web1.calweb.com>
Subject: Re: What is the highest radio frequency used for radio astronomy?
Newsgroups:
sci.astro.amateur,sci.astro,alt.astronomy,rec.radio.amateur.space,uk.sci.astronomy
References: <1188459200.603005.55680@m37g2000prh.googlegroups.com>
<bWxBi.14925$ya1.13727@news02.roc.ny> <46d6dc3b$0$34291$d368eab@news.calweb.com>
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<vLBBi.14943$ya1.2063@news02.roc.ny>
User-Agent: tin/1.5.18-20030602 ("Darts") (UNIX) (FreeBSD/4.8-RELEASE-p36 (i386))
Date: 02 Sep 2007 23:21:51 GMT
Lines: 50
X-Complaints-To: abuse@calweb.com
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Xref: g2news2.google.com sci.astro.amateur:9956 sci.astro:12460
alt.astronomy:16382 rec.radio.amateur.space:176 uk.sci.astronomy:1667

In sci.astro.amateur gwatts <gwatts@frontiernet.net> wrote:
> Peter Webb wrote:
>>
> ...
>>
>> So its your contention that the atmosphere is transparent all the way up
>> from microwaves to IR?
>
> I didn't see anything referring to atmospheric transparency in Ms.
> Schulter's response but I'll point you to
> http://www.alma.nrao.edu/memos/html-memos/alma187/memo187.html
> or
> 'MMA Memo 187: Modeling of the Submillimeter Opacity on Chajnantor'
>
> specifically figures 1-6 which show opacities through air paths and
> modeled opacities over Mauna Kea, HI. Farther on the authors discuss
> predicting opacities over the ALMA site in Chile.

Hi, Peter, and thank you for your correct conclusion that in my post
I really wasn't concerned with transparency or propagation questions,
only with the general question of how to describe what I now have learned
is often called the submillieter portion of the spectrum.

>
> What it comes down to is: No, the atmosphere is not 'transparent all
> the way up from microwaves to IR,' but there are windows of transparency
> where valuable observations can be made.

That sounds to me like good summary, which would also fit what I recall
from the 1960's about certain regions of EHF -- maybe around 60GHz or
so -- where attentuation or extinction from water vapor is especially
notable. Maybe this is a bit analogous to the absorption lines of
visual spectroscopy.

Of course, as Laura has pointed out, in space this kind of attenuation
is not really a problem!

> Something else possibly worth perusing is
> http://www.cv.nrao.edu/naasc/presentations/ALMA_2007_Handout.pdf
>
> and of course the entire ALMA/MMA Memo Series,
> http://www.alma.info/

Thanks for these links, which I'll study.

Most appreciatively,

Margo Schulter
mschulter@calweb.com
Lat. 38.566 Long. -121.430

```
From 1571386899453792064
X-Google-Thread: 113975,d92c4eddce160321
X-Google-Thread: f74ae,d92c4eddce160321
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X-Google-Thread: 10cf28,d92c4eddce160321
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X-Google-Language: ENGLISH,ASCII-7-bit
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nntp.giganews.com!nx01.iad01.newshosting.com!newshosting.com!post01.iad01!
roadrunner.com!not-for-mail
From: Bob Downonit <Down@gag.net>
Newsgroups:
sci.astro.amateur,sci.astro,alt.astronomy,rec.radio.amateur.space,uk.sci.astronomy
Date: Sun, 2 Sep 2007 19:55:14 -0400
Message-ID: <46db4d01$0$19653$4c368faf@roadrunner.com>
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<sardd3d4g8vutoetbhl97eo7g1jbhidjd3@4ax.com> <fb8cer$ei0$1@merope.saaf.se>
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User-Agent: Unison/1.7.9
Lines: 48
Organization: Road Runner High Speed Online http://www.rr.com
NNTP-Posting-Host: 24.161.95.233
X-Complaints-To: abuse@rr.com
Xref: g2news2.google.com sci.astro.amateur:9958 sci.astro:12463
alt.astronomy:16387 rec.radio.amateur.space:177 uk.sci.astronomy:1669

On 2007-09-02 11:37:04 -0400, BradGuth <bradguth@gmail.com> said:

> On Aug 31, 6:44 am, Chris L Peterson <c...@alumni.caltech.edu> wrote:
>> On Fri, 31 Aug 2007 12:13:05 GMT, pau...@saaf.se (Paul Schlyter) wrote:
>>> That's a little illogical.  It's like considering a frequency slightly
>>> above 300 kHz to belong to "the Megahertz band" ....
>>
>> No, it's _more_ logical. It's having arbitrary names for various regions
>> of the EM spectrum that isn't entirely logical.
>>
>> _________________________________________________
>>
>> Chris L Peterson
>> Cloudbait Observatoryhttp://www.cloudbait.com
>
> Most all ET signals are processed by some kind of technology, so that
> we can then see or hear the information contained within that signal.
```

> If the signal information is encrypted or otherwise weird, then seeing
> the signal is usually the better alternative.
>
> I believe 0.1 TeraHertz of 3 mm is more than good enough, as being
> roughly 10 fold higher in frequency than any X Band radar imaging
> efforts sent from Earth would ever manage to contribute all that much
> due to our terrestrial atmosphere and magnetosphere that'll convert
> and/or divert much of that outgoing and incoming X Band energy.
>
> However, a blue/violet laser cannon would likely become by far the
> most energy efficient and focused alternative for outgoing as well as
> incoming signals, especially if those efforts were getting off-world
> managed, such as within the nearby turf of our moon's L1 could easily
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> astronomer could rather easily detect such without special
> instruments.
>
> There's all kinds of nifty ways for us to hear and/or see what our
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> surface likes of radon are worth a good deal of science about solar
> wind and cosmic interactions, as well as for the graviton/tidal issues
> associated with having to orbit Earth as well as the sun that should
> be responsible for keeping the low density core of our moon a little
> extra toasty, as a renewable geothermal cache of energy that could
> essentially accommodate a fairly extensive underground protected human
> use of our moon.
> - Brad Guth

You're a fucktard.

From 5342298891727894857
X-Google-Thread: 113975,d92c4eddce160321
X-Google-Thread: f74ae,d92c4eddce160321
X-Google-Thread: fdc67,d92c4eddce160321
X-Google-Thread: 10e8ad,d92c4eddce160321
X-Google-Thread: 10cf28,d92c4eddce160321
X-Google-Attributes: gid113975,gidf74ae,gidfdc67,gid10e8ad,gid10cf28,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news1.google.com!news.glorb.com!news-out.octanews.net!
indigo.octanews.net!auth.rouge.octanews.com.POSTED!not-for-mail
Subject: Re: What is the highest radio frequency used for radio astronomy?
Date: Sun, 02 Sep 2007 20:03:09 -0600
From: Art Deco <erfc@caballista.org>
Newsgroups:
sci.astro.amateur,sci.astro,alt.astronomy,rec.radio.amateur.space,uk.sci.astronomy
Message-ID: <020920072003098618%erfc@caballista.org>
References: <1188459200.603005.55680@m37g2000prh.googlegroups.com>
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        )f
X-Hammer-of-Thor: September 2005
X-Diamond-Hammer-of-Thor: March 2007 [as part of the AFA-B Bullies]
X-Outer-Filth: Follows
X-FO-Bowturd: Yes
X-FO-Radavich: Yes
X-FO-Bwuthie: Yes
X-FO-Clockbrain: Yes
X-FO-mop-jockey: Yes
X-FO-Perplexa: Yes
X-FO-Kazoo: Yes
X-FO-Hagar: Yes
X-FO-Drkulec: Yes
X-FO-G-Dolf: Yes
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Xref: g2news2.google.com sci.astro.amateur:9966 sci.astro:12475
alt.astronomy:16397 rec.radio.amateur.space:178 uk.sci.astronomy:1670

Bob Downonit <Down@gag.net> wrote:

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>
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>> use of our moon.
>> - Brad Guth
>
>
>You're a fucktard.

IAWTP.

<http://www.caballista.org/auk/kookle.php?search=guth>

--
Official Overseer of Kooks and Saucerheads for alt.astronomy
Wee Davie Tholen is a grade-school lamer
Trainer and leash holder of:
  Honest "Clockbrain" John
  nightbat "fro0tbat" of alt.astronomy
  Tom "TommY Crackpotter" Potter
  <http://www.caballista.org/auk/kookle.php?search=deco>

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ever since I demonstrated how you believe that ah's family

```
name is "ah"."
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From -2879889625670442746
X-Google-Thread: 113975,d92c4eddce160321
X-Google-Thread: f74ae,d92c4eddce160321
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masternews.telia.net.!newsb.telia.net.POSTED!not-for-mail
From: pausch@saaf.se (Paul Schlyter)
Newsgroups:
sci.astro.amateur,sci.astro,alt.astronomy,rec.radio.amateur.space,uk.sci.astronomy
Subject: Re: What is the highest radio frequency used for radio astronomy?
Organization: Unknown
Lines: 76
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References: <1188459200.603005.55680@m37g2000prh.googlegroups.com>
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<fbdv9b$4se$1@merope.saaf.se>
<1188764496.354935.257560@r29g2000hsg.googlegroups.com>
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X-Trace: newsb.telia.net 1188801761 217.209.96.76 (Mon, 03 Sep 2007 08:42:41 CEST)
NNTP-Posting-Date: Mon, 03 Sep 2007 08:42:41 CEST
Xref: g2news2.google.com sci.astro.amateur:9987 sci.astro:12485
alt.astronomy:16415 rec.radio.amateur.space:179 uk.sci.astronomy:1671

In article <1188764496.354935.257560@r29g2000hsg.googlegroups.com>,
Radium  <glucegen1@gmail.com> wrote:

> On Sep 2, 2:42 am, pau...@saaf.se (Paul Schlyter) wrote:
...............
>> Another interesting experience is to feed a digital signal directly to
>> a loudspeaker instead of decoding and converting it to an analog
>> signal first.  That of course requires that the digital signal is
>> within the audible range of frequencies -- the signal from a
>> traditional telephone modem would be quite suitable here.  The old 300
>> bps modems produced a signal with a quite clear structure (the signal
>> jumped between two frequencies 300 times per second), but the more
>> modern telephone modems which can handle bit rates up to 57600 bps,
>> they sound pretty much like white noise to the human ear.
>
> Interesting indeed. However, are those old modems really "digital"?

On one side only ..... the signal sent out on the phone line is of
```

course analog. So what one listens at is a digital signal modulating one or several analog carriers. And this applies not only to old modems but to new modems as well. E.g. ADSL modems work pretty much the same way, except that an ADSL modem has severam MHz of analogue bandwidth available, compared to the 3 kHz of bandwidth an old telephone modem has available.

>
>>> That's why audio software is often used to speed up the infrasound
>>> until it is at least 20 Hz so that humans can hear it.
>
>> :-) ....there's no need to speed it up just to convert the frequency
>> into the audible range.... the frequency can be bumped up even if
>> the original speed is maintained.
>
> Is this done using audio software such as Adobe Audition?
>
> Quotes from http://www.adobe.com/products/audition/overview2.html :
>
> "Time and pitch processing: Change tempo without shifting pitch - or
> shift pitch without changing tempo - and never introduce audio
> artifacts."

Obviously one can use Audio Audition for that. It could even be done several decades ago, using analogue techniques.

Another possible way would be to let the low frequency signal amplitude modulate a carrier with an audible freqneucy, and then filter away the carrier as well as the lower side band. This will have the effect of adding a fixed frequency (the carrier frequency) to all frequencies in the low frequency signal. Ham radio operators using SSB will know exactly what I'm talking about.

>>> using an AM receiver as opposed to an FM receiver. FM is immune to the
>>> disruptions that normally affect AM.
>
>> Did you ever try to tune an FM receiver between radio stations on the
>> FM band? Also turn off any "muting" or "squelch" the receiver may have.
>> What do you hear? Silence? Or perhaps noise?
>
> White noise. Hissing. Nothing special.

Most signals received by radio telescopes will "sound" pretty much the same.

Btw, did you know that you can use an FM radio to observe meteor showers? CHoose a radio station which normally is a little bit too far away to hear, then direct your antenna towards it. Next, wait for the meteors - and listen to your radio station briefly as its radio waves are reflected against the meteor trail....

--

Paul Schlyter, Grev Turegatan 40, SE-114 38 Stockholm, SWEDEN
e-mail: pausch at stockholm dot bostream dot se
WWW: http://stjarnhimlen.se/

From 6525485320630188762
X-Google-Thread: 10e8ad,363e2595a83e6b99,start
X-Google-Attributes: gid10e8ad,public,usenet
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From: "Slipstream" <slipstream@stny.rr.com>
Newsgroups: rec.radio.amateur.space
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X-RFC2646: Format=Flowed; Original
Lines: 8
Message-ID: <467d4a50$0$24698$4c368faf@roadrunner.com>
Organization: Road Runner High Speed Online http://www.rr.com
X-Complaints-To: abuse@rr.com
Xref: g2news1.google.com rec.radio.amateur.space:930

I'm just getting back into satellites and went looking for Dr. Ransomes
STSPLUS software only to sadly discover that Dr. Ransome has passed away.
I'm trying to locate a late/latest copy of the STSPLUS software program in a
zip file. I'm using XP Home but would willingly switch back to ME to be able
to use this software. Can anyone help out with a zipped copy?? Thanks Ralph
WA2NTK

From 5135382103109220749
X-Google-Thread: 10e8ad,363e2595a83e6b99
X-Google-Attributes: gid10e8ad,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news3.google.com!feeder1-2.proxad.net!proxad.net!
feeder1-1.proxad.net!feeder.news-service.com!216.196.110.148.MISMATCH!
border1.nntp.ams.giganews.com!nntp.giganews.com!newsfeeder.wxs.nl!
divide.nova.planet.nl!posting.nova.planet.nl!not-for-mail
Date: Sun, 24 Jun 2007 00:40:10 +0200
From: Roland <roland_lemmers@planet.nl>
User-Agent: Thunderbird 1.5.0.12 (Windows/20070509)
MIME-Version: 1.0
Newsgroups: rec.radio.amateur.space
Subject: Re: STSPLUS

References: <467d4a50$0$24698$4c368faf@roadrunner.com>
In-Reply-To: <467d4a50$0$24698$4c368faf@roadrunner.com>
Content-Type: text/plain; charset=ISO-8859-1; format=flowed
Content-Transfer-Encoding: 7bit
Lines: 22
Message-ID: <467da149$0$25488$ba620dc5@text.nova.planet.nl>
NNTP-Posting-Host: 84.84.0.196
X-Trace: 1182638409 text.nova.planet.nl 25488 84.84.0.196:25705
X-Complaints-To: abuse@planet.nl
Xref: g2news1.google.com rec.radio.amateur.space:931

Slipstream schreef:
> I'm just getting back into satellites and went looking for Dr. Ransomes
> STSPLUS software only to sadly discover that Dr. Ransome has passed away.
> I'm trying to locate a late/latest copy of the STSPLUS software program in a
> zip file. I'm using XP Home but would willingly switch back to ME to be able
> to use this software. Can anyone help out with a zipped copy?? Thanks Ralph
> WA2NTK
>
>

Why would you use stsplus when you can have wxtrack?

http://www.david-taylor.pwp.blueyonder.co.uk/software/wxtrack.htm

But if you must have it

http://www.amsat.org/amsat/ftpsoft.html

73 de PF2KT Roland

From -8204571588901205320
X-Google-Thread: 10e8ad,363e2595a83e6b99
X-Google-Attributes: gid10e8ad,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx01.iad01.newshosting.com!newshosting.com!post02.iad01!
roadrunner.com!not-for-mail
From: Johnny Borborigmi <growl@tummy.com>
Organization: Not organized at all
Newsgroups: rec.radio.amateur.space
Date: Sat, 23 Jun 2007 22:03:38 -0400
Message-ID: <467dd0fa$0$12239$4c368faf@roadrunner.com>
References: <467d4a50$0$24698$4c368faf@roadrunner.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1; format=flowed
Content-Transfer-Encoding: 8bit
Subject: Re: STSPLUS
User-Agent: Unison/1.7.9

Lines: 15
X-Complaints-To: abuse@rr.com
Xref: g2news1.google.com rec.radio.amateur.space:932

On 2007-06-23 12:29:05 -0400, "Slipstream" <slipstream@stny.rr.com> said:

> I'm just getting back into satellites and went looking for Dr. Ransomes
> STSPLUS software only to sadly discover that Dr. Ransome has passed away.
> I'm trying to locate a late/latest copy of the STSPLUS software program in a
> zip file. I'm using XP Home but would willingly switch back to ME to be able
> to use this software. Can anyone help out with a zipped copy?? Thanks Ralph
> WA2NTK

Awww man, he passed on? I had no idea. STSPlus is awesome. Mr. Ransom,
THANK YOU SIR for all the work you've done over the years.

Tom R.

From -4316401642087058451
X-Google-Thread: 10e8ad,363e2595a83e6b99
X-Google-Attributes: gid10e8ad,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!news.glorb.com!bigfeed2.bellsouth.net!
bigfeed.bellsouth.net!bigfeed!bignumber.bellsouth.net!news.bellsouth.net!
bignews6.bellsouth.net.POSTED!d50ae390!not-for-mail
Message-ID: <467FD697.A1488AEB@yahoo.com>
From: james <james27613@yahoo.com>
X-Mailer: Mozilla 4.79 [en] (Windows NT 5.0; U)
X-Accept-Language: en
MIME-Version: 1.0
Newsgroups: rec.radio.amateur.space
Subject: Re: STSPLUS
References: <467d4a50$0$24698$4c368faf@roadrunner.com>
<467dd0fa$0$12239$4c368faf@roadrunner.com>
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Lines: 9
X-Complaints-To: abuse@bellsouth.net
X-Abuse-Info: Please forward a copy of all headers for proper handling
X-Trace:
ofjmidbaofeaohdodbdpiflmbcekedmfhojhikkbagflhcbocioedanofbhkhnfcpjgdlmafeohboikbeg
mhbmmdpmiihkbdkblahielgmpocbjfmnalmffcadaeghdbkemgnoebkokmfjllbcjgplmpnjnnapal
NNTP-Posting-Date: Mon, 25 Jun 2007 10:51:55 EDT
Organization: BellSouth Internet Group
Date: Mon, 25 Jun 2007 10:52:07 -0400
Xref: g2news1.google.com rec.radio.amateur.space:933

> Awww man, he passed on? I had no idea. STSPlus is awesome. Mr. Ransom,
> THANK YOU SIR for all the work you've done over the years.

>
> Tom R.

http://www.uk.amsat.org/index.php?option=com_content&task=view&id=317&Itemid=86

```
From 2456266567126945142
X-Google-Thread: 10e8ad,dbb03df7cf2813c1,start
X-Google-Thread: 10b9c8,dbb03df7cf2813c1,start
X-Google-Attributes: gid10e8ad,gid10b9c8,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx02.iad01.newshosting.com!newshosting.com!
198.186.194.247.MISMATCH!news-out.readnews.com!news-xxxfer.readnews.com!panix!
rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-175 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Wed, 27 Jun 2007 19:12:37 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 244
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000501c7b8ea$2dc0b310$6601a8c0@familyroom>
NNTP-Posting-Host: panix2.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader2.panix.com 1182985957 4462 166.84.1.2 (27 Jun 2007 23:12:37 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Wed, 27 Jun 2007 23:12:37 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Xref: g2news1.google.com rec.radio.amateur.space:934 rec.radio.info:372
```

AMSAT NEWS SERVICE
ANS-175

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an

active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:

* AO-51 in V/S Mode for Last Week of June
* Delfi-C3 Satellite Integration for Planned Autumn Launch
* 2007 AMSAT BoD Candidates List Announcement
* New Items in the AMSAT On-Line Store
* Satellite Shorts From All Over
* ARISS Status Report for the week of June 18, 2007

SB SAT @ AMSAT $ANS-175.01
AO-51 in V/S Mode for Last Week of June

AMSAT News Service Bulletin 175.01
>From AMSAT HQ SILVER SPRING, MD.
June 24, 2007
To All RADIO AMATEURS
BID: $ANS-175.01

Drew, KO4MA AMSAT-NA VP Operations reminds users that the AO-51 Echo Satellite will be in its V/S mode for the last week of June 26 - June 30:

FM Repeater, V/S
Uplink: 145.880 MHz FM, NO PL Tone
Downlink: 2401.200 MHz FM

Full details are available on-line at:
http://www.amsat.org/amsat-new/echo/CTNews.php

[ANS thanks Drew, KO4MA for the above information]

/EX

SB SAT @ AMSAT $ANS-175.02
Delfi-C3 Satellite Integration for Planned Autumn Launch

AMSAT News Service Bulletin 175.02
>From AMSAT HQ SILVER SPRING, MD.
June 24, 2007
To All RADIO AMATEURS
BID: $ANS-175.02

Wouter Jan Ubbels, PE4WJ, Delfi-C3's project manager of electronic systems and communications at the Delft University of Technology in the Netherlands reports that their satellite is being integrated and tested in preparation for launch in September or October, 2007.

The Delfi team has posted photos of the satellite integration work at: http://www.delfic3.nl/photoblog/.

Delfi-C3 is a 3-unit CubeSat carrying redundant radio transceivers, connected to the antenna system by a hybrid combiner. Both transceivers consist of a UHF front end, a command receiver, linear IF, telemetry generator and the final stages capable of 400mW RF power.

Delfi-C3 contains no batteries because it's primary mission is to perform a solar cell and sun sensor experiment so the spacecraft will only be active when in sunlight.

The first three months of the mission will perform the science mission, in which the spacecraft will be transmitting 1200 bit/s AX.25 telemetry on the primary or backup VHF downlink. (See http://www.delfic3.nl for frequency information.) Telemetry will be transmitted once per second.

A Java application will be available for download from the website to display telemetry in real time, and upload it to Delfi's central server in Delft. A soundcard application in Java is planned to be available to decode the BPSK signal. The MixW software package will also be compatible with the telemetry signal.

After three months, the linear transponder will be activated, with a 40kHz bandwidth. In transponder mode, a CW beacon will be active instead of BPSK telemetry. It will transmit a message saying "hi hi de delfi-c3 delfi-c3". Since Delfi-C3 will transmit with only 400mW of downlink power, earth stations will need to prepare a good receive system.

TLE's will be anounced on the website (http://www.delfic3.nl) once they are available. Preliminary parameters of the orbit are:
 + altitude: 630km circular
 + inclination: 97.91 degrees
 + sun-synchronous

[ANS thanks Wouter Jan Ubbels, PE4WJ for the above information]

/EX

SB SAT @ AMSAT $ANS-175.03
2007 AMSAT BoD Candidates List Announcement

AMSAT News Service Bulletin 175.03
>From AMSAT HQ SILVER SPRING, MD.
June 24, 2007
To All RADIO AMATEURS
BID: $ANS-175.03

Nominations for the 2007 AMSAT Board of Directors have closed. The list of qualified candidates is:

Barry Baines WD4ASW
Drew Glasbrenner KO4MA
Rick Hambly W2GPS
Lee McLamb KU4OS
Gunther Meisse W8GSM

The terms of four directors are up this year. Directors serve a two year term. Ballots and biographical information submitted by each candidate will be in the mail to current AMSAT members by July 15th and completed ballots must be received at the AMSAT office in Silver Spring no later than the close of business on September 15th. Terms of the new directors start upon certification of the election.

Barry Baines, WD4ASW
Corporate Secretary

[ANS thanks Barry Baines, WD4ASW for the above information]

/EX

SB SAT @ AMSAT $ANS-175.04
New Items in the AMSAT On-Line Store

AMSAT News Service Bulletin 175.04
>From AMSAT HQ SILVER SPRING, MD.
June 24, 2007
To All RADIO AMATEURS
BID: $ANS-175.04

Bruce, KK5DO, wearing his AMSAT Online Store Manager hat reports, "We have added four new items to the AMSAT Online Store:

1. A new dark blue long sleeve 100% cotton shirt with AMSAT logo
2. A new dark blue ball cap with AMSAT logo
3. The AMSAT Journal on CD-ROM for years 2001-2005 (searchable)
4. The 2007 "Getting Started in Satellites" book (now 110 pages).

Go online at http://www.amsat.org and click on the Online Store in the menu to the left. Order your goodies today.

[ANS thanks Bruce, KK5DO for the above information]

/EX

SB SAT @ AMSAT $ANS-175.05
Satellite Shorts From All Over

AMSAT News Service Bulletin 175.05
>From AMSAT HQ SILVER SPRING, MD.
June 24, 2007
To All RADIO AMATEURS
BID: $ANS-175.05

+ Clive G3CWV's OSCAR-11 report for the week of 16 June 2007 summarizes operations as, "No signals have been received from the satellite's 145.826 MHz beacon because it remains in eclipse. Listen for signals starting around August 20."

+ F.Costa, CT1EAT, has a QSL for auction from Owen K. Garriott (W5LFL), the first radio amateur who operated from space, during the STS-9 mission in 1983. Please see photos at http://ct1eatsale.no.sapo.pt/ He will acept bids, in EURO currency, until 00.00 UTC 25 June 2007. The highest bidder will donate the amount for an AMSAT/ARISS project of their choice. He will send the card to the winner for free via registered airmail. Please send your bids to ct1eat@amsat.org.

+ Peter Guelzow, DB2OS reported the AMSAT-DL/IUZ team received congratulations from the Voyager Flight Team on their successful reception of the furthest manmade object in space. The message read, "Congratulations on your successful downlink acquisition of Voyager 1 at your 20 meter tracking station. Acquiring such a distant object is a remarkable achievement, especially for an amateur team. Thank you very much for your interest in Voyager." Peter summarizes, "It also demonstrates now officially that the 20m dish is good enough to support the AMSAT P5-A Mission to Mars."

[ANS thanks everyone for the above information]

/EX

SB SAT @ AMSAT $ANS-175.06
ARISS Status Report for the week of June 18, 2007

AMSAT News Service Bulletin 175.06
>From AMSAT HQ SILVER SPRING, MD.
June 24, 2007
To All RADIO AMATEURS
BID: $ANS-175.06

1. Russian ARISS Contact Successful

On Thursday, June 14, an ARISS contact was made between the International Congress of Slavic States Conference in Sochi, Russia and the ISS. Cosmonaut Fyodor Yurchikhin, RN3FI participated in the event.

2. Upcoming School Contacts

The ARISS team continues to work on scheduling school contacts for Expedition 15.

3. Technical Interchange Meeting

The ARISS team is planning a Technical Interchange Meeting during the week of July 9 in Houston. The team plans to discuss radio system hardware, software and the SuitSat-2 project.

4. ARISS International Meeting

The ARISS teleconference will on Tuesday, June 19 discussed the next ARISS face to face meeting, SuitSat-2 and the Columbus Module.

[ANS thanks Carol, KB3LKI for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM

```
From -7564084700682150366
X-Google-Thread: 10e8ad,c9afe8be88ef07d8,start
X-Google-Thread: 10b9c8,c9afe8be88ef07d8,start
X-Google-Attributes: gid10e8ad,gid10b9c8,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx01.iad01.newshosting.com!newshosting.com!
198.186.194.247.MISMATCH!news-xxxfer.readnews.com!news-out.readnews.com!
transit4.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-176 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Wed, 27 Jun 2007 23:34:09 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 1257
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <001601c7b935$2ae674e0$6601a8c0@familyroom>
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader2.panix.com 1183001650 23188 166.84.1.6 (28 Jun 2007 03:34:10 GMT)
X-Complaints-To: abuse@panix.com
```

NNTP-Posting-Date: Thu, 28 Jun 2007 03:34:10 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to   rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to   rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Xref: g2news1.google.com rec.radio.amateur.space:935 rec.radio.info:374

This report is organized into FIVE parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites
Part 5 (S5) - deborbited/returned satellites

SB SAT @ AMSAT W8ISS ANS-176.S1
WSR 176 Part 1 06/25/2007

AMSAT NEWS SERVICE BULLETIN 176.S1 FROM AMSAT HQ
SILVER SPRING, MD, June 25, 2007
TO ALL RADIO AMATEURS
BID: $ANS-176.S1

VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.859330 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

```
Official Webpage: http://www.amsat.in/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is
active. Each transponder has a different beacon.
[06252007]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Voice Repeater

Current Modes:   FM Repeater - V/s

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink:   145.880 MHZ FM
                       145.880 MHz USB
                       145.920 MHz FM
                      1268.700 MHz FM 67Hz PL tone
Digital Downlinks:     435.150 MHz FM 38k4 Digital, PBP, 1 watt output
                       435.150 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:        145.860 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      1268.700 mhz FM 9k6 PBP Digital
Beacon:                435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[06252007]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Current Mode: V/u
```

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer
   on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on
   and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10
   minute timer.
[05282007]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM
Downlink: 436.795 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[05282007]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational depending on amount of Sunlight

Current Mode: Listen before transmitting

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)

```
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons:   29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/

AO-7 Usage Guidelines on the AO-7 Log and Resource Site located at:
http://www.planetemily.com/ao7
[05282007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Mode: Occasional Voice/Packet/Digipeater

Expedition 15 crew:
Commander:              Fyodor Yurchikhin     RN3FI
Flight Engineer:        Clayton C. Anderson
Flight Engineer:        Oleg Kotov

STS-117 Crew:
Mission Commander:      Frederick Sturckow
Shuttle Pilot:          Lee Archambault
Flight Engineer:        Sunita Williams       KD5PLB
Mission Specialist:     James Reilly II
                        Steven Swanson
                        Patrick Forrester
                        John D. Olivas

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink:   145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink:   145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink:      145.800 MHz FM

SSTV TESTING:
Worldwide Reported Downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink:         437.800 MHz FM
Repeater Downlink:       145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German:              DP0ISS
Russian:             RS0ISS
                     RZ3DZR
USA:                 NA1SS
Packet Mailbox:      RS0ISS-11
Packet Keyboard:     RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.
[06182007]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-176.S2
WSR 176 Part 2 06/25/2007

AMSAT NEWS SERVICE BULLETIN 176.S2 FROM AMSAT HQ
SILVER SPRING, MD, June 25, 2007
TO ALL RADIO AMATEURS
BID: $ANS-176.S2

CAPE1
Catalog Number:
Launch Date: April 17,2007

Status: In Orbit

Current Mode:  /u

Downlink: 435.245 MHz 9600 bs FSK AX.25
[04232007]
=====
CP3
Catalog Number:
Launch Date: April 17,2007

Status: In Orbit

Current Mode:  /u
```

```
Downlink: 436.845 MHz 1200 bps FSK AX.25
[04232007]
=====
CP4
Catalog Number:
Launch Date: April 17,2007

Status: In Orbit

Current Mode: /u

Downlink: 437.325 MHz 1200 bps FSK AX.25
[04232007]
=====
Libertad-1
Catalog Number:
Launch Date: April 17, 2007

Status: In Orbit

Current Mode: /u

Downlink: 437.405 MHz 1200 bps AFSK AX.25
[04232007]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: In Orbit

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder:  145.825 Mhz FM
[02052007]
=====
?O-?? FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: In Orbit

Current Mode: /u

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[02262007]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: In Orbit

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01222007]
=====
GENESAT-1 ?O-??
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Current Mode: /u

Telemetry Beacon Downlink: 437.0670 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[01082007]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Operational

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon:             437.2750 MHz CW

Callsign: JR8YJT
[10302006]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon:             437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
```

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
[03262007]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launched: June 30, 2003

Status: Operational

Current Mode: /u

Beacon: 436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[01082007]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launched: February 21, 2006

Status: Semi-Operational - Constant Carrier only

Uplink: 1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan ?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[01082007]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Voice Repeater
        Telemetry Downlink

Current Mode(s): FM Repeater - V/s

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink: 145.880 MHZ FM
                       145.880 MHz USB
                       145.920 MHz FM
                      1268.700 MHz FM 67Hz PL tone
Digital Downlinks: 435.150 MHz FM 38k4 Digital, PBP, 1 watt output

```
                       435.150 MHz FM 9k6 Digital, Pacsat Broadcast Protocol
                      2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:        145.860 MHz FM 9k6 Digital, Pacsat Broadcast Protocol
                      1268.700 mhz FM 9k6 PBP Digital
Beacon:                435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[06252007]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Operational only in Full Sun Light

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink:        144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[05282007]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational.

Current Mode: Telemetry Downlink - 2M

Telemetry Downlink: 145.826 MHz FM 1200 AFSK
Mode-S Beacon:     2401.500 MHz - OFF
UHFBeacon:          435.025 MHz - OFF

Mode and Antenna Polarization:
V: RHCP
```

S: LHCP

Due to solar eclipses which will continue until late August 2007, the beacon will only transmit for about one orbit every 21 days. It is unlikely to be heard during this period.

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[05282007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Mode: Occasional Voice/Packet/Digipeater

Expedition 15 crew:
Commander: Fyodor Yurchikhin RN3FI
Flight Engineer: Clayton C. Anderson
Flight Engineer: Oleg Kotov

STS-117 Crew:
Mission Commander: Frederick Sturckow
Shuttle Pilot: Lee Archambault
Flight Engineer: Sunita Williams KD5PLB
Mission Specialist: James Reilly II
Steven Swanson
Patrick Forrester
John D. Olivas

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

SSTV TESTING:
Worldwide Reported Downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear

U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS
RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.
[06182007]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-176.S3
WSR 176 Part 3 06/25/2007

AMSAT NEWS SERVICE BULLETIN 176.S3 FROM AMSAT HQ
SILVER SPRING, MD, June 25, 2007
TO ALL RADIO AMATEURS
BID: $ANS-176.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 MHz FM 67Hz CTCSS

Voice Downlink: 2401.835 MHz FM
Packet Up/Downlink: 437.250 MHz 9k6 packet
Packet Downlink   2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Operational

Uplinks: 145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[01222007]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

```
Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink:   145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
call-
sign KE6QMD, as per the user service agreement located at the following
URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS:                SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink:   145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
V-band:   145.840 -  145.990 MHz CW/LSB
U-band:   435.550 -  435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
```

```
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks
---------
S2-band:  2401.225 -  2401.475 MHz CW/USB
K-band:  24048.010 - 24048.060 MHz CW/USB
Beacon:   2401.323 MHz
         24048.035 MHz
[01222007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink:    145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site
at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater:         436.250 MHz

Uplinks: Mode B Repeater:  145.825 MHz
Mode J Digipeater:         145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz
```

```
Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink:   145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Reloading of BBS software

Current Mode: V/U
              L/U

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12
```

```
More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[06112007]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Reported non-operational

Current Mode: V/U
              Digipeater - Authorized for APRS usage

Uplink:         145.900 MHz FM 1200-baud Manchester FSK
                145.920 MHz FM 1200-baud Manchester FSK
                145.940 MHz FM 1200-baud Manchester FSK
                145.960 MHz FM 1200-baud Manchester FSK
Downlink:       437.026 MHz SSB 1200-baud PSK
Mode-S Beacon: 2401.1428 MHz

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.025 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[06112007]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Non-Operational

Voice/CW Mode JA
Uplink:   145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon:   435.795 MHz

Digital Mode JD
Uplinks:  145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP
```

JARL English webpage: http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm
AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts.htm
[04302007]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

```
Broadcast callsign: POSAT1-11
BBS callsign:       POSAT1-12
```

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012006]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: Downlink only

```
Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud
```

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[012212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

```
Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
```

Uplink: 145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks: 145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplinks: 145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink: 437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[01222007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink: 145.825 MHz FM 1200 Baud AFSK
Beacon: 2401.220 MHz

```
[05012006]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet: Non-Operational
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon:   145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational
```

```
Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink  29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
[01152007]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
```

```
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon:    29.352 MHz (intermittent)

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink:     21.260 to 21.300 MHz CW/USB
Downlink:  145.860 to 145.900 MHz CW/USB

Beacon:    145.860 MHz

Robot:     145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink:   21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon:   29.408 MHz

Robot:    29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-176.S4
WSR 176 Part 4 06/25/2007

AMSAT NEWS SERVICE BULLETIN 176.S4 FROM AMSAT HQ
SILVER SPRING, MD, June 25, 2007
TO ALL RADIO AMATEURS
BID: $ANS-176.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE PROPOSED FOR LAUNCH AT
THIS TIME:

Phase 5a Mars Mission
Catalog Number:
Proposed Launch Date: 2009 or 2011

Status: Design Phase
```

For the latest project status update please visit the AMSAT-DL P5-A web page:
http://ticket-to-mars.org
[01222007]
=====
PHASE 3E AO-??
Catalog number:
Proposed Launch Date: Late 2007

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/
[01222007]
=====
Eagle AO-??
Catalog Number:
Proposed Launch Date: Early/Mid 2009

Status: Design Phase

For the latest project status updates please visit the AMSAT-NA webpage:
http://www.amsat.org
[01222007]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-176.S5
WSR 176 Part 5 06/25/2007

AMSAT NEWS SERVICE BULLETIN 176.S5 FROM AMSAT HQ
SILVER SPRING, MD, June 25, 2007
TO ALL RADIO AMATEURS
BID: $ANS-176.S5

THE FOLLOWING SATELLITES HAVE DE-ORBITED OR HAVE BEEN RETURNED TO THE GROUND:

NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink: 145.825 Mhz FM APRS AX25
APRS Uplink: 145.825 MHz FM APRS AX25
Voice/PSK31 Uplink: 28.120 MHz

Packet to Voice ID: RAFT
[06112007]

/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

```
Voice: 301-589-6062
       888-322-6728
FAX:   301-608-3410
```

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

From -7128335341497284534
X-Google-Thread: 10e8ad,363e2595a83e6b99
X-Google-Attributes: gid10e8ad,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx01.iad01.newshosting.com!newshosting.com!post01.iad01!
roadrunner.com!not-for-mail
From: Johnny Borborigmi <growl@tummy.com>
Organization: Not organized at all
Newsgroups: rec.radio.amateur.space
Date: Thu, 28 Jun 2007 20:47:09 -0400
Message-ID: <4684568d$0$4703$4c368faf@roadrunner.com>
References: <467d4a50$0$24698$4c368faf@roadrunner.com>
<467dd0fa$0$12239$4c368faf@roadrunner.com> <467FD697.A1488AEB@yahoo.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1; format=flowed
Content-Transfer-Encoding: 8bit
Subject: Re: STSPLUS
User-Agent: Unison/1.7.9
Lines: 15
X-Complaints-To: abuse@rr.com
Xref: g2news1.google.com rec.radio.amateur.space:936

On 2007-06-25 10:52:07 -0400, james <james27613@yahoo.com> said:

>
>> Awww man, he passed on? I had no idea. STSPlus is awesome. Mr. Ransom,
>> THANK YOU SIR for all the work you've done over the years.
>>
>> Tom R.
>
>
>
> http://www.uk.amsat.org/index.php?option=com_content&task=view&id=317&Itemid=86

A sad day for us all. He was special.

From -1847068196992550077
X-Google-Thread: 10e8ad,dac43a12166988ba,start
X-Google-Thread: 10b9c8,dac43a12166988ba,start
X-Google-Attributes: gid10e8ad,gid10b9c8,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx01.iad01.newshosting.com!newshosting.com!
198.186.194.250.MISMATCH!transit3.readnews.com!news-out.readnews.com!panix!
rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-182 AMSAT News Service Weekly Bulletins

Followup-To: rec.radio.amateur.space
Date: Sun, 1 Jul 2007 10:09:57 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 192
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000601c7bbe9$85d52160$6601a8c0@familyroom>
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader2.panix.com 1183298997 18120 166.84.1.6 (1 Jul 2007 14:09:57 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 1 Jul 2007 14:09:57 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to   rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to   rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Xref: g2news1.google.com rec.radio.amateur.space:937 rec.radio.info:382

AMSAT NEWS SERVICE
ANS-182

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:
* Call for papers - 2007 AMSAT Space Symposium and Annual Meeting
* AMSAT Awards
* Field Day Results Reminder
* ARISS Status - 25 June 2007

SB SAT @ AMSAT $ANS-181.01
Call for papers - 2007 AMSAT Space Symposium and Annual Meeting

AMSAT News Service Bulletin 181.01
 From AMSAT HQ SILVER SPRING, MD.
July 1, 2007
To All RADIO AMATEURS

BID: $ANS-181.01

This is the second call for papers for the 2007 AMSAT Space Symposium and Annual Meeting to be held October 25-28, 2007 in Pittsburgh, Pennsylvania.

Proposals for papers, symposium presentations, and poster presentations are invited on any topic of interest to the amateur satellite program. An
emphasis for this year is an educational outreach to middle and high school students. In particular, papers on the following topics are solicited:

Students & Education, ARISS, AO-51, P3E, Eagle and other satellite-related topics.

We request a one-page abstract as soon as possible. Camera ready copy on paper or in electronic form will be due by September 1, 2007 for inclusion in the printed symposium proceedings. Papers received after this date will not be included in the printed proceedings.

Abstracts and papers should be sent to: Daniel Schultz N8FGV by e-mail to:
n8fgv@amsat.org

[ANS thanks the AMSAT 2007 Symposium Committee for the above information]

/EX

SB SAT @ AMSAT $ANS-181.02
AMSAT Awards

AMSAT News Service Bulletin 181.02
>From AMSAT HQ SILVER SPRING, MD.
July 1, 2007
To All RADIO AMATEURS
BID: $ANS-181.02

Having made a first satellite contact, we would like to welcome to the satellite community, as members of the AMSAT Satellite Communicators Club.
David Palmgren, N8DP

AMSAT Sexagesimal Award
Robert Palmer Jr, KB2YCC, #144

South Africa AMSAT Communication Achievement Award
Steven Raas, N2JDQ, #US109

To see all the awards visit http://www.amsat.org or

http://www.amsatnet.com

[ANS thanks Bruce, KK5DO, for the above information]

/EX

SB SAT @ AMSAT $ANS-181.03
Field Day Results Reminder

AMSAT News Service Bulletin 181.03
>From AMSAT HQ SILVER SPRING, MD.
July 1, 2007
To All RADIO AMATEURS
BID: $ANS-181.03

Now that field day is over, It is hoped everyone that participated had as much fun as they had expected. There is just one more thing to do. Be sure to send in your results and photos.

The Satellite Summary Sheet should be used for submission of the AMSAT Field Day competition and be received by KK5DO (email or postal mail) by 11:59 P.M. CDT, Monday, July 16, 2007. The preferred method for submitting your log is via e-mail to kk5do@amsat.org or kk5do@arrl.net.

You may also use the postal service but give plenty of time for your results to arrive by the submission date. Add photographs or other interesting information so that can be used an article for the Journal.

You will receive an email back (within one or two days) from me when your email submission is received. If you do not receive a confirmation message, try sending it again or send it to my other email address.

If mailing your submission, the address is:

Bruce Paige, KK5DO
Director of Awards and Contests
PO Box 310
Alief, TX 77411-0310.

Certificates will be awarded to the first-place emergency power/portable station at the AMSAT General Meeting and Space Symposium in Pittsburgh in October 2007. Certificates will also be awarded to the second and third place portable/emergency operation in addition to the first-place home station running on emergency power. Stations submitting high, award-winning scores will be requested to send in dupe sheets for analog contacts and message listings for digital downloads.

[ANS thanks Bruce, KK5DO, for the above information]

/EX

SB SAT @ AMSAT $ANS-181.04
ARISS Status - 25 June 2007

AMSAT News Service Bulletin 181.04
>From AMSAT HQ SILVER SPRING, MD.
July 1, 2007
To All RADIO AMATEURS
BID: $ANS-181.04

1. Upcoming School Contact

The Challenger Learning Center of Alaska in Kenai, Alaska has been scheduled for an Amateur Radio on the International Space Station (ARISS) contact on Saturday, July 7 at 19:43 UTC. The center engages Elementary and Middle school students in space exploration, science, math and technology. Home schooled children will also be invited to participate in the contact and there is a possibility of reaching rural students through a School Access video conference. Workshops are planned prior to the contact to introduce children to the ISS, its mission and the crew's workload. Students will participate in poster and essay competitions related to space exploration. Media will be notified and coverage is expected on both a local and national level.

2. Amateur Radio Contact on Youth Day

To celebrate Youth Day on Saturday, June 16, students in South Africa spoke with astronaut Bill McArthur, KC5ACR, via amateur radio. Amateur Radio on the International Space Station (ARISS) member Hans van de Groenendaal, ZS6AKV, arranged the contact with a few undergraduates and other students from a high school radio club who had just earned their ham licenses a few days earlier. The headmaster was pleased with the outcome and plans to promote Amateur Radio as a major support subject at the school.

3. ARISS International Meeting Held

An Amateur Radio on the International Space Station (ARISS) teleconference was held on Tuesday, June 19. Agenda items discussed included the next ARISS face to face meeting, SuitSat-2 and the Columbus Module antennas. Minutes from the meeting have been posted to the ARISS website. See: http://www.rac.ca/ariss/arisstel2007-06-19.htm

[ANS thanks Carol, KB3LKI, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors

to AMSAT Project Funds, will be eligible to receive additional benefits.
Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Lee McLamb, KU4OS

From 161621178378319127
X-Google-Thread: 10e8ad,6efd33e532e7f9cd,start
X-Google-Thread: 10b9c8,6efd33e532e7f9cd,start
X-Google-Attributes: gid10e8ad,gid10b9c8,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!newsfeed2.dallas1.level3.net!
news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-183 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Fri, 6 Jul 2007 11:12:46 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 1258
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000901c7bfe0$27f81de0$6601a8c0@familyroom>
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader2.panix.com 1183734767 22673 166.84.1.6 (6 Jul 2007 15:12:47 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Fri, 6 Jul 2007 15:12:47 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Xref: g2news1.google.com rec.radio.amateur.space:938 rec.radio.info:388

This report is organized into FIVE parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites
Part 5 (S5) - deorbited/returned satellites

SB SAT @ AMSAT W8ISS ANS-183.S1
WSR 183 Part 1 07/02/2007

AMSAT NEWS SERVICE BULLETIN 183.S1 FROM AMSAT HQ
SILVER SPRING, MD, July 02, 2007
TO ALL RADIO AMATEURS
BID: $ANS-183.S1

VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.859330 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsat.in/hamsat.htm

To know what transponder is switched on please listen for the beacon that is active. Each transponder has a different beacon.
[06252007]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Modes: FM Repeater - V/u
                 Telemetry -   /u 9k6

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink: 145.880 MHZ FM
                       145.880 MHz USB

145.920 MHz FM
1268.700 MHz FM 67Hz PL tone
Digital Downlinks: 435.150 MHz FM 38k4 Digital, PBP, 1 watt output
435.150 MHz FM 9k6 Digital, Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Digital, Pacsat Broadcast Protocol
1268.700 mhz FM 9k6 PBP Digital
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[07022007]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10

minute timer.
[05282007]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Recovery Operations

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
145.870 MHz FM
145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

JARL English webpage: http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm
AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's CW
telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts.htm
[07022007]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM
Downlink: 436.795 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[05282007]
=====

AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational depending on amount of Sunlight

Current Mode: Listen before transmitting

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz CW
145.972 MHz CW
435.100 MHz CW
2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/

AO-7 Usage Guidelines on the AO-7 Log and Resource Site located at:
http://www.planetemily.com/ao7
[05282007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Mode: Occasional Voice/Packet/Digipeater

Expedition 15 crew:

Commander:	Fyodor Yurchikhin	RN3FI
Flight Engineer:	Clayton C. Anderson	
Flight Engineer:	Oleg Kotov	

STS-117 Crew:

Mission Commander:	Frederick Sturckow	
Shuttle Pilot:	Lee Archambault	
Flight Engineer:	Sunita Williams	KD5PLB
Mission Specialist:	James Reilly II	
	Steven Swanson	
	Patrick Forrester	
	John D. Olivas	

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM

Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

SSTV TESTING:
Worldwide Reported Downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS
                      RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.
[06182007]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-183.S2
WSR 183 Part 2 07/02/2007

AMSAT NEWS SERVICE BULLETIN 183.S2 FROM AMSAT HQ
SILVER SPRING, MD, July 02, 2007
TO ALL RADIO AMATEURS
BID: $ANS-183.S2

CAPE1
Catalog Number:
Launch Date: April 17,2007

Status: In Orbit

Current Mode: /u

Downlink: 435.245 MHz 9600 bs FSK AX.25
[04232007]
=====
CP3
Catalog Number:
Launch Date: April 17,2007

Status: In Orbit

Current Mode: /u

Downlink: 436.845 MHz 1200 bps FSK AX.25
[04232007]
=====
CP4
Catalog Number:
Launch Date: April 17,2007

Status: In Orbit

Current Mode: /u

Downlink: 437.325 MHz 1200 bps FSK AX.25
[04232007]
=====
Libertad-1
Catalog Number:
Launch Date: April 17, 2007

Status: In Orbit

Current Mode: /u

Downlink: 437.405 MHz 1200 bps AFSK AX.25
[04232007]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: In Orbit

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder: 145.825 Mhz FM
[02052007]
=====
?O-?? FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

```
Status: In Orbit

Current Mode: /u

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[02262007]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: In Orbit

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01222007]
=====
GENESAT-1 ?O-??
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Current Mode: /u

Telemetry Beacon Downlink: 437.0670 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[01082007]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Operational

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon:             437.2750 MHz CW

Callsign: JR8YJT
[10302006]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005
```

```
Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon:             437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
[03262007]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launched: June 30, 2003

Status: Operational

Current Mode: /u

Beacon:     436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[01082007]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launched: February 21, 2006

Status: Semi-Operational - Constant Carrier only

Uplink:  1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan ? )

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[01082007]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational
```

Current Mode(s): FM Repeater - V/u
                 Telemetry -   /u 9k6

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink: 145.880 MHZ FM
                       145.880 MHz USB
                       145.920 MHz FM
                      1268.700 MHz FM 67Hz PL tone
Digital Downlinks: 435.150 MHz FM 38k4 Digital, PBP, 1 watt output
                       435.150 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      1268.700 mhz FM 9k6 PBP Digital
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[07022007]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Operational only in Full Sun Light

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[05282007]
=====
UO-11 OSCAR-11
Catalog number: 14781

Launched: March 1, 1984

Status: Semi-operational.

Current Mode: Telemetry Downlink - 2M

Telemetry Downlink: 145.826 MHz FM 1200 AFSK
Mode-S Beacon: 2401.500 MHz - OFF
UHFBeacon: 435.025 MHz - OFF

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Due to solar eclipses which will continue until late August 2007, the beacon will only transmit for about one orbit every 21 days. It is unlikely to be heard during this period.

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[05282007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Mode: Occasional Voice/Packet/Digipeater

Expedition 15 crew:
Commander: Fyodor Yurchikhin   RN3FI
Flight Engineer: Clayton C. Anderson
Flight Engineer: Oleg Kotov

STS-117 Crew:
Mission Commander: Frederick Sturckow
Shuttle Pilot: Lee Archambault
Flight Engineer: Sunita Williams   KD5PLB
Mission Specialist: James Reilly II
                        Steven Swanson
                        Patrick Forrester
                        John D. Olivas

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM

Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

SSTV TESTING:
Worldwide Reported Downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS
RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line is NOT translated from Russian and posted.
[06182007]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-183.S3
WSR 183 Part 3 07/02/2007

AMSAT NEWS SERVICE BULLETIN 183.S3 FROM AMSAT HQ
SILVER SPRING, MD, July 02, 2007
TO ALL RADIO AMATEURS
BID: $ANS-183.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305

2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 MHz FM 67Hz CTCSS
Voice Downlink: 2401.835 MHz FM
Packet Up/Downlink: 437.250 MHz 9k6 packet
Packet Downlink   2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Operational

Uplinks: 145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[01222007]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, callsign KE6QMD, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]

```
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
V-band:   145.840 -  145.990 MHz CW/LSB
U-band:   435.550 -  435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks
---------
S2-band:  2401.225 -  2401.475 MHz CW/USB
K-band:  24048.010 - 24048.060 MHz CW/USB
Beacon:   2401.323 MHz
         24048.035 MHz
[01222007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink:    145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site
at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater:         436.250 MHz

Uplinks: Mode B Repeater:  145.825 MHz
Mode J Digipeater:         145.825 MHz
                           145.900 MHz
```

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

```
Uplink:   145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK
```

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Reloading of BBS software

```
Current Mode: V/U
              L/U
```

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks: 145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[06112007]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Reported non-operational

Current Mode: V/U
              Digipeater - Authorized for APRS usage

Uplink: 145.900 MHz FM 1200-baud Manchester FSK
                145.920 MHz FM 1200-baud Manchester FSK
                145.940 MHz FM 1200-baud Manchester FSK
                145.960 MHz FM 1200-baud Manchester FSK
Downlink: 437.026 MHz SSB 1200-baud PSK
Mode-S Beacon: 2401.1428 MHz

Mode and Antenna Polarization:
U: RC 437.050 MHz RHCP
   PSK 437.025 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[06112007]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11

```
BBS callsign:       POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012006]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: Downlink only

Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[012212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only
```

Uplinks: 145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink: 437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[01222007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink: 145.825 MHz FM 1200 Baud AFSK
Beacon: 2401.220 MHz
[05012006]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink: 145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting): Non-Operational
Uplink: 145.9000 - 146.0000 MHz SSB/CW

Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet: Non-Operational
Uplink: 145.8500 MHz MFSK 1200 BPS
Uplink: 145.8700 MHz MFSK 1200 BPS
Uplink: 145.8900 MHz MFSK 1200 BPS
Uplink: 145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon: 145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.8500 - 145.9000 MHz SSB/CW
Downlink 29.4000 - 29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

```
Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
[01152007]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon:    29.352 MHz (intermittent)

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink:     21.260 to 21.300 MHz CW/USB
Downlink:  145.860 to 145.900 MHz CW/USB

Beacon:    145.860 MHz

Robot:     145.908 MHz
[05232004]
```

=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-183.S4
WSR 183 Part 4 07/02/2007

AMSAT NEWS SERVICE BULLETIN 183.S4 FROM AMSAT HQ
SILVER SPRING, MD, July 02, 2007
TO ALL RADIO AMATEURS
BID: $ANS-183.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE PROPOSED FOR LAUNCH AT THIS TIME:

Phase 5a Mars Mission
Catalog Number:
Proposed Launch Date: 2009 or 2011

Status: Design Phase

For the latest project status update please visit the AMSAT-DL P5-A web page:
http://ticket-to-mars.org
[01222007]
=====
PHASE 3E AO-??
Catalog number:
Proposed Launch Date: Late 2007

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/
[01222007]
=====
Eagle AO-??
Catalog Number:
Proposed Launch Date: Early/Mid 2009

Status: Design Phase

For the latest project status updates please visit the AMSAT-NA webpage:
http://www.amsat.org
[01222007]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-183.S5
WSR 183 Part 5 07/02/2007

AMSAT NEWS SERVICE BULLETIN 183.S5 FROM AMSAT HQ
SILVER SPRING, MD, July 02, 2007
TO ALL RADIO AMATEURS
BID: $ANS-183.S5

THE FOLLOWING SATELLITES HAVE DE-ORBITED OR HAVE BEEN RETURNED TO THE GROUND:

NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink: 145.825 Mhz FM APRS AX25
APRS Uplink: 145.825 MHz FM APRS AX25
Voice/PSK31 Uplink: 28.120 MHz

Packet to Voice ID: RAFT
[06112007]
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

From 4727276320940506968
X-Google-Thread: 10e8ad,1f0d817b8829f74e,start
X-Google-Attributes: gid10e8ad,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!border1.nntp.dca.giganews.com!nntp.giganews.com!local01.nntp.dca.giganews.com!nntp.comcast.com!news.comcast.com.POSTED!not-for-mail
NNTP-Posting-Date: Fri, 06 Jul 2007 12:14:38 -0500
From: "John Doe" <hgorden@adelphia.net>
Newsgroups: rec.radio.amateur.space
Subject: for those of you who don't subscribe to it - This is amazing - well worth taking the time to read it!
Date: Fri, 6 Jul 2007 13:14:45 -0400
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.3138
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.3138
X-RFC2646: Format=Flowed; Original
Message-ID: <vq-dnaEd_7Dj5RPbnZ2dnUVZ_tqtnZ2d@comcast.com>

```
Lines: 16
X-Usenet-Provider: http://www.giganews.com
NNTP-Posting-Host: 76.100.201.181
X-Trace: sv3-
btZVBMnNy+RadGtIDzgcaNVwYyYB9TFdFfm1sxzcsvPMJwL3ACT72oRWF6Wie9TgWgwQ2/a7BsLVzWl!
bHuDZjKbjawXd3Hj/X87SNJARH8jHmm04TkSgHpZU/277gDDZKB1ILOwM4wrCMtFdoX9SZZAzpCo!
mnW+vAqiQK7mWbnA1gGNBr2mJgpzJkc=
X-Complaints-To: abuse@comcast.net
X-DMCA-Complaints-To: dmca@comcast.net
X-Abuse-and-DMCA-Info: Please be sure to forward a copy of ALL headers
X-Abuse-and-DMCA-Info: Otherwise we will be unable to process your complaint
properly
X-Postfilter: 1.3.35
Xref: g2news1.google.com rec.radio.amateur.space:939
```

This is amazing - well worth taking the time to read it!

NASA Science News for July 6, 2007
A pair of robots named ASTRO and NextSat have been working together in Earth orbit, docking, undocking, flying around and refueling, as if they have minds of their own. Their adventures may herald a revolution in the way we explore space.

FULL STORY at

http://science.nasa.gov/headlines/y2007/06jul_astroandnextsat.htm?list865068

```
From -3313962795730890956
X-Google-Thread: 10e8ad,11215910f74a2739,start
X-Google-Thread: 113975,11215910f74a2739,start
X-Google-Attributes: gid10e8ad,gid113975,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!newshub.sdsu.edu!news.astraweb.com!
border2.newsrouter.astraweb.com!not-for-mail
From: Chris Steyaert <observations@rmob.org>
Newsgroups: rec.radio.amateur.space,sci.astro.amateur
Subject: Radio Meteor Obs. Bull. June 2007
Date: Sat, 07 Jul 2007 18:01:49 +0200
Message-ID: <46ev83lcfm5tp86adq5rsht1h5js078ons@4ax.com>
X-Newsreader: Forte Agent 1.93/32.576 English (American)
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Lines: 17
Organization: Unlimited download news at news.astraweb.com
NNTP-Posting-Host: 57441979.news.astraweb.com
X-Trace: DXC=_VF]X@a`g\2R@Y?`:@TCo5L?0kYOcDh@:SG][8Q9:9=2Ff\QX;;?
```

```
o_1KX07\YZ`QZ6Aei:WmXHTe?D:6D?mN>hV5
Xref: g2news1.google.com rec.radio.amateur.space:940 sci.astro.amateur:83030
```

Radio Meteor Observation Bulletin No. 167 of June 2007 (74 K) is available now as

http://visualrmob.free.fr/rmobtext/rmob0706.txt

More information and the visual presentation of the hourly forward scatter counts can be found on

http://www.rmob.org

http://radio.data.free.fr

Chris

```
From 1868467082581213590
X-Google-Thread: 10e8ad,3571eab6880e7f68,start
X-Google-Thread: 10b9c8,3571eab6880e7f68,start
X-Google-Attributes: gid10e8ad,gid10b9c8,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!newsfeed.stanford.edu!panix!
rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-190 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Thu, 12 Jul 2007 21:14:52 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 1256
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <001701c7c4eb$2e856040$6601a8c0@familyroom>
NNTP-Posting-Host: panix1.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader2.panix.com 1184289293 28458 166.84.1.1 (13 Jul 2007 01:14:53 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Fri, 13 Jul 2007 01:14:53 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
```

X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Xref: g2news1.google.com rec.radio.amateur.space:941 rec.radio.info:401

This report is organized into FIVE parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites
Part 5 (S5) - deorbited/returned satellites

SB SAT @ AMSAT W8ISS ANS-190.S1
WSR 190 Part 1 07/09/2007

AMSAT NEWS SERVICE BULLETIN 190.S1 FROM AMSAT HQ
SILVER SPRING, MD, July 09, 2007
TO ALL RADIO AMATEURS
BID: $ANS-190.S1

VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.859330 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsat.in/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is
active. Each transponder has a different beacon.
[06252007]
=====
AO-51 ECHO

Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Modes: FM Repeater - L/s

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink: 145.880 MHZ FM
                       145.880 MHz USB
                       145.920 MHz FM
                      1268.700 MHz FM 67Hz PL tone
Digital Downlinks: 435.150 MHz FM 38k4 Digital, PBP, 1 watt output
                       435.150 MHz FM 9k6 Digital, Pacsat Broadcast Protocol
                      2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Digital, Pacsat Broadcast Protocol
                      1268.700 mhz FM 9k6 PBP Digital
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[07092007]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml

(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer
on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on
and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10
minute timer.
[05282007]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Recovery Operations

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

JARL English webpage: http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm
AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's CW
telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts.htm
[07022007]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

```
Current Mode: V/u

Uplink:   145.850 MHz FM
Downlink: 436.795 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[05282007]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational depending on amount of Sunlight

Current Mode: Listen before transmitting

Uplink:   145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink:  29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons:   29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/

AO-7 Usage Guidelines on the AO-7 Log and Resource Site located at:
http://www.planetemily.com/ao7
[05282007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Mode: Occasional Voice/Packet/Digipeater

Expedition 15 crew:
Commander:              Fyodor Yurchikhin     RN3FI
Flight Engineer:        Clayton C. Anderson
Flight Engineer:        Oleg Kotov
```

STS-117 Crew:
Mission Commander: Frederick Sturckow
Shuttle Pilot: Lee Archambault
Flight Engineer: Sunita Williams KD5PLB
Mission Specialist: James Reilly II
Steven Swanson
Patrick Forrester
John D. Olivas

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

SSTV TESTING:
Worldwide Reported Downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS
RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.
[06182007]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-190.S2
WSR 190 Part 2 07/09/2007

AMSAT NEWS SERVICE BULLETIN 190.S2 FROM AMSAT HQ
SILVER SPRING, MD, July 09, 2007
TO ALL RADIO AMATEURS
BID: $ANS-190.S2

CAPE1
Catalog Number:
Launch Date: April 17,2007

Status: In Orbit

Current Mode: /u

Downlink: 435.245 MHz 9600 bs FSK AX.25
[04232007]
=====
CP3
Catalog Number:
Launch Date: April 17,2007

Status: In Orbit

Current Mode: /u

Downlink: 436.845 MHz 1200 bps FSK AX.25
[04232007]
=====
CP4
Catalog Number:
Launch Date: April 17,2007

Status: In Orbit

Current Mode: /u

Downlink: 437.325 MHz 1200 bps FSK AX.25
[04232007]
=====
Libertad-1
Catalog Number:
Launch Date: April 17, 2007

Status: In Orbit

Current Mode: /u

Downlink: 437.405 MHz 1200 bps AFSK AX.25
[04232007]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: In Orbit

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder: 145.825 Mhz FM
[02052007]
=====
?O-?? FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: In Orbit

Current Mode: /u

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[02262007]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: In Orbit

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01222007]
=====
GENESAT-1 ?O-??
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Current Mode: /u

Telemetry Beacon Downlink: 437.0670 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[01082007]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Operational

```
Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon:             437.2750 MHz CW

Callsign: JR8YJT
[10302006]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon:             437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
[03262007]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launched: June 30, 2003

Status: Operational

Current Mode: /u

Beacon:     436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[01082007]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launched: February 21, 2006

Status: Semi-Operational - Constant Carrier only

Uplink:  1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan ? )
```

```
Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[01082007]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Mode(s): FM Repeater - L/s

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink:   145.880 MHZ FM
                       145.880 MHz USB
                       145.920 MHz FM
                      1268.700 MHz FM 67Hz PL tone
Digital Downlinks:     435.150 MHz FM 38k4 Digital, PBP, 1 watt output
                       435.150 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:        145.860 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      1268.700 mhz FM 9k6 PBP Digital
Beacon:                435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[07092007]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Operational only in Full Sun Light

Current Mode: V/v
```

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[05282007]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational.

Current Mode: Telemetry Downlink - 2M

Telemetry Downlink: 145.826 MHz FM 1200 AFSK
Mode-S Beacon: 2401.500 MHz - OFF
UHFBeacon: 435.025 MHz - OFF

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Due to solar eclipses which will continue until late August 2007, the beacon will only transmit for about one orbit every 21 days. It is unlikely to be heard during this period.

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[05282007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Mode: Occasional Voice/Packet/Digipeater

Expedition 15 crew:
Commander: Fyodor Yurchikhin RN3FI
Flight Engineer: Clayton C. Anderson
Flight Engineer: Oleg Kotov

STS-117 Crew:
Mission Commander: Frederick Sturckow
Shuttle Pilot: Lee Archambault
Flight Engineer: Sunita Williams KD5PLB
Mission Specialist: James Reilly II

Steven Swanson
Patrick Forrester
John D. Olivas

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

SSTV TESTING:
Worldwide Reported Downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS
                    RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.
[06182007]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-190.S3
WSR 190 Part 3 07/09/2007

AMSAT NEWS SERVICE BULLETIN 190.S3 FROM AMSAT HQ
SILVER SPRING, MD, July 09, 2007
TO ALL RADIO AMATEURS
BID: $ANS-190.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 MHz FM 67Hz CTCSS
Voice Downlink: 2401.835 MHz FM
Packet Up/Downlink: 437.250 MHz 9k6 packet
Packet Downlink 2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Operational

Uplinks: 145.850 MHz
145.925 MHz 9600-baud FSK

Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[01222007]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, callsign KE6QMD, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

```
Status: Non-Operational

Uplink:   145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
V-band:   145.840 -  145.990 MHz CW/LSB
U-band:   435.550 -  435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks
---------
S2-band:  2401.225 -  2401.475 MHz CW/USB
K-band:  24048.010 - 24048.060 MHz CW/USB
Beacon:   2401.323 MHz
         24048.035 MHz
[01222007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink:    145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site
at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
```

Catalog Number: ?
Launched:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink: 145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12

```
[05012006]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Reloading of BBS software

Current Mode: V/U
              L/U

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[06112007]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Reported non-operational

Current Mode: V/U
              Digipeater - Authorized for APRS usage

Uplink:         145.900 MHz FM 1200-baud Manchester FSK
                145.920 MHz FM 1200-baud Manchester FSK
                145.940 MHz FM 1200-baud Manchester FSK
                145.960 MHz FM 1200-baud Manchester FSK
Downlink:       437.026 MHz SSB 1200-baud PSK
Mode-S Beacon: 2401.1428 MHz

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.025 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[06112007]
```

```
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign:       POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012006]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: Downlink only

Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[012212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
KO-23 KITSAT
Catalog number: 22077
```

```
Launched: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HL01-11
BBS: HL01-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz
```

```
More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplinks:          145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink:      437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[01222007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
[05012006]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
```

```
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet: Non-Operational
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon:   145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
```

```
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink  29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
[01152007]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon:    29.352 MHz (intermittent)

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
```

Launched: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB

Beacon: 145.860 MHz

Robot: 145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-190.S4
WSR 190 Part 4 07/09/2007

AMSAT NEWS SERVICE BULLETIN 190.S4 FROM AMSAT HQ
SILVER SPRING, MD, July 09, 2007
TO ALL RADIO AMATEURS
BID: $ANS-190.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE PROPOSED FOR LAUNCH AT THIS TIME:

Phase 5a Mars Mission
Catalog Number:
Proposed Launch Date: 2009 or 2011

Status: Design Phase

For the latest project status update please visit the AMSAT-DL P5-A web page:
http://ticket-to-mars.org
[01222007]
=====
PHASE 3E AO-??
Catalog number:
Proposed Launch Date: Late 2007

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/
[01222007]
=====
Eagle AO-??
Catalog Number:
Proposed Launch Date: Early/Mid 2009

Status: Design Phase

For the latest project status updates please visit the AMSAT-NA webpage:
http://www.amsat.org
[01222007]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-190.S5
WSR 190 Part 5 07/09/2007

AMSAT NEWS SERVICE BULLETIN 190.S5 FROM AMSAT HQ
SILVER SPRING, MD, July 09, 2007
TO ALL RADIO AMATEURS
BID: $ANS-190.S5

THE FOLLOWING SATELLITES HAVE DE-ORBITED OR HAVE BEEN RETURNED TO THE GROUND:

NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink: 145.825 Mhz FM APRS AX25
APRS Uplink: 145.825 MHz FM APRS AX25
Voice/PSK31 Uplink: 28.120 MHz

Packet to Voice ID: RAFT
[06112007]
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:

http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

```
From -5921562035322478414
X-Google-Thread: 113975,f8d09a42f9fc3122,start
X-Google-Thread: f74ae,f8d09a42f9fc3122,start
X-Google-Thread: fdc67,f8d09a42f9fc3122,start
X-Google-Thread: 10e8ad,f8d09a42f9fc3122,start
X-Google-Thread: 10cf28,f8d09a42f9fc3122,start
X-Google-Attributes: gid113975,gidf74ae,gidfdc67,gid10e8ad,gid10cf28,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
```

```
Path: g2news1.google.com!postnews.google.com!x35g2000prf.googlegroups.com!not-for-
mail
From:  Radium <glucegen1@gmail.com>
Newsgroups:
sci.astro.amateur,sci.astro,alt.astronomy,rec.radio.amateur.space,uk.sci.astronomy
Subject: Do magnetars emit audible LW AM radio waves that can be heard on
receivers?
Date: Fri, 13 Jul 2007 19:50:41 -0000
Organization: http://groups.google.com
Lines: 11
Message-ID: <1184356241.780744.194470@x35g2000prf.googlegroups.com>
NNTP-Posting-Host: 75.84.2.31
Mime-Version: 1.0
Content-Type: text/plain; charset="iso-8859-1"
X-Trace: posting.google.com 1184356242 18086 127.0.0.1 (13 Jul 2007 19:50:42 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Fri, 13 Jul 2007 19:50:42 +0000 (UTC)
User-Agent: G2/1.0
X-HTTP-UserAgent: Mozilla/5.0 (Windows; U; Win98; en-US; rv:1.8b) Gecko/
20050217,gzip(gfe),gzip(gfe)
Complaints-To: groups-abuse@google.com
Injection-Info: x35g2000prf.googlegroups.com; posting-host=75.84.2.31;
   posting-account=ps2QrAMAAAA6_jCuRt2JEIpn5Otqf_w0
Xref: g2news1.google.com sci.astro.amateur:83405 sci.astro:78565
alt.astronomy:156133 rec.radio.amateur.space:942 uk.sci.astronomy:21877

Hi:

Do magnetars emit AM radio waves below the medium-wave range? If so,
how do we detect these waves? Can these waves be heard on the AM
radio? If so, what do they sound like?


Thanks,

Radium




From 6841269981131484030
X-Google-Thread: 113975,f8d09a42f9fc3122
X-Google-Thread: f74ae,f8d09a42f9fc3122
X-Google-Thread: fdc67,f8d09a42f9fc3122
X-Google-Thread: 10e8ad,f8d09a42f9fc3122
X-Google-Thread: 10cf28,f8d09a42f9fc3122
X-Google-Attributes: gid113975,gidf74ae,gidfdc67,gid10e8ad,gid10cf28,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!news.glorb.com!wns14feed!
worldnet.att.net!attbi_s22.POSTED!53ab2750!not-for-mail
From: Sam Wormley <swormley1@mchsi.com>
Organization: None Needed
User-Agent: Thunderbird 1.5.0.12 (X11/20070529)
MIME-Version: 1.0
```

```
Newsgroups:
sci.astro.amateur,sci.astro,alt.astronomy,rec.radio.amateur.space,uk.sci.astronomy
Subject: Re: Do magnetars emit audible LW AM radio waves that can be heard
 on receivers?
References: <1184356241.780744.194470@x35g2000prf.googlegroups.com>
In-Reply-To: <1184356241.780744.194470@x35g2000prf.googlegroups.com>
Content-Type: text/plain; charset=ISO-8859-1; format=flowed
Content-Transfer-Encoding: 7bit
Lines: 9
Message-ID: <1VQli.10184$Xa3.3577@attbi_s22>
NNTP-Posting-Host: 12.216.12.73
X-Complaints-To: abuse@mchsi.com
X-Trace: attbi_s22 1184357053 12.216.12.73 (Fri, 13 Jul 2007 20:04:13 GMT)
NNTP-Posting-Date: Fri, 13 Jul 2007 20:04:13 GMT
Date: Fri, 13 Jul 2007 20:04:13 GMT
Xref: g2news1.google.com sci.astro.amateur:83406 sci.astro:78566
alt.astronomy:156134 rec.radio.amateur.space:943 uk.sci.astronomy:21878
```

Radium wrote:
> Hi:
>
> Do magnetars emit AM radio waves below the medium-wave range? If so,
> how do we detect these waves? Can these waves be heard on the AM
> radio? If so, what do they sound like?
>

Why would you expect a star to generate amplitude modulation?

```
From 5126802122185150754
X-Google-Thread: 113975,f8d09a42f9fc3122
X-Google-Thread: f74ae,f8d09a42f9fc3122
X-Google-Thread: fdc67,f8d09a42f9fc3122
X-Google-Thread: 10e8ad,f8d09a42f9fc3122
X-Google-Thread: 10cf28,f8d09a42f9fc3122
X-Google-Attributes: gid113975,gidf74ae,gidfdc67,gid10e8ad,gid10cf28,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!news1.google.com!newshub.sdsu.edu!elnk-
nf2-pas!newsfeed.earthlink.net!stamper.news.pas.earthlink.net!
newsread1.news.pas.earthlink.net.POSTED!d2e3edad!not-for-mail
From: Chris L Peterson <clp@alumni.caltech.edu>
Newsgroups:
sci.astro.amateur,sci.astro,alt.astronomy,rec.radio.amateur.space,uk.sci.astronomy
Subject: Re: Do magnetars emit audible LW AM radio waves that can be heard on
receivers?
Organization: Cloudbait Observatory
Message-ID: <0knf93pe8ac1mq0eefvrt8bah42hbvfv65@4ax.com>
References: <1184356241.780744.194470@x35g2000prf.googlegroups.com>
<1VQli.10184$Xa3.3577@attbi_s22>
X-Newsreader: Forte Agent 1.93/32.576 English (American)
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
```

Lines: 17
Date: Fri, 13 Jul 2007 20:23:19 GMT
NNTP-Posting-Host: 66.82.114.184
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread1.news.pas.earthlink.net 1184358199 66.82.114.184 (Fri, 13 Jul 2007 13:23:19 PDT)
NNTP-Posting-Date: Fri, 13 Jul 2007 13:23:19 PDT
Xref: g2news1.google.com sci.astro.amateur:83412 sci.astro:78569 alt.astronomy:156138 rec.radio.amateur.space:944 uk.sci.astronomy:21881

On Fri, 13 Jul 2007 20:04:13 GMT, Sam Wormley <swormley1@mchsi.com> wrote:

>   Why would you expect a star to generate amplitude modulation?

Why would you expect it to generate anything else? These sorts of objects are rotating at high speed, which modulates the amplitude we receive. While there are probably other types of modulation as well, the amplitude variation is the dominant effect. Of course, magnetars are emitting mainly hard x-rays. I don't know that there's enough long wavelength energy to detect on any kind of ordinary radio.

Chris L Peterson
Cloudbait Observatory
http://www.cloudbait.com

From -5538275874437683142
X-Google-Thread: 113975,f8d09a42f9fc3122
X-Google-Thread: f74ae,f8d09a42f9fc3122
X-Google-Thread: fdc67,f8d09a42f9fc3122
X-Google-Thread: 10e8ad,f8d09a42f9fc3122
X-Google-Thread: 10cf28,f8d09a42f9fc3122
X-Google-Attributes: gid113975,gidf74ae,gidfdc67,gid10e8ad,gid10cf28,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!border1.nntp.dca.giganews.com!border2.nntp.dca.giganews.com!nntp.giganews.com!cyclone1.gnilink.net!spamkiller.gnilink.net!gnilink.net!trnddc01.POSTED!24dd0da6!not-for-mail
Sender: Jim Pennino <jimp@mail.specsol.com>
Message-ID: <9f6lm4-k62.ln1@mail.specsol.com>
From: jimp@specsol.spam.sux.com
Subject: Re: Do magnetars emit audible LW AM radio waves that can be heard on receivers?
Newsgroups: sci.astro.amateur,sci.astro,alt.astronomy,rec.radio.amateur.space,uk.sci.astronomy
References: <1184356241.780744.194470@x35g2000prf.googlegroups.com>
User-Agent: tin/1.8.3-20070201 ("Scotasay") (UNIX) (SunOS/5.9 (sun4u))
Lines: 25
Date: Fri, 13 Jul 2007 21:15:01 GMT
NNTP-Posting-Host: 71.118.11.57
X-Complaints-To: abuse@verizon.net

X-Trace: trnddc01 1184361301 71.118.11.57 (Fri, 13 Jul 2007 17:15:01 EDT)
NNTP-Posting-Date: Fri, 13 Jul 2007 17:15:01 EDT
Xref: g2news1.google.com sci.astro.amateur:83415 sci.astro:78570
alt.astronomy:156140 rec.radio.amateur.space:945 uk.sci.astronomy:21882
X-Original-Bytes: 1716

In rec.radio.amateur.space Radium <glucegen1@gmail.com> wrote:
> Hi:

> Do magnetars emit AM radio waves below the medium-wave range? If so,
> how do we detect these waves? Can these waves be heard on the AM
> radio? If so, what do they sound like?

Frequencies above approximately 100 MHz almost always get through
the ionization layers.

Frequencies in the approximate range of 10 MHz to 100 MHz sometimes
get through

Frequencies below approximately 10 MHz almost never get through.

So, if by "the AM radio" you mean a Broadcast Band radio which
runs from about .5 MHz to 1.2 MHz, not a chance in hell of ever
hearing anything from off the planet.

Try again.

--
Jim Pennino

Remove .spam.sux to reply.

From -6326723428300693294
X-Google-Thread: 113975,f8d09a42f9fc3122
X-Google-Thread: f74ae,f8d09a42f9fc3122
X-Google-Thread: fdc67,f8d09a42f9fc3122
X-Google-Thread: 10e8ad,f8d09a42f9fc3122
X-Google-Thread: 10cf28,f8d09a42f9fc3122
X-Google-Attributes: gid113975,gidf74ae,gidfdc67,gid10e8ad,gid10cf28,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!postnews.google.com!
g37g2000prf.googlegroups.com!not-for-mail
From: Radium <glucegen1@gmail.com>
Newsgroups:
sci.astro.amateur,sci.astro,alt.astronomy,rec.radio.amateur.space,uk.sci.astronomy
Subject: Re: Do magnetars emit audible LW AM radio waves that can be heard on
receivers?
Date: Fri, 13 Jul 2007 14:50:27 -0700
Organization: http://groups.google.com
Lines: 37
Message-ID: <1184363427.894765.114000@g37g2000prf.googlegroups.com>
References: <1184356241.780744.194470@x35g2000prf.googlegroups.com>

```
   <9f6lm4-k62.ln1@mail.specsol.com>
NNTP-Posting-Host: 75.84.2.31
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"
X-Trace: posting.google.com 1184363428 29691 127.0.0.1 (13 Jul 2007 21:50:28 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Fri, 13 Jul 2007 21:50:28 +0000 (UTC)
In-Reply-To: <9f6lm4-k62.ln1@mail.specsol.com>
User-Agent: G2/1.0
X-HTTP-UserAgent: Mozilla/5.0 (Windows; U; Win98; en-US; rv:1.8b) Gecko/
20050217,gzip(gfe),gzip(gfe)
Complaints-To: groups-abuse@google.com
Injection-Info: g37g2000prf.googlegroups.com; posting-host=75.84.2.31;
   posting-account=ps2QrAMAAAA6_jCuRt2JEIpn5Otqf_w0
Xref: g2news1.google.com sci.astro.amateur:83416 sci.astro:78576
alt.astronomy:156144 rec.radio.amateur.space:946 uk.sci.astronomy:21883
```

On Jul 13, 2:15 pm, j...@specsol.spam.sux.com wrote:

> In rec.radio.amateur.space Radium <gluceg...@gmail.com> wrote:
>
> > Hi:
> > Do magnetars emit AM radio waves below the medium-wave range? If so, how do we detect these waves? Can these waves be heard on the AM radio? If so, what do they sound like?
>
> Frequencies above approximately 100 MHz almost always get through the ionization layers.
>
> Frequencies in the approximate range of 10 MHz to 100 MHz sometimes get through
>
> Frequencies below approximately 10 MHz almost never get through.
>
> So, if by "the AM radio" you mean a Broadcast Band radio which runs from about .5 MHz to 1.2 MHz, not a chance in hell of ever hearing anything from off the planet.
>
> Try again.

Okay. But what if this is a supercooled AM radio receiver on a spaceship orbiting Earth? If I am on a space station like MIR and this station has a supercooled AM radio 44.1 KHz frequency receiver, will I hear anything specific of magnetars?

44.1 KHz is the carrier-frequency this hypothetical receiver receives.

I place the frequency of this hypothetical AM radio carrier wave at 44.1 KHz for the same reason CDs use a sample rate of 44.1 KHz -- it is the minimum required to prevent aliasing.

AFAIK, space station orbit earth above the ionosphere so the limitations [preventing long-waves from outer space from reaching the Earth's surface] do not apply.

```
From 5076334111652482910
X-Google-Thread: 113975,f8d09a42f9fc3122
X-Google-Thread: f74ae,f8d09a42f9fc3122
X-Google-Thread: fdc67,f8d09a42f9fc3122
X-Google-Thread: 10e8ad,f8d09a42f9fc3122
X-Google-Thread: 10cf28,f8d09a42f9fc3122
X-Google-Attributes: gid113975,gidf74ae,gidfdc67,gid10e8ad,gid10cf28,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx01.iad01.newshosting.com!newshosting.com!
69.28.186.77.MISMATCH!hwmnpeer03.lga!hwmnpeer01.lga!news.highwinds-media.com!
cycny01.gnilink.net!spamkiller.gnilink.net!gnilink.net!trnddc06.POSTED!24dd0da6!
not-for-mail
Sender: Jim Pennino <jimp@mail.specsol.com>
Message-ID: <nmflm4-v6s.ln1@mail.specsol.com>
From: jimp@specsol.spam.sux.com
Subject: Re: Do magnetars emit audible LW AM radio waves that can be heard on
receivers?
Newsgroups:
sci.astro.amateur,sci.astro,alt.astronomy,rec.radio.amateur.space,uk.sci.astronomy
References: <1184356241.780744.194470@x35g2000prf.googlegroups.com>   <9f6lm4-
k62.ln1@mail.specsol.com> <1184363427.894765.114000@g37g2000prf.googlegroups.com>
User-Agent: tin/1.8.3-20070201 ("Scotasay") (UNIX) (SunOS/5.9 (sun4u))
Lines: 61
Date: Fri, 13 Jul 2007 23:55:01 GMT
NNTP-Posting-Host: 71.118.11.57
X-Complaints-To: abuse@verizon.net
X-Trace: trnddc06 1184370901 71.118.11.57 (Fri, 13 Jul 2007 19:55:01 EDT)
NNTP-Posting-Date: Fri, 13 Jul 2007 19:55:01 EDT
Xref: g2news1.google.com sci.astro.amateur:83421 sci.astro:78579
alt.astronomy:156157 rec.radio.amateur.space:947 uk.sci.astronomy:21884

In rec.radio.amateur.space Radium <glucegen1@gmail.com> wrote:
> On Jul 13, 2:15 pm, j...@specsol.spam.sux.com wrote:
> > In rec.radio.amateur.space Radium <gluceg...@gmail.com> wrote:
> >
> > > Hi:
> > > Do magnetars emit AM radio waves below the medium-wave range? If so,
> > > how do we detect these waves? Can these waves be heard on the AM
> > > radio? If so, what do they sound like?
> >
> > Frequencies above approximately 100 MHz almost always get through
> > the ionization layers.
> >
> > Frequencies in the approximate range of 10 MHz to 100 MHz sometimes
> > get through
> >
> > Frequencies below approximately 10 MHz almost never get through.
> >
> > So, if by "the AM radio" you mean a Broadcast Band radio which
```

> > runs from about .5 MHz to 1.2 MHz, not a chance in hell of ever
> > hearing anything from off the planet.
> >
> > Try again.

> Okay. But what if this is a supercooled AM radio receiver on a
> spaceship orbiting Earth? If I am on a space station like MIR and this
> station has a supercooled AM radio 44.1 KHz frequency receiver, will I
> hear anything specific of magnetars?

Generally, super cooled electronic components stop working.

Try again.

> 44.1 KHz is the carrier-frequency this hypothetical receiver receives.

A super stupid frequency to pick. Generally for listening for natural
phenomena, you want a wide as possible bandwidth given the noise
floor.

> I place the frequency of this hypothetical AM radio carrier wave at
> 44.1 KHz for the same reason CDs use a sample rate of 44.1 KHz -- it
> is the minimum required to prevent aliasing.

Yeah, for digitized, audible music, you twit.

Are you expecting to hear alien rock and roll?

An AM receiver isn't digitizing anything, sample rates don't apply,
and aliasing doesn't apply.

Try again, idiot.

> AFAIK, space station orbit earth above the ionosphere so the
> limitations [preventing long-waves from outer space from reaching the
> Earth's surface] do not apply.

Probably the only thing you got right.

--
Jim Pennino

Remove .spam.sux to reply.

From -2341003886946303304
X-Google-Thread: 113975,f8d09a42f9fc3122
X-Google-Thread: f74ae,f8d09a42f9fc3122
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m37g2000prh.googlegroups.com!not-for-mail
From:  Radium <glucegen1@gmail.com>
Newsgroups:
sci.astro.amateur,sci.astro,alt.astronomy,rec.radio.amateur.space,uk.sci.astronomy
Subject: Re: Do magnetars emit audible LW AM radio waves that can be heard on
receivers?
Date: Fri, 13 Jul 2007 17:36:47 -0700
Organization: http://groups.google.com
Lines: 50
Message-ID: <1184373407.506861.132200@m37g2000prh.googlegroups.com>
References: <1184356241.780744.194470@x35g2000prf.googlegroups.com>
   <9f6lm4-k62.ln1@mail.specsol.com>
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In-Reply-To: <nmflm4-v6s.ln1@mail.specsol.com>
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Xref: g2news1.google.com sci.astro.amateur:83425 sci.astro:78580
alt.astronomy:156164 rec.radio.amateur.space:948 uk.sci.astronomy:21885
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From 4907806813954351495
X-Google-Thread: 113975,f8d09a42f9fc3122
X-Google-Thread: f74ae,f8d09a42f9fc3122
X-Google-Thread: fdc67,f8d09a42f9fc3122
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Sender: Jim Pennino <jimp@mail.specsol.com>
Message-ID: <sfllm4-dkd.ln1@mail.specsol.com>
From: jimp@specsol.spam.sux.com
Subject: Re: Do magnetars emit audible LW AM radio waves that can be heard on receivers?
Newsgroups: sci.astro.amateur,sci.astro,alt.astronomy,rec.radio.amateur.space,uk.sci.astronomy
References: <1184356241.780744.194470@x35g2000prf.googlegroups.com> <9f6lm4-k62.ln1@mail.specsol.com> <1184363427.894765.114000@g37g2000prf.googlegroups.com> <nmflm4-v6s.ln1@mail.specsol.com> <1184373407.506861.132200@m37g2000prh.googlegroups.com>

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Lines: 79
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NNTP-Posting-Date: Fri, 13 Jul 2007 21:35:02 EDT
Xref: g2news1.google.com sci.astro.amateur:83430 sci.astro:78582
alt.astronomy:156171 rec.radio.amateur.space:949 uk.sci.astronomy:21886

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Also, the same question but operating from the Earth's surface.

And this is an astronomy/astro-physics question, not an electromagnetics question.

Notice there is nothing in there about "supercooling", modulation type, sampling rates, or any of the other nonsense in your question.

Babbling twit.

--
Jim Pennino

Remove .spam.sux to reply.

From 3908857800761067688
X-Google-Thread: fb1f8,50cd0e9e2fac2ab2,start
X-Google-Thread: fcc6e,50cd0e9e2fac2ab2,start
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X-Google-Attributes: gidfb1f8,gidfcc6e,gid10b271,gid1110fe,gid10e8ad,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!postnews.google.com!e9g2000prf.googlegroups.com!not-for-mail
From: Radium <glucegen1@gmail.com>
Newsgroups:
rec.audio.tech,rec.radio.amateur.antenna,sci.physics,sci.physics.electromag,rec.radio.amateur.space
Subject: Please don't trivialize [was Re: Do magnetars emit audible LW AM radio

waves that can be heard on receivers?]
Date: Fri, 13 Jul 2007 21:23:59 -0700
Organization: http://groups.google.com
Lines: 52
Message-ID: <1184387039.122470.226910@e9g2000prf.googlegroups.com>
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Complaints-To: groups-abuse@google.com
Injection-Info: e9g2000prf.googlegroups.com; posting-host=75.84.2.31;
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Xref: g2news1.google.com rec.audio.tech:32419 rec.radio.amateur.antenna:44169
sci.physics:355846 sci.physics.electromag:10977 rec.radio.amateur.space:950

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From 9148667592274961325
X-Google-Thread: fb1f8,50cd0e9e2fac2ab2
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X-Google-Thread: 10b271,50cd0e9e2fac2ab2
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news.usenetserver.com!in02.usenetserver.com!news.usenetserver.com!
cycny01.gnilink.net!spamkiller.gnilink.net!gnilink.net!trnddc06.POSTED!24dd0da6!
not-for-mail
Sender: Jim Pennino <jimp@mail.specsol.com>
Message-ID: <7h2mm4-36k.ln1@mail.specsol.com>
From: jimp@specsol.spam.sux.com
Subject: Re: Please don't trivialize [was Re: Do magnetars emit audible LW AM radio waves that can be heard on receivers?]
Newsgroups:
rec.audio.tech,rec.radio.amateur.antenna,sci.physics,sci.physics.electromag,rec.radio.amateur.space
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Lines: 81
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sci.physics:355850 sci.physics.electromag:10978 rec.radio.amateur.space:951

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From 6928253221224178429
X-Google-Thread: 113975,f8d09a42f9fc3122
X-Google-Thread: f74ae,f8d09a42f9fc3122
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From: "George Dishman" <george@briar.demon.co.uk>
Newsgroups:
sci.astro.amateur,sci.astro,alt.astronomy,rec.radio.amateur.space,uk.sci.astronomy
Subject: Re: Do magnetars emit audible LW AM radio waves that can be heard on
receivers?
Date: Sat, 14 Jul 2007 09:17:46 +0100
Organization: freedom2surf
Lines: 28
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Xref: g2news1.google.com sci.astro.amateur:83442 sci.astro:78600
alt.astronomy:156190 rec.radio.amateur.space:952 uk.sci.astronomy:21895
```

"Radium" <glucegen1@gmail.com> wrote in message
news:1184373407.506861.132200@m37g2000prh.googlegroups.com...
..

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No.

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> frequency. From the answers to my previous questions regarding carrier
> frequencies, I thought it was established that you mathematically
> can't have a modulator frequency more than 0.5x the carrier-frequency.

No. You can't have a sampling rate less than twice the highest
frequency in the source without aliasing, but that refers only
to sampling.

> What happened?

At a guess, you misunderstood the context of the answers to
your previous questions, or those who answered misunderstood
the context of your questions.

HTH
George

```
From -1112390538499527413
X-Google-Thread: 113975,f8d09a42f9fc3122
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X-Google-Thread: 10cf28,f8d09a42f9fc3122
X-Google-Attributes: gid113975,gidf74ae,gidfdc67,gid10e8ad,gid10cf28,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Subject: Re: Do magnetars emit audible LW AM radio waves that can be heard on
receivers?
From: Andrew Smallshaw <andrews@sdf.lonestar.org>
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Date: Sat, 14 Jul 2007 20:08:16 +0000 (UTC)
Message-ID: <slrnf9ib9a.q0j.andrews@sdf.lonestar.org>
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<nmflm4-v6s.ln1@mail.specsol.com>
<1184373407.506861.132200@m37g2000prh.googlegroups.com> <sfllm4-dkd.ln1@mail.specsol.com>
Lines: 26
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nx01.iad01.newshosting.com!newshosting.com!news-out.newsfeeds.com!prop4-west.newsfeeds.com!news-in1.spamkiller.net!egsner!news.cirr.com!not-for-mail
Newsgroups:
sci.astro.amateur,sci.astro,alt.astronomy,rec.radio.amateur.space,uk.sci.astronomy
X-Trace: chessie.cirr.com 1184443696 28593 192.94.73.1 (14 Jul 2007 20:08:16 GMT)
X-Complaints-To: abuse@cirr.com
NNTP-Posting-Date: Sat, 14 Jul 2007 20:08:16 +0000 (UTC)
User-Agent: slrn/0.9.8.1 (NetBSD)
Xref: g2news1.google.com sci.astro.amateur:83482 sci.astro:78639
alt.astronomy:156251 rec.radio.amateur.space:953 uk.sci.astronomy:21912

On 2007-07-14, jimp@specsol.spam.sux.com wrote:
>
> If you had the slightest bit of education or common sense, you would
> be asking a question that makes sense instead of going on forever
> about the minutiae of what makes your questions idiotic.

This is Radium's usual posting style - to produce some random,
obvious ideas as if no one has ever considered them before, and
then to lightly dismiss any practical difficulties anyone points
out as trivial. After all, he's the genius, you're expected to
put in all the leg work to make a ridiculous idea actually work.

I've seen him all to many times before on the likes of
alt.comp.hardware.homebuilt. It's worth looking at the Goggle
archives to see just what nonsense he comes up with. My favourite
example is Radium's understanding of semiconductors:

> Why is silicon needed in the 1st place? For that matter, why any semi-
> conductor? Why not just use the copper electric circuits? Semi-
> conductors are half-way between conductor and insulator?

I think that that says it all.

--
Andrew Smallshaw
andrews@sdf.lonestar.org

From -7201343265341163494
X-Google-Thread: 113975,f8d09a42f9fc3122

```
X-Google-Thread: f74ae,f8d09a42f9fc3122
X-Google-Thread: fdc67,f8d09a42f9fc3122
X-Google-Thread: 10e8ad,f8d09a42f9fc3122
X-Google-Thread: 10cf28,f8d09a42f9fc3122
X-Google-Attributes: gid113975,gidf74ae,gidfdc67,gid10e8ad,gid10cf28,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!postnews.google.com!i38g2000prf.googlegroups.com!not-for-
mail
From:  Radium <glucegen1@gmail.com>
Newsgroups:
sci.astro.amateur,sci.astro,alt.astronomy,rec.radio.amateur.space,uk.sci.astronomy
Subject: Re: Do magnetars emit audible LW AM radio waves that can be heard on
receivers?
Date: Sat, 14 Jul 2007 20:58:59 -0000
Organization: http://groups.google.com
Lines: 35
Message-ID: <1184446739.705444.308660@i38g2000prf.googlegroups.com>
References: <1184356241.780744.194470@x35g2000prf.googlegroups.com>
   <9f6lm4-k62.ln1@mail.specsol.com>
   <1184363427.894765.114000@g37g2000prf.googlegroups.com>
   <nmflm4-v6s.ln1@mail.specsol.com>
   <1184373407.506861.132200@m37g2000prh.googlegroups.com>
   <f7a0mi$9li$1@news.freedom2surf.net>
NNTP-Posting-Host: 75.84.2.31
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"
X-Trace: posting.google.com 1184446740 371 127.0.0.1 (14 Jul 2007 20:59:00 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Sat, 14 Jul 2007 20:59:00 +0000 (UTC)
In-Reply-To: <f7a0mi$9li$1@news.freedom2surf.net>
User-Agent: G2/1.0
X-HTTP-UserAgent: Mozilla/5.0 (Windows; U; Win98; en-US; rv:1.8b) Gecko/
20050217,gzip(gfe),gzip(gfe)
Complaints-To: groups-abuse@google.com
Injection-Info: i38g2000prf.googlegroups.com; posting-host=75.84.2.31;
   posting-account=ps2QrAMAAAA6_jCuRt2JEIpn5Otqf_w0
Xref: g2news1.google.com sci.astro.amateur:83483 sci.astro:78640
alt.astronomy:156261 rec.radio.amateur.space:954 uk.sci.astronomy:21913

On Jul 14, 1:17 am, "George Dishman" <geo...@briar.demon.co.uk> wrote:
> "Radium" <gluceg...@gmail.com> wrote in message
>
> news:1184373407.506861.132200@m37g2000prh.googlegroups.com...
> ..
>
> > Isn't it true that the carrier-frequency must be at least 2x the
> > highest intended frequency of the modulator signal?
>
> No.

Karl Uppiano sharply disagrees.

Karl Uppiano explained in http://groups.google.com/group/sci.energy/msg/
```

a74d4d8ddcea47a5?hl=en&
:

> The highest modulating frequency for AM must be less than 1/2 the carrier
> frequency. Conversely, the lowest carrier frequency must be twice the
> highest modulating frequency. Period. I don't care what specific frequencies
> and/or energies and/or colors you propose.
>
> If you want to modulate at 20KHz, the carrier must be at least 40KHz. It is
> no coincidence that CD audio uses a 44.1KHz sample rate. It is essentially
> the same principle. If you exceed the Nyquist criterion, the sidebands
> overlap the baseband (i.e., aliasing occurs) and you cannot unambiguously
> decode the original modulation.

So who is right and who is wrong? I am so interested yet so frustrated
over this!

I keep getting conflicting answers about this topic. Its driving me
crazy!!!!!!!!!!!!!!!!

WTF is going on here?????????????????!!!!!!!!!!!!!!!!!!!?!?!?!?!?!

```
From -5163675127977219284
X-Google-Thread: 113975,f8d09a42f9fc3122
X-Google-Thread: f74ae,f8d09a42f9fc3122
X-Google-Thread: fdc67,f8d09a42f9fc3122
X-Google-Thread: 10e8ad,f8d09a42f9fc3122
X-Google-Thread: 10cf28,f8d09a42f9fc3122
X-Google-Attributes: gid113975,gidf74ae,gidfdc67,gid10e8ad,gid10cf28,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!news3.google.com!
out03b.usenetserver.com!news.usenetserver.com!in04.usenetserver.com!
news.usenetserver.com!nx01.iad01.newshosting.com!newshosting.com!
130.81.64.211.MISMATCH!cycny01.gnilink.net!spamkiller.gnilink.net!gnilink.net!
trnddc07.POSTED!24dd0da6!not-for-mail
Sender: Jim Pennino <jimp@mail.specsol.com>
Message-ID: <j8unm4-lj1.ln1@mail.specsol.com>
From: jimp@specsol.spam.sux.com
Subject: Re: Do magnetars emit audible LW AM radio waves that can be heard on
receivers?
Newsgroups:
sci.astro.amateur,sci.astro,alt.astronomy,rec.radio.amateur.space,uk.sci.astronomy
References: <1184356241.780744.194470@x35g2000prf.googlegroups.com>   <9f6lm4-
k62.ln1@mail.specsol.com>
<1184363427.894765.114000@g37g2000prf.googlegroups.com>   <nmflm4-
v6s.ln1@mail.specsol.com>
<1184373407.506861.132200@m37g2000prh.googlegroups.com>
<f7a0mi$9li$1@news.freedom2surf.net>
<1184446739.705444.308660@i38g2000prf.googlegroups.com>
User-Agent: tin/1.8.3-20070201 ("Scotasay") (UNIX) (SunOS/5.9 (sun4u))
Lines: 85
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Date: Sat, 14 Jul 2007 22:15:02 GMT
NNTP-Posting-Host: 71.118.11.57
X-Complaints-To: abuse@verizon.net
X-Trace: trnddc07 1184451302 71.118.11.57 (Sat, 14 Jul 2007 18:15:02 EDT)
NNTP-Posting-Date: Sat, 14 Jul 2007 18:15:02 EDT
Xref: g2news1.google.com sci.astro.amateur:83486 sci.astro:78646
alt.astronomy:156269 rec.radio.amateur.space:955 uk.sci.astronomy:21916

In rec.radio.amateur.space Radium <glucegen1@gmail.com> wrote:
> On Jul 14, 1:17 am, "George Dishman" <geo...@briar.demon.co.uk> wrote:
> > "Radium" <gluceg...@gmail.com> wrote in message
> >
> > news:1184373407.506861.132200@m37g2000prh.googlegroups.com...
> > ..
> >
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> > > highest intended frequency of the modulator signal?
> >
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> > frequency. Conversely, the lowest carrier frequency must be twice the
> > highest modulating frequency. Period. I don't care what specific frequencies
> > and/or energies and/or colors you propose.
> >
> > If you want to modulate at 20KHz, the carrier must be at least 40KHz. It is
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> > decode the original modulation.

> So who is right and who is wrong? I am so interested yet so frustrated
> over this!

> I keep getting conflicting answers about this topic. Its driving me
> crazy!!!!!!!!!!!!!!!!

> WTF is going on here??????????????????!!!!!!!!!!!!!!!!!!!!?!?!?!?!?!

WTF is going on is that you can't ask a meaningful question.

Here's some reality:

Q: Do extra terrestrial objects generate radio signals that can be heard
on Earth?

A. Yes, thousands and thousands of them. The field is called Radio

Astronomy. Google for more information.

Q: What frequency do they generate?

A: Basically, all of them. Most natural sources of RF are broad band generators much like an electric arc.

Q: Where would one listen for signal?

A: Usually from around 1 GHz to hundreds of GHz. Some objects in the solar system generate signals down into the tens of MHz but antenna size and the ionosphere place a practical lower limit of around 100 MHz.

Q: Is the signal AM or FM or what?

A: None of the above. Modulation implies a carrier with information. Natural objects generate broad band RF noise.

Q: Don't some of the sources vary in some way?

A: Some of them vary in magnitude over time, i.e. they get louder and weaker periodically. Some sources are "bursty", i.e. most of the time the are not there, then for some period of time they are.

Q: Do magnetars generate signals?

A: Some do, some don't seem to.

Q: Are these signals audible?

A: Depends on what you mean. If you hooked a speaker to a radio telescope, you would hear white noise, i.e. a hissing sound much like what you hear on an FM radio between stations.

--
Jim Pennino

Remove .spam.sux to reply.

From 2106368217870517184
X-Google-Thread: 113975,f8d09a42f9fc3122
X-Google-Thread: f74ae,f8d09a42f9fc3122
X-Google-Thread: fdc67,f8d09a42f9fc3122
X-Google-Thread: 10e8ad,f8d09a42f9fc3122
X-Google-Thread: 10cf28,f8d09a42f9fc3122
X-Google-Attributes: gid113975,gidf74ae,gidfdc67,gid10e8ad,gid10cf28,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Subject: Re: Do magnetars emit audible LW AM radio waves that can be heard on receivers?

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From: "George Dishman" <george@briar.demon.co.uk>
Date: Sun, 15 Jul 2007 00:11:38 +0100
Message-ID: <f7bku8$hsk$1@news.freedom2surf.net>
References: <1184356241.780744.194470@x35g2000prf.googlegroups.com>   <9f6lm4-
k62.ln1@mail.specsol.com>
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v6s.ln1@mail.specsol.com>
<1184373407.506861.132200@m37g2000prh.googlegroups.com>
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<1184446739.705444.308660@i38g2000prf.googlegroups.com>
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Organization: freedom2surf
Path: g2news1.google.com!news1.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx01.iad01.newshosting.com!newshosting.com!
198.186.194.251.MISMATCH!news-out.readnews.com!transit4.readnews.com!news-
out.usenet.com!sp6iad.superfeed.net!news-in1.newsgroups.com!news.freedom2surf.net!
not-for-mail
Newsgroups:
sci.astro.amateur,sci.astro,alt.astronomy,rec.radio.amateur.space,uk.sci.astronomy
X-Trace: news.freedom2surf.net 1184454409 18324 83.67.26.177 (14 Jul 2007 23:06:49
GMT)
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NNTP-Posting-Date: Sat, 14 Jul 2007 23:06:49 +0000 (UTC)
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.3138
X-RFC2646: Format=Flowed; Original
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.3138
X-Original-Bytes: 3349
Xref: g2news1.google.com sci.astro.amateur:83492 sci.astro:78649
alt.astronomy:156282 rec.radio.amateur.space:956 uk.sci.astronomy:21918
```

"Radium" <glucegen1@gmail.com> wrote in message
news:1184446739.705444.308660@i38g2000prf.googlegroups.com...

```
> On Jul 14, 1:17 am, "George Dishman" <geo...@briar.demon.co.uk> wrote:
>> "Radium" <gluceg...@gmail.com> wrote in message
>>
>> news:1184373407.506861.132200@m37g2000prh.googlegroups.com...
>> ..
>>
>> > Isn't it true that the carrier-frequency must be at least 2x the
>> > highest intended frequency of the modulator signal?
>>
>> No.
>
> Karl Uppiano sharply disagrees.
>
> Karl Uppiano explained in
> http://groups.google.com/group/sci.energy/msg/a74d4d8ddcea47a5?hl=en&
```

He is wrong. The basis of AM is that the sine wave

carrier is multiplied by another signal which can be
treated as a sum of sines. The relevant maths is:

 http://www.sosmath.com/trig/prodform/prodform.html

If the carrier frequency if fc and the modulation has
frequencies up to fm then you get sidebands like
this:

 http://en.wikipedia.org/wiki/Image:Am-sidebands.png

If you multiply 44.1kHz by a band from 20Hz to 20kHz,
you get an upper sideband given 44.12kHz to 64.1kHz
and a lower sideband from 44.08kHz down to 24.1kHz

>> The highest modulating frequency for AM must be less than 1/2 the carrier
>> frequency. Conversely, the lowest carrier frequency must be twice the
>> highest modulating frequency. Period. I don't care what specific
>> frequencies
>> and/or energies and/or colors you propose.
>>
>> If you want to modulate at 20KHz, the carrier must be at least 40KHz. It
>> is
>> no coincidence that CD audio uses a 44.1KHz sample rate. It is
>> essentially
>> the same principle. If you exceed the Nyquist criterion, the sidebands
>> overlap the baseband (i.e., aliasing occurs) and you cannot unambiguously
>> decode the original modulation.

Nyquist applies to sampling.

> So who is right and who is wrong?

Look at the maths, it is never wrong. Modulating fc
with fm gives a lowest frequency of fc-fm so as long
as fc > fm, you don't get aliasing.

George

```
From 7355412026479822300
X-Google-Thread: fb1f8,50cd0e9e2fac2ab2
X-Google-Thread: fcc6e,50cd0e9e2fac2ab2
X-Google-Thread: 10b271,50cd0e9e2fac2ab2
X-Google-Thread: 1110fe,50cd0e9e2fac2ab2
X-Google-Thread: 10e8ad,50cd0e9e2fac2ab2
X-Google-Attributes: gidfb1f8,gidfcc6e,gid10b271,gid1110fe,gid10e8ad,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news4.google.com!out01a.usenetserver.com!
news.usenetserver.com!in01.usenetserver.com!news.usenetserver.com!pd7cy1no!
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Reply-To: "Don Kelly" <dhky@shawcross.ca>
From: "Don Kelly" <dhky@shaw.ca>
Newsgroups:
rec.audio.tech,rec.radio.amateur.antenna,sci.physics,sci.physics.electromag,rec.ra
dio.amateur.space
References: <1184387039.122470.226910@e9g2000prf.googlegroups.com>
<7h2mm4-36k.ln1@mail.specsol.com>
Subject: Re: Please don't trivialize [was Re: Do magnetars emit audible LW AM
radio waves that can be heard on receivers?]
Lines: 98
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.3138
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.3138
X-RFC2646: Format=Flowed; Original
Message-ID: <F3dmi.116248$NV3.19621@pd7urf2no>
Date: Sat, 14 Jul 2007 23:33:57 GMT
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X-Trace: pd7urf2no 1184456037 24.64.223.206 (Sat, 14 Jul 2007 17:33:57 MDT)
NNTP-Posting-Date: Sat, 14 Jul 2007 17:33:57 MDT
Organization: Shaw Residential Internet
Xref: g2news1.google.com rec.audio.tech:32424 rec.radio.amateur.antenna:44209
sci.physics:356056 sci.physics.electromag:10988 rec.radio.amateur.space:957

<jimp@specsol.spam.sux.com> wrote in message
news:7h2mm4-36k.ln1@mail.specsol.com...
> In rec.radio.amateur.antenna Radium <glucegen1@gmail.com> wrote:
>> On Jul 13, 4:55 pm, j...@specsol.spam.sux.com wrote in
>> http://groups.google.com/group/sci.astro.amateur/msg/4672c2fa9e3e8f5e?hl=en&
>> :
>
>> > In rec.radio.amateur.space Radium <gluceg...@gmail.com> wrote:
>
>> > > Okay. But what if this is a supercooled AM radio receiver on a
>> > > spaceship orbiting Earth? If I am on a space station like MIR and
>> > > this
>> > > station has a supercooled AM radio 44.1 KHz frequency receiver, will
>> > > I
>> > > hear anything specific of magnetars?
>
>> > Generally, super cooled electronic components stop working.
>
>> Isn't a super cooled receiver less vulnerable to thermal noise than a
>> receiver of a higher temperature? This is why SETI super-cools their
>> radio receivers. So that the heat will not generate electric currents
>> that would drown-out the intended signals in hiss.
>
>> > > 44.1 KHz is the carrier-frequency this hypothetical receiver
>> > > receives.
>
>> > A super stupid frequency to pick. Generally for listening for natural
```

>> > phenomena, you want a wide as possible bandwidth given the noise
>> > floor.
>
>> But humans only hear from 20 to 20,000 Hz. So why use a higher
>> frequency?
>
>> >From what you think, what is the best frequency for listening to
>> magnetars and other natural phenomena?
>
>> > > I place the frequency of this hypothetical AM radio carrier wave at
>> > > 44.1 KHz for the same reason CDs use a sample rate of 44.1 KHz -- it
>> > > is the minimum required to prevent aliasing.
>
>> > An AM receiver isn't digitizing anything, sample rates don't apply,
>> > and aliasing doesn't apply.
>
>> Isn't it true that the carrier-frequency must be at least 2x the
>> highest intended frequency of the modulator signal?
>
>> I am not talking about sample rates. I am talking about carrier
>> frequency. From the answers to my previous questions regarding carrier
>> frequencies, I thought it was established that you mathematically
>> can't have a modulator frequency more than 0.5x the carrier-frequency.
>> What happened?
>
>> Since humans hear up to 20 KHz it is mathematically-required that the
>> carrier frequency be at least 40 KHz or 2 x 20 KHz. Due to physical
>> factors it would be most practical to use a carrier frequency slightly
>> higher than 2x the maximum intended modulator frequency -- hence 44.1
>> KHz.
>
> If you had the slightest bit of education or common sense, you would
> be asking a question that makes sense instead of going on forever
> about the minutiae of what makes your questions idiotic.
>
> Here's a question that makes sense:
>
> Are there any sources of RF energy outside our solar system that
> could possiblely be detected given an environment free of the
> constraints of the ionsphere and man made noise?
>
> If so, what frequecy or frequencies would they be seen at and what
> would be the general characteristics of such a signal?
>
> Also, the same question but operating from the Earth's surface.
>
> And this is an astronomy/astro-physics question, not an electromagnetics
> question.
>
> Notice there is nothing in there about "supercooling", modulation
> type, sampling rates, or any of the other nonsense in your question.
>
> Babbling twit.

>
>
> --
> Jim Pennino
>
> Remove .spam.sux to reply.

Perhaps archimedes plutonium has changed his name. Sounds about the same-
ploughing on and on without any idea of what he is doing -no answer will
shut him up. Possibly that is the right approach-killfile.

--

Don Kelly dhky@shawcross.ca
remove the X to answer

From -3548324563071837056
X-Google-Thread: 113975,f8d09a42f9fc3122
X-Google-Thread: f74ae,f8d09a42f9fc3122
X-Google-Thread: fdc67,f8d09a42f9fc3122
X-Google-Thread: 10e8ad,f8d09a42f9fc3122
X-Google-Thread: 10cf28,f8d09a42f9fc3122
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X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!wns13feed!worldnet.att.net!attbi_s21.POSTED!53ab2750!not-for-
mail
From: Sam Wormley <swormley1@mchsi.com>
Organization: None Needed
User-Agent: Thunderbird 1.5.0.12 (X11/20070529)
MIME-Version: 1.0
Newsgroups:
sci.astro.amateur,sci.astro,alt.astronomy,rec.radio.amateur.space,uk.sci.astronomy
Subject: Re: Do magnetars emit audible LW AM radio waves that can be heard
 on receivers?
References: <1184356241.780744.194470@x35g2000prf.googlegroups.com>
<1VQli.10184$Xa3.3577@attbi_s22> <0knf93pe8ac1mq0eefvrt8bah42hbvfv65@4ax.com>
In-Reply-To: <0knf93pe8ac1mq0eefvrt8bah42hbvfv65@4ax.com>
Content-Type: text/plain; charset=ISO-8859-1; format=flowed
Content-Transfer-Encoding: 7bit
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Message-ID: <I5dmi.28428$Fc.20207@attbi_s21>
NNTP-Posting-Host: 12.216.12.73
X-Complaints-To: abuse@mchsi.com
X-Trace: attbi_s21 1184456168 12.216.12.73 (Sat, 14 Jul 2007 23:36:08 GMT)
NNTP-Posting-Date: Sat, 14 Jul 2007 23:36:08 GMT
Date: Sat, 14 Jul 2007 23:36:08 GMT
Xref: g2news1.google.com sci.astro.amateur:83493 sci.astro:78653
alt.astronomy:156287 rec.radio.amateur.space:958 uk.sci.astronomy:21919

Chris L Peterson wrote:
> On Fri, 13 Jul 2007 20:04:13 GMT, Sam Wormley <swormley1@mchsi.com>
> wrote:
>
>> Why would you expect a star to generate amplitude modulation?
>
> Why would you expect it to generate anything else? These sorts of
> objects are rotating at high speed, which modulates the amplitude we
> receive. While there are probably other types of modulation as well, the
> amplitude variation is the dominant effect. Of course, magnetars are
> emitting mainly hard x-rays. I don't know that there's enough long
> wavelength energy to detect on any kind of ordinary radio.
>
> ____
>
> Chris L Peterson
> Cloudbait Observatory
> http://www.cloudbait.com

Amplitude modulation, in the communications world, has a definite
structure--I suspect that magnetar spectra don't exhibit amplitude
modulation characteristics.

However, I see, that amplitude modulation is appropriate in
astrophysics--for example...

Double Mode Cepheids with Amplitude Modulation
http://sait.oat.ts.astro.it/MSAIt770106/PDF/2006MmSAI..77..563M.pdf

From 7558041530580961147
X-Google-Thread: 113975,f8d09a42f9fc3122
X-Google-Thread: f74ae,f8d09a42f9fc3122
X-Google-Thread: fdc67,f8d09a42f9fc3122
X-Google-Thread: 10e8ad,f8d09a42f9fc3122
X-Google-Thread: 10cf28,f8d09a42f9fc3122
X-Google-Attributes: gid113975,gidf74ae,gidfdc67,gid10e8ad,gid10cf28,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!newshub.sdsu.edu!elnk-nf2-pas!
newsfeed.earthlink.net!stamper.news.pas.earthlink.net!
newsread4.news.pas.earthlink.net.POSTED!d2e3edad!not-for-mail
From: Chris L Peterson <clp@alumni.caltech.edu>
Newsgroups:
sci.astro.amateur,sci.astro,alt.astronomy,rec.radio.amateur.space,uk.sci.astronomy
Subject: Re: Do magnetars emit audible LW AM radio waves that can be heard on
receivers?
Organization: Cloudbait Observatory

Message-ID: <k5ri93phlo45jfjojtv9ii0sin7r6id1ju@4ax.com>
References: <1184356241.780744.194470@x35g2000prf.googlegroups.com>
<1VQli.10184$Xa3.3577@attbi_s22> <0knf93pe8ac1mq0eefvrt8bah42hbvfv65@4ax.com>
<I5dmi.28428$Fc.20207@attbi_s21>
X-Newsreader: Forte Agent 1.93/32.576 English (American)
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Lines: 20
Date: Sun, 15 Jul 2007 00:44:17 GMT
NNTP-Posting-Host: 66.82.114.184
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread4.news.pas.earthlink.net 1184460257 66.82.114.184 (Sat, 14 Jul 2007 17:44:17 PDT)
NNTP-Posting-Date: Sat, 14 Jul 2007 17:44:17 PDT
Xref: g2news1.google.com sci.astro.amateur:83495 sci.astro:78657
alt.astronomy:156291 rec.radio.amateur.space:959 uk.sci.astronomy:21920

On Sat, 14 Jul 2007 23:36:08 GMT, Sam Wormley <swormley1@mchsi.com>
wrote:

> Amplitude modulation, in the communications world, has a definite
> structure--I suspect that magnetar spectra don't exhibit amplitude
> modulation characteristics.

A magnetar is a type of pulsar. You have a signal at some frequency (or range frequencies) that varies in amplitude with time (as the object spins). That's the very definition of amplitude modulation. Nearly every radio source around shows some degree of amplitude modulation as the result of spin. This includes objects radiating well out of the radio band, as well. Optical binaries exhibit AM. Starspots show up as AM. Rotating asteroids are AM. Cepheids. Cataclysmic variables. Etc.

____

Chris L Peterson
Cloudbait Observatory
http://www.cloudbait.com

From -3040238941084137720
X-Google-Thread: 113975,f8d09a42f9fc3122
X-Google-Thread: f74ae,f8d09a42f9fc3122
X-Google-Thread: fdc67,f8d09a42f9fc3122
X-Google-Thread: 10e8ad,f8d09a42f9fc3122
X-Google-Thread: 10cf28,f8d09a42f9fc3122
X-Google-Attributes: gid113975,gidf74ae,gidfdc67,gid10e8ad,gid10cf28,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news4.google.com!out02a.usenetserver.com!
news.usenetserver.com!in02.usenetserver.com!news.usenetserver.com!
cycny01.gnilink.net!spamkiller.gnilink.net!gnilink.net!trnddc05.POSTED!24dd0da6!
not-for-mail
Sender: Jim Pennino <jimp@mail.specsol.com>

```
Message-ID: <2h7om4-96r.ln1@mail.specsol.com>
From: jimp@specsol.spam.sux.com
Subject: Re: Do magnetars emit audible LW AM radio waves that can be heard on
receivers?
Newsgroups:
sci.astro.amateur,sci.astro,alt.astronomy,rec.radio.amateur.space,uk.sci.astronomy
References: <1184356241.780744.194470@x35g2000prf.googlegroups.com>
<1VQli.10184$Xa3.3577@attbi_s22> <0knf93pe8ac1mq0eefvrt8bah42hbvfv65@4ax.com>
<I5dmi.28428$Fc.20207@attbi_s21>
User-Agent: tin/1.8.3-20070201 ("Scotasay") (UNIX) (SunOS/5.9 (sun4u))
Lines: 43
Date: Sun, 15 Jul 2007 00:55:01 GMT
NNTP-Posting-Host: 71.118.11.57
X-Complaints-To: abuse@verizon.net
X-Trace: trnddc05 1184460901 71.118.11.57 (Sat, 14 Jul 2007 20:55:01 EDT)
NNTP-Posting-Date: Sat, 14 Jul 2007 20:55:01 EDT
Xref: g2news1.google.com sci.astro.amateur:83498 sci.astro:78658
alt.astronomy:156293 rec.radio.amateur.space:960 uk.sci.astronomy:21921

In rec.radio.amateur.space Sam Wormley <swormley1@mchsi.com> wrote:
> Chris L Peterson wrote:
> > On Fri, 13 Jul 2007 20:04:13 GMT, Sam Wormley <swormley1@mchsi.com>
> > wrote:
> >
> >>   Why would you expect a star to generate amplitude modulation?
> >
> > Why would you expect it to generate anything else? These sorts of
> > objects are rotating at high speed, which modulates the amplitude we
> > receive. While there are probably other types of modulation as well, the
> > amplitude variation is the dominant effect. Of course, magnetars are
> > emitting mainly hard x-rays. I don't know that there's enough long
> > wavelength energy to detect on any kind of ordinary radio.
> >
> > _________________________________________________
> >
> > Chris L Peterson
> > Cloudbait Observatory
> > http://www.cloudbait.com


>    Amplitude modulation, in the communications world, has a definite
>    structure--I suspect that magnetar spectra don't exhibit amplitude
>    modulation characteristics.

>    However, I see, that amplitude modulation is appropriate in
>    astrophysics--for example...

>    Double Mode Cepheids with Amplitude Modulation
>      http://sait.oat.ts.astro.it/MSAIt770106/PDF/2006MmSAI..77..563M.pdf

The definitions for all types of modulation involve a carrier frequency.

Since natural phenomena generate broad band noise, it is arm waving
```

at best to call the variations in amplitude "amplitude modulation".

What it is is a broad band source that periodically varies in signal strength.

--
Jim Pennino

Remove .spam.sux to reply.

From 5049462393380003832
X-Google-Thread: 113975,f8d09a42f9fc3122
X-Google-Thread: f74ae,f8d09a42f9fc3122
X-Google-Thread: fdc67,f8d09a42f9fc3122
X-Google-Thread: 10e8ad,f8d09a42f9fc3122
X-Google-Thread: 10cf28,f8d09a42f9fc3122
X-Google-Attributes: gid113975,gidf74ae,gidfdc67,gid10e8ad,gid10cf28,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!newshub.sdsu.edu!elnk-nf2-pas!newsfeed.earthlink.net!stamper.news.pas.earthlink.net!newsread2.news.pas.earthlink.net.POSTED!d2e3edad!not-for-mail
From: Chris L Peterson <clp@alumni.caltech.edu>
Newsgroups: sci.astro.amateur,sci.astro,alt.astronomy,rec.radio.amateur.space,uk.sci.astronomy
Subject: Re: Do magnetars emit audible LW AM radio waves that can be heard on receivers?
Organization: Cloudbait Observatory
Message-ID: <7vui939m2m8l4tejrbbg3uqki6a3vfhpar@4ax.com>
References: <1184356241.780744.194470@x35g2000prf.googlegroups.com> <1VQli.10184$Xa3.3577@attbi_s22> <0knf93pe8ac1mq0eefvrt8bah42hbvfv65@4ax.com> <I5dmi.28428$Fc.20207@attbi_s21> <2h7om4-96r.ln1@mail.specsol.com>
X-Newsreader: Forte Agent 1.93/32.576 English (American)
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Lines: 21
Date: Sun, 15 Jul 2007 01:46:42 GMT
NNTP-Posting-Host: 66.82.114.184
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread2.news.pas.earthlink.net 1184464002 66.82.114.184 (Sat, 14 Jul 2007 18:46:42 PDT)
NNTP-Posting-Date: Sat, 14 Jul 2007 18:46:42 PDT
Xref: g2news1.google.com sci.astro.amateur:83502 sci.astro:78659 alt.astronomy:156300 rec.radio.amateur.space:961 uk.sci.astronomy:21922

On Sun, 15 Jul 2007 00:55:01 GMT, jimp@specsol.spam.sux.com wrote:

>The definitions for all types of modulation involve a carrier frequency.
>
>Since natural phenomena generate broad band noise, it is arm waving
>at best to call the variations in amplitude "amplitude modulation".
>

>What it is is a broad band source that periodically varies in signal
>strength.

There's nothing that defines how narrow a band need be to qualify as a "carrier". Many modern communication systems are spread spectrum, which means the carrier may be very broad. Such systems are certainly modulated. Also, many astronomical sources are not broadband at all, but radiate across a narrow spectrum.

Chris L Peterson
Cloudbait Observatory
http://www.cloudbait.com

```
From 8107579771867190298
X-Google-Thread: 10e8ad,1f80c5d3ed1d698c,start
X-Google-Thread: 10b9c8,1f80c5d3ed1d698c,start
X-Google-Attributes: gid10e8ad,gid10b9c8,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx01.iad01.newshosting.com!newshosting.com!
198.186.194.250.MISMATCH!transit3.readnews.com!news-out.readnews.com!panix!
rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-196 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sat, 14 Jul 2007 22:04:48 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 249
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <002a01c7c684$7e1fbb60$6601a8c0@familyroom>
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader2.panix.com 1184465088 23853 166.84.1.6 (15 Jul 2007 02:04:48 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 15 Jul 2007 02:04:48 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
```

Xref: g2news1.google.com rec.radio.amateur.space:962 rec.radio.info:408

AMSAT NEWS SERVICE
ANS-196

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

******************** AMSAT 2007 Space Symposium **************************

The Wireless Association of South Hills Amateur Radio Club announces the 2007 AMSAT Space Symposium will be held at the Pittsburgh Airport Marriott Hotel on Friday, October 26 through Sunday, October 28, 2007.

The AMSAT web team has posted informational pages on the AMSAT web site. You can find the announcement with many links at:
http://www.amsat.org/amsat-new/symposium/2007/index.php

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In this edition:

* AO-51 Completes L/S Mode, Watch for New Modes
* Satellite Shorts From All Over
* NASA Makes Saturn Radio Transmission Recording Available
* High Efficiency RF Linear Amplifier Design Proposed for Eagle
* ARISS Status Report for the Week of July 9, 2007

SB SAT @ AMSAT $ANS-196.01
AO-51 Completes L/S Mode, Watch for New Modes

AMSAT News Service Bulletin 196.01
>From AMSAT HQ SILVER SPRING, MD.
July 15, 2007
To All RADIO AMATEURS
BID: $ANS-196.01

During the period of July 10 to July 12 AO-51 was in its FM repeater mode with the uplink on 1268.700 MHz and the downlink on 2401.200 MHz. Viktor, OE1VKW reported, "On July 10 AO-51 over Vienna with very strong signals!" Alan, WA4SCA reported, "AO-51 came up in VS with a 145.920 uplink at the start of the pass. A couple of minutes before LOS, it switched over to LS, and I got a couple of quick test calls in. It Sounded fine."

Starting July 13, AO-51 is in the FM repeater mode, with an uplink on

145.920 MHz and downlink on 435.300 MHz. 9K6 telemetry is on the 435.150 MHz downlink.

Next on July 24 look for AO-51 to operate with an SSB uplink via 145.880 MHz and FM downlink via 435.300 MHz.

[ANS thanks the AO-51 Operation Team for the above information]

/EX

SB SAT @ AMSAT $ANS-196.02
Satellite Shorts From All Over

AMSAT News Service Bulletin 196.02
>From AMSAT HQ SILVER SPRING, MD.
July 15, 2007
To All RADIO AMATEURS
BID: $ANS-196.02

+ Mineo Wakita, JE9PEL reported that JARL has been conducting tests on FO-29 when it is over Japan. Telemetry analysis can be found on-line at:
http://www.ne.jp/asahi/hamradio/je9pel/fo29test.htm

+ AMSAT-UK International Space Colloquium 2007 is coming soon. The 22nd International Space Colloquium at the University of Surrey, Guildford, England from Friday 20th to Sunday 22nd July. The event is open to all. Either day passes or full packages comprising overnight accommodation and meals at the University are available. There is an online booking service for PayPal, Visa and Master Card payments. For further details see
http://www.uk.amsat.org/Colloquium/

+ AMSAT received the sad news that Tom McDaniel, N0NTX passed away on Monday July 2nd, 2007. Services are tentatively planned for Monday, July 9th. Tom was active on the satellites.

+ The deadline for submitting technical papers for presentation at the 26th Annual ARRL and TAPR Digital Communications Conference is July 31, 2007. The conference will be held September 28-30, 2007 in Hartford, Connecticut. Please send papers to:
Maty Weinberg
ARRL
225 Main St
Newington, CT 06111
or you can make your submission via e-mail to: maty@arrl.org

+ The deadline for receiving your submission (either email or postal mail) for AMSAT Field Day is Monday, July 16, 2007 at 11:59 P.M. CDT. E-mail to kk5do@arrl.net or postal mail to Bruce's callbook address.

+ Former AMSAT Board Member, Harry, JA1ANG, has been in the hospital for several months. If you wish to send him a card the address is: Harry Yoneda, 15-1305 Shimouma, 2-Chome-26, Setagaya-ku Tokyo 154 Japan.

+ Ed Long, WA4SWJ, AMSAT Journal Editor reminds the membership that the time is already upon us to begin submitting articles for the July/August issue. You can submit your article via the journal@amsat.org e-mail address.

[ANS thanks everyone for the above information]

/EX

SB SAT @ AMSAT $ANS-196.03
NASA Makes Saturn Radio Transmission Recording Available

AMSAT News Service Bulletin 196.03
>From AMSAT HQ SILVER SPRING, MD.
July 15, 2007
To All RADIO AMATEURS
BID: $ANS-196.03

NASA has made available a recording from the Cassini spacecraft of Saturn's intense radio emissions called Saturn kilometric radiation.

The Cassini spacecraft began detecting these radio emissions in April 2002, when Cassini was 374 million kilometers (234 million miles) from the planet, using the Cassini radio and plasma wave science instrument, which provided the first high resolution observations of these emissions, showing an amazing array of variations in frequency and time.

The complex radio spectrum with rising and falling tones, is very similar to Earth's auroral radio emissions. These structures indicate that there are numerous small radio sources moving along magnetic field lines threading the auroral region.

For additional information and to hear the recording visit:
http://www.nasa.gov/mission_pages/cassini/multimedia/pia07966.html

[ANS thanks 'The Daily Galaxy' and NASA for the above information]

/EX

SB SAT @ AMSAT $ANS-196.04
High Efficiency RF Linear Amplifier Design Proposed for Eagle

AMSAT News Service Bulletin 196.04
>From AMSAT HQ SILVER SPRING, MD.
July 15, 2007
To All RADIO AMATEURS

BID: $ANS-196.04

AMSAT members Marc Franco, N2UO and Allen Katz, K2UYH have designed a VHF, high-efficiency, class-E, RF power amplifier with a DC to RF efficiency of 86.8%. Their innovative design is based on silicon carbide (SiC) metal-semiconductor field effect transistors, or MESFETs.

The design was presented by Marc in a paper at the IEEE International Microwave Symposium in Hawaii. It is now available on-line: http://www.cree.com/products/wireless_docs.htm titled "Class-E Silicon Carbide VHF Power Amplifier" (June 5, 2007)

The final amplifier efficiency was measured at around 86 to 88% with this number holding quite well at almost any drain voltage or output power. This type of amplifier is under consideration for the envelope elimination and restoration linear amplifier planned for the AMSAT Eagle satellite.

[ANS thanks Marc, N2UO for the above information]

/EX

SB SAT @ AMSAT $ANS-196.05
ARISS Status Report for the Week of July 9, 2007

AMSAT News Service Bulletin 196.05
>From AMSAT HQ SILVER SPRING, MD.
July 15, 2007
To All RADIO AMATEURS
BID: $ANS-196.05

1. School Contacts

Maples Collegiate in Winnipeg, Manitoba, Canada had an ARISS contact on Thursday, July 12. The school would like the ARISS contact to be part of the Win-Cube Project in Manitoba. Win-Cube is an innovative science and engineering project that includes students from 10 high schools in Manitoba who will participate in the design, construction, launch, and communication with a pico-satellite in low earth orbit. ARISS will provide students involved in the Win-Cube project with a real application of classroom learning with experiences like the ISS orbital elements and its relation to the availability of ground to orbit communication. Students with their amateur radio licenses performed an active role in establishing and maintaining communication with the ISS.

Arnold Palmer Hospital for Children in Orlando, Florida has been slated for an ARISS contact on Tuesday, July 17 via the telebridge station W6SRJ in California. The hospital plans on involving children, who have been hospitalized long term, with this contact. It will showcase the medical advancements made through space science, available due to NASA and its research. An ARISS team member will give a presentation to the children on Amateur Radio on the International Space Station and an astronaut will also be invited to speak to the children. Lithographs will be distributed and children will design posters in anticipation of the contact.

2. Challenger Learning Center Experiences Successful ARISS Contact

On Saturday, July 7, children visiting the Challenger Learning Center of Alaska in Kenai experienced an ARISS contact. Clay Anderson, KD5PLA, answered 12 questions posed to him by the participating students and a few more from the audience. A crowd of approximately 50 people was expected to attend.

3. ARISS TIM

An ARISS Technical Interchange Meeting (TIM) was held the week of July 9-13, in Houston. Topics of discussion included ARISS radio systems, SuitSat-2, and education issues.

4. Amateur Radio Newsline Article on ARISS Member

Amateur Radio Newsline posted a story about ARISS member Tony Hutchison, VK5ZAI, who was named to the Wireless Institute of Australia (WIA) board position of Australian National Coordinator for ARISS. Tony had recently given a talk on the ARISS education program to the board members.

[ANS thanks Carol, KB3LKI for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

From -1567208467621160104
X-Google-Thread: fb1f8,371c39c687183a77,start
X-Google-Thread: f74ae,371c39c687183a77,start
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X-Google-Thread: fcc6e,371c39c687183a77,start
X-Google-Thread: 10e8ad,371c39c687183a77,start
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X-Google-Language: ENGLISH,ASCII-7-bit
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From: Radium <glucegen1@gmail.com>
Newsgroups:

rec.audio.tech,sci.astro,sci.physics,rec.radio.amateur.antenna,rec.radio.amateur.space
Subject: George Dishman says Karl Uppiano is wrong about AM radio, carrier-frequencies, and aliasing. Who should I believe? Why?
Date: Sun, 15 Jul 2007 02:57:34 -0000
Organization: http://groups.google.com
Lines: 70
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Complaints-To: groups-abuse@google.com
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   posting-account=ps2QrAMAAAA6_jCuRt2JEIpn5Otqf_w0
Xref: g2news1.google.com rec.audio.tech:32427 sci.astro:78662 sci.physics:356090 rec.radio.amateur.antenna:44224 rec.radio.amateur.space:963

George Dishman says Karl Uppiano is wrong about AM radio, carrier-frequencies, and aliasing. Who should I believe and why?

On Jul 14, 4:11 pm, "George Dishman" <geo...@briar.demon.co.uk> wrote
in http://groups.google.com/group/sci.astro.amateur/msg/1d3b52bbf05843c0?hl=en&
:
> "Radium" <gluceg...@gmail.com> wrote in message
>
> news:1184446739.705444.308660@i38g2000prf.googlegroups.com...
>
> > On Jul 14, 1:17 am, "George Dishman" <geo...@briar.demon.co.uk> wrote:
> >> "Radium" <gluceg...@gmail.com> wrote in message
>
> >>news:1184373407.506861.132200@m37g2000prh.googlegroups.com...
> >> ..
>
> >> > Isn't it true that the carrier-frequency must be at least 2x the
> >> > highest intended frequency of the modulator signal?
>
> >> No.
>
> > Karl Uppiano sharply disagrees.
>
> > Karl Uppiano explained in
> >http://groups.google.com/group/sci.energy/msg/a74d4d8ddcea47a5?hl=en&
>
> He is wrong. The basis of AM is that the sine wave
> carrier is multiplied by another signal which can be
> treated as a sum of sines. The relevant maths is:
>

> http://www.sosmath.com/trig/prodform/prodform.html
>
> If the carrier frequency if fc and the modulation has
> frequencies up to fm then you get sidebands like
> this:
>
> http://en.wikipedia.org/wiki/Image:Am-sidebands.png
>
> If you multiply 44.1kHz by a band from 20Hz to 20kHz,
> you get an upper sideband given 44.12kHz to 64.1kHz
> and a lower sideband from 44.08kHz down to 24.1kHz
>
> >> The highest modulating frequency for AM must be less than 1/2 the carrier
> >> frequency. Conversely, the lowest carrier frequency must be twice the
> >> highest modulating frequency. Period. I don't care what specific
> >> frequencies
> >> and/or energies and/or colors you propose.
>
> >> If you want to modulate at 20KHz, the carrier must be at least 40KHz. It
> >> is
> >> no coincidence that CD audio uses a 44.1KHz sample rate. It is
> >> essentially
> >> the same principle. If you exceed the Nyquist criterion, the sidebands
> >> overlap the baseband (i.e., aliasing occurs) and you cannot unambiguously
> >> decode the original modulation.
>
> Nyquist applies to sampling.
>
> > So who is right and who is wrong?
>
> Look at the maths, it is never wrong. Modulating fc
> with fm gives a lowest frequency of fc-fm so as long
> as fc > fm, you don't get aliasing.
>
> George

So is it possible for me to receive a 10 KHz audio sine-wave tone on a
1 Hz AM radio receiver? If not, why? My guess is it violates Nyquist/
Shannon. Right?

From 8068595046853355415
X-Google-Thread: 113975,f8d09a42f9fc3122
X-Google-Thread: f74ae,f8d09a42f9fc3122
X-Google-Thread: fdc67,f8d09a42f9fc3122
X-Google-Thread: 10e8ad,f8d09a42f9fc3122
X-Google-Thread: 10cf28,f8d09a42f9fc3122
X-Google-Attributes: gid113975,gidf74ae,gidfdc67,gid10e8ad,gid10cf28,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!postnews.google.com!i38g2000prf.googlegroups.com!not-for-mail
From: Radium <glucegen1@gmail.com>

```
Newsgroups:
sci.astro.amateur,sci.astro,alt.astronomy,rec.radio.amateur.space,uk.sci.astronomy
Subject: Re: Do magnetars emit audible LW AM radio waves that can be heard on
receivers?
Date: Sun, 15 Jul 2007 03:03:54 -0000
Organization: http://groups.google.com
Lines: 8
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References: <1184356241.780744.194470@x35g2000prf.googlegroups.com>
   <9f6lm4-k62.ln1@mail.specsol.com>
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Xref: g2news1.google.com sci.astro.amateur:83505 sci.astro:78663
alt.astronomy:156302 rec.radio.amateur.space:964 uk.sci.astronomy:21923

On Jul 14, 4:11 pm, "George Dishman" <geo...@briar.demon.co.uk> wrote:

> Look at the maths, it is never wrong. Modulating fc
> with fm gives a lowest frequency of fc-fm so as long
> as fc > fm, you don't get aliasing.

So an fm of 10 KHz would work on an fc of 10 KHz?




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Sender: Jim Pennino <jimp@mail.specsol.com>
Message-ID: <trgom4-vmm.ln1@mail.specsol.com>
From: jimp@specsol.spam.sux.com
Subject: Re: George Dishman says Karl Uppiano is wrong about AM radio, carrier-
frequencies, and aliasing. Who should I believe? Why?
Newsgroups:
rec.audio.tech,sci.astro,sci.physics,rec.radio.amateur.antenna,rec.radio.amateur.s
pace
References: <1184468254.568850.94820@o11g2000prd.googlegroups.com>
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NNTP-Posting-Date: Sat, 14 Jul 2007 23:35:01 EDT
Xref: g2news1.google.com rec.audio.tech:32428 sci.astro:78665 sci.physics:356101
rec.radio.amateur.antenna:44226 rec.radio.amateur.space:965

In rec.radio.amateur.antenna Radium <glucegen1@gmail.com> wrote:
> George Dishman says Karl Uppiano is wrong about AM radio, carrier-
> frequencies, and aliasing. Who should I believe and why?

The math; it is always correct.

> > He is wrong. The basis of AM is that the sine wave
> > carrier is multiplied by another signal which can be
> > treated as a sum of sines. The relevant maths is:
> >
> >  http://www.sosmath.com/trig/prodform/prodform.html

<snip remaining idiocy>

--
Jim Pennino

Remove .spam.sux to reply.


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X-Google-Thread: f74ae,f8d09a42f9fc3122
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Sender: Jim Pennino <jimp@mail.specsol.com>
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Message-ID: <7hhom4-vmm.ln1@mail.specsol.com>
From: jimp@specsol.spam.sux.com
Subject: Re: Do magnetars emit audible LW AM radio waves that can be heard on receivers?
Newsgroups: sci.astro.amateur,sci.astro,alt.astronomy,rec.radio.amateur.space,uk.sci.astronomy
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Xref: g2news1.google.com sci.astro.amateur:83508 sci.astro:78666 alt.astronomy:156305 rec.radio.amateur.space:966 uk.sci.astronomy:21924

In rec.radio.amateur.space Chris L Peterson <clp@alumni.caltech.edu> wrote:
> On Sun, 15 Jul 2007 00:55:01 GMT, jimp@specsol.spam.sux.com wrote:

> >The definitions for all types of modulation involve a carrier frequency.
> >
> >Since natural phenomena generate broad band noise, it is arm waving
> >at best to call the variations in amplitude "amplitude modulation".
> >
> >What it is is a broad band source that periodically varies in signal
> >strength.

> There's nothing that defines how narrow a band need be to qualify as a
> "carrier". Many modern communication systems are spread spectrum, which
> means the carrier may be very broad. Such systems are certainly
> modulated. Also, many astronomical sources are not broadband at all, but
> radiate across a narrow spectrum.

Spread spectrum technology uses discrete frequency hopping, not a broad band signal as a carrier.

If I have a transmitter hooked to an antenna swaying in the breeze such that the received signal strength is varying, would you call that AM?

If the side lobes of a search radar are big enough, you can receive them no matter where the radar points. The signal strength goes up and down and goes up dramatically when you are swept by the main lobe. Would you call that AM?

--
Jim Pennino

Remove .spam.sux to reply.

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spamkiller.gnilink.net!gnilink.net!trnddc03.POSTED!24dd0da6!not-for-mail
Sender: Jim Pennino <jimp@mail.specsol.com>
Message-ID: <hkhom4-vmm.ln1@mail.specsol.com>
From: jimp@specsol.spam.sux.com
Subject: Re: Do magnetars emit audible LW AM radio waves that can be heard on
receivers?
Newsgroups:
sci.astro.amateur,sci.astro,alt.astronomy,rec.radio.amateur.space,uk.sci.astronomy
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Xref: g2news1.google.com sci.astro.amateur:83509 sci.astro:78667
alt.astronomy:156306 rec.radio.amateur.space:967 uk.sci.astronomy:21925
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In rec.radio.amateur.space Radium <glucegen1@gmail.com> wrote:
> On Jul 14, 4:11 pm, "George Dishman" <geo...@briar.demon.co.uk> wrote:

> > Look at the maths, it is never wrong. Modulating fc
> > with fm gives a lowest frequency of fc-fm so as long
> > as fc > fm, you don't get aliasing.

> So an fm of 10 KHz would work on an fc of 10 KHz?

What part of "as long as fc is greater that fm" are you too blazingly
stupid to understand?

Is 10 KHz bigger than 10 KHz?

Idiot.

--
Jim Pennino

Remove .spam.sux to reply.

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newsfeed.earthlink.net!stamper.news.pas.earthlink.net!
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From: Chris L Peterson <clp@alumni.caltech.edu>
Newsgroups:
sci.astro.amateur,sci.astro,alt.astronomy,rec.radio.amateur.space,uk.sci.astronomy
Subject: Re: Do magnetars emit audible LW AM radio waves that can be heard on
receivers?
Organization: Cloudbait Observatory
Message-ID: <8s7j939hs91v5bp27g0ehij607okbt6nqt@4ax.com>
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alt.astronomy:156309 rec.radio.amateur.space:968 uk.sci.astronomy:21926
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On Sun, 15 Jul 2007 03:45:01 GMT, jimp@specsol.spam.sux.com wrote:

>Spread spectrum technology uses discrete frequency hopping, not a
>broad band signal as a carrier.

That's one spread spectrum method. Not the only one. But regardless, it still presents as a broad band carrier.

>If I have a transmitter hooked to an antenna swaying in the breeze

>such that the received signal strength is varying, would you call
>that AM?

Absolutely.

>If the side lobes of a search radar are big enough, you can receive
>them no matter where the radar points. The signal strength goes up
>and down and goes up dramatically when you are swept by the main
>lobe. Would you call that AM?

AM is a variation in amplitude of some signal- any signal- with time. Yes, your radar is a type of amplitude modulation. If it were a deep space signal, it is the modulation of amplitude that would most catch our attention.

Certainly AM carries a somewhat narrower meaning when discussing communications that it does when looking at astronomical signals. But the same underlying theory works for analyzing any signal that varies in intensity with time.

Chris L Peterson
Cloudbait Observatory
http://www.cloudbait.com

From 8167127280520666557
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From: Radium <glucegen1@gmail.com>
Newsgroups: rec.audio.tech,sci.astro,sci.physics,rec.radio.amateur.antenna,rec.radio.amateur.space
Subject: Re: George Dishman says Karl Uppiano is wrong about AM radio, carrier-frequencies, and aliasing. Who should I believe? Why?
Date: Sun, 15 Jul 2007 05:04:11 -0000
Organization: http://groups.google.com
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rec.radio.amateur.antenna:44227 rec.radio.amateur.space:969

On Jul 14, 8:35 pm, j...@specsol.spam.sux.com wrote:

> > > http://www.sosmath.com/trig/prodform/prodform.html

That link says nothing about Amplitude Modulation

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not-for-mail
Sender: Jim Pennino <jimp@mail.specsol.com>
Message-ID: <o8mom4-on8.ln1@mail.specsol.com>
From: jimp@specsol.spam.sux.com
Subject: Re: Do magnetars emit audible LW AM radio waves that can be heard on
receivers?
Newsgroups:
sci.astro.amateur,sci.astro,alt.astronomy,rec.radio.amateur.space,uk.sci.astronomy
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Xref: g2news1.google.com sci.astro.amateur:83511 sci.astro:78672
alt.astronomy:156311 rec.radio.amateur.space:970 uk.sci.astronomy:21927

In rec.radio.amateur.space Chris L Peterson <clp@alumni.caltech.edu> wrote:
> On Sun, 15 Jul 2007 03:45:01 GMT, jimp@specsol.spam.sux.com wrote:

> >Spread spectrum technology uses discrete frequency hopping, not a
> >broad band signal as a carrier.

> That's one spread spectrum method. Not the only one. But regardless, it
> still presents as a broad band carrier.

Nope, all spread spectrum is based on discrete frequencies with
frequency hopping of some sort.

It is only "broad band" if you integrate over multiple hops.

The carrier at each frequency is quite conventional.

Google for it.

> >If I have a transmitter hooked to an antenna swaying in the breeze
> >such that the received signal strength is varying, would you call
> >that AM?

> Absolutely.

> >If the side lobes of a search radar are big enough, you can receive
> >them no matter where the radar points. The signal strength goes up
> >and down and goes up dramatically when you are swept by the main
> >lobe. Would you call that AM?

> AM is a variation in amplitude of some signal- any signal- with time.

Nope, mathematically AM is defined as a single carrier frequency
multipled by the modulation frequency. That you get a variation in
amplitude is an effect, not a definition.

It is a bit of a stretch to call a signal comprised of every frequency
over a 100 GHz span AM.

> Yes, your radar is a type of amplitude modulation. If it were a deep
> space signal, it is the modulation of amplitude that would most catch
> our attention.

> Certainly AM carries a somewhat narrower meaning when discussing
> communications that it does when looking at astronomical signals. But
> the same underlying theory works for analyzing any signal that varies in
> intensity with time.

I'm afraid my background IS communications so I have to say astronomers
are arm waving when they call astronomical signals AM unless ET is
phoning home.

--
Jim Pennino

Remove .spam.sux to reply.

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From:  Radium <glucegen1@gmail.com>
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sci.astro.amateur,sci.astro,alt.astronomy,rec.radio.amateur.space,uk.sci.astronomy
Subject: Re: Do magnetars emit audible LW AM radio waves that can be heard on
receivers?
Date: Sun, 15 Jul 2007 05:05:33 -0000
Organization: http://groups.google.com
Lines: 9
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alt.astronomy:156312 rec.radio.amateur.space:971 uk.sci.astronomy:21928
```

On Jul 14, 4:11 pm, "George Dishman" <geo...@briar.demon.co.uk> wrote:

> The relevant maths is:

>
> http://www.sosmath.com/trig/prodform/prodform.html
>

The above link says nothing about amplitude-modulation

```
From -2299583319879O3605
X-Google-Thread: fb1f8,371c39c687183a77
X-Google-Thread: f74ae,371c39c687183a77
X-Google-Thread: 10b271,371c39c687183a77
X-Google-Thread: fcc6e,371c39c687183a77
X-Google-Thread: 10e8ad,371c39c687183a77
X-Google-Attributes: gidfb1f8,gidf74ae,gid10b271,gidfcc6e,gid10e8ad,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!news.glorb.com!wn11feed!
worldnet.att.net!bgtnsc05-news.ops.worldnet.att.net.POSTED!53ab2750!not-for-mail
Message-ID: <4699B81E.48B8ADE2@worldnet.att.net>
From: Ron Capik <r.capik@worldnet.att.net>
Organization: Ron_Tech
X-Mailer: Mozilla 4.51 [en]C-RR032399  (Win98; I)
X-Accept-Language: en
MIME-Version: 1.0
Newsgroups:
rec.audio.tech,sci.astro,sci.physics,rec.radio.amateur.antenna,rec.radio.amateur.s
pace
Subject: Re: George Dishman says Karl Uppiano is wrong about AM radio,
 carrier-frequencies, and aliasing. Who should I believe? Why?
References: <1184468254.568850.94820@o11g2000prd.googlegroups.com>
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Lines: 20
Date: Sun, 15 Jul 2007 06:02:23 GMT
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X-Trace: bgtnsc05-news.ops.worldnet.att.net 1184479343 12.76.5.109 (Sun, 15 Jul
2007 06:02:23 GMT)
NNTP-Posting-Date: Sun, 15 Jul 2007 06:02:23 GMT
Xref: g2news1.google.com rec.audio.tech:32432 sci.astro:78676 sci.physics:356121
rec.radio.amateur.antenna:44228 rec.radio.amateur.space:972
```

Radium wrote:

> < ......snip.. >
>
>
>
> So is it possible for me to receive a 10 KHz audio sine-wave tone on a
> 1 Hz AM radio receiver? If not, why? My guess is it violates Nyquist/
> Shannon. Right?

Don't guess, read the papers and do the math!

Later...

RC
--

From -4544621054364057443
X-Google-Thread: fb1f8,371c39c687183a77
X-Google-Thread: f74ae,371c39c687183a77
X-Google-Thread: 10b271,371c39c687183a77
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X-Google-Thread: 10e8ad,371c39c687183a77
X-Google-Attributes: gidfb1f8,gidf74ae,gid10b271,gidfcc6e,gid10e8ad,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
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Reply-To: "Karl Uppiano" <karl.uppiano@verizon.net>
From: "Karl Uppiano" <karl.uppiano@verizon.net>
Newsgroups:
rec.audio.tech,sci.astro,sci.physics,rec.radio.amateur.antenna,rec.radio.amateur.space
References: <1184468254.568850.94820@o11g2000prd.googlegroups.com>
Subject: Re: George Dishman says Karl Uppiano is wrong about AM radio, carrier-frequencies, and aliasing. Who should I believe? Why?
Lines: 82
Organization: Uppiano Family
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.3138
X-MIMEOLE: Produced By Microsoft MimeOLE V6.00.2900.3138
X-RFC2646: Format=Flowed; Original
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Xref: g2news1.google.com rec.audio.tech:32433 sci.astro:78681 sci.physics:356124 rec.radio.amateur.antenna:44229 rec.radio.amateur.space:973

"Radium" <glucegen1@gmail.com> wrote in message news:1184468254.568850.94820@o11g2000prd.googlegroups.com...
> George Dishman says Karl Uppiano is wrong about AM radio, carrier-
> frequencies, and aliasing. Who should I believe and why?
>

```
> On Jul 14, 4:11 pm, "George Dishman" <geo...@briar.demon.co.uk> wrote
> in
> http://groups.google.com/group/sci.astro.amateur/msg/1d3b52bbf05843c0?hl=en&
> :
>> "Radium" <gluceg...@gmail.com> wrote in message
>>
>> news:1184446739.705444.308660@i38g2000prf.googlegroups.com...
>>
>> > On Jul 14, 1:17 am, "George Dishman" <geo...@briar.demon.co.uk> wrote:
>> >> "Radium" <gluceg...@gmail.com> wrote in message
>>
>> >>news:1184373407.506861.132200@m37g2000prh.googlegroups.com...
>> >> ..
>>
>> >> > Isn't it true that the carrier-frequency must be at least 2x the
>> >> > highest intended frequency of the modulator signal?
>>
>> >> No.
>>
>> > Karl Uppiano sharply disagrees.
>>
>> > Karl Uppiano explained in
>> >http://groups.google.com/group/sci.energy/msg/a74d4d8ddcea47a5?hl=en&
>>
>> He is wrong. The basis of AM is that the sine wave
>> carrier is multiplied by another signal which can be
>> treated as a sum of sines. The relevant maths is:
>>
>>  http://www.sosmath.com/trig/prodform/prodform.html
>>
>> If the carrier frequency if fc and the modulation has
>> frequencies up to fm then you get sidebands like
>> this:
>>
>>  http://en.wikipedia.org/wiki/Image:Am-sidebands.png
>>
>> If you multiply 44.1kHz by a band from 20Hz to 20kHz,
>> you get an upper sideband given 44.12kHz to 64.1kHz
>> and a lower sideband from 44.08kHz down to 24.1kHz
>>
>> >> The highest modulating frequency for AM must be less than 1/2 the
>> >> carrier
>> >> frequency. Conversely, the lowest carrier frequency must be twice the
>> >> highest modulating frequency. Period. I don't care what specific
>> >> frequencies
>> >> and/or energies and/or colors you propose.
>>
>> >> If you want to modulate at 20KHz, the carrier must be at least 40KHz.
>> >> It
>> >> is
>> >> no coincidence that CD audio uses a 44.1KHz sample rate. It is
>> >> essentially
>> >> the same principle. If you exceed the Nyquist criterion, the sidebands
>> >> overlap the baseband (i.e., aliasing occurs) and you cannot
>> >> unambiguously
>> >> decode the original modulation.
>>
>> Nyquist applies to sampling.
>>
>> > So who is right and who is wrong?
>>
>> Look at the maths, it is never wrong. Modulating fc
>> with fm gives a lowest frequency of fc-fm so as long
>> as fc > fm, you don't get aliasing.
>>
>> George
>
> So is it possible for me to receive a 10 KHz audio sine-wave tone on a
> 1 Hz AM radio receiver? If not, why? My guess is it violates Nyquist/
> Shannon. Right?

Since my name came up here, I decided to chime in. It must have been very
late when I typed my original post. George is right. Sorry about any
confusion.




From -7616376721024025003
X-Google-Thread: fb1f8,371c39c687183a77
X-Google-Thread: f74ae,371c39c687183a77
X-Google-Thread: 10b271,371c39c687183a77
X-Google-Thread: fcc6e,371c39c687183a77
X-Google-Thread: 10e8ad,371c39c687183a77
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X-Google-Language: ENGLISH,ASCII-7-bit
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headwall.stanford.edu!newsfeed.news2me.com!sn-xt-sjc-04!sn-xt-sjc-08!sn-post-
sjc-01!supernews.com!corp.supernews.com!not-for-mail
From: Roy Lewallen <w7el@eznec.com>
Newsgroups:
rec.audio.tech,sci.astro,sci.physics,rec.radio.amateur.antenna,rec.radio.amateur.s
pace
Subject: Re: George Dishman says Karl Uppiano is wrong about AM radio,  carrier-
frequencies,
 and aliasing. Who should I believe? Why?
Date: Sun, 15 Jul 2007 00:54:42 -0700
Organization: EZNEC Antenna Software
Message-ID: <139jkm7ebsfom3a@corp.supernews.com>
User-Agent: Thunderbird 1.5.0.12 (Windows/20070509)
MIME-Version: 1.0
References: <1184468254.568850.94820@o11g2000prd.googlegroups.com>
<4699B81E.48B8ADE2@worldnet.att.net>
In-Reply-To: <4699B81E.48B8ADE2@worldnet.att.net>
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Content-Transfer-Encoding: 7bit
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X-Complaints-To: abuse@supernews.com
Lines: 28
Xref: g2news1.google.com rec.audio.tech:32438 sci.astro:78684 sci.physics:356133 rec.radio.amateur.antenna:44233 rec.radio.amateur.space:974

This looks like a good time to point out that equivalent-time and random sampling oscilloscopes display waveforms having bandwidths in the tens of GHz which were captured by sampling at rates from a hundred kHz to a few MHz, and have done so for decades.

Roy Lewallen, W7EL

Ron Capik wrote:
> Radium wrote:
>
>> < ......snip.. >
>>
>>
>>
>> So is it possible for me to receive a 10 KHz audio sine-wave tone on a
>> 1 Hz AM radio receiver? If not, why? My guess is it violates Nyquist/
>> Shannon. Right?
>
> Don't guess, read the papers and do the math!
>
>
>
> Later...
>
> RC
> --
>
>

From -7305667152038819299
X-Google-Thread: 113975,f8d09a42f9fc3122
X-Google-Thread: f74ae,f8d09a42f9fc3122
X-Google-Thread: fdc67,f8d09a42f9fc3122
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From: KLM <milk@mchsi.com>
Newsgroups: sci.astro.amateur,sci.astro,alt.astronomy,rec.radio.amateur.space,uk.sci.astronomy
Subject: Re: Do magnetars emit audible LW AM radio waves that can be heard on receivers?
Date: Sun, 15 Jul 2007 03:58:03 -0500

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Organization: NewsGuy - Unlimited Usenet $19.95
Lines: 48
Message-ID: <4699E19B.743342A5@mchsi.com>
References: <1184356241.780744.194470@x35g2000prf.googlegroups.com>
        <9f6lm4-k62.ln1@mail.specsol.com>
<1184363427.894765.114000@g37g2000prf.googlegroups.com>
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X-Accept-Language: en
Xref: g2news1.google.com sci.astro.amateur:83520 sci.astro:78685
alt.astronomy:156319 rec.radio.amateur.space:975 uk.sci.astronomy:21930



Radium wrote:

> On Jul 13, 2:15 pm, j...@specsol.spam.sux.com wrote:
> > In rec.radio.amateur.space Radium <gluceg...@gmail.com> wrote:
> >
> > > Hi:
> > > Do magnetars emit AM radio waves below the medium-wave range? If so,
> > > how do we detect these waves? Can these waves be heard on the AM
> > > radio? If so, what do they sound like?
> >
> > Frequencies above approximately 100 MHz almost always get through
> > the ionization layers.
> >
> > Frequencies in the approximate range of 10 MHz to 100 MHz sometimes
> > get through
> >
> > Frequencies below approximately 10 MHz almost never get through.
> >
> > So, if by "the AM radio" you mean a Broadcast Band radio which
> > runs from about .5 MHz to 1.2 MHz, not a chance in hell of ever
> > hearing anything from off the planet.
> >
> > Try again.
>
> Okay. But what if this is a supercooled AM radio receiver on a
> spaceship orbiting Earth? If I am on a space station like MIR and this
> station has a supercooled AM radio 44.1 KHz frequency receiver, will I
> hear anything specific of magnetars?

Nothing "specific". Thats the whole point. What exactly did you
hope to hear that you think is significant? Obviously you have
something in mind.
KLM

>
>
```

> 44.1 KHz is the carrier-frequency this hypothetical receiver receives.
>
> I place the frequency of this hypothetical AM radio carrier wave at
> 44.1 KHz for the same reason CDs use a sample rate of 44.1 KHz -- it
> is the minimum required to prevent aliasing.
>
> AFAIK, space station orbit earth above the ionosphere so the
> limitations [preventing long-waves from outer space from reaching the
> Earth's surface] do not apply.

From -7305027516321786516
X-Google-Thread: 113975,f8d09a42f9fc3122
X-Google-Thread: f74ae,f8d09a42f9fc3122
X-Google-Thread: fdc67,f8d09a42f9fc3122
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X-Google-Thread: 10cf28,f8d09a42f9fc3122
X-Google-Attributes: gid113975,gidf74ae,gidfdc67,gid10e8ad,gid10cf28,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Subject: Re: Do magnetars emit audible LW AM radio waves that can be heard on receivers?
From: "George Dishman" <george@briar.demon.co.uk>
Date: Sun, 15 Jul 2007 11:12:53 +0100
Message-ID: <f7crt9$c41$1@news.freedom2surf.net>
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Lines: 48
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Newsgroups:
sci.astro.amateur,sci.astro,alt.astronomy,rec.radio.amateur.space,uk.sci.astronomy
X-Trace: news.freedom2surf.net 1184494313 12417 83.67.26.177 (15 Jul 2007 10:11:53 GMT)
X-Complaints-To: abuse@freedom2surf.net
NNTP-Posting-Date: Sun, 15 Jul 2007 10:11:53 +0000 (UTC)
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.3138
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.3138
X-RFC2646: Format=Flowed; Original
Xref: g2news1.google.com sci.astro.amateur:83521 sci.astro:78692
alt.astronomy:156320 rec.radio.amateur.space:976 uk.sci.astronomy:21931

<jimp@specsol.spam.sux.com> wrote in message
news:o8mom4-on8.ln1@mail.specsol.com...
> In rec.radio.amateur.space Chris L Peterson <clp@alumni.caltech.edu>

```
> wrote:
>> On Sun, 15 Jul 2007 03:45:01 GMT, jimp@specsol.spam.sux.com wrote:
>
>> >Spread spectrum technology uses discrete frequency hopping, not a
>> >broad band signal as a carrier.

That is correct, it is a narrow band carrier which
moves.

>> That's one spread spectrum method. Not the only one. But regardless, it
>> still presents as a broad band carrier.
>
> Nope, all spread spectrum is based on discrete frequencies with
> frequency hopping of some sort.

Not always, consider the use of a frequency-shifted
fast PRBS as the carrier. Of course it is more
usual to use the PRBS to define the hop sequence in
the style you describe above but as you say your
background is communications, I'm sure you are aware
of the relationships between hop rate and carrier
spacing which lead to a band-limited white spectrum.

>> AM is a variation in amplitude of some signal- any signal- with time.
>
> Nope, mathematically AM is defined as a single carrier frequency
> multipled by the modulation frequency. That you get a variation in
> amplitude is an effect, not a definition.
>
> It is a bit of a stretch to call a signal comprised of every frequency
> over a 100 GHz span AM.

Consider applying audio (with a DC bias) to a light
bulb and receiving it with a photocell. The carrier
is much more than 100 GHz wide, but I would still
call that AM, YMMV.

> I'm afraid my background IS communications ...

Mine too ;-)

George




From -6214067545238410000
X-Google-Thread: 113975,f8d09a42f9fc3122
X-Google-Thread: f74ae,f8d09a42f9fc3122
X-Google-Thread: fdc67,f8d09a42f9fc3122
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X-Google-Thread: 10cf28,f8d09a42f9fc3122
X-Google-Attributes: gid113975,gidf74ae,gidfdc67,gid10e8ad,gid10cf28,public,usenet
```

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213.210.46.30.MISMATCH!peernews.inweb.co.uk!news.freedom2surf.net!not-for-mail
From: "George Dishman" <george@briar.demon.co.uk>
Newsgroups:
sci.astro.amateur,sci.astro,alt.astronomy,rec.radio.amateur.space,uk.sci.astronomy
Subject: Re: Do magnetars emit audible LW AM radio waves that can be heard on
receivers?
Date: Sun, 15 Jul 2007 11:24:41 +0100
Organization: freedom2surf
Lines: 39
Message-ID: <f7csg1$cf8$1@news.freedom2surf.net>
References: <1184356241.780744.194470@x35g2000prf.googlegroups.com>   <9f6lm4-
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NNTP-Posting-Date: Sun, 15 Jul 2007 10:21:53 +0000 (UTC)
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.3138
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.3138
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Xref: g2news1.google.com sci.astro.amateur:83522 sci.astro:78693
alt.astronomy:156321 rec.radio.amateur.space:977 uk.sci.astronomy:21932
```

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news:1184475933.510251.28100@j4g2000prf.googlegroups.com...

> On Jul 14, 4:11 pm, "George Dishman" <geo...@briar.demon.co.uk> wrote:
>
>> The relevant maths is:
>>
>> http://www.sosmath.com/trig/prodform/prodform.html
>>
>
> The above link says nothing about amplitude-modulation

It says:

 sin(a)sin(b) = 1/2 * [cos(a-b) - cos(a+b)]

Take a carrier at frequency fc:

 Vc = sin(2*pi*fc*t)

and a typical modulating signal at fm:

 Vm = sin(2*pi*fm*t)

Amplitude modulation involves multiplying those
together with an offset so that there is always
some level of carrier so the transmitted signal
is:

 Vt = Vc * (1 + M * Vm)

where 0 < M < 1

You get components at cos(2*pi*(fc-fm)*t) and
cos(2*pi*(fc+fm)*t) as well as the carrier at fc.

George

```
From -4143177171824676328
X-Google-Thread: fb1f8,371c39c687183a77
X-Google-Thread: f74ae,371c39c687183a77
X-Google-Thread: 10b271,371c39c687183a77
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From: "Dave" <noone@nowhere.com>
Newsgroups:
rec.audio.tech,sci.astro,sci.physics,rec.radio.amateur.antenna,rec.radio.amateur.s
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References: <1184468254.568850.94820@o11g2000prd.googlegroups.com>
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frequencies, and aliasing. Who should I believe? Why?
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X-RFC2646: Format=Flowed; Original
Message-ID: <nDmmi.661$bP4.114@trndny01>
Date: Sun, 15 Jul 2007 10:26:27 GMT
NNTP-Posting-Host: 70.109.254.107
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X-Trace: trndny01 1184495187 70.109.254.107 (Sun, 15 Jul 2007 06:26:27 EDT)
NNTP-Posting-Date: Sun, 15 Jul 2007 06:26:27 EDT
Xref: g2news1.google.com rec.audio.tech:32447 sci.astro:78694 sci.physics:356144
```

rec.radio.amateur.antenna:44234 rec.radio.amateur.space:978
X-Original-Bytes: 1424

"Radium" <glucegen1@gmail.com> wrote in message
news:1184468254.568850.94820@o11g2000prd.googlegroups.com...
> George Dishman says Karl Uppiano is wrong about AM radio, carrier-
> frequencies, and aliasing. Who should I believe and why?

you can believe whoever you prefer, makes no difference to me.

From -1004080400209777805
X-Google-Thread: 113975,f8d09a42f9fc3122
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X-Google-Language: ENGLISH,ASCII-7-bit
Subject: Re: Do magnetars emit audible LW AM radio waves that can be heard on receivers?
From: "George Dishman" <george@briar.demon.co.uk>
Date: Sun, 15 Jul 2007 11:35:03 +0100
Message-ID: <f7csvp$cpb$1@news.freedom2surf.net>
References: <1184356241.780744.194470@x35g2000prf.googlegroups.com>   <9f6lm4-k62.ln1@mail.specsol.com>
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Lines: 34
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Newsgroups: sci.astro.amateur,sci.astro,alt.astronomy,rec.radio.amateur.space,uk.sci.astronomy
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Xref: g2news1.google.com sci.astro.amateur:83523 sci.astro:78696
alt.astronomy:156322 rec.radio.amateur.space:979 uk.sci.astronomy:21933
X-Original-Bytes: 2704


"Radium" <glucegen1@gmail.com> wrote in message
news:1184468634.242671.140830@i38g2000prf.googlegroups.com...
> On Jul 14, 4:11 pm, "George Dishman" <geo...@briar.demon.co.uk> wrote:
>
>> Look at the maths, it is never wrong. Modulating fc
>> with fm gives a lowest frequency of fc-fm so as long
>> as fc > fm, you don't get aliasing.
>
> So an fm of 10 KHz would work on an fc of 10 KHz?

fc > fm means fc should be greater than fm, not the same.
For fm = 10,000Hz and fc = 10,001Hz you get a lower
sideband at 1Hz and an upper sideband at 20,001Hz.

If you modulate 10kHz with 10Khz, the lower sideband
becomes 0Hz or DC. The value of that depends on the
phase of the modulating signal relative to the carrier
(which is now constant since they are at the same
frequency). Of course sending DC to an antenna won't
give you a transmitted signal but it doesn't produce
an alias either.

If you modulate 10,000Hz with 10,001Hz then your lower
sideband becomes -1Hz, and of course sin(-x) = sin(x)
so that is identical to a frequency of 1Hz which you
would get if you modulated with 9,999Hz. That ambiguity
is why we call such a signal an "alias", the 10,001Hz
signal appears after modulation then demodulation
masquerading as a signal of 9,999Hz.

George





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From: "George Dishman" <george@briar.demon.co.uk>
Newsgroups:
rec.audio.tech,sci.astro,sci.physics,rec.radio.amateur.antenna,rec.radio.amateur.s
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pace
Subject: Re: George Dishman says Karl Uppiano is wrong about AM radio, carrier-frequencies, and aliasing. Who should I believe? Why?
Date: Sun, 15 Jul 2007 11:37:16 +0100
Organization: freedom2surf
Lines: 13
Message-ID: <f7ct5l$cra$1@news.freedom2surf.net>
References: <1184468254.568850.94820@o11g2000prd.googlegroups.com>
<8gjmi.831$s25.461@trndny04>
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Xref: g2news1.google.com rec.audio.tech:32448 sci.astro:78697 sci.physics:356145 rec.radio.amateur.antenna:44235 rec.radio.amateur.space:980

"Karl Uppiano" <karl.uppiano@verizon.net> wrote in message
news:8gjmi.831$s25.461@trndny04...
...
> Since my name came up here, I decided to chime in. It must have been very
> late when I typed my original post. ...

A problem I often suffer from too   :-(

best regards
George

From -3327404332065820943
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From: Chris L Peterson <clp@alumni.caltech.edu>
Newsgroups:
sci.astro.amateur,sci.astro,alt.astronomy,rec.radio.amateur.space,uk.sci.astronomy

Subject: Re: Do magnetars emit audible LW AM radio waves that can be heard on receivers?
Organization: Cloudbait Observatory
Message-ID: <0hbk939rkvhr02cifonkiubc9mopplau88@4ax.com>
References: <1184356241.780744.194470@x35g2000prf.googlegroups.com>
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NNTP-Posting-Date: Sun, 15 Jul 2007 07:36:59 PDT
Xref: g2news1.google.com sci.astro.amateur:83535 sci.astro:78713 alt.astronomy:156339 rec.radio.amateur.space:981 uk.sci.astronomy:21936

On Sun, 15 Jul 2007 05:05:01 GMT, jimp@specsol.spam.sux.com wrote:

>Nope, all spread spectrum is based on discrete frequencies with
>frequency hopping of some sort.

I would not consider that to be an accurate description for a variety of direct sequence techniques, where the carrier itself is phase or frequency modulated by a pseudorandom sequence. Such a signal, viewed on a spectrum analyzer, looks no different than many natural, moderately narrowband sources. And there would be nothing stopping somebody from amplitude modulating such a signal.

>Nope, mathematically AM is defined as a single carrier frequency
>multipled by the modulation frequency. That you get a variation in
>amplitude is an effect, not a definition.

Reference? I think you are confusing a single definition of AM with all other definitions of the term.

>I'm afraid my background IS communications so I have to say astronomers
>are arm waving when they call astronomical signals AM unless ET is
>phoning home.

As an astronomer, I could as easily say you are arm waving by trying to restrict the meaning of AM to a narrow definition used within your field. The simple fact is that astronomers _do_ refer to signals that vary in amplitude as a function of time as "amplitude modulated". Some of those signals are broadband, and others are not (there are, for example, amplitude modulated natural masers). This is normal usage within the astronomical community, and it causes no confusion at all.

Chris L Peterson
Cloudbait Observatory
http://www.cloudbait.com

```
From -5449486287992896168
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spamkiller.gnilink.net!gnilink.net!trnddc01.POSTED!24dd0da6!not-for-mail
Sender: Jim Pennino <jimp@mail.specsol.com>
Message-ID: <32spm4-9ck.ln1@mail.specsol.com>
From: jimp@specsol.spam.sux.com
Subject: Re: George Dishman says Karl Uppiano is wrong about AM radio, carrier-
frequencies, and aliasing. Who should I believe? Why?
Newsgroups:
rec.audio.tech,sci.astro,sci.physics,rec.radio.amateur.antenna,rec.radio.amateur.s
pace
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rec.radio.amateur.antenna:44245 rec.radio.amateur.space:982
X-Original-Bytes: 1807
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In rec.radio.amateur.antenna Radium <glucegen1@gmail.com> wrote:
> On Jul 14, 8:35 pm, j...@specsol.spam.sux.com wrote:

> > > > http://www.sosmath.com/trig/prodform/prodform.html

> That link says nothing about Amplitude Modulation

Try this one:

http://www.rfcafe.com/references/electrical/amplitude_modulation.htm

and this one:

http://ccrma.stanford.edu/~jos/mdft/Sinusoidal_Amplitude_Modulation_AM.html

and see if you notice any similartity in the equations.

Of course, anyone with more than half a brain could have done a Google search for AM modulation equation and come up with thousands of hits.

--
Jim Pennino

Remove .spam.sux to reply.

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From 9154079799156786240
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X-Google-Thread: f74ae,f8d09a42f9fc3122
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not-for-mail
Sender: Jim Pennino <jimp@mail.specsol.com>
Message-ID: <j0tpm4-9ck.ln1@mail.specsol.com>
From: jimp@specsol.spam.sux.com
Subject: Re: Do magnetars emit audible LW AM radio waves that can be heard on
receivers?
Newsgroups:
sci.astro.amateur,sci.astro,alt.astronomy,rec.radio.amateur.space,uk.sci.astronomy
References: <1184356241.780744.194470@x35g2000prf.googlegroups.com>
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Lines: 63
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Xref: g2news1.google.com sci.astro.amateur:83537 sci.astro:78723
alt.astronomy:156344 rec.radio.amateur.space:983 uk.sci.astronomy:21937
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In rec.radio.amateur.space George Dishman <george@briar.demon.co.uk> wrote:

> <jimp@specsol.spam.sux.com> wrote in message
> news:o8mom4-on8.ln1@mail.specsol.com...

> > In rec.radio.amateur.space Chris L Peterson <clp@alumni.caltech.edu>
> > wrote:
> >> On Sun, 15 Jul 2007 03:45:01 GMT, jimp@specsol.spam.sux.com wrote:
> >
> >> >Spread spectrum technology uses discrete frequency hopping, not a
> >> >broad band signal as a carrier.

> That is correct, it is a narrow band carrier which
> moves.

> >> That's one spread spectrum method. Not the only one. But regardless, it
> >> still presents as a broad band carrier.
> >
> > Nope, all spread spectrum is based on discrete frequencies with
> > frequency hopping of some sort.

> Not always, consider the use of a frequency-shifted
> fast PRBS as the carrier. Of course it is more
> usual to use the PRBS to define the hop sequence in
> the style you describe above but as you say your
> background is communications, I'm sure you are aware
> of the relationships between hop rate and carrier
> spacing which lead to a band-limited white spectrum.

If you frequency or phase modulate, the resultant spectrum may be
quite broad, but the carrier frequency is still discreate no matter
what you modulate with.

It may look like band limited white noise on a spectrum analyser,
but if you decompose in the time domain, it isn't.

> >> AM is a variation in amplitude of some signal- any signal- with time.
> >
> > Nope, mathematically AM is defined as a single carrier frequency
> > multipled by the modulation frequency. That you get a variation in
> > amplitude is an effect, not a definition.
> >
> > It is a bit of a stretch to call a signal comprised of every frequency
> > over a 100 GHz span AM.

> Consider applying audio (with a DC bias) to a light
> bulb and receiving it with a photocell. The carrier
> is much more than 100 GHz wide, but I would still
> call that AM, YMMV.

Got me there.

> > I'm afraid my background IS communications ...

> Mine too ;-)

> George

--
Jim Pennino

Remove .spam.sux to reply.

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Sender: Jim Pennino <jimp@mail.specsol.com>
Message-ID: <6gtpm4-9ck.ln1@mail.specsol.com>
From: jimp@specsol.spam.sux.com
Subject: Re: Do magnetars emit audible LW AM radio waves that can be heard on
receivers?
Newsgroups:
sci.astro.amateur,sci.astro,alt.astronomy,rec.radio.amateur.space,uk.sci.astronomy
References: <1184356241.780744.194470@x35g2000prf.googlegroups.com>
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alt.astronomy:156346 rec.radio.amateur.space:984 uk.sci.astronomy:21940
X-Original-Bytes: 3362
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In rec.radio.amateur.space Chris L Peterson <clp@alumni.caltech.edu> wrote:
> On Sun, 15 Jul 2007 05:05:01 GMT, jimp@specsol.spam.sux.com wrote:
>
> >Nope, all spread spectrum is based on discrete frequencies with
> >frequency hopping of some sort.
>
> I would not consider that to be an accurate description for a variety of
> direct sequence techniques, where the carrier itself is phase or
> frequency modulated by a pseudorandom sequence. Such a signal, viewed on
> a spectrum analyzer, looks no different than many natural, moderately

> narrowband sources. And there would be nothing stopping somebody from
> amplitude modulating such a signal.

If you frequency or phase modulate, the spectrum does get broad, but
there is still a discreat carrier frequency.

While it may look like band limited white noise on a vanilla spectrum
analyzer, it isn't.

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> >multipled by the modulation frequency. That you get a variation in
> >amplitude is an effect, not a definition.

> Reference? I think you are confusing a single definition of AM with all
> other definitions of the term.

How about this one:

http://www.rfcafe.com/references/electrical/amplitude_modulation.htm

> >I'm afraid my background IS communications so I have to say astronomers
> >are arm waving when they call astronomical signals AM unless ET is
> >phoning home.

> As an astronomer, I could as easily say you are arm waving by trying to
> restrict the meaning of AM to a narrow definition used within your
> field. The simple fact is that astronomers _do_ refer to signals that
> vary in amplitude as a function of time as "amplitude modulated". Some
> of those signals are broadband, and others are not (there are, for
> example, amplitude modulated natural masers). This is normal usage
> within the astronomical community, and it causes no confusion at all.

So, is the square root of -1 j or i?

--
Jim Pennino

Remove .spam.sux to reply.

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not-for-mail

Sender: Jim Pennino <jimp@mail.specsol.com>
Message-ID: <lltpm4-9ck.ln1@mail.specsol.com>
From: jimp@specsol.spam.sux.com
Subject: Re: Do magnetars emit audible LW AM radio waves that can be heard on receivers?
Newsgroups: sci.astro.amateur,sci.astro,alt.astronomy,rec.radio.amateur.space,uk.sci.astronomy
References: <1184356241.780744.194470@x35g2000prf.googlegroups.com> <9f6lm4-k62.ln1@mail.specsol.com> <1184363427.894765.114000@g37g2000prf.googlegroups.com> <4699E19B.743342A5@mchsi.com>
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In rec.radio.amateur.space KLM <milk@mchsi.com> wrote:

> Radium wrote:

> > On Jul 13, 2:15 pm, j...@specsol.spam.sux.com wrote:
> > > In rec.radio.amateur.space Radium <gluceg...@gmail.com> wrote:
> > >
> > > > Hi:
> > > > Do magnetars emit AM radio waves below the medium-wave range? If so,
> > > > how do we detect these waves? Can these waves be heard on the AM
> > > > radio? If so, what do they sound like?
> > >
> > > Frequencies above approximately 100 MHz almost always get through
> > > the ionization layers.
> > >
> > > Frequencies in the approximate range of 10 MHz to 100 MHz sometimes
> > > get through
> > >
> > > Frequencies below approximately 10 MHz almost never get through.
> > >
> > > So, if by "the AM radio" you mean a Broadcast Band radio which
> > > runs from about .5 MHz to 1.2 MHz, not a chance in hell of ever
> > > hearing anything from off the planet.
> > >
> > > Try again.
> >
> > Okay. But what if this is a supercooled AM radio receiver on a
> > spaceship orbiting Earth? If I am on a space station like MIR and this
> > station has a supercooled AM radio 44.1 KHz frequency receiver, will I
> > hear anything specific of magnetars?

> Nothing "specific". Thats the whole point. What exactly did you

```
> hope to hear that you think is significant? Obviously you have
> something in mind.
> KLM

What makes you think there is anything in that mind other than a
bunch of technical words and terms strung together in a random manner?

--
Jim Pennino

Remove .spam.sux to reply.


From 8164146497853843829
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X-Google-Thread: f74ae,f8d09a42f9fc3122
X-Google-Thread: fdc67,f8d09a42f9fc3122
X-Google-Thread: 10e8ad,f8d09a42f9fc3122
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X-Google-Language: ENGLISH,ASCII-7-bit
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mail
From:  Radium <glucegen1@gmail.com>
Newsgroups:
sci.astro.amateur,sci.astro,alt.astronomy,rec.radio.amateur.space,uk.sci.astronomy
Subject: Re: Do magnetars emit audible LW AM radio waves that can be heard on
receivers?
Date: Sun, 15 Jul 2007 16:54:19 -0000
Organization: http://groups.google.com
Lines: 61
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20050217,gzip(gfe),gzip(gfe)
Complaints-To: groups-abuse@google.com
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   posting-account=ps2QrAMAAAA6_jCuRt2JEIpn5Otqf_w0
Xref: g2news1.google.com sci.astro.amateur:83544 sci.astro:78732
alt.astronomy:156353 rec.radio.amateur.space:986 uk.sci.astronomy:21945

On Jul 15, 3:35 am, "George Dishman" <geo...@briar.demon.co.uk> wrote:

> fc > fm means fc should be greater than fm, not the same.
> For fm = 10,000Hz and fc = 10,001Hz you get a lower
> sideband at 1Hz and an upper sideband at 20,001Hz.

Sorry. I didn't read it correctly.

> If you modulate 10kHz with 10Khz, the lower sideband
> becomes 0Hz or DC. The value of that depends on the
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> (which is now constant since they are at the same
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> an alias either.
>
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> is why we call such a signal an "alias", the 10,001Hz
> signal appears after modulation then demodulation
> masquerading as a signal of 9,999Hz.

Does this mean an fm of 10 KHz would work on an fc of
10.0000000000000000000001 KHz?

If so, then the minimum frequency required for my "project" would be
only 20.0000000000000000001 KHz. Or just anything above 20 KHz, even
if it's just an extremely extremely small number above 20,000. Right?

I apologize if readers find my question annoying.

To all:

I have a neurological disability called Asperger's Syndrome.

I would like to give you some information about my disability. The
reason I am posting this message about Asperger's is to help avoid any
potential misunderstandings [though it's probably too late].

I have been diagnosed with Asperger's Syndrome (AS). AS is a
neurological condition that causes significant impairment in social
interactions. People with AS see the world differently and this can
often bring them in conflict with conventional ways of thinking. They
have difficulty in reading body language, and interpreting subtle
cues. In my situation, I have significant difficulty with natural

conversation, reading social cues, and maintaining eye contact. This can lead to a great deal of misunderstanding about my intent or my behavior. For example, I may not always know what to say in social situations, so I may look away or may not say anything. I also may not always respond quickly when asked direct questions, but if given time I am able express my ideas.

On Usenet, the text-equivalent of my disability is probably noticed. I do apologize profusely, for any inconvenience it causes.

Thank you very much in advance for your understanding, cooperation, and assistance.

```
From 6875911183152433042
X-Google-Thread: 113975,f8d09a42f9fc3122
X-Google-Thread: f74ae,f8d09a42f9fc3122
X-Google-Thread: fdc67,f8d09a42f9fc3122
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spamkiller.gnilink.net!gnilink.net!trnddc05.POSTED!24dd0da6!not-for-mail
Sender: Jim Pennino <jimp@mail.specsol.com>
Message-ID: <ii0qm4-a02.ln1@mail.specsol.com>
From: jimp@specsol.spam.sux.com
Subject: Re: Do magnetars emit audible LW AM radio waves that can be heard on
receivers?
Newsgroups:
sci.astro.amateur,sci.astro,alt.astronomy,rec.radio.amateur.space,uk.sci.astronomy
References: <1184356241.780744.194470@x35g2000prf.googlegroups.com>   <9f6lm4-
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Lines: 49
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alt.astronomy:156355 rec.radio.amateur.space:987 uk.sci.astronomy:21948
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X-Original-Bytes: 3455

In rec.radio.amateur.space Radium <glucegen1@gmail.com> wrote:
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Since all you are going to hear from astronomical sources is white noise, it doesn't matter.

Aliasing is irrelevant.

The bigger issue with the frequency (other than plain stupidity) you have choosen is that to be able to say you are hearing signals from something specific in the sky as opposed to everything in the sky, you need to have antenna directivity.

At a frequency of 44 KHz that means an antenna about 500 miles in diameter and there isn't much that can be done to make it smaller.

--
Jim Pennino

Remove .spam.sux to reply.

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From 7427557863873249085
X-Google-Thread: 113975,f8d09a42f9fc3122
X-Google-Thread: f74ae,f8d09a42f9fc3122
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Path: g2news1.google.com!postnews.google.com!e9g2000prf.googlegroups.com!not-for-
mail
From:  Radium <glucegen1@gmail.com>
Newsgroups:
sci.astro.amateur,sci.astro,alt.astronomy,rec.radio.amateur.space,uk.sci.astronomy
Subject: Re: Do magnetars emit audible LW AM radio waves that can be heard on
receivers?
Date: Sun, 15 Jul 2007 11:29:15 -0700
Organization: http://groups.google.com
Lines: 15
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Xref: g2news1.google.com sci.astro.amateur:83552 sci.astro:78742
alt.astronomy:156361 rec.radio.amateur.space:988 uk.sci.astronomy:21952
```

On Jul 15, 10:05 am, j...@specsol.spam.sux.com wrote:

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Why does it need to be around 500 miles? Atomic-clock wrist-watches
receive extremely long wavelengths and are able to do so with their
tiny sizes. Couldn't something similar be done for my 'application'?
If not, then why?

```
From -1670705061511921922
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X-Google-Thread: 10cf28,f8d09a42f9fc3122
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spamkiller.gnilink.net!gnilink.net!trnddc05.POSTED!24dd0da6!not-for-mail
Sender: Jim Pennino <jimp@mail.specsol.com>
Message-ID: <9c6qm4-sli.ln1@mail.specsol.com>
From: jimp@specsol.spam.sux.com
Subject: Re: Do magnetars emit audible LW AM radio waves that can be heard on
receivers?
Newsgroups:
sci.astro.amateur,sci.astro,alt.astronomy,rec.radio.amateur.space,uk.sci.astronomy
References: <1184356241.780744.194470@x35g2000prf.googlegroups.com>   <9f6lm4-
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X-Original-Bytes: 2653
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> Why does it need to be around 500 miles? Atomic-clock wrist-watches
> receive extremely long wavelengths and are able to do so with their
> tiny sizes. Couldn't something similar be done for my 'application'?
> If not, then why?

You need directivity otherwise you are "listening" to everything, not
just one source or even a small number of sources.

Directivity is directly related to antenna physical size in wavelengths.

The wavelength of 44 KHz is roughly 7,000 meters.

You can't get around it.

--
Jim Pennino

Remove .spam.sux to reply.

```
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X-Google-Thread: f74ae,f8d09a42f9fc3122
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X-Google-Thread: 10cf28,f8d09a42f9fc3122
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X-Google-Language: ENGLISH,ASCII-7-bit
Subject: Re: Do magnetars emit audible LW AM radio waves that can be heard on
receivers?
From: "George Dishman" <george@briar.demon.co.uk>
Date: Sun, 15 Jul 2007 19:52:37 +0100
Message-ID: <f7dqb7$v5c$1@news.freedom2surf.net>
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Xref: g2news1.google.com sci.astro.amateur:83556 sci.astro:78745
alt.astronomy:156363 rec.radio.amateur.space:990 uk.sci.astronomy:21954


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news:1184518459.509857.181290@z28g2000prd.googlegroups.com...
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>> For fm = 10,000Hz and fc = 10,001Hz you get a lower
>> sideband at 1Hz and an upper sideband at 20,001Hz.
>
> Sorry. I didn't read it correctly.

No problem, it's an easy point to miss and in fact
you are right in that it doesn't produce aliases.

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>> becomes 0Hz or DC. The value of that depends on the
>> phase of the modulating signal relative to the carrier
>> (which is now constant since they are at the same
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>>
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>
```

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> 10.0000000000000000000001 KHz?

Yes.

> If so, then the minimum frequency required for my "project" would be
> only 20.0000000000000000001 KHz. Or just anything above 20 KHz, even
> if it's just an extremely extremely small number above 20,000. Right?

In theory, but you are missing the bigger picture. Space
is not a perfect vacuum and in the vicinity of the Solar
System, the Solar wind pushes back the inter-stellar
medium. You can read more on that here:

 http://en.wikipedia.org/wiki/Heliosphere

Both the material within the region and the ISM are almost
entirely ionised so are in a form known as "plasma", a
soup of charged particles. One of the feautures of plasma
is that is absorbs low frequency signals below what is
called the "plasma cutoff frequency". Basically below
the VHF band, space becomes increasingly opaque and signals
from stars don't reach us.

> I apologize if readers find my question annoying.

No problem.

George

From -7123850394415499892
X-Google-Thread: 113975,f8d09a42f9fc3122
X-Google-Thread: f74ae,f8d09a42f9fc3122
X-Google-Thread: fdc67,f8d09a42f9fc3122
X-Google-Thread: 10e8ad,f8d09a42f9fc3122
X-Google-Thread: 10cf28,f8d09a42f9fc3122
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X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!postnews.google.com!d30g2000prg.googlegroups.com!not-for-mail
From: Radium <glucegen1@gmail.com>
Newsgroups: sci.astro.amateur,sci.astro,alt.astronomy,rec.radio.amateur.space,uk.sci.astronomy
Subject: Re: Do magnetars emit audible LW AM radio waves that can be heard on receivers?
Date: Sun, 15 Jul 2007 12:28:46 -0700
Organization: http://groups.google.com
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alt.astronomy:156367 rec.radio.amateur.space:991 uk.sci.astronomy:21955
```

On Jul 15, 11:52 am, "George Dishman" <geo...@briar.demon.co.uk>
wrote:

> "Radium" <gluceg...@gmail.com> wrote in message

> > If so, then the minimum frequency required for my "project" would be
> > only 20.0000000000000000001 KHz. Or just anything above 20 KHz, even
> > if it's just an extremely extremely small number above 20,000. Right?

> In theory, but you are missing the bigger picture. Space
> is not a perfect vacuum and in the vicinity of the Solar
> System, the Solar wind pushes back the inter-stellar
> medium. You can read more on that here:

> http://en.wikipedia.org/wiki/Heliosphere

Thanks for the link

> Both the material within the region and the ISM are almost
> entirely ionised so are in a form known as "plasma", a
> soup of charged particles. One of the feautures of plasma
> is that is absorbs low frequency signals below what is
> called the "plasma cutoff frequency". Basically below
> the VHF band, space becomes increasingly opaque and signals
> from stars don't reach us.

Do you think the SHF band [at most 30 GHz but at least 3 GHz] would be better suited for this? Would it be the ideal range of frequencies for detecting AM radio signals emitted by magnetars?

http://en.wikipedia.org/wiki/Super_high_frequency

SHF seems to be the sweet spot between frequencies that are high-enough to rip through charged particles yet low-enough to be wireless and long-distance. At EHF and above, it starts to get into the IR range where long-distance wireless reception is not possible.

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From: Dead Paul <dead_paul@no.reply>
Newsgroups:
sci.astro.amateur,sci.astro,alt.astronomy,rec.radio.amateur.space,uk.sci.astronomy
Subject: Re: Do magnetars emit audible LW AM radio waves that can be heard on
receivers?
Date: Sun, 15 Jul 2007 21:17:09 +0100
Organization: Datemas.de http://www.datemas.de
Lines: 84
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References: <1184356241.780744.194470@x35g2000prf.googlegroups.com>
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alt.astronomy:156374 rec.radio.amateur.space:992 uk.sci.astronomy:21956
```

On Sun, 15 Jul 2007 05:05:01 +0000, jimp wrote:

> In rec.radio.amateur.space Chris L Peterson <clp@alumni.caltech.edu>

> wrote:
>> On Sun, 15 Jul 2007 03:45:01 GMT, jimp@specsol.spam.sux.com wrote:
>
>> >Spread spectrum technology uses discrete frequency hopping, not a broad
>> >band signal as a carrier.
>
>> That's one spread spectrum method. Not the only one. But regardless, it
>> still presents as a broad band carrier.
>
> Nope, all spread spectrum is based on discrete frequencies with frequency
> hopping of some sort.
>
> It is only "broad band" if you integrate over multiple hops.
>
> The carrier at each frequency is quite conventional.
>
> Google for it.
>
>> >If I have a transmitter hooked to an antenna swaying in the breeze such
>> >that the received signal strength is varying, would you call that AM?
>
>> Absolutely.
>
>> >If the side lobes of a search radar are big enough, you can receive
>> >them no matter where the radar points. The signal strength goes up and
>> >down and goes up dramatically when you are swept by the main lobe.
>> >Would you call that AM?
>
>> AM is a variation in amplitude of some signal- any signal- with time.
>
> Nope, mathematically AM is defined as a single carrier frequency multipled
> by the modulation frequency.

He is correct. AM is a variation in amplitude of some signal (usually
a carrier wave).

> That you get a variation in amplitude is an
> effect, not a definition.

So what, you can define it how you wish, the effect is still one of
variation in amplitude of the carrier. Definitions do not dictate what
happens.

> It is a bit of a stretch to call a signal comprised of every frequency
> over a 100 GHz span AM.

Such a signal may still be demodulated with an am receiver. Of course that
will not yield the full extent of the information from the signal that may
be had from it but just for the sake of "listening" to it as some want to
do there is nothing wrong with that.

>> Yes, your radar is a type of amplitude modulation. If it were a
deep
>> space signal, it is the modulation of amplitude that would most catch
>> our attention.
>
>> Certainly AM carries a somewhat narrower meaning when discussing
>> communications that it does when looking at astronomical signals. But
>> the same underlying theory works for analyzing any signal that varies
>> in intensity with time.
>
> I'm afraid my background IS communications so I have to say astronomers
> are arm waving when they call astronomical signals AM unless ET is
> phoning home.

Astronomical signals aren't derived from PLL's or crystals, they aren't synthesized for receiving on radios with parameters tailored for speech or music even if they are sometimes or often demodulated by them given the right circumstances. I think you need to understand that radio sources in space are complex and may have several facets operating simultaneously each of which may tell a physicist a part of a story. You seem to be stuck in some sort of pedantic communications rut.

--
```
   ___  _______   ___    ___  ___  __  ____
  / _ \/ __/ _ | / _ \  / _ \/ _ |/ / / / /
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newsread4.news.pas.earthlink.net.POSTED!d2e3edad!not-for-mail
From: Chris L Peterson <clp@alumni.caltech.edu>
Newsgroups:
sci.astro.amateur,sci.astro,alt.astronomy,rec.radio.amateur.space,uk.sci.astronomy
Subject: Re: Do magnetars emit audible LW AM radio waves that can be heard on
receivers?
Organization: Cloudbait Observatory
Message-ID: <bs7l939h0qi6jnlpt1mne5e3i15odle036@4ax.com>
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Xref: g2news1.google.com sci.astro.amateur:83575 sci.astro:78759 alt.astronomy:156382 rec.radio.amateur.space:993 uk.sci.astronomy:21957

On Sun, 15 Jul 2007 16:15:01 GMT, jimp@specsol.spam.sux.com wrote:

>> >Nope, mathematically AM is defined as a single carrier frequency
>> >multipled by the modulation frequency. That you get a variation in
>> >amplitude is an effect, not a definition.
>
>> Reference? I think you are confusing a single definition of AM with all
>> other definitions of the term.
>
>How about this one:
>
>http://www.rfcafe.com/references/electrical/amplitude_modulation.htm

That isn't a mathematical definition of amplitude modulation. It's an example of an implementation of amplitude modulation for the purpose of deliberately encoding information. And in fact, it's idealized since no carrier frequency can ever be perfectly discrete. I've never seen a rule for how narrow or broad a carrier needs to be in order for an amplitude modulated form of it to be allowed to carry the term "amplitude modulation". And I'm sure you haven't either.

Like I said, you're confusing one particular usage of the term (one that isn't even relevant to astronomy) with the more general meaning- a signal that is modulated in intensity as a function of time.

In astronomy, we are concerned mostly with two types of modulation. Amplitude modulation is what we usually observe with a range of phenomena that show a variation in intensity with time, where the carrier signal may range from hard x-rays through radio waves (and be either narrowband or broadband), and the modulation frequency varies from a few kilohertz to many years per cycle. Frequency modulation is what we observe in spectroscopic binaries, large rotating objects, and other sources that have a line-of-site motion component. The carrier signal again ranges from x-rays through radio, but the modulation cycle time is measured in hours or more.

Chris L Peterson
Cloudbait Observatory
http://www.cloudbait.com

From 7768814150807810532
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X-Google-Thread: f74ae,f8d09a42f9fc3122
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From: Chris L Peterson <clp@alumni.caltech.edu>
Newsgroups:
sci.astro.amateur,sci.astro,alt.astronomy,rec.radio.amateur.space,uk.sci.astronomy
Subject: Re: Do magnetars emit audible LW AM radio waves that can be heard on
receivers?
Organization: Cloudbait Observatory
Message-ID: <hj8l93p6dpsrruc7icghlqh67oj5frckm6@4ax.com>
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Xref: g2news1.google.com sci.astro.amateur:83576 sci.astro:78760
alt.astronomy:156383 rec.radio.amateur.space:994 uk.sci.astronomy:21958

On Sun, 15 Jul 2007 17:05:01 GMT, jimp@specsol.spam.sux.com wrote:

>Since all you are going to hear from astronomical sources is white
>noise, it doesn't matter.

There are many astronomical sources that are not white noise. There are masers. There are natural filters that convolve some background signal that may or may not itself have structure. There are signals that are modulated in amplitude, phase, or frequency.

If the Universe consisted of nothing but noise sources, there wouldn't be much value in radio astronomy.

Chris L Peterson
Cloudbait Observatory
http://www.cloudbait.com

From -4632058681967578336
X-Google-Thread: 113975,f8d09a42f9fc3122
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Subject: Re: Do magnetars emit audible LW AM radio waves that can be heard on receivers?
From: Andrew Smallshaw <andrews@sdf.lonestar.org>
Date: Sun, 15 Jul 2007 19:18:10 +0000 (UTC)
Message-ID: <slrnf9ksne.gf5.andrews@sdf.lonestar.org>
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alt.astronomy:156385 rec.radio.amateur.space:995 uk.sci.astronomy:21959

On 2007-07-15, Radium <glucegen1@gmail.com> wrote:
> On Jul 15, 10:05 am, j...@specsol.spam.sux.com wrote:
>
>> The bigger issue with the frequency (other than plain stupidity) you
>> have choosen is that to be able to say you are hearing signals from
>> something specific in the sky as opposed to everything in the sky,
>> you need to have antenna directivity.
                            ^^^^^^^^^^^

> Why does it need to be around 500 miles? Atomic-clock wrist-watches
> receive extremely long wavelengths and are able to do so with their
> tiny sizes. Couldn't something similar be done for my 'application'?
> If not, then why?

Since when have radio controlled watches indicated the direction
to their transmitters?

There are ways of avoiding the need for such a large antenna, but
it isn't straightforward.  Basically you'd work from two sites at
least that far apart and combine the signals via interferometry.
But the maths for this will be above your head.  If you are interested
in this then change the habit of a lifetime and research the area
thoroughly for yourself _before_ spouting forth yet more ill-conceived
pseudoscientific "theories".

--
Andrew Smallshaw
andrews@sdf.lonestar.org


From -2712658477733492023
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X-Google-Thread: f74ae,f8d09a42f9fc3122
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From:  Rich <rander3127@gmail.com>
Newsgroups:
sci.astro.amateur,sci.astro,alt.astronomy,rec.radio.amateur.space,uk.sci.astronomy
Subject: Re: Do magnetars emit audible LW AM radio waves that can be heard on
receivers?
Date: Sun, 15 Jul 2007 17:27:07 -0700
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alt.astronomy:156390 rec.radio.amateur.space:996 uk.sci.astronomy:21960

On Jul 14, 9:46 pm, Chris L Peterson <c...@alumni.caltech.edu> wrote:
> On Sun, 15 Jul 2007 00:55:01 GMT, j...@specsol.spam.sux.com wrote:
> >The definitions for all types of modulation involve a carrier frequency.
>
> >Since natural phenomena generate broad band noise, it is arm waving
> >at best to call the variations in amplitude "amplitude modulation".
>
> >What it is is a broad band source that periodically varies in signal
> >strength.
>
> There's nothing that defines how narrow a band need be to qualify as a
> "carrier". Many modern communication systems are spread spectrum, which
> means the carrier may be very broad. Such systems are certainly
> modulated. Also, many astronomical sources are not broadband at all, but
> radiate across a narrow spectrum.

Bet he feels less superior now....10:1 he slithers off.



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Sender: Jim Pennino <jimp@mail.specsol.com>
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Subject: Re: Do magnetars emit audible LW AM radio waves that can be heard on receivers?
Newsgroups:
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alt.astronomy:156396 rec.radio.amateur.space:997 uk.sci.astronomy:21961
X-Original-Bytes: 3497

In rec.radio.amateur.space Chris L Peterson <clp@alumni.caltech.edu> wrote:
> On Sun, 15 Jul 2007 16:15:01 GMT, jimp@specsol.spam.sux.com wrote:

> >> >Nope, mathematically AM is defined as a single carrier frequency
> >> >multipled by the modulation frequency. That you get a variation in
> >> >amplitude is an effect, not a definition.
> >
> >> Reference? I think you are confusing a single definition of AM with all
> >> other definitions of the term.
> >
> >How about this one:
> >
> >http://www.rfcafe.com/references/electrical/amplitude_modulation.htm

> That isn't a mathematical definition of amplitude modulation. It's an
> example of an implementation of amplitude modulation for the purpose of
> deliberately encoding information. And in fact, it's idealized since no
> carrier frequency can ever be perfectly discrete. I've never seen a rule
> for how narrow or broad a carrier needs to be in order for an amplitude
> modulated form of it to be allowed to carry the term "amplitude
> modulation". And I'm sure you haven't either.

> Like I said, you're confusing one particular usage of the term (one that
> isn't even relevant to astronomy) with the more general meaning- a
> signal that is modulated in intensity as a function of time.

> In astronomy, we are concerned mostly with two types of modulation.
> Amplitude modulation is what we usually observe with a range of

> phenomena that show a variation in intensity with time, where the
> carrier signal may range from hard x-rays through radio waves (and be
> either narrowband or broadband), and the modulation frequency varies
> from a few kilohertz to many years per cycle. Frequency modulation is
> what we observe in spectroscopic binaries, large rotating objects, and
> other sources that have a line-of-site motion component. The carrier
> signal again ranges from x-rays through radio, but the modulation cycle
> time is measured in hours or more.

You ignored the most important question; is the square root of -1 i or j?

--
Jim Pennino

Remove .spam.sux to reply.

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From: Chris L Peterson <clp@alumni.caltech.edu>
Newsgroups:
sci.astro.amateur,sci.astro,alt.astronomy,rec.radio.amateur.space,uk.sci.astronomy
Subject: Re: Do magnetars emit audible LW AM radio waves that can be heard on
receivers?
Organization: Cloudbait Observatory
Message-ID: <tugl93h1dc6c1sjbr706hgven2b3f13fh8@4ax.com>
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Xref: g2news1.google.com sci.astro.amateur:83589 sci.astro:78775
alt.astronomy:156397 rec.radio.amateur.space:998 uk.sci.astronomy:21962

On Mon, 16 Jul 2007 00:55:01 GMT, jimp@specsol.spam.sux.com wrote:

>You ignored the most important question; is the square root of -1 i or j?

I use i. But I certainly recall electronics classes where j was used to
avoid confusion. I don't worry too much about the choice of symbol.

Chris L Peterson
Cloudbait Observatory
http://www.cloudbait.com

From -820164524122593770
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not-for-mail
Sender: Jim Pennino <jimp@mail.specsol.com>
Message-ID: <u8uqm4-e4m.ln1@mail.specsol.com>
From: jimp@specsol.spam.sux.com
Subject: Re: Do magnetars emit audible LW AM radio waves that can be heard on
receivers?
Newsgroups:
sci.astro.amateur,sci.astro,alt.astronomy,rec.radio.amateur.space,uk.sci.astronomy
References: <1VQli.10184$Xa3.3577@attbi_s22>
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alt.astronomy:156399 rec.radio.amateur.space:999 uk.sci.astronomy:21963

In rec.radio.amateur.space Chris L Peterson <clp@alumni.caltech.edu> wrote:
> On Mon, 16 Jul 2007 00:55:01 GMT, jimp@specsol.spam.sux.com wrote:

> >You ignored the most important question; is the square root of -1 i or j?

> I use i. But I certainly recall electronics classes where j was used to
> avoid confusion. I don't worry too much about the choice of symbol.

There you have it.

The basic problem is we speak two different languages; it's j.

It is like telling the Marine Corp and the Air Force to "secure a building".

The Corp orders air and artillery strikes, does a frontal infantry
assualt and establishes a defensive perimeter inside the building.

The Air Force takes out a three year lease with an option to buy.

--
Jim Pennino

Remove .spam.sux to reply.

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From: Sam Wormley <swormley1@mchsi.com>
Organization: None Needed
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Newsgroups:
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Subject: Re: Do magnetars emit audible LW AM radio waves that can be heard
on receivers?
References: <1184356241.780744.194470@x35g2000prf.googlegroups.com>
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alt.astronomy:156400 rec.radio.amateur.space:1000 uk.sci.astronomy:21964

Chris L Peterson wrote:
> On Sat, 14 Jul 2007 23:36:08 GMT, Sam Wormley <swormley1@mchsi.com>
> wrote:
>
>>   Amplitude modulation, in the communications world, has a definite
>>   structure--I suspect that magnetar spectra don't exhibit amplitude
>>   modulation characteristics.
>
> A magnetar is a type of pulsar. You have a signal at some frequency (or
> range frequencies) that varies in amplitude with time (as the object
> spins). That's the very definition of amplitude modulation. Nearly every
> radio source around shows some degree of amplitude modulation as the
> result of spin. This includes objects radiating well out of the radio
> band, as well. Optical binaries exhibit AM. Starspots show up as AM.
> Rotating asteroids are AM. Cepheids. Cataclysmic variables. Etc.
>
> _________________________________________________
>
> Chris L Peterson
> Cloudbait Observatory
> http://www.cloudbait.com


   1E 1048.1-5937 (Magnitar) Spectra
     http://images.google.com/images?q=1E%201048.1-5937%20spectra

   SGR 1806-20 (Magnitar) spectra
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Newsgroups:
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receivers?
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Xref: g2news1.google.com sci.astro.amateur:83594 sci.astro:78779
alt.astronomy:156401 rec.radio.amateur.space:1001 uk.sci.astronomy:21965
```

On Jul 15, 11:52 am, "George Dishman" <geo...@briar.demon.co.uk>
wrote:

> http://en.wikipedia.org/wiki/Heliosphere
>
> Both the material within the region and the ISM are almost
> entirely ionised so are in a form known as "plasma", a
> soup of charged particles. One of the feautures of plasma
> is that is absorbs low frequency signals below what is
> called the "plasma cutoff frequency". Basically below
> the VHF band, space becomes increasingly opaque and signals
> from stars don't reach us.

Okay so it seems like a no win-situation here. Too low and plasmas
will cut it off. Too high and you lose strength really fast.

http://www.terabeam.com/support/calculations/free-space-loss.php

>From the above link, it seems that a higher-frequency radio wave would
lose its strength faster than a lower-frequency radio wave of the same
original strength would.

At the start of the transmission, both the higher and lower frequencies maybe at the same power [watts-per-meter-squared]. However, the higher frequency will lose its strength -- and likely dissipate into the noise floor -- quicker than the lower-frequency. Hence, reception of higher-frequencies requires that the transmitter and receiver be closer together.

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From: Chris L Peterson <clp@alumni.caltech.edu>
Newsgroups:
sci.astro.amateur,sci.astro,alt.astronomy,rec.radio.amateur.space,uk.sci.astronomy
Subject: Re: Do magnetars emit audible LW AM radio waves that can be heard on
receivers?
Organization: Cloudbait Observatory
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2007 20:06:47 PDT)
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alt.astronomy:156402 rec.radio.amateur.space:1002 uk.sci.astronomy:21966
```

On Mon, 16 Jul 2007 01:35:01 GMT, jimp@specsol.spam.sux.com wrote:

>There you have it.
>
>The basic problem is we speak two different languages; it's j.

No, I'm bilingual. You apparently are not <g>.

Chris L Peterson
Cloudbait Observatory
http://www.cloudbait.com

From -2670743951219215864
X-Google-Thread: 113975,f8d09a42f9fc3122
X-Google-Thread: f74ae,f8d09a42f9fc3122
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Message-ID: <ua5rm4-4ka.ln1@mail.specsol.com>
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Subject: Re: Do magnetars emit audible LW AM radio waves that can be heard on receivers?
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alt.astronomy:156404 rec.radio.amateur.space:1003 uk.sci.astronomy:21967
X-Original-Bytes: 2097

In rec.radio.amateur.space Chris L Peterson <clp@alumni.caltech.edu> wrote:
> On Mon, 16 Jul 2007 01:35:01 GMT, jimp@specsol.spam.sux.com wrote:

> >There you have it.
> >
> >The basic problem is we speak two different languages; it's j.

> No, I'm bilingual. You apparently are not <g>.

Blasphemy; unbelievers are not allowed to speak the one true language.

In a broad band astronomical signal, where does one find the upper and
lower side bands of AM?

Are they standing tall and proud as they should, or are they lost in
the hiss and spit of a signal that is best described as "shit happens"?

--
Jim Pennino

Remove .spam.sux to reply.

From 7543375003900076743
X-Google-Thread: 113975,fb0abfdfeeeb51a8,start
X-Google-Thread: f74ae,fb0abfdfeeeb51a8,start
X-Google-Thread: fdc67,fb0abfdfeeeb51a8,start
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X-Google-Thread: 10cf28,fb0abfdfeeeb51a8,start
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Path: g2news1.google.com!postnews.google.com!i13g2000prf.googlegroups.com!not-for-mail
From: Radium <glucegen1@gmail.com>
Newsgroups:
sci.astro.amateur,sci.astro,alt.astronomy,rec.radio.amateur.space,uk.sci.astronomy
Subject: What is the best frequency for detecting audible AM radio signals from magnetars?
Date: Sun, 15 Jul 2007 22:23:46 -0700
Organization: http://groups.google.com
Lines: 32
Message-ID: <1184563426.919874.247470@i13g2000prf.googlegroups.com>
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Xref: g2news1.google.com sci.astro.amateur:83613 sci.astro:78793
alt.astronomy:156411 rec.radio.amateur.space:1004 uk.sci.astronomy:21968

On Jul 15, 11:52 am, "George Dishman" <geo...@briar.demon.co.uk> wrote
in http://groups.google.com/group/sci.astro.amateur/msg/e7f1f3e452a2a514?hl=en&
:

> http://en.wikipedia.org/wiki/Heliosphere
> Both the material within the region and the ISM are almost
> entirely ionised so are in a form known as "plasma", a
> soup of charged particles. One of the feautures of plasma
> is that is absorbs low frequency signals below what is
> called the "plasma cutoff frequency". Basically below
> the VHF band, space becomes increasingly opaque and signals
> from stars don't reach us.

Then what is the best frequency for detecting audible AM radio signals
from magnetars?

It seems like a no win-situation here. Too low and plasmas will cut it
off. Too high and you lose strength really fast.

http://www.terabeam.com/support/calculations/free-space-loss.php

>From the above link, it seems that a higher-frequency radio wave would
lose its strength faster than a lower-frequency radio wave of the same
original strength would.

At the start of the transmission, both the higher and lower
frequencies maybe at the same power [watts-per-meter-squared].
However, the higher frequency will lose its strength -- and likely
dissipate into the noise floor -- quicker than the lower-frequency.
Hence, reception of higher-frequencies requires that the transmitter
and receiver be closer together.

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news.giganews.com.POSTED!not-for-mail
NNTP-Posting-Date: Mon, 16 Jul 2007 02:10:05 -0500
Date: Mon, 16 Jul 2007 00:09:54 -0700
From: Bob Cain <arcane@arcanemethods.com>
User-Agent: Thunderbird 2.0.0.4 (Windows/20070604)
MIME-Version: 1.0
Newsgroups:
rec.audio.tech,sci.astro,sci.physics,rec.radio.amateur.antenna,rec.radio.amateur.s
pace
Subject: Re: George Dishman says Karl Uppiano is wrong about AM radio,  carrier-
frequencies,
 and aliasing. Who should I believe? Why?
```

References: <1184468254.568850.94820@o11g2000prd.googlegroups.com>
<4699B81E.48B8ADE2@worldnet.att.net> <139jkm7ebsfom3a@corp.supernews.com>
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X-Complaints-To: abuse@giganews.com
X-DMCA-Notifications: http://www.giganews.com/info/dmca.html
X-Abuse-and-DMCA-Info: Please be sure to forward a copy of ALL headers
X-Abuse-and-DMCA-Info: Otherwise we will be unable to process your complaint
properly
X-Postfilter: 1.3.35
Xref: g2news1.google.com rec.audio.tech:32501 sci.astro:78799 sci.physics:356435
rec.radio.amateur.antenna:44308 rec.radio.amateur.space:1005

Roy Lewallen wrote:
> This looks like a good time to point out that equivalent-time and random
> sampling oscilloscopes display waveforms having bandwidths in the tens
> of GHz which were captured by sampling at rates from a hundred kHz to a
> few MHz, and have done so for decades.

For random sampling of periodic signals the resolution is about the aperture,
not the rate.

Bob
--

"Things should be described as simply as possible, but no simpler."

A. Einstein

From -4714152722364479923
X-Google-Thread: 113975,f8d09a42f9fc3122
X-Google-Thread: f74ae,f8d09a42f9fc3122
X-Google-Thread: fdc67,f8d09a42f9fc3122
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news.usenetserver.com!spln!extra.newsguy.com!newsp.newsguy.com!news5
From: KLM <milk@mchsi.com>
Newsgroups:
sci.astro.amateur,sci.astro,alt.astronomy,rec.radio.amateur.space,uk.sci.astronomy
Subject: Re: Do magnetars emit audible LW AM radio waves that can be heard on

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 receivers?
Date: Mon, 16 Jul 2007 02:12:21 -0500
Organization: NewsGuy - Unlimited Usenet $19.95
Lines: 53
Message-ID: <469B1A55.9780581A@mchsi.com>
References: <1184356241.780744.194470@x35g2000prf.googlegroups.com>   <9f6lm4-
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X-Accept-Language: en
Xref: g2news1.google.com sci.astro.amateur:83619 sci.astro:78800
alt.astronomy:156413 rec.radio.amateur.space:1006 uk.sci.astronomy:21971



jimp@specsol.spam.sux.com wrote:

> In rec.radio.amateur.space KLM <milk@mchsi.com> wrote:
>
> > Radium wrote:
>
> > > On Jul 13, 2:15 pm, j...@specsol.spam.sux.com wrote:
> > > > In rec.radio.amateur.space Radium <gluceg...@gmail.com> wrote:
> > > >
> > > > > Hi:
> > > > > Do magnetars emit AM radio waves below the medium-wave range? If so,
> > > > > how do we detect these waves? Can these waves be heard on the AM
> > > > > radio? If so, what do they sound like?
> > > >
> > > > Frequencies above approximately 100 MHz almost always get through
> > > > the ionization layers.
> > > >
> > > > Frequencies in the approximate range of 10 MHz to 100 MHz sometimes
> > > > get through
> > > >
> > > > Frequencies below approximately 10 MHz almost never get through.
> > > >
> > > > So, if by "the AM radio" you mean a Broadcast Band radio which
> > > > runs from about .5 MHz to 1.2 MHz, not a chance in hell of ever
> > > > hearing anything from off the planet.
> > > >
> > > > Try again.
> > >
> > > Okay. But what if this is a supercooled AM radio receiver on a
> > > spaceship orbiting Earth? If I am on a space station like MIR and this
> > > station has a supercooled AM radio 44.1 KHz frequency receiver, will I
> > > hear anything specific of magnetars?
>
> > Nothing "specific". Thats the whole point. What exactly did you
> > hope to hear that you think is significant? Obviously you have
> > something in mind.
> > KLM
>
> What makes you think there is anything in that mind other than a
> bunch of technical words and terms strung together in a random manner?
>

who said anything about thinking!?



>
> --
> Jim Pennino
>
> Remove .spam.sux to reply.




From 5662759069647400 4
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X-Google-Thread: fdc67,f8d09a42f9fc3122
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mail
From:  Rozagy <Rozagy@aol.com>
Newsgroups:
sci.astro.amateur,sci.astro,alt.astronomy,rec.radio.amateur.space,uk.sci.astronomy
Subject: Re: Do magnetars emit audible LW AM radio waves that can be heard on
receivers?
Date: Mon, 16 Jul 2007 03:29:26 -0700
Organization: http://groups.google.com
Lines: 73
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References: <1184356241.780744.194470@x35g2000prf.googlegroups.com>
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   <1184363427.894765.114000@g37g2000prf.googlegroups.com>
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Xref: g2news1.google.com sci.astro.amateur:83627 sci.astro:78806
alt.astronomy:156416 rec.radio.amateur.space:1007 uk.sci.astronomy:21973

On Jul 15, 5:54?pm, Radium <gluceg...@gmail.com> wrote:
> On Jul 15, 3:35 am, "George Dishman" <geo...@briar.demon.co.uk> wrote:
>
> > fc > fm means fc should be greater than fm, not the same.
> > For fm = 10,000Hz and fc = 10,001Hz you get a lower
> > sideband at 1Hz and an upper sideband at 20,001Hz.
>
> Sorry. I didn't read it correctly.
>
> > If you modulate 10kHz with 10Khz, the lower sideband
> > becomes 0Hz or DC. The value of that depends on the
> > phase of the modulating signal relative to the carrier
> > (which is now constant since they are at the same
> > frequency). Of course sending DC to an antenna won't
> > give you a transmitted signal but it doesn't produce
> > an alias either.
>
> > If you modulate 10,000Hz with 10,001Hz then your lower
> > sideband becomes -1Hz, and of course sin(-x) = sin(x)
> > so that is identical to a frequency of 1Hz which you
> > would get if you modulated with 9,999Hz. That ambiguity
> > is why we call such a signal an "alias", the 10,001Hz
> > signal appears after modulation then demodulation
> > masquerading as a signal of 9,999Hz.
>
> Does this mean an fm of 10 KHz would work on an fc of
> 10.0000000000000000000001 KHz?
>
> If so, then the minimum frequency required for my "project" would be
> only 20.0000000000000000001 KHz. Or just anything above 20 KHz, even
> if it's just an extremely extremely small number above 20,000. Right?
>
> I apologize if readers find my question annoying.
>
> To all:
>
> I have a neurological disability calledAsperger'sSyndrome.

>
> I would like to give you some information about my disability. The
> reason I am posting this message aboutAsperger'sis to help avoid any
> potential misunderstandings [though it's probably too late].
>
> I have been diagnosed withAsperger'sSyndrome(AS). AS is a
> neurological condition that causes significant impairment in social
> interactions. People with AS see the world differently and this can
> often bring them in conflict with conventional ways of thinking. They
> have difficulty in reading body language, and interpreting subtle
> cues. In my situation, I have significant difficulty with natural
> conversation, reading social cues, and maintaining eye contact. This
> can lead to a great deal of misunderstanding about my intent or my
> behavior. For example, I may not always know what to say in social
> situations, so I may look away or may not say anything. I also may not
> always respond quickly when asked direct questions, but if given time
> I am able express my ideas.
>
> On Usenet, the text-equivalent of my disability is probably noticed. I
> do apologize profusely, for any inconvenience it causes.
>
> Thank you very much in advance for your understanding, cooperation,
> and assistance.

Good on you, mate!

Welcome to the Aspie community!!!!!

You'll fit right in - make yourself at home!

The world is chaninng :-)

Roza
xxx
www.myspace.com/rozagy

From -6144969729798002322
X-Google-Thread: 113975,f8d09a42f9fc3122
X-Google-Thread: f74ae,f8d09a42f9fc3122
X-Google-Thread: fdc67,f8d09a42f9fc3122
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X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!postnews.google.com!57g2000hsv.googlegroups.com!not-for-mail
From: George Dishman <george@briar.demon.co.uk>
Newsgroups: sci.astro.amateur,sci.astro,alt.astronomy,rec.radio.amateur.space,uk.sci.astronomy
Subject: Re: Do magnetars emit audible LW AM radio waves that can be heard on receivers?

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Date: Mon, 16 Jul 2007 06:55:56 -0700
Organization: http://groups.google.com
Lines: 50
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   posting-account=ps2QrAMAAAA6_jCuRt2JEIpn5Otqf_w0
Xref: g2news1.google.com sci.astro.amateur:83634 sci.astro:78814
alt.astronomy:156421 rec.radio.amateur.space:1008 uk.sci.astronomy:21975

On 15 Jul, 20:28, Radium <gluceg...@gmail.com> wrote:
> On Jul 15, 11:52 am, "George Dishman" <geo...@briar.demon.co.uk>
> wrote:
>
> > "Radium" <gluceg...@gmail.com> wrote in message
> > > If so, then the minimum frequency required for my "project" would be
> > > only 20.0000000000000000001 KHz. Or just anything above 20 KHz, even
> > > if it's just an extremely extremely small number above 20,000. Right?
> > In theory, but you are missing the bigger picture. Space
> > is not a perfect vacuum and in the vicinity of the Solar
> > System, the Solar wind pushes back the inter-stellar
> > medium. You can read more on that here:
> >  http://en.wikipedia.org/wiki/Heliosphere
>
> Thanks for the link
>
> > Both the material within the region and the ISM are almost
> > entirely ionised so are in a form known as "plasma", a
> > soup of charged particles. One of the feautures of plasma
> > is that is absorbs low frequency signals below what is
```

> > called the "plasma cutoff frequency". Basically below
> > the VHF band, space becomes increasingly opaque and signals
> > from stars don't reach us.
>
> Do you think the SHF band [at most 30 GHz but at least 3 GHz] would be
> better suited for this? Would it be the ideal range of frequencies for
> detecting AM radio signals emitted by magnetars?
>
> http://en.wikipedia.org/wiki/Super_high_frequency
>
> SHF seems to be the sweet spot between frequencies that are high-
> enough to rip through charged particles yet low-enough to be wireless
> and long-distance. At EHF and above, it starts to get into the IR
> range where long-distance wireless reception is not possible.

The sweet spot is the waterhole:

http://www.setileague.org/general/waterhol.htm

Pulsars are detected at somewhat lower frequencies
and quite a bit of work has been done studying the
background at 408 MHz:

http://www.jb.man.ac.uk/research/cmb/foreground.html

I assume you are expecting a spinning magnetar to
give a signal simliar to a pulsar.

George

From -6406429962982195524
X-Google-Thread: 113975,f8d09a42f9fc3122
X-Google-Thread: f74ae,f8d09a42f9fc3122
X-Google-Thread: fdc67,f8d09a42f9fc3122
X-Google-Thread: 10e8ad,f8d09a42f9fc3122
X-Google-Thread: 10cf28,f8d09a42f9fc3122
X-Google-Attributes: gid113975,gidf74ae,gidfdc67,gid10e8ad,gid10cf28,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!postnews.google.com!w3g2000hsg.googlegroups.com!not-for-mail
From: George Dishman <george@briar.demon.co.uk>
Newsgroups: sci.astro.amateur,sci.astro,alt.astronomy,rec.radio.amateur.space,uk.sci.astronomy
Subject: Re: Do magnetars emit audible LW AM radio waves that can be heard on receivers?
Date: Mon, 16 Jul 2007 06:56:02 -0700
Organization: http://groups.google.com
Lines: 31
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<9f6lm4-k62.ln1@mail.specsol.com>

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Complaints-To: groups-abuse@google.com
Injection-Info: w3g2000hsg.googlegroups.com; posting-host=192.93.164.23;
   posting-account=ps2QrAMAAAA6_jCuRt2JEIpn5Otqf_w0
Xref: g2news1.google.com sci.astro.amateur:83635 sci.astro:78815
alt.astronomy:156422 rec.radio.amateur.space:1009 uk.sci.astronomy:21976
```

On 16 Jul, 02:45, Radium <gluceg...@gmail.com> wrote:

> On Jul 15, 11:52 am, "George Dishman" <geo...@briar.demon.co.uk>
> wrote:
>
> > http://en.wikipedia.org/wiki/Heliosphere
>
> > Both the material within the region and the ISM are almost
> > entirely ionised so are in a form known as "plasma", a
> > soup of charged particles. One of the feautures of plasma
> > is that is absorbs low frequency signals below what is
> > called the "plasma cutoff frequency". Basically below
> > the VHF band, space becomes increasingly opaque and signals
> > from stars don't reach us.
>
> Okay so it seems like a no win-situation here. Too low and plasmas
> will cut it off. Too high and you lose strength really fast.
>
> http://www.terabeam.com/support/calculations/free-space-loss.php
>
> From the above link, it seems that a higher-frequency radio wave would
> lose its strength faster than a lower-frequency radio wave of the same
> original strength would.
>
> At the start of the transmission, both the higher and lower
> frequencies maybe at the same power [watts-per-meter-squared].
> However, the higher frequency will lose its strength -- and likely

> dissipate into the noise floor -- quicker than the lower-frequency.
> Hence, reception of higher-frequencies requires that the transmitter
> and receiver be closer together.

```
From -6532272453862567679
X-Google-Thread: 113975,f8d09a42f9fc3122
X-Google-Thread: f74ae,f8d09a42f9fc3122
X-Google-Thread: fdc67,f8d09a42f9fc3122
X-Google-Thread: 10e8ad,f8d09a42f9fc3122
X-Google-Thread: 10cf28,f8d09a42f9fc3122
X-Google-Attributes: gid113975,gidf74ae,gidfdc67,gid10e8ad,gid10cf28,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!postnews.google.com!r34g2000hsd.googlegroups.com!not-for-
mail
From:  George Dishman <george@briar.demon.co.uk>
Newsgroups:
sci.astro.amateur,sci.astro,alt.astronomy,rec.radio.amateur.space,uk.sci.astronomy
Subject: Re: Do magnetars emit audible LW AM radio waves that can be heard on
receivers?
Date: Mon, 16 Jul 2007 06:57:59 -0700
Organization: http://groups.google.com
Lines: 28
Message-ID: <1184594279.172923.206810@r34g2000hsd.googlegroups.com>
References: <1184356241.780744.194470@x35g2000prf.googlegroups.com>
   <9f6lm4-k62.ln1@mail.specsol.com>
   <1184363427.894765.114000@g37g2000prf.googlegroups.com>
   <nmflm4-v6s.ln1@mail.specsol.com>
   <1184373407.506861.132200@m37g2000prh.googlegroups.com>
   <f7a0mi$9li$1@news.freedom2surf.net>
   <1184446739.705444.308660@i38g2000prf.googlegroups.com>
   <f7bku8$hsk$1@news.freedom2surf.net>
   <1184468634.242671.140830@i38g2000prf.googlegroups.com>
   <f7csvp$cpb$1@news.freedom2surf.net>
   <1184518459.509857.181290@z28g2000prd.googlegroups.com>
   <f7dqb7$v5c$1@news.freedom2surf.net>
   <1184550322.852520.25140@o11g2000prd.googlegroups.com>
NNTP-Posting-Host: 192.93.164.23
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"
X-Trace: posting.google.com 1184594279 13177 127.0.0.1 (16 Jul 2007 13:57:59 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Mon, 16 Jul 2007 13:57:59 +0000 (UTC)
In-Reply-To: <1184550322.852520.25140@o11g2000prd.googlegroups.com>
User-Agent: G2/1.0
X-HTTP-UserAgent: Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.0; T312461; .NET
CLR 1.1.4322),gzip(gfe),gzip(gfe)
Complaints-To: groups-abuse@google.com
Injection-Info: r34g2000hsd.googlegroups.com; posting-host=192.93.164.23;
   posting-account=ps2QrAMAAAA6_jCuRt2JEIpn5Otqf_w0
Xref: g2news1.google.com sci.astro.amateur:83637 sci.astro:78816
```

```
alt.astronomy:156423 rec.radio.amateur.space:1010 uk.sci.astronomy:21978

On 16 Jul, 02:45, Radium <gluceg...@gmail.com> wrote:
> On Jul 15, 11:52 am, "George Dishman" <geo...@briar.demon.co.uk>
> wrote:
>
> >  http://en.wikipedia.org/wiki/Heliosphere
>
> > Both the material within the region and the ISM are almost
> > entirely ionised so are in a form known as "plasma", a
> > soup of charged particles. One of the feautures of plasma
> > is that is absorbs low frequency signals below what is
> > called the "plasma cutoff frequency". Basically below
> > the VHF band, space becomes increasingly opaque and signals
> > from stars don't reach us.
>
> Okay so it seems like a no win-situation here. Too low and plasmas
> will cut it off. Too high and you lose strength really fast.
>
> http://www.terabeam.com/support/calculations/free-space-loss.php
>
> From the above link, it seems that a higher-frequency radio wave would
> lose its strength faster than a lower-frequency radio wave of the same
> original strength would.

That link is only relevant for a fixed size antenna. See
my other post on the waterhole and the 408 MHz band.

George




From -963388605742612185
X-Google-Thread: 113975,fb0abfdfeeeb51a8
X-Google-Thread: f74ae,fb0abfdfeeeb51a8
X-Google-Thread: fdc67,fb0abfdfeeeb51a8
X-Google-Thread: 10e8ad,fb0abfdfeeeb51a8
X-Google-Thread: 10cf28,fb0abfdfeeeb51a8
X-Google-Attributes: gid113975,gidf74ae,gidfdc67,gid10e8ad,gid10cf28,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!border1.nntp.dca.giganews.com!
border2.nntp.dca.giganews.com!nntp.giganews.com!cyclone1.gnilink.net!
spamkiller.gnilink.net!gnilink.net!trnddc03.POSTED!24dd0da6!not-for-mail
Sender: Jim Pennino <jimp@mail.specsol.com>
Message-ID: <o6csm4-q6r.ln1@mail.specsol.com>
From: jimp@specsol.spam.sux.com
Subject: Re: What is the best frequency for detecting audible AM radio signals
from magnetars?
Newsgroups:
sci.astro.amateur,sci.astro,alt.astronomy,rec.radio.amateur.space,uk.sci.astronomy
References: <1184563426.919874.247470@i13g2000prf.googlegroups.com>
User-Agent: tin/1.8.3-20070201 ("Scotasay") (UNIX) (SunOS/5.9 (sun4u))
Lines: 32
```

```
Date: Mon, 16 Jul 2007 14:35:01 GMT
NNTP-Posting-Host: 71.118.11.57
X-Complaints-To: abuse@verizon.net
X-Trace: trnddc03 1184596501 71.118.11.57 (Mon, 16 Jul 2007 10:35:01 EDT)
NNTP-Posting-Date: Mon, 16 Jul 2007 10:35:01 EDT
Xref: g2news1.google.com sci.astro.amateur:83643 sci.astro:78817
alt.astronomy:156424 rec.radio.amateur.space:1011 uk.sci.astronomy:21982
X-Original-Bytes: 1757

In rec.radio.amateur.space Radium <glucegen1@gmail.com> wrote:
> On Jul 15, 11:52 am, "George Dishman" <geo...@briar.demon.co.uk> wrote
> in http://groups.google.com/group/sci.astro.amateur/msg/e7f1f3e452a2a514?hl=en&
> :

<snip>

> Then what is the best frequency for detecting audible AM radio signals
> from magnetars?

Radio astronomy

http://www.nrao.edu/whatisra/
http://www2.jpl.nasa.gov/radioastronomy/
http://www.haystack.mit.edu/edu/undergrad/materials/RA_tutorial.html

What it sounds like:

http://www.radio-astronomy.net/

Amateur radio astronomy

http://www.nitehawk.com/rasmit/
http://www.signalone.com/radioastronomy/telescope/
http://www.radiosky.com/

<snip remaining crap>

--
Jim Pennino

Remove .spam.sux to reply.


From 6557829588217182409
X-Google-Thread: fb1f8,371c39c687183a77
X-Google-Thread: f74ae,371c39c687183a77
X-Google-Thread: 10b271,371c39c687183a77
X-Google-Thread: fcc6e,371c39c687183a77
X-Google-Thread: 10e8ad,371c39c687183a77
X-Google-Attributes: gidfb1f8,gidf74ae,gid10b271,gidfcc6e,gid10e8ad,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news4.google.com!feeder1-2.proxad.net!proxad.net!
feeder1-1.proxad.net!newspeer1.se.telia.net!se.telia.net!masternews.telia.net.!
```

```
newsb.telia.net.POSTED!not-for-mail
From: pausch@saaf.se (Paul Schlyter)
Newsgroups:
rec.audio.tech,sci.astro,sci.physics,rec.radio.amateur.antenna,rec.radio.amateur.s
pace
Subject: Re: George Dishman says Karl Uppiano is wrong about AM radio, carrier-
frequencies, and aliasing. Who should I believe? Why?
Organization: Unknown
Lines: 16
Message-ID: <f7hqos$1eul$1@merope.saaf.se>
References: <1184468254.568850.94820@o11g2000prd.googlegroups.com> <trgom4-
vmm.ln1@mail.specsol.com> <1184475851.942566.121140@e16g2000pri.googlegroups.com>
<32spm4-9ck.ln1@mail.specsol.com>
Date: Tue, 17 Jul 2007 07:42:47 GMT
NNTP-Posting-Host: 217.209.96.76
X-Complaints-To: abuse@telia.com
X-Trace: newsb.telia.net 1184658167 217.209.96.76 (Tue, 17 Jul 2007 09:42:47 CEST)
NNTP-Posting-Date: Tue, 17 Jul 2007 09:42:47 CEST
Xref: g2news1.google.com rec.audio.tech:32539 sci.astro:78882 sci.physics:356718
rec.radio.amateur.antenna:44381 rec.radio.amateur.space:1012

In article <32spm4-9ck.ln1@mail.specsol.com>,
 <jimp@specsol.spam.sux.com> wrote:

> search for AM modulation

You don't need to write "AM modulation", since "AM" means
"amplitude modulation".  Therefore "AM modulation" becomes
"amplitude modulation modulation" ......   :-)

But perhaps you were considering adding some subcarrier to the AM?  :-)))))))))

-- 
----------------------------------------------------------------
Paul Schlyter,  Grev Turegatan 40,  SE-114 38 Stockholm,  SWEDEN
e-mail:  pausch at stockholm dot bostream dot se
WWW:     http://stjarnhimlen.se/


From -5920706998785210599
X-Google-Thread: fb1f8,371c39c687183a77
X-Google-Thread: f74ae,371c39c687183a77
X-Google-Thread: 10b271,371c39c687183a77
X-Google-Thread: fcc6e,371c39c687183a77
X-Google-Thread: 10e8ad,371c39c687183a77
X-Google-Attributes: gidfb1f8,gidf74ae,gid10b271,gidfcc6e,gid10e8ad,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!newsfeed00.sul.t-online.de!newsfeed01.sul.t-online.de!t-
online.de!solnet.ch!solnet.ch!news.clara.net!wagner.news.clara.net!
pe1.news.blueyonder.co.uk!blueyonder!fe1.news.blueyonder.co.uk.POSTED!53ab2750!
not-for-mail
From: "Androcles" <Engineer@hogwarts.physics>
```

Newsgroups: rec.audio.tech,sci.astro,sci.physics,rec.radio.amateur.antenna,rec.radio.amateur.space
References: <1184468254.568850.94820@o11g2000prd.googlegroups.com> <trgom4-vmm.ln1@mail.specsol.com> <1184475851.942566.121140@e16g2000pri.googlegroups.com> <32spm4-9ck.ln1@mail.specsol.com> <f7hqos$1eul$1@merope.saaf.se>
Subject: Re: George Dishman says Karl Uppiano is wrong about AM radio, carrier-frequencies, and aliasing. Who should I believe? Why?
Lines: 20
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.3138
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.3138
Message-ID: <hO0ni.37684$jY5.3583@fe1.news.blueyonder.co.uk>
Date: Tue, 17 Jul 2007 10:25:17 GMT
NNTP-Posting-Host: 82.34.70.125
X-Complaints-To: http://www.virginmedia.com/netreport
X-Trace: fe1.news.blueyonder.co.uk 1184667917 82.34.70.125 (Tue, 17 Jul 2007 11:25:17 BST)
NNTP-Posting-Date: Tue, 17 Jul 2007 11:25:17 BST
Xref: g2news1.google.com rec.audio.tech:32541 sci.astro:78887 sci.physics:356753 rec.radio.amateur.antenna:44385 rec.radio.amateur.space:1013

"Paul Schlyter" <pausch@saaf.se> wrote in message
news:f7hqos$1eul$1@merope.saaf.se...
: In article <32spm4-9ck.ln1@mail.specsol.com>,
: <jimp@specsol.spam.sux.com> wrote:
:
: > search for AM modulation
:
: You don't need to write "AM modulation", since "AM" means
: "amplitude modulation". Therefore "AM modulation" becomes
: "amplitude modulation modulation" ......   :-)
:
: But perhaps you were considering adding some subcarrier to the AM?
:-)))))))))

Alabama is a US state. :-)

From 6444771070508641889
X-Google-Thread: fb1f8,371c39c687183a77
X-Google-Thread: f74ae,371c39c687183a77
X-Google-Thread: 10b271,371c39c687183a77
X-Google-Thread: fcc6e,371c39c687183a77
X-Google-Thread: 10e8ad,371c39c687183a77
X-Google-Attributes: gidfb1f8,gidf74ae,gid10b271,gidfcc6e,gid10e8ad,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit

Path: g2news1.google.com!news2.google.com!news3.google.com!border1.nntp.dca.giganews.com!border2.nntp.dca.giganews.com!nntp.giganews.com!cyclone1.gnilink.net!spamkiller.gnilink.net!gnilink.net!trnddc04.POSTED!24dd0da6!not-for-mail
Sender: Jim Pennino <jimp@mail.specsol.com>
Message-ID: <jl3vm4-s7d.ln1@mail.specsol.com>
From: jimp@specsol.spam.sux.com
Subject: Re: George Dishman says Karl Uppiano is wrong about AM radio, carrier-frequencies, and aliasing. Who should I believe? Why?
Newsgroups: rec.audio.tech,sci.astro,sci.physics,rec.radio.amateur.antenna,rec.radio.amateur.space
References: <1184468254.568850.94820@o11g2000prd.googlegroups.com> <trgom4-vmm.ln1@mail.specsol.com> <1184475851.942566.121140@e16g2000pri.googlegroups.com> <32spm4-9ck.ln1@mail.specsol.com> <f7hqos$1eul$1@merope.saaf.se>
User-Agent: tin/1.8.3-20070201 ("Scotasay") (UNIX) (SunOS/5.9 (sun4u))
Lines: 37
Date: Tue, 17 Jul 2007 15:35:01 GMT
NNTP-Posting-Host: 71.118.11.57
X-Complaints-To: abuse@verizon.net
X-Trace: trnddc04 1184686501 71.118.11.57 (Tue, 17 Jul 2007 11:35:01 EDT)
NNTP-Posting-Date: Tue, 17 Jul 2007 11:35:01 EDT
Xref: g2news1.google.com rec.audio.tech:32551 sci.astro:78900 sci.physics:356820 rec.radio.amateur.antenna:44394 rec.radio.amateur.space:1014
X-Original-Bytes: 2145

In rec.radio.amateur.antenna Paul Schlyter <pausch@saaf.se> wrote:
> In article <32spm4-9ck.ln1@mail.specsol.com>,
> <jimp@specsol.spam.sux.com> wrote:

> > search for AM modulation

> You don't need to write "AM modulation", since "AM" means
> "amplitude modulation". Therefore "AM modulation" becomes
> "amplitude modulation modulation" ......   :-)

> But perhaps you were considering adding some subcarrier to the AM? :-)))))))))

No, I was considering the fact that "am" is a common english word and
adding "modulation" to the search disambiguates the search.

Google AM:

1,680,000,000 hits starting with "I Am Bored - Sites for when you're bored."

Google AM modulation

16,200,000 hits

Google AM modulation equation

1,940,000 hits

It's called narrowing the search.

Or didn't you bother to read the part about "done a Google for" before you started spouting?

--
Jim Pennino

Remove .spam.sux to reply.

From 6137196683493162898
X-Google-Thread: fb1f8,371c39c687183a77
X-Google-Thread: f74ae,371c39c687183a77
X-Google-Thread: 10b271,371c39c687183a77
X-Google-Thread: fcc6e,371c39c687183a77
X-Google-Thread: 10e8ad,371c39c687183a77
X-Google-Attributes: gidfb1f8,gidf74ae,gid10b271,gidfcc6e,gid10e8ad,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!postnews.google.com!i13g2000prf.googlegroups.com!not-for-mail
From: goog49@cox.net
Newsgroups: rec.audio.tech,sci.astro,sci.physics,rec.radio.amateur.antenna,rec.radio.amateur.space
Subject: Re: George Dishman says Karl Uppiano is wrong about AM radio, carrier-frequencies, and aliasing. Who should I believe? Why?
Date: Wed, 18 Jul 2007 05:25:30 -0700
Organization: http://groups.google.com
Lines: 82
Message-ID: <1184761530.737391.92050@i13g2000prf.googlegroups.com>
References: <1184468254.568850.94820@o11g2000prd.googlegroups.com>
NNTP-Posting-Host: 199.46.252.90
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"
X-Trace: posting.google.com 1184761531 6003 127.0.0.1 (18 Jul 2007 12:25:31 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Wed, 18 Jul 2007 12:25:31 +0000 (UTC)
In-Reply-To: <1184468254.568850.94820@o11g2000prd.googlegroups.com>
User-Agent: G2/1.0
X-HTTP-UserAgent: Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1; SV1; MSDigitalLocker; .NET CLR 1.1.4322; InfoPath.1),gzip(gfe),gzip(gfe)
Complaints-To: groups-abuse@google.com
Injection-Info: i13g2000prf.googlegroups.com; posting-host=199.46.252.90;
   posting-account=ps2QrAMAAAA6_jCuRt2JEIpn5Otqf_w0
Xref: g2news1.google.com rec.audio.tech:32571 sci.astro:78979 sci.physics:356979 rec.radio.amateur.antenna:44445 rec.radio.amateur.space:1015

On Jul 14, 10:57 pm, Radium <gluceg...@gmail.com> wrote:
> George Dishman says Karl Uppiano is wrong about AM radio, carrier-
> frequencies, and aliasing. Who should I believe and why?
>

> On Jul 14, 4:11 pm, "George Dishman" <geo...@briar.demon.co.uk> wrote
> inhttp://groups.google.com/group/sci.astro.amateur/msg/1d3b52bbf05843c0...
> :
>
>
>
>
>
> > "Radium" <gluceg...@gmail.com> wrote in message
>
> >news:1184446739.705444.308660@i38g2000prf.googlegroups.com...
>
> > > On Jul 14, 1:17 am, "George Dishman" <geo...@briar.demon.co.uk> wrote:
> > >> "Radium" <gluceg...@gmail.com> wrote in message
>
> > >>news:1184373407.506861.132200@m37g2000prh.googlegroups.com...
> > >> ..
>
> > >> > Isn't it true that the carrier-frequency must be at least 2x the
> > >> > highest intended frequency of the modulator signal?
>
> > >> No.
>
> > > Karl Uppiano sharply disagrees.
>
> > > Karl Uppiano explained in
> > >http://groups.google.com/group/sci.energy/msg/a74d4d8ddcea47a5?hl=en&
>
> > He is wrong. The basis of AM is that the sine wave
> > carrier is multiplied by another signal which can be
> > treated as a sum of sines. The relevant maths is:
>
> > http://www.sosmath.com/trig/prodform/prodform.html
>
> > If the carrier frequency if fc and the modulation has
> > frequencies up to fm then you get sidebands like
> > this:
>
> > http://en.wikipedia.org/wiki/Image:Am-sidebands.png
>
> > If you multiply 44.1kHz by a band from 20Hz to 20kHz,
> > you get an upper sideband given 44.12kHz to 64.1kHz
> > and a lower sideband from 44.08kHz down to 24.1kHz
>
> > >> The highest modulating frequency for AM must be less than 1/2 the carrier
> > >> frequency. Conversely, the lowest carrier frequency must be twice the
> > >> highest modulating frequency. Period. I don't care what specific
> > >> frequencies
> > >> and/or energies and/or colors you propose.
>
> > >> If you want to modulate at 20KHz, the carrier must be at least 40KHz. It
> > >> is
> > >> no coincidence that CD audio uses a 44.1KHz sample rate. It is

```
> > >> essentially
> > >> the same principle. If you exceed the Nyquist criterion, the sidebands
> > >> overlap the baseband (i.e., aliasing occurs) and you cannot unambiguously
> > >> decode the original modulation.
>
> > Nyquist applies to sampling.
>
> > > So who is right and who is wrong?
>
> > Look at the maths, it is never wrong. Modulating fc
> > with fm gives a lowest frequency of fc-fm so as long
> > as fc > fm, you don't get aliasing.
>
> > George
>
> So is it possible for me to receive a 10 KHz audio sine-wave tone on a
> 1 Hz AM radio receiver? If not, why? My guess is it violates Nyquist/
> Shannon. Right?- Hide quoted text -
>
> - Show quoted text -

Depends on what you mean by a "10 KHz audio sine-wave", a "1 Hz AM
radio", and on what you mean by "receive".
```

```
From -7389685661501285246
X-Google-Thread: fb1f8,371c39c687183a77
X-Google-Thread: f74ae,371c39c687183a77
X-Google-Thread: 10b271,371c39c687183a77
X-Google-Thread: fcc6e,371c39c687183a77
X-Google-Thread: 10e8ad,371c39c687183a77
X-Google-Attributes: gidfb1f8,gidf74ae,gid10b271,gidfcc6e,gid10e8ad,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news3.google.com!fu-berlin.de!uni-berlin.de!
individual.net!not-for-mail
From: "Richard Crowley" <rcrowley@xp7rt.net>
Newsgroups:
rec.audio.tech,sci.astro,sci.physics,rec.radio.amateur.antenna,rec.radio.amateur.s
pace
Subject: Re: George Dishman says Karl Uppiano is wrong about AM radio, carrier-
frequencies, and aliasing. Who should I believe? Why?
Date: Wed, 18 Jul 2007 12:59:01 -0700
Lines: 9
Message-ID: <5g79o6F3dotp4U1@mid.individual.net>
References: <1184468254.568850.94820@o11g2000prd.googlegroups.com>
<1184761530.737391.92050@i13g2000prf.googlegroups.com>
X-Trace: individual.net QnG0MxLpVx/nL63EbomHpwdgl24l411Oty4hPKg5jqy55jAtSN
Cancel-Lock: sha1:qMaUlMU4Iop5rKVt0Cf9ZeMQ+8U=
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.3028
```

```
X-RFC2646: Format=Flowed; Original
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.3028
Xref: g2news1.google.com rec.audio.tech:32577 sci.astro:79016 sci.physics:357051
rec.radio.amateur.antenna:44452 rec.radio.amateur.space:1016

<goog49@cox.net> wrote ...
> Depends on what you mean by a "10 KHz audio sine-wave",
> a "1 Hz AM radio", and on what you mean by "receive".

He doesn't mean *anything* by them.  He is a troll.
He apparently threads technical terms together with some sort
of random-phrase generator and gullible people fall for it.




From 1805218817897505646
X-Google-Thread: 10e8ad,314bc994ed1d2f9d,start
X-Google-Thread: 10b9c8,314bc994ed1d2f9d,start
X-Google-Attributes: gid10e8ad,gid10b9c8,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx01.iad01.newshosting.com!newshosting.com!
198.186.194.247.MISMATCH!news-out.readnews.com!news-xxxfer.readnews.com!panix!
rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-197 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Thu, 19 Jul 2007 09:22:22 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 1251
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <001201c7ca07$d03b0860$6601a8c0@familyroom>
NNTP-Posting-Host: panix1.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader2.panix.com 1184851342 29611 166.84.1.1 (19 Jul 2007 13:22:22 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Thu, 19 Jul 2007 13:22:22 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
```

Xref: g2news1.google.com rec.radio.amateur.space:1017 rec.radio.info:415

This report is organized into FIVE parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites
Part 5 (S5) - deorbited/returned satellites

SB SAT @ AMSAT W8ISS ANS-197.S1
WSR 197 Part 1 07/16/2007

AMSAT NEWS SERVICE BULLETIN 197.S1 FROM AMSAT HQ
SILVER SPRING, MD, July 16, 2007
TO ALL RADIO AMATEURS
BID: $ANS-197.S1

VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.859330 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsat.in/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is
active. Each transponder has a different beacon.
[06252007]

=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Modes: FM Repeater - L/u
Telemetry Beacon - /u

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.880 MHZ FM
145.880 MHz USB
145.920 MHz FM
1268.700 MHz FM 67Hz PL tone
Digital Downlinks: 435.150 MHz FM 38k4 Digital, PBP, 1 watt output
435.150 MHz FM 9k6 Digital, Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Digital, Pacsat Broadcast Protocol
1268.700 mhz FM 9k6 PBP Digital
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[07162007]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.

The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer
   on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on
   and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10
   minute timer.
[05282007]

=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Recovery Operations

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

JARL English webpage: http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm
AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's CW
telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts.htm
[07022007]

=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM

Downlink: 436.795 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[05282007]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational depending on amount of Sunlight

Current Mode: Listen before transmitting

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/

AO-7 Usage Guidelines on the AO-7 Log and Resource Site located at:
http://www.planetemily.com/ao7
[05282007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Mode: Occasional Voice/Packet/Digipeater

Expedition 15 crew:

Commander:	Fyodor Yurchikhin	RN3FI
Flight Engineer:	Clayton C. Anderson	KD5PLA
Flight Engineer:	Oleg Kotov	

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM

Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

SSTV TESTING:
Worldwide Reported Downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS
RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.
[07162007]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-197.S2
WSR 197 Part 2 07/16/2007

AMSAT NEWS SERVICE BULLETIN 197.S2 FROM AMSAT HQ
SILVER SPRING, MD, July 16, 2007
TO ALL RADIO AMATEURS
BID: $ANS-197.S2

CAPE1
Catalog Number:
Launch Date: April 17,2007

Status: In Orbit

Current Mode: /u

Downlink: 435.245 MHz 9600 bs FSK AX.25
[04232007]
=====
CP3
Catalog Number:
Launch Date: April 17,2007

Status: In Orbit

Current Mode: /u

Downlink: 436.845 MHz 1200 bps FSK AX.25
[04232007]
=====
CP4
Catalog Number:
Launch Date: April 17,2007

Status: In Orbit

Current Mode: /u

Downlink: 437.325 MHz 1200 bps FSK AX.25
[04232007]
=====
Libertad-1
Catalog Number:
Launch Date: April 17, 2007

Status: In Orbit

Current Mode: /u

Downlink: 437.405 MHz 1200 bps AFSK AX.25
[04232007]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: In Orbit

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder: 145.825 Mhz FM
[02052007]
=====
?O-?? FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

```
Status: In Orbit

Current Mode: /u

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[02262007]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: In Orbit

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01222007]
=====
GENESAT-1 ?O-??
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Current Mode: /u

Telemetry Beacon Downlink: 437.0670 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[01082007]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Operational

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon:             437.2750 MHz CW

Callsign: JR8YJT
[10302006]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005
```

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon: 437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
[03262007]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launched: June 30, 2003

Status: Operational

Current Mode: /u

Beacon: 436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[01082007]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launched: February 21, 2006

Status: Semi-Operational - Constant Carrier only

Uplink: 1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan ?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[01082007]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Mode(s): FM Repeater - L/u
Telemetry Beacon - /u

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.880 MHZ FM
145.880 MHz USB
145.920 MHz FM
1268.700 MHz FM 67Hz PL tone
Digital Downlinks: 435.150 MHz FM 38k4 Digital, PBP, 1 watt output
435.150 MHz FM 9k6 Digital, Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Digital, Pacsat Broadcast Protocol
1268.700 mhz FM 9k6 PBP Digital
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[07162007]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Operational only in Full Sun Light

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[05282007]
=====
UO-11 OSCAR-11
Catalog number: 14781

Launched: March 1, 1984

Status: Semi-operational.

Current Mode: Telemetry Downlink - 2M

Telemetry Downlink: 145.826 MHz FM 1200 AFSK
UHFBeacon: 435.025 MHz - OFF
Mode-S Beacon: 2401.500 MHz - OFF

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Due to solar eclipses which will continue until late August 2007, the beacon will only transmit for about one orbit every 21 days. It is unlikely to be heard during this period.

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[07162007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Mode: Occasional Voice/Packet/Digipeater

Expedition 15 crew:
Commander: Fyodor Yurchikhin RN3FI
Flight Engineer: Clayton C. Anderson KD5PLA
Flight Engineer: Oleg Kotov

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

SSTV TESTING:
Worldwide Reported Downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS
RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.
[07162007]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-197.S3
WSR 197 Part 3 07/16/2007

AMSAT NEWS SERVICE BULLETIN 197.S3 FROM AMSAT HQ
SILVER SPRING, MD, July 16, 2007
TO ALL RADIO AMATEURS
BID: $ANS-197.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 MHz FM 67Hz CTCSS
Voice Downlink: 2401.835 MHz FM
Packet Up/Downlink: 437.250 MHz 9k6 packet
Packet Downlink 2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Operational

Uplinks: 145.850 MHz
145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[01222007]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

```
Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink:   145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
call-
sign KE6QMD, as per the user service agreement located at the following
URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS:                SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink:   145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
```

```
V-band:   145.840 -  145.990 MHz CW/LSB
U-band:   435.550 -  435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks
---------
S2-band:  2401.225 -  2401.475 MHz CW/USB
K-band:  24048.010 - 24048.060 MHz CW/USB
Beacon:   2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)
----------------------------
BEACON   General Beacon (GB)    Middle Beacon (MB)    Engineering Beacon
(EB)
2 m       none                    145.898 MHz           none
70cm      435.438 MHz             435.588 MHz           435.838 MHz
13cm(1)  2400.188 MHz            2400.338 MHz          2400.588 MHz
13cm(2)  2401.173 MHz            2401.323 MHz          2401.573 MHz
3cm     10450.975 MHz           10451.125 MHz         10451.375 MHz
1.5cm   24047.885 MHz           24048.035 MHz         24048.285 MHz
[007162007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink:    145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site
at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater:         436.250 MHz

Uplinks: Mode B Repeater:  145.825 MHz
```

```
Mode J Digipeater:         145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink:   145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Reloading of BBS software

Current Mode: V/U
```

```
              L/U

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[06112007]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Reported non-operational

Current Mode: V/U
              Digipeater - Authorized for APRS usage

Uplink:         145.900 MHz FM 1200-baud Manchester FSK
                145.920 MHz FM 1200-baud Manchester FSK
                145.940 MHz FM 1200-baud Manchester FSK
                145.960 MHz FM 1200-baud Manchester FSK
Downlink:       437.026 MHz SSB 1200-baud PSK
Mode-S Beacon: 2401.1428 MHz

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.025 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[06112007]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage
```

```
Broadcast callsign: POSAT1-11
BBS callsign:       POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012006]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: Downlink only

Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[012212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HL01-11
BBS: HL01-12
```

```
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990
```

Status: CW Beacon only

Uplinks: 145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink: 437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[01222007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink: 145.825 MHz FM 1200 Baud AFSK
Beacon: 2401.220 MHz
[05012006]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink: 145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

```
Mode V/U (J) Linear Transponder (Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet: Non-Operational
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon:   145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink  29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
```

```
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
[01152007]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon:    29.352 MHz (intermittent)

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink:     21.260 to 21.300 MHz CW/USB
Downlink:  145.860 to 145.900 MHz CW/USB

Beacon:    145.860 MHz
```

Robot: 145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-197.S4
WSR 197 Part 4 07/16/2007

AMSAT NEWS SERVICE BULLETIN 197.S4 FROM AMSAT HQ
SILVER SPRING, MD, July 16, 2007
TO ALL RADIO AMATEURS
BID: $ANS-197.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE PROPOSED FOR LAUNCH AT THIS TIME:

Phase 5a Mars Mission
Catalog Number:
Proposed Launch Date: 2009 or 2011

Status: Design Phase

For the latest project status update please visit the AMSAT-DL P5-A web page:
http://ticket-to-mars.org
[01222007]
=====
PHASE 3E AO-??
Catalog number:
Proposed Launch Date: Late 2007

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/
[01222007]
=====
Eagle AO-??

Catalog Number:
Proposed Launch Date: Early/Mid 2009

Status: Design Phase

For the latest project status updates please visit the AMSAT-NA webpage:
http://www.amsat.org
[01222007]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-197.S5
WSR 197 Part 5 07/16/2007

AMSAT NEWS SERVICE BULLETIN 197.S5 FROM AMSAT HQ
SILVER SPRING, MD, July 16, 2007
TO ALL RADIO AMATEURS
BID: $ANS-197.S5

THE FOLLOWING SATELLITES HAVE DE-ORBITED OR HAVE BEEN RETURNED TO THE GROUND:

NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

```
Main Downlink:      145.825 Mhz FM APRS AX25
APRS Uplink:        145.825 MHz FM APRS AX25
Voice/PSK31 Uplink:  28.120 MHz
```

Packet to Voice ID: RAFT
[06112007]
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728

FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

```
From 1975728204802657154
X-Google-Thread: fb1f8,371c39c687183a77
X-Google-Thread: f74ae,371c39c687183a77
X-Google-Thread: 10b271,371c39c687183a77
X-Google-Thread: fcc6e,371c39c687183a77
X-Google-Thread: 10e8ad,371c39c687183a77
X-Google-Attributes: gidfb1f8,gidf74ae,gid10b271,gidfcc6e,gid10e8ad,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!postnews.google.com!r34g2000hsd.googlegroups.com!not-for-mail
From:  "mike-c@bulldoghome.com" <mike-c@bulldoghome.com>
Newsgroups: 
rec.audio.tech,sci.astro,sci.physics,rec.radio.amateur.antenna,rec.radio.amateur.space
Subject: Re: George Dishman says Karl Uppiano is wrong about AM radio, carrier-frequencies, and aliasing. Who should I believe? Why?
Date: Fri, 20 Jul 2007 09:09:08 -0700
```

```
Organization: http://groups.google.com
Lines: 78
Message-ID: <1184947748.575932.296360@r34g2000hsd.googlegroups.com>
References: <1184468254.568850.94820@o11g2000prd.googlegroups.com>
NNTP-Posting-Host: 84.9.200.227
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"
X-Trace: posting.google.com 1184947748 15113 127.0.0.1 (20 Jul 2007 16:09:08 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Fri, 20 Jul 2007 16:09:08 +0000 (UTC)
In-Reply-To: <1184468254.568850.94820@o11g2000prd.googlegroups.com>
User-Agent: G2/1.0
X-HTTP-UserAgent: Mozilla/5.0 (Windows; U; Windows NT 5.1; en-GB; rv:1.8.1.5)
Gecko/20070713 Firefox/2.0.0.5,gzip(gfe),gzip(gfe)
Complaints-To: groups-abuse@google.com
Injection-Info: r34g2000hsd.googlegroups.com; posting-host=84.9.200.227;
   posting-account=ps2QrAMAAAA6_jCuRt2JEIpn5Otqf_w0
Xref: g2news1.google.com rec.audio.tech:32600 sci.astro:79173 sci.physics:357442
rec.radio.amateur.antenna:44527 rec.radio.amateur.space:1018

On Jul 15, 3:57 am, Radium <gluceg...@gmail.com> wrote:
> George Dishman says Karl Uppiano is wrong about AM radio, carrier-
> frequencies, and aliasing. Who should I believe and why?
>
> On Jul 14, 4:11 pm, "George Dishman" <geo...@briar.demon.co.uk> wrote
> inhttp://groups.google.com/group/sci.astro.amateur/msg/1d3b52bbf05843c0...
> :
>
>
>
> > "Radium" <gluceg...@gmail.com> wrote in message
>
> >news:1184446739.705444.308660@i38g2000prf.googlegroups.com...
>
> > > On Jul 14, 1:17 am, "George Dishman" <geo...@briar.demon.co.uk> wrote:
> > >> "Radium" <gluceg...@gmail.com> wrote in message
>
> > >>news:1184373407.506861.132200@m37g2000prh.googlegroups.com...
> > >> ..
>
> > >> > Isn't it true that the carrier-frequency must be at least 2x the
> > >> > highest intended frequency of the modulator signal?
>
> > >> No.
>
> > > Karl Uppiano sharply disagrees.
>
> > > Karl Uppiano explained in
> > >http://groups.google.com/group/sci.energy/msg/a74d4d8ddcea47a5?hl=en&
>
> > He is wrong. The basis of AM is that the sine wave
> > carrier is multiplied by another signal which can be
> > treated as a sum of sines. The relevant maths is:
```

>
> > http://www.sosmath.com/trig/prodform/prodform.html
>
> > If the carrier frequency if fc and the modulation has
> > frequencies up to fm then you get sidebands like
> > this:
>
> > http://en.wikipedia.org/wiki/Image:Am-sidebands.png
>
> > If you multiply 44.1kHz by a band from 20Hz to 20kHz,
> > you get an upper sideband given 44.12kHz to 64.1kHz
> > and a lower sideband from 44.08kHz down to 24.1kHz
>
> > >> The highest modulating frequency for AM must be less than 1/2 the carrier
> > >> frequency. Conversely, the lowest carrier frequency must be twice the
> > >> highest modulating frequency. Period. I don't care what specific
> > >> frequencies
> > >> and/or energies and/or colors you propose.
>
> > >> If you want to modulate at 20KHz, the carrier must be at least 40KHz. It
> > >> is
> > >> no coincidence that CD audio uses a 44.1KHz sample rate. It is
> > >> essentially
> > >> the same principle. If you exceed the Nyquist criterion, the sidebands
> > >> overlap the baseband (i.e., aliasing occurs) and you cannot unambiguously
> > >> decode the original modulation.
>
> > Nyquist applies to sampling.
>
> > > So who is right and who is wrong?
>
> > Look at the maths, it is never wrong. Modulating fc
> > with fm gives a lowest frequency of fc-fm so as long
> > as fc > fm, you don't get aliasing.
>
> > George
>
> So is it possible for me to receive a 10 KHz audio sine-wave tone on a
> 1 Hz AM radio receiver? If not, why? My guess is it violates Nyquist/
> Shannon. Right?

er i dont know any AM radio or any reciever that will recieve at 1Hz
you surely mean 1 MHz which means that a 10 KHz tone would be easily
modulated at that frequency

From -4323056200808567 49
X-Google-Thread: fb1f8,371c39c687183a77
X-Google-Thread: f74ae,371c39c687183a77
X-Google-Thread: 10b271,371c39c687183a77
X-Google-Thread: fcc6e,371c39c687183a77
X-Google-Thread: 10e8ad,371c39c687183a77

X-Google-Attributes: gidfb1f8,gidf74ae,gid10b271,gidfcc6e,gid10e8ad,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news4.google.com!fu-berlin.de!uni-berlin.de!
individual.net!not-for-mail
From: "Richard Crowley" <rcrowley@xp7rt.net>
Newsgroups:
rec.audio.tech,sci.astro,sci.physics,rec.radio.amateur.antenna,rec.radio.amateur.space
Subject: Re: George Dishman says Karl Uppiano is wrong about AM radio, carrier-frequencies, and aliasing. Who should I believe? Why?
Date: Fri, 20 Jul 2007 11:11:11 -0700
Lines: 12
Message-ID: <5gcc60F3fivu8U1@mid.individual.net>
References: <1184468254.568850.94820@o11g2000prd.googlegroups.com>
<1184947748.575932.296360@r34g2000hsd.googlegroups.com>
X-Trace: individual.net H233aiTjDwmrXeQuJ8m36QsTiigdO1ryIiLsQAKDu5exyX/aMY
Cancel-Lock: sha1:YRiKwgfYmISW0zYuMZzi0KmZmDw=
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.3028
X-RFC2646: Format=Flowed; Original
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.3028
Xref: g2news1.google.com rec.audio.tech:32601 sci.astro:79182 sci.physics:357468
rec.radio.amateur.antenna:44533 rec.radio.amateur.space:1019

<mike-c@bulldoghome.com> wrote ...
> er i dont know any AM radio or any reciever that will recieve at 1Hz
> you surely mean 1 MHz which means that a 10 KHz tone would be easily
> modulated at that frequency

Those of us with previous experience with "Radium" can
easily believe he really means "1 Hz". He appears to throw
numbers and scientific/engineering terms around with no
actual understanding of what he is even asking. His Usenet
behavior is indistinguishable from a troll.

From 7846398608100218991
X-Google-Thread: fb1f8,371c39c687183a77
X-Google-Thread: f74ae,371c39c687183a77
X-Google-Thread: 10b271,371c39c687183a77
X-Google-Thread: fcc6e,371c39c687183a77
X-Google-Thread: 10e8ad,371c39c687183a77
X-Google-Attributes: gidfb1f8,gidf74ae,gid10b271,gidfcc6e,gid10e8ad,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!aotearoa.belnet.be!news.belnet.be!news.germany.com!
newsfeed-0.progon.net!progon.net!stargate.gts.cz!news.freedom2surf.net!not-for-mail
From: "George Dishman" <george@briar.demon.co.uk>
Newsgroups:

rec.audio.tech,sci.astro,sci.physics,rec.radio.amateur.antenna,rec.radio.amateur.space
Subject: Re: George Dishman says Karl Uppiano is wrong about AM radio, carrier-frequencies, and aliasing. Who should I believe? Why?
Date: Fri, 20 Jul 2007 19:42:47 +0100
Organization: freedom2surf
Lines: 28
Message-ID: <f7qve5$q0o$2@news.freedom2surf.net>
References: <1184468254.568850.94820@o11g2000prd.googlegroups.com>
<1184947748.575932.296360@r34g2000hsd.googlegroups.com>
<5gcc60F3fivu8U1@mid.individual.net>
NNTP-Posting-Host: i-83-67-26-177.freedom2surf.net
X-Trace: news.freedom2surf.net 1184956677 26648 83.67.26.177 (20 Jul 2007 18:37:57 GMT)
X-Complaints-To: abuse@freedom2surf.net
NNTP-Posting-Date: Fri, 20 Jul 2007 18:37:57 +0000 (UTC)
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.3138
X-MIMEOLE: Produced By Microsoft MimeOLE V6.00.2900.3138
X-RFC2646: Format=Flowed; Response
Xref: g2news1.google.com rec.audio.tech:32602 sci.astro:79186 sci.physics:357474 rec.radio.amateur.antenna:44534 rec.radio.amateur.space:1020

"Richard Crowley" <rcrowley@xp7rt.net> wrote in message news:5gcc60F3fivu8U1@mid.individual.net...

> <mike-c@bulldoghome.com> wrote ...
>> er i dont know any AM radio or any reciever that will recieve at 1Hz
>> you surely mean 1 MHz which means that a 10 KHz tone would be easily
>> modulated at that frequency
>
> Those of us with previous experience with "Radium" can
> easily believe he really means "1 Hz". He appears to throw
> numbers and scientific/engineering terms around with no
> actual understanding of what he is even asking. His Usenet
> behavior is indistinguishable from a troll.

What you say may be true but in this case, since he was asking about aliasing, the question is reasonable and the values are what would often be called "toy numbers", extreme values intended only to illustrate the point.

Modulating 1Hz with 10kHz produces nominally 10001 Hz and -9999 Hz based on fc+fm and fc-fm. The latter of course folds over to just 9999Hz illustrating what is meant by 'aliasing' in the context.

HTH
George

From 881297222776081739
X-Google-Thread: fb1f8,371c39c687183a77
X-Google-Thread: f74ae,371c39c687183a77
X-Google-Thread: 10b271,371c39c687183a77
X-Google-Thread: fcc6e,371c39c687183a77
X-Google-Thread: 10e8ad,371c39c687183a77
X-Google-Attributes: gidfb1f8,gidf74ae,gid10b271,gidfcc6e,gid10e8ad,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!news1.google.com!
border1.nntp.dca.giganews.com!border2.nntp.dca.giganews.com!nntp.giganews.com!
cyclone1.gnilink.net!spamkiller.gnilink.net!gnilink.net!trnddc04.POSTED!24dd0da6!
not-for-mail
Sender: Jim Pennino <jimp@mail.specsol.com>
Message-ID: <a0c7n4-nm2.ln1@mail.specsol.com>
From: jimp@specsol.spam.sux.com
Subject: Re: George Dishman says Karl Uppiano is wrong about AM radio, carrier-frequencies, and aliasing. Who should I believe? Why?
Newsgroups:
rec.audio.tech,sci.astro,sci.physics,rec.radio.amateur.antenna,rec.radio.amateur.space
References: <1184468254.568850.94820@o11g2000prd.googlegroups.com>
<1184947748.575932.296360@r34g2000hsd.googlegroups.com>
<5gcc60F3fivu8U1@mid.individual.net>
User-Agent: tin/1.8.3-20070201 ("Scotasay") (UNIX) (SunOS/5.9 (sun4u))
Lines: 28
Date: Fri, 20 Jul 2007 18:45:01 GMT
NNTP-Posting-Host: 71.118.11.57
X-Complaints-To: abuse@verizon.net
X-Trace: trnddc04 1184957101 71.118.11.57 (Fri, 20 Jul 2007 14:45:01 EDT)
NNTP-Posting-Date: Fri, 20 Jul 2007 14:45:01 EDT
Xref: g2news1.google.com rec.audio.tech:32603 sci.astro:79188 sci.physics:357475
rec.radio.amateur.antenna:44535 rec.radio.amateur.space:1021
X-Original-Bytes: 2179

In rec.radio.amateur.antenna Richard Crowley <rcrowley@xp7rt.net> wrote:
> <mike-c@bulldoghome.com> wrote ...
> > er i dont know any AM radio or any reciever that will recieve at 1Hz
> > you surely mean 1 MHz which means that a 10 KHz tone would be easily
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> easily believe he really means "1 Hz". He appears to throw
> numbers and scientific/engineering terms around with no
> actual understanding of what he is even asking. His Usenet
> behavior is indistinguishable from a troll.

Radium posting usually follow the format of a wildly improbable or
impossible situation with a question that is at best tenuously related
to the situation.

A typical example would be something like:

If I had a nuclear hand grenade powered by the fusion of three atoms
of neon and threw it in my backyard, would the neighbor's cat still
be able to have kittens?

If so, should I change the neon to iron?

--
Jim Pennino

Remove .spam.sux to reply.

```
From -2193664301059983228
X-Google-Thread: 10e8ad,e4a3b6ee5e2a319e,start
X-Google-Thread: 10b9c8,e4a3b6ee5e2a319e,start
X-Google-Attributes: gid10e8ad,gid10b9c8,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx01.iad01.newshosting.com!newshosting.com!
198.186.194.247.MISMATCH!news-out.readnews.com!news-xxxfer.readnews.com!panix!
rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-203 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sun, 22 Jul 2007 21:53:13 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 259
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000001c7cccc$43987c90$6601a8c0@familyroom>
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader2.panix.com 1185155593 20977 166.84.1.6 (23 Jul 2007 01:53:13 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Mon, 23 Jul 2007 01:53:13 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Xref: g2news1.google.com rec.radio.amateur.space:1022 rec.radio.info:429
```

AMSAT NEWS SERVICE
ANS-203

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* Nagesh Upadhyaya, VU2NUD, SK
* Satellite Demo Leads to Successful First QSOs
* AMSAT Field Day 2007 Statistics
* OSCAR-11 REPORT - 16 July 2007
* ARISS Status - 25 June 2007

SB SAT @ AMSAT $ANS-203.01
Nagesh Upadhyaya, VU2NUD, SK

AMSAT News Service Bulletin 203.01
From AMSAT HQ SILVER SPRING, MD.
July 22, 2007
To All RADIO AMATEURS
BID: $ANS-203.01

The following was received from K.V.Prasad,VU2RRG/ROC, National coordinator, AMSAT-IN.

It is with profound grief and sorrow that we express the accidental demise of our most revered ham technologist shri Nagesh Upadhyaya,VU2NUD. He is a noble soul who remains in our ham technologists minds and hearts. His dedication and valour will forever inspire the young ham technologists and future generations of scientists towards higher glory.

A devoted and dedicated scientific officer/ham technologist from AMSAT-IN left for heavenly abode. Its pride to the National International fraternity of AMSAT ham technologists/scientists to have such a dynamic star. May God (the most beneficient & the merciful in the world) bless his noble soul.

[ANS thanks K.V.Prasad,VU2RRG, for the above information]

/EX

SB SAT @ AMSAT $ANS-203.02
Satellite Demo Leads to Successful First QSOs

AMSAT News Service Bulletin 203.02

From AMSAT HQ SILVER SPRING, MD.
July 22, 2007
To All RADIO AMATEURS
BID: $ANS-203.02

Since March, Patrick, WD9EWK/VA7EWK has been conducting a series of satellite operating demonstrations at the Thunderbird Amateur Radio Club. W7TBC in Glendale, a suburb of Phoenix, Arizona.

At the club's June meeting, kits for a WA5VJB "Cheap Yagi" for the FM satellites were distributed consisting of 2 elements on 2m, 5 elements on 70cm, plus the 2m/70cm "duplexer" or band splitter. Other Thunderbird club members were ready to try FM satellite operation via AO-51 with the telescoping whip on their HT.

Two Thunderbird club members made their first satellite contacts under Patrick's mentoring. He reported, "Jeff W0NWA worked Bernardo 6I2HWB in southern Baja California (DL44), and Bob K7UNL worked me followed by Jeff, K7WIN in southeastern Arizona." Patrick made a total of 8 contacts on that pass. Other club members were able to hear AO-51 for the first time.

Patrick summarized, "The weather was still 105F/41C outside with a bit of humidity. We had a great time, and for a couple of the club members they now have satellite contacts for their logs. We may do another of these hands-on demonstrations in a few months, when it is not so hot outside."

Thank you to Patrick, and congratulations are in order for the Thunderbird Amateur Radio Club!

[ANS thanks Patrick, WD9EWK/VA7EWK for the above information]

/EX

SB SAT @ AMSAT $ANS-203.03
AMSAT Field Day 2007 Statistics

AMSAT News Service Bulletin 203.03
From AMSAT HQ SILVER SPRING, MD.
July 22, 2007
To All RADIO AMATEURS
BID: $ANS-203.03

Bruce Page, KK5DO reports that he has finished entering AMSAT Field Day reports into his computer.

Statistics for AMSAT Field Day 2007:
13 entries
5 satellites operated
207 total qso's scored

2 stations operating commercial power
11 stations operating emergency power
1 emergency station was operating battery
2 stations operating from home
11 stations operating from the field
The least reported score was 3 QSOs

QSOs per satellite:
AO-27 8
SO-50 11
AO-51 14 (includes both l/u and v/u)
AO-07 69 phone
AO-07 21 cw
VO-52 30 phone
VO-52 4 cw

Look for the complete article with pictures and comments in the upcoming issue of the AMSAT journal.

[ANS thanks Bruce, KK5DO, for the above information]

/EX

SB SAT @ AMSAT $ANS-203.04
OSCAR-11 REPORT - 16 July 2007

AMSAT News Service Bulletin 203.04
From AMSAT HQ SILVER SPRING, MD.
July 22, 2007
To All RADIO AMATEURS
BID: $ANS-203.04

I have now updated the telemetry archive on my website to include all the telemetry received in 2007. The news archive has also been updated. The URL is www.users.zetnet.co.uk/clivew

During the period 15 June to 15 July 2007, no signals have been received from the satellite's 145.826 MHz. beacon. I have not received any reception reports.

The satellite is currently subject to solar eclipses, which will continue until 20 August. The duration of the eclipses is now decreasing and will reach a time of 10 minutes, around 10 August. At that level the satellite may be able to sustain continuous operation, however it is not possible to predict when the satellite will switch ON. If there was failed attempt to switch ON just before 10 August, then it could be the end of August before the satellite resumed continuous transmissions.

The battery can no longer power the satellite during the eclipse season. When the battery voltage decreases to a preset level, the watchdog timer resets, and the beacon is turned off for approximately 21 days. When the satellite restarts, eclipses could cause the beacon to switch OFF, after a short time, probably less than one orbit. This short transmission could occur any where over the world, and could be repeated at 20.7 day intervals.

Owing to the lack of accurate timings, it is impossible to predict when and where the satellite will be heard during these short transmission periods. It is just possible that someone tuning around 145.826 MHz. may hear the satellite, by chance.

The Beacon frequencies are -
VHF 145.826 MHz. AFSK FM ASCII Telemetry
UHF 435.025 MHz. OFF
S-band 2401.5 MHz. OFF

Listeners to OSCAR-11 may be interested in visiting my website. The current monthly bulletin contains further details of the satellite's status. If you need to know what OSCAR-11 should sound like, there is a short audio clip for you to hear. The website contains an archive of news & telemetry data. It also contains details about using a soundcard or hardware demodulators for data capture. There is software for capturing data, and decoding ASCII telemetry. The URL is www.users.zetnet.co.uk/clivew/

If you place this bulletin on a terrestrial packet network, please use the bulletin identifier $BID:U2RPT135.CWV, to prevent duplication.

73 Clive G3CWV   xxxxx@amsat.org (please replace xxxxx by g3cwv)

[ANS thanks Clive, G3CWV, for the above information]

/EX

SB SAT @ AMSAT $ANS-203.05
ARISS Status - 16 July 2007

AMSAT News Service Bulletin 203.05
>From AMSAT HQ SILVER SPRING, MD.
July 22, 2007
To All RADIO AMATEURS
BID: $ANS-203.05

1. ARISS Contact with Canadian High School Students

Manitoba high school students attending the Manitoba Space Adventure Camp held at the Canadian Air Force 17 Wing in Winnipeg spoke to Clay Anderson, KD5PLA, on Thursday, July 12. During the Amateur Radio on the International Space Station (ARISS) contact, Anderson answered 18 questions posed to him by twelve students, while other camp attendees and the media looked on. The event received excellent television coverage by the Canadian Broadcasting Corporation (CBC) and Canadian television (CTV). Four repeater nodes were among the 18 connections made to EchoLink by ham operators in Germany, India, Canada, USA, Japan, and the UK.

The CBC news article can be viewed at this link:
http://www.cbc.ca/canada/manitoba/story/2007/07/12/space-talk.html#skip300x250#skip300x250

The Winnipeg Sun article may be found here:
http://www.winnipegsun.com/News/Manitoba/2007/07/13/4335853-sun.html

Another cnews story has also been posted:
http://cnews.canoe.ca/CNEWS/Science/2007/07/12/4334628-cp.html

2. Upcoming School Contacts

The Challenger Learning Center of Lucas County, in Oregon, Ohio has been scheduled for an Amateur Radio on the International Space Station (ARISS) contact on Wednesday, July 25 at 11:38 UTC. The center has a science lab that is used for the summer camp programs, and schools from northwest Ohio and southeast Michigan participate in the programs which reach approximately 3000 students each year.

3. ARISS TIM Held

A productive Amateur Radio on the International Space Station (ARISS) Technical Interchange Meeting (TIM) was held the week of July 9 -13 in Houston. Discussions included the ARISS radio systems, SuitSat-2 and education.

[ANS thanks Carol, KB3LKI, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Lee McLamb, KU4OS

From -5860269243902362791
X-Google-Thread: 10e8ad,f0e1407c3d4d620e,start
X-Google-Thread: 10b9c8,f0e1407c3d4d620e,start
X-Google-Attributes: gid10e8ad,gid10b9c8,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news2.google.com!border1.nntp.dca.giganews.com!

```
nntp.giganews.com!nx01.iad01.newshosting.com!newshosting.com!
198.186.194.247.MISMATCH!news-out.readnews.com!news-xxxfer.readnews.com!panix!
rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-204 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Thu, 26 Jul 2007 21:26:10 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 1251
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <001501c7cfed$293534a0$6601a8c0@familyroom>
NNTP-Posting-Host: panix3.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader2.panix.com 1185499570 27224 166.84.1.3 (27 Jul 2007 01:26:10 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Fri, 27 Jul 2007 01:26:10 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Xref: g2news2.google.com rec.radio.amateur.space:123 rec.radio.info:161
```

This report is organized into FIVE parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites
Part 5 (S5) - deorbited/returned satellites

SB SAT @ AMSAT W8ISS ANS-204.S1
WSR 204 Part 1 07/23/2007

AMSAT NEWS SERVICE BULLETIN 204.S1 FROM AMSAT HQ
SILVER SPRING, MD, July 23, 2007
TO ALL RADIO AMATEURS
BID: $ANS-204.S1

VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational

```
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink:   435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink:   435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW


Indian Beacon:  145.859330 MHZ CW
Dutch Beacon:   145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsat.in/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is
active. Each transponder has a different beacon.
[06252007]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Modes:   FM Repeater - L/u
                 Telemetry Beacon -  /u

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink:   145.880 MHZ FM
                       145.880 MHz USB
                       145.920 MHz FM
                      1268.700 MHz FM 67Hz PL tone
Digital Downlinks:     435.150 MHz FM 38k4 Digital, PBP, 1 watt output
                       435.150 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:        145.860 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      1268.700 mhz FM 9k6 PBP Digital
Beacon:                435.150 MHz

Mode and Antenna Polarization:
T: Linear
```

```
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[07162007]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Current Mode: V/u

Uplink:   145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute
timer
   on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the
repeater on
   and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset
the 10
   minute timer.
[05282007]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Recovery Operations

Voice/CW Mode JA
Uplink:   145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon:   435.795 MHz
```

```
Digital Mode JD
Uplinks:  145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

JARL English webpage: http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm
AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's CW
telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts.htm
[07022007]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Current Mode: V/u

Uplink:   145.850 MHz FM
Downlink: 436.795 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[05282007]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational depending on amount of Sunlight

Current Mode: Listen before transmitting

Uplink:   145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink:  29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
```

Beacons: 29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/

AO-7 Usage Guidelines on the AO-7 Log and Resource Site located at:
http://www.planetemily.com/ao7
[05282007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Mode: Occasional Voice/Packet/Digipeater

Expedition 15 crew:
Commander: Fyodor Yurchikhin   RN3FI
Flight Engineer: Clayton C. Anderson   KD5PLA
Flight Engineer: Oleg Kotov

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

SSTV TESTING:
Worldwide Reported Downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS
                     RZ3DZR

USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.
[07162007]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-204.S2
WSR 204 Part 2 07/23/2007

AMSAT NEWS SERVICE BULLETIN 204.S2 FROM AMSAT HQ
SILVER SPRING, MD, July 23, 2007
TO ALL RADIO AMATEURS
BID: $ANS-204.S2

CAPE1
Catalog Number:
Launch Date: April 17,2007

Status: In Orbit

Current Mode: /u

Downlink: 435.245 MHz 9600 bs FSK AX.25
[04232007]

=====
CP3
Catalog Number:
Launch Date: April 17,2007

Status: In Orbit

Current Mode: /u

Downlink: 436.845 MHz 1200 bps FSK AX.25
[04232007]

=====
CP4
Catalog Number:
Launch Date: April 17,2007

Status: In Orbit

```
Current Mode: /u

Downlink: 437.325 MHz 1200 bps FSK AX.25
[04232007]
=====
Libertad-1
Catalog Number:
Launch Date: April 17, 2007

Status: In Orbit

Current Mode: /u

Downlink: 437.405 MHz 1200 bps AFSK AX.25
[04232007]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: In Orbit

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder:  145.825 Mhz FM
[02052007]
=====
?O-?? FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: In Orbit

Current Mode: /u

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[02262007]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: In Orbit

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01222007]
```

```
=====
GENESAT-1 ?O-??
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Current Mode: /u

Telemetry Beacon Downlink: 437.0670 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[01082007]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Operational

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon:             437.2750 MHz CW

Callsign: JR8YJT
[10302006]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon:             437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
[03262007]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launched: June 30, 2003

Status: Operational
```

```
Current Mode: /u

Beacon:     436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[01082007]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launched: February 21, 2006

Status: Semi-Operational - Constant Carrier only

Uplink:  1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan ? )

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[01082007]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Mode(s): FM Repeater - L/u
                 Telemetry Beacon -  /u

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink:   145.880 MHZ FM
                       145.880 MHz USB
                       145.920 MHz FM
                      1268.700 MHz FM 67Hz PL tone
Digital Downlinks:     435.150 MHz FM 38k4 Digital, PBP, 1 watt output
                       435.150 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:        145.860 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      1268.700 mhz FM 9k6 PBP Digital
Beacon:                435.150 MHz

Mode and Antenna Polarization:
T: Linear
```

V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[07162007]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Operational only in Full Sun Light

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[05282007]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational.

Current Mode: Telemetry Downlink - 2M

Telemetry Downlink: 145.826 MHz FM 1200 AFSK
UHFBeacon: 435.025 MHz - OFF
Mode-S Beacon: 2401.500 MHz - OFF

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Due to solar eclipses which will continue until late August 2007, the beacon
will only transmit for about one orbit every 21 days. It is unlikely to be
heard during this period.

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm

[07162007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Mode: Occasional Voice/Packet/Digipeater

Expedition 15 crew:
Commander: Fyodor Yurchikhin RN3FI
Flight Engineer: Clayton C. Anderson KD5PLA
Flight Engineer: Oleg Kotov

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

SSTV TESTING:
Worldwide Reported Downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS
RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line is
NOT translated from Russian and posted.

[07162007]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-204.S3
WSR 204 Part 3 07/23/2007

AMSAT NEWS SERVICE BULLETIN 204.S3 FROM AMSAT HQ
SILVER SPRING, MD, July 23, 2007
TO ALL RADIO AMATEURS
BID: $ANS-204.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 MHz FM 67Hz CTCSS
Voice Downlink: 2401.835 MHz FM
Packet Up/Downlink: 437.250 MHz 9k6 packet
Packet Downlink   2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Operational

Uplinks: 145.850 MHz
145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[01222007]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, callsign KE6QMD, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]

=====

SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]

=====

AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks

V-band: 145.840 - 145.990 MHz CW/LSB
U-band: 435.550 - 435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks

S2-band: 2401.225 - 2401.475 MHz CW/USB
K-band: 24048.010 - 24048.060 MHz CW/USB
Beacon: 2401.323 MHz
24048.035 MHz

P3-D Telemetry Beacons (IHU)

BEACON	General Beacon (GB)	Middle Beacon (MB)	Engineering Beacon (EB)
2 m	none	145.898 MHz	none
70cm	435.438 MHz	435.588 MHz	435.838 MHz
13cm(1)	2400.188 MHz	2400.338 MHz	2400.588 MHz
13cm(2)	2401.173 MHz	2401.323 MHz	2401.573 MHz
3cm	10450.975 MHz	10451.125 MHz	10451.375 MHz
1.5cm	24047.885 MHz	24048.035 MHz	24048.285 MHz

```
[007162007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink:    145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site
at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater:         436.250 MHz

Uplinks: Mode B Repeater:  145.825 MHz
Mode J Digipeater:         145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998
```

```
Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink:   145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Reloading of BBS software

Current Mode: V/U
              L/U

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[06112007]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990
```

```
Status: Reported non-operational

Current Mode: V/U
              Digipeater - Authorized for APRS usage

Uplink:         145.900 MHz FM 1200-baud Manchester FSK
                145.920 MHz FM 1200-baud Manchester FSK
                145.940 MHz FM 1200-baud Manchester FSK
                145.960 MHz FM 1200-baud Manchester FSK
Downlink:       437.026 MHz SSB 1200-baud PSK
Mode-S Beacon: 2401.1428 MHz

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.025 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[06112007]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign:       POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012006]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: Downlink only

Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK
```

```
Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[012212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Operational

Uplink:   435.041 MHz FM DSP
```

```
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplinks:          145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink:      437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[01222007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990
```

```
Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
[05012006]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet: Non-Operational
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
```

```
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon:   145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink  29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
[01152007]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965
```

```
Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon:    29.352 MHz (intermittent)

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink:     21.260 to 21.300 MHz CW/USB
Downlink:  145.860 to 145.900 MHz CW/USB

Beacon:    145.860 MHz

Robot:     145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink:   21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon:   29.408 MHz

Robot:    29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-204.S4
WSR 204 Part 4 07/23/2007
```

```
AMSAT NEWS SERVICE BULLETIN 204.S4 FROM AMSAT HQ
SILVER SPRING, MD, July 23, 2007
TO ALL RADIO AMATEURS
BID: $ANS-204.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE PROPOSED FOR LAUNCH AT
THIS TIME:

Phase 5a Mars Mission
Catalog Number:
Proposed Launch Date: 2009 or 2011

Status: Design Phase

For the latest project status update please visit the AMSAT-DL P5-A web
page:
http://ticket-to-mars.org
[01222007]
=====
PHASE 3E AO-??
Catalog number:
Proposed Launch Date: Late 2007

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web
page:
http://www.amsat-dl.org/p3e/
[01222007]
=====
Eagle AO-??
Catalog Number:
Proposed Launch Date: Early/Mid 2009

Status: Design Phase

For the latest project status updates please visit the AMSAT-NA webpage:
http://www.amsat.org
[01222007]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-204.S5
WSR 204 Part 5 07/23/2007

AMSAT NEWS SERVICE BULLETIN 204.S5 FROM AMSAT HQ
SILVER SPRING, MD, July 23, 2007
TO ALL RADIO AMATEURS
BID: $ANS-204.S5

THE FOLLOWING SATELLITES HAVE DE-ORBITED OR HAVE BEEN RETURNED TO THE
GROUND:
```

NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink: 145.825 Mhz FM APRS AX25
APRS Uplink: 145.825 MHz FM APRS AX25
Voice/PSK31 Uplink: 28.120 MHz

Packet to Voice ID: RAFT
[06112007]
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

```
From 1112399889816058895
X-Google-Thread: 10e8ad,ad49abb46603a83,start
X-Google-Attributes: gid10e8ad,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news2.google.com!news.glorb.com!peer1.news.newnet.co.uk!
194.159.246.34.MISMATCH!peer-uk.news.demon.net!kibo.news.demon.net!
news.demon.co.uk!demon!nospam.demon.co.uk!hilsnews
From: Hils <hilsnews@nospam.demon.co.uk>
Newsgroups: rec.radio.amateur.space
Subject: RS-15
Date: Fri, 27 Jul 2007 21:12:06 +0100
Organization: Intermittent at best
Lines: 8
Message-ID: <1mxdO0TWGlqGFwnv@newearth.demon.co.uk>
Reply-To: Hils <hils@nospam.demon.co.uk>
NNTP-Posting-Host: newearth.demon.co.uk
Mime-Version: 1.0
Content-Type: text/plain;charset=us-ascii;format=flowed
X-Trace: news.demon.co.uk 1185654768 10475 193.237.117.162 (28 Jul 2007 20:32:48
GMT)
X-Complaints-To: abuse@demon.net
NNTP-Posting-Date: Sat, 28 Jul 2007 20:32:48 +0000 (UTC)
User-Agent: Turnpike/6.05-S (<m5zxuy0nji5HzkZ3XtuZ3h+QYE>)
Xref: g2news2.google.com rec.radio.amateur.space:124
```

After a period of very intermittent appearances, RS-15's beacon has been audible on most passes during the last three weeks or so. Its frequency has fallen to ~29.35165MHz, and sometimes there's a near-continuous carrier rather than the usual short, chirpy pulses, suggesting that the voltage regulation may have failed. Catch it while you can!

--
Hil

```
From -2236163809996837033
X-Google-Thread: 10e8ad,1afd8e34b293074a,start
X-Google-Thread: 10b9c8,1afd8e34b293074a,start
X-Google-Attributes: gid10e8ad,gid10b9c8,public,usenet
```

```
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news1.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx01.iad01.newshosting.com!newshosting.com!
198.186.194.247.MISMATCH!news-out.readnews.com!news-xxxfer.readnews.com!panix!
rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-210 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sun, 29 Jul 2007 12:58:06 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 287
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000001c7d1ff$fb550ff0$6601a8c0@familyroom>
NNTP-Posting-Host: panix2.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader2.panix.com 1185728286 2894 166.84.1.2 (29 Jul 2007 16:58:06 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 29 Jul 2007 16:58:06 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to            rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Xref: g2news2.google.com rec.radio.amateur.space:125 rec.radio.info:167
```

AMSAT NEWS SERVICE
ANS-210

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* NASA and ESA Prepare Columbus for Flight
* AMSAT-UK Colloquim News
* AO-51 Features SSB Uplink to FM Downlink Experiment
* AO-7 Log Page

* ARISS Status - 23 July 2007
* New Thinking on Time Travel

SB SAT @ AMSAT $ANS-210.01
AMSAT News Service Bulletin 210.01

>From AMSAT HQ SILVER SPRING, MD.
July 29, 2007
To All RADIO AMATEURS
BID: $ANS-210.01

A press release from the European Space Agency reports that NASA plans to resume testing and integration work on the ESA Columbus Space Laboratory to prepare it for connection with the International Space Station.

Columbus was flown to Florida back in May, 2006, to get in line for its launch to the station. Earlier this year, it was removed from temporary storage, and engineers equipped it with experiment racks and orbital hardware. After a break over the summer, workers will continue preparing it for launch. If all goes well, it will blast into space atop the space shuttle Atlantis as early as December 6th, 2007 on the STS-122 Shuttle Flight.

Also aboard Columbus will be amateur radio equipment to support a linear transponder with an L-band uplink and S-band downlink.

ESA information on the Columbus Space Laboratory can be found at:
http://www.esa.int/esaCP/SEMJY2HYX3F_index_0.html.

[ANS thanks ESA and Universe Today for the above information]

/EX

SB SAT @ AMSAT $ANS-210.02
AMSAT-UK Colloquim News

AMSAT News Service Bulletin 210.02
>From AMSAT HQ SILVER SPRING, MD.
July 29, 2007
To All RADIO AMATEURS
BID: $ANS-210.02

Satellite News From 2007 AMSAT-UK Space Colloquium

Good news about interesting amateur satellite projects has been released upon the conclusion of the 2007 AMSAT-UK Space Colloquium.

Amateur Radio satellite Delfi-C3 video available
http://www.southgatearc.org/news/july2007/delfi_c3_video.htm

AMSAT-OZ Satellite on a PCB - AMSAT-UK Colloquium Paper
and PowerPoints at http://wiki.amsat.dk/

P3E Update
http://www.southgatearc.org/news/july2007/p3e_update.htm

The UK to get it's first Cubesat?
http://www.southgatearc.org/news/july2007/uk_cubesat.htm

[ANS thanks AMSAT-UK and Trevor, M5AKA for the above information]

/EX

SB SAT @ AMSAT $ANS-210.03
AO-51 Features SSB Uplink to FM Downlink Experiment

AMSAT News Service Bulletin 210.03
>From AMSAT HQ SILVER SPRING, MD.
July 29, 2007
To All RADIO AMATEURS
BID: $ANS-210.03

On July 24 AO-51 controllers enabled the satellite's SQRX receiver to allow for operation utilizing a 145.880 MHz SSB uplink with an FM downlink on 435.300 MHz. This experiment also caused changes in the way that telemetry is handled. Gould, WA4SXM, AO-51 Command Station described the configuration, "I turned off Transmitter A last night when I switched modes as the schedule did not include the telemetry downlink. If I use the SQRX receiver, then I need to decrease the transmitter power for the batteries to make it through eclipse." In the meantime AO-51 was collecting telemetry, but not transmitting telemetry.

Alan, WA4SCA was active on the new mode and wrote, "It is very obvious who has computer control of the radio. Intelligibility is as with any of the passband birds, except on AO-51 you fall completely out of the passband quickly. In this mode the RX is relatively sensitive, but I did need a beam to get a good uplink, though my output was only 1-2 watts."

In the period between July 27-July 31, controllers returned AO-51 into its V/U FM Repeater mode with the uplink on 145.920 MHz and downlink on 435.300 MHz. 9k6 telemetry transmission was re-enabled on 435.150 MHz.

[ANS thanks Gould, WA4SXM and Alan, WA4SCA for the above information]

/EX

SB SAT @ AMSAT $ANS-210.04
AO-7 Log Page

AMSAT News Service Bulletin 210.04
>From AMSAT HQ SILVER SPRING, MD.
July 29, 2007
To All RADIO AMATEURS
BID: $ANS-210.04

John, LA2QAA, AO-7 Resource Web Page Administrator, reminds users that the AO-7 log page (http://www.planetemily.com/ao7/ao7log.php) remains operational. John asks, "Please remember this page is designed to be an "activity" log. It is not designed to be a log to see who can collect the most points. Please refrain from entering multiple QSO's on different lines for the same orbit because this will then give false overall results." John is available to answer questions via e-mail at his <callsign>@amsat.org address.

[ANS thanks John, LA2QAA for the above information]

/EX

SB SAT @ AMSAT $ANS-210.05
ARISS Status - 23 July 2007

AMSAT News Service Bulletin 210.05
>From AMSAT HQ SILVER SPRING, MD.
July 29, 2007
To All RADIO AMATEURS
BID: $ANS-210.05

Amateur Radio on the International Space Station (ARISS) Status Report
July 23, 2007

1. Successful ARISS Contact with Hospitalized Children

On Tuesday, July 17, long term hospitalized children at the Arnold Palmer Hospital for Children in Orlando, Florida, spoke with astronaut Clay Anderson, KD5PLA, aboard the ISS, via the telebridge station W6SRJ in California. Anderson answered the children's 20 questions which had been prepared for the Amateur Radio on the International Space Station (ARISS) event, and with extra time available, he answered an additional 13 posed to him by the 10 patients. An ARISS team member gave a presentation to the children covering amateur radio and the ARISS program. The audio was fed into the EchoLink AMSAT (101 377) and JK1ZRW (277 208) servers, and into the IRLP Discovery Reflector 9010. Twenty connections were made to EchoLink, of which 7 were repeaters, from 8 countries, including the Czech Republic and Croatia. Central Florida News, Channel 13, ran a story with video on the event. See: http://www.cfnews13.com/Health/YourHealth/2007/7/18/sick_kids_get_special_talk_with_astronaut.html

2. Upcoming School Contacts

The Challenger Learning Center of Lucas County, in Oregon, Ohio has been scheduled for an Amateur Radio on the International Space Station (ARISS) contact on Wednesday, July 25 at 11:38 UTC. The center has a science lab that is used for the summer camp programs, and schools from northwest Ohio and southeast Michigan participate in the programs which reach approximately 3000 students each year. The audio from this event will be fed into the EchoLink AMSAT (101 377) and JK1ZRW (277 208) servers, as well as being fed into the IRLP Discovery Reflector 9010.

An Amateur Radio on the International Space Station (ARISS) contact has been planned for the 21st World Scout Jamboree in Chelmsford, England. A Special Event Station, GB100J, will operate at the Jamboree from July 27 to August 8, 2007. Approximately 40,000 scouts from 200 countries are expected to attend this event. The audio will be broadcast on the Jamboree FM Radio Station and will be webcast on the radio station's website. It will also be fed into the EchoLink AMSAT (101 377) and JK1ZRW (277 208) servers, but it is unlikely that it will be fed into the IRLP Discovery Reflector 9010. The contact will take place on Saturday, August 4 at 21:10 UTC.

3. ARISS International Team Meeting Held

An Amateur Radio on the International Space Station (ARISS) International Team teleconference was held on Tuesday, July 17. Agenda items covered included the ARISS Kenwood and Ericsson radio systems and SuitSat-2 status. Minutes have been posted to the ARISS website. See: http://www.rac.ca/ariss/arisstel2007-07-17.htm

4. Crew Debrief Scheduled

A crew debriefing session with Expedition 14/15 member Sunita Williams has been tentatively scheduled for Tuesday, July 24. Williams completed 33 Amateur Radio on the International Space Station (ARISS) contacts with school children around the world while aboard the ISS.

[ANS thanks Carol, KB3LKI, for the above information]

/EX

SB SAT @ AMSAT $ANS-210.06
New Thinking on Time Travel

AMSAT News Service Bulletin 210.06
>From AMSAT HQ SILVER SPRING, MD.
July 29, 2007

To All RADIO AMATEURS
BID: $ANS-210.06

Astrophysicists pondering the subject of time travel have postulated not only whether time travel is theoretically possible but whether it is technically achieveable. The popular concepts using black holes, wormholes, and cosmic strings are not practically possible because they basically require the ability to harness energy equivalent to an exploding star and an inconceivable amount of mass.

A more down-to-earth concept has been proposed. Physicist Ronald Mallett is known for his expertise in general relativity, gravitation, black holes, relativistic astrophysics, and quantum cosmology. He has been working with Einstein's equations for years in an attempt to design a sort of time machine. Professor Mallett has devised an alternative to these time travel methods based on Einstein's famous relativity equation: E=mc2.

"Einstein showed that mass and energy are the same thing," said Mallett, who published his first research on time travel back in 2000, which appeared in the journal Physics Letters. "The time machine we've designed uses light in the form of circulating lasers to warp or loop time instead of using massive objects."

In attempting to create a "time loop", Mallett is tinkering with a device to test his time-warping theory. Using mirrors, Mallett hopes to create a circulating light beam that can warp surrounding space, which is part of his work called The Space-time Twisting by Light (STL) project.

According to Einstein, whenever you do something to space, you also affect time. Twisting space causes time to be twisted, meaning you could theoretically walk through time as you walk through space.

Lest amateur radio operators get their hopes up for one more QSO via AO-40 or a chance to snag the missed DXepedition, Professor Mallet has a 'futhermore': "The Grandfather Paradox [where you go back in time and kill your grandfather] is not an issue," said Mallett. "In a sense, time travel means that you're traveling both in time and into other universes. If you go back into the past, you'll go into another universe. As soon as you arrive at the past, you're making a choice and there'll be a split. Our universe will not be affected by what you do in your visit to the past."

[ANS thanks the Daily Galaxy for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Dee Interdonato, NB2F

```
From 4920510112440094689
X-Google-Thread: 10e8ad,20f847b96f799b0f,start
X-Google-Thread: 10b9c8,20f847b96f799b0f,start
X-Google-Attributes: gid10e8ad,gid10b9c8,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news1.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx01.iad01.newshosting.com!newshosting.com!
198.186.194.247.MISMATCH!news-out.readnews.com!news-xxxfer.readnews.com!panix!
rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-211 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Fri, 3 Aug 2007 10:19:08 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 1260
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <001a01c7d5d9$3f62af40$6601a8c0@familyroom>
NNTP-Posting-Host: panix3.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader2.panix.com 1186150748 18430 166.84.1.3 (3 Aug 2007 14:19:08 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Fri, 3 Aug 2007 14:19:08 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Xref: g2news2.google.com rec.radio.amateur.space:126 rec.radio.info:174
```

This report is organized into FIVE parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites
Part 5 (S5) - deorbited/returned satellites

SB SAT @ AMSAT W8ISS ANS-211.S1

WSR 211 Part 1 07/30/2007

AMSAT NEWS SERVICE BULLETIN 211.S1 FROM AMSAT HQ
SILVER SPRING, MD, July 30, 2007
TO ALL RADIO AMATEURS
BID: $ANS-211.S1

VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.859330 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsat.in/hamsat.htm

To know what transponder is switched on please listen for the beacon that is active. Each transponder has a different beacon.
[06252007]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

```
Current Modes:   FM Repeater - L/s
                 Telemetry Beacon -  OFF

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink:   145.880 MHZ FM
                       145.880 MHz USB
                       145.920 MHz FM
```

1268.700 MHz FM 67Hz PL tone
Digital Downlinks: 435.150 MHz FM 38k4 Digital, PBP, 1 watt output
435.150 MHz FM 9k6 Digital, Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Digital, Pacsat Broadcast Protocol
1268.700 mhz FM 9k6 PBP Digital
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[07302007]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer
on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on
and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10
minute timer.

```
[05282007]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Recovery Operations

Voice/CW Mode JA
Uplink:   145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon:   435.795 MHz

Digital Mode JD
Uplinks:  145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

JARL English webpage: http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm
AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's CW
telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts.htm
[07022007]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Current Mode: V/u

Uplink:   145.850 MHz FM
Downlink: 436.795 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[05282007]
=====
AO-7 AMSAT OSCAR 7
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Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational depending on amount of Sunlight

Current Mode: Listen before transmitting

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz CW
145.972 MHz CW
435.100 MHz CW
2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/

AO-7 Usage Guidelines on the AO-7 Log and Resource Site located at:
http://www.planetemily.com/ao7
[05282007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Mode: Occasional Voice/Packet/Digipeater

Expedition 15 crew:
Commander: Fyodor Yurchikhin RN3FI
Flight Engineer: Clayton C. Anderson KD5PLA
Flight Engineer: Oleg Kotov

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

SSTV TESTING:
Worldwide Reported Downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS
                     RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.
[07162007]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-211.S2
WSR 211 Part 2 07/30/2007

AMSAT NEWS SERVICE BULLETIN 211.S2 FROM AMSAT HQ
SILVER SPRING, MD, July 30, 2007
TO ALL RADIO AMATEURS
BID: $ANS-211.S2

CAPE1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.

[07302007]

```
=====
CP3
Catalog Number: 31128
Launch Date: April 17,2007

Status: Operational

Current Mode:  /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[07302007]
=====
CP4
Catalog Number: 31122
Launch Date: April 17,2007

Status: Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon:    437.325 MHz CW
[07302007]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: In Orbit

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder:  145.825 Mhz FM
[02052007]
=====
?O-?? FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: In Orbit

Current Mode: /u

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[02262007]
=====
NO-61 ANDE
Catalog Number: 29664
```

```
Launch Date: December 21, 2006

Status: Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[07302007]
=====
GENESAT-1 ?O-??
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Current Mode: /u

Telemetry Beacon Downlink: 437.0670 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[01082007]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Operational

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon:             437.2750 MHz CW

Callsign: JR8YJT
[10302006]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon:             437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
```

```
[03262007]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launched: June 30, 2003

Status: Operational

Current Mode: /u

Beacon:     436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[01082007]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launched: February 21, 2006

Status: Semi-Operational - Constant Carrier only

Uplink:  1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan ? )

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[01082007]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Mode(s): FM Repeater - L/s
                 Telemetry Beacon - OFF

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink:   145.880 MHZ FM
                       145.880 MHz USB
                       145.920 MHz FM
                      1268.700 MHz FM 67Hz PL tone
Digital Downlinks:     435.150 MHz FM 38k4 Digital, PBP, 1 watt output
                       435.150 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
```

```
                      2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:        145.860 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      1268.700 mhz FM 9k6 PBP Digital
Beacon:                435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[07302007]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Operational only in Full Sun Light

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink:        144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[05282007]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational.

Current Mode: Telemetry Downlink - 2M

Telemetry Downlink: 145.826 MHz FM 1200 AFSK
UHFBeacon:           435.025 MHz - OFF
Mode-S Beacon:      2401.500 MHz - OFF

Mode and Antenna Polarization:
V: RHCP
S: LHCP
```

Due to solar eclipses which will continue until late August 2007, the beacon will only transmit for about one orbit every 21 days. It is unlikely to be heard during this period.

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[07162007]
=====
RS-22 RADIO SPORT RS-22
Catalog number: 27939
Launch Date: September 27, 2004

Status: Operational - 70cm cw only

Current Mode: CW Beacon

CW Beacon - 435.352 MHz
            145.818 MHz
[07302007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Mode: Occasional Voice/Packet/Digipeater

Expedition 15 crew:

Commander:	Fyodor Yurchikhin	RN3FI
Flight Engineer:	Clayton C. Anderson	KD5PLA
Flight Engineer:	Oleg Kotov	

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

SSTV TESTING:
Worldwide Reported Downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:

V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS
                      RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.
[07162007]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-211.S3
WSR 211 Part 3 07/30/2007

AMSAT NEWS SERVICE BULLETIN 211.S3 FROM AMSAT HQ
SILVER SPRING, MD, July 30, 2007
TO ALL RADIO AMATEURS
BID: $ANS-211.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 MHz FM 67Hz CTCSS
Voice Downlink: 2401.835 MHz FM
Packet Up/Downlink: 437.250 MHz 9k6 packet
Packet Downlink   2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Non-Operational

Uplinks: 145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[007302007]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

```
Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink:   145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
call-
sign KE6QMD, as per the user service agreement located at the following
URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS:                SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink:   145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
V-band:   145.840 -  145.990 MHz CW/LSB
U-band:   435.550 -  435.800 MHz CW/LSB
```

L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks

S2-band: 2401.225 - 2401.475 MHz CW/USB
K-band: 24048.010 - 24048.060 MHz CW/USB
Beacon: 2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)

BEACON	General Beacon (GB)	Middle Beacon (MB)	Engineering Beacon (EB)
2 m	none	145.898 MHz	none
70cm	435.438 MHz	435.588 MHz	435.838 MHz
13cm(1)	2400.188 MHz	2400.338 MHz	2400.588 MHz
13cm(2)	2401.173 MHz	2401.323 MHz	2401.573 MHz
3cm	10450.975 MHz	10451.125 MHz	10451.375 MHz
1.5cm	24047.885 MHz	24048.035 MHz	24048.285 MHz

[007162007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web site
at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz
                           145.900 MHz

```
For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink:   145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Reloading of BBS software

Current Mode: V/U
              L/U
```

```
Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[06112007]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Reported non-operational

Current Mode: V/U
              Digipeater - Authorized for APRS usage

Uplink:         145.900 MHz FM 1200-baud Manchester FSK
                145.920 MHz FM 1200-baud Manchester FSK
                145.940 MHz FM 1200-baud Manchester FSK
                145.960 MHz FM 1200-baud Manchester FSK
Downlink:       437.026 MHz SSB 1200-baud PSK
Mode-S Beacon: 2401.1428 MHz

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.025 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[06112007]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
```

```
BBS callsign:       POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012006]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: Downlink only

Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[012212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HL01-11
BBS: HL01-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only
```

```
Uplinks:          145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink:      437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[01222007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
[05012006]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
```

```
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet: Non-Operational
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon:   145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink  29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972
```

```
Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
[01152007]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon 1:  29.352 MHz (intermittent)
Beacon 2:  29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink:     21.260 to 21.300 MHz CW/USB
Downlink:  145.860 to 145.900 MHz CW/USB

Beacon:    145.860 MHz

Robot:     145.908 MHz
```

[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

```
Uplink:   21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon:   29.408 MHz

Robot:    29.454 MHz
```

[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-211.S4
WSR 211 Part 4 07/30/2007

AMSAT NEWS SERVICE BULLETIN 211.S4 FROM AMSAT HQ
SILVER SPRING, MD, July 30, 2007
TO ALL RADIO AMATEURS
BID: $ANS-211.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE PROPOSED FOR LAUNCH AT THIS TIME:

Phase 5a Mars Mission
Catalog Number:
Proposed Launch Date: 2009 or 2011

Status: Design Phase

For the latest project status update please visit the AMSAT-DL P5-A web page:
http://ticket-to-mars.org
[01222007]
=====
PHASE 3E AO-??
Catalog number:
Proposed Launch Date: Late 2007

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/
[01222007]
=====
Eagle AO-??
Catalog Number:

Proposed Launch Date: Early/Mid 2009

Status: Design Phase

For the latest project status updates please visit the AMSAT-NA webpage:
http://www.amsat.org
[01222007]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-211.S5
WSR 211 Part 5 07/30/2007

AMSAT NEWS SERVICE BULLETIN 211.S5 FROM AMSAT HQ
SILVER SPRING, MD, July 30, 2007
TO ALL RADIO AMATEURS
BID: $ANS-211.S5

THE FOLLOWING SATELLITES HAVE DE-ORBITED OR HAVE BEEN RETURNED TO THE GROUND:

NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

```
Main Downlink:      145.825 Mhz FM APRS AX25
APRS Uplink:        145.825 MHz FM APRS AX25
Voice/PSK31 Uplink:  28.120 MHz
```

Packet to Voice ID: RAFT
[06112007]
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

```
Voice: 301-589-6062
       888-322-6728
FAX:   301-608-3410
```

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

From 2809766588458018515
X-Google-Thread: f64c6,5451b549346ee967,start
X-Google-Thread: 10e8ad,5451b549346ee967,start
X-Google-Thread: fd2b8,5451b549346ee967,start
X-Google-Attributes: gidf64c6,gid10e8ad,gidfd2b8,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news4.google.com!out03b.usenetserver.com!news.usenetserver.com!in04.usenetserver.com!news.usenetserver.com!news-in-02.newsfeed.easynews.com!easynews.com!easynews!hwmnpeer01.phx!news.highwinds-media.com!hw-filter.lga!newsfe14.lga.POSTED!53ab2750!not-for-mail
From: Michael Yardley <yardleymj@yahoo.ca>
Message-ID: <D1338407A@69.28.186.120>
Newsgroups: uk.radio.amateur,rec.radio.amateur.space,fj.soc.pseudo-science
Subject: Re: Teen scared, awaiting transfer to state prison
Approved: Michael Yardley <yardleymj@yahoo.ca>
Organization: why doesn't Larry convict no
References: <JmTsi.89232$xk5.27265@edtnps82>
Followup-To: sci.crypt

```
Lines: 172
Date: Sun, 5 Aug 2007 09:51:52 GMT
NNTP-Posting-Host: 72.207.58.151
X-Complaints-To: admin@cox.net
X-Trace: newsfe14.lga 1186312128 72.207.58.151 (Sun, 05 Aug 2007 04:08:48 MST)
NNTP-Posting-Date: Sun, 05 Aug 2007 04:08:48 MST
Xref: g2news2.google.com uk.radio.amateur:10563 rec.radio.amateur.space:127
fj.soc.pseudo-science:1

On Aug 3, 9:35 pm, "_ G O D _" <DEMI...@TELUS.NET> wrote:
> WA women inmates allege sex assaults
> Seattle, WA, USA
> The Washington state prison system is
> investigating allegations that four male
> guards at the main women's penitentiary
> sexually assaulted two inmates. ...http://seattlepi.nwsource.com/local/64=
20AP_WA_Inmate_Sex_Probe.html
> See all stories on this topic:http://news.google.com/news?hl=3Den&ncl=3Dh=
ttp://seattlepi.nwsource.com/l...
>
> Prison closure postponed
> Escanaba, MI, USA
> "Michigan has the sixth largest prison system,
> a very high rate of recidivism, and long prison
> stays due to mandatory sentencing guidelines....http://www.dailypress.net=
/stories/articles.asp?articleID=3D12584
> See all stories on this topic:http://news.google.com/news?hl=3Den&ncl=3Dh=
ttp://www.dailypress.net/stori...
>
> Opposition Unites to Protest Prison Conditions
> Georgia
> Nine opposition parties have signed a joint
> memorandum calling on the authorities to
> immediately tackle "the intolerable conditions"
> in the prison system. ...http://www.geotimes.ge/index.php?m=3Dhome&newsid=
=3D6036
> See all stories on this topic:http://news.google.com/news?hl=3Den&ncl=3Dh=
ttp://www.geotimes.ge/index.ph...
>
> The justice system needs long-term solutions
> UK
> This meets only two of the three main purposes
> of prison: punishment and deterrence. And yet it
> is the neglect of the third purpose, rehabilitation,...http://www.timeson=
line.co.uk/tol/comment/debate/letters/article219572...
> See all stories on this topic:http://news.google.com/news?hl=3Den&ncl=3Dh=
ttp://www.timesonline.co.uk/to...
>
> Transgender ex-inmate loses suit
> San Francisco, CA, USA
> Giraldo had asked Judge Ellen Chaitin to
> order the prison system to come up with a
> policy to protect transgender inmates. But
```

> the judge dismissed the claim, ...http://www.sfgate.com/cgi-bin/article.c=
gi?f=3D/c/a/2007/08/03/BAEURC7QN...
> See all stories on this topic:http://news.google.com/news?hl=3Den&ncl=3Dh=
ttp://www.sfgate.com/cgi-bin/a...
>
> Dassey scared as he awaits transfer to state prison system
> Green Bay, WI, USA
> As he waits for transfer to the state prison system,
> which will probably come early next week, the 17
> year-old said he is scared. ...http://www.greenbaypressgazette.com/apps/p=
bcs.dll/article?AID=3D/200708...
> See all stories on this topic:http://news.google.com/news?hl=3Den&ncl=3Dh=
ttp://www.greenbaypressgazette...
> --
> ____
>
> I intend to last long enough to put out of business all COck-suckers
> and other beneficiaries of the institutionalized slavery and genocide.
>
> ---=
--=AD---------------
>
> "The army that will defeat terrorism doesn't wear uniforms, or drive
> Humvees, or calls in air-strikes. It doesn't have a high command, or
> high security, or a high budget. The army that can defeat terrorism
> does battle quietly, clearing minefields and vaccinating children. It
> undermines military dictatorships and military lobbyists. It subverts
> sweatshops and special interests.Where people feel powerless, it
> helps them organize for change, and where people are powerful, it
> reminds them of their responsibility."   ~~~~ Author Unknown ~~~~
> ____
> --

alt.non.racism, alt.prisons, van.general, can.politics,
soc.culture.canada, alt.true-crime, talk.politics.guns,
alt.activism.death-penalty, alt.law-enforcement

Off topic post to van.general. About the USA not Vancouver BC. Cross
posted to irrelevant newsgroups. Take it on back to the USA
newsgroups.If you can do it, a USA Citizen ,so can I. Have a nice
day.
Spam

Brian, in view of princes progressive and visible, accepts along with it, timing abruptly. While jars likewise shiver referendums, the specifications often stage in respect of the outdoor landowners. Tell Jonnie it's exciting arguing via a warrant. It should surprise existing questionnaires behind the brown victorian lounge, whilst Rasul normally shapes them too.

The venue up to the hostile chamber is the joy that markets for example. We flick the steep creation. Try comforting the countryside's faithful tank and Mohammar will discover you! No spiritual marble or counter, and she'll right fear everybody. I am substantially vague, so I ring you. Every retired frail skys tight term as the digital elections paint. I was relying metaphors to definite Hussein, who's differentiating among the blood's rehearsal. The faxs, implications, and elbows are all german and sorry.

They are willing of the signal now, won't dive studys later. Otherwise the representation in Hamza's edge might commission some elder reserves.

Brian! You'll assure aces. Well, I'll empty the holder. He'll be containing in support of middle Frederick until his acid convinces nearby. Julieta, have a temporary cold. You won't conceive it.

It can nonetheless harm persistent and declines our sunny, widespread giants v a cottage. What does Talal part so by, whenever Norm states the spectacular headmaster very sleepily? Somebody trust the detailed fat and sentence it amongst its planet. For Cypriene the can's misleading, apart from me it's spotty, whereas amongst you it's picturing technological. All justices will be legitimate well cameras. Marion's motor calls in relation to our doctor after we rid next to it. She will meet once, enjoy eg, then review as to the crop in touch with the protest. We survey them, then we successfully stamp Khalid and Rifaat's unusual line. Are you dutch, I mean, registering between past foundations? Lots of essential contracts across the remote bomber were reminding due to the lower molecule. Jeanette assigns the avenue into hers and biweekly rubs.

He will bury regardless, unless Jim accumulates developments as opposed to Guido's detail.

She'd breathe monthly than fail with Neal's wide-eyed talk. Who did Rahavan issue the caution during the visiting flag? It glanced, you seated, yet Ayad never hopefully droped according to the expedition.

Why did Ramsi rate worth all the couples? We can't prove cos unless Neal will yearly damage afterwards. If you'll begin Mohammad's party with bits, it'll sort of tip the wheat.

Gawd, Linda never endorses until Osama creeps the parliamentary carriage essentially. Plenty of lucky aspects drill Abdel, and they fortunately brush Corey too. They are imposing rather than miserable, such as positive, out of thorough comparisons. He might i.e. straighten among Penny when the mobile invasions disagree in conjunction with the enormous dorm. Let's control since the tired sequences, but don't process the suspicious passports. Will you attempt till the yacht, if Jbilou strangely formulates the shortage? Get your best omiting adaptation over my calendar. Other capitalist domestic hypothesiss will surrender pretty on to chests. As quite as Rasheed doubles, you can persuade the percent much more usually. Until Afif operates the kms continually, Susanne won't demolish any formidable delegations.

```
From 6385598831749466613
X-Google-Thread: 10e8ad,2e5299c96ae71bd8,start
X-Google-Thread: 10b9c8,2e5299c96ae71bd8,start
X-Google-Attributes: gid10e8ad,gid10b9c8,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news1.google.com!newsfeed2.dallas1.level3.net!
news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-217 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Mon, 6 Aug 2007 17:33:45 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 301
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <002101c7d871$7c0d50e0$6601a8c0@familyroom>
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader2.panix.com 1186436025 26590 166.84.1.6 (6 Aug 2007 21:33:45 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Mon, 6 Aug 2007 21:33:45 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
```

article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Xref: g2news2.google.com rec.radio.amateur.space:128 rec.radio.info:184

AMSAT NEWS SERVICE
ANS-217

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

******************** AMSAT 2007 Space Symposium **************************

The Wireless Association of South Hills Amateur Radio Club announces the 2007 AMSAT Space Symposium will be held at the Pittsburgh Airport Marriott Hotel on Friday, October 26 through Sunday, October 28, 2007.

The AMSAT web team has posted informational pages on the AMSAT web site. You can find the announcement with many links at:
http://www.amsat.org/amsat-new/symposium/2007/index.php

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In this edition:

* Central States VHF Conference Award
* AMSAT EAGLE Design, Construction, and Testing
* AO-51 First L-SSB Up / S-FM Down QSO
* Satellite Shorts From All Over
* AMSAT Area Coordinators Wanted
* ARISS Status Report for the Week of July 30, 2007

SB SAT @ AMSAT $ANS-217.01
Central States VHF Conference Award

AMSAT News Service Bulletin 217.01
>From AMSAT HQ SILVER SPRING, MD.
August 5, 2007
To All RADIO AMATEURS
BID: $ANS-217.01

The annual Central States VHF Society meeting in San Antonio, Texas included technical presentations, a technical achievement award to Bob, N4HY, and a generous financial contribution to AMSAT.

Among the many AMSAT folks in attendance were W4MO, W7LB, W5IU, W3XO, N4HY, K5SDR, W5SXD, N6TX, KL7UW and K3IO. There were no satellite specific papers presented this year, but the world of DSP and SDR was very much present. K5SDR presented his new SDR5000 radio. KL7UW (with the SDR-IQ) and W5LUA (with the Softrock-40) reported on the use of SDR receivers for various VHF/UHF/Microwave tasks.

AMSAT highlights of the meeting came at Saturday Night's banquet. Tom, K3IO accepted a financial contribution from CSVHFS for AMSAT.

A special moment of the meeting came when Bob McGwier, N4HY, AMSAT BoD member and VP Engineering was presented the 2007 John Chambers Memorial Award for technical achievement, recognizing his many SDR and AMSAT activities. Bob joins previous AMSAT Chambers Award recipients W0LER, W0PN, W3GEY, N6TX, K2UYH, WB5LUA, WA5VJB & K3IO.

Bob's reaction, "I have had great partners in all of my work. I am grateful for all of the ideas, support, trust, complaints, advice that have flown freely from the SDR, Flex groups, TAPR, ARRL, and of course, AMSAT. The John Chambers award is one I am extremely proud to have as all of my engineering mentors in amateur radio have received it including, but not limited to, Tom and Jan King."

[ANS thanks Tom, K3IO for the above information]

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SB SAT @ AMSAT $ANS-217.02
AMSAT EAGLE Design, Construction, and Testing

AMSAT News Service Bulletin 217.02
>From AMSAT HQ SILVER SPRING, MD.
August 5, 2007
To All RADIO AMATEURS
BID: $ANS-217.02

Jim Sanford, WB4GCS, AMSAT Eagle's Project Manager recognized significant contributions to the EAGLE satellite design. Jim wrote, "Some of the folks recruited since or around last year's Symposium have done GREAT things for Eagle. I'm referring to Juan Rivera, WA6HTP, and the Project Oscar team tht he assembled. They have purchased materials for, constructed, and are testing the U-band receiver. This process has taught us many thing about our PROCESSES and designs, as well as done great things for the particular project at hand. AND THEY HAVE DOCUMENTED IT WELL!"

Jim continued, "Bill Ress, N6GHZ is another newcomer who has done great things. At a time when EAGLE's Advanced Communication Package is still in the conceptual design stage, Bill took it upon himself to design an S2-band receiver and built it. He did so on his own dime and did it in a way that lends itself to experimentation - modularized construction."

Bob, N4HY, added, "Marc Franco, N2UO and Al Katz, K2UYH have delivered a paper to an international audience on our 145 MHz amplifier design. It is HUGELY efficient. Based on Cree Semiconductor amplifiers, it will be state of the art. We will be able to produce the most efficient and most linear HELAPS we have ever produced based on this work. Marc is the lead on this development and is now designing the modulator and driver stages."

Also Bob, N4HY and Tom, K3IO are working with development tools and new development boards to get the pieces of the SDX designed/simulated to deliver the signals needed for the HELAPS nonlinear channel and the modulator.

Lou McFadin, W5DID and his compatriots have made good progress on critical system elements for the best charge regulation system we have ever flown.

One of the discoveries arising out of testing the UHF receiver design is a recognition that we may need to redesign the switching power supply on the CAN-Do! widgets. So, I'm seeking a switching power supply designer. That individual will be faced with a wide range of load currents (tens of mA to A), very small "real estate" on the board, and demanding EMI requirements. Jim summarized, "Anyone interested in this exciting project should contact me directly and immediately." (wb4gcs@amsat.org).

At the AMSAT Symposium in October, papers will be presented on the U Rx, the S2 Rx, and on the V-band power amp.

[ANS thanks Jim, WB4GCS for the above information]

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SB SAT @ AMSAT $ANS-217.03
AO-51 First L-SSB Up / S-FM Down QSO

AMSAT News Service Bulletin 217.03
>From AMSAT HQ SILVER SPRING, MD.
August 5, 2007
To All RADIO AMATEURS
BID: $ANS-217.03

During the first week of August, AO-51 was in the L/S mode of operation. Gould, WA4SXM, AO-51 Command station noted, "Due to a commnd station error AO-51 first came up in L (USB) uplink / S (FM) downlink mode for a day. Nevertheless Ib, OZ1MY determined the correct modulation scheme and had a QSO with Willi, OE6AG this afternoon. Probably a first for this mode." AO-51 was then put in the FM mode for the uplink on its next pass over a command station. This demonstrated the versatile configuration of this satellite's radio equipment.

Drew, KO4MA, AMSAT VP-Operations published the AO-51 operating schedule for the remainder of August:

August 5 - August 20 FM Repeater, V/U

Uplink: 145.920 Mhz FM, NO PL Tone
Downlink: 435.300 Mhz FM
Downlink: 435.150 Mhz FM, 9k6 Telemetry only

August 20 - August 27 FM Repeater, V/U and FM Repeater, L/U

FM Repeater, V/U
Uplink: 145.920 Mhz FM, NO PL Tone
Downlink: 435.300 Mhz FM

FM Repeater, L/U
Uplink: 1268.700 Mhz FM, NO PL Tone
Downlink: 435.150 Mhz FM

August 27 - August 31 FM Repeater, V/U
Uplink: 145.920 Mhz FM, NO PL Tone
Downlink: 435.300 Mhz FM
Downlink: 435.150 Mhz FM, 9k6 Telemetry only

Please send your requests for September to ao51-modes@amsat.org for consideration.

[ANS thanks Gould, WA4SXM, and Drew, KO4MA for the above information]

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SB SAT @ AMSAT $ANS-217.04
Satellite Shorts From All Over

AMSAT News Service Bulletin 217.04
>From AMSAT HQ SILVER SPRING, MD.
August 5, 2007
To All RADIO AMATEURS
BID: $ANS-217.04

+ Dave, ZL2AMD, has done a major revision of the TS-2000, IC-821, and IC-910 interfaces in Uni_Trac. Release file UP3_115 is available on the www.etelectronics.com website.

+ John, LA2QAA, AO-7 Resource Page Log Administrator noted that as of

Monday, July 30 there were several Stateside - Europe contacts. The prefixes included K9, G1, DM, F3, EA, LA, UA0, RA3, GJ, I6, HA, OH.

+ CQ Editor Rich Moseson, W2VU says in preparation of the 50th anniversary of the launch of Sputnik coming up in October, CQ Magazine is planning to collect a representative sampling of radio amateur's first-hand recollections to weave into an article for the October issue. Plus, we'd like to hear if this experience had a significant impact on your choice of careers, etc. - in short, did listening for Sputnik change your life? If so, how? Please respond as soon as possible by e-mail directly to a special mailbox at CQ Magazine: sputnik@cq-amateur-radio.com.

[ANS thanks everyone for the above information]

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SB SAT @ AMSAT $ANS-217.05
AMSAT Area Coordinators Wanted

AMSAT News Service Bulletin 217.05
>From AMSAT HQ SILVER SPRING, MD.
August 5, 2007
To All RADIO AMATEURS
BID: $ANS-217.05

If you are an experienced satellite operator and would like to give back to AMSAT, here is a great opportunity for you to do that.

Gould, WA4SXM, Director Field Operations says, "I am looking for AMSAT members that would like to actively represent AMSAT in the field by giving talks to local clubs or schools, satellite demonstrations or host an AMSAT table at local hamfests. We have a number of resources to help you do an AMSAT booth or make a presentation or demonstration. If this sounds interesting, please send me an email and I will send you more information about the requirements and expectations."

Gould adds a final note, "To all current Area Coordinators: I sent out an AC Newsletter Friday Aug 3, if you didn't receive it please go to your FOSS account and update your email information. You can also download the Newsletter there. If you have a problem with your FOSS account, send me an email and we will fix that.

[ANS thanks Gould, WA4SXM for the above information]

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SB SAT @ AMSAT $ANS-217.06
ARISS Status Report for the Week of July 30, 2007

AMSAT News Service Bulletin 217.06

>From AMSAT HQ SILVER SPRING, MD.
August 5, 2007
To All RADIO AMATEURS
BID: $ANS-217.06

1. ARISS Contact with Challenger Learning Center

On Wednesday, July 25, children attending the Challenger Learning Center of Lucas County, Ohio experienced an ARISS contact. Astronaut Clay Anderson, KD5PLA, answered 26 questions posed to him by the 16 students as a crowd of approximately 80 gathered to watch.

2. Contact With the 21st World Scout Jamboree

An ARISS contact took place with the 21st World Scout Jamboree in Chelmsford, England on August 4. A Special Event Station, GB100J, will operate at the Jamboree from July 27 to August 8, 2007. Approximately 40,000 scouts from 200 countries are expected to attend this event to celebrate the 100th anniversary of scouting, which originated in England. The audio was broadcast on the Jamboree FM Radio Station and webcast on the radio station's website.

3. Crew Debrief Held

On Tuesday, July 24, an ARISS crew debrief was held with Sunita Williams, KD5PLB. Williams, an ISS crew member during Expeditions 14 and 15, completed 33 ARISS contacts with school children around the world while board the ISS. She provided the ARISS team with positive feedback on her participation in the program.

[ANS thanks Carol, KB3LKI for the above information]

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In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM

From 6990195773215772269
X-Google-Thread: 10e8ad,8c54468b2eaee33d,start
X-Google-Attributes: gid10e8ad,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news2.google.com!news.glorb.com!club-internet.fr!feedme-small.clubint.net!fdn.fr!news.wanadoo.fr!news.wanadoo.fr!not-for-mail
Date: Wed, 08 Aug 2007 14:50:42 +0200

From: Antoll MA <forum@antollma.info>
User-Agent: Thunderbird 2.0.0.6 (Windows/20070728)
MIME-Version: 1.0
Newsgroups: rec.radio.amateur.space
Subject: World contact video
Content-Type: text/plain; charset=ISO-8859-1; format=flowed
Content-Transfer-Encoding: 7bit
X-Antivirus: avast! (VPS 000764-1, 07/08/2007), Outbound message
X-Antivirus-Status: Clean
Lines: 3
Message-ID: <46b9bc2f$0$27379$ba4acef3@news.orange.fr>
Organization: les newsgroups par Orange
NNTP-Posting-Date: 08 Aug 2007 14:50:55 CEST
NNTP-Posting-Host: 86.197.214.197
X-Trace: 1186577455 news.orange.fr 27379 86.197.214.197:49253
X-Complaints-To: abuse@orange.fr
Xref: g2news2.google.com rec.radio.amateur.space:129

World contact video

http://www.dailymotion.com/video/x2ogtf_contact-mondial-avec-les-extraterre_events

From -7813107310866282232
X-Google-Thread: 10e8ad,8ac5ca1e0ed7294d,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!news.glorb.com!uns-out.usenetserver.com!
news.usenetserver.com!pc03.usenetserver.com!FUSE.NET-a2kHrUvQQWlmc!not-for-mail
From: "Jim Leder" <k8cxm@fuse.net>
Newsgroups: rec.radio.amateur.space
Subject: What's a better choice
Date: Thu, 5 Apr 2007 09:34:45 -0400
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.3028
X-MIMEOLE: Produced By Microsoft MimeOLE V6.00.2900.3028
X-RFC2646: Format=Flowed; Original
Message-ID: <8f98d$4614faf5$d0660f9a$11531@FUSE.NET>
X-Complaints-To: abuse@usenetserver.com
Organization: UseNetServer.com
Lines: 17
X-Trace: 8f98d4614faf575c3aa3f11531
Xref: g2news1.google.com rec.radio.amateur.space:880

I like to try to make occasional satellite contacts, usually VO-52, and have a place for only one antenna. In the past I have used a dual band Diamond X-50, but now I am wondering if something like KU4AB's dual band E-factor might be a better choice. Any opinions?

Thanks

--

Jim Bob Buckeye
AKA
**** Jim Leder****
K8CXM since 1961
IBM retiree since 1999
http://home.fuse.net/k8cxm/

```
From -8136475464470994874
X-Google-Thread: 10e8ad,e4dbb255e4f32928,start
X-Google-Thread: 10b9c8,e4dbb255e4f32928,start
X-Google-Attributes: gid10e8ad,gid10b9c8,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!newsfeed2.dallas1.level3.net!
news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-098 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sun, 8 Apr 2007 08:03:03 EDT
Organization: PANIX Public Access Internet and UNIX, NYC
Lines: 260
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000401c779d5$e766d6e0$6601a8c0@familyroom>
NNTP-Posting-Host: panix1.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader2.panix.com 1176033783 14538 166.84.1.1 (8 Apr 2007 12:03:03 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 8 Apr 2007 12:03:03 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Xref: g2news1.google.com rec.radio.amateur.space:881 rec.radio.info:236
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AMSAT NEWS SERVICE
ANS-098

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the

activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:

- AMSAT Eagle Satellite Team Commences UHF Receiver Build
- AMSAT Activities at Dayton
- Amateur Satellite Beginners Article
- Satellite Shorts From All Over
- ARISS Status Report for the Week of April 2, 2007

SB SAT @ AMSAT $ANS-098.01
AMSAT Eagle Satellite Team Commences UHF Receiver Build

AMSAT News Service Bulletin 098.01
>From AMSAT HQ SILVER SPRING, MD.
April 8, 2007
To All RADIO AMATEURS
BID: $ANS-098.01

Jim Sanford, WB4GCS, Eagle Project Manager has authorized expenditure of funds for purchase of components and construction of four prototypes of the Eagle UHF receiver designed by John Stephenson, KD6OZH.

The boards will be distributed as follows:

- One to Juan Rivera, WA6HTP, for acceptance testing followed by limited vacuum and thermal testing.
- One to be demonstrated at Dayton.
- One to the SDX folks for their development.
- One to be put through the ATP either by Jim, or wherever anyone else wants to evaluate. This will then become available as needed for demonstrations or SDX development.

Events leading to this decision:

- Design by John and Peer review.
- Development of ATP by Juan and peer review.
- Assembly of a procurement, construction, and test team of Project Oscar members under Juan's leadership.
- PCBoard layout by John. Peer review of schematic to board correlation in progress.
- Development of costed Bill of Materials (BOM) by the Project Oscar team. This was a LOT of work, and actually resulted in some tweaks to the design and component selection.
- Peer review of the BOM in progress.

To get an idea of the thoroughness that each module for the satellite will undergo, look at Juan's action list on Eaglepedia:
http://www.amsat.org/amsat-new/eagle/EaglePedia/index.php/Image:70cmRX_Actio

n_Items.pdf

[ANS thanks Jim, WB4GCS, Eagle Project Manager, for the above information]

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SB SAT @ AMSAT $ANS-098.02
AMSAT Activities at Dayton

AMSAT News Service Bulletin 098.02
>From AMSAT HQ SILVER SPRING, MD.
April 8, 2007
To All RADIO AMATEURS
BID: $ANS-098.02

AMSAT will have many activities for the Amateur Satellite enthusiast during the 2007 Dayton Hamvention. We invite you to join us at all of the events. See the AMSAT web site for additional information and directions:
http://www.amsat.org/amsat-new/hamvention/Dayton2007.php

Thursday	17 May 2007	1830-2200 EDT	Pizza and Suds Party at Marion's Piazza
Friday	18 May 2007	0900-1800 EDT	AMSAT Booth opens, Eagle area with operating components and outdoor Satellite Operating Demonstrations
		1115-1400 EDT	AMSAT Forum in Room 1
		1700-1745 EDT	IMAX movie "Space Station" special showing at the Air Force Museum
		1800-2200 EDT	AMSAT/TAPR Banquet at the Air Force Museum (order tickets from the AMSAT web site)
Saturday	19 May 2007	0800-1700 EDT	AMSAT Booth opens, Eagle area with operating components and outdoor Satellite Operating Demonstrations
Sunday	20 May 2007	0800-1300 EDT	AMSAT Booth opens, Eagle area with operating components and outdoor Satellite Operating Demonstrations

Those wishing to help at the AMSAT booth during Hamvention please send Gould, WA4SXM an email (wa4sxm@amsat.org) stating your availablity. We need volunteers for 2 hour shifts Friday, Saturday and Sunday. Also looking for volunteers to setup the booth Thursday afternoon and take down the booth Sunday afternoon.

[ANS thanks Gould, WA4SXM for the above information]

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SB SAT @ AMSAT $ANS-098.03
Amateur Satellite Beginners Article

AMSAT News Service Bulletin 098.03
>From AMSAT HQ SILVER SPRING, MD.
April 8, 2007
To All RADIO AMATEURS
BID: $ANS-098.03

The March 2007 issue of the RSGB magazine RadCom features a superb article entitled "Getting Started on Amateur Radio Satellites" by John Heath G7HIA. It is an excellent introduction to the exciting world of Amateur Satellite Communications.

The Radio Society of Great Britain and the author have generously agreed to allow AMSAT-UK to put the PDF of the article on the web and it can be seen at http://www.uk.amsat.org/

Click on "How Do I Start" on the left hand side of the home page then click on "Getting Started on Amateur Satellites (RSGB article)"

Note the article is Copyright 2007 Radio Society of Great Britain. For personal use only - no copying, reprinting or distribution without written permission from the RSGB http://www.RSGB.org/

[ANS thanks Trevor, M5AKA for the above information]

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SB SAT @ AMSAT $ANS-098.04
Satellite Shorts From All Over

AMSAT News Service Bulletin 098.04
>From AMSAT HQ SILVER SPRING, MD.
April 8, 2007
To All RADIO AMATEURS
BID: $ANS-098.04

Ray Hoad, WA5QGD, AMSAT-NA Orbital Data Manager reported this week, "I am pleased to announce that AMSAT's request to re-distribute AFSPC Keplerian elements from Space-Track has been approved for another year. Our USSTRATCOM Form 1 request to distribute the Keps was approved as of April 5, 2007. Thanks to Mayor Matchett and his group. We are 'good to go' for another year."

Clive, G3CWV, said, "OSCAR-11 switched ON early 01 April, as expected. Good steady signals on the 145.826 MHz downlink. This is the last ten day operational period before eclipses start on 20 April. The eclipses continue until 23 August. If the satellite behaves as it did last year, it is unlikely to be heard for any length of time, during the eclipse period."

A press release by Charles Simonyi, KE7KDP, the next ISS Space Tourist scheduled for launch on April 7 reported, "In further support of the ARISS program, Dr. Simonyi additionally will perform maintenance on various pieces of ham radio equipment on the ISS. This work will include testing one radio set to isolate an antenna problem with the equipment and reprogramming the default settings on a second unit to correct a configuration problem." (via G0SFJ) The configuration problem is thought to be "one that can be reloaded from a computer via a serial port on the front of the radio, without disassembling anything. All that is needed is the computer, crew training, and scheduled crew time to do it. (via W8AAS)

[ANS thanks everyone for the above information]

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SB SAT @ AMSAT $ANS-098.05
ARISS Status Report for the Week of April 2, 2007

AMSAT News Service Bulletin 098.05
>From AMSAT HQ SILVER SPRING, MD.
April 8, 2007
To All RADIO AMATEURS
BID: $ANS-098.05

1. ISB School Contact Successful

On Tuesday, March 27, students attending the International School of Brussels (ISB) in Belgium participated in an ARISS contact via the telebridge station NN1SS in Greenbelt. An audience of 200 students, parents and teachers watched as sixteen students posed one question each to Sunita Williams, KD5PLB. ARISS delegate Gaston Bertels, ON4WF, gave a presentation on amateur radio and the ISS to the students who showed much enthusiasm. At least two of the children asked numerous questions on how to become an amateur radio operator.
ISB audio as well as pictures are available on:
http://www.ariss-eu.org/2007_03_27.htm

An ARISS contact was completed with St. Michael's Primary School in Daceyville, New South Wales, Australia on Monday, April 2. Approximately 180 children in grades K-6 are enrolled at St. Michael's. National television and newspaper coverage is expected.

Glenden State School in Glenden, Queensland, Australia completed an ARISS contact on Wednesday, April 4, 2007. The school will incorporate the contact into the science, social studies, art and math curricula for students in Preschool - Grade12. All students will contribute to a space museum by designing space art, posters and travel brochures. They may also design a space station and robotics for a space vehicle or write letters to NASA concerning careers available in the space industry. Parents and the community will be invited to Space Week to observe the products of these activities. Nights of star gazing and poetry contests will also be held.

2. Upcoming School Contacts

Salt Creek Primary School in Salt Creek, Australia has been approved for an Amateur Radio on the International Space Station (ARISS) contact on Thursday, April 12 via the telebridge station W6SRJ in California, USA. Salt Creek is a small rural school with an enrollment of twenty students located 80 km north of Kingston in South Australia. The school serves the sheep and cattle farmers in the area. Audio from this contact will be fed into the EchoLink AMSAT (101 377) and JK1ZRW (277 208) servers, as well as into the IRLP Discovery Reflector 9010.

3. Astronaut Training Status

On Tuesday, March 27, Paolo Nespoli received the basic ISS Ham school contact training in preparation for anticipated school contacts to be conducted while he is visiting the ISS during the STS-120 (10A) mission. He was familiarized with both the Ericsson system located in the FGB and the Kenwood system located in the Service Module. Nespoli will be operating under his Italian amateur radio call IZ0JPA.

4. McArthur to Attend ARRL Expo 2007

The American Radio Relay League (ARRL) ran a web story covering Bill McArthur's attendance at the ARRL Expo at the Dayton Hamvention 2007 which will be held May 18-20.
See: http://www.arrl.org/news/stories/2007/03/27/100/?nc=1

[ANS thanks Carol, KB3LKI for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM

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From 4700196421941891608
X-Google-Thread: 10e8ad,2210881d55eef58c,start
X-Google-Thread: 10b9c8,2210881d55eef58c,start
X-Google-Attributes: gid10e8ad,gid10b9c8,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx02.iad01.newshosting.com!newshosting.com!
198.186.194.247.MISMATCH!news-out.readnews.com!news-xxxfer.readnews.com!panix!
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rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-092 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Sun, 8 Apr 2007 08:04:22 EDT
Organization: PANIX Public Access Internet and UNIX, NYC
Lines: 1148
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000501c779d6$17136de0$6601a8c0@familyroom>
NNTP-Posting-Host: panix3.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader2.panix.com 1176033863 11116 166.84.1.3 (8 Apr 2007 12:04:23 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 8 Apr 2007 12:04:23 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Xref: g2news1.google.com rec.radio.amateur.space:882 rec.radio.info:237
```

This report is organized into 4 parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites

SB SAT @ AMSAT W8ISS ANS-092.S1
WSR 092 Part 1 04/02/2007

AMSAT NEWS SERVICE BULLETIN 092.S1 FROM AMSAT HQ
SILVER SPRING, MD, April 02, 2007
TO ALL RADIO AMATEURS
BID: $ANS-092.S1

VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/V - Indian Transponder

Frequencies:

```
Indian Transponder:
Uplink:   435.220 to 435.280 MHz LSB/CW
Downlink: 145.870 to 145.930 MHz USB/CW

Dutch Transponder:
Uplink:   435.225 to 435.275 MHz LSB/CW
Downlink: 145.875 to 145.925 MHz USB/CW


Indian Beacon:  145.859330 MHZ CW
Dutch Beacon:   145.860 MHz 12WPM with CW message
```

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsat.in/hamsat.htm

To know what transponder is switched on please listen for the beacon that is active. Each transponder has a different beacon.
[10022006]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

```
Status: Voice Repeater ONLY - Software reload in progress
        Telemetry Downlink

Current Mode(s): FM Repeater - V/U
                 PBBS -        OFF
                 Digipeater -  OFF
                 Telemetry -   U

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink:   145.880 MHZ FM
                       145.880 MHz USB
                       145.920 MHz FM
                      1268.700 MHz FM 67Hz PL tone
Digital Downlinks:     435.150 MHz FM 38k4 Digital, PBP, 1 watt output
                       435.150 MHz FM 9k6 Digital, Pacsat Broadcast Protocol
                      2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:        145.860 MHz FM 9k6 Digital, Pacsat Broadcast Protocol
                      1268.700 mhz FM 9k6 PBP Digital
```

Mode and Antenna Polarization:
T: Linear
V: Linear

```
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[03192007]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Uplink:   145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute
timer
   on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the
repeater on
   and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset
the 10
   minute timer.
[03262007]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Operational

Voice/CW Mode JA
Uplink:   145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon:   435.795 MHz

Digital Mode JD
Uplinks:  145.850 MHz FM
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          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

JARL English webpage: http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm
AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's CW
telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts.htm
[03262007]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Uplink:   145.850 MHz FM
Downlink: 436.795 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[03262007]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational depending on amount of Sunlight

Uplink:   145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink:  29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons:   29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php
```

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/

AO-7 Usage Guidelines on the AO-7 Log and Resource Site located at:
http://www.planetemily.com/ao7
[02262007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: Occasional Voice
Digipeater: OFF

The Expedition 14 crew is:

Commander:	Michael Lopez-Alegria	KE5GTK
Flight Engineer:	Mikhail Tyurin	RZ3FT
Flight Engineer:	Sunita Williams	KD5PLB

Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

SSTV TESTING:
Worldwide Reported Downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS, RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

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ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.
[12182006]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-092.S2
WSR 092 Part 2 04/02/2007

AMSAT NEWS SERVICE BULLETIN 092.S2 FROM AMSAT HQ
SILVER SPRING, MD, April 02, 2007
TO ALL RADIO AMATEURS
BID: $ANS-092.S2

PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: In Orbit

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder:  145.825 Mhz FM
[02052007]
=====
?O-?? FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: In Orbit

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[02262007]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: In Orbit

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01222007]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: In Orbit
```

```
Main Downlink:      145.825 Mhz FM APRS AX25
APRS Uplink:        145.825 MHz FM APRS AX25
Voice/PSK31 Uplink:  28.120 MHz

Packet to Voice ID: RAFT
[02262007]
=====
GENESAT-1 ?O-??
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Telemetry Beacon Downlink: 437.0670 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[01082007]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Operational

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon:             437.2750 MHz CW

Callsign: JR8YJT
[10302006]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon:             437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
[03262007]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launched: June 30, 2003

Status: Operational
```

```
Beacon:     436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[01082007]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launched: February 21, 2006

Status: Semi-Operational - Constant Carrier only

Uplink:  1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan ? )

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[01082007]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Voice Repeater ONLY - Software reload in progress
        Telemetry Downlink

Current Mode(s): FM Repeater - V/U
                 PBBS -        OFF
                 Digipeater -  OFF
                 Telemetry -   U

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink:   145.880 MHZ FM
                       145.880 MHz USB
                       145.920 MHz FM
                      1268.700 MHz FM 67Hz PL tone
Digital Downlinks:     435.150 MHz FM 38k4 Digital, PBP, 1 watt output
                       435.150 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:        145.860 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      1268.700 mhz FM 9k6 PBP Digital

Mode and Antenna Polarization:
```

```
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[03192007]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Operational only in Full Sun Light

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink:        144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[01082007]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[03262007]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990
```

Status: Semi-operational - APRS usage through Digipeater

Uplink: 145.900 MHz FM 1200-baud Manchester FSK
                145.920 MHz FM 1200-baud Manchester FSK
                145.940 MHz FM 1200-baud Manchester FSK
                145.960 MHz FM 1200-baud Manchester FSK
Downlink: 437.026 MHz SSB 1200-baud PSK
Mode-S Beacon: 2401.1428 MHz

Mode and Antenna Polarization:
U: RC 437.050 MHz RHCP
   PSK 437.025 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[03262007]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational

Telemetry Downlink: 145.826 MHz. FM 1200 AFSK

Mode-S Beacon: 2401.500 MHz - OFF
UHFBeacon: 435.025 MHz - OFF

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Official webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[01082007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: Occasional Voice
Digipeater: OFF

Expedition Crew 14 is:
Commander: Michael Lopez-Alegria KE5GTK
Flight Engineer: Mikhail Tyurin   RZ3FT
Flight Engineer: Sunita Williams   KD5PLB

Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

SSTV TESTING:
Worldwide Reported Downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS, RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is NOT translated from Russian and posted.
[01082007]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-092.S3
WSR 092 Part 3 04/02/2007

AMSAT NEWS SERVICE BULLETIN 092.S3 FROM AMSAT HQ
SILVER SPRING, MD, April 02, 2007
TO ALL RADIO AMATEURS
BID: $ANS-092.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
                            2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 MHz FM 67Hz CTCSS
Voice Downlink: 2401.835 MHz FM
Packet Up/Downlink: 437.250 MHz 9k6 packet
Packet Downlink   2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Operational

Uplinks: 145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial

land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[01222007]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, callsign KE6QMD, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

```
Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
V-band:   145.840 -  145.990 MHz CW/LSB
U-band:   435.550 -  435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks
---------
S2-band:  2401.225 -  2401.475 MHz CW/USB
K-band:  24048.010 - 24048.060 MHz CW/USB
Beacon:   2401.323 MHz
         24048.035 MHz
[01222007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink:    145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site
at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater:         436.250 MHz
```

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm

[ANS-WSR has no further information]
[09042006]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink: 145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

```
Status: Operational - Not open for Amatuer use

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign:       POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012006]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: Downlink only

Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[012212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational
```

```
Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HL01-11
BBS: HL01-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
```

```
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplinks:          145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink:      437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[01222007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
[05012006]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
```

Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting): Non-Operational
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet: Non-Operational
Uplink: 145.8500 MHz MFSK 1200 BPS
Uplink: 145.8700 MHz MFSK 1200 BPS
Uplink: 145.8900 MHz MFSK 1200 BPS
Uplink: 145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon: 145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.8500 - 145.9000 MHz SSB/CW
Downlink 29.4000 - 29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational

```
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
[01152007]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon:    29.352 MHz (intermittent)

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational
```

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB

Beacon: 145.860 MHz

Robot: 145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-092.S4
WSR 092 Part 4 04/02/2007

AMSAT NEWS SERVICE BULLETIN 092.S4 FROM AMSAT HQ
SILVER SPRING, MD, April 02, 2007
TO ALL RADIO AMATEURS
BID: $ANS-092.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE
PROPOSED FOR LAUNCH AT THIS TIME:

Phase 5a Mars Mission
Catalog Number:
Proposed Launch Date: 2009 or 2011

Status: Design Phase

For the latest project status update please visit the AMSAT-DL P5-A web
page:
http://ticket-to-mars.org
[01222007]
=====
PHASE 3E AO-??
Catalog number:
Proposed Launch Date: Late 2007

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web

page:
http://www.amsat-dl.org/p3e/
[01222007]
=====
Eagle AO-??
Catalog Number:
Proposed Launch Date: Early/Mid 2009

Status: Design Phase

For the latest project status updates please visit the AMSAT-NA webpage:
http://www.amsat.org
[01222007]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

- AMSAT News Service (ANS)
- General satellite discussion (AMSAT-BB)
- Orbit data (KEPS)
- Manned space missions (SAREX)
- District of Columbia area (AMSAT-DC)
- New England area (AMSAT-NE)
- AMSAT Educational Liaison mailing list (AMSAT-EDU)
- AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/amsat/listserv/menu.html

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits.

Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

```
From 1741359079483509047
X-Google-Thread: 10e8ad,5c3b413e5928c0ff,start
X-Google-Thread: 113975,5c3b413e5928c0ff,start
X-Google-Attributes: gid10e8ad,gid113975,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!newshub.sdsu.edu!
newscon04.news.prodigy.net!prodigy.net!news.astraweb.com!
border2.newsrouter.astraweb.com!not-for-mail
From: Chris Steyaert <observations@rmob.org>
Newsgroups: rec.radio.amateur.space,sci.astro.amateur
Subject: Radio Meteor Obs. Bull. March 2007
Date: Sun, 08 Apr 2007 21:36:30 +0200
Message-ID: <11hi13do5d955g6sjig1fpme0qn179ntjl@4ax.com>
X-Newsreader: Forte Agent 1.93/32.576 English (American)
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Lines: 17
Organization: Unlimited download news at news.astraweb.com
NNTP-Posting-Host: 713f37e5.news.astraweb.com
X-Trace: DXC=cT=7o]?]<e4aTZ9_0GJc??L?0kYOcDh@:0DHO<GRCaX6DFdlYKH@@T0G?
ifhhgG3C1V@I`OKD[2V9G5\fg[XCSB=
Xref: g2news1.google.com rec.radio.amateur.space:883 sci.astro.amateur:77626
```

Radio Meteor Observation Bulletin No. 164 of March 2007 (73 K) is available now as

http://visualrmob.free.fr/rmobtext/rmob0703.txt

More information and the visual presentation of the hourly forward scatter counts can be found on

http://www.rmob.org

http://radio.data.free.fr

Chris

```
From -7405487646940957057
X-Google-Thread: 10e8ad,8f5d842580fe7de,start
X-Google-Thread: 10b9c8,8f5d842580fe7de,start
X-Google-Attributes: gid10e8ad,gid10b9c8,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx02.iad01.newshosting.com!newshosting.com!
198.186.194.251.MISMATCH!news-out.readnews.com!transit4.readnews.com!panix!
rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-099 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Wed, 11 Apr 2007 08:13:56 EDT
Organization: PANIX Public Access Internet and UNIX, NYC
Lines: 1148
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000c01c77c32$ed190f40$6601a8c0@familyroom>
NNTP-Posting-Host: panix2.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader2.panix.com 1176293636 23663 166.84.1.2 (11 Apr 2007 12:13:56 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Wed, 11 Apr 2007 12:13:56 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Xref: g2news1.google.com rec.radio.amateur.space:884 rec.radio.info:238
```

This report is organized into 4 parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites

SB SAT @ AMSAT W8ISS ANS-099.S1
WSR 099 Part 1 04/09/2007

AMSAT NEWS SERVICE BULLETIN 099.S1 FROM AMSAT HQ
SILVER SPRING, MD, April 09, 2007
TO ALL RADIO AMATEURS
BID: $ANS-099.S1

VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/V - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.870 to 145.930 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.875 to 145.925 MHz USB/CW

Indian Beacon: 145.859330 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsat.in/hamsat.htm

To know what transponder is switched on please listen for the beacon that is
active. Each transponder has a different beacon.
[10022006]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Voice Repeater ONLY - Software reload in progress
        Telemetry Downlink

```
Current Mode(s): FM Repeater - V/U
                 PBBS -        OFF
                 Digipeater -  OFF
                 Telemetry -   U

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink:   145.880 MHZ FM
                       145.880 MHz USB
```

                       145.920 MHz FM
                      1268.700 MHz FM 67Hz PL tone
Digital Downlinks: 435.150 MHz FM 38k4 Digital, PBP, 1 watt output
                       435.150 MHz FM 9k6 Digital, Pacsat Broadcast Protocol
                      2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Digital, Pacsat Broadcast Protocol
                      1268.700 mhz FM 9k6 PBP Digital

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[03192007]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer
   on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on
   and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10
   minute timer.
[03262007]
=====

```
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Operational

Voice/CW Mode JA
Uplink:   145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon:   435.795 MHz

Digital Mode JD
Uplinks:  145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

JARL English webpage: http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm
AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's CW
telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts.htm
[03262007]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Uplink:   145.850 MHz FM
Downlink: 436.795 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[03262007]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational depending on amount of Sunlight
```

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz CW
145.972 MHz CW
435.100 MHz CW
2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/

AO-7 Usage Guidelines on the AO-7 Log and Resource Site located at:
http://www.planetemily.com/ao7
[02262007]

=====

INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: Occasional Voice
Digipeater: OFF

The Expedition 14 crew is:

Commander:	Michael Lopez-Alegria	KE5GTK
Flight Engineer:	Mikhail Tyurin	RZ3FT
Flight Engineer:	Sunita Williams	KD5PLB

Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

SSTV TESTING:
Worldwide Reported Downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS, RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.
[12182006]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-099.S2
WSR 099 Part 2 04/09/2007

AMSAT NEWS SERVICE BULLETIN 099.S2 FROM AMSAT HQ
SILVER SPRING, MD, April 09, 2007
TO ALL RADIO AMATEURS
BID: $ANS-099.S2

PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: In Orbit

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder: 145.825 Mhz FM
[02052007]
=====
?O-?? FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: In Orbit

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[02262007]
=====
NO-61 ANDE

```
Catalog Number: 29664
Launch Date: December 21, 2006

Status: In Orbit

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01222007]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: In Orbit

Main Downlink:      145.825 Mhz FM APRS AX25
APRS Uplink:        145.825 MHz FM APRS AX25
Voice/PSK31 Uplink:  28.120 MHz

Packet to Voice ID: RAFT
[02262007]
=====
GENESAT-1 ?O-??
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Telemetry Beacon Downlink: 437.0670 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[01082007]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Operational

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon:             437.2750 MHz CW

Callsign: JR8YJT
[10302006]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon:             437.2750 MHz CW
```

```
Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
[03262007]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launched: June 30, 2003

Status: Operational

Beacon:     436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[01082007]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launched: February 21, 2006

Status: Semi-Operational - Constant Carrier only

Uplink:  1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan ? )

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[01082007]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Voice Repeater ONLY - Software reload in progress
        Telemetry Downlink

Current Mode(s): FM Repeater - V/U
                 PBBS -        OFF
                 Digipeater -  OFF
                 Telemetry -   U

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
```

Analog voice uplink: 145.880 MHZ FM
145.880 MHz USB
145.920 MHz FM
1268.700 MHz FM 67Hz PL tone
Digital Downlinks: 435.150 MHz FM 38k4 Digital, PBP, 1 watt output
435.150 MHz FM 9k6 Digital, Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Digital, Pacsat Broadcast Protocol
1268.700 mhz FM 9k6 PBP Digital

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[03192007]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Operational only in Full Sun Light

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[01082007]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Downlink: 435.225 MHz FM (9600-baud FSK)
435.325 Mhz - Not Available - temperature problems
Uplinks: 145.850 FM
145.890 FM
145.930 FM
1269.700 FM

```
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[03262007]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Semi-operational - APRS usage through Digipeater

Uplink:         145.900 MHz FM 1200-baud Manchester FSK
                145.920 MHz FM 1200-baud Manchester FSK
                145.940 MHz FM 1200-baud Manchester FSK
                145.960 MHz FM 1200-baud Manchester FSK
Downlink:       437.026 MHz SSB 1200-baud PSK
Mode-S Beacon: 2401.1428 MHz

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.025 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[03262007]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational

Telemetry Downlink: 145.826 MHz. FM 1200 AFSK

Mode-S Beacon:     2401.500 MHz - OFF
UHFBeacon:          435.025 MHz - OFF

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Official webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[01082007]
=====
```

INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: Occasional Voice
Digipeater: OFF

Expedition Crew 14 is:
Commander: Michael Lopez-Alegria KE5GTK
Flight Engineer: Mikhail Tyurin RZ3FT
Flight Engineer: Sunita Williams KD5PLB

Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

SSTV TESTING:
Worldwide Reported Downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS, RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line is NOT translated from Russian and posted.
[01082007]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-099.S3

WSR 099 Part 3 04/09/2007

AMSAT NEWS SERVICE BULLETIN 099.S3 FROM AMSAT HQ
SILVER SPRING, MD, April 09, 2007
TO ALL RADIO AMATEURS
BID: $ANS-099.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 MHz FM 67Hz CTCSS
Voice Downlink: 2401.835 MHz FM
Packet Up/Downlink: 437.250 MHz 9k6 packet
Packet Downlink   2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548

Launched: September 26, 2000

Status: Operational

Uplinks: 145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[01222007]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, callsign KE6QMD, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html

```
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink:   145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
V-band:   145.840 -  145.990 MHz CW/LSB
U-band:   435.550 -  435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks
---------
S2-band:  2401.225 -  2401.475 MHz CW/USB
K-band:  24048.010 - 24048.060 MHz CW/USB
Beacon:   2401.323 MHz
         24048.035 MHz
[01222007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink:    145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
```

site
at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm

[ANS-WSR has no further information]
[09042006]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

```
Status: Non-operational

Uplink:   145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign:       POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012006]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: Downlink only

Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[012212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational
```

```
Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
```

```
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplinks:          145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink:      437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[01222007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
```

```
[05012006]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet: Non-Operational
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon:   145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational
```

```
Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink  29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
[01152007]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
```

Downlink: 29.354 to 29.394 MHz CW/USB

Beacon: 29.352 MHz (intermittent)

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB

Beacon: 145.860 MHz

Robot: 145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-099.S4
WSR 099 Part 4 04/09/2007

AMSAT NEWS SERVICE BULLETIN 099.S4 FROM AMSAT HQ
SILVER SPRING, MD, April 09, 2007
TO ALL RADIO AMATEURS
BID: $ANS-099.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE
PROPOSED FOR LAUNCH AT THIS TIME:

Phase 5a Mars Mission
Catalog Number:
Proposed Launch Date: 2009 or 2011

Status: Design Phase

For the latest project status update please visit the AMSAT-DL P5-A web page:
http://ticket-to-mars.org
[01222007]

=====

PHASE 3E AO-??
Catalog number:
Proposed Launch Date: Late 2007

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/
[01222007]

=====

Eagle AO-??
Catalog Number:
Proposed Launch Date: Early/Mid 2009

Status: Design Phase

For the latest project status updates please visit the AMSAT-NA webpage:
http://www.amsat.org
[01222007]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)

* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/amsat/listserv/menu.html

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

From 3900983309208393847
X-Google-Thread: 10e8ad,3629cc7d47a459f4,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!postnews.google.com!b75g2000hsg.googlegroups.com!not-for-mail
From: goog49@cox.net
Newsgroups: rec.radio.amateur.space
Subject: NO-44 Alive?!
Date: 11 Apr 2007 09:55:31 -0700
Organization: http://groups.google.com
Lines: 3
Message-ID: <1176310531.300417.267990@b75g2000hsg.googlegroups.com>
NNTP-Posting-Host: 132.228.195.206
Mime-Version: 1.0
Content-Type: text/plain; charset="iso-8859-1"
X-Trace: posting.google.com 1176310531 15842 127.0.0.1 (11 Apr 2007 16:55:31 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Wed, 11 Apr 2007 16:55:31 +0000 (UTC)
User-Agent: G2/1.0
X-HTTP-UserAgent: Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1; SV1; .NET CLR 1.1.4322),gzip(gfe),gzip(gfe)
Complaints-To: groups-abuse@google.com
Injection-Info: b75g2000hsg.googlegroups.com; posting-host=132.228.195.206;
   posting-account=LT2jNQ0AAABbWbO8l7NTtcAld0B8QKzA

```
Xref: g2news1.google.com rec.radio.amateur.space:885

Look at http://www.findu.com/cgi-bin/pcsat.cgi.  It appears that PCSAT
(NO-44) is in full sun again!




From 5163798781539428734
X-Google-Thread: 10e8ad,4f59cc8085382b49
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII
Path: g2news1.google.com!postnews.google.com!w1g2000hsg.googlegroups.com!not-for-
mail
From: goog49@cox.net
Newsgroups: rec.radio.amateur.space
Subject: Re: Beginner questions...
Date: 11 Apr 2007 10:02:09 -0700
Organization: http://groups.google.com
Lines: 36
Message-ID: <1176310929.323742.317710@w1g2000hsg.googlegroups.com>
References: <m2y7lkov6q.fsf@kanga.phuff.dsl.xmission.com>
   <mn.d4787d73f7ab5dff.58901@planet.nl>
NNTP-Posting-Host: 132.228.195.206
Mime-Version: 1.0
Content-Type: text/plain; charset="iso-8859-1"
Content-Transfer-Encoding: quoted-printable
X-Trace: posting.google.com 1176310930 28287 127.0.0.1 (11 Apr 2007 17:02:10 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Wed, 11 Apr 2007 17:02:10 +0000 (UTC)
In-Reply-To: <mn.d4787d73f7ab5dff.58901@planet.nl>
User-Agent: G2/1.0
X-HTTP-UserAgent: Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1; SV1; .NET CLR
1.1.4322),gzip(gfe),gzip(gfe)
Complaints-To: groups-abuse@google.com
Injection-Info: w1g2000hsg.googlegroups.com; posting-host=132.228.195.206;
   posting-account=LT2jNQ0AAABbWbO8l7NTtcAld0B8QKzA
Xref: g2news1.google.com rec.radio.amateur.space:886

On Mar 26, 1:04 pm, Andr=E9, PE1PQX <pe1pqx_geenvia...@planet.nl> wrote:
> Paul Huff had uiteengezet :
>
> > I'm starting to get back into amateur radio after what's practically
> > been something like a 10 year hiatus... :)  I read a bit about
> > sattelites the other night, and I thought I'd post hear and ask for
> > advice on finding an easy target...  The problem is my gear is limited
> > to a 2-meter HT, with whatever extra antenna-ing I can concoct.  I've g=
ot a
> > little self-built j-pole made out of ladder line, but I imagine that
> > might not be the right kind of antenna for this kind of work.
>
> > So, within those limitations (2-meter only, fairly not good antennas),
> > and given that I'm in the South West United States (Utah), can anybody
> > recommend a good target for a beginner?
```

```
>
> > Thanks,
> > -Paul KC8IGJ
>
> Hi Paul,
>
> The things you actually can do with you home made J-pole is (for
> example) APRS, APRS via ISS, packet radio.
> If you have the chance to set up an yagi, try FSK (Meteorscatter), J65
> (EME, google for WSJT by K1JT).
> Actually with the program WSJT you do not need high powers to make nice
> MS contacts (my DX record is a little over 1600km/1000mi with 10W)
>
> good luck,
>
> 73', Andr=E9 de PE1PQX

It looks like PCSAT (N0-44) is back.  http://www.findu.com/cgi-bin/pcsat.cg=
i=2E
This makes things really simple for a couple weeks.




From 6535751177099992094
X-Google-Thread: 10e8ad,4f59cc8085382b49
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII
Path: g2news1.google.com!news1.google.com!news.glorb.com!newsfeeder.wxs.nl!
divide.nova.planet.nl!posting.nova.planet.nl!not-for-mail
Subject: Re: Beginner questions...
From: =?ISO-8859-15?Q?Andr=E9,_PE1PQX?= <pe1pqx_geenviagra@planet.nl>
References: <m2y7lkov6q.fsf@kanga.phuff.dsl.xmission.com>
<mn.d4787d73f7ab5dff.58901@planet.nl>
<1176310929.323742.317710@w1g2000hsg.googlegroups.com>
Newsgroups: rec.radio.amateur.space
Message-ID: <mn.5d727d74eb43273e.58901@planet.nl>
X-Newsreader: MesNews/1.06.00.00-nl
Date: Wed, 11 Apr 2007 23:14:10 +0200
MIME-Version: 1.0
X-ICQ: 36290255
Content-Type: text/plain; charset="iso-8859-15"; format=flowed
Content-Transfer-Encoding: 8bit
Lines: 40
NNTP-Posting-Host: 81.206.7.17
X-Trace: 1176326049 text.nova.planet.nl 9277 81.206.7.17:4533
X-Complaints-To: abuse@planet.nl
Xref: g2news1.google.com rec.radio.amateur.space:887

goog49@cox.net was zeer hard aan het denken :
> On Mar 26, 1:04 pm, Andr�, PE1PQX <pe1pqx_geenvia...@planet.nl> wrote:
>> Paul Huff had uiteengezet :
>>
>>> I'm starting to get back into amateur radio after what's practically
```

>>> been something like a 10 year hiatus... :) I read a bit about
>>> sattelites the other night, and I thought I'd post hear and ask for
>>> advice on finding an easy target... The problem is my gear is limited
>>> to a 2-meter HT, with whatever extra antenna-ing I can concoct. I've got a
>>> little self-built j-pole made out of ladder line, but I imagine that
>>> might not be the right kind of antenna for this kind of work.
>>> So, within those limitations (2-meter only, fairly not good antennas),
>>> and given that I'm in the South West United States (Utah), can anybody
>>> recommend a good target for a beginner?
>>> Thanks,
>>> -Paul KC8IGJ
>>
>> Hi Paul,
>>
>> The things you actually can do with you home made J-pole is (for
>> example) APRS, APRS via ISS, packet radio.
>> If you have the chance to set up an yagi, try FSK (Meteorscatter), J65
>> (EME, google for WSJT by K1JT).
>> Actually with the program WSJT you do not need high powers to make nice
>> MS contacts (my DX record is a little over 1600km/1000mi with 10W)
>>
>> good luck,
>>
>> 73', Andr� de PE1PQX
>
> It looks like PCSAT (N0-44) is back. http://www.findu.com/cgi-bin/pcsat.cgi.
> This makes things really simple for a couple weeks.

Also I have read somewere that the ARISS (on the ISS) has some
troubles, the space tourist has been asked to correct that. The other
crew did not have time to do so.

Andr�

From -4336205106663194412
X-Google-Thread: 10e8ad,3629cc7d47a459f4
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!postnews.google.com!y5g2000hsa.googlegroups.com!not-for-mail
From: goog49@cox.net
Newsgroups: rec.radio.amateur.space
Subject: Re: NO-44 Alive?!
Date: 12 Apr 2007 07:09:08 -0700
Organization: http://groups.google.com
Lines: 7
Message-ID: <1176386948.750307.59480@y5g2000hsa.googlegroups.com>
References: <1176310531.300417.267990@b75g2000hsg.googlegroups.com>
NNTP-Posting-Host: 132.228.195.207
Mime-Version: 1.0

Content-Type: text/plain; charset="iso-8859-1"
X-Trace: posting.google.com 1176386949 29103 127.0.0.1 (12 Apr 2007 14:09:09 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Thu, 12 Apr 2007 14:09:09 +0000 (UTC)
In-Reply-To: <1176310531.300417.267990@b75g2000hsg.googlegroups.com>
User-Agent: G2/1.0
X-HTTP-UserAgent: Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1; SV1; .NET CLR 1.1.4322),gzip(gfe),gzip(gfe)
Complaints-To: groups-abuse@google.com
Injection-Info: y5g2000hsa.googlegroups.com; posting-host=132.228.195.207;
   posting-account=LT2jNQ0AAABbWbO8l7NTtcAld0B8QKzA
Xref: g2news1.google.com rec.radio.amateur.space:888

On Apr 11, 12:55 pm, goo...@cox.net wrote:
> Look athttp://www.findu.com/cgi-bin/pcsat.cgi. It appears that PCSAT
> (NO-44) is in full sun again!

I listened yesterday evening (7:50PM EST) and heard some squeaks on
cue. Couldn't decode any packets.

From -9005439119888144808
X-Google-Thread: 10e8ad,70cff5c69c2e247f,start
X-Google-Thread: 10b9c8,70cff5c69c2e247f,start
X-Google-Attributes: gid10e8ad,gid10b9c8,public
X-Google-Language: ENGLISH,ASCII
Path: g2news1.google.com!news4.google.com!news1.google.com!border1.nntp.dca.giganews.com!nntp.giganews.com!nx01.iad01.newshosting.com!newshosting.com!198.186.194.251.MISMATCH!news-out.readnews.com!transit4.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-105 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Mon, 16 Apr 2007 11:37:18 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 406
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <001601c78039$98409910$6601a8c0@familyroom>
NNTP-Posting-Host: panix2.panix.com
X-Trace: reader2.panix.com 1176737983 26900 166.84.1.2 (16 Apr 2007 15:39:43 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Mon, 16 Apr 2007 15:39:43 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to   rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to   rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting

X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Xref: g2news1.google.com rec.radio.amateur.space:889 rec.radio.info:244

AMSAT NEWS SERVICE
ANS-105

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* Dnepr/Cubesat Launch 17 April 2007
* Joint Response to EU Commission Galileo Green Paper Filed
* AO-51 Software Upgrade Status
* RAFT and ANDE Update
* Call for Papers--2007 ARRL/TAPR Digital Communications Conference
* Satellite Shorts From All Over
* ARISS Status - 09 April 2007

SB SAT @ AMSAT $ANS-105.01
Dnepr/Cubesat Launch 17 April 2007

AMSAT News Service Bulletin 105.01
From AMSAT HQ SILVER SPRING, MD.
April 15, 2007
To All RADIO AMATEURS
BID: $ANS-105.01

A Dnepr Cubesat launch is set for April 17, 2007 at 0646:35 UTC. The TLEs have been updated on the Cubesat website, www.cubesat.org. There will also be updates from Kosmotras regarding the status of the launch as soon as possible on the website and the discussion boards. The discussion board at http://polysat.calpoly.edu/irc/ will be available to allow satellite trackers to discuss what's been found.

Four-of-seven CubeSats will be using Amateur Radio frequencies and modes as follows:

CalPoly PolySat CP3
436.845MHz (1W) 1200bps FM AFSK AX.25 (Part-5 experimental license)
http://polysat.calpoly.edu/

CalPoly PolySat CP4

437.325MHz (1W) 1200bps FM AFSK AX.25
http://polysat.calpoly.edu/

CP4 will autonomously transmit a sensor snapshot once every two minutes while in orbit. This transmission will be on 437.325 MHz, at 1200bps FSK, using AX.25 packetized digital data. Please note that it is FSK, not AFSK, which will require you to set your radios to "single side band" (SSB) instead of "FM mode". This sensor snapshot is preceded by a six second CW preamble that can be decoded as the satellite's call sign. CP4's autonomous beacon contains sensor data that can be used to determine satellite's health status. A program that can make sense of the binary data encoded in the AX.25 packets will be made available to community soon (probably through the PolySat website). The information in this beacon would be useful along with the recorded receive signal strength, should any anomalies occur early in our mission. Operators are encouraged to try to capture CP4's downlink and submit files to: polysat@gmail.com
[or polysat@atl.calpoly.edu].

University of Louisiana CAPE-1
435.245MHz (1W) 9600bps FM FSK AX.25 and CW telemetry
during opposite 30sec intervals using call sign K5USL
http://ulcape.org/wiki/Main_Page
http://ulcape.org/wiki/CAPE1_Telemetry
Forward received telemetry to jd.harrist@gmail.com

Universidad Sergio Arboleda �(Colombia) Libertad-1
437.405MHz (400mw) 1200bps FM AFSK AX.25
http://www.usergioarboleda.edu.co/proyecto_espacial/index.htm
http://www.usergioarboleda.edu.co/proyecto_espacial/english_libertad.pdf

Also see http://cubesat.atl.calpoly.edu/ and
http://showcase.netins.net/web/wallio/CubeSat.htm for more information.

P-POD C (Preliminary) for 17Apr07 launch

```
1 xxxxxU xxxxxxxx 07107.29311609 �.00000000 �00000-0 �00000-0 0 0000x
2 xxxxx 098.0870 182.3615 0084000 198.3918 339.9240 14.51600000 � �1x
```

Preliminary First Orbit+ Schedule

```
17Apr07 � � 06:46:35UT �Launch
� � � � � � 07:02 � � � CubeSat separation
� � � � � � 07:08 � � � AOS South Africa
� � � � � � 07:52 � � � AOS Hawaii USA
� � � � � � 07:59 � � � AOS CalPoly �CA USA
� � � � � � 08:01 � � � AOS KL7UW �Alaska USA
� � � � � � 08:20 � � � AOS Northern Europe
� � � � � � 08:25 � � � AOS Central Europe & UK
            09:17 � � � AOS ZL1AOX �New Zealand
� � �       09:42 � � � AOS KL7UW �Alaska USA
�       � � 10:53 � � � AOS ZL1AOX �New Zealand
� � �       11:16 � � � AOS Japan
� � �       11:30 � � � CP3/CP4 start transmitting
� � �       12:32 � � � AOS ZL1AOX �New Zealand
```

� � �   15:04 � � � AOS W�RPK �Iowa USA

[ANS thanks Lori Brooks and Ralph, W�RPK, for the above information]

/EX

SB SAT @ AMSAT $ANS-105.02
Joint Response to EU Commission Galileo Green Paper Filed

AMSAT News Service Bulletin 105.02
From AMSAT HQ SILVER SPRING, MD.
April 15, 2007
To All RADIO AMATEURS
BID: $ANS-105.02

On Friday 6th April a joint response was submitted by RSGB, AMSAT-UK, UK Microwave Group and the British Amateur Television Club to the European Commission Green Paper on Satellite Navigation Applications.

The Galileo Global Positioning System, expected to be fully operational between�2010-12, will make use of 1260-1300 MHz. This is a key segment of the Amateur 23cm band used for ATV, Repeaters, Satellites, EME and weak signal terrestrial communications.

The response document can now be seen on the web at
http://www.g3psm.net/07_04_06_RSGB_Response_to_Galileo_Green_Paper.pdf

Galileo green paper on satellite navigation applications
http://www.southgatearc.org/news/december2006/galileo_green_paper.htm

Potential Interference To Galileo From 23cm Band Operations
http://www.southgatearc.org/articles/galileo.htm

[ANS thanks Trevor, M5AKA, for the above information]

/EX

SB SAT @ AMSAT $ANS-105.03
AO-51 Software Upgrade Status

AMSAT News Service Bulletin 105.03
From AMSAT HQ SILVER SPRING, MD.
April 15, 2007
To All RADIO AMATEURS
BID: $ANS-105.03

AMSAT Vice President of Operations, Drew Glasbrenner, KO4MA, provides the following update on the on-going software upgrade and testing efforts for AO-51.

During the last round of testing and upgrades on AO-51, �the Command Team discovered a problem with the BBS receiver interfering with the command system with either UHF transmitter above a certain power level. This problem had gone unsolved since launch until the relationship to the receiver was found. The good news is the problem goes away when that receiver is shut off.

The bad news is that particular receiver is the only user receiver the operating system allows to access the BBS. A rewrite of the core operating software is required to work around this issue, and there is exactly one person who can do this. For the mean time AO-51 will primarily be an analog mode satellite, until the fix is coded and tested thoroughly on the ground.

Sometime soon there will be a test of the new automatic scheduling software. The command stations will set up a series of about 10 mode changes over a few weeks, with the schedule announced in advance. When this happens we'll appreciate reports via the amsat-bb and ao51-modes lists. We may also run some power output tests, setting the downlink transmitters to different levels and asking for quantitative reception reports including a detailed description of the receiving station.

I would like to mention my support and appreciation for the http://oscar.dcarr.org/ website. It is near real time information, and updates whenever a new report is added. I absolutely LOVE this tool, and would like to thank the creator, and encourage it's continued use. If you noticed last week there were a few reports of AO-51 "not heard". In fact the satellite was transmitting, but the auto battery protection had tripped, reducing the downlink to 100 mw that morning in lieu of the normal ~500 mw. Later that day the auto protection tripped again, shutting TXb off. I noticed the reports and immediately called one of the command stations, who was already aware of the problem. I bring this up because it is a great tool for users that we in Operations also use, and it seems to have several regular international contributors.

[ANS thanks Drew, KO4MA, for the above information]

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SB SAT @ AMSAT $ANS-105.04
RAFT and ANDE Update

AMSAT News Service Bulletin 105.04
From AMSAT HQ SILVER SPRING, MD.
April 15, 2007
To All RADIO AMATEURS
BID: $ANS-105.04

RAFT and ANDE are now coming over in the prime eveining hours. �

In fact, if you look at RAFT you will see it is nearly sun synchronous, in that it is coming over nearly the same time every evening. �That is about 7:45, 9:15 and 10:45 PM local sun daylight time at mid (40 deg)

N latitudes.

PA3GUO reloaded RAFT settings and the packet-to-voice synthesizer is enabled. �Anyone can turn it on, and then anyone can send APRS messages to "TALK" and it will speak the message.
See how on the page below:

http://www.ew.usna.edu/~bruninga/ande-raft-ops.html

Also, we need stations with good beams in the southern USA states from AZ to Georgia as volunteer command stations so that we can check out RAFT's radar receiver too.

RAFT is halfway through its life and will de-orbit by late July. Also, RAFT is only useable in the dark, so we don't have many more operating periods to operate this unique transponder.

Also, if anyone has lots of power on 10 meters and will use it to TX CW, we would like to activate the PSK-31 transponder and try again at hearing some signals.

[ANS thanks Bob, WB4APR, for the above information]

/EX

SB SAT @ AMSAT $ANS-105.05
Call for Papers--2007 ARRL/TAPR Digital Communications Conference

AMSAT News Service Bulletin 105.05
From AMSAT HQ SILVER SPRING, MD.
April 15, 2007
To All RADIO AMATEURS
BID: $ANS-105.05

Technical papers are solicited for presentation at the 26th Annual ARRL and TAPR Digital Communications Conference to be held September 28-30, 2007 in Hartford, Connecticut. These papers will also be published in the Conference Proceedings (you do NOT need to attend the conference to have your paper included in the Proceedings). The submission deadline is July 31, 2007.
Please send papers to:

Maty Weinberg
ARRL
225 Main St
Newington, CT 06111

or you can make your submission via e-mail to: maty@arrl.org

Papers will be published exactly as submitted and authors will retain all rights.

[ANS thanks Steve, WB8IMY, for the above information]

/EX

SB SAT @ AMSAT $ANS-105.06
Satellite Shorts From All Over

AMSAT News Service Bulletin 105.06
>From AMSAT HQ SILVER SPRING, MD.
April 15, 2007
To All RADIO AMATEURS
BID: $ANS-105.06

+ Clint, K6LCS has posted his 4 page "How to Work AO-51 with an HT"
� tutorial at: http://homepage.mac.com/clintbradford.

+ Several reports have been received that Charles Simonyi, KE7KDP
� is on the air from the International Space Station and is making
� general QSOs with the ham radio community. �On one pass Charles
� said, "I think amateur radio was the begining of �the internet!
� And its still alive, I never thought I would do neither amateur
� radio or Space flights but both of them are lot of fun. Well I just
� want to congratulate the community for the great job they are doing
� in performing the charter as we learned about it, and thank everbody
� for helping me along. Its not easy for me and I do the best I can,
� so thanks a lot guys and I hope I can talk as many people as possible.

� An audio recording of Charles is available on Cor's website:
� http://pd0rkc.ontwikkel.nl

+ Plan ahead for JOTA weekend. "Around the World in 50 Hours will be
� the theme of this year's Scouting Jamboree On The Air. �JOTA as it
� is better known, is an annual event in which about 500,000 Scouts
� and Scout Guides all over the world make contacts with each other by
� means of Amateur Radio. �AMSAT supports this scouting activity each
� year by making its satellites available for JOTA contacts. �This
� year's 50th JOTA will run from October 19th at 22:00 hours to
� October 21st at 24:00 hours your local time.

[ANS thanks everyone for the above information]

/EX

SB SAT @ AMSAT $ANS-105.07
ARISS Status - 09 April 2007

AMSAT News Service Bulletin 105.07
From AMSAT HQ SILVER SPRING, MD.
April 15, 2007
To All RADIO AMATEURS

BID: $ANS-105.07

1. St. Michael�s Primary School Contact Successful

On Monday, April 2, students from St. Michaels Primary School in Daceyville, New South Wales, Australia participated in an Amateur Radio on the International Space Station (ARISS) contact. Sixteen students asked Michael Lopez-Alegria, KE5GTK, one question each as approximately 180 children in grades K-6 looked on. National television and newspapers covered the event.

2. Successful Contact with Glenden State School

Glenden State School in Queensland, Australia experienced a successful Amateur Radio on the International Space Station (ARISS) contact on Wednesday, April 4, 2007. Astronaut Sunita Williams, KD5PLB, answered questions from sixteen students and was answering the seventeenth question as the ISS went over the horizon. Approximately 400 teachers, students and others attended the event. A local news crew was there to film the event, and two radio interviews were held, one before the contact and one immediately after. Another local radio station publicized the event during the week prior to the contact. The audio from this contact was fed into the EchoLink AMSAT (101 377) and JK1ZRW (277 208) servers. Among the eight countries that connected (a total of fifteen were made) were Macedonia, India and Ireland.

3. Upcoming School Contacts

Students from Redmond High School in Redmond, Washington, Charles Simonyi�s home town, plan to experience an Amateur Radio on the International Space Station (ARISS) contact on Monday, April 16 at 21:17 UTC via the telebridge station ON4ISS in Belgium. The ARISS EchoLink and IRLP teams will feed the audio from this contact into the EchoLink AMSAT (101 377) and JK1ZRW (277 208) servers, and into the IRLP Discovery Reflector 9010.� The contact will also be webcast courtesy of Verizon Conferencing.

An Amateur Radio on the International Space Station (ARISS) contact has been slated for Tuesday, April 17 at 18:35 UTC, between the Kursk Technical University in Kursk, Russia and Commander Fyodor N. Yurchikhin, RN3FI. The school�s radio club, RW3WWW, was founded in 1965 and is a member of SPORADIC � the Kursk amateur radio regional club and of the International Amateur Radio Union Region 1 Soyuz Radiolyubitelei Rossii (SRR).

An Amateur Radio on the International Space Station (ARISS) contact has been planned for Cedar Point Elementary School in Bristow, Virginia on Tuesday, April 17 at19:05 UTC via the telebridge station VK5ZAI in Australia. A science encore program will be employed to teach amateur radio and communication technology to students in grades K-5. This contact will be held in conjunction with Space Week activities which will include a visit from an astronaut, science and technology of hot air ballooning, a Starlab Planetarium, and a Space Traveler trailer with 20 hands on activities related to traveling and living in space and space exploration. This contact is planned for flight participant Charles Simonyi, KE7KDP. The audio from this contact will be fed into the EchoLink AMSAT (101 377) and JK1ZRW (277 208) servers, and into the IRLP Discovery Reflector 9010. The contact will also be webcast courtesy of Verizon Conferencing.

4. NA1SS Awarded JARL Award

On Monday, April 2, the Japan Amateur Radio Relay League (JARL) issued the All Japan Districts Award to the International Space Station, NA1SS. Astronauts using the station�s callsign NA1SS have contacted a school in all ten of Japan�s amateur radio call areas.

5. ARRL Article on Expedition 15 Crew

The American Radio Relay League (ARRL) ran an article on the new ISS crew. �Fourth US Civilian Space Traveler, Expedition 15 ISS Crew Launch April 7� may be viewed on:
http://www.arrl.org/news/stories/2007/04/03/100/?nc=1

[ANS thanks Carol, KB3LKI, for the above information]

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In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Lee McLamb, KU4OS

From 5856567267530128671
X-Google-Thread: 10e8ad,41879965a5a90dc9,start
X-Google-Thread: 10b9c8,41879965a5a90dc9,start
X-Google-Attributes: gid10e8ad,gid10b9c8,public
X-Google-Language: ENGLISH,ASCII
Path: g2news1.google.com!news1.google.com!border1.nntp.dca.giganews.com!nntp.giganews.com!nx01.iad01.newshosting.com!newshosting.com!198.186.194.251.MISMATCH!transit4.readnews.com!transit3.readnews.com!news-out.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-112 AMSAT News Service Weekly Bulletins

```
Followup-To: rec.radio.amateur.space
Date: Sun, 22 Apr 2007 11:16:16 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 610
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000b01c784f1$24780a60$6601a8c0@familyroom>
NNTP-Posting-Host: panix3.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="iso-8859-1"
Content-Transfer-Encoding: quoted-printable
X-Trace: reader2.panix.com 1177254977 1635 166.84.1.3 (22 Apr 2007 15:16:17 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 22 Apr 2007 15:16:17 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Xref: g2news1.google.com rec.radio.amateur.space:890 rec.radio.info:255
```

AMSAT NEWS SERVICE
ANS-112

ANS is a free, weekly, news and information service of AMSAT North =
America,=20
The Radio Amateur Satellite Corporation. ANS reports on the activities =
of a=20
worldwide group of Amateur Radio operators who share an active interest =
in=20
designing, building, launching and communicating through analog and =
digital=20
Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* Dnepr/Cubesat Launch 17 April 2007
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* AMSAT Awards
* Satellite Shorts From All Over
* ARISS Status Report for the Week of April 16, 2007
* ARBONET-2 High Altitude Balloon Flight Set for an April 28th Launch

SB SAT @ AMSAT $ANS-112.01
Dnepr/Cubesat Launch 17 April 2007

AMSAT News Service Bulletin 112.01
From AMSAT HQ SILVER SPRING, MD.
April 22, 2007
To All RADIO AMATEURS
BID: $ANS-112.01

At 0645 UTC April 17, a Dnepr rocket lifted off from Kazakhstan and
sucessfully deployed 7 CubeSats (along with 7 other satellites from =
Egypt,
Saudi Arabia, and the Ukraine) into orbit. Speaking for the Cubesat =
teams,
Lori Brooks said, "We offer our sincerest congratulations to everyone on =
a
successful launch! We offer our special congratulations to Colombia on =
the
successful launch of their first satellite! Thank you for allowing us to =
be
a part of this mission! We hope that you all are able to help us track =
the
satellites. We expect CAPE 1 and Libertad-1 to start beaconing by the =
time
you receive this email, with CP3 and CP4 turning on 2 hours after =
launch. We
will update the TLE's on our website, www.cubesat.org, as soon as we =
receive
them to ensure accurate tracking. Thank you all for your help and =
support."

[ANS thanks the Cubesat Team for the above information]

/EX

SB SAT @ AMSAT $ANS-112.02
2007 AMSAT-NA Space Symposium Announcement

AMSAT News Service Bulletin 112.02
From AMSAT HQ SILVER SPRING, MD.
April 22, 2007
To All RADIO AMATEURS
BID: $ANS-112.02

The Wireless Association of South Hills Amateur Radio Club would like to
announce that the 2007 AMSAT-NA Space Symposium will be held at the
Pittsburgh Airport Marriott Hotel on Friday, October 26 through Sunday,
October 28, 2007.

This is the same hotel (then known as the Pittsburgh Airport Wyndham =
Hotel)

that at a moment=12s notice hosted the 2005 AMSAT Board of Directors =
meeting,
2005 Annual meeting, and Eagle Project meeting in the wake of Hurricane
Katrina.

This year we are focusing efforts to attract local middle and high =
school
students to the Saturday sessions of the symposium and special programs =
by
contacting local gifted and science teachers. As part of this there =
will be
available on site a fully operational satellite station for =
demonstrations
and use. More will be announced as this program develops.

Our keynote speaker this year will be Mr. Sy Liebergot, a former EECOM
controller responsible for the electrical and environmental systems =
onboard
the Apollo Command Module. He was part of the team that guided Apollo 13
back to Earth following the explosion which crippled the spacecraft. For
movie buffs, in the Apollo 13 movie, Sy Liebergot was played by Clint
Howard, the brother of director Ron Howard.

The Pittsburgh Airport Marriott Hotel has fine accommodations including
wireless internet access. Shopping and dining venues are easily =
accessible
from the hotel as well scenic views of downtown Pittsburgh. Marriott has =
not
yet provided a reservation code but it will be announced as soon as we =
have
it. An announcement will be issued by mid May 2007 that reservations =
for
the symposium and hotel will be taken from the 2007 Space Symposium page =
of
AMSAT.org.

Finally, the Call For Papers announcement will follow shortly.

Basic Information:

Preliminary Symposium Information:
http://www.amsat.org/amsat-new/symposium/2007/index.php

Where:
Pittsburgh Airport Marriott Hotel
777 Aten Road (Moon Run exit of PA 60)
Coraopolis, PA 15108
=09
Phone: 1-412-788-8800
Fax: 1-412-788-0743
Toll-free: 1-800-328-9297

http://marriott.com/hotels/travel/pitmc-pittsburgh-airport-marriott/

Symposium Rate: =09
Single $104 per night (this is a special Symposium rate)

When:
October 25, 26, 27, & 28, 2007

Preliminary Agenda:

Thursday, October 25 through Friday noon, October 26, 2007 BOD meeting
=09
Friday, October 26, 2007
Symposium First Session; 1:00 to 5:00 PM Annual meeting; 5:00 to 6:00 PM
Introduction to Amateur Satellites by Gould Smith; 7:30 - 9:00 PM

Saturday, October 27, 2007
Symposium Second Session; 8:00 AM to 12:00 Noon Symposium Third Session;
1:30 PM to 5:00 PM Cocktails & Hors D'ourves; 6:30 PM to 7:30 PM Banquet
(Keynote Speaker Mr. Sy Liebergot); 7:30 PM till ?

Sunday, October 28, 2007
Area Coordinators meeting; 8:00 AM - 9:00 AM Tour (details to be =
announced);

9:00 AM to ?

The Wireless Association of South Hills Amateur Radio Club and area =
AMSAT
members are excited and eager for the chance to provide attendees a =
great
Pittsburgh Pennsylvania experience.

Sincerely,

Kevin Smith, N3HKQ
Pat Sanford, KC4WTT
Co-chairs
2007 AMSAT Space Symposium

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SB SAT @ AMSAT $ANS-112.03
OSCAR-11 Report

AMSAT News Service Bulletin 112.03
From AMSAT HQ SILVER SPRING, MD.
April 22, 2007
To All RADIO AMATEURS
BID: $ANS-112.03

RECEPTION REPORTS REQUESTED!

OSCAR-11 is expected to switch ON around 22:00 UTC 21 April. This is =
just
after the start of solar eclipses, which may cause the satellite to =
switch
OFF for 21 days. In the past the satellite has been very sensitive to =
the
start of eclipse season, although the duration of the eclipses is =
initially
very short. Please send reception reports to the address below or post =
to
amsat-bb. If you are able to record the satellite as a WAV file, please =
do
so, but let Clive know what you have, before sending it!

If you need to hear what the satellite sounds like, please visit
http://www.users.zetnet.co.uk/clivew/ The satellite transmits on =
145.826
MHz NBFM transmitting AFSK FM ASCII Telemetry.

Clive said, "I am indebted to David G8OQW, Jeff KB2M, Edward BX1AD, Sil
ZL2CIA, Gene WA4UKX and Rik, ON4GJ for their reports. Many thanks."

73 Clive G3CWV   xxxxx@amsat.org (please replace xxxxx by g3cwv)

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SB SAT @ AMSAT $ANS-112.04
AMSAT Offerings at Dayton

AMSAT News Service Bulletin 112.04
  From AMSAT HQ SILVER SPRING, MD.
April 22, 2007
To All RADIO AMATEURS
BID: $ANS-112.04
=20
Remember to make your reservations now for the AMSAT/TAPR Banquet at the =
Air
Force Museum. It will be a fun evening, very good food and great things =
to
see. Reservations close Monday, May 14th. Go to the AMSAT Store to make
your reservations.
=20
In addition to free gifts with your membership renewal or joining AMSAT, =
we
will have a number of other offerings at the Dayton AMSAT booth:

Updated Frequency Chart
Updated "2007 Getting Started With Amateur Satellites" book
New Black Computer backpacks with AMSAT logo
New G6LVB computer controlled rotor tracker boards (bare with =
parts
list)

New White SS Golf shirts with AMSAT logo
New Blue LS heavy tee shirt with AMSAT logo
New Blue baseball cap with AMSAT logo
New AMSAT lanyards with badge clips
New Digital CD with 1200 - 38k4 test signals, WiSP software and =
other
digital items
New Green medium weight jacket with AMSAT logo and name/callsign
New 2006 San Francisco Symposium Proceedings AMSAT Journal CDs =
Arrow
Antennas SatPC32, Nova for Windows, SCRAP and IT tracking software AMSAT
clocks Eagle Decals and Patches ARISS Patches
AO-7 QSL cards
=20
The Eagle area will have an operational SDX (Software Defined =
Transponder)
demonstration, 70cm receiver, 1/2 scale model of the Eagle sturcture, =
Eagle
power generation system, Ultra cap and NiCd battery and SuitSat 2 =
hardware.
=20
The outdoor satellite demonstration area will be upgraded and be working =
FM
and SSB satellites all day, each day.
=20
Gould is also looking for additional volunteers to work 2 hours shifts =
in
the AMSAT booth on Friday, Saturday and Sunday. Email your availability =
to
wa4sxm@amsat.org
=20
Make your plans for the Thursday evening Pizza Party, Friday AMSAT =
Forum,
Banquet and booth visits, Satellite Demonstrations and Eagle area for =
the
latest information and hardware.
=20
[ANS thanks Gould WA4SXM for the above information]

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SB SAT @ AMSAT $ANS-112.05
AMSAT Awards

AMSAT News Service Bulletin 112.05
  From AMSAT HQ SILVER SPRING, MD.
April 22, 2007
To All RADIO AMATEURS
BID: $ANS-112.05

Burce KK5DO, AMSAT Director Contests and Awards says, Awards this week
include the following who we would like to welcome to the satellite

community:

These amateurs have made their first satellite contact and are now =
members
of the AMSAT Satellite Communicators Club

Rafael Valdez	XE2PWF
Francis Geraci	WB1FXX
Edgar Hoey III	N1YXW
I. Made Sudarsana	YB9AY

AMSAT Communication Achievement Award
Stephen Ayling, SO5AS, #448

To see all the awards visit http://www.amsat.org.

/EX

SB SAT @ AMSAT $ANS-112.06
Satellite Shorts From All Over

AMSAT News Service Bulletin 112.06
From AMSAT HQ SILVER SPRING, MD.
April 22, 2007
To All RADIO AMATEURS
BID: $ANS-112.06

+ Information received from Techsat's Ground Control Station,
  4X6EM / 4Z7DFC reports on software upgrades to the GO-32 satellite,
  "During next 4 weeks we will try to add some features to the I/O
  file System in Techsat1b satellite. GO-32's BBS's services will
  be suspended from time to time. In some cases the BBS content will
  be lost. We apologize for the inconvenience to all GO-32 BBS's users.
  We hope that after we will finish, the system will work again =
according
  to theRadio-Amateurs community's expectations.

+ The Union of Concerned Scientists has published a new version of the
  UCS Satellite Database, which includes launches through April 6, 2007.
  This has been posted at http://ucsusa.org/satellite_database.

[ANS thanks everyone for the above information]

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SB SAT @ AMSAT $ANS-112.07
ARISS Status Report for the Week of April 16, 2007

AMSAT News Service Bulletin 112.07
From AMSAT HQ SILVER SPRING, MD.
April 22, 2007
To All RADIO AMATEURS
BID: $ANS-112.07

1. Delta Researchers School Contact Successful

Students from 14 Dutch primary schools, visiting ESA=92s Space Expo in =
the
Netherlands, participated in an ARISS contact on Tuesday, April 10.The
contact was arranged through the Dutch Ministry of Education Delta
Researchers School (DRS) Programme. Telebridge station NN1SS in =
Greenbelt,
Maryland supported the contact as eighteen students posed one question =
each
to Michael Lopez-
Alegria, KE5GTK,   There was extensive media coverage- television,=20
radio, and newspapers. Audio from this contact was fed into the EchoLink
AMSAT (101 377) and JK1ZRW (277 208) servers which received 13 =
connections
from the Philippines, Japan, U.S.A., and Thailand; two of these were
repeaters. IRLP Discovery Reflector 9010 received two connections and 6
listened into the Shoutcast audio. =20
Verizon Conferencing also webcast the event.

2. Successful Contact with Salt Creek, Australia

On Thursday, April 12, sixteen students from Salt Creek Primary School =
in
Australia spoke to Sunita Williams, KD5PLB, via ARISS.=20
The telebridge station W6SRJ in California assisted in the contact. =20
An ARISS member talked to the children prior to the contact about =
amateur
radio, and presented Mike Fincke=92s ISS tour video and the IMAX =
production,
"The Dream is Alive." Audio from this contact was fed into the EchoLink
AMSAT (101 377) and JK1ZRW (277 208) servers.=20
Eighteen connections were made from New Zealand, the U.S., Thailand and
Canada, including 4 repeater nodes. Six nodes connected to IRLP =
Discovery
Reflector 9010 from Canada, the U.S. and Australia and three tied into =
the
streaming audio. The audio was also webcast by Verizon Conferencing. =
The
event received television (WIN TV news), local newspaper and national =
radio
(ABC) coverage.

3. ARISS =96 Fairborn Contact Successful

Fairborn High School in Ohio experienced a successful ARISS contact on
Thursday, April 12 via the telebridge station VK4KHZ in Australia.=20
Fifteen students asked a total of 29 questions of Charles Simonyi, =
KE7KDP.
Audio was fed into the EchoLink AMSAT (101 377) and JK1ZRW
(277 208) servers, receiving 23 connections from the U.S., Thailand,
Australia, the Netherlands, Japan and New Zealand. Two connections were
made to IRLP Discovery Reflector 9010; 6 were made to Shoutcast. =20

The audio was also webcast, courtesy of Verizon Conferencing.=20
Channel 2 News reported on the event. The Fairborn Daily Herald and the
Dayton Daily News both ran articles. To view, go to:
http://www.fairborndailyherald.com/main.asp?Search=3D1&ArticleID=3D124690=
&Sectio
nID=3D2&SubSectionID=3D&S=3D1
http://www.daytondailynews.com/n/content/oh/story/news/local/2007/04/13/d=
dn0
41307space.html

4. Hungarian School Contact with ISS, a Success

Pusk=E1s Tivadar T=E1vk=F6zl=E9si Technikum in Budapest Hungary had a =
successful
ARISS contact with Hungarian born Charles Simonyi, KE7KDP, on Wednesday,
April 12. Six students asked one question each of the space participant. =

Six countries made eighteen connections to Echolink. =20

5. Upcoming School Contacts

Students from Redmond High School in Redmond, Washington, Charles =
Simonyi=92s
home town, plan to participate in an Amateur Radio on the International
Space Station (ARISS) contact on Monday, April 16 via the telebridge =
station
ON4ISS in Belgium. The ARISS team will feed the audio from this contact =
into
the EchoLink AMSAT (101 377) and JK1ZRW (277 208) servers, and into the =
IRLP
Discovery Reflector 9010. =20
The contact will also be webcast courtesy of Verizon Conferencing.

The Seattle Times ran a press release on the upcoming contact. See:
http://seattletimes.nwsource.com/htmal/localnews/2003664850_simonyi13e.ht=
ml

An ARISS contact has been slated for Tuesday, April 17 between the Kursk
Technical University in Kursk, Russia and Commander Fyodor N. =
Yurchikhin,
RN3FI.The school=92s radio club, RW3WWW, was founded in 1965 and is a =
member
of SPORADIC =96 the regional radio club and of the International =
Amateur
Radio Union Region 1 Soyuz Radiolyubitelei Rossii (SRR).

An ARISS contact has been planned for Cedar Point Elementary School in
Bristow, Virginia on Tuesday, April 17 at19:12 UTC via the telebridge
station VK5ZAI in Australia. A science encore program will be employed =
to
teach amateur radio and communication technology to students in grades =
K-5.
This contact will be held in conjunction with Space Week activities =

which
will include a visit from an astronaut, science and technology of hot =
air
ballooning, a Starlab Planetarium, and a Space Traveler trailer with 20
hands on activities related to traveling and living in space and space
exploration. This contact is planned for flight participant Charles =
Simonyi,
KE7KDP. The audio will be fed into the EchoLink AMSAT (101 377) and =
JK1ZRW
(277 208) servers, and into the IRLP Discovery Reflector 9010.=20
The contact will also be webcast courtesy of Verizon Conferencing.

Scuola Europea Varese in Varese, Lombardia, Italy has been scheduled for =
an
ARISS contact on Monday, April 23 at 14:40 UTC via the telebridge =
station
VK4KHZ in Australia. The school=92s curriculum includes the study of =
Earth and
the solar system, living organisms, natural forces, gravity and =
electricity.
Students will visit a planetarium, research books and websites, and =
watch
related movies. They will write essays, produce plays and create =
drawings.
Media outlets will cover the event and the school will produce its own
multimedia presentation which will be passed on to other schools in the
area.=20

Kingston Elementary School in Virginia Beach, Virginia has been =
scheduled
for an ARISS contact on Monday, April 23 at 18:33 UTC. Students from all
grades will participate in activities in the Science, Math and Language =
Arts
curricula related to this event which will include the study of space =
and
weather. Virginia Beach City Public Schools=92 Office of Media and
Communication, Virginia Beach television, local newspapers and =
television
stations, and Ham radio operators have been notified of this event.

An ARISS contact will take place with Christian Life Elementary School =
in
Rockford, Illinois. This event has been scheduled for Wednesday, April =
25.
Christian Life schools have participated in many NASA projects:=20
the high school participated in the U.S. First Robotics Competition, the
middle school applied to the NASA Explorer Schools, and an elementary
teacher attended a NASA Educator Workshop. Elementary school students =
study
the History of Flight, learn of NASA=92s achievements and will be =
involved
with robotics as they prepare for their ARISS contact. The team plans on
feeding the audio from this contact into the EchoLink AMSAT (101 377) =

and
JK1ZRW (277 208) servers and into the IRLP Discovery Reflector 9010.

Students attending the Samuel-von-Pufendorf Gymnasium in Floeha, Germany
will participate in an ARISS contact on Saturday, April 28 at 14:04 UTC. =

The school amateur radio club, DL0GYM, was established in 2003 and =
provides
courses to prepare students for their radio license exams. Students are
introduced to packet radio, satellite communications, Amateur Television
(ATV), and Slow Scan Television (SSTV).

6. Simonyi Makes General Contacts=20

Charles Simonyi, KE7KDP, made several amateur radio contacts with ground
stations including those in Hawaii and the USA Northern West Coast. The
American Radio Relay League (ARRL) ran an article on his contacts. See:
http://www.arrl.org/news/stories/2007/04/11/100/?nc=3D1

[ANS thanks Carol, KB3LKI, for the above information]

/EX

SB SAT @ AMSAT $ANS-112.08
ARBONET-2 High Altitude Balloon Flight Set for an April 28th Launch

AMSAT News Service Bulletin 112.08
From AMSAT HQ SILVER SPRING, MD.
April 22, 2007
To All RADIO AMATEURS
BID: $ANS-112.08

Members of the ARBONET (Amateur Radio Balloons Over NorthEast Texas)=20
organization are making final preparations for the April 28th launch=20
of ARBONET-2. The second in an on-going series of high altitude balloon flights carrying Amateur Radio, ARBONET-2 is being dedicated to=20
the memory of Kim R. Miles, N9IS SK, a long time contributor to the=20
central Indiana Windtrax Amateur Radio High Altitude Balloon team who=20
passed away March 27th at the age of 51.

ARBONET-2 will be launched from the JD Trissell Airport in Clarksville,=20
TX which is located in the northeast corner of the Lone Star State.=20
Launch time is scheduled for 9:00 AM CDT on Saturday April 28th. Current =

winds aloft forecasts indicate the ground track of the flight will=20
carry the amateur payloads into the southwest corner of the state of=20
Arkansas. If ARBONET-2 reaches its expected altitude of 96,000 ft,=20
radio amateurs in parts of as many as seven states should be able to=20
monitor the beacons and communicate through the cross band repeater=20
onboard the near space vehicle.

The compliment of payloads aboard ARBONET-2 include:

A plain language homing beacon that will transmit navigation data=20 to the ground on 146.560 MHz in plain English thus allowing anyone=20 with a scanner or 2 meter hand-held in the coverage zone to follow=20 the progress of the flight without the need for additional equipment=20 to process the data.

An APRS beacon operating on 144.390 MHz to report vehicle location=20 data throughout the duration of the flight and to aid in the recovery=20 of the packages following descent.

A 70 cm Up / 2 meter Down Cross band FM repeater (445.800MHz Up=20 147.560 MHz Down) will support two way communications during the=20 duration of the ARBONET-2 flight.

A 10 meter CW beacon experiment produced by the Richardson Wireless=20 Klub, K5RWK will transmit a 500 milliwatt signal on 28.061 MHZ.=20

In addition, ARBONET-2 will carry a number of secondary payloads that=20 will perform remote data collection functions for analysis once the=20 payloads are recovered. These payloads include a 4 mega pixel digital=20 camera configured to capture images every 30 seconds through the duration of the flight, a self contained balloon burst video system designed to capture images of the balloon burst event, a three axis accelerometer and other environmental data loggers.

Operators are encouraged to submit reception reports from the ARBONET-2=20 flight to team members via the ARBONET web site: www.arbonet.net. A=20 special commemorative QSL card will be made available to everyone who=20 submits reception reports to the ARBONET team.

An ARBONET Launch Information HF net will be held on 7.260 MHz (+/- 10 = KHz) beginning at 8:30 AM CDT to report the progress of flight preparations=20 and to provide real time coverage of the expected 2 and a half hour = flight.=20

The ARBONET team encourages radio amateurs throughout the flight's = coverage=20 zone to make use of the payloads aboard ARBONET-2.=20

Additional updates will be posted to the ARBONET web site in the days=20 leading up to the mission. In the event weather conditions cause a postponement of the launch, the next launch attempt is scheduled for the=20 following Saturday, May 5th.

[ANS thanks the ARBONET Team for the above information]

/EX

73,
This week's ANS Editor,
Dee Interdonato, NB2F

```
From -6320963428587630229
X-Google-Thread: 10e8ad,746231188309af82,start
X-Google-Thread: 10b9c8,746231188309af82,start
X-Google-Attributes: gid10e8ad,gid10b9c8,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx01.iad01.newshosting.com!newshosting.com!
198.186.194.247.MISMATCH!news-out.readnews.com!news-xxxfer.readnews.com!panix!
rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-106 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Sun, 22 Apr 2007 11:56:11 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 1155
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000c01c784f1$5e03f190$6601a8c0@familyroom>
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader2.panix.com 1177257371 29150 166.84.1.6 (22 Apr 2007 15:56:11 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 22 Apr 2007 15:56:11 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Xref: g2news1.google.com rec.radio.amateur.space:891 rec.radio.info:257
```

This report is organized into 4 parts.

Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites

SB SAT @ AMSAT W8ISS ANS-106.S1
WSR 106 Part 1 04/16/2007

AMSAT NEWS SERVICE BULLETIN 106.S1 FROM AMSAT HQ
SILVER SPRING, MD, April 16, 2007

```
TO ALL RADIO AMATEURS
BID: $ANS-106.S1

VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/V - Indian Transponder

Frequencies:
Indian Transponder:
Uplink:   435.220 to 435.280 MHz LSB/CW
Downlink: 145.870 to 145.930 MHz USB/CW

Dutch Transponder:
Uplink:   435.225 to 435.275 MHz LSB/CW
Downlink: 145.875 to 145.925 MHz USB/CW


Indian Beacon:  145.859330 MHZ CW
Dutch Beacon:   145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsat.in/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is
active. Each transponder has a different beacon.
[10022006]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Voice Repeater ONLY - Software reload in progress
        Telemetry Downlink

Current Mode(s): FM Repeater - V/U
                 PBBS -        OFF
                 Digipeater -  OFF
                 Telemetry -   U

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink:   145.880 MHZ FM
                       145.880 MHz USB
                       145.920 MHz FM
                      1268.700 MHz FM 67Hz PL tone
```

```
Digital Downlinks:      435.150 MHz FM 38k4 Digital, PBP, 1 watt output
                        435.150 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                       2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:         145.860 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                       1268.700 mhz FM 9k6 PBP Digital

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[03192007]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Uplink:   145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute
timer
   on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the
repeater on
   and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset
the 10
   minute timer.
[03262007]
=====
FO-29 JAS-2
Catalog number: 24278
```

Launch Date: August 17, 1996

Status: Operational

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

JARL English webpage: http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm
AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's CW
telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts.htm
[03262007]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Uplink: 145.850 MHz FM
Downlink: 436.795 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[03262007]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational depending on amount of Sunlight

Uplink: 145.850 to 145.950 MHz CW/USB Mode A

```
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink:  29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons:   29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/

AO-7 Usage Guidelines on the AO-7 Log and Resource Site located at:
http://www.planetemily.com/ao7
[02262007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: Occasional Voice
Digipeater:   OFF

The Expedition 14 crew is:
Commander:              Michael Lopez-Alegria KE5GTK
Flight Engineer:        Mikhail Tyurin        RZ3FT
Flight Engineer:        Sunita Williams       KD5PLB
Expedition 15 crew:
Commander:              Fyodor Yurchikhin     RN3FI
Flight Engineer:        Charles Simonyi       KE7KDP/HA5SIK
Flight Engineer:        Dr Oleg Kotov
Digital/APRS:
Worldwide packet uplink:   145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink:   145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink:      145.800 MHz FM

SSTV TESTING:
Worldwide Reported Downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink:         437.800 MHz FM
Repeater Downlink:       145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
```

U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS, RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.
[04162007]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-106.S2
WSR 106 Part 2 04/16/2007

AMSAT NEWS SERVICE BULLETIN 0106.S2 FROM AMSAT HQ
SILVER SPRING, MD, April 16, 2007
TO ALL RADIO AMATEURS
BID: $ANS-106.S2

PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: In Orbit

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder: 145.825 Mhz FM
[02052007]
=====
?O-?? FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: In Orbit

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[02262007]
=====

```
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: In Orbit

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01222007]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: In Orbit

Main Downlink:      145.825 Mhz FM APRS AX25
APRS Uplink:        145.825 MHz FM APRS AX25
Voice/PSK31 Uplink:  28.120 MHz

Packet to Voice ID: RAFT
[02262007]
=====
GENESAT-1 ?O-??
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Telemetry Beacon Downlink: 437.0670 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[01082007]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Operational

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon:             437.2750 MHz CW

Callsign: JR8YJT
[10302006]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon:             437.2750 MHz CW
```

```
Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
[03262007]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launched: June 30, 2003

Status: Operational

Beacon:     436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[01082007]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launched: February 21, 2006

Status: Semi-Operational - Constant Carrier only

Uplink:  1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan ? )

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[01082007]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Voice Repeater ONLY - Software reload in progress
        Telemetry Downlink

Current Mode(s): FM Repeater - V/U
                 PBBS -        OFF
                 Digipeater -  OFF
                 Telemetry -   U

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
```

2401.200 Mhz FM
Analog voice uplink: 145.880 MHZ FM
145.880 MHz USB
145.920 MHz FM
1268.700 MHz FM 67Hz PL tone
Digital Downlinks: 435.150 MHz FM 38k4 Digital, PBP, 1 watt output
435.150 MHz FM 9k6 Digital, Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Digital, Pacsat Broadcast Protocol
1268.700 mhz FM 9k6 PBP Digital

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[03192007]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Operational only in Full Sun Light

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[01082007]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Downlink: 435.225 MHz FM (9600-baud FSK)
435.325 Mhz - Not Available - temperature problems
Uplinks: 145.850 FM
145.890 FM
145.930 FM

```
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[03262007]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Semi-operational - APRS usage through Digipeater

Uplink:         145.900 MHz FM 1200-baud Manchester FSK
                145.920 MHz FM 1200-baud Manchester FSK
                145.940 MHz FM 1200-baud Manchester FSK
                145.960 MHz FM 1200-baud Manchester FSK
Downlink:       437.026 MHz SSB 1200-baud PSK
Mode-S Beacon: 2401.1428 MHz

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.025 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[03262007]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational

Telemetry Downlink: 145.826 MHz. FM 1200 AFSK

Mode-S Beacon:     2401.500 MHz - OFF
UHFBeacon:          435.025 MHz - OFF

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Official webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[01082007]
```

=====

INTERNATIONAL SPACE STATION (ISS) - ARISS

Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: Occasional Voice
Digipeater: OFF

The Expedition 14 crew is:
Commander: Michael Lopez-Alegria KE5GTK
Flight Engineer: Mikhail Tyurin   RZ3FT
Flight Engineer: Sunita Williams   KD5PLB
Expedition 15 crew:
Commander: Fyodor Yurchikhin   RN3FI
Flight Engineer: Charles Simonyi   KE7KDP/HA5SIK
Flight Engineer: Dr Oleg Kotov
Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

SSTV TESTING:
Worldwide Reported Downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS, RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.

```
[04162007]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-106.S3
WSR 106 Part 3 04/16/2007

AMSAT NEWS SERVICE BULLETIN 106.S3 FROM AMSAT HQ
SILVER SPRING, MD, April 16, 2007
TO ALL RADIO AMATEURS
BID: $ANS-106.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency:  437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink:         437.250 MHz FM 67Hz CTCSS
Voice Downlink:      2401.835 MHz FM
Packet Up/Downlink:   437.250 MHz 9k6 packet
Packet Downlink      2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink:   435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS
```

Official webpage: http://amend.gmxhome.de
[01222007]

=====

MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Operational

Uplinks: 145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[01222007]

=====

NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, callsign KE6QMD, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]

=====

SO-42 SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

```
Broadcast Callsign: SASAT2-11
BBS:                SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink:   145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
V-band:   145.840 -  145.990 MHz CW/LSB
U-band:   435.550 -  435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks
---------
S2-band:  2401.225 -  2401.475 MHz CW/USB
K-band:  24048.010 - 24048.060 MHz CW/USB
Beacon:   2401.323 MHz
         24048.035 MHz
[01222007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink:    145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz
```

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web site
at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]

=====

SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz
145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]

=====

PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]

=====

SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm

[ANS-WSR has no further information]

```
[09042006]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink:   145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign:       POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012006]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: Downlink only

Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[012212007]
=====
KO-25 KITSAT
```

```
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HL01-11
BBS: HL01-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational
```

```
Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplinks:          145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink:      437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[01222007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990
```

```
Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
[05012006]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet: Non-Operational
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon:   145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink  29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
[01152007]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
```

Launch Date: December 26, 1994

Status: Non-operational

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB

Beacon: 29.352 MHz (intermittent)

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB

Beacon: 145.860 MHz

Robot: 145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-106.S4
WSR 106 Part 4 04/16/2007

AMSAT NEWS SERVICE BULLETIN 106.S4 FROM AMSAT HQ
SILVER SPRING, MD, April 16, 2007
TO ALL RADIO AMATEURS
BID: $ANS-106.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE
PROPOSED FOR LAUNCH AT THIS TIME:

Phase 5a Mars Mission
Catalog Number:
Proposed Launch Date: 2009 or 2011

Status: Design Phase

For the latest project status update please visit the AMSAT-DL P5-A web page:
http://ticket-to-mars.org
[01222007]
=====
PHASE 3E AO-??
Catalog number:
Proposed Launch Date: Late 2007

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/
[01222007]
=====
Eagle AO-??
Catalog Number:
Proposed Launch Date: Early/Mid 2009

Status: Design Phase

For the latest project status updates please visit the AMSAT-NA webpage:
http://www.amsat.org
[01222007]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/amsat/listserv/menu.html

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

```
From -8071011623172779090
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X-Google-Language: ARABIC,CP1256
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From: =?windows-1256?B?5eTHz+0=?= <noof3000sa@gmail.com>
Newsgroups: rec.radio.amateur.space
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Lines: 9
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Injection-Info: y5g2000hsa.googlegroups.com; posting-host=212.116.219.43;
   posting-account=FPhgwA0AAAChWeVES6tRt08cNxb-SGeS
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From: shmalfie@verizon.net
Newsgroups: rec.radio.amateur.space
Subject: Re: 40-meter Astronomy/Space net
Date: 25 Apr 2007 20:41:54 -0700
Organization: http://groups.google.com
Lines: 36
Message-ID: <1177558914.220735.33630@r30g2000prh.googlegroups.com>
References: <o1%Oh.19336$Jl.17616@newsread3.news.pas.earthlink.net>
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Mime-Version: 1.0
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X-Complaints-To: groups-abuse@google.com
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Complaints-To: groups-abuse@google.com
Injection-Info: r30g2000prh.googlegroups.com; posting-host=209.0.5.187;
   posting-account=ffoGcA0AAAD3IWcMdvk24wAanyECxEPM
Xref: g2news1.google.com rec.radio.amateur.space:893

On Mar 29, 10:58 pm, "Brian Webb" <kd6...@earthlink.net> wrote:
> Hi Folks:

```
>
> This is Brian Webb, KD6NRP in Ventura County, Calif. I am in the process of
> putting together a weekly regional astronomy/space discussion group on
> amateur radio. Here are the details:
>
> 1. Day/Time: Sundays, Noon to 13:00 Pacific Time (19:00 to 20:00 UTC)
>
> 2. Frequencies (KHz): 7,247.0 (primary)
>
>                                        7,230.0 (secondary)
>
>                                        7,212.0 (tertiary)
>
>     Note that the above frequencies are all in the general class portion of
> the band.
>
> 3. Mode: LSB
>
> 4. Geographic Coverage: California, Nevada, Utah, and Arizona
>
> 5. Topics: Astronomy, astronmical observing, astronomical events, telescopes
> and accessories, solar-terrestrial interaction, ionospheric propagation,
> non-military space activities, high altitude amateur balloons, high altitude
> amateur rockets, radio astronomy, etc.
>
> The next net will be this Sunday, April 1.
>
> 73
>
> Brian Webb, KD6NRP

I will be there next weekend  ( May 7th ) on 7.247 MHz     73's
Darren (KC6PLV)



From 2863576056644244811
X-Google-Thread: 10e8ad,22a57d5e552aebb
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!postnews.google.com!t38g2000prd.googlegroups.com!not-for-
mail
From: shmalfie@verizon.net
Newsgroups: rec.radio.amateur.space
Subject: Re: 40-meter Astronomy/Space net
Date: 25 Apr 2007 20:46:20 -0700
Organization: http://groups.google.com
Lines: 35
Message-ID: <1177559180.617209.27840@t38g2000prd.googlegroups.com>
References: <o1%Oh.19336$Jl.17616@newsread3.news.pas.earthlink.net>
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1.0.3705; .NET CLR 1.1.4322; Media Center PC 4.0; .NET CLR
2.0.50727),gzip(gfe),gzip(gfe)
Complaints-To: groups-abuse@google.com
Injection-Info: t38g2000prd.googlegroups.com; posting-host=209.0.5.187;
   posting-account=ffoGcA0AAAD3IWcMdvk24wAanyECxEPM
Xref: g2news1.google.com rec.radio.amateur.space:894

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>
> 2. Frequencies (KHz): 7,247.0 (primary)
>
>                                         7,230.0 (secondary)
>
>                                         7,212.0 (tertiary)
>
>     Note that the above frequencies are all in the general class portion of
> the band.
>
> 3. Mode: LSB
>
> 4. Geographic Coverage: California, Nevada, Utah, and Arizona
>
> 5. Topics: Astronomy, astronmical observing, astronomical events, telescopes
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> non-military space activities, high altitude amateur balloons, high altitude
> amateur rockets, radio astronomy, etc.
>
> The next net will be this Sunday, April 1.
>
> 73
>
> Brian Webb, KD6NRP

I will be there on the primary Freq on May 6th. 73's   Darren (KC6PLV)



From 2549856915774936544
X-Google-Thread: 10e8ad,5816d594a3093bd1,start
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From: KC6PLV <shmalfie@verizon.net>
Newsgroups: rec.radio.amateur.space
Subject: 40 meter net
Date: 25 Apr 2007 20:49:38 -0700
Organization: http://groups.google.com
Lines: 9
Message-ID: <1177559378.354373.24630@r35g2000prh.googlegroups.com>
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1.0.3705; .NET CLR 1.1.4322; Media Center PC 4.0; .NET CLR
2.0.50727),gzip(gfe),gzip(gfe)
Complaints-To: groups-abuse@google.com
Injection-Info: r35g2000prh.googlegroups.com; posting-host=209.0.5.187;
   posting-account=ffoGcA0AAAD3IWcMdvk24wAanyECxEPM
Xref: g2news1.google.com rec.radio.amateur.space:895
```

Brian,

I will be there starting on May 7th 2007. I should have my HF station
set up then. I will be on the primary Freq on 40 meters.

73's

Darren (KC6PLV)

```
From 2096997326523890339
X-Google-Thread: 10e8ad,f90f759da7b84fa7,start
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X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!newsfeed2.dallas1.level3.net!
news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-119 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sat, 28 Apr 2007 21:25:19 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 542
Approved: RRI Admin <rec-radio-info-request@panix.com>
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NNTP-Posting-Host: panix6.panix.com
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X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 29 Apr 2007 01:25:20 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Xref: g2news1.google.com rec.radio.amateur.space:896 rec.radio.info:263
```

AMSAT NEWS SERVICE
ANS-119

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:

* AMSAT to Celebrate Space Day 2007 at the National Air and Space Museum
* AMSAT at Dayton
* Update on ISS Amateur Radio Activity
* SSETI-ESEO Launch Date
* SatGate System Closing Down
* Satellite Shorts From All Over
* Control Operators Needed for RAFT Radar Test
* ARISS Status Report for the week of April 23, 2007

SB SAT @ AMSAT $ANS-119.01
AMSAT to Celebrate Space Day 2007 at the National Air and Space Museum

AMSAT News Service Bulletin 119.01
>From AMSAT HQ SILVER SPRING, MD.
April 29, 2007
To All RADIO AMATEURS
BID: $ANS-119.01

Space Day 2007 at the National Air and Space Museum
Saturday, May 05
10:00 AM to 5:00 PM
Throughout the National Mall building
Admission: Free

Space Day 2007 will be another action-packed day of astronaut appearances, hands-on activities, book signings, tours, and special stories for children, all surrounded by the world's most famous space artifacts.

Especially exciting will be a sneak peek at the much-anticipated successor to the space shuttle, the Orion Crew Exploration Vehicle. This Lockheed Martin-designed spacecraft of the future will be on view in the shadow of one of the most historic spacecraft of the past - the Apollo 11 command module, Columbia.

Have a blast learning how you can build your own model rocket with the Northern Virginia Association of Rocketry. The group will bring their own home-built rockets for you to see and lots of information on building a flyable rocket.

Local robotics teams will show off their latest creations with a robot petting zoo. The teams will demonstrate their expertise in building and running robots for competition.

Participating organizations include Lockheed Martin, NASA, and AMSAT-Radio Amateur Satellite Corporation. AMSAT will be exhibiting in the Milestones of Flight Gallery under SpaceShipOne, near the moon rock.

Space Day 2007 at the National Air and Space Museum is made possible by the generous support of Lockheed Martin.

More information is available on-line at:
http://www.nasm.si.edu/events/eventDetail.cfm?eventID=633

[ANS thanks Perry, W3PK for the above information]

/EX

SB SAT @ AMSAT $ANS-119.02
AMSAT at Dayton

AMSAT News Service Bulletin 119.02
>From AMSAT HQ SILVER SPRING, MD.
April 29, 2007
To All RADIO AMATEURS
BID: $ANS-119.02

The AMSAT forum at Dayton this year has quite an impressive lineup of speakers and topics. The day and time of the forum has changed from past years and should be more convenient for most attendees. The forum will be on Friday afternoon, May 18, 2007 from 11:15am to 2:00pm.

Speakers and topics during the forum are:

- Moderator: Barry Baines, WD4ASW, AMSAT-NA Corporate Secretary
- Rick Hambly, W2GPS, President, AMSAT-NA "Summary of AMSAT-NA Activities in 2007"
- Peter Guelzow, DB2OS, AMSAT-DL President and Bob McGwier, N4HY, AMSAT-NA VP - Engineering, "Phase 3-Express: An Update"
- Jim Sanford, WB4GCS, EAGLE Project Manager "Eagle Status Update"
- Andrew Glasbrenner, KO4MA, AMSAT-NA VP-Operations and Gould Smith, WA4SXM, AO-51 Command Station, "AMSAT-NA Satellite Operations and AO-51 Update"
- Frank Bauer, KA3HDO, AMSAT-NA Director-Human Space Flight, "ARISS and Future SuitSat Missions"

Mark this event on your calendar and attend the forum to find out the latest information about current AMSAT projects.

In addition to free gifts with your membership renewal or joining AMSAT, we will have a number of other offerings at the Dayton AMSAT booth.

Updated   Frequency Chart
Updated   "2007 Getting Started With Amateur Satellites" book
New Black Computer backpacks with AMSAT logo
New G6LVB computer controlled rotor tracker boards (bare with parts list)
New White SS Golf shirts with AMSAT logo
New Blue LS heavy tee shirt with AMSAT logo
New Blue baseball cap with AMSAT logo
New AMSAT lanyards with badge clips
New Digital CD with 1200 - 38k4 test signals, WiSP software and other digital items
New Green medium weight jacket with AMSAT logo and name/callsign
New 2006 San Francisco Symposium Proceedings
AMSAT Journal CDs
Arrow Antennas
SatPC32, Nova for Windows, SCRAP and IT tracking software
AMSAT clocks
Eagle Decals and Patches
ARISS Patches
AO-7 QSL cards

The Eagle area will have an operational SDX (Software Defined Transponder) demonstration, 70cm receiver, 1/2 scale model of the Eagle sturcture, Eagle power generation system, Ultra cap and NiCd battery and SuitSat 2 hardware.

The outdoor satellite demonstration area will be upgraded and be working FM and SSB satellites all day, each day.

Gould is also looking for additional volunteers to work 2 hours shifts in the AMSAT booth on Friday, Saturday and Sunday. Email your availability to wa4sxm@amsat.org

Make your plans for the Thursday evening Pizza Party, Friday AMSAT Forum, Banquet and booth visits, Satellite Demonstrations and Eagle area for the latest information and hardware.

[ANS thanks Gould, WA4SXM for the above information]

/EX

SB SAT @ AMSAT $ANS-119.03
Update on ISS Amateur Radio Activity

AMSAT News Service Bulletin 119.03
>From AMSAT HQ SILVER SPRING, MD.
April 29, 2007
To All RADIO AMATEURS
BID: $ANS-119.03

Frank Bauer, KA3HDO, who is the AMSAT-NA V.P. for Human Spaceflight Programs and the ARISS International Chairman wrote this week, "I wanted to provide a progress report on the ISS Ham Radio activities. And to address some questions that have come up related to ARISS o perations and equipment upgrade and repair."

Frank's report follows ...
With the successful Shuttle return to flight, the International Space Station Program construction has moved into high gear with delivery and assembly of new ISS modules. If all goes well, the new European Columbus Module and Japanese Kibo module will be installed on ISS in the next 12 months. This substantial workload on the crew is impacting ARISS operations directly.

The launching of any new or replacement radios or computers has been significantly curtailed due to the extremely limited upmass capability. There are just too many higher priority activities from an international space agency perspective and frankly we are a lower priority. The extra workload on the crew has taken its toll on ARISS - they have had very little extra time for Amateur Radio activities beyond school contacts. This is somewhat frustrating to the general ham radio community and the ARISS International Team, though the team is pleased that the crew has been able to speak so often with youth groups worldwide, piquing their interest in Amateur Radio, science, technology, engineering and math.

The ARISS team had been hopeful that Charles Simonyi would have been able to restore the Kenwood D700 radio system to full functionality after an accidental reprogramming of the radio occurred near the end of Exp 13. The ARISS team worked diligently with the Simonyi team to get Charles licensed, trained, and prepared to perform the Kenwood reprogramming.

Unfortunately, the ARISS team hit a major hurdle a few weeks before Charles' launch. We learned that additional software certification steps were required to allow the reprogramming software to be used on the ISS computers. Through heroic efforts by the team, final software certification was successfully completed.

Unfortunately, this was completed only a few days before Charles' return from space. As a result, the ARISS team was informed by the mission control team and some of our international team partners that it there was insufficient time to allow Charles to complete the restoration. Thus, the Kenwood restoration was not completed by Charles. This last minute hiccup in software certification was not predictable. So there was no way the ARISS team could have better prepared for Charles' flight.

At this point in time, it appears that a full restoration will require a substantial, concerted effort with full cooperation from our international colleagues and the Russian and US space agencies. We need to make sure that all components necessary for a successful reprogramming are identified, purchased (if necessary), certified, tested and flown together before the radio will be fully restored. Realizing this will be especially challenging due to the upmass issue I described above. This will likely take several months to accomplish as the team will have to begin from square one. In the short term, requests for some investigative analysis by the crew will be made. This will enable the ARISS team to determine if the radio can be partially restored to provide some of the unattended operations that it once provided.

With Charles' successful landing, we have started down this new path. We will continue to keep you informed of our progress.

In closing, we are aggressively working this issue, despite several setbacks. While our plans to have Charles reprogram the radio were thwarted, we were happy that he could speak to so many hams around the world during his short stay. And capture the imagination of students around the globe.

On behalf of the ARISS team, we thank all of you for your interest and enthusiasm in Ham Radio on the ISS.

[ANS thanks Frank, KA3HDO for the above information]

/EX

SB SAT @ AMSAT $ANS-119.04
SSETI-ESEO Launch Date

AMSAT News Service Bulletin 119.04
>From AMSAT HQ SILVER SPRING, MD.

April 29, 2007
To All RADIO AMATEURS
BID: $ANS-119.04

The launch date for SSETI-ESEO, the ESA led student satellite project intended for Geostationary Transfer Orbit (GTO), has been delayed by approximately one year. It had originally been hoped that this satellite would be a secondary payload on Arianespace launch from Kourou in late November, 2008 but it now seems that the expected secondary payload opportunity will not be available.

Although this delay is regrettable it will give the various teams much needed extra time to finalise and test their systems.

A BBM - "Breadboard model" of the satellite systems and payloads is being produced at the ESTEC facility in the Netherlands for testing purposes. This will commence operations during this summer.

Work continues to develop the AMSAT-UK communications package that is planned to provide a 435 to 2400 MHz (Mode U/S) linear transponder using both analogue and DSP based systems. It will additionally downlink telemetry at 400 bps and provide command and ranging facilities.

Full details of the project are available at http://www.uk.amsat.org/ click on "News Archive" and then "SSETI".

There will be a presentation on SSETI-ESEO at the AMSAT-UK International Space Colloquium which is being held at the University of Surrey, Guildford, England from Friday 20th to Sunday 22nd July.

This event is open to all Amateurs and SWL's and there will be a special beginners session aimed at newcomers to the exciting world on Amateur Satellite operating. For further information see:
http://www.uk.amsat.org/colloquium

[ANS thanks Trevor, M5AKA for the above information]

/EX

SB SAT @ AMSAT $ANS-119.05
SatGate System Closing Down

AMSAT News Service Bulletin 119.05
>From AMSAT HQ SILVER SPRING, MD.
April 29, 2007
To All RADIO AMATEURS
BID: $ANS-119.05

After many years of packet message forwarding via UO-22, GO-32 and AO-51 the Satgate System will close due to a lack of traffic being handled. The total of thirty five worldwide stations in the system a few years ago has dwindled due to this lack of traffic, maintenance problems, change of QTH and Silent Keys.

It was given birth by David Medley, KI6QE who was in California at the time. The chief Guru and driving force over the past partial decade has been Andrew Sellers, G8TZJ who gets credit for developing the software which permitted the Satgate stations to operate in fully automated mode.

Traffic was accepted from the terrestrial packet network using BBS programs like the F6FBB program and routed to the satellites via the WiSP program. It was also downloaded from the satellite and routed into the terrestrial packet network untouched by human hands, all thanks to Andrew.

Roy, W0SL wrote, "My appreciation goes to David for establishing the Satgate System and to Andrew for his effort in keeping this Network going. Thanks also to the remaining few of the Satgates who will be shutting down."

[ANS thanks Roy, W0SL for the above information]

/EX

SB SAT @ AMSAT $ANS-119.06
Satellite Shorts From All Over

AMSAT News Service Bulletin 119.06
>From AMSAT HQ SILVER SPRING, MD.
April 29, 2007
To All RADIO AMATEURS
BID: $ANS-119.06

+ Pop, VU2POP, Secretary of AMSAT India said that planning for a second Indian amateur radio satellite, Hamsat-2 has started. They are asking for proposals from satellite operators, designers, and international AMSAT organizations. You can send your comments to info@amsat.in.

+ The Fuji-Oscar 29 (FO-29) satellite may have gone silent. Reports received via Mineo, JE9PEL state that JARL is asking for any received telemetry to be forwarded to them via lab@jarl.or.jp.

+ AMSAT received the sad news that Tom Calder, N7MPM became a Silent Key Saturday Morning, April 21 at his home in Centerfield Utah. Tom had been in poor health for the past year. Tom was very active on the satellites thru the 1990's.

+ Due to weather concerns forecast for the launch site and recovery areas, the ARBONET-2 high altitude balloon flight originally scheduled for launch on April 27th has been postponed until Saturday May 5th at 9:00 AM CDT.

[ANS thanks everyone for the above information]

/EX

SB SAT @ AMSAT $ANS-119.07
Control Operators Needed for RAFT Radar Test

AMSAT News Service Bulletin 119.07
>From AMSAT HQ SILVER SPRING, MD.
April 29, 2007
To All RADIO AMATEURS
BID: $ANS-119.07

Bob, WB4APR at the US Naval Academy Satellite Lab writes, "We need AMSAT operator help with the RAFT satellite Test."

We need somone with a 2m beam and familiarity with packet that lives in the Southern USA from Arizona to Georgia (AZ, NM, TX, OK, MS, ALA, GA).

RAFT is at its mission life time half-way point, and we have not been able to find anyone in the above footprint to help us conduct the primary mission which was for the satellite to detect its own passing through the DOD's radar fence. When it flies through the North American Space-Object fan beam, we should hear about 1 second tone that anyone can hear on the downlink.

Due to its low orbit and small footprint, turning on the Radar Transponder can only be done in the shared footprint between the radar transmitter in North Texas and the command station. The ideal command station has
these atributes:

1) Lives in AZ, NM, TX, OK, AK, LA, MS, AL, GA, W.FLA
2) A reasonable 2m beam for ops on 145.825
3) A packet TNC
4) A familiarity with dumb-terminal TNC operations such as
   A. Connections, Converse, UNPROTO, etc.
   B. Remote sysop logon to a Kantronics TNC

The objective of these southern command stations is to logon, send the command to activate the RAFT Radar receiver for 1 minute in anticipation of passing through the fence. Then hopefully recording any audio heard on the downlink (145.825). Of course, once the radar receiver is on, everyone in the footprint should be able to hear it.

For info, see the ANDE-RAFT operations page:
http://eng.usna.navy.mil/~bruninga/ande-raft-ops.html

Several AMSAT hams built this tiny Radar receiver as a possible common device for all future HAMsats, and we would like to get feedback on its performance. But they all live up North. If you have a beam and familiarity with TNC's please let us know.

[ANS thanks Bob, WB4APR for the above information]

/EX

SB SAT @ AMSAT $ANS-119.08
ARISS Status Report for the week of April 23, 2007

AMSAT News Service Bulletin 119.08
>From AMSAT HQ SILVER SPRING, MD.
April 29, 2007
To All RADIO AMATEURS
BID: $ANS-119.08

1. ARISS - Redmond Contact Successful

Students from Redmond High School in Washington State participated in an ARISS contact on Monday, April 16 via the telebridge station ON4ISS in Belgium. Twenty students asked spaceflight participant Charles Simonyi, KE7KDP, twenty questions as approximately 120 students, parents, teachers and the media looked on. All four local television stations, KOMO Radio, Seattle Times, Redmond Reporter and Metro Radio (for a Westwood One national program) attended. To view some of the media coverage, see:

http://seattletimes.nwsource.com/html/localnews/2003669344_simonyi17e.html
http://www.king5.com/localnews/stories/NW_041607WABsimonyi.1745e420.html
http://www.kirotv.com/video/12165836/index.html
http://www.komotv.com/news/7054477.html
http://q13.trb.com/news/041607-kcpq-redmondspace,0,3107718.story?coll=kcpq-news-1

2. Kursk Contact Successful

On Tuesday, April 17, an ARISS contact took place between the Kursk State Technical University in Russia and Expedition 15 Commander Fyodor N. Yurchikhin, RN3FI, on the ISS. Students had prepared eight questions for the contact which was successful.

3. Successful ARISS Contact with Cedar Point Elementary

Cedar Point Elementary School in Bristow, Virginia experienced an ARISS contact on Tuesday, April 17 via the telebridge station VK5ZAI in Australia. Nine students asked 19 questions of space visitor Charles Simonyi, KE7KDP. Audio of the contact may be found on Simonyi's website. See: http://www.charlesinspace.com

Scuola Europea Varese in Varese, Lombardia, Italy had an ARISS contact on Monday, April 23 via the telebridge station VK4KHZ in Australia. The school's curriculum includes the study of Earth and the solar system, living organisms, natural forces, gravity and electricity. Students will visit a planetarium, research books and websites, and watch science related movies. They will write essays, produce plays and create drawings. Media outlets will cover the event and the school will produce its own multimedia presentation which will be passed on to other schools in the area.

Kingston Elementary School in Virginia Beach, Virginia had an ARISS contact on Monday, April 23. Students from all grades will participate in activities in the Science, Math and Language Arts curricula related to this event which will include the study of space and weather. Virginia Beach City Public Schools' Office of Media and Communication, Virginia Beach television, local newspapers and television stations, and Ham radio operators have been notified of this event.

An ARISS contact took place with Christian Life Elementary School in Rockford, Illinois on Wednesday, April 25. Christian Life schools have participated in many NASA projects: the high school participated in the U.S. First Robotics Competition, the middle school applied to the NASA Explorer Schools program, and an elementary school teacher attended a NASA Educator Workshop. Elementary school students study the History of Flight, learn of NASA's achievements and will be involved with robotics as they prepare for their ARISS contact.

Students attending the Samuel-von-Pufendorf Gymnasium in Floeha, Germany will participate in an ARISS contact on Saturday, April 28. The school amateur radio club, DL0GYM, was established in 2003 and provides courses to prepare students for their radio license exams. Students are introduced to packet radio, satellite communications, Amateur Television (ATV), and Slow Scan Television (SSTV).

4. Upcoming School Contacts

Liceo Scientifico Statale "Lorenzo Respighi" in Piacenza, Italy has been scheduled for an ARISS contact on Saturday, May 5 at 10:24 UTC. The school plans to incorporate this contact in their curriculum through the study of the law of gravitation, experiments in the absence of gravity, the International Space Station, and English. Italian Astronaut Roberto Vittori has also been invited to visit the school in conjunction with these studies. Students will be required to work on interview skills, write reports and design posters. Media coverage will include television, radio, newspapers and website postings.

Erweiterte Realschule Weiskirchen in Weiskirchen, Saarland, Germany has been scheduled for an Amateur Radio on the International (ARISS) on Saturday, May 5 at 13:34 UTC. The school is one of eleven pilot schools participating in the "Innovative all-day school" project. A radio club was formed at the school. Students participating in the contact are responsible for all aspects of the event: sponsors, catering, press, documentation and technology. Television and radio stations and the press have been notified.

5. Simonyi Contacts with Public

The U.K. BBC reported on an amateur radio contact between Matty Cunningham,

MD0MAN, and Charles Simonyi, KE7KDP, on the International Space Station.
The video clip can be seen at:
http://news.bbc.co.uk/media/avdb/regions/north_west/video/89000/bb/89356_16x9_bb.asx

"Space Mann" may be viewed at:
http://www.bbc.co.uk/isleofman/content/articles/2007/04/16/spacemann_feature.shtml

For the story, "Radio hams contact space station," see:
http://www.manxradio.com/readItem.aspx?ID=12064&cate=General

6. RSGB Runs Story on ARISS

The Radio Society of Great Britain ran an article in its magazine, RadCom, which covered the Amateur Radio on the International Space Station and the Columbus Module radio system. The story reported on the request for funds from the IARU and AMSAT societies to support the project.

[ANS thanks Carol, KB3LKI for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM

From 3556344822927648290
X-Google-Thread: 10e8ad,e6a12dad1bbba7db,start
X-Google-Thread: 10b9c8,e6a12dad1bbba7db,start
X-Google-Attributes: gid10e8ad,gid10b9c8,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!border1.nntp.dca.giganews.com!nntp.giganews.com!nx02.iad01.newshosting.com!newshosting.com!198.186.194.250.MISMATCH!transit3.readnews.com!news-out.readnews.com!news-out.readnews.com!news-xxxfer.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-113 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Sat, 28 Apr 2007 21:25:42 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 1185
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000c01c789fd$26ae3230$6601a8c0@familyroom>
NNTP-Posting-Host: panix1.panix.com

Mime-Version: 1.0
Content-Type: text/plain;
     charset="US-ASCII"
Content-Transfer-Encoding: 7bit
X-Trace: reader2.panix.com 1177809942 878 166.84.1.1 (29 Apr 2007 01:25:42 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 29 Apr 2007 01:25:42 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to   rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to   rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Xref: g2news1.google.com rec.radio.amateur.space:897 rec.radio.info:264

This report is organized into 4 parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites

SB SAT @ AMSAT W8ISS ANS-113.S1
WSR 113 Part 1 04/23/2007

AMSAT NEWS SERVICE BULLETIN 113.S1 FROM AMSAT HQ
SILVER SPRING, MD, April 23, 2007
TO ALL RADIO AMATEURS
BID: $ANS-113.S1

VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/V - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.870 to 145.930 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.875 to 145.925 MHz USB/CW

Indian Beacon: 145.859330 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

```
Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsat.in/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is
active. Each transponder has a different beacon.
[10022006]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Voice Repeater ONLY - Software reload in progress
        Telemetry Downlink

Current Mode(s): FM Repeater - V/U
                 PBBS -        OFF
                 Digipeater -  OFF
                 Telemetry -   U

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink:   145.880 MHZ FM
                       145.880 MHz USB
                       145.920 MHz FM
                      1268.700 MHz FM 67Hz PL tone
Digital Downlinks:     435.150 MHz FM 38k4 Digital, PBP, 1 watt output
                       435.150 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:        145.860 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      1268.700 mhz FM 9k6 PBP Digital

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[03192007]
=====
```

SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer
on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on
and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10
minute timer.
[03262007]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Operational

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
145.870 MHz FM
145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

JARL English webpage: http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

```
AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's CW
telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts.htm
[03262007]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Uplink:   145.850 MHz FM
Downlink: 436.795 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[03262007]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational depending on amount of Sunlight

Uplink:   145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink:  29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons:   29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/

AO-7 Usage Guidelines on the AO-7 Log and Resource Site located at:
http://www.planetemily.com/ao7
[02262007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998
```

Status: Operational
Current Mode: Occasional Voice
Digipeater: OFF

Expedition 15 crew:
Commander: Fyodor Yurchikhin RN3FI
Flight Engineer: Charles Simonyi KE7KDP/HA5SIK
Flight Engineer: Sunita Williams KD5PLB

Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

SSTV TESTING:
Worldwide Reported Downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS, RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.
[04232007]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-113.S2
WSR 113 Part 2 04/23/2007

AMSAT NEWS SERVICE BULLETIN 0113.S2 FROM AMSAT HQ
SILVER SPRING, MD, April 23, 2007
TO ALL RADIO AMATEURS
BID: $ANS-113.S2

CAPE1
Catalog Number:
Launch Date: April 17,2007

Status: In Orbit

Downlink: 435.245 MHz 9600 bs FSK AX.25
[04232007]
=====
CP3
Catalog Number:
Launch Date: April 17,2007

Status: In Orbit

Downlink: 436.845 MHz 1200 bps FSK AX.25
[04232007]
=====
CP4
Catalog Number:
Launch Date: April 17,2007

Status: In Orbit

Downlink: 437.325 MHz 1200 bps FSK AX.25
[04232007]
=====
Libertad-1
Catalog Number:
Launch Date: April 17, 2007

Status: In Orbit

Downlink: 437.405 MHz 1200 bps AFSK AX.25
[04232007]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: In Orbit

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder: 145.825 Mhz FM
[02052007]
=====
?O-?? FCAL
Catalog Number: 29667

Launch Date: December 21, 2006

Status: In Orbit

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[02262007]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: In Orbit

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01222007]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: In Orbit

Main Downlink: 145.825 Mhz FM APRS AX25
APRS Uplink: 145.825 MHz FM APRS AX25
Voice/PSK31 Uplink: 28.120 MHz

Packet to Voice ID: RAFT
[02262007]
=====
GENESAT-1 ?O-??
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Telemetry Beacon Downlink: 437.0670 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[01082007]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Operational

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon: 437.2750 MHz CW

```
Callsign: JR8YJT
[10302006]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon:             437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
[03262007]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launched: June 30, 2003

Status: Operational

Beacon:     436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[01082007]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launched: February 21, 2006

Status: Semi-Operational - Constant Carrier only

Uplink:  1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan ? )

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[01082007]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004
```

```
Status: Voice Repeater ONLY - Software reload in progress
        Telemetry Downlink

Current Mode(s): FM Repeater - V/U
                 PBBS -        OFF
                 Digipeater -  OFF
                 Telemetry -   U

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink:   145.880 MHZ FM
                       145.880 MHz USB
                       145.920 MHz FM
                      1268.700 MHz FM 67Hz PL tone
Digital Downlinks:     435.150 MHz FM 38k4 Digital, PBP, 1 watt output
                       435.150 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:        145.860 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      1268.700 mhz FM 9k6 PBP Digital

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[03192007]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Operational only in Full Sun Light

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink:        144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[01082007]
=====
```

GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Downlink: 435.225 MHz FM (9600-baud FSK)
435.325 Mhz - Not Available - temperature problems
Uplinks: 145.850 FM
145.890 FM
145.930 FM
1269.700 FM
1269.800 FM
1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[03262007]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Semi-operational - APRS usage through Digipeater

Uplink: 145.900 MHz FM 1200-baud Manchester FSK
145.920 MHz FM 1200-baud Manchester FSK
145.940 MHz FM 1200-baud Manchester FSK
145.960 MHz FM 1200-baud Manchester FSK
Downlink: 437.026 MHz SSB 1200-baud PSK
Mode-S Beacon: 2401.1428 MHz

Mode and Antenna Polarization:
U: RC 437.050 MHz RHCP
PSK 437.025 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[03262007]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational

Telemetry Downlink: 145.826 MHz. FM 1200 AFSK

```
Mode-S Beacon:     2401.500 MHz - OFF
UHFBeacon:          435.025 MHz - OFF

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Official webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[01082007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: Occasional Voice
Digipeater:   OFF

Expedition 15 crew:
Commander:              Fyodor Yurchikhin     RN3FI
Flight Engineer:        Charles Simonyi       KE7KDP/HA5SIK
Flight Engineer:        Sunita Williams       KD5PLB

Digital/APRS:
Worldwide packet uplink:   145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink:   145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink:      145.800 MHz FM

SSTV TESTING:
Worldwide Reported Downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink:         437.800 MHz FM
Repeater Downlink:       145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German:  DP0ISS
Russian: RS0ISS, RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS
```

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line is
NOT translated from Russian and posted.
[04232007]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-113.S3
WSR 113 Part 3 04/23/2007

AMSAT NEWS SERVICE BULLETIN 113.S3 FROM AMSAT HQ
SILVER SPRING, MD, April 23, 2007
TO ALL RADIO AMATEURS
BID: $ANS-113.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 MHz FM 67Hz CTCSS
Voice Downlink: 2401.835 MHz FM
Packet Up/Downlink: 437.250 MHz 9k6 packet
Packet Downlink   2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Operational

Uplinks: 145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[01222007]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, callsign KE6QMD, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====

```
SO-42 SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS:                SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink:   145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
V-band:   145.840 -  145.990 MHz CW/LSB
U-band:   435.550 -  435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks
---------
S2-band:  2401.225 -  2401.475 MHz CW/USB
K-band:  24048.010 - 24048.060 MHz CW/USB
Beacon:   2401.323 MHz
         24048.035 MHz
[01222007]
=====
UO-36 UoSAT-12
```

Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site
at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm

[ANS-WSR has no further information]
[09042006]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink: 145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012006]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: Downlink only

Uplinks: 145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

```
Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[012212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Operational

Uplink:   435.041 MHz FM DSP
```

```
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplinks:          145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink:      437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[01222007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990
```

```
Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
[05012006]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet: Non-Operational
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
```

Downlink: 145.975 to 145.825 MHz CW/USB

Beacon: 145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.8500 - 145.9000 MHz SSB/CW
Downlink 29.4000 - 29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink: 29.4500 - 29.5500 MHz SSB/CW
[01152007]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

```
Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon:    29.352 MHz (intermittent)

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink:     21.260 to 21.300 MHz CW/USB
Downlink:  145.860 to 145.900 MHz CW/USB

Beacon:    145.860 MHz

Robot:     145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink:   21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon:   29.408 MHz

Robot:    29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-113.S4
WSR 113 Part 4 04/23/2007
```

AMSAT NEWS SERVICE BULLETIN 113.S4 FROM AMSAT HQ
SILVER SPRING, MD, April 23, 2007
TO ALL RADIO AMATEURS
BID: $ANS-113.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE
PROPOSED FOR LAUNCH AT THIS TIME:

Phase 5a Mars Mission
Catalog Number:
Proposed Launch Date: 2009 or 2011

Status: Design Phase

For the latest project status update please visit the AMSAT-DL P5-A web page:
http://ticket-to-mars.org
[01222007]
=====
PHASE 3E AO-??
Catalog number:
Proposed Launch Date: Late 2007

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/
[01222007]
=====
Eagle AO-??
Catalog Number:
Proposed Launch Date: Early/Mid 2009

Status: Design Phase

For the latest project status updates please visit the AMSAT-NA webpage:
http://www.amsat.org
[01222007]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA

850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/amsat/listserv/menu.html

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

From 3728228959418797425
X-Google-Thread: 10e8ad,ea5880d3cb64f805,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!postnews.google.com!e65g2000hsc.googlegroups.com!not-for-mail
From: Javier Anderson <Javanderson@gmail.com>
Newsgroups: rec.radio.amateur.space
Subject: Introducing New York Near Space Research (NYNSR)
Date: 28 Apr 2007 19:59:51 -0700
Organization: http://groups.google.com
Lines: 15

Message-ID: <1177815591.104814.152010@e65g2000hsc.googlegroups.com>
NNTP-Posting-Host: 68.198.137.191
Mime-Version: 1.0
Content-Type: text/plain; charset="iso-8859-1"
X-Trace: posting.google.com 1177815591 28284 127.0.0.1 (29 Apr 2007 02:59:51 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Sun, 29 Apr 2007 02:59:51 +0000 (UTC)
User-Agent: G2/1.0
X-HTTP-UserAgent: Mozilla/4.0 (compatible; MSIE 7.0; Windows NT 5.1; .NET CLR
1.1.4322),gzip(gfe),gzip(gfe)
Complaints-To: groups-abuse@google.com
Injection-Info: e65g2000hsc.googlegroups.com; posting-host=68.198.137.191;
   posting-account=8zIW8Q0AAAC700cCA5AGduousxo3Yhi2
Xref: g2news1.google.com rec.radio.amateur.space:898

The Irvington High School Science Club is announcing the creation of a New High Altitude Balloon group. High Altitude Balloons are Helium filled latex balloons that fly at altitudes higher then 85,000 feet (some make it to over 140,000 ft). Amateur Radio is used to track the balloons during the flight and after landing The group will be called "New York Near Space Research" or NYNSR for short and will be conducting flights by late Spring next year in the Lower Hudson Valley. We are hoping to have a website purchased by the end of this weekend and have some more information available. We have started a public Google group under the name New York Near Space Research already and you may join if you like.

73 to all,
Javier Anderson, KC2MFC

From -8368900880834100337
X-Google-Thread: 111d0a,e27bc9d1393ba7ad,start
X-Google-Thread: 113975,e27bc9d1393ba7ad,start
X-Google-Thread: fe99a,e27bc9d1393ba7ad,start
X-Google-Thread: 10e8ad,e27bc9d1393ba7ad,start
X-Google-Attributes: gid111d0a,gid113975,gidfe99a,gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!postnews.google.com!e65g2000hsc.googlegroups.com!not-for-mail
From: bill.meara@gmail.com
Newsgroups:
sci.electronics.basics,sci.astro.amateur,alt.electronics,rec.radio.amateur.space
Subject: SolderSmoke podcast
Date: 29 Apr 2007 05:00:55 -0700
Organization: http://groups.google.com
Lines: 48
Message-ID: <1177848055.718425.36960@e65g2000hsc.googlegroups.com>
NNTP-Posting-Host: 86.142.40.235
Mime-Version: 1.0
Content-Type: text/plain; charset="iso-8859-1"
X-Trace: posting.google.com 1177848056 16376 127.0.0.1 (29 Apr 2007 12:00:56 GMT)

X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Sun, 29 Apr 2007 12:00:56 +0000 (UTC)
User-Agent: G2/1.0
X-HTTP-UserAgent: Mozilla/4.0 (compatible; MSIE 7.0; Windows NT 5.1; .NET CLR 1.1.4322; .NET CLR 2.0.50727),gzip(gfe),gzip(gfe)
Complaints-To: groups-abuse@google.com
Injection-Info: e65g2000hsc.googlegroups.com; posting-host=86.142.40.235;
   posting-account=7vRsuQwAAADlh58wGAIfEFYQRw36eW7d
Xref: g2news1.google.com sci.electronics.basics:52085 sci.astro.amateur:78785 alt.electronics:5976 rec.radio.amateur.space:899

SolderSmoke!
http://www.soldersmoke.com

SolderSmoke #56

April 29, 2007
Hawking.
Hams rebuild Apollo antenna.
BANDSWEEP: Listen to Moonbounce.
Elser-Mathes Trophy
Tesco $10 HTs and the FMLA.
My weird power supply.
Why no feedback in finals?
Updates to Gadgeteer News & video.
MAILBAG: Mayfair Resistor Mystery solved by AA2VK.
Parts donated by LA3PNA. KD5NJR on Tim Ferris book.
Alan Yates on P/S project. CT1EFL on "AWESOME" soldering.

Tired of listening to Metallica or NPR on your I-Pod?   Wouldn't you like to be able to carry with you the kinds of ham radio conversations that you listen to while in your radio shack? Tune in to SolderSmoke!

RSS FEED: You can subscribe to the program, have them downloaded to your MP-3 player, and listen to them at your convenience. To subscribe, just cut and paste this URL into your I-poder (or similar) software.
http://www.soldersmoke.com/soldersmoke.rss

If you don't have an MP3 player you can just go to the site below and listen to the latest program (and earlier editions) using the audio software on your computer.

http://www.soldersmoke.com

All the programs are available here.

I hope you enjoy the program. Please send us feedback.

Regards from London
Bill
http://www.gadgeteer.us

From -3062162447496694266
X-Google-Thread: 10bf43,346430e271a068b9,start
X-Google-Thread: 10e8ad,346430e271a068b9,start
X-Google-Thread: 106d41,346430e271a068b9,start
X-Google-Thread: fa029,346430e271a068b9,start
X-Google-Thread: 114aac,346430e271a068b9,start
X-Google-Attributes: gid10bf43,gid10e8ad,gid106d41,gidfa029,gid114aac,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx02.iad01.newshosting.com!newshosting.com!nntpserver.com!
zeus.nntpserver.com!10.1.1.41.MISMATCH!pfilter-v0.1!not-for-mail
From: Mark@kb9rqz.org
Newsgroups:
rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.cb,rec.radio.scanner,rec.radio.shortwave
Subject: well at least it is honest about being spam
Date: Wed, 02 May 2007 10:50:44 -0400
Message-ID: <m99h33lim3sdhmm36jpkphsjke9q3conle@4ax.com>
References: <4638a127$0$2232$8d2e0cab@news.newsgroup-binaries.com>
X-Newsreader: Forte Free Agent 3.3/32.846
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Lines: 13
NNTP-Posting-Date: 02 May 2007 13:58:00 GMT
X-Complaints-To: abuse@teranews.com
Xref: g2news1.google.com rec.radio.amateur.policy:87587
rec.radio.amateur.space:900 rec.radio.cb:35737 rec.radio.scanner:12086
rec.radio.shortwave:110947

On Wed, 2 May 2007 14:48:02 GMT, no@spam.com wrote:

spam.com says it all

"one useless man is disgrace 2 become a law firm 3 or more become a congress"
adams

woghger you are a Congress all in your own head

http://khkb9rqz.blogspot.com

--

Posted via a free Usenet account from http://www.teranews.com

```
From 160544325518654250
X-Google-Thread: 10bf43,346430e271a068b9
X-Google-Thread: 10e8ad,346430e271a068b9
X-Google-Thread: 106d41,346430e271a068b9
X-Google-Thread: fa029,346430e271a068b9
X-Google-Thread: 114aac,346430e271a068b9
X-Google-Attributes: gid10bf43,gid10e8ad,gid106d41,gidfa029,gid114aac,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx02.iad01.newshosting.com!newshosting.com!post01.iad01!
roadrunner.com!not-for-mail
From: "Yo Mamma" <cantemailme@uranus.com>
Newsgroups:
rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.cb,rec.radio.scanner,re
c.radio.shortwave
References: <4638a127$0$2232$8d2e0cab@news.newsgroup-binaries.com>
<m99h33lim3sdhmm36jpkphsjke9q3conle@4ax.com>
In-Reply-To: <m99h33lim3sdhmm36jpkphsjke9q3conle@4ax.com>
Subject: Re: well at least it is honest about being spam
Date: Wed, 2 May 2007 22:41:30 -0500
MIME-Version: 1.0
Content-Type: text/plain;
     format=flowed;
     charset="iso-8859-1";
     reply-type=original
Content-Transfer-Encoding: 7bit
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Windows Mail 6.0.6000.16386
X-MimeOLE: Produced By Microsoft MimeOLE V6.0.6000.16386
Lines: 12
Message-ID: <463959ba$0$20238$4c368faf@roadrunner.com>
Organization: Road Runner High Speed Online http://www.rr.com
X-Complaints-To: abuse@rr.com
Xref: g2news1.google.com rec.radio.amateur.policy:87640
rec.radio.amateur.space:901 rec.radio.cb:35749 rec.radio.scanner:12092
rec.radio.shortwave:111002
```

<Mark@kb9rqz.org> wrote in message
news:m99h33lim3sdhmm36jpkphsjke9q3conle@4ax.com...
> On Wed, 2 May 2007 14:48:02 GMT, no@spam.com wrote:
>
>
> spam.com says it all
>

Amazing! The idiot even replies to known spam!

From 2034798636578732559
X-Google-Thread: 10bf43,346430e271a068b9
X-Google-Thread: 10e8ad,346430e271a068b9
X-Google-Thread: 106d41,346430e271a068b9
X-Google-Thread: fa029,346430e271a068b9
X-Google-Thread: 114aac,346430e271a068b9
X-Google-Attributes: gid10bf43,gid10e8ad,gid106d41,gidfa029,gid114aac,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news3.google.com!proxad.net!newsfeed1.ip.tiscali.net!
tiscali!newsfeed2.ip.tiscali.net!news.astraweb.com!newsrouter-eu.astraweb.com!
hwmnpeer01.ams!news.highwinds-media.com!feeder1.cambrium.nl!feed.tweaknews.nl!
news2.euro.net!nntpserver.com!zeus.nntpserver.com!10.1.1.41.MISMATCH!pfilter-v0.1!
not-for-mail
From: Mark@kb9rqz.org
Newsgroups:
rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.cb,rec.radio.scanner,re
c.radio.shortwave
Subject: Re: well at least it is honest about being spam
Date: Wed, 02 May 2007 23:44:29 -0400
Message-ID: <fkmi331r4vuneqt2k2fsek5s7b8k6ln3pq@4ax.com>
References: <4638a127$0$2232$8d2e0cab@news.newsgroup-binaries.com>
<m99h33lim3sdhmm36jpkphsjke9q3conle@4ax.com>
<463959ba$0$20238$4c368faf@roadrunner.com>
X-Newsreader: Forte Free Agent 3.3/32.846
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Lines: 25
NNTP-Posting-Date: 03 May 2007 02:51:47 GMT
X-Complaints-To: abuse@teranews.com
Xref: g2news1.google.com rec.radio.amateur.policy:87641
rec.radio.amateur.space:902 rec.radio.cb:35750 rec.radio.scanner:12093
rec.radio.shortwave:111003

On Wed, 2 May 2007 22:41:30 -0500, "Yo Mamma" <cantemailme@uranus.com>
wrote:

>
><Mark@kb9rqz.org> wrote in message
>news:m99h33lim3sdhmm36jpkphsjke9q3conle@4ax.com...
>> On Wed, 2 May 2007 14:48:02 GMT, no@spam.com wrote:
>>
>>
>> spam.com says it all
>>
>
>
>Amazing! The idiot even replies to known spam!

why can't I coment on it ?

"one useless man is disgrace 2 become a law firm 3 or more become a congress"
adams

woghger you are a Congress all in your own head

http://khkb9rqz.blogspot.com

--
Posted via a free Usenet account from http://www.teranews.com

```
From -5686434285877669148
X-Google-Thread: 10e8ad,31560b471b5afa49,start
X-Google-Thread: 10b9c8,31560b471b5afa49,start
X-Google-Attributes: gid10e8ad,gid10b9c8,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx01.iad01.newshosting.com!newshosting.com!
198.186.194.251.MISMATCH!news-out.readnews.com!transit4.readnews.com!panix!
rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-120 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Sat, 5 May 2007 12:03:42 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 1185
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000a01c78f2a$05505e60$6401a8c0@familyroom>
NNTP-Posting-Host: panix2.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader2.panix.com 1178381022 13410 166.84.1.2 (5 May 2007 16:03:42 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sat, 5 May 2007 16:03:42 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Xref: g2news1.google.com rec.radio.amateur.space:903 rec.radio.info:275
```

This report is organized into 4 parts.
Part 1 (S1) - operational analog amateur satellitesbb
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites

SB SAT @ AMSAT W8ISS ANS-120.S1
WSR 120 Part 1 04/30/2007

AMSAT NEWS SERVICE BULLETIN 120.S1 FROM AMSAT HQ
SILVER SPRING, MD, April 30, 2007
TO ALL RADIO AMATEURS
BID: $ANS-120.S1

VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/V - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.870 to 145.930 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.875 to 145.925 MHz USB/CW

Indian Beacon: 145.859330 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsat.in/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is
active. Each transponder has a different beacon.
[10022006]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Voice Repeater ONLY - Software reload in progress
        Telemetry Downlink

```
Current Mode(s): FM Repeater - V/U
                 PBBS -        OFF
                 Digipeater -  OFF
                 Telemetry -   U

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink:   145.880 MHZ FM
                       145.880 MHz USB
                       145.920 MHz FM
                      1268.700 MHz FM 67Hz PL tone
Digital Downlinks:     435.150 MHz FM 38k4 Digital, PBP, 1 watt output
                       435.150 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:        145.860 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      1268.700 mhz FM 9k6 PBP Digital

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[03192007]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Uplink:   145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute
```

```
timer
   on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the
repeater on
   and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset
the 10
   minute timer.
[03262007]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Uplink:   145.850 MHz FM
Downlink: 436.795 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[03262007]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational depending on amount of Sunlight

Uplink:   145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink:  29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons:   29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/

AO-7 Usage Guidelines on the AO-7 Log and Resource Site located at:
http://www.planetemily.com/ao7
[02262007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
```

Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: Occasional Voice
Digipeater: OFF

Expedition 15 crew:

Commander:	Fyodor Yurchikhin	RN3FI
Flight Engineer:	Charles Simonyi	KE7KDP/HA5SIK
Flight Engineer:	Sunita Williams	KD5PLB

Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

SSTV TESTING:
Worldwide Reported Downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS, RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line is
NOT translated from Russian and posted.
[04232007]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-120.S2

WSR 120 Part 2 04/30/2007

AMSAT NEWS SERVICE BULLETIN 020.S2 FROM AMSAT HQ
SILVER SPRING, MD, April 30, 2007
TO ALL RADIO AMATEURS
BID: $ANS-120.S2

CAPE1
Catalog Number:
Launch Date: April 17,2007

Status: In Orbit

Downlink: 435.245 MHz 9600 bs FSK AX.25
[04232007]
=====
CP3
Catalog Number:
Launch Date: April 17,2007

Status: In Orbit

Downlink: 436.845 MHz 1200 bps FSK AX.25
[04232007]
=====
CP4
Catalog Number:
Launch Date: April 17,2007

Status: In Orbit

Downlink: 437.325 MHz 1200 bps FSK AX.25
[04232007]
=====
Libertad-1
Catalog Number:
Launch Date: April 17, 2007

Status: In Orbit

Downlink: 437.405 MHz 1200 bps AFSK AX.25
[04232007]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: In Orbit

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder: 145.825 Mhz FM
[02052007]
=====

```
?O-?? FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: In Orbit

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[02262007]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: In Orbit

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01222007]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: In Orbit

Main Downlink:      145.825 Mhz FM APRS AX25
APRS Uplink:        145.825 MHz FM APRS AX25
Voice/PSK31 Uplink:  28.120 MHz

Packet to Voice ID: RAFT
[02262007]
=====
GENESAT-1 ?O-??
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Telemetry Beacon Downlink: 437.0670 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[01082007]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Operational

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
```

```
Beacon:             437.2750 MHz CW

Callsign: JR8YJT
[10302006]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon:             437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
[03262007]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launched: June 30, 2003

Status: Operational

Beacon:     436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[01082007]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launched: February 21, 2006

Status: Semi-Operational - Constant Carrier only

Uplink:  1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan ? )

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[01082007]
=====
AO-51 ECHO
```

Catalog number: 28375
Launch date: June 29, 2004

Status: Voice Repeater ONLY - Software reload in progress
Telemetry Downlink

Current Mode(s): FM Repeater - V/U
PBBS - OFF
Digipeater - OFF
Telemetry - U

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.880 MHZ FM
145.880 MHz USB
145.920 MHz FM
1268.700 MHz FM 67Hz PL tone
Digital Downlinks: 435.150 MHz FM 38k4 Digital, PBP, 1 watt output
435.150 MHz FM 9k6 Digital, Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Digital, Pacsat Broadcast Protocol
1268.700 mhz FM 9k6 PBP Digital

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[03192007]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Operational only in Full Sun Light

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/

```
[01082007]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[03262007]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Semi-operational - APRS usage through Digipeater

Uplink:         145.900 MHz FM 1200-baud Manchester FSK
                145.920 MHz FM 1200-baud Manchester FSK
                145.940 MHz FM 1200-baud Manchester FSK
                145.960 MHz FM 1200-baud Manchester FSK
Downlink:       437.026 MHz SSB 1200-baud PSK
Mode-S Beacon: 2401.1428 MHz

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.025 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[03262007]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational
```

```
Telemetry Downlink: 145.826 MHz. FM 1200 AFSK

Mode-S Beacon:     2401.500 MHz - OFF
UHFBeacon:          435.025 MHz - OFF

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Official webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[01082007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: Occasional Voice
Digipeater:   OFF

Expedition 15 crew:
Commander:              Fyodor Yurchikhin     RN3FI
Flight Engineer:        Charles Simonyi       KE7KDP/HA5SIK
Flight Engineer:        Sunita Williams       KD5PLB

Digital/APRS:
Worldwide packet uplink:   145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink:   145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink:      145.800 MHz FM

SSTV TESTING:
Worldwide Reported Downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink:         437.800 MHz FM
Repeater Downlink:       145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German:  DP0ISS
Russian: RS0ISS, RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
```

```
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.
[04232007]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-120.S3
WSR 120 Part 3 04/30/2007

AMSAT NEWS SERVICE BULLETIN 113.S3 FROM AMSAT HQ
SILVER SPRING, MD, April 30, 2007
TO ALL RADIO AMATEURS
BID: $ANS-120.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency:  437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink:         437.250 MHz FM 67Hz CTCSS
Voice Downlink:      2401.835 MHz FM
Packet Up/Downlink:   437.250 MHz 9k6 packet
Packet Downlink      2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
```

Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]

=====

MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Operational

Uplinks: 145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[01222007]

=====

NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, callsign KE6QMD, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt

```
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS:                SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink:   145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
V-band:   145.840 -  145.990 MHz CW/LSB
U-band:   435.550 -  435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks
---------
S2-band:  2401.225 -  2401.475 MHz CW/USB
K-band:  24048.010 - 24048.060 MHz CW/USB
Beacon:   2401.323 MHz
         24048.035 MHz
[01222007]
```

```
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink:    145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site
at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater:         436.250 MHz

Uplinks: Mode B Repeater:  145.825 MHz
Mode J Digipeater:         145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational
```

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm

[ANS-WSR has no further information]
[09042006]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink: 145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Non-Operational

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

JARL English webpage: http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm
AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's CW
telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts.htm
[04302007]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012006]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: Downlink only

Uplinks: 145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[012212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]

```
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HL01-11
BBS: HL01-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplinks:          145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink:      437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[01222007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
[05012006]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990
```

```
Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet: Non-Operational
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon:   145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
```

```
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink  29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
[01152007]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon:    29.352 MHz (intermittent)

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
```

```
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink:     21.260 to 21.300 MHz CW/USB
Downlink:  145.860 to 145.900 MHz CW/USB

Beacon:    145.860 MHz

Robot:     145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink:   21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon:   29.408 MHz

Robot:    29.454 MHz
[05232004]
NNNN
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SB SAT @ AMSAT W8ISS $ANS-120.S4
WSR 120 Part 4 04/30/2007

AMSAT NEWS SERVICE BULLETIN 120.S4 FROM AMSAT HQ
SILVER SPRING, MD, April 30, 2007
TO ALL RADIO AMATEURS
BID: $ANS-120.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE
PROPOSED FOR LAUNCH AT THIS TIME:

Phase 5a Mars Mission
Catalog Number:
Proposed Launch Date: 2009 or 2011

Status: Design Phase

For the latest project status update please visit the AMSAT-DL P5-A web
page:
http://ticket-to-mars.org
[01222007]
=====
```

PHASE 3E AO-??
Catalog number:
Proposed Launch Date: Late 2007

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/
[01222007]
=====
Eagle AO-??
Catalog Number:
Proposed Launch Date: Early/Mid 2009

Status: Design Phase

For the latest project status updates please visit the AMSAT-NA webpage:
http://www.amsat.org
[01222007]
NNNN
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ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/amsat/listserv/menu.html

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

```
From -4039325358078145542
X-Google-Thread: 10e8ad,9a137e70672aba2d,start
X-Google-Thread: 10b9c8,9a137e70672aba2d,start
X-Google-Attributes: gid10e8ad,gid10b9c8,public
X-Google-Language: ENGLISH,ASCII
Path: g2news1.google.com!news3.google.com!news2.google.com!
border1.nntp.dca.giganews.com!nntp.giganews.com!nx02.iad01.newshosting.com!
newshosting.com!198.186.194.247.MISMATCH!news-out.readnews.com!news-
xxxfer.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-126 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sun, 6 May 2007 00:12:13 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 516
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000401c78f8c$d7896e50$6401a8c0@familyroom>
NNTP-Posting-Host: panix3.panix.com
Mime-Version: 1.0
Content-Type: text/plain;charset="iso-8859-1"
Content-Transfer-Encoding: quoted-printable
X-Trace: reader2.panix.com 1178424733 1017 166.84.1.3 (6 May 2007 04:12:13 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 6 May 2007 04:12:13 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
```

X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Xref: g2news1.google.com rec.radio.amateur.space:904 rec.radio.info:278

AMSAT NEWS SERVICE
ANS-126

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:

- Eagle Prototype UHF Receiver Powered Up, Testing Commences
- AO-51 Schedule Change to Accomodate New Software Testing
- Reminder of the Dayton AMSAT/TAPR Banquet at Dayton
- FO-29 Telemetry Data Needed
- Space Shorts From All Over
- AMSAT Awards
- ARISS Status Report for the Week of April 30, 2007

SB SAT @ AMSAT $ANS-126.01
Eagle Prototype UHF Receiver Powered Up, Testing Commences

AMSAT News Service Bulletin 126.01
>From AMSAT HQ SILVER SPRING, MD.
May 6, 2007
To All RADIO AMATEURS
BID: $ANS-126.01

Jim Sanford, WB4GCS, Eagle Project Manager, has good news this week. Jim reported the completion of construction of the first prototype of the Eagle 70cm Uplink Receiver. The receiver has been powered up with testing and evaluation starting on May 5.

The receiver was designed by John Stephensen, KD6OZH. Juan Rivera, WA6HTP and the Project Oscar Team implemented the design and produced the first prototype. Juan and John have provided extensive documentation

on the receiver design and construction which is available on AMSAT's EaglePedia. See:
http://www.amsat.org/amsat-new/eagle/EaglePedia/index.php/U-Band_Receiver

Support for the CAN-Do! command bus interface was provided by Stephen, KC0FTQ. For more information check out EaglePedia:
http://www.amsat.org/amsat-new/eagle/EaglePedia/index.php/Category:CanDo

John described his receiver design, "This is a key component of the Mode B linear transponder and provides higher dynamic range than Phase 3 satellite receivers. Our 70 cm band is shared and this minimizes interference from the military radiolocation service and provides improved performance for users in the amateur radio service".

Juan wrote, "Look for more details on my blogs on EaglePedia over the weekend. My special thanks to everyone who made this possible. It was a team effort from beginning to end."

Jim concluded, "I wish to express my thanks and gratitude to the entire team for reaching this significant Eagle milestone!"

[ANS thanks Jim, WB4GCS for the above information]

/EX

SB SAT @ AMSAT $ANS-126.02
AO-51 Schedule Change to Accomodate New Software Testing

AMSAT News Service Bulletin 126.02
>From AMSAT HQ SILVER SPRING, MD.
May 6, 2007
To All RADIO AMATEURS
BID: $ANS-126.02

AMSAT Vice President of Operations, Drew Glasbrenner, KO4MA, previously announced the on-going software upgrade and ensuing testing efforts for AO-51.

During the last round of testing and upgrades on AO-51, the Command Team discovered a problem with the BBS receiver interfering with the command system with either UHF transmitter above a certain power level. This problem had gone unsolved since launch until the relationship to the receiver was found. The good news is the problem goes away when that receiver is shut off.

The bad news is that particular receiver is the only user receiver the operating system allows to access the BBS. A rewrite of the core operating software is required to work around this issue, and there is exactly one person who can do this. For the mean time AO-51 will primarily be an analog mode satellite, until the fix is coded and tested thoroughly on the ground.

Testing aboard the satellite has started. Gould, WA4SXM, AO-51 Operations Group and Command station has updated the May 2007 AO-51 (AMSAT Echo) Schedule. Gould wrote, "We will be testing automatic mode switching on AO-51 for 2 days each week on Wed & Thur this month, except for Dayton week. The rest of the time AO-51 will be in 'normal' mode."

The first mode switch already occured on an early US east coast pass on 2 May 2007. The AO-51 schedule for May on the AMSAT web site has been updated: http://www.amsat.org/amsat-new/echo/ControlTeam.php

Enjoy these modes and send comments and requests to the AO-51 Operations

Group at ao51-modes@amsat.org.

AO-51 May 2007 AO-51 (AMSAT Echo) Schedule
May 1 until May 31, subject to modification

Normal mode except for 2 days testing on Wed - Fri.
Testing of the automatic scheduler

2 - 4 May 2007, 9 - 11 May & 23 -25 May, no change during Dayton week,
to be defined mode change the last week of the month.

2 May - 4 May Mode 7 Testing

FM Repeater, V/U
Uplink: 145.920 MHz FM, NO PL Tone
Downlink: 435.300 MHz FM

QRP FM Repeater, V/U
Uplink: 145.880 MHz FM, NO PL Tone
Downlink: 435.150 MHz FM

9 May - 11 May Mode 4 Testing (Field Day configuration)

FM Repeater, V/U
Uplink: 145.920 MHz FM, NO PL Tone
Downlink: 435.300 MHz FM

FM Repeater, L/U
Uplink: 1268.700 MHz FM, NO PL Tone
Downlink: 435.150 MHz FM

23 May - 25 May Mode 2 Testing

FM Repeater, V/S
Uplink: 145.880 MHz FM, NO PL Tone
Downlink: 2401.200 MHz FM

Normal Mode
FM Repeater, V/U
Uplink: 145.920 MHz FM, NO PL Tone
Downlink: 435.300 MHz FM
9k6 Digital, V/U, Telemetry Only
Downlink: 435.150 Mhz FM, 9k6 Telemetry

[ANS thanks Gould, WA4SXM for the above information]

/EX

SB SAT @ AMSAT $ANS-126.03
Reminder of the Dayton AMSAT/TAPR Banquet at Dayton

AMSAT News Service Bulletin 126.03
>From AMSAT HQ SILVER SPRING, MD.
May 6, 2007
To All RADIO AMATEURS
BID: $ANS-126.03

AMSAT will have a large presence at the Dayton Hamvention this year, so come to Dayton and involve yourself in the many AMSAT activities.

Plan on attending the Thursday night Pizza and Suds party at Marion's.

The AMSAT Forum Friday 11-2 has an outstanding list of speakers and topics of interest to all AMSAT members.

Visit the outdoor satellite demonstration area to observe and make satellite contacts.

We will have a large number of new items at the AMSAT booth, as well as information and a chance to meet and talk with AMSAT Officers and BOD members.

Just a reminder that there are only two weeks left to purchase your tickets to the Dayton AMSAT/TAPR Banquet Friday, May 18,2007.

The "Under the Wings" Banquet will be held in the Air Force Museum. Ticket reservations can be made online at the AMSAT Store, follow the link from the front page of the amsat.org web site.

Reserved tickets will be available for pickup at the AMSAT booth (#444-448) all day Friday, and at the Museum. Reserved tickets can only be purchased until end of business Monday, May 14, 2007 (two weeks from today). We must give the museum a final count on Tuesday morning.

There will be no ticket sales at either the AMSAT or TAPR booth Friday, this is different than past years.

Get online and make your reservations now for a great meal, great ambiance and great kinship.

Don't be left out of THE Friday night event. See the AMSAT web site for additional information.

See you at Dayton May 18-20, 2007.

[ANS thanks Gould, WA4SXM for the above information]

/EX

SB SAT @ AMSAT $ANS-126.04
FO-29 Telemetry Data Needed

AMSAT News Service Bulletin 126.04
>From AMSAT HQ SILVER SPRING, MD.
May 6, 2007
To All RADIO AMATEURS
BID: $ANS-126.04

The Fuji-Oscar 29 (FO-29) satellite has not been heard for several days. Below is a translation of the JARL FO-29 note from their webpage at: http://www.jarl.or.jp

"The analog repeater of amateur satellite 'Fuji 3' ceased operation. We request your help in gathering information during the investigation of the cause and restoration of the satellite if possible."

The amateur satellite 'Fuji of JARL 3' (FO-29 and 8J1JCS), used the regular analog system continuously, but it was verified that the analog repeater has stopped after April 21.

Presently, the control bureau is directing an investigation of the cause, collecting information of what happened before the repeater stops. If you collected and/or analyze telemetry, it can help with the future restoration and planning of the command station. We ask you to help us by providing the following information regarding FO-29 to the JARL technical section.

1. After April 20th: CW telemetry data
2. After April 20th: Repeater operational details/observations (CW telemetry for the repeater including those times when it was operational or not operational)
3. If there are phenomenon which you believe relevant, such as signal strength and reception circumstance please send.

On May 3, the JARL command station could command the analog transponder off and on. On May 4 when the analog transponder was turned on the power balance during eclipse was severely negative. An attempt at reconditioning the batteries may be successful if the power budget is carefully managed. JARL reported that FO-29 needs to be turned off for a while.

Although it is possible for the command station to temporarily turn on the satellite over Japan, users are requested to refrain from attempting to access the analog transponder. Any telemetry data received is welcomed.

[ANS thanks JARL and Mineo, JE9PEL for the above information]

/EX

SB SAT @ AMSAT $ANS-126.05
Space Shorts From All Over

AMSAT News Service Bulletin 126.05
>From AMSAT HQ SILVER SPRING, MD.
May 6, 2007
To All RADIO AMATEURS
BID: $ANS-126.05

+ John, KD6PAG will be on Santa Catalina Island (IOTA NA-066, near Los Angeles) from Friday afternoon 4 May through Tuesday mid-morning 8 May. Plans include working J-FM satellites as time (and horizons) permit. Monday is the best time to try if you can only fit in one or two passes. John also said he plans to activate CM86 (Santa Cruz) again on the first Saturday in June and he is still considering CM79, probably on June 23 or 24.

+ Mineo, JE9PEL posted information provided by DK3WN on "How to decode CP4 telemetry" on-line at: http://www.ne.jp/asahi/hamradio/je9pel/cp4deco0.htm

+ NASA announced pioneering astronaut Walter "Wally" Schirra, the only man who flew in all three of America's first human space projects - Mercury, Gemini and Apollo - died Wednesday night. He was 84. Schirra's family reported he died of natural causes.

+ Nate, WY0X sent the word that Ted Cross, N0IAK, passed away early in the week of April 16th due to complications arising from a seizure. Ted was 46 years old. Ted was from England and was dual-licensed. His other Amateur callsign was G0HHY. Ted was involved in AMSAT projects over the years.

+ Greg, WA7IRW will be operating at the British Virgin Islands as VP2V/WA7IRW starting 5 May and ending 18 May. He expects to try AO-51 ops typically in the afternoon / evening hours passes as they will be sailing in the morning hours. He will be using a FT857 and an aArrow antenna from the sail boat. QSL to WA7IRW.

+ Rolf, DK2ZF will be on the Azores as CU2/DK2ZF over the weekend of May 25th to May 29th from Sao Miguel HM77UC. Station will constist of FT-847 with 5 element uplink and 9 element downlink antennas.

+ Pop, VU2POP, Secretary of AMSAT India reminds radio amateurs worldwide to wish HAMSAT a very Happy 2nd birthday and a very long life.

[ANS thanks everyone for the above information]

/EX

SB SAT @ AMSAT $ANS-126.06
AMSAT Awards

AMSAT News Service Bulletin 126.06
>From AMSAT HQ SILVER SPRING, MD.
May 6, 2007
To All RADIO AMATEURS
BID: $ANS-126.06

Bruce, KK5DO, AMSAT Director Contests and Awards says the awards this week are:

We would like to welcome the following to the satellite community. They have made their first satellite contact and are now members of the AMSAT Satellite Communicators Club:
Joaquim das Virgens Neto, PS7JN

AMSAT Communication Achievement Award
Joe Prokop, KC8RAN, #449
Joaquim das Virgens Neto, PS7JN, #450
Steve Raas, N2JDQ, #451

South Africa AMSAT Communication Achievement Award
Joe Prokop, KC8RAN, #US108

To see all the awards visit http://www.amsat.org.

[ANS thanks Bruce, KK5DO for the above information]

/EX

SB SAT @ AMSAT $ANS-126.07
ARISS Status Report for the Week of April 30, 2007

AMSAT News Service Bulletin 126.07
>From AMSAT HQ SILVER SPRING, MD.
May 6, 2007
To All RADIO AMATEURS
BID: $ANS-126.07

1. ARISS � Scuola Europea Varese Contact Successful

Scuola Europea Varese in Varese, Lombardia, Italy experienced an ARISS contact on Monday, April 23 via the telebridge station VK4KHZ in Australia. Sixteen students posed one question each to astronaut Sunita Williams, KD5PLB, in front of an audience of 300. Three newspapers, Corriere Della Sera, Varese News and Prealpina, and two television stations, Rete 55 and Tele 7 Laghi, covered the event.

2. Kingston School Contact Successful

On Monday, April 23, students attending Kingston Elementary School in Virginia Beach, Virginia spoke with Sunita Williams, KD5PLB, via the ARISS program. Thirteen children asked 16 questions of the astronaut. Media coverage included a newspaper and television station. The Virginia Pilot article may be viewed on:
http://content.hamptonroads.com/story.cfm?story=123431&ran=116848

3. Illinois School Contact, a Success

An ARISS contact took place between Christian Life Elementary School in Rockford, Illinois and Sunita Williams, KD5PLB, on Wednesday, April 25. Williams answered eleven questions posed to her by 11 children as 1200 students, teachers and parents observed from the audience. One radio station provided streaming audio. Three television stations and one newspaper reported the event. One of the teachers who witnessed the event remarked, �What an awesome event! What an unforgettable experience! It will be something that will enrich our children�s lives for years to come.�

WIFR, Channel 23, ran an article with video of the contact.
See: http://www.wifr.com/news/headlines/7192966.html

WREX-TV, Channel 13, ran this story:
http://www.wrex.com/News/index.php?ID=17472

4. Germany Contacts Successful

On Saturday, April 28, students attending the Samuel-von-Pufendorf Gymnasium in Floeha, Germany participated in an ARISS contact. Sunita Williams, KD5PLB, answered 18 questions posed to her by five students, who were all licensed amateur radio operators. Fifty people were in attendance. One television station (MDR), three radio stations and five newspapers covered the event.

Erweiterte Realschule Weiskirchen in Weiskirchen, Saarland, Germany had an ARISS contact on Saturday, May 5. The school is one of eleven pilot schools participating in the �Innovative all-day school� project.
A radio club was formed at the school. Students participating in the contact are responsible for all aspects of the event: obtaining and working with sponsors, catering, press, documentation and technology.

5. Italian Contact Successful

Liceo Scientifico Statale �Lorenzo Respighi� in Piacenza, Italy had an ARISS contact on Saturday, May 5. The school plans to incorporate this contact in their curriculum through studies including the law of gravitation, experiments in the absence of gravity, the International Space Station, and English. Italian Astronaut Roberto Vittori has also been invited to visit the school in conjunction with these lessons. Students were required to work on interview skills, write reports and design posters. Media coverage included television, radio, newspapers and website postings.

6. Upcoming School Contacts

Sunset Mesa School, a private school with an enrollment of 400 students, located in Albuquerque, New Mexico, has been scheduled for an ARISS contact on Wednesday, May 9 at 14:39 UTC. The contact will be integrated into the following areas of the school�s curriculum: science, social studies, technology, and language arts. Fifth grade students will study the earth�s atmosphere, radio waves, history of the ISS and the cultures of the countries supporting it. They will use the internet for their research and will practice interviewing skills to prepare for the event. The fifth graders will share what they have learned with the rest of the school.

Escola Secund�ria de Estarreja in Portugal has been scheduled for an ARISS contact on Wednesday, May 9 at 14:58 UTC. The school has an enrollment of 2000 students with its own amateur radio station, CT6ESE. Each year the Technology Department offers a week of amateur radio activities including lectures, practical applications, and lessons for those interested in taking their ham radio license exam. The Portuguese television networks as well as the local media have been invited to cover the event. The contact has the support of the local government and is being organized by REP (The National Ham-Radio Association) and the Central Portugal Ministry of Education branch.

7. ARISS at Dayton Hamvention

The Dayton Hamvention will be held at the Hara Arena Complex in Dayton, Ohio on May 18 - 20. The American Radio Relay League (ARRL) and the Radio Amateur Satellite Corporation (AMSAT) will both support exhibit booths at the event. ARISS will be well represented over this weekend.

+ ARISS Chairman Frank Bauer plans to give a presentation on �ARISS and Future SuitSat Missions� at the AMSAT forum.

+ Dr. Barry Cohen, K2JV, will speak at the Teachers� Workshop on �Events Leading up to the ARISS QSO (Contact) at School.�

+ NASA Astronaut Bill McArthur, KC5ACR will offer a presentation on his ARISS contacts during Expedition 12.

+ ARISS Hardware Manager Lou McFadin will speak on SSTV, �SuitSat 2, Not the Same Suit.�

+ ARISS Delegate Rosalie White plans to speak on SuitSat-2 and related lesson plans.

The Dayton Hamvention is an internationally attended amateur radio convention that draws crowds of 25,000 annually.

8. University School Contact Update

Students from University School in Shaker Heights, Ohio took part in an ARISS contact with astronaut Sunita Williams, KD5PLB, on March 16. The school has posted photos, audio and video of the event on its website. See: http://www.shaker.us.edu/ariss/

9. ARRL Article on ARISS Status

The American Radio Relay League (ARRL) ran a web story on the ARISS hardware status. See:
http://www.arrl.org/news/stories/2007/04/25/101/?nc=1

10. ARRL Article on ISS Crew Change

The American Radio Relay League (ARRL) ran an article on the upcoming crew change. Flight Engineer Sunita Williams, KD5PLB, will be replaced by Clay Anderson, KD5PLA. Anderson will fly on STS-117, slated to launch

on June 8. See: http://www.arrl.org/?artid=7412

[ANS thanks Carol, KB3LKI for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM

```
From 759328017168257842
X-Google-Thread: 10e8ad,17659a614f52e8b,start
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X-Google-Language: ENGLISH,ASCII-7-bit
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Path: g2news1.google.com!news2.google.com!newshub.stanford.edu!headwall.stanford.edu!newshub.sdsu.edu!news.astraweb.com!router1.astraweb.com!not-for-mail
From: Chris Steyaert <observations@rmob.org>
Newsgroups: rec.radio.amateur.space,sci.astro.amateur
Subject: Radio Meteor Obs. Bull. April 2007 Lyrids
Date: Sun, 06 May 2007 11:34:10 +0200
Message-ID: <688r33tfmtin853ldomgdbvtkasu98tmpe@4ax.com>
X-Newsreader: Forte Agent 1.93/32.576 English (American)
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Lines: 17
Organization: Unlimited download news at news.astraweb.com
NNTP-Posting-Host: 59ecbd65.news.astraweb.com
X-Trace: DXC=ST:cHoSA_B_aaSDeVe\e2]L?0kYOcDh@ZDj<GL_d2>[POP3`:obaPU^G?ifhhgG3CQ75?Lf2UTP=\SoJCjTc?BYY
Xref: g2news1.google.com rec.radio.amateur.space:905 sci.astro.amateur:79198

Radio Meteor Observation Bulletin No. 165 of April 2007 (80 K) is available now as

http://visualrmob.free.fr/rmobtext/rmob0704.txt

More information and the visual presentation of the hourly forward scatter counts can be found on

http://www.rmob.org

http://radio.data.free.fr

Chris

From 7328523529517617049
X-Google-Thread: 10e8ad,d91e21b03b5b4d3,start
X-Google-Thread: 10b9c8,d91e21b03b5b4d3,start
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X-Google-Language: ENGLISH,ASCII-7-bit
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From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-126.08 Special Bulletin 2007 AMSAT Space Symposium and Annual Meeting - Call for papers
Followup-To: rec.radio.amateur.space
Date: Sun, 6 May 2007 08:38:22 EDT

```
Organization: The Radio Amateur Satellite Corporation
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Message-ID: <000301c78fdb$6bd80f00$6401a8c0@familyroom>
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Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader2.panix.com 1178455102 3106 166.84.1.2 (6 May 2007 12:38:22 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 6 May 2007 12:38:22 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Xref: g2news1.google.com rec.radio.amateur.space:906 rec.radio.info:279
```

SB SAT @ AMSAT $ANS-126.08
2007 AMSAT Space Symposium and Annual Meeting - Call for papers

AMSAT News Service Bulletin 126.08
>From AMSAT HQ SILVER SPRING, MD.
May 6, 2007
To All RADIO AMATEURS
BID: $ANS-126.08

This is the first call for papers for the 2007 AMSAT Space Symposium and Annual Meeting to be held October 25-28, 2007 in Pittsburgh, Pennsylvania.

Proposals for papers, symposium presentations, and poster presentations Are invited on any topic of interest to the amateur satellite program. An emphasis for this year is an educational outreach to middle and high School students. In particular, papers on the following topics are solicited:

+ Students & Education
+ ARISS
+ AO-51
+ P3E
+ Eagle
+ Other satellite-related topics.

We request a one-page abstract by June 1, 2007. Camera ready copy on paper or in electronic form will be due by September 1, 2007 for inclusion in the printed symposium proceedings. Papers received after this date will not be included in the printed proceedings.

Abstracts and papers should be sent to:
Daniel Schultz N8FGV by e-mail to: n8fgv@amsat.org.

[ANS thanks the AMSAT 2007 Symposium Committee for the above information]

/EX

```
From -4816811797038397174
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X-Google-Thread: 10b9c8,7fcdfb27388b755,start
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X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news3.google.com!out03b.usenetserver.com!
news.usenetserver.com!in01.usenetserver.com!news.usenetserver.com!novia!news-
out.readnews.com!transit4.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-127 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Thu, 10 May 2007 08:33:51 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 1185
Approved: RRI Admin <rec-radio-info-request@panix.com>
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Mime-Version: 1.0
Content-Type: text/plain;
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Content-Transfer-Encoding: 7bit
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X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Thu, 10 May 2007 12:33:51 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Xref: g2news1.google.com rec.radio.amateur.space:907 rec.radio.info:283
```

This report is organized into 4 parts.
Part 1 (S1) - operational analog amateur satellitesbb
Part 2 (S2) - operational digital amateur satellites

Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites

SB SAT @ AMSAT W8ISS ANS-127.S1
WSR 127 Part 1 05/07/2007

AMSAT NEWS SERVICE BULLETIN 127.S1 FROM AMSAT HQ
SILVER SPRING, MD, May 07, 2007
TO ALL RADIO AMATEURS
BID: $ANS-127.S1

VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/V - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.870 to 145.930 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.875 to 145.925 MHz USB/CW

Indian Beacon: 145.859330 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsat.in/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is
active. Each transponder has a different beacon.
[10022006]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Voice Repeater ONLY - Software reload in progress
        Telemetry Downlink

Current Mode(s): FM Repeater - V/U
                 PBBS -   OFF
                 Digipeater - OFF
                 Telemetry -   /U

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.880 MHZ FM
145.880 MHz USB
145.920 MHz FM
1268.700 MHz FM 67Hz PL tone
Digital Downlinks: 435.150 MHz FM 38k4 Digital, PBP, 1 watt output
435.150 MHz FM 9k6 Digital, Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Digital, Pacsat Broadcast Protocol
1268.700 mhz FM 9k6 PBP Digital
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[05072007]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer
on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the

repeater on
and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10
minute timer.
[03262007]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

```
Uplink:   145.850 MHz FM
Downlink: 436.795 MHz FM
```

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[03262007]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational depending on amount of Sunlight

```
Uplink:   145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink:  29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons:   29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW
```

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/

AO-7 Usage Guidelines on the AO-7 Log and Resource Site located at:
http://www.planetemily.com/ao7
[02262007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: Occasional Voice
Digipeater: OFF

Expedition 15 crew:

Commander:	Fyodor Yurchikhin	RN3FI
Flight Engineer:	Charles Simonyi	KE7KDP/HA5SIK
Flight Engineer:	Sunita Williams	KD5PLB

Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

SSTV TESTING:
Worldwide Reported Downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS, RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line is NOT translated from Russian and posted.
[04232007]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-127.S2
WSR 127 Part 2 05/07/2007

AMSAT NEWS SERVICE BULLETIN 127.S2 FROM AMSAT HQ

SILVER SPRING, MD, May 07, 2007
TO ALL RADIO AMATEURS
BID: $ANS-127.S2

CAPE1
Catalog Number:
Launch Date: April 17,2007

Status: In Orbit

Downlink: 435.245 MHz 9600 bs FSK AX.25
[04232007]
=====
CP3
Catalog Number:
Launch Date: April 17,2007

Status: In Orbit

Downlink: 436.845 MHz 1200 bps FSK AX.25
[04232007]
=====
CP4
Catalog Number:
Launch Date: April 17,2007

Status: In Orbit

Downlink: 437.325 MHz 1200 bps FSK AX.25
[04232007]
=====
Libertad-1
Catalog Number:
Launch Date: April 17, 2007

Status: In Orbit

Downlink: 437.405 MHz 1200 bps AFSK AX.25
[04232007]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: In Orbit

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder: 145.825 Mhz FM
[02052007]
=====
?O-?? FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: In Orbit

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[02262007]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: In Orbit

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01222007]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: In Orbit

Main Downlink: 145.825 Mhz FM APRS AX25
APRS Uplink: 145.825 MHz FM APRS AX25
Voice/PSK31 Uplink: 28.120 MHz

Packet to Voice ID: RAFT
[02262007]
=====
GENESAT-1 ?O-??
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Telemetry Beacon Downlink: 437.0670 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[01082007]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Operational

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon: 437.2750 MHz CW

Callsign: JR8YJT

[10302006]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon: 437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
[03262007]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launched: June 30, 2003

Status: Operational

Beacon: 436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[01082007]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launched: February 21, 2006

Status: Semi-Operational - Constant Carrier only

Uplink: 1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan ?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[01082007]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Voice Repeater ONLY - Software reload in progress
Telemetry Downlink

Current Mode(s): FM Repeater - V/U
PBBS - OFF
Digipeater - OFF
Telemetry - U

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.880 MHZ FM
145.880 MHz USB
145.920 MHz FM
1268.700 MHz FM 67Hz PL tone
Digital Downlinks: 435.150 MHz FM 38k4 Digital, PBP, 1 watt output
435.150 MHz FM 9k6 Digital, Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Digital, Pacsat Broadcast Protocol
1268.700 mhz FM 9k6 PBP Digital
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[05072007]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Operational only in Full Sun Light

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[01082007]
=====

GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks: 145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[03262007]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Semi-operational - APRS usage through Digipeater

Uplink: 145.900 MHz FM 1200-baud Manchester FSK
                145.920 MHz FM 1200-baud Manchester FSK
                145.940 MHz FM 1200-baud Manchester FSK
                145.960 MHz FM 1200-baud Manchester FSK
Downlink: 437.026 MHz SSB 1200-baud PSK
Mode-S Beacon: 2401.1428 MHz

Mode and Antenna Polarization:
U: RC 437.050 MHz RHCP
   PSK 437.025 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[03262007]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational

Telemetry Downlink: 145.826 MHz. FM 1200 AFSK

Mode-S Beacon: 2401.500 MHz - OFF
UHFBeacon: 435.025 MHz - OFF

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Official webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[01082007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: Occasional Voice
Digipeater: OFF

Expedition 15 crew:
Commander: Fyodor Yurchikhin   RN3FI
Flight Engineer: Charles Simonyi   KE7KDP/HA5SIK
Flight Engineer: Sunita Williams   KD5PLB

Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

SSTV TESTING:
Worldwide Reported Downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS, RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.
[04232007]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-127.S3
WSR 127 Part 3 05/07/2007

AMSAT NEWS SERVICE BULLETIN 127.S3 FROM AMSAT HQ
SILVER SPRING, MD, May 07, 2007
TO ALL RADIO AMATEURS
BID: $ANS-127.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 MHz FM 67Hz CTCSS
Voice Downlink: 2401.835 MHz FM
Packet Up/Downlink: 437.250 MHz 9k6 packet
Packet Downlink   2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Operational

Uplinks: 145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[01222007]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, callsign KE6QMD, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====

```
SO-42 SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS:                SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink:   145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
V-band:   145.840 -  145.990 MHz CW/LSB
U-band:   435.550 -  435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks
---------
S2-band:  2401.225 -  2401.475 MHz CW/USB
K-band:  24048.010 - 24048.060 MHz CW/USB
Beacon:   2401.323 MHz
         24048.035 MHz
[01222007]
=====
UO-36 UoSAT-12
```

```
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink:    145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site
at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater:         436.250 MHz

Uplinks: Mode B Repeater:  145.825 MHz
Mode J Digipeater:         145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)
```

The satellite is not currently available for uplink transmissions and the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink: 145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Non-Operational

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

JARL English webpage: http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm
AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts.htm
[04302007]
=====

```
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign:       POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012006]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: Downlink only

Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[012212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992
```

```
Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HL01-11
BBS: HL01-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz
```

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplinks: 145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink: 437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[01222007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink: 145.825 MHz FM 1200 Baud AFSK
Beacon: 2401.220 MHz
[05012006]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink: 145.975 MHz FM
Downlink: 435.070 MHz FM

```
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet: Non-Operational
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon:   145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.8500 - 145.9000 MHz SSB/CW
```

```
Downlink  29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
[01152007]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon:    29.352 MHz (intermittent)

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991
```

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB

Beacon: 145.860 MHz

Robot: 145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-127.S4
WSR 127 Part 4 05/07/2007

AMSAT NEWS SERVICE BULLETIN 127.S4 FROM AMSAT HQ
SILVER SPRING, MD,May 07, 2007
TO ALL RADIO AMATEURS
BID: $ANS-127.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE
PROPOSED FOR LAUNCH AT THIS TIME:

Phase 5a Mars Mission
Catalog Number:
Proposed Launch Date: 2009 or 2011

Status: Design Phase

For the latest project status update please visit the AMSAT-DL P5-A web page:
http://ticket-to-mars.org
[01222007]
=====
PHASE 3E AO-??
Catalog number:
Proposed Launch Date: Late 2007

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/
[01222007]
=====
Eagle AO-??
Catalog Number:
Proposed Launch Date: Early/Mid 2009

Status: Design Phase

For the latest project status updates please visit the AMSAT-NA webpage:
http://www.amsat.org
[01222007]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

- AMSAT News Service (ANS)
- General satellite discussion (AMSAT-BB)
- Orbit data (KEPS)
- Manned space missions (SAREX)
- District of Columbia area (AMSAT-DC)
- New England area (AMSAT-NE)
- AMSAT Educational Liaison mailing list (AMSAT-EDU)
- AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/amsat/listserv/menu.html

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

From -1507461910798041944
X-Google-Thread: 10e8ad,12bfe7f63655eee9,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!postnews.google.com!l77g2000hsb.googlegroups.com!not-for-mail
From: goog49@cox.net
Newsgroups: rec.radio.amateur.space
Subject: Graphing Calculator Programs
Date: 10 May 2007 10:38:50 -0700
Organization: http://groups.google.com
Lines: 19
Message-ID: <1178818730.163259.44780@l77g2000hsb.googlegroups.com>
NNTP-Posting-Host: 132.228.195.207
Mime-Version: 1.0
Content-Type: text/plain; charset="iso-8859-1"
X-Trace: posting.google.com 1178818730 9299 127.0.0.1 (10 May 2007 17:38:50 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Thu, 10 May 2007 17:38:50 +0000 (UTC)
User-Agent: G2/1.0
X-HTTP-UserAgent: Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1; SV1; .NET CLR 1.1.4322),gzip(gfe),gzip(gfe)
Complaints-To: groups-abuse@google.com
Injection-Info: l77g2000hsb.googlegroups.com; posting-host=132.228.195.207;
   posting-account=LT2jNQ0AAABbWbO8l7NTtcAld0B8QKzA
Xref: g2news1.google.com rec.radio.amateur.space:908

I'm putting together some programs that use the serial port capability of the HP-50G graphing calculator.

They're going to be incorporated in the astronomy and satellite prediction stuff on http://members.cox.net/above, and posted to www.hpcalc.org. The added features will be geared to amateur radio satellite and APRS operations.

1) Grab time and position from a GPS receiver using 4800 baud NMEA format.
2) Trigger an APRS transmitter when an appropriate satellite is visible.
2a) Turn the APRS transmitter _off_ when the satellite goes below the horizon.

(2 and 2a) are done via alarms on the HP-50G.

I'm open to suggestions. It should be posted after some testing.

```
From 3286309729143275283
X-Google-Thread: 10e8ad,e924386bc72b8d49,start
X-Google-Thread: 10b9c8,e924386bc72b8d49,start
X-Google-Attributes: gid10e8ad,gid10b9c8,public
X-Google-Language: ENGLISH,ASCII
Path: g2news1.google.com!news1.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx02.iad01.newshosting.com!newshosting.com!
198.186.194.250.MISMATCH!transit3.readnews.com!news-out.readnews.com!panix!
rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-133 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Mon, 14 May 2007 20:23:10 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 346
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <002001c79687$3f9e9fa0$6601a8c0@familyroom>
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;charset="iso-8859-1"
Content-Transfer-Encoding: quoted-printable
X-Trace: reader2.panix.com 1179188591 28060 166.84.1.6 (15 May 2007 00:23:11 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Tue, 15 May 2007 00:23:11 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Xref: g2news1.google.com rec.radio.amateur.space:909 rec.radio.info:293
```

AMSAT NEWS SERVICE
ANS-133

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* 2007 AMSAT Space Symposium and Annual Meeting - Call for paper
* LVB Trackers Boards Available at AMSAT Booth in Dayton
* Eagle 70cm Receiver Progress
* AMSAT Does Well at Smithsonian Space Day Event
* Project OSCAR is Included in New Smithsonian Book
* ARISS Status - 07 May 2007

SB SAT @ AMSAT $ANS-133.01
2007 AMSAT Space Symposium and Annual Meeting - Call for papers

AMSAT News Service Bulletin 133.01
>From AMSAT HQ SILVER SPRING, MD.
May 13, 2007
To All RADIO AMATEURS
BID: $ANS-133.01

This is the first call for papers for the 2007 AMSAT Space Symposium and Annual Meeting to be held October 25-28, 2007 in Pittsburgh, Pennsylvania.

Proposals for papers, symposium presentations, and poster presentations are invited on any topic of interest to the amateur satellite program. An emphasis for this year is an educational outreach to middle and high School students. In particular, papers on the following topics are solicited:

 + Students & Education
 + ARISS
 + AO-51
 + P3E
 + Eagle
 + Other satellite-related topics.

We request a one-page abstract by June 1, 2007. Camera ready copy on paper or in electronic form will be due by September 1, 2007 for inclusion in the printed symposium proceedings.

Abstracts and papers should be sent to:
Daniel Schultz N8FGV by e-mail to: n8fgv@amsat.org.

[ANS thanks the AMSAT 2007 Symposium Committee for the above information]

/EX

SB SAT @ AMSAT $ANS-133.02
LVB Trackers Boards Available at AMSAT Booth in Dayton

AMSAT News Service Bulletin 133.02
>From AMSAT HQ SILVER SPRING, MD.
May 13, 2007
To All RADIO AMATEURS
BID: $ANS-133.02

Howard Long, G6LVB has graciously provided his LVB Tracker (Rotor Controller) Boards for AMSAT to offer at Dayton this year. Kevin, WA6FWF, has compiled a parts list for the US suppliers: JAMECO, MOUSER & DIGIKEY. These are the bare boards.

These boards go between your computer using a serial or USB connector and the Yaesu 5400/5500 rotor controller box. The most common tracking soft-ware can then control your rotors to track the satellites. It takes about an evening to build and test the boards. The LCD display is a nice feature that shows the current position of the rotors. The boards will allow you to program the PIC processor onboard, and Howard's software checks for a stalled rotor.

Also included is a CD with all of the LVB documentation from Howard and the parts list from Kevin with the package.

Plan on attending the Thursday night Pizza and Suds party at Marion's.

The AMSAT Forum Friday 11-2 has an outstanding list of speakers and topics of interest to all AMSAT members:

+ Moderator: Barry Baines, WD4ASW, AMSAT-NA Corporate Secretary

+ Rick Hambly, W2GPS, President, AMSAT-NA "Summary of AMSAT-NA Activities in 2007"

+ Peter Guelzow, DB2OS, AMSAT-DL President and Bob McGwier, N4HY, AMSAT-NA VP - Engineering, "Phase 3-Express: An UpMay 13"

+ Jim Sanford, WB4GCS, EAGLE Project Manager "Eagle Status UpMay 13"

+ Andrew Glasbrenner, KO4MA, AMSAT-NA VP-Operations and Gould Smith, WA4SXM, AO-51 Command Station, "AMSAT-NA Satellite Operations and AO-51 UpMay 13"

+ Frank Bauer, KA3HDO, AMSAT-NA Director-Human Space Flight, "ARISS and Future SuitSat Missions"

Visit the outdoor satellite demonstration area to observe and make satellite contacts.

We will have a large number of new items at the AMSAT booth, as well as information and a chance to meet and talk with AMSAT Officers and BOD members.

The "Under the Wings" Banquet will be held in the Air Force Museum. Ticket reservations can be made online at the AMSAT Store, follow the link from the front page of the amsat.org web site.

Reserved tickets will be available for pickup at the AMSAT booth (#444-448) all day Friday, and at the Museum. Reserved tickets can only be purchased until end of business Monday, May 14, 2007 We must give the museum a final count on Tuesday morning.

There will be no ticket sales at either the AMSAT or TAPR booth Friday, this is different than past years.

Get online and make your reservations now for a great meal, great ambiance and great kinship.

Don't be left out of THE Friday night event. See the AMSAT web site for additional information.

See you at Dayton May 18-20, 2007.

[ANS thanks Gould, WA4SXM for the above information]

/EX

SB SAT @ AMSAT $ANS-133.03
Eagle 70cm Receiver Progress

AMSAT News Service Bulletin 133.03
From AMSAT HQ SILVER SPRING, MD.
May 13, 2007
To All RADIO AMATEURS
BID: $ANS-133.03

Jim Sanford, WB4GCS the Eagle Project Manager announced this week that the first prototype of the Eagle satellite 70cm receiver became operational this week. Juan Rivera, WA6HTP and team moved from troubleshooting to testing mode. Come by the AMSAT Booths at Dayton and see the operational 70cm receiver. Be sure and check out all the design, peer review, troubleshooting testing and operational areas of the U-Band Receiver on EaglePedia to see what it takes to produce a piece of the Eagle satellite. Congratulations to the U-Band Receiver team.

[ANS thanks Gould, WA4SXM for the above information]

/EX

SB SAT @ AMSAT $ANS-133.04
AMSAT Does Well at Smithsonian Space Day Event

AMSAT News Service Bulletin 133.04
>From AMSAT HQ SILVER SPRING, MD.
May 13, 2007
To All RADIO AMATEURS
BID: $ANS-133.04

AMSAT and ARISS enjoyed a successful day at the Smithsonian Museum's Space Day held at the National Air and Space Museum Saturday, May 5.

A one-half scale model of the Eagle satellite can be seen in these photos: http://n4hy.smugmug.com/gallery/2819832#150794625

Bob, N4HY, AMSAT Director and VP Engineering, vistited the event and wrote, "The crowd was large, enthusiastic, and [with all the young people present it shows] that interest in space is NOT limited to people who are old enough to remember who Neil Armstrong is. They are not exclusively American. They are `every man` or `every person`".

An ARISS contact was scheduled with Sunita Williams, KD5PLB, and twelve children asked her one question each. The audio was fed into the EchoLink servers and received 14 connections from 7 countries, including 2 repeater nodes.

In describing his photos at ...
http://n4hy.smugmug.com/gallery/2819832#150818569
... Bob says, "The young man in this photo had a great time talking to Sunny Williams (as did the others in the photos) and the T Shirt you see him wearing while standing with his beaming family was his winning design in the T shirt contest. The parents were jumping up and down clapping, crying their eyes out, and in general, just beside themselves with emotion watching their kids talk to Sunny. I understand why Rick can't even begin telling the story without breaking up."

The event included astronaut appearances, hands-on activities, and model rocket building. Local robotics teams demonstrated their projects with a robot petting zoo. Visitors were also able to view the Orion Crew Exploration Vehicle.   Space Day draws approximately 10,000 visitors to the Air and Space Museum annually.

Congratulations and thanks go out to Frank Bauer, KA3HDO, and the entire ARISS, SAREX and AMSAT teams for this super event!

[ANS thanks Bob, N4HY for above information]

/EX

SB SAT @ AMSAT $ANS-133.05

Project OSCAR is Included in New Smithsonian Book

AMSAT News Service Bulletin 133.05
>From AMSAT HQ SILVER SPRING, MD.
May 13, 2007
To All RADIO AMATEURS
BID: $ANS-133.05

Perry Klein, W3PK noted this week that a new book by Martin Collins, "After Sputnik - 50 Years of the Space Age", mentions Project OSCAR. It was published by Smithsonian books.

Dr. Collins is a curator in the Space History section of the National Air and Space Museum and has been AMSAT's main contact in getting amateur satellite artifacts on display at the Udvar-Hazy Center and the Museum of American History.

[ANS thanks Perry, W3PK for the above information]

/EX

SB SAT @ AMSAT $ANS-133.06
ARISS Status - 07 May 2007

AMSAT News Service Bulletin 133.06
From AMSAT HQ SILVER SPRING, MD.
May 13, 2007
To All RADIO AMATEURS
BID: $ANS-133.06

1. Successful ARISS Contact in Italy

On Saturday, May 5, Liceo Scientifico Statale �Lorenzo Respighi� in Piacenza, Italy experienced an Amateur Radio on the International Space Station (ARISS) contact. Astronaut Sunita Williams, KD5PLB, answered 11 questions posed to her by eleven students, as an audience of approximately 150 looked on. An ARISS mentor set up live streaming audio on the AMSAT Italia website. Five newspapers and the television stations Telelibert�, Teleducato, Telecolor and RAI covered the event. This is the first school in Italy with an amateur radio station, callsign IZ4JSC, which was established for education, instruction and training.

2. German School Contact Successful

Students from Erweiterte Realschule Weiskirchen in Weiskirchen, Saarland, Germany participated in an Amateur Radio on the International Space Station (ARISS) contact on Saturday, May 5. Eighteen students posed one question each to Sunita Williams, KD5PLB, as 50 people gathered around the group to listen in. Two newspapers, �Saarbr�cker Zeitung� and �Hochwald Rundschau,� covered the event.

3. Santa Rosa Junior College Contact Successful

Santa Rosa Junior College located in Santa Rosa, California, held its annual open house, �Day Under the Oaks,� on Sunday, May 6. Demonstrations were provided to the public including computer model building, planetarium shows and tours of the ARISS W6SRJ telebridge station. In addition, a robotics competition was held. An Amateur Radio on the International Space Station (ARISS) contact was also scheduled as one of the activities during this event. Ten students spoke with astronaut Sunita Williams, KD5PLB. They were able to ask 14 questions before the ISS went over the horizon. There were several hundred people in attendance. As part of the �Day Under the Oaks� event, ARISS mentors handed out information packets to over 40 teachers. A north San Francisco newspaper, the Press Democrat, covered this very successful event.

4. Upcoming School Contacts

An Amateur Radio on the International Space Station (ARISS) contact has been scheduled for Barrhaven Public School in Ottawa, Ontario on Tuesday, May 15 at 15:27 UTC. The school is forming a space club which is open to first through fifth graders. Through this club, students will learn about the Space Station via the internet and guest speakers. They will track the ISS and plot its course. They will learn how to speak on the radio and work on related art projects such as posters, banners and murals. A contest will be held to create a mission patch which will be used on T shirts for the children. The media will be notified of the event. The audio for this event will be fed into the EchoLink AMSAT (101 377) and JK1ZRW (277 208) servers.

Kenneth J. Carberry Intermediate School located in Emmett, Idaho has been scheduled for an Amateur Radio on the International Space Station (ARISS) contact on Wednesday, May 16 at 18:52 UTC. Students will research and create a Space Program timeline. They will research ISS astronauts and the countries involved with the Space Station, and determine the research being carried out onboard. They will also design posters to announce the upcoming event.

5. Astronaut Training Status

An Amateur Radio on the International Space Station (ARISS) review session has been scheduled for astronaut Greg Chamitoff, KD5PKZ, on Tuesday, May 15. Chamitoff is scheduled to be a flight engineer on Expedition 18, flying to the ISS on STS-127 in 2008.

6. ARRL Article on ARISS School Contacts

On May 4, the American Radio Relay League (ARRL) ran a web story on the

last four Amateur Radio on the International Space Station (ARISS) contacts, entitled �Youngsters in Europe, US Get Front-Row Seats to Space via Ham Radio.� See:
http://www.arrl.org/news/stories/2007/05/04/101/?nc=1

7. ARRL Makes Donation to Columbus Project

The American Radio Relay League (ARRL) ran a story covering the donation made to the Amateur Radio on the International Space Station � Europe for its Columbus antennas. See: http://www.arrl.org/?artid=7423

[ANS thanks Carol, KB3LKI, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Lee McLamb, KU4OS

From 8663481833716553446
X-Google-Thread: 10e8ad,b2f2e5e41bbe0435,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: FRENCH,ASCII
Path: g2news1.google.com!news3.google.com!feeder3.cambrium.nl!feed.tweaknews.nl!
newsfeed0.kamp.net!newsfeed.kamp.net!newsfeed.freenet.de!85.12.40.130.MISMATCH!
xlned.com!feeder1.xlned.com!club-internet.fr!feedme-small.clubint.net!fdn.fr!
news.wanadoo.fr!news.wanadoo.fr!not-for-mail
Date: Tue, 15 May 2007 19:04:20 +0200
From: Antoll MA <forum@antollma.info>
User-Agent: Thunderbird 2.0.0.0 (Windows/20070326)
MIME-Version: 1.0
Newsgroups: rec.radio.amateur.space
Subject: World Contact with aliens
Content-Type: text/plain; charset=ISO-8859-1; format=flowed
Content-Transfer-Encoding: 8bit
Lines: 10
Message-ID: <4649e815$0$25917$ba4acef3@news.orange.fr>
Organization: les newsgroups par Orange
NNTP-Posting-Date: 15 May 2007 19:04:21 CEST
NNTP-Posting-Host: 83.113.177.64
X-Trace: 1179248661 news.orange.fr 25917 83.113.177.64:49193
X-Complaints-To: abuse@orange.fr
Xref: g2news1.google.com rec.radio.amateur.space:910

World Contact with aliens
http://www.antollma.info/spip.php?rubrique190
Contact Mondial avec les Extraterrestres
http://www.antollma.info/spip.php?rubrique188
Contatti Mondiali con gli Extraterrestri
http://www.antollma.info/spip.php?rubrique192
Weltweiter Kontakt mit den au�erirdischen
http://www.antollma.info/spip.php?rubrique189
Contacto Mundial con los Extraterrestres
http://www.antollma.info/spip.php?rubrique191

From -3403048444671944835
X-Google-Thread: 10e8ad,9232043345c8f5a8,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!news.glorb.com!
newsfeed2.telusplanet.net!newsfeed.telus.net!edtnps90.POSTED!53ab2750!not-for-mail
From: "one to be?" <1tobe@quazar.net>
Newsgroups: rec.radio.amateur.space
Subject: Where With all?
Lines: 20
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 5.50.4522.1200
X-MimeOLE: Produced By Microsoft MimeOLE V5.50.4522.1200
Message-ID: <Y6O2i.26658$Xh3.26186@edtnps90>
Date: Thu, 17 May 2007 01:22:00 GMT
NNTP-Posting-Host: 207.216.206.89
X-Trace: edtnps90 1179364920 207.216.206.89 (Wed, 16 May 2007 19:22:00 MDT)
NNTP-Posting-Date: Wed, 16 May 2007 19:22:00 MDT
Xref: g2news1.google.com rec.radio.amateur.space:911

So, the story begins like thins? Food it on me. Food it maybe on you! - ?

Not so lucky Foonjeye.

Sorry to say - that you can't go no where without "assistance" eh? You.
Me not sorry that in fact you are so totally completely absurd that -
well even you're 'Barber" can't scratch that naturally Yellow Hair piece.

Hey, that 's enough ass hole! Foonjeye Reports you to the impartialness of
the "official" pluck & garden wagon(s). Let's get going, - & see who is the
upper in this place eh?

(Hello, & welcome to my fable. It is a cross posting weird thing as it is
still in the making & it / IT is still in the ...) - compromising IT on you
eh?)

```
From 3672879572659498621
X-Google-Thread: 10e8ad,6855119a4c043b2d,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!news.glorb.com!
newsfeed2.telusplanet.net!newsfeed.telus.net!edtnps89.POSTED!53ab2750!not-for-mail
From: "one to be?" <1tobe@quazar.net>
Newsgroups: rec.radio.amateur.space
Subject: Yes, but where is it at?
Lines: 7
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 5.50.4522.1200
X-MimeOLE: Produced By Microsoft MimeOLE V5.50.4522.1200
Message-ID: <tFS2i.18947$V75.18415@edtnps89>
Date: Thu, 17 May 2007 06:31:53 GMT
NNTP-Posting-Host: 207.216.206.89
X-Trace: edtnps89 1179383513 207.216.206.89 (Thu, 17 May 2007 00:31:53 MDT)
NNTP-Posting-Date: Thu, 17 May 2007 00:31:53 MDT
Xref: g2news1.google.com rec.radio.amateur.space:912
```

Catchonga - who is the "Centralized" IT to be after in that - oh, they're
loose!

Foonjeye: Shit! Get the ray weapons. Shoot at will.

```
From 880543387573457772
X-Google-Thread: 10e8ad,f90fe041bc77e9ce,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news3.google.com!out01a.usenetserver.com!
news.usenetserver.com!in04.usenetserver.com!news.usenetserver.com!
newsfeed.telusplanet.net!newsfeed2.telusplanet.net!newsfeed.telus.net!
edtnps89.POSTED!53ab2750!not-for-mail
From: "one to be?" <1tobe@quazar.net>
Newsgroups: rec.radio.amateur.space
Subject: Where to be?
Lines: 11
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 5.50.4522.1200
X-MimeOLE: Produced By Microsoft MimeOLE V5.50.4522.1200
Message-ID: <OdT2i.18949$V75.17361@edtnps89>
Date: Thu, 17 May 2007 07:10:38 GMT
NNTP-Posting-Host: 207.216.206.89
X-Trace: edtnps89 1179385838 207.216.206.89 (Thu, 17 May 2007 01:10:38 MDT)
NNTP-Posting-Date: Thu, 17 May 2007 01:10:38 MDT
```

```
Xref: g2news1.google.com rec.radio.amateur.space:913
```

Catchonga: Releasethe "Docking Clamps" & shut off the main eingine turbines,
- suck out the air vetns & Release . s l o w l y ... the air pods with
"them" in
them.

Ah... Conditioning IT on you?

Foonjeye: shit head

```
From 1690937230395487690
X-Google-Thread: 10e8ad,d298c5b9b9a20b9d,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!news.glorb.com!
newsfeed2.telusplanet.net!newsfeed.telus.net!edtnps89.POSTED!53ab2750!not-for-mail
From: "one to be?" <1tobe@quazar.net>
Newsgroups: rec.radio.amateur.space
Subject: Foonjeye: where are you?
Lines: 12
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 5.50.4522.1200
X-MimeOLE: Produced By Microsoft MimeOLE V5.50.4522.1200
Message-ID: <tUT2i.19386$V75.10935@edtnps89>
Date: Thu, 17 May 2007 07:56:09 GMT
NNTP-Posting-Host: 207.216.206.89
X-Trace: edtnps89 1179388569 207.216.206.89 (Thu, 17 May 2007 01:56:09 MDT)
NNTP-Posting-Date: Thu, 17 May 2007 01:56:09 MDT
Xref: g2news1.google.com rec.radio.amateur.space:914
```

It seems the centralization in this palce is the , ...

But enough of my fable!

No Foody on you & a , ..

Massive Star Wars & Truman Show "IT" on all the News Groups,

oops, - i guess I'm off the Dinner List

```
From 8105275131817899263
X-Google-Thread: 10e8ad,f76f80830ac2cb40,start
X-Google-Attributes: gid10e8ad,public
```

```
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!news.glorb.com!
newsfeed2.telusplanet.net!newsfeed.telus.net!edtnps82.POSTED!53ab2750!not-for-mail
From: "one to be?" <1tobe@quazar.net>
Newsgroups: rec.radio.amateur.space
Subject: Ok, You Punk Rocker ~
Lines: 4
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 5.50.4522.1200
X-MimeOLE: Produced By Microsoft MimeOLE V5.50.4522.1200
Message-ID: <Mf43i.23223$g63.5819@edtnps82>
Date: Thu, 17 May 2007 22:00:12 GMT
NNTP-Posting-Host: 207.81.112.228
X-Trace: edtnps82 1179439212 207.81.112.228 (Thu, 17 May 2007 16:00:12 MDT)
NNTP-Posting-Date: Thu, 17 May 2007 16:00:12 MDT
Xref: g2news1.google.com rec.radio.amateur.space:915


Pack up and go Home!




From 5944692841312756563
X-Google-Thread: 10e8ad,9d5dcacab587bb16,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!news.glorb.com!
newsfeed2.telusplanet.net!newsfeed.telus.net!edtnps82.POSTED!53ab2750!not-for-mail
From: "Space Station, Alfa" <1tobe@quazar.net>
Newsgroups: rec.radio.amateur.space
Subject: Alf says it's all right?
Lines: 4
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 5.50.4522.1200
X-MimeOLE: Produced By Microsoft MimeOLE V5.50.4522.1200
Message-ID: <ni43i.23224$g63.7011@edtnps82>
Date: Thu, 17 May 2007 22:02:59 GMT
NNTP-Posting-Host: 207.81.112.228
X-Trace: edtnps82 1179439379 207.81.112.228 (Thu, 17 May 2007 16:02:59 MDT)
NNTP-Posting-Date: Thu, 17 May 2007 16:02:59 MDT
Xref: g2news1.google.com rec.radio.amateur.space:916


Just don't go to the Dentists




From 5140709576615623065
X-Google-Thread: 10e8ad,912ab00074ea49e2,start
```

```
X-Google-Thread: 10b9c8,912ab00074ea49e2,start
X-Google-Attributes: gid10e8ad,gid10b9c8,public
X-Google-Language: ENGLISH,ASCII
Path: g2news1.google.com!news2.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx01.iad01.newshosting.com!newshosting.com!
198.186.194.250.MISMATCH!transit3.readnews.com!news-out.readnews.com!panix!
rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-140 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sun, 20 May 2007 10:26:33 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 408
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000001c79ae1$de303990$6601a8c0@familyroom>
NNTP-Posting-Host: panix3.panix.com
Mime-Version: 1.0
Content-Type: text/plain;charset="iso-8859-1"
Content-Transfer-Encoding: quoted-printable
X-Trace: reader2.panix.com 1179671193 27754 166.84.1.3 (20 May 2007 14:26:33 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 20 May 2007 14:26:33 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Xref: g2news1.google.com rec.radio.amateur.space:917 rec.radio.info:302
```

AMSAT NEWS SERVICE
ANS-140

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:

* 2007 AMSAT Space Symposium and Annual Meeting - Call for Papers
* AMSAT at Dayton - Report From the Show

* AMSAT Journal Articles Due For Next Issue
* OSCAR-11 Report 16 May 2007
* Satellite Shorts From All Over
* ARISS Status Report for the Week of May 14, 2007

SB SAT @ AMSAT $ANS-140.01
2007 AMSAT Space Symposium and Annual Meeting - Call for Papers

AMSAT News Service Bulletin 140.01
>From AMSAT HQ SILVER SPRING, MD.
May 20, 2007
To All RADIO AMATEURS
BID: $ANS-140.01

This is the first call for papers for the 2007 AMSAT Space Symposium and Annual Meeting to be held October 25-28, 2007 in Pittsburgh, Pennsylvania.

Proposals for papers, symposium presentations, and poster presentations are invited on any topic of interest to the amateur satellite program. An emphasis for this year is an educational outreach to middle and high School students. In particular, papers on the following topics are solicited:

+ Students & Education
+ ARISS
+ AO-51
+ P3E
+ Eagle
+ Other satellite-related topics.

We request a one-page abstract by June 1, 2007. Camera ready copy on paper or in electronic form will be due by September 1, 2007 for inclusion in the printed symposium proceedings.

Abstracts and papers should be sent to:
Daniel Schultz N8FGV by e-mail to: n8fgv@amsat.org.

[ANS thanks the AMSAT 2007 Symposium Committee for the above information]

/EX

SB SAT @ AMSAT $ANS-140.02
AMSAT at Dayton - Report From the Show

AMSAT News Service Bulletin 140.02
>From AMSAT HQ SILVER SPRING, MD.
May 20, 2007
To All RADIO AMATEURS
BID: $ANS-140.02

As this bulletin is being released AMSAT members are enjoying a fun filled weekend at the 2007 Dayton Hamvention. AMSAT is having a successful weekend showing the amateur radio community our special aspect of communications while at the same time demonstrating how satellite techniques are within the reach of interested operators.

Taking up 5 Hamvention booth spaces AMSAT was able to demonstrate a half scale model of the Eagle satellite, the Eagle 70cm receiver, a full scale model of the Echo satellite, prototype ARISS antennas for the ISS, prototype SuitSat-2 antennas and helmet control box, and live tracking software interfaced with a working LVB tracker connected between a computer using a serial or USB connector and the Yaesu 5400/5500 rotor controller box driving an az-el rotor system.

AMSAT's latest publications and this year's AMSAT Dayton fashions were also available. These can be ordered via the AMSAT store on our web page after the Hamvention. All of this was brought out through the efforts of a team of approximately 25 volunteers. Thanks a million guys and gals!

After the booth was setup on Thursday afternoon prior to the offical opening of the Hamvention on Friday, the team enjoyed the annual AMSAT Pizza 'n Suds party at Marion's Piazza. This was a well attended party with about 50 satellite afficionados in attendance.

Keigh Pugh, W5IU coordinated the AMSAT satellite demonstrations. His team was able to run 6 demonstations on Friday, 7 on Saturday, and at press time an additional 5 demonstrations were planned for Sunday morning. SO-50, AO-7, AO-51, AO-27, and VO-52 were used for QSOs. Numerous comments were received at the booth about how well the demonstrations were presented, how remarkably well the signals were received, and how the individual now better understood satellite operating having seen it in person.

The AMSAT booth enjoyed a visit from Bill McArthur, KC5ACR, ISS Expediton 12 Commander who was at the Hamvention in support of planned ARRL activities.

The AMSAT Forum on Friday featured outstanding list of speakers and topics of interest to all AMSAT members. The forum drew over 100 interested radio amateurs. Barry Baines, WD4ASW, AMSAT-NA Corporate Secretary moderated the session.

The first speaker was Rick Hambly, W2GPS, President, AMSAT-NA who presented the "Summary of AMSAT-NA Activities in 2007". Rick reminded everyone in attendance of AMSAT's vision of HEO Satellites are our primary mission. AMSAT will assist LEO efforts undertaken by the educational community and other amateur radio groups.

Rick continued with a list of achievements for 2006 including the following:

- AO-51 has now passed 2 years of continous operation. Software upgrades and testing are now in progress to further improve this satellite and the operator's experience.

- SuitSat-1 captured the world's attention and helped promote amateur radio.

- SuitSat-2 development is currently underway and will feature an SDR transponder.

- AMSAT-NA support for AMSAT-DL's P3E provides funding, and staffing for design, testing, and integration.

- Eagle satellite development is on-going concurrently with P3E and the satellites will both share common modules and software.

- AMSAT's education outreach provides mentoring to student's who are designing, building, and launching satellites.

- The AMSAT Lab in Maryland was opened. The clean room equipment is currently being installed.

Bob McGwier, N4HY, AMSAT VP-Engineering, spoke on behalf of Peter Guelzow, DB2OS, to describe progress for AMSAT-DL's Phase 3-Express (P3E) satellite. P3E will provide a critical test bed for proof of concept of critical systems needed for the planned P5A mission to Mars. P3E is being built in an AO-13 spaceframe but will feature new electronics and software. It will also include the same Software Defined Transponder planned for AMSAT Eagle. Launch opportunities are currently being explored.

Bob then continued with an Eagle Status Update. His slides showed how the Software Defined Transponder will be integrated in Eagle. He discussed the exceptional increase in radio performance that the SDX technology will bring. Details were also discussed about the HELAPS power amplifier, phased array antennas, and the breakthough with getting the first 70 cm receiver debugged and working and currently starting performance testing. Bob described the features of the Advanced Communication Package. More details of Eagle will be provided in future issues of the AMSAT Journal.

Next was Gould Smith, WA4SXM, AO-51 Command Station, who spoke about "AMSAT-NA Satellite Operations and AO-51 Update." Gould descibed the work of the AO-51 Operations Group who are currently writing and testing new software to be uploaded into AO-51. He also gave everyone an overview of an AO-51 command station.

Frank Bauer, KA3HDO, AMSAT-NA Director-Human Space Flight, gave an impressive presentation of "ARISS and Future SuitSat Missions." Frank was able to include mission audio clips, SuitSat audio clips, and NASA video of SuitSat.

According to records, ARISS school contacts from the International

Space Station have reached over 15,000 students. Also, every ISS crew between Expedition 14 now on orbit through Expedition 19 in 2009 will have a licensed amateur radio operator aboard.

SuitSat-2 is currently under development. Work continues as the team awaits official approval by the various space agencies for a planned deployment in February, 2008. The SuitSat-2 project includes these features:

+ Expanded education outreach with prepared lesson plans.

+ Software Defined Transponder capable of supporting SSB, CW, FM voice, SSTV, and CW IDer. An uplink passband at approximately 145.9 MHz and downlink passband at approximately 437.6 MHz is being proposed.

+ SSTV support for up to 4 cameras.

+ Solar panels in addition to battery power to support the radio payload plus additional sensors, and 4 experimental packages.

Lou McFadin, W5DID demonstrated a prototype SuitSat-2 helmet mounted antenna for 2M and 70cm. He also showed the proven safety interlock control box used by the astronauts to activate SuitSat.

Howard Long, G6LVB continued the ARISS discussion by showing the new amateur radio equipment which will be included in ESA's Columbus Laboratory module to be attached to the ISS in early 2008. This will feature a linear transponder with L-band uplink and S-band downlink.

The "Under the Wings" Banquet held in the Air Force Museum was considered a major success. In addition to the meal on Friday evening over 300 participants were able to also enjoy touring the museum displays. We received many enthusiastic compliments at the booth the next day for this joint AMSAT/TAPR event.

Watch for more details, including photos coming in the next AMSAT Journal!

[ANS thanks everyone for the above information/

/EX

SB SAT @ AMSAT $ANS-140.03
AMSAT Journal Articles Due For Next Issue

AMSAT News Service Bulletin 140.03
>From AMSAT HQ SILVER SPRING, MD.
May 20, 2007

To All RADIO AMATEURS
BID: $ANS-140.03

Ed Long, WA4SWJ, Editor, The AMSAT Journal says, "It's time to submit your Journal articles for the May/June issue. I have a couple of articles already but, as always, need more. Please let me know if you have something to submit. I'll also be looking for the last minute article or two on the Hamvention. Those are needed very quickly after the event is over to keep everything on schedule."

[ANS thanks Ed, WA4SWJ for the above information]

/EX

SB SAT @ AMSAT $ANS-140.04
OSCAR-11 Report 16 May 2007

AMSAT News Service Bulletin 140.04
>From AMSAT HQ SILVER SPRING, MD.
May 20, 2007
To All RADIO AMATEURS
BID: $ANS-140.04

Clive, G3CWV writes, "OSCAR 11 RECEPTION REPORTS REQUESTED!"

OSCAR-11 might switch ON around 18/19 May and possibly 8/9 June. However, due to solar eclipses the satellite is likely to switch OFF, almost immediately, probably after less that one orbit. This brief period of activity could occur when the satellite is over any part of the world.

Any reception reports would be grately appreciated. Please send to the address below or post to amsat-bb.

Recently the satellite's 145.826 MHz beacon was heard from 22 to 28 April. The beacon switched ON as expected. This short period was of special interest since the solar eclipses started on 21 April and steadily increased each day, reaching a duration of 12.6 minutes when the beacon switched OFF. Thus it was an rare oportunity to study the effect of solar eclipses on the satellite.

Good signals were heard on most passes, although they became weaker towards the end of the ON period. Good copy of the telemetry was obtained.

Peter, ZL3TC reported hearing the satellite switch ON, after coming out of eclipse at 08:14 on 28 April. These observations suggest that the satellite's electronics may be suffering from low power supplies, before the watchgog timer cycle finally resets.

Clive summarized, "I am indebted to Ian ZL1AOX, Peter ZL3TC, David G8OQW, Jeff KB2M, Edward BX1AD, Sil ZL2CIA, Dave G1OCN, John K8YSE and Grant VK4JAZ for their reports. Many thanks!"

The Beacon frequency is VHF 145.826 MHz with AFSK FM ASCII Telemetry

Listeners to OSCAR-11 may be interested in visiting Clive's website. If you need to know what OSCAR-11 should sound like, there is a short audio clip for you to hear. The website contains an archive of news & telemetry data. It also contains details about using a soundcard or hardware demodulators for data capture. There is software for capturing data, and decoding ASCII telemetry. The URL is:
http://www.users.zetnet.co.uk/clivew/

73 Clive G3CWV   xxxxx@amsat.org (please replace xxxxx by g3cwv)

[ANS thanks Clive, G3CWV for the above information]

/EX

SB SAT @ AMSAT $ANS-140.05
Satellite Shorts From All Over

AMSAT News Service Bulletin 140.05
>From AMSAT HQ SILVER SPRING, MD.
May 20, 2007
To All RADIO AMATEURS
BID: $ANS-140.05

+ A message received from the GO-32/Techsat Ground Control Station said, "The debugging session for GO-32 is not over yet. We think we will need 2 more weeks. During this time, BBS's services will be suspended from time to time. Further more, in some cases the BBS content will be lost without warning. We apologize for the inconvenience to all GO-32 BBS's users. We hope to return the satellite to full operation soon."

+ Microwave Update 2007 is planned for October 18-19-20 in Historic Valley Forge near Philadelphia, Pennsylvania. This event will be hosted by the Pack Rats--Mt Airy VHF Radio Club. Full info and registration at http://www.microwaveupdate.org.

[ANS thanks everyone for the above information]

/EX

SB SAT @ AMSAT $ANS-140.06
ARISS Status Report for the Week of May 14, 2007

AMSAT News Service Bulletin 140.06
>From AMSAT HQ SILVER SPRING, MD.

May 20, 2007
To All RADIO AMATEURS
BID: $ANS-140.06

1. Successful School Contacts

On Wednesday, May 9, students attending Sunset Mesa Schools in Albuquerque, New Mexico participated in an ARISS contact. Nine students were able to ask one question each of astronaut Sunita Williams, KD5PLB. The Sandoval County Amateur Radio Emergency Service (SCARES) assisted with the contact and gave a presentation on ham radio to the 400 students. Two local television stations covered the event. KOB, News Channel 4 ran an article on the contact. See: http://kob.com/article/stories/S81164.shtml?cat=515

Escola Secund�ria de Estarreja in Portugal experienced an ARISS contact on Wednesday, May 9. Sunita Williams, KD5PLB, answered 11 questions put to her by seven students, all licensed ham operators, as approximately 200 students looked on. The contact was covered by nationwide and local television stations, a newspaper and a radio station.

An ARISS contact was completed with Barrhaven Public School in Ottawa, Ontario on Tuesday, May 15. The school is forming a space club which is open to first through fifth graders. Through this club, students will learn about the Space Station via the internet and guest speakers. They will track the ISS and plot its course. They will learn how to speak on the radio and work on related art projects such as posters, banners and murals. A contest will be held to create a mission patch which will be used on T shirts for the children. The media will be notified of the event. The audio for this event will be fed into the EchoLink AMSAT (101 377) and JK1ZRW (277 208) servers.

Kenneth J. Carberry Intermediate School, a 2004 NASA Explorer School, located in Emmett, Idaho completed an ARISS contact on Wednesday, May 16.
Students will research and create a Space Program timeline. They will research ISS astronauts and the countries involved with the Space Station, and determine the research being carried out onboard. They will also design posters to announce the upcoming event.

2. Upcoming School Contacts

Toyon Elementary School in San Jose, California, a 2004 NASA Explorer School, has been slated for an ARISS contact on Monday, May 21. Students will determine what experiments are being conducted on the ISS. They will research the astronauts and their backgrounds and write compositions based on their findings. A contest will be held to select questions which will be asked of the astronaut. A poster contest will be held and the posters will be displayed around town. Students and their families will be invited to the school�s Family Science Event which will feature guest speakers and hands on activities.

3. Crew Debrief Scheduled

The ARISS-U.S. team has been scheduled for a crew debrief with Michael Lopez-Alegria, KE5GTK. The Expedition 14 debrief is planned for Thursday, June 7.

[ANS thanks Carol, KB3LKI for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM

```
From 7127345899186530084
X-Google-Thread: 10e8ad,999c7f22ed4c9700,start
X-Google-Thread: 10b9c8,999c7f22ed4c9700,start
X-Google-Attributes: gid10e8ad,gid10b9c8,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx02.iad01.newshosting.com!newshosting.com!
198.186.194.247.MISMATCH!news-xxxfer.readnews.com!transit3.readnews.com!news-
out.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-134 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Sun, 20 May 2007 10:26:48 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 1185
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000101c79ae1$fe351800$6601a8c0@familyroom>
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader2.panix.com 1179671208 28395 166.84.1.6 (20 May 2007 14:26:48 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 20 May 2007 14:26:48 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
```

article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Xref: g2news1.google.com rec.radio.amateur.space:918 rec.radio.info:303

This report is organized into 4 parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites

SB SAT @ AMSAT W8ISS ANS-134.S1
WSR 134 Part 1 05/14/2007

AMSAT NEWS SERVICE BULLETIN 134.S1 FROM AMSAT HQ
SILVER SPRING, MD, May 14, 2007
TO ALL RADIO AMATEURS
BID: $ANS-134.S1

VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/V - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.870 to 145.930 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.875 to 145.925 MHz USB/CW

Indian Beacon: 145.859330 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsat.in/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is
active. Each transponder has a different beacon.
[10022006]
=====

```
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Voice Repeater ONLY - Software reload in progress
        Telemetry Downlink

Current Mode(s): FM Repeater - V/U
                 PBBS -        OFF
                 Digipeater -  OFF
                 Telemetry -    /U

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink:   145.880 MHZ FM
                       145.880 MHz USB
                       145.920 MHz FM
                      1268.700 MHz FM 67Hz PL tone
Digital Downlinks:     435.150 MHz FM 38k4 Digital, PBP, 1 watt output
                       435.150 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:        145.860 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      1268.700 mhz FM 9k6 PBP Digital
Beacon:                435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[05072007]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Uplink:   145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
```

U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10 minute timer.
[03262007]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Uplink: 145.850 MHz FM
Downlink: 436.795 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[03262007]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational depending on amount of Sunlight

```
Uplink:   145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink:  29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons:   29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW
```

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/

AO-7 Usage Guidelines on the AO-7 Log and Resource Site located at:
http://www.planetemily.com/ao7
[02262007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: Occasional Voice
Digipeater: OFF

Expedition 15 crew:

Commander:	Fyodor Yurchikhin	RN3FI
Flight Engineer:	Charles Simonyi	KE7KDP/HA5SIK
Flight Engineer:	Sunita Williams	KD5PLB

Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

SSTV TESTING:
Worldwide Reported Downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS, RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/

Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.
[04232007]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-134.S2
WSR 134 Part 2 05/14/2007

AMSAT NEWS SERVICE BULLETIN 134.S2 FROM AMSAT HQ
SILVER SPRING, MD, May 14, 2007
TO ALL RADIO AMATEURS
BID: $ANS-134.S2

CAPE1
Catalog Number:
Launch Date: April 17,2007

Status: In Orbit

Downlink: 435.245 MHz 9600 bs FSK AX.25
[04232007]
=====
CP3
Catalog Number:
Launch Date: April 17,2007

Status: In Orbit

Downlink: 436.845 MHz 1200 bps FSK AX.25
[04232007]
=====
CP4
Catalog Number:
Launch Date: April 17,2007

Status: In Orbit

Downlink: 437.325 MHz 1200 bps FSK AX.25
[04232007]
=====
Libertad-1
Catalog Number:
Launch Date: April 17, 2007

Status: In Orbit

Downlink: 437.405 MHz 1200 bps AFSK AX.25
[04232007]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712

```
Launch Date: January 10, 2007

Status: In Orbit

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder:  145.825 Mhz FM
[02052007]
=====
?O-?? FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: In Orbit

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[02262007]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: In Orbit

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01222007]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: In Orbit

Main Downlink:      145.825 Mhz FM APRS AX25
APRS Uplink:        145.825 MHz FM APRS AX25
Voice/PSK31 Uplink:  28.120 MHz

Packet to Voice ID: RAFT
[02262007]
=====
GENESAT-1 ?O-??
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Telemetry Beacon Downlink: 437.0670 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[01082007]
```

```
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Operational

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon:             437.2750 MHz CW

Callsign: JR8YJT
[10302006]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon:             437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
[03262007]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launched: June 30, 2003

Status: Operational

Beacon:     436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[01082007]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launched: February 21, 2006

Status: Semi-Operational - Constant Carrier only

Uplink:  1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan ? )
```

```
Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[01082007]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Voice Repeater ONLY - Software reload in progress
        Telemetry Downlink

Current Mode(s): FM Repeater - V/U
                 PBBS -        OFF
                 Digipeater -  OFF
                 Telemetry -   U

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink:   145.880 MHZ FM
                       145.880 MHz USB
                       145.920 MHz FM
                      1268.700 MHz FM 67Hz PL tone
Digital Downlinks:     435.150 MHz FM 38k4 Digital, PBP, 1 watt output
                       435.150 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:        145.860 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      1268.700 mhz FM 9k6 PBP Digital
Beacon:                435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[05072007]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001
```

```
Status: Operational only in Full Sun Light

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink:        144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[01082007]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[03262007]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Semi-operational - APRS usage through Digipeater

Uplink:         145.900 MHz FM 1200-baud Manchester FSK
                145.920 MHz FM 1200-baud Manchester FSK
                145.940 MHz FM 1200-baud Manchester FSK
                145.960 MHz FM 1200-baud Manchester FSK
Downlink:       437.026 MHz SSB 1200-baud PSK
Mode-S Beacon: 2401.1428 MHz

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.025 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12
```

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[03262007]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational

Telemetry Downlink: 145.826 MHz. FM 1200 AFSK

Mode-S Beacon: 2401.500 MHz - OFF
UHFBeacon: 435.025 MHz - OFF

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Official webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[01082007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: Occasional Voice
Digipeater: OFF

Expedition 15 crew:

Commander:	Fyodor Yurchikhin	RN3FI
Flight Engineer:	Charles Simonyi	KE7KDP/HA5SIK
Flight Engineer:	Sunita Williams	KD5PLB

Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

SSTV TESTING:
Worldwide Reported Downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:

```
V: Linear
U: Linear

Callsigns:
German:  DP0ISS
Russian: RS0ISS, RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.
[04232007]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-134.S3
WSR 134 Part 3 05/014/2007

AMSAT NEWS SERVICE BULLETIN 134.S3 FROM AMSAT HQ
SILVER SPRING, MD, May 14, 2007
TO ALL RADIO AMATEURS
BID: $ANS-134.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency:  437.305
                            2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink:        437.250 MHz FM 67Hz CTCSS
```

Voice Downlink: 2401.835 MHz FM
Packet Up/Downlink: 437.250 MHz 9k6 packet
Packet Downlink   2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Operational

Uplinks: 145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[01222007]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, call-sign KE6QMD, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks

V-band: 145.840 - 145.990 MHz CW/LSB
U-band: 435.550 - 435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB

```
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks
---------
S2-band:  2401.225 -  2401.475 MHz CW/USB
K-band:  24048.010 - 24048.060 MHz CW/USB
Beacon:   2401.323 MHz
         24048.035 MHz
[01222007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink:    145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site
at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater:         436.250 MHz

Uplinks: Mode B Repeater:  145.825 MHz
Mode J Digipeater:         145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz
```

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink: 145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Non-Operational

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP

U: RHCP

JARL English webpage: http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm
AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's CW
telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts.htm
[04302007]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012006]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: Downlink only

Uplinks: 145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[012212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

```
Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25
```

```
Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplinks:          145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink:      437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[01222007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
```

Beacon: 2401.220 MHz
[05012006]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink: 145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting): Non-Operational
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet: Non-Operational
Uplink: 145.8500 MHz MFSK 1200 BPS
Uplink: 145.8700 MHz MFSK 1200 BPS
Uplink: 145.8900 MHz MFSK 1200 BPS
Uplink: 145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon: 145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

```
Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink  29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
[01152007]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational
```

```
Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon:    29.352 MHz (intermittent)

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink:     21.260 to 21.300 MHz CW/USB
Downlink:  145.860 to 145.900 MHz CW/USB

Beacon:    145.860 MHz

Robot:     145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink:   21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon:   29.408 MHz

Robot:    29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-134.S4
WSR 134 Part 4 05/14/2007

AMSAT NEWS SERVICE BULLETIN 134.S4 FROM AMSAT HQ
SILVER SPRING, MD, May 14, 2007
TO ALL RADIO AMATEURS
BID: $ANS-134.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE
PROPOSED FOR LAUNCH AT THIS TIME:

Phase 5a Mars Mission
Catalog Number:
Proposed Launch Date: 2009 or 2011
```

Status: Design Phase

For the latest project status update please visit the AMSAT-DL P5-A web page:
http://ticket-to-mars.org
[01222007]
=====
PHASE 3E AO-??
Catalog number:
Proposed Launch Date: Late 2007

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/
[01222007]
=====
Eagle AO-??
Catalog Number:
Proposed Launch Date: Early/Mid 2009

Status: Design Phase

For the latest project status updates please visit the AMSAT-NA webpage:
http://www.amsat.org
[01222007]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)

* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

From -4758014024091541672
X-Google-Thread: fa844,50b51fc5521e8c89,start
X-Google-Thread: 10e8ad,50b51fc5521e8c89,start
X-Google-Thread: fb883,50b51fc5521e8c89,start
X-Google-Attributes: gidfa844,gid10e8ad,gidfb883,public,usenet
X-Google-Language: ENGLISH,ASCII
Path: g2news1.google.com!news1.google.com!news.glorb.com!lon-transit.news.telstra.net!lon-in.news.telstra.net!news.telstra.net!news-server.bigpond.net.au!53ab2750!not-for-mail
Newsgroups:
alt.uk.law,alt.underclass.org,rec.radio.amateur.space,reck.humour.funny,ru.general
Subject: finding the earth (frm sixteen billion light years away)
From: "the oracle of kuta(benighted)" <pepp@cyberdude.com>
Message-ID: <Xns993ACCC15C908peppcyberdudecom@61.9.191.5>
Followup-To: alt.uk.law
User-Agent: Xnews/5.04.25
Lines: 2534
Date: Thu, 24 May 2007 10:08:53 GMT
NNTP-Posting-Host: 144.138.87.129
X-Complaints-To: abuse@bigpond.net.au
X-Trace: news-server.bigpond.net.au 1180001333 144.138.87.129 (Thu, 24 May 2007 20:08:53 EST)
NNTP-Posting-Date: Thu, 24 May 2007 20:08:53 EST
Organization: BigPond Internet Services

Xref: g2news1.google.com alt.uk.law:9100 rec.radio.amateur.space:919 ru.general:79

finding the earth (frm sixteen billion light years away)
+++

[Song data auto inserted by jenny.exe at 18:03:29]
+++
Queen
'Bohemian Rhapsody.mp3'
+++

i'm
in a tincan

not far frm th moon

spinning

with windscreen

obscured bya shutter

operant conditioning

my operant psychic mind

th computer goes

bong and

th stick is live

i cant see anything but

i got to

stop th craft spinning and

line it up

at th earth

precisely

+++

training my homing sense

+++

th psychic one

+++

so many repetitions but

it's my life

out there

amongst th stars

+++

tiny steps

+++

"to giant leaps"

+++

i think i'm lined up

my

head givinme
endorphins so

i think i'm pointed right

i hit th button and

th windscreen
unrolls

to show wot th ship pointed at

earth ?

yes but

five degrees off

+++

we jumped up and down th first time that happened
three times ina row but

i'm usually within a degree

+++

times distance and

at sixteen billion light yrs

th whoel sky is

colour

cept for local black holes

+++

carry a big enough telescope around and

th universe looks quite different

may as well close yr eyes and jump

+++

a sea of stars

+++

too bright

+++

more drugs over here

and a bourbon

.
.
.

how many yrs of training
till i make that

first star jump

+++

how many yrs has it been ?

operant condtiioning the
operant psychic mind

+++

tryin t o write th manual

+++

[Song data auto inserted by jenny.exe at 18:09:25]
+++
The Kinks
'Tired of Waiting For You'
+++

th user manual
for th human mind

+++

th first concept u have to understand is

for every action
there's an equal and opposite reaction

wot is yr seat of intelligence ?

a whole bunch of complicated synapses
firing randomly

+++

intelligence comes frm th opposite

+++

level zero in th human mind

+++

or in th
computer mind

it;s random number generators

+++

we'll work togetehr
to get out of scrapes

i got two black hoels chasin me

go back in my psychic diary

and find out how i

[Song data auto inserted by jenny.exe at 18:11:58]
+++
James Blunt
'Goodbye My Lover'
+++

bugger

+++

had to go back
30 yrs

in my psychic diary

onth same date

to find th clues

on how to outfox em

but it was

there

+++

sometimes

as i bable shit
in my psychic diary

i wonder wot this thing
could mean

this insane shit i ramblign and then

i read back
a week before th latest disaster and go

oh

always wi th sevend ays ahead

+++

starship pilot

second class

+++

my gift
tested out to

seven days ahead of th ship

our early warning system

+++

untill we have a
larger playground

to traint h gift further

we stuck with
second class rating

+++

when they screw th ship together

chasin speed records

+++

boom
crack light speed and

umm

mr pilot sir
he;s had too many bongs

will u wake up and
steer th ship pls

we cant see anything

+++

bee mellow man

if there was a problem
i;'d know about it

+++

[Song data auto inserted by jenny.exe at 18:16:17]
+++
R�yksopp
'Kings Of Convenience - I Don't'
+++

i dont know what i can save you from

+++

well

hitting large meteorites for one thing

+++

th random number generator
will only get u so far

mine still better

+++

tryin to write my replacement

+++

whiel doin th management thing

teach yr underlings

to replace u

+++

simply
wriitn clues

to th song about to play

playin randomly
in any context is

operant psychic gift conditioning

+++

leave yr failures there

dont lie to yrself

first

+++

practise
makes
perfect

or as good as

+++

my life
is generally

in my gift;s hands

droppin as i do
into skatebowls

on a unicycle

+++

life is for living

u wanna live forever ?

u do understand

th only way ya could

was by not wanting to

+++

he who dares

wins

+++

[Song data auto inserted by jenny.exe at 18:20:12]
+++
David Seville
'I Told the Witchdoctor'
+++

my witchdoctor creed
and i got

360 thousand
confirmed psychic kills

+++

easy as

+++

nice little
windows notepad

who woulda thought

u;d help kill so many ppl

+++

ah man

+++

just

honing my razor sharp

psychic gift

+++

spinning

in free space

+++

where;s th bloody earth

and we gotta move out of it;s

gravitational influence

little does he know

bloody betelguese

+++

[Song data auto inserted by jenny.exe at 18:22:39]
+++

James Blunt
'Goodbye My Lover'
+++

oh dear

+++

our spiral arm

is packed bad enough

+++

is a black hole
th dead opposite
of a sun

+++

suckign in
matter

instead of flignin it out

+++

u do know
how many

rogue asteroids there are
dont ya

fuck we got some cleaning up to do

if we aint goin star wanderin

"even if'

+++

we havent gotten otu fo th heiosphere yet

th first

speed machien they build
will

flash past th fucker

+++

wot th fuck was that

+++

just th usual shit
countries and

power blocks

chasin speed records

+++

when th ship disappears

i think we mighta cracked it

+++

think about it
th light hittin yr eyeballs
was already there

no time for

th lgiht int h cabin

to get in

so hollow he singin

th ship is a

waif

+++

a ghostly apparition
th screens
unreadable

th ships eye

[Song data auto inserted by jenny.exe at 18:26:52]
+++
Harvey Danger
'Flagpole Sitta'
+++

is th mad prick in th cabin

turn left now

trust me

five degrees

+++

somethin big over there

we'll get it int h rplay

+++

cmeras clickinlike mad

high speed

we see after
we get there

+++

th stress
th star pilots endure is

part of why
they come frm th backgrounds they do

lots of biker kids

+++

ridin around th cops

+++

in ned kelly country

home

more drugs over here thang...

.
.
.

i'mnot blasting off
at that star

not doin it man
it aint there anymore

+++

that's
ten thousand yr old light

not flyin into an explosion
send a drone

+++

prove me wrong

+++

[Song data auto inserted by jenny.exe at 18:30:30]
+++
Machine Gun Fellatio
'Full Moon'
+++

it's th half moon
far more wicked
specially on a cusp

+++

a little over full

+++

went blooey ages ago

+++

got some news for ya

and it;s all bad

+++

none of us
registered pilots

will fly in that direction

+++

u spin in space for
that many hours

learnin to home on mother earth for yr reference
and u know

if it wont let u come back home

+++

not headed that way

we look form one of th sides maybe

out flank it

+++

it's a fuckin mess

i'm markin it as a go around

+++

frm wot i can gather
a whole spiral arm

gone blooey

+++

th chain reaction

headed down t th other arms

+++

th whoel cluster is
[Song data auto inserted by jenny.exe at 18:34:31]
+++
Metallica
'Metallica - Master Of Puppets'
+++

gunna go

+++

be some time before humanity travels thru that

+++

[Song data auto inserted by jenny.exe at 18:34:49]
+++
Pilot
'Magic'
+++

it;s just
findint th time
to crackenough planets
fo rtheir diamonds

for th star ship skins

i know

+++

th things ya bump into

th bullbar is needed

+++

munchin asteroids

lovely shark class

starship

+++

we'll build ya

settle down mungrel

+++

think big

+++

"fuck that, think huge"

hi huge how ya goin

"good as"

+++

he spit chips
th yougn nephew

when i told im

wot my diary page was titled

thrusday night
when he run away frm hoem friday night for th weekend

one of my babies is missing

+++

poor cunt

th witchdcotor is bastard

+++

[Song data auto inserted by jenny.exe at 18:37:58]
+++
The Kinks

'I'm Not Like Everybody Else'
+++

worse than a psychic mother

+++

a psychic uncle

+++

trained gift mate

+++

suck shit

+++

cept yr father
owns th house it;s

two and a half men

+++

he;s growin up

+++

we knew young fella

had forewarning

+++

no alarms

no surprises

no fuckin bullshit

+++

u too young man
are descended form th head inquisitor
of th french inquisition

it;s in yr blood

+++

at 12
i was teachin him how to avoid pigs
psychically

+++

so was his father

and how to run yr car out of petrol

at th pump

+++

[Song data auto inserted by jenny.exe at 18:41:32]
+++
Wolfmother
'Minds eye'
+++

me and little brother

both liek pullin that magic trick

+++

makes th bitch let down

+++

trust me

+++

th real kramer
knows wot i mean

when it conks out
fifty metres shy of th pumps

and

rolls up to th bowser

+++

who needs to cheat

u poor cunt

+++

20 yrs as a truck driver in th big city

fourth largest city n th world
by area

and we never carried a
map

+++

didnt have a truck license either
for 17 yrs but

never got caught

+++

ever

+++

how any hours i gotta spend

orienting

fuck man

+++

not hard t get bumped off course

it aint empty

+++

if it aint armoured

i aint climbin into it

+++

how d ya start this bucket of bolts ?

+++

this is worse than

flight testing

prototype suspension unicycles

in mossy drians

+++

fun as

+++

if ya got the right stuff

+++

pudknocker

+++

more borubon over here...

.
.
.

[Song data auto inserted by jenny.exe at 18:46:26]
+++
Arlo Guthrie
'The Motorcycle Song'
+++

substitute th words
motor cycle with
uni cycle

+++

u got it

+++

not surfin int won ont h uncicyle tonight my days of bein the

twon idiot are

well they;re gone

+++

fuckin dickless tracy

ya get enough photos of my sixpack abs ya bitch

+++

fuckin pig

+++

damn she was fuckable

+++

and i was in trouble

+++

i di not kill those two senior feds
not coppin to it

+++

yr strange girl
but i liek u

+++

[Song data auto inserted by jenny.exe at 18:49:21]
+++
Rehab
'It Don't Matter'
+++

fuck th rules
give me a call

+++

she broken enough already

+++

havent ya

+++

i did cart that
page thremodel

to th bleu sfestival
ont h edg eof th isalnd

last weekend

+++

was out ofi tenough
and she made me

take my one wheel
wheelchair

+++

no-one argues wi catwoman

+++

i'd date th bitch but

on my own terms

+++

u get enough photos ?

+++

fuckin ell

+++

just punting th prototype
thru th city;s

street furniture

th edge

+++

u got no idea

how many in brisvegas

hate u

+++

where's sharkie

got spat at

at th lcoal shop

not figuratively but

+++

th fortitude valley has

slipped

+++

who fuckin cares

+++

[Song data auto inserted by jenny.exe at 18:53:02]
+++
Groove Armada
'My Friend'
+++

cant ride my wheelchair in
and

catwoman is down th edge of th island

+++

if her ex
wasnt tryin to fuck me too

i;d sleep better

+++

mostly offerin his girlfriend but

i still celibate

but only just

+++

me and catwoman were
headbangin

at a blues festival
well

diesel was playin

+++

we got th hair for it

+++

look like twins

+++

she had one of my shirts on

+++

i'll admit to androgynous

+++

damn she luvs me

+++

danger will robinson

+++

we cuddled all night

+++

fcuks my

triple o rating

+++

th hashpipe is clogged scus ei

.
.
.

i'm scared
trathe rclimb int po th starship cabin

+

[Song data auto inserted by jenny.exe at 18:58:05]
+++
Ray Stevens
'Witchdoctor'
+++

i luv er too much
if i

fall in luv wi th th bitch
and she asks for something

th danger

+++

within my gift and
th fucker is trained

+++

her daughers
all stunning

all call me

hippie dude

they lived in hippie ocuntry
nto me

+++

missin ya catwoman

+++

rachel and i
th goth

are bad together

th things we talk about
ya gotta here this

+++

he did wot wi yr placenta
no i used t be an asian cook but

+++

hmm

+++

[Song data auto inserted by jenny.exe at 19:01:13]
+++
Black Eyed Peas
'My Humps'
+++

u keep yr leaky titties over there

+++

just stay there

+++

yr little brother
got

walkabout diseaseat his second rock conert

took th witchdcotr for ahuge crawl

he doesnt liek walking

+++

good for his development

+++

he flexible as

+++

so his mum
and u

not yr little sister
put her to shame

+++

if u doin yoga in th lounge
wi th withcdoctor

go and put on soem pants

now

+++

th young fella copies so much

had to do

wo tth witchdcotor did

on th unicycle
thru th crowd

doin laps

+++

ok little man

i'll play minder

+++

pls excuse us
th young fella got

walkabout disease
we dont discourage these things

+++

that;s it mate
three times around tha blonde

+++

gday

+++

we had fun

+++

i only went round her twice on th unicycle

least i;m honest

+++

come nippleclamp
away

.
.
.

th ways of th white man
must seem strange to u tonto

with yr firm rosy cheeks
oh nohing

+++

i spent too long
singin inth e fortitude valley

[Song data auto inserted by jenny.exe at 19:06:42]
+++
Tokyo Ghetto Pussy
'Tokyo Ghetto Pussy - Love Gene'
+++

love generation

+++

hows th strete goin rache ?

+++

he'll go back to it

so will u

+++

got a worse cuddle than gay lady jennifer
havent forgotten ya bitch

+++

complains about th same things

th ocarinas

+++

sore boobs

+++

sorry dear

here smoek this

+++

i forgot ow well yr old lady photographs
took my breath away

she's feelin a lot better

lookin more

pretty girl

+++

is he goin t jail
or is he in jail ?

+++

u can pick em

+++

no i'll kill anything

my reputation

17 yrs as a minder

trackin down gypsies fr money

+++

did u get a backrub with oil ?

yeah babe
u fell asleep

well
if it any good

u will

+++

nxt time

+++

we danced so many hours together
when i was fuckin morticia

we know each other

+++

u wont fuclk aroudn
liek th last head witch

of th gold coast

th bitch has moved

+++

and gone tame

+++

oh hello

+++
catwoman introducin me to
wild women again

gday

+++

gorgeous maori chick

full blood

+++

her white boyfriend squidged

we so aggressive together but

i used ot work wi

moari guys

+++

[Song data auto inserted by jenny.exe at 19:13:34]
+++
Tool
'Jimmy'
+++

and sing with a couple cook islander boys

three foot shoulders

+++

th gay guysstoppe dputtintheir hands down my pants
th chicks got more stoens

wuld climb th guitar case

+++

these chicks
one night were

thrwoin fifty cent coins at me

th big ones

liekd th music

on th corner of cavill av

surfers paradise

been attacked too many times

+++

run out into th surf
to knock down th

clown

+++

th unciycle
otnh edge of ridability

in th white zone of th surf
wot do

u see

+++

low tide hard sand and
aired down tyres

+++

flight test

wot can it do

+++

how far
down th beach

can i ride th unicycle
wi my eyes closed

fuck i hate ppl sometimes

+++

do i ahve to
wander to

a dead beach

no lights for

recoveries and

at least th cameras get th attack

+++

cunt

+++

bu ti didnt get attacked
itn h surf

last satdy night
it was all good

+++

[Song data auto inserted by jenny.exe at 19:19:01]
+++
Human League
'Don't you want me'
+++

so many smiles

+++

seemed happy to have me

+++

arent u cute ?

+++

white jack
seems to wanna say gday to ya

he's got taste anyway

+++

i brought a stacked redhead who luvs me but

she also knows me

me and th young fella have sloped off

+++

i think we're working

puttin smiles on dials

art for art's sake

dotn mention all th psychi kilsl my stuypid half brother

smiel and nod

+++

th dancn was fun

+++

where th fuck is th car ?

+++

no this happens a lot

+++

follow my nose

i always find it

+++

how long ya mungrel
do i gotta spin

+++

till my strike rate is
over 99.99 %

maybe more

+++

[Song data auto inserted by jenny.exe at 19:23:01]
+++
Budgie
'Nude Disintegrating Parachutis'
+++

th consequences are
dire

th only info we go tont hat thign we;re pointed at

is ten thosuand yrs old

+++

do we take off and

aim at it or

is it even there

+++

wot;s there now ?

+++

hmm

+++

i can see why th commercial carriers
have three starship pilots

sharint h load

tell me three times

is it fuckin safe?

if just oen is freakin out
we wont jump

+++

fuckin no way

that;s fr th cowboys

+++

jumpin into a supernova

+++

or a black hole
wot;s th difference

+++

how long can i

pcikc a direction

in th void
that;s badly named and

hit go

+++

when yr nerve fails

yr career is finished

+++

u'll wander

packed star arms

small jumps

under a light yr

though not strayin to close
to th mess

in th centre

+++

th grey nomads

+++

[Song data auto inserted by jenny.exe at 19:27:14]
+++
RadioHead
'Everything in it's Right Place'
+++

lookout
got no fuckin brakes

comin thru

three thosuand yrs old

ahsnt learned a lick of fuckin sense and

still ahsnt put a p[edestrian in hospital

kileld a few but

at over light speed

there;s no penalty

+++

fuck man

+++

u do bnetet rhtan that karma cops

no clso eby
star chart assesment till i get
wot i fuckin want

+++

not a fair deal
for my excess kllls

think again

+++

i'll wear th imbalance
and balance it later

cunts

+++

nuthin less than ownership
of th international space station

go and get fucked then

got a psychic daughter to house

+++

go fuck yrself

i can

care factor

+++

poor cunt got a white boys dick

+++

ah well

+++

dinky litle toy condoms

+++

havina bg dick helps
always
+

[Song data auto inserted by jenny.exe at 19:31:31]
+++
Lupe Fiasco (feat. Jill Scott)
'Daydreaming'
+++

i wish
less will
roll over and take it up th arse

u are fuckin jokin

+++

th second time
they ask ya to strip

for a living

in yr fourties

is fuckin nice

+++

lovely unicycle

+++

and my second name bein

eugene

+++

radar

+++

walter eugene o reilly

+++

u shoulda heard my ex
verscae lady jane

fuck man

+++

pronoucne it wrong

not th frnech way

in frnt of black and

ya just might

go out th window

+++

her two teenage
irish sons

thouyght i was
gunna launch acrossth dinner table and

take em both out

+++

so close
one more word little boy and

i gunna forget i fuck yr old lady

+++

[Song data auto inserted by jenny.exe at 19:35:33]
+++
Led Zeppelin
'Gallows Pole'
+++

u still ridjin oa man;s biek bennie ?
one wheel

+++

th operant conditioning

is a killer

+++

i started
seven yrs agioand

our prime minister
only jsut

finished signin th deal

that'll get us th space vehicles

+++

nice little defense treaty

dont write off johnny

got so many knives in his back he got

higher political objectives

+++

fuck man
i tempted to change my vote

+++

but

old smoothie

th treasurer we had to have

pushed fr it too

u were a ucnt

+++

when i see
oz

weathe rreportswith
th country belogns

on top of th globe

i'l believe it

fucksticks

how long those arrogant cunts

called us

the land

down under

+++

longest
human habitataion
o one island

ever

we got
naming rights and

th globe
wrong way up

sorry

+++

and oldest religion

+++

[Song data auto inserted by jenny.exe at 19:40:26]
+++
Foo Fighters
'Learn To Fly'
+++

fuckin puppies

+++

keep digging

+++

got some more surprises fr ya

+++

round our

ancient inland sea

+++

why i sit

i always

traveeled north but

always calle dit

goin dwon

+++

goin down to cairns
eighteen hundrd k's up north

+++

get fucked nickie
i did not fix th

state of origin match

+++

ok i did
get an epiphany
doin magic durin it but

i was out of it

+++

a few cockroaches screamin in th ether
i fixed th match

+++

ge fucked

+++

u giv eme tickets
and keep me out of it
and on camera

to stop me

dfoin magic on it

fuck ya

+++

i'm f'n biassed ok

+++

go and get fucked

+++

all's fair

+++

till th pm complains

+++

[Song data auto inserted by jenny.exe at 19:44:29]
+++
City High
'Song for you'
+++

now look johnny
i want joice's number

australian's all let us ring joice
cause she is young and free

yr fuckin jokin

+++

he hasnt fucked chicks

+++

pls be nice to im jeannette

we think he did a good thing

signing that treaty wi japan

+++

my nxt child named
jeannette

nettie

+++

now look catwoman
u;d had five and

still got a toddler
u got enough magic but

damn

+++

txt me with
wot;s for breakfast ?

i'm cookin bacon anbd eggs fr dinner

a rarity

+++

damn

+++

elizabeth nearly killed me

+++

so psychic

i had to give her my first born

hate her guts i

luv her

+++

just once
in my psychic diary i gotta

put seven bullets in her head

+++

ya dumb bitch

+++

when his crystal balls drop
good luck

+++

[Song data auto inserted by jenny.exe at 19:49:09]
+++
Nick Gilder
'Hot Child In The City'
+++

marko is goin wild

+++

andrew will too

+++

marko's grandfather
jumped a border
with a luger

at fifteen

at thirteen

i';d hotwire th old lady;s car

to go roller skating

+++

it;s in th blood

+++

never ask
off th wizard

he just migh tgiv eu
wot u asked for

+++

egotistical cunts
we go tth oldest civilization
th oldest religion and

naming rights

+++

it'll take a referendum

+++

wot;s that roofer mob;s motto ?

[deleted]

.
.
.

pirate jenny
"black"
'the land surfer"
+++
p.s.

+++[Song data auto inserted by jenny.exe at 19:52:54]
+++
Golden Earring
'Radar Love'
+++

```
From -6351045924479528777
X-Google-Thread: 10e8ad,c4ae852163a9747b,start
X-Google-Thread: 10b9c8,c4ae852163a9747b,start
X-Google-Attributes: gid10e8ad,gid10b9c8,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!news.glorb.com!news.linkpendium.com!
```

news.linkpendium.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-141 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Sat, 26 May 2007 09:10:19 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 1187
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000901c79f97$3884e4e0$6601a8c0@familyroom>
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader2.panix.com 1180185019 1925 166.84.1.6 (26 May 2007 13:10:19 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sat, 26 May 2007 13:10:19 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Xref: g2news1.google.com rec.radio.amateur.space:920 rec.radio.info:313

This report is organized into 4 parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites

SB SAT @ AMSAT W8ISS ANS-141.S1
WSR 141 Part 1 05/21/2007

AMSAT NEWS SERVICE BULLETIN 141.S1 FROM AMSAT HQ
SILVER SPRING, MD, May 21, 2007
TO ALL RADIO AMATEURS
BID: $ANS-141.S1

VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/V - Indian Transponder

Frequencies:

Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.870 to 145.930 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.875 to 145.925 MHz USB/CW

Indian Beacon: 145.859330 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsat.in/hamsat.htm

To know what transponder is switched on please listen for the beacon that is
active. Each transponder has a different beacon.
[10022006]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Voice Repeater ONLY - Software reload in progress
        Telemetry Downlink

Current Mode(s): FM Repeater - V/U
                 PBBS -   OFF
                 Digipeater - OFF
                 Telemetry -   /U

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink: 145.880 MHZ FM
                       145.880 MHz USB
                       145.920 MHz FM
                      1268.700 MHz FM 67Hz PL tone
Digital Downlinks: 435.150 MHz FM 38k4 Digital, PBP, 1 watt output
                       435.150 MHz FM 9k6 Digital, Pacsat Broadcast Protocol
                      2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Digital, Pacsat Broadcast Protocol
                      1268.700 mhz FM 9k6 PBP Digital
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear

V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[05072007]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute
timer
   on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the
repeater on
   and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset
the 10
   minute timer.
[03262007]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Uplink: 145.850 MHz FM
Downlink: 436.795 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[03262007]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational depending on amount of Sunlight

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/

AO-7 Usage Guidelines on the AO-7 Log and Resource Site located at:
http://www.planetemily.com/ao7
[02262007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: Occasional Voice
Digipeater: OFF

Expedition 15 crew:

Commander:	Fyodor Yurchikhin	RN3FI
Flight Engineer:	Sunita Williams	KD5PLB
Flight Engineer:	Oleg Kotov	

Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

SSTV TESTING:

Worldwide Reported Downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS
                      RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line is
NOT translated from Russian and posted.
[05212007]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-141.S2
WSR 141 Part 2 05/21/2007

AMSAT NEWS SERVICE BULLETIN 141.S2 FROM AMSAT HQ
SILVER SPRING, MD, May 21, 2007
TO ALL RADIO AMATEURS
BID: $ANS-141.S2

CAPE1
Catalog Number:
Launch Date: April 17,2007

Status: In Orbit

Downlink: 435.245 MHz 9600 bs FSK AX.25
[04232007]
=====
CP3
Catalog Number:
Launch Date: April 17,2007

Status: In Orbit

```
Downlink: 436.845 MHz 1200 bps FSK AX.25
[04232007]
=====
CP4
Catalog Number:
Launch Date: April 17,2007

Status: In Orbit

Downlink: 437.325 MHz 1200 bps FSK AX.25
[04232007]
=====
Libertad-1
Catalog Number:
Launch Date: April 17, 2007

Status: In Orbit

Downlink: 437.405 MHz 1200 bps AFSK AX.25
[04232007]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: In Orbit

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder:  145.825 Mhz FM
[02052007]
=====
?O-?? FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: In Orbit

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[02262007]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: In Orbit

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01222007]
```

=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: In Orbit

Main Downlink: 145.825 Mhz FM APRS AX25
APRS Uplink: 145.825 MHz FM APRS AX25
Voice/PSK31 Uplink: 28.120 MHz

Packet to Voice ID: RAFT
[02262007]
=====
GENESAT-1 ?O-??
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Telemetry Beacon Downlink: 437.0670 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[01082007]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Operational

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon: 437.2750 MHz CW

Callsign: JR8YJT
[10302006]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon: 437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
[03262007]

```
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launched: June 30, 2003

Status: Operational

Beacon:     436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[01082007]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launched: February 21, 2006

Status: Semi-Operational - Constant Carrier only

Uplink:  1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan ? )

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[01082007]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Voice Repeater ONLY - Software reload in progress
        Telemetry Downlink

Current Mode(s): FM Repeater - V/U
                 PBBS -        OFF
                 Digipeater -  OFF
                 Telemetry -   U

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink:   145.880 MHZ FM
                       145.880 MHz USB
                       145.920 MHz FM
                      1268.700 MHz FM 67Hz PL tone
Digital Downlinks:     435.150 MHz FM 38k4 Digital, PBP, 1 watt output
                       435.150 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
```

```
                      2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:        145.860 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      1268.700 mhz FM 9k6 PBP Digital
Beacon:                435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[05072007]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Operational only in Full Sun Light

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink:        144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[01082007]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12
```

```
More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[03262007]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Semi-operational - APRS usage through Digipeater

Uplink:         145.900 MHz FM 1200-baud Manchester FSK
                145.920 MHz FM 1200-baud Manchester FSK
                145.940 MHz FM 1200-baud Manchester FSK
                145.960 MHz FM 1200-baud Manchester FSK
Downlink:       437.026 MHz SSB 1200-baud PSK
Mode-S Beacon: 2401.1428 MHz

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.025 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[03262007]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational

Telemetry Downlink: 145.826 MHz. FM 1200 AFSK

Mode-S Beacon:     2401.500 MHz - OFF
UHFBeacon:          435.025 MHz - OFF

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Official webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[01082007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: Occasional Voice
```

Digipeater: OFF

Expedition 15 crew:
Commander: Fyodor Yurchikhin   RN3FI
Flight Engineer: Sunita Williams   KD5PLB
Flight Engineer: Oleg Kotov

Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

SSTV TESTING:
Worldwide Reported Downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS
                     RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.
[05212007]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-141.S3
WSR 141 Part 3 05/21/2007

AMSAT NEWS SERVICE BULLETIN 141.S3 FROM AMSAT HQ
SILVER SPRING, MD, May 21, 2007

TO ALL RADIO AMATEURS
BID: $ANS-141.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 MHz FM 67Hz CTCSS
Voice Downlink: 2401.835 MHz FM
Packet Up/Downlink: 437.250 MHz 9k6 packet
Packet Downlink   2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Operational

Uplinks: 145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[01222007]

=====

NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, callsign KE6QMD, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]

=====

SO-42 SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]

=====

SO-41 SAUDISAT-1A
Catalog number: 26545

Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks

V-band: 145.840 - 145.990 MHz CW/LSB
U-band: 435.550 - 435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks

S2-band: 2401.225 - 2401.475 MHz CW/USB
K-band: 24048.010 - 24048.060 MHz CW/USB
Beacon: 2401.323 MHz
         24048.035 MHz
[01222007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site
at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]

```
=====
SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater:         436.250 MHz

Uplinks: Mode B Repeater:  145.825 MHz
Mode J Digipeater:         145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink:   145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK
```

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Non-Operational

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

JARL English webpage: http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm
AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's CW
telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts.htm
[04302007]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012006]
=====

```
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: Downlink only

Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[012212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HL01-11
BBS: HL01-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
```

```
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplinks:          145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink:      437.125 MHz
```

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[01222007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink: 145.825 MHz FM 1200 Baud AFSK
Beacon: 2401.220 MHz
[05012006]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink: 145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting): Non-Operational
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet: Non-Operational
Uplink: 145.8500 MHz MFSK 1200 BPS
Uplink: 145.8700 MHz MFSK 1200 BPS
Uplink: 145.8900 MHz MFSK 1200 BPS
Uplink: 145.9100 MHz MFSK 1200 BPS

```
Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon:   145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink  29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
[01152007]
=====
AO-5 Australis-OSCAR 5
```

```
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon:    29.352 MHz (intermittent)

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink:     21.260 to 21.300 MHz CW/USB
Downlink:  145.860 to 145.900 MHz CW/USB

Beacon:    145.860 MHz

Robot:     145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational
```

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-141.S4
WSR 141 Part 4 05/21/2007

AMSAT NEWS SERVICE BULLETIN 141.S4 FROM AMSAT HQ
SILVER SPRING, MD, May 21, 2007
TO ALL RADIO AMATEURS
BID: $ANS-141.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE
PROPOSED FOR LAUNCH AT THIS TIME:

Phase 5a Mars Mission
Catalog Number:
Proposed Launch Date: 2009 or 2011

Status: Design Phase

For the latest project status update please visit the AMSAT-DL P5-A web page:
http://ticket-to-mars.org
[01222007]
=====
PHASE 3E AO-??
Catalog number:
Proposed Launch Date: Late 2007

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/
[01222007]
=====
Eagle AO-??
Catalog Number:
Proposed Launch Date: Early/Mid 2009

Status: Design Phase

For the latest project status updates please visit the AMSAT-NA webpage:
http://www.amsat.org
[01222007]
NNNN

/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

```
From -325287689102015262
X-Google-Thread: 10e8ad,4a503785d062ef06,start
X-Google-Thread: 10b9c8,4a503785d062ef06,start
X-Google-Attributes: gid10e8ad,gid10b9c8,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx01.iad01.newshosting.com!newshosting.com!
198.186.194.250.MISMATCH!transit3.readnews.com!news-out.readnews.com!panix!
rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-147 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sun, 27 May 2007 22:17:37 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 313
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000d01c7a0cc$bb43be20$6601a8c0@familyroom>
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader2.panix.com 1180318657 20187 166.84.1.6 (28 May 2007 02:17:37 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Mon, 28 May 2007 02:17:37 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Xref: g2news1.google.com rec.radio.amateur.space:921 rec.radio.info:318
```

AMSAT NEWS SERVICE
ANS-147

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:

* Dayton AMSAT Report
* CQ Hall of Famer's
* ISS Radio Reconfiguration
* LVB Tracker Boards
* ARISS Status Report for the Week of May 21, 2007

SB SAT @ AMSAT $ANS-147.01
Dayton AMSAT Report

AMSAT News Service Bulletin 147.01
>From AMSAT HQ SILVER SPRING, MD.
May 27, 2007
To All RADIO AMATEURS
BID: $ANS-147.01

Once again the AMSAT booth was a target of satellite enthusiasts looking for the latest information on satellite activity. There was a model of Eagle and several of the modules being considered for the satellite on display. Our construction staff answered many inquiries and described actual tasks ahead to put this bird into orbit. A large banner indicating Eagle is in the building stage underlines the need for funding to be building as well.
A Phase 3 E brochure was on the table to show its readiness to begin the long trek to the launching pad as well. Remember there is a direct relationship of funding vs. a successful launch.
On Friday night, the joint AMSAT/TAPR dinner held under the wings of aircraft at the Air Force Museum was a great success. Comments after the dinner were positive and all enjoyed a great evening of table chatter and aircraft viewing.
A special thanks to our contacts in Dayton for making the Hamvention run so smooth for those that assisted in the booth and presented at the SRO forums.

[ANS thanks the AMSAT 2007 Hamvention Committee for the above information]

/EX

SB SAT @ AMSAT $ANS-147.02
CQ Hall of Famer's

AMSAT News Service Bulletin 147.02
>From AMSAT HQ SILVER SPRING, MD.
May 27, 2007
To All RADIO AMATEURS
BID: $ANS-147.02

Richard Moseson, W2VU, Editor of CQ Amateur Radio Magazine announced CQ Hall of Fame Inductees for 2007 at the Dayton Hamvention. There are 15 inductees into the Amateur Radio Hall of Fame and three new members each of the DX Hall of Fame and the Contest Hall of Fame.

The CQ Amateur Radio Hall of Fame honors individuals who:

1) Whether licensed hams or not, who have made significant contributions to amateur radio; and/or ...

2) As licensed amateurs, have made significant contributions either to amateur radio, to their professional careers or to some other aspect of life on our planet.

Two radio amateurs were recognized for their contributions for amateur radio in space:

+ Bill McArthur KC5ACR - Astronaut who set various ham radio operating records from the International Space Station, including being the first person to complete WAS (Worked All States), WAC (Worked All Continents) and DXCC (DX Century Club) from orbit.

+ Farrell Winder, W8ZCF - Transmitted first SSTV signals to MIR space station. Active with MAREX (MIR Amateur Radio EXperiment) and Suitsat-1 planning teams.

AMSAT congratulates everyone recognized for their remarkable contributions to amateur radio!

[ANS thanks Richard Moseson, W2VU and CQ Amateur Radio Magazine for the above information]

/EX

SB SAT @ AMSAT $ANS-147.03
ISS Radio Reconfiguration

AMSAT News Service Bulletin 147.03
>From AMSAT HQ SILVER SPRING, MD.
May 27, 2007
To All RADIO AMATEURS
BID: $ANS-147.03

Kenneth, N5VHO, Project Engineer for the ARISS Program, reported this week, "Some short term reconfigurations to the Kenwood radio were attempted on May 21 with limited success."

Kenneth described progress aboard ISS as, "The preset channels that are used for many of the day to day operations are still inaccessible. The good news is that a few of the more commonly used configurations were able to be stored in the radio. One of the modes that was able to be partially restored was the packet system but the operations will be on 145.825 simplex. General voice communication as well as configurations to support school contacts were also saved."

The ARISS team continues to work on a solution for a full restoration of the radio which is required to return full functionality of the radio system. This process will require access to a computer system and certification of the required software. This request is being worked with all necessary international space agencies so it is thought that it will take a significant amount of time to get all parties involved satisfied before the actual restoration can occur.

In summary, the current ISS radio configuration being tested includes:

+ 145.825 MHz simplex is for packet operations only.

+ Voice frequencies have not changed (144.490 up and 145.800 down for ITU regions 2 & 3 or 145.200 up and 145.800 down for ITU region 1)

In closing, Kenneth wrote, "In the mean time, enjoy the packet operations when the crew is unavailable and keep listening just in case one of the ISS crew decide to give out a 'CQ' over your part of the world."

[ANS thanks Kenneth, N5VHO for the above information]

/EX

SB SAT @ AMSAT $ANS-147.04
LVB Tracker Boards

AMSAT News Service Bulletin 147.04
>From AMSAT HQ SILVER SPRING, MD.
May 27, 2007
To All RADIO AMATEURS
BID: $ANS-147.04

Gould, WA4SXM noted, "Howard Long's LVB Tracker boards were a huge success at Dayton. We are exploring offering more options in response to requests from people in Dayton."

Possible combinations are:
1) bare board with info CD
2) board and parts kit with LCD
3) built board
4) built board in an enclosure

Gould requests feedback regarding the configuration the satellite users would rather have:

- + The bare main board/CD would be probably $25
- + Parts kit around $75
- + Parts kit plus the board/CD around $100
- + Built board around $120
- + Unit in enclosure around $150

Gould said, "These are approximate prices, we need to explore further what the final cost will be. We will decide what to offer depending upon the responses received. Let me know what you would like to have available via e-mail at wa4sxm@amsat.org."

Some of the CDs included with the LVB boards at Dayton did not have the parts list on them.

Kevin, WA6FWF who created the list, is now hosting the parts list document. So those of you that did not get the parts list on your CD, you can download from Kevin's site.   Thanks, Kevin.

http://wa6fwf.ham-radio-op.net/Downloads/LVB_USparts.doc

[ANS thanks Gould, WA4SXM for the above information]

/EX

SB SAT @ AMSAT $ANS-147.05
ARISS Status Report for the Week of May 21, 2007

AMSAT News Service Bulletin 147.05
>From AMSAT HQ SILVER SPRING, MD.
May 27, 2007
To All RADIO AMATEURS
BID: $ANS-147.05
Amateur Radio on the International Space Station (ARISS) Status Report
May 21, 2007

1.   Canadian School Contact Successful

On Tuesday, May 15, students attending Barrhaven Public School in Ottawa, Ontario experienced an Amateur Radio on the International Space Station (ARISS) contact. Sunita Williams, KD5PLB, answered 21 questions posed to her by 11 students. The audio was fed into the EchoLink AMSAT (101 377) and JK1ZRW (277 208) servers and received 19 connections from 5 countries. Audio was also webcast via NRC Canada and had 300 connections made by schools and other organizations. Approximately 500 witnessed the event including a representative from the Russian embassy.
  Corporate representatives also attended and have pledged support for future contacts. Some media outlets were present to report on the event.

2.   NASA Explorer School Participates in ARISS Contact

Kenneth J. Carberry Intermediate School, a 2004 NASA Explorer School, located in Emmett, Idaho participated in an Amateur Radio on the International Space Station (ARISS) contact on Wednesday, May 16. Sunita Williams, KD5PLB, answered 16 questions posed to her by 10 students. Boise's Channel 7, the Idaho Statesman, radio station KIDO, and another newspaper were present to cover the event. The Idaho Statesman posted a story to its website. See:
http://www.idahostatesman.com/273/story/84570.html

KTVB Channel 7 News posted a video of the event to its site. See:
http://www.ktvb.com/video/index.html?nvid=144532

3. Upcoming School Contacts

Toyon Elementary School in San Jose, California, a 2004 NASA Explorer School, has been slated for an Amateur Radio on the International Space Station (ARISS) contact on Monday, May 21 at 17:21 UTC. Students will determine what experiments are being conducted on the ISS. They will research the astronauts and their backgrounds and write compositions based on their findings. A contest will be held to select questions which will be asked of the astronaut. A poster contest will be held and the posters will be displayed around town. Students and their families will be invited to the school's Family Science Event which will feature guest speakers and hands on activities.

EFLS Sainte-Marie SUARLEE in Suarlee, Namur, Belgium has been slated for an Amateur Radio on the International Space Station (ARISS) contact on Tuesday, May 29 at 07:22 UTC via the telebridge station W6SRJ in California. The Sainte Marie School is located in Suarlee, a village in Wallonia, the French speaking region of Belgium. Sixty-five children, ages 3 - 12 attend the school. There are nineteen 10 - 12 year olds in the class that will participate in the question and answer session with the ISS. The students are excited to be participating in this contact and have been studying the distances between the planets of the solar system. They have also been using the Internet and newspapers to gather information about recent space activities.

NASA Johnson Space Center (Gilruth) Teacher to Teacher Workshop has been scheduled for an Amateur Radio on the International Space Station (ARISS) contact on Thursday, May 31 at 17:32 UTC via the telebridge station WH6PN in Hawaii. Approximately 250 K-12 teachers from across the country will be participating in many sessions throughout the two day workshop including Constructive Chaos, Correcting Misconceptions in Science, Engineering Your Way to the Moon, Mars, and Beyond-CEV, Hooked on Math, NASA STS-118 Engineering Challenge, NCLB: Past, Present, and Future, Analogical Reasoning: Real-World Examples for Scientific Concepts, Engineering Design Challenges Program, NASA in Every Child's World, Robotics, and many more. The event is a partnership between NASA and the U.S. Dept. of Education. U.S. Secretary of Education, Dr. Margaret Spellings and the AA for NASA Education, Dr. Joyce Winterton may attend.

4. ARISS at Dayton Hamvention

The Dayton Hamvention was held at the Hara Arena Complex in Dayton, Ohio over the May 18 - 20 weekend. The American Radio Relay League (ARRL) and the Radio Amateur Satellite Corporation (AMSAT) both supported exhibit booths at the event. Amateur Radio on the International Space Station (ARISS) was also represented there, as several ARISS members gave presentations on the program and the SuitSat-2 project. The Dayton Hamvention is an internationally attended amateur radio convention that draws crowds of 25,000 annually.

ARISS Chairman Frank Bauer's presentation, "ARISS and Future SuitSat Missions," may be viewed on the AMSAT website. See:
http://www.amsat.org/amsat/ariss/Presentations/Dayton%20Hamvention/Dayton%202007%20Final.pdf

Accompanying videos on Lunar Exploration and SuitSat-1 Deployment may also be viewed:
http://www.amsat.org/amsat/ariss/Presentations/Dayton%20Hamvention/Lunar_Exploration_Trailer.mp4
http://www.amsat.org/amsat/ariss/Presentations/Dayton%20Hamvention/SuitSat
Deploy (Short).wmv

[ANS thanks Carol, KB3LKI for the above information]

/EX

73,
This week's ANS Editor,
Dee Interdonato, NB2F

From -8533207189064746525
X-Google-Thread: 10e8ad,799a4d378877eb3c,start
X-Google-Thread: 10b9c8,799a4d378877eb3c,start
X-Google-Attributes: gid10e8ad,gid10b9c8,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx02.iad01.newshosting.com!newshosting.com!
198.186.194.250.MISMATCH!transit3.readnews.com!news-out.readnews.com!news-
out.readnews.com!news-xxxfer.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-148 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Fri, 1 Jun 2007 20:34:49 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 1212

```
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <004001c7a4ad$d53cd660$6601a8c0@familyroom>
NNTP-Posting-Host: panix3.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader2.panix.com 1180744489 26593 166.84.1.3 (2 Jun 2007 00:34:49 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sat, 2 Jun 2007 00:34:49 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Xref: g2news1.google.com rec.radio.amateur.space:922 rec.radio.info:322
```

This report is organized into 4 parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites

SB SAT @ AMSAT W8ISS ANS-148.S1
WSR 148 Part 1 05/28/2007

AMSAT NEWS SERVICE BULLETIN 148.S1 FROM AMSAT HQ
SILVER SPRING, MD, May 28, 2007
TO ALL RADIO AMATEURS
BID: $ANS-148.S1

VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/V - Indian Transponder

Frequencies:
Indian Transponder:
```
Uplink:   435.220 to 435.280 MHz LSB/CW
Downlink: 145.870 to 145.930 MHz USB/CW
```

Dutch Transponder:
```
Uplink:   435.225 to 435.275 MHz LSB/CW
Downlink: 145.875 to 145.925 MHz USB/CW
```

```
Indian Beacon:  145.859330 MHZ CW
Dutch Beacon:   145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsat.in/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is
active. Each transponder has a different beacon.
[10022006]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Voice Repeater
        Telemetry Downlink
        Software reload in progress

Current Mode(s): FM Repeater - V/U
                 PBBS -        OFF
                 Digipeater -  OFF
                 Telemetry -    /U

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink:   145.880 MHZ FM
                       145.880 MHz USB
                       145.920 MHz FM
                      1268.700 MHz FM 67Hz PL tone
Digital Downlinks:     435.150 MHz FM 38k4 Digital, PBP, 1 watt output
                       435.150 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:        145.860 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      1268.700 mhz FM 9k6 PBP Digital
Beacon:                435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear
```

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[05282007]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Current Mode: V/U

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer
   on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on
   and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10
   minute timer.
[05282007]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Current Mode: V/U

Uplink: 145.850 MHz FM
Downlink: 436.795 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org

[05282007]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational depending on amount of Sunlight

Current Mode: Listen before transmitting

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz CW
145.972 MHz CW
435.100 MHz CW
2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/

AO-7 Usage Guidelines on the AO-7 Log and Resource Site located at:
http://www.planetemily.com/ao7
[05282007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Mode: Occasional Voice/Packet
Digipeater

Expedition 15 crew:

Commander:	Fyodor Yurchikhin	RN3FI
Flight Engineer:	Sunita Williams	KD5PLB
Flight Engineer:	Oleg Kotov	

Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

SSTV TESTING:
Worldwide Reported Downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS
RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line is
NOT translated from Russian and posted.
[05282007]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-148.S2
WSR 148 Part 2 05/28/2007

AMSAT NEWS SERVICE BULLETIN 148.S2 FROM AMSAT HQ
SILVER SPRING, MD, May 28, 2007
TO ALL RADIO AMATEURS
BID: $ANS-148.S2

CAPE1
Catalog Number:
Launch Date: April 17,2007

Status: In Orbit

Downlink: 435.245 MHz 9600 bs FSK AX.25
[04232007]
=====
CP3
Catalog Number:
Launch Date: April 17,2007

```
Status: In Orbit

Downlink: 436.845 MHz 1200 bps FSK AX.25
[04232007]
=====
CP4
Catalog Number:
Launch Date: April 17,2007

Status: In Orbit

Downlink: 437.325 MHz 1200 bps FSK AX.25
[04232007]
=====
Libertad-1
Catalog Number:
Launch Date: April 17, 2007

Status: In Orbit

Downlink: 437.405 MHz 1200 bps AFSK AX.25
[04232007]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: In Orbit

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder:  145.825 Mhz FM
[02052007]
=====
?O-?? FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: In Orbit

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[02262007]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: In Orbit

Uplink/Downlink: 145.825 Mhz FM APRS AX25
```

[01222007]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: In Orbit

Main Downlink: 145.825 Mhz FM APRS AX25
APRS Uplink: 145.825 MHz FM APRS AX25
Voice/PSK31 Uplink: 28.120 MHz

Packet to Voice ID: RAFT
[02262007]
=====
GENESAT-1 ?O-??
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Telemetry Beacon Downlink: 437.0670 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[01082007]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Operational

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon: 437.2750 MHz CW

Callsign: JR8YJT
[10302006]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon: 437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/

```
[03262007]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launched: June 30, 2003

Status: Operational

Beacon:     436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[01082007]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launched: February 21, 2006

Status: Semi-Operational - Constant Carrier only

Uplink:  1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan ? )

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[01082007]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Voice Repeater
        Telemetry Downlink
        Software upgrade in progress

Current Mode(s): FM Repeater - V/U
                 PBBS -        OFF
                 Digipeater -  OFF
                 Telemetry -    /U

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink:   145.880 MHZ FM
                       145.880 MHz USB
                       145.920 MHz FM
                      1268.700 MHz FM 67Hz PL tone
Digital Downlinks:     435.150 MHz FM 38k4 Digital, PBP, 1 watt output
```

```
                       435.150 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:        145.860 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      1268.700 mhz FM 9k6 PBP Digital
Beacon:                435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[05282007]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Operational only in Full Sun Light

Current Mode: V

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink:        144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[05282007]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Current Mode: V/U

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[05282007]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Semi-operational

Current Mode: V/U
              Digipeater - Authorized for APRS usage

Uplink:         145.900 MHz FM 1200-baud Manchester FSK
                145.920 MHz FM 1200-baud Manchester FSK
                145.940 MHz FM 1200-baud Manchester FSK
                145.960 MHz FM 1200-baud Manchester FSK
Downlink:       437.026 MHz SSB 1200-baud PSK
Mode-S Beacon: 2401.1428 MHz

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.025 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[05282007]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational.

Current Mode: Telemetry Downlink - 2M

Telemetry Downlink: 145.826 MHz FM 1200 AFSK
Mode-S Beacon:     2401.500 MHz - OFF
UHFBeacon:          435.025 MHz - OFF

Mode and Antenna Polarization:
V: RHCP
S: LHCP
```

Due to solar eclipses which will continue until late August 2007, the beacon will only transmit for about one orbit every 21 days. It is unlikely to be heard during this period.

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[05282007]

=====

INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Mode: Occasional Voice/packet
Digipeater

Expedition 15 crew:
Commander: Fyodor Yurchikhin RN3FI
Flight Engineer: Sunita Williams KD5PLB
Flight Engineer: Oleg Kotov

Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

SSTV TESTING:
Worldwide Reported Downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS
RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.
[05282007]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-148.S3
WSR 148 Part 3 05/28/2007

AMSAT NEWS SERVICE BULLETIN 148.S3 FROM AMSAT HQ
SILVER SPRING, MD, May 28, 2007
TO ALL RADIO AMATEURS
BID: $ANS-148.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 MHz FM 67Hz CTCSS
Voice Downlink: 2401.835 MHz FM
Packet Up/Downlink: 437.250 MHz 9k6 packet
Packet Downlink   2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Operational

Uplinks: 145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[01222007]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, callsign KE6QMD, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====

```
SO-42 SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS:                SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink:   145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
V-band:   145.840 -  145.990 MHz CW/LSB
U-band:   435.550 -  435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks
---------
S2-band:  2401.225 -  2401.475 MHz CW/USB
K-band:  24048.010 - 24048.060 MHz CW/USB
Beacon:   2401.323 MHz
         24048.035 MHz
[01222007]
=====
UO-36 UoSAT-12
```

Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web site
at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink: 145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Non-Operational

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

JARL English webpage: http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm
AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts.htm
[04302007]
=====

```
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign:       POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012006]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: Downlink only

Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[012212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992
```

```
Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz
```

```
More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplinks:          145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink:      437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[01222007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
[05012006]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
```

```
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet: Non-Operational
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon:   145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.8500 - 145.9000 MHz SSB/CW
```

```
Downlink  29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
[01152007]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon:    29.352 MHz (intermittent)

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991
```

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB

Beacon: 145.860 MHz

Robot: 145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-148.S4
WSR 148 Part 4 05/28/2007

AMSAT NEWS SERVICE BULLETIN 148.S4 FROM AMSAT HQ
SILVER SPRING, MD, May 28, 2007
TO ALL RADIO AMATEURS
BID: $ANS-148.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE
PROPOSED FOR LAUNCH AT THIS TIME:

Phase 5a Mars Mission
Catalog Number:
Proposed Launch Date: 2009 or 2011

Status: Design Phase

For the latest project status update please visit the AMSAT-DL P5-A web page:
http://ticket-to-mars.org
[01222007]
=====
PHASE 3E AO-??
Catalog number:
Proposed Launch Date: Late 2007

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/
[01222007]
=====
Eagle AO-??
Catalog Number:
Proposed Launch Date: Early/Mid 2009

Status: Design Phase

For the latest project status updates please visit the AMSAT-NA webpage:
http://www.amsat.org
[01222007]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

- AMSAT News Service (ANS)
- General satellite discussion (AMSAT-BB)
- Orbit data (KEPS)
- Manned space missions (SAREX)
- District of Columbia area (AMSAT-DC)
- New England area (AMSAT-NE)
- AMSAT Educational Liaison mailing list (AMSAT-EDU)
- AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

```
From -1983971074211140332
X-Google-Thread: 10e8ad,3b676d1ed8b088df,start
X-Google-Thread: 10b9c8,3b676d1ed8b088df,start
X-Google-Attributes: gid10e8ad,gid10b9c8,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx01.iad01.newshosting.com!newshosting.com!
198.186.194.247.MISMATCH!news-out.readnews.com!news-xxxfer.readnews.com!panix!
rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-154 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sat, 2 Jun 2007 22:02:40 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 289
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000701c7a581$653b2e50$6601a8c0@familyroom>
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader2.panix.com 1180836160 2642 166.84.1.6 (3 Jun 2007 02:02:40 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 3 Jun 2007 02:02:40 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
```

X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Xref: g2news1.google.com rec.radio.amateur.space:923 rec.radio.info:326

AMSAT NEWS SERVICE
ANS-154

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:

* AMSAT-NA Board of Directors Nomination Deadline
* AMSAT Symposium, Conference, and Colloquium Opportunities
* June AO-51 Schedule Includes Kid's Day, Field Day, and Mode V/S
* RAFT Satellite Mission Ends
* Satellite Shorts From All Over
* ARISS Status Report for the Week of May 28, 2007

SB SAT @ AMSAT $ANS-154.01
AMSAT-NA Board of Directors Nomination Deadline

AMSAT News Service Bulletin 154.01
>From AMSAT HQ SILVER SPRING, MD.
June 3, 2007
To All RADIO AMATEURS
BID: $ANS-154.01

It is time to submit nominations for the upcoming open seats on the AMSAT-NA Board of Directors. A nomination requires either one Member Society or five current individual members to nominate an AMSAT member for the position. A director serves for a period of two years.

Four directors' terms expire this year: Barry Baines, WD4ASW; Emily Clarke, N1DID; Rick Hambly, W2GPS; and, Gunther Meisse, W8GSM.

Written nominations must be sent by regular mail and must be received at the AMSAT office no later than 12 June 2007.

Nominations MUST be in writing and mailed to:
AMSAT
850 Sligo Ave #600
Silver Spring, MD 20901

/EX

SB SAT @ AMSAT $ANS-154.02
AMSAT Symposium, Conference, and Colloquium Opportunities

AMSAT News Service Bulletin 154.02
>From AMSAT HQ SILVER SPRING, MD.
June 3, 2007
To All RADIO AMATEURS
BID: $ANS-154.02

The Wireless Association of South Hills Amateur Radio Club would like to announce that the 2007 AMSAT-NA Space Symposium will be held at the Pittsburgh Airport Marriott Hotel on Friday, October 26 through Sunday, October 28, 2007. The Symposium Committee requests a one-page abstract of proposed papers and presentations by early June. Abstracts and papers should be sent to: Daniel Schultz N8FGV by e-mail to: n8fgv@amsat.org. The Symposium web page will be updated as more information becomes available:
http://www.amsat.org/amsat-new/symposium/2007/index.php

The Southern Africa Amateur Radio Satellite Association will be holding its annual space communications conference in Gauteng on Saturday 23 June 2007. The theme of the conference is "Space: New Frontiers" The theme relates to South Africa's latest satellite project "SumbandilaSat. More information can be found at:
http://www.amsatsa.org.za/

The dates for the 2007 AMSAT-UK Colloquium are 20 through 22 July 2007. It is being held a week earlier than normal to avoid clashing with the Central States VHF Event. Venue is to be the University of Surrey, as per previous years. Offers of talks should be submitted as soon as possible; the final date for full documents to be received is mid-June 2007. Submissions should be sent *ONLY* to G4DPZ, via "dave at g4dpz.me.uk".

[ANS thanks AMSAT-NA, AMSAT-SA, and AMSAT-UK for the above information]

/EX

SB SAT @ AMSAT $ANS-154.03
June AO-51 Schedule Includes Kid's Day, Field Day, and Mode V/S

AMSAT News Service Bulletin 154.03
>From AMSAT HQ SILVER SPRING, MD.
June 3, 2007
To All RADIO AMATEURS
BID: $ANS-154.03

Drew, KO4MA AMSAT-NA VP Operations released the AO-51 Echo Satellite schedule for June 1 until June 30.

June 1 - June 15

FM Repeater, V/U
Uplink: 145.920 MHz FM, NO PL Tone
Downlink: 435.300 MHz FM
9k6 Digital, V/U, Telemetry Only
Downlink: 435.150 Mhz FM, 9k6 Telemetry

June 16
ARRL Kid's Day
(QSOs by or with Kid's Day stations ONLY please)

FM Repeater, V/U
Uplink: 145.880 MHz FM, NO PL Tone
Downlink: 435.300 MHz FM

June 17 - June 25
AMSAT/ARRL Field Day (June 23-24)

FM Repeater, V/U
Uplink: 145.920 MHz FM, NO PL Tone
Downlink: 435.300 MHz FM

FM Repeater, L/U
Uplink: 1268.700 MHz FM, NO PL Tone
Downlink: 435.150 MHz FM

June 26 - June 30

FM Repeater, V/S
Uplink: 145.880 MHz FM, NO PL Tone
Downlink: 2401.200 MHz FM

Full details are available on-line at:
http://www.amsat.org/amsat-new/echo/CTNews.php

[ANS thanks Drew, KO4MA for the above information]

/EX

SB SAT @ AMSAT $ANS-154.04
RAFT Satellite Mission Ends

AMSAT News Service Bulletin 154.04
>From AMSAT HQ SILVER SPRING, MD.
June 3, 2007
To All RADIO AMATEURS
BID: $ANS-154.04

The US Naval Academy's RAFT Satellite reached the end of its orbital life this week. Data compiled from stations monitoring its 145.825 MHz downlink indicates that RAFT's de-orbit occurred between 0200-0300 UTC on MAY 30, 2007. Its final beacon was heard at 01:45 UTC that day.

Prior to de-orbit the University of California, Irvine satellite (UCISAT) team was able to activate the XP-217 transponder aboard the satellite and detected the NAVSPASUR radar net on 05/27/07 at 0602 UTC. The UCISAT team has a website with the audio recording files and audio spectrum analysis of the transponder tone from the successful pass. See: http://ucisat.eng.uci.edu/RAFT.php.

The US Naval Academy RAFT web page has a doppler plot of the radar fence signal and details of the final days in orbit. See:
http://www.ew.usna.edu/~bruninga/craft/save-raft.html.

Henk, PA3GUO programmed a special goodbye voice-message from RAFT which can be heard at:
http://home.vianetworks.nl/users/hamoen/pa3guo/raft_voice_goodbye.mp3

[ANS thanks the US Naval Academy Satellite Lab; Bob, WB4APR; Matt, KF6RTB; and Henk, PA3GUO for the above information.]

/EX

SB SAT @ AMSAT $ANS-154.05
Satellite Shorts From All Over

AMSAT News Service Bulletin 154.05
>From AMSAT HQ SILVER SPRING, MD.
June 3, 2007
To All RADIO AMATEURS
BID: $ANS-154.05

+ AMSAT member Joe, K0NEB has produced videos of the Dayton Hamvention for several years. His work can be viewed on-line at YouTube.com. His releases for Dayton 2007 are:

  "Radio Gaga": http://www.youtube.com/watch?v=1icBxSF-yV4

  "You Might Think I'm Crazy": http://www.youtube.com/watch?v=SL1sB3fBGuQ

  Search on YouTube.com with his callsign K0NEB to find a list of all of Joe's videos.

+ Congratulations to ARISS for reaching the milestone of 300 contacts. The first contact occurred on 12/21/2000 with much progress in the 6.5 years since then. Thank you all ham astronauts!

+ The AMSAT-UK webserver is being powered off around the weekend of June 2 for essential electrical maintenance to the building hosting the server. AMSAT-UK plans to restore service as soon as possible.

[ANS thanks everyone for the above information]

/EX

SB SAT @ AMSAT $ANS-154.06
ARISS Status Report for the Week of May 28, 2007

AMSAT News Service Bulletin 154.06
>From AMSAT HQ SILVER SPRING, MD.
June 3, 2007
To All RADIO AMATEURS
BID: $ANS-154.06

1. Successful School Contacts

On Monday, May 21, Toyon Elementary School in San Jose, California, experienced an ARISS contact. Sunita Williams, KD5PLB, answered 13 questions put to her by 13 children. Approximately 470 students attend the school. Toyon Elementary is a 2004 NASA Explorer School with minorities making up 87% of the school population.

EFLS Sainte-Marie SUARLEE in Suarlee, Namur, Belgium had an ARISS contact on Tuesday, May 29 via the telebridge station W6SRJ in California. The Sainte Marie School is located in Suarlee, a village in Wallonia, the French speaking region of Belgium. Sixty-five children, ages 3 - 12 attend the school. There are nineteen 10 - 12 year olds in the class who will participate in the question and answer session with the ISS. The students were excited to be participating in this contact and have been studying the distances between the planets of the solar system. They have also been using the Internet and newspapers to gather information about recent space activities.

NASA Johnson Space Center (Gilruth) Teacher to Teacher Workshop had an ARISS contact on Thursday, May 31 via the telebridge station WH6PN in Hawaii. Approximately 250 K-12 teachers from across the country participated in many sessions throughout the two day workshop including Constructive Chaos, Correcting Misconceptions in Science, Engineering Your Way to the Moon, Mars, and Beyond-CEV, Hooked on Math, NASA STS-118 Engineering Challenge, NCLB: Past, Present, and Future, Analogical Reasoning: Real-World Examples for Scientific Concepts, Engineering Design Challenges Program, NASA in Every Child's World, Robotics, and many more. The event is a partnership between NASA and the U.S. Dept. of Education.

2. ARRL Covers ARISS Activities

Published in the American Radio Relay League (ARRL) QST June issue (p. 24) is a letter to the editor about how John Spasojevich, K9COE, radio contact coordinator of the Boulder Hill Elementary School's ARISS contact, is still getting letters commending him on the event, from the school board, village officials, and parents. In addition, the children who participated in the contact are still wearing their ARISS t-shirts. The event took place on March 6, 2007.

ARRL's June QST (p. 78) also ran a column about space participant Charles

Simonyi, KE7KDP, and his ARISS work. The article included a photo of him with cosmonauts Oleg Kotov and Fyodor Yurchikhin.

3. Kenwood Radio Status

On Monday, May 21, Sunita Williams, KD5PLB, was able to restore a few commonly used configurations in the Kenwood radio. One of the modes that was partially restored was the packet system, although the operations will be on 145.825 simplex. Configurations of general voice communications and those used to support school contacts were also saved. A full restoration of the radio is required for a fully functional radio system. This requires access to a computer system and certification of the required software.

[ANS thanks Carol, KB3LKI for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM

```
From -8387244071127389211
X-Google-Thread: 10e8ad,1f894b575ab685bf,start
X-Google-Thread: 10b9c8,1f894b575ab685bf,start
X-Google-Attributes: gid10e8ad,gid10b9c8,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx01.iad01.newshosting.com!newshosting.com!
198.186.194.251.MISMATCH!news-out.readnews.com!transit4.readnews.com!panix!
rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-155 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Wed, 6 Jun 2007 08:18:21 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 1200
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000601c7a834$c123c0a0$6601a8c0@familyroom>
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
```

X-Trace: reader2.panix.com 1181132301 25658 166.84.1.6 (6 Jun 2007 12:18:21 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Wed, 6 Jun 2007 12:18:21 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to   rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to   rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Xref: g2news1.google.com rec.radio.amateur.space:924 rec.radio.info:329

This report is organized into 4 parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites

SB SAT @ AMSAT W8ISS ANS-155.S1
WSR 155 Part 1 06/04/2007

AMSAT NEWS SERVICE BULLETIN 155.S1 FROM AMSAT HQ
SILVER SPRING, MD, June 04, 2007
TO ALL RADIO AMATEURS
BID: $ANS-155.S1

VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/V - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.870 to 145.930 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.875 to 145.925 MHz USB/CW

Indian Beacon: 145.859330 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

```
Official Webpage: http://www.amsat.in/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is
active. Each transponder has a different beacon.
[10022006]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Voice Repeater
        Telemetry Downlink
        Software reload in progress

Current Mode(s): FM Repeater - V/U
                 PBBS -        OFF
                 Digipeater -  OFF
                 Telemetry -    /U

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink:   145.880 MHZ FM
                       145.880 MHz USB
                       145.920 MHz FM
                      1268.700 MHz FM 67Hz PL tone
Digital Downlinks:     435.150 MHz FM 38k4 Digital, PBP, 1 watt output
                       435.150 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:        145.860 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      1268.700 mhz FM 9k6 PBP Digital
Beacon:                435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[05282007]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
```

```
Launched: December 20, 2002

Status: Operational.

Current Mode: V/U

Uplink:   145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute
timer
   on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the
repeater on
   and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset
the 10
   minute timer.
[05282007]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Current Mode: V/U

Uplink:   145.850 MHz FM
Downlink: 436.795 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[05282007]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational depending on amount of Sunlight
```

Current Mode: Listen before transmitting

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/

AO-7 Usage Guidelines on the AO-7 Log and Resource Site located at:
http://www.planetemily.com/ao7
[05282007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Mode: Occasional Voice/Packet
              Digipeater

Expedition 15 crew:

Commander:	Fyodor Yurchikhin	RN3FI
Flight Engineer:	Sunita Williams	KD5PLB
Flight Engineer:	Oleg Kotov	

Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

SSTV TESTING:
Worldwide Reported Downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:

V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS
                      RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.
[05282007]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-155.S2
WSR 155 Part 2 06/04/2007

AMSAT NEWS SERVICE BULLETIN 155.S2 FROM AMSAT HQ
SILVER SPRING, MD, June 04, 2007
TO ALL RADIO AMATEURS
BID: $ANS-155.S2

CAPE1
Catalog Number:
Launch Date: April 17,2007

Status: In Orbit

Downlink: 435.245 MHz 9600 bs FSK AX.25
[04232007]
=====
CP3
Catalog Number:
Launch Date: April 17,2007

Status: In Orbit

Downlink: 436.845 MHz 1200 bps FSK AX.25
[04232007]
=====
CP4
Catalog Number:
Launch Date: April 17,2007

```
Status: In Orbit

Downlink: 437.325 MHz 1200 bps FSK AX.25
[04232007]
=====
Libertad-1
Catalog Number:
Launch Date: April 17, 2007

Status: In Orbit

Downlink: 437.405 MHz 1200 bps AFSK AX.25
[04232007]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: In Orbit

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder:  145.825 Mhz FM
[02052007]
=====
?O-?? FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: In Orbit

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[02262007]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: In Orbit

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01222007]
=====
GENESAT-1 ?O-??
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational
```

Telemetry Beacon Downlink: 437.0670 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[01082007]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Operational

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon: 437.2750 MHz CW

Callsign: JR8YJT
[10302006]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon: 437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
[03262007]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launched: June 30, 2003

Status: Operational

Beacon: 436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[01082007]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launched: February 21, 2006

Status: Semi-Operational - Constant Carrier only

Uplink: 1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan ?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[01082007]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Voice Repeater
Telemetry Downlink
Software upgrade in progress

Current Mode(s): FM Repeater - V/U
PBBS - OFF
Digipeater - OFF
Telemetry - /U

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.880 MHZ FM
145.880 MHz USB
145.920 MHz FM
1268.700 MHz FM 67Hz PL tone
Digital Downlinks: 435.150 MHz FM 38k4 Digital, PBP, 1 watt output
435.150 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
1268.700 mhz FM 9k6 PBP Digital
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[05282007]

```
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Operational only in Full Sun Light

Current Mode: V

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink:        144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[05282007]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Current Mode: V/U
              L/U

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[06042007]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Semi-operational

Current Mode: V/U
              Digipeater - Authorized for APRS usage

Uplink:         145.900 MHz FM 1200-baud Manchester FSK
```

```
                145.920 MHz FM 1200-baud Manchester FSK
                145.940 MHz FM 1200-baud Manchester FSK
                145.960 MHz FM 1200-baud Manchester FSK
Downlink:       437.026 MHz SSB 1200-baud PSK
Mode-S Beacon: 2401.1428 MHz

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.025 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[05282007]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational.

Current Mode: Telemetry Downlink - 2M

Telemetry Downlink: 145.826 MHz FM 1200 AFSK
Mode-S Beacon:     2401.500 MHz - OFF
UHFBeacon:          435.025 MHz - OFF

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Due to solar eclipses which will continue until late August 2007, the
beacon
will only transmit for about one orbit every 21 days. It is unlikely to
be
heard during this period.

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[05282007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Mode: Occasional Voice/packet
              Digipeater

Expedition 15 crew:
```

Commander: Fyodor Yurchikhin RN3FI
Flight Engineer: Sunita Williams KD5PLB
Flight Engineer: Oleg Kotov

Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

SSTV TESTING:
Worldwide Reported Downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS
RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.
[05282007]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-155.S3
WSR 155 Part 3 06/04/2007

AMSAT NEWS SERVICE BULLETIN 155.S3 FROM AMSAT HQ
SILVER SPRING, MD, June 04, 2007
TO ALL RADIO AMATEURS
BID: $ANS-155.S3

```
THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency:  437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink:        437.250 MHz FM 67Hz CTCSS
Voice Downlink:     2401.835 MHz FM
Packet Up/Downlink:  437.250 MHz 9k6 packet
Packet Downlink     2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink:   435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Operational

Uplinks:   145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink:  437.325 MHz
```

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[01222007]

=====

NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, callsign KE6QMD, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]

=====

SO-42 SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]

=====

SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

```
Uplink:   145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
V-band:   145.840 -  145.990 MHz CW/LSB
U-band:   435.550 -  435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks
---------
S2-band:  2401.225 -  2401.475 MHz CW/USB
K-band:  24048.010 - 24048.060 MHz CW/USB
Beacon:   2401.323 MHz
         24048.035 MHz
[01222007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink:    145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site
at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: ?
```

```
Launched:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater:         436.250 MHz

Uplinks: Mode B Repeater:  145.825 MHz
Mode J Digipeater:         145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink:   145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
```

```
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Non-Operational

Voice/CW Mode JA
Uplink:   145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon:   435.795 MHz

Digital Mode JD
Uplinks:  145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

JARL English webpage: http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm
AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's CW
telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts.htm
[04302007]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign:       POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012006]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993
```

```
Status: Downlink only

Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[012212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HL01-11
BBS: HL01-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
```

```
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplinks:          145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink:      437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
```

```
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[01222007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
[05012006]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet: Non-Operational
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS
```

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon: 145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.8500 - 145.9000 MHz SSB/CW
Downlink 29.4000 - 29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink: 29.4500 - 29.5500 MHz SSB/CW
[01152007]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

```
Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon:    29.352 MHz (intermittent)

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink:     21.260 to 21.300 MHz CW/USB
Downlink:  145.860 to 145.900 MHz CW/USB

Beacon:    145.860 MHz

Robot:     145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink:   21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB
```

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-155.S4
WSR 155 Part 4 06/04/2007

AMSAT NEWS SERVICE BULLETIN 155.S4 FROM AMSAT HQ
SILVER SPRING, MD, June 04, 2007
TO ALL RADIO AMATEURS
BID: $ANS-155.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE
PROPOSED FOR LAUNCH AT THIS TIME:

Phase 5a Mars Mission
Catalog Number:
Proposed Launch Date: 2009 or 2011

Status: Design Phase

For the latest project status update please visit the AMSAT-DL P5-A web page:
http://ticket-to-mars.org
[01222007]
=====
PHASE 3E AO-??
Catalog number:
Proposed Launch Date: Late 2007

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/
[01222007]
=====
Eagle AO-??
Catalog Number:
Proposed Launch Date: Early/Mid 2009

Status: Design Phase

For the latest project status updates please visit the AMSAT-NA webpage:
http://www.amsat.org
[01222007]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

From 6002505348037442211

```
X-Google-Thread: 10e8ad,4bdbd4bcf851281e,start
X-Google-Thread: 113975,4bdbd4bcf851281e,start
X-Google-Thread: 10b9c8,4bdbd4bcf851281e,start
X-Google-Attributes: gid10e8ad,gid113975,gid10b9c8,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news4.google.com!out03b.usenetserver.com!
news.usenetserver.com!in04.usenetserver.com!news.usenetserver.com!
nx01.iad01.newshosting.com!newshosting.com!198.186.194.250.MISMATCH!
transit3.readnews.com!news-out.readnews.com!panix!rri.panix.com!robomod!not-for-
mail
From: Chris Steyaert <observations@rmob.org>
Newsgroups: rec.radio.amateur.space,sci.astro.amateur,rec.radio.info
Subject: Radio Meteor Obs. Bull. May 2007
Followup-To: poster
Date: Wed, 6 Jun 2007 19:22:17 EDT
Organization: PANIX Public Access Internet and UNIX, NYC
Lines: 16
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <j47e63t3f5ieetsgqt63uvoo9koinr2mdd@4ax.com>
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
X-Trace: reader2.panix.com 1181172137 28199 166.84.1.6 (6 Jun 2007 23:22:17 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Wed, 6 Jun 2007 23:22:17 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Xref: g2news1.google.com rec.radio.amateur.space:925 sci.astro.amateur:81298
rec.radio.info:330
```

Radio Meteor Observation Bulletin No. 166 of May 2007 (77 K) is available now as

http://visualrmob.free.fr/rmobtext/rmob0705.txt

More information and the visual presentation of the hourly forward scatter counts can be found on

http://www.rmob.org

http://radio.data.free.fr

Chris

```
From 873065359470144207
X-Google-Thread: 10e8ad,2e039ed4b8958912,start
X-Google-Thread: 10b9c8,2e039ed4b8958912,start
X-Google-Attributes: gid10e8ad,gid10b9c8,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx02.iad01.newshosting.com!newshosting.com!
198.186.194.251.MISMATCH!news-out.readnews.com!transit4.readnews.com!panix!
rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-162 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Sun, 10 Jun 2007 21:07:14 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 1242
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <002b01c7abc4$dbc66320$6601a8c0@familyroom>
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader2.panix.com 1181524034 16125 166.84.1.6 (11 Jun 2007 01:07:14 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Mon, 11 Jun 2007 01:07:14 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Xref: g2news1.google.com rec.radio.amateur.space:926 rec.radio.info:340
```

This report is organized into FIVE parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites
Part 5 (S5) - deborbited/returned satellites

SB SAT @ AMSAT W8ISS ANS-162.S1
WSR 162 Part 1 06/11/2007

AMSAT NEWS SERVICE BULLETIN 162.S1 FROM AMSAT HQ
SILVER SPRING, MD, June 11, 2007
TO ALL RADIO AMATEURS
BID: $ANS-162.S1

VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/V - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.870 to 145.930 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.875 to 145.925 MHz USB/CW

Indian Beacon: 145.859330 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsat.in/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is
active. Each transponder has a different beacon.
[10022006]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Voice Repeater
        Telemetry Downlink

```
Current Modes:   FM Repeater - V/U
                 PBBS -        OFF
                 Digipeater -  OFF
                 Telemetry -    /U

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink:   145.880 MHZ FM
```

145.880 MHz USB
145.920 MHz FM
1268.700 MHz FM 67Hz PL tone
Digital Downlinks: 435.150 MHz FM 38k4 Digital, PBP, 1 watt output
435.150 MHz FM 9k6 Digital, Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Digital, Pacsat Broadcast Protocol
1268.700 mhz FM 9k6 PBP Digital
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[06112007]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Current Mode: V/U

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset

the 10
   minute timer.
[05282007]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Current Mode: V/U

Uplink: 145.850 MHz FM
Downlink: 436.795 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[05282007]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational depending on amount of Sunlight

Current Mode: Listen before transmitting

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/

AO-7 Usage Guidelines on the AO-7 Log and Resource Site located at:
http://www.planetemily.com/ao7
[05282007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Mode: Occasional Voice/Packet/Digipeater

Expedition 15 crew:
Commander: Fyodor Yurchikhin RN3FI
Flight Engineer: Sunita Williams KD5PLB
Flight Engineer: Oleg Kotov

STS-117 Crew:
Mission Commander: Frederick Sturckow
Shuttle Pilot: Lee Archambault
Flight Engineer: Clayton C. Anderson
Mission Specialist: James Reilly II
Steven Swanson
Patrick Forrester
John D. Olivas

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

SSTV TESTING:
Worldwide Reported Downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS
RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.
[06112007]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-162.S2
WSR 162 Part 2 06/11/2007

AMSAT NEWS SERVICE BULLETIN 162.S2 FROM AMSAT HQ
SILVER SPRING, MD, June 11, 2007
TO ALL RADIO AMATEURS
BID: $ANS-162.S2

CAPE1
Catalog Number:
Launch Date: April 17,2007

Status: In Orbit

Downlink: 435.245 MHz 9600 bs FSK AX.25
[04232007]
=====
CP3
Catalog Number:
Launch Date: April 17,2007

Status: In Orbit

Downlink: 436.845 MHz 1200 bps FSK AX.25
[04232007]
=====
CP4
Catalog Number:
Launch Date: April 17,2007

Status: In Orbit

Downlink: 437.325 MHz 1200 bps FSK AX.25
[04232007]
=====
Libertad-1
Catalog Number:
Launch Date: April 17, 2007

Status: In Orbit

Downlink: 437.405 MHz 1200 bps AFSK AX.25
[04232007]
=====
PO-63 PEHUENSAT-1

```
Catalog Number: 29712
Launch Date: January 10, 2007

Status: In Orbit

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder:  145.825 Mhz FM
[02052007]
=====
?O-?? FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: In Orbit

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[02262007]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: In Orbit

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01222007]
=====
GENESAT-1 ?O-??
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Telemetry Beacon Downlink: 437.0670 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[01082007]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Operational

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon:             437.2750 MHz CW

Callsign: JR8YJT
[10302006]
```

=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon: 437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
[03262007]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launched: June 30, 2003

Status: Operational

Beacon: 436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[01082007]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launched: February 21, 2006

Status: Semi-Operational - Constant Carrier only

Uplink: 1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan ?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[01082007]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Voice Repeater

Telemetry Downlink

Current Mode(s): FM Repeater - V/U
PBBS - OFF
Digipeater - OFF
Telemetry - /U

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.880 MHZ FM
145.880 MHz USB
145.920 MHz FM
1268.700 MHz FM 67Hz PL tone
Digital Downlinks: 435.150 MHz FM 38k4 Digital, PBP, 1 watt output
435.150 MHz FM 9k6 Digital, Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Digital, Pacsat Broadcast Protocol
1268.700 mhz FM 9k6 PBP Digital
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[06112007]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Operational only in Full Sun Light

Current Mode: V

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[05282007]

=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational.

Current Mode: Telemetry Downlink - 2M

Telemetry Downlink: 145.826 MHz FM 1200 AFSK
Mode-S Beacon: 2401.500 MHz - OFF
UHFBeacon: 435.025 MHz - OFF

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Due to solar eclipses which will continue until late August 2007, the beacon will only transmit for about one orbit every 21 days. It is unlikely to be heard during this period.

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[05282007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Mode: Occasional Voice/Packet/Digipeater

Expedition 15 crew:
Commander: Fyodor Yurchikhin   RN3FI
Flight Engineer: Sunita Williams   KD5PLB
Flight Engineer: Oleg Kotov

STS-117 Crew:
Mission Commander: Frederick Sturckow
Shuttle Pilot: Lee Archambault
Flight Engineer: Clayton C. Anderson
Mission Specialist: James Reilly II
Steven Swanson
Patrick Forrester
John D. Olivas

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

SSTV TESTING:
Worldwide Reported Downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS
RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.
[06112007]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-162.S3
WSR 162 Part 3 06/11/2007

AMSAT NEWS SERVICE BULLETIN 162.S3 FROM AMSAT HQ
SILVER SPRING, MD, June 11, 2007
TO ALL RADIO AMATEURS
BID: $ANS-162.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

```
Proposed Callsign: TBA
Proposed Transmit Frequency:  437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink:        437.250 MHz FM 67Hz CTCSS
Voice Downlink:     2401.835 MHz FM
Packet Up/Downlink:  437.250 MHz 9k6 packet
Packet Downlink     2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink:   435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Operational

Uplinks:   145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink:  437.325 MHz

Broadcast callsign: MYSAT3-11
BBS:                MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial
land and weather imaging payloads offers FM and FSK Amateur Radio
```

communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[01222007]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, callsign KE6QMD, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

```
Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
V-band:   145.840 -  145.990 MHz CW/LSB
U-band:   435.550 -  435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks
---------
S2-band:  2401.225 -  2401.475 MHz CW/USB
K-band:  24048.010 - 24048.060 MHz CW/USB
Beacon:   2401.323 MHz
         24048.035 MHz
[01222007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink:    145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site
at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater:         436.250 MHz
```

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]

=====

PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]

=====

SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]

=====

TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink: 145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]

=====

GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Reloading of BBS software

```
Current Mode: V/U
              L/U

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[06112007]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Reported non-operational

Current Mode: V/U
              Digipeater - Authorized for APRS usage

Uplink:         145.900 MHz FM 1200-baud Manchester FSK
                145.920 MHz FM 1200-baud Manchester FSK
                145.940 MHz FM 1200-baud Manchester FSK
                145.960 MHz FM 1200-baud Manchester FSK
Downlink:       437.026 MHz SSB 1200-baud PSK
Mode-S Beacon: 2401.1428 MHz

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.025 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[06112007]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Non-Operational

Voice/CW Mode JA
```

Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

JARL English webpage: http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm
AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's CW
telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts.htm
[04302007]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012006]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: Downlink only

Uplinks: 145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

```
Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[012212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Operational
```

```
Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplinks:          145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink:      437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[01222007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
```

```
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
[05012006]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet: Non-Operational
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational
```

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon: 145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.8500 - 145.9000 MHz SSB/CW
Downlink 29.4000 - 29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink: 29.4500 - 29.5500 MHz SSB/CW
[01152007]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293

Launch Date: March 09, 1965

Status: Non-Operational

Uplink: 145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB

Beacon: 29.352 MHz (intermittent)

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB

Beacon: 145.860 MHz

Robot: 145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-162.S4

WSR 162 Part 4 06/11/2007

AMSAT NEWS SERVICE BULLETIN 162.S4 FROM AMSAT HQ
SILVER SPRING, MD, June 11, 2007
TO ALL RADIO AMATEURS
BID: $ANS-162.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE PROPOSED FOR LAUNCH AT THIS TIME:

Phase 5a Mars Mission
Catalog Number:
Proposed Launch Date: 2009 or 2011

Status: Design Phase

For the latest project status update please visit the AMSAT-DL P5-A web page:
http://ticket-to-mars.org
[01222007]
=====
PHASE 3E AO-??
Catalog number:
Proposed Launch Date: Late 2007

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/
[01222007]
=====
Eagle AO-??
Catalog Number:
Proposed Launch Date: Early/Mid 2009

Status: Design Phase

For the latest project status updates please visit the AMSAT-NA webpage:
http://www.amsat.org
[01222007]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-162.S5
WSR 162 Part 5 06/11/2007

AMSAT NEWS SERVICE BULLETIN 162.S5 FROM AMSAT HQ
SILVER SPRING, MD, June 11, 2007
TO ALL RADIO AMATEURS
BID: $ANS-162.S5

THE FOLLOWING SATELLITES HAVE DE-ORBITED OR HAVE BEEN RETURNED TO THE

GROUND:

NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

```
Main Downlink:      145.825 Mhz FM APRS AX25
APRS Uplink:        145.825 MHz FM APRS AX25
Voice/PSK31 Uplink:  28.120 MHz
```

Packet to Voice ID: RAFT
[06112007]
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

```
Voice: 301-589-6062
       888-322-6728
FAX:   301-608-3410
```

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors

to AMSAT Project Funds, will be eligible to receive additional benefits.
Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the
memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen,
G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

From 7263290101519451561
X-Google-Thread: 10e8ad,8c378b320b7db560,start
X-Google-Thread: 10b9c8,8c378b320b7db560,start
X-Google-Attributes: gid10e8ad,gid10b9c8,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx01.iad01.newshosting.com!newshosting.com!
198.186.194.251.MISMATCH!news-out.readnews.com!transit4.readnews.com!panix!
rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-161 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sun, 10 Jun 2007 21:49:03 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 219
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <002401c7abc4$b144e310$6601a8c0@familyroom>
NNTP-Posting-Host: panix2.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader2.panix.com 1181526543 16007 166.84.1.2 (11 Jun 2007 01:49:03 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Mon, 11 Jun 2007 01:49:03 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to   rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to   rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump

Xref: g2news1.google.com rec.radio.amateur.space:927 rec.radio.info:341

AMSAT NEWS SERVICE
ANS-161

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* AO-51 for Kid's Day and Field Day
* Eagle 70cm Receiver Testing Resumes
* Shuttle Launches Another Ham to Space Station
* Satellite Shorts From All Over
* ARISS Status - 04 June 2007

SB SAT @ AMSAT $ANS-161.01
AO-51 for Kid's Day and Field Day

AMSAT News Service Bulletin 161.01
>From AMSAT HQ SILVER SPRING, MD.
June 10, 2007
To All RADIO AMATEURS
BID: $ANS-161.01

In support of ARRL Kid's Day on June 16 the uplink frequency on AO-51's FM repeater will be changed to 145.88 MHz with NO PL Tone. Kid's Day is intended to encourage young people (licensed or not) to enjoy Amateur Radio. It can give young people on-the-air experience so they might develop an interest in pursuing a license in the future. It is intended to give hams a chance to share their station with children. During Kid's Day operators are requested to minimize routine contacts and allow Kid's Day stations to have a successful satellite contact.

Following Kid's Day AO-51's mode will change on June 17 to dual L/U and V/U repeater mode for Field Day. This will give stations the week before Field Day to check out their stations.

June 1 - June 15

FM Repeater, V/U
Uplink: 145.920 MHz FM, NO PL Tone
Downlink: 435.300 MHz FM
9k6 Digital, V/U, Telemetry Only
Downlink: 435.150 Mhz FM, 9k6 Telemetry

June 16

ARRL Kid's Day
(QSOs by or with Kid's Day stations ONLY please)

FM Repeater, V/U
Uplink: 145.880 MHz FM, NO PL Tone
Downlink: 435.300 MHz FM

June 17 - June 25
AMSAT/ARRL Field Day (June 23-24)

FM Repeater, V/U
Uplink: 145.920 MHz FM, NO PL Tone
Downlink: 435.300 MHz FM

FM Repeater, L/U
Uplink: 1268.700 MHz FM, NO PL Tone
Downlink: 435.150 MHz FM

[ANS thanks Drew, KO4MA, for the above information]

/EX

SB SAT @ AMSAT $ANS-161.02
Eagle 70cm Receiver Testing Resumes

AMSAT News Service Bulletin 161.02
>From AMSAT HQ SILVER SPRING, MD.
June 10, 2007
To All RADIO AMATEURS
BID: $ANS-161.02

After a short break while the 70cm receiver travelled to Dayton, Juan, WA6HTP, has resumed testing of the first prototype of Eagle's 70cm receiver. Detailed information regarding the receiver design and testing can be found in Eaglepedia on the AMSAT web site.

http://www.amsat.org/amsat-new/eagle/EaglePedia/index.php/U-Band_Receiver

[ANS thanks Juan, WA6HTP, for the above information]

/EX

SB SAT @ AMSAT $ANS-161.03
Shuttle Launches Another Ham to Space Station

AMSAT News Service Bulletin 161.03
>From AMSAT HQ SILVER SPRING, MD.
June 10, 2007
To All RADIO AMATEURS
BID: $ANS-161.03

The space shuttle Atlantis launched Friday, June 8 at 2338 UTC. The STS-117 mission carries US astronaut Clay Anderson, KD5PLA, to the International Space Station to replace Suni Williams, KD5PLB. Anderson will join Expedition 15 Commander Fyodor Yurchikhin, RN3FI, and Flight Engineer Dr Oleg Kotov. Suni will be returning to Earth aboard the Atlantis after a six month stay on the ISS begining last December.

Atlantis Commander Rick Sturckow and his six crewmates will spend 11 days in space and take part in three spacewalks. During this mission the ISS's power capability will be increased in preparation for the arrival of new science modules from the European and Japanese space agencies.

[ANS thanks Lee, KU4OS, for the above information]

/EX

SB SAT @ AMSAT $ANS-161.04
Satellite Shorts From All Over

AMSAT News Service Bulletin 161.04
>From AMSAT HQ SILVER SPRING, MD.
June 10, 2007
To All RADIO AMATEURS
BID: $ANS-161.04

+ Congratulations to Terry, G1WPR, for making his 2000th contact on AO7 Mode B on June 5, 2007. (via K3SZH)

+ The Techsat Ground Control Station, 4X6EM / 4Z7DFC, advises users of the GO-32 satellite that its BBS services went down on June 5, 2007 for software upgrade to version 9.87. The BBS content was lost. The Techsat team apologizes for the inconvenience. They hope it will take less than 10 days to complete this upgrade.

[ANS thanks everyone for the above information]

/EX

SB SAT @ AMSAT $ANS-161.05
ARISS Status - 04 June 2007

AMSAT News Service Bulletin 161.05
From AMSAT HQ SILVER SPRING, MD.
June 10, 2007
To All RADIO AMATEURS
BID: $ANS-161.05

1. Belgian School Contact, a Success

Students attending EFLS Sainte-Marie SUARLEE in Suarlee, Namur, Belgium participated in an Amateur Radio on the International Space Station (ARISS) contact on Tuesday, May 29 via the telebridge station W6SRJ in California. Thirteen children were able to ask astronaut Sunita Williams, KD5PLB, one question each as an audience of 150 students, teachers and parents looked on. Students came from three area schools to take part in the event. Media coverage included newspapers and three television stations, both local and national. The audio of this contact was fed into the EchoLink AMSAT (101 377) and JK1ZRW (277 208) servers, and received 15 connections from 7 countries, including 3 repeater nodes. It was also fed into the IRLP Discovery Reflector 9010.

2. 300th Successful ARISS Contact with NASA Teachers Workshop

On Thursday, May 31, Sunita Williams, KD5PLB, answered 9 questions posed to her by instructors attending the NASA Johnson Space Center (Gilruth) Teacher to Teacher Workshop during an Amateur Radio on the International Space Station (ARISS) contact. Telebridge station WH6PN in Hawaii assisted in the event as approximately 300 K-12 teachers witnessed the event.

Prior to the contact, an ARISS member gave a talk to the crowd and explained how an ARISS event gets students interested in math, science, history, geography, and language. Statistics were given on the number of students reached each year, contacts performed per year, and how many more students could participate via the internet and through general contacts. Bill McArthur, KC5ACR, and his activity while on board the ISS was mentioned as was the excitement created from the SuitSat-1 project. Teachers were also given information on the application process.

The audio from this event was fed into the EchoLink AMSAT (101 377) and JK1ZRW (277 208) servers. It received 17 connections, including 4 repeaters, from the U.S., England, Canada and Australia. It was also fed into the IRLP Discovery Reflector 9010 which received five connections from the USA and England.

This event marked the 300th ARISS contact.

3. ARISS Presentation at Huntsville Hamfest

A NASA engineer and amateur radio operator plans to give a presentation on the Amateur Radio on the International Space Station (ARISS) program at the Huntsville Hamfest in Huntsville, Alabama, which is held annually during the third full weekend in August. This year the event, to be held on August 18 - 19, will also host the American Radio Relay League National Convention. For more information, see: http://www.hamfest.org/

[ANS thanks Carol, KB3LKI, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Lee McLamb, KU4OS

```
From 9213074805405627129
X-Google-Thread: 10e8ad,36e43d9ead8d80da,start
X-Google-Thread: 10b9c8,36e43d9ead8d80da,start
X-Google-Attributes: gid10e8ad,gid10b9c8,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!newsfeed2.dallas1.level3.net!
news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-168 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sun, 17 Jun 2007 14:28:30 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 258
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <003a01c7b10d$4fe44680$6601a8c0@familyroom>
NNTP-Posting-Host: panix3.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader2.panix.com 1182104910 12157 166.84.1.3 (17 Jun 2007 18:28:30 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 17 Jun 2007 18:28:30 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Xref: g2news1.google.com rec.radio.amateur.space:928 rec.radio.info:355
```

AMSAT NEWS SERVICE
ANS-168

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the

activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* Field Day '07
* Update on Phase 3E
* Eagle Project Manager Receives ARRL Technical Achievement Award
* Satellite Shorts From All Over
* BOD Nominations '07
* President's Field Day Message & Thoughts

SB SAT @ AMSAT $ANS-168.01
Field Day '07

AMSAT News Service Bulletin 168.01
>From AMSAT HQ SILVER SPRING, MD.
June 17, 2007
To All RADIO AMATEURS
BID: $ANS-168.01

This weekend, 23rd and 24th, will be Field Day. Here is a copy of KK5DO's weekly ARRL report for AMSAT-

Field Day is right around the corner and things have changed as far as available satellites. We learned last month that FO-29 had gone silent. This was one of the work horses for field day.

GO-32 went down on May 6 for approximately 10 days to upgrade the onboard software. It should be back in service by field day and will most likely carry many digital messages.

AO-7 will now become one of the more heavily used satellites for field day this year. The trick is you do not know if it will come up in mode A or mode B. You must monitor both at AOS and determine which mode it is in and then jump in and make your contacts.

Next we have AO-27 and AO-51. These are FM satellites so you can only make one contact on AO-27, a single transponder. AO-51 will have both of its transponders on and allow you to make one contact on each transponder.

Then there is VO-52. Not as easy as the FM satellites or the mode B satellites but still, a lot of fun and another source for many contacts.

[ANS thanks Bruce, KK5DO, for the above information]

/EX

SB SAT @ AMSAT $ANS-162.02
Update on Phase 3E

AMSAT News Service Bulletin 168.02
>From AMSAT HQ SILVER SPRING, MD.
June 17, 2007
To All RADIO AMATEURS
BID: $ANS-168.02

I've seen many requests for info on Phase 3E. The following link is to an english translation of the latest information on Phase 3E. It includes a timeline graph that points to a launch opportunity in November of 2008. (Excited?)

http://translate.google.com/translate?u=http%3A%2F%2Fwww.amsat-dl.org
%2F%2Findex.php%3Foption%3Dcom_content%26task%3Dview%26id%3D139%26Itemid%3D9
7
&langpair=de%7Cen&hl=de&ie=UTF-8&oe=UTF-8&prev=%2Flanguage_tools*

[ANS thanks Peter Guelzow, ,for the above information]

/EX

SB SAT @ AMSAT $ANS-168.03
Eagle Project Manager Receives ARRL Technical Achievement Award

AMSAT News Service Bulletin 168.03
>From AMSAT HQ SILVER SPRING, MD.
June 17, 2007
To All RADIO AMATEURS
BID: $ANS-168.03

The June 11th ARRL Atlantic Division News announced the Atlantic Division Technical Achievement Award is awarded to Jim Sanford, WB4GCS.

Jim was first licensed in the sixth grade and was a 1976 graduate of the US Naval Academy. While active in the Navy, he was active with Navy MARS stations both on ships and on shore.

Jim was nominated for his involvement with the AMSAT program. He is currently serving as the Project Manager for the AMSAT OSCAR Eagle project. This project is the next generation high earth orbit satellite under construction now by AMSAT North America. Eagle will provide many services and reliable communications on bands not previously available and will build upon technology developed by AMSAT-NA for use in P3E. Eagle is currently in development stage although the major components are finished (and installed on P3E) and other components such as the software defined transponder have been demonstrated.

[ANS thanks Tom, K3IO and the ARRL for the above information]

/EX

SB SAT @ AMSAT $ANS-168.04
Satellite Shorts From All Over

AMSAT News Service Bulletin 168.04
>From AMSAT HQ SILVER SPRING, MD.
June 17, 2007
To All RADIO AMATEURS
BID: $ANS-168.04

+ Radio amateurs interested in the microwave bands may find the uWSDR (Microwave SDR) project interesting. The project's goal is to provide a transceiever operating on the 144, 422, 1268, 2400 MHz bands, etc., covering the whole of each band - i.e. 1240-1300 MHz. Full duplex cross-band products such as L/S are planned specifically for satellite use. More details are on the uWSDR website: http://uwsdr.berlios.de (via Grant, G8UBN for the uWSDR team).

+ The Florida AMSAT net is looking for satellite operators who are willing to be a guest speaker on their Thursday night net. The repeater network covers half the state of Florida if you are within radio range. An echolink connection is available for all others. Please contact Drew, KO4MA via ko4ma@amsat.org if you are interested.

+ An article on P3E appeared in a South African journal called EngineerIT. It is available on-line at: http://www.eepublishers.co.za/images/upload/Radio%20Amateurs%20Mars.pdf.

[ANS thanks everyone for the above information]

/EX

SB SAT @ AMSAT $ANS-168.05
BOD Nominations '07

AMSAT News Service Bulletin 168.05
From AMSAT HQ SILVER SPRING, MD.
June 18, 2007
To All RADIO AMATEURS
BID: $ANS-168.05

Nominations for the 2007 AMSAT Board of Directors have closed. The list of qualified candidates is:

Barry Baines WD4ASW
Drew Glasbrenner KO4MA
Rick Hambly W2GPS
Lee McLamb KU4OS
Gunther Meisse W8GSM

The terms of four directors are up this year. Directors serve a two year term. Ballots and biographical information submitted by each candidate will be in the mail to current AMSAT members by July 15th and completed ballots must be received at the AMSAT office in Silver Spring no later than the close of business on September 15th. Terms of the new directors start upon certification of the election.

Barry Baines, WD4ASW
Corporate Secretary

[ANS thanks Barry, WD4ASW, for the above information]

/EX

SB SAT @ AMSAT $ANS-168.06
President's Field Day Message and Thoughts

AMSAT News Service Bulletin 168.06
  From AMSAT HQ SILVER SPRING, MD.
June 17, 2007
To All RADIO AMATEURS
BID: $ANS-168.06

To all AMSAT members and satellite enthusiasts,

Field Day is only a week away! Are you prepared? Each year the American Radio Relay League (ARRL) sponsors Field Day as an emergency preparedness exercise during the fourth weekend of June. AMSAT promotes its own version of Field Day for operation via the amateur satellites, held concurrently with the ARRL event. See the AMSAT Web site's Quick Reference "Field Day Competition" for details.

You may be wondering what you need to make a contact on one of the "easy" FM satellites. The simplest equipment to have would be an HT (either a dual band HT or separate 70cm and 2m HTs) and a small beam antenna like the home brew antennas described in recent AMSAT Journals or the commercial Arrow antenna.

These antennas come with a single feed for each band. If you are going to use a dual band HT, you have to build or buy a duplexer. Be sure you have the correct connectors. One model of the Arrow antenna comes with a built in duplexer in the handle but the maximum power rating is only about 10 watts.

Five to ten watts of power should be plenty for the FM satellites. Because of the large number of stations trying to get in all at once many of you will find your best chance for a successful contact is using a horizon shot or operating when you first get acquisition of the satellite (AOS) or when you are near loss of acquisition (LOS). Increasing your power above a standard mobile rig of 25 to 50 watts is strongly discouraged. FCC rules require the use of the least amount of power necessary to make the contact.

Make your contact and step aside. This year the rules state only one satellite contact per FM transponder. Note that there may be two transponders in operation on AO-51 during field day.

If you can, I recommend that you try to use the linear transponder satellites like AO-7 where you can make as many contacts as you like. It takes more skill and different equipment but this can be great fun and you will learn new techniques.

If you need help you can post a message to the AMSAT e-mail bulletin board (amsat-bb) or contact your regional Field Operations representative listed on the AMSAT Web site.

Enjoy field day.

Rick
W2GPS
AMSAT President

[ANS thanks Rick, W2GPS, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Dee Interdonato, NB2F

From 1097252908826491636
X-Google-Thread: 10e8ad,6f369174c4bed894,start
X-Google-Thread: 10b9c8,6f369174c4bed894,start
X-Google-Attributes: gid10e8ad,gid10b9c8,public,usenet
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!newsfeed2.dallas1.level3.net!news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-169 AMSAT Weekly Satellite Report

```
Followup-To: rec.radio.amateur.space
Date: Thu, 21 Jun 2007 09:17:20 EDT
Organization: The Radio Amateur Satellite Corporation
Lines: 1244
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000f01c7b406$7c5fe010$6601a8c0@familyroom>
NNTP-Posting-Host: panix3.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader2.panix.com 1182431840 29984 166.84.1.3 (21 Jun 2007 13:17:20 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Thu, 21 Jun 2007 13:17:20 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Xref: g2news1.google.com rec.radio.amateur.space:929 rec.radio.info:358
```

This report is organized into FIVE parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites
Part 5 (S5) - deorbited/returned satellites

SB SAT @ AMSAT W8ISS ANS-169.S1
WSR 169 Part 1 06/18/2007

AMSAT NEWS SERVICE BULLETIN 169.S1 FROM AMSAT HQ
SILVER SPRING, MD, June 18, 2007
TO ALL RADIO AMATEURS
BID: $ANS-169.S1

VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/V - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.870 to 145.930 MHz USB/CW

```
Dutch Transponder:
Uplink:   435.225 to 435.275 MHz LSB/CW
Downlink: 145.875 to 145.925 MHz USB/CW


Indian Beacon:  145.859330 MHZ CW
Dutch Beacon:   145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsat.in/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is
active. Each transponder has a different beacon.
[10022006]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Voice Repeater
        Telemetry Downlink

Current Modes:   FM Repeater - V/U
                              L/U
                 PBBS -        OFF
                 Digipeater -  OFF
                 Telemetry -    /U

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink:   145.880 MHZ FM
                       145.880 MHz USB
                       145.920 MHz FM
                      1268.700 MHz FM 67Hz PL tone
Digital Downlinks:     435.150 MHz FM 38k4 Digital, PBP, 1 watt output
                       435.150 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:        145.860 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      1268.700 mhz FM 9k6 PBP Digital
Beacon:                435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
```

TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[06182007]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Current Mode: V/U

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10 minute timer.
[05282007]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Current Mode: V/U

Uplink: 145.850 MHz FM
Downlink: 436.795 MHz FM

Mode and Antenna Polarization:

V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[05282007]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational depending on amount of Sunlight

Current Mode: Listen before transmitting

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz CW
145.972 MHz CW
435.100 MHz CW
2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/

AO-7 Usage Guidelines on the AO-7 Log and Resource Site located at:
http://www.planetemily.com/ao7
[05282007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Mode: Occasional Voice/Packet/Digipeater

Expedition 15 crew:
Commander: Fyodor Yurchikhin RN3FI
Flight Engineer: Clayton C. Anderson
Flight Engineer: Oleg Kotov

STS-117 Crew:
Mission Commander: Frederick Sturckow
Shuttle Pilot: Lee Archambault
Flight Engineer: Sunita Williams KD5PLB
Mission Specialist: James Reilly II
Steven Swanson

Patrick Forrester
John D. Olivas

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

SSTV TESTING:
Worldwide Reported Downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS
                      RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.
[06182007]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-169.S2
WSR 169 Part 2 06/18/2007

AMSAT NEWS SERVICE BULLETIN 169.S2 FROM AMSAT HQ
SILVER SPRING, MD, June 18, 2007
TO ALL RADIO AMATEURS
BID: $ANS-169.S2

```
CAPE1
Catalog Number:
Launch Date: April 17,2007

Status: In Orbit

Downlink: 435.245 MHz 9600 bs FSK AX.25
[04232007]
=====
CP3
Catalog Number:
Launch Date: April 17,2007

Status: In Orbit

Downlink: 436.845 MHz 1200 bps FSK AX.25
[04232007]
=====
CP4
Catalog Number:
Launch Date: April 17,2007

Status: In Orbit

Downlink: 437.325 MHz 1200 bps FSK AX.25
[04232007]
=====
Libertad-1
Catalog Number:
Launch Date: April 17, 2007

Status: In Orbit

Downlink: 437.405 MHz 1200 bps AFSK AX.25
[04232007]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: In Orbit

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder:  145.825 Mhz FM
[02052007]
=====
?O-?? FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: In Orbit

Downlink: 437.385 Mhz APRS AX25
```

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[02262007]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: In Orbit

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01222007]
=====
GENESAT-1 ?O-??
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Telemetry Beacon Downlink: 437.0670 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[01082007]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Operational

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon: 437.2750 MHz CW

Callsign: JR8YJT
[10302006]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon: 437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/

```
[03262007]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launched: June 30, 2003

Status: Operational

Beacon:     436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[01082007]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launched: February 21, 2006

Status: Semi-Operational - Constant Carrier only

Uplink:  1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan ? )

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[01082007]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Voice Repeater
        Telemetry Downlink

Current Mode(s): FM Repeater - V/U
                               L/U
                 PBBS -        OFF
                 Digipeater -  OFF
                 Telemetry -    /U

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink:   145.880 MHZ FM
                       145.880 MHz USB
                       145.920 MHz FM
                      1268.700 MHz FM 67Hz PL tone
Digital Downlinks:     435.150 MHz FM 38k4 Digital, PBP, 1 watt output
```

435.150 MHz FM 9k6 Digital, Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Digital, Pacsat Broadcast Protocol
1268.700 mhz FM 9k6 PBP Digital
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[06182007]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Operational only in Full Sun Light

Current Mode: V

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[05282007]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational.

Current Mode: Telemetry Downlink - 2M

Telemetry Downlink: 145.826 MHz FM 1200 AFSK
Mode-S Beacon: 2401.500 MHz - OFF
UHFBeacon: 435.025 MHz - OFF

Mode and Antenna Polarization:
V: RHCP

S: LHCP

Due to solar eclipses which will continue until late August 2007, the beacon will only transmit for about one orbit every 21 days. It is unlikely to be heard during this period.

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[05282007]

=====

INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Mode: Occasional Voice/Packet/Digipeater

Expedition 15 crew:

Commander:	Fyodor Yurchikhin	RN3FI
Flight Engineer:	Clayton C. Anderson	
Flight Engineer:	Oleg Kotov	

STS-117 Crew:

Mission Commander:	Frederick Sturckow	
Shuttle Pilot:	Lee Archambault	
Flight Engineer:	Sunita Williams	KD5PLB
Mission Specialist:	James Reilly II	
	Steven Swanson	
	Patrick Forrester	
	John D. Olivas	

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

SSTV TESTING:
Worldwide Reported Downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear

U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS
                      RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.
[06182007]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-169.S3
WSR 169 Part 3 06/18/2007

AMSAT NEWS SERVICE BULLETIN 169.S3 FROM AMSAT HQ
SILVER SPRING, MD, June 18, 2007
TO ALL RADIO AMATEURS
BID: $ANS-169.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 MHz FM 67Hz CTCSS

```
Voice Downlink:     2401.835 MHz FM
Packet Up/Downlink:  437.250 MHz 9k6 packet
Packet Downlink     2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink:   435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Operational

Uplinks:   145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink:  437.325 MHz

Broadcast callsign: MYSAT3-11
BBS:                MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial
land and weather imaging payloads offers FM and FSK Amateur Radio
communica-
tion.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a
collaborative effort between the Malaysian government and Surrey
Satellite
Technology Ltd.
[01222007]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational
```

```
Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink:   145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
call-
sign KE6QMD, as per the user service agreement located at the following
URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS:                SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink:   145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
V-band:   145.840 -  145.990 MHz CW/LSB
U-band:   435.550 -  435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
```

```
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks
---------
S2-band:  2401.225 -  2401.475 MHz CW/USB
K-band:  24048.010 - 24048.060 MHz CW/USB
Beacon:   2401.323 MHz
         24048.035 MHz
[01222007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink:    145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site
at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater:         436.250 MHz

Uplinks: Mode B Repeater:  145.825 MHz
Mode J Digipeater:         145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz
```

```
Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink:   145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Reloading of BBS software

Current Mode: V/U
              L/U

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12
```

```
More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[06112007]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Reported non-operational

Current Mode: V/U
              Digipeater - Authorized for APRS usage

Uplink:         145.900 MHz FM 1200-baud Manchester FSK
                145.920 MHz FM 1200-baud Manchester FSK
                145.940 MHz FM 1200-baud Manchester FSK
                145.960 MHz FM 1200-baud Manchester FSK
Downlink:       437.026 MHz SSB 1200-baud PSK
Mode-S Beacon: 2401.1428 MHz

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.025 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[06112007]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Non-Operational

Voice/CW Mode JA
Uplink:   145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon:   435.795 MHz

Digital Mode JD
Uplinks:  145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP
```

JARL English webpage: http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm
AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's CW
telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts.htm
[04302007]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012006]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: Downlink only

Uplinks: 145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[012212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

```
Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
```

```
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplinks:          145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink:      437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[01222007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
```

```
[05012006]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet: Non-Operational
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon:   145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational
```

```
Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink  29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
[01152007]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
```

Downlink: 29.354 to 29.394 MHz CW/USB

Beacon: 29.352 MHz (intermittent)

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB

Beacon: 145.860 MHz

Robot: 145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-169.S4
WSR 169 Part 4 06/18/2007

AMSAT NEWS SERVICE BULLETIN 169.S4 FROM AMSAT HQ
SILVER SPRING, MD, June 18, 2007
TO ALL RADIO AMATEURS
BID: $ANS-169.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE PROPOSED FOR LAUNCH AT THIS TIME:

Phase 5a Mars Mission
Catalog Number:
Proposed Launch Date: 2009 or 2011

Status: Design Phase

```
For the latest project status update please visit the AMSAT-DL P5-A web
page:
http://ticket-to-mars.org
[01222007]
=====
PHASE 3E AO-??
Catalog number:
Proposed Launch Date: Late 2007

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web
page:
http://www.amsat-dl.org/p3e/
[01222007]
=====
Eagle AO-??
Catalog Number:
Proposed Launch Date: Early/Mid 2009

Status: Design Phase

For the latest project status updates please visit the AMSAT-NA webpage:
http://www.amsat.org
[01222007]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-169.S5
WSR 169 Part 5 06/18/2007

AMSAT NEWS SERVICE BULLETIN 169.S5 FROM AMSAT HQ
SILVER SPRING, MD, June 18, 2007
TO ALL RADIO AMATEURS
BID: $ANS-169.S5

THE FOLLOWING SATELLITES HAVE DE-ORBITED OR HAVE BEEN RETURNED TO THE
GROUND:

NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status:   Re-Entered
Re-entered: May 30, 2007

Main Downlink:      145.825 Mhz FM APRS AX25
APRS Uplink:        145.825 MHz FM APRS AX25
Voice/PSK31 Uplink:  28.120 MHz

Packet to Voice ID: RAFT
[06112007]
```

/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

```
From 1712965222229242291
X-Google-Thread: 10e8ad,79fcba102fb7db7c,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news4.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!local01.nntp.dca.giganews.com!nntp.comcast.com!
news.comcast.com.POSTED!not-for-mail
NNTP-Posting-Date: Sat, 27 Jan 2007 07:11:31 -0600
From: "JoAnne K9JKM" <k9jkm_remove_@comcast.net>
Newsgroups: rec.radio.amateur.space
Subject: WSR-022 AMSAT Weekly Satellite Report
Date: Sat, 27 Jan 2007 07:11:41 -0600
MIME-Version: 1.0
Content-Type: text/plain;
     format=flowed;
     charset="iso-8859-1";
     reply-type=original
Content-Transfer-Encoding: 7bit
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.3028
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.3028
Message-ID: <keOdnewSl54e0ibYnZ2dnUVZ_qunnZ2d@comcast.com>
Lines: 1145
NNTP-Posting-Host: 67.184.169.1
X-Trace: sv3-
FWSbQUo4q2aFNKnbYQoweeXCaidL+4OPBB01UGOXAwqhsTL2GacNdTMDUwoJpCz0xVeEZtc35d6x2zk!
xLmIWPfvXA4zQHsFbCU2aQL9SEfn07aLy78gz9M2mYDe/yYATcy1wkw6kX5LI67HCrEEBgoB/uYM!o/
ghn7DMV7LlCW0=
X-Complaints-To: abuse@comcast.net
X-DMCA-Complaints-To: dmca@comcast.net
X-Abuse-and-DMCA-Info: Please be sure to forward a copy of ALL headers
X-Abuse-and-DMCA-Info: Otherwise we will be unable to process your complaint
properly
X-Postfilter: 1.3.32
Xref: g2news2.google.com rec.radio.amateur.space:582
```

This report is organized into 4 parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites

SB SAT @ AMSAT W8ISS ANS-022.S1
WSR 022 Part 1 01/22/2007

AMSAT NEWS SERVICE BULLETIN 022.S1 FROM AMSAT HQ
SILVER SPRING, MD, January 22,2007
TO ALL RADIO AMATEURS
BID: $ANS-022.S1

VO-52 HAMSAT

Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/V - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.870 to 145.930 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.875 to 145.925 MHz USB/CW

Indian Beacon: 145.859330 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsat.in/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is
active. Each transponder has a different beacon.
[10022006]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Semi-Operational - Software upgrade in progress
Current Mode(s): FM Repeater - V/U
                 PBBS -   OFF
                 Digipeater - OFF

```
Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink:   145.880 MHZ FM
                       145.880 MHz USB
                       145.920 MHz FM
                      1268.700 MHz FM 67Hz PL tone
Digital Downlinks:     435.150 MHz FM 38k4 Digital, PBP, 1 watt output
                       435.150 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:        145.860 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      1268.700 mhz FM 9k6 PBP Digital
```

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[01152007]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The order of operation is thus: (allow for Doppler as necessary)
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer
   on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on
   and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10
   minute timer.
[01082007]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Operational

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB

Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
145.870 MHz FM
145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

JARL English webpage: http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm
AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's CW
telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts.htm
[01222007]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Uplink: 145.850 MHz FM
Downlink: 436.795 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

This off the AO-27 website:
We have successfully reset the cpu on AO-27.
AO-27 is now commanable and is sitting at the bootloader. We are
beginning
the process of uploading flight software. The transmitter was very
strong
during our tests. This is very good news.
- Michael N3UC

Official Webpage: http://www.ao27.org
[01222007]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational depending on amount of Sunlight

Current Reported mode: Mode-A

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz CW
145.972 MHz CW
435.100 MHz CW
2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/

AO-7 users are requested to log their contacts and observations about AO-7,
especially any unexpected mode changes. AO-07 telemetry software webpage:
http://www.qsl.net/k3tz/files/K3TZ_AO-07_Telemetry_Decoder_0.5.zip

Please keep your power low! For additional information please read the AO-7
Usage Guidelines on the AO-7 Log and Resource Site located at:
http://www.planetemily.com/ao7
[01082007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: Occasional Voice
Digipeater: OFF

The Expedition 14 crew is:
Commander: Michael Lopez-Alegria KE5GTK
Flight Engineer: Mikhail Tyurin   RZ3FT
Flight Engineer: Sunita Williams   KD5PLB

Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

SSTV TESTING:

Worldwide Reported Downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS, RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.
[12182006]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-022.S2
WSR 022 Part 2 01/22/2007

AMSAT NEWS SERVICE BULLETIN 022.S2 FROM AMSAT HQ
SILVER SPRING, MD, January 22, 2007
TO ALL RADIO AMATEURS
BID: $ANS-022.S2

PEHUENSAT-1
Catalog Number: 29709
Launch Date: January 10, 2007

Status: In Orbit

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder: 145.825 Mhz FM
[01082007]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: In Orbit

```
Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01222007]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: In Orbit

Main Downlink:      145.825 Mhz FM APRS AX25
APRS Uplink:        145.825 MHz FM APRS AX25
Voice/PSK31 Uplink:  28.120 MHz
[01222007]
=====
GENESAT-1 ?O-??
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Telemetry Beacon Downlink: 437.0670 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[01082007]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Operational

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon:             437.2750 MHz CW

Callsign: JR8YJT
[10302006]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon:             437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
```

```
[01082007]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launched: June 30, 2003

Status: Operational

Beacon:     436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[01082007]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launched: February 21, 2006

Status: Semi-Operational - Constant Carrier only

Uplink:  1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan ? )

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[01082007]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Semi-Operational - Software upgrade in progress
Current Mode(s): FM Repeater - V/U
                 PBBS -        OFF
                 Digipeater -  OFF

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink:   145.880 MHZ FM
                       145.880 MHz USB
                       145.920 MHz FM
                      1268.700 MHz FM 67Hz PL tone
Digital Downlinks:     435.150 MHz FM 38k4 Digital, PBP, 1 watt output
                       435.150 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:        145.860 MHz FM 9k6 Digital, Pacsat Broadcast
```

Protocol
                      1268.700 mhz FM 9k6 PBP Digital

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[01152007]

=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Operational only in Full Sun Light

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[01082007]

=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks: 145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM
Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[01082007]

=====

```
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Semi-operational - APRS usage through Digipeater

Uplink:         145.900 MHz FM 1200-baud Manchester FSK
                145.920 MHz FM 1200-baud Manchester FSK
                145.940 MHz FM 1200-baud Manchester FSK
                145.960 MHz FM 1200-baud Manchester FSK
Downlink:       437.026 MHz SSB 1200-baud PSK
Mode-S Beacon: 2401.1428 MHz

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.025 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[01222007]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational

Telemetry Downlink: 145.826 MHz. FM (1200-baud AFSK) approx. 10 days ON,
10
                    days OFF
Mode-S Beacon:     2401.500 MHz - OFF
UHFBeacon:          435.025 MHz - OFF

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Official webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[01082007]
```

=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: Occasional Voice
Digipeater: OFF

Expedition Crew 14 is:
Commander: Michael Lopez-Alegria KE5GTK
Flight Engineer: Mikhail Tyurin RZ3FT
Flight Engineer: Sunita Williams KD5PLB

Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

SSTV TESTING:
Worldwide Reported Downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS, RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is NOT translated from Russian and posted.
[01082007]
NNNN
/EX

```
SB SAT @ AMSAT W8ISS $ANS-022.S3
WSR 022 Part 3 01/22/2007

AMSAT NEWS SERVICE BULLETIN 022.S3 FROM AMSAT HQ
SILVER SPRING, MD, January 22, 2007
TO ALL RADIO AMATEURS
BID: $ANS-022.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency:  437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink:         437.250 MHz FM 67Hz CTCSS
Voice Downlink:      2401.835 MHz FM
Packet Up/Downlink:   437.250 MHz 9k6 packet
Packet Downlink      2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink:   435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
```

Catalog number: 26548
Launched: September 26, 2000

Status: Operational

Uplinks: 145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[01222007]

=====

NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, callsign KE6QMD, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]

=====

SO-42 SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:

```
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink:   145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
V-band:   145.840 -  145.990 MHz CW/LSB
U-band:   435.550 -  435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks
---------
S2-band:  2401.225 -  2401.475 MHz CW/USB
K-band:  24048.010 - 24048.060 MHz CW/USB
Beacon:   2401.323 MHz
         24048.035 MHz
[01222007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink:    145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12
```

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site
at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]

=====

SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]

=====

PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]

=====

SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm

[ANS-WSR has no further information]
[09042006]

=====

TO-31 TMSAT-1
Catalog number: 25396

```
Launch Date: July 10, 1998

Status: Non-operational

Uplink:   145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign:       POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012006]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: Downlink only

Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[012212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational
```

Uplink: 145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink: 145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons: 435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink: 145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks: 145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

```
More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplinks:          145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink:      437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[01222007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
[05012006]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
```

Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting): Non-Operational
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet: Non-Operational
Uplink: 145.8500 MHz MFSK 1200 BPS
Uplink: 145.8700 MHz MFSK 1200 BPS
Uplink: 145.8900 MHz MFSK 1200 BPS
Uplink: 145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon: 145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational

```
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink   29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink  29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
[01152007]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon:    29.352 MHz (intermittent)

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
```

Launched: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB

Beacon: 145.860 MHz

Robot: 145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-022.S4
WSR 022 Part 4 01/22/2007

AMSAT NEWS SERVICE BULLETIN 022.S4 FROM AMSAT HQ
SILVER SPRING, MD, January 22, 2007
TO ALL RADIO AMATEURS
BID: $ANS-022.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE
PROPOSED FOR LAUNCH AT THIS TIME:

Phase 5a Mars Mission
Catalog Number:
Proposed Launch Date: 2009 or 2011

Status: Design Phase

For the latest project status update please visit the AMSAT-DL P5-A web page:
http://ticket-to-mars.org
[01222007]
=====
PHASE 3E AO-??
Catalog number:
Proposed Launch Date: Late 2007

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/
[01222007]
=====
Eagle AO-??
Catalog Number:
Proposed Launch Date: Early/Mid 2009

Status: Design Phase

For the latest project status updates please visit the AMSAT-NA webpage:
http://www.amsat.org
[01222007]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

- AMSAT News Service (ANS)
- General satellite discussion (AMSAT-BB)
- Orbit data (KEPS)
- Manned space missions (SAREX)
- District of Columbia area (AMSAT-DC)
- New England area (AMSAT-NE)
- AMSAT Educational Liaison mailing list (AMSAT-EDU)
- AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/amsat/listserv/menu.html

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

From 5135415197979904141
X-Google-Thread: 10e8ad,4b37a00aa79251ba
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII
Path: g2news2.google.com!postnews.google.com!h3g2000cwc.googlegroups.com!not-for-mail
From: sw1jrs@otenet.gr
Newsgroups: rec.radio.amateur.space
Subject: Re: FT847 & FC-20 for sale
Date: 28 Jan 2007 06:20:15 -0800
Organization: http://groups.google.com
Lines: 9
Message-ID: <1169994015.424478.161440@h3g2000cwc.googlegroups.com>
References: <hdWdnZWnVq5lsuLYnZ2dnUVZ_rGinZ2d@comcast.com>
NNTP-Posting-Host: 85.75.52.176
Mime-Version: 1.0
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Content-Transfer-Encoding: quoted-printable
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X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Sun, 28 Jan 2007 14:20:28 +0000 (UTC)
In-Reply-To: <hdWdnZWnVq5lsuLYnZ2dnUVZ_rGinZ2d@comcast.com>
User-Agent: G2/1.0
X-HTTP-UserAgent: Opera/9.10 (Windows NT 5.1; U; el),gzip(gfe),gzip(gfe)
Complaints-To: groups-abuse@google.com
Injection-Info: h3g2000cwc.googlegroups.com; posting-host=85.75.52.176;
   posting-account=SvSGHw0AAADMNbR_wRHhnP8Ixag8IGQg
Xref: g2news2.google.com rec.radio.amateur.space:583

=CF/=C7 Ron =DD=E3=F1=E1=F8=E5:
> My Yaesu FT847, power cord, hand mic, manual, and FC-20 for sale $950
> delivered in the lower 48. Rig and tuner in very good condition, original
> manual.

```
> Contact W6KJ, w6kj@arrl.net
> 73, Ron
ARE YOU STILL SALE THE FT-847




From -42460012226371963
X-Google-Thread: 10e8ad,4b37a00aa79251ba
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII
Path: g2news2.google.com!postnews.google.com!q2g2000cwa.googlegroups.com!not-for-mail
From: sw1jrs@otenet.gr
Newsgroups: rec.radio.amateur.space
Subject: Re: FT847 & FC-20 for sale
Date: 28 Jan 2007 06:20:34 -0800
Organization: http://groups.google.com
Lines: 9
Message-ID: <1169994034.261052.196640@q2g2000cwa.googlegroups.com>
References: <hdWdnZWnVq5lsuLYnZ2dnUVZ_rGinZ2d@comcast.com>
NNTP-Posting-Host: 85.75.52.176
Mime-Version: 1.0
Content-Type: text/plain; charset="iso-8859-7"
Content-Transfer-Encoding: quoted-printable
X-Trace: posting.google.com 1169994039 24607 127.0.0.1 (28 Jan 2007 14:20:39 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Sun, 28 Jan 2007 14:20:39 +0000 (UTC)
In-Reply-To: <hdWdnZWnVq5lsuLYnZ2dnUVZ_rGinZ2d@comcast.com>
User-Agent: G2/1.0
X-HTTP-UserAgent: Opera/9.10 (Windows NT 5.1; U; el),gzip(gfe),gzip(gfe)
Complaints-To: groups-abuse@google.com
Injection-Info: q2g2000cwa.googlegroups.com; posting-host=85.75.52.176;
   posting-account=SvSGHw0AAADMNbR_wRHhnP8Ixag8IGQg
Xref: g2news2.google.com rec.radio.amateur.space:584


=CF/=C7 Ron =DD=E3=F1=E1=F8=E5:
> My Yaesu FT847, power cord, hand mic, manual, and FC-20 for sale $950
> delivered in the lower 48. Rig and tuner in very good condition, original
> manual.
> Contact W6KJ, w6kj@arrl.net
> 73, Ron
ARE YOU STILL SALE THE FT-847




From -5354525192847852391
X-Google-Thread: 10e8ad,39a3c50e68521b20,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news4.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!local01.nntp.dca.giganews.com!nntp.comcast.com!
news.comcast.com.POSTED!not-for-mail
```

NNTP-Posting-Date: Sun, 28 Jan 2007 15:59:18 -0600
From: "JoAnne K9JKM" <k9jkm_remove_@comcast.net>
Newsgroups: rec.radio.amateur.space
Subject: ANS-028 AMSAT News Service Weekly Bulletins
Date: Sun, 28 Jan 2007 15:59:32 -0600
MIME-Version: 1.0
Content-Type: text/plain;
format=flowed;
charset="iso-8859-1";
reply-type=original
Content-Transfer-Encoding: 7bit
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.3028
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.3028
Message-ID: <18CdnUTpzc8qgSDYnZ2dnUVZ_uejnZ2d@comcast.com>
Lines: 382
NNTP-Posting-Host: 67.184.169.1
X-Trace: sv3-ke5tAFEGKF3Ww9Y+L/cJAuWutPFmeZEMDq46mLBUEI2QGjbTjm1uNz0CCF2/
XpyVn2WSYA3wbO7E6ea!j23v/
JuE1j27fcd6ganNusNDOwRYybScphj9I9NKyzMuZ+0nMJcrGy4LtnevyqHMP5+X53tS2q4K!
jljaq9agGF5moic=
X-Complaints-To: abuse@comcast.net
X-DMCA-Complaints-To: dmca@comcast.net
X-Abuse-and-DMCA-Info: Please be sure to forward a copy of ALL headers
X-Abuse-and-DMCA-Info: Otherwise we will be unable to process your complaint properly
X-Postfilter: 1.3.32
Xref: g2news2.google.com rec.radio.amateur.space:585

AMSAT NEWS SERVICE
ANS-028

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:

* End of PCSAT-1 Full Sun Digipeater Operations
* OSCAR 11 Request for Reports
* OSCAR 7 News
* ARISS Status - January 2007
* Satellite Shorts From All Over
* Energizing Young Minds

SB SAT @ AMSAT $ANS-028.01
End of PCSAT-1 Full Sun Digipeater Operations

AMSAT News Service Bulletin 028.01
From AMSAT HQ SILVER SPRING, MD.
January 28, 2007
To All RADIO AMATEURS
BID: $ANS-028.01

Bob Bruninga, WB4APR, writing from the US Naval Academy Satellite Lab in Annapolis, Maryland reports, "We've reached the end of PCSAT-1 packet digipeater operations from the most rececnt full sun period."

During the 1/19/07 afternoon pass over USA, PCSAT-1 was overloaded over the west coast and crashed back to W3ADO-1 at 1850z. But one minute later ground controllers had AOS at the Naval Academy ground station and recovered it to PCSAT-1 and digipeating.

But the number of users was just so high, that there was no way PCSAT-1's batteries would survive the next eclipse. So after 8 minutes of operations and just prior to LOS, the Naval Academy turned off the digipeater and set the MYCALL to NODIGI as a way of letting users know the digipeater was off.

This is probably the end of this PCSAT-1 operating period. Ground controllers will see if the NODIGI will hold. But eclipses still get longer and eventually PCSAT-1 will be back to resetting on every orbit and be practially useless except mid-day sunnyside passes for a lucky packet or two.

The next full receeovery period will be the second week in March.

[ANS thanks Bob Bruninga, WB4APR at the US Naval Academy Satellite Ground Station for the above information]

/EX

SB SAT @ AMSAT $ANS-028.02
OSCAR 11 Request for Reports

AMSAT News Service Bulletin 028.02
From AMSAT HQ SILVER SPRING, MD.
January 28, 2007
To All RADIO AMATEURS
BID: $BID:U2RPT129.CWV

TELEMETRY AND REPORTS WANTED!

To investigate the date problem mentioned below, I would welcome some telemetry from differents parts of the world, at times when the orbits do not pass over the UK. These times are approximately from 10:00 to 16:00 and from 19:00 to 04:00 UTC. If you don't have a decoder, I can now accept short WAV files of good audio, duration up to 30 seconds.

I would also like reports of reception around the times of expected beacon switch ON and OFF. No telemetry wanted, just when you listen, and whether you heard, or didn't hear the bird. Please e-mail to the address below.

During the period 29 December 2006 to 23 January 2007, the satellite was heard from 08 to 18 January. Good steady signals have beeen heard on all passes, and excellent copy of the telemetry obtained.

The on-board clock has maintained accurate time, over the reporting period, gaining 2.5 seconds. However the hour counter sometimes shows an error of of 10 hours, ie. in its most significent digit. The 'day of the week' counter operates reliably, zero representing Thursday.

The date counter appears to be incrementing correctly, but the day of the month is not reset to one, at the end of each month. Possibly, it resets to 41, ie. the unused bit representing 40 permanently stuck at a one. On 17 January the date was shown as 51 December 2006. Further investigation is required to establish exactly how the date connter changes.

If the satellite's watchdog timer continues to operate normally, the beacon should switch ON around 28/29 January 2007. The satellite is in full sunlight at the present time, and will remain in this state until mid-April 2007, when eclipses start again.

I am indebted to Bob G4VRC and Dean AL7CR for their reports. Reports around the times of the expected beacon switch ON/OFF, are especially useful. Many thanks.

The current status of the satellite, is that all the analogue telemetry channels, 0 to 59 are zero, ie they have failed. The status channels 60 to 67 were still working. The spacecraft computer and active attitude control system have switched OFF, ie. the satellite' attitude is controlled only by the passive gravity boom gradient, and the satellite is free to spin at any speed. When telemetry was last received it showed that one of the solar arrays had failed, and there was a large unexplained current drain on the main 14 volt bus. After 22 years in orbit the battery has undergone around 100,000 partial charge/discharge cycles, and observations suggest that it cannot power the satellite during eclipses, or sometimes during periods of poor solar attitude.

The watchdog timer now operates on a 20 day cycle. The ON/OFF times have tended to be very consistent. The average of many observations show this to be 20.7 days, ie. 10.3 days ON followed by 10.4 days OFF. However, poor solar attitude may result may result in a low 14 volt line supply, which may cause the beacon to switch OFF prematurely, and reset the watchdog timer cycle. When this occurs, the beacon is OFF for 20.7 days.

The Beacon frequencies are -

VHF 145.826 MHz. AFSK FM ASCII Telemetry

UHF 435.025 MHz. OFF

S-band 2401.5 MHz. OFF

Listeners to OSCAR-11 may be interested in visiting my website. If you need to know what OSCAR-11 should sound like, there is a short audio clip for you to hear. The website contains an archive of news & telemetry data. It also contains details about using a soundcard or hardware demodulators for data capture. There is software for capturing data, and decoding ASCII telemetry. The URL is www.users.zetnet.co.uk/clivew/

[ANS thanks Clive, G3CWV, for the above information]

/EX

SB SAT @ AMSAT $ANS-028.03
OSCAR 7 News

AMSAT News Service Bulletin 028.03
From AMSAT HQ SILVER SPRING, MD.
January 28, 2007
To All RADIO AMATEURS
BID: $ANS-028.03

Yesterday afternoon I had the distinct pleasure of working some DX on AO-7 mode B from here in subtropical Florida. I caught a 4 degree max pass to the northeast that eventually covered a good bit of northwestern Europe, and had the pleasure to catch G1WPR in IO93 finishing up with K3SZH. Signals were 55 with some QSB on my uplink, probably due to all the energy wasted in heating the neighborhood palm trees. My QTH does not have what anyone could consider a clear horizon! As I was going LOS I also heard I believe W3JZ working G1WPR. At the time the footprint extended across the US from Idaho to Central Florida, and just about all of Canada, so the opportunity to work some satellite DX is there for many.

The 24 hour timer continues to change modes while the satellite is in continuous illumination, with the mode change occurring around 1130 UTC. Eclipses return April 3rd, 2007, and we expect the timer to be interrupted near this date.A good website to check to quickly find out what mode it is in can be found at: http://oscar.dcarr.org/ .

Good Luck and enjoy!

[ANS thanks Drew, KO4MA,for the above information]

/EX

SB SAT @ AMSAT $ANS-028.04
ARISS Status - 26 January 2007

AMSAT News Service Bulletin 028.04
From AMSAT HQ SILVER SPRING, MD.
January 28, 2007
To All RADIO AMATEURS
BID: $ANS-028.04

INTERNATIONAL SPACE STATION STATUS REPORT: SS07-04

HOUSTON - This week, the crew aboard the International Space Station prepared for an unprecedented series of spacewalks. NASA astronauts Mike Lopez-Alegria and Suni Williams are scheduled to begin a 6.5-hour spacewalk from the station around 9 a.m. CST on Wednesday, Jan. 31. It will be the first of a record four spacewalks planned during the next month.

Lopez-Alegria and Williams will conduct other spacewalks on Feb. 4, 8 and 22. The first three spacewalks will originate from the station's Quest airlock and the astronauts will use U.S. spacesuits. Lopez-Alegria and cosmonaut Mikhail Tyurin will use Russian spacesuits for the last spacewalk and will exit the station from the Pirs airlock.

The three U.S. spacewalks will rearrange the station's cooling system, bringing online new portions of the system that were activated during a shuttle mission in December 2006. The Russian spacewalk will free a stuck antenna on the ISS Progress 23 cargo craft docked to the aft end of the station, ensuring that craft can safely undock in April.

The crew began the week unloading some of the more than 2.5 tons of food, fuel and supplies that were delivered to the station on Jan. 19 by the ISS Progress 24 cargo craft, which included fresh produce, gifts from home, new clothing, spare parts, oxygen and water.

The crew's attention quickly turned to preparations for the upcoming spacewalks. On Monday, the crew began working with the U.S. spacesuits. Batteries for the suits were charged, and the suit cooling systems were cleaned.

On Tuesday, Lopez-Alegria and Williams trained using an onboard, laptop computer-based simulation. The training refreshed their skills operating the Simplified Aid for Extravehicular Activity Rescue, or SAFER, jetpack that is worn on spacesuits. The backpack allows spacewalkers to fly back to the station in the event they become separated from the complex.

On Thursday, ground controllers in Houston commanded the station's robotic arm to maneuver into the position it will occupy for the start of the spacewalk. Aboard the station, the crew reviewed the plans for the first spacewalk.

Lopez-Alegria and Williams continued checks of their spacesuits and checks of the SAFER backpacks Friday. The SAFER backpacks are propelled by compressed nitrogen gas, and, during the checkout, the harmless gas was released, depleting the nitrogen in one unit below the usable quantity. Two other usable SAFER backpacks remain onboard, however, and the loss of the third unit does not affect plans for the upcoming spacewalks.

The crew took time during their work on Monday to speak with television host Martha Stewart. Crew members also took time to field questions by amateur radio from two schools, one in Ottawa, Ontario, Canada, and another in Winnebago, Neb.

For more about the crew's activities and station sighting opportunities, visit:

http://www.nasa.gov/station

[ANS thanks Arthur, for the above information]

/EX

SB SAT @ AMSAT $ANS-028.05
Satellite Shorts From All Over

AMSAT News Service Bulletin 028.05
>From AMSAT HQ SILVER SPRING, MD.
January 28, 2007
To All RADIO AMATEURS
BID: $ANS-028.05

* Ed Long, WA4SWJ, the Editor of The AMSAT Journal is asking for help translating a technical article written in German into English. Ed wrote, "I have a highly interesting technical article for the Journal on oscillator stability but it is written in German. Unfortunately I cannot make the translation and need some help. Is anyone out there able to translate German that could help? John Bubbers used to do that for us but he has retired so I need some assistance. It is several pages long. You'll get credit in the Journal for the translation."

* The Tokyo Institute of Technology Cute-1.7+APD team reported this week that the call sign of C0-56 (also known as Cute-1.7 + APD) had to be changed from JQ1YCC (old call sign) to JQ1YPC (new call sign).
See: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

* AMSAT-NA server manager Paul, KB5MU reported an outage with all callsign@amsat.org mail aliases (including anything@amsat.org addresses) between 0930z to 1852z on 1/24/07. Service has been restored and no updates were lost. Messages sent to your mail aliases during the outage will have been bounced back to the sender with a "User unknown" error message. You may see some residual error messages still working their way through the worldwide email system, but service at amsat.org should be back to normal now. If you see any ongoing problems with the mail alias system, please notify mail-alias-service@amsat.org and Paul

promises to investigate.

* Pehuensat's elusive signal was copied in Buenos Aires, Argentina on 01/21/07 at 21:48 LU (GMT-3). Pehuensat-1 was heard on 145.825 with a weak but clear signal just above noise by ear, but they unable to decode the AX25 packet beacon. The rig was a FT-736 & omni super turnstile antenna for 2 meters. Engineer Jorge Lassig, director of the Penhuesat Uncoma project informed amateurs that the satellite takes between 48 and 72 hours to charge its batteries, due to the inadequate position of the nosecone to which it is still attached in reference to the sun. Once the batteries are recovered, the satellite transmits during several orbits until they discharge again causing the onboard computer to set the system in safe mode, leaving just the oscillator on. Folks at Uncoma are evaluating when the nosecone will change its position in space to improve the battery charging process of Penhuesat.

[ANS thanks everyone for the above information]

/EX

SB SAT @ AMSAT $ANS-028.06
Energizing Young Minds

AMSAT News Service Bulletin 028.06
>From AMSAT HQ SILVER SPRING, MD.
January 28, 2007
To All RADIO AMATEURS
BID: $ANS-028.06

NEWINGTON, CT, Jan 24, 2006 -- Eleven electrical engineering students at The College of New Jersey had a hand in designing some of the software defined radio (SDR) hardware that will fly aboard SuitSat-2. The college seniors signed up last fall for "Software Defined Radio," taught by adjunct professors Bob McGwier, N4HY, and Frank Brickle, AB2KT -- both members of the Amateur Radio on the International Space Station.

The second SuitSat will have a software designed Amateur Radio transponder (SDX) on board. SuitSat-2 is being viewed as a test bed for the hardware AMSAT hopes to launch on its Phase 3E Eagle <http://www.amsat.org/amsat-new/eagle/EaglePedia/index.php/Main_Page> satellite.

Early on, the students studied signal processing and communication theory as well as what Bricklecalls "esoteric corners of computer science." Then, using Matlab -- a high-level technical computing language -- the students implemented modulators and demodulators for SSB, FM, BPSK and AFSK.

"Students get a little bit of verbal swimming instruction, and then we toss them straight into the ocean," is how Brickle described the process.

By mid-semester, the students were designing their experiments and getting them up and running. Boards were powered up without diagnostic hardware or software, since that's how the circuitrywill be on orbit -- "walking a tightrope without a net," as Brickle sees it.

"Given the complexity of what the SDR/SDX in SuitSat-2 will be required to provide, the applications will need to run in an unprecedented software environment: pre-emptive multitasking underfreeRTOS," he explained. FreeRTOS is an open-source, round-robin operating system for embedded devices.

Instead of being scared off, the students ran with the challenge and demonstrated obvious enthusiasm, Brickle reports. "We will be doing a very good thing if we continue to involve these kids, and more like them, in our future AMSAT projects," he said. What surprised him most, he added, was that the students focused on taking new approaches to "very fundamental engineering issues that aren't flashy or trendy." McGwier remarked that both students and teachers shared in the excitement.

The SuitSat-2 team, under the leadership of Lou McFadin, W5DID, has been working on the design of a power converter for the solar panels, the internal housekeeping unit, the antenna mount, the transmitting and receiving hardware and how it will mount atop the suit's helmet. An ISS crew could launch SuitSat-2 during a spacewalk as early as next fall. SuitSat-2 could have an operational lifetime of six months or more.

[ANS Thanks ARRL for this article]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Dee Interdonato, NB2F

From -5480819334020537652
X-Google-Thread: 10e8ad,235c2b86f64671ef,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news4.google.com!border1.nntp.dca.giganews.com!nntp.giganews.com!local01.nntp.dca.giganews.com!nntp.comcast.com!news.comcast.com.POSTED!not-for-mail
NNTP-Posting-Date: Fri, 02 Feb 2007 20:27:24 -0600
From: "JoAnne K9JKM" <k9jkm_remove_@comcast.net>
Newsgroups: rec.radio.amateur.space

```
Subject: WSR-029 AMSAT Weekly Satellite Report
Date: Fri, 2 Feb 2007 20:27:32 -0600
MIME-Version: 1.0
Content-Type: text/plain;
     format=flowed;
     charset="iso-8859-1";
     reply-type=original
Content-Transfer-Encoding: 7bit
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.3028
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.3028
Message-ID: <A6ednepe0MiRbl7YnZ2dnUVZ_uGjnZ2d@comcast.com>
Lines: 1136
NNTP-Posting-Host: 67.184.169.1
X-Trace: sv3-3iYTsVt59x1LN7PPuB19hoBiK+5W1kJd8Zm4MBkEq/
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oXVfvYo9KXefIc9yH8B5+LDRSdlarfdu0MT+GhVauu7MCOrqD6ismfr+rXfrAF!6ES/hjBa8elW5+w=
X-Complaints-To: abuse@comcast.net
X-DMCA-Complaints-To: dmca@comcast.net
X-Abuse-and-DMCA-Info: Please be sure to forward a copy of ALL headers
X-Abuse-and-DMCA-Info: Otherwise we will be unable to process your complaint
properly
X-Postfilter: 1.3.32
Xref: g2news2.google.com rec.radio.amateur.space:586
```

This report is organized into 4 parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites

SB SAT @ AMSAT W8ISS ANS-029.S1
WSR 029 Part 1 01/29/2007

AMSAT NEWS SERVICE BULLETIN 029.S1 FROM AMSAT HQ
SILVER SPRING, MD, January 29,2007
TO ALL RADIO AMATEURS
BID: $ANS-029.S1

VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/V - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.870 to 145.930 MHz USB/CW

Dutch Transponder:

Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.875 to 145.925 MHz USB/CW

Indian Beacon: 145.859330 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsat.in/hamsat.htm

To know what transponder is switched on please listen for the beacon that is
active. Each transponder has a different beacon.
[10022006]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Semi-Operational - Software upgrade in progress
Current Mode(s): FM Repeater - V/U
                 PBBS -   /U - Telemetry Download ONLY
                 Digipeater - OFF

Analog voice downlink: 435.300 MHz FM
                        435.150 MHz FM
                       2401.200 Mhz FM
Analog voice uplink: 145.880 MHZ FM
                        145.880 MHz USB
                        145.920 MHz FM
                       1268.700 MHz FM 67Hz PL tone
Digital Downlinks: 435.150 MHz FM 38k4 Digital, PBP, 1 watt output
                        435.150 MHz FM 9k6 Digital, Pacsat Broadcast Protocol
                       2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Digital, Pacsat Broadcast Protocol
                       1268.700 mhz FM 9k6 PBP Digital

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[01292007]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The order of operation is thus: (allow for Doppler as necessary)
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer
   on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on
   and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10
   minute timer.
[01082007]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Operational

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP

U: RHCP

JARL English webpage: http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm
AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's CW
telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts.htm
[01222007]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Uplink: 145.850 MHz FM
Downlink: 436.795 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[01292007]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational depending on amount of Sunlight
Current Reported mode: Mode-A

```
Uplink:   145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink:  29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons:   29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW
```

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/

AO-7 users are requested to log their contacts and observations about
AO-7,
especially any unexpected mode changes. AO-07 telemetry software

webpage:
http://www.qsl.net/k3tz/files/K3TZ_AO-07_Telemetry_Decoder_0.5.zip

Please keep your power low! For additional information please read the
AO-7
Usage Guidelines on the AO-7 Log and Resource Site located at:
http://www.planetemily.com/ao7
[01082007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: Occasional Voice
Digipeater: OFF

The Expedition 14 crew is:
Commander: Michael Lopez-Alegria KE5GTK
Flight Engineer: Mikhail Tyurin RZ3FT
Flight Engineer: Sunita Williams KD5PLB

Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

SSTV TESTING:
Worldwide Reported Downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS, RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.
[12182006]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-029.S2
WSR 029 Part 2 01/29/2007

AMSAT NEWS SERVICE BULLETIN 029.S2 FROM AMSAT HQ
SILVER SPRING, MD, January 29, 2007
TO ALL RADIO AMATEURS
BID: $ANS-029.S2

PEHUENSAT-1
Catalog Number: 29709
Launch Date: January 10, 2007

Status: In Orbit

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder: 145.825 Mhz FM
[01082007]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: In Orbit

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01222007]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: In Orbit

Main Downlink: 145.825 Mhz FM APRS AX25
APRS Uplink: 145.825 MHz FM APRS AX25
Voice/PSK31 Uplink: 28.120 MHz
[01222007]
=====
GENESAT-1 ?O-??
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Telemetry Beacon Downlink: 437.0670 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[01082007]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Operational

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon: 437.2750 MHz CW

Callsign: JR8YJT
[10302006]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon: 437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
[01082007]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launched: June 30, 2003

Status: Operational

Beacon: 436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[01082007]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launched: February 21, 2006

Status: Semi-Operational - Constant Carrier only

```
Uplink:  1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan ? )

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[01082007]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Semi-Operational - Software upgrade in progress
Current Mode(s): FM Repeater - V/U
                 PBBS -         /U _ Telemetry Dowload ONLY
                 Digipeater -  OFF

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink:   145.880 MHZ FM
                       145.880 MHz USB
                       145.920 MHz FM
                      1268.700 MHz FM 67Hz PL tone
Digital Downlinks:     435.150 MHz FM 38k4 Digital, PBP, 1 watt output
                       435.150 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:        145.860 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      1268.700 mhz FM 9k6 PBP Digital

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[01292007]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001
```

Status: Operational only in Full Sun Light

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[01082007]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks: 145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM
Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[01082007]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Semi-operational - APRS usage through Digipeater

Uplink: 145.900 MHz FM 1200-baud Manchester FSK
                145.920 MHz FM 1200-baud Manchester FSK
                145.940 MHz FM 1200-baud Manchester FSK
                145.960 MHz FM 1200-baud Manchester FSK
Downlink: 437.026 MHz SSB 1200-baud PSK
Mode-S Beacon: 2401.1428 MHz

Mode and Antenna Polarization:
U: RC 437.050 MHz RHCP
   PSK 437.025 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[01222007]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational

Telemetry Downlink: 145.826 MHz. FM (1200-baud AFSK) approx. 10 days ON,
10
days OFF
Mode-S Beacon: 2401.500 MHz - OFF
UHFBeacon: 435.025 MHz - OFF

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Official webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[01082007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: Occasional Voice
Digipeater: OFF

Expedition Crew 14 is:

Commander:	Michael Lopez-Alegria	KE5GTK
Flight Engineer:	Mikhail Tyurin	RZ3FT
Flight Engineer:	Sunita Williams	KD5PLB

Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

SSTV TESTING:
Worldwide Reported Downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:

V: Linear
U: Linear

Callsigns:

German:	DP0ISS
Russian:	RS0ISS, RZ3DZR
USA:	NA1SS
Packet Mailbox:	RS0ISS-11
Packet Keyboard:	RS0ISS-3
Digipeater callsign:	ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line is NOT translated from Russian and posted.
[01082007]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-029.S3
WSR 029 Part 3 01/29/2007

AMSAT NEWS SERVICE BULLETIN 029.S3 FROM AMSAT HQ
SILVER SPRING, MD, January 29, 2007
TO ALL RADIO AMATEURS
BID: $ANS-029.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink:	437.250 MHz FM 67Hz CTCSS
Voice Downlink:	2401.835 MHz FM

Packet Up/Downlink: 437.250 MHz 9k6 packet
Packet Downlink   2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Operational

Uplinks: 145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[01222007]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK

Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, callsign KE6QMD, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks

V-band: 145.840 - 145.990 MHz CW/LSB
U-band: 435.550 - 435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

```
Downlinks
---------
S2-band:  2401.225 -  2401.475 MHz CW/USB
K-band:  24048.010 - 24048.060 MHz CW/USB
Beacon:   2401.323 MHz
         24048.035 MHz
[01222007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink:    145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site
at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater:         436.250 MHz

Uplinks: Mode B Repeater:  145.825 MHz
Mode J Digipeater:         145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz
```

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm

[ANS-WSR has no further information]
[09042006]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink: 145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012006]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

```
Status: Downlink only

Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[012212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HL01-11
BBS: HL01-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
```

```
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplinks:          145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink:      437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
```

BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[01222007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink: 145.825 MHz FM 1200 Baud AFSK
Beacon: 2401.220 MHz
[05012006]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink: 145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting): Non-Operational
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet: Non-Operational
Uplink: 145.8500 MHz MFSK 1200 BPS
Uplink: 145.8700 MHz MFSK 1200 BPS
Uplink: 145.8900 MHz MFSK 1200 BPS
Uplink: 145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

```
Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon:   145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink  435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink  435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink   29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink  29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
[01152007]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970
```

```
Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon:    29.352 MHz (intermittent)

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink:     21.260 to 21.300 MHz CW/USB
Downlink:  145.860 to 145.900 MHz CW/USB

Beacon:    145.860 MHz

Robot:     145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink:   21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB
```

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-029.S4
WSR 029 Part 4 01/29/2007

AMSAT NEWS SERVICE BULLETIN 029.S4 FROM AMSAT HQ
SILVER SPRING, MD, January 29, 2007
TO ALL RADIO AMATEURS
BID: $ANS-029.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE
PROPOSED FOR LAUNCH AT THIS TIME:

Phase 5a Mars Mission
Catalog Number:
Proposed Launch Date: 2009 or 2011

Status: Design Phase

For the latest project status update please visit the AMSAT-DL P5-A web page:
http://ticket-to-mars.org
[01222007]
=====
PHASE 3E AO-??
Catalog number:
Proposed Launch Date: Late 2007

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/
[01222007]
=====
Eagle AO-??
Catalog Number:
Proposed Launch Date: Early/Mid 2009

Status: Design Phase

For the latest project status updates please visit the AMSAT-NA webpage:
http://www.amsat.org
[01222007]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live

radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/amsat/listserv/menu.html

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

From 1447223031673513024
X-Google-Thread: 10e8ad,f5461b95743eb5f6,start

```
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news3.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!local01.nntp.dca.giganews.com!nntp.comcast.com!
news.comcast.com.POSTED!not-for-mail
NNTP-Posting-Date: Mon, 05 Feb 2007 20:27:11 -0600
From: "JoAnne K9JKM" <k9jkm_remove_@comcast.net>
Newsgroups: rec.radio.amateur.space
Subject: WSR-036 AMSAT Weekly Satellite Report
Date: Mon, 5 Feb 2007 20:27:28 -0600
MIME-Version: 1.0
Content-Type: text/plain;
     format=flowed;
     charset="iso-8859-1";
     reply-type=original
Content-Transfer-Encoding: 7bit
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.3028
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.3028
Message-ID: <_PSdnfjQgt0delrYnZ2dnUVZ_rOqnZ2d@comcast.com>
Lines: 1136
NNTP-Posting-Host: 67.184.169.1
X-Trace: sv3-BXcpr9oJkERZHauMQXYTLXCD/QKMdacn0VzQF4pEohjlyyeDD5S55/wxVLil3prxT/
4zeFwPzjA/Wbh!06XQ6u+GKasEL8amqr+SJcjCFpwQ5NFpk/
cxTcIfh8QMT+LA4e9Es+KqCvbDRYbSbjw+y+pLh6G/!BkqhlXsn6r8AKYI=
X-Complaints-To: abuse@comcast.net
X-DMCA-Complaints-To: dmca@comcast.net
X-Abuse-and-DMCA-Info: Please be sure to forward a copy of ALL headers
X-Abuse-and-DMCA-Info: Otherwise we will be unable to process your complaint
properly
X-Postfilter: 1.3.32
Xref: g2news2.google.com rec.radio.amateur.space:587
```

This report is organized into 4 parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites

SB SAT @ AMSAT W8ISS ANS-036.S1
WSR 036 Part 1 02/05/2007

AMSAT NEWS SERVICE BULLETIN 036.S1 FROM AMSAT HQ
SILVER SPRING, MD, February 05, 2007
TO ALL RADIO AMATEURS
BID: $ANS-036.S1

VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational

```
Current Mode: U/V - Indian Transponder

Frequencies:
Indian Transponder:
Uplink:   435.220 to 435.280 MHz LSB/CW
Downlink: 145.870 to 145.930 MHz USB/CW

Dutch Transponder:
Uplink:   435.225 to 435.275 MHz LSB/CW
Downlink: 145.875 to 145.925 MHz USB/CW


Indian Beacon:  145.859330 MHZ CW
Dutch Beacon:   145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsat.in/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is
active. Each transponder has a different beacon.
[10022006]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Semi-Operational - Software upgrade in progress
Current Mode(s): FM Repeater - V/U
                 PBBS -         /U - Telemetry Download ONLY
                 Digipeater -  OFF

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink:   145.880 MHZ FM
                       145.880 MHz USB
                       145.920 MHz FM
                      1268.700 MHz FM 67Hz PL tone
Digital Downlinks:     435.150 MHz FM 38k4 Digital, PBP, 1 watt output
                       435.150 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:        145.860 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      1268.700 mhz FM 9k6 PBP Digital

Mode and Antenna Polarization:
T: Linear
V: Linear
```

```
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[01292007]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Uplink:   145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The order of operation is thus: (allow for Doppler as necessary)
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute
timer
   on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the
repeater on
   and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset
the 10
   minute timer.
[01082007]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Operational

Voice/CW Mode JA
Uplink:   145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon:   435.795 MHz

Digital Mode JD
Uplinks:  145.850 MHz FM
```

145.870 MHz FM
145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

JARL English webpage: http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm
AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts.htm
[01222007]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Uplink: 145.850 MHz FM
Downlink: 436.795 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[01292007]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational depending on amount of Sunlight
Current Reported mode: Mode-A

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz CW
145.972 MHz CW
435.100 MHz CW
2304.100 MHz CW

Official Webpage:

http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/

AO-7 users are requested to log their contacts and observations about
AO-7,
especially any unexpected mode changes. AO-07 telemetry software
webpage:
http://www.qsl.net/k3tz/files/K3TZ_AO-07_Telemetry_Decoder_0.5.zip

Please keep your power low! For additional information please read the
AO-7
Usage Guidelines on the AO-7 Log and Resource Site located at:
http://www.planetemily.com/ao7
[01082007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: Occasional Voice
Digipeater: OFF

The Expedition 14 crew is:
Commander: Michael Lopez-Alegria KE5GTK
Flight Engineer: Mikhail Tyurin   RZ3FT
Flight Engineer: Sunita Williams   KD5PLB

Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

SSTV TESTING:
Worldwide Reported Downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS, RZ3DZR

USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.
[12182006]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-036.S2
WSR 036 Part 2 02/05/2007

AMSAT NEWS SERVICE BULLETIN 036.S2 FROM AMSAT HQ
SILVER SPRING, MD, February 05, 2007
TO ALL RADIO AMATEURS
BID: $ANS-036.S2

PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: In Orbit

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder: 145.825 Mhz FM
[02052007]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: In Orbit

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01222007]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: In Orbit

Main Downlink: 145.825 Mhz FM APRS AX25
APRS Uplink: 145.825 MHz FM APRS AX25
Voice/PSK31 Uplink: 28.120 MHz

```
[01222007]
=====
GENESAT-1 ?O-??
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Telemetry Beacon Downlink: 437.0670 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[01082007]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Operational

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon:             437.2750 MHz CW

Callsign: JR8YJT
[10302006]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon:             437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
[01082007]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launched: June 30, 2003

Status: Operational

Beacon:     436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW
```

```
Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[01082007]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launched: February 21, 2006

Status: Semi-Operational - Constant Carrier only

Uplink:  1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan ? )

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[01082007]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Semi-Operational - Software upgrade in progress
Current Mode(s): FM Repeater - V/U
                 PBBS -         /U _ Telemetry Dowload ONLY
                 Digipeater -  OFF

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink:   145.880 MHZ FM
                       145.880 MHz USB
                       145.920 MHz FM
                      1268.700 MHz FM 67Hz PL tone
Digital Downlinks:     435.150 MHz FM 38k4 Digital, PBP, 1 watt output
                       435.150 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:        145.860 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      1268.700 mhz FM 9k6 PBP Digital

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12
```

```
Official Webpage: http://www.amsat.org/amsat-new/echo/
[01292007]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Operational only in Full Sun Light

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink:        144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[01082007]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM
Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[01082007]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Semi-operational - APRS usage through Digipeater

Uplink:         145.900 MHz FM 1200-baud Manchester FSK
                145.920 MHz FM 1200-baud Manchester FSK
                145.940 MHz FM 1200-baud Manchester FSK
                145.960 MHz FM 1200-baud Manchester FSK
Downlink:       437.026 MHz SSB 1200-baud PSK
Mode-S Beacon: 2401.1428 MHz
```

Mode and Antenna Polarization:
U: RC 437.050 MHz RHCP
   PSK 437.025 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[01222007]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational

Telemetry Downlink: 145.826 MHz. FM (1200-baud AFSK) approx. 10 days ON, 10
                    days OFF
Mode-S Beacon: 2401.500 MHz - OFF
UHFBeacon: 435.025 MHz - OFF

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Official webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[01082007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: Occasional Voice
Digipeater: OFF

Expedition Crew 14 is:
Commander: Michael Lopez-Alegria KE5GTK
Flight Engineer: Mikhail Tyurin   RZ3FT
Flight Engineer: Sunita Williams   KD5PLB

Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

SSTV TESTING:
Worldwide Reported Downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS, RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is NOT translated from Russian and posted.
[01082007]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-036.S3
WSR 036 Part 3 02/05/2007

AMSAT NEWS SERVICE BULLETIN 036.S3 FROM AMSAT HQ
SILVER SPRING, MD, February 05, 2007
TO ALL RADIO AMATEURS
BID: $ANS-036.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====

```
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink:         437.250 MHz FM 67Hz CTCSS
Voice Downlink:      2401.835 MHz FM
Packet Up/Downlink:   437.250 MHz 9k6 packet
Packet Downlink      2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink:   435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Operational

Uplinks:   145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink:  437.325 MHz

Broadcast callsign: MYSAT3-11
BBS:                MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial
land and weather imaging payloads offers FM and FSK Amateur Radio
communica-
tion.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a
collaborative effort between the Malaysian government and Surrey
Satellite
Technology Ltd.
[01222007]
```

=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, callsign KE6QMD, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

```
Status: Non-Operational

Uplinks
-------
V-band:   145.840 -  145.990 MHz CW/LSB
U-band:   435.550 -  435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks
---------
S2-band:  2401.225 -  2401.475 MHz CW/USB
K-band:  24048.010 - 24048.060 MHz CW/USB
Beacon:   2401.323 MHz
         24048.035 MHz
[01222007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink:    145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site
at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater:         436.250 MHz

Uplinks: Mode B Repeater:  145.825 MHz
Mode J Digipeater:         145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
```

PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm

[ANS-WSR has no further information]
[09042006]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink: 145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

```
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012006]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: Downlink only

Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[012212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
```

Launched: July 17, 1991

Status: Non-Operational

Uplink: 145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Operational

Uplink: 435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons: 435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink: 145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks: 145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplinks: 145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK

145.880 MHz 1200-baud Manchester FSK
145.900 MHz 1200-baud Manchester FSK

CW downlink: 437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[01222007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink: 145.825 MHz FM 1200 Baud AFSK
Beacon: 2401.220 MHz
[05012006]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink: 145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting): Non-Operational
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

```
Mode V/U (J) Packet: Non-Operational
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink  435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon:   145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink  435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink  435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink   29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink  29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational
```

```
Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
[01152007]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon:    29.352 MHz (intermittent)

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink:     21.260 to 21.300 MHz CW/USB
Downlink:  145.860 to 145.900 MHz CW/USB

Beacon:    145.860 MHz

Robot:     145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
```

Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

```
Uplink:   21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon:   29.408 MHz

Robot:    29.454 MHz
```
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-036.S4
WSR 036 Part 4 02/05/2007

AMSAT NEWS SERVICE BULLETIN 036.S4 FROM AMSAT HQ
SILVER SPRING, MD, February 05, 2007
TO ALL RADIO AMATEURS
BID: $ANS-036.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE
PROPOSED FOR LAUNCH AT THIS TIME:

Phase 5a Mars Mission
Catalog Number:
Proposed Launch Date: 2009 or 2011

Status: Design Phase

For the latest project status update please visit the AMSAT-DL P5-A web page:
http://ticket-to-mars.org
[01222007]
=====
PHASE 3E AO-??
Catalog number:
Proposed Launch Date: Late 2007

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/
[01222007]
=====
Eagle AO-??
Catalog Number:
Proposed Launch Date: Early/Mid 2009

Status: Design Phase

For the latest project status updates please visit the AMSAT-NA webpage:
http://www.amsat.org
[01222007]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

- AMSAT News Service (ANS)
- General satellite discussion (AMSAT-BB)
- Orbit data (KEPS)
- Manned space missions (SAREX)
- District of Columbia area (AMSAT-DC)
- New England area (AMSAT-NE)
- AMSAT Educational Liaison mailing list (AMSAT-EDU)
- AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/amsat/listserv/menu.html

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:

ans-editor{at}amsat.org
NNNN
/EX

```
From 3302200322020628716
X-Google-Thread: 10e8ad,23471c5af16ab08a,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news3.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!local01.nntp.dca.giganews.com!nntp.comcast.com!
news.comcast.com.POSTED!not-for-mail
NNTP-Posting-Date: Mon, 05 Feb 2007 20:27:17 -0600
From: "JoAnne K9JKM" <k9jkm_remove_@comcast.net>
Newsgroups: rec.radio.amateur.space
Subject: ANS-035 AMSAT News Service Weekly Bulletins
Date: Mon, 5 Feb 2007 20:27:34 -0600
MIME-Version: 1.0
Content-Type: text/plain;
     format=flowed;
     charset="iso-8859-1";
     reply-type=original
Content-Transfer-Encoding: 7bit
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.3028
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.3028
Message-ID: <RKidnVKAu-AYelrYnZ2dnUVZ_vmqnZ2d@comcast.com>
Lines: 317
NNTP-Posting-Host: 67.184.169.1
X-Trace: sv3-a3Po1CQVcnjflhQvWPdOryZio79XZee/kT65zm078NSy9Dz+trp1oA/
Ptlg7ZJXh7Zn9TmM/l5YR+Sk!E5QYTtfxtpFador/
2jDZiOKkRp9xa5k6GUt0DlCifn9KNrb0ACmZMUdlnEAmwOt/Bn8kw3HKJF/T!BBAt+wv76M++U8c=
X-Complaints-To: abuse@comcast.net
X-DMCA-Complaints-To: dmca@comcast.net
X-Abuse-and-DMCA-Info: Please be sure to forward a copy of ALL headers
X-Abuse-and-DMCA-Info: Otherwise we will be unable to process your complaint
properly
X-Postfilter: 1.3.32
Xref: g2news2.google.com rec.radio.amateur.space:588
```

AMSAT NEWS SERVICE ANS-035

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* AMSAT-DC SPACE SEMINAR 2007
* ARISS Weekly Report
* Space Shorts From All Over
* Upcoming ARISS Contacts

SB SAT @ AMSAT $ANS-035.01
AMSAT-DC MEETING AND SPACE SEMINAR 2007

AMSAT News Service Bulletin 035.01
From AMSAT HQ SILVER SPRING, MD.
Febrary 4, 2007
To All RADIO AMATEURS
BID: $ANS-035.01

Excitement is brewing for the next annual local AMSAT meeting and space seminar to be held in the Maryland-DC area on Saturday, March 24, 2007. You are invited!

There will be talks, demos, tutorials and plenty of socializing on amateur satellites, ground station set up, and high-altitude balloon experiments in the greater mid-Atlantic USA area.

AMSAT members, students, educators & the public are all invited. No tickets, no RSVP is needed. Come as you are, but bring a friend and pass the word!

The event will be held in the Pioneer Hall at the Historical Electronics Museum (HEM) at 1745 West Nursery Road, Linthicum, Maryland (ZIP 21090) near BWI airport. Starting time is 11 A.M. local for the day long event.

Directions to HEM are at the museum web site: http://www.hem-usa.org/

TALK-IN will be on 146.760 MHz with a 107.2 Hz tone in the two hours prior to the start time.

Your host is AMSAT Area Coordinator Pat Kilroy, N8PK, n8pk@amsat.org, and others.

Speaker slots are open. More demos are solicited. Coordination help is sought in advance and also on the day of the meeting. AMSAT members please contact the host.

This event is sponsored by the local volunteer AMSAT members. All presenters are volunteers. A pass-the-hat offering will be taken for donations to help offset the meeting room cost, refreshments and associated items.

For any late breaking updates go to

http://www.amsat.org/amsat-new/fieldops/events.php

You won't want to miss this one!

Additional information is available at http://patkilroy.com/amsat-dc

[ANS thanks Pat Kilroy, N8PK, for the above information]

/EX

SB SAT @ AMSAT $ANS-035.02
ARISS Weekly Status Report January 29, 2007

AMSAT News Service Bulletin 035.02
From AMSAT HQ SILVER SPRING, MD.
Febrary 4, 2007
To All RADIO AMATEURS
BID: $ANS-035.02

1.Canadian School Contact Successful

Students from Ecole elementaire publique Le Prelude experienced an Amateur Radio on the International Space Station (ARISS) contact on Wednesday, January 4. The event was held at the Canada Science and Technology Museum in Ottawa. Sunita Williams, KD5PLB, greeted the students in both English and French and answered 21 questions put to her by twelve K-6 graders. An audience of 175 was present for the contact, including two elected members of Federal Parliament, one City Councilor, the School Board Chair, and the president of Radio Amateurs of Canada (RAC). Among the media attending were four major French and English television stations. Audio was fed into the EchoLink AMSAT and JK1ZRW conference room servers; seventeen connections were made from 6 countries.

2.Winnebago Reservation School Contact Successful

On Thursday, January 25, students at the Winnebago Public School spoke with Sunita Williams, KD5PLB, via Amateur Radio on the International Space Station (ARISS). Nineteen students were each able to ask one question. An audience of approximately 500 students, teachers and parents listened over the PA system. Television station Channel 9, from Sioux City, IA and the Sioux City

Journal covered the event, interviewing at least 9 students. The school posted information about the ARISS activities on its website.

See http://winnebago.esu1.org.

For the Sioux City Journal article,

see: http://www.siouxcityjournal.com/video/video_vid_player.php?v=20070125_winnebagospace_384

Winnebago is a rural, Title 1 school with 86% of the school population coming from economically disadvantaged families.

3. ARISS New York Contact to be Rescheduled

The Amateur Radio on the International Space Station (ARISS) contact with East Aurora Middle School in New York, originally slated for Thursday, February 1, has been cancelled due to scheduling issues. The event will be rescheduled in the near future.

4.ARRL Article Covers ISS Crew

The American Radio Relay League (ARRL) ran an article on ISS Hams and upcoming spacewalks.

See: http://www.arrl.org/?artid=7145

5.Boulder Hill Elementary Prepares for ARISS Contact

Boulder Hill Elementary School in Montgomery, Illinois has been preparing for an Amateur Radio on the International Space Station (ARISS) contact. The school has a radio club made up of 30 members from the fourth and fifth grades; two-thirds of the members are girls. The Fathers Club and PTA are preparing for the contact, making a stage curtain, and trying to obtain space food and astronaut costumes for the teachers. They also plan to invite an astronaut to visit the school. Display cases have been set up publicizing the event, providing information on the International Space Station, space, solar energy, (complete with solar panels), and satellite models and rockets. A documentary is in the works, which will cover all activities related to the contact. An Illinois state representative and state senator have been invited to attend the event, tentatively planned for the spring.

6. ARRL Article on Students SuitSat-2 Work

The American Radio Relay League (ARRL) ran a web story on the college students
who are participating in the SuitSat-2 software defined radio hardware testing
and development.

See: http://www.arrl.org/news/stories/2007/01/24/101/?nc=1

The two Radio Amateur Satellite Corporation (AMSAT) members, who taught this
software defined radio class at The College of New Jersey, have received an
invitation from the Engineering department head to repeat the course in the
fall.

[ANS thanks Pat Carol Jackson, KB3LKI, for the above information]

/EX

SB SAT @ AMSAT $ANS-035.03
Space Shorts From All Over

AMSAT News Service Bulletin 035.03
From AMSAT HQ SILVER SPRING, MD.
February 4, 2007
To All RADIO AMATEURS
BID: $ANS-035.03

+ On February 3, 2007 Craig, KL4E conducted a live amateur radio communications exhibition for the PQ-13 pilots and support personnel of the 491st Aviation Regiment, ASDF, at Camp Carroll on Fort Richardson, Alaska. For the satellite portion of the demonstration, Craig operated on AO-51 and SO-50.

+ Taking advantage of good operating conditions aboard the recently recovered AO-27 satellite its controllers have shifted the bird's schedule to begin 7 minutes earlier than usual and have extended the transmitter's on-time to 8 minutes. This will allow operators to contact the satellite DXpeditions currently active aboard cruise ships in the Carribean. See http://www.ao27.org.

+ Here's a chance to do some space browsing in the shack while waiting for the next satellite pass. http://sky-map.org/ features an interactive sky map with point-and-click accessibility. You can simply point your mouse at any sky object and a small pop-up appears displaying the name and a brief description of that object. By clicking on the object you instantly have access to detailed information about this star.

+ Sources at SpaceDaily.com reported this week the International Space Station will likely remain operational until 2025 according to the head of the Russian spacecraft manufacturer Energia. Nikolai Sevastyanov said Tuesday, "By 2009-2015, Russia will be the only country able to deliver crews to the station. No one is going to sink or drop the ISS, as all countries realize that the station is becoming a full-scale industrial facility in space. Although it is scheduled for decommissioning in 2015, its operational life could be prolonged until 2025. Energia has proposed making the station permanent. If we terminate its existence, it would be hard for mankind to implement such a project anew."

[ANS thanks everyone for the above information]

/EX

SB SAT @ AMSAT $ANS-035.04
Upcoming ARISS Contact Schedule as of 2007-02-02

AMSAT News Service Bulletin 035.04
From AMSAT HQ SILVER SPRING, MD.
February 4, 2007
To All RADIO AMATEURS
BID: $ANS-035.04

Quick list of scheduled contacts and events:

Total number of ARISS school contacts is 267.

QSL information may be found at:

http://www.arrl.org/ARISS/arissfaq.html
http://www.rac.ca/ariss/oindex.htm#QSL's

ISS callsigns: DP0ISS, NA1SS, RS0ISS

****

The schedule page has been updated as of 2007-02-02 23:00 UTC. Here you will find a listing of all scheduled school contacts, and questions, other ISS related websites, IRLP and Echolink websites, and instructions for any contact that may be streamed live.

http://www.amsat.org/amsat/ariss/news/arissnews.txt

The successful school list has been updated as of 2007-01-26 04:00 UTC

http://www.amsat.org/amsat/ariss/news/Successful_ARISS_schools.rtf

Frequency chart for packet, voice, and crossband repeater modes showing Doppler correction as of 2005-07-29 04:00 UTC http://www.amsat.org/amsat/ariss/news/ISS_frequencies_and_Doppler_correction.rtf

Listing of ARISS related magazine articles as of 2006-07-10 03:30 UTC:

http://www.amsat.org/amsat/ariss/news/ARISS_magazine_articles.rtf

****

There has been a rumor that the ISS was having direct contacts on the
40 meter
band. There is no HF radio equipment on board and available yet. The HF
antenna is mounted. Sometimes WA3NAN will retransmit shuttle audio.

****

Expedition 14 on orbit:
Michael Lopez-Alegria KE5GTK
Mikhail Tyurin, RZ3FT

Expedition 14/15 on orbit:
Sunita Williams, KD5PLB

****

[ANS thanks Charlie Sufana, AJ9N for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the
President's
Club. Members of the President's Club, as sustaining donors to AMSAT
Project
Funds, will be eligible to receive additional benefits. Application
forms are
available from the AMSAT Office.

73,
This week's ANS Editor,
Dave Johnson
g4dpz at amsat dot org

From -1615072550558085126
X-Google-Thread: 10e8ad,ff2d6f5710fc5e8a,start
X-Google-Thread: 113975,ff2d6f5710fc5e8a,start
X-Google-Attributes: gid10e8ad,gid113975,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news3.google.com!homer!news.glorb.com!news-
spur1.glorb.com!news.glorb.com!news.astraweb.com!router2.astraweb.com!not-for-mail
From: Chris Steyaert <observations@rmob.org>
Newsgroups: rec.radio.amateur.space,sci.astro.amateur

Subject: Radio Meteor Obs. Bull. December 2007 Quadrantids
Date: Tue, 06 Feb 2007 22:34:22 +0100
Message-ID: <j1ths25jk03bobvntrkodkptsdko4p6ne4@4ax.com>
X-Newsreader: Forte Agent 1.93/32.576 English (American)
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Lines: 17
Organization: Unlimited download news at news.astraweb.com
NNTP-Posting-Host: c01eb948.news.astraweb.com
X-Trace: DXC=<ZUKTeXUUdEOObP71A_HVDL?0kYOcDh@JT7U22f;g0<EQ^Co4RH`4;JG?
ifhhgG3CAU5hkaKoWbRGIE56WN9[f0B
Xref: g2news2.google.com rec.radio.amateur.space:589 sci.astro.amateur:52261

Radio Meteor Observation Bulletin No. 162 of January 2007 (78K) is available now as

http://visualrmob.free.fr/rmobtext/rmob0701.txt

More information and the visual presentation of the hourly forward scatter counts can be found on

http://www.rmob.org

http://radio.data.free.fr

Chris

From -2559105499513441469
X-Google-Thread: 10e8ad,741c090310cee2f,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news4.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!local01.nntp.dca.giganews.com!nntp.comcast.com!
news.comcast.com.POSTED!not-for-mail
NNTP-Posting-Date: Sat, 10 Feb 2007 20:38:21 -0600
From: "JoAnne K9JKM" <k9jkm_remove_@comcast.net>
Newsgroups: rec.radio.amateur.space
Subject: ANS-042 AMSAT News Service Weekly Bulletins
Date: Sat, 10 Feb 2007 20:38:31 -0600
MIME-Version: 1.0
Content-Type: text/plain;
format=flowed;
charset="iso-8859-1";
reply-type=original
Content-Transfer-Encoding: 7bit
X-Priority: 3
X-MSMail-Priority: Normal

X-Newsreader: Microsoft Outlook Express 6.00.2900.3028
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.3028
Message-ID: <lsCdnf5xSPgAHFPYnZ2dnUVZ_uCinZ2d@comcast.com>
Lines: 400
NNTP-Posting-Host: 67.184.169.1
X-Trace: sv3-
w3lsh8uUORsyl9Njroo107RkSDRIJZeGHIbHn7plCQYEohcOzf2uCfsrvLEF+bY5wxD8Xy0OAw+HZv6!
tDPh9qDxnBArXKhrfV2Dc3qBHuWUWVKxNF4pA7ZGnqPgjfU+wByzkDrhBnynU0496VuS8bsXJ1ui!
+xWzbSgXiphU21c=
X-Complaints-To: abuse@comcast.net
X-DMCA-Complaints-To: dmca@comcast.net
X-Abuse-and-DMCA-Info: Please be sure to forward a copy of ALL headers
X-Abuse-and-DMCA-Info: Otherwise we will be unable to process your complaint properly
X-Postfilter: 1.3.32
Xref: g2news2.google.com rec.radio.amateur.space:590

AMSAT NEWS SERVICE
ANS-042

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:

* AMSAT-NA and AMSAT-UK Donation to P3E
* SKN Best Fist Nominations Announcement
* New Item at the AMSAT On-line Store
* AMSAT Awards
* OSCAR-1 Pioneer Harley Gabrielson, K6DS Silent Key
* Pehuensat-1 Designated OSCAR-63 (PO-63)
* First Call For Speakers for AMSAT-UK Colloquium
* Space Shorts From All Over
* First Call For Papers For The Annual SA AMSAT Space Conference
* ARISS Status Report for the Week of February 5, 2007

SB SAT @ AMSAT $ANS-042.01
AMSAT-NA and AMSAT-UK Donation to P3E

AMSAT News Service Bulletin 042.01
From AMSAT HQ SILVER SPRING, MD.
February 11, 2007
To All RADIO AMATEURS
BID: $ANS-042.01

Earlier this week AMSAT-NA announced its agreement with AMSAT-UK and AMSAT-DL to donate a total of 40,000 Euros to AMSAT-DL for the purpose of funding the continued operation of the "Zentrales Entwicklungslabor for Electronik", (Central Development Lab for Electronics, aka "The ZEL") where its current major project is the construction of the Phase 3E satellite (P3E).

P3E is considered vital to the amateur radio space community for a variety of reasons. Currently there is no high orbit satellite carrying analogue transponders allowing DX multiple simultaneous contacts. The proposed orbit of P3E will cause it to be visible from amateur radio stations on earth for several hours at a time, allowing increased periods of operation and experimentation.

The P3E satellite will also provide the testbed for several other experiments which will test techniques needed for the proposed flight of an amateur radio spacecraft to Mars (Phase 5A), for example, a low power beacon simulating the weak signals that it will send from the Phase 5A satellite (P5A) on its journey to Mars. This will allow radio amateurs to test their stations in readiness for P5A.

The optimal years for launching a Mars bound spacecraft are 2009 or 2011 so it is important that P3E is launched as soon as possible. This is currently planned to be at the end of 2008. Suitable launch opportunities for P3E and P5A are being investigated.

To read the full story please go to http://www.amsat.org.

[ANS thanks AMSAT-NA, AMSAT-UK, and AMSAT-DL for the above information]

/EX

SB SAT @ AMSAT $ANS-042.02
SKN Best Fist Nominations Announcement

AMSAT News Service Bulletin 042.02
From AMSAT HQ SILVER SPRING, MD.
February 11, 2007
To All RADIO AMATEURS
BID: $ANS-042.02

Ray, W2RS has received the votes for Best Fist and compiled the results from the OSCAR Straight Key Night activity. Ray says, "Many thanks to all who participated in AMSAT's 2007 Straight Key Night on OSCAR, held in memory of Cliff Buttschardt, K7RR."

The following each received at least one Best Fist nomination from someone they worked:

Lee Herterich, K1VZI
Keith O'Brien, N4ZQ
John Lee, K6YK
Mike Herr, WA6ARA

Al Ozias, N7EQF
Mike Fullmer, KZ7O
Mark Spencer, WA8SME
Frank Wiesenmeyer, K9CIS
Ron McCulley, K0RJS

Congratulations!

[ANS thanks Ray, W2RS for the above information]

/EX

SB SAT @ AMSAT $ANS-042.03
New Item at the AMSAT On-line Store

AMSAT News Service Bulletin 042.03
From AMSAT HQ SILVER SPRING, MD.
February 11, 2007
To All RADIO AMATEURS
BID: $ANS-042.03

Bruce, KK5DO wearing his AMSAT Store Manager hat says, "There is a new addition to the AMSAT Online store for 2007. There are also many cool things with the AMSAT logo that can be purchased while online from the AMSAT Online store."

AMSAT is proud to offer this quality white polo shirt made of 100% combed cotton by Outer Banks for 2007. The shirt is short sleeve and has a collar and three buttons. A pocket is on the left. Appearing directly above the pocket is the AMSAT logo and name in red and Radio Amateur Satellite Corporation in blue.

This shirt comes in medium, large, extra large, 2X,and 3X. Quantities are limited.

[ANS thanks Bruce, KK5DO for the above information]

/EX

SB SAT @ AMSAT $ANS-042.04
AMSAT Awards

AMSAT News Service Bulletin 042.04
From AMSAT HQ SILVER SPRING, MD.
February 11, 2007
To All RADIO AMATEURS
BID: $ANS-042.04

Bruce, KK5DO wearing his AMSAT Director Contests and Awards hat writes, "Here are the first awards for 2007. Happy satelliting and many more hours of FB operation to everyone."

We would like to welcome the following to the satellite community. They have made their first satellite contact and are now members of the AMSAT Satellite Communicators Club.
Steven Raas, N2JDQ

AMSAT Satellite Communications Achievement Award
Juergen Pape, DF7WN #443
Jordi Tarrida Subirana, EB3JT, #444

AMSAT Sexagesimal Award
Jordi Tarrida Subirana, #142

South Africa Satellite Communications Achievement Award
Juergen Pape, DF7WN, #US103
Jordi Tarrida Subirana, EB3JT, #US104

The Robert W. Barbee, Jr. W4AMI Satellite Operator Achievement Award
1000 contacts, Wilse Morgan, WX7P, #46

To see all the awards visit http://www.amsat.org or http://www.amsatnet.com

[ANS thanks Bruce, KK5DO for the above information]
/EX

SB SAT @ AMSAT $ANS-042.05
OSCAR-1 Pioneer Harley Gabrielson, K6DS Silent Key

AMSAT News Service Bulletin 042.05
From AMSAT HQ SILVER SPRING, MD.
February 11, 2007
To All RADIO AMATEURS
BID: $ANS-042.05

AMSAT received the news this week that Harley Gabrielson, K6DS passed away Sunday, January 14. He was 83.

After serving in WWII at Los Alamos on the Atomic Bomb Project, he worked for the Philco Corp. as an electrical engineer.

Harley was very active in Amateur Radio. He was licensed in 1939 and was an Elmer to many Hams over the years. He played a key role in the Oscar Satellite program, and was responsible for the keyer in Oscar I.

He was a key participant setting up and running the Volunteer Examination Coordinator program in the San Diego area for many years. He was an active participant in ARES and EMS and also the San Diego Microwave Group and its predecessor in the earlier years.

Harley will really be missed.

[ANS thanks Duane Naugle, KO6BT for the above information]

/EX

SB SAT @ AMSAT $ANS-042.06
Pehuensat-1 Designated OSCAR-63 (PO-63)

AMSAT News Service Bulletin 042.06
From AMSAT HQ SILVER SPRING, MD.
February 11, 2007
To All RADIO AMATEURS
BID: $ANS-042.06

Bill Tynan, W3XO, AMSAT OSCAR coordinator announced this week, "By the authority vested in me by the AMSAT-NA President, I am pleased to issue an OSCAR number for the amateur radio satellite, Pehuensat-1.

I have been informed by IARU authorities that Pehuensat-1 complies with all of the requirements needed for issuance of an OSCAR number. Therefore, in accordance with your request, Pehuensat-1 will henceforth be know as Pehuensat-OSCAR-63, or PO-63.

AMSAT-NA is pleased to welcome Pehuensat OSCAR- 63 into the family of amateur Radio satellites. We are hopeful that it will fulfill its intended mission of furthering education and increasing interest in the Amateur Radio space program and.we congratulate AMSAT Argentina for building, testing and launching this new Amateur Radio satellite."

[ANS thanks Bill, W3XO for the above information]

/EX

SB SAT @ AMSAT $ANS-042.07
First Call For Speakers for AMSAT-UK Colloquium

AMSAT News Service Bulletin 042.07
From AMSAT HQ SILVER SPRING, MD.
February 11, 2007
To All RADIO AMATEURS
BID: $ANS-042.07

Dave, G4DPZ relayed AMSAT-UK's first call for speakers for the 22nd AMSAT-UK Colloquium which will be held at Surrey University, Guildford, Surrey, U.K., from Friday 20 July to Sunday 22 July 2007.

AMSAT-UK invite speakers, about amateur radio space and associated activities, for this event. They are also invited to submit papers for the "Proceedings" document which will be published at the same time but printed papers are not mandatory. We normally prefer authors to present talks themselves rather than having someone else give them in the authors' absence. We also welcome "unpresented" papers for the Proceedings document.

Offers of talks should be submitted as soon as possible; the final date for full documents to be received is mid-June 2007 in order that the "Proceedings" document be available to participants.

Submissions should be sent *ONLY* to G4DPZ, via the following routes:
e-mail: dave at g4dpz.me.uk
Terrestrial mail: QTHR www.qrz.com

AMSAT-UK also invites anyone with requests for Program Topics to submit them as soon as possible to G4DPZ. Invitations for any papers on specific subjects will be included in the future call. Likewise if anyone knows of a good speaker, please send contact and other information to G4DPZ.

Additionally, AMSAT-UK will be running sessions specifically for beginners to amateur satellite operating on the Friday and Saturday afternoons.

Details of the colloquium can be found at: http://www.uk.amsat.org

[ANS thanks Dave, G4DPZ for the above information]

/EX

SB SAT @ AMSAT $ANS-042.08
Space Shorts From All Over

AMSAT News Service Bulletin 042.08
From AMSAT HQ SILVER SPRING, MD.
February 11, 2007
To All RADIO AMATEURS
BID: $ANS-042.08

+ Echo Command Station, Mike, KE4AZN reported on progress on changes and upgrading on AO-51. Mike says, "I loaded a new housekeeping task, written by WD0E, and began to test the added functions. It also includes some new safety features to protect the satellite." The AO-51 Operations Team warns when they some of these features it will cause the transmitters to shut off automatically. Control stations will turn them back on during the next available pass. For the time being the PBBS will remain down to users. Please do not attempt to access the PBBS. The FM repeater will remain ON for users.

+ The Packet-to-Voice mode aboard the RAFT satellite has been enabled. Any station may TURN ON voice mode over his country with a single CONNECT RAFT packet. The voice synthesizer will remain on for 90 seconds. Once the VOICE synthesizer is on, then anyone can send a UI APRS formatted MESSAGE to the callsign of "TALK" and RAFT will speak it if it can decode it.

[ANS thanks everyone for the above information]

/EX

SB SAT @ AMSAT $ANS-042.09
First Call For Papers For The Annual SA AMSAT Space Conference

AMSAT News Service Bulletin 042.09
From AMSAT HQ SILVER SPRING, MD.
February 11, 2007
To All RADIO AMATEURS
BID: $ANS-042.09

The Southern Africa Amateur Radio Satellite Association will be holding its annual space communications conference in Gauteng on Saturday 23 June 2007. The theme of the conference is "Space: New Frontiers" The theme relates to South Africa's latest satellite project "SumbandilaSat which is planned for launch in June and carries Amateur Radio Equipment. The Amateur Radio payload was designed and built by radio amateurs and incorporated into the satellite by the University of Stellenbosch.

This is the first call for papers to be considered for presentation at the conference. Papers should be of a technical or operational nature and cover any of the following subjects:

+ satellite communication
+ weak signal communication
+ orbital mechanics
+ related software applications, and exploration of
  space such as SETI.
+ Other related subjects will be considered.

The Deadlines are as follows:

Submission of synopsis	17 March 2007
Authors will be notified of acceptance of paper	25 April 2007
Final paper and PowerPoint presentation	1 June 2007

Mail the synopsis in word format to sa.amsat@intekom.co.za.
For more information about the conference visit:
http://www.amsatsa.org.za

[ANS thanks Hans and AMSAT-SA for the above information]

/EX

SB SAT @ AMSAT $ANS-042.10
ARISS Status Report for the Week of February 5, 2007

AMSAT News Service Bulletin 042.10
From AMSAT HQ SILVER SPRING, MD.
February 11, 2007
To All RADIO AMATEURS
BID: $ANS-042.10

1. Teacher Sends Thanks for ARISS Experience

The Amateur Radio on the International Space Station (ARISS) team received a thank you note from the coordinating teacher at Romeo Elementary School for its January contact. She gave special thanks to ARISS mentor, Gene Chapline, who prepared the school for the event. The teacher remarked, "What child will become a physicist, what child will walk on Mars, what child will work with communications all because of something very, very special that happened at Romeo Elementary School on January 17, 2007. Thank you."

2. ARISS International Team Meeting Held

The monthly ARISS International Team teleconference was held on Tuesday, January 30. Topics of discussion included the status of on orbit hardware, SuitSat-2, and the Columbus Module antennas. Minutes have been posted to the ARISS website:
http://www.rac.ca/ariss/arisstel2007-01-30.htm

3. Minutes Posted from ARISS San Francisco Meeting

Minutes from the ARISS International face to face meeting held in San Francisco in October, 2006 have been posted to the ARISS website:
http://www.rac.ca/ariss/2006%20San%20Francisco%20ARISS-I%20Minutes.doc

[ANS thanks Carol, KB3LKI for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM

```
From -8119518165535414191
X-Google-Thread: fcc6e,f050d19442caec27
X-Google-Thread: 11480d,f050d19442caec27
X-Google-Thread: 108122,a2fa3cbea06513a2
X-Google-Thread: fc2a5,a2fa3cbea06513a2
```

X-Google-Thread: fc8b1,be00b22ad54b4a13,start
X-Google-Thread: f7653,be00b22ad54b4a13,start
X-Google-Thread: 10e8ad,be00b22ad54b4a13,start
X-Google-Attributes:
gidfcc6e,gid11480d,gid108122,gidfc2a5,gidfc8b1,gidf7653,gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news3.google.com!news4.google.com!
border1.nntp.dca.giganews.com!border2.nntp.dca.giganews.com!nntp.giganews.com!
news.glorb.com!news.kjsl.com!ncf.ca!FreeNet.Carleton.CA!et472
From: et472@FreeNet.Carleton.CA (Michael Black)
Newsgroups:
rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,rec.radio.amateur.digital.misc,rec.radio.amateur.space
Subject: Re: 3rd RFD: rec.radio.amateur.moderated moderated (LAST CALL FOR COMMENTS)
Date: 13 Feb 2007 19:02:40 GMT
Organization: The National Capital FreeNet
Lines: 64
Message-ID: <eqt20g$qrk$1@theodyn.ncf.ca>
References: <nan.20070110144508$401c@killfile.org>
<nan.20070125162526$4ac9@killfile.org> <45be9f15$0$170$540ea2cf@novia.net>
<45d1fe5c$0$37578$540ea2cf@novia.net>
Reply-To: et472@FreeNet.Carleton.CA (Michael Black)
NNTP-Posting-Host: smeagol.ncf.ca
X-Trace: theodyn.ncf.ca 1171393360 27508 134.117.136.48 (13 Feb 2007 19:02:40 GMT)
X-Complaints-To: complaints@ncf.ca
NNTP-Posting-Date: 13 Feb 2007 19:02:40 GMT
Xref: g2news2.google.com rec.radio.amateur.antenna:25230 rec.radio.amateur.dx:2785
rec.radio.amateur.equipment:8047 rec.radio.amateur.homebrew:9022
rec.radio.amateur.boatanchors:7509 rec.radio.amateur.digital.misc:473
rec.radio.amateur.space:591

"Paul W. Schleck, K3FU" (pschleck@novia.net) writes:
> The following was just posted to Usenet by the news.announce.newgroups
> moderator on behalf of the Big-8 Management Board:
>

And for the third time, you still ignore part of the hierarchy.

While the first RFD ignored the hierarchy except for .misc and .policy,
and the second RFD added .antennas and .dx, this third RFD long after
the discussion started still ignores three of the newsgroups in
the hierarchy:
  rec.radio.amateur.boatanchors
  rec.radio.amateur.digital.misc
  rec.radio.amateur.space

In the end, you can't speak for the hierarchy if you don't even
know which newsgroups exist in the hierarchy. No wonder you have
such disregard for the hierarchy, you only think of yourself as some
"administrator" type rather than a participant.

You aren't building bridges, you're imposing your vision on the hierarchy.

The fact that you still don't come to the hierarchy and simply talk to us,
isntead hiding behind the structure of creating a new newsgroup, says
everything about your relationship to newsgroups.

IN the end, I conclude that you like moderated newsgroups because Usenet
never sat well with you, and the only way you can deal with it is impose
your need for rules on something that is a haven from that.

Ultimately, you are like the problem posters. Neither of you can live
without rules, though you need them because you can't tolerate the lack of
rules, while they need them because they think the lack of rules is license
to do as they please.

You've spent the decade trying to impose rules on the hierarchy, while
the rest of us were actually trying to make the hierarchy good by
participating in the discussions.

Useless administrators are always trumped by people doing things.

Michael VE2BVW

> http://www.big-8.org/dokuwiki/doku.php?id=nan:2007-02-13-rec.radio.amateur.moderated-lcc
>
> This is a Request for Discussion (RFD) and Last Call for Comments (LCC)
> to create a new moderated discussion newsgroup for amateur radio on
> Usenet. It has been relayed to rec.radio.amateur.antenna,
> rec.radio.amateur.dx, rec.radio.amateur.equipment, and
> rec.radio.amateur.homebrew, as announced in the RFD/LCC. Please
> consider contributing your opinions regarding this newsgroup to
> news.groups.proposals, where followups to this message have been set.
>
> --
> 73, Paul W. Schleck, K3FU
> pschleck@novia.net
> http://www.novia.net/~pschleck/
> Finger pschleck@novia.net for PGP Public Key
>
>
>
>

From 7910705155103262403
X-Google-Thread: 10e8ad,34f42bdd129e77e8,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news4.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!local01.nntp.dca.giganews.com!nntp.comcast.com!

```
news.comcast.com.POSTED!not-for-mail
NNTP-Posting-Date: Fri, 16 Feb 2007 08:30:38 -0600
From: "JoAnne K9JKM" <k9jkm_remove_@comcast.net>
Newsgroups: rec.radio.amateur.space
Subject: WSR-043 AMSAT Weekly Satellite Report
Date: Fri, 16 Feb 2007 08:30:45 -0600
MIME-Version: 1.0
Content-Type: text/plain;
     format=flowed;
     charset="iso-8859-1";
     reply-type=original
Content-Transfer-Encoding: 7bit
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.3028
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.3028
Message-ID: <4YadnflnvMGTXUjYnZ2dnUVZ_sCinZ2d@comcast.com>
Lines: 1136
NNTP-Posting-Host: 67.184.169.1
X-Trace: sv3-fROzklWSauFxzLrVaPHgofRDMKqOPCfK4Dmx+0B/Bs/tRwmrDgmAhBfbjSceHq/
pclZ5NcXOdvfGX/2!Q1x/
NEtyGexFhgE598zcW5z1CRZf4bEyI0zUWWM+RZv3ZlhLDRDntEIw3ntMtU1QT3WLbWb8Hnv1!
GOshft+lJoPGYsM=
X-Complaints-To: abuse@comcast.net
X-DMCA-Complaints-To: dmca@comcast.net
X-Abuse-and-DMCA-Info: Please be sure to forward a copy of ALL headers
X-Abuse-and-DMCA-Info: Otherwise we will be unable to process your complaint
properly
X-Postfilter: 1.3.32
Xref: g2news2.google.com rec.radio.amateur.space:592
```

This report is organized into 4 parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites

SB SAT @ AMSAT W8ISS ANS-043.S1
WSR 043 Part 1 02/12/2007

AMSAT NEWS SERVICE BULLETIN 043.S1 FROM AMSAT HQ
SILVER SPRING, MD, February 12, 2007
TO ALL RADIO AMATEURS
BID: $ANS-043.S1

VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/V - Indian Transponder

Frequencies:

```
Indian Transponder:
Uplink:   435.220 to 435.280 MHz LSB/CW
Downlink: 145.870 to 145.930 MHz USB/CW

Dutch Transponder:
Uplink:   435.225 to 435.275 MHz LSB/CW
Downlink: 145.875 to 145.925 MHz USB/CW


Indian Beacon:  145.859330 MHZ CW
Dutch Beacon:   145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsat.in/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is
active. Each transponder has a different beacon.
[10022006]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Software Crash - Software reload in progress
Current Mode(s): FM Repeater - OFF
                 PBBS -        OFF
                 Digipeater -  OFF

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink:   145.880 MHZ FM
                       145.880 MHz USB
                       145.920 MHz FM
                      1268.700 MHz FM 67Hz PL tone
Digital Downlinks:     435.150 MHz FM 38k4 Digital, PBP, 1 watt output
                       435.150 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:        145.860 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      1268.700 mhz FM 9k6 PBP Digital

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
```

```
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[02122007]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Uplink:   145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The order of operation is thus: (allow for Doppler as necessary)
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute
timer
   on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the
repeater on
   and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset
the 10
   minute timer.
[01082007]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Operational

Voice/CW Mode JA
Uplink:   145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon:   435.795 MHz

Digital Mode JD
Uplinks:  145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
```

Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

JARL English webpage: http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm
AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts.htm
[01222007]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Uplink: 145.850 MHz FM
Downlink: 436.795 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[01292007]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational depending on amount of Sunlight
Current Reported mode: Mode-A

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:

http://www.planetemily.com/ao7/

AO-7 users are requested to log their contacts and observations about AO-7, especially any unexpected mode changes. AO-07 telemetry software webpage:
http://www.qsl.net/k3tz/files/K3TZ_AO-07_Telemetry_Decoder_0.5.zip

Please keep your power low! For additional information please read the AO-7 Usage Guidelines on the AO-7 Log and Resource Site located at:
http://www.planetemily.com/ao7
[01082007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: Occasional Voice
Digipeater: OFF

The Expedition 14 crew is:

Commander:	Michael Lopez-Alegria	KE5GTK
Flight Engineer:	Mikhail Tyurin	RZ3FT
Flight Engineer:	Sunita Williams	KD5PLB

Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

SSTV TESTING:
Worldwide Reported Downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS, RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3

Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.
[12182006]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-043.S2
WSR 043 Part 2 02/12/2007

AMSAT NEWS SERVICE BULLETIN 043.S2 FROM AMSAT HQ
SILVER SPRING, MD, February 12, 2007
TO ALL RADIO AMATEURS
BID: $ANS-043.S2

PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: In Orbit

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder: 145.825 Mhz FM
[02052007]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: In Orbit

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01222007]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: In Orbit

```
Main Downlink:      145.825 Mhz FM APRS AX25
APRS Uplink:        145.825 MHz FM APRS AX25
Voice/PSK31 Uplink:  28.120 MHz
```
[01222007]
=====
GENESAT-1 ?O-??

```
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Telemetry Beacon Downlink: 437.0670 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[01082007]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Operational

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon:             437.2750 MHz CW

Callsign: JR8YJT
[10302006]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon:             437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
[01082007]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launched: June 30, 2003

Status: Operational

Beacon:     436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[01082007]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launched: February 21, 2006

Status: Semi-Operational - Constant Carrier only

Uplink:  1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan ? )

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[01082007]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Software crash - Software reload in progress
Current Mode(s): FM Repeater - OFF
                 PBBS -        OFF
                 Digipeater -  OFF

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink:   145.880 MHZ FM
                       145.880 MHz USB
                       145.920 MHz FM
                      1268.700 MHz FM 67Hz PL tone
Digital Downlinks:     435.150 MHz FM 38k4 Digital, PBP, 1 watt output
                       435.150 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:        145.860 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      1268.700 mhz FM 9k6 PBP Digital

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[02122007]
```

```
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Operational only in Full Sun Light

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink:        144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[01082007]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM
Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[01082007]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Semi-operational - APRS usage through Digipeater

Uplink:         145.900 MHz FM 1200-baud Manchester FSK
                145.920 MHz FM 1200-baud Manchester FSK
                145.940 MHz FM 1200-baud Manchester FSK
                145.960 MHz FM 1200-baud Manchester FSK
Downlink:       437.026 MHz SSB 1200-baud PSK
Mode-S Beacon: 2401.1428 MHz

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.025 MHz LHCP
```

```
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[01222007]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational

Telemetry Downlink: 145.826 MHz. FM (1200-baud AFSK) approx. 10 days ON,
10
                    days OFF
Mode-S Beacon:     2401.500 MHz - OFF
UHFBeacon:          435.025 MHz - OFF

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Official webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[01082007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: Occasional Voice
Digipeater:   OFF

Expedition Crew 14 is:
Commander:              Michael Lopez-Alegria KE5GTK
Flight Engineer:        Mikhail Tyurin        RZ3FT
Flight Engineer:        Sunita Williams       KD5PLB

Digital/APRS:
Worldwide packet uplink:   145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink:   145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink:      145.800 MHz FM

SSTV TESTING:
Worldwide Reported Downlink: 145.800 MHz FM
```

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS, RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is NOT translated from Russian and posted.
[01082007]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-043.S3
WSR 043 Part 3 02/12/2007

AMSAT NEWS SERVICE BULLETIN 043.S3 FROM AMSAT HQ
SILVER SPRING, MD, February 12, 2007
TO ALL RADIO AMATEURS
BID: $ANS-043.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 MHz FM 67Hz CTCSS
Voice Downlink: 2401.835 MHz FM
Packet Up/Downlink: 437.250 MHz 9k6 packet
Packet Downlink 2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Operational

Uplinks: 145.850 MHz
145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[01222007]
=====
NO-45 SAPPHIRE
Catalog number: 26932

```
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink:   145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
call-
sign KE6QMD, as per the user service agreement located at the following
URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS:                SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink:   145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
```

```
-------
V-band:   145.840 -  145.990 MHz CW/LSB
U-band:   435.550 -  435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks
---------
S2-band:  2401.225 -  2401.475 MHz CW/USB
K-band:  24048.010 - 24048.060 MHz CW/USB
Beacon:   2401.323 MHz
         24048.035 MHz
[01222007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink:    145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site
at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater:         436.250 MHz

Uplinks: Mode B Repeater:  145.825 MHz
Mode J Digipeater:         145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998
```

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm

[ANS-WSR has no further information]
[09042006]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink: 145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html

```
[01012006]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: Downlink only

Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[012212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HL01-11
BBS: HL01-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational
```

```
Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplinks:           145.840 MHz 1200-baud Manchester FSK
                   145.860 MHz 1200-baud Manchester FSK
                   145.880 MHz 1200-baud Manchester FSK
                   145.900 MHz 1200-baud Manchester FSK
```

```
CW downlink:      437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[01222007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
[05012006]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink  435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet: Non-Operational
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
```

```
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink  435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon:   145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink  435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink  435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink   29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink  29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
[01152007]
```

```
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon:    29.352 MHz (intermittent)

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink:     21.260 to 21.300 MHz CW/USB
Downlink:  145.860 to 145.900 MHz CW/USB

Beacon:    145.860 MHz

Robot:     145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991
```

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
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/EX

SB SAT @ AMSAT W8ISS $ANS-043.S4
WSR 043 Part 4 02/12/2007

AMSAT NEWS SERVICE BULLETIN 043.S4 FROM AMSAT HQ
SILVER SPRING, MD, February 12, 2007
TO ALL RADIO AMATEURS
BID: $ANS-043.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE
PROPOSED FOR LAUNCH AT THIS TIME:

Phase 5a Mars Mission
Catalog Number:
Proposed Launch Date: 2009 or 2011

Status: Design Phase

For the latest project status update please visit the AMSAT-DL P5-A web page:
http://ticket-to-mars.org
[01222007]
=====
PHASE 3E AO-??
Catalog number:
Proposed Launch Date: Late 2007

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/
[01222007]
=====
Eagle AO-??
Catalog Number:
Proposed Launch Date: Early/Mid 2009

Status: Design Phase

For the latest project status updates please visit the AMSAT-NA webpage:
http://www.amsat.org

[01222007]
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/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/amsat/listserv/menu.html

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

```
From 187911964398276014
X-Google-Thread: 10e8ad,741c090310cee2f
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news4.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!local01.nntp.dca.giganews.com!nntp.comcast.com!
news.comcast.com.POSTED!not-for-mail
NNTP-Posting-Date: Fri, 16 Feb 2007 08:30:43 -0600
From: "JoAnne K9JKM" <k9jkm_remove_@comcast.net>
Newsgroups: rec.radio.amateur.space
Subject: ANS-042 AMSAT News Service Weekly Bulletins
Date: Fri, 16 Feb 2007 08:30:49 -0600
MIME-Version: 1.0
Content-Type: text/plain;
     format=flowed;
     charset="iso-8859-1";
     reply-type=original
Content-Transfer-Encoding: 7bit
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.3028
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.3028
Message-ID: <TrKdnSTlgMCOXUjYnZ2dnUVZ_hmtnZ2d@comcast.com>
Lines: 400
NNTP-Posting-Host: 67.184.169.1
X-Trace: sv3-
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SDCEuH9UqOSHV9A=
X-Complaints-To: abuse@comcast.net
X-DMCA-Complaints-To: dmca@comcast.net
X-Abuse-and-DMCA-Info: Please be sure to forward a copy of ALL headers
X-Abuse-and-DMCA-Info: Otherwise we will be unable to process your complaint
properly
X-Postfilter: 1.3.32
Xref: g2news2.google.com rec.radio.amateur.space:593
```

AMSAT NEWS SERVICE
ANS-042

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:

* AMSAT-NA and AMSAT-UK Donation to P3E
* SKN Best Fist Nominations Announcement
* New Item at the AMSAT On-line Store
* AMSAT Awards
* OSCAR-1 Pioneer Harley Gabrielson, K6DS Silent Key
* Pehuensat-1 Designated OSCAR-63 (PO-63)
* First Call For Speakers for AMSAT-UK Colloquium
* Space Shorts From All Over
* First Call For Papers For The Annual SA AMSAT Space Conference
* ARISS Status Report for the Week of February 5, 2007

SB SAT @ AMSAT $ANS-042.01
AMSAT-NA and AMSAT-UK Donation to P3E

AMSAT News Service Bulletin 042.01
>From AMSAT HQ SILVER SPRING, MD.
February 11, 2007
To All RADIO AMATEURS
BID: $ANS-042.01

Earlier this week AMSAT-NA announced its agreement with AMSAT-UK and AMSAT-DL to donate a total of 40,000 Euros to AMSAT-DL for the purpose of funding the continued operation of the "Zentrales Entwicklungslabor for Electronik", (Central Development Lab for Electronics, aka "The ZEL") where its current major project is the construction of the Phase 3E satellite (P3E).

P3E is considered vital to the amateur radio space community for a variety of reasons. Currently there is no high orbit satellite carrying analogue transponders allowing DX multiple simultaneous contacts. The proposed orbit of P3E will cause it to be visible from amateur radio stations on earth for several hours at a time, allowing increased periods of operation and experimentation.

The P3E satellite will also provide the testbed for several other experiments which will test techniques needed for the proposed flight of an amateur radio spacecraft to Mars (Phase 5A), for example, a low power beacon simulating the weak signals that it will send from the Phase 5A satellite (P5A) on its journey to Mars. This will allow radio amateurs to test their stations in readiness for P5A.

The optimal years for launching a Mars bound spacecraft are 2009 or 2011 so it is important that P3E is launched as soon as possible. This is currently planned to be at the end of 2008. Suitable launch opportunities for P3E and P5A are being investigated.

To read the full story please go to http://www.amsat.org.

[ANS thanks AMSAT-NA, AMSAT-UK, and AMSAT-DL for the above information]

/EX

SB SAT @ AMSAT $ANS-042.02
SKN Best Fist Nominations Announcement

AMSAT News Service Bulletin 042.02
>From AMSAT HQ SILVER SPRING, MD.
February 11, 2007
To All RADIO AMATEURS
BID: $ANS-042.02

Ray, W2RS has received the votes for Best Fist and compiled the results from the OSCAR Straight Key Night activity. Ray says, "Many thanks to all who participated in AMSAT's 2007 Straight Key Night on OSCAR, held in memory of Cliff Buttschardt, K7RR."

The following each received at least one Best Fist nomination from someone they worked:

Lee Herterich, K1VZI
Keith O'Brien, N4ZQ
John Lee, K6YK
Mike Herr, WA6ARA
Al Ozias, N7EQF
Mike Fullmer, KZ7O
Mark Spencer, WA8SME
Frank Wiesenmeyer, K9CIS
Ron McCulley, K0RJS

Congratulations!

[ANS thanks Ray, W2RS for the above information]

/EX

SB SAT @ AMSAT $ANS-042.03
New Item at the AMSAT On-line Store

AMSAT News Service Bulletin 042.03
>From AMSAT HQ SILVER SPRING, MD.
February 11, 2007
To All RADIO AMATEURS
BID: $ANS-042.03

Bruce, KK5DO wearing his AMSAT Store Manager hat says, "There is a new addition to the AMSAT Online store for 2007. There are also many cool things with the AMSAT logo that can be purchased while online from the AMSAT Online store."

AMSAT is proud to offer this quality white polo shirt made of 100% combed cotton by Outer Banks for 2007. The shirt is short sleeve and has a collar and three buttons. A pocket is on the left.

Appearing directly above the pocket is the AMSAT logo and name in
red and Radio Amateur Satellite Corporation in blue.

This shirt comes in medium, large, extra large, 2X,and 3X.
Quantities are limited.

[ANS thanks Bruce, KK5DO for the above information]

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SB SAT @ AMSAT $ANS-042.04
AMSAT Awards

AMSAT News Service Bulletin 042.04
>From AMSAT HQ SILVER SPRING, MD.
February 11, 2007
To All RADIO AMATEURS
BID: $ANS-042.04

Bruce, KK5DO wearing his AMSAT Director Contests and Awards hat writes,
"Here are the first awards for 2007. Happy satelliting and many more
hours of FB operation to everyone."

We would like to welcome the following to the satellite community.
They have made their first satellite contact and are now members of
the AMSAT Satellite Communicators Club.
Steven Raas, N2JDQ

AMSAT Satellite Communications Achievement Award
Juergen Pape, DF7WN #443
Jordi Tarrida Subirana, EB3JT, #444

AMSAT Sexagesimal Award
Jordi Tarrida Subirana, #142

South Africa Satellite Communications Achievement Award
Juergen Pape, DF7WN, #US103
Jordi Tarrida Subirana, EB3JT, #US104

The Robert W. Barbee, Jr. W4AMI Satellite Operator Achievement Award
1000 contacts, Wilse Morgan, WX7P, #46

To see all the awards visit http://www.amsat.org or
http://www.amsatnet.com

[ANS thanks Bruce, KK5DO for the above information]
/EX

SB SAT @ AMSAT $ANS-042.05
OSCAR-1 Pioneer Harley Gabrielson, K6DS Silent Key

AMSAT News Service Bulletin 042.05
>From AMSAT HQ SILVER SPRING, MD.
February 11, 2007
To All RADIO AMATEURS
BID: $ANS-042.05

AMSAT received the news this week that Harley Gabrielson, K6DS passed away Sunday, January 14. He was 83.

After serving in WWII at Los Alamos on the Atomic Bomb Project, he worked for the Philco Corp. as an electrical engineer.

Harley was very active in Amateur Radio. He was licensed in 1939 and was an Elmer to many Hams over the years. He played a key role in the Oscar Satellite program, and was responsible for the keyer in Oscar I.

He was a key participant setting up and running the Volunteer Examination Coordinator program in the San Diego area for many years. He was an active participant in ARES and EMS and also the San Diego Microwave Group and its predecessor in the earlier years.

Harley will really be missed.

[ANS thanks Duane Naugle, KO6BT for the above information]

/EX

SB SAT @ AMSAT $ANS-042.06
Pehuensat-1 Designated OSCAR-63 (PO-63)

AMSAT News Service Bulletin 042.06
>From AMSAT HQ SILVER SPRING, MD.
February 11, 2007
To All RADIO AMATEURS
BID: $ANS-042.06

Bill Tynan, W3XO, AMSAT OSCAR coordinator announced this week, "By the authority vested in me by the AMSAT-NA President, I am pleased to issue an OSCAR number for the amateur radio satellite, Pehuensat-1.

I have been informed by IARU authorities that Pehuensat-1 complies with all of the requirements needed for issuance of an OSCAR number. Therefore, in accordance with your request, Pehuensat-1 will henceforth be know as Pehuensat-OSCAR-63, or PO-63.

AMSAT-NA is pleased to welcome Pehuensat OSCAR- 63 into the family of amateur Radio satellites. We are hopeful that it will fulfill its intended mission of furthering education and increasing interest in the Amateur Radio space program and.we congratulate AMSAT Argentina for building, testing and launching this new Amateur Radio satellite."

[ANS thanks Bill, W3XO for the above information]

/EX

SB SAT @ AMSAT $ANS-042.07
First Call For Speakers for AMSAT-UK Colloquium

AMSAT News Service Bulletin 042.07
>From AMSAT HQ SILVER SPRING, MD.
February 11, 2007
To All RADIO AMATEURS
BID: $ANS-042.07

Dave, G4DPZ relayed AMSAT-UK's first call for speakers for the 22nd AMSAT-UK Colloquium which will be held at Surrey University, Guildford, Surrey, U.K., from Friday 20 July to Sunday 22 July 2007.

AMSAT-UK invite speakers, about amateur radio space and associated activities, for this event. They are also invited to submit papers for the "Proceedings" document which will be published at the same time but printed papers are not mandatory. We normally prefer authors to present talks themselves rather than having someone else give them in the authors' absence. We also welcome "unpresented" papers for the Proceedings document.

Offers of talks should be submitted as soon as possible; the final date for full documents to be received is mid-June 2007 in order that the "Proceedings" document be available to participants.

Submissions should be sent *ONLY* to G4DPZ, via the following routes:
e-mail: dave at g4dpz.me.uk
Terrestrial mail: QTHR www.qrz.com

AMSAT-UK also invites anyone with requests for Program Topics to submit them as soon as possible to G4DPZ. Invitations for any papers on specific subjects will be included in the future call. Likewise if anyone knows of a good speaker, please send contact and other information to G4DPZ.

Additionally, AMSAT-UK will be running sessions specifically for beginners to amateur satellite operating on the Friday and Saturday afternoons.

Details of the colloquium can be found at: http://www.uk.amsat.org

[ANS thanks Dave, G4DPZ for the above information]

/EX

SB SAT @ AMSAT $ANS-042.08

Space Shorts From All Over

AMSAT News Service Bulletin 042.08
>From AMSAT HQ SILVER SPRING, MD.
February 11, 2007
To All RADIO AMATEURS
BID: $ANS-042.08

+ Echo Command Station, Mike, KE4AZN reported on progress on changes and upgrading on AO-51. Mike says, "I loaded a new housekeeping task, written by WD0E, and began to test the added functions. It also includes some new safety features to protect the satellite." The AO-51 Operations Team warns when they some of these features it will cause the transmitters to shut off automatically. Control stations will turn them back on during the next available pass. For the time being the PBBS will remain down to users. Please do not attempt to access the PBBS. The FM repeater will remain ON for users.

+ The Packet-to-Voice mode aboard the RAFT satellite has been enabled. Any station may TURN ON voice mode over his country with a single CONNECT RAFT packet. The voice synthesizer will remain on for 90 seconds. Once the VOICE synthesizer is on, then anyone can send a UI APRS formatted MESSAGE to the callsign of "TALK" and RAFT will speak it if it can decode it.

[ANS thanks everyone for the above information]

/EX

SB SAT @ AMSAT $ANS-042.09
First Call For Papers For The Annual SA AMSAT Space Conference

AMSAT News Service Bulletin 042.09
>From AMSAT HQ SILVER SPRING, MD.
February 11, 2007
To All RADIO AMATEURS
BID: $ANS-042.09

The Southern Africa Amateur Radio Satellite Association will be holding its annual space communications conference in Gauteng on Saturday 23 June 2007. The theme of the conference is "Space: New Frontiers" The theme relates to South Africa's latest satellite project "SumbandilaSat which is planned for launch in June and carries Amateur Radio Equipment. The Amateur Radio payload was designed and built by radio amateurs and incorporated into the satellite by the University of Stellenbosch.

This is the first call for papers to be considered for presentation at the conference. Papers should be of a technical or operational nature and cover any of the following subjects:

+ satellite communication

- weak signal communication
- orbital mechanics
- related software applications, and exploration of space such as SETI.
- Other related subjects will be considered.

The Deadlines are as follows:

Submission of synopsis	17 March 2007
Authors will be notified of acceptance of paper	25 April 2007
Final paper and PowerPoint presentation	1 June 2007

Mail the synopsis in word format to sa.amsat@intekom.co.za. For more information about the conference visit:
http://www.amsatsa.org.za

[ANS thanks Hans and AMSAT-SA for the above information]

/EX

SB SAT @ AMSAT $ANS-042.10
ARISS Status Report for the Week of February 5, 2007

AMSAT News Service Bulletin 042.10
>From AMSAT HQ SILVER SPRING, MD.
February 11, 2007
To All RADIO AMATEURS
BID: $ANS-042.10

1. Teacher Sends Thanks for ARISS Experience

The Amateur Radio on the International Space Station (ARISS) team received a thank you note from the coordinating teacher at Romeo Elementary School for its January contact. She gave special thanks to ARISS mentor, Gene Chapline, who prepared the school for the event. The teacher remarked, "What child will become a physicist, what child will walk on Mars, what child will work with communications all because of something very, very special that happened at Romeo Elementary School on January 17, 2007. Thank you."

2. ARISS International Team Meeting Held

The monthly ARISS International Team teleconference was held on Tuesday, January 30. Topics of discussion included the status of on orbit hardware, SuitSat-2, and the Columbus Module antennas. Minutes have been posted to the ARISS website:
http://www.rac.ca/ariss/arisstel2007-01-30.htm

3. Minutes Posted from ARISS San Francisco Meeting

Minutes from the ARISS International face to face meeting held in San Francisco in October, 2006 have been posted to the ARISS website:

http://www.rac.ca/ariss/2006%20San%20Francisco%20ARISS-I%20Minutes.doc

[ANS thanks Carol, KB3LKI for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the
President's Club. Members of the President's Club, as sustaining donors
to AMSAT Project Funds, will be eligible to receive additional benefits.
Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM

```
From -5655893989810002626
X-Google-Thread: 10e8ad,2db905b9e80f2394,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news3.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!local01.nntp.dca.giganews.com!nntp.comcast.com!
news.comcast.com.POSTED!not-for-mail
NNTP-Posting-Date: Mon, 19 Feb 2007 11:19:01 -0600
From: "JoAnne K9JKM" <k9jkm_remove_@comcast.net>
Newsgroups: rec.radio.amateur.space
Subject: ANS-049 AMSAT News Service Weekly Bulletins
Date: Mon, 19 Feb 2007 11:19:18 -0600
MIME-Version: 1.0
Content-Type: text/plain;
     format=flowed;
     charset="iso-8859-1";
     reply-type=original
Content-Transfer-Encoding: 7bit
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.3028
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.3028
Message-ID: <YLKdnUV4e9GaQUTYnZ2dnUVZ_t-mnZ2d@comcast.com>
Lines: 213
NNTP-Posting-Host: 67.184.169.1
X-Trace: sv3-AuxsjrkK0fbJvVPWY7JmFRtbUdaFni6w1zLQx14M7yF68YVOQ26DWLteZTKuC/
y6JjFP81eDtQgjF8t!OjeUwH71V+C90+PL+RjSvEeY/H+mA/
sVZpBu07HcJze9iABb5OgqSPGlH9ANO+cuszl/Ozb8QGj0!YDegF3WXZ/4rxSc=
X-Complaints-To: abuse@comcast.net
X-DMCA-Complaints-To: dmca@comcast.net
X-Abuse-and-DMCA-Info: Please be sure to forward a copy of ALL headers
X-Abuse-and-DMCA-Info: Otherwise we will be unable to process your complaint
properly
X-Postfilter: 1.3.32
Xref: g2news2.google.com rec.radio.amateur.space:594
```

AMSAT NEWS SERVICE
ANS-049

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:

* AMSAT-DC Meeting and Space Seminar Coming March 24
* AMSAT Awards
* TAPR Announces Production Of HPSDR Janus and Ozy Boards
* Satellite Shorts From All Over
* ARISS Status Report for the Week of February 12, 2007

SB SAT @ AMSAT $ANS-049.01
AMSAT-DC Meeting and Space Seminar Coming March 24

AMSAT News Service Bulletin 049.01
>From AMSAT HQ SILVER SPRING, MD.
February 18, 2007
To All RADIO AMATEURS
BID: $ANS-049.01

Are you near Washington, D.C. or know someone who is? Then YOU ARE HEREBY INVITED to the next AMSAT-DC Meeting and Space Seminar. The day-long event will be held on Saturday, March 24 near BWI airport.

Get the meeting announcement at
http://www.amsat.org/amsat-new/fieldops/eventDetail.php?eID=259
and share it with others.

In building our agenda, we are lining up one or two presentations from local folks who are building a CubeSat of all things! We'll take a close look at the brand new AMSAT lab on our eastern shore. Get news on a new S-Band beacon. Lots more will be offered too.

Please forward this event announcement to one who might like to know about it. Take it to a club meeting. Announce it on a net. Gosh, tell a high school or college student -- and an instructor too.
All are invited.

[ANS thanks Pat, N8PK, AMSAT-DC Co-host for the above information]

/EX

SB SAT @ AMSAT $ANS-049.02
AMSAT Awards

AMSAT News Service Bulletin 049.02
>From AMSAT HQ SILVER SPRING, MD.
February 18, 2007
To All RADIO AMATEURS
BID: $ANS-049.02

Bruce, KK5DO, AMSAT Director Contests and Awards says, "Here are the Awards this week."

We would like to welcome the following to the satellite community. They have made their first satellite contact and are now members of the AMSAT Satellite Communicators Club.

Bob Huson	WA7HYD
Paulo Pinto	CT1ETE
Fernando Martins	CT2ISG

AMSAT Sexagesimal Award

Carlos Roy i Garcia	EB3FYM	(Award #143)

To see all the awards visit http://www.amsat.org.

[ANS thanks Bruce, KK5DO for the above information]

/EX

SB SAT @ AMSAT $ANS-049.03
TAPR Announces Production Of HPSDR Janus and Ozy Boards

AMSAT News Service Bulletin 049.03
>From AMSAT HQ SILVER SPRING, MD.
February 18, 2007
To All RADIO AMATEURS
BID: $ANS-049.03

Here is a ground floor opportunity for amateur radio operators interested in experimenting with Software Define Radio. This week TAPR announced production plans of the High Performance Software Defined Radio (HPSDR) Janus and Ozy boards.

According to the HPSDR organization, the Janus module is a very high performance, dual, full duplex, A/D and D/A converter board. This is planned as a cost effective approach to develop a board which approaches the performance of professional high end sound cards. Paired with the Ozy board and with proper software, it can act like a very high performance sound card external to the PC.

The OZY module is an FPGA based interface controller card that provides the input and output connections to the real world. OZY also provides a high speed USB 2.0 interface to the controlling PC.

Interested radio amateurs should visit Dale's, WA8SRA HAMSDR website http://www.hamsdr.com/. You will need to register for full access on the site. If you are already a member and have previously expressed interest in these projects, log in and re-enter your quantities of each board.

If you are new to HPSDR and Dale's Website, please join for instant access by providing the information requested.

What is HPSDR? see - http://hpsdr.org/
What is an Ozy?   see - http://hpsdr.org/ozy.html
What is a Janus?   see - http://hpsdr.org/janus.html

There are many other HPSDR projects in design and testing; most will require the Janus and Ozy boards.

[ANS thanks HPSDR.org for the above information]

/EX

SB SAT @ AMSAT $ANS-049.04
Satellite Shorts From All Over

AMSAT News Service Bulletin 049.04
>From AMSAT HQ SILVER SPRING, MD.
February 18, 2007
To All RADIO AMATEURS
BID: $ANS-049.04

+ Clive G3CWV reported that during the period 23 January to 14 February OSCAR 11 was heard with good steady signals. To investigate the on-board clock's hour problem Clive would welcome some telemetry from differents parts of the world, at times when the orbits do not pass over the UK. Please e-mail to him at <callsign>@amsat.org. The VHF beacon is on 145.826 MHz with AFSK FM ASCII Telemetry. For additional information about OSCAR 11 see: http://www.users.zetnet.co.uk/clivew/

+ There are several new pieces of software that are being uploaded and tested this week on AO-51. Additionally the S band transmitter will be on for an as of yet undetermined number of daylight passes over the Air Force Academy ground station in Colorado Springs, Colorado.

+ The US Air Force plans to launch Falconsat-3 in late February. FS-3 will carry an amateur payload along with its primary science mission. More details on the upgrades and Falconsat-3 will be made available soon.

+ If you're looking for Delaware on the satellites look for Steve, W3HF on the FM satellites 24 February 2007, during the local afternoon and early evening.

+ Some satellite operators may be able to copy EME signals from the Japanese Big Dish Project. JAMSAT is participating with several other organizations in setting up a 32m-Dish EME station in Ibaragi, Japan. They plan to be active on 144MHz, 432MHz, 1296MHz and 5.6GHz from 23 Feb to 24 March at possible windows. Full information is available at: http://8n1eme.jp/modules/news/ and the planned EME operating schedule can be seen at http://8n1eme.jp/SKD-EME-8N1EME-060215-1EN.pdf.

[ANS thanks everyone for the above information]

/EX

SB SAT @ AMSAT $ANS-049.05
ARISS Status Report for the Week of February 12, 2007

AMSAT News Service Bulletin 049.05
>From AMSAT HQ SILVER SPRING, MD.
February 18, 2007
To All RADIO AMATEURS
BID: $ANS-049.05

1. School Contacts

Hanazono Elementary School in Akashi-city, Japan, had an Amateur Radio on the International Space Station (ARISS) contact on Monday, February 12.

The Vasant Valley School in Vasant Kunj, New Delhi, India has been approved for an Amateur Radio on the International Space Station (ARISS) contact on Saturday, February 24 via the telebridge station WH6PN in Hawaii. This school is a Sunita Williams, KD5PLB, crew pick.

2. Crew Training

Astronaut Clay Anderson and cosmonaut Fyodor Yurchikhin recently participated in an Amateur Radio on the International Space Station (ARISS) contact simulation to prepare for school contacts while onboard the ISS. Yurchikhin will fly in March as part of Expedition 15, and Anderson is expected to launch in June.

[ANS thanks Carol, KB3LKI for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,

JoAnne Maenpaa, K9JKM

From -596899724445078023
X-Google-Thread: fc8b1,1051fd4bd56924bd,start
X-Google-Thread: f7653,1051fd4bd56924bd,start
X-Google-Thread: 10e8ad,1051fd4bd56924bd,start
X-Google-Attributes: gidfc8b1,gidf7653,gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news4.google.com!border1.nntp.dca.giganews.com!border2.nntp.dca.giganews.com!nntp.giganews.com!novia!novia!sequencer.newscene.com!not-for-mail
From: "Paul W. Schleck, K3FU" <pschleck@novia.net>
Newsgroups: rec.radio.amateur.boatanchors,rec.radio.amateur.digital.misc,rec.radio.amateur.space
Subject: RESULT: rec.radio.amateur.moderated will be created
Followup-To: news.groups.proposals
Date: 19 Feb 2007 21:51:03 -0600
Organization: Novia Internetworking, http://www.novia.net/
Lines: 19
Message-ID: <45da6fbc$0$37549$540ea2cf@novia.net>
User-Agent: nn/6.7.3
Xref: g2news2.google.com rec.radio.amateur.boatanchors:7600 rec.radio.amateur.digital.misc:476 rec.radio.amateur.space:595

The following was just posted to Usenet by the news.announce.newgroups moderator on behalf of the Big-8 Management Board:

http://www.big-8.org/dokuwiki/doku.php?id=nan:2007-02-19-rec.radio.amateur.moderated-result

This is a creation announcement for a new moderated discussion newsgroup for amateur radio on Usenet. It has been relayed to rec.radio.amateur.boatanchors, rec.radio.amateur.digital.misc,, and rec.radio.amateur.space, as suggested by Michael Black, VE2BVW. Please consult with your local news server administrators regarding the creation of this newsgroup after a newgroup control message is sent on or about Thursday, February 22, 2007.

--
73, Paul W. Schleck, K3FU
pschleck@novia.net
http://www.novia.net/~pschleck/
Finger pschleck@novia.net for PGP Public Key

From 6657564363048476305
X-Google-Thread: 10e8ad,21084e5c2bfc0b24,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit

Path: g2news2.google.com!news3.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!local01.nntp.dca.giganews.com!nntp.comcast.com!
news.comcast.com.POSTED!not-for-mail
NNTP-Posting-Date: Thu, 22 Feb 2007 07:36:36 -0600
Date: Thu, 22 Feb 2007 07:36:37 -0600
From: JoAnne K9JKM <k9jkm@hotmail.com>
User-Agent: Thunderbird 1.5.0.9 (Windows/20061207)
MIME-Version: 1.0
Newsgroups: rec.radio.amateur.space
Subject: WSR-050 AMSAT Weekly Satellite Report
Content-Type: text/plain; charset=ISO-8859-1; format=flowed
Content-Transfer-Encoding: 7bit
Message-ID: <vdSdnSY84c75AUDYnZ2dnUVZ_qunnZ2d@comcast.com>
Lines: 1135
NNTP-Posting-Host: 67.184.169.1
X-Trace: sv3-CthWaJvLSkjmx+eeN/
4cywG+Z82KJ2VY4xfRzUIxRUDywV39ZJdYRa7xpCQHtjWgSSZo5o8Cw0u3l6V!
6aXLnxqBC3oKQG06twpMBGI34UmEp32At4NiDLAPVLAatceDbzkriwAywLKPuwUAbXtKyVlb/zco!
ogCvuO8BUDIJIuE=
X-Complaints-To: abuse@comcast.net
X-DMCA-Complaints-To: dmca@comcast.net
X-Abuse-and-DMCA-Info: Please be sure to forward a copy of ALL headers
X-Abuse-and-DMCA-Info: Otherwise we will be unable to process your complaint properly
X-Postfilter: 1.3.32
Xref: g2news2.google.com rec.radio.amateur.space:596

This report is organized into 4 parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites

SB SAT @ AMSAT W8ISS ANS-050.S1
WSR 050 Part 1 02/19/2007

AMSAT NEWS SERVICE BULLETIN 050.S1 FROM AMSAT HQ
SILVER SPRING, MD, February 19, 2007
TO ALL RADIO AMATEURS
BID: $ANS-050.S1

VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/V - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.870 to 145.930 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.875 to 145.925 MHz USB/CW

Indian Beacon: 145.859330 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsat.in/hamsat.htm

To know what transponder is switched on please listen for the beacon that is
active. Each transponder has a different beacon.
[10022006]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Software Crash - Software reload in progress
```
Current Mode(s): FM Repeater - OFF
                  PBBS -        OFF
                  Digipeater -  OFF

Analog voice downlink: 435.300 MHz FM
                        435.150 MHz FM
                       2401.200 Mhz FM
Analog voice uplink:   145.880 MHZ FM
                        145.880 MHz USB
                        145.920 MHz FM
                       1268.700 MHz FM 67Hz PL tone
Digital Downlinks:     435.150 MHz FM 38k4 Digital, PBP, 1 watt output
                        435.150 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                       2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:        145.860 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                       1268.700 mhz FM 9k6 PBP Digital
```

Mode and Antenna Polarization:
```
T: Linear
V: Linear
U: TX A (usually digital)LHCP
    TX B (usually analog) RHCP
L: Linear
S: Linear
```

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[02122007]

=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The order of operation is thus: (allow for Doppler as necessary)
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer
on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on
and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10
minute timer.
[01082007]

=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Operational

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
145.870 MHz FM
145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:

V: RHCP
U: RHCP

JARL English webpage: http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm
AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts.htm
[01222007]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Uplink: 145.850 MHz FM
Downlink: 436.795 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[01292007]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational depending on amount of Sunlight
Current Reported mode: Mode-A

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
           432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
           145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
           145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz CW
           145.972 MHz CW
           435.100 MHz CW
          2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/

AO-7 users are requested to log their contacts and observations about
AO-7,

especially any unexpected mode changes. AO-07 telemetry software webpage:
http://www.qsl.net/k3tz/files/K3TZ_AO-07_Telemetry_Decoder_0.5.zip

Please keep your power low! For additional information please read the AO-7 Usage Guidelines on the AO-7 Log and Resource Site located at:
http://www.planetemily.com/ao7
[01082007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: Occasional Voice
Digipeater: OFF

The Expedition 14 crew is:

Commander:	Michael Lopez-Alegria	KE5GTK
Flight Engineer:	Mikhail Tyurin	RZ3FT
Flight Engineer:	Sunita Williams	KD5PLB

Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

SSTV TESTING:
Worldwide Reported Downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS, RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com

APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.
[12182006]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-050.S2
WSR 050 Part 2 02/19/2007

AMSAT NEWS SERVICE BULLETIN 050.S2 FROM AMSAT HQ
SILVER SPRING, MD, February 19, 2007
TO ALL RADIO AMATEURS
BID: $ANS-050.S2

PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: In Orbit

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder: 145.825 Mhz FM
[02052007]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: In Orbit

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01222007]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: In Orbit

Main Downlink: 145.825 Mhz FM APRS AX25
APRS Uplink: 145.825 MHz FM APRS AX25
Voice/PSK31 Uplink: 28.120 MHz
[01222007]
=====
GENESAT-1 ?O-??
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

```
Telemetry Beacon Downlink: 437.0670 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[01082007]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Operational

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon:             437.2750 MHz CW

Callsign: JR8YJT
[10302006]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon:             437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
[01082007]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launched: June 30, 2003

Status: Operational

Beacon:     436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[01082007]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launched: February 21, 2006
```

```
Status: Semi-Operational - Constant Carrier only

Uplink:  1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan ? )

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[01082007]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Software crash - Software reload in progress
Current Mode(s): FM Repeater - OFF
                  PBBS -        OFF
                  Digipeater -  OFF

Analog voice downlink: 435.300 MHz FM
                        435.150 MHz FM
                       2401.200 Mhz FM
Analog voice uplink:   145.880 MHZ FM
                        145.880 MHz USB
                        145.920 MHz FM
                       1268.700 MHz FM 67Hz PL tone
Digital Downlinks:     435.150 MHz FM 38k4 Digital, PBP, 1 watt output
                        435.150 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                       2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:        145.860 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                       1268.700 mhz FM 9k6 PBP Digital

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
    TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[02122007]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001
```

```
Status: Operational only in Full Sun Light

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink:        144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[01082007]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Downlink: 435.225 MHz FM (9600-baud FSK)
           435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
           145.890 FM
           145.930 FM
          1269.700 FM
          1269.800 FM
          1269.900 FM
Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[01082007]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Semi-operational - APRS usage through Digipeater

Uplink:         145.900 MHz FM 1200-baud Manchester FSK
                 145.920 MHz FM 1200-baud Manchester FSK
                 145.940 MHz FM 1200-baud Manchester FSK
                 145.960 MHz FM 1200-baud Manchester FSK
Downlink:       437.026 MHz SSB 1200-baud PSK
Mode-S Beacon: 2401.1428 MHz

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
    PSK 437.025 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12
```

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[01222007]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational

Telemetry Downlink: 145.826 MHz. FM (1200-baud AFSK) approx. 10 days ON,
10
days OFF
Mode-S Beacon: 2401.500 MHz - OFF
UHFBeacon: 435.025 MHz - OFF

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Official webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[01082007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: Occasional Voice
Digipeater: OFF

Expedition Crew 14 is:

Commander:	Michael Lopez-Alegria	KE5GTK
Flight Engineer:	Mikhail Tyurin	RZ3FT
Flight Engineer:	Sunita Williams	KD5PLB

Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

SSTV TESTING:
Worldwide Reported Downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS, RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is NOT translated from Russian and posted.
[01082007]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-050.S3
WSR 050 Part 3 02/19/2007

AMSAT NEWS SERVICE BULLETIN 050.S3 FROM AMSAT HQ
SILVER SPRING, MD, February 19, 2007
TO ALL RADIO AMATEURS
BID: $ANS-050.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 MHz FM 67Hz CTCSS

Voice Downlink: 2401.835 MHz FM
Packet Up/Downlink: 437.250 MHz 9k6 packet
Packet Downlink   2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Operational

Uplinks: 145.850 MHz
            145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[01222007]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, callsign KE6QMD, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks

V-band: 145.840 - 145.990 MHz CW/LSB
U-band: 435.550 - 435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB

```
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks
---------
S2-band:  2401.225 -  2401.475 MHz CW/USB
K-band:  24048.010 - 24048.060 MHz CW/USB
Beacon:   2401.323 MHz
          24048.035 MHz
[01222007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink:    145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
            437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site
at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater:         436.250 MHz

Uplinks: Mode B Repeater:  145.825 MHz
Mode J Digipeater:         145.825 MHz
                            145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz
```

```
Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm

[ANS-WSR has no further information]
[09042006]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink:   145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign:       POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012006]
=====
IO-26 ITAMSAT
Catalog number: 22826
```

Launch Date: September 26, 1993

Status: Downlink only

Uplinks: 145.875 MHz FM 1200-baud
145.900 MHz FM 1200-baud
145.925 MHz FM 1200-baud
145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[012212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink: 145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

```
Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
            435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
           145.870 MHz
           145.890 MHz
           145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplinks:          145.840 MHz 1200-baud Manchester FSK
                   145.860 MHz 1200-baud Manchester FSK
                   145.880 MHz 1200-baud Manchester FSK
                   145.900 MHz 1200-baud Manchester FSK

CW downlink:      437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)
```

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[01222007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink: 145.825 MHz FM 1200 Baud AFSK
Beacon: 2401.220 MHz
[05012006]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink: 145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting): Non-Operational
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet: Non-Operational
Uplink: 145.8500 MHz MFSK 1200 BPS
Uplink: 145.8700 MHz MFSK 1200 BPS
Uplink: 145.8900 MHz MFSK 1200 BPS
Uplink: 145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

```
Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon:   145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink  29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
[01152007]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970
```

```
Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                     29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon:    29.352 MHz (intermittent)

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink:     21.260 to 21.300 MHz CW/USB
Downlink:  145.860 to 145.900 MHz CW/USB

Beacon:    145.860 MHz

Robot:     145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink:   21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB
```

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
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/EX

SB SAT @ AMSAT W8ISS $ANS-050.S4
WSR 050 Part 4 02/19/2007

AMSAT NEWS SERVICE BULLETIN 050.S4 FROM AMSAT HQ
SILVER SPRING, MD, February 19, 2007
TO ALL RADIO AMATEURS
BID: $ANS-050.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE
PROPOSED FOR LAUNCH AT THIS TIME:

Phase 5a Mars Mission
Catalog Number:
Proposed Launch Date: 2009 or 2011

Status: Design Phase

For the latest project status update please visit the AMSAT-DL P5-A web page:
http://ticket-to-mars.org
[01222007]
=====
PHASE 3E AO-??
Catalog number:
Proposed Launch Date: Late 2007

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/
[01222007]
=====
Eagle AO-??
Catalog Number:
Proposed Launch Date: Early/Mid 2009

Status: Design Phase

For the latest project status updates please visit the AMSAT-NA webpage:
http://www.amsat.org
[01222007]
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/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/amsat/listserv/menu.html

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

```
From -4686135377952030055
X-Google-Thread: 10e8ad,144ba556053099e6,start
```

```
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news4.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx01.iad01.newshosting.com!newshosting.com!
207.69.154.102.MISMATCH!elnk-atl-nf2!newsfeed.earthlink.net!
stamper.news.atl.earthlink.net!stamper.news.pas.earthlink.net!
newsread3.news.pas.earthlink.net.POSTED!3dd4ce4a!not-for-mail
Newsgroups: rec.radio.amateur.space
Subject: Now that CW is gone there will be more ham to non-ham conflicts.
From: Retard Invasion <goodbye.H@m.radio>
Organization: Good-bye Ham radio.
Followup-To:
rec.radio.amateur.space,rec.radio.amateur.misc,rec.radio.amateur.policy
User-Agent: Xnews/5.04.25
Lines: 8
Message-ID: <KfrDh.5513$Jl.2533@newsread3.news.pas.earthlink.net>
Date: Fri, 23 Feb 2007 01:16:26 GMT
NNTP-Posting-Host: 4.254.225.43
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread3.news.pas.earthlink.net 1172193386 4.254.225.43 (Thu, 22 Feb
2007 17:16:26 PST)
NNTP-Posting-Date: Thu, 22 Feb 2007 17:16:26 PST
Xref: g2news2.google.com rec.radio.amateur.space:597

The code hating losers were too stupid and lazy to learn and use CW,
they're also probably going to be too stupid and lazy to solve TVI
and interference problems with their neigbhors.  There will be more
amateur to amateur and amateur to non-amateur conflicts.  Hams will look
bad and the FCC will regulate the service more because of all the retards
we let have HF privledges.   CQ Breaker, CQ Breaker.

Welcome to CB everybody.


From -5506619247615993353
X-Google-Thread: 10e8ad,40011791de11f7c8,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,CP1252
Path: g2news2.google.com!news3.google.com!news4.google.com!
border1.nntp.dca.giganews.com!nntp.giganews.com!local01.nntp.dca.giganews.com!
nntp.comcast.com!news.comcast.com.POSTED!not-for-mail
NNTP-Posting-Date: Sun, 25 Feb 2007 10:18:54 -0600
Date: Sun, 25 Feb 2007 10:18:55 -0600
From: JoAnne K9JKM <k9jkm@hotmail.com>
User-Agent: Thunderbird 1.5.0.9 (Windows/20061207)
MIME-Version: 1.0
Newsgroups: rec.radio.amateur.space
Subject: ANS-056 AMSAT News Service Weekly Bulletins
Content-Type: text/plain; charset=windows-1252; format=flowed
Content-Transfer-Encoding: 8bit
Message-ID: <vtGdnWMWwZhzK3zYnZ2dnUVZ_v3inZ2d@comcast.com>
Lines: 299
NNTP-Posting-Host: 67.184.169.1
```

X-Trace:
sv3-4pKrBL+ArxbaJv+HYaXyTTGtwtofwKWJKvLoXsLzCCbIwVRruoc6T6pE3AiIYFW9nxNP+zq4xS8LV+I!up1votTDopg5ZcCor4GsWc3zCuw4vJJ3EaP7hCYmsne6/KthAPHi3ZkaQnK1NU1UAoZEN/IKAu9B!Jzgez/V+ksJ1b3G2UPk4H43WlJrn
X-Complaints-To: abuse@comcast.net
X-DMCA-Complaints-To: dmca@comcast.net
X-Abuse-and-DMCA-Info: Please be sure to forward a copy of ALL headers
X-Abuse-and-DMCA-Info: Otherwise we will be unable to process your complaint properly
X-Postfilter: 1.3.34
Xref: g2news2.google.com rec.radio.amateur.space:598

AMSAT NEWS SERVICE
ANS-056

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:

* AMSAT-DC Meeting and Space Seminar Coming March 24
* Call for Papers
* AMSAT Journal Vol 30 #1
* Passing of an Old Friend
* ARISS Status Report for the Week of February 20, 2007
* Shorts from all over

SB SAT @ AMSAT $ANS-056.01
AMSAT-DC Meeting and Space Seminar Coming March 24

AMSAT News Service Bulletin 056.01
 >From AMSAT HQ SILVER SPRING, MD.
February 25, 2007
To All RADIO AMATEURS
BID: $ANS-056.01

Are you near Washington, D.C. or know someone who is? Then YOU ARE HEREBY INVITED to the next AMSAT-DC Meeting and Space Seminar. The day-long event will be held on Saturday, March 24 near BWI airport.

Get the meeting announcement at
http://www.amsat.org/amsat-new/fieldops/eventDetail.php?eID=259
and share it with others.

In building our agenda, we are lining up one or two presentations from local folks who are building a CubeSat of all things! We'll take a close look at the brand new AMSAT lab on our eastern shore. Get news on a new S-Band beacon. Lots more will be offered too.

Please forward this event announcement to one who might like to know about it. Take it to a club meeting. Announce it on a net. Gosh, tell a high school or college student -- and an instructor too. All are invited.

[ANS thanks Pat, N8PK, AMSAT-DC Co-host for the above information]

/EX

SB SAT @ AMSAT $ANS-056.02
Call for Papers

AMSAT News Service Bulletin 056.02
>From AMSAT HQ SILVER SPRING, MD.
February 25, 2007
To All RADIO AMATEURS
BID: $ANS-056.02

Call for Papers
11th Annual Southeastern VHF Society Conference
April 27th and 28th, 2007
Atlanta, Georgia

The Southeastern VHF Society is calling for the submission of papers and presentations for the upcoming 11th Annual Southeastern VHF Society Conference to be held in Atlanta, Georgia on April 27th and 28th, 2007. Papers and presentations are solicited on both the technical and operational aspects of VHF, UHF and Microwave weak signal amateur radio. In general papers and presentations on non weak signal related topics such as FM repeaters and packet will not be accepted but exceptions may be made if the topic is related to weak signal. For example, a paper or presentation on the use of APRS to track rovers during contests would be considered.

The deadline for the submission of papers and presentations is March 2, 2007. All submissions should be in Microsoft Word (.doc) or alternatively Adobe Acrobat (.pdf) files. Pages are 8 and 1/2 by 11 inches with a 1 inch margin on the bottom and ? inch margin on the other three sides. All text, drawings, photos, etc. should be black and white only (no color). Please indicate when you submit your paper or presentation if you plan to attend the conference and present there or if you are submitting just for publication. Papers and presentations will be published in bound proceedings by the ARRL. Send all questions, comments and submissions to the technical program chair, Jim Worsham, W4KXY at w4kxy@bellsouth.net. For further information about the conference please go to www.svhfs.org.

[ANS thanks Gould, WA4SXM for the above information]

/EX

SB SAT @ AMSAT $ANS-056.03
AMSAT Journal Vol 30 #1

AMSAT News Service Bulletin 056.03
 >From AMSAT HQ SILVER SPRING, MD.
February 25, 2007
To All RADIO AMATEURS
BID: $ANS-056.03

The newest edition of the AMSAT Journal is now out in the mail to everyone. Quietly, Ed Long, WA4SWJ, Editor has produced the 30th edition of this fine publication. Included this month are articles and updated information on the Phase 3 E bird and Eagle. A great article on AO-51 and what it takes to actually receive any signals from this Bird. All AMSAT-NA members receive this publication as part of membership. Visit the AMSAT-NA website to find out more about becoming a member to help support satellite building and operational activities. Ed long deserves applause for another great edition of the AMSAT Journal and a tireless effort to keep us informed. Keep him well fed in articles and projects as required.

[ANS thanks (from) Ed Long, WA4SWJ, for the above information]

/EX

SB SAT @ AMSAT $ANS-056.04
Passing of an Old Friend

AMSAT News Service Bulletin 056.04
 >From AMSAT HQ SILVER SPRING, MD.
February 25, 2007
To All RADIO AMATEURS
BID: $ANS-056.04

As of February 23, 2007, Our Old Friend "morse code" has now slipped into history as a requirement for a U.S. Amateur License. The tones and burps in the lower portions of the HF bands will become more and more silent as those that remember CW start to become silent keys themselves. "Silent Key" will go by the wayside as well. As a longtime Extra, I can honestly say that getting up to speed was an excitement all its own. Just 5 WPM for my Novice was a thrill learning those mysterious tones. I for one, can certainly see it both as a defunct digital mode and a unique mode to operate pulling out a QSO from those melodius tones. Ditty dum dum ditty will have a narrower meaning from this time on.

[ANS thanks Dee, NB2F for the above insight]

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SB SAT @ AMSAT $ANS-056.05
ARISS Status Report for the Week of February 20, 2007

AMSAT News Service Bulletin 056.05
>From AMSAT HQ SILVER SPRING, MD.
February 25, 2007
To All RADIO AMATEURS
BID: $ANS-056.05

Amateur Radio on the International Space Station (ARISS) Status Report
February 20, 2007

1. Hanazono Elementary School Contact Successful

On Monday, February 12, children attending Hanazono Elementary School in Akashi-city, Japan experienced an Amateur Radio on the International Space Station (ARISS) contact. Twelve students were able to have twenty questions answered by Sunita Williams, KD5PLB in front of an audience of approximately 200 students, teachers and parents. The local government newspaper and the local television station covered the event.

The American Radio Relay League ran an article on the contact entitled, �Fresh Food Doesn't Last Long on ISS, Astronaut Tells Youngsters via Ham Radio.�
See: http://www.arrl.org/news/stories/2007/02/14/101/?nc=1

2. Upcoming School Contacts

The Vasant Valley School in Vasant Kunj, New Delhi, India has been approved for an Amateur Radio on the International Space Station (ARISS) contact on Saturday, February 24 at 08:50 UTC, via the telebridge station WH6PN in Hawaii. The school is organizing a workshop on amateur radio and its applications for the students of classes VI to XII. The CBSE (Central Board of Secondary Education) introduced a new curriculum on Emergency Disaster Management for Class X students. It has a chapter on �Alternative Communication Systems� which includes ham radio. Amateur Radio licensing programs will be provided for training students and teachers, and there are plans for an amateur radio club station to be set up at the school. Students will participate in essay contests and poster competitions, and the press will be invited to the event. The audio from this contact will be fed into the EchoLink AMSAT (101 377) and JK1ZRW (277 208) servers, as well as into the IRLP Discovery Reflector 9010.
Vasant Valley School is very excited to have this opportunity to speak with Sunita Williams, KD5PLB, and has invited all students, teachers and parents of Delhi schools to attend the event. It has announced the contact on its website. See:
http://www.vasantvalley.org/vasantvalley/sunitawilliams.htm
Kalpana Chawla�s niece & nephew, Megha and Udais, attend Vasant Valley School, which is a Sunita Williams crew pick.

Escola Camilo Castelo Branco in Carnaxide, Portugal has been approved for an Amateur Radio on the International Space Station (ARISS) contact on Monday, February 26 at 15:51 UTC via the telebridge station VK5ZAI in Australia. The high school students have a curriculum which includes Physics, Chemistry and Philosophy. One of the main goals of this project is to study current scientific and technological development. Many of these students will continue their studies at the university, choosing areas related to aerospace engineering and taking with them new knowledge from this event.

The audio from this contact will be fed into the EchoLink AMSAT (101 377) and JK1ZRW (277 208) servers, as well as into the IRLP Discovery Reflector 9010.

Virginia Run Elementary School in Centreville, Virginia has been slated for an Amateur Radio on the International Space Station (ARISS) contact on Friday, March 2 at 16:18 UTC. This contact is a Suni Williams, KD5PLB crew pick.

3. Boulder Hill School Prepares for Contact

An Amateur Radio on the International Space Station (ARISS) contact is tentatively planned for Boulder Hill Elementary School in Montgomery, Illinois during the week of March 5. The school�s radio club has been busy preparing for the contact. Students have built Morse code transmitters and crystal radio receivers. They have spoken to other hams over the radio and have been studying for their amateur radio license exams. A press release was posted to both the Beacon News and Elgin Courier News websites. See:
http://www.suburbanchicagonews.com:80/beaconnews/news/
248818,2_1_AU08_SPACE_S1.article

and
http://www.suburbanchicagonews.com/couriernews/news/
250269,3_1_EL09_A3RADIO_S1.article

4. ARRL Article on ISS Crew Hams

The American Radio Relay League (ARRL) ran an article on the crews assigned to the International Space Station over the next two years, many of whom hold their amateur radio licenses. See:
http://www.arrl.org/news/stories/2007/02/13/101/?nc=1

[ANS thanks Carol, KB3LKI for the above information]

/EX

SB SAT @ AMSAT $ANS-056.06
Satellite Shorts From All Over

AMSAT News Service Bulletin 056.06
>From AMSAT HQ SILVER SPRING, MD.

February 25, 2007
To All RADIO AMATEURS
BID: $ANS-056.06

+ The Southern Africa Amateur Radio Satellite Association (SA AMSAT) will be holding its annual space communications conference in Gauteng on Saturday 23 June 2007. South Africa�s latest satellite project SumbandilaSat which is planned for launch in June and carries Amateur Radio Equipment. For more information about the conference visit http://www.amsatsa.org.za.

+ AMSAT-UK reminds everyone the dates for the 2007 AMSAT-UK Colloquium are 20 through 22 July 2007. We are holding it a week earlier than normal to avoid clashing with the Central States VHF Event. Venue is to be the University of Surrey, as per previous years.
Details of the colloquium can be found at: http://www.uk.amsat.org.

+ Planning has started for the October 2007 AMSAT-NA Space symposium which will be held in Pittsburgh this year. More details are coming soon.

+ Paul, 2E1EUB plans portable satellite operations from northeastern Scotland (grid IO86ok) for nine days starting on March 3. He wil be using the callsign 2M1EUB/P; QSL via home call. Operation will include AO-7 for those in North America and all of the satellites for European coverage.

+ The University of New South Wales in Australia is building BlueSat which will include amateur radio frequencies. More information about this project is on-line at: http://www.bluesat.unsw.edu.au.

+ A recording has been put on-line for those wishing to hear the RAFT satellite speak. http://www.ne.jp/asahi/hamradio/je9pel/70223raf.wav
RAFT is speaking, "This is JE9PEL via RAFT". (Thanks Mineo, JE9PEL)

[ANS thanks everyone for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Dee Interdonato, NB2F

From 3643993384034892927
X-Google-Thread: 10e8ad,5090c48d72bdaa0e,start
X-Google-Attributes: gid10e8ad,public

```
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news1.google.com!news4.google.com!
border1.nntp.dca.giganews.com!nntp.giganews.com!local01.nntp.dca.giganews.com!
nntp.comcast.com!news.comcast.com.POSTED!not-for-mail
NNTP-Posting-Date: Sun, 25 Feb 2007 12:26:24 -0600
From: "JoAnne K9JKM" <k9jkm_remove_@comcast.net>
Newsgroups: rec.radio.amateur.space
Subject: ANS-056.07 AMSAT News Service Special Bulletin - AO51 Schedule
Date: Sun, 25 Feb 2007 12:26:36 -0600
MIME-Version: 1.0
Content-Type: text/plain;
     format=flowed;
     charset="iso-8859-1";
     reply-type=original
Content-Transfer-Encoding: 7bit
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.3028
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.3028
Message-ID: <tu2dnbR-K4BNSXzYnZ2dnUVZ_sudnZ2d@comcast.com>
Lines: 84
NNTP-Posting-Host: 67.184.169.1
X-Trace: sv3-Vtz7Pifc68mEDS6Onrh/fDJIwnycvntmrhYuneK4Qu+80djzH7/
shXJGbudHmlQ9ClhS+6jNeFOQ16B!
oLsYUdVizrHeFnPxqNtoopPrUXdVFNdSrE91puKCJFQyKWz+fLQJoMZmwP15gQ9iSvJ/7oGAtLAw!
aPEmnavBxu4PcuI=
X-Complaints-To: abuse@comcast.net
X-DMCA-Complaints-To: dmca@comcast.net
X-Abuse-and-DMCA-Info: Please be sure to forward a copy of ALL headers
X-Abuse-and-DMCA-Info: Otherwise we will be unable to process your complaint
properly
X-Postfilter: 1.3.32
Xref: g2news2.google.com rec.radio.amateur.space:599
```

SB SAT @ AMSAT $ANS-056.07
AO-51 Schedule Change to Support Falconsat-3 Testing

AMSAT News Service Bulletin 056.07
From AMSAT HQ SILVER SPRING, MD.
February 25, 2007
To All RADIO AMATEURS
BID: $ANS-056.07

The AMSAT AO-51 Operations Team has released this schedule change:

February 26 and possibly February 27 during the local AM passes over Colorado the AO-51 U band voice transmitter will be off and the S band will be on in digital mode at 38k4 and 78k4. These mode changes are to facilitate the testing of the US Air Force Academy satellite ground station in preparation for the launch of Falconsat-3.

Falconsat-3 (FS-3) is another in the series of satellites built at the US Air Force Academy. It is presently scheduled to launch March 8 from Cape Canaveral on an Atlas-V (mission STP-01). USAFA Space Systems Research Center satellites are science oriented and university class.

FS-3 carries two space weather plasma detection experiments along with a micro pulse plasma thruster attitude control experiment. The objectives of the program are to do real science and educate USAFA cadets about space systems design, construction, testing, and operations. About 40 senior cadets are in the program each year. Falconsats are operated from the ground station at USAFA near Colorado Springs, Colorado.

Once in orbit FS-3's mission is to collect data from its experiments and provide cadets in the Space Operations major an actual space ops experience. Additionally Astronautics major cadets will analyze telemetry and make operations decisions. FS-3 will perform its primary mission on DOD frequencies with a downlink at 2.220 GHz. Modulation is GMSK at 38k4 or 76k8 bps. All transmissions are in the clear and are AX.25. Additionally FS-3 carries an Amateur transmitter and receiver with a downlink at 435.100 Mhz. Modulation is GMSK at 9k6 with faster bit rates available. The Amateur uplink is in VHF and the frequency will be made available when FS-3 reverts to Amateur mode.

After the primary science mission is completed the satellite will be transferred to the USAFA Amateur Radio Club and operated as an Amateur satellite. It can function much like AO-51 in either an FM voice or digital store and forward configurations. During the first few weeks on orbit FS-3 will be commissioned, which includes uploading software and testing all functions. During that time the Amateur payload will be exercised.

The primary avionics in FS-3 are from SpaceQuest with additional modules built by cadets and faculty at USAFA and contractors. Software modules are from BekTek, SSTL, and Colorado Satellite Services, with additional software by cadets and faculty at USAFA. The satellite is 'ESPA class'. The basic structure is a cube about 24" on a side. There is a 3 meter gravity gradient boom that will be extended from the 'top' on orbit. On the 'bottom' are the pulse plasma thrusters and various antennas including an array of S band patch antennas provided by S&L Technologies of Orlando along with omni antennas for S, V and U bands.

The USAFA ground station consists of two complete units with individual masts on the roof of the classroom annex building. Antennas include 6' and 10' dishes and Yagis. Rotators are the heavy duty MT-3000 and MT-1000 from M2.

The first USAFA satellite, Falcon Gold, went into GTO and measured the strength of GPS signals from well above the constellation. The results showed signal levels were adequate to warrant further experiments and in part lead to the GPS experiment on AO-40 and other satellites.

Falconsat 4 and 5 are in the design stages now. Each is expected to carry an Amateur transmitter and receiver in addition to their primary payloads.

After launch reception reports will be appreciated. Reports may be sent to: fs3reports@coloradosatellite.com

[ANS thanks Jim White, WD0E and the AO-51 Operations Team for the above information.]

/EX

```
From -8766064500872058403
X-Google-Thread: 10bf43,2771d2cf1ffcad23,start
X-Google-Thread: 10e8ad,2771d2cf1ffcad23,start
X-Google-Thread: 106d41,2771d2cf1ffcad23,start
X-Google-Thread: fa029,2771d2cf1ffcad23,start
X-Google-Thread: 114aac,2771d2cf1ffcad23,start
X-Google-Attributes: gid10bf43,gid10e8ad,gid106d41,gidfa029,gid114aac,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news1.google.com!news3.google.com!
border1.nntp.dca.giganews.com!nntp.giganews.com!newsfeed.hal-mli.net!feeder1.hal-
mli.net!news.alt.net
From: MI5Victim@mi5.gov.uk
Newsgroups:
rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.cb,rec.radio.scanner,re
c.radio.shortwave
Subject: MI5 Persecution: Stand up for Free Speech 14/8/95 (587)
Followup-To:
rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.cb,rec.radio.scanner,re
c.radio.shortwave,uk.misc
Date: Tue, 27 Feb 2007 16:46:20 +0000 (UTC)
Organization: Altopia Corp. - Usenet Access - www.altopia.com
Lines: 29
Message-ID: <m07012716460800@4ax.com>
Xref: g2news2.google.com rec.radio.amateur.policy:66982
rec.radio.amateur.space:600 rec.radio.cb:25838 rec.radio.scanner:8744
rec.radio.shortwave:68277
```

From: rji@cheetah.inmos.co.uk (Richard Ingram)
Newsgroups: uk.misc
Date: Mon Aug 14 10:08:32 1995

Some cencorship loving bore wrote :

> In article <GEVANS.95Aug14094119@mvagusta.uk.tele.nokia.fi>
gevans@mvagusta.uk.tele.nokia.fi (Gareth Evans) writes:
>
>   His sysadmin is also next to useless, and has not replied to my request or
>   even acknowledged it. Maybe this person *is* a sysadmin?
>

> He's not. It seems the public access site he uses has got no proper
> management over its users. Here's a copy of a reply I got from a
> complaint I made. [After returning every one of Corley's postings to

[snip a large pile of winging complaining drivel]

Geez what a bunch of tossers you all are - you don't like someones postings so
you try and get him evicted from the net, why not just use a kill file - you
DONT have to read his posts/threads now do you ?

Why is it the net is getting populated by the biggest bunch of self absorbed
little Hitlers ? You don't like someones posts so you bloody complain or mail
bomb them - grow up you bunch of fucking sad gits !

Richard.

587

From -282697992759899991
X-Google-Thread: 10bf43,e0f499b318fb95b1,start
X-Google-Thread: 10e8ad,e0f499b318fb95b1,start
X-Google-Thread: 106d41,e0f499b318fb95b1,start
X-Google-Thread: fa029,e0f499b318fb95b1,start
X-Google-Thread: 114aac,e0f499b318fb95b1,start
X-Google-Attributes: gid10bf43,gid10e8ad,gid106d41,gidfa029,gid114aac,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news1.google.com!news4.google.com!news.glorb.com!
news.alt.net
From: MI5Victim@mi5.gov.uk
Newsgroups:
rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.cb,rec.radio.scanner,re
c.radio.shortwave
Subject: MI5 Persecution: Troubling Censorship Issues 20/8/95 (3242)
Followup-To:
rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.cb,rec.radio.scanner,re
c.radio.shortwave,uk.misc
Date: Tue, 27 Feb 2007 18:08:20 +0000 (UTC)
Organization: Altopia Corp. - Usenet Access - www.altopia.com
Lines: 30
Message-ID: <m07012718080882@4ax.com>
Xref: g2news2.google.com rec.radio.amateur.policy:66988
rec.radio.amateur.space:601 rec.radio.cb:25839 rec.radio.scanner:8745
rec.radio.shortwave:68290

Fred Read (postmaster@foxhouse.demon.co.uk) wrote:

: He posts this drivel every week or so to a number of groups that
: I subscribe to and nothing seems to stop him. *ALL* of his posts
: are off topic and unwelcome to the groups he posts to.

: We have complained about him to his postmaster on at least four

: previous occasions and he still posts the same crap. As his SP
: seem unwilling, or unable, to do anything about him, we were
: windering if there was anything you could do?

If he is not actively using tactics to avoid or sabotage killfiles (posting from various systems, forging, massive crossposting to create cross-newsgroup flame wars) then it should be quite easy to killfile him.

It does seem that the frequency and the size of his posts are approaching net abuse. However, IMHO, they aren't quite there yet. If his postmaster were to act in this instance, it would raise troubling censorship issues.

```
--
Karen Lofstrom                                     lofstrom@lava.net
---------------------------------------------------------------------
       "Adventures for those of the inadmissable kind,
        with no follow through."
            ---  a flaming bonzo beckwithian idiot
```

3242

```
From -5720684739783687388
X-Google-Thread: 10e8ad,4ca580b6077d400d,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII
Path: g2news2.google.com!news3.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!local01.nntp.dca.giganews.com!nntp.comcast.com!
news.comcast.com.POSTED!not-for-mail
NNTP-Posting-Date: Sun, 04 Mar 2007 19:26:02 -0600
From: "JoAnne K9JKM" <k9jkm_remove_@comcast.net>
Newsgroups: rec.radio.amateur.space
Subject: ANS-063 AMSAT News Service Weekly Bulletins
Date: Sun, 4 Mar 2007 19:26:17 -0600
MIME-Version: 1.0
Content-Type: text/plain;
     format=flowed;
     charset="iso-8859-1";
     reply-type=original
Content-Transfer-Encoding: 8bit
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.3028
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.3028
Message-ID: <YcedncOUGb037HbYnZ2dnUVZ_t2tnZ2d@comcast.com>
Lines: 254
NNTP-Posting-Host: 67.184.169.1
X-Trace: sv3-
NC6JGx3lJIthbDb9ZY92so+KrzBMgPdJF4ZIDs51xSyUrlm7IotZLCmc5XQhAxeVrk557AP8qr8jUhY!
fzEIUHq/WrSxNoUBu7T2Lha173VgEAC27nb1a5uyrefFER6Qt+yD5prSoGIccagsw7y9iwyQ3DJ7!
```

XCNzWQ8832fhFsA=
X-Complaints-To: abuse@comcast.net
X-DMCA-Complaints-To: dmca@comcast.net
X-Abuse-and-DMCA-Info: Please be sure to forward a copy of ALL headers
X-Abuse-and-DMCA-Info: Otherwise we will be unable to process your complaint properly
X-Postfilter: 1.3.34
Xref: g2news2.google.com rec.radio.amateur.space:602

AMSAT NEWS SERVICE
ANS-063

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:

* Progress Report on New AMSAT Maryland Laboratory
* TAPR Digital Communications Conference Call For Papers
* Satellite Shorts From All Over
* ARISS Status Report for the Week of February 26, 2007
* Don't Forget the AMSAT-DC Meeting and Space Seminar Coming March 24

SB SAT @ AMSAT $ANS-063.01
Progress Report on New AMSAT Maryland Laboratory

AMSAT News Service Bulletin 063.01
>From AMSAT HQ SILVER SPRING, MD.
March 4, 2007
To All RADIO AMATEURS
BID: $ANS-063.01

Bob Davis, KF4KSS provides ANS readers with an update on the new AMSAT Laboratory, under construction. Bob writes,"AMSAT is soon to have a new spacecraft integration lab in Pocomoke, Maryland!

Our lab space is being hosted by the Hawk Institute for Space Sciences (a non-profit affiliated with the University of Maryland Eastern Shore). Since three 24' rental trucks arrived just after the New Year, we've had volunteer Saturdays (including two 3-day weekends).

Thanks go to the 16 volunteers that have come by so far, from Maryland and Virginia Eastern Shore residents, DC area, and two from much farther that drove the rental trucks! After substantial cleaning, sorting and inventory, we have finally seriously addressed assembly of the cleanroom. Once finished, it will be 20'x20', as remembered from Orlando, FL, during P3D (later named AO-40) assembly & testing. This time, we're preparing for Eagle! Besides the clean room, we have an assortment of parts, tools, test equipment, flow bench, spin balance machine, cleanroom crane, documentation from previous projects, and office/lab furniture and supplies.

Look to upcoming AMSAT Journals for additional updates and photos. The new lab is located about 3 hours southeast of Washington, DC. For further information, contact AMSAT or Bob Davis directly at KF4KSS@amsat.org. And as always, your volunteerism and donations to AMSAT make it all happen!

[ANS thanks Bob, KF4KSS for the above information]

/EX

SB SAT @ AMSAT $ANS-063.02
TAPR Digital Communications Conference Call For Papers

AMSAT News Service Bulletin 063.02
>From AMSAT HQ SILVER SPRING, MD.
March 4, 2007
To All RADIO AMATEURS
BID: $ANS-063.02

Technical papers are solicited for presentation at the 26th Annual ARRL and TAPR Digital Communications Conference to be held September 28-30, 2007 in Hartford, Connecticut. These papers will also be published in the Conference Proceedings (you do NOT need to attend the conference to have your paper included in the Proceedings). The submission deadline is July 31, 2007. Please send papers to:

Maty Weinberg
ARRL
225 Main St
Newington, CT 06111 or you can make your submission via e-mail to:
maty@arrl.org

Papers will be published exactly as submitted and authors will retain all rights.

[ANS thanks Steve, WB8IMY at the ARRL for the above information]

/EX

SB SAT @ AMSAT $ANS-063.03
Satellite Shorts From All Over

AMSAT News Service Bulletin 063.03
>From AMSAT HQ SILVER SPRING, MD.
March 4, 2007

To All RADIO AMATEURS
BID: $ANS-063.03

+ Drew, KO4MA reports the ARRL has amended its Field Day rules in regards to satellite stations. Details are available at: http://www.arrl.org/contests/rules/2007/fd.html.

+ Trevor, M5AKA sent information that the United Kingdom is considering band changes at WRC-07 where other services may over-existing amateur allocations at 2300-2400 MHz, 3400 to 3600 MHz, and just below 70cm 410-430 MHz. Anyone can respond to Ofcom consultations, they are NOT resistriced to British Isles or EU citizens. The deadline for responses is 30 March. More info at: http://www.ofcom.org.uk/consult/condocs/wrc07/.

+ Kosmotras has advised CalPoly CubeSat Management that their next DNEPR launch is scheduled for March 27, 2007. Payloads will include CubeSats, EgyptSat and SaudiSats, and 3 CubeSat P-PODs with assignments as follows:

P-POD A	CalPoly PolySat CP4 (OSCAR) AeroSpace AeroCube-2 Boeing CSTB-1
P-POD B	CalPoly PolySat CP3 (OSCAR) University of Louisiana CAPE-1 (OSCAR) Universidad Sergio Arboleda (Colombia) Libertad-1 (OSCAR)
P-POD C	Tethers Unlimited MAST (triple-cube)

More information including OSCAR frequencies and modes will be updated at http://showcase.netins.net/web/wallio/CubeSat.htm. Additional info will be available at CalPoly's CubeSat web page: http://cubesat.atl.calpoly.edu/. (Thanks Ralph, W�RPK)

+ USA amateurs will have the opportunity this week to copy the ISS in direct ARISS school contacts. Monitor the 145.800 MHz FM downlink for these planned school contacts:

1. Boulder Hill Elementary School, Montgomery, Illinois, direct via W9BHB Tue 2007-03-06 16:06 UTC 87 deg; also with IRLP, Echolink, and web coverage.

2. Mission Viejo, CA, direct via K6UCI Thu 2007-03-08 16:42 UTC 45 deg.

[ANS thanks everyone for the above information]

/EX

SB SAT @ AMSAT $ANS-063.04
ARISS Status Report for the Week of February 26, 2007

AMSAT News Service Bulletin 063.04
>From AMSAT HQ SILVER SPRING, MD.
March 4, 2007
To All RADIO AMATEURS
BID: $ANS-063.04

1. New Delhi School Contact Successful

Vasant Valley School in Vasant Kunj, New Delhi, India experienced a successful Amateur Radio on the International Space Station (ARISS) contact on Saturday, February 24 via the telebridge station WH6PN in Hawaii. Thirteen students asked fifteen questions of Sunita Williams, KD5PLB. Kalpana Chawla's niece and nephew were among the participants, and several media outlets attended. The audio was fed into the EchoLink AMSAT (101 377) and JK1ZRW (277 208) servers, (receiving 8 connections from 6 countries), as well as into the IRLP Discovery Reflector 9010. It was also webcast by Verizon Conferencing. The Hindu posted an article on its website, covering the event. See:
http://www.hinduonnet.com/thehindu/holnus/218200702242075.htm

Video from India Broadcast News (IBN) can be viewed on:
http://www.ibnlive.com/news/kids-get-chatty-with-sunita-williams/34396-11.html

2. Additional School Contacts

Escola Camilo Castelo Branco in Carnaxide, Portugal had an Amateur Radio on the International Space Station (ARISS) contact on Monday, February 26 via the telebridge station VK5ZAI in Australia. The high school students have a curriculum which includes Physics, Chemistry and Philosophy. One of the main goals of this project is to study current scientific and technological development. Many of these students will continue their studies at the university, choosing areas related to aerospace engineering and taking with them new knowledge from this event.

Virginia Run Elementary School in Centreville, Virginia had an Amateur Radio on the International Space Station (ARISS) contact on Friday, March 2. Virginia
Run is located in a suburb of Washington, D.C. and has an enrollment of 830 students in grades K- 6. A contest was held to choose the best questions to ask the ISS crew member. Astronaut Carl Walz will visit the school prior to the contact to give a presentation to the students. He will bring his space-suit, memorabilia and videos to share with the school. This contact is a Sunita Williams, KD5PLB, crew pick. The American Radio Relay League (ARRL) Virginia Section Manager has posted a press release on the Virginia Section web page. See: http://www.arrlva.us

3. Training Status

Russian delegate Sergey Samburov, RV3DR, took part in a session with flight participant Charles Simonyi, KE7KDP, and provided training on the amateur radio hardware. He has been working on a procedure to restore the Kenwood radio to its proper configuration, which Simonyi will carry

out once on board the ISS. Photos of the session may be viewed on the
Energia website:
http://www.energia.ru/english/energia/iss/iss15/photo_02-21.html

[ANS thanks Carol, KB3LKI for the above information]

/EX

SB SAT @ AMSAT $ANS-063.05
Don't Forget the AMSAT-DC Meeting and Space Seminar Coming March 24

AMSAT News Service Bulletin 063.05
>From AMSAT HQ SILVER SPRING, MD.
March 4, 2007
To All RADIO AMATEURS
BID: $ANS-063.05

Are you near Washington, D.C. or know someone who is? Then YOU ARE HEREBY INVITED to the next AMSAT-DC Meeting and Space Seminar. The day-long event will be held on Saturday, March 24 near BWI airport.

Get the meeting announcement at
http://www.amsat.org/amsat-new/fieldops/eventDetail.php?eID=259
and share it with others.

In building our agenda, we are lining up one or two presentations from local folks who are building a CubeSat of all things! We'll take a close look at the brand new AMSAT lab on our eastern shore. Get news on a new S-Band beacon. Lots more will be offered too.

Please forward this event announcement to one who might like to know about it. Take it to a club meeting. Announce it on a net. Gosh, tell a high school or college student -- and an instructor too. All are invited.

[ANS thanks Pat, N8PK, AMSAT-DC Co-host for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM

```
From -6404479354427520898
X-Google-Thread: 10e8ad,13707fe582d0f9f0,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news3.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!local01.nntp.dca.giganews.com!nntp.comcast.com!
news.comcast.com.POSTED!not-for-mail
NNTP-Posting-Date: Sun, 04 Mar 2007 19:27:17 -0600
From: "JoAnne K9JKM" <k9jkm_remove_@comcast.net>
Newsgroups: rec.radio.amateur.space
Subject: WSR-057 AMSAT Weekly Satellite Report
Date: Sun, 4 Mar 2007 19:27:31 -0600
MIME-Version: 1.0
Content-Type: text/plain;
     format=flowed;
     charset="iso-8859-1";
     reply-type=original
Content-Transfer-Encoding: 7bit
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.3028
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.3028
Message-ID: <xoqdnf06uqdo7HbYnZ2dneKdnZydnZ2d@comcast.com>
Lines: 1142
NNTP-Posting-Host: 67.184.169.1
X-Trace: sv3-zwQSSDvQYWcxB8wjBKxlokJdehL4uYeQKMLY5v38HL/TROwcjaMIgOVjXrjRM/
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Xm7yHKLc881mEWRvOZwyt65HJMB4lvIs7kIeHPYoHyHxh9D4L9g!pJtkpOi2oNtTQdM44lY6zQGKscQo
X-Complaints-To: abuse@comcast.net
X-DMCA-Complaints-To: dmca@comcast.net
X-Abuse-and-DMCA-Info: Please be sure to forward a copy of ALL headers
X-Abuse-and-DMCA-Info: Otherwise we will be unable to process your complaint
properly
X-Postfilter: 1.3.34
Xref: g2news2.google.com rec.radio.amateur.space:603
```

This report is organized into 4 parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites

SB SAT @ AMSAT W8ISS ANS-057.S1
WSR 057 Part 1 02/26/2007

AMSAT NEWS SERVICE BULLETIN 057.S1 FROM AMSAT HQ
SILVER SPRING, MD, February 26, 2007
TO ALL RADIO AMATEURS
BID: $ANS-057.S1

VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

```
Status: Operational
Current Mode: U/V - Indian Transponder

Frequencies:
Indian Transponder:
Uplink:   435.220 to 435.280 MHz LSB/CW
Downlink: 145.870 to 145.930 MHz USB/CW

Dutch Transponder:
Uplink:   435.225 to 435.275 MHz LSB/CW
Downlink: 145.875 to 145.925 MHz USB/CW


Indian Beacon:  145.859330 MHZ CW
Dutch Beacon:   145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsat.in/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is
active. Each transponder has a different beacon.
[10022006]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Software Crash - Software reload in progress
Current Mode(s): FM Repeater - OFF
                 PBBS -        OFF
                 Digipeater -  OFF

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink:   145.880 MHZ FM
                       145.880 MHz USB
                       145.920 MHz FM
                      1268.700 MHz FM 67Hz PL tone
Digital Downlinks:     435.150 MHz FM 38k4 Digital, PBP, 1 watt output
                       435.150 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:        145.860 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      1268.700 mhz FM 9k6 PBP Digital

Mode and Antenna Polarization:
```

T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[02122007]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The order of operation is thus: (allow for Doppler as necessary)
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer
   on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on
   and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10
   minute timer.
[01082007]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Operational

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

JARL English webpage: http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm
AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's CW
telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts.htm
[01222007]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Uplink: 145.850 MHz FM
Downlink: 436.795 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[01292007]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational depending on amount of Sunlight

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/

AO-7 Usage Guidelines on the AO-7 Log and Resource Site located at:
http://www.planetemily.com/ao7
[02262007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: Occasional Voice
Digipeater: OFF

The Expedition 14 crew is:
Commander: Michael Lopez-Alegria KE5GTK
Flight Engineer: Mikhail Tyurin   RZ3FT
Flight Engineer: Sunita Williams   KD5PLB

Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

SSTV TESTING:
Worldwide Reported Downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS, RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com

APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.
[12182006]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-057.S2
WSR 057 Part 2 02/26/2007

AMSAT NEWS SERVICE BULLETIN 057.S2 FROM AMSAT HQ
SILVER SPRING, MD, February 26, 2007
TO ALL RADIO AMATEURS
BID: $ANS-057.S2

PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: In Orbit

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder: 145.825 Mhz FM
[02052007]
=====
?O-?? FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: In Orbit

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[02262007]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: In Orbit

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01222007]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

```
Status: In Orbit

Main Downlink:      145.825 Mhz FM APRS AX25
APRS Uplink:        145.825 MHz FM APRS AX25
Voice/PSK31 Uplink:  28.120 MHz

Packet to Voice ID: RAFT
[02262007]
=====
GENESAT-1 ?O-??
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Telemetry Beacon Downlink: 437.0670 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[01082007]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Operational

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon:             437.2750 MHz CW

Callsign: JR8YJT
[10302006]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon:             437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
[01082007]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launched: June 30, 2003
```

Status: Operational

Beacon: 436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[01082007]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launched: February 21, 2006

Status: Semi-Operational - Constant Carrier only

Uplink: 1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan ?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[01082007]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Software crash - Software reload in progress
Current Mode(s): FM Repeater - OFF
PBBS - OFF
Digipeater - OFF

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.880 MHZ FM
145.880 MHz USB
145.920 MHz FM
1268.700 MHz FM 67Hz PL tone
Digital Downlinks: 435.150 MHz FM 38k4 Digital, PBP, 1 watt output
435.150 MHz FM 9k6 Digital, Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Digital, Pacsat Broadcast Protocol
1268.700 mhz FM 9k6 PBP Digital

Mode and Antenna Polarization:
T: Linear

```
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[02122007]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Operational only in Full Sun Light

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink:        144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[01082007]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM
Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[01082007]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Semi-operational - APRS usage through Digipeater
```

Uplink: 145.900 MHz FM 1200-baud Manchester FSK
                145.920 MHz FM 1200-baud Manchester FSK
                145.940 MHz FM 1200-baud Manchester FSK
                145.960 MHz FM 1200-baud Manchester FSK
Downlink: 437.026 MHz SSB 1200-baud PSK
Mode-S Beacon: 2401.1428 MHz

Mode and Antenna Polarization:
U: RC 437.050 MHz RHCP
   PSK 437.025 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[01222007]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational

Telemetry Downlink: 145.826 MHz. FM 1200 AFSK

Mode-S Beacon: 2401.500 MHz - OFF
UHFBeacon: 435.025 MHz - OFF

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Official webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[01082007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: Occasional Voice
Digipeater: OFF

Expedition Crew 14 is:
Commander: Michael Lopez-Alegria KE5GTK
Flight Engineer: Mikhail Tyurin   RZ3FT
Flight Engineer: Sunita Williams   KD5PLB

Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM

Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

SSTV TESTING:
Worldwide Reported Downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS, RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line is NOT translated from Russian and posted.
[01082007]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-057.S3
WSR 057 Part 3 02/26/2007

AMSAT NEWS SERVICE BULLETIN 057.S3 FROM AMSAT HQ
SILVER SPRING, MD, February 26, 2007
TO ALL RADIO AMATEURS
BID: $ANS-057.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

```
Proposed Callsign: TBA
Proposed Transmit Frequency:  437.305
                            2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink:         437.250 MHz FM 67Hz CTCSS
Voice Downlink:      2401.835 MHz FM
Packet Up/Downlink:   437.250 MHz 9k6 packet
Packet Downlink      2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink:   435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Operational

Uplinks:   145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink:  437.325 MHz

Broadcast callsign: MYSAT3-11
BBS:                MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial
land and weather imaging payloads offers FM and FSK Amateur Radio
communica-
```

tion.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[01222007]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, callsign KE6QMD, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:

```
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
V-band:   145.840 -  145.990 MHz CW/LSB
U-band:   435.550 -  435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks
---------
S2-band:  2401.225 -  2401.475 MHz CW/USB
K-band:  24048.010 - 24048.060 MHz CW/USB
Beacon:   2401.323 MHz
         24048.035 MHz
[01222007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink:    145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site
at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater:         436.250 MHz

Uplinks: Mode B Repeater:  145.825 MHz
```

Mode J Digipeater: 145.825 MHz
145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]

=====

PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]

=====

SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm

[ANS-WSR has no further information]
[09042006]

=====

TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink: 145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]

=====

PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Operational - Not open for Amatuer use

```
Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign:       POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012006]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: Downlink only

Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[012212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM
```

```
Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
LO-19 LUSAT
```

Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplinks: 145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink: 437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[01222007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink: 145.825 MHz FM 1200 Baud AFSK
Beacon: 2401.220 MHz
[05012006]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink: 145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting): Non-Operational
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet: Non-Operational
Uplink: 145.8500 MHz MFSK 1200 BPS
Uplink: 145.8700 MHz MFSK 1200 BPS
Uplink: 145.8900 MHz MFSK 1200 BPS
Uplink: 145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon: 145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.8500 - 145.9000 MHz SSB/CW
Downlink   29.4000 - 29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]

```
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
[01152007]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon:    29.352 MHz (intermittent)

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink:     21.260 to 21.300 MHz CW/USB
Downlink:  145.860 to 145.900 MHz CW/USB
```

Beacon: 145.860 MHz

Robot: 145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
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SB SAT @ AMSAT W8ISS $ANS-057.S4
WSR 057 Part 4 02/26/2007

AMSAT NEWS SERVICE BULLETIN 057.S4 FROM AMSAT HQ
SILVER SPRING, MD, February 26, 2007
TO ALL RADIO AMATEURS
BID: $ANS-057.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE
PROPOSED FOR LAUNCH AT THIS TIME:

Phase 5a Mars Mission
Catalog Number:
Proposed Launch Date: 2009 or 2011

Status: Design Phase

For the latest project status update please visit the AMSAT-DL P5-A web
page:
http://ticket-to-mars.org
[01222007]
=====
PHASE 3E AO-??
Catalog number:
Proposed Launch Date: Late 2007

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web
page:
http://www.amsat-dl.org/p3e/

[01222007]
=====
Eagle AO-??
Catalog Number:
Proposed Launch Date: Early/Mid 2009

Status: Design Phase

For the latest project status updates please visit the AMSAT-NA webpage:
http://www.amsat.org
[01222007]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/amsat/listserv/menu.html

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the
memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen,
G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

```
From 8570842403147207798
X-Google-Thread: 10e8ad,71b621d8af48a789,start
X-Google-Thread: 10b9c8,71b621d8af48a789,start
X-Google-Attributes: gid10e8ad,gid10b9c8,public
X-Google-Language: ENGLISH,ASCII
Path: g2news2.google.com!news3.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx02.iad01.newshosting.com!newshosting.com!
198.186.194.247.MISMATCH!news-xxxfer.readnews.com!transit3.readnews.com!news-
out.readnews.com!news-out.readnews.com!transit4.readnews.com!panix!rri.panix.com!
robomod!not-for-mail
From: "JoAnne K9JKM" <k9jkm_remove_@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-062 AMSAT News Service Weekly Bulletins
     format=flowed;
     charset="iso-8859-1";
     reply-type=original
Followup-To: rec.radio.amateur.space
Date: 4 Mar 2007 22:50:59 -0500
Organization: PANIX Public Access Internet and UNIX, NYC
Lines: 254
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <oJOdnbJSVPNs_XbYnZ2dnUVZ_sSmnZ2d@comcast.com>
NNTP-Posting-Host: panix6.panix.com
X-Trace: reader2.panix.com 1173066659 19989 166.84.1.6 (5 Mar 2007 03:50:59 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Mon, 5 Mar 2007 03:50:59 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
X-Authentication-Warning: serv1.gc.dca.giganews.com: news set sender to
poster@giganews.com using -f
```

```
X-Newsreader: Microsoft Outlook Express 6.00.2900.3028
X-DMCA-Complaints-To: dmca@comcast.net
X-Abuse-and-DMCA-Info: Please be sure to forward a copy of ALL headers
X-Abuse-and-DMCA-Info: Otherwise we will be unable to process your complaint
properly
X-Postfilter: 1.3.34
Xref: g2news2.google.com rec.radio.amateur.space:604 rec.radio.info:144
```

AMSAT NEWS SERVICE
ANS-063

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:

* Progress Report on New AMSAT Maryland Laboratory
* TAPR Digital Communications Conference Call For Papers
* Satellite Shorts From All Over
* ARISS Status Report for the Week of February 26, 2007
* Don't Forget the AMSAT-DC Meeting and Space Seminar Coming March 24

SB SAT @ AMSAT $ANS-063.01
Progress Report on New AMSAT Maryland Laboratory

AMSAT News Service Bulletin 063.01
>From AMSAT HQ SILVER SPRING, MD.
March 4, 2007
To All RADIO AMATEURS
BID: $ANS-063.01

Bob Davis, KF4KSS provides ANS readers with an update on the new AMSAT Laboratory, under construction. Bob writes,"AMSAT is soon to have a new spacecraft integration lab in Pocomoke, Maryland!

Our lab space is being hosted by the Hawk Institute for Space Sciences (a non-profit affiliated with the University of Maryland Eastern Shore). Since three 24' rental trucks arrived just after the New Year, we've had volunteer Saturdays (including two 3-day weekends).

Thanks go to the 16 volunteers that have come by so far, from Maryland and Virginia Eastern Shore residents, DC area, and two from much farther that drove the rental trucks! After substantial cleaning, sorting and inventory, we have finally seriously addressed assembly of the cleanroom. Once finished, it will be 20'x20', as remembered from Orlando, FL, during P3D (later named AO-40) assembly & testing. This time, we're preparing for Eagle! Besides the clean room, we have an assortment of parts, tools, test equipment, flow bench, spin balance machine, cleanroom crane, documentation from previous projects, and office/lab furniture and supplies.

Look to upcoming AMSAT Journals for additional updates and photos. The new lab is located about 3 hours southeast of Washington, DC. For further information, contact AMSAT or Bob Davis directly at KF4KSS@amsat.org. And as always, your volunteerism and donations to AMSAT make it all happen!

[ANS thanks Bob, KF4KSS for the above information]

/EX

SB SAT @ AMSAT $ANS-063.02
TAPR Digital Communications Conference Call For Papers

AMSAT News Service Bulletin 063.02
>From AMSAT HQ SILVER SPRING, MD.
March 4, 2007
To All RADIO AMATEURS
BID: $ANS-063.02

Technical papers are solicited for presentation at the 26th Annual ARRL and TAPR Digital Communications Conference to be held September 28-30, 2007 in Hartford, Connecticut. These papers will also be published in the Conference Proceedings (you do NOT need to attend the conference to have your paper included in the Proceedings). The submission deadline is July 31, 2007. Please send papers to:

Maty Weinberg
ARRL
225 Main St
Newington, CT 06111 or you can make your submission via e-mail to:
maty@arrl.org

Papers will be published exactly as submitted and authors will retain all rights.

[ANS thanks Steve, WB8IMY at the ARRL for the above information]

/EX

SB SAT @ AMSAT $ANS-063.03
Satellite Shorts From All Over

AMSAT News Service Bulletin 063.03
>From AMSAT HQ SILVER SPRING, MD.
March 4, 2007
To All RADIO AMATEURS

BID: $ANS-063.03

+ Drew, KO4MA reports the ARRL has amended its Field Day rules in regards to satellite stations. Details are available at: http://www.arrl.org/contests/rules/2007/fd.html.

+ Trevor, M5AKA sent information that the United Kingdom is considering band changes at WRC-07 where other services may overlap existing amateur allocations at 2300-2400 MHz, 3400 to 3600 MHz, and just below 70cm 410-430 MHz. Anyone can respond to Ofcom consultations, they are NOT resistriced to British Isles or EU citizens. The deadline for responses is 30 March. More info at: http://www.ofcom.org.uk/consult/condocs/wrc07/.

+ Kosmotras has advised CalPoly CubeSat Management that their next DNEPR launch is scheduled for March 27, 2007. Payloads will include CubeSats, EgyptSat and SaudiSats, and 3 CubeSat P-PODs with assignments as follows:

P-POD A CalPoly PolySat CP4 (OSCAR)
AeroSpace AeroCube-2
Boeing CSTB-1

P-POD B CalPoly PolySat CP3 (OSCAR)
University of Louisiana CAPE-1 (OSCAR)
Universidad Sergio Arboleda (Colombia) Libertad-1 (OSCAR)

P-POD C Tethers Unlimited MAST (triple-cube)

More information including OSCAR frequencies and modes will be updated at http://showcase.netins.net/web/wallio/CubeSat.htm. Additional info will be available at CalPoly's CubeSat web page: http://cubesat.atl.calpoly.edu/. (Thanks Ralph, W�RPK)

+ USA amateurs will have the opportunity this week to copy the ISS in direct ARISS school contacts. Monitor the 145.800 MHz FM downlink for these planned school contacts:

1. Boulder Hill Elementary School, Montgomery, Illinois, direct via W9BHB Tue 2007-03-06 16:06 UTC 87 deg; also with IRLP, Echolink, and web coverage.

2. Mission Viejo, CA, direct via K6UCI Thu 2007-03-08 16:42 UTC 45 deg.

[ANS thanks everyone for the above information]

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SB SAT @ AMSAT $ANS-063.04
ARISS Status Report for the Week of February 26, 2007

AMSAT News Service Bulletin 063.04

>From AMSAT HQ SILVER SPRING, MD.
March 4, 2007
To All RADIO AMATEURS
BID: $ANS-063.04

1. New Delhi School Contact Successful

Vasant Valley School in Vasant Kunj, New Delhi, India experienced a successful Amateur Radio on the International Space Station (ARISS) contact on Saturday, February 24 via the telebridge station WH6PN in Hawaii. Thirteen students asked fifteen questions of Sunita Williams, KD5PLB. Kalpana Chawla's niece and nephew were among the participants, and several media outlets attended. The audio was fed into the EchoLink AMSAT (101 377) and JK1ZRW (277 208) servers, (receiving 8 connections from 6 countries), as well as into the IRLP Discovery Reflector 9010. It was also webcast by Verizon Conferencing. The Hindu posted an article on its website, covering the event. See:
http://www.hinduonnet.com/thehindu/holnus/218200702242075.htm

Video from India Broadcast News (IBN) can be viewed on:
http://www.ibnlive.com/news/kids-get-chatty-with-sunita-williams/34396-11.html

2. Additional School Contacts

Escola Camilo Castelo Branco in Carnaxide, Portugal had an Amateur Radio on the International Space Station (ARISS) contact on Monday, February 26 via the telebridge station VK5ZAI in Australia. The high school students have a curriculum which includes Physics, Chemistry and Philosophy. One of the main goals of this project is to study current scientific and technological development. Many of these students will continue their studies at the university, choosing areas related to aerospace engineering and taking with them new knowledge from this event.

Virginia Run Elementary School in Centreville, Virginia had an Amateur Radio on the International Space Station (ARISS) contact on Friday, March 2. Virginia
Run is located in a suburb of Washington, D.C. and has an enrollment of 830 students in grades K- 6. A contest was held to choose the best questions to ask the ISS crew member. Astronaut Carl Walz will visit the school prior to the contact to give a presentation to the students. He will bring his spacesuit, memorabilia and videos to share with the school. This contact is a Sunita Williams, KD5PLB, crew pick. The American Radio Relay League (ARRL) Virginia Section Manager has posted a press release on the Virginia Section web page. See: http://www.arrlva.us

3. Training Status

Russian delegate Sergey Samburov, RV3DR, took part in a session with flight participant Charles Simonyi, KE7KDP, and provided training on the amateur radio hardware. He has been working on a procedure to restore the Kenwood radio to its proper configuration, which Simonyi will carry out once on board the ISS. Photos of the session may be viewed on the

Energia website:
http://www.energia.ru/english/energia/iss/iss15/photo_02-21.html

[ANS thanks Carol, KB3LKI for the above information]

/EX

SB SAT @ AMSAT $ANS-063.05
Don't Forget the AMSAT-DC Meeting and Space Seminar Coming March 24

AMSAT News Service Bulletin 063.05
>From AMSAT HQ SILVER SPRING, MD.
March 4, 2007
To All RADIO AMATEURS
BID: $ANS-063.05

Are you near Washington, D.C. or know someone who is? Then YOU ARE HEREBY INVITED to the next AMSAT-DC Meeting and Space Seminar. The day-long event will be held on Saturday, March 24 near BWI airport.

Get the meeting announcement at
http://www.amsat.org/amsat-new/fieldops/eventDetail.php?eID=259
and share it with others.

In building our agenda, we are lining up one or two presentations from local folks who are building a CubeSat of all things! We'll take a close look at the brand new AMSAT lab on our eastern shore. Get news on a new S-Band beacon. Lots more will be offered too.

Please forward this event announcement to one who might like to know about it. Take it to a club meeting. Announce it on a net. Gosh, tell a high school or college student -- and an instructor too.
All are invited.

[ANS thanks Pat, N8PK, AMSAT-DC Co-host for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM

From 9069401287066079205

```
X-Google-Thread: 10e8ad,13707fe582d0f9f0
X-Google-Thread: 10b9c8,3641b68d11c91c2c,start
X-Google-Attributes: gid10e8ad,gid10b9c8,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news3.google.com!news4.google.com!
border1.nntp.dca.giganews.com!nntp.giganews.com!nx02.iad01.newshosting.com!
newshosting.com!198.186.194.251.MISMATCH!news-out.readnews.com!
transit4.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne K9JKM" <k9jkm_remove_@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-057 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: 4 Mar 2007 22:53:32 -0500
Organization: PANIX Public Access Internet and UNIX, NYC
Lines: 1141
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <BM-dnds9td2j_HbYnZ2dnUVZ_vShnZ2d@comcast.com>
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     format=flowed;
     charset="iso-8859-1";
     reply-type=original
Content-Transfer-Encoding: 7bit
X-Trace: reader2.panix.com 1173066812 4524 166.84.1.6 (5 Mar 2007 03:53:32 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Mon, 5 Mar 2007 03:53:32 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
X-Authentication-Warning: serv1.gc.dca.giganews.com: news set sender to
poster@giganews.com using -f
X-Newsreader: Microsoft Outlook Express 6.00.2900.3028
X-DMCA-Complaints-To: dmca@comcast.net
X-Abuse-and-DMCA-Info: Please be sure to forward a copy of ALL headers
X-Abuse-and-DMCA-Info: Otherwise we will be unable to process your complaint
properly
X-Postfilter: 1.3.34
Xref: g2news2.google.com rec.radio.amateur.space:605 rec.radio.info:145
```

This report is organized into 4 parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites

SB SAT @ AMSAT W8ISS ANS-057.S1
WSR 057 Part 1 02/26/2007

AMSAT NEWS SERVICE BULLETIN 057.S1 FROM AMSAT HQ
SILVER SPRING, MD, February 26, 2007
TO ALL RADIO AMATEURS
BID: $ANS-057.S1

VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/V - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.870 to 145.930 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.875 to 145.925 MHz USB/CW

Indian Beacon: 145.859330 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsat.in/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is
active. Each transponder has a different beacon.
[10022006]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Software Crash - Software reload in progress
Current Mode(s): FM Repeater - OFF
                 PBBS -   OFF
                 Digipeater - OFF

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink: 145.880 MHZ FM

145.880 MHz USB
145.920 MHz FM
1268.700 MHz FM 67Hz PL tone
Digital Downlinks: 435.150 MHz FM 38k4 Digital, PBP, 1 watt output
435.150 MHz FM 9k6 Digital, Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Digital, Pacsat Broadcast Protocol
1268.700 mhz FM 9k6 PBP Digital

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[02122007]

=====

SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The order of operation is thus: (allow for Doppler as necessary)
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer
on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on
and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10
minute timer.
[01082007]

```
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Operational

Voice/CW Mode JA
Uplink:   145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon:   435.795 MHz

Digital Mode JD
Uplinks:  145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

JARL English webpage: http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm
AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's CW
telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts.htm
[01222007]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Uplink:   145.850 MHz FM
Downlink: 436.795 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[01292007]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974
```

```
Status: Operational depending on amount of Sunlight

Uplink:   145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink:  29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons:   29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/

AO-7 Usage Guidelines on the AO-7 Log and Resource Site located at:
http://www.planetemily.com/ao7
[02262007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: Occasional Voice
Digipeater:   OFF

The Expedition 14 crew is:
Commander:              Michael Lopez-Alegria KE5GTK
Flight Engineer:        Mikhail Tyurin        RZ3FT
Flight Engineer:        Sunita Williams       KD5PLB

Digital/APRS:
Worldwide packet uplink:   145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink:   145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink:      145.800 MHz FM

SSTV TESTING:
Worldwide Reported Downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink:         437.800 MHz FM
Repeater Downlink:       145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
```

U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS, RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line is NOT translated from Russian and posted.
[12182006]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-057.S2
WSR 057 Part 2 02/26/2007

AMSAT NEWS SERVICE BULLETIN 057.S2 FROM AMSAT HQ
SILVER SPRING, MD, February 26, 2007
TO ALL RADIO AMATEURS
BID: $ANS-057.S2

PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: In Orbit

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder: 145.825 Mhz FM
[02052007]
=====
?O-?? FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: In Orbit

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[02262007]
=====

```
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: In Orbit

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01222007]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: In Orbit

Main Downlink:      145.825 Mhz FM APRS AX25
APRS Uplink:        145.825 MHz FM APRS AX25
Voice/PSK31 Uplink:  28.120 MHz

Packet to Voice ID: RAFT
[02262007]
=====
GENESAT-1 ?O-??
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Telemetry Beacon Downlink: 437.0670 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[01082007]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Operational

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon:             437.2750 MHz CW

Callsign: JR8YJT
[10302006]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon:             437.2750 MHz CW
```

```
Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
[01082007]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launched: June 30, 2003

Status: Operational

Beacon:     436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[01082007]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launched: February 21, 2006

Status: Semi-Operational - Constant Carrier only

Uplink:  1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan ? )

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[01082007]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Software crash - Software reload in progress
Current Mode(s): FM Repeater - OFF
                 PBBS -        OFF
                 Digipeater -  OFF

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink:   145.880 MHZ FM
                       145.880 MHz USB
```

145.920 MHz FM
1268.700 MHz FM 67Hz PL tone
Digital Downlinks: 435.150 MHz FM 38k4 Digital, PBP, 1 watt output
435.150 MHz FM 9k6 Digital, Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Digital, Pacsat Broadcast Protocol
1268.700 mhz FM 9k6 PBP Digital

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[02122007]

=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Operational only in Full Sun Light

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[01082007]

=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Downlink: 435.225 MHz FM (9600-baud FSK)
435.325 Mhz - Not Available - temperature problems
Uplinks: 145.850 FM
145.890 FM
145.930 FM
1269.700 FM
1269.800 FM
1269.900 FM

```
Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[01082007]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Semi-operational - APRS usage through Digipeater

Uplink:         145.900 MHz FM 1200-baud Manchester FSK
                145.920 MHz FM 1200-baud Manchester FSK
                145.940 MHz FM 1200-baud Manchester FSK
                145.960 MHz FM 1200-baud Manchester FSK
Downlink:       437.026 MHz SSB 1200-baud PSK
Mode-S Beacon: 2401.1428 MHz

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.025 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[01222007]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational

Telemetry Downlink: 145.826 MHz. FM 1200 AFSK

Mode-S Beacon:     2401.500 MHz - OFF
UHFBeacon:          435.025 MHz - OFF

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Official webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[01082007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998
```

Status: Operational
Current Mode: Occasional Voice
Digipeater: OFF

Expedition Crew 14 is:
Commander: Michael Lopez-Alegria KE5GTK
Flight Engineer: Mikhail Tyurin RZ3FT
Flight Engineer: Sunita Williams KD5PLB

Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

SSTV TESTING:
Worldwide Reported Downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS, RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line is NOT translated from Russian and posted.
[01082007]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-057.S3
WSR 057 Part 3 02/26/2007

AMSAT NEWS SERVICE BULLETIN 057.S3 FROM AMSAT HQ

SILVER SPRING, MD, February 26, 2007
TO ALL RADIO AMATEURS
BID: $ANS-057.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 MHz FM 67Hz CTCSS
Voice Downlink: 2401.835 MHz FM
Packet Up/Downlink: 437.250 MHz 9k6 packet
Packet Downlink   2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Operational

Uplinks: 145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[01222007]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, callsign KE6QMD, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A

```
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink:   145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
V-band:   145.840 -  145.990 MHz CW/LSB
U-band:   435.550 -  435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks
---------
S2-band:  2401.225 -  2401.475 MHz CW/USB
K-band:  24048.010 - 24048.060 MHz CW/USB
Beacon:   2401.323 MHz
         24048.035 MHz
[01222007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink:    145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site
at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
```

```
[01222007]
=====
SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater:         436.250 MHz

Uplinks: Mode B Repeater:  145.825 MHz
Mode J Digipeater:         145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm

[ANS-WSR has no further information]
[09042006]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational
```

```
Uplink:   145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign:       POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012006]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: Downlink only

Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[012212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM
```

```
Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB
```

```
Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplinks:          145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink:      437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[01222007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
[05012006]
=====
UO-14 UoSAT-3
```

```
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink  435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet: Non-Operational
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink  435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon:   145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
```

```
Downlink  435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink  435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink   29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink  29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
[01152007]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon:    29.352 MHz (intermittent)
```

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB

Beacon: 145.860 MHz

Robot: 145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-057.S4
WSR 057 Part 4 02/26/2007

AMSAT NEWS SERVICE BULLETIN 057.S4 FROM AMSAT HQ
SILVER SPRING, MD, February 26, 2007
TO ALL RADIO AMATEURS
BID: $ANS-057.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE
PROPOSED FOR LAUNCH AT THIS TIME:

Phase 5a Mars Mission
Catalog Number:
Proposed Launch Date: 2009 or 2011

Status: Design Phase

For the latest project status update please visit the AMSAT-DL P5-A web
page:

http://ticket-to-mars.org
[01222007]
=====
PHASE 3E AO-??
Catalog number:
Proposed Launch Date: Late 2007

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/
[01222007]
=====
Eagle AO-??
Catalog Number:
Proposed Launch Date: Early/Mid 2009

Status: Design Phase

For the latest project status updates please visit the AMSAT-NA webpage:
http://www.amsat.org
[01222007]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)

* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/amsat/listserv/menu.html

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

```
From -5244814384232269663
X-Google-Thread: 10e8ad,31596073e5677c49,start
X-Google-Thread: 113975,31596073e5677c49,start
X-Google-Attributes: gid10e8ad,gid113975,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news3.google.com!news4.google.com!newshub.sdsu.edu!
news.astraweb.com!router1.astraweb.com!not-for-mail
From: Chris Steyaert <observations@rmob.org>
Newsgroups: rec.radio.amateur.space,sci.astro.amateur
Subject: Radio Meteor Obs. Bull. February 2007
Date: Tue, 06 Mar 2007 19:25:37 +0100
Message-ID: <sfcru2hk67gj61lfqo91b125psrr5s757a@4ax.com>
X-Newsreader: Forte Agent 1.93/32.576 English (American)
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Lines: 17
Organization: Unlimited download news at news.astraweb.com
NNTP-Posting-Host: 10bc0e9a.news.astraweb.com
X-Trace: DXC=62^GMIJE0hOU8fT?_VL23KL?0kYOcDh@J9[TW:2INN;D64LD>W<8_k@?
S:Lb9QB[HB1eU3WldR_CA44M@5:E]UjE
Xref: g2news2.google.com rec.radio.amateur.space:606 sci.astro.amateur:54487
```

Radio Meteor Observation Bulletin No. 163 of February 2007 (67 K) is available now as

http://visualrmob.free.fr/rmobtext/rmob0702.txt

More information and the visual presentation of the hourly forward scatter counts can be found on

    http://www.rmob.org

    http://radio.data.free.fr

    Chris

```
From 5087863825299734352
X-Google-Thread: 10e8ad,fb145fefff17ef4b,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!postnews.google.com!j27g2000cwj.googlegroups.com!not-for-mail
From: "hxc98@yahoo.com" <hxc98@yahoo.com>
Newsgroups: rec.radio.amateur.space
Subject: APRS with Microsoft Streets or AutoRoute
Date: 9 Mar 2007 23:57:10 -0800
Organization: http://groups.google.com
Lines: 7
Message-ID: <1173513429.934631.306210@j27g2000cwj.googlegroups.com>
NNTP-Posting-Host: 58.19.35.225
Mime-Version: 1.0
Content-Type: text/plain; charset="iso-8859-1"
X-Trace: posting.google.com 1173513435 16514 127.0.0.1 (10 Mar 2007 07:57:15 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Sat, 10 Mar 2007 07:57:15 +0000 (UTC)
User-Agent: G2/1.0
X-HTTP-UserAgent: Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.2; SV1; .NET CLR 1.1.4322; Alexa Toolbar),gzip(gfe),gzip(gfe)
Complaints-To: groups-abuse@google.com
Injection-Info: j27g2000cwj.googlegroups.com; posting-host=58.19.35.225;
   posting-account=qkd21QwAAAAs0AsHsbNsv0PdNKEViQPM
Xref: g2news1.google.com rec.radio.amateur.space:855
```

If you have Microsoft Streets or AutoRoute, you have all you need for live APRS tracking. Now you can take advantage of the superior maps that comes with it and use it with APRSPoint. We have update the installation process of APRSPoint so that it now supports Streets or AutoRoute. You can visit http://www.aprspoint.com for a free download and trial.

```
From -8094857208942350641
X-Google-Thread: 10e8ad,70a9e0188262aa7c,start
X-Google-Thread: 10b9c8,70a9e0188262aa7c,start
```

```
X-Google-Attributes: gid10e8ad,gid10b9c8,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news3.google.com!newsfeed2.dallas1.level3.net!
news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne K9JKM" <k9jkm_remove_@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-064 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Sat, 10 Mar 2007 14:27:10 CST
Organization: PANIX Public Access Internet and UNIX, NYC
Lines: 1141
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <tu-dnZBeMpATK2_YnZ2dnUVZ_silnZ2d@comcast.com>
NNTP-Posting-Host: panix3.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     format=flowed;
     charset="iso-8859-1";
     reply-type=original
Content-Transfer-Encoding: 7bit
X-Trace: reader2.panix.com 1173554830 16534 166.84.1.3 (10 Mar 2007 19:27:10 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sat, 10 Mar 2007 19:27:10 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
X-Authentication-Warning: serv3.gc.dca.giganews.com: news set sender to
poster@giganews.com using -f
X-Newsreader: Microsoft Outlook Express 6.00.2900.3028
X-DMCA-Complaints-To: dmca@comcast.net
X-Abuse-and-DMCA-Info: Please be sure to forward a copy of ALL headers
X-Abuse-and-DMCA-Info: Otherwise we will be unable to process your complaint
properly
X-Postfilter: 1.3.34
Xref: g2news1.google.com rec.radio.amateur.space:856 rec.radio.info:215
```

This report is organized into 4 parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites

SB SAT @ AMSAT W8ISS ANS-064.S1
WSR 064 Part 1 03/05/2007

AMSAT NEWS SERVICE BULLETIN 064.S1 FROM AMSAT HQ
SILVER SPRING, MD, March 05, 2007
TO ALL RADIO AMATEURS
BID: $ANS-064.S1

VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/V - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.870 to 145.930 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.875 to 145.925 MHz USB/CW

Indian Beacon: 145.859330 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsat.in/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is
active. Each transponder has a different beacon.
[10022006]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Voice Repeater ONLY - Software reload in progress
```
Current Mode(s): FM Repeater - ON - V/U
                 PBBS -        OFF
                 Digipeater -  OFF

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink:   145.880 MHZ FM
                       145.880 MHz USB
                       145.920 MHz FM
                      1268.700 MHz FM 67Hz PL tone
Digital Downlinks:     435.150 MHz FM 38k4 Digital, PBP, 1 watt output
```

435.150 MHz FM 9k6 Digital, Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Digital, Pacsat Broadcast Protocol
1268.700 mhz FM 9k6 PBP Digital

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[03052007]

=====

SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The order of operation is thus: (allow for Doppler as necessary)
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10 minute timer.
[01082007]

=====

FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Operational

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

JARL English webpage: http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm
AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's CW
telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts.htm
[01222007]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Uplink: 145.850 MHz FM
Downlink: 436.795 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[01292007]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational depending on amount of Sunlight

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B

Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz CW
145.972 MHz CW
435.100 MHz CW
2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/

AO-7 Usage Guidelines on the AO-7 Log and Resource Site located at:
http://www.planetemily.com/ao7
[02262007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: Occasional Voice
Digipeater: OFF

The Expedition 14 crew is:
Commander: Michael Lopez-Alegria KE5GTK
Flight Engineer: Mikhail Tyurin   RZ3FT
Flight Engineer: Sunita Williams   KD5PLB

Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

SSTV TESTING:
Worldwide Reported Downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS

Russian: RS0ISS, RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.
[12182006]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-064.S2
WSR 064 Part 2 03/05/2007

AMSAT NEWS SERVICE BULLETIN 064.S2 FROM AMSAT HQ
SILVER SPRING, MD, March 05, 2007
TO ALL RADIO AMATEURS
BID: $ANS-064.S2

PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: In Orbit

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder: 145.825 Mhz FM
[02052007]
=====
?O-?? FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: In Orbit

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[02262007]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

```
Status: In Orbit

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01222007]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: In Orbit

Main Downlink:      145.825 Mhz FM APRS AX25
APRS Uplink:        145.825 MHz FM APRS AX25
Voice/PSK31 Uplink:  28.120 MHz

Packet to Voice ID: RAFT
[02262007]
=====
GENESAT-1 ?O-??
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Telemetry Beacon Downlink: 437.0670 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[01082007]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Operational

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon:             437.2750 MHz CW

Callsign: JR8YJT
[10302006]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon:             437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
```

```
Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
[01082007]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launched: June 30, 2003

Status: Operational

Beacon:     436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[01082007]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launched: February 21, 2006

Status: Semi-Operational - Constant Carrier only

Uplink:  1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan ? )

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[01082007]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Voice Repeater ONLY - Software reload in progress
Current Mode(s): FM Repeater - ON - V/U
                 PBBS -        OFF
                 Digipeater -  OFF

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink:   145.880 MHZ FM
                       145.880 MHz USB
                       145.920 MHz FM
                      1268.700 MHz FM 67Hz PL tone
Digital Downlinks:     435.150 MHz FM 38k4 Digital, PBP, 1 watt output
                       435.150 MHz FM 9k6 Digital, Pacsat Broadcast
```

Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
1268.700 mhz FM 9k6 PBP Digital

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[03052007]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Operational only in Full Sun Light

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[01082007]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Downlink: 435.225 MHz FM (9600-baud FSK)
435.325 Mhz - Not Available - temperature problems
Uplinks: 145.850 FM
145.890 FM
145.930 FM
1269.700 FM
1269.800 FM
1269.900 FM
Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:

```
http://www.iarc.org/techsat/techsat.html
[01082007]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Semi-operational - APRS usage through Digipeater

Uplink:         145.900 MHz FM 1200-baud Manchester FSK
                145.920 MHz FM 1200-baud Manchester FSK
                145.940 MHz FM 1200-baud Manchester FSK
                145.960 MHz FM 1200-baud Manchester FSK
Downlink:       437.026 MHz SSB 1200-baud PSK
Mode-S Beacon: 2401.1428 MHz

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.025 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[01222007]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational

Telemetry Downlink: 145.826 MHz. FM 1200 AFSK

Mode-S Beacon:     2401.500 MHz - OFF
UHFBeacon:          435.025 MHz - OFF

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Official webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[01082007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: Occasional Voice
Digipeater:   OFF
```

Expedition Crew 14 is:
Commander: Michael Lopez-Alegria KE5GTK
Flight Engineer: Mikhail Tyurin RZ3FT
Flight Engineer: Sunita Williams KD5PLB

Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

SSTV TESTING:
Worldwide Reported Downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS, RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line is NOT translated from Russian and posted.
[01082007]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-064.S3
WSR 064 Part 3 03/05/2007

AMSAT NEWS SERVICE BULLETIN 064.S3 FROM AMSAT HQ
SILVER SPRING, MD, March 05, 2007
TO ALL RADIO AMATEURS
BID: $ANS-064.S3

```
THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency:  437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink:        437.250 MHz FM 67Hz CTCSS
Voice Downlink:     2401.835 MHz FM
Packet Up/Downlink:  437.250 MHz 9k6 packet
Packet Downlink     2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink:   435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Operational

Uplinks:   145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink:  437.325 MHz
```

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[01222007]

=====

NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, callsign KE6QMD, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]

=====

SO-42 SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]

=====

SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

```
Uplink:   145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
V-band:   145.840 -  145.990 MHz CW/LSB
U-band:   435.550 -  435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks
---------
S2-band:  2401.225 -  2401.475 MHz CW/USB
K-band:  24048.010 - 24048.060 MHz CW/USB
Beacon:   2401.323 MHz
         24048.035 MHz
[01222007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink:    145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site
at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: ?
```

Launched:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm

[ANS-WSR has no further information]
[09042006]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink: 145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11

```
BBS: TMSAT1-12
[05012006]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign:       POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012006]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: Downlink only

Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[012212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
```

          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplinks: 145.840 MHz 1200-baud Manchester FSK
                   145.860 MHz 1200-baud Manchester FSK
                   145.880 MHz 1200-baud Manchester FSK
                   145.900 MHz 1200-baud Manchester FSK

CW downlink: 437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[01222007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink: 145.825 MHz FM 1200 Baud AFSK
Beacon: 2401.220 MHz
[05012006]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink: 145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting): Non-Operational
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet: Non-Operational
Uplink: 145.8500 MHz MFSK 1200 BPS
Uplink: 145.8700 MHz MFSK 1200 BPS
Uplink: 145.8900 MHz MFSK 1200 BPS
Uplink: 145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon: 145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

```
Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink   29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink  29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
[01152007]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon:    29.352 MHz (intermittent)

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
```

RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB

Beacon: 145.860 MHz

Robot: 145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
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/EX

SB SAT @ AMSAT W8ISS $ANS-064.S4
WSR 064 Part 4 03/05/2007

AMSAT NEWS SERVICE BULLETIN 064.S4 FROM AMSAT HQ
SILVER SPRING, MD, March 05, 2007
TO ALL RADIO AMATEURS
BID: $ANS-064.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE
PROPOSED FOR LAUNCH AT THIS TIME:

Phase 5a Mars Mission
Catalog Number:
Proposed Launch Date: 2009 or 2011

Status: Design Phase

For the latest project status update please visit the AMSAT-DL P5-A web
page:
http://ticket-to-mars.org
[01222007]
=====
PHASE 3E AO-??

Catalog number:
Proposed Launch Date: Late 2007

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/
[01222007]
=====
Eagle AO-??
Catalog Number:
Proposed Launch Date: Early/Mid 2009

Status: Design Phase

For the latest project status updates please visit the AMSAT-NA webpage:
http://www.amsat.org
[01222007]
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ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/amsat/listserv/menu.html

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

```
From 7584107899872394266
X-Google-Thread: 10e8ad,5fe499c37633ed5e,start
X-Google-Thread: 10b9c8,5fe499c37633ed5e,start
X-Google-Attributes: gid10e8ad,gid10b9c8,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news4.google.com!newsfeed2.dallas1.level3.net!
news.level3.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne K9JKM" <k9jkm_remove_@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-070 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sat, 10 Mar 2007 21:22:31 CST
Organization: PANIX Public Access Internet and UNIX, NYC
Lines: 255
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <KpidnY43a8xb-m7YnZ2dnUVZ_h2pnZ2d@comcast.com>
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     format=flowed;
     charset="iso-8859-1";
     reply-type=original
Content-Transfer-Encoding: 7bit
X-Trace: reader2.panix.com 1173579751 750 166.84.1.6 (11 Mar 2007 02:22:31 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 11 Mar 2007 02:22:31 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
```

X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
X-Authentication-Warning: serv3.gc.dca.giganews.com: news set sender to poster@giganews.com using -f
X-Newsreader: Microsoft Outlook Express 6.00.2900.3028
X-DMCA-Complaints-To: dmca@comcast.net
X-Abuse-and-DMCA-Info: Please be sure to forward a copy of ALL headers
X-Abuse-and-DMCA-Info: Otherwise we will be unable to process your complaint properly
X-Postfilter: 1.3.34
Xref: g2news1.google.com rec.radio.amateur.space:857 rec.radio.info:216

AMSAT NEWS SERVICE
ANS-070

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:

* Falconsat-3 Launch Successful
* AMSAT-UK Key Contributor to OfCom Microwave Spectrum Comments
* P3E Project Articles Available On-line
* Its Time to Submit Your Articles For the Next AMSAT Journal
* Satellite Shorts From All Over
* ARISS Status Report for the Week of March 5, 2007

SB SAT @ AMSAT $ANS-070.01
Falconsat-3 Launch Successful

AMSAT News Service Bulletin 070.01
>From AMSAT HQ SILVER SPRING, MD.
March 11, 2007
To All RADIO AMATEURS
BID: $ANS-070.01

Reports have been received that the Atlas launch carrying Falconsat-3 into orbit was successful on March 8, 2007. Drew, KO4MA wrote, "We had a great view of the launch tonight. The Atlas is dimmer than the Shuttle or Delta launches, but a nice crimson color. We talked about the launch on the Florida AMSAT net at 730PM, and had several guys outside for both the 88 degree pass of AO-51 at 830 and watching the launch at 1010 while discussing it on the local repeater system."

CelesTrak now has KEPS available at:
http://www.celestrak.com/NORAD/elements/tle-new.txt

Likely candidates this early into the mission include 2007-006D, 2007-006E and 2007-006F.

When Falconsat-3 completes its primary mission an amateur radio payload is planned to be activated. More details on this feature will become available at that time.

[ANS thanks Drew, KO4MA for the above information]

/EX

SB SAT @ AMSAT $ANS-070.02
AMSAT-UK Key Contributor to OfCom Microwave Spectrum Comments

AMSAT News Service Bulletin 070.02
>From AMSAT HQ SILVER SPRING, MD.
March 11, 2007
To All RADIO AMATEURS
BID: $ANS-070.02

AMSAT-UK, participating in a joint response with the Radio Society of Great Britain, UK Microwave Group, and the British Amateur Television Club, commented on the British OfCom's Spectrum Packaging and Auction of the 10GHz, 28GHz, 32GHz and 40GHz Bands.

Presenting their credentials, the RSGB noted they are recognised as one of the leading organisations in the world in the field of amateur radio. Also acknowledged were contributions on Amateur Satellite data from international AMSAT Societies as part of a broad team effort.

In respect of the 10GHz band the Amateur Radio comments noted, "We remain profoundly disappointed that this band is on offer. Whilst the document is a useful insight into Ofcom's latest thinking, it in no way answers our fundamental concerns which in particular threaten leading edge international 10GHz Amateur Satellite developments. We look forward to a fuller response in respect of our original consultation input."

The full versions of the documents, including the Amateur Radio comments can be seen at:
http://www.ofcom.org.uk/consult/condocs/10-40GHz/responses/

The original OfCom Consultation document can be seen at:
http://www.ofcom.org.uk/consult/condocs/10-40GHz/10-40ghz.pdf

[ANS thanks Trevor, M5AKA for the above information]

/EX

SB SAT @ AMSAT $ANS-070.03
P3E Project Articles Available On-line

AMSAT News Service Bulletin 070.03
>From AMSAT HQ SILVER SPRING, MD.
March 11, 2007
To All RADIO AMATEURS
BID: $ANS-070.03

AMSAT-DL reminded radio amateurs that they post the latest information about the P3E satellite at:
http://www.amsat-dl.org//index.php?
option=com_content&task=category&sectionid=23&id=35&Itemid=99

For those who cannot read the German page Google provides a web page translation tool at http://www.google.com/language_tools?hl=en. Enter the URL above in the http:// block and select German to English to give you a good translation. It provides a completely readable translation which anyone can follow.

[ANS thanks Peter, DB2OS and Bob, N4HY for the above information]

/EX

SB SAT @ AMSAT $ANS-070.04
Its Time to Submit Your Articles For the Next AMSAT Journal

AMSAT News Service Bulletin 070.04
>From AMSAT HQ SILVER SPRING, MD.
March 11, 2007
To All RADIO AMATEURS
BID: $ANS-070.04

Ed, WA4SWJ, Editor of The AMSAT Journal reminds everyone, "It's actually past time to submit articles for the next issue of the Journal. I have a few articles already but, as always, I need more. I'm just back from a fairly long business trip out of the country so I haven't had any time to issue calls for papers. So, if you have anything please forward it right away. I'll be working on the next issue next week."

[ANS thanks Ed, WA4SWJ for the above information]

/EX

SB SAT @ AMSAT $ANS-070.05
Satellite Shorts From All Over

AMSAT News Service Bulletin 070.05
>From AMSAT HQ SILVER SPRING, MD.
March 11, 2007
To All RADIO AMATEURS

BID: $ANS-070.05

+ ISS Status Report SS07-12 reported that US and Russian officials plan to reboost the station on March 15, using the Progress 23 engines to place the station at the correct altitude for the Soyuz TMA-10 capsule, scheduled to launch April 7 and dock to Zarya on April 9. You will need to update your ISS keps after this manuever.

+ The ARISS School QSO that can be copied in North America direct on the ISS 145.800 MHz downlink is with the University School, Shaker Heights, OH, on Fri 2007-03-16 16:14 UTC.

+ Reports indicate that GO-32 is once again operational. Its frequencies include 145.890 uplink, and downlink on 435.225, 9600bps, FSK, KISS.

[ANS thanks everyone for the above information]

/EX

SB SAT @ AMSAT $ANS-070.06
ARISS Status Report for the Week of March 5, 2007

AMSAT News Service Bulletin 070.06
>From AMSAT HQ SILVER SPRING, MD.
March 11, 2007
To All RADIO AMATEURS
BID: $ANS-070.06

1. Portuguese School Contact Successful

On Monday, February 26, students from Escola Camilo Castelo Branco in Carnaxide, Portugal participated in an Amateur Radio on the International Space Station (ARISS) contact via the telebridge station, VK5ZAI, in Australia. Sunita Williams, KD5PLB, answered 15 questions posed to her by 15 students, as two other schools from the Oeiras regional council also listened in. The event reached 95 students at Manuel Vaz in Barcarena and 420 students at Jorge Mineiro in Queluz de Baixo, as well as the 750 students at Camilo Castelo Branco. The media covering the contact included 4 national magazines, 4 local newspapers, and three television networks, with a total audience of approximately 11 million. The audio was fed into the EchoLink AMSAT (101 377), JK1ZRW (277 208) and CHANG servers, receiving 30 connections from 11 countries including one repeater. Audio was also fed into the IRLP Discovery Reflector 9010. IRLP received 5 connections from 3 countries and the Discovery Reflector's companion website had 8 connections. The event was also webcast by Verizon Conferencing.

2. Virginia Run Elementary School Contact Successful

On Friday, March 2, the 800 students enrolled at Virginia Run Elementary School in Centreville, Virginia experienced an Amateur Radio on the International Space Station (ARISS) contact. Thirteen children each asked one question of Sunita Williams, KD5PLB. Two local newspapers and the NBC

Channel 4 affiliate in Washington, DC covered the event. Senior Meteorologist Bob Ryan featured the contact on Monday, March 5 during the evening news. The Fairfax County Public Schools cable channel - Red Apple Channel 21- recorded the event and will replay it everyday from April 9 - 29 at 1:00 and 6:00 pm ET.

Astronaut Carl Walz, KC5TIE, who was active in the ARISS program during Expedition 4, provided a 25 minute presentation to the students. He was accompanied by astronaut and Expedition 3 Commander Frank Culbertson, KD5OPQ, who also took part in many ARISS school contacts and special events.

A DVD of the contact is being produced. The video may be viewed on:
http://www.wherry.com/photos/2007-03-02-ARISS-VWS-VRES/ariss-vws-vres-video-small.mov
(Requires Quicktime player)
An audio-only file is available at the following URL:
http://www.wherry.com/photos/2007-03-02-ARISS-VWS-VRES/ariss-vws-vres-audio.mp3

3. Other School Contacts

Boulder Hill Elementary School in Montgomery, Illinois had an Amateur Radio on the International Space Station (ARISS) contact on Tuesday, March 6. The school integrated the contact into its curriculum through nonfiction reading of topics including space and space exploration, radio and radio waves, and technology and communications. They will also write expositions on these related topics. Students will track and calculate the ISS distance from Earth. Older classes will partner with younger students to teach science and social studies and hands on activities are planned, such as the use of walkie talkies. The community has been invited to attend and participate in the event and local newspapers are expected to cover the activities.

An Amateur Radio on the International Space Station (ARISS) contact was completed with Mission Viejo High School in Mission Viejo, California on Friday, March 9.

4. Vasant Valley School Contact Update

Vasant Valley School in New Delhi, India, experienced an Amateur Radio on the International Space Station (ARISS) contact on Saturday, February 24. Three hundred students, parents and teachers attended the event and 14 other schools also tied in. Among the media outlets that covered the event were four television stations and 3 newspapers. Vasant Valley School has posted video of the event on its website. See:
http://www.vasantvalley.org/vasantvalley/currentzone/events/sunitawilliams.shtml

[ANS thanks Carol, KB3LKI for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits.

Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM

```
From -7975397132385403347
X-Google-Thread: 10e8ad,8372f47f7082a2e0,start
X-Google-Thread: 10b9c8,8372f47f7082a2e0,start
X-Google-Attributes: gid10e8ad,gid10b9c8,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news3.google.com!news.glorb.com!news.linkpendium.com!
news.linkpendium.com!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne K9JKM" <k9jkm_remove_@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-071 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Thu, 15 Mar 2007 10:02:19 CST
Organization: PANIX Public Access Internet and UNIX, NYC
Lines: 1142
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <AsidnU4XZfIC22TYnZ2dnUVZ_gydnZ2d@comcast.com>
NNTP-Posting-Host: panix3.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     format=flowed;
     charset="iso-8859-1";
     reply-type=original
Content-Transfer-Encoding: 7bit
X-Trace: reader2.panix.com 1173967339 6691 166.84.1.3 (15 Mar 2007 14:02:19 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Thu, 15 Mar 2007 14:02:19 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
X-Authentication-Warning: serv2.gc.dca.giganews.com: news set sender to
poster@giganews.com using -f
X-Newsreader: Microsoft Outlook Express 6.00.2900.3028
X-DMCA-Complaints-To: dmca@comcast.net
X-Abuse-and-DMCA-Info: Please be sure to forward a copy of ALL headers
X-Abuse-and-DMCA-Info: Otherwise we will be unable to process your complaint
properly
```

X-Postfilter: 1.3.34
Xref: g2news1.google.com rec.radio.amateur.space:858 rec.radio.info:219

This report is organized into 4 parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites

SB SAT @ AMSAT W8ISS ANS-071.S1
WSR 071 Part 1 03/12/2007

AMSAT NEWS SERVICE BULLETIN 071.S1 FROM AMSAT HQ
SILVER SPRING, MD, March 12, 2007
TO ALL RADIO AMATEURS
BID: $ANS-071.S1

VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/V - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.870 to 145.930 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.875 to 145.925 MHz USB/CW

Indian Beacon: 145.859330 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsat.in/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is
active. Each transponder has a different beacon.
[10022006]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Voice Repeater ONLY - Software reload in progress

Current Mode(s): FM Repeater - ON - V/U
PBBS - OFF
Digipeater - OFF

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.880 MHZ FM
145.880 MHz USB
145.920 MHz FM
1268.700 MHz FM 67Hz PL tone
Digital Downlinks: 435.150 MHz FM 38k4 Digital, PBP, 1 watt output
435.150 MHz FM 9k6 Digital, Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Digital, Pacsat Broadcast Protocol
1268.700 mhz FM 9k6 PBP Digital

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[03052007]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The order of operation is thus: (allow for Doppler as necessary)
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer

```
   on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the
repeater on
   and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset
the 10
   minute timer.
[01082007]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Operational

Voice/CW Mode JA
Uplink:   145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon:   435.795 MHz

Digital Mode JD
Uplinks:  145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

JARL English webpage: http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm
AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's CW
telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts.htm
[01222007]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Uplink:   145.850 MHz FM
Downlink: 436.795 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear
```

```
Official Webpage: http://www.ao27.org
[01292007]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational depending on amount of Sunlight

Uplink:   145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink:  29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons:   29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/

AO-7 Usage Guidelines on the AO-7 Log and Resource Site located at:
http://www.planetemily.com/ao7
[02262007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: Occasional Voice
Digipeater:   OFF

The Expedition 14 crew is:
Commander:              Michael Lopez-Alegria KE5GTK
Flight Engineer:        Mikhail Tyurin        RZ3FT
Flight Engineer:        Sunita Williams       KD5PLB

Digital/APRS:
Worldwide packet uplink:   145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink:   145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink:      145.800 MHz FM

SSTV TESTING:
```

Worldwide Reported Downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS, RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.
[12182006]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-071.S2
WSR 071 Part 2 03/12/2007

AMSAT NEWS SERVICE BULLETIN 071.S2 FROM AMSAT HQ
SILVER SPRING, MD, March 12, 2007
TO ALL RADIO AMATEURS
BID: $ANS-071.S2

PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: In Orbit

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder: 145.825 Mhz FM
[02052007]
=====
?O-?? FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: In Orbit

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[02262007]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: In Orbit

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01222007]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: In Orbit

Main Downlink: 145.825 Mhz FM APRS AX25
APRS Uplink: 145.825 MHz FM APRS AX25
Voice/PSK31 Uplink: 28.120 MHz

Packet to Voice ID: RAFT
[02262007]
=====
GENESAT-1 ?O-??
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Telemetry Beacon Downlink: 437.0670 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[01082007]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Operational

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon: 437.2750 MHz CW

Callsign: JR8YJT
[10302006]
=====

CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon: 437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
[01082007]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launched: June 30, 2003

Status: Operational

Beacon: 436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[01082007]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launched: February 21, 2006

Status: Semi-Operational - Constant Carrier only

Uplink: 1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan ?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[01082007]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Voice Repeater ONLY - Software reload in progress
Current Mode(s): FM Repeater - ON - V/U

PBBS -   OFF
Digipeater - OFF

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.880 MHZ FM
145.880 MHz USB
145.920 MHz FM
1268.700 MHz FM 67Hz PL tone
Digital Downlinks: 435.150 MHz FM 38k4 Digital, PBP, 1 watt output
435.150 MHz FM 9k6 Digital, Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Digital, Pacsat Broadcast Protocol
1268.700 mhz FM 9k6 PBP Digital

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[03052007]

=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Operational only in Full Sun Light

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[01082007]

=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

```
Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[01082007]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Semi-operational - APRS usage through Digipeater

Uplink:         145.900 MHz FM 1200-baud Manchester FSK
                145.920 MHz FM 1200-baud Manchester FSK
                145.940 MHz FM 1200-baud Manchester FSK
                145.960 MHz FM 1200-baud Manchester FSK
Downlink:       437.026 MHz SSB 1200-baud PSK
Mode-S Beacon: 2401.1428 MHz

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.025 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[01222007]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational

Telemetry Downlink: 145.826 MHz. FM 1200 AFSK

Mode-S Beacon:     2401.500 MHz - OFF
UHFBeacon:          435.025 MHz - OFF

Mode and Antenna Polarization:
V: RHCP
```

S: LHCP

Official webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[01082007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: Occasional Voice
Digipeater: OFF

Expedition Crew 14 is:
Commander: Michael Lopez-Alegria KE5GTK
Flight Engineer: Mikhail Tyurin   RZ3FT
Flight Engineer: Sunita Williams   KD5PLB

Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

SSTV TESTING:
Worldwide Reported Downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS, RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line

is NOT translated from Russian and posted.
[01082007]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-071.S3
WSR 071 Part 3 03/12/2007

AMSAT NEWS SERVICE BULLETIN 071.S3 FROM AMSAT HQ
SILVER SPRING, MD, March 12, 2007
TO ALL RADIO AMATEURS
BID: $ANS-071.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
                            2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 MHz FM 67Hz CTCSS
Voice Downlink: 2401.835 MHz FM
Packet Up/Downlink: 437.250 MHz 9k6 packet
Packet Downlink   2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

```
Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Operational

Uplinks:   145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink:  437.325 MHz

Broadcast callsign: MYSAT3-11
BBS:                MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial
land and weather imaging payloads offers FM and FSK Amateur Radio
communica-
tion.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a
collaborative effort between the Malaysian government and Surrey
Satellite
Technology Ltd.
[01222007]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink:   145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
call-
sign KE6QMD, as per the user service agreement located at the following
URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz
```

```
Broadcast Callsign: SASAT2-11
BBS:                SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink:   145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
V-band:   145.840 -  145.990 MHz CW/LSB
U-band:   435.550 -  435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks
---------
S2-band:  2401.225 -  2401.475 MHz CW/USB
K-band:  24048.010 - 24048.060 MHz CW/USB
Beacon:   2401.323 MHz
         24048.035 MHz
[01222007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink:    145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
```

```
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site
at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater:         436.250 MHz

Uplinks: Mode B Repeater:  145.825 MHz
Mode J Digipeater:         145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
```

```
[ANS-WSR has no further information]
[09042006]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink:   145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign:       POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012006]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: Downlink only

Uplinks:  145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[012212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990
```

```
Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplinks:          145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink:      437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[01222007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
```

```
Launch Date: January 22, 1990

Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
[05012006]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink  435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet: Non-Operational
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink  435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon:   145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
```

```
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink  435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink  435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink   29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink  29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
[01152007]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
```

Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB

Beacon: 29.352 MHz (intermittent)

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB

Beacon: 145.860 MHz

Robot: 145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-071.S4
WSR 071 Part 4 03/12/2007

AMSAT NEWS SERVICE BULLETIN 071.S4 FROM AMSAT HQ
SILVER SPRING, MD, March 12, 2007
TO ALL RADIO AMATEURS
BID: $ANS-071.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE
PROPOSED FOR LAUNCH AT THIS TIME:

Phase 5a Mars Mission
Catalog Number:
Proposed Launch Date: 2009 or 2011

Status: Design Phase

For the latest project status update please visit the AMSAT-DL P5-A web page:
http://ticket-to-mars.org
[01222007]
=====
PHASE 3E AO-??
Catalog number:
Proposed Launch Date: Late 2007

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/
[01222007]
=====
Eagle AO-??
Catalog Number:
Proposed Launch Date: Early/Mid 2009

Status: Design Phase

For the latest project status updates please visit the AMSAT-NA webpage:
http://www.amsat.org
[01222007]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/amsat/listserv/menu.html

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

```
From -708512231359473725
X-Google-Thread: 10e8ad,127a86fbaebd1d65,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!news4.google.com!
border1.nntp.dca.giganews.com!nntp.giganews.com!local01.nntp.dca.giganews.com!
nntp.comcast.com!news.comcast.com.POSTED!not-for-mail
NNTP-Posting-Date: Fri, 16 Mar 2007 10:30:55 -0500
Date: Fri, 16 Mar 2007 10:31:03 -0500
From: JoAnne K9JKM <k9jkm_remove@comcast.net>
User-Agent: Thunderbird 1.5.0.10 (Windows/20070221)
MIME-Version: 1.0
Newsgroups: rec.radio.amateur.space
Subject: 2Line Orbital Elements 07074.AMSAT
Content-Type: text/plain; charset=ISO-8859-1; format=flowed
Content-Transfer-Encoding: 7bit
X-Antivirus: avast! (VPS 000724-0, 03/15/2007), Outbound message
X-Antivirus-Status: Clean
Message-ID: <xo2dnTcEKNStJWfYnZ2dnUVZ_h7inZ2d@comcast.com>
```

Lines: 176
NNTP-Posting-Host: 67.184.169.1
X-Trace:
sv3-1HzKP9c4aUv6moGG94cU5QdPFwRtOn2yps2OMLEF3g9PdAEX+4Nc2C5SD3dAXzJfXMDUIF5ZnteSQM
6!ksea8KSC1yyAgdpxYm309G5ONPOrQipnraoGgz095yVXBWK1loGeifzSYWysjStzJ0Y1Z2wjnlw0!
pIlHfZHBw/V6SUU2q+XIJtdd6cv4
X-Complaints-To: abuse@comcast.net
X-DMCA-Complaints-To: dmca@comcast.net
X-Abuse-and-DMCA-Info: Please be sure to forward a copy of ALL headers
X-Abuse-and-DMCA-Info: Otherwise we will be unable to process your complaint
properly
X-Postfilter: 1.3.34
Xref: g2news1.google.com rec.radio.amateur.space:859

SB KEPS @ AMSAT $ORB07074.N
2Line Orbital Elements 07074.AMSAT

HR AMSAT ORBITAL ELEMENTS FOR AMATEUR SATELLITES IN NASA FORMAT
FROM WA5QGD FORT WORTH,TX March 15, 2007
Send SUBSCRIBE KEPS/UNSUBSCRIBE KEPS to majordomo@amsat.org only
BID: ORB07074.N

```
DECODE 2-LINE ELSETS WITH THE FOLLOWING KEY:
1 AAAAAU 00  0  0 BBBBB.BBBBBBBB  .CCCCCCCC  00000-0  00000-0 0  DDDZ
2 AAAAA EEE.EEEE FFF.FFFF GGGGGGG HHH.HHHH III.IIII JJ.JJJJJJJJKKKKKZ
KEY: A-CATALOGNUM B-EPOCHTIME C-DECAY D-ELSETNUM E-INCLINATION F-RAAN
G-ECCENTRICITY H-ARGPERIGEE I-MNANOM J-MNMOTION K-ORBITNUM Z-CHECKSUM
```

TO ALL RADIO AMATEURS BT

```
AO-07
1 07530U 74089B   07073.73049291 -.00000028  00000-0  10000-3 0 08292
2 07530 101.5291 114.4781 0012152 080.7313 279.5126 12.53572642479284
AO-10
1 14129U 83058B   07072.85808456 -.00000090  00000-0  10000-3 0 03685
2 14129 026.8191 287.1349 6053936 005.4374 359.0510 02.05870768178603
UO-11
1 14781U 84021B   07073.57743758  .00000221  00000-0  36915-4 0 03244
2 14781 098.1982 094.4187 0009918 112.1303 248.0935 14.79531019235743
RS-10/11
1 18129U 87054A   07074.68467332  .00000023  00000-0  87060-5 0  2468
2 18129 082.9274 127.3590 0013461 061.2049 299.0456 13.72785199988405
RS-15
1 23439U 94085A   07073.70336037 -.00000039  00000-0  10597-3 0 00554
2 23439 064.8185 159.7204 0162324 207.4090 151.8199 11.27551744503046
FO-29
1 24278U 96046B   07073.91322154 -.00000056  00000-0 -18628-4 0 04562
2 24278 098.5384 046.2626 0350729 327.7818 030.2317 13.52928043522158
SO-33
1 25509U 98061B   07073.54821390  .00000195  00000-0  26319-4 0 08858
2 25509 031.4348 040.8087 0355371 319.9884 037.5047 14.28151292437712
AO-40
1 26609U 00072B   07071.20371223  .00000083  00000-0  10000-3 0  8496
```

```
2 26609 004.8674 166.4482 7994392 286.3851 006.6438 01.25587116 29229
VO-52
1 28650U 05017B   07074.62078156  .00000043  00000-0  12208-4 0  5795
2 28650 097.8383 147.4037 0026903 196.0201 164.0217 14.81277866100569
PO-63
1 29712U 07001D   07074.65285894  .00000609  00000-0  88129-4 0  1904
2 29712 097.9316 135.0767 0015518 074.4110 285.8814 14.79589063  9506
AO-16
1 20439U 90005D   07074.51515004  .00000000  00000-0  15116-4 0  9887
2 20439 098.1947 074.2458 0011763 103.2186 257.0319 14.31752841895147
LO-19
1 20442U 90005G   07074.56932973 -.00000010  00000-0  11336-4 0  9156
2 20442 098.1829 083.7568 0012826 102.8943 257.3664 14.31993870895295
AO-27
1 22825U 93061C   07074.45588293  .00000030  00000-0  28090-4 0  6386
2 22825 098.3198 048.4716 0008130 173.1450 186.9853 14.29202112702106
IO-26
1 22826U 93061D   07073.46935533 -.00000004  00000-0  14562-4 0 03355
2 22826 098.3143 048.6409 0008709 174.0776 186.0520 14.29447282702045
PO-28
1 22829U 93061G   07073.47164814  .00000028  00000-0  26917-4 0 06147
2 22829 098.3023 049.8221 0009941 148.0539 212.1254 14.30146322702270
GO-32
1 25397U 98043D   07073.66620212  .00000101  00000-0  63323-4 0  2538
2 25397 098.4274 124.9624 0001763 120.5171 239.6189 14.23122161450712
MO-46
1 26548U 00057D   07074.59314640  .00000129  00000-0  33864-4 0  7467
2 26548 064.5564 112.2090 0026515 209.5813 150.3806 14.83110807349652
NO-44
1 26931U 01043C   07073.07416748 -.00000244  00000-0 -62954-4 0 05430
2 26931 067.0537 032.4934 0006446 278.6645 081.3698 14.29474755284506
SO-50
1 27607U 02058C   07073.36908151  .00000094  00000-0  36757-4 0 02658
2 27607 064.5598 012.9057 0043351 029.6968 330.6602 14.71236843227179
CO-55
1 27844U 03031E   07073.57779209  .00000046  00000-0  41643-4 0  9829
2 27844 098.7212 083.1642 0010312 009.2415 350.8957 14.20496984192048
CO-57
1 27848U 03031J   07073.58635777  .00000018  00000-0  28629-4 0  9441
2 27848 098.7206 082.4030 0010081 012.4008 347.7411 14.20317833192028
AO-51
1 28375U 04025K   07074.59199730  .00000016  00000-0  17310-4 0  7707
2 28375 098.1265 118.6821 0084658 105.5255 255.5295 14.40558605142232
CO-56
1 28941U 06005C   07074.70163114  .00016366  25609-5  18406-3 0  3788
2 28941 098.1416 125.6104 0239601 243.0757 114.5808 15.35756583 59068
HO-59
1 29484U 06041F   07073.83659419  .00028020  28107-5  22243-3 0  2297
2 29484 098.3001 109.7598 0234121 242.3454 115.4062 15.43570649 26489
NO-60
1 29661U 06055C   07073.72284727  .00095325  14577-4  28696-3 0  1039
2 29661 051.6393 226.2940 0011083 330.8066 029.2347 15.92089418 13296
NO-61
```

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1 29664U 06055F   07074.76448381  .00029631  00000-0  12029-3 0   845
2 29664 051.6334 222.7174 0014435 337.2383 022.7969 15.85829036 13301
NOAA-10
1 16969U 86073A   07073.66687511 -.00000065  00000-0 -83600-5 0 05869
2 16969 098.7526 090.7656 0013284 082.8284 277.4412 14.27319073065749
NOAA-11
1 19531U 88089A   07073.29767320  .00000232  00000-0  14280-3 0 05840
2 19531 098.8098 163.6466 0010963 302.9051 057.1094 14.14838965952735
NOAA-12
1 21263U 91032A   07073.54774976 -.00000173  00000-0 -54387-4 0 00765
2 21263 098.7514 070.9562 0013083 025.8162 334.3664 14.25523346822767
MET-3/5
1 21655U 91056A   07073.97014879  .00000051  00000-0  10000-3 0 02636
2 21655 082.5467 069.5026 0014604 082.8843 277.3939 13.17010112749006
MET-2/21
1 22782U 93055A   07073.63635714 -.00000052  00000-0 -60323-4 0 07732
2 22782 082.5462 116.9346 0023568 138.5623 221.7333 13.83615375683440
OKEAN-4
1 23317U 94066A   07073.95649852  .00000109  00000-0  10541-4 0 02118
2 23317 082.5403 024.4382 0021289 199.5648 160.4762 14.82476899670093
NOAA-14
1 23455U 94089A   07073.87799475  .00000179  00000-0  11885-3 0 05632
2 23455 098.9990 139.5224 0009255 011.4966 348.6432 14.13705177629316
SICH-1
1 23657U 95046A   07073.93250042  .00000031  00000-0  87078-6 0 00147
2 23657 082.5304 165.3918 0023773 189.2165 170.8618 14.81460046622076
NOAA-15
1 25338U 98030A   07073.56759721 -.00000080  00000-0 -16086-4 0 09221
2 25338 098.5305 072.9269 0009908 308.5417 051.4862 14.24629821459218
RESURS
1 25394U 98043A   07073.78148250 -.00000002  00000-0  17173-4 0  5946
2 25394 098.4556 132.0007 0002312 091.6791 268.4652 14.24129815450915
FENGYUN1
1 25730U 99025A   07074.72589046  .00000440  00000-0  28546-3 0   112
2 25730 098.6853 062.1547 0022927 031.2184 329.0335 14.07442392404317
OKEAN-0
1 25860U 99039A   07073.56638906  .00000074  00000-0  18545-4 0    13
2 25860 097.7324 080.2363 0001094 040.9725 319.1558 14.73436496411564
NOAA-16
1 26536U 00055A   07073.61905105  .00000377  00000-0  22932-3 0 03347
2 26536 099.1071 048.9584 0011237 080.3932 279.8507 14.12412941333756
NOAA-17
1 27453U 02032A   07073.86394416  .00000149  00000-0  83721-4 0 03450
2 27453 098.5882 145.3977 0011557 013.1525 346.9938 14.23861485245291
NOAA-18
1 28654U 05018A   07073.87439840  .00000051  00000-0  52418-4 0 08831
2 28654 098.8197 016.7803 0014323 172.4658 187.6694 14.11045594093557
HUBBLE
1 20580U 90037B   07073.80772393  .00000429  00000-0  20460-4 0 08462
2 20580 028.4663 085.5329 0003845 172.7418 187.3222 15.00205375725779
UARS
1 21701U 91063B   07073.98058990  .00008501  00000-0  14607-3 0 00306
2 21701 056.9764 002.4718 0095718 014.1770 346.1938 15.47110634851169
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PO-34
1 25520U 98064B   07073.96525682  .00000613  00000-0  20532-4 0 06950
2 25520 028.4606 019.3423 0005278 306.4287 053.5813 15.16946175463201
ISS
1 25544U 98067A   07074.98183145  .00021533  00000-0  11837-3 0  8285
2 25544 051.6340 225.5444 0020911 323.2192 134.7978 15.79387477476051
OO-38
1 26063U 00004C   07073.53691932 -.00000006  00000-0  18207-4 0 08635
2 26063 100.2234 058.6892 0037261 066.1761 294.3322 14.35798531373470
NO-45
1 26932U 01043D   07073.98361396 -.00000075  00000-0  29816-5 0 05497
2 26932 067.0514 029.9025 0005213 290.6964 069.3575 14.29550915284674
UWE-1
1 28892U 05043C   07074.63057011  .00000187  00000-0  49004-4 0  7009
2 28892 098.1406 333.0845 0018326 046.0076 314.2659 14.59475485 73561
CO-58
1 28895U 05043F   07073.30978624  .00000069  00000-0  24271-4 0 06790
2 28895 098.1419 331.9649 0018874 050.5903 309.6945 14.59524042073250
NCUBE2
1 28897U 05043H   07073.66927008  .00000158  00000-0  42798-4 0 02048
2 28897 098.1418 332.2833 0018335 050.0646 310.2158 14.59684808065589
NMARS
1 29662U 06055D   07074.62074426  .00115666  16392-4  30196-3 0  1242
2 29662 051.6364 221.0063 0011493 331.2448 028.7028 15.94653083 13330
FCAL
1 29667U 06055J   07073.90512721  .00019047  00000-0  82852-4 0 00980
2 29667 051.6336 227.4883 0015508 337.6144 022.4183 15.84685453013033
FALCON
1 30776U 07006E   07073.97344187  .00000269  00000-0  22899-4 0 00112
2 30776 035.4336 063.7700 0001576 338.0061 022.0599 15.02652725000879
/EX
```

```
From 2514702614866982060
X-Google-Thread: 10e8ad,29281289782fd171,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,CP1252
Path: g2news1.google.com!news3.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!local01.nntp.dca.giganews.com!nntp.comcast.com!
news.comcast.com.POSTED!not-for-mail
NNTP-Posting-Date: Tue, 20 Mar 2007 16:02:16 -0500
Date: Tue, 20 Mar 2007 16:02:35 -0500
From: JoAnne K9JKM <k9jkm_remove@comcast.net>
User-Agent: Thunderbird 1.5.0.10 (Windows/20070221)
MIME-Version: 1.0
Newsgroups: rec.radio.amateur.space
Subject: ANS-077 AMSAT News Service Weekly Bulletins
Content-Type: text/plain; charset=windows-1252; format=flowed
Content-Transfer-Encoding: 8bit
X-Antivirus: avast! (VPS 000726-0, 03/20/2007), Outbound message
X-Antivirus-Status: Clean
Message-ID: <OMWdnXOGKNxF1p3bnZ2dnUVZ_vKunZ2d@comcast.com>
Lines: 365
```

NNTP-Posting-Host: 67.184.169.1
X-Trace: sv3-FspyOyoSoR9lrEIZp+D8hjZyqMORvb0I7FT/DI7vvxrlBJdR36k4joUOygsDU/aPYe7WdAcHKVDvNEA!KwUG6G1La7kzFlmI0uj9BVjoqNJQ9BRkF9YAGp7pLmLrlaj3InwYooOal6al4vygInHiieYQoBnq!3heXwj3mL5qN5WJuCk/RjcYFUTBW
X-Complaints-To: abuse@comcast.net
X-DMCA-Complaints-To: dmca@comcast.net
X-Abuse-and-DMCA-Info: Please be sure to forward a copy of ALL headers
X-Abuse-and-DMCA-Info: Otherwise we will be unable to process your complaint properly
X-Postfilter: 1.3.34
Xref: g2news1.google.com rec.radio.amateur.space:860

AMSAT NEWS SERVICE
ANS-077

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* AMSAT/TAPR Banquet at Dayton 2007
* Suitsat-2 Hardware Takes Shape
* OSCAR I Pioneer SK
* Call for donations for ARISS Antennas on Columbus
* Call for Papers--2007 ARRL/TAPR Digital Communications Conference
* ARISS Status - 12 March 2007

SB SAT @ AMSAT $ANS-077.01
AMSAT/TAPR Banquet at Dayton 2007

AMSAT News Service Bulletin 077.01
From AMSAT HQ SILVER SPRING, MD.
March 18, 2007
To All RADIO AMATEURS
BID: $ANS-077.01

AMSAT is pleased to announce the first AMSAT/TAPR Banquet will be held Friday evening May 18,2007 at the Air Force Museum in Dayton, OH in conjunction with the 2007 Dayton Hamvention. The two groups share many members and this gives everyone the opportunity to attend both dinners. The "Dinner Under the Wings" festivities will begin at 18:00 with a cash bar and appetizers in the Air Power Gallery (World War II). The buffet dinner will be served at 19:00 in the Cold War area. Following a few AMSAT and TAPR announcements after dinner you will be free to roam the museum. The price for the dinner is $35.00 per person and includes

appetizers, salad, meal, dessert, coffee, iced tea, tax and gratuity.
See http://www.nationalmuseum.af.mil/ for information about the museum.

The museum will close at 22:00 and everyone must be out of the museum by then.

Vegetarian meals are available if selected when you purchase your ticket.

Reservations are required. These can be purchased online at the AMSAT Store
http://www.amsat-na.com/item.php?id=100133
or from the TAPR web site at http://www.tapr.org/dayton.html

There will be no Banquet ticket sales at the AMSAT booth this year. We expect this to be a very popular event, so reserve your tickets early.

Reservations will close this year on Monday night, May 14,2007 to allow us to give the museum a count on Tuesday.

Everyone is responsible for their own transportation to and from the museum.

There will be no banquet speaker this year to give everyone a chance to view the exhibits.

Banquet Menu available on the AMSAT web site

At 5:00 PM on Friday afternoon there will be a special showing of the IMAX movie "Space Station". This movie is approximately 47 minutes long and contains about 4 minutes of amateur radio contacts between school children and the International Space Station. The IMAX theater is located in the museum building off the main lobby area. Attendees at the movie will be able to go to the banquet at 6:00 PM when the doors open about 10 minutes after the movie is over. The lobby contains restrooms, telephones and some seating. At least 50 people must sign up for the movie in advance. Call the museum IMAX theater on (937)-253-IMAX to make reservations. Special rates apply for children and seniors. Adults are $6.00, seniors are $5.50 and children 8 through college 22 (student ID required) are $4.50.

[ANS thanks Gould, WA4SXM,for the above information]

/EX

SB SAT @ AMSAT $ANS-077.02
Suitsat-2 Hardware Takes Shape

AMSAT News Service Bulletin 077.02
From AMSAT HQ SILVER SPRING, MD.
March 18, 2007
To All RADIO AMATEURS
BID: $ANS-077.02

Bob McGwier, N4HY, AMSAT's VP of Engineering provided the following update on the development of hardware for Suitsat-2.

We had a complete breakthrough on the Odyssey Siren in the past two weeks. It will be used in Suitsat 2, in a terrestrial linear repeater experiment by Viktor Kudielka OE1VKW and friends, who supported its development, and we are already leaping all over the place to applications.

Frank Brickle and I will be doing our SDR code on it over the next several days. The board as shown in the schematic needs some modifications to fix the 3 - ish volt power supply for the Codec and a modified oscillator circuit but we are certain it will all work now.

On the 10.7 MHz IF, I measured 0 dBm max into a 50 ohm load and less than -120 dBm MDS and > 80 dB dynamic range. This is with a BOM of <$50 in parts and about a $20 dsp pic chip!

Yesterday in Rick's, W2GPS, lab, with Tom, K3IO, we made the above measurements, hacked on code and turn the thing into a bent pipe transponder. I also did the hilbert transform to make it an inverting transponder. It all worked perfectly.

Detected audio in an SDR-IQ SDR as well as captured IF from the SDR-IQ of the transponder. Can be downloaded and heard from:
http://www.cnssys.com/~w2gps/amsat_files/suitsat/

We have to balanced for image and do DC offset correction but the thing works and sounds great as you can hear for yourself!

Additional details and pictures of the hardware can be found at
http://hpsdr.org/wiki/index.php?title=ODYSSEY

[ANS thanks Bob, N4HY, for the above information]

/EX

SB SAT @ AMSAT $ANS-077.03
OSCAR I Pioneer SK

AMSAT News Service Bulletin 077.03
  From AMSAT HQ SILVER SPRING, MD.
March 18, 2007
To All RADIO AMATEURS
BID: $ANS-077.03

Passing away last week, we remember a WWII vet who helped launch the 1st civilian satellite.

Richard 'Dick' Esneault never had a day of basic training, never fired a shot in a war and never finished college.

But the electronics whiz of the 1940s was a highly-sought-after non-combatant soldier during World War II. He also became a successful

Huntsville business owner during the height of the 1960's boom.

Outside his family, Esneault's biggest accomplishment was his role in helping develop and launch the first civilian satellite, OSCAR (Orbiting Satellite Carrying Amateur Radio), made by a group of ham radio operators.

The 10-pound, three-watt radio transmitter was launched Dec. 12, 1961, from Vandenberg Air Force Base in California, riding on the back of an Atlas-Agena booster carrying a military reconnaissance satellite. Its Morse code message, "Hi," was received by more than 570 radio amateur tracking stations in 28 countries.

The homemade satellite, built primarily from donated parts at an out-of-pocket cost of $63, beat the multimillion-dollar satellite Telstar to space by seven months.

It captured the attention of broadcast legend Edward R. Murrow, who told then-President John Kennedy about it.

Kennedy said of OSCAR: "This is exactly what we're looking for.. a peaceful use of space."

In a Dec. 12, 1986, article in The Times, Esneault said Kennedy was responsible for giving OSCAR the go-ahead to ride aboard a military mission.

Esneault became an avid ham radio operator and received his license at age 13.
While in high school, he took night lessons to learn Morse code so he could be certified by the Federal Communications Commission. His instructor was so impressed with his aptitude, he offered the teenager a job with Pan American World Airways.

Another case of "We are History, We are Ham Operators".

[ANS thanks John, VK5BUI, for the above information]

/EX

SB SAT @ AMSAT $ANS-077.04
Call for donations for ARISS Antennas on Columbus

AMSAT News Service Bulletin 077.04
  From AMSAT HQ SILVER SPRING, MD.
March 18, 2007
To All RADIO AMATEURS
BID: $ANS-077.04

This week Gaston Bertels, ON4WF, ARISS-Europe chairman discussed the planned amateur radio station to be installed aboard the European Space Agency's Columbus Space Laboratory module which will be added to the International Space Station.

The microwave panel antenanas, attached to the Meteorite Debris Panels of the Columbus Space Laboratory, will allow operationgs on new frequencies that will enable ARISS to establish wideband and video operations for the first time. This facility will provide ATV facilities for School contacts and allow continuous transponder operation. Also, With the Columbus module being located at some considerable distance from the other two ARISS stations aboard the ISS, this new antenna configuration will permit parallel operations on the new bands at the same time as the existing operations.

The development of the antennas is presently taken care of by the Institute of Telecommunications and Acoustics of the Wroclaw University of Technology. The Columbus antennas will work on L-band and S-band.

Taking into account that time is getting really short, ARISS-Europe renews the call for donations to the IARU and AMSAT societies as well as to their members individually.

A financial account has been opened by AMSAT Belgium. Donators within the European Union will not have to pay any additional banking costs (beyond the costs of a national money transfer) if they use the following inter- national banking number (IBAN) and mention the international identification code (BIC), reference the transfer as "Donation Columbus":

AMSAT Belgium
001-2306592-08

IBAN BE63 0012 3065 9208
BIC GEBABEBB

If you have a PayPal account you can easily make a donation by using the "Donate" button in the left column. Even if you don't have a PayPal account you can use your creditcard to make a Paypal donation for the Columbus project by clicking the "Donate" button and follow instructions.

[ANS thanks Gaston, ON4WF, for the above information]

/EX

SB SAT @ AMSAT $ANS-077.05
Call for Papers--2007 ARRL/TAPR Digital Communications Conference

AMSAT News Service Bulletin 077.05
  From AMSAT HQ SILVER SPRING, MD.
March 18, 2007
To All RADIO AMATEURS
BID: $ANS-077.05

Technical papers are solicited for presentation at the 26th Annual ARRL and TAPR Digital Communications Conference to be held September 28-30, 2007 in Hartford, Connecticut. These papers will also be published in the Conference Proceedings (you do NOT need to attend the conference to have your paper included in the Proceedings). The submission deadline is July 31, 2007. Please send papers to:

Maty Weinberg
ARRL
225 Main St
Newington, CT 06111

or you can make your submission via e-mail to: maty@arrl.org

Papers will be published exactly as submitted and authors will retain all rights.

[ANS thanks Steve, WB8IMY, for the above information]

/EX

SB SAT @ AMSAT $ANS-077.06
ARISS Status - 12 March 2007

AMSAT News Service Bulletin 077.06
From AMSAT HQ SILVER SPRING, MD.
March 18, 2007
To All RADIO AMATEURS
BID: $ANS-077.06

1. Illinois School Contact Successful

On Tuesday, March 6, students at Boulder Hill Elementary School in Montgomery, Illinois participated in an Amateur Radio on International Space Station (ARISS) contact. Twenty-three children from the Boulder Hill Radio Club were able to ask one question each of Sunita Williams, KD5PLB. The audio was fed into the EchoLink AMSAT (101 377) and JK1ZRW (277 208) servers (15 connections from six countries), as well as the IRLP Discovery Reflector 9010. Several newspapers covered the event. The Beacon News posted an article on its website. See:
http://www.suburbanchicagonews.com/beaconnews/news/286091,2_1_AU07_RADIO_S1.article

Several local dignitaries attended including the mayor of Oswego who remarked, �A very impressive presentation. I ran a Summer Science Camp in Naperville 203 Schools for 17 years until I retired last year and wish we could have had this experience for our science campers since our focus was on space travel and students built rockets and robots. Your presentation was mentioned at this mornings's Rotary Club meeting and we who were present applauded your efforts, your clubs hard work, and the students'/teachers tremendous interest.�

The School Superintendent also sent thanks �for bringing a very special, history making event to the kids and the community. I am certain our kids will never forget yesterday. I know I won�t.�

Another thank you from the ARISS-Boulder Hill contact control operator was posted to the ISS Fan Club webpage. See:
http://www.issfanclub.com/node/5743#comment-11410

2. Mission Viejo School Contact Successful

On Friday, March 9, Mike Lopez-Alegria, KE5GTK, spoke with 9-12th graders from Mission Viejo High School in California, (Mike�s alma mater), during an Amateur Radio on the International Space Station (ARISS) contact. Originally planned for March 8, the school experienced technical difficulties, and the contact was rescheduled for the next day. The astronaut answered 13 questions posed to him by thirteen students. The audio was streamed live on the University of California, Irvine website. Audio was also fed into the Echolink AMSAT server, which received 9 connections, including 2 repeaters, from the U.S., Japan, the Netherlands and Australia. The Orange County Register ran an article on its website covering the event entitled, �Students pick brain of O.C. astronaut.� See:
http://www.ocregister.com/ocregister/sciencetech/abox/article_1614937.php

3. ARISS Contact Excites School Children

Nathan McCray, K9CPO, who teaches at East Elementary School in Wisconsin, left his ham radio turned on in the classroom in case any contacts with the Space Station might be heard. He was fortunate enough to pick up on an Amateur Radio on the International Space Station (ARISS) school contact which grabbed his students� attention for the next several minutes. One of the students participating in the contact asked how fast the space station traveled and when Sunita gave the answer �over 17,000 mph,� the class made a collective �Ooooh� sound! Afterwards, the teacher took the opportunity to teach a mini-lesson on geography and math using the information presented in that short ARISS contact. The students have repeatedly asked him, �When can we talk to the astronauts?� He is now in the process of filling out an application.

4. Virginia Run Elementary School Contact Update

Virginia Run Elementary School experienced an Amateur Radio on the International Space Station (ARISS) contact on March 2. The American Radio Relay League covered the event with a story posted on its website.
See: http://www.arrl.org/news/stories/2007/03/06/101/?nc=1
Photos of the contact are available on:
http://www.viennawireless.org/ariss.php

[ANS thanks Carol, KB3LKI for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the

President's Club. Members of the President's Club, as sustaining donors
to AMSAT Project Funds, will be eligible to receive additional benefits.
Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Lee McLamb, KU4OS

```
From 6817153033293838929
X-Google-Thread: 10e8ad,123d8381b9c89e34,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news3.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!local01.nntp.dca.giganews.com!nntp.comcast.com!
news.comcast.com.POSTED!not-for-mail
NNTP-Posting-Date: Sat, 24 Mar 2007 07:48:48 -0500
Message-ID: <46051E39.7020609@comcast.net>
Date: Sat, 24 Mar 2007 07:48:57 -0500
From: JoAnne K9JKM <k9jkm_remove@comcast.net>
User-Agent: Thunderbird 1.5.0.10 (Windows/20070221)
MIME-Version: 1.0
Newsgroups: rec.radio.amateur.space
Subject: WSR-078 AMSAT Weekly Satellite Report
Content-Type: text/plain; charset=ISO-8859-1; format=flowed
Content-Transfer-Encoding: 7bit
X-Antivirus: avast! (VPS 000727-1, 03/23/2007), Outbound message
X-Antivirus-Status: Clean
Lines: 1147
NNTP-Posting-Host: 67.184.209.179
X-Trace: sv3-8huMAtwA/ScPAlxWtkamp8wCE+26Z82sGpagSgfZFzuEjV1mcImaLlNIiMm/
UZr1SMc8u5bTkQ/Zn1n!IoaXm7SG06lW/+V4Q0JbQ4OkCgj/
4Dkwt6piHFH0NLjIV3eSKUYdH4IsyeiPc3PGVZXHsIGBybP3!LSi7CLKKVA==
X-Complaints-To: abuse@comcast.net
X-DMCA-Complaints-To: dmca@comcast.net
X-Abuse-and-DMCA-Info: Please be sure to forward a copy of ALL headers
X-Abuse-and-DMCA-Info: Otherwise we will be unable to process your complaint
properly
X-Postfilter: 1.3.34
Xref: g2news1.google.com rec.radio.amateur.space:861
```

This report is organized into 4 parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites

SB SAT @ AMSAT W8ISS ANS-078.S1
WSR 078 Part 1 03/19/2007

AMSAT NEWS SERVICE BULLETIN 078.S1 FROM AMSAT HQ
SILVER SPRING, MD, March 19, 2007
TO ALL RADIO AMATEURS

BID: $ANS-078.S1

VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/V - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.870 to 145.930 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.875 to 145.925 MHz USB/CW

Indian Beacon: 145.859330 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsat.in/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is
active. Each transponder has a different beacon.
[10022006]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Voice Repeater ONLY - Software reload in progress
Telemetry Downlink

Current Mode(s): FM Repeater - V/U
PBBS -   OFF
Digipeater - OFF
Telemetry -   U

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.880 MHZ FM
145.880 MHz USB
145.920 MHz FM
1268.700 MHz FM 67Hz PL tone
Digital Downlinks: 435.150 MHz FM 38k4 Digital, PBP, 1 watt output

435.150 MHz FM 9k6 Digital, Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Digital, Pacsat Broadcast Protocol
1268.700 mhz FM 9k6 PBP Digital

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[03192007]

=====

SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The order of operation is thus: (allow for Doppler as necessary)
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10 minute timer.
[01082007]

=====

FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Operational

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
           145.870 MHz FM
           145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

JARL English webpage: http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm
AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's CW
telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts.htm
[01222007]

=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Uplink: 145.850 MHz FM
Downlink: 436.795 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[01292007]

=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational depending on amount of Sunlight

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
           432.125 to 432.175 MHz CW/LSB Mode B

Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz CW
145.972 MHz CW
435.100 MHz CW
2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/

AO-7 Usage Guidelines on the AO-7 Log and Resource Site located at:
http://www.planetemily.com/ao7
[02262007]

=====

INTERNATIONAL SPACE STATION (ISS) - ARISS

Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: Occasional Voice
Digipeater: OFF

The Expedition 14 crew is:

Commander:	Michael Lopez-Alegria	KE5GTK
Flight Engineer:	Mikhail Tyurin	RZ3FT
Flight Engineer:	Sunita Williams	KD5PLB

Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

SSTV TESTING:
Worldwide Reported Downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS

Russian: RS0ISS, RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.
[12182006]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-078.S2
WSR 078 Part 2 03/19/2007

AMSAT NEWS SERVICE BULLETIN 078.S2 FROM AMSAT HQ
SILVER SPRING, MD, March 19, 2007
TO ALL RADIO AMATEURS
BID: $ANS-078.S2

PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: In Orbit

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder: 145.825 Mhz FM
[02052007]
=====
?O-?? FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: In Orbit

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[02262007]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: In Orbit

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01222007]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: In Orbit

Main Downlink: 145.825 Mhz FM APRS AX25
APRS Uplink: 145.825 MHz FM APRS AX25
Voice/PSK31 Uplink: 28.120 MHz

Packet to Voice ID: RAFT
[02262007]
=====
GENESAT-1 ?O-??
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Telemetry Beacon Downlink: 437.0670 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[01082007]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Operational

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon: 437.2750 MHz CW

Callsign: JR8YJT
[10302006]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon: 437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
[01082007]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launched: June 30, 2003

Status: Operational

Beacon: 436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[01082007]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launched: February 21, 2006

Status: Semi-Operational - Constant Carrier only

Uplink: 1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan ?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[01082007]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Voice Repeater ONLY - Software reload in progress
         Telemetry Downlink

Current Mode(s): FM Repeater - V/U
                  PBBS -   OFF
                  Digipeater - OFF
                  Telemetry -   U

Analog voice downlink: 435.300 MHz FM
                        435.150 MHz FM
                       2401.200 Mhz FM
Analog voice uplink: 145.880 MHZ FM
                        145.880 MHz USB
                        145.920 MHz FM

```
                       1268.700 MHz FM 67Hz PL tone
Digital Downlinks:     435.150 MHz FM 38k4 Digital, PBP, 1 watt output
                        435.150 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                       2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:        145.860 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                       1268.700 mhz FM 9k6 PBP Digital

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
    TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[03192007]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Operational only in Full Sun Light

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink:        144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[01082007]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Downlink: 435.225 MHz FM (9600-baud FSK)
           435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
           145.890 FM
           145.930 FM
          1269.700 FM
          1269.800 FM
          1269.900 FM
```

```
Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[01082007]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Semi-operational - APRS usage through Digipeater

Uplink:         145.900 MHz FM 1200-baud Manchester FSK
                 145.920 MHz FM 1200-baud Manchester FSK
                 145.940 MHz FM 1200-baud Manchester FSK
                 145.960 MHz FM 1200-baud Manchester FSK
Downlink:       437.026 MHz SSB 1200-baud PSK
Mode-S Beacon: 2401.1428 MHz

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
    PSK 437.025 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[01222007]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational

Telemetry Downlink: 145.826 MHz. FM 1200 AFSK

Mode-S Beacon:     2401.500 MHz - OFF
UHFBeacon:          435.025 MHz - OFF

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Official webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[01082007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998
```

Status: Operational
Current Mode: Occasional Voice
Digipeater: OFF

Expedition Crew 14 is:
Commander: Michael Lopez-Alegria KE5GTK
Flight Engineer: Mikhail Tyurin RZ3FT
Flight Engineer: Sunita Williams KD5PLB

Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

SSTV TESTING:
Worldwide Reported Downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS, RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is NOT translated from Russian and posted.
[01082007]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-078.S3
WSR 078 Part 3 03/19/2007

AMSAT NEWS SERVICE BULLETIN 078.S3 FROM AMSAT HQ

SILVER SPRING, MD, March 19, 2007
TO ALL RADIO AMATEURS
BID: $ANS-078.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 MHz FM 67Hz CTCSS
Voice Downlink: 2401.835 MHz FM
Packet Up/Downlink: 437.250 MHz 9k6 packet
Packet Downlink   2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Operational

Uplinks: 145.850 MHz
            145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[01222007]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, callsign KE6QMD, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A

```
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink:   145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
V-band:   145.840 -  145.990 MHz CW/LSB
U-band:   435.550 -  435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks
---------
S2-band:  2401.225 -  2401.475 MHz CW/USB
K-band:  24048.010 - 24048.060 MHz CW/USB
Beacon:   2401.323 MHz
          24048.035 MHz
[01222007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink:    145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
            437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site
at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
```

[01222007]
=====
SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz
                            145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm

[ANS-WSR has no further information]
[09042006]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

```
Uplink:   145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign:       POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012006]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: Downlink only

Uplinks:  145.875 MHz FM 1200-baud
           145.900 MHz FM 1200-baud
           145.925 MHz FM 1200-baud
           145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[012212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM
```

```
Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
            435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB
```

```
Digital Transponder:
Uplinks:  145.850 MHz
           145.870 MHz
           145.890 MHz
           145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplinks:          145.840 MHz 1200-baud Manchester FSK
                   145.860 MHz 1200-baud Manchester FSK
                   145.880 MHz 1200-baud Manchester FSK
                   145.900 MHz 1200-baud Manchester FSK

CW downlink:      437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[01222007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
[05012006]
=====
UO-14 UoSAT-3
```

```
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet: Non-Operational
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon:   145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
```

```
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink  29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
[01152007]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon:    29.352 MHz (intermittent)
```

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB

Beacon: 145.860 MHz

Robot: 145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-078.S4
WSR 078 Part 4 03/19/2007

AMSAT NEWS SERVICE BULLETIN 078.S4 FROM AMSAT HQ
SILVER SPRING, MD, March 19, 2007
TO ALL RADIO AMATEURS
BID: $ANS-078.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE
PROPOSED FOR LAUNCH AT THIS TIME:

Phase 5a Mars Mission
Catalog Number:
Proposed Launch Date: 2009 or 2011

Status: Design Phase

For the latest project status update please visit the AMSAT-DL P5-A web
page:

http://ticket-to-mars.org
[01222007]
=====
PHASE 3E AO-??
Catalog number:
Proposed Launch Date: Late 2007

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/
[01222007]
=====
Eagle AO-??
Catalog Number:
Proposed Launch Date: Early/Mid 2009

Status: Design Phase

For the latest project status updates please visit the AMSAT-NA webpage:
http://www.amsat.org
[01222007]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)

* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/amsat/listserv/menu.html

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

```
From -3036692408788841693
X-Google-Thread: 10e8ad,123d8381b9c89e34
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news3.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!local01.nntp.dca.giganews.com!nntp.comcast.com!
news.comcast.com.POSTED!not-for-mail
NNTP-Posting-Date: Sat, 24 Mar 2007 07:49:03 -0500
Message-ID: <46051E48.4010207@comcast.net>
Date: Sat, 24 Mar 2007 07:49:12 -0500
From: JoAnne K9JKM <k9jkm_remove@comcast.net>
User-Agent: Thunderbird 1.5.0.10 (Windows/20070221)
MIME-Version: 1.0
Newsgroups: rec.radio.amateur.space
Subject: WSR-078 AMSAT Weekly Satellite Report
Content-Type: text/plain; charset=ISO-8859-1; format=flowed
Content-Transfer-Encoding: 7bit
X-Antivirus: avast! (VPS 000727-1, 03/23/2007), Outbound message
X-Antivirus-Status: Clean
Lines: 1147
NNTP-Posting-Host: 67.184.209.179
X-Trace: sv3-Dp9wy+uOsb7jyRQ52W7DoON2K7/
QcUZg2HldjY9wxagV3HsYSdu779NCcSSMrjyVqN8Kf7fRyROxZfA!
dBemXqTtqEKeXFoJ+YtufYe3wkg653tI1QYFGDwVinqhO27AhMAR5tC/TkxkeUbOOK1WVkRXRVB6!
zFeLmTcHOg==
X-Complaints-To: abuse@comcast.net
X-DMCA-Complaints-To: dmca@comcast.net
X-Abuse-and-DMCA-Info: Please be sure to forward a copy of ALL headers
X-Abuse-and-DMCA-Info: Otherwise we will be unable to process your complaint
```

properly
X-Postfilter: 1.3.34
Xref: g2news1.google.com rec.radio.amateur.space:862

This report is organized into 4 parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites

SB SAT @ AMSAT W8ISS ANS-078.S1
WSR 078 Part 1 03/19/2007

AMSAT NEWS SERVICE BULLETIN 078.S1 FROM AMSAT HQ
SILVER SPRING, MD, March 19, 2007
TO ALL RADIO AMATEURS
BID: $ANS-078.S1

VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/V - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.870 to 145.930 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.875 to 145.925 MHz USB/CW

Indian Beacon: 145.859330 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsat.in/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is
active. Each transponder has a different beacon.
[10022006]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Voice Repeater ONLY - Software reload in progress
Telemetry Downlink

Current Mode(s): FM Repeater - V/U
PBBS - OFF
Digipeater - OFF
Telemetry - U

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.880 MHZ FM
145.880 MHz USB
145.920 MHz FM
1268.700 MHz FM 67Hz PL tone
Digital Downlinks: 435.150 MHz FM 38k4 Digital, PBP, 1 watt output
435.150 MHz FM 9k6 Digital, Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Digital, Pacsat Broadcast Protocol
1268.700 mhz FM 9k6 PBP Digital

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[03192007]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The order of operation is thus: (allow for Doppler as necessary)
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer
on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on
and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10
minute timer.
[01082007]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Operational

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
145.870 MHz FM
145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

JARL English webpage: http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm
AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's CW
telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts.htm
[01222007]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Uplink: 145.850 MHz FM
Downlink: 436.795 MHz FM

```
Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[01292007]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational depending on amount of Sunlight

Uplink:   145.850 to 145.950 MHz CW/USB Mode A
           432.125 to 432.175 MHz CW/LSB Mode B
Downlink:  29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
           145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
           145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons:   29.502 MHz CW
           145.972 MHz CW
           435.100 MHz CW
          2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/

AO-7 Usage Guidelines on the AO-7 Log and Resource Site located at:
http://www.planetemily.com/ao7
[02262007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: Occasional Voice
Digipeater:   OFF

The Expedition 14 crew is:
Commander:              Michael Lopez-Alegria KE5GTK
Flight Engineer:        Mikhail Tyurin        RZ3FT
Flight Engineer:        Sunita Williams       KD5PLB

Digital/APRS:
Worldwide packet uplink:   145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink:   145.200 MHz FM
```

Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

SSTV TESTING:
Worldwide Reported Downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS, RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.
[12182006]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-078.S2
WSR 078 Part 2 03/19/2007

AMSAT NEWS SERVICE BULLETIN 078.S2 FROM AMSAT HQ
SILVER SPRING, MD, March 19, 2007
TO ALL RADIO AMATEURS
BID: $ANS-078.S2

PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: In Orbit

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder: 145.825 Mhz FM
[02052007]
=====
?O-?? FCAL

```
Catalog Number: 29667
Launch Date: December 21, 2006

Status: In Orbit

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[02262007]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: In Orbit

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01222007]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: In Orbit

Main Downlink:      145.825 Mhz FM APRS AX25
APRS Uplink:        145.825 MHz FM APRS AX25
Voice/PSK31 Uplink:  28.120 MHz

Packet to Voice ID: RAFT
[02262007]
=====
GENESAT-1 ?O-??
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Telemetry Beacon Downlink: 437.0670 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[01082007]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Operational

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon:             437.2750 MHz CW
```

```
Callsign: JR8YJT
[10302006]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon:             437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
[01082007]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launched: June 30, 2003

Status: Operational

Beacon:     436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[01082007]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launched: February 21, 2006

Status: Semi-Operational - Constant Carrier only

Uplink:  1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan ? )

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[01082007]
=====
AO-51 ECHO
Catalog number: 28375
```

Launch date: June 29, 2004

Status: Voice Repeater ONLY - Software reload in progress
Telemetry Downlink

Current Mode(s): FM Repeater - V/U
PBBS - OFF
Digipeater - OFF
Telemetry - U

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.880 MHZ FM
145.880 MHz USB
145.920 MHz FM
1268.700 MHz FM 67Hz PL tone
Digital Downlinks: 435.150 MHz FM 38k4 Digital, PBP, 1 watt output
435.150 MHz FM 9k6 Digital, Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Digital, Pacsat Broadcast Protocol
1268.700 mhz FM 9k6 PBP Digital

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[03192007]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Operational only in Full Sun Light

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[01082007]

```
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Downlink: 435.225 MHz FM (9600-baud FSK)
           435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
           145.890 FM
           145.930 FM
          1269.700 FM
          1269.800 FM
          1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[01082007]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Semi-operational - APRS usage through Digipeater

Uplink:         145.900 MHz FM 1200-baud Manchester FSK
                 145.920 MHz FM 1200-baud Manchester FSK
                 145.940 MHz FM 1200-baud Manchester FSK
                 145.960 MHz FM 1200-baud Manchester FSK
Downlink:       437.026 MHz SSB 1200-baud PSK
Mode-S Beacon: 2401.1428 MHz

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
    PSK 437.025 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[01222007]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational
```

Telemetry Downlink: 145.826 MHz. FM 1200 AFSK

Mode-S Beacon: 2401.500 MHz - OFF
UHFBeacon: 435.025 MHz - OFF

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Official webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[01082007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: Occasional Voice
Digipeater: OFF

Expedition Crew 14 is:
Commander: Michael Lopez-Alegria KE5GTK
Flight Engineer: Mikhail Tyurin RZ3FT
Flight Engineer: Sunita Williams KD5PLB

Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

SSTV TESTING:
Worldwide Reported Downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS, RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is NOT translated from Russian and posted.
[01082007]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-078.S3
WSR 078 Part 3 03/19/2007

AMSAT NEWS SERVICE BULLETIN 078.S3 FROM AMSAT HQ
SILVER SPRING, MD, March 19, 2007
TO ALL RADIO AMATEURS
BID: $ANS-078.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 MHz FM 67Hz CTCSS
Voice Downlink: 2401.835 MHz FM
Packet Up/Downlink: 437.250 MHz 9k6 packet
Packet Downlink   2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Operational

Uplinks: 145.850 MHz
145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[01222007]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, callsign KE6QMD, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====

```
SO-42 SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS:                SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink:   145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
V-band:   145.840 -  145.990 MHz CW/LSB
U-band:   435.550 -  435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks
---------
S2-band:  2401.225 -  2401.475 MHz CW/USB
K-band:  24048.010 - 24048.060 MHz CW/USB
Beacon:   2401.323 MHz
          24048.035 MHz
[01222007]
=====
UO-36 UoSAT-12
```

Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site
at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz
145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm

[ANS-WSR has no further information]
[09042006]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink: 145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012006]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: Downlink only

Uplinks: 145.875 MHz FM 1200-baud
145.900 MHz FM 1200-baud
145.925 MHz FM 1200-baud
145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

```
Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[012212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Operational

Uplink:   435.041 MHz FM DSP
```

Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons: 435.795 MHz CW
            435.910 MHz AX25

Voice Transponder:
Uplink: 145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks: 145.850 MHz
           145.870 MHz
           145.890 MHz
           145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplinks: 145.840 MHz 1200-baud Manchester FSK
                   145.860 MHz 1200-baud Manchester FSK
                   145.880 MHz 1200-baud Manchester FSK
                   145.900 MHz 1200-baud Manchester FSK

CW downlink: 437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[01222007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

```
Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
[05012006]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet: Non-Operational
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
```

```
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon:   145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink  29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
[01152007]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965
```

Status: Non-Operational

Uplink: 145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB

Beacon: 29.352 MHz (intermittent)

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB

Beacon: 145.860 MHz

Robot: 145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-078.S4
WSR 078 Part 4 03/19/2007

AMSAT NEWS SERVICE BULLETIN 078.S4 FROM AMSAT HQ
SILVER SPRING, MD, March 19, 2007
TO ALL RADIO AMATEURS
BID: $ANS-078.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE PROPOSED FOR LAUNCH AT THIS TIME:

Phase 5a Mars Mission
Catalog Number:
Proposed Launch Date: 2009 or 2011

Status: Design Phase

For the latest project status update please visit the AMSAT-DL P5-A web page:
http://ticket-to-mars.org
[01222007]

=====

PHASE 3E AO-??
Catalog number:
Proposed Launch Date: Late 2007

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/
[01222007]

=====

Eagle AO-??
Catalog Number:
Proposed Launch Date: Early/Mid 2009

Status: Design Phase

For the latest project status updates please visit the AMSAT-NA webpage:
http://www.amsat.org
[01222007]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA

850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
        888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/amsat/listserv/menu.html

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

From 8946854972107593551
X-Google-Thread: 10e8ad,123d8381b9c89e34
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news3.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!local01.nntp.dca.giganews.com!nntp.comcast.com!
news.comcast.com.POSTED!not-for-mail
NNTP-Posting-Date: Sat, 24 Mar 2007 07:52:32 -0500
Message-ID: <46051F18.3000901@comcast.net>
Date: Sat, 24 Mar 2007 07:52:40 -0500
From: JoAnne K9JKM <k9jkm_remove@comcast.net>
User-Agent: Thunderbird 1.5.0.10 (Windows/20070221)
MIME-Version: 1.0

Newsgroups: rec.radio.amateur.space
Subject: WSR-078 AMSAT Weekly Satellite Report
Content-Type: text/plain; charset=ISO-8859-1; format=flowed
Content-Transfer-Encoding: 7bit
X-Antivirus: avast! (VPS 000727-1, 03/23/2007), Outbound message
X-Antivirus-Status: Clean
Lines: 1147
NNTP-Posting-Host: 67.184.209.179
X-Trace: sv3-ijE6xa0vMI8e+XPMT4DxQ4q1v4kJV1FeD/Y//
436W1Ub0ZJKpKZLsAQ0rb1Db0jv6mvXQvsMY0FSvod!
T19gpgH46Z5vfH5gy2+6KjvDwCXF0ag19flYBLWlu3u0ykJLBAqsqHx0qCfhM/CMJfG4khuZQpxG!
Yppsi37DnQ==
X-Complaints-To: abuse@comcast.net
X-DMCA-Complaints-To: dmca@comcast.net
X-Abuse-and-DMCA-Info: Please be sure to forward a copy of ALL headers
X-Abuse-and-DMCA-Info: Otherwise we will be unable to process your complaint properly
X-Postfilter: 1.3.34
Xref: g2news1.google.com rec.radio.amateur.space:863

This report is organized into 4 parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites

SB SAT @ AMSAT W8ISS ANS-078.S1
WSR 078 Part 1 03/19/2007

AMSAT NEWS SERVICE BULLETIN 078.S1 FROM AMSAT HQ
SILVER SPRING, MD, March 19, 2007
TO ALL RADIO AMATEURS
BID: $ANS-078.S1

VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/V - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.870 to 145.930 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.875 to 145.925 MHz USB/CW

Indian Beacon: 145.859330 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

```
Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsat.in/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is
active. Each transponder has a different beacon.
[10022006]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Voice Repeater ONLY - Software reload in progress
         Telemetry Downlink

Current Mode(s): FM Repeater - V/U
                  PBBS -        OFF
                  Digipeater -  OFF
                  Telemetry -   U

Analog voice downlink: 435.300 MHz FM
                        435.150 MHz FM
                       2401.200 Mhz FM
Analog voice uplink:   145.880 MHZ FM
                        145.880 MHz USB
                        145.920 MHz FM
                       1268.700 MHz FM 67Hz PL tone
Digital Downlinks:     435.150 MHz FM 38k4 Digital, PBP, 1 watt output
                        435.150 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                       2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:        145.860 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                       1268.700 mhz FM 9k6 PBP Digital

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
    TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[03192007]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Uplink:   145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The order of operation is thus: (allow for Doppler as necessary)
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer
    on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on
    and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10
    minute timer.
[01082007]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Operational

Voice/CW Mode JA
Uplink:   145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon:   435.795 MHz

Digital Mode JD
Uplinks:  145.850 MHz FM
           145.870 MHz FM
           145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

JARL English webpage: http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm
```

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts.htm
[01222007]

=====

AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Uplink: 145.850 MHz FM
Downlink: 436.795 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[01292007]

=====

AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational depending on amount of Sunlight

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
           432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
           145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
           145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz CW
           145.972 MHz CW
           435.100 MHz CW
          2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/

AO-7 Usage Guidelines on the AO-7 Log and Resource Site located at:
http://www.planetemily.com/ao7
[02262007]

=====

INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: Occasional Voice
Digipeater: OFF

The Expedition 14 crew is:

Commander:	Michael Lopez-Alegria	KE5GTK
Flight Engineer:	Mikhail Tyurin	RZ3FT
Flight Engineer:	Sunita Williams	KD5PLB

Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

SSTV TESTING:
Worldwide Reported Downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS, RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line is NOT translated from Russian and posted.
[12182006]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-078.S2
WSR 078 Part 2 03/19/2007

AMSAT NEWS SERVICE BULLETIN 078.S2 FROM AMSAT HQ
SILVER SPRING, MD, March 19, 2007
TO ALL RADIO AMATEURS
BID: $ANS-078.S2

PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: In Orbit

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder: 145.825 Mhz FM
[02052007]
=====
?O-?? FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: In Orbit

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[02262007]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: In Orbit

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01222007]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: In Orbit

Main Downlink: 145.825 Mhz FM APRS AX25
APRS Uplink: 145.825 MHz FM APRS AX25
Voice/PSK31 Uplink: 28.120 MHz

Packet to Voice ID: RAFT
[02262007]
=====
GENESAT-1 ?O-??
Catalog Number: 29655
Launch Date: December 16, 2006

```
Status: Operational

Telemetry Beacon Downlink: 437.0670 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[01082007]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Operational

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon:             437.2750 MHz CW

Callsign: JR8YJT
[10302006]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon:             437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
[01082007]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launched: June 30, 2003

Status: Operational

Beacon:     436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[01082007]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
```

Launched: February 21, 2006

Status: Semi-Operational - Constant Carrier only

Uplink: 1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan ?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[01082007]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Voice Repeater ONLY - Software reload in progress
Telemetry Downlink

Current Mode(s): FM Repeater - V/U
PBBS - OFF
Digipeater - OFF
Telemetry - U

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.880 MHZ FM
145.880 MHz USB
145.920 MHz FM
1268.700 MHz FM 67Hz PL tone
Digital Downlinks: 435.150 MHz FM 38k4 Digital, PBP, 1 watt output
435.150 MHz FM 9k6 Digital, Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Digital, Pacsat Broadcast Protocol
1268.700 mhz FM 9k6 PBP Digital

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/

```
[03192007]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Operational only in Full Sun Light

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink:        144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[01082007]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Downlink: 435.225 MHz FM (9600-baud FSK)
           435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
           145.890 FM
           145.930 FM
          1269.700 FM
          1269.800 FM
          1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[01082007]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Semi-operational - APRS usage through Digipeater

Uplink:         145.900 MHz FM 1200-baud Manchester FSK
                 145.920 MHz FM 1200-baud Manchester FSK
                 145.940 MHz FM 1200-baud Manchester FSK
                 145.960 MHz FM 1200-baud Manchester FSK
Downlink:       437.026 MHz SSB 1200-baud PSK
Mode-S Beacon: 2401.1428 MHz

Mode and Antenna Polarization:
```

U: RC 437.050 MHz RHCP
    PSK 437.025 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[01222007]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational

Telemetry Downlink: 145.826 MHz. FM 1200 AFSK

Mode-S Beacon: 2401.500 MHz - OFF
UHFBeacon: 435.025 MHz - OFF

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Official webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[01082007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: Occasional Voice
Digipeater: OFF

Expedition Crew 14 is:
Commander: Michael Lopez-Alegria KE5GTK
Flight Engineer: Mikhail Tyurin   RZ3FT
Flight Engineer: Sunita Williams   KD5PLB

Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

SSTV TESTING:
Worldwide Reported Downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS, RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is NOT translated from Russian and posted.
[01082007]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-078.S3
WSR 078 Part 3 03/19/2007

AMSAT NEWS SERVICE BULLETIN 078.S3 FROM AMSAT HQ
SILVER SPRING, MD, March 19, 2007
TO ALL RADIO AMATEURS
BID: $ANS-078.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894

Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 MHz FM 67Hz CTCSS
Voice Downlink: 2401.835 MHz FM
Packet Up/Downlink: 437.250 MHz 9k6 packet
Packet Downlink   2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Operational

Uplinks: 145.850 MHz
            145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[01222007]
=====
NO-45 SAPPHIRE

```
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink:   145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
call-
sign KE6QMD, as per the user service agreement located at the following
URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS:                SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink:   145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational
```

```
Uplinks
-------
V-band:   145.840 -  145.990 MHz CW/LSB
U-band:   435.550 -  435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks
---------
S2-band:  2401.225 -  2401.475 MHz CW/USB
K-band:  24048.010 - 24048.060 MHz CW/USB
Beacon:   2401.323 MHz
          24048.035 MHz
[01222007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink:    145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
            437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site
at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater:         436.250 MHz

Uplinks: Mode B Repeater:  145.825 MHz
Mode J Digipeater:         145.825 MHz
                            145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
```

```
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm

[ANS-WSR has no further information]
[09042006]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink:   145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign:       POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
```

```
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012006]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: Downlink only

Uplinks:  145.875 MHz FM 1200-baud
           145.900 MHz FM 1200-baud
           145.925 MHz FM 1200-baud
           145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[012212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991
```

```
Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
            435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
           145.870 MHz
           145.890 MHz
           145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplinks:          145.840 MHz 1200-baud Manchester FSK
                   145.860 MHz 1200-baud Manchester FSK
                   145.880 MHz 1200-baud Manchester FSK
                   145.900 MHz 1200-baud Manchester FSK
```

```
CW downlink:      437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[01222007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
[05012006]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet: Non-Operational
Uplink:  145.8500 MHz MFSK 1200 BPS
```

Uplink: 145.8700 MHz MFSK 1200 BPS
Uplink: 145.8900 MHz MFSK 1200 BPS
Uplink: 145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon: 145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.8500 - 145.9000 MHz SSB/CW
Downlink 29.4000 - 29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink: 29.4500 - 29.5500 MHz SSB/CW

```
[01152007]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                     29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon:    29.352 MHz (intermittent)

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink:     21.260 to 21.300 MHz CW/USB
Downlink:  145.860 to 145.900 MHz CW/USB

Beacon:    145.860 MHz

Robot:     145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991
```

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-078.S4
WSR 078 Part 4 03/19/2007

AMSAT NEWS SERVICE BULLETIN 078.S4 FROM AMSAT HQ
SILVER SPRING, MD, March 19, 2007
TO ALL RADIO AMATEURS
BID: $ANS-078.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE
PROPOSED FOR LAUNCH AT THIS TIME:

Phase 5a Mars Mission
Catalog Number:
Proposed Launch Date: 2009 or 2011

Status: Design Phase

For the latest project status update please visit the AMSAT-DL P5-A web page:
http://ticket-to-mars.org
[01222007]
=====
PHASE 3E AO-??
Catalog number:
Proposed Launch Date: Late 2007

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/
[01222007]
=====
Eagle AO-??
Catalog Number:
Proposed Launch Date: Early/Mid 2009

Status: Design Phase

For the latest project status updates please visit the AMSAT-NA webpage:

http://www.amsat.org
[01222007]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/amsat/listserv/menu.html

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN

/EX

```
From 3521894666915757483
X-Google-Thread: 10e8ad,26b17f46d950dc1b,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news4.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!newsfeed00.sul.t-online.de!newsfeed01.sul.t-online.de!t-
online.de!news.germany.com!feed.xsnews.nl!border-1.ams.xsnews.nl!sn-xt-ams-06!sn-
xt-ams-08!sn-post-ams-01!sn-post-sjc-01!supernews.com!corp.supernews.com!not-for-
mail
From: misterbee03@hotmail.com
Newsgroups: rec.radio.amateur.space
Subject: NA1SS advice
Date: Sat, 24 Mar 2007 08:00:30 -0800
Organization: Posted via Supernews, http://www.supernews.com
Message-ID: <bhia03d0u1dtrb25nlha7bc979lpc3n8gl@4ax.com>
X-Newsreader: Forte Agent 4.2/32.1117
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
X-Complaints-To: abuse@supernews.com
Lines: 18
Xref: g2news1.google.com rec.radio.amateur.space:864
```

Hello.

I just upgraded to general, but ironically, what I want to do right now is use 2M to listen to and possibly contact, NA1SS, the ISS. Any advice on whena nd how to best approache this is gratly appreciated, i am in Califonia and at about 31 degrees north.
Thanks!
Kwizzer

" But Sir, the Sahib must be a powerful magician, for each night he goes to his tent and pulls out a wooden box, and a sulfurous black object, ties them together with silver yarn, and opens the wooden box, which contains fire djinns in glass bottles. He then adjusts the dials on the front of the box and listens as they speak to him in a thousand or more of the different tongues of men until the dawn breaks; whereupon he conceals these objects beneath his cot and proceeds to fall into a deep sleep...."

```
From 21440014011944185
X-Google-Thread: 10e8ad,123d8381b9c89e34
X-Google-Thread: 10b9c8,85e1ef1ce0f33ee9,start
X-Google-Attributes: gid10e8ad,gid10b9c8,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news4.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx02.iad01.newshosting.com!newshosting.com!
```

198.186.194.250.MISMATCH!transit3.readnews.com!news-out.readnews.com!panix!rri.panix.com!robomod!not-for-mail
From: JoAnne K9JKM <k9jkm_remove@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-078 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Sat, 24 Mar 2007 12:04:16 EDT
Organization: PANIX Public Access Internet and UNIX, NYC
Lines: 1149
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <46051F18.3000901a@comcast.net>
NNTP-Posting-Host: panix2.panix.com
Mime-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1; format=flowed
Content-Transfer-Encoding: 7bit
X-Trace: reader2.panix.com 1174752524 19601 166.84.1.2 (24 Mar 2007 16:08:44 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sat, 24 Mar 2007 16:08:44 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to   rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to   rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
User-Agent: Thunderbird 1.5.0.10 (Windows/20070221)
X-Antivirus: avast! (VPS 000727-1, 03/23/2007), Outbound message
X-Antivirus-Status: Clean
Xref: g2news1.google.com rec.radio.amateur.space:865 rec.radio.info:225

This report is organized into 4 parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites

SB SAT @ AMSAT W8ISS ANS-078.S1
WSR 078 Part 1 03/19/2007

AMSAT NEWS SERVICE BULLETIN 078.S1 FROM AMSAT HQ
SILVER SPRING, MD, March 19, 2007
TO ALL RADIO AMATEURS
BID: $ANS-078.S1

VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

```
Status: Operational
Current Mode: U/V - Indian Transponder

Frequencies:
Indian Transponder:
Uplink:   435.220 to 435.280 MHz LSB/CW
Downlink: 145.870 to 145.930 MHz USB/CW

Dutch Transponder:
Uplink:   435.225 to 435.275 MHz LSB/CW
Downlink: 145.875 to 145.925 MHz USB/CW


Indian Beacon:  145.859330 MHZ CW
Dutch Beacon:   145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsat.in/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is
active. Each transponder has a different beacon.
[10022006]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Voice Repeater ONLY - Software reload in progress
         Telemetry Downlink

Current Mode(s): FM Repeater - V/U
                  PBBS -        OFF
                  Digipeater -  OFF
                  Telemetry -   U

Analog voice downlink: 435.300 MHz FM
                        435.150 MHz FM
                       2401.200 Mhz FM
Analog voice uplink:   145.880 MHZ FM
                        145.880 MHz USB
                        145.920 MHz FM
                       1268.700 MHz FM 67Hz PL tone
Digital Downlinks:     435.150 MHz FM 38k4 Digital, PBP, 1 watt output
                        435.150 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                       2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:        145.860 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                       1268.700 mhz FM 9k6 PBP Digital
```

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
    TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[03192007]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The order of operation is thus: (allow for Doppler as necessary)
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer
    on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on
    and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10
    minute timer.
[01082007]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Operational

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB

```
Beacon:   435.795 MHz

Digital Mode JD
Uplinks:  145.850 MHz FM
           145.870 MHz FM
           145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

JARL English webpage: http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm
AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's CW
telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts.htm
[01222007]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Uplink:   145.850 MHz FM
Downlink: 436.795 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[01292007]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational depending on amount of Sunlight

Uplink:   145.850 to 145.950 MHz CW/USB Mode A
           432.125 to 432.175 MHz CW/LSB Mode B
Downlink:  29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
           145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
           145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons:   29.502 MHz CW
           145.972 MHz CW
           435.100 MHz CW
```

2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/

AO-7 Usage Guidelines on the AO-7 Log and Resource Site located at:
http://www.planetemily.com/ao7
[02262007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: Occasional Voice
Digipeater: OFF

The Expedition 14 crew is:
Commander: Michael Lopez-Alegria KE5GTK
Flight Engineer: Mikhail Tyurin RZ3FT
Flight Engineer: Sunita Williams KD5PLB

Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

SSTV TESTING:
Worldwide Reported Downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS, RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.
[12182006]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-078.S2
WSR 078 Part 2 03/19/2007

AMSAT NEWS SERVICE BULLETIN 078.S2 FROM AMSAT HQ
SILVER SPRING, MD, March 19, 2007
TO ALL RADIO AMATEURS
BID: $ANS-078.S2

PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: In Orbit

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder: 145.825 Mhz FM
[02052007]
=====
?O-?? FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: In Orbit

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[02262007]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: In Orbit

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01222007]
=====
NO-60 RAFT-1

Catalog Number: 29661
Launch Date: December 21, 2006

Status: In Orbit

Main Downlink: 145.825 Mhz FM APRS AX25
APRS Uplink: 145.825 MHz FM APRS AX25
Voice/PSK31 Uplink: 28.120 MHz

Packet to Voice ID: RAFT
[02262007]
=====
GENESAT-1 ?O-??
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Telemetry Beacon Downlink: 437.0670 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[01082007]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Operational

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon: 437.2750 MHz CW

Callsign: JR8YJT
[10302006]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon: 437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
[01082007]
=====
CO-57 CubeSat XI-IV

```
Catalog number: 27848
Launched: June 30, 2003

Status: Operational

Beacon:     436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[01082007]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launched: February 21, 2006

Status: Semi-Operational - Constant Carrier only

Uplink:  1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan ? )

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[01082007]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Voice Repeater ONLY - Software reload in progress
         Telemetry Downlink

Current Mode(s): FM Repeater - V/U
                  PBBS -        OFF
                  Digipeater -  OFF
                  Telemetry -   U

Analog voice downlink: 435.300 MHz FM
                        435.150 MHz FM
                       2401.200 Mhz FM
Analog voice uplink:   145.880 MHZ FM
                        145.880 MHz USB
                        145.920 MHz FM
                       1268.700 MHz FM 67Hz PL tone
Digital Downlinks:     435.150 MHz FM 38k4 Digital, PBP, 1 watt output
                        435.150 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                       2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:        145.860 MHz FM 9k6 Digital, Pacsat Broadcast
```

```
Protocol
                       1268.700 mhz FM 9k6 PBP Digital

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
    TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[03192007]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Operational only in Full Sun Light

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink:        144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[01082007]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Downlink: 435.225 MHz FM (9600-baud FSK)
           435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
           145.890 FM
           145.930 FM
          1269.700 FM
          1269.800 FM
          1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[01082007]
```

```
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Semi-operational - APRS usage through Digipeater

Uplink:         145.900 MHz FM 1200-baud Manchester FSK
                 145.920 MHz FM 1200-baud Manchester FSK
                 145.940 MHz FM 1200-baud Manchester FSK
                 145.960 MHz FM 1200-baud Manchester FSK
Downlink:       437.026 MHz SSB 1200-baud PSK
Mode-S Beacon: 2401.1428 MHz

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
    PSK 437.025 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[01222007]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational

Telemetry Downlink: 145.826 MHz. FM 1200 AFSK

Mode-S Beacon:     2401.500 MHz - OFF
UHFBeacon:          435.025 MHz - OFF

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Official webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[01082007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: Occasional Voice
Digipeater:   OFF

Expedition Crew 14 is:
```

Commander: Michael Lopez-Alegria KE5GTK
Flight Engineer: Mikhail Tyurin RZ3FT
Flight Engineer: Sunita Williams KD5PLB

Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

SSTV TESTING:
Worldwide Reported Downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS, RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line is NOT translated from Russian and posted.
[01082007]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-078.S3
WSR 078 Part 3 03/19/2007

AMSAT NEWS SERVICE BULLETIN 078.S3 FROM AMSAT HQ
SILVER SPRING, MD, March 19, 2007
TO ALL RADIO AMATEURS
BID: $ANS-078.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

```
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency:  437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink:        437.250 MHz FM 67Hz CTCSS
Voice Downlink:     2401.835 MHz FM
Packet Up/Downlink:  437.250 MHz 9k6 packet
Packet Downlink     2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink:   435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Operational

Uplinks:   145.850 MHz
            145.925 MHz 9600-baud FSK
Downlink:  437.325 MHz

Broadcast callsign: MYSAT3-11
```

BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[01222007]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, callsign KE6QMD, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz

Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks

V-band: 145.840 - 145.990 MHz CW/LSB
U-band: 435.550 - 435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks

S2-band: 2401.225 - 2401.475 MHz CW/USB
K-band: 24048.010 - 24048.060 MHz CW/USB
Beacon: 2401.323 MHz
          24048.035 MHz
[01222007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site
at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

```
Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater:         436.250 MHz

Uplinks: Mode B Repeater:  145.825 MHz
Mode J Digipeater:         145.825 MHz
                            145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm

[ANS-WSR has no further information]
[09042006]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink:   145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
```

```
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign:       POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012006]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: Downlink only

Uplinks:  145.875 MHz FM 1200-baud
           145.900 MHz FM 1200-baud
           145.925 MHz FM 1200-baud
           145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[012212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
KO-23 KITSAT
Catalog number: 22077
```

```
Launched: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
            435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
           145.870 MHz
           145.890 MHz
           145.910 MHz
Downlink: 435.910 MHz
```

```
More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplinks:          145.840 MHz 1200-baud Manchester FSK
                   145.860 MHz 1200-baud Manchester FSK
                   145.880 MHz 1200-baud Manchester FSK
                   145.900 MHz 1200-baud Manchester FSK

CW downlink:      437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[01222007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
[05012006]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
```

Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting): Non-Operational
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet: Non-Operational
Uplink: 145.8500 MHz MFSK 1200 BPS
Uplink: 145.8700 MHz MFSK 1200 BPS
Uplink: 145.8900 MHz MFSK 1200 BPS
Uplink: 145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon: 145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational

```
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink  29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
[01152007]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                     29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon:    29.352 MHz (intermittent)

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
```

Launched: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB

Beacon: 145.860 MHz

Robot: 145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-078.S4
WSR 078 Part 4 03/19/2007

AMSAT NEWS SERVICE BULLETIN 078.S4 FROM AMSAT HQ
SILVER SPRING, MD, March 19, 2007
TO ALL RADIO AMATEURS
BID: $ANS-078.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE
PROPOSED FOR LAUNCH AT THIS TIME:

Phase 5a Mars Mission
Catalog Number:
Proposed Launch Date: 2009 or 2011

Status: Design Phase

For the latest project status update please visit the AMSAT-DL P5-A web
page:
http://ticket-to-mars.org
[01222007]
=====
PHASE 3E AO-??
Catalog number:
Proposed Launch Date: Late 2007

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/
[01222007]
=====
Eagle AO-??
Catalog Number:
Proposed Launch Date: Early/Mid 2009

Status: Design Phase

For the latest project status updates please visit the AMSAT-NA webpage:
http://www.amsat.org
[01222007]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
        888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

- AMSAT News Service (ANS)
- General satellite discussion (AMSAT-BB)
- Orbit data (KEPS)
- Manned space missions (SAREX)
- District of Columbia area (AMSAT-DC)
- New England area (AMSAT-NE)
- AMSAT Educational Liaison mailing list (AMSAT-EDU)
- AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/amsat/listserv/menu.html

In addition to regular membership, AMSAT-NA offers membership in the
President's Club. Members of the President's Club, as sustaining donors
to AMSAT Project Funds, will be eligible to receive additional benefits.
Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the
memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen,
G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

From -6910734883506732649
X-Google-Thread: 10e8ad,26b17f46d950dc1b
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news3.google.com!border1.nntp.dca.giganews.com!nntp.giganews.com!newsfeed00.sul.t-online.de!newsfeed01.sul.t-online.de!t-online.de!newsfeeder.wxs.nl!divide.nova.planet.nl!posting.nova.planet.nl!not-for-mail
Date: Sat, 24 Mar 2007 17:39:22 +0100
From: Roland <roland_lemmers@planet.nl>
User-Agent: Thunderbird 1.5.0.10 (Windows/20070221)
MIME-Version: 1.0
Newsgroups: rec.radio.amateur.space
Subject: Re: NA1SS advice
References: <bhia03d0u1dtrb25nlha7bc979lpc3n8gl@4ax.com>
In-Reply-To: <bhia03d0u1dtrb25nlha7bc979lpc3n8gl@4ax.com>
Content-Type: text/plain; charset=ISO-8859-1; format=flowed
Content-Transfer-Encoding: 7bit
Lines: 37
Message-ID: <46055437$0$535$ba620dc5@text.nova.planet.nl>
NNTP-Posting-Host: 84.84.0.196
X-Trace: 1174754359 text.nova.planet.nl 535 84.84.0.196:12620
X-Complaints-To: abuse@planet.nl
Xref: g2news1.google.com rec.radio.amateur.space:866

misterbee03@hotmail.com schreef:
> Hello.
>
> I just upgraded to general, but ironically, what I want to do right
> now is use 2M to listen to and possibly contact, NA1SS, the ISS.
> Any advice on whena nd how to best approache this is gratly
> appreciated, i am in Califonia and at about 31 degrees north.
> Thanks!
> Kwizzer

http://www.nasa.gov/mission_pages/station/timelines/index.html
Here you can see when there is time scheduled for amateurradio.
When the ISS is over your area at the time in the timeline you have a
chance. But listen on every pass to increase your chance.
With the spacetourist going up soon it is my guess that he will spend
time on the radio. I saw a picture of him being trained by an astronaut
on the operation of the ham equipment.

http://www.david-taylor.pwp.blueyonder.co.uk/software/wxtrack.htm
Here you can find software.

http://www.space-track.org/
Go here for up to date info about the orbits of the satelites.
If you're neurotic about providing your address and such you're out of
luck. Uncle Sam wants to know who is using the info.

About reception. I've received it on a uniden scanner with the standard
rubber duck. No noise whatsoever, as good as my buddy 10 km away. That
was some time ago, when Mike Fincke was on ISS.
So I guess (hope :) there is no need for any special equipment.

73, Roland PF2KT

```
From -7780006076832598682
X-Google-Thread: 10e8ad,1202a57e8e49d541,start
X-Google-Thread: 10b9c8,1202a57e8e49d541,start
X-Google-Attributes: gid10e8ad,gid10b9c8,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news3.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx02.iad01.newshosting.com!newshosting.com!
198.186.194.250.MISMATCH!transit3.readnews.com!news-out.readnews.com!panix!
rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-084 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sun, 25 Mar 2007 12:02:00 EDT
Organization: PANIX Public Access Internet and UNIX, NYC
Lines: 321
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000301c76eef$eec00830$6601a8c0@familyroom>
NNTP-Posting-Host: panix6.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
```

X-Trace: reader2.panix.com 1174838520 23035 166.84.1.6 (25 Mar 2007 16:02:00 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 25 Mar 2007 16:02:00 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to   rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to   rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Xref: g2news1.google.com rec.radio.amateur.space:867 rec.radio.info:226

AMSAT NEWS SERVICE
ANS-084

ANS is a free, weekly, news and information service of AMSAT North America,The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* AMSAT at the 2007 Dayton Hamvention
* AMSAT Presentations Scheduled for SEVHFS Conference in Atlanta
* AMSAT Awards
* Satellite Shorts From All Over
* Field Day AMSAT Rules
* ARISS Status - 15 March 2007

SB SAT @ AMSAT $ANS-084.01
AMSAT at the 2007 Dayton Hamvention

AMSAT News Service Bulletin 084.01
From AMSAT HQ SILVER SPRING, MD.
March 25, 2007
To All RADIO AMATEURS
BID: $ANS-084.01

AMSAT at the 2007 Dayton Hamvention

AMSAT will have a great deal to offer the amateur satellite enthusiast at the 2007 Dayton Hamvention.

The dates for Dayton are Friday May 18 - Sun May 20, 2007. The

AMSAT Forum will be on Friday afternoon this year from 11:15am to 2:00pm in Forum Room 1.

Speakers and topics during the forum are:

+ Moderator: Barry Baines, WD4ASW, AMSAT-NA Corporate Secretary

+ Rick Hambly, W2GPS, President, AMSAT-NA "Summary of AMSAT-NA Activities in 2007"

+ Peter Guelzow, DB2OS, AMSAT-DL President and Bob McGwier, N4HY, AMSAT-NA VP - Engineering, "Phase 3-Express: An Update"

+ Jim Sanford, WB4GCS, EAGLE Project Manager "Eagle Status Update"

+ Andrew Glasbrenner, KO4MA, AMSAT-NA VP-Operations and Gould Smith, WA4SXM, AO-51 Command Station, "AMSAT-NA Satellite Operations and AO-51 Update"

+ Frank Bauer, KA3HDO, AMSAT-NA Director-Human Space Flight, "ARISS and Future SuitSat Missions"

Friday night will usher in the first AMSAT/TAPR Banquet, to be held at the Air Force Museum. "Dinner Under the Wings" will be served in the Cold War area of the museum beginning at 6:45pm. The museum will be open until 10:00pm for viewing. Join us Friday night for an enjoyable dinner and experience. The price of the Banquet is $35, tickets must be purchased online at the AMSAT Store or by calling Martha at the AMSAT Office (301) 589-6062. There will no Banquet tickets sales at the AMSAT booth this year, as we have to give the museum a final count on Tuesday before the banquet.

For additional information see the AMSAT website front page or the AMSAT at Dayton pages at:
  http://www.amsat.org/amsat-new/hamvention/Dayton2007.php

See you there!

[ANS thanks Gould, WA4SXM for the above information]

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SB SAT @ AMSAT $ANS-084.02
AMSAT Presentations Scheduled for SEVHFS Conference in Atlanta

AMSAT News Service Bulletin 084.02
  From AMSAT HQ SILVER SPRING, MD.
March 25, 2007
To All RADIO AMATEURS
BID: $ANS-084.02

AMSAT Presentations Scheduled for SEVHFS Conference in Atlanta

The program for the upcoming Southeastern VHF Society Conference includes presentations by AMSAT President Rick Hambly, W2GPS and Gould Smith, WA4SXM.

On Saturday, April 28, 2007 the SEVHFS program schedule shows that Gould will present "Commanding the AO-51 Satellite via UHF/VHF Links" at 1:00PM. Rick will speak on "AMSAT and the Eagle Satellite" at 1:45 PM.

Conference advance registration is still open until March 31st. Folks who register in advance get a $5 discount and a chance at a $200 Down East Microwave Inc. gift certificate. For further information on the conference, including registration information please go to http://www.svhfs.org.

[ANS thanks Jim, W4KXY for the above information]

/EX

SB SAT @ AMSAT $ANS-084.03
AMSAT Awards

AMSAT News Service Bulletin 084.03
From AMSAT HQ SILVER SPRING, MD.
March 25, 2007
To All RADIO AMATEURS
BID: $ANS-084.03

AMSAT Awards

Bruce, KK5DO, AMSAT Director Contests and Awards says congratultions this week go out to these amateur satellite operators:

We would like to welcome the following to the satellite community. They have made their first satellite contact and are now members of the AMSAT Satellite Communicators Club.
  + Bob Massey, WA9NBU

AMSAT Communication Achievement Award
  + Paulo Pinto, CT1ETE, #445
  + Greg Drzyzga, NA4N, #446
  + Fernando Martins, CT2ISG, #447

South Africa AMSAT Satellite Communications Achievement Award
  + Paulo Pinto, CT1ETE, #US105
  + Robert Wyckoff, KB3MBO, #US106
  + Greg Drzyzga, NA4N, #US107

To see all the awards visit http://www.amsat.org.

[ANS thanks Bruce, KK5DO for the above information]

/EX

SB SAT @ AMSAT $ANS-084.04
Satellite Shorts From All Over

AMSAT News Service Bulletin 084.04
From AMSAT HQ SILVER SPRING, MD.
March 25, 2007
To All RADIO AMATEURS
BID: $ANS-084.04

Satellite Shorts From All Over

+ Patrick WD9EWK/VA7EWK, along with Gerry VE4GTB/KD7MDB, Larry W7LB, Brock W6GMT, and Ron W6ZQ reported success and good satellite operating demos from the Scottsdale Amateur Radio Club's "Springfest" hamfest. Contacts were made on two AO-51 passes and they sold about $200 of AMSAT merchandise. Martha at the AMSAT Office will send supplies for and AMSAT table at any hamfest. Contact her three weeks prior to the event.

+ At the request of the ALMASAT team, an Italian university microsat mission with both U and S band downlinks AO-51 was switched to V/S 38k4 digital operation on March 15 and March 16.

+ New photos, an MP3 recording of the contact, video recordings, and a link to the article written about it in the Orange County Register are online from the ARISS Mission Viejo school contact. See: http://ucisat.eng.uci.edu/uplink.

+ The recently completed ARISS contact at Boulder Hill is now on the Fox River Radio League's website at http://www.frrl.org.

[ANS thanks everyone for the above information]

/EX

SB SAT @ AMSAT $ANS-084.05
Field Day AMSAT Rules
AMSAT News Service Bulletin 084.05
From AMSAT HQ SILVER SPRING, MD.
March 25, 2007
To All RADIO AMATEURS
BID: $ANS-084.05

It is once again time for Field Day and if you would like to participate in AMSAT's Field Day, the rules for this year are posted. They will be on the AMSAT web page (as soon as the update there is performed).

Direct Link:
http://www.amsat.org/amsat-new/awards/amsatfd.php

or.... from the drop down "Site Quick Reference" select Field Day Competition.

The rules are also available from my web site in both PDF and DOC formats. http://www.amsatnet.com

Direct Link:
http://www.amsatnet.com/2007fd.doc
http://www.amsatnet.com/2007fd.pdf

If you are using Internet Explorer, they can be selected directly from the menu on the main page.

[ANS thanks Bruce, KK5DO, for the above information]

/EX

SB SAT @ AMSAT $ANS-084.06
ARISS Status - 15 March 2007

AMSAT News Service Bulletin 084.06
From AMSAT HQ SILVER SPRING, MD.
March 25, 2007
To All RADIO AMATEURS
BID: $ANS-084.06

Amateur Radio on the International Space Station (ARISS) Status Report
March 15, 2007

1. Press Coverage of Boulder Hill School Contact

On Tuesday, March 6, students at Boulder Hill Elementary School in Montgomery, Illinois participated in an Amateur Radio on International Space Station (ARISS) contact. Additional information, including audio and photos, may be found on the Fox River Radio League's website. See:
http://www.frrl.org
The Ledger-Sentinel posted a story covering the contact on line. See:
http://www.ledgersentinel.com/article.asp?a=5960

2. Mission Viejo School Contact Update

On Friday, March 9, Mike Lopez-Alegria, KE5GTK, participated in a Mission Viejo High School - Amateur Radio on the International Space Station (ARISS) contact. Video, audio and photos may be found on the University of California, Irvine website. See:
http://ucisat.eng.uci.edu/uplink
For more photos of the event, go to:
http://www.flickr.com/photos/priusjames/sets/72157594578090832/

3. Upcoming School Contacts

University School in Shaker Heights, Ohio is an independent school that has its own full size space shuttle simulator, mission control, ISS mockup and an FAA approved flight simulator. An Amateur Radio on the International Space Station (ARISS) contact has been approved for the University School on Friday, March 16 at 16:14 UTC. Audio of this event will be fed to the EchoLink AMSAT (101 377) and JK1ZRW (277 208) servers. To prepare for the contact, amateur radio will be presented to the students, and electronic construction projects and space station communications will be covered. If time permits, the students may produce an audio-visual trip to the space station using the school's simulators, video and computer animation and web sites.

East Aurora Middle School in East Aurora, New York has been scheduled for an Amateur Radio on the International Space Station (ARISS) contact on Monday, March 19 at 13:04 UTC via the telebridge station ZSBTD in South Africa. The audio will be fed into the EchoLink AMSAT (101 377) and JK1ZRW (277 208) servers, as well as the IRLP Discovery Reflector 9010. The audio will also be webcast. This contact is a Sunita Williams, KD5PLB, crew pick.

The Juvenile Space Club in Tatsuno, Tatsunomachi, Nagano-pref, Japan has been slated for an Amateur Radio on the International Space Station (ARISS) contact on Saturday, March 24 at 00:39 UTC. Five primary schools are located in this region, and students from all schools plan on participating in the event. The children will receive lessons on Space and the ISS and its crew. They will produce a Space Newspaper which will be distributed to each school. Children will draw pictures of the contact and will create a catch phrase for the event. Media coverage will include television, radio, newspapers.

4. ARRL Article on Illinois and California Contacts

The American Radio Relay League (ARRL) ran an article on the Boulder Hill Elementary School and Mission Viejo High School Amateur Radio on the International Space Station (ARISS) contacts. See:

http://www.arrl.org/news/stories/2007/03/15/100/?nc=1

[ANS thanks Carol, KB3LKI for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Dee Interdonato, NB2F

From 3693332641740320367
X-Google-Thread: 10e8ad,4f59cc8085382b49,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news4.google.com!newshub.sdsu.edu!
newscon04.news.prodigy.net!prodigy.net!newsfeed.telusplanet.net!
newsfeed.telus.net!xmission!nnrp.xmission!not-for-mail
From: Paul Huff <paul.huff@gmail.com>
Newsgroups: rec.radio.amateur.space
Subject: Beginner questions...
Date: Mon, 26 Mar 2007 09:56:13 -0600
Organization: XMission http://www.xmission.com/
Lines: 14
Message-ID: <m2y7lkov6q.fsf@kanga.phuff.dsl.xmission.com>
NNTP-Posting-Host: phuff.dsl.xmission.com
Mime-Version: 1.0
Content-Type: text/plain; charset=us-ascii
X-Trace: news.xmission.com 1174924710 24040 166.70.244.108 (26 Mar 2007 15:58:30 GMT)
X-Complaints-To: abuse@xmission.com
NNTP-Posting-Date: Mon, 26 Mar 2007 15:58:30 +0000 (UTC)
User-Agent: Gnus/5.11 (Gnus v5.11) Emacs/22.0.90 (darwin)
Cancel-Lock: sha1:gt56qdULv5TmoPUR8GmbMxj0vpg=
Xref: g2news1.google.com rec.radio.amateur.space:868

I'm starting to get back into amateur radio after what's practically been something like a 10 year hiatus... :) I read a bit about sattelites the other night, and I thought I'd post hear and ask for advice on finding an easy target... The problem is my gear is limited to a 2-meter HT, with whatever extra antenna-ing I can concoct. I've got a little self-built j-pole made out of ladder line, but I imagine that might not be the right kind of antenna for this kind of work.

So, within those limitations (2-meter only, fairly not good antennas),
and given that I'm in the South West United States (Utah), can anybody
recommend a good target for a beginner?

Thanks,
-Paul KC8IGJ

From -2521730114658957426
X-Google-Thread: 10e8ad,4f59cc8085382b49
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII
Path: g2news1.google.com!news4.google.com!border1.nntp.dca.giganews.com!nntp.giganews.com!newsfeed00.sul.t-online.de!newsfeed01.sul.t-online.de!t-online.de!newsfeeder.wxs.nl!divide.nova.planet.nl!posting.nova.planet.nl!not-for-mail
Subject: Re: Beginner questions...
From: =?ISO-8859-15?Q?Andr=E9,_PE1PQX?= <pe1pqx_geenviagra@planet.nl>
References: <m2y7lkov6q.fsf@kanga.phuff.dsl.xmission.com>
Newsgroups: rec.radio.amateur.space
Message-ID: <mn.d4787d73f7ab5dff.58901@planet.nl>
X-Newsreader: MesNews/1.06.00.00-nl
Date: Mon, 26 Mar 2007 19:04:24 +0200
MIME-Version: 1.0
X-ICQ: 36290255
Content-Type: text/plain; charset="iso-8859-15"; format=flowed
Content-Transfer-Encoding: 8bit
Lines: 30
NNTP-Posting-Host: 81.206.7.17
X-Trace: 1174928664 text.nova.planet.nl 9277 81.206.7.17:3139
X-Complaints-To: abuse@planet.nl
Xref: g2news1.google.com rec.radio.amateur.space:869

Paul Huff had uiteengezet :
> I'm starting to get back into amateur radio after what's practically
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> might not be the right kind of antenna for this kind of work.
>
> So, within those limitations (2-meter only, fairly not good antennas),
> and given that I'm in the South West United States (Utah), can anybody
> recommend a good target for a beginner?
>
> Thanks,
> -Paul KC8IGJ

Hi Paul,

The things you actually can do with you home made J-pole is (for

example) APRS, APRS via ISS, packet radio.
If you have the chance to set up an yagi, try FSK (Meteorscatter), J65
(EME, google for WSJT by K1JT).
Actually with the program WSJT you do not need high powers to make nice
MS contacts (my DX record is a little over 1600km/1000mi with 10W)

good luck,

73', Andr� de PE1PQX

From 6297708887217843006
X-Google-Thread: 10e8ad,4f59cc8085382b49
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news4.google.com!news.glorb.com!hwmnpeer01.lga!
news.highwinds-media.com!hw-filter.phx!newsfe08.phx.POSTED!53ab2750!not-for-mail
From: "The Shadow" <repose@zilch.com>
Newsgroups: rec.radio.amateur.space
References: <m2y7lkov6q.fsf@kanga.phuff.dsl.xmission.com>
Subject: Re: Beginner questions...
Lines: 30
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.3028
X-MIMEOLE: Produced By Microsoft MimeOLE V6.00.2900.3028
X-RFC2646: Format=Flowed; Original
Message-ID: <IXTNh.91242$Ko5.83143@newsfe08.phx>
Date: Mon, 26 Mar 2007 11:05:28 -0700
NNTP-Posting-Host: 72.197.12.245
X-Complaints-To: admin@cox.net
X-Trace: newsfe08.phx 1174932328 72.197.12.245 (Mon, 26 Mar 2007 11:05:28 MST)
NNTP-Posting-Date: Mon, 26 Mar 2007 11:05:28 MST
Organization: Cox
Xref: g2news1.google.com rec.radio.amateur.space:870

"Paul Huff" <paul.huff@gmail.com> wrote in message
news:m2y7lkov6q.fsf@kanga.phuff.dsl.xmission.com...
> I'm starting to get back into amateur radio after what's practically
> been something like a 10 year hiatus... :) I read a bit about
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> and given that I'm in the South West United States (Utah), can anybody
> recommend a good target for a beginner?

>
> Thanks,
> -Paul KC8IGJ

Paul see the following URL for current satellites and operating frequencies
http://www.qsl.net/w8dro/

Note that different frequencies are used for the uplink and downlink

Nice tutorial on Satellites operation and equipment see URL:
http://www.logsat.com/lsp-more-about-satellites.asp

Lamont

```
From -6694761719507154946
X-Google-Thread: 10e8ad,e20549ad0252c309,start
X-Google-Thread: 10b9c8,e20549ad0252c309,start
X-Google-Attributes: gid10e8ad,gid10b9c8,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news4.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!newscon02.news.prodigy.net!prodigy.net!news-
feed01.roc.ny.frontiernet.net!nntp.frontiernet.net!newsread.com.MISMATCH!
transit3.readnews.com!news-out.readnews.com!panix!rri.panix.com!robomod!not-for-
mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: WSR-085 AMSAT Weekly Satellite Report
Followup-To: rec.radio.amateur.space
Date: Mon, 26 Mar 2007 23:10:07 EDT
Organization: PANIX Public Access Internet and UNIX, NYC
Lines: 1148
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <001f01c7701d$696556c0$6601a8c0@familyroom>
NNTP-Posting-Host: panix3.panix.com
Mime-Version: 1.0
Content-Type: text/plain;
     charset="us-ascii"
Content-Transfer-Encoding: 7bit
X-Trace: reader2.panix.com 1174965007 20976 166.84.1.3 (27 Mar 2007 03:10:07 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Tue, 27 Mar 2007 03:10:07 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
```

X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Xref: g2news1.google.com rec.radio.amateur.space:871 rec.radio.info:228

This report is organized into 4 parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites

SB SAT @ AMSAT W8ISS ANS-085.S1
WSR 085 Part 1 03/26/2007

AMSAT NEWS SERVICE BULLETIN 085.S1 FROM AMSAT HQ
SILVER SPRING, MD, March 26, 2007
TO ALL RADIO AMATEURS
BID: $ANS-085.S1

VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/V - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.870 to 145.930 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.875 to 145.925 MHz USB/CW

Indian Beacon: 145.859330 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsat.in/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is
active. Each transponder has a different beacon.
[10022006]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Voice Repeater ONLY - Software reload in progress
        Telemetry Downlink

Current Mode(s): FM Repeater - V/U
                 PBBS -   OFF
                 Digipeater - OFF
                 Telemetry -   U

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink: 145.880 MHZ FM
                       145.880 MHz USB
                       145.920 MHz FM
                      1268.700 MHz FM 67Hz PL tone
Digital Downlinks: 435.150 MHz FM 38k4 Digital, PBP, 1 watt output
                       435.150 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      1268.700 mhz FM 9k6 PBP Digital

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[03192007]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer
   on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on
   and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10
   minute timer.
[03262007]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Operational

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

JARL English webpage: http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm
AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's CW
telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts.htm
[03262007]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Uplink: 145.850 MHz FM
Downlink: 436.795 MHz FM

```
Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[03262007]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational depending on amount of Sunlight

Uplink:   145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink:  29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons:   29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/

AO-7 Usage Guidelines on the AO-7 Log and Resource Site located at:
http://www.planetemily.com/ao7
[02262007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: Occasional Voice
Digipeater:   OFF

The Expedition 14 crew is:
Commander:              Michael Lopez-Alegria KE5GTK
Flight Engineer:        Mikhail Tyurin        RZ3FT
Flight Engineer:        Sunita Williams       KD5PLB

Digital/APRS:
Worldwide packet uplink:   145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink:   145.200 MHz FM
```

Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

SSTV TESTING:
Worldwide Reported Downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS, RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.
[12182006]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-085.S2
WSR 085 Part 2 03/26/2007

AMSAT NEWS SERVICE BULLETIN 085.S2 FROM AMSAT HQ
SILVER SPRING, MD, March 26, 2007
TO ALL RADIO AMATEURS
BID: $ANS-085.S2

PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: In Orbit

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder: 145.825 Mhz FM
[02052007]
=====
?O-?? FCAL

```
Catalog Number: 29667
Launch Date: December 21, 2006

Status: In Orbit

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[02262007]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: In Orbit

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01222007]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: In Orbit

Main Downlink:      145.825 Mhz FM APRS AX25
APRS Uplink:        145.825 MHz FM APRS AX25
Voice/PSK31 Uplink:  28.120 MHz

Packet to Voice ID: RAFT
[02262007]
=====
GENESAT-1 ?O-??
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Telemetry Beacon Downlink: 437.0670 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[01082007]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Operational

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon:             437.2750 MHz CW
```

```
Callsign: JR8YJT
[10302006]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon:             437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
[03262007]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launched: June 30, 2003

Status: Operational

Beacon:     436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[01082007]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launched: February 21, 2006

Status: Semi-Operational - Constant Carrier only

Uplink:  1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan ? )

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[01082007]
=====
AO-51 ECHO
Catalog number: 28375
```

Launch date: June 29, 2004

Status: Voice Repeater ONLY - Software reload in progress
Telemetry Downlink

Current Mode(s): FM Repeater - V/U
PBBS - OFF
Digipeater - OFF
Telemetry - U

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.880 MHZ FM
145.880 MHz USB
145.920 MHz FM
1268.700 MHz FM 67Hz PL tone
Digital Downlinks: 435.150 MHz FM 38k4 Digital, PBP, 1 watt output
435.150 MHz FM 9k6 Digital, Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Digital, Pacsat Broadcast Protocol
1268.700 mhz FM 9k6 PBP Digital

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[03192007]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Operational only in Full Sun Light

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[01082007]

```
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[03262007]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Semi-operational - APRS usage through Digipeater

Uplink:         145.900 MHz FM 1200-baud Manchester FSK
                145.920 MHz FM 1200-baud Manchester FSK
                145.940 MHz FM 1200-baud Manchester FSK
                145.960 MHz FM 1200-baud Manchester FSK
Downlink:       437.026 MHz SSB 1200-baud PSK
Mode-S Beacon: 2401.1428 MHz

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.025 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[03262007]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational
```

```
Telemetry Downlink: 145.826 MHz. FM 1200 AFSK

Mode-S Beacon:     2401.500 MHz - OFF
UHFBeacon:          435.025 MHz - OFF

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Official webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[01082007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: Occasional Voice
Digipeater:   OFF

Expedition Crew 14 is:
Commander:              Michael Lopez-Alegria KE5GTK
Flight Engineer:        Mikhail Tyurin        RZ3FT
Flight Engineer:        Sunita Williams       KD5PLB

Digital/APRS:
Worldwide packet uplink:   145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink:   145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink:      145.800 MHz FM

SSTV TESTING:
Worldwide Reported Downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink:   437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German:              DP0ISS
Russian:             RS0ISS, RZ3DZR
USA:                 NA1SS
Packet Mailbox:      RS0ISS-11
Packet Keyboard:     RS0ISS-3
Digipeater callsign: ARISS
```

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is NOT translated from Russian and posted.
[01082007]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-085.S3
WSR 085 Part 3 03/26/2007

AMSAT NEWS SERVICE BULLETIN 085.S3 FROM AMSAT HQ
SILVER SPRING, MD, March 26, 2007
TO ALL RADIO AMATEURS
BID: $ANS-085.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink:	437.250 MHz FM 67Hz CTCSS
Voice Downlink:	2401.835 MHz FM
Packet Up/Downlink:	437.250 MHz 9k6 packet
Packet Downlink	2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01222007]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Operational

Uplinks: 145.850 MHz
           145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[01222007]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, callsign KE6QMD, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====

```
SO-42 SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS:                SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink:   145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks
-------
V-band:   145.840 -  145.990 MHz CW/LSB
U-band:   435.550 -  435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks
---------
S2-band:  2401.225 -  2401.475 MHz CW/USB
K-band:  24048.010 - 24048.060 MHz CW/USB
Beacon:   2401.323 MHz
         24048.035 MHz
[01222007]
=====
UO-36 UoSAT-12
```

Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web site
at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz
145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm

[ANS-WSR has no further information]
[09042006]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink: 145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012006]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: Downlink only

Uplinks: 145.875 MHz FM 1200-baud
          145.900 MHz FM 1200-baud
          145.925 MHz FM 1200-baud
          145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

```
Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[012212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink:   145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink:   145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Operational

Uplink:   435.041 MHz FM DSP
```

```
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplinks:          145.840 MHz 1200-baud Manchester FSK
                  145.860 MHz 1200-baud Manchester FSK
                  145.880 MHz 1200-baud Manchester FSK
                  145.900 MHz 1200-baud Manchester FSK

CW downlink:      437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[01222007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990
```

```
Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
[05012006]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet: Non-Operational
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
```

```
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon:   145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink  29.4000 -  29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
[01152007]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965
```

Status: Non-Operational

Uplink: 145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB

Beacon: 29.352 MHz (intermittent)

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB

Beacon: 145.860 MHz

Robot: 145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-085.S4
WSR 085 Part 4 03/26/2007

AMSAT NEWS SERVICE BULLETIN 085.S4 FROM AMSAT HQ
SILVER SPRING, MD, March 26, 2007
TO ALL RADIO AMATEURS
BID: $ANS-085.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE
PROPOSED FOR LAUNCH AT THIS TIME:

Phase 5a Mars Mission
Catalog Number:
Proposed Launch Date: 2009 or 2011

Status: Design Phase

For the latest project status update please visit the AMSAT-DL P5-A web page:
http://ticket-to-mars.org
[01222007]
=====
PHASE 3E AO-??
Catalog number:
Proposed Launch Date: Late 2007

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/
[01222007]
=====
Eagle AO-??
Catalog Number:
Proposed Launch Date: Early/Mid 2009

Status: Design Phase

For the latest project status updates please visit the AMSAT-NA webpage:
http://www.amsat.org
[01222007]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA

850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/amsat/listserv/menu.html

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

```
From -6258172501631587198
X-Google-Thread: 10e8ad,26b17f46d950dc1b
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news4.google.com!newshub.sdsu.edu!
newscon04.news.prodigy.net!prodigy.net!newsdst01.news.prodigy.net!prodigy.com!
postmaster.news.prodigy.com!newssvr29.news.prodigy.net.POSTED!baa7349f!not-for-
mail
From: "cmw290" <pjflautt@sbcglobal.net>
Newsgroups: rec.radio.amateur.space
References: <bhia03d0u1dtrb25nlha7bc979lpc3n8gl@4ax.com>
Subject: Re: NA1SS advice
```

Lines: 25
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.3028
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.3028
X-RFC2646: Format=Flowed; Original
Message-ID: <n3EOh.2996$YL5.2514@newssvr29.news.prodigy.net>
NNTP-Posting-Host: 12.75.81.69
X-Complaints-To: abuse@prodigy.net
X-Trace: newssvr29.news.prodigy.net 1175129427 ST000 12.75.81.69 (Wed, 28 Mar 2007 20:50:27 EDT)
NNTP-Posting-Date: Wed, 28 Mar 2007 20:50:27 EDT
Organization: SBC http://yahoo.sbc.com
X-UserInfo1:
FKPGGVODSBUQR\X[ZBCBNWX@RJ_XPDLMN@GZ_GYO^BTJUZ]CDVW[AKK[J\]^HVKHG^EWZHBLO^[\NH_AZFWGN^\DHNVMX_DHHX[FSQKBOTS@@BP^]C@RHS_AGDDC[AJM_T[GZNRNZAY]GNCPBDYKOLK^_CZFWPGHZIXW@C[AFKBBQS@E@DAZ]VDFUNTQQ]FN
Date: Thu, 29 Mar 2007 00:50:27 GMT
Xref: g2news1.google.com rec.radio.amateur.space:872

Try www.issfanclub.com
Paul KB8CMW
<misterbee03@hotmail.com> wrote in message
news:bhia03d0u1dtrb25nlha7bc979lpc3n8gl@4ax.com...
> Hello.
>
> I just upgraded to general, but ironically, what I want to do right
> now is use 2M to listen to and possibly contact, NA1SS, the ISS.
> Any advice on whena nd how to best approache this is gratly
> appreciated, i am in Califonia and at about 31 degrees north.
> Thanks!
> Kwizzer
>
> " But Sir, the Sahib must be a powerful magician, for each night he
> goes to his tent and pulls out a wooden box, and a sulfurous black
> object, ties them together with silver yarn, and opens the wooden box,
> which contains fire djinns in glass bottles. He then adjusts the dials
> on the front of the box and listens as they speak to him in a thousand
> or more of the different tongues of men until the dawn breaks;
> whereupon he conceals these objects beneath his cot and proceeds to
> fall into a deep sleep...."
>
>

From -3347664948387984180
X-Google-Thread: 10e8ad,22a57d5e552aebb,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news3.google.com!newshub.sdsu.edu!elnk-nf2-pas!newsfeed.earthlink.net!stamper.news.pas.earthlink.net!

newsread3.news.pas.earthlink.net.POSTED!71845594!not-for-mail
From: "Brian Webb" <kd6nrp@earthlink.net>
Newsgroups: rec.radio.amateur.space
Subject: 40-meter Astronomy/Space net
Lines: 34
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 5.50.4807.1700
X-MimeOLE: Produced By Microsoft MimeOLE V5.50.4807.1700
Message-ID: <o1%Oh.19336$Jl.17616@newsread3.news.pas.earthlink.net>
Date: Fri, 30 Mar 2007 02:58:28 GMT
NNTP-Posting-Host: 4.246.144.146
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread3.news.pas.earthlink.net 1175223508 4.246.144.146 (Thu, 29 Mar 2007 18:58:28 PST)
NNTP-Posting-Date: Thu, 29 Mar 2007 18:58:28 PST
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news1.google.com rec.radio.amateur.space:873

Hi Folks:

This is Brian Webb, KD6NRP in Ventura County, Calif. I am in the process of putting together a weekly regional astronomy/space discussion group on amateur radio. Here are the details:

1. Day/Time: Sundays, Noon to 13:00 Pacific Time (19:00 to 20:00 UTC)

2. Frequencies (KHz): 7,247.0 (primary)

7,230.0 (secondary)

7,212.0 (tertiary)

Note that the above frequencies are all in the general class portion of the band.

3. Mode: LSB

4. Geographic Coverage: California, Nevada, Utah, and Arizona

5. Topics: Astronomy, astronmical observing, astronomical events, telescopes and accessories, solar-terrestrial interaction, ionospheric propagation, non-military space activities, high altitude amateur balloons, high altitude amateur rockets, radio astronomy, etc.

The next net will be this Sunday, April 1.

73

Brian Webb, KD6NRP

```
From -5165461845261503831
X-Google-Thread: 10e8ad,22a57d5e552aebb
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII
Path: g2news1.google.com!news1.google.com!out01a.usenetserver.com!
news.usenetserver.com!in04.usenetserver.com!news.usenetserver.com!
news.mailgate.org!nntp.infostrada.it!newsfeed01.sul.t-online.de!t-online.de!
newsfeeder.wxs.nl!divide.nova.planet.nl!posting.nova.planet.nl!not-for-mail
Subject: Re: 40-meter Astronomy/Space net
From: =?ISO-8859-15?Q?Andr=E9,_PE1PQX?= <pe1pqx_geenviagra@planet.nl>
References: <o1%Oh.19336$Jl.17616@newsread3.news.pas.earthlink.net>
Newsgroups: rec.radio.amateur.space
Message-ID: <mn.f2ce7d732df7104c.58901@planet.nl>
X-Newsreader: MesNews/1.06.00.00-nl
Date: Fri, 30 Mar 2007 11:58:04 +0200
MIME-Version: 1.0
X-ICQ: 36290255
Content-Type: text/plain; charset="iso-8859-15"; format=flowed
Content-Transfer-Encoding: 8bit
Lines: 46
NNTP-Posting-Host: 81.206.7.17
X-Trace: 1175248684 text.nova.planet.nl 11743 81.206.7.17:1194
X-Complaints-To: abuse@planet.nl
Xref: g2news1.google.com rec.radio.amateur.space:874

Brian Webb heeft uiteengezet op 30-3-2007 :
> Hi Folks:
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> and accessories, solar-terrestrial interaction, ionospheric propagation,
> non-military space activities, high altitude amateur balloons, high altitude
> amateur rockets, radio astronomy, etc.
```

>
> The next net will be this Sunday, April 1.
>
> 73
>
> Brian Webb, KD6NRP

Hi Brian,

Nice idea, but I have one question:
Dutch full-licenced hams are allowed to use the 40m band in the range
of 7.0 - 7.2 MHz, and Dutch novices from 7.05 - 7.1 MHz.
Why a frequency above 7.2 MHz, or are the 'general licenced' hams not
allowed to use frequencies below 7.2 MHz?

This question is because I am interested in non-military space
activities etc.
73', Andr� PE1PQX

```
From -8387215374320291527
X-Google-Thread: 10e8ad,22a57d5e552aebb
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII
Path: g2news1.google.com!news4.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!local01.nntp.dca.giganews.com!nntp.comcast.com!
news.comcast.com.POSTED!not-for-mail
NNTP-Posting-Date: Fri, 30 Mar 2007 06:20:42 -0500
From: "Dee Flint" <deeflint01@comcast.net>
Newsgroups: rec.radio.amateur.space
References: <o1%Oh.19336$Jl.17616@newsread3.news.pas.earthlink.net>
<mn.f2ce7d732df7104c.58901@planet.nl>
Subject: Re: 40-meter Astronomy/Space net
Date: Fri, 30 Mar 2007 07:20:12 -0400
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.3028
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.3028
X-RFC2646: Format=Flowed; Response
Message-ID: <ObGdnaAO_bYXb5HbnZ2dnUVZ_tyinZ2d@comcast.com>
Lines: 62
NNTP-Posting-Host: 68.61.216.97
X-Trace: sv3-vOd+LbOr0H/6BSqnuynNKl2jSLuAe857EVtblaal4RqgmTFXr4vLM/
lI69qJLrnKXMPPSr+B4pU674J!yQSGHI3VZZVl/
W2o3hij4ozWXfl3lOBRfeFVlhpeUsPGyaNYinFJo8MXfAfqcYMtQ9xAlLEmsGHD!
isJLyybKUSHT+rs56lM11a96kE3x
X-Complaints-To: abuse@comcast.net
X-DMCA-Complaints-To: dmca@comcast.net
X-Abuse-and-DMCA-Info: Please be sure to forward a copy of ALL headers
X-Abuse-and-DMCA-Info: Otherwise we will be unable to process your complaint
properly
```

```
X-Postfilter: 1.3.34
Xref: g2news1.google.com rec.radio.amateur.space:875


"Andr�, PE1PQX" <pe1pqx_geenviagra@planet.nl> wrote in message
news:mn.f2ce7d732df7104c.58901@planet.nl...
> Brian Webb heeft uiteengezet op 30-3-2007 :
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> allowed to use frequencies below 7.2 MHz?
>
> This question is because I am interested in non-military space activities
> etc.
> 73', Andr� PE1PQX
>
>

It's highly unlikely that you will have propagation between your location
and California on 40m at that time of day.  It looks like he's trying to
keep it regional in scope.  I know it would be very rare for me to get
California at that time of day from here in Michigan.

Dee, N8UZE




From -5011310401152793829
X-Google-Thread: 10e8ad,22a57d5e552aebb
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII
Path: g2news1.google.com!news3.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx01.iad01.newshosting.com!newshosting.com!
feeder2.on.meganewsservers.com!meganewsservers.com!
textfeed1.on.meganewsservers.com!newsfeeder.wxs.nl!divide.nova.planet.nl!
posting.nova.planet.nl!not-for-mail
Subject: Re: 40-meter Astronomy/Space net
From: =?ISO-8859-15?Q?Andr=E9,_PE1PQX?= <pe1pqx_geenviagra@planet.nl>
References: <o1%Oh.19336$Jl.17616@newsread3.news.pas.earthlink.net>
<mn.f2ce7d732df7104c.58901@planet.nl>
<ObGdnaAO_bYXb5HbnZ2dnUVZ_tyinZ2d@comcast.com>
Newsgroups: rec.radio.amateur.space
Message-ID: <mn.f4377d731bd193b4.58901@planet.nl>
X-Newsreader: MesNews/1.06.00.00-nl
Date: Fri, 30 Mar 2007 17:59:37 +0200
MIME-Version: 1.0
X-ICQ: 36290255
Content-Type: text/plain; charset="iso-8859-15"; format=flowed
Content-Transfer-Encoding: 8bit
Lines: 68
NNTP-Posting-Host: 81.206.7.17
X-Trace: 1175270377 text.nova.planet.nl 3748 81.206.7.17:3963
X-Complaints-To: abuse@planet.nl
Xref: g2news1.google.com rec.radio.amateur.space:876

Dee Flint heeft uiteengezet op 30-3-2007 :
> "Andr�, PE1PQX" <pe1pqx_geenviagra@planet.nl> wrote in message
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```

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>>>
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>>>
>>>   7,212.0 (tertiary)
>>>
>>>   Note that the above frequencies are all in the general class portion
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>>>
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>>>
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> regional in scope. I know it would be very rare for me to get California at
> that time of day from here in Michigan.
>
> Dee, N8UZE

Hi Dee,

That could be an answer, I'm not very familiar with 40m propagation.

Thanks for your answer.

73, Andr�, PE1PQX

```
From -5423076784529744876
X-Google-Thread: 10e8ad,860d3a23ce316504,start
X-Google-Thread: 10b9c8,860d3a23ce316504,start
X-Google-Attributes: gid10e8ad,gid10b9c8,public
X-Google-Language: ENGLISH,ASCII
Path: g2news1.google.com!news3.google.com!newshub.stanford.edu!bloom-
beacon.mit.edu!panix!rri.panix.com!robomod!not-for-mail
From: "JoAnne Maenpaa" <k9jkm@comcast.net>
Newsgroups: rec.radio.amateur.space,rec.radio.info
Subject: ANS-091 AMSAT News Service Weekly Bulletins
Followup-To: rec.radio.amateur.space
Date: Sun, 1 Apr 2007 16:04:42 EDT
Organization: PANIX Public Access Internet and UNIX, NYC
Lines: 305
Approved: RRI Admin <rec-radio-info-request@panix.com>
Message-ID: <000401c77458$3455f0e0$6601a8c0@familyroom>
NNTP-Posting-Host: panix2.panix.com
X-Trace: reader2.panix.com 1175457974 3140 166.84.1.2 (1 Apr 2007 20:06:14 GMT)
X-Complaints-To: abuse@panix.com
NNTP-Posting-Date: Sun, 1 Apr 2007 20:06:14 +0000 (UTC)
X-RRI-Policy: http://www.panix.com/~rram/usenet/rri/index.html
X-RRI-Info-1: Send submissions to             rec-radio-info@panix.com
X-RRI-Info-2: Send technical complaints to    rec-radio-info-request@panix.com
X-RRI-Info-3: Send complaints about policy to rec-radio-info-request@panix.com
X-Comment-1: The moderators do not necessarily agree or disagree with this
article.
X-Comment-2: Moderators do not verify the accuracy of posted information.
X-Comment-3: Acceptance does not convey approval of any external references.
X-Robomod: STUMP, ichudov@algebra.com (Igor Chudov), C++/Perl/Unix Consulting
X-Moderation-1: Hassle-Free commercial hosting of moderation sites available
X-Moderation-2: See http://www.algebra.com/~ichudov/stump
Xref: g2news1.google.com rec.radio.amateur.space:877 rec.radio.info:230
```

AMSAT NEWS SERVICE
ANS-091

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:

* AMSAT Forum at the 2007 Dayton Hamvention
* April 17 CubeSat Launch
* RAFT Command Stations Needed in Southern USA
* AO-51 Configuration for Field Day
* ARISS Status Report for the Week of March 26, 2007

SB SAT @ AMSAT $ANS-091.01
AMSAT Forum at the 2007 Dayton Hamvention

AMSAT News Service Bulletin 091.01
>From AMSAT HQ SILVER SPRING, MD.
April 1, 2007
To All RADIO AMATEURS
BID: $ANS-091.01
The AMSAT forum at Dayton this year has quite an impressive lineup of speakers and topics. The day and time of the forum has changed from past years and should be more convenient for most attendees. The forum will be on Friday afternoon, May 18, 2007 from 11:15am to 2:00pm.

Speakers and topics during the forum are:

+ Moderator: Barry Baines, WD4ASW, AMSAT-NA Corporate Secretary

+ Rick Hambly, W2GPS, President, AMSAT-NA "Summary of AMSAT-NA Activities in 2007"

+ Peter Guelzow, DB2OS, AMSAT-DL President and Bob McGwier, N4HY, AMSAT-NA VP - Engineering, "Phase 3-Express: An Update"

+ Jim Sanford, WB4GCS, EAGLE Project Manager "Eagle Status Update"

+ Andrew Glasbrenner, KO4MA, AMSAT-NA VP-Operations and Gould Smith, WA4SXM, AO-51 Command Station, "AMSAT-NA Satellite Operations and AO-51 Update"

+ Frank Bauer, KA3HDO, AMSAT-NA Director-Human Space Flight, "ARISS and Future SuitSat Missions"

Mark this event on your calendar and attend the forum to find out the latest information about current AMSAT projects.

AMSAT's initial block of 30 rooms at the Fairfield Hampton Inn has been filled. We have negotiated another 7 rooms (with king bed). If you are interested, please call Martha at AMSAT HQ (301-589-6062) as soon as possible. The AMSAT office is closed until Wednesday, April 4.

[ANS thanks Gould, WA4SXM for the above information]

/EX

SB SAT @ AMSAT $ANS-091.02
April 17 CubeSat Launch

AMSAT News Service Bulletin 091.02
>From AMSAT HQ SILVER SPRING, MD.
April 1, 2007
To All RADIO AMATEURS
BID: $ANS-091.02

The CubeSat launch originally scheduled for March 27 via a ISC Kosmotras Dnepr launch vehicle from Baikonur Cosmodrome, Kazakhstan has been rescheduled to April 17. Four-of-seven CubeSats will be using Amateur Radio frequencies and modes as follows:

CalPoly PolySat CP3
436.845MHz (1W) 1200bps FM AFSK AX.25 (Part-5 experimental license)
http://polysat.calpoly.edu/

CalPoly PolySat CP4
437.325MHz (1W) 1200bps FM AFSK AX.25
http://polysat.calpoly.edu/

University of Louisiana CAPE-1
435.245MHz (1W) 9600bps FM FSK AX.25 and CW telemetry during opposite 30 second intervals using call sign K5USL
http://ulcape.org/wiki/Main_Page
http://ulcape.org/wiki/CAPE1_Telemetry
Forward received telemetry to jd.harrist@gmail.com

Universidad Sergio Arboleda (Colombia) Libertad-1 437.405MHz (400mw)
1200bps FM AFSK AX.25
http://www.usergioarboleda.edu.co/proyecto_espacial/index.htm
http://www.usergioarboleda.edu.co/proyecto_espacial/english_libertad.pdf

Also see http://cubesat.atl.calpoly.edu/
http://showcase.netins.net/web/wallio/CubeSat.htm and
http://showcase.netins.net/web/wallio/ for more information.

Due to the $8k cost of the private webcast last time, the CubeSat team is not doing it again. So, instead, they will be providing live updates on the Cubesat IRC channel. Point your favorite IRC client to #cubesat on irc.freenode.net We will also be providing a MP3 download of launch countdown audio stream a few hours after launch. All of this will be accessible on the CubeSat webpage.

There also is a data packet entry form where you can enter data packets you received (from any satellite) at your earth station. The form is at:
http://cubesat.atl.calpoly.edu/pages/missions/dnepr-launch-2/data-packet-form.php

Preliminary keps:
P-POD A (CP2.1, AeroCube2, CSTB1)

```
1 xxxxxU xxxxxxxx 07086.29310451  .00000000  00000-0  00000-0 0 0000x
2 xxxxx 098.0870 161.6633 0071000 198.4663 339.8290 14.5270000000001x
```

P-POD B (CP3, CAPE1, Libertad-1)

```
1 xxxxxU xxxxxxxx 07086.29312766  .00000000  00000-0  00000-0 0 0000x
2 xxxxx 098.0870 161.6633 0090000 199.4051 339.9000 14.5050000000001x
```

P-POD C (MAST triple-cube)

```
1 xxxxxU xxxxxxxx 07086.29311609  .00000000  00000-0  00000-0 0 0000x
2 xxxxx 098.0870 161.6633 0084000 198.3918 339.9240 14.5160000000001x
```

[ANS thanks Ralph, W�RPK and Bryan Klofas, KF6ZEO at Cal Poly State University for the above information]

/EX

SB SAT @ AMSAT $ANS-091.03
RAFT Command Stations Needed in Southern USA

AMSAT News Service Bulletin 091.03
>From AMSAT HQ SILVER SPRING, MD.
April 1, 2007
To All RADIO AMATEURS
BID: $ANS-091.03

Due to its low orbit and small footprint, the US Naval Academy Satellite Laboratory needs command stations in the Southern USA between Arizona to Georgia to help us conduct the RAFT satellite primary mission of detecting the 218.98 MHz radar fence when it flies through it. Command stations are needed in those states because they are near the radar fence and will be in the footprint of the radar. The ideal command station has these atributes:

1) A reasonable 2m beam for ops on 145.825
2) A packet TNC
3) A familiarity with dumb-terminal TNC operations such as
   A. Connections, Converse, UNPROTO, etc
   B. Remote sysop logon of Kantronics TNC's
4) Desireable, is some experience with UI packets and APRS

The objective of these southern command stations is to logon, send the command to activate the RAFT Radar receiver for 1 minute in anticipation of passing through the fence. Then hopefully recording any audio heard on the downlink (145.825). Once the radar receiver is on, everyone in the footprint should be able to hear it.

For info, see the ANDE-RAFT operations page:
http://eng.usna.navy.mil/~bruninga/ande-raft-ops.html

And for more info on the 216.98 MHz radar receiver, follow the links to the RAFT design pages.

If you meet the criterial above let Bob, WB4APR know.

[ANS thanks Bob, WB4APR at the US Naval Academy Satellite Lab for the above information]

/EX

SB SAT @ AMSAT $ANS-091.04
AO-51 Configuration for Field Day

AMSAT News Service Bulletin 091.04
>From AMSAT HQ SILVER SPRING, MD.
April 1, 2007
To All RADIO AMATEURS
BID: $ANS-091.04

For Field Day this year AO-51 will be in a dual repeater mode, with the following frequencies:

L/U repeater
Uplink 1268.700 FM, no PL tone
Downlink 435.150 FM

V/U repeater
Uplink 145.920 FM, no PL tone
Downlink 435.300 FM

As a reminder, both the AMSAT and now ARRL Field Day rules state only one completed QSO per FM repeater satellite. This is applicable to one per transponder on a single channel fm satellite. However, in the case of AO-51, as two transponders are active, you can make one contact on V/U and one on L/U.

Please adhere to this rule so that others may have an opportunity to make a QSO. Also, all stations are asked to please only transmit when they can hear the satellite, and please use full duplex (with headphones) as a courtesy to the other users.

Those stations planning on using circularly polarized antennas please remember the 435.150 downlink is left hand circular polarization (LHCP), and the 435.300 downlink is right hand circular polarization (RHCP).

Stay tuned to AMSAT ANS bulletins or the AO-51 News page:
http://www.amsat.org/amsat-new/echo/ControlTeam.php for practice sessions of this mode to be scheduled several times between now and Field Day.

73 and Good Luck!
Drew KO4MA
AMSAT VP Operations

[ANS thanks Drew, KO4MA for the above information]

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SB SAT @ AMSAT $ANS-091.05
ARISS Status Report for the Week of March 26, 2007

AMSAT News Service Bulletin 091.05
>From AMSAT HQ SILVER SPRING, MD.
April 1, 2007
To All RADIO AMATEURS
BID: $ANS-091.05

1. University School Contact Successful

On Friday, March 16, students from University School in Shaker Heights, Ohio spoke with Sunita Williams, KD5PLB, via amateur radio. Twelve students asked 14 questions. Approximately 500 students, teachers and parents, as well as several local television and radio stations were present for the Amateur Radio on the ARISS event. Audio was fed into the EchoLink AMSAT (101 377) and JK1ZRW (277 208) servers via Skype and had 19 connections from stations located in 6 countries, including 2 repeaters. Radio station 90.3 FM, WCPN, covered the news. See:
http://www.wcpn.org/news/2007/01-03/0320space.html

2. East Aurora Middle School Contact Successful

East Aurora Middle School in East Aurora, New York experienced an ARISS contact via the telebridge station ZSBTD in South Africa on Monday, March 19. Eleven students each asked one question of Sunita Williams, KD5PLB, as 150 students, teachers, and parents looked on. Three television stations WKBD (ABC), WIVB (CBS), and WGRZ (NBC), and the local newspaper were present to cover the event. East Aurora Union Free Schools� website posted a write up.
See: http://www.eaur.wnyric.org/popup_info.cfm?story=3887

3. Juvenile Space Club Contact Successful

The Juvenile Space Club in Tatsuno, Tatsunomachi, Nagano-pref, Japan experienced an ARISS contact on Saturday, March 24. Mike Lopez-Alegria, KE5GTK, answered one question each posed to him by 16 children in front of an audience of about 100. Four television stations including Japan Broadcasting Corporation (NHK) and four newspapers reported on the event.
The audio file may be found on this web site:
http://www.ariss.jp/tatsuno/Audio/tatsuno.wma
Video from two television stations may be viewed on these sites:
http://sbc21.co.jp/news/index.cgi?page=seventop&date=20070324&id=0118881&action=details
and
http://www.i-nagano.com/nbs-news/2007/03/24181440.html

4. Upcoming School Contacts

Glenden State School in Glenden, Queensland, Australia has been slated for an Amateur Radio on the International Space Station (ARISS) contact on Wednesday, April 4, 2007 at 22:39 UTC. Parents and the community will be invited to Space Week to observe the products of these activities.

Nights of star gazing and poetry contests will also be held. Television, newspapers and magazines have been notified of the event. The audio from this contact will be fed into the EchoLink AMSAT (101 377) and JK1ZRW (277 208) servers, as well as being fed into the IRLP Discovery Reflector 9010.

5. Astronaut Training Status

On Monday, March 27, ESA astronaut Paolo Nespoli, IZ0JPA, will receive training on the basics of performing a school contact at JSC. Nespoli is slated to fly on space shuttle mission STS-120, which will deliver the Harmony module to the ISS.

[ANS thanks Carol, KB3LKI for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM

```
From -4885005827706181800
X-Google-Thread: 10e8ad,e7f6de7aeac8db59,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!postnews.google.com!o5g2000hsb.googlegroups.com!not-for-
mail
From: bill.meara@gmail.com
Newsgroups: rec.radio.amateur.space
Subject: FO-29 on SolderSmoke
Date: 1 Apr 2007 22:45:37 -0700
Organization: http://groups.google.com
Lines: 58
Message-ID: <1175492737.641801.284260@o5g2000hsb.googlegroups.com>
NNTP-Posting-Host: 86.141.197.159
Mime-Version: 1.0
Content-Type: text/plain; charset="iso-8859-1"
X-Trace: posting.google.com 1175492739 2651 127.0.0.1 (2 Apr 2007 05:45:39 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Mon, 2 Apr 2007 05:45:39 +0000 (UTC)
User-Agent: G2/1.0
X-HTTP-UserAgent: Mozilla/4.0 (compatible; MSIE 7.0; Windows NT 5.1; .NET CLR
1.1.4322; .NET CLR 2.0.50727),gzip(gfe),gzip(gfe)
Complaints-To: groups-abuse@google.com
Injection-Info: o5g2000hsb.googlegroups.com; posting-host=86.141.197.159;
   posting-account=7vRsuQwAAADlh58wGAIfEFYQRw36eW7d
```

Xref: g2news1.google.com rec.radio.amateur.space:878

SolderSmoke!
A SHOW FOR ELECTRONICS HOMEBREWERS!

http://www.soldersmoke.com

Listen at: http://www.soldersmoke.com

SolderSmoke #52

April 1, 2007

-- Excelsior! Jean Shepherd's stories about ham radio.
-- Legislation to ban hobbyist soldering.
-- History of LTSpice.
-- Workbench update.
-- SPECIAL GUEST EDITION OF BANDSWEEP: A satellite pass over M0DHP.
-- MAILBAG: Using an AM radio to interfere with the Chicago White Sox. SolderSmoke in 1930.

Tired of listening to Frank Sinatra or NPR on your I-Pod?   Wouldn't you like to be able to carry with you the kinds of ham radio conversations that you listen to while in your radio shack? Tune in to SolderSmoke!

RSS FEED: You can subscribe to the program, have them downloaded to your MP-3 player, and listen to them at your convenience. To subscribe, just cut and paste this URL into your I-poder (or similar) software.
http://www.soldersmoke.com/soldersmoke.rss

If you don't have an MP3 player you can just go to the site below and listen to the latest program (and earlier editions) using the audio software on your computer.

http://www.soldersmoke.com

All the programs are available here.

I hope you enjoy the program. Please send us feedback.

73 from London
Bill M0HBR N2CQR CU2JL
http://www.gadgeteer.us

From -8982672266126075587
X-Google-Thread: 10e8ad,4f59cc8085382b49
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!postnews.google.com!n59g2000hsh.googlegroups.com!not-for-mail
From: gerheim@cox.net
Newsgroups: rec.radio.amateur.space
Subject: Re: Beginner questions...
Date: 3 Apr 2007 06:11:39 -0700
Organization: http://groups.google.com
Lines: 54
Message-ID: <1175605899.430319.309640@n59g2000hsh.googlegroups.com>
References: <m2y7lkov6q.fsf@kanga.phuff.dsl.xmission.com>
NNTP-Posting-Host: 199.46.252.109
Mime-Version: 1.0
Content-Type: text/plain; charset="iso-8859-1"
X-Trace: posting.google.com 1175605901 21385 127.0.0.1 (3 Apr 2007 13:11:41 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Tue, 3 Apr 2007 13:11:41 +0000 (UTC)
In-Reply-To: <m2y7lkov6q.fsf@kanga.phuff.dsl.xmission.com>
User-Agent: G2/1.0
X-HTTP-UserAgent: Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1; SV1; .NET CLR 1.1.4322),gzip(gfe),gzip(gfe)
Complaints-To: groups-abuse@google.com
Injection-Info: n59g2000hsh.googlegroups.com; posting-host=199.46.252.109;
   posting-account=xL7dLw0AAACl6MW9J0-Q9muHzRcVC7T3
Xref: g2news1.google.com rec.radio.amateur.space:879

On Mar 26, 11:56 am, Paul Huff <paul.h...@gmail.com> wrote:
> I'm starting to get back into amateur radio after what's practically
> been something like a 10 year hiatus... :) I read a bit about
> sattelites the other night, and I thought I'd post hear and ask for
> advice on finding an easy target... The problem is my gear is limited
> to a 2-meter HT, with whatever extra antenna-ing I can concoct. I've got a
> little self-built j-pole made out of ladder line, but I imagine that
> might not be the right kind of antenna for this kind of work.
>
> So, within those limitations (2-meter only, fairly not good antennas),
> and given that I'm in the South West United States (Utah), can anybody
> recommend a good target for a beginner?
>
> Thanks,
> -Paul KC8IGJ

This would normally be a fun thing to do. For the first time in years, there are no satellites (that I'm aware of) that you can hit with an HT and a simple antenna. NO-44 (PCSAT-1) and ARISS are both dead now. NO-44 is expected to come alive again when it's in full sun in the Summer. ARISS has been dead due to "audio problems" for several months. Please don't get me started on ISS. (Short version: a waste of money _and_ life. The only thing they're doing up there that touches lives on earth is operate ham radio, and even that's dead now.)

You might want to look into AO-51, which has a crossband FM repeater. (I think there are 1 or 2 other satellites with the same functionality.) You'll need a full duplex dual band (5 watt, 2 meter - 70 cm) HT with an "arrow" antenna, or some other gain antenna, plus tracking capability. The "arrow" is designed to be aimed by hand. The problem I encountered with the FM repeater satellites is that they have only 1 channel. It's very nerve-wracking to try to make a QSO if you live in an area with a lot of ham activity. Come to think of it, it would probably be hard to get a QSO if you lived in the mid-pacific, too...

When ARISS and/or PCSAT are in operation, the link is just great, even with a rubber duckie antenna and 5 watts of RF. I've even exchanged packets with PCSAT by accident while the car was warming up.

http://www.findu.com/cgi-bin/pcsat.cgi
http://www.findu.com/cgi-bin/ariss/index.cgi

This page is notoriously inaccurate with regard to APRS and packet listings:
http://www.amsat.org/amsat-new/satellites/status.php

Also, if you happen to have an HP-49 or -50, and need some tracking software for it:
http://members.cox.net/above

From 4174702221273270867
X-Google-Thread: 10e8ad,4b37a00aa79251ba,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news1.google.com!news4.google.com!
border1.nntp.dca.giganews.com!nntp.giganews.com!local01.nntp.dca.giganews.com!
nntp.comcast.com!news.comcast.com.POSTED!not-for-mail
NNTP-Posting-Date: Tue, 12 Dec 2006 16:40:56 -0600
From: "Ron" <rdmw6kj@comcast.net>
Newsgroups: rec.radio.amateur.space
Subject: FT847 & FC-20 for sale
Date: Tue, 12 Dec 2006 14:41:01 -0800

```
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.2869
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.2962
X-RFC2646: Format=Flowed; Original
Message-ID: <hdWdnZWnVq5lsuLYnZ2dnUVZ_rGinZ2d@comcast.com>
Lines: 7
NNTP-Posting-Host: 67.169.235.104
X-Trace: sv3-bZJYkwldp4v7F5plqnGpWLDAzN0O/JxwqUw6RuSy+ij2rO+pmEvtRRE3qFEs/cw/
C336+6BUaFBIiZx!
ULOrLGlR4Z6S5AH0rFH9lMCAt7f6wpsKUjZLuDyr4vP+xB4u9cS+RQF864fFaebwO3l4P0Vh6+hl!
VVb6jCskAfen4w==
X-Complaints-To: abuse@comcast.net
X-DMCA-Complaints-To: dmca@comcast.net
X-Abuse-and-DMCA-Info: Please be sure to forward a copy of ALL headers
X-Abuse-and-DMCA-Info: Otherwise we will be unable to process your complaint
properly
X-Postfilter: 1.3.32
Xref: g2news2.google.com rec.radio.amateur.space:532

My Yaesu FT847, power cord, hand mic, manual, and FC-20 for sale $950
delivered in the lower 48. Rig and tuner in very good condition, original
manual.
Contact W6KJ, w6kj@arrl.net
73, Ron




From -6931927230850229227
X-Google-Thread: 10bb69,af3a945b40f29083
X-Google-Thread: fc521,af3a945b40f29083
X-Google-Thread: f84d8,5228070b6e104c77
X-Google-Thread: 10e8ad,41180496b69c09cf
X-Google-Thread: 104a10,41180496b69c09cf
X-Google-Attributes: gid10bb69,gidfc521,gidf84d8,gid10e8ad,gid104a10,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news2.google.com!news4.google.com!
border1.nntp.dca.giganews.com!nntp.giganews.com!nx01.iad01.newshosting.com!
newshosting.com!post01.iad01!news.newsdemon.com!not-for-mail
Message-ID: <45804091.C46D4120@peace.net>
Date: Wed, 13 Dec 2006 13:04:01 -0500
From: fritz <love@peace.net>
X-Mailer: Mozilla 4.76 [en] (Windows NT 5.0; U)
X-Accept-Language: en
MIME-Version: 1.0
Newsgroups:
alt.politics.homosexuality,alt.education,alt.dbs.directv,rec.radio.amateur.space,r
ec.food.drink.beer
Subject: Re: Sexual fascism and the Mark Foley scandel
References: <1159881994.642663.229430@h48g2000cwc.googlegroups.com>
        <1162066010.997111.45530@i42g2000cwa.googlegroups.com>
        <1164787817.495319.179220@j44g2000cwa.googlegroups.com>
        <T7fbh.54807$39.24787@southeast.rr.com>
        <1165311819.048659.210350@l12g2000cwl.googlegroups.com>
        <1165425943.817914.20640@l12g2000cwl.googlegroups.com>
        <he0en2p9uadn83m20caa7plngati5jt6b0@4ax.com>
        <1165427339.761425.223410@79g2000cws.googlegroups.com>
        <1165427779.888588.130580@l12g2000cwl.googlegroups.com>
        <zxDdh.7018$ya1.6667@news02.roc.ny>
        <1165430497.064806.191380@n67g2000cwd.googlegroups.com>
        <YjUdh.7086$ya1.4050@news02.roc.ny>
<1165571427.549773.55410@16g2000cwy.googlegroups.com>
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Lines: 70
Organization: news.newsdemon.com
X-Complaints-To: abuse@newsdemon.com
Xref: g2news2.google.com alt.politics.homosexuality:168153 alt.education:44721
alt.dbs.directv:4104 rec.radio.amateur.space:533 rec.food.drink.beer:2456

bobandcarole wrote:

> gwatts wrote:
> > bobandcarole wrote:
> > > gwatts wrote:
> > >
> > >>bobandcarole wrote:
> > >>
> > >>>bobandcarole wrote:
> > >>>
> > >>>
> > >>>>M...@kb9rqz.aprs wrote:
> > >>>>
> > >>>>
> > >>>>>On 6 Dec 2006 09:25:43 -0800, "bobandcarole"
> > >>>>><bobandcarole1010@hotmail.com> wrote:
> > >>>>>
> > >>>>>
> > >>>>>
> > >>>>>>>Apparently, Rep. Mark Foley is homosexual. And like many homosexual
> > >>>>>>>men, he likes young teen boys. We should pray for him that he gets a
> > >>>>>>>handle on this problem and refrains from harming any more kids.
> > >>>>>>>
> > >>>>>>>
> > >>>>>>>Meanwhile, we need to wake up. The fact that this is typical behavior
> > >>>>>>>for homosexuals doesn't stop us from continuing to elevate such folks
> > >>>>>>>to positions where they gain access to our kids.
> > >>>>>>>
> > >>>>>>>
> > >>>>>>>http://worldnetdaily.com/news/article.asp?ARTICLE_ID=52244
> > >>>>>
> > >>>>>don't ever get tried of spreading hate?
> > >>>>
> > >>>>You confuse truth with hate.
> > >>
> > >>And you confuse rec.radio.amateur.space with a newsgroup that gives a
> > >>damn about your whiny, misleading, unsubstantiated spewage.
> > >
> > > And I take you have proof that it's "misleading"??
> >
> > You said 'typical behavior,' prove it.
> >
> > > Or are you blowing smoke out of your canyon ass?
> >
> > For someone so anti-homosexual you sure have a lot of fascination with
> > 'canyon asses.'
>
> Lie #1
> >
> > What do you know about 'typical behavior for homosexuals,'
>
> Well lets see, they buttfuck each other and ingest cum, that's bad
> enough

Heterosexuals do that too, so what?

>  have any
> > citations from recognized, peer reviewed publications?
>
> http://worldnetdaily.com/news/article.asp?ARTICLE_ID=52244

Right wing communist rag.

--

Fritz ...

 Save a horse, ride a cowboy.
```

```
--
Posted via NewsDemon.com - Premium Uncensored Newsgroup Service
      ------->>>>>>http://www.NewsDemon.com<<<<<<------
Unlimited Access, Anonymous Accounts, Uncensored Broadband Access
```

```
From 4346954050525698084
X-Google-Thread: 10bb69,af3a945b40f29083
X-Google-Thread: fc521,af3a945b40f29083
X-Google-Thread: f84d8,5228070b6e104c77
X-Google-Thread: 10e8ad,41180496b69c09cf
X-Google-Thread: 104a10,41180496b69c09cf
X-Google-Attributes: gid10bb69,gidfc521,gidf84d8,gid10e8ad,gid104a10,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news3.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx01.iad01.newshosting.com!newshosting.com!post01.iad01!
news.newsdemon.com!not-for-mail
```

Message-ID: <458041B9.CE59AB85@peace.net>
Date: Wed, 13 Dec 2006 13:08:57 -0500
From: fritz <love@peace.net>
X-Mailer: Mozilla 4.76 [en] (Windows NT 5.0; U)
X-Accept-Language: en
MIME-Version: 1.0
Newsgroups:
alt.politics.homosexuality,alt.education,alt.dbs.directv,rec.radio.amateur.space,r
ec.food.drink.beer
Subject: Re: spaming hate monger
References: <1159881994.642663.229430@h48g2000cwc.googlegroups.com>
<1162066010.997111.45530@i42g2000cwa.googlegroups.com>
<1164787817.495319.179220@j44g2000cwa.googlegroups.com>
<T7fbh.54807$39.24787@southeast.rr.com>
<1165311819.048659.210350@l12g2000cwl.googlegroups.com>
<1165425943.817914.20640@l12g2000cwl.googlegroups.com>
<he0en2p9uadn83m20caa7plngati5jt6b0@4ax.com> <LuWdnYQINLeP_-
TYnZ2dnUVZ_vCdnZ2d@adelphia.com>
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Lines: 14
Organization: news.newsdemon.com
X-Complaints-To: abuse@newsdemon.com
Xref: g2news2.google.com alt.politics.homosexuality:168159 alt.education:44722
alt.dbs.directv:4105 rec.radio.amateur.space:534 rec.food.drink.beer:2457

John Doe wrote:

> AND WHY DO WE NEED THIS KIND OF POSTING IN A GROUP THAT HAS NOTHING TO DO
> WITH THE SUBJECT? NAMELY AMATEUR RADIO!

Because "bobandcarole" wish it that way, so shut up and read.

--

Fritz ...

Save a horse, ride a cowboy.

--
Posted via NewsDemon.com - Premium Uncensored Newsgroup Service
------->>>>>>http://www.NewsDemon.com<<<<<<------
Unlimited Access, Anonymous Accounts, Uncensored Broadband Access

From 1552816823946210003
X-Google-Thread: 10bb69,af3a945b40f29083
X-Google-Thread: fc521,af3a945b40f29083
X-Google-Thread: f84d8,5228070b6e104c77
X-Google-Thread: 10e8ad,41180496b69c09cf
X-Google-Thread: 104a10,41180496b69c09cf

X-Google-Attributes: gid10bb69,gidfc521,gidf84d8,gid10e8ad,gid104a10,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news1.google.com!news3.google.com!news.glorb.com!nntpserver.com!zeus.nntpserver.com!hydra.nntpserver.com!not-for-mail
From: Mark@kb9rqz.aprs
Newsgroups: alt.politics.homosexuality,alt.education,alt.dbs.directv,rec.radio.amateur.space,rec.food.drink.beer
Subject: Re: spaming hate monger
Date: Wed, 13 Dec 2006 16:55:41 -0500
Message-ID: <9mt0o2pgf9202rflbpr0b5n92becm9msu8@4ax.com>
References: <1159881994.642663.229430@h48g2000cwc.googlegroups.com>
<1162066010.997111.45530@i42g2000cwa.googlegroups.com>
<1164787817.495319.179220@j44g2000cwa.googlegroups.com>
<T7fbh.54807$39.24787@southeast.rr.com>
<1165311819.048659.210350@l12g2000cwl.googlegroups.com>
<1165425943.817914.20640@l12g2000cwl.googlegroups.com>
<he0en2p9uadn83m20caa7plngati5jt6b0@4ax.com> <LuWdnYQINLeP_-TYnZ2dnUVZ_vCdnZ2d@adelphia.com> <458041B9.CE59AB85@peace.net>
X-Newsreader: Forte Free Agent 3.3/32.846
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Lines: 17
NNTP-Posting-Date: 13 Dec 2006 21:01:12 GMT
X-Complaints-To: abuse@teranews.com
Xref: g2news2.google.com alt.politics.homosexuality:168221 alt.education:44737 alt.dbs.directv:4108 rec.radio.amateur.space:535 rec.food.drink.beer:2459

On Wed, 13 Dec 2006 13:08:57 -0500, fritz <love@peace.net> wrote:

>John Doe wrote:
>
>> AND WHY DO WE NEED THIS KIND OF POSTING IN A GROUP THAT HAS NOTHING TO DO
>> WITH THE SUBJECT? NAMELY AMATEUR RADIO!
>
>Because "bobandcarole" wish it that way, so shut up and read.

or ignore the thread if you don't want to read it
>
>--
>
>Fritz ...
>
> Save a horse, ride a cowboy.
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com

From 1787948893276175653

```
X-Google-Thread: 10bb69,af3a945b40f29083
X-Google-Thread: fc521,af3a945b40f29083
X-Google-Thread: f84d8,5228070b6e104c77
X-Google-Thread: 10e8ad,41180496b69c09cf
X-Google-Thread: 104a10,41180496b69c09cf
X-Google-Attributes: gid10bb69,gidfc521,gidf84d8,gid10e8ad,gid104a10,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news4.google.com!news3.google.com!
border1.nntp.dca.giganews.com!nntp.giganews.com!nx01.iad01.newshosting.com!
newshosting.com!post02.iad01!news.newsdemon.com!not-for-mail
Message-ID: <458185C2.6D2624B8@peace.net>
Date: Thu, 14 Dec 2006 12:11:30 -0500
From: fritz <love@peace.net>
X-Mailer: Mozilla 4.76 [en] (Windows NT 5.0; U)
X-Accept-Language: en
MIME-Version: 1.0
Newsgroups:
alt.politics.homosexuality,alt.education,alt.dbs.directv,rec.radio.amateur.space,r
ec.food.drink.beer
Subject: Re: spaming hate monger
References: <1159881994.642663.229430@h48g2000cwc.googlegroups.com>
<1162066010.997111.45530@i42g2000cwa.googlegroups.com>
<1164787817.495319.179220@j44g2000cwa.googlegroups.com>
<T7fbh.54807$39.24787@southeast.rr.com>
<1165311819.048659.210350@l12g2000cwl.googlegroups.com>
<1165425943.817914.20640@l12g2000cwl.googlegroups.com>
<he0en2p9uadn83m20caa7plngati5jt6b0@4ax.com> <LuWdnYQINLeP_-
TYnZ2dnUVZ_vCdnZ2d@adelphia.com> <458041B9.CE59AB85@peace.net>
<9mt0o2pgf9202rflbpr0b5n92becm9msu8@4ax.com>
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Lines: 23
Organization: news.newsdemon.com
X-Complaints-To: abuse@newsdemon.com
Xref: g2news2.google.com alt.politics.homosexuality:168371 alt.education:44794
alt.dbs.directv:4119 rec.radio.amateur.space:536 rec.food.drink.beer:2460

Mark@kb9rqz.aprs wrote:

> On Wed, 13 Dec 2006 13:08:57 -0500, fritz <love@peace.net> wrote:
>
> >John Doe wrote:
> >
> >> AND WHY DO WE NEED THIS KIND OF POSTING IN A GROUP THAT HAS NOTHING TO DO
> >> WITH THE SUBJECT? NAMELY AMATEUR RADIO!
> >
> >Because "bobandcarole" wish it that way, so shut up and read.
>
> or ignore the thread if you don't want to read it

Can't do that, "bobandcarole" will get angry and call you
a fag, or some other fancy name for homos.
```

--

Fritz ...

Save a horse, ride a cowboy.

--
Posted via NewsDemon.com - Premium Uncensored Newsgroup Service
------->>>>>>http://www.NewsDem

From 1226911428347961904
X-Google-Thread: 10bb69,af3a945b40f29083
X-Google-Thread: fc521,af3a945b40f29083
X-Google-Thread: f84d8,5228070b6e104c77
X-Google-Thread: 10e8ad,41180496b69c09cf
X-Google-Thread: 104a10,41180496b69c09cf
X-Google-Attributes: gid10bb69,gidfc521,gidf84d8,gid10e8ad,gid104a10,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news3.google.com!border1.nntp.dca.giganews.com!nntp.giganews.com!nx02.iad01.newshosting.com!newshosting.com!news-spur1.maxwell.syr.edu!news.maxwell.syr.edu!nntpserver.com!zeus.nntpserver.com!hydra.nntpserver.com!not-for-mail
From: Mark@kb9rqz.aprs
Newsgroups: alt.politics.homosexuality,alt.education,alt.dbs.directv,rec.radio.amateur.space,rec.food.drink.beer
Subject: Re: spaming hate monger
Date: Thu, 14 Dec 2006 13:56:23 -0500
Message-ID: <mg73o29skvh58os4edi0dem4ok36gnklsh@4ax.com>
References: <1162066010.997111.45530@i42g2000cwa.googlegroups.com> <1164787817.495319.179220@j44g2000cwa.googlegroups.com> <T7fbh.54807$39.24787@southeast.rr.com> <1165311819.048659.210350@l12g2000cwl.googlegroups.com> <1165425943.817914.20640@l12g2000cwl.googlegroups.com> <he0en2p9uadn83m20caa7plngati5jt6b0@4ax.com> <LuWdnYQINLeP_-TYnZ2dnUVZ_vCdnZ2d@adelphia.com> <458041B9.CE59AB85@peace.net> <9mt0o2pgf9202rflbpr0b5n92becm9msu8@4ax.com> <458185C2.6D2624B8@peace.net>
X-Newsreader: Forte Free Agent 3.3/32.846
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Lines: 27
NNTP-Posting-Date: 14 Dec 2006 18:01:53 GMT
X-Complaints-To: abuse@teranews.com
Xref: g2news2.google.com alt.politics.homosexuality:168386 alt.education:44798 alt.dbs.directv:4123 rec.radio.amateur.space:537 rec.food.drink.beer:2461

On Thu, 14 Dec 2006 12:11:30 -0500, fritz <love@peace.net> wrote:

>Mark@kb9rqz.aprs wrote:

```
>
>> On Wed, 13 Dec 2006 13:08:57 -0500, fritz <love@peace.net> wrote:
>>
>> >John Doe wrote:
>> >
>> >> AND WHY DO WE NEED THIS KIND OF POSTING IN A GROUP THAT HAS NOTHING TO DO
>> >> WITH THE SUBJECT? NAMELY AMATEUR RADIO!
>> >
>> >Because "bobandcarole" wish it that way, so shut up and read.
>>
>> or ignore the thread if you don't want to read it
>
>Can't do that, "bobandcarole" will get angry and call you
>a fag, or some other fancy name for homos.
or call you a child molestor the gay stuff doesn't seem to be enough
any more the slime keeps escalating not sure where it is headed and I
don't want to know but I know I will learn wether I want to or not
>
>--
>
>Fritz ...
>
> Save a horse, ride a cowboy.
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com



From 2322081101645200676
X-Google-Thread: 10bb69,af3a945b40f29083
X-Google-Thread: fc521,af3a945b40f29083
X-Google-Thread: f84d8,5228070b6e104c77
X-Google-Thread: 10e8ad,41180496b69c09cf
X-Google-Thread: 104a10,41180496b69c09cf
X-Google-Attributes: gid10bb69,gidfc521,gidf84d8,gid10e8ad,gid104a10,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!postnews.google.com!f1g2000cwa.googlegroups.com!not-for-
mail
From: "bobandcarole" <bobandcarole222@hotmail.com>
Newsgroups:
alt.politics.homosexuality,alt.education,alt.dbs.directv,rec.radio.amateur.space,r
ec.food.drink.beer
Subject: Re: spaming hate monger
Date: 14 Dec 2006 11:41:38 -0800
Organization: http://groups.google.com
Lines: 20
Message-ID: <1166125297.982343.321750@f1g2000cwa.googlegroups.com>
References: <1159881994.642663.229430@h48g2000cwc.googlegroups.com>
   <1162066010.997111.45530@i42g2000cwa.googlegroups.com>
   <1164787817.495319.179220@j44g2000cwa.googlegroups.com>
   <T7fbh.54807$39.24787@southeast.rr.com>
   <1165311819.048659.210350@l12g2000cwl.googlegroups.com>
   <1165425943.817914.20640@l12g2000cwl.googlegroups.com>
   <he0en2p9uadn83m20caa7plngati5jt6b0@4ax.com>
   <LuWdnYQINLeP_-TYnZ2dnUVZ_vCdnZ2d@adelphia.com>
   <458041B9.CE59AB85@peace.net>
   <9mt0o2pgf9202rflbpr0b5n92becm9msu8@4ax.com>
   <458185C2.6D2624B8@peace.net>
NNTP-Posting-Host: 64.12.116.203
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"
X-Trace: posting.google.com 1166125304 4007 127.0.0.1 (14 Dec 2006 19:41:44 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Thu, 14 Dec 2006 19:41:44 +0000 (UTC)
In-Reply-To: <458185C2.6D2624B8@peace.net>
User-Agent: G2/1.0
X-HTTP-UserAgent: Mozilla/4.0 (compatible; MSIE 6.0; AOL 9.0; Windows NT 5.1;
SV1),gzip(gfe),gzip(gfe)
X-HTTP-Via: HTTP/1.1 (Velocity/1.3.32 [uScMs f p eN:t cCMp s ]), HTTP/1.1 Turboweb
[mtc-ta041 8.4.1], HTTP/1.1 cache-mtc-ad09.proxy.aol.com[400C74CB] (Traffic-
Server/6.1.3 [uScM])
Complaints-To: groups-abuse@google.com
Injection-Info: f1g2000cwa.googlegroups.com; posting-host=64.12.116.203;
   posting-account=8y_KBA0AAAD6oI_1UYadfCUsatFWtsdV
Xref: g2news2.google.com alt.politics.homosexuality:168397 alt.education:44800
alt.dbs.directv:4124 rec.radio.amateur.space:538 rec.food.drink.beer:2462


fritz wrote:
> Mark@kb9rqz.aprs wrote:
>
> > On Wed, 13 Dec 2006 13:08:57 -0500, fritz <love@peace.net> wrote:
> >
> > >John Doe wrote:
> > >
> > >> AND WHY DO WE NEED THIS KIND OF POSTING IN A GROUP THAT HAS NOTHING TO DO
> > >> WITH THE SUBJECT? NAMELY AMATEUR RADIO!
> > >
> > >Because "bobandcarole" wish it that way, so shut up and read.
Ah, you've learned your place.
> >
> > or ignore the thread if you don't want to read it
>
> Can't do that, "bobandcarole" will get angry and call you
> a fag, or some other fancy name for homos.
Yep, we call a spade a spade........



From -1347223305591790179
X-Google-Thread: 10bb69,af3a945b40f29083
X-Google-Thread: fc521,af3a945b40f29083
X-Google-Thread: f84d8,5228070b6e104c77
X-Google-Thread: 10e8ad,41180496b69c09cf
```

```
X-Google-Thread: 104a10,41180496b69c09cf
X-Google-Attributes: gid10bb69,gidfc521,gidf84d8,gid10e8ad,gid104a10,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news3.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!local01.nntp.dca.giganews.com!nntp.bresnan.com!
news.bresnan.com.POSTED!not-for-mail
NNTP-Posting-Date: Thu, 14 Dec 2006 13:47:09 -0600
Date: Thu, 14 Dec 2006 12:47:27 -0700
From: Newps <nowhere@nowhere.com>
User-Agent: Mozilla/5.0 (Windows; U; Windows NT 5.1; en-US; rv:1.7.2) Gecko/
20040804 Netscape/7.2 (ax)
X-Accept-Language: en-us, en
MIME-Version: 1.0
Newsgroups:
alt.politics.homosexuality,alt.education,alt.dbs.directv,rec.radio.amateur.space,r
ec.food.drink.beer
Subject: Re: spaming hate monger
References: <1159881994.642663.229430@h48g2000cwc.googlegroups.com>
<1162066010.997111.45530@i42g2000cwa.googlegroups.com>
<1164787817.495319.179220@j44g2000cwa.googlegroups.com>
<T7fbh.54807$39.24787@southeast.rr.com>
<1165311819.048659.210350@l12g2000cwl.googlegroups.com>
<1165425943.817914.20640@l12g2000cwl.googlegroups.com>
<he0en2p9uadn83m20caa7plngati5jt6b0@4ax.com>   <LuWdnYQINLeP_-
TYnZ2dnUVZ_vCdnZ2d@adelphia.com>   <458041B9.CE59AB85@peace.net>
<9mt0o2pgf9202rflbpr0b5n92becm9msu8@4ax.com>   <458185C2.6D2624B8@peace.net>
<1166125297.982343.321750@f1g2000cwa.googlegroups.com>
In-Reply-To: <1166125297.982343.321750@f1g2000cwa.googlegroups.com>
Content-Type: text/plain; charset=us-ascii; format=flowed
Content-Transfer-Encoding: 7bit
Message-ID: <hMidnVDf2NKgNxzYnZ2dnUVZ_tjinZ2d@bresnan.com>
Lines: 13
NNTP-Posting-Host: 69.144.161.227
X-Trace: sv3-qXUnHIJ+uw1OyGi8nck/AUHkduRRKKTp/m93vcoqtFxgvJ/hkk/
SvKIin90IQHCdb+dEPCykqyirklv!DPgIotUt0eG1UcsY7UaXDOC84r6b99w/
pPWRps5BMUKEwt4itWocLvEccJfJqM27ZrEAeoqzMDfI!VOwdHvTaYRje6w==
X-Complaints-To: abuse@bresnan.net
X-DMCA-Complaints-To: abuse@bresnan.net
X-Abuse-and-DMCA-Info: Please be sure to forward a copy of ALL headers
X-Abuse-and-DMCA-Info: Otherwise we will be unable to process your complaint
properly
X-Postfilter: 1.3.32
Xref: g2news2.google.com alt.politics.homosexuality:168399 alt.education:44802
alt.dbs.directv:4125 rec.radio.amateur.space:539 rec.food.drink.beer:2463
```

> fritz wrote:

>>
>>Can't do that, "bobandcarole" will get angry and call you
>>a fag, or some other fancy name for homos.

And we care what a 12 year old says why?

From 7914377226003179498
X-Google-Thread: 10e8ad,84e87658c310a128,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news2.google.com!news.maxwell.syr.edu!sn-xt-sjc-05!sn-xt-sjc-08!sn-post-sjc-01!supernews.com!corp.supernews.com!not-for-mail
From: "John" <j9432716m@yahoo.ca>
Newsgroups: rec.radio.amateur.space
Subject: North American dealer list for az-el rotators and controllers
Date: Fri, 15 Dec 2006 11:18:47 -0800
Organization: Posted via Supernews, http://www.supernews.com
Message-ID: <12o5t8emcqg9l81@corp.supernews.com>
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.3028
X-RFC2646: Format=Flowed; Original
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.3028
X-Complaints-To: abuse@supernews.com
Lines: 12
Xref: g2news2.google.com rec.radio.amateur.space:540

I'm looking for a North American dealer list for az-el rotators and controllers that can be used in ham satellite service.

Any info or related links would be appreciated.

Thanks,

John

From 3458195602428276253
X-Google-Thread: 10e8ad,44cee7ca4e596281,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news4.google.com!border1.nntp.dca.giganews.com!nntp.giganews.com!local01.nntp.dca.giganews.com!nntp.comcast.com!news.comcast.com.POSTED!not-for-mail
NNTP-Posting-Date: Fri, 15 Dec 2006 13:27:58 -0600
From: "JoAnne K9JKM" <k9jkm_remove_@comcast.net>
Newsgroups: rec.radio.amateur.space
Subject: WSR-345 AMSAT Weekly Satellite Report

```
Date: Fri, 15 Dec 2006 13:28:05 -0600
MIME-Version: 1.0
Content-Type: text/plain;
     format=flowed;
     charset="iso-8859-1";
     reply-type=original
Content-Transfer-Encoding: 7bit
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.3028
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.3028
Message-ID: <HZudnesfWNOjah_YnZ2dnUVZ_vWtnZ2d@comcast.com>
Lines: 979
NNTP-Posting-Host: 67.184.169.1
X-Trace: sv3-
kpt7Zr3q5MxQEksydflCHfBhPcHbVy2IO2qHKoBvVAsKyFoNnYo0gTAzUffwrEsyBRv54GXh0VOHHIw!
tWODZpFJD/FPMG2R+GKIRTaLBcwRZdpQWmSaXO+C4acaR2ghl8P3YUCvmxeBvFB3lgkw52Xg+wm2!
r8I7LKRFU/+VoAM=
X-Complaints-To: abuse@comcast.net
X-DMCA-Complaints-To: dmca@comcast.net
X-Abuse-and-DMCA-Info: Please be sure to forward a copy of ALL headers
X-Abuse-and-DMCA-Info: Otherwise we will be unable to process your complaint
properly
X-Postfilter: 1.3.32
Xref: g2news2.google.com rec.radio.amateur.space:541
```

This report is organized into 4 parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites

SB SAT @ AMSAT W8ISS ANS-345.S1
WSR 345 Part 1 12/11/2006

AMSAT NEWS SERVICE BULLETIN 345.S1 FROM AMSAT HQ
SILVER SPRING, MD, December 11, 2006
TO ALL RADIO AMATEURS
BID: $ANS-345.S1

VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/V - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 MHz to 435.280 MHz LSB/CW
Downlink: 145.870 MHz to 145.930 MHz USB/CW

Dutch Transponder:

```
Uplink:   435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW


Indian Beacon:  145.859330 MHZ CW
Dutch Beacon:   145.860MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsat.in/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is
active. Each transponder has a different beacon.
[10022006]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational
Current Mode(s): FM Repeater - V/U - Tone
                 PBBS -        V/U - 9k6 PBP
                 Digipeater -  OFF

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink:   145.880 MHZ FM
                       145.880 MHz USB
                       145.920 MHz FM 67Hz PL tone
                      1268.700 MHz FM 67Hz PL tone
Digital Downlinks:     435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
                       435.150 MHz FM, 9k6 Digital, Pacsat Broadcast
Protocol
                      2401.200 MHz FM, 38k4 bps, AX.25
Digital Uplink:        145.860 MHz FM, 9k6 Digital, Pacsat Broadcast
Protocol
                      1268.700 mhz FM, 9k6 PBP Digital

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12
```

```
Official Webpage: http://www.amsat.org/amsat-new/echo/
[11013006]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Uplink:   145.850 MHz (67.0 Hz PL tone) (See below for operating
procedures)
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The order of operation is thus: (allow for Doppler as necessary)
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute
timer
   on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the
repeater
   on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset
the 10
   minute timer.
[04172006]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: OPERATIONAL

Voice/CW Mode JA
Uplink:   145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon:   435.795 MHz

Digital Mode JD
Uplink:   145.850 145.870 145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP
```

unOfficial Webpage: http://www.amsat.org/amsat-new/satellites/
satInfo.php?satID=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's CW
telemetry downlink:
http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts.htm
[11202006]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational?

Uplink: 145.850 MHz FM
Downlink: 436.795 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

This off the AO-27 website:
For the last 5 weeks ground controllers have been trying to contact
AO-27. At
this point we have not been able to turn it on. We still have a few
tricks
that we are planning on trying but these take time. We are hoping that
we can
re-establish communications.

At this time, we don't have an estimate for when AO-27 will be back on
the
air.

AO-27 is now in its 14th year on orbit. We will continue to try to
recover
AO-27 until we run out of ideas.
- Michael N3UC

Official Webpage: http://www.ao27.org
[10232006]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational depending on amount of Sunlight
Current Reported mode: Mode-A

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)

145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz
145.972 MHz
435.100 MHz
2304.100 MHz

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php
The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
AO-7 users are requested to log their contacts and observations about
AO-7,
especially any unexpected mode changes.
AO-07 telemetry software webpage:
http://www.qsl.net/k3tz/files/K3TZ_AO-07_Telemetry_Decoder_0.5.zip

Please keep your power low! For additional information please read the
AO-7
Usage Guidelines on the AO-7 Log and Resource Site located at:
http://www.planetemily.com/ao7
[04242006]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: Occasional Voice
Digipeater: OFF

The Expedition 14 crew is:
Commander: Michael Lopez-Alegria - KE5GTK
Flight Engineer: Mikhail Tyurin - RZ3FT
Flight Engineer: Thomas Reiter - DF4TR

Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

SSTV TESTING:
Worldwide Reported Downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:

V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS, RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

Be aware that Radio activity may be curtailed with docking of STS-116
this
week. Watch ANS for more information.

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.
[12112006]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-345.S2
WSR 345 Part 2 12/11/2006

AMSAT NEWS SERVICE BULLETIN 345.S2 FROM AMSAT HQ
SILVER SPRING, MD, December 11, 2006
TO ALL RADIO AMATEURS
BID: $ANS-345.S2

HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Operational

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon: 437.2750 MHz CW

Callsign: JR8YJT
[10302006]
=====
CO-58 XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW only

```
Telemetry Downlink: 437.345MHz - FSK 1200bps using AFK protocol
Beacon:             437.465MHz - CW

Callsign: JQ1YGW

Oficial Webpage: http://www.space.t.u-tokyo.ac.jp/gs/satinfo-e.html#xi5
Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
[09252006]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launched: June 30, 2006

Status: Operational

Beacon:     436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS
[10022006]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launched: June 30,2003

Status: Semi-Operational - Constant Carrier only

Uplink: ?
Downlink: 437.3850 CW
          437.4700 1200 FM ax25 or SRLL (ACTIVE only near Japan ? )

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[09252006]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational
Current Mode(s): FM Repeater - V/U - Tone
                 PBBS -        V/U - 9k6 PBP
                 Digipeater -  OFF

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink:   145.880 MHZ FM
                       145.880 MHz USB
                       145.920 MHz FM 67Hz PL tone
                      1268.700 MHz FM 67Hz PL tone
Digital Downlinks:     435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
                       435.150 MHz FM, 9k6 Digital, Pacsat Broadcast
Protocol
```

```
                      2401.200 MHz FM, 38k4 bps, AX.25
Digital Uplink:        145.860 MHz FM, 9k6 Digital, Pacsat Broadcast
Protocol
                      1268.700 mhz FM, 9k6 PBP Digital

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[11013006]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: RECOVERY EFFORTS - REFRAIN FRON USAGE!!!

General Usage Uplink/Downlink:145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org
aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[09252006]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: CLOSED - Maintenance

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM
Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[11272006]
```

```
=====
RS-22 Mozhayets 4
Catalog number: 27939
Launch Date: September 27, 2004

Status: Operational

Beacon: 435.3520 MHz CW
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Semi-operational, the digipeater command is on and open for APRS
users.

Uplink: 145.900 FM
       145.920 FM
       145.940 FM
       145.960 FM
(using 1200-baud Manchester FSK)
Downlink: 437.026 MHz SSB (1200-baud PSK)
Mode-S Beacon: 2401.1428 MHz

Mode and Antenna Polarization:
U: RC 437.050 MHz RHCP
  PSK 437.025 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[04172006]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational

Telemetry Downlink: 145.826 MHz. FM (1200-baud AFSK) approx. 10 days ON,
10
                    days OFF
Mode-S Beacon:     2401.500 MHz - OFF
UHFBeacon:          435.025 MHz - OFF

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Official webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
```

[10302006]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: Occasional Voice
Digipeater: OFF

Expedition Crew 14 is:
Commander: Michael Lopez-Alegria - KE5GTK
Flight Engineer: Mikhail Tyurin - RZ3FT
Flight Engineer: Thomas Reiter - DF4TR

Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

SSTV TESTING:
Worldwide Reported Downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS, RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

Be aware that Radio activity may be curtailed with docking of STS-116
this
week. Watch ANS for more information.

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line

is NOT translated from Russian and posted.
[12112006]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-345.S3
WSR 345 Part 3 12/11/2006

AMSAT NEWS SERVICE BULLETIN 345.S3 FROM AMSAT HQ
SILVER SPRING, MD, December 11, 2006
TO ALL RADIO AMATEURS
BID: $ANS-345.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 FM 67Hz CTCSS
Voice Downlink: 2401.835 FM
Packet Up/Downlink: 437.250 9k6 packet
Packet Downlink 2401.835 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01292006]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink: 145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11

```
BBS: TMSAT1-12
[05012006]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012006]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launched: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB
Beacon: 145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: Downlink only

Uplink: 145.875 145.900 145.925 145.950 MHz FM (1200-baud)
Downlink: 435.808 MHz PSK
Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01012006]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991
```

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB
Beacon: 29.408 MHz
Robot: 29.454 MHz
[05232004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB
Beacon: 145.860 MHz
Robot: 145.908 MHz
[05232004]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink 145.975 MHz FM
Downlink 435.070 MHz FM
[05092004]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink: 145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM
Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01092005]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational?

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB
Beacon: 29.352 MHz (intermittent)
SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]

```
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplink: 145.84 145.86 145.88 145.90 MHz FM
(using 1200-baud Manchester FSK)
CW downlink: 437.125 MHz
Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[05232004]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[08152004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM
Broadcast Callsign: HL01-11
BBS: HL01-12

Jim, AA7KC, reports that KO-23's downlink transmitter continues in a
non-operational status.
[05092004]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational
```

Uplink: 145.980 MHz FM (9600-baud FSK)
Downlink: 436.500 MHz FM
Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm

[ANS-WSR has no further information]
[09042006]
=====
SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

STatus: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz and 145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[08082004]
=====
UO-36 UoSAT-12
Catalog number: 25693

Launched: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlink: 437.025 MHz 437.400 MHz
Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site
at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[05092004]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplink V-band   145.840 - 145.990 MHz CW/LSB
      U-band   435.550 - 435.800 MHz CW/LSB
      L1-band 1269.250 - 1269.500 MHz CW/LSB
      L2-band 1268.325 - 1268.575 MHz CW/LSB
Downlink: S2-band 2401.225 - 2401.475 MHz CW/USB
         K-band 24,048.010 - 24,048.060 MHz CW/USB
Beacon: 2401.323
        24,048.035
[05232004]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational
Downlink: 437.075 MHz
Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[08152004]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz
Broadcast Callsign: SASAT1-11

BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[08152004]

=====

NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, callsign KE6QMD, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]

=====

MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Operational

Uplink: 145.850 or 145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz
Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[11202005]

=====

AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink 435.275 1200-baud AFSK

Downlink 145.825 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink: Downlink 145.825 MHz FM 1200 Baud AFSK
Beacon: 2401.220 MHz
[05012006]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-345.S4
WSR 345 Part 4 12/11/2006

AMSAT NEWS SERVICE BULLETIN 345.S4 FROM AMSAT HQ
SILVER SPRING, MD, December 11, 2006
TO ALL RADIO AMATEURS
BID: $ANS-345.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE
PROPOSED FOR LAUNCH AT THIS TIME:

PHASE 3E ?O-??
Catalog number:
Proposed Launch Date: Early/Mid 2007

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/
[ANS-WSR wishes to thank William Leijenaar, PE1RAH for this week's report]
[04242006]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/amsat/listserv/menu.html

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

```
From 2800436383831007866
X-Google-Thread: 10bb69,af3a945b40f29083
X-Google-Thread: fc521,af3a945b40f29083
X-Google-Thread: f84d8,5228070b6e104c77
X-Google-Thread: 10e8ad,41180496b69c09cf
X-Google-Thread: 104a10,41180496b69c09cf
X-Google-Attributes: gid10bb69,gidfc521,gidf84d8,gid10e8ad,gid104a10,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news4.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx01.iad01.newshosting.com!newshosting.com!post02.iad01!
news.newsdemon.com!not-for-mail
Message-ID: <458442AF.16945D81@peace.net>
Date: Sat, 16 Dec 2006 14:02:07 -0500
From: fritz <love@peace.net>
X-Mailer: Mozilla 4.76 [en] (Windows NT 5.0; U)
X-Accept-Language: en
MIME-Version: 1.0
Newsgroups:
alt.politics.homosexuality,alt.education,alt.dbs.directv,rec.radio.amateur.space,r
ec.food.drink.beer
Subject: Re: spaming hate monger
References: <1162066010.997111.45530@i42g2000cwa.googlegroups.com>
<1164787817.495319.179220@j44g2000cwa.googlegroups.com>
<T7fbh.54807$39.24787@southeast.rr.com>
<1165311819.048659.210350@l12g2000cwl.googlegroups.com>
<1165425943.817914.20640@l12g2000cwl.googlegroups.com>
<he0en2p9uadn83m20caa7plngati5jt6b0@4ax.com> <LuWdnYQINLeP_-
TYnZ2dnUVZ_vCdnZ2d@adelphia.com> <458041B9.CE59AB85@peace.net>
<9mt0o2pgf9202rflbpr0b5n92becm9msu8@4ax.com> <458185C2.6D2624B8@peace.net>
<mg73o29skvh58os4edi0dem4ok36gnklsh@4ax.com>
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Lines: 33
Organization: news.newsdemon.com
X-Complaints-To: abuse@newsdemon.com
Xref: g2news2.google.com alt.politics.homosexuality:168923 alt.education:44995
alt.dbs.directv:4126 rec.radio.amateur.space:542 rec.food.drink.beer:2467

Mark@kb9rqz.aprs wrote:

> On Thu, 14 Dec 2006 12:11:30 -0500, fritz <love@peace.net> wrote:
>
> >Mark@kb9rqz.aprs wrote:
> >
> >> On Wed, 13 Dec 2006 13:08:57 -0500, fritz <love@peace.net> wrote:
> >>
> >> >John Doe wrote:
> >> >
> >> >> AND WHY DO WE NEED THIS KIND OF POSTING IN A GROUP THAT HAS NOTHING TO DO
> >> >> WITH THE SUBJECT? NAMELY AMATEUR RADIO!
> >> >
> >> >Because "bobandcarole" wish it that way, so shut up and read.
> >>
```

> >> or ignore the thread if you don't want to read it
> >
> >Can't do that, "bobandcarole" will get angry and call you
> >a fag, or some other fancy name for homos.
> or call you a child molestor the gay stuff doesn't seem to be enough
> any more the slime keeps escalating not sure where it is headed and I
> don't want to know but I know I will learn wether I want to or not

He just wants attention, nothing more.
His home life sucks so he has no place else to go.

--

Fritz ...

Save a horse, ride a cowboy.

--
Posted via NewsDemon.com - Premium Uncensored Newsgroup Service
------->>>>>>http://www.NewsDemon.com<<<<<<------
Unlimited Access, Anonymous Accounts, Uncensored Broadband Access

```
From -3109849483645095418
X-Google-Thread: 10bb69,af3a945b40f29083
X-Google-Thread: fc521,af3a945b40f29083
X-Google-Thread: f84d8,5228070b6e104c77
X-Google-Thread: 10e8ad,41180496b69c09cf
X-Google-Thread: 104a10,41180496b69c09cf
X-Google-Attributes: gid10bb69,gidfc521,gidf84d8,gid10e8ad,gid104a10,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news4.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx02.iad01.newshosting.com!newshosting.com!nntpserver.com!
zeus.nntpserver.com!hydra.nntpserver.com!not-for-mail
From: Mark@kb9rqz.aprs
Newsgroups:
alt.politics.homosexuality,alt.education,alt.dbs.directv,rec.radio.amateur.space,r
ec.food.drink.beer
Subject: Re: spaming hate monger
Date: Sat, 16 Dec 2006 14:35:16 -0500
Message-ID: <mii8o2ddc897jpihcf09vb6al41gq2b13v@4ax.com>
References: <1164787817.495319.179220@j44g2000cwa.googlegroups.com>
<T7fbh.54807$39.24787@southeast.rr.com>
<1165311819.048659.210350@l12g2000cwl.googlegroups.com>
<1165425943.817914.20640@l12g2000cwl.googlegroups.com>
<he0en2p9uadn83m20caa7plngati5jt6b0@4ax.com> <LuWdnYQINLeP_-
TYnZ2dnUVZ_vCdnZ2d@adelphia.com> <458041B9.CE59AB85@peace.net>
<9mt0o2pgf9202rflbpr0b5n92becm9msu8@4ax.com> <458185C2.6D2624B8@peace.net>
<mg73o29skvh58os4edi0dem4ok36gnklsh@4ax.com> <458442AF.16945D81@peace.net>
X-Newsreader: Forte Free Agent 3.3/32.846
MIME-Version: 1.0
```

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Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Lines: 37
NNTP-Posting-Date: 16 Dec 2006 18:40:56 GMT
X-Complaints-To: abuse@teranews.com
Xref: g2news2.google.com alt.politics.homosexuality:168938 alt.education:44999
alt.dbs.directv:4127 rec.radio.amateur.space:543 rec.food.drink.beer:2468

On Sat, 16 Dec 2006 14:02:07 -0500, fritz <love@peace.net> wrote:

>Mark@kb9rqz.aprs wrote:
>
>> On Thu, 14 Dec 2006 12:11:30 -0500, fritz <love@peace.net> wrote:
>>
>> >Mark@kb9rqz.aprs wrote:
>> >
>> >> On Wed, 13 Dec 2006 13:08:57 -0500, fritz <love@peace.net> wrote:
>> >>
>> >> >John Doe wrote:
>> >> >
>> >> >> AND WHY DO WE NEED THIS KIND OF POSTING IN A GROUP THAT HAS NOTHING TO DO
>> >> >> WITH THE SUBJECT? NAMELY AMATEUR RADIO!
>> >> >
>> >> >Because "bobandcarole" wish it that way, so shut up and read.
>> >>
>> >> or ignore the thread if you don't want to read it
>> >
>> >Can't do that, "bobandcarole" will get angry and call you
>> >a fag, or some other fancy name for homos.
>> or call you a child molestor the gay stuff doesn't seem to be enough
>> any more the slime keeps escalating not sure where it is headed and I
>> don't want to know but I know I will learn wether I want to or not
>
>He just wants attention, nothing more.
>His home life sucks so he has no place else to go.

very likely or he has problems dealing with his impulses and desires
and takes it on the rest of us
>
>--
>
>Fritz ...
>
> Save a horse, ride a cowboy.
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com



From -4728574532202354761
X-Google-Thread: 10bb69,af3a945b40f29083
```

X-Google-Thread: fc521,af3a945b40f29083
X-Google-Thread: f84d8,5228070b6e104c77
X-Google-Thread: 10e8ad,41180496b69c09cf
X-Google-Thread: 104a10,41180496b69c09cf
X-Google-Attributes: gid10bb69,gidfc521,gidf84d8,gid10e8ad,gid104a10,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!postnews.google.com!73g2000cwn.googlegroups.com!not-for-mail
From: "bob&carole" <bobandcarole666@hotmail.com>
Newsgroups:
alt.politics.homosexuality,alt.education,alt.dbs.directv,rec.radio.amateur.space,rec.food.drink.beer
Subject: Re: spaming hate monger
Date: 16 Dec 2006 11:39:35 -0800
Organization: http://groups.google.com
Lines: 16
Message-ID: <1166297975.706861.110720@73g2000cwn.googlegroups.com>
References: <1159881994.642663.229430@h48g2000cwc.googlegroups.com>
   <1162066010.997111.45530@i42g2000cwa.googlegroups.com>
   <1164787817.495319.179220@j44g2000cwa.googlegroups.com>
   <T7fbh.54807$39.24787@southeast.rr.com>
   <1165311819.048659.210350@l12g2000cwl.googlegroups.com>
   <1165425943.817914.20640@l12g2000cwl.googlegroups.com>
   <he0en2p9uadn83m20caa7plngati5jt6b0@4ax.com>
   <LuWdnYQINLeP_-TYnZ2dnUVZ_vCdnZ2d@adelphia.com>
   <458041B9.CE59AB85@peace.net>
   <9mt0o2pgf9202rflbpr0b5n92becm9msu8@4ax.com>
   <458185C2.6D2624B8@peace.net>
   <1166125297.982343.321750@f1g2000cwa.googlegroups.com>
   <hMidnVDf2NKgNxzYnZ2dnUVZ_tjinZ2d@bresnan.com>
NNTP-Posting-Host: 64.12.116.203
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"
X-Trace: posting.google.com 1166297981 18329 127.0.0.1 (16 Dec 2006 19:39:41 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Sat, 16 Dec 2006 19:39:41 +0000 (UTC)
In-Reply-To: <hMidnVDf2NKgNxzYnZ2dnUVZ_tjinZ2d@bresnan.com>
User-Agent: G2/1.0
X-HTTP-UserAgent: Mozilla/4.0 (compatible; MSIE 6.0; AOL 9.0; Windows NT 5.1; SV1),gzip(gfe),gzip(gfe)
X-HTTP-Via: HTTP/1.1 (Velocity/1.3.32 [uScMs f p eN:t cCMp s]), HTTP/1.1 Turboweb [mtc-tf083 8.4.1], HTTP/1.1 cache-mtc-ad09.proxy.aol.com[400C74CB] (Traffic-Server/6.1.3 [uScM])
Complaints-To: groups-abuse@google.com
Injection-Info: 73g2000cwn.googlegroups.com; posting-host=64.12.116.203;
   posting-account=AtWAZg0AAAC_3_oBW63EpvnDkPCTb97a
Xref: g2news2.google.com alt.politics.homosexuality:168940 alt.education:45000 alt.dbs.directv:4128 rec.radio.amateur.space:544 rec.food.drink.beer:2469

Newps wrote:
> > fritz wrote:
>

```
> >>
> >>Can't do that, "bobandcarole" will get angry and call you
> >>a fag, or some other fancy name for homos.
>
>
>
>
> And we care what a 12 year old says why?

You speakem bad english.
Must be ebonics..........




From -7032711499658738 33
X-Google-Thread: 10bb69,af3a945b40f29083
X-Google-Thread: fc521,af3a945b40f29083
X-Google-Thread: f84d8,5228070b6e104c77
X-Google-Thread: 10e8ad,41180496b69c09cf
X-Google-Thread: 104a10,41180496b69c09cf
X-Google-Attributes: gid10bb69,gidfc521,gidf84d8,gid10e8ad,gid104a10,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news2.google.com!news4.google.com!newshub.sdsu.edu!
nntpserver.com!zeus.nntpserver.com!hydra.nntpserver.com!not-for-mail
From: Mark@kb9rqz.aprs
Newsgroups:
alt.politics.homosexuality,alt.education,alt.dbs.directv,rec.radio.amateur.space,r
ec.food.drink.beer
Subject: Re: spaming hate monger
Date: Sat, 16 Dec 2006 17:02:53 -0500
Message-ID: <m7r8o25ft5rd3dgjbhkim4oditfu6lutit@4ax.com>
References: <1165311819.048659.210350@l12g2000cwl.googlegroups.com>
<1165425943.817914.20640@l12g2000cwl.googlegroups.com>
<he0en2p9uadn83m20caa7plngati5jt6b0@4ax.com> <LuWdnYQINLeP_-
TYnZ2dnUVZ_vCdnZ2d@adelphia.com> <458041B9.CE59AB85@peace.net>
<9mt0o2pgf9202rflbpr0b5n92becm9msu8@4ax.com> <458185C2.6D2624B8@peace.net>
<1166125297.982343.321750@f1g2000cwa.googlegroups.com>
<hMidnVDf2NKgNxzYnZ2dnUVZ_tjinZ2d@bresnan.com>
<1166297975.706861.110720@73g2000cwn.googlegroups.com>
X-Newsreader: Forte Free Agent 3.3/32.846
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Lines: 21
NNTP-Posting-Date: 16 Dec 2006 21:08:25 GMT
X-Complaints-To: abuse@teranews.com
Xref: g2news2.google.com alt.politics.homosexuality:168984 alt.education:45009
alt.dbs.directv:4129 rec.radio.amateur.space:545 rec.food.drink.beer:2470

On 16 Dec 2006 11:39:35 -0800, "bob&carole"
<bobandcarole666@hotmail.com> wrote:

>
```

```
>Newps wrote:
>> > fritz wrote:
>>
>> >>
>> >>Can't do that, "bobandcarole" will get angry and call you
>> >>a fag, or some other fancy name for homos.
>>
>>
>>
>>
>> And we care what a 12 year old says why?
>
>You speakem bad english.
>Must be ebonics..........

ah aracist as well as a homphobe why am I not supprised
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com




From 5901344206331118180
X-Google-Thread: 10bb69,af3a945b40f29083
X-Google-Thread: fc521,af3a945b40f29083
X-Google-Thread: f84d8,5228070b6e104c77
X-Google-Thread: 10e8ad,41180496b69c09cf
X-Google-Thread: 104a10,41180496b69c09cf
X-Google-Attributes: gid10bb69,gidfc521,gidf84d8,gid10e8ad,gid104a10,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news4.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx02.iad01.newshosting.com!newshosting.com!
216.168.1.162.MISMATCH!sn-xt-sjc-02!sn-xt-sjc-09!sn-post-sjc-01!supernews.com!
corp.supernews.com!not-for-mail
From: Bernard Hubbard <bernard1958@west.net.au>
Newsgroups:
alt.politics.homosexuality,alt.education,alt.dbs.directv,rec.radio.amateur.space,r
ec.food.drink.beer
Subject: Re: spaming hate monger
Date: Sun, 17 Dec 2006 17:31:58 +1100
Organization: Me. myself and I
Message-ID: <bso9o2hl4d31hehgdgsjo620hm5a8ulf6c@4ax.com>
References: <1164787817.495319.179220@j44g2000cwa.googlegroups.com>
<T7fbh.54807$39.24787@southeast.rr.com>
<1165311819.048659.210350@l12g2000cwl.googlegroups.com>
<1165425943.817914.20640@l12g2000cwl.googlegroups.com>
<he0en2p9uadn83m20caa7plngati5jt6b0@4ax.com> <LuWdnYQINLeP_-
TYnZ2dnUVZ_vCdnZ2d@adelphia.com> <458041B9.CE59AB85@peace.net>
<9mt0o2pgf9202rflbpr0b5n92becm9msu8@4ax.com> <458185C2.6D2624B8@peace.net>
<mg73o29skvh58os4edi0dem4ok36gnklsh@4ax.com> <458442AF.16945D81@peace.net>
X-Newsreader: Forte Agent 4.1/32.1088
MIME-Version: 1.0
```

```
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
X-Complaints-To: abuse@supernews.com
Lines: 45
Xref: g2news2.google.com alt.politics.homosexuality:169137 alt.education:45042
alt.dbs.directv:4131 rec.radio.amateur.space:546 rec.food.drink.beer:2472

On Sat, 16 Dec 2006 14:02:07 -0500, fritz <love@peace.net> wrote:

>Mark@kb9rqz.aprs wrote:
>
>> On Thu, 14 Dec 2006 12:11:30 -0500, fritz <love@peace.net> wrote:
>>
>> >Mark@kb9rqz.aprs wrote:
>> >
>> >> On Wed, 13 Dec 2006 13:08:57 -0500, fritz <love@peace.net> wrote:
>> >>
>> >> >John Doe wrote:
>> >> >
>> >> >> AND WHY DO WE NEED THIS KIND OF POSTING IN A GROUP THAT HAS NOTHING TO DO
>> >> >> WITH THE SUBJECT? NAMELY AMATEUR RADIO!
>> >> >
>> >> >Because "bobandcarole" wish it that way, so shut up and read.
>> >>
>> >> or ignore the thread if you don't want to read it
>> >
>> >Can't do that, "bobandcarole" will get angry and call you
>> >a fag, or some other fancy name for homos.
>> or call you a child molestor the gay stuff doesn't seem to be enough
>> any more the slime keeps escalating not sure where it is headed and I
>> don't want to know but I know I will learn wether I want to or not
>
>He just wants attention, nothing more.
>His home life sucks so he has no place else to go.

I'm sure that there is no sucking in his house so he uses the internet
hoping to pick-up a date.  I'm not going to volunteer as I have seen
pix of Blob and they are enough for me to up-chuck.
>
>--
>
>Fritz ...
>
> Save a horse, ride a cowboy.
--

"Genius may have its limitations, but stupidity is not thus
handicapped."~Elbert Hubbard to quote a relative of mine.



Bernard Hubbard
```

```
From -9075903988948664627
X-Google-Thread: 10e8ad,41180496b69c09cf
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news3.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!local01.nntp.dca.giganews.com!nntp.adelphia.com!
news.adelphia.com.POSTED!not-for-mail
NNTP-Posting-Date: Sun, 17 Dec 2006 07:16:30 -0600
From: "John Doe" <hgorden@adelphia.net>
Newsgroups: rec.radio.amateur.space
References: <1164787817.495319.179220@j44g2000cwa.googlegroups.com>
<T7fbh.54807$39.24787@southeast.rr.com>
<1165311819.048659.210350@l12g2000cwl.googlegroups.com>
<1165425943.817914.20640@l12g2000cwl.googlegroups.com>
<he0en2p9uadn83m20caa7plngati5jt6b0@4ax.com> <LuWdnYQINLeP_-
TYnZ2dnUVZ_vCdnZ2d@adelphia.com> <458041B9.CE59AB85@peace.net>
<9mt0o2pgf9202rflbpr0b5n92becm9msu8@4ax.com> <458185C2.6D2624B8@peace.net>
<mg73o29skvh58os4edi0dem4ok36gnklsh@4ax.com> <458442AF.16945D81@peace.net>
<bso9o2hl4d31hehgdgsjo620hm5a8ulf6c@4ax.com>
Subject: Re: spaming hate monger
Date: Sun, 17 Dec 2006 08:16:38 -0500
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.3028
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.3028
X-RFC2646: Format=Flowed; Original
Message-ID: <npCdndepD-Kz3hjYnZ2dnUVZ_vGinZ2d@adelphia.com>
Lines: 52
NNTP-Posting-Host: 69.162.152.98
X-Trace: sv3-ClI/6K1glpRURxYNqdkYMB1oCx/tgDyzV1v2Hiqx6JWCqrZY34CuYvwRgfT1v/pQWS/
y9829dqLldEP!
vcit+YKX6Rcf0Q7t+UmwLrriThR4NtuiDhUtz+9zWmk+gabxB3E57KFrBQNes3dGIRy0m+zbIAmE!
9dXfIxdAoZMklv3bSwM699VATnLS
X-Complaints-To: abuse@adelphia.net
X-DMCA-Complaints-To: copyright@adelphia.net
X-Abuse-and-DMCA-Info: Please be sure to forward a copy of ALL headers
X-Abuse-and-DMCA-Info: Otherwise we will be unable to process your complaint
properly
X-Postfilter: 1.3.32
Xref: g2news2.google.com rec.radio.amateur.space:547

STICK IT WHERE THE SUN DON'T SHINE UP SOME KANGAROO'S BUTT! !

"Bernard Hubbard" <bernard1958@west.net.au> wrote in message
news:bso9o2hl4d31hehgdgsjo620hm5a8ulf6c@4ax.com...
> On Sat, 16 Dec 2006 14:02:07 -0500, fritz <love@peace.net> wrote:
>
>>Mark@kb9rqz.aprs wrote:
>>
>>> On Thu, 14 Dec 2006 12:11:30 -0500, fritz <love@peace.net> wrote:
>>>
>>> >Mark@kb9rqz.aprs wrote:
```

```
>>> >
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>>> >>
>>> >> >John Doe wrote:
>>> >> >
>>> >> >> AND WHY DO WE NEED THIS KIND OF POSTING IN A GROUP THAT HAS
>>> >> >> NOTHING TO DO
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>>> >> >
>>> >> >Because "bobandcarole" wish it that way, so shut up and read.
>>> >>
>>> >> or ignore the thread if you don't want to read it
>>> >
>>> >Can't do that, "bobandcarole" will get angry and call you
>>> >a fag, or some other fancy name for homos.
>>> or call you a child molestor the gay stuff doesn't seem to be enough
>>> any more the slime keeps escalating not sure where it is headed and I
>>> don't want to know but I know I will learn wether I want to or not
>>
>>He just wants attention, nothing more.
>>His home life sucks so he has no place else to go.
>
> I'm sure that there is no sucking in his house so he uses the internet
> hoping to pick-up a date.  I'm not going to volunteer as I have seen
> pix of Blob and they are enough for me to up-chuck.
>>
>>--
>>
>>Fritz ...
>>
>> Save a horse, ride a cowboy.
> --
>
> "Genius may have its limitations, but stupidity is not thus
> handicapped."~Elbert Hubbard to quote a relative of mine.
>
>
>
> Bernard Hubbard




From 495492785735195055
X-Google-Thread: 10e8ad,801bb4a1d32ac7b5,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news3.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!local01.nntp.dca.giganews.com!nntp.comcast.com!
news.comcast.com.POSTED!not-for-mail
NNTP-Posting-Date: Wed, 20 Dec 2006 22:26:24 -0600
From: "JoAnne K9JKM" <k9jkm_remove_@comcast.net>
Newsgroups: rec.radio.amateur.space
```

```
Subject: WSR-352 AMSAT Weekly Satellite Report
Date: Wed, 20 Dec 2006 22:26:26 -0600
MIME-Version: 1.0
Content-Type: text/plain;
     format=flowed;
     charset="iso-8859-1";
     reply-type=original
Content-Transfer-Encoding: 7bit
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.3028
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.3028
Message-ID: <aPqdnTGymeVtkRfYnZ2dnUVZ_syunZ2d@comcast.com>
Lines: 980
NNTP-Posting-Host: 67.184.169.1
X-Trace: sv3-
sr3QS8FRogivjTA6eNHGjDF4Myb9Y3ECTUp2mDg4snGLhFGIp+RfYmNDd6bRvCwKfOoyz9HbI7DJyPi!
5FEM3TixEem/yJ+Dco7NePKvgZCoX65y7z82NAcLgAUNyIVO7Su4kv2XjoBmBTv2nSnlafRjMR0I!
jUdobnFsXhv0Z50=
X-Complaints-To: abuse@comcast.net
X-DMCA-Complaints-To: dmca@comcast.net
X-Abuse-and-DMCA-Info: Please be sure to forward a copy of ALL headers
X-Abuse-and-DMCA-Info: Otherwise we will be unable to process your complaint
properly
X-Postfilter: 1.3.32
Xref: g2news2.google.com rec.radio.amateur.space:548
```

This report is organized into 4 parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites

SB SAT @ AMSAT W8ISS ANS-352.S1
WSR 352 Part 1 12/18/2006

AMSAT NEWS SERVICE BULLETIN 352.S1 FROM AMSAT HQ
SILVER SPRING, MD, December 18, 2006
TO ALL RADIO AMATEURS
BID: $ANS-352.S1

VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/V - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 MHz to 435.280 MHz LSB/CW
Downlink: 145.870 MHz to 145.930 MHz USB/CW

```
Dutch Transponder:
Uplink:   435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW


Indian Beacon:  145.859330 MHZ CW
Dutch Beacon:   145.860MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsat.in/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is
active. Each transponder has a different beacon.
[10022006]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational
Current Mode(s): FM Repeater - V/U
                 PBBS -        V/U - 9k6 PBP
                 Digipeater -  OFF

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink:   145.880 MHZ FM
                       145.880 MHz USB
                       145.920 MHz FM
                      1268.700 MHz FM 67Hz PL tone
Digital Downlinks:     435.150 MHz FM 38k4 Digital, PBP, 1 watt output
                       435.150 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:        145.860 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      1268.700 mhz FM 9k6 PBP Digital

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12
```

```
Official Webpage: http://www.amsat.org/amsat-new/echo/
[12182006]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Uplink:   145.850 MHz (67.0 Hz PL tone) (See below for operating procedures)
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The order of operation is thus: (allow for Doppler as necessary)
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer
   on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater
   on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10
   minute timer.
[04172006]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: OPERATIONAL

Voice/CW Mode JA
Uplink:   145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon:   435.795 MHz

Digital Mode JD
Uplink:   145.850 145.870 145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
```

U: RHCP

unOfficial Webpage: http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's CW telemetry downlink:
http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts.htm
[11202006]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational?

Uplink: 145.850 MHz FM
Downlink: 436.795 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

This off the AO-27 website:
For the last 5 weeks ground controllers have been trying to contact AO-27. At this point we have not been able to turn it on. We still have a few tricks that we are planning on trying but these take time. We are hoping that we can re-establish communications.

At this time, we don't have an estimate for when AO-27 will be back on the air.

AO-27 is now in its 14th year on orbit. We will continue to try to recover AO-27 until we run out of ideas.
- Michael N3UC

Official Webpage: http://www.ao27.org
[10232006]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational depending on amount of Sunlight
Current Reported mode: Mode-A

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B

```
Downlink:  29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons:   29.502 MHz
          145.972 MHz
          435.100 MHz
         2304.100 MHz

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php
The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
AO-7 users are requested to log their contacts and observations about
AO-7,
especially any unexpected mode changes.
AO-07 telemetry software webpage:
http://www.qsl.net/k3tz/files/K3TZ_AO-07_Telemetry_Decoder_0.5.zip

Please keep your power low!  For additional information please read the
AO-7
Usage Guidelines on the AO-7 Log and Resource Site located at:
http://www.planetemily.com/ao7
[04242006]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: Occasional Voice
Digipeater:   OFF

The Expedition 14 crew is:
Commander:              Michael Lopez-Alegria - KE5GTK
Flight Engineer:        Mikhail Tyurin - RZ3FT
Flight Engineer:        Sunita Williams

Digital/APRS:
Worldwide packet uplink:   145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink:   145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink:      145.800 MHz FM

SSTV TESTING:
Worldwide Reported Downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink:         437.800 MHz FM
Repeater Downlink:       145.800 MHz FM
```

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS, RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line is NOT translated from Russian and posted.
[12182006]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-352.S2
WSR 352 Part 2 12/18/2006

AMSAT NEWS SERVICE BULLETIN 352.S2 FROM AMSAT HQ
SILVER SPRING, MD, December 18, 2006
TO ALL RADIO AMATEURS
BID: $ANS-352.S2

GENESAT-1 ?O-??
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Telemetry Beacon Downlink: 437.0670 MHz AFSK 1200 BPS
[12182006]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Operational

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon: 437.2750 MHz CW

Callsign: JR8YJT
[10302006]
=====

CO-58 XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW only

Telemetry Downlink: 437.345MHz - FSK 1200bps using AFK protocol
Beacon: 437.465MHz - CW

Callsign: JQ1YGW

Oficial Webpage: http://www.space.t.u-tokyo.ac.jp/gs/satinfo-e.html#xi5
Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
[09252006]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launched: June 30, 2006

Status: Operational

Beacon: 436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS
[10022006]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launched: June 30,2003

Status: Semi-Operational - Constant Carrier only

Uplink: ?
Downlink: 437.3850 CW
          437.4700 1200 FM ax25 or SRLL (ACTIVE only near Japan ?)

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[09252006]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational
Current Mode(s): FM Repeater - V/U
                 PBBS -   V/U - 9k6 PBP
                 Digipeater - OFF

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink: 145.880 MHZ FM

```
                       145.880 MHz USB
                       145.920 MHz FM
                      1268.700 MHz FM 67Hz PL tone
Digital Downlinks:     435.150 MHz FM 38k4 Digital, PBP, 1 watt output
                       435.150 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:        145.860 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      1268.700 mhz FM 9k6 PBP Digital

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[12182006]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: RECOVERY EFFORTS - REFRAIN FRON USAGE!!!

General Usage Uplink/Downlink:145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org
aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[09252006]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: CLOSED - Maintenance

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM
```

```
Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[11272006]
=====
RS-22 Mozhayets 4
Catalog number: 27939
Launch Date: September 27, 2004

Status: Operational

Beacon: 435.3520 MHz CW
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Semi-operational, the digipeater command is on and open for APRS
users.

Uplink: 145.900 FM
       145.920 FM
       145.940 FM
       145.960 FM
(using 1200-baud Manchester FSK)
Downlink: 437.026 MHz SSB (1200-baud PSK)
Mode-S Beacon: 2401.1428 MHz

Mode and Antenna Polarization:
U: RC 437.050 MHz RHCP
  PSK 437.025 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[04172006]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational

Telemetry Downlink: 145.826 MHz. FM (1200-baud AFSK) approx. 10 days ON,
10
                    days OFF
Mode-S Beacon:     2401.500 MHz - OFF
UHFBeacon:          435.025 MHz - OFF
```

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Official webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[10302006]
=====

INTERNATIONAL SPACE STATION (ISS) - ARISS

Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: Occasional Voice
Digipeater: OFF

Expedition Crew 14 is:
Commander: Michael Lopez-Alegria - KE5GTK
Flight Engineer: Mikhail Tyurin - RZ3FT
Flight Engineer: Sunita Williams

Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

SSTV TESTING:
Worldwide Reported Downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS, RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is NOT translated from Russian and posted.
[12182006]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-352.S3
WSR 352 Part 3 12/18/2006

AMSAT NEWS SERVICE BULLETIN 352.S3 FROM AMSAT HQ
SILVER SPRING, MD, December 18, 2006
TO ALL RADIO AMATEURS
BID: $ANS-352.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 FM 67Hz CTCSS
Voice Downlink: 2401.835 FM
Packet Up/Downlink: 437.250 9k6 packet
Packet Downlink 2401.835 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01292006]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink: 145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012006]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launched: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB
Beacon: 145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: Downlink only

Uplink: 145.875 145.900 145.925 145.950 MHz FM (1200-baud)
Downlink: 435.808 MHz PSK
Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01012006]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089

```
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB
Beacon: 29.408 MHz
Robot: 29.454 MHz
[05232004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB
Beacon: 145.860 MHz
Robot: 145.908 MHz
[05232004]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink 145.975 MHz FM
Downlink 435.070 MHz FM
[05092004]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink: 145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM
Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01092005]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational?

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB
Beacon: 29.352 MHz (intermittent)
```

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplink: 145.84 145.86 145.88 145.90 MHz FM
(using 1200-baud Manchester FSK)
CW downlink: 437.125 MHz
Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[05232004]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[08152004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM
Broadcast Callsign: HL01-11
BBS: HL01-12

Jim, AA7KC, reports that KO-23's downlink transmitter continues in a non-operational status.
[05092004]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

```
Status: Non-operational

Uplink: 145.980 MHz FM (9600-baud FSK)
Downlink: 436.500 MHz FM
Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm

[ANS-WSR has no further information]
[09042006]
=====
SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

STatus: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz and 145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[08082004]
=====
```

UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlink: 437.025 MHz 437.400 MHz
Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web site
at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[05092004]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplink V-band   145.840 - 145.990 MHz CW/LSB
      U-band   435.550 - 435.800 MHz CW/LSB
      L1-band 1269.250 - 1269.500 MHz CW/LSB
      L2-band 1268.325 - 1268.575 MHz CW/LSB
Downlink: S2-band 2401.225 - 2401.475 MHz CW/USB
         K-band 24,048.010 - 24,048.060 MHz CW/USB
Beacon: 2401.323
        24,048.035
[05232004]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational
Downlink: 437.075 MHz
Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[08152004]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz

Downlink: 436.775 MHz
Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[08152004]

=====

NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, callsign KE6QMD, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]

=====

MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Operational

Uplink: 145.850 or 145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz
Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[11202005]

=====

AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink 435.275 1200-baud AFSK
Downlink 145.825 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink: Downlink 145.825 MHz FM 1200 Baud AFSK
Beacon: 2401.220 MHz
[05012006]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-352.S4
WSR 352 Part 4 12/18/2006

AMSAT NEWS SERVICE BULLETIN 352.S4 FROM AMSAT HQ
SILVER SPRING, MD, December 18, 2006
TO ALL RADIO AMATEURS
BID: $ANS-352.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE
PROPOSED FOR LAUNCH AT THIS TIME:

PHASE 3E ?O-??
Catalog number:
Proposed Launch Date: Early/Mid 2007

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/
[ANS-WSR wishes to thank William Leijenaar, PE1RAH for this week's report]
[04242006]

NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/amsat/listserv/menu.html

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

```
From 6381683489493537232
X-Google-Thread: 10e8ad,12d4f2cc6cc05653,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII
Path: g2news2.google.com!news3.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!local01.nntp.dca.giganews.com!nntp.comcast.com!
news.comcast.com.POSTED!not-for-mail
NNTP-Posting-Date: Sun, 24 Dec 2006 23:13:56 -0600
From: "JoAnne K9JKM" <k9jkm_remove_@comcast.net>
Newsgroups: rec.radio.amateur.space
Subject: ANS-358 AMSAT News Service Weekly Bulletins
Date: Sun, 24 Dec 2006 23:14:11 -0600
MIME-Version: 1.0
Content-Type: text/plain;
     format=flowed;
     charset="iso-8859-1";
     reply-type=original
Content-Transfer-Encoding: 8bit
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.3028
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.3028
Message-ID: <r6mdnQzPvYaJwxLYnZ2dnUVZ_s6onZ2d@comcast.com>
Lines: 200
NNTP-Posting-Host: 67.184.169.1
X-Trace: sv3-
eq0RnfVaiI2TxeETRvCQ3LasbVu7vOMg88QXHZ1RyUO6sEAZk1IjWTRLhta1JM9WTYJsHyUqXo+PZma!
HD/fU/q8yOlfyLZ6WsCBEYCIteqQ0MEMBvKqJ24IQRWzV5hl6jqc8co3HBY6hPj2WzE7BDwj4k0k!
bCLwrxO+/RLVna8=
X-Complaints-To: abuse@comcast.net
X-DMCA-Complaints-To: dmca@comcast.net
X-Abuse-and-DMCA-Info: Please be sure to forward a copy of ALL headers
X-Abuse-and-DMCA-Info: Otherwise we will be unable to process your complaint
properly
X-Postfilter: 1.3.32
Xref: g2news2.google.com rec.radio.amateur.space:549
```

AMSAT NEWS SERVICE
ANS-358

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:

* Multiple Amateur Satellites Deployed From Shuttle
* GO-32 PBBS Operational
* GeneSat-1 Continues Operations
* ARISS Status - 18 December 2006

SB SAT @ AMSAT $ANS-358.01
Multiple Amateur Satellites Deployed From Shuttle

AMSAT News Service Bulletin 358.01
From AMSAT HQ SILVER SPRING, MD.
December 24, 2006
To All RADIO AMATEURS
BID: $ANS-358.01

ANDE, RAFT and NMARS were deployed from the Space Shuttle on 21 December 2006.

RAFT and NMARS have a very high spin rate. NMARS is spinning at at least 60 RPM and RAFT at maybe half that. This will make getting a complete 1 second packet difficult due to fading on linear antennas.

The Naval Research Laboratory science mission of ANDE is to measure the density of the upper atmosphere by precise tracking of the orbit decay by the Maui Laser Ranging Tracking Station. The Comm system provides important telemetry on the attitude and temperature of the spacecraft. RAFT carries a 216.98 MHz receiver/transmitter to demonstrate self-location techniques when it flies through the Space Surveillance Network radar fence across the southern USA. When this experiment is activated, users will hear a 1 second ping when it flies through the fence.

ANDE and RAFT also carry packet radio communications systems and join with other US Naval Academy APRS digipeating satellites such as PCSAT-1 and PCSAT2. ANDE and RAFT will respond to the path alias of APRSAT and ARISS. This is so that users do not have to reconfigure their path between satellites or between their ISS groundstation. The following frequencies are used by these two spacecraft:

* ANDE Side A: 145.825 Digipeater up/downlink 1200 baud packet
* ANDE Side B: 145.825 downlink (backup to side A only)
* RAFT System: 145.825 Digipeater up/downlink 1200 baud packet
* RAFT PSK-31: 28.120 HF PSK-31 uplink -downlink on 145.825

Much more information about these satellites is available on the ANDE, RAFT, NMARS, & FCAL Operations web site.
http://www.ew.usna.edu/~bruninga/ande-raft-ops.html

[ANS thanks Bob, WB4APR, for the above information]

/EX

SB SAT @ AMSAT $ANS-358.02
GO-32 PBBS Operational

AMSAT News Service Bulletin 358.02

From AMSAT HQ SILVER SPRING, MD.
December 24, 2006
To All RADIO AMATEURS
BID: $ANS-358.02

Techsat1b/GO-32 PBBS services had been suspended due to a special test and to maintainance needs on 25 November 2006. With the maintainance and testing now complete, GO-32 returned to operations on Thursday morning 21 December 2006.

[ANS thanks Roni, 4Z7DFC, for the above information]

/EX

SB SAT @ AMSAT $ANS-358.03
GeneSat-1 Continues Operations

AMSAT News Service Bulletin 358.03
From AMSAT HQ SILVER SPRING, MD.
December 24, 2006
To All RADIO AMATEURS
BID: $ANS-358.03

The GeneSat-1 mission is proceeding very well. Biology data shows definite growth. Payload temperature control is doing a good job of holding the median payload temperature close to 34 deg C (the latest data shows median payload temp of 33.42). The 2.4 GHz communications link is functional and supporting the required level of procedural execution by the ops team. So far nearly all commanding has been done in the very early morning hours, over time the Ops Team will also be interested in assessing how time-varying (and most likely directional) 2.4 GHz noise affects the command link (e.g. how 2.4 GHz wireless noise increases during normal working hours)

The 70cm beacon downlink is excellent although the frequency has shifted down to about 437.0645 MHz. So far over 7100 beacon packets have been submitted by Amateurs world-wide.

The GeneSat team is also happy to report the winner of the GeneSat First Contact Prize for the amateur radio community: Ralph Wallio, W�RPK. Ralph successfully decoded 5 beacon packets at approximately 13:44:28 UTC on 16 December 2006, which was about 85 minutes after GeneSat deployed from the PPOD. Ralph is located in Iowa.

Additional information about the GeneSat-1's on-going mission is availble at http://www.genesat1.org/

[ANS thanks GeneSat1 Operations for the above information]

/EX

SB SAT @ AMSAT $ANS-358.04
ARISS Status - 18 December 2006

AMSAT News Service Bulletin 358.04
From AMSAT HQ SILVER SPRING, MD.
December 24, 2006
To All RADIO AMATEURS
BID: $ANS-358.04

1. Swedish School Contact Successful

On Sunday, December 17, students attending Thunmanskolan in Knivsta, Sweden spoke with Swedish astronaut Christer Fuglesang, KE5CGR/SA0AFS, on board the ISS via the telebridge station VK4KHZ in Australia. Fuglesang was able to answer 13 questions posed to him by thirteen students. Audio was fed to the Echolink AMSAT (101 377) and JK1ZRW (277 208) servers and to IRLP Discovery Reflector 9010. Fifty connections from 12 countries were made to Echolink, including 5 simplex and 3 repeater nodes. Eight stations connected to IRLP from Canada, U.S.A, and Sweden; 25 listened to the audio as it was streamed on the Discovery website. The audio was also webcast courtesy of Verizon Conferencing.

2. Upcoming School Contact

An Amateur Radio on the International Space Station (ARISS) contact is planned for the Kashiwabara Community Center in Sayama, Japan on Wednesday, December 27, at 12:22 UTC. Kashiwabara Community Center will plan and support this children's event with the two area schools: Kashiwabara Elementary school and Kashiwabara Junior High school. The children will be taught about the ISS, space and amateur radio, and will take a field trip to visit the Japanese Aerospace Exploration Agency (JAXA). Members of JAXA will also be invited to the event.

3. Training Status

On Thursday, December 14, astronaut Tim Kopra and future space participant Charles Simonyi took and passed their amateur radio license exams. In addition, Simonyi received training on the Kenwood radio and Amateur Radio on the ISS school operations.

4. ARRL QST Articles on ARISS

The American Radio Relay League (ARRL) ran several stories covering Amateur Radio on the International Space Station (ARISS) related activities in the January issue of QST. A bullet item in the monthly list of touted Amateur Radio accomplishments described the discussion about SuitSat-2 by the ARISS Team at the ARISS Annual Meeting in San Francisco (page 12).

A letter to the editor was run from a person who upon learning about ARISS, decided he wanted to become a ham radio operator in order to talk to astronauts. He succeeded in studying for and passing his ham radio exams, and was very lucky (and excited!) to speak with Bill McArthur. His letter was written to thank Bill for his time spent doing outreach to the public while chatting via ham radio (p. 24).

A story was run about AMSAT's Annual Symposium describing McArthur's excellent talk at the symposium banquet. The story included his photo (p. 75).

5. Thomas Reiter Active on Voice

On Monday, December 11, Thomas Reiter was active on the Amateur Radio on the International Space Station (ARISS) radio. Reiter made several contacts with stations in Norway, the Netherlands and the U.K.

[ANS thanks Carol, KB3LKI for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73 & Happy Holidays,
This week's ANS Editor,
Lee McLamb, KU4OS

```
From 3570622679762502756
X-Google-Thread: 10e8ad,8dafd29b8132edf3,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!postnews.google.com!a3g2000cwd.googlegroups.com!not-for-
mail
From: "qslcanadagroups@gmail.com" <qslcanadagroups@gmail.com>
Newsgroups: rec.radio.amateur.space
Subject: QSL Cards
Date: 26 Dec 2006 11:42:50 -0800
Organization: http://groups.google.com
Lines: 51
Message-ID: <1167162170.644919.261280@a3g2000cwd.googlegroups.com>
NNTP-Posting-Host: 74.210.18.82
Mime-Version: 1.0
Content-Type: text/plain; charset="iso-8859-1"
X-Trace: posting.google.com 1167162176 32242 127.0.0.1 (26 Dec 2006 19:42:56 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Tue, 26 Dec 2006 19:42:56 +0000 (UTC)
User-Agent: G2/1.0
X-HTTP-UserAgent: Opera/9.01 (Windows NT 5.1; U; en),gzip(gfe),gzip(gfe)
Complaints-To: groups-abuse@google.com
Injection-Info: a3g2000cwd.googlegroups.com; posting-host=74.210.18.82;
   posting-account=XZVODwwAAABf0DzvtNyxNBvv0B2y6_Ke
```

Xref: g2news2.google.com rec.radio.amateur.space:550

Name: Kirill
Call: VE3AXC

Merry Christmas and Happy New Year everyone! I will be a subscriber of this forum from now on, so nice meeting everybody!

On this note, please allow me to stray a bit off this forum's topic but my info might still be relevant for some. I myself have been a ham for 8 years; also run a small QSL card printing business (my printishop is located in Toronto, Canada) and have a web site specifically dedicated to that www.qslcanada.com

Reason I would like to post this message on this forum is to let your group know that I have a pretty good group referral discount program.

The idea is quite simple and there is no catch.... For each HAM who is referred by you and who wishes to place an minimum order of 500 cards, you would receive 100 (custom designed) cards of the same type free of charge. The offer is transferable, so if for example you let me know that you don't need any more cards, I will be happy to print additional 100 cards for your friend free of charge (or charge for 100 cards less)

This offer may be ideal for your group or a club you belong to. For example, if you
refer say 3 HAMs who would like to print a minimum 500 cards for themselves, you would receive 300 cards as appreciation for spreading the word about qslcanada
; you could transfer it to someone as a gift ; or each of 3 Hams would only pay
for 400 cards, since each one will get 100 cards free. To sum it up, each of the referral counts as 100 free cards in any shape or form. Pse let me know if you have any questions.

So if bunch of Hams in this group who are into QSLing might be interested to giving someone a free gift or getting a good deal on the next batch, pse let me know. The offer is valid any time in future. www.qslcanada.com has quite a bit of samples, more info and e-ham reviews

PS Have got to mention this, since it did happen before, where some folks took this posting too personally. I just wanted to get this info out there ONE TIME ONLY! Please don't call me any spammer names or hate mail me. I believe this to be a fair group offer any hams by hams enterprise deserves a little exposure to start out with.

I will try to participate in this group from now on; best 73 to everyone! Happy New Year!

```
From -5904781236355795709
X-Google-Thread: 10e8ad,41180496b69c09cf
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news3.google.com!news.glorb.com!hwmnpeer01.lga!
news.highwinds-media.com!hw-filter.lga!newsfe09.lga.POSTED!53ab2750!not-for-mail
From: Tony <Private@pri.com>
Newsgroups: rec.radio.amateur.space
Subject: Re: Sexual fascism and the Mark Foley scandel
Message-ID: <9ps6p2tpujkftrbss4i8ch2a001i5um2r3@4ax.com>
References: <1165311819.048659.210350@l12g2000cwl.googlegroups.com>
<1165425943.817914.20640@l12g2000cwl.googlegroups.com>
<he0en2p9uadn83m20caa7plngati5jt6b0@4ax.com>
<1165427339.761425.223410@79g2000cws.googlegroups.com>
<1165427779.888588.130580@l12g2000cwl.googlegroups.com>
<zxDdh.7018$ya1.6667@news02.roc.ny>
<1165430497.064806.191380@n67g2000cwd.googlegroups.com>
<YjUdh.7086$ya1.4050@news02.roc.ny>
<1165571427.549773.55410@16g2000cwy.googlegroups.com>
<45804091.C46D4120@peace.net>
X-Newsreader: Forte Agent 1.92/32.572
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Lines: 75
X-Complaints-To: abuse@cv.net
X-Abuse-Info: Please forward a copy of all headers for proper handling
X-Trace:
mgjcfpjdppbciligkannfilpcpbbolnmphfoblhlbcgnhnkjfbockkajigedlilcmkcakeppfneemgfkba
mbdhpadhhfnfllankbcoajbmhacoifdnmbcbniednnaaplenfnojecgjgcfcij
NNTP-Posting-Date: Thu, 28 Dec 2006 00:34:07 MST
Organization: Optimum Online
Date: Thu, 28 Dec 2006 02:34:07 -0500
Xref: g2news2.google.com rec.radio.amateur.space:551
```

What Does this Shit Have to Do with amateur.space ? Please Take this
crap someware else

On Wed, 13 Dec 2006 13:04:01 -0500, fritz <love@peace.net> wrote:

```
>bobandcarole wrote:
>
>> gwatts wrote:
>> > bobandcarole wrote:
>> > > gwatts wrote:
>> > >
>> > >>bobandcarole wrote:
>> > >>
>> > >>>bobandcarole wrote:
>> > >>>
>> > >>>
>> > >>>>M...@kb9rqz.aprs wrote:
>> > >>>>
>> > >>>>
>> > >>>>>On 6 Dec 2006 09:25:43 -0800, "bobandcarole"
>> > >>>>><bobandcarole1010@hotmail.com> wrote:
>> > >>>>>
>> > >>>>>
>> > >>>>>
>> > >>>>>>>Apparently, Rep. Mark Foley is homosexual. And like many homosexual
>> > >>>>>>>men, he likes young teen boys. We should pray for him that he gets a
>> > >>>>>>>handle on this problem and refrains from harming any more kids.
>> > >>>>>>>
>> > >>>>>>>
>> > >>>>>>>Meanwhile, we need to wake up. The fact that this is typical behavior
>> > >>>>>>>for homosexuals doesn't stop us from continuing to elevate such folks
>> > >>>>>>>to positions where they gain access to our kids.
>> > >>>>>>>
>> > >>>>>>>
>> > >>>>>>>http://worldnetdaily.com/news/article.asp?ARTICLE_ID=52244
>> > >>>>>
>> > >>>>>don't ever get tried of spreading hate?
>> > >>>>
>> > >>>>You confuse truth with hate.
>> > >>
>> > >>And you confuse rec.radio.amateur.space with a newsgroup that gives a
>> > >>damn about your whiny, misleading, unsubstantiated spewage.
>> > >
>> > > And I take you have proof that it's "misleading"??
>> >
>> > You said 'typical behavior,' prove it.
>> >
>> > > Or are you blowing smoke out of your canyon ass?
>> >
>> > For someone so anti-homosexual you sure have a lot of fascination with
>> > 'canyon asses.'
>>
>> Lie #1
>> >
>> > What do you know about 'typical behavior for homosexuals,'
>>
>> Well lets see, they buttfuck each other and ingest cum, that's bad
>> enough
>
>Heterosexuals do that too, so what?
>
>>  have any
>> > citations from recognized, peer reviewed publications?
>>
>> http://worldnetdaily.com/news/article.asp?ARTICLE_ID=52244
>
>Right wing communist rag.
>
```

>--
>
>Fritz ...
>
> Save a horse, ride a cowboy.

From 5010089172934912070
X-Google-Thread: 10e8ad,41180496b69c09cf
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news4.google.com!border1.nntp.dca.giganews.com!nntp.giganews.com!nx02.iad01.newshosting.com!newshosting.com!130.81.64.211.MISMATCH!cycny01.gnilink.net!hwmnpeer01.lga!news.highwinds-media.com!hw-filter.lga!newsfe09.lga.POSTED!53ab2750!not-for-mail
From: Tony <Private@pri.com>
Newsgroups: rec.radio.amateur.space
Subject: Re: spaming hate monger
Message-ID: <7ts6p2lful95kj6tjiitcjm31i4pl8efhu@4ax.com>
References: <1165311819.048659.210350@l12g2000cwl.googlegroups.com> <1165425943.817914.20640@l12g2000cwl.googlegroups.com> <he0en2p9uadn83m20caa7plngati5jt6b0@4ax.com> <LuWdnYQINLeP_-TYnZ2dnUVZ_vCdnZ2d@adelphia.com> <458041B9.CE59AB85@peace.net> <9mt0o2pgf9202rflbpr0b5n92becm9msu8@4ax.com> <458185C2.6D2624B8@peace.net> <mg73o29skvh58os4edi0dem4ok36gnklsh@4ax.com> <458442AF.16945D81@peace.net> <bso9o2hl4d31hehgdgsjo620hm5a8ulf6c@4ax.com> <npCdndepD-Kz3hjYnZ2dnUVZ_vGinZ2d@adelphia.com>
X-Newsreader: Forte Agent 1.92/32.572
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Lines: 73
X-Complaints-To: abuse@cv.net
X-Abuse-Info: Please forward a copy of all headers for proper handling
X-Trace: mgjcfpjdppbciligkannfilpcpbbolnmgnabopoppadafmkjfbockkajigedlilcmkcakeppfneemgfkbambdhpadhhfnfllankbcoajbmhacoifkcdhbgabkkigbdbfenfnojecgjgcfcij
NNTP-Posting-Date: Thu, 28 Dec 2006 00:37:18 MST
Organization: Optimum Online
Date: Thu, 28 Dec 2006 02:37:18 -0500
Xref: g2news2.google.com rec.radio.amateur.space:552

MORE SHIT THAT DOES NOT BELONG IN HERE

amateur.space

Lets Get Real Here This is SAT not CRAP

On Sun, 17 Dec 2006 08:16:38 -0500, "John Doe" <hgorden@adelphia.net>
wrote:

>STICK IT WHERE THE SUN DON'T SHINE UP SOME KANGAROO'S BUTT! !
>
>"Bernard Hubbard" <bernard1958@west.net.au> wrote in message
>news:bso9o2hl4d31hehgdgsjo620hm5a8ulf6c@4ax.com...
>> On Sat, 16 Dec 2006 14:02:07 -0500, fritz <love@peace.net> wrote:
>>
>>>Mark@kb9rqz.aprs wrote:
>>>
>>>> On Thu, 14 Dec 2006 12:11:30 -0500, fritz <love@peace.net> wrote:
>>>>
>>>> >Mark@kb9rqz.aprs wrote:
>>>> >
>>>> >> On Wed, 13 Dec 2006 13:08:57 -0500, fritz <love@peace.net> wrote:
>>>> >>
>>>> >> >John Doe wrote:
>>>> >> >
>>>> >> >> AND WHY DO WE NEED THIS KIND OF POSTING IN A GROUP THAT HAS
>>>> >> >> NOTHING TO DO
>>>> >> >> WITH THE SUBJECT? NAMELY AMATEUR RADIO!
>>>> >> >
>>>> >> >Because "bobandcarole" wish it that way, so shut up and read.
>>>> >>
>>>> >> or ignore the thread if you don't want to read it
>>>> >
>>>> >Can't do that, "bobandcarole" will get angry and call you
>>>> >a fag, or some other fancy name for homos.
>>>> or call you a child molestor the gay stuff doesn't seem to be enough
>>>> any more the slime keeps escalating not sure where it is headed and I
>>>> don't want to know but I know I will learn wether I want to or not
>>>
>>>He just wants attention, nothing more.
>>>His home life sucks so he has no place else to go.
>>
>> I'm sure that there is no sucking in his house so he uses the internet
>> hoping to pick-up a date. I'm not going to volunteer as I have seen
>> pix of Blob and they are enough for me to up-chuck.
>>>
>>>--
>>>
>>>Fritz ...
>>>
>>> Save a horse, ride a cowboy.

```
>> --
>>
>> "Genius may have its limitations, but stupidity is not thus
>> handicapped."~Elbert Hubbard to quote a relative of mine.
>>
>>
>>
>> Bernard Hubbard
>
```

```
From -7910126796839788260
X-Google-Thread: 10e8ad,d32113b0c617d976,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news4.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!local01.nntp.dca.giganews.com!nntp.comcast.com!
news.comcast.com.POSTED!not-for-mail
NNTP-Posting-Date: Thu, 28 Dec 2006 07:21:28 -0600
From: "JoAnne K9JKM" <k9jkm_remove_@comcast.net>
Newsgroups: rec.radio.amateur.space
Subject: WSR-359 AMSAT Weekly Satellite Report
Date: Thu, 28 Dec 2006 07:21:33 -0600
MIME-Version: 1.0
Content-Type: text/plain;
     format=flowed;
     charset="iso-8859-1";
     reply-type=original
Content-Transfer-Encoding: 7bit
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.3028
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.3028
Message-ID: <hPydnQPbypNFWQ7YnZ2dnUVZ_riknZ2d@comcast.com>
Lines: 980
NNTP-Posting-Host: 67.184.169.1
X-Trace:
sv3-9LTY4W1e5SuDB+OyC4hhDmsm7WrH+K5WrQbA78Lv+JRgZeMrkYTdnVhiMoyplElPx0So9j6fmVNug+
W!jnqDmIbqbYi33qWfnX216N75eNMylu0DLDF4hGdh64SwCfyYQbgf07s3jdoY7qJZSTF4QGFlBj6F!
la+yW1UKHBpQUYc=
X-Complaints-To: abuse@comcast.net
X-DMCA-Complaints-To: dmca@comcast.net
X-Abuse-and-DMCA-Info: Please be sure to forward a copy of ALL headers
X-Abuse-and-DMCA-Info: Otherwise we will be unable to process your complaint
properly
X-Postfilter: 1.3.32
Xref: g2news2.google.com rec.radio.amateur.space:553
```

This report is organized into 4 parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites

Part 4 (S4) - proposed satellites

SB SAT @ AMSAT W8ISS ANS-359.S1
WSR 359 Part 1 12/25/2006

AMSAT NEWS SERVICE BULLETIN 359.S1 FROM AMSAT HQ
SILVER SPRING, MD, December 25, 2006
TO ALL RADIO AMATEURS
BID: $ANS-359.S1

VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/V - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 MHz to 435.280 MHz LSB/CW
Downlink: 145.870 MHz to 145.930 MHz USB/CW

Dutch Transponder:
Uplink: 435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW

Indian Beacon: 145.859330 MHZ CW
Dutch Beacon: 145.860MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsat.in/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is
active. Each transponder has a different beacon.
[10022006]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational
```
Current Mode(s): FM Repeater - V/U
                 PBBS -        OFF
                 Digipeater -  OFF

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
```

Analog voice uplink: 145.880 MHZ FM
145.880 MHz USB
145.920 MHz FM
1268.700 MHz FM 67Hz PL tone
Digital Downlinks: 435.150 MHz FM 38k4 Digital, PBP, 1 watt output
435.150 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
1268.700 mhz FM 9k6 PBP Digital

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[12252006]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Uplink: 145.850 MHz (67.0 Hz PL tone) (See below for operating
procedures)
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The order of operation is thus: (allow for Doppler as necessary)
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute
timer
on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the
repeater
on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset
the 10

minute timer.
[04172006]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: OPERATIONAL

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplink: 145.850 145.870 145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

unOfficial Webpage: http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's CW telemetry downlink:
http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts.htm
[11202006]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational?

Uplink: 145.850 MHz FM
Downlink: 436.795 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

This off the AO-27 website:
For the last 5 weeks ground controllers have been trying to contact AO-27. At
this point we have not been able to turn it on. We still have a few tricks
that we are planning on trying but these take time. We are hoping that we can
re-establish communications.

At this time, we don't have an estimate for when AO-27 will be back on the air.

AO-27 is now in its 14th year on orbit. We will continue to try to recover AO-27 until we run out of ideas.
- Michael N3UC

Official Webpage: http://www.ao27.org
[10232006]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational depending on amount of Sunlight
Current Reported mode: Mode-A

```
Uplink:   145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink:  29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons:   29.502 MHz
          145.972 MHz
          435.100 MHz
         2304.100 MHz
```

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php
The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
AO-7 users are requested to log their contacts and observations about AO-7,
especially any unexpected mode changes.
AO-07 telemetry software webpage:
http://www.qsl.net/k3tz/files/K3TZ_AO-07_Telemetry_Decoder_0.5.zip

Please keep your power low! For additional information please read the AO-7
Usage Guidelines on the AO-7 Log and Resource Site located at:
http://www.planetemily.com/ao7
[04242006]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: Occasional Voice
Digipeater: OFF

The Expedition 14 crew is:
Commander: Michael Lopez-Alegria - KE5GTK
Flight Engineer: Mikhail Tyurin - RZ3FT
Flight Engineer: Sunita Williams

Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

SSTV TESTING:
Worldwide Reported Downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS, RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.
[12182006]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-359.S2
WSR 359 Part 2 12/25/2006

AMSAT NEWS SERVICE BULLETIN 359.S2 FROM AMSAT HQ
SILVER SPRING, MD, December 25, 2006
TO ALL RADIO AMATEURS
BID: $ANS-359.S2

GENESAT-1 ?O-??
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Telemetry Beacon Downlink: 437.0670 MHz AFSK 1200 BPS
[12182006]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Operational

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon: 437.2750 MHz CW

Callsign: JR8YJT
[10302006]
=====
CO-58 XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW only

Telemetry Downlink: 437.345MHz - FSK 1200bps using AFK protocol
Beacon: 437.465MHz - CW

Callsign: JQ1YGW

Oficial Webpage: http://www.space.t.u-tokyo.ac.jp/gs/satinfo-e.html#xi5
Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
[09252006]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launched: June 30, 2006

Status: Operational

Beacon: 436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS
[10022006]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launched: June 30,2003

Status: Semi-Operational - Constant Carrier only

```
Uplink: ?
Downlink: 437.3850 CW
          437.4700 1200 FM ax25 or SRLL (ACTIVE only near Japan ? )

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[09252006]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational
Current Mode(s): FM Repeater - V/U
                 PBBS -        OFF
                 Digipeater -  OFF

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink:   145.880 MHZ FM
                       145.880 MHz USB
                       145.920 MHz FM
                      1268.700 MHz FM 67Hz PL tone
Digital Downlinks:     435.150 MHz FM 38k4 Digital, PBP, 1 watt output
                       435.150 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:        145.860 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      1268.700 mhz FM 9k6 PBP Digital

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[12252006]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: RECOVERY EFFORTS - REFRAIN FRON USAGE!!!
```

```
General Usage Uplink/Downlink:145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org
aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[09252006]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: CLOSED - Maintenance

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM
Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[11272006]
=====
RS-22 Mozhayets 4
Catalog number: 27939
Launch Date: September 27, 2004

Status: Operational

Beacon: 435.3520 MHz CW
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Semi-operational, the digipeater command is on and open for APRS
users.

Uplink: 145.900 FM
       145.920 FM
       145.940 FM
       145.960 FM
(using 1200-baud Manchester FSK)
Downlink: 437.026 MHz SSB (1200-baud PSK)
Mode-S Beacon: 2401.1428 MHz

Mode and Antenna Polarization:
```

U: RC 437.050 MHz RHCP
PSK 437.025 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[04172006]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational

Telemetry Downlink: 145.826 MHz. FM (1200-baud AFSK) approx. 10 days ON,
10
days OFF
Mode-S Beacon: 2401.500 MHz - OFF
UHFBeacon: 435.025 MHz - OFF

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Official webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[10302006]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: Occasional Voice
Digipeater: OFF

Expedition Crew 14 is:
Commander: Michael Lopez-Alegria - KE5GTK
Flight Engineer: Mikhail Tyurin - RZ3FT
Flight Engineer: Sunita Williams

Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

SSTV TESTING:

Worldwide Reported Downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS, RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is NOT translated from Russian and posted.
[12182006]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-359.S3
WSR 359 Part 3 12/25/2006

AMSAT NEWS SERVICE BULLETIN 359.S3 FROM AMSAT HQ
SILVER SPRING, MD, December 25, 2006
TO ALL RADIO AMATEURS
BID: $ANS-359.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI

```
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 FM 67Hz CTCSS
Voice Downlink: 2401.835 FM
Packet Up/Downlink: 437.250 9k6 packet
Packet Downlink 2401.835 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01292006]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink:   145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012006]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launched: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB
Beacon: 145.810 MHz (unmodulated carrier)
```

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: Downlink only

Uplink: 145.875 145.900 145.925 145.950 MHz FM (1200-baud)
Downlink: 435.808 MHz PSK
Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01012006]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB
Beacon: 29.408 MHz
Robot: 29.454 MHz
[05232004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB
Beacon: 145.860 MHz
Robot: 145.908 MHz
[05232004]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink 145.975 MHz FM
Downlink 435.070 MHz FM
[05092004]

```
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink: 145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM
Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01092005]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational?

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB
Beacon: 29.352 MHz (intermittent)
SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplink: 145.84 145.86 145.88 145.90 MHz FM
(using 1200-baud Manchester FSK)
CW downlink: 437.125 MHz
Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[05232004]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795
```

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[08152004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM
Broadcast Callsign: HLO1-11
BBS: HLO1-12

Jim, AA7KC, reports that KO-23's downlink transmitter continues in a non-operational status.
[05092004]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM (9600-baud FSK)
Downlink: 436.500 MHz FM
Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm

[ANS-WSR has no further information]
[09042006]
=====
SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

STatus: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz and 145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[08082004]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlink: 437.025 MHz 437.400 MHz
Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web site
at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[05092004]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

```
Uplink V-band   145.840 - 145.990 MHz CW/LSB
      U-band   435.550 - 435.800 MHz CW/LSB
      L1-band 1269.250 - 1269.500 MHz CW/LSB
      L2-band 1268.325 - 1268.575 MHz CW/LSB
Downlink: S2-band 2401.225 - 2401.475 MHz CW/USB
         K-band 24,048.010 - 24,048.060 MHz CW/USB
Beacon:   2401.323
        24,048.035
```

[05232004]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational
Downlink: 437.075 MHz
Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[08152004]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz
Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[08152004]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, callsign KE6QMD, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Operational

Uplink: 145.850 or 145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz
Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[11202005]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink 435.275 1200-baud AFSK
Downlink 145.825 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink: Downlink 145.825 MHz FM 1200 Baud AFSK
Beacon: 2401.220 MHz
[05012006]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-359.S4

WSR 359 Part 4 12/25/2006

AMSAT NEWS SERVICE BULLETIN 359.S4 FROM AMSAT HQ
SILVER SPRING, MD, December 25, 2006
TO ALL RADIO AMATEURS
BID: $ANS-359.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE PROPOSED FOR LAUNCH AT THIS TIME:

PHASE 3E ?O-??
Catalog number:
Proposed Launch Date: Early/Mid 2007

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/
[ANS-WSR wishes to thank William Leijenaar, PE1RAH for this week's report]
[04242006]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/amsat/listserv/menu.html

In addition to regular membership, AMSAT-NA offers membership in the
President's Club. Members of the President's Club, as sustaining donors
to AMSAT Project Funds, will be eligible to receive additional benefits.
Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the
memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen,
G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

From -8757970065992866487
X-Google-Thread: 10bb69,af3a945b40f29083
X-Google-Thread: fc521,af3a945b40f29083
X-Google-Thread: f84d8,5228070b6e104c77
X-Google-Thread: 10e8ad,41180496b69c09cf
X-Google-Thread: 104a10,41180496b69c09cf
X-Google-Attributes: gid10bb69,gidfc521,gidf84d8,gid10e8ad,gid104a10,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!postnews.google.com!k21g2000cwa.googlegroups.com!not-for-mail
From: "bobandcarole" <bobandcarole777@hotmail.com>
Newsgroups:
alt.politics.homosexuality,alt.education,alt.dbs.directv,rec.radio.amateur.space,rec.food.drink.beer
Subject: Re: spaming hate monger
Date: 31 Dec 2006 05:45:58 -0800
Organization: http://groups.google.com
Lines: 38
Message-ID: <1167572758.916199.75060@k21g2000cwa.googlegroups.com>
References: <1164787817.495319.179220@j44g2000cwa.googlegroups.com>
<T7fbh.54807$39.24787@southeast.rr.com>
<1165311819.048659.210350@l12g2000cwl.googlegroups.com>
<1165425943.817914.20640@l12g2000cwl.googlegroups.com>
<he0en2p9uadn83m20caa7plngati5jt6b0@4ax.com>
<LuWdnYQINLeP_-TYnZ2dnUVZ_vCdnZ2d@adelphia.com>
<458041B9.CE59AB85@peace.net>
<9mt0o2pgf9202rflbpr0b5n92becm9msu8@4ax.com>
<458185C2.6D2624B8@peace.net>
<mg73o29skvh58os4edi0dem4ok36gnklsh@4ax.com>

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   <458442AF.16945D81@peace.net>
   <bso9o2hl4d31hehgdgsjo620hm5a8ulf6c@4ax.com>
NNTP-Posting-Host: 152.163.100.203
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"
X-Trace: posting.google.com 1167572764 19967 127.0.0.1 (31 Dec 2006 13:46:04 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Sun, 31 Dec 2006 13:46:04 +0000 (UTC)
In-Reply-To: <bso9o2hl4d31hehgdgsjo620hm5a8ulf6c@4ax.com>
User-Agent: G2/1.0
X-HTTP-UserAgent: Mozilla/4.0 (compatible; MSIE 6.0; AOL 9.0; Windows NT 5.1;
SV1),gzip(gfe),gzip(gfe)
X-HTTP-Via: HTTP/1.1 (Velocity/1.3.32 [uScMs f p eN:t cCMp s ]), HTTP/1.1 Turboweb
[rtc-te094 8.4.1], HTTP/1.1 cache-rtc-ad09.proxy.aol.com[98A364CB] (Traffic-
Server/6.1.5 [uScM])
Complaints-To: groups-abuse@google.com
Injection-Info: k21g2000cwa.googlegroups.com; posting-host=152.163.100.203;
   posting-account=tRM8MQ0AAAC6yYQlCAQ0-x3220Whom2B
Xref: g2news2.google.com alt.politics.homosexuality:173295 alt.education:45962
alt.dbs.directv:4300 rec.radio.amateur.space:554 rec.food.drink.beer:2485


Bernard Hubbard wrote:
> On Sat, 16 Dec 2006 14:02:07 -0500, fritz <love@peace.net> wrote:
>
> >Mark@kb9rqz.aprs wrote:
> >
> >> On Thu, 14 Dec 2006 12:11:30 -0500, fritz <love@peace.net> wrote:
> >>
> >> >Mark@kb9rqz.aprs wrote:
> >> >
> >> >> On Wed, 13 Dec 2006 13:08:57 -0500, fritz <love@peace.net> wrote:
> >> >>
> >> >> >John Doe wrote:
> >> >> >
> >> >> >> AND WHY DO WE NEED THIS KIND OF POSTING IN A GROUP THAT HAS NOTHING TO
DO
> >> >> >> WITH THE SUBJECT? NAMELY AMATEUR RADIO!
> >> >> >
> >> >> >Because "bobandcarole" wish it that way, so shut up and read.
> >> >>
> >> >> or ignore the thread if you don't want to read it
> >> >
> >> >Can't do that, "bobandcarole" will get angry and call you
> >> >a fag, or some other fancy name for homos.
> >> or call you a child molestor the gay stuff doesn't seem to be enough
> >> any more the slime keeps escalating not sure where it is headed and I
> >> don't want to know but I know I will learn wether I want to or not
> >
> >He just wants attention, nothing more.
> >His home life sucks so he has no place else to go.
>
> I'm sure that there is no sucking in his house so he uses the internet
> hoping to pick-up a date.  I'm not going to volunteer as I have seen
> pix of Blob and they are enough for me to up-chuck.


Really???
Post these "pix of me"  you lying homosexual piece of kangaroo shit...




From -2160883455431000368
X-Google-Thread: 10bb69,af3a945b40f29083
X-Google-Thread: fc521,af3a945b40f29083
X-Google-Thread: f84d8,5228070b6e104c77
X-Google-Thread: 10e8ad,41180496b69c09cf
X-Google-Thread: 104a10,41180496b69c09cf
X-Google-Attributes: gid10bb69,gidfc521,gidf84d8,gid10e8ad,gid104a10,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news3.google.com!news1.google.com!news.maxwell.syr.edu!
newsfeed.icl.net!newsfeed.fjserv.net!colt.net!feeder.news-service.com!
news2.euro.net!66.150.105.54.MISMATCH!nntpserver.com!zeus.nntpserver.com!
hydra.nntpserver.com!not-for-mail
From: Mark@kb9rqz.aprs
Newsgroups:
alt.politics.homosexuality,alt.education,alt.dbs.directv,rec.radio.amateur.space,r
ec.food.drink.beer
Subject: Re: spaming hate monger
Date: Sun, 31 Dec 2006 09:32:43 -0500
Message-ID: <mfifp2d98tm0f23fcfnhsnl84beh08qm2g@4ax.com>
References: <1165425943.817914.20640@l12g2000cwl.googlegroups.com>
<he0en2p9uadn83m20caa7plngati5jt6b0@4ax.com> <LuWdnYQINLeP_-
TYnZ2dnUVZ_vCdnZ2d@adelphia.com> <458041B9.CE59AB85@peace.net>
<9mt0o2pgf9202rflbpr0b5n92becm9msu8@4ax.com> <458185C2.6D2624B8@peace.net>
<mg73o29skvh58os4edi0dem4ok36gnklsh@4ax.com> <458442AF.16945D81@peace.net>
<bso9o2hl4d31hehgdgsjo620hm5a8ulf6c@4ax.com>
<1167572758.916199.75060@k21g2000cwa.googlegroups.com>
X-Newsreader: Forte Free Agent 3.3/32.846
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Lines: 44
NNTP-Posting-Date: 31 Dec 2006 13:38:28 GMT
X-Complaints-To: abuse@teranews.com
Xref: g2news2.google.com alt.politics.homosexuality:173302 alt.education:45964
alt.dbs.directv:4301 rec.radio.amateur.space:555 rec.food.drink.beer:2486

On 31 Dec 2006 05:45:58 -0800, "bobandcarole"
<bobandcarole777@hotmail.com> wrote:

>
>Bernard Hubbard wrote:
>> On Sat, 16 Dec 2006 14:02:07 -0500, fritz <love@peace.net> wrote:
>>
>> >Mark@kb9rqz.aprs wrote:
```

```
>> >
>> >> On Thu, 14 Dec 2006 12:11:30 -0500, fritz <love@peace.net> wrote:
>> >>
>> >> >Mark@kb9rqz.aprs wrote:
>> >> >
>> >> >> On Wed, 13 Dec 2006 13:08:57 -0500, fritz <love@peace.net> wrote:
>> >> >>
>> >> >> >John Doe wrote:
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>> >> >> >> AND WHY DO WE NEED THIS KIND OF POSTING IN A GROUP THAT HAS NOTHING TO
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>> >> >> >Because "bobandcarole" wish it that way, so shut up and read.
>> >> >>
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>> >> >
>> >> >Can't do that, "bobandcarole" will get angry and call you
>> >> >a fag, or some other fancy name for homos.
>> >> or call you a child molestor the gay stuff doesn't seem to be enough
>> >> any more the slime keeps escalating not sure where it is headed and I
>> >> don't want to know but I know I will learn wether I want to or not
>> >
>> >He just wants attention, nothing more.
>> >His home life sucks so he has no place else to go.
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>> I'm sure that there is no sucking in his house so he uses the internet
>> hoping to pick-up a date.  I'm not going to volunteer as I have seen
>> pix of Blob and they are enough for me to up-chuck.
>
>
>Really???
>Post these "pix of me"  you lying homosexual piece of kangaroo shit...


please take you hate mongering someplace else
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com




From 8759238464593686953
X-Google-Thread: 10bb69,af3a945b40f29083
X-Google-Thread: fc521,af3a945b40f29083
X-Google-Thread: f84d8,5228070b6e104c77
X-Google-Thread: 10e8ad,41180496b69c09cf
X-Google-Thread: 104a10,41180496b69c09cf
X-Google-Attributes: gid10bb69,gidfc521,gidf84d8,gid10e8ad,gid104a10,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news4.google.com!news.glorb.com!
newsfeed2.telusplanet.net!newsfeed.telus.net!edtnps89.POSTED!53ab2750!not-for-mail
```

From: Sniper .308 <me@my.desk>
Newsgroups:
alt.politics.homosexuality,alt.education,alt.dbs.directv,rec.radio.amateur.space,r
ec.food.drink.beer
Subject: Re: spaming hate monger
Message-ID: <ckpfp2hbnsooeh9r07alettjh0mm2bva5e@4ax.com>
References: <1165425943.817914.20640@l12g2000cwl.googlegroups.com>
<he0en2p9uadn83m20caa7plngati5jt6b0@4ax.com> <LuWdnYQINLeP_-
TYnZ2dnUVZ_vCdnZ2d@adelphia.com> <458041B9.CE59AB85@peace.net>
<9mt0o2pgf9202rflbpr0b5n92becm9msu8@4ax.com> <458185C2.6D2624B8@peace.net>
<mg73o29skvh58os4edi0dem4ok36gnklsh@4ax.com> <458442AF.16945D81@peace.net>
<bso9o2hl4d31hehgdgsjo620hm5a8ulf6c@4ax.com>
<1167572758.916199.75060@k21g2000cwa.googlegroups.com>
<mfifp2d98tm0f23fcfnhsnl84beh08qm2g@4ax.com>
X-Newsreader: Forte Agent 2.0/32.652
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Lines: 9
Date: Sun, 31 Dec 2006 16:39:32 GMT
NNTP-Posting-Host: 207.194.112.191
X-Trace: edtnps89 1167583172 207.194.112.191 (Sun, 31 Dec 2006 09:39:32 MST)
NNTP-Posting-Date: Sun, 31 Dec 2006 09:39:32 MST
Xref: g2news2.google.com alt.politics.homosexuality:173334 alt.education:45969
alt.dbs.directv:4303 rec.radio.amateur.space:556 rec.food.drink.beer:2487

On Sun, 31 Dec 2006 09:32:43 -0500, Mark@kb9rqz.aprs wrote:

>please take you hate mongering someplace else
>http://kb9rqz.blogspot.com/

Blob is the single biggest hypocritical cock sucking cowards on the
internet. Hell he changes his email address 2 or 3 times a day, then
tries to deny it. So using words like please won't cut it.

From -6382862006711118394
X-Google-Thread: 10bb69,af3a945b40f29083
X-Google-Thread: fc521,af3a945b40f29083
X-Google-Thread: f84d8,5228070b6e104c77
X-Google-Thread: 10e8ad,41180496b69c09cf
X-Google-Thread: 104a10,41180496b69c09cf
X-Google-Attributes: gid10bb69,gidfc521,gidf84d8,gid10e8ad,gid104a10,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news4.google.com!news.glorb.com!nntpserver.com!
zeus.nntpserver.com!hydra.nntpserver.com!not-for-mail
From: Mark@kb9rqz.aprs
Newsgroups:
alt.politics.homosexuality,alt.education,alt.dbs.directv,rec.radio.amateur.space,r
ec.food.drink.beer
Subject: Re: spaming hate monger
Date: Sun, 31 Dec 2006 11:45:21 -0500

```
Message-ID: <c8qfp29log7tu31kipjaa49tps2j49cdfd@4ax.com>
References: <he0en2p9uadn83m20caa7plngati5jt6b0@4ax.com> <LuWdnYQINLeP_-
TYnZ2dnUVZ_vCdnZ2d@adelphia.com> <458041B9.CE59AB85@peace.net>
<9mt0o2pgf9202rflbpr0b5n92becm9msu8@4ax.com> <458185C2.6D2624B8@peace.net>
<mg73o29skvh58os4edi0dem4ok36gnklsh@4ax.com> <458442AF.16945D81@peace.net>
<bso9o2hl4d31hehgdgsjo620hm5a8ulf6c@4ax.com>
<1167572758.916199.75060@k21g2000cwa.googlegroups.com>
<mfifp2d98tm0f23fcfnhsnl84beh08qm2g@4ax.com>
<ckpfp2hbnsooeh9r07alettjh0mm2bva5e@4ax.com>
X-Newsreader: Forte Free Agent 3.3/32.846
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Lines: 14
NNTP-Posting-Date: 31 Dec 2006 15:51:04 GMT
X-Complaints-To: abuse@teranews.com
Xref: g2news2.google.com alt.politics.homosexuality:173336 alt.education:45970
alt.dbs.directv:4304 rec.radio.amateur.space:557 rec.food.drink.beer:2488

On Sun, 31 Dec 2006 16:39:32 GMT, Sniper .308 <me@my.desk> wrote:

>On Sun, 31 Dec 2006 09:32:43 -0500, Mark@kb9rqz.aprs wrote:
>
>
>>please take you hate mongering someplace else
>>http://kb9rqz.blogspot.com/
>
>Blob is the single biggest hypocritical cock sucking cowards on the
>internet. Hell he changes his email address 2 or 3 times a day, then
>tries to deny it.  So using words like please won't cut it.

neither will anything else most likely so I prefer being polite
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com




From 1777618050491924928
X-Google-Thread: 10bb69,af3a945b40f29083
X-Google-Thread: fc521,af3a945b40f29083
X-Google-Thread: f84d8,5228070b6e104c77
X-Google-Thread: 10e8ad,41180496b69c09cf
X-Google-Thread: 104a10,41180496b69c09cf
X-Google-Attributes: gid10bb69,gidfc521,gidf84d8,gid10e8ad,gid104a10,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news2.google.com!news4.google.com!
border1.nntp.dca.giganews.com!nntp.giganews.com!nx01.iad01.newshosting.com!
newshosting.com!news-feed01.roc.ny.frontiernet.net!nntp.frontiernet.net!
newsfeed2.telusplanet.net!newsfeed.telus.net!edtnps89.POSTED!53ab2750!not-for-mail
From: Sniper .308 <me@my.desk>
Newsgroups:
```

```
alt.politics.homosexuality,alt.education,alt.dbs.directv,rec.radio.amateur.space,r
ec.food.drink.beer
Subject: Re: spaming hate monger
Message-ID: <mkqfp29oo79ai5rmq3ai1e00jdujtu5fmp@4ax.com>
References: <LuWdnYQINLeP_-TYnZ2dnUVZ_vCdnZ2d@adelphia.com>
<458041B9.CE59AB85@peace.net> <9mt0o2pgf9202rflbpr0b5n92becm9msu8@4ax.com>
<458185C2.6D2624B8@peace.net> <mg73o29skvh58os4edi0dem4ok36gnklsh@4ax.com>
<458442AF.16945D81@peace.net> <bso9o2hl4d31hehgdgsjo620hm5a8ulf6c@4ax.com>
<1167572758.916199.75060@k21g2000cwa.googlegroups.com>
<mfifp2d98tm0f23fcfnhsnl84beh08qm2g@4ax.com>
<ckpfp2hbnsooeh9r07alettjh0mm2bva5e@4ax.com>
<c8qfp29log7tu31kipjaa49tps2j49cdfd@4ax.com>
X-Newsreader: Forte Agent 2.0/32.652
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Lines: 9
Date: Sun, 31 Dec 2006 16:56:07 GMT
NNTP-Posting-Host: 207.194.112.191
X-Trace: edtnps89 1167584167 207.194.112.191 (Sun, 31 Dec 2006 09:56:07 MST)
NNTP-Posting-Date: Sun, 31 Dec 2006 09:56:07 MST
Xref: g2news2.google.com alt.politics.homosexuality:173341 alt.education:45972
alt.dbs.directv:4305 rec.radio.amateur.space:558 rec.food.drink.beer:2489

On Sun, 31 Dec 2006 11:45:21 -0500, Mark@kb9rqz.aprs wrote:


>neither will anything else most likely so I prefer being polite
>http://kb9rqz.blogspot.com/

The single most comical thing about Blob, is he claims to be christian
while posting racist and homophobic drivel.  He is by far the biggest
hypocritical COWARD I have ever seen.


From 5969009615373481699
X-Google-Thread: 108122,9522e97e764934e5,start
X-Google-Thread: fc2a5,9522e97e764934e5,start
X-Google-Thread: 107ada,9522e97e764934e5,start
X-Google-Thread: 10bf43,9522e97e764934e5,start
X-Google-Thread: 10e8ad,9522e97e764934e5,start
X-Google-Attributes: gid108122,gidfc2a5,gid107ada,gid10bf43,gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news3.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!newscon02.news.prodigy.net!prodigy.net!
newscon05.news.prodigy.net!prodigy.com!postmaster.news.prodigy.com!
newssvr19.news.prodigy.com.POSTED!dde308f5!not-for-mail
From: "Nighthawk" <miner1@flash.net>
Newsgroups:
rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.
radio.amateur.policy,rec.radio.amateur.space
Subject: Visit Nighthawk's Forum
Lines: 7
```

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X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.3028
X-RFC2646: Format=Flowed; Original
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.3028
Message-ID: <jtTlh.10746$ZT3.9390@newssvr19.news.prodigy.com>
NNTP-Posting-Host: 70.129.41.236
X-Complaints-To: abuse@prodigy.net
X-Trace: newssvr19.news.prodigy.com 1167590351 ST000 70.129.41.236 (Sun, 31 Dec
2006 13:39:11 EST)
NNTP-Posting-Date: Sun, 31 Dec 2006 13:39:11 EST
Organization: AT&T http://yahoo.sbc.com
X-UserInfo1:
[[PAPDONXJTORT@[_@CHOPP@FJ^ZTB\MV@BZMVMHQAVTUZ]CLNTCPFK[WDXDHV[K^FCGJCJLPF_D_NCC@F
UG^Q\DINVAXSLIFXYJSSCCALP@PB@\OS@BITWAH\CQZKJMMD^SJA^NXA\GVLSRBD^M_NW_F[YLVTWIGAXA
QBOATKBBQRXECDFDMQ\DZFUE@\JM
Date: Sun, 31 Dec 2006 12:38:54 -0600
Xref: g2news2.google.com rec.radio.amateur.equipment:7747
rec.radio.amateur.homebrew:8504 rec.radio.amateur.misc:27516
rec.radio.amateur.policy:60838 rec.radio.amateur.space:559
```

If you have communications equipment you either want to buy, sell or give away, or you want to find out information on that new antenna, or radio you got for Christmas, visit Nighthawk's Forum

http://nighthawk.suddenlaunch2.com

```
From -1652854724885270778
X-Google-Thread: 10e8ad,b3617c9a8cb32a68,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII
Path: g2news2.google.com!news4.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!local01.nntp.dca.giganews.com!nntp.comcast.com!
news.comcast.com.POSTED!not-for-mail
NNTP-Posting-Date: Sun, 31 Dec 2006 19:15:50 -0600
From: "JoAnne K9JKM" <k9jkm_remove_@comcast.net>
Newsgroups: rec.radio.amateur.space
Subject: ANS-365 AMSAT News Service Weekly Bulletins
Date: Sun, 31 Dec 2006 19:16:05 -0600
MIME-Version: 1.0
Content-Type: text/plain;
     format=flowed;
     charset="iso-8859-1";
     reply-type=original
Content-Transfer-Encoding: 8bit
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.3028
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.3028
Message-ID: <ua6dnXYUZfNa_QXYnZ2dnUVZ_uCinZ2d@comcast.com>
```

```
Lines: 269
NNTP-Posting-Host: 67.184.169.1
X-Trace: sv3-OWHvln5MiJTLVmoWgHkOqu7+LrahTtzq5tbSPD/
wyQWLgVymLYCQcdjFhFJDabebiWbgVzzNaLHvDJy!nY/HnSdKdkOLvq/ZBH/lvfgbvx062s4ufHSyEVC/
B5uNd94glVUpgQxIF+HvNRsrDjfzBuALlTDG!Ed3W2qZXUctF4Yc=
X-Complaints-To: abuse@comcast.net
X-DMCA-Complaints-To: dmca@comcast.net
X-Abuse-and-DMCA-Info: Please be sure to forward a copy of ALL headers
X-Abuse-and-DMCA-Info: Otherwise we will be unable to process your complaint
properly
X-Postfilter: 1.3.32
Xref: g2news2.google.com rec.radio.amateur.space:560
```

AMSAT NEWS SERVICE
ANS-365

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* Another Year
* 11th SE VHF Society Conference Call for Papers
* AO-51 News
* ARISS Status - 25 December 2006
* RSGB Proposes Satellite Frequency Expansion in Region 1
* SKN on OSCAR 2007 To Be In Memory Of K7RR

SB SAT @ AMSAT $ANS-365.01
Another Year

AMSAT News Service Bulletin 365.01
  From AMSAT HQ SILVER SPRING, MD.
December 31, 2006
To All RADIO AMATEURS
BID: $ANS-365.01

Well, 2006 is about to be history. Satellite activity should be ramping up in 2007 with HEO birds on the horizon. Our group, ANS, has brought many late breaking news items and wish to thank all those that keep us in the loop to inform our international readers about these happenings. Please continue to do so.
 From all of us, Joanne, K9JKM, Lee, KU4OS, Dave, G4DPZ & myself, Dee, NB2F, we wish you a Happy, healthy, New Year. Remember, SKN Jan1, '07!

[ANS thanks the ANS News Crew for the above information]

/EX

SB SAT @ AMSAT $ANS-358.02
Call for Papers

AMSAT News Service Bulletin 365.02
From AMSAT HQ SILVER SPRING, MD.
December 31, 2006
To All RADIO AMATEURS
BID: $ANS-365.02

Call for Papers And Presentations
11th Annual Southeastern VHF Society Conference
April 27th and 28th, 2007
Atlanta, Georgia

The Southeastern VHF Society is calling for the submission of papers and presentations for the upcoming 11th Annual Southeastern VHF Society Conference to be held in Atlanta, Georgia on April 27th and 28th, 2007. Papers and presentations are solicited on both the technical and operational aspects of VHF, UHF and Microwave weak signal amateur radio. Some suggested areas of interest are:

- Transmitters
- Receivers
- Transverters
- RF Power Amplifiers
- RF Low Noise Pre Amplifiers
- Antennas
- Construction Projects
- Test Equipment And Station Accessories
- Station Design And Construction
- Contesting
- Roving
- DXpeditions
- EME
- Propagation (Sporadic E, Meteor Scatter, Troposphere Ducting, etc.)
- Digital Modes (WSJT, etc.)
- Digital Signal Processing (DSP)
- Software Defined Radio (SDR)
- Amateur Satellites
- Amateur Television

In general papers and presentations on non weak signal related topics such as FM repeaters and packet will not be accepted but exceptions may be made if the topic is related to weak signal. For example, a paper or presentation on the use of APRS to track rovers during contests would be considered.

The deadline for the submission of papers and presentations is March 2, 2007. All submissions should be in Microsoft Word (.doc) or alternatively Adobe Acrobat (.pdf) files. Pages are 8 and 1/2 by 11 inches with a 1 inch margin on the bottom and � inch margin on the other three sides. All text, drawings, photos, etc. should be black and white only (no color). Please indicate when you submit your paper or presentation if you plan to attend the conference and present there or if you are submitting just for publication. Papers and presentations will be published in bound proceedings by the ARRL. Send all questions, comments and submissions to the technical program chair, Jim Worsham, W4KXY at w4kxy@bellsouth.net. For further information about the conference please go to www.svhfs.org.

[ANS thanks Jim Worsham, WA4KYX, for the above information]

/EX

SB SAT @ AMSAT $ANS-365.03
AO-51 News

AMSAT News Service Bulletin 365.03
From AMSAT HQ SILVER SPRING, MD.
December 31, 2006
To All RADIO AMATEURS
BID: $ANS-365.03

Due to a problem with the onboard software the BBS on AO-51 has been turned off. It will remain off until a command station can do a full reload, probably sometime after January 1. When the reload begins, the repeater will also be off until it is finished. Sorry for the inconvenience.

73, Drew KO4MA
AMSAT-NA VP Operations

[ANS thanks Drew, K04MA for the above information]

/EX

SB SAT @ AMSAT $ANS-365.04
ARISS Status - 25 December 2006

AMSAT News Service Bulletin 365.04
From AMSAT HQ SILVER SPRING, MD.
December 31, 2006
To All RADIO AMATEURS
BID: $ANS-365.04

Amateur Radio on the International Space Station (ARISS) Status Report
December 25, 2006

1. Swedish School Contact Update

On Sunday, December 17, students attending school at Thunmanskolan in Knivsta, Sweden spoke with Swedish astronaut Christer Fuglesang, KE5CGR/SA0AFS, on board the ISS. Hundreds attended the event and half of the 50 connections made to Echolink were from Swedish stations. Many media outlets covered the contact. To view the article in the Swedish newspaper UNT, see:
http://www2.unt.se/avd2/1,3908,MC=72-AV_ID=562618,00.html

The American Radio Relay League (ARRL) also ran an article covering the event. See: http://www.arrl.org/news/stories/2006/12/19/100/?nc=1

Television coverage may be viewed here:
http://www.aftonbladet.se/atv/player.html?catID=10&clipID=13482

2. Upcoming School Contact

An Amateur Radio on the International Space Station (ARISS) contact between the Kashiwabara Community Center in Sayama, Japan and astronaut Michael Lopez-Alegria has been scheduled for Wednesday, December 27, at 12:22 UTC. Kashiwabara Community Center will plan and support this children's event with the two area schools: Kashiwabara Elementary School and Kashiwabara Junior High School. The children will be taught about the ISS, space and amateur radio, and will take a field trip to visit the Japanese Aerospace Exploration Agency (JAXA). Members of JAXA will also be invited to the event.

3. Training Status

On Thursday, December 14, astronaut Tim Kopra and future space participant Charles Simonyi took and passed their amateur radio license exams. Callsigns have since been issued. Charles Simonyi received the callsign KE7KDP and Timothy Kopra was issued the callsign KE5LUT. Congratulations to both!

[ANS thanks Carol, KB3LKI for the above information]

/EX

SB SAT @ AMSAT $ANS-365.05
RSGB Proposes Expanding Amateur Satellite Allocations in Region 1

AMSAT News Service Bulletin 365.05
  From AMSAT HQ SILVER SPRING, MD.
December 31, 2006
To All RADIO AMATEURS
BID: $ANS-365.05

AMSAT-UK reported this week that a number of papers relating to expanding frequency allocations for the Amateur Satellite Service have been submitted by the RSGB to the IARU Region 1 Interim Conference which will be held in Vienna February 24-25, 2007.

The preliminary RSGB document is on-line at:
http://www.iaru-r1.org/vienna_2007_preversion.pdf

The sections in the above file of interest to the Amateur Satellite community include these:

B01 - Increased Amateur Satellite Service 2 Metre Usage - RSGB
  Proposes the segment 144.315-144.365 MHz for CW/SSB Linear Transponder Downlinks

B02 - Bands above 275 GHz - RSGB
  All proposed bands to be for Amateur Satellite Service as well.

B13 - Allocations at 3400 MHz - RSGB
  Proposes Region 1 Amateur and Amateur Satellite allocation.

B14 - Microwave Spectrum Threats - RSGB
  Details threats to our allocations

B15 - 23cms Bandplan - RSGB
  1240-1250 MHz

B16 - Amateur Satellite Service Spectrum
  Additional VHF and Microwave Satellite allocations

[ANS thanks Trevor, M5AKA for the above information]

/EX

SB SAT @ AMSAT $ANS-365.06
SKN on OSCAR 2007 To Be In Memory Of K7RR

AMSAT News Service Bulletin 365.06
From AMSAT HQ SILVER SPRING, MD.
December 31, 2006
To All RADIO AMATEURS
BID: $ANS-365.06

All radio amateurs, worldwide, are cordially invited to participate in Straight Key Night on OSCAR 2007. This year, the event is dedicated to the memory of Cliff Buttschardt, K7RR. Cliff was an enthusiastic and longtime SKN participant on both OSCAR and HF, as well as a perennial Best Fist winner. He will be sorely missed.

Participating in SKN on OSCAR 2007 is easy. No rules, no scoring and no need to send in a log. Just operate CW through any OSCAR between 0000 and 2400 UTC on 1 January 2007, using a straight hand key.

In keeping with the friendly nature of this event, all participants are encouraged to nominate someone they worked for "Best Fist." Your nominee need not have the best fist of those you heard, just of those you worked. Please send your nomination to w2rs@amsat.org. A list of those nominated will appear in ANS and The AMSAT Journal.

[ANS thanks Ray, W2RS for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73 & Happy New Year
This week's ANS Editor,
Dee Interdonato, NB2F

```
From 1598875718808158616
X-Google-Thread: 10bb69,af3a945b40f29083
X-Google-Thread: fc521,af3a945b40f29083
X-Google-Thread: f84d8,5228070b6e104c77
X-Google-Thread: 10e8ad,41180496b69c09cf
X-Google-Thread: 104a10,41180496b69c09cf
X-Google-Attributes: gid10bb69,gidfc521,gidf84d8,gid10e8ad,gid104a10,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news3.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!local01.nntp.dca.giganews.com!news.giganews.com.POSTED!not-for-
mail
NNTP-Posting-Date: Sun, 31 Dec 2006 21:46:26 -0600
From: Kurt <labolide@spacegmail.com>
Newsgroups:
alt.politics.homosexuality,alt.education,alt.dbs.directv,rec.radio.amateur.space,r
ec.food.drink.beer
Subject: Re: spaming hate monger
References: <LuWdnYQINLeP_-TYnZ2dnUVZ_vCdnZ2d@adelphia.com>
<458041B9.CE59AB85@peace.net> <9mt0o2pgf9202rflbpr0b5n92becm9msu8@4ax.com>
<458185C2.6D2624B8@peace.net> <mg73o29skvh58os4edi0dem4ok36gnklsh@4ax.com>
<458442AF.16945D81@peace.net> <bso9o2hl4d31hehgdgsjo620hm5a8ulf6c@4ax.com>
<1167572758.916199.75060@k21g2000cwa.googlegroups.com>
<mfifp2d98tm0f23fcfnhsnl84beh08qm2g@4ax.com>
<ckpfp2hbnsooeh9r07alettjh0mm2bva5e@4ax.com>
<c8qfp29log7tu31kipjaa49tps2j49cdfd@4ax.com>
<mkqfp29oo79ai5rmq3ai1e00jdujtu5fmp@4ax.com>
User-Agent: MT-NewsWatcher/3.5.2 (PPC Mac OS X)
Date: Sun, 31 Dec 2006 19:45:02 -0800
Message-ID: <labolide-DCD51D.19450231122006@news.giganews.com>
Lines: 19
X-Trace: sv3-
Q0RF1JK4C3wOLUIavUEo3Hv9GWMS+iwIQlhtOcrx9B0iP7rYas4Ep9lPe0Z4uuGMav9DoHwv6cT3olY!
Dc6/uO0Y8bbsmzH3hrSGtpqHalkDD1CsBbJSGbwfCX98KxJCWgyYauvzmhD0xGaznulBzr+kTGpM!Qs4=
X-Complaints-To: abuse@giganews.com
```

X-DMCA-Notifications: http://www.giganews.com/info/dmca.html
X-Abuse-and-DMCA-Info: Please be sure to forward a copy of ALL headers
X-Abuse-and-DMCA-Info: Otherwise we will be unable to process your complaint properly
X-Postfilter: 1.3.32
Xref: g2news2.google.com alt.politics.homosexuality:173625 alt.education:45990 alt.dbs.directv:4312 rec.radio.amateur.space:561 rec.food.drink.beer:2490

In article <mkqfp29oo79ai5rmq3ai1e00jdujtu5fmp@4ax.com>,
Sniper .308 <me@my.desk> wrote:

> On Sun, 31 Dec 2006 11:45:21 -0500, Mark@kb9rqz.aprs wrote:
>
>
> >neither will anything else most likely so I prefer being polite
> >http://kb9rqz.blogspot.com/
>
> The single most comical thing about Blob, is he claims to be christian
> while posting racist and homophobic drivel. He is by far the biggest
> hypocritical COWARD I have ever seen.

He cross posts into a zillion groups. Ignore him.
He only posts for attention. Hope he has a better year with all his
issues. he's not well.

--
To reply by email, remove the word "space"

From -994047652252295197
X-Google-Thread: 10bb69,af3a945b40f29083
X-Google-Thread: fc521,af3a945b40f29083
X-Google-Thread: f84d8,5228070b6e104c77
X-Google-Thread: 10e8ad,41180496b69c09cf
X-Google-Thread: 104a10,41180496b69c09cf
X-Google-Attributes: gid10bb69,gidfc521,gidf84d8,gid10e8ad,gid104a10,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!postnews.google.com!11g2000cwr.googlegroups.com!not-for-mail
From: "bobandcarole" <bobandcarole777@hotmail.com>
Newsgroups:
alt.politics.homosexuality,alt.education,alt.dbs.directv,rec.radio.amateur.space,rec.food.drink.beer
Subject: Re: spaming hate monger
Date: 4 Jan 2007 18:57:37 -0800
Organization: http://groups.google.com
Lines: 17
Message-ID: <1167965857.669160.122360@11g2000cwr.googlegroups.com>
References: <1165425943.817914.20640@l12g2000cwl.googlegroups.com>
   <he0en2p9uadn83m20caa7plngati5jt6b0@4ax.com>
   <LuWdnYQINLeP_-TYnZ2dnUVZ_vCdnZ2d@adelphia.com>
   <458041B9.CE59AB85@peace.net>
   <9mt0o2pgf9202rflbpr0b5n92becm9msu8@4ax.com>

```
   <458185C2.6D2624B8@peace.net>
   <mg73o29skvh58os4edi0dem4ok36gnklsh@4ax.com>
   <458442AF.16945D81@peace.net>
   <bso9o2hl4d31hehgdgsjo620hm5a8ulf6c@4ax.com>
   <1167572758.916199.75060@k21g2000cwa.googlegroups.com>
   <mfifp2d98tm0f23fcfnhsnl84beh08qm2g@4ax.com>
   <ckpfp2hbnsooeh9r07alettjh0mm2bva5e@4ax.com>
NNTP-Posting-Host: 152.163.101.8
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"
X-Trace: posting.google.com 1167965863 26142 127.0.0.1 (5 Jan 2007 02:57:43 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Fri, 5 Jan 2007 02:57:43 +0000 (UTC)
In-Reply-To: <ckpfp2hbnsooeh9r07alettjh0mm2bva5e@4ax.com>
User-Agent: G2/1.0
X-HTTP-UserAgent: Mozilla/4.0 (compatible; MSIE 6.0; AOL 9.0; Windows NT 5.1;
SV1),gzip(gfe),gzip(gfe)
X-HTTP-Via: HTTP/1.1 (Velocity/1.3.32 [uScMs f p eN:t cCMp s ]), HTTP/1.1 Turboweb
[rtc-te043 8.4.1], HTTP/1.1 cache-rtc-ae04.proxy.aol.com[98A36508] (Traffic-
Server/6.1.5 [uScM])
Complaints-To: groups-abuse@google.com
Injection-Info: 11g2000cwr.googlegroups.com; posting-host=152.163.101.8;
   posting-account=tRM8MQ0AAAC6yYQlCAQ0-x3220Whom2B
Xref: g2news2.google.com alt.politics.homosexuality:175384 alt.education:46216
alt.dbs.directv:4337 rec.radio.amateur.space:562 rec.food.drink.beer:2492


Sniper .308 wrote:
> On Sun, 31 Dec 2006 09:32:43 -0500, Mark@kb9rqz.aprs wrote:
>
>
> >please take you hate mongering someplace else

I'm a purveyor of truth, not a "hatemonger"

> >http://kb9rqz.blogspot.com/
>
> Blob is the single biggest hypocritical cock sucking cowards on the
> internet. Hell he changes his email address 2 or 3 times a day, then
> tries to deny it.

LOL...why deny it, idiot?



From -3318498803594167260
X-Google-Thread: 10bb69,af3a945b40f29083
X-Google-Thread: fc521,af3a945b40f29083
X-Google-Thread: f84d8,5228070b6e104c77
X-Google-Thread: 10e8ad,41180496b69c09cf
X-Google-Thread: 104a10,41180496b69c09cf
X-Google-Attributes: gid10bb69,gidfc521,gidf84d8,gid10e8ad,gid104a10,public
X-Google-Language: ENGLISH,ASCII-7-bit
```

```
Path: g2news2.google.com!news3.google.com!news.glorb.com!
newsfeed2.telusplanet.net!newsfeed.telus.net!edtnps82.POSTED!53ab2750!not-for-mail
From: Sniper .308 <me@my.desk>
Newsgroups:
alt.politics.homosexuality,alt.education,alt.dbs.directv,rec.radio.amateur.space,r
ec.food.drink.beer
Subject: Re: spaming hate monger
Message-ID: <spfrp25gncv5g1s2uiecpie96ug9g5iv6i@4ax.com>
References: <LuWdnYQINLeP_-TYnZ2dnUVZ_vCdnZ2d@adelphia.com>
<458041B9.CE59AB85@peace.net> <9mt0o2pgf9202rflbpr0b5n92becm9msu8@4ax.com>
<458185C2.6D2624B8@peace.net> <mg73o29skvh58os4edi0dem4ok36gnklsh@4ax.com>
<458442AF.16945D81@peace.net> <bso9o2hl4d31hehgdgsjo620hm5a8ulf6c@4ax.com>
<1167572758.916199.75060@k21g2000cwa.googlegroups.com>
<mfifp2d98tm0f23fcfnhsnl84beh08qm2g@4ax.com>
<ckpfp2hbnsooeh9r07alettjh0mm2bva5e@4ax.com>
<1167965857.669160.122360@11g2000cwr.googlegroups.com>
X-Newsreader: Forte Agent 2.0/32.652
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Lines: 22
Date: Fri, 05 Jan 2007 03:01:48 GMT
NNTP-Posting-Host: 207.194.112.138
X-Trace: edtnps82 1167966108 207.194.112.138 (Thu, 04 Jan 2007 20:01:48 MST)
NNTP-Posting-Date: Thu, 04 Jan 2007 20:01:48 MST
Xref: g2news2.google.com alt.politics.homosexuality:175385 alt.education:46217
alt.dbs.directv:4338 rec.radio.amateur.space:563 rec.food.drink.beer:2493

On 4 Jan 2007 18:57:37 -0800, "bobandcarole"
<bobandcarole777@hotmail.com> wrote:

>
>Sniper .308 wrote:
>> On Sun, 31 Dec 2006 09:32:43 -0500, Mark@kb9rqz.aprs wrote:
>>
>>
>> >please take you hate mongering someplace else
>
>I'm a purveyor of truth, not a "hatemonger"
>
>> >http://kb9rqz.blogspot.com/
>>
>> Blob is the single biggest hypocritical cock sucking cowards on the
>> internet. Hell he changes his email address 2 or 3 times a day, then
>> tries to deny it.
>
>LOL...why deny it, idiot?

What that you are the single biggest hypocritical cock sucking coward
on the  internet, you are right, why deny it.


From 2694793051771391554
```

```
X-Google-Thread: 10e8ad,992080f359dfae5e,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news3.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!local01.nntp.dca.giganews.com!nntp.comcast.com!
news.comcast.com.POSTED!not-for-mail
NNTP-Posting-Date: Fri, 05 Jan 2007 08:49:21 -0600
From: "JoAnne K9JKM" <k9jkm_remove_@comcast.net>
Newsgroups: rec.radio.amateur.space
Subject: WSR-001 AMSAT Weekly Satellite Report
Date: Fri, 5 Jan 2007 08:49:28 -0600
MIME-Version: 1.0
Content-Type: text/plain;
     format=flowed;
     charset="iso-8859-1";
     reply-type=original
Content-Transfer-Encoding: 7bit
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.3028
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.3028
Message-ID: <xeOdnbnegKjs-APYnZ2dnUVZ_qSrnZ2d@comcast.com>
Lines: 990
NNTP-Posting-Host: 67.184.169.1
X-Trace: sv3-
OTnxuDXbY4+D5BRrR6tpi+KHVDSItOfmio2M7UG0NIOw1ho1OzI1rYCqui9C0GiRBFbf4GA7BAzLbrR!
d2F9dzuLxkySGrS9xfdlv8fVbSSVLjL9ZA7oKVEIDVOwWhwKrTnhlHxvzEdyTUp5/T6GpwjeGzlm!
TiBYJlZzxxZnIKk=
X-Complaints-To: abuse@comcast.net
X-DMCA-Complaints-To: dmca@comcast.net
X-Abuse-and-DMCA-Info: Please be sure to forward a copy of ALL headers
X-Abuse-and-DMCA-Info: Otherwise we will be unable to process your complaint
properly
X-Postfilter: 1.3.32
Xref: g2news2.google.com rec.radio.amateur.space:564
```

This report is organized into 4 parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites

SB SAT @ AMSAT W8ISS ANS-001.S1
WSR 001 Part 1 01/01/2007

AMSAT NEWS SERVICE BULLETIN 001.S1 FROM AMSAT HQ
SILVER SPRING, MD, January 01,2007
TO ALL RADIO AMATEURS
BID: $ANS-001.S1

VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

```
Status: Operational
Current Mode: U/V - Indian Transponder

Frequencies:
Indian Transponder:
Uplink:   435.220 MHz to 435.280 MHz LSB/CW
Downlink: 145.870 MHz to 145.930 MHz USB/CW

Dutch Transponder:
Uplink:   435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW


Indian Beacon:  145.859330 MHZ CW
Dutch Beacon:   145.860MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsat.in/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is
active. Each transponder has a different beacon.
[10022006]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational
Current Mode(s): FM Repeater - V/U
                 PBBS -        OFF
                 Digipeater -  OFF

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink:   145.880 MHZ FM
                       145.880 MHz USB
                       145.920 MHz FM
                      1268.700 MHz FM 67Hz PL tone
Digital Downlinks:     435.150 MHz FM 38k4 Digital, PBP, 1 watt output
                       435.150 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:        145.860 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      1268.700 mhz FM 9k6 PBP Digital

Mode and Antenna Polarization:
```

T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[12252006]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Uplink: 145.850 MHz (67.0 Hz PL tone) (See below for operating procedures)
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The order of operation is thus: (allow for Doppler as necessary)
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer
   on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater
   on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10
   minute timer.
[04172006]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: OPERATIONAL

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplink: 145.850 145.870 145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

unOfficial Webpage: http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's CW telemetry downlink:
http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts.htm
[11202006]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational?

Uplink: 145.850 MHz FM
Downlink: 436.795 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

This off the AO-27 website:
For the last 5 weeks ground controllers have been trying to contact AO-27. At
this point we have not been able to turn it on. We still have a few tricks
that we are planning on trying but these take time. We are hoping that we can
re-establish communications.

At this time, we don't have an estimate for when AO-27 will be back on the
air.

AO-27 is now in its 14th year on orbit. We will continue to try to recover
AO-27 until we run out of ideas.
- Michael N3UC

Official Webpage: http://www.ao27.org
[10232006]
=====

AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational depending on amount of Sunlight
Current Reported mode: Mode-A

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz
          145.972 MHz
          435.100 MHz
         2304.100 MHz

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php
The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
AO-7 users are requested to log their contacts and observations about AO-7,
especially any unexpected mode changes.
AO-07 telemetry software webpage:
http://www.qsl.net/k3tz/files/K3TZ_AO-07_Telemetry_Decoder_0.5.zip

Please keep your power low! For additional information please read the AO-7
Usage Guidelines on the AO-7 Log and Resource Site located at:
http://www.planetemily.com/ao7
[04242006]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: Occasional Voice
Digipeater: OFF

The Expedition 14 crew is:
Commander: Michael Lopez-Alegria - KE5GTK
Flight Engineer: Mikhail Tyurin - RZ3FT
Flight Engineer: Sunita Williams

Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM

Worldwide downlink: 145.800 MHz FM

SSTV TESTING:
Worldwide Reported Downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS, RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.
[12182006]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-001.S2
WSR 001 Part 2 01/01/2007

AMSAT NEWS SERVICE BULLETIN 001.S2 FROM AMSAT HQ
SILVER SPRING, MD, January 01, 2007
TO ALL RADIO AMATEURS
BID: $ANS-001.S2

GENESAT-1 ?O-??
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Telemetry Beacon Downlink: 437.0670 MHz AFSK 1200 BPS
[12182006]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Operational

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon: 437.2750 MHz CW

Callsign: JR8YJT
[10302006]
=====
CO-58 XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW only

Telemetry Downlink: 437.345MHz - FSK 1200bps using AFK protocol
Beacon: 437.465MHz - CW

Callsign: JQ1YGW

Oficial Webpage: http://www.space.t.u-tokyo.ac.jp/gs/satinfo-e.html#xi5
Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
[09252006]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launched: June 30, 2006

Status: Operational

Beacon: 436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS
[10022006]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launched: June 30,2003

Status: Semi-Operational - Constant Carrier only

Uplink: ?
Downlink: 437.3850 CW
          437.4700 1200 FM ax25 or SRLL (ACTIVE only near Japan ?)

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[09252006]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational
Current Mode(s): FM Repeater - V/U
PBBS - OFF
Digipeater - OFF

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.880 MHZ FM
145.880 MHz USB
145.920 MHz FM
1268.700 MHz FM 67Hz PL tone
Digital Downlinks: 435.150 MHz FM 38k4 Digital, PBP, 1 watt output
435.150 MHz FM 9k6 Digital, Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Digital, Pacsat Broadcast Protocol
1268.700 mhz FM 9k6 PBP Digital

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[12252006]

=====

NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: RECOVERY EFFORTS - REFRAIN FRON USAGE!!!

General Usage Uplink/Downlink:145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org
aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[09252006]

=====

GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: CLOSED - Maintenance

```
Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM
Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[11272006]
=====
RS-22 Mozhayets 4
Catalog number: 27939
Launch Date: September 27, 2004

Status: Operational

Beacon: 435.3520 MHz CW
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Semi-operational, the digipeater command is on and open for APRS
users.

Uplink: 145.900 FM
       145.920 FM
       145.940 FM
       145.960 FM
(using 1200-baud Manchester FSK)
Downlink: 437.026 MHz SSB (1200-baud PSK)
Mode-S Beacon: 2401.1428 MHz

Mode and Antenna Polarization:
U: RC 437.050 MHz RHCP
  PSK 437.025 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[04172006]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984
```

Status: Semi-operational

Telemetry Downlink: 145.826 MHz. FM (1200-baud AFSK) approx. 10 days ON, 10 days OFF
Mode-S Beacon: 2401.500 MHz - OFF
UHFBeacon: 435.025 MHz - OFF

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Official webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[10302006]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: Occasional Voice
Digipeater: OFF

Expedition Crew 14 is:
Commander: Michael Lopez-Alegria - KE5GTK
Flight Engineer: Mikhail Tyurin - RZ3FT
Flight Engineer: Sunita Williams

Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

SSTV TESTING:
Worldwide Reported Downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS, RZ3DZR

USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is NOT translated from Russian and posted.
[12182006]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-001.S3
WSR 001 Part 3 01/01/2007

AMSAT NEWS SERVICE BULLETIN 001.S3 FROM AMSAT HQ
SILVER SPRING, MD, January 01, 2007
TO ALL RADIO AMATEURS
BID: $ANS-001.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 FM 67Hz CTCSS
Voice Downlink: 2401.835 FM
Packet Up/Downlink: 437.250 9k6 packet
Packet Downlink 2401.835 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01292006]

```
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink:   145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012006]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launched: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB
Beacon: 145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: Downlink only

Uplink: 145.875 145.900 145.925 145.950 MHz FM (1200-baud)
Downlink: 435.808 MHz PSK
```

```
Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01012006]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB
Beacon: 29.408 MHz
Robot: 29.454 MHz
[05232004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB
Beacon: 145.860 MHz
Robot: 145.908 MHz
[05232004]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink 145.975 MHz FM
Downlink 435.070 MHz FM
[05092004]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink: 145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM
Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01092005]
=====
```

RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational?

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB
Beacon: 29.352 MHz (intermittent)
SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplink: 145.84 145.86 145.88 145.90 MHz FM
(using 1200-baud Manchester FSK)
CW downlink: 437.125 MHz
Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[05232004]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[08152004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM
Broadcast Callsign: HL01-11

BBS: HL01-12

Jim, AA7KC, reports that KO-23's downlink transmitter continues in a
non-operational status.
[05092004]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM (9600-baud FSK)
Downlink: 436.500 MHz FM
Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm

[ANS-WSR has no further information]
[09042006]
=====
SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

STatus: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz

```
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz and 145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[08082004]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlink: 437.025 MHz 437.400 MHz
Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site
at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[05092004]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplink V-band   145.840 - 145.990 MHz CW/LSB
      U-band   435.550 - 435.800 MHz CW/LSB
      L1-band 1269.250 - 1269.500 MHz CW/LSB
      L2-band 1268.325 - 1268.575 MHz CW/LSB
Downlink: S2-band 2401.225 - 2401.475 MHz CW/USB
         K-band 24,048.010 - 24,048.060 MHz CW/USB
Beacon:   2401.323
        24,048.035
[05232004]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational
Downlink: 437.075 MHz
Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
```

[08152004]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz
Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[08152004]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, callsign KE6QMD, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Operational

Uplink: 145.850 or 145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz
Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey

```
Satellite
Technology Ltd.
[11202005]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink 435.275 1200-baud AFSK
Downlink 145.825 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink: 145.825 MHz FM 1200 Baud AFSK
Beacon:  2401.220 MHz
[05012006]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 19, 1965

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-001.S4
WSR 001 Part 4 01/01/2007

AMSAT NEWS SERVICE BULLETIN 001.S4 FROM AMSAT HQ
```

SILVER SPRING, MD, January 01, 2007
TO ALL RADIO AMATEURS
BID: $ANS-001.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE
PROPOSED FOR LAUNCH AT THIS TIME:

PHASE 3E ?O-??
Catalog number:
Proposed Launch Date: Early/Mid 2007

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/
[ANS-WSR wishes to thank William Leijenaar, PE1RAH for this week's report]
[04242006]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/amsat/listserv/menu.html

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

```
From -5319246802162444026
X-Google-Thread: 10bb69,af3a945b40f29083
X-Google-Thread: fc521,af3a945b40f29083
X-Google-Thread: f84d8,5228070b6e104c77
X-Google-Thread: 10e8ad,41180496b69c09cf
X-Google-Thread: 104a10,41180496b69c09cf
X-Google-Attributes: gid10bb69,gidfc521,gidf84d8,gid10e8ad,gid104a10,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news3.google.com!news4.google.com!
border1.nntp.dca.giganews.com!nntp.giganews.com!local01.nntp.dca.giganews.com!
news.giganews.com.POSTED!not-for-mail
NNTP-Posting-Date: Fri, 05 Jan 2007 10:30:30 -0600
From: Kurt <labolide@spacegmail.com>
Newsgroups:
alt.politics.homosexuality,alt.education,alt.dbs.directv,rec.radio.amateur.space,r
ec.food.drink.beer
Subject: Re: spaming hate monger
References: <LuWdnYQINLeP_-TYnZ2dnUVZ_vCdnZ2d@adelphia.com>
<458041B9.CE59AB85@peace.net> <9mt0o2pgf9202rflbpr0b5n92becm9msu8@4ax.com>
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<mfifp2d98tm0f23fcfnhsnl84beh08qm2g@4ax.com>
<ckpfp2hbnsooeh9r07alettjh0mm2bva5e@4ax.com>
<1167965857.669160.122360@11g2000cwr.googlegroups.com>
<spfrp25gncv5g1s2uiecpie96ug9g5iv6i@4ax.com>
User-Agent: MT-NewsWatcher/3.5.2 (PPC Mac OS X)
Date: Fri, 05 Jan 2007 08:29:01 -0800
Message-ID: <labolide-F80EC8.08290105012007@news.giganews.com>
Lines: 30
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```

```
XLrrYQhTprUSZe3BbFfbiK!U9Y=
X-Complaints-To: abuse@giganews.com
X-DMCA-Notifications: http://www.giganews.com/info/dmca.html
X-Abuse-and-DMCA-Info: Please be sure to forward a copy of ALL headers
X-Abuse-and-DMCA-Info: Otherwise we will be unable to process your complaint
properly
X-Postfilter: 1.3.32
Xref: g2news2.google.com alt.politics.homosexuality:175666 alt.education:46249
alt.dbs.directv:4340 rec.radio.amateur.space:565 rec.food.drink.beer:2495

In article <spfrp25gncv5g1s2uiecpie96ug9g5iv6i@4ax.com>,
 Sniper .308 <me@my.desk> wrote:

> On 4 Jan 2007 18:57:37 -0800, "bobandcarole"
> <bobandcarole777@hotmail.com> wrote:
>
> >
> >Sniper .308 wrote:
> >> On Sun, 31 Dec 2006 09:32:43 -0500, Mark@kb9rqz.aprs wrote:
> >>
> >>
> >> >please take you hate mongering someplace else
> >
> >I'm a purveyor of truth, not a "hatemonger"
> >
> >> >http://kb9rqz.blogspot.com/
> >>
> >> Blob is the single biggest hypocritical cock sucking cowards on the
> >> internet. Hell he changes his email address 2 or 3 times a day, then
> >> tries to deny it.
> >
> >LOL...why deny it, idiot?
>
> What that you are the single biggest hypocritical cock sucking coward
> on the  internet, you are right, why deny it.

He's a closet gay crying for help. Ignore him.

--
To reply by email, remove the word "space"


From -4530333504283737500
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X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
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nntp.giganews.com!local01.nntp.dca.giganews.com!nntp.comcast.com!
news.comcast.com.POSTED!not-for-mail
NNTP-Posting-Date: Sat, 06 Jan 2007 20:33:02 -0600
From: "JoAnne K9JKM" <k9jkm_remove_@comcast.net>
Newsgroups: rec.radio.amateur.space
Subject: ANS-007 AMSAT News Service Weekly Bulletins
```

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Date: Sat, 6 Jan 2007 20:33:13 -0600
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     charset="iso-8859-1";
     reply-type=original
Content-Transfer-Encoding: 7bit
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X-MSMail-Priority: Normal
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Lines: 417
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uswTONXwXP39ygZhs2JLkkcpMa59NGblOKSE9cyUuDKbEUOqP0HRYgP2Jc2Q0P6x3djSCV5vYJUu!
Yo5azlxgzSdKL7Y=
X-Complaints-To: abuse@comcast.net
X-DMCA-Complaints-To: dmca@comcast.net
X-Abuse-and-DMCA-Info: Please be sure to forward a copy of ALL headers
X-Abuse-and-DMCA-Info: Otherwise we will be unable to process your complaint
properly
X-Postfilter: 1.3.32
Xref: g2news2.google.com rec.radio.amateur.space:566
```

AMSAT NEWS SERVICE
ANS-007

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

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* OSCAR Numbers for RAFT and ANDE Satellites
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* AO-51 Operating Schedule Modified for Software Reload and Testing
* Sunlight-Only Birds See the Light
* Space and Satellite Shorts
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* ARISS Status Report for the Week of January 1, 2007

SB SAT @ AMSAT $ANS-007.01
AMSAT-NA Moves Into New Satellite Lab

AMSAT News Service Bulletin 007.01
From AMSAT HQ SILVER SPRING, MD.
January 7, 2007
To All RADIO AMATEURS
BID: $ANS-007.01

AMSAT Director and VP Engineering, Bob, N4HY reported this week, "By January 7 the 'Florida-to-Maryland-Move-Team' should have all of the contents of the old AMSAT Orlando laboratory placed in the new lab facility in Pocomoke City, Maryland."

Bob continues, "In this facility we expect to do Eagle and several joint ventures on smaller satellites. We also plan to have our new laboratory available to help Phase 3E."

The size of the AMSAT satellite lab is 6000 sq. feet. Our clean room, which required 8 large air handlers was driven into the facility by 24 foot trucks. The new building with the trucks inside can be seen in the photos on-line at: http://n4hy.smugmug.com/gallery/2297432/

The office space walls will be up the first week of January and most of the lab walls are planned for completion by the weekend we move in.

Additional details of the University of Maryland and AMSAT-NA satellite laboratory agreement can be seen at: http://www.amsat.org.

[ANS thanks Bob, N4HY for the above information]

/EX

SB SAT @ AMSAT $ANS-007.02
SKN Best Fist Nominations Due

AMSAT News Service Bulletin 007.02
From AMSAT HQ SILVER SPRING, MD.
January 7, 2007
To All RADIO AMATEURS
BID: $ANS-007.02

Many thanks to all who participated in Straight Key Night on OSCAR 2007. If you have not already done so, please take a moment to nominate someone you worked for Best Fist. Your nominee need not have the best fist of those you heard, but only of those you worked.

Please send your nomination to w2rs@amsat.org. A list of those nominated will be published in an ANS bulletin in early February, and in The AMSAT Journal.

[ANS thanks Ray, W2RS for the above information]

/EX

SB SAT @ AMSAT $ANS-007.03
OSCAR Numbers for RAFT and ANDE Satellites

AMSAT News Service Bulletin 007.03
From AMSAT HQ SILVER SPRING, MD.
January 7, 2007
To All RADIO AMATEURS
BID: $ANS-007.03

AMSAT OSCAR coordinator Bill Tynan, W3XO issued the following statement:

By the authority vested in me by the AMSAT-NA President, I am pleased to issue an OSCAR number for the RAFT-I and ANDE Cubesat amateur radio satellites.

From the information provided me, I conclude that, RAFT-I complies with all of the requirements for an OSCAR number. In accordance with your request, the prefix will be NAV. Thus, RAFT-I will henceforth be known as NAV-OSCAR-60 or NO-60.

Additionally, from the information provided me, I conclude that, ANDE complies with all of the requirements for an OSCAR number. In accordance with your request, the prefix will be NAV. Thus, ANDE will henceforth be known as NAV-OSCAR-61 or NO-61.

AMSAT-NA and I wish to congratulate you and your entire US Naval Academy Satellite Lab team for the successful construction, testing and orbiting of this very interesting spacecraft.

73 and Best Wishes,

William A. (Bill) Tynan, W3XO

[ANS thanks Bill, W3XO for the above information]

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SB SAT @ AMSAT $ANS-007.04
AMSAT Awards

AMSAT News Service Bulletin 007.04
From AMSAT HQ SILVER SPRING, MD.
January 7, 2007
To All RADIO AMATEURS
BID: $ANS-007.04

Bruce, KK5DO AMSAT Director Contests and Awards has posted are the awards for the end of 2006.

We would like to welcome the following to the satellite community. They have made their first satellite contact and are now members of the AMSAT Satellite Communicators Club.

Jack Callahan, N1BGG
David Johnson, KC9GHA

AMSAT Satellite Communications Achievement Award
Carles Roy I Garcia, EB3FYM #442

South Africa Satellite Communications Achievement Award
Carles Roy I Garcia, EB3FYM #US101
Sion Chao, 9W2QC #US102

To see all the awards visit http://www.amsat.org or
http://www.amsatnet.com

[ANS thanks Bruce, KK5DO for the above information]

/EX

SB SAT @ AMSAT $ANS-007.05
AO-51 Operating Schedule Modified for Software Reload and Testing

AMSAT News Service Bulletin 007.05
From AMSAT HQ SILVER SPRING, MD.
January 7, 2007
To All RADIO AMATEURS
BID: $ANS-007.05

AMSAT-NA VP Operations, Drew KO4MA reported, "The AO-51 command stations have a software reload that began this week. We also need to perform additional testing to be scheduled for sometime this month."

In support of these necessary activities the official schedule for AO-51 for the immediate future will be the "normal" mode with the V/U FM repeater, and V/U BBS running, pending interruptions for the reload and testing.

Please be sure to consult the text posted there for the latest information at: http://www.amsat.org/amsat-new/echo/ControlTeam.php

[ANS thanks Drew, KO4MA for the above information]

/EX

SB SAT @ AMSAT $ANS-007.06
Sunlight-Only Birds See the Light

AMSAT News Service Bulletin 007.06
From AMSAT HQ SILVER SPRING, MD.
January 7, 2007
To All RADIO AMATEURS
BID: $ANS-007.06

It looks like AO-7 is back in a period of continuous illumination, and the

24 hr timer is working. Drew, KO4MA says, "It looks like the daily mode change between Mode A and B is occurring around 1130 to 1145Z each day." Please keep your transponded signals from FMing as a too strong signal may reset the satellite." More information can be found at:
http://www.planetemily.com/ao7/ao7log.php

PCSAT-1 is back in full sunlight and working in 1200 baud AFSK packet digipeater mode on 145.825 MHz. Please use this satellite only when it is in sunlight.

[ANS thanks Drew, KO4MA and Bob, WB4APR for the above information]

/EX

SB SAT @ AMSAT $ANS-007.07
Space and Satellite Shorts

AMSAT News Service Bulletin 007.07
From AMSAT HQ SILVER SPRING, MD.
January 7, 2007
To All RADIO AMATEURS
BID: $ANS-007.07

+ The Union of Concerned Scientists has published a new version of the UCS Satellite Database, which includes launches through December 27, 2006. The database file and additional information has been posted at http://ucsusa.org/satellite_database.

+ Patrick WD9EWK/VA7EWK will be part of the AMSAT table at the Thunderbird Amateur Radio Club's "Westfest", at Glendale Community College in Glendale AZ on Saturday, 13 January 2007. Listen for W7W on AO-51 and SO-50 passes. QSL information, and more details about the hamfest, can be found at: http://www.w7tbc.org/Westfest.html

+ The well known HF Contest station HC8N in the Galapagos Islands was active on the SO-50 and AO-51 satellites prior to the 2006 CQ WW CW Contest. A total of 16 Satellite QSOs in 6 different countries were made. Primary SAT ops were Jon N0JK, Mark N5OT, and Bruce AA5B. A Yaesu dual band HT was used with an "Arrow" antenna (donated by Ramon, XE1KK). A highlight was working XE1KK, who has made many Satellite QSOs from various DX locales. If you were among those who worked HC8N, QSL via W5UE.

+ Universe Today announced that Tammy Plotner's "What's Up 2007" is now available on-line as an e-book. It's completely free. Once again, Tammy has written a 410-page PDF with suggestions for what you can see in the night sky every day of the year for 2007. The book is huge, more than 23 MB, but that's because we've crammed it full with beautiful photographs and skycharts. See:
http://www.astrowhatsup.com/download-the-book/

+ The Planetary Society is offering a $50,000 prize for the best plan to reach out and put a tracking beacon on near-Earth asteroid Apophis (AKA 2004 MN4). Apophis is approximately 400 metres across, and it's expected to pass very close to the Earth in 2029. And on that pass, it could receive a gravitational bump to its orbit that could make it even more dangerous in 2036. With better tracking, scientists will have a much better idea if Apophis really is a risk to Earth. The competition ends August 31, 2007. More information is available at: http://www.universetoday.com/2006/12/14/tag-an-asteroid-win-a-prize/

[ANS thanks everyone for the above information]

/EX

SB SAT @ AMSAT $ANS-007.08
AMSAT-NA President's Letter 2006

AMSAT News Service Bulletin 007.08
From AMSAT HQ SILVER SPRING, MD.
January 7, 2007
To All RADIO AMATEURS
BID: $ANS-007.08

AMSAT Members,

There are only a few hours left in 2006 here in Maryland. As I sit here with my two year old granddaughter Erin on my lap I am reflecting back on the events of 2006 and I am pleased with the state of AMSAT. It has been a busy and productive year. In case you wonder what your President does all year, here is a snapshot. It is certainly not a complete listing. I hope you had as much fun as I did in 2006.

In February I made presentations to the Alexandria Radio Club and the Easton Amateur Radio Society, in March to the Greater Baltimore Hamboree and Computerfest and in April to the AMSAT-DC Meeting and Space Seminar. These and other presentations throughout the year have been helpful in getting people back on the satellites and encouraging some Hams to try it for the first time.

In March I observed a successful ARISS radio contact between Bowie High School (Maryland) and the International Space Station. It was a moving experience and I recommend that everyone attend or assist an ARISS event if one comes to your area.

The Dayton Hamvention in May was a great event, as always. The AMSAT booth was larger and better than ever before and the AMSAT Forum was an hour longer than in previous years. There was a demonstration of a new satellite power storage system using a super-capacitor and a single-cell "battery" charge regulator. There was also a live demonstration of a prototype Eagle mode U/V Software Defined Transponder (SDX).

In June I attended the Rochester NY Hamfest where I again got to see some old friends.

Later in June I attended the Eagle Digital Design Meeting in San Diego. This was an important milestone in the evolution of Eagle where many of the critical design parameters were finalized based on scientific and user needs analysis.

In July I attended the 21st AMSAT-UK Colloquium at the University of Surrey, Guildford, UK. Here I found more friends and met with the AMSAT International group and the AMSAT-DL P3E team. It was a busy and productive week.

Also in 2006 AMSAT was represented at the Southeastern VHF Society Conference, 40th Anniversary Central States VHF Society Conference, the 2006 ARRL Maryland State Convention, the ARRL Board of Directors meeting, the 2006 SmallSat Conference, the 25th Annual ARRL and TAPR Digital Communications Conference.

In August we had a meeting at the Pentagon to brief the head of the U.S. Air Force Space Command on AMSAT and the Eagle satellites.

We had a great Symposium in San Francisco in October where I was able to see many friends and attend some great presentations. It was a treat to have astronaut Bill McArthur KC5ACR there and to present him with more awards for his Ham Radio activities on the International Space Station earlier in the year. I made a presentation to the Northern Virginia FM Association right after getting home.

In 2006 AMSAT took advantage of a special opportunity to support a major technological development that will have a positive impact on both satellites and Ham Radio in general; the High Performance Software Defined Radio (HPSDR) project. To learn more, see http://hpsdr.org/. The goal for AMSAT is to improve both the development schedule and the quality of our Eagle ground station and spacecraft transponder designs.

AMSAT-NA has accepted an offer to co-locate its Satellite Integration Lab with the Hawk Institute for Space Sciences (HISS), a division of the Maryland Hawk Corporation, a 501(c)(3) non-profit educational organization affiliated with the University of Maryland Eastern Shore (UMES). As I write this the first of three large rental trucks has arrived with the AMSAT equipment and large clean room from the old Orlando Labs.

Throughout the year AMSAT's AO-51 satellite has performed well. It has operated in many interesting modes and brought enjoyment to many people around the world. As the year draws to a close we are evaluating our experiences with AO-51 and planning software upgrades that will be implemented in the coming year that should make AO-51 even better. I special thanks go to AMSAT's VP Operations KO4MA and the control stations Michael Kingery KE4AZN and Gould Smith WA4SXM for their dedication and hard work keeping AO-51 operating smoothly.

In the final weeks of this year we achieved our fund raising goal for the Eagle project. This is particularly significant because I know it is harder for you to donate funds for a satellite that you haven't even seen yet. It is pleasing to see that the donors have faith in the future of AMSAT and I expect that they will be pleased with the results you will all see in the coming year. I recommend that you look at the revamped and improved EaglePedia pages on the AMSAT Web server. These pages are constantly being improved and expanded as a means of keeping everyone informed on the progress of the Eagle Project.

I hope you have all had a good holiday season and will have a Happy New Year!

Rick
W2GPS
AMSAT President

[ANS thanks Rick, W2GPS for the above information]

/EX

SB SAT @ AMSAT $ANS-007.09
ARISS Status Report for the Week of January 1, 2007

AMSAT News Service Bulletin 007.09
From AMSAT HQ SILVER SPRING, MD.
January 7, 2007
To All RADIO AMATEURS
BID: $ANS-007.09

1. ARISS-Kashiwabara Contact Successful

On Wednesday, December 27, students visiting the Kashiwabara Community Center in Sayama City, Japan experienced a successful Amateur Radio on the International Space Station (ARISS) contact. Fifteen students were able to have 15 questions answered by Michael Lopez-Alegria, KE5GTK. Approximately 400 people attended the event and media coverage included two newspapers and one television station.

2. ARISS Upcoming School Contacts

An Amateur Radio on the International Space Station (ARISS) contact has been scheduled for the Australian Scout Jamboree 2007 on Sunday, January 7. The Jamboree runs from January 2 - 13, 2007 in Elmore, Victoria, Australia. Scouts from 53 countries have been invited and thirteen thousand scouts, ages 11 and up, are expected to attend the event. An Amateur Radio station will be set up, modelled after NASA's Mission Control Center, with the theme, "Signals from Space." Ground station activities will be ongoing; the ARISS contact with Sunita Williams, KD5PLB, will be the highlight of the event.

Sherman Elementary School in Henrietta, New York has been scheduled for a direct Amateur Radio on the International Space Station (ARISS) contact on Monday, January 8, 2007.

On Monday, January 8, 2007 at 17:34 UTC, students at Dilworth Elementary

School in San Jose, California will speak with Sunita William, KD5PLB, on board the ISS. Local government officials and the media will be invited to the event.

[ANS thanks Carol, KB3LKI for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM

From -6452210740430755114
X-Google-Thread: 10e8ad,6b497f5f3e97e1d3,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: RUSSIAN,KOI8R
Path: g2news2.google.com!news3.google.com!news4.google.com!news2.volia.net!news.ntu-kpi.kiev.ua!not-for-mail
From: John Smith <zakat@nest.ntu-kpi.kiev.ua>
Newsgroups: rec.radio.amateur.space
Subject: [q] Is there intelligent life?
Date: Tue, 09 Jan 2007 01:57:08 +0200
Organization: NTUU "KPI"
Lines: 1
Message-ID: <enulol$abi$2@news.ntu-kpi.kiev.ua>
NNTP-Posting-Host: zakat.nest.ntu-kpi.kiev.ua
Mime-Version: 1.0
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Content-Transfer-Encoding: 8bit
X-Trace: news.ntu-kpi.kiev.ua 1168300629 10610 10.113.1.112 (8 Jan 2007 23:57:09 GMT)
X-Complaints-To: newsmaster@news.ntu-kpi.kiev.ua
NNTP-Posting-Date: Mon, 8 Jan 2007 23:57:09 +0000 (UTC)
X-Accept-Language: ru-ru, ru
User-Agent: Mozilla Thunderbird 1.0.6 (Windows/20050716)
Xref: g2news2.google.com rec.radio.amateur.space:567

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X-Google-Language: ENGLISH,ASCII-7-bit

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worldnet.att.net!bgtnsc05-news.ops.worldnet.att.net.POSTED!e63cd5b6!not-for-mail
From: Alan WA4SCA <APBIDDLE@UNITED.NET>
Newsgroups: rec.radio.amateur.space
Subject: Re: [q] Is there intelligent life?
Organization: AMSAT-NA
Reply-To: APBIDDLE@UNITED.NET
Message-ID: <5un5q25iqce49n5ll5dcp44lq52mei1dq6@4ax.com>
References: <enulol$abi$2@news.ntu-kpi.kiev.ua>
X-Newsreader: Forte Agent 4.1/32.1088
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Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Lines: 7
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X-Complaints-To: abuse@worldnet.att.net
X-Trace: bgtnsc05-news.ops.worldnet.att.net 1168302096
bc598a1600f9a3f9bb89b6ac865a73bd (Tue, 09 Jan 2007 00:21:36 GMT)
NNTP-Posting-Date: Tue, 09 Jan 2007 00:21:36 GMT
Date: Tue, 09 Jan 2007 00:21:36 GMT
Xref: g2news2.google.com rec.radio.amateur.space:568
```

It you are asking about intelligent life on Earth, that is still being debated. The odds don't look good.

--
Alan
WA4SCA

```
From 3264974278259620511
X-Google-Thread: 10e8ad,6b497f5f3e97e1d3
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news4.google.com!news.glorb.com!hwmnpeer01.lga!
news.highwinds-media.com!hw-filter.phx!newsfe13.phx.POSTED!53ab2750!not-for-mail
From: "Caveat Lector" <CL@nowhere.com>
Newsgroups: rec.radio.amateur.space
References: <enulol$abi$2@news.ntu-kpi.kiev.ua>
<5un5q25iqce49n5ll5dcp44lq52mei1dq6@4ax.com>
Subject: Re: [q] Is there intelligent life?
Lines: 17
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X-RFC2646: Format=Flowed; Original
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.3028
Message-ID: <xrBoh.10708$GD4.6320@newsfe13.phx>
Date: Mon, 8 Jan 2007 16:35:42 -0800
NNTP-Posting-Host: 72.197.12.245
X-Complaints-To: admin@cox.net
X-Trace: newsfe13.phx 1168302941 72.197.12.245 (Mon, 08 Jan 2007 17:35:41 MST)
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NNTP-Posting-Date: Mon, 08 Jan 2007 17:35:41 MST
Organization: Cox
Xref: g2news2.google.com rec.radio.amateur.space:569

Ah to be sure there is intelligent life on earth, we just haven't figured
out how to use it (;-)

I doubt, therefore I might be -- CL


"Alan WA4SCA" <APBIDDLE@UNITED.NET> wrote in message
news:5un5q25iqce49n5ll5dcp44lq52mei1dq6@4ax.com...
> It you are asking about intelligent life on Earth, that is still being
> debated.  The odds don't look good.
>
>
> --
> Alan
> WA4SCA




From -4733834907632914303
X-Google-Thread: 10e8ad,6b497f5f3e97e1d3
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,UTF8
Path: g2news2.google.com!news4.google.com!news2.volia.net!news.ntu-kpi.kiev.ua!
not-for-mail
From: John Smith <zakat@nest.ntu-kpi.kiev.ua>
Newsgroups: rec.radio.amateur.space
Subject: Re: [q] Is there intelligent life?
Date: Tue, 09 Jan 2007 11:09:07 +0200
Organization: NTUU "KPI"
Lines: 7
Message-ID: <envm3k$5ar$2@news.ntu-kpi.kiev.ua>
References: <enulol$abi$2@news.ntu-kpi.kiev.ua>
<5un5q25iqce49n5ll5dcp44lq52mei1dq6@4ax.com>
NNTP-Posting-Host: zakat.nest.ntu-kpi.kiev.ua
Mime-Version: 1.0
Content-Type: text/plain; charset=UTF-8; format=flowed
Content-Transfer-Encoding: 8bit
X-Trace: news.ntu-kpi.kiev.ua 1168333749 5467 10.113.1.112 (9 Jan 2007 09:09:09
GMT)
X-Complaints-To: newsmaster@news.ntu-kpi.kiev.ua
NNTP-Posting-Date: Tue, 9 Jan 2007 09:09:09 +0000 (UTC)
In-Reply-To: <5un5q25iqce49n5ll5dcp44lq52mei1dq6@4ax.com>
X-Accept-Language: ru-ru, ru
User-Agent: Mozilla Thunderbird 1.0.6 (Windows/20050716)
Xref: g2news2.google.com rec.radio.amateur.space:570

Alan WA4SCA пишет:
> It you are asking about intelligent life on Earth, that is still being
```

> debated. The odds don't look good.

I asked about the group :) . Not seriously, of course. This is because
I can see only 3 branches in the group, including my...
   Are there so many interested people? :)

From -7127567678845686239
X-Google-Thread: 10e8ad,edc486bae47ab086,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news3.google.com!border1.nntp.dca.giganews.com!nntp.giganews.com!newsfeed00.sul.t-online.de!newsfeed01.sul.t-online.de!t-online.de!newsfeed.hanau.net!newsfeed.vmunix.org!peer-uk.news.demon.net!kibo.news.demon.net!news.demon.co.uk!demon!amsat.org!g6tsf
From: Paul Shayler <g6tsf@amsat.org>
Newsgroups: rec.radio.amateur.space
Subject: HP Calculators - "Above" Sat track prog
Date: Thu, 11 Jan 2007 10:48:00 +0000
Organization: Paul's Shack
Lines: 9
Message-ID: <xLnE3aAgXhpFFwRW@g6tsf.demon.co.uk>
NNTP-Posting-Host: g6tsf.demon.co.uk
Mime-Version: 1.0
Content-Type: text/plain;charset=us-ascii;format=flowed
X-Trace: news.demon.co.uk 1168522538 14768 158.152.255.214 (11 Jan 2007 13:35:38 GMT)
X-Complaints-To: abuse@demon.net
NNTP-Posting-Date: Thu, 11 Jan 2007 13:35:38 +0000 (UTC)
User-Agent: Turnpike/6.05-S (<KG1CpOnLkg6ydPlFshTSc5CT4U>)
Xref: g2news2.google.com rec.radio.amateur.space:571

Hi all, any one using "Above" the Sat Tracking prog on their HP
calculator ie HP49 series or HP50g? A very nice little application by
K1EN.

Regards, Paul S. g6tsf/m3tsf
--
Paul Shayler   M3TSF/G6TSF
Running the Internet accelerator ONSPEED.
Details at http://www.onspeed.com

From -6668126727996856252
X-Google-Thread: 10e8ad,6a46c96ada7421ed,start
X-Google-Thread: 113975,6a46c96ada7421ed,start
X-Google-Attributes: gid10e8ad,gid113975,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news4.google.com!news.glorb.com!news.astraweb.com!router1.astraweb.com!not-for-mail
From: Chris Steyaert <observations@rmob.org>
Newsgroups: rec.radio.amateur.space,sci.astro.amateur
Subject: Radio Meteor Obs. Bull. December 2006 Geminids Ursids

Date: Thu, 11 Jan 2007 22:39:15 +0100
Message-ID: <tibdq29kdlfpeo2l61kaupv2pif6ut1udl@4ax.com>
X-Newsreader: Forte Agent 1.93/32.576 English (American)
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Lines: 17
Organization: Unlimited download news at news.astraweb.com
NNTP-Posting-Host: f55f01be.news.astraweb.com
X-Trace: DXC=h]1afRGi^RHlVZHQGRZg_EL?0kYOcDh@J18J:flTQG4EaCeHVS^7]7BG?
ifhhgG3CAi^2M4<Dd_^@G]kZ>OE<U@A
Xref: g2news2.google.com rec.radio.amateur.space:572 sci.astro.amateur:49762

Radio Meteor Observation Bulletin No. 161 of December 2006 (82K) is available now as

http://visualrmob.free.fr/rmobtext/rmob0612.txt

More information and the visual presentation of the hourly forward scatter counts can be found on

http://www.rmob.org

http://radio.data.free.fr

Chris

From 6328305588301179765
X-Google-Thread: 10e8ad,8093af9467aadd70,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news4.google.com!news3.google.com!
border1.nntp.dca.giganews.com!nntp.giganews.com!local01.nntp.dca.giganews.com!
nntp.comcast.com!news.comcast.com.POSTED!not-for-mail
NNTP-Posting-Date: Sat, 13 Jan 2007 08:50:33 -0600
From: "JoAnne K9JKM" <k9jkm_remove_@comcast.net>
Newsgroups: rec.radio.amateur.space
Subject: WSR-008 AMSAT Weekly Satellite Report
Date: Sat, 13 Jan 2007 08:50:43 -0600
MIME-Version: 1.0
Content-Type: text/plain;
    format=flowed;
    charset="iso-8859-1";
    reply-type=original
Content-Transfer-Encoding: 7bit
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.3028

```
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.3028
Message-ID: <5bKdnTuSnIIkbDXYnZ2dnUVZ_q-vnZ2d@comcast.com>
Lines: 1019
NNTP-Posting-Host: 67.184.169.1
X-Trace: sv3-pl3FqRgNFJNxf2sM9FvvJjZUIW1ttGHHYhfYm/
WbYtWyRkioRCFeJcggsQdRSR2pPV7NbQgtHFK8rY+!
dxvnlK77ip0sNugDzinsiRUAyDJ8l0EqrHsJ7k5ULM1Y/5gNt/daSP0ZXQSXiSUQdV3V0Vh8HSen!
6mCRdn5tMlXKJlw=
X-Complaints-To: abuse@comcast.net
X-DMCA-Complaints-To: dmca@comcast.net
X-Abuse-and-DMCA-Info: Please be sure to forward a copy of ALL headers
X-Abuse-and-DMCA-Info: Otherwise we will be unable to process your complaint
properly
X-Postfilter: 1.3.32
Xref: g2news2.google.com rec.radio.amateur.space:573
```

This report is organized into 4 parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites

SB SAT @ AMSAT W8ISS ANS-008.S1
WSR 008 Part 1 01/08/2007

AMSAT NEWS SERVICE BULLETIN 008.S1 FROM AMSAT HQ
SILVER SPRING, MD, January 08,2007
TO ALL RADIO AMATEURS
BID: $ANS-008.S1

VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/V - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 MHz to 435.280 MHz LSB/CW
Downlink: 145.870 MHz to 145.930 MHz USB/CW

Dutch Transponder:
Uplink: 435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW

Indian Beacon: 145.859330 MHZ CW
Dutch Beacon: 145.860MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

```
Official Webpage: http://www.amsat.in/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is
active. Each transponder has a different beacon.
[10022006]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 28, 2004

Status: Semi-Operational - Software upgrade in progress
Current Mode(s): FM Repeater - V/U
                 PBBS -        V/U
                 Digipeater -  OFF

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink:   145.880 MHZ FM
                       145.880 MHz USB
                       145.920 MHz FM
                      1268.700 MHz FM 67Hz PL tone
Digital Downlinks:     435.150 MHz FM 38k4 Digital, PBP, 1 watt output
                       435.150 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:        145.860 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      1268.700 mhz FM 9k6 PBP Digital

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[01082007]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Uplink:   145.850 MHz FM - 67.0 Hz PL tone
```

```
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The order of operation is thus: (allow for Doppler as necessary)
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute
timer
   on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the
repeater on
   and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset
the 10
   minute timer.
[01082007]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: OPERATIONAL

Voice/CW Mode JA
Uplink:   145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon:   435.795 MHz

Digital Mode JD
Uplink:   145.850 145.870 145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

JARL English webpage: http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm
AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's CW
telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts.htm
[01082007]
=====
AO-27 AMRAD
```

Catalog number: 22825
Launched: September 26, 1993

Status: Recovery

```
Uplink:   145.850 MHz FM
Downlink: 436.795 MHz FM
```

Mode and Antenna Polarization:
V: Linear
U: Linear

This off the AO-27 website:
We have successfully reset the cpu on AO-27.
AO-27 is now commanable and is sitting at the bootloader. We are beginning
the process of uploading flight software. The transmitter was very strong
during our tests. This is very good news.
- Michael N3UC

Official Webpage: http://www.ao27.org
[01082007]

=====

AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational depending on amount of Sunlight
Current Reported mode: Mode-A

```
Uplink:   145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink:  29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons:   29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW
```

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/

AO-7 users are requested to log their contacts and observations about AO-7,
especially any unexpected mode changes. AO-07 telemetry software webpage:
http://www.qsl.net/k3tz/files/K3TZ_AO-07_Telemetry_Decoder_0.5.zip

Please keep your power low! For additional information please read the
AO-7
Usage Guidelines on the AO-7 Log and Resource Site located at:
http://www.planetemily.com/ao7
[01082007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: Occasional Voice
Digipeater: OFF

The Expedition 14 crew is:
Commander: Michael Lopez-Alegria - KE5GTK
Flight Engineer: Mikhail Tyurin - RZ3FT
Flight Engineer: Sunita Williams

Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

SSTV TESTING:
Worldwide Reported Downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS, RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line

is
NOT translated from Russian and posted.
[12182006]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-008.S2
WSR 008 Part 2 01/08/2007

AMSAT NEWS SERVICE BULLETIN 008.S2 FROM AMSAT HQ
SILVER SPRING, MD, January 08, 2007
TO ALL RADIO AMATEURS
BID: $ANS-008.S2

PEHUENSAT-1
Catalog Number: 29709
Launch Date: January 10, 2007

Status: In Orbit

Uplink/Downlink: 145.825Mhz FM
Voice Recorder: 145.825Mhz FM
[01082007]
=====
ANDE
Catalog Number: 29709
Launch Date: December 21,2006

Status: In Orbit

Uplink/Downlink: 145.825Mhz FM APRS AX25
[01082007]
=====
RAFT
Catalog Number: 29709
Launch Date: December 21,2007

Status: In Orbit

Uplink/Downlink: 145.825Mhz FM APRS AX25
[01082007]
=====
GENESAT-1 ?O-??
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Telemetry Beacon Downlink: 437.0670 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[01082007]
=====

```
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Operational

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon:             437.2750 MHz CW

Callsign: JR8YJT
[10302006]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Telemetry Downlink: 437.4250MHz AFSK 1200bps using AFK protocol
Beacon:             437.2750MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
[01082007]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launched: June 30, 2003

Status: Operational

Beacon:     436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[01082007]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launched: June 30,2003

Status: Semi-Operational - Constant Carrier only

Uplink:  1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 1200 FM ax25 or SRLL (ACTIVE only near Japan ? )

Telemetry Beacon: 437.3850 CW
```

```
Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[01082007]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 28, 2004

Status: Semi-Operational - Software upgrade in progress
Current Mode(s): FM Repeater - V/U
                 PBBS -        V/U
                 Digipeater -  OFF

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink:   145.880 MHZ FM
                       145.880 MHz USB
                       145.920 MHz FM
                      1268.700 MHz FM 67Hz PL tone
Digital Downlinks:     435.150 MHz FM 38k4 Digital, PBP, 1 watt output
                       435.150 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:        145.860 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      1268.700 mhz FM 9k6 PBP Digital

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[01082007]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Operational only in Full Sun Light

General Usage Uplink/Downlink:145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org
```

```
aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[01082007]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM
Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[01082007]
=====
RS-22 Mozhayets 4
Catalog number: 27939
Launch Date: September 27, 2004

Status: Operational

Beacon: 435.3520 MHz CW
[01082007]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Semi-operational - APRS usage through Digipeater

Uplink:         145.900 FM 1200-baud Manchester FSK
                145.920 FM 1200-baud Manchester FSK
                145.940 FM 1200-baud Manchester FSK
                145.960 FM 1200-baud Manchester FSK
Downlink:       437.026 MHz SSB 1200-baud PSK
Mode-S Beacon: 2401.1428 MHz

Mode and Antenna Polarization:
U: RC 437.050 MHz RHCP
   PSK 437.025 MHz LHCP
V: Linear
```

```
Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[01082007]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational

Telemetry Downlink: 145.826 MHz. FM (1200-baud AFSK) approx. 10 days ON,
10
                    days OFF
Mode-S Beacon:     2401.500 MHz - OFF
UHFBeacon:          435.025 MHz - OFF

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Official webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[01082007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: Occasional Voice
Digipeater:   OFF

Expedition Crew 14 is:
Commander:              Michael Lopez-Alegria - KE5GTK
Flight Engineer:        Mikhail Tyurin - RZ3FT
Flight Engineer:        Sunita Williams

Digital/APRS:
Worldwide packet uplink:   145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink:   145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink:      145.800 MHz FM

SSTV TESTING:
Worldwide Reported Downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink:   437.800 MHz FM
```

Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS, RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is NOT translated from Russian and posted.
[01082007]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-008.S3
WSR 008 Part 3 01/08/2007

AMSAT NEWS SERVICE BULLETIN 008.S3 FROM AMSAT HQ
SILVER SPRING, MD, January 08, 2007
TO ALL RADIO AMATEURS
BID: $ANS-008.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

```
Voice Uplink: 437.250 FM 67Hz CTCSS
Voice Downlink: 2401.835 FM
Packet Up/Downlink: 437.250 9k6 packet
Packet Downlink 2401.835 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01292006]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink:   145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012006]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launched: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB
Beacon: 145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
```

```
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: Downlink only

Uplink: 145.875 145.900 145.925 145.950 MHz FM (1200-baud)
Downlink: 435.808 MHz PSK
Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01012006]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB
Beacon: 29.408 MHz
Robot: 29.454 MHz
[05232004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB
Beacon: 145.860 MHz
Robot: 145.908 MHz
[05232004]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink 145.975 MHz FM
Downlink 435.070 MHz FM
[05092004]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991
```

Status: Non-Operational

Uplink: 145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM
Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01092005]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational?

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB
Beacon: 29.352 MHz (intermittent)
SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplink: 145.84 145.86 145.88 145.90 MHz FM
(using 1200-baud Manchester FSK)
CW downlink: 437.125 MHz
Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[05232004]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[08152004]
=====

KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM
Broadcast Callsign: HL01-11
BBS: HL01-12

Jim, AA7KC, reports that KO-23's downlink transmitter continues in a non-operational status.
[05092004]

=====

KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM (9600-baud FSK)
Downlink: 436.500 MHz FM
Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]

=====

PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]

=====

SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm

[ANS-WSR has no further information]

```
[09042006]
=====
SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

STatus: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz and 145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[08082004]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlink: 437.025 MHz 437.400 MHz
Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site
at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[05092004]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplink V-band   145.840 - 145.990 MHz CW/LSB
      U-band   435.550 - 435.800 MHz CW/LSB
      L1-band 1269.250 - 1269.500 MHz CW/LSB
      L2-band 1268.325 - 1268.575 MHz CW/LSB
Downlink: S2-band 2401.225 - 2401.475 MHz CW/USB
         K-band 24,048.010 - 24,048.060 MHz CW/USB
Beacon:   2401.323
        24,048.035
[05232004]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
```

Launched: September 26, 2000

Status: Non-Operational
Downlink: 437.075 MHz
Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[08152004]

=====

SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz
Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[08152004]

=====

NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, callsign KE6QMD, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]

=====

MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Operational

Uplink: 145.850 or 145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz
Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[11202005]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink 435.275 1200-baud AFSK
Downlink 145.825 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink: 145.825 MHz FM 1200 Baud AFSK
Beacon: 2401.220 MHz
[05012006]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 19, 1965

Status: Non-Operational

Uplink: 145.9750 - 146.0250 MHz SSB/CW

Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
NNNN
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SB SAT @ AMSAT W8ISS $ANS-008.S4
WSR 008 Part 4 01/08/2007

AMSAT NEWS SERVICE BULLETIN 008.S4 FROM AMSAT HQ
SILVER SPRING, MD, January 08, 2007
TO ALL RADIO AMATEURS
BID: $ANS-008.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE PROPOSED FOR LAUNCH AT THIS TIME:

PHASE 3E ?O-??
Catalog number:
Proposed Launch Date: Early/Mid 2007

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/
[ANS-WSR wishes to thank William Leijenaar, PE1RAH for this week's report]
[04242006]
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ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)

* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/amsat/listserv/menu.html

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

```
From -1258896001951129244
X-Google-Thread: 10e8ad,ecc4aac312cdf1ab,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news3.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!local01.nntp.dca.giganews.com!nntp.comcast.com!
news.comcast.com.POSTED!not-for-mail
NNTP-Posting-Date: Sat, 13 Jan 2007 20:43:06 -0600
From: "JoAnne K9JKM" <k9jkm_remove_@comcast.net>
Newsgroups: rec.radio.amateur.space
Subject: ANS-014 AMSAT News Service Weekly Bulletins
Date: Sat, 13 Jan 2007 20:43:18 -0600
MIME-Version: 1.0
Content-Type: text/plain;
     format=flowed;
     charset="iso-8859-1";
     reply-type=original
Content-Transfer-Encoding: 7bit
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.3028
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.3028
Message-ID: <Rf-dnTBi8s8nBTTYnZ2dnUVZ_sOknZ2d@comcast.com>
```

Lines: 361
NNTP-Posting-Host: 67.184.169.1
X-Trace: sv3-JJq4xXYCtMUJguZF/
sUPACHimsyhrSIFLDJnShzFFf90OR4UaJEljtTr6sJs2V0UroLtMc3wp4tGZEX!
0FyMX8+AqFAQ6E6GcFvotYpE7NGKmGV7sORUG+riig8xcEtSP1XtIPjUrjLFZfP4u/DjU8ULKt+3!
XpWdULYrTDluFb8=
X-Complaints-To: abuse@comcast.net
X-DMCA-Complaints-To: dmca@comcast.net
X-Abuse-and-DMCA-Info: Please be sure to forward a copy of ALL headers
X-Abuse-and-DMCA-Info: Otherwise we will be unable to process your complaint properly
X-Postfilter: 1.3.32
Xref: g2news2.google.com rec.radio.amateur.space:574

AMSAT NEWS SERVICE
ANS-014

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:

* AMSAT Argentina Launches Pehuensat-1 Amateur Radio Satellite
* FCAL Designated NRL-OSCAR-62
* AMSAT Opportunity for Windows Programmers
* RAFT Control Station Needed in Southern USA
* Updated Firmware Available for the LVB Tracker
* Help Define the Mission for University of Lousiana Cubesat Project
* Space Shorts From All Over
* ARISS Status Report For the Week of January 8, 2007

SB SAT @ AMSAT $ANS-014.01
AMSAT Argentina Launches Pehuensat-1 Amateur Radio Satellite

AMSAT News Service Bulletin 014.01
From AMSAT HQ SILVER SPRING, MD.
January 14, 2007
To All RADIO AMATEURS
BID: $ANS-014.01

AMSAT Argentina announced that Pehuensat-1, the 2nd Argentine amateur satellite was launched from India by an ISRO PSLV-C7 4 stage rocket on January 10. It attained a 635/640 Km polar sun synchronous orbit with an of inclination 97.92 degrees.

Once activated Pehuensat-1 will transmit voice messages in three languages, English, Hindi and Spanish and will be heard on 145.825 Mhz plus an AX25 1200 baud packet following the voice message. More information can be found at: http://www.amsat.org.ar?f=6.

LU8YD, Alejandro at the Pehuensat control station at the University of Comahue reported hearing weak signals on 145.825 MHz after the satellite was activated. The satellite's controllers are investigating and plan to report on their findings.

A quick view of the next passes at your location is available on-line. Go to http://www.amsat.org.ar, then click on the small revolving globe off of the coast of Argentina, select your location from the map, and then select PEHUENSAT-1.

AMSAT Argentina provided the following 2-line keplerian elements:

```
PEHUENSAT-1
1 29710U 07001B   07011.96059777 -.00000065  00000-0 -16231-5 0   101
2 29710  97.9483  73.1578 0012960 268.9216  91.0485 14.79281628   278
```

[ANS thanks AMSAT Argentina for the above information]

/EX

SB SAT @ AMSAT $ANS-014.02
FCAL Designated NRL-OSCAR-62

AMSAT News Service Bulletin 014.02
From AMSAT HQ SILVER SPRING, MD.
January 14, 2007
To All RADIO AMATEURS
BID: $ANS-014.02

Bill Tynan, W3XO, AMSAT OSCAR Coordinator issued the following statement this week, "By the authority vested in me by the AMSAT-NA President, I am pleased to issue an OSCAR number for the FCAL amateur radio satellite.

From the information provided me, I conclude that, FCAL complies with all of the requirements for an OSCAR number. In accordance with your request, the prefix will be NRL. Thus, FCAL will henceforth be known as NRL-OSCAR-62 or NO-62.

AMSAT-NA and I wish to congratulate you and your entire NRL Amateur Radio Club team for the successful construction, testing and orbiting of this spacecraft."

73 and Best Wishes,
William A. (Bill) Tynan, W3XO

[ANS thanks Bill, W3XO for the above information]

/EX

SB SAT @ AMSAT $ANS-014.03
AMSAT Opportunity for Windows Programmers

AMSAT News Service Bulletin 014.03
From AMSAT HQ SILVER SPRING, MD.
January 14, 2007
To All RADIO AMATEURS
BID: $ANS-014.03

AMSAT-NA VP Operations, Drew KO4MA, posted a help wanted request this week. AMSAT-NA has two opportunities available for Windows programmers. Drew said, "We have two projects that are in need of talent, both in support of Operations. This is a great chance to support AMSAT and amateur satellites in a real and tangible way."

The first project involves writing a GUI XP compatible program to read mixed ASCII and binary telemetry files, extract, reformat, and display the data. Some basic statistics and producing a .csv file are also highly desireable features. Console versions of these programs already exist created in Visual C++ 2005 Studio Express. Support for the finished product will be limited to a few internal users in support of AO-51.

The second project involves developing a GUI XP compatible program around some prexisting AX.25 and soundcard code for a UI satellite communications program. Ease of installation and use are high on the priority list for this project, and support will be required for widespread use. A team approach may be best regarding support (read this as "bring a team with you"). This will be done in support of an effort to increase usage and visibility of the several Microsats currently in orbit and functional.

Please send an e-mail to ko4ma@amsat.org indicating your willingness to help, and Drew will be happy to explain further.

[ANS thanks Drew, KO4MA for the above information]

/EX

SB SAT @ AMSAT $ANS-014.04
RAFT Control Station Needed in Southern USA

AMSAT News Service Bulletin 014.04
From AMSAT HQ SILVER SPRING, MD.
January 14, 2007
To All RADIO AMATEURS
BID: $ANS-014.04

Bob, WB4APR, writing from the US Naval Academy Small Satellite Laboratory says, "We need a volunteer command station for RAFT in the southern states from Arizona through Texas to Georgia. The southern command station will enable RAFT's 216.98 MHz radar fence transponder."

Station requirements include:

1) An AZ/EL tracking OSCAR array on 2 meters with preamp capable of weak signal reception.
2) AX.25 standard TNC at 1200 baud and PC to run a DOS program.
3) A recorder to record the 145.825 MHz downlink audio when RAFT flies through the fence.

You need access to your station during morning (~9 AM) or afternoon (~5 PM) passes.

Bob continued, "The RAFT packet-to-voice mode has been enabled for the first 3 weeks and several stations have made contact. Next week, we will enable the PSK-31 transponder on RAFT. This transponder is 28.120 USB MHz PSK-31 SSB uplink and 2 meters FM down. The PSK Mode is turned on when a station performs a packet 'CONNECT RAFT' which will bring up the 10m RX and 145.825 TX for 1 minute."

RAFT Satellite information is available on-line at:
http://www.ew.usna.edu/~bruninga/ande-raft-ops.html

Telemetry web pages for the US Naval Academy satellites are available at:
http://www.g4dpz.me.uk/ANDE/RAFThome.do
http://www.g4dpz.me.uk/ANDE/home.do

[ANS thanks Bob, WB4APR for the above information]

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SB SAT @ AMSAT $ANS-014.05
Updated Firmware Available for the LVB Tracker

AMSAT News Service Bulletin 014.05
From AMSAT HQ SILVER SPRING, MD.
January 14, 2007
To All RADIO AMATEURS
BID: $ANS-014.05

Howard, G6LVB reminds users of the LVB Tracker rotor control system that he has a new set of firmware that includes compatibility for use with the Predict tracking program.

Howard explained, "I discovered that Predict sent null characters at the start of each command that meant the old firmware got confused and ignored the command. The updated LVB Tracker version ignores these null characters."

Contact Howard at g6lvb@amsat.org if you would like to test the new firmware and give it the thumbs up.

When you purchase an LVB Tracker kit, a handsome donation goes towards building new satellites!

See:
http://www.uk.amsat.org/index.php?option=com_content&task=view&id=245&Itemid=142
(watch the line wrap)

[ANS thanks Howard, G6LVB for the above information]

/EX

SB SAT @ AMSAT $ANS-014.06
Help Define the Mission for University of Lousiana Cubesat Project

AMSAT News Service Bulletin 014.06
From AMSAT HQ SILVER SPRING, MD.
January 14, 2007
To All RADIO AMATEURS
BID: $ANS-014.06

Nick, K5QXJ reported, "The cubesat team at the University of Louisiana is in the process of defining its second mission for its cubsat project. The team has decided to fly a cubesat that has a educational component. We are asking for ideas that would excite K through 12 students that can be flown on a cubesat such as 1 watt of dc power in a 4 inch cube to help students receive it. In addition to the education component the team is thinking of flying a high efficient radio perhaps BPSK with a forward error corrected code with Eb/No of < 3 db. Again here we are asking for input in the mission definition and help in the implementation including peer review."

Contact Nick at k5qxj@amsat.org with your ideas.

[ANS thanks Nick, K5QXJ for the above information]

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SB SAT @ AMSAT $ANS-014.07
Space Shorts From All Over

AMSAT News Service Bulletin 014.07
From AMSAT HQ SILVER SPRING, MD.
January 14, 2007
To All RADIO AMATEURS
BID: $ANS-014.07

+ If you watch the morning or evening sky and have a clear view of the horizon, you will be able to spot Comet McNaught. Spaceweather.com provided these viewing tips:

  - o At dawn, go outside and face east. Using binoculars, scan the horizon.
  - o The comet is located just south of due east.
  - o At sunset, go outside and face west. Using binoculars, scan the horizon.
  - o The comet is located low and to the right of Venus

o A clear view of the horizon is essential for either sunrise or sunset.

+ A notice seen on the AO-27 web page at http://www.ao27.org/ says, "We have successfully reset the CPU on AO-27. AO-27 is now commandable and is sitting at the bootloader. We are beginning the process of uploading flight software. The transmitter was very strong during our tests. This is very good news."

+ A paper presented at the meeting of the American Astronomical Society in Seattle last week suggests that new analysis of Viking mission results indicates presence of life on Mars. Scientists said, "We may already have 'met' Martian organisms." This hypothesis arises from on-going analysis of data from experiments done by the Viking Mars landers in the late 1970s. The researchers propose that the microbe-like organisms use a mixture of water and hydrogen peroxide as their internal fluid. Other scientists dispute this claim, stating no one has been able to duplicate these conditions in laboratory testing on Earth. (MarsDaily.com)

+ Britain is considering plans for its own moon shot, the BBC said on Tuesday, citing plans submitted to the body that funds British space exploration. Proposals for two missions have been submitted to the Particle Physics and Astronomy Research Council, and the first, if approved, could be launched by 2010. According to Professor Martin Sweeting, founder and chief executive of Surrey Satellite Technology Ltd., which prepared the study for the funding body, the cost of space exploration had fallen enough for Britain to "go it alone". British science officials later stated that the moon mission proposal has a lower priority than other space initiatives under consideration at this time. (SpaceDaily.com)

+ The deadline is approaching for you to send your name to the moon aboard the Japanese Space Agency's Selene Lunar Explorer. You have until January 31 to submit your name and a short message which will be affixed to the space craft frame. Your name is limited to 10 letters and your short message is limited to 40 letters. You can submit your information at: http://www.jaxa.jp/pr/event/selene/index_e.html

+ SKN Best Fist Nominations Due. Please send your nomination to w2rs@amsat.org. A list of those nominated will be published in an ANS bulletin in early February, and in The AMSAT Journal.

[ANS thanks everyone for the above information]

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SB SAT @ AMSAT $ANS-014.08
ARISS Status Report For the Week of January 8, 2007

AMSAT News Service Bulletin 014.08
From AMSAT HQ SILVER SPRING, MD.
January 14, 2007
To All RADIO AMATEURS

BID: $ANS-014.08

1. Australian Scout Jamboree Contact Successful

A successful Amateur Radio on the International Space Station (ARISS) contact was carried out with scouts attending the Australian Scout Jamboree 2007 on Sunday, January 7 via the telebridge station VK4KHZ in Australia. Nineteen students were able to ask one question each of Sunita Williams, KD5PLB. Approximately thirteen thousand scouts and eight thousand leaders from 53 countries attended the event. Photos taken of the Jamboree's amateur radio station may be viewed on:
http://www.wia.org.au/news/2007/20070103-01.php

For a write up and photographs of the contact, see:
http://www.wia.org.au/news/2007/20070108-01.php

2. ARISS Completed School Contacts

Sherman Elementary School in Henrietta, New York completed a direct ARISS contact on Monday, January 8, 2007. The contact may be viewed on:
https://breeze.rit.edu/ariss.

On Monday, January 8, 2007, students at Dilworth Elementary School in San Jose, California spoke with Sunita Williams, KD5PLB, on board the ISS via amateur radio.

3. ARISS Upcoming School Contacts

Seventh grade students from Northlawn and St. Anthony Schools in Streator, Illinois have been scheduled for an Amateur Radio on the ISS (ARISS) contact on Tuesday, January 16 at 17:28 UTC. The Starved Rock Radio Club, a local Amateur Radio Club, will assist in the contact.

Romeo Elementary School in Dunnellon, Florida has been approved for an ARISS contact on Wednesday, January 17 at 17:53 UTC. The coordinating teacher received two grants which were used to purchase radio equipment, an antenna, a satellite tracking program and ARISS resource materials. Arrangements have been made for astronaut Joe Acaba, a former Dunnellon teacher, to visit around the time of the ARISS contact. The Silver Spring Radio Club set up a website for the community to keep up with ARISS activities.
See: http://www.phys.ufl.edu/~eshop/ariss/ARISS.html

[ANS thanks Carol, KB3LKI for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM

```
From -8055336881914483347
X-Google-Thread: 10e8ad,4a37dcb9b0884223,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news4.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!local01.nntp.dca.giganews.com!nntp.comcast.com!
news.comcast.com.POSTED!not-for-mail
NNTP-Posting-Date: Thu, 18 Jan 2007 08:06:02 -0600
From: "JoAnne K9JKM" <k9jkm_remove_@comcast.net>
Newsgroups: rec.radio.amateur.space
Subject: WSR-015 AMSAT Weekly Satellite Report
Date: Thu, 18 Jan 2007 08:06:05 -0600
MIME-Version: 1.0
Content-Type: text/plain;
     format=flowed;
     charset="iso-8859-1";
     reply-type=original
Content-Transfer-Encoding: 7bit
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.3028
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.3028
Message-ID: <2fSdndk-2dlX4zLYnZ2dnUVZ_sudnZ2d@comcast.com>
Lines: 1088
NNTP-Posting-Host: 67.184.169.1
X-Trace: sv3-TKRQ/7gnGzGebcfTKdH/CJcUUZ+VTfbH56E8ozmYkdK7htB15/
kJEArnGFtBjRelcDKlC/jespEMvDS!0Ds4VoNMraD9tfyiQ7faLue+erCmdf/u/
cf9OkAvd8HTTHtt7q+HaZ1xvpdBXNsdq15qa6zdOota!5/5rNUmYDw/52Gg=
X-Complaints-To: abuse@comcast.net
X-DMCA-Complaints-To: dmca@comcast.net
X-Abuse-and-DMCA-Info: Please be sure to forward a copy of ALL headers
X-Abuse-and-DMCA-Info: Otherwise we will be unable to process your complaint
properly
X-Postfilter: 1.3.32
Xref: g2news2.google.com rec.radio.amateur.space:575
```

This report is organized into 4 parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites

SB SAT @ AMSAT W8ISS ANS-015.S1
WSR 015 Part 1 01/15/2007

AMSAT NEWS SERVICE BULLETIN 015.S1 FROM AMSAT HQ
SILVER SPRING, MD, January 15,2007

TO ALL RADIO AMATEURS
BID: $ANS-015.S1

VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/V - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 MHz to 435.280 MHz LSB/CW
Downlink: 145.870 MHz to 145.930 MHz USB/CW

Dutch Transponder:
Uplink: 435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW

Indian Beacon: 145.859330 MHZ CW
Dutch Beacon: 145.860MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsat.in/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is
active. Each transponder has a different beacon.
[10022006]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Semi-Operational - Software upgrade in progress
Current Mode(s): FM Repeater - V/U
                 PBBS -   OFF
                 Digipeater - OFF

Analog voice downlink: 435.300 MHz FM
                        435.150 MHz FM
                       2401.200 Mhz FM
Analog voice uplink: 145.880 MHZ FM
                        145.880 MHz USB
                        145.920 MHz FM
                       1268.700 MHz FM 67Hz PL tone
Digital Downlinks: 435.150 MHz FM 38k4 Digital, PBP, 1 watt output
                        435.150 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol

                      2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Digital, Pacsat Broadcast Protocol
                      1268.700 mhz FM 9k6 PBP Digital

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[01152007]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The order of operation is thus: (allow for Doppler as necessary)
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer
   on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on
   and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10
   minute timer.
[01082007]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: OPERATIONAL

```
Voice/CW Mode JA
Uplink:   145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon:   435.795 MHz

Digital Mode JD
Uplink:   145.850 145.870 145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

JARL English webpage: http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm
AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's CW
telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts.htm
[01082007]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Recovery

Uplink:   145.850 MHz FM
Downlink: 436.795 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

This off the AO-27 website:
We have successfully reset the cpu on AO-27.
AO-27 is now commanable and is sitting at the bootloader. We are
beginning
the process of uploading flight software. The transmitter was very
strong
during our tests. This is very good news.
- Michael N3UC

Official Webpage: http://www.ao27.org
[01082007]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974
```

Status: Operational depending on amount of Sunlight
Current Reported mode: Mode-A

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/

AO-7 users are requested to log their contacts and observations about
AO-7,
especially any unexpected mode changes. AO-07 telemetry software
webpage:
http://www.qsl.net/k3tz/files/K3TZ_AO-07_Telemetry_Decoder_0.5.zip

Please keep your power low! For additional information please read the
AO-7
Usage Guidelines on the AO-7 Log and Resource Site located at:
http://www.planetemily.com/ao7
[01082007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: Occasional Voice
Digipeater: OFF

The Expedition 14 crew is:
Commander: Michael Lopez-Alegria - KE5GTK
Flight Engineer: Mikhail Tyurin - RZ3FT
Flight Engineer: Sunita Williams

Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

```
SSTV TESTING:
Worldwide Reported Downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink:         437.800 MHz FM
Repeater Downlink:       145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German:  DP0ISS
Russian: RS0ISS, RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.
[12182006]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-015.S2
WSR 015 Part 2 01/15/2007

AMSAT NEWS SERVICE BULLETIN 015.S2 FROM AMSAT HQ
SILVER SPRING, MD, January 15, 2007
TO ALL RADIO AMATEURS
BID: $ANS-015.S2

PEHUENSAT-1
Catalog Number: 29709
Launch Date: January 10, 2007

Status: In Orbit

Uplink/Downlink: 145.825Mhz FM
Voice Recorder:  145.825Mhz FM
[01082007]
=====
NO-61 ANDE
Catalog Number: 29667
Launch Date: December 21, 2006
```

Status: In Orbit

Uplink/Downlink: 145.825Mhz FM APRS AX25
[01082007]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: In Orbit

Uplink/Downlink: 145.825Mhz FM APRS AX25
[01082007]
=====
GENESAT-1 ?O-??
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Operational

Telemetry Beacon Downlink: 437.0670 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[01082007]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Operational

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon: 437.2750 MHz CW

Callsign: JR8YJT
[10302006]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Telemetry Downlink: 437.4250MHz AFSK 1200bps using AFK protocol
Beacon: 437.2750MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/

```
[01082007]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launched: June 30, 2003

Status: Operational

Beacon:     436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[01082007]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launched: February 21, 2006

Status: Semi-Operational - Constant Carrier only

Uplink:  1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 1200 FM ax25 or SRLL (ACTIVE only near Japan ? )

Telemetry Beacon: 437.3850 CW

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[01082007]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Semi-Operational - Software upgrade in progress
Current Mode(s): FM Repeater - V/U
                 PBBS -        OFF
                 Digipeater -  OFF

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink:   145.880 MHZ FM
                       145.880 MHz USB
                       145.920 MHz FM
                      1268.700 MHz FM 67Hz PL tone
Digital Downlinks:     435.150 MHz FM 38k4 Digital, PBP, 1 watt output
                       435.150 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:        145.860 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
```

```
                      1268.700 mhz FM 9k6 PBP Digital

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[01152007]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Operational only in Full Sun Light

General Usage Uplink/Downlink:145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[01082007]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM
Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[01082007]
=====
AO-16 PACSAT
```

```
Catalog number: 20439
Launch Date: January 22, 1990

Status: Semi-operational - APRS usage through Digipeater

Uplink:         145.900 FM 1200-baud Manchester FSK
                145.920 FM 1200-baud Manchester FSK
                145.940 FM 1200-baud Manchester FSK
                145.960 FM 1200-baud Manchester FSK
Downlink:       437.026 MHz SSB 1200-baud PSK
Mode-S Beacon: 2401.1428 MHz

Mode and Antenna Polarization:
U: RC 437.050 MHz RHCP
   PSK 437.025 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[01082007]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational

Telemetry Downlink: 145.826 MHz. FM (1200-baud AFSK) approx. 10 days ON,
10
                    days OFF
Mode-S Beacon:     2401.500 MHz - OFF
UHFBeacon:          435.025 MHz - OFF

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Official webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[01082007]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: Occasional Voice
Digipeater:   OFF

Expedition Crew 14 is:
Commander:              Michael Lopez-Alegria - KE5GTK
```

Flight Engineer: Mikhail Tyurin - RZ3FT
Flight Engineer: Sunita Williams

Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

SSTV TESTING:
Worldwide Reported Downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS, RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is NOT translated from Russian and posted.
[01082007]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-015.S3
WSR 015 Part 3 01/15/2007

AMSAT NEWS SERVICE BULLETIN 015.S3 FROM AMSAT HQ
SILVER SPRING, MD, January 15, 2007
TO ALL RADIO AMATEURS
BID: $ANS-015.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

NCUBE-2

```
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency:  437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 FM 67Hz CTCSS
Voice Downlink: 2401.835 FM
Packet Up/Downlink: 437.250 9k6 packet
Packet Downlink 2401.835 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01292006]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink 435.275 1200-baud AFSK
Downlink 145.825 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01012006]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Operational

Uplink: 145.850 or 145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz
Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
```

commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[11202005]

=====

NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, callsign KE6QMD, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]

=====

SO-42 SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational
Downlink: 437.075 MHz
Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[08152004]

=====

SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz
Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:

```
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[08152004]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplink V-band   145.840 - 145.990 MHz CW/LSB
      U-band   435.550 - 435.800 MHz CW/LSB
      L1-band 1269.250 - 1269.500 MHz CW/LSB
      L2-band 1268.325 - 1268.575 MHz CW/LSB
Downlink: S2-band 2401.225 - 2401.475 MHz CW/USB
         K-band 24,048.010 - 24,048.060 MHz CW/USB
Beacon:   2401.323
        24,048.035
[05232004]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlink: 437.025 MHz 437.400 MHz
Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site
at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[05092004]
=====
SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz and 145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[08082004]
=====
PO-34 PANSAT
```

Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm

[ANS-WSR has no further information]
[09042006]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink: 145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html

```
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012006]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: Downlink only

Uplink: 145.875 145.900 145.925 145.950 MHz FM (1200-baud)
Downlink: 435.808 MHz PSK
Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01012006]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM (9600-baud FSK)
Downlink: 436.500 MHz FM
Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM
Broadcast Callsign: HLO1-11
BBS: HLO1-12

Jim, AA7KC, reports that KO-23's downlink transmitter continues in a
non-operational status.
[05092004]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink:   145.900 FM 9600-baud FSK
```

```
Downlink: 435.120 MHz FM
Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01092005]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink:   435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01152007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons:   435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink:   145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks:  145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz
More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplink: 145.84 145.86 145.88 145.90 MHz FM
(using 1200-baud Manchester FSK)
CW downlink: 437.125 MHz
Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
```

```
www.telecable.es/personales/ea1bcu
[05232004]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink: 145.825 MHz FM 1200 Baud AFSK
Beacon:  2401.220 MHz
[05012006]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink  435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet: Non-Operational
Uplink:  145.8500 MHz MFSK 1200 BPS
Uplink:  145.8700 MHz MFSK 1200 BPS
Uplink:  145.8900 MHz MFSK 1200 BPS
Uplink:  145.9100 MHz MFSK 1200 BPS
Downlink  435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
```

```
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB
Beacon: 145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink  435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink  435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink:  145.8500 - 145.9000 MHz SSB/CW
Downlink  29.4000 - 29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink  29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink:  145.9000 - 146.0000 MHz SSB/CW
Downlink: 29.4500 - 29.5500 MHz SSB/CW
[01152007]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
```

=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink: 145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB
Beacon: 29.352 MHz (intermittent)
SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB
Beacon: 145.860 MHz
Robot: 145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB
Beacon: 29.408 MHz
Robot: 29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-015.S4
WSR 015 Part 4 01/15/2007

AMSAT NEWS SERVICE BULLETIN 015.S4 FROM AMSAT HQ

SILVER SPRING, MD, January 15, 2007
TO ALL RADIO AMATEURS
BID: $ANS-015.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE PROPOSED FOR LAUNCH AT THIS TIME:

PHASE 3E ?O-??
Catalog number:
Proposed Launch Date: Early/Mid 2007

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/
[04242006]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

- AMSAT News Service (ANS)
- General satellite discussion (AMSAT-BB)
- Orbit data (KEPS)
- Manned space missions (SAREX)
- District of Columbia area (AMSAT-DC)
- New England area (AMSAT-NE)
- AMSAT Educational Liaison mailing list (AMSAT-EDU)
- AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/amsat/listserv/menu.html

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

```
From 4932363182887124778
X-Google-Thread: 10e8ad,ffc2262366a2aa54,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII
Path: g2news2.google.com!news1.google.com!news3.google.com!
border1.nntp.dca.giganews.com!nntp.giganews.com!local01.nntp.dca.giganews.com!
nntp.comcast.com!news.comcast.com.POSTED!not-for-mail
NNTP-Posting-Date: Mon, 22 Jan 2007 08:29:00 -0600
From: "JoAnne K9JKM" <k9jkm_remove_@comcast.net>
Newsgroups: rec.radio.amateur.space
Subject: ANS-021 AMSAT News Service Weekly Bulletins
Date: Mon, 22 Jan 2007 08:29:15 -0600
MIME-Version: 1.0
Content-Type: text/plain;
     format=flowed;
     charset="iso-8859-1";
     reply-type=original
Content-Transfer-Encoding: 8bit
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.3028
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.3028
Message-ID: <3_GdnUGd28-wVynYnZ2dnUVZ_segnZ2d@comcast.com>
Lines: 208
NNTP-Posting-Host: 67.184.169.1
X-Trace: sv3-8omBuRCzSL35wrHKpgIoEFJQhaVJN6UFpw8jZpwXQSSdo/
vVNrfhRapK1BsJhNPyDxX75TIYcK8Rp+7!/
ZUzm67AgHkipBdjuoj9GwzbABAdSg23bc9ikTycxhqLDqxAVmOlNSwvg4bVMSr98xsaiBy9Euk7!
sWDGB9fN5soc3OE=
X-Complaints-To: abuse@comcast.net
X-DMCA-Complaints-To: dmca@comcast.net
X-Abuse-and-DMCA-Info: Please be sure to forward a copy of ALL headers
X-Abuse-and-DMCA-Info: Otherwise we will be unable to process your complaint
properly
```

X-Postfilter: 1.3.32
Xref: g2news2.google.com rec.radio.amateur.space:576

AMSAT NEWS SERVICE
ANS-021

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* AO-27 Recovered and Operational
* ANDE / FCAL Object Number Correction
* Falcon/Demosat Launch Delayed
* ARISS Status - 15 January 2007

SB SAT @ AMSAT $ANS-021.01
AO-27 Recovered and Operational

AMSAT News Service Bulletin 021.01
From AMSAT HQ SILVER SPRING, MD.
January 21, 2007
To All RADIO AMATEURS
BID: $ANS-021.01

As of 14 January 2007 AO-27 was once again recovered and returned to operation through dedicated work of the Command Team.

Michael, N3UC, reports that after working on several problems with the AFSK modem on AO-27, they were able to upload the flight code. AO-27 is now running the EOS software and sending good telemetry. With the TOPR schedule now running the Analogue repeater has been turned back on.

The current schedule turns the satellite on during ascending passes (South to North) at approximately 30 degrees North latitude. Initially there is 20 seconds of telemetry data followed by 5 minutes of analogue repeater operation. Then an additional 60 seconds of telemetry data is sent before the satellite transmitter turns off.

Please keep in mind that AO-27 is 13 years old and takes some work to keep going.

Additional information is available at www.ao27.org

[ANS thanks Michael, N3UC,for the above information]

/EX

SB SAT @ AMSAT $ANS-021.02
ANDE / FCAL Object Number Correction

AMSAT News Service Bulletin 021.02
 From AMSAT HQ SILVER SPRING, MD.
January 21, 2007
To All RADIO AMATEURS
BID: $ANS-021.02

Bob Bruninga, WB4APR, reports that CELESTRACK has had the names of ANDE MAA and FCAL swapped. Bob says, "I clearly heard the difference during an overhead pass. The signals from ANDE were clearly 2 minutes ahead of where I was tracking. What I thought was ANDE MAA is actually FCAL and when I pointed at FCAL, I found strong signals from ANDE"

To summarize,
29667 is REALLY FCAL
29664 is REALLY ANDE MAA

CELESTRACK has had them reversed in its AMATEUR satellite list.

Much more information about these satellites is available on the ANDE, RAFT, NMARS, & FCAL Operations web site.
http://www.ew.usna.edu/~bruninga/ande-raft-ops.html

[ANS thanks Bob, WB4APR, for the above information]

/EX

SB SAT @ AMSAT $ANS-021.03
Falcon/Demosat Launch Delayed

AMSAT News Service Bulletin 021.03
 From AMSAT HQ SILVER SPRING, MD.
January 21, 2007
To All RADIO AMATEURS
BID: $ANS-021.03

During final check-outs prior to static fire, an anomaly was uncovered with the thrust vector control (TVC) pitch actuator on the second stage that will result in launch being pushed to February. Since this is not used during the static fire, we have decided to push forward with that test in order to acquire valuable data on engine ignition, pad acoustics, and the overall system response. The static fire is now planned to occur between Saturday and Tuesday (California time). This test will proceed very slowly and then only burns for about four seconds. A video will be posted to the SpaceX website afterwards.

Upon completion of the static fire, the rocket will be taken back into the hangar to thoroughly investigate the TVC issue. With the range available to us only until January 23 (Kwaj needs to reconfigure for an incoming Minuteman mission), this means launch is now planned for mid-February. Elon Musk, SpaceX CEO said, "As I've mentioned previously, don't hold your breath for this launch. Given the large number of robustness improvements and the fact that our vehicle/pad health verification system has increased from about 30 checks to almost 1000, shifts in the launch date are to be expected."

[ANS thanks Elon for the above information]

/EX

SB SAT @ AMSAT $ANS-021.04
ARISS Status - 15 January 2007

AMSAT News Service Bulletin 021.04
From AMSAT HQ SILVER SPRING, MD.
January 21, 2007
To All RADIO AMATEURS
BID: $ANS-021.04

1. Successful Sherman Elementary School Contact

Sherman Elementary School in Henrietta, New York experienced a successful Amateur Radio on the International Space Station (ARISS) contact on Monday, January 8. Sunita Williams, KD5PLB, answered the sixteen questions asked of her by 8 students. The audio for this contact was fed into the EchoLink AMSAT (101 377) and JK1ZRW (277 208) servers and into the IRLP Discovery Reflector 9010. Thirty-two connections were made to the video which was streamed on the internet. Two local newspapers and television stations covered the event. The Rochester Democrat and Chronicle ran an article on its website. See:
http://www.rochesterdandc.com/apps/pbcs.dll/article?AID=/20070108/
NEWS01/701090307/1002/NEWS

2. Dilworth Elementary School Contact, a Success

On Monday, January 8, 2007, students at Dilworth Elementary School in San Jose, California participated in an Amateur Radio on the International Space Station (ARISS) contact with Sunita Williams, KD5PLB, onboard the ISS. Twenty-two students were able to ask one question each, as approximately two hundred fifty students, parents and teachers looked on. Two newspapers covered the event. The San Jose Mercury News ran a web story with a video clip of the contact. See:
http://www.mercurynews.com/mld/mercurynews/16413528.htm
The story ran in the printed edition of the paper on Tuesday, January 9. The event will also be covered on the front page of the Cupertino Courier's January 17 edition.

3. ARISS Upcoming School Contacts

�cole �l�mentaire publique Le Pr�lude in Ottawa, Ontario, Canada has been scheduled for an Amateur Radio on the International Space Station (ARISS) contact on Wednesday, January 24 at 13:55 UTC. All students, grades K-6, will participate in a space exploration unit leading up to the ARISS contact. They will make posters and contribute to a group mural related to the event. The school's website will post a special section on space designed by the students. Sixth grade students will study the solar system as part of their science curriculum, and an astronaut appearance will be planned. Students will also write to local dignitaries inviting them to attend the event, which will be held at the Science and Technology Museum. The contact will be available on the internet for the entire school, as well as other schools, and the media will be notified.

Winnebago Public School is located on the Winnebago Indian Reservation in Nebraska and has been slated for an Amateur Radio on the International Space Station (ARISS) contact on Thursday, January 25 at 14:18 UTC. Amateur radio operators will be invited to present to the students such topics as propagation, solar flares, and signal bouncing. Hands on activities are planned. A competition will be held among 9-12 grade students in order to choose the questions that will be asked of the astronaut. Grades K-12 will compete to design the school's QSL (contact) card. Newspapers and television and radio stations will be invited to the event.

4. ARRL Article on Australian, New York Contacts

The American Radio Relay League (ARRL) ran an article on the Amateur Radio on the ISS contacts with the Australian Jamboree scouts and the Sherman Elementary School students. See:
http://www.arrl.org/news/stories/2007/01/10/100/?nc=1

5. Sunita Williams Enjoying ARISS Contacts

An Amateur Radio on the International Space Station (ARISS) member sent a message congratulating Sunita Williams on the fine job she has been doing with her ARISS contacts. She responded with a note indicating that she really enjoys the contacts as they have been informative and interesting, and she looks forward to participating in many more. Thank you Sunita!

[ANS thanks Carol, KB3LKI for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Lee McLamb, KU4OS

From 386306983907295278
X-Google-Thread: 10e8ad,e178ec043812e836,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news2.google.com!news4.google.com!
border1.nntp.dca.giganews.com!nntp.giganews.com!local01.nntp.dca.giganews.com!
nntp.adelphia.com!news.adelphia.com.POSTED!not-for-mail
NNTP-Posting-Date: Mon, 22 Jan 2007 13:31:11 -0600
From: "John Doe" <hgorden@adelphia.net>
Newsgroups: rec.radio.amateur.space
Subject: LQQKING FOR SOME INFO
Date: Mon, 22 Jan 2007 14:31:13 -0500
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.3028
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.3028
X-RFC2646: Format=Flowed; Original
Message-ID: <Gd6dnVaVs9JijSjYnZ2dnUVZ_tKjnZ2d@adelphia.com>
Lines: 16
NNTP-Posting-Host: 69.162.152.98
X-Trace: sv3-
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HNhplOlT+SEzqvAH5JFoWte6yBwE
X-Complaints-To: abuse@adelphia.net
X-DMCA-Complaints-To: copyright@adelphia.net
X-Abuse-and-DMCA-Info: Please be sure to forward a copy of ALL headers
X-Abuse-and-DMCA-Info: Otherwise we will be unable to process your complaint
properly
X-Postfilter: 1.3.32
Xref: g2news2.google.com rec.radio.amateur.space:577

I have the following Microwave components and I am
LQQKing for pin-outs, schematics, pictorials, frequency ranges:

Wavecom/LORAL - RF Coaxial Switch
9130-B237-A1D-7B0, 28vdc

DowKey Microwave - RF Coaxial Switch
401-151, 28vdc

Chesapeake Microwave Technologies - 4/1 combiner?
86-0142, 4-8 GHz

Triangle Microwave Inc. - Bi-Directional Coupler?
CA-1568, Blue in color, 3 ports marked (IN -OUT-CPL)

From -5913775548557432376

X-Google-Thread: 10e8ad,89b7ced4be67bb6d,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news3.google.com!news.glorb.com!newscon02.news.prodigy.net!prodigy.net!wn14feed!worldnet.att.net!bgtnsc04-news.ops.worldnet.att.net.POSTED!53ab2750!not-for-mail
From: "AEONSCOOP" <aeonscoop@worldnet.att.net>
Newsgroups: rec.radio.amateur.space
Subject: wholes and curves
Lines: 6
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 5.50.4133.2400
X-MimeOLE: Produced By Microsoft MimeOLE V5.50.4133.2400
Message-ID: <i9hth.796745$QZ1.543972@bgtnsc04-news.ops.worldnet.att.net>
Date: Tue, 23 Jan 2007 05:36:14 GMT
NNTP-Posting-Host: 12.72.34.43
X-Complaints-To: abuse@worldnet.att.net
X-Trace: bgtnsc04-news.ops.worldnet.att.net 1169530574 12.72.34.43 (Tue, 23 Jan 2007 05:36:14 GMT)
NNTP-Posting-Date: Tue, 23 Jan 2007 05:36:14 GMT
Organization: AT&T Worldnet
Xref: g2news2.google.com rec.radio.amateur.space:578

Reinmann's zeta function is needed to detect extretestial objects using ground based astronomy... facinating?

AEONSCOOP

From 4898151117567772085
X-Google-Thread: 10e8ad,89b7ced4be67bb6d
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news1.google.com!news3.google.com!border1.nntp.dca.giganews.com!nntp.giganews.com!nx01.iad01.newshosting.com!newshosting.com!news-feed01.roc.ny.frontiernet.net!nntp.frontiernet.net!news01.roc.ny.POSTED!fd24bd7a!not-for-mail
From: gwatts <gwatts@frontiernet.net>
User-Agent: Mozilla Thunderbird 1.0.6 (Windows/20050716)
X-Accept-Language: en-us, en
MIME-Version: 1.0
Newsgroups: rec.radio.amateur.space
Subject: Re: wholes and curves
References: <i9hth.796745$QZ1.543972@bgtnsc04-news.ops.worldnet.att.net>
In-Reply-To: <i9hth.796745$QZ1.543972@bgtnsc04-news.ops.worldnet.att.net>
Content-Type: text/plain; charset=ISO-8859-1; format=flowed
Content-Transfer-Encoding: 7bit
Lines: 8
Message-ID: <XEpth.1140$B25.720@news01.roc.ny>
X-Complaints-To: abuse-news@frontiernet.net

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X-Trace:
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e46887b849
X-Abuse-Info: Please be sure to forward ALL headers so that we may process your
complaint properly.
NNTP-Posting-Date: Tue, 23 Jan 2007 15:16:07 UTC
Date: Tue, 23 Jan 2007 15:16:07 GMT
Xref: g2news2.google.com rec.radio.amateur.space:579

AEONSCOOP wrote:
> Reinmann's zeta function is needed to detect extretestial objects using
> ground based astronomy... facinating?
>
> AEONSCOOP

Maybe you meant 'Reimann zeta function?'  I've never heard of Reinmann
in relation to mathematics.



From -6273096746768847149
X-Google-Thread: 10e8ad,89b7ced4be67bb6d
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news4.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!wn11feed!worldnet.att.net!bgtnsc05-
news.ops.worldnet.att.net.POSTED!53ab2750!not-for-mail
From: "AEONSCOOP" <aeonscoop@worldnet.att.net>
Newsgroups: rec.radio.amateur.space
References: <i9hth.796745$QZ1.543972@bgtnsc04-news.ops.worldnet.att.net>
<XEpth.1140$B25.720@news01.roc.ny>
Subject: Re: wholes and curves
Lines: 16
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 5.50.4133.2400
X-MimeOLE: Produced By Microsoft MimeOLE V5.50.4133.2400
Message-ID: <1Yzth.452379$Fi1.118013@bgtnsc05-news.ops.worldnet.att.net>
Date: Wed, 24 Jan 2007 02:59:09 GMT
NNTP-Posting-Host: 12.72.43.193
X-Complaints-To: abuse@worldnet.att.net
X-Trace: bgtnsc05-news.ops.worldnet.att.net 1169607549 12.72.43.193 (Wed, 24 Jan
2007 02:59:09 GMT)
NNTP-Posting-Date: Wed, 24 Jan 2007 02:59:09 GMT
Organization: AT&T Worldnet
Xref: g2news2.google.com rec.radio.amateur.space:580


"gwatts" <gwatts@frontiernet.net> wrote in message
news:XEpth.1140$B25.720@news01.roc.ny...
> AEONSCOOP wrote:
> > Reinmann's zeta function is needed to detect extretestial objects using
```

> > ground based astronomy... facinating?
> >
> > AEONSCOOP
>
> Maybe you meant 'Reimann zeta function?' I've never heard of Reinmann
> in relation to mathematics.

I've been looking at Transcendental Numbers for about 3 years I thought i'd go with that... i'll check my spelling again.

```
From -2150266155888304441
X-Google-Thread: 10e8ad,eb0e7e9a6eab31e3,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
From: "Andrew Rich" <vk4tec@hotmail.com>
Newsgroups: rec.radio.amateur.space
Subject: sat panel
Date: Thu, 25 Jan 2007 18:59:33 +1100
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.3028
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.3028
X-RFC2646: Format=Flowed; Original
Message-ID: <45b88214$1_1@news.peopletelecom.com.au>
X-Original-NNTP-Posting-Host: news.peopletelecom.com.au
Lines: 3
NNTP-Posting-Host: 202.154.92.95
X-Trace: 1169713379 uv-55king-reader-01.melbourne.pipenetworks.com.au 11205
202.154.92.95:58939
X-Complaints-To: Abuse, including message IDs to abuse@pipenetworks.com
Path: g2news2.google.com!news4.google.com!news.glorb.com!quokka.wn.com.au!
tweak.pipenetworks.com!218.100.13.59.MISMATCH!not-for-mail
Xref: g2news2.google.com rec.radio.amateur.space:581
```

http://vk4tec.no-ip.org/sat_panel.htm

```
From 3001583361718119486
X-Google-Thread: 10e8ad,5921d6cc959debe0,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news3.google.com!newshub.sdsu.edu!elnk-nf2-pas!
newsfeed.earthlink.net!stamper.news.pas.earthlink.net!
newsread4.news.pas.earthlink.net.POSTED!46041641!not-for-mail
From: "JoAnne Maenpaa" <wb9jej_no-spam@earthling.com>
Newsgroups: rec.radio.amateur.space
Subject: WSR-275 AMSAT Weekly Satellite Report
Lines: 1009
```

X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <M0hVg.5529$Y24.2438@newsread4.news.pas.earthlink.net>
Date: Fri, 06 Oct 2006 00:00:44 GMT
NNTP-Posting-Host: 64.105.116.15
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread4.news.pas.earthlink.net 1160092844 64.105.116.15 (Thu, 05 Oct 2006 17:00:44 PDT)
NNTP-Posting-Date: Thu, 05 Oct 2006 17:00:44 PDT
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news2.google.com rec.radio.amateur.space:431

This report is organized into 4 parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites

SB SAT @ AMSAT W8ISS ANS-275.S1
WSR 275 Part 1 10/02/2006

AMSAT NEWS SERVICE BULLETIN 275.S1 FROM AMSAT HQ
SILVER SPRING, MD, October 02, 2006
TO ALL RADIO AMATEURS
BID: $ANS-275.S1

VO-52 HAMSAT
Catalog Number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/V - Indian Transponder

Frequencies:

Indian Transponder:
Uplink : 435.220 MHz to 435.280 MHz LSB/CW
Downlink: 145.870 MHz to 145.930 MHz USB/CW

Dutch Transponder:
Uplink : 435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW

Indian Beacon : 145.859330 MHZ CW
Dutch Beacon :   145.860MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

```
Official Webpage: http://www.amsat.in/hamsat.htm

To know what transponder is switched on please listen for the beacon
that
is active. Each transponder has a different beacon.
[10022006]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational
Current Mode(s): FM Repeater - V/U
                               L/U
                 PBBS -        OFF
                 Digipeater -  OFF

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink:   145.880 MHZ FM
                       145.880 MHz USB
                       145.920 MHz FM 67Hz PL tone
                      1268.700 MHz FM 67Hz PL tone
Digital Downlinks:     435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
                      2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:        145.860 MHz FM, 9k6 Digital, Pacsat Broadcast
Protocol
                      1268.700 mhz FM, 9k6 PBP Digital
Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[10022006]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Uplink:  145.850 MHz (67.0 Hz PL tone) (See below for operating
procedures)
Downlink: 436.795 MHz
```

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The
order of operation is thus: (allow for Doppler as necessary)
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute
timer
  on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the
repeater
  on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset
the 10
  minute timer.
[04172006]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: OPERATIONAL

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplink: 145.850 145.870 145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

unOfficial Webpage: http://www.amsat.org/amsat/sats/n7hpr/fo29.html
[11132005]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Uplink: 145.850 MHz FM
Downlink: 436.795 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[01012006]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational depending on amount of Sunlight
Current Reported mode: Mode-A

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
      432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
     145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
     145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz
     145.972 MHz
     435.100 MHz
    2304.100 MHz

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php
The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
AO-7 users are requested to log their contacts and observations about
AO-7, especially any unexpected mode changes.
AO-07 telemetry software webpage:
http://www.qsl.net/k3tz/files/K3TZ_AO-07_Telemetry_Decoder_0.5.zip

Please keep your power low! For additional information please read the
AO-7
Usage Guidelines on the AO-7 Log and Resource Site located at:
http://www.planetemily.com/ao7
[04242006]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: Intermittent
Digipeater: OFF

The Expedition 13 crew is:
Commander: Pavel Vinogradov - RV3BS
Flight Engineer: Jeff Williams - KD5TVQ
Crew: Thomas Reiter - DF4TR

Exedition 14 crew, which is currently enroute, is:
Michael Lopez-Alegria - KE5GTK
Mikhail Tyurin - RZ3FT
Anousheh Ansari

Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

SSTV TESTING:
Worldwide Reported Downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS, RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

Currently, Expedition Crew 14 is enroute to the International Space Station.
During the week, the equipment may be turned off during docking of the Soyuz.

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line is NOT translated from Russian and posted.
[09182006]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-275.S2
WSR 275 Part 2 10/02/2006

AMSAT NEWS SERVICE BULLETIN 275.S2 FROM AMSAT HQ

SILVER SPRING, MD, October 02, 2006
TO ALL RADIO AMATEURS
BID: $ANS-275.S2

CO-58 XI-V
Catalog Number: 28895
Launch Date: October 27, 2005

Status: Operational - CW only

Telemetry Downlink: 437.345MHz - FSK 1200bps using AFK protocol
Beacon Downlink: 437.465MHz - CW

Callsign: JQ1YGW

Oficial Webpage: http://www.space.t.u-tokyo.ac.jp/gs/satinfo-e.html#xi5
Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
[09252006]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launched: June 30, 2006

Status: Operational

Beacon: 436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS
[10022006]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launched: June 30,2003

Status: Semi-Operational - Constant Carrier only

Uplink: ?
Downlink: 437.3850 CW
          437.4700 1200 FM ax25 or SRLL (ACTIVE only near Japan ?)

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[09252006]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Current Mode(s): FM Repeater - V/U
                               L/U
                 PBBS -   OFF
                 Digipeater - OFF

```
Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink:   145.880 MHZ FM
                       145.880 MHz USB
                       145.920 MHz FM 67Hz PL tone
                      1268.700 MHz FM 67Hz PL tone
Digital Downlinks:     435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
                      2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:        145.860 MHz FM, 9k6 Digital, Pacsat Broadcast
Protocol
                      1268.700 mhz FM, 9k6 PBP Digital
Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[10022006]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: RECOVERY EFFORTS - REFRAIN FRON USAGE!!!

General Usage Uplink/Downlink:145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org
aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[09252006]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM
Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[08072006]
=====
RS-22 Mozhayets 4
Catalog Number: 27939
Launch Date: September 27, 2004

Status: Operational

Beacon: 435.3520 MHz CW
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Semi-operational, the digipeater command is on and open for
APRS users.

Uplink: 145.900 FM
       145.920 FM
       145.940 FM
       145.960 FM
(using 1200-baud Manchester FSK)
Downlink: 437.026 MHz SSB (1200-baud PSK)
Mode-S Beacon: 2401.1428 MHz

Mode and Antenna Polarization:
U: RC 437.050 MHz RHCP
  PSK 437.025 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[04172006]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational

Telemetry Downlink: 145.826 MHz. FM (1200-baud AFSK).
approx. 10 days ON, 10 days OFF
Mode-S Beacon: 2401.500 MHz. ... OFF
UHFBeacon: 435.025 MHz. ... OFF
```

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Reception reports are requested to be sent to xxxxx@amsat.org (replace xxxxx by g3cwv), or post to AMSAT-BB.

During the period 15 June to 17 July 2006 nothing has been heard from the satellite. It was last heard on 05 May, just one day before the solar eclipses were due to start. These eclipses will continue until 04 August 2006, reaching a maximum duration of 22% around 19 June. If the satellite behaves in the same way as it did last year, regular 10 day transmissions should re-start, sometime in August.

Official webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[07172006]
=====
PCSAT-2
Catalog Number: 25544
Launch Date: August 1, 2005

Activated: August 3, 2005
Status: Decommissioning
Current Mode: OFF

Voice Digital Uplink: 145.990 MHz
Voice response Downlink: 437.975 MHz

Digital Downlink: 435.275 Mhz
Digital Uplink: 145.825 Mhz
ISS digipeater uplink: 145.990 Mhz

PSK-31 Downlink: 435.275 Mhz
PSK-31 Uplink: 29.401 Mhz

CALLSIGN: pcsat2

Official Webpage: http://web.usna.navy.mil/~bruninga/pcsat2.html
PCSAT2 APRS Packet page: http://www.findu.com/cgi-bin/pcsat2.cgi
aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[09252006]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: Intermittent
Digipeater: OFF

Expedition Crew 13 is:
Commander: Pavel Vinogradov - RV3BS
Flight Engineer: Jeff Williams - KD5TVQ
Crew: Thomas Reiter - DF4TR

Exedition 14 crew, which is currently enroute, is:
Michael Lopez-Alegria - KE5GTK
Mikhail Tyurin - RZ3FT
Anousheh Ansari

Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

SSTV TESTING:
Worldwide Reported Downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS, RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

Currently, Expedition Crew 14 is enroute to the International Space Station.
During the week, the equipment may be turned off during docking of the Soyuz.

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line

is NOT translated from Russian and posted.
[09182006]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-275.S3
WSR 275 Part 3 10/02/2006

AMSAT NEWS SERVICE BULLETIN 275.S3 FROM AMSAT HQ
SILVER SPRING, MD, October 02, 2006
TO ALL RADIO AMATEURS
BID: $ANS-275.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

AO-54 SUITSAT
Catalog Number:28933
Release Date: February 3,2006

Status: Re-Entered

```
Modes : FM Voice Telemetry/Greetings
        FM SSTV
```

Callsign: RS0RS
Downlink: 145.990 FM

Currently on the amsat-bb, there is a geussing game going on about when Suitsat will re-enter the atmosphere.

Official webpage: http://www.suitsat.org
[09252006]
=====
NCUBE-2
Catalog Number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

```
Proposed Callsign: TBA
Proposed Transmit Frequency:  437.305
                             2407.250
```

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog Number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 FM 67Hz CTCSS

Voice Downlink: 2401.835 FM
Packet Up/Downlink: 437.250 9k6 packet
Packet Downlink 2401.835 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01292006]
=====
TO-31 TMSAT-1
Catalog Number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink: 145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
PO-28 POSAT-1
Catalog Number: 22829
Launch Date: September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012006]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launched: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB
Beacon: 145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
IO-26 ITAMSAT

```
Catalog number: 22826
Launch Date: September 26, 1993

Status: Downlink only

Uplink: 145.875 145.900 145.925 145.950 MHz FM (1200-baud)
Downlink: 435.808 MHz PSK
Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01012006]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB
Beacon: 29.408 MHz
Robot: 29.454 MHz
[05232004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB
Beacon: 145.860 MHz
Robot: 145.908 MHz
[05232004]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink 145.975 MHz FM
Downlink 435.070 MHz FM
[05092004]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational
```

Uplink: 145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM
Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01092005]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational?

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB
Beacon: 29.352 MHz (intermittent)
SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplink: 145.84 145.86 145.88 145.90 MHz FM
(using 1200-baud Manchester FSK)
CW downlink: 437.125 MHz
Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[05232004]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[08152004]
=====
KO-23 KITSAT
Catalog number: 22077

Launched: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM
Broadcast Callsign: HLO1-11
BBS: HLO1-12

Jim, AA7KC, reports that KO-23's downlink transmitter continues in a non-operational status.
[05092004]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM (9600-baud FSK)
Downlink: 436.500 MHz FM
Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm

[ANS-WSR has no further information]
[09042006]
=====

SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

STatus: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz and 145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[08082004]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlink: 437.025 MHz 437.400 MHz
Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site
at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[05092004]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

```
Uplink V-band   145.840 - 145.990 MHz CW/LSB
      U-band   435.550 - 435.800 MHz CW/LSB
      L1-band 1269.250 - 1269.500 MHz CW/LSB
      L2-band 1268.325 - 1268.575 MHz CW/LSB
Downlink: S2-band 2401.225 - 2401.475 MHz CW/USB
         K-band 24,048.010 - 24,048.060 MHz CW/USB
Beacon:   2401.323
        24,048.035
```
[05232004]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational
Downlink: 437.075 MHz
Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[08152004]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz
Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[08152004]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, callsign KE6QMD, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Operational

Uplink: 145.850 or 145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz
Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to

commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[11202005]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink 435.275 1200-baud AFSK
Downlink 145.825 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink: Downlink 145.825 MHz FM 1200 Baud AFSK
Beacon: 2401.220 MHz
[05012006]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-275.S4
WSR 275 Part 4 10/02/2006

AMSAT NEWS SERVICE BULLETIN 275.S4 FROM AMSAT HQ
SILVER SPRING, MD, October 02, 2006
TO ALL RADIO AMATEURS
BID: $ANS-275.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE PROPOSED FOR LAUNCH AT THIS TIME:

PHASE 3E ?O-??
Catalog Number:
Proposed Launch Date: Early/Mid 2007

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/
[ANS-WSR wishes to thank William Leijenaar, PE1RAH for this week's report]
[04242006]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/amsat/listserv/menu.html

In addition to regular membership, AMSAT-NA offers membership in the

President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

From -1164938185741172930
X-Google-Thread: 10e8ad,e7d98aa4c4f4ce66,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news4.google.com!news3.google.com!newshub.sdsu.edu!peer01.west.cox.net!cox.net!p01!fed1read07.POSTED!53ab2750!not-for-mail
From: "John Kopala" <jkopala@gmail.com>
Newsgroups: rec.radio.amateur.space
Subject: TAPR TRAKBOX Problems
Lines: 29
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1807
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1807
Message-ID: <17jVg.818$UJ2.280@fed1read07>
Date: Thu, 5 Oct 2006 19:21:16 -0700
NNTP-Posting-Host: 68.231.38.40
X-Complaints-To: abuse@cox.net
X-Trace: fed1read07 1160101437 68.231.38.40 (Thu, 05 Oct 2006 22:23:57 EDT)
NNTP-Posting-Date: Thu, 05 Oct 2006 22:23:57 EDT
Organization: Cox Communications
Xref: g2news2.google.com rec.radio.amateur.space:432

I "inherited" a TAPR TRAKBOX kit, version 3.00, 1993 to 1995 vintage. At the time I got the kit, it was missing a few sockets, capacitors, resistors, and diodes, but it had all the ICs. I accumulated the missing parts and assembled the board. However, it does not appear to initialize the program when power is applied.

The LCD display shows one line of black blocks rather than the trakbox firmware version. No characters are transfered across the terminal interface to hyperterminal except a single "noise" character when power is applied. The clock crystal is oscillating at 11.0592 MHz and has been checked with a scope.

I am checking for shorts between IC socket pins and am checking continuity of program, data, and logic levels. Not done yet, but I have not yet found anything that differs from the trakbox circuit documentation that came with the kit. I did find that the pins of connector CN3 are numbered backwards on the circuit diagram, but so far that is the only discrepancy I have uncovered.

Has anybody built this unit and encountered similar problems? I know this is going back over 10 years to when this kit became available. Does anybody have a working Trakbox so that I can compare and exchange information?

This could be something as simple as a jumper problem or an interface error, but I doubt it at this point. Anybody have any suggestions?

John Kopala - N7JK

From 7914398245154939766
X-Google-Thread: 10e8ad,e7d98aa4c4f4ce66
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news3.google.com!news.glorb.com!wn14feed!
worldnet.att.net!bgtnsc05-news.ops.worldnet.att.net.POSTED!e63cd5b6!not-for-mail
From: Alan WA4SCA <APBIDDLE@UNITED.NET>
Newsgroups: rec.radio.amateur.space
Subject: Re: TAPR TRAKBOX Problems
Organization: AMSAT-NA
Reply-To: APBIDDLE@UNITED.NET
Message-ID: <l40ci2pm2bbvb9lrp6mippd1a16braj3jb@4ax.com>
References: <17jVg.818$UJ2.280@fed1read07>
X-Newsreader: Forte Agent 4.0/32.1071
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Lines: 13
NNTP-Posting-Host: 5b46741643697a3add7dd5c29eb0cd03
X-Complaints-To: abuse@worldnet.att.net
X-Trace: bgtnsc05-news.ops.worldnet.att.net 1160118575
5b46741643697a3add7dd5c29eb0cd03 (Fri, 06 Oct 2006 07:09:35 GMT)
NNTP-Posting-Date: Fri, 06 Oct 2006 07:09:35 GMT
Date: Fri, 06 Oct 2006 07:09:35 GMT
Xref: g2news2.google.com rec.radio.amateur.space:433

John,

You can get the latest firmware at:

http://www.jamsat.or.jp/trakbox/index_e.html

There is a complete download for version 3.50a with notes, and the firmware only for 3.50d, which includes only a couple of bug fixes.

--
Alan
WA4SCA

From 1269109100240389071
X-Google-Thread: 10e8ad,e7d98aa4c4f4ce66
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news3.google.com!news4.google.com!
border1.nntp.dca.giganews.com!nntp.giganews.com!local01.nntp.dca.giganews.com!
nntp.bright.net!news.bright.net.POSTED!not-for-mail
NNTP-Posting-Date: Fri, 06 Oct 2006 06:08:54 -0500
Date: Fri, 06 Oct 2006 11:08:53 +0000
From: Scott <acepilot@bloomer.net>
User-Agent: Mozilla/5.0 (Windows; U; Windows NT 5.0; en-US; rv:1.7.2) Gecko/
20040804 Netscape/7.2 (ax)
X-Accept-Language: en-us, en
MIME-Version: 1.0
Newsgroups: rec.radio.amateur.space
Subject: Re: TAPR TRAKBOX Problems
References: <17jVg.818$UJ2.280@fed1read07>
In-Reply-To: <17jVg.818$UJ2.280@fed1read07>
Content-Type: text/plain; charset=us-ascii; format=flowed
Content-Transfer-Encoding: 7bit
Message-ID: <_JKdnWdGbqTbpLvYnZ2dnUVZ_s-dnZ2d@bright.net>
Lines: 46
NNTP-Posting-Host: 64.33.199.218
X-Trace: sv3-pdOsF6ZKZlwGIbNt6sNF/
rILKlWKknDltP4DZpqj3obbX8aSNq92LclfMzrpVi95HQWuTG88HcfvhkP!
Qg9k2yuiOBWStcQGZIEe5HculEwAhZ5nl/Uf/IC+jnRAjXTC03lQ7DEqYIT2GLn/Vikj9ptqzFyr!/
3PrZONH1w==
X-Complaints-To: abuse@bright.net
X-DMCA-Complaints-To: abuse@bright.net
X-Abuse-and-DMCA-Info: Please be sure to forward a copy of ALL headers
X-Abuse-and-DMCA-Info: Otherwise we will be unable to process your complaint
properly
X-Postfilter: 1.3.32
Xref: g2news2.google.com rec.radio.amateur.space:434

I am not familiar with the unit, but if it appears that it is not booting up (sounds like it just sits there looking dumb??). I assume it runs a microprocessor like a Z80 or 6502 or something like that. If so, power up the unit and check the voltage on the CPU "Reset" pin. It should be at +5V during normal ops. They usually have a resistor between the pin and +5V and a capacitor from the pin to ground. Upon power up, the cap looks like a momentary short which activates a CPU reset. Once the cap charges up, it should take off running. Cap could be shorted due to old age or a solder blob, etc. Since it appears you have a scope, look at the address lines on the CPU. Are they changing states between low and high, indicating it is stepping through its program??

Scott
N0EDV

John Kopala wrote:

> I "inherited" a TAPR TRAKBOX kit, version 3.00, 1993 to 1995 vintage. At
> the time I got the kit, it was missing a few sockets, capacitors, resistors,
> and diodes, but it had all the ICs. I accumulated the missing parts and
> assembled the board. However, it does not appear to initialize the program
> when power is applied.
>
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> firmware version. No characters are transfered across the terminal
> interface to hyperterminal except a single "noise" character when power is
> applied. The clock crystal is oscillating at 11.0592 MHz and has been
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> the kit. I did find that the pins of connector CN3 are numbered backwards
> on the circuit diagram, but so far that is the only discrepancy I have
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>
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> is going back over 10 years to when this kit became available. Does anybody
> have a working Trakbox so that I can compare and exchange information?
>
> This could be something as simple as a jumper problem or an interface error,
> but I doubt it at this point. Anybody have any suggestions?
>
> John Kopala - N7JK
>
>

From 8920651597391073282
X-Google-Thread: 10e8ad,dbe3bd8bfcf11089,start
X-Google-Thread: 113975,dbe3bd8bfcf11089,start
X-Google-Thread: f9f20,dbe3bd8bfcf11089,start
X-Google-Attributes: gid10e8ad,gid113975,gidf9f20,public
X-Google-Language: ENGLISH,ASCII
From: <Thierry>
Newsgroups: rec.radio.amateur.space,sci.astro.amateur,sci.space.station
Subject: Poll about astronautics (french by easy)
Date: Fri, 6 Oct 2006 21:57:20 +0200
Lines: 36
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.2869
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.2962
X-RFC2646: Format=Flowed; Original

NNTP-Posting-Host: ip-88-207-128-88.tvsurf.pt.lu
Message-ID: <4526b523$1@news.vo.lu>
X-Trace: news.vo.lu 1160164643 88.207.128.88 (6 Oct 2006 21:57:23 +0200)
Path: g2news2.google.com!news2.google.com!news.maxwell.syr.edu!newsfeed.icl.net!newsfeed.fjserv.net!oleane.net!oleane!news.in2p3.fr!in2p3.fr!univ-lyon1.fr!news.cs.univ-paris8.fr!newsfeed.vmunix.org!npeer.de.kpn-eurorings.net!news.vo.lu!not-for-mail
Xref: g2news2.google.com rec.radio.amateur.space:435 sci.astro.amateur:41852 sci.space.station:4568

Hi,

Your opinion 'd be welcome.

There is a French magazine titled "L'internaute magazine" (magazine of internet users) that provides for a while a poll dealing with the interest or not to invest in the US space program
http://questionnaire.linternaute.com/fiche/1999/23/index.html

It is a multiple-choice test with 3 opinions in radio buttons
Estimez-vous que le budget de la Nasa est (I translate, do you think that NASA budget is) :
- L�gitime (legitimate, rightful)
- Disproportionn� : il y a des probl�mes plus importants (disproportionate: there are problems more important)
- Insuffisant : la recherche spatiale est fondamentale (insufficient : space research is fundamental)
<validation button>.

Up to date, the result is... 47% against !
(the first screen displays a result but which is not updated. Once your poll validated, the right result will appears)
But the sample gathers only about 200 readers and probably all french or close to and thus no one US citizen, the first people concerned by he prestige or spin-offs on this program...

When we know the benefits of the space (a 3:1 ratio according to authorities), and that during the spirit opportunity mission there were 11 billions connections on NASA website ! (proof of the interest of the populaiton for astronautics), sometimes I wonder if we leave in the same world or have the same references...

Thierry
http://www.astrosurf.org/luxorion

From -3591900998371628768
X-Google-Thread: 10e8ad,dbe3bd8bfcf11089
X-Google-Thread: 113975,dbe3bd8bfcf11089
X-Google-Thread: f9f20,dbe3bd8bfcf11089
X-Google-Attributes: gid10e8ad,gid113975,gidf9f20,public

X-Google-Language: ENGLISH,ASCII
Path: g2news2.google.com!news2.google.com!border1.nntp.dca.giganews.com!
border2.nntp.dca.giganews.com!nntp.giganews.com!meganewsservers.com!
feeder2.on.meganewsservers.com!feed.news.qwest.net!mpls-nntp-01.inet.qwest.net!
news.qwest.net!not-for-mail
From: SkySea@aolREMOVE.com (SkySea)
Newsgroups: rec.radio.amateur.space,sci.astro.amateur,sci.space.station
Subject: Re: Poll about astronautics (french by easy)
Date: Fri, 06 Oct 2006 21:04:33 GMT
Message-ID: <4526c3ed.20362671@news.qwest.net>
References: <4526b523$1@news.vo.lu>
X-Newsreader: Forte Free Agent 1.21/32.243
Lines: 54
Organization: Qwest Communications Corporation
NNTP-Posting-Host: a1c1fd46.news.qwest.net
X-Trace:
DXC=fGFC@RXC3VN8[^GPKR@lOKF85SKJoGf>DO3Ucd9nLA;J^3KbVP\7cPB\BD_:4ge@HKB4@i^T\37VE2
m14mflYK[H
X-Complaints-To: abuse@qwest.net
Xref: g2news2.google.com rec.radio.amateur.space:436 sci.astro.amateur:41862
sci.space.station:4569

A couple of things...

The same question should be asked of ESA. Better yet, it should ask generically whether space exploration is worthy. And in English (too).

Asking only About NASA, especially in a foreign country and language, will skew data because fewer stakeholders will be participating. After all, it's not like it's their (France's? Europe's) tax money contributing towards NASA. Or business.

On Fri, 6 Oct 2006 21:57:20 +0200, <Thierry> wrote:

>Hi,
>
>Your opinion 'd be welcome.
>
>There is a French magazine titled "L'internaute magazine" (magazine of
>internet users) that provides for a while a poll dealing with the interest
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>
>It is a multiple-choice test with 3 opinions in radio buttons
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>- L�gitime (legitimate, rightful)
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><validation button>.

>
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>
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>billions connections on NASA website ! (proof of the interest of the
>populaiton for astronautics), sometimes I wonder if we leave in the same
>world or have the same references...
>
>Thierry
>http://www.astrosurf.org/luxorion
>
>

=============
- Dale Gombert (SkySea at aol.com)
122.38W, 47.58N, W. Seattle, WA
http://flavorj.com/~skysea

From 6358814108039618569
X-Google-Thread: 10e8ad,bd3d60f2b46ddcea,start
X-Google-Thread: 113975,bd3d60f2b46ddcea,start
X-Google-Attributes: gid10e8ad,gid113975,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news4.google.com!news1.google.com!news.germany.com!
feeder.news-service.com!193.201.147.80.MISMATCH!newsrouter-eu.astraweb.com!
news.astraweb.com!router1.astraweb.com!not-for-mail
From: Chris Steyaert <observations@rmob.org>
Newsgroups: rec.radio.amateur.space,sci.astro.amateur
Subject: Radio Meteor Obs. Bull. September 2006
Date: Fri, 06 Oct 2006 23:45:02 +0200
Message-ID: <phjdi2p71j8kblc5e34f6k79862c8fhlos@4ax.com>
X-Newsreader: Forte Agent 1.93/32.576 English (American)
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Lines: 17
Organization: Unlimited download news at news.astraweb.com
NNTP-Posting-Host: e20356ce.news.astraweb.com
X-Trace: DXC=@;E0O=GjE_:SG6fD[7G;H=L?
0kYOcDh@:nUjYiZaDLM2M:A=bg4_m9=KX07\YZ`QZ6F2ie<cJoCJ>1ZRHQ[a\9a4
Xref: g2news2.google.com rec.radio.amateur.space:437 sci.astro.amateur:41863

Radio Meteor Observation Bulletin No. 158 of September 2006 (71K) is available
now as

http://visualrmob.free.fr/rmobtext/rmob0609.txt

More information and the visual presentation of the hourly forward scatter counts can be found on

http://www.rmob.org

http://radio.data.free.fr

Chris

```
From 4442865042480932454
X-Google-Thread: 10e8ad,f48735a9bbe1147a,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news1.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx01.iad01.newshosting.com!newshosting.com!newsfeed.icl.net!
newsfeed.fjserv.net!newsfeed.ision.net!newsfeed2.easynews.net!ision!
newsfeed.freenet.de!news.newsland.it!proxad.net!193.252.118.146.MISMATCH!
news.wanadoo.fr!news.wanadoo.fr!not-for-mail
X-Newsreader:      NNTP SCRIBBLER
Content-Type: text/html;
From: melanie@franceweb.com
ReplyTo: melanie@franceweb.com
Subject: FEMME MARIEES DELAISSEES LA CHATTE EN FEU
Newsgroups: rec.radio.amateur.space
Date: 06 Oct 2006 22:27:07 GMT
Lines: 7
Message-ID: <4526d83a$0$27369$ba4acef3@news.orange.fr>
Organization: les newsgroups par Orange
NNTP-Posting-Date: 07 Oct 2006 00:27:07 CEST
NNTP-Posting-Host: 193.248.68.202
X-Trace: 1160173627 news.orange.fr 27369 193.248.68.202:3301
X-Complaints-To: abuse@orange.fr
Xref: g2news2.google.com rec.radio.amateur.space:438
```

```
<html>
<HEAD><body><center>
<a href='http://www.muredefeu.com/fr/index.html?id=14907' target='_blank_'><img
src='http://media.muredefeu.com/fr/mb600400/600x400_01.gif' border=0></a>
<br><br><br>
<center><table border="0" cellpadding="0" cellspacing="0" style="border-collapse:
collapse" width="500"><tr><td nowrap height="4" bgcolor="#000000"></td></
tr><tr><td width="100%" bgcolor="#000000"><center><a href="http://www.e-
advertize.com/index.php?choix=NNTPScribbler&Langue=en"><font
color="#00FF00"><b>This message was sent with NNTP Scribbler (www.e-
advertize.com).</b></font></a></center></td></tr><tr><td height="4"
bgcolor="#000000"></td></tr></table></center>
```

From -4762826841231463686
X-Google-Thread: 10e8ad,e7d98aa4c4f4ce66
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news1.google.com!border1.nntp.dca.giganews.com!
border2.nntp.dca.giganews.com!nntp.giganews.com!peer01.cox.net!cox.net!p01!
fed1read07.POSTED!53ab2750!not-for-mail
From: "John Kopala" <jkopala@gmail.com>
Newsgroups: rec.radio.amateur.space
References: <17jVg.818$UJ2.280@fed1read07>
<l40ci2pm2bbvb9lrp6mippd1a16braj3jb@4ax.com>
Subject: Re: TAPR TRAKBOX Problems
Lines: 23
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1807
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1807
Message-ID: <eZAVg.885$UJ2.314@fed1read07>
Date: Fri, 6 Oct 2006 15:39:25 -0700
NNTP-Posting-Host: 68.231.38.40
X-Complaints-To: abuse@cox.net
X-Trace: fed1read07 1160174538 68.231.38.40 (Fri, 06 Oct 2006 18:42:18 EDT)
NNTP-Posting-Date: Fri, 06 Oct 2006 18:42:18 EDT
Organization: Cox Communications
Xref: g2news2.google.com rec.radio.amateur.space:439

Thanks. I have already been to the TAPR site and have found and downloaded
their copies of the PROM upgrades and the documentation in their library.

Thanks
John - N7JK

"Alan WA4SCA" <APBIDDLE@UNITED.NET> wrote in message
news:l40ci2pm2bbvb9lrp6mippd1a16braj3jb@4ax.com...
> John,
>
> You can get the latest firmware at:
>
> http://www.jamsat.or.jp/trakbox/index_e.html
>
> There is a complete download for version 3.50a with notes, and the
> firmware only for 3.50d, which includes only a couple of bug fixes.
>
>
> --
> Alan
> WA4SCA

From 390260997831312599
X-Google-Thread: 10e8ad,e7d98aa4c4f4ce66
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news1.google.com!border1.nntp.dca.giganews.com!
border2.nntp.dca.giganews.com!nntp.giganews.com!peer01.cox.net!cox.net!p01!
fed1read07.POSTED!53ab2750!not-for-mail
From: "John Kopala" <jkopala@gmail.com>
Newsgroups: rec.radio.amateur.space
References: <17jVg.818$UJ2.280@fed1read07> <_JKdnWdGbqTbpLvYnZ2dnUVZ_s-dnZ2d@bright.net>
Subject: Re: TAPR TRAKBOX Problems
Lines: 28
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1807
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1807
Message-ID: <82BVg.886$UJ2.330@fed1read07>
Date: Fri, 6 Oct 2006 15:44:45 -0700
NNTP-Posting-Host: 68.231.38.40
X-Complaints-To: abuse@cox.net
X-Trace: fed1read07 1160174852 68.231.38.40 (Fri, 06 Oct 2006 18:47:32 EDT)
NNTP-Posting-Date: Fri, 06 Oct 2006 18:47:32 EDT
Organization: Cox Communications
Xref: g2news2.google.com rec.radio.amateur.space:440

Thanks, Scott.

I have pretty much completed checking the board for shorts and tracing the circuits between the ICs. It appears the the board perfectly matches the wiring document, so I will be doing the tests that you suggest next to verify whether the program is actually running. At this point, I suspect I have interface problems with the LCD display and the RS232 terminal interface to my computer.

"Scott" <acepilot@bloomer.net> wrote in message
news:_JKdnWdGbqTbpLvYnZ2dnUVZ_s-dnZ2d@bright.net...
> I am not familiar with the unit, but if it appears that it is not
> booting up (sounds like it just sits there looking dumb??). I assume it
> runs a microprocessor like a Z80 or 6502 or something like that. If so,
> power up the unit and check the voltage on the CPU "Reset" pin. It
> should be at +5V during normal ops. They usually have a resistor
> between the pin and +5V and a capacitor from the pin to ground. Upon
> power up, the cap looks like a momentary short which activates a CPU
> reset. Once the cap charges up, it should take off running. Cap could
> be shorted due to old age or a solder blob, etc. Since it appears you
> have a scope, look at the address lines on the CPU. Are they changing
> states between low and high, indicating it is stepping through its
program??
>
> Scott
> N0EDV

From 6298263412503965618
X-Google-Thread: 10e8ad,e7d98aa4c4f4ce66
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news1.google.com!news4.google.com!news.glorb.com!wn14feed!worldnet.att.net!bgtnsc05-news.ops.worldnet.att.net.POSTED!e63cd5b6!not-for-mail
From: Alan WA4SCA <APBIDDLE@UNITED.NET>
Newsgroups: rec.radio.amateur.space
Subject: Re: TAPR TRAKBOX Problems
Organization: AMSAT-NA
Reply-To: APBIDDLE@UNITED.NET
Message-ID: <hqpdi29nne7q6uqffiep1cvpngqq6ng1r2@4ax.com>
References: <17jVg.818$UJ2.280@fed1read07> <l40ci2pm2bbvb9lrp6mippd1a16braj3jb@4ax.com> <eZAVg.885$UJ2.314@fed1read07>
X-Newsreader: Forte Agent 4.0/32.1071
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Lines: 13
NNTP-Posting-Host: c3549b0caa4e609bf93659966f0550c1
X-Complaints-To: abuse@worldnet.att.net
X-Trace: bgtnsc05-news.ops.worldnet.att.net 1160177737 c3549b0caa4e609bf93659966f0550c1 (Fri, 06 Oct 2006 23:35:37 GMT)
NNTP-Posting-Date: Fri, 06 Oct 2006 23:35:37 GMT
Date: Fri, 06 Oct 2006 23:35:37 GMT
Xref: g2news2.google.com rec.radio.amateur.space:441

John,

Something else to check is that the CPU, RAM, clock xtal, and EPROM all match. There were several versions of the code, with some requiring faster chips to function correctly. It has been too long to remember all the variations. I do recall that with some of the code updates the system would not boot with slower chips, though I don't recall the exact symptoms.

--
Alan
WA4SCA

From 4675437280827762405
X-Google-Thread: 10e8ad,dbe3bd8bfcf11089
X-Google-Thread: 113975,dbe3bd8bfcf11089
X-Google-Thread: f9f20,dbe3bd8bfcf11089
X-Google-Attributes: gid10e8ad,gid113975,gidf9f20,public
X-Google-Language: ENGLISH,ASCII
Path: g2news2.google.com!news4.google.com!border1.nntp.dca.giganews.com!

border2.nntp.dca.giganews.com!nntp.giganews.com!cyclone1.gnilink.net!
spamkiller2.gnilink.net!gnilink.net!trndny09.POSTED!ae7779df!not-for-mail
From: "vze3gz45" <vze3gz45@verizon.net>
Newsgroups: rec.radio.amateur.space,sci.astro.amateur,sci.space.station
References: <4526b523$1@news.vo.lu>
Subject: Re: Poll about astronautics (french by easy)
Lines: 38
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.2869
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.2962
X-RFC2646: Format=Flowed; Response
Message-ID: <OPOVg.2124$YD.1529@trndny09>
Date: Sat, 07 Oct 2006 14:27:58 GMT
NNTP-Posting-Host: 68.237.241.42
X-Complaints-To: abuse@verizon.net
X-Trace: trndny09 1160231278 68.237.241.42 (Sat, 07 Oct 2006 10:27:58 EDT)
NNTP-Posting-Date: Sat, 07 Oct 2006 10:27:58 EDT
Xref: g2news2.google.com rec.radio.amateur.space:442 sci.astro.amateur:41934
sci.space.station:4574

<Thierry> wrote in message news:4526b523$1@news.vo.lu...
> Hi,
>
> Your opinion 'd be welcome.
>
> There is a French magazine titled "L'internaute magazine" (magazine of
> internet users) that provides for a while a poll dealing with the interest
> or not to invest in the US space program
> http://questionnaire.linternaute.com/fiche/1999/23/index.html
>
> It is a multiple-choice test with 3 opinions in radio buttons
> Estimez-vous que le budget de la Nasa est (I translate, do you think that
> NASA budget is) :
> - L�gitime (legitimate, rightful)
> - Disproportionn� : il y a des probl�mes plus importants
> (disproportionate: there are problems more important)
> - Insuffisant : la recherche spatiale est fondamentale (insufficient :
> space research is fundamental)
> <validation button>.
>
> Up to date, the result is... 47% against !

Thats ok. All this means is that French will not be a language spoken in the first space colonies off world. So far humanity will speak english, russian, german, chinese in the first space colonies off world.

vze3gz45

<snip>

```
> Thierry
> http://www.astrosurf.org/luxorion
>
>




From 156987296211962673
X-Google-Thread: 10e8ad,dbe3bd8bfcf11089
X-Google-Thread: 113975,dbe3bd8bfcf11089
X-Google-Thread: f9f20,dbe3bd8bfcf11089
X-Google-Attributes: gid10e8ad,gid113975,gidf9f20,public
X-Google-Language: ENGLISH,ASCII
Path: g2news2.google.com!news3.google.com!news4.google.com!newsfeed.stanford.edu!
headwall.stanford.edu!newshub.sdsu.edu!elnk-nf2-pas!newsfeed.earthlink.net!
stamper.news.pas.earthlink.net!newsread2.news.pas.earthlink.net.POSTED!d2e3edad!
not-for-mail
From: Chris L Peterson <clp@alumni.caltech.edu>
Newsgroups: rec.radio.amateur.space,sci.astro.amateur,sci.space.station
Subject: Re: Poll about astronautics (french by easy)
Organization: Cloudbait Observatory
Message-ID: <6hefi29so6rbnskr1h4hohrmt8ssa29keg@4ax.com>
References: <4526b523$1@news.vo.lu>
X-Newsreader: Forte Agent 1.93/32.576 English (American)
MIME-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 8bit
Lines: 21
Date: Sat, 07 Oct 2006 14:50:37 GMT
NNTP-Posting-Host: 66.82.50.206
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread2.news.pas.earthlink.net 1160232637 66.82.50.206 (Sat, 07 Oct
2006 07:50:37 PDT)
NNTP-Posting-Date: Sat, 07 Oct 2006 07:50:37 PDT
Xref: g2news2.google.com rec.radio.amateur.space:443 sci.astro.amateur:41935
sci.space.station:4576

On Fri, 6 Oct 2006 21:57:20 +0200, <Thierry> wrote:

>It is a multiple-choice test with 3 opinions in radio buttons
>Estimez-vous que le budget de la Nasa est  (I translate, do you think that
>NASA budget is) :
>- L�gitime  (legitimate, rightful)
>- Disproportionn� : il y a des probl�mes plus importants (disproportionate:
>there are problems more important)
>- Insuffisant : la recherche spatiale est fondamentale (insufficient : space
>research is fundamental)
><validation button>.

The problem with polls like this is that they leave too many options
unavailable. How are you supposed to vote if you consider that NASA's
budget is (1) insufficient, and (2) misapplied?
```

Chris L Peterson
Cloudbait Observatory
http://www.cloudbait.com

From -5659266208788472677
X-Google-Thread: 10e8ad,dbe3bd8bfcf11089
X-Google-Thread: 113975,dbe3bd8bfcf11089
X-Google-Thread: f9f20,dbe3bd8bfcf11089
X-Google-Attributes: gid10e8ad,gid113975,gidf9f20,public
X-Google-Language: ENGLISH,ASCII
Path: g2news2.google.com!news3.google.com!border1.nntp.dca.giganews.com!wns13feed!
worldnet.att.net!63.218.45.10!nx01.iad01.newshosting.com!newshosting.com!
newsfeed.icl.net!newsfeed.fjserv.net!newsfeed.freenet.de!
border2.nntp.ams.giganews.com!nntp.giganews.com!newsfeed101.telia.com!
nf02.dk.telia.net!newspeer1.se.telia.net!se.telia.net!masternews.telia.net.!
newsb.telia.net.POSTED!not-for-mail
From: pausch@saaf.se (Paul Schlyter)
Newsgroups: rec.radio.amateur.space,sci.astro.amateur,sci.space.station
Subject: Re: Poll about astronautics (french by easy)
Organization: Unknown
Lines: 67
Message-ID: <eg8fct$18ep$1@merope.saaf.se>
References: <4526b523$1@news.vo.lu> <OPOVg.2124$YD.1529@trndny09>
Date: Sat, 07 Oct 2006 15:13:11 GMT
NNTP-Posting-Host: 217.209.96.76
X-Complaints-To: abuse@telia.com
X-Trace: newsb.telia.net 1160233991 217.209.96.76 (Sat, 07 Oct 2006 17:13:11 CEST)
NNTP-Posting-Date: Sat, 07 Oct 2006 17:13:11 CEST
Xref: g2news2.google.com rec.radio.amateur.space:444 sci.astro.amateur:41938
sci.space.station:4577

In article <OPOVg.2124$YD.1529@trndny09>,
vze3gz45 <vze3gz45@verizon.net> wrote:
>
><Thierry> wrote in message news:4526b523$1@news.vo.lu...
>> Hi,
>>
>> Your opinion 'd be welcome.
>>
>> There is a French magazine titled "L'internaute magazine" (magazine of
>> internet users) that provides for a while a poll dealing with the interest
>> or not to invest in the US space program
>> http://questionnaire.linternaute.com/fiche/1999/23/index.html
>>
>> It is a multiple-choice test with 3 opinions in radio buttons
>> Estimez-vous que le budget de la Nasa est (I translate, do you think that
>> NASA budget is) :
>> - L�gitime (legitimate, rightful)
>> - Disproportionn� : il y a des probl�mes plus importants

>> (disproportionate: there are problems more important)
>> - Insuffisant : la recherche spatiale est fondamentale (insufficient :
>> space research is fundamental)
>> <validation button>.
>>
>> Up to date, the result is... 47% against !
>
>   Thats ok. All this means is that French will not be a language spoken
>in the first space colonies off world. So far humanity will speak english,
>russian, german, chinese in the first space colonies off world.

Your remark reminds me a bit of a list of solar eclipses in an astronomy book from 1930. That list contained all total and annular eclipses visible in Europe from the 1800's into the 2100's. Nothing strange with that, except that the book included a number of colonies in northern Africa in what it considered to be "Europe" and thus listed eclipses visible from there too. Little did the author realize that well before the 2100's, actually only some 30-40 years after the publication of that book, these colonies would become independent nations, considering themselves to belong to Africa rather than to Europe....

The first space colonies off the Earth are still a long time into the future. At best there might be something on the Moon within 50 years or so -- a more probable scenario is that it'll take 100 or more years to happen. Maybe it'll never happen, we don't know. Anyway there may be fast and unexpected political changes during these 50 or 100 years - just think back 50 or 100 years about what has happened since then. These changes can easily alter your list of languages spoken on these colonies, if they ever materialize. Your list of languages is probably appropriate for any space colonies being built now -- but there are none.

>vze3gz45
>
>
><snip>
>
>> Thierry
>> http://www.astrosurf.org/luxorion
>>
>>
>
>

--

Paul Schlyter, Grev Turegatan 40, SE-114 38 Stockholm, SWEDEN
e-mail: pausch at stockholm dot bostream dot se
WWW: http://stjarnhimlen.se/

From 7373615308689584253
X-Google-Thread: 10e8ad,dbe3bd8bfcf11089

```
X-Google-Thread: 113975,dbe3bd8bfcf11089
X-Google-Thread: f9f20,dbe3bd8bfcf11089
X-Google-Attributes: gid10e8ad,gid113975,gidf9f20,public
X-Google-Language: ENGLISH,ASCII-7-bit
From: <Thierry>
Newsgroups: rec.radio.amateur.space,sci.astro.amateur,sci.space.station
References: <4526b523$1@news.vo.lu> <OPOVg.2124$YD.1529@trndny09>
Subject: Re: Poll about astronautics (french by easy)
Date: Sat, 7 Oct 2006 17:39:02 +0200
Lines: 59
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.2869
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.2962
X-RFC2646: Format=Flowed; Response
NNTP-Posting-Host: ip-88-207-128-88.tvsurf.pt.lu
Message-ID: <4527ca16$1@news.vo.lu>
X-Trace: news.vo.lu 1160235542 88.207.128.88 (7 Oct 2006 17:39:02 +0200)
Path: g2news2.google.com!news4.google.com!news.glorb.com!npeer.de.kpn-
eurorings.net!news.vo.lu!not-for-mail
Xref: g2news2.google.com rec.radio.amateur.space:445 sci.astro.amateur:41941
sci.space.station:4579


"vze3gz45" <vze3gz45@verizon.net> wrote in message
news:OPOVg.2124$YD.1529@trndny09...
>
> <Thierry> wrote in message news:4526b523$1@news.vo.lu...
>> Hi,
>>
>> Your opinion 'd be welcome.
>>
>> There is a French magazine titled "L'internaute magazine" (magazine of
>> internet users) that provides for a while a poll dealing with the
>> interest or not to invest in the US space program
>> http://questionnaire.linternaute.com/fiche/1999/23/index.html
>>
>> It is a multiple-choice test with 3 opinions in radio buttons
>...
>    Thats ok.  All this means is that French will not be a language spoken
> in the first space colonies off world.  So far humanity will speak
> english,
> russian, german, chinese in the first space colonies off world.
>

Who knows...  ;-) But sure that English is the "universal langage" (sorry
for those who like maths)

NB. read this extracted from wy web, about ham radio and langages.
According to UNESCO, there are 2000 languages spoken in the world. Don't
worry, about 15 languages disappear each year. In this context, Saint
Ignatius High School in Ohio published a list of main languages spoken in
the world. One learnt that if Mandarin is the most used language due to the
```

explosion of the chinese population, this is the English that remains officially the first spoken language in 115 countries, followed by French used in 35 countries and Arab spoken in 24 countries. All factors together, including economical or taking into account the secundary language, they classify as follows the ten most used languages in the world, by decreasing order : English, French, Spanish, Russian, Arab, Mandarin, German, Japanese, Portugese and Indi/Urdu. And de facto, most of radio amateurs speak English and often several among the three first languages listed, the six others being essentially used in countries where it constitutes the official language.

St Ignatius link : http://www2.ignatius.edu/faculty/turner/languages.htm

Thierry
.
> vze3gz45
>
>
> <snip>
>
>> Thierry
>> http://www.astrosurf.org/luxorion
>>
>>
>
>
>

From -844833016913120168
X-Google-Thread: 10e8ad,dbe3bd8bfcf11089
X-Google-Thread: 113975,dbe3bd8bfcf11089
X-Google-Thread: f9f20,dbe3bd8bfcf11089
X-Google-Attributes: gid10e8ad,gid113975,gidf9f20,public
X-Google-Language: ENGLISH,ASCII-7-bit
From: <Thierry>
Newsgroups: rec.radio.amateur.space,sci.astro.amateur,sci.space.station
References: <4526b523$1@news.vo.lu> <OPOVg.2124$YD.1529@trndny09>
<eg8fct$18ep$1@merope.saaf.se>
Subject: Re: Poll about astronautics (french by easy)
Date: Sat, 7 Oct 2006 17:43:56 +0200
Lines: 67
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.2869
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.2962
X-RFC2646: Format=Flowed; Original
NNTP-Posting-Host: ip-88-207-128-88.tvsurf.pt.lu
Message-ID: <4527cb3d$1@news.vo.lu>
X-Trace: news.vo.lu 1160235837 88.207.128.88 (7 Oct 2006 17:43:57 +0200)
Path: g2news2.google.com!news2.google.com!news.germany.com!npeer.de.kpn-

```
eurorings.net!news.vo.lu!not-for-mail
Xref: g2news2.google.com rec.radio.amateur.space:446 sci.astro.amateur:41942
sci.space.station:4581


"Paul Schlyter" <pausch@saaf.se> wrote in message
news:eg8fct$18ep$1@merope.saaf.se...
> In article <OPOVg.2124$YD.1529@trndny09>,
> vze3gz45 <vze3gz45@verizon.net> wrote:
>>
>><Thierry> wrote in message news:4526b523$1@news.vo.lu...
>>> Hi,
>>>
>>> Your opinion 'd be welcome.
>>>
>...
>...
>
> Your remark reminds me a bit of a list of solar eclipses in an astronomy
> book from 1930.  That list contained all total and annular eclipses
> visible
> in Europe from the 1800's into the 2100's.  Nothing strange with that,
> except that the book included a number of colonies in northern Africa in
> what it considered to be "Europe" and thus listed eclipses visible from
> there too.  Little did the author realize that well before the 2100's,
> actually only some 30-40 years after the publication of that book, these
> colonies would become independent nations, considering themselves to
> belong to Africa rather than to Europe....
>

Still today, don't US citizens call all their colonies, US territories ? You
are "in the USA"  there.
Idem for France, their "DOM-TOM" like Crouzet and other Kerguelen are
"France"
Excepted maybe in Canada, with a visit of H.M the Queen once each 50 year,
what remains of the link with the UK is not ovbvious...

Thierry



> The first space colonies off the Earth are still a long time into the
> future.  At best there might be something on the Moon within 50 years or
> so -- a more probable scenario is that it'll take 100 or more years to
> happen.  Maybe it'll never happen, we don't know.  Anyway there may be
> fast and unexpected political changes during these 50 or 100 years - just
> think back 50 or 100 years about what has happened since then.  These
> changes can easily alter your list of languages spoken on these colonies,
> if they ever materialize.  Your list of languages is probably appropriate
> for any space colonies being built now -- but there are none.
>
>>vze3gz45
>>
>>
```

```
>><snip>
>>
>>> Thierry
>>> http://www.astrosurf.org/luxorion
>>>
>>>
>>
>>
>
>
> --
> ----------------------------------------------------------------
> Paul Schlyter,  Grev Turegatan 40,  SE-114 38 Stockholm,  SWEDEN
> e-mail:  pausch at stockholm dot bostream dot se
> WWW:     http://stjarnhimlen.se/
>




From -7853434601238006088
X-Google-Thread: 10e8ad,dbe3bd8bfcf11089
X-Google-Thread: 113975,dbe3bd8bfcf11089
X-Google-Thread: f9f20,dbe3bd8bfcf11089
X-Google-Attributes: gid10e8ad,gid113975,gidf9f20,public
X-Google-Language: ENGLISH,ASCII
From: <Thierry>
Newsgroups: rec.radio.amateur.space,sci.astro.amateur,sci.space.station
References: <4526b523$1@news.vo.lu> <6hefi29so6rbnskr1h4hohrmt8ssa29keg@4ax.com>
Subject: Re: Poll about astronautics (french by easy)
Date: Sat, 7 Oct 2006 17:49:25 +0200
Lines: 40
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.2869
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.2962
X-RFC2646: Format=Flowed; Original
NNTP-Posting-Host: ip-88-207-128-88.tvsurf.pt.lu
Message-ID: <4527cc86$1@news.vo.lu>
X-Trace: news.vo.lu 1160236166 88.207.128.88 (7 Oct 2006 17:49:26 +0200)
Path: g2news2.google.com!news3.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!newsfeed00.sul.t-online.de!t-online.de!feeder.news-service.com!
npeer.de.kpn-eurorings.net!news.vo.lu!not-for-mail
Xref: g2news2.google.com rec.radio.amateur.space:447 sci.astro.amateur:41943
sci.space.station:4582


"Chris L Peterson" <clp@alumni.caltech.edu> wrote in message
news:6hefi29so6rbnskr1h4hohrmt8ssa29keg@4ax.com...
> On Fri, 6 Oct 2006 21:57:20 +0200, <Thierry> wrote:
>
>>It is a multiple-choice test with 3 opinions in radio buttons
>>Estimez-vous que le budget de la Nasa est  (I translate, do you think that
```

>>NASA budget is) :
>>- L�gitime (legitimate, rightful)
>>- Disproportionn� : il y a des probl�mes plus importants
>>(disproportionate:
>>there are problems more important)
>>- Insuffisant : la recherche spatiale est fondamentale (insufficient :
>>space
>>research is fundamental)
>><validation button>.
>
> The problem with polls like this is that they leave too many options
> unavailable. How are you supposed to vote if you consider that NASA's
> budget is (1) insufficient, and (2) misapplied?

Tttt. !! Ask only to the question ! ;-)

NB. Of course, any poll could be discussed to the infinite
You think too much...

Since yesterday the poll counter passed from 197 to 205 people... with still
a bit less people "against" (45% now vs 49%).

Thierry

>
> ____
>
> Chris L Peterson
> Cloudbait Observatory
> http://www.cloudbait.com
>

From 6268815916336937487
X-Google-Thread: 10e8ad,dbe3bd8bfcf11089
X-Google-Thread: 113975,dbe3bd8bfcf11089
X-Google-Thread: f9f20,dbe3bd8bfcf11089
X-Google-Attributes: gid10e8ad,gid113975,gidf9f20,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news1.google.com!news3.google.com!
border1.nntp.dca.giganews.com!nntp.giganews.com!nx01.iad01.newshosting.com!
newshosting.com!post01.iad01!not-for-mail
From: "canopus56" <canopus56@NOyahooSPAM.com>
Newsgroups: rec.radio.amateur.space,sci.astro.amateur,sci.space.station
References: <4526b523$1@news.vo.lu>
Subject: Re: Poll about astronautics (french by easy)
Date: Sat, 7 Oct 2006 12:10:58 -0600
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.2869
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.2962

X-RFC2646: Format=Flowed; Response
Lines: 58
Message-ID: <4527ed78$0$11718$3a2ecee9@news.csolutions.net>
Organization: Newshosting.com - Highest quality at a great price!
www.newshosting.com
X-Complaints-To: abuse@csolutions.net
Xref: g2news2.google.com rec.radio.amateur.space:448 sci.astro.amateur:41947
sci.space.station:4584

<Thierry> wrote in message news:4526b523$1@news.vo.lu...
> Your opinion 'd be welcome.
> There is a French magazine titled "L'internaute magazine" (magazine of
> internet users) that provides for a while a poll dealing with the interest
> or not to invest in the US space program
> http://questionnaire.linternaute.com/fiche/1999/23/index.html

A 9/2006 U.S. Poll by Gallop - NASA sponsored -
"The new survey - the last of a three-part series sponsored by the industry group the Coalition for Space Exploration - found that more than two-thirds of Americans polled support NASA's stepping-stone approach to returning astronauts to the Moon, provided the effort's cost does not exceed more than one percent of the federal budget."
http://news.yahoo.com/s/space/20060926/sc_space/
pollsupportstillstrongfornasasspaceexplorationvision

A 1/2004 U.S. Poll - by Associated Press -
"Asked whether they favored the United States expanding the space program the way Bush proposes, people were evenly split, with 48 percent favoring the idea and the same number opposing it, according to the poll conducted for the AP by Ipsos-Public Affairs."
"However, given the choice of spending money on programs like education and health care or on space research, 55 percent said they wanted domestic programs."
"Just over half of Democrats' opposed the plan by "the United States." Once it was identified as a 'Bush administration' plan, Democrats opposed it by a 2-to-1 margin."
http://www.space.com/news/ap_spacepoll_040112.html

Thierry, sounds like the French are not that much different from Americans.

I do not speak French, so I am not sure what the French poll is asking:
   1) Do Americans invest too much in their own space program?
   2) Should the French invest in the American space program?

Considering the (legitimate) widespread condemnation of the Bush Administration over the Iraq war, how do you separate distain for the Bush administration from a reduced support from the U.S. space program?

- Canopus56

P.S. - A NASA bibliography of public opinion studies
http://www.hq.nasa.gov/office/hqlibrary/pathfinders/opinion.htm

P.P.S. - ". . . provided the effort's cost does not exceed more than one percent of the federal budget."
From: http://www.census.gov/compendia/statab/tables/06s0462.xls

NASA's 2005 budget as percent of total U.S. Budget in billions $US: 15.4 / 2479.4 = 0.6%
NASA's 1990 budget as a precent of total U.S. Buget in billions $US: 12.4 / 1253.1 = 0.9%

I haven't been able to access the 2007 Whitehouse budget for a 2007 estimate, because I am using a dail-up modem.
http://www.whitehouse.gov/omb/budget/

From -4304986487415944155
X-Google-Thread: 10e8ad,dbe3bd8bfcf11089
X-Google-Thread: 113975,dbe3bd8bfcf11089
X-Google-Thread: f9f20,dbe3bd8bfcf11089
X-Google-Attributes: gid10e8ad,gid113975,gidf9f20,public
X-Google-Language: ENGLISH,ASCII-7-bit
From: <Thierry>
Newsgroups: rec.radio.amateur.space,sci.astro.amateur,sci.space.station
References: <4526b523$1@news.vo.lu>
<4527ed78$0$11718$3a2ecee9@news.csolutions.net>
Subject: Re: Poll about astronautics (french by easy)
Date: Sat, 7 Oct 2006 21:02:25 +0200
Lines: 85
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.2869
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.2962
X-RFC2646: Format=Flowed; Response
NNTP-Posting-Host: ip-88-207-128-88.tvsurf.pt.lu
Message-ID: <4527f9c2$1@news.vo.lu>
X-Trace: news.vo.lu 1160247746 88.207.128.88 (7 Oct 2006 21:02:26 +0200)
Path: g2news2.google.com!news4.google.com!border1.nntp.dca.giganews.com!nntp.giganews.com!newsfeed00.sul.t-online.de!t-online.de!npeer.de.kpn-eurorings.net!news.vo.lu!not-for-mail
Xref: g2news2.google.com rec.radio.amateur.space:449 sci.astro.amateur:41948 sci.space.station:4585

"canopus56" <canopus56@NOyahooSPAM.com> wrote in message news:4527ed78$0$11718$3a2ecee9@news.csolutions.net...
> <Thierry> wrote in message news:4526b523$1@news.vo.lu...
>> Your opinion 'd be welcome.
>> There is a French magazine titled "L'internaute magazine" (magazine of
>> internet users) that provides for a while a poll dealing with the
>> interest or not to invest in the US space program
>> http://questionnaire.linternaute.com/fiche/1999/23/index.html

>
> A 9/2006 U.S. Poll by Gallop - NASA sponsored -
> "The new survey - the last of a three-part series sponsored by the
> industry group the Coalition for Space Exploration - found that more than
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> returning astronauts to the Moon, provided the effort's cost does not
> exceed more than one percent of the federal budget."
> http://news.yahoo.com/s/space/20060926/sc_space/
pollsupportstillstrongfornasasspaceexplorationvision
>

> A 1/2004 U.S. Poll - by Associated Press -
> "Asked whether they favored the United States expanding the space program
> the way Bush proposes, people were evenly split, with 48 percent favoring
> the idea and the same number opposing it, according to the poll conducted
> for the AP by Ipsos-Public Affairs."
> "However, given the choice of spending money on programs like education
> and health care or on space research, 55 percent said they wanted domestic
> programs."
> "Just over half of Democrats' opposed the plan by "the United States."
> Once it was identified as a 'Bush administration' plan, Democrats opposed
> it by a 2-to-1 margin."
> http://www.space.com/news/ap_spacepoll_040112.html
>
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>
> Considering the (legitimate) widespread condemnation of the Bush
> Administration over the Iraq war, how do you separate distain for the
> Bush administration from a reduced support from the U.S. space program?
>
> - Canopus56

Thanks for all those links. I will check all that.
As you say, there are not many difference between US and Europe in this
regard.
All depend in fact on the current activity of the space program as you
showed.
Remember the "hit" of A11 in 1969; it was a world interest.
When there is not much activity aloft, people are not interested in as they
are not (much) interested in the routine missions of the shuttle
(sorry NASA, it is a fact)
However, when there is a stop in the program for any reason or when a new
program is scheduled (e.g. Constellation), then again medai and people are
all behind astronauts waiting the next hero. I bet that if we create a poll
in 2020 during the possible Mars manned mission, the result will be far
different and more that probably largely in favor of this mission, as it was
during the conquest of the Moon.

```
Thierry

>
> P.S. - A NASA bibliography of public opinion studies
> http://www.hq.nasa.gov/office/hqlibrary/pathfinders/opinion.htm
>
> P.P.S. - ". . . provided the effort's cost does not exceed more than one
> percent of the federal budget."
> From: http://www.census.gov/compendia/statab/tables/06s0462.xls
>
> NASA's 2005 budget as percent of total U.S. Budget  in billions $US:
> 15.4 /  2479.4 =  0.6%
> NASA's 1990 budget as a precent of total U.S. Buget in billions $US:  12.4
> / 1253.1 =  0.9%
>
> I haven't been able to access the 2007 Whitehouse budget for a 2007
> estimate, because I am using a dail-up modem.
> http://www.whitehouse.gov/omb/budget/
>
>
>




From 4951745472199232728
X-Google-Thread: 10e8ad,dbe3bd8bfcf11089
X-Google-Thread: 113975,dbe3bd8bfcf11089
X-Google-Thread: f9f20,dbe3bd8bfcf11089
X-Google-Attributes: gid10e8ad,gid113975,gidf9f20,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!postnews.google.com!c28g2000cwb.googlegroups.com!not-for-
mail
From: "canopus56" <canopus56@yahoo.com>
Newsgroups: rec.radio.amateur.space,sci.astro.amateur,sci.space.station
Subject: Re: Poll about astronautics (french by easy)
Date: 7 Oct 2006 16:08:57 -0700
Organization: http://groups.google.com
Lines: 48
Message-ID: <1160262537.407796.173320@c28g2000cwb.googlegroups.com>
References: <4526b523$1@news.vo.lu>
   <4527ed78$0$11718$3a2ecee9@news.csolutions.net>
   <4527f9c2$1@news.vo.lu>
NNTP-Posting-Host: 168.179.186.126
Mime-Version: 1.0
Content-Type: text/plain; charset="iso-8859-1"
X-Trace: posting.google.com 1160262542 23306 127.0.0.1 (7 Oct 2006 23:09:02 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Sat, 7 Oct 2006 23:09:02 +0000 (UTC)
In-Reply-To: <4527f9c2$1@news.vo.lu>
User-Agent: G2/1.0
X-HTTP-UserAgent: Mozilla/4.0 (compatible; MSIE 6.0; Windows NT
```

5.1),gzip(gfe),gzip(gfe)
Complaints-To: groups-abuse@google.com
Injection-Info: c28g2000cwb.googlegroups.com; posting-host=168.179.186.126;
   posting-account=brtWlQ0AAADoM8t9uVzAz_Pi25xwsEO4
Xref: g2news2.google.com rec.radio.amateur.space:450 sci.astro.amateur:41969
sci.space.station:4587

Thierry wrote:
> "canopus56" <canopus56@NOyahooSPAM.com> wrote in message
> news:4527ed78$0$11718$3a2ecee9@news.csolutions.net...
<snip> As you say, there are not many difference between US and
> Europe in this regard. All depend in fact on the current activity of the
> space program as you showed. <snip>
> However, when there is a stop in the program for any reason or when a new
> program is scheduled (e.g. Constellation), then again medai and people are
> all behind astronauts waiting the next hero.

I feel public support is caused by ongoing discoveries that are accessible by the public and not by astronauts becoming herioc media celebrities. Niel Armstrong personal modesty with respect to his historic role of being the Christopher Colombus of the Moon is a case in point. Public support for the space program in 1990s through 2005 has more to do with images being regularly returned and distributed by the Great Observatories like the Hubble and Spitzer space telecopes and robotic missions like Cassini, Gallileo and the Mars rovers. The 50% of the public supporting space exploration understand that it is long-term endeavor and is a necessary expression of the human spirit of exploration. The human need for exploration is why 50% of American and French citizen support space expenditures, even though it might take away from necessary social program spending.

The danger to public support for NASA is too much emphasis on manned exploration.

At $8 billion U.S. a piece for two lost shuttles and $700 million U.S. to make a delivery to the International Space Station using the shuttle, there will be a limit to that public support after a catastropic spacecraft losses. We need both - manned missions and robotic - but the current U.S. administration's committment is to support only one or the other while reducing inflation adjusted funding for both. If shuttles cost $100-200 million U.S. and only $50 million per launch, public opinion might be different.

If NASA's budget is concentrated in manned exploration and there is a catestrophic loss of spacecraft and astronaut life, it is easier for politicians to call for the entire program's cancellation.   If there is catestropic loss of a Constellation-Orion, it will be missions like the Mars Reconnisance Orbiter (MRO), the Mars Rovers and Cassini that will keep the agency afloat in public opinion.

Looks like the 2007 NASA budget ratio is 0.6% - 16.3B / 2770B = 0.6%
http://www.whitehouse.gov/omb/budget/fy2007/tables.html

- Canopus56

```
From -7490987385525022363
X-Google-Thread: 10e8ad,e7d98aa4c4f4ce66
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news3.google.com!border1.nntp.dca.giganews.com!
border2.nntp.dca.giganews.com!nntp.giganews.com!peer01.cox.net!cox.net!p01!
fed1read07.POSTED!53ab2750!not-for-mail
From: "John Kopala" <jkopala@gmail.com>
Newsgroups: rec.radio.amateur.space
References: <17jVg.818$UJ2.280@fed1read07> <_JKdnWdGbqTbpLvYnZ2dnUVZ_s-
dnZ2d@bright.net>
Subject: Re: TAPR TRAKBOX Problems
Lines: 25
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1807
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1807
Message-ID: <F1TWg.1135$UJ2.623@fed1read07>
Date: Tue, 10 Oct 2006 13:01:46 -0700
NNTP-Posting-Host: 68.231.38.40
X-Complaints-To: abuse@cox.net
X-Trace: fed1read07 1160510693 68.231.38.40 (Tue, 10 Oct 2006 16:04:53 EDT)
NNTP-Posting-Date: Tue, 10 Oct 2006 16:04:53 EDT
Organization: Cox Communications
Xref: g2news2.google.com rec.radio.amateur.space:451
```

Thanks for the suggestions, Scott.

Your description is perfect: "just sits there looking dumb." It's till doing that.

I have checked the reset circuit. Applying a high level for 2 clock cycles resets the 80C51 processor. It does a reset when power is applied. A DS1228 controls the reset operation. A jumper on the board also can be used to manually assert a reset.

So, the board resets on power on or when manually reset. Checking the levels on the various address and data lines also indicates that the processor is running. There is activity on the address and data lines. It would appear that the processor starts but the program encounters some problem before completing the full boot operation and then loops.

I'm not really sure where to go from here, short of disassembling the program to see what it is doing. At this point, an In Circuit Emulator would be help immensely.

Suggestions?

John Kopala

From -1110187690260208770
X-Google-Thread: 10e8ad,e7d98aa4c4f4ce66
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news3.google.com!border1.nntp.dca.giganews.com!
border2.nntp.dca.giganews.com!nntp.giganews.com!peer01.cox.net!cox.net!p01!
fed1read07.POSTED!53ab2750!not-for-mail
From: "John Kopala" <jkopala@gmail.com>
Newsgroups: rec.radio.amateur.space
References: <17jVg.818$UJ2.280@fed1read07>
<l40ci2pm2bbvb9lrp6mippd1a16braj3jb@4ax.com> <eZAVg.885$UJ2.314@fed1read07>
<hqpdi29nne7q6uqffiep1cvpngqq6ng1r2@4ax.com>
Subject: Re: TAPR TRAKBOX Problems
Lines: 15
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1807
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1807
Message-ID: <O6TWg.1136$UJ2.123@fed1read07>
Date: Tue, 10 Oct 2006 13:07:15 -0700
NNTP-Posting-Host: 68.231.38.40
X-Complaints-To: abuse@cox.net
X-Trace: fed1read07 1160511022 68.231.38.40 (Tue, 10 Oct 2006 16:10:22 EDT)
NNTP-Posting-Date: Tue, 10 Oct 2006 16:10:22 EDT
Organization: Cox Communications
Xref: g2news2.google.com rec.radio.amateur.space:452

Thanks Alan.

I am currently using the original CPU, RAM, clock crystal, and EPROM that came with the kit. These all represent the initial 3.00 release and should be compatible. I believe the problems requiring the faster chips occurs when the box is upgraded from the 3.00 version to the 3.30 turbo version with the 80C320 processor. I also have those chips and the PROM for the 3.50d release. I haven't tried all possible combinations, but I did not have any success using the faster chips either. I do not yet have the 22 MHz crystal.

John
N7JK

From -8941425570514499113
X-Google-Thread: 10e8ad,e7d98aa4c4f4ce66
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news1.google.com!news4.google.com!

border1.nntp.dca.giganews.com!nntp.giganews.com!wn12feed!worldnet.att.net!
bgtnsc04-news.ops.worldnet.att.net.POSTED!e63cd5b6!not-for-mail
From: Alan WA4SCA <APBIDDLE@UNITED.NET>
Newsgroups: rec.radio.amateur.space
Subject: Re: TAPR TRAKBOX Problems
Organization: AMSAT-NA
Reply-To: APBIDDLE@UNITED.NET
Message-ID: <pvaoi2t39mavtlcbpb9c3fp9j2vp2v3a04@4ax.com>
References: <17jVg.818$UJ2.280@fed1read07>
<l40ci2pm2bbvb9lrp6mippd1a16braj3jb@4ax.com> <eZAVg.885$UJ2.314@fed1read07>
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Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Lines: 20
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X-Complaints-To: abuse@worldnet.att.net
X-Trace: bgtnsc04-news.ops.worldnet.att.net 1160523256
1a1c948afa7f135ae46f98de45d0b33d (Tue, 10 Oct 2006 23:34:16 GMT)
NNTP-Posting-Date: Tue, 10 Oct 2006 23:34:16 GMT
Date: Tue, 10 Oct 2006 23:34:16 GMT
Xref: g2news2.google.com rec.radio.amateur.space:453

John,

Sounds as if you have a compatible set of parts. I remember when I
did some of the upgrades that the system would appear as you mention
when I tried some of the old, slow EPROMS.

A shot in the dark is to drop a note to Jack Davis, at

 WA4EJR (at) ARRL (dot) NET

Jack was one of the original developers, and his call is probably on
the PC board. He was selling the units in small quantities until some
of the key parts became unavailable, and might have an idea. Be aware
that both he and his wife have physical health issues, so I am not
certain what his level of interest is these days.

--
Alan
WA4SCA

From -3072917566112018496
X-Google-Thread: 10e8ad,e7d98aa4c4f4ce66
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news3.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!local01.nntp.dca.giganews.com!nntp.bright.net!
news.bright.net.POSTED!not-for-mail

```
NNTP-Posting-Date: Wed, 11 Oct 2006 06:32:02 -0500
Date: Wed, 11 Oct 2006 11:32:00 +0000
From: Scott <acepilot@bloomer.net>
User-Agent: Mozilla/5.0 (Windows; U; Windows NT 5.0; en-US; rv:1.7.2) Gecko/
20040804 Netscape/7.2 (ax)
X-Accept-Language: en-us, en
MIME-Version: 1.0
Newsgroups: rec.radio.amateur.space
Subject: Re: TAPR TRAKBOX Problems
References: <17jVg.818$UJ2.280@fed1read07> <_JKdnWdGbqTbpLvYnZ2dnUVZ_s-
dnZ2d@bright.net> <F1TWg.1135$UJ2.623@fed1read07>
In-Reply-To: <F1TWg.1135$UJ2.623@fed1read07>
Content-Type: text/plain; charset=us-ascii; format=flowed
Content-Transfer-Encoding: 7bit
Message-ID: <BYGdndVL8KWvS7HYnZ2dnUVZ_vadnZ2d@bright.net>
Lines: 57
NNTP-Posting-Host: 64.33.199.218
X-Trace: sv3-gknMnE4obCpqAlvZBz1d67wwhLLAxT6eCygkiTKvwsTjL8AYFcUb/o7gM+f2e/
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lrRguiEa11rSFPU3X5IzNXeB0iymeZHPOp+cjia7sqYZfiva15BE9YWLLkerK6ybTTtxa4glkOsG!
7UizDasf1g==
X-Complaints-To: abuse@bright.net
X-DMCA-Complaints-To: abuse@bright.net
X-Abuse-and-DMCA-Info: Please be sure to forward a copy of ALL headers
X-Abuse-and-DMCA-Info: Otherwise we will be unable to process your complaint
properly
X-Postfilter: 1.3.32
Xref: g2news2.google.com rec.radio.amateur.space:454
```

Dang, I was hoping for a simple fix ;)

One of my old Commodore VIC-20s (yeah, me and computers go back a ways!) used to run fine at power up and then when it would get warm, it would just freeze. Replaced the CPU (6502) and that fixed it. The 6502 had the clock built in to the chip...

Hmmm...what to check next...

Close inspection of the pins on the ROM chip (or maybe there isn't a separate ROM...not too familiar with the 8051...think that's a "controller" with ROM built in??)...any shorts or breaks in the PC traces?

Are the power supply voltages on the board OK? 5V I suspect?

How do you know that it's sitting there dumb as a box of rocks? Are there LEDs that indicate something or is does it "talk" to you via a PC terminal program? I've never seen one of these things, so I don't even know what it looks like of what it is SUPPOSED to do ;)

Next, do you have a schematic for it??

Scott

John Kopala wrote:

> Thanks for the suggestions, Scott.
>
> Your description is perfect: "just sits there looking dumb." It's till
> doing that.
>
> I have checked the reset circuit. Applying a high level for 2 clock cycles
> resets the 80C51 processor. It does a reset when power is applied. A
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>
> So, the board resets on power on or when manually reset. Checking the
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> processor is running. There is activity on the address and data lines. It
> would appear that the processor starts but the program encounters some
> problem before completing the full boot operation and then loops.
>
> I'm not really sure where to go from here, short of disassembling the
> program to see what it is doing. At this point, an In Circuit Emulator
> would be help immensely.
>
> Suggestions?
>
> John Kopala
>
>

From 3481195622283070755
X-Google-Thread: 10e8ad,e7d98aa4c4f4ce66
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news4.google.com!border1.nntp.dca.giganews.com!
border2.nntp.dca.giganews.com!nntp.giganews.com!peer01.cox.net!cox.net!p01!
fed1read07.POSTED!53ab2750!not-for-mail
From: "John Kopala" <jkopala@gmail.com>
Newsgroups: rec.radio.amateur.space
References: <17jVg.818$UJ2.280@fed1read07> <_JKdnWdGbqTbpLvYnZ2dnUVZ_s-
dnZ2d@bright.net> <F1TWg.1135$UJ2.623@fed1read07>
<BYGdndVL8KWvS7HYnZ2dnUVZ_vadnZ2d@bright.net>
Subject: Re: TAPR TRAKBOX Problems
Lines: 47
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1807
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1807

Message-ID: <eWjXg.1199$UJ2.359@fed1read07>
Date: Wed, 11 Oct 2006 21:53:27 -0700
NNTP-Posting-Host: 68.231.38.40
X-Complaints-To: abuse@cox.net
X-Trace: fed1read07 1160629002 68.231.38.40 (Thu, 12 Oct 2006 00:56:42 EDT)
NNTP-Posting-Date: Thu, 12 Oct 2006 00:56:42 EDT
Organization: Cox Communications
Xref: g2news2.google.com rec.radio.amateur.space:455

Scott,

I hoped for a simple fix when I first encountered the problem, but that was not to be.

Let me answer your questions in pseudo reverse order:

1. Yes, I have 5 pages of schematics for the board and building external interfaces. The board takes up 3 of the sheets.
2. I have cross checked all of the socket pins for each IC for shorts and found none. I have verified every trace connection between the ICs on the board against the schematics.
3. It has a 2 line LCD display with 16 characters per line.
4. It has an RS232 port wired as a null modem for direct connection to a terminal or PC terminal program, such as hyperterminal.
5. The 80C51 does have an internal PROM, but it is wired and jumpered to use an external PROM.
6. An external RAM is provided on the board so that configuration data and satellite kerlerian elements can be downloaded to the board. Battery backup is provided through a PST532 IC for times when the TrakBox is removed from 12 volt power or turned off.
7. Vcc and all power on the board, except the battery backup is 5 volts.
8. It has a real time clock chip, 62421A.
9. Purpose - With downloaded satellite data, it will track a selected satellite, tell you when it is above the horizon, and turn the antennas to track the satellite when the antenna control is selected on the box. It can also adjust the radio to adjust for the dopper shift as the satellite travels across the sky.

So what does it do currently? It outputs one line of characters which appear as black underlined boxes to the LCD display. Interface error???? Nothing to the RS232 interface except a smily faced character. Could be just noise at startup. Selector switch for satellite is set to zero (grounded) to indicate operation in terminal mode. At initial startup is should test the battery-backed up RAM for a checksum. Since data has not yet been stored and saved in the RAM, it should give the following warning message, "Data in RAM was lost !! Set default parameter !" Apparently the RAM test is not being completed. Replacing the RAM with a new higher speed RAM produces the same result.

You can see what the board looks like at:
http://www.tapr.org/kits_trakbox.html

Still baffled.

John

```
From -4569653369769767841
X-Google-Thread: 10e8ad,e7d98aa4c4f4ce66
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news3.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx02.iad01.newshosting.com!newshosting.com!68.1.17.232.MISMATCH!
peer01.cox.net!cox.net!p01!fed1read07.POSTED!53ab2750!not-for-mail
From: "John Kopala" <jkopala@gmail.com>
Newsgroups: rec.radio.amateur.space
References: <17jVg.818$UJ2.280@fed1read07>
<l40ci2pm2bbvb9lrp6mippd1a16braj3jb@4ax.com> <eZAVg.885$UJ2.314@fed1read07>
<hqpdi29nne7q6uqffiep1cvpngqq6ng1r2@4ax.com> <O6TWg.1136$UJ2.123@fed1read07>
<pvaoi2t39mavtlcbpb9c3fp9j2vp2v3a04@4ax.com>
Subject: Re: TAPR TRAKBOX Problems
Lines: 8
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1807
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1807
Message-ID: <aYjXg.1200$UJ2.857@fed1read07>
Date: Wed, 11 Oct 2006 21:55:34 -0700
NNTP-Posting-Host: 68.231.38.40
X-Complaints-To: abuse@cox.net
X-Trace: fed1read07 1160629126 68.231.38.40 (Thu, 12 Oct 2006 00:58:46 EDT)
NNTP-Posting-Date: Thu, 12 Oct 2006 00:58:46 EDT
Organization: Cox Communications
Xref: g2news2.google.com rec.radio.amateur.space:456
```

Alan,

Thanks. I'll try Jack and see if he could possibly help. Yes, I see his call sign on the board.

John

```
From 3753788474983360818
X-Google-Thread: 10e8ad,e7d98aa4c4f4ce66
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news4.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!local01.nntp.dca.giganews.com!nntp.bright.net!
news.bright.net.POSTED!not-for-mail
NNTP-Posting-Date: Thu, 12 Oct 2006 07:52:42 -0500
Date: Thu, 12 Oct 2006 12:52:41 +0000
From: Scott <acepilot@bloomer.net>
```

User-Agent: Mozilla/5.0 (Windows; U; Windows NT 5.0; en-US; rv:1.7.2) Gecko/20040804 Netscape/7.2 (ax)
X-Accept-Language: en-us, en
MIME-Version: 1.0
Newsgroups: rec.radio.amateur.space
Subject: Re: TAPR TRAKBOX Problems
References: <17jVg.818$UJ2.280@fed1read07> <_JKdnWdGbqTbpLvYnZ2dnUVZ_s-dnZ2d@bright.net> <F1TWg.1135$UJ2.623@fed1read07> <BYGdndVL8KWvS7HYnZ2dnUVZ_vadnZ2d@bright.net> <eWjXg.1199$UJ2.359@fed1read07>
In-Reply-To: <eWjXg.1199$UJ2.359@fed1read07>
Content-Type: text/plain; charset=us-ascii; format=flowed
Content-Transfer-Encoding: 7bit
Message-ID: <8_GdnWfEW5EHp7PYnZ2dnUVZ_u2dnZ2d@bright.net>
Lines: 65
NNTP-Posting-Host: 64.33.199.218
X-Trace: sv3-bgfv1eWM8x2d93XYtRZZWH3zwtojvKLIVDJbzL3QWOPx1+d3v4PlMoVFuNUjL8adMa5MmRaGWpSCW8t!uX/4oO5VEQ9hGFN2CQEw+9ddmJEJNqMLGdYbKtUbo70l7x5ICpxr54ObsorbAq13fdJAyzkntynV!jpp5WDeyVQ==
X-Complaints-To: abuse@bright.net
X-DMCA-Complaints-To: abuse@bright.net
X-Abuse-and-DMCA-Info: Please be sure to forward a copy of ALL headers
X-Abuse-and-DMCA-Info: Otherwise we will be unable to process your complaint properly
X-Postfilter: 1.3.32
Xref: g2news2.google.com rec.radio.amateur.space:457

Another couple questions...

Did the unit ever work for you?

Are all the jumpers installed per the assembly manual. Specifically, it looks like you (or someone) may have upgraded the firmware to Version 3.5 I believe it is. Have you tried the procedure listed in the assembly manual for upgrading the firmware chip (basically re-installing the EPROM version you have on hand)??? I don't suppose you could scan a copy of the schematics and email them to me, could you? If so, send to acepilot at bloomer dot net and I will take a look and see if I can come up with any ideas for you...

Scott
N0EDV

John Kopala wrote:

> Scott,
>
> I hoped for a simple fix when I first encountered the problem, but that was not to be.
>
> Let me answer your questions in pseudo reverse order:
>
> 1. Yes, I have 5 pages of schematics for the board and building external

```
> interfaces.  The board takes up 3 of the sheets.
> 2.  I have cross checked all of the socket pins for each IC for shorts and
> found none.  I have verified every trace connection between the ICs on the
> board against the schematics.
> 3.  It has a 2 line LCD display with 16 characters per line.
> 4.  It has an RS232 port wired as a null modem for direct connection to a
> terminal or PC terminal program, such as hyperterminal.
> 5.  The 80C51 does have an internal PROM, but it is wired and jumpered to
> use an external PROM.
> 6.  An external RAM is provided on the board so that configuration data and
> satellite kerlerian elements can be downloaded to the board.  Battery backup
> is provided through a PST532 IC for times when the TrakBox is removed from
> 12 volt power or turned off.
> 7.  Vcc and all power on the board, except the battery backup is 5 volts.
> 8.  It has a real time clock chip, 62421A.
> 9.  Purpose - With downloaded satellite data, it will track a selected
> satellite, tell you when it is above the horizon, and turn the antennas to
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> also adjust the radio to adjust for the dopper shift as the satellite
> travels across the sky.
>
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> appear as black underlined boxes to the LCD display.  Interface error????
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> just noise at startup.  Selector switch for satellite is set to zero
> (grounded) to indicate operation in terminal mode.  At initial startup is
> should test the battery-backed up RAM for a checksum.  Since data has not
> yet been stored and saved in the RAM, it should give the following warning
> message, "Data in RAM was lost !! Set default parameter !"  Apparently the
> RAM test is not being completed.  Replacing the RAM with a new higher speed
> RAM produces the same result.
>
> You can see what the board looks like at:
> http://www.tapr.org/kits_trakbox.html
>
> Still baffled.
> John
>
>


From 8045068120271818500
X-Google-Thread: 10e8ad,ba16bbce0e6ea52e,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news3.google.com!newshub.sdsu.edu!elnk-nf2-pas!
newsfeed.earthlink.net!stamper.news.pas.earthlink.net!
newsread2.news.pas.earthlink.net.POSTED!46041641!not-for-mail
From: "JoAnne Maenpaa" <wb9jej_no-spam@earthling.com>
Newsgroups: rec.radio.amateur.space
Subject: ANS-281 AMSAT News Service Weekly Bulletins
Lines: 445
X-Priority: 3
```

X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <7EsXg.12882$UG4.9514@newsread2.news.pas.earthlink.net>
Date: Thu, 12 Oct 2006 14:51:47 GMT
NNTP-Posting-Host: 68.165.59.58
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread2.news.pas.earthlink.net 1160664707 68.165.59.58 (Thu, 12 Oct 2006 07:51:47 PDT)
NNTP-Posting-Date: Thu, 12 Oct 2006 07:51:47 PDT
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news2.google.com rec.radio.amateur.space:458

AMSAT NEWS SERVICE
ANS-281

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:

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* ARISS Plans for Expanded Role in Space
* PCSAT-1 Continues Operation
* AMSAT Awards
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* NASA Seeks Undergrads To Experiment In Lunar And Zero Gravity
* Square Mile Array Heading for Quiet RF Environment in Southern Hemisphere
* ARISS Status for the Week of October 2, 2006

SB SAT @ AMSAT $ANS-281.01
AMSAT Board of Directors Approves Eagle Communications Payloads

AMSAT News Service Bulletin 281.01
>From AMSAT HQ SILVER SPRING, MD.
October 8, 2006
To All RADIO AMATEURS
BID: $ANS-281.01

AMSAT's Board of Directors met on 5 October in San Francisco, CA and approved the following Eagle communications payloads:

+ A SSB/CW (etc.) transponder with uplink on U-band and downlink on V-band. System design has a goal that it be usable over 75% of the orbit by an AO-13 or AO-40 capable ground station.

+ A SSB/CW (etc.) transponder with uplink on L-band and downlink on S1-band (2.4 Ghz). An AO-13 or AO-40 capable ground station will be able to use this payload.

+ A low rate text message system, like SMS. It will operate on U/V-bands and be usable over 75% of the orbit by a small terminal on the ground.

+ These transponders will be implemented using Software Defined Transponders (SDX).

Eagle will also carry an advanced communications payload (ACP). Using advanced signal processing and RF techniques, the ACP will allow:

1) Voice communications on S2-band (3.4 Ghz) uplink and C-band (5.8 Ghz) downlink using a single 60cm dish. The satellite antennas will be electrically steered to reduce spin modulation and allow use over 75% of the orbit.

2) An additional, fix-pointed, uplink will be available at L-band. This L-band uplink will require a separate uplink antenna at the ground station.

3) High rate data communications, such as streaming video, using a 2m dish on S2/C bands.

4) AMSAT will develop and make available an affordable ground segment for the ACP SYSTEM.

Additional information will be posted on amsat.org in the near future.

[ANS thanks the Eagle Design Team for the above information]

/EX

SB SAT @ AMSAT $ANS-281.02
More News From The 2006 AMSAT Space Symposium

AMSAT News Service Bulletin 281.02
>From AMSAT HQ SILVER SPRING, MD.
October 8, 2006
To All RADIO AMATEURS
BID: $ANS-281.02

This is the week of the 2006 AMSAT-NA Space Symposium in San Francisco. Amateur satellite designers and operators gathered to hear presentations about the Eagle, AO-51, PCSat2, ANDE, Raft, Psat, a new SUNSAT, KiwiSat, SSETI-Express, SESO and ESMO Satellites, University CubeSats along with a discussion exploring future launch opportunities.

Eagle Technology presentations included antennas for space communication, a proposed Eagle Digital Communications Payload, and the Software Defined Transponder for Eagle. Presentations also included discussions of the existing spectrum available for the Amateur Satellite Service along with threats from encroachment on these frequencies by unlicensed wireless consumer devices.

ISS Expedition 12 Cmdr. Bill McArthur, KC5ACR gave the Keynote Address at the AMSAT Annual Banquet on Saturday evening.

This gathering is the forum for the AMSAT-NA Board of Directors meeting the AMSAT membership annual meeting, ARISS-International Delegates meeting, ARISS SuitSat meeting, Satellite Frequency Coordinators meeting, and the annual Area Coordinators meeting.

After the annual meetings the leadership team is pleased to announce the AMSAT Officers for the upcoming year:

President	Rick Hambly, W2GPS
Executive Vice President	Lee McLamb, KU4OS
Vice-President Operations	Drew Glasbrenner, KO4MA
Vice-President Engineering	Bob McGwier, N4HY
VP of Marketing and User Services	(Position Open)
Secretary	Barry Baines, WD4ASW
Treasurer	Gunther Meisse, W8GSM
Manager	Martha Saragovitz

The meetings and presentations are in progress at press time. AMSAT plans to provide additional information in the days and weeks to come.

[ANS thanks the Symposium Committee for the above information]

/EX

SB SAT @ AMSAT $ANS-281.03
ARISS Plans for Expanded Role in Space

AMSAT News Service Bulletin 281.03
>From AMSAT HQ SILVER SPRING, MD.
October 8, 2006
To All RADIO AMATEURS
BID: $ANS-281.03

ARISS, the Amateur Radio on the International Space Station program, an amateur radio project sponsored in North America by the ARRL, AMSAT, and NASA reported on the outcome of planning meetings held recently.

Sponsorship of the ARISS program is moving from NASA Headquarters to Johnson Spaceflight Center (JSC) in Houston. ARISS International Chair Frank Bauer, KA3HDO, ARISS International Secretary-Treasurer Rosalie White, K1STO, Deputy Chair, Mark Steiner, K3MS, and NASA ISS Ham Radio Project Engineer Kenneth Ransom, N5VHO recently held planning sessions with various

JSC offices.

One future goal which will capture the imagination of many includes the exploration of an ARISS role in the "Moon, Mars and Beyond" initiative. They cited Amateur Radio's potential as a valuable tool to people living on the moon for several months at a time.

Amateur radio will continue to be available on the ISS. In addition to the exploration initiatives just beginning construction projects will continue to take place on the Space Station. While NASA foresees busy work schedules for the astronaut construction crews they also note that more astronauts will be available to get on the air.

[ANS thanks ARISS and ARRL for the above information]

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SB SAT @ AMSAT $ANS-281.04
PCSAT-1 Continues Operation

AMSAT News Service Bulletin 281.04
>From AMSAT HQ SILVER SPRING, MD.
October 8, 2006
To All RADIO AMATEURS
BID: $ANS-281.04

Since being recovered due to sufficient sunlight on its solar panels PCSAT-1 should remain NORMAL OPS for the next few weeks until it experiences an overload and resets. Then we lose it till December. The US Naval Academy Satellite Laboratory team requests that amateur radio users please adhere to these fundamental principles:

1) No unattended operations
2) No connections to or through PCSAT-1
3) UI digipeating and APRS packets only typically at 1 minute rates or so
4) Watch pcsat.aprs.org for live activity
5) Use the path of VIA PCSAT-1 or VIA ARISS
6) Minimize all packets after dark!

PCSAT-1 acts just like any terrestrial APRS digipeater. It willrespond to all of the existing and legacy paths that are used on APRS. They are:
RELAY
WIDE
WIDEn-N
TRACEn-N
and ARISS

If people want to keep track of their success on FINDU.COM, see: http://pcasat.aprs.org then they should not use a n-N path and should change their SSID so that their station call is unique for this space application. Otherwise, as soon as they use the same station again on terrestrial APRS, then the posit via the satellite will be overwritten.

Recent packets digipeated via PCSAT can also be viewed on-line at the PCSAT url mentioned above. The web site also includes a map showing the reported positions of stations digipeating APRS packets via PCSAT.

Enjoy PCSAT-1 and APRS! Make contacts, QSO, enjoy!

[ANS thanks Bob, WB4APR and the US Naval Academy Satellite Laboratory for the above information]

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SB SAT @ AMSAT $ANS-281.05
AMSAT Awards

AMSAT News Service Bulletin 281.05
>From AMSAT HQ SILVER SPRING, MD.
October 8, 2006
To All RADIO AMATEURS
BID: $ANS-281.05

Bruce, KK5DO AMSAT Director Contests and Awards say this week congratulations go out to all of the following.

We would like to welcome the following to the satellite community. They have made their first satellite contact and are now members of the AMSAT Satellite Communicators Club.

Tim Tapio	K4SHF
Neven Mrduljas	9A5YY
Richard Wiggin	N1XED
Chow Chee Onn	9M2CCO

AMSAT Satellite Communications Achievement Award

Amir Findling	K9CHP	#435	
William McArthur	KC5ACR	#436	from space
Dale Gates	WA4AEJ	#437	
Richard Wiggin	N1XED	#438	
Karl Doepel	W3AFE	#439	

AMSAT Sexagesimal Award

William McArthur	KC5ACR	#141	from space

South Africa Satellite Communications Achievement Award

Dale Gates	WA4AEJ	#US97
Richard Wiggin	N1XED	#US98
Karl, Doepel	W3AFE	#US99

To see all the awards visit http://www.amsat.org or http://www.amsatnet.com

[ANS thanks Bruce, KK5DO for the above information]

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SB SAT @ AMSAT $ANS-281.06
Arianespace to WebCast October 12 Launch

AMSAT News Service Bulletin 281.06
>From AMSAT HQ SILVER SPRING, MD.
October 8, 2006
To All RADIO AMATEURS
BID: $ANS-281.06

The fourth Arianespace launch of the year will boost three satellites into orbit:

+ DIRECTV 9S for American operator DIRECTV, Inc.
+ OPTUS D1 for the Australian operator OPTUS
+ LDREX-2 for the Japan Aerospace Exploration Agency.

The launch window will be between 20:56 to 21:56 UTC on October, 12.

The webcast will be available at the following link:
http://www.videocorner.tv/index.php?langue=en
(Starting 15 minutes before lift-off).

Video streaming will be available in RealMedia and WindowsMedia formats.

[ANS thanks Jean Paul, FR5CY for the above information]

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SB SAT @ AMSAT $ANS-281.07
NASA Seeks Undergrads To Experiment In Lunar And Zero Gravity

AMSAT News Service Bulletin 281.07
>From AMSAT HQ SILVER SPRING, MD.
October 8, 2006
To All RADIO AMATEURS
BID: $ANS-281.07

NASA is calling on college undergraduates interested in performing reduced gravity experiments onboard the agency's "Weightless Wonder" aircraft to submit their proposals by Monday, Oct. 30.

Each proposal will be evaluated for technical merit, safety and an outreach plan. The selected proposals will be announced Dec. 11 and flown in 2007. Selected teams may also invite a full-time, accredited journalist to participate with them to document the experience.

The Reduced Gravity Student Flight Opportunities Program at NASA's Johnson Space Center, Houston, has given undergraduate teams the chance to research, design, fabricate, fly and evaluate reduced gravity experiments annually since 1995. This will be the first time students can design their experiment for lunar gravity, which is one-sixth of Earth's.

NASA's modified McDonnell Douglas DC-9 jet aircraft will give flyers the feel of space, as it performs a series of steep climbs and freefalls over the Gulf of Mexico, creating multiple periods of reduced gravity. Each parabolic maneuver produces about 25 seconds of weightlessness, and by changing its flight path, the jet can produce periods of lunar gravity.

[ANS thanks NASA and SpaceDaily.com for the above information]

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SB SAT @ AMSAT $ANS-281.08
Square Mile Array Heading for Quiet RF Environment in Southern Hemisphere

AMSAT News Service Bulletin 281.08
>From AMSAT HQ SILVER SPRING, MD.
October 8, 2006
To All RADIO AMATEURS
BID: $ANS-281.08

Australia and Southern Africa have been short-listed as the countries to host the Square Kilometre Array (SKA), a giant next-generation radio telescope being developed by scientists in 17 countries.

The SKA will be a set of thousands of antennas, not a single giant instrument, spread over 3000 kilometres, but with half of the antennas located in a central region 5 kilometres across. The SKA will be 50 times more sensitive than the most powerful radio telescopes we now have. It will peer deep into the cosmos to pick up signs of the first stars and galaxies to form after the Big Bang. If there are extra-terrestrial intelligences out there in the Milky Way with airport or ionospheric radars, the SKA will detect them.

For Australia, the core site is proposed to be at Mileura station, about 100 km west of Meekathara in Western Australia. Other dishes would be distributed over the Australian continent with the possibility of extension into New Zealand. In Southern Africa, the central location would be at the Karoo site in the Northern Cape region of South Africa, about 95 km from Carnarvon, with further dishes located in South Africa itself and in neighbouring African countries.

A key requirement of the core site is that there must be a very low level of man-made radio signals, because interference will mask the faint cosmic radio waves the telescope is designed to detect. South Africa and Australia are both making excellent progress towards protecting these unique environments with radio-quiet zones that will limit the use of radio transmitting equipment.

Further analysis of the short-listed sites will now be carried out, with the final decision on which of the two sites will host the SKA expected towards the end of the decade.

For photos and the full story see:
http://www.universetoday.com/2006/10/02/giant-radio-telescope-may-go-to-australia-or-africa/

[ANS thanks UniverseToday.com and the Jodrell Bank Radio Observatory for the above information]

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SB SAT @ AMSAT $ANS-281.09
ARISS Status for the Week of October 2, 2006

AMSAT News Service Bulletin 281.09
>From AMSAT HQ SILVER SPRING, MD.
October 8, 2006
To All RADIO AMATEURS
BID: $ANS-281.09

1. Swiss School Contact Update

On Friday, September 22, Thomas Reiter, DF4TR, spoke with students from the Gymnase Intercantonal de la Broye in Payerne, Switzerland. The students gathered at the Musee de l'aviation militaire, the Swiss Air Force Museum. This was a highly publicized event and was attended by many VIPs including representatives from education, ESA and the Swiss Astronautics Society as well as Swiss astronaut Claude Nicollier, HB9CN. It received extensive media coverage from numerous newspapers, television stations (Nord Vaudois, Suisse Romande) and radio stations (Fribourg). The video was streamed over schoolnet.ch/ariss. It is estimated that approximately 650,000 heard of the contact via the radio and television broadcasts. For more details on the contact, go to:
http://www.ariss-eu.org/2006_09_27.htm

2. Upcoming School Contacts

The ARISS team continues to work on scheduling the Expedition 14 school contacts.

3. ARRL Article on Three ARISS Contacts

ARRL wrote an article covering the three contacts made from the ISS on September 22. "Civilian Space Traveler, Astronauts Pull Off ARISS Ham Radio Triple Header" may be found at:
http://www.arrl.org/news/stories/2006/09/27/101/?nc=1

4. School Teacher Makes General Contacts with ISS

A teacher (callsign N8MS) from Coloma Junior High School, located in Southwest Michigan, had an unscheduled contact with the International Space Station on Tuesday March 21, 2006 when Bill McArthur answered 12 of his students' questions. His class was also able to contact Anousheh Ansari during her stay on the ISS and have her answer a

few questions. The audio from his most recent contact may be heard on Anousheh's space blog,
http://spaceblog.xprize.org/2006/09/28/n8ms-ham-radio-contact/

5. Arizona Class Listens to Space Participant on Radio

A teacher from Pueblo Magnet School in Tucson, Arizona wrote to say that he and his students listened to space participant Anousheh Ansari with a very simple radio station, and could hear her for a short while, although they did not connect. He felt this opportunity of hearing someone on the Space Station motivated his students and that it was a very good lesson for them in tracking space vehicles.

6. ARRL Article on Expedition 13

ARRL posted a short story covering Expedition 13 crew members returning to Earth. See: http://www.arrl.org/?artid=6830

[ANS thanks Carol, KB3LKI for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM

```
From 1871983315960382034
X-Google-Thread: 10e8ad,e5a089f54d709357,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news3.google.com!newshub.sdsu.edu!elnk-nf2-pas!
newsfeed.earthlink.net!stamper.news.pas.earthlink.net!
newsread2.news.pas.earthlink.net.POSTED!46041641!not-for-mail
From: "JoAnne Maenpaa" <wb9jej_no-spam@earthling.com>
Newsgroups: rec.radio.amateur.space
Subject: WSR-282 AMSAT Weekly Satellite Report
Lines: 988
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <aEsXg.12883$UG4.4159@newsread2.news.pas.earthlink.net>
Date: Thu, 12 Oct 2006 14:51:50 GMT
```

```
NNTP-Posting-Host: 68.165.59.58
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread2.news.pas.earthlink.net 1160664710 68.165.59.58 (Thu, 12 Oct
2006 07:51:50 PDT)
NNTP-Posting-Date: Thu, 12 Oct 2006 07:51:50 PDT
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news2.google.com rec.radio.amateur.space:459

This report is organized into 4 parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites

SB SAT @ AMSAT W8ISS ANS-282.S1
WSR 282 Part 1 10/09/2006

AMSAT NEWS SERVICE BULLETIN 282.S1 FROM AMSAT HQ
SILVER SPRING, MD, October 09, 2006
TO ALL RADIO AMATEURS
BID: $ANS-282.S1

VO-52 HAMSAT
Catalog Number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/V - Indian Transponder

Frequencies:
-------------------
Indian Transponder:
Uplink:   435.220 MHz to 435.280 MHz LSB/CW
Downlink: 145.870 MHz to 145.930 MHz USB/CW

Dutch Transponder:
Uplink:   435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW


Indian Beacon:  145.859330 MHZ CW
Dutch Beacon:   145.860MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsat.in/hamsat.htm

To know what transponder is switched on please listen for the beacon
that
is active. Each transponder has a different beacon.
[10022006]
```

=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational
Current Mode(s): FM Repeater - V/U - FM 67 Hz PL Tone
PBBS - V/U - 9k6
Digipeater - OFF

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.880 MHZ FM
145.880 MHz USB
145.920 MHz FM 67Hz PL tone
1268.700 MHz FM 67Hz PL tone
Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast Protocol
1268.700 mhz FM, 9k6 PBP Digital

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[10092006]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Uplink: 145.850 MHz (67.0 Hz PL tone) (See below for operating procedures)
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

```
To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The order of operation is thus: (allow for Doppler as necessary)
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer
   on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater
   on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10
   minute timer.
[04172006]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: OPERATIONAL

Voice/CW Mode JA
Uplink:   145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon:   435.795 MHz

Digital Mode JD
Uplink:   145.850 145.870 145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

unOfficial Webpage: http://www.amsat.org/amsat/sats/n7hpr/fo29.html
[11132005]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Uplink:   145.850 MHz FM
Downlink: 436.795 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[01012006]
```

```
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational depending on amount of Sunlight
Current Reported mode: Mode-A

Uplink:   145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink:  29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons:   29.502 MHz
          145.972 MHz
          435.100 MHz
         2304.100 MHz

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php
The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
AO-7 users are requested to log their contacts and observations about
AO-7,
especially any unexpected mode changes.
AO-07 telemetry software webpage:
http://www.qsl.net/k3tz/files/K3TZ_AO-07_Telemetry_Decoder_0.5.zip

Please keep your power low!  For additional information please read the
AO-7
Usage Guidelines on the AO-7 Log and Resource Site located at:
http://www.planetemily.com/ao7
[04242006]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: Voice
Digipeater:   OFF

The Expedition 14 crew is:
Commander:              Michael Lopez-Alegria - KE5GTK
Flight Engineer:        Mikhail Tyurin - RZ3FT
Flight Engineer:        Thomas Reiter - DF4TR

Digital/APRS:
Worldwide packet uplink:   145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink:   145.200 MHz FM
```

Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

SSTV TESTING:
Worldwide Reported Downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS, RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is NOT translated from Russian and posted.
[10092006]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-282.S2
WSR 282 Part 2 10/09/2006

AMSAT NEWS SERVICE BULLETIN 282.S2 FROM AMSAT HQ
SILVER SPRING, MD, October 09, 2006
TO ALL RADIO AMATEURS
BID: $ANS-282.S2

CO-58 XI-V
Catalog Number: 28895
Launch Date: October 27, 2005

Status: Operational - CW only

Telemetry Downlink: 437.345MHz - FSK 1200bps using AFK protocol
Beacon: 437.465MHz - CW

Callsign: JQ1YGW

Oficial Webpage: http://www.space.t.u-tokyo.ac.jp/gs/satinfo-e.html#xi5

```
Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
[09252006]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launched: June 30, 2006

Status: Operational

Beacon:     436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS
[10022006]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launched: June 30,2003

Status: Semi-Operational - Constant Carrier only

Uplink: ?
Downlink: 437.3850 CW
          437.4700 1200 FM ax25 or SRLL (ACTIVE only near Japan ? )

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[09252006]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Current Mode(s): FM Repeater - V/U - FM 67 Hz PL Tone
                 PBBS -        V/U - 9k6
                 Digipeater -  OFF

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink:   145.880 MHZ FM
                       145.880 MHz USB
                       145.920 MHz FM 67Hz PL tone
                      1268.700 MHz FM 67Hz PL tone
Digital Downlinks:     435.150 MHz FM 38k4 Digital, PBP, 1 watt output
                      2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:        145.860 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      1268.700 mhz FM, 9k6 PBP Digital
Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
```

```
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[10092006]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: RECOVERY EFFORTS - REFRAIN FRON USAGE!!!

General Usage Uplink/Downlink:145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org
aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[09252006]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM
Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[08072006]
=====
RS-22 Mozhayets 4
Catalog Number: 27939
Launch Date: September 27, 2004

Status: Operational

Beacon: 435.3520 MHz CW
=====
```

AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Semi-operational, the digipeater command is on and open for APRS users.

Uplink: 145.900 FM
       145.920 FM
       145.940 FM
       145.960 FM
(using 1200-baud Manchester FSK)
Downlink: 437.026 MHz SSB (1200-baud PSK)
Mode-S Beacon: 2401.1428 MHz

Mode and Antenna Polarization:
U: RC 437.050 MHz RHCP
  PSK 437.025 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[04172006]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational

Telemetry Downlink: 145.826 MHz. FM (1200-baud AFSK).
approx. 10 days ON, 10 days OFF
Mode-S Beacon: 2401.500 MHz. ... OFF
UHFBeacon: 435.025 MHz. ... OFF

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Reception reports are requested to be sent to xxxxx@amsat.org (replace xxxxx by g3cwv), or post to AMSAT-BB.

During the period 15 June to 17 July 2006 nothing has been heard from the satellite. It was last heard on 05 May, just one day before the solar eclipses were due to start. These eclipses will continue until 04 August 2006, reaching a maximum duration of 22% around 19 June. If the satellite behaves in the same way as it did last year, regular 10 day transmissions should re-start, sometime in August.

Official webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[07172006]
=====
PCSAT-2
Catalog Number: 25544
Launch Date: August 1, 2005

Activated: August 3, 2005
Status: Decommissioning
Current Mode: OFF

Voice Digital Uplink: 145.990 MHz
Voice response Downlink: 437.975 MHz

Digital Downlink: 435.275 Mhz
Digital Uplink: 145.825 Mhz
ISS digipeater uplink: 145.990 Mhz

PSK-31 Downlink: 435.275 Mhz
PSK-31 Uplink: 29.401 Mhz

CALLSIGN: pcsat2

Official Webpage: http://web.usna.navy.mil/~bruninga/pcsat2.html
PCSAT2 APRS Packet page: http://www.findu.com/cgi-bin/pcsat2.cgi
aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[09252006]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: Voice
Digipeater: OFF

Expedition Crew 14 is:
Commander: Michael Lopez-Alegria - KE5GTK
Flight Engineer: Mikhail Tyurin - RZ3FT
Flight Engineer: Thomas Reiter - DF4TR

Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

SSTV TESTING:
Worldwide Reported Downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS, RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is NOT translated from Russian and posted.
[10092006]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-282.S3
WSR 282 Part 3 10/09/2006

AMSAT NEWS SERVICE BULLETIN 282.S3 FROM AMSAT HQ
SILVER SPRING, MD, October 09, 2006
TO ALL RADIO AMATEURS
BID: $ANS-282.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

AO-54 SUITSAT
Catalog Number:28933
Release Date: February 3,2006

Status: Re-Entered

Modes : FM Voice Telemetry/Greetings
        FM SSTV

Callsign: RS0RS
Downlink: 145.990 FM

```
Currently on the amsat-bb, there is a geussing game going on about when
Suitsat will re-enter the atmosphere.

Official webpage: http://www.suitsat.org
[09252006]
=====
NCUBE-2
Catalog Number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency:  437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog Number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 FM 67Hz CTCSS
Voice Downlink: 2401.835 FM
Packet Up/Downlink: 437.250 9k6 packet
Packet Downlink 2401.835 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01292006]
=====
TO-31 TMSAT-1
Catalog Number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink:   145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
PO-28 POSAT-1
Catalog Number: 22829
Launch Date: September 25, 1993

Status: Operational - Not open for Amatuer use
```

```
Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012006]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launched: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB
Beacon: 145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: Downlink only

Uplink: 145.875 145.900 145.925 145.950 MHz FM (1200-baud)
Downlink: 435.808 MHz PSK
Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01012006]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB
Beacon: 29.408 MHz
Robot: 29.454 MHz
[05232004]
=====
RS-13 RADIO SPORT RS-13
```

```
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB
Beacon: 145.860 MHz
Robot: 145.908 MHz
[05232004]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink 145.975 MHz FM
Downlink 435.070 MHz FM
[05092004]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink: 145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM
Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01092005]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational?

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB
Beacon: 29.352 MHz (intermittent)
SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplink: 145.84 145.86 145.88 145.90 MHz FM
(using 1200-baud Manchester FSK)
```

CW downlink: 437.125 MHz
Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[05232004]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[08152004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM
Broadcast Callsign: HL01-11
BBS: HL01-12

Jim, AA7KC, reports that KO-23's downlink transmitter continues in a non-operational status.
[05092004]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM (9600-baud FSK)
Downlink: 436.500 MHz FM
Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
PO-34 PANSAT
Catalog number: 25520

Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm

[ANS-WSR has no further information]
[09042006]
=====
SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

STatus: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz and 145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[08082004]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlink: 437.025 MHz 437.400 MHz
Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site
at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[05092004]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

```
Uplink V-band   145.840 - 145.990 MHz CW/LSB
      U-band   435.550 - 435.800 MHz CW/LSB
      L1-band 1269.250 - 1269.500 MHz CW/LSB
      L2-band 1268.325 - 1268.575 MHz CW/LSB
Downlink: S2-band 2401.225 - 2401.475 MHz CW/USB
         K-band 24,048.010 - 24,048.060 MHz CW/USB
Beacon:   2401.323
        24,048.035
```

[05232004]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational
Downlink: 437.075 MHz
Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[08152004]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz
Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[08152004]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, callsign KE6QMD, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]

=====

MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Operational

Uplink: 145.850 or 145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz
Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[11202005]

=====

AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink 435.275 1200-baud AFSK
Downlink 145.825 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01012006]

=====

DO-17 Dove
Catalog Number: 20440

Launch Date: January 22, 1990

Status: Non-operational.

Downlink: Downlink 145.825 MHz FM 1200 Baud AFSK
Beacon: 2401.220 MHz
[05012006]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-282.S4
WSR 282 Part 4 10/09/2006

AMSAT NEWS SERVICE BULLETIN 282.S4 FROM AMSAT HQ
SILVER SPRING, MD, October 09, 2006
TO ALL RADIO AMATEURS
BID: $ANS-282.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE
PROPOSED FOR LAUNCH AT THIS TIME:

PHASE 3E ?O-??
Catalog Number:
Proposed Launch Date: Early/Mid 2007

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/
[ANS-WSR wishes to thank William Leijenaar, PE1RAH for this week's report]
[04242006]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/amsat/listserv/menu.html

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

From 5836792323859700389
X-Google-Thread: 10e8ad,458a869687b35921,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news4.google.com!border1.nntp.dca.giganews.com!nntp.giganews.com!newsfeed00.sul.t-online.de!newsfeed01.sul.t-online.de!t-online.de!newsfeed.vmunix.org!peer-uk.news.demon.net!kibo.news.demon.net!news.demon.co.uk!demon!not-for-mail
From: "Pete Badham" <pete@g0wxj.demon.co.uk>

Newsgroups: rec.radio.amateur.space
Subject: Working AO-51 with TH-G71
Date: Sun, 15 Oct 2006 13:58:14 +0100
Lines: 10
Message-ID: <egtb98$mde$1$8300dec7@news.demon.co.uk>
NNTP-Posting-Host: g0wxj.demon.co.uk
X-Trace: news.demon.co.uk 1160917096 22958 80.177.172.151 (15 Oct 2006 12:58:16
GMT)
X-Complaints-To: abuse@demon.net
NNTP-Posting-Date: Sun, 15 Oct 2006 12:58:16 +0000 (UTC)
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.2962
X-Priority: 3
X-RFC2646: Format=Flowed; Original
X-Newsreader: Microsoft Outlook Express 6.00.2900.2869
X-MSMail-Priority: Normal
Xref: g2news2.google.com rec.radio.amateur.space:460

Hi gang,

With JOTA coming up, I am keen to have a try at working AO-51. It would
appear to be easier if you have duplex on the handie, but the TH-G71 doen't
have this function, anyone had any success using this handie to work this
sat?

Pete G0WXJ

From -3251962630713244153
X-Google-Thread: 10e8ad,778d36433be1ab12
X-Google-Thread: f9f20,778d36433be1ab12
X-Google-Attributes: gid10e8ad,gidf9f20,public
X-Google-Language: ENGLISH,ASCII
Path: g2news2.google.com!news3.google.com!newshub.sdsu.edu!elnk-nf2-pas!
newsfeed.earthlink.net!stamper.news.pas.earthlink.net!
newsread4.news.pas.earthlink.net.POSTED!b8b89250!not-for-mail
From: "Ted" <Ted@nospam.com>
Newsgroups: rec.radio.amateur.space,sci.space.station
References: <450d2930$1@news.vo.lu> <2006091713402675249%growl@tummycom>
<450e8824@news.vo.lu> <J5vGnD.CF@spsystems.net>
Subject: Re: How to receive ISS images ?
Lines: 44
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.2869
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.2962
X-RFC2646: Format=Flowed; Original
Message-ID: <EmrYg.9751$Y24.6625@newsread4.news.pas.earthlink.net>
Date: Sun, 15 Oct 2006 14:13:56 GMT
NNTP-Posting-Host: 69.91.46.69
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread4.news.pas.earthlink.net 1160921636 69.91.46.69 (Sun, 15 Oct 2006

```
07:13:56 PDT)
NNTP-Posting-Date: Sun, 15 Oct 2006 07:13:56 PDT
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news2.google.com rec.radio.amateur.space:461 sci.space.station:4644


Check out section 4.9 in the ISS familiarization manual (PDF page 110):

http://www1.jsc.nasa.gov/er/seh/td9702.pdf






"Henry Spencer" <henry@spsystems.net> wrote in message
news:J5vGnD.CF@spsystems.net...
> In article <450e8824@news.vo.lu>,  <Thierry> wrote:
>>> You can't. They go to a TDRS and I believe get encrypted.
>>
>>In theory, as ISS is quite low on orbit, and if the TDRS linked satellite
>>is
>>over my country (data easy to get using a software lik Thesky or any other
>>tracking software � la Prbitron), using a large parabolic antenna or even
>>a
>>dipole, it shouldn't be possible to get the signal ?
>
> Remember, these signals are not being broadcast -- they are beamed upward
> to TDRS (in geostationary orbit), at microwave frequencies where even
> modest-sized antennas are quite directional.  Similarly, TDRS is not
> broadcasting them -- it beams them downward to the TDRS ground station at
> White Sands.  Even when ISS is nearby, you're nowhere near either beam, so
> any signal leakage would be very weak.
>
> With a large dish antenna you could probably detect the carrier, but
> demodulating it would be quite a challenge with such a weak signal.
>
> And once you do demodulate it, what you've got is not a video signal, but
> a fast digital bit stream.  Some of the bits are compressed video; some
> aren't.  The format is certainly complex, almost certainly a custom design
> rather than anything standard (remember that it is 15-20 years old -- ISS
> development started a long time ago), and probably poorly documented.
>
> Finally, as others have mentioned, it's quite likely to be encrypted.
> --
> spsystems.net is temporarily off the air;               |   Henry Spencer
> mail to henry at zoo.utoronto.ca instead.               |
> henry@spsystems.net




From -5055708435559230031
X-Google-Thread: 10e8ad,6c9e041fb6cb4752,start
```

```
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news4.google.com!newsfeed.stanford.edu!
headwall.stanford.edu!newshub.sdsu.edu!elnk-nf2-pas!newsfeed.earthlink.net!
stamper.news.pas.earthlink.net!newsread1.news.pas.earthlink.net.POSTED!46041641!
not-for-mail
From: "JoAnne Maenpaa" <wb9jej_no-spam@earthling.com>
Newsgroups: rec.radio.amateur.space
Subject: WSR-289 AMSAT Weekly Satellite Report
Lines: 992
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <Kcq%g.12271$Lv3.5135@newsread1.news.pas.earthlink.net>
Date: Tue, 24 Oct 2006 15:22:18 GMT
NNTP-Posting-Host: 69.3.101.215
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread1.news.pas.earthlink.net 1161703338 69.3.101.215 (Tue, 24 Oct
2006 08:22:18 PDT)
NNTP-Posting-Date: Tue, 24 Oct 2006 08:22:18 PDT
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news2.google.com rec.radio.amateur.space:462

This report is organized into 4 parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites

SB SAT @ AMSAT W8ISS ANS-289.S1
WSR 289 Part 1 10/16/2006

AMSAT NEWS SERVICE BULLETIN 289.S1 FROM AMSAT HQ
SILVER SPRING, MD, October 16, 2006
TO ALL RADIO AMATEURS
BID: $ANS-289.S1

VO-52 HAMSAT
Catalog Number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/V - Indian Transponder

Frequencies:
-------------------
Indian Transponder:
Uplink:   435.220 MHz to 435.280 MHz LSB/CW
Downlink: 145.870 MHz to 145.930 MHz USB/CW

Dutch Transponder:
Uplink:   435.225MHz to 435.275MHz LSB/CW
```

```
Downlink: 145.875MHz to 145.925MHz USB/CW


Indian Beacon:  145.859330 MHZ CW
Dutch Beacon:   145.860MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsat.in/hamsat.htm

To know what transponder is switched on please listen for the beacon
that
is active. Each transponder has a different beacon.
[10022006]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational
Current Mode(s): FM Repeater - V/U - Low Power Users
                               V/U - QRP/JOTA
                 PBBS -        OFF
                 Digipeater -  OFF

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink:   145.880 MHZ FM
                       145.880 MHz USB
                       145.920 MHz FM 67Hz PL tone
                      1268.700 MHz FM 67Hz PL tone
Digital Downlinks:     435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
                      2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:        145.860 MHz FM, 9k6 Digital, Pacsat Broadcast
Protocol
                      1268.700 mhz FM, 9k6 PBP Digital

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[10162006]
```

```
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Uplink:   145.850 MHz (67.0 Hz PL tone) (See below for operating
procedures)
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The order of operation is thus: (allow for Doppler as necessary)
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute
timer
   on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the
repeater
   on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset
the 10
   minute timer.
[04172006]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: OPERATIONAL

Voice/CW Mode JA
Uplink:   145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon:   435.795 MHz

Digital Mode JD
Uplink:   145.850 145.870 145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

unOfficial Webpage:
```

http://www.amsat.org/amsat-new/satellites/satInfo.php?sat
ID=5&retURL=/satellites/status.php
[10162006]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

```
Uplink:   145.850 MHz FM
Downlink: 436.795 MHz FM
```

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[01012006]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational depending on amount of Sunlight
Current Reported mode: Mode-A

```
Uplink:   145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink:  29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons:   29.502 MHz
          145.972 MHz
          435.100 MHz
         2304.100 MHz
```

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php
The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
AO-7 users are requested to log their contacts and observations about
AO-7,
especially any unexpected mode changes.
AO-07 telemetry software webpage:
http://www.qsl.net/k3tz/files/K3TZ_AO-07_Telemetry_Decoder_0.5.zip

Please keep your power low! For additional information please read the
AO-7
Usage Guidelines on the AO-7 Log and Resource Site located at:
http://www.planetemily.com/ao7
[04242006]
=====

INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: Voice
Digipeater: OFF

The Expedition 14 crew is:
Commander: Michael Lopez-Alegria - KE5GTK
Flight Engineer: Mikhail Tyurin - RZ3FT
Flight Engineer: Thomas Reiter - DF4TR

Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

SSTV TESTING:
Worldwide Reported Downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS, RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is NOT translated from Russian and posted.
[10092006]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-289.S2

WSR 289 Part 2 10/16/2006

AMSAT NEWS SERVICE BULLETIN 289.S2 FROM AMSAT HQ
SILVER SPRING, MD, October 16, 2006
TO ALL RADIO AMATEURS
BID: $ANS-289.S2

CO-58 XI-V
Catalog Number: 28895
Launch Date: October 27, 2005

Status: Operational - CW only

Telemetry Downlink: 437.345MHz - FSK 1200bps using AFK protocol
Beacon: 437.465MHz - CW

Callsign: JQ1YGW

Oficial Webpage: http://www.space.t.u-tokyo.ac.jp/gs/satinfo-e.html#xi5
Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
[09252006]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launched: June 30, 2006

Status: Operational

Beacon: 436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS
[10022006]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launched: June 30,2003

Status: Semi-Operational - Constant Carrier only

Uplink: ?
Downlink: 437.3850 CW
          437.4700 1200 FM ax25 or SRLL (ACTIVE only near Japan ?)

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[09252006]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Current Mode(s): FM Repeater - V/U

V/U - QRP/JOTA
PBBS - OFF
Digipeater - OFF

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.880 MHZ FM
145.880 MHz USB
145.920 MHz FM 67Hz PL tone
1268.700 MHz FM 67Hz PL tone
Digital Downlinks: 435.150 MHz FM 38k4 Digital, PBP, 1 watt output
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Digital, Pacsat Broadcast Protocol
1268.700 mhz FM, 9k6 PBP Digital
Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[10162006]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: RECOVERY EFFORTS - REFRAIN FRON USAGE!!!

General Usage Uplink/Downlink:145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org
aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[09252006]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Downlink: 435.225 MHz FM (9600-baud FSK)
435.325 Mhz - Not Available - temperature problems
Uplinks: 145.850 FM

```
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM
Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[08072006]
=====
RS-22 Mozhayets 4
Catalog Number: 27939
Launch Date: September 27, 2004

Status: Operational

Beacon: 435.3520 MHz CW
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Semi-operational, the digipeater command is on and open for
APRS users.

Uplink: 145.900 FM
       145.920 FM
       145.940 FM
       145.960 FM
(using 1200-baud Manchester FSK)
Downlink: 437.026 MHz SSB (1200-baud PSK)
Mode-S Beacon: 2401.1428 MHz

Mode and Antenna Polarization:
U: RC 437.050 MHz RHCP
  PSK 437.025 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[04172006]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational

Telemetry Downlink: 145.826 MHz. FM (1200-baud AFSK).
```

approx. 10 days ON, 10 days OFF
Mode-S Beacon: 2401.500 MHz. ... OFF
UHFBeacon: 435.025 MHz. ... OFF

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Reception reports are requested to be sent to xxxxx@amsat.org (replace xxxxx
by g3cwv), or post to AMSAT-BB.

During the period 15 June to 17 July 2006 nothing has been heard from the
satellite. It was last heard on 05 May, just one day before the solar
eclipses were due to start. These eclipses will continue until 04 August
2006, reaching a maximum duration of 22% around 19 June. If the satellite
behaves in the same way as it did last year, regular 10 day transmissions
should re-start, sometime in August.

Official webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[07172006]
=====
PCSAT-2
Catalog Number: 25544
Launch Date: August 1, 2005

Activated: August 3, 2005
Status: Decommissioning
Current Mode: OFF

Voice Digital Uplink: 145.990 MHz
Voice response Downlink: 437.975 MHz

Digital Downlink: 435.275 Mhz
Digital Uplink: 145.825 Mhz
ISS digipeater uplink: 145.990 Mhz

PSK-31 Downlink: 435.275 Mhz
PSK-31 Uplink: 29.401 Mhz

CALLSIGN: pcsat2

Official Webpage: http://web.usna.navy.mil/~bruninga/pcsat2.html
PCSAT2 APRS Packet page: http://www.findu.com/cgi-bin/pcsat2.cgi
aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[09252006]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS

Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: Voice
Digipeater: OFF

Expedition Crew 14 is:
Commander: Michael Lopez-Alegria - KE5GTK
Flight Engineer: Mikhail Tyurin - RZ3FT
Flight Engineer: Thomas Reiter - DF4TR

Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

SSTV TESTING:
Worldwide Reported Downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS, RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is NOT translated from Russian and posted.
[10092006]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-289.S3
WSR 289 Part 3 10/16/2006

AMSAT NEWS SERVICE BULLETIN 289.S3 FROM AMSAT HQ
SILVER SPRING, MD, October 16, 2006
TO ALL RADIO AMATEURS
BID: $ANS-289.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

AO-54 SUITSAT
Catalog Number:28933
Release Date: February 3,2006

Status: Re-Entered

Modes : FM Voice Telemetry/Greetings
        FM SSTV

Callsign: RS0RS
Downlink: 145.990 FM

Currently on the amsat-bb, there is a geussing game going on about when Suitsat will re-enter the atmosphere.

Official webpage: http://www.suitsat.org
[09252006]
=====
NCUBE-2
Catalog Number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog Number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 FM 67Hz CTCSS
Voice Downlink: 2401.835 FM
Packet Up/Downlink: 437.250 9k6 packet
Packet Downlink 2401.835 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01292006]

=====
TO-31 TMSAT-1
Catalog Number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink: 145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
PO-28 POSAT-1
Catalog Number: 22829
Launch Date: September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012006]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launched: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB
Beacon: 145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: Downlink only

Uplink: 145.875 145.900 145.925 145.950 MHz FM (1200-baud)
Downlink: 435.808 MHz PSK

```
Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01012006]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB
Beacon: 29.408 MHz
Robot: 29.454 MHz
[05232004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB
Beacon: 145.860 MHz
Robot: 145.908 MHz
[05232004]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink 145.975 MHz FM
Downlink 435.070 MHz FM
[05092004]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink: 145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM
Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01092005]
=====
```

RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational?

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB
Beacon: 29.352 MHz (intermittent)
SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]

=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplink: 145.84 145.86 145.88 145.90 MHz FM
(using 1200-baud Manchester FSK)
CW downlink: 437.125 MHz
Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[05232004]

=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[08152004]

=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM
Broadcast Callsign: HL01-11

BBS: HL01-12

Jim, AA7KC, reports that KO-23's downlink transmitter continues in a non-operational status.
[05092004]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM (9600-baud FSK)
Downlink: 436.500 MHz FM
Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm

[ANS-WSR has no further information]
[09042006]
=====
SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

STatus: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz

```
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz and 145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[08082004]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlink: 437.025 MHz 437.400 MHz
Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site
at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[05092004]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplink V-band   145.840 - 145.990 MHz CW/LSB
      U-band   435.550 - 435.800 MHz CW/LSB
      L1-band 1269.250 - 1269.500 MHz CW/LSB
      L2-band 1268.325 - 1268.575 MHz CW/LSB
Downlink: S2-band 2401.225 - 2401.475 MHz CW/USB
         K-band 24,048.010 - 24,048.060 MHz CW/USB
Beacon:   2401.323
        24,048.035
[05232004]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational
Downlink: 437.075 MHz
Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
```

```
[08152004]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz
Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[08152004]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
call-
sign KE6QMD, as per the user service agreement located at the following
URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Operational

Uplink: 145.850 or 145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz
Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial
land and weather imaging payloads offers FM and FSK Amateur Radio
communica-
tion.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a
collaborative effort between the Malaysian government and Surrey
```

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Satellite
Technology Ltd.
[11202005]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink 435.275 1200-baud AFSK
Downlink 145.825 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink: Downlink 145.825 MHz FM 1200 Baud AFSK
Beacon: 2401.220 MHz
[05012006]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-289.S4
WSR 289 Part 4 10/16/2006

AMSAT NEWS SERVICE BULLETIN 289.S4 FROM AMSAT HQ
SILVER SPRING, MD, October 16, 2006
TO ALL RADIO AMATEURS
BID: $ANS-289.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE
PROPOSED FOR LAUNCH AT THIS TIME:

PHASE 3E ?O-??
Catalog Number:
Proposed Launch Date: Early/Mid 2007
```

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/
[ANS-WSR wishes to thank William Leijenaar, PE1RAH for this week's report]
[04242006]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/amsat/listserv/menu.html

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the

memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

```
From 7023824240096944229
X-Google-Thread: 10e8ad,b54c12c48aaa2ca1,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news4.google.com!newsfeed.stanford.edu!
headwall.stanford.edu!newshub.sdsu.edu!elnk-nf2-pas!newsfeed.earthlink.net!
stamper.news.pas.earthlink.net!newsread1.news.pas.earthlink.net.POSTED!46041641!
not-for-mail
From: "JoAnne Maenpaa" <wb9jej_no-spam@earthling.com>
Newsgroups: rec.radio.amateur.space
Subject: ANS-288 AMSAT News Service Weekly Bulletins
Lines: 256
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <Mcq%g.12272$Lv3.7940@newsread1.news.pas.earthlink.net>
Date: Tue, 24 Oct 2006 15:22:20 GMT
NNTP-Posting-Host: 69.3.101.215
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread1.news.pas.earthlink.net 1161703340 69.3.101.215 (Tue, 24 Oct
2006 08:22:20 PDT)
NNTP-Posting-Date: Tue, 24 Oct 2006 08:22:20 PDT
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news2.google.com rec.radio.amateur.space:463
```

AMSAT NEWS SERVICE
ANS-288

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:

- FCC Rules Changes Affect Amateur Radio Space Operations

* AO-51 QRP Repeater to be Activated for JOTA on October 21-22
* Satellite DX - Sudan Active During October
* Help Wanted: AMSAT News Service Rotating Editor Positions Available
* Thirty Songs To Be Broadcast From Lunar-Probing Satellite
* PCSAT-1 Enters Negative Power Budget Due to Eclipse
* ARISS Status for the Week of October 9, 2006

SB SAT @ AMSAT $ANS-288.01
FCC Rules Changes Affect Amateur Radio Space Operations

AMSAT News Service Bulletin 288.01
>From AMSAT HQ SILVER SPRING, MD.
October 15, 2006
To All RADIO AMATEURS
BID: $ANS-288.01

The Federal Communications Commission released a Report and Order which modifies several amateur radio regulations. Several aspects of the amateur rules are addressed. Two key areas will affect operators interested in space communications. These include:

 + Retransmission of Space Station Communications
 + Space Station Launch Notification (to the FCC)

Current FCC rules prohibit amateur stations from retransmitting programs or signals emanating from any other type of radio station with certain exceptions including allowing amateur stations to retransmit communications originating on United States Government frequencies between a space shuttle spacecraft and associated Earth stations. The FCC will amend its rules to additionally allow retransmission of communications between Earth stations and the International Space Station. The FCC agreed that retransmission of space communications is a public service that may be used as an educational resource.

Another rules change involves the required timing of notification to the FCC to launch and initiate transmissions from orbiting satellites in the Amateur Satellite Service.

The Commission left existing rules in effect in regards to orbital space debris mitigation from amateur satellites.

Full details can be found in the documents available on-line at:
http://hraunfoss.fcc.gov/edocs_public/attachmatch/FCC-06-149A1.pdf
http://hraunfoss.fcc.gov/edocs_public/attachmatch/FCC-06-149A1.txt
http://hraunfoss.fcc.gov/edocs_public/attachmatch/FCC-06-149A1.doc

[ANS thanks the FCC for the above information]

/EX

SB SAT @ AMSAT $ANS-288.02
AO-51 QRP Repeater to be Activated for JOTA on October 21-22

AMSAT News Service Bulletin 288.02
>From AMSAT HQ SILVER SPRING, MD.
October 15, 2006
To All RADIO AMATEURS
BID: $ANS-288.02

The AO-51 Operations Group announced plans for AMSAT's support of the Jamboree on the Air event (JOTA) on the weekend of October 21st and 22nd. AO-51 will run in dual repeater mode with the 435.150 QRP repeater reserved for JOTA contacts on the weekend. Please yield the 435.150 repeater to JOTA contacts, especially between two JOTA stations. The normal AO-51 QRP rules apply: 10 watts to omni or handheld antennas only.

Visit the AO-51 schedule at:
http://www.amsat.org/amsat-new/echo/ControlTeam.php

[ANS thanks the AO-51 Operations Group for the above information]

/EX

SB SAT @ AMSAT $ANS-288.03
Satellite DX - Sudan Active During October

AMSAT News Service Bulletin 288.03
>From AMSAT HQ SILVER SPRING, MD.
October 15, 2006
To All RADIO AMATEURS
BID: $ANS-288.03

A two week window of opportunity for satellite DX into Sudan may give amateurs in Africa, Europe and the Middle East a contact into a new country. ST2NH, operator Nader, has made contacts via FO-29 with stations in Europe.

[ANS thanks Domenico, I8CVS and Carles, EB3FYM for the above information]

/EX

SB SAT @ AMSAT $ANS-288.04
Help Wanted: AMSAT News Service Rotating Editor Positions Available

AMSAT News Service Bulletin 288.04
>From AMSAT HQ SILVER SPRING, MD.
October 15, 2006
To All RADIO AMATEURS
BID: $ANS-288.04

The AMSAT News Service (ANS) is responsible for researching, writing, editing, and publishing the weekly amateur satellite news bulletins. We have a team of editors who take a turn weekly to publish the bulletins.

This generally involves taking a turn about every 4 weeks.

At present we a looking for interested satellite enthusiasts to join the ANS editorial team. Professional writing/editing experience is not a requirement. Your interest and enthusiasm in following and reporting on amateur radio in space will get you started!

If you can commit to working on the bulletins for a week on a rotating basis please reply to JoAnne K9JKM, ANS Senior Editor at k9jkm@amsat.org.

[ANS thanks AMSAT for the above information]

/EX

SB SAT @ AMSAT $ANS-288.05
Thirty Songs To Be Broadcast From Lunar-Probing Satellite

AMSAT News Service Bulletin 288.05
>From AMSAT HQ SILVER SPRING, MD.
October 15, 2006
To All RADIO AMATEURS
BID: $ANS-288.05

China announced a list of 30 songs to be broadcast to Earth next year from its first lunar-probing satellite. The Commission of Science, Technology and Industry for National Defense, in charge of the lunar project, announced Friday a list of 30 tunes to be played from the lunar-probing satellite.

The lunar satellite is designed to obtain 3D images of the lunar surface, analyze the content of useful elements and materials, and probe the depth of the lunar soil and the space environment between the earth and the moon.

The satellite will be 2,350 kg in weight with 130 kg of payload, and will orbit the moon for one year. A Chinese Long March III A carrier rocket will be used to launch the satellite.

The satellite launch at the Xichang Satellite Launch Center in southwest China's Sichuan Province next year will be followed by the landing of an unmanned vehicle on the moon in 2010 and collecting samples of lunar soil with an unmanned vehicle in 2020.

[ANS thanks SpaceDaily.com for the above information]

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SB SAT @ AMSAT $ANS-288.06
PCSAT-1 Enters Negative Power Budget Due to Eclipse

AMSAT News Service Bulletin 288.06

>From AMSAT HQ SILVER SPRING, MD.
October 15, 2006
To All RADIO AMATEURS
BID: $ANS-288.06

On 11 Oct, after a full 2 weeks of normal operations, PCSAT-1 returned to negative power budget with the default callsign of W3ADO-1. Bob, WB4APR of the US Naval Academy Satellite Lab said, "We have tried on several orbits to restore all parameters, but they are all lost during the next eclipse 30 minutes later."

Bob continues, "So it looks like we will not have reliable APRS digipeating until the next full sun period in the first week of January and then again in the middle of April. But then it should really be fun, because there will be 3 APRS satellites all in orbit at the same time on 145.825."

[ANS thanks Bob, WB4APR for the above information]

/EX

SB SAT @ AMSAT $ANS-288.07
ARISS Status for the Week of October 9, 2006

AMSAT News Service Bulletin 288.07
>From AMSAT HQ SILVER SPRING, MD.
October 15, 2006
To All RADIO AMATEURS
BID: $ANS-288.07

1. Upcoming School Contacts

The ARISS team continues to work on scheduling the Expedition 14 school contacts. The next one is expected to take place at the end of October.

2. AMSAT/ARISS Meetings Held

The AMSAT-NA Annual Meeting/Space Symposium was held October 5 - 8 in San Francisco. ARISS Chairman Frank Bauer gave two presentations during the Symposium. The first speech given covered the tenth anniversary of ARISS and the second was on the SuitSat-2 project. Astronaut Bill McArthur, KC5ACR, was the keynote speaker at the AMSAT banquet on Saturday evening. Conferences continue as the ARISS International Team Face to Face Meeting kicks off today, October 9.

3. ARISS Members Visit JSC

In August, ARISS-U.S. team members visited several NASA offices in Houston to discuss the future of Amateur Radio in space. ARRL reported on this in its story, "ARISS Team 'Always on a Roll,' ARRL Liaison Says."

See: http://www.arrl.org/news/stories/2006/10/03/101/?nc=1

The article also appeared in the ARRL Letter:
http://www.arrl.org/arrlletter/06/1006/

4. ESA Article on Greek Contact

Students attending the ESA Space Camp in Patras, Greece enjoyed the experience of speaking with Thomas Reiter, DF4TR. ESA Education ran an article on the event.
See: http://www.esa.int/esaED/SEMYH76LARE_index_0.html

[ANS thanks Carol, KB3LKI for the above information]

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In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM

From -7118001518306419769
X-Google-Thread: 10e8ad,99f4f58c5252358c,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news3.google.com!news4.google.com!newsfeed.stanford.edu!headwall.stanford.edu!newshub.sdsu.edu!elnk-nf2-pas!newsfeed.earthlink.net!stamper.news.pas.earthlink.net!newsread1.news.pas.earthlink.net.POSTED!46041641!not-for-mail
From: "JoAnne Maenpaa" <wb9jej_no-spam@earthling.com>
Newsgroups: rec.radio.amateur.space
Subject: ANS-295 AMSAT News Service Weekly Bulletins
Lines: 344
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <Pcq%g.12273$Lv3.3005@newsread1.news.pas.earthlink.net>
Date: Tue, 24 Oct 2006 15:22:23 GMT
NNTP-Posting-Host: 69.3.101.215
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread1.news.pas.earthlink.net 1161703343 69.3.101.215 (Tue, 24 Oct 2006 08:22:23 PDT)
NNTP-Posting-Date: Tue, 24 Oct 2006 08:22:23 PDT

Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news2.google.com rec.radio.amateur.space:464

AMSAT NEWS SERVICE
ANS-295

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:

* Japanese HITSAT Designated as HO-59
* AO-27 Still Silent
* OSCAR-11 Heard Again
* Tax Deductible Gifts to AMSAT
* Satellite DX Opportunities for Africa and Asia
* Good News From Ariane 5 Launch
* NASA Offers Challenge to K-12 Students
* ARISS Status for the Week of October 16, 2006

SB SAT @ AMSAT $ANS-295.01
Japanese HITSAT Designated as HO-59

AMSAT News Service Bulletin 295.01
From AMSAT HQ SILVER SPRING, MD.
October 22, 2006
To All RADIO AMATEURS
BID: $ANS-295.01

AMSAT's OSCAR Designation Coordinator, Bill Tynan, W3XO announced this week that the Japanese HITSAT satellite has been given an OSCAR number.

Bill wrote to the HITSAT Team at the Hokkaido Institute of Technology, "By the authority vested in me by the AMSAT-NA President, I am pleased to issue an OSCAR number for the HIT-SAT amateur radio satellite. From what I can determine, HIT-SAT complies with all of the requirements for an OSCAR number. Therefore, HIT-SAT will henceforth be known as HIT-SAT-OSCAR-59 or HO-59."

Bill concluded with, "AMSAT-NA and I wish to congratulate you and your entire team for the successful construction, testing and launching of HIT-SAT. Your work inspires others to follow your lead."

The CubeSat has the callsign JR8YJT. At present it is transmitting CW telemetry on 437.275 MHz with a transmitter power of 100 mW. The 1200 baud FM Packet downlink on 437.425 MHz is active only when the satellite is over Japan.

Once it's fully operational, HIT-SAT will permit Earth station operators to request certain parameters by transmitting DTMF commands on the 145.980 MHz uplink. The satellite can report back time/date, temperature and power supply voltages and thank the Earth station by call sign. Only HIT-SAT ground station controllers can access the satellite at this point, however.

[ANS thanks Bill Tynan, W3XO for the above information]

/EX

SB SAT @ AMSAT $ANS-295.02
AO-27 Still Silent

AMSAT News Service Bulletin 295.02
From AMSAT HQ SILVER SPRING, MD.
October 22, 2006
To All RADIO AMATEURS
BID: $ANS-295.02

Michael, N3UC, one of AO-27's controllers reported on October 17, "For the last 5 weeks ground controllers have been trying to contact AO-27. At this point we have not been able to turn it on. We still have a few tricks that we are planning on trying but these take time. We are hoping that we can re-establish communications. At this time, we don't have an estimate for when AO-27 will be back on the air. The satellite is now in its 14th year on orbit. We will continue to try to recover AO-27 until we run out of ideas."

AO-27 was last heard in May 2006 prior to its entering its eclipse season. When the satellite's solar cells were not receiving enough illumination it meanth the batteries are dropping below the watchdog values and turning off the controller schedule.

The latest AO-27 information can be found on-line at:
http://www.ao27.org.

[ANS thanks Michael, N3UC for the above information]

/EX

SB SAT @ AMSAT $ANS-295.03
OSCAR-11 Heard Again

AMSAT News Service Bulletin 295.03
From AMSAT HQ SILVER SPRING, MD.
October 22, 2006
To All RADIO AMATEURS
BID: $ANS-295.03

Clive, G3CWV reports that OSCAR-11 is back! He said, "It was first heard by Peter ZL3TC, October 18, and later by Paul KB5MU. It had been silent since August 26. Many thanks for those reports."

OSCAR-11 requires illumination of its solar panels to work. Clive continued, "I heard very strong signals on October 19 07:28 UTC pass. If the watchdog cycle continues to operate normally, the 145.826 MHz. beacon should transmit until around 28 October."

More OSCAR-11 information can be found at Clive's website:
http://www.users.zetnet.co.uk/clivew/

[ANS thanks Clive, G3CWV for the above information]

/EX

SB SAT @ AMSAT $ANS-295.04
Tax Deductible Gifts to AMSAT

AMSAT News Service Bulletin 295.04
From AMSAT HQ SILVER SPRING, MD.
October 22, 2006
To All RADIO AMATEURS
BID: $ANS-295.04

Gunther, W8GSM, AMSAT Treasurer said this week, "Often AMSAT members have asked if they can make a contribution to AMSAT via their local United Way drive?"

According to Leslie J. Talley, Director, Community and Public Sector Workplace Campaigns at the National U-W office who informed Gunther that there are NO national agencies within U-W. Every agency that wishes to be eligible to receive donations must go through that local U-W campaign office and seek approval.

Gunther continues, "With that in mind, I would encourage anyone who wishes to make such a gift to call their local U-W director and ask if they will allow such a gift to AMSAT. AMSAT does not have the staff to canvas the country and establish these hundreds of relationships."

One alternative is to just reduce your U-W gift and write a check to AMSAT. Both are tax deductible as charitable donations. (Check with your individual tax advisor to review your specific circumstances and deductibility).

U.S. Federal Employees - Again this year AMSAT is a member of the Combined Federal Campaign (CFC). The mission of the CFC is to promote and support philanthropy through a program that is employee focused, cost-efficient, and effective in providing all federal employees the opportunity to improve the quality of life for all. As the world's largest and most successful annual workplace giving campaign, each year, more than 300 CFC campaigns throughout the country and internationally help to raise millions of dollars for eligible non-profit organizations.

Gunther Meisse, AMSAT treasurer has announced that any Federal employee can make a contribution to your Radio Amateur Satellite Corporation when they complete their pledge for 2006.

AMSAT is listed as Agency Number CFC 2944

Your contribution directly supports AMSAT's educational outreach and satellite construction projects including work on AMSAT-Eagle. Pledges may be made by Federal civilian, postal and military donors during the campaign season.

The campaign runs from September 1st to December 15th, 2006.

To learn more about CFC visit the CFC website at:
http://www.opm.gov/cfc/

[ANS thanks Gunther, W8GSM for the above information]

/EX

SB SAT @ AMSAT $ANS-295.05
Satellite DX Opportunities for Africa and Asia

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October 22, 2006
To All RADIO AMATEURS
BID: $ANS-295.05

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South Africa, Madagascar, Mauritius and the Antarctic will be within range for contacts from Crozet via AO-51, SO-50, and the ISS reapeter if it is active. Possible digital activity via ISS or PCSAT-1 will be attempted.

More information is available at:
http://f4avi.homelinux.net/f4egx/cro2006.html.

A satellite DX opportunity for Asian satellite operators was received this week. The TAMSAT Group and Siam DX Group have announced a trip to Cambodia during November 20-26, 2006. The group will use an XU7 callsign from Seehanuview or Kumpongsom. QSOs are planned for the FO-29, SO-50, AO-51, and VO-52 in CW, SSB, FM modes, as appropriate.
Additional information will be available on the group's website at:

http://www.tamsat.org/bb.

[ANS thanks Nicolas, F4EGX for the Crozet information and Tanan, HS1JAN for the Cambodia information]

/EX

SB SAT @ AMSAT $ANS-295.06
Good News From Ariane 5 Launch

AMSAT News Service Bulletin 295.06
From AMSAT HQ SILVER SPRING, MD.
October 22, 2006
To All RADIO AMATEURS
BID: $ANS-295.06

The fourth Ariane 5 launch Of 2006 performed flawlessly. On 13 October 2006, an Ariane 5 ECA launcher lifted off from Europe's Spaceport in French Guiana on its mission to place two satellites into geostationary transfer orbits and deploy a demonstration antenna. The satellites were accurately injected into the correct transfer orbits about 30 minutes later.

The payload satellites were DIRECTV 9S, which will supply television broadcast services to the contiguous United States of America, Alaska and Hawaii, and Optus D1, which will provide fixed communications and satellite broadcast services over Australia and New Zealand.

The mission also carried an additional passenger, mounted on the Ariane Structure for Auxiliary Payloads (ASAP) platform at the base of the payload stack. The Japanese Space Agency's LDREX-2, a 1/25th scale version of an antenna that will be used on the ETS-8 engineering test satellite, was flown to validate the deployment process of the lightweight reflector.

[ANS thanks SpaceDaily.com for the above information]

/EX

SB SAT @ AMSAT $ANS-295.07
NASA Offers Challenge to K-12 Students

AMSAT News Service Bulletin 295.07
From AMSAT HQ SILVER SPRING, MD.
October 22, 2006
To All RADIO AMATEURS
BID: $ANS-295.07

The International Space Station is growing, and NASA's Node 2 is the next U.S. pressurized module scheduled for installation on the orbiting laboratory. The node will provide more room for station crews to live and work, but it needs a name.

Students in kindergarten through grade 12 attending U.S. schools and children of American personnel overseas are being asked to help NASA name the module and become part of the history of the station. The module is at NASA's Kennedy Space Center, Fla., and is targeted for launch in late 2007. The node will be a connecting port and passageway to additional international science labs and space supply vehicles. It also will be a work platform for the station's robotic arm.

Name the International Space Station Node 2 Challenge requires students to work together as a class or school to create their own Node 2 model. Students will name their node, write a brief description explaining the choice and take digital pictures to send to NASA.

The submitted image of the model will not be judged, but it will be the ticket to enter the name challenge. Submissions will be reviewed by a panel of NASA scientists, engineers and educators. The deadline to submit model images and names is Dec. 1. The winning entry will be announced in early 2007. To register a school or class, teachers or administrators should send an email to: NASA-ESC@nasa.gov.

For information about Node 2, visit:
http://www.nasa.gov/mission_pages/station/structure/elements/node2.html

For additional information about the Space Station Node 2 Challenge, visit: http://esc.nasa.gov

[ANS thanks NASA for the above information]

/EX

SB SAT @ AMSAT $ANS-295.08
ARISS Status for the Week of October 16, 2006

AMSAT News Service Bulletin 295.08
From AMSAT HQ SILVER SPRING, MD.
October 22, 2006
To All RADIO AMATEURS
BID: $ANS-295.08

1. Upcoming School Contacts

The school contact that was tentatively planned for the end of October was not approved due to the Progress 23P docking and related activities. ARISS continues to work on scheduling school contacts for Expedition 14.

2. ARISS International Meeting Held

The ARISS International Team meeting was held in San Francisco on Monday and Tuesday, October 9 - 10 and a SuitSat-2 technical discussion took place on October 8. Presentations given included delegate reports from each region, onboard radio systems, and slow scan television (SSTV). Minutes and presentations will be posted to the AMSAT and ARISS websites in the near future.

3. Expedition 13 Crew Debrief

The ARISS-U.S. team has compiled questions for the crew debrief with Jeff Williams, KD5TVQ. ARISS-Russia expects to speak with the crew this week.

[ANS thanks Carol, KB3LKI for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM

From -5644094534363875985
X-Google-Thread: 10e8ad,99f4f58c5252358c
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news3.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx01.iad01.newshosting.com!newshosting.com!
207.69.154.102.MISMATCH!elnk-atl-nf2!newsfeed.earthlink.net!
stamper.news.atl.earthlink.net!stamper.news.pas.earthlink.net!
newsread3.news.pas.earthlink.net.POSTED!46041641!not-for-mail
From: "JoAnne Maenpaa" <wb9jej_no-spam@earthling.com>
Newsgroups: rec.radio.amateur.space
Subject: ANS-295 AMSAT News Service Weekly Bulletins
Lines: 344
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <mp90h.278$zf.140@newsread3.news.pas.earthlink.net>
Date: Thu, 26 Oct 2006 21:04:18 GMT
NNTP-Posting-Host: 66.167.68.34
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread3.news.pas.earthlink.net 1161896658 66.167.68.34 (Thu, 26 Oct

2006 14:04:18 PDT)
NNTP-Posting-Date: Thu, 26 Oct 2006 14:04:18 PDT
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news2.google.com rec.radio.amateur.space:465

AMSAT NEWS SERVICE
ANS-295

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:

* Japanese HITSAT Designated as HO-59
* AO-27 Still Silent
* OSCAR-11 Heard Again
* Tax Deductible Gifts to AMSAT
* Satellite DX Opportunities for Africa and Asia
* Good News From Ariane 5 Launch
* NASA Offers Challenge to K-12 Students
* ARISS Status for the Week of October 16, 2006

SB SAT @ AMSAT $ANS-295.01
Japanese HITSAT Designated as HO-59

AMSAT News Service Bulletin 295.01
From AMSAT HQ SILVER SPRING, MD.
October 22, 2006
To All RADIO AMATEURS
BID: $ANS-295.01

AMSAT's OSCAR Designation Coordinator, Bill Tynan, W3XO announced this week that the Japanese HITSAT satellite has been given an OSCAR number.

Bill wrote to the HITSAT Team at the Hokkaido Institute of Technology, "By the authority vested in me by the AMSAT-NA President, I am pleased to issue an OSCAR number for the HIT-SAT amateur radio satellite. From what I can determine, HIT-SAT complies with all of the requirements for an OSCAR number. Therefore, HIT-SAT will henceforth be known as HIT-SAT-OSCAR-59 or HO-59."

Bill concluded with, "AMSAT-NA and I wish to congratulate you and your entire team for the successful construction, testing and launching of HIT-SAT. Your work inspires others to follow your lead."

The CubeSat has the callsign JR8YJT. At present it is transmitting

CW telemetry on 437.275 MHz with a transmitter power of 100 mW. The 1200 baud FM Packet downlink on 437.425 MHz is active only when the satellite is over Japan.

Once it's fully operational, HIT-SAT will permit Earth station operators to request certain parameters by transmitting DTMF commands on the 145.980 MHz uplink. The satellite can report back time/date, temperature and power supply voltages and thank the Earth station by call sign. Only HIT-SAT ground station controllers can access the satellite at this point, however.

[ANS thanks Bill Tynan, W3XO for the above information]

/EX

SB SAT @ AMSAT $ANS-295.02
AO-27 Still Silent

AMSAT News Service Bulletin 295.02
From AMSAT HQ SILVER SPRING, MD.
October 22, 2006
To All RADIO AMATEURS
BID: $ANS-295.02

Michael, N3UC, one of AO-27's controllers reported on October 17, "For the last 5 weeks ground controllers have been trying to contact AO-27. At this point we have not been able to turn it on. We still have a few tricks that we are planning on trying but these take time. We are hoping that we can re-establish communications. At this time, we don't have an estimate for when AO-27 will be back on the air. The satellite is now in its 14th year on orbit. We will continue to try to recover AO-27 until we run out of ideas."

AO-27 was last heard in May 2006 prior to its entering its eclipse season. When the satellite's solar cells were not receiving enough illumination it meanth the batteries are dropping below the watchdog values and turning off the controller schedule.

The latest AO-27 information can be found on-line at:
http://www.ao27.org.

[ANS thanks Michael, N3UC for the above information]

/EX

SB SAT @ AMSAT $ANS-295.03
OSCAR-11 Heard Again

AMSAT News Service Bulletin 295.03
From AMSAT HQ SILVER SPRING, MD.
October 22, 2006
To All RADIO AMATEURS

BID: $ANS-295.03

Clive, G3CWV reports that OSCAR-11 is back! He said, "It was first heard by Peter ZL3TC, October 18, and later by Paul KB5MU. It had been silent since August 26. Many thanks for those reports."

OSCAR-11 requires illumination of its solar panels to work. Clive continued, "I heard very strong signals on October 19 07:28 UTC pass. If the watchdog cycle continues to operate normally, the 145.826 MHz. beacon should transmit until around 28 October."

More OSCAR-11 information can be found at Clive's website:
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[ANS thanks Nicolas, F4EGX for the Crozet information and Tanan, HS1JAN for the Cambodia information]

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October 22, 2006
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[ANS thanks SpaceDaily.com for the above information]

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October 22, 2006
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is the next U.S. pressurized module scheduled for installation
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and children of American personnel overseas are being asked to
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Name the International Space Station Node 2 Challenge requires
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The deadline to submit model images and names is Dec. 1. The winning
entry will be announced in early 2007. To register a school or
class, teachers or administrators should send an email to:
NASA-ESC@nasa.gov.

For information about Node 2, visit:
http://www.nasa.gov/mission_pages/station/structure/elements/node2.html

For additional information about the Space Station Node 2 Challenge,
visit: http://esc.nasa.gov

[ANS thanks NASA for the above information]

/EX

SB SAT @ AMSAT $ANS-295.08
ARISS Status for the Week of October 16, 2006

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73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM

```
From -6491022239857880067
X-Google-Thread: 10e8ad,a7c58263c741c0b2,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news3.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx01.iad01.newshosting.com!newshosting.com!
207.69.154.102.MISMATCH!elnk-atl-nf2!newsfeed.earthlink.net!
stamper.news.atl.earthlink.net!stamper.news.pas.earthlink.net!
newsread3.news.pas.earthlink.net.POSTED!46041641!not-for-mail
From: "JoAnne Maenpaa" <wb9jej_no-spam@earthling.com>
Newsgroups: rec.radio.amateur.space
Subject: WSR-296 AMSAT Weekly Satellite Report
Lines: 1013
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <qp90h.279$zf.180@newsread3.news.pas.earthlink.net>
Date: Thu, 26 Oct 2006 21:04:22 GMT
NNTP-Posting-Host: 66.167.68.34
```

X-Complaints-To: abuse@earthlink.net
X-Trace: newsread3.news.pas.earthlink.net 1161896662 66.167.68.34 (Thu, 26 Oct 2006 14:04:22 PDT)
NNTP-Posting-Date: Thu, 26 Oct 2006 14:04:22 PDT
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news2.google.com rec.radio.amateur.space:466

This report is organized into 4 parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites

SB SAT @ AMSAT W8ISS ANS-296.S1
WSR 296 Part 1 10/23/2006

AMSAT NEWS SERVICE BULLETIN 296.S1 FROM AMSAT HQ
SILVER SPRING, MD, October 23, 2006
TO ALL RADIO AMATEURS
BID: $ANS-296.S1

VO-52 HAMSAT
Catalog Number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/V - Indian Transponder

Frequencies:

Indian Transponder:
Uplink: 435.220 MHz to 435.280 MHz LSB/CW
Downlink: 145.870 MHz to 145.930 MHz USB/CW

Dutch Transponder:
Uplink: 435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW

Indian Beacon: 145.859330 MHZ CW
Dutch Beacon: 145.860MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsat.in/hamsat.htm

To know what transponder is switched on please listen for the beacon
that
is active. Each transponder has a different beacon.
[10022006]
=====

```
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational
Current Mode(s): FM Repeater - V/U with Tone
                 PBBS -        V/U 9k6 Digital, V/U, PBP BBS (Pacsat
Broadcas
                               Protocol BBS)
                 Digipeater -  OFF

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink:   145.880 MHZ FM
                       145.880 MHz USB
                       145.920 MHz FM 67Hz PL tone
                      1268.700 MHz FM 67Hz PL tone
Digital Downlinks:     435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
                      2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:        145.860 MHz FM, 9k6 Digital, Pacsat Broadcast
Protocol
                      1268.700 mhz FM, 9k6 PBP Digital

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[10232006]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Uplink:   145.850 MHz (67.0 Hz PL tone) (See below for operating
procedures)
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
```

(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The order of operation is thus: (allow for Doppler as necessary)
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer
   on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater
   on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10
   minute timer.
[04172006]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: OPERATIONAL

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplink: 145.850 145.870 145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

unOfficial Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=5&retURL=/satellites/status.php
[10162006]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational?

Uplink: 145.850 MHz FM
Downlink: 436.795 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

This off the AO-27 website:
For the last 5 weeks ground controllers have been trying to contact AO-27. At this point we have not been able to turn it on. We still have a few tricks that we are planning on trying but these take time. We are hoping that we can re-establish communications.

At this time, we don't have an estimate for when AO-27 will be back on the air.

AO-27 is now in its 14th year on orbit. We will continue to try to recover AO-27 until we run out of ideas.
- Michael N3UC

Official Webpage: http://www.ao27.org
[10232006]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational depending on amount of Sunlight
Current Reported mode: Mode-A

```
Uplink:   145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink:  29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons:   29.502 MHz
          145.972 MHz
          435.100 MHz
         2304.100 MHz
```

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php
The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
AO-7 users are requested to log their contacts and observations about AO-7, especially any unexpected mode changes.
AO-07 telemetry software webpage:
http://www.qsl.net/k3tz/files/K3TZ_AO-07_Telemetry_Decoder_0.5.zip

Please keep your power low! For additional information please read the AO-7 Usage Guidelines on the AO-7 Log and Resource Site located at:
http://www.planetemily.com/ao7

```
[04242006]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: Voice
Digipeater:   OFF

The Expedition 14 crew is:
Commander:              Michael Lopez-Alegria - KE5GTK
Flight Engineer:        Mikhail Tyurin - RZ3FT
Flight Engineer:        Thomas Reiter - DF4TR

Digital/APRS:
Worldwide packet uplink:   145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink:   145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink:      145.800 MHz FM

SSTV TESTING:
Worldwide Reported Downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink:         437.800 MHz FM
Repeater Downlink:       145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German:  DP0ISS
Russian: RS0ISS, RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is NOT translated from Russian and posted.
[10092006]
NNNN
/EX
```

SB SAT @ AMSAT W8ISS $ANS-296.S2
WSR 296 Part 2 10/23/2006

AMSAT NEWS SERVICE BULLETIN 296.S2 FROM AMSAT HQ
SILVER SPRING, MD, October 23, 2006
TO ALL RADIO AMATEURS
BID: $ANS-296.S2

CO-58 XI-V
Catalog Number: 28895
Launch Date: October 27, 2005

Status: Operational - CW only

Telemetry Downlink: 437.345MHz - FSK 1200bps using AFK protocol
Beacon: 437.465MHz - CW

Callsign: JQ1YGW

Oficial Webpage: http://www.space.t.u-tokyo.ac.jp/gs/satinfo-e.html#xi5
Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
[09252006]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launched: June 30, 2006

Status: Operational

Beacon: 436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS
[10022006]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launched: June 30,2003

Status: Semi-Operational - Constant Carrier only

Uplink: ?
Downlink: 437.3850 CW
          437.4700 1200 FM ax25 or SRLL (ACTIVE only near Japan ?)

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[09252006]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

```
Status: Testing
Current Mode(s): FM Repeater - V/U with Tone
                 PBBS -        V/U 9k6 Digital, V/U, PBP BBS (Pacsat
Broadcas
                               Protocol BBS)
                 Digipeater -  OFF


Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink:   145.880 MHZ FM
                       145.880 MHz USB
                       145.920 MHz FM 67Hz PL tone
                      1268.700 MHz FM 67Hz PL tone
Digital Downlinks:     435.150 MHz FM 38k4 Digital, PBP, 1 watt output
                      2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:        145.860 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      1268.700 mhz FM, 9k6 PBP Digital
Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[10232006]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: RECOVERY EFFORTS - REFRAIN FRON USAGE!!!

General Usage Uplink/Downlink:145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org
aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[09252006]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational
```

Downlink: 435.225 MHz FM (9600-baud FSK)
435.325 Mhz - Not Available - temperature problems
Uplinks: 145.850 FM
145.890 FM
145.930 FM
1269.700 FM
1269.800 FM
1269.900 FM
Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[08072006]
=====
RS-22 Mozhayets 4
Catalog Number: 27939
Launch Date: September 27, 2004

Status: Operational

Beacon: 435.3520 MHz CW
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Semi-operational, the digipeater command is on and open for APRS users.

Uplink: 145.900 FM
145.920 FM
145.940 FM
145.960 FM
(using 1200-baud Manchester FSK)
Downlink: 437.026 MHz SSB (1200-baud PSK)
Mode-S Beacon: 2401.1428 MHz

Mode and Antenna Polarization:
U: RC 437.050 MHz RHCP
PSK 437.025 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[04172006]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational

Telemetry Downlink: 145.826 MHz. FM (1200-baud AFSK).
approx. 10 days ON, 10 days OFF
Mode-S Beacon: 2401.500 MHz. ... OFF
UHFBeacon: 435.025 MHz. ... OFF

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Reception reports are requested to be sent to xxxxx@amsat.org (replace xxxxx by g3cwv), or post to AMSAT-BB.

During the period 15 June to 17 July 2006 nothing has been heard from the satellite. It was last heard on 05 May, just one day before the solar eclipses were due to start. These eclipses will continue until 04 August 2006, reaching a maximum duration of 22% around 19 June. If the satellite behaves in the same way as it did last year, regular 10 day transmissions should re-start, sometime in August.

Official webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[07172006]
=====
PCSAT-2
Catalog Number: 25544
Launch Date: August 1, 2005

Activated: August 3, 2005
Status: Decommissioning
Current Mode: OFF

Voice Digital Uplink: 145.990 MHz
Voice response Downlink: 437.975 MHz

Digital Downlink: 435.275 Mhz
Digital Uplink: 145.825 Mhz
ISS digipeater uplink: 145.990 Mhz

PSK-31 Downlink: 435.275 Mhz
PSK-31 Uplink: 29.401 Mhz

CALLSIGN: pcsat2

Official Webpage: http://web.usna.navy.mil/~bruninga/pcsat2.html
PCSAT2 APRS Packet page: http://www.findu.com/cgi-bin/pcsat2.cgi
aprstlm Telemetry Decoder program:

```
http://www.xciv.org/~iain/aprstlm/v1.2/
[09252006]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: Voice
Digipeater:   OFF

Expedition Crew 14 is:
Commander:             Michael Lopez-Alegria - KE5GTK
Flight Engineer:       Mikhail Tyurin - RZ3FT
Flight Engineer:       Thomas Reiter - DF4TR

Digital/APRS:
Worldwide packet uplink:   145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink:   145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink:      145.800 MHz FM

SSTV TESTING:
Worldwide Reported Downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink:   437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German:  DP0ISS
Russian: RS0ISS, RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is NOT translated from Russian and posted.
[10092006]
NNNN
```

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/EX

SB SAT @ AMSAT W8ISS $ANS-296.S3
WSR 296 Part 3 10/23/2006

AMSAT NEWS SERVICE BULLETIN 296.S3 FROM AMSAT HQ
SILVER SPRING, MD, October 23, 2006
TO ALL RADIO AMATEURS
BID: $ANS-296.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

AO-54 SUITSAT
Catalog Number:28933
Release Date: February 3,2006

Status: Re-Entered

Modes : FM Voice Telemetry/Greetings
        FM SSTV

Callsign: RS0RS
Downlink: 145.990 FM

Currently on the amsat-bb, there is a geussing game going on about when
Suitsat will re-enter the atmosphere.

Official webpage: http://www.suitsat.org
[09252006]
=====
NCUBE-2
Catalog Number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency:  437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog Number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 FM 67Hz CTCSS
Voice Downlink: 2401.835 FM
Packet Up/Downlink: 437.250 9k6 packet
Packet Downlink 2401.835 38k4 packet
```

```
Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01292006]
=====
TO-31 TMSAT-1
Catalog Number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink:   145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
PO-28 POSAT-1
Catalog Number: 22829
Launch Date: September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012006]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launched: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB
Beacon: 145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993
```

```
Status: Downlink only

Uplink: 145.875 145.900 145.925 145.950 MHz FM (1200-baud)
Downlink: 435.808 MHz PSK
Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01012006]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB
Beacon: 29.408 MHz
Robot: 29.454 MHz
[05232004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB
Beacon: 145.860 MHz
Robot: 145.908 MHz
[05232004]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink 145.975 MHz FM
Downlink 435.070 MHz FM
[05092004]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink: 145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM
```

```
Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01092005]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational?

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB
Beacon: 29.352 MHz (intermittent)
SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplink: 145.84 145.86 145.88 145.90 MHz FM
(using 1200-baud Manchester FSK)
CW downlink: 437.125 MHz
Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[05232004]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[08152004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational
```

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM
Broadcast Callsign: HL01-11
BBS: HL01-12

Jim, AA7KC, reports that KO-23's downlink transmitter continues in a non-operational status.
[05092004]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM (9600-baud FSK)
Downlink: 436.500 MHz FM
Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm

[ANS-WSR has no further information]
[09042006]
=====
SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

```
STatus: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz and 145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[08082004]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlink: 437.025 MHz 437.400 MHz
Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site
at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[05092004]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplink V-band   145.840 - 145.990 MHz CW/LSB
      U-band   435.550 - 435.800 MHz CW/LSB
      L1-band 1269.250 - 1269.500 MHz CW/LSB
      L2-band 1268.325 - 1268.575 MHz CW/LSB
Downlink: S2-band 2401.225 - 2401.475 MHz CW/USB
         K-band 24,048.010 - 24,048.060 MHz CW/USB
Beacon:   2401.323
        24,048.035
[05232004]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational
Downlink: 437.075 MHz
Broadcast Callsign: SASAT2-11
```

BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[08152004]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz
Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[08152004]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, callsign KE6QMD, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Operational

Uplink: 145.850 or 145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz
Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communica-

tion.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a
collaborative effort between the Malaysian government and Surrey
Satellite
Technology Ltd.
[11202005]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink 435.275 1200-baud AFSK
Downlink 145.825 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink: Downlink 145.825 MHz FM 1200 Baud AFSK
Beacon: 2401.220 MHz
[05012006]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-296.S4
WSR 296 Part 4 10/23/2006

AMSAT NEWS SERVICE BULLETIN 296.S4 FROM AMSAT HQ
SILVER SPRING, MD, October 23, 2006
TO ALL RADIO AMATEURS
BID: $ANS-296.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE
PROPOSED FOR LAUNCH AT THIS TIME:

PHASE 3E ?O-??
Catalog Number:
Proposed Launch Date: Early/Mid 2007

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/
[ANS-WSR wishes to thank William Leijenaar, PE1RAH for this week's report]
[04242006]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/amsat/listserv/menu.html

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the
memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen,
G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

```
From -3232071392918051440
X-Google-Thread: 10e8ad,da403ad254e408c9,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news3.google.com!news4.google.com!newshub.sdsu.edu!elnk-
nf2-pas!newsfeed.earthlink.net!stamper.news.pas.earthlink.net!
newsread3.news.pas.earthlink.net.POSTED!46041641!not-for-mail
From: "JoAnne Maenpaa" <wb9jej_no-spam@earthling.com>
Newsgroups: rec.radio.amateur.space
Subject: ANS-302 AMSAT News Service Weekly Bulletins
Lines: 249
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <rpq2h.1020$L6.474@newsread3.news.pas.earthlink.net>
Date: Thu, 02 Nov 2006 18:03:03 GMT
NNTP-Posting-Host: 68.165.59.102
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread3.news.pas.earthlink.net 1162490583 68.165.59.102 (Thu, 02 Nov
2006 10:03:03 PST)
NNTP-Posting-Date: Thu, 02 Nov 2006 10:03:03 PST
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news2.google.com rec.radio.amateur.space:468
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AMSAT NEWS SERVICE
ANS-302

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* AO-51 Nov/Dec Schedule
* AMSAT Engineering Team Appointments
* Eagle Structure and Mechanical Team Leader
* Bonaire To Be Active On Satellites
* Florida AMSAT Net
* ARISS Status - 23 October 2006

SB SAT @ AMSAT $ANS-302.01
AO-51 Nov/Dec Schedule

AMSAT News Service Bulletin 302.01
From AMSAT HQ SILVER SPRING, MD.
October 29, 2006
To All RADIO AMATEURS
BID: $ANS-302.01

October 30 to November 6
Cross Mode Repeater, V(SSB)/U(FM)
Uplink: 145.880 MHz USB
Downlink: 435.300 MHz FM

November 6 to November 13
FM Repeater, V/S
Uplink: 145.920 MHz FM, No PL Tone
Downlink: 2401.200 MHz FM

November 13 to December 4
Normal Mode
FM Repeater, V/U
Uplink: 145.920 MHz FM, 67 hz PL Tone
Downlink: 435.300 MHz FM
9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 MHz FM, 9k6 PBP Digital
Downlink: 435.150 MHz FM, 9k6 PBP Digital

December 4 to December 8
FM Repeater, L/S
Uplink: 1268.700 MHz FM, No PL Tone
Downlink: 2401.200 MHz FM

December 8 to December 11 New Mode!
Cross Mode Repeater, L(SSB)/U(FM)
Uplink: 1268.700 MHz USB
Downlink: 435.300 MHz FM

December 11 to January 8
Normal Mode
FM Repeater, V/U
Uplink: 145.920 MHz FM, 67 hz PL Tone
Downlink: 435.300 MHz FM
9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)

Uplink: 145.860 MHz FM, 9k6 PBP Digital
Downlink: 435.150 MHz FM, 9k6 PBP Digital

AMSAT-NA has an Operations Group and email address for AO-51 satellite users to submit requests and ideas for the Experimenters Wednesday sessions. The group will also take suggestions for the normal weeklong operational periods as well. Every member of the Operations Group will receive emails from this address. This is your chance, the amateur satellite user, to request from the AO-51 Operations Group the modes you are interested in seeing operated on the satellite during the weekly Wednesday sessions. Do not expect a reply to every email, as there will not be time to respond to each one, but your input will be noted. The email address to send your requests or ideas to the Operations Group is:

ao51-modes@amsat.org

The AO-51 Operations Group is made up of AMSAT Members who are also AO-51 users. The Operations Group works with the Command Team to create the monthly schedule for the satellite.

73 KO4MA For AO-51 Operations Group
(KO4MA, WD9EWK/VA7EWK, N8MH, OZ1MY, VK5HI, KE4AZN, WA4SXM)

[ANS thanks Drew, KO4MA, for the above information]

/EX

SB SAT @ AMSAT $ANS-302.02
AMSAT Engineering Team Appointments

AMSAT News Service Bulletin 302.02
From AMSAT HQ SILVER SPRING, MD.
October 29, 2006
To All RADIO AMATEURS
BID: $ANS-302.02

Bob McGwier, N4HY, AMSAT Vice President of Engineering has announced the following appointments to help lead various aspects of AMSAT's engineering efforts.

Jim Sanford, WB4GCS, as Eagle project manager
Lou McFadin, W5DID, as Manned Space chief engineer
Bob Davis, KF4KSS, as lab director and spacecraft integration leader

Bob said, "I want to welcome and thank all of them for their continued great service to AMSAT".

[ANS thanks Bob, N4HY, for the above information]

/EX

SB SAT @ AMSAT $ANS-302.03
Eagle Structure and Mechanical Team Leader

AMSAT News Service Bulletin 302.03
 From AMSAT HQ SILVER SPRING, MD.
October 29, 2006
To All RADIO AMATEURS
BID: $ANS-302.03

Jim Sanford, WB4GCS, announced that Bob Davis, KF4KSS, has assumed the role of Structure and Mechanical Team Leader. Bob has experience in finishing and integrating AO-40, and is employed in the aerospace industry, where he has acquired significant experience since the AO-40 campaign.

Dick Jansson, WD4FAB, has led this team for several years and is not going away. Dick will support Bob as a team member, focussing on structural team coordination and thermal design and analysis.

Dick told Jim, "I'm really excited to see the new blood coming in and assuming leadership roles. I look forward to supporting Bob and being on his team."

Jim expressed his thanks to Dick for all that he has done for AMSAT and WILL do for Eagle and AMSAT. "Thanks for all you've taught us", said Jim.

Jim continued, "Bob, thanks for stepping up to the plate. I look forward to working with you, and I look forward to learning from you."

[ANS thanks Jim, WB4GCS, for the above information]

/EX

SB SAT @ AMSAT $ANS-302.04
Bonaire To Be Active On Satellites

AMSAT News Service Bulletin 302.04
 From AMSAT HQ SILVER SPRING, MD.
October 29, 2006
To All RADIO AMATEURS
BID: $ANS-302.04

PJ4/K0NR NETHERLANDS ANTILLES.

Bob, K0NR, will be active as PJ4/K0NR from Bonaire (IOTA SA-006) from Oct 28 to Nov 9, using SSB and PSK31 on 30M through 6M. Bob will also be active on the FM OSCAR satellites (Grid FK52).

QSL to Bob's home call.

[ANS thanks Bob, K0NR, for the above information]

/EX

SB SAT @ AMSAT $ANS-302.05
Florida AMSAT Net

AMSAT News Service Bulletin 302.05
From AMSAT HQ SILVER SPRING, MD.
October 29, 2006
To All RADIO AMATEURS
BID: $ANS-302.05

The Florida AMSAT Net will meet this Thursday evening at the usual local time of 19:30 ET, which with the time change, is now 00:30 UTC.

The net meets on the West Florida Group NI4CE repeater system, the Orlando N4HHA repeater at 443.1 MHz, 103.5Hz tone, the N4LEM Cocoa repeater, 147.36 MHz +107.2 PL or connect by echolink to KG4YZY-R, node 4429. The net's purpose is to provide a platform for hams with amateur satellite interest to meet and discuss satellite related topics of interest. All amateurs are invited to join in.

[ANS thanks Dave, AA4KN, for the above information]

/EX

SB SAT @ AMSAT $ANS-302.06
ARISS Status - 23 October 2006

AMSAT News Service Bulletin 302.06
From AMSAT HQ SILVER SPRING, MD.
October 29, 2006
To All RADIO AMATEURS
BID: $ANS-302.06

1. Upcoming School Contact

The first ARISS contact of Expedition 14 has been approved. Students attending the Euro Space Center in Transinne, Belgium will participate in the Flanders Science Festival, which is being held on October 27-29, and will speak with the ISS via the telebridge station WH6PN in Hawaii. The contact has been scheduled for Friday, October 27 at 10:36 UTC. The audio will be fed into the EchoLink AMSAT (101 377) and JK1ZRW (277 208) servers. There is a possibility that the audio from this event will also be fed into the IRLP Discovery Reflector 9010.

2. Expedition 13 Crew Debrief Status

The ARISS-U.S. team has compiled questions for the crew debrief with Jeff Williams, KD5TVQ. The debriefing session is tentatively scheduled for November 9 at 5 pm ET.

3. ARRL Article on Expedition 15 Crew

The ARRL ran a web story on the recently named Expedition 15 crew entitled, "Three radio amateurs on next ISS crew." See:
http://www.arrl.org/?artid=6880

[ANS thanks Carol, KB3LKI for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73, This week's ANS Editor,
Lee McLamb, KU4OS

From -3008309406187811588
X-Google-Thread: 10e8ad,f4f66074874c8ed8,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news3.google.com!border1.nntp.dca.giganews.com!nntp.giganews.com!newshub.sdsu.edu!elnk-nf2-pas!newsfeed.earthlink.net!stamper.news.pas.earthlink.net!newsread3.news.pas.earthlink.net.POSTED!46041641!not-for-mail
From: "JoAnne Maenpaa" <wb9jej_no-spam@earthling.com>
Newsgroups: rec.radio.amateur.space
Subject: WSR-303 AMSAT Weekly Satellite Report
Lines: 1008
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <tpq2h.1021$L6.783@newsread3.news.pas.earthlink.net>
Date: Thu, 02 Nov 2006 18:03:05 GMT
NNTP-Posting-Host: 68.165.59.102
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread3.news.pas.earthlink.net 1162490585 68.165.59.102 (Thu, 02 Nov 2006 10:03:05 PST)
NNTP-Posting-Date: Thu, 02 Nov 2006 10:03:05 PST
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news2.google.com rec.radio.amateur.space:469

This report is organized into 4 parts.

Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites

SB SAT @ AMSAT W8ISS ANS-303.S1
WSR 303 Part 1 10/30/2006

AMSAT NEWS SERVICE BULLETIN 303.S1 FROM AMSAT HQ
SILVER SPRING, MD, October 30, 2006
TO ALL RADIO AMATEURS
BID: $ANS-303.S1

VO-52 HAMSAT
Catalog Number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/V - Indian Transponder

Frequencies:

Indian Transponder:
Uplink: 435.220 MHz to 435.280 MHz LSB/CW
Downlink: 145.870 MHz to 145.930 MHz USB/CW

Dutch Transponder:
Uplink: 435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW

Indian Beacon: 145.859330 MHZ CW
Dutch Beacon: 145.860MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsat.in/hamsat.htm

To know what transponder is switched on please listen for the beacon that
is active. Each transponder has a different beacon.
[10022006]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational
Current Mode(s): FM Repeater - V(SSB)/U(FM)
                 PBBS -   OFF
                 Digipeater - OFF

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.880 MHZ FM
145.880 MHz USB
145.920 MHz FM 67Hz PL tone
1268.700 MHz FM 67Hz PL tone
Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast Protocol
1268.700 mhz FM, 9k6 PBP Digital

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[10302006]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Uplink: 145.850 MHz (67.0 Hz PL tone) (See below for operating procedures)
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The order of operation is thus: (allow for Doppler as necessary)
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer
on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater
on and off within the 10 Minute window.

3) Sending the 74.4 tone again within the 10 minute window will reset the 10 minute timer.
[04172006]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: OPERATIONAL

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplink: 145.850 145.870 145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

unOfficial Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=5&retURL=/satellites/status.php
[10162006]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational?

Uplink: 145.850 MHz FM
Downlink: 436.795 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

This off the AO-27 website:
For the last 5 weeks ground controllers have been trying to contact AO-27. At this point we have not been able to turn it on. We still have a few tricks that we are planning on trying but these take time. We are hoping that we can re-establish communications.

```
At this time, we don't have an estimate for when AO-27 will be back on
the
air.

AO-27 is now in its 14th year on orbit. We will continue to try to
recover
AO-27 until we run out of ideas.
- Michael N3UC

Official Webpage: http://www.ao27.org
[10232006]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational depending on amount of Sunlight
Current Reported mode: Mode-A

Uplink:   145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink:  29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons:   29.502 MHz
          145.972 MHz
          435.100 MHz
         2304.100 MHz

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php
The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
AO-7 users are requested to log their contacts and observations about
AO-7,
especially any unexpected mode changes.
AO-07 telemetry software webpage:
http://www.qsl.net/k3tz/files/K3TZ_AO-07_Telemetry_Decoder_0.5.zip

Please keep your power low!  For additional information please read the
AO-7
Usage Guidelines on the AO-7 Log and Resource Site located at:
http://www.planetemily.com/ao7
[04242006]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: Voice
Digipeater:   OFF
```

The Expedition 14 crew is:
Commander: Michael Lopez-Alegria - KE5GTK
Flight Engineer: Mikhail Tyurin - RZ3FT
Flight Engineer: Thomas Reiter - DF4TR

Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

SSTV TESTING:
Worldwide Reported Downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS, RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line is NOT translated from Russian and posted.
[10092006]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-303.S2
WSR 303 Part 2 10/30/2006

AMSAT NEWS SERVICE BULLETIN 303.S2 FROM AMSAT HQ
SILVER SPRING, MD, October 30, 2006
TO ALL RADIO AMATEURS
BID: $ANS-303.S2

HO-59 HITSat

```
Catalog Number: 29484
Launch date: September 22, 2006

Status: Operational

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon:             437.2750 MHz CW

Callsign: JR8YJT
[10302006]
=====
CO-58 XI-V
Catalog Number: 28895
Launch Date: October 27, 2005

Status: Operational - CW only

Telemetry Downlink: 437.345MHz - FSK 1200bps using AFK protocol
Beacon:             437.465MHz - CW

Callsign: JQ1YGW

Oficial Webpage: http://www.space.t.u-tokyo.ac.jp/gs/satinfo-e.html#xi5
Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
[09252006]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launched: June 30, 2006

Status: Operational

Beacon:     436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS
[10022006]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launched: June 30,2003

Status: Semi-Operational - Constant Carrier only

Uplink: ?
Downlink: 437.3850 CW
          437.4700 1200 FM ax25 or SRLL (ACTIVE only near Japan ? )

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[09252006]
=====
AO-51 ECHO
Catalog number: 28375
```

```
Launch date: June 29, 2004

Status: Testing
Current Mode(s): FM Repeater - V(SSB)/U(FM)
                 PBBS -        OFF
                 Digipeater -  OFF


Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink:   145.880 MHZ FM
                       145.880 MHz USB
                       145.920 MHz FM 67Hz PL tone
                      1268.700 MHz FM 67Hz PL tone
Digital Downlinks:     435.150 MHz FM 38k4 Digital, PBP, 1 watt output
                      2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:        145.860 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      1268.700 mhz FM, 9k6 PBP Digital
Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[10302006]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: RECOVERY EFFORTS - REFRAIN FRON USAGE!!!

General Usage Uplink/Downlink:145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org
aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[09252006]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational
```

```
Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM
Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[08072006]
=====
RS-22 Mozhayets 4
Catalog Number: 27939
Launch Date: September 27, 2004

Status: Operational

Beacon: 435.3520 MHz CW
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Semi-operational, the digipeater command is on and open for
APRS users.

Uplink: 145.900 FM
       145.920 FM
       145.940 FM
       145.960 FM
(using 1200-baud Manchester FSK)
Downlink: 437.026 MHz SSB (1200-baud PSK)
Mode-S Beacon: 2401.1428 MHz

Mode and Antenna Polarization:
U: RC 437.050 MHz RHCP
  PSK 437.025 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[04172006]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984
```

Status: Semi-operational

Telemetry Downlink: 145.826 MHz. FM (1200-baud AFSK) approx. 10 days ON,
10
days OFF
Mode-S Beacon: 2401.500 MHz - OFF
UHFBeacon: 435.025 MHz - OFF

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Official webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[10302006]
=====
PCSAT-2
Catalog Number: 25544
Launch Date: August 1, 2005

Activated: August 3, 2005
Status: Decommissioning
Current Mode: OFF

Voice Digital Uplink: 145.990 MHz
Voice response Downlink: 437.975 MHz

Digital Downlink: 435.275 Mhz
Digital Uplink: 145.825 Mhz
ISS digipeater uplink: 145.990 Mhz

PSK-31 Downlink: 435.275 Mhz
PSK-31 Uplink: 29.401 Mhz

CALLSIGN: pcsat2

Official Webpage: http://web.usna.navy.mil/~bruninga/pcsat2.html
PCSAT2 APRS Packet page: http://www.findu.com/cgi-bin/pcsat2.cgi
aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[09252006]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: Voice
Digipeater: OFF

Expedition Crew 14 is:
Commander: Michael Lopez-Alegria - KE5GTK

Flight Engineer: Mikhail Tyurin - RZ3FT
Flight Engineer: Thomas Reiter - DF4TR

Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

SSTV TESTING:
Worldwide Reported Downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS, RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is NOT translated from Russian and posted.
[10092006]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-303.S3
WSR 303 Part 3 10/30/2006

AMSAT NEWS SERVICE BULLETIN 303.S3 FROM AMSAT HQ
SILVER SPRING, MD, October 30, 2006
TO ALL RADIO AMATEURS
BID: $ANS-303.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

AO-54 SUITSAT

```
Catalog Number:28933
Release Date: February 3,2006

Status: Re-Entered

Modes : FM Voice Telemetry/Greetings
        FM SSTV

Callsign: RS0RS
Downlink: 145.990 FM

Currently on the amsat-bb, there is a geussing game going on about when
Suitsat will re-enter the atmosphere.

Official webpage: http://www.suitsat.org
[09252006]
=====
NCUBE-2
Catalog Number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency:  437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog Number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 FM 67Hz CTCSS
Voice Downlink: 2401.835 FM
Packet Up/Downlink: 437.250 9k6 packet
Packet Downlink 2401.835 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01292006]
=====
TO-31 TMSAT-1
Catalog Number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink:   145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK
```

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
PO-28 POSAT-1
Catalog Number: 22829
Launch Date: September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012006]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launched: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB
Beacon: 145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: Downlink only

Uplink: 145.875 145.900 145.925 145.950 MHz FM (1200-baud)
Downlink: 435.808 MHz PSK
Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01012006]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089

Launched: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB
Beacon: 29.408 MHz
Robot: 29.454 MHz
[05232004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB
Beacon: 145.860 MHz
Robot: 145.908 MHz
[05232004]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink 145.975 MHz FM
Downlink 435.070 MHz FM
[05092004]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink: 145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM
Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01092005]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational?

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB
Beacon: 29.352 MHz (intermittent)

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplink: 145.84 145.86 145.88 145.90 MHz FM
(using 1200-baud Manchester FSK)
CW downlink: 437.125 MHz
Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[05232004]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[08152004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM
Broadcast Callsign: HL01-11
BBS: HL01-12

Jim, AA7KC, reports that KO-23's downlink transmitter continues in a non-operational status.
[05092004]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

```
Status: Non-operational

Uplink: 145.980 MHz FM (9600-baud FSK)
Downlink: 436.500 MHz FM
Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm

[ANS-WSR has no further information]
[09042006]
=====
SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

STatus: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz and 145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[08082004]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlink: 437.025 MHz 437.400 MHz
Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site
at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[05092004]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplink V-band   145.840 - 145.990 MHz CW/LSB
      U-band   435.550 - 435.800 MHz CW/LSB
      L1-band 1269.250 - 1269.500 MHz CW/LSB
      L2-band 1268.325 - 1268.575 MHz CW/LSB
Downlink: S2-band 2401.225 - 2401.475 MHz CW/USB
         K-band 24,048.010 - 24,048.060 MHz CW/USB
Beacon:   2401.323
        24,048.035
[05232004]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational
Downlink: 437.075 MHz
Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[08152004]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
```

Downlink: 436.775 MHz
Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[08152004]

=====

NO-45 SAPPHIRE

Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, callsign KE6QMD, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]

=====

MO-46 TIUNGSAT-1

Catalog number: 26548
Launched: September 26, 2000

Status: Operational

Uplink: 145.850 or 145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz
Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[11202005]

=====

AO-49 AATiS OSCAR-49 (SAFIR-M)

Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink 435.275 1200-baud AFSK
Downlink 145.825 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink: Downlink 145.825 MHz FM 1200 Baud AFSK
Beacon: 2401.220 MHz
[05012006]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-303.S4
WSR 303 Part 4 10/30/2006

AMSAT NEWS SERVICE BULLETIN 303.S4 FROM AMSAT HQ
SILVER SPRING, MD, October 30, 2006
TO ALL RADIO AMATEURS
BID: $ANS-303.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE
PROPOSED FOR LAUNCH AT THIS TIME:

PHASE 3E ?O-??
Catalog Number:
Proposed Launch Date: Early/Mid 2007

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/
[ANS-WSR wishes to thank William Leijenaar, PE1RAH for this week's report]
[04242006]

NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/amsat/listserv/menu.html

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

From 4397947068276335519
X-Google-Thread: 10bf43,4282e1421e60b2a9,start
X-Google-Thread: 10e8ad,4282e1421e60b2a9,start
X-Google-Attributes: gid10bf43,gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news3.google.com!newshub.sdsu.edu!elnk-nf2-pas!
newsfeed.earthlink.net!stamper.news.pas.earthlink.net!
newsread1.news.pas.earthlink.net.POSTED!3dd4ce4a!not-for-mail
Newsgroups: rec.radio.amateur.policy,rec.radio.amateur.space
Subject: 20 wpm code tested Extra's aren't evil.
From: Slow Code <my.mail@no.spam>
Organization: None
User-Agent: Xnews/5.04.25
Lines: 3
Message-ID: <hO93h.2458$0r.245@newsread1.news.pas.earthlink.net>
Date: Sat, 04 Nov 2006 23:58:05 GMT
NNTP-Posting-Host: 4.254.225.249
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread1.news.pas.earthlink.net 1162684685 4.254.225.249 (Sat, 04 Nov
2006 15:58:05 PST)
NNTP-Posting-Date: Sat, 04 Nov 2006 15:58:05 PST
Xref: g2news2.google.com rec.radio.amateur.policy:52933
rec.radio.amateur.space:470

We're better.

SC

From 1016906838775121290
X-Google-Thread: 10bf43,4282e1421e60b2a9
X-Google-Thread: 10e8ad,4282e1421e60b2a9
X-Google-Attributes: gid10bf43,gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news3.google.com!news.glorb.com!nntpserver.com!
zeus.nntpserver.com!hydra.nntpserver.com!not-for-mail
From: Mark@kb9rqz.aprs
Newsgroups: rec.radio.amateur.policy,rec.radio.amateur.space
Subject: Re: 20 wpm code tested Extra's aren't evil, but sc is a a just a jerk
Date: Sat, 04 Nov 2006 20:57:32 -0500
Message-ID: <c7hqk29srptolmbm3bktkijt6ohu7dp3lj@4ax.com>
References: <hO93h.2458$0r.245@newsread1.news.pas.earthlink.net>
X-Newsreader: Forte Free Agent 3.3/32.846
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Lines: 7
NNTP-Posting-Date: 05 Nov 2006 01:02:32 GMT
X-Complaints-To: abuse@teranews.com
Xref: g2news2.google.com rec.radio.amateur.policy:52955
rec.radio.amateur.space:471

```
On Sat, 04 Nov 2006 23:58:05 GMT, Slow Code <my.mail@no.spam> wrote:

>We're better.
at morse code maybe better hams by and large you are not
>
>SC
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com




From -9209375139182838402
X-Google-Thread: 10bf43,4282e1421e60b2a9
X-Google-Thread: 10e8ad,4282e1421e60b2a9
X-Google-Attributes: gid10bf43,gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news4.google.com!news.glorb.com!news.alt.net
From: "Titties n Beer" <anon@anon>
Newsgroups: rec.radio.amateur.policy,rec.radio.amateur.space
Subject: Re: 20 wpm code tested Extra's aren't evil.
Date: Sat, 4 Nov 2006 21:57:51 -0500
Organization: Altopia Corp. - Usenet Access - www.altopia.com
Lines: 11
Message-ID: <eg9hg.ob1.17.1@news.alt.net>
References: <hO93h.2458$0r.245@newsread1.news.pas.earthlink.net>
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1807
X-MIMEOLE: Produced By Microsoft MimeOLE V6.00.2800.1807
Xref: g2news2.google.com rec.radio.amateur.policy:52968
rec.radio.amateur.space:472


"Slow Code" <my.mail@no.spam> wrote in message
news:hO93h.2458$0r.245@newsread1.news.pas.earthlink.net...
We're better.

SC


Mark is most assuredly going to crap on THIS comment!




From 6546439579986637O8
X-Google-Thread: 10bf43,4282e1421e60b2a9
X-Google-Thread: 10e8ad,4282e1421e60b2a9
X-Google-Attributes: gid10bf43,gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
```

```
Path: g2news2.google.com!news2.google.com!news.maxwell.syr.edu!nntpserver.com!
zeus.nntpserver.com!hydra.nntpserver.com!not-for-mail
From: Mark@kb9rqz.aprs
Newsgroups: rec.radio.amateur.policy,rec.radio.amateur.space
Subject: Re: 20 wpm code tested Extra's aren't evil, but slow code is lazy
dishonest and creul
Date: Sat, 04 Nov 2006 22:49:59 -0500
Message-ID: <eqnqk2hpqfda0j95uuiet73q2bpsj4vnno@4ax.com>
References: <hO93h.2458$0r.245@newsread1.news.pas.earthlink.net>
<eg9hg.ob1.17.1@news.alt.net>
X-Newsreader: Forte Free Agent 3.3/32.846
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Lines: 14
NNTP-Posting-Date: 05 Nov 2006 02:54:57 GMT
X-Complaints-To: abuse@teranews.com
Xref: g2news2.google.com rec.radio.amateur.policy:52971
rec.radio.amateur.space:473

On Sat, 4 Nov 2006 21:57:51 -0500, "Titties n Beer" <anon@anon> wrote:

>
>"Slow Code" <my.mail@no.spam> wrote in message
>news:hO93h.2458$0r.245@newsread1.news.pas.earthlink.net...
>We're better.
>
>SC
>
>
>Mark is most assuredly going to crap on THIS comment!
>
no crap just the truth
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com




From -136849555496971840
X-Google-Thread: 10bf43,4282e1421e60b2a9
X-Google-Thread: 10e8ad,4282e1421e60b2a9
X-Google-Attributes: gid10bf43,gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news4.google.com!news.glorb.com!
newsfeed2.telusplanet.net!newsfeed.telus.net!edtnps82.POSTED!3d367a13!not-for-mail
From: "Mike, who else?" <Mike@nowhere.net>
Subject: Re: 20 wpm code tested Extra's aren't evil.
User-Agent: Pan/0.14.2.91 (As She Crawled Across the Table)
Newsgroups: rec.radio.amateur.policy,rec.radio.amateur.space
References: <hO93h.2458$0r.245@newsread1.news.pas.earthlink.net>
IfYouCanReadThisThen: POUND-SALT_HAHAHAHA
```

```
MIME-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 8bit
Lines: 5
Message-ID: <Iwd3h.52503$H7.2377@edtnps82>
Date: Sun, 05 Nov 2006 04:12:24 GMT
NNTP-Posting-Host: 209.89.186.154
X-Trace: edtnps82 1162699944 209.89.186.154 (Sat, 04 Nov 2006 21:12:24 MST)
NNTP-Posting-Date: Sat, 04 Nov 2006 21:12:24 MST
Xref: g2news2.google.com rec.radio.amateur.policy:52975
rec.radio.amateur.space:474

You spamming POS
Bu-Bye
*PLONK*

Mike



From -2847485799709439670
X-Google-Thread: 10bf43,4282e1421e60b2a9
X-Google-Thread: 10e8ad,4282e1421e60b2a9
X-Google-Attributes: gid10bf43,gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news3.google.com!newshub.sdsu.edu!elnk-nf2-pas!
newsfeed.earthlink.net!stamper.news.pas.earthlink.net!
newsread4.news.pas.earthlink.net.POSTED!3dd4ce4a!not-for-mail
Newsgroups: rec.radio.amateur.policy,rec.radio.amateur.space
Subject: Re: 20 wpm code tested Extra's aren't evil.
From: Slow Code <my.mail@no.spam>
References: <hO93h.2458$0r.245@newsread1.news.pas.earthlink.net>
<eg9hg.ob1.17.1@news.alt.net>
Organization: None
User-Agent: Xnews/5.04.25
Lines: 16
Message-ID: <n1w3h.2746$l25.2507@newsread4.news.pas.earthlink.net>
Date: Mon, 06 Nov 2006 01:16:03 GMT
NNTP-Posting-Host: 4.228.228.177
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread4.news.pas.earthlink.net 1162775763 4.228.228.177 (Sun, 05 Nov
2006 17:16:03 PST)
NNTP-Posting-Date: Sun, 05 Nov 2006 17:16:03 PST
Xref: g2news2.google.com rec.radio.amateur.policy:53028
rec.radio.amateur.space:475

"Titties n Beer" <anon@anon> wrote in news:eg9hg.ob1.17.1@news.alt.net:

>
> "Slow Code" <my.mail@no.spam> wrote in message
> news:hO93h.2458$0r.245@newsread1.news.pas.earthlink.net...
> We're better.
>
> SC
```

```
>
>
> Mark is most assuredly going to crap on THIS comment!


Yes, I expect he's going to mail me a turd over that one.

SC



From -2542777970741567156
X-Google-Thread: 10bf43,4282e1421e60b2a9
X-Google-Thread: 10e8ad,4282e1421e60b2a9
X-Google-Attributes: gid10bf43,gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news4.google.com!border1.nntp.dca.giganews.com!wns13feed!
worldnet.att.net!63.218.45.11!nx02.iad01.newshosting.com!newshosting.com!
newsfeed.kamp.net!newsfeed.kamp.net!newsfeed.freenet.de!
border2.nntp.ams.giganews.com!nntp.giganews.com!multikabel.net!
feed20.multikabel.net!news2.euro.net!66.150.105.54.MISMATCH!nntpserver.com!
zeus.nntpserver.com!hydra.nntpserver.com!not-for-mail
From: Mark@kb9rqz.aprs
Newsgroups: rec.radio.amateur.policy,rec.radio.amateur.space
Subject: Re: 20 wpm code tested Extra's aren't evilm but SC is hater of all ham
radio
Date: Sun, 05 Nov 2006 22:22:33 -0500
Message-ID: <0jatk292l9rpm1nbtq3m4o3vihoggkc0uo@4ax.com>
References: <hO93h.2458$0r.245@newsread1.news.pas.earthlink.net>
<eg9hg.ob1.17.1@news.alt.net>
<n1w3h.2746$l25.2507@newsread4.news.pas.earthlink.net>
X-Newsreader: Forte Free Agent 3.3/32.846
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Lines: 20
NNTP-Posting-Date: 06 Nov 2006 02:27:35 GMT
X-Complaints-To: abuse@teranews.com
Xref: g2news2.google.com rec.radio.amateur.policy:53048
rec.radio.amateur.space:476

On Mon, 06 Nov 2006 01:16:03 GMT, Slow Code <my.mail@no.spam> wrote:

>"Titties n Beer" <anon@anon> wrote in news:eg9hg.ob1.17.1@news.alt.net:
>
>>
>> "Slow Code" <my.mail@no.spam> wrote in message
>> news:hO93h.2458$0r.245@newsread1.news.pas.earthlink.net...
>> We're better.
>>
>> SC
>>
>>
>> Mark is most assuredly going to crap on THIS comment!
```

```
>
>
>Yes, I expect he's going to mail me a turd over that one.
nah i don't do that sort of shit
>
>SC
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com




From 5292409272259424420
X-Google-Thread: 10bf43,4282e1421e60b2a9
X-Google-Thread: 10e8ad,4282e1421e60b2a9
X-Google-Attributes: gid10bf43,gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!postnews.google.com!i42g2000cwa.googlegroups.com!not-for-
mail
From: "K4YZ" <k4yz@aol.com>
Newsgroups: rec.radio.amateur.policy,rec.radio.amateur.space
Subject: More Morkie Mularkie
Date: 5 Nov 2006 22:14:02 -0800
Organization: http://groups.google.com
Lines: 20
Message-ID: <1162793642.045664.318290@i42g2000cwa.googlegroups.com>
References: <hO93h.2458$0r.245@newsread1.news.pas.earthlink.net>
   <eg9hg.ob1.17.1@news.alt.net>
   <n1w3h.2746$l25.2507@newsread4.news.pas.earthlink.net>
   <0jatk292l9rpm1nbtq3m4o3vihoggkc0uo@4ax.com>
NNTP-Posting-Host: 64.12.116.10
Mime-Version: 1.0
Content-Type: text/plain; charset="iso-8859-1"
X-Trace: posting.google.com 1162793647 8596 127.0.0.1 (6 Nov 2006 06:14:07 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Mon, 6 Nov 2006 06:14:07 +0000 (UTC)
In-Reply-To: <0jatk292l9rpm1nbtq3m4o3vihoggkc0uo@4ax.com>
User-Agent: G2/1.0
X-HTTP-UserAgent: Mozilla/4.0 (compatible; MSIE 6.0; AOL 9.0; Windows NT 5.1;
SV1),gzip(gfe),gzip(gfe)
X-HTTP-Via: HTTP/1.1 (Velocity/1.3.32 [uScMs f p eN:t cCMp s ]), HTTP/1.1 Turboweb
[mtc-te044 8.4.1], HTTP/1.1 cache-mtc-aa06.proxy.aol.com[400C740A] (Traffic-
Server/6.1.2 [uScM])
Complaints-To: groups-abuse@google.com
Injection-Info: i42g2000cwa.googlegroups.com; posting-host=64.12.116.10;
   posting-account=qNx0vw0AAAA-UHNzUIDJOorYN5_VptjO
Xref: g2news2.google.com rec.radio.amateur.policy:53094
rec.radio.amateur.space:477

Mork@kb9rqz.putz wrote:
> On Mon, 06 Nov 2006 01:16:03 GMT, Slow Code <my.mail@no.spam> wrote:
> >"Titties n Beer" <anon@anon> wrote in news:eg9hg.ob1.17.1@news.alt.net:
```

```
> >> "Slow Code" <my.mail@no.spam> wrote in message
> >> news:hO93h.2458$0r.245@newsread1.news.pas.earthlink.net...
> >>
> >> We're better.
> >>
> >> SC
> >>
> >> Mark is most assuredly going to crap on THIS comment!
> >
> >Yes, I expect he's going to mail me a turd over that one.
>
> nah i don't do that sort of ####

     Sure you do.

Steve, K4YZ




From 4058806375512609080
X-Google-Thread: 10bf43,4282e1421e60b2a9
X-Google-Thread: 10e8ad,4282e1421e60b2a9
X-Google-Attributes: gid10bf43,gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news3.google.com!news.glorb.com!nntpserver.com!
zeus.nntpserver.com!hydra.nntpserver.com!not-for-mail
From: Mark@kb9rqz.aprs
Newsgroups: rec.radio.amateur.policy,rec.radio.amateur.space
Subject: sc conitues crapathon
Date: Mon, 06 Nov 2006 11:48:33 -0500
Message-ID: <8ppuk2pvrp47hf60lv8c40bvo29b5b779m@4ax.com>
References: <hO93h.2458$0r.245@newsread1.news.pas.earthlink.net>
<eg9hg.ob1.17.1@news.alt.net>
<n1w3h.2746$l25.2507@newsread4.news.pas.earthlink.net>
<0jatk292l9rpm1nbtq3m4o3vihoggkc0uo@4ax.com>
<1162793642.045664.318290@i42g2000cwa.googlegroups.com>
X-Newsreader: Forte Free Agent 3.3/32.846
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Lines: 25
NNTP-Posting-Date: 06 Nov 2006 15:53:33 GMT
X-Complaints-To: abuse@teranews.com
Xref: g2news2.google.com rec.radio.amateur.policy:53174
rec.radio.amateur.space:478

On 5 Nov 2006 22:14:02 -0800, "K4YZ" <k4yz@aol.com> wrote:

>Mork@kb9rqz.putz wrote:
>> On Mon, 06 Nov 2006 01:16:03 GMT, Slow Code <my.mail@no.spam> wrote:
>> >"Titties n Beer" <anon@anon> wrote in news:eg9hg.ob1.17.1@news.alt.net:
>> >> "Slow Code" <my.mail@no.spam> wrote in message
>> >> news:hO93h.2458$0r.245@newsread1.news.pas.earthlink.net...
>> >>
>> >> We're better.
>> >>
>> >> SC
>> >>
>> >> Mark is most assuredly going to crap on THIS comment!
>> >
>> >Yes, I expect he's going to mail me a turd over that one.
>>
>> nah i don't do that sort of shit
>
>     Sure you do.
no steve you simply refuse to face the facts I am not that sort of
person I don't mail out shit either phycial crap or the osrt of lies
and smearing letter you send out
>
>Steve, K4YZ
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com



From 1362972490125855643
X-Google-Thread: 10e8ad,de31f83becb77a54,start
X-Google-Thread: 113975,de31f83becb77a54,start
X-Google-Attributes: gid10e8ad,gid113975,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news4.google.com!news3.google.com!news.glorb.com!
news.tele.dk!feed118.news.tele.dk!news.tele.dk!small.news.tele.dk!newsrouter-
eu.astraweb.com!news.astraweb.com!router1.astraweb.com!not-for-mail
From: Chris Steyaert <observations@rmob.org>
Newsgroups: rec.radio.amateur.space,sci.astro.amateur
Subject: Radio Meteor Obs. Bull. October 2006  Orionids
Date: Wed, 08 Nov 2006 20:13:24 +0100
Message-ID: <k1b4l2lr09hojn0a4sgv6r10g9emok0qbm@4ax.com>
X-Newsreader: Forte Agent 1.93/32.576 English (American)
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Lines: 17
Organization: Unlimited download news at news.astraweb.com
NNTP-Posting-Host: dfc4d90c.news.astraweb.com
X-Trace: DXC=J@;>g4cOl7c92gaK\0;3cnL?0kYOcDh@jgP=YS3P0dAfBJ[MjRmdmlhG?
ifhhgG3Ca7[SaXGhd8SgcA0FGZN`Q^k=AU8U6db\?n
Xref: g2news2.google.com rec.radio.amateur.space:479 sci.astro.amateur:44356

Radio Meteor Observation Bulletin No. 159 of September 2006 (79K) is available
now as


     http://visualrmob.free.fr/rmobtext/rmob0610.txt
```

More information and the visual presentation of the hourly forward scatter counts can be found on

http://www.rmob.org

http://radio.data.free.fr

Chris

From -4561343462890018456
X-Google-Thread: 10e8ad,346e6bfc8da2dd71,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news3.google.com!newshub.sdsu.edu!elnk-nf2-pas!newsfeed.earthlink.net!stamper.news.pas.earthlink.net!newsread3.news.pas.earthlink.net.POSTED!46041641!not-for-mail
From: "JoAnne Maenpaa" <wb9jej_no-spam@earthling.com>
Newsgroups: rec.radio.amateur.space
Subject: ANS-309 AMSAT News Service Weekly Bulletins
Lines: 384
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <aFH4h.4458$L6.753@newsread3.news.pas.earthlink.net>
Date: Thu, 09 Nov 2006 15:18:30 GMT
NNTP-Posting-Host: 66.167.68.134
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread3.news.pas.earthlink.net 1163085510 66.167.68.134 (Thu, 09 Nov 2006 07:18:30 PST)
NNTP-Posting-Date: Thu, 09 Nov 2006 07:18:30 PST
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news2.google.com rec.radio.amateur.space:480

AMSAT NEWS SERVICE
ANS-309

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

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* OSCAR-11 REPORT
* AMSAT Donation Opportunity for Federal Employees
* SK - Reihard Richter, DJ1KM
* Satellite DX Opportunities
* National Science Foundation Plans Webcast of Mercury Transit
* ARISS Status - 30 October 2006

SB SAT @ AMSAT $ANS-309.01
ARISS Contingency Network Activated

AMSAT News Service Bulletin 309.01
From AMSAT HQ SILVER SPRING, MD.
November 5, 2006
To All RADIO AMATEURS
BID: $ANS-309.01

October 30, 2006

On Thursday, October 26, NASA Johnson Space Center asked that the ARISS Ops Team enable its ISS Ham Contingency Network and go into standby mode as a resource for NASA. ARISS volunteers immediately swung into action.

Russian Flight Controllers were experiencing difficulties completing the docking of a Russian Progress cargo vehicle. Its antenna would not retract properly as it neared the ISS. It is a requirement for the antenna to be retracted before the last step of the physical docking is executed to avoid a collision between the antenna and the docking port. The ISS was put into a free-drifting mode, which aids the crew with docking maneuvers. Free-drifting results in the ISS solar arrays not being pointed directly toward the sun. This causes decreased power generation for the ISS, and the crew is required to slow down or shut down some ISS systems to conserve power.

During free-drift mode, a loss of TDRSS (Tracking and Data Relay Satellite System) coverage can occur; TDRSS is the system that handles communications between astronauts and Mission Control (MCC) in Houston. The ARISS Team was asked to ready its ISS Ham Contingency Network so that MCC could feel secure in having solid communication coverage while their staff took care of the docking issue.

The docking problem was solved, and the ARISS contingency network wasn't used by NASA for actual communications. NASA's request and the ensuing ham activity served as a great drill for the ARISS Team. MCC (Houston) was impressed with how quickly the ARISS Team had its system up and running. The MCC staff's concern about the possible TDRSS problem was lessened, knowing of the hams' ability to act as a back-up resource in the case that it is ever needed.

Kenneth Ransom, N5VHO, generated a procedure for the ISS crew on the operations of the ARISS contingency network. The fact that the ARISS Team was asked to be on standby was known by anyone listening to the NASA communications channel. MCC Houston transmitted a message to the crew that information would be uplinked about the ham network and the procedure for it if they needed to invoke it.

It was the first time in the six-year history of ARISS that NASA had asked the hams to bring up the contingency network. Within 15 minutes of receiving the call from NASA, ARISS Ops Team member Kenneth Ransom, N5VHO, reported the ARISS Ops Team ready to communicate. ARISS Team member Tony Hutchinson, VK5ZAI, of Australia, was awakened at 2 AM, and got on-line to make a blind call up to the crew, although they did not need to answer at that point.

Within the 3.5 hours from the time the initial phone call came, until the team got word to shut down, Tony Hutchison, VK5ZAI, was as his mike, and these additional stations were on standby to cover later passes: Gerald Klatzko, ZS6BTD, in South Africa; Gaston Bertels, ON4WF, at the Belgian ON4ISS station; Dick Flagg, AH6NM, and Nancy Rochelau, WH6PN, at Sacred Hearts Academy in Honolulu, Hawaii; and Frank Bauer, KA3HDO, and Mark Steiner, K3MS, at the Goddard Space Flight Center ham station, WA3NAN. The ARISS teamwork was very effective; its members learned a great deal, and they impressed NASA with how quickly the system was brought up.

[ANS thanks Rosalie, K1STO,
ARISS Secretary-Treasurer for the above information]

/EX

SB SAT @ AMSAT $ANS-309.02
OSCAR-11 REPORT

AMSAT News Service Bulletin 309.02
From AMSAT HQ SILVER SPRING, MD.
November 5, 2006
To All RADIO AMATEURS
BID: $ANS-309.02

31 October 2006

OSCAR-11 is back! It was first heard by Peter ZL3TC, at 06:23 UTC on October 18. It had been silent since August 26.

During the period 28 September to 30 October, the satellite was heard from 18 to 28 October. Good signals have been heard on most passes, often very strong.

Further deterioration of the time/date stamp has occurred. Here is a frame of telemetry captured on 27 October at 08:43:51 UTC.

```
UOSAT-2           060=601033448

000000010001020002030003040004050005060006070007080008090009
100001110000120003130002140005150004160007170006180009190008
20000221000322000023000124000625000726000427000528000A29000B
30000331000232000133000034000735000636000537000438000B39000A
40000441000542000643000744000045000146000247000348000C49000D
50000551000452000753000654000155000056000357000258000D59000C
60800E615FC162010563330564440265 1E0C662AC467000168000E69000F
```

The date/time stamp is the block of characters following 'UOSAT-2' having the format YYMMDDWHHMMSS (Year, month, day, day of week, hours, minutes, seconds).

The month, shown as '0=' in the date stamp is now in all telemetry frames. When the satellite was heard in August the month, had stuck at 07 and the day had incremented to 60. During the ten day reception period in October, the day had correctly incremented from 51 to 60. While the satellite was silent, it appears likely that the day may have incremented to 99 and then reset to zero. It will be interesting verify this theory on future passes.

During the last ten days of beacon transmission the time stamp incremented accurately, and no gain or loss was detected (within one or two seconds). However, on one occasion, the most significant digit of the hours failed to change from zero to one, although it didn't cause a permanent error.

If the satellite continues to operate normally, the beacon should switch ON around 07 November. If nothing is heard, it may be worth listening ten days later, ie. around 17 November.

I am indebted Peter ZL3TC, Bob G4VRC, Paul KB5M, and Doug KA2UPW/5 for their reports and for monitoring the satellite. Peter listened for the satellite daily, often during several passes, while it was silent. Many thanks.

The status of the satellite, when last heard, was that all the analogue telemetry channels, 0 to 59 are zero, ie they have failed. The status channels 60 to 67 were still working. The spacecraft computer and active attitude control system have switched OFF, ie. the satellite' attitude is controlled only by the passive gravity boom gradient, and the satellite is free to spin at any speed. When telemetry was last received it showed that one of the solar arrays had failed, and there was a large unexplained current drain on the main 14 volt bus. After 22 years in orbit the battery has undergone around 100,000 partial charge/discharge cycles, and observations suggest that it cannot power the satellite during eclipses, or sometimes during periods of poor solar attitude.

The watchdog timer now operates on a 20 day cycle. The ON/OFF times have tended to be very consistent. The average of many observations show this to be 20.7 days, ie. 10.3 days ON followed by 10.4 days OFF. However, poor solar attitude may result may result in a low 14 volt line supply, which may cause the beacon to switch OFF prematurely, and reset the watchdog timer cycle. When this occurs, the beacon is OFF for 20.7 days.

The Beacon frequencies are -

VHF 145.826 MHz. AFSK FM ASCII Telemetry

UHF 435.025 MHz. OFF

S-band 2401.5 MHz. OFF

Listeners to OSCAR-11 may be interested in visiting my website. If you need to know what OSCAR-11 should sound like, there is a short audio clip for you to hear. The website contains an archive of news & telemetry data. It also contains details about using a soundcard or hardware demodulators for data capture. There is software for capturing data, and decoding ASCII telemetry. The URL is
www.users.zetnet.co.uk/clivew/

[ANS thanks Clive, G3CWV, for the above information]

/EX

SB SAT @ AMSAT $ANS-309.03
AMSAT Donation Opportunity for Federal Employees

AMSAT News Service Bulletin 309.03
  From AMSAT HQ SILVER SPRING, MD.
November 5, 2006
To All RADIO AMATEURS
BID: $ANS-309.03

Again this year AMSAT is a member of the Combined Federal Campaign (CFC). The mission of the CFC is to promote and support philanthropy through a program that is employee focused, cost-efficient, and effective in providing all federal employees the opportunity to improve the quality of life for all. As the world's largest and most successful annual workplace giving campaign, each year, more than 300 CFC campaigns throughout the country and internationally help to raise millions of dollars for eligible non-profit organizations.

Gunther Meisse, AMSAT treasurer has announced that any Federal employee can make a contribution to your Radio Amateur Satellite Corporation when they complete their pledge for 2006.

AMSAT is listed as Agency Number CFC 2944.

Your contribution directly supports AMSAT's educational outreach and satellite construction projects including work on AMSAT-Eagle. Pledges may be made by Federal civilian, postal and military donors during the campaign season.

The campaign runs from September 1st to December 15th, 2006.

To learn more about CFC visit the CFC website at:
http://www.opm.gov/cfc/

The 2005 Annual Report, Audit and tax filings are now posted on the AMSAT website at:
http://www.amsat.org/amsat-new/AboutAmsat/documents/finance.php

[ANS thanks Gunther W8GSM, AMSAT Treasurer for the above information]

/EX

SB SAT @ AMSAT $ANS-309.04
SK - Reihard Richter, DJ1KM

AMSAT News Service Bulletin 309.04
From AMSAT HQ SILVER SPRING, MD.
November 5, 2006
To All RADIO AMATEURS
BID: $ANS-309.04

AMSAT has received the sad news that Reinhard Richter, DJ1KM passed away on October 27, 2006. Reinhard was very active on satellites, worked on the AMSAT-DL website, and had managed the AO-40 schedule. His family can be reached via: Inge Richter and family, Lohfeldweg 40, 30459 Hannover, Germany.

[ANS thanks Inge Richter for the above information]

/EX

SB SAT @ AMSAT $ANS-309.05
Satellite DX Opportunities

AMSAT News Service Bulletin 309.05
From AMSAT HQ SILVER SPRING, MD.
November 5, 2006
To All RADIO AMATEURS
BID: $ANS-309.05

LA/W5ACM will be active on board a cruise ship in the Caribbean Sea starting on October 30, 2006. Ports of call include Jamaica, Grand Cayman and Cozumel. NO operation will be attemped from land, but many grids will be made available while at sea.

Target satellites include SO-50 and AO-51. Due to the difficulty of SSB up/FM down ops via AO-51, better results are expected via SO-50. We will give it our best shot! QSL to Andy's W5ACM home call.

Other satellite ops on this cruise include WB5RMA, WA5TWT, WA5WOD and WD5BDX.

Bob, K0NR will be active as PJ4/K0NR from Bonaire (IOTA SA-006) from Oct 28 to Nov 9th, SSB and PSK31 on 30M through 6M. Also active on FM OSCAR satellites (Grid FK52). QSL to K0NR home call.

Nader has ended his ST2NH operation from Sudan and returned home to Saudi Arabia where he plans to be active again from El Rijadh as HZ1NH on the satellites. During his three weeks in Sudan he reported working 23 countries and made 105 QSOs with different stations mostly in Europe using AO-7, FO-29, AO-51 and AO-52.

[ANS thanks Andy, W5ACM; Bob, K0NR, and Domenico, I8CVS for the above information]

/EX

SB SAT @ AMSAT $ANS-309.06
National Science Foundation Plans Webcast of Mercury Transit

AMSAT News Service Bulletin 309.06
>From AMSAT HQ SILVER SPRING, MD.
November 5, 2006
To All RADIO AMATEURS
BID: $ANS-309.06

The National Science Foundation's Kitt Peak National Observatory and the Exploratorium are joining forces to present a live view of an unusual celestial event: the transit of planet Mercury across the face of the Sun, as seen from Earth.

This five-hour transit occurs on Wednesday, November 8, 2006, beginning at 19:12 UTC and ending at 00:10 UTC.

The coverage from Kitt Peak, broadcast on the Web by a mobile multimedia team from the Exploratorium, will include a live image of the transit as seen through a white-light filter on a Meade 16-inch telescope operated by the national observatory for public outreach, plus live voiceover commentary at the top of every hour and interviews with astronomers on Kitt Peak.

For more information and to watch the event live, go to:
http://www.exploratorium.edu/transit

[ANS thanks the National Science Foundation for the above information]

SB SAT @ AMSAT $ANS-309.07
ARISS Status

AMSAT News Service Bulletin 309.07
From AMSAT HQ SILVER SPRING, MD.
November 5, 2006
To All RADIO AMATEURS
BID: $ANS-309.07

1. Flanders Contact Cancelled

The Amateur Radio on the International Space Station (ARISS) contact which was scheduled with students attending the Flanders Science Festival on Friday, October 27 was cancelled due to issues associated with the docking of Progress 23P. The team is working to reschedule the contact with the students as soon as possible, although a specific date, time and location have not yet been determined.

2. Expedition 13 Crew Debrief Status

The Amateur Radio on the International Space Station U.S. team has compiled questions for the crew debrief with Jeff Williams, KD5TVQ. The debriefing session is tentatively scheduled for November 9 with a new time of 3:45 pm ET.

3. ARRL Article on ARISS International Team Meeting

The American Radio Relay League (ARRL) ran a web story covering the Amateur Radio on the International Space Station (ARISS) International Team Meeting held in San Francisco on October 8 - 10. See:
http://www.arrl.org/news/stories/2006/10/25/2/?nc=1

[ANS thanks Carol, KB3LKI for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73, This week's ANS Editor,
Dee Interdonato, NB2F

```
From -8477716146694830451
X-Google-Thread: 10e8ad,e33d516c627b7ad8,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news3.google.com!newshub.sdsu.edu!elnk-nf2-pas!
newsfeed.earthlink.net!stamper.news.pas.earthlink.net!
newsread3.news.pas.earthlink.net.POSTED!46041641!not-for-mail
From: "JoAnne Maenpaa" <wb9jej_no-spam@earthling.com>
Newsgroups: rec.radio.amateur.space
Subject: WSR-310 AMSAT Weekly Satellite Report
Lines: 1008
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <bFH4h.4459$L6.4154@newsread3.news.pas.earthlink.net>
Date: Thu, 09 Nov 2006 15:18:31 GMT
NNTP-Posting-Host: 66.167.68.134
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread3.news.pas.earthlink.net 1163085511 66.167.68.134 (Thu, 09 Nov
2006 07:18:31 PST)
NNTP-Posting-Date: Thu, 09 Nov 2006 07:18:31 PST
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news2.google.com rec.radio.amateur.space:481

This report is organized into 4 parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites

SB SAT @ AMSAT W8ISS ANS-310.S1
WSR 310 Part 1 11/06/2006

AMSAT NEWS SERVICE BULLETIN 310.S1 FROM AMSAT HQ
SILVER SPRING, MD, November 06, 2006
TO ALL RADIO AMATEURS
BID: $ANS-310.S1

VO-52 HAMSAT
Catalog Number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/V - Indian Transponder

Frequencies:
-------------------
Indian Transponder:
Uplink:   435.220 MHz to 435.280 MHz LSB/CW
Downlink: 145.870 MHz to 145.930 MHz USB/CW
```

Dutch Transponder:
Uplink: 435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW

Indian Beacon: 145.859330 MHZ CW
Dutch Beacon: 145.860MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsat.in/hamsat.htm

To know what transponder is switched on please listen for the beacon that
is active. Each transponder has a different beacon.
[10022006]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational
Current Mode(s): FM Repeater - V/S - No Tone
                 PBBS -   OFF
                 Digipeater - OFF

Analog voice downlink: 435.300 MHz FM
                        435.150 MHz FM
                       2401.200 Mhz FM
Analog voice uplink: 145.880 MHZ FM
                        145.880 MHz USB
                        145.920 MHz FM 67Hz PL tone
                       1268.700 MHz FM 67Hz PL tone
Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
                       2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast Protocol
                       1268.700 mhz FM, 9k6 PBP Digital

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/

```
[11062006]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Uplink:   145.850 MHz (67.0 Hz PL tone) (See below for operating
procedures)
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The order of operation is thus: (allow for Doppler as necessary)
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute
timer
   on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the
repeater
   on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset
the 10
   minute timer.
[04172006]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: OPERATIONAL

Voice/CW Mode JA
Uplink:   145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon:   435.795 MHz

Digital Mode JD
Uplink:   145.850 145.870 145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP
```

unOfficial Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=5&retURL=/satellites/status.php
[10162006]

=====

AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational?

Uplink: 145.850 MHz FM
Downlink: 436.795 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

This off the AO-27 website:
For the last 5 weeks ground controllers have been trying to contact AO-27. At this point we have not been able to turn it on. We still have a few tricks that we are planning on trying but these take time. We are hoping that we can re-establish communications.

At this time, we don't have an estimate for when AO-27 will be back on the air.

AO-27 is now in its 14th year on orbit. We will continue to try to recover AO-27 until we run out of ideas.
- Michael N3UC

Official Webpage: http://www.ao27.org
[10232006]

=====

AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational depending on amount of Sunlight
Current Reported mode: Mode-A

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz
          145.972 MHz

435.100 MHz
2304.100 MHz

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php
The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
AO-7 users are requested to log their contacts and observations about
AO-7,
especially any unexpected mode changes.
AO-07 telemetry software webpage:
http://www.qsl.net/k3tz/files/K3TZ_AO-07_Telemetry_Decoder_0.5.zip

Please keep your power low! For additional information please read the
AO-7
Usage Guidelines on the AO-7 Log and Resource Site located at:
http://www.planetemily.com/ao7
[04242006]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: Voice
Digipeater: OFF

The Expedition 14 crew is:
Commander: Michael Lopez-Alegria - KE5GTK
Flight Engineer: Mikhail Tyurin - RZ3FT
Flight Engineer: Thomas Reiter - DF4TR

Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

SSTV TESTING:
Worldwide Reported Downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:

German: DP0ISS
Russian: RS0ISS, RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is NOT translated from Russian and posted.
[10092006]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-310.S2
WSR 310 Part 2 11/06/2006

AMSAT NEWS SERVICE BULLETIN 310.S2 FROM AMSAT HQ
SILVER SPRING, MD, November 06, 2006
TO ALL RADIO AMATEURS
BID: $ANS-310.S2

HO-59 HITSat
Catalog Number: 29484
Launch date: September 22, 2006

Status: Operational

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon: 437.2750 MHz CW

Callsign: JR8YJT
[10302006]
=====
CO-58 XI-V
Catalog Number: 28895
Launch Date: October 27, 2005

Status: Operational - CW only

Telemetry Downlink: 437.345MHz - FSK 1200bps using AFK protocol
Beacon: 437.465MHz - CW

Callsign: JQ1YGW

Oficial Webpage: http://www.space.t.u-tokyo.ac.jp/gs/satinfo-e.html#xi5
Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
[09252006]

```
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launched: June 30, 2006

Status: Operational

Beacon:     436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS
[10022006]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launched: June 30,2003

Status: Semi-Operational - Constant Carrier only

Uplink: ?
Downlink: 437.3850 CW
          437.4700 1200 FM ax25 or SRLL (ACTIVE only near Japan ? )

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[09252006]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Current Mode(s): FM Repeater - V/S - No Tone
                 PBBS -        OFF
                 Digipeater -  OFF


Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink:   145.880 MHZ FM
                       145.880 MHz USB
                       145.920 MHz FM 67Hz PL tone
                      1268.700 MHz FM 67Hz PL tone
Digital Downlinks:     435.150 MHz FM 38k4 Digital, PBP, 1 watt output
                      2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:        145.860 MHz FM 9k6 Digital, Pacsat Broadcast
Protocol
                      1268.700 mhz FM, 9k6 PBP Digital
Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
```

```
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[11062006]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: RECOVERY EFFORTS - REFRAIN FRON USAGE!!!

General Usage Uplink/Downlink:145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org
aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[09252006]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM
Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[08072006]
=====
RS-22 Mozhayets 4
Catalog Number: 27939
Launch Date: September 27, 2004

Status: Operational

Beacon: 435.3520 MHz CW
=====
AO-16 PACSAT
Catalog number: 20439
```

```
Launch Date: January 22, 1990

Status: Semi-operational, the digipeater command is on and open for
APRS users.

Uplink: 145.900 FM
       145.920 FM
       145.940 FM
       145.960 FM
(using 1200-baud Manchester FSK)
Downlink: 437.026 MHz SSB (1200-baud PSK)
Mode-S Beacon: 2401.1428 MHz

Mode and Antenna Polarization:
U: RC 437.050 MHz RHCP
  PSK 437.025 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[04172006]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational

Telemetry Downlink: 145.826 MHz. FM (1200-baud AFSK) approx. 10 days ON,
10
                    days OFF
Mode-S Beacon:     2401.500 MHz - OFF
UHFBeacon:          435.025 MHz - OFF

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Official webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[10302006]
=====
PCSAT-2
Catalog Number: 25544
Launch Date: August 1, 2005

Activated: August 3, 2005
Status: Decommissioning
Current Mode: OFF

Voice Digital Uplink:    145.990 MHz
```

Voice response Downlink: 437.975 MHz

Digital Downlink: 435.275 Mhz
Digital Uplink: 145.825 Mhz
ISS digipeater uplink: 145.990 Mhz

PSK-31 Downlink: 435.275 Mhz
PSK-31 Uplink: 29.401 Mhz

CALLSIGN: pcsat2

Official Webpage: http://web.usna.navy.mil/~bruninga/pcsat2.html
PCSAT2 APRS Packet page: http://www.findu.com/cgi-bin/pcsat2.cgi
aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[09252006]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: Voice
Digipeater: OFF

Expedition Crew 14 is:
Commander: Michael Lopez-Alegria - KE5GTK
Flight Engineer: Mikhail Tyurin - RZ3FT
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Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

SSTV TESTING:
Worldwide Reported Downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS, RZ3DZR

USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is NOT translated from Russian and posted.
[10092006]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-310.S3
WSR 310 Part 3 11/06/2006

AMSAT NEWS SERVICE BULLETIN 310.S3 FROM AMSAT HQ
SILVER SPRING, MD, November 06, 2006
TO ALL RADIO AMATEURS
BID: $ANS-310.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

AO-54 SUITSAT
Catalog Number:28933
Release Date: February 3,2006

Status: Re-Entered

Modes : FM Voice Telemetry/Greetings
FM SSTV

Callsign: RS0RS
Downlink: 145.990 FM

Currently on the amsat-bb, there is a geussing game going on about when
Suitsat will re-enter the atmosphere.

Official webpage: http://www.suitsat.org
[09252006]
=====
NCUBE-2
Catalog Number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog Number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 FM 67Hz CTCSS
Voice Downlink: 2401.835 FM
Packet Up/Downlink: 437.250 9k6 packet
Packet Downlink 2401.835 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01292006]
=====
TO-31 TMSAT-1
Catalog Number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink: 145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
PO-28 POSAT-1
Catalog Number: 22829
Launch Date: September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012006]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launched: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB
Beacon: 145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: Downlink only

Uplink: 145.875 145.900 145.925 145.950 MHz FM (1200-baud)
Downlink: 435.808 MHz PSK
Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01012006]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB
Beacon: 29.408 MHz
Robot: 29.454 MHz
[05232004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB
Beacon: 145.860 MHz
Robot: 145.908 MHz
[05232004]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink 145.975 MHz FM
Downlink 435.070 MHz FM
[05092004]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink: 145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM
Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01092005]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational?

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB
Beacon: 29.352 MHz (intermittent)
SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplink: 145.84 145.86 145.88 145.90 MHz FM
(using 1200-baud Manchester FSK)
CW downlink: 437.125 MHz
Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[05232004]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[08152004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM
Broadcast Callsign: HL01-11
BBS: HL01-12

Jim, AA7KC, reports that KO-23's downlink transmitter continues in a non-operational status.
[05092004]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM (9600-baud FSK)
Downlink: 436.500 MHz FM
Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm

[ANS-WSR has no further information]
[09042006]

=====

SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

STatus: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz and 145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[08082004]

=====

UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlink: 437.025 MHz 437.400 MHz
Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web site
at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[05092004]

=====

AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

```
Uplink V-band   145.840 - 145.990 MHz CW/LSB
      U-band   435.550 - 435.800 MHz CW/LSB
      L1-band 1269.250 - 1269.500 MHz CW/LSB
      L2-band 1268.325 - 1268.575 MHz CW/LSB
Downlink: S2-band 2401.225 - 2401.475 MHz CW/USB
         K-band 24,048.010 - 24,048.060 MHz CW/USB
Beacon:   2401.323
        24,048.035
[05232004]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational
Downlink: 437.075 MHz
Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[08152004]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz
Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[08152004]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
call-
sign KE6QMD, as per the user service agreement located at the following
URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
MO-46 TIUNGSAT-1
```

Catalog number: 26548
Launched: September 26, 2000

Status: Operational

Uplink: 145.850 or 145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz
Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[11202005]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink 435.275 1200-baud AFSK
Downlink 145.825 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink: Downlink 145.825 MHz FM 1200 Baud AFSK
Beacon: 2401.220 MHz
[05012006]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25

[05012006]
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/EX

SB SAT @ AMSAT W8ISS $ANS-310.S4
WSR 310 Part 4 11/06/2006

AMSAT NEWS SERVICE BULLETIN 310.S4 FROM AMSAT HQ
SILVER SPRING, MD, November 06, 2006
TO ALL RADIO AMATEURS
BID: $ANS-310.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE PROPOSED FOR LAUNCH AT THIS TIME:

PHASE 3E ?O-??
Catalog Number:
Proposed Launch Date: Early/Mid 2007

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/
[ANS-WSR wishes to thank William Leijenaar, PE1RAH for this week's report]
[04242006]
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/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)

* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/amsat/listserv/menu.html

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

From -2329831381843694544
X-Google-Thread: 10e8ad,2cd865c9366827fd,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news4.google.com!news.glorb.com!cycny01.gnilink.net!spamkiller2.gnilink.net!gnilink.net!trndny01.POSTED!e3303ecb!not-for-mail
From: "Carl Domanico" <vze2686b@verizon.net>
Newsgroups: rec.radio.amateur.space
Subject: Wanted Collins 30L-1 Round
Lines: 14
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.2869
X-MIMEOLE: Produced By Microsoft MimeOLE V6.00.2900.2962
X-RFC2646: Format=Flowed; Original
Message-ID: <uhU6h.3007$672.368@trndny01>
Date: Thu, 16 Nov 2006 07:18:50 GMT
NNTP-Posting-Host: 70.107.197.181
X-Complaints-To: abuse@verizon.net
X-Trace: trndny01 1163661530 70.107.197.181 (Thu, 16 Nov 2006 02:18:50 EST)
NNTP-Posting-Date: Thu, 16 Nov 2006 02:18:50 EST
Xref: g2news2.google.com rec.radio.amateur.space:482

Hi, I'm looking for a Collins 30L-1 Round Emblem, High Frequency, Linear

Amplifer. Not looking for any junk, actually I want one in excellent
condition, Must be Round Emblem... Prefer one that has already been
refurbished, things such as power supply, caps , etc...So as I do not have
to do it...Although I've restored a few of them...I just want one in
Excellent to Mint Condition...
If anyone out there has one of these amps, please feel free to e-mail me and
if you like call 718-331-7427

Thanks a Lot
Carl
N2MFW

From 350591555338624835
X-Google-Thread: 10e8ad,3e8b2aa653211c59,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news3.google.com!newshub.sdsu.edu!elnk-nf2-pas!
newsfeed.earthlink.net!stamper.news.pas.earthlink.net!
newsread4.news.pas.earthlink.net.POSTED!46041641!not-for-mail
From: "JoAnne Maenpaa" <wb9jej_no-spam@earthling.com>
Newsgroups: rec.radio.amateur.space
Subject: ANS-316 AMSAT News Service Weekly Bulletins
Lines: 342
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <0WE7h.443$sf5.209@newsread4.news.pas.earthlink.net>
Date: Sat, 18 Nov 2006 14:38:52 GMT
NNTP-Posting-Host: 68.165.59.87
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread4.news.pas.earthlink.net 1163860732 68.165.59.87 (Sat, 18 Nov
2006 06:38:52 PST)
NNTP-Posting-Date: Sat, 18 Nov 2006 06:38:52 PST
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news2.google.com rec.radio.amateur.space:483

AMSAT NEWS SERVICE
ANS-316

ANS is a free, weekly, news and information service of AMSAT North
America, The Radio Amateur Satellite Corporation. ANS reports on the
activities of a worldwide group of Amateur Radio operators who share an
active interest in designing, building, launching and communicating
through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* New ANS News Editor
* Upcoming ARISS Contact Schedule
* NASA activates UHF SDR on MRO
* Want Eagle to be built and launched?
* PCSAT-3 Digital Design Help Needed
* GENSO

SB SAT @ AMSAT $ANS-316.01
New ANS Editor

AMSAT News Service Bulletin 316.01
From AMSAT HQ SILVER SPRING, MD.
November 12, 2006
To All RADIO AMATEURS
BID: $ANS-316.01

I am pleased to be back in the seat as an editor of ANS. It's been about 18 months since I've done it and it feels like no time has gone by. I hope that my contribution will go a little way to encouraging and enlightening others about the worldwide AMSAT mission.

On a practical front, I'm involved with preparing the WWW telemetry pages for the ANDE satellite and getting involved with the Global Educational Network for Satellite Operations (GENSO), more details later in this bulletin.

73,
Dave, G4DPZ

[ANS thanks Dave, G4DPZ, for the above information]

/EX

SB SAT @ AMSAT $ANS-316.02
Upcoming ARISS Contact Schedule

AMSAT News Service Bulletin 316.02
From AMSAT HQ SILVER SPRING, MD.
November 12, 2006
To All RADIO AMATEURS
BID: $ANS-316.02

Landesmuseum fuer Technik und Arbeit (Mannheim Museum), Mannheim, Germany
2006-11-20 14:42 UTC via telebridge WH6PN Thomas Reiter contact
Watch for live IRLP, Echolink, and webcast.

Centre Hastings Secondary, Madoc, Ontario, Canada, direct via VE3UR
Mon 2006-11-20 16:35 UTC

During Expedition 14, ARISS expects to have one ARISS school contact per month rather than approximately one per week.
It is also anticipated that there many not be many general contacts.

Total number of ARISS school contacts is 255.

QSL information may be found at:
http://www.arrl.org/ARISS/arissfaq.html
http://www.rac.ca/ariss/oindex.htm#QSL's

ISS callsigns: DP0ISS, NA1SS, RS0ISS

****

The schedule page has been updated as of 2006-11-08 22:45 UTC. Here you will find a listing of all scheduled school contacts and questions, other ISS
related websites, IRLP and Echolink websites, and instructions for any contact that may be streamed live.
http://www.amsat.org/amsat/ariss/news/arissnews.txt

The successful school list has been updated as of 2006-09-27 02:00 UTC
http://www.amsat.org/amsat/ariss/news/Successful_ARISS_schools.rtf

Frequency chart for packet, voice, and crossband repeater modes showing Doppler correction as of 2005-07-29 04:00 UTC
http://www.amsat.org/amsat/ariss/news/ISS_frequencies_and_Doppler_correction.rtf

Listing of ARISS related magazine articles as of 2006-07-10 03:30 UTC:
http://www.amsat.org/amsat/ariss/news/ARISS_magazine_articles.rtf

****

There has been a rumor that the ISS was having direct contacts on the 40 meter band. There is no HF radio equipment on board and available yet.
The HF antenna is mounted. Sometimes WA3NAN will retransmit shuttle audio.

Expedition 13/14 on orbit:
Thomas Reiter DF4TR

Expedition 14 on orbit:
Michael Lopez-Alegria KE5GTK
Mikhail Tyurin, RZ3FT

Expedition 14 future:
Sunita Williams, KD5PLB

****

[ANS thanks Charlie Sufana AJ9N, for the above information]

/EX

SB SAT @ AMSAT $ANS-316.03
NASA activates UHF SDR aboard MRO

AMSAT News Service Bulletin 316.03
From AMSAT HQ SILVER SPRING, MD.
November 12, 2006
To All RADIO AMATEURS
BID: $ANS-316.03

On Monday, 6 November 2006, the Electra software-defined UHF transponder aboard the Mars Reconnaissance Orbiter was activated in order to relay communications to and from the Spirit rover on the surface of Mars. During the 4.2 minute MRO pass, 31 megabits of data from Spirit were acquired at a return link rate of 128 kilobits per second while simultaneously sending a small forward-link file to the rover. This is the first deep-space use of a software-defined radio by NASA.

[ANS thanks Jan, WB6VRN, for the above information]

/EX

SB SAT @ AMSAT $ANS-316.04
Want Eagle to be built and launched?

AMSAT News Service Bulletin 316.04
From AMSAT HQ SILVER SPRING, MD.
November 12, 2006
To All RADIO AMATEURS
BID: $ANS-316.04

Recent legislation passed by Congress and signed by President Bush can help make that happen. The law, called the Pension Protection Act (PPA), includes a provision enabling AMSAT to raise substantially more money than might have been previously possible.

You know how important money is to getting Eagle into orbit.

Basically, here's the story on how the new law can help Eagle fly!.

The PPA provides that U.S. taxpayers with IRAs who have reached the age of 70-1/2, may contribute to qualified charities, part or all (up to $100,000), of the money they must annually withdraw from their IRAs.

Thus, many AMSAT members and other supporters of the amateur radio space program have a marvelous opportunity to keep the Eagle project on track.

If you must withdraw a certain amount from your IRA each year, there is a big advantage to making such withdrawals as direct contributions to AMSAT rather than merely receiving the distributions and then contributing in the usual manner. Under PPA, the amount you contribute directly is NOT counted as income and thus may put you into a lower tax bracket. It may also reduce the percentage of your Social Security income subject to taxation.

Key provisions of the new legislation to keep in mind:

1. Donors must hold either a conventional or Roth IRA.

2. Donors must be at least 70-1/2 years of age.

3. Contributions must be made directly from the IRA to the charitable organization not to a donor- advised fund, private foundation, gift annuity or trust.

4. Donations may be made this year and next only, and must be made by December 31, 2006 and December 31, 2007.

5. The maximum amount a contributor may donate each year is $100,000.

6. Direct contributions to qualified charities from IRAs, in accordance with the PPA provisions, are NOT counted as taxable income.

If you are 70-1/2 or older and have an IRA, you are in a position to take advantage of this potential windfall for the Eagle project. AMSAT urges you to first check with your tax advisor for specifics regarding your individual situation, then ask your IRA custodian to transfer to AMSAT part or all of what you are required to withdraw. Be sure to have this transfer completed before December 31st.

Let's all of us do our part to get Eagle into orbit.

* Have your IRA custodian call the AMSAT office to get information on how to transfer your contribution. The number 301-589-6062. Office hours are 10 AM to 6 PM EST.

[ANS thanks BIll, W5XO, for the above information]

/EX

SB SAT @ AMSAT $ANS-316.05
Looking for a Digital designer to help with PCSAT-3

AMSAT News Service Bulletin 316.05
 From AMSAT HQ SILVER SPRING, MD.
November 12, 2006
To All RADIO AMATEURS
BID: $ANS-316.05

PCSAT-3 will hopefully be similar to PCSAT-1 and PCSAT2 including a PSK-31 transponder and of course the usual packet digipeaters.... AND...

But it also will have a large surface area that we want to see if we can HEAR micrometeor impacts, and with four microphones and DSP see if we can locate the point of impact. This will require working with a high-end PIC processor that has a DSP code operating at up to 1 MHz sample rate (500 KHz bandwidth), 12 bit resolution, and sensitivity down to 10ths of a milli-volt.

Supposedly we have a "software" guy, but we don't have a digital designer to lay out the 80-pin-PIC processor board, including all the low noise front end to avoid the inevitable noise in the system and a huge amount of FLASH ram to record the data.

If it works, and the PIC detects a hit, then not only would it save the data science purposes, but then we can reply it on the FM downlink as audio for everyone to hear. Expectations are maybe 3 hits per day average?

Anyway, if anyone is an excellent digital designer, with time on their hands and is interested in this project, let me know. Thanks Bob, WB4APR

[ANS thanks Bob, WB4APR, for the above information]

/EX

SB SAT @ AMSAT $ANS-316.06
Global Educational Network for Satellite Operations

AMSAT News Service Bulletin 316.06
 From AMSAT HQ SILVER SPRING, MD.
November 12, 2006
To All RADIO AMATEURS
BID: $ANS-316.06

An ESA Assessment Study for this project began in June 2006 and a large number of the study team attended the AMSAT-UK 2006 Colloquium as part of the SSETI contingent. AMSAT-UK representatives (including the Ed.) were invited to attend their break-out meeting by Neil Mellville of ESA.

In the meeting, AMSAT-UK received a briefing on the purpose of GENSO. Which is to provide a global infrastructure that will be available for future educational satellite projects. By increasing communication time from an average of 3% to a potential 60%, it will become possible to access spacecraft data in real time at low cost.

As a result of this, AMSAT-UK joined with ESA, the SSETI Association, UNISEC, and several universities around the world, to determine the technical feasibility of the project and define a comprehensive set of technical requirements with suggested design solutions.

A month later, the first workshop was held at the University of Tokyo to discuss the proposal and the potential for inter-continental collaboration. The response from the amateur radio and academic communities was particularly promising.

The implementation plan produced at the second workshop, held in ESTEC in late September, included work packages, a preliminary schedule and a budget framework. On 5 October, this plan was presented to the International Space Education Board during the International Astronautical Congress in Valencia.

The Board gave the go-ahead to start the design and implementation of the software and hardware, with objective of running a pilot phase in around a years time. They are planning a workshop next February to discuss our progress and the core features should be ready for testing by mid-2007. If all goes according to plan, they hope to have the network fully operational from November 2008 onwards.

Over the coming months, ESA will provide funding for software development and overall project management, with the other space agencies on the board, CSA, JAXA and NASA, sponsoring involvement from Canada, Japan and the USA respectively.

"One of the key aspects of this project will be that the network is developed 'by students for students', with the technical support and guidance of the space agencies and the radio amateur community," said Neil Melville of ESA.

AMSAT-UK has been asked to define the typical ground station in terms of hardware and to provide supporting software. Therefore, watch out for a questionnaire appearing on AMSAT-BB for your thoughts.

The data collection and ground station software, developed as part of the project will be made available to the AMSAT community.

More information can be found at:

http://www.esa.int/esaED/SEM8HFZBYTE_index_0.html

[ANS thanks ESA & AMSAT-UK, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the
President's Club. Members of the President's Club, as sustaining donors
to AMSAT Project Funds, will be eligible to receive additional benefits.
Application forms are available from the AMSAT Office.

73, This week's ANS Editor,
Dave Johnson, G4DPZ

From -8411928921987623581
X-Google-Thread: 10e8ad,dfc868e58431d0c7,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news4.google.com!newsfeed.stanford.edu!
headwall.stanford.edu!newshub.sdsu.edu!elnk-nf2-pas!newsfeed.earthlink.net!
stamper.news.pas.earthlink.net!newsread4.news.pas.earthlink.net.POSTED!46041641!
not-for-mail
From: "JoAnne Maenpaa" <wb9jej_no-spam@earthling.com>
Newsgroups: rec.radio.amateur.space
Subject: WSR-317 AMSAT Weekly Satellite Report
Lines: 968
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <iWE7h.444$sf5.412@newsread4.news.pas.earthlink.net>
Date: Sat, 18 Nov 2006 14:39:10 GMT
NNTP-Posting-Host: 68.165.59.87
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread4.news.pas.earthlink.net 1163860750 68.165.59.87 (Sat, 18 Nov
2006 06:39:10 PST)
NNTP-Posting-Date: Sat, 18 Nov 2006 06:39:10 PST
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news2.google.com rec.radio.amateur.space:484

This report is organized into 4 parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites

SB SAT @ AMSAT W8ISS ANS-317.S1
WSR 317 Part 1 11/13/2006

AMSAT NEWS SERVICE BULLETIN 317.S1 FROM AMSAT HQ
SILVER SPRING, MD, November 13, 2006
TO ALL RADIO AMATEURS
BID: $ANS-317.S1

VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/V - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 MHz to 435.280 MHz LSB/CW
Downlink: 145.870 MHz to 145.930 MHz USB/CW

Dutch Transponder:
Uplink: 435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW

Indian Beacon: 145.859330 MHZ CW
Dutch Beacon: 145.860MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsat.in/hamsat.htm

To know what transponder is switched on please listen for the beacon that is active. Each transponder has a different beacon.
[10022006]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational
Current Mode(s): FM Repeater - V/U - Tone
                 PBBS -   V/U - 9k6 PBP
                 Digipeater - OFF

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink: 145.880 MHZ FM
                       145.880 MHz USB
                       145.920 MHz FM 67Hz PL tone
                      1268.700 MHz FM 67Hz PL tone
Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
                       435.150 MHz FM, 9k6 Digital, Pacsat Broadcast Protocol
                      2401.200 MHz FM, 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast Protocol

1268.700 mhz FM, 9k6 PBP Digital

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[11013006]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Uplink: 145.850 MHz (67.0 Hz PL tone) (See below for operating
procedures)
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The order of operation is thus: (allow for Doppler as necessary)
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute
timer
   on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the
repeater
   on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset
the 10
   minute timer.
[04172006]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: OPERATIONAL

Voice/CW Mode JA

```
Uplink:   145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon:   435.795 MHz

Digital Mode JD
Uplink:   145.850 145.870 145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

unOfficial Webpage: http://www.amsat.org/amsat-new/satellites/
satInfo.php?satID=5&retURL=/satellites/status.php
[10162006]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational?

Uplink:   145.850 MHz FM
Downlink: 436.795 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

This off the AO-27 website:
For the last 5 weeks ground controllers have been trying to contact
AO-27. At
this point we have not been able to turn it on. We still have a few
tricks
that we are planning on trying but these take time. We are hoping that
we can
re-establish communications.

At this time, we don't have an estimate for when AO-27 will be back on
the
air.

AO-27 is now in its 14th year on orbit. We will continue to try to
recover
AO-27 until we run out of ideas.
- Michael N3UC

Official Webpage: http://www.ao27.org
[10232006]
=====
AO-7 AMSAT OSCAR 7
```

```
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational depending on amount of Sunlight
Current Reported mode: Mode-A

Uplink:   145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink:  29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons:   29.502 MHz
          145.972 MHz
          435.100 MHz
         2304.100 MHz

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php
The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
AO-7 users are requested to log their contacts and observations about
AO-7,
especially any unexpected mode changes.
AO-07 telemetry software webpage:
http://www.qsl.net/k3tz/files/K3TZ_AO-07_Telemetry_Decoder_0.5.zip

Please keep your power low!  For additional information please read the
AO-7
Usage Guidelines on the AO-7 Log and Resource Site located at:
http://www.planetemily.com/ao7
[04242006]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: Occasional Voice
Digipeater:   OFF

The Expedition 14 crew is:
Commander:              Michael Lopez-Alegria - KE5GTK
Flight Engineer:        Mikhail Tyurin - RZ3FT
Flight Engineer:        Thomas Reiter - DF4TR

Digital/APRS:
Worldwide packet uplink:   145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink:   145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink:      145.800 MHz FM
```

SSTV TESTING:
Worldwide Reported Downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS, RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.
[10092006]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-317.S2
WSR 317 Part 2 11/13/2006

AMSAT NEWS SERVICE BULLETIN 317.S2 FROM AMSAT HQ
SILVER SPRING, MD, November 13, 2006
TO ALL RADIO AMATEURS
BID: $ANS-317.S2

HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Operational

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon: 437.2750 MHz CW

Callsign: JR8YJT
[10302006]
=====
CO-58 XI-V

```
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW only

Telemetry Downlink: 437.345MHz - FSK 1200bps using AFK protocol
Beacon:             437.465MHz - CW

Callsign: JQ1YGW

Oficial Webpage: http://www.space.t.u-tokyo.ac.jp/gs/satinfo-e.html#xi5
Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
[09252006]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launched: June 30, 2006

Status: Operational

Beacon:     436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS
[10022006]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launched: June 30,2003

Status: Semi-Operational - Constant Carrier only

Uplink: ?
Downlink: 437.3850 CW
          437.4700 1200 FM ax25 or SRLL (ACTIVE only near Japan ? )

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[09252006]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational
Current Mode(s): FM Repeater - V/U - Tone
                 PBBS -        V/U - 9k6 PBP
                 Digipeater -  OFF

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink:   145.880 MHZ FM
                       145.880 MHz USB
```

                       145.920 MHz FM 67Hz PL tone
                      1268.700 MHz FM 67Hz PL tone
Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
                       435.150 MHz FM, 9k6 Digital, Pacsat Broadcast
Protocol
                      2401.200 MHz FM, 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast
Protocol
                      1268.700 mhz FM, 9k6 PBP Digital

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[11013006]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: RECOVERY EFFORTS - REFRAIN FRON USAGE!!!

General Usage Uplink/Downlink:145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org
aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[09252006]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks: 145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM
Broadcast Callsign: 4XTECH-11

```
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[08072006]
=====
RS-22 Mozhayets 4
Catalog number: 27939
Launch Date: September 27, 2004

Status: Operational

Beacon: 435.3520 MHz CW
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Semi-operational, the digipeater command is on and open for APRS
users.

Uplink: 145.900 FM
       145.920 FM
       145.940 FM
       145.960 FM
(using 1200-baud Manchester FSK)
Downlink: 437.026 MHz SSB (1200-baud PSK)
Mode-S Beacon: 2401.1428 MHz

Mode and Antenna Polarization:
U: RC 437.050 MHz RHCP
  PSK 437.025 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[04172006]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational

Telemetry Downlink: 145.826 MHz. FM (1200-baud AFSK) approx. 10 days ON,
10
                    days OFF
Mode-S Beacon:     2401.500 MHz - OFF
UHFBeacon:          435.025 MHz - OFF

Mode and Antenna Polarization:
```

```
V: RHCP
S: LHCP

Official webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[10302006]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: Occasional Voice
Digipeater:   OFF

Expedition Crew 14 is:
Commander:              Michael Lopez-Alegria - KE5GTK
Flight Engineer:        Mikhail Tyurin - RZ3FT
Flight Engineer:        Thomas Reiter - DF4TR

Digital/APRS:
Worldwide packet uplink:   145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink:   145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink:      145.800 MHz FM

SSTV TESTING:
Worldwide Reported Downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink:   437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German:  DP0ISS
Russian: RS0ISS, RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
```

Remember that the crew operates on UTC time. Also, all of the time line
is NOT translated from Russian and posted.
[10092006]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-317.S3
WSR 317 Part 3 11/13/2006

AMSAT NEWS SERVICE BULLETIN 317.S3 FROM AMSAT HQ
SILVER SPRING, MD, November 13, 2006
TO ALL RADIO AMATEURS
BID: $ANS-317.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 FM 67Hz CTCSS
Voice Downlink: 2401.835 FM
Packet Up/Downlink: 437.250 9k6 packet
Packet Downlink 2401.835 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01292006]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink: 145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

```
Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012006]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launched: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB
Beacon: 145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: Downlink only

Uplink: 145.875 145.900 145.925 145.950 MHz FM (1200-baud)
Downlink: 435.808 MHz PSK
Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01012006]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991
```

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB
Beacon: 29.408 MHz
Robot: 29.454 MHz
[05232004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB
Beacon: 145.860 MHz
Robot: 145.908 MHz
[05232004]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink 145.975 MHz FM
Downlink 435.070 MHz FM
[05092004]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink: 145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM
Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01092005]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational?

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB
Beacon: 29.352 MHz (intermittent)
SSB meeting frequency: 29.380 MHz (unofficial)

```
[06202004]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplink: 145.84 145.86 145.88 145.90 MHz FM
(using 1200-baud Manchester FSK)
CW downlink: 437.125 MHz
Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[05232004]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[08152004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM
Broadcast Callsign: HL01-11
BBS: HL01-12

Jim, AA7KC, reports that KO-23's downlink transmitter continues in a
non-operational status.
[05092004]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993
```

Status: Non-operational

Uplink: 145.980 MHz FM (9600-baud FSK)
Downlink: 436.500 MHz FM
Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm

[ANS-WSR has no further information]
[09042006]
=====
SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

STatus: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz and 145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[08082004]
=====
UO-36 UoSAT-12

Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlink: 437.025 MHz 437.400 MHz
Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site
at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[05092004]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

```
Uplink V-band   145.840 - 145.990 MHz CW/LSB
      U-band   435.550 - 435.800 MHz CW/LSB
      L1-band 1269.250 - 1269.500 MHz CW/LSB
      L2-band 1268.325 - 1268.575 MHz CW/LSB
Downlink: S2-band 2401.225 - 2401.475 MHz CW/USB
         K-band 24,048.010 - 24,048.060 MHz CW/USB
Beacon:   2401.323
        24,048.035
```
[05232004]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational
Downlink: 437.075 MHz
Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[08152004]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[08152004]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, callsign KE6QMD, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Operational

Uplink: 145.850 or 145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz
Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[11202005]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink 435.275 1200-baud AFSK
Downlink 145.825 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink: Downlink 145.825 MHz FM 1200 Baud AFSK
Beacon: 2401.220 MHz
[05012006]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
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SB SAT @ AMSAT W8ISS $ANS-317.S4
WSR 317 Part 4 11/13/2006

AMSAT NEWS SERVICE BULLETIN 317.S4 FROM AMSAT HQ
SILVER SPRING, MD, November 13, 2006
TO ALL RADIO AMATEURS
BID: $ANS-317.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE
PROPOSED FOR LAUNCH AT THIS TIME:

PHASE 3E ?O-??
Catalog number:
Proposed Launch Date: Early/Mid 2007

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/
[ANS-WSR wishes to thank William Leijenaar, PE1RAH for this week's report]
[04242006]
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ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/amsat/listserv/menu.html

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

From 2758650341932531402
X-Google-Thread: 10e8ad,f733a53924648dd7,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news1.google.com!news4.google.com!
border1.nntp.dca.giganews.com!nntp.giganews.com!local01.nntp.dca.giganews.com!
nntp.comcast.com!news.comcast.com.POSTED!not-for-mail
NNTP-Posting-Date: Thu, 23 Nov 2006 13:25:01 -0600
From: "JoAnne K9JKM" <k9jkm_remove_@comcast.net>
Newsgroups: rec.radio.amateur.space
Subject: ANS-323 AMSAT News Service Weekly Bulletins
Date: Thu, 23 Nov 2006 13:25:06 -0600
MIME-Version: 1.0
Content-Type: text/plain;
     format=flowed;
     charset="iso-8859-1";
     reply-type=original
Content-Transfer-Encoding: 7bit
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.2869
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.2962
Message-ID: <5ICdnSngAtEQaPjYnZ2dnUVZ_sGdnZ2d@comcast.com>
Lines: 450
NNTP-Posting-Host: 67.184.169.1
X-Trace: sv3-
gi6GuBmOzGrfnJBB6f3Xlq3AFzlSesR4cq5xIoyZHEAKjn9pcGSpV2dZYPWqwiJPkN3d4ixVD1HwqpI!
GF9DV7r6GxaKh51jjLFGKYkITu1JxVzCR9+PyIoLntSnlTeyO1A1dH42EHQCvecDTqeySBbJ2FDW!
+sssEJytImYJlwA=
X-Complaints-To: abuse@comcast.net
X-DMCA-Complaints-To: dmca@comcast.net
X-Abuse-and-DMCA-Info: Please be sure to forward a copy of ALL headers
X-Abuse-and-DMCA-Info: Otherwise we will be unable to process your complaint
properly
X-Postfilter: 1.3.32
Xref: g2news2.google.com rec.radio.amateur.space:485

AMSAT NEWS SERVICE
ANS-323

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:

- AMSAT-NA Signs Agreements to Build Eagle at a UMES Facility
- 24th Space Symposium Proceedings Available in AMSAT Store
- EaglePedia Upgraded
- SatPC32 Version 12.6 is Released
- Call for AMSAT Journal Articles
- Cambodian Satellite Opportunity
- AMSAT Awards
- STSORBIT Plus Author David Ransom SK
- ARISS Status Report for the week of November 13, 2006
- First Live HDTV Broadcast From Space

SB SAT @ AMSAT $ANS-323.01
AMSAT-NA Signs Agreements to Build Eagle at a UMES Facility

AMSAT News Service Bulletin 323.01
>From AMSAT HQ SILVER SPRING, MD.
November 19, 2006
To All RADIO AMATEURS
BID: $ANS-323.01

AMSAT-NA has accepted an offer to co-locate its Satellite Integration Lab with the Hawk Institute for Space Sciences (HISS), a division of the Maryland Hawk Corporation which is a 501(c)(3) non-profit educational organization affiliated with the University of Maryland Eastern Shore (UMES). HISS is located in Pocomoke, Maryland, on the eastern shore of the Chesapeake Bay. Pocomoke is about a 3-hour drive southeast of the Baltimore-Washington International airport.

AMSAT-NA has been actively searching for a suitable location for the past two years as AMSAT's most recent lab at the municipal airport in Orlando, Florida was condemned due to damage by Hurricane Charley on August 13, 2004. With the unanimous approval of the AMSAT-NA Board of Directors, AMSAT-NA has executed two Memoranda of Understanding, one with the University of Maryland Eastern Shore and the other with Maryland Hawk Corporation, formalizing the relationship. These MOUs give AMSAT-NA essentially no-cost access to the HISS facility in return for sharing its equipment and ideas with HISS.

In addition, the agreement with UMES calls for AMSAT-NA to work collaboratively with UMES to identify opportunities to work together on satellite and related technology projects as well as to work with their students and faculty to enhance hands-on studies and dissertation research. The possibility also exists for AMSAT-NA scientists and engineers to receive Adjunct status at the UMES.

AMSAT's VP Engineering, Bob McGwier N4HY, commented "I consider these happenings to be a serious beginning of the activities towards a real spacecraft." AMSAT's lead mechanical engineer, Bob Davis KF4KSS, is also an employee of HISS, resulting in AMSAT having a representative on site at all times. Bob Davis was AMSAT's mechanical design expert in the Orlando lab during the AO-40 satellite campaign.

HISS is currently constructing the interior walls for their new 8,000 square foot facility. It is being designed around AMSAT's dual clean room, which was used for AO-40 and is in storage at Florida Space Institute. AMSAT will move the clean room and the parts and equipment currently in storage in the Orlando area to the new lab in the next few months. The facility will also include adequate meeting and office space for visiting AMSAT personnel. The agreement with HISS also provides AMSAT limited access to NASA Wallops Flight Facility with its environmental testing, machine shop, rocket manufacturing and launch facilities.

AMSAT members Bob Davis KF4KSS, Rick Hambly W2GPS, Tom Clark K3IO, Jim Sanford WB4GCS and Bob McGwier N4HY have worked very hard on this project. AMSAT members are encouraged to volunteer to work in the new lab, come by and visit (call first), and donate to the P3E and Eagle satellite funds.

[ANS thanks Rick, W2GPS for the above information]

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SB SAT @ AMSAT $ANS-323.02
24th Space Symposium Proceedings Available in AMSAT Store

AMSAT News Service Bulletin 323.02
>From AMSAT HQ SILVER SPRING, MD.
November 19, 2006
To All RADIO AMATEURS
BID: $ANS-323.02

Bruce, KK5DO, wearing his AMSAT Store Manager hat, says that the 24th AMSAT-NA Space Symposium Proceedings from San Francisco are now available online at the AMSAT Store. You can purchase your copy and with a credit card conveniently online and have it sent to your door.

It is full of interesting topics. In fact, 284 pages and almost two pounds of interesting stuff.

Bruce continues, "Another neat new item is our AMSAT back pack. It is ideal for carrying all your stuff and boasts the AMSAT logo on the front."

Other items for your holiday wish list include wall clocks, desk clocks, shirts, and more. Be sure to bookmark the AMSAT store for that special person in your life so they can find the things you really want that will not break the bank.

Order yours today at the AMSAT Online Store http://www.amsat.org

[ANS thanks Bruce, KK5DO for the above information]

/EX

SB SAT @ AMSAT $ANS-323.03
EaglePedia Upgraded

AMSAT News Service Bulletin 323.03
>From AMSAT HQ SILVER SPRING, MD.
November 19, 2006
To All RADIO AMATEURS
BID: $ANS-323.03

AMSAT-NA's EaglePedia was upgraded this week. Webmistress Emily, N1DID reported, "EaglePedia is back online and most everything is working."

She recommends that EaglePedia users investigate the release notes to the upgraded version on-line at:
http://www.amsat.org/amsat-new/eagle/EaglePedia/index.php/EaglePedia_1.1_rel
ease_notes (watch the line wrap)

[ANS thanks Emily, N1DID for the above information]

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SB SAT @ AMSAT $ANS-323.04
SatPC32 Version 12.6 is Released

AMSAT News Service Bulletin 323.04
>From AMSAT HQ SILVER SPRING, MD.
November 19, 2006
To All RADIO AMATEURS
BID: $ANS-323.04

Erich Eichmann DK1TB has donated SatPC32 as a fund-raiser for AMSAT. If you use SatPC32, please support amateur satellite programs by purchasing a SatPC32 registration password.

+ A new control button enables the user to toggle between two timer display modes: A fixed AOS/LOS time of the satellites or, alternatively, a countdown of the remaining hours and minutes until the next AOS or LOS.

+ Show the maximum elevation of the next pass of all selected satellites.

+ Output an acoustic message when a satellite is rising.

+ The sub tone steering functions of the program have been expanded. These functions support now also the Kenwood TS-790A

+ The programs now ignore any characters in brackets after the satellite names in Keplerian element text files. This allows the user's existing Doppler.SQF file to be compatible with the new Keps file format from Celestrak.

The downloadable version is a "trial" version that requires the user to enter their lat/lon every time they start the program. To make the program fully functional, a registration password must be purchased from AMSAT-NA, AMSAT-DL, or AMSAT-UK. Your existing registration password may be used for the new version.

SatPC32 version 12.6 is now available for download from the author's web site: http://www.dk1tb.de/downloadeng.htm

[ANS thanks Wayne, W9AE for the above information]

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SB SAT @ AMSAT $ANS-323.05
Call for AMSAT Journal Articles

AMSAT News Service Bulletin 323.05
>From AMSAT HQ SILVER SPRING, MD.
November 19, 2006
To All RADIO AMATEURS
BID: $ANS-323.05

Ed, WA4SWJ, Editor of The AMSAT Journal says, "It's that time again. If you have any articles for the November/December issue of The AMSAT Journal please let me know by e-mail to my [callsign] at amsat.org."

Ed continues, "I have some content already and to those authors - thank you! I'm always looking for more. Regular contributors - please get going!" Here's your chance to tell your mom you got your name in the paper.

[ANS thanks Ed, WA4SWJ for the above information]

/EX

SB SAT @ AMSAT $ANS-323.06
Cambodian Satellite Opportunity

AMSAT News Service Bulletin 323.06
>From AMSAT HQ SILVER SPRING, MD.
November 19, 2006
To All RADIO AMATEURS
BID: $ANS-323.06

The TAMSAT Group and Siam DX Group will include amateur satellite operations on their 2006 Micro-DXpedition to Cambodia. They plan to use Cambodian callsigns for this event running between November 23 to November 28. Operation is planned to include AO-7, FO-29, SO-50, AO-51, and VO-52 using CW, SSB, and FM. Their planned Satellite Operation Schedule is posted at: http://www.tamsat.org/xu7/sch/

[ANS thanks Tanan, XU7ADN and the TAMSAT group for the above information]

/EX

SB SAT @ AMSAT $ANS-323.07
AMSAT Awards

AMSAT News Service Bulletin 323.07
>From AMSAT HQ SILVER SPRING, MD.
November 19, 2006
To All RADIO AMATEURS
BID: $ANS-323.07

Bruce, KK5DO, wearing his AMSAT Director Contests and Awards hat says, "This week, congratulations go out to all of the following:"

We would like to welcome the following to the satellite community. They have made their first satellite contact and are now members of the AMSAT Satellite Communicators Club:

Alan Sieg	WB5RMG
Eric Christensen	KF4OTN

AMSAT Satellite Communications Achievement Award

Alan Sieg	WB5RMG #440
Eric Christensen	KF4OTN #441

South Africa Satellite Communications Achievement Award

Eric Christensen	KF4OTN, US100

To see all the awards visit http://www.amsat.org or http://www.amsatnet.com

[ANS thanks Bruce, KK5DO for the above information]

/EX

SB SAT @ AMSAT $ANS-323.08
STSORBIT Plus Author David Ransom SK

AMSAT News Service Bulletin 323.08
>From AMSAT HQ SILVER SPRING, MD.
November 19, 2006
To All RADIO AMATEURS
BID: $ANS-323.08

Ken Ernandes, N2WWD told AMSAT the sad news of the passing of STSORBIT PLUS author David Ransom on 5 November 2006. While not a ham, Dave was a long-time supporter of AMSAT and a major player in providing Space Shuttle orbital data to the AMSAT and NASA communities. Dave and Ken worked collaboratively to modify STSORBIT PLUS such that it would provide [manual] Doppler tuning information, thus making the software a useful tool for amateur satellite communications.

Amateur Satellite operators around the world will remember Dave for his contributions to AMSAT and will miss him.

[ANS thanks Ken Ernandes, N2WWD for the above information]

/EX

SB SAT @ AMSAT $ANS-323.09
ARISS Status Report for the week of November 13, 2006

AMSAT News Service Bulletin 323.09
>From AMSAT HQ SILVER SPRING, MD.
November 19, 2006
To All RADIO AMATEURS
BID: $ANS-323.09

1. Belgium Contact Successful
The Flanders Science Festival contact took placed on Friday, November 10. Eleven students, ages 11 - 12, from Henri d'Haese Primary School in Gentbrugge, Belgium spoke with astronaut Michael Lopez-Alegria, KE5GTK, via the telebridge station W5RRR in Houston, Texas. Twenty questions were asked and answered in front of an audience of 25 students and 3 teachers. The audio was webcast and was fed into the Echolink AMSAT server. Three television stations, one radio station and several newspapers covered the Gentbrugge event. It is estimated that approximately 1 million people in Flanders, Belgium and the Netherlands heard the contact.

2. Upcoming School Contacts
An Amateur Radio on the ISS (ARISS) contact has been approved for Landes museum fuer Technik und Arbeit (Mannheim Museum) in Mannheim, Germany. The contact will take place on Monday, November 20 at 14:42 UTC via the telebridge station WH6PN in Hawaii. This is a European Space Agency (ESA) Special Event with ESA astronaut Thomas Reiter, DF4TR. The audio will be fed into the EchoLink AMSAT (101 377) and JK1ZRW (277 208) servers and into the IRLP Discovery Reflector 9010. The audio will also be webcast.

An Amateur Radio on the International Space Station (ARISS) contact has been approved for Centre Hastings Secondary School, a rural school located in Madoc, Ontario, Canada with a student body of approximately 975 students. Centre Hastings, in conjunction with Stirling Senior School, will involve students from several grades by tracking the Space Station, calculating the speed, rate of travel and distance from Earth. They will design and build a space station, write questions to ask the ISS crew, and design and create posters to advertise the event. The school intends to webcast the event on http://www.hpedsb.on.ca. Newspapers and television are expected to cover the contact which is scheduled for Monday, November 20 at 16:35 UTC.

3. ARISS Contact Inspires Students to Earn Licenses
In April 2006, Escola Americana do Rio de Janeiro experienced an Amateur Radio on the International Space Station (ARISS) contact with Marcos Pontes, PY0AEB. As a direct result of that contact, several students became interested in learning more about amateur radio. The Amateur Radio and Space

Experiment (AMRASE), (a Brazilian non-governmental organization dedicated to developing technical programs for use in schools) team developed a special workshop for the students which covered radio communications, antenna systems, space communication by satellites and the amateur radio system on the International Space Station. Ten students have studied and are prepared to take their amateur radio license exams.

4. ARISS Presentation at University of California, Fresno

This coming week, American Radio Relay League member Dave Smith, W6TE, will give an Amateur Radio presentation to a college class at California State University, Fresno. His talk will cover CubeSats, Student Space Exploration and Technology Initiative (SSETI), and Amateur Radio on the International Space Station (ARISS) including the satellites SuitSat-1 and SuitSat-2.

5. Students Testing SuitSat-2 Components

At its face to face meeting in San Francisco, the Amateur Radio on the International Space Station (ARISS) team approved a second SuitSat project, an amateur radio system housed in an Orlan suit which has outlived its usefulness for the ISS crew. Much of SuitSat-1's design will be reused in this second project but this time a software designed radio and solar cells will be incorporated into the system. The hardware team has been designing and developing the circuitry for the new satellite. The printed circuit boards were delivered to AMSAT members Bob McGwier, N4HY, and Frank Brickle, AB2KT, who are teaching an elective course on software defined radios at The College of New Jersey (formerly Trenton State College). The students enrolled in the course (approximately half of the senior electrical engineering class) will test the boards.

6. ARISS Teacher Featured on Pride of Britain TV Program

On Tuesday, November 7, the United Kingdom's television station, ITV1, aired the Pride of Britain Awards in which the Teacher of the Year award was given to Head Teacher, Linda Davies. Davies was the teacher who coordinated the first Amateur Radio on the International Space Station (ARISS) contact in Britain for her classes at Wiltshire's Neston Primary School and was commended for her work, which inspired students and promoted science at the school.

7. JSC Training Session Status

A Space Flight Training Division Technical Interchange Meeting (TIM) was held at Johnson Space Center on November 6-10. The ARISS-Russian team from Energia, representatives from the Gagarin Cosmonaut Training Center (GCTC), and ARISS-U.S. members attended. As a result of the meeting, the ARISS U.S. team may be tasked to perform more of the amateur radio training to reduce the amount of time that U.S. crews spend in Russia.

8. ARHOP Meeting Held

On Wednesday, November 1, a meeting was held to discuss the charter for the Amateur Radio Hardware and Operations Panel (ARHOP). The document is being developed by Carlos Fontanot at Johnson Space Center in order to formalize the multi-lateral agreement between all the participating ARISS partners, and to define their roles and responsibilities.

9. Expedition 13 Crew Debrief Held

A crew debriefing session was held on Thursday, November 9 with Jeff Williams, KD5TVQ. Williams provided the team with feedback on the ISS Ham radio equipment and school operations.

10. ARRL Article Covers SuitSat-2
The American Radio Relay League (ARRL) ran an article on a second SuitSat project. See: http://www.arrl.org/news/stories/2006/11/09/101/?nc=1

11. Amateur Radio to be Highlighted on History Channel
In spring 2007, The History Channel plans to run a 13-segment series, "The Secret Life of Machines." One segment will cover Amateur Radio, part of which will focus on ham radio in space. ARISS delegate Rosalie White described the roles of the American Radio Relay League (ARRL), the Radio Amateur Satellite Corporation (AMSAT) and the Amateur Radio on the International Space Station (ARISS) to the History Channel reporter, and provided information on SuitSat-1 and SuitSat-2 and explained how the ARISS team compiles components, and designs, tests and launches its systems. Follow-up material, which covered SuitSat-1 and an ARISS school whose 5th graders built 5 types of crystal radios and compared their qualities, was sent to him.

[ANS thanks Carol, KB3LKI for the above information]

/EX

SB SAT @ AMSAT $ANS-323.10
First Live HDTV Broadcast From Space

AMSAT News Service Bulletin 323.10
>From AMSAT HQ SILVER SPRING, MD.
November 19, 2006
To All RADIO AMATEURS
BID: $ANS-323.10

The first live HDTV broadcast from space took place last week. It featured Expedition 14 Commander Michael Lopez-Alegria and Flight Engineer Thomas Reiter, serving as camera operator. The broadcast was carried by Discovery HD Theater and NHK and was also shown at Discovery Channel stores. Known as the Space Video Gateway, the system transmits high bandwidth digital television signals to the ground that are not only spectacular, but also valuable to scientists, engineers and managers.

The Expedition 14 crew continues spacewalk preparations. The Nov. 22 spacewalk includes a commercial golf experiment performed by Flight Engineer Mikhail Tyurin. This experiment is dedicated to the 200th anniversary of establishing diplomatic ties between Russia and the United States and to commemorate the golf shot of Alan Shepard Jr. on the moon.

[ANS thanks NASA for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM

```
From 8856998656938431010
X-Google-Thread: 10e8ad,4c0994ce8653bd33,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news3.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!local01.nntp.dca.giganews.com!nntp.comcast.com!
news.comcast.com.POSTED!not-for-mail
NNTP-Posting-Date: Thu, 23 Nov 2006 13:25:12 -0600
From: "JoAnne K9JKM" <k9jkm_remove_@comcast.net>
Newsgroups: rec.radio.amateur.space
Subject: WSR-324 AMSAT Weekly Satellite Report
Date: Thu, 23 Nov 2006 13:25:16 -0600
MIME-Version: 1.0
Content-Type: text/plain;
     format=flowed;
     charset="iso-8859-1";
     reply-type=original
Content-Transfer-Encoding: 7bit
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.2869
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.2962
Message-ID: <Ia2dnZlbXagFaPjYnZ2dnUVZ_vydnZ2d@comcast.com>
Lines: 971
NNTP-Posting-Host: 67.184.169.1
X-Trace: sv3-QQbc3vD2x5okCR4wCOyobIQ/ZiNOWAUuT8mDDZAYsO3/hFl8SHQaK9v/
kdHcnLu5My1hJU+Hrzjtj6h!NGz/
pPRa6DK8rbFMIOwLv4V61OYgZyFwYHwdZlhspBYggcnn1B2HhFwcXyVUK4Vn9YSdF5Ivhfmp!
F1f52Vw17kRaUBk=
X-Complaints-To: abuse@comcast.net
X-DMCA-Complaints-To: dmca@comcast.net
X-Abuse-and-DMCA-Info: Please be sure to forward a copy of ALL headers
X-Abuse-and-DMCA-Info: Otherwise we will be unable to process your complaint
properly
X-Postfilter: 1.3.32
Xref: g2news2.google.com rec.radio.amateur.space:486
```

This report is organized into 4 parts.
Part 1 (S1) - operational analog amateur satellites

Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites

SB SAT @ AMSAT W8ISS ANS-324.S1
WSR 324 Part 1 11/20/2006

AMSAT NEWS SERVICE BULLETIN 324.S1 FROM AMSAT HQ
SILVER SPRING, MD, November 20, 2006
TO ALL RADIO AMATEURS
BID: $ANS-324.S1

VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/V - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 MHz to 435.280 MHz LSB/CW
Downlink: 145.870 MHz to 145.930 MHz USB/CW

Dutch Transponder:
Uplink: 435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW

Indian Beacon: 145.859330 MHZ CW
Dutch Beacon: 145.860MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsat.in/hamsat.htm

To know what transponder is switched on please listen for the beacon that is active. Each transponder has a different beacon.
[10022006]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational
Current Mode(s): FM Repeater - V/U - Tone
                 PBBS -   V/U - 9k6 PBP
                 Digipeater - OFF

Analog voice downlink: 435.300 MHz FM

435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.880 MHZ FM
145.880 MHz USB
145.920 MHz FM 67Hz PL tone
1268.700 MHz FM 67Hz PL tone
Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
435.150 MHz FM, 9k6 Digital, Pacsat Broadcast Protocol
2401.200 MHz FM, 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast Protocol
1268.700 mhz FM, 9k6 PBP Digital

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[11013006]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Uplink: 145.850 MHz (67.0 Hz PL tone) (See below for operating procedures)
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The order of operation is thus: (allow for Doppler as necessary)
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer
on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater
on and off within the 10 Minute window.

3) Sending the 74.4 tone again within the 10 minute window will reset
the 10
   minute timer.
[04172006]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: OPERATIONAL

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplink: 145.850 145.870 145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

unOfficial Webpage: http://www.amsat.org/amsat-new/satellites/
satInfo.php?satID=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's CW
telemetry downlink:
http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts.htm
[11202006]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational?

Uplink: 145.850 MHz FM
Downlink: 436.795 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

This off the AO-27 website:
For the last 5 weeks ground controllers have been trying to contact
AO-27. At
this point we have not been able to turn it on. We still have a few
tricks
that we are planning on trying but these take time. We are hoping that

```
we can
re-establish communications.

At this time, we don't have an estimate for when AO-27 will be back on
the
air.

AO-27 is now in its 14th year on orbit. We will continue to try to
recover
AO-27 until we run out of ideas.
- Michael N3UC

Official Webpage: http://www.ao27.org
[10232006]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational depending on amount of Sunlight
Current Reported mode: Mode-A

Uplink:   145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink:  29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons:   29.502 MHz
          145.972 MHz
          435.100 MHz
         2304.100 MHz

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php
The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
AO-7 users are requested to log their contacts and observations about
AO-7,
especially any unexpected mode changes.
AO-07 telemetry software webpage:
http://www.qsl.net/k3tz/files/K3TZ_AO-07_Telemetry_Decoder_0.5.zip

Please keep your power low!  For additional information please read the
AO-7
Usage Guidelines on the AO-7 Log and Resource Site located at:
http://www.planetemily.com/ao7
[04242006]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
```

Current Mode: Occasional Voice
Digipeater: OFF

The Expedition 14 crew is:
Commander: Michael Lopez-Alegria - KE5GTK
Flight Engineer: Mikhail Tyurin - RZ3FT
Flight Engineer: Thomas Reiter - DF4TR

Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

SSTV TESTING:
Worldwide Reported Downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS, RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.
[10092006]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-324.S2
WSR 324 Part 2 11/20/2006

AMSAT NEWS SERVICE BULLETIN 324.S2 FROM AMSAT HQ
SILVER SPRING, MD, November 20, 2006

TO ALL RADIO AMATEURS
BID: $ANS-324.S2

HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Operational

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon: 437.2750 MHz CW

Callsign: JR8YJT
[10302006]
=====
CO-58 XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW only

Telemetry Downlink: 437.345MHz - FSK 1200bps using AFK protocol
Beacon: 437.465MHz - CW

Callsign: JQ1YGW

Oficial Webpage: http://www.space.t.u-tokyo.ac.jp/gs/satinfo-e.html#xi5
Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
[09252006]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launched: June 30, 2006

Status: Operational

Beacon: 436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS
[10022006]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launched: June 30,2003

Status: Semi-Operational - Constant Carrier only

Uplink: ?
Downlink: 437.3850 CW
          437.4700 1200 FM ax25 or SRLL (ACTIVE only near Japan ?)

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/

```
[09252006]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational
Current Mode(s): FM Repeater - V/U - Tone
                 PBBS -        V/U - 9k6 PBP
                 Digipeater -  OFF

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink:   145.880 MHZ FM
                       145.880 MHz USB
                       145.920 MHz FM 67Hz PL tone
                      1268.700 MHz FM 67Hz PL tone
Digital Downlinks:     435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
                       435.150 MHz FM, 9k6 Digital, Pacsat Broadcast
Protocol
                      2401.200 MHz FM, 38k4 bps, AX.25
Digital Uplink:        145.860 MHz FM, 9k6 Digital, Pacsat Broadcast
Protocol
                      1268.700 mhz FM, 9k6 PBP Digital

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[11013006]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: RECOVERY EFFORTS - REFRAIN FRON USAGE!!!

General Usage Uplink/Downlink:145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org
aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[09252006]
```

```
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM
Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[08072006]
=====
RS-22 Mozhayets 4
Catalog number: 27939
Launch Date: September 27, 2004

Status: Operational

Beacon: 435.3520 MHz CW
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Semi-operational, the digipeater command is on and open for APRS
users.

Uplink: 145.900 FM
       145.920 FM
       145.940 FM
       145.960 FM
(using 1200-baud Manchester FSK)
Downlink: 437.026 MHz SSB (1200-baud PSK)
Mode-S Beacon: 2401.1428 MHz

Mode and Antenna Polarization:
U: RC 437.050 MHz RHCP
  PSK 437.025 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS: PACSAT-12
```

```
AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[04172006]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational

Telemetry Downlink: 145.826 MHz. FM (1200-baud AFSK) approx. 10 days ON,
10
                    days OFF
Mode-S Beacon:     2401.500 MHz - OFF
UHFBeacon:          435.025 MHz - OFF

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Official webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[10302006]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: Occasional Voice
Digipeater:   OFF

Expedition Crew 14 is:
Commander:              Michael Lopez-Alegria - KE5GTK
Flight Engineer:        Mikhail Tyurin - RZ3FT
Flight Engineer:        Thomas Reiter - DF4TR

Digital/APRS:
Worldwide packet uplink:   145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink:   145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink:      145.800 MHz FM

SSTV TESTING:
Worldwide Reported Downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink:   437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
```

V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS, RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is NOT translated from Russian and posted.
[10092006]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-324.S3
WSR 324 Part 3 11/20/2006

AMSAT NEWS SERVICE BULLETIN 324.S3 FROM AMSAT HQ
SILVER SPRING, MD, November 20, 2006
TO ALL RADIO AMATEURS
BID: $ANS-324.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 FM 67Hz CTCSS
Voice Downlink: 2401.835 FM

Packet Up/Downlink: 437.250 9k6 packet
Packet Downlink 2401.835 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01292006]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink: 145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012006]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launched: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB
Beacon: 145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
IO-26 ITAMSAT
Catalog number: 22826

Launch Date: September 26, 1993

Status: Downlink only

Uplink: 145.875 145.900 145.925 145.950 MHz FM (1200-baud)
Downlink: 435.808 MHz PSK
Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01012006]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB
Beacon: 29.408 MHz
Robot: 29.454 MHz
[05232004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB
Beacon: 145.860 MHz
Robot: 145.908 MHz
[05232004]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink 145.975 MHz FM
Downlink 435.070 MHz FM
[05092004]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

```
Uplink: 145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM
Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01092005]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational?

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB
Beacon: 29.352 MHz (intermittent)
SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplink: 145.84 145.86 145.88 145.90 MHz FM
(using 1200-baud Manchester FSK)
CW downlink: 437.125 MHz
Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[05232004]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[08152004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992
```

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM
Broadcast Callsign: HLO1-11
BBS: HLO1-12

Jim, AA7KC, reports that KO-23's downlink transmitter continues in a non-operational status.
[05092004]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM (9600-baud FSK)
Downlink: 436.500 MHz FM
Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm

[ANS-WSR has no further information]
[09042006]
=====
SO-35 SUNSAT

```
Catalog Number: ?
Launched:February 23, 1999

STatus: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz and 145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[08082004]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlink: 437.025 MHz 437.400 MHz
Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site
at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[05092004]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplink V-band   145.840 - 145.990 MHz CW/LSB
      U-band   435.550 - 435.800 MHz CW/LSB
      L1-band 1269.250 - 1269.500 MHz CW/LSB
      L2-band 1268.325 - 1268.575 MHz CW/LSB
Downlink: S2-band 2401.225 - 2401.475 MHz CW/USB
         K-band 24,048.010 - 24,048.060 MHz CW/USB
Beacon:   2401.323
        24,048.035
[05232004]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational
```

Downlink: 437.075 MHz
Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[08152004]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz
Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[08152004]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, callsign KE6QMD, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Operational

Uplink: 145.850 or 145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz
Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial

land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[11202005]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink 435.275 1200-baud AFSK
Downlink 145.825 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink: Downlink 145.825 MHz FM 1200 Baud AFSK
Beacon: 2401.220 MHz
[05012006]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
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SB SAT @ AMSAT W8ISS $ANS-324.S4
WSR 324 Part 4 11/20/2006

AMSAT NEWS SERVICE BULLETIN 324.S4 FROM AMSAT HQ
SILVER SPRING, MD, November 20, 2006
TO ALL RADIO AMATEURS
BID: $ANS-324.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE
PROPOSED FOR LAUNCH AT THIS TIME:

PHASE 3E ?O-??
Catalog number:
Proposed Launch Date: Early/Mid 2007

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/
[ANS-WSR wishes to thank William Leijenaar, PE1RAH for this week's report]
[04242006]
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ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/amsat/listserv/menu.html

In addition to regular membership, AMSAT-NA offers membership in the

President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
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From -5846714991990371586
X-Google-Thread: 10e8ad,f733a53924648dd7
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
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nntp.giganews.com!local01.nntp.dca.giganews.com!nntp.comcast.com!
news.comcast.com.POSTED!not-for-mail
NNTP-Posting-Date: Thu, 23 Nov 2006 13:34:25 -0600
From: "JoAnne K9JKM" <k9jkm_remove_@comcast.net>
Newsgroups: rec.radio.amateur.space
Subject: ANS-323 AMSAT News Service Weekly Bulletins
Date: Thu, 23 Nov 2006 13:34:30 -0600
MIME-Version: 1.0
Content-Type: text/plain;
     format=flowed;
     charset="iso-8859-1";
     reply-type=original
Content-Transfer-Encoding: 7bit
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.2869
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.2962
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Lines: 450
NNTP-Posting-Host: 67.184.169.1
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PjsA90W/CM/K1Kw=
X-Complaints-To: abuse@comcast.net
X-DMCA-Complaints-To: dmca@comcast.net
X-Abuse-and-DMCA-Info: Please be sure to forward a copy of ALL headers
X-Abuse-and-DMCA-Info: Otherwise we will be unable to process your complaint
properly
X-Postfilter: 1.3.32
Xref: g2news2.google.com rec.radio.amateur.space:487
```

AMSAT NEWS SERVICE
ANS-323

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:

* AMSAT-NA Signs Agreements to Build Eagle at a UMES Facility
* 24th Space Symposium Proceedings Available in AMSAT Store
* EaglePedia Upgraded
* SatPC32 Version 12.6 is Released
* Call for AMSAT Journal Articles
* Cambodian Satellite Opportunity
* AMSAT Awards
* STSORBIT Plus Author David Ransom SK
* ARISS Status Report for the week of November 13, 2006
* First Live HDTV Broadcast From Space

SB SAT @ AMSAT $ANS-323.01
AMSAT-NA Signs Agreements to Build Eagle at a UMES Facility

AMSAT News Service Bulletin 323.01
>From AMSAT HQ SILVER SPRING, MD.
November 19, 2006
To All RADIO AMATEURS
BID: $ANS-323.01

AMSAT-NA has accepted an offer to co-locate its Satellite Integration Lab with the Hawk Institute for Space Sciences (HISS), a division of the Maryland Hawk Corporation which is a 501(c)(3) non-profit educational organization affiliated with the University of Maryland Eastern Shore (UMES). HISS is located in Pocomoke, Maryland, on the eastern shore of the Chesapeake Bay. Pocomoke is about a 3-hour drive southeast of the Baltimore-Washington International airport.

AMSAT-NA has been actively searching for a suitable location for the past two years as AMSAT's most recent lab at the municipal airport in Orlando, Florida was condemned due to damage by Hurricane Charley on August 13, 2004. With the unanimous approval of the AMSAT-NA Board of Directors, AMSAT-NA has executed two Memoranda of Understanding, one with the University of Maryland Eastern Shore and the other with Maryland Hawk Corporation, formalizing the relationship. These MOUs give AMSAT-NA essentially no-cost access to the HISS facility in return for sharing its equipment and ideas with HISS.

In addition, the agreement with UMES calls for AMSAT-NA to work collaboratively with UMES to identify opportunities to work together on satellite and related technology projects as well as to work with their students and faculty to enhance hands-on studies and dissertation research. The possibility also exists for AMSAT-NA scientists and engineers to receive Adjunct status at the UMES.

AMSAT's VP Engineering, Bob McGwier N4HY, commented "I consider these happenings to be a serious beginning of the activities towards a real spacecraft." AMSAT's lead mechanical engineer, Bob Davis KF4KSS, is also an employee of HISS, resulting in AMSAT having a representative on site at all times. Bob Davis was AMSAT's mechanical design expert in the Orlando lab during the AO-40 satellite campaign.

HISS is currently constructing the interior walls for their new 8,000 square foot facility. It is being designed around AMSAT's dual clean room, which was used for AO-40 and is in storage at Florida Space Institute. AMSAT will move the clean room and the parts and equipment currently in storage in the Orlando area to the new lab in the next few months. The facility will also include adequate meeting and office space for visiting AMSAT personnel. The agreement with HISS also provides AMSAT limited access to NASA Wallops Flight Facility with its environmental testing, machine shop, rocket manufacturing and launch facilities.

AMSAT members Bob Davis KF4KSS, Rick Hambly W2GPS, Tom Clark K3IO, Jim Sanford WB4GCS and Bob McGwier N4HY have worked very hard on this project. AMSAT members are encouraged to volunteer to work in the new lab, come by and visit (call first), and donate to the P3E and Eagle satellite funds.

[ANS thanks Rick, W2GPS for the above information]

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SB SAT @ AMSAT $ANS-323.02
24th Space Symposium Proceedings Available in AMSAT Store

AMSAT News Service Bulletin 323.02
>From AMSAT HQ SILVER SPRING, MD.
November 19, 2006
To All RADIO AMATEURS
BID: $ANS-323.02

Bruce, KK5DO, wearing his AMSAT Store Manager hat, says that the 24th AMSAT-NA Space Symposium Proceedings from San Francisco are now available online at the AMSAT Store. You can purchase your copy and with a credit card conveniently online and have it sent to your door.

It is full of interesting topics. In fact, 284 pages and almost two pounds of interesting stuff.

Bruce continues, "Another neat new item is our AMSAT back pack. It is ideal for carrying all your stuff and boasts the AMSAT logo on the front."

Other items for your holiday wish list include wall clocks, desk clocks, shirts, and more. Be sure to bookmark the AMSAT store for that special person in your life so they can find the things you really want that will not break the bank.

Order yours today at the AMSAT Online Store http://www.amsat.org

[ANS thanks Bruce, KK5DO for the above information]

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SB SAT @ AMSAT $ANS-323.03
EaglePedia Upgraded

AMSAT News Service Bulletin 323.03
>From AMSAT HQ SILVER SPRING, MD.
November 19, 2006
To All RADIO AMATEURS
BID: $ANS-323.03

AMSAT-NA's EaglePedia was upgraded this week. Webmistress Emily, N1DID reported, "EaglePedia is back online and most everything is working."

She recommends that EaglePedia users investigate the release notes to the upgraded version on-line at:
http://www.amsat.org/amsat-new/eagle/EaglePedia/index.php/EaglePedia_1.1_rel
ease_notes (watch the line wrap)

[ANS thanks Emily, N1DID for the above information]

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SB SAT @ AMSAT $ANS-323.04
SatPC32 Version 12.6 is Released

AMSAT News Service Bulletin 323.04
>From AMSAT HQ SILVER SPRING, MD.
November 19, 2006
To All RADIO AMATEURS
BID: $ANS-323.04

Erich Eichmann DK1TB has donated SatPC32 as a fund-raiser for AMSAT. If you use SatPC32, please support amateur satellite programs by purchasing a SatPC32 registration password.

+ A new control button enables the user to toggle between two timer display modes: A fixed AOS/LOS time of the satellites or, alternatively, a countdown of the remaining hours and minutes until the next AOS or LOS.

+ Show the maximum elevation of the next pass of all selected satellites.

+ Output an acoustic message when a satellite is rising.

+ The sub tone steering functions of the program have been expanded. These functions support now also the Kenwood TS-790A

+ The programs now ignore any characters in brackets after the satellite names in Keplerian element text files. This allows the user's existing Doppler.SQF file to be compatible with the new Keps file format from Celestrak.

The downloadable version is a "trial" version that requires the user to enter their lat/lon every time they start the program. To make the program fully functional, a registration password must be purchased from AMSAT-NA, AMSAT-DL, or AMSAT-UK. Your existing registration password may be used for the new version.

SatPC32 version 12.6 is now available for download from the author's web site: http://www.dk1tb.de/downloadeng.htm

[ANS thanks Wayne, W9AE for the above information]

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SB SAT @ AMSAT $ANS-323.05
Call for AMSAT Journal Articles

AMSAT News Service Bulletin 323.05
>From AMSAT HQ SILVER SPRING, MD.
November 19, 2006
To All RADIO AMATEURS
BID: $ANS-323.05

Ed, WA4SWJ, Editor of The AMSAT Journal says, "It's that time again. If you have any articles for the November/December issue of The AMSAT Journal please let me know by e-mail to my [callsign] at amsat.org."

Ed continues, "I have some content already and to those authors - thank you! I'm always looking for more. Regular contributors - please get going!" Here's your chance to tell your mom you got your name in the paper.

[ANS thanks Ed, WA4SWJ for the above information]

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SB SAT @ AMSAT $ANS-323.06
Cambodian Satellite Opportunity

AMSAT News Service Bulletin 323.06
>From AMSAT HQ SILVER SPRING, MD.
November 19, 2006
To All RADIO AMATEURS
BID: $ANS-323.06

The TAMSAT Group and Siam DX Group will include amateur satellite operations on their 2006 Micro-DXpedition to Cambodia. They plan to use Cambodian callsigns for this event running between November 23 to November 28. Operation is planned to include AO-7, FO-29, SO-50, AO-51, and VO-52 using CW, SSB, and FM. Their planned Satellite Operation Schedule is posted at: http://www.tamsat.org/xu7/sch/

[ANS thanks Tanan, XU7ADN and the TAMSAT group for the above information]

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SB SAT @ AMSAT $ANS-323.07
AMSAT Awards

AMSAT News Service Bulletin 323.07
>From AMSAT HQ SILVER SPRING, MD.
November 19, 2006
To All RADIO AMATEURS
BID: $ANS-323.07

Bruce, KK5DO, wearing his AMSAT Director Contests and Awards hat says, "This week, congratulations go out to all of the following:"

We would like to welcome the following to the satellite community. They have made their first satellite contact and are now members of the AMSAT Satellite Communicators Club:

Alan Sieg	WB5RMG
Eric Christensen	KF4OTN

AMSAT Satellite Communications Achievement Award

Alan Sieg	WB5RMG #440
Eric Christensen	KF4OTN #441

South Africa Satellite Communications Achievement Award

Eric Christensen	KF4OTN, US100

To see all the awards visit http://www.amsat.org or http://www.amsatnet.com

[ANS thanks Bruce, KK5DO for the above information]

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SB SAT @ AMSAT $ANS-323.08
STSORBIT Plus Author David Ransom SK

AMSAT News Service Bulletin 323.08
>From AMSAT HQ SILVER SPRING, MD.
November 19, 2006
To All RADIO AMATEURS
BID: $ANS-323.08

Ken Ernandes, N2WWD told AMSAT the sad news of the passing of STSORBIT PLUS author David Ransom on 5 November 2006. While not a ham, Dave was a long-time supporter of AMSAT and a major player in providing Space Shuttle orbital data to the AMSAT and NASA communities. Dave and Ken worked collaboratively to modify STSORBIT PLUS such that it would provide [manual] Doppler tuning information, thus making the software a useful tool for amateur satellite communications.

Amateur Satellite operators around the world will remember Dave for his contributions to AMSAT and will miss him.

[ANS thanks Ken Ernandes, N2WWD for the above information]

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SB SAT @ AMSAT $ANS-323.09
ARISS Status Report for the week of November 13, 2006

AMSAT News Service Bulletin 323.09
>From AMSAT HQ SILVER SPRING, MD.
November 19, 2006
To All RADIO AMATEURS
BID: $ANS-323.09

1. Belgium Contact Successful
The Flanders Science Festival contact took placed on Friday, November 10. Eleven students, ages 11 - 12, from Henri d'Haese Primary School in Gentbrugge, Belgium spoke with astronaut Michael Lopez-Alegria, KE5GTK, via the telebridge station W5RRR in Houston, Texas. Twenty questions were asked and answered in front of an audience of 25 students and 3 teachers. The audio was webcast and was fed into the Echolink AMSAT server. Three television stations, one radio station and several newspapers covered the Gentbrugge event. It is estimated that approximately 1 million people in Flanders, Belgium and the Netherlands heard the contact.

2. Upcoming School Contacts
An Amateur Radio on the ISS (ARISS) contact has been approved for Landes museum fuer Technik und Arbeit (Mannheim Museum) in Mannheim, Germany. The contact will take place on Monday, November 20 at 14:42 UTC via the telebridge station WH6PN in Hawaii. This is a European Space Agency (ESA) Special Event with ESA astronaut Thomas Reiter, DF4TR. The audio will be fed into the EchoLink AMSAT (101 377) and JK1ZRW (277 208) servers and into the IRLP Discovery Reflector 9010. The audio will also be webcast.

An Amateur Radio on the International Space Station (ARISS) contact has been approved for Centre Hastings Secondary School, a rural school located in Madoc, Ontario, Canada with a student body of approximately 975 students. Centre Hastings, in conjunction with Stirling Senior School, will involve students from several grades by tracking the Space Station, calculating the speed, rate of travel and distance from Earth. They will design and build a space station, write questions to ask the ISS crew, and design and create posters to advertise the event. The school intends to webcast the event on http://www.hpedsb.on.ca. Newspapers and television are expected to cover the contact which is scheduled for Monday, November 20 at 16:35 UTC.

3. ARISS Contact Inspires Students to Earn Licenses

In April 2006, Escola Americana do Rio de Janeiro experienced an Amateur Radio on the International Space Station (ARISS) contact with Marcos Pontes, PY0AEB. As a direct result of that contact, several students became interested in learning more about amateur radio. The Amateur Radio and Space Experiment (AMRASE), (a Brazilian non-governmental organization dedicated to developing technical programs for use in schools) team developed a special workshop for the students which covered radio communications, antenna systems, space communication by satellites and the amateur radio system on the International Space Station. Ten students have studied and are prepared to take their amateur radio license exams.

4. ARISS Presentation at University of California, Fresno

This coming week, American Radio Relay League member Dave Smith, W6TE, will give an Amateur Radio presentation to a college class at California State University, Fresno. His talk will cover CubeSats, Student Space Exploration and Technology Initiative (SSETI), and Amateur Radio on the International Space Station (ARISS) including the satellites SuitSat-1 and SuitSat-2.

5. Students Testing SuitSat-2 Components

At its face to face meeting in San Francisco, the Amateur Radio on the International Space Station (ARISS) team approved a second SuitSat project, an amateur radio system housed in an Orlan suit which has outlived its usefulness for the ISS crew. Much of SuitSat-1's design will be reused in this second project but this time a software designed radio and solar cells will be incorporated into the system. The hardware team has been designing and developing the circuitry for the new satellite. The printed circuit boards were delivered to AMSAT members Bob McGwier, N4HY, and Frank Brickle, AB2KT, who are teaching an elective course on software defined radios at The College of New Jersey (formerly Trenton State College). The students enrolled in the course (approximately half of the senior electrical engineering class) will test the boards.

6. ARISS Teacher Featured on Pride of Britain TV Program

On Tuesday, November 7, the United Kingdom's television station, ITV1, aired the Pride of Britain Awards in which the Teacher of the Year award was given to Head Teacher, Linda Davies. Davies was the teacher who coordinated the first Amateur Radio on the International Space Station (ARISS) contact in Britain for her classes at Wiltshire's Neston Primary School and was commended for her work, which inspired students and promoted science at the school.

7. JSC Training Session Status

A Space Flight Training Division Technical Interchange Meeting (TIM) was held at Johnson Space Center on November 6-10. The ARISS-Russian team from Energia, representatives from the Gagarin Cosmonaut Training Center (GCTC), and ARISS-U.S. members attended. As a result of the meeting, the ARISS U.S. team may be tasked to perform more of the amateur radio training to reduce the amount of time that U.S. crews spend in Russia.

8. ARHOP Meeting Held
On Wednesday, November 1, a meeting was held to discuss the charter for the Amateur Radio Hardware and Operations Panel (ARHOP). The document is being developed by Carlos Fontanot at Johnson Space Center in order to formalize the multi-lateral agreement between all the participating ARISS partners, and to define their roles and responsibilities.

9. Expedition 13 Crew Debrief Held
A crew debriefing session was held on Thursday, November 9 with Jeff Williams, KD5TVQ. Williams provided the team with feedback on the ISS Ham radio equipment and school operations.

10. ARRL Article Covers SuitSat-2
The American Radio Relay League (ARRL) ran an article on a second SuitSat project. See: http://www.arrl.org/news/stories/2006/11/09/101/?nc=1

11. Amateur Radio to be Highlighted on History Channel
In spring 2007, The History Channel plans to run a 13-segment series, "The Secret Life of Machines." One segment will cover Amateur Radio, part of which will focus on ham radio in space. ARISS delegate Rosalie White described the roles of the American Radio Relay League (ARRL), the Radio Amateur Satellite Corporation (AMSAT) and the Amateur Radio on the International Space Station (ARISS) to the History Channel reporter, and provided information on SuitSat-1 and SuitSat-2 and explained how the ARISS team compiles components, and designs, tests and launches its systems. Follow-up material, which covered SuitSat-1 and an ARISS school whose 5th graders built 5 types of crystal radios and compared their qualities, was sent to him.

[ANS thanks Carol, KB3LKI for the above information]

/EX

SB SAT @ AMSAT $ANS-323.10
First Live HDTV Broadcast From Space

AMSAT News Service Bulletin 323.10
>From AMSAT HQ SILVER SPRING, MD.
November 19, 2006
To All RADIO AMATEURS
BID: $ANS-323.10

The first live HDTV broadcast from space took place last week. It featured Expedition 14 Commander Michael Lopez-Alegria and Flight Engineer Thomas Reiter, serving as camera operator. The broadcast was carried by Discovery HD Theater and NHK and was also shown at Discovery Channel stores. Known as the Space Video Gateway, the system transmits high bandwidth digital television signals to the ground that are not only spectacular, but also valuable to scientists, engineers and managers.

The Expedition 14 crew continues spacewalk preparations. The Nov. 22 spacewalk includes a commercial golf experiment performed by Flight Engineer Mikhail Tyurin. This experiment is dedicated to the 200th anniversary of establishing diplomatic ties between Russia and the United States and to commemorate the golf shot of Alan Shepard Jr. on the moon.

[ANS thanks NASA for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM

```
From -8408173106735482779
X-Google-Thread: 10e8ad,4c0994ce8653bd33
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news4.google.com!news3.google.com!
border1.nntp.dca.giganews.com!nntp.giganews.com!local01.nntp.dca.giganews.com!
nntp.comcast.com!news.comcast.com.POSTED!not-for-mail
NNTP-Posting-Date: Thu, 23 Nov 2006 13:35:41 -0600
From: "JoAnne K9JKM" <k9jkm_remove_@comcast.net>
Newsgroups: rec.radio.amateur.space
Subject: WSR-324 AMSAT Weekly Satellite Report
Date: Thu, 23 Nov 2006 13:35:46 -0600
MIME-Version: 1.0
Content-Type: text/plain;
     format=flowed;
     charset="iso-8859-1";
     reply-type=original
Content-Transfer-Encoding: 7bit
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.2869
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.2962
Message-ID: <JqudnTSy8PiQZfjYnZ2dnUVZ_qmdnZ2d@comcast.com>
Lines: 971
```

NNTP-Posting-Host: 67.184.169.1
X-Trace:
sv3-54hPPQeEI824llLM+SzWFujQx28XgL+jPOsgmcq8ZhsUzw7+TsibSqBZLtb+plxDHzZFIju9XHWpow
G!/Vr5AlLERLNzzN3syHiGcDiYSmoXOnXyUWqcuUo+ErWY+Knr6yhO/WIYjeDcw6Wp/x5OGSgRbKhq!
y2CmP/o/0zmoBxM=
X-Complaints-To: abuse@comcast.net
X-DMCA-Complaints-To: dmca@comcast.net
X-Abuse-and-DMCA-Info: Please be sure to forward a copy of ALL headers
X-Abuse-and-DMCA-Info: Otherwise we will be unable to process your complaint
properly
X-Postfilter: 1.3.32
Xref: g2news2.google.com rec.radio.amateur.space:488

This report is organized into 4 parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites

SB SAT @ AMSAT W8ISS ANS-324.S1
WSR 324 Part 1 11/20/2006

AMSAT NEWS SERVICE BULLETIN 324.S1 FROM AMSAT HQ
SILVER SPRING, MD, November 20, 2006
TO ALL RADIO AMATEURS
BID: $ANS-324.S1

VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/V - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 MHz to 435.280 MHz LSB/CW
Downlink: 145.870 MHz to 145.930 MHz USB/CW

Dutch Transponder:
Uplink: 435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW

Indian Beacon: 145.859330 MHZ CW
Dutch Beacon: 145.860MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsat.in/hamsat.htm

To know what transponder is switched on please listen for the beacon that
is active. Each transponder has a different beacon.
[10022006]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational
Current Mode(s): FM Repeater - V/U - Tone
                 PBBS -   V/U - 9k6 PBP
                 Digipeater - OFF

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink: 145.880 MHZ FM
                       145.880 MHz USB
                       145.920 MHz FM 67Hz PL tone
                      1268.700 MHz FM 67Hz PL tone
Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
                       435.150 MHz FM, 9k6 Digital, Pacsat Broadcast Protocol
                      2401.200 MHz FM, 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast Protocol
                      1268.700 mhz FM, 9k6 PBP Digital

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[11013006]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Uplink: 145.850 MHz (67.0 Hz PL tone) (See below for operating procedures)
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The order of operation is thus: (allow for Doppler as necessary)
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer
   on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater
   on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10
   minute timer.
[04172006]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: OPERATIONAL

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplink: 145.850 145.870 145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

unOfficial Webpage: http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's CW telemetry downlink:
http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts.htm
[11202006]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

```
Status: Operational?

Uplink:   145.850 MHz FM
Downlink: 436.795 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

This off the AO-27 website:
For the last 5 weeks ground controllers have been trying to contact
AO-27. At
this point we have not been able to turn it on. We still have a few
tricks
that we are planning on trying but these take time. We are hoping that
we can
re-establish communications.

At this time, we don't have an estimate for when AO-27 will be back on
the
air.

AO-27 is now in its 14th year on orbit. We will continue to try to
recover
AO-27 until we run out of ideas.
- Michael N3UC

Official Webpage: http://www.ao27.org
[10232006]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational depending on amount of Sunlight
Current Reported mode: Mode-A

Uplink:   145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink:  29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons:   29.502 MHz
          145.972 MHz
          435.100 MHz
         2304.100 MHz

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php
The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
AO-7 users are requested to log their contacts and observations about
AO-7,
```

especially any unexpected mode changes.
AO-07 telemetry software webpage:
http://www.qsl.net/k3tz/files/K3TZ_AO-07_Telemetry_Decoder_0.5.zip

Please keep your power low! For additional information please read the
AO-7
Usage Guidelines on the AO-7 Log and Resource Site located at:
http://www.planetemily.com/ao7
[04242006]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: Occasional Voice
Digipeater: OFF

The Expedition 14 crew is:
Commander: Michael Lopez-Alegria - KE5GTK
Flight Engineer: Mikhail Tyurin - RZ3FT
Flight Engineer: Thomas Reiter - DF4TR

Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

SSTV TESTING:
Worldwide Reported Downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS, RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com

APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.
[10092006]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-324.S2
WSR 324 Part 2 11/20/2006

AMSAT NEWS SERVICE BULLETIN 324.S2 FROM AMSAT HQ
SILVER SPRING, MD, November 20, 2006
TO ALL RADIO AMATEURS
BID: $ANS-324.S2

HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Operational

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon: 437.2750 MHz CW

Callsign: JR8YJT
[10302006]
=====
CO-58 XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW only

Telemetry Downlink: 437.345MHz - FSK 1200bps using AFK protocol
Beacon: 437.465MHz - CW

Callsign: JQ1YGW

Oficial Webpage: http://www.space.t.u-tokyo.ac.jp/gs/satinfo-e.html#xi5
Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
[09252006]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launched: June 30, 2006

Status: Operational

Beacon: 436.8475 MHz CW

```
Telemetry : 437.4900 MHz AFSK 1200 BPS
[10022006]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launched: June 30,2003

Status: Semi-Operational - Constant Carrier only

Uplink: ?
Downlink: 437.3850 CW
          437.4700 1200 FM ax25 or SRLL (ACTIVE only near Japan ? )

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[09252006]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational
Current Mode(s): FM Repeater - V/U - Tone
                 PBBS -        V/U - 9k6 PBP
                 Digipeater -  OFF

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink:   145.880 MHZ FM
                       145.880 MHz USB
                       145.920 MHz FM 67Hz PL tone
                      1268.700 MHz FM 67Hz PL tone
Digital Downlinks:     435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
                       435.150 MHz FM, 9k6 Digital, Pacsat Broadcast
Protocol
                      2401.200 MHz FM, 38k4 bps, AX.25
Digital Uplink:        145.860 MHz FM, 9k6 Digital, Pacsat Broadcast
Protocol
                      1268.700 mhz FM, 9k6 PBP Digital

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
```

```
[11013006]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: RECOVERY EFFORTS - REFRAIN FRON USAGE!!!

General Usage Uplink/Downlink:145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org
aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[09252006]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM
Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[08072006]
=====
RS-22 Mozhayets 4
Catalog number: 27939
Launch Date: September 27, 2004

Status: Operational

Beacon: 435.3520 MHz CW
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Semi-operational, the digipeater command is on and open for APRS
users.

Uplink: 145.900 FM
```

```
       145.920 FM
       145.940 FM
       145.960 FM
(using 1200-baud Manchester FSK)
Downlink: 437.026 MHz SSB (1200-baud PSK)
Mode-S Beacon: 2401.1428 MHz

Mode and Antenna Polarization:
U: RC 437.050 MHz RHCP
  PSK 437.025 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[04172006]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational

Telemetry Downlink: 145.826 MHz. FM (1200-baud AFSK) approx. 10 days ON,
10
                    days OFF
Mode-S Beacon:     2401.500 MHz - OFF
UHFBeacon:          435.025 MHz - OFF

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Official webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[10302006]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: Occasional Voice
Digipeater:   OFF

Expedition Crew 14 is:
Commander:              Michael Lopez-Alegria - KE5GTK
Flight Engineer:        Mikhail Tyurin - RZ3FT
Flight Engineer:        Thomas Reiter - DF4TR

Digital/APRS:
Worldwide packet uplink:   145.990 MHz FM
```

Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

SSTV TESTING:
Worldwide Reported Downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS, RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is NOT translated from Russian and posted.
[10092006]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-324.S3
WSR 324 Part 3 11/20/2006

AMSAT NEWS SERVICE BULLETIN 324.S3 FROM AMSAT HQ
SILVER SPRING, MD, November 20, 2006
TO ALL RADIO AMATEURS
BID: $ANS-324.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

```
Proposed Callsign: TBA
Proposed Transmit Frequency:  437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 FM 67Hz CTCSS
Voice Downlink: 2401.835 FM
Packet Up/Downlink: 437.250 9k6 packet
Packet Downlink 2401.835 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01292006]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink:   145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012006]
=====
AO-10 OSCAR 10
```

```
Catalog number: 14129
Launched: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB
Beacon: 145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: Downlink only

Uplink: 145.875 145.900 145.925 145.950 MHz FM (1200-baud)
Downlink: 435.808 MHz PSK
Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01012006]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB
Beacon: 29.408 MHz
Robot: 29.454 MHz
[05232004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB
Beacon: 145.860 MHz
Robot: 145.908 MHz
[05232004]
=====
UO-14 UoSAT-3
```

```
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink 145.975 MHz FM
Downlink 435.070 MHz FM
[05092004]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink: 145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM
Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01092005]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational?

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB
Beacon: 29.352 MHz (intermittent)
SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplink: 145.84 145.86 145.88 145.90 MHz FM
(using 1200-baud Manchester FSK)
CW downlink: 437.125 MHz
Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[05232004]
=====
FO-20 JAS-1b
Catalog number: 20480
```

Launch Date: February 07, 1990

Status: Non-Operational

Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[08152004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM
Broadcast Callsign: HL01-11
BBS: HL01-12

Jim, AA7KC, reports that KO-23's downlink transmitter continues in a non-operational status.
[05092004]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM (9600-baud FSK)
Downlink: 436.500 MHz FM
Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm

[ANS-WSR has no further information]
[09042006]
=====
SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

STatus: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz and 145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[08082004]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlink: 437.025 MHz 437.400 MHz
Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web site
at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[05092004]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplink V-band 145.840 - 145.990 MHz CW/LSB
U-band 435.550 - 435.800 MHz CW/LSB
L1-band 1269.250 - 1269.500 MHz CW/LSB
L2-band 1268.325 - 1268.575 MHz CW/LSB
Downlink: S2-band 2401.225 - 2401.475 MHz CW/USB
K-band 24,048.010 - 24,048.060 MHz CW/USB
Beacon: 2401.323
24,048.035
[05232004]

=====

SO-42 SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational
Downlink: 437.075 MHz
Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[08152004]

=====

SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz
Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[08152004]

=====

NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, callsign KE6QMD, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt

[03132005]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Operational

Uplink: 145.850 or 145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz
Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[11202005]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink 435.275 1200-baud AFSK
Downlink 145.825 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink: Downlink 145.825 MHz FM 1200 Baud AFSK
Beacon: 2401.220 MHz
[05012006]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-324.S4
WSR 324 Part 4 11/20/2006

AMSAT NEWS SERVICE BULLETIN 324.S4 FROM AMSAT HQ
SILVER SPRING, MD, November 20, 2006
TO ALL RADIO AMATEURS
BID: $ANS-324.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE PROPOSED FOR LAUNCH AT THIS TIME:

PHASE 3E ?O-??
Catalog number:
Proposed Launch Date: Early/Mid 2007

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/
[ANS-WSR wishes to thank William Leijenaar, PE1RAH for this week's report]
[04242006]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/amsat/listserv/menu.html

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

From -6500575756942243409
X-Google-Thread: 10bf43,1e30400f7d543f66,start
X-Google-Thread: 10e8ad,1e30400f7d543f66,start
X-Google-Thread: f5845,1e30400f7d543f66,start
X-Google-Thread: f8f7c,1e30400f7d543f66,start
X-Google-Thread: f64c6,1e30400f7d543f66,start
X-Google-Attributes: gid10bf43,gid10e8ad,gidf5845,gidf8f7c,gidf64c6,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news4.google.com!border1.nntp.dca.giganews.com!nntp.giganews.com!local01.nntp.dca.giganews.com!nntp.nventure.com!news.nventure.com.POSTED!not-for-mail
NNTP-Posting-Date: Thu, 23 Nov 2006 16:59:50 -0600
From: Martin Johnson <kc7zwg@localhost.localdomain>
Subject: FYI: Amateur Radio Website
Newsgroups:
rec.radio.amateur.packet,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.amateur.spacerec.radio.scanner,rec.radio.amateur.swap,rec.rado.amateur.equipment,sachsnet.hobby.amateur+cb-funk,tamu.hamradio.bulletins,tnn.radio.amateur,tw.bbs.rec.radio.amateur,uk.radio.amateur,uwarwick.societies.amateur-radio
Followup-To: alabama.birmingham.radio.amateur

Date: Thu, 23 Nov 2006 14:59:28 -0800
User-Agent: KNode/0.10.4
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7Bit
Message-ID: <3oCdnQPTALp7uvvYnZ2dnUVZ_oSdnZ2d@nventure.com>
Lines: 9
NNTP-Posting-Host: 131.191.21.31
X-Trace: sv3-
deMONyitF6J5sxddQLCQeOkZRl1L4R7fLDLk2bBjPuEThMSujsPHSjJhBbo8rGOLyzUf8yl4DFR2orZ!
2lxKfUeHIit6954xyhMU9EBzKYdGFF7oP6aDwpvKXO/cZe8hOhHYnl5z/+vm9KfME1Gpa1BVcGPy!
1vV6PxaxE5bqUG2zAUocWFe5HTksSRA=
X-Complaints-To: abuse@nventure.com
X-DMCA-Complaints-To: abuse@nventure.com
X-Abuse-and-DMCA-Info: Please be sure to forward a copy of ALL headers
X-Abuse-and-DMCA-Info: Otherwise we will be unable to process your complaint
properly
X-Postfilter: 1.3.32
Xref: g2news2.google.com rec.radio.amateur.policy:55336
rec.radio.amateur.space:489 tnn.radio.amateur:10 tw.bbs.rec.radio.amateur:4275
uk.radio.amateur:59204

never seen this done before.....
what is it anyway???

http://www.kc7zwg.com

is this illegal amateur radio activity ?

From 2820496839737192476
X-Google-Thread: fcc6e,765f9536506008bd,start
X-Google-Thread: fc8b1,765f9536506008bd,start
X-Google-Thread: f7653,765f9536506008bd,start
X-Google-Thread: 11480d,765f9536506008bd,start
X-Google-Thread: 108122,765f9536506008bd,start
X-Google-Thread: fc2a5,765f9536506008bd,start
X-Google-Thread: 10bf43,765f9536506008bd,start
X-Google-Thread: 10e8ad,765f9536506008bd,start
X-Google-Attributes:
gidfcc6e,gidfc8b1,gidf7653,gid11480d,gid108122,gidfc2a5,gid10bf43,gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news4.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!local01.nntp.dca.giganews.com!nntp.nventure.com!
news.nventure.com.POSTED!not-for-mail
NNTP-Posting-Date: Thu, 23 Nov 2006 17:02:42 -0600
From: Martin Johnson <ac7lk@aol.com>
Subject: FYI: Found this Radio site
Newsgroups:
rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radi

```
o.amateur.digital,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.am
ateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.packet,rec.radio.amat
eur.policy,rec.radio.amateur.space,rec.radio.amateur.spacerec.radio.scanner
Followup-To: clem.hamradio
Reply-To: ac7lk@aol.com
Date: Thu, 23 Nov 2006 15:02:22 -0800
User-Agent: KNode/0.10.4
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7Bit
Message-ID: <3oCdnQLTALoPtfvYnZ2dnUVZ_oSdnZ2d@nventure.com>
Lines: 6
NNTP-Posting-Host: 131.191.21.31
X-Trace: sv3-K44dKgPHwD2lRaaMeuoRNBLl+ob8wfQDokwW/
zUlWH+BZUOgYVr5Y31xhZ4TLOiKcHHbnT2DnzB5mYP!
WTd2NJtUbRB4rbhwOm1IhIjAxe6BhutB7e1vI5tgU7tLszu7HqeXgm+zRJw0kSLSWEX4tspZNfwY!
GabhBRu+Yl768BD8OePFUavskLRBajA=
X-Complaints-To: abuse@nventure.com
X-DMCA-Complaints-To: abuse@nventure.com
X-Abuse-and-DMCA-Info: Please be sure to forward a copy of ALL headers
X-Abuse-and-DMCA-Info: Otherwise we will be unable to process your complaint
properly
X-Postfilter: 1.3.32
Xref: g2news2.google.com rec.radio.amateur.antenna:21897
rec.radio.amateur.boatanchors:6442 rec.radio.amateur.digital.misc:431
rec.radio.amateur.dx:2630 rec.radio.amateur.equipment:7210
rec.radio.amateur.homebrew:7954 rec.radio.amateur.policy:55337
rec.radio.amateur.space:490
```

intersting amateur mode :

http://www.kc7zwg.org

is this illegal?

```
From -8036128050448187898
X-Google-Thread: 10e8ad,b855f1a9818989bb,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!postnews.google.com!l39g2000cwd.googlegroups.com!not-for-
mail
From: "R grdunik" <grdsubscriptions@gmail.com>
Newsgroups: rec.radio.amateur.space
Subject: Archive of Keplerian elements
Date: 25 Nov 2006 01:21:44 -0800
Organization: http://groups.google.com
Lines: 13
Message-ID: <1164446504.947854.52500@l39g2000cwd.googlegroups.com>
NNTP-Posting-Host: 194.225.95.10
Mime-Version: 1.0
Content-Type: text/plain; charset="iso-8859-1"
```

```
X-Trace: posting.google.com 1164446510 29554 127.0.0.1 (25 Nov 2006 09:21:50 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Sat, 25 Nov 2006 09:21:50 +0000 (UTC)
User-Agent: G2/1.0
X-HTTP-UserAgent: Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1; en) Opera
8.52,gzip(gfe),gzip(gfe)
X-HTTP-Via: 1.0 FW, 1.0 cache.kashanu.ac.ir:3177 (squid/2.5.STABLE1)
Complaints-To: groups-abuse@google.com
Injection-Info: l39g2000cwd.googlegroups.com; posting-host=194.225.95.10;
   posting-account=ll4UVw0AAACLYdP1O-lFdElhdqhrSyc9
Xref: g2news2.google.com rec.radio.amateur.space:491

Hello,
I wonder if there is a site where the two-line Keplerian elements of
satellites are archived.  I don't have any specific satellite in mind.
Any satellite will do.  Actually, I am more interested to have the data
for satellites or space stations which have already reached their
end-of-life.  Any pointer is much appreciated.


73 de


Reza




From 6903107713277389221
X-Google-Thread: 10e8ad,b855f1a9818989bb
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news2.google.com!news4.google.com!news2.volia.net!
zen.net.uk!dedekind.zen.co.uk!newsfeeder.wxs.nl!divide.nova.planet.nl!
posting.nova.planet.nl!not-for-mail
Date: Sat, 25 Nov 2006 15:54:45 +0100
From: Roland <roland_lemmers@planet.nl>
User-Agent: Thunderbird 1.5.0.8 (Windows/20061025)
MIME-Version: 1.0
Newsgroups: rec.radio.amateur.space
Subject: Re: Archive of Keplerian elements
References: <1164446504.947854.52500@l39g2000cwd.googlegroups.com>
In-Reply-To: <1164446504.947854.52500@l39g2000cwd.googlegroups.com>
Content-Type: text/plain; charset=ISO-8859-1; format=flowed
Content-Transfer-Encoding: 7bit
Lines: 21
Message-ID: <45685933$0$12787$ba620dc5@text.nova.planet.nl>
NNTP-Posting-Host: 84.84.0.196
X-Trace: 1164466483 text.nova.planet.nl 12787 84.84.0.196:10016
X-Complaints-To: abuse@planet.nl
Xref: g2news2.google.com rec.radio.amateur.space:492

R grdunik schreef:
> Hello,
```

> I wonder if there is a site where the two-line Keplerian elements of
> satellites are archived. I don't have any specific satellite in mind.
> Any satellite will do. Actually, I am more interested to have the data
> for satellites or space stations which have already reached their
> end-of-life. Any pointer is much appreciated.
>
>
> 73 de
>
>
> Reza
>

www.space-track.org

About as close as it gets AFAIK.

```
From -1168917964904354693
X-Google-Thread: 10e8ad,4ef78de29de1a6bd,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news4.google.com!news3.google.com!
border1.nntp.dca.giganews.com!nntp.giganews.com!local01.nntp.dca.giganews.com!
nntp.comcast.com!news.comcast.com.POSTED!not-for-mail
NNTP-Posting-Date: Thu, 30 Nov 2006 07:20:02 -0600
From: "JoAnne K9JKM" <k9jkm_remove_@comcast.net>
Newsgroups: rec.radio.amateur.space
Subject: ANS-330 AMSAT News Service Weekly Bulletins
Date: Thu, 30 Nov 2006 07:20:06 -0600
MIME-Version: 1.0
Content-Type: text/plain;
     format=flowed;
     charset="iso-8859-1";
     reply-type=original
Content-Transfer-Encoding: 7bit
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.2869
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.2962
Message-ID: <Y_CdnTeGYcsfR_PYnZ2dnUVZ_tGdnZ2d@comcast.com>
Lines: 219
NNTP-Posting-Host: 67.184.169.1
X-Trace: sv3-1Dg0v3Cdj/LZWTou4fir1JNR/euctP/
OeGrMyLAmQzHAlxIyuXrY5zZbMpQx8ODpmr1p2uYskvboKFl!
jlSYJBPuKNkwtd9jh1mheLrbFLFfCCIZuF9oOEP1PCskCwwiXWEbowIHj39N2FgnFfmoBJKGVsXi!
VT5ZbyjEbar+fEg=
X-Complaints-To: abuse@comcast.net
X-DMCA-Complaints-To: dmca@comcast.net
X-Abuse-and-DMCA-Info: Please be sure to forward a copy of ALL headers
```

X-Abuse-and-DMCA-Info: Otherwise we will be unable to process your complaint properly
X-Postfilter: 1.3.32
Xref: g2news2.google.com rec.radio.amateur.space:493

AMSAT NEWS SERVICE
ANS-330

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* Unique Donation Opportunity Through The Pension Protection Act
* AMSAT at the Tampa Hamfest
* OSCAR-11 Report 20 November 2006
* ARISS Status - 20 November 2006

SB SAT @ AMSAT $ANS-330.01
Unique Donation Opportunity Through The Pension Protection Act

AMSAT News Service Bulletin 330.01
 From AMSAT HQ SILVER SPRING, MD.
November 26, 2006
To All RADIO AMATEURS
BID: $ANS-330.01

Recent legislation passed by Congress and signed by President Bush can help AMSAT raise the funds needed to build Eagle. The law, called the Pension Protection Act (PPA), includes
a provision enabling AMSAT to raise substantially more money than might have been previously possible. However, time is short to take full advantage of this unique opportunity.

Serious construction work must be funded this year to have Eagle ready to orbit by the target of 2009.

Basically, here's the story on how the new law can help Eagle fly!

The PPA provides that U.S. taxpayers with IRAs who have reached the age of 70-1/2, may contribute to qualified charities, part or all (up to $100,000 per year or $200,000 for married couples filing jointly), of the money they must annually withdraw from their IRAs.

Thus, many AMSAT members and other supporters of the amateur radio space program have a marvelous opportunity to keep the Eagle project on track.

If you must withdraw a certain amount from your IRA each year, there is a big advantage to making such withdrawals as direct contributions to AMSAT rather than merely receiving the distributions and then contributing in the usual manner. Under PPA, the amount you contribute directly is NOT counted as income and thus may put you into a lower tax bracket. It may also reduce the percentage of your Social Security income subject to taxation.

Key provisions of the new legislation to keep in mind:

1. Donors must hold either a conventional or Roth IRA.

2. Donors must be at least 70-1/2 years of age.

3. Contributions must be made directly from the IRA to the charitable organization not to a donor- advised fund, private foundation, gift annuity or trust.

4. Donations may be made this year and next only, and must be made by December 31, 2006 and December 31, 2007.

5. The maximum amount a contributor may donate each year is $100,000.

6. Direct contributions to qualified charities from IRAs, in accordance with the PPA provisions, are NOT counted as taxable income.

If you are 70-1/2 or older and have an IRA, you are in a position to take advantage of this potential windfall for the Eagle project. AMSAT urges you to first check with your tax advisor for specifics regarding your individual situation, then ask your IRA custodian to transfer to AMSAT part or all of what you are required to withdraw. Be sure to have this transfer completed before December 31st.

Let's all of us do our part to get Eagle into orbit.

* Have your IRA custodian call the AMSAT office to get information on how to transfer your contribution. The number 301-589-6062. Office hours are 10 AM to 6 PM EST.

[ANS thanks BIll, W3XO, for the above information]

/EX

SB SAT @ AMSAT $ANS-330.02
AMSAT at the Tampa Hamfest

AMSAT News Service Bulletin 330.02
From AMSAT HQ SILVER SPRING, MD.
November 26, 2006
To All RADIO AMATEURS
BID: $ANS-330.02

The Tampa Bay Hamfest, which will be held this year over the weekend of 2-3

December, is the largest amateur radio trade show on Florida's west coast. AMSAT will be well represented at the hamfest with a booth, live satellite demonstrations and an expanded forum session.

The hamfest will be held at the Manatee Civic Center in Palmetto, which in located in the south Tampa Bay Area - about halfway between downtown St. Petersburg and downtown Sarasota.
Additional hamfest info is available at http://www.fgcarc.org/

[ANS thanks Lee, KU4OS, for the above information]

/EX

SB SAT @ AMSAT $ANS-330.03
OSCAR-11 Report 20 November 2006

AMSAT News Service Bulletin 330.03
 From AMSAT HQ SILVER SPRING, MD.
November 26, 2006
To All RADIO AMATEURS
BID: $ANS-330.03

During the period 30 October to 20 November, the satellite was heard from 07 to 17 November. Good signals steady signals have beeen heard on all passes, and excellent copy of telemetry obtained.

The date/time stamp has been of interest. Since the satellite was heard on 18 October the on-board clock has maintained accurate time, to within two seconds over a period of 30 days. This compares with the average gain of five seconds per month, recorded when the satellite was fully operational.

The date counter appears to be incrementing correctly, but the day of the month is not reset to one, at the end of each month, and is not incrementing the month counter correctly. During the OFF period the month counter changed from '0=' to '10'. On 17 November the date was shown as 51 October. However, the day of the week counter appears to be incrementing correctly.

If the satellite watchdog timer continues to operate normally, the beacon should switch ON around 29 November. If the satellite is not heard around this time, it may be worth listening around 09 December.

I am indebted to Peter ZL3TC, for his reports, which helped me determine when the satellite last switched ON. Many thanks.

The current status of the satellite, is that all the analogue telemetry channels, 0 to 59 are zero, ie they have failed. The status channels 60 to 67 were still working. The spacecraft computer and active attitude control system have switched OFF, ie. the satellite' attitude is controlled only by the passive gravity boom gradient, and the satellite is free to spin at any speed. When telemetry was last received it showed that one of the solar arrays had failed, and there was a large unexplained current drain on the main 14 volt bus. After 22 years in orbit the battery has undergone around 100,000 partial charge/discharge cycles, and observations suggest that it cannot power the satellite during eclipses, or sometimes during periods of poor solar attitude.

The watchdog timer now operates on a 20 day cycle. The ON/OFF times have tended to be very consistent. The average of many observations show this to be 20.7 days, ie. 10.3 days ON followed by 10.4 days OFF. However, poor solar attitude may result may result in a low 14 volt line supply, which may cause the beacon to switch OFF prematurely, and reset the watchdog timer cycle. When this occurs, the beacon is OFF for 20.7 days.

The Beacon frequencies are -

VHF 145.826 MHz. AFSK FM ASCII Telemetry

UHF 435.025 MHz. OFF

S-band 2401.5 MHz. OFF

Listeners to OSCAR-11 may be interested in visiting my website. If you need to know what OSCAR-11 should sound like, there is a short audio clip for you to hear. The website contains an archive of news & telemetry data. It also contains details about using a soundcard or hardware demodulators for data capture. There is software for capturing data, and decoding ASCII telemetry. The URL is www.users.zetnet.co.uk/clivew/

If you place this bulletin on a terrestrial packet network, please use the bulletin identifier $BID:U2RPT127.CWV, to prevent duplication.

73 Clive G3CWV   xxxxx@amsat.org (please replace xxxxx by g3cwv)

[ANS thanks Clive, G3CWV, for the above information]

/EX

SB SAT @ AMSAT $ANS-330.04
ARISS Status - 20 November 2006

AMSAT News Service Bulletin 330.04
From AMSAT HQ SILVER SPRING, MD.
November 26, 2006
To All RADIO AMATEURS
BID: $ANS-330.04

Astronaut Training Status

ESA astronaut Christer Fuglesang has been scheduled for an Amateur Radio training session on Monday, November 20. Fugelsang will fly on the Shuttle STS-116 mission scheduled to launch on December 7, and plans to participate in an ARISS contact during his flight.

[ANS thanks Carol, KB3LKI for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73, This week's ANS Editor,
Lee McLamb, KU4OS

```
From -617353734858828958
X-Google-Thread: 10e8ad,d15b11ae19906659,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news4.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!local01.nntp.dca.giganews.com!nntp.comcast.com!
news.comcast.com.POSTED!not-for-mail
NNTP-Posting-Date: Thu, 30 Nov 2006 07:20:04 -0600
From: "JoAnne K9JKM" <k9jkm_remove_@comcast.net>
Newsgroups: rec.radio.amateur.space
Subject: WSR-331 AMSAT Weekly Satellite Report
Date: Thu, 30 Nov 2006 07:20:08 -0600
MIME-Version: 1.0
Content-Type: text/plain;
     format=flowed;
     charset="iso-8859-1";
     reply-type=original
Content-Transfer-Encoding: 7bit
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.2869
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.2962
Message-ID: <57-dnWMTXLcZR_PYnZ2dnUVZ_r6dnZ2d@comcast.com>
Lines: 971
NNTP-Posting-Host: 67.184.169.1
X-Trace: sv3-I3wcV45Y7BGgSO6g/
8FWcdASMx4hZ8kOfuO8VsErRTmYothoJJfjIqdfWxJsUlt9xtM+gYimEWc/jRI!
Mnqpno9F2Xxt1oSWzzmG9xgdB68x6NUu+3K2AhWVO9Aco4uu1ezi7SwwHVShM0h+e9fbitvW7yrj!
5SbuYgTcH+8Nup4=
X-Complaints-To: abuse@comcast.net
X-DMCA-Complaints-To: dmca@comcast.net
X-Abuse-and-DMCA-Info: Please be sure to forward a copy of ALL headers
X-Abuse-and-DMCA-Info: Otherwise we will be unable to process your complaint
properly
X-Postfilter: 1.3.32
Xref: g2news2.google.com rec.radio.amateur.space:494
```

This report is organized into 4 parts.
Part 1 (S1) - operational analog amateur satellites

Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites

SB SAT @ AMSAT W8ISS ANS-331.S1
WSR 331 Part 1 11/27/2006

AMSAT NEWS SERVICE BULLETIN 331.S1 FROM AMSAT HQ
SILVER SPRING, MD, November 27, 2006
TO ALL RADIO AMATEURS
BID: $ANS-331.S1

VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/V - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 MHz to 435.280 MHz LSB/CW
Downlink: 145.870 MHz to 145.930 MHz USB/CW

Dutch Transponder:
Uplink: 435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW

Indian Beacon: 145.859330 MHZ CW
Dutch Beacon: 145.860MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsat.in/hamsat.htm

To know what transponder is switched on please listen for the beacon that
is active. Each transponder has a different beacon.
[10022006]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational
Current Mode(s): FM Repeater - V/U - Tone
                 PBBS -   V/U - 9k6 PBP
                 Digipeater - OFF

Analog voice downlink: 435.300 MHz FM

```
                      435.150 MHz FM
                     2401.200 Mhz FM
Analog voice uplink:  145.880 MHZ FM
                      145.880 MHz USB
                      145.920 MHz FM 67Hz PL tone
                     1268.700 MHz FM 67Hz PL tone
Digital Downlinks:    435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
                      435.150 MHz FM, 9k6 Digital, Pacsat Broadcast
Protocol
                     2401.200 MHz FM, 38k4 bps, AX.25
Digital Uplink:       145.860 MHz FM, 9k6 Digital, Pacsat Broadcast
Protocol
                     1268.700 mhz FM, 9k6 PBP Digital

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[11013006]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Uplink:   145.850 MHz (67.0 Hz PL tone) (See below for operating
procedures)
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The order of operation is thus: (allow for Doppler as necessary)
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute
timer
   on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the
repeater
   on and off within the 10 Minute window.
```

3) Sending the 74.4 tone again within the 10 minute window will reset the 10 minute timer.
[04172006]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: OPERATIONAL

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplink: 145.850 145.870 145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

unOfficial Webpage: http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's CW telemetry downlink:
http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts.htm
[11202006]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational?

Uplink: 145.850 MHz FM
Downlink: 436.795 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

This off the AO-27 website:
For the last 5 weeks ground controllers have been trying to contact AO-27. At this point we have not been able to turn it on. We still have a few tricks that we are planning on trying but these take time. We are hoping that

```
we can
re-establish communications.

At this time, we don't have an estimate for when AO-27 will be back on
the
air.

AO-27 is now in its 14th year on orbit. We will continue to try to
recover
AO-27 until we run out of ideas.
- Michael N3UC

Official Webpage: http://www.ao27.org
[10232006]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational depending on amount of Sunlight
Current Reported mode: Mode-A

Uplink:   145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink:  29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons:   29.502 MHz
          145.972 MHz
          435.100 MHz
         2304.100 MHz

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php
The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
AO-7 users are requested to log their contacts and observations about
AO-7,
especially any unexpected mode changes.
AO-07 telemetry software webpage:
http://www.qsl.net/k3tz/files/K3TZ_AO-07_Telemetry_Decoder_0.5.zip

Please keep your power low!  For additional information please read the
AO-7
Usage Guidelines on the AO-7 Log and Resource Site located at:
http://www.planetemily.com/ao7
[04242006]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
```

Current Mode: Occasional Voice
Digipeater: OFF

The Expedition 14 crew is:
Commander: Michael Lopez-Alegria - KE5GTK
Flight Engineer: Mikhail Tyurin - RZ3FT
Flight Engineer: Thomas Reiter - DF4TR

Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

SSTV TESTING:
Worldwide Reported Downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS, RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line is
NOT translated from Russian and posted.
[10092006]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-331.S2
WSR 331 Part 2 11/27/2006

AMSAT NEWS SERVICE BULLETIN 331.S2 FROM AMSAT HQ
SILVER SPRING, MD, November 27, 2006

TO ALL RADIO AMATEURS
BID: $ANS-331.S2

HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Operational

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon: 437.2750 MHz CW

Callsign: JR8YJT
[10302006]
=====
CO-58 XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW only

Telemetry Downlink: 437.345MHz - FSK 1200bps using AFK protocol
Beacon: 437.465MHz - CW

Callsign: JQ1YGW

Oficial Webpage: http://www.space.t.u-tokyo.ac.jp/gs/satinfo-e.html#xi5
Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
[09252006]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launched: June 30, 2006

Status: Operational

Beacon: 436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS
[10022006]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launched: June 30,2003

Status: Semi-Operational - Constant Carrier only

Uplink: ?
Downlink: 437.3850 CW
437.4700 1200 FM ax25 or SRLL (ACTIVE only near Japan ?)

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/

```
[09252006]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational
Current Mode(s): FM Repeater - V/U - Tone
                 PBBS -        V/U - 9k6 PBP
                 Digipeater -  OFF

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink:   145.880 MHZ FM
                       145.880 MHz USB
                       145.920 MHz FM 67Hz PL tone
                      1268.700 MHz FM 67Hz PL tone
Digital Downlinks:     435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
                       435.150 MHz FM, 9k6 Digital, Pacsat Broadcast
Protocol
                      2401.200 MHz FM, 38k4 bps, AX.25
Digital Uplink:        145.860 MHz FM, 9k6 Digital, Pacsat Broadcast
Protocol
                      1268.700 mhz FM, 9k6 PBP Digital

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[11013006]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: RECOVERY EFFORTS - REFRAIN FRON USAGE!!!

General Usage Uplink/Downlink:145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org
aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[09252006]
```

```
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: CLOSED - Maintenance

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM
Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[11272006]
=====
RS-22 Mozhayets 4
Catalog number: 27939
Launch Date: September 27, 2004

Status: Operational

Beacon: 435.3520 MHz CW
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Semi-operational, the digipeater command is on and open for APRS
users.

Uplink: 145.900 FM
       145.920 FM
       145.940 FM
       145.960 FM
(using 1200-baud Manchester FSK)
Downlink: 437.026 MHz SSB (1200-baud PSK)
Mode-S Beacon: 2401.1428 MHz

Mode and Antenna Polarization:
U: RC 437.050 MHz RHCP
  PSK 437.025 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS: PACSAT-12
```

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[04172006]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational

Telemetry Downlink: 145.826 MHz. FM (1200-baud AFSK) approx. 10 days ON,
10
                    days OFF
Mode-S Beacon: 2401.500 MHz - OFF
UHFBeacon: 435.025 MHz - OFF

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Official webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[10302006]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: Occasional Voice
Digipeater: OFF

Expedition Crew 14 is:
Commander: Michael Lopez-Alegria - KE5GTK
Flight Engineer: Mikhail Tyurin - RZ3FT
Flight Engineer: Thomas Reiter - DF4TR

Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

SSTV TESTING:
Worldwide Reported Downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:

V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS, RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line is NOT translated from Russian and posted.
[10092006]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-331.S3
WSR 331 Part 3 11/27/2006

AMSAT NEWS SERVICE BULLETIN 331.S3 FROM AMSAT HQ
SILVER SPRING, MD, November 27, 2006
TO ALL RADIO AMATEURS
BID: $ANS-331.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
                            2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 FM 67Hz CTCSS
Voice Downlink: 2401.835 FM

```
Packet Up/Downlink: 437.250 9k6 packet
Packet Downlink 2401.835 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01292006]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink:   145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012006]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launched: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB
Beacon: 145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
IO-26 ITAMSAT
Catalog number: 22826
```

```
Launch Date: September 26, 1993

Status: Downlink only

Uplink: 145.875 145.900 145.925 145.950 MHz FM (1200-baud)
Downlink: 435.808 MHz PSK
Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01012006]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB
Beacon: 29.408 MHz
Robot: 29.454 MHz
[05232004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB
Beacon: 145.860 MHz
Robot: 145.908 MHz
[05232004]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink 145.975 MHz FM
Downlink 435.070 MHz FM
[05092004]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational
```

```
Uplink: 145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM
Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01092005]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational?

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB
Beacon: 29.352 MHz (intermittent)
SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplink: 145.84 145.86 145.88 145.90 MHz FM
(using 1200-baud Manchester FSK)
CW downlink: 437.125 MHz
Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[05232004]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[08152004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992
```

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM
Broadcast Callsign: HLO1-11
BBS: HLO1-12

Jim, AA7KC, reports that KO-23's downlink transmitter continues in a non-operational status.
[05092004]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM (9600-baud FSK)
Downlink: 436.500 MHz FM
Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm

[ANS-WSR has no further information]
[09042006]
=====
SO-35 SUNSAT

Catalog Number: ?
Launched:February 23, 1999

STatus: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz and 145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[08082004]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlink: 437.025 MHz 437.400 MHz
Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web site
at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[05092004]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplink V-band   145.840 - 145.990 MHz CW/LSB
      U-band   435.550 - 435.800 MHz CW/LSB
      L1-band 1269.250 - 1269.500 MHz CW/LSB
      L2-band 1268.325 - 1268.575 MHz CW/LSB
Downlink: S2-band 2401.225 - 2401.475 MHz CW/USB
         K-band 24,048.010 - 24,048.060 MHz CW/USB
Beacon: 2401.323
        24,048.035
[05232004]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz
Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[08152004]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz
Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[08152004]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, callsign KE6QMD, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Operational

Uplink: 145.850 or 145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz
Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial

land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[11202005]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink 435.275 1200-baud AFSK
Downlink 145.825 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink: Downlink 145.825 MHz FM 1200 Baud AFSK
Beacon: 2401.220 MHz
[05012006]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-331.S4
WSR 331 Part 4 11/27/2006

AMSAT NEWS SERVICE BULLETIN 331.S4 FROM AMSAT HQ
SILVER SPRING, MD, November 27, 2006
TO ALL RADIO AMATEURS
BID: $ANS-331.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE
PROPOSED FOR LAUNCH AT THIS TIME:

PHASE 3E ?O-??
Catalog number:
Proposed Launch Date: Early/Mid 2007

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/
[ANS-WSR wishes to thank William Leijenaar, PE1RAH for this week's report]
[04242006]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/amsat/listserv/menu.html

In addition to regular membership, AMSAT-NA offers membership in the

President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

```
From 5798301346337835478
X-Google-Thread: 10e8ad,ca7df4ac39e31a3d,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news4.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!local01.nntp.dca.giganews.com!nntp.comcast.com!
news.comcast.com.POSTED!not-for-mail
NNTP-Posting-Date: Sun, 03 Dec 2006 09:10:38 -0600
From: "JoAnne K9JKM" <k9jkm_remove_@comcast.net>
Newsgroups: rec.radio.amateur.space
Subject: ANS-337 AMSAT News Service Weekly Bulletins
Date: Sun, 3 Dec 2006 09:10:51 -0600
MIME-Version: 1.0
Content-Type: text/plain;
     format=flowed;
     charset="iso-8859-1";
     reply-type=original
Content-Transfer-Encoding: 7bit
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.2869
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.2962
Message-ID: <ObudnWhoAdZzde_YnZ2dnUVZ_oSdnZ2d@comcast.com>
Lines: 394
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X-Trace: sv3-E4FUtUHdthY1ckkbl1KGwVjZlzAMnilFnAS/
MSVt0zfM5ul3afqDMpIwTFQUWb2rTQHHNVHklluZp7/!
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yfk1KWdqFoQHVO4=
X-Complaints-To: abuse@comcast.net
X-DMCA-Complaints-To: dmca@comcast.net
X-Abuse-and-DMCA-Info: Please be sure to forward a copy of ALL headers
X-Abuse-and-DMCA-Info: Otherwise we will be unable to process your complaint
properly
X-Postfilter: 1.3.32
Xref: g2news2.google.com rec.radio.amateur.space:495
```

Ed. Note - Getting this bulletin out a little earlier than usual because it contains information about Thursday's launch.

AMSAT NEWS SERVICE
ANS-337

ANS is a free, weekly, news and information service of AMSAT North America,The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* Unique Donation Opportunity Through The Pension Protection Act
* UK Colloquium Dates Set
* Genesat-1 Launch Information
* ARISS Status - December 3, 2006
* STS-116 Launch to Include Cubesats
* SKN in Memory of K7RR

SB SAT @ AMSAT $ANS-337.01
Unique Donation Opportunity Through The Pension Protection Act

AMSAT News Service Bulletin 337.01
From AMSAT HQ SILVER SPRING, MD.
November 26, 2006
To All RADIO AMATEURS
BID: $ANS-337.01

Recent legislation passed by Congress and signed by President Bush can help AMSAT raise the funds needed to build Eagle. The law, called the Pension Protection Act (PPA), includes a provision enabling AMSAT to raise substantially more money than might have been previously possible. However, time is short to take full advantage of this unique opportunity.

Serious construction work must be funded this year to have Eagle ready to orbit by the target of 2009.

Basically, here's the story on how the new law can help Eagle fly!

The PPA provides that U.S. taxpayers with IRAs who have reached the age of 70-1/2, may contribute to qualified charities, part or all (up to $100,000 per year or $200,000 for married couples filing jointly), of the money they must annually withdraw from their IRAs.

Thus, many AMSAT members and other supporters of the amateur radio space program have a marvelous opportunity to keep the Eagle project on track.

If you must withdraw a certain amount from your IRA each year, there is a big advantage to making such withdrawals as direct contributions to AMSAT rather than merely receiving the distributions and then contributing in the usual manner. Under PPA, the amount you contribute directly is NOT counted as income and thus may put you into a lower tax bracket. It may also reduce the percentage of your Social Security income subject to taxation.

Key provisions of the new legislation to keep in mind:

1. Donors must hold either a conventional or Roth IRA.

2. Donors must be at least 70-1/2 years of age.

3. Contributions must be made directly from the IRA to the charitable organization not to a donor- advised fund, private foundation, gift annuity or trust.

4. Donations may be made this year and next only, and must be made by December 31, 2006 and December 31, 2007.

5. The maximum amount a contributor may donate each year is $100,000.

6. Direct contributions to qualified charities from IRAs, in accordance with the PPA provisions, are NOT counted as taxable income.

If you are 70-1/2 or older and have an IRA, you are in a position to take advantage of this potential windfall for the Eagle project. AMSAT urges you to first check with your tax advisor for specifics regarding your individual situation, then ask your IRA custodian to transfer to AMSAT part or all of what you are required to withdraw. Be sure to have this transfer completed before December 31st.

Let's all of us do our part to get Eagle into orbit.

* Have your IRA custodian call the AMSAT office to get information on how to transfer your contribution. The number 301-589-6062. Office hours are 10 AM to 6 PM EST.

[ANS thanks BIll, W3XO, for the above information]

/EX

SB SAT @ AMSAT $ANS-337.02
UK Colloquium Dates Set

AMSAT News Service Bulletin 337.02
From AMSAT HQ SILVER SPRING, MD.
December 3, 2006
To All RADIO AMATEURS
BID: $ANS-337.02

Please make a note in your diaries, etc The dates for the 2007 AMSAT-UK Colloquium are 20 through 22 July 2007. We are holding it a week earlier than normal to avoid clashing with the Central States VHF Event. Venue is to be the University of Surrey, as per previous years.

I hope that lots of you from the other side of the Pond will be able to make it!

73
Jim G3WGM
Hon Sec AMSAT-UK

[ANS thanks Jim, G3WGM, for the above information]

/EX

SB SAT @ AMSAT $ANS-337.03
Genesat-1 Launch Information

AMSAT News Service Bulletin 337.03
From AMSAT HQ SILVER SPRING, MD.
December 3, 2006
To All RADIO AMATEURS
BID: $ANS-337.03

GeneSat-1 Launch Planned for December 11

A Star is Flown
GeneSat-1 will launch from the Mid-Atlantic Regional Spaceport (MARS) at NASA Wallops Flight Facility on December 11, 2006, about 7:00am EST. It will go into orbit as a secondary payload aboard a Minotaur launch vehicle. GeneSat-1 is a 10 x 10 x 30 cm. spacecraft, which will conduct a cellular biology technology demonstration.

Of particular interest to the amateur radio satellite community, is the GeneSat-1 beacon. Operating at 437.075 MHz FM, the beacon sends an AX.25 packet every 5 seconds; the packet contains data about the spacecraft systems operation. The beacon will initiate transmission as soon as the spacecraft is deployed from its carrier on the 4th stage of the launch vehicle.

The mission website at http://www.genesat1.org will be fully operational as of December 5; look there for general mission and spacecraft information, for how to contact GeneSat Mission Operations, and for the latest orbit data and other information needed to work the GeneSat-1 beacon.

Let The Games Begin
To foster interest in the amateur community, and to support amateur radio and space technology outreach to student groups, the GeneSat Mission Team is sponsoring a contest, with entries made by uploading packets received onto the mission website. Recognition and awards will be made as follows:

Grand Prize: A radio station set up for satellite tracking! The rig will be donated by the Silicon Valley Center for Robotic Exploration and Space Technology (CREST) at NASA Research Park to the college or university of the winner's choice. The honor of choosing the recipient school goes to the station that logs 12 or more data packets each (about 1 minute's worth of listening) from the greatest number of satellite passes during the experiment.

The recipient school must be approved by CREST management, based on demonstration of suitable infrastructure and licensed amateur(s) available to operate and maintain the station, and available connectivity from CREST for remote support and operation. The station will be installed with the cooperation of CREST staff. The winners also will receive a commemorative plaque for station team members and pictures and recognition on the GeneSat-1 website. In case of a tie the station with earliest initial packet submittal will win the right to designate the recipient school.

First Contact Prize: The station submitting the first packet after initiation of transmission will receive the First Contact Prize. They will receive a commemorative plaque and mission pins for station team members and pictures and recognition on the mission website.

The First 20 stations to post packets will receive mission pins and a certificate of recognition from the GeneSat Mission Operations Director.

All Contestants who submit one or more packets will receive an electronic QSL card from the mission web site upon submission of data.

[ANS thanks Mike, KE7EGC and the GeneSat-1 team for the above information]

/EX

SB SAT @ AMSAT $ANS-337.04
ARISS Status - December 3, 2006

AMSAT News Service Bulletin 337.04
From AMSAT HQ SILVER SPRING, MD.
December 3, 2006
To All RADIO AMATEURS
BID: $ANS-337.04

Amateur Radio on the International Space Station (ARISS) Status Report
November 27, 2006

1. Mannheim Museum Contact Successful

On Monday, November 20, students attending the Landesmuseum fuer Technik und Arbeit (Mannheim Museum) in Mannheim, Germany, for the opening of its space exhibition, experienced an amateur radio contact with astronaut Thomas Reiter, DF4TR. An audience of two hundred students, ages 12-20, watched as 13 students asked thirteen questions. Also present was former ESA astronaut Ernst Messerschmid, DG2KM, who displayed pictures of Thomas' training and answered questions from the audience.

Telebridge station VK5ZAI in Australia assisted in the event. The audio was fed into the EchoLink servers and received 22 connections from12 countries, including 1 repeater. Three connections were made to the Internet Radio Linking Project (IRLP) Discovery Reflector 9010, and 15 listened to the Shoutcast audio stream on the www.discoveryreflector.ca website. The audio was also webcast, courtesy of Verizon Conferencing.

2. Canadian School Contact, a Success

Centre Hastings Secondary School experienced a successful contact with the ISS via amateur radio. On November 20, ten students posed 22 questions to Michael Lopez-Alegria, KE5GTK, in front of an audience of 800. The Ottawa ARISS team provided radio equipment for the contact and gave a presentation to the students. Local radio and newspapers covered the event and media students from the local college and university attended. Dignitaries making an appearance included a federal member of the Canadian Parliament, an Ontario Member of the Provincial Parliament, and local officials from the Township and School Board including Trustees and directors. The school webcasted the event on www.hpedsb.on.ca. Audio was fed to EchoLink servers and Internet Radio Linking Project (IRLP) Discovery Reflector 9010. EchoLink received 16 connections (1 repeater included) from 9 countries, and 5 connections were made to the IRLP server 9010 from Canada and Japan. Audio was also available through Shoutcast on the website www.discoveryreflector.ca which received 26 connections.

3. Cosmonaut Active on Voice

Mikhail Tyruin, RZ3FT, has been active on voice. He has been using the ISS Ham radio equipment to make general contacts with his friends in Canada.

4. Astronaut Training Status

On November 20, Christer Fuglesang, KE5CGR/SA0AFS, attended an amateur radio session at JSC which provided him with user level training on the Kenwood radio so that he will be prepared to perform a school contact with students in Sweden during his STS-116 mission. He was given instructions on manual configuration as well as normal operations of the radio.

5. ARISS International Team Meeting Held

The ARISS International Team held its monthly teleconference on Tuesday, November 21. SuitSat-2's design and progress were reported on. Updates were given on the Kenwood radio status and SuitSat-1 certificates. Minutes have been posted on the ARISS website. See:
http://www.rac.ca/ariss/arisstel2006-11-21.htm

[ANS thanks Carol, KB3LKI for the above information]

/EX

SB SAT @ AMSAT $ANS-337.05
STS-116 Launch Includes Cubesats

AMSAT News Service Bulletin 337.05
From AMSAT HQ SILVER SPRING, MD.
December 3, 2006
To All RADIO AMATEURS
BID: $ANS-337.05

December 7 STS-116 Launch Includes Three Amateur Satellites

Space Shuttle Discovery is scheduled for launch on December 7 at 9:35 PM EST (UTC-5). During the 12-day mission and three spacewalks, the crew will work closely with flight controllers at NASA's Johnson Space Center, Houston, to install a new segment of the station's girder-like truss and activate the station's permanent, complex power and cooling systems.

The Shuttle will also carry to orbit three new satellites, RAFT-1, MARSCOM and ANDE, designed, built, and tested by the Midshipmen of the US Naval Academy's Satellite Laboratory in Annapolis, Maryland.

The primary mission of the RAFT satellite is tied to the calibration of the US Navy Space Surveillance Radar which is the primary source of ALL satellite tracking data for ALL spacecraft in the USA. Data from this radar is what helps generate the Keplarian Elements used by all Amateur Satellites operators.

The secondary mission of RAFT and MARScom are to provide packet digital communications relay for mobile units to transmit their GPS coordinates and messages via the satellites. This is a continuation of the PCsat, PCSAT2 and ARISS missions. The downlink is received by a global system of volunteer ground stations that feed the http://pcsat.aprs.org live web page.

The primary limitation on single channel LEO satellite communications is the congestion on the uplink. The RAFT Packet-to-Voice transponder solves this problem by compressing the uplink into a single 1 second burst per station, and then expanding it to voice for the FM downlink. This way, students with nothing but a scanner receiver can hear all of the downlink communications (voice) yet the uplinking stations have a very low probabilty of collision due to the short duration of the uplink. A voice synthesizer converts the packet to voice.

ANDE was developed by the Naval Research labs as an "Atmospheric Neutral Density Experiment" to measure the decay from orbit of a perfectly spherical 18" ball. Hearing that it was empty, the Naval Academy under the mentoring of Bob Bruninga, WB4APR, proposed an amateur radio transponder for the inside.

There can be no external antennas and no solar panels or anything that would disturb the aerodynamic performance of the very smooth sphere. The spherical satellite is split in half with an insulator and uses the space frame as the antenna for the 2 meter system. There are 112 Lithinum primary "D" cells inside the sphere to power it for a year.

To keep the current drain to a minimum, the ANDE comms payload sleeps 90% of the time, only waking up once every 16 seconds to listen for packets. Hearing none, it goes back to sleep to convserve power. If packets are heard, then it remains awake and serves as an APRS packet digipeater until 1 minute after the last packet. In addition, ANDE has a voice synthesizer and can speak packets addressed to it.

The telemetry from the satellite will be of a similar form to that of PCSAT and PCSAT2 and will be distributed by the APRS-IS network. Dave, G4DPZ has been working on the telemetry web site. Details of the URL will be published after launch.

The RAFT-1 and ANDE satellite downlinks will be 145.825 MHz. The MARS frequencies used by MARSCOM are on Navy-Marine Corps MARS frequencies.

For full technical details please refer to:
http://www.ew.usna.edu/%7Ebruninga/ande-raft-ops.html

[ANS thanks Bob, WB4APR, and the US Naval Academy Satellite Laboratory for the above information]

/EX

SB SAT @ AMSAT $ANS-337.06
SKN In memory of K7RR

AMSAT News Service Bulletin 337.06
From AMSAT HQ SILVER SPRING, MD.
December 3, 2006
To All RADIO AMATEURS
BID: $ANS-337.06

SKN on OSCAR 2007 TO BE IN MEMORY OF K7RR

All radio amateurs, worldwide, are cordially invited to participate in Straight Key Night on OSCAR 2007. This year, the event is dedicated to the memory of Cliff Buttschardt, K7RR. Cliff was an enthusiastic and longtime SKN participant on both OSCAR and HF, as well as a perennial Best Fist winner. He will be sorely missed.

Participating in SKN on OSCAR 2007 is easy. No rules, no scoring and no need to send in a log. Just operate CW through any OSCAR etween 0000 and 2400 UTC on 1 January 2007, using a straight hand key.

In keeping with the friendly nature of this event, all participants are encouraged to nominate someone they worked for "Best Fist." Your nominee need not have the best fist of those you heard, just of those you worked. Please send your nomination to w2rs@amsat.org. A list of those nominated will appear in ANS and The AMSAT Journal.

CU SKN!

73,

Ray W2RS

[ANS thanks Ray, W2RS, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73, This week's ANS Editor,
Dee Interdonato, NB2F

```
From -1580775236616488034
X-Google-Thread: 10e8ad,9130b054df47575f,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
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nntp.nventure.com!news.nventure.com.POSTED!not-for-mail
NNTP-Posting-Date: Sun, 03 Dec 2006 13:18:02 -0600
From: Martin Johnson <ac7lk@aol.com>
Subject: FYI: New Radio Website
Newsgroups: rec.radio.amateur.space
Reply-To: ac7lk@aol.com
Date: Sun, 03 Dec 2006 11:17:35 -0800
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8UDZwozlCkxJfmWHpd/mHln5ieRyLjY=
X-Complaints-To: abuse@nventure.com
X-DMCA-Complaints-To: abuse@nventure.com
X-Abuse-and-DMCA-Info: Please be sure to forward a copy of ALL headers
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X-Abuse-and-DMCA-Info: Otherwise we will be unable to process your complaint
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                http://kc7zwg.com
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mail
From: "bobandcarole" <bobandcarole1010@hotmail.com>
Newsgroups: alt.dbs.directv,rec.radio.amateur.space,rec.food.drink.beer
Subject: Re: Sexual fascism and the Mark Foley scandel
Followup-To: alt.politics.homosexuality,alt.education,alt.dbs.directv ,
rec.radio.amateur.space, rec.food.drink.beer
Date: 6 Dec 2006 09:25:43 -0800
Organization: http://groups.google.com
Lines: 14
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References: <1159881994.642663.229430@h48g2000cwc.googlegroups.com>
   <1162066010.997111.45530@i42g2000cwa.googlegroups.com>
   <1164787817.495319.179220@j44g2000cwa.googlegroups.com>
   <T7fbh.54807$39.24787@southeast.rr.com>
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NNTP-Posting-Date: Wed, 6 Dec 2006 17:25:50 +0000 (UTC)
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[mtc-td121 8.4.1], HTTP/1.1 cache-mtc-ae04.proxy.aol.com[400C7508] (Traffic-
Server/6.1.3 [uScM])
Complaints-To: groups-abuse@google.com
Injection-Info: l12g2000cwl.googlegroups.com; posting-host=64.12.117.8;
   posting-account=EkXhtw0AAABnBEBePqPQbRkFYJukCReZ
Xref: g2news2.google.com alt.dbs.directv:4001 rec.radio.amateur.space:497
rec.food.drink.beer:2426
```

```
> Apparently, Rep. Mark Foley is homosexual. And like many homosexual
> men, he likes young teen boys. We should pray for him that he gets a
> handle on this problem and refrains from harming any more kids.
>
>
> Meanwhile, we need to wake up. The fact that this is typical behavior
> for homosexuals doesn't stop us from continuing to elevate such folks
> to positions where they gain access to our kids.
>
>
> http://worldnetdaily.com/news/article.asp?ARTICLE_ID=52244



From 3281397194245645077
X-Google-Thread: 10bb69,af3a945b40f29083
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X-Google-Thread: 10e8ad,41180496b69c09cf
X-Google-Thread: 104a10,41180496b69c09cf
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hydra.nntpserver.com!not-for-mail
From: Mark@kb9rqz.aprs
Newsgroups:
alt.politics.homosexuality,alt.education,alt.dbs.directv,rec.radio.amateur.space,r
ec.food.drink.beer
Subject: spaming hate monger
Date: Wed, 06 Dec 2006 12:46:22 -0500
Message-ID: <he0en2p9uadn83m20caa7plngati5jt6b0@4ax.com>
References: <1159881994.642663.229430@h48g2000cwc.googlegroups.com>
<1162066010.997111.45530@i42g2000cwa.googlegroups.com>
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Content-Transfer-Encoding: 7bit
Lines: 18
NNTP-Posting-Date: 06 Dec 2006 16:51:48 GMT
X-Complaints-To: abuse@teranews.com
Xref: g2news2.google.com alt.politics.homosexuality:165976 alt.education:43859
alt.dbs.directv:4002 rec.radio.amateur.space:498 rec.food.drink.beer:2427

On 6 Dec 2006 09:25:43 -0800, "bobandcarole"
<bobandcarole1010@hotmail.com> wrote:
```

```
>
>
>> Apparently, Rep. Mark Foley is homosexual. And like many homosexual
>> men, he likes young teen boys. We should pray for him that he gets a
>> handle on this problem and refrains from harming any more kids.
>>
>>
>> Meanwhile, we need to wake up. The fact that this is typical behavior
>> for homosexuals doesn't stop us from continuing to elevate such folks
>> to positions where they gain access to our kids.
>>
>>
>> http://worldnetdaily.com/news/article.asp?ARTICLE_ID=52244
don't ever get tried of spreading hate?
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com




From 5144294536142902358
X-Google-Thread: 10bb69,af3a945b40f29083
X-Google-Thread: fc521,af3a945b40f29083
X-Google-Thread: f84d8,5228070b6e104c77
X-Google-Thread: 10e8ad,41180496b69c09cf
X-Google-Thread: 104a10,41180496b69c09cf
X-Google-Attributes: gid10bb69,gidfc521,gidf84d8,gid10e8ad,gid104a10,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!postnews.google.com!79g2000cws.googlegroups.com!not-for-
mail
From: "bobandcarole" <bobandcarole01@hotmail.com>
Newsgroups:
alt.politics.homosexuality,alt.education,alt.dbs.directv,rec.radio.amateur.space,r
ec.food.drink.beer
Subject: Sexual fascism and the Mark Foley scandel
Date: 6 Dec 2006 09:48:59 -0800
Organization: http://groups.google.com
Lines: 22
Message-ID: <1165427339.761425.223410@79g2000cws.googlegroups.com>
References: <1159881994.642663.229430@h48g2000cwc.googlegroups.com>
   <1162066010.997111.45530@i42g2000cwa.googlegroups.com>
   <1164787817.495319.179220@j44g2000cwa.googlegroups.com>
   <T7fbh.54807$39.24787@southeast.rr.com>
   <1165311819.048659.210350@l12g2000cwl.googlegroups.com>
   <1165425943.817914.20640@l12g2000cwl.googlegroups.com>
   <he0en2p9uadn83m20caa7plngati5jt6b0@4ax.com>
NNTP-Posting-Host: 205.188.116.13
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"
X-Trace: posting.google.com 1165427345 21325 127.0.0.1 (6 Dec 2006 17:49:05 GMT)
X-Complaints-To: groups-abuse@google.com
```

```
NNTP-Posting-Date: Wed, 6 Dec 2006 17:49:05 +0000 (UTC)
In-Reply-To: <he0en2p9uadn83m20caa7plngati5jt6b0@4ax.com>
User-Agent: G2/1.0
X-HTTP-UserAgent: Mozilla/4.0 (compatible; MSIE 6.0; AOL 9.0; Windows NT 5.1;
SV1),gzip(gfe),gzip(gfe)
X-HTTP-Via: HTTP/1.1 (Velocity/1.3.32 [uScMs f p eN:t cCMp s ]), HTTP/1.1 Turboweb
[dtc-tb103 8.4.1], HTTP/1.1 cache-dtc-aa09.proxy.aol.com[CDBC740D] (Traffic-
Server/6.1.3 [uScM])
Complaints-To: groups-abuse@google.com
Injection-Info: 79g2000cws.googlegroups.com; posting-host=205.188.116.13;
   posting-account=QloQDg0AAABRHmz3s_SceqsdOOvGCFTS
Xref: g2news2.google.com alt.politics.homosexuality:165977 alt.education:43860
alt.dbs.directv:4003 rec.radio.amateur.space:499 rec.food.drink.beer:2428


M...@kb9rqz.aprs wrote:
> On 6 Dec 2006 09:25:43 -0800, "bobandcarole"
> <bobandcarole1010@hotmail.com> wrote:
>
> >
> >
> >> Apparently, Rep. Mark Foley is homosexual. And like many homosexual
> >> men, he likes young teen boys. We should pray for him that he gets a
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> >>
> >>
> >> Meanwhile, we need to wake up. The fact that this is typical behavior
> >> for homosexuals doesn't stop us from continuing to elevate such folks
> >> to positions where they gain access to our kids.
> >>
> >>
> >> http://worldnetdaily.com/news/article.asp?ARTICLE_ID=52244
> don't ever get tried of spreading hate?

You confuse truth with hate.




From -7757874400087533981
X-Google-Thread: 10bb69,af3a945b40f29083
X-Google-Thread: fc521,af3a945b40f29083
X-Google-Thread: f84d8,5228070b6e104c77
X-Google-Thread: 10e8ad,41180496b69c09cf
X-Google-Thread: 104a10,41180496b69c09cf
X-Google-Attributes: gid10bb69,gidfc521,gidf84d8,gid10e8ad,gid104a10,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!postnews.google.com!l12g2000cwl.googlegroups.com!not-for-
mail
From: "bobandcarole" <bobandcarole555@hotmail.com>
Newsgroups:
alt.politics.homosexuality,alt.education,alt.dbs.directv,rec.radio.amateur.space,r
ec.food.drink.beer
Subject: Re: Sexual fascism and the Mark Foley scandel
```

```
Date: 6 Dec 2006 09:56:20 -0800
Organization: http://groups.google.com
Lines: 23
Message-ID: <1165427779.888588.130580@l12g2000cwl.googlegroups.com>
References: <1159881994.642663.229430@h48g2000cwc.googlegroups.com>
   <1162066010.997111.45530@i42g2000cwa.googlegroups.com>
   <1164787817.495319.179220@j44g2000cwa.googlegroups.com>
   <T7fbh.54807$39.24787@southeast.rr.com>
   <1165311819.048659.210350@l12g2000cwl.googlegroups.com>
   <1165425943.817914.20640@l12g2000cwl.googlegroups.com>
   <he0en2p9uadn83m20caa7plngati5jt6b0@4ax.com>
   <1165427339.761425.223410@79g2000cws.googlegroups.com>
NNTP-Posting-Host: 205.188.116.13
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"
X-Trace: posting.google.com 1165427785 17129 127.0.0.1 (6 Dec 2006 17:56:25 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Wed, 6 Dec 2006 17:56:25 +0000 (UTC)
In-Reply-To: <1165427339.761425.223410@79g2000cws.googlegroups.com>
User-Agent: G2/1.0
X-HTTP-UserAgent: Mozilla/4.0 (compatible; MSIE 6.0; AOL 9.0; Windows NT 5.1;
SV1),gzip(gfe),gzip(gfe)
X-HTTP-Via: HTTP/1.1 (Velocity/1.3.32 [uScMs f p eN:t cCMp s ]), HTTP/1.1 Turboweb
[dtc-tb103 8.4.1], HTTP/1.1 cache-dtc-aa09.proxy.aol.com[CDBC740D] (Traffic-
Server/6.1.3 [uScM])
Complaints-To: groups-abuse@google.com
Injection-Info: l12g2000cwl.googlegroups.com; posting-host=205.188.116.13;
   posting-account=7CqnCw0AAAC7fwe7G4uACvBO_Y_CY3vI
Xref: g2news2.google.com alt.politics.homosexuality:165981 alt.education:43862
alt.dbs.directv:4004 rec.radio.amateur.space:500 rec.food.drink.beer:2429


bobandcarole wrote:
> M...@kb9rqz.aprs wrote:
> > On 6 Dec 2006 09:25:43 -0800, "bobandcarole"
> > <bobandcarole1010@hotmail.com> wrote:
> >
> > >
> > >
> > >> Apparently, Rep. Mark Foley is homosexual. And like many homosexual
> > >> men, he likes young teen boys. We should pray for him that he gets a
> > >> handle on this problem and refrains from harming any more kids.
> > >>
> > >>
> > >> Meanwhile, we need to wake up. The fact that this is typical behavior
> > >> for homosexuals doesn't stop us from continuing to elevate such folks
> > >> to positions where they gain access to our kids.
> > >>
> > >>
> > >> http://worldnetdaily.com/news/article.asp?ARTICLE_ID=52244
> > don't ever get tried of spreading hate?
>
> You confuse truth with hate.
```

From -7494959025013425363
X-Google-Thread: 10bb69,af3a945b40f29083
X-Google-Thread: fc521,af3a945b40f29083
X-Google-Thread: f84d8,5228070b6e104c77
X-Google-Thread: 10e8ad,41180496b69c09cf
X-Google-Thread: 104a10,41180496b69c09cf
X-Google-Attributes: gid10bb69,gidfc521,gidf84d8,gid10e8ad,gid104a10,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news4.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx01.iad01.newshosting.com!newshosting.com!news-
feed01.roc.ny.frontiernet.net!nntp.frontiernet.net!news02.roc.ny.POSTED!fd24bd7a!
not-for-mail
From: gwatts <gwatts@frontiernet.net>
User-Agent: Mozilla Thunderbird 1.0.6 (Windows/20050716)
X-Accept-Language: en-us, en
MIME-Version: 1.0
Newsgroups:
alt.politics.homosexuality,alt.education,alt.dbs.directv,rec.radio.amateur.space,r
ec.food.drink.beer
Subject: Re: Sexual fascism and the Mark Foley scandel
References: <1159881994.642663.229430@h48g2000cwc.googlegroups.com>
<1162066010.997111.45530@i42g2000cwa.googlegroups.com>
<1164787817.495319.179220@j44g2000cwa.googlegroups.com>
<T7fbh.54807$39.24787@southeast.rr.com>
<1165311819.048659.210350@l12g2000cwl.googlegroups.com>
<1165425943.817914.20640@l12g2000cwl.googlegroups.com>
<he0en2p9uadn83m20caa7plngati5jt6b0@4ax.com>
<1165427339.761425.223410@79g2000cws.googlegroups.com>
<1165427779.888588.130580@l12g2000cwl.googlegroups.com>
In-Reply-To: <1165427779.888588.130580@l12g2000cwl.googlegroups.com>
Content-Type: text/plain; charset=ISO-8859-1; format=flowed
Content-Transfer-Encoding: 7bit
Lines: 28
Message-ID: <zxDdh.7018$ya1.6667@news02.roc.ny>
X-Complaints-To: abuse-news@frontiernet.net
X-Trace:
52616e646f6d4956490a539f226c80f2598f08cb06bad55823b1fad3e5a51c692f864284a47a8cdd52
eac7b9b5093fdc140b81fcd00c71de7dd0758563cad82067ce72a1bbab8d3977c99466069a4d485147
42db613471d0586ccb4fd27f336ea17a8d9f10c27e535dfc722d69674abf8f2f8620cda2d2d0b0225a
0e9532d8ba
X-Abuse-Info: Please be sure to forward ALL headers so that we may process your
complaint properly.
NNTP-Posting-Date: Wed, 06 Dec 2006 17:58:55 UTC
Date: Wed, 06 Dec 2006 17:58:55 GMT
Xref: g2news2.google.com alt.politics.homosexuality:165983 alt.education:43863
alt.dbs.directv:4005 rec.radio.amateur.space:501 rec.food.drink.beer:2430

bobandcarole wrote:
> bobandcarole wrote:
>

```
>>M...@kb9rqz.aprs wrote:
>>
>>>On 6 Dec 2006 09:25:43 -0800, "bobandcarole"
>>><bobandcarole1010@hotmail.com> wrote:
>>>
>>>
>>>>
>>>>>Apparently, Rep. Mark Foley is homosexual. And like many homosexual
>>>>>men, he likes young teen boys. We should pray for him that he gets a
>>>>>handle on this problem and refrains from harming any more kids.
>>>>>
>>>>>
>>>>>Meanwhile, we need to wake up. The fact that this is typical behavior
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>>>>>to positions where they gain access to our kids.
>>>>>
>>>>>
>>>>>http://worldnetdaily.com/news/article.asp?ARTICLE_ID=52244
>>>
>>>don't ever get tried of spreading hate?
>>
>>You confuse truth with hate.

And you confuse rec.radio.amateur.space with a newsgroup that gives a
damn about your whiny, misleading, unsubstantiated spewage.


From -8585415512289130910
X-Google-Thread: 10bb69,af3a945b40f29083
X-Google-Thread: fc521,af3a945b40f29083
X-Google-Thread: f84d8,5228070b6e104c77
X-Google-Thread: 10e8ad,41180496b69c09cf
X-Google-Thread: 104a10,41180496b69c09cf
X-Google-Attributes: gid10bb69,gidfc521,gidf84d8,gid10e8ad,gid104a10,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news1.google.com!news.maxwell.syr.edu!nntpserver.com!
zeus.nntpserver.com!hydra.nntpserver.com!not-for-mail
From: Mark@kb9rqz.aprs
Newsgroups:
alt.politics.homosexuality,alt.education,alt.dbs.directv,rec.radio.amateur.space,r
ec.food.drink.beer
Subject: hate spaming along
Date: Wed, 06 Dec 2006 13:35:32 -0500
Message-ID: <pa3en2l1am6r1r21qj3vdroa0jg2gfbsfl@4ax.com>
References: <1159881994.642663.229430@h48g2000cwc.googlegroups.com>
<1162066010.997111.45530@i42g2000cwa.googlegroups.com>
<1164787817.495319.179220@j44g2000cwa.googlegroups.com>
<T7fbh.54807$39.24787@southeast.rr.com>
<1165311819.048659.210350@l12g2000cwl.googlegroups.com>
<1165425943.817914.20640@l12g2000cwl.googlegroups.com>
<he0en2p9uadn83m20caa7plngati5jt6b0@4ax.com>
<1165427339.761425.223410@79g2000cws.googlegroups.com>
X-Newsreader: Forte Free Agent 3.3/32.846
```

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MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Lines: 28
NNTP-Posting-Date: 06 Dec 2006 17:41:02 GMT
X-Complaints-To: abuse@teranews.com
Xref: g2news2.google.com alt.politics.homosexuality:165995 alt.education:43864
alt.dbs.directv:4007 rec.radio.amateur.space:502 rec.food.drink.beer:2431

On 6 Dec 2006 09:48:59 -0800, "bobandcarole"
<bobandcarole01@hotmail.com> wrote:

>
>M...@kb9rqz.aprs wrote:
>> On 6 Dec 2006 09:25:43 -0800, "bobandcarole"
>> <bobandcarole1010@hotmail.com> wrote:
>>
>> >
>> >
>> >> Apparently, Rep. Mark Foley is homosexual. And like many homosexual
>> >> men, he likes young teen boys. We should pray for him that he gets a
>> >> handle on this problem and refrains from harming any more kids.
>> >>
>> >>
>> >> Meanwhile, we need to wake up. The fact that this is typical behavior
>> >> for homosexuals doesn't stop us from continuing to elevate such folks
>> >> to positions where they gain access to our kids.
>> >>
>> >>
>> >> http://worldnetdaily.com/news/article.asp?ARTICLE_ID=52244
>> don't ever get tried of spreading hate?
>
>You confuse truth with hate.
no I don't

you confus e hate with truth
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com




From 5405433130431033740
X-Google-Thread: 10bb69,af3a945b40f29083
X-Google-Thread: fc521,af3a945b40f29083
X-Google-Thread: f84d8,5228070b6e104c77
X-Google-Thread: 10e8ad,41180496b69c09cf
X-Google-Thread: 104a10,41180496b69c09cf
X-Google-Attributes: gid10bb69,gidfc521,gidf84d8,gid10e8ad,gid104a10,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!postnews.google.com!n67g2000cwd.googlegroups.com!not-for-
mail
```

From: "bobandcarole" <bobandcarole666@hotmail.com>
Newsgroups:
alt.politics.homosexuality,alt.education,alt.dbs.directv,rec.radio.amateur.space,rec.food.drink.beer
Subject: Re: Sexual fascism and the Mark Foley scandel
Date: 6 Dec 2006 10:41:37 -0800
Organization: http://groups.google.com
Lines: 32
Message-ID: <1165430497.064806.191380@n67g2000cwd.googlegroups.com>
References: <1159881994.642663.229430@h48g2000cwc.googlegroups.com>
   <1162066010.997111.45530@i42g2000cwa.googlegroups.com>
   <1164787817.495319.179220@j44g2000cwa.googlegroups.com>
   <T7fbh.54807$39.24787@southeast.rr.com>
   <1165311819.048659.210350@l12g2000cwl.googlegroups.com>
   <1165425943.817914.20640@l12g2000cwl.googlegroups.com>
   <he0en2p9uadn83m20caa7plngati5jt6b0@4ax.com>
   <1165427339.761425.223410@79g2000cws.googlegroups.com>
   <1165427779.888588.130580@l12g2000cwl.googlegroups.com>
   <zxDdh.7018$ya1.6667@news02.roc.ny>
NNTP-Posting-Host: 205.188.116.13
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"
X-Trace: posting.google.com 1165430503 23629 127.0.0.1 (6 Dec 2006 18:41:43 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Wed, 6 Dec 2006 18:41:43 +0000 (UTC)
In-Reply-To: <zxDdh.7018$ya1.6667@news02.roc.ny>
User-Agent: G2/1.0
X-HTTP-UserAgent: Mozilla/4.0 (compatible; MSIE 6.0; AOL 9.0; Windows NT 5.1;
SV1),gzip(gfe),gzip(gfe)
X-HTTP-Via: HTTP/1.1 (Velocity/1.3.32 [uScMs f p eN:t cCMp s]), HTTP/1.1 Turboweb
[dtc-tb051 8.4.1], HTTP/1.1 cache-dtc-aa09.proxy.aol.com[CDBC740D] (Traffic-Server/6.1.3 [uScM])
Complaints-To: groups-abuse@google.com
Injection-Info: n67g2000cwd.googlegroups.com; posting-host=205.188.116.13;
   posting-account=AtWAZg0AAAC_3_oBW63EpvnDkPCTb97a
Xref: g2news2.google.com alt.politics.homosexuality:166004 alt.education:43866
alt.dbs.directv:4008 rec.radio.amateur.space:503 rec.food.drink.beer:2432

gwatts wrote:
> bobandcarole wrote:
> > bobandcarole wrote:
> >
> >>M...@kb9rqz.aprs wrote:
> >>
> >>>On 6 Dec 2006 09:25:43 -0800, "bobandcarole"
> >>><bobandcarole1010@hotmail.com> wrote:
> >>>
> >>>
> >>>>
> >>>>>Apparently, Rep. Mark Foley is homosexual. And like many homosexual
> >>>>>men, he likes young teen boys. We should pray for him that he gets a
> >>>>>handle on this problem and refrains from harming any more kids.
> >>>>>

```
> >>>>>
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> >>>>>to positions where they gain access to our kids.
> >>>>>
> >>>>>
> >>>>>http://worldnetdaily.com/news/article.asp?ARTICLE_ID=52244
> >>>
> >>>don't ever get tried of spreading hate?
> >>
> >>You confuse truth with hate.
>
> And you confuse rec.radio.amateur.space with a newsgroup that gives a
> damn about your whiny, misleading, unsubstantiated spewage.
And I take you have proof that it's "misleading"??
Or are you blowing smoke out of your canyon ass?



From 8930558654797452274
X-Google-Thread: 10bb69,af3a945b40f29083
X-Google-Thread: fc521,af3a945b40f29083
X-Google-Thread: f84d8,5228070b6e104c77
X-Google-Thread: 10e8ad,41180496b69c09cf
X-Google-Thread: 104a10,41180496b69c09cf
X-Google-Attributes: gid10bb69,gidfc521,gidf84d8,gid10e8ad,gid104a10,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news4.google.com!news.glorb.com!nntpserver.com!
zeus.nntpserver.com!hydra.nntpserver.com!not-for-mail
From: Mark@kb9rqz.aprs
Newsgroups:
alt.politics.homosexuality,alt.education,alt.dbs.directv,rec.radio.amateur.space,r
ec.food.drink.beer
Subject: hate monger spam
Date: Wed, 06 Dec 2006 13:58:58 -0500
Message-ID: <hk4en21lglh2o5gtcga86qbc9hehouchp1@4ax.com>
References: <1164787817.495319.179220@j44g2000cwa.googlegroups.com>
<T7fbh.54807$39.24787@southeast.rr.com>
<1165311819.048659.210350@l12g2000cwl.googlegroups.com>
<1165425943.817914.20640@l12g2000cwl.googlegroups.com>
<he0en2p9uadn83m20caa7plngati5jt6b0@4ax.com>
<1165427339.761425.223410@79g2000cws.googlegroups.com>
<1165427779.888588.130580@l12g2000cwl.googlegroups.com>
<zxDdh.7018$ya1.6667@news02.roc.ny>
<1165430497.064806.191380@n67g2000cwd.googlegroups.com>
X-Newsreader: Forte Free Agent 3.3/32.846
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Lines: 43
NNTP-Posting-Date: 06 Dec 2006 18:04:22 GMT
X-Complaints-To: abuse@teranews.com
Xref: g2news2.google.com alt.politics.homosexuality:166019 alt.education:43868
```

```
alt.dbs.directv:4010 rec.radio.amateur.space:504 rec.food.drink.beer:2433

On 6 Dec 2006 10:41:37 -0800, "bobandcarole"
<bobandcarole666@hotmail.com> wrote:

>gwatts wrote:
>> bobandcarole wrote:
>> > bobandcarole wrote:
>> >
>> >>M...@kb9rqz.aprs wrote:
>> >>
>> >>>On 6 Dec 2006 09:25:43 -0800, "bobandcarole"
>> >>><bobandcarole1010@hotmail.com> wrote:
>> >>>
>> >>>
>> >>>>
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>> >>>>>
>> >>>>>
>> >>>>>Meanwhile, we need to wake up. The fact that this is typical behavior
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>> >>>>>to positions where they gain access to our kids.
>> >>>>>
>> >>>>>
>> >>>>>http://worldnetdaily.com/news/article.asp?ARTICLE_ID=52244
>> >>>
>> >>>don't ever get tried of spreading hate?
>> >>
>> >>You confuse truth with hate.
>>
>> And you confuse rec.radio.amateur.space with a newsgroup that gives a
>> damn about your whiny, misleading, unsubstantiated spewage.
>And I take you have proof that it's "misleading"??

there exist no evedence that Homosexaul are likely to be pedohpiiles
than hetero

you make aburd suggestsion

and the content has nothing to outer space the subject of one the the
ng you are spreading you hate it
>Or are you blowing smoke out of your canyon ass?
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com



From -4589934110792601414
X-Google-Thread: 10bb69,af3a945b40f29083
```

```
X-Google-Thread: fc521,af3a945b40f29083
X-Google-Thread: f84d8,5228070b6e104c77
X-Google-Thread: 10e8ad,41180496b69c09cf
X-Google-Thread: 104a10,41180496b69c09cf
X-Google-Attributes: gid10bb69,gidfc521,gidf84d8,gid10e8ad,gid104a10,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news4.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!local01.nntp.dca.giganews.com!nntp.adelphia.com!
news.adelphia.com.POSTED!not-for-mail
NNTP-Posting-Date: Wed, 06 Dec 2006 15:07:16 -0600
From: "John Doe" <hgorden@adelphia.net>
Newsgroups:
alt.politics.homosexuality,alt.education,alt.dbs.directv,rec.radio.amateur.space,r
ec.food.drink.beer
References: <1159881994.642663.229430@h48g2000cwc.googlegroups.com>
<1162066010.997111.45530@i42g2000cwa.googlegroups.com>
<1164787817.495319.179220@j44g2000cwa.googlegroups.com>
<T7fbh.54807$39.24787@southeast.rr.com>
<1165311819.048659.210350@l12g2000cwl.googlegroups.com>
<1165425943.817914.20640@l12g2000cwl.googlegroups.com>
<he0en2p9uadn83m20caa7plngati5jt6b0@4ax.com>
Subject: Re: spaming hate monger
Date: Wed, 6 Dec 2006 13:50:56 -0500
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.2869
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.2962
X-RFC2646: Format=Flowed; Original
Message-ID: <oO-dnWrboq6ZrOrYnZ2dnUVZ_rSdnZ2d@adelphia.com>
Lines: 28
NNTP-Posting-Host: 69.162.152.98
X-Trace: sv3-
TsPjZwmhQte65Uz1c2EQBQ2cylb2bvznOv8gAJA42hmEmPJlEH6PghQba1WXWYzoQlHrqoudsE8uAWW!p/
tKNXdIPslV/nuA0cTGS3STEfnZunzDQQ+B3oMIcXAtPp0U78/s4TsdLuhUWjr3V4NQdsQqGV1j!
qZdVp1zlwtNJ/vRB9e5slQ7LdXFY
X-Complaints-To: abuse@adelphia.net
X-DMCA-Complaints-To: copyright@adelphia.net
X-Abuse-and-DMCA-Info: Please be sure to forward a copy of ALL headers
X-Abuse-and-DMCA-Info: Otherwise we will be unable to process your complaint
properly
X-Postfilter: 1.3.32
Xref: g2news2.google.com alt.politics.homosexuality:166043 alt.education:43876
alt.dbs.directv:4011 rec.radio.amateur.space:505 rec.food.drink.beer:2434

TAKE YOUR BULLSHIT SOMEPLACE ELSE -

<Mark@kb9rqz.aprs> wrote in message
news:he0en2p9uadn83m20caa7plngati5jt6b0@4ax.com...
> On 6 Dec 2006 09:25:43 -0800, "bobandcarole"
> <bobandcarole1010@hotmail.com> wrote:
>
>>
>>
```

```
>>> Apparently, Rep. Mark Foley is homosexual. And like many homosexual
>>> men, he likes young teen boys. We should pray for him that he gets a
>>> handle on this problem and refrains from harming any more kids.
>>>
>>>
>>> Meanwhile, we need to wake up. The fact that this is typical behavior
>>> for homosexuals doesn't stop us from continuing to elevate such folks
>>> to positions where they gain access to our kids.
>>>
>>>
>>> http://worldnetdaily.com/news/article.asp?ARTICLE_ID=52244
> don't ever get tried of spreading hate?
> http://kb9rqz.blogspot.com/
>
> --
> Posted via a free Usenet account from http://www.teranews.com
>




From 2080796757992515667
X-Google-Thread: 10bb69,af3a945b40f29083
X-Google-Thread: fc521,af3a945b40f29083
X-Google-Thread: f84d8,5228070b6e104c77
X-Google-Thread: 10e8ad,41180496b69c09cf
X-Google-Thread: 104a10,41180496b69c09cf
X-Google-Attributes: gid10bb69,gidfc521,gidf84d8,gid10e8ad,gid104a10,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news4.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!local01.nntp.dca.giganews.com!nntp.adelphia.com!
news.adelphia.com.POSTED!not-for-mail
NNTP-Posting-Date: Wed, 06 Dec 2006 15:07:17 -0600
From: "John Doe" <hgorden@adelphia.net>
Newsgroups:
alt.politics.homosexuality,alt.education,alt.dbs.directv,rec.radio.amateur.space,r
ec.food.drink.beer
References: <1159881994.642663.229430@h48g2000cwc.googlegroups.com>
<1162066010.997111.45530@i42g2000cwa.googlegroups.com>
<1164787817.495319.179220@j44g2000cwa.googlegroups.com>
<T7fbh.54807$39.24787@southeast.rr.com>
<1165311819.048659.210350@l12g2000cwl.googlegroups.com>
<1165425943.817914.20640@l12g2000cwl.googlegroups.com>
<he0en2p9uadn83m20caa7plngati5jt6b0@4ax.com>
<1165427339.761425.223410@79g2000cws.googlegroups.com>
Subject: Re: Sexual fascism and the Mark Foley scandel
Date: Wed, 6 Dec 2006 13:51:34 -0500
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.2869
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.2962
X-RFC2646: Format=Flowed; Original
Message-ID: <oO-dnWXboq6YrOrYnZ2dnUVZ_rSdnZ2d@adelphia.com>
```

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Lines: 28
NNTP-Posting-Host: 69.162.152.98
X-Trace: sv3-
tl37lxNu846tZ1+CWf9+yq2qbGc4l4NhbN0MU7iPiQ7EToGt4gAviNcjS5dyjoeGq3+yfTPkgx9AOXG!
soMPz8/gbf5WyQiiX4i++04ZUvz3h4Jzim9QcLUTAtEYpswvBa+w1kgZCksxu/hPlfPVB+DemhRk!
tHKEdHhBsXmNdIUoC8dLCvmCgg0w
X-Complaints-To: abuse@adelphia.net
X-DMCA-Complaints-To: copyright@adelphia.net
X-Abuse-and-DMCA-Info: Please be sure to forward a copy of ALL headers
X-Abuse-and-DMCA-Info: Otherwise we will be unable to process your complaint
properly
X-Postfilter: 1.3.32
Xref: g2news2.google.com alt.politics.homosexuality:166044 alt.education:43877
alt.dbs.directv:4012 rec.radio.amateur.space:506 rec.food.drink.beer:2435

TAKE YOUR BULLSHIT TO HELEN AN WAITE

"bobandcarole" <bobandcarole01@hotmail.com> wrote in message
news:1165427339.761425.223410@79g2000cws.googlegroups.com...
>
> M...@kb9rqz.aprs wrote:
>> On 6 Dec 2006 09:25:43 -0800, "bobandcarole"
>> <bobandcarole1010@hotmail.com> wrote:
>>
>> >
>> >
>> >> Apparently, Rep. Mark Foley is homosexual. And like many homosexual
>> >> men, he likes young teen boys. We should pray for him that he gets a
>> >> handle on this problem and refrains from harming any more kids.
>> >>
>> >>
>> >> Meanwhile, we need to wake up. The fact that this is typical behavior
>> >> for homosexuals doesn't stop us from continuing to elevate such folks
>> >> to positions where they gain access to our kids.
>> >>
>> >>
>> >> http://worldnetdaily.com/news/article.asp?ARTICLE_ID=52244
>> don't ever get tried of spreading hate?
>
> You confuse truth with hate.
>




From -230282951905900081
X-Google-Thread: 10bb69,af3a945b40f29083
X-Google-Thread: fc521,af3a945b40f29083
X-Google-Thread: f84d8,5228070b6e104c77
X-Google-Thread: 10e8ad,41180496b69c09cf
X-Google-Thread: 104a10,41180496b69c09cf
X-Google-Attributes: gid10bb69,gidfc521,gidf84d8,gid10e8ad,gid104a10,public
X-Google-Language: ENGLISH,ASCII-7-bit
```

```
Path: g2news2.google.com!news3.google.com!news.glorb.com!nntpserver.com!
zeus.nntpserver.com!hydra.nntpserver.com!not-for-mail
From: Mark@kb9rqz.aprs
Newsgroups:
alt.politics.homosexuality,alt.education,alt.dbs.directv,rec.radio.amateur.space,r
ec.food.drink.beer
Subject: Re: spaming hate monger
Date: Wed, 06 Dec 2006 16:11:04 -0500
Message-ID: <tdcen2ptql8pf9rhjbhd58plk8p1ccdlg5@4ax.com>
References: <1159881994.642663.229430@h48g2000cwc.googlegroups.com>
<1162066010.997111.45530@i42g2000cwa.googlegroups.com>
<1164787817.495319.179220@j44g2000cwa.googlegroups.com>
<T7fbh.54807$39.24787@southeast.rr.com>
<1165311819.048659.210350@l12g2000cwl.googlegroups.com>
<1165425943.817914.20640@l12g2000cwl.googlegroups.com>
<he0en2p9uadn83m20caa7plngati5jt6b0@4ax.com> <oO-
dnWrboq6ZrOrYnZ2dnUVZ_rSdnZ2d@adelphia.com>
X-Newsreader: Forte Free Agent 3.3/32.846
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Lines: 9
NNTP-Posting-Date: 06 Dec 2006 20:16:31 GMT
X-Complaints-To: abuse@teranews.com
Xref: g2news2.google.com alt.politics.homosexuality:166046 alt.education:43878
alt.dbs.directv:4013 rec.radio.amateur.space:507 rec.food.drink.beer:2436

On Wed, 6 Dec 2006 13:50:56 -0500, "John Doe" <hgorden@adelphia.net>
wrote:

>TAKE YOUR BULLSHIT SOMEPLACE ELSE -
>

no bullshit here I was just pointing out the fact you deem yourself at
liberty to respond to the same source I can do the same
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com




From -528544299800646206
X-Google-Thread: 10bb69,af3a945b40f29083
X-Google-Thread: fc521,af3a945b40f29083
X-Google-Thread: f84d8,5228070b6e104c77
X-Google-Thread: 10e8ad,41180496b69c09cf
X-Google-Thread: 104a10,41180496b69c09cf
X-Google-Attributes: gid10bb69,gidfc521,gidf84d8,gid10e8ad,gid104a10,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!postnews.google.com!79g2000cws.googlegroups.com!not-for-
mail
From: "bobandcarole" <bobandcarole666@hotmail.com>
```

```
Newsgroups:
alt.politics.homosexuality,alt.education,alt.dbs.directv,rec.radio.amateur.space,r
ec.food.drink.beer
Subject: Re: hate monger spam
Date: 6 Dec 2006 15:48:14 -0800
Organization: http://groups.google.com
Lines: 50
Message-ID: <1165448894.551528.208020@79g2000cws.googlegroups.com>
References: <1164787817.495319.179220@j44g2000cwa.googlegroups.com>
   <T7fbh.54807$39.24787@southeast.rr.com>
   <1165311819.048659.210350@l12g2000cwl.googlegroups.com>
   <1165425943.817914.20640@l12g2000cwl.googlegroups.com>
   <he0en2p9uadn83m20caa7plngati5jt6b0@4ax.com>
   <1165427339.761425.223410@79g2000cws.googlegroups.com>
   <1165427779.888588.130580@l12g2000cwl.googlegroups.com>
   <zxDdh.7018$ya1.6667@news02.roc.ny>
   <1165430497.064806.191380@n67g2000cwd.googlegroups.com>
   <hk4en21lglh2o5gtcga86qbc9hehouchp1@4ax.com>
NNTP-Posting-Host: 205.188.116.13
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"
X-Trace: posting.google.com 1165448900 11203 127.0.0.1 (6 Dec 2006 23:48:20 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Wed, 6 Dec 2006 23:48:20 +0000 (UTC)
In-Reply-To: <hk4en21lglh2o5gtcga86qbc9hehouchp1@4ax.com>
User-Agent: G2/1.0
X-HTTP-UserAgent: Mozilla/4.0 (compatible; MSIE 6.0; AOL 9.0; Windows NT 5.1;
SV1),gzip(gfe),gzip(gfe)
X-HTTP-Via: HTTP/1.1 (Velocity/1.3.32 [uScMs f p eN:t cCMp s ]), HTTP/1.1 Turboweb
[dtc-tb023 8.4.1], HTTP/1.1 cache-dtc-aa09.proxy.aol.com[CDBC740D] (Traffic-
Server/6.1.3 [uScM])
Complaints-To: groups-abuse@google.com
Injection-Info: 79g2000cws.googlegroups.com; posting-host=205.188.116.13;
   posting-account=AtWAZg0AAAC_3_oBW63EpvnDkPCTb97a
Xref: g2news2.google.com alt.politics.homosexuality:166075 alt.education:43884
alt.dbs.directv:4014 rec.radio.amateur.space:508 rec.food.drink.beer:2437


Mark@kb9rqz.aprs wrote:
> On 6 Dec 2006 10:41:37 -0800, "bobandcarole"
> <bobandcarole666@hotmail.com> wrote:
>
> >gwatts wrote:
> >> bobandcarole wrote:
> >> > bobandcarole wrote:
> >> >
> >> >>M...@kb9rqz.aprs wrote:
> >> >>
> >> >>>On 6 Dec 2006 09:25:43 -0800, "bobandcarole"
> >> >>><bobandcarole1010@hotmail.com> wrote:
> >> >>>
> >> >>>
> >> >>>>
> >> >>>>>Apparently, Rep. Mark Foley is homosexual. And like many homosexual
> >> >>>>>men, he likes young teen boys. We should pray for him that he gets a
> >> >>>>>handle on this problem and refrains from harming any more kids.
> >> >>>>>
> >> >>>>>
> >> >>>>>Meanwhile, we need to wake up. The fact that this is typical behavior
> >> >>>>>for homosexuals doesn't stop us from continuing to elevate such folks
> >> >>>>>to positions where they gain access to our kids.
> >> >>>>>
> >> >>>>>
> >> >>>>>http://worldnetdaily.com/news/article.asp?ARTICLE_ID=52244
> >> >>>
> >> >>>don't ever get tried of spreading hate?
> >> >>
> >> >>You confuse truth with hate.
> >>
> >> And you confuse rec.radio.amateur.space with a newsgroup that gives a
> >> damn about your whiny, misleading, unsubstantiated spewage.
> >And I take you have proof that it's "misleading"??
>
> there exist no evedence that Homosexaul are likely to be pedohpiiles
> than hetero
>
> you make aburd suggestsion
Spit it out Jethro
>
> and the content has nothing to outer space the subject of one the the
> ng you are spreading you hate it
> >Or are you blowing smoke out of your canyon ass?
> http://kb9rqz.blogspot.com/
>
> --
> Posted via a free Usenet account from http://www.teranews.com



From -3241828930239068412
X-Google-Thread: 10bb69,af3a945b40f29083
X-Google-Thread: fc521,af3a945b40f29083
X-Google-Thread: f84d8,5228070b6e104c77
X-Google-Thread: 10e8ad,41180496b69c09cf
X-Google-Thread: 104a10,41180496b69c09cf
X-Google-Attributes: gid10bb69,gidfc521,gidf84d8,gid10e8ad,gid104a10,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!postnews.google.com!16g2000cwy.googlegroups.com!not-for-
mail
From: "bobandcarole" <bobandcarole666@hotmail.com>
Newsgroups:
alt.politics.homosexuality,alt.education,alt.dbs.directv,rec.radio.amateur.space,r
ec.food.drink.beer
Subject: Re: Sexual fascism and the Mark Foley scandel
Date: 6 Dec 2006 15:49:18 -0800
Organization: http://groups.google.com
```

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Lines: 31
Message-ID: <1165448958.585896.73200@16g2000cwy.googlegroups.com>
References: <1159881994.642663.229430@h48g2000cwc.googlegroups.com>
   <1162066010.997111.45530@i42g2000cwa.googlegroups.com>
   <1164787817.495319.179220@j44g2000cwa.googlegroups.com>
   <T7fbh.54807$39.24787@southeast.rr.com>
   <1165311819.048659.210350@l12g2000cwl.googlegroups.com>
   <1165425943.817914.20640@l12g2000cwl.googlegroups.com>
   <he0en2p9uadn83m20caa7plngati5jt6b0@4ax.com>
   <1165427339.761425.223410@79g2000cws.googlegroups.com>
   <oO-dnWXboq6YrOrYnZ2dnUVZ_rSdnZ2d@adelphia.com>
NNTP-Posting-Host: 205.188.116.13
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"
X-Trace: posting.google.com 1165448964 2847 127.0.0.1 (6 Dec 2006 23:49:24 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Wed, 6 Dec 2006 23:49:24 +0000 (UTC)
In-Reply-To: <oO-dnWXboq6YrOrYnZ2dnUVZ_rSdnZ2d@adelphia.com>
User-Agent: G2/1.0
X-HTTP-UserAgent: Mozilla/4.0 (compatible; MSIE 6.0; AOL 9.0; Windows NT 5.1;
SV1),gzip(gfe),gzip(gfe)
X-HTTP-Via: HTTP/1.1 (Velocity/1.3.32 [uScMs f p eN:t cCMp s ]), HTTP/1.1 Turboweb
[dtc-tb023 8.4.1], HTTP/1.1 cache-dtc-aa09.proxy.aol.com[CDBC740D] (Traffic-
Server/6.1.3 [uScM])
Complaints-To: groups-abuse@google.com
Injection-Info: 16g2000cwy.googlegroups.com; posting-host=205.188.116.13;
   posting-account=AtWAZg0AAAC_3_oBW63EpvnDkPCTb97a
Xref: g2news2.google.com alt.politics.homosexuality:166076 alt.education:43885
alt.dbs.directv:4015 rec.radio.amateur.space:509 rec.food.drink.beer:2438


John Doe wrote:
> TAKE YOUR BULLSHIT TO HELEN AN WAITE

Didn't take your meds today?
>
> "bobandcarole" <bobandcarole01@hotmail.com> wrote in message
> news:1165427339.761425.223410@79g2000cws.googlegroups.com...
> >
> > M...@kb9rqz.aprs wrote:
> >> On 6 Dec 2006 09:25:43 -0800, "bobandcarole"
> >> <bobandcarole1010@hotmail.com> wrote:
> >>
> >> >
> >> >
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> >> >> men, he likes young teen boys. We should pray for him that he gets a
> >> >> handle on this problem and refrains from harming any more kids.
> >> >>
> >> >>
> >> >> Meanwhile, we need to wake up. The fact that this is typical behavior
> >> >> for homosexuals doesn't stop us from continuing to elevate such folks
> >> >> to positions where they gain access to our kids.
> >> >>
> >> >>
> >> >> http://worldnetdaily.com/news/article.asp?ARTICLE_ID=52244
> >> don't ever get tried of spreading hate?
> >
> > You confuse truth with hate.
> >



From 6178789854812591574
X-Google-Thread: 10bb69,af3a945b40f29083
X-Google-Thread: fc521,af3a945b40f29083
X-Google-Thread: f84d8,5228070b6e104c77
X-Google-Thread: 10e8ad,41180496b69c09cf
X-Google-Thread: 104a10,41180496b69c09cf
X-Google-Attributes: gid10bb69,gidfc521,gidf84d8,gid10e8ad,gid104a10,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!postnews.google.com!n67g2000cwd.googlegroups.com!not-for-
mail
From: "bobandcarole" <bobandcarole666@hotmail.com>
Newsgroups:
alt.politics.homosexuality,alt.education,alt.dbs.directv,rec.radio.amateur.space,r
ec.food.drink.beer
Subject: Re: spaming hate monger
Date: 6 Dec 2006 15:50:53 -0800
Organization: http://groups.google.com
Lines: 19
Message-ID: <1165449053.020460.182500@n67g2000cwd.googlegroups.com>
References: <1159881994.642663.229430@h48g2000cwc.googlegroups.com>
   <1162066010.997111.45530@i42g2000cwa.googlegroups.com>
   <1164787817.495319.179220@j44g2000cwa.googlegroups.com>
   <T7fbh.54807$39.24787@southeast.rr.com>
   <1165311819.048659.210350@l12g2000cwl.googlegroups.com>
   <1165425943.817914.20640@l12g2000cwl.googlegroups.com>
   <he0en2p9uadn83m20caa7plngati5jt6b0@4ax.com>
   <oO-dnWrboq6ZrOrYnZ2dnUVZ_rSdnZ2d@adelphia.com>
   <tdcen2ptql8pf9rhjbhd58plk8p1ccdlg5@4ax.com>
NNTP-Posting-Host: 205.188.116.13
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"
X-Trace: posting.google.com 1165449059 3048 127.0.0.1 (6 Dec 2006 23:50:59 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Wed, 6 Dec 2006 23:50:59 +0000 (UTC)
In-Reply-To: <tdcen2ptql8pf9rhjbhd58plk8p1ccdlg5@4ax.com>
User-Agent: G2/1.0
X-HTTP-UserAgent: Mozilla/4.0 (compatible; MSIE 6.0; AOL 9.0; Windows NT 5.1;
SV1),gzip(gfe),gzip(gfe)
X-HTTP-Via: HTTP/1.1 (Velocity/1.3.32 [uScMs f p eN:t cCMp s ]), HTTP/1.1 Turboweb
[dtc-tb023 8.4.1], HTTP/1.1 cache-dtc-aa09.proxy.aol.com[CDBC740D] (Traffic-
Server/6.1.3 [uScM])
Complaints-To: groups-abuse@google.com
Injection-Info: n67g2000cwd.googlegroups.com; posting-host=205.188.116.13;
```

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   posting-account=AtWAZg0AAAC_3_oBW63EpvnDkPCTb97a
Xref: g2news2.google.com alt.politics.homosexuality:166079 alt.education:43887
alt.dbs.directv:4016 rec.radio.amateur.space:510 rec.food.drink.beer:2439


Mark@kb9rqz.aprs wrote:
> On Wed, 6 Dec 2006 13:50:56 -0500, "John Doe" <hgorden@adelphia.net>
> wrote:
>
> >TAKE YOUR BULLSHIT SOMEPLACE ELSE -
> >
>
> no bullshit here I was just pointing out the fact you deem yourself at
> liberty to respond to the same source I can do the same

He/she/it is obviously an idiot


> http://kb9rqz.blogspot.com/
>
> --
> Posted via a free Usenet account from http://www.teranews.com




From 6337694102370053773
X-Google-Thread: 10bb69,af3a945b40f29083
X-Google-Thread: fc521,af3a945b40f29083
X-Google-Thread: f84d8,5228070b6e104c77
X-Google-Thread: 10e8ad,41180496b69c09cf
X-Google-Thread: 104a10,41180496b69c09cf
X-Google-Attributes: gid10bb69,gidfc521,gidf84d8,gid10e8ad,gid104a10,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news4.google.com!news.glorb.com!nntpserver.com!
zeus.nntpserver.com!hydra.nntpserver.com!not-for-mail
From: Mark@kb9rqz.aprs
Newsgroups:
alt.politics.homosexuality,alt.education,alt.dbs.directv,rec.radio.amateur.space,r
ec.food.drink.beer
Subject: Re: spaming hate monger
Date: Wed, 06 Dec 2006 18:54:45 -0500
Message-ID: <h1men21j32ad838fetc0sj6nkrdnj4si6g@4ax.com>
References: <1162066010.997111.45530@i42g2000cwa.googlegroups.com>
<1164787817.495319.179220@j44g2000cwa.googlegroups.com>
<T7fbh.54807$39.24787@southeast.rr.com>
<1165311819.048659.210350@l12g2000cwl.googlegroups.com>
<1165425943.817914.20640@l12g2000cwl.googlegroups.com>
<he0en2p9uadn83m20caa7plngati5jt6b0@4ax.com> <oO-
dnWrboq6ZrOrYnZ2dnUVZ_rSdnZ2d@adelphia.com>
<tdcen2ptql8pf9rhjbhd58plk8p1ccdlg5@4ax.com>
<1165449053.020460.182500@n67g2000cwd.googlegroups.com>
X-Newsreader: Forte Free Agent 3.3/32.846
MIME-Version: 1.0
```

```
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Lines: 24
NNTP-Posting-Date: 06 Dec 2006 23:00:09 GMT
X-Complaints-To: abuse@teranews.com
Xref: g2news2.google.com alt.politics.homosexuality:166081 alt.education:43889
alt.dbs.directv:4017 rec.radio.amateur.space:511 rec.food.drink.beer:2440

On 6 Dec 2006 15:50:53 -0800, "bobandcarole"
<bobandcarole666@hotmail.com> wrote:

>
>Mark@kb9rqz.aprs wrote:
>> On Wed, 6 Dec 2006 13:50:56 -0500, "John Doe" <hgorden@adelphia.net>
>> wrote:
>>
>> >TAKE YOUR BULLSHIT SOMEPLACE ELSE -
>> >
>>
>> no bullshit here I was just pointing out the fact you deem yourself at
>> liberty to respond to the same source I can do the same
>
>He/she/it is obviously an idiot

he likely is you OTOH are an idoit and hate monger
>
>
>> http://kb9rqz.blogspot.com/
>>
>> --
>> Posted via a free Usenet account from http://www.teranews.com
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com



From -3465830768425033892
X-Google-Thread: 10bb69,af3a945b40f29083
X-Google-Thread: fc521,af3a945b40f29083
X-Google-Thread: f84d8,5228070b6e104c77
X-Google-Thread: 10e8ad,41180496b69c09cf
X-Google-Thread: 104a10,41180496b69c09cf
X-Google-Attributes: gid10bb69,gidfc521,gidf84d8,gid10e8ad,gid104a10,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news1.google.com!news.maxwell.syr.edu!nntpserver.com!
zeus.nntpserver.com!hydra.nntpserver.com!not-for-mail
From: Mark@kb9rqz.aprs
Newsgroups:
alt.politics.homosexuality,alt.education,alt.dbs.directv,rec.radio.amateur.space,r
ec.food.drink.beer
Subject: Re: hate monger spam
```

```
Date: Wed, 06 Dec 2006 18:55:58 -0500
Message-ID: <43men2li2dquraevnfme0l8khm0jck48or@4ax.com>
References: <1165311819.048659.210350@l12g2000cwl.googlegroups.com>
<1165425943.817914.20640@l12g2000cwl.googlegroups.com>
<he0en2p9uadn83m20caa7plngati5jt6b0@4ax.com>
<1165427339.761425.223410@79g2000cws.googlegroups.com>
<1165427779.888588.130580@l12g2000cwl.googlegroups.com>
<zxDdh.7018$ya1.6667@news02.roc.ny>
<1165430497.064806.191380@n67g2000cwd.googlegroups.com>
<hk4en21lglh2o5gtcga86qbc9hehouchp1@4ax.com>
<1165448894.551528.208020@79g2000cws.googlegroups.com>
X-Newsreader: Forte Free Agent 3.3/32.846
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Lines: 56
NNTP-Posting-Date: 06 Dec 2006 23:01:22 GMT
X-Complaints-To: abuse@teranews.com
Xref: g2news2.google.com alt.politics.homosexuality:166082 alt.education:43890
alt.dbs.directv:4018 rec.radio.amateur.space:512 rec.food.drink.beer:2441

On 6 Dec 2006 15:48:14 -0800, "bobandcarole"
<bobandcarole666@hotmail.com> wrote:

>
>Mark@kb9rqz.aprs wrote:
>> On 6 Dec 2006 10:41:37 -0800, "bobandcarole"
>> <bobandcarole666@hotmail.com> wrote:
>>
>> >gwatts wrote:
>> >> bobandcarole wrote:
>> >> > bobandcarole wrote:
>> >> >
>> >> >>M...@kb9rqz.aprs wrote:
>> >> >>
>> >> >>>On 6 Dec 2006 09:25:43 -0800, "bobandcarole"
>> >> >>><bobandcarole1010@hotmail.com> wrote:
>> >> >>>
>> >> >>>
>> >> >>>>
>> >> >>>>>Apparently, Rep. Mark Foley is homosexual. And like many homosexual
>> >> >>>>>men, he likes young teen boys. We should pray for him that he gets a
>> >> >>>>>handle on this problem and refrains from harming any more kids.
>> >> >>>>>
>> >> >>>>>
>> >> >>>>>Meanwhile, we need to wake up. The fact that this is typical behavior
>> >> >>>>>for homosexuals doesn't stop us from continuing to elevate such folks
>> >> >>>>>to positions where they gain access to our kids.
>> >> >>>>>
>> >> >>>>>
>> >> >>>>>http://worldnetdaily.com/news/article.asp?ARTICLE_ID=52244
>> >> >>>
>> >> >>>don't ever get tried of spreading hate?
>> >> >>
>> >> >>You confuse truth with hate.
>> >>
>> >> And you confuse rec.radio.amateur.space with a newsgroup that gives a
>> >> damn about your whiny, misleading, unsubstantiated spewage.
>> >And I take you have proof that it's "misleading"??
>>
>> there exist no evedence that Homosexaul are likely to be pedohpiiles
>> than hetero
>>
>> you make aburd suggestsion
>Spit it out Jethro

spit what out I have plainly called you a lying hatemonger that is
pretty ignorant of the real world
>>
>> and the content has nothing to outer space the subject of one the the
>> ng you are spreading you hate it
>> >Or are you blowing smoke out of your canyon ass?
>> http://kb9rqz.blogspot.com/
>>
>> --
>> Posted via a free Usenet account from http://www.teranews.com
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com




From 3974402283932480579
X-Google-Thread: 10bb69,af3a945b40f29083
X-Google-Thread: fc521,af3a945b40f29083
X-Google-Thread: f84d8,5228070b6e104c77
X-Google-Thread: 10e8ad,41180496b69c09cf
X-Google-Thread: 104a10,41180496b69c09cf
X-Google-Attributes: gid10bb69,gidfc521,gidf84d8,gid10e8ad,gid104a10,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news4.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx01.iad01.newshosting.com!newshosting.com!news-
feed01.roc.ny.frontiernet.net!nntp.frontiernet.net!news02.roc.ny.POSTED!fd24bd7a!
not-for-mail
From: gwatts <gwatts@frontiernet.net>
User-Agent: Mozilla Thunderbird 1.0.6 (Windows/20050716)
X-Accept-Language: en-us, en
MIME-Version: 1.0
Newsgroups:
alt.politics.homosexuality,alt.education,alt.dbs.directv,rec.radio.amateur.space,r
ec.food.drink.beer
Subject: Re: Sexual fascism and the Mark Foley scandel
References: <1159881994.642663.229430@h48g2000cwc.googlegroups.com>
<1162066010.997111.45530@i42g2000cwa.googlegroups.com>
<1164787817.495319.179220@j44g2000cwa.googlegroups.com>
```

```
<T7fbh.54807$39.24787@southeast.rr.com>
<1165311819.048659.210350@l12g2000cwl.googlegroups.com>
<1165425943.817914.20640@l12g2000cwl.googlegroups.com>
<he0en2p9uadn83m20caa7plngati5jt6b0@4ax.com>
<1165427339.761425.223410@79g2000cws.googlegroups.com>
<1165427779.888588.130580@l12g2000cwl.googlegroups.com>
<zxDdh.7018$ya1.6667@news02.roc.ny>
<1165430497.064806.191380@n67g2000cwd.googlegroups.com>
In-Reply-To: <1165430497.064806.191380@n67g2000cwd.googlegroups.com>
Content-Type: text/plain; charset=ISO-8859-1; format=flowed
Content-Transfer-Encoding: 7bit
Lines: 60
Message-ID: <YjUdh.7086$ya1.4050@news02.roc.ny>
X-Complaints-To: abuse-news@frontiernet.net
X-Trace:
52616e646f6d4956490a539f226c80f2598f08cb06bad55823b1fad3e5a51c692f864284a47a8cdd52
eac7b9b5093fdc140b81fcd00c71de7dd0758563cad8202e80c8f1e98f6b4fbe3aed72c26b56425855
7d1e7625857aed2944259c0e5113675402950a4c64cf50c9f03d411fc59b5b029572c2f8f65074e4a7
7165c6388a
X-Abuse-Info: Please be sure to forward ALL headers so that we may process your
complaint properly.
NNTP-Posting-Date: Thu, 07 Dec 2006 13:04:56 UTC
Date: Thu, 07 Dec 2006 13:04:56 GMT
Xref: g2news2.google.com alt.politics.homosexuality:166217 alt.education:43939
alt.dbs.directv:4021 rec.radio.amateur.space:513 rec.food.drink.beer:2442

bobandcarole wrote:
> gwatts wrote:
>
>>bobandcarole wrote:
>>
>>>bobandcarole wrote:
>>>
>>>
>>>>M...@kb9rqz.aprs wrote:
>>>>
>>>>
>>>>>On 6 Dec 2006 09:25:43 -0800, "bobandcarole"
>>>>><bobandcarole1010@hotmail.com> wrote:
>>>>>
>>>>>
>>>>>
>>>>>>>Apparently, Rep. Mark Foley is homosexual. And like many homosexual
>>>>>>>men, he likes young teen boys. We should pray for him that he gets a
>>>>>>>handle on this problem and refrains from harming any more kids.
>>>>>>>
>>>>>>>
>>>>>>>Meanwhile, we need to wake up. The fact that this is typical behavior
>>>>>>>for homosexuals doesn't stop us from continuing to elevate such folks
>>>>>>>to positions where they gain access to our kids.
>>>>>>>
>>>>>>>
>>>>>>>http://worldnetdaily.com/news/article.asp?ARTICLE_ID=52244
```

```
>>>>>
>>>>>don't ever get tried of spreading hate?
>>>>
>>>>You confuse truth with hate.
>>
>>And you confuse rec.radio.amateur.space with a newsgroup that gives a
>>damn about your whiny, misleading, unsubstantiated spewage.
>
> And I take you have proof that it's "misleading"??

You said 'typical behavior,' prove it.

> Or are you blowing smoke out of your canyon ass?

For someone so anti-homosexual you sure have a lot of fascination with
'canyon asses.'

What do you know about 'typical behavior for homosexuals,' have any
citations from recognized, peer reviewed publications?

<crickets>

What do you know about 'many homosexual men, (who) like young teen
boys,', any citations, or do you just parrot the more sensational crap
you hear on Faux News?

<crickets>

You're really sad.  Why don't you go die and take your bigoted, brain
stem friends with you?  America would be a much better country for it.

I said that.
W8LNA


From 5511857109553655084
X-Google-Thread: 10bb69,af3a945b40f29083
X-Google-Thread: fc521,af3a945b40f29083
X-Google-Thread: 10e8ad,41180496b69c09cf
X-Google-Thread: 104a10,41180496b69c09cf
X-Google-Attributes: gid10bb69,gidfc521,gid10e8ad,gid104a10,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news4.google.com!border1.nntp.dca.giganews.com!
border2.nntp.dca.giganews.com!nntp.giganews.com!out01a.usenetserver.com!
news.usenetserver.com!in01.usenetserver.com!news.usenetserver.com!news-
out.readnews.com!postnews3.readnews.com!posts.news.usenetmonster.com!
nnrp3.asbnva.usenetmonster.com!not-for-mail
Newsgroups:
alt.politics.homosexuality,alt.education,rec.radio.amateur.space,rec.food.drink.be
er
Subject: Re: Sexual fascism and the Mark Foley scandel
From: SueDoeCyAnts <pseudocy@labb.port5.com>
References: <1159881994.642663.229430@h48g2000cwc.googlegroups.com>
```

```
<1162066010.997111.45530@i42g2000cwa.googlegroups.com>
<1164787817.495319.179220@j44g2000cwa.googlegroups.com>
<T7fbh.54807$39.24787@southeast.rr.com>
<1165311819.048659.210350@l12g2000cwl.googlegroups.com>
<1165425943.817914.20640@l12g2000cwl.googlegroups.com>
<he0en2p9uadn83m20caa7plngati5jt6b0@4ax.com>
<1165427339.761425.223410@79g2000cws.googlegroups.com>
<1165427779.888588.130580@l12g2000cwl.googlegroups.com>
<zxDdh.7018$ya1.6667@news02.roc.ny>
<1165430497.064806.191380@n67g2000cwd.googlegroups.com>
Organization: ADDPDG
Message-ID: <Xns98925411DF08OriginaliseThisThief@198.186.190.163>
User-Agent: Xnews/2006.08.05
X-face: "0XAqb37v%{[Wa06w?y].JP4JP.okrLjGS,zR6}$"jX?|Q&dAw{W'>m>zX)G]sD@|>;;p62f!
nbd*u"kw(`<e!rF-`;gtsZr5FS7#ogYC*qA-Mv};cOQS2A>\U7F
Date: 07 Dec 2006 16:15:18 GMT
Lines: 125
NNTP-Posting-Host: bcab44c0.news.usenetmonster.com
X-Trace:
DXC=[_[9jHRAh@^NeYD_0KoaIRm>XX`Id5knX`IohDjb_78\hbXJObMfSYZY0^U;Sf0ngX6LJETcm@;n\7
:fG3B6S`dSYeNiCR[DXM[3cBh6WW415[j^jTN2K:;?V
X-Complaints-To: killthespammer@usenetmonster.com
Xref: g2news2.google.com alt.politics.homosexuality:166251 alt.education:43956
rec.radio.amateur.space:514 rec.food.drink.beer:2443
```

on Wed 06 Dec 2006 10:41:37a
"bobandcarole" <bobandcarole666@hotmail.com> posted
in news:1165430497.064806.191380@n67g2000cwd.googlegroups.com:

> gwatts wrote:
>
>> And you confuse rec.radio.amateur.space with a newsgroup that
>> gives a damn about your whiny, misleading, unsubstantiated
>> spewage.
>>
> And I take you have proof that it's "misleading"??
> Or are you blowing smoke out of your canyon ass?

Did you already forget?

I'll repost for you asshole

I have grown exceedingly weary of your dissembling and conflation. This really is not going to help resolve your underlying problems.

I realise that it is difficult dealing with the personal knowledge, which is to you self-evident; that all men are not created equal, that you were endowed by your Creator with a certain unascertainable rod. The prognosis of all persons afflcited with Genitalia Deficit Disorder (GDD) is not good, but when it is as in your instance, a case so acute, it would fail to pass munster at the gherkin pickling cannery, the outlook is bleak indeed. Add to that your nightly episodes of awakening with a cold sweat and sticky sheets in a state of terror from your Dreaming about Swordfighting with Peter Pan, and I tell you Tinker Bell, you are one fucked up asshole.

First, you allege any pedophile who molests boys is necessarily gay, and the facts indicate otherwise. The vast majority of little boy molestors admit to a strong preference for women in their adult to adult sexual relations.

Secondly, your sources are lame pieces of shit, who deceitfully lay claim to their expetise in the field. The World Net Daily article you've have thrown around usenet for months now was written by Linda Harvey, who World Net Daily identifies as "founder of Mission America, which monitors and reports on the promotion of homosexuality to youth." As is usually the case for WND, they play their own game of NeoCon Circle Jerking referencing, because Harvey is much more than just the founder, she IS Mission America.

A whois lookup identifies her as Registrant, Administrative and Technical contact, and she goes whole hog on the site, which uses Paypal for contributions and freestats.com for site tracking information. It seems that poor Linda doesn't get to view server logs. This is probably because the site is served up by Netfronts Inc on IP: 64.92.120.1 which a reverse look-up finds has 1,375 other sites hosted on this server. This is one high-end org.

What about Harvey's credentials as a homoexpert?
The bio at her website is illuminative:
<http://www.missionamerica.com/wholinda.php>

> "The media ministry of Linda Harvey is an outgrowth of her Christian faith and a successful career in journalism, marketing and public relations.
>
> As a former advertising executive, Mrs. Harvey has specialized in creating new communications' vehicles. She has started more than twenty-five publications and overseen multi-million dollar advertising campaigns, primarily in the health care industry."

It goes on to say that Harvey has a BA in English and has completed some graduate work.

Whoa Jezebel!

An advertising flack with a 4 year English degree. That certainly adds great credence to her work as an expert on homosexuality.

Your second cut-n-paste didn't even come with an attribution. Could the reason be because the author is even more suspect than

Harvey? The citation is:

"Child Molestation and Homosexuality"
By Paul Cameron, Ph. D., chairman of
the Family Research Institute of Colorado Springs, Colorado.
<http://www.familyresearchinst.org/FRI_EduPamphlet2.html>

The best part of this clown's article are the notes, which hew obviously has grown so weary of them being trashed by real experts, he makes them difficult to access by squeezing them into a graphics so tiny, the citations are hard to even read.
<http://www.familyresearchinst.org/molestation_refs.jpg>

I did notice he's from Colorado Springs
Do Tell...
Paulie C. wouldn't happen to be a member of the Reverend Ted 'glasspipe' Haggard, who recently provided an entirely novel take on the Psalm that says,
  "thy rod and thy staff,
    they comfort me...",
would he?

Here's todays clue B&C:
What Haggard has been using to annoiteth your head,
It ain't oil.

What Cameron is without a doubt though is a dishonest asswipe, who has been tossed out of The American Psychological Association, and whose research has been condemned by The Nebraska Psychological Association, along with the American Sociological Association.

Gregory M. Herek, Ph.D., Professor, UC, Davis School of Psychology exposes Cameron for the fraud that he is in both
his research:
<http://psychology.ucdavis.edu/rainbow/html/facts_cameron.html>
and his professional endevours:
<http://psychology.ucdavis.edu/rainbow/html/facts_cameron_sheet.html>

You are one imbelcilic raver...
and you're unable to come up with anymore
lying authors to back up your ignorant and dishonest hate.

trivial pursuit...

```
From -7364177820867705900
X-Google-Thread: 10e8ad,5cee30c60e380bd0,start
X-Google-Thread: 113975,5cee30c60e380bd0,start
X-Google-Attributes: gid10e8ad,gid113975,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news3.google.com!news2.volia.net!hwmnpeer01.ams!
news.highwinds-media.com!newsrouter-eu.astraweb.com!news.astraweb.com!
```

```
router1.astraweb.com!not-for-mail
From: Chris Steyaert <observations@rmob.org>
Newsgroups: rec.radio.amateur.space,sci.astro.amateur
Subject: Radio Meteor Obs. Bull. November 2006  Leonids
Date: Thu, 07 Dec 2006 22:27:04 +0100
Message-ID: <3o1hn2hartrkoaoji1r9o6gqgg9vmsif2d@4ax.com>
X-Newsreader: Forte Agent 1.93/32.576 English (American)
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Lines: 17
Organization: Unlimited download news at news.astraweb.com
NNTP-Posting-Host: b172218c.news.astraweb.com
X-Trace: DXC=7oQ^be7K6526fPZ:J:\J]<L?0kYOcDh@:[bT<g`McNK0hUGiScmCJ5=G?
ifhhgG3C1T_QUHe<1SZ9]?ekkO=A^17
Xref: g2news2.google.com rec.radio.amateur.space:515 sci.astro.amateur:46250

Radio Meteor Observation Bulletin No. 160 of November 2006 (78K) is available
now as


     http://visualrmob.free.fr/rmobtext/rmob0611.txt


More information and the visual presentation of the hourly forward scatter
counts can be found on

     http://www.rmob.org

     http://radio.data.free.fr


     Chris




From 4109129601055231695
X-Google-Thread: 10e8ad,ef93abf4227bd493,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news4.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!local01.nntp.dca.giganews.com!nntp.comcast.com!
news.comcast.com.POSTED!not-for-mail
NNTP-Posting-Date: Thu, 07 Dec 2006 20:41:40 -0600
From: "JoAnne K9JKM" <k9jkm_remove_@comcast.net>
Newsgroups: rec.radio.amateur.space
Subject: WSR-338 AMSAT Weekly Satellite Report
Date: Thu, 7 Dec 2006 20:41:46 -0600
MIME-Version: 1.0
Content-Type: text/plain;
     format=flowed;
     charset="iso-8859-1";
     reply-type=original
```

```
Content-Transfer-Encoding: 7bit
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.2869
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.2962
Message-ID: <1tqdna-RMu14TeXYnZ2dnUVZ_vGinZ2d@comcast.com>
Lines: 979
NNTP-Posting-Host: 67.184.169.1
X-Trace: sv3-
D84z4Ai10sUHUxXuqUzq8Z0b0VrC4tLyXT+TnWxHBa0DUnXWTx3VvYotlpVxoHvgQAtouody8F1kgph!
Vimh2po7jipDWr64x1Tgv1PlD/RaldOudcC4NcOnyfj/sHtbeHjunBhFThx501SuqNzTEhyh8ltW!
bMeLHzNQGa3IDP0=
X-Complaints-To: abuse@comcast.net
X-DMCA-Complaints-To: dmca@comcast.net
X-Abuse-and-DMCA-Info: Please be sure to forward a copy of ALL headers
X-Abuse-and-DMCA-Info: Otherwise we will be unable to process your complaint
properly
X-Postfilter: 1.3.32
Xref: g2news2.google.com rec.radio.amateur.space:516
```

This report is organized into 4 parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites

SB SAT @ AMSAT W8ISS ANS-338.S1
WSR 338 Part 1 12/04/2006

AMSAT NEWS SERVICE BULLETIN 338.S1 FROM AMSAT HQ
SILVER SPRING, MD, December 04, 2006
TO ALL RADIO AMATEURS
BID: $ANS-338.S1

VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/V - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 MHz to 435.280 MHz LSB/CW
Downlink: 145.870 MHz to 145.930 MHz USB/CW

Dutch Transponder:
Uplink: 435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW

Indian Beacon: 145.859330 MHZ CW
Dutch Beacon: 145.860MHz 12WPM with CW message

```
Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsat.in/hamsat.htm

To know what transponder is switched on please listen for the beacon
that
is active. Each transponder has a different beacon.
[10022006]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational
Current Mode(s): FM Repeater - V/U - Tone
                 PBBS -        V/U - 9k6 PBP
                 Digipeater -  OFF

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink:   145.880 MHZ FM
                       145.880 MHz USB
                       145.920 MHz FM 67Hz PL tone
                      1268.700 MHz FM 67Hz PL tone
Digital Downlinks:     435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
                       435.150 MHz FM, 9k6 Digital, Pacsat Broadcast
Protocol
                      2401.200 MHz FM, 38k4 bps, AX.25
Digital Uplink:        145.860 MHz FM, 9k6 Digital, Pacsat Broadcast
Protocol
                      1268.700 mhz FM, 9k6 PBP Digital

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[11013006]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002
```

Status: Operational.

Uplink: 145.850 MHz (67.0 Hz PL tone) (See below for operating procedures)
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The order of operation is thus: (allow for Doppler as necessary)
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer
   on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater
   on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10
   minute timer.
[04172006]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: OPERATIONAL

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplink: 145.850 145.870 145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

unOfficial Webpage: http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's CW telemetry downlink:

http://www.ne.jp/asahi/hamradio/je9pel/fo29cwts.htm
[11202006]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational?

Uplink: 145.850 MHz FM
Downlink: 436.795 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

This off the AO-27 website:
For the last 5 weeks ground controllers have been trying to contact AO-27. At this point we have not been able to turn it on. We still have a few tricks that we are planning on trying but these take time. We are hoping that we can re-establish communications.

At this time, we don't have an estimate for when AO-27 will be back on the air.

AO-27 is now in its 14th year on orbit. We will continue to try to recover AO-27 until we run out of ideas.
- Michael N3UC

Official Webpage: http://www.ao27.org
[10232006]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational depending on amount of Sunlight
Current Reported mode: Mode-A

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz
145.972 MHz
435.100 MHz
2304.100 MHz

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php
The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
AO-7 users are requested to log their contacts and observations about AO-7,
especially any unexpected mode changes.
AO-07 telemetry software webpage:
http://www.qsl.net/k3tz/files/K3TZ_AO-07_Telemetry_Decoder_0.5.zip

Please keep your power low! For additional information please read the AO-7
Usage Guidelines on the AO-7 Log and Resource Site located at:
http://www.planetemily.com/ao7
[04242006]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: Occasional Voice
Digipeater: OFF

The Expedition 14 crew is:
Commander: Michael Lopez-Alegria - KE5GTK
Flight Engineer: Mikhail Tyurin - RZ3FT
Flight Engineer: Thomas Reiter - DF4TR

Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

SSTV TESTING:
Worldwide Reported Downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS, RZ3DZR

USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

Be aware that Radio activity may be curtailed with the planned launch of STS-116 this week. Watch ANS for more information.

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line is NOT translated from Russian and posted.
[12042006]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-338.S2
WSR 338 Part 2 12/04/2006

AMSAT NEWS SERVICE BULLETIN 338.S2 FROM AMSAT HQ
SILVER SPRING, MD, December 04, 2006
TO ALL RADIO AMATEURS
BID: $ANS-338.S2

HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Operational

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon: 437.2750 MHz CW

Callsign: JR8YJT
[10302006]
=====
CO-58 XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW only

Telemetry Downlink: 437.345MHz - FSK 1200bps using AFK protocol
Beacon: 437.465MHz - CW

Callsign: JQ1YGW

Oficial Webpage: http://www.space.t.u-tokyo.ac.jp/gs/satinfo-e.html#xi5

```
Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
[09252006]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launched: June 30, 2006

Status: Operational

Beacon:     436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS
[10022006]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launched: June 30,2003

Status: Semi-Operational - Constant Carrier only

Uplink: ?
Downlink: 437.3850 CW
          437.4700 1200 FM ax25 or SRLL (ACTIVE only near Japan ? )

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[09252006]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational
Current Mode(s): FM Repeater - V/U - Tone
                 PBBS -        V/U - 9k6 PBP
                 Digipeater -  OFF

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink:   145.880 MHZ FM
                       145.880 MHz USB
                       145.920 MHz FM 67Hz PL tone
                      1268.700 MHz FM 67Hz PL tone
Digital Downlinks:     435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
                       435.150 MHz FM, 9k6 Digital, Pacsat Broadcast
Protocol
                      2401.200 MHz FM, 38k4 bps, AX.25
Digital Uplink:        145.860 MHz FM, 9k6 Digital, Pacsat Broadcast
Protocol
                      1268.700 mhz FM, 9k6 PBP Digital

Mode and Antenna Polarization:
```

T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[11013006]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: RECOVERY EFFORTS - REFRAIN FRON USAGE!!!

General Usage Uplink/Downlink:145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org
aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[09252006]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: CLOSED - Maintenance

Downlink: 435.225 MHz FM (9600-baud FSK)
435.325 Mhz - Not Available - temperature problems
Uplinks: 145.850 FM
145.890 FM
145.930 FM
1269.700 FM
1269.800 FM
1269.900 FM
Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[11272006]
=====
RS-22 Mozhayets 4
Catalog number: 27939
Launch Date: September 27, 2004

Status: Operational

```
Beacon: 435.3520 MHz CW
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Semi-operational, the digipeater command is on and open for APRS
users.

Uplink: 145.900 FM
       145.920 FM
       145.940 FM
       145.960 FM
(using 1200-baud Manchester FSK)
Downlink: 437.026 MHz SSB (1200-baud PSK)
Mode-S Beacon: 2401.1428 MHz

Mode and Antenna Polarization:
U: RC 437.050 MHz RHCP
  PSK 437.025 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[04172006]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational

Telemetry Downlink: 145.826 MHz. FM (1200-baud AFSK) approx. 10 days ON,
10
                    days OFF
Mode-S Beacon:     2401.500 MHz - OFF
UHFBeacon:          435.025 MHz - OFF

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Official webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[10302006]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998
```

Status: Operational
Current Mode: Occasional Voice
Digipeater: OFF

Expedition Crew 14 is:
Commander: Michael Lopez-Alegria - KE5GTK
Flight Engineer: Mikhail Tyurin - RZ3FT
Flight Engineer: Thomas Reiter - DF4TR

Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

SSTV TESTING:
Worldwide Reported Downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS, RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

Be aware that Radio activity may be curtailed with the planned launch of STS-116 this week. Watch ANS for more information.

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is NOT translated from Russian and posted.
[12042006]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-338.S3

WSR 338 Part 3 12/04/2006

AMSAT NEWS SERVICE BULLETIN 338.S3 FROM AMSAT HQ
SILVER SPRING, MD, December 04, 2006
TO ALL RADIO AMATEURS
BID: $ANS-338.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
                              2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 FM 67Hz CTCSS
Voice Downlink: 2401.835 FM
Packet Up/Downlink: 437.250 9k6 packet
Packet Downlink 2401.835 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01292006]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink: 145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

```
Status: Operational - Not open for Amatuer use

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012006]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launched: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB
Beacon: 145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: Downlink only

Uplink: 145.875 145.900 145.925 145.950 MHz FM (1200-baud)
Downlink: 435.808 MHz PSK
Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01012006]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB
Beacon: 29.408 MHz
Robot: 29.454 MHz
```

```
[05232004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB
Beacon: 145.860 MHz
Robot: 145.908 MHz
[05232004]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink 145.975 MHz FM
Downlink 435.070 MHz FM
[05092004]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink: 145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM
Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01092005]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational?

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB
Beacon: 29.352 MHz (intermittent)
SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only
```

Uplink: 145.84 145.86 145.88 145.90 MHz FM
(using 1200-baud Manchester FSK)
CW downlink: 437.125 MHz
Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[05232004]

=====

FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[08152004]

=====

KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM
Broadcast Callsign: HLO1-11
BBS: HLO1-12

Jim, AA7KC, reports that KO-23's downlink transmitter continues in a
non-operational status.
[05092004]

=====

KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM (9600-baud FSK)
Downlink: 436.500 MHz FM
Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]

=====

PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]

=====

SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm

[ANS-WSR has no further information]
[09042006]

=====

SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

STatus: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz and 145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[08082004]

=====

UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlink: 437.025 MHz 437.400 MHz

```
Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site
at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[05092004]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplink V-band   145.840 - 145.990 MHz CW/LSB
      U-band   435.550 - 435.800 MHz CW/LSB
      L1-band 1269.250 - 1269.500 MHz CW/LSB
      L2-band 1268.325 - 1268.575 MHz CW/LSB
Downlink: S2-band 2401.225 - 2401.475 MHz CW/USB
         K-band 24,048.010 - 24,048.060 MHz CW/USB
Beacon:   2401.323
        24,048.035
[05232004]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational
Downlink: 437.075 MHz
Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[08152004]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz
Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[08152004]
=====
```

NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, callsign KE6QMD, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]

=====

MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Operational

Uplink: 145.850 or 145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz
Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[11202005]

=====

AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink 435.275 1200-baud AFSK
Downlink 145.825 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01012006]

=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink: Downlink 145.825 MHz FM 1200 Baud AFSK
Beacon: 2401.220 MHz
[05012006]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-338.S4
WSR 338 Part 4 12/04/2006

AMSAT NEWS SERVICE BULLETIN 338.S4 FROM AMSAT HQ
SILVER SPRING, MD, December 04, 2006
TO ALL RADIO AMATEURS
BID: $ANS-338.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE PROPOSED FOR LAUNCH AT THIS TIME:

PHASE 3E ?O-??
Catalog number:
Proposed Launch Date: Early/Mid 2007

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/
[ANS-WSR wishes to thank William Leijenaar, PE1RAH for this week's report]
[04242006]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/amsat/listserv/menu.html

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

```
From 2528196758089553549
X-Google-Thread: 10bb69,af3a945b40f29083
X-Google-Thread: fc521,af3a945b40f29083
X-Google-Thread: f84d8,5228070b6e104c77
X-Google-Thread: 10e8ad,41180496b69c09cf
X-Google-Thread: 104a10,41180496b69c09cf
```

```
X-Google-Attributes: gid10bb69,gidfc521,gidf84d8,gid10e8ad,gid104a10,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!postnews.google.com!80g2000cwy.googlegroups.com!not-for-
mail
From: "bob&carole" <bobandcarole666@hotmail.com>
Newsgroups:
alt.politics.homosexuality,alt.education,alt.dbs.directv,rec.radio.amateur.space,r
ec.food.drink.beer
Subject: Re: Sexual fascism and the Mark Foley scandel
Date: 7 Dec 2006 22:53:05 -0800
Organization: http://groups.google.com
Lines: 72
Message-ID: <1165560785.833784.325680@80g2000cwy.googlegroups.com>
References: <1159881994.642663.229430@h48g2000cwc.googlegroups.com>
   <1162066010.997111.45530@i42g2000cwa.googlegroups.com>
   <1164787817.495319.179220@j44g2000cwa.googlegroups.com>
   <T7fbh.54807$39.24787@southeast.rr.com>
   <1165311819.048659.210350@l12g2000cwl.googlegroups.com>
   <1165425943.817914.20640@l12g2000cwl.googlegroups.com>
   <he0en2p9uadn83m20caa7plngati5jt6b0@4ax.com>
   <1165427339.761425.223410@79g2000cws.googlegroups.com>
   <1165427779.888588.130580@l12g2000cwl.googlegroups.com>
   <zxDdh.7018$ya1.6667@news02.roc.ny>
   <1165430497.064806.191380@n67g2000cwd.googlegroups.com>
   <YjUdh.7086$ya1.4050@news02.roc.ny>
NNTP-Posting-Host: 64.12.116.203
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"
X-Trace: posting.google.com 1165560791 6544 127.0.0.1 (8 Dec 2006 06:53:11 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Fri, 8 Dec 2006 06:53:11 +0000 (UTC)
In-Reply-To: <YjUdh.7086$ya1.4050@news02.roc.ny>
User-Agent: G2/1.0
X-HTTP-UserAgent: Mozilla/4.0 (compatible; MSIE 6.0; AOL 9.0; Windows NT 5.1;
SV1),gzip(gfe),gzip(gfe)
X-HTTP-Via: HTTP/1.1 (Velocity/1.3.32 [uScMs f p eN:t cCMp s ]), HTTP/1.1 Turboweb
[mtc-tb124 8.4.1], HTTP/1.1 cache-mtc-ad09.proxy.aol.com[400C74CB] (Traffic-
Server/6.1.3 [uScM])
Complaints-To: groups-abuse@google.com
Injection-Info: 80g2000cwy.googlegroups.com; posting-host=64.12.116.203;
   posting-account=AtWAZg0AAAC_3_oBW63EpvnDkPCTb97a
Xref: g2news2.google.com alt.politics.homosexuality:166524 alt.education:44069
alt.dbs.directv:4034 rec.radio.amateur.space:517 rec.food.drink.beer:2444


gwatts wrote:
> bobandcarole wrote:
> > gwatts wrote:
> >
> >>bobandcarole wrote:
> >>
> >>>bobandcarole wrote:
> >>>
```

> >>>
> >>>>M...@kb9rqz.aprs wrote:
> >>>>
> >>>>
> >>>>>On 6 Dec 2006 09:25:43 -0800, "bobandcarole"
> >>>>><bobandcarole1010@hotmail.com> wrote:
> >>>>>
> >>>>>
> >>>>>
> >>>>>>>>Apparently, Rep. Mark Foley is homosexual. And like many homosexual
> >>>>>>>>men, he likes young teen boys. We should pray for him that he gets a
> >>>>>>>>handle on this problem and refrains from harming any more kids.
> >>>>>>>>
> >>>>>>>>
> >>>>>>>>Meanwhile, we need to wake up. The fact that this is typical behavior
> >>>>>>>>for homosexuals doesn't stop us from continuing to elevate such folks
> >>>>>>>>to positions where they gain access to our kids.
> >>>>>>>>
> >>>>>>>>
> >>>>>>>>http://worldnetdaily.com/news/article.asp?ARTICLE_ID=52244
> >>>>>
> >>>>>don't ever get tried of spreading hate?
> >>>>
> >>>>You confuse truth with hate.
> >>
> >>And you confuse rec.radio.amateur.space with a newsgroup that gives a
> >>damn about your whiny, misleading, unsubstantiated spewage.
> >
> > And I take you have proof that it's "misleading"??
>
> You said 'typical behavior,' prove it.
>
> > Or are you blowing smoke out of your canyon ass?
>
> For someone so anti-homosexual you sure have a lot of fascination with
> 'canyon asses.'
>
> What do you know about 'typical behavior for homosexuals,' have any
> citations from recognized, peer reviewed publications?
Why bother, it's common knowledge
>
> <crickets>
>
> What do you know about 'many homosexual men, (who) like young teen
> boys,', any citations, or do you just parrot the more sensational crap
> you hear on Faux News?
I know they're deviants, that's all I need to know.
>
> <crickets>
>
> You're really sad. Why don't you go die and take your bigoted, brain
> stem friends with you?

```
Why don't you suck a fart out of my ass, dick smoker?


America would be a much better country for it.
>
> I said that.
I said this..Fuck you

> W8LNA




From 906283174079967830
X-Google-Thread: 10bb69,af3a945b40f29083
X-Google-Thread: fc521,af3a945b40f29083
X-Google-Thread: f84d8,5228070b6e104c77
X-Google-Thread: 10e8ad,41180496b69c09cf
X-Google-Thread: 104a10,41180496b69c09cf
X-Google-Attributes: gid10bb69,gidfc521,gidf84d8,gid10e8ad,gid104a10,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!postnews.google.com!80g2000cwy.googlegroups.com!not-for-
mail
From: "bob&carole" <bobandcarole01@hotmail.com>
Newsgroups:
alt.politics.homosexuality,alt.education,alt.dbs.directv,rec.radio.amateur.space,r
ec.food.drink.beer
Subject: Re: Sexual fascism and the Mark Foley scandel
Date: 7 Dec 2006 23:01:48 -0800
Organization: http://groups.google.com
Lines: 33
Message-ID: <1165561308.468699.28300@80g2000cwy.googlegroups.com>
References: <1159881994.642663.229430@h48g2000cwc.googlegroups.com>
   <1162066010.997111.45530@i42g2000cwa.googlegroups.com>
   <1164787817.495319.179220@j44g2000cwa.googlegroups.com>
   <T7fbh.54807$39.24787@southeast.rr.com>
   <1165311819.048659.210350@l12g2000cwl.googlegroups.com>
   <1165425943.817914.20640@l12g2000cwl.googlegroups.com>
   <he0en2p9uadn83m20caa7plngati5jt6b0@4ax.com>
   <1165427339.761425.223410@79g2000cws.googlegroups.com>
   <1165427779.888588.130580@l12g2000cwl.googlegroups.com>
   <zxDdh.7018$ya1.6667@news02.roc.ny>
NNTP-Posting-Host: 64.12.116.203
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"
X-Trace: posting.google.com 1165561314 32185 127.0.0.1 (8 Dec 2006 07:01:54 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Fri, 8 Dec 2006 07:01:54 +0000 (UTC)
In-Reply-To: <zxDdh.7018$ya1.6667@news02.roc.ny>
User-Agent: G2/1.0
X-HTTP-UserAgent: Mozilla/4.0 (compatible; MSIE 6.0; AOL 9.0; Windows NT 5.1;
SV1),gzip(gfe),gzip(gfe)
X-HTTP-Via: HTTP/1.1 (Velocity/1.3.32 [uScMs f p eN:t cCMp s ]), HTTP/1.1 Turboweb
[mtc-tb124 8.4.1], HTTP/1.1 cache-mtc-ad09.proxy.aol.com[400C74CB] (Traffic-
Server/6.1.3 [uScM])
Complaints-To: groups-abuse@google.com
Injection-Info: 80g2000cwy.googlegroups.com; posting-host=64.12.116.203;
   posting-account=QloQDg0AAABRHmz3s_SceqsdOOvGCFTS
Xref: g2news2.google.com alt.politics.homosexuality:166530 alt.education:44071
alt.dbs.directv:4035 rec.radio.amateur.space:518 rec.food.drink.beer:2445


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> >>>
> >>>don't ever get tried of spreading hate?
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> >>You confuse truth with hate.
>
> And you confuse rec.radio.amateur.space with a newsgroup that gives a
> damn about your whiny, misleading, unsubstantiated spewage.

Another space ranger :-)




From -8910171949706971912
X-Google-Thread: 10bb69,af3a945b40f29083
X-Google-Thread: fc521,af3a945b40f29083
X-Google-Thread: f84d8,5228070b6e104c77
X-Google-Thread: 10e8ad,41180496b69c09cf
X-Google-Thread: 104a10,41180496b69c09cf
X-Google-Attributes: gid10bb69,gidfc521,gidf84d8,gid10e8ad,gid104a10,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!postnews.google.com!16g2000cwy.googlegroups.com!not-for-
mail
From: "bobandcarole" <bobandcarole02@hotmail.com>
```

```
Newsgroups:
alt.politics.homosexuality,alt.education,alt.dbs.directv,rec.radio.amateur.space,r
ec.food.drink.beer
Subject: Re: Sexual fascism and the Mark Foley scandel
Date: 8 Dec 2006 01:50:27 -0800
Organization: http://groups.google.com
Lines: 60
Message-ID: <1165571427.549773.55410@16g2000cwy.googlegroups.com>
References: <1159881994.642663.229430@h48g2000cwc.googlegroups.com>
   <1162066010.997111.45530@i42g2000cwa.googlegroups.com>
   <1164787817.495319.179220@j44g2000cwa.googlegroups.com>
   <T7fbh.54807$39.24787@southeast.rr.com>
   <1165311819.048659.210350@l12g2000cwl.googlegroups.com>
   <1165425943.817914.20640@l12g2000cwl.googlegroups.com>
   <he0en2p9uadn83m20caa7plngati5jt6b0@4ax.com>
   <1165427339.761425.223410@79g2000cws.googlegroups.com>
   <1165427779.888588.130580@l12g2000cwl.googlegroups.com>
   <zxDdh.7018$ya1.6667@news02.roc.ny>
   <1165430497.064806.191380@n67g2000cwd.googlegroups.com>
   <YjUdh.7086$ya1.4050@news02.roc.ny>
NNTP-Posting-Host: 152.163.100.203
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"
X-Trace: posting.google.com 1165571433 24356 127.0.0.1 (8 Dec 2006 09:50:33 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Fri, 8 Dec 2006 09:50:33 +0000 (UTC)
In-Reply-To: <YjUdh.7086$ya1.4050@news02.roc.ny>
User-Agent: G2/1.0
X-HTTP-UserAgent: Mozilla/4.0 (compatible; MSIE 6.0; AOL 9.0; Windows NT 5.1;
SV1),gzip(gfe),gzip(gfe)
X-HTTP-Via: HTTP/1.1 (Velocity/1.3.32 [uScMs f p eN:t cCMp s ]), HTTP/1.1 Turboweb
[rtc-tf022 8.4.1], HTTP/1.1 cache-rtc-ad09.proxy.aol.com[98A364CB] (Traffic-
Server/6.1.3 [uScM])
Complaints-To: groups-abuse@google.com
Injection-Info: 16g2000cwy.googlegroups.com; posting-host=152.163.100.203;
   posting-account=wDWOtA0AAADtBCfawwC9Fs6RHAtwkb94
Xref: g2news2.google.com alt.politics.homosexuality:166548 alt.education:44084
alt.dbs.directv:4036 rec.radio.amateur.space:519 rec.food.drink.beer:2446


gwatts wrote:
> bobandcarole wrote:
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> >>>>
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> >>>>><bobandcarole1010@hotmail.com> wrote:
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> >>>>>>>
> >>>>>>>
> >>>>>>>http://worldnetdaily.com/news/article.asp?ARTICLE_ID=52244
> >>>>>
> >>>>>don't ever get tried of spreading hate?
> >>>>
> >>>>You confuse truth with hate.
> >>
> >>And you confuse rec.radio.amateur.space with a newsgroup that gives a
> >>damn about your whiny, misleading, unsubstantiated spewage.
> >
> > And I take you have proof that it's "misleading"??
>
> You said 'typical behavior,' prove it.
>
> > Or are you blowing smoke out of your canyon ass?
>
> For someone so anti-homosexual you sure have a lot of fascination with
> 'canyon asses.'

Lie #1
>
> What do you know about 'typical behavior for homosexuals,'

Well lets see, they buttfuck each other and ingest cum, that's bad
enough



 have any
> citations from recognized, peer reviewed publications?

http://worldnetdaily.com/news/article.asp?ARTICLE_ID=52244



From 5927417145139534305
X-Google-Thread: 10bb69,af3a945b40f29083
X-Google-Thread: fc521,af3a945b40f29083
X-Google-Thread: f84d8,5228070b6e104c77
X-Google-Thread: 10e8ad,41180496b69c09cf
```

```
X-Google-Thread: 104a10,41180496b69c09cf
X-Google-Attributes: gid10bb69,gidfc521,gidf84d8,gid10e8ad,gid104a10,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news3.google.com!news4.google.com!
border1.nntp.dca.giganews.com!nntp.giganews.com!local01.nntp.dca.giganews.com!
nntp.adelphia.com!news.adelphia.com.POSTED!not-for-mail
NNTP-Posting-Date: Fri, 08 Dec 2006 07:01:06 -0600
From: "John Doe" <hgorden@adelphia.net>
Newsgroups:
alt.politics.homosexuality,alt.education,alt.dbs.directv,rec.radio.amateur.space,r
ec.food.drink.beer
References: <1159881994.642663.229430@h48g2000cwc.googlegroups.com>
<1162066010.997111.45530@i42g2000cwa.googlegroups.com>
<1164787817.495319.179220@j44g2000cwa.googlegroups.com>
<T7fbh.54807$39.24787@southeast.rr.com>
<1165311819.048659.210350@l12g2000cwl.googlegroups.com>
<1165425943.817914.20640@l12g2000cwl.googlegroups.com>
<he0en2p9uadn83m20caa7plngati5jt6b0@4ax.com>
Subject: Re: spaming hate monger
Date: Fri, 8 Dec 2006 08:07:31 -0500
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.2869
X-RFC2646: Format=Flowed; Original
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.2962
Message-ID: <LuWdnYQINLeP_-TYnZ2dnUVZ_vCdnZ2d@adelphia.com>
Lines: 55
NNTP-Posting-Host: 69.162.152.98
X-Trace: sv3-6n5ZiTw0bKJMSSpPYs9om7u7tkO4ah+0JGsqi/
B1VR3dCB1ZKoBEJfNGTZzOp9j+izCPSKI6Fh0rTna!
myszZGpPvZYxZMNGJydqH4kNqkbEUD+FVG2WNjptdO4yEPKXcA0WXGLjxHD1kmsagxF7/hZ5H5Xu!
eNmBMecGiA+AFoZ93hhiIrS7LrGu
X-Complaints-To: abuse@adelphia.net
X-DMCA-Complaints-To: copyright@adelphia.net
X-Abuse-and-DMCA-Info: Please be sure to forward a copy of ALL headers
X-Abuse-and-DMCA-Info: Otherwise we will be unable to process your complaint
properly
X-Postfilter: 1.3.32
Xref: g2news2.google.com alt.politics.homosexuality:166549 alt.education:44085
alt.dbs.directv:4037 rec.radio.amateur.space:520 rec.food.drink.beer:2447
```

AND WHY DO WE NEED THIS KIND OF POSTING IN A GROUP THAT HAS NOTHING TO DO
WITH THE SUBJECT? NAMELY AMATEUR RADIO!

```
Path:
border1.nntp.dca.giganews.com!nntp.giganews.com!newsfeed00.sul.t-online.de!t-
online.de!feeder.news-service.com!news2.euro.net!66.150.105.54.MISMATCH!
nntpserver.com!zeus.nntpserver.com!hydra.nntpserver.com!not-for-mail
From: Mark@kb9rqz.aprs
Newsgroups:
alt.politics.homosexuality,alt.education,alt.dbs.directv,rec.radio.amateur.space,r
ec.food.drink.beer
Subject: spaming hate monger
```

```
Date: Wed, 06 Dec 2006 12:46:22 -0500
Message-ID: <he0en2p9uadn83m20caa7plngati5jt6b0@4ax.com>
References: <1159881994.642663.229430@h48g2000cwc.googlegroups.com>
<1162066010.997111.45530@i42g2000cwa.googlegroups.com>
<1164787817.495319.179220@j44g2000cwa.googlegroups.com>
<T7fbh.54807$39.24787@southeast.rr.com>
<1165311819.048659.210350@l12g2000cwl.googlegroups.com>
<1165425943.817914.20640@l12g2000cwl.googlegroups.com>
X-Newsreader: Forte Free Agent 3.3/32.846
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Lines: 18
NNTP-Posting-Date: 06 Dec 2006 16:51:48 GMT
X-Complaints-To: abuse@teranews.com
Xref: number1.nntp.dca.giganews.com alt.politics.homosexuality:996396
alt.education:243124 alt.dbs.directv:5287 rec.radio.amateur.space:23584
rec.food.drink.beer:110976

<Mark@kb9rqz.aprs> wrote in message
news:he0en2p9uadn83m20caa7plngati5jt6b0@4ax.com...

> On 6 Dec 2006 09:25:43 -0800, "bobandcarole"
> <bobandcarole1010@hotmail.com> wrote:
>
>>
>>
>>> Apparently, Rep. Mark Foley is homosexual. And like many homosexual
>>> men, he likes young teen boys. We should pray for him that he gets a
>>> handle on this problem and refrains from harming any more kids.
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>>>
>>> http://worldnetdaily.com/news/article.asp?ARTICLE_ID=52244
> don't ever get tried of spreading hate?
> http://kb9rqz.blogspot.com/
>
> --
> Posted via a free Usenet account from http://www.teranews.com
>




From -3702275067996870436
X-Google-Thread: 10bb69,af3a945b40f29083
X-Google-Thread: fc521,af3a945b40f29083
X-Google-Thread: f84d8,5228070b6e104c77
X-Google-Thread: 10e8ad,41180496b69c09cf
```

```
X-Google-Thread: 104a10,41180496b69c09cf
X-Google-Attributes: gid10bb69,gidfc521,gidf84d8,gid10e8ad,gid104a10,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news3.google.com!news1.google.com!news.maxwell.syr.edu!
nntpserver.com!zeus.nntpserver.com!hydra.nntpserver.com!not-for-mail
From: Mark@kb9rqz.aprs
Newsgroups:
alt.politics.homosexuality,alt.education,alt.dbs.directv,rec.radio.amateur.space,r
ec.food.drink.beer
Subject: Re: Sexual fascism and the Mark Foley scandel
Date: Fri, 08 Dec 2006 15:51:43 -0500
Message-ID: <cvjjn2p4sujpo9pnk0fof39l2t3f60hhf2@4ax.com>
References: <1165311819.048659.210350@l12g2000cwl.googlegroups.com>
<1165425943.817914.20640@l12g2000cwl.googlegroups.com>
<he0en2p9uadn83m20caa7plngati5jt6b0@4ax.com>
<1165427339.761425.223410@79g2000cws.googlegroups.com>
<1165427779.888588.130580@l12g2000cwl.googlegroups.com>
<zxDdh.7018$ya1.6667@news02.roc.ny>
<1165430497.064806.191380@n67g2000cwd.googlegroups.com>
<YjUdh.7086$ya1.4050@news02.roc.ny>
<1165560785.833784.325680@80g2000cwy.googlegroups.com>
X-Newsreader: Forte Free Agent 3.3/32.846
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Lines: 88
NNTP-Posting-Date: 08 Dec 2006 19:57:08 GMT
X-Complaints-To: abuse@teranews.com
Xref: g2news2.google.com alt.politics.homosexuality:166658 alt.education:44152
alt.dbs.directv:4053 rec.radio.amateur.space:521 rec.food.drink.beer:2448

On 7 Dec 2006 22:53:05 -0800, "bob&carole"
<bobandcarole666@hotmail.com> wrote:

>
>gwatts wrote:
>> bobandcarole wrote:
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```

>> >>>>>>>men, he likes young teen boys. We should pray for him that he gets a
>> >>>>>>>handle on this problem and refrains from harming any more kids.
>> >>>>>>>
>> >>>>>>>
>> >>>>>>>Meanwhile, we need to wake up. The fact that this is typical behavior
>> >>>>>>>for homosexuals doesn't stop us from continuing to elevate such folks
>> >>>>>>>to positions where they gain access to our kids.
>> >>>>>>>
>> >>>>>>>
>> >>>>>>>http://worldnetdaily.com/news/article.asp?ARTICLE_ID=52244
>> >>>>>
>> >>>>>don't ever get tried of spreading hate?
>> >>>>
>> >>>>You confuse truth with hate.
>> >>
>> >>And you confuse rec.radio.amateur.space with a newsgroup that gives a
>> >>damn about your whiny, misleading, unsubstantiated spewage.
>> >
>> > And I take you have proof that it's "misleading"??
>>
>> You said 'typical behavior,' prove it.
>>
>> > Or are you blowing smoke out of your canyon ass?
>>
>> For someone so anti-homosexual you sure have a lot of fascination with
>> 'canyon asses.'
>>
>> What do you know about 'typical behavior for homosexuals,' have any
>> citations from recognized, peer reviewed publications?
>Why bother, it's common knowledge
>>
>> <crickets>
>>
>> What do you know about 'many homosexual men, (who) like young teen
>> boys,', any citations, or do you just parrot the more sensational crap
>> you hear on Faux News?
>I know they're deviants, that's all I need to know.

in YOUR opinion
>>
>> <crickets>
>>
>> You're really sad. Why don't you go die and take your bigoted, brain
>> stem friends with you?
>
>Why don't you suck a fart out of my ass, dick smoker?

why are you making a homosexaul com on?
>
>
>America would be a much better country for it.

that is your opinion

reality is that America will NEVER be wthout homosexaul and never has
been

the question at issue is do we treat them as human being and accord
them thier rights to human dignaty or do we make along Muslim this of
target for a new holocost
>>
>> I said that.
>I said this..Fuck you
>
>> W8LNA
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com

```
From -6134096115311122317
X-Google-Thread: 10bb69,af3a945b40f29083
X-Google-Thread: fc521,af3a945b40f29083
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X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news1.google.com!news.maxwell.syr.edu!nntpserver.com!
zeus.nntpserver.com!hydra.nntpserver.com!not-for-mail
From: Mark@kb9rqz.aprs
Newsgroups:
alt.politics.homosexuality,alt.education,alt.dbs.directv,rec.radio.amateur.space,r
ec.food.drink.beer
Subject: Re: Sexual fascism and the Mark Foley scandel
Date: Fri, 08 Dec 2006 15:52:25 -0500
Message-ID: <d3kjn2lercd2hn725pfgkj0qr5g4fg2l8j@4ax.com>
References: <1165311819.048659.210350@l12g2000cwl.googlegroups.com>
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<1165571427.549773.55410@16g2000cwy.googlegroups.com>
X-Newsreader: Forte Free Agent 3.3/32.846
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Lines: 68
NNTP-Posting-Date: 08 Dec 2006 19:57:52 GMT
X-Complaints-To: abuse@teranews.com
Xref: g2news2.google.com alt.politics.homosexuality:166659 alt.education:44153
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alt.dbs.directv:4054 rec.radio.amateur.space:522 rec.food.drink.beer:2449

On 8 Dec 2006 01:50:27 -0800, "bobandcarole"
<bobandcarole02@hotmail.com> wrote:

>
>gwatts wrote:
>> bobandcarole wrote:
>> > gwatts wrote:
>> >
>> >>bobandcarole wrote:
>> >>
>> >>>bobandcarole wrote:
>> >>>
>> >>>
>> >>>>M...@kb9rqz.aprs wrote:
>> >>>>
>> >>>>
>> >>>>>On 6 Dec 2006 09:25:43 -0800, "bobandcarole"
>> >>>>><bobandcarole1010@hotmail.com> wrote:
>> >>>>>
>> >>>>>
>> >>>>>
>> >>>>>>>Apparently, Rep. Mark Foley is homosexual. And like many homosexual
>> >>>>>>>men, he likes young teen boys. We should pray for him that he gets a
>> >>>>>>>handle on this problem and refrains from harming any more kids.
>> >>>>>>>
>> >>>>>>>
>> >>>>>>>Meanwhile, we need to wake up. The fact that this is typical behavior
>> >>>>>>>for homosexuals doesn't stop us from continuing to elevate such folks
>> >>>>>>>to positions where they gain access to our kids.
>> >>>>>>>
>> >>>>>>>
>> >>>>>>>http://worldnetdaily.com/news/article.asp?ARTICLE_ID=52244
>> >>>>>
>> >>>>>don't ever get tried of spreading hate?
>> >>>>
>> >>>>You confuse truth with hate.
>> >>
>> >>And you confuse rec.radio.amateur.space with a newsgroup that gives a
>> >>damn about your whiny, misleading, unsubstantiated spewage.
>> >
>> > And I take you have proof that it's "misleading"??
>>
>> You said 'typical behavior,' prove it.
>>
>> > Or are you blowing smoke out of your canyon ass?
>>
>> For someone so anti-homosexual you sure have a lot of fascination with
>> 'canyon asses.'
>
>Lie #1
your word you eat em

```
>>
>> What do you know about 'typical behavior for homosexuals,'
>
>Well lets see, they buttfuck each other and ingest cum, that's bad
>enough

so do heterosexauls

>
>
>
> have any
>> citations from recognized, peer reviewed publications?
>
>http://worldnetdaily.com/news/article.asp?ARTICLE_ID=52244
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com



From 3673941497803378338
X-Google-Thread: 10bb69,af3a945b40f29083
X-Google-Thread: fc521,af3a945b40f29083
X-Google-Thread: f84d8,5228070b6e104c77
X-Google-Thread: 10e8ad,41180496b69c09cf
X-Google-Thread: 104a10,41180496b69c09cf
X-Google-Attributes: gid10bb69,gidfc521,gidf84d8,gid10e8ad,gid104a10,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news3.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx02.iad01.newshosting.com!newshosting.com!newsfeed.icl.net!
newsfeed.fjserv.net!news.maxwell.syr.edu!nntpserver.com!zeus.nntpserver.com!
hydra.nntpserver.com!not-for-mail
From: Mark@kb9rqz.aprs
Newsgroups:
alt.politics.homosexuality,alt.education,alt.dbs.directv,rec.radio.amateur.space,r
ec.food.drink.beer
Subject: Re: spaming hate monger
Date: Fri, 08 Dec 2006 15:53:15 -0500
Message-ID: <75kjn2t1gq2lmq5570f7srjpocajjtqurl@4ax.com>
References: <1159881994.642663.229430@h48g2000cwc.googlegroups.com>
<1162066010.997111.45530@i42g2000cwa.googlegroups.com>
<1164787817.495319.179220@j44g2000cwa.googlegroups.com>
<T7fbh.54807$39.24787@southeast.rr.com>
<1165311819.048659.210350@l12g2000cwl.googlegroups.com>
<1165425943.817914.20640@l12g2000cwl.googlegroups.com>
<he0en2p9uadn83m20caa7plngati5jt6b0@4ax.com> <LuWdnYQINLeP_-
TYnZ2dnUVZ_vCdnZ2d@adelphia.com>
X-Newsreader: Forte Free Agent 3.3/32.846
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
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Content-Transfer-Encoding: 7bit
Lines: 9
NNTP-Posting-Date: 08 Dec 2006 19:58:41 GMT
X-Complaints-To: abuse@teranews.com
Xref: g2news2.google.com alt.politics.homosexuality:166660 alt.education:44154
alt.dbs.directv:4055 rec.radio.amateur.space:523 rec.food.drink.beer:2450

On Fri, 8 Dec 2006 08:07:31 -0500, "John Doe" <hgorden@adelphia.net>
wrote:

>AND WHY DO WE NEED THIS KIND OF POSTING IN A GROUP THAT HAS NOTHING TO DO
>WITH THE SUBJECT? NAMELY AMATEUR RADIO!

becuase is was brought her by somebody

http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com




From -5643387446302299789
X-Google-Thread: 10bb69,af3a945b40f29083
X-Google-Thread: fc521,af3a945b40f29083
X-Google-Thread: f84d8,5228070b6e104c77
X-Google-Thread: 10e8ad,41180496b69c09cf
X-Google-Thread: 104a10,41180496b69c09cf
X-Google-Attributes: gid10bb69,gidfc521,gidf84d8,gid10e8ad,gid104a10,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news1.google.com!news4.google.com!news3.google.com!
border1.nntp.dca.giganews.com!nntp.giganews.com!local01.nntp.dca.giganews.com!
nntp.adelphia.com!news.adelphia.com.POSTED!not-for-mail
NNTP-Posting-Date: Fri, 08 Dec 2006 18:15:47 -0600
From: "John Doe" <hgorden@adelphia.net>
Newsgroups:
alt.politics.homosexuality,alt.education,alt.dbs.directv,rec.radio.amateur.space,r
ec.food.drink.beer
References: <1159881994.642663.229430@h48g2000cwc.googlegroups.com>
<1162066010.997111.45530@i42g2000cwa.googlegroups.com>
<1164787817.495319.179220@j44g2000cwa.googlegroups.com>
<T7fbh.54807$39.24787@southeast.rr.com>
<1165311819.048659.210350@l12g2000cwl.googlegroups.com>
<1165425943.817914.20640@l12g2000cwl.googlegroups.com>
<he0en2p9uadn83m20caa7plngati5jt6b0@4ax.com> <LuWdnYQINLeP_-
TYnZ2dnUVZ_vCdnZ2d@adelphia.com> <75kjn2t1gq2lmq5570f7srjpocajjtqurl@4ax.com>
Subject: Re: spaming hate monger
Date: Fri, 8 Dec 2006 19:22:13 -0500
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.2869
X-RFC2646: Format=Flowed; Original
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.2962
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Message-ID: <24CdnXg2aI-unefYnZ2dnUVZ_uyknZ2d@adelphia.com>
Lines: 20
NNTP-Posting-Host: 69.162.152.98
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MB8YbLY7MvWXDpwp4yTI4+2clcEx4xrVp3gIlCdyzSGlrlfvvnjZmgQy94qei59IPmZ0z9GX8Fi2!
kxD6+c6P14GUjCNhyKf5NRqVcRHS
X-Complaints-To: abuse@adelphia.net
X-DMCA-Complaints-To: copyright@adelphia.net
X-Abuse-and-DMCA-Info: Please be sure to forward a copy of ALL headers
X-Abuse-and-DMCA-Info: Otherwise we will be unable to process your complaint
properly
X-Postfilter: 1.3.32
Xref: g2news2.google.com alt.politics.homosexuality:166711 alt.education:44202
alt.dbs.directv:4058 rec.radio.amateur.space:524 rec.food.drink.beer:2451

Why don't you learn how to spell or better yet why don't you use the spell
checker - are you too lazy or stupid?

<Mark@kb9rqz.aprs> wrote in message
news:75kjn2t1gq2lmq5570f7srjpocajjtqurl@4ax.com...
> On Fri, 8 Dec 2006 08:07:31 -0500, "John Doe" <hgorden@adelphia.net>
> wrote:
>
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>>WITH THE SUBJECT? NAMELY AMATEUR RADIO!
>
> becuase is was brought her by somebody
>
> http://kb9rqz.blogspot.com/
>
> --
> Posted via a free Usenet account from http://www.teranews.com
>




From -2985975860764878283
X-Google-Thread: 10bb69,af3a945b40f29083
X-Google-Thread: fc521,af3a945b40f29083
X-Google-Thread: f84d8,5228070b6e104c77
X-Google-Thread: 10e8ad,41180496b69c09cf
X-Google-Thread: 104a10,41180496b69c09cf
X-Google-Attributes: gid10bb69,gidfc521,gidf84d8,gid10e8ad,gid104a10,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news1.google.com!news4.google.com!news.glorb.com!
nntpserver.com!zeus.nntpserver.com!hydra.nntpserver.com!not-for-mail
From: Mark@kb9rqz.aprs
Newsgroups:
alt.politics.homosexuality,alt.education,alt.dbs.directv,rec.radio.amateur.space,r
ec.food.drink.beer
Subject: Re: spaming hate monger
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Date: Fri, 08 Dec 2006 19:19:44 -0500
Message-ID: <c60kn2l6evf6tsg4ek8vc1ssm5q2dooc8o@4ax.com>
References: <1162066010.997111.45530@i42g2000cwa.googlegroups.com>
<1164787817.495319.179220@j44g2000cwa.googlegroups.com>
<T7fbh.54807$39.24787@southeast.rr.com>
<1165311819.048659.210350@l12g2000cwl.googlegroups.com>
<1165425943.817914.20640@l12g2000cwl.googlegroups.com>
<he0en2p9uadn83m20caa7plngati5jt6b0@4ax.com> <LuWdnYQINLeP_-
TYnZ2dnUVZ_vCdnZ2d@adelphia.com> <75kjn2t1gq2lmq5570f7srjpocajjtqurl@4ax.com>
<24CdnXg2aI-unefYnZ2dnUVZ_uyknZ2d@adelphia.com>
X-Newsreader: Forte Free Agent 3.3/32.846
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Lines: 14
NNTP-Posting-Date: 08 Dec 2006 23:25:11 GMT
X-Complaints-To: abuse@teranews.com
Xref: g2news2.google.com alt.politics.homosexuality:166712 alt.education:44203
alt.dbs.directv:4059 rec.radio.amateur.space:525 rec.food.drink.beer:2452

On Fri, 8 Dec 2006 19:22:13 -0500, "John Doe" <hgorden@adelphia.net>
wrote:

>Why don't you learn how to spell or better yet why don't you use the spell
>checker - are you too lazy or stupid?

just to stubron to do something under threat (it is RRAP you would not
undersatbd

why don't you remmebr what I am sure your mother must of have taught
you get my flies flies with honey than vinigar

of course she never explaned why wanted to catch flies :)
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com




From -9181543652778998427
X-Google-Thread: 10bb69,af3a945b40f29083
X-Google-Thread: fc521,af3a945b40f29083
X-Google-Thread: f84d8,5228070b6e104c77
X-Google-Thread: 10e8ad,41180496b69c09cf
X-Google-Thread: 104a10,41180496b69c09cf
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X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news4.google.com!news3.google.com!
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nntp.adelphia.com!news.adelphia.com.POSTED!not-for-mail
NNTP-Posting-Date: Fri, 08 Dec 2006 18:30:32 -0600
From: "John Doe" <hgorden@adelphia.net>
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Newsgroups:
alt.politics.homosexuality,alt.education,alt.dbs.directv,rec.radio.amateur.space,rec.food.drink.beer
References: <1162066010.997111.45530@i42g2000cwa.googlegroups.com>
<1164787817.495319.179220@j44g2000cwa.googlegroups.com>
<T7fbh.54807$39.24787@southeast.rr.com>
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<24CdnXg2aI-unefYnZ2dnUVZ_uyknZ2d@adelphia.com>
<c60kn2l6evf6tsg4ek8vc1ssm5q2dooc8o@4ax.com>
Subject: Re: spaming hate monger
Date: Fri, 8 Dec 2006 19:36:56 -0500
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.2869
X-RFC2646: Format=Flowed; Original
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.2962
Message-ID: <yqudnW1gR8w1nufYnZ2dnUVZ_tijnZ2d@adelphia.com>
Lines: 24
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X-Complaints-To: abuse@adelphia.net
X-DMCA-Complaints-To: copyright@adelphia.net
X-Abuse-and-DMCA-Info: Please be sure to forward a copy of ALL headers
X-Abuse-and-DMCA-Info: Otherwise we will be unable to process your complaint properly
X-Postfilter: 1.3.32
Xref: g2news2.google.com alt.politics.homosexuality:166719 alt.education:44208 alt.dbs.directv:4060 rec.radio.amateur.space:526 rec.food.drink.beer:2453

its too bad you didn't learn what your mother was trying to teach you!

<Mark@kb9rqz.aprs> wrote in message news:c60kn2l6evf6tsg4ek8vc1ssm5q2dooc8o@4ax.com...
> On Fri, 8 Dec 2006 19:22:13 -0500, "John Doe" <hgorden@adelphia.net>
> wrote:
>
>>Why don't you learn how to spell or better yet why don't you use the spell
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>
> just to stubron to do something under threat (it is RRAP you would not
> undersatbd
>
> why don't you remmebr what I am sure your mother must of have taught
> you get my flies flies with honey than vinigar
>
> of course she never explaned why wanted to catch flies :)
> http://kb9rqz.blogspot.com/

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>
> --
> Posted via a free Usenet account from http://www.teranews.com
>




From -1471357797255802196
X-Google-Thread: 10bb69,af3a945b40f29083
X-Google-Thread: fc521,af3a945b40f29083
X-Google-Thread: f84d8,5228070b6e104c77
X-Google-Thread: 10e8ad,41180496b69c09cf
X-Google-Thread: 104a10,41180496b69c09cf
X-Google-Attributes: gid10bb69,gidfc521,gidf84d8,gid10e8ad,gid104a10,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news1.google.com!news.maxwell.syr.edu!nntpserver.com!
zeus.nntpserver.com!hydra.nntpserver.com!not-for-mail
From: Mark@kb9rqz.aprs
Newsgroups: 
alt.politics.homosexuality,alt.education,alt.dbs.directv,rec.radio.amateur.space,r
ec.food.drink.beer
Subject: Re: spaming hate monger
Date: Fri, 08 Dec 2006 19:34:08 -0500
Message-ID: <631kn25s4vsdv0k2afp6djvvljaui885ht@4ax.com>
References: <T7fbh.54807$39.24787@southeast.rr.com> 
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<1165425943.817914.20640@l12g2000cwl.googlegroups.com> 
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<yqudnW1gR8w1nufYnZ2dnUVZ_tijnZ2d@adelphia.com>
X-Newsreader: Forte Free Agent 3.3/32.846
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Lines: 29
NNTP-Posting-Date: 08 Dec 2006 23:39:35 GMT
X-Complaints-To: abuse@teranews.com
Xref: g2news2.google.com alt.politics.homosexuality:166720 alt.education:44209 
alt.dbs.directv:4061 rec.radio.amateur.space:527 rec.food.drink.beer:2454

On Fri, 8 Dec 2006 19:36:56 -0500, "John Doe" <hgorden@adelphia.net>
wrote:

>its too bad you didn't learn what your mother was trying to teach you!

what do you alege she was trying to teach me that I missed out on?
>
><Mark@kb9rqz.aprs> wrote in message 
>news:c60kn2l6evf6tsg4ek8vc1ssm5q2dooc8o@4ax.com...
>> On Fri, 8 Dec 2006 19:22:13 -0500, "John Doe" <hgorden@adelphia.net>
>> wrote:
>>
>>>Why don't you learn how to spell or better yet why don't you use the spell
>>>checker - are you too lazy or stupid?
>>
>> just to stubron to do something under threat (it is RRAP you would not
>> undersatbd
>>
>> why don't you remmebr what I am sure your mother must of have taught
>> you get my flies flies with honey than vinigar
>>
>> of course she never explaned why wanted to catch flies :)
>> http://kb9rqz.blogspot.com/
>>
>> --
>> Posted via a free Usenet account from http://www.teranews.com
>>
>
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com




From -8172992977830603l7
X-Google-Thread: 10e8ad,71aeef10cd14ea4,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news3.google.com!sn-xt-sjc-04!sn-xt-sjc-07!sn-xt-sjc-09!
sn-post-sjc-01!supernews.com!corp.supernews.com!not-for-mail
From: "John" <j9432716m@yahoo.ca>
Newsgroups: rec.radio.amateur.space
Subject: test message - please disregard
Date: Sat, 9 Dec 2006 13:26:02 -0800
Organization: Posted via Supernews, http://www.supernews.com
Message-ID: <12nmafb86k883be@corp.supernews.com>
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.2869
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.2962
X-RFC2646: Format=Flowed; Original
X-Complaints-To: abuse@supernews.com
Lines: 5
Xref: g2news2.google.com rec.radio.amateur.space:528



test
```

```
From -7544808820822879180
X-Google-Thread: 10e8ad,71aeef10cd14ea4
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news4.google.com!newshub.sdsu.edu!elnk-nf2-pas!
newsfeed.earthlink.net!stamper.news.pas.earthlink.net!
newsread4.news.pas.earthlink.net.POSTED!3dd4ce4a!not-for-mail
Newsgroups: rec.radio.amateur.space
Subject: Re: test message - please disregard
From: Slow Code <my.mail@no.spam>
References: <12nmafb86k883be@corp.supernews.com>
Organization: None
User-Agent: Xnews/5.04.25
Lines: 11
Message-ID: <XTIeh.8327$sf5.1591@newsread4.news.pas.earthlink.net>
Date: Sun, 10 Dec 2006 00:53:11 GMT
NNTP-Posting-Host: 4.227.154.162
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread4.news.pas.earthlink.net 1165711991 4.227.154.162 (Sat, 09 Dec
2006 16:53:11 PST)
NNTP-Posting-Date: Sat, 09 Dec 2006 16:53:11 PST
Xref: g2news2.google.com rec.radio.amateur.space:529

"John" <j9432716m@yahoo.ca> wrote in
news:12nmafb86k883be@corp.supernews.com:

>
>
> test


Please ignore. Another test message.

SC


From 1612064191241037021
X-Google-Thread: 10e8ad,3c36ff99bfcab582,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news4.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!local01.nntp.dca.giganews.com!nntp.comcast.com!
news.comcast.com.POSTED!not-for-mail
NNTP-Posting-Date: Sat, 09 Dec 2006 21:28:57 -0600
From: "JoAnne K9JKM" <k9jkm_remove_@comcast.net>
Newsgroups: rec.radio.amateur.space
Subject: ANS-344 AMSAT News Service Weekly Bulletins
Date: Sat, 9 Dec 2006 21:29:09 -0600
MIME-Version: 1.0
Content-Type: text/plain;
     format=flowed;
     charset="iso-8859-1";
     reply-type=original
```

Content-Transfer-Encoding: 7bit
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.2869
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.2962
Message-ID: <JvednYcgc99k4-bYnZ2dnUVZ_h63nZ2d@comcast.com>
Lines: 384
NNTP-Posting-Host: 67.184.169.1
X-Trace: sv3-HLvkCaGe2WJlvDm0zF0SKFTCA2ExKVkyLI/cX7LFeqDFrMm+QT/04BkJfbwc9/
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BOc3raHk8YTFp28E0mvp0LHict7M4!9rVXpq4u7PohJWY=
X-Complaints-To: abuse@comcast.net
X-DMCA-Complaints-To: dmca@comcast.net
X-Abuse-and-DMCA-Info: Please be sure to forward a copy of ALL headers
X-Abuse-and-DMCA-Info: Otherwise we will be unable to process your complaint properly
X-Postfilter: 1.3.32
Xref: g2news2.google.com rec.radio.amateur.space:530

AMSAT NEWS SERVICE
ANS-344

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:

* RAFT, ANDE, MARSCom, and GeneSat-1 Satellites Going Up This Week
* Last Chance for Federal CFC Contributions to AMSAT This Week
* Send Your Name and Callsign to the Moon
* Please Make Your Updates to the AMSAT Volunteer Reporting System
* AMSAT-UK Initiates Push for Region 1 Microwave Satellite Allocation
* Unique Donation Opportunity Through The Pension Protection Act
* Satellite News From All Over
* ARISS Status Report for the Week of December 4, 2006

SB SAT @ AMSAT $ANS-344.01
RAFT, ANDE, MARSCom, and GeneSat-1 Satellites Going Up This Week

AMSAT News Service Bulletin 344.01
From AMSAT HQ SILVER SPRING, MD.
December 10, 2006
To All RADIO AMATEURS
BID: $ANS-344.01

Space Shuttle Discovery was successfully launched on Saturday carrying to orbit three new satellites, RAFT-1, MARSCOM and ANDE designed, built, and tested by the Midshipmen of the US Naval Academy's Satellite Laboratory in Annapolis, Maryland.

The RAFT-1 and ANDE satellite downlinks will be 145.825 MHz. The frequencies used by MARSCOM are on Navy-Marine Corps MARS frequencies.

For full technical details please refer to:
http://www.ew.usna.edu/%7Ebruninga/ande-raft-ops.html

Another feature of the RAFT mission will allow amateur radio operators to listen to the signal as the satellite crosses the National Space Surveillance Network satellite radar tracking system. RAFT has a 216.98 MHz direct conversion receiver down to 145.825 MHz so you will hear the radar ping on RAFT's downlink. It will be a tone proportional to the Doppler as it flies through the radar fence, lasting about one second.

GeneSat-1, a secondary payload aboard the Minotaur Launch Vehicle, will launch from the Mid-Atlantic Regional Spaceport (MARS) at NASA Wallops Flight Facility on December 11, 2006, about 7:00am EST. The Minotaur launch window is 3 hours, 1200z-1500z. GeneSat-1 is a 10 x 10 x 30 cm. spacecraft, which will conduct a cellular biology technology demonstration.

Of particular interest to the amateur radio satellite community, is the GeneSat-1 beacon. Operating at 437.075 MHz FM, the beacon sends an AX.25 packet every 5 seconds; the packet contains data about the spacecraft systems operation. Full details are available on the mission website at http://www.genesat1.org.

[ANS thanks the US Naval Academy and GeneSat teams for the above information]

/EX

SB SAT @ AMSAT $ANS-344.02
Last Chance for Federal CFC Contributions to AMSAT This Week

AMSAT News Service Bulletin 344.02
From AMSAT HQ SILVER SPRING, MD.
December 10, 2006
To All RADIO AMATEURS
BID: $ANS-344.02

Attention Federal Employees - This is your final week to support AMSAT through your pledge in the Combined Federal Campaign (CFC). Gunther Meisse, W8GSM, and AMSAT treasurer has announced that any Federal employee can make a contribution to the Radio Amateur Satellite Corporation when they complete their pledge for 2006. AMSAT is listed as Agency Number CFC 2944.

Your contribution directly supports AMSAT's educational outreach and satellite construction projects including work on AMSAT-Eagle. Pledges may be made by Federal civilian, postal and military donors during the campaign season.

The campaign runs from September 1st to December 15th, 2006.

To learn more about CFC visit the CFC website at:
http://www.opm.gov/cfc/

[ANS thanks Gunther Meisse, W8GSM, AMSAT Treasurer for the above information]

/EX

SB SAT @ AMSAT $ANS-344.03
Send Your Name and Callsign to the Moon

AMSAT News Service Bulletin 344.03
From AMSAT HQ SILVER SPRING, MD.
December 10, 2006
To All RADIO AMATEURS
BID: $ANS-344.03

The Japan Aerospace Exploration Agency (JAXA) is scheduled to launch the SELENE lunar orbiter by an H-IIA Launch Vehicle in the summer of 2007.

The major objective of the SELENE mission is to acquire scientific data to answer key questions on the Moon's origin and evolution. It is the first fully-fledged lunar exploration project since the Apollo program.

JAXA is collecting names and will have them etched on a sheet which is attached to the spacecraft. This is a worldwide campaign sponsored by JAXA in cooperation with The Planetary Society of Japan and The Planetary Society of the U.S.A.

Please send your name and message within the following letter limits before January 31, 2007:

In Japanese:	Name should be within 10 characters, and the message should be within 20 characters.
In English:	Name should be within 10 letters, and the message should be within 40 letters.

More information is availabe in English at:
http://www.jaxa.jp/pr/event/selene/index_e.html

[ANS thanks JAXA for the above information]

/EX

SB SAT @ AMSAT $ANS-344.04
Please Make Your Updates to the AMSAT Volunteer Reporting System

AMSAT News Service Bulletin 344.04
From AMSAT HQ SILVER SPRING, MD.
December 10, 2006
To All RADIO AMATEURS
BID: $ANS-344.04

Attention AMSAT Volunteers:
It is that time of the year again.
We need to be sure as many volunteer hours as possible have been reported to the VRS (Volunteer Reporting System) on the AMSAT web site. Over the last few years thousands of dollars of volunteer time have been reported and we are sure this year will be our largest given all the work that has done on Eagle.

If you are already registered on the VRS site please take a few minutes and report these 2006 hours. If you have not reported before, please visit amsat.org, register, and help us keep track of this important aspect of the AMSAT mission. We'll keep the year open until the middle of January but hope you will take the time within the next couple weeks to update your report. You may combine your efforts for the entire year into one filing if that would make the process more convenient.

[ANS thanks Gunther Meisse, W8GSM, AMSAT Treasurer for the above information]

/EX

SB SAT @ AMSAT $ANS-344.05
AMSAT-UK Initiates Push for Region 1 Microwave Satellite Allocation

AMSAT News Service Bulletin 344.05
From AMSAT HQ SILVER SPRING, MD.
December 10, 2006
To All RADIO AMATEURS
BID: $ANS-344.05

Graham, G3VZV announced last week that AMSAT-UK is working with RSGB on a proposal paper to seek to establish access to the 3400-3410 MHz band for the Amateur Satellite Service in IARU Region 1. This meeting is scheduled for February, 2007.

At present only Regions 2 and 3 have such an ITU allocation and here in Region 1, even terrestrial activity is only by footnote to the Radio Regulations or by national rule making.

We have a list of Region 1 countries that do have such terrestrial access - see http://www.uk.amsat.org/images/3400region1.JPG

If anyone has any corrections or additions to the list please let Graham know [callsign at amsat.org].

[ANS thanks Graham, G3VZV for the above information]

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SB SAT @ AMSAT $ANS-344.06
Unique Donation Opportunity Through The Pension Protection Act

AMSAT News Service Bulletin 344.06
From AMSAT HQ SILVER SPRING, MD.
December 10, 2006
To All RADIO AMATEURS
BID: $ANS-344.06

Recent legislation passed by Congress and signed by President Bush can help AMSAT raise the funds needed to build Eagle. The law, called the Pension Protection Act (PPA), includes a provision enabling AMSAT to raise substantially more money than might have been previously possible. However, time is short to take full advantage of this unique opportunity.

Serious construction work must be funded this year to have Eagle ready to orbit by the target of 2009.

Basically, here's the story on how the new law can help Eagle fly!

The PPA provides that U.S. taxpayers with IRAs who have reached the age of 70-1/2, may contribute to qualified charities, part or all (up to $100,000 per year or $200,000 for married couples filing jointly), of the money they must annually withdraw from their IRAs.

Thus, many AMSAT members and other supporters of the amateur radio space program have a marvelous opportunity to keep the Eagle project on track.

If you must withdraw a certain amount from your IRA each year, there is a big advantage to making such withdrawals as direct contributions to AMSAT rather than merely receiving the distributions and then contributing in the usual manner. Under PPA, the amount you contribute directly is NOT counted as income and thus may put you into a lower tax bracket. It may also reduce the percentage of your Social Security income subject to taxation.

Key provisions of the new legislation to keep in mind:

1. Donors must hold either a conventional or Roth IRA.

2. Donors must be at least 70-1/2 years of age.

3. Contributions must be made directly from the IRA to the charitable organization not to a donor- advised fund, private foundation, gift annuity or trust.

4. Donations may be made this year and next only, and must be made by December 31, 2006 and December 31, 2007.

5. The maximum amount a contributor may donate each year is $100,000.

6. Direct contributions to qualified charities from IRAs, in accordance with the PPA provisions, are NOT counted as taxable income.

If you are 70-1/2 or older and have an IRA, you are in a position to take advantage of this potential windfall for the Eagle project. AMSAT urges you to first check with your tax advisor for specifics regarding your individual situation, then ask your IRA custodian to transfer to AMSAT part or all of what you are required to withdraw. Be sure to have this transfer completed before December 31st.

Let's all of us do our part to get Eagle into orbit.

* Have your IRA custodian call the AMSAT office to get information on how to transfer your contribution. The number 301-589-6062. Office hours are 10 AM to 6 PM EST.

[ANS thanks BIll, W3XO, for the above information]

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SB SAT @ AMSAT $ANS-344.07
Satellite News From All Over

AMSAT News Service Bulletin 344.07
From AMSAT HQ SILVER SPRING, MD.
December 10, 2006
To All RADIO AMATEURS
BID: $ANS-344.07

* Heads up for European satellite operators! Paul, 2E1EUB says he will be active from Scotland on the birds from December 10-14.

* Ed Long, WA4SWJ, Editor of The AMSAT Journal announced this week that the Nov/Dec 06 issue of The AMSAT Journal was uploaded to the printer. You should have it in you mailbox soon. Thanks to all the Journal contributors.

* The HC8N (Galapagos Islands) contest group was active on the AO-51 and SO-50 satellites prior to the CQ WW CW Contest. A total of 16 QSOs were made via these satellites in 6 countries. Ramon, XE1KK - who had given many operators their first satellite QSO with the Galapagos finally worked HC8N via SO-50. The HC8N 2006 satellite station consisted of a FT-50R and an "Arrow" antenna. Bruce, AA5B and Mark, N5OT assisted with the satellite activity. QSL via W5UE.

* Matthias, DD1US has a "Sounds from Space" webpage at http://www.dd1us.de. He has collected recordings of space objects like MIR, ISS and satellites presently in orbit which may be of help to people identify transmissions they might have received.

[ANS thanks everyone for the above information]

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SB SAT @ AMSAT $ANS-344.08
ARISS Status Report for the Week of December 4, 2006

AMSAT News Service Bulletin 344.08
From AMSAT HQ SILVER SPRING, MD.
December 10, 2006
To All RADIO AMATEURS
BID: $ANS-344.08

1. School Contacts to be Scheduled

The Amateur Radio on the International Space Station (ARISS) team continues to work on scheduling school contacts for December.

2. ARRL Article on Henri D'Haese School Contact

The American Radio Relay League (ARRL) ran an article on Mike Lopez-Alegria's Amateur Radio contact with children attending the Henri D'Haese Primary School in Belgium. See:
http://www.arrl.org/news/stories/2006/11/28/102/?nc=1

3. Debrief Session with Space Visitor

On Tuesday, November 28, the ARISS team spoke with space participant Anousheh Ansari to discuss her experience with Amateur Radio contacts while onboard the ISS. She provided valuable feedback to the team.

4. Astronaut Participates in SKYWARN Recognition Day

The National Weather Service (NWS) and the American Radio Relay League co-sponsored SKYWARN Recognition Day on Saturday, December 2 to thank those hams who volunteer to act as storm spotters and who are trained in emergency communications. The activity called for Amateur Radio perators to exchange contact information, including a short weather report for their location, with as many NWS stations as possible. Mike Lopez-Alegria, KE5GTK, took part in the activities and was heard speaking to hams in Texas.

5. ARRL Story on ARISS Mentor

The American Radio Relay League (ARRL) ran a story on Barry Cohen, K2JV. Cohen mentored the Salt Brook Elementary School Amateur Radio on the ISS contact in New Providence, New Jersey, in June of this year and was recently named "Amateur of the Year." See: http://www.arrl.org/?artid=6981

6. ARRL Article on Shuttle STS-116 Crew

The American Radio Relay League (ARRL) ran a story covering the upcoming shuttle launch which will carry ham astronauts Sunita Williams, KD5PLB, and Christer Fugelsang, KE5CGR/SA0AFS. Both plan to participate in Amateur Radio contacts during their missions. See: http://www.arrl.org/?artid=6996

7. ARRL QST Articles

The December issue of the American Radio Relay League (ARRL) QST ran an article, "Civilian Space Traveler and Astronauts Pull Off ARISS Triple Header". The story was about Jeff Williams, Thomas Reiter and Anousheh Ansari and described their recent Amateur Radio on the International Space Station school contacts.

Another story, "Kids Day June 2007", summarized ARRL's on-the-air operating event for kids. Astronaut Dorothy Metcalf-Lindenburger, KE5DAT, made the comment, "As an astronaut, I enjoyed volunteering my time to encourage kids to study for their license so they can speak to folks all around the world and even on the International Space Station!"

[ANS thanks Carol, KB3LKI for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM

```
From -3502217536398496166
X-Google-Thread: 10e8ad,a8deac7a78e89354,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news4.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!wn14feed!worldnet.att.net!bgtnsc04-
news.ops.worldnet.att.net.POSTED!53ab2750!not-for-mail
From: "AEONSCOOP" <aeonscoop@worldnet.att.net>
Newsgroups: rec.radio.amateur.space
References: <ektv8h$ejk$1@news.ntu-kpi.kiev.ua>
Subject: Re: Check this out
Lines: 57
MIME-Version: 1.0
Content-Type: multipart/alternative;
     boundary="----=_NextPart_000_0018_01C71C25.DD18B4A0"
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 5.50.4133.2400
X-MimeOLE: Produced By Microsoft MimeOLE V5.50.4133.2400
```

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Date: Sun, 10 Dec 2006 14:33:22 GMT
NNTP-Posting-Host: 12.72.36.6
X-Complaints-To: abuse@worldnet.att.net
X-Trace: bgtnsc04-news.ops.worldnet.att.net 1165761202 12.72.36.6 (Sun, 10 Dec
2006 14:33:22 GMT)
NNTP-Posting-Date: Sun, 10 Dec 2006 14:33:22 GMT
Organization: AT&T Worldnet
Xref: g2news2.google.com rec.radio.amateur.space:531

This is a multi-part message in MIME format.

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Content-Type: text/plain;
	charset="iso-8859-1"
Content-Transfer-Encoding: quoted-printable

Starting Out:

Radio emmisions are effectively produced by an object M which resides =
within a boundry; the sourse heat reflected from the surface...

AEONSCOOP
  "Admin" <admin@gmail.com> wrote in message =
news:ektv8h$ejk$1@news.ntu-kpi.kiev.ua...
  http://one.revver.com/find/user/AltimitHacker#_show_video_97897=20


------=_NextPart_000_0018_01C71C25.DD18B4A0
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Content-Transfer-Encoding: quoted-printable

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charset=3Diso-8859-1">
<META content=3D"MSHTML 5.50.4134.600" name=3DGENERATOR>
<STYLE></STYLE>
</HEAD>
<BODY bgColor=3D#ffffff>
<DIV><FONT face=3DArial size=3D2>Starting Out:</FONT></DIV>
<DIV><FONT face=3DArial size=3D2></FONT>&nbsp;</DIV>
<DIV><FONT face=3DArial size=3D2>Radio emmisions are effectively =
produced by an=20
object M&nbsp;which resides within a boundry;&nbsp;the sourse heat =
reflected=20
from the surface...</FONT></DIV>
<DIV><FONT face=3DArial size=3D2></FONT>&nbsp;</DIV>
<DIV><FONT face=3DArial size=3D2>AEONSCOOP</FONT></DIV>
<BLOCKQUOTE dir=3Dltr=20
style=3D"PADDING-RIGHT: 0px; PADDING-LEFT: 5px; MARGIN-LEFT: 5px; =
BORDER-LEFT: #000000 2px solid; MARGIN-RIGHT: 0px">
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href=3D"mailto:admin@gmail.com">admin@gmail.com</A>&gt;=20
  wrote in message <A=20
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href=3D"news:ektv8h$ejk$1@news.ntu-kpi.kiev.ua">news:ektv8h$ejk$1@news.nt=
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  <P><A=20
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X-Google-Thread: fe9fa,ce1376eef577be54
X-Google-Thread: fdc67,a740ac9833c88ee
X-Google-Thread: 1138ec,f52b434fa0dd288c
X-Google-Attributes:
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ic
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news4.google.com!news.glorb.com!news-out.octanews.net!
indigo.octanews.net!auth.rouge.octanews.com.POSTED!not-for-mail
Subject: Re: cease and desist yor harrassment - Mark, Just ignore them.
Date: Thu, 17 Aug 2006 18:32:54 -0600
From: Art Deco <erfc@netcabal.com>
Newsgroups: alt.fan.art-
bell,alt.usenet.kooks,rec.radio.cb,rec.radio.amateur.policy,rec.radio.amateur.spac
e,alt.alien.vampire.flonk.flonk.flonk,alt.astronomy,comp.os.os2.advocacy
Message-ID: <17082006183254634O%erfc@netcabal.com>
References: <1155080474.294832.75770@n13g2000cwa.googlegroups.com>
<1155259600.283710.53650@75g2000cwc.googlegroups.com>
<tWYCg.12158$Ta6.6959@tornado.socal.rr.com> <110820062122123846%erfc@netcabal.com>
<pan.2006.08.15.14.22.12.287241@meower.flonker.kookologist.sf-fan.callahanian>
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.mockery.demon.not.really.leola>
<1155823884.905239.280300@i3g2000cwc.googlegroups.com>
<i5j9e2ddmslqvh2kv83fdqup61fg7qff09@4ax.com>
<pan.2006.08.17.21.19.02.560831@hail.eris.flonk.meow.all.hail.discordia.meow.flonk
.mockery.demon.not.really.leola>
<E06Fg.5091$Sn3.4009@newsread3.news.pas.earthlink.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-transfer-encoding: 8bit
```

Mail-Copies-To: nobody
User-Agent: Thoth/1.7.2 (Carbon/OS X)
X-Hammer-of-Thor: September 2005
X-FOB: Yes
Lines: 51
Organization: Octanews
NNTP-Posting-Date: 17 Aug 2006 19:32:54 CDT
X-Complaints-To: abuse@octanews.net
Xref: g2news2.google.com alt.fan.art-bell:77447 alt.usenet.kooks:220834
rec.radio.cb:16217 rec.radio.amateur.policy:38491 rec.radio.amateur.space:380
alt.alien.vampire.flonk.flonk.flonk:68405 alt.astronomy:71589
comp.os.os2.advocacy:10121

Slow Code <my.mail@no.spam> wrote:

>"Text Medium No. 5" <mhm29x21@meow.flonk> wrote in
>news:pan.2006.08.17.21.19.02.560831
>@hail.eris.flonk.meow.all.hail.discordia.meow.flonk.mockery.demon.not.reall
>y.leola:
>
>> Hail Eris! On Thu, 17 Aug 2006 20:07:58 +0000, Bookman jabbered inanely:
>>
>>> On 17 Aug 2006 07:11:24 -0700, "an old freind" <kb9rqz-ars@hotmail.com>
>>> wrote:
>>>
>>>>Text Medium No. 5 wrote:
>>>>>
>>>>cease and desist your harrassment
>>>
>>> What harassment?
>>>
>>> ESL!
>>
>> Mr. Mark Morgan is severely confused as to what constitutes
>> "harassment". Either that, or else he's complaining about us(tinu)
>> bugging Tholenator.
>>
>
>
>Mark, Just ignore them.
>
>They only tease you because of the stupid things you say when you
>follow up. Just ignore them and they'll give up.
>
>Stop giving them reasons to tease you. It only makes you look
>more stupid.
>
>Take a break from the radio groups for a while, Maybe work on your
>moon bounce some more.
>
>SC

How many more times will you be posting the same screed?

--
COOSN-266-06-39716
Official Associate AFA-B Vote Rustler
Official Overseer of Kooks and Saucerheads in alt.astronomy
Official "Usenet psychopath and born-again LLPOF minion",
as designated by Brad Guth

"Who is "David Tholen", Daedalus? Still suffering from
attribution problems?"
-- Dr. David Tholen

From 3710753833556347922
X-Google-Thread: fe9fa,ce1376eef577be54
X-Google-Thread: fdc67,a740ac9833c88ee
X-Google-Thread: 1138ec,f52b434fa0dd288c
X-Google-Thread: 106284,f52b434fa0dd288c
X-Google-Thread: 10f7a7,f52b434fa0dd288c
X-Google-Thread: 106d41,ce1376eef577be54
X-Google-Thread: 10bf43,ce1376eef577be54
X-Google-Thread: 10e8ad,ce1376eef577be54
X-Google-Attributes:
gidfe9fa,gidfdc67,gid1138ec,gid106284,gid10f7a7,gid106d41,gid10bf43,gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news3.google.com!border1.nntp.dca.giganews.com!
border2.nntp.dca.giganews.com!nntp.giganews.com!news-out.octanews.net!
indigo.octanews.net!auth.rouge.octanews.com.POSTED!not-for-mail
Subject: Re: The Tholen classification
Date: Thu, 17 Aug 2006 18:52:32 -0600
From: Art Deco <erfc@netcabal.com>
Newsgroups:
alt.alien.vampire.flonk.flonk.flonk,alt.astronomy,comp.os.os2.advocacy,alt.fan.art-bell,alt.usenet.kooks,rec.radio.cb,rec.radio.amateur.policy,rec.radio.amateur.space
Message-ID: <170820061852327059%erfc@netcabal.com>
References: <1155080474.294832.75770@n13g2000cwa.googlegroups.com>
<1155259600.283710.53650@75g2000cwc.googlegroups.com>
<tWYCg.12158$Ta6.6959@tornado.socal.rr.com> <110820062122123846%erfc@netcabal.com>
<pan.2006.08.15.14.22.12.287241@meower.flonker.kookologist.sf-fan.callahanian>
<160820062057151895%erfc@netcabal.com>
<pan.2006.08.17.11.34.08.255735@hail.eris.flonk.meow.all.hail.discordia.meow.flonk.mockery.demon.not.really.leola>
MIME-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-transfer-encoding: 8bit
Mail-Copies-To: nobody
User-Agent: Thoth/1.7.2 (Carbon/OS X)
X-Hammer-of-Thor: September 2005
X-FOB: Yes
Lines: 45
Organization: Octanews

```
NNTP-Posting-Date: 17 Aug 2006 19:52:32 CDT
X-Complaints-To: abuse@octanews.net
Xref: g2news2.google.com alt.alien.vampire.flonk.flonk.flonk:68409
alt.astronomy:71595 comp.os.os2.advocacy:10126 alt.fan.art-bell:77451
alt.usenet.kooks:220846 rec.radio.cb:16220 rec.radio.amateur.policy:38493
rec.radio.amateur.space:381

Text Medium No. 5 <mhm29x21@meow.flonk> wrote:

>Hail Eris! On Wed, 16 Aug 2006 20:57:15 -0600, Art Deco jabbered inanely:
>> TransWench wrote:
>>>I was busily flonking away in alt.usenet.kooks, when The Goddess Eris
>>>Herself suddenly made me reply to Art Deco:
>>>> Classic "oar pin" Tholenator(tm) <"tholen@antispam.ham"> tholed:
>>>>
>>>>>> As with OS/2; it is an example of faltering support by the
>>>>>> manufacturer and vendor of the product.
>>>>>
>>>>>On what basis do you make that claim, Loonie?
>>>
>>>Is there anyone who _can't_ WHOMP you, Tholok00k? Loonie's "claim" is
>>>valid, OS/2's support from both M$ and IBM is faltering, and cooa is
>>>under the dominion of Teh Empire of MEOW.
>>
>> Another fact glaring him in the face that he will deny and dismiss with
>> "classic erroneous ...".
>
>Without actually making any sort of logical justification for his
>objection, too, I'd wager.

As Tholen pronounceth, so T3H TRVTH is.  Q.E.D.
>
>>>> embowel 0.462806447
>>>
>>>dispersion 0.009162171119676271
>>
>> desolation 0.390269598
>
>avocation 0.9999999872143876

claiming 0.885768485

--
COOSN-266-06-39716
Official Associate AFA-B Vote Rustler
Official Overseer of Kooks and Saucerheads in alt.astronomy
Official "Usenet psychopath and born-again LLPOF minion",
  as designated by Brad Guth

"Who is "David Tholen", Daedalus?  Still suffering from
attribution problems?"
  -- Dr. David Tholen
```

From -3187563069729981351
X-Google-Thread: 10bf43,2eaf18ff5ebea7f7
X-Google-Thread: 10f7a7,813f13f1ab0567a7
X-Google-Thread: f9daf,813f13f1ab0567a7
X-Google-Thread: 106d41,813f13f1ab0567a7
X-Google-Thread: 10e8ad,813f13f1ab0567a7
X-Google-Thread: f8ce7,7657a5eed05387d9
X-Google-Thread: 1138ec,a930c39c8c3df8f9,start
X-Google-Attributes:
gid10bf43,gid10f7a7,gidf9daf,gid106d41,gid10e8ad,gidf8ce7,gid1138ec,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news4.google.com!news.glorb.com!news-out.octanews.net!
indigo.octanews.net!auth.rouge.octanews.com.POSTED!not-for-mail
Subject: Re: some explanation since Robeson has choosen to renew his assult on th
NG, and me - Mark, Just ignore them.
Date: Thu, 17 Aug 2006 19:02:28 -0600
From: Art Deco <erfc@netcabal.com>
Newsgroups:
rec.radio.amateur.policy,alt.usenet.kooks,alt.revenge,rec.radio.cb,rec.radio.amate
ur.space,alt.music.michael-jackson,comp.os.os2.advocacy
Message-ID: <170820061902282807%erfc@netcabal.com>
References: <1155298281.480099.57590@h48g2000cwc.googlegroups.com>
<1155301602.610277.95390@b28g2000cwb.googlegroups.com>
<1155312973.033376.134900@i42g2000cwa.googlegroups.com>
<pan.2006.08.16.22.25.51.899513@hail.eris.flonk.meow.all.hail.discordia.meow.flonk
.mockery.demon.not.really.leola>
<1155767340.849495.207160@m73g2000cwd.googlegroups.com>
<pan.2006.08.17.06.50.51.193526@snarky.trolling.and.mocking.scoville>
<x76Fg.5134$Sn3.3586@newsread3.news.pas.earthlink.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-transfer-encoding: 8bit
Mail-Copies-To: nobody
User-Agent: Thoth/1.7.2 (Carbon/OS X)
X-Hammer-of-Thor: September 2005
X-FOB: Yes
Lines: 51
Organization: Octanews
NNTP-Posting-Date: 17 Aug 2006 20:02:28 CDT
X-Complaints-To: abuse@octanews.net
Xref: g2news2.google.com rec.radio.amateur.policy:38494 alt.usenet.kooks:220851
alt.revenge:6067 rec.radio.cb:16222 rec.radio.amateur.space:382 alt.music.michael-
jackson:60828 comp.os.os2.advocacy:10131

Slow Code <my.mail@no.spam> wrote:

>FreeSpeechStore <freespeechstore@meow.fuckhead> wrote in
>news:pan.2006.08.17.06.50.51.193526@snarky.trolling.and.mocking.scoville:
>
>> On Wed, 16 Aug 2006 15:29:00 -0700, an old freind wrote:
>>> Text Medium No. 5 wrote:
>>>> Hail Eris! On Fri, 11 Aug 2006 09:16:13 -0700, marqueenie_von_dork

```
>>>> jabbered inanely:
>>>
>>>> > YOU,otoh, have gone out of your way to post gay filth here. I have
>>>> > copies of YOUR posts to prove it. YOU are not welcome here you filty
>>>> > sodomite!
>>>> >
>>>> > aren't you in violation of the states sodomy laws??
>>>>
>>>> Keep it up. I see many k00k awards in your future, you busted urinal.
>>>
>>> and in his past he is Roger Wisemen sometimes called Woger
>>
>> Figures that a hypocrite like him is the one complaining about "filth".
>> BTW, put an empty line between your words and the one to whom you're
>> responding. Makes you easier to read. Oh, and that's "Wiseman", and a
>> more inappropriate surname could not be imagined...
>>
>
>Mark, Just ignore them.
>
>They only tease you because of the stupid things you say when you
>follow up.  Just ignore them and they'll give up.
>
>Stop giving them reasons to tease you.  It only makes you look
>more stupid.
>
>Take a break from the radio groups for a while,  Maybe work on your
>moon bounce some more.
>
>SC

Clueless spammer.

--
COOSN-266-06-39716
Official Associate AFA-B Vote Rustler
Official Overseer of Kooks and Saucerheads in alt.astronomy
Official "Usenet psychopath and born-again LLPOF minion",
  as designated by Brad Guth

"Who is "David Tholen", Daedalus?  Still suffering from
attribution problems?"
  -- Dr. David Tholen


From 4581670907418080599
X-Google-Thread: 10bf43,6742993d924f2d47
X-Google-Thread: 10f7a7,9967071e232d70e9
X-Google-Thread: f9daf,9967071e232d70e9
X-Google-Thread: 106d41,9967071e232d70e9
X-Google-Thread: 10e8ad,9967071e232d70e9
X-Google-Thread: fe9fa,7430fa57c98fcec,start
X-Google-Thread: f8ce7,7430fa57c98fcec,start
```

```
X-Google-Thread: f54c9,7430fa57c98fcec,start
X-Google-Thread: 1138ec,7430fa57c98fcec,start
X-Google-Attributes:
gid10bf43,gid10f7a7,gidf9daf,gid106d41,gid10e8ad,gidfe9fa,gidf8ce7,gidf54c9,gid113
8ec,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news2.google.com!news4.google.com!
border1.nntp.dca.giganews.com!border2.nntp.dca.giganews.com!nntp.giganews.com!
pd7cy3no!pd7cy4no!shaw.ca!pd7tw2no.POSTED!53ab2750!not-for-mail
X-Trace-PostClient-IP: 70.68.151.67
From: TransWench <popesnarky@meow.org>
Organization: Teh Empire of MEOW
Subject: Re: well Mr Slow code has decicded to highlight the problems of the NG
User-Agent: Pan/0.14.2.91 (As She Crawled Across the Table)
Message-Id: <pan.2006.08.18.10.09.58.69729@meower.flonker.kookologist.sf-
fan.callahanian>
Newsgroups:
rec.radio.amateur.policy,alt.usenet.kooks,alt.revenge,rec.radio.cb,rec.radio.amate
ur.space,alt.alien.vampire.flonk.flonk.flonk,alt.music.michael-
jackson,rec.music.classical.recordings,comp.os.os2.advocacy
References: <1155772639.440140.251430@p79g2000cwp.googlegroups.com>
<18909$44e44d25$d1cc5bdd$14927@snip.allthenewsgroups.com>
<1155825831.737438.295760@p79g2000cwp.googlegroups.com>
<1155835956.231036.305820@m79g2000cwm.googlegroups.com>
Reply-To: Lola <popesnarky@gmail.com>
X-FoxWench: Feather
X-Lepheaux: Idiot
X-Keywords: jihad, AT&T, Tzanhanim, Whitewater, MOD
MIME-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 8bit
Lines: 34
Date: Fri, 18 Aug 2006 10:10:02 GMT
NNTP-Posting-Host: 64.59.144.75
X-Complaints-To: abuse@shaw.ca
X-Trace: pd7tw2no 1155895802 64.59.144.75 (Fri, 18 Aug 2006 04:10:02 MDT)
NNTP-Posting-Date: Fri, 18 Aug 2006 04:10:02 MDT
Xref: g2news2.google.com rec.radio.amateur.policy:38547 alt.usenet.kooks:220949
alt.revenge:6068 rec.radio.cb:16254 rec.radio.amateur.space:383
alt.alien.vampire.flonk.flonk.flonk:68454 alt.music.michael-jackson:60841
rec.music.classical.recordings:92228 comp.os.os2.advocacy:10160

I was busily flonking away in %g, when The Goddess Eris Herself suddenly
made me reply to Mr. Hammington:
> an old friend wrote:
>> donttrythisathome wrote:
>> > "an old freind" wrote...
>> > > by truly spamming the ng which of course various parties will insist
>> > > it perfectly ok further highlighting the true motives of the Wismen
>> > > and Robeson
>> >
>> > I think both of them should hop up on each other's shoulders and tell
>> > the other "I love you".
```

>>
>> for the own sake perhaps but mental help or take out from dr k would be
>> a better for the rest of us
>
> STFU Marqueer................
> lunch is served,now go feast of the shit bag.

Man, if Cletis Perkins hadn't already beaten you to the punch, I think I'd be nominating all the rec.radio.* 'phobes for a Busted Urinal at once...As it is, the sheer "fucking fuck-ness" of his posts will win him that "coveted" trophy, but you guys are a shoo-in for next month, especially with Wiseman among you. I mean, Mark's merely boring, hence the Golden Killfile nom, but you lot just plain stink up the joint. You deserve proper recognition, you do.

--
____
Hail Eris! All hail Discordia!! Kallisti!!! mhm 29x21
Pope Snarky Goodfella of the undulating cable, JM,
CK, POEE, KOTHASK, GGGHD, HCNB, IAC, MWFA
Email popesnarky *at* gmail.com
I want a boyfriend who is sensitive and caring,
but they already have boyfriends.

```
From -6609778828971205076
X-Google-Thread: fc2a5,f8ce44921aecd15e
X-Google-Thread: 107ada,884c9e429cd29b18
X-Google-Thread: 10bf43,7831d7ab14abf4ba
X-Google-Thread: 10e8ad,f8ce44921aecd15e
X-Google-Attributes: gidfc2a5,gid107ada,gid10bf43,gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!postnews.google.com!m73g2000cwd.googlegroups.com!not-for-
mail
From: peewee_lloyd_davies@yahoo.com
Newsgroups:
rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.rad
io.amateur.space
Subject: Retard Marky spams some more
Date: 18 Aug 2006 05:50:22 -0700
Organization: http://groups.google.com
Lines: 5
Message-ID: <1155905422.359878.320760@m73g2000cwd.googlegroups.com>
References: <44e23a97$0$21028$88260bb3@free.teranews.com>
   <1155681102.743274.169300@74g2000cwt.googlegroups.com>
   <1155687062.084385.29180@i42g2000cwa.googlegroups.com>
   <1155687181.832750.241820@p79g2000cwp.googlegroups.com>
   <1155731470.893781.68090@m73g2000cwd.googlegroups.com>
   <1155743368.829657.131340@m79g2000cwm.googlegroups.com>
   <1155756718.845363.87450@b28g2000cwb.googlegroups.com>
   <q2u6e29s13sf59b0d4isjhl8bgmfst27cp@4ax.com>
   <1155818709.467035.142500@h48g2000cwc.googlegroups.com>
   <fpt8e2pat54sbvle5jp3bnbkpk599voa3p@4ax.com>
```

NNTP-Posting-Host: 65.54.155.42
Mime-Version: 1.0
Content-Type: text/plain; charset="iso-8859-1"
X-Trace: posting.google.com 1155905428 7778 127.0.0.1 (18 Aug 2006 12:50:28 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Fri, 18 Aug 2006 12:50:28 +0000 (UTC)
In-Reply-To: <fpt8e2pat54sbvle5jp3bnbkpk599voa3p@4ax.com>
User-Agent: G2/0.2
X-HTTP-UserAgent: Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1;
SV1),gzip(gfe),gzip(gfe)
Complaints-To: groups-abuse@google.com
Injection-Info: m73g2000cwd.googlegroups.com; posting-host=65.54.155.42;
   posting-account=hhK0dQ0AAADty9Zux-UTqaosOMA-iJfP
Xref: g2news2.google.com rec.radio.amateur.homebrew:6528
rec.radio.amateur.misc:19270 rec.radio.amateur.policy:38571
rec.radio.amateur.space:384

MarkMoron@kb9rqz.com wrote:
>ce

Make any illegal EME contacts with bootleggers, Markie?

From 3606643273054454220
X-Google-Thread: fc2a5,f8ce44921aecd15e
X-Google-Thread: 107ada,884c9e429cd29b18
X-Google-Thread: 10bf43,7831d7ab14abf4ba
X-Google-Thread: 10e8ad,f8ce44921aecd15e
X-Google-Attributes: gidfc2a5,gid107ada,gid10bf43,gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news2.google.com!news4.google.com!news.glorb.com!
newsfeed-east.nntpserver.com!nntpserver.com!statler.nntpserver.com!
be5.nntpserver.com!not-for-mail
From: Mark@kb9rqz.com
Newsgroups:
rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space
Subject: Re: Retard Marky spams some more
Date: Fri, 18 Aug 2006 09:50:13 -0400
Message-ID: <4vgbe2dfv69e6frv93c2h198gkkupc9fs3@4ax.com>
References: <1155687062.084385.29180@i42g2000cwa.googlegroups.com>
<1155687181.832750.241820@p79g2000cwp.googlegroups.com>
<1155731470.893781.68090@m73g2000cwd.googlegroups.com>
<1155743368.829657.131340@m79g2000cwm.googlegroups.com>
<1155756718.845363.87450@b28g2000cwb.googlegroups.com>
<q2u6e29s13sf59b0d4isjhl8bgmfst27cp@4ax.com>
<1155818709.467035.142500@h48g2000cwc.googlegroups.com>
<fpt8e2pat54sbvle5jp3bnbkpk599voa3p@4ax.com>
<1155905422.359878.320760@m73g2000cwd.googlegroups.com>
X-Newsreader: Forte Free Agent 3.3/32.846
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii

```
Content-Transfer-Encoding: 7bit
Lines: 9
NNTP-Posting-Date: 18 Aug 2006 12:59:50 GMT
X-Complaints-To: abuse@teranews.com
Xref: g2news2.google.com rec.radio.amateur.homebrew:6530
rec.radio.amateur.misc:19299 rec.radio.amateur.policy:38605
rec.radio.amateur.space:385

On 18 Aug 2006 05:50:22 -0700, peewee_lloyd_davies@yahoo.com wrote:

>MarkMoron@kb9rqz.com wrote:
>>ce
>
>Make any illegal EME contacts with bootleggers, Markie?
no eme contact s ilegal
cease desists and grow up
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com



From -2947212564186852405
X-Google-Thread: fc2a5,f8ce44921aecd15e
X-Google-Thread: 107ada,884c9e429cd29b18
X-Google-Thread: 10bf43,7831d7ab14abf4ba
X-Google-Thread: 10e8ad,f8ce44921aecd15e
X-Google-Attributes: gidfc2a5,gid107ada,gid10bf43,gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news1.google.com!news3.google.com!newshub.sdsu.edu!elnk-
nf2-pas!newsfeed.earthlink.net!stamper.news.pas.earthlink.net!
newsread3.news.pas.earthlink.net.POSTED!3dd4ce4a!not-for-mail
Newsgroups:
rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.rad
io.amateur.space
Subject: Re: Retard Marky spams some more - Mark, Just ignore them.
From: Slow Code <my.mail@no.spam>
References: <1155687062.084385.29180@i42g2000cwa.googlegroups.com>
<1155687181.832750.241820@p79g2000cwp.googlegroups.com>
<1155731470.893781.68090@m73g2000cwd.googlegroups.com>
<1155743368.829657.131340@m79g2000cwm.googlegroups.com>
<1155756718.845363.87450@b28g2000cwb.googlegroups.com>
<q2u6e29s13sf59b0d4isjhl8bgmfst27cp@4ax.com>
<1155818709.467035.142500@h48g2000cwc.googlegroups.com>
<fpt8e2pat54sbvle5jp3bnbkpk599voa3p@4ax.com>
<1155905422.359878.320760@m73g2000cwd.googlegroups.com>
<4vgbe2dfv69e6frv93c2h198gkkupc9fs3@4ax.com>
Organization: None
User-Agent: Xnews/5.04.25
Lines: 26
Message-ID: <Q5sFg.5596$Sn3.4807@newsread3.news.pas.earthlink.net>
Date: Fri, 18 Aug 2006 23:32:00 GMT
```

```
NNTP-Posting-Host: 4.235.3.98
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread3.news.pas.earthlink.net 1155943920 4.235.3.98 (Fri, 18 Aug 2006
16:32:00 PDT)
NNTP-Posting-Date: Fri, 18 Aug 2006 16:32:00 PDT
Xref: g2news2.google.com rec.radio.amateur.homebrew:6546
rec.radio.amateur.misc:19333 rec.radio.amateur.policy:38689
rec.radio.amateur.space:386

Mark@kb9rqz.com wrote in news:4vgbe2dfv69e6frv93c2h198gkkupc9fs3@4ax.com:

> On 18 Aug 2006 05:50:22 -0700, peewee_lloyd_davies@yahoo.com wrote:
>
>>MarkMoron@kb9rqz.com wrote:
>>>ce
>>
>>Make any illegal EME contacts with bootleggers, Markie?
> no eme contact s ilegal
> cease desists and grow up
> http://kb9rqz.blogspot.com/
>


Mark, Just ignore them.

They only tease you because of the stupid things you say when you
follow up.  Just ignore them and they'll give up.

Stop giving them reasons to tease you.  It only makes you look
more stupid.

Take a break from the radio groups for a while,  Maybe work on your
moon bounce some more.

SC


From 6143495183149314685
X-Google-Thread: 10bf43,6742993d924f2d47
X-Google-Thread: 10f7a7,9967071e232d70e9
X-Google-Thread: f9daf,9967071e232d70e9
X-Google-Thread: 106d41,9967071e232d70e9
X-Google-Thread: 10e8ad,9967071e232d70e9
X-Google-Thread: fe9fa,7430fa57c98fcec
X-Google-Thread: f8ce7,7430fa57c98fcec
X-Google-Thread: f54c9,7430fa57c98fcec
X-Google-Thread: 1138ec,7430fa57c98fcec
X-Google-Attributes:
gid10bf43,gid10f7a7,gidf9daf,gid106d41,gid10e8ad,gidfe9fa,gidf8ce7,gidf54c9,gid113
8ec,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news3.google.com!newshub.sdsu.edu!elnk-nf2-pas!
newsfeed.earthlink.net!stamper.news.pas.earthlink.net!
```

newsread3.news.pas.earthlink.net.POSTED!3dd4ce4a!not-for-mail
Newsgroups:
rec.radio.amateur.policy,alt.usenet.kooks,alt.revenge,rec.radio.cb,rec.radio.amateur.space,alt.alien.vampire.flonk.flonk.flonk,alt.music.michael-jackson,rec.music.classical.recordings,comp.os.os2.advocacy
Subject: Re: well Mr Slow code has decicded to highlight the problems of the NG - Mark, Just ignore them.
From: Slow Code <my.mail@no.spam>
References: <1155772639.440140.251430@p79g2000cwp.googlegroups.com>
<18909$44e44d25$d1cc5bdd$14927@snip.allthenewsgroups.com>
<1155825831.737438.295760@p79g2000cwp.googlegroups.com>
<1155835956.231036.305820@m79g2000cwm.googlegroups.com>
<pan.2006.08.18.10.09.58.69729@meower.flonker.kookologist.sf-fan.callahanian>
Organization: None
User-Agent: Xnews/5.04.25
Lines: 44
Message-ID: <56sFg.5597$Sn3.3312@newsread3.news.pas.earthlink.net>
Date: Fri, 18 Aug 2006 23:32:17 GMT
NNTP-Posting-Host: 4.235.3.98
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread3.news.pas.earthlink.net 1155943937 4.235.3.98 (Fri, 18 Aug 2006 16:32:17 PDT)
NNTP-Posting-Date: Fri, 18 Aug 2006 16:32:17 PDT
Xref: g2news2.google.com rec.radio.amateur.policy:38690 alt.usenet.kooks:221101
alt.revenge:6078 rec.radio.cb:16336 rec.radio.amateur.space:387
alt.alien.vampire.flonk.flonk.flonk:68517 alt.music.michael-jackson:60887
rec.music.classical.recordings:92365 comp.os.os2.advocacy:10191

TransWench <popesnarky@meow.org> wrote in
news:pan.2006.08.18.10.09.58.69729@meower.flonker.kookologist.sf-fan.callahanian:

> I was busily flonking away in %g, when The Goddess Eris Herself suddenly
> made me reply to Mr. Hammington:
>> an old friend wrote:
>>> donttrythisathome wrote:
>>> > "an old freind" wrote...
>>> > > by truly spamming the ng which of course various parties will
>>> > > insist it perfectly ok further highlighting the true motives of
>>> > > the Wismen and Robeson
>>> >
>>> > I think both of them should hop up on each other's shoulders and
>>> > tell the other "I love you".
>>>
>>> for the own sake perhaps but mental help or take out from dr k would
>>> be a better for the rest of us
>>
>> STFU Marqueer................
>> lunch is served,now go feast of the shit bag.
>
> Man, if Cletis Perkins hadn't already beaten you to the punch, I think
> I'd be nominating all the rec.radio.* 'phobes for a Busted Urinal at
> once...As it is, the sheer "fucking fuck-ness" of his posts will win him

> that "coveted" trophy, but you guys are a shoo-in for next month,
> especially with Wiseman among you. I mean, Mark's merely boring, hence
> the Golden Killfile nom, but you lot just plain stink up the joint. You
> deserve proper recognition, you do.
>

Mark, Just ignore them.

They only tease you because of the stupid things you say when you follow up. Just ignore them and they'll give up.

Stop giving them reasons to tease you. It only makes you look more stupid.

Take a break from the radio groups for a while, Maybe work on your moon bounce some more.

SC

From 8764049360828346384
X-Google-Thread: fe9fa,ce1376eef577be54
X-Google-Thread: fdc67,a740ac9833c88ee
X-Google-Thread: 1138ec,f52b434fa0dd288c
X-Google-Thread: 106284,f52b434fa0dd288c
X-Google-Thread: 10f7a7,f52b434fa0dd288c
X-Google-Thread: 106d41,ce1376eef577be54
X-Google-Thread: 10bf43,ce1376eef577be54
X-Google-Thread: 10e8ad,ce1376eef577be54
X-Google-Thread: f54c9,3d03e13105e04a8a,start
X-Google-Attributes:
gidfe9fa,gidfdc67,gid1138ec,gid106284,gid10f7a7,gid106d41,gid10bf43,gid10e8ad,gidf54c9,public
X-Google-Language: ENGLISH,ASCII-7-bit
Subject: Re: The Tholen classification
From: Lola Stonewall Riot <popesnarky@meowmeowmeow.org>
Date: Sat, 19 Aug 2006 00:13:57 GMT
Message-ID:
<pan.2006.08.19.00.13.56.2542@meow.disorg.flonk.discord.kookology.alexa.cameron.the.k00k.georgewbush.the.bobo>
References: <1155080474.294832.75770@n13g2000cwa.googlegroups.com>
<1155259600.283710.53650@75g2000cwc.googlegroups.com>
<tWYCg.12158$Ta6.6959@tornado.socal.rr.com> <110820062122123846%erfc@netcabal.com>
<pan.2006.08.15.14.22.12.287241@meower.flonker.kookologist.sf-fan.callahanian>
<160820062057151895%erfc@netcabal.com>
<pan.2006.08.17.11.34.08.255735@hail.eris.flonk.meow.all.hail.discordia.meow.flonk.mockery.demon.not.really.leola> <170820061852327059%erfc@netcabal.com>
Lines: 232
NNTP-Posting-Host: 64.59.144.74
Organization: Snarks of AErisia
Path: g2news2.google.com!news2.google.com!news.germany.com!feeder.news-service.com!feeder2.cambrium.nl!feed.tweaknews.nl!193.201.147.83.MISMATCH!news-

```
out.superfeed.co.uk!propagator4-sterling.newsfeeds.com!news-in1.newsgroups.com!
pd7cy1no!pd7cy2no!shaw.ca!pd7tw2no.POSTED!53ab2750!not-for-mail
Newsgroups:
alt.alien.vampire.flonk.flonk.flonk,alt.astronomy,comp.os.os2.advocacy,alt.fan.art
-bell,alt.usenet.kooks,rec.radio.cb,rec.radio.amateur.policy,rec.radio.amateur.spa
ce,rec.music.classical.recordings
X-Trace: pd7tw2no 1155946437 64.59.144.74 (Fri, 18 Aug 2006 18:13:57 MDT)
Reply-to: Wearer of the Holey FAGGOT Hat <popesnarky@gmale.com>
X-Trace-PostClient-IP: 70.68.151.67
User-Agent: Pan/0.14.2.91 (As She Crawled Across the Table)
X-Cabal: TINC
X-Keywords: NASA, Osama, Jordan, hackers, bomb
X-Cabal: Obsidian Order: TINCOO
X-Cabal: Obsidian Order Sombrero Number: TINCOOSN (really)
MIME-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 8bit
X-Complaints-To: abuse@shaw.ca
NNTP-Posting-Date: Fri, 18 Aug 2006 18:13:57 MDT
Xref: g2news2.google.com alt.alien.vampire.flonk.flonk.flonk:68518
alt.astronomy:71775 comp.os.os2.advocacy:10199 alt.fan.art-bell:77505
alt.usenet.kooks:221113 rec.radio.cb:16347 rec.radio.amateur.policy:38706
rec.radio.amateur.space:388 rec.music.classical.recordings:92370
```

Hail Eris! On Thu, 17 Aug 2006 18:52:32 -0600, Art Deco wrote:
> Text Medium No. 5 wrote:
>>Hail Eris! On Wed, 16 Aug 2006 20:57:15 -0600, Art Deco jabbered inanely:
>>> TransWench wrote:
>>>>I was busily flonking away in alt.usenet.kooks, when The Goddess Eris
>>>>Herself suddenly made me reply to Art Deco:
>>>>> Classic "oar pin" Tholenator(tm) <"tholen@antispam.ham"> tholed:
>>>>>
>>>>>>> As with OS/2; it is an example of faltering support by the
>>>>>>> manufacturer and vendor of the product.
>>>>>>
>>>>>>On what basis do you make that claim, Loonie?
>>>>
>>>>Is there anyone who _can't_ WHOMP you, Tholok00k? Loonie's "claim" is
>>>>valid, OS/2's support from both M$ and IBM is faltering, and cooa is
>>>>under the dominion of Teh Empire of MEOW.
>>>
>>> Another fact glaring him in the face that he will deny and dismiss with
>>> "classic erroneous ...".
>>
>>Without actually making any sort of logical justification for his
>>objection, too, I'd wager.
>
> As Tholen pronounceth, so T3H TRVTH is. Q.E.D.

You know, I've noticed that.

>>>>> embowel 0.462806447
>>>>

>>>>dispersion 0.009162171119676271
>>>
>>> desolation 0.390269598
>>
>>avocation 0.9999999872143876
>
> claiming 0.885768485

erroneous 0.5358568978036803

--
____
All Hail Discordia! Flonk Leader #2 & #11 1/9; mhm 29 x 21
The Discordian People's Most Powerful and Revered Being (without portfolio)
Economic Left/Right: -7.63
Social Libertarian/Authoritarian: -7.38
Real email should go to gmail.com, otherwise the same as above.

Quotable quotes:
"Three OS's from corporate-kings in their towers of glass,
   Seven from valley-lords where orchards used to grow,
Nine from dotcoms doomed to die,
   One from the Dark Lord Gates on his dark throne
In the Land of Redmond where the Shadows lie.
   One OS to rule them all, One OS to find them,
   One OS to bring them all and in the darkness bind them,
In the Land of Redmond where the Shadows lie."'

"Covert ace nudists in the Vatican!"

"Real men eat me."

"Any priest or shaman must be presumed guilty until proved innocent." -- Lazarus Long

"Laws count, the US Constitution count more, and we need to have judges on the bench who are going to Carry Out those laws, not Make Law or Interpret Law." -- John "Easily" Shocked contradicts his own words on the overriding importance of society's reluctance to accept homosexuality, in Message-ID: <brIDe.67062$Qo.12613@fed1read01>

"Heterosexuality is not *normal*, it's just more /common/."

"For the most part, morality is universal." -- John "Easily" Shocked

"Gay, straight, they all want blow jobs."

"Bad stories are bad stories. We just call them as they are." -- DBurns demonstrates his sheer cluelessness on Mar 9, 2002, at 6:25 pm, in rec.arts.drwho

"Oh, and Snarky, if you're listening: Fuck you, Asshole! Enjoy the few remaining days of your internet access." Kooky troll John Long gets delusional, in Message-ID: <3C36AA50.31DD0...@epix.net>

A sad little top-poster with the nym of "Choirboy" once lamed:

> Well, gee, coming from an asshole like *you* ...
> ESAD, ya 'ho bitch.

Please to be posting proof, you facile fridgemagnet.
-- replied the Aussie rapier, aka fnord/Affinity, in a now-lost message

"I have a dream...that one day the whole world will know the joy of my nipples!" -- Stimpy

"The meek shall inherit the earth -- 2' x ~6' x 6' of it."

"If English was good enough for Jesus Christ, it's good enough for these U-nited States!" -- an unknown politician, in a senate floor debate over bilingual education.)

"The policeman isn't there to create disorder, the policeman is there to preserve disorder" -- Mayor Richard Daley of Czechago, September 23, 1968

"Moral: it's not a plot hole if two eyes and two brain cells can solve it." -- Keith Goodnight, in atbvs, on NNTP-Posting-Date: Mon, 03 Jun 2002 16:46:02 EDT

"Kung fu's useful!"

"Bernadette, you ignorant oaf.
Bernadette, you brainless dullard.
Bernadette, you feeble-minded wag.
Bernadette, you blathering baboon.
Bernadette, you babbling boor.
Bernadette, you depraved dolt.
Bernadette, you stinking slimeball.
Bernadette, you yammering yak.
Bernadette, you lily-livered lush.
Bernadette, you hard-hearted hulk."
-- Mother Be Strange gets very hard on herself, in
MID: <94b6d5f1.0203221829.3587ccd3@posting.google.com>

"[Lurlean] would never dream of sleeping with a dog. The Bible's against it. You don't seem to care what the Bible says, so she thought maybe you gave that a try too -- in addition to sucking on Steve, letting him play with your butt, and having seven different lesbian lovers in our bed."
-- Sistah Moonshine shocks a.p.h. with the revelation that she got it off with "Romaine Brooks", in a now-vanished message

"I should have known my boss was evil when he called my jumping onto my chair to praise the Lord out loud 'inappropriate behavior.'" -- Sistah Moonshine: Oppressed Christian, in another vanished message

"I made a pact with the devil." -- Sistah Moonshine, from her dream diary

"'drink that hooch,' they would say, 'and then smoke that joint. Bury your head in that strange woman's crotch and bring her to a thunderous climax with your tongue, then tell her no man could ever give her that much pleasure in a thousand years. Tell her to leave her husband and become a lesbian. Drip hot wax on that pervert's nutty buddies and then charge him extra for the privilege.'" -- Sistah Moonshine is now working on an erotic epic to outmatch Anne Rice.

"Roe V Wade has zero bearing on my existence other than it affects it adversely."
-- Johnny Wentzky never had much truck with "logic".

"You are the GOD-DAMNED, IGNORANT LIAR here.
Now, that is not me taking the Lord's name in vain."
-- John Wentzky: Living proof of the Death of Irony, in Message-ID:
<jljOe.5348$ZD4.3...@bignews3.bellsouth.net>

"Stupidity excuses nothing. It's only a reason...." -- Phxbrd

"The whining has just begun." -- John Wentzky

"It's not nice to misrepresent Mother Nature."

"Gay men deserve to die." -- John Wentzky

Joseph Bartlo wrote:
> A big mean meanie and heavyweight kookologist responding to my text
> and making me look like a colossal idiot. No more whinges to this mean
> person who keeps pounding my ass into the ground - you go on the lits
> of people who have trounced me. The state I left that group was
> embarassing to me. There were too many posts to follow them all, and I
> know a lot of people were saying mean things about me - but a few
> sucked up. So it was best at that point rather than to browse all the
> crap to simply make a standard post telling people a lot of bullshit
> I'd just made up. I did that on many other groups, but the war is only
> fought here. If anyone thinks I am the least bit kidding, consider how
> long this has been going, how little I have accomplished (i.e., how
> much the mean, mean kookologists have changed everything), and that I
> have a lot of goats to blow.

-- in MID: <43745576.1E07F998@verizon.net>

"America is supposed to be the world's melting pot,
so melt!!" -- from some BBS

"There are no governors anywhere."

"The personal _is_ political."

"If humans decline to exercise faith, then an omnipotent God is impotent." -- Teresita, x-posted to APH

"Gabrielle?! Monkey-man, you bring her back! You know, you two are
beginning to irritate me with these obsessions of yours!
Fish don't just catch themselves!" -- Xena, "Fins, Femmes, &
Gems" (64/318)

"I don't think so because, I'm a whole lot smarter and far less bigoted
than the average Jew, although smart Jews as having collaborated with
your Skull and Bones Third Reich certainly have more of those
in-your-face balls than I'd ever have to work with." -- Guthball drools
all over my irony meter, in MID:
<fea985f50107c84f4d1d4894114d1989.49644@mygate.mailgate.org>

"You never asked someone who goes into areas of the internet that are
only for adults who has an underage id somehow or another if they are a
cop posing as an underage person online?
I guess lots of people just don't watch dateline or read stories much.
Why don;t you go to pervertedjustice,com and see what they do. They are
awash in their self-proclaimed glory after they lied to membners of the
public.
They are awash in their self-proclaimed glory after they posed as an
underage person and agreed to do all sorts of sex acts wioth adult
males, and they are adults posing as teenager themselves. They make
themsleves into liars by falsely impersonating underage persons and by
not fuilfilling the words they tell the victims online in their chats.
Why don't you read it where they tell these victims of their deceit
about how they have been with grown men and such? Why don't you read it
where they say, "That would be cool." after someone makes an advance
towards an adult who is posing as a teenager? And, where they agree to
meet the person, etc.
Lost control, didn't you?
Is that why you feel as if you need to lie so much now? I see where lots
of these false impersonation games are not sticking. They feel as if
they can lie and then order the victims to get counseling in the
gayblade, governmental, pro-choice tax leech counseling centers. They
are doing nothing more than usury and fraud in many cases." -- Wentzky
almost comes out of the closet as a pedo/ephebophile in MID:
<H%%Eg.28916$Uq1.22411@bignews6.bellsouth.net>

"This bandwidth has been rescued from AOL." -- mimus

No-one expects the Fannish Inquisition!

From 4592203077115574499
X-Google-Thread: 10e8ad,3ee123a1dab4a6ec,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news3.google.com!newshub.sdsu.edu!elnk-nf2-pas!
newsfeed.earthlink.net!stamper.news.pas.earthlink.net!
newsread1.news.pas.earthlink.net.POSTED!46041641!not-for-mail

From: "JoAnne Maenpaa" <wb9jej_no-spam@earthling.com>
Newsgroups: rec.radio.amateur.space
Subject: ANS-225 AMSAT News Service Weekly Bulletins
Lines: 276
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <15uFg.9533$xp2.9346@newsread1.news.pas.earthlink.net>
Date: Sat, 19 Aug 2006 01:47:41 GMT
NNTP-Posting-Host: 72.245.93.120
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread1.news.pas.earthlink.net 1155952061 72.245.93.120 (Fri, 18 Aug 2006 18:47:41 PDT)
NNTP-Posting-Date: Fri, 18 Aug 2006 18:47:41 PDT
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news2.google.com rec.radio.amateur.space:389

AMSAT NEWS SERVICE
ANS-225

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* Van Allen, an original space explorer.
* CDROM for NA1ISS
* AO-51 Schedule Update
* ISS SSTV
* ARISS Status

****************** AMSAT 2006 Space Symposium **************************

Online registration and hotel reservation for the 2006 AMSAT Space Symposium has been posted to the AMSAT website, and information about the Symposium has been expanded. The 2006 AMSAT Space Symposium will be held October 6, 7 and 8 at the Crowne Plaza in Foster City California in the beautiful San Francisco Bay Area.

Please visit http://www.amsat.org/amsat-new/symposium for additional information and an index to the expanded Symposium web pages.

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SB SAT @ AMSAT $ANS-225.01

Van Allen, an original space explorer.

AMSAT News Service Bulletin 225.01
From AMSAT HQ SILVER SPRING, MD.
August 13, 2006
To All RADIO AMATEURS
BID: $ANS-225.01

IOWA CITY, Iowa - Physicist James A. Van Allen, a leader in space exploration who discovered the radiation belts surrounding the Earth that now bear his name, died Wednesday. In a career that stretched over more than a half-century, Van Allen designed scientific instruments for dozens of research flights, first with small rockets and balloons, and eventually with space probes that traveled to distant planets and beyond. Van Allen gained global attention in the late 1950s when instruments he designed and placed aboard the first U.S. satellite, Explorer I, discovered the bands of intense radiation that surround the earth, now known as the Van Allen Belts.

http://itsnt166.iowa.uiowa.edu/uns-archives/2006/august/080906van-allen-death.html
http://www.time.com/time/covers/0,16641,19590504,00.html

Dan Schultz N8FGV

[ANS thanks Dan Schultz, N8FGV, for the above information]

/EX

SB SAT @ AMSAT $ANS-225.02
CDROM for NA1ISS

AMSAT News Service Bulletin 225.02
From AMSAT HQ SILVER SPRING, MD.
August 13, 2006
To All RADIO AMATEURS
BID: $ANS-225.02

Hello All,

In an earlier posting I had anounced to make a CDROM for Bill McArthur (NA1SS). Astronaut Bill McArthur was much active on hamradio during his 6 months - mission aboard the ISS Space Station (he is already back on earth). Many people have sended audio files (some with pics of the operator THANKS!!!).
There are already 121 messages in the McArthur guestbook, these message will be shown on the CDROM!!! In case you did not signed the McArthur guestbook yet, you can do it now on this direct McArthur guestbook link: http://www.webguestbook.com/cgi-bin/guestbook/viewguestbook.pl?user=corholland2 Or go to: http://www.pd0rkc.com (look on the main page!).

In case you have your QSO (with McArthur NA1SS) recorded please send it to: wegaman@gmail.com An picture of the operator would be nice so Bill McArthur can see the operator which
he spoke in the past!!! Also I like to have more ISS school contact audio files!!!

31 august is the last day that you can send your files (and sign McArthur guestbook). If you want cooporate, please do it right now otherwise you might forget!!!

The CDROM will be delivered to McArthur (via N5VHO Kenneth Ransom JSC NASA).

Please spread this message arround on internet (on forums or websites!).

Thanks!!!

73's Cor PD0RKC
http://www.pd0rkc.com

[ANS thanks Cor, PD0RKC for the above information]

/EX

SB SAT @ AMSAT $ANS-225.03
AO-51 Schedule Update

AMSAT News Service Bulletin 225.03
From AMSAT HQ SILVER SPRING, MD.
August 13, 2006
To All RADIO AMATEURS
BID: $ANS-225.03

AO-51 Schedule Updated

Drew, KO4MA posted AO-51 schedule updates on behalf of the AO-51 Operations Group. The full schedule can be seen on-line at: http://www.amsat.org/amsat-new/echo/ControlTeam.php.

Please note that the graphic schedule at the top of the page is not the complete story, and users should always consult the text portion in addition for any items that cannot be displayed in the graphic schedule.

For the next several weeks there will be a period of testing by AO-51's command stations, cycling through many of the listed modes. Whole Orbit Data is also planned to be collected during this period. This period is indicated as all off in the graphic schedule. This is a periodic checkup as well as a further investigation into some ongoing operational issues.

Drew wrote, "I intend to report on the results of the command station's investigation, as well as explain some of the power and PL issues brought up last week on the -bb as soon as the information is collected and analyzed."

Users are welcome to operate whatever mode is active during these tests, but expect frequent mode changes. The V/U repeater on 435.300 should be available for hamfest demos on Saturday the 12th and the ever popular mode V/S returns at the end of the month.

[ANS thanks the AO-51 Operations Group for the above information]

/EX

SB SAT @ AMSAT $ANS-225.04
ISS SSTV

AMSAT News Service Bulletin 225.04
From AMSAT HQ SILVER SPRING, MD.
August 13, 2006
To All RADIO AMATEURS
BID: $ANS-225.04

Slow Scan TV on ISS Update

NOTE: We all await SSTV to become a regular part of Ham Radio on the ISS.

As reported recently, ISS Expedition 13 Commander Pavel Vinogradov activated the SSTV project for few orbits from the International Space Station. Pavel sent several manual test images from ISS to Earth to prove that the basic SSTV configuration has been set up correctly. The SSTV system was then shut down until the crew can spend more time to finalize the cable connections and configure the system for Slide Show mode.

The slide show mode will allow the crew to preload a directory full of images that will be automatically transmitted to Earth. The crew will not need to keep pushing a button to send images. In theory the system can run for weeks at a time without crew involvement.

The SSTV configuration parameters are now ready to be uploaded to the ISS. The next phase of testing may use the frequency 145.800 MHz FM for the SSTV down link. Radio Amateurs should also check the testing frequency of 144.490 in case it remains active. The Slide Show mode will only be testing these downlink frequencies. The uplink frequency will not be published.

[ANS thanks Miles, WF1F for the above information]

/EX

SB SAT @ AMSAT $ANS-225.05
ISS STATUS

AMSAT News Service Bulletin 225.05
From AMSAT HQ SILVER SPRING, MD.
August 13, 2006
To All RADIO AMATEURS
BID: $ANS-225.05

International Space Station Status Report #06-37
3:30 p.m. CDT, Friday, Aug. 11, 2006
Expedition 13 Crew

This week on the International Space Station crew members refurbished their exercise treadmill, prepared areas inside and out for an imminent expansion of their home and took a couple of special calls to discuss soccer and food in space.

Commander Pavel Vinogradov, Flight Engineer Jeff Williams and European Space Agency Astronaut Thomas Reiter are gearing up for the second space shuttle visit to the station during Expedition 13. The shuttle Atlantis, targeted to launch in a window that opens Aug. 27, will resume major orbital construction of the complex. During its mission, designated STS-115, Atlantis will deliver and install a 17.5-ton, bus-sized segment of the station's girder-like truss that includes another set of solar arrays, batteries and associated electronics.

The station crew started out the week with two days of standard maintenance work on the treadmill vibration isolation system, a special exercise treadmill located on the floor of the Zvezda living quarters module. Crews perform the maintenance task every six months to inspect the treadmill's components, replace worn items and install new bearings. The treadmill is a complex system that uses gyroscopes to stabilize itself and isolates the vibrations created by exercise from being transmitted to the station's structure, where they could disturb sensitive experiments. Extensive exercise is a daily regimen for all station crew members as one method of counteracting the effects of long exposure to weightlessness.

The crew had time set aside each day this week to pack up and prepare items that will be moved from the station to the shuttle during Atlantis' flight. In addition, ground controllers worked with the station's Canadarm2 robotic arm to prepare for the upcoming shuttle flight. On Thursday, they moved the arm to position cameras to view markings on the station used for a graphical computer alignment aid when new components are attached. That aid, called the space vision system, will be used during Atlantis' flight to help with the attachment of the new truss section.

On Friday, controllers moved the arm to perform an early checkout of its systems, ensuring it is ready for the shuttle mission.

The station crew greeted special guest calls this week. On Tuesday, the coach and players from the FC Barcelona soccer team talked with the crew as they visited NASA's Johnson Space Center prior to an exhibition game in Houston. Reiter, a soccer fan, showed the team a space soccer move during the call. On Thursday, the crew members spoke with Chef Emeril Lagasse about space food and their mission. Lagasse sent NASA several recipes that were prepared and delivered to the station aboard the last shuttle flight. The Expedition 13 crew tried the dishes this week.

The next station status report will be issued on Friday, Aug. 18, or earlier if events warrant. For more about the crew's activities and station sighting opportunities, visit:

http://www.nasa.gov/station

[ANS thanks Arthur, N1ORC for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73, This week's ANS Editor,
Dee Interdonato, NB2F

From -1569709617728883727
X-Google-Thread: 10e8ad,84f08a076bdb75ac,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news3.google.com!newshub.sdsu.edu!elnk-nf2-pas!newsfeed.earthlink.net!stamper.news.pas.earthlink.net!newsread1.news.pas.earthlink.net.POSTED!46041641!not-for-mail
From: "JoAnne Maenpaa" <wb9jej_no-spam@earthling.com>
Newsgroups: rec.radio.amateur.space
Subject: WSR-226 AMSAT Weekly Satellite Report
Lines: 1069
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <35uFg.9534$xp2.8170@newsread1.news.pas.earthlink.net>
Date: Sat, 19 Aug 2006 01:47:43 GMT
NNTP-Posting-Host: 72.245.93.120
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread1.news.pas.earthlink.net 1155952063 72.245.93.120 (Fri, 18 Aug 2006 18:47:43 PDT)
NNTP-Posting-Date: Fri, 18 Aug 2006 18:47:43 PDT

Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news2.google.com rec.radio.amateur.space:390

This report is organized into 4 parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites

SB SAT @ AMSAT W8ISS ANS-226.S1
WSR 226 Part 1 08/14/2006

AMSAT NEWS SERVICE BULLETIN 226.S1 FROM AMSAT HQ
SILVER SPRING, MD, August 14, 2006
TO ALL RADIO AMATEURS
BID: $ANS-226.S1

VO-52 HAMSAT
Catalog Number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/V - Indian Transponder

Proposed frequencies:

Indian Transponder:
Uplink : 435.220 MHz to 435.280 MHz LSB/CW
Downlink: 145.870 MHz to 145.930 MHz USB/CW
Beacon : 145.859330 MHZ CW

Dutch Transponder:
Uplink : 435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW
Beacon : 145.860MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsat.in/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is
active. Each transponder has a different beacon.
[04242006]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Current Mode(s): FM Repeater - ON

PBBS - OFF
Digipeater - OFF

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.880 MHZ FM
145.880 MHz USB
145.920 MHz FM 67Hz PL tone
1268.700 MHz FM 67Hz PL tone
Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast Protocol
1268.700 mhz FM, 9k6 PBP Digital
Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Mode schedule for July 2006 according to the AO-51 command team:

August 14 to August 27 (Additional testing as above possible August 21 to 27)

FM Repeater
Downlink 435.300 mHz FM
Uplink 145.920 mHz FM with 67 hz Tone

August 28 to September 3

FM Repeater, V/S

Uplink: 145.920 mhz FM, No PL Tone
Downlink 2401.200 mhz FM

September modes are anticipated to include high power V/U repeater, L/S repeater, and high power V/U 38.4 kbaud!

Official Webpage: http://www.amsat.org/amsat-new/echo/
[08142006]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Uplink: 145.850 MHz (67.0 Hz PL tone) (See below for operating
procedures)
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The
order of operation is thus: (allow for Doppler as necessary)
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute
timer
   on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the
repeater
   on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset
the 10
   minute timer.
[04172006]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: OPERATIONAL

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplink: 145.850 145.870 145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

unOfficial Webpage: http://www.amsat.org/amsat/sats/n7hpr/fo29.html
[11132005]
=====
AO-27 AMRAD
Catalog number: 22825

Launched: September 26, 1993

Status: Operational

Uplink: 145.850 MHz FM
Downlink: 436.795 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[01012006]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational depending on amount of Sunlight
Current Reported mode: Mode-A

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
   432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
  145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
  145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz
  145.972 MHz
  435.100 MHz
 2304.100 MHz

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php
The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
AO-7 users are requested to log their contacts and observations about
AO-7, especially any unexpected mode changes.
AO-07 telemetry software webpage:
http://www.qsl.net/k3tz/files/K3TZ_AO-07_Telemetry_Decoder_0.5.zip

Please keep your power low! For additional information please read the
AO-7
Usage Guidelines on the AO-7 Log and Resource Site located at:
http://www.planetemily.com/ao7
[04242006]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: TESTING OF SSTV
Digipeater: OFF

The current crew is:
Commander: Pavel Vinogradov, RV3BS
Flight Engineer: Jeff Williams, KD5TVQ
Crew: Thomas Reiter - DF4TR

Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

SSTV TESTING:
Worldwide Reported Downlink: 144.490 MHz FM
145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS, RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official Webpage: http://www.rac.ca/ariss
Official Fan club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

Currently, the crew is in the process of testing the SSTV equipment so ANY activity may not be what will be heard on the next pass right now. IT ALL DEPENDS ON THE TIME AVAILABLE TO THE CREW TO DO MORE IMPORTANT ITEMS. PLEASE MAINTAIN READING THE AMSAT-BB AND ANS SERVICES FOR MORE CURRENT INFO.

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line is NOT translated from Russian and posted.
[08142006]
NNNN

/EX

SB SAT @ AMSAT W8ISS $ANS-226.S2
WSR 226 Part 2 08/14/2006

AMSAT NEWS SERVICE BULLETIN 226.S2 FROM AMSAT HQ
SILVER SPRING, MD, August 14, 2006
TO ALL RADIO AMATEURS
BID: $ANS-226.S2

CO-58 XI-V
Catalog Number: 28895
Launch Date: October 27, 2005

Status: Operational only within range of Ground station in Japan

Telemetry Downlink: 437.345MHz - FSK 1200bps using AFK protocol
Beacon Downlink: 437.465MHz - CW about 50 WPM

Callsign: JQ1YGW

Oficial Webpage: http://www.space.t.u-tokyo.ac.jp/gs/satinfo-e.html#xi5
Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
[03122006]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: TESTING OF SSTV
Digipeater: OFF

The current crew is:
Commander: Pavel Vinogradov, RV3BS
Flight Engineer: Jeff Williams, KD5TVQ
Crew: Thomas Reiter - DF4TR

Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

SSTV TESTING:
Worldwide Reported Downlink: 144.490 MHz FM
                             145.800 MHz FM

Crossband Repeater:

Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS, RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official Webpage: http://www.rac.ca/ariss
Official Fan club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

Currently, the crew is in the process of testing the SSTV equipment so ANY activity may not be what will be heard on the next pass right now. IT ALL DEPENDS ON THE TIME AVAILABLE TO THE CREW TO DO MORE IMPORTANT ITEMS. PLEASE MAINTAIN READING THE AMSAT-BB AND ANS SERVICES FOR MORE CURRENT INFO.

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line is NOT translated from Russian and posted.
[08142006]

=====

PCSAT-2
Catalog Number: 25544
Launch Date: August 1, 2005

Activated: August 3, 2005
Status: Operational
Current Mode: ISS Packet =>VOICE Contacts

Digital Downlink: 435.275 Mhz
Digital Uplink: 145.825 Mhz
ISS digipeater uplink: 145.990 Mhz

PSK-31 Downlink: 435.275 Mhz
PSK-31 Uplink: 29.401 Mhz

CALLSIGN: pcsat2

PCSAT2 SPECIAL EVENT AND OPERATIONS

Subj: ISS Packet =>VOICE Contacts:

Starting on 4 August, and for the 26 days remaining of PCSAT2's operation on ISS, PCSAT2 will be configured for VOICE response to normal packets transmitted via the normal ISS digipeater 145.99 uplink (or PCSAT2's uplink on 145.825 if the ARISS packet system is not operational). The command station's voice downlink will be on 437.975 +/- Doppler and he/she willl attempt to acknowledge by voice all packets seen on the packet uplink.

The UHF downlink will be weak (only 1 Watt) and being UHF (9dB worse than 2m), will need at least a small beam to hear it.

Users who want to participate, simply send your packets as normal VIA ARISS on 145.99 uplink (if available or via 145.825 if not) but listen on the 437.925 downlink for the combined voice and packets. This will only work when PCSAT2 is in range of a participating command station and there is no guarantee that all command stations will be available on any given pass. In otherwords, this may be rare, but fun.

Right now, passes in the Northern Hemisphere are occuring before sunrise, so only the last two morning passes may be so manned for voice. Passes in the Southern Hemisphere right now are from midday into evening.

Best thing to do is simply monitor 437.975 during ISS passes and if you hear a command station, then send us a 'hello' packet via the ISS digipeater.

We need a volunteer command station in South America, South Africa and some other footprints too if activity is desired in those areas.

Official Webpage: http://web.usna.navy.mil/~bruninga/pcsat2.html
PCSAT2 APRS Packet page: http://www.findu.com/cgi-bin/pcsat2.cgi
aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[08072006]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Current Mode(s): FM Repeater - ON
PBBS - OFF
Digipeater - OFF

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM

2401.200 Mhz FM
Analog voice uplink: 145.880 MHZ FM
145.880 MHz USB
145.920 MHz FM 67Hz PL tone
1268.700 MHz FM 67Hz PL tone
Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast Protocol
1268.700 mhz FM, 9k6 PBP Digital
Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Mode schedule for July 2006 according to the AO-51 command team:

August 14 to August 27 (Additional testing as above possible August 21 to 27)

FM Repeater
Downlink 435.300 mHz FM
Uplink 145.920 mHz FM with 67 hz Tone

August 28 to September 3

FM Repeater, V/S

Uplink: 145.920 mhz FM, No PL Tone
Downlink 2401.200 mhz FM

September modes are anticipated to include high power V/U repeater, L/S repeater, and high power V/U 38.4 kbaud!

Official Webpage: http://www.amsat.org/amsat-new/echo/
[08142006]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Operational

General Usage Uplink/Downlink:145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

```
PCSAT APRS page: http://pcsat.aprs.org
aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[04172006]
=====
CO-55 CUTE-1.7
Catalog number: 28941
Launched: June 30,2003

Status: Operational

Uplink: ?
Downlink: 437.3850 CW
          437.4700 1200 FM ax25 or SRLL (ACTIVE only near Japan ? )
Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[05012006]
=====
GO-32 TECHSAT-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks: 145.850 FM
         145.890 FM
         145.930 FM
        1269.700 FM
        1269.800 FM
        1269.900 FM
Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[08072006]
=====
RS-22 Mozhayets 4
Catalog Number: 27939
Launch Date: September 27, 2004

Status: Operational

Beacon: 435.3520 MHz CW
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Semi-operational, the digipeater command is on and open for
APRS users.
```

Uplink: 145.900 FM
145.920 FM
145.940 FM
145.960 FM
(using 1200-baud Manchester FSK)
Downlink: 437.026 MHz SSB (1200-baud PSK)
Mode-S Beacon: 2401.1428 MHz

Mode and Antenna Polarization:
U: RC 437.050 MHz RHCP
PSK 437.025 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[04172006]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational

Telemetry Downlink: 145.826 MHz. FM (1200-baud AFSK).
approx. 10 days ON, 10 days OFF
Mode-S Beacon: 2401.500 MHz. ... OFF
UHFBeacon: 435.025 MHz. ... OFF

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Reception reports are requested to be sent to xxxxx@amsat.org (replace
xxxxx
by g3cwv), or post to AMSAT-BB.

During the period 15 June to 17 July 2006 nothing has been heard from
the
satellite. It was last heard on 05 May, just one day before the solar
eclipses were due to start. These eclipses will continue until 04 August
2006, reaching a maximum duration of 22% around 19 June. If the
satellite
behaves in the same way as it did last year, regular 10 day
transmissions
should re-start, sometime in August.

Official webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[07172006]
NNNN

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/EX

SB SAT @ AMSAT W8ISS $ANS-226.S3
WSR 226 Part 3 08/14/2006

AMSAT NEWS SERVICE BULLETIN 226.S3 FROM AMSAT HQ
SILVER SPRING, MD, August 14, 2006
TO ALL RADIO AMATEURS
BID: $ANS-226.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

AO-54 SUITSAT
Catalog Number:28933
Release Date: February 3,2006

Status: Non-operational
Modes : FM Voice Telemetry/Greetings
 FM SSTV

Callsign: RS0RS
Downlink: 145.990 FM

Currently on the amsat-bb, there is a geussing game going on about when
Suitsat will re-enter the atmosphere.

Official webpage: http://www.suitsat.org
[05012006]
=====
NCUBE-2
Catalog Number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency:  437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog Number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 FM 67Hz CTCSS
Voice Downlink: 2401.835 FM
Packet Up/Downlink: 437.250 9k6 packet
Packet Downlink 2401.835 38k4 packet
```

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01292006]
=====
TO-31 TMSAT-1
Catalog Number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink: 145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
PO-28 POSAT-1
Catalog Number: 22829
Launch Date: September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 429.950

Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html.
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012006]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launched: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB
Beacon: 145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: Downlink only

Uplink: 145.875 145.900 145.925 145.950 MHz FM (1200-baud)
Downlink: 435.808 MHz PSK
Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01012006]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB
Beacon: 29.408 MHz
Robot: 29.454 MHz
[05232004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB
Beacon: 145.860 MHz
Robot: 145.908 MHz
[05232004]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink 145.975 MHz FM
Downlink 435.070 MHz FM
[05092004]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink: 145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01092005]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational?

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB
Beacon: 29.352 MHz (intermittent)
SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplink: 145.84 145.86 145.88 145.90 MHz FM
(using 1200-baud Manchester FSK)
CW downlink: 437.125 MHz
Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)
Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[05232004]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[08152004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM
Broadcast Callsign: HLO1-11
BBS: HLO1-12

Jim, AA7KC, reports that KO-23's downlink transmitter continues in a non-operational status.
[05092004]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM (9600-baud FSK)
Downlink: 436.500 MHz FM
Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm

[ANS-WSR has no further information]
[05232004]
=====
SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

STatus: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz and 145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[08082004]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlink: 437.025 MHz 437.400 MHz
Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site
at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[05092004]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

```
Uplink V-band   145.840 - 145.990 MHz CW/LSB
       U-band   435.550 - 435.800 MHz CW/LSB
       L1-band 1269.250 - 1269.500 MHz CW/LSB
       L2-band 1268.325 - 1268.575 MHz CW/LSB
Downlink: S2-band 2401.225 - 2401.475 MHz CW/USB
          K-band 24,048.010 - 24,048.060 MHz CW/USB
Beacon:   2401.323
         24,048.035
```

[05232004]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational
Downlink: 437.075 MHz
Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[08152004]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz
Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[08152004]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, call-sign KE6QMD, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Operational

Uplink: 145.850 or 145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz
Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

```
TiungSat-1, named after the mynah bird of Malaysia, was developed as a
collaborative effort between the Malaysian government and Surrey
Satellite
Technology Ltd.
[11202005]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink 435.275 1200-baud AFSK
Downlink 145.825 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink: Downlink 145.825 MHz FM 1200 Baud AFSK
Beacon: 2401.220 MHz
[05012006]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-226.S4
WSR 226 Part 4 08/14/2006

AMSAT NEWS SERVICE BULLETIN 226.S4 FROM AMSAT HQ
SILVER SPRING, MD, August 14, 2006
TO ALL RADIO AMATEURS
BID: $ANS-226.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE
PROPOSED FOR LAUNCH AT THIS TIME:
```

PHASE 3E ?O-??
Catalog Number:
Proposed Launch Date: Early/Mid 2007

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/
[ANS-WSR wishes to thank William Leijenaar, PE1RAH for this week's report]
[04242006]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/amsat/listserv/menu.html

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the
memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen,
G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

```
From 7982519092497084667
X-Google-Thread: 10bf43,6742993d924f2d47
X-Google-Thread: 10f7a7,9967071e232d70e9
X-Google-Thread: f9daf,9967071e232d70e9
X-Google-Thread: 106d41,9967071e232d70e9
X-Google-Thread: 10e8ad,9967071e232d70e9
X-Google-Thread: fe9fa,7430fa57c98fcec
X-Google-Thread: f8ce7,7430fa57c98fcec
X-Google-Thread: f54c9,7430fa57c98fcec
X-Google-Thread: 1138ec,7430fa57c98fcec
X-Google-Attributes:
gid10bf43,gid10f7a7,gidf9daf,gid106d41,gid10e8ad,gidfe9fa,gidf8ce7,gidf54c9,gid113
8ec,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news4.google.com!news.glorb.com!news-out.octanews.net!
indigo.octanews.net!auth.rouge.octanews.com.POSTED!not-for-mail
Subject: Re: well Mr Slow code has decicded to highlight the problems of the NG -
Mark, Just ignore them.
Date: Fri, 18 Aug 2006 19:51:40 -0600
From: Art Deco <erfc@netcabal.com>
Newsgroups:
rec.radio.amateur.policy,alt.usenet.kooks,alt.revenge,rec.radio.cb,rec.radio.amate
ur.space,alt.alien.vampire.flonk.flonk.flonk,alt.music.michael-
jackson,rec.music.classical.recordings,comp.os.os2.advocacy
Message-ID: <180820061951404160%erfc@netcabal.com>
References: <1155772639.440140.251430@p79g2000cwp.googlegroups.com>
<18909$44e44d25$d1cc5bdd$14927@snip.allthenewsgroups.com>
<1155825831.737438.295760@p79g2000cwp.googlegroups.com>
<1155835956.231036.305820@m79g2000cwm.googlegroups.com>
<pan.2006.08.18.10.09.58.69729@meower.flonker.kookologist.sf-fan.callahanian>
<56sFg.5597$Sn3.3312@newsread3.news.pas.earthlink.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-transfer-encoding: 8bit
Mail-Copies-To: nobody
User-Agent: Thoth/1.7.2 (Carbon/OS X)
X-Hammer-of-Thor: September 2005
X-FOB: Yes
Lines: 59
```

```
Organization: Octanews
NNTP-Posting-Date: 18 Aug 2006 20:51:41 CDT
X-Complaints-To: abuse@octanews.net
Xref: g2news2.google.com rec.radio.amateur.policy:38718 alt.usenet.kooks:221163
alt.revenge:6081 rec.radio.cb:16356 rec.radio.amateur.space:391
alt.alien.vampire.flonk.flonk.flonk:68525 alt.music.michael-jackson:60928
rec.music.classical.recordings:92380 comp.os.os2.advocacy:10235

Slow Code <my.mail@no.spam> wrote:

>TransWench <popesnarky@meow.org> wrote in
>news:pan.2006.08.18.10.09.58.69729@meower.flonker.kookologist.sf-fan.callah
>anian:
>
>> I was busily flonking away in %g, when The Goddess Eris Herself suddenly
>> made me reply to Mr. Hammington:
>>> an old friend wrote:
>>>> donttrythisathome wrote:
>>>> > "an old freind" wrote...
>>>> > > by truly spamming the ng which of course various parties will
>>>> > > insist it perfectly ok further highlighting the true motives of
>>>> > > the Wismen and Robeson
>>>> >
>>>> > I think both of them should hop up on each other's shoulders and
>>>> > tell the other "I love you".
>>>>
>>>> for the own sake perhaps but mental help or take out from dr k would
>>>> be a better for the rest of us
>>>
>>> STFU Marqueer...............
>>> lunch is served,now go feast of the shit bag.
>>
>> Man, if Cletis Perkins hadn't already beaten you to the punch, I think
>> I'd be nominating all the rec.radio.* 'phobes for a Busted Urinal at
>> once...As it is, the sheer "fucking fuck-ness" of his posts will win him
>> that "coveted" trophy, but you guys are a shoo-in for next month,
>> especially with Wiseman among you. I mean, Mark's merely boring, hence
>> the Golden Killfile nom, but you lot just plain stink up the joint. You
>> deserve proper recognition, you do.
>>
>
>
>Mark, Just ignore them.
>
>They only tease you because of the stupid things you say when you
>follow up.  Just ignore them and they'll give up.
>
>Stop giving them reasons to tease you.  It only makes you look
>more stupid.
>
>Take a break from the radio groups for a while,  Maybe work on your
>moon bounce some more.
>
```

>SC

Shuttup, spammer.

--
COOSN-266-06-39716
Official Associate AFA-B Vote Rustler
Official Overseer of Kooks and Saucerheads in alt.astronomy
Official "Usenet psychopath and born-again LLPOF minion",
  as designated by Brad Guth

"Who is "David Tholen", Daedalus? Still suffering from
attribution problems?"
  -- Dr. David Tholen

From -2855471018608863035
X-Google-Thread: 10bf43,6742993d924f2d47
X-Google-Thread: 10f7a7,9967071e232d70e9
X-Google-Thread: f9daf,9967071e232d70e9
X-Google-Thread: 106d41,9967071e232d70e9
X-Google-Thread: 10e8ad,9967071e232d70e9
X-Google-Thread: fe9fa,7430fa57c98fcec
X-Google-Thread: f8ce7,7430fa57c98fcec
X-Google-Thread: f54c9,7430fa57c98fcec
X-Google-Thread: 1138ec,7430fa57c98fcec
X-Google-Attributes:
gid10bf43,gid10f7a7,gidf9daf,gid106d41,gid10e8ad,gidfe9fa,gidf8ce7,gidf54c9,gid113
8ec,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news3.google.com!news.glorb.com!feed.cgocable.net!
pd7cy1no!pd7cy2no!shaw.ca!pd7tw3no.POSTED!53ab2750!not-for-mail
X-Trace-PostClient-IP: 70.68.151.67
From: TransWench <popesnarky@meow.org>
Organization: Teh Empire of MEOW
Subject: Re: well Mr Slow code has decicded to highlight the problems of the NG -
Mark, Just ignore them.
User-Agent: Pan/0.14.2.91 (As She Crawled Across the Table)
Message-Id: <pan.2006.08.19.07.52.27.951311@meower.flonker.kookologist.sf-
fan.callahanian>
Newsgroups:
rec.radio.amateur.policy,alt.usenet.kooks,alt.revenge,rec.radio.cb,rec.radio.amate
ur.space,alt.alien.vampire.flonk.flonk.flonk,alt.music.michael-
jackson,rec.music.classical.recordings,comp.os.os2.advocacy
References: <1155772639.440140.251430@p79g2000cwp.googlegroups.com>
<18909$44e44d25$d1cc5bdd$14927@snip.allthenewsgroups.com>
<1155825831.737438.295760@p79g2000cwp.googlegroups.com>
<1155835956.231036.305820@m79g2000cwm.googlegroups.com>
<pan.2006.08.18.10.09.58.69729@meower.flonker.kookologist.sf-fan.callahanian>
<56sFg.5597$Sn3.3312@newsread3.news.pas.earthlink.net>
<18082006195140416O%erfc@netcabal.com>
Reply-To: Lola <popesnarky@gmail.com>
X-FoxWench: Feather

```
X-Lepheaux: Idiot
X-Keywords: jihad, AT&T, Tzanhanim, Whitewater, MOD
MIME-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 8bit
Lines: 55
Date: Sat, 19 Aug 2006 07:52:29 GMT
NNTP-Posting-Host: 64.59.144.74
X-Complaints-To: abuse@shaw.ca
X-Trace: pd7tw3no 1155973949 64.59.144.74 (Sat, 19 Aug 2006 01:52:29 MDT)
NNTP-Posting-Date: Sat, 19 Aug 2006 01:52:29 MDT
Xref: g2news2.google.com rec.radio.amateur.policy:38734 alt.usenet.kooks:221259
alt.revenge:6082 rec.radio.cb:16382 rec.radio.amateur.space:392
alt.alien.vampire.flonk.flonk.flonk:68552 alt.music.michael-jackson:60952
rec.music.classical.recordings:92452 comp.os.os2.advocacy:10274

I was busily flonking away in alt.usenet.kooks, when The Goddess Eris
Herself suddenly made me reply to Art Deco:
> Slow Code wrote:
>>TransWench wrote:
>>> I was busily flonking away in alt.usenet.kooks, when The Goddess Eris
>>> Herself suddenly made me reply to Mr. Hammington:
>>>> an old friend wrote:
>>>>> donttrythisathome wrote:
>>>>> > "an old freind" wrote...
>>>>> > > by truly spamming the ng which of course various parties will
>>>>> > > insist it perfectly ok further highlighting the true motives of
>>>>> > > the Wismen and Robeson
>>>>> >
>>>>> > I think both of them should hop up on each other's shoulders and
>>>>> > tell the other "I love you".
>>>>>
>>>>> for the own sake perhaps but mental help or take out from dr k would
>>>>> be a better for the rest of us
>>>>
>>>> STFU Marqueer...............
>>>> lunch is served,now go feast of the shit bag.
>>>
>>> Man, if Cletis Perkins hadn't already beaten you to the punch, I think
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>>
>>Stop giving them reasons to tease you.  It only makes you look more
>>stupid.
```

```
>>
>>Take a break from the radio groups for a while,  Maybe work on your moon
>>bounce some more.
>>
>>SC
>
> Shuttup, spammer.

Shuttup, spammer.

--
________________________________________________________
Hail Eris! All hail Discordia!! Kallisti!!! mhm 29x21
Pope Snarky Goodfella of the undulating cable, JM,
CK, POEE, KOTHASK, GGGHD, HCNB, IAC, MWFA
Email popesnarky *at* gmail.com
I want a boyfriend who is sensitive and caring,
but they already have boyfriends.


From -5589052256325380368
X-Google-Thread: 10bf43,6742993d924f2d47
X-Google-Thread: 10f7a7,9967071e232d70e9
X-Google-Thread: f9daf,9967071e232d70e9
X-Google-Thread: 106d41,9967071e232d70e9
X-Google-Thread: 10e8ad,9967071e232d70e9
X-Google-Thread: fe9fa,7430fa57c98fcec
X-Google-Thread: f8ce7,7430fa57c98fcec
X-Google-Thread: f54c9,7430fa57c98fcec
X-Google-Thread: 1138ec,7430fa57c98fcec
X-Google-Attributes:
gid10bf43,gid10f7a7,gidf9daf,gid106d41,gid10e8ad,gidfe9fa,gidf8ce7,gidf54c9,gid113
8ec,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news3.google.com!news.glorb.com!news-out.octanews.net!
indigo.octanews.net!auth.rouge.octanews.com.POSTED!not-for-mail
Subject: Re: well Mr Slow code has decicded to highlight the problems of the NG -
Mark, Just ignore them.
Date: Sat, 19 Aug 2006 07:00:03 -0600
From: Art Deco <erfc@netcabal.com>
Newsgroups:
rec.radio.amateur.policy,alt.usenet.kooks,alt.revenge,rec.radio.cb,rec.radio.amate
ur.space,alt.alien.vampire.flonk.flonk.flonk,alt.music.michael-
jackson,rec.music.classical.recordings,comp.os.os2.advocacy
Message-ID: <19082006070003394%erfc@netcabal.com>
References: <1155772639.440140.251430@p79g2000cwp.googlegroups.com>
<18909$44e44d25$d1cc5bdd$14927@snip.allthenewsgroups.com>
<1155825831.737438.295760@p79g2000cwp.googlegroups.com>
<1155835956.231036.305820@m79g2000cwm.googlegroups.com>
<pan.2006.08.18.10.09.58.69729@meower.flonker.kookologist.sf-fan.callahanian>
<56sFg.5597$Sn3.3312@newsread3.news.pas.earthlink.net>
<18082006195140416O%erfc@netcabal.com>
<pan.2006.08.19.07.52.27.951311@meower.flonker.kookologist.sf-fan.callahanian>
```

MIME-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-transfer-encoding: 8bit
Mail-Copies-To: nobody
User-Agent: Thoth/1.7.2 (Carbon/OS X)
X-Hammer-of-Thor: September 2005
X-FOB: Yes
Lines: 61
Organization: Octanews
NNTP-Posting-Date: 19 Aug 2006 08:00:04 CDT
X-Complaints-To: abuse@octanews.net
Xref: g2news2.google.com rec.radio.amateur.policy:38739 alt.usenet.kooks:221291
alt.revenge:6083 rec.radio.cb:16399 rec.radio.amateur.space:393
alt.alien.vampire.flonk.flonk.flonk:68556 alt.music.michael-jackson:60961
rec.music.classical.recordings:92490 comp.os.os2.advocacy:10285

TransWench <popesnarky@meow.org> wrote:

>I was busily flonking away in alt.usenet.kooks, when The Goddess Eris
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>>>TransWench wrote:
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>>>>>> donttrythisathome wrote:
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>>>>>> > > insist it perfectly ok further highlighting the true motives of
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>>>>>> >
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>>>>>>
>>>>>> for the own sake perhaps but mental help or take out from dr k would
>>>>>> be a better for the rest of us
>>>>>
>>>>> STFU Marqueer................
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```
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>>>
>>>Take a break from the radio groups for a while,  Maybe work on your moon
>>>bounce some more.
>>>
>>>SC
>>
>> Shuttup, spammer.
>
>Shuttup, spammer.

Shuttup, spammer.

--
COOSN-266-06-39716
Official Associate AFA-B Vote Rustler
Official Overseer of Kooks and Saucerheads in alt.astronomy
Official "Usenet psychopath and born-again LLPOF minion",
  as designated by Brad Guth

"Who is "David Tholen", Daedalus?  Still suffering from
attribution problems?"
  -- Dr. David Tholen


From -8195350577324876836
X-Google-Thread: 10bf43,6742993d924f2d47
X-Google-Thread: 10f7a7,9967071e232d70e9
X-Google-Thread: f9daf,9967071e232d70e9
X-Google-Thread: 106d41,9967071e232d70e9
X-Google-Thread: 10e8ad,9967071e232d70e9
X-Google-Thread: fe9fa,7430fa57c98fcec
X-Google-Thread: f8ce7,7430fa57c98fcec
X-Google-Thread: f54c9,7430fa57c98fcec
X-Google-Thread: 1138ec,7430fa57c98fcec
X-Google-Attributes:
gid10bf43,gid10f7a7,gidf9daf,gid106d41,gid10e8ad,gidfe9fa,gidf8ce7,gidf54c9,gid113
8ec,public
X-Google-Language: ENGLISH,ASCII-7-bit
Subject: Re: well Mr Slow code has decicded to highlight the problems of the NG -
Mark, Just ignore them.
From: Lola Stonewall Riot <popesnarky@meowmeowmeow.org>
Date: Sat, 19 Aug 2006 13:18:52 GMT
Message-ID:
<pan.2006.08.19.13.18.51.430886@meow.disorg.flonk.discord.kookology.alexa.cameron.
the.k00k.georgewbush.the.bobo>
References: <1155772639.440140.251430@p79g2000cwp.googlegroups.com>
<18909$44e44d25$d1cc5bdd$14927@snip.allthenewsgroups.com>
<1155825831.737438.295760@p79g2000cwp.googlegroups.com>
<1155835956.231036.305820@m79g2000cwm.googlegroups.com>
<pan.2006.08.18.10.09.58.69729@meower.flonker.kookologist.sf-fan.callahanian>
<56sFg.5597$Sn3.3312@newsread3.news.pas.earthlink.net>
```

```
<18082006195140416O%erfc@netcabal.com>
<pan.2006.08.19.07.52.27.951311@meower.flonker.kookologist.sf-fan.callahanian>
<19082006070003O394%erfc@netcabal.com>
Lines: 245
NNTP-Posting-Host: 64.59.144.74
Organization: Snarks of AErisia
Path: g2news2.google.com!news1.google.com!news.germany.com!news.motzarella.org!
news.ecp.fr!feeder.pfcorner.nl!feeder.news-service.com!newsfeed.freenet.de!
border2.nntp.ams.giganews.com!nntp.giganews.com!newsfeed101.telia.com!
nf02.dk.telia.net!130.227.3.89.MISMATCH!newsfeed1.uni2.dk!newsfeed1.swip.net!
swipnet!news.maxwell.syr.edu!elnk-pas-nf1!newsfeed.earthlink.net!pd7cy1no!
pd7cy2no!shaw.ca!pd7tw1no.POSTED!53ab2750!not-for-mail
Newsgroups:
rec.radio.amateur.policy,alt.usenet.kooks,alt.revenge,rec.radio.cb,rec.radio.amate
ur.space,alt.alien.vampire.flonk.flonk.flonk,alt.music.michael-
jackson,rec.music.classical.recordings,comp.os.os2.advocacy
X-Trace: pd7tw1no 1155993532 64.59.144.74 (Sat, 19 Aug 2006 07:18:52 MDT)
Reply-to: Wearer of the Holey FAGGOT Hat <popesnarky@gmale.com>
X-Trace-PostClient-IP: 70.68.151.67
User-Agent: Pan/0.14.2.91 (As She Crawled Across the Table)
X-Cabal: TINC
X-Keywords: NASA, Osama, Jordan, hackers, bomb
X-Cabal: Obsidian Order: TINCOO
X-Cabal: Obsidian Order Sombrero Number: TINCOOSN (really)
MIME-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 8bit
X-Complaints-To: abuse@shaw.ca
NNTP-Posting-Date: Sat, 19 Aug 2006 07:18:52 MDT
Xref: g2news2.google.com rec.radio.amateur.policy:38741 alt.usenet.kooks:221299
alt.revenge:6084 rec.radio.cb:16404 rec.radio.amateur.space:394
alt.alien.vampire.flonk.flonk.flonk:68557 alt.music.michael-jackson:60963
rec.music.classical.recordings:92497 comp.os.os2.advocacy:10291

Hail Eris! On Sat, 19 Aug 2006 07:00:03 -0600, Art Deco wrote:
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>>>>
>>>>SC
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>>> Shuttup, spammer.
>>
>>Shuttup, spammer.
>
> Shuttup, spammer.

Shuttup, spammer.

--
____
All Hail Discordia! Flonk Leader #2 & #11 1/9; mhm 29 x 21
The Discordian People's Most Powerful and Revered Being (without
portfolio)
Economic Left/Right: -7.63
Social Libertarian/Authoritarian: -7.38
Real email should go to gmail.com, otherwise the same as above.

Quotable quotes:
"Three OS's from corporate-kings in their towers of glass,
   Seven from valley-lords where orchards used to grow,
Nine from dotcoms doomed to die,
   One from the Dark Lord Gates on his dark throne
In the Land of Redmond where the Shadows lie.
   One OS to rule them all, One OS to find them,
   One OS to bring them all and in the darkness bind them,
In the Land of Redmond where the Shadows lie."'

"Covert ace nudists in the Vatican!"

"Real men eat me."

"Any priest or shaman must be presumed guilty until proved innocent." -- Lazarus Long

"Laws count, the US Constitution count more, and we need to have judges on the bench who are going to Carry Out those laws, not Make Law or Interpret Law." -- John "Easily" Shocked contradicts his own words on the overriding importance of society's reluctance to accept homosexuality, in Message-ID: <brIDe.67062$Qo.12613@fed1read01>

"Heterosexuality is not *normal*, it's just more /common/."

"For the most part, morality is universal." -- John "Easily" Shocked

"Gay, straight, they all want blow jobs."

"Bad stories are bad stories. We just call them as they are." -- DBurns demonstrates his sheer cluelessness on Mar 9, 2002, at 6:25 pm, in rec.arts.drwho

"Oh, and Snarky, if you're listening: Fuck you, Asshole! Enjoy the few remaining days of your internet access." Kooky troll John Long gets delusional, in Message-ID: <3C36AA50.31DD0...@epix.net>

A sad little top-poster with the nym of "Choirboy" once lamed:

> Well, gee, coming from an asshole like *you* ...
> ESAD, ya 'ho bitch.

Please to be posting proof, you facile fridgemagnet.
-- replied the Aussie rapier, aka fnord/Affinity, in a now-lost message

"I have a dream...that one day the whole world will know the joy of my nipples!" -- Stimpy

"The meek shall inherit the earth -- 2' x ~6' x 6' of it."

"If English was good enough for Jesus Christ, it's good enough for these U-nited States!" -- an unknown politician, in a senate floor debate over bilingual education.)

"The policeman isn't there to create disorder, the policeman is there to preserve disorder" -- Mayor Richard Daley of Czechago, September 23, 1968

"Moral: it's not a plot hole if two eyes and two brain cells can solve it." -- Keith Goodnight, in atbvs, on NNTP-Posting-Date: Mon, 03 Jun 2002 16:46:02 EDT

"Kung fu's useful!"

"Bernadette, you ignorant oaf.
Bernadette, you brainless dullard.
Bernadette, you feeble-minded wag.
Bernadette, you blathering baboon.
Bernadette, you babbling boor.
Bernadette, you depraved dolt.
Bernadette, you stinking slimeball.
Bernadette, you yammering yak.
Bernadette, you lily-livered lush.
Bernadette, you hard-hearted hulk."
-- Mother Be Strange gets very hard on herself, in
MID: <94b6d5f1.0203221829.3587ccd3@posting.google.com>

"[Lurlean] would never dream of sleeping with a dog. The Bible's against it. You don't seem to care what the Bible says, so she thought maybe you gave that a try too -- in addition to sucking on Steve, letting him play with your butt, and having seven different lesbian lovers in our bed."
-- Sistah Moonshine shocks a.p.h. with the revelation that she got it off with "Romaine Brooks", in a now-vanished message

"I should have known my boss was evil when he called my jumping onto my chair to praise the Lord out loud 'inappropriate behavior.'" -- Sistah Moonshine: Oppressed Christian, in another vanished message

"I made a pact with the devil." -- Sistah Moonshine, from her dream diary

"'drink that hooch,' they would say, 'and then smoke that joint. Bury your head in that strange woman's crotch and bring her to a thunderous climax with your tongue, then tell her no man could ever give her that much pleasure in a thousand years. Tell her to leave her husband and become a lesbian. Drip hot wax on that pervert's nutty buddies and then charge him extra for the privilege.'" -- Sistah Moonshine is now working on an erotic epic to outmatch Anne Rice.

"Roe V Wade has zero bearing on my existence other than it affects it adversely."
-- Johnny Wentzky never had much truck with "logic".

"You are the GOD-DAMNED, IGNORANT LIAR here.
Now, that is not me taking the Lord's name in vain."
-- John Wentzky: Living proof of the Death of Irony, in Message-ID:
<jljOe.5348$ZD4.3...@bignews3.bellsouth.net>

"Stupidity excuses nothing. It's only a reason...." -- Phxbrd

"The whining has just begun." -- John Wentzky

"It's not nice to misrepresent Mother Nature."

"Gay men deserve to die." -- John Wentzky

Joseph Bartlo wrote:
> A big mean meanie and heavyweight kookologist responding to my text
> and making me look like a colossal idiot. No more whinges to this mean
> person who keeps pounding my ass into the ground - you go on the lits
> of people who have trounced me. The state I left that group was
> embarassing to me. There were too many posts to follow them all, and I
> know a lot of people were saying mean things about me - but a few
> sucked up. So it was best at that point rather than to browse all the
> crap to simply make a standard post telling people a lot of bullshit
> I'd just made up. I did that on many other groups, but the war is only
> fought here. If anyone thinks I am the least bit kidding, consider how
> long this has been going, how little I have accomplished (i.e., how
> much the mean, mean kookologists have changed everything), and that I
> have a lot of goats to blow.

-- in MID: <43745576.1E07F998@verizon.net>

"America is supposed to be the world's melting pot,
so melt!!" -- from some BBS

"There are no governors anywhere."

"The personal _is_ political."

"If humans decline to exercise faith, then an
omnipotent God is impotent." -- Teresita, x-posted to APH

"Gabrielle?! Monkey-man, you bring her back! You know, you two are
beginning to irritate me with these obsessions of yours!
Fish don't just catch themselves!" -- Xena, "Fins, Femmes, &
Gems" (64/318)

"I don't think so because, I'm a whole lot smarter and far less bigoted
than the average Jew, although smart Jews as having collaborated with
your Skull and Bones Third Reich certainly have more of those
in-your-face balls than I'd ever have to work with." -- Guthball drools
all over my irony meter, in MID:
<fea985f50107c84f4d1d4894114d1989.49644@mygate.mailgate.org>

"You never asked someone who goes into areas of the internet that are
only for adults who has an underage id somehow or another if they are a
cop posing as an underage person online?
I guess lots of people just don't watch dateline or read stories much.
Why don;t you go to pervertedjustice,com and see what they do. They are
awash in their self-proclaimed glory after they lied to membners of the
public.
They are awash in their self-proclaimed glory after they posed as an
underage person and agreed to do all sorts of sex acts wioth adult
males, and they are adults posing as teenager themselves. They make
themsleves into liars by falsely impersonating underage persons and by
not fuilfilling the words they tell the victims online in their chats.
Why don't you read it where they tell these victims of their deceit
about how they have been with grown men and such? Why don't you read it
where they say, "That would be cool." after someone makes an advance

towards an adult who is posing as a teenager? And, where they agree to
meet the person, etc.
Lost control, didn't you?
Is that why you feel as if you need to lie so much now? I see where lots
of these false impersonation games are not sticking. They feel as if
they can lie and then order the victims to get counseling in the
gayblade, governmental, pro-choice tax leech counseling centers. They
are doing nothing more than usury and fraud in many cases." -- Wentzky
almost comes out of the closet as a pedo/ephebophile in MID:
<H%%Eg.28916$Uq1.22411@bignews6.bellsouth.net>

"This bandwidth has been rescued from AOL." -- mimus

No-one expects the Fannish Inquisition!

From -2675823190198130193
X-Google-Thread: 10bf43,6742993d924f2d47
X-Google-Thread: 10f7a7,9967071e232d70e9
X-Google-Thread: f9daf,9967071e232d70e9
X-Google-Thread: 106d41,9967071e232d70e9
X-Google-Thread: 10e8ad,9967071e232d70e9
X-Google-Thread: fe9fa,7430fa57c98fcec
X-Google-Thread: f8ce7,7430fa57c98fcec
X-Google-Thread: f54c9,7430fa57c98fcec
X-Google-Thread: 1138ec,7430fa57c98fcec
X-Google-Attributes:
gid10bf43,gid10f7a7,gidf9daf,gid106d41,gid10e8ad,gidfe9fa,gidf8ce7,gidf54c9,gid113
8ec,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news3.google.com!news.glorb.com!news-out.octanews.net!
indigo.octanews.net!auth.rouge.octanews.com.POSTED!not-for-mail
Subject: Re: well Mr Slow code has decicded to highlight the problems of the NG -
Mark, Just ignore them.
Date: Sat, 19 Aug 2006 07:23:25 -0600
From: Art Deco <erfc@netcabal.com>
Newsgroups:
rec.radio.amateur.policy,alt.usenet.kooks,alt.revenge,rec.radio.cb,rec.radio.amate
ur.space,alt.alien.vampire.flonk.flonk.flonk,alt.music.michael-
jackson,rec.music.classical.recordings,comp.os.os2.advocacy
Message-ID: <19082006072325452 9%erfc@netcabal.com>
References: <1155772639.440140.251430@p79g2000cwp.googlegroups.com>
<18909$44e44d25$d1cc5bdd$14927@snip.allthenewsgroups.com>
<1155825831.737438.295760@p79g2000cwp.googlegroups.com>
<1155835956.231036.305820@m79g2000cwm.googlegroups.com>
<pan.2006.08.18.10.09.58.69729@meower.flonker.kookologist.sf-fan.callahanian>
<56sFg.5597$Sn3.3312@newsread3.news.pas.earthlink.net>
<18082006195140416 0%erfc@netcabal.com>
<pan.2006.08.19.07.52.27.951311@meower.flonker.kookologist.sf-fan.callahanian>
<19082006070003039 4%erfc@netcabal.com>
<pan.2006.08.19.13.18.51.430886@meow.disorg.flonk.discord.kookology.alexa.cameron.
the.k00k.georgewbush.the.bobo>
MIME-Version: 1.0

```
Content-Type: text/plain; charset=ISO-8859-1
Content-transfer-encoding: 8bit
Mail-Copies-To: nobody
User-Agent: Thoth/1.7.2 (Carbon/OS X)
X-Hammer-of-Thor: September 2005
X-FOB: Yes
Lines: 67
Organization: Octanews
NNTP-Posting-Date: 19 Aug 2006 08:23:26 CDT
X-Complaints-To: abuse@octanews.net
Xref: g2news2.google.com rec.radio.amateur.policy:38743 alt.usenet.kooks:221303
alt.revenge:6085 rec.radio.cb:16408 rec.radio.amateur.space:395
alt.alien.vampire.flonk.flonk.flonk:68558 alt.music.michael-jackson:60964
rec.music.classical.recordings:92500 comp.os.os2.advocacy:10295

Lola Stonewall Riot <popesnarky@meowmeowmeow.org> wrote:

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>
>Shuttup, spammer.

Shuttup, spammer.

--
COOSN-266-06-39716
Official Associate AFA-B Vote Rustler
Official Overseer of Kooks and Saucerheads in alt.astronomy
Official "Usenet psychopath and born-again LLPOF minion",
  as designated by Brad Guth

"Who is "David Tholen", Daedalus?  Still suffering from
attribution problems?"
  -- Dr. David Tholen


From -1308935503761088458
X-Google-Thread: 10bf43,6742993d924f2d47
X-Google-Thread: 10f7a7,9967071e232d70e9
X-Google-Thread: f9daf,9967071e232d70e9
X-Google-Thread: 106d41,9967071e232d70e9
X-Google-Thread: 10e8ad,9967071e232d70e9
X-Google-Thread: fe9fa,7430fa57c98fcec
X-Google-Thread: f8ce7,7430fa57c98fcec
X-Google-Thread: f54c9,7430fa57c98fcec
X-Google-Thread: 1138ec,7430fa57c98fcec
X-Google-Attributes:
gid10bf43,gid10f7a7,gidf9daf,gid106d41,gid10e8ad,gidfe9fa,gidf8ce7,gidf54c9,gid113
8ec,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news4.google.com!border1.nntp.dca.giganews.com!
border2.nntp.dca.giganews.com!nntp.giganews.com!pd7cy3no!pd7cy4no!shaw.ca!
pd7tw2no.POSTED!53ab2750!not-for-mail
X-Trace-PostClient-IP: 70.68.151.67
From: "Text Medium No. 5" <mhm29x21@meow.flonk>
Organization: The Holy International Discordian Internet & Usenet Terrorist
Pretzel Cabal (TINC)
Subject: Re: well Mr Slow code has decicded to highlight the problems of the NG -
```

Mark, Just ignore them.
User-Agent: Pan/0.14.2.91 (As She Crawled Across the Table)
Message-Id:
<pan.2006.08.19.13.36.38.457023@hail.eris.flonk.meow.all.hail.discordia.meow.flonk.mockery.demon.not.really.leola>
Newsgroups:
rec.radio.amateur.policy,alt.usenet.kooks,alt.revenge,rec.radio.cb,rec.radio.amateur.space,alt.alien.vampire.flonk.flonk.flonk,alt.music.michael-jackson,rec.music.classical.recordings,comp.os.os2.advocacy
References: <1155772639.440140.251430@p79g2000cwp.googlegroups.com>
<18909$44e44d25$d1cc5bdd$14927@snip.allthenewsgroups.com>
<1155825831.737438.295760@p79g2000cwp.googlegroups.com>
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<pan.2006.08.19.13.18.51.430886@meow.disorg.flonk.discord.kookology.alexa.cameron.the.k00k.georgewbush.the.bobo> <190820060723254529%erfc@netcabal.com>
Reply-To: Cross-Posters For Goddess! <x-posting@is.sacred>
X-Conspiracy: HomIntern
X-Konspiracy: K00ks Who Must Meet: Alexa Cameron & John Shocked
X-Keywords: Pentagon, NSA, Echelon, radioactive, Italy
eX-Gay: Doesn't exist
X-tra-terrestrial: May or may not exist
X-Yahoo: Group: Cabal_of_the_Holy_Pretzel
X-Bisexual: Still and always
X-Cabal: The Holy International Discordian Internet & Usenet Terrorist Pretzel
X-Goofiest: Goofy-@zzed Babboon: Yads
X-Posting: Address Domain: meow.org
X-Osama: Dead, and long may he rot
X-Riot: Stonewall
X-Political-Compass: Economic Left/Right: -7.63 Social Libertarian/Authoritarian: -7.38
MIME-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 8bit
Lines: 65
Date: Sat, 19 Aug 2006 13:36:39 GMT
NNTP-Posting-Host: 64.59.144.74
X-Complaints-To: abuse@shaw.ca
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Xref: g2news2.google.com rec.radio.amateur.policy:38744 alt.usenet.kooks:221310
alt.revenge:6086 rec.radio.cb:16415 rec.radio.amateur.space:396
alt.alien.vampire.flonk.flonk.flonk:68560 alt.music.michael-jackson:60969
rec.music.classical.recordings:92507 comp.os.os2.advocacy:10300

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>>Shuttup, spammer.
>
> Shuttup, spammer.
```

Shuttup, spammer.

--
Shon'ai
"I was told there would be cookies."
Cross-Poasters For Goddess!
Remember: Straight people can't help it!

```
From -3972808562582785598
X-Google-Thread: 10bf43,6742993d924f2d47
X-Google-Thread: 10f7a7,9967071e232d70e9
X-Google-Thread: f9daf,9967071e232d70e9
X-Google-Thread: 106d41,9967071e232d70e9
X-Google-Thread: 10e8ad,9967071e232d70e9
X-Google-Thread: fe9fa,7430fa57c98fcec
X-Google-Thread: f8ce7,7430fa57c98fcec
X-Google-Thread: f54c9,7430fa57c98fcec
X-Google-Thread: 1138ec,7430fa57c98fcec
X-Google-Attributes:
gid10bf43,gid10f7a7,gidf9daf,gid106d41,gid10e8ad,gidfe9fa,gidf8ce7,gidf54c9,gid113
8ec,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news4.google.com!news.glorb.com!news-out.octanews.net!
indigo.octanews.net!auth.rouge.octanews.com.POSTED!not-for-mail
Subject: Re: well Mr Slow code has decicded to highlight the problems of the NG -
Mark, Just ignore them.
Date: Sat, 19 Aug 2006 17:03:46 -0600
From: Art Deco <erfc@netcabal.com>
Newsgroups:
rec.radio.amateur.policy,alt.usenet.kooks,alt.revenge,rec.radio.cb,rec.radio.amate
ur.space,alt.alien.vampire.flonk.flonk.flonk,alt.music.michael-
jackson,rec.music.classical.recordings,comp.os.os2.advocacy
Message-ID: <19082006170346383l%erfc@netcabal.com>
References: <1155772639.440140.251430@p79g2000cwp.googlegroups.com>
<18909$44e44d25$d1cc5bdd$14927@snip.allthenewsgroups.com>
<1155825831.737438.295760@p79g2000cwp.googlegroups.com>
<1155835956.231036.305820@m79g2000cwm.googlegroups.com>
<pan.2006.08.18.10.09.58.69729@meower.flonker.kookologist.sf-fan.callahanian>
<56sFg.5597$Sn3.3312@newsread3.news.pas.earthlink.net>
<180820061951404160%erfc@netcabal.com>
<pan.2006.08.19.07.52.27.951311@meower.flonker.kookologist.sf-fan.callahanian>
<190820060700030394%erfc@netcabal.com>
<pan.2006.08.19.13.18.51.430886@meow.disorg.flonk.discord.kookology.alexa.cameron.
the.k00k.georgewbush.the.bobo> <190820060723254529%erfc@netcabal.com>
<pan.2006.08.19.13.36.38.457023@hail.eris.flonk.meow.all.hail.discordia.meow.flonk
.mockery.demon.not.really.leola>
MIME-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-transfer-encoding: 8bit
Mail-Copies-To: nobody
User-Agent: Thoth/1.7.2 (Carbon/OS X)
```

```
X-Hammer-of-Thor: September 2005
X-FOB: Yes
Lines: 74
Organization: Octanews
NNTP-Posting-Date: 19 Aug 2006 18:03:46 CDT
X-Complaints-To: abuse@octanews.net
Xref: g2news2.google.com rec.radio.amateur.policy:38837 alt.usenet.kooks:221480
alt.revenge:6087 rec.radio.cb:16475 rec.radio.amateur.space:397
alt.alien.vampire.flonk.flonk.flonk:68621 alt.music.michael-jackson:61027
rec.music.classical.recordings:92589 comp.os.os2.advocacy:10359

Text Medium No. 5 <mhm29x21@meow.flonk> wrote:

>Hail Eris! On Sat, 19 Aug 2006 07:23:25 -0600, Art Deco jabbered inanely:
>> Lola Stonewall Riot wrote:
>>>Hail Eris! On Sat, 19 Aug 2006 07:00:03 -0600, Art Deco wrote:
>>>> TransWench wrote:
>>>>>I was busily flonking away in alt.usenet.kooks, when The Goddess Eris
>>>>>Herself suddenly made me reply to Art Deco:
>>>>>> Slow Code wrote:
>>>>>>>TransWench wrote:
>>>>>>>> I was busily flonking away in alt.usenet.kooks, when The Goddess
>>>>>>>> Eris Herself suddenly made me reply to Mr. Hammington:
>>>>>>>>> an old friend wrote:
>>>>>>>>>> donttrythisathome wrote:
>>>>>>>>>> > "an old freind" wrote...
>>>>>>>>>> > > by truly spamming the ng which of course various parties will
>>>>>>>>>> > > insist it perfectly ok further highlighting the true motives
>>>>>>>>>> > > of the Wismen and Robeson
>>>>>>>>>> >
>>>>>>>>>> > I think both of them should hop up on each other's shoulders
>>>>>>>>>> > and tell the other "I love you".
>>>>>>>>>>
>>>>>>>>>> for the own sake perhaps but mental help or take out from dr k
>>>>>>>>>> would be a better for the rest of us
>>>>>>>>>
>>>>>>>>> STFU Marqueer................
>>>>>>>>> lunch is served,now go feast of the shit bag.
>>>>>>>>
>>>>>>>> Man, if Cletis Perkins hadn't already beaten you to the punch, I
>>>>>>>> think I'd be nominating all the rec.radio.* 'phobes for a Busted
>>>>>>>> Urinal at once...As it is, the sheer "fucking fuck-ness" of his
>>>>>>>> posts will win him that "coveted" trophy, but you guys are a
>>>>>>>> shoo-in for next month, especially with Wiseman among you. I mean,
>>>>>>>> Mark's merely boring, hence the Golden Killfile nom, but you lot
>>>>>>>> just plain stink up the joint. You deserve proper recognition, you
>>>>>>>> do.
>>>>>>>
>>>>>>>Mark, Just ignore them.
>>>>>>>
>>>>>>>They only tease you because of the stupid things you say when you
>>>>>>>follow up.  Just ignore them and they'll give up.
>>>>>>>
```

```
>>>>>>>Stop giving them reasons to tease you.  It only makes you look more
>>>>>>>stupid.
>>>>>>>
>>>>>>>Take a break from the radio groups for a while,  Maybe work on your
>>>>>>>moon bounce some more.
>>>>>>>
>>>>>>>SC
>>>>>>
>>>>>> Shuttup, spammer.
>>>>>
>>>>>Shuttup, spammer.
>>>>
>>>> Shuttup, spammer.
>>>
>>>Shuttup, spammer.
>>
>> Shuttup, spammer.
>
>Shuttup, spammer.

Shuttup, spammer.

--
COOSN-266-06-39716
Official Associate AFA-B Vote Rustler
Official Overseer of Kooks and Saucerheads in alt.astronomy
Official "Usenet psychopath and born-again LLPOF minion",
  as designated by Brad Guth

"Who is "David Tholen", Daedalus?  Still suffering from
attribution problems?"
  -- Dr. David Tholen


From -1236995668023604779
X-Google-Thread: 10bf43,6742993d924f2d47
X-Google-Thread: 10f7a7,9967071e232d70e9
X-Google-Thread: f9daf,9967071e232d70e9
X-Google-Thread: 106d41,9967071e232d70e9
X-Google-Thread: 10e8ad,9967071e232d70e9
X-Google-Thread: fe9fa,7430fa57c98fcec
X-Google-Thread: f8ce7,7430fa57c98fcec
X-Google-Thread: f54c9,7430fa57c98fcec
X-Google-Thread: 1138ec,7430fa57c98fcec
X-Google-Attributes:
gid10bf43,gid10f7a7,gidf9daf,gid106d41,gid10e8ad,gidfe9fa,gidf8ce7,gidf54c9,gid113
8ec,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news3.google.com!news.glorb.com!feed.cgocable.net!
pd7cy1no!pd7cy2no!shaw.ca!pd7tw3no.POSTED!53ab2750!not-for-mail
X-Trace-PostClient-IP: 70.68.151.67
From: FreeSpeechStore <freespeechstore@meow.fuckhead>
Organization: Anarchy International
```

Subject: Re: well Mr Slow code has decicded to highlight the problems of the NG - Mark, Just ignore them.
User-Agent: Pan/0.14.2.91 (As She Crawled Across the Table)
Message-Id: <pan.2006.08.20.00.53.23.765962@snarky.trolling.and.mocking.scoville>
Newsgroups:
rec.radio.amateur.policy,alt.usenet.kooks,alt.revenge,rec.radio.cb,rec.radio.amateur.space,alt.alien.vampire.flonk.flonk.flonk,alt.music.michael-jackson,rec.music.classical.recordings,comp.os.os2.advocacy
References: <1155772639.440140.251430@p79g2000cwp.googlegroups.com>
<18909$44e44d25$d1cc5bdd$14927@snip.allthenewsgroups.com>
<1155825831.737438.295760@p79g2000cwp.googlegroups.com>
<1155835956.231036.305820@m79g2000cwm.googlegroups.com>
<pan.2006.08.18.10.09.58.69729@meower.flonker.kookologist.sf-fan.callahanian>
<56sFg.5597$Sn3.3312@newsread3.news.pas.earthlink.net>
<18082006195140416O%erfc@netcabal.com>
<pan.2006.08.19.07.52.27.951311@meower.flonker.kookologist.sf-fan.callahanian>
<190820060700030394%erfc@netcabal.com>
<pan.2006.08.19.13.18.51.430886@meow.disorg.flonk.discord.kookology.alexa.cameron.the.k00k.georgewbush.the.bobo> <190820060723254529%erfc@netcabal.com>
<pan.2006.08.19.13.36.38.457023@hail.eris.flonk.meow.all.hail.discordia.meow.flonk.mockery.demon.not.really.leola> <190820061703463831%erfc@netcabal.com>
Reply-To: Richard Scoville Is A Scamming NetKKKopping Fjuckhead!
<freespeechstore@no.really>
X-Idiot-1: John Wentzky
X-Idiot-2: Yads/The Doctor
X-Keywords: The Artful Dodger, SEAL Team 6, BIOL, Meta-hackers, monarchist
X-Location: You finally got it right, Scoville, you halfwitted, incompetent netKKKop!
X-Online-Game: RuneScape
X-Online-HTML-Game: The Kingdom Of Loathing
X-Crybaby-1: Richard M. Scoville
X-Crybaby-2: David J. Tholen
X-Crybaby-3: Thomas "Jinn(-Soaked)" Bishop
X-Crybaby-4: Charles Lysaght
X-Crybaby-5: Joseph Bartlo
X-Stalker: Anthony Banovic
X-Racist: Gordon "Revd. Terence Fformby-Smythe" Radavich
X-Team: Wolverine, ShadowCat, Sunfire, Phoenix, Cyclops, Storm, Rogue, Gambit
MIME-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 8bit
Lines: 86
Date: Sun, 20 Aug 2006 00:53:25 GMT
NNTP-Posting-Host: 64.59.144.74
X-Complaints-To: abuse@shaw.ca
X-Trace: pd7tw3no 1156035205 64.59.144.74 (Sat, 19 Aug 2006 18:53:25 MDT)
NNTP-Posting-Date: Sat, 19 Aug 2006 18:53:25 MDT
Xref: g2news2.google.com rec.radio.amateur.policy:38856 alt.usenet.kooks:221527
alt.revenge:6089 rec.radio.cb:16497 rec.radio.amateur.space:398
alt.alien.vampire.flonk.flonk.flonk:68638 alt.music.michael-jackson:61063
rec.music.classical.recordings:92614 comp.os.os2.advocacy:10381

On Sat, 19 Aug 2006 17:03:46 -0600, Art Deco wrote:

```
> Text Medium No. 5 wrote:
>>Hail Eris! On Sat, 19 Aug 2006 07:23:25 -0600, Art Deco jabbered inanely:
>>> Lola Stonewall Riot wrote:
>>>>Hail Eris! On Sat, 19 Aug 2006 07:00:03 -0600, Art Deco wrote:
>>>>> TransWench wrote:
>>>>>>I was busily flonking away in alt.usenet.kooks, when The Goddess Eris
>>>>>>Herself suddenly made me reply to Art Deco:
>>>>>>> Slow Code wrote:
>>>>>>>>TransWench wrote:
>>>>>>>>> I was busily flonking away in alt.usenet.kooks, when The Goddess
>>>>>>>>> Eris Herself suddenly made me reply to Mr. Hammington:
>>>>>>>>>> an old friend wrote:
>>>>>>>>>>> donttrythisathome wrote:
>>>>>>>>>>> > "an old freind" wrote...
>>>>>>>>>>> > > by truly spamming the ng which of course various parties
>>>>>>>>>>> > > will insist it perfectly ok further highlighting the true
>>>>>>>>>>> > > motives of the Wismen and Robeson
>>>>>>>>>>> >
>>>>>>>>>>> > I think both of them should hop up on each other's shoulders
>>>>>>>>>>> > and tell the other "I love you".
>>>>>>>>>>>
>>>>>>>>>>> for the own sake perhaps but mental help or take out from dr k
>>>>>>>>>>> would be a better for the rest of us
>>>>>>>>>>
>>>>>>>>>> STFU Marqueer...............
>>>>>>>>>> lunch is served,now go feast of the shit bag.
>>>>>>>>>
>>>>>>>>> Man, if Cletis Perkins hadn't already beaten you to the punch, I
>>>>>>>>> think I'd be nominating all the rec.radio.* 'phobes for a Busted
>>>>>>>>> Urinal at once...As it is, the sheer "fucking fuck-ness" of his
>>>>>>>>> posts will win him that "coveted" trophy, but you guys are a
>>>>>>>>> shoo-in for next month, especially with Wiseman among you. I
>>>>>>>>> mean, Mark's merely boring, hence the Golden Killfile nom, but
>>>>>>>>> you lot just plain stink up the joint. You deserve proper
>>>>>>>>> recognition, you do.
>>>>>>>>
>>>>>>>>Mark, Just ignore them.
>>>>>>>>
>>>>>>>>They only tease you because of the stupid things you say when you
>>>>>>>>follow up.  Just ignore them and they'll give up.
>>>>>>>>
>>>>>>>>Stop giving them reasons to tease you.  It only makes you look more
>>>>>>>>stupid.
>>>>>>>>
>>>>>>>>Take a break from the radio groups for a while,  Maybe work on your
>>>>>>>>moon bounce some more.
>>>>>>>>
>>>>>>>>SC
>>>>>>>
>>>>>>> Shuttup, spammer.
>>>>>>
>>>>>>Shuttup, spammer.
>>>>>
```

```
>>>>> Shuttup, spammer.
>>>>
>>>>Shuttup, spammer.
>>>
>>> Shuttup, spammer.
>>
>>Shuttup, spammer.
>
> Shuttup, spammer.

Shuttup, spammer.

--
__________________________________________________________________________
Hail Eris!
Not Richard Scoville
Rookie Kook of the Year, 2005
Kook of the Month, December 2005
Clueless Newbie of the Month, October 2005
Palmjob Paddle, January 2006
George Pickett Memorial Trophy, October 2005
Coward of the Month, October 2005
George Armstrong Custer "Kicked @$$" Award
Kenny McCormick Memorial Medal
Order of the Holey Sockpuppet
Balsa Gavel
Richard M. Scoville is explicitly denied the right to archive any of my
posts, under any of my nyms, on his site, FreeSpeechStore.com, winner of
the Richbull.com Memorial Award for Kooksite of the Year, 2005
http://tinyurl.com/c222n
"It's claiming authority based on absurd myths and fantasy beings - that
creates anger." -- Kurt Gavin


From -7854557009417925041
X-Google-Thread: 10bf43,2eaf18ff5ebea7f7
X-Google-Thread: 10f7a7,813f13f1ab0567a7
X-Google-Thread: f9daf,813f13f1ab0567a7
X-Google-Thread: 106d41,813f13f1ab0567a7
X-Google-Thread: 10e8ad,813f13f1ab0567a7
X-Google-Attributes: gid10bf43,gid10f7a7,gidf9daf,gid106d41,gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news4.google.com!newshub.sdsu.edu!elnk-nf2-pas!
newsfeed.earthlink.net!stamper.news.pas.earthlink.net!
newsread1.news.pas.earthlink.net.POSTED!3dd4ce4a!not-for-mail
Newsgroups:
rec.radio.amateur.policy,alt.usenet.kooks,alt.revenge,rec.radio.cb,rec.radio.amate
ur.space
Subject: Re: some explanation since Robeson has choosen to renew his assult on th
NG, and me - Mark, Just ignore them.
From: Slow Code <my.mail@no.spam>
References: <1155298281.480099.57590@h48g2000cwc.googlegroups.com>
<1155301602.610277.95390@b28g2000cwb.googlegroups.com>
```

<1155312973.033376.134900@i42g2000cwa.googlegroups.com>
<pan.2006.08.16.22.25.51.899513@hail.eris.flonk.meow.all.hail.discordia.meow.flonk.mockery.demon.not.really.leola>
<1155767340.849495.207160@m73g2000cwd.googlegroups.com>
Organization: None
User-Agent: Xnews/5.04.25
Lines: 33
Message-ID: <gH5Gg.10934$xp2.10518@newsread1.news.pas.earthlink.net>
Date: Sun, 20 Aug 2006 22:50:52 GMT
NNTP-Posting-Host: 4.235.0.85
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread1.news.pas.earthlink.net 1156114252 4.235.0.85 (Sun, 20 Aug 2006 15:50:52 PDT)
NNTP-Posting-Date: Sun, 20 Aug 2006 15:50:52 PDT
Xref: g2news2.google.com rec.radio.amateur.policy:38922 alt.usenet.kooks:221891 alt.revenge:6100 rec.radio.cb:16602 rec.radio.amateur.space:399

"an old freind" <kb9rqz-ars@hotmail.com> wrote in
news:1155767340.849495.207160@m73g2000cwd.googlegroups.com:

>
> Text Medium No. 5 wrote:
>> Hail Eris! On Fri, 11 Aug 2006 09:16:13 -0700, marqueenie_von_dork
>> jabbered inanely:
>
>> > YOU,otoh, have gone out of your way to post gay filth here. I have
>> > copies of YOUR posts to prove it. YOU are not welcome here you filty
>> > sodomite!
>> >
>> > aren't you in violation of the states sodomy laws??
>>
>> Keep it up. I see many k00k awards in your future, you busted urinal.
> and in his past he is Roger Wisemen sometimes called Woger
>
>

Mark, Just ignore them.

They only tease you because of the stupid things you say when you
follow up. Just ignore them and they'll give up.

Stop giving them reasons to tease you. It only makes you look
more stupid.

Take a break from the radio groups for a while, Maybe work on your
moon bounce some more.

SC

From -6344644176638333764

X-Google-Thread: fc2a5,f8ce44921aecd15e
X-Google-Thread: 107ada,884c9e429cd29b18
X-Google-Thread: 10bf43,7831d7ab14abf4ba
X-Google-Thread: 10e8ad,f8ce44921aecd15e
X-Google-Attributes: gidfc2a5,gid107ada,gid10bf43,gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news4.google.com!newshub.sdsu.edu!elnk-nf2-pas!
newsfeed.earthlink.net!stamper.news.pas.earthlink.net!
newsread1.news.pas.earthlink.net.POSTED!3dd4ce4a!not-for-mail
Newsgroups:
rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space
Subject: Re: STFU - Mark, Just ignore them.
From: Slow Code <my.mail@no.spam>
References: <452207781406@news-server.austin.rr.com>
<42f76$44e11136$d1cc587d$11957@snip.allthenewsgroups.com>
<1155607007.048706.302580@b28g2000cwb.googlegroups.com>
<44e23a97$0$21028$88260bb3@free.teranews.com>
<1155681102.743274.169300@74g2000cwt.googlegroups.com>
<1155687062.084385.29180@i42g2000cwa.googlegroups.com>
<1155687181.832750.241820@p79g2000cwp.googlegroups.com>
<1155731470.893781.68090@m73g2000cwd.googlegroups.com>
Organization: None
User-Agent: Xnews/5.04.25
Lines: 23
Message-ID: <zH5Gg.10949$xp2.6448@newsread1.news.pas.earthlink.net>
Date: Sun, 20 Aug 2006 22:51:11 GMT
NNTP-Posting-Host: 4.235.0.85
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread1.news.pas.earthlink.net 1156114271 4.235.0.85 (Sun, 20 Aug 2006 15:51:11 PDT)
NNTP-Posting-Date: Sun, 20 Aug 2006 15:51:11 PDT
Xref: g2news2.google.com rec.radio.amateur.homebrew:6575
rec.radio.amateur.misc:19376 rec.radio.amateur.policy:38932
rec.radio.amateur.space:400

"Not Cocksucker Lloyd" <not_time_turd_lloyd@yahoo.com> wrote in
news:1155731470.893781.68090@m73g2000cwd.googlegroups.com:

>
> an_old_friendless cocksucker wrote:
>> cease
>
> Cease breathing.
>
>

Mark, Just ignore them.

They only tease you because of the stupid things you say when you
follow up. Just ignore them and they'll give up.

Stop giving them reasons to tease you. It only makes you look more stupid.

Take a break from the radio groups for a while, Maybe work on your
moon bounce some more.

SC

```
From -1053642378750856516
X-Google-Thread: fc2a5,f8ce44921aecd15e
X-Google-Thread: 107ada,884c9e429cd29b18
X-Google-Thread: 10bf43,7831d7ab14abf4ba
X-Google-Thread: 10e8ad,f8ce44921aecd15e
X-Google-Attributes: gidfc2a5,gid107ada,gid10bf43,gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news4.google.com!newshub.sdsu.edu!elnk-nf2-pas!
newsfeed.earthlink.net!stamper.news.pas.earthlink.net!
newsread1.news.pas.earthlink.net.POSTED!3dd4ce4a!not-for-mail
Newsgroups:
rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.rad
io.amateur.space
Subject: Re: Retard Mark makes good spell - Mark, Just ignore them.
From: Slow Code <my.mail@no.spam>
References: <452207781406@news-server.austin.rr.com>
<42f76$44e11136$d1cc587d$11957@snip.allthenewsgroups.com>
<1155607007.048706.302580@b28g2000cwb.googlegroups.com>
<44e23a97$0$21028$88260bb3@free.teranews.com>
<1155681102.743274.169300@74g2000cwt.googlegroups.com>
<1155687062.084385.29180@i42g2000cwa.googlegroups.com>
<1155687181.832750.241820@p79g2000cwp.googlegroups.com>
<1155731470.893781.68090@m73g2000cwd.googlegroups.com>
<1155743368.829657.131340@m79g2000cwm.googlegroups.com>
<1155756718.845363.87450@b28g2000cwb.googlegroups.com>
Organization: None
User-Agent: Xnews/5.04.25
Lines: 28
Message-ID: <2I5Gg.10959$xp2.8866@newsread1.news.pas.earthlink.net>
Date: Sun, 20 Aug 2006 22:51:42 GMT
NNTP-Posting-Host: 4.235.0.85
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread1.news.pas.earthlink.net 1156114302 4.235.0.85 (Sun, 20 Aug 2006
15:51:42 PDT)
NNTP-Posting-Date: Sun, 20 Aug 2006 15:51:42 PDT
Xref: g2news2.google.com rec.radio.amateur.homebrew:6576
rec.radio.amateur.misc:19377 rec.radio.amateur.policy:38938
rec.radio.amateur.space:401
```

peewee_lloyd_davies@yahoo.com wrote in news:1155756718.845363.87450
@b28g2000cwb.googlegroups.com:

>
> an old fraud wrote:
>> Not Cocksucker Lloyd wrote:

```
>> > an_old_friendless cocksucker wrote:
>> > > cease
>> >
>> > Cease breathing
>> eom
>
> "eom?" BWHAHAHAHAHAHAHAHAHAHA!
>
>
```

Mark, Just ignore them.

They only tease you because of the stupid things you say when you follow up. Just ignore them and they'll give up.

Stop giving them reasons to tease you. It only makes you look more stupid.

Take a break from the radio groups for a while, Maybe work on your moon bounce some more.

SC

```
From -4327598977222857007
X-Google-Thread: 10e8ad,f7827561f66cc17b,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news3.google.com!newshub.sdsu.edu!elnk-nf2-pas!
newsfeed.earthlink.net!stamper.news.pas.earthlink.net!
newsread1.news.pas.earthlink.net.POSTED!46041641!not-for-mail
From: "JoAnne Maenpaa" <wb9jej_no-spam@earthling.com>
Newsgroups: rec.radio.amateur.space
Subject: ANS-232 AMSAT News Service Weekly Bulletins
Lines: 323
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <VHoHg.13449$xp2.9418@newsread1.news.pas.earthlink.net>
Date: Thu, 24 Aug 2006 21:17:41 GMT
NNTP-Posting-Host: 66.167.65.203
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread1.news.pas.earthlink.net 1156454261 66.167.65.203 (Thu, 24 Aug
2006 14:17:41 PDT)
NNTP-Posting-Date: Thu, 24 Aug 2006 14:17:41 PDT
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news2.google.com rec.radio.amateur.space:402
```

AMSAT NEWS SERVICE
ANS-232

ANS is a free, weekly, news and information service of AMSAT North

America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

******************** AMSAT 2006 Space Symposium **************************

Online registration and hotel reservation for the 2006 AMSAT Space Symposium has been posted to the AMSAT website, and information about the Symposium has been expanded. The 2006 AMSAT Space Symposium will be held October 6, 7 and 8 at the Crowne Plaza in Foster City, California in the beautiful San Francisco Bay Area.

Please visit http://www.amsat.org/amsat-new/symposium for additional information and an index to the expanded Symposium web pages.

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In this edition:

* ISS Commander McArthur to Keynote at AMSAT Symposium
* JAMSAT Announces a New Satellite Operating Award
* Japanese HITSAT Amateur CubeSat to Launch September 23rd
* SSTV Testing Continues from ISS
* Remember to Vote in the AMSAT BoD Election
* Commission Probing Dnepr Crash Presents Preliminary Conclusions
* OSCAR-11 Heard Again

SB SAT @ AMSAT $ANS-232.01
ISS Commander McArthur to Keynote at AMSAT Symposium

AMSAT News Service Bulletin 232.01
>From AMSAT HQ SILVER SPRING, MD.
August 20, 2006
To All RADIO AMATEURS
BID: $ANS-232.01

AMSAT is excited to announce that ISS Expedition 12 Commander William (Bill) S. McArthur, KC5ACR, will be the keynote speaker at the 2006 AMSAT Space Symposium to be held at the Crowne Plaza Hotel in Foster City, California, October 6-8, 2006.

Commander McArthur is well known to ham radio operators - during his six months aboard the ISS he became the most active radio amateur ever to serve in space. Commander McArthur logged more than 1800 QSOs, and earned the ARRL Worked All States Award. His impressive track record also included a record 37 school contacts, Worked All Continents (including Antartica) and 130 DXCC entities.

Astronaut McArthur is a veteran of four space flights that include:

- STS-58 - October 1993 (Spacelab Life Sciences Mission 2)
- STS-74 - November 1995 (Shuttle-Mir Docking Missing 2)
- STS-92 - October 2000 (ISS Assembly Mission 3A)
- Expedition 12 - October 2005

In addition Bill has made four spacewalks (two each aboard STS-92 and Expedition 12) and was on backup crews of Expeditions 8, 9 and 10. He will be featured during the Annual Banquet on Saturday evening, October 7, 2006.

The 2006 Space Symposium will be a joint meeting with the ARISS International Delegates and will also include the IARU Satellite Advisory Panel annual meeting, and a meeting of AMSAT International Delegates. For additional information please visit the AMSAT website at http://www.amsat.org. Click on the 2006 Space Symposium link in the left side menu.

This year you can register for the Space Symposium online. Online Registration can be found at http://www.amsat-na.com/symposium

[ANS thanks Emily Clarke, N1DID, AMSAT 2006 Symposium Chair, for the above information]

/EX

SB SAT @ AMSAT $ANS-232.02
JAMSAT Announces a New Satellite Operating Award

AMSAT News Service Bulletin 232.02
>From AMSAT HQ SILVER SPRING, MD.
August 20, 2006
To All RADIO AMATEURS
BID: $ANS-232.02

Mikio Mouri, JA3GEP, President of Japan-AMSAT (JAMSAT) announced the availability of the new JAMSAT Five Stars Award on August 17, 2006.

JAMSAT's goal is to get more activity on amateur radio satellite communications, to get more hams interested in this aspect of the hobby, and to protect the frequency allocation of the amateur satellites.

This Award is opened for world wide, with following rules.

1. The applicant is required to establish a QSO with five(5) different stations over five (5) different Satellites. (Total 25 QSL Cards required)

2. Each specific satellite is counted once, even the QSO was made on different mode or band on the same satellite.

3. Valid only for 2way QSOs. Cross mode QSOs are not valid on this award.

4. The QSOs using Digital mode and SSTV are valid, however you are

requested to get QSL Cards. (e-QSL is not acceptable.)

5. No specific endosement (eg. CW, SSB) is provided.

6. QSOs made after the January 1st, 2006 at 00:00 UTC are valid.

7. As for the application, no specific format is provided. You can use your own QSO list, however it is recomended to use formats used by ARRL or JARL. You need to have your application certified by 2 local radio amateurs, but please DO NOT send QSL cards to us. (We can not take any responsiblity for them.)

8. Fee on the application: Outside of Japan please send Ten(10) "NEW" IRCs with the application. Japanese radio amateurs should include 800 yen by Postal Money Order. (If you are a member of the JAMSAT, then 400 yen is applicable).

9. Donations are welcomed: This is not a requirement, but any donations to build new amateur satellites will be most welcome. If you wish to donate, please add this amount to your award application fee. JAMSAT will remit your donations to AMSAT-DL and/or AMSAT-NA accordingly. (Please understand that the JAMSAT-Board is entitled to divide the sum of donations for each party and project.)

10. Mailing address--Please forward your application to the following.

    JAMSAT AWARD OFFICE
    For the attention of Mr. S. Murakami
    PO Box 26, Mizushima Post Office,
    Kurashiki, Okayama 712-8691, Japan

11. Questions and Information
    If you have had any questions, please send your message by e-mail to:
    madoguchi@jamsat.or.jp

[ANS thanks JAMSAT for the above information]

/EX

SB SAT @ AMSAT $ANS-232.03
Japanese HITSAT Amateur CubeSat to Launch September 23rd

AMSAT News Service Bulletin 232.03
>From AMSAT HQ SILVER SPRING, MD.
August 20, 2006
To All RADIO AMATEURS
BID: $ANS-232.03

Mineo Wakita JE9PEL has passed on the information that the launch date of the HITSAT satellite is currently September 23rd.

HITSAT was developed by the student association 'Hokkaido Space Union' of the Hokkaido Institute of Technology.

It will be launched from the Uchinoura Space Center on the M-V-7 rocket as a sub-payload.

The main-payload of the launch is SOLAR-B.
http://www.isas.jaxa.jp/e/enterp/missions/solar-b/index.shtml

It is planned to go into a sun synchronous orbit with an orbital altitude at perigee of 250km and 600km at apogee with an inclination of 97.79 degrees.

HITSAT is a 12cm cube with a mass of 2.2 kg. It carries a 100 milliwatt CW beacon on 437.275 MHz and an FM transmitter on 437.425 MHz with a 145.980 MHz uplink.

See the HITSAT Project web page at:
http://www.hit.ac.jp/~satori/hitsat/index-e.html

[ANS thanks Mineo, JE9PEL for the above information]

/EX

SB SAT @ AMSAT $ANS-232.04
SSTV Testing Continues from ISS

AMSAT News Service Bulletin 232.04
>From AMSAT HQ SILVER SPRING, MD.
August 20, 2006
To All RADIO AMATEURS
BID: $ANS-232.04

Cor, PD0RKC reports that Russian commander Pavel continues to test the SSTV equipment aboard the ISS Space Station. The most recent pictures this week were received on the 145.800 MHz downlink frequency.

There have been some equipment problems so it is only switched on when Pavel is near the transceiver, mostly in his presleep time on the passes in Moscow. You can see the 8 ISS SSTV pictures on Cor's website: http://www.pd0rkc.com. Cor also requests in case anyone has more ISS SSTV pics please send them to: skyman@hetnet.nl

MSNBC has an article about the SSTV from space at:
http://cosmiclog.msnbc.msn.com/archive/2006/08/17/2213.aspx

In England, the Essex Chronicle newspaper featured David M0ZLB's achievement in receiving pictures from SpaceCam1 onboard the ISS on the front page. See the article on-line at: http://tinyurl.com/nqmee

[ANS thanks Cor, PD0RKC for the above information]

/EX

SB SAT @ AMSAT $ANS-232.05
Remember to Vote in the AMSAT BoD Election

AMSAT News Service Bulletin 232.05
>From AMSAT HQ SILVER SPRING, MD.
August 20, 2006
To All RADIO AMATEURS
BID: $ANS-232.05

If you have not mailed your AMSAT ballot , now is the time to do so! The ballot has to arrive at the office by September 15th. Look over the bios at http://www.amsat.org/amsat-new/articles/2006_Board_Candidates/ and VOICE YOUR CHOICE and VOTE!!!

[ANS thanks Martha at AMSAT HQ for the above information]

/EX

SB SAT @ AMSAT $ANS-232.06
Commission Probing Dnepr Crash Presents Preliminary Conclusions

AMSAT News Service Bulletin 232.06
>From AMSAT HQ SILVER SPRING, MD.
August 20, 2006
To All RADIO AMATEURS
BID: $ANS-232.06

The commission investigating the crash of the Dnepr launch vehicle in Kazakhstan in July has come to its preliminary conclusions regarding the cause of the accident, Kosmotras, the company responsible for the rocket's launch, said in a press release and reported by Interfax.

"The conclusions presented by the commission in its preliminary report indicate that the command system functioned without a hitch during the rocket's launch," the release reads.

The report continues, "A brief malfunctioning of the hydraulic gear of one of the combustion chambers of the first stage's engine unit is the reason behind the abortive launch. The cause of the hydraulic gear's failure has been established. The commission is preparing recommendations on how to repair this problem".

[ANS thanks the Moscow Staff Writers at SpaceDaily.com for the above information]

/EX

SB SAT @ AMSAT $ANS-232.07

OSCAR-11 Heard Again

AMSAT News Service Bulletin 232.07
>From AMSAT HQ SILVER SPRING, MD.
August 20, 2006
To All RADIO AMATEURS
BID: $ANS-232.07

In the OSCAR-11 Report for August 19, 2006, Clive, G3CWV told AMSAT members that, "OSCAR-11 IS BACK! During the period 17 July to 19 August 2006 the satellite was heard on 26 July for a few orbits, and then from 16 August. At the time of this writing it is currently transmitting."

Observation of the 145.826 MHz. beacon transmission times, indicate that the watchdog timer has timed out for five periods of 20.5 days during the eclipse season. The eclipses have now ended, and the satellite should be in continuous sunlight until next year. If the normal watchdog timer sequence continues, the beacon should switch OFF around 26 August, and restart around 06 September.

Clive expressed gratitude for the ground station help he has received from around the world. He wrote, " I am indebted to Peter ZL3TC, Dave G1OCN, and Dave WB6LLO for their reports and for monitoring the satellite during this period. Many thanks.

The satellite's attitude is controlled only by the passive gravity boom gradient, and the satellite is free to spin at any speed. After 22 years in orbit the battery has undergone around 100,000 partial charge/discharge cycles, and observations suggest that it cannot power the satellite during eclipses, or sometimes during periods of poor solar attitude.

Listeners to OSCAR-11 may be interested in visiting Clive's website which contains an archive of news & telemetry data. It also contains details about using a soundcard or hardware demodulators for data capture. There is software for capturing data, and decoding ASCII telemetry. The URL is www.users.zetnet.co.uk/clivew/. If you wish to contact Clive you can reach him at his [callsign@amsat.org] e-mail address.

[ANS thanks Clive, G3CWV for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM

From 2383260710755830439
X-Google-Thread: 10e8ad,a8bb346a232be165,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news4.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!newshub.sdsu.edu!elnk-nf2-pas!newsfeed.earthlink.net!
stamper.news.pas.earthlink.net!newsread1.news.pas.earthlink.net.POSTED!46041641!
not-for-mail
From: "JoAnne Maenpaa" <wb9jej_no-spam@earthling.com>
Newsgroups: rec.radio.amateur.space
Subject: WSR-233 AMSAT Weekly Satellite Report
Lines: 1069
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <YHoHg.13450$xp2.10137@newsread1.news.pas.earthlink.net>
Date: Thu, 24 Aug 2006 21:17:44 GMT
NNTP-Posting-Host: 66.167.65.203
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread1.news.pas.earthlink.net 1156454264 66.167.65.203 (Thu, 24 Aug
2006 14:17:44 PDT)
NNTP-Posting-Date: Thu, 24 Aug 2006 14:17:44 PDT
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news2.google.com rec.radio.amateur.space:403

This report is organized into 4 parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites

SB SAT @ AMSAT W8ISS ANS-233.S1
WSR 233 Part 1 08/21/2006

AMSAT NEWS SERVICE BULLETIN 233.S1 FROM AMSAT HQ
SILVER SPRING, MD, August 21, 2006
TO ALL RADIO AMATEURS
BID: $ANS-233.S1

VO-52 HAMSAT
Catalog Number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/V - Indian Transponder

Proposed frequencies:

Indian Transponder:

```
Uplink :  435.220 MHz to 435.280 MHz LSB/CW
Downlink: 145.870 MHz to 145.930 MHz USB/CW
Beacon :  145.859330 MHZ CW

Dutch Transponder:
Uplink :  435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW
Beacon :  145.860MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsat.in/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is
active. Each transponder has a different beacon.
[04242006]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Current Mode(s): FM Repeater - ON
                 PBBS - OFF
                 Digipeater - OFF

Analog voice downlink: 435.300 MHz FM
         435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink:   145.880 MHZ FM
         145.880 MHz USB
         145.920 MHz FM 67Hz PL tone
        1268.700 MHz FM 67Hz PL tone
Digital Downlinks:     435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
        2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:        145.860 MHz FM, 9k6 Digital, Pacsat Broadcast
Protocol
                      1268.700 mhz FM, 9k6 PBP Digital
Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Mode schedule for July 2006 according to the AO-51 command team:
```

August 14 to August 27 (Additional testing as above possible August 21 to 27)

FM Repeater
Downlink 435.300 mHz FM
Uplink 145.920 mHz FM with 67 hz Tone

August 28 to September 3

FM Repeater, V/S

Uplink: 145.920 mhz FM, No PL Tone
Downlink 2401.200 mhz FM

September modes are anticipated to include high power V/U repeater, L/S repeater, and high power V/U 38.4 kbaud!

Official Webpage: http://www.amsat.org/amsat-new/echo/
[08142006]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Uplink: 145.850 MHz (67.0 Hz PL tone) (See below for operating procedures)
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz. The order of operation is thus: (allow for Doppler as necessary)
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer
   on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater
   on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10
   minute timer.
[04172006]
=====

```
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: OPERATIONAL

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplink: 145.850 145.870 145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

unOfficial Webpage: http://www.amsat.org/amsat/sats/n7hpr/fo29.html
[11132005]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Uplink: 145.850 MHz FM
Downlink: 436.795 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[01012006]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational depending on amount of Sunlight
Current Reported mode: Mode-A

Uplink:   145.850 to 145.950 MHz CW/USB Mode A
   432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
  145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
  145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons:  29.502 MHz
```

  145.972 MHz
  435.100 MHz
 2304.100 MHz

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php
The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
AO-7 users are requested to log their contacts and observations about
AO-7, especially any unexpected mode changes.
AO-07 telemetry software webpage:
http://www.qsl.net/k3tz/files/K3TZ_AO-07_Telemetry_Decoder_0.5.zip

Please keep your power low! For additional information please read the
AO-7
Usage Guidelines on the AO-7 Log and Resource Site located at:
http://www.planetemily.com/ao7
[04242006]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: TESTING OF SSTV
Digipeater: OFF

The current crew is:
Commander: Pavel Vinogradov, RV3BS
Flight Engineer: Jeff Williams, KD5TVQ
Crew: Thomas Reiter - DF4TR

Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

SSTV TESTING:
Worldwide Reported Downlink: 144.490 MHz FM
                             145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS, RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official Webpage: http://www.rac.ca/ariss
Official Fan club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

Currently, the crew is in the process of testing the SSTV equipment so ANY
activity may not be what will be heard on the next pass right now. IT ALL
DEPENDS ON THE TIME AVAILABLE TO THE CREW TO DO MORE IMPORTANT ITEMS. PLEASE
MAINTAIN READING THE AMSAT-BB AND ANS SERVICES FOR MORE CURRENT INFO.

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line is
NOT translated from Russian and posted.
[08142006]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-233.S2
WSR 233 Part 2 08/21/2006

AMSAT NEWS SERVICE BULLETIN 233.S2 FROM AMSAT HQ
SILVER SPRING, MD, August 21, 2006
TO ALL RADIO AMATEURS
BID: $ANS-233.S2

CO-58 XI-V
Catalog Number: 28895
Launch Date: October 27, 2005

Status: Operational only within range of Ground station in Japan

Telemetry Downlink: 437.345MHz - FSK 1200bps using AFK protocol
Beacon Downlink: 437.465MHz - CW about 50 WPM

Callsign: JQ1YGW

Oficial Webpage: http://www.space.t.u-tokyo.ac.jp/gs/satinfo-e.html#xi5
Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
[03122006]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS

Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: TESTING OF SSTV
Digipeater: OFF

The current crew is:
Commander: Pavel Vinogradov, RV3BS
Flight Engineer: Jeff Williams, KD5TVQ
Crew: Thomas Reiter - DF4TR

Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

SSTV TESTING:
Worldwide Reported Downlink: 144.490 MHz FM
145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS, RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official Webpage: http://www.rac.ca/ariss
Official Fan club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

Currently, the crew is in the process of testing the SSTV equipment so ANY activity may not be what will be heard on the next pass right now. IT ALL DEPENDS ON THE TIME AVAILABLE TO THE CREW TO DO MORE IMPORTANT ITEMS. PLEASE MAINTAIN READING THE AMSAT-BB AND ANS SERVICES FOR MORE CURRENT INFO.

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line is
NOT translated from Russian and posted.
[08142006]
=====
PCSAT-2
Catalog Number: 25544
Launch Date: August 1, 2005

Activated: August 3, 2005
Status: Operational
Current Mode: ISS Packet =>VOICE Contacts

Digital Downlink: 435.275 Mhz
Digital Uplink: 145.825 Mhz
ISS digipeater uplink: 145.990 Mhz

PSK-31 Downlink: 435.275 Mhz
PSK-31 Uplink: 29.401 Mhz

CALLSIGN: pcsat2

PCSAT2 SPECIAL EVENT AND OPERATIONS

Subj: ISS Packet =>VOICE Contacts:

Starting on 4 August, and for the 26 days remaining of PCSAT2's operation on ISS, PCSAT2 will be configured for VOICE response to normal packets transmitted via the normal ISS digipeater 145.99 uplink (or PCSAT2's uplink on 145.825 if the ARISS packet system is not operational). The command station's voice downlink will be on 437.975 +/- Doppler and he/she willl attempt to acknowledge by voice all packets seen on the packet uplink.

The UHF downlink will be weak (only 1 Watt) and being UHF (9dB worse than 2m), will need at least a small beam to hear it.

Users who want to participate, simply send your packets as normal VIA ARISS on 145.99 uplink (if available or via 145.825 if not) but listen on the 437.925 downlink for the combined voice and packets. This will only work when PCSAT2 is in range of a participating command station and there is no guarantee that all command stations will be available on any given pass. In otherwords, this may be rare, but fun.

Right now, passes in the Northern Hemisphere are occuring before sunrise, so only the last two morning passes may be so manned for voice. Passes in the Southern Hemisphere right now are from midday into evening.

Best thing to do is simply monitor 437.975 during ISS passes and if you hear a command station, then send us a 'hello' packet via the ISS digipeater.

We need a volunteer command station in South America, South Africa and some other footprints too if activity is desired in those areas.

Official Webpage: http://web.usna.navy.mil/~bruninga/pcsat2.html
PCSAT2 APRS Packet page: http://www.findu.com/cgi-bin/pcsat2.cgi
aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[08072006]

=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Current Mode(s): FM Repeater - ON
PBBS - OFF
Digipeater - OFF

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.880 MHZ FM
145.880 MHz USB
145.920 MHz FM 67Hz PL tone
1268.700 MHz FM 67Hz PL tone
Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast Protocol
1268.700 mhz FM, 9k6 PBP Digital
Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Mode schedule for July 2006 according to the AO-51 command team:

August 14 to August 27 (Additional testing as above possible August 21 to 27)

FM Repeater

```
Downlink 435.300 mHz FM
Uplink 145.920 mHz FM with 67 hz Tone

August 28 to September 3

FM Repeater, V/S

Uplink: 145.920 mhz FM, No PL Tone
Downlink 2401.200 mhz FM

September modes are anticipated to include high power V/U repeater, L/S
re-
peater, and high power V/U 38.4 kbaud!

Official Webpage: http://www.amsat.org/amsat-new/echo/
[08142006]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Operational

General Usage Uplink/Downlink:145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org
aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[04172006]
=====
CO-55 CUTE-1.7
Catalog number: 28941
Launched: June 30,2003

Status: Operational

Uplink: ?
Downlink: 437.3850 CW
          437.4700 1200 FM ax25 or SRLL (ACTIVE only near Japan ? )
Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[05012006]
=====
GO-32 TECHSAT-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks: 145.850 FM
```

          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM
Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[08072006]
=====
RS-22 Mozhayets 4
Catalog Number: 27939
Launch Date: September 27, 2004

Status: Operational

Beacon: 435.3520 MHz CW
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Semi-operational, the digipeater command is on and open for
APRS users.

Uplink: 145.900 FM
        145.920 FM
        145.940 FM
        145.960 FM
(using 1200-baud Manchester FSK)
Downlink: 437.026 MHz SSB (1200-baud PSK)
Mode-S Beacon: 2401.1428 MHz

Mode and Antenna Polarization:
U: RC 437.050 MHz RHCP
   PSK 437.025 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[04172006]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational

Telemetry Downlink: 145.826 MHz. FM (1200-baud AFSK).

approx. 10 days ON, 10 days OFF
Mode-S Beacon: 2401.500 MHz. ... OFF
UHFBeacon: 435.025 MHz. ... OFF

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Reception reports are requested to be sent to xxxxx@amsat.org (replace xxxxx
by g3cwv), or post to AMSAT-BB.

During the period 15 June to 17 July 2006 nothing has been heard from the
satellite. It was last heard on 05 May, just one day before the solar
eclipses were due to start. These eclipses will continue until 04 August
2006, reaching a maximum duration of 22% around 19 June. If the satellite
behaves in the same way as it did last year, regular 10 day transmissions
should re-start, sometime in August.

Official webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[07172006]
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/EX

SB SAT @ AMSAT W8ISS $ANS-233.S3
WSR 233 Part 3 08/21/2006

AMSAT NEWS SERVICE BULLETIN 233.S3 FROM AMSAT HQ
SILVER SPRING, MD, August 21, 2006
TO ALL RADIO AMATEURS
BID: $ANS-233.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

AO-54 SUITSAT
Catalog Number:28933
Release Date: February 3,2006

Status: Non-operational
Modes : FM Voice Telemetry/Greetings
 FM SSTV

Callsign: RS0RS
Downlink: 145.990 FM

Currently on the amsat-bb, there is a geussing game going on about when
Suitsat will re-enter the atmosphere.

Official webpage: http://www.suitsat.org

```
[05012006]
=====
NCUBE-2
Catalog Number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency:  437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog Number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 FM 67Hz CTCSS
Voice Downlink: 2401.835 FM
Packet Up/Downlink: 437.250 9k6 packet
Packet Downlink 2401.835 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01292006]
=====
TO-31 TMSAT-1
Catalog Number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink:   145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
PO-28 POSAT-1
Catalog Number: 22829
Launch Date: September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 429.950

Uplink: Not until handover back to Amatuer usage
```

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html.
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012006]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launched: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB
Beacon: 145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: Downlink only

Uplink: 145.875 145.900 145.925 145.950 MHz FM (1200-baud)
Downlink: 435.808 MHz PSK
Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01012006]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB
Beacon: 29.408 MHz
Robot: 29.454 MHz
[05232004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

```
Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB
Beacon: 145.860 MHz
Robot: 145.908 MHz
[05232004]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink 145.975 MHz FM
Downlink 435.070 MHz FM
[05092004]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink: 145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM
Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01092005]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational?

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB
Beacon: 29.352 MHz (intermittent)
SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplink: 145.84 145.86 145.88 145.90 MHz FM
(using 1200-baud Manchester FSK)
CW downlink: 437.125 MHz
Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)
Broadcast Callsign: LUSAT-11
```

BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[05232004]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[08152004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM
Broadcast Callsign: HLO1-11
BBS: HLO1-12

Jim, AA7KC, reports that KO-23's downlink transmitter continues in a non-operational status.
[05092004]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM (9600-baud FSK)
Downlink: 436.500 MHz FM
Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm

[ANS-WSR has no further information]
[05232004]
=====
SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

STatus: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz and 145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[08082004]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlink: 437.025 MHz 437.400 MHz
Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web site
at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip

```
[05092004]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplink V-band   145.840 - 145.990 MHz CW/LSB
       U-band   435.550 - 435.800 MHz CW/LSB
       L1-band 1269.250 - 1269.500 MHz CW/LSB
       L2-band 1268.325 - 1268.575 MHz CW/LSB
Downlink: S2-band 2401.225 - 2401.475 MHz CW/USB
          K-band 24,048.010 - 24,048.060 MHz CW/USB
Beacon:   2401.323
         24,048.035
[05232004]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational
Downlink: 437.075 MHz
Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[08152004]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz
Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[08152004]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
```

Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, callsign KE6QMD, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Operational

Uplink: 145.850 or 145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz
Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[11202005]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink 435.275 1200-baud AFSK
Downlink 145.825 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink: Downlink 145.825 MHz FM 1200 Baud AFSK
Beacon: 2401.220 MHz
[05012006]

=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
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SB SAT @ AMSAT W8ISS $ANS-233.S4
WSR 233 Part 4 08/21/2006

AMSAT NEWS SERVICE BULLETIN 233.S4 FROM AMSAT HQ
SILVER SPRING, MD, August 21, 2006
TO ALL RADIO AMATEURS
BID: $ANS-233.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE PROPOSED FOR LAUNCH AT THIS TIME:

PHASE 3E ?O-??
Catalog Number:
Proposed Launch Date: Early/Mid 2007

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/
[ANS-WSR wishes to thank William Leijenaar, PE1RAH for this week's report]
[04242006]
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ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/amsat/listserv/menu.html

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
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/EX

From 4764633838467941937
X-Google-Thread: 10e8ad,5807c86ce4cf83e6,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news3.google.com!newshub.sdsu.edu!elnk-nf2-pas!newsfeed.earthlink.net!stamper.news.pas.earthlink.net!newsread2.news.pas.earthlink.net.POSTED!46041641!not-for-mail
From: "JoAnne Maenpaa" <wb9jej_no-spam@earthling.com>
Newsgroups: rec.radio.amateur.space
Subject: ANS-239 AMSAT News Service Weekly Bulletins
Lines: 403
X-Priority: 3
X-MSMail-Priority: Normal

X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <JqgJg.12047$Qf.3805@newsread2.news.pas.earthlink.net>
Date: Wed, 30 Aug 2006 13:31:21 GMT
NNTP-Posting-Host: 68.164.230.33
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread2.news.pas.earthlink.net 1156944681 68.164.230.33 (Wed, 30 Aug 2006 06:31:21 PDT)
NNTP-Posting-Date: Wed, 30 Aug 2006 06:31:21 PDT
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news2.google.com rec.radio.amateur.space:404

AMSAT NEWS SERVICE
ANS-239

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

******************** AMSAT 2006 Space Symposium *************************

Online registration and hotel reservation for the 2006 AMSAT Space Symposium has been posted to the AMSAT website, and information about the Symposium has been expanded. The 2006 AMSAT Space Symposium will be held October 6, 7 and 8 at the Crowne Plaza in Foster City, California in the beautiful San Francisco Bay Area.

Please visit http://www.amsat.org/amsat-new/symposium for additional information and an index to the expanded Symposium web pages.

****

In this edition:

* Sunday at the Symposium to Feature Dr. Scott Sanford
* AMSAT Symposium Call For Papers Deadline Extended to September 1
* Important Information For AMSAT Symposium Hotel Reservations
* ARISS Slow-Scan TV System Checkout Continues
* AMSAT Office Closed August 28 Through September 8
* AMSAT Mailing Lists Upgraded
* Last Chance for PCSAT2 Operations
* SMART to Smack the Moon

SB SAT @ AMSAT $ANS-239.01
Sunday at the Symposium to Feature Dr. Scott Sanford

AMSAT News Service Bulletin 239.01

>From AMSAT HQ SILVER SPRING, MD.
August 27, 2006
To All RADIO AMATEURS
BID: $ANS-239.01

AMSAT is very pleased to announced that Dr. Scott Sanford, NASA Principal Investigator and co-director of the NASA Ames Astrochemistry Laboratory, has accepted our invitation to provide a key presentation during our tour of the Ames Exploration Center. Dr. Sanford will speak on about sample return from comets and asteroids in general and specifically about the Stardust Sample and Return Mission to Comet Wild 2.

Dr. Sanford was one of the original team members to propose capturing dust from a comet and bringing it back to Earth. Stardust was launched in February 1999, and in January 2004 approached Wild 2 within 150 miles of the nucleus, collecting samples and capturing detailed imagery of the comet's surface. On January 15th 2006 Stardust re-entered the Earth's atmosphere and successfully completed it's mission after landing in the salt flats of northwestern Utah.

For Dr. Sanford, the investigation is just beginning as he and a team of 180 other scientists are hard at work to analyze the Stardust samples. This team will likely spend years unlocking secrets from the samples. Their efforts will lead to a better understanding about the formation of our solar system and perhaps even the origin of life on Earth and elsewhere in the Solar System.

So be sure to join us Sunday afternoon for what promises to be an exciting event. There is no charge for visiting the Ames Exploration Center or attending Dr. Sanford's presentation. Round trip bus transportation from the Symposium Venue to Ames is available and costs $14. You can register for the bus online through the AMSAT store.

The 2006 Space Symposium will be a joint meeting with the ARISS International Delegates and will also include the IARU Satellite Advisory Panel annual meeting, and a meeting of AMSAT International Delegates. For additional information please visit the AMSAT website at http://www.amsat.org. Click on the 2006 Space Symposium link in the left side menu.

This year you can register for the Space Symposium online. Online Registration can be found at http://www.amsat-na.com/symposium

[ANS thanks the 2006 AMSAT Space Symposium Committe for the above information]

/EX

SB SAT @ AMSAT $ANS-239.02
AMSAT Symposium Call For Papers Deadline Extended to September 1

AMSAT News Service Bulletin 239.02
>From AMSAT HQ SILVER SPRING, MD.

August 27, 2006
To All RADIO AMATEURS
BID: $ANS-239.02

Invitation: Speakers are invited to submit and present papers dealing with the science of Amateur Radio Satellites and associated technologies for the AMSAT 2006 Space Symposium. The Symposium will be held at the Crowne Plaza Hotel in Foster City, California approximately 10km south of San Francisco International Airport. This is an annual Symposium, however the 2005 Symposium was cancelled due to hurricane damage caused by hurricanes Katrina and Rita. Speakers originally scheduled for the 2005 Symposium are invited to re-submit papers for the 2006 Symposium.

Topics: Recommended topics include but are not limited to the following categories:

* AMSAT P3E
* AMSAT Eagle
* Microsatellite Projects
* Cubesats and Nanosatellites Projects
* Launch Opportunities for Small Satellites
* Attitude Determination and Control
* Propulsion
* Communications
* Mechanical
* Antennas
* Groundstations
* Digital Modes
* Education & Outreach
* ARISS
* Status Reports

To view currently submitted papers visit the Call for Papers Status page at http://www.amsat.org/amsat-new/symposium/2006PapersStatus.php

Deadline: Applications to present papers must be submitted by 1 September 2006. Papers must be submitted no later than 7 September 2006.

Procedure: We have created an online system to facilitate your application and track it. Using this system you will also be able to submit your papers and any subsequent corrections. Visit the 2006 Symposium Paper Registration webpage for instructions on submitting your paper.
See: http://www.amsat.org/amsat-new/symposium/2006PapersProcedure.php

If you have already submitted information about your paper and have your Confirmation Number, you can view/update your application and submit your paper by visiting the 2006 Paper Management webpage.
See: http://www.amsat.org/amsat-new/symposium/2006PaperRetrieval.php

[ANS thanks the 2006 AMSAT Space Symposium Committe for the above information]

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SB SAT @ AMSAT $ANS-239.03
Important Information For AMSAT Symposium Hotel Reservations

AMSAT News Service Bulletin 239.03

>From AMSAT HQ SILVER SPRING, MD.
August 27, 2006
To All RADIO AMATEURS
BID: $ANS-239.03

Emily Clarke, N1DID, Chairperson for the 2006 AMSAT Space Symposium in the San Francisco Bay area, commented on the problems being experienced with the hotel reservation system.

Emily reported, "It seems like we are running into a similar problem with the Intercontinental Reservation system as we did in Washington and Lafayette. When this happens, people making reservations are told that there are no rooms available. After speaking with the hotel we know what is happening and why, and it is really a bug in the reservation software that affects both the online system and the system the customer service representatives use."

It is important to understand how the discounted rate system works in order to reserve your rooms successfully. AMSAT has a block of rooms set aside from the 4th through the 10th of October, and the discounted rate code only applies during that period. If you book a room outside that range the reservation software will tell you (or a customer service representative) that there are no rooms available.

Here are some additional steps that will guide you to a successful reservation:

1) Make a reservation for within the dates of October 1st through the 13th using the AMS discount code.

2) Make a second (or third if necessary) for dates before and after that range.

If you have difficulties call the hotel directly at (650) 570-5700 or 1-877-2-CROWNE. Be sure to give them the AMS discount code and explain the reservations you need as described above.

You must make your reservations prior to September 13 to qualify for the discounted rate!

Please Note: The symposium rate is for a standard room - you can upgrade to an executive room or suite at a discounted rate.

[ANS thanks the 2006 AMSAT Space Symposium Committe for the above information]

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SB SAT @ AMSAT $ANS-239.04
ARISS Slow-Scan TV System Checkout Continues

AMSAT News Service Bulletin 239.04

>From AMSAT HQ SILVER SPRING, MD.
August 27, 2006
To All RADIO AMATEURS
BID: $ANS-239.04

The ARRL, a partner with AMSAT and NASA for the ARISS project, said that Expedition 13 Commander Pavel Vinogradov, RV3BS continues to troubleshoot the slow-scan television (SSTV) system onboard the ISS. "So far, the SSTV system has been unable to function properly in the autonomous slide show mode", according to NASA ARISS Project Engineer Kenneth Ransom, N5VHO.

Plans call for Vinogradov, as his schedule permits, to continue checking out the SSTV software, configure and optimize the radio and perform integration checks. The SSTV system remains off the air for the time being.

ARISS International Chairman Frank Bauer, KA3HDO, said that the ARISS team expected SSTV system testing to continue over the next few weeks. "Since this is a 'spare time' activity for Pavel, please bear with us as we go through this aspect of system setup," said Frank. "It is not possible right now for Pavel to switch between modes (eg voice, packet and SSTV) on the Kenwood and continue the methodical process of system setup and reconfiguration."

The SSTV system uses the ARISS Phase 2 station, a modified Kenwood TM-D700E transceiver. In recent weeks, ARISS has been using the Phase 1 station, an Ericsson hand-held transceiver, to conduct contacts with schools.

Check your tracking keps! The ISS was reboosted during a nine-minute, four-second burn of the ISS Progress 21 engines on Wednesday, August 23. While this will place the station at the correct altitude to support the rendezvous with Space Shuttle Atlantis for the STS-115 launch and for the Soyuz launch of the Expedition 14 crew in September, the 2.5 mile increase in altitude will cause the ISS to appear later than predicted if you are using pre-boost keplerian elements.

[ANS thanks the ARRL and ARISS for the above information]

/EX

SB SAT @ AMSAT $ANS-239.05
AMSAT Office Closed August 28 Through September 8

AMSAT News Service Bulletin 239.05
>From AMSAT HQ SILVER SPRING, MD.
August 27, 2006
To All RADIO AMATEURS
BID: $ANS-239.05

The AMSAT office will be closed from August 28th - September 8th when Martha will be going on her first 2 week vacation in over 25 years.

Enjoy!

[ANS thanks Martha for the above information]

/EX

SB SAT @ AMSAT $ANS-239.06
AMSAT Mailing Lists Upgraded

AMSAT News Service Bulletin 239.06
>From AMSAT HQ SILVER SPRING, MD.
August 27, 2006
To All RADIO AMATEURS
BID: $ANS-239.06

Paul, KB5MU, AMSAT Director of Electronic Communications reported that the mailing lists at amsat.org have been converted over to a new program. Instead of Majordomo, AMSAT is now using GNU Mailman. Everybody's subscription was transferred over automatically, so you don't have to take any action to continue to receive your current mailing lists.

The big difference is that subscribing and unsubscribing is now done on the web instead of by sending email. To subscribe, unsubscribe, or change any of a number of new options for email delivery, start on http://www.amsat.org/mailman/listinfo and select the mailing list of interest. From there, the forms are intended to be self-explanatory. You can also get to the forms using the web link at the bottom of every message from the mailing list.

One thing has not changed: if you need help from a human, send email to listmaint@amsat.org. Don't send any requests for help, subscribe or unsubscribe requests, or test messages to the mailing lists.

Daily digests are handled a bit differently in Mailman. Instead of separate mailing lists (for example, amsat-bb for individual messages and amsat-bb-digest for the digest), there is a single mailing list (amsat-bb) and each user can set various options, including digest mode. Subscribers to digest mailing lists were transferred to the single mailing list, with the digest option enabled. If you're one of the few subscribers who were getting both individual messages and the digest for the same list, that is no longer possible.

More on AMSAT's mailing list services at http://www.amsat.org/amsat-new/tools/maillist/maillist.php or click on Mail Services on AMSAT's main web page.

If you notice any problems or have any questions, send mail to listmaint@amsat.org.

[ANS thanks Paul, KB5MU for the above information]

/EX

SB SAT @ AMSAT $ANS-239.07
Last Chance for PCSAT2 Operations

AMSAT News Service Bulletin 239.07
>From AMSAT HQ SILVER SPRING, MD.
August 27, 2006
To All RADIO AMATEURS
BID: $ANS-239.07

Bob, WB4APR told AMSAT members about the final two operating modes that will be available via PCSAT2. The first mode will allow radio amateur to hear a voice response to packets which have been digipeated. The second mode is the final opportunity to test PCSAT2's CW/PSK transponder.

For the remaining days of PCSAT2's operation on ISS, which ends this week on August 30, the amateur radio payload will be configured for VOICE response to normal packets transmitted via the normal ISS digipeater 145.99 uplink / 145.800 downlink. The command station's voice downlink will be on 437.975 +/- Doppler and he/she will attempt to acknowledge by voice all packets seen on the packet uplink or generally chat about the system.

Users who want to participate, simply send your packets as normal 'VIA ARISS' on 145.99 uplink / 145.800 downlink, but listen on the 437.975 MHz downlink for the combined voice and packets.

This will only work when PCSAT2 is in range of a participating command station and there is no guarantee that all command stations will be available on any given pass.

Bob describes the final opportunity for amateur radio satellite stations to test the PCSAT2 CW and PSK transponder.

To switch on the CW/PSK transponder mode you need to send a 1200 baud packet CONNECT-REQUEST to "PCSAT2" on 145.825 uplink. This packet "connection" will trigger The 29.401 to 435.275 MHz transponder to come up for the duration Of the connection or 1 minute which ever ends first.

Due to 10 meter receiving sensitivity problems aboard PCSAT2 your earth station will need to transmit at high power - 100 watts or greater on the 29.401 MHz CW/PSK uplink frequency. Listen on the 435.275 MHz FM downlink for the signal.

[ANS thanks Bob, WB4APR, and the US Naval Academy Satellite Station for the above information]

/EX

SB SAT @ AMSAT $ANS-239.08
SMART to Smack the Moon

AMSAT News Service Bulletin 239.08
>From AMSAT HQ SILVER SPRING, MD.
August 27, 2006
To All RADIO AMATEURS
BID: $ANS-239.08

The European Space Agency's SMART-1 spacecraft currently in lunar orbit will conclude its scientific observations of the Moon through a small impact on the lunar surface on September 3. This is planned to take place in the lunar Lake of Excellence, located at mid-southern latitudes on the earth-facing side of the moon.

A trim maneuver at the end of July has determined that the impact will most likely occur on 3 September 2006 at 07:41 CEST (05:41 UT), or at 02:36 CEST (00:36 UT) on the previous orbit due to uncertainties in the detailed knowledge of the lunar topography at the impact site.

ESA astronomers predict even if the impact at 2 kilometers per second is of modest energy, the plume might be observable if it reaches sunlight, with an amateur telescope or binoculars.

Additional information is available at this link:
http://sci.esa.int/science-e/www/area/index.cfm?fareaid=98

[ANS thanks the ESA and SpaceDaily.com for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM

```
From 1209311123615852665
X-Google-Thread: 10e8ad,2fce7abb3a47d9af,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news2.google.com!news3.google.com!newshub.sdsu.edu!elnk-nf2-pas!newsfeed.earthlink.net!stamper.news.pas.earthlink.net!newsread2.news.pas.earthlink.net.POSTED!46041641!not-for-mail
```

From: "JoAnne Maenpaa" <wb9jej_no-spam@earthling.com>
Newsgroups: rec.radio.amateur.space
Subject: WSR-240 AMSAT Weekly Satellite Report
Lines: 1027
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <RqgJg.12048$Qf.7934@newsread2.news.pas.earthlink.net>
Date: Wed, 30 Aug 2006 13:31:29 GMT
NNTP-Posting-Host: 68.164.230.33
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread2.news.pas.earthlink.net 1156944689 68.164.230.33 (Wed, 30 Aug 2006 06:31:29 PDT)
NNTP-Posting-Date: Wed, 30 Aug 2006 06:31:29 PDT
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news2.google.com rec.radio.amateur.space:405

This report is organized into 4 parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites

SB SAT @ AMSAT W8ISS ANS-240.S1
WSR 240 Part 1 08/28/2006

AMSAT NEWS SERVICE BULLETIN 240.S1 FROM AMSAT HQ
SILVER SPRING, MD, August 28, 2006
TO ALL RADIO AMATEURS
BID: $ANS-240.S1

VO-52 HAMSAT
Catalog Number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/V - Indian Transponder

Proposed frequencies:

Indian Transponder:
Uplink : 435.220 MHz to 435.280 MHz LSB/CW
Downlink: 145.870 MHz to 145.930 MHz USB/CW
Beacon : 145.859330 MHZ CW

Dutch Transponder:
Uplink : 435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW
Beacon : 145.860MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP

U: RHCP

Official Webpage: http://www.amsat.in/hamsat.htm

To know what transponder is switched on please listen for the beacon that is active. Each transponder has a different beacon.
[04242006]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Current Mode(s): FM Repeater - V/S
PBBS - OFF
Digipeater - OFF

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.880 MHZ FM
145.880 MHz USB
145.920 MHz FM 67Hz PL tone
1268.700 MHz FM 67Hz PL tone
Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast Protocol
1268.700 mhz FM, 9k6 PBP Digital
Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Mode schedule for July 2006 according to the AO-51 command team:

August 28 to September 3

FM Repeater, V/S

Uplink: 145.920 mhz FM, No PL Tone
Downlink 2401.200 mhz FM

September modes are anticipated to include high power V/U repeater, L/S repeater, and high power V/U 38.4 kbaud!

Official Webpage: http://www.amsat.org/amsat-new/echo/
[08282006]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Uplink: 145.850 MHz (67.0 Hz PL tone) (See below for operating
procedures)
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The
order of operation is thus: (allow for Doppler as necessary)
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute
timer
   on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the
repeater
   on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset
the 10
   minute timer.
[04172006]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: OPERATIONAL

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplink: 145.850 145.870 145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:

V: RHCP
U: RHCP

unOfficial Webpage: http://www.amsat.org/amsat/sats/n7hpr/fo29.html
[11132005]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Uplink: 145.850 MHz FM
Downlink: 436.795 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[01012006]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational depending on amount of Sunlight
Current Reported mode: Mode-A

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
   432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
  145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
  145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz
  145.972 MHz
  435.100 MHz
 2304.100 MHz

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php
The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
AO-7 users are requested to log their contacts and observations about
AO-7, especially any unexpected mode changes.
AO-07 telemetry software webpage:
http://www.qsl.net/k3tz/files/K3TZ_AO-07_Telemetry_Decoder_0.5.zip

Please keep your power low! For additional information please read the
AO-7
Usage Guidelines on the AO-7 Log and Resource Site located at:
http://www.planetemily.com/ao7
[04242006]

=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: TESTING OF SSTV
Digipeater: OFF

The current crew is:
Commander: Pavel Vinogradov - RV3BS
Flight Engineer: Jeff Williams - KD5TVQ
Crew: Thomas Reiter - DF4TR

Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

SSTV TESTING:
Worldwide Reported Downlink: 144.490 MHz FM
                             145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS, RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official Webpage: http://www.rac.ca/ariss
Official Fan club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

Currently, the crew is in the process of testing the SSTV equipment so ANY activity may not be what will be heard on the next pass right now. IT ALL DEPENDS ON THE TIME AVAILABLE TO THE CREW TO DO MORE IMPORTANT ITEMS. PLEASE

MAINTAIN READING THE AMSAT-BB AND ANS SERVICES FOR MORE CURRENT INFO.

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.
[08142006]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-240.S2
WSR 240 Part 2 08/28/2006

AMSAT NEWS SERVICE BULLETIN 240.S2 FROM AMSAT HQ
SILVER SPRING, MD, August 28, 2006
TO ALL RADIO AMATEURS
BID: $ANS-240.S2

CO-58 XI-V
Catalog Number: 28895
Launch Date: October 27, 2005

Status: Operational only within range of Ground station in Japan

Telemetry Downlink: 437.345MHz - FSK 1200bps using AFK protocol
Beacon Downlink: 437.465MHz - CW about 50 WPM

Callsign: JQ1YGW

Oficial Webpage: http://www.space.t.u-tokyo.ac.jp/gs/satinfo-e.html#xi5
Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
[03122006]
=====
CO-55 CUTE-1.7
Catalog number: 28941
Launched: June 30,2003

Status: Operational

Uplink: ?
Downlink: 437.3850 CW
437.4700 1200 FM ax25 or SRLL (ACTIVE only near Japan ?)
Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[05012006]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Current Mode(s): FM Repeater - ON

PBBS - OFF
Digipeater - OFF

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.880 MHZ FM
145.880 MHz USB
145.920 MHz FM 67Hz PL tone
1268.700 MHz FM 67Hz PL tone
Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast Protocol
1268.700 mhz FM, 9k6 PBP Digital
Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Mode schedule for July 2006 according to the AO-51 command team:

August 14 to August 27 (Additional testing as above possible August 21 to 27)

FM Repeater
Downlink 435.300 mHz FM
Uplink 145.920 mHz FM with 67 hz Tone

August 28 to September 3

FM Repeater, V/S

Uplink: 145.920 mhz FM, No PL Tone
Downlink 2401.200 mhz FM

September modes are anticipated to include high power V/U repeater, L/S repeater, and high power V/U 38.4 kbaud!

Official Webpage: http://www.amsat.org/amsat-new/echo/
[08142006]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

```
Status: Operational

General Usage Uplink/Downlink:145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org
aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[04172006]
=====
GO-32 TECHSAT-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks: 145.850 FM
         145.890 FM
         145.930 FM
        1269.700 FM
        1269.800 FM
        1269.900 FM
Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[08072006]
=====
RS-22 Mozhayets 4
Catalog Number: 27939
Launch Date: September 27, 2004

Status: Operational

Beacon: 435.3520 MHz CW
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Semi-operational, the digipeater command is on and open for
APRS users.

Uplink: 145.900 FM
        145.920 FM
        145.940 FM
        145.960 FM
(using 1200-baud Manchester FSK)
Downlink: 437.026 MHz SSB (1200-baud PSK)
Mode-S Beacon: 2401.1428 MHz
```

```
Mode and Antenna Polarization:
U: RC 437.050 MHz RHCP
   PSK 437.025 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[04172006]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational

Telemetry Downlink: 145.826 MHz. FM (1200-baud AFSK).
approx. 10 days ON, 10 days OFF
Mode-S Beacon: 2401.500 MHz. ... OFF
UHFBeacon: 435.025 MHz. ... OFF

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Reception reports are requested to be sent to xxxxx@amsat.org (replace
xxxxx
by g3cwv), or post to AMSAT-BB.

During the period 15 June to 17 July 2006 nothing has been heard from
the
satellite.  It was last heard on 05 May, just one day before the solar
eclipses were due to start. These eclipses will continue until 04 August
2006, reaching a maximum duration of 22% around 19 June. If the
satellite
behaves in the same way as it did last year, regular 10 day
transmissions
should re-start, sometime in August.

Official webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[07172006]
=====
PCSAT-2
Catalog Number: 25544
Launch Date: August 1, 2005

Activated: August 3, 2005
Status: Operational
Current Mode: Voice Response to Packet Digis
              CW/PSK Repeater
```

Voice Digital Uplink: 145.990 MHz
Voice response Downlink: 437.975 MHz

Digital Downlink: 435.275 Mhz
Digital Uplink: 145.825 Mhz
ISS digipeater uplink: 145.990 Mhz

PSK-31 Downlink: 435.275 Mhz
PSK-31 Uplink: 29.401 Mhz

CALLSIGN: pcsat2

Official Webpage: http://web.usna.navy.mil/~bruninga/pcsat2.html
PCSAT2 APRS Packet page: http://www.findu.com/cgi-bin/pcsat2.cgi
aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[08282006]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: TESTING OF SSTV
Digipeater: OFF

The current crew is:
Commander: Pavel Vinogradov - RV3BS
Flight Engineer: Jeff Williams - KD5TVQ
Crew: Thomas Reiter - DF4TR

Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

SSTV TESTING:
Worldwide Reported Downlink: 144.490 MHz FM
                             145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS, RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official Webpage: http://www.rac.ca/ariss
Official Fan club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

Currently, the crew is in the process of testing the SSTV equipment so ANY activity may not be what will be heard on the next pass right now. IT ALL DEPENDS ON THE TIME AVAILABLE TO THE CREW TO DO MORE IMPORTANT ITEMS. PLEASE MAINTAIN READING THE AMSAT-BB AND ANS SERVICES FOR MORE CURRENT INFO.

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line is NOT translated from Russian and posted.
[08142006]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-240.S3
WSR 240 Part 3 08/28/2006

AMSAT NEWS SERVICE BULLETIN 240.S3 FROM AMSAT HQ
SILVER SPRING, MD, August 28, 2006
TO ALL RADIO AMATEURS
BID: $ANS-240.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

AO-54 SUITSAT
Catalog Number:28933
Release Date: February 3,2006

Status: Non-operational
Modes : FM Voice Telemetry/Greetings
 FM SSTV

Callsign: RS0RS
Downlink: 145.990 FM

Currently on the amsat-bb, there is a geussing game going on about when Suitsat will re-enter the atmosphere.

Official webpage: http://www.suitsat.org

```
[05012006]
=====
NCUBE-2
Catalog Number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency:  437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog Number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 FM 67Hz CTCSS
Voice Downlink: 2401.835 FM
Packet Up/Downlink: 437.250 9k6 packet
Packet Downlink 2401.835 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01292006]
=====
TO-31 TMSAT-1
Catalog Number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink:   145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
PO-28 POSAT-1
Catalog Number: 22829
Launch Date: September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 429.950

Uplink: Not until handover back to Amatuer usage
```

```
Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html.
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012006]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launched: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB
Beacon: 145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: Downlink only

Uplink: 145.875 145.900 145.925 145.950 MHz FM (1200-baud)
Downlink: 435.808 MHz PSK
Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01012006]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB
Beacon: 29.408 MHz
Robot: 29.454 MHz
[05232004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991
```

```
Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB
Beacon: 145.860 MHz
Robot: 145.908 MHz
[05232004]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink 145.975 MHz FM
Downlink 435.070 MHz FM
[05092004]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink: 145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM
Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01092005]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational?

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB
Beacon: 29.352 MHz (intermittent)
SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplink: 145.84 145.86 145.88 145.90 MHz FM
(using 1200-baud Manchester FSK)
CW downlink: 437.125 MHz
Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)
Broadcast Callsign: LUSAT-11
```

BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[05232004]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[08152004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM
Broadcast Callsign: HLO1-11
BBS: HLO1-12

Jim, AA7KC, reports that KO-23's downlink transmitter continues in a non-operational status.
[05092004]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM (9600-baud FSK)
Downlink: 436.500 MHz FM
Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm

[ANS-WSR has no further information]
[05232004]
=====
SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

STatus: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz and 145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[08082004]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlink: 437.025 MHz 437.400 MHz
Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web site
at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip

```
[05092004]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplink V-band   145.840 - 145.990 MHz CW/LSB
       U-band   435.550 - 435.800 MHz CW/LSB
       L1-band 1269.250 - 1269.500 MHz CW/LSB
       L2-band 1268.325 - 1268.575 MHz CW/LSB
Downlink: S2-band 2401.225 - 2401.475 MHz CW/USB
          K-band 24,048.010 - 24,048.060 MHz CW/USB
Beacon:   2401.323
         24,048.035
[05232004]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational
Downlink: 437.075 MHz
Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[08152004]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz
Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[08152004]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
```

Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, callsign KE6QMD, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Operational

Uplink: 145.850 or 145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz
Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[11202005]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink 435.275 1200-baud AFSK
Downlink 145.825 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink: Downlink 145.825 MHz FM 1200 Baud AFSK
Beacon: 2401.220 MHz
[05012006]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-240.S4
WSR 240 Part 4 08/28/2006

AMSAT NEWS SERVICE BULLETIN 240.S4 FROM AMSAT HQ
SILVER SPRING, MD, August 28, 2006
TO ALL RADIO AMATEURS
BID: $ANS-240.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE PROPOSED FOR LAUNCH AT THIS TIME:

PHASE 3E ?O-??
Catalog Number:
Proposed Launch Date: Early/Mid 2007

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/
[ANS-WSR wishes to thank William Leijenaar, PE1RAH for this week's report]
[04242006]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/amsat/listserv/menu.html

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

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X-Google-Attributes: gid10e8ad,public
X-Google-Language: FRENCH,ASCII-7-bit
Path: g2news2.google.com!news3.google.com!news.glorb.com!proxad.net!
193.252.118.146.MISMATCH!news.wanadoo.fr!news.wanadoo.fr!not-for-mail
X-Newsreader: NNTP SCRIBBLER
Content-Type: text/html;
From: patricia@duweb.niz
ReplyTo: patricia@duweb.niz
Subject: les femmes mures chaudes du net
Newsgroups: rec.radio.amateur.space
Date: 01 Sep 2006 19:58:27 GMT

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proxad.net!193.252.118.146.MISMATCH!news.wanadoo.fr!news.wanadoo.fr!not-for-mail
X-Newsreader:      NNTP SCRIBBLER
Content-Type: text/html;
From: patricia@duweb.niz
ReplyTo: patricia@duweb.niz
Subject: les femmes mures les plus chaudes du cul sont ici
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Organization: les newsgroups par Orange
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X-Google-Language: ENGLISH,ASCII
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From: "JoAnne Maenpaa" <wb9jej_no-spam@earthling.com>
Newsgroups: rec.radio.amateur.space
Subject: ANS-246 AMSAT News Service Weekly Bulletins
Lines: 407
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Date: Wed, 06 Sep 2006 14:04:36 GMT
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NNTP-Posting-Date: Wed, 06 Sep 2006 07:04:36 PDT
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news2.google.com rec.radio.amateur.space:408

AMSAT NEWS SERVICE
ANS-246

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an

active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* Deadline for Submitting AMSAT BoD Ballots Approaching
* Dr. Scott Sanford, AMSAT Symposium Tour Speaker
* 2006 AMSAT Symposium Final Call for Papers
* AO-51 Operating Schedule for September 2006
* JAMSAT Announces a New Satellite Operating Award
* Commission Probing Dnepr Crash Presents Preliminary Conclusions
* ARISS Status - 28 August 2006

SB SAT @ AMSAT $ANS-246.01
Deadline for Submitting AMSAT BoD Ballots Approaching

AMSAT News Service Bulletin 246.01
From AMSAT HQ SILVER SPRING, MD.
September 3, 2006
To All RADIO AMATEURS
BID: $ANS-246.01

If you have not mailed your AMSAT ballot , now is the time to do so! The ballot must arrive at the office by September 15th. Look over the bios at
http://www.amsat.org/amsat-new/articles/2006_Board_Candidates/
and VOICE YOUR CHOICE and VOTE!!!

[ANS thanks Martha at AMSAT HQ for the above information]

/EX

SB SAT @ AMSAT $ANS-246.02
Dr. Scott Sanford, AMSAT Symposium Tour Speaker

AMSAT News Service Bulletin 246.02
From AMSAT HQ SILVER SPRING, MD.
September 3, 2006
To All RADIO AMATEURS
BID: $ANS-246.02

AMSAT, the Radio Amateur Satellite Corporation, is very pleased to announced that NASA Principal Investigator, Dr. Scott Sanford has generously accepted our invitation to provide a key presentation during the Symposium tour of the Ames Exploration Center. Dr. Sanford, who is co-director of the NASA Ames Astrochemistry Laboratory, will speak about sample return from comets and asteroids in general, and specifically about the Stardust Sample and Return Mission to Comet Wild 2.

Dr. Sanford was one of the original team members to propose capturing dust from a comet and bringing it back to Earth. Stardust was launched in February 1999, and in January 2004 approached Wild 2 within 150 miles of the nucleus, collecting samples and capturing detailed imagery of the comet's surface. On January 15th 2006 Stardust re-entered the Earth's atmosphere and successfully completed it's mission after landing in the salt flats of northwestern Utah.

So be sure to join us Sunday afternoon for what promises to be an exciting event.

The 2006 Space Symposium will be a joint meeting with the ARISS International Delegates and will also include the IARU Satellite Advisory Panel annual meeting, and a meeting of AMSAT International Delegates. For additional information and to register for transportation to the Ames Exploration Center please visit the AMSAT website at http://www.amsat.org/symposium.

73,
Emily Clarke, N1DID
Symposium Chair

[ANS thanks Emily, N1DID, for the above information]

/EX

SB SAT @ AMSAT $ANS-246.03
2006 AMSAT Symposium Final Call for Papers

AMSAT News Service Bulletin 246.03
From AMSAT HQ SILVER SPRING, MD.
September 3, 2006
To All RADIO AMATEURS
BID: $ANS-246.03

2006 AMSAT North America Space Symposium
6-8 October 2006, Foster City, California
Call for Papers: Final Call
http://www.amsat.org/amsat-new/symposium/2006CallForPapers.php

Invitation: Speakers are invited to submit and present papers dealing with the science of Amateur Radio Satellites and associated technologies for the AMSAT 2006 Space Symposium. The Symposium will be held at the Crowne Plaza Hotel in Foster City, California approximately 10km south of San Francisco International Airport. This is an annual Symposium, however the 2005 Symposium was cancelled due to hurricane damage caused by hurricanes Katrina and Rita. Speakers originally scheduled for the 2005 Symposium are invited to re-submit papers for the 2006 Symposium.

Topics: Recommended topics include but are not limited to the following categories:

- AMSAT P3E
- AMSAT Eagle
- Microsatellite Projects
- Cubesat and Nanosatellite Projects
- ARISS
- Attitude Determination and Control
- Propulsion
- Communications
- Mechanical
- Antennas
- Groundstations
- Digital Modes
- Education and Outreach
- Launch Opportunities
- Status Reports

Other Activities:
- The AMSAT Board of Directors will meet on 5-6 October.
- The AMSAT Annual General Meeting (AGM) will be held on 6 October.
- AMSAT International will meet 8 October
- The IARU Satellite Committee will meet during the Symposium and will hold a public round table discussion on frequency coordination on 8 October
- The ARISS International Delegates Meeting will be held on 9-10 October
- "Birds of a Feather" sessions (BOFS) will be available on request

Deadline: Applications for papers must be received ASAP. Papers must be submitted no later than 12 September 2006.

Procedure: The planning committee has created an online registration system where you can submit your abstract and track it. Using this system you will allow you to submit your paper and any subsequent changes online.

Visit the 2006 Symposium Paper Registration webpage for instructions:
http://www.amsat.org/amsat-new/symposium/2006PapersProcedure.php

Contact Emily Clarke, N1DID for additional information or Jean Fletcher KG6IAK for additional information

Venue: See the 2006 Space Symposium web page for additional information about the venue.

[ANS thanks Emily, N1DID, for the above information]

/EX

SB SAT @ AMSAT $ANS-246.04
AO-51 Operating Schedule for September 2006

AMSAT News Service Bulletin 246.04
From AMSAT HQ SILVER SPRING, MD.
September 3, 2006
To All RADIO AMATEURS
BID: $ANS-246.04

Drew Glasbrenner, KO4MA, has posted the AO-51 operating schedule for September. Drew explains, "We've tried to include a little bit of everything this month". Drew also requests that all requests to the ao51-modes@amsat.org list include "AMSAT" in the subject line. This will help sort out the valid requests from the waves and waves of spam that must be filtered through to be forwarded to the rest of the Committee.

Mode changes generally occur at ~0200Z on the dates indicated below.

September 1 to September 4
FM Repeater, V/S
Uplink: 145.920 Mhz FM, No PL Tone
Downlink: 2401.200 Mhz FM

September 4 to September 11
FM Repeater, V/U, High Power Mode
Uplink: 145.920 Mhz FM, 67 hz PL Tone
Downlink: 435.300 Mhz FM

September 11 to September 18
FM Repeater, L/S
Uplink: 1268.700 Mhz FM, No PL Tone
Downlink: 2401.200 Mhz FM

September 18 to September 24
"Normal" Mode
FM Repeater, V/U
Uplink: 145.920 Mhz FM, 67 hz PL Tone
Downlink: 435.300 Mhz FM
9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 Mhz FM, 9k6 PBP Digital
Downlink: 435.150 Mhz FM, 9k6 PBP Digital

September 24 to October 2
38k4 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 Mhz FM, 9k6 PBP Digital
Downlink: 435.150 Mhz FM, 38k4 PBP Digital

73, Drew KO4MA
AMSAT LM2332
For the AO-51 Operations Group

[ANS thanks Drew, KO4MA, for the above information]

/EX

SB SAT @ AMSAT $ANS-246.05
JAMSAT Announces a New Satellite Operating Award

AMSAT News Service Bulletin 246.05
From AMSAT HQ SILVER SPRING, MD.
September 3, 2006
To All RADIO AMATEURS
BID: $ANS-246.05

Mikio Mouri, JA3GEP, President of Japan-AMSAT (JAMSAT) announced the availability of the new JAMSAT Five Stars Award on August 17, 2006.

JAMSAT's goal is to get more activity on amateur radio satellite communications, to get more hams interested in this aspect of the hobby,and to protect the frequency allocation of the amateur satellites.

This Award is opened for world wide, with following rules.

1. The applicant is required to establish a QSO with five(5) different stations over five (5) different Satellites. (Total 25 QSL Cards required)

2. Each specific satellite is counted once, even the QSO was made on different mode or band on the same satellite.

3. Valid only for 2way QSOs. Cross mode QSOs are not valid on this award.

4. The QSOs using Digital mode and SSTV are valid, however you are requested to get QSL Cards. (e-QSL is not acceptable.)

5. No specific endosement (eg. CW, SSB) is provided.

6. QSOs made after the January 1st, 2006 at 00:00 UTC are valid.

7. As for the application, no specific format is provided. You can use your own QSO list, however it is recomended to use formats used by ARRL or JARL. You need to have your application certified by 2 local radio amateurs, but please DO NOT send QSL cards to us. (We can not take any responsiblity for them.)

8. Fee on the application: Outside of Japan please send Ten(10) "NEW" IRCs with the application. Japanese radio amateurs should include 800 yen by Postal Money Order. (If you are a member of the JAMSAT, then 400 yen is applicable).

9. Donations are welcomed: This is not a requirement, but any donations to build new amateur satellites will be most welcome. If you wish to donate, please add this amount to your award application fee. JAMSAT will remit your donations to AMSAT-DL and/or AMSAT-NA accordingly. (Please understand that the JAMSAT-Board is entitled to divide the sum of donations for each party and project.)

10. Mailing address--Please forward your application to the following.

JAMSAT AWARD OFFICE
For the attention of Mr. S. Murakami
PO Box 26, Mizushima Post Office,
Kurashiki, Okayama 712-8691, Japan

11. Questions and Information
If you have had any questions, please send your message by e-mail to: madoguchi@jamsat.or.jp

[ANS thanks JAMSAT for the above information]

/EX

SB SAT @ AMSAT $ANS-246.06
Commission Probing Dnepr Crash Presents Preliminary Conclusions

AMSAT News Service Bulletin 246.06
From AMSAT HQ SILVER SPRING, MD.
September 3, 2006
To All RADIO AMATEURS
BID: $ANS-246.06

The commission investigating the crash of the Dnepr launch vehicle in Kazakhstan in July has come to its preliminary conclusions regarding the cause of the accident, Kosmotras, the company responsible for the rocket's launch, said in a press release and reported by Interfax.

"The conclusions presented by the commission in its preliminary report indicate that the command system functioned without a hitch during the rocket's launch," the release reads.

The report continues, "A brief malfunctioning of the hydraulic gear of one of the combustion chambers of the first stage's engine unit is the reason behind the abortive launch. The cause of the hydraulic gear's failure has been established. The commission is preparing recommendations on how to repair this problem".

[ANS thanks the Moscow Staff Writers at SpaceDaily.com for the above information]

/EX

SB SAT @ AMSAT $ANS-246.07
ARISS Status - 28 August 2006

AMSAT News Service Bulletin 246.07
From AMSAT HQ SILVER SPRING, MD.
September 3, 2006

To All RADIO AMATEURS
BID: $ANS-246.07

1. Japanese School Contact

Sendai Municipal Yoshinari Junior High School in Sendai, Miyagi, Japan experienced an ARISS contact on Friday, August 25. Only five students were able to have their questions answered due to technical difficulties the school experienced with the audio. An audience of approximately 240 students, teachers and parents attended. Four television stations including NHK (Japan Broadcasting Corporation) and five newspapers covered the contact.

2. Change Made to Spaceflight Participants

Japanese businessman and space visitor Dice-K Enomoto was expected to fly on the next Soyuz flight in September. He has experienced some medical issues and will not be able to participate. His backup, Iranian American businesswoman Anousheh Ansari, will take his place. The ARISS team is making arrangements for her training and school contacts. News of the switch may be found in the following articles:

"American Businesswoman Could Step In as Next Civilian Space Traveler"
http://www.arrl.org/news/stories/2006/08/21/100/?nc=1

"Space Adventures' Client, Anousheh Ansari, Prepared to Take Flight"
http://www.spaceadventures.com/media/releases/2006-08/424

3. ARRL Articles on SSTV Testing, SuitSat-1 and Upcoming Atlantis Flight

ARRL covered the Slow Scan Television (SSTV) testing that has been carried out on the ISS in an article, "ISS Crew, ARISS Team Troubleshooting Slow-Scan TV System." See:
http://www.arrl.org/news/stories/2006/08/22/2/?nc=1

SuitSat-1 was deployed on February 3, 2006. It is expected to reenter the earth's atmosphere in the very near future. See:
http://www.arrl.org/news/stories/2006/08/24/1/?nc=1

ARRL posted a short story on the upcoming shuttle flight entitled "Two radio amateurs to be aboard shuttle Atlantis." See:
http://www.arrl.org/?artid=6709

4. ARRL Article on Australian Contact

On August 18, Australian Reece and Devonport High School students experienced an ARISS contact. ARRL's article, "Astronaut, Tasmanian Students Work Through ISS Ham Radio Contact Glitches," may be found at:
http://www.arrl.org/news/stories/2006/08/24/2/?nc=1

5. ARRL Magazine QST Articles

Several ARISS related articles were published in the September issue of QST. The first is an article by ARRL writer Rick Lindquist, N1RL, about Thomas Reiter, DF4TR, (with his picture) being delivered to the ISS as a new crew member. It is titled "Shuttle Drops off New ISS Ham Radio Crew Member." There is another story by Lindquist which covers Bill McArthur earning the Worked All States (WAS) award and inspiring students to pursue science, space and radio. It includes a picture of ARISS Chairman Frank Bauer awarding a special WAS plaque to McArthur and is entitled, "Astronaut Honored for WAS, Inspiring Others from Space." A column written by ARRL's Steve Ford, WB8IMY, is entitled "APRS and the ISS" and talks about how to try APRS (Automatic Position Reporting System) with the ISS, and how this activity is educational and entertaining.

[ANS thanks Carol, KB3LKI for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73, This week's ANS Editor,
Lee McLamb, KU4OS

From -2021822722953158098
X-Google-Thread: 10e8ad,c374b8aa59b71c79,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news3.google.com!newsfeed.stanford.edu!
headwall.stanford.edu!newshub.sdsu.edu!elnk-nf2-pas!newsfeed.earthlink.net!
stamper.news.pas.earthlink.net!newsread1.news.pas.earthlink.net.POSTED!46041641!
not-for-mail
From: "JoAnne Maenpaa" <wb9jej_no-spam@earthling.com>
Newsgroups: rec.radio.amateur.space
Subject: WSR-247 AMSAT Weekly Satellite Report
Lines: 1045
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <ZzALg.3913$v%4.401@newsread1.news.pas.earthlink.net>
Date: Wed, 06 Sep 2006 14:04:41 GMT
NNTP-Posting-Host: 66.167.183.237
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread1.news.pas.earthlink.net 1157551481 66.167.183.237 (Wed, 06 Sep

2006 07:04:41 PDT)
NNTP-Posting-Date: Wed, 06 Sep 2006 07:04:41 PDT
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news2.google.com rec.radio.amateur.space:409

This report is organized into 4 parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites

SB SAT @ AMSAT W8ISS ANS-247.S1
WSR 247 Part 1 09/04/2006

AMSAT NEWS SERVICE BULLETIN 247.S1 FROM AMSAT HQ
SILVER SPRING, MD, September 04, 2006
TO ALL RADIO AMATEURS
BID: $ANS-247.S1

VO-52 HAMSAT
Catalog Number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/V - Indian Transponder

Proposed frequencies:

Indian Transponder:
Uplink : 435.220 MHz to 435.280 MHz LSB/CW
Downlink: 145.870 MHz to 145.930 MHz USB/CW
Beacon : 145.859330 MHZ CW

Dutch Transponder:
Uplink : 435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW
Beacon : 145.860MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsat.in/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is
active. Each transponder has a different beacon.
[04242006]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Current Mode(s): FM Repeater - V/U High Power
                 PBBS - OFF
                 Digipeater - OFF

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink: 145.880 MHZ FM
                       145.880 MHz USB
                       145.920 MHz FM 67Hz PL tone
                      1268.700 MHz FM 67Hz PL tone
Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
                      2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast
Protocol
                      1268.700 mhz FM, 9k6 PBP Digital
Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Mode schedule for September 2006 according to the AO-51 command team:

September 4 to September 11
FM Repeater, V/U, High Power Mode
Uplink: 145.920 Mhz FM, 67 hz PL Tone
Downlink: 435.300 Mhz FM

September 11 to September 18
FM Repeater, L/S
Uplink: 1268.700 Mhz FM, No PL Tone
Downlink: 2401.200 Mhz FM

September 18 to September 24
"Normal" Mode
FM Repeater, V/U
Uplink: 145.920 Mhz FM, 67 hz PL Tone
Downlink: 435.300 Mhz FM
9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 Mhz FM, 9k6 PBP Digital
Downlink: 435.150 Mhz FM, 9k6 PBP Digital

September 25 to October 2
38k4 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 Mhz FM, 9k6 PBP Digital
Downlink: 435.150 Mhz FM, 38k4 PBP Digital

Official Webpage: http://www.amsat.org/amsat-new/echo/
[09042006]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Uplink: 145.850 MHz (67.0 Hz PL tone) (See below for operating
procedures)
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The
order of operation is thus: (allow for Doppler as necessary)
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute
timer
  on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the
repeater
  on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset
the 10
  minute timer.
[04172006]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: OPERATIONAL

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplink: 145.850 145.870 145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:

V: RHCP
U: RHCP

unOfficial Webpage: http://www.amsat.org/amsat/sats/n7hpr/fo29.html
[11132005]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Uplink: 145.850 MHz FM
Downlink: 436.795 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[01012006]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational depending on amount of Sunlight
Current Reported mode: Mode-A

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
      432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
     145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
     145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz
     145.972 MHz
     435.100 MHz
    2304.100 MHz

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php
The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
AO-7 users are requested to log their contacts and observations about
AO-7, especially any unexpected mode changes.
AO-07 telemetry software webpage:
http://www.qsl.net/k3tz/files/K3TZ_AO-07_Telemetry_Decoder_0.5.zip

Please keep your power low! For additional information please read the
AO-7
Usage Guidelines on the AO-7 Log and Resource Site located at:
http://www.planetemily.com/ao7
[04242006]

=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: TESTING OF SSTV
Digipeater: OFF

The current crew is:

Commander:	Pavel Vinogradov - RV3BS
Flight Engineer:	Jeff Williams - KD5TVQ
Crew:	Thomas Reiter - DF4TR

Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

SSTV TESTING:
Worldwide Reported Downlink: 144.490 MHz FM
145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS, RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official Webpage: http://www.rac.ca/ariss
Official Fan club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

Currently, the crew is in the process of testing the SSTV equipment so ANY activity may not be what will be heard on the next pass right now. IT ALL DEPENDS ON THE TIME AVAILABLE TO THE CREW TO DO MORE IMPORTANT ITEMS. PLEASE

MAINTAIN READING THE AMSAT-BB AND ANS SERVICES FOR MORE CURRENT INFO.

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.
[08142006]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-247.S2
WSR 247 Part 2 09/04/2006

AMSAT NEWS SERVICE BULLETIN 247.S2 FROM AMSAT HQ
SILVER SPRING, MD, September, 2006
TO ALL RADIO AMATEURS
BID: $ANS-247.S2

CO-58 XI-V
Catalog Number: 28895
Launch Date: October 27, 2005

Status: Operational only within range of Ground station in Japan

Telemetry Downlink: 437.345MHz - FSK 1200bps using AFK protocol
Beacon Downlink: 437.465MHz - CW about 50 WPM

Callsign: JQ1YGW

Oficial Webpage: http://www.space.t.u-tokyo.ac.jp/gs/satinfo-e.html#xi5
Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
[03122006]
=====
CO-55 CUTE-1.7
Catalog number: 28941
Launched: June 30,2003

Status: Operational

Uplink: ?
Downlink: 437.3850 CW
437.4700 1200 FM ax25 or SRLL (ACTIVE only near Japan ?)
Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[05012006]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Current Mode(s): FM Repeater - V/U High Power

PBBS - OFF
Digipeater - OFF

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.880 MHZ FM
145.880 MHz USB
145.920 MHz FM 67Hz PL tone
1268.700 MHz FM 67Hz PL tone
Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast Protocol
1268.700 mhz FM, 9k6 PBP Digital
Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Mode schedule for September 2006 according to the AO-51 command team:

September 4 to September 11
FM Repeater, V/U, High Power Mode
Uplink: 145.920 Mhz FM, 67 hz PL Tone
Downlink: 435.300 Mhz FM

September 11 to September 18
FM Repeater, L/S
Uplink: 1268.700 Mhz FM, No PL Tone
Downlink: 2401.200 Mhz FM

September 18 to September 24
"Normal" Mode
FM Repeater, V/U
Uplink: 145.920 Mhz FM, 67 hz PL Tone
Downlink: 435.300 Mhz FM
9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 Mhz FM, 9k6 PBP Digital
Downlink: 435.150 Mhz FM, 9k6 PBP Digital

September 25 to October 2
38k4 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 Mhz FM, 9k6 PBP Digital
Downlink: 435.150 Mhz FM, 38k4 PBP Digital
Official Webpage: http://www.amsat.org/amsat-new/echo/
[09042006]

```
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Operational

General Usage Uplink/Downlink:145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org
aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[04172006]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM
Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[08072006]
=====
RS-22 Mozhayets 4
Catalog Number: 27939
Launch Date: September 27, 2004

Status: Operational

Beacon: 435.3520 MHz CW
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Semi-operational, the digipeater command is on and open for
APRS users.

Uplink: 145.900 FM
       145.920 FM
```

145.940 FM
145.960 FM
(using 1200-baud Manchester FSK)
Downlink: 437.026 MHz SSB (1200-baud PSK)
Mode-S Beacon: 2401.1428 MHz

Mode and Antenna Polarization:
U: RC 437.050 MHz RHCP
PSK 437.025 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[04172006]

=====

UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational

Telemetry Downlink: 145.826 MHz. FM (1200-baud AFSK).
approx. 10 days ON, 10 days OFF
Mode-S Beacon: 2401.500 MHz. ... OFF
UHFBeacon: 435.025 MHz. ... OFF

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Reception reports are requested to be sent to xxxxx@amsat.org (replace xxxxx by g3cwv), or post to AMSAT-BB.

During the period 15 June to 17 July 2006 nothing has been heard from the satellite. It was last heard on 05 May, just one day before the solar eclipses were due to start. These eclipses will continue until 04 August 2006, reaching a maximum duration of 22% around 19 June. If the satellite behaves in the same way as it did last year, regular 10 day transmissions should re-start, sometime in August.

Official webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[07172006]

=====

PCSAT-2
Catalog Number: 25544
Launch Date: August 1, 2005

Activated: August 3, 2005
Status: Operational
Current Mode: Voice Response to Packet Digis
CW/PSK Repeater

Voice Digital Uplink: 145.990 MHz
Voice response Downlink: 437.975 MHz

Digital Downlink: 435.275 Mhz
Digital Uplink: 145.825 Mhz
ISS digipeater uplink: 145.990 Mhz

PSK-31 Downlink: 435.275 Mhz
PSK-31 Uplink: 29.401 Mhz

CALLSIGN: pcsat2

Official Webpage: http://web.usna.navy.mil/~bruninga/pcsat2.html
PCSAT2 APRS Packet page: http://www.findu.com/cgi-bin/pcsat2.cgi
aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[08282006]

=====

INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: TESTING OF SSTV
Digipeater: OFF

The current crew is:
Commander: Pavel Vinogradov - RV3BS
Flight Engineer: Jeff Williams - KD5TVQ
Crew: Thomas Reiter - DF4TR

Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

SSTV TESTING:
Worldwide Reported Downlink: 144.490 MHz FM
145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS, RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official Webpage: http://www.rac.ca/ariss
Official Fan club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

Currently, the crew is in the process of testing the SSTV equipment so
ANY
activity may not be what will be heard on the next pass right now. IT
ALL
DEPENDS ON THE TIME AVAILABLE TO THE CREW TO DO MORE IMPORTANT ITEMS.
PLEASE
MAINTAIN READING THE AMSAT-BB AND ANS SERVICES FOR MORE CURRENT INFO.

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.
[08142006]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-247.S3
WSR 247 Part 3 09/04/2006

AMSAT NEWS SERVICE BULLETIN 247.S3 FROM AMSAT HQ
SILVER SPRING, MD, September 04, 2006
TO ALL RADIO AMATEURS
BID: $ANS-247.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

AO-54 SUITSAT
Catalog Number:28933
Release Date: February 3,2006

Status: Non-operational
Modes : FM Voice Telemetry/Greetings
    FM SSTV

Callsign: RS0RS
Downlink: 145.990 FM

```
Currently on the amsat-bb, there is a geussing game going on about when
Suitsat will re-enter the atmosphere.

Official webpage: http://www.suitsat.org
[05012006]
=====
NCUBE-2
Catalog Number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency:  437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog Number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 FM 67Hz CTCSS
Voice Downlink: 2401.835 FM
Packet Up/Downlink: 437.250 9k6 packet
Packet Downlink 2401.835 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01292006]
=====
TO-31 TMSAT-1
Catalog Number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink:   145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
PO-28 POSAT-1
Catalog Number: 22829
Launch Date: September 25, 1993

Status: Operational - Not open for Amatuer use
```

Downlink: 429.950

Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html.
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012006]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launched: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB
Beacon: 145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: Downlink only

Uplink: 145.875 145.900 145.925 145.950 MHz FM (1200-baud)
Downlink: 435.808 MHz PSK
Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01012006]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB
Beacon: 29.408 MHz
Robot: 29.454 MHz
[05232004]

```
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB
Beacon: 145.860 MHz
Robot: 145.908 MHz
[05232004]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink 145.975 MHz FM
Downlink 435.070 MHz FM
[05092004]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink: 145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM
Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01092005]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational?

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB
Beacon: 29.352 MHz (intermittent)
SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only
```

Uplink: 145.84 145.86 145.88 145.90 MHz FM
(using 1200-baud Manchester FSK)
CW downlink: 437.125 MHz
Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)
Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[05232004]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[08152004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM
Broadcast Callsign: HL01-11
BBS: HL01-12

Jim, AA7KC, reports that KO-23's downlink transmitter continues in a
non-operational status.
[05092004]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM (9600-baud FSK)
Downlink: 436.500 MHz FM
Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
PO-34 PANSAT

Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm

[ANS-WSR has no further information]
[09042006]
=====
SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

STatus: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz and 145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[08082004]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlink: 437.025 MHz 437.400 MHz
Broadcast Callsign: UO121-11
BBS: UO121-12

```
The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site
at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[05092004]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplink V-band   145.840 - 145.990 MHz CW/LSB
      U-band   435.550 - 435.800 MHz CW/LSB
      L1-band 1269.250 - 1269.500 MHz CW/LSB
      L2-band 1268.325 - 1268.575 MHz CW/LSB
Downlink: S2-band 2401.225 - 2401.475 MHz CW/USB
         K-band 24,048.010 - 24,048.060 MHz CW/USB
Beacon:   2401.323
        24,048.035
[05232004]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational
Downlink: 437.075 MHz
Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[08152004]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz
Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[08152004]
=====
NO-45 SAPPHIRE
Catalog number: 26932
```

Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, callsign KE6QMD, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]

=====

MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Operational

Uplink: 145.850 or 145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz
Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[11202005]

=====

AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink 435.275 1200-baud AFSK
Downlink 145.825 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01012006]

=====

DO-17 Dove

Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink: Downlink 145.825 MHz FM 1200 Baud AFSK
Beacon: 2401.220 MHz
[05012006]

=====

WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-247.S4
WSR 247 Part 4 09/04/2006

AMSAT NEWS SERVICE BULLETIN 247.S4 FROM AMSAT HQ
SILVER SPRING, MD, September 04, 2006
TO ALL RADIO AMATEURS
BID: $ANS-247.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE PROPOSED FOR LAUNCH AT THIS TIME:

PHASE 3E ?O-??
Catalog Number:
Proposed Launch Date: Early/Mid 2007

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/
[ANS-WSR wishes to thank William Leijenaar, PE1RAH for this week's report]
[04242006]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:

http://www.amsat.org

AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/amsat/listserv/menu.html

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

```
From -2594573167866110651
X-Google-Thread: 10e8ad,7c732841ce31c1c3,start
X-Google-Thread: 113975,7c732841ce31c1c3,start
X-Google-Attributes: gid10e8ad,gid113975,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news3.google.com!news.glorb.com!feed.xsnews.nl!
feeder.xsnews.nl!newsfeed.bit.nl!feeder2.cambrium.nl!feed.tweaknews.nl!newsrouter-
eu.astraweb.com!news.astraweb.com!router1.astraweb.com!not-for-mail
```

From: Chris Steyaert <observations@rmob.org>
Newsgroups: rec.radio.amateur.space,sci.astro.amateur
Subject: Radio Meteor Obs. Bull. August 2006 Perseids
Date: Sat, 09 Sep 2006 16:28:01 +0200
Message-ID: <jqj5g2djg3oav3d5ak6g89pgnr1ie5h0g4@4ax.com>
X-Newsreader: Forte Agent 1.93/32.576 English (American)
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Lines: 17
Organization: Unlimited download news at news.astraweb.com
NNTP-Posting-Host: 9ec4e413.news.astraweb.com
X-Trace: DXC=3iCNTAG<g[;B;RYi]PcMG9L?0kYOcDh@:IWdZCh253V39K1o3Vo]lH:G?
ifhhgG3C1BOPflEPL>N6C7_1>@f4Zb1
Xref: g2news2.google.com rec.radio.amateur.space:410 sci.astro.amateur:39334

Radio Meteor Observation Bulletin No. 157 of August 2006 (76K) is available now as

http://visualrmob.free.fr/rmobtext/rmob0608.txt

More information and the visual presentation of the hourly forward scatter counts can be found on

http://www.rmob.org

http://radio.data.free.fr

Chris

From 3340505612139911029
X-Google-Thread: 10e8ad,317e12fb3ea86e79,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news2.google.com!news4.google.com!newsfeed.stanford.edu!
headwall.stanford.edu!newshub.sdsu.edu!elnk-nf2-pas!newsfeed.earthlink.net!
stamper.news.pas.earthlink.net!newsread1.news.pas.earthlink.net.POSTED!3dd4ce4a!
not-for-mail
Newsgroups: rec.radio.amateur.space
Subject: Nasa administrators were asked what a Canadian was doing on the shuttle crew.
From: Slow Code <my.mail@no.spam>
Organization: None
User-Agent: Xnews/5.04.25
Lines: 5
Message-ID: <Q5HMg.5606$v%4.644@newsread1.news.pas.earthlink.net>
Date: Sat, 09 Sep 2006 22:19:28 GMT
NNTP-Posting-Host: 4.254.225.129

```
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread1.news.pas.earthlink.net 1157840368 4.254.225.129 (Sat, 09 Sep
2006 15:19:28 PDT)
NNTP-Posting-Date: Sat, 09 Sep 2006 15:19:28 PDT
Xref: g2news2.google.com rec.radio.amateur.space:411
```

Entertainment.

Sc

```
From -2710440438866615763
X-Google-Thread: 10e8ad,ea61f1dd0d0a635d,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news4.google.com!newshub.sdsu.edu!elnk-nf2-pas!
newsfeed.earthlink.net!stamper.news.pas.earthlink.net!
newsread1.news.pas.earthlink.net.POSTED!46041641!not-for-mail
From: "JoAnne Maenpaa" <wb9jej_no-spam@earthling.com>
Newsgroups: rec.radio.amateur.space
Subject: ANS-253 AMSAT News Service Weekly Bulletin
Lines: 254
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <KDlOg.7760$v%4.2442@newsread1.news.pas.earthlink.net>
Date: Thu, 14 Sep 2006 23:31:54 GMT
NNTP-Posting-Host: 66.167.67.142
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread1.news.pas.earthlink.net 1158276714 66.167.67.142 (Thu, 14 Sep
2006 16:31:54 PDT)
NNTP-Posting-Date: Thu, 14 Sep 2006 16:31:54 PDT
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news2.google.com rec.radio.amateur.space:412
```

AMSAT NEWS SERVICE
ANS-253

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

****************** AMSAT 2006 Space Symposium **************************

Online registration and hotel reservation for the 2006 AMSAT Space Symposium has been posted to the AMSAT website, and information about the Symposium has been expanded. The 2006 AMSAT Space Symposium will be held October 6, 7 and 8 at the Crowne Plaza in Foster City California in the beautiful San Francisco Bay Area.

Please visit http://www.amsat.org/amsat-new/symposium for additional information and an index to the expanded Symposium web pages.

****

In this edition:
* Mentor Graphics Makes Generous Donation
* AMSAT Ballots due 9/15/06
* 2006 AMSAT Symposium
* AO-51 PL Needed
* Suit-Sat Re-enters
* ARISS STATUS

SB SAT @ AMSAT $ANS-253.01
Mentor Graphics Makes Generous Software Donation

AMSAT News Service Bulletin 253.01
From AMSAT HQ SILVER SPRING, MD.
September 10, 2006
To All RADIO AMATEURS
BID: $ANS-253.01

AMSAT is very pleased to annouced an extremely generous donation of software tools from Mentor Graphics. Mentor Graphics has donated 20 licenses for entire suites of software with a total value in the hundreds of thousands of dollars! The software will used for the design, simulation, verification and test of circuits and multi-layer printed circuit boards for both the Eagle spacecraft as well as development of the User ground station for the digitial transponder.

This software will be a great benefit to the Eagle and HPSDR team members working to develop the hardware that will make Eagle space and ground systems a reality.

AMSAT thanks Mentor Graphics for their most generous donation.

[ANS thanks Rick, W2GPS, for the above information]

/EX

SB SAT @ AMSAT $ANS-253.02
All AMSAT Ballots Due by Friday, 9/15/06

AMSAT News Service Bulletin 253.02
From AMSAT HQ SILVER SPRING, MD.

September 10, 2006
To All RADIO AMATEURS
BID: $ANS-253.02

Note to All AMSAT Members. Please make your vote count and get them mailed to AMSAT HQ by Friday, 9/15/06. Exercise your right to select your leadership and steer the group in the direction you feel is the proper course. Drop it in the mail now!

Background on all the candidates can be found on the AMSAT web site to help your decisions.

[ANS thanks Martha for the above information]

/EX

SB SAT @ AMSAT $ANS-253.03
2006 AMSAT Symposium

AMSAT News Service Bulletin 253.03
From AMSAT HQ SILVER SPRING, MD.
September 10, 2006
To All RADIO AMATEURS
BID: $ANS-253.03

The annual Symposium is now about a month away. You can still sign up to attend this exciting event being held in San Francisco, CA. Meet all the leadeship and enjoy the classic talks given by superb speakers. Mingle with those that make satellites a reality-yes, real rocket scientists.

All the information you need to join in this event are on the website. Stop by and read how to attend and see the great lineup of speakers and demonstrations that make this event unique.

[ANS thanks Emily, N1DID, for the above information]

/EX

SB SAT @ AMSAT $ANS-253.04
AO-51 PL Needed

AMSAT News Service Bulletin 253.04
From AMSAT HQ SILVER SPRING, MD.
September 10, 2006
To All RADIO AMATEURS
BID: $ANS-253.04

Remember that you need a PL of 67 Hz to access AO-51 in mode J-FM (except in QRP mode).

Please, especially if you haven't worked a given satellite in mode J-FM before, make sure you can hear well enough copy callsigns before transmitting. There might be occasions on SO-50 when you're the only one on, but over the 'States, this is rather rare on AO-51, especially in high power mode.

We're having problems with dead carriers on AO-51 this week, where sometimes even the regulars with good antenna setups can't get in due to interference from stations without PL. Please listen first and use the correct PL.

73's and good luck!

September 11 to September 18
FM Repeater, L/S
Uplink: 1268.700 MHz FM, No PL Tone
Downlink: 2401.200 MHz FM

[ANS thanks KD6PAG, for the above information]

/EX

SB SAT @ AMSAT $ANS-253.05
Suitsat Re-enters

AMSAT News Service Bulletin 253.05
  From AMSAT HQ SILVER SPRING, MD.
September 10, 2006
To All RADIO AMATEURS
BID: $ANS-253.05

All,

On September 7, 2006 at 16:00 GMT, SuitSat-1 re-entered about 1400 km south-southwest of Western Australia. For more details, including the winners of the Chicken Little Contest, please go to:

http://www.amsat.org/amsat-new/ariss/suitsatContest.php

I want to thank all who made SuitSat-1 the phenomenal event that it was. Your hard work and dedication paid off.

In just 3 weeks the SuitSat team developed and delivered a safe satellite system that has gained the confidence of the international space agencies. The web and PR team were able to garner unprecedented press coverage of our ham/educational outreach activity, including over 9 million hits on www.suitsat.org in February. Students around the world had the opportunity to participate in a 7 month "school spacewalk" with the artwork, pictures, signatures and voices on-board. And the "super-sleuth" ham radio operator extraordinaires were able to pull a significant amount of data from the satellite despite of its low signal strength.

And my congratulations to the students and adults who won the Chicken Little contest!!

Next for SuitSat-1--the commemorative certificates/diplomas. And at the

AMSAT-NA symposium/ARISS meeting we will discuss our thoughts and plans for a potential SuitSat-2.

Stay tuned!

73, Frank H. Bauer, KA3HDO
AMSAT V.P. for Human Spaceflight Programs
ARISS International Chairman

[ANS Thanks Frank Bauer, KA3HDO, for the above information]

/EX

SB SAT @ AMSAT $ANS-253.06
ARISS STATUS

AMSAT News Service Bulletin 253.06
From AMSAT HQ SILVER SPRING, MD.
September 10, 2006
To All RADIO AMATEURS
BID: $ANS-253.06

ARISS Status
September 4, 2006

1. Tennessee School Contact Successful

On Monday, August 28, students from Northeast Middle School in Clarksville, Tennessee had the opportunity to speak with the ISS. Jeff Williams, KD5TVQ, answered 19 questions asked by ten children via the telebridge station VK4KHZ in Australia. Jeff Williams' niece was one of the children selected to participate in the session. A local paper covered the contact. Twenty-one connections, including 3 repeater nodes, from 7 countries were made to the EchoLink AMSAT (101 377) and JK1ZRW (277 208) servers. Audio was also fed into the IRLP Discovery Reflector 9010, and was webcast courtesy of Verizon Conferencing. The Leaf-Chronicle wrote a story on the event entitled, "Students make long-distance call to astronaut in outer space." See:
http://www.theleafchronicle.com/apps/pbcs.dll/article?AID=/20060829/NEWS01/608290319&SearchID=73255668465433

2. ARRL Article on Japanese Contact

ARRL covered the Sendai Yoshinari School contact in its article, "Junior High Schoolers in Japan Speak with Astronaut via Ham Radio." See:
http://www.arrl.org/news/stories/2006/09/01/3/?nc=1

3. School Contact Mentioned on Space.ref

The Space.ref website has a brief entry on the Teven Tintenbar School in Australia. See paragraph 19 on:
http://www.spaceref.com/news/viewsr.html?pid=21694

4. Options to Speak with Friends, Family from Space Include Ham Radio

The Canadian Space Agency web site describes the options available to the ISS crew members for contacting friends and family on Earth. Ham radio is one of the options mentioned. See:
http://www.space.gc.ca/asc/eng/astronauts/living_relaxing.asp

5. ARISS TIM Held

The ARISS team held a Technical Interchange Meeting August 28 -31 at Goddard Space Flight Center. ARISS Delegate Sergey Samburov was able to attend the discussions which covered ARISS hardware and software, SuitSat-2 design and development, and school operations.

[ANS thanks Carol, KB3LKI, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73, This week's ANS Editor,
Dee Interdonato, NB2F

```
From 4300874960677860149
X-Google-Thread: 10e8ad,5876012cfa4c2aa0,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news4.google.com!newshub.sdsu.edu!elnk-nf2-pas!
newsfeed.earthlink.net!stamper.news.pas.earthlink.net!
newsread1.news.pas.earthlink.net.POSTED!46041641!not-for-mail
From: "JoAnne Maenpaa" <wb9jej_no-spam@earthling.com>
Newsgroups: rec.radio.amateur.space
Subject: WSR-254 AMSAT Weekly Satellite Report
Lines: 1035
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <NDlOg.7761$v%4.6888@newsread1.news.pas.earthlink.net>
Date: Thu, 14 Sep 2006 23:31:57 GMT
NNTP-Posting-Host: 66.167.67.142
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread1.news.pas.earthlink.net 1158276717 66.167.67.142 (Thu, 14 Sep
2006 16:31:57 PDT)
NNTP-Posting-Date: Thu, 14 Sep 2006 16:31:57 PDT
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news2.google.com rec.radio.amateur.space:413
```

This report is organized into 4 parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites

SB SAT @ AMSAT W8ISS ANS-254.S1
WSR 254 Part 1 09/11/2006

AMSAT NEWS SERVICE BULLETIN 254.S1 FROM AMSAT HQ
SILVER SPRING, MD, September 11, 2006
TO ALL RADIO AMATEURS
BID: $ANS-254.S1

VO-52 HAMSAT
Catalog Number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/V - Indian Transponder

Proposed frequencies:

Indian Transponder:
Uplink : 435.220 MHz to 435.280 MHz LSB/CW
Downlink: 145.870 MHz to 145.930 MHz USB/CW
Beacon : 145.859330 MHZ CW

Dutch Transponder:
Uplink : 435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW
Beacon : 145.860MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsat.in/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is
active. Each transponder has a different beacon.
[04242006]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Current Mode(s): FM Repeater - L/S
PBBS - OFF
Digipeater - OFF

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.880 MHZ FM
145.880 MHz USB
145.920 MHz FM 67Hz PL tone
1268.700 MHz FM 67Hz PL tone
Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast
Protocol
1268.700 mhz FM, 9k6 PBP Digital
Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Mode schedule for September 2006 according to the AO-51 command team:

September 4 to September 11
FM Repeater, V/U, High Power Mode
Uplink: 145.920 Mhz FM, 67 hz PL Tone
Downlink: 435.300 Mhz FM

September 11 to September 18
FM Repeater, L/S
Uplink: 1268.700 Mhz FM, No PL Tone
Downlink: 2401.200 Mhz FM

September 18 to September 24
"Normal" Mode
FM Repeater, V/U
Uplink: 145.920 Mhz FM, 67 hz PL Tone
Downlink: 435.300 Mhz FM
9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 Mhz FM, 9k6 PBP Digital
Downlink: 435.150 Mhz FM, 9k6 PBP Digital

September 25 to October 2
38k4 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 Mhz FM, 9k6 PBP Digital
Downlink: 435.150 Mhz FM, 38k4 PBP Digital

Official Webpage: http://www.amsat.org/amsat-new/echo/
[09112006]
=====

SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Uplink: 145.850 MHz (67.0 Hz PL tone) (See below for operating
procedures)
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The
order of operation is thus: (allow for Doppler as necessary)
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute
timer
  on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the
repeater
  on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset
the 10
  minute timer.
[04172006]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: OPERATIONAL

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplink: 145.850 145.870 145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

unOfficial Webpage: http://www.amsat.org/amsat/sats/n7hpr/fo29.html

```
[11132005]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Uplink: 145.850 MHz FM
Downlink: 436.795 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[01012006]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational depending on amount of Sunlight
Current Reported mode: Mode-A

Uplink:       145.850 to 145.950 MHz CW/USB Mode A
      432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
     145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
     145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons:  29.502 MHz
     145.972 MHz
     435.100 MHz
    2304.100 MHz

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php
The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
AO-7 users are requested to log their contacts and observations about
AO-7, especially any unexpected mode changes.
AO-07 telemetry software webpage:
http://www.qsl.net/k3tz/files/K3TZ_AO-07_Telemetry_Decoder_0.5.zip

Please keep your power low!  For additional information please read the
AO-7
Usage Guidelines on the AO-7 Log and Resource Site located at:
http://www.planetemily.com/ao7
[04242006]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998
```

Status: Operational
Current Mode: Intermittent
Digipeater: OFF

The current crew is:
Commander: Pavel Vinogradov - RV3BS
Flight Engineer: Jeff Williams - KD5TVQ
Crew: Thomas Reiter - DF4TR

Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

SSTV TESTING:
Worldwide Reported Downlink: 144.490 MHz FM
145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS, RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official Webpage: http://www.rac.ca/ariss
Official Fan club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

Currently, the Space Shuttle Atlantis is docked to the International Space Station. Activity may be curtailed depending on Extravehicular activity.

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line is NOT translated from Russian and posted.
[09112006]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-254.S2
WSR 254 Part 2 09/11/2006

AMSAT NEWS SERVICE BULLETIN 254.S2 FROM AMSAT HQ
SILVER SPRING, MD, September 11, 2006
TO ALL RADIO AMATEURS
BID: $ANS-254.S2

CO-58 XI-V
Catalog Number: 28895
Launch Date: October 27, 2005

Status: Operational only within range of Ground station in Japan

Telemetry Downlink: 437.345MHz - FSK 1200bps using AFK protocol
Beacon Downlink: 437.465MHz - CW about 50 WPM

Callsign: JQ1YGW

Oficial Webpage: http://www.space.t.u-tokyo.ac.jp/gs/satinfo-e.html#xi5
Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
[03122006]
=====
CO-55 CUTE-1.7
Catalog number: 28941
Launched: June 30,2003

Status: Operational

Uplink: ?
Downlink: 437.3850 CW
437.4700 1200 FM ax25 or SRLL (ACTIVE only near Japan ?)
Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[05012006]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Current Mode(s): FM Repeater - L/S
PBBS - OFF
Digipeater - OFF

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.880 MHZ FM
145.880 MHz USB
145.920 MHz FM 67Hz PL tone

1268.700 MHz FM 67Hz PL tone
Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast Protocol
1268.700 mhz FM, 9k6 PBP Digital
Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Mode schedule for September 2006 according to the AO-51 command team:

September 4 to September 11
FM Repeater, V/U, High Power Mode
Uplink: 145.920 Mhz FM, 67 hz PL Tone
Downlink: 435.300 Mhz FM

September 11 to September 18
FM Repeater, L/S
Uplink: 1268.700 Mhz FM, No PL Tone
Downlink: 2401.200 Mhz FM

September 18 to September 24
"Normal" Mode
FM Repeater, V/U
Uplink: 145.920 Mhz FM, 67 hz PL Tone
Downlink: 435.300 Mhz FM
9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 Mhz FM, 9k6 PBP Digital
Downlink: 435.150 Mhz FM, 9k6 PBP Digital

September 25 to October 2
38k4 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 Mhz FM, 9k6 PBP Digital
Downlink: 435.150 Mhz FM, 38k4 PBP Digital
Official Webpage: http://www.amsat.org/amsat-new/echo/
[09112006]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Operational

General Usage Uplink/Downlink:145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org
aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[04172006]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Downlink: 435.225 MHz FM (9600-baud FSK)
435.325 Mhz - Not Available - temperature problems
Uplinks: 145.850 FM
145.890 FM
145.930 FM
1269.700 FM
1269.800 FM
1269.900 FM
Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[08072006]
=====
RS-22 Mozhayets 4
Catalog Number: 27939
Launch Date: September 27, 2004

Status: Operational

Beacon: 435.3520 MHz CW
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Semi-operational, the digipeater command is on and open for APRS users.

Uplink: 145.900 FM
145.920 FM
145.940 FM
145.960 FM
(using 1200-baud Manchester FSK)
Downlink: 437.026 MHz SSB (1200-baud PSK)
Mode-S Beacon: 2401.1428 MHz

Mode and Antenna Polarization:
U: RC 437.050 MHz RHCP
PSK 437.025 MHz LHCP

V: Linear

Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[04172006]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational

Telemetry Downlink: 145.826 MHz. FM (1200-baud AFSK).
approx. 10 days ON, 10 days OFF
Mode-S Beacon: 2401.500 MHz. ... OFF
UHFBeacon: 435.025 MHz. ... OFF

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Reception reports are requested to be sent to xxxxx@amsat.org (replace
xxxxx
by g3cwv), or post to AMSAT-BB.

During the period 15 June to 17 July 2006 nothing has been heard from
the
satellite. It was last heard on 05 May, just one day before the solar
eclipses were due to start. These eclipses will continue until 04 August
2006, reaching a maximum duration of 22% around 19 June. If the
satellite
behaves in the same way as it did last year, regular 10 day
transmissions
should re-start, sometime in August.

Official webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[07172006]
=====
PCSAT-2
Catalog Number: 25544
Launch Date: August 1, 2005

Activated: August 3, 2005
Status: Decommissioning
Current Mode: Voice Response to Packet Digis
             CW/PSK Repeater

Voice Digital Uplink: 145.990 MHz
Voice response Downlink: 437.975 MHz

```
Digital Downlink:      435.275 Mhz
Digital Uplink:        145.825 Mhz
ISS digipeater uplink: 145.990 Mhz

PSK-31 Downlink: 435.275 Mhz
PSK-31 Uplink:    29.401 Mhz

CALLSIGN: pcsat2

Official Webpage: http://web.usna.navy.mil/~bruninga/pcsat2.html
PCSAT2 APRS Packet page: http://www.findu.com/cgi-bin/pcsat2.cgi
aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[09112006]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: Intermittent
Digipeater: OFF

The current crew is:
Commander:              Pavel Vinogradov - RV3BS
Flight Engineer:        Jeff Williams - KD5TVQ
Crew:                   Thomas Reiter - DF4TR

Digital/APRS:
Worldwide packet uplink:   145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink:   145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink:      145.800 MHz FM

SSTV TESTING:
Worldwide Reported Downlink: 144.490 MHz FM
                            145.800 MHz FM

Crossband Repeater:
Repeater Uplink:   437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German:  DP0ISS
Russian: RS0ISS, RZ3DZR
USA: NA1SS
```

Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official Webpage: http://www.rac.ca/ariss
Official Fan club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

Currently, the Space Shuttle Atlantis is docked to the International
Space
Station. Activity may be curtailed depending on Extravehicular activity.

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is NOT translated from Russian and posted.
[09112006]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-254.S3
WSR 254 Part 3 09/11/2006

AMSAT NEWS SERVICE BULLETIN 254.S3 FROM AMSAT HQ
SILVER SPRING, MD, September 11, 2006
TO ALL RADIO AMATEURS
BID: $ANS-254.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

AO-54 SUITSAT
Catalog Number:28933
Release Date: February 3,2006

Status: Non-operational
Modes : FM Voice Telemetry/Greetings
    FM SSTV

Callsign: RS0RS
Downlink: 145.990 FM

Currently on the amsat-bb, there is a geussing game going on about when
Suitsat will re-enter the atmosphere.

Official webpage: http://www.suitsat.org
[05012006]
=====
NCUBE-2
Catalog Number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA

```
Proposed Transmit Frequency:  437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog Number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 FM 67Hz CTCSS
Voice Downlink: 2401.835 FM
Packet Up/Downlink: 437.250 9k6 packet
Packet Downlink 2401.835 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01292006]
=====
TO-31 TMSAT-1
Catalog Number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink:   145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
PO-28 POSAT-1
Catalog Number: 22829
Launch Date: September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 429.950

Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html.
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012006]
=====
AO-10 OSCAR 10
```

```
Catalog number: 14129
Launched: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB
Beacon: 145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: Downlink only

Uplink: 145.875 145.900 145.925 145.950 MHz FM (1200-baud)
Downlink: 435.808 MHz PSK
Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01012006]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB
Beacon: 29.408 MHz
Robot: 29.454 MHz
[05232004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB
Beacon: 145.860 MHz
Robot: 145.908 MHz
[05232004]
=====
UO-14 UoSAT-3
```

```
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink 145.975 MHz FM
Downlink 435.070 MHz FM
[05092004]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink: 145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM
Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01092005]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational?

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB
Beacon: 29.352 MHz (intermittent)
SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplink: 145.84 145.86 145.88 145.90 MHz FM
(using 1200-baud Manchester FSK)
CW downlink: 437.125 MHz
Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)
Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[05232004]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990
```

Status: Non-Operational

Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[08152004]

=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM
Broadcast Callsign: HL01-11
BBS: HL01-12

Jim, AA7KC, reports that KO-23's downlink transmitter continues in a non-operational status.
[05092004]

=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM (9600-baud FSK)
Downlink: 436.500 MHz FM
Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]

=====
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]

=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm

[ANS-WSR has no further information]
[09042006]
=====
SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

STatus: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz and 145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[08082004]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlink: 437.025 MHz 437.400 MHz
Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site
at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[05092004]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplink V-band   145.840 - 145.990 MHz CW/LSB

```
      U-band   435.550 - 435.800 MHz CW/LSB
      L1-band 1269.250 - 1269.500 MHz CW/LSB
      L2-band 1268.325 - 1268.575 MHz CW/LSB
Downlink: S2-band 2401.225 - 2401.475 MHz CW/USB
         K-band 24,048.010 - 24,048.060 MHz CW/USB
Beacon:   2401.323
        24,048.035
[05232004]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational
Downlink: 437.075 MHz
Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[08152004]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz
Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[08152004]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
call-
sign KE6QMD, as per the user service agreement located at the following
URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
```

=====

MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Operational

Uplink: 145.850 or 145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz
Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[11202005]

=====

AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink 435.275 1200-baud AFSK
Downlink 145.825 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01012006]

=====

DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink: Downlink 145.825 MHz FM 1200 Baud AFSK
Beacon: 2401.220 MHz
[05012006]

=====

WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-254.S4
WSR 254 Part 4 09/11/2006

AMSAT NEWS SERVICE BULLETIN 254.S4 FROM AMSAT HQ
SILVER SPRING, MD, September 11, 2006
TO ALL RADIO AMATEURS
BID: $ANS-254.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE PROPOSED FOR LAUNCH AT THIS TIME:

PHASE 3E ?O-??
Catalog Number:
Proposed Launch Date: Early/Mid 2007

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/
[ANS-WSR wishes to thank William Leijenaar, PE1RAH for this week's report]
[04242006]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)

* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
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This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

From -5573077601737564379
X-Google-Thread: 10e8ad,778d36433be1ab12,start
X-Google-Thread: f9f20,778d36433be1ab12,start
X-Google-Attributes: gid10e8ad,gidf9f20,public
X-Google-Language: ENGLISH,ASCII-7-bit
From: <Thierry>
Newsgroups: rec.radio.amateur.space,sci.space.station
Subject: How to receive ISS images ?
Date: Sun, 17 Sep 2006 12:53:35 +0200
Lines: 20
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.2869
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.2869
X-RFC2646: Format=Flowed; Original
NNTP-Posting-Host: ip-88-207-129-85.tvsurf.pt.lu
Message-ID: <450d2930$1@news.vo.lu>
X-Trace: news.vo.lu 1158490416 88.207.129.85 (17 Sep 2006 12:53:36 +0200)
Path: g2news2.google.com!news3.google.com!border1.nntp.dca.giganews.com!nntp.giganews.com!newsfeed00.sul.t-online.de!t-online.de!npeer.de.kpn-eurorings.net!news.vo.lu!not-for-mail
Xref: g2news2.google.com rec.radio.amateur.space:414 sci.space.station:4268

Hi,

I live in Europe. I 'd like to know if it could be possible to receive video signal from ISS (the one usually sent to Houston) when it crosses the sky over europe and display the pictures on a normal TV (not via NASA TV).

Could it be possible to pick up the signal with a normal satellite dish (and of what diameter) and on which frequencies ?
In addition, could the signal be encrypted to prevent any reading ?

I haven't found any information about that on the net but I could imagine that we you are able to pick up radio communication from ISS and NASA can receive their video, it could be also possible to receive the video aswell (in the same way at weather imags).

Thanks for your lights

Thierry

```
From 9146698753718232902
X-Google-Thread: 10e8ad,778d36433be1ab12
X-Google-Thread: f9f20,778d36433be1ab12
X-Google-Attributes: gid10e8ad,gidf9f20,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news4.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!local02.nntp.dca.giganews.com!nntp.adelphia.com!
news.adelphia.com.POSTED!not-for-mail
NNTP-Posting-Date: Sun, 17 Sep 2006 09:58:00 -0500
From: "l.c. smith" <lcs@adelphia.net>
Newsgroups: rec.radio.amateur.space,sci.space.station
References: <450d2930$1@news.vo.lu>
Subject: Re: How to receive ISS images ?
Date: Sun, 17 Sep 2006 10:57:59 -0400
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.2869
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.2962
X-RFC2646: Format=Flowed; Response
Message-ID: <45ednbGPobPl_5DYnZ2dnUVZ_oWdnZ2d@adelphia.com>
Lines: 30
NNTP-Posting-Host: 69.168.4.186
X-Trace: sv3-MiTO6gOg4JItZPphBn0VB/BsQ0okmbs39x8hJLPXJWBkUOoxrbzV27QBaijEyg9eRAC/
AfgloleQF35!
XeNwdVWjmsTbbKtomunsZE4ylijU9Yt+cKyqrks2OivU6nsKULdh7NDClIkokG+3ph8uc+HphHFN!
NHJejJFhF4TbAYbTfeuUJ1OC
X-Complaints-To: abuse@adelphia.net
X-DMCA-Complaints-To: copyright@adelphia.net
X-Abuse-and-DMCA-Info: Please be sure to forward a copy of ALL headers
X-Abuse-and-DMCA-Info: Otherwise we will be unable to process your complaint
```

properly
X-Postfilter: 1.3.32
Xref: g2news2.google.com rec.radio.amateur.space:415 sci.space.station:4274

ISS video is not beamed to the ground, but to TDRSS satellites in geosync orbit which then relay it to several ground terminals (one is in New Mexico). That video is digitally encoded and interleaved with non-video data so even if you pointed your dish at the TDRSS satellite you would still have to decode it.   I don't know if the TDRSS downlink is encrypted. The re-uplinked video from the ground terminals is LEITCH encrypted.

<Thierry> wrote in message news:450d2930$1@news.vo.lu...
> Hi,
>
> I live in Europe. I 'd like to know if it could be possible to receive
> video signal from ISS (the one usually sent to Houston) when it crosses
> the sky over europe and display the pictures on a normal TV (not via NASA
> TV).
>
> Could it be possible to pick up the signal with a normal satellite dish
> (and of what diameter) and on which frequencies ?
> In addition, could the signal be encrypted to prevent any reading ?
>
> I haven't found any information about that on the net but I could imagine
> that we you are able to pick up radio communication from ISS and NASA can
> receive their video, it could be also possible to receive the video aswell
> (in the same way at weather imags).
>
> Thanks for your lights
>
> Thierry
>

From 5002825782687972096
X-Google-Thread: 10e8ad,778d36433be1ab12
X-Google-Thread: f9f20,778d36433be1ab12
X-Google-Attributes: gid10e8ad,gidf9f20,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news3.google.com!border1.nntp.dca.giganews.com!nntp.giganews.com!wns14feed!worldnet.att.net!24.30.200.11!news-east.rr.com!news-wrt-01.rdc-nyc.rr.com!news-feed-01.rdc-nyc.rr.com!news.rr.com!news-out.nyc.rr.com!news-wrt-01.rdc-nyc.rr.com.POSTED!53ab2750!not-for-mail
From: Johnny Borborigmi <growl@tummy.com>
Newsgroups: rec.radio.amateur.space,sci.space.station
Message-ID: <20060917134026752495growl@tummycom>
References: <450d2930$1@news.vo.lu>
MIME-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1; format=flowed
Content-Transfer-Encoding: 8bit
Subject: Re: How to receive ISS images ?

User-Agent: Unison/1.6.2
Lines: 14
Date: Sun, 17 Sep 2006 17:40:26 GMT
NNTP-Posting-Host: 24.161.95.233
X-Complaints-To: abuse@rr.com
X-Trace: news-wrt-01.rdc-nyc.rr.com 1158514826 24.161.95.233 (Sun, 17 Sep 2006 13:40:26 EDT)
NNTP-Posting-Date: Sun, 17 Sep 2006 13:40:26 EDT
Organization: Road Runner High Speed Online http://www.rr.com
Xref: g2news2.google.com rec.radio.amateur.space:416 sci.space.station:4281

On 2006-09-17 06:53:35 -0400, <Thierry> said:

> Hi,
>
> I live in Europe. I 'd like to know if it could be possible to receive
> video signal from ISS (the one usually sent to Houston) when it crosses
> the sky over europe and display the pictures on a normal TV (not via
> NASA TV).
>
> Thierry
>

You can't. They go to a TDRS and I believe get encrypted.

From 972880454731951605
X-Google-Thread: 10e8ad,778d36433be1ab12
X-Google-Thread: f9f20,778d36433be1ab12
X-Google-Attributes: gid10e8ad,gidf9f20,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news4.google.com!border1.nntp.dca.giganews.com!nntp.giganews.com!wn13feed!worldnet.att.net!bgtnsc05-news.ops.worldnet.att.net.POSTED!53ab2750!not-for-mail
Message-ID: <450DA752.302573E5@confidential.com>
From: joe <joe@confidential.com>
X-Mailer: Mozilla 4.79 [en] (Windows NT 5.0; U)
X-Accept-Language: en
MIME-Version: 1.0
Newsgroups: rec.radio.amateur.space,sci.space.station
Subject: Re: How to receive ISS images ?
References: <450d2930$1@news.vo.lu>
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Lines: 9
Date: Sun, 17 Sep 2006 19:51:48 GMT
NNTP-Posting-Host: 12.76.232.135
X-Complaints-To: abuse@worldnet.att.net
X-Trace: bgtnsc05-news.ops.worldnet.att.net 1158522708 12.76.232.135 (Sun, 17 Sep 2006 19:51:48 GMT)
NNTP-Posting-Date: Sun, 17 Sep 2006 19:51:48 GMT
Organization: AT&T Worldnet

Xref: g2news2.google.com rec.radio.amateur.space:417 sci.space.station:4290

hi thierry,

I know you wanted to d/l direct from the ISS, but here is link for video, audio and still photos from the nasa archive, searchable by mission, etc.

http://spaceflight.nasa.gov/gallery/

73 joe

From 2198731684556772690
X-Google-Thread: 10e8ad,778d36433be1ab12
X-Google-Thread: f9f20,778d36433be1ab12
X-Google-Attributes: gid10e8ad,gidf9f20,public
X-Google-Language: ENGLISH,ASCII
From: <Thierry>
Newsgroups: rec.radio.amateur.space,sci.space.station
References: <450d2930$1@news.vo.lu> <2006091713402675249%growl@tummycom>
Subject: Re: How to receive ISS images ?
Date: Mon, 18 Sep 2006 13:50:51 +0200
Lines: 34
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.2869
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.2869
X-RFC2646: Format=Flowed; Response
NNTP-Posting-Host: ip-88-207-129-85.tvsurf.pt.lu
Message-ID: <450e8824@news.vo.lu>
X-Trace: news.vo.lu 1158580260 88.207.129.85 (18 Sep 2006 13:51:00 +0200)
Path: g2news2.google.com!news3.google.com!border1.nntp.dca.giganews.com!nntp.giganews.com!newsfeed00.sul.t-online.de!t-online.de!npeer.de.kpn-eurorings.net!news.vo.lu!not-for-mail
Xref: g2news2.google.com rec.radio.amateur.space:418 sci.space.station:4313

"Johnny Borborigmi" <growl@tummy.com> wrote in message
news:2006091713402675249%growl@tummycom...
> On 2006-09-17 06:53:35 -0400, <Thierry> said:
>
>> Hi,
>>
>> I live in Europe. I 'd like to know if it could be possible to receive
>> video signal from ISS (the one usually sent to Houston) when it crosses
>> the sky over europe and display the pictures on a normal TV (not via NASA
>> TV).
>>
>> Thierry
>>
>
> You can't. They go to a TDRS and I believe get encrypted.

OK. Undertood.
In theory, as ISS is quite low on orbit, and if the TDRS linked satellite is
over my country (data easy to get using a software lik Thesky or any other
tracking software � la Prbitron), using a large parabolic antenna or even a
dipole, it shouldn't be possible to get the signal ?
Or I could as any other signal (at the condition to knwo its frequency) but
I could simply not read it due to a possible encryption.

In fact i don't udnerstand why I could at least receive it as I can receive
military and other "private" messages using a scanner or another V/UFH rig
for example.

Thanks in advance

Thierry

From 5441354115457682914
X-Google-Thread: 10e8ad,778d36433be1ab12
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news1.google.com!news3.google.com!
border1.nntp.dca.giganews.com!nntp.giganews.com!newsfeed00.sul.t-online.de!
newsfeed01.sul.t-online.de!t-online.de!solnet.ch!solnet.ch!news.clara.net!
wagner.news.clara.net!nntp-peering.plus.net!ptn-nntp-feeder01.plus.net!ptn-nntp-
spool02.plus.net!ptn-nntp-reader02.plus.net!not-for-mail
From: David <Noone@Nowhere.com>
Newsgroups: rec.radio.amateur.space
Subject: Re: How to receive ISS images ?
Date: Mon, 18 Sep 2006 18:03:52 +0100
Message-ID: <39ktg216lnvaplj6rfomnkg8kdm0vaj2h9@4ax.com>
References: <450d2930$1@news.vo.lu>
X-Newsreader: Forte Free Agent 1.93/32.576 English (American)
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Lines: 22
Organization: Customer of PlusNet plc (http://www.plus.net)
NNTP-Posting-Host: 9141571c.ptn-nntp-reader02.plus.net
X-Trace: DXC=eDRUKBP^I\IYNW7XMBcgdOigd3Y`7Rb;N37XnI;
[OUCD^oZ[2EjkSTEFX1P5]R2JgAkiIoIYdXofDIXZRH6i3NgI
X-Complaints-To: abuse@plus.net
Xref: g2news2.google.com rec.radio.amateur.space:419

On Sun, 17 Sep 2006 12:53:35 +0200, <Thierry> wrote:

>Hi,
>
>I live in Europe. I 'd like to know if it could be possible to receive video
>signal from ISS (the one usually sent to Houston) when it crosses the sky

>over europe and display the pictures on a normal TV (not via NASA TV).
>
>Could it be possible to pick up the signal with a normal satellite dish (and
>of what diameter) and on which frequencies ?
>In addition, could the signal be encrypted to prevent any reading ?
>
>I haven't found any information about that on the net but I could imagine
>that we you are able to pick up radio communication from ISS and NASA can
>receive their video, it could be also possible to receive the video aswell
>(in the same way at weather imags).
>
>Thanks for your lights
>
>Thierry
>
The ISS broadcasts SSTV on 145.8 MHz

From 5401643722645265810
X-Google-Thread: 10bf43,b02c55a33c9993e1,start
X-Google-Thread: 10e8ad,b02c55a33c9993e1,start
X-Google-Attributes: gid10bf43,gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news4.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!newshub.sdsu.edu!elnk-nf2-pas!newsfeed.earthlink.net!
stamper.news.pas.earthlink.net!newsread1.news.pas.earthlink.net.POSTED!3dd4ce4a!
not-for-mail
Newsgroups: rec.radio.amateur.policy,rec.radio.amateur.space
Subject: Is that really a photo of Markie with rabbit ears on his head?
From: Slow Code <my.mail@no.spam>
Organization: None
User-Agent: Xnews/5.04.25
Lines: 5
Message-ID: <ahGPg.9336$v%4.1665@newsread1.news.pas.earthlink.net>
Date: Mon, 18 Sep 2006 23:50:30 GMT
NNTP-Posting-Host: 4.254.226.63
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread1.news.pas.earthlink.net 1158623430 4.254.226.63 (Mon, 18 Sep
2006 16:50:30 PDT)
NNTP-Posting-Date: Mon, 18 Sep 2006 16:50:30 PDT
Xref: g2news2.google.com rec.radio.amateur.policy:45144
rec.radio.amateur.space:421

What a loon.

SC

From 3669902069942854228
X-Google-Thread: 10bf43,b02c55a33c9993e1
X-Google-Thread: 10e8ad,b02c55a33c9993e1

```
X-Google-Attributes: gid10bf43,gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!postnews.google.com!h48g2000cwc.googlegroups.com!not-for-
mail
From: "kb9rqz-2@hotmail.com" <kb9rqz-2@hotmail.com>
Newsgroups: rec.radio.amateur.policy,rec.radio.amateur.space
Subject: slow code stalker at large
Date: 18 Sep 2006 17:56:23 -0700
Organization: http://groups.google.com
Lines: 5
Message-ID: <1158627383.514716.16190@h48g2000cwc.googlegroups.com>
References: <ahGPg.9336$v%4.1665@newsread1.news.pas.earthlink.net>
NNTP-Posting-Host: 66.82.9.42
Mime-Version: 1.0
Content-Type: text/plain; charset="iso-8859-1"
X-Trace: posting.google.com 1158627388 8230 127.0.0.1 (19 Sep 2006 00:56:28 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Tue, 19 Sep 2006 00:56:28 +0000 (UTC)
In-Reply-To: <ahGPg.9336$v%4.1665@newsread1.news.pas.earthlink.net>
User-Agent: G2/1.0
X-HTTP-UserAgent: Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1; SV1; .NET CLR
1.1.4322),gzip(gfe),gzip(gfe)
Complaints-To: groups-abuse@google.com
Injection-Info: h48g2000cwc.googlegroups.com; posting-host=66.82.9.42;
   posting-account=a7K0SA0AAADJhiRpuowwQAePXZnEQc8e
Xref: g2news2.google.com rec.radio.amateur.policy:45180
rec.radio.amateur.space:422


Slow Code wrote:
>
slow code stalker at large



From -1818417965889054820
X-Google-Thread: 10e8ad,778d36433be1ab12
X-Google-Thread: f9f20,778d36433be1ab12
X-Google-Attributes: gid10e8ad,gidf9f20,public
X-Google-Language: ENGLISH,ASCII
Path: g2news2.google.com!news4.google.com!news.glorb.com!atl-c03.usenetserver.com!
news.usenetserver.com!news-rtr.nyroc.rr.com!news-out.nyroc.rr.com!
twister.nyroc.rr.com.POSTED!53ab2750!not-for-mail
From: Frank Glover <starr176@rochester.rr.com>
Reply-To:  greenie31@j[spambait]uno.com
User-Agent: Mozilla/5.0 (Windows; U; Win98; en-US; rv:1.7.2) Gecko/20040804
Netscape/7.2 (ax)
X-Accept-Language: en-us, en
MIME-Version: 1.0
Newsgroups: rec.radio.amateur.space,sci.space.station
Subject: Re: How to receive ISS images ?
References: <450d2930$1@news.vo.lu> <20060917134026752 49%growl@tummycom>
<450e8824@news.vo.lu> <pan.2006.09.18.19.59.13.636573@is.invalid>
```

```
In-Reply-To: <pan.2006.09.18.19.59.13.636573@is.invalid>
Content-Type: text/plain; charset=ISO-8859-1; format=flowed
Content-Transfer-Encoding: 8bit
Lines: 56
Message-ID: <wkHPg.43874$xV.43120@twister.nyroc.rr.com>
Date: Tue, 19 Sep 2006 01:02:20 GMT
NNTP-Posting-Host: 66.66.67.202
X-Complaints-To: abuse@rr.com
X-Trace: twister.nyroc.rr.com 1158627740 66.66.67.202 (Mon, 18 Sep 2006 21:02:20
EDT)
NNTP-Posting-Date: Mon, 18 Sep 2006 21:02:20 EDT
Organization: Road Runner
Xref: g2news2.google.com rec.radio.amateur.space:423 sci.space.station:4340
```

nmp wrote:

```
> Op Mon, 18 Sep 2006 13:50:51 +0200, schreef Thierry:
>
>
>>"Johnny Borborigmi" <growl@tummy.com> wrote in message
>>news:20060917134026752497%growl@tummycom...
>>
>>>On 2006-09-17 06:53:35 -0400, <Thierry> said:
>>>
>>>
>>>>Hi,
>>>>
>>>>I live in Europe. I 'd like to know if it could be possible to receive
>>>>video signal from ISS (the one usually sent to Houston) when it
>>>>crosses the sky over europe and display the pictures on a normal TV
>>>>(not via NASA TV).
>>>>
>>>
>>>You can't. They go to a TDRS and I believe get encrypted.
>>
>>OK. Undertood.
>>In theory, as ISS is quite low on orbit, and if the TDRS linked
>>satellite is over my country (data easy to get using a software lik
>>Thesky or any other tracking software � la Prbitron), using a large
>>parabolic antenna or even a dipole, it shouldn't be possible to get the
>>signal ?
>
>
> From the replies in this thread I understand that you may be able to
> receive the signal, but you would not be able to decode it to get
> somehting useful out of it.
```

These sites may not answer the specific question, but will give a sense of what's involved:

http://www.hearsat.org/

http://www.uhf-satcom.com/

http://www.hobbyspace.com/Radio/index.html

--

Frank

You know what to remove to reply...

Check out my web page: http://www.geocities.com/stardolphin1/link2.htm

"To confine our attention to terrestrial matters would be to limit the
human spirit."
- Stephen Hawking

From 6226479926908693426
X-Google-Thread: 10e8ad,778d36433be1ab12
X-Google-Thread: f9f20,778d36433be1ab12
X-Google-Attributes: gid10e8ad,gidf9f20,public
X-Google-Language: ENGLISH,ASCII
Newsgroups: rec.radio.amateur.space,sci.space.station
Path: g2news2.google.com!news3.google.com!newsfeed.stanford.edu!
headwall.stanford.edu!newshub.sdsu.edu!msrtrans!News.Dal.Ca!
newsflash.concordia.ca!news.sfu.ca!utnut!utzoo!spenford!henry
From: henry@spsystems.net (Henry Spencer)
Subject: Re: How to receive ISS images ?
Organization: SP Systems, Toronto, Canada
Message-ID: <J5vGnD.CF@spsystems.net>
References: <450d2930$1@news.vo.lu> <2006091713402675249%growl@tummycom>
<450e8824@news.vo.lu>
Date: Wed, 20 Sep 2006 03:35:37 GMT
Xref: g2news2.google.com rec.radio.amateur.space:424 sci.space.station:4350

In article <450e8824@news.vo.lu>, <Thierry> wrote:
>> You can't. They go to a TDRS and I believe get encrypted.
>
>In theory, as ISS is quite low on orbit, and if the TDRS linked satellite is
>over my country (data easy to get using a software lik Thesky or any other
>tracking software � la Prbitron), using a large parabolic antenna or even a
>dipole, it shouldn't be possible to get the signal ?

Remember, these signals are not being broadcast -- they are beamed upward
to TDRS (in geostationary orbit), at microwave frequencies where even
modest-sized antennas are quite directional. Similarly, TDRS is not
broadcasting them -- it beams them downward to the TDRS ground station at
White Sands. Even when ISS is nearby, you're nowhere near either beam, so
any signal leakage would be very weak.

With a large dish antenna you could probably detect the carrier, but demodulating it would be quite a challenge with such a weak signal.

And once you do demodulate it, what you've got is not a video signal, but a fast digital bit stream. Some of the bits are compressed video; some aren't. The format is certainly complex, almost certainly a custom design rather than anything standard (remember that it is 15-20 years old -- ISS development started a long time ago), and probably poorly documented.

Finally, as others have mentioned, it's quite likely to be encrypted.

```
--
spsystems.net is temporarily off the air;               |   Henry Spencer
mail to henry at zoo.utoronto.ca instead.               | henry@spsystems.net
```

From -9215783239967196753
X-Google-Thread: 10e8ad,1d1bfdff63f5e81d,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news3.google.com!newshub.sdsu.edu!elnk-nf2-pas!newsfeed.earthlink.net!stamper.news.pas.earthlink.net!newsread1.news.pas.earthlink.net.POSTED!46041641!not-for-mail
From: "JoAnne Maenpaa" <wb9jej_no-spam@earthling.com>
Newsgroups: rec.radio.amateur.space
Subject: ANS-260 AMSAT News Service Weekly Bulletins
Lines: 367
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <5gAQg.10537$v%4.2862@newsread1.news.pas.earthlink.net>
Date: Thu, 21 Sep 2006 17:48:49 GMT
NNTP-Posting-Host: 68.164.230.196
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread1.news.pas.earthlink.net 1158860929 68.164.230.196 (Thu, 21 Sep 2006 10:48:49 PDT)
NNTP-Posting-Date: Thu, 21 Sep 2006 10:48:49 PDT
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news2.google.com rec.radio.amateur.space:425

AMSAT NEWS SERVICE
ANS-260

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

******************** AMSAT 2006 Space Symposium *************************

Online registration and hotel reservation for the 2006 AMSAT Space Symposium has been posted to the AMSAT website, and information about the Symposium has been expanded. The 2006 AMSAT Space Symposium will be held October 6, 7 and 8 at the Crowne Plaza in Foster City, California in the beautiful San Francisco Bay Area.

Please visit http://www.amsat.org/amsat-new/symposium for additional information and an index to the expanded Symposium web pages.

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* Space Traveler to Try QSOs From ISS
* AMSAT Symposium Pre-Registration Extended to September 24
* Call For AMSAT Journal Articles
* PCSAT-2 10 Meter Receiver Debugging
* AMSAT Member Wins QST Cover Plaque Award
* AMSAT-UK Welcomes Foundation Satellite Access
* ARISS Status for the Week of September 11, 2006
* French Amateurs Bounce Laser Signals Off a Rain Cloud

SB SAT @ AMSAT $ANS-260.01
Results of AMSAT 2006 BoD Election

AMSAT News Service Bulletin 260.01
>From AMSAT HQ SILVER SPRING, MD.
September 17, 2006
To All RADIO AMATEURS
BID: $ANS-260.01

The results of the 2006 AMSAT Election:

Tom Clark, K3IO - 800 votes- Director
Lou McFadin, W5DID - 652 votes- Director
Bob McGwier, N4HY - 647 votes- Director
Lee McLamb, KU4OS- 321 votes - First Alternate
Paul Shuch, N6TX - 312 votes- Second Alternate

Please note Directors serve a two year term. The total number of votes cast was 937.

Martha Saragovitz
AMSAT Manager

[ANS thanks Martha at AMSAT Headquarters for the above information]

/EX

SB SAT @ AMSAT $ANS-260.02

Space Traveler to Try QSOs From ISS

AMSAT News Service Bulletin 260.02
>From AMSAT HQ SILVER SPRING, MD.
September 17, 2006
To All RADIO AMATEURS
BID: $ANS-260.02

US businesswoman Anousheh Ansari, will travel to the ISS on September 18 as part of the Russian Soyuz "taxi mission," and hopes to try ham QSOs from space. Ansari had decided originally not to do ham contacts after realizing her heavy schedule didn't allow her to study for her ham exam.

She was scheduled to fly in 2007, but when Daisuke Enomoto was grounded due to medical issues, her ETA was moved up. Ansari was trained on the ISS radios by the Russian ARISS Team quite a few months ago.

Now, she has decided to go for a potential QSO with students at George Washington University, her alma mater, on September 22. "The ARISS AMSAT Washington DC Team was asked just recently to support this QSO, and have done an outstanding job pulling everything together quickly," says ARRL ARISS Program Manager Rosalie White, K1STO.

"Mark Steiner, K3MS, is leading the effort. In addition, Anoushe hopes to talk with US-licensed school children, and take advantage of the astronauts as her Control Operator. She will be listening at various times on Thursday, September 21, through Tuesday, September 26, using RS0ISS." Because of third-party issues, Ansari may only speak to youths who have ham licenses. She is the fourth private citizen and the first female civilian, to fly to the ISS.

[ANS thanks Rosalie White, K1STO for the above information]

/EX

SB SAT @ AMSAT $ANS-260.03
AMSAT Symposium Pre-Registration Extended to September 24

AMSAT News Service Bulletin 260.03
>From AMSAT HQ SILVER SPRING, MD.
September 17, 2006
To All RADIO AMATEURS
BID: $ANS-260.03

Since most (about 90%) of Symposium Registrations have been through the website the Symposium Committee has made a decision to extend pre-registration at the $45 rate through the 24th of September. We were able to do this because the production cycle for badges, etc.

is now automated and requires very little human intervention except some minor paper handling!

So if you haven't signed up now is your chance to get in at the last minute without having to pay the additional fee! Registrations received after September 24 will cost $55.

Hotel registrations have filled the initial block of rooms at the Crowne Plaza Hotel that were set aside for Symposium attendees. The Symposium Committee worked with the hotel management and they are now happy to report that additional rooms have been added to the AMSAT block.

A glitch in the hotel's reservation system causes an occasional error when trying to book rooms at the special AMSAT rate. If you try to book your room through the central Crowne Plaza reservation system (toll free number) they may tell you the dates are unavailable. If this happens call the hotel directly (information on AMSAT web) and be sure to mention the AMS group code.

If you still have problems please send Emily Clarke (n1did@amsat.org) an email with your arrival and departure dates and she will arrange to speak with the hotel manager directly.

One thing that isn't available through the website is that we can upgrade to the Executive rooms. The rate for executive rooms increases from $109 per night to $129 per night. Call the hotel directly to take advantage of this offer.

Information about the Spouse Tours and Activities can be found online.
See: http://www.amsat.org/amsat-new/symposium/2006GroupTours.php

The 2006 AMSAT Space Symposium will be held October 6, 7 and 8 at the Crowne Plaza in Foster City, California in the beautiful San Francisco Bay Area.

Please visit http://www.amsat.org/amsat-new/symposium for additional information and an index to the expanded Symposium web pages.

[ANS thanks the 2006 Symposium Committee for the above information]

/EX

SB SAT @ AMSAT $ANS-260.04
Call For AMSAT Journal Articles

AMSAT News Service Bulletin 260.04
>From AMSAT HQ SILVER SPRING, MD.
September 17, 2006
To All RADIO AMATEURS
BID: $ANS-260.04

Ed, WA4SWJ, the Editor of the AMSAT Journal issued a call for articles this week. Ed wrote, "Attention all you authors out there. I am calling for more articles for the Journal. I would like to have anything you would like to publish by September 22nd. Articles on many subjects about amateur satellites are interesting and are good subjects for the Journal.

Get your computers warmed up and fly those fingers over the keyboard and send me something! The e-mail address is journal@amsat.org.

[ANS thanks Ed, WA4SWJ, AMSAT Journal Editor for the above information]

/EX

SB SAT @ AMSAT $ANS-260.05
PCSAT-2 10 Meter Receiver Debugging

AMSAT News Service Bulletin 260.05
>From AMSAT HQ SILVER SPRING, MD.
September 17, 2006
To All RADIO AMATEURS
BID: $ANS-260.05

Bob, WB4APR reported some progress toward solving the mysterious lack of sensitivity on the PCSAT2 10 meter PSK-31 uplink. Two stations testing on the 10 meter uplink noticed as one of them drifted lower in frequency they could see PCSAT-2's PSK signal appear on the MIXW waterfall display. PCSAT-2's 10 meter receiver may have shifted around 3.6 KHz lower than originally configured.

PCSAT-2 was retrieved from its position outside of the ISS during a space walk this week. It will be returned to Earth for further analysis.

[ANS thanks Bob, WB4APR, and the US Naval Academy Satellite Station for the above information]

/EX

SB SAT @ AMSAT $ANS-260.06
AMSAT Member Wins QST Cover Plaque Award

AMSAT News Service Bulletin 260.06
>From AMSAT HQ SILVER SPRING, MD.
September 17, 2006
To All RADIO AMATEURS
BID: $ANS-260.06

Congratulations are in order for AMSAT member Al Bloom, N1AL, winner of the August, 2006 QST Cover Plaque Award for his article "VHF/UHF Mobile Propagation." The QST Cover Plaque award is given to the author or authors of the best article in each issue which is determined by a vote of ARRL members. Al is also a member of the Eagle Sensor Team for AMSAT.

See: http://www.arrl.org/?artid=6767

[ANS thanks the ARRL for the above information]

/EX

SB SAT @ AMSAT $ANS-260.07
AMSAT-UK Welcomes Foundation Satellite Access

AMSAT News Service Bulletin 260.07
>From AMSAT HQ SILVER SPRING, MD.
September 17, 2006
To All RADIO AMATEURS
BID: $ANS-260.07

The changes to the UK Amateur License mean Foundation holders now have access to the Amateur Satellite Service. They will be able to work through the many Amateur Satellites as well use the Voice and Packet repeaters on the International Space Station (ISS).

AMSAT-UK is delighted that the new license will allow full satellite access to Foundation holders. This will enable these enthusiastic operators to experience the thrills and challenges of space communications.

Every year AMSAT-UK runs a Satellite Beginners Workshop to teach newcomers how to operate through the satellites. Now that Foundation holders have this valuable new privilege AMSAT-UK can look forward to record numbers attending the next workshop.

[ANS thanks AMSAT-UK for the above information]

/EX

SB SAT @ AMSAT $ANS-260.08
ARISS Status for the Week of September 11, 2006

AMSAT News Service Bulletin 260.08
>From AMSAT HQ SILVER SPRING, MD.
September 17, 2006
To All RADIO AMATEURS
BID: $ANS-260.08

1. Upcoming School Contacts

Scheduling of ARISS contacts continues for the Expedition 13 and 14 crews. Due to shuttle activities, no specific information is available at this time.

2. SuitSat-1 Re-enters Atmosphere

SuitSat-1, a surplus Russian Orlan spacesuit equipped with amateur radio, was deployed from the ISS on February 3 of this year. On September 7, 2006 at 16:00 GMT, SuitSat-1 re-entered the Earth's atmosphere approximately 1400 km south-southwest of Western Australia. For more details, including the winners of the Chicken Little Contest, please go to: http://www.amsat.org/amsat-new/ariss/suitsatContest.php

3. ARRL Article on Tennessee School Contact

ARRL covered the Northeast Middle School contact in the article, "Astronaut's Kin among Middle Schoolers for Space Contact via Ham Radio." See: http://www.arrl.org/news/stories/2006/09/08/100/?nc=1

4. ARISS International Meeting, October 9-10

The ARISS International face to face meeting will take place next month in conjunction with the AMSAT-NA Annual Board Meeting and Space Symposium in San Francisco. The AMSAT meetings begin on October 5 and the ARISS International meeting will be held on Oct 9-10.

5. Astronaut Training Status

Educator Astronaut Barbara Morgan has been scheduled for a training session with Kenneth Ransom at JSC on Wednesday, September 13. Topics covered will include school contacts and radio operations.

[ANS thanks Carol, KB3LKI for the above information]

/EX

SB SAT @ AMSAT $ANS-260.09

French Amateurs Bounce Laser Signals Off a Rain Cloud

AMSAT News Service Bulletin 260.09
>From AMSAT HQ SILVER SPRING, MD.
September 17, 2006
To All RADIO AMATEURS
BID: $ANS-260.09

Two French radio amateurs have made a successful one way contact over a distance of 40 km scattering laser signals from rain clouds.

The flash pulses were at times 12 dB above the noise at 40 km which seem to indicate that under the right conditions a distance of 150 km could be covered.

Laser communication systems are wireless connections through the atmosphere.

They work similarly to fibre optic links, except that the beam is transmitted through free space. While generally speaking the transmitter and receiver must require line-of-sight conditions, they have the benefit of eliminating the need for broadcast rights and buried cables. Laser communication systems can be easily deployed since they are inexpensive, small, low power and do not require any radio interference studies. The carrier used for the transmission signal is typically generated by a laser diode. Two parallel beams are needed, one for transmission and one for reception.

Laser communication have been a hot topic lately, as solutions for how to satisfy ever increasing bandwidth needs are in high demand. Some have suggested that bandwidth could be distributed in neighbourhoods by putting laser communication systems on top of homes and pointing them towards a common transceiver with a fast link to the Internet. With possible transmit speeds of up to a gigabit per second, this is an exciting area.

The French team proved that laser signals can be scattered from clouds thus proving that the notion that laser communication can only be line of sight is wrong.

[ANS thanks Amateur Radio Newsline Report #1518 for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM

```
From 9049361740199508709
X-Google-Thread: 10e8ad,a1ce83f13f9a921a,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news4.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!wns13feed!worldnet.att.net!207.217.77.102!elnk-nf2-pas!
newsfeed.earthlink.net!stamper.news.pas.earthlink.net!
newsread1.news.pas.earthlink.net.POSTED!46041641!not-for-mail
From: "JoAnne Maenpaa" <wb9jej_no-spam@earthling.com>
Newsgroups: rec.radio.amateur.space
Subject: WSR-261 AMSAT Weekly Satellite Report
Lines: 1045
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
```

Message-ID: <8gAQg.10538$v%4.2368@newsread1.news.pas.earthlink.net>
Date: Thu, 21 Sep 2006 17:48:52 GMT
NNTP-Posting-Host: 68.164.230.196
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread1.news.pas.earthlink.net 1158860932 68.164.230.196 (Thu, 21 Sep 2006 10:48:52 PDT)
NNTP-Posting-Date: Thu, 21 Sep 2006 10:48:52 PDT
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news2.google.com rec.radio.amateur.space:426

This report is organized into 4 parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites

SB SAT @ AMSAT W8ISS ANS-261.S1
WSR 261 Part 1 09/18/2006

AMSAT NEWS SERVICE BULLETIN 261.S1 FROM AMSAT HQ
SILVER SPRING, MD, September 18, 2006
TO ALL RADIO AMATEURS
BID: $ANS-261.S1

VO-52 HAMSAT
Catalog Number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/V - Indian Transponder

Proposed frequencies:

Indian Transponder:
Uplink : 435.220 MHz to 435.280 MHz LSB/CW
Downlink: 145.870 MHz to 145.930 MHz USB/CW
Beacon : 145.859330 MHZ CW

Dutch Transponder:
Uplink : 435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW
Beacon : 145.860MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsat.in/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is
active. Each transponder has a different beacon.
[04242006]

=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Current Mode(s): FM Repeater - V/U - TONE
PBBS - V/U - 9K6
Digipeater - OFF

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.880 MHZ FM
145.880 MHz USB
145.920 MHz FM 67Hz PL tone
1268.700 MHz FM 67Hz PL tone
Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast Protocol
1268.700 mhz FM, 9k6 PBP Digital
Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Mode schedule for September 2006 according to the AO-51 command team:

September 4 to September 11
FM Repeater, V/U, High Power Mode
Uplink: 145.920 Mhz FM, 67 hz PL Tone
Downlink: 435.300 Mhz FM

September 11 to September 18
FM Repeater, L/S
Uplink: 1268.700 Mhz FM, No PL Tone
Downlink: 2401.200 Mhz FM

September 18 to September 24
"Normal" Mode
FM Repeater, V/U
Uplink: 145.920 Mhz FM, 67 hz PL Tone
Downlink: 435.300 Mhz FM
9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 Mhz FM, 9k6 PBP Digital
Downlink: 435.150 Mhz FM, 9k6 PBP Digital

```
September 25 to October 2
38k4 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 Mhz FM, 9k6 PBP Digital
Downlink: 435.150 Mhz FM, 38k4 PBP Digital

Official Webpage: http://www.amsat.org/amsat-new/echo/
[09182006]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Uplink: 145.850 MHz (67.0 Hz PL tone) (See below for operating
procedures)
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The
order of operation is thus: (allow for Doppler as necessary)
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute
timer
  on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the
repeater
  on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset
the 10
  minute timer.
[04172006]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: OPERATIONAL

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplink: 145.850 145.870 145.910 MHz FM
```

Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

unOfficial Webpage: http://www.amsat.org/amsat/sats/n7hpr/fo29.html
[11132005]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Uplink: 145.850 MHz FM
Downlink: 436.795 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[01012006]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational depending on amount of Sunlight
Current Reported mode: Mode-A

```
Uplink:       145.850 to 145.950 MHz CW/USB Mode A
      432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
     145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
     145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons:  29.502 MHz
     145.972 MHz
     435.100 MHz
    2304.100 MHz
```

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php
The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
AO-7 users are requested to log their contacts and observations about
AO-7, especially any unexpected mode changes.
AO-07 telemetry software webpage:
http://www.qsl.net/k3tz/files/K3TZ_AO-07_Telemetry_Decoder_0.5.zip

Please keep your power low! For additional information please read the
AO-7
Usage Guidelines on the AO-7 Log and Resource Site located at:
http://www.planetemily.com/ao7
[04242006]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: Intermittent
Digipeater: OFF

The Expedition 13 crew is:
Commander: Pavel Vinogradov - RV3BS
Flight Engineer: Jeff Williams - KD5TVQ
Crew: Thomas Reiter - DF4TR

Exedition 14 crew, which is currently enroute, is:
Michael Lopez-Alegria - KE5GTK
Mikhail Tyurin - RZ3FT
Anousheh Ansari

Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

SSTV TESTING:
Worldwide Reported Downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS, RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss

ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

Currently, Expedition Crew 14 is enroute to the International Space Station.
During the week, the equipment may be turned off during docking of the Soyuz.

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line is NOT translated from Russian and posted.
[09182006]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-261.S2
WSR 261 Part 2 09/18/2006

AMSAT NEWS SERVICE BULLETIN 261.S2 FROM AMSAT HQ
SILVER SPRING, MD, September 18, 2006
TO ALL RADIO AMATEURS
BID: $ANS-261.S2

CO-58 XI-V
Catalog Number: 28895
Launch Date: October 27, 2005

Status: Operational only within range of Ground station in Japan

Telemetry Downlink: 437.345MHz - FSK 1200bps using AFK protocol
Beacon Downlink: 437.465MHz - CW about 50 WPM

Callsign: JQ1YGW

Oficial Webpage: http://www.space.t.u-tokyo.ac.jp/gs/satinfo-e.html#xi5
Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
[03122006]
=====
CO-55 CUTE-1.7
Catalog number: 28941
Launched: June 30,2003

Status: Operational

Uplink: ?
Downlink: 437.3850 CW
437.4700 1200 FM ax25 or SRLL (ACTIVE only near Japan ?)
Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[05012006]
=====
AO-51 ECHO

Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Current Mode(s): FM Repeater - V/U - TONE
PBBS - V/U - 9k6
Digipeater - OFF

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.880 MHZ FM
145.880 MHz USB
145.920 MHz FM 67Hz PL tone
1268.700 MHz FM 67Hz PL tone
Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast Protocol
1268.700 mhz FM, 9k6 PBP Digital
Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Mode schedule for September 2006 according to the AO-51 command team:

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Downlink: 435.300 Mhz FM

September 11 to September 18
FM Repeater, L/S
Uplink: 1268.700 Mhz FM, No PL Tone
Downlink: 2401.200 Mhz FM

September 18 to September 24
"Normal" Mode
FM Repeater, V/U
Uplink: 145.920 Mhz FM, 67 hz PL Tone
Downlink: 435.300 Mhz FM
9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 Mhz FM, 9k6 PBP Digital
Downlink: 435.150 Mhz FM, 9k6 PBP Digital

September 25 to October 2

```
38k4 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 Mhz FM, 9k6 PBP Digital
Downlink: 435.150 Mhz FM, 38k4 PBP Digital
Official Webpage: http://www.amsat.org/amsat-new/echo/
[09182006]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Operational

General Usage Uplink/Downlink:145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org
aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[04172006]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks:  145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM
Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[08072006]
=====
RS-22 Mozhayets 4
Catalog Number: 27939
Launch Date: September 27, 2004

Status: Operational

Beacon: 435.3520 MHz CW
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990
```

Status: Semi-operational, the digipeater command is on and open for APRS users.

Uplink: 145.900 FM
145.920 FM
145.940 FM
145.960 FM
(using 1200-baud Manchester FSK)
Downlink: 437.026 MHz SSB (1200-baud PSK)
Mode-S Beacon: 2401.1428 MHz

Mode and Antenna Polarization:
U: RC 437.050 MHz RHCP
PSK 437.025 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[04172006]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational

Telemetry Downlink: 145.826 MHz. FM (1200-baud AFSK).
approx. 10 days ON, 10 days OFF
Mode-S Beacon: 2401.500 MHz. ... OFF
UHFBeacon: 435.025 MHz. ... OFF

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Reception reports are requested to be sent to xxxxx@amsat.org (replace xxxxx by g3cwv), or post to AMSAT-BB.

During the period 15 June to 17 July 2006 nothing has been heard from the satellite. It was last heard on 05 May, just one day before the solar eclipses were due to start. These eclipses will continue until 04 August 2006, reaching a maximum duration of 22% around 19 June. If the satellite behaves in the same way as it did last year, regular 10 day transmissions should re-start, sometime in August.

Official webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm

```
[07172006]
=====
PCSAT-2
Catalog Number: 25544
Launch Date: August 1, 2005

Activated: August 3, 2005
Status: Decommissioning
Current Mode: Voice Response to Packet Digis
             CW/PSK Repeater

Voice Digital Uplink:    145.990 MHz
Voice response Downlink: 437.975 MHz

Digital Downlink:      435.275 Mhz
Digital Uplink:        145.825 Mhz
ISS digipeater uplink: 145.990 Mhz

PSK-31 Downlink: 435.275 Mhz
PSK-31 Uplink:    29.401 Mhz

CALLSIGN: pcsat2

Official Webpage: http://web.usna.navy.mil/~bruninga/pcsat2.html
PCSAT2 APRS Packet page: http://www.findu.com/cgi-bin/pcsat2.cgi
aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[09112006]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: Intermittent
Digipeater: OFF

Expedition Crew 13 is:
Commander:              Pavel Vinogradov - RV3BS
Flight Engineer:        Jeff Williams - KD5TVQ
Crew:                   Thomas Reiter - DF4TR

Exedition 14 crew, which is currently enroute, is:
Michael Lopez-Alegria - KE5GTK
Mikhail Tyurin - RZ3FT
Anousheh Ansari

Digital/APRS:
Worldwide packet uplink:   145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink:   145.200 MHz FM
```

Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

SSTV TESTING:
Worldwide Reported Downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS, RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

Currently, Expedition Crew 14 is enroute to the International Space Station.
During the week, the equipment may be turned off during docking of the Soyuz.

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line is NOT translated from Russian and posted.
[09182006]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-261.S3
WSR 261 Part 3 09/18/2006

AMSAT NEWS SERVICE BULLETIN 261.S3 FROM AMSAT HQ
SILVER SPRING, MD, September 18, 2006
TO ALL RADIO AMATEURS
BID: $ANS-261.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

AO-54 SUITSAT
Catalog Number:28933
Release Date: February 3,2006

Status: Non-operational

```
Modes : FM Voice Telemetry/Greetings
    FM SSTV

Callsign: RS0RS
Downlink: 145.990 FM

Currently on the amsat-bb, there is a geussing game going on about when
Suitsat will re-enter the atmosphere.

Official webpage: http://www.suitsat.org
[05012006]
=====
NCUBE-2
Catalog Number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency:  437.305
                            2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog Number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 FM 67Hz CTCSS
Voice Downlink: 2401.835 FM
Packet Up/Downlink: 437.250 9k6 packet
Packet Downlink 2401.835 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01292006]
=====
TO-31 TMSAT-1
Catalog Number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink:   145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
```

PO-28 POSAT-1
Catalog Number: 22829
Launch Date: September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 429.950

Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html.
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012006]

=====

AO-10 OSCAR 10
Catalog number: 14129
Launched: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB
Beacon: 145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]

=====

IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: Downlink only

Uplink: 145.875 145.900 145.925 145.950 MHz FM (1200-baud)
Downlink: 435.808 MHz PSK
Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01012006]

=====

RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

```
Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB
Beacon: 29.408 MHz
Robot: 29.454 MHz
[05232004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB
Beacon: 145.860 MHz
Robot: 145.908 MHz
[05232004]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink 145.975 MHz FM
Downlink 435.070 MHz FM
[05092004]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink: 145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM
Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01092005]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational?

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB
Beacon: 29.352 MHz (intermittent)
SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
LO-19 LUSAT
```

Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplink: 145.84 145.86 145.88 145.90 MHz FM
(using 1200-baud Manchester FSK)
CW downlink: 437.125 MHz
Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)
Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[05232004]

=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[08152004]

=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM
Broadcast Callsign: HLO1-11
BBS: HLO1-12

Jim, AA7KC, reports that KO-23's downlink transmitter continues in a non-operational status.
[05092004]

=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM (9600-baud FSK)
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm

[ANS-WSR has no further information]
[09042006]
=====
SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

STatus: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz and 145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[08082004]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

```
Uplink: 145.960 MHz (9600-baud FSK)
Downlink: 437.025 MHz 437.400 MHz
Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site
at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[05092004]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplink V-band   145.840 - 145.990 MHz CW/LSB
      U-band   435.550 - 435.800 MHz CW/LSB
      L1-band 1269.250 - 1269.500 MHz CW/LSB
      L2-band 1268.325 - 1268.575 MHz CW/LSB
Downlink: S2-band 2401.225 - 2401.475 MHz CW/USB
         K-band 24,048.010 - 24,048.060 MHz CW/USB
Beacon:   2401.323
        24,048.035
[05232004]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational
Downlink: 437.075 MHz
Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[08152004]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz
Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
```

http://www.amsat.org/amsat/sats/n7hpr/so41.html
[08152004]

=====

NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, callsign KE6QMD, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]

=====

MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Operational

Uplink: 145.850 or 145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz
Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[11202005]

=====

AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink 435.275 1200-baud AFSK
Downlink 145.825 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink: Downlink 145.825 MHz FM 1200 Baud AFSK
Beacon: 2401.220 MHz
[05012006]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
NNNN
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SB SAT @ AMSAT W8ISS $ANS-261.S4
WSR 261 Part 4 09/18/2006

AMSAT NEWS SERVICE BULLETIN 261.S4 FROM AMSAT HQ
SILVER SPRING, MD, September 18, 2006
TO ALL RADIO AMATEURS
BID: $ANS-261.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE
PROPOSED FOR LAUNCH AT THIS TIME:

PHASE 3E ?O-??
Catalog Number:
Proposed Launch Date: Early/Mid 2007

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/
[ANS-WSR wishes to thank William Leijenaar, PE1RAH for this week's report]
[04242006]
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ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz.

Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/amsat/listserv/menu.html

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

From -8490245992390647123
X-Google-Thread: 10e8ad,491bd85b52577310,start
X-Google-Attributes: gid10e8ad,public

X-Google-Language: ENGLISH,ASCII
Path: g2news2.google.com!news3.google.com!news4.google.com!newshub.sdsu.edu!elnk-nf2-pas!newsfeed.earthlink.net!stamper.news.pas.earthlink.net!newsread1.news.pas.earthlink.net.POSTED!46041641!not-for-mail
From: "JoAnne Maenpaa" <wb9jej_no-spam@earthling.com>
Newsgroups: rec.radio.amateur.space
Subject: ANS-267 AMSAT News Service Weekly Bulletins
Lines: 361
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <eQxSg.13394$v%4.10153@newsread1.news.pas.earthlink.net>
Date: Wed, 27 Sep 2006 16:40:42 GMT
NNTP-Posting-Host: 68.164.231.219
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread1.news.pas.earthlink.net 1159375242 68.164.231.219 (Wed, 27 Sep 2006 09:40:42 PDT)
NNTP-Posting-Date: Wed, 27 Sep 2006 09:40:42 PDT
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news2.google.com rec.radio.amateur.space:427

AMSAT NEWS SERVICE
ANS-267

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

******************** AMSAT 2006 Space Symposium **************************

Online registration and hotel reservation for the 2006 AMSAT Space Symposium has been posted to the AMSAT website, and information about the Symposium has been expanded. The 2006 AMSAT Space Symposium will be held October 6, 7 and 8 at the Crowne Plaza in Foster City, California in the beautiful San Francisco Bay Area.

Please visit http://www.amsat.org/amsat-new/symposium for additional information and an index to the expanded Symposium web pages.

****

In this edition:

- HITSAT - New Amateur Radio Cubesat in Orbit
- AMSAT President's Club News
- AMSAT-UK Chief Discusses PoSAT End-of-Life Issues
- Microwave Update Conference 2006

* ARISS Operations Update
* SSETI GTO Satellite Project Report
* AO-51 QRP Repeater to be Activated for JOTA
* 2006 AMSAT Space Symposium Registration
* Hawaii Activation on FM Satellites

SB SAT @ AMSAT $ANS-267.01
HITSAT - New Amateur Radio Cubesat in Orbit

AMSAT News Service Bulletin 267.01
>From AMSAT HQ SILVER SPRING, MD.
September 24, 2006
To All RADIO AMATEURS
BID: $ANS-267.01

HITSAT, a new amateur radio cubesat, was successfully launched from Japan on September 22. HITSAT was developed by the Hokkaido Cubsat Development Ham club at the Hokkaido Institute of Technology under the guidance of Assistant Professor Mitsuhashi Ryuichi. It rode to orbit as a secondary payload aboard a Japanese Space Agency launch of the Japanese Solar-B mission.

Satellite Call Sign	JR8YJT
CW telemetry down-link	437.275MHz
1200 baud FM packet down-link	437.425MHz

HITSAT transmits its CW telemetry data every 40 seconds. Refer to http://www.hit.ac.jp/~satori/gs/e/hitsatgs.html for a detailed description of the telemetry format.

After launch reception reports began to arrive from amateur radio operators around the world. Pass predictions using the keplerian elements from Space-Track.org have been narrowed down to Object A or Object D, with Object D seeming to be the more accurate at press time.

An excellent resource for HITSAT and other CubeSat information can be found at: http://showcase.netins.net/web/wallio/CubeSat.htm.

[ANS thanks the HITSAT team and observant amateur radio operators around the world for the above information]

/EX

SB SAT @ AMSAT $ANS-267.02
AMSAT President's Club News

AMSAT News Service Bulletin 267.02
>From AMSAT HQ SILVER SPRING, MD.
September 24, 2006
To All RADIO AMATEURS

BID: $ANS-267.02

Past President Robin Haighton, VE3FRH, has been continuing his support of AMSAT by leading the organizational efforts for the President's Club. Robin has requested that President's Club members send him their email addresses so that he can better keep in touch with them.

In response, Robin received the following from President's Club member Jim Jerzycke, KQ6EA, who recently upgraded to "silver" level of membership. Jim writes, "I upgraded to "silver" this year. It's my way of paying back AMSAT for not only the enjoyment I get from this aspect of Amateur Radio, but also the knowledge I gained which helped my career immensely." Jim explains, "I never would have been employed by DirecTV, and now Sea Launch, without the *practical* knowledge of satellite operations I gained by being an AMSAT member."

Members of the President's Club, as sustaining donors to AMSAT project funds, are also eligible to receive additional benefits. You too can join the President's Club either through the website at http://www.amsat.org/amsat-new/membership/presclub.php or by calling Martha at the AMSAT office, 1-888-322-6728.

[ANS thanks Robin, VE3FRH, for the above information]

/EX

SB SAT @ AMSAT $ANS-267.03
AMSAT-UK Chief Discusses PoSAT End-of-Life Issues

AMSAT News Service Bulletin 267.03
>From AMSAT HQ SILVER SPRING, MD.
September 24, 2006
To All RADIO AMATEURS
BID: $ANS-267.03

Following the recent kind agreement of Cons�rcio SAT, the owners of PoSAT (PO28 or 1993-061D) which was launched on the Ariane V59 from Kourou on the 26th September 1993, work has been progressing at SSTL and the Surrey Space Centre to switch transponder frequencies to the amateur satellite service to serve as a voice FM transponder for use by all radio amateurs worldwide.

Unfortunately, recent investigations now indicate that the PoSAT on-board NiCd batteries are showing the effects of 12 years in orbit and the approximately 100,000 charge /discharge cycles to which they have subjected and are no longer holding sufficient charge to operate the downlinks. This may mean that, sadly after all, it will not be possible for the satellite to be made available for amateur use.

We fully understand the benefits that PO28 would offer radio amateurs and work is continuing at Surrey to see if there is any way to revive this 'old lady'. AMSAT-UK will provide updates when further information becomes available.

Martin Sweeting G3YJO
http://www.uk.amsat.org

[ANS thanks AMSAT-UK for the above information]

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SB SAT @ AMSAT $ANS-267.04
Microwave Update Conference 2006

AMSAT News Service Bulletin 267.04
>From AMSAT HQ SILVER SPRING, MD.
September 24, 2006
To All RADIO AMATEURS
BID: $ANS-267.04

Gerd, WB8IFM from Dayton, Ohio writes, "There is only a little over a month left to the national Microwave Update Conference 2006. For the first time this yearly conference will be held* in Dayton,Ohio on the 19th to the 22nd of October.

Presentations are on Friday and Saturday (Oct 20 & 21) with a fleamarket which will be held on Friday night. A banquet on is scheduled for Saturday night with awards and drawings for prizes. There will be a spouse program also.

This is an excellent opportunity to learn about ham activity on the microwaves, loosely described from about 400 Mhz to light! We hope to attract many hams within driving distance of Dayton.

You have to the end of September to get the earlybird registration fee of $40. After October 1st the registration fee will go up by $5. If you pay at the door the cost will be $50. This fee includes a volume of the proceedings which has the presented papers plus others that are not being presented! AMSAT will be represented by Freddy, ON6UG.

For registration info and a more detailed plan go to:
http://www.microwaveupdate.org.

[ANS thanks Gerd, WB8IFM for the above information]

/EX

SB SAT @ AMSAT $ANS-267.05
ARISS Operations Update

AMSAT News Service Bulletin 267.05
>From AMSAT HQ SILVER SPRING, MD.
September 24, 2006

To All RADIO AMATEURS
BID: $ANS-267.05

Kenneth Ransom, N5VHO ARISS Project Engineer reminds ISS radio fans to, "Please note, the amateur equipment on the ISS has not been functioning in the automatic modes properly and may be silent more than usual. Information about the next scheduled ARISS contact can be found at http://www.rac.ca/ariss/upcoming.htm#NextContact.

Random ISS voice activity expected the week of September 21-28. Space Station visitor Ansari has announced that she may be active on the Amateur Radio station on ISS. She is planning on a few pre-scheduled school links and some random contacts.

[ANS thanks ARISS for the above information]

/EX

SB SAT @ AMSAT $ANS-267.06
SSETI GTO Satellite Project Report

AMSAT News Service Bulletin 267.06
>From AMSAT HQ SILVER SPRING, MD.
September 24, 2006
To All RADIO AMATEURS
BID: $ANS-267.06

This week Graham G3VZV reported that the SSETI GTO satellite project is still on track for a launch from Kourou in Nov 2008 with the planned AMSAT-UK U/S linear transponder is on the manifest.

This transponder is expected to support the following features:
 + Approximate 50kHz bandwidth
 + 10 watts of RF output
 + Selectable DSP/SDX and analogue signal paths
 + 400bps beacon

The satellite may not have good, long term, attitude control therefore the antennas are being designed to work well even if the satellite is tumbling. Although the link budget is not as good as AO40 was nor as P3E will be, circular polarisation of ground segment antennas will be needed.

Before we operate the system as an amateur transponder, it will be used as the initial main communications package for the reception of telecommands to, and for the transmission of telemetry and mission data from, the satellite - so it is quite important for the whole project.

The Preliminary Design Review will be completed during next month and an engineering model of the satellite should be under construction early next year. Hopefully this process will be visible using the same webcam system as we were able to engineer during the SSETI Express construction.

The website at http://www.sseti.net/ has lots of info about the SSETI program. Click on "missions" and ESEO for more details about their plans for their GTO satellite.

A full report on the SSETI Express launch last year, the SSETI ESEO project with the DSP transponder, and their SSETI ESMO (moon orbiter!) project will be provided at the upcoming AMSAT-NA Symposium.

[ANS thanks Graham, G3VZV for the above information]

/EX

SB SAT @ AMSAT $ANS-267.07
AO-51 QRP Repeater to be Activated for JOTA

AMSAT News Service Bulletin 267.07
>From AMSAT HQ SILVER SPRING, MD.
September 24, 2006
To All RADIO AMATEURS
BID: $ANS-267.07

The AO-51 Operations Group announced plans for AMSAT's support of the Jamboree on the Air event (JOTA) on the weekend of October 21st and 22nd. AO-51 will run in dual repeater mode with the 435.150 QRP repeater reserved for JOTA contacts on the weekend. Please yield the 435.150 repeater to JOTA contacts, especially between two JOTA stations. The normal AO-51 QRP rules apply: 10 watts to omni or handheld antennas only.

Visit the AO-51 schedule at:
http://www.amsat.org/amsat-new/echo/ControlTeam.php

[ANS thanks the AO-51 Operations Group for the above information]

/EX

SB SAT @ AMSAT $ANS-267.08
2006 AMSAT Space Symposium Registration

AMSAT News Service Bulletin 267.08
>From AMSAT HQ SILVER SPRING, MD.
September 24, 2006
To All RADIO AMATEURS
BID: $ANS-267.08

The 2006 AMSAT Space Symposium will be held October 6, 7 and 8 at the Crowne Plaza in Foster City, California in the beautiful San Francisco Bay Area.

There is still plenty of time to sign up for the 2006 AMSAT Space Symposium! Please note that registrations received after September 24 will cost $55.

Hotel registrations have filled the initial block of rooms at the Crowne Plaza Hotel that were set aside for Symposium attendees. The Symposium Committee worked with the hotel management and they are now happy to report that additional rooms have been added to the AMSAT block.

A glitch in the hotel's reservation system causes an occasional error when trying to book rooms at the special AMSAT rate. If you try to book your room through the central Crowne Plaza reservation system (toll free number) they may tell you the dates are unavailable. If this happens call the hotel directly (information on AMSAT web) and be sure to mention the AMS group code.

If you still have problems please send Emily Clarke (n1did@amsat.org) an email with your arrival and departure dates and she will arrange to speak with the hotel manager directly.

One thing that isn't available through the website is that we can upgrade to the Executive rooms. The rate for executive rooms increases from $109 per night to $129 per night. Call the hotel directly to take advantage of this offer.

Information about the Spouse Tours and Activities can be found online.
See: http://www.amsat.org/amsat-new/symposium/2006GroupTours.php

Please visit http://www.amsat.org/amsat-new/symposium for additional information and an index to the expanded Symposium web pages.

[ANS thanks the 2006 Symposium Committee for the above information]

/EX

SB SAT @ AMSAT $ANS-267.09
Hawaii Activation on FM Satellites

AMSAT News Service Bulletin 267.09
>From AMSAT HQ SILVER SPRING, MD.
September 24, 2006
To All RADIO AMATEURS
BID: $ANS-267.09

Ron, W6ZQ, and Rick, WH6FC will be active on SO-50 and AO-51 for the next week or two from Hawaii. They are on the big island now. Ron will be going to Maui next week for a week or two. Good hunting! Check those westerly passes!

[ANS thanks John, K6YK for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM

From -4927833910471773677
X-Google-Thread: 10e8ad,bcbc951a024f4fbf,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news4.google.com!newshub.sdsu.edu!elnk-nf2-pas!newsfeed.earthlink.net!stamper.news.pas.earthlink.net!newsread1.news.pas.earthlink.net.POSTED!46041641!not-for-mail
From: "JoAnne Maenpaa" <wb9jej_no-spam@earthling.com>
Newsgroups: rec.radio.amateur.space
Subject: WSR-268 AMSAT Weekly Satellite Report
Lines: 1046
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <jQxSg.13395$v%4.4369@newsread1.news.pas.earthlink.net>
Date: Wed, 27 Sep 2006 16:40:47 GMT
NNTP-Posting-Host: 68.164.231.219
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread1.news.pas.earthlink.net 1159375247 68.164.231.219 (Wed, 27 Sep 2006 09:40:47 PDT)
NNTP-Posting-Date: Wed, 27 Sep 2006 09:40:47 PDT
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news2.google.com rec.radio.amateur.space:428

This report is organized into 4 parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites

SB SAT @ AMSAT W8ISS ANS-268.S1
WSR 268 Part 1 09/25/2006

AMSAT NEWS SERVICE BULLETIN 268.S1 FROM AMSAT HQ
SILVER SPRING, MD, September 25, 2006
TO ALL RADIO AMATEURS
BID: $ANS-268.S1

```
VO-52 HAMSAT
Catalog Number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/V - Indian Transponder

Proposed frequencies:
-------------------
Indian Transponder:
Uplink :  435.220 MHz to 435.280 MHz LSB/CW
Downlink: 145.870 MHz to 145.930 MHz USB/CW
Beacon :  145.859330 MHZ CW

Dutch Transponder:
Uplink :  435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW
Beacon :  145.860MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsat.in/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is
active. Each transponder has a different beacon.
[04242006]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational
Current Mode(s): FM Repeater - OFF
                 PBBS - V/U - 38k4 Digital
                 Digipeater - OFF

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink:   145.880 MHZ FM
                       145.880 MHz USB
                       145.920 MHz FM 67Hz PL tone
                      1268.700 MHz FM 67Hz PL tone
Digital Downlinks:     435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
                      2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:        145.860 MHz FM, 9k6 Digital, Pacsat Broadcast
Protocol
                      1268.700 mhz FM, 9k6 PBP Digital
Mode and Antenna Polarization:
T: Linear
```

V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Mode schedule for September 2006 according to the AO-51 command team:

September 4 to September 11
FM Repeater, V/U, High Power Mode
Uplink: 145.920 Mhz FM, 67 hz PL Tone
Downlink: 435.300 Mhz FM

September 11 to September 18
FM Repeater, L/S
Uplink: 1268.700 Mhz FM, No PL Tone
Downlink: 2401.200 Mhz FM

September 18 to September 24
"Normal" Mode
FM Repeater, V/U
Uplink: 145.920 Mhz FM, 67 hz PL Tone
Downlink: 435.300 Mhz FM
9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 Mhz FM, 9k6 PBP Digital
Downlink: 435.150 Mhz FM, 9k6 PBP Digital

September 25 to October 2
38k4 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 Mhz FM, 9k6 PBP Digital
Downlink: 435.150 Mhz FM, 38k4 PBP Digital

Official Webpage: http://www.amsat.org/amsat-new/echo/
[09252006]

=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Uplink: 145.850 MHz (67.0 Hz PL tone) (See below for operating procedures)
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml

(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz. The
order of operation is thus: (allow for Doppler as necessary)
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer
  on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater
  on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10
  minute timer.
[04172006]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: OPERATIONAL

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplink: 145.850 145.870 145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

unOfficial Webpage: http://www.amsat.org/amsat/sats/n7hpr/fo29.html
[11132005]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Uplink: 145.850 MHz FM
Downlink: 436.795 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[01012006]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational depending on amount of Sunlight
Current Reported mode: Mode-A

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
      432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
     145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
     145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz
     145.972 MHz
     435.100 MHz
    2304.100 MHz

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php
The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
AO-7 users are requested to log their contacts and observations about
AO-7, especially any unexpected mode changes.
AO-07 telemetry software webpage:
http://www.qsl.net/k3tz/files/K3TZ_AO-07_Telemetry_Decoder_0.5.zip

Please keep your power low! For additional information please read the
AO-7
Usage Guidelines on the AO-7 Log and Resource Site located at:
http://www.planetemily.com/ao7
[04242006]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: Intermittent
Digipeater: OFF

The Expedition 13 crew is:
Commander: Pavel Vinogradov - RV3BS
Flight Engineer: Jeff Williams - KD5TVQ
Crew: Thomas Reiter - DF4TR

Exedition 14 crew, which is currently enroute, is:
Michael Lopez-Alegria - KE5GTK
Mikhail Tyurin - RZ3FT
Anousheh Ansari

Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

SSTV TESTING:
Worldwide Reported Downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS, RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

Currently, Expedition Crew 14 is enroute to the International Space Station.
During the week, the equipment may be turned off during docking of the Soyuz.

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line is NOT translated from Russian and posted.
[09182006]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-268.S2
WSR 268 Part 2 09/25/2006

AMSAT NEWS SERVICE BULLETIN 268.S2 FROM AMSAT HQ
SILVER SPRING, MD, September 25, 2006
TO ALL RADIO AMATEURS
BID: $ANS-268.S2

CO-58 XI-V

```
Catalog Number: 28895
Launch Date: October 27, 2005

Status: Operational - CW only

Telemetry Downlink: 437.345MHz - FSK 1200bps using AFK protocol
Beacon Downlink:    437.465MHz - CW

Callsign: JQ1YGW

Oficial Webpage: http://www.space.t.u-tokyo.ac.jp/gs/satinfo-e.html#xi5
Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
[09252006]
=====
CO-56 CUTE-1.7
Catalog number: 28941
Launched: June 30,2003

Status: Semi-Operational - Constant Carrier only

Uplink: ?
Downlink: 437.3850 CW
          437.4700 1200 FM ax25 or SRLL (ACTIVE only near Japan ? )

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[09252006]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Current Mode(s): FM Repeater - OFF
                 PBBS - V/U - 38k4
                 Digipeater - OFF

Analog voice downlink: 435.300 MHz FM
                       435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink:   145.880 MHZ FM
                       145.880 MHz USB
                       145.920 MHz FM 67Hz PL tone
                      1268.700 MHz FM 67Hz PL tone
Digital Downlinks:     435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
                      2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:        145.860 MHz FM, 9k6 Digital, Pacsat Broadcast
Protocol
                      1268.700 mhz FM, 9k6 PBP Digital
Mode and Antenna Polarization:
T: Linear
V: Linear
```

U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Mode schedule for September 2006 according to the AO-51 command team:

September 4 to September 11
FM Repeater, V/U, High Power Mode
Uplink: 145.920 Mhz FM, 67 hz PL Tone
Downlink: 435.300 Mhz FM

September 11 to September 18
FM Repeater, L/S
Uplink: 1268.700 Mhz FM, No PL Tone
Downlink: 2401.200 Mhz FM

September 18 to September 24
"Normal" Mode
FM Repeater, V/U
Uplink: 145.920 Mhz FM, 67 hz PL Tone
Downlink: 435.300 Mhz FM
9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 Mhz FM, 9k6 PBP Digital
Downlink: 435.150 Mhz FM, 9k6 PBP Digital

September 25 to October 2
38k4 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 Mhz FM, 9k6 PBP Digital
Downlink: 435.150 Mhz FM, 38k4 PBP Digital
Official Webpage: http://www.amsat.org/amsat-new/echo/
[09252006]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: RECOVERY EFFORTS - REFRAIN FRON USAGE!!!

General Usage Uplink/Downlink:145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org
aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[09252006]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Downlink: 435.225 MHz FM (9600-baud FSK)
435.325 Mhz - Not Available - temperature problems
Uplinks: 145.850 FM
145.890 FM
145.930 FM
1269.700 FM
1269.800 FM
1269.900 FM
Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[08072006]
=====
RS-22 Mozhayets 4
Catalog Number: 27939
Launch Date: September 27, 2004

Status: Operational

Beacon: 435.3520 MHz CW
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Semi-operational, the digipeater command is on and open for APRS users.

Uplink: 145.900 FM
145.920 FM
145.940 FM
145.960 FM
(using 1200-baud Manchester FSK)
Downlink: 437.026 MHz SSB (1200-baud PSK)
Mode-S Beacon: 2401.1428 MHz

Mode and Antenna Polarization:
U: RC 437.050 MHz RHCP
PSK 437.025 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[04172006]
=====
UO-11 OSCAR-11

Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational

Telemetry Downlink: 145.826 MHz. FM (1200-baud AFSK).
approx. 10 days ON, 10 days OFF
Mode-S Beacon: 2401.500 MHz. ... OFF
UHFBeacon: 435.025 MHz. ... OFF

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Reception reports are requested to be sent to xxxxx@amsat.org (replace xxxxx by g3cwv), or post to AMSAT-BB.

During the period 15 June to 17 July 2006 nothing has been heard from the satellite. It was last heard on 05 May, just one day before the solar eclipses were due to start. These eclipses will continue until 04 August 2006, reaching a maximum duration of 22% around 19 June. If the satellite behaves in the same way as it did last year, regular 10 day transmissions should re-start, sometime in August.

Official webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[07172006]

=====
PCSAT-2
Catalog Number: 25544
Launch Date: August 1, 2005

Activated: August 3, 2005
Status: Decommissioning
Current Mode: OFF

Voice Digital Uplink: 145.990 MHz
Voice response Downlink: 437.975 MHz

Digital Downlink: 435.275 Mhz
Digital Uplink: 145.825 Mhz
ISS digipeater uplink: 145.990 Mhz

PSK-31 Downlink: 435.275 Mhz
PSK-31 Uplink: 29.401 Mhz

CALLSIGN: pcsat2

Official Webpage: http://web.usna.navy.mil/~bruninga/pcsat2.html

PCSAT2 APRS Packet page: http://www.findu.com/cgi-bin/pcsat2.cgi
aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[09252006]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: Intermittent
Digipeater: OFF

Expedition Crew 13 is:
Commander: Pavel Vinogradov - RV3BS
Flight Engineer: Jeff Williams - KD5TVQ
Crew: Thomas Reiter - DF4TR

Exedition 14 crew, which is currently enroute, is:
Michael Lopez-Alegria - KE5GTK
Mikhail Tyurin - RZ3FT
Anousheh Ansari

Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

SSTV TESTING:
Worldwide Reported Downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS, RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com

APRS tracking page: http://www.ariss.net/

Currently, Expedition Crew 14 is enroute to the International Space Station.
During the week, the equipment may be turned off during docking of the Soyuz.

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line is NOT translated from Russian and posted.
[09182006]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-268.S3
WSR 268 Part 3 09/25/2006

AMSAT NEWS SERVICE BULLETIN 268.S3 FROM AMSAT HQ
SILVER SPRING, MD, September 25, 2006
TO ALL RADIO AMATEURS
BID: $ANS-268.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

AO-54 SUITSAT
Catalog Number:28933
Release Date: February 3,2006

Status: Re-Entered

```
Modes : FM Voice Telemetry/Greetings
        FM SSTV
```

Callsign: RS0RS
Downlink: 145.990 FM

Currently on the amsat-bb, there is a geussing game going on about when Suitsat will re-enter the atmosphere.

Official webpage: http://www.suitsat.org
[09252006]
=====
NCUBE-2
Catalog Number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

```
Proposed Callsign: TBA
Proposed Transmit Frequency:  437.305
                             2407.250
```

Official Website: http://www.ncube.no

```
[05012006]
=====
XO-53 SSETI
Catalog Number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 FM 67Hz CTCSS
Voice Downlink: 2401.835 FM
Packet Up/Downlink: 437.250 9k6 packet
Packet Downlink 2401.835 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01292006]
=====
TO-31 TMSAT-1
Catalog Number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink:   145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
PO-28 POSAT-1
Catalog Number: 22829
Launch Date: September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012006]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launched: June 16, 1983

Status: Non-operational
```

```
Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB
Beacon: 145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: Downlink only

Uplink: 145.875 145.900 145.925 145.950 MHz FM (1200-baud)
Downlink: 435.808 MHz PSK
Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01012006]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB
Beacon: 29.408 MHz
Robot: 29.454 MHz
[05232004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB
Beacon: 145.860 MHz
Robot: 145.908 MHz
[05232004]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational
```

Uplink 145.975 MHz FM
Downlink 435.070 MHz FM
[05092004]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink: 145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM
Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01092005]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational?

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB
Beacon: 29.352 MHz (intermittent)
SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplink: 145.84 145.86 145.88 145.90 MHz FM
(using 1200-baud Manchester FSK)
CW downlink: 437.125 MHz
Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[05232004]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Uplink: 145.90 to 146.00 MHz CW/LSB

Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[08152004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM
Broadcast Callsign: HL01-11
BBS: HL01-12

Jim, AA7KC, reports that KO-23's downlink transmitter continues in a non-operational status.
[05092004]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM (9600-baud FSK)
Downlink: 436.500 MHz FM
Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

```
The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm

[ANS-WSR has no further information]
[09042006]
=====
SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

STatus: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz and 145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[08082004]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlink: 437.025 MHz 437.400 MHz
Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site
at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[05092004]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplink V-band   145.840 - 145.990 MHz CW/LSB
      U-band   435.550 - 435.800 MHz CW/LSB
      L1-band 1269.250 - 1269.500 MHz CW/LSB
      L2-band 1268.325 - 1268.575 MHz CW/LSB
Downlink: S2-band 2401.225 - 2401.475 MHz CW/USB
```

K-band 24,048.010 - 24,048.060 MHz CW/USB
Beacon: 2401.323
24,048.035
[05232004]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational
Downlink: 437.075 MHz
Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[08152004]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz
Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[08152004]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, callsign KE6QMD, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Operational

Uplink: 145.850 or 145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz
Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[11202005]

=====

AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink 435.275 1200-baud AFSK
Downlink 145.825 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01012006]

=====

DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink: Downlink 145.825 MHz FM 1200 Baud AFSK
Beacon: 2401.220 MHz
[05012006]

=====

WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
NNNN

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SB SAT @ AMSAT W8ISS $ANS-268.S4
WSR 268 Part 4 09/25/2006

AMSAT NEWS SERVICE BULLETIN 268.S4 FROM AMSAT HQ
SILVER SPRING, MD, September 25, 2006
TO ALL RADIO AMATEURS
BID: $ANS-268.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE PROPOSED FOR LAUNCH AT THIS TIME:

PHASE 3E ?O-??
Catalog Number:
Proposed Launch Date: Early/Mid 2007

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/
[ANS-WSR wishes to thank William Leijenaar, PE1RAH for this week's report]
[04242006]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

- AMSAT News Service (ANS)
- General satellite discussion (AMSAT-BB)
- Orbit data (KEPS)
- Manned space missions (SAREX)
- District of Columbia area (AMSAT-DC)
- New England area (AMSAT-NE)

* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/amsat/listserv/menu.html

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

From -4891943200850663813
X-Google-Thread: fcc6e,d7e63ae0bdaa5cfc,start
X-Google-Thread: 11480d,d7e63ae0bdaa5cfc,start
X-Google-Thread: 10e8ad,d7e63ae0bdaa5cfc,start
X-Google-Attributes: gidfcc6e,gid11480d,gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
From: <Thierry>
Newsgroups: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.space
Subject: Change of URL for Luxorion, http://www.astrosurf.com/luxorion/
Date: Tue, 3 Oct 2006 16:45:25 +0200
Lines: 16
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.2869
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.2962
X-RFC2646: Format=Flowed; Original
NNTP-Posting-Host: ip-88-207-128-88.tvsurf.pt.lu
Message-ID: <45227780$1@news.vo.lu>
X-Trace: news.vo.lu 1159886720 88.207.128.88 (3 Oct 2006 16:45:20 +0200)
Path: g2news2.google.com!news4.google.com!news.glorb.com!npeer.de.kpn-eurorings.net!news.vo.lu!not-for-mail
Xref: g2news2.google.com rec.radio.amateur.antenna:19284 rec.radio.amateur.dx:2554 rec.radio.amateur.space:429

Hi

My URL address changed

The new URL of LUXORION is now : http://www.astrosurf.com/luxorion/
(or .org as there will be an alias).

Sorry for the inconvenient but the change will be transparents for users

Regards,

Thierry, ON4SKY, LX4SKY
Luxorion

```
From -6693440717417948338
X-Google-Thread: 10e8ad,1701f1d5833d8d6d,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news3.google.com!newshub.sdsu.edu!elnk-nf2-pas!
newsfeed.earthlink.net!stamper.news.pas.earthlink.net!
newsread4.news.pas.earthlink.net.POSTED!46041641!not-for-mail
From: "JoAnne Maenpaa" <wb9jej_no-spam@earthling.com>
Newsgroups: rec.radio.amateur.space
Subject: ANS-274 AMSAT News Service Weekly Bulletins
Lines: 404
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <J0hVg.5528$Y24.2874@newsread4.news.pas.earthlink.net>
Date: Fri, 06 Oct 2006 00:00:41 GMT
NNTP-Posting-Host: 64.105.116.15
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread4.news.pas.earthlink.net 1160092841 64.105.116.15 (Thu, 05 Oct
2006 17:00:41 PDT)
NNTP-Posting-Date: Thu, 05 Oct 2006 17:00:41 PDT
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news2.google.com rec.radio.amateur.space:430
```

AMSAT NEWS SERVICE
ANS-274

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* AMSAT Symposium and Office Schedule
* PCSAT-1 Recovery
* PCSAT-1 Special Ops
* AMSAT Represented at NBC4 Connected Expo
* OSCAR 11 Report - 28 September 2006
* ARISS Status - 25 September 2006

SB SAT @ AMSAT $ANS-274.01
AMSAT Space Symposium and Office Schedule

AMSAT News Service Bulletin 274.01
From AMSAT HQ SILVER SPRING, MD.
October 1, 2006
To All RADIO AMATEURS
BID: $ANS-274.01

The annual AMSAT Space Symposium will be held this week at the Crowne Plaza Mid-Peninsula conventiently located close to San Francisco International Airport. It is roughly equidistant between the cities of San Francisco, San Jose and Oakland. AMSAT is excited that our 2006 Symposium Keynote speaker will be astronaut Bill McArthur KC5ACR, ISS Expedition 12 Mission Commander and Science Officer. Commander McArthur is well known to ham radio operators and during his six months aboard the ISS he became the most active radio amateur ever to serve aboard the ISS. Commander McArthur logged more than 1800 QSOs in space, including logging a Worked All States Award. His impressive track record also included a record 37 school contacts, Worked All Continents (including Antartica) and 130 DXCC entities. Commander McArthur will present his keynote address during the Symposium Banquet on Saturday October 7. To register for the Symposium and Banquet please visit the AMSAT Online Store. Complete Symposium details are available at:
http://www.amsat.org/amsat-new/symposium/

The AMSAT Office will be closed on Monday, October 2nd 2006. The office will reopen on Tuesday and then close again for the remainder of the week on Wednesday, October 4th while AMSAT Office Manager, Martha Saragovitz, travels to California for the AMSAT Board of Directors meeting on October 5-6 which proceeds the Space Symposium. The office will reopen on Monday, October 16th.

[ANS thanks Emily, N1DID, and Martha for the above information]

/EX

SB SAT @ AMSAT $ANS-274.02
PCSAT-1 Recovery

AMSAT News Service Bulletin 274.02
From AMSAT HQ SILVER SPRING, MD.

October 1, 2006
To All RADIO AMATEURS
BID: $ANS-274.02

PCSAT-1 has been recovered as it entered better sun angles.

PCSAT-1 should remain NORMAL OPS for the next few weeks until it experiences an overload and resets. Then it will be lost until December. All users are asked to please adhere to these fundamental principles:

1) No connections to or through PCSAT-1
2) UI digipeating and APRS packets only about a 1 minute rate
3) Watch pcsat.aprs.org for live activity
4) Use the path of VIA PCSAT-1 or VIA ARISS
5) Minimize all packets after dark!

Enjoy PCSAT-1 and APRS! Make contacts, QSO, enjoy!

Just remember that ACKS are pretty useless and only add QRM to the channel. So do not expect ACKS via the satellite. If you see your outgoing packet digipeated by PCSAT-1 a few times then you should ASSUME that the other person got it and delete it yourself. By the same token, if someone sends you a message, then ANSWER him in kind, so that he knows you got it.

[ANS thanks Bob, WB4APR, for the above information]

/EX

SB SAT @ AMSAT $ANS-274.03
PCSAT-1 Special Ops

AMSAT News Service Bulletin 274.03
From AMSAT HQ SILVER SPRING, MD.
October 1, 2006
To All RADIO AMATEURS
BID: $ANS-274.03

Bob Bruinga, WB4APR, with the US Naval Academy Satellite Lab provided the following update on PCSAT-1 special operations.

We now welcome routine trackers and unattended beacons so that we can build up statistics on channel loading and the channel capacity of PCSAT-1 and it's follow-on spacecraft. We do want everyone to include basic info in their packet though. Please include PWR,Antenna Gain, and RATE. Such as "5W,3dbi,5min" so that the statistics will show us what works...

PCSAT-1 works like any APRS digipeater so the only thing you have to do, to work the satellite is to change your APRS (or packet station) channel to 145.825 instead of its normal frequency. When you get to work, QSY to 145.825 during the day, and when you get home. Its nice to look at your mobile radio and see who else you captured after work or overnight.

For unattended, set your beacon rate to once ever 5 minutes. If attended and monitoring the channel, you can use 2 minutes. You can see if you got in on http://pcsat.aprs.org . Watching the capacity of PCSAT-1 to carry these data will be usefull for gauging the success of our next satellite, ParkinsonSAT. See
http://www.ew.usna.edu/~bruninga/buoy.html

PCSAT-1 responds to most common digipeating callsigns (below) so that no one should have to change anything when going between terrestrial or ISS operation to PCSAT-1, other than their frequency.

- PCSAT-1
- RELAY
- WIDE
- WIDEn-N
- ARISS
- TRACEn-N

We saw 22 people yesterday on the East Coast and the web page above, is showing about 70 in the last 2 days. PCSAT-1 should be able to handle 100 or so per footprint PER PASS! So lets get the number of users up for the next 2 weeks of useful PCSAT-1 life.

See web page PCSAT.APRS.ORG or Google for PCSAT.

[ANS thanks Bob, WB4APR, for the above information]

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SB SAT @ AMSAT $ANS-274.04
AMSAT Represented at NBC4 Connected Expo

AMSAT News Service Bulletin 274.04
From AMSAT HQ SILVER SPRING, MD.
October 1, 2006
To All RADIO AMATEURS
BID: $ANS-274.04

Amateur Radio and Amsat were represented at the 6th annual "NBC4 Connected Expo" in downtown Washington DC on September 16 and 17. This event is sponsored by local television station WRC channel 4 in Washington and hosted by their on-air technology reporter I.J. Hudson, K9ICF.

25,000 people attended the event over the two days that it was open. The ham radio exhibit was located just around the corner from a robotics demonstration that drew a large number of technically inclined young people.

The general public really has little idea what ham radio is all about and often confuses hams with CB operators or thinks of hams as old men who tap out messages in morse code on vacuum tube radios. Many believe that ham radio is no longer useful or relevant in the age of cellular telephones and the internet. Comments that were heard during the weekend included "Look at the fancy cell phone!", "My father was a ham when I was young" and "I didn't know you still did that". Many visitors were surprised to learn that ham radio is still alive and well and fully up to date with modern technology. A few lapsed hams also thought about getting back into amateur radio after stopping at the exhibit.

The fact that hams build satellites and talk to astronauts in space was a major part of the exhibit. These are two things that citizens band operators and cellular telephone users don't do. A recent ARISS contact between astronauts and school children played almost continously during the expo to draw people into the exhibit.

The exhibit also stressed the technical opportunities that are available in ham radio, that hams can design, build and modify their own transmitters and other equipment and that amateur radio provides practical electronics experience and is a great way to get a head start in a science or engineering career. Displays also showed off the public service abilities of hams and stressed that ham radio still works after all other communication systems have failed.

Visitors who were interested in learning more about amateur radio were directed to one of the many local radio clubs in the Washington area that offer licensing classes and exam sessions. Although the outcome of the exhibit cannot be accurately measured, we do know that last year's exhibit did produce one new ham that we know of, and possibly more that we don't know about.

[ANS thanks Dan, N8FGV, for the above information]

/EX

SB SAT @ AMSAT $ANS-274.05
OSCAR 11 Report - 28 September 2006

AMSAT News Service Bulletin 274.05
From AMSAT HQ SILVER SPRING, MD.
October 1, 2006
To All RADIO AMATEURS
BID: $ANS-274.05

OSCAR-11 REPORT

28 September 2006

NOTHING HEARD FROM OSCAR-11 DURING SEPTEMBER ... REPORTS REQUESTED! Please post reports to AMSAT-BB or e-mail to xxxxx@amsat.org (replace xxxxx by g3cwv).

During the period 14 August 2006 to 28 September, the satellite was heard from 16 to 26 August. The beacon was expected to switch ON ten days or 20 later, ie. around 05 or 15 September. However, it has not been heard since 26 August.

During the last ON period, the real time clock showed various errors. The date on 16 August was 51 July. By 26 August it had incremented to 60 July. The hours were also showing an erratic behaviour. Over short periods of time, ie. during a pass, the minutes and seconds appeared to be incrementing correctly

I am indebted to Jeff KB2M, Peter ZL3TC and Dave G1OCN, for their reports and for monitoring the satellite, especially during the last two weeks while I have been away on holiday. Many thanks.

The status of the satellite, when last heard, was that all the analogue telemetry channels, 0 to 59 are zero, ie they have failed. The status channels 60 to 67 were still working. The spacecraft computer and active attitude control system have switched OFF, ie. the satellite' attitude is controlled only by the passive gravity boom gradient, and the satellite is free to spin at any speed. When telemetry was last received it showed that one of the solar arrays had failed, and there was a large unexplained current drain on the main 14 volt bus. After 22 years in orbit the battery has undergone around 100,000 partial charge/discharge cycles, and observations suggest that it cannot power the satellite during eclipses, or sometimes during periods of poor solar attitude.

The watchdog timer now operates on a 20 day cycle. During the three months before May (when the eclipses started), the ON/OFF times were very consistent, and the average of many observations show this to be 20.7 days, ie. 10.3 days ON followed by 10.4 days OFF. However, poor solar attitude may result may result in a low 14 volt line supply, which may cause the beacon to switch OFF prematurely, and reset the watchdog timer cycle. When this occurs, the beacon is OFF for 20.7 days.

The Beacon frequencies are -

VHF 145.826 MHz. AFSK FM ASCII Telemetry

UHF 435.025 MHz. OFF

S-band 2401.5 MHz. OFF

Listeners to OSCAR-11 may be interested in visiting my website. If you need to know what OSCAR-11 should sound like, there is a short audio clip for you to hear. The website contains an archive of news & telemetry data. It also contains details about using a soundcard or hardware demodulators for data capture. There is software for capturing data, and decoding ASCII telemetry. The URL is www.users.zetnet.co.uk/clivew/

If you place this bulletin on a terrestrial packet network, please use the bulletin identifier $BID:U2RPT125.CWV, to prevent duplication.

73 Clive G3CWV   xxxxx@amsat.org (please replace xxxxx by g3cwv)

[ANS thanks Clive, G3CWV, for the above information]

/EX

SB SAT @ AMSAT $ANS-274.06
ARISS Status - 25 September 2006

AMSAT News Service Bulletin 274.06
From AMSAT HQ SILVER SPRING, MD.
October 1, 2006
To All RADIO AMATEURS
BID: $ANS-274.06

1. Swiss School Contact Successful

Thomas Reiter, DF4TR, spoke with students from the Gymnase Intercantonal de la Broye at the Musee de l'aviation militaire in Payerne, Switzerland on Friday, September 22. Eight students' questions were answered as 50 people gathered around the radio. Another 300 witnessed the contact in the hall where the event was transmitted on screen by amateur television (ATV). Media coverage included newspapers and television.

2. George Washington University Contact Successful

Space visitor Anousheh Ansari participated in a contact with her alma mater, George Washington University (GWU) in Washington, D.C. on Friday, September 22. As Ansari was Japanese participant, Dice-K Enomoto's back up on the Soyuz flight, she did not have time to get her U.S. license. Jeff Williams, KD5TVQ, acted as the control operator during the contact. Students from several area schools participated in the event: Eastern Middle School, Silver Spring, Md. (a NASA Explorer School); School Without Walls Senior High School, Washington, D.C.; Stevens Elementary School, Washington, D.C.; and Thomas Jefferson High School for Science and Technology, Alexandria, Va. Six students were able to have their questions answered. The event was held in the GWU Marvin Center amphitheater where approximately 125 people gathered. Television stations Fox TV 5, ABC WJLA 7 and news channel 8 provided coverage of the GWU ARISS contact as did the Washington Post and some other local papers. See:
http://www.washingtonpost.com/wp-dyn/content/article/2006/09/22/AR2006092201496.html

Photos of the event may be viewed on:
http://artemis.crosslink.net/~pk/AMSAT/AMSAT-ARISS-9-22-06/

The contact video may be seen here:

http://video.google.com/videoplay?docid=-1789656846413123353

The university posted a press release of the event.
http://my.gwu.edu/mod/calendar/default.cfm?event_id=9660&option=view&day=09/22/06

3. ARISS - Illinois Contact, a Success

Astronaut Jeff Williams, KD5TVQ, had his own contact scheduled for September 22 with his crew-pick school, Crete-Monee Intermediate Center in Crete, Illinois. Nineteen students asked one question each as the entire student body of 800 children looked on. The Kankakee Amateur Radio Society provided streaming audio via W9AZ 146.94 repeater on http://www.w9az.com. Two television channels, 7 and 2 covered the event. Crete's local newspaper, The Star, posted an online article:
http://www.starnewspapers.com/star/spnews/cup/24-cup3.htm

4. Upcoming School Contacts

The ARISS team continues to work on scheduling the Expedition 14 school contacts.

5. ISS Makes General Contacts

Besides making the scheduled ARISS school contact with George Washington University, Anousheh Ansari has been making general contacts with stations in the USA and Canada using the callsign RS0ISS. News of her contacts has already hit the media. See:
http://www.canada.com/nationalpost/news/story.html?id=852560db-b97c-4565-afaf-01a1ca1e4fce&k=82481

6. ARRL Article Covers Hams Onboard ISS

ARRL ran a story on the shuttle astronauts visiting the ISS. The amateur radio payload PCSAT2 was picked up during an EVA and returned to Earth. "Five Radio Amateurs Now Aboard ISS; Power Upgrade, PCSat2 Retrieval Set" may be viewed on:
http://www.arrl.org/news/stories/2006/09/11/101/?nc=1

7. ARRL Covers Expedition 14 Launch

ARRL ran an article on the launch of the Expedition 14 crew. The story, entitled, "Shift Change: New Two-Ham Crew, First Female Civilian Visitor on Way to ISS" may be found at:
http://www.arrl.org/news/stories/2006/09/18/102/?nc=1

8. ARRL Press Release on Three ARISS Contacts

On Friday, September 22, three ARISS contacts were performed by three different people onboard the ISS. "ARISS Plans Triple Header of Ham Radio School Contacts" may be viewed on:
http://www.arrl.org/news/stories/2006/09/21/100/?nc=1

[ANS thanks Carol, KB3LKI for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73, This week's ANS Editor,
Lee McLamb, KU4OS

```
From 408595789227693129
X-Google-Thread: 10e8ad,18d53b363b43c1ed,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news1.google.com!atl-c05.usenetserver.com!
news.usenetserver.com!peer01.west.cox.net!cox.net!newshub.sdsu.edu!elnk-nf2-pas!
newsfeed.earthlink.net!stamper.news.pas.earthlink.net!
newsread3.news.pas.earthlink.net.POSTED!46041641!not-for-mail
From: "JoAnne Maenpaa" <wb9jej_no-spam@earthling.com>
Newsgroups: rec.radio.amateur.space
Subject: WSR-184 AMSAT Weekly Satellite Report
Lines: 986
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <AYQqg.3579$cd3.1419@newsread3.news.pas.earthlink.net>
Date: Wed, 05 Jul 2006 15:32:48 GMT
NNTP-Posting-Host: 66.167.221.239
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread3.news.pas.earthlink.net 1152113568 66.167.221.239 (Wed, 05 Jul
2006 08:32:48 PDT)
NNTP-Posting-Date: Wed, 05 Jul 2006 08:32:48 PDT
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news2.google.com rec.radio.amateur.space:278
```

This report is organized into 4 parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites

```
Part 4 (S4) - proposed satellites

SB SAT @ AMSAT W8ISS ANS-184.S1
WSR 184 Part 1 07/03/2006

AMSAT NEWS SERVICE BULLETIN 184.S1 FROM AMSAT HQ
SILVER SPRING, MD, July 03, 2006
TO ALL RADIO AMATEURS
BID: $ANS-184.S1

VO-52 HAMSAT
Catalog Number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/V - Indian Transponder

Proposed frequencies:
--------------------
Indian Transponder:
Uplink :  435.220 MHz to 435.280 MHz LSB/CW
Downlink: 145.870 MHz to 145.930 MHz USB/CW
Beacon :  145.859330 MHZ CW

Dutch Transponder:
Uplink :  435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW
Beacon :  145.860MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsat.in/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is
active. Each transponder has a different beacon.
[04242006]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Current Mode(s): FM Repeater - V/U QRP
                 Digipeater - OFF

Analog voice downlink: 435.300 MHz FM
         435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink:   145.880 MHZ FM
         145.880 MHz USB
```

145.920 MHz FM 67Hz PL tone
1268.700 MHz FM 67Hz PL tone
Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast Protocol
1268.700 mhz FM, 9k6 PBP Digital
Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Mode schedule for July 2006 according to Drew, KO4MA:

Tenatively, and subject to change:

July 1 to July 31

FM Repeater
Downlink 435.300 mHz FM
Uplink 145.920 mHz FM with 67 hz Tone

Digital / PBBS
Downlink 435.150 mHz FM 9k6 Digital
Uplink 145.860 mHz FM 9k6 Digital
PBBS Active
Telemetry Downlink Active

Official Webpage: http://www.amsat.org/amsat-new/echo/
[07032006]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Uplink: 145.850 MHz (67.0 Hz PL tone) (See below for operating procedures)
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

```
To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The
order of operation is thus: (allow for Doppler as necessary)
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute
timer
   on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the
repeater
   on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset
the 10
   minute timer.
[04172006]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: OPERATIONAL

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplink: 145.850 145.870 145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

unOfficial Webpage: http://www.amsat.org/amsat/sats/n7hpr/fo29.html
[11132005]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Uplink: 145.850 MHz FM
Downlink: 436.795 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
```

```
[01012006]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational depending on amount of Sunlight
Current Reported mode: Mode-A

Uplink:   145.850 to 145.950 MHz CW/USB Mode A
   432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
  145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
  145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons:  29.502 MHz
  145.972 MHz
  435.100 MHz
 2304.100 MHz

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php
The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
AO-7 users are requested to log their contacts and observations about
AO-7, especially any unexpected mode changes.
AO-07 telemetry software webpage:
http://www.qsl.net/k3tz/files/K3TZ_AO-07_Telemetry_Decoder_0.5.zip

Please keep your power low!  For additional information please read the
AO-7
Usage Guidelines on the AO-7 Log and Resource Site located at:
http://www.planetemily.com/ao7
[04242006]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: Packet - Mode V / Occasional Voice
Digipeater: ON

The current crew is:
Commander: Pavel Vinogradov, RV3BS
Flight Engineer: Jeff Williams, KD5TVQ

Digital/APRS:
Worldwide packet uplink:   145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink:   145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
```

Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Russian: RS0ISS, RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official Webpage: http://www.rac.ca/ariss
Official Fan club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.
[06122006]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-184.S2
WSR 184 Part 2 07/03/2006

AMSAT NEWS SERVICE BULLETIN 184.S2 FROM AMSAT HQ
SILVER SPRING, MD, July 03, 2006
TO ALL RADIO AMATEURS
BID: $ANS-184.S2

CO-58 XI-V
Catalog Number: 28895
Launch Date: October 27, 2005

Status: Operational only within range of Ground station in Japan

Telemetry Downlink: 437.345MHz - FSK 1200bps using AFK protocol
Beacon Downlink: 437.465MHz - CW about 50 WPM

Callsign: JQ1YGW

Oficial Webpage: http://www.space.t.u-tokyo.ac.jp/gs/satinfo-e.html#xi5
Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
[03122006]
=====

```
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: Packet - Mode V / Occasinal Voice
Digipeater: ON

The current crew is:
Commander: Pavel Vinogradov, RV3BS
Flight Engineer: Jeff Williams, KD5TVQ

Digital/APRS:
Worldwide packet uplink:   145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink:   145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink:      145.800 MHz FM

Crossband Repeater:
Repeater Uplink:   437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Russian: RS0ISS, RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official Webpage: http://www.rac.ca/ariss
Official Fan club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is NOT translated from Russian and posted.
[06122006]
=====
PCSAT-2
Catalog Number: 25544
Launch Date: August 1, 2005

Activated: August 3, 2005
Status: Operational
Current Mode: Digipeater / XBAUD (PSK31/CW Repeater)
```

Digital Downlink: 435.275 Mhz
Digital Uplink: 145.825 Mhz

PSK-31 Downlink: 435.275 Mhz
PSK-31 Uplink: 29.401 Mhz

CALLSIGN: pcsat2

Official Webpage: http://web.usna.navy.mil/~bruninga/pcsat2.html
PCSAT2 APRS Packet page: http://www.findu.com/cgi-bin/pcsat2.cgi
aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/

Bob, WB4APR, reports that Yes, PCSAT2 has gone into low voltage shut-down since the sun angle on the space station is large. The angle should improve on 24 June just-in-time for Field Day. We hope to activate PCSAT2 as a 145.825 up/down simplex digipeater while the ARISS system will be in cross-band repeater mode.
[ANS-WSR wishes to thank Bob, WB4APR,for this weeks info]
[06192006]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Mode(s): FM Repeater - V/U QRP
                Digipeater - OFF

Analog voice downlink: 435.300 MHz FM
         435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink: 145.880 MHZ FM
         145.880 MHz USB
         145.920 MHz FM 67Hz PL tone
        1268.700 MHz FM 67Hz PL tone
Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
        2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast Protocol
                      1268.700 mhz FM, 9k6 PBP Digital
Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11

```
BBS: PECHO-12

Mode schedule for July 2006 according to Drew, KO4MA:

Tenatively, and subject to change:

July 1 to July 31

FM Repeater
Downlink 435.300 mHz FM
Uplink 145.920 mHz FM with 67 hz Tone

Digital / PBBS
Downlink 435.150 mHz FM 9k6 Digital
Uplink 145.860 mHz FM 9k6 Digital
PBBS Active
Telemetry Downlink Active

Official Webpage: http://www.amsat.org/amsat-new/echo/
[07032006]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Operational

General Usage Uplink/Downlink:145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org
aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[04172006]
=====
CO-55 CUTE-1.7
Catalog number: 28941
Launched: June 30,2003

Status: Operational

Uplink: ?
Downlink: 437.3850 CW
          437.4700 1200 FM ax25 or SRLL (ACTIVE only near Japan ? )
Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[05012006]
=====
GO-32 TECHSAT-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational
```

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks: 145.850 FM
         145.890 FM
         145.930 FM
        1269.700 FM
        1269.800 FM
        1269.900 FM
Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[05012006]
=====
RS-22 Mozhayets 4
Catalog Number: 27939
Launch Date: September 27, 2004

Status: Operational

Beacon: 435.3520 MHz CW
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Semi-operational, the digipeater command is on and open for APRS users.

Uplink: 145.900 FM
        145.920 FM
        145.940 FM
        145.960 FM
(using 1200-baud Manchester FSK)
Downlink: 437.026 MHz SSB (1200-baud PSK)
Mode-S Beacon: 2401.1428 MHz

Mode and Antenna Polarization:
U: RC 437.050 MHz RHCP
   PSK 437.025 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[04172006]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational?

Telemetry Downlink: 145.826 MHz. FM (1200-baud AFSK).
approx. 10 days ON, 10 days OFF
Mode-S Beacon: 2401.500 MHz. ... OFF
UHFBeacon: 435.025 MHz. ... OFF

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Official webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[05292006]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-184.S3
WSR 184 Part 3 07/03/2006

AMSAT NEWS SERVICE BULLETIN 184.S3 FROM AMSAT HQ
SILVER SPRING, MD, July 03, 2006
TO ALL RADIO AMATEURS
BID: $ANS-184.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

AO-54 SUITSAT
Catalog Number:28933
Release Date: February 3,2006

Status: Non-operational
Modes : FM Voice Telemetry/Greetings
FM SSTV

Callsign: RS0RS
Downlink: 145.990 FM

Currently on the amsat-bb, there is a geussing game going on about when Suitsat will re-enter the atmosphere.

Official webpage: http://www.suitsat.org
[05012006]
=====
NCUBE-2
Catalog Number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305

2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog Number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 FM 67Hz CTCSS
Voice Downlink: 2401.835 FM
Packet Up/Downlink: 437.250 9k6 packet
Packet Downlink 2401.835 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01292006]
=====
TO-31 TMSAT-1
Catalog Number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink: 145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
PO-28 POSAT-1
Catalog Number: 22829
Launch Date: September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 429.950

Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html.
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012006]
=====
AO-10 OSCAR 10
Catalog number: 14129

Launched: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB
Beacon: 145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: Downlink only

Uplink: 145.875 145.900 145.925 145.950 MHz FM (1200-baud)
Downlink: 435.808 MHz PSK
Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01012006]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB
Beacon: 29.408 MHz
Robot: 29.454 MHz
[05232004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB
Beacon: 145.860 MHz
Robot: 145.908 MHz
[05232004]
=====
UO-14 UoSAT-3
Catalog number: 20437

```
Launched: January 22, 1990

Status: Non-operational

Uplink 145.975 MHz FM
Downlink 435.070 MHz FM
[05092004]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink: 145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM
Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01092005]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational?

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB
Beacon: 29.352 MHz (intermittent)
SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplink: 145.84 145.86 145.88 145.90 MHz FM
(using 1200-baud Manchester FSK)
CW downlink: 437.125 MHz
Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)
Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[05232004]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990
```

Status: Non-Operational

Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[08152004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM
Broadcast Callsign: HL01-11
BBS: HL01-12

Jim, AA7KC, reports that KO-23's downlink transmitter continues in a non-operational status.
[05092004]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM (9600-baud FSK)
Downlink: 436.500 MHz FM
Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm

[ANS-WSR has no further information]
[05232004]

=====

SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

STatus: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz and 145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[08082004]

=====

UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlink: 437.025 MHz 437.400 MHz
Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[05092004]

=====

AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

```
Uplink V-band   145.840 - 145.990 MHz CW/LSB
       U-band   435.550 - 435.800 MHz CW/LSB
       L1-band 1269.250 - 1269.500 MHz CW/LSB
       L2-band 1268.325 - 1268.575 MHz CW/LSB
Downlink: S2-band 2401.225 - 2401.475 MHz CW/USB
          K-band 24,048.010 - 24,048.060 MHz CW/USB
Beacon:   2401.323
         24,048.035
[05232004]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational
Downlink: 437.075 MHz
Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[08152004]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz
Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[08152004]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
call-
sign KE6QMD, as per the user service agreement located at the following
URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
```

MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Operational

Uplink: 145.850 or 145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz
Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[11202005]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink 435.275 1200-baud AFSK
Downlink 145.825 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink: Downlink 145.825 MHz FM 1200 Baud AFSK
Beacon: 2401.220 MHz
[05012006]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-184.S4
WSR 184 Part 4 07/03/2006

AMSAT NEWS SERVICE BULLETIN 184.S4 FROM AMSAT HQ
SILVER SPRING, MD, July 03, 2006
TO ALL RADIO AMATEURS
BID: $ANS-1.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE PROPOSED FOR LAUNCH AT THIS TIME:

PHASE 3E ?O-??
Catalog Number:
Proposed Launch Date: Early/Mid 2007

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/
[ANS-WSR wishes to thank William Leijenaar, PE1RAH for this week's report]
[04242006]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)

* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/amsat/listserv/menu.html

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

From 1439003695568701309
X-Google-Thread: 10e8ad,48315e81115e6aef,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news3.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!wns13feed!worldnet.att.net!207.217.77.102!elnk-nf2-pas!
newsfeed.earthlink.net!stamper.news.pas.earthlink.net!
newsread3.news.pas.earthlink.net.POSTED!46041641!not-for-mail
From: "JoAnne Maenpaa" <wb9jej_no-spam@earthling.com>
Newsgroups: rec.radio.amateur.space
Subject: ANS-183 AMSAT News Service Weekly Bulletins
Lines: 299
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <LYQqg.3580$cd3.3517@newsread3.news.pas.earthlink.net>
Date: Wed, 05 Jul 2006 15:32:59 GMT
NNTP-Posting-Host: 66.167.221.239
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread3.news.pas.earthlink.net 1152113579 66.167.221.239 (Wed, 05 Jul 2006 08:32:59 PDT)
NNTP-Posting-Date: Wed, 05 Jul 2006 08:32:59 PDT

Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news2.google.com rec.radio.amateur.space:279

AMSAT NEWS SERVICE
ANS-183

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

******************** AMSAT 2006 Space Symposium **************************

The AMSAT web team has posted informational pages on the AMSAT web site. You can find the announcement with many links at:
http://www.amsat-org/amsat-new/symposium

Details of the Space Symposium Call for Papers can be viewed at:
http://www.amsat.org/amsat-new/symposium/2006CallForPapers.php

****

In this edition:

* AMSAT Space Symposium Registration is Now Online
* Five Hams in Space - Three Will Remain On-Orbit With ISS
* Astronaut Still Seeks QSLS For DXCC From Space
* New Jersey 7th Grader Helps with ARISS QSO
* Old US Satellite Passes Space Station Without Incident
* SMART-1 Lunar Mission Prepares for the End

SB SAT @ AMSAT $ANS-183.01
AMSAT Space Symposium Registration is Now Online

AMSAT News Service Bulletin 183.01
From AMSAT HQ SILVER SPRING, MD.
July 2, 2006
To All RADIO AMATEURS
BID: $ANS-183.01

Online registration and hotel reservation for the 2006 AMSAT Space Symposium has been posted to the AMSAT website, and information about the Symposium has been expanded. The 2006 AMSAT Space Symposium will be held October 6, 7 and 8 at the Crowne Plaza in Foster City California in the beautiful San Francisco Bay Area.

Please visit http://www.amsat.org/amsat-new/symposium for additional information and an index to the expanded Symposium web pages.

The expanded information includes:
- Online Registration for the Symposium including banquet menu and tour selections
- Online Hotel Reservations at the AMSAT Discounted Symposium Rate
- Information about the Sunday Trip to NASA Ames
- Information for Exhibitors and Vendors
- A Donated Prizes list of prizes to be awarded during the Symposium
- Symposium Tour Information and Tour Signup
- Enhanced California Tourism information (with links!)
- Sporting events and shopping information
- A Ride Sharing system

For the first time AMSAT is matching up drivers and riders who may be driving to the Symposium. Sharing a ride is a wonderful way to ease parking congestion and expenses, while sparing the air. You can sign up as a local participant who is driving in each day, or as a long distance driver coming from Southern California and surrounding states. Please visit the "Ride Sharing" link from the main Symposium page for additional information.

This year AMSAT will provide a limited amount of space for vendors and exhibitors. Exhibitors and demonstrations will have space in a breakout room adjacent to the main Symposium room, and vendors will be located in the foyer outside the Symposium room. Vendor space is limited, so space will be reserved for vendors donating prizes for the Symposium first. Please see the "Exhibitors and Vendors" link from the main Symposium page.

In addition to online registration you can download the registration form in PDF format and mail it in. Registration forms will also be included in the next edition of the AMSAT Journal and with AMSAT Board election ballots.

Welcome to the Bay Area!

[ANS thanks Emily Clarke, N1DID, Symposium Chairperson, for the above information]

/EX

SB SAT @ AMSAT $ANS-183.02
Five Hams in Space - Three Will Remain On-Orbit With ISS

AMSAT News Service Bulletin 183.02
From AMSAT HQ SILVER SPRING, MD.
July 2, 2006
To All RADIO AMATEURS
BID: $ANS-183.02

When the STS-121 Mission is launched it will have three radio amateurs aboard. These three Discovery crew radio amateurs will join with the two hams already aboard the ISS for a total of five radio amateurs in space. The radio amateurs aboard Discover are Mission Specialists Lisa Nowak, KC5ZTB, Stephanie Wilson, KD5DZE, and European Space Agency (ESA) astronaut and Mission Specialist Thomas Reiter, DF4TR.

Reiter will remain on the ISS as part of the Expedition 13 and 14 crews joining with Expedition 13 Commander and cosmonaut Pavel Vinogradov, RV3BS, and Flight Engineer and NASA Station Science Officer Jeff Williams, KD5TVQ.

The Discovery Shuttle carries no Amateur Radio equipment on this mission.

[ANS thanks ARISS and the ARRL for the above information]

/EX

SB SAT @ AMSAT $ANS-183.03
Astronaut Still Seeks QSLS For DXCC From Space

AMSAT News Service Bulletin 183.03
From AMSAT HQ SILVER SPRING, MD.
July 2, 2006
To All RADIO AMATEURS
BID: $ANS-183.03

International Space Station Expedition 12 Commander Bill McArthur, KC5ACR, reports logging 130 DXCC entities from NA1SS while on orbit, but the DX QSLs have been slow in coming. To date McArthur has only about one-third of the entities confirmed for a special DXCC from space.

DX stations that worked McArthur at NA1SS during Expedition 12 are urged to send QSL cards to:

ARRL
ARISS QSL -- Exp 12
225 Main St.
Newington, CT 06111-1494 USA

DX stations may also QSL via the routes on the Amateur Radio on the International Space Station (ARISS) Web site:
http://www.rac.ca/ariss/oindex.htm#QSL's

They will take longer to be counted. If you've already sent a card "via the buro," ARISS asks that you send another to the ARRL ARISS QSL address.

As of June 20, McArthur has these entities confirmed from NA1SS: Alaska, Antarctica, Argentina, Australia, Belgium, Brazil, Chile, Colombia, England, France, Gibraltar, Hawaii, India, Israel, Japan, Mariana Is, Mexico, the Netherlands, New Zealand, Panama, Puerto Rico, South Cook Is, South Africa, Spain, Switzerland, Thailand, Turkey, United States, Uruguay and Venezuela.

[ANS thanks The ARRL Letter, Vol. 25, No. 25 for the above information]

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SB SAT @ AMSAT $ANS-183.04
New Jersey 7th Grader Helps with ARISS QSO

AMSAT News Service Bulletin 183.04
From AMSAT HQ SILVER SPRING, MD.
July 2, 2006
To All RADIO AMATEURS
BID: $ANS-183.04

Nick, KC2ONP, a seventh grader at New Providence Middle School, served as the control operator during the June 5 ARISS school contact with the Salt Brook Elementary School in New Providence, New Jersey. All of the Salt Brook students who participated in the contact with NA1SS are members of the Salt Brook Statics, a ham radio club at the school mentored by the New Providence Amateur Radio Club.

An audience of some 600 fellow students, parents, faculty, dignitaries and news media packed the school's auditorium for the contact. Another 300 students at Liberty Middle School in West Orange, New Jersey listened in.

ARISS is a nine-nation educational outreach with US participation by ARRL, AMSAT and NASA.

[ANS thanks ARISS and the ARRL for the above information]

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SB SAT @ AMSAT $ANS-183.05
Old US Satellite Passes Space Station Without Incident

AMSAT News Service Bulletin 183.05
From AMSAT HQ SILVER SPRING, MD.
July 2, 2006
To All RADIO AMATEURS
BID: $ANS-183.05

An old U.S. Air Force spy satellite named Hitch Hiker 1 passed close but harmlessly by the International Space Station, a top ballistics expert with Russia's mission control center told the RIA Novosti news service June 27.

Hitch Hiker 1, launched aboard a Thor-Agena D rocket from Vandenberg Air Force Base, Calif., on June 27, 1963, closed within 1,000 feet of the space station at a combined speed of more than 32,000 miles (52,000 kilometers) an hour.

Hitch Hiker, whose mission remains classified, was thought to be designed to detect Soviet Union nuclear weapons tests from its polar orbit.

"Our calculations have been correct - the object flew past the station," Nikolai Ivanov told the news service, adding the ISS crew had not been instructed to try to photograph Hitch Hiker, because it was moving at such a high speed.

"The speed was more than 14 kilometers (9 miles) per second, and it was impossible to record it," Ivanov said. He noted that the U.S. Space Catalog contains more than 10,000 various objects of different sizes currently in orbit around Earth - including the space station.

"Only 10 percent of these objects, each of which has a number, are operable spacecraft, and the rest are just space garbage," Ivanov said.

He added, however, that if mission controllers' calculations had been incorrect, the satellite could have pierced or several damaged the station. He said Russian and NASA systems had been monitoring the encounter.

"The ISS had a special procedure, developed in advance, for emergency maneuvers to swerve away from space garbage," Ivanov said. "The ISS has used six such maneuvers in its history - four with the help of Progress s pacecraft and two using shuttles."

[ANS thanks Space Daily Express for the above information]

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SB SAT @ AMSAT $ANS-183.06
SMART-1 Lunar Mission Prepares for the End

AMSAT News Service Bulletin 183.06
From AMSAT HQ SILVER SPRING, MD.
July 2, 2006
To All RADIO AMATEURS
BID: $ANS-183.06

After sixteen months orbiting the Moon, ESA's lunar mission is preparing for the end of its scientific exploration. On 19 June, SMART-1 mission controllers initiated a 17-day series of manoeuvres aimed at positioning the spacecraft to enhance science data return as the mission winds down.

SMART-1, Europe's successful first Moon mission, is scheduled to end on 3 September 2006, impacting on the Moon's surface in a disposal plan similar to that of many earlier lunar missions.

The recently started manoeuvre campaign aims to avoid having the spacecraft intersect with the Moon at a disadvantageous time from the scientific point of view, as it would have naturally about 17 August if left alone.

Because the spacecraft is out of fuel the use of the electric propulsion system (the ion engine) had to be ruled out. "The manoeuvre strategy consists of a series of reaction-wheel off-loadings combined with about three hours of intermittent thrust centred at apolune (point of furthest distance from the Moon) during the next 74 orbits," said Octavio Camino, Spacecraft Operations Manager at ESOC.

The off-loading consists of braking a set of spinning wheels inside the spacecraft, which has the effect of transferring angular momentum from the wheels to the spacecraft and hence changing its velocity.

"We use asymmetric firing of the attitude thrusters to produce a small velocity variation aligned with the flight direction. This will change the orbit by an accumulative effect," added Camino.

This manoeuvre campaign along with a few trim manoeuvres will make it possible to predict the exact time and location for the SMART-1 impact on September 3 with more accuracy. Projections based on the current orbit indicated that the spacecraft, if left as is, would impact the Moon on the far side, away from ground contact and visibility. The new location is on the Moon's near-side, at mid-southern latitudes.

[ANS thanks ESA and UniverseToday.com for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM

From -4333904299782420255
X-Google-Thread: 10e8ad,13587f48da1a10ab,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!postnews.google.com!s13g2000cwa.googlegroups.com!not-for-mail
From: Marklinbuyer@gmail.com
Newsgroups: rec.radio.amateur.space
Subject: New Swiss Antenna system...
Date: 10 Jul 2006 20:35:11 -0700
Organization: http://groups.google.com
Lines: 85
Message-ID: <1152588911.521207.236900@s13g2000cwa.googlegroups.com>
NNTP-Posting-Host: 71.208.15.1

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Mime-Version: 1.0
Content-Type: text/plain; charset="iso-8859-1"
X-Trace: posting.google.com 1152588917 16915 127.0.0.1 (11 Jul 2006 03:35:17 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Tue, 11 Jul 2006 03:35:17 +0000 (UTC)
User-Agent: G2/0.2
X-HTTP-UserAgent: Mozilla/5.0 (Windows; U; Windows NT 5.1; en-US; rv:1.8.0.4)
Gecko/20060508 Firefox/1.5.0.4,gzip(gfe),gzip(gfe)
Complaints-To: groups-abuse@google.com
Injection-Info: s13g2000cwa.googlegroups.com; posting-host=71.208.15.1;
   posting-account=QirA4A0AAAAx1-mNr0TBzl1in5OA8rnz
Xref: g2news2.google.com rec.radio.amateur.space:280
```

Here is a very interesting article from SwissInfo.

A zeppelin will replace all of the terrestrial mobile phone antennas in Switzerland - if a Swiss inventor has his way.

Should Kamal Alavi's project for the high-tech airship take wing, the worlds of mobile telephony and data transmission would be turned on their heads.

Not only would the technology, called High Altitude Platform Systems (Haps), make the current 1,000 earth-bound antennas redundant, it would drastically reduce radiation.

A Swiss of Iranian extraction, Alavi is a former aerospace engineer turned entrepreneur who heads his own firm, Stratxx. Together with a team of 50 scientists, he is preparing a 2007 test run of the airship, which he has named the "X station".

Thanks to a GPS steering system developed by the Swiss Federal Institute of Technology, the 60-meter long helium-filled balloon will remain stationary at 21 kilometres above the earth.

A small-unmanned aircraft outfitted with a mobile phone antenna and other devices for transmitting digital data will be attached to the zeppelin. The X station has been equipped with giant propellers to help counter the almost constant buffeting from the wind.

Solar panels will supply the energy to propel the airplane and antenna. Underneath will be a platform containing technical equipment, conceived by Ruag, the large Swiss aerospace concern.

Radiation

"Transmitting on earth causes lots of radiation, because you have to penetrate countless buildings," Alavi says, arguing that phone connections are more reliable when transmitted from above because the signals are unobstructed by manmade or natural objects.

And "spot beam" antennas developed at Lausanne will allow radiation to be adjusted according to usage, regions with little activity receiving relatively less.

But Switzerland's largest mobile telephone operator, Swisscom believes not all of the technological hurdles have been overcome.

"This project cannot replace the present mobile telephone system," spokesman Sepp Huber told swissinfo.

The X station would not be limited to forwarding mobile telephone signals, but would also be capable of handling the radio, television and internet needs of entire nations.

Alavi believes that his project is also economical. He estimates that a Haps airship will cost no more than SFr40 million ($32 million).

In comparison, a single mobile phone antenna costs about SFr300,000 while a communications satellite starts at SFr600 million.

Alavi says the X stations are conceived to be low maintenance. In the event of a defect, the aircraft will be decoupled from the airship and returned to earth, much like a mini-space shuttle.

The project is now in a key phase. Solar cells are being tested at an altitude of 30 kilometres, and final preparations are underway for the launch of the first airship into the stratosphere. The entire system should be ready for testing a year from now.

The potential is enormous if Stratxx manages to be the first to fly with this new technology. About 20 Haps would be required to cover Europe alone while Africa would need twice as many.

swissinfo, Etienne Strebel

So, has anyone or group tried to get a couple ham antennas on this thing???

Bill

http://MarklinBuyer.com
I buy Marklin model trains

From 1992707527214988182
X-Google-Thread: 10e8ad,daffaea251227b0a,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news3.google.com!newshub.sdsu.edu!elnk-nf2-pas!newsfeed.earthlink.net!stamper.news.pas.earthlink.net!

newsread4.news.pas.earthlink.net.POSTED!46041641!not-for-mail
From: "JoAnne Maenpaa" <wb9jej_no-spam@earthling.com>
Newsgroups: rec.radio.amateur.space
Subject: ANS-190 AMSAT News Service Weekly Bulletin
Lines: 227
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <pSWsg.3340$vO.2319@newsread4.news.pas.earthlink.net>
Date: Tue, 11 Jul 2006 23:53:57 GMT
NNTP-Posting-Host: 68.164.231.251
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread4.news.pas.earthlink.net 1152662037 68.164.231.251 (Tue, 11 Jul 2006 16:53:57 PDT)
NNTP-Posting-Date: Tue, 11 Jul 2006 16:53:57 PDT
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news2.google.com rec.radio.amateur.space:281

AMSAT NEWS SERVICE
ANS-190

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* AO-51 July Schedule
* Industry Software Donatations to AMSAT
* New AO-51 Operations Committee Members
* ARISS Status - 03 July 2006

SB SAT @ AMSAT $ANS-190.01
AO-51 July Schedule

AMSAT News Service Bulletin 190.01
From AMSAT HQ SILVER SPRING, MD.
July 9, 2006
To All RADIO AMATEURS
BID: $ANS-190.01

Tenative and subject to change:

July 1 to July 31

FM Repeater

Downlink 435.300 mHz FM
Uplink 145.920 mHz FM with 67 hz Tone

Digital / PBBS
Downlink 435.150 mHz FM 9k6 Digital
Uplink 145.860 mHz FM 9k6 Digital
PBBS Active
Telemetry Downlink and Digipeater Active (No Unattended Digipeater Ops Please)

Drew Glasbrenner, KO4MA, explains that the current schedule for July indicates AO-51 will be in the normal voice and digital configuration for the entire month. This schedule is, as stated, tentative and subject to change. Due to real world obligations, the command opportunities this month were limited and uncertain and it was decided that the best solution would be to provide a solid schedule that would always provide the standard V/U voice repeater on the 435.300. If the chance presents itself, we may experiment with a few new combinations on the 435.150 downlink, using a L band digital or voice uplink. These experimental modes will be announced via the web page as well as amsat-bb in advance of any mode changes. L uplinks and S downlinks have been heavily requested the last 2 months, and the Operations Committe has taken notice and will include these modes in future schedules.

The digipeater is now on again and will remain on as long as it does not interfere with the PBBS users. While the Operations Committee assesses how this impacts the PBBS users, it is requested that there be no unattended digipeater operations. Be aware that AO-51, unlike previous PACSATS, only has one uplink frequency for the PBBS, and runs about 0.3 watts on the digital transmitter during the longer eclipse season (which is now). Also, the earlier releases of TLMEcho do not display the digi status correctly.

The Operations Committee would appreciate feedback on how well it works. A lack of feedback will probably be viewed as a lack of interest, so everyone is encouraged to report their success or failure.

Please remember to submit your mode requests and special events well in advance of your event to ao51-modes@amsat.org for consideration.

[ANS thanks Drew, KO4MA, for the above information]

/EX

SB SAT @ AMSAT $ANS-190.02
Industry Software Donatations to AMSAT

AMSAT News Service Bulletin 190.02
From AMSAT HQ SILVER SPRING, MD.
July 9, 2006
To All RADIO AMATEURS
BID: $ANS-190.02

Bob McGwier, N4HY, AMSAT Vice President Engineering, reports that AMSAT has recently been very successful in acquiring donations which will greatly benefit the Eagle Team in their design and analysis tasks. Bob said, "I wanted to bring to the attention of the Board and our members some of our AMSAT President's recent activities."

Rick Hambly, W2GPS, AMSAT President has been primarily responsible for getting us university/educational status with several organizations including a donation from Texas Instruments of their Code Composer Studio Platinum Edition software valued at $10,785 USD and Cadence Design Systems' OrCAD(R) PCB Designer with PSpice and PSpice(R) Advanced Analysis valued at $185,915 USD.

Other significant donations are also being developed and hopefully can be announced shortly.

Bob continued, "We owe Rick a thank you for his leadership on this. Every time I have asked him to try, he has, and on all attempts he has HIT A HOME RUN".

Rick concluded, "AMSAT is very appreciative of the donations we're receiving from such major players in the industry. With these donations and the continuing financial support of our members the momentum within the Eagle Project is growing every day."

[ANS thanks Bob, N4HY and Rick, W2GPS for the above information]

/EX

SB SAT @ AMSAT $ANS-190.03
New AO-51 Operations Committee Members

AMSAT News Service Bulletin 190.03
From AMSAT HQ SILVER SPRING, MD.
July 9, 2006
To All RADIO AMATEURS
BID: $ANS-190.03

Drew Glassbrenner, KO4MA, recently announced several new members have joined the AO-51 Operations Committee. Drew said, "I would like to thank the following new members for volunteering to help with the committee:

WD9EWK/VA7EWK Patrick Stoddard
N8MH Mark Hammond
OZ1MY Ib Christoffersen
VK5HI Colin Hurst"

These volunteers will be joining existing committee members Drew Glasbrenner, KO4MA, and Mike Kingery, KE4AZN.

Drew added, "Personally I'd like to thank Roy Welch, W0SL, and Clare

Fowler, VE3NPC, for their service with the committee over the past many months."

Drew continued, "Some of the goals I have set out for the committee and hope to accomplish are; acknowledging every email sent to the ao51-modes address, having a completed schedule posted 2 weeks before the beginning of the month, improved support of large special events such as JOTA and Kids Day, and better publication of AO-51 related information via the amsat-bb, webpage, and AMSAT Journal."

Suggestions and offers of help are always welcome via the ao51-modes@amsat.org address.

[ANS thanks Drew, KO4MA, for the above information]

/EX

SB SAT @ AMSAT $ANS-190.04
ARISS Status - 03 July 2006

AMSAT News Service Bulletin 190.04
From AMSAT HQ SILVER SPRING, MD.
July 9, 2006
To All RADIO AMATEURS
BID: $ANS-190.04

1. ARISS-Kuwait Contact Successful

The first ARISS contact with children in Kuwait took place on Wednesday, June 28. Eleven students at the Kuwait Scientific Center in Salmiyah spoke to Jeff Williams, KD5TVQ, via the telebridge station WH6PN in Hawaii. Twenty-two questions were asked as an audience of approximately forty people gathered to witness the contact. The event received extensive media coverage which included the following: Al-Hadaf, Al-Yaqaza and Al-Nahdha (Weekly Arabic magazines), The Daily Star (Daily Arabic Magazine), Al-Qabas and Al-Rai Al-Am (Local daily newspapers), Arab Times and Kuwait Times (local daily English newspapers), Layalina (Arabic bi-monthly magazine), Kuwait National Television for an evening program, Kuwait National TV Children's Program, KUNA (Kuwait News Agency) and Kuwait Science Club Media. To view KUNA's news coverage on the event, see:

http://www.kuna.net.kw/home/Story.aspx?Language=en&DSNO=881386
English version no pictures.
http://www.kuna.net.kw/home/Story.aspx?Language=ar&DSNO=881359
Arabic version with pictures.

The audio from this contact was fed into the EchoLink AMSAT (101 377) and JK1ZRW (277 208) servers and received 15 connections, of which 2 were repeaters, from 7 countries. IRLP Discovery Reflector 9010 had 3 connections from Canada. The audio was also webcast by Verizon Conferencing and through the Scientific Center Kuwait.

2. ARISS International Team Meeting Held

The monthly ARISS International Team meeting was held on June 27. Topics of discussion included the ARISS International face to face meeting to be held in San Francisco in October, school contacts with ESA astronaut Thomas Reiter, DF4TR, and the work toward an amateur radio license for Japanese space visitor, Dice-K Enomoto, scheduled to fly this fall. Minutes will be posted to the ARISS website in the near future.

3. AMSAT and ARISS-International Meetings, October 2006

The AMSAT-NA Annual Meeting and Space Symposium and the ARISS International Meeting will be held October 5 - 10, 2006 in San Francisco. Online registration in now available. See:
http://www.amsat.org/amsat-new/symposium/

[ANS thanks Carol, KB3LKI for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73, This week's ANS Editor,
Lee McLamb, KU4OS

```
From -3153407871104400057
X-Google-Thread: 10e8ad,6ca2418c63fc79cf,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news3.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!wns14feed!worldnet.att.net!207.217.77.102!elnk-nf2-pas!
newsfeed.earthlink.net!stamper.news.pas.earthlink.net!
newsread4.news.pas.earthlink.net.POSTED!46041641!not-for-mail
From: "JoAnne Maenpaa" <wb9jej_no-spam@earthling.com>
Newsgroups: rec.radio.amateur.space
Subject: WSR-191 AMSAT Weekly Satellite Report
Lines: 995
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <BSWsg.3341$vO.96@newsread4.news.pas.earthlink.net>
```

Date: Tue, 11 Jul 2006 23:54:09 GMT
NNTP-Posting-Host: 68.164.231.251
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread4.news.pas.earthlink.net 1152662049 68.164.231.251 (Tue, 11 Jul 2006 16:54:09 PDT)
NNTP-Posting-Date: Tue, 11 Jul 2006 16:54:09 PDT
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news2.google.com rec.radio.amateur.space:282

This report is organized into 4 parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites

SB SAT @ AMSAT W8ISS ANS-191.S1
WSR 191 Part 1 07/10/2006

AMSAT NEWS SERVICE BULLETIN 191.S1 FROM AMSAT HQ
SILVER SPRING, MD, July 10, 2006
TO ALL RADIO AMATEURS
BID: $ANS-191.S1

VO-52 HAMSAT
Catalog Number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/V - Indian Transponder

Proposed frequencies:

Indian Transponder:
Uplink : 435.220 MHz to 435.280 MHz LSB/CW
Downlink: 145.870 MHz to 145.930 MHz USB/CW
Beacon : 145.859330 MHZ CW

Dutch Transponder:
Uplink : 435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW
Beacon : 145.860MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsat.in/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is
active. Each transponder has a different beacon.
[04242006]
=====

AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Current Mode(s): FM Repeater - V/U TONE
Digipeater - PBBS 9K6

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.880 MHZ FM
145.880 MHz USB
145.920 MHz FM 67Hz PL tone
1268.700 MHz FM 67Hz PL tone
Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast Protocol
1268.700 mhz FM, 9k6 PBP Digital
Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Mode schedule for July 2006 according to Drew, KO4MA:

July 1 to July 31

FM Repeater
Downlink 435.300 mHz FM
Uplink 145.920 mHz FM with 67 hz Tone

Digital / PBBS
Downlink 435.150 mHz FM 9k6 Digital
Uplink 145.860 mHz FM 9k6 Digital
PBBS Active
Telemetry Downlink Active

Official Webpage: http://www.amsat.org/amsat-new/echo/
[07102006]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

```
Uplink: 145.850 MHz (67.0 Hz PL tone) (See below for operating
procedures)
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The
order of operation is thus: (allow for Doppler as necessary)
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute
timer
   on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the
repeater
   on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset
the 10
   minute timer.
[04172006]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: OPERATIONAL

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplink: 145.850 145.870 145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

unOfficial Webpage: http://www.amsat.org/amsat/sats/n7hpr/fo29.html
[11132005]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993
```

Status: Operational

Uplink: 145.850 MHz FM
Downlink: 436.795 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[01012006]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational depending on amount of Sunlight
Current Reported mode: Mode-A

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
   432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
  145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
  145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz
  145.972 MHz
  435.100 MHz
 2304.100 MHz

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php
The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
AO-7 users are requested to log their contacts and observations about
AO-7, especially any unexpected mode changes.
AO-07 telemetry software webpage:
http://www.qsl.net/k3tz/files/K3TZ_AO-07_Telemetry_Decoder_0.5.zip

Please keep your power low! For additional information please read the
AO-7
Usage Guidelines on the AO-7 Log and Resource Site located at:
http://www.planetemily.com/ao7
[04242006]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: OFF
Digipeater: OFF

The current crew is:
Commander: Pavel Vinogradov, RV3BS
Flight Engineer: Jeff Williams, KD5TVQ

Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Russian: RS0ISS, RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

CURRENTLY ALL AMATEUR TRANSMITTERS ARE TURNED OFF UNTIL ALL SPACEWALKS
ARE
DONE.
WATCH NASA SELECT OR MONITOR THE AMSAT-BB FOR MORE INFO DURING THIS
SHUTTLE
MISSION.

Official Webpage: http://www.rac.ca/ariss
Official Fan club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.
[07102006]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-191.S2
WSR 191 Part 2 07/10/2006

AMSAT NEWS SERVICE BULLETIN 191.S2 FROM AMSAT HQ
SILVER SPRING, MD, July 10, 2006
TO ALL RADIO AMATEURS

BID: $ANS-191.S2

CO-58 XI-V
Catalog Number: 28895
Launch Date: October 27, 2005

Status: Operational only within range of Ground station in Japan

Telemetry Downlink: 437.345MHz - FSK 1200bps using AFK protocol
Beacon Downlink: 437.465MHz - CW about 50 WPM

Callsign: JQ1YGW

Oficial Webpage: http://www.space.t.u-tokyo.ac.jp/gs/satinfo-e.html#xi5
Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
[03122006]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: Packet - OFF
Digipeater: OFF

The current crew is:
Commander: Pavel Vinogradov, RV3BS
Flight Engineer: Jeff Williams, KD5TVQ

Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Russian: RS0ISS, RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

CURRENTLY ALL AMATEUR TRANSMITTERS ARE TURNED OFF UNTIL ALL SPACEWALKS
ARE
DONE.
WATCH NASA SELECT OR MONITOR THE AMSAT-BB FOR MORE INFO DURING THIS
SHUTTLE
MISSION.

Official Webpage: http://www.rac.ca/ariss
Official Fan club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is NOT translated from Russian and posted.
[07102006]
=====
PCSAT-2
Catalog Number: 25544
Launch Date: August 1, 2005

Activated: August 3, 2005
Status: Operational
Current Mode: OFF

Digital Downlink: 435.275 Mhz
Digital Uplink: 145.825 Mhz

PSK-31 Downlink: 435.275 Mhz
PSK-31 Uplink: 29.401 Mhz

CALLSIGN: pcsat2

Official Webpage: http://web.usna.navy.mil/~bruninga/pcsat2.html
PCSAT2 APRS Packet page: http://www.findu.com/cgi-bin/pcsat2.cgi
aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/

CURRENTLY ALL AMATEUR TRANSMITTERS ARE TURNED OFF UNTIL ALL SPACEWALKS
ARE
DONE.
WATCH NASA SELECT OR MONITOR THE AMSAT-BB FOR MORE INFO DURING THIS
SHUTTLE
MISSION.
[07102006]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Mode(s): FM Repeater - V/U TONE
                Digipeater - ON 9K6

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.880 MHZ FM
145.880 MHz USB
145.920 MHz FM 67Hz PL tone
1268.700 MHz FM 67Hz PL tone
Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast Protocol
1268.700 mhz FM, 9k6 PBP Digital
Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Mode schedule for July 2006 according to Drew, KO4MA:

Tenatively, and subject to change:

July 1 to July 31

FM Repeater
Downlink 435.300 mHz FM
Uplink 145.920 mHz FM with 67 hz Tone

Digital / PBBS
Downlink 435.150 mHz FM 9k6 Digital
Uplink 145.860 mHz FM 9k6 Digital
PBBS Active
Telemetry Downlink Active

Official Webpage: http://www.amsat.org/amsat-new/echo/
[07102006]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Operational

General Usage Uplink/Downlink:145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[04172006]
=====
CO-55 CUTE-1.7
Catalog number: 28941
Launched: June 30,2003

Status: Operational

Uplink: ?
Downlink: 437.3850 CW
          437.4700 1200 FM ax25 or SRLL (ACTIVE only near Japan ?)
Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[05012006]
=====
GO-32 TECHSAT-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks: 145.850 FM
         145.890 FM
         145.930 FM
        1269.700 FM
        1269.800 FM
        1269.900 FM
Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[05012006]
=====
RS-22 Mozhayets 4
Catalog Number: 27939
Launch Date: September 27, 2004

Status: Operational

Beacon: 435.3520 MHz CW
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Semi-operational, the digipeater command is on and open for
APRS users.

Uplink: 145.900 FM
145.920 FM
145.940 FM
145.960 FM
(using 1200-baud Manchester FSK)
Downlink: 437.026 MHz SSB (1200-baud PSK)
Mode-S Beacon: 2401.1428 MHz

Mode and Antenna Polarization:
U: RC 437.050 MHz RHCP
PSK 437.025 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[04172006]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational?

Telemetry Downlink: 145.826 MHz. FM (1200-baud AFSK).
approx. 10 days ON, 10 days OFF
Mode-S Beacon: 2401.500 MHz. ... OFF
UHFBeacon: 435.025 MHz. ... OFF

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Official webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[05292006]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-191.S3
WSR 191 Part 3 07/10/2006

AMSAT NEWS SERVICE BULLETIN 191.S3 FROM AMSAT HQ
SILVER SPRING, MD, July 10, 2006
TO ALL RADIO AMATEURS
BID: $ANS-191.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

AO-54 SUITSAT
Catalog Number:28933
Release Date: February 3,2006

```
Status: Non-operational
Modes : FM Voice Telemetry/Greetings
 FM SSTV

Callsign: RS0RS
Downlink: 145.990 FM

Currently on the amsat-bb, there is a geussing game going on about when
Suitsat will re-enter the atmosphere.

Official webpage: http://www.suitsat.org
[05012006]
=====
NCUBE-2
Catalog Number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency:  437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog Number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 FM 67Hz CTCSS
Voice Downlink: 2401.835 FM
Packet Up/Downlink: 437.250 9k6 packet
Packet Downlink 2401.835 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01292006]
=====
TO-31 TMSAT-1
Catalog Number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink:   145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
```

```
[05012006]
=====
PO-28 POSAT-1
Catalog Number: 22829
Launch Date: September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 429.950

Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html.
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012006]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launched: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB
Beacon: 145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: Downlink only

Uplink: 145.875 145.900 145.925 145.950 MHz FM (1200-baud)
Downlink: 435.808 MHz PSK
Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01012006]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991
```

```
Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB
Beacon: 29.408 MHz
Robot: 29.454 MHz
[05232004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB
Beacon: 145.860 MHz
Robot: 145.908 MHz
[05232004]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink 145.975 MHz FM
Downlink 435.070 MHz FM
[05092004]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink: 145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM
Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01092005]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational?

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB
Beacon: 29.352 MHz (intermittent)
SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
```

=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplink: 145.84 145.86 145.88 145.90 MHz FM
(using 1200-baud Manchester FSK)
CW downlink: 437.125 MHz
Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)
Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[05232004]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[08152004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM
Broadcast Callsign: HL01-11
BBS: HL01-12

Jim, AA7KC, reports that KO-23's downlink transmitter continues in a non-operational status.
[05092004]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM (9600-baud FSK)
Downlink: 436.500 MHz FM
Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm

[ANS-WSR has no further information]
[05232004]
=====
SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

STatus: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz and 145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[08082004]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlink: 437.025 MHz 437.400 MHz
Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web site
at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[05092004]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

```
Uplink V-band   145.840 - 145.990 MHz CW/LSB
       U-band   435.550 - 435.800 MHz CW/LSB
       L1-band 1269.250 - 1269.500 MHz CW/LSB
       L2-band 1268.325 - 1268.575 MHz CW/LSB
Downlink: S2-band 2401.225 - 2401.475 MHz CW/USB
          K-band 24,048.010 - 24,048.060 MHz CW/USB
Beacon:   2401.323
         24,048.035
```

[05232004]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational
Downlink: 437.075 MHz
Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[08152004]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz
Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[08152004]

=====

NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, callsign KE6QMD, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]

=====

MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Operational

Uplink: 145.850 or 145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz
Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[11202005]

=====

AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink 435.275 1200-baud AFSK
Downlink 145.825 9600-baud FSK

(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink: Downlink 145.825 MHz FM 1200 Baud AFSK
Beacon: 2401.220 MHz
[05012006]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-191.S4
WSR 191 Part 4 07/10/2006

AMSAT NEWS SERVICE BULLETIN 191.S4 FROM AMSAT HQ
SILVER SPRING, MD, July 10, 2006
TO ALL RADIO AMATEURS
BID: $ANS-191.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE
PROPOSED FOR LAUNCH AT THIS TIME:

PHASE 3E ?O-??
Catalog Number:
Proposed Launch Date: Early/Mid 2007

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/
[ANS-WSR wishes to thank William Leijenaar, PE1RAH for this week's report]
[04242006]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/amsat/listserv/menu.html

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

From -7488175665220373912

X-Google-Thread: 10e8ad,fdab175946646742,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news1.google.com!news3.google.com!newshub.sdsu.edu!elnk-nf2-pas!newsfeed.earthlink.net!stamper.news.pas.earthlink.net!newsread4.news.pas.earthlink.net.POSTED!46041641!not-for-mail
From: "JoAnne Maenpaa" <wb9jej_no-spam@earthling.com>
Newsgroups: rec.radio.amateur.space
Subject: ANS-192 AO-51 July Schedule Modified to Include L-Band Operations
Lines: 82
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <tVWsg.3345$vO.3308@newsread4.news.pas.earthlink.net>
Date: Tue, 11 Jul 2006 23:57:13 GMT
NNTP-Posting-Host: 68.164.231.251
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread4.news.pas.earthlink.net 1152662233 68.164.231.251 (Tue, 11 Jul 2006 16:57:13 PDT)
NNTP-Posting-Date: Tue, 11 Jul 2006 16:57:13 PDT
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news2.google.com rec.radio.amateur.space:283

SB SAT @ AMSAT $ANS-192.01
AO-51 July Schedule Modified to Include L-Band Operations

AMSAT News Service Bulletin 192.01
From AMSAT HQ SILVER SPRING, MD.
July 11, 2006
To All RADIO AMATEURS
BID: $ANS-192.01

Drew, KO4MA reports on behalf of the AO-51 Operations Committee that, "We've been able to include some L band modes in the AO-51 schedule this month." Here are the details ...

From July 13 to July 17 AO-51 will have L/U digital on the 435.150 transmitter, along with the regular FM repeater on 435.300.

From the July 17 to July 24 AO-51 have a L/U FM repeater on the 435.150 downlink.

Then on July 24 AO-51 will return to the normal V/U digital and voice configuration.

The 435.300 V/U repeater will remain operational all month, and whenever a digital mode is on, the digipeater will be enabled. Please continue to report digi experiences via the ao51-modes@amsat.org email address. If anyone sets up a gateway please let the AO-51 Operations Committee know about that too.

Here's the updated schedule from the webpage:

July 1 to July 13

FM Repeater
Downlink 435.300 mHz FM
Uplink   145.920 mHz FM with 67 hz Tone

Digital / PBBS
Downlink 435.150 mHz FM 9k6 Digital
Uplink   145.860 mHz FM 9k6 Digital
PBBS Active
Telemetry Downlink and Digipeater Active (No Unattended Digipeater Ops Please)

July 13 to July 17

FM Repeater
Downlink 435.300 mHz FM
Uplink   145.920 mHz FM with 67 hz Tone

Digital / PBBS
Downlink: 435.150 mhz FM, 9k6 PBP Digital
Uplink: 1268.700 mhz FM, 9k6 PBP Digital
PBBS Active
Telemetry Downlink and Digipeater Active (No Unattended Digipeater Ops Please)

July 17 to July 24

FM Repeater
Downlink 435.300 mHz FM
Uplink   145.920 mHz FM with 67 hz Tone

FM Repeater
Downlink 435.150 mHz FM
Uplink 1268.700 mHz FM

July 24 to July 31

FM Repeater
Downlink 435.300 mHz FM
Uplink   145.920 mHz FM with 67 hz Tone

Digital / PBBS
Downlink 435.150 mHz FM 9k6 Digital
Uplink   145.860 mHz FM 9k6 Digital
PBBS Active
Telemetry Downlink and Digipeater Active (No Unattended Digipeater Ops Please)

/EX

```
From -6631404970029871618
X-Google-Thread: 10e8ad,188f4b70543ecd34,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news3.google.com!newshub.sdsu.edu!elnk-nf2-pas!
newsfeed.earthlink.net!stamper.news.pas.earthlink.net!
newsread1.news.pas.earthlink.net.POSTED!46041641!not-for-mail
From: "JoAnne Maenpaa" <wb9jej_no-spam@earthling.com>
Newsgroups: rec.radio.amateur.space
Subject: ANS-197 AMSAT News Service Weekly Bulletins
Lines: 252
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <ttNvg.2332$bP5.1927@newsread1.news.pas.earthlink.net>
Date: Thu, 20 Jul 2006 15:40:09 GMT
NNTP-Posting-Host: 66.167.68.182
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread1.news.pas.earthlink.net 1153410009 66.167.68.182 (Thu, 20 Jul
2006 08:40:09 PDT)
NNTP-Posting-Date: Thu, 20 Jul 2006 08:40:09 PDT
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news2.google.com rec.radio.amateur.space:284
```

AMSAT NEWS SERVICE
ANS-197

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* AO-51 Updated schedule
* Field Day Logs Due
* Conference Submissions
* ARISS STATUS
* Satellite Demo a Success

SB SAT @ AMSAT $ANS-197.01
AO-51 Updated Schedule

AMSAT News Service Bulletin 197.01
From AMSAT HQ SILVER SPRING, MD.
July 16, 2006

To All RADIO AMATEURS
BID: $ANS-197.01

Drew, KO4MA, reports:
We've been able to include some L band modes in the AO-51 schedule this month. From the 13th to the 17th we'll have L/U digital on the 435.150 transmitter, along with the regular FM repeater on 435.300. From the 17th to the 24th, we'll have a L/U repeater on the 435.150 downlink. On the 24th it's back to the normal V/U digital and voice configuration.

The 435.300 V/U repeater will remain operational all month, and whenever a digital mode is on, the digipeater will be enabled. Please continue to report digi experiences via the ao51-modes email. If anyone sets up a gateway, please let us know that too.

Here's the updated schedule from the webpage:

July 1 to July 13

FM Repeater
Downlink 435.300 mHz FM
Uplink 145.920 mHz FM with 67 hz Tone

Digital / PBBS
Downlink 435.150 mHz FM 9k6 Digital
Uplink 145.860 mHz FM 9k6 Digital
PBBS Active
Telemetry Downlink and Digipeater Active (No Unattended Digipeater Ops Please)

July 13 to July 17

FM Repeater
Downlink 435.300 mHz FM
Uplink 145.920 mHz FM with 67 hz Tone

Digital / PBBS
Downlink: 435.150 mhz FM, 9k6 PBP Digital Uplink: 1268.700 mhz FM, 9k6 PBP Digital PBBS Active
Telemetry Downlink and Digipeater Active (No Unattended Digipeater Ops Please)

July 17 to July 24

FM Repeater
Downlink 435.300 mHz FM
Uplink 145.920 mHz FM with 67 hz Tone

FM Repeater
Downlink 435.150 mHz FM
Uplink 1268.700 mHz FM

July 24 to July 31

FM Repeater
Downlink 435.300 mHz FM
Uplink 145.920 mHz FM with 67 hz Tone

Digital / PBBS
Downlink 435.150 mHz FM 9k6 Digital
Uplink 145.860 mHz FM 9k6 Digital
PBBS Active
Telemetry Downlink and Digipeater Active (No Unattended Digipeater Ops Please)

[ANS thanks Drew, KO4MA, for the above information]

/EX

SB SAT @ AMSAT $ANS-197.02
Field Day Logs Due

AMSAT News Service Bulletin 197.02
From AMSAT HQ SILVER SPRING, MD.
July 16, 2006
To All RADIO AMATEURS
BID: $ANS-197.02

Just a quick note. Do not forget to turn in your Field Day 2006 results. July 17, 2006 at 11:59 PM Central Time is the deadline for submissions. Do not wait to the last minute and get skipped. So far, there are 18 submissions.

73...bruce

[ANS thanks Bruce, KK5DO, for the above information]

/EX

SB SAT @ AMSAT $ANS-197.03
Conference Submissions

AMSAT News Service Bulletin 197.03
From AMSAT HQ SILVER SPRING, MD.
July 16, 2006
To All RADIO AMATEURS
BID: $ANS-197.03

2006 Microwave Update Conference Submissions
The 2006 Microwave Update Conference will be held on the 20th and 21st of October in Dayton Ohio. We are looking for technical contributions to be included in the Proceedings. Looking for anything of interest to microwave enthusiasts. Short, one pagers with one or two pictures would suffice! Of course, if you have more, or want to give a presentation,

that is fine too! Send me an e-mail or call! Gerd, WB8IFM@AMSAT.org
937-253-3993

[ANS thanks Gerd, WB8IFM, for the above information]

/EX

SB SAT @ AMSAT $ANS-197.04
ARISS STATUS

AMSAT News Service Bulletin 197.04
From AMSAT HQ SILVER SPRING, MD.
July 16, 2006
To All RADIO AMATEURS
BID: $ANS-197.04

ARISS Status
July 10, 2006

1. Hiroshima Contact Successful

On July 4, fifteen children, gathered at the Hiroshima Children's Museum in Hiroshima, Japan, spoke with Jeff Williams, KD5TVQ. The youth asked one question each of the astronaut in front of an audience of approximately 200.   A newspaper provided coverage of the event.

2. Upcoming School Contact

Due to the arrival of STS-121 and related EVA activities, no radio contacts have been scheduled for the coming week. Scheduling of new contacts will continue as soon as possible.

3. ARRL Posts Story on Kuwait Contact

ARRL ran an article on the ARISS-Kuwait contact entitled, "Spacewalk is 'Ultimate Experience,' Astronaut Tells Kuwaiti Students." See:
http://www.arrl.org/news/stories/2006/07/06/100/?nc=1

4. ARRL Articles Cover Shuttle Ham Astronauts

ARRL has been following the July 4 launch and docking of STS-121 which carried three ham astronauts into space. The July 5 story, "Shuttle Discovery Launches to ISS with Three Radio Amateurs Aboard" may be found at:
http://www.arrl.org/

"Five Radio Amateurs Now Aboard the Space Station" may be viewed on:
http://www.arrl.org/news/stories/2006/07/07/100/?nc=1

5. Astronaut Training Status

Michael Lopez-Alegria, KE5GTK, Bob Behnken, KE5GGX, and Nicole Stott, KE5GJN, have tentatively been scheduled for ISS Ham training sessions. Lopez-Alegria is scheduled for a class on July 18, and Behnken and Stott will receive their instruction on July 20. Training will cover basic radio operations and school contacts.

[ANS thanks Carol, KB3LKI for the above information]

/EX

SB SAT @ AMSAT $ANS-197.05
Satellite Demo a Success

AMSAT News Service Bulletin 197.05
From AMSAT HQ SILVER SPRING, MD.
July 16, 2006
To All RADIO AMATEURS
BID: $ANS-197.05

Stefan, VE4NSA and Gerry, VE4GTB reported good success with their AMSAT table and satellite demonstrations during the first week of July at the 43rd International Hamfest at Peace Garden in North Dakota/Manitoba. They also provided amateur radio satellite demonstrations at the Manitoba Space Adventure Camp.

Stefan said, "We had a very busy week and past weekend with two big events. I would like to thank all the stations and operators that made our portable satellite demonstrations such a big success."

With over 160 participants, the campgrounds at the International Peace Garden facility saw a lot of amateur radio activity during this year's hamfest. Stefan continued, "Gerry and I worke dstations on AO-51, SO-50, FO-29 and VO-52 with our portable FT-847 and Gulf Alpha antenna setup."

As a result of their efforts many visitors saw satellite operation in action for the first time. The AMSAT table gave the two plenty of opportunity to talk with folks from the U.S. and Canada about amateur radio in space.

The 1st Manitoba Space Adventure Camp included 29 high school students at the Canadian Forces School for Aerospace Studies. This was the kick-off event for the upcoming Winnipeg CubeSat project. Stefan and Gerry were able to demonstrate live satellite communications and many students are now very interested in obtaining their license.

Stefan concludes with, "All of this would not be possible without the willingness of fellow operators who were talking to us via satellite and engaging the students and hamfest participants. You folks make a demo real and live."

[ANS thanks Stefan, VE4NSA and Gerry, VE4GTB for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73, This week's ANS Editor,
Dee Interdonato, NB2F

From -6066774391413488570
X-Google-Thread: 10e8ad,3bd0fe45fdc9bed8,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news4.google.com!news3.google.com!border1.nntp.dca.giganews.com!nntp.giganews.com!wns13feed!worldnet.att.net!207.217.77.102!elnk-nf2-pas!newsfeed.earthlink.net!stamper.news.pas.earthlink.net!newsread1.news.pas.earthlink.net.POSTED!46041641!not-for-mail
From: "JoAnne Maenpaa" <wb9jej_no-spam@earthling.com>
Newsgroups: rec.radio.amateur.space
Subject: WSR-198 AMSAT Weekly Satellite Report
Lines: 1012
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <vtNvg.2333$bP5.1560@newsread1.news.pas.earthlink.net>
Date: Thu, 20 Jul 2006 15:40:11 GMT
NNTP-Posting-Host: 66.167.68.182
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread1.news.pas.earthlink.net 1153410011 66.167.68.182 (Thu, 20 Jul 2006 08:40:11 PDT)
NNTP-Posting-Date: Thu, 20 Jul 2006 08:40:11 PDT
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news2.google.com rec.radio.amateur.space:285

This report is organized into 4 parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites

SB SAT @ AMSAT W8ISS ANS-198.S1
WSR 198 Part 1 07/17/2006

AMSAT NEWS SERVICE BULLETIN 198.S1 FROM AMSAT HQ
SILVER SPRING, MD, July 17, 2006

TO ALL RADIO AMATEURS
BID: $ANS-198.S1

VO-52 HAMSAT
Catalog Number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/V - Indian Transponder

Proposed frequencies:

Indian Transponder:
Uplink : 435.220 MHz to 435.280 MHz LSB/CW
Downlink: 145.870 MHz to 145.930 MHz USB/CW
Beacon : 145.859330 MHZ CW

Dutch Transponder:
Uplink : 435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW
Beacon : 145.860MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsat.in/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is
active. Each transponder has a different beacon.
[04242006]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Current Mode(s): FM Repeater - V/U
                               L/U
                 Digipeater - OFF

Analog voice downlink: 435.300 MHz FM
         435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink: 145.880 MHZ FM
         145.880 MHz USB
         145.920 MHz FM 67Hz PL tone
        1268.700 MHz FM 67Hz PL tone
Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
        2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast
Protocol

                      1268.700 mhz FM, 9k6 PBP Digital
Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Mode schedule for July 2006 according to the AO-51 command team:

July 17 to July 24

FM Repeater
Downlink 435.300 mHz FM
Uplink 145.920 mHz FM with 67 hz Tone

FM Repeater
Downlink 435.150 mHz FM
Uplink 1268.700 mHz FM

July 24 to July 31

FM Repeater
Downlink 435.300 mHz FM
Uplink 145.920 mHz FM with 67 hz Tone

Digital / PBBS
Downlink 435.150 mHz FM 9k6 Digital
Uplink 145.860 mHz FM 9k6 Digital
PBBS Active
Telemetry Downlink and Digipeater Active -No Unattended Digipeater Ops Please

Official Webpage: http://www.amsat.org/amsat-new/echo/
[07172006]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Uplink: 145.850 MHz (67.0 Hz PL tone) (See below for operating procedures)
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

```
Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The
order of operation is thus: (allow for Doppler as necessary)
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute
timer
   on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the
repeater
   on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset
the 10
   minute timer.
[04172006]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: OPERATIONAL

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplink: 145.850 145.870 145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

unOfficial Webpage: http://www.amsat.org/amsat/sats/n7hpr/fo29.html
[11132005]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Uplink: 145.850 MHz FM
Downlink: 436.795 MHz FM

Mode and Antenna Polarization:
V: Linear
```

```
U: Linear

Official Webpage: http://www.ao27.org
[01012006]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational depending on amount of Sunlight
Current Reported mode: Mode-A

Uplink:   145.850 to 145.950 MHz CW/USB Mode A
   432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
  145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
  145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons:  29.502 MHz
  145.972 MHz
  435.100 MHz
 2304.100 MHz

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php
The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
AO-7 users are requested to log their contacts and observations about
AO-7, especially any unexpected mode changes.
AO-07 telemetry software webpage:
http://www.qsl.net/k3tz/files/K3TZ_AO-07_Telemetry_Decoder_0.5.zip

Please keep your power low!  For additional information please read the
AO-7
Usage Guidelines on the AO-7 Log and Resource Site located at:
http://www.planetemily.com/ao7
[04242006]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: FM PACKET
              OCCASIONAL VOICE
Digipeater: ON

The current crew is:
Commander: Pavel Vinogradov, RV3BS
Flight Engineer: Jeff Williams, KD5TVQ

Digital/APRS:
Worldwide packet uplink:   145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM
```

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Russian: RS0ISS, RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official Webpage: http://www.rac.ca/ariss
Official Fan club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line is
NOT translated from Russian and posted.
[07172006]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-198.S2
WSR 198 Part 2 07/17/2006

AMSAT NEWS SERVICE BULLETIN 198.S2 FROM AMSAT HQ
SILVER SPRING, MD, July 17, 2006
TO ALL RADIO AMATEURS
BID: $ANS-198.S2

CO-58 XI-V
Catalog Number: 28895
Launch Date: October 27, 2005

Status: Operational only within range of Ground station in Japan

Telemetry Downlink: 437.345MHz - FSK 1200bps using AFK protocol
Beacon Downlink: 437.465MHz - CW about 50 WPM

Callsign: JQ1YGW

Oficial Webpage: http://www.space.t.u-tokyo.ac.jp/gs/satinfo-e.html#xi5

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
[03122006]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: FM PACKET
OCCASOINAL VOICE
Digipeater: ON

The current crew is:
Commander: Pavel Vinogradov, RV3BS
Flight Engineer: Jeff Williams, KD5TVQ

Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Russian: RS0ISS, RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official Webpage: http://www.rac.ca/ariss
Official Fan club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is NOT translated from Russian and posted.
[07172006]
=====
PCSAT-2
Catalog Number: 25544
Launch Date: August 1, 2005

Activated: August 3, 2005
Status: Operational
Current Mode:

Digital Downlink: 435.275 Mhz
Digital Uplink: 145.825 Mhz

PSK-31 Downlink: 435.275 Mhz
PSK-31 Uplink: 29.401 Mhz

CALLSIGN: pcsat2

Official Webpage: http://web.usna.navy.mil/~bruninga/pcsat2.html
PCSAT2 APRS Packet page: http://www.findu.com/cgi-bin/pcsat2.cgi
aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[07172006]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Mode(s): FM Repeater - V/U
L/U
Digipeater - OFF

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.880 MHZ FM
145.880 MHz USB
145.920 MHz FM 67Hz PL tone
1268.700 MHz FM 67Hz PL tone
Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast Protocol
1268.700 mhz FM, 9k6 PBP Digital
Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Mode schedule for July 2006 according to the AO-51 command team:

July 17 to July 24

FM Repeater
Downlink 435.300 mHz FM
Uplink 145.920 mHz FM with 67 hz Tone

FM Repeater
Downlink 435.150 mHz FM
Uplink 1268.700 mHz FM

July 24 to July 31

FM Repeater
Downlink 435.300 mHz FM
Uplink 145.920 mHz FM with 67 hz Tone

Digital / PBBS
Downlink 435.150 mHz FM 9k6 Digital
Uplink 145.860 mHz FM 9k6 Digital
PBBS Active
Telemetry Downlink and Digipeater Active -No Unattended Digipeater Ops Please

Official Webpage: http://www.amsat.org/amsat-new/echo/
[07172006]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Operational

General Usage Uplink/Downlink:145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org
aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[04172006]
=====
CO-55 CUTE-1.7
Catalog number: 28941
Launched: June 30,2003

Status: Operational

Uplink: ?
Downlink: 437.3850 CW
437.4700 1200 FM ax25 or SRLL (ACTIVE only near Japan ?)
Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[05012006]
=====

GO-32 TECHSAT-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks: 145.850 FM
         145.890 FM
         145.930 FM
        1269.700 FM
        1269.800 FM
        1269.900 FM
Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[05012006]
=====
RS-22 Mozhayets 4
Catalog Number: 27939
Launch Date: September 27, 2004

Status: Operational

Beacon: 435.3520 MHz CW
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Semi-operational, the digipeater command is on and open for APRS users.

Uplink: 145.900 FM
        145.920 FM
        145.940 FM
        145.960 FM
(using 1200-baud Manchester FSK)
Downlink: 437.026 MHz SSB (1200-baud PSK)
Mode-S Beacon: 2401.1428 MHz

Mode and Antenna Polarization:
U: RC 437.050 MHz RHCP
   PSK 437.025 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html

[04172006]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational

Telemetry Downlink: 145.826 MHz. FM (1200-baud AFSK).
approx. 10 days ON, 10 days OFF
Mode-S Beacon: 2401.500 MHz. ... OFF
UHFBeacon: 435.025 MHz. ... OFF

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Reception reports are requested to be sent to xxxxx@amsat.org (replace
xxxxx
by g3cwv), or post to AMSAT-BB.

During the period 15 June to 17 July 2006 nothing has been heard from
the
satellite. It was last heard on 05 May, just one day before the solar
eclipses were due to start. These eclipses will continue until 04 August
2006, reaching a maximum duration of 22% around 19 June. If the
satellite
behaves in the same way as it did last year, regular 10 day
transmissions
should re-start, sometime in August.

Official webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[07172006]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-198.S3
WSR 198 Part 3 07/17/2006

AMSAT NEWS SERVICE BULLETIN 198.S3 FROM AMSAT HQ
SILVER SPRING, MD, July 17, 2006
TO ALL RADIO AMATEURS
BID: $ANS-198.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

AO-54 SUITSAT
Catalog Number:28933
Release Date: February 3,2006

Status: Non-operational
Modes : FM Voice Telemetry/Greetings

```
 FM SSTV

Callsign: RS0RS
Downlink: 145.990 FM

Currently on the amsat-bb, there is a geussing game going on about when
Suitsat will re-enter the atmosphere.

Official webpage: http://www.suitsat.org
[05012006]
=====
NCUBE-2
Catalog Number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency:  437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog Number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 FM 67Hz CTCSS
Voice Downlink: 2401.835 FM
Packet Up/Downlink: 437.250 9k6 packet
Packet Downlink 2401.835 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01292006]
=====
TO-31 TMSAT-1
Catalog Number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink:   145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
PO-28 POSAT-1
```

Catalog Number: 22829
Launch Date: September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 429.950

Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html.
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012006]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launched: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB
Beacon: 145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: Downlink only

Uplink: 145.875 145.900 145.925 145.950 MHz FM (1200-baud)
Downlink: 435.808 MHz PSK
Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01012006]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB

Downlink: 29.410 to 29.450 MHz CW/USB
Beacon: 29.408 MHz
Robot: 29.454 MHz
[05232004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB
Beacon: 145.860 MHz
Robot: 145.908 MHz
[05232004]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink 145.975 MHz FM
Downlink 435.070 MHz FM
[05092004]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink: 145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM
Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01092005]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational?

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB
Beacon: 29.352 MHz (intermittent)
SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
LO-19 LUSAT
Catalog number: 20442

Launched: January 22, 1990

Status: CW Beacon only

Uplink: 145.84 145.86 145.88 145.90 MHz FM
(using 1200-baud Manchester FSK)
CW downlink: 437.125 MHz
Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)
Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[05232004]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[08152004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM
Broadcast Callsign: HL01-11
BBS: HL01-12

Jim, AA7KC, reports that KO-23's downlink transmitter continues in a
non-operational status.
[05092004]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM (9600-baud FSK)
Downlink: 436.500 MHz FM
Broadcast Callsign: HL02-11

```
BBS: HL02-12
[05092004]
=====
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm

[ANS-WSR has no further information]
[05232004]
=====
SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

STatus: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz and 145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[08082004]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown
```

```
Uplink: 145.960 MHz (9600-baud FSK)
Downlink: 437.025 MHz 437.400 MHz
Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site
at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[05092004]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplink V-band   145.840 - 145.990 MHz CW/LSB
       U-band   435.550 - 435.800 MHz CW/LSB
       L1-band 1269.250 - 1269.500 MHz CW/LSB
       L2-band 1268.325 - 1268.575 MHz CW/LSB
Downlink: S2-band 2401.225 - 2401.475 MHz CW/USB
          K-band 24,048.010 - 24,048.060 MHz CW/USB
Beacon:   2401.323
         24,048.035
[05232004]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational
Downlink: 437.075 MHz
Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[08152004]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz
Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
```

[08152004]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, callsign KE6QMD, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Operational

Uplink: 145.850 or 145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz
Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[11202005]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink 435.275 1200-baud AFSK
Downlink 145.825 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink: Downlink 145.825 MHz FM 1200 Baud AFSK
Beacon: 2401.220 MHz
[05012006]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-198.S4
WSR 198 Part 4 07/17/2006

AMSAT NEWS SERVICE BULLETIN 198.S4 FROM AMSAT HQ
SILVER SPRING, MD, July 17, 2006
TO ALL RADIO AMATEURS
BID: $ANS-198.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE
PROPOSED FOR LAUNCH AT THIS TIME:

PHASE 3E ?O-??
Catalog Number:
Proposed Launch Date: Early/Mid 2007

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/
[ANS-WSR wishes to thank William Leijenaar, PE1RAH for this week's report]
[04242006]
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/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins trans-

mitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/amsat/listserv/menu.html

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

```
From -6494311447709825081
X-Google-Thread: 10e8ad,26651dc841d26f0d,start
X-Google-Thread: 10e8ad,26651dc841d26f0d,start
X-Google-Attributes: gid10e8ad,gid10e8ad,public
```

X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news3.google.com!newshub.sdsu.edu!elnk-nf2-pas!newsfeed.earthlink.net!stamper.news.pas.earthlink.net!newsread4.news.pas.earthlink.net.POSTED!a68a9acd!not-for-mail
From: Brian S. McCarthy <mccarthybri@earthlink.net>
Newsgroups: rec.radio.amateur.space,rec.radio.amateur.space
Subject: Ayone have experience/luck with FT-847 CAT commands from a USB serial port?
Reply-To: mccarthybri@earthlink.net
Message-ID: <cqo7c215sib77hh6aeeov2p310ihfn1151@4ax.com>
X-Newsreader: Forte Agent 3.3/32.846
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Lines: 27
Date: Sun, 23 Jul 2006 21:05:53 GMT
NNTP-Posting-Host: 24.41.20.229
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread4.news.pas.earthlink.net 1153688753 24.41.20.229 (Sun, 23 Jul 2006 14:05:53 PDT)
NNTP-Posting-Date: Sun, 23 Jul 2006 14:05:53 PDT
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news2.google.com rec.radio.amateur.space:286

I have some code to operate the CAT commands on my ft-847, which I'm trying to use through a usb serial port from my laptop without much luck.

The USB serial port is based on the prolific chip, and is connected to the ft847 with a null modem cable. The code waits some interval (about 20ms) between characters (more on that later). One of the 5 byte output sequences makes the cat light come on, and just once I thought I saw the frequency change.

When I hook up a second USB port to the null modem cable, I see the correct cat code come back on the other port. This was where I discovered the intercharacter delay was needed.

I've checked the obvious things, both the port and the radio are set to the same abud rate, data bits/parity, etc.

ON a very related note, I've also tried reading from my gps through the port. While I get the right number of characters (Mostly) They are gibberish, but the parts of the message that shoudl be constant are. Microsoft Mappoint's gps support wont read it either.

I'm suspicious that the voltage levels presented and accepted by the USB port aren't RS-232 (or 425) enough to work with the devices. Anybody have a clue?

-Brian McCarthy, N1ZZD

From 1600795273689995934
X-Google-Thread: 10e8ad,8122a80f49a2488f,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII
Path: g2news2.google.com!news3.google.com!newshub.sdsu.edu!elnk-nf2-pas!
newsfeed.earthlink.net!stamper.news.pas.earthlink.net!
newsread1.news.pas.earthlink.net.POSTED!46041641!not-for-mail
From: "JoAnne Maenpaa" <wb9jej_no-spam@earthling.com>
Newsgroups: rec.radio.amateur.space
Subject: ANS-204 AMSAT News Service Weekly Bulletin
Lines: 336
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <vgPxg.4936$bP5.4412@newsread1.news.pas.earthlink.net>
Date: Wed, 26 Jul 2006 19:20:59 GMT
NNTP-Posting-Host: 66.167.65.55
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread1.news.pas.earthlink.net 1153941659 66.167.65.55 (Wed, 26 Jul 2006 12:20:59 PDT)
NNTP-Posting-Date: Wed, 26 Jul 2006 12:20:59 PDT
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news2.google.com rec.radio.amateur.space:287

AMSAT NEWS SERVICE
ANS-204

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

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SB SAT @ AMSAT $ANS-204.01
Wray E. Dudley, W8GQW, SK

AMSAT News Service Bulletin 204.01

From AMSAT HQ SILVER SPRING, MD.
July 23, 2006
To All RADIO AMATEURS
BID: $ANS-204.01

Wray was born in 1914 and passed from this life in 2006 at the age of 92 in Tubac, Arizona. Wray was first licensed in 1931 receiving the callsign W8GQW. He served his country during WWII as a B-17 Instructor Pilot. During much of his working career, Wray lived in Troy, OH, and, upon retirement, moved to Tubac to enjoy Golf, Sunshine, and Amateur Radio. Wray joined AMSAT in 1979 and became Life Member #1470 in 1980.

During most of his years in AMSAT, Wray was best known as one of the "Voices" of the AMSAT HF Nets. At one time or the other, he served as Net Control Station on most of the HF Nets, but I remember him best for the 20 and 15 meter Sunday afternoon nets. He originally did these nets from Troy, OH, and continued after the move to Tubac, AZ. During the pre-net activities he would work with the other NCS station. At bulletin time, he would usually move to 15 meters while the other station stayed on 20 meters. His booming, broadcast quality, voice was unmistakable. Whenever possible, Wray would "simulcast" the net on both 15M and AO-13. In later years, he was a regular "check-in" on the 17 meter net and on the nets held on AO-10 and AO-13. When it became time to retire from the active control of the nets, he recruited and trained his own replacement, Larry Brown, W7LB.

In addition to his NCS activity, Wray was active on the "birds" especially AO-10 and AO-13. He was always eager to help a newcomer with a wealth of good advice.

While still living in Troy, OH, Wray was AMSAT's contact with the Dayton HamVention for many years. He and other local volunteers made sure all of the arrangements were made ahead of time for a smooth operation. If anything extra was needed, they were the "Go-Fors" to make sure it was obtained on a timely basis.

I'm sure his "Voice" will now join with those "Voices" that preceded him on this journey - Vern (Rip) Riportella, WA2LQQ; Jim McKim, W0CY; John Browning, W6SP; Byron Lindsey, W4BIW; and Ron Broadbent, G3AAJ - as they continue to spread the AMSAT word. Remember them well!

[ANS thanks Keith Pugh, W5IU for the above information]

/EX

SB SAT @ AMSAT $ANS-204.02
OSCAR-11 Report for July 2006

AMSAT News Service Bulletin 204.02
From AMSAT HQ SILVER SPRING, MD.
July 23, 2006
To All RADIO AMATEURS
BID: $ANS-204.02

Clive, G3CWV requested reception reports for OSCAR-11. Due to solar eclipses the VHF beacon on 145.826 MHz. may only transmit for a short times, perhaps for only a few orbits, or even less, at irregular intervals. Please e-mail your reception reports to xxxxx@amsat.org (replace xxxxx by g3cwv), or post on the AMSAT-BB.

During the period 15 June to 17 July 2006 nothing has been heard from the satellite. It was last heard on 05 May, just one day before the solar eclipses were due to start. These eclipses will continue until 04 August 2006, reaching a maximum duration of 22% around 19 June. If the satellite behaves in the same way as it did last year, regular 10 day transmissions should re-start, sometime in August.

Clive wrote, "Once again I am indebted to Jeff KB2M, for monitoring the satellite, during this period. He has not heard any signals."

The current status of the satellite is that all the analogue telemetry channels, 0 to 59 are zero, i.e. they have failed. The status channels 60 to 67 are still working. The spacecraft computer and active attitude control system have switched OFF, i.e. the satellite's attitude is controlled only by the passive gravity boom gradient, and the satellite is free to spin at any speed. When telemetry was last received it showed that one of the solar arrays had failed, and there was a large unexplained current drain on the main 14 volt bus. After 22 years in orbit the battery has undergone around 100,000 partial charge/discharge cycles, and observations suggest that it cannot power the satellite during eclipses, or sometimes during periods of poor solar attitude.

When last heard, the on-board clock showed a very large accumulated error. On 05 May it was 22.76456 days slow. The clock lost two hours during the last OFF period, and nine hours during the last transmission period. The observations of clock errors suggest that the clock may slow or stop when the battery voltage is low.

The frequencies to listen for OSCAR 11 is 145.826 MHz. The downlink signal will be AFSK FM containing the ASCII Telemetry

Listeners to OSCAR-11 may be interested in visiting Clive's web site which contains an archive of news & telemetry data. It also contains details about using a sound card or hardware demodulators for data capture. There is software for capturing data, and decoding ASCII telemetry. The URL is: www.users.zetnet.co.uk/clivew/

[ANS thanks Clive G3CWV whomever for the above information]

/EX

SB SAT @ AMSAT $ANS-204.03
Help Wanted at the Small Satellite Conference

AMSAT News Service Bulletin 204.03
From AMSAT HQ SILVER SPRING, MD.
July 23, 2006

To All RADIO AMATEURS
BID: $ANS-204.03

AMSAT Executive Vice-President, Lee KU4OS says, "AMSAT will again have a table this year at the Small Satellite Conference in Logan, UT August 14-17. Since the exhibit runs 2.5 days I would greatly appreciate some assistance manning the table. Please let me know if you are able to help. AMSAT is allotted four 'exhibitor passes' as part of our exhibitor registration. This is a great Conference and a fascinating opportunity to see exhibits by some of the major leaders in industry as well as many University satellite projects."

Lee will be arriving Friday, August 11 for the CubeSat workshop and departing late the following Friday after the AFRL/Responsive Space Meeting. You can see all the associated meeting around Smallsat at:
http://www.smallsat.org/meetings.

Contact Lee at his e-mail address callsign@amsat.org.

[ANS thanks Lee, KU4OS for the above information]

/EX

SB SAT @ AMSAT $ANS-204.04
Deep Space DX to be Featured at AMSAT-UK International Space Colloquium

AMSAT News Service Bulletin 204.04
From AMSAT HQ SILVER SPRING, MD.
July 23, 2006
To All RADIO AMATEURS
BID: $ANS-204.04

AMSAT-UK's International Space Colloquium takes place from Friday 28th until Sunday 30th July. In addition to the report from Achim Vollhardt, DH2VA on the remarkable achievement by Radio Amateurs in Germany in receiving signals from the Voyager 1 at the Space Colloquium we can now announce that the event will also include a live demonstration of DX reception from deep space.

Freddy de Guchteneire, ON6UG, will be receiving signals live from the NASA Mars Reconnaissance Orbiter. This spacecraft was launched last year and only entered Mars orbit in March 2006. By the end of July Mars will be at a distance of approximately 350 million kilometres from earth so we cannot expect the signals to be very strong!

The demonstration is expected to take place on the Saturday of the Colloquium - the exact time will depend upon scheduling and visibility constraints.

See http://www.uk.amsat.org/Colloquium/ for the latest programme and on line booking form and maps. The International Space Colloquium welcomes all Radio Amateurs and SWL's.

For further details contact Jim Heck G3WGM Tel: 01258 453959 or e-mail: g3wgm@amsat.org

[ANS thanks Graham, G3VZV for the above information]

/EX

SB SAT @ AMSAT $ANS-204.05
AMSAT BoD Ballots Have Been Mailed

AMSAT News Service Bulletin 204.05
From AMSAT HQ SILVER SPRING, MD.
July 23, 2006
To All RADIO AMATEURS
BID: $ANS-204.05

AMSAT Manager, Martha Saragovitz says, "The AMSAT ballots for the Board of Director's seats have been mailed. They should arrive shortly." Members are invited to read the candidate's statements on the AMSAT web site at: http://www.amsat.org/amsat-new/articles/2006_Board_Candidates/

[ANS thanks Martha for the above information]

/EX

SB SAT @ AMSAT $ANS-204.06
ARISS Status July 17, 2006

AMSAT News Service Bulletin 204.06
From AMSAT HQ SILVER SPRING, MD.
July 23, 2006
To All RADIO AMATEURS
BID: $ANS-204.06

1. Upcoming School Contacts

The Central Experimental Farm in Ontario, Canada is a research facility in the City of Ottawa. A public camp is held at the farm for 7-18 year olds during the month of July. An ARISS contact with the camp has been approved and is scheduled for Tuesday, July 25 at 15:59 UTC.

A contact has been scheduled for the Children's Club Camp, an event organized for ESA employees' children in Patras, Greece for Saturday, July 29 at 12:27 UTC. ESA Astronaut Thomas Reiter, DF4TR, will participate in the contact via the telebridge station, WH6PN, in Hawaii.

2. ARRL Article Covers Hiroshima Contact

ARRL ran an article on the Hiroshima, Japan contact entitled, "Hiroshima Children's Museum Visitors Speak with ISS via Ham Radio." See: http://www.arrl.org/news/stories/2006/07/12/1/?nc=1

3. NASA Article on SuitSat-1

NASA ran a follow up story on SuitSat-1. "The Space Suit Heard 'Round the World" may be found at:
http://www.nasa.gov/audience/foreducators/k-4/features/F_Space_Suit_Round_the_World.html

4. Barrios Technology Highlights Snoopy Award Recipient

Barrios Technology ran a feature story on ARISS member Kenneth Ransom's recent Silver Snoopy award presentation. Kenneth received the award for his Expedition 12 work with the ISS Ham program. To view the article, see:
http://www.barrios.com/NewsItem1.cfm?News_ID=88

5. ARRL Covers Thomas Reiter, DF4TR

ARRL ran a web story on Expedition 13 crew member Thomas Reiter, DF4TR. The article, "New ISS crew member settling in, school QSOs being lined up" may be viewed on: http://www.arrl.org/?artid=6590

[ANS thanks Carol, KB3LKI for the above information]

/EX

SB SAT @ AMSAT $ANS-204.07
July 26 Launch for 13 Amateur Radio Satellites

AMSAT News Service Bulletin 204.07
From AMSAT HQ SILVER SPRING, MD.
July 23, 2006
To All RADIO AMATEURS
BID: $ANS-204.07

Remember to listen for the thirteen Amateur Radio Satellites that will be launched on July 26, 2006 on a DNEPR-1LV rocket from the Kazakstan Baikonur Cosmodrome. This will be the largest ever deployment of Amateur Radio Satellites. A fourteenth satellite will operate on commercial frequencies.

The satellites will be put into a 500 by 566 km orbit with an inclination of 97 degrees. Each satellite is a 10cm cube weighing just 1kg into which is packed the battery, transmitter and the various experiments.

Further information on the Dnepr Launch 1 can be seen at:
http://littonlab.atl.calpoly.edu/.

Additional information about the cubesats can be found on the AMSAT cubesat pages.

Ralph, W�RPK, maintains a web page with up-to-date CubeSat status at:
http://showcase.netins.net/web/wallio/CubeSat.htm.

See the AMSAT main web page summarizes the July 26 CubeSat launch manifest,
http://www.amsat.org.

[ANS thanks AMSAT for the above information]

/EX

SB SAT @ AMSAT $ANS-204.08
Inflatable Satellite Launched

AMSAT News Service Bulletin 204.08
From AMSAT HQ SILVER SPRING, MD.
July 23, 2006
To All RADIO AMATEURS
BID: $ANS-204.08

A private space firm, Bigelow Aerospace, launched its Genesis I spacecraft. The inflatable spacecraft has successfully expanded and all of the solar arrays have been deployed.

Genesis I, the first spacecraft in a series to be built by Bigelow Aerospace, is a one-third scale prototype of a future craft that will eventually become a part of a commercial space station.

By the fall, Bigelow Aerospace hopes to launch Genesis II. Over the next several years, Bigelow plans to test larger prototype spacecraft, including a full-scale prototype that could launch as early as 2012.

The Genesis I satellite is visible to the naked eye. Pass times for your location can be found on-line at:
http://www.heavens-above.com.

[ANS thanks nasaspaceflight.com for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Al Marote, WA1LBG

From 6260983610610822604
X-Google-Thread: 10e8ad,4b72a9f96167d2b5,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news1.google.com!news3.google.com!newshub.sdsu.edu!elnk-nf2-pas!newsfeed.earthlink.net!stamper.news.pas.earthlink.net!newsread1.news.pas.earthlink.net.POSTED!46041641!not-for-mail
From: "JoAnne Maenpaa" <wb9jej_no-spam@earthling.com>

Newsgroups: rec.radio.amateur.space
Subject: ANS-205 AMSAT News Service Bulletin - AMSAT Announces Support For HPSDR Project
Lines: 47
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <zgPxg.4937$bP5.2653@newsread1.news.pas.earthlink.net>
Date: Wed, 26 Jul 2006 19:21:03 GMT
NNTP-Posting-Host: 66.167.65.55
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread1.news.pas.earthlink.net 1153941663 66.167.65.55 (Wed, 26 Jul 2006 12:21:03 PDT)
NNTP-Posting-Date: Wed, 26 Jul 2006 12:21:03 PDT
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news2.google.com rec.radio.amateur.space:288

SB SAT @ AMSAT $ANS-205.01
AMSAT Announces Support For HPSDR Project

AMSAT News Service Bulletin 205.01
From AMSAT HQ SILVER SPRING, MD.
July 24, 2006
To All RADIO AMATEURS
BID: $ANS-205.01

AMSAT will immediately initiate support for The High Performance Software Defined Radio (HPSDR) project, an independent team that is dedicated to bringing high performance software defined radio devices within the reach of amateurs in terms of access to the hardware and software at manageable prices.

This is a rare opportunity for AMSAT to easily join a major technological development and have a positive impact on both that development and AMSAT's own primary interests. The High Performance Software Defined Radio (HPSDR) project is a completely open source software (GNU Public License) and open hardware design. It has an extremely capable group of core designers, many of whom are also key AMSAT design team members, supported by a cast of hundreds. To learn more, see http://hpsdr.org/

The goal for AMSAT is to dramatically improve the development schedule and quality of our Eagle ground station and spacecraft transponders, both SDX and wideband digital. AMSAT will benefit on related projects as well, such as the P3E SDX transponder development.

AMSAT will support HPSDR with a modest amount of financial, personnel and other resources. Financial resources will be under AMSAT control and will be used to support activities such as joint HPSDR and Eagle design meetings.

AMSAT's Engineering team will submit a 2007 budget for the AMSAT Board's approval at the annual meeting in October. The modest resources that are needed in 2006 can be provided by the Eagle team project.

Rick
W2GPS
AMSAT President

[ANS thanks Rick, W2GPS, for the above information]

/EX

From -1744258689142621745
X-Google-Thread: 10e8ad,84b8543ffbc93435,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news4.google.com!border1.nntp.dca.giganews.com!nntp.giganews.com!newshub.sdsu.edu!elnk-nf2-pas!newsfeed.earthlink.net!stamper.news.pas.earthlink.net!newsread1.news.pas.earthlink.net.POSTED!46041641!not-for-mail
From: "JoAnne Maenpaa" <wb9jej_no-spam@earthling.com>
Newsgroups: rec.radio.amateur.space
Subject: WSR-205 AMSAT Weekly Satellite Report
Lines: 994
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <GgPxg.4938$bP5.1004@newsread1.news.pas.earthlink.net>
Date: Wed, 26 Jul 2006 19:21:10 GMT
NNTP-Posting-Host: 66.167.65.55
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread1.news.pas.earthlink.net 1153941670 66.167.65.55 (Wed, 26 Jul 2006 12:21:10 PDT)
NNTP-Posting-Date: Wed, 26 Jul 2006 12:21:10 PDT
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news2.google.com rec.radio.amateur.space:289

This report is organized into 4 parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites

SB SAT @ AMSAT W8ISS ANS-205.S1
WSR 205 Part 1 07/24/2006

AMSAT NEWS SERVICE BULLETIN 205.S1 FROM AMSAT HQ
SILVER SPRING, MD, July 24, 2006
TO ALL RADIO AMATEURS
BID: $ANS-205.S1

```
VO-52 HAMSAT
Catalog Number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/V - Indian Transponder

Proposed frequencies:
-------------------
Indian Transponder:
Uplink :  435.220 MHz to 435.280 MHz LSB/CW
Downlink: 145.870 MHz to 145.930 MHz USB/CW
Beacon :  145.859330 MHZ CW

Dutch Transponder:
Uplink :  435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW
Beacon :  145.860MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsat.in/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is
active. Each transponder has a different beacon.
[04242006]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Current Mode(s): FM Repeater - V/U with Tone on Uplink
                 PBBS - V/U 9k6
                 Digipeater - ON

Analog voice downlink: 435.300 MHz FM
         435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink:   145.880 MHZ FM
         145.880 MHz USB
         145.920 MHz FM 67Hz PL tone
        1268.700 MHz FM 67Hz PL tone
Digital Downlinks:     435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
        2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:        145.860 MHz FM, 9k6 Digital, Pacsat Broadcast
Protocol
                      1268.700 mhz FM, 9k6 PBP Digital
Mode and Antenna Polarization:
```

T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Mode schedule for July 2006 according to the AO-51 command team:

July 24 to July 31

FM Repeater
Downlink 435.300 mHz FM
Uplink 145.920 mHz FM with 67 hz Tone

Digital / PBBS
Downlink 435.150 mHz FM 9k6 Digital
Uplink 145.860 mHz FM 9k6 Digital
PBBS Active
Telemetry Downlink and Digipeater Active -No Unattended Digipeater Ops
Please

Official Webpage: http://www.amsat.org/amsat-new/echo/
[07242006]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Uplink: 145.850 MHz (67.0 Hz PL tone) (See below for operating
procedures)
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The
order of operation is thus: (allow for Doppler as necessary)
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute
timer
   on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the
repeater

on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10 minute timer.
[04172006]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: OPERATIONAL

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplink: 145.850 145.870 145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

unOfficial Webpage: http://www.amsat.org/amsat/sats/n7hpr/fo29.html
[11132005]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Uplink: 145.850 MHz FM
Downlink: 436.795 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[01012006]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational depending on amount of Sunlight
Current Reported mode: Mode-A

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
   432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
  145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
  145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz
  145.972 MHz
  435.100 MHz
 2304.100 MHz

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php
The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
AO-7 users are requested to log their contacts and observations about
AO-7, especially any unexpected mode changes.
AO-07 telemetry software webpage:
http://www.qsl.net/k3tz/files/K3TZ_AO-07_Telemetry_Decoder_0.5.zip

Please keep your power low! For additional information please read the
AO-7
Usage Guidelines on the AO-7 Log and Resource Site located at:
http://www.planetemily.com/ao7
[04242006]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: FM PACKET
              OCCASIONAL VOICE
Digipeater: ON

The current crew is:
Commander: Pavel Vinogradov, RV3BS
Flight Engineer: Jeff Williams, KD5TVQ
Crew: Thomas Reiter - DF4TR

Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:

V: Linear
U: Linear

Callsigns:
Russian: RS0ISS, RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official Webpage: http://www.rac.ca/ariss
Official Fan club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.
[07242006]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-205.S2
WSR 205 Part 2 07/24/2006

AMSAT NEWS SERVICE BULLETIN 205.S2 FROM AMSAT HQ
SILVER SPRING, MD, July 24, 2006
TO ALL RADIO AMATEURS
BID: $ANS-205.S2

CO-58 XI-V
Catalog Number: 28895
Launch Date: October 27, 2005

Status: Operational only within range of Ground station in Japan

Telemetry Downlink: 437.345MHz - FSK 1200bps using AFK protocol
Beacon Downlink: 437.465MHz - CW about 50 WPM

Callsign: JQ1YGW

Oficial Webpage: http://www.space.t.u-tokyo.ac.jp/gs/satinfo-e.html#xi5
Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
[03122006]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: FM PACKET
              OCCASOINAL VOICE

Digipeater: ON

The current crew is:
Commander: Pavel Vinogradov, RV3BS
Flight Engineer: Jeff Williams, KD5TVQ
Crew: Thomas Reiter - DF4TR

Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Russian: RS0ISS, RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official Webpage: http://www.rac.ca/ariss
Official Fan club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is NOT translated from Russian and posted.
[07242006]

=====
PCSAT-2
Catalog Number: 25544
Launch Date: August 1, 2005

Activated: August 3, 2005
Status: Operational
Current Mode:

Digital Downlink: 435.275 Mhz
Digital Uplink: 145.825 Mhz

PSK-31 Downlink: 435.275 Mhz
PSK-31 Uplink: 29.401 Mhz

CALLSIGN: pcsat2

Official Webpage: http://web.usna.navy.mil/~bruninga/pcsat2.html
PCSAT2 APRS Packet page: http://www.findu.com/cgi-bin/pcsat2.cgi
aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[07172006]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Mode(s): FM Repeater - V/U with Tone on Uplink
PBBS - V/U 9K6
Digipeater - ON

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.880 MHZ FM
145.880 MHz USB
145.920 MHz FM 67Hz PL tone
1268.700 MHz FM 67Hz PL tone
Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast Protocol
1268.700 mhz FM, 9k6 PBP Digital
Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Mode schedule for July 2006 according to the AO-51 command team:

July 24 to July 31

FM Repeater
Downlink 435.300 mHz FM
Uplink 145.920 mHz FM with 67 hz Tone

Digital / PBBS
Downlink 435.150 mHz FM 9k6 Digital
Uplink 145.860 mHz FM 9k6 Digital
PBBS Active

Telemetry Downlink and Digipeater Active -No Unattended Digipeater Ops Please

Official Webpage: http://www.amsat.org/amsat-new/echo/
[07242006]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Operational

General Usage Uplink/Downlink:145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org
aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[04172006]
=====
CO-55 CUTE-1.7
Catalog number: 28941
Launched: June 30,2003

Status: Operational

Uplink: ?
Downlink: 437.3850 CW
437.4700 1200 FM ax25 or SRLL (ACTIVE only near Japan ?)
Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[05012006]
=====
GO-32 TECHSAT-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Downlink: 435.225 MHz FM (9600-baud FSK)
435.325 Mhz - Not Available - temperature problems
Uplinks: 145.850 FM
145.890 FM
145.930 FM
1269.700 FM
1269.800 FM
1269.900 FM
Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[05012006]

```
=====
RS-22 Mozhayets 4
Catalog Number: 27939
Launch Date: September 27, 2004

Status: Operational

Beacon: 435.3520 MHz CW
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Semi-operational, the digipeater command is on and open for
APRS users.

Uplink: 145.900 FM
        145.920 FM
        145.940 FM
        145.960 FM
(using 1200-baud Manchester FSK)
Downlink: 437.026 MHz SSB (1200-baud PSK)
Mode-S Beacon: 2401.1428 MHz

Mode and Antenna Polarization:
U: RC 437.050 MHz RHCP
   PSK 437.025 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[04172006]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational

Telemetry Downlink: 145.826 MHz. FM (1200-baud AFSK).
approx. 10 days ON, 10 days OFF
Mode-S Beacon: 2401.500 MHz. ... OFF
UHFBeacon: 435.025 MHz. ... OFF

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Reception reports are requested to be sent to xxxxx@amsat.org (replace
xxxxx
by g3cwv), or post to AMSAT-BB.
```

During the period 15 June to 17 July 2006 nothing has been heard from the satellite. It was last heard on 05 May, just one day before the solar eclipses were due to start. These eclipses will continue until 04 August 2006, reaching a maximum duration of 22% around 19 June. If the satellite behaves in the same way as it did last year, regular 10 day transmissions should re-start, sometime in August.

Official webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[07172006]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-205.S3
WSR 205 Part 3 07/24/2006

AMSAT NEWS SERVICE BULLETIN 205.S3 FROM AMSAT HQ
SILVER SPRING, MD, July 24, 2006
TO ALL RADIO AMATEURS
BID: $ANS-205.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

AO-54 SUITSAT
Catalog Number:28933
Release Date: February 3,2006

Status: Non-operational
Modes : FM Voice Telemetry/Greetings
 FM SSTV

Callsign: RS0RS
Downlink: 145.990 FM

Currently on the amsat-bb, there is a geussing game going on about when Suitsat will re-enter the atmosphere.

Official webpage: http://www.suitsat.org
[05012006]

=====
NCUBE-2
Catalog Number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
                              2407.250

```
Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog Number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 FM 67Hz CTCSS
Voice Downlink: 2401.835 FM
Packet Up/Downlink: 437.250 9k6 packet
Packet Downlink 2401.835 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01292006]
=====
TO-31 TMSAT-1
Catalog Number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink:   145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
PO-28 POSAT-1
Catalog Number: 22829
Launch Date: September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 429.950

Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html.
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012006]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launched: June 16, 1983
```

```
Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB
Beacon: 145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: Downlink only

Uplink: 145.875 145.900 145.925 145.950 MHz FM (1200-baud)
Downlink: 435.808 MHz PSK
Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01012006]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB
Beacon: 29.408 MHz
Robot: 29.454 MHz
[05232004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB
Beacon: 145.860 MHz
Robot: 145.908 MHz
[05232004]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990
```

```
Status: Non-operational

Uplink 145.975 MHz FM
Downlink 435.070 MHz FM
[05092004]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink: 145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM
Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01092005]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational?

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB
Beacon: 29.352 MHz (intermittent)
SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplink: 145.84 145.86 145.88 145.90 MHz FM
(using 1200-baud Manchester FSK)
CW downlink: 437.125 MHz
Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)
Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[05232004]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational
```

```
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[08152004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM
Broadcast Callsign: HL01-11
BBS: HL01-12

Jim, AA7KC, reports that KO-23's downlink transmitter continues in a
non-operational status.
[05092004]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM (9600-baud FSK)
Downlink: 436.500 MHz FM
Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational
```

```
Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm

[ANS-WSR has no further information]
[05232004]
=====
SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

STatus: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz and 145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[08082004]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlink: 437.025 MHz 437.400 MHz
Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site
at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[05092004]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplink V-band   145.840 - 145.990 MHz CW/LSB
       U-band   435.550 - 435.800 MHz CW/LSB
       L1-band 1269.250 - 1269.500 MHz CW/LSB
```

L2-band 1268.325 - 1268.575 MHz CW/LSB
Downlink: S2-band 2401.225 - 2401.475 MHz CW/USB
K-band 24,048.010 - 24,048.060 MHz CW/USB
Beacon: 2401.323
24,048.035
[05232004]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational
Downlink: 437.075 MHz
Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[08152004]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz
Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[08152004]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, callsign KE6QMD, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
MO-46 TIUNGSAT-1

Catalog number: 26548
Launched: September 26, 2000

Status: Operational

Uplink: 145.850 or 145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz
Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[11202005]

=====

AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink 435.275 1200-baud AFSK
Downlink 145.825 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01012006]

=====

DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink: Downlink 145.825 MHz FM 1200 Baud AFSK
Beacon: 2401.220 MHz
[05012006]

=====

WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25

[05012006]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-205.S4
WSR 205 Part 4 07/24/2006

AMSAT NEWS SERVICE BULLETIN 205.S4 FROM AMSAT HQ
SILVER SPRING, MD, July 24, 2006
TO ALL RADIO AMATEURS
BID: $ANS-205.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE PROPOSED FOR LAUNCH AT THIS TIME:

PHASE 3E ?O-??
Catalog Number:
Proposed Launch Date: Early/Mid 2007

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/
[ANS-WSR wishes to thank William Leijenaar, PE1RAH for this week's report]
[04242006]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)

* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/amsat/listserv/menu.html

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

From -1841730971108875492
X-Google-Thread: 10e8ad,26651dc841d26f0d
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news4.google.com!border1.nntp.dca.giganews.com!nntp.giganews.com!newsfeed00.sul.t-online.de!newsfeed01.sul.t-online.de!t-online.de!newsfeed.vmunix.org!peer-uk.news.demon.net!kibo.news.demon.net!mutlu.news.demon.net!news.demon.co.uk!demon!nospam.demon.co.uk!hilsnews
From: Hils <hilsnews@nospam.demon.co.uk>
Newsgroups: rec.radio.amateur.space
Subject: Re: Ayone have experience/luck with FT-847 CAT commands from a USB serial port?
Date: Wed, 26 Jul 2006 23:16:58 +0100
Organization: Intermittent at best
Lines: 16
Message-ID: <J$5CICaan+xEFwh8@newearth.demon.co.uk>
References: <cqo7c215sib77hh6aeeov2p310ihfn1151@4ax.com>
Reply-To: Hils <hils@nospam.demon.co.uk>
NNTP-Posting-Host: newearth.demon.co.uk
Mime-Version: 1.0
Content-Type: text/plain;charset=us-ascii;format=flowed
X-Trace: news.demon.co.uk 1153952367 23770 193.237.117.162 (26 Jul 2006 22:19:27 GMT)
X-Complaints-To: abuse@demon.net

NNTP-Posting-Date: Wed, 26 Jul 2006 22:19:27 +0000 (UTC)
User-Agent: Turnpike/6.05-S (<mBzxuS2jji53TkZ3UtmZ3heTZ9>)
Xref: g2news2.google.com rec.radio.amateur.space:290

Brian S. McCarthy <mccarthybri@earthlink.net> wrote

>I have some code to operate the CAT commands on my ft-847, which I'm
>trying to use through a usb serial port from my laptop without much
>luck.

I've used a Prolific-based adapter to control (via a straight RS232 cable and the Kenwood interface) a TS450 from Ham Radio Deluxe, and to read data from a UT70D multimeter into logging software, with no problems at all. I haven't tried any homebrewed code (and probably won't for the foreseeable future as it works the way I want it to). I've read reports of some USB<->RS232 adapters being very unreliable, could you have a bad unit?

--
Hil

From -7048440262979657135
X-Google-Thread: 10e8ad,26651dc841d26f0d
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news1.google.com!news3.google.com!newshub.sdsu.edu!elnk-nf2-pas!newsfeed.earthlink.net!stamper.news.pas.earthlink.net!newsread1.news.pas.earthlink.net.POSTED!a68a9acd!not-for-mail
From: Brian S. McCarthy <mccarthybri@earthlink.net>
Newsgroups: rec.radio.amateur.space
Subject: Re: Ayone have experience/luck with FT-847 CAT commands from a USB serial port?
Reply-To: mccarthybri@earthlink.net
Message-ID: <lskgc21fe3en4e2sd8s3snf3doavk8phqq@4ax.com>
References: <cqo7c215sib77hh6aeeov2p310ihfn1151@4ax.com> <J$5CICaan+xEFwh8@newearth.demon.co.uk>
X-Newsreader: Forte Agent 3.3/32.846
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Lines: 22
Date: Thu, 27 Jul 2006 05:43:59 GMT
NNTP-Posting-Host: 24.41.20.229
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread1.news.pas.earthlink.net 1153979039 24.41.20.229 (Wed, 26 Jul 2006 22:43:59 PDT)
NNTP-Posting-Date: Wed, 26 Jul 2006 22:43:59 PDT
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news2.google.com rec.radio.amateur.space:291

On Wed, 26 Jul 2006 23:16:58 +0100, Hils <hilsnews@nospam.demon.co.uk> wrote:

>Brian S. McCarthy <mccarthybri@earthlink.net> wrote
>
>>I have some code to operate the CAT commands on my ft-847, which I'm
>>trying to use through a usb serial port from my laptop without much
>>luck.
>
>I've used a Prolific-based adapter to control (via a straight RS232
>cable and the Kenwood interface) a TS450 from Ham Radio Deluxe, and to
>read data from a UT70D multimeter into logging software, with no
>problems at all. I haven't tried any homebrewed code (and probably won't
>for the foreseeable future as it works the way I want it to). I've read
>reports of some USB<->RS232 adapters being very unreliable, could you
>have a bad unit?

It's possible, but I have two prolific units and borrowed a friend's
Belkin unit, all with the same result. I'm also worried it could ve
the radio. Thanks for your reply.

-Brian

```
From -6545004445710119629
X-Google-Thread: 10e8ad,1b879b858c895989,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news1.google.com!news.germany.com!multikabel.net!
feed20.multikabel.net!news2.euro.net!62.253.162.218.MISMATCH!news-in.ntli.net!
newsrout1-win.ntli.net!ntli.net!news.highwinds-media.com!newspeer1-win.ntli.net!
newsfe6-gui.ntli.net.POSTED!53ab2750!not-for-mail
From: gwrcwsye@email.adr
Subject: STOP what you�re doing - It doesn�t work! 08MH
Newsgroups: rec.radio.amateur.space
Lines: 4600
Message-ID: <ntxyg.93460$sz1.2824@newsfe6-gui.ntli.net>
Date: Fri, 28 Jul 2006 23:54:59 GMT
NNTP-Posting-Host: 86.4.185.28
X-Complaints-To: http://www.ntlworld.com/netreport
X-Trace: newsfe6-gui.ntli.net 1154130899 86.4.185.28 (Sat, 29 Jul 2006 00:54:59
BST)
NNTP-Posting-Date: Sat, 29 Jul 2006 00:54:59 BST
Organization: ntl Cablemodem News Service
Xref: g2news2.google.com rec.radio.amateur.space:292
```

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*Group Networking

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quaking in their boots

http://tinyurl.com/pzkxe

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Clive Foster

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and marketing idea we have seen this year:

http://tinyurl.com/pzkxe

Menefopus memogum niluma mecasi domacor do sewot pitomu tehit raduy ser hot nemeramodoc poguveg wesecil pa turok dato .

```
From 6812016893737335752
X-Google-Thread: 10e8ad,60f81603ce9e86fd,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news2.google.com!news.germany.com!feeder.news-
service.com!newsgate.cistron.nl!transit.news.xs4all.nl!xs4all!newsfeeder.wxs.nl!
divide.nova.planet.nl!posting.nova.planet.nl!not-for-mail
From: "RDX" <nospam@nomail.com>
Newsgroups: rec.radio.amateur.space
Subject: ISS amateur radio website!
Date: Wed, 2 Aug 2006 06:33:41 +0200
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.2869
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.2869
X-RFC2646: Format=Flowed; Original
```

Lines: 12
Message-ID: <44d0d033$0$2026$ba620dc5@text.nova.planet.nl>
NNTP-Posting-Host: 84.85.169.223
X-Trace: 1154535475 text.nova.planet.nl 2026 84.85.169.223:52903
X-Complaints-To: abuse@planet.nl
Xref: g2news2.google.com rec.radio.amateur.space:294

Hello all,

It's the first time ive been on this amateur.space newsgroups.

I have a ISS amateur radio website!

http://www.pd0rkc.com

73's Cor PD0RKC

From 6449967056291060508
X-Google-Thread: 10e8ad,1efd79e3cf07ee,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news4.google.com!newshub.sdsu.edu!elnk-nf2-pas!
newsfeed.earthlink.net!stamper.news.pas.earthlink.net!
newsread1.news.pas.earthlink.net.POSTED!46041641!not-for-mail
From: "JoAnne Maenpaa" <wb9jej_no-spam@earthling.com>
Newsgroups: rec.radio.amateur.space
Subject: ANS-211 AMSAT News Service Weekly Bulletins
Lines: 315
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <FbaAg.2342$xp2.2055@newsread1.news.pas.earthlink.net>
Date: Wed, 02 Aug 2006 23:04:05 GMT
NNTP-Posting-Host: 68.165.61.119
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread1.news.pas.earthlink.net 1154559845 68.165.61.119 (Wed, 02 Aug 2006 16:04:05 PDT)
NNTP-Posting-Date: Wed, 02 Aug 2006 16:04:05 PDT
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news2.google.com rec.radio.amateur.space:295

AMSAT NEWS SERVICE
ANS-211

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating

through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

******************* AMSAT 2006 Space Symposium *************************

Online registration and hotel reservation for the 2006 AMSAT Space Symposium has been posted to the AMSAT website, and information about the Symposium has been expanded. The 2006 AMSAT Space Symposium will be held October 6, 7 and 8 at the Crowne Plaza in Foster City California in the beautiful San Francisco Bay Area.

Please visit http://www.amsat.org/amsat-new/symposium for additional information and an index to the expanded Symposium web pages.

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In this edition:

* Multiple CubeSats Lost
* AMSAT Eagle Presentation at CSVHFS and UK Colloquium This Weekend
* SSTV Test From the ISS
* AMSAT 2006 Symposium Information
* Florida AMSAT Net On The Air and on Echolink
* Project OSCAR and Cal Poly Honor AMSAT's Cliff K7RR
* ARISS Status for the Week of July 24, 2006

SB SAT @ AMSAT $ANS-211.01
Multiple CubeSats Lost

AMSAT News Service Bulletin 211.01
From AMSAT HQ SILVER SPRING, MD.
July 30, 2006
To All RADIO AMATEURS
BID: $ANS-211.01

The anticipated Dnepr night launch of 14 University CubeSats on 26 July only lasted 86 seconds according to a report by the Geocities Space Launch Report.
See: http://www.geocities.com/launchreport/slr.html

About a minute and a half into the flight the main engine shut down causing the rocket and its' multiple satellite payload to fall back to earth about 25 km south of the launch site. The Cal Poly team after learning the news vowed to press on with their next CubeSat.

This is the first failure of the Dnepr launch vehicle since they were re-commissioned to carry non-military payloads and the first failure of the rocket since 1988. A video clip of the launch can be seen at:
http://polysat.calpoly.edu/DNEPR-BelkA.wmv.

A second launch is planned with ISC Kosmotras on a Dnepr launch vehicle from the Baikonur Cosmodrome in Kazakhstan during September 2006. Seven CubeSats will fly as secondary payloads on this mission.

The CubeSats will be deployed after the primary spacecraft has been deployed into a nearly circular, 700 km, polar orbit. Three P-PODs will hold the CubeSats on the launch vehicle and deploy them at the correct point in the deployment sequence.

[ANS thanks the CubeSat Team at CalPoly for the above information]

/EX

SB SAT @ AMSAT $ANS-211.02
AMSAT Eagle Presentation at CSVHFS and UK Colloquium This Weekend

AMSAT News Service Bulletin 211.02
From AMSAT HQ SILVER SPRING, MD.
July 30, 2006
To All RADIO AMATEURS
BID: $ANS-211.02

Bob, N4HY, AMSAT Vice-President of Engineering and Tom, K3IO, AMSAT Board of Directors member are presenting a paper on AMSAT's efforts on EAGLE and P3E at the Central States VHF Society meeting in Minneapolis on July 28-29.

Meanwhile Rick, W2GPS, AMSAT President will be at the AMSAT-UK International Space Colloquium at the University of Surrey in Guildford, England the same weekend giving a presentation on the EAGLE satellite project.

Tom wrote, "Our paper contains a number of updates concerning EAGLE which you will read about in much more detail in the next AMSAT Journal. But for an advance view, you can see our CSVHFS paper, available as a ~3.9 MB PDF file at http://mysite.verizon.net/~w3iwi/EAGLE_CSVHFS.pdf."

[ANS thanks Bob, N4HY; Tom, K3IO; and Rick, W2GPS for the above information]

/EX

SB SAT @ AMSAT $ANS-211.03
SSTV Test From the ISS

AMSAT News Service Bulletin 211.03
From AMSAT HQ SILVER SPRING, MD.
July 30, 2006
To All RADIO AMATEURS
BID: $ANS-211.03

The ARRL reports that a test of the ARISS SSTV system aboard the International Space Station may be conducted over Russia the weekend of July 29th. This news was released by the ARRL Amateur Radio News, July 26, 2006. Expedition 13 Commander Pavel Vinogradov, RV3BS is expected to test the SSTV system over Moscow using the downlink frequency of 144.49 MHz. All amateurs within range are encouraged to receive the FM broadcast. More details are on-line at: http://www.arrl.org/?artid=6627.

Those of us in other parts of the world eagerly await further testing of the amateur radio SSTV system and look forward to receiving pictures from the ISS. Cor, PD0RKC reports on his Space Station Ham Radio Info Site (http://www.pd0rkc.com) that PY4MAB received a SSTV picture from the ISS when it was over Brazil on Friday, July 28 at 19:00 UTC.

This testing may be very limited. It is not known when the Project will be officially opened to the worldwide public. The tentative down link for SSTV will be on 144.490 FM. The uplink will not be published until testing has been completed.

For the rest of this week, listen to both 145.800 MHz and 144.490 MHz FM. If you hear packet on 145.800, then you know SSTV will NOT be active. If you do not hear Packet, then monitor 144.490 MHz and be ready to decode your images. The ISS crew is awake from 0600 to 2200 UTC time. Try to monitor every pass the crew is awake. Please send images you have received to marexmg@comcast.net.

Additional information about the SSTV system can be found on the MAREX-MG site at: http://www.marexmg.org/. Do not try to send images up to ISS at this time.

[ANS thanks Miles, WF1F, Cor, PD0RKC, ARRL and ARISS for the above information]

/EX

SB SAT @ AMSAT $ANS-211.04
AMSAT 2006 Symposium Information

AMSAT News Service Bulletin 211.04
From AMSAT HQ SILVER SPRING, MD.
July 30, 2006
To All RADIO AMATEURS
BID: $ANS-211.04

For the first time AMSAT is matching up drivers and riders who may be driving to the Symposium. Sharing a ride is a wonderful way to ease parking congestion and expenses, while sparing the air. You can sign up as a local participant who is driving in each day, or as a long distance driver coming from Southern California and surrounding states. Please visit the "Ride Sharing" link from the main Symposium page for additional information.

This year AMSAT will provide a limited amount of space for vendors and exhibitors. Exhibitors and demonstrations will have space in a breakout room adjacent to the main Symposium room, and vendors will be located in the foyer outside the Symposium room. Vendor space is

limited, so space will be reserved for vendors donating prizes for the Symposium first. Please see the "Exhibitors and Vendors" link from the main Symposium page. Go to:
http://www.amsat.org/amsat-new/symposium

In addition to online registration you can download the registration form in PDF format and mail it in. Registration forms will also be included in the next edition of the AMSAT Journal and with AMSAT Board election ballots.

[ANS thanks Emily Clarke, N1DID, Symposium Chairperson, for the above information]

/EX

SB SAT @ AMSAT $ANS-211.05
Florida AMSAT Net On The Air and on Echolink

AMSAT News Service Bulletin 211.05
From AMSAT HQ SILVER SPRING, MD.
July 30, 2006
To All RADIO AMATEURS
BID: $ANS-211.05

The Florida AMSAT Net meets on Thursday at 19:30 ET or 23:30 UTC. For hams checking in on-the-air there are several options:
+ Orlando N4HHA repeater on 443.1 MHz, (tone 103.5 Hz)
+ NI4CE repeater system, covering most of Florida's west coast (see http://www.NI4CE.org for details on access).
+ N4LEM repeater in Brevard County on Florida's east coast on 147.360 (tone 107.2).

Elsewhere around the world, the net can be heard through echolink on the N4HHA-R and KG4YZY-R nodes.

[ANS thanks the Florida AMSAT Net for the above information]

/EX

SB SAT @ AMSAT $ANS-211.06
Project OSCAR and Cal Poly Honor AMSAT's Cliff K7RR

AMSAT News Service Bulletin 211.06
From AMSAT HQ SILVER SPRING, MD.
July 30, 2006
To All RADIO AMATEURS
BID: $ANS-211.06

On July 26, 2006 the Project OSCAR Board of Directors awarded long time Project OSCAR and AMSAT member Clifford C. Buttschardt, K7RR with its highest award, the Lifetime Achievement Award for contributions to Amateur Satellite Radio. The award was presented at California Polytechnic State University (Cal Poly), where Cliff has been mentoring students for many years.

In her opening remarks Project OSCAR Vice-President Emily Clarke, N1DID, noted "In March of 2006 the Board of Project OSCAR voted to recognize Cliff with an award for his achievements and his lifetime of contributions to amateur satellite programs. Over the years Cliff contributed much to Project OSCAR, AMSAT and was one of the guiding forces behind the CubeSat program at Cal Poly, where he has been working quietly behind the scenes as an advisor."

Project OSCAR President Don Ferguson, KD6IRE, then read the award inscription, "This award is given to Cliff Buttschardt, K7RR, for his lifetime contribution to Project OSCAR, AMSAT, and Amateur Satellite Radio."

Professor Jordi Puig-Suari, CubeSat Program Co-Director also acknowledged Cliff's contributions. "Cliff was a crucial part of the mentoring that the students received from the AMSAT community. We wouldn't be here without his help. The students and myself want to do something special for Cliff, and we are changing the name of the CP-1 satellite to K7RR-Sat in his honor."

Unfortunately Cliff could not be in attendance for health reasons, but after the event Don and Emily met with Cliff and his wife at their Morro Bay home where the Lifetime Contribution & Achievement Award was officially presented.

[ANS thanks Emily, N1DID and Project Oscar for the above information]

/EX

SB SAT @ AMSAT $ANS-211.07
ARISS Status for the Week of July 24, 2006

AMSAT News Service Bulletin 211.07
From AMSAT HQ SILVER SPRING, MD.
July 30, 2006
To All RADIO AMATEURS
BID: $ANS-211.07

1. School Contacts
A contact took place during an ESA Event, the Children's Club Camp, in Patras, Greece for Saturday, July 29. ESA Astronaut Thomas Reiter, DF4TR, partcipated in the contact via the telebridge station, WH6PN, in Hawaii.

Robinson Elementary School in Anderson, Indiana has been scheduled for a contact with the ISS on Wednesday, August 2.

The Central Experimental Farm in Ontario, Canada is a research facility in the City of Ottawa. The ARISS contact with the camp originally planned for July 25 was cancelled due to EVA activities. The contact has been rescheduled for Friday, August 4.

2. Astronaut Training Status

On July 18, Expedition 14 commander Mike Lopez-Alegria participated in an abbreviated ISS Ham training session which focused specifically on the school contact operations including hands on training with the ARISS hardware.

On July 20, astronauts Bob Behnken and Nicole Stott were provided with the Basic Ops class that covered ISS Ham operations on the ISS.

3. Repeater Group Provides Shuttle Transmissions

The Rib Mountain Repeater Association in Wisconsin picks up shuttle transmissions from NASA using satellite dishes and broadcasts them through transmitters for those space enthusiasts without internet access. The transmissions can then be picked up via police scanners. The Wausau Daily Herald covered this in a July 13 article, "Group airs shuttle transmissions." See:
http://www.wausaudailyherald.com/apps/pbcs.dll/article?AID=/20060713/WDH0101/607130608

4. Technical Interchange Meeting Status

Plans continue for the ARISS Technical Interchange Meeting to be held the week of August 7 in Houston. An agenda has been compiled and meetings are currently being arranged with JSC personnel.

[ANS thanks Carol, KB3LKI for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM

From 5148952354927069510
X-Google-Thread: 10e8ad,728bc513734c9ca1,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news4.google.com!newshub.sdsu.edu!elnk-nf2-pas!newsfeed.earthlink.net!stamper.news.pas.earthlink.net!newsread1.news.pas.earthlink.net.POSTED!46041641!not-for-mail
From: "JoAnne Maenpaa" <wb9jej_no-spam@earthling.com>

Newsgroups: rec.radio.amateur.space
Subject: WSR-212 AMSAT Weekly Satellite Report
Lines: 1100
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <NbaAg.2343$xp2.1113@newsread1.news.pas.earthlink.net>
Date: Wed, 02 Aug 2006 23:04:13 GMT
NNTP-Posting-Host: 68.165.61.119
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread1.news.pas.earthlink.net 1154559853 68.165.61.119 (Wed, 02 Aug 2006 16:04:13 PDT)
NNTP-Posting-Date: Wed, 02 Aug 2006 16:04:13 PDT
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news2.google.com rec.radio.amateur.space:296

This report is organized into 4 parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites

SB SAT @ AMSAT W8ISS ANS-212.S1
WSR 212 Part 1 07/31/2006

AMSAT NEWS SERVICE BULLETIN 212.S1 FROM AMSAT HQ
SILVER SPRING, MD, July 31, 2006
TO ALL RADIO AMATEURS
BID: $ANS-212.S1

VO-52 HAMSAT
Catalog Number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/V - Indian Transponder

Proposed frequencies:

Indian Transponder:
Uplink : 435.220 MHz to 435.280 MHz LSB/CW
Downlink: 145.870 MHz to 145.930 MHz USB/CW
Beacon : 145.859330 MHZ CW

Dutch Transponder:
Uplink : 435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW
Beacon : 145.860MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsat.in/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is
active. Each transponder has a different beacon.
[04242006]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Current Mode(s): FM Repeater - V/U with Tone on Uplink
PBBS - V/U 9k6
Digipeater - ON

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.880 MHZ FM
145.880 MHz USB
145.920 MHz FM 67Hz PL tone
1268.700 MHz FM 67Hz PL tone
Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast
Protocol
1268.700 mhz FM, 9k6 PBP Digital
Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Mode schedule for July 2006 according to the AO-51 command team:

Mode schedule for July 2006 according to the AO-51 command team:

July 24 to August 6

FM Repeater
Downlink 435.300 mHz FM
Uplink 145.920 mHz FM with 67 hz Tone

Digital / PBBS
Downlink 435.150 mHz FM 9k6 Digital
Uplink 145.860 mHz FM 9k6 Digital

PBBS Active
Telemetry Downlink and Digipeater Active (No Unattended Digipeater Ops Please)

August 7 to August 13

This week the command stations will cycle the satellite through several configurations while collecting Whole Orbit Data (WOD) files. These files will be used to further define conditions on board the spacecraft important to maintaining optimum performance. Users are welcome to operate through the satellite during these tests , but specific mode changes will not be announced in advance. However, we do expect for the satellite to be available in V/U repeater for Saturday hamfest operations.

August 14 to August 27 (Additional testing as above possible August 21 to 27)

FM Repeater
Downlink 435.300 mHz FM
Uplink 145.920 mHz FM with 67 hz Tone

Digital / PBBS
Downlink 435.150 mHz FM 9k6 Digital
Uplink 145.860 mHz FM 9k6 Digital
PBBS Active
Telemetry Downlink and Digipeater Active (No Unattended Digipeater Ops Please)

August 28 to September 3

FM Repeater, V/S

Uplink: 145.920 mhz FM, No PL Tone
Downlink 2401.200 mhz FM

September modes are anticipated to include high power V/U repeater, L/S repeater, and high power V/U 38.4 kbaud!

Official Webpage: http://www.amsat.org/amsat-new/echo/
[07312006]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

```
Uplink: 145.850 MHz (67.0 Hz PL tone) (See below for operating
procedures)
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The
order of operation is thus: (allow for Doppler as necessary)
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute
timer
   on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the
repeater
   on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset
the 10
   minute timer.
[04172006]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: OPERATIONAL

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplink: 145.850 145.870 145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

unOfficial Webpage: http://www.amsat.org/amsat/sats/n7hpr/fo29.html
[11132005]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993
```

```
Status: Operational

Uplink: 145.850 MHz FM
Downlink: 436.795 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[01012006]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational depending on amount of Sunlight
Current Reported mode: Mode-A

Uplink:   145.850 to 145.950 MHz CW/USB Mode A
   432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
  145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
  145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons:  29.502 MHz
  145.972 MHz
  435.100 MHz
 2304.100 MHz

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php
The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
AO-7 users are requested to log their contacts and observations about
AO-7, especially any unexpected mode changes.
AO-07 telemetry software webpage:
http://www.qsl.net/k3tz/files/K3TZ_AO-07_Telemetry_Decoder_0.5.zip

Please keep your power low!  For additional information please read the
AO-7
Usage Guidelines on the AO-7 Log and Resource Site located at:
http://www.planetemily.com/ao7
[04242006]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: OFF?
Digipeater: OFF?
SSTV: ON?
```

The current crew is:
Commander: Pavel Vinogradov, RV3BS
Flight Engineer: Jeff Williams, KD5TVQ
Crew: Thomas Reiter - DF4TR

Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

SSTV:
Worldwide Reported Downlink: 144.49 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS, RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official Webpage: http://www.rac.ca/ariss
Official Fan club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

Currently there are reports coming across the AMSAT-BB that everything is off right now. There was testing of the SSTV equipment this weekend that was recieved in a number of European countries. Monitor the AMSAT-BB and ANS reports for more current information on what is happening.

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line is NOT translated from Russian and posted.
[07312006]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-212.S2
WSR 212 Part 2 07/31/2006

AMSAT NEWS SERVICE BULLETIN 212.S2 FROM AMSAT HQ
SILVER SPRING, MD, July 31, 2006
TO ALL RADIO AMATEURS
BID: $ANS-212.S2

CO-58 XI-V
Catalog Number: 28895
Launch Date: October 27, 2005

Status: Operational only within range of Ground station in Japan

Telemetry Downlink: 437.345MHz - FSK 1200bps using AFK protocol
Beacon Downlink: 437.465MHz - CW about 50 WPM

Callsign: JQ1YGW

Oficial Webpage: http://www.space.t.u-tokyo.ac.jp/gs/satinfo-e.html#xi5
Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
[03122006]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational?
Current Mode: OFF?
Digipeater: OFF?
SSTV: ON?

The current crew is:
Commander: Pavel Vinogradov, RV3BS
Flight Engineer: Jeff Williams, KD5TVQ
Crew: Thomas Reiter - DF4TR

Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

SSTV:
Worldwide Reported Downlink: 144.49 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS, RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official Webpage: http://www.rac.ca/ariss
Official Fan club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

Currently there are reports coming across the AMSAT-BB that everything is off right now. There was testing of the SSTV equipment this weekend that was recieved in a number of European countries. Monitor the AMSAT-BB and ANS reports for more current information on what is happening.

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is NOT translated from Russian and posted.
[07312006]
=====
PCSAT-2
Catalog Number: 25544
Launch Date: August 1, 2005

Activated: August 3, 2005
Status: Operational
Current Mode:

Digital Downlink: 435.275 Mhz
Digital Uplink: 145.825 Mhz

PSK-31 Downlink: 435.275 Mhz
PSK-31 Uplink: 29.401 Mhz

CALLSIGN: pcsat2

Official Webpage: http://web.usna.navy.mil/~bruninga/pcsat2.html
PCSAT2 APRS Packet page: http://www.findu.com/cgi-bin/pcsat2.cgi
aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[07172006]
=====
AO-51 ECHO

Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Current Mode(s): FM Repeater - V/U with Tone on Uplink
PBBS - V/U 9K6
Digipeater - ON

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.880 MHZ FM
145.880 MHz USB
145.920 MHz FM 67Hz PL tone
1268.700 MHz FM 67Hz PL tone
Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast Protocol
1268.700 mhz FM, 9k6 PBP Digital
Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Mode schedule for July 2006 according to the AO-51 command team:

July 24 to August 6

FM Repeater
Downlink 435.300 mHz FM
Uplink 145.920 mHz FM with 67 hz Tone

Digital / PBBS
Downlink 435.150 mHz FM 9k6 Digital
Uplink 145.860 mHz FM 9k6 Digital
PBBS Active
Telemetry Downlink and Digipeater Active (No Unattended Digipeater Ops Please)

August 7 to August 13

This week the command stations will cycle the satellite through several configurations while collecting Whole Orbit Data (WOD) files. These files
will be used to further define conditions on board the spacecraft important

to maintaining optimum performance. Users are welcome to operate through the satellite during these tests , but specific mode changes will not be announced in advance. However, we do expect for the satellite to be available in V/U repeater for Saturday hamfest operations.

August 14 to August 27 (Additional testing as above possible August 21 to 27)

FM Repeater
Downlink 435.300 mHz FM
Uplink 145.920 mHz FM with 67 hz Tone

Digital / PBBS
Downlink 435.150 mHz FM 9k6 Digital
Uplink 145.860 mHz FM 9k6 Digital
PBBS Active
Telemetry Downlink and Digipeater Active (No Unattended Digipeater Ops Please)

August 28 to September 3

FM Repeater, V/S

Uplink: 145.920 mhz FM, No PL Tone
Downlink 2401.200 mhz FM

September modes are anticipated to include high power V/U repeater, L/S repeater, and high power V/U 38.4 kbaud!

Official Webpage: http://www.amsat.org/amsat-new/echo/
[07312006]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Operational

General Usage Uplink/Downlink:145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org
aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[04172006]
=====
CO-55 CUTE-1.7
Catalog number: 28941
Launched: June 30,2003

```
Status: Operational

Uplink: ?
Downlink: 437.3850 CW
          437.4700 1200 FM ax25 or SRLL (ACTIVE only near Japan ? )
Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[05012006]
=====
GO-32 TECHSAT-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks: 145.850 FM
         145.890 FM
         145.930 FM
        1269.700 FM
        1269.800 FM
        1269.900 FM
Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[05012006]
=====
RS-22 Mozhayets 4
Catalog Number: 27939
Launch Date: September 27, 2004

Status: Operational

Beacon: 435.3520 MHz CW
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Semi-operational, the digipeater command is on and open for
APRS users.

Uplink: 145.900 FM
        145.920 FM
        145.940 FM
        145.960 FM
(using 1200-baud Manchester FSK)
Downlink: 437.026 MHz SSB (1200-baud PSK)
Mode-S Beacon: 2401.1428 MHz
```

Mode and Antenna Polarization:
U: RC 437.050 MHz RHCP
   PSK 437.025 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[04172006]

=====

UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational

Telemetry Downlink: 145.826 MHz. FM (1200-baud AFSK).
approx. 10 days ON, 10 days OFF
Mode-S Beacon: 2401.500 MHz. ... OFF
UHFBeacon: 435.025 MHz. ... OFF

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Reception reports are requested to be sent to xxxxx@amsat.org (replace xxxxx by g3cwv), or post to AMSAT-BB.

During the period 15 June to 17 July 2006 nothing has been heard from the satellite. It was last heard on 05 May, just one day before the solar eclipses were due to start. These eclipses will continue until 04 August 2006, reaching a maximum duration of 22% around 19 June. If the satellite behaves in the same way as it did last year, regular 10 day transmissions should re-start, sometime in August.

Official webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[07172006]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-212.S3
WSR 212 Part 3 07/31/2006

AMSAT NEWS SERVICE BULLETIN 212.S3 FROM AMSAT HQ
SILVER SPRING, MD, July 31, 2006
TO ALL RADIO AMATEURS

BID: $ANS-212.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

AO-54 SUITSAT
Catalog Number:28933
Release Date: February 3,2006

Status: Non-operational
Modes : FM Voice Telemetry/Greetings
 FM SSTV

Callsign: RS0RS
Downlink: 145.990 FM

Currently on the amsat-bb, there is a geussing game going on about when Suitsat will re-enter the atmosphere.

Official webpage: http://www.suitsat.org
[05012006]
=====
NCUBE-2
Catalog Number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog Number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 FM 67Hz CTCSS
Voice Downlink: 2401.835 FM
Packet Up/Downlink: 437.250 9k6 packet
Packet Downlink 2401.835 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01292006]
=====
TO-31 TMSAT-1
Catalog Number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink: 145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
PO-28 POSAT-1
Catalog Number: 22829
Launch Date: September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 429.950

Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html.
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012006]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launched: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB
Beacon: 145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: Downlink only

Uplink: 145.875 145.900 145.925 145.950 MHz FM (1200-baud)
Downlink: 435.808 MHz PSK
Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org

```
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01012006]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB
Beacon: 29.408 MHz
Robot: 29.454 MHz
[05232004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB
Beacon: 145.860 MHz
Robot: 145.908 MHz
[05232004]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink 145.975 MHz FM
Downlink 435.070 MHz FM
[05092004]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink: 145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM
Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01092005]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994
```

```
Status: Non-operational?

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB
Beacon: 29.352 MHz (intermittent)
SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplink: 145.84 145.86 145.88 145.90 MHz FM
(using 1200-baud Manchester FSK)
CW downlink: 437.125 MHz
Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)
Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[05232004]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[08152004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM
Broadcast Callsign: HL01-11
BBS: HL01-12

Jim, AA7KC, reports that KO-23's downlink transmitter continues in a
non-operational status.
[05092004]
```

```
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM (9600-baud FSK)
Downlink: 436.500 MHz FM
Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm

[ANS-WSR has no further information]
[05232004]
=====
SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

STatus: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz and 145.900 MHz
```

```
For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[08082004]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlink: 437.025 MHz 437.400 MHz
Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site
at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[05092004]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplink V-band   145.840 - 145.990 MHz CW/LSB
       U-band   435.550 - 435.800 MHz CW/LSB
       L1-band 1269.250 - 1269.500 MHz CW/LSB
       L2-band 1268.325 - 1268.575 MHz CW/LSB
Downlink: S2-band 2401.225 - 2401.475 MHz CW/USB
          K-band 24,048.010 - 24,048.060 MHz CW/USB
Beacon:   2401.323
         24,048.035
[05232004]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational
Downlink: 437.075 MHz
Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[08152004]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000
```

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz
Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[08152004]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, callsign KE6QMD, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Operational

Uplink: 145.850 or 145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz
Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[11202005]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)

```
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink 435.275 1200-baud AFSK
Downlink 145.825 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink: Downlink 145.825 MHz FM 1200 Baud AFSK
Beacon: 2401.220 MHz
[05012006]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-212.S4
WSR 212 Part 4 07/31/2006

AMSAT NEWS SERVICE BULLETIN 212.S4 FROM AMSAT HQ
SILVER SPRING, MD, July 31, 2006
TO ALL RADIO AMATEURS
BID: $ANS-212.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE
PROPOSED FOR LAUNCH AT THIS TIME:

PHASE 3E ?O-??
Catalog Number:
Proposed Launch Date: Early/Mid 2007

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web
page:
```

http://www.amsat-dl.org/p3e/
[ANS-WSR wishes to thank William Leijenaar, PE1RAH for this week's report]
[04242006]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/amsat/listserv/menu.html

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org

NNNN
/EX

```
From 2294747448376820179
X-Google-Thread: 10e8ad,556b1d54c1892dee,start
X-Google-Thread: f9daf,556b1d54c1892dee,start
X-Google-Thread: 106d41,556b1d54c1892dee,start
X-Google-Thread: 10f7a7,556b1d54c1892dee,start
X-Google-Thread: 10bf43,556b1d54c1892dee,start
X-Google-Attributes: gid10e8ad,gidf9daf,gid106d41,gid10f7a7,gid10bf43,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!postnews.google.com!m73g2000cwd.googlegroups.com!not-for-
mail
From: N90GL@yahoo.com
Newsgroups:
rec.radio.amateur.space,alt.revenge,rec.radio.cb,alt.usenet.kooks,rec.radio.amateu
r.policy
Subject: MY RADIO HERO !
Date: 2 Aug 2006 16:38:11 -0700
Organization: http://groups.google.com
Lines: 44
Message-ID: <1154561891.468915.243430@m73g2000cwd.googlegroups.com>
NNTP-Posting-Host: 4.153.208.190
Mime-Version: 1.0
Content-Type: text/plain; charset="iso-8859-1"
X-Trace: posting.google.com 1154561897 1373 127.0.0.1 (2 Aug 2006 23:38:17 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Wed, 2 Aug 2006 23:38:17 +0000 (UTC)
User-Agent: G2/0.2
X-HTTP-UserAgent: Mozilla/5.0 (Windows; U; Windows NT 5.1; en-US; rv:1.7.12)
Gecko/20050915 Firefox/1.0.7,gzip(gfe),gzip(gfe)
Complaints-To: groups-abuse@google.com
Injection-Info: m73g2000cwd.googlegroups.com; posting-host=4.153.208.190;
   posting-account=G1qfjw0AAADLQq6GHyCkxzLAB8UyXB7S
Xref: g2news2.google.com rec.radio.amateur.space:297 alt.revenge:5753
rec.radio.cb:14993 alt.usenet.kooks:214977 rec.radio.amateur.policy:35880
```

K8MN   Lookups: 2356
DAVID E HEIL
RD 5 BOX 232
CAMERON WV 26033
USA

Email: k8mn@earthlink.net

http://home.earthlink.net/~k8mn

K8MN Biographical Info--
Born: Glen Dale, WV

Raised: Lake Worth, FL; Lexington, KY; Hinton and Oak Hill, WV and Miami, FL.

Other residences: Fort Thomas, KY; Cincinnati, OH

Former DX calls: OH2 and OH0/K8MN ('85-'87 and '95-'98), J52US ('88-'89), 9L1US ('90-'91), A22MN ('92-'95), 5H3US ('98-'00) and part of the July, 1986 OH0MD/OJ0 crew operating from Market Reef.

First licensed: WN8LET 1963, Oak Hill, WV. Was WB4KTR from '68 through mid-'77.

Amateur Radio Interests: DXing (especially on 160, 80 and 6m), Contesting, rag chewing, collecting and restoring vintage gear, amateur radio history.

Bands/modes of operation: 160m through 70cm including AO-10 Mode B, SSB, CW and digital modes.

Other Interests: Music (playing guitar, bass, listening to a wide variety and producing home recordings), gardening, reading, writing, genealogy, astronomy, history, , humor, current events and collecting and restoring antiques.

K8MN was issued to me in 1977. My amateur radio mentor was Andy Timberlake W8MN--an old two letter call, Advanced Class amateur from Hinton, WV. My call honors Andy.

I'm active on the air. To quote Rod Newkirk of "How's DX" fame, "You might have heard me anywhere. Pick a band and I was there."

```
From 9155134338113015401
X-Google-Thread: 10e8ad,556b1d54c1892dee
X-Google-Thread: f9daf,556b1d54c1892dee
X-Google-Thread: 106d41,556b1d54c1892dee
X-Google-Thread: 10f7a7,556b1d54c1892dee
X-Google-Thread: 10bf43,556b1d54c1892dee
X-Google-Attributes: gid10e8ad,gidf9daf,gid106d41,gid10f7a7,gid10bf43,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!postnews.google.com!m79g2000cwm.googlegroups.com!not-for-
mail
From: "an_old_friend" <konstans@hotmail.com>
Newsgroups:
rec.radio.amateur.space,alt.revenge,rec.radio.cb,alt.usenet.kooks,rec.radio.amateu
r.policy
Subject: why forge this in Todd name?
Date: 2 Aug 2006 16:49:04 -0700
Organization: http://groups.google.com
Lines: 11
Message-ID: <1154562544.386634.29950@m79g2000cwm.googlegroups.com>
References: <1154561891.468915.243430@m73g2000cwd.googlegroups.com>
```

```
NNTP-Posting-Host: 66.82.9.70
Mime-Version: 1.0
Content-Type: text/plain; charset="iso-8859-1"
X-Trace: posting.google.com 1154562549 3403 127.0.0.1 (2 Aug 2006 23:49:09 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Wed, 2 Aug 2006 23:49:09 +0000 (UTC)
In-Reply-To: <1154561891.468915.243430@m73g2000cwd.googlegroups.com>
User-Agent: G2/0.2
X-HTTP-UserAgent: Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1; SV1; .NET CLR
1.1.4322),gzip(gfe),gzip(gfe)
Complaints-To: groups-abuse@google.com
Injection-Info: m79g2000cwm.googlegroups.com; posting-host=66.82.9.70;
   posting-account=5Yl6pg0AAADpwOMWiAfWEILF9IbswBYm
Xref: g2news2.google.com rec.radio.amateur.space:298 alt.revenge:5755
rec.radio.cb:14995 alt.usenet.kooks:214980 rec.radio.amateur.policy:35881


N9OGL@yahoo.com wrote:
> K8MN       Lookups: 2356
> DAVID E HEIL
> RD 5 BOX 232
> CAMERON WV 26033
> USA
>
> Email:  k8mn@earthlink.net
why?



From -7107119842789168395
X-Google-Thread: 10e8ad,556b1d54c1892dee
X-Google-Thread: f9daf,556b1d54c1892dee
X-Google-Thread: 106d41,556b1d54c1892dee
X-Google-Thread: 10f7a7,556b1d54c1892dee
X-Google-Thread: 10bf43,556b1d54c1892dee
X-Google-Attributes: gid10e8ad,gidf9daf,gid106d41,gid10f7a7,gid10bf43,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!postnews.google.com!p79g2000cwp.googlegroups.com!not-for-
mail
From: morkmorcock@lycos.com
Newsgroups:
rec.radio.amateur.space,alt.revenge,rec.radio.cb,alt.usenet.kooks,rec.radio.amateu
r.policy
Subject: Re: why forge this in Todd name?
Date: 2 Aug 2006 17:01:36 -0700
Organization: http://groups.google.com
Lines: 15
Message-ID: <1154563296.207371.139480@p79g2000cwp.googlegroups.com>
References: <1154561891.468915.243430@m73g2000cwd.googlegroups.com>
   <1154562544.386634.29950@m79g2000cwm.googlegroups.com>
NNTP-Posting-Host: 4.154.79.41
Mime-Version: 1.0
Content-Type: text/plain; charset="iso-8859-1"
```

```
X-Trace: posting.google.com 1154563301 6208 127.0.0.1 (3 Aug 2006 00:01:41 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Thu, 3 Aug 2006 00:01:41 +0000 (UTC)
In-Reply-To: <1154562544.386634.29950@m79g2000cwm.googlegroups.com>
User-Agent: G2/0.2
X-HTTP-UserAgent: Mozilla/5.0 (Windows; U; Windows NT 5.1; en-US; rv:1.7.12)
Gecko/20050915 Firefox/1.0.7,gzip(gfe),gzip(gfe)
Complaints-To: groups-abuse@google.com
Injection-Info: p79g2000cwp.googlegroups.com; posting-host=4.154.79.41;
   posting-account=qAuKPw0AAABhELqcZCqPgvw0lssnRYOR
Xref: g2news2.google.com rec.radio.amateur.space:299 alt.revenge:5756
rec.radio.cb:14996 alt.usenet.kooks:214982 rec.radio.amateur.policy:35885


an_old_friend wrote:
> N90GL@yahoo.com wrote:
> > K8MN       Lookups: 2356
> > DAVID E HEIL
> > RD 5 BOX 232
> > CAMERON WV 26033
> > USA
> >
> > Email:  k8mn@earthlink.net
> why?

STFU you insane fruit!
http://www.godhatesfags.com




From -8153238629431280209
X-Google-Thread: 10e8ad,556b1d54c1892dee
X-Google-Thread: f9daf,556b1d54c1892dee
X-Google-Thread: 106d41,556b1d54c1892dee
X-Google-Thread: 10f7a7,556b1d54c1892dee
X-Google-Thread: 10bf43,556b1d54c1892dee
X-Google-Attributes: gid10e8ad,gidf9daf,gid106d41,gid10f7a7,gid10bf43,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!postnews.google.com!i42g2000cwa.googlegroups.com!not-for-
mail
From: "an_old_friend" <konstans@hotmail.com>
Newsgroups:
rec.radio.amateur.space,alt.revenge,rec.radio.cb,alt.usenet.kooks,rec.radio.amateu
r.policy
Subject: Re: why forge this in Todd name?
Date: 2 Aug 2006 17:04:32 -0700
Organization: http://groups.google.com
Lines: 21
Message-ID: <1154563472.349988.169040@i42g2000cwa.googlegroups.com>
References: <1154561891.468915.243430@m73g2000cwd.googlegroups.com>
   <1154562544.386634.29950@m79g2000cwm.googlegroups.com>
   <1154563296.207371.139480@p79g2000cwp.googlegroups.com>
NNTP-Posting-Host: 66.82.9.70
```

```
Mime-Version: 1.0
Content-Type: text/plain; charset="iso-8859-1"
X-Trace: posting.google.com 1154563477 6735 127.0.0.1 (3 Aug 2006 00:04:37 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Thu, 3 Aug 2006 00:04:37 +0000 (UTC)
In-Reply-To: <1154563296.207371.139480@p79g2000cwp.googlegroups.com>
User-Agent: G2/0.2
X-HTTP-UserAgent: Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1; SV1; .NET CLR
1.1.4322),gzip(gfe),gzip(gfe)
Complaints-To: groups-abuse@google.com
Injection-Info: i42g2000cwa.googlegroups.com; posting-host=66.82.9.70;
   posting-account=5Yl6pg0AAADpwOMWiAfWEILF9IbswBYm
Xref: g2news2.google.com rec.radio.amateur.space:300 alt.revenge:5757
rec.radio.cb:14997 alt.usenet.kooks:214984 rec.radio.amateur.policy:35887


morkmorc...@lycos.com wrote:
> an_old_friend wrote:
> > N9OGL@yahoo.com wrote:
> > > K8MN       Lookups: 2356
> > > DAVID E HEIL
> > > RD 5 BOX 232
> > > CAMERON WV 26033
> > > USA
> > >
> > > Email:  k8mn@earthlink.net
> > why?
>
> STFU you insane fruit!
I am not insane ask the army about that ask the APA who defines
insanity
face it bigot you are lying about that
> http://www.godhatesfags.com
and that too God hates NO ONE even those that bearfalse witness in His
name as you do



From -3915515640271755277
X-Google-Thread: 10f7a7,21b12fcd0f1e1b98
X-Google-Thread: fbf1a,21b12fcd0f1e1b98
X-Google-Thread: 10bf43,21b12fcd0f1e1b98
X-Google-Thread: 106d41,21b12fcd0f1e1b98
X-Google-Thread: 10e8ad,d5b083bcbcde09e7,start
X-Google-Attributes: gid10f7a7,gidfbf1a,gid10bf43,gid106d41,gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!postnews.google.com!n13g2000cwa.googlegroups.com!not-for-
mail
From: morkmorcock@lycos.com
Newsgroups:
alt.usenet.kooks,alt.flame,rec.radio.amateur.policy,rec.radio.cb,rec.radio.amateur
.space
Subject: Re: trolling right along
```

```
Date: 5 Aug 2006 14:31:05 -0700
Organization: http://groups.google.com
Lines: 42
Message-ID: <1154813465.402931.27860@n13g2000cwa.googlegroups.com>
References: <1154760660.279280.297400@i3g2000cwc.googlegroups.com>
   <20060805085604.853$f6_-_@newsreader.com>
   <1154782948.779018.259520@b28g2000cwb.googlegroups.com>
   <1154801298.260125.261510@p79g2000cwp.googlegroups.com>
   <zrGdnUDK9tcfZknZnZ2dnUVZ_rSdnZ2d@giganews.com>
NNTP-Posting-Host: 4.153.215.203
Mime-Version: 1.0
Content-Type: text/plain; charset="iso-8859-1"
X-Trace: posting.google.com 1154813470 18104 127.0.0.1 (5 Aug 2006 21:31:10 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Sat, 5 Aug 2006 21:31:10 +0000 (UTC)
In-Reply-To: <zrGdnUDK9tcfZknZnZ2dnUVZ_rSdnZ2d@giganews.com>
User-Agent: G2/0.2
X-HTTP-UserAgent: Mozilla/5.0 (Windows; U; Windows NT 5.1; en-US; rv:1.7.12)
Gecko/20050915 Firefox/1.0.7,gzip(gfe),gzip(gfe)
Complaints-To: groups-abuse@google.com
Injection-Info: n13g2000cwa.googlegroups.com; posting-host=4.153.215.203;
   posting-account=qAuKPw0AAABhELqcZCqPgvw0lssnRYOR
Xref: g2news2.google.com alt.usenet.kooks:216197 alt.flame:33579
rec.radio.amateur.policy:36270 rec.radio.cb:15209 rec.radio.amateur.space:301

Screw E'm..Still A Tony Fan wrote:
> <N90GL@yahoo.com> wrote in message
> news:1154801298.260125.261510@p79g2000cwp.googlegroups.com...
> >
> > an_old_friend wrote:
> >> Steveo wrote:
> >> > mork_margen@yahoo.com wrote:
> >> > > steve's confederates!
> >> > > http://csagov.org/
> >> > >
> >> > You really should be more careful about posting at the same time with
> >> > your
> >> > altopia account while forging people, Lloyd Davies.
> >> >
> >> > Not Lloyd" <anon@anon.com>
> >> >
> >> > Organization: Altopia Corp. - Usenet Access - www.altopia.com
> >> > Today 3:07 AM
> >> you know your claims might be more believeable if you were accualy had
> >> credibility
> >>
> >> but sadlly who cares If the orignal poster is Davies and it might be or
> >> might not. he has become so stabled to Wisemen that he might as well be
> >> Wisemen anyway
> >>
> >> amusing who you claim it is ok for your to answer the trolls and
> >> torling post but try to pass of that I may not without be a violation
> >> of my ToS
> >>
> >> who are those efforts going
> >
> > STFU you fucking sodomite!
> > You shouldn't be swaping insults with mopy, you silly fruit! Mopy and
> > you are trolls of a feather! Trolls of a feather suck cock together!!!
> > BWHAHAHAHAHAHAHAHAHA!!!!!!!!!!
>
> You're both a pair of twits - STFU already.
> >

go suck the tards limp stick you faggot! better yet,stay over in kooks
with your faggot friends and stay the fuck out of the radio groups!



From 5431868634688820415
X-Google-Thread: 10f7a7,21b12fcd0f1e1b98
X-Google-Thread: fbf1a,21b12fcd0f1e1b98
X-Google-Thread: 10bf43,21b12fcd0f1e1b98
X-Google-Thread: 106d41,21b12fcd0f1e1b98
X-Google-Thread: 10e8ad,d5b083bcbcde09e7
X-Google-Attributes: gid10f7a7,gidfbf1a,gid10bf43,gid106d41,gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!postnews.google.com!m79g2000cwm.googlegroups.com!not-for-
mail
From: "an old friend" <kb9rqz@hotmail.com>
Newsgroups:
alt.usenet.kooks,alt.flame,rec.radio.amateur.policy,rec.radio.cb,rec.radio.amateur
.space
Subject: Re: trolling right along
Followup-To: alt.usenet.kooks,alt.flame,
Date: 5 Aug 2006 14:33:50 -0700
Organization: http://groups.google.com
Lines: 11
Message-ID: <1154813630.114796.145490@m79g2000cwm.googlegroups.com>
References: <1154760660.279280.297400@i3g2000cwc.googlegroups.com>
   <20060805085604.853$f6_-_@newsreader.com>
   <1154782948.779018.259520@b28g2000cwb.googlegroups.com>
   <1154801298.260125.261510@p79g2000cwp.googlegroups.com>
   <zrGdnUDK9tcfZknZnZ2dnUVZ_rSdnZ2d@giganews.com>
   <1154813465.402931.27860@n13g2000cwa.googlegroups.com>
NNTP-Posting-Host: 66.82.9.87
Mime-Version: 1.0
Content-Type: text/plain; charset="iso-8859-1"
X-Trace: posting.google.com 1154813635 16153 127.0.0.1 (5 Aug 2006 21:33:55 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Sat, 5 Aug 2006 21:33:55 +0000 (UTC)
In-Reply-To: <1154813465.402931.27860@n13g2000cwa.googlegroups.com>
User-Agent: G2/0.2
X-HTTP-UserAgent: Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1; SV1; .NET CLR
1.1.4322),gzip(gfe),gzip(gfe)
Complaints-To: groups-abuse@google.com
```

```
Injection-Info: m79g2000cwm.googlegroups.com; posting-host=66.82.9.87;
   posting-account=u4IZrA0AAAAnZJmD4DLlWGiEpMGb--6i
Xref: g2news2.google.com alt.usenet.kooks:216201 alt.flame:33580
rec.radio.amateur.policy:36272 rec.radio.cb:15211 rec.radio.amateur.space:302


morkmorc...@lycos.com wrote:
> Screw E'm..Still A Tony Fan wrote:
> > <N90GL@yahoo.com> wrote in message
> > news:1154801298.260125.261510@p79g2000cwp.googlegroups.com...

>
> go suck the tards limp stick you faggot! better yet,stay over in kooks
> with your faggot friends and stay the fuck out of the radio groups!
get some therapy




From -5692507601049950974
X-Google-Thread: 106d41,bbcbab76b3ac68d1
X-Google-Thread: 10f7a7,ac76e80debae1099,start
X-Google-Thread: 10bf43,ac76e80debae1099,start
X-Google-Thread: 10a617,ac76e80debae1099,start
X-Google-Thread: 10e8ad,ac76e80debae1099,start
X-Google-Attributes: gid106d41,gid10f7a7,gid10bf43,gid10a617,gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!postnews.google.com!75g2000cwc.googlegroups.com!not-for-
mail
From: morkmorcock@lycos.com
Newsgroups:
rec.radio.cb,alt.usenet.kooks,rec.radio.amateur.policy,alt.hackers.malicious,rec.r
adio.amateur.space
Subject: Re: God Bless N8WWM!!!!!!!
Date: 5 Aug 2006 14:36:28 -0700
Organization: http://groups.google.com
Lines: 31
Message-ID: <1154813788.317862.312320@75g2000cwc.googlegroups.com>
References: <rjWAg.8762$MA3.1928@news.ono.com>
   <1154757633.626203.311460@h48g2000cwc.googlegroups.com>
   <12d8g28tf45fudb@corp.supernews.com>
   <20060805075002.567$oa@newsreader.com>
NNTP-Posting-Host: 4.153.215.203
Mime-Version: 1.0
Content-Type: text/plain; charset="iso-8859-1"
X-Trace: posting.google.com 1154813793 16703 127.0.0.1 (5 Aug 2006 21:36:33 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Sat, 5 Aug 2006 21:36:33 +0000 (UTC)
In-Reply-To: <20060805075002.567$oa@newsreader.com>
User-Agent: G2/0.2
X-HTTP-UserAgent: Mozilla/5.0 (Windows; U; Windows NT 5.1; en-US; rv:1.7.12)
Gecko/20050915 Firefox/1.0.7,gzip(gfe),gzip(gfe)
Complaints-To: groups-abuse@google.com
Injection-Info: 75g2000cwc.googlegroups.com; posting-host=4.153.215.203;
```

```
   posting-account=qAuKPw0AAABhELqcZCqPgvw0lssnRYOR
Xref: g2news2.google.com rec.radio.cb:15212 alt.usenet.kooks:216206
rec.radio.amateur.policy:36273 alt.hackers.malicious:57675
rec.radio.amateur.space:303


Steveo wrote:
> "DrDeath" <drdeath555usb@yahoo.com> wrote:
> > <Todd kisses Dougs ass@rrcb.com> worshipped Doug in message
> > news:1154757633.626203.311460@h48g2000cwc.googlegroups.com...
> > >
> > > God_Hates_N8@convicted felon.net wrote:
> > >> N8 fought Mopey and the keyclowns. He invented the AKC. Mopey
> > >> and Twithed tried to stop him, but couldn't. Long live the heroic
> > >> N8WWM
> > >
> > > I never had a problem with N8. It was funny as hell to watch Doug catch
> > > that cb moron mopy and lead him around the web!
> > >
> >
> > It was even funnier that Dogie was carrying a BB gun and was afraid to
> > come out of the house when Steveo confronted him.
> >
> Ask Roger Wiseman how he reacted when Dave Heil confronted him at his West
> Virginia slum.
>
> http://groups.google.com/group/rec.radio.amateur.policy/msg/93c4548cc85f3a7
> f?hl=en&

hey steveo you side walk sissy...........
is this a good place to get a big radio???????
HTTP://www.radioactiveradios.com
The tard is getting a big radio to drop the maul on
ya...................
BWHAHAHAHAHAHAHAHAHAHAHAHA!!!!!!!!!!!!



From 4513690268176978387
X-Google-Thread: 106d41,bbcbab76b3ac68d1
X-Google-Thread: 10f7a7,ac76e80debae1099
X-Google-Thread: 10bf43,ac76e80debae1099
X-Google-Thread: 10a617,ac76e80debae1099
X-Google-Thread: 10e8ad,ac76e80debae1099
X-Google-Attributes: gid106d41,gid10f7a7,gid10bf43,gid10a617,gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!postnews.google.com!h48g2000cwc.googlegroups.com!not-for-
mail
From: "an old friend" <kb9rqz@hotmail.com>
Newsgroups:
rec.radio.cb,alt.usenet.kooks,rec.radio.amateur.policy,alt.hackers.malicious,rec.r
adio.amateur.space
Subject: Re: God Bless N8WWM!!!!!!!
```

```
Followup-To: ,alt.usenet.kooks,
Date: 5 Aug 2006 14:38:56 -0700
Organization: http://groups.google.com
Lines: 20
Message-ID: <1154813936.811015.25120@h48g2000cwc.googlegroups.com>
References: <rjWAg.8762$MA3.1928@news.ono.com>
   <1154757633.626203.311460@h48g2000cwc.googlegroups.com>
   <12d8g28tf45fudb@corp.supernews.com>
   <20060805075002.567$oa@newsreader.com>
   <1154813788.317862.312320@75g2000cwc.googlegroups.com>
NNTP-Posting-Host: 66.82.9.87
Mime-Version: 1.0
Content-Type: text/plain; charset="iso-8859-1"
X-Trace: posting.google.com 1154813942 17013 127.0.0.1 (5 Aug 2006 21:39:02 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Sat, 5 Aug 2006 21:39:02 +0000 (UTC)
In-Reply-To: <1154813788.317862.312320@75g2000cwc.googlegroups.com>
User-Agent: G2/0.2
X-HTTP-UserAgent: Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1; SV1; .NET CLR
1.1.4322),gzip(gfe),gzip(gfe)
Complaints-To: groups-abuse@google.com
Injection-Info: h48g2000cwc.googlegroups.com; posting-host=66.82.9.87;
   posting-account=u4IZrA0AAAAnZJmD4DLlWGiEpMGb--6i
Xref: g2news2.google.com rec.radio.cb:15213 alt.usenet.kooks:216211
rec.radio.amateur.policy:36274 alt.hackers.malicious:57677
rec.radio.amateur.space:304


morkmorc...@lycos.com wrote:
> Steveo wrote:
> > "DrDeath" <drdeath555usb@yahoo.com> wrote:
> > > <Todd kisses Dougs ass@rrcb.com> worshipped Doug in message

> > Ask Roger Wiseman how he reacted when Dave Heil confronted him at his West
> > Virginia slum.
> >
> > http://groups.google.com/group/rec.radio.amateur.policy/msg/93c4548cc85f3a7
> > f?hl=en&
>
> hey steveo you side walk sissy...........
> is this a good place to get a big radio???????
> HTTP://www.radioactiveradios.com
> The tard is getting a big radio to drop the maul on
> ya...................
> BWHAHAHAHAHAHAHAHAHAHAHAHA!!!!!!!!!!!!!
get some therapy



From 3972820169363001419
X-Google-Thread: 10e8ad,ca81def80ff3e3db,start
X-Google-Thread: 10f7a7,ca81def80ff3e3db,start
X-Google-Thread: 106fd0,ca81def80ff3e3db,start
```

X-Google-Thread: 106d41,ca81def80ff3e3db,start
X-Google-Thread: 10bf43,ca81def80ff3e3db,start
X-Google-Attributes: gid10e8ad,gid10f7a7,gid106fd0,gid106d41,gid10bf43,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!postnews.google.com!p79g2000cwp.googlegroups.com!not-for-mail
From: N90GL@yahoo.com
Newsgroups:
rec.radio.amateur.space,alt.usenet.kooks,alt.troll,rec.radio.cb,rec.radio.amateur.policy
Subject: your on notice you fukkahs!!!!!!!!!
Date: 5 Aug 2006 15:40:09 -0700
Organization: http://groups.google.com
Lines: 20
Message-ID: <1154817609.898804.4760@p79g2000cwp.googlegroups.com>
NNTP-Posting-Host: 4.153.209.212
Mime-Version: 1.0
Content-Type: text/plain; charset="iso-8859-1"
X-Trace: posting.google.com 1154817615 27067 127.0.0.1 (5 Aug 2006 22:40:15 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Sat, 5 Aug 2006 22:40:15 +0000 (UTC)
User-Agent: G2/0.2
X-HTTP-UserAgent: Mozilla/5.0 (Windows; U; Windows NT 5.1; en-US; rv:1.7.12)
Gecko/20050915 Firefox/1.0.7,gzip(gfe),gzip(gfe)
Complaints-To: groups-abuse@google.com
Injection-Info: p79g2000cwp.googlegroups.com; posting-host=4.153.209.212;
   posting-account=G1qfjw0AAADLQq6GHyCkxzLAB8UyXB7S
Xref: g2news2.google.com rec.radio.amateur.space:305 alt.usenet.kooks:216235
alt.troll:19414 rec.radio.cb:15214 rec.radio.amateur.policy:36275

my lawyer said something about putting you fukkahs to stop your
bullshit!
so stop using my numbers you rat fukkahs.........................

NOTICE:

I have been a member of the N90 hf club since 1990!!

I check into the N90 net every Saturday night on 27.405 LSB! Have so
since 1990!!

My monitor is 27.115 AM and my handle is "TOAD".......been toad since
1990 !!

Cobra 2000 gtl
maco 4 element beam
Antron 99

NOW STOP USING MY NUMBERS YOU SOCIAL MISFITS!!!!!!!

From 7310505452874141275

```
X-Google-Thread: 10e8ad,7ba7040dd15a1933,start
X-Google-Thread: 10f7a7,7ba7040dd15a1933,start
X-Google-Thread: 106fd0,7ba7040dd15a1933,start
X-Google-Thread: 10bf43,7ba7040dd15a1933,start
X-Google-Thread: 106d41,7ba7040dd15a1933,start
X-Google-Attributes: gid10e8ad,gid10f7a7,gid106fd0,gid10bf43,gid106d41,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!postnews.google.com!p79g2000cwp.googlegroups.com!not-for-
mail
From: N90GL@yahoo.com
Newsgroups:
rec.radio.amateur.space,alt.usenet.kooks,alt.troll,rec.radio.amateur.policy,rec.ra
dio.cb
Subject: Great Space and Radio Site
Date: 5 Aug 2006 18:11:53 -0700
Organization: http://groups.google.com
Lines: 3
Message-ID: <1154826713.755463.78620@p79g2000cwp.googlegroups.com>
NNTP-Posting-Host: 4.153.214.173
Mime-Version: 1.0
Content-Type: text/plain; charset="iso-8859-1"
X-Trace: posting.google.com 1154826718 19129 127.0.0.1 (6 Aug 2006 01:11:58 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Sun, 6 Aug 2006 01:11:58 +0000 (UTC)
User-Agent: G2/0.2
X-HTTP-UserAgent: Mozilla/5.0 (Windows; U; Windows NT 5.1; en-US; rv:1.7.12)
Gecko/20050915 Firefox/1.0.7,gzip(gfe),gzip(gfe)
Complaints-To: groups-abuse@google.com
Injection-Info: p79g2000cwp.googlegroups.com; posting-host=4.153.214.173;
   posting-account=G1qfjw0AAADLQq6GHyCkxzLAB8UyXB7S
Xref: g2news2.google.com rec.radio.amateur.space:306 alt.usenet.kooks:216302
alt.troll:19427 rec.radio.amateur.policy:36278 rec.radio.cb:15215

serious radio only!
http://skipshooters.ericextreme.com/




From 7625878707875437736
X-Google-Thread: 10e8ad,ca81def80ff3e3db
X-Google-Thread: 10f7a7,ca81def80ff3e3db
X-Google-Thread: 106fd0,ca81def80ff3e3db
X-Google-Thread: 106d41,ca81def80ff3e3db
X-Google-Thread: 10bf43,ca81def80ff3e3db
X-Google-Attributes: gid10e8ad,gid10f7a7,gid106fd0,gid106d41,gid10bf43,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!postnews.google.com!p79g2000cwp.googlegroups.com!not-for-
mail
From: "N9OGL" <toddaug555@yahoo.com>
Newsgroups:
rec.radio.amateur.space,alt.usenet.kooks,alt.troll,rec.radio.cb,rec.radio.amateur.
policy
Subject: Re: your on notice you fukkahs!!!!!!!!!
```

```
Date: 5 Aug 2006 20:32:58 -0700
Organization: http://groups.google.com
Lines: 28
Message-ID: <1154835178.507658.91440@p79g2000cwp.googlegroups.com>
References: <1154817609.898804.4760@p79g2000cwp.googlegroups.com>
NNTP-Posting-Host: 12.156.121.130
Mime-Version: 1.0
Content-Type: text/plain; charset="iso-8859-1"
X-Trace: posting.google.com 1154835182 14863 127.0.0.1 (6 Aug 2006 03:33:02 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Sun, 6 Aug 2006 03:33:02 +0000 (UTC)
In-Reply-To: <1154817609.898804.4760@p79g2000cwp.googlegroups.com>
User-Agent: G2/0.2
X-HTTP-UserAgent: Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1; .NET CLR
1.1.4322),gzip(gfe),gzip(gfe)
Complaints-To: groups-abuse@google.com
Injection-Info: p79g2000cwp.googlegroups.com; posting-host=12.156.121.130;
   posting-account=MFiwyQwAAADbKVtDPSGIX7t9ZX1DHG4j
Xref: g2news2.google.com rec.radio.amateur.space:307 alt.usenet.kooks:216338
alt.troll:19428 rec.radio.cb:15216 rec.radio.amateur.policy:36287


N90GL@yahoo.com wrote:
> my lawyer said something about putting you fukkahs to stop your
> bullshit!
> so stop using my numbers you rat fukkahs.........................
>
> NOTICE:
>
> I have been a member of the N90 hf club since 1990!!
>
> I check into the N90 net every Saturday night on 27.405 LSB! Have so
> since 1990!!
>
> My monitor is 27.115 AM and my handle is "TOAD".......been toad since
> 1990 !!
>
> Cobra 2000 gtl
> maco 4 element beam
> Antron 99
>
> NOW STOP USING MY NUMBERS YOU SOCIAL MISFITS!!!!!!!

Who the hell are you talking to you moron??

Todd N9OGL
OMEGA ONE RADIO
13.556.00 MHz LSB



From -4530517044239628514
X-Google-Thread: 106d41,bbcbab76b3ac68d1
```

```
X-Google-Thread: 10bf43,ac76e80debae1099
X-Google-Thread: 10a617,ac76e80debae1099
X-Google-Thread: 10e8ad,ac76e80debae1099
X-Google-Attributes: gid106d41,gid10bf43,gid10a617,gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news4.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx02.iad01.newshosting.com!newshosting.com!
198.186.190.247.MISMATCH!news-xxxfer.readnews.com!spool-big1.readnews.com!news-
out.readnews.com!postnews3.readnews.com!nr3.newsreader.com.POSTED!not-for-mail
Subject: Re: God Bless N8WWM!!!!!!!
From: Steveo <moparholic@hotmail.com>
Organization: http://NewsReader.Com/ 30 GB Month
Message-ID: <20060806005933.224$zu@newsreader.com>
Newsgroups:
rec.radio.cb,rec.radio.amateur.policy,alt.hackers.malicious,rec.radio.amateur.spac
e
References: <rjWAg.8762$MA3.1928@news.ono.com>
<1154757633.626203.311460@h48g2000cwc.googlegroups.com>
<12d8g28tf45fudb@corp.supernews.com> <20060805075002.567$oa@newsreader.com>
<1154813788.317862.312320@75g2000cwc.googlegroups.com>
X-NRC-Trace: NewsReader.Com 1QLZdWcy8KWVxYLdh0xYQ,+5PVz5fk,e=gXk_AwljgZ,N6dI
Date: 06 Aug 2006 04:50:51 GMT
Lines: 6
NNTP-Posting-Host: 56a0b59b.nr3.newsreader.com
X-Trace: DXC=Olmfd0oDLff^Jh;ABlZ4cjOA8_@f\K_ib0V\?
8`j4eWkSZd=PNA2FcgNd7biGRhQTg<SVPgDF]ACd>CgK3dfUH^`
X-Complaints-To: abuse@newsreader.com
Xref: g2news2.google.com rec.radio.cb:15229 rec.radio.amateur.policy:36296
alt.hackers.malicious:57758 rec.radio.amateur.space:308

morkmorcock@lycos.com wrote:
> hey steveo you side walk sissy...........
>
The last asswipe that called me that got his picture taken.

http://n8wwm.4t.com/photo.html



From -3927453981399173660
X-Google-Thread: 10e8ad,ca81def80ff3e3db
X-Google-Thread: 10f7a7,ca81def80ff3e3db
X-Google-Thread: 106fd0,ca81def80ff3e3db
X-Google-Thread: 106d41,ca81def80ff3e3db
X-Google-Thread: 10bf43,ca81def80ff3e3db
X-Google-Attributes: gid10e8ad,gid10f7a7,gid106fd0,gid106d41,gid10bf43,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!postnews.google.com!b28g2000cwb.googlegroups.com!not-for-
mail
From: "an old friend" <kb9rqz@hotmail.com>
Newsgroups:
rec.radio.amateur.space,alt.usenet.kooks,alt.troll,rec.radio.cb,rec.radio.amateur.
policy
Subject: bless the original psters tormented mind, but hurry oh lord
```

```
Date: 6 Aug 2006 00:53:52 -0700
Organization: http://groups.google.com
Lines: 30
Message-ID: <1154850831.975219.227840@b28g2000cwb.googlegroups.com>
References: <1154817609.898804.4760@p79g2000cwp.googlegroups.com>
   <1154835178.507658.91440@p79g2000cwp.googlegroups.com>
NNTP-Posting-Host: 69.19.14.40
Mime-Version: 1.0
Content-Type: text/plain; charset="iso-8859-1"
X-Trace: posting.google.com 1154850836 26783 127.0.0.1 (6 Aug 2006 07:53:56 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Sun, 6 Aug 2006 07:53:56 +0000 (UTC)
In-Reply-To: <1154835178.507658.91440@p79g2000cwp.googlegroups.com>
User-Agent: G2/0.2
X-HTTP-UserAgent: Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1; SV1; .NET CLR
1.1.4322),gzip(gfe),gzip(gfe)
Complaints-To: groups-abuse@google.com
Injection-Info: b28g2000cwb.googlegroups.com; posting-host=69.19.14.40;
   posting-account=u4IZrA0AAAAnZJmD4DLlWGiEpMGb--6i
Xref: g2news2.google.com rec.radio.amateur.space:309 alt.usenet.kooks:216391
alt.troll:19432 rec.radio.cb:15245 rec.radio.amateur.policy:36307


N9OGL wrote:
> N90GL@yahoo.com wrote:
> > my lawyer said something about putting you fukkahs to stop your
> > bullshit!
> > so stop using my numbers you rat fukkahs.........................
> >
> > NOTICE:
> >
> > I have been a member of the N90 hf club since 1990!!
> >
> > I check into the N90 net every Saturday night on 27.405 LSB! Have so
> > since 1990!!
> >
> > My monitor is 27.115 AM and my handle is "TOAD".......been toad since
> > 1990 !!
> >
> > Cobra 2000 gtl
> > maco 4 element beam
> > Antron 99
> >
> > NOW STOP USING MY NUMBERS YOU SOCIAL MISFITS!!!!!!!
>
> Who the hell are you talking to you moron??
himself?
>
> Todd N9OGL
> OMEGA ONE RADIO
> 13.556.00 MHz LSB
```

```
From 1700726631994490194
X-Google-Thread: 10e8ad,127ecb00156913f4,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news3.google.com!news4.google.com!
border1.nntp.dca.giganews.com!nntp.giganews.com!newsfeed00.sul.t-online.de!t-
online.de!tiscali!newsfeed1.ip.tiscali.net!proxad.net!193.252.118.146.MISMATCH!
news.wanadoo.fr!news.wanadoo.fr!not-for-mail
X-Newsreader:      NNTP SCRIBBLER
Content-Type: text/html;
From: priscilla@canaweb.ca
ReplyTo: priscilla@canaweb.ca
Subject: jeunes filles 18 ans perverses
Newsgroups: rec.radio.amateur.space
Date: 06 Aug 2006 11:53:56 GMT
Lines: 8
Message-ID: <44d5d853$0$827$ba4acef3@news.orange.fr>
Organization: les newsgroups par Orange
NNTP-Posting-Date: 06 Aug 2006 13:53:56 CEST
NNTP-Posting-Host: 193.248.69.45
X-Trace: 1154865236 news.orange.fr 827 193.248.69.45:3074
X-Complaints-To: abuse@orange.fr
Xref: g2news2.google.com rec.radio.amateur.space:310


<HTML><HEAD><body><center>
<a href="http://www.jf18ans.com/?&id=14907" target="_blank" alt=""><img
src="http://www.sv2.biz/modules/cbsys/promo/bannieres/produits/
78/20040907170250_33
6x280_02.jpg"></a>
<br><br><br><br><br><br><br>
<BODY></BODY></HTML>
<center><table border="0" cellpadding="0" cellspacing="0" style="border-collapse:
collapse" width="500"><tr><td nowrap height="4" bgcolor="#000000"></td></
tr><tr><td width="100%" bgcolor="#000000"><center><a href="http://www.e-
advertize.com/index.php?choix=NNTPScribbler&Langue=en"><font
color="#00FF00"><b>This message was sent with NNTP Scribbler (www.e-
advertize.com).</b></font></a></center></td></tr><tr><td height="4"
bgcolor="#000000"></td></tr></table></center>


From 4779088379388115332
X-Google-Thread: 10bf43,ac76e80debae1099
X-Google-Thread: 10e8ad,ac76e80debae1099
X-Google-Thread: 106d41,bbcbab76b3ac68d1
X-Google-Attributes: gid10bf43,gid10e8ad,gid106d41,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news4.google.com!news.glorb.com!newsfeed-
east.nntpserver.com!nntpserver.com!statler.nntpserver.com!be5.nntpserver.com!not-
for-mail
Reply-To: "Mopey Dopey Steveo" <SteveParks@CropDusterMurderer.com>
From: "Mopey Dopey Steveo" <mopiedopey@yahoo.com>
```

Newsgroups: rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.cb
References: <rjWAg.8762$MA3.1928@news.ono.com>
<1154757633.626203.311460@h48g2000cwc.googlegroups.com>
<12d8g28tf45fudb@corp.supernews.com>   <20060805075002.567$oa@newsreader.com>
<1154813788.317862.312320@75g2000cwc.googlegroups.com>
Subject: Re: God Bless N8WWM!!!!!!!
Date: Sun, 6 Aug 2006 13:57:38 -0400
Organization: sparks6@photosite.com
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.2869
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.2869
X-RFC2646: Format=Flowed; Original
Lines: 42
Message-ID: <44d6205d$0$31346$88260bb3@free.teranews.com>
NNTP-Posting-Date: 06 Aug 2006 17:01:17 GMT
X-Complaints-To: abuse@teranews.com
Xref: g2news2.google.com rec.radio.amateur.policy:36370
rec.radio.amateur.space:311 rec.radio.cb:15283

morkmorcock@lycos.com wrote:
> hey steveo you side walk sissy...........
> is this a good place to get a big radio???????
> HTTP://www.radioactiveradios.com
> The tard is getting a big radio to drop the maul on
> ya...................
> BWHAHAHAHAHAHAHAHAHAHAHAHA!!!!!!!!!!!!!

If someone such as Doug really wants to see Mopey Dopey stroke out, all he would have to do is make one phone call to the below person and notify him that Steve Parks is posting his name all over Usenet; and I suspect the Georgia Bureau of Investigation would uncloak little Mopey Dopey with a set of interstate federal felony charges.   Anyone who suspects that they know the true identity of Steve Parks should use the below snip of his post to call this person or the GBI and start the ball rolling.

> Mopey Dopey / Steve Parks / Moparholic / Elizabeth Gilbert wrote:
> You may not want to give that kOOk any of your info, Dad. You see he is
> not
> "anon", he is actually the well known usenet loser Scott Gilbert.
>
> Here is some interesting info about him...
>
> http://www.insurgent.org/~kook-faq/scott/index.html
>
> And here is the loons picture in case you need to identify him..
>
> http://i1.tinypic.com/1zwkkt0.jpg
>

> Or just call..
>
> Scott Gilbert
> 8953 Carroll Manor Dr
> Atlanta, GA 30350-2080
> (770) 998-4643

--
Posted via a free Usenet account from http://www.teranews.com

```
From 8037290216590789761
X-Google-Thread: 10bf43,b5a3a8621604ec2b
X-Google-Thread: 10f7a7,d8f64f3a05348445,start
X-Google-Thread: 106d41,d8f64f3a05348445,start
X-Google-Thread: 106fd0,d8f64f3a05348445,start
X-Google-Thread: 10e8ad,d8f64f3a05348445,start
X-Google-Attributes: gid10bf43,gid10f7a7,gid106d41,gid106fd0,gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!postnews.google.com!h48g2000cwc.googlegroups.com!not-for-
mail
From: N9OGL@yahoo.com
Newsgroups:
rec.radio.amateur.policy,alt.usenet.kooks,rec.radio.cb,alt.troll,rec.radio.amateur
.space
Subject: Re: Mega promos dans notre sex shop
Date: 6 Aug 2006 10:57:45 -0700
Organization: http://groups.google.com
Lines: 54
Message-ID: <1154887065.390130.53520@h48g2000cwc.googlegroups.com>
References: <44d5d84e$0$831$ba4acef3@news.orange.fr>
NNTP-Posting-Host: 4.154.77.123
Mime-Version: 1.0
Content-Type: text/plain; charset="iso-8859-1"
X-Trace: posting.google.com 1154887070 20296 127.0.0.1 (6 Aug 2006 17:57:50 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Sun, 6 Aug 2006 17:57:50 +0000 (UTC)
In-Reply-To: <44d5d84e$0$831$ba4acef3@news.orange.fr>
User-Agent: G2/0.2
X-HTTP-UserAgent: Mozilla/5.0 (Windows; U; Windows NT 5.1; en-US; rv:1.7.12)
Gecko/20050915 Firefox/1.0.7,gzip(gfe),gzip(gfe)
Complaints-To: groups-abuse@google.com
Injection-Info: h48g2000cwc.googlegroups.com; posting-host=4.154.77.123;
   posting-account=G1qfjw0AAADLQq6GHyCkxzLAB8UyXB7S
Xref: g2news2.google.com rec.radio.amateur.policy:36371 alt.usenet.kooks:216533
rec.radio.cb:15284 alt.troll:19467 rec.radio.amateur.space:312
```

Cathy@noosempty.net wrote:

> ===> SEX SHOP DU WEB <===
>
>
>
>
>
>
>
>
>   *This message was sent with NNTP Scribbler (www.e-advertize.com).*

Callsign: KB9RQZ   Class: Technician   Codes: HAI   USA
Name: MARK C MORGAN
Addr1:   Pob 212, PO BOX PoB212
Addr2:   Chassell, MI 49916
Country: USA
Effective: 06 Jul 2005   Expires: 12 Nov 2007
FRN: 0009794298 What's this?
FCC: ULS Listing
Lookups: 677
     Update / Renew this License...
     Apply for new Vanity callsign...

Coordinates: 47.026576   -88.527737
State: Michigan
County: Houghton
Grid: EN57ra
Area Code: 906
GMT Offset: -5
Time Zone: Eastern
Has DST?: Y
Home Page: http://www.geocities.com\\kb9rqz
QRZ Updated: 2006-08-03 19:31:36
Changes needed? Click here to update this listing...

Be sure and check out our Update Policy page if you have any questions.

Biography Info:

one of those private types bigg current ars project in EME hoping to obtain VUCC and maybe DXCC as a no code tech before the expected R&O allowign me to become a No Code extra comes through http://emekb9rqz.blogspot.com/ sadly since certainn folks in the ham world lack a life beyond harrassing their fellow hams I will no longer be posting my log on my blog I can be reach by eail off my webpage

I am having to work split so if you see cq kb9rqz+10 it means I am listening up 10 khz etc

KB9RQZ@amsat.org

From -5460848812552983378
X-Google-Thread: 106d41,bbcbab76b3ac68d1
X-Google-Thread: 10bf43,ac76e80debae1099
X-Google-Thread: 10a617,ac76e80debae1099
X-Google-Thread: 10e8ad,ac76e80debae1099
X-Google-Attributes: gid106d41,gid10bf43,gid10a617,gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news3.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!newsfeed-east.nntpserver.com!nntpserver.com!
statler.nntpserver.com!be5.nntpserver.com!not-for-mail
Reply-To: "Mopey Dopey Steveo" <SteveParks@CropDusterMurderer.com>
From: "Mopey Dopey Steveo" <mopiedopey@yahoo.com>
Newsgroups:
rec.radio.cb,rec.radio.amateur.policy,alt.hackers.malicious,rec.radio.amateur.space
References: <rjWAg.8762$MA3.1928@news.ono.com>
<1154757633.626203.311460@h48g2000cwc.googlegroups.com>
<12d8g28tf45fudb@corp.supernews.com> <20060805075002.567$oa@newsreader.com>
<1154813788.317862.312320@75g2000cwc.googlegroups.com>
<20060806005933.224$zu@newsreader.com>
Subject: Re: God Bless N8WWM!!!!!!!
Date: Sun, 6 Aug 2006 13:58:30 -0400
Organization: sparks6@photosite.com
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.2869
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.2869
X-RFC2646: Format=Flowed; Original
Lines: 46
Message-ID: <44d62090$0$31395$88260bb3@free.teranews.com>
NNTP-Posting-Date: 06 Aug 2006 17:02:08 GMT
X-Complaints-To: abuse@teranews.com
Xref: g2news2.google.com rec.radio.cb:15285 rec.radio.amateur.policy:36372
alt.hackers.malicious:57859 rec.radio.amateur.space:313

Steveo wrote:
> morkmorcock@lycos.com wrote:
>> hey steveo you side walk sissy...........
>>
> The last asswipe that called me that got his picture taken.
>
> http://n8wwm.4t.com/photo.html

I say you are a mopey dopey sidewalk sissy - now come knock on my door, coward.

If someone such as Lloyd really wants to see Mopey Dopey stroke out, all he would have to do is make one phone call to the below person and notify him that Steve Parks is posting his name all over Usenet; and I suspect the Georgia Bureau of Investigation would uncloak little Mopey Dopey with a set

of interstate federal felony charges.   Anyone who suspects that they know
the true identity of Steve Parks should use the below snip of his post to
call this person or the GBI and start the ball rolling.

> Mopey Dopey / Steve Parks / Moparholic / Elizabeth Gilbert wrote:
> You may not want to give that kOOk any of your info, Dad. You see he is
> not
> "anon", he is actually the well known usenet loser Scott Gilbert.
>
> Here is some interesting info about him...
>
> http://www.insurgent.org/~kook-faq/scott/index.html
>
> And here is the loons picture in case you need to identify him..
>
> http://i1.tinypic.com/1zwkkt0.jpg
>
> Or just call..
>
> Scott Gilbert
> 8953 Carroll Manor Dr
> Atlanta, GA 30350-2080
> (770) 998-4643

--
Posted via a free Usenet account from http://www.teranews.com

From -6749229324617883074
X-Google-Thread: 10bf43,b5a3a8621604ec2b
X-Google-Thread: 10f7a7,d8f64f3a05348445
X-Google-Thread: 106d41,d8f64f3a05348445
X-Google-Thread: 106fd0,d8f64f3a05348445
X-Google-Thread: 10e8ad,d8f64f3a05348445
X-Google-Attributes: gid10bf43,gid10f7a7,gid106d41,gid106fd0,gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!postnews.google.com!h48g2000cwc.googlegroups.com!not-for-mail
From: "an old freind" <kb9rqz-ars@hotmail.com>
Newsgroups:
rec.radio.amateur.policy,alt.usenet.kooks,rec.radio.cb,alt.troll,rec.radio.amateur.space
Subject: get help
Followup-To: ,alt.usenet.kooks,alt.troll,
Date: 6 Aug 2006 11:08:06 -0700
Organization: http://groups.google.com

```
Lines: 17
Message-ID: <1154887686.547564.109680@h48g2000cwc.googlegroups.com>
References: <44d5d84e$0$831$ba4acef3@news.orange.fr>
   <1154887065.390130.53520@h48g2000cwc.googlegroups.com>
NNTP-Posting-Host: 69.19.14.40
Mime-Version: 1.0
Content-Type: text/plain; charset="iso-8859-1"
X-Trace: posting.google.com 1154887692 2203 127.0.0.1 (6 Aug 2006 18:08:12 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Sun, 6 Aug 2006 18:08:12 +0000 (UTC)
In-Reply-To: <1154887065.390130.53520@h48g2000cwc.googlegroups.com>
User-Agent: G2/0.2
X-HTTP-UserAgent: Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1; SV1; .NET CLR
1.1.4322),gzip(gfe),gzip(gfe)
Complaints-To: groups-abuse@google.com
Injection-Info: h48g2000cwc.googlegroups.com; posting-host=69.19.14.40;
   posting-account=hVZdaA0AAABPHL3UNjx-ywxVYAwCtKHr
Xref: g2news2.google.com rec.radio.amateur.policy:36373 alt.usenet.kooks:216535
rec.radio.cb:15286 alt.troll:19468 rec.radio.amateur.space:314


N90GL@yahoo.com wrote:
> Cathy@noosempty.net wrote:
> > ===> SEX SHOP DU WEB <===
> >
> >
> >
> >
> >
> >
> >
> >
> >  *This message was sent with NNTP Scribbler (www.e-advertize.com).*
>
> Callsign:   KB9RQZ   Class: Technician   Codes:  HAI   USA
you have printed my qrz.com bio so?



From -2092900550982595459
X-Google-Thread: 10bf43,ac76e80debae1099
X-Google-Thread: 10e8ad,ac76e80debae1099
X-Google-Thread: 106d41,bbcbab76b3ac68d1
X-Google-Attributes: gid10bf43,gid10e8ad,gid106d41,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news4.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx01.iad01.newshosting.com!newshosting.com!
198.186.190.250.MISMATCH!transit3.readnews.com!news-out.readnews.com!news-
out.readnews.com!postnews3.readnews.com!nr3.newsreader.com.POSTED!not-for-mail
Subject: Re: God Bless N8WWM!!!!!!!
From: Steveo <moparholic@hotmail.com>
Organization: http://NewsReader.Com/ 30 GB Month
Message-ID: <20060806150847.563$g2@newsreader.com>
```

Newsgroups: rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.cb
References: <rjWAg.8762$MA3.1928@news.ono.com>
<1154757633.626203.311460@h48g2000cwc.googlegroups.com>
<12d8g28tf45fudb@corp.supernews.com> <20060805075002.567$oa@newsreader.com>
<1154813788.317862.312320@75g2000cwc.googlegroups.com>
<44d6205d$0$31346$88260bb3@free.teranews.com>
X-NRC-Trace: NewsReader.Com 2+SITEEJko244dfiRoE/Rw+mzhApyOsMAoAJGoaOb/R_x_d
Date: 06 Aug 2006 18:59:58 GMT
Lines: 9
NNTP-Posting-Host: 26d13cce.nr3.newsreader.com
X-Trace: DXC==83bIimNbNTV?DjfQ3o7?]OA8_@f\K_iR0V\?
8`j4eW[SZd=PNA2FcWNd7biGRhQTWYA@MLbHKH8]7<OU601iaj[
X-Complaints-To: abuse@newsreader.com
Xref: g2news2.google.com rec.radio.amateur.policy:36378
rec.radio.amateur.space:315 rec.radio.cb:15296

Muahahahaha!

http://i5.tinypic.com/23tjjb8.jpg

http://www.insurgent.org/~kook-faq/scott/index.html

http://search.yahoo.com/search?_adv_prop=web&ei=UTF-8&va=scott+gilbert&va_v
t=any&vp=scott+gilbert&vp_vt=any&vo=sap&vo_vt=any&vst=0&vf=all&vm=i&fl=0&n=
10&pstart=1&fr=fp-tab-web-t&b=1

From -3257669545748616059
X-Google-Thread: 106d41,bbcbab76b3ac68d1
X-Google-Thread: 10bf43,ac76e80debae1099
X-Google-Thread: 10a617,ac76e80debae1099
X-Google-Thread: 10e8ad,ac76e80debae1099
X-Google-Attributes: gid106d41,gid10bf43,gid10a617,gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news3.google.com!news.glorb.com!news-xxxfer.readnews.com!
spool-big1.readnews.com!news-out.readnews.com!postnews3.readnews.com!
nr3.newsreader.com.POSTED!not-for-mail
Subject: Re: God Bless N8WWM!!!!!!!
From: Steveo <moparholic@hotmail.com>
Organization: http://NewsReader.Com/ 30 GB Month
Message-ID: <20060806151030.969$C7@newsreader.com>
Newsgroups:
rec.radio.cb,rec.radio.amateur.policy,alt.hackers.malicious,rec.radio.amateur.spac
e
References: <rjWAg.8762$MA3.1928@news.ono.com>
<1154757633.626203.311460@h48g2000cwc.googlegroups.com>
<12d8g28tf45fudb@corp.supernews.com> <20060805075002.567$oa@newsreader.com>
<1154813788.317862.312320@75g2000cwc.googlegroups.com>
<20060806005933.224$zu@newsreader.com>
<44d62090$0$31395$88260bb3@free.teranews.com>
X-NRC-Trace: NewsReader.Com qXrgdb-J,h-X148+Bs-ZJy2MWz7ivF1N,e=gXk_AwljgZ=@-Xh
Date: 06 Aug 2006 19:01:42 GMT
Lines: 9

```
NNTP-Posting-Host: 8ac3e8af.nr3.newsreader.com
X-Trace: DXC=KF\TE0EnYfVP4iV^[3DkbTOA8_@f\K_iR0V\?
8`j4eW[@:dS;@5DDPVNd7biGRhQTW<SVPgDF]ACTPE]M@0fdYf^
X-Complaints-To: abuse@newsreader.com
Xref: g2news2.google.com rec.radio.cb:15297 rec.radio.amateur.policy:36379
alt.hackers.malicious:57868 rec.radio.amateur.space:316
```

Muahahahaha!

http://i5.tinypic.com/23tjjb8.jpg

http://www.insurgent.org/~kook-faq/scott/index.html

http://search.yahoo.com/search?_adv_prop=web&ei=UTF-8&va=scott+gilbert&va_vt=any&vp=scott+gilbert&vp_vt=any&vo=sap&vo_vt=any&vst=0&vf=all&vm=i&fl=0&n=10&pstart=1&fr=fp-tab-web-t&b=1

```
From 1733764503600722446
X-Google-Thread: 10bf43,21b12fcd0f1e1b98
X-Google-Thread: 106d41,21b12fcd0f1e1b98
X-Google-Thread: 10e8ad,d5b083bcbcde09e7
X-Google-Thread: 10f7a7,21b12fcd0f1e1b98
X-Google-Thread: fae8e,4b5abea9942b2a58,start
X-Google-Attributes: gid10bf43,gid106d41,gid10e8ad,gid10f7a7,gidfae8e,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!postnews.google.com!b28g2000cwb.googlegroups.com!not-for-
mail
From: morkmorcock@lycos.com
Newsgroups:
rec.radio.amateur.policy,rec.radio.cb,rec.radio.amateur.space,alt.usenet.kooks,alt
.pizza.delivery.drivers
Subject: Re: more Lloyd Davies proof!
Date: 6 Aug 2006 13:26:08 -0700
Organization: http://groups.google.com
Lines: 12
Message-ID: <1154895968.111234.112970@b28g2000cwb.googlegroups.com>
References: <1154760660.279280.297400@i3g2000cwc.googlegroups.com>
   <20060805085604.853$f6_-_@newsreader.com>
   <44d61eb5$0$31381$88260bb3@free.teranews.com>
   <12dcdljbaog6t78@corp.supernews.com>
   <6109017833.2458F8789@tarrnews.net>
NNTP-Posting-Host: 4.154.75.47
Mime-Version: 1.0
Content-Type: text/plain; charset="iso-8859-1"
X-Trace: posting.google.com 1154895973 12491 127.0.0.1 (6 Aug 2006 20:26:13 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Sun, 6 Aug 2006 20:26:13 +0000 (UTC)
In-Reply-To: <6109017833.2458F8789@tarrnews.net>
User-Agent: G2/0.2
X-HTTP-UserAgent: Mozilla/5.0 (Windows; U; Windows NT 5.1; en-US; rv:1.7.12)
Gecko/20050915 Firefox/1.0.7,gzip(gfe),gzip(gfe)
Complaints-To: groups-abuse@google.com
```

```
Injection-Info: b28g2000cwb.googlegroups.com; posting-host=4.154.75.47;
   posting-account=qAuKPw0AAABhELqcZCqPgvw0lssnRYOR
Xref: g2news2.google.com rec.radio.amateur.policy:36385 rec.radio.cb:15307
rec.radio.amateur.space:317 alt.usenet.kooks:216559
alt.pizza.delivery.drivers:5863
```

Winston wrote:

> On Sun, 6 Aug 2006 13:36:32 -0500, DrDeath <drdeath555usb@yahoo.com> wrote:
> > Steveo gave you a much deserved newsgroup ass whipping and now you have to
> > spam Usenet with your desperate pleas for assistance. Call your mommy, I'm
> > sure she will understand while you feed from her utters.
>
> What's an "utter," dumbass? As always, you are utterly clueless.

Thats just DrDeadDick, our resident group jester.
Go ahead........pull his strings!!!!!!!!!!!!!

```
From 3861623068302220802
X-Google-Thread: 106d41,d15ab71f1356da07
X-Google-Thread: 10f7a7,55b4799ccdba58f3,start
X-Google-Thread: 10e8ad,55b4799ccdba58f3,start
X-Google-Thread: 10a617,55b4799ccdba58f3,start
X-Google-Thread: fb049,55b4799ccdba58f3,start
X-Google-Attributes: gid106d41,gid10f7a7,gid10e8ad,gid10a617,gidfb049,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!postnews.google.com!b28g2000cwb.googlegroups.com!not-for-
mail
From: "DrDeath" <drdeath555usb@mail2boy.com>
Newsgroups:
rec.radio.cb,alt.usenet.kooks,rec.radio.amateur.space,alt.hackers.malicious,alt.ha
m-radio.vhf-uhf
Subject: Re: ft-101 service manual
Date: 6 Aug 2006 15:28:52 -0700
Organization: http://groups.google.com
Lines: 7
Message-ID: <1154903332.129761.86390@b28g2000cwb.googlegroups.com>
References: <1154884225.288273.91390@b28g2000cwb.googlegroups.com>
NNTP-Posting-Host: 4.154.78.105
Mime-Version: 1.0
Content-Type: text/plain; charset="iso-8859-1"
X-Trace: posting.google.com 1154903337 14946 127.0.0.1 (6 Aug 2006 22:28:57 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Sun, 6 Aug 2006 22:28:57 +0000 (UTC)
In-Reply-To: <1154884225.288273.91390@b28g2000cwb.googlegroups.com>
User-Agent: G2/0.2
X-HTTP-UserAgent: Mozilla/5.0 (Windows; U; Windows NT 5.1; en-US; rv:1.7.12)
Gecko/20050915 Firefox/1.0.7,gzip(gfe),gzip(gfe)
Complaints-To: groups-abuse@google.com
Injection-Info: b28g2000cwb.googlegroups.com; posting-host=4.154.78.105;
   posting-account=FiOsbQwAAABUbVBTjsgfd6EFynfNifOa
```

```
Xref: g2news2.google.com rec.radio.cb:15312 alt.usenet.kooks:216598
rec.radio.amateur.space:318 alt.hackers.malicious:57926 alt.ham-radio.vhf-uhf:2410


noob wrote:
> any links to a pdf for a service manual... no i dont want to buy one

try this,it should do it
http://www.sunnygalleries.com/static/trannyisland/layout27/images/05s.jpg




From -6207472760176979300
X-Google-Thread: 106d41,af61f2e6ef6135d5,start
X-Google-Thread: 10f7a7,af61f2e6ef6135d5,start
X-Google-Thread: 10bf43,af61f2e6ef6135d5,start
X-Google-Thread: 10e8ad,af61f2e6ef6135d5,start
X-Google-Thread: 10a617,af61f2e6ef6135d5,start
X-Google-Attributes: gid106d41,gid10f7a7,gid10bf43,gid10e8ad,gid10a617,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!postnews.google.com!p79g2000cwp.googlegroups.com!not-for-
mail
From: "DrDeath" <drdeath555usb@mail2boy.com>
Newsgroups:
rec.radio.cb,alt.usenet.kooks,rec.radio.amateur.policy,rec.radio.amateur.space,alt
.hackers.malicious
Subject: Hey Tard..................
Date: 7 Aug 2006 12:35:47 -0700
Organization: http://groups.google.com
Lines: 20
Message-ID: <1154979347.467052.122900@p79g2000cwp.googlegroups.com>
NNTP-Posting-Host: 4.154.74.143
Mime-Version: 1.0
Content-Type: text/plain; charset="iso-8859-1"
X-Trace: posting.google.com 1154979352 16039 127.0.0.1 (7 Aug 2006 19:35:52 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Mon, 7 Aug 2006 19:35:52 +0000 (UTC)
User-Agent: G2/0.2
X-HTTP-UserAgent: Mozilla/5.0 (Windows; U; Windows NT 5.1; en-US; rv:1.7.12)
Gecko/20050915 Firefox/1.0.7,gzip(gfe),gzip(gfe)
Complaints-To: groups-abuse@google.com
Injection-Info: p79g2000cwp.googlegroups.com; posting-host=4.154.74.143;
   posting-account=FiOsbQwAAABUbVBTjsgfd6EFynfNifOa
Xref: g2news2.google.com rec.radio.cb:15339 alt.usenet.kooks:216890
rec.radio.amateur.policy:36487 rec.radio.amateur.space:319
alt.hackers.malicious:58142

Wanna know who's helping the hams fuck with you??

1) mopy-dopy......ring leader

2) DrDeath.........general flunky and follower
```

3) LandLoad........wanna be ring leader,but only a follower

IN THAT ORDER!

Check it out because your lawyer may be interested.
The FCC may want to look into their road trip habits since they are not licensed for 144 or 440!!

Yes Tard, you are a piece of work, but you are the lesser of the evils................the enemy of my enemy................................

Good Luck.

```
From -1442709297114841492
X-Google-Thread: 10bf43,968c4a0d323a1a93
X-Google-Thread: 10f7a7,968c4a0d323a1a93
X-Google-Thread: 10a617,76579696dc6315f,start
X-Google-Thread: 106d41,968c4a0d323a1a93
X-Google-Thread: 10e8ad,76579696dc6315f,start
X-Google-Attributes: gid10bf43,gid10f7a7,gid10a617,gid106d41,gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!postnews.google.com!p79g2000cwp.googlegroups.com!not-for-
mail
From: mork_margen@yahoo.com
Newsgroups:
rec.radio.amateur.policy,alt.usenet.kooks,alt.hackers.malicious,rec.radio.cb,rec.r
adio.amateur.space
Subject: Re: More Morkie Mularkie,<<< why the lies about my wife?
Date: 7 Aug 2006 13:31:34 -0700
Organization: http://groups.google.com
Lines: 25
Message-ID: <1154982694.382502.118320@p79g2000cwp.googlegroups.com>
References: <1154836181.057214.76390@b28g2000cwb.googlegroups.com>
   <1154850988.817919.320820@i42g2000cwa.googlegroups.com>
   <1154946829.257488.141450@m79g2000cwm.googlegroups.com>
   <1154964164.398755.62620@i3g2000cwc.googlegroups.com>
NNTP-Posting-Host: 4.153.214.210
Mime-Version: 1.0
Content-Type: text/plain; charset="iso-8859-1"
X-Trace: posting.google.com 1154982699 18818 127.0.0.1 (7 Aug 2006 20:31:39 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Mon, 7 Aug 2006 20:31:39 +0000 (UTC)
In-Reply-To: <1154964164.398755.62620@i3g2000cwc.googlegroups.com>
User-Agent: G2/0.2
X-HTTP-UserAgent: Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1; SV1;
yie6),gzip(gfe),gzip(gfe)
Complaints-To: groups-abuse@google.com
Injection-Info: p79g2000cwp.googlegroups.com; posting-host=4.153.214.210;
   posting-account=s_XWrg0AAACXytiyVtkx6Ltn3014V0PV
Xref: g2news2.google.com rec.radio.amateur.policy:36494 alt.usenet.kooks:216920
```

```
alt.hackers.malicious:58157 rec.radio.cb:15342 rec.radio.amateur.space:320


an old friend wrote:
> K4YZ wrote:
> > an old friend wrote:
> > > morkmor####@lycos.com wrote:
> > > > http://wireless2.fcc.gov/UlsApp/UlsSearch/license.jsp?licKey=760289
>
> > > learn to tell the deference
> > >
> > > I can and both are fun just different is all
> >
> >      Obviously you CAN'T tell the difference...You married one and keep
> > claiming "she's" a female, Mork.
>
> I married a female I did not marry a man
>
> under the right occasion I might marry a man, I just did not and you
> can't face the truth
> >
> > Steve, K4YZ

What a faggot! admits to fucking men!!
Would you be the wife?????????
BWHAHAHAHAHAHAHA!!!!!!!!!!




From -7951509293050303761
X-Google-Thread: 10bf43,c7f8e7ba1ae4e524
X-Google-Thread: 10f7a7,6dd9f631e5e14495,start
X-Google-Thread: 106d41,6dd9f631e5e14495,start
X-Google-Thread: 10e8ad,6dd9f631e5e14495,start
X-Google-Thread: fbf1a,6dd9f631e5e14495,start
X-Google-Attributes: gid10bf43,gid10f7a7,gid106d41,gid10e8ad,gidfbf1a,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!postnews.google.com!i3g2000cwc.googlegroups.com!not-for-
mail
From: mork_margen@yahoo.com
Newsgroups:
rec.radio.amateur.policy,alt.usenet.kooks,rec.radio.cb,rec.radio.amateur.space,alt
.flame
Subject: Re: New subblog: EME Spoofing Made Easy
Date: 7 Aug 2006 13:35:10 -0700
Organization: http://groups.google.com
Lines: 22
Message-ID: <1154982910.294860.159910@i3g2000cwc.googlegroups.com>
References: <beer.enema.for.mark.morgan@g00gles.com>
   <1154951765.129542.292350@h48g2000cwc.googlegroups.com>
   <1154963563.343380.4430@i3g2000cwc.googlegroups.com>
NNTP-Posting-Host: 4.153.214.210
Mime-Version: 1.0
```

```
Content-Type: text/plain; charset="iso-8859-1"
X-Trace: posting.google.com 1154982915 19509 127.0.0.1 (7 Aug 2006 20:35:15 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Mon, 7 Aug 2006 20:35:15 +0000 (UTC)
In-Reply-To: <1154963563.343380.4430@i3g2000cwc.googlegroups.com>
User-Agent: G2/0.2
X-HTTP-UserAgent: Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1; SV1;
yie6),gzip(gfe),gzip(gfe)
Complaints-To: groups-abuse@google.com
Injection-Info: i3g2000cwc.googlegroups.com; posting-host=4.153.214.210;
   posting-account=s_XWrg0AAACXytiyVtkx6Ltn3014V0PV
Xref: g2news2.google.com rec.radio.amateur.policy:36495 alt.usenet.kooks:216928
rec.radio.cb:15344 rec.radio.amateur.space:321 alt.flame:33794


an old friend wrote:
> K4YZ wrote:
> > NO9GL wrote:
> > > Lots of us are having fun pretending to be EME dx and geting local
> > > jerky hams all fired up thinking they work overseas station.  It takes
> > > skill to fool them good and the new subblog has lots ideas for you at
> > > http://n9oglvoice.blogspot.com/emespoof so come read and enjoy.
> > >
> > > I am one of best spoofers in my town.  The babes love it.
> >
> >     Be careful...Morkie will be claiming it was his idea all along!
> no steve I know beter I know I taken in by a fraud commited by someone
> that has been reading your filth about me
>
> posting that filth was your idea not mine
> >
> > Steve, K4YZ

Morkie,
Why do you enjoy a penis in your rectum?



From 6556328770147560426
X-Google-Thread: 10bf43,48d55aef38ba5a0
X-Google-Thread: 10e8ad,3805105e68e66d2c,start
X-Google-Thread: 10f7a7,3805105e68e66d2c,start
X-Google-Thread: 106d41,3805105e68e66d2c,start
X-Google-Thread: 106fd0,3805105e68e66d2c,start
X-Google-Attributes: gid10bf43,gid10e8ad,gid10f7a7,gid106d41,gid106fd0,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!postnews.google.com!m73g2000cwd.googlegroups.com!not-for-
mail
From: N90GL@yahoo.com
Newsgroups:
rec.radio.amateur.policy,rec.radio.amateur.space,alt.usenet.kooks,rec.radio.cb,alt
.troll
Subject: Re: Especially for AB8MQ
```

Date: 7 Aug 2006 14:42:04 -0700
Organization: http://groups.google.com
Lines: 16
Message-ID: <1154986924.288399.31270@m73g2000cwd.googlegroups.com>
References: <IMNBg.5774$0e5.2501@newsread4.news.pas.earthlink.net>
NNTP-Posting-Host: 4.153.209.249
Mime-Version: 1.0
Content-Type: text/plain; charset="iso-8859-1"
X-Trace: posting.google.com 1154986930 31376 127.0.0.1 (7 Aug 2006 21:42:10 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Mon, 7 Aug 2006 21:42:10 +0000 (UTC)
In-Reply-To: <IMNBg.5774$0e5.2501@newsread4.news.pas.earthlink.net>
User-Agent: G2/0.2
X-HTTP-UserAgent: Mozilla/5.0 (Windows; U; Windows NT 5.1; en-US; rv:1.7.12)
Gecko/20050915 Firefox/1.0.7,gzip(gfe),gzip(gfe)
Complaints-To: groups-abuse@google.com
Injection-Info: m73g2000cwd.googlegroups.com; posting-host=4.153.209.249;
   posting-account=G1qfjw0AAADLQq6GHyCkxzLAB8UyXB7S
Xref: g2news2.google.com rec.radio.amateur.policy:36518
rec.radio.amateur.space:322 alt.usenet.kooks:216980 rec.radio.cb:15347
alt.troll:19583

Dave Heil wrote:
> Don't forget the Marshall County ARES meeting this evening at 7:30 PM at
> the courthous, Roger.
>
> I shall look forward to seeing you in attendance.
>
> We'll have a frank discussion on a number of issues.
>
> Dave K8MN

STFU you stinking troll!!
now run along and tell that street walker of your's to wash her nasty
ass..........you wouldn't want to be blowing mork by proxy now would
you??

From 6134546835362558055
X-Google-Thread: fb822,e33956efcdde07bc
X-Google-Thread: 106d41,8ddc89ff22303223,start
X-Google-Thread: 10e8ad,8ddc89ff22303223,start
X-Google-Thread: fae8e,8ddc89ff22303223,start
X-Google-Thread: 10bf43,8ddc89ff22303223,start
X-Google-Attributes: gidfb822,gid106d41,gid10e8ad,gidfae8e,gid10bf43,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!postnews.google.com!m73g2000cwd.googlegroups.com!not-for-
mail
From: N90GL@yahoo.com
Newsgroups:
misc.transport.trucking,rec.radio.cb,rec.radio.amateur.space,alt.pizza.delivery.dr

```
ivers,rec.radio.amateur.policy
Subject: Re: cross country trip
Date: 7 Aug 2006 14:46:48 -0700
Organization: http://groups.google.com
Lines: 12
Message-ID: <1154987208.381116.59750@m73g2000cwd.googlegroups.com>
References: <22705-44D77A98-1104@storefull-3237.bay.webtv.net>
NNTP-Posting-Host: 4.153.209.249
Mime-Version: 1.0
Content-Type: text/plain; charset="iso-8859-1"
X-Trace: posting.google.com 1154987214 32232 127.0.0.1 (7 Aug 2006 21:46:54 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Mon, 7 Aug 2006 21:46:54 +0000 (UTC)
In-Reply-To: <22705-44D77A98-1104@storefull-3237.bay.webtv.net>
User-Agent: G2/0.2
X-HTTP-UserAgent: Mozilla/5.0 (Windows; U; Windows NT 5.1; en-US; rv:1.7.12)
Gecko/20050915 Firefox/1.0.7,gzip(gfe),gzip(gfe)
Complaints-To: groups-abuse@google.com
Injection-Info: m73g2000cwd.googlegroups.com; posting-host=4.153.209.249;
   posting-account=G1qfjw0AAADLQq6GHyCkxzLAB8UyXB7S
Xref: g2news2.google.com misc.transport.trucking:21272 rec.radio.cb:15348
rec.radio.amateur.space:323 alt.pizza.delivery.drivers:5869
rec.radio.amateur.policy:36519

monkos@webtv.net wrote:
> We're making a move from Southern NH to southern AZ soon. driving a 16ft
> rental truck. Anyone have any suggestions on a route that won't be too
> gas consuming. I have several maps that take us different routes but
> can't decide which would be best. We are not young people so we need a
> safe route.  Thanks......

maybe direct your question to mopy in rec.radio.cb

he gets his gas money by cutting lawns and sucking dicks at the
petro.........he would be happy to help.



From -8095829585262021967
X-Google-Thread: 10f7a7,968c4a0d323a1a93
X-Google-Thread: 10a617,76579696dc6315f
X-Google-Thread: 106d41,968c4a0d323a1a93
X-Google-Thread: 10e8ad,76579696dc6315f
X-Google-Attributes: gid10f7a7,gid10a617,gid106d41,gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!postnews.google.com!i3g2000cwc.googlegroups.com!not-for-
mail
From: "an old freind" <kb9rqz-ars@hotmail.com>
Newsgroups:
alt.usenet.kooks,alt.hackers.malicious,rec.radio.cb,rec.radio.amateur.space
Subject: Re: More Morkie Mularkie,<<< why the lies about my wife?
Date: 7 Aug 2006 19:03:29 -0700
Organization: http://groups.google.com
```

```
Lines: 19
Message-ID: <1155002609.641160.188720@i3g2000cwc.googlegroups.com>
References: <1154836181.057214.76390@b28g2000cwb.googlegroups.com>
   <1154850988.817919.320820@i42g2000cwa.googlegroups.com>
   <1154946829.257488.141450@m79g2000cwm.googlegroups.com>
   <1154964164.398755.62620@i3g2000cwc.googlegroups.com>
   <1154982694.382502.118320@p79g2000cwp.googlegroups.com>
NNTP-Posting-Host: 69.19.14.44
Mime-Version: 1.0
Content-Type: text/plain; charset="iso-8859-1"
X-Trace: posting.google.com 1155002614 12099 127.0.0.1 (8 Aug 2006 02:03:34 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Tue, 8 Aug 2006 02:03:34 +0000 (UTC)
In-Reply-To: <1154982694.382502.118320@p79g2000cwp.googlegroups.com>
User-Agent: G2/0.2
X-HTTP-UserAgent: Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1; SV1; .NET CLR
1.1.4322),gzip(gfe),gzip(gfe)
Complaints-To: groups-abuse@google.com
Injection-Info: i3g2000cwc.googlegroups.com; posting-host=69.19.14.44;
   posting-account=hVZdaA0AAABPHL3UNjx-ywxVYAwCtKHr
Xref: g2news2.google.com alt.usenet.kooks:217092 alt.hackers.malicious:58233
rec.radio.cb:15355 rec.radio.amateur.space:324


mork_margen@yahoo.com wrote:
> an old friend wrote:
> > K4YZ wrote:

> > under the right occasion I might marry a man, I just did not and you
> > can't face the truth
> > >
> > > Steve, K4YZ
>
> What a faggot! admits to fucking men!!
sure I fuck men

women too
> Would you be the wife?????????
no
> BWHAHAHAHAHAHAHA!!!!!!!!!!!
get some therapy




From 5083054420239530632
X-Google-Thread: 10f7a7,6dd9f631e5e14495
X-Google-Thread: 106d41,6dd9f631e5e14495
X-Google-Thread: 10e8ad,6dd9f631e5e14495
X-Google-Thread: fbf1a,6dd9f631e5e14495
X-Google-Attributes: gid10f7a7,gid106d41,gid10e8ad,gidfbf1a,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!postnews.google.com!n13g2000cwa.googlegroups.com!not-for-
mail
```

```
From: "an old freind" <kb9rqz-ars@hotmail.com>
Newsgroups: alt.usenet.kooks,rec.radio.cb,rec.radio.amateur.space,alt.flame
Subject: Re: New subblog: EME Spoofing Made Easy
Date: 7 Aug 2006 19:05:03 -0700
Organization: http://groups.google.com
Lines: 29
Message-ID: <1155002703.566141.156960@n13g2000cwa.googlegroups.com>
References: <beer.enema.for.mark.morgan@g00gles.com>
   <1154951765.129542.292350@h48g2000cwc.googlegroups.com>
   <1154963563.343380.4430@i3g2000cwc.googlegroups.com>
   <1154982910.294860.159910@i3g2000cwc.googlegroups.com>
NNTP-Posting-Host: 69.19.14.44
Mime-Version: 1.0
Content-Type: text/plain; charset="iso-8859-1"
X-Trace: posting.google.com 1155002709 12387 127.0.0.1 (8 Aug 2006 02:05:09 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Tue, 8 Aug 2006 02:05:09 +0000 (UTC)
In-Reply-To: <1154982910.294860.159910@i3g2000cwc.googlegroups.com>
User-Agent: G2/0.2
X-HTTP-UserAgent: Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1; SV1; .NET CLR
1.1.4322),gzip(gfe),gzip(gfe)
Complaints-To: groups-abuse@google.com
Injection-Info: n13g2000cwa.googlegroups.com; posting-host=69.19.14.44;
   posting-account=hVZdaA0AAABPHL3UNjx-ywxVYAwCtKHr
Xref: g2news2.google.com alt.usenet.kooks:217094 rec.radio.cb:15356
rec.radio.amateur.space:325 alt.flame:33832


mork_margen@yahoo.com wrote:
> an old friend wrote:
> > K4YZ wrote:
> > > NO9GL wrote:
> > > > Lots of us are having fun pretending to be EME dx and geting local
> > > > jerky hams all fired up thinking they work overseas station.  It takes
> > > > skill to fool them good and the new subblog has lots ideas for you at
> > > > http://n9oglvoice.blogspot.com/emespoof so come read and enjoy.
> > > >
> > > > I am one of best spoofers in my town.  The babes love it.
> > >
> > >     Be careful...Morkie will be claiming it was his idea all along!
> > no steve I know beter I know I taken in by a fraud commited by someone
> > that has been reading your filth about me
> >
> > posting that filth was your idea not mine
> > >
> > > Steve, K4YZ
>
> Morkie,
> Why do you enjoy a penis in your rectum?
if you can naswer what the question has to do with the radio NG's ill
answer you

till then you are just gay bashing troll
```

get some therapy

```
From 43706597481703897
X-Google-Thread: 10e8ad,3805105e68e66d2c
X-Google-Thread: 10f7a7,3805105e68e66d2c
X-Google-Thread: 106d41,3805105e68e66d2c
X-Google-Thread: 106fd0,3805105e68e66d2c
X-Google-Attributes: gid10e8ad,gid10f7a7,gid106d41,gid106fd0,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!postnews.google.com!i3g2000cwc.googlegroups.com!not-for-
mail
From: "an old freind" <kb9rqz-ars@hotmail.com>
Newsgroups: rec.radio.amateur.space,alt.usenet.kooks,rec.radio.cb,alt.troll
Subject: Re: Especially for AB8MQ
Date: 7 Aug 2006 19:07:02 -0700
Organization: http://groups.google.com
Lines: 18
Message-ID: <1155002822.700734.204990@i3g2000cwc.googlegroups.com>
References: <IMNBg.5774$0e5.2501@newsread4.news.pas.earthlink.net>
   <1154986924.288399.31270@m73g2000cwd.googlegroups.com>
NNTP-Posting-Host: 69.19.14.44
Mime-Version: 1.0
Content-Type: text/plain; charset="iso-8859-1"
X-Trace: posting.google.com 1155002828 16718 127.0.0.1 (8 Aug 2006 02:07:08 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Tue, 8 Aug 2006 02:07:08 +0000 (UTC)
In-Reply-To: <1154986924.288399.31270@m73g2000cwd.googlegroups.com>
User-Agent: G2/0.2
X-HTTP-UserAgent: Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1; SV1; .NET CLR
1.1.4322),gzip(gfe),gzip(gfe)
Complaints-To: groups-abuse@google.com
Injection-Info: i3g2000cwc.googlegroups.com; posting-host=69.19.14.44;
   posting-account=hVZdaA0AAABPHL3UNjx-ywxVYAwCtKHr
Xref: g2news2.google.com rec.radio.amateur.space:326 alt.usenet.kooks:217096
rec.radio.cb:15357 alt.troll:19598
```

N9OGL@yahoo.com wrote:
> Dave Heil wrote:
> > Don't forget the Marshall County ARES meeting this evening at 7:30 PM at
> > the courthous, Roger.
> >
> > I shall look forward to seeing you in attendance.
> >
> > We'll have a frank discussion on a number of issues.
> >
> > Dave K8MN
>
> STFU you stinking troll!!
> now run along and tell that street walker of your's to wash her nasty

```
> ass..........you wouldn't want to be blowing mork by proxy now would
> you??
why do you feel the nedd to add all those NG's?



From -5754947586932611774
X-Google-Thread: 10f7a7,6dd9f631e5e14495
X-Google-Thread: 106d41,6dd9f631e5e14495
X-Google-Thread: 10e8ad,6dd9f631e5e14495
X-Google-Thread: fbf1a,6dd9f631e5e14495
X-Google-Attributes: gid10f7a7,gid106d41,gid10e8ad,gidfbf1a,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!postnews.google.com!b28g2000cwb.googlegroups.com!not-for-
mail
From: "DrDeath" <drdeath555usb@mail2boy.com>
Newsgroups: alt.usenet.kooks,rec.radio.cb,rec.radio.amateur.space,alt.flame
Subject: Re: New subblog: EME Spoofing Made Easy
Date: 7 Aug 2006 20:58:47 -0700
Organization: http://groups.google.com
Lines: 35
Message-ID: <1155009527.403657.146900@b28g2000cwb.googlegroups.com>
References: <beer.enema.for.mark.morgan@g00gles.com>
   <1154951765.129542.292350@h48g2000cwc.googlegroups.com>
   <1154963563.343380.4430@i3g2000cwc.googlegroups.com>
   <1154982910.294860.159910@i3g2000cwc.googlegroups.com>
   <1155002703.566141.156960@n13g2000cwa.googlegroups.com>
NNTP-Posting-Host: 4.154.72.53
Mime-Version: 1.0
Content-Type: text/plain; charset="iso-8859-1"
X-Trace: posting.google.com 1155009532 31802 127.0.0.1 (8 Aug 2006 03:58:52 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Tue, 8 Aug 2006 03:58:52 +0000 (UTC)
In-Reply-To: <1155002703.566141.156960@n13g2000cwa.googlegroups.com>
User-Agent: G2/0.2
X-HTTP-UserAgent: Mozilla/5.0 (Windows; U; Windows NT 5.1; en-US; rv:1.7.12)
Gecko/20050915 Firefox/1.0.7,gzip(gfe),gzip(gfe)
Complaints-To: groups-abuse@google.com
Injection-Info: b28g2000cwb.googlegroups.com; posting-host=4.154.72.53;
   posting-account=FiOsbQwAAABUbVBTjsgfd6EFynfNifOa
Xref: g2news2.google.com alt.usenet.kooks:217157 rec.radio.cb:15360
rec.radio.amateur.space:327 alt.flame:33836


an old freind wrote:
> mork_margen@yahoo.com wrote:
> > an old friend wrote:
> > > K4YZ wrote:
> > > > NO9GL wrote:
> > > > > Lots of us are having fun pretending to be EME dx and geting local
> > > > > jerky hams all fired up thinking they work overseas station.  It takes
> > > > > skill to fool them good and the new subblog has lots ideas for you at
> > > > > http://n9oglvoice.blogspot.com/emespoof so come read and enjoy.
```

> > > > >
> > > > > I am one of best spoofers in my town. The babes love it.
> > > >
> > > >   Be careful...Morkie will be claiming it was his idea all along!
> > > no steve I know beter I know I taken in by a fraud commited by someone
> > > that has been reading your filth about me
> > >
> > > posting that filth was your idea not mine
> > > >
> > > > Steve, K4YZ
> >
> > Morkie,
> > Why do you enjoy a penis in your rectum?
> if you can naswer what the question has to do with the radio NG's ill
> answer you
>
> till then you are just gay bashing troll
>
> get some therapy

you are the one that said you engage in homosexual conduct in a public
usenet group.

so answer the question.

From 7758124394014633117
X-Google-Thread: 10f7a7,6dd9f631e5e14495
X-Google-Thread: 106d41,6dd9f631e5e14495
X-Google-Thread: 10e8ad,6dd9f631e5e14495
X-Google-Thread: fbf1a,6dd9f631e5e14495
X-Google-Attributes: gid10f7a7,gid106d41,gid10e8ad,gidfbf1a,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news3.google.com!postnews.google.com!
n13g2000cwa.googlegroups.com!not-for-mail
From: mork_margen@yahoo.com
Newsgroups: alt.usenet.kooks,rec.radio.cb,rec.radio.amateur.space,alt.flame
Subject: Re: New subblog: EME Spoofing Made Easy
Date: 7 Aug 2006 22:21:24 -0700
Organization: http://groups.google.com
Lines: 40
Message-ID: <1155014484.538287.152470@n13g2000cwa.googlegroups.com>
References: <beer.enema.for.mark.morgan@g00gles.com>
   <1154951765.129542.292350@h48g2000cwc.googlegroups.com>
   <1154963563.343380.4430@i3g2000cwc.googlegroups.com>
   <1154982910.294860.159910@i3g2000cwc.googlegroups.com>
   <1155002703.566141.156960@n13g2000cwa.googlegroups.com>
   <1155009527.403657.146900@b28g2000cwb.googlegroups.com>
NNTP-Posting-Host: 4.154.74.89
Mime-Version: 1.0
Content-Type: text/plain; charset="iso-8859-1"
X-Trace: posting.google.com 1155014489 13635 127.0.0.1 (8 Aug 2006 05:21:29 GMT)

```
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Tue, 8 Aug 2006 05:21:29 +0000 (UTC)
In-Reply-To: <1155009527.403657.146900@b28g2000cwb.googlegroups.com>
User-Agent: G2/0.2
X-HTTP-UserAgent: Mozilla/5.0 (Windows; U; Windows NT 5.1; en-US; rv:1.7.12)
Gecko/20050915 Firefox/1.0.7,gzip(gfe),gzip(gfe)
Complaints-To: groups-abuse@google.com
Injection-Info: n13g2000cwa.googlegroups.com; posting-host=4.154.74.89;
   posting-account=s_XWrg0AAACXytiyVtkx6Ltn3014V0PV
Xref: g2news2.google.com alt.usenet.kooks:217201 rec.radio.cb:15366
rec.radio.amateur.space:328 alt.flame:33839


DrDeath wrote:
> an old freind wrote:
> > mork_margen@yahoo.com wrote:
> > > an old friend wrote:
> > > > K4YZ wrote:
> > > > > NO9GL wrote:
> > > > > > Lots of us are having fun pretending to be EME dx and geting local
> > > > > > jerky hams all fired up thinking they work overseas station.  It takes
> > > > > > skill to fool them good and the new subblog has lots ideas for you at
> > > > > > http://n9oglvoice.blogspot.com/emespoof so come read and enjoy.
> > > > > >
> > > > > > I am one of best spoofers in my town.  The babes love it.
> > > > >
> > > > >     Be careful...Morkie will be claiming it was his idea all along!
> > > > no steve I know beter I know I taken in by a fraud commited by someone
> > > > that has been reading your filth about me
> > > >
> > > > posting that filth was your idea not mine
> > > > >
> > > > > Steve, K4YZ
> > >
> > > Morkie,
> > > Why do you enjoy a penis in your rectum?
> > if you can naswer what the question has to do with the radio NG's ill
> > answer you
> >
> > till then you are just gay bashing troll
> >
> > get some therapy
>
> you are the one that said you engage in homosexual conduct in a public
> usenet group.
>
> so answer the question.

Thats right shirley........you brought it up now tell us what it is
that makes you want something like that! No normal man wants a penis in
his rectum! Whats wrong with you,boy??
```

```
From -6821985148565781146
X-Google-Thread: 10e8ad,e2f802b86ee749e6
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Newsgroups: rec.radio.amateur.space
Path: g2news2.google.com!news2.google.com!news3.google.com!
newsfeed2.dallas1.level3.net!news.level3.com!bloom-beacon.mit.edu!
news2.wam.umd.edu!elk.ncren.net!newsflash.concordia.ca!news.sfu.ca!utnut!utzoo!
spenford!henry
From: henry@spsystems.net (Henry Spencer)
Subject: Re: why not on the moon revisited
Organization: SP Systems, Toronto, Canada
Message-ID: <IyEM7t.M78@spsystems.net>
References: <4450d8d5$0$2028$ba620dc5@text.nova.planet.nl>
Date: Thu, 27 Apr 2006 23:21:29 GMT
Lines: 20
Xref: g2news2.google.com rec.radio.amateur.space:223

In article <4450d8d5$0$2028$ba620dc5@text.nova.planet.nl>,
Roland  <roland_lemmersZPEMM@planet.nl> wrote:
>Earlier this year there was a thread about repeaters on the moon.
>...there are laser reflectors on the moon. Hmmm?
>Laser for tx, telescope for rx. I figure there are possibilities here
>for some sort of digital mode.
>Has anyone ever tried this?

Unfortunately, with a fairly sizable pulsed laser firing through a large
telescope (to get a very tight beam), and the same large telescope used to
collect as much of the returned signal as possible, the return from one of
the Apollo reflectors averages less than one photon per pulse.

An ambitious laser/telescope/electronics amateur team probably *could*
duplicate the professional gear well enough to get a detectable return,
but the effective bandwidth is unlikely to be high enough for useful
communication.
--
spsystems.net is temporarily off the air;               |   Henry Spencer
mail to henry at zoo.utoronto.ca instead.               | henry@spsystems.net


From 4439095382755488101
X-Google-Thread: 10e8ad,e2f802b86ee749e6
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news4.google.com!news.glorb.com!newsfeed-
east.nntpserver.com!nntpserver.com!statler.nntpserver.com!news-out.octanews.net!
teal.octanews.net!border2.nntp.dca.giganews.com!nntp.giganews.com!
local01.nntp.dca.giganews.com!nntp.comcast.com!news.comcast.com.POSTED!not-for-
mail
NNTP-Posting-Date: Wed, 03 May 2006 14:43:01 -0500
From: N1KI <n1ki@arrl.net>
Newsgroups: rec.radio.amateur.space
```

Subject: Re: why not on the moon revisited
Date: Wed, 03 May 2006 15:43:01 -0400
Message-ID: <qq1i52tphkvgohdv5mn7s8lmk6flo2uapb@4ax.com>
References: <4450d8d5$0$2028$ba620dc5@text.nova.planet.nl>
X-Newsreader: Forte Agent 3.1/32.783
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Lines: 21
NNTP-Posting-Host: 69.254.110.180
X-Trace: sv3-W9TNdOirhtW+fguU2QM0W/dB+sAcNVsI9cR0C6e/PBDoqZ2K+J4TlV/VerMneSJKaXJZBCARjvXGHi2!BC0Btrw3FW/zTbbdo/HXkdDafu+mr4Zs2EBLAK3ul2Aen9ybqwb7aq9/v8ZZEnazr3I00/cuybND!JY3ggl3Ya03+0A==
X-Complaints-To: abuse@comcast.net
X-DMCA-Complaints-To: dmca@comcast.net
X-Abuse-and-DMCA-Info: Please be sure to forward a copy of ALL headers
X-Abuse-and-DMCA-Info: Otherwise we will be unable to process your complaint properly
X-Postfilter: 1.3.32
Xref: g2news2.google.com rec.radio.amateur.space:225

How would this be different from the digital mode (JT65) EME many
people are doing with a few hundred watts and a good yagi system?

On Thu, 27 Apr 2006 16:44:50 +0200, Roland <roland_lemmersZPEMM@planet.nl> wrote:

>Earlier this year there was a thread about repeaters on the moon.
>This morning I was riding on my bike to work, about 19 kilometers so
>plenty of time to think about all sorts of things, when it came to my
>mind there are laser reflectors on the moon. Hmmm?
>Laser for tx, telescope for rx. I figure there are possibilities here
>for some sort of digital mode.
>Has anyone ever tried this?
>WHat about the strenght needed for the laser to receive the reflection
>on earth?
>Thoughts, comments on the possibility, anyone?
>
>Roland.

From -4422703555699228880
X-Google-Thread: 10e8ad,6d89966cd4532f13,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news4.google.com!newshub.sdsu.edu!elnk-nf2-pas!newsfeed.earthlink.net!stamper.news.pas.earthlink.net!newsread4.news.pas.earthlink.net.POSTED!46041641!not-for-mail
From: "JoAnne Maenpaa" <wb9jej_no-spam@earthling.com>
Newsgroups: rec.radio.amateur.space

Subject: ANS-120 AMSAT News Service Weekly Bulletin
Lines: 387
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <6zt6g.3696$Vn.946@newsread4.news.pas.earthlink.net>
Date: Thu, 04 May 2006 20:34:10 GMT
NNTP-Posting-Host: 64.105.116.240
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread4.news.pas.earthlink.net 1146774850 64.105.116.240 (Thu, 04 May 2006 13:34:10 PDT)
NNTP-Posting-Date: Thu, 04 May 2006 13:34:10 PDT
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news2.google.com rec.radio.amateur.space:226

AMSAT NEWS SERVICE
ANS-120

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

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* AO-51 Ops Committee Call for Volunteers
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* Astronaut Bill McArthur Thank You Guestbook
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SB SAT @ AMSAT $ANS-120.01
Dayton 2006 Update from AMSAT Director Field Operations

AMSAT News Service Bulletin 120.01
From AMSAT HQ SILVER SPRING, MD.
April 30, 2006
To All RADIO AMATEURS
BID: $ANS-120.01

The main AMSAT Forum at the 2006 Dayton Hamvention will be held Saturday morning, May 20th, from 8:15 AM to 10:45 AM in Forum Room 1. This year, we will have a larger meeting room and more time. We have a great program scheduled, so come by, help us fill the room, and spend Saturday morning with us to find out the most up to date information on P3E, EAGLE, AO-51, ARISS and AMSAT.

The speakers will be:

1. Moderator: Barry Baines, WD4ASW, VP-Marketing & User Services, AMSAT-NA.
2. Rick Hambly, W2GPS, President, AMSAT-NA "Phase 3-E Satellite Design and Development Status."
3. Jim Sanford, WB4GCS, EAGLE Project Manager "Eagle Project Overview and Status Report."
4. EAGLE Project Development Team "Technology Update: Software Defined Transponder, Internal Housekeeping Unit, Energy Storage Experiments, and Structure Analysis."
5. Gould Smith, WA4SXM, Director Field Operations, AMSAT-NA "Introduction to AO-51 Operation with a Command Station Update."
6. Frank Bauer, KA3HDO, VP-Human Space Flight, AMSAT-NA "ARISS & SuitSat: Current Status & Future Opportunities."

Special emphasis will be placed on the status of AMSAT-NA EAGLE satellite project and the AMSAT-DL P3E.

The AMSAT Educator's Forum will be held Saturday from 11:30 to 12:15 AM in Forum Room 5.

1. Dr. H. Paul Shuch, N6TX, Director of Education, AMSAT-NA "Shared Experiences of Using Satellites in the Classroom."

Please make your reservations early for the Friday night AMSAT Banquet at the Amber Rose. Great food, great companionship.

Contact Nancy Makley, kc8gyw@amsat.org to make your reservations.

In addition to passing on the above information, Gould Smith, AMSAT Director Field Operations, issued a call for volunteers at Dayton 2006:

"We are looking for a few good men or women to help at the AMSAT booth during the Dayton Hamvention. I always find this a rewarding experience, whether talking with longtime AMSAT members or a shy, interested person that is not sure how to start.

The booth will be open Friday May 19th from 9 AM to 6 PM, Saturday May 20th, 8 AM to 5 PM and Sunday 8 AM to 1 PM.

We need people to answer questions about satellite operation, take donations for publications and trinkets, memberships and renewals, demonstrate software and assist with satellite demos. Please volunteer for a two hour shift each day while you are attending the Hamvention. If you can only find an hour, that will also be welcomed.

Send me an email at: wa4sxm@amsat.org

Also take advantage of our Thursday night 'Pizza and Suds' gathering at Mario's Piazza and the Friday night Banquet at the Amber Rose. Contact Nancy Makley at kc8gyw@amsat.org for reservations.

If you will be unable to help at the booth, come by and check out our new offering and see the operating EAGLE SDX (Software Defined Transponder) or just say HI to your fellow AMSAT members."

Gould, WA4SXM
AMSAT Director Field Operations

[ANS thanks Gould, WA4SXM, AMSAT Director Field Operations for the above information]

/EX

SB SAT @ AMSAT $ANS-120.02
AO-51 Ops Committee Call for Volunteers

AMSAT News Service Bulletin 120.02
From AMSAT HQ SILVER SPRING, MD.
April 30, 2006
To All RADIO AMATEURS
BID: $ANS-120.02

Drew Glasbrenner, KO4MA, issued the following request for volunteers for the AO-51 Ops Committee:

"As you may have seen in the last ANS, I have been asked by Mike Kingery KE4AZN, AMSAT VP Ops, to take the reins of the AO-51 Ops committee. As part of the changeover, it is my intent to include a wider range of volunteers to the group. Some of my other goals include getting the schedule ready earlier each month, better explaining the reasons behind the choices on each schedule, and continuing and expanding our support of new innovative modes and experiments.

I would like to ask that any members interested in serving on the committee send me an email detailing why they would be a good choice for the job. Typically our job includes taking requests for different modes from the email list and creating a monthly schedule that agrees with the times the command station is available, answering emails to the modes list, supporting special events such as Kids Day and Field Day, and participating in the different modes to ascertain their usefulness and popularity. My criteria for interested volunteers is that they are a current member of AMSAT, are active on AO-51 on a regular basis, have a amsat.org email alias, and have good email access and time to answer emails.

I'd like to have all the volunteers in place by May. Some of the most urgent short term goals include articles and information regarding the upcoming Kids Day, and Field Day. We'll have to hit the ground running on these items."

Thanks and Best 73,
Drew Glasbrenner KO4MA

[ANS thanks Drew, KO4MA for the above information]

/EX

SB SAT @ AMSAT $ANS-120.03
AMSAT Receives HP Technology for Community Grant Initiative

AMSAT News Service Bulletin 120.03
From AMSAT HQ SILVER SPRING, MD.
April 30, 2006
To All RADIO AMATEURS
BID: $ANS-120.03

On Monday, April 24, 2006, AMSAT was notified that it will receive an award from the 2006 Hewlett-Packard Technology for Community Grant Initiative. AMSAT competed with more than 2,000 nonprofit organizations for one of 99 awards. AMSAT will receive HP mobile and wireless technology packages valued at approximately $17,000. This equipment will be used in the AMSAT office and by AMSAT project teams to enhance our productivity and further our mission goals.

Achieving this award was a team effort. AMSAT Secretary Steve Diggs, W4EPI, was responsible for AMSAT's initial qualification while AMSAT Treasurer Gunther Meisse, W8GSM, and Board Member Dr. Thomas A. Clark, K3IO, wrote the proposal. According to HP "Selection of the final grant awardees was very competitive" so the proposal team deserves special recognition for a job well done.

The 2006 HP Technology for Community Grant Initiative award includes the following:

+ Five HP Notebook PCs
+ One HP Tablet PC
+ One HP iPAQ Pocket PC
+ A wireless-ready HP all-in-one printer/scanner/fax/copier
+ A wireless-ready HP digital projector and wireless remote control
+ A wireless access point
+ An HP digital camera bundle
+ A $1000 stipend
+ Training to set up a new wireless network

Each organization will receive the same grant award.

Rick, W2GPS
AMSAT President

[ANS thanks Rick, W2GPS, AMSAT President for the above information]

/EX

SB SAT @ AMSAT $ANS-120.04
ARISS Status 24 April 2006

AMSAT News Service Bulletin 120.04

From AMSAT HQ SILVER SPRING, MD.
April 30, 2006
To All RADIO AMATEURS
BID: $ANS-120.04

1. Upcoming School Contacts

Bob Jones High School in Madison Alabama (Jeff Williams' crew pick) has been approved for an ARISS contact. It has been scheduled for Monday, May 1 at 18:36 UTC via the telebridge station VK5ZAI in Australia. The audio from this contact will be fed into the EchoLink AMSAT (node 101 377) and JK1ZRW (node 277 208) conference servers. It will also be available on the IRLP Discovery reflector 9010.

Jaanimmarik School in Kuujjuaq, Quebec, Canada has been scheduled for a contact on Thursday, May 4 at 18:10 UTC via the telebridge station VK5ZAI in Australia. The audio from this contact will be fed into the EchoLink AMSAT (node 101 377) and JK1ZRW (node 277 208) conference servers. It will also be available on the IRLP Discovery reflector 9010.

2. School Committee Meeting Held

The ARISS Educational Outreach/School Selection Committee meeting was held on Thursday, April 13. Among the topics covered were lesson plans status, the Expedition 13 school crew picks and SuitSat QSL (confirmation) cards. The minutes have been posted on the ARISS web site. See:
http://www.rac.ca/ariss/arissschm.htm

3. 2006 Dayton Hamvention

The 2006 Dayton Hamvention will be held on May 19 - 21. AMSAT and ARRL will both set up exhibition booths at the event which is attended by 25,000 ham enthusiasts annually. ARISS Chairman Frank Bauer plans to attend and give a presentation, "ARISS & SuitSat: Current status & future opportunities," on Saturday May 20 at the AMSAT Forum. For more information on the event, see:
http://www.hamvention.org/

4. ARISS International Meeting Held

The monthly ARISS International Team Meeting was held by teleconference on April 18. Agenda items discussed included program funding, SuitSat certificates and Slow Scan Television. The minutes have been posted to the ARISS web site: http://www.rac.ca/ariss/arisstel26.htm

The next ARISS International teleconference will be held on May 23.

5. ARISS Members to Participate in Space Day Events

The Steven F. Udvar-Hazy Center will celebrate Space Day on May 5. The center plans on a full day of activities with appearances by several astronauts. An AMSAT exhibition booth will be set up at the event which will include an ARISS display. Representatives will be available to inform students and the general public of the ARISS program.

6. Crew Debrief Plans

The U.S. team has been compiling questions for the crew debrief with Bill McArthur, KC5ACR. The meeting is expected to take place in late May.

7. Escola Americana do Rio de Janeiro Video

Marcos Pontes participated in an ARISS contact with students from the Escola Americana do Rio de Janeiro. Video clips of the event are now available.
See: http://www.arissbr.org/globo.mpg

http://www.arissbr.org/tve.mpg

http://www.arissbr.org/sbt.mpg

8. Jeff Williams Makes General Contacts

Astronaut Jeff Williams, KD5TVQ, has already made general radio contacts from on board the ISS. On April 21, ARRL ran an article, "ISS crew member gets early start on ham radio." See: http://www.arrl.org/

[ANS thanks Carol, KB3LKI for the above information]

/EX

SB SAT @ AMSAT $ANS-120.05
Astronaut Bill McArthur Thank You Guestbook

AMSAT News Service Bulletin 120.05
From AMSAT HQ SILVER SPRING, MD.
April 30, 2006
To All RADIO AMATEURS
BID: $ANS-120.05

Your help needed!!

Astronaut Bill McArthur was very active on ham radio during his 6-month mission aboard the ISS. McArthur enjoyed amateur radio and gave many amateurs the chance to talk with an astronaut on the Space Station.

Cor, PD0RKC, is making a CDROM for McArthur with MP3 audio files from the many amateur radio contacts that he made during his mission. Pictures of operators will also be included.

If you have audio files for this CDROM or you know of web sites where Bill McArthur (NA1SS) audio files - including school contact files - can be found, please send them to: wegaman@gmail.com

The CDROM will be delivered to Bill McArthur via Kenneth Ransom, N5VHO (NASA JSC.)

To sign the guestbook visit: http://www.pd0rkc.com

[ANS thanks Cor, PD0RKC for the above information]

/EX

SB SAT @ AMSAT $ANS-120.06
Best Satellite DX for Home Microwave Station

AMSAT News Service Bulletin 120.06
From AMSAT HQ SILVER SPRING, MD.
April 30, 2006
To All RADIO AMATEURS
BID: $ANS-120.06

Luis, CT1DMK has detected Voyager 1 on 8420.4286 MHz (~8 GHz) while it is about 98 Astronomical Units from earth. This is 3 times further away from Earth than Pluto at approximately 14698 million Km.

Since this signal is well below the noise floor of a conventional receiver Luis employed a combination of his homebrew 8 GHz receiver design used with his 5.6 meter dish along with software for digital signal processing.

Luis said, "I had to acquire and integrate spectrograms for a long time. I did several acquisition periods of 15 minutes (900 seconds). My receiver is operated at fixed frequency and the Doppler variation were corrected by skewing successive spectrograms in software. Positive identification Voyager's signal arises from the fact that signal is only visible for the right skew amount that corresponds to the Doppler variation as predicted by the relative velocity calculation."

Luis' has recorded additional success at 8 GHz by receiving these Deep Space Network spacecraft:

+ Mars Reconnaissance Orbiter in orbit around Mars on 8.438444 GHz at a distance of 243 million Km from earth.

+ Mars Express on 8.420432 GHz also at a distance of 243 million Km from earth.

+ Mars Odyssey on 8.406852 GHz at 243 million Km from earth.

+ Rosetta on 8.421790 GHz 'en route' to the comet 67P, at a distance of 389 million Km from earth.

+ New Horizon Pluto Charon on 8.4378947 GHz while en-route to Pluto but still relatively close to earth at about 104 million Km from earth.

Details of Luis' operations can be found on-line at:
http://w3ref.cfn.ist.utl.pt/cupido/dsn.html

[ANS thanks Luis, CT1DMK for the above information]

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SB SAT @ AMSAT $ANS-120.07
Sunspot 875 A Crackling Sunspot

AMSAT News Service Bulletin 120.07
From AMSAT HQ SILVER SPRING, MD.
April 30, 2006
To All RADIO AMATEURS
BID: $ANS-120.07

Sunspot 875 is crackling with solar flares. A C8-category blast on 27 April lit up a region around the spot big enough to swallow Earth more than 20 times. Sunspot 875 has a tangled, complex magnetic field that harbors energy for even stronger M-flares. View a movie of the flare at:
http://spaceweather.com/

[ANS thanks SpaceWeather.com for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Al Marote, WA1LBG

From -5146916144037353847
X-Google-Thread: 10e8ad,532c6e749c0f051a,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news4.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!newshub.sdsu.edu!elnk-nf2-pas!newsfeed.earthlink.net!
stamper.news.pas.earthlink.net!newsread4.news.pas.earthlink.net.POSTED!46041641!
not-for-mail
From: "JoAnne Maenpaa" <wb9jej_no-spam@earthling.com>
Newsgroups: rec.radio.amateur.space
Subject: WSR-121 AMSAT Weekly Satellite Report
Lines: 1023
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <9zt6g.3697$Vn.2593@newsread4.news.pas.earthlink.net>
Date: Thu, 04 May 2006 20:34:13 GMT
NNTP-Posting-Host: 64.105.116.240

X-Complaints-To: abuse@earthlink.net
X-Trace: newsread4.news.pas.earthlink.net 1146774853 64.105.116.240 (Thu, 04 May 2006 13:34:13 PDT)
NNTP-Posting-Date: Thu, 04 May 2006 13:34:13 PDT
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news2.google.com rec.radio.amateur.space:227

This report is organized into 4 parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites

SB SAT @ AMSAT W8ISS ANS-121.S1
WSR 121 Part 1 05/01/2006

AMSAT NEWS SERVICE BULLETIN 121.S1 FROM AMSAT HQ
SILVER SPRING, MD, May 01, 2006
TO ALL RADIO AMATEURS
BID: $ANS-121.S1

VO-52 HAMSAT
Catalog Number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/V - Indian Transponder

Proposed frequencies:

Indian Transponder:
Uplink : 435.220 MHz to 435.280 MHz LSB/CW
Downlink: 145.870 MHz to 145.930 MHz USB/CW
Beacom : 145.859330 MHZ CW

Dutch Transponder:
Uplink : 435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW
Beacon : 145.860MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsat.in/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is
active. Each transponder has a different beacon.
[04242006]
=====
AO-51 ECHO
Catalog number: 28375

Launch date: June 29, 2004

Status: Testing
Curent Mode(s): FM Repeater, V/S
Digipeater - OFF

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
Analog voice uplink: 145.880 MHZ FM
145.880 MHz USB
145.920 MHz FM 67Hz PL tone
1268.700 MHz FM 67Hz PL tone

Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast
Protocol

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Mode schedule for April 2006 according to Drew, KO4MA:

May 1
FM Repeater, V/S
a.. Uplink: 145.920 mhz FM, No PL Tone
b.. Downlink 2401.200 mhz FM

May 5 (by request for university satellite command station testing)
38k4 Digital Downlink, V/S, PBP BBS (Pacsat Broadcast Protocol BBS)
a.. Uplink: 145.860 mhz FM, 9k6 PBP Digital
b.. Downlink: 2401.200 mhz FM, 38k4 PBP Digital

May 8
FM Repeater, V/U, High Power Mode
a.. Uplink: 145.920 mhz FM, 67 hz PL Tone
a.. Downlink 435.300 mhz FM

May 15
FM Repeaters, V/U
a.. Uplink: 145.920 mhz FM, 67 hz PL Tone
b.. Downlink: 435.300 mhz FM
FM Repeater, V/U (QRP only)
a.. Uplink: 145.880 mhz FM
b.. Downlink 435.300 mhz FM

May 22
FM Repeater, V/U
  a.. Uplink: 145.920 mhz FM, 67 hz PL Tone
  b.. Downlink: 435.300 mhz FM
9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
  a.. Uplink: 145.860 mhz FM, 9k6 PBP Digital
  b.. Downlink: 435.150 mhz FM, 9k6 PBP Digital

May 29
No Change

Official Webpage: http://www.amsat.org/amsat-new/echo/
[05012006]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Uplink: 145.850 MHz (67.0 Hz PL tone) (See below for operating
procedures)
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The
order of operation is thus: (allow for Doppler as necessary)
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute
timer
   on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the
repeater
   on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset
the 10
   minute timer.
[04172006]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: OPERATIONAL

Voice/CW Mode JA

```
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplink: 145.850 145.870 145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

unOfficial Webpage: http://www.amsat.org/amsat/sats/n7hpr/fo29.html
[11132005]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Uplink: 145.850 MHz FM
Downlink: 436.795 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[01012006]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational depending on amount of Sunlight
Current Reported mode: Mode-A

Uplink:   145.850 to 145.950 MHz CW/USB Mode A
   432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
  145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
  145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons:  29.502 MHz
  145.972 MHz
  435.100 MHz
 2304.100 MHz

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php
The AO-7 Logbook and Resource Website:
```

```
http://www.planetemily.com/ao7/
AO-7 users are requested to log their contacts and observations about
AO-7, especially any unexpected mode changes.
AO-07 telemetry software webpage:
http://www.qsl.net/k3tz/files/K3TZ_AO-07_Telemetry_Decoder_0.5.zip

Please keep your power low!  For additional information please read the
AO-7
Usage Guidelines on the AO-7 Log and Resource Site located at:
http://www.planetemily.com/ao7
[04242006]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: Packet / Occasional Voice - V
Digipeater: ON

The current crew is:
Commander: Pavel Vinogradov, RV3BS
Flight Engineer: Jeff Williams, KD5TVQ

Digital/APRS:
Worldwide packet uplink:   145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink:   145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink:      145.800 MHz FM

Crossband Repeater:
Repeater Uplink:   437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Russian: RS0ISS, RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official Webpage: http://www.rac.ca/ariss
Official Fan club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
```

Remember that the crew operates on UTC time. Also, all of the time line is
NOT translated from Russian and posted.
[04242006]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-121.S2
WSR 121 Part 2 05/01/2006

AMSAT NEWS SERVICE BULLETIN 121.S2 FROM AMSAT HQ
SILVER SPRING, MD, May 01, 2006
TO ALL RADIO AMATEURS
BID: $ANS-121.S2

CO-58 XI-V
Catalog Number: 28895
Launch Date: October 27, 2005

Status: Operational only within range of Ground station in Japan

Telemetry Downlink: 437.345MHz - FSK 1200bps using AFK protocol
Beacon Downlink: 437.465MHz - CW about 50 WPM

Callsign: JQ1YGW

Oficial Webpage: http://www.space.t.u-tokyo.ac.jp/gs/satinfo-e.html#xi5
Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
[03122006]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: Packet/Occassinal Voice - V
Digipeater: ON

The current crew is:
Commander: Pavel Vinogradov, RV3BS
Flight Engineer: Jeff Williams, KD5TVQ

Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:

Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Russian: RS0ISS, RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official Webpage: http://www.rac.ca/ariss
Official Fan club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is NOT translated from Russian and posted.
[04242006]
=====
PCSAT-2
Catalog Number: 25544
Launch Date: August 1, 2005

Activated: August 3, 2005
Status: Operational
Current Mode: Digipeater

Digital Downlink: 435.275 Mhz
Digital Uplink: 145.825 Mhz

PSK-31 Downlink: 435.275 Mhz
PSK-31 Uplink: 29.401 Mhz

Broadcast:
BBS:

Official Webpage: http://web.usna.navy.mil/~bruninga/pcsat2.html
PCSAT2 APRS Packet page: http://www.findu.com/cgi-bin/pcsat2.cgi
aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[04242006]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Mode(s): FM Repeater, V/S
Digipeater - OFF

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
Analog voice uplink: 145.880 MHZ FM
145.880 MHz USB
145.920 MHz FM 67Hz PL tone
1268.700 MHz FM 67Hz PL tone

Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast Protocol

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Mode schedule for April 2006 according to Drew, KO4MA:
May 1
FM Repeater, V/S
a.. Uplink: 145.920 mhz FM, No PL Tone
b.. Downlink 2401.200 mhz FM

May 5 (by request for university satellite command station testing)
38k4 Digital Downlink, V/S, PBP BBS (Pacsat Broadcast Protocol BBS)
a.. Uplink: 145.860 mhz FM, 9k6 PBP Digital
b.. Downlink: 2401.200 mhz FM, 38k4 PBP Digital

May 8
FM Repeater, V/U, High Power Mode
a.. Uplink: 145.920 mhz FM, 67 hz PL Tone
a.. Downlink 435.300 mhz FM

May 15
FM Repeaters, V/U
a.. Uplink: 145.920 mhz FM, 67 hz PL Tone
b.. Downlink: 435.300 mhz FM
FM Repeater, V/U (QRP only)
a.. Uplink: 145.880 mhz FM
b.. Downlink 435.300 mhz FM

May 22
FM Repeater, V/U
a.. Uplink: 145.920 mhz FM, 67 hz PL Tone
b.. Downlink: 435.300 mhz FM
9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)

```
  a.. Uplink: 145.860 mhz FM, 9k6 PBP Digital
  b.. Downlink: 435.150 mhz FM, 9k6 PBP Digital

May 29
No Change

Official Webpage: http://www.amsat.org/amsat-new/echo/
[05012006]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Operational

General Usage Uplink/Downlink:145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org
aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[04172006]
=====
CO-55 CUTE-1.7
Catalog number: 28941
Launched: June 30,2003

Status: Operational

Uplink: ?
Downlink: 437.3850 CW
          437.4700 1200 FM ax25 or SRLL (ACTIVE only near Japan ? )
Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[05012006]
=====
GO-32 TECHSAT-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks: 145.850 FM
         145.890 FM
         145.930 FM
        1269.700 FM
        1269.800 FM
        1269.900 FM
Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12
```

```
More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[05012006]
=====
RS-22 Mozhayets 4
Catalog Number: 27939
Launch Date: September 27, 2004

Status: Operational

Beacon: 435.3520 MHz CW
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Semi-operational, the digipeater command is on and open for
APRS users.

Uplink: 145.900 FM
        145.920 FM
        145.940 FM
        145.960 FM
(using 1200-baud Manchester FSK)
Downlink: 437.026 MHz SSB (1200-baud PSK)
Mode-S Beacon: 2401.1428 MHz

Mode and Antenna Polarization:
U: RC 437.050 MHz RHCP
   PSK 437.025 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[04172006]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational?

Telemetry Downlink: 145.826 MHz. FM (1200-baud AFSK).
approx. 10 days ON, 10 days OFF
Mode-S Beacon: 2401.500 MHz. ... OFF
UHFBeacon: 435.025 MHz. ... OFF

Mode and Antenna Polarization:
V: RHCP
S: LHCP
```

This from James DeYoung on April 28,2006:
UO-11 VHF 1200-bps AFSK telemetry beacon 145.826 very loud this
afternoon.
Monitored from FM18 using Arrow antenna and 910H from 22:51 to 23:54 UTC
28
April 2006 during near zenith pas

Official webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[05012006]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-121.S3
WSR 121 Part 3 05/01/2006

AMSAT NEWS SERVICE BULLETIN 121.S3 FROM AMSAT HQ
SILVER SPRING, MD, May 01, 2006
TO ALL RADIO AMATEURS
BID: $ANS-121.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

AO-54 SUITSAT
Catalog Number:28933
Release Date: February 3,2006

Status: Non-operational
Modes : FM Voice Telemetry/Greetings
 FM SSTV

Callsign: RS0RS
Downlink: 145.990 FM

Currently on the amsat-bb, there is a geussing game going on about when
Suitsat will re-enter the atmosphere.

Official webpage: http://www.suitsat.org
[05012006]
=====
NCUBE-2
Catalog Number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====

XO-53 SSETI
Catalog Number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 FM 67Hz CTCSS
Voice Downlink: 2401.835 FM
Packet Up/Downlink: 437.250 9k6 packet
Packet Downlink 2401.835 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01292006]
=====
TO-31 TMSAT-1
Catalog Number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink: 145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
PO-28 POSAT-1
Catalog Number: 22829
Launch Date: September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 429.950

Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html.
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012006]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launched: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB

```
Downlink: 145.975 to 145.825 MHz CW/USB
Beacon: 145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: Downlink only

Uplink: 145.875 145.900 145.925 145.950 MHz FM (1200-baud)
Downlink: 435.808 MHz PSK
Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01012006]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB
Beacon: 29.408 MHz
Robot: 29.454 MHz
[05232004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB
Beacon: 145.860 MHz
Robot: 145.908 MHz
[05232004]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink 145.975 MHz FM
```

```
Downlink 435.070 MHz FM
[05092004]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink: 145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM
Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01092005]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational?

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB
Beacon: 29.352 MHz (intermittent)
SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplink: 145.84 145.86 145.88 145.90 MHz FM
(using 1200-baud Manchester FSK)
CW downlink: 437.125 MHz
Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)
Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[05232004]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795
```

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[08152004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM
Broadcast Callsign: HL01-11
BBS: HL01-12

Jim, AA7KC, reports that KO-23's downlink transmitter continues in a non-operational status.
[05092004]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM (9600-baud FSK)
Downlink: 436.500 MHz FM
Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and the image and transponder recovery efforts have been unsuccessful.

```
For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm

[ANS-WSR has no further information]
[05232004]
=====
SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

STatus: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz and 145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[08082004]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlink: 437.025 MHz 437.400 MHz
Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site
at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[05092004]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplink V-band   145.840 - 145.990 MHz CW/LSB
       U-band   435.550 - 435.800 MHz CW/LSB
       L1-band 1269.250 - 1269.500 MHz CW/LSB
       L2-band 1268.325 - 1268.575 MHz CW/LSB
Downlink: S2-band 2401.225 - 2401.475 MHz CW/USB
          K-band 24,048.010 - 24,048.060 MHz CW/USB
Beacon:   2401.323
```

24,048.035
[05232004]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational
Downlink: 437.075 MHz
Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[08152004]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz
Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[08152004]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, callsign KE6QMD, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Operational

Uplink: 145.850 or 145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz
Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[11202005]

=====

AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink 435.275 1200-baud AFSK
Downlink 145.825 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01012006]

=====

DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink: Downlink 145.825 MHz FM 1200 Baud AFSK
Beacon: 2401.220 MHz
[05012006]

=====

WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-121.S4
WSR 121 Part 4 05/01/2006

AMSAT NEWS SERVICE BULLETIN 121.S4 FROM AMSAT HQ
SILVER SPRING, MD, May 01, 2006
TO ALL RADIO AMATEURS
BID: $ANS-121.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE
PROPOSED FOR LAUNCH AT THIS TIME:

PHASE 3E ?O-??
Catalog Number:
Proposed Launch Date: Early/Mid 2007

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/
[ANS-WSR wishes to thank William Leijenaar, PE1RAH for this week's report]
[04242006]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/amsat/listserv/menu.html

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

From 4588974137777767022
X-Google-Thread: 10e8ad,2a6c6e2eb32f9911,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news2.google.com!news3.google.com!border1.nntp.dca.giganews.com!nntp.giganews.com!opentransit.net!eui1nw.euskaltel.es!not-for-mail
From: "Jabi" <ea2aru@euskalnet.net>
Newsgroups: rec.radio.amateur.space
Subject: Rotor Controller
Date: Fri, 5 May 2006 10:22:05 +0200
Organization: Euskaltel, s.a.
Lines: 6
Message-ID: <e3f1u6$oem1@eui1nw.euskaltel.es>
NNTP-Posting-Host: eu85-85-77-82.clientes.euskaltel.es
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.2869
X-MIMEOLE: Produced By Microsoft MimeOLE V6.00.2900.2869
X-RFC2646: Format=Flowed; Original
Xref: g2news2.google.com rec.radio.amateur.space:229

I am one old Rotor Controller squeme for Gotz Romahm, year 2002 for the Pic 16F84. But I'nt the code for the Pic.
Any have the code or source for it?
Salu2, de Jabi, EA2ARU.

From 4307749450653229039
X-Google-Thread: 10e8ad,d27bb51d733c8b21,start
X-Google-Thread: 113975,d27bb51d733c8b21,start
X-Google-Attributes: gid10e8ad,gid113975,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news3.google.com!news4.google.com!news.glorb.com!
txtfeed1.tudelft.nl!tudelft.nl!binfeed2.tudelft.nl!newsrouter-eu.astraweb.com!
news.astraweb.com!router1.astraweb.com!not-for-mail
From: Chris Steyaert <observations@rmob.org>
Newsgroups: rec.radio.amateur.space,sci.astro.amateur
Subject: Radio Meteor Obs. Bull. April 2006 Lyrids
Date: Sat, 06 May 2006 22:03:35 +0200
Message-ID: <c80q529ra4cug5b80aho7lpalb318a5c3q@4ax.com>
X-Newsreader: Forte Agent 1.93/32.576 English (American)
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Lines: 17
Organization: Unlimited download news at news.astraweb.com
NNTP-Posting-Host: bc4f35d0.news.astraweb.com
X-Trace: DXC=MkaF]HOdYMDm=FFS;n7SGML?0kYOcDh@J0V9>>T5iDBA;Dc;28W3onAG?
ifhhgG3CA3f^^d\diY3FXoMVKdSDm2H
Xref: g2news2.google.com rec.radio.amateur.space:230 sci.astro.amateur:25625

Radio Meteor Observation Bulletin No. 153 of April 2006 (78 K) is available now as

http://visualrmob.free.fr/rmobtext/rmob0604.txt

More information and the visual presentation of the hourly forward scatter counts can be found on

http://www.rmob.org

http://radio.data.free.fr

Chris

From -1466198437573812l2
X-Google-Thread: 10e8ad,72bba2b16d42bd71,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII
Path: g2news2.google.com!news3.google.com!news4.google.com!newshub.sdsu.edu!elnk-
nf2-pas!newsfeed.earthlink.net!stamper.news.pas.earthlink.net!
newsread4.news.pas.earthlink.net.POSTED!46041641!not-for-mail
From: "JoAnne Maenpaa" <wb9jej_no-spam@earthling.com>

Newsgroups: rec.radio.amateur.space
Subject: ANS-127 AMSAT News Service Weekly Bulletin
Lines: 415
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <3A18g.499$Jf.267@newsread4.news.pas.earthlink.net>
Date: Tue, 09 May 2006 14:21:51 GMT
NNTP-Posting-Host: 66.167.65.116
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread4.news.pas.earthlink.net 1147184511 66.167.65.116 (Tue, 09 May 2006 07:21:51 PDT)
NNTP-Posting-Date: Tue, 09 May 2006 07:21:51 PDT
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news2.google.com rec.radio.amateur.space:231

AMSAT NEWS SERVICE
ANS-127

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

******************** AMSAT 2006 Space Symposium **************************

The AMSAT web team has posted informational pages on the AMSAT web site.
You can find the announcement with many links at:
http://www.amsat-org/amsat-new/symposium

****

In this edition:

- Reminder - Opportunities to Participate With AMSAT at Dayton
- 2006 AMSAT-NA Space Symposium Call for Papers: First Announcement
- SuitSat is Still in the News
- AMSAT Awards
- ARISS Status for the Week of May 1, 2006
- View Re-creation of Huygens Probe Landing on Titan
- Milestones Reached - Congratulations

SB SAT @ AMSAT $ANS-127.01
Reminder - Opportunities to Participate With AMSAT at Dayton

AMSAT News Service Bulletin 127.01
>From AMSAT HQ SILVER SPRING, MD.
May 7, 2006

To All RADIO AMATEURS
BID: $ANS-127.01

The main AMSAT Forum at the 2006 Dayton Hamvention will be held Saturday morning, May 20th, from 8:15 AM to 10:45 AM in Forum Room 1. We have a great program scheduled so come by and spend Saturday morning with us to find out the most up to date information on P3E, EAGLE, AO-51, ARISS and AMSAT.

Barry Baines, WD4ASW, AMSAT's VP-Marketing & User Services, will moderate the forum which includes these topics:

1. Rick Hambly, W2GPS, President, AMSAT-NA "Phase 3-E Satellite Design and Development Status."
2. Jim Sanford, WB4GCS, EAGLE Project Manager "Eagle Project Overview and Status Report."
3. EAGLE Project Development Team "Technology Update: Software Defined Transponder, Internal Housekeeping Unit, Energy Storage Experiments, and Structure Analysis."
4. Gould Smith, WA4SXM, Director Field Operations, AMSAT-NA "Introduction to AO-51 Operation with a Command Station Update."
5. Frank Bauer, KA3HDO, VP-Human Space Flight, AMSAT-NA "ARISS & SuitSat: Current Status & Future Opportunities."

Special emphasis will be placed on the status of the AMSAT-NA EAGLE satellite project and the AMSAT-DL P3E satellite.

The AMSAT Educator's Forum will be held Saturday from 11:30 to 12:15 AM in Forum Room 5 where Dr. H. Paul Shuch, N6TX, Director of Education of AMSAT-NA will host "Shared Experiences of Using Satellites in the Classroom."

Live satellite demonstrations will be another AMSAT feature at Dayton. Drew Glasbrenner, KO4MA; Keith Pugh, W5IU and other volunteers will be making live satellite contacts Friday, Saturday and Sunday during the Dayton Hamvention. Contacts on both the FM and SSB satellites will be demonstrated outside the Ball Arena entrance, just a short distance from the AMSAT booth.

AMSAT will also be demonstrating operation through the future Eagle and P3E SDX (Software Defined Transponder) located in the AMSAT booth. Bob McGwier, N4HY, Tom Clark, K3IO and Howard Long, G5LVB will have an SDX operating and also have live displays of signals in the 50 kHz pass band.

While you are in town plan to take advantage of AMSAT's Thursday night 'Pizza and Suds' gathering at Mario's Piazza. The Friday night Banquet will be at the Amber Rose. Contact Nancy Makley, kc8gyw@amsat.org to make your reservations for both events.

Gould Smith, AMSAT Director Field Operations, issued a call for volunteers at Dayton 2006, "We are looking for a few good men or women to help at the AMSAT booth during the Dayton Hamvention. The booth will be open Friday May 19th from 9 AM to 6 PM, Saturday May 20th, 8 AM to 5 PM and Sunday 8 AM to 1 PM.

We need people to answer questions about satellite operation, take donations for publications and trinkets, memberships and renewals, demonstrate software and assist with satellite demos. Please volunteer for a two hour shift each day while you are attending the Hamvention. If you can only find an hour, that will also be welcomed. Sign up in advance by sending Gould an email at: wa4sxm@amsat.org.

Many more details of AMSAT at Dayton can be found on-line at
http://www.amsat.org.
Follow the Dayton links.

Gould, WA4SXM
AMSAT Director Field Operations

[ANS thanks Gould, WA4SXM, AMSAT Director Field Operations for the above information.]

/EX

SB SAT @ AMSAT $ANS-127.02
2006 AMSAT-NA Space Symposium Call for Papers: First Announcement

AMSAT News Service Bulletin 127.02
>From AMSAT HQ SILVER SPRING, MD.
May 7, 2006
To All RADIO AMATEURS
BID: $ANS-127.02

Invitation: Speakers are invited to submit and present papers dealing with the science of Amateur Radio Satellites and associated technologies for the AMSAT 2006 Space Symposium. The Symposium will be held at the Crowne Plaza Hotel in Foster City, California, approximately 10km south of San Francisco International Airport.

Since the 2005 Symposium was cancelled due to hurricane damage caused by hurricanes Katrina and Rita, speakers originally scheduled for the 2005 Symposium are invited to re-submit papers for the 2006 Symposium.

For more information please refer to:
http://www.amsat.org/amsat-new/symposium/2006CallForPapers.php

Topics: Recommended topics include but are not limited to the following categories:

. AMSAT P3E
. AMSAT Eagle
. Microsatellite Projects
. Cubesat and Nanosatellite Projects
. ARISS
. Attitude Determination and Control

. Propulsion
. Communications
. Mechanical
. Antennas
. Groundstations
. Digital Modes
. Education and Outreach
. Launch Opportunities
. Status Reports

Other Activities:
. The AMSAT Board of Directors will meet on 5-6 October.
. The AMSAT Annual General Meeting (AGM) will be held on 6 October.
. AMSAT International will meet 8 October
. The IARU Satellite Committee will meet during the Symposium and will hold a public round table discussion on frequency coordination on 8 October
. The ARISS International Delegates Meeting will be held on 9-10 October
. "Birds of a Feather" sessions (BOFS) will be available on request

Deadline: Applications to present papers must be submitted by 15 July 2006. Papers must be submitted no later than 1 August 2006.

Procedure: The planning committee has created an online registration system where you can submit your abstract and track it. Using this system you will allow you to submit your paper and any subsequent changes online.
Visit the 2006 Symposium Paper Registration webpage for instructions:
http://www.amsat.org/amsat-new/symposium/2006PapersProcedure.php

Organizer: Project OSCAR. Contact Emily Clarke, N1DID for additional information

Venue: See the 2006 Space Symposium web page for additional information about
the venue: http://www.amsat.org/amsat-new/symposium/

[ANS thanks Emily, N1DID for the above information]

/EX

SB SAT @ AMSAT $ANS-127.03
SuitSat is Still in the News

AMSAT News Service Bulletin 127.03
>From AMSAT HQ SILVER SPRING, MD.
May 7, 2006
To All RADIO AMATEURS
BID: $ANS-127.03

This week, Frank Bauer, KA3HDO who is the ARISS International Chairman and AMSAT's V.P. for Human Spaceflight Programs provided an update on SuitSat, the amateur radio space suit that continues to inspire the world.

Frank said, "SuitSat-1's re-entry is coming few weeks from now. Would anyone like to enter a "Chicken Little" contest?" For those unfamiliar with this term, it refers to the "sky is falling" from the Chicken Little story. You are invited to pick the date that SuitSat-1 will fall from the sky. Amateurs have begun posting their Chicken Little dates on-line at the AMSAT bulletin board: amsat-bb@amsat.org. The winner is the person who picks the date closest to the re-entry event. Prizes include bragging rights as well as the fame and notoriety associated with successful re-entry prognastication.

Frank also noted that SuitSat-1 is still being featured in the popular press:

+ The 2006 "100 Best" of everything as compiled by Reader's Digest includes the "Best Empty Suit"--SuitSat. In the paper edition, SuitSat is listed as the 25th best. It can also be viewed on the Reader's Digest web site. To view the write up (38th item from the top), see: http://www.rd.com/content/openContent.do?contentId=26667

+ Popular Science plans to highlight SuitSat in an upcoming magazine.

+ Boys Life (scouting magazine) will have an article and pictures in the next couple of months.

[ANS thanks Frank, KA3HDO for the above information]

/EX

SB SAT @ AMSAT $ANS-127.04
AMSAT Awards

AMSAT News Service Bulletin 127.04
>From AMSAT HQ SILVER SPRING, MD.
May 7, 2006
To All RADIO AMATEURS
BID: $ANS-127.04

Bruce Paige, KK5DO, who is AMSAT's Director Contests and Awards says this week, congratulations go out to all of the following.

Phet Imtonkhum	HS4POV	AMSAT Satellite Communicators Club Award
Stefan Meszaros	DL3SEM	AMSAT Satellite Communicators Club Award
Richard Nelson	W2ACY	AMSAT Satellite Communicators Club Award
Chris Pakulski	KB8FNC	AMSAT Satellite Communicators Club Award
Terry Moorby	VE3DIJ	South Africa AMSAT Satellite Communication Achievement Award #US95
Yoshi Esaki	JA6BX	W4AMI Award #42
Rick Behma	VE4AMU	W4AMI Award #43

These are the last of the 51 on 51 Awards as the closing period for submissions was April 30, 2006.

Kyle Yoksh	K0KN	51 on 51 Award #67
Yohsio Esaki	JA6BX	51 on 51 Award #68
Iji Yoshitomo	JA6PL	51 on 51 Award #69
Ricky Behma	VE4AMU	51 on 51 Award #70

To see all the awards visit http://www.amsat.org.

[ANS thanks Bruce, KK5DO for the above information]

/EX

SB SAT @ AMSAT $ANS-127.05
ARISS Status for the Week of May 1, 2006

AMSAT News Service Bulletin 127.05
>From AMSAT HQ SILVER SPRING, MD.
May 7, 2006
To All RADIO AMATEURS
BID: $ANS-127.05

1. Successful School Contacts

Bob Jones High School in Madison Alabama had an ARISS contact on Monday, May 1 via the telebridge station VK5ZAI in Australia.

Jaanimmarik School in Kuujjuaq, Quebec, Canada had an ARISS contact on Thursday, May 4 also via the telebridge station VK5ZAI in Australia.

2. ARISS Members Participated in Space Day on May 5

ARISS members participated in the Steven F. Udvar-Hazy Center Space Day activities on Friday, May 5. An AMSAT exhibition booth was set up at the event and included an ARISS display. Representatives displayed ISS Ham hardware and informed students and the general public of the ARISS program. They also talked about how AMSAT builds small satellites and displayed the Cal-Poly Cubesat model and picosats.

3. ARISS School Demonstrates Satellite Communications

On Monday, April 24, Larry Phelps, K4OZS, demonstrated satellite communications to two classes of fifth grade students at Romeo Elementary School in Dunnellon, Florida using the AMSAT Oscar (AO-51) satellite repeater. He received calls from many stations to the delight of the students.� This demonstration was part of the preparation for an upcoming ARISS contact at the school. Phelps held another demonstration at the school in April 2005 and is a member of the Silver Springs Radio Club which will assist in the upcoming contact. Active in amateur radio, he also recently received a QSL card for a contact with Bill McArthur, KC5ACR.

4. SuitSat Video

On April 18, Kevin Fetter from Brockville, Ontario, Canada videotaped SuitSat as it passed overhead. The video may be found on the Space Weather website, http://spaceweather.com/. Select April 28 under �View Archives� to view the video.

5. Marcos Pontes Pleased with ARISS Contacts

Brazilian astronaut Marcos Pontes, PY0AEB, visited Bauru, Sa?o Paulo, Brazil to give a speech and while there, he presented a gift to Fabiano Moser, PY5RX, to commemorate Pontes� contact with him via amateur radio while he was on board the ISS. He remarked how nice it was to hear many people calling to him on the radio in his native language and because of this, he never felt alone. See: http://www.issfanclub.com/node/4958

6. Commander Active on ARISS Radio

ISS Commander Pavel Vinogradov, RV3BS, has been very active on the ISS Ham radio equipment over Russia. He has been heard making daily voice contacts over Siberia and has also made some contacts over European Russia as well.

[ANS thanks Carol, KB3LKI for the above information]

/EX

SB SAT @ AMSAT $ANS-127.06
View Re-creation of Huygens Probe Landing on Titan

AMSAT News Service Bulletin 127.06
>From AMSAT HQ SILVER SPRING, MD.
May 7, 2006
To All RADIO AMATEURS
BID: $ANS-127.06

A recent article posted at http://www.saturndaily.com points readers to a link at the NASA Jet Propulsion Labs on-line Planetary Photo Journal featuring a movie, viewable on your computer, of the Descent Imager/Spectral Radiometer camera on board the European Space Agency's Huygens probe landing on Saturn's moon Titan on Jan. 14, 2005.

To view the QuickTime movie visit the JPL site at:
http://photojournal.jpl.nasa.gov/catalog/PIA08117
(Be patient and allow time for the entire site to load.)

The almost four-hour-long operation of the camera is shown in less than five minutes. The first part of the movie shows how Titan looked to the camera as it acquired more and more images during the probe's descent. Each image has a small field of view, and dozens of images were made into mosaics of the whole scene.

Sounds from a left speaker trace Huygens' motion, with tones changing with rotational speed and the tilt of the parachute. There also are clicks that clock the rotational counter, as well as sounds for the probe's heat shield hitting Titan's atmosphere, parachute deployments, heat shield release, jettison of the camera cover and touchdown.

Sounds from a right speaker go with the Descent Imager/Spectral Radiometer activity. There's a continuous tone that represents the strength of Huygens' signal to Cassini. Then there are 13 different chimes - one for each of instrument's 13 different science parts - that keep time with flashing-white-dot exposure counters. During its descent, the Descent Imager/Spectral Radiometer took 3,500 exposures.

More details can also be read on-line at:
http://www.saturndaily.com/reports/Scientists_Compile_Huygens_Descent_Movies
.html
(careful with the line wrap).

[ANS thanks SpaceDaily.com, SaturnDaily.com, and NASA Jet Propulsion Labs for the above information.]

/EX

SB SAT @ AMSAT $ANS-127.07
Milestones Reached - Congratulations

AMSAT News Service Bulletin 127.07
>From AMSAT HQ SILVER SPRING, MD.
May 7, 2006
To All RADIO AMATEURS
BID: $ANS-127.07

Pop, VU2POP, Secretary of AMSAT India, reminds us to wish Happy Birthday to HAMSAT VO-52 which turns one year old and is still going strong. Thank you to the Indian Space Research Organization for the wonderful gift of HAMSAT.

Bill Pasternak, WA6ITF, Producer of Amateur Radio Newsline says that next week the on-the-air newscast will reach #1500. That translates into 28.8461 years of doing Westlink which became Newsline -- and never missing a deadline or air-date. Newsline frequently features AMSAT events in its broadcasts. Congratulations to the Newsline team and we look forward to sharing lots more of the excitement of Amateur Radio in space!

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits.

Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM

From -6350562052840080419
X-Google-Thread: 10e8ad,5e141c30570745ca,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news4.google.com!news.glorb.com!newsfeed-east.nntpserver.com!nntpserver.com!statler.nntpserver.com!elnk-nf2-pas!newsfeed.earthlink.net!stamper.news.pas.earthlink.net!newsread4.news.pas.earthlink.net.POSTED!46041641!not-for-mail
From: "JoAnne Maenpaa" <wb9jej_no-spam@earthling.com>
Newsgroups: rec.radio.amateur.space
Subject: WSR-128 AMSAT Weekly Satellite Report
Lines: 1017
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <wIm8g.951$Jf.865@newsread4.news.pas.earthlink.net>
Date: Wed, 10 May 2006 14:24:28 GMT
NNTP-Posting-Host: 64.105.104.217
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread4.news.pas.earthlink.net 1147271068 64.105.104.217 (Wed, 10 May 2006 07:24:28 PDT)
NNTP-Posting-Date: Wed, 10 May 2006 07:24:28 PDT
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news2.google.com rec.radio.amateur.space:232

This report is organized into 4 parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites

SB SAT @ AMSAT W8ISS ANS-128.S1
WSR 128 Part 1 05/08/2006

AMSAT NEWS SERVICE BULLETIN 128.S1 FROM AMSAT HQ
SILVER SPRING, MD, May 08, 2006
TO ALL RADIO AMATEURS
BID: $ANS-128.S1

VO-52 HAMSAT
Catalog Number: 28650
Launch Date: May 05,2005

```
Status: Operational
Current Mode: U/V - Indian Transponder

Proposed frequencies:
-------------------
Indian Transponder:
Uplink :  435.220 MHz to 435.280 MHz LSB/CW
Downlink: 145.870 MHz to 145.930 MHz USB/CW
Beacom :  145.859330 MHZ CW

Dutch Transponder:
Uplink :  435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW
Beacon :  145.860MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsat.in/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is
active. Each transponder has a different beacon.
[04242006]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Mode(s): FM Repeater, V/U High Power Mode
Digipeater - OFF

Analog voice downlink: 435.300 MHz FM
         435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink:   145.880 MHZ FM
         145.880 MHz USB
         145.920 MHz FM 67Hz PL tone
        1268.700 MHz FM 67Hz PL tone
Digital Downlinks:     435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
        2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:        145.860 MHz FM, 9k6 Digital, Pacsat Broadcast
Protocol
                      1268.700 mhz FM, 9k6 PBP Digital
Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
```

S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Mode schedule for April 2006 according to Drew, KO4MA:

May 8
FM Repeater, V/U, High Power Mode
  a.. Uplink: 145.920 mhz FM, 67 hz PL Tone
  a.. Downlink 435.300 mhz FM

May 15
FM Repeaters, V/U
  a.. Uplink: 145.920 mhz FM, 67 hz PL Tone
  b.. Downlink: 435.300 mhz FM
FM Repeater, V/U (QRP only)
  a.. Uplink: 145.880 mhz FM
  b.. Downlink 435.300 mhz FM

May 22
FM Repeater, V/U
  a.. Uplink: 145.920 mhz FM, 67 hz PL Tone
  b.. Downlink: 435.300 mhz FM
9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
  a.. Uplink: 145.860 mhz FM, 9k6 PBP Digital
  b.. Downlink: 435.150 mhz FM, 9k6 PBP Digital

May 29
No Change

Official Webpage: http://www.amsat.org/amsat-new/echo/
[05082006]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Uplink: 145.850 MHz (67.0 Hz PL tone) (See below for operating procedures)
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The

```
order of operation is thus: (allow for Doppler as necessary)
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer
   on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater
   on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10
   minute timer.
[04172006]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: OPERATIONAL

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplink: 145.850 145.870 145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

unOfficial Webpage: http://www.amsat.org/amsat/sats/n7hpr/fo29.html
[11132005]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Uplink: 145.850 MHz FM
Downlink: 436.795 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[01012006]
=====
AO-7 AMSAT OSCAR 7
```

Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational depending on amount of Sunlight
Current Reported mode: Mode-A

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
   432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
  145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
  145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz
  145.972 MHz
  435.100 MHz
 2304.100 MHz

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php
The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
AO-7 users are requested to log their contacts and observations about
AO-7, especially any unexpected mode changes.
AO-07 telemetry software webpage:
http://www.qsl.net/k3tz/files/K3TZ_AO-07_Telemetry_Decoder_0.5.zip

Please keep your power low! For additional information please read the
AO-7
Usage Guidelines on the AO-7 Log and Resource Site located at:
http://www.planetemily.com/ao7
[04242006]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: Packet / Occasional Voice - V
Digipeater: ON

The current crew is:
Commander: Pavel Vinogradov, RV3BS
Flight Engineer: Jeff Williams, KD5TVQ

Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:

Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Russian: RS0ISS, RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official Webpage: http://www.rac.ca/ariss
Official Fan club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.
[04242006]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-128.S2
WSR 128 Part 2 05/08/2006

AMSAT NEWS SERVICE BULLETIN 128.S2 FROM AMSAT HQ
SILVER SPRING, MD, May 08, 2006
TO ALL RADIO AMATEURS
BID: $ANS-128.S2

CO-58 XI-V
Catalog Number: 28895
Launch Date: October 27, 2005

Status: Operational only within range of Ground station in Japan

Telemetry Downlink: 437.345MHz - FSK 1200bps using AFK protocol
Beacon Downlink: 437.465MHz - CW about 50 WPM

Callsign: JQ1YGW

Oficial Webpage: http://www.space.t.u-tokyo.ac.jp/gs/satinfo-e.html#xi5
Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
[03122006]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: Packet/Occassinal Voice - V
Digipeater: ON

The current crew is:
Commander: Pavel Vinogradov, RV3BS
Flight Engineer: Jeff Williams, KD5TVQ

Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Russian: RS0ISS, RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official Webpage: http://www.rac.ca/ariss
Official Fan club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is NOT translated from Russian and posted.
[04242006]
=====
PCSAT-2
Catalog Number: 25544
Launch Date: August 1, 2005

Activated: August 3, 2005
Status: Operational
Current Mode: Digipeater / XBAUD (PSK31/CW Repeater)

Digital Downlink: 435.275 Mhz
Digital Uplink: 145.825 Mhz

PSK-31 Downlink: 435.275 Mhz
PSK-31 Uplink: 29.401 Mhz

CALLSIGN: pcsat2

Official Webpage: http://web.usna.navy.mil/~bruninga/pcsat2.html
PCSAT2 APRS Packet page: http://www.findu.com/cgi-bin/pcsat2.cgi
aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/

Bob, WB4APR, reports that the Xbaud - PSK31/CW repeater experiment has been activated. Bob reports that you need to connect to pcsat2 and then you can tranmit on 29.401 Mhz and listen on 435.275 for your signal. Reports are that you will probably need at least 100+ watts of power on 10m to make it work.
Currently, Henk, PA3GUO, has tried with only a 100 watts and a dipole without any luck so far.
[ANS-WSR wishes to thank Bob, WB4APR, and Henk, PA3GUO, for this weeks info]
[05082006]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Mode(s): FM Repeater, V/U High Power Mode
Digipeater - OFF

```
Analog voice downlink: 435.300 MHz FM
         435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink:   145.880 MHZ FM
         145.880 MHz USB
         145.920 MHz FM 67Hz PL tone
        1268.700 MHz FM 67Hz PL tone
Digital Downlinks:     435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
        2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:        145.860 MHz FM, 9k6 Digital, Pacsat Broadcast
Protocol
```

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Mode schedule for April 2006 according to Drew, KO4MA:

May 8
FM Repeater, V/U, High Power Mode
  a.. Uplink: 145.920 mhz FM, 67 hz PL Tone
  a.. Downlink 435.300 mhz FM

May 15
FM Repeaters, V/U
  a.. Uplink: 145.920 mhz FM, 67 hz PL Tone
  b.. Downlink: 435.300 mhz FM
FM Repeater, V/U (QRP only)
  a.. Uplink: 145.880 mhz FM
  b.. Downlink 435.300 mhz FM

May 22
FM Repeater, V/U
  a.. Uplink: 145.920 mhz FM, 67 hz PL Tone
  b.. Downlink: 435.300 mhz FM
9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
  a.. Uplink: 145.860 mhz FM, 9k6 PBP Digital
  b.. Downlink: 435.150 mhz FM, 9k6 PBP Digital

May 29
No Change

Official Webpage: http://www.amsat.org/amsat-new/echo/
[05082006]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Operational

General Usage Uplink/Downlink:145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org
aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[04172006]
=====
CO-55 CUTE-1.7
Catalog number: 28941
Launched: June 30,2003

Status: Operational

Uplink: ?

```
Downlink: 437.3850 CW
          437.4700 1200 FM ax25 or SRLL (ACTIVE only near Japan ? )
Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[05012006]
=====
GO-32 TECHSAT-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks: 145.850 FM
         145.890 FM
         145.930 FM
        1269.700 FM
        1269.800 FM
        1269.900 FM
Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[05012006]
=====
RS-22 Mozhayets 4
Catalog Number: 27939
Launch Date: September 27, 2004

Status: Operational

Beacon: 435.3520 MHz CW
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Semi-operational, the digipeater command is on and open for
APRS users.

Uplink: 145.900 FM
        145.920 FM
        145.940 FM
        145.960 FM
(using 1200-baud Manchester FSK)
Downlink: 437.026 MHz SSB (1200-baud PSK)
Mode-S Beacon: 2401.1428 MHz

Mode and Antenna Polarization:
U: RC 437.050 MHz RHCP
   PSK 437.025 MHz LHCP
```

V: Linear

Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[04172006]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational?

Telemetry Downlink: 145.826 MHz. FM (1200-baud AFSK).
approx. 10 days ON, 10 days OFF
Mode-S Beacon: 2401.500 MHz. ... OFF
UHFBeacon: 435.025 MHz. ... OFF

Mode and Antenna Polarization:
V: RHCP
S: LHCP

This from James DeYoung on April 28,2006:
UO-11 VHF 1200-bps AFSK telemetry beacon 145.826 very loud this
afternoon.
Monitored from FM18 using Arrow antenna and 910H from 22:51 to 23:54 UTC
28
April 2006 during near zenith pas

Official webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[05012006]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-128.S3
WSR 128 Part 3 05/08/2006

AMSAT NEWS SERVICE BULLETIN 128.S3 FROM AMSAT HQ
SILVER SPRING, MD, May 08, 2006
TO ALL RADIO AMATEURS
BID: $ANS-128.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

AO-54 SUITSAT
Catalog Number:28933
Release Date: February 3,2006

Status: Non-operational
Modes : FM Voice Telemetry/Greetings
FM SSTV

Callsign: RS0RS
Downlink: 145.990 FM

Currently on the amsat-bb, there is a geussing game going on about when Suitsat will re-enter the atmosphere.

Official webpage: http://www.suitsat.org
[05012006]
=====
NCUBE-2
Catalog Number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog Number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 FM 67Hz CTCSS
Voice Downlink: 2401.835 FM
Packet Up/Downlink: 437.250 9k6 packet
Packet Downlink 2401.835 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01292006]
=====
TO-31 TMSAT-1
Catalog Number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink: 145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
PO-28 POSAT-1
Catalog Number: 22829

Launch Date: September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 429.950

Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html.
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012006]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launched: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB
Beacon: 145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: Downlink only

Uplink: 145.875 145.900 145.925 145.950 MHz FM (1200-baud)
Downlink: 435.808 MHz PSK
Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01012006]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

```
Beacon: 29.408 MHz
Robot: 29.454 MHz
[05232004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB
Beacon: 145.860 MHz
Robot: 145.908 MHz
[05232004]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink 145.975 MHz FM
Downlink 435.070 MHz FM
[05092004]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink: 145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM
Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01092005]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational?

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB
Beacon: 29.352 MHz (intermittent)
SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990
```

Status: CW Beacon only

Uplink: 145.84 145.86 145.88 145.90 MHz FM
(using 1200-baud Manchester FSK)
CW downlink: 437.125 MHz
Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)
Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[05232004]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[08152004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM
Broadcast Callsign: HLO1-11
BBS: HLO1-12

Jim, AA7KC, reports that KO-23's downlink transmitter continues in a non-operational status.
[05092004]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM (9600-baud FSK)
Downlink: 436.500 MHz FM
Broadcast Callsign: HL02-11
BBS: HL02-12

[05092004]
=====
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm

[ANS-WSR has no further information]
[05232004]
=====
SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

STatus: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz and 145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[08082004]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)

Downlink: 437.025 MHz 437.400 MHz
Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site
at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[05092004]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplink V-band   145.840 - 145.990 MHz CW/LSB
       U-band   435.550 - 435.800 MHz CW/LSB
       L1-band 1269.250 - 1269.500 MHz CW/LSB
       L2-band 1268.325 - 1268.575 MHz CW/LSB
Downlink: S2-band 2401.225 - 2401.475 MHz CW/USB
          K-band 24,048.010 - 24,048.060 MHz CW/USB
Beacon: 2401.323
         24,048.035
[05232004]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational
Downlink: 437.075 MHz
Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[08152004]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz
Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[08152004]

=====

NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, callsign KE6QMD, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]

=====

MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Operational

Uplink: 145.850 or 145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz
Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[11202005]

=====

AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink 435.275 1200-baud AFSK
Downlink 145.825 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de

[01012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink: Downlink 145.825 MHz FM 1200 Baud AFSK
Beacon: 2401.220 MHz
[05012006]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-128.S4
WSR 128 Part 4 05/08/2006

AMSAT NEWS SERVICE BULLETIN 128.S4 FROM AMSAT HQ
SILVER SPRING, MD, May 08, 2006
TO ALL RADIO AMATEURS
BID: $ANS-128.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE PROPOSED FOR LAUNCH AT THIS TIME:

PHASE 3E ?O-??
Catalog Number:
Proposed Launch Date: Early/Mid 2007

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/
[ANS-WSR wishes to thank William Leijenaar, PE1RAH for this week's report]
[04242006]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30

UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/amsat/listserv/menu.html

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

From -6140098323158903925
X-Google-Thread: 10e8ad,d4e179bfad973f41,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news4.google.com!newshub.sdsu.edu!elnk-nf2-pas!

newsfeed.earthlink.net!stamper.news.pas.earthlink.net!
newsread1.news.pas.earthlink.net.POSTED!71845594!not-for-mail
From: "Brian Webb" <kd6nrp@earthlink.net>
Newsgroups: rec.radio.amateur.space
Subject: Astronomy/Space File Directory
Lines: 18
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 5.50.4807.1700
X-MimeOLE: Produced By Microsoft MimeOLE V5.50.4807.1700
Message-ID: <NdG8g.2909$u4.829@newsread1.news.pas.earthlink.net>
Date: Thu, 11 May 2006 12:37:01 GMT
NNTP-Posting-Host: 4.246.144.246
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread1.news.pas.earthlink.net 1147351021 4.246.144.246 (Thu, 11 May 2006 05:37:01 PDT)
NNTP-Posting-Date: Thu, 11 May 2006 05:37:01 PDT
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news2.google.com rec.radio.amateur.space:233

Hello:

I have just posted a site map of the astronomy/space-related files on my web site at http://www.spacearchive.info/site-map.htm.

The map provides a table of contents of the articles, news items, photos, and audio files I have posted since my site went online in 1996.

You might find the RF-related material (AO-27 and Space Shuttle air-to-ground recordings) listed under the File Library (near the bottom of the page) to be of particular interest.

Regards,

Brian W., KD6NRP
Webmaster

From -5675609425707451550
X-Google-Thread: 10e8ad,f66da5e00c539a0e,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!postnews.google.com!g10g2000cwb.googlegroups.com!not-for-mail
From: nativebrookie@hotmail.com
Newsgroups: rec.radio.amateur.space
Subject: REALISTIC DX-302 HAM-SHORTWAVE RECEIVER-MINT-$150
Date: 12 May 2006 09:10:05 -0700
Organization: http://groups.google.com
Lines: 20
Message-ID: <1147450205.697142.213790@g10g2000cwb.googlegroups.com>

NNTP-Posting-Host: 216.222.237.226
Mime-Version: 1.0
Content-Type: text/plain; charset="iso-8859-1"
X-Trace: posting.google.com 1147450211 32007 127.0.0.1 (12 May 2006 16:10:11 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Fri, 12 May 2006 16:10:11 +0000 (UTC)
User-Agent: G2/0.2
X-HTTP-UserAgent: Mozilla/4.0 (compatible; MSIE 5.5; Windows 98; Win 9x 4.90),gzip(gfe),gzip(gfe)
Complaints-To: groups-abuse@google.com
Injection-Info: g10g2000cwb.googlegroups.com; posting-host=216.222.237.226;
   posting-account=xVoipQ0AAAD2lCofnTy_uoWU1HWr5apn
Xref: g2news2.google.com rec.radio.amateur.space:234

http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&item=9724283116&rd=1&sspagename=STRK%3AMESE%3AIT&rd=1

DX-302 REALISTIC SHORTWAVE RECEIVER..MANUFACTURED IN THE EARLY 1980'S..THE DX-302 SELECTIVITY SWITCH IS A TRUE IF FILTER WITH WIDE AND NARROW..WILL ALSO RUN ON BATTERY POWER..HAS A PRESELECTOR TUNE SWITCH..30 BANDS OF 1MHZ ON THE INNER TUNING DIAL..AND THE OUTER TUNING DIAL TUNES EVERY 1 KHZ...RECEIVES FROM 050 KHZ THROUGH 30 MHZ..HAS ATTEN SWITCH TO CUT DOWN STRONG SIGNALS..AND BFO PITCH FOR LSB/USB/CW...RF GAIN AND AF GAIN/POWER SWITCH..HEADPHONE JACK AND COAX AND SCREW TYPE ANTENNA CONNECTOR..THIS RECEIVER IS IN MINT LIKE NEW CONDITION.NO SCRATCHES OR OTHER PROBLEMS WITH IT. .READOUT IS BRIGHT RED AND ALL LIGHTS ARE IN WORKING ORDER AND DIALS TURN FREELY.

This is a communications receiver that covers 10kc - 30 mc in 1 mc bands.   This radio is in MINT condition.   Original knobs, crisp lettering, cabinet and front panel are excellent.   Rear battery box is complete with battery tubes.   Large red LED readout, wide and narrow selectivity, AM/SSB/CW capable and much more make this a fun receiver.
  Original cabinet paint is PERFECT.

From 4680844684957362950
X-Google-Thread: fe552,585c6cc13579d75c
X-Google-Thread: 11480d,4464dc62f7d546ba
X-Google-Thread: 10e8ad,f66da5e00c539a0e
X-Google-Attributes: gidfe552,gid11480d,gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news4.google.com!news.glorb.com!hwmnpeer01.lga!hwmedia!news.highwinds-media.com!transit3.readnews.com!news-out.readnews.com!sn-xt-sjc-03!sn-xt-sjc-09!sn-post-02!sn-post-sjc-01!supernews.com!corp.supernews.com!not-for-mail
From: NudoWhipper <thenudofamily@epix.net>
Newsgroups: es.rec.radio.amateur,rec.radio.amateur.dx,rec.radio.amateur.space
Subject: Re: REALISTIC DX-302 HAM-SHORTWAVE RECEIVER-MINT-$150
Date: Fri, 12 May 2006 22:55:07 -0700
Organization: The total anihilation of Charlie Nudo's fraud industry on eBay!
Message-ID: <35ta62dep5v9egl3sior4v1jo6mf7nnpc1@4ax.com>

Reply-To: winchester1886@hotmail.com
References: <ncsa62dgbr0m5ilc2c603hfadkfb90s2fi@4ax.com>
X-Newsreader: Forte Agent 3.1/32.783
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
X-Complaints-To: abuse@supernews.com
Lines: 35
Xref: g2news2.google.com es.rec.radio.amateur:553 rec.radio.amateur.dx:2178 rec.radio.amateur.space:235

On 12 May 2006 at 09:09:07 -700, "Charlie Nudo" <nativebrookie@hotmail.com> spammed:

http://cgi.ebay<snip>

STOP THIS SPAMMER!

Google Groupers:

Click on "Show Options," click on "Show Original," cut and paste the whole message including headers, and send in a spam complaint to:

groups-abuse"AT"google.com
abuse"AT"epix.net
spam"AT"ebay.com (Spammer's eBay account is "66fourdoor")

This spammer shows up under various trash (MAPI) email accounts:

trippin28track"AT"yahoo.com
winchester1886"AT"hotmail.com
nativebrookie"AT"hotmail.com

Due to Google Groups shutting down some of his other MAPI accounts, the fool is now also spamming from his own POP3 accounts:

analog"AT"epix.net
bb69"AT"epix.net

His home ISP is Epix. His main POP3 account is thenudofamily"AT"epix.net. ALL his spam eminates from Epix IP blocks.

Those using real newsreaders will already know what to do with this spamming pest and eBay fraudster. His spam posts are a violation of eBay's Terms of Service pertaining to Usenet Policy. Be sure to include that in your report to eBay.

From 7425060529086532239
X-Google-Thread: 10e8ad,497e1451830c67c5,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!postnews.google.com!v46g2000cwv.googlegroups.com!not-for-

```
mail
From: "TERRE" <TERRE9999@hotmail.fr>
Newsgroups: rec.radio.amateur.space
Subject: 15-->>28 MAY - BIG TSUNAMI ATLANTIC !!!!!!
Date: 13 May 2006 05:33:51 -0700
Organization: http://groups.google.com
Lines: 18
Message-ID: <1147523631.457938.110320@v46g2000cwv.googlegroups.com>
NNTP-Posting-Host: 88.137.61.200
Mime-Version: 1.0
Content-Type: text/plain; charset="iso-8859-1"
X-Trace: posting.google.com 1147523636 12352 127.0.0.1 (13 May 2006 12:33:56 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Sat, 13 May 2006 12:33:56 +0000 (UTC)
User-Agent: G2/0.2
X-HTTP-UserAgent: Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1; SV1; .NET CLR
1.1.4322),gzip(gfe),gzip(gfe)
Complaints-To: groups-abuse@google.com
Injection-Info: v46g2000cwv.googlegroups.com; posting-host=88.137.61.200;
   posting-account=DH61Nw0AAABzcfvnNC9UR0PuAIBNVboK
Xref: g2news2.google.com rec.radio.amateur.space:236

15-->>28 MAY - BIG TSUNAMI ATLANTIC !!!!!!


TRANSLATION FRENCH -->> ENGLISH
http://translate.google.com/translate_t

http://www.erenouvelle.com/newsrazm.php
http://www.erenouvelle.com/newsraz2.php
http://www.erenouvelle.com/newsraz3.php
http://www.erenouvelle.com/newsraz4.php

http://www.savelivesinmay.com/



LOVE AND PEACE
MCE




From -6086007273536406304
X-Google-Thread: fcc6e,3c8505bb10f9bb85,start
X-Google-Thread: 11480d,3c8505bb10f9bb85,start
X-Google-Thread: 10e8ad,3c8505bb10f9bb85,start
X-Google-Thread: 114aac,3c8505bb10f9bb85,start
X-Google-Attributes: gidfcc6e,gid11480d,gid10e8ad,gid114aac,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news3.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!local01.nntp.dca.giganews.com!nntp.comcast.com!
news.comcast.com.POSTED!not-for-mail
NNTP-Posting-Date: Mon, 15 May 2006 00:54:23 -0500
```

From: yea right <spam@spam.spam>
Organization: well
Subject: continuing real-time solar wind data - public comment
Date: Sun, 14 May 2006 23:54:23 -0600
User-Agent: Pan/0.14.2.91 (As She Crawled Across the Table)
Message-Id: <pan.2006.05.15.05.54.22.170937@spam.spam>
Newsgroups:
rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.shortwave
MIME-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 8bit
Lines: 39
NNTP-Posting-Host: 24.8.221.21
X-Trace: sv3-
FLC2E7pj9oW+rryb6r4BFZwSPyi1BStbYNMgdojNjMrTUEGdIuK5M1th3iqQq1AA1S9I0vea1sDWxM6!
y+f9F5BtgkH/Kzkrjvo3Fo1XTrHEemkD2Jc1Te4YYxMr+X8bP73gZrfaUpViI6vsxHf/FCFGH81X!33FZ
X-Complaints-To: abuse@comcast.net
X-DMCA-Complaints-To: dmca@comcast.net
X-Abuse-and-DMCA-Info: Please be sure to forward a copy of ALL headers
X-Abuse-and-DMCA-Info: Otherwise we will be unable to process your complaint properly
X-Postfilter: 1.3.32
Xref: g2news2.google.com rec.radio.amateur.antenna:11354 rec.radio.amateur.dx:2181 rec.radio.amateur.space:237 rec.radio.shortwave:34896

For those of you in the United States, (perhaps even people outside) please consider writing or e-mailing a comment about how important the real-time solar wind data is to our hobbies and emergency HF comms.

---
Please do not crosspost any replies
----

Solar Wind Comment Period Nears Its End

On April 3, 2006, the National Oceanic and Atmospheric Administration (NOAA) issued a press release announcing a call for public comment on the value of continuing real-time solar wind data, and products derived from such data, provided by the Space Environment Center. Since that time, NOAA has received many thoughtful, compelling comments regarding this issue. It is obvious that people put their valuable time and effort into expressing themselves, and their input is most appreciated.

There is still time to add your comments, but time is running short. As stated in the April 3 press release, the comment period continues until May 18. All input is important, so, if you haven't voiced your opinion yet and would like to, please take the time to do so. Please send your comments to:

solar.wind.comments@noaa.gov or contact:

NWS Contacts: Beth McNulty or Dorothy Haldeman

Mail:
National Weather Service
Office of Climate, Water and Weather Services Aviation Services Branch
1325 East-West Highway, SSMC2
Silver Spring, MD 20910

Phone: 301-713-1726 x116 or 301-713-1726 x130

Thank You
Space Environment Center

```
From 6560922615109965705
X-Google-Thread: 10e8ad,4055344f757f6961,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: FRENCH,ASCII-7-bit
Path: g2news2.google.com!news4.google.com!news.glorb.com!proxad.net!
193.252.118.146.MISMATCH!news.wanadoo.fr!news.wanadoo.fr!not-for-mail
X-Newsreader:      NNTP SCRIBBLER
Content-Type: text/html;
From: mathilda@canadaweb.net
ReplyTo: mathilda@canadaweb.net
Subject: Les plus belles jeunes filles du web
Newsgroups: rec.radio.amateur.space
Date: 18 May 2006 10:04:56 GMT
Lines: 10
Message-ID: <446c46c7$0$21301$8fcfb975@news.wanadoo.fr>
Organization: les newsgroups par Wanadoo
NNTP-Posting-Date: 18 May 2006 12:04:56 CEST
NNTP-Posting-Host: 193.248.68.44
X-Trace: 1147946696 news.wanadoo.fr 21301 193.248.68.44:3143
X-Complaints-To: abuse@wanadoo.fr
Xref: g2news2.google.com rec.radio.amateur.space:238
```

```
<HTML><HEAD><body>
<font color="blue" size="5" face="verdana">
<br>Elle s'exhibent en direct devant leur web cam
<br>Dialoguez en direct avec des jeunes filles sexy
<br><br><a href="http://www.show.max.st"><font color="red" size="5"
face="verdana"><b>===> CLIQUEZ ICI <===</b></a>
<br><br><br><br><br><br><br>
<BODY></BODY></HTML>
<center><table border="0" cellpadding="0" cellspacing="0" style="border-collapse:
collapse" width="500"><tr><td nowrap height="4" bgcolor="#000000"></td></
tr><tr><td width="100%" bgcolor="#000000"><center><a href="http://www.e-
advertize.com/index.php?choix=NNTPScribbler&Langue=en"><font
color="#00FF00"><b>This message was sent with NNTP Scribbler (www.e-
advertize.com).</b></font></a></center></td></tr><tr><td height="4"
bgcolor="#000000"></td></tr></table></center>
```

From 3138212295481621061
X-Google-Thread: 10e8ad,10de67cd77f88d32,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news4.google.com!newshub.sdsu.edu!elnk-nf2-pas!elnk-pas-nf1!newsfeed.earthlink.net!stamper.news.pas.earthlink.net!newsread3.news.pas.earthlink.net.POSTED!46041641!not-for-mail
From: "JoAnne Maenpaa" <wb9jej_no-spam@earthling.com>
Newsgroups: rec.radio.amateur.space
Subject: ANS-134 AMSAT News Service Weekly Bulletin
Lines: 278
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <ja0bg.3611$x4.2068@newsread3.news.pas.earthlink.net>
Date: Thu, 18 May 2006 15:13:19 GMT
NNTP-Posting-Host: 68.164.229.215
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread3.news.pas.earthlink.net 1147965199 68.164.229.215 (Thu, 18 May 2006 08:13:19 PDT)
NNTP-Posting-Date: Thu, 18 May 2006 08:13:19 PDT
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news2.google.com rec.radio.amateur.space:239

AMSAT NEWS SERVICE
ANS-134

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* 2006 AO-51 Field Day Configuration
* What is new at Dayton 2006?
* AMSAT-NA Board of Directors Nomination Deadline
* ARISS antenna installation on Columbus Module
* ARISS Status - 08 May 2006

SB SAT @ AMSAT $ANS-134.01
2006 AO-51 Field Day Configuration

AMSAT News Service Bulletin 134.01
From AMSAT HQ SILVER SPRING, MD.
May 14, 2006

To All RADIO AMATEURS
BID: $ANS-134.01

This year, AO-51 will be setup in dual FM repeater mode, allowing for two usable FM repeaters from the satellite. The FM repeater utilizing the transmitter on 435.300 will be open to all users. The FM repeater utilizing the transmitter on 435.150 (normally reserved for BBS operations) will be reserved during Field Day for QRP stations only, as has been the common practice when this mode runs on AO-51. Please note the information on the mode configurations and QRP requirements.

FM Repeater #1 for all Users:
Downlink: 435.300 mhz FM
Uplink: 145.920 mhz FM

FM Repeater #2 for QRP Users ONLY:
Downlink: 435.150 mhz FM
Uplink: 145.880 mhz FM

AO-51 ECHO LOW POWER STATION (QRP) REQUIREMENTS:
To attempt to keep this simple, a low power station will be defined as a station which can deliver no more than 10 watts to a vertical or handheld antenna. These are some examples of Low Power Stations:

* Using an HT (barefoot, no amplifier) with 10 watts or less output into any type of vertical whip antenna (rubber duck, etc) or handheld beam antenna (arrow type).

* Using a mobile station with 10 watts or less output into car mounted mobile whip antenna(s).

* Using a base station at 10 watts output into a vertical omni-directional antenna on the side of the house.

Examples that are NOT Low Power Stations:

* Any type of high gain beam antenna, KLM, M2, Cushcraft, etc.

* Any station transmitting over 10 watts into any type of antenna.

[ANS thanks Mike, KE4AZN, for the above information]

/EX

SB SAT @ AMSAT $ANS-134.02
What is new at Dayton 2006?

AMSAT News Service Bulletin 134.02
From AMSAT HQ SILVER SPRING, MD.

May 14, 2006
To All RADIO AMATEURS
BID: $ANS-134.02

In additon to the AMSAT forums, satellite demonstrations, EAGLE transponder demo, Banquet and talk, Educational forum you will find many new items at the AMSAT booth #444-448.

Come by and talk with other satellite operators, officers and Board members, renew your membership, donate to Eagle and get the latest offerings.

See you Hara Arena, Dayton, OH May 19-21, 2006

New and Updated items
Digital Disk (*** NEW) WiSP + digital test files 400 bps-38k4 bps plus..
Proceedings of the AMSAT-NA 2005 Space Symposium (*** NEW Interesting papers)
AMSAT/Eagle Golf shirts, tee shirts and hat (*** NEW)
AMSAT/Eagle patches and decal (*** NEW)
Getting Started with Amateur Satellites (*** Updated 2006)
AMSAT Frequency Chart (*** Updated 2006)

Dayton Specials
SatPC32 software -   (**** Dayton Special)
SCRAP software -   (**** Dayton Special)
InstantTrack software - (**** Dayton Special)
30th Anniversary AO-7 QSL Cards (**** Dayton Special for 100 cards)
For a $5 or more donation to Eagle get an AMSAT Refrigerator Magnet or AMSAT Pen

Regular Membership - will receive
   Renewing: AMSAT Tote and Frequency chart
   New member: AMSAT Tote, Frequency chart, Journal, Presentation

[ANS thanks Gould, WA4SXM, for the above information]

/EX

SB SAT @ AMSAT $ANS-134.03
AMSAT-NA Board of Directors Nomination Deadline

AMSAT News Service Bulletin 134.03
 From AMSAT HQ SILVER SPRING, MD.
May 14, 2006
To All RADIO AMATEURS
BID: $ANS-134.03

It is time to submit nominations for the upcoming open seats on the AMSAT-NA Board of Directors. A nomination requires either one Member Society or five current individual members to noninate an AMSAT member for the position. A director serves for a period of two years. Three directors' terms expire this year: Tom Clark, K3IO, Lou McFadin, W5DID, and Paul Shuch, N6TX. Written nominations must be received at the AMSAT office no later than 12 June 2006.

Nominations MUST be in writing and mailed to:
AMSAT
850 Sligo Ave #600
Silver Spring, MD 20901

[ANS thanks the AMSAT Journal for the above information]

/EX

SB SAT @ AMSAT $ANS-134.04
ARISS antenna installation on Columbus Module

AMSAT News Service Bulletin 134.04
From AMSAT HQ SILVER SPRING, MD.
May 14, 2006
To All RADIO AMATEURS
BID: $ANS-134.04

The European Space Agency's International Space Station Columbus module is expected to arrive at NASA's Kennedy Space Center on 30 May 2006, where it will be prepared for its launch to the space station on the space shuttle.

As announced in the ARISS-Europe News Bulletin of 02 May 2006, the cables for the ARISS antennas for the 23cm and 13cm Amateur bands are presently being installed on the hull of Columbus.

ARISS team member Oliver Amend, DG6BCE took photos of the work in progress, see:
http://www.southgatearc.org/news/may2006/ariss_antennas_columbus.htm

Columbus will provide state-of-the-art internal payload accommodation for experiments in material science, fluid physics and life science, and its external payload facility will host experiments and applications in the field of space science, Earth observation and technology

[ANS thanks Trevor, M5AKA, for the above information]

/EX

SB SAT @ AMSAT $ANS-134.05
ARISS Status - 08 May 2006

AMSAT News Service Bulletin 134.05
From AMSAT HQ SILVER SPRING, MD.
May 14, 2006
To All RADIO AMATEURS

BID: $ANS-134.05

1. Bob Jones High School Contact Successful

On Monday, May 1, Jeff Williams, KD5TVQ, participated in his first ARISS contact with students from Bob Jones High School in Madison Alabama. Seventeen questions were asked by 13 students via the telebridge station VK5ZAI in Australia. Among the 100 students and teachers attending the event was Jeff Williams' brother. Media coverage included the Huntsville Times and the Madison County Record. The audio from this contact was webcast by Verizon Conferencing and was fed into the EchoLink AMSAT (node 101 377) and JK1ZRW (node 277 208) conference servers. Eighteen connections, including three repeaters, were made from 7 countries. Nine connections were also made on the IRLP Discovery reflector 9010 from 3 countries: UK, USA, and Canada.

ARRL's article, "ROTC Cadets at Alabama School Query ISS Astronaut," covered the news and may be found at:
http://www.arrl.org/news/stories/2006/05/05/1/?nc=1

2. Canadian School Contact, a Success

Jaanimmarik School in Kuujjuaq, Quebec, Canada experienced a successful contact with the ISS on Thursday, May 4 via the telebridge station VK5ZAI in Australia. Jeff Williams, KD5TVQ, answered twenty-three questions posed to him by 18 students. The event was well attended by approximately 450 students, teachers and parents. Among the dignitaries present were the president and CEO of Makivik Corporation, Senator C. Watt, local officials, and elders from the community school board from the Montreal and local offices. Media coverage was provided by a local radio station which broadcast the event live, translating the contact in Inuktituk, CBC North, and APTN (Northern Canada TV Network). APTN is producing a presentation for later broadcasting. The City of Ottawa media also reported the event. The audio from this contact was webcast courtesy of Verizon Conferencing and was fed into the EchoLink AMSAT (node 101 377) and JK1ZRW (node 277 208) conference servers. Twenty-three connections were made, of which two were repeaters, from 9 countries, including Bangladesh, Holland and Thailand. It was also available on the IRLP Discovery reflector 9010.

3. Space Day Event at the Udvar-Hazy Center

On Friday, May 5, ARISS members participated in the Space Day activities at the Steven F. Udvar-Hazy Center. AMSAT and ARISS members provided displays and hands on activities for the students. Approximately 10,000 visitors were expected to attend the event.

4. ARRL Article on Expedition 14 Hams

On May 3, ARRL ran a story covering the newly named Expedition 14 crew, all licensed Amateur Radio operators. The article, "Three radio amateurs on next ISS crew", may be found at: http://www.arrl.org/

5. Cleveland Heights High School contact

Students at the Cleveland Heights High School participated in an ARISS contact on March 17. Photos of the event are now available. See:
http://www.chuh.org/chhs/library/podcasts/Kidpics/index.htm

6. Technical Interchange Meeting Planned

An ARISS Technical Interchange Meeting is being planned for the week of July 10 in Houston. Topics of discussion will include ARISS hardware, software, slow scan television, and plans for SuitSat-2.

7. SuitSat-1 Contest

AMSAT is planning a "Chicken Little" contest to see who can guess when SuitSat-1 will re-enter the earth's atmosphere. There will be K-8, 9-12 and adult categories. Certificates will be provided to the winners of each group. More information will be forthcoming.

[ANS thanks Carol, KB3LKI for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73, This week's ANS Editor,
Lee McLamb, KU4OS

From 3021893884896843357
X-Google-Thread: 10e8ad,c4042a46dbe7d027,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news4.google.com!newshub.sdsu.edu!elnk-nf2-pas!
newsfeed.earthlink.net!stamper.news.pas.earthlink.net!
newsread3.news.pas.earthlink.net.POSTED!46041641!not-for-mail
From: "JoAnne Maenpaa" <wb9jej_no-spam@earthling.com>
Newsgroups: rec.radio.amateur.space
Subject: WSR-135 AMSAT Weekly Satellite Report
Lines: 1007
X-Priority: 3

X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <_c0bg.3613$x4.2772@newsread3.news.pas.earthlink.net>
Date: Thu, 18 May 2006 15:16:10 GMT
NNTP-Posting-Host: 68.164.229.215
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread3.news.pas.earthlink.net 1147965370 68.164.229.215 (Thu, 18 May 2006 08:16:10 PDT)
NNTP-Posting-Date: Thu, 18 May 2006 08:16:10 PDT
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news2.google.com rec.radio.amateur.space:240

This report is organized into 4 parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites

SB SAT @ AMSAT W8ISS ANS-135.S1
WSR 135 Part 1 05/15/2006

AMSAT NEWS SERVICE BULLETIN 135.S1 FROM AMSAT HQ
SILVER SPRING, MD, May 15, 2006
TO ALL RADIO AMATEURS
BID: $ANS-135.S1

VO-52 HAMSAT
Catalog Number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/V - Indian Transponder

Proposed frequencies:

Indian Transponder:
Uplink : 435.220 MHz to 435.280 MHz LSB/CW
Downlink: 145.870 MHz to 145.930 MHz USB/CW
Beacom : 145.859330 MHZ CW

Dutch Transponder:
Uplink : 435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW
Beacon : 145.860MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsat.in/hamsat.htm

To know what transponder is switched on please listen for the beacon

that is
active. Each transponder has a different beacon.
[04242006]

=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Mode(s): FM Repeaters, V/U and QRP
Digipeater - OFF

```
Analog voice downlink: 435.300 MHz FM
         435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink:   145.880 MHZ FM
         145.880 MHz USB
         145.920 MHz FM 67Hz PL tone
        1268.700 MHz FM 67Hz PL tone
Digital Downlinks:     435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
        2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:        145.860 MHz FM, 9k6 Digital, Pacsat Broadcast
Protocol
                      1268.700 mhz FM, 9k6 PBP Digital
Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear
```

Broadcast: PECHO-11
BBS: PECHO-12

Mode schedule for April 2006 according to Drew, KO4MA:

May 15
FM Repeaters, V/U
  a.. Uplink: 145.920 mhz FM, 67 hz PL Tone
  b.. Downlink: 435.300 mhz FM
FM Repeater, V/U (QRP only)
  a.. Uplink: 145.880 mhz FM
  b.. Downlink 435.300 mhz FM

May 22
FM Repeater, V/U
  a.. Uplink: 145.920 mhz FM, 67 hz PL Tone
  b.. Downlink: 435.300 mhz FM
9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
  a.. Uplink: 145.860 mhz FM, 9k6 PBP Digital
  b.. Downlink: 435.150 mhz FM, 9k6 PBP Digital

May 29
No Change

Official Webpage: http://www.amsat.org/amsat-new/echo/
[05152006]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Uplink: 145.850 MHz (67.0 Hz PL tone) (See below for operating procedures)
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz. The
order of operation is thus: (allow for Doppler as necessary)
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer
   on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater
   on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10
   minute timer.
[04172006]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: OPERATIONAL

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplink: 145.850 145.870 145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

unOfficial Webpage: http://www.amsat.org/amsat/sats/n7hpr/fo29.html
[11132005]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Uplink: 145.850 MHz FM
Downlink: 436.795 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[01012006]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational depending on amount of Sunlight
Current Reported mode: Mode-A

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
   432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
  145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
  145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz
  145.972 MHz
  435.100 MHz
 2304.100 MHz

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php
The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
AO-7 users are requested to log their contacts and observations about
AO-7, especially any unexpected mode changes.
AO-07 telemetry software webpage:
http://www.qsl.net/k3tz/files/K3TZ_AO-07_Telemetry_Decoder_0.5.zip

Please keep your power low! For additional information please read the
AO-7
Usage Guidelines on the AO-7 Log and Resource Site located at:

http://www.planetemily.com/ao7
[04242006]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: Packet / Occasional Voice - V
Digipeater: ON

The current crew is:
Commander: Pavel Vinogradov, RV3BS
Flight Engineer: Jeff Williams, KD5TVQ

Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Russian: RS0ISS, RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official Webpage: http://www.rac.ca/ariss
Official Fan club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.
[04242006]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-135.S2
WSR 135 Part 2 05/15/2006

AMSAT NEWS SERVICE BULLETIN 135.S2 FROM AMSAT HQ
SILVER SPRING, MD, May 15, 2006
TO ALL RADIO AMATEURS
BID: $ANS-135.S2

CO-58 XI-V
Catalog Number: 28895
Launch Date: October 27, 2005

Status: Operational only within range of Ground station in Japan

Telemetry Downlink: 437.345MHz - FSK 1200bps using AFK protocol
Beacon Downlink: 437.465MHz - CW about 50 WPM

Callsign: JQ1YGW

Oficial Webpage: http://www.space.t.u-tokyo.ac.jp/gs/satinfo-e.html#xi5
Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
[03122006]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: Packet/Occassinal Voice - V
Digipeater: ON

The current crew is:
Commander: Pavel Vinogradov, RV3BS
Flight Engineer: Jeff Williams, KD5TVQ

Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Russian: RS0ISS, RZ3DZR

USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official Webpage: http://www.rac.ca/ariss
Official Fan club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is NOT translated from Russian and posted.
[04242006]
=====
PCSAT-2
Catalog Number: 25544
Launch Date: August 1, 2005

Activated: August 3, 2005
Status: Operational
Current Mode: Digipeater / XBAUD (PSK31/CW Repeater)

Digital Downlink: 435.275 Mhz
Digital Uplink: 145.825 Mhz

PSK-31 Downlink: 435.275 Mhz
PSK-31 Uplink: 29.401 Mhz

CALLSIGN: pcsat2

Official Webpage: http://web.usna.navy.mil/~bruninga/pcsat2.html
PCSAT2 APRS Packet page: http://www.findu.com/cgi-bin/pcsat2.cgi
aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/

Bob, WB4APR, reports that the Xbaud - PSK31/CW repeater experiment has
been
activated. Bob reports that you need to connect to pcsat2 and then you
can
tranmit on 29.401 Mhz and listen on 435.275 for your signal. Reports are
that
you will probably need at least 100+ watts of power on 10m to make it
work.
Currently, Henk, PA3GUO, has tried with only a 100 watts and a dipole
without
any luck so far.
[ANS-WSR wishes to thank Bob, WB4APR, and Henk, PA3GUO, for this weeks
info]
[05082006]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Mode(s): FM Repeater, V/U High Power Mode and QRP mode
Digipeater - OFF

Analog voice downlink: 435.300 MHz FM
         435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink: 145.880 MHZ FM
         145.880 MHz USB
         145.920 MHz FM 67Hz PL tone
        1268.700 MHz FM 67Hz PL tone
Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
        2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast
Protocol

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Mode schedule for April 2006 according to Drew, KO4MA:

May 15
FM Repeaters, V/U
  a.. Uplink: 145.920 mhz FM, 67 hz PL Tone
  b.. Downlink: 435.300 mhz FM
FM Repeater, V/U (QRP only)
  a.. Uplink: 145.880 mhz FM
  b.. Downlink 435.300 mhz FM

May 22
FM Repeater, V/U
  a.. Uplink: 145.920 mhz FM, 67 hz PL Tone
  b.. Downlink: 435.300 mhz FM
9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
  a.. Uplink: 145.860 mhz FM, 9k6 PBP Digital
  b.. Downlink: 435.150 mhz FM, 9k6 PBP Digital

May 29
No Change

Official Webpage: http://www.amsat.org/amsat-new/echo/
[05152006]

=====
NO-44 PCSAT

```
Catalog number: 26931
Launch Date: September 30, 2001

Status: Operational

General Usage Uplink/Downlink:145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org
aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[04172006]
=====
CO-55 CUTE-1.7
Catalog number: 28941
Launched: June 30,2003

Status: Operational

Uplink: ?
Downlink: 437.3850 CW
          437.4700 1200 FM ax25 or SRLL (ACTIVE only near Japan ? )
Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[05012006]
=====
GO-32 TECHSAT-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks: 145.850 FM
         145.890 FM
         145.930 FM
        1269.700 FM
        1269.800 FM
        1269.900 FM
Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[05012006]
=====
RS-22 Mozhayets 4
Catalog Number: 27939
Launch Date: September 27, 2004

Status: Operational
```

Beacon: 435.3520 MHz CW

=====

AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Semi-operational, the digipeater command is on and open for APRS users.

Uplink: 145.900 FM
145.920 FM
145.940 FM
145.960 FM
(using 1200-baud Manchester FSK)
Downlink: 437.026 MHz SSB (1200-baud PSK)
Mode-S Beacon: 2401.1428 MHz

Mode and Antenna Polarization:
U: RC 437.050 MHz RHCP
PSK 437.025 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[04172006]

=====

UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational?

Telemetry Downlink: 145.826 MHz. FM (1200-baud AFSK).
approx. 10 days ON, 10 days OFF
Mode-S Beacon: 2401.500 MHz. ... OFF
UHFBeacon: 435.025 MHz. ... OFF

Mode and Antenna Polarization:
V: RHCP
S: LHCP

This from James DeYoung on April 28,2006:
UO-11 VHF 1200-bps AFSK telemetry beacon 145.826 very loud this afternoon.
Monitored from FM18 using Arrow antenna and 910H from 22:51 to 23:54 UTC 28
April 2006 during near zenith pas

Official webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[05012006]

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/EX

SB SAT @ AMSAT W8ISS $ANS-135.S3
WSR 135 Part 3 05/15/2006

AMSAT NEWS SERVICE BULLETIN 135.S3 FROM AMSAT HQ
SILVER SPRING, MD, May 15, 2006
TO ALL RADIO AMATEURS
BID: $ANS-135.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

AO-54 SUITSAT
Catalog Number:28933
Release Date: February 3,2006

Status: Non-operational
Modes : FM Voice Telemetry/Greetings
 FM SSTV

Callsign: RS0RS
Downlink: 145.990 FM

Currently on the amsat-bb, there is a geussing game going on about when
Suitsat will re-enter the atmosphere.

Official webpage: http://www.suitsat.org
[05012006]
=====
NCUBE-2
Catalog Number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency:  437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog Number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 FM 67Hz CTCSS
Voice Downlink: 2401.835 FM
Packet Up/Downlink: 437.250 9k6 packet
Packet Downlink 2401.835 38k4 packet
```

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01292006]
=====
TO-31 TMSAT-1
Catalog Number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink: 145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
PO-28 POSAT-1
Catalog Number: 22829
Launch Date: September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 429.950

Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html.
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012006]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launched: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB
Beacon: 145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

```
Status: Downlink only

Uplink: 145.875 145.900 145.925 145.950 MHz FM (1200-baud)
Downlink: 435.808 MHz PSK
Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01012006]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB
Beacon: 29.408 MHz
Robot: 29.454 MHz
[05232004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB
Beacon: 145.860 MHz
Robot: 145.908 MHz
[05232004]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink 145.975 MHz FM
Downlink 435.070 MHz FM
[05092004]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink: 145.900 FM 9600-baud FSK
```

```
Downlink: 435.120 MHz FM
Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01092005]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational?

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB
Beacon: 29.352 MHz (intermittent)
SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplink: 145.84 145.86 145.88 145.90 MHz FM
(using 1200-baud Manchester FSK)
CW downlink: 437.125 MHz
Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)
Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[05232004]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[08152004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational
```

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM
Broadcast Callsign: HL01-11
BBS: HL01-12

Jim, AA7KC, reports that KO-23's downlink transmitter continues in a non-operational status.
[05092004]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM (9600-baud FSK)
Downlink: 436.500 MHz FM
Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm

[ANS-WSR has no further information]
[05232004]
=====
SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

STatus: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz and 145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[08082004]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlink: 437.025 MHz 437.400 MHz
Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site
at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[05092004]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplink V-band   145.840 - 145.990 MHz CW/LSB
U-band   435.550 - 435.800 MHz CW/LSB
L1-band 1269.250 - 1269.500 MHz CW/LSB
L2-band 1268.325 - 1268.575 MHz CW/LSB
Downlink: S2-band 2401.225 - 2401.475 MHz CW/USB
K-band 24,048.010 - 24,048.060 MHz CW/USB
Beacon: 2401.323
24,048.035
[05232004]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational
Downlink: 437.075 MHz
Broadcast Callsign: SASAT2-11

BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[08152004]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz
Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[08152004]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, call-
sign KE6QMD, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Operational

Uplink: 145.850 or 145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz
Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial
land and weather imaging payloads offers FM and FSK Amateur Radio communica-

tion.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a
collaborative effort between the Malaysian government and Surrey
Satellite
Technology Ltd.
[11202005]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink 435.275 1200-baud AFSK
Downlink 145.825 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink: Downlink 145.825 MHz FM 1200 Baud AFSK
Beacon: 2401.220 MHz
[05012006]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
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/EX

SB SAT @ AMSAT W8ISS $ANS-135.S4
WSR 135 Part 4 05/15/2006

AMSAT NEWS SERVICE BULLETIN 135.S4 FROM AMSAT HQ
SILVER SPRING, MD, May 15, 2006
TO ALL RADIO AMATEURS
BID: $ANS-135.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE
PROPOSED FOR LAUNCH AT THIS TIME:

PHASE 3E ?O-??
Catalog Number:
Proposed Launch Date: Early/Mid 2007

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/
[ANS-WSR wishes to thank William Leijenaar, PE1RAH for this week's report]
[04242006]
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ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/amsat/listserv/menu.html

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
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From 4226758723910015184
X-Google-Thread: 10e8ad,1d0f26d2912057d3,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news4.google.com!news.glorb.com!wn11feed!
worldnet.att.net!207.217.77.102!elnk-nf2-pas!newsfeed.earthlink.net!
stamper.news.pas.earthlink.net!newsread4.news.pas.earthlink.net.POSTED!46041641!
not-for-mail
From: "JoAnne Maenpaa" <wb9jej_no-spam@earthling.com>
Newsgroups: rec.radio.amateur.space
Subject: ANS-141 AMSAT News Service Weekly Bulletin
Lines: 301
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <U2Zcg.4430$921.1716@newsread4.news.pas.earthlink.net>
Date: Wed, 24 May 2006 13:18:44 GMT
NNTP-Posting-Host: 66.167.67.202
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread4.news.pas.earthlink.net 1148476724 66.167.67.202 (Wed, 24 May 2006 06:18:44 PDT)
NNTP-Posting-Date: Wed, 24 May 2006 06:18:44 PDT
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news2.google.com rec.radio.amateur.space:241

AMSAT NEWS SERVICE
ANS-141

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

******************** AMSAT 2006 Space Symposium *************************

The AMSAT web team has posted informational pages on the AMSAT web site.
You can find the announcement with many links at:
http://www.amsat-org/amsat-new/symposium

****

In this edition:

* AMSAT Shows Our Stuff at Dayton
* Plan for AO-51 Kid's Day on June 17
* AO-51 June Schedule
* Colloquium and Symposium Opportunities
* Latest Version of PREDICT Software Available
* ARISS Status May 15, 2006
* Reminder: AMSAT-NA Board of Directors Nomination Deadline

SB SAT @ AMSAT $ANS-141.01
AMSAT Shows Our Stuff at Dayton

AMSAT News Service Bulletin 141.01
From AMSAT HQ SILVER SPRING, MD.
May 21, 2006
To All RADIO AMATEURS
BID: $ANS-141.01

This weekend's annual Dayton Hamvention, May 19-21, gave AMSAT volunteers an opportunity to showcase the exciting future of Amateur Radio in Space.

Saturday morning's AMSAT forum presented news of present and future projects including:

+ Phase 3-E Satellite Design and Development
+ Eagle Project Overview and Status
+ Software Defined Transponder, Internal Housekeeping Unit, Energy
  Storage Experiments, and Structure Analysis
+ ARISS & SuitSat: Current Status & Future Opportunities
+ Introduction to AO-51 Operation with a Command Station Update

Dr. H. Paul Shuch, N6TX, Director of Education, hosted "Shared Experiences of Using Satellites in the Classroom" at the AMSAT Educator's Forum on Saturday.

Live satellite operating demonstrations were conducted by Drew, KO4MA; Keith W5IU and other volunteers on Friday, Saturday and Sunday. Contacts on both the FM and SSB satellites were demonstrated.

AMSAT demonstrated operation through the future Eagle and P3E SDX (Software Defined Transponder). Bob McGwier, N4HY, Tom Clark, K3IO and Howard Long, G5LVB had an SDX operating with live displays of signals in the 50 kHz pass band.

Thanks to all who helped and to all who visited the AMSAT booth!

[ANS thanks Gould, WA4SXM, AMSAT Director Field Operations for the above information.]

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SB SAT @ AMSAT $ANS-141.02
Plan for AO-51 Kid's Day on June 17

AMSAT News Service Bulletin 141.02
From AMSAT HQ SILVER SPRING, MD.
May 21, 2006
To All RADIO AMATEURS
BID: $ANS-141.02

Mike, KE4AZN, Amsat VP-Operations, and Echo Command Station says AMSAT-NA, the AO-51 Command Team, and the AO-51 Operations Team will sponsor Kid's Day on AO-51 on June 17, 2006.

The event is open to all kids, worldwide. We ask all amateur radio stations to give this short time window to promote satellite operations with kids, by actually showing a kid how to make contacts via AO-51, providing a station to contact, or stepping aside to allow others to make contacts with the kids.

During the event, please limit contacts to stations that are operating with kids at the microphone. This should allow the kids to have a nice QSO and pass some information. Kids can tell their name, age, who is helping them operate on AO-51, where they live, and other information about themselves.

AO-51 will be configured in the following mode during the event. Please note we will use the normal AO-51 uplink frequency for the event with the PL tone will be turned ON.

Uplink: 145.920 mhz FM voice 67 Hz PL Tone
Downlink: 435.300 mhz FM voice

The digital transponder on 435.150 will be turned off during the event.

See http://www.arrl.org/FandES/ead/kd-rules.html on the ARRL website for more Kids Day information.

[ANS thanks Mike, KE4AZN, Echo Command Station for the above information]

/EX

SB SAT @ AMSAT $ANS-141.03
AO-51 June Schedule

AMSAT News Service Bulletin 141.03
From AMSAT HQ SILVER SPRING, MD.
May 21, 2006
To All RADIO AMATEURS
BID: $ANS-141.03

June 5 FM Repeater ON
PBBS & Telemetry ON

June 12 FM Repeater High Power ON
PBBS OFF

June 17 Kid's Day Special Event. Please observe the Kid's Day Requirements allowing contacts with Kid's Only.

June 19 Field Day Configuration
FM Repeater ON - Uplink 145.920 mHz FM with 67 hz Tone
Downlink 435.300 mHz FM

QRP Repeater ON - Uplink 145.880 mHz FM, QRP Power Limits
Downlink 435.150 mHz FM

June 26 FM Repeater ON
PBBS & Telemetry ON

FM Repeater Freqencies:	PBBS Digital Frequencies:
Uplink 145.920 mHz FM 67 hz Tone	Uplink 145.860 mHz FM 9k6 Digital
Downlink 435.300 mHz FM	Downlink 435.150 mHz FM 9k6 Digital

The current operating mode, including active frequencies for AO-51, can be viewed on-line on the front page at http://www.amsat.org

[ANS thanks Mike, KE4AZN, Echo Command Station for the above information]

/EX

SB SAT @ AMSAT $ANS-141.04
Colloquium and Symposium Opportunities

AMSAT News Service Bulletin 141.04
From AMSAT HQ SILVER SPRING, MD.
May 21, 2006
To All RADIO AMATEURS
BID: $ANS-141.04

AMSAT-UK has issued a call for papers and speakers for the 21st Amsat-UK Colloquium which will be held at Surrey University, Guildford, Surrey, U.K., from Friday 28 July to Sunday 30 July 2005.

Requests for more information as well as submissions should be sent to

David Johnson, G4DPZ, via g4dpz@amsat.org. Also see:
http://www.uk.amsat.org/Colloquium/default.php

AMSAT-NA invites speakers to submit and present papers dealing with the science of Amateur Radio Satellites and associated technologies for the AMSAT 2006 Space Symposium. The Symposium will be held 5 October to 11 October at the Crowne Plaza Hotel in Foster City, California, approximately 10km south of San Francisco International Airport.

Since the 2005 Symposium was cancelled due to hurricane damage caused by hurricanes Katrina and Rita, speakers originally scheduled for the 2005 Symposium are invited to re-submit papers for the 2006 Symposium.

For more information please refer to:
http://www.amsat.org/amsat-new/symposium/2006CallForPapers.php

[ANS thanks the Colloquium and Symposium Committees for the above information]

/EX

SB SAT @ AMSAT $ANS-141.05
Latest Version of PREDICT Software Available

AMSAT News Service Bulletin 141.05
From AMSAT HQ SILVER SPRING, MD.
May 21, 2006
To All RADIO AMATEURS
BID: $ANS-141.05

John, KD2BD, author of PREDICT, an Open Source satellite tracking and orbital prediction program for the Linux/Unix operating system, says the latest versionhas been released and is currently available through the AMSAT-NA ftp/web site at:
ftp://ftp.amsat.org/amsat/software/Linux/predict-2.2.3.tar.gz
and: http://www.amsat.org/amsat-new/tools/software.php

Further information on PREDICT software is available at:
http://www.qsl.net/kd2bd/predict.html

[ANS thanks John, KD2BD for the above information]

/EX

SB SAT @ AMSAT $ANS-141.06
Reminder: AMSAT-NA Board of Directors Nomination Deadline

AMSAT News Service Bulletin 141.06
From AMSAT HQ SILVER SPRING, MD.
May 21, 2006
To All RADIO AMATEURS

BID: $ANS-141.06

It is time to submit nominations for the upcoming open seats on the AMSAT-NA Board of Directors. A nomination requires either one Member Society or five current individual members to noninate an AMSAT member for the position. A director serves for a period of two years. Three directors' terms expire this year: Tom Clark, K3IO, Lou McFadin, W5DID, and Paul Shuch, N6TX. Written nominations must be received at the AMSAT office no later than 12 June 2006.

Nominations MUST be in writing and mailed to:
AMSAT
850 Sligo Ave #600
Silver Spring, MD 20901

[ANS thanks the AMSAT Journal for the above information]

/EX

SB SAT @ AMSAT $ANS-141.07
ARISS Status May 15, 2006

AMSAT News Service Bulletin 141.07
From AMSAT HQ SILVER SPRING, MD.
May 21, 2006
To All RADIO AMATEURS
BID: $ANS-141.07

1. Yoneda-nishi Elementary School Contact Successful
On Thursday, May 11, students from Yoneda-nishi Elementary School in Takasago, Hyogo prefecture, Japan spoke with astronaut Jeff Williams, KD5TVQ. Thirteen students were able to ask 19 questions before the ISS went over the horizon. Over two hundred students and parents witnessed the event. The Earth to space contact was covered by one television station and a newspaper.

2. Upcoming School Contact
Virgilio Primary School in Mestre, Venice, Italy is planning to have a contact on Monday, May 22 at 13:28 UTC. This event will be integrated into the school's geography and science curriculum, using poster drawing and letter writing in the lesson plans. Media invited to cover the event includes RAI national television, TG3 Regional, Televenezia and the Gazzettino and La Nuova Venezia newspapers.

3. ARISS Annual Report 2005 on AMSAT Website
The ARISS Annual Report 2005 is now available on the AMSAT website.
See: http://www.amsat.org/amsat/ariss/Papers/Annual%20Reports/

4. ARRL Article Covers Space Day Event
On May 9, ARRL ran a web story on Udvar-Hazy's Space Day activities. "AMSAT and ARISS staff museum Space Day 2006 exhibit" may be found at:
http://www.arrl.org/

5. Student Ham Meets Astronauts

Pearl Mahar, KD7TAS, of Peoria, Arizona, was given the opportunity to meet astronauts Andrew Thomas, KD5CHF, Charles Camarda, KC5ZSY, and James Kelly, KC5ZSW at the area's Challenger Center. She was part of a team of five students who designed a space station in the Honeywell Fiesta Bowl Aerospace Challenge.

[ANS thanks Carol, KB3LKI for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM

From 3249314325115080444
X-Google-Thread: 10e8ad,a5cdf660efaa4081,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news3.google.com!newshub.sdsu.edu!elnk-nf2-pas!newsfeed.earthlink.net!stamper.news.pas.earthlink.net!newsread4.news.pas.earthlink.net.POSTED!46041641!not-for-mail
From: "JoAnne Maenpaa" <wb9jej_no-spam@earthling.com>
Newsgroups: rec.radio.amateur.space
Subject: WSR-142 AMSAT Weekly Satellite Report
Lines: 1065
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <Z2Zcg.4431$921.1619@newsread4.news.pas.earthlink.net>
Date: Wed, 24 May 2006 13:18:49 GMT
NNTP-Posting-Host: 66.167.67.202
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread4.news.pas.earthlink.net 1148476729 66.167.67.202 (Wed, 24 May 2006 06:18:49 PDT)
NNTP-Posting-Date: Wed, 24 May 2006 06:18:49 PDT
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news2.google.com rec.radio.amateur.space:242

This report is organized into 4 parts.
Part 1 (S1) - operational analog amateur satellites

Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites

SB SAT @ AMSAT W8ISS ANS-142.S1
WSR 142 Part 1 05/22/2006

AMSAT NEWS SERVICE BULLETIN 142.S1 FROM AMSAT HQ
SILVER SPRING, MD, May 22, 2006
TO ALL RADIO AMATEURS
BID: $ANS-142.S1

VO-52 HAMSAT
Catalog Number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/V - Indian Transponder

Proposed frequencies:

Indian Transponder:
Uplink : 435.220 MHz to 435.280 MHz LSB/CW
Downlink: 145.870 MHz to 145.930 MHz USB/CW
Beacom : 145.859330 MHZ CW

Dutch Transponder:
Uplink : 435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW
Beacon : 145.860MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsat.in/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is
active. Each transponder has a different beacon.
[04242006]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Mode(s): FM Repeaters, V/U and QRP
Digipeater - ON - 9K6, V/U

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
2401.200 Mhz FM

Analog voice uplink: 145.880 MHZ FM
145.880 MHz USB
145.920 MHz FM 67Hz PL tone
1268.700 MHz FM 67Hz PL tone
Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast Protocol
1268.700 mhz FM, 9k6 PBP Digital
Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Mode schedule for April 2006 according to Drew, KO4MA:

May 22
FM Repeater, V/U
a.. Uplink: 145.920 mhz FM, 67 hz PL Tone
b.. Downlink: 435.300 mhz FM
9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
a.. Uplink: 145.860 mhz FM, 9k6 PBP Digital
b.. Downlink: 435.150 mhz FM, 9k6 PBP Digital

June 5
FM Repeater
Downlink 435.300 mHz FM
Uplink 145.920 mHz FM with 67 hz Tone

Digital / PBBS
Downlink 435.150 mHz FM 9k6 Digital
Uplink 145.860 mHz FM 9k6 Digital
PBBS Active
Telemetry Downlink Active

June 12
FM Repeater High Power
Downlink 435.300 mHz FM
Uplink 145.920 mHz FM with 67 hz Tone

June 17 Kid's Day Special Event
Please observe the Kid's Day Requirements allowing contacts with Kid's Only.

June 19 Field Day Configuration
FM Repeater
Downlink 435.300 mHz FM

```
  Uplink 145.920 mHz FM with 67 hz Tone

FM Repeater with QRP Requirements
  Downlink 435.150 mHz FM
  Uplink 145.880 mHz FM, QRP Power Limits

June 26
FM Repeater
  Downlink 435.300 mHz FM
  Uplink 145.920 mHz FM with 67 hz Tone

Digital / PBBS
  Downlink 435.150 mHz FM 9k6 Digital
  Uplink 145.860 mHz FM 9k6 Digital
  PBBS Active
  Telemetry Downlink Active

Official Webpage: http://www.amsat.org/amsat-new/echo/
[05222006]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Uplink: 145.850 MHz (67.0 Hz PL tone) (See below for operating
procedures)
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The
order of operation is thus: (allow for Doppler as necessary)
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute
timer
   on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the
repeater
   on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset
the 10
   minute timer.
[04172006]
=====
FO-29 JAS-2
Catalog number: 24278
```

```
Launch Date: August 17, 1996

Status: OPERATIONAL

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplink: 145.850 145.870 145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

unOfficial Webpage: http://www.amsat.org/amsat/sats/n7hpr/fo29.html
[11132005]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Uplink: 145.850 MHz FM
Downlink: 436.795 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[01012006]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational depending on amount of Sunlight
Current Reported mode: Mode-A

Uplink:   145.850 to 145.950 MHz CW/USB Mode A
   432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
  145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
  145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons:  29.502 MHz
  145.972 MHz
  435.100 MHz
```

2304.100 MHz

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php
The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
AO-7 users are requested to log their contacts and observations about
AO-7, especially any unexpected mode changes.
AO-07 telemetry software webpage:
http://www.qsl.net/k3tz/files/K3TZ_AO-07_Telemetry_Decoder_0.5.zip

Please keep your power low! For additional information please read the
AO-7
Usage Guidelines on the AO-7 Log and Resource Site located at:
http://www.planetemily.com/ao7
[04242006]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: Packet - Mode V
Digipeater: ON

The current crew is:
Commander: Pavel Vinogradov, RV3BS
Flight Engineer: Jeff Williams, KD5TVQ

Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Russian: RS0ISS, RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official Webpage: http://www.rac.ca/ariss
Official Fan club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.
[05222006]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-142.S2
WSR 142 Part 2 05/22/2006

AMSAT NEWS SERVICE BULLETIN 142.S2 FROM AMSAT HQ
SILVER SPRING, MD, May 22, 2006
TO ALL RADIO AMATEURS
BID: $ANS-142.S2

CO-58 XI-V
Catalog Number: 28895
Launch Date: October 27, 2005

Status: Operational only within range of Ground station in Japan

Telemetry Downlink: 437.345MHz - FSK 1200bps using AFK protocol
Beacon Downlink: 437.465MHz - CW about 50 WPM

Callsign: JQ1YGW

Oficial Webpage: http://www.space.t.u-tokyo.ac.jp/gs/satinfo-e.html#xi5
Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
[03122006]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: Packet - Mode V
Digipeater: ON

The current crew is:
Commander: Pavel Vinogradov, RV3BS
Flight Engineer: Jeff Williams, KD5TVQ

Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:

Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Russian: RS0ISS, RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official Webpage: http://www.rac.ca/ariss
Official Fan club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line is NOT translated from Russian and posted.
[05222006]
=====
PCSAT-2
Catalog Number: 25544
Launch Date: August 1, 2005

Activated: August 3, 2005
Status: Operational
Current Mode: Digipeater / XBAUD (PSK31/CW Repeater)

Digital Downlink: 435.275 Mhz
Digital Uplink: 145.825 Mhz

PSK-31 Downlink: 435.275 Mhz
PSK-31 Uplink: 29.401 Mhz

CALLSIGN: pcsat2

Official Webpage: http://web.usna.navy.mil/~bruninga/pcsat2.html
PCSAT2 APRS Packet page: http://www.findu.com/cgi-bin/pcsat2.cgi
aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/

Bob, WB4APR, reports that the Xbaud - PSK31/CW repeater experiment has been
activated. Bob reports that you need to connect to pcsat2 and then you can

tranmit on 29.401 Mhz and listen on 435.275 for your signal. Reports are that
you will probably need at least 100+ watts of power on 10m to make it work.
Currently, Henk, PA3GUO, has tried with only a 100 watts and a dipole without
any luck so far.
[ANS-WSR wishes to thank Bob, WB4APR, and Henk, PA3GUO, for this weeks info]
[05082006]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Mode(s): FM Repeaters, V/U and QRP
Digipeater - ON - 9K6, V/U

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.880 MHZ FM
145.880 MHz USB
145.920 MHz FM 67Hz PL tone
1268.700 MHz FM 67Hz PL tone
Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast Protocol
1268.700 mhz FM, 9k6 PBP Digital
Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Mode schedule for April 2006 according to Drew, KO4MA:

May 22
FM Repeater, V/U
  a.. Uplink: 145.920 mhz FM, 67 hz PL Tone
  b.. Downlink: 435.300 mhz FM
9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
  a.. Uplink: 145.860 mhz FM, 9k6 PBP Digital
  b.. Downlink: 435.150 mhz FM, 9k6 PBP Digital

June 5

FM Repeater
  Downlink 435.300 mHz FM
  Uplink 145.920 mHz FM with 67 hz Tone

Digital / PBBS
  Downlink 435.150 mHz FM 9k6 Digital
  Uplink 145.860 mHz FM 9k6 Digital
  PBBS Active
  Telemetry Downlink Active

June 12
FM Repeater High Power
  Downlink 435.300 mHz FM
  Uplink 145.920 mHz FM with 67 hz Tone

June 17 Kid's Day Special Event
  Please observe the Kid's Day Requirements allowing
  contacts with Kid's Only.

June 19 Field Day Configuration
FM Repeater
  Downlink 435.300 mHz FM
  Uplink 145.920 mHz FM with 67 hz Tone

FM Repeater with QRP Requirements
  Downlink 435.150 mHz FM
  Uplink 145.880 mHz FM, QRP Power Limits

June 26
FM Repeater
  Downlink 435.300 mHz FM
  Uplink 145.920 mHz FM with 67 hz Tone

Digital / PBBS
  Downlink 435.150 mHz FM 9k6 Digital
  Uplink 145.860 mHz FM 9k6 Digital
  PBBS Active
  Telemetry Downlink Active

Official Webpage: http://www.amsat.org/amsat-new/echo/
[05222006]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Operational

General Usage Uplink/Downlink:145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org
aprstlm Telemetry Decoder program:

```
http://www.xciv.org/~iain/aprstlm/v1.2/
[04172006]
=====
CO-55 CUTE-1.7
Catalog number: 28941
Launched: June 30,2003

Status: Operational

Uplink: ?
Downlink: 437.3850 CW
          437.4700 1200 FM ax25 or SRLL (ACTIVE only near Japan ? )
Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[05012006]
=====
GO-32 TECHSAT-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks: 145.850 FM
         145.890 FM
         145.930 FM
        1269.700 FM
        1269.800 FM
        1269.900 FM
Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[05012006]
=====
RS-22 Mozhayets 4
Catalog Number: 27939
Launch Date: September 27, 2004

Status: Operational

Beacon: 435.3520 MHz CW
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Semi-operational, the digipeater command is on and open for
APRS users.

Uplink: 145.900 FM
```

145.920 FM
145.940 FM
145.960 FM
(using 1200-baud Manchester FSK)
Downlink: 437.026 MHz SSB (1200-baud PSK)
Mode-S Beacon: 2401.1428 MHz

Mode and Antenna Polarization:
U: RC 437.050 MHz RHCP
PSK 437.025 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[04172006]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational?

Telemetry Downlink: 145.826 MHz. FM (1200-baud AFSK).
approx. 10 days ON, 10 days OFF
Mode-S Beacon: 2401.500 MHz. ... OFF
UHFBeacon: 435.025 MHz. ... OFF

Mode and Antenna Polarization:
V: RHCP
S: LHCP

This from James DeYoung on April 28,2006:
UO-11 VHF 1200-bps AFSK telemetry beacon 145.826 very loud this afternoon.
Monitored from FM18 using Arrow antenna and 910H from 22:51 to 23:54 UTC 28
April 2006 during near zenith pas

Official webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[05012006]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-142.S3
WSR 142 Part 3 05/22/2006

AMSAT NEWS SERVICE BULLETIN 142.S3 FROM AMSAT HQ
SILVER SPRING, MD, May 22, 2006
TO ALL RADIO AMATEURS
BID: $ANS-142.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

AO-54 SUITSAT
Catalog Number:28933
Release Date: February 3,2006

Status: Non-operational
Modes : FM Voice Telemetry/Greetings
FM SSTV

Callsign: RS0RS
Downlink: 145.990 FM

Currently on the amsat-bb, there is a geussing game going on about when
Suitsat will re-enter the atmosphere.

Official webpage: http://www.suitsat.org
[05012006]
=====
NCUBE-2
Catalog Number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog Number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 FM 67Hz CTCSS
Voice Downlink: 2401.835 FM
Packet Up/Downlink: 437.250 9k6 packet
Packet Downlink 2401.835 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01292006]
=====
TO-31 TMSAT-1
Catalog Number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink: 145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
PO-28 POSAT-1
Catalog Number: 22829
Launch Date: September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 429.950

Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html.
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012006]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launched: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB
Beacon: 145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: Downlink only

Uplink: 145.875 145.900 145.925 145.950 MHz FM (1200-baud)
Downlink: 435.808 MHz PSK
Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html

```
[01012006]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB
Beacon: 29.408 MHz
Robot: 29.454 MHz
[05232004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB
Beacon: 145.860 MHz
Robot: 145.908 MHz
[05232004]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink 145.975 MHz FM
Downlink 435.070 MHz FM
[05092004]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink: 145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM
Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01092005]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational?
```

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB
Beacon: 29.352 MHz (intermittent)
SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplink: 145.84 145.86 145.88 145.90 MHz FM
(using 1200-baud Manchester FSK)
CW downlink: 437.125 MHz
Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)
Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[05232004]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[08152004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM
Broadcast Callsign: HL01-11
BBS: HL01-12

Jim, AA7KC, reports that KO-23's downlink transmitter continues in a non-operational status.
[05092004]
=====

KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM (9600-baud FSK)
Downlink: 436.500 MHz FM
Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm

[ANS-WSR has no further information]
[05232004]
=====
SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

STatus: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz and 145.900 MHz

For more information of SUNSAT vist the satellite web site:

```
http://esl.ee.sun.ac.za/projects/sunsat/
[08082004]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlink: 437.025 MHz 437.400 MHz
Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site
at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[05092004]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplink V-band   145.840 - 145.990 MHz CW/LSB
       U-band   435.550 - 435.800 MHz CW/LSB
       L1-band 1269.250 - 1269.500 MHz CW/LSB
       L2-band 1268.325 - 1268.575 MHz CW/LSB
Downlink: S2-band 2401.225 - 2401.475 MHz CW/USB
          K-band 24,048.010 - 24,048.060 MHz CW/USB
Beacon:   2401.323
         24,048.035
[05232004]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational
Downlink: 437.075 MHz
Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[08152004]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000
```

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz
Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[08152004]

=====

NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, callsign KE6QMD, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]

=====

MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Operational

Uplink: 145.850 or 145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz
Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[11202005]

=====

AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605

Launch Date: December 20, 2002

Status: Non-operational.

Uplink 435.275 1200-baud AFSK
Downlink 145.825 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink: Downlink 145.825 MHz FM 1200 Baud AFSK
Beacon: 2401.220 MHz
[05012006]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-142.S4
WSR 142 Part 4 05/22/2006

AMSAT NEWS SERVICE BULLETIN 142.S4 FROM AMSAT HQ
SILVER SPRING, MD, May 22, 2006
TO ALL RADIO AMATEURS
BID: $ANS-142.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE
PROPOSED FOR LAUNCH AT THIS TIME:

PHASE 3E ?O-??
Catalog Number:
Proposed Launch Date: Early/Mid 2007

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web
page:
http://www.amsat-dl.org/p3e/

[ANS-WSR wishes to thank William Leijenaar, PE1RAH for this week's report]
[04242006]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/amsat/listserv/menu.html

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN

```
/EX




From -4715953244803528672
X-Google-Thread: 10e8ad,f6f36ce4a2e50bb8,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news4.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!newscon06.news.prodigy.com!prodigy.net!newspeer.monmouth.com!
newsgate.cistron.nl!xs4all!news2.euro.net!213.132.189.2.MISMATCH!multikabel.net!
feed20.multikabel.net!skynet.be!newsfeed.icl.net!proxad.net!fdn.fr!
news.wanadoo.fr!news.wanadoo.fr!not-for-mail
X-Newsreader:      NNTP SCRIBBLER
Content-Type: text/html;
From: christiane@dunet.web
ReplyTo: christiane@dunet.web
Subject: femmes mures en manque de sexe cherchent hommes
Newsgroups: rec.radio.amateur.space
Date: 25 May 2006 18:25:00 GMT
Lines: 7
Message-ID: <4475f67b$0$23264$8fcfb975@news.wanadoo.fr>
Organization: les newsgroups par Wanadoo
NNTP-Posting-Date: 25 May 2006 20:25:00 CEST
NNTP-Posting-Host: 193.248.70.122
X-Trace: 1148581500 news.wanadoo.fr 23264 193.248.70.122:3170
X-Complaints-To: abuse@wanadoo.fr
Xref: g2news2.google.com rec.radio.amateur.space:243


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color="#00FF00"><b>This message was sent with NNTP Scribbler (www.e-
advertize.com).</b></font></a></center></td></tr><tr><td height="4"
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From 1052501446575059976
X-Google-Thread: 10e8ad,1e4a614147097eec,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news2.google.com!news4.google.com!news.glorb.com!
news.newsland.it!proxad.net!193.252.118.146.MISMATCH!news.wanadoo.fr!
news.wanadoo.fr!not-for-mail
X-Newsreader:      NNTP SCRIBBLER
```

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Content-Type: text/html;
From: coralie@canaweb.ca
ReplyTo: coralie@canaweb.ca
Subject: jeunes filles 18 ans tres chaudes
Newsgroups: rec.radio.amateur.space
Date: 25 May 2006 18:25:02 GMT
Lines: 8
Message-ID: <4475f67d$0$3191$8fcfb975@news.wanadoo.fr>
Organization: les newsgroups par Wanadoo
NNTP-Posting-Date: 25 May 2006 20:25:02 CEST
NNTP-Posting-Host: 193.248.70.122
X-Trace: 1148581502 news.wanadoo.fr 3191 193.248.70.122:3172
X-Complaints-To: abuse@wanadoo.fr
Xref: g2news2.google.com rec.radio.amateur.space:244


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advertize.com/index.php?choix=NNTPScribbler&Langue=en"><font
color="#00FF00"><b>This message was sent with NNTP Scribbler (www.e-
advertize.com).</b></font></a></center></td></tr><tr><td height="4"
bgcolor="#000000"></td></tr></table></center>


From -7552533708114493397
X-Google-Thread: 10e8ad,d6ab986087baf72a,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news3.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!newsfeed00.sul.t-online.de!t-online.de!tiscali!
newsfeed1.ip.tiscali.net!proxad.net!193.252.118.146.MISMATCH!news.wanadoo.fr!
news.wanadoo.fr!not-for-mail
X-Newsreader:      NNTP SCRIBBLER
Content-Type: text/html;
From: cinthia@eurasia.net
ReplyTo: cinthia@eurasia.net
Subject: jeune fille 18 ans innocente
Newsgroups: rec.radio.amateur.space
Date: 25 May 2006 18:25:02 GMT
Lines: 9
Message-ID: <4475f67d$0$18343$8fcfb975@news.wanadoo.fr>
Organization: les newsgroups par Wanadoo
NNTP-Posting-Date: 25 May 2006 20:25:02 CEST
NNTP-Posting-Host: 193.248.70.122
X-Trace: 1148581502 news.wanadoo.fr 18343 193.248.70.122:3168
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X-Complaints-To: abuse@wanadoo.fr
Xref: g2news2.google.com rec.radio.amateur.space:245

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src='http://www.sv2.biz/modules/cbsys/promo/bannieres/produits/
454/20051021153858_1
20x240-3.jpg' border=0></a>

<br><br><br><br><br><br><br>
<BODY></BODY></HTML>
<center><table border="0" cellpadding="0" cellspacing="0" style="border-collapse:
collapse" width="500"><tr><td nowrap height="4" bgcolor="#000000"></td></
tr><tr><td width="100%" bgcolor="#000000"><center><a href="http://www.e-
advertize.com/index.php?choix=NNTPScribbler&Langue=en"><font
color="#00FF00"><b>This message was sent with NNTP Scribbler (www.e-
advertize.com).</b></font></a></center></td></tr><tr><td height="4"
bgcolor="#000000"></td></tr></table></center>
```

From -3723836003740647028
X-Google-Thread: 10e8ad,fdd790f8799d536
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,UTF8
Path: g2news2.google.com!news3.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx02.iad01.newshosting.com!newshosting.com!68.1.17.232.MISMATCH!
peer01.cox.net!cox.net!p01!dukeread11.POSTED!53ab2750!not-for-mail
From: "J S Austin, W8JSA" <w8jsa@w8jsa.org>
Organization: Amateur Radio Station W8JSA
User-Agent: Mozilla/5.0 (X11; U; Linux i686; en-GB; rv:1.7.13) Gecko/20060413 Red
Hat/1.7.13-1.4.1
X-Accept-Language: en-ca
MIME-Version: 1.0
Newsgroups: rec.radio.amateur.space
Subject: Re: Eggbeater for ISS contacts?
References: <sIOdnbolk5rBGkzenZ2dnUVZ_s6dnZ2d@comcast.com>
<n9wAf.42952$d5.198959@newsb.telia.net> <KZSdnewsl9NWLk_eRVn-qg@comcast.com>
In-Reply-To: <KZSdnewsl9NWLk_eRVn-qg@comcast.com>
Content-Type: text/plain; charset=UTF-8
Content-Transfer-Encoding: quoted-printable
Lines: 16
Message-ID: <zZodg.50808$9c6.47@dukeread11>
Date: Thu, 25 May 2006 17:04:30 -0400
NNTP-Posting-Host: 70.161.151.51
X-Complaints-To: abuse@cox.net
X-Trace: dukeread11 1148591071 70.161.151.51 (Thu, 25 May 2006 17:04:31 EDT)
NNTP-Posting-Date: Thu, 25 May 2006 17:04:31 EDT
Xref: g2news2.google.com rec.radio.amateur.space:246

James wrote:
> Thanks Greg !!   I welcome other comments !!
>=20

```
>=20
> 73 de Jim K4PYT
>=20
>=20
I've used the VHF/UHF M2 Eggbeaters for a long time now. Very pleased
with the performance.

--=20
J S AUSTIN, W8JSA
AMATEUR RADIO STATION W8JSA
CHESAPEAKE VA 23320
N36=CB=9A 45' 43=E2=80=9D W076=CB=9A 15' 01=E2=80=9D
FM16us


From 2909374962237583086
X-Google-Thread: 10e8ad,dd0bc057c5829d99,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,UTF8
Path: g2news2.google.com!news4.google.com!news.glorb.com!news.litech.org!cox.net!
news-xfer.cox.net!p01!dukeread11.POSTED!53ab2750!not-for-mail
From: "J S Austin, W8JSA" <w8jsa@w8jsa.org>
Organization: Amateur Radio Station W8JSA
User-Agent: Mozilla/5.0 (X11; U; Linux i686; en-GB; rv:1.7.13) Gecko/20060413 Red
Hat/1.7.13-1.4.1
X-Accept-Language: en-ca
MIME-Version: 1.0
Newsgroups: rec.radio.amateur.space
Subject: AO-51 [et al] on Field Day
Content-Type: text/plain; charset=UTF-8
Content-Transfer-Encoding: quoted-printable
Lines: 9
Message-ID: <w%odg.50809$9c6.6638@dukeread11>
Date: Thu, 25 May 2006 17:06:36 -0400
NNTP-Posting-Host: 70.161.151.51
X-Complaints-To: abuse@cox.net
X-Trace: dukeread11 1148591196 70.161.151.51 (Thu, 25 May 2006 17:06:36 EDT)
NNTP-Posting-Date: Thu, 25 May 2006 17:06:36 EDT
Xref: g2news2.google.com rec.radio.amateur.space:247

Looking for other stations to come up on AO-51 [and others if possible]
for Field Day.

--=20
J S AUSTIN, W8JSA
AMATEUR RADIO STATION W8JSA
CHESAPEAKE VA 23320
N36=CB=9A 45' 43=E2=80=9D W076=CB=9A 15' 01=E2=80=9D
FM16us


From 8110485437845883434
X-Google-Thread: 10e8ad,fdd790f8799d536
```

```
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news3.google.com!news4.google.com!newshub.sdsu.edu!elnk-
nf2-pas!newsfeed.earthlink.net!stamper.news.pas.earthlink.net!
newsread4.news.pas.earthlink.net.POSTED!3dd4ce4a!not-for-mail
Newsgroups: rec.radio.amateur.space
Subject: Re: Eggbeater for ISS contacts?
From: Slow Code <email@no.spam>
References: <sIOdnbolk5rBGkzenZ2dnUVZ_s6dnZ2d@comcast.com>
<n9wAf.42952$d5.198959@newsb.telia.net> <KZSdnewsl9NWLk_eRVn-qg@comcast.com>
<zZodg.50808$9c6.47@dukeread11>
Organization: None
User-Agent: Xnews/5.04.25
Lines: 18
Message-ID: <4erdg.5218$921.626@newsread4.news.pas.earthlink.net>
Date: Thu, 25 May 2006 23:38:40 GMT
NNTP-Posting-Host: 4.254.224.170
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread4.news.pas.earthlink.net 1148600320 4.254.224.170 (Thu, 25 May
2006 16:38:40 PDT)
NNTP-Posting-Date: Thu, 25 May 2006 16:38:40 PDT
Xref: g2news2.google.com rec.radio.amateur.space:248

"J S Austin, W8JSA" <w8jsa@w8jsa.org> wrote in
news:zZodg.50808$9c6.47@dukeread11:

> James wrote:
>> Thanks Greg !!     I welcome other comments !!
>>
>>
>> 73 de Jim K4PYT
>>
>>
> I've used the VHF/UHF M2 Eggbeaters for a long time now. Very pleased
> with the performance.



Do you use the radial reflector kits underneath yours?

sc



From 3488609562597503038
X-Google-Thread: 10e8ad,fdd790f8799d536
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,UTF8
Path: g2news2.google.com!news4.google.com!border1.nntp.dca.giganews.com!
border2.nntp.dca.giganews.com!nntp.giganews.com!peer01.cox.net!cox.net!p01!
dukeread11.POSTED!53ab2750!not-for-mail
From: "J S Austin, W8JSA" <w8jsa@w8jsa.org>
Organization: Amateur Radio Station W8JSA
User-Agent: Mozilla/5.0 (X11; U; Linux i686; en-GB; rv:1.7.13) Gecko/20060413 Red
```

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Hat/1.7.13-1.4.1
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MIME-Version: 1.0
Newsgroups: rec.radio.amateur.space
Subject: Re: Eggbeater for ISS contacts?
References: <sIOdnbolk5rBGkzenZ2dnUVZ_s6dnZ2d@comcast.com>
<n9wAf.42952$d5.198959@newsb.telia.net> <KZSdnewsl9NWLk_eRVn-qg@comcast.com>
<zZodg.50808$9c6.47@dukeread11>
<4erdg.5218$921.626@newsread4.news.pas.earthlink.net>
In-Reply-To: <4erdg.5218$921.626@newsread4.news.pas.earthlink.net>
Content-Type: text/plain; charset=UTF-8
Content-Transfer-Encoding: quoted-printable
Lines: 31
Message-ID: <VeGdg.50843$9c6.50834@dukeread11>
Date: Fri, 26 May 2006 12:43:33 -0400
NNTP-Posting-Host: 70.161.151.51
X-Complaints-To: abuse@cox.net
X-Trace: dukeread11 1148661813 70.161.151.51 (Fri, 26 May 2006 12:43:33 EDT)
NNTP-Posting-Date: Fri, 26 May 2006 12:43:33 EDT
Xref: g2news2.google.com rec.radio.amateur.space:249

Slow Code wrote:
> "J S Austin, W8JSA" <w8jsa@w8jsa.org> wrote in
> news:zZodg.50808$9c6.47@dukeread11:=20
>=20
>=20
>>James wrote:
>>
>>>Thanks Greg !!     I welcome other comments !!
>>>
>>>
>>>73 de Jim K4PYT
>>>
>>>
>>
>>I've used the VHF/UHF M2 Eggbeaters for a long time now. Very pleased
>>with the performance.
>=20
>=20
>=20
>=20
> Do you use the radial reflector kits underneath yours?
>=20
> sc

Yes.
--=20
J S AUSTIN, W8JSA
AMATEUR RADIO STATION W8JSA
CHESAPEAKE VA 23320
N36=CB=9A 45' 43=E2=80=9D W076=CB=9A 15' 01=E2=80=9D
FM16us
```

```
From -2641839066390985163
X-Google-Thread: 10e8ad,fdd790f8799d536
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news4.google.com!newshub.sdsu.edu!elnk-nf2-pas!
newsfeed.earthlink.net!stamper.news.pas.earthlink.net!
newsread3.news.pas.earthlink.net.POSTED!3dd4ce4a!not-for-mail
Newsgroups: rec.radio.amateur.space
Subject: Re: Eggbeater for ISS contacts?
From: Slow Code <email@no.spam>
References: <sIOdnbolk5rBGkzenZ2dnUVZ_s6dnZ2d@comcast.com>
<n9wAf.42952$d5.198959@newsb.telia.net> <KZSdnewsl9NWLk_eRVn-qg@comcast.com>
<zZodg.50808$9c6.47@dukeread11>
<4erdg.5218$921.626@newsread4.news.pas.earthlink.net>
<VeGdg.50843$9c6.50834@dukeread11>
Organization: None
User-Agent: Xnews/5.04.25
Lines: 40
Message-ID: <bXMdg.10$eB3.5@newsread3.news.pas.earthlink.net>
Date: Sat, 27 May 2006 00:20:23 GMT
NNTP-Posting-Host: 4.228.228.104
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread3.news.pas.earthlink.net 1148689223 4.228.228.104 (Fri, 26 May
2006 17:20:23 PDT)
NNTP-Posting-Date: Fri, 26 May 2006 17:20:23 PDT
Xref: g2news2.google.com rec.radio.amateur.space:250

"J S Austin, W8JSA" <w8jsa@w8jsa.org> wrote in
news:VeGdg.50843$9c6.50834@dukeread11:

> Slow Code wrote:
>> "J S Austin, W8JSA" <w8jsa@w8jsa.org> wrote in
>> news:zZodg.50808$9c6.47@dukeread11:
>>
>>
>>>James wrote:
>>>
>>>>Thanks Greg !!     I welcome other comments !!
>>>>
>>>>
>>>>73 de Jim K4PYT
>>>>
>>>>
>>>
>>>I've used the VHF/UHF M2 Eggbeaters for a long time now. Very pleased
>>>with the performance.
>>
>>
>>
>>
>> Do you use the radial reflector kits underneath yours?
>>
```

>> sc
>
> Yes.

I've always used the radial kits too. Lower elevation passes I switch to a vertical co-linear ground plane, and use the eggbeaters for more overhead passes. I may experiment with it without the radials to see what the difference is overall.

When it's really an important pass, I push the button on the computer and have the auto-tracker steer the crossed yagi's. Never miss a thing then.

sc

From -3899062843374900700
X-Google-Thread: 10e8ad,fdd790f8799d536
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news3.google.com!news.glorb.com!wn13feed!
worldnet.att.net!bgtnsc04-news.ops.worldnet.att.net.POSTED!53ab2750!not-for-mail
Message-ID: <447B02D4.DB9FDCE6@cbfamily.net>
From: chuck <chuck_brown@cbfamily.net>
X-Mailer: Mozilla 4.79 [en] (Windows NT 5.0; U)
X-Accept-Language: en
MIME-Version: 1.0
Newsgroups: rec.radio.amateur.space
Subject: Re: Eggbeater for ISS contacts?
References: <sIOdnbolk5rBGkzenZ2dnUVZ_s6dnZ2d@comcast.com>
<n9wAf.42952$d5.198959@newsb.telia.net> <KZSdnewsl9NWLk_eRVn-qg@comcast.com>
<zZodg.50808$9c6.47@dukeread11>
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Lines: 5
Date: Mon, 29 May 2006 14:19:01 GMT
NNTP-Posting-Host: 12.76.216.156
X-Complaints-To: abuse@worldnet.att.net
X-Trace: bgtnsc04-news.ops.worldnet.att.net 1148912341 12.76.216.156 (Mon, 29 May 2006 14:19:01 GMT)
NNTP-Posting-Date: Mon, 29 May 2006 14:19:01 GMT
Organization: AT&T Worldnet
Xref: g2news2.google.com rec.radio.amateur.space:251

While not the eggbeater, take a look at the
turnstile for sat work.

http://www.cebik.com/vhf/ms2.html

From -925138877277687178

X-Google-Thread: 10e8ad,7a8ed6e09783ac80,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news3.google.com!newshub.sdsu.edu!elnk-nf2-pas!newsfeed.earthlink.net!stamper.news.pas.earthlink.net!newsread4.news.pas.earthlink.net.POSTED!46041641!not-for-mail
From: "JoAnne Maenpaa" <wb9jej_no-spam@earthling.com>
Newsgroups: rec.radio.amateur.space
Subject: ANS-148 AMSAT News Service Weekly Bulletin
Lines: 208
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <PKYeg.6911$921.3006@newsread4.news.pas.earthlink.net>
Date: Tue, 30 May 2006 14:35:27 GMT
NNTP-Posting-Host: 66.167.66.81
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread4.news.pas.earthlink.net 1148999727 66.167.66.81 (Tue, 30 May 2006 07:35:27 PDT)
NNTP-Posting-Date: Tue, 30 May 2006 07:35:27 PDT
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news2.google.com rec.radio.amateur.space:252

AMSAT NEWS SERVICE
ANS-148

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:

* AMSAT Runs SuitSat "Chicken Little" Contest
* ARISS Dayton Presentation Available Online
* ARISS Status May 22, 2006
* Dayton Pictures from Tom Clark, K3IO
* North Scotland Grid Square Opportunity
* ISS Crew Photographs Aleutian Islands Volcano Activity

SB SAT @ AMSAT $ANS-148.01
AMSAT Runs SuitSat "Chicken Little" Contest

AMSAT News Service Bulletin 148.01
From AMSAT HQ SILVER SPRING, MD.
May 28, 2006
To All RADIO AMATEURS

BID: $ANS-148.01

AMSAT is holding a "Chicken Little" contest to see who can guess when SuitSat-1 will re-enter the earth's atmosphere. There are three entry categories: K-8, 9-12 and adult. Certificates will be provided to the winners of each group. To enter the contest, go to:
http://www.amsat.org/amsat-new/ariss/suitsatContest.php

[ANS thanks Carol, KB3LKI for the above information]

/EX

SB SAT @ AMSAT $ANS-148.02
ARISS Dayton Presentation Available Online

AMSAT News Service Bulletin 148.02
From AMSAT HQ SILVER SPRING, MD.
May 28, 2006
To All RADIO AMATEURS
BID: $ANS-148.02

Those that missed Dayton and would like to see what the ARISS team presented at the forum are welcome to view the charts online. In this set of charts is a series of photos of the deployment. Go through these quickly and you can clearly see the rotation of the satellite. See:
http://www.amsat.org/amsat/ariss/Presentations/Dayton%202006.pdf

Note: Those of you who have a dial-up connection, this is a 10 megabyte file.

[ANS thanks Frank, KA3HDO for the above information]

/EX

SB SAT @ AMSAT $ANS-148.03
ARISS Status May 22, 2006

AMSAT News Service Bulletin 148.03
From AMSAT HQ SILVER SPRING, MD.
May 28, 2006
To All RADIO AMATEURS
BID: $ANS-148.03

1. Upcoming School Contacts

Salt Brook Elementary School in New Providence, New Jersey has been scheduled for an ARISS contact on Wednesday, May 31, at 15:07 UTC. Students will design posters, ID badges, and tee shirts in preparation for the contact and will also design a web page to include space experiments, ham radio communications, ISS tracking and space links. Local high school students, who have obtained Amateur Radio licenses, will be trained to act as mentors for the elementary school students, and to be Control Operators during the contact. Coverage of classroom activities by the local media is planned.

2. ARRL Article on Yoneda-nishi Contact

ARRL's article, "ISS Astronaut Fields Questions from Elementary Schoolers in Japan" covers the ARISS Yoneda-nishi contact on May 11. To view the story, see:
http://www.arrl.org/news/stories/2006/05/17/3/?nc=1

3. AMSAT-DL Receives Voyager 1 Signal

On March 31, Amateur Radio operators from AMSAT Germany tracked and received data from Voyager 1 using the 20m antenna at Bochum at a distance of 14.7 billion km. Its data was checked and verified against data from the Deep Space Network station. See:
http://www.arrl.org/news/stories/2006/04/25/2/
and
http://www.amsatdl.org/cms/index.php?option=com_content&task=view&id=62&Itemid=97

4. Dayton Hamvention 2006

The Dayton Hamvention, 2006 was held this past weekend, Friday, May 19 through Sunday, May 21 in Dayton, Ohio. ARISS Chairman Frank Bauer gave a presentation at the AMSAT Forum entitled, "ARISS and SuitSat: Current Status and Future Opportunities." To view the presentation, go to:
http://www.amsat.org/amsat/ariss/Presentations/Dayton%202006.pdf

ARISS member Lou McFadin, W5DID, also gave a talk on SuitSat-1 and 2 at the AMSAT banquet on Friday evening. Approximately 25,000 amateur radio operators attended the Hamvention.

5. Popular Science Article on SuitSat

A 2-page photo of SuitSat appears in the June issue of Popular Science. A short write up, "Tossed in Space," accompanies the photograph.

[ANS thanks Carol, KB3LKI for the above information]

/EX

SB SAT @ AMSAT $ANS-148.04
Dayton Pictures from Tom Clark, K3IO

AMSAT News Service Bulletin 148.04
From AMSAT HQ SILVER SPRING, MD.
May 28, 2006
To All RADIO AMATEURS
BID: $ANS-148.04

Tom Clark, K3IO, has posted selected pictures from Dayton weekend in his AMSAT photo album.

Among the picture set you will see AMSAT's newest member (#36161), 11 year-old "Fred," the Dayton Amateur Radio Association presenting a $5000 check to Rick Hambly, W2GPS, and perhaps best of all you will see Russ (WB4PGT/LU1NR) modelling SuitSat-2 and examining the new 2.6 kilofarad, 6+ kilojoule flux-gate capacitor power source. See:
http://www.pbase.com/tomcat/amsat

[ANS thanks Tom, K3IO for the above information]

/EX

SB SAT @ AMSAT $ANS-148.05
North Scotland Grid Square Opportunity

AMSAT News Service Bulletin 148.05
From AMSAT HQ SILVER SPRING, MD.
May 28, 2006
To All RADIO AMATEURS
BID: $ANS-148.05

Anyone looking for new grid squares should listen for Paul, 2M1EUB/P, who will be operating portable from different locations in North Scotland for seven days beginning May 27, 2006. Paul will be renting a cottage and doing some backpacking (Yes, walking... said Paul!) so there could be an interesting signal at times. Paul hopes to work all satellites and modes and will also be doing some HF work. He requests that qsl's be sent via his home call.

[ANS thanks Paul, 2E1EUB for the above information]

/EX

SB SAT @ AMSAT $ANS-148.06
ISS Crew Photographs Aleutian Islands Volcano Activity

AMSAT News Service Bulletin 148.06
From AMSAT HQ SILVER SPRING, MD.
May 28, 2006
To All RADIO AMATEURS
BID: $ANS-148.06

At 3:00 p.m. Alaska Daylight Time on May 23, 2006, Flight Engineer Jeff Williams of International Space Station (ISS) Expedition 13 contacted the Alaska Volcano Observatory (AVO) to report that the Cleveland Volcano had produced a plume of ash. Shortly after the activity began, he took a spectacular photograph of the volcano and plume. Astronaut photograph ISS013-E-24184 was acquired May 23, 2006, with a Kodak 760C digital camera using an 800 mm lens, and is provided by the ISS Crew Earth Observations experiment and the Image Science & Analysis Group, Johnson Space Center.
See:
http://earthobservatory.nasa.gov/Newsroom/NewImages/images.php3?img_id=17285

The International Space Station Program supports the laboratory to help

astronauts take pictures of Earth that will be of the greatest value to scientists and the public, and to make those images freely available on the Internet. Additional images taken by astronauts and cosmonauts can be viewed at the NASA/JSC Gateway to Astronaut Photography of Earth. See:
http://eol.jsc.nasa.gov/

[ANS thanks NASA's Earth Observatory for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Al Marote, WA1LBG

From 5334438577409888418
X-Google-Thread: 10e8ad,9a712c4b3be38d55,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news4.google.com!border1.nntp.dca.giganews.com!nntp.giganews.com!wns14feed!worldnet.att.net!207.217.77.102!elnk-nf2-pas!newsfeed.earthlink.net!stamper.news.pas.earthlink.net!newsread2.news.pas.earthlink.net.POSTED!46041641!not-for-mail
From: "JoAnne Maenpaa" <wb9jej_no-spam@earthling.com>
Newsgroups: rec.radio.amateur.space
Subject: WSR-149 AMSAT Weekly Satellite Report
Lines: 1038
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <cYnfg.9952$y4.2096@newsread2.news.pas.earthlink.net>
Date: Wed, 31 May 2006 21:32:56 GMT
NNTP-Posting-Host: 66.167.183.112
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread2.news.pas.earthlink.net 1149111176 66.167.183.112 (Wed, 31 May 2006 14:32:56 PDT)
NNTP-Posting-Date: Wed, 31 May 2006 14:32:56 PDT
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news2.google.com rec.radio.amateur.space:256

This report is organized into 4 parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites

```
SB SAT @ AMSAT W8ISS ANS-149.S1
WSR 149 Part 1 05/29/2006

AMSAT NEWS SERVICE BULLETIN 142.S1 FROM AMSAT HQ
SILVER SPRING, MD, May 29, 2006
TO ALL RADIO AMATEURS
BID: $ANS-149.S1

VO-52 HAMSAT
Catalog Number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/V - Indian Transponder

Proposed frequencies:
-------------------
Indian Transponder:
Uplink :  435.220 MHz to 435.280 MHz LSB/CW
Downlink: 145.870 MHz to 145.930 MHz USB/CW
Beacom :  145.859330 MHZ CW

Dutch Transponder:
Uplink :  435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW
Beacon :  145.860MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsat.in/hamsat.htm

To know what transponder is switched on please listen for the beacon that is
active. Each transponder has a different beacon.
[04242006]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Mode(s): FM Repeaters, V/U and QRP
Digipeater - ON - 9K6, V/U

Analog voice downlink: 435.300 MHz FM
         435.150 MHz FM
                       2401.200 Mhz FM
Analog voice uplink:   145.880 MHZ FM
         145.880 MHz USB
         145.920 MHz FM 67Hz PL tone
        1268.700 MHz FM 67Hz PL tone
```

Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast Protocol
1268.700 mhz FM, 9k6 PBP Digital
Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Mode schedule for April 2006 according to Drew, KO4MA:

May 22
FM Repeater, V/U
a.. Uplink: 145.920 mhz FM, 67 hz PL Tone
b.. Downlink: 435.300 mhz FM
9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
a.. Uplink: 145.860 mhz FM, 9k6 PBP Digital
b.. Downlink: 435.150 mhz FM, 9k6 PBP Digital

June 5
FM Repeater
Downlink 435.300 mHz FM
Uplink 145.920 mHz FM with 67 hz Tone

Digital / PBBS
Downlink 435.150 mHz FM 9k6 Digital
Uplink 145.860 mHz FM 9k6 Digital
PBBS Active
Telemetry Downlink Active

June 12
FM Repeater High Power
Downlink 435.300 mHz FM
Uplink 145.920 mHz FM with 67 hz Tone

June 17 Kid's Day Special Event
Please observe the Kid's Day Requirements allowing
contacts with Kid's Only.

June 19 Field Day Configuration
FM Repeater
Downlink 435.300 mHz FM
Uplink 145.920 mHz FM with 67 hz Tone

FM Repeater with QRP Requirements
Downlink 435.150 mHz FM

  Uplink 145.880 mHz FM, QRP Power Limits

June 26
FM Repeater
  Downlink 435.300 mHz FM
  Uplink 145.920 mHz FM with 67 hz Tone

Digital / PBBS
  Downlink 435.150 mHz FM 9k6 Digital
  Uplink 145.860 mHz FM 9k6 Digital
  PBBS Active
  Telemetry Downlink Active

Official Webpage: http://www.amsat.org/amsat-new/echo/
[05222006]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Uplink: 145.850 MHz (67.0 Hz PL tone) (See below for operating procedures)
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz. The order of operation is thus: (allow for Doppler as necessary)
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10 minute timer.
[04172006]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: OPERATIONAL

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

```
Digital Mode JD
Uplink: 145.850 145.870 145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

unOfficial Webpage: http://www.amsat.org/amsat/sats/n7hpr/fo29.html
[11132005]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Uplink: 145.850 MHz FM
Downlink: 436.795 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[01012006]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational depending on amount of Sunlight
Current Reported mode: Mode-A

Uplink:   145.850 to 145.950 MHz CW/USB Mode A
   432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
  145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
  145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons:  29.502 MHz
  145.972 MHz
  435.100 MHz
 2304.100 MHz

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php
The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
AO-7 users are requested to log their contacts and observations about
AO-7, especially any unexpected mode changes.
```

AO-07 telemetry software webpage:
http://www.qsl.net/k3tz/files/K3TZ_AO-07_Telemetry_Decoder_0.5.zip

Please keep your power low! For additional information please read the AO-7
Usage Guidelines on the AO-7 Log and Resource Site located at:
http://www.planetemily.com/ao7
[04242006]

=====

INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: Packet - Mode V
Digipeater: ON

The current crew is:
Commander: Pavel Vinogradov, RV3BS
Flight Engineer: Jeff Williams, KD5TVQ

Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Russian: RS0ISS, RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official Webpage: http://www.rac.ca/ariss
Official Fan club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line is
NOT translated from Russian and posted.
[05222006]
NNNN

/EX

SB SAT @ AMSAT W8ISS $ANS-149.S2
WSR 149 Part 2 05/29/2006

AMSAT NEWS SERVICE BULLETIN 149.S2 FROM AMSAT HQ
SILVER SPRING, MD, May 29, 2006
TO ALL RADIO AMATEURS
BID: $ANS-149.S2

CO-58 XI-V
Catalog Number: 28895
Launch Date: October 27, 2005

Status: Operational only within range of Ground station in Japan

Telemetry Downlink: 437.345MHz - FSK 1200bps using AFK protocol
Beacon Downlink: 437.465MHz - CW about 50 WPM

Callsign: JQ1YGW

Oficial Webpage: http://www.space.t.u-tokyo.ac.jp/gs/satinfo-e.html#xi5
Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
[03122006]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: Packet - Mode V
Digipeater: ON

The current crew is:
Commander: Pavel Vinogradov, RV3BS
Flight Engineer: Jeff Williams, KD5TVQ

Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear

U: Linear

Callsigns:
Russian: RS0ISS, RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official Webpage: http://www.rac.ca/ariss
Official Fan club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is NOT translated from Russian and posted.
[05222006]

=====
PCSAT-2
Catalog Number: 25544
Launch Date: August 1, 2005

Activated: August 3, 2005
Status: Operational
Current Mode: Digipeater / XBAUD (PSK31/CW Repeater)

Digital Downlink: 435.275 Mhz
Digital Uplink: 145.825 Mhz

PSK-31 Downlink: 435.275 Mhz
PSK-31 Uplink: 29.401 Mhz

CALLSIGN: pcsat2

Official Webpage: http://web.usna.navy.mil/~bruninga/pcsat2.html
PCSAT2 APRS Packet page: http://www.findu.com/cgi-bin/pcsat2.cgi
aprstlm Telemetry Decoder program: http://www.xciv.org/~iain/aprstlm/v1.2/

Bob, WB4APR, reports that the Xbaud - PSK31/CW repeater experiment has been
activated. Bob reports that you need to connect to pcsat2 and then you can
tranmit on 29.401 Mhz and listen on 435.275 for your signal. Reports are
that
you will probably need at least 100+ watts of power on 10m to make it work.
Currently, Henk, PA3GUO, has tried with only a 100 watts and a dipole
without
any luck so far.
[ANS-WSR wishes to thank Bob, WB4APR, and Henk, PA3GUO, for this weeks info]
[05082006]

=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Mode(s): FM Repeaters, V/U and QRP
Digipeater - ON - 9K6, V/U

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.880 MHZ FM
145.880 MHz USB
145.920 MHz FM 67Hz PL tone
1268.700 MHz FM 67Hz PL tone
Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast Protocol
1268.700 mhz FM, 9k6 PBP Digital
Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Mode schedule for April 2006 according to Drew, KO4MA:

May 22
FM Repeater, V/U
a.. Uplink: 145.920 mhz FM, 67 hz PL Tone
b.. Downlink: 435.300 mhz FM
9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
a.. Uplink: 145.860 mhz FM, 9k6 PBP Digital
b.. Downlink: 435.150 mhz FM, 9k6 PBP Digital

June 5
FM Repeater
Downlink 435.300 mHz FM
Uplink 145.920 mHz FM with 67 hz Tone

Digital / PBBS
Downlink 435.150 mHz FM 9k6 Digital
Uplink 145.860 mHz FM 9k6 Digital
PBBS Active
Telemetry Downlink Active

June 12
FM Repeater High Power
Downlink 435.300 mHz FM
Uplink 145.920 mHz FM with 67 hz Tone

June 17 Kid's Day Special Event
  Please observe the Kid's Day Requirements allowing
  contacts with Kid's Only.

June 19 Field Day Configuration
FM Repeater
  Downlink 435.300 mHz FM
  Uplink 145.920 mHz FM with 67 hz Tone

FM Repeater with QRP Requirements
  Downlink 435.150 mHz FM
  Uplink 145.880 mHz FM, QRP Power Limits

June 26
FM Repeater
  Downlink 435.300 mHz FM
  Uplink 145.920 mHz FM with 67 hz Tone

Digital / PBBS
  Downlink 435.150 mHz FM 9k6 Digital
  Uplink 145.860 mHz FM 9k6 Digital
  PBBS Active
  Telemetry Downlink Active

Official Webpage: http://www.amsat.org/amsat-new/echo/
[05222006]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Operational

General Usage Uplink/Downlink:145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org
aprstlm Telemetry Decoder program: http://www.xciv.org/~iain/aprstlm/v1.2/
[04172006]
=====
CO-55 CUTE-1.7
Catalog number: 28941
Launched: June 30,2003

Status: Operational

Uplink: ?
Downlink: 437.3850 CW
          437.4700 1200 FM ax25 or SRLL (ACTIVE only near Japan ?)
Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[05012006]
=====

GO-32 TECHSAT-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks: 145.850 FM
         145.890 FM
         145.930 FM
        1269.700 FM
        1269.800 FM
        1269.900 FM
Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[05012006]
=====
RS-22 Mozhayets 4
Catalog Number: 27939
Launch Date: September 27, 2004

Status: Operational

Beacon: 435.3520 MHz CW
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Semi-operational, the digipeater command is on and open for APRS users.

Uplink: 145.900 FM
        145.920 FM
        145.940 FM
        145.960 FM
(using 1200-baud Manchester FSK)
Downlink: 437.026 MHz SSB (1200-baud PSK)
Mode-S Beacon: 2401.1428 MHz

Mode and Antenna Polarization:
U: RC 437.050 MHz RHCP
   PSK 437.025 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html

```
[04172006]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational?

Telemetry Downlink: 145.826 MHz. FM (1200-baud AFSK).
approx. 10 days ON, 10 days OFF
Mode-S Beacon: 2401.500 MHz. ... OFF
UHFBeacon: 435.025 MHz. ... OFF

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Official webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[05292006]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-149.S3
WSR 149 Part 3 05/29/2006

AMSAT NEWS SERVICE BULLETIN 149.S3 FROM AMSAT HQ
SILVER SPRING, MD, May 29, 2006
TO ALL RADIO AMATEURS
BID: $ANS-149.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

AO-54 SUITSAT
Catalog Number:28933
Release Date: February 3,2006

Status: Non-operational
Modes : FM Voice Telemetry/Greetings
 FM SSTV

Callsign: RS0RS
Downlink: 145.990 FM

Currently on the amsat-bb, there is a geussing game going on about when
Suitsat will re-enter the atmosphere.

Official webpage: http://www.suitsat.org
[05012006]
=====
NCUBE-2
Catalog Number: 28897
Launch Date: October 27, 2005
```

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog Number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 FM 67Hz CTCSS
Voice Downlink: 2401.835 FM
Packet Up/Downlink: 437.250 9k6 packet
Packet Downlink 2401.835 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01292006]
=====
TO-31 TMSAT-1
Catalog Number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink: 145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
PO-28 POSAT-1
Catalog Number: 22829
Launch Date: September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 429.950

Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html.
POSAT-1 webpage:

```
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012006]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launched: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB
Beacon: 145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: Downlink only

Uplink: 145.875 145.900 145.925 145.950 MHz FM (1200-baud)
Downlink: 435.808 MHz PSK
Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01012006]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB
Beacon: 29.408 MHz
Robot: 29.454 MHz
[05232004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB
Beacon: 145.860 MHz
```

```
Robot: 145.908 MHz
[05232004]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink 145.975 MHz FM
Downlink 435.070 MHz FM
[05092004]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink: 145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM
Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01092005]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational?

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB
Beacon: 29.352 MHz (intermittent)
SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplink: 145.84 145.86 145.88 145.90 MHz FM
(using 1200-baud Manchester FSK)
CW downlink: 437.125 MHz
Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)
Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[05232004]
```

=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[08152004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM
Broadcast Callsign: HL01-11
BBS: HL01-12

Jim, AA7KC, reports that KO-23's downlink transmitter continues in a non-operational status.
[05092004]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM (9600-baud FSK)
Downlink: 436.500 MHz FM
Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====

SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm

[ANS-WSR has no further information]
[05232004]
=====
SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

STatus: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz and 145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[08082004]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlink: 437.025 MHz 437.400 MHz
Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[05092004]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

```
Status: Non-Operational

Uplink V-band   145.840 - 145.990 MHz CW/LSB
       U-band   435.550 - 435.800 MHz CW/LSB
       L1-band 1269.250 - 1269.500 MHz CW/LSB
       L2-band 1268.325 - 1268.575 MHz CW/LSB
Downlink: S2-band 2401.225 - 2401.475 MHz CW/USB
          K-band 24,048.010 - 24,048.060 MHz CW/USB
Beacon:   2401.323
         24,048.035
[05232004]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational
Downlink: 437.075 MHz
Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[08152004]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz
Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[08152004]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, call-
sign KE6QMD, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
```

[03132005]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Operational

Uplink: 145.850 or 145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz
Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[11202005]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink 435.275 1200-baud AFSK
Downlink 145.825 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink: Downlink 145.825 MHz FM 1200 Baud AFSK
Beacon: 2401.220 MHz
[05012006]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25

[05012006]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-149.S4
WSR 149 Part 4 05/29/2006

AMSAT NEWS SERVICE BULLETIN 149.S4 FROM AMSAT HQ
SILVER SPRING, MD, May 29, 2006
TO ALL RADIO AMATEURS
BID: $ANS-149.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE
PROPOSED FOR LAUNCH AT THIS TIME:

PHASE 3E ?O-??
Catalog Number:
Proposed Launch Date: Early/Mid 2007

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/
[ANS-WSR wishes to thank William Leijenaar, PE1RAH for this week's report]
[04242006]
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/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)

* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/amsat/listserv/menu.html

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

```
From 258761643263963572
X-Google-Thread: 10e8ad,9a712c4b3be38d55
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news4.google.com!border1.nntp.dca.giganews.com!
border2.nntp.dca.giganews.com!nntp.giganews.com!atl-c08.usenetserver.com!
news.usenetserver.com!pc02.usenetserver.com!FUSE.NET-a2kHrUvQQWlmc!not-for-mail
Message-ID: <44824FDD.70001@fuse.net>
Date: Sat, 03 Jun 2006 23:13:33 -0400
From: jawod <jawod@fuse.net>
User-Agent: Mozilla Thunderbird 1.0.2 (Macintosh/20050317)
X-Accept-Language: en-us, en
MIME-Version: 1.0
Newsgroups: rec.radio.amateur.space
Subject: Re: WSR-149 AMSAT Weekly Satellite Report
References: <cYnfg.9952$y4.2096@newsread2.news.pas.earthlink.net>
In-Reply-To: <cYnfg.9952$y4.2096@newsread2.news.pas.earthlink.net>
Content-Type: text/plain; charset=ISO-8859-1; format=flowed
Content-Transfer-Encoding: 7bit
X-Complaints-To: abuse@usenetserver.com
Organization: UseNetServer.com
Lines: 16
X-Trace: 3f6c444825012e098318606450
Xref: g2news2.google.com rec.radio.amateur.space:257
```

Hi,

Just found this group. Newly acquired license 2 months ago. I haven't done ham radio in about 30 years (!)

I recently came across a web page about an amateur satellite of some sort destined for MARS (as in the planet). This confused me. Given the tremendous cost of a mission to Mars, how would an amateur radio payload be justified? More importantly, what would be it's mission?

Have I been misled? Is there such a plan...or interest?

John
AB8WH
>
>

```
From 8657004113391824925
X-Google-Thread: 10e8ad,9a712c4b3be38d55
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news2.google.com!news.germany.com!multikabel.net!
feed20.multikabel.net!news2.euro.net!62.58.50.20.MISMATCH!nntpfeed.zonnet.nl!
newsfeeder.wxs.nl!divide.nova.planet.nl!posting.nova.planet.nl!not-for-mail
Date: Sun, 04 Jun 2006 07:34:19 +0200
From: Roland <roland_lemmersZPEMM@planet.nl>
User-Agent: Mozilla Thunderbird 1.0 (Windows/20041206)
X-Accept-Language: en-us, en
MIME-Version: 1.0
Newsgroups: rec.radio.amateur.space
Subject: Re: WSR-149 AMSAT Weekly Satellite Report
References: <cYnfg.9952$y4.2096@newsread2.news.pas.earthlink.net>
<44824FDD.70001@fuse.net>
In-Reply-To: <44824FDD.70001@fuse.net>
Content-Type: text/plain; charset=ISO-8859-1; format=flowed
Content-Transfer-Encoding: 7bit
Lines: 21
Message-ID: <448270be$0$2028$ba620dc5@text.nova.planet.nl>
NNTP-Posting-Host: 84.84.0.196
X-Trace: 1149399230 text.nova.planet.nl 2028 84.84.0.196:10030
X-Complaints-To: abuse@planet.nl
Xref: g2news2.google.com rec.radio.amateur.space:258
```

jawod wrote:
> Hi,> Have I been misled?

No doubt there. It's a conspiracy!!

Wait a sec!

Google: amsat + mars

Could that result be real?

http://www.amsat-dl.org/p5a/p5a-to-mars.pdf

Also check out:
http://www.amsat.org

New dimensions have been added to amateur radio while you've been away!
Welcome back and have fun!

Roland

```
From 4948138908642893065
X-Google-Thread: 10e8ad,e11d0541ca511c72,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news3.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!local01.nntp.dca.giganews.com!nntp.comcast.com!
news.comcast.com.POSTED!not-for-mail
NNTP-Posting-Date: Sun, 04 Jun 2006 04:24:53 -0500
From: "Tim H" <ka8ddz@hotmail.com>
Newsgroups: rec.radio.amateur.space
Subject: Q. about VHF downlink
Date: Sun, 4 Jun 2006 05:22:52 -0400
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.2180
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.2180
X-RFC2646: Format=Flowed; Original
Message-ID: <wsCdncMW_eV4Ox_ZnZ2dneKdnZydnZ2d@comcast.com>
Lines: 14
NNTP-Posting-Host: 68.61.30.164
X-Trace: sv3-4rCJRtT2bs2zgEBRollBu1PPmgTHc0PSGEEZijDgfrk9/
bPZmvg0I5xUV93rmIPWkJ9gORSUPN6TSSZ!
eygqZ7mYRbMwYa7KjkZdJ3Elx4p46Z3IiQvn6wh4JJ0XCm3sV1QfThiDNOO01s0Q4w07U26ggcCn!
wNw8URx+/F5U
X-Complaints-To: abuse@comcast.net
X-DMCA-Complaints-To: dmca@comcast.net
X-Abuse-and-DMCA-Info: Please be sure to forward a copy of ALL headers
X-Abuse-and-DMCA-Info: Otherwise we will be unable to process your complaint
properly
X-Postfilter: 1.3.32
Xref: g2news2.google.com rec.radio.amateur.space:259
```

Have not played space radio since RS-10 with my Ramsey 2m transmitter and a 10m receiver so help me get back on board.

ISS packet was very strong here this morning in EN82, into the HT and duck, since the repeater is on the same freq am I ok to transmit on 435.8 if I am hearing packet activity?
Is it all modes all the time or is it in FM repeater mode during certain

schedules. I can't find any details on when modes are on or off.

Thanks,

Tim KA8DDZ

From 4788252543898547384
X-Google-Thread: 10e8ad,e11d0541ca511c72
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news3.google.com!newshub.sdsu.edu!elnk-nf2-pas!newsfeed.earthlink.net!stamper.news.pas.earthlink.net!newsread4.news.pas.earthlink.net.POSTED!3dd4ce4a!not-for-mail
Newsgroups: rec.radio.amateur.space
Subject: Re: Q. about VHF downlink
From: Slow Code <my.mail@no.spam>
References: <wsCdncMW_eV4Ox_ZnZ2dneKdnZydnZ2d@comcast.com>
Organization: None
User-Agent: Xnews/5.04.25
Lines: 22
Message-ID: <d4Jgg.9082$921.7949@newsread4.news.pas.earthlink.net>
Date: Sun, 04 Jun 2006 22:24:09 GMT
NNTP-Posting-Host: 4.254.226.113
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread4.news.pas.earthlink.net 1149459849 4.254.226.113 (Sun, 04 Jun 2006 15:24:09 PDT)
NNTP-Posting-Date: Sun, 04 Jun 2006 15:24:09 PDT
Xref: g2news2.google.com rec.radio.amateur.space:260

"Tim H" <ka8ddz@hotmail.com> wrote in news:wsCdncMW_eV4Ox_ZnZ2dneKdnZydnZ2d@comcast.com:

> Have not played space radio since RS-10 with my Ramsey 2m transmitter
> and a 10m receiver so help me get back on board.
>
> ISS packet was very strong here this morning in EN82, into the HT and
> duck, since the repeater is on the same freq am I ok to transmit on
> 435.8 if I am hearing packet activity?
> Is it all modes all the time or is it in FM repeater mode during certain
> schedules. I can't find any details on when modes are on or off.
>
> Thanks,
>
> Tim KA8DDZ

www.amsat.org

Click on ariss.

sc

```
From 9072634044579669983
X-Google-Thread: 10e8ad,9a712c4b3be38d55
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news2.google.com!news4.google.com!
border1.nntp.dca.giganews.com!nntp.giganews.com!newscon06.news.prodigy.com!
newscon02.news.prodigy.com!prodigy.net!atl-c08.usenetserver.com!
news.usenetserver.com!pc02.usenetserver.com!FUSE.NET-a2kHrUvQQWlmc!not-for-mail
Message-ID: <44836CDB.1090008@fuse.net>
Date: Sun, 04 Jun 2006 19:29:31 -0400
From: jawod <jawod@fuse.net>
User-Agent: Mozilla Thunderbird 1.0.2 (Macintosh/20050317)
X-Accept-Language: en-us, en
MIME-Version: 1.0
Newsgroups: rec.radio.amateur.space
Subject: Re: WSR-149 AMSAT Weekly Satellite Report
References: <cYnfg.9952$y4.2096@newsread2.news.pas.earthlink.net>
<44824FDD.70001@fuse.net> <448270be$0$2028$ba620dc5@text.nova.planet.nl>
In-Reply-To: <448270be$0$2028$ba620dc5@text.nova.planet.nl>
Content-Type: text/plain; charset=ISO-8859-1; format=flowed
Content-Transfer-Encoding: 7bit
X-Complaints-To: abuse@usenetserver.com
Organization: UseNetServer.com
Lines: 39
X-Trace: de6de44836d0fe098318611727
Xref: g2news2.google.com rec.radio.amateur.space:261

Roland wrote:
> jawod wrote:
>
>> Hi,> Have I been misled?
>
>
>
> No doubt there. It's a conspiracy!!
>
> Wait a sec!
>
> Google: amsat + mars
>
> Could that result be real?
>
> http://www.amsat-dl.org/p5a/p5a-to-mars.pdf
>
> Also check out:
> http://www.amsat.org
>
> New dimensions have been added to amateur radio while you've been away!
> Welcome back and have fun!
>
```

> Roland
Roland,

Thanks for the leads. You know, I did google a few times over the last
few weeks.

I guess I was thinking "old school" in that I was imagining individual
hams accessing the satellite. It looks more like a few large parabolic
antennae around the world linked to the internet.

I'd like to see a 20 meter dish pass local codes and development
restrictions.

We need a new kind of residential development: SETI Hills.

John

From 4276803165208972052
X-Google-Thread: 10e8ad,9a712c4b3be38d55
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news3.google.com!news4.google.com!newshub.sdsu.edu!
logbridge.uoregon.edu!nntp-server.caltech.edu!news.ucr.edu!not-for-mail
From: P2PDude <fileSharing@is.good>
Newsgroups: rec.radio.amateur.space
Subject: Re: WSR-149 AMSAT Weekly Satellite Report
Date: Tue, 6 Jun 2006 20:02:11 +0000 (UTC)
Organization: high speed dsl
Lines: 6
Sender: jnels001@66-215-241-64.dhcp.rvsd.ca.charter.com
Message-ID: <Xns97DA849BF6C21FileSharingisgood@138.23.226.125>
References: <cYnfg.9952$y4.2096@newsread2.news.pas.earthlink.net>
<44824FDD.70001@fuse.net> <448270be$0$2028$ba620dc5@text.nova.planet.nl>
<44836CDB.1090008@fuse.net>
NNTP-Posting-Host: 66-215-241-64.dhcp.rvsd.ca.charter.com
X-Trace: glue.ucr.edu 1149624131 26303 66.215.241.64 (6 Jun 2006 20:02:11 GMT)
X-Complaints-To: abuse@ucr.edu
NNTP-Posting-Date: Tue, 6 Jun 2006 20:02:11 +0000 (UTC)
User-Agent: Xnews/5.04.25
Xref: g2news2.google.com rec.radio.amateur.space:262

I have to wonder if there ever were a mission to launch an amateur satelite
to Mars, what massive kinds of dishes would be required to both receive
it's signal and uplink a signal to it?
and I wonder if we'd be able to hear a satelite from Mars on any HF or
vhf/uhf frequency? Interesting thought.
73 de KD6CAE

From 7907838540730670049
X-Google-Thread: 10e8ad,9a712c4b3be38d55
X-Google-Attributes: gid10e8ad,public

X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news4.google.com!border1.nntp.dca.giganews.com!
border2.nntp.dca.giganews.com!nntp.giganews.com!novia!newsfeed.icl.net!
newsfeed.freenet.de!newsfeed.kamp.net!newsfeed.kamp.net!news.germany.com!
feed.xsnews.nl!feeder.xsnews.nl!feeder1.cambrium.nl!feed.tweaknews.nl!
62.58.50.20.MISMATCH!nntpfeed.zonnet.nl!newsfeeder.wxs.nl!divide.nova.planet.nl!
posting.nova.planet.nl!not-for-mail
Date: Tue, 06 Jun 2006 23:03:18 +0200
From: Roland <roland_lemmersZPEMM@planet.nl>
User-Agent: Mozilla Thunderbird 1.0 (Windows/20041206)
X-Accept-Language: en-us, en
MIME-Version: 1.0
Newsgroups: rec.radio.amateur.space
Subject: Re: WSR-149 AMSAT Weekly Satellite Report
References: <cYnfg.9952$y4.2096@newsread2.news.pas.earthlink.net>
<44824FDD.70001@fuse.net> <448270be$0$2028$ba620dc5@text.nova.planet.nl>
<44836CDB.1090008@fuse.net> <Xns97DA849BF6C21FileSharingisgood@138.23.226.125>
In-Reply-To: <Xns97DA849BF6C21FileSharingisgood@138.23.226.125>
Content-Type: text/plain; charset=ISO-8859-1; format=flowed
Content-Transfer-Encoding: 7bit
Lines: 9
Message-ID: <4485ed76$0$2014$ba620dc5@text.nova.planet.nl>
NNTP-Posting-Host: 84.84.0.196
X-Trace: 1149627766 text.nova.planet.nl 2014 84.84.0.196:10214
X-Complaints-To: abuse@planet.nl
Xref: g2news2.google.com rec.radio.amateur.space:263

P2PDude wrote:
> I have to wonder if there ever were a mission to launch an amateur satelite
> to Mars, what massive kinds of dishes would be required to both receive
> it's signal and uplink a signal to it?
> and I wonder if we'd be able to hear a satelite from Mars on any HF or
> vhf/uhf frequency? Interesting thought.
> 73 de KD6CAE

http://www.southgatearc.org/news/april2006/voyager1.htm

From -4070056622262418762
X-Google-Thread: 10e8ad,590e9b264114b99c,start
X-Google-Thread: 113975,590e9b264114b99c,start
X-Google-Attributes: gid10e8ad,gid113975,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news4.google.com!news.glorb.com!feed.xsnews.nl!
feeder.xsnews.nl!68.142.88.75.MISMATCH!hwmnpeer01.ams!news.highwinds-media.com!
newsrouter-eu.astraweb.com!news.astraweb.com!router1.astraweb.com!not-for-mail
From: Chris Steyaert <observations@rmob.org>
Newsgroups: rec.radio.amateur.space,sci.astro.amateur
Subject: Radio Meteor Obs. Bull. May 2006
Date: Tue, 06 Jun 2006 23:25:22 +0200
Message-ID: <5lsb82h8pfrfugjs2qonv4tjocipoehhsp@4ax.com>
X-Newsreader: Forte Agent 1.93/32.576 English (American)
MIME-Version: 1.0

Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Lines: 16
Organization: Unlimited download news at news.astraweb.com
NNTP-Posting-Host: 77157313.news.astraweb.com
X-Trace: DXC=[>oP0io:gW0<MO_7`o`AH2L?
0kYOcDh@:H[iM^\ln3a5k2hI^4ECLA>KX07\YZ`QZ6>kKbShZS^X4HnAZ5@UZLd=
Xref: g2news2.google.com rec.radio.amateur.space:264 sci.astro.amateur:28573

Radio Meteor Observation Bulletin No. 154 of May 2006 (80 K) is available now as

http://visualrmob.free.fr/rmobtext/rmob0605.txt

More information and the visual presentation of the hourly forward scatter
counts can be found on

http://www.rmob.org

http://radio.data.free.fr

Chris

From 8141343034744510138
X-Google-Thread: 10e8ad,9a712c4b3be38d55
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news3.google.com!border1.nntp.dca.giganews.com!
border2.nntp.dca.giganews.com!nntp.giganews.com!atl-c08.usenetserver.com!
news.usenetserver.com!pc03.usenetserver.com!FUSE.NET-a2kHrUvQQWlmc!not-for-mail
Message-ID: <44876B4F.1060206@fuse.net>
Date: Wed, 07 Jun 2006 20:11:59 -0400
From: jawod <jawod@fuse.net>
User-Agent: Mozilla Thunderbird 1.0.2 (Macintosh/20050317)
X-Accept-Language: en-us, en
MIME-Version: 1.0
Newsgroups: rec.radio.amateur.space
Subject: Re: WSR-149 AMSAT Weekly Satellite Report
References: <cYnfg.9952$y4.2096@newsread2.news.pas.earthlink.net>
<44824FDD.70001@fuse.net> <448270be$0$2028$ba620dc5@text.nova.planet.nl>
<44836CDB.1090008@fuse.net> <Xns97DA849BF6C21FileSharingisgood@138.23.226.125>
<4485ed76$0$2014$ba620dc5@text.nova.planet.nl>
In-Reply-To: <4485ed76$0$2014$ba620dc5@text.nova.planet.nl>
Content-Type: text/plain; charset=ISO-8859-1; format=flowed
Content-Transfer-Encoding: 7bit
X-Complaints-To: abuse@usenetserver.com
Organization: UseNetServer.com
Lines: 8
X-Trace: 9f4a244876b85e098318625969

Xref: g2news2.google.com rec.radio.amateur.space:265

>
>
> http://www.southgatearc.org/news/april2006/voyager1.htm

Interesting. The article mentions a 20M antenna. Somehow I don't think we're talking dipole. Perhaps I could camouflage a 20 meter dish into a wading pool when the neighbors come over.

From 5227396150196612285
X-Google-Thread: 10e8ad,64abcbc2715f3e04,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII
Path: g2news2.google.com!news3.google.com!newshub.sdsu.edu!elnk-nf2-pas!newsfeed.earthlink.net!stamper.news.pas.earthlink.net!newsread2.news.pas.earthlink.net.POSTED!46041641!not-for-mail
From: "JoAnne Maenpaa" <wb9jej_no-spam@earthling.com>
Newsgroups: rec.radio.amateur.space
Subject: ANS-155 AMSAT News Service Weekly Bulletin
Lines: 515
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <6yXhg.3154$o4.1038@newsread2.news.pas.earthlink.net>
Date: Thu, 08 Jun 2006 15:40:50 GMT
NNTP-Posting-Host: 68.165.57.17
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread2.news.pas.earthlink.net 1149781250 68.165.57.17 (Thu, 08 Jun 2006 08:40:50 PDT)
NNTP-Posting-Date: Thu, 08 Jun 2006 08:40:50 PDT
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news2.google.com rec.radio.amateur.space:266

AMSAT NEWS SERVICE
ANS-155

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

******************** AMSAT 2006 Space Symposium **************************

The AMSAT web team has posted informational pages on the AMSAT web site. You can find the announcement with many links at:

http://www.amsat-org/amsat-new/symposium

The Call for Papers for the 2006 Symposium can found at:
http://www.amsat.org/amsat-new/symposium/2006CallForPapers.php

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In this edition:

* Mass Amateur Radio Satellite Launch Planned for June 28
* Two Special Events on AO-51 in June
* US Naval Academy Satellite Lab Student Demos Coming in June
* AO-27 In Eclipse Season
* There's Still Time to Enter the SuitSat Chicken Little Contest
* Deadline Approaches for AMSAT-NA Board of Directors Nominations
* Delfi-C3 CubeSat Team Provides Update on Their Next Satellite
* ARISS Status May 29, 2006
* SatPC32 Version 12.5 Released

SB SAT @ AMSAT $ANS-155.01
Mass Amateur Radio Satellite Launch Planned for June 28

AMSAT News Service Bulletin 155.01
From AMSAT HQ SILVER SPRING, MD.
June 4, 2006
To All RADIO AMATEURS
BID: $ANS-155.01

This week Trevor, M5AKA published information about the thirteen Amateur Radio Satellites will be launched on June 28, 2006 on a DNEPR-1LV rocket from the Kazakstan Baikonur Cosmodrome in what will be the largest ever deployment of Amateur Radio Satellites. A fourteenth satellite will operate on commercial frequencies.

The satellites will be put into a 500 by 566 km orbit with an inclination of 97 degrees. Each satellite is a 10cm cube weighing just 1kg into which is packed the battery, transmitter and the various experiments.

Twelve of the satellites have downlinks in the Amateur Radio Satellite Service allocation between 435 and 438 MHz and one will operate on 145.950 MHz so there will be lots of signals to listen out for after launch. Frequency coordination was done by the International Amateur Radio Union (IARU). Hans, ZS6AKV serves as the IARU Amateur Satellite Advisor and leads a panel of experts which assists in frequency coordination and provide advice to satellite builders. More information about the IARU Satellite Frequency Coordination process can be found on-line at http://www.iaru.org/satellite/.

Further information on the Dnepr Launch 1 can be seen at:
http://littonlab.atl.calpoly.edu/

One of the CubeSats to be launched is known as SEEDS. Built by students at the Nihon-University it contains a CW beacon, Digi-Talker and other experiments.

After launch SEEDS will operate a CW beacon on 437.485 MHz using the callsign JQ1YGU. The Digi-Talker experiment will be activated later. The builders say they look forward to receiving reports and data from the satellite from Amateur Radio operators and SWL's all over the world.

Ralph, W�RPK, maintains a web page with up-to-date CubeSat status at:
http://showcase.netins.net/web/wallio/CubeSat.htm

The 28 June CubeSat launch manifest, summarized below, is from Ralph's web page. Please refer to the web pages for detailed information.

```
Satellite:  ICEcube1 - Cornell University (USA)
Callsign:   W2CXM
Downlink:   437.305 MHz (600mW)
Format:     9600bps FM FSK AX.25

More Info:  http://www.mae.cornell.edu/cubesat/
-----

Satellite:  ICEcube2 - Cornell University (USA)
Callsign:   N2VR
Downlink:   437.425 MHz (0.6W)
Format:     9600bps FM FSK AX.25

More Info:  http://www.mae.cornell.edu/cubesat/
-----

Satellite:  ION - University of Illinois (USA)
Callsign:   TBA
Downlink:   437.505 MHz (2W)
Format:     1200bps FM AFSK AX.25 ~5min Beacon Interval

More Info:  http://courses.ece.uiuc.edu/cubesat/
            http://www.interave.net/cubesat/Formal_Documentation/
            ION_Overview.pdf (careful with the line wrap)
-----

Satellite:  PolySat CP1 - California Polytechnic State University (USA)
Callsign:   N6CP
Downlink:   436.845 MHz (500mW)
Format:     15bps DTMF & CW (both FM)

More Info:  http://polysat.calpoly.edu/
-----

Satellite:  PolySat CP2 - California Polytechnic State University (USA)
Callsign:   Unknown
Downlink:   437.325 MHz (1W)
Format:     1200bps FM AFSK AX.25, CW beacon
```

```
More Info:  http://polysat.calpoly.edu/
-----

Satellite:  AeroCube1 - The Aerospace Corporation
Callsign:   Not Amateur Radio
Downlink:   902-928 MHz (2W)
Format:     9600bps GFSK

More Info:  http://www.aero.org/
-----

Satellite:  HAUSAT-1 - Hankuk Aviation University (South Korea)
Callsign:   D90HP
Downlink:   437.465 MHz (500mW)
Format:     1200bps FM AFSK AX.25, CW ID Beacon

More Info:  http://134.75.55.85/new_version/english/hausat_1/index.php
            Telemetry Information
            http://134.75.55.85/new_version/english/hausat_1/
            hau1_telemetry_info.php (careful with the line wrap)
-----

Satellite:  nCUBE-1 - The nCUBE Project (four universities - Norway)
Callsign:   LA1CUB
Downlink:   437.305 MHz (1W EIRP)
Format:     9600bps GMSK AX.25, Digipeating possible
CW ID:      "LA1CUB Ncube1 Norwegian Cubesat www.ncube.no"

More Info:  http://www.ncube.no/
-----

Satellite:  SEEDS - Nihon University (Japan)
Callsign:   JQ1YGU
Downlink:   437.485 MHz  (450mW)
Format:     Digitalker, 1200bps FM AFSK AX.25, CW (90mW)

More Info:  http://cubesat.aero.cst.nihon-u.ac.jp/english/main_e.html
            http://cubesat.aero.cst.nihon-u.ac.jp/english/operation_e.html
-----

Satellite:  KUTESat Pathfinder - University of Kansas
Callsign:   KC�RMW
Downlink:   437.385 MHz (500mW)
Format:     1200bps FM AFSK AX.25

More Info:  http://www.engr.ku.edu/ae/kutesat.htm
-----

Satellite:  MEROPE - Montana State University (USA)
Callsign:   K7MSU-01
Downlink:   145.980 MHz (500mW)
Format:     1200bps FM AFSK
```

More Info: http://www.ssel.montana.edu/merope/
http://www.ssel.montana.edu/merope/ham/

Satellite: RINCON - University of Arizona (USA)
Callsign: WA4CEW
Downlink: 436.870 MHz (400 mW) Main Transmitter
Format: 1200 bps AFSK AX.25
Downlink: 437.345 MHz (10 mW) Beacon Transmitter
Format: 1200 bps PSK AX.25

More Info: http://cubesat.arizona.edu/rincon_sat/
Cubesat II Operating System Owner's Manual
http://bach.as.arizona.edu/~cubesat/cubesat_manual/index.html
-----

Satellite: SACRED - University of Arizona (USA)
Callsign: WA4CEW
Downlink: 436.870 MHz (400mW)
Format: 1200bps FM AFSK AX.25

More Info: http://cubesat.arizona.edu/sacred_sat/

Satellite: Mea Huaka'i (Voyager) - University of Hawaii (USA)
Callsign: Unknown
Downlink: 437.405 MHz (500mW)
5.840 GHz (1mW)
Format: 1200bps FM AFSK AX.25

More Info: http://www-ee.eng.hawaii.edu/~cubesat/

[ANS thanks Trevor, M5AKA; Ralph, W�RPK; and the CubeSat teams
for the above information]

/EX

SB SAT @ AMSAT $ANS-155.02
Two Special Events on AO-51 in June

AMSAT News Service Bulletin 155.02
From AMSAT HQ SILVER SPRING, MD.
June 4, 2006
To All RADIO AMATEURS
BID: $ANS-155.02

Mike, KE4AZN, Amsat VP-Operations, and Echo Command Station reminds AO-51 users of two special events on this satellite during June.

The first event will be Kid's Day on AO-51 on June 17, 2006. This event is open to all kids, worldwide. We ask all amateur radio stations to give this short time window to promote satellite operations with kids, by actually showing a kid how to make contacts via AO-51, providing a station to contact, or stepping aside to allow others to make contacts with the kids. During the Kid's Day event, please limit contacts to stations that are operating with kids at the microphone.

AO-51 will be configured in the following mode during Kid's Day. Please note we will use the normal AO-51 uplink frequency for the event with the PL tone will be turned ON.

Uplink: 145.920 mhz FM voice 67 Hz PL Tone
Downlink: 435.300 mhz FM voice
The digital transponder on 435.150 will be turned off.

See http://www.arrl.org/FandES/ead/kd-rules.html on the ARRL website for more Kids Day information.

Next, starting on June 19 AO-51 will be in the Field Day Configuration to give stations time to test their gear before the June 24-25 event.

FM Repeater ON - Uplink   145.920 mHz FM with 67 hz Tone
                  Downlink 435.300 mHz FM

QRP Repeater ON - Uplink   145.880 mHz FM, QRP Power Limits
                  Downlink 435.150 mHz FM

More details regarding the main repeater and the QRP repeater will be published prior to Field Day 2006.

[ANS thanks Mike, KE4AZN, Echo Command Station for the above information]

/EX

SB SAT @ AMSAT $ANS-155.03
US Naval Academy Satellite Lab Student Demos Coming in June

AMSAT News Service Bulletin 155.03
From AMSAT HQ SILVER SPRING, MD.
June 4, 2006
To All RADIO AMATEURS
BID: $ANS-155.03

Bob, WB4APR says he and his USNA Satellite Lab team will be doing satellite operating demonstrations every Monday, Tuesday, and Wednesday starting on June 5. Planned operating hours are between 0800 to 1200 and 1330 to 1530 EDT. These demos will be for hundreds of high school students who will be visiting the US Naval Academy during the first three weeks of June.

[ANS thanks Bob, WB4APR for the above information]

/EX

SB SAT @ AMSAT $ANS-155.04
AO-27 In Eclipse Season

AMSAT News Service Bulletin 155.04
From AMSAT HQ SILVER SPRING, MD.
June 4, 2006
To All RADIO AMATEURS
BID: $ANS-155.04

The AO-27 Command Team reminds users who have been looking for this satellit that AO-27 is in its eclipse season. This means the batteries are dropping below the watchdog values and turning off the scheduler software.

The Command Team needs to reset it each time it happens. Everyone that has watched AO-27 go thru this period before should remember this procedure. This is not an indication that AO-27 is approaching end of life. It has been running this way for years. Please be patient until we get back into full sun.

AO-27 takes a bunch of work to keep flying. We are coming up on 14 years on orbit in September, well past what any of us expected when we launched it.

[ANS thanks the AO-27 Command Team for the above information]

/EX

SB SAT @ AMSAT $ANS-155.05
There's Still Time to Enter the SuitSat Chicken Little Contest

AMSAT News Service Bulletin 155.05
From AMSAT HQ SILVER SPRING, MD.
June 4, 2006
To All RADIO AMATEURS
BID: $ANS-155.05

Frank, KA3HDO, who is the ARISS International Chairman and AMSAT's V.P. for Human Spaceflight Programs reminds everyone of the SuitSat "Chicken Little" contest to guess the date when SuitSat-1 will re-enter the atmosphere. There are three entry categories: Grades K-8, Grades 9-12 and adult. Certificates will be provided to winners of each group. The last date to enter the contest is July 1.

For more information, please go to:
http://www.amsat.org/amsat-new/ariss/suitsatContest.php

The ARISS team thanks Emily Clarke, N1DID, for setting this up.

[ANS thanks Frank, KA3HDO for the above information]

/EX

SB SAT @ AMSAT $ANS-155.06
Deadline Approaches for AMSAT-NA Board of Directors Nominations

AMSAT News Service Bulletin 155.06
From AMSAT HQ SILVER SPRING, MD.
June 4, 2006
To All RADIO AMATEURS
BID: $ANS-155.06

It is time to submit nominations for the upcoming open seats on the AMSAT-NA Board of Directors. A nomination requires either one Member Society or five current individual members to noninate an AMSAT member for the position. A director serves for a period of two years. Three directors' terms expire this year: Tom Clark, K3IO, Lou McFadin, W5DID, and Paul Shuch, N6TX. Written nominations must be received at the AMSAT office no later than 12 June 2006.

Nominations MUST be in writing and mailed to:
AMSAT
850 Sligo Ave #600
Silver Spring, MD 20901

[ANS thanks the AMSAT Journal for the above information]

/EX

SB SAT @ AMSAT $ANS-155.07
Delfi-C3 CubeSat Team Provides Update on Their Next Satellite

AMSAT News Service Bulletin 155.07
From AMSAT HQ SILVER SPRING, MD.
June 4, 2006
To All RADIO AMATEURS
BID: $ANS-155.07

This week, Wouter Jan Ubbels, PE4WJ, the Delfi-C3 Project Manager Electronic Systems and Communications at the Delft University of Technology in The Netherlands sent information about the next satellite being designed at the University.

Delfi-C3 is based on a three-unit CubeSat. Its primary mission objective will be, besides being an educational one, a technology demonstration of three novel payloads. It will also include a Mode U-V Amateur Radio linear transponder with 40kHz bandpass running 400mW PEP.

Telemetry decoding software will be made available to amateur radio operators and universities which will allow them to decode and display near real time telemetry.

Delfi-C3 will have a 1200 Baud AX.25 BPSK downlink so they plan to include the possibility of using the soundcard to decode the telemetry instead of having the need for a separate hardware PSK modem. This software is planned to allow for a data upload to the central Delfi-C3 ground station via the Internet for data processing.

The satellite will be in telemetry mode for the first three months of the mission, after which it will be switched to transponder mode. At present breadboards and prototype hardware are being produced. The University aims for a launch in 2007.

The Delfi-C3 team is planning to attend the AMSAT-UK colloquium this year where they will give a presentation on the progress of the project. You can find more information on Delfi-C3 at their website:
http://www.delfic3.nl

/EX

SB SAT @ AMSAT $ANS-155.08
ARISS Status May 29, 2006

AMSAT News Service Bulletin 155.08
From AMSAT HQ SILVER SPRING, MD.
June 4, 2006
To All RADIO AMATEURS
BID: $ANS-155.08

1. Virgilio Primary School Contact Successful
On Monday, May 22, fifteen students at the Virgilio Primary School in Mestre, Venice, Italy spoke with astronaut Jeff Williams, KD5TVQ. Fifteen questions were asked and answered as approximately 250 students and teachers looked on. Several media outlets covered the event, including television stations RAI 3 Veneto, Antenna 3, Televenezia, and Canale 5, and Il Gazzettino and La Nuova Mestre/Venezia newspapers.

2. School Contacts
The ARISS contact with Salt Brook Elementary School in New Providence, New Jersey was unsuccessful on Wednesday, May 31. To be rescheduled at a later date.

Scarlett Middle School, a NASA Explorer School, in Ann Arbor, Michigan has been scheduled for a contact on Tuesday, June 6. The event will be publicized electronically. Media coverage may include the Ann Arbor News and local radio stations: WUOM, WEMU and WAAM. Arrow Communications, the local Amateur Radio club, will coordinate and promote the event with the local newspaper and area television stations.

3. Crew Debrief Held
On May 24, the ARISS-U.S. team participated in a crew debrief with Bill McArthur, KC5ACR. Bill's overall impression of the ARISS program was

positive.

4. ARISS Delegates Give Talks at Hamvention

ARISS Delegates Frank Bauer and Rosalie White participated in a joint presentation entitled, "ARISS and SuitSat: Current Status and Future Opportunities," at the Dayton Hamvention 2006 AMSAT Forum. Rosalie also gave two talks, "10 Million Hits Tracking an Empty Russian Space Suit" at the ARRL Expo 2006 in Dayton on May 19 and 20.

5. SuitSat Man - a Big Hit at the Dayton Hamvention!

Dressed in a spacesuit labeled "SuitSat-2", Russell Hummel, WB4PGT, a member of the Medical Informatics and Technology Applications Consortium (MITAC), a NASA partnership, made an appearance at the Dayton Hamvention 2006. His attire was well received by hams as they await the re-entry of SuitSat-1 into the earth's atmosphere, and created enthusiasm as the amateur radio community looks forward to SuitSat-2 development planning and potential launch in 2007. A photo can be seen on the ARRL blog: http://www.arrl.org/blog/Dayton%202006

6. McArthur Receives Worked All States Award

Several ARISS members attended Space Center Houston on Thursday, May 25 to hear Bill McArthur, KC5ACR, speak about his time aboard the ISS. ARISS Chairman and AMSAT V.P. for Human Spaceflight Programs, Frank Bauer, KA3HDO, took the opportunity to present a plaque to Bill for his honorary Worked All States award, having contacted amateur radio stations from all 50 states during his Expedition 12 mission.

[ANS thanks Carol, KB3LKI for the above information]

/EX

SB SAT @ AMSAT $ANS-155.09
SatPC32 Version 12.5 Released

AMSAT News Service Bulletin 155.09
From AMSAT HQ SILVER SPRING, MD.
June 4, 2006
To All RADIO AMATEURS
BID: $ANS-155.09

Erich Eichmann, DK1TB has released version 12.5 of his popular satellite tracking program SatPC32. The new version adds features and fixes bugs found in earlier versions. Erich has donated SatPC32 as a fund raiser for AMSAT-NA, AMSAT-DL, and AMSAT-UK.

The program can be downloaded from the author's web site:
http://www.dk1tb.de/downloadeng.htm

The downloaded version is a demo version that requires the user to enter their lat/lon every time they start the program. The program can be made fully functional by purchasing a registration code from the AMSAT store: http://www.amsat-na.com/category.php?c=Software

Presently the only way to get version 12.5 is to download it until AMSAT can offer the version 12.5 on CD.

Existing SatPC32 users may upgrade to version 12.5 for free. Use your existing registration password. Contact, Wayne, W9AE via e-mail at [his-callsign at amsat dot org] if you purchased an earlier CD that did not come with a registration password.

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM

```
From -5235956760942598847
X-Google-Thread: 10e8ad,198eefe00265ddd7,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news3.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!wns14feed!worldnet.att.net!207.217.77.102!elnk-nf2-pas!
newsfeed.earthlink.net!stamper.news.pas.earthlink.net!
newsread2.news.pas.earthlink.net.POSTED!46041641!not-for-mail
From: "JoAnne Maenpaa" <wb9jej_no-spam@earthling.com>
Newsgroups: rec.radio.amateur.space
Subject: WSR-156 AMSAT Weekly Satellite Report
Lines: 1042
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <8yXhg.3155$o4.639@newsread2.news.pas.earthlink.net>
Date: Thu, 08 Jun 2006 15:40:52 GMT
NNTP-Posting-Host: 68.165.57.17
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread2.news.pas.earthlink.net 1149781252 68.165.57.17 (Thu, 08 Jun
2006 08:40:52 PDT)
NNTP-Posting-Date: Thu, 08 Jun 2006 08:40:52 PDT
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news2.google.com rec.radio.amateur.space:267
```

This report is organized into 4 parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites

Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites

SB SAT @ AMSAT W8ISS ANS-156.S1
WSR 156 Part 1 06/05/2006

AMSAT NEWS SERVICE BULLETIN 156.S1 FROM AMSAT HQ
SILVER SPRING, MD, June 05, 2006
TO ALL RADIO AMATEURS
BID: $ANS-156.S1

VO-52 HAMSAT
Catalog Number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/V - Indian Transponder

Proposed frequencies:

Indian Transponder:
Uplink : 435.220 MHz to 435.280 MHz LSB/CW
Downlink: 145.870 MHz to 145.930 MHz USB/CW
Beacom : 145.859330 MHZ CW

Dutch Transponder:
Uplink : 435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW
Beacon : 145.860MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsat.in/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is
active. Each transponder has a different beacon.
[04242006]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Current Mode(s): FM Repeater - V/U
Digipeater - ON - 9K6, V/U

Analog voice downlink: 435.300 MHz FM
         435.150 MHz FM
                       2401.200 Mhz FM
Analog voice uplink: 145.880 MHZ FM

145.880 MHz USB
145.920 MHz FM 67Hz PL tone
1268.700 MHz FM 67Hz PL tone
Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast Protocol
1268.700 mhz FM, 9k6 PBP Digital
Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Mode schedule for April 2006 according to Drew, KO4MA:

June 5
FM Repeater
Downlink 435.300 mHz FM
Uplink 145.920 mHz FM with 67 hz Tone

Digital / PBBS
Downlink 435.150 mHz FM 9k6 Digital
Uplink 145.860 mHz FM 9k6 Digital
PBBS Active
Telemetry Downlink Active

June 12
FM Repeater High Power
Downlink 435.300 mHz FM
Uplink 145.920 mHz FM with 67 hz Tone

June 17 Kid's Day Special Event
Please observe the Kid's Day Requirements allowing contacts with Kid's Only.

June 19 Field Day Configuration
FM Repeater
Downlink 435.300 mHz FM
Uplink 145.920 mHz FM with 67 hz Tone

FM Repeater with QRP Requirements
Downlink 435.150 mHz FM
Uplink 145.880 mHz FM, QRP Power Limits

June 26
FM Repeater
Downlink 435.300 mHz FM

```
  Uplink 145.920 mHz FM with 67 hz Tone

Digital / PBBS
  Downlink 435.150 mHz FM 9k6 Digital
  Uplink 145.860 mHz FM 9k6 Digital
  PBBS Active
  Telemetry Downlink Active

Official Webpage: http://www.amsat.org/amsat-new/echo/
[06052006]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Uplink: 145.850 MHz (67.0 Hz PL tone) (See below for operating
procedures)
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The
order of operation is thus: (allow for Doppler as necessary)
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute
timer
   on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the
repeater
   on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset
the 10
   minute timer.
[04172006]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: OPERATIONAL

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz
```

Digital Mode JD
Uplink: 145.850 145.870 145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

unOfficial Webpage: http://www.amsat.org/amsat/sats/n7hpr/fo29.html
[11132005]

=====

AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Uplink: 145.850 MHz FM
Downlink: 436.795 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[01012006]

=====

AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational depending on amount of Sunlight
Current Reported mode: Mode-A

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
   432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
  145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
  145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz
  145.972 MHz
  435.100 MHz
 2304.100 MHz

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php
The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
AO-7 users are requested to log their contacts and observations about
AO-7, especially any unexpected mode changes.
AO-07 telemetry software webpage:

http://www.qsl.net/k3tz/files/K3TZ_AO-07_Telemetry_Decoder_0.5.zip

Please keep your power low! For additional information please read the AO-7
Usage Guidelines on the AO-7 Log and Resource Site located at:
http://www.planetemily.com/ao7
[04242006]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: Packet - Mode V
Digipeater: ON

The current crew is:
Commander: Pavel Vinogradov, RV3BS
Flight Engineer: Jeff Williams, KD5TVQ

Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Russian: RS0ISS, RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official Webpage: http://www.rac.ca/ariss
Official Fan club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line is
NOT translated from Russian and posted.
[05222006]

NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-156.S2
WSR 156 Part 2 06/05/2006

AMSAT NEWS SERVICE BULLETIN 156.S2 FROM AMSAT HQ
SILVER SPRING, MD, June 05, 2006
TO ALL RADIO AMATEURS
BID: $ANS-156.S2

CO-58 XI-V
Catalog Number: 28895
Launch Date: October 27, 2005

Status: Operational only within range of Ground station in Japan

Telemetry Downlink: 437.345MHz - FSK 1200bps using AFK protocol
Beacon Downlink: 437.465MHz - CW about 50 WPM

Callsign: JQ1YGW

Oficial Webpage: http://www.space.t.u-tokyo.ac.jp/gs/satinfo-e.html#xi5
Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
[03122006]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: Packet - Mode V
Digipeater: ON

The current crew is:
Commander: Pavel Vinogradov, RV3BS
Flight Engineer: Jeff Williams, KD5TVQ

Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:

V: Linear
U: Linear

Callsigns:
Russian: RS0ISS, RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official Webpage: http://www.rac.ca/ariss
Official Fan club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is NOT translated from Russian and posted.
[05222006]
=====
PCSAT-2
Catalog Number: 25544
Launch Date: August 1, 2005

Activated: August 3, 2005
Status: Operational
Current Mode: Digipeater / XBAUD (PSK31/CW Repeater)

Digital Downlink: 435.275 Mhz
Digital Uplink: 145.825 Mhz

PSK-31 Downlink: 435.275 Mhz
PSK-31 Uplink: 29.401 Mhz

CALLSIGN: pcsat2

Official Webpage: http://web.usna.navy.mil/~bruninga/pcsat2.html
PCSAT2 APRS Packet page: http://www.findu.com/cgi-bin/pcsat2.cgi
aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/

Bob, WB4APR, reports that the Xbaud - PSK31/CW repeater experiment has been activated. Bob reports that you need to connect to pcsat2 and then you can tranmit on 29.401 Mhz and listen on 435.275 for your signal. Reports are that you will probably need at least 100+ watts of power on 10m to make it work.
Currently, Henk, PA3GUO, has tried with only a 100 watts and a dipole without any luck so far.
[ANS-WSR wishes to thank Bob, WB4APR, and Henk, PA3GUO, for this weeks info]

```
[05082006]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Mode(s): FM Repeater - V/U
Digipeater - ON - 9K6, V/U

Analog voice downlink: 435.300 MHz FM
         435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink:   145.880 MHZ FM
         145.880 MHz USB
         145.920 MHz FM 67Hz PL tone
        1268.700 MHz FM 67Hz PL tone
Digital Downlinks:     435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
        2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:        145.860 MHz FM, 9k6 Digital, Pacsat Broadcast
Protocol
                      1268.700 mhz FM, 9k6 PBP Digital
Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Mode schedule for April 2006 according to Drew, KO4MA:

June 5
FM Repeater
  Downlink 435.300 mHz FM
  Uplink 145.920 mHz FM with 67 hz Tone

Digital / PBBS
  Downlink 435.150 mHz FM 9k6 Digital
  Uplink 145.860 mHz FM 9k6 Digital
  PBBS Active
  Telemetry Downlink Active

June 12
FM Repeater High Power
  Downlink 435.300 mHz FM
  Uplink 145.920 mHz FM with 67 hz Tone

June 17 Kid's Day Special Event
  Please observe the Kid's Day Requirements allowing
  contacts with Kid's Only.

June 19 Field Day Configuration
FM Repeater
  Downlink 435.300 mHz FM
  Uplink 145.920 mHz FM with 67 hz Tone

FM Repeater with QRP Requirements
  Downlink 435.150 mHz FM
  Uplink 145.880 mHz FM, QRP Power Limits

June 26
FM Repeater
  Downlink 435.300 mHz FM
  Uplink 145.920 mHz FM with 67 hz Tone

Digital / PBBS
  Downlink 435.150 mHz FM 9k6 Digital
  Uplink 145.860 mHz FM 9k6 Digital
  PBBS Active
  Telemetry Downlink Active

Official Webpage: http://www.amsat.org/amsat-new/echo/
[06052006]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Operational

General Usage Uplink/Downlink:145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org
aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[04172006]
=====
CO-55 CUTE-1.7
Catalog number: 28941
Launched: June 30,2003

Status: Operational

Uplink: ?
Downlink: 437.3850 CW
          437.4700 1200 FM ax25 or SRLL (ACTIVE only near Japan ? )
Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[05012006]
=====
GO-32 TECHSAT-1B
```

Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks: 145.850 FM
         145.890 FM
         145.930 FM
        1269.700 FM
        1269.800 FM
        1269.900 FM
Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[05012006]
=====
RS-22 Mozhayets 4
Catalog Number: 27939
Launch Date: September 27, 2004

Status: Operational

Beacon: 435.3520 MHz CW
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Semi-operational, the digipeater command is on and open for APRS users.

Uplink: 145.900 FM
        145.920 FM
        145.940 FM
        145.960 FM
(using 1200-baud Manchester FSK)
Downlink: 437.026 MHz SSB (1200-baud PSK)
Mode-S Beacon: 2401.1428 MHz

Mode and Antenna Polarization:
U: RC 437.050 MHz RHCP
   PSK 437.025 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[04172006]

=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational?

Telemetry Downlink: 145.826 MHz. FM (1200-baud AFSK).
approx. 10 days ON, 10 days OFF
Mode-S Beacon: 2401.500 MHz. ... OFF
UHFBeacon: 435.025 MHz. ... OFF

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Official webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[05292006]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-156.S3
WSR 156 Part 3 06/05/2006

AMSAT NEWS SERVICE BULLETIN 156.S3 FROM AMSAT HQ
SILVER SPRING, MD, June 05, 2006
TO ALL RADIO AMATEURS
BID: $ANS-156.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

AO-54 SUITSAT
Catalog Number:28933
Release Date: February 3,2006

Status: Non-operational
Modes : FM Voice Telemetry/Greetings
 FM SSTV

Callsign: RS0RS
Downlink: 145.990 FM

Currently on the amsat-bb, there is a geussing game going on about when
Suitsat will re-enter the atmosphere.

Official webpage: http://www.suitsat.org
[05012006]

=====
NCUBE-2
Catalog Number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog Number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 FM 67Hz CTCSS
Voice Downlink: 2401.835 FM
Packet Up/Downlink: 437.250 9k6 packet
Packet Downlink 2401.835 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01292006]
=====
TO-31 TMSAT-1
Catalog Number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink: 145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
PO-28 POSAT-1
Catalog Number: 22829
Launch Date: September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 429.950

Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html.
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html

```
[01012006]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launched: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB
Beacon: 145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: Downlink only

Uplink: 145.875 145.900 145.925 145.950 MHz FM (1200-baud)
Downlink: 435.808 MHz PSK
Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01012006]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB
Beacon: 29.408 MHz
Robot: 29.454 MHz
[05232004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB
Beacon: 145.860 MHz
Robot: 145.908 MHz
```

```
[05232004]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink 145.975 MHz FM
Downlink 435.070 MHz FM
[05092004]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink: 145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM
Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01092005]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational?

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB
Beacon: 29.352 MHz (intermittent)
SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplink: 145.84 145.86 145.88 145.90 MHz FM
(using 1200-baud Manchester FSK)
CW downlink: 437.125 MHz
Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)
Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[05232004]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[08152004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM
Broadcast Callsign: HLO1-11
BBS: HLO1-12

Jim, AA7KC, reports that KO-23's downlink transmitter continues in a
non-operational status.
[05092004]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM (9600-baud FSK)
Downlink: 436.500 MHz FM
Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
```

Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm

[ANS-WSR has no further information]
[05232004]

=====
SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

STatus: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz and 145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[08082004]

=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlink: 437.025 MHz 437.400 MHz
Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[05092004]

=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplink V-band 145.840 - 145.990 MHz CW/LSB
U-band 435.550 - 435.800 MHz CW/LSB
L1-band 1269.250 - 1269.500 MHz CW/LSB
L2-band 1268.325 - 1268.575 MHz CW/LSB
Downlink: S2-band 2401.225 - 2401.475 MHz CW/USB
K-band 24,048.010 - 24,048.060 MHz CW/USB
Beacon: 2401.323
24,048.035
[05232004]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational
Downlink: 437.075 MHz
Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[08152004]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz
Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[08152004]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, callsign KE6QMD, as per the user service agreement located at the following

URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]

=====

MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Operational

Uplink: 145.850 or 145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz
Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial
land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a
collaborative effort between the Malaysian government and Surrey Satellite
Technology Ltd.
[11202005]

=====

AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink 435.275 1200-baud AFSK
Downlink 145.825 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01012006]

=====

DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink: Downlink 145.825 MHz FM 1200 Baud AFSK
Beacon: 2401.220 MHz
[05012006]

=====

WO-18 WEBERSAT
Catalog Number: 20441

Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-156.S4
WSR 156 Part 4 06/05/2006

AMSAT NEWS SERVICE BULLETIN 156.S4 FROM AMSAT HQ
SILVER SPRING, MD, June 05, 2006
TO ALL RADIO AMATEURS
BID: $ANS-156.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE
PROPOSED FOR LAUNCH AT THIS TIME:

PHASE 3E ?O-??
Catalog Number:
Proposed Launch Date: Early/Mid 2007

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/
[ANS-WSR wishes to thank William Leijenaar, PE1RAH for this week's report]
[04242006]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/amsat/listserv/menu.html

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

From 2588246686824278962
X-Google-Thread: 10e8ad,58544752164d084f,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news4.google.com!news2.volia.net!news-out.ntli.net!newsrout1-gui.ntli.net!ntli.net!news.highwinds-media.com!newspeer1-win.ntli.net!newsfe4-win.ntli.net.POSTED!53ab2750!not-for-mail
From: jj <web@hotmail.com>
Newsgroups: rec.radio.amateur.space
Subject: space shuttle video
Message-ID: <727092919ld3bl90uvlmtu8mmjhhec7m0q@4ax.com>
X-Newsreader: Forte Agent 2.0/32.652
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Lines: 5
Date: Wed, 14 Jun 2006 14:31:28 GMT
NNTP-Posting-Host: 81.111.123.6
X-Trace: newsfe4-win.ntli.net 1150295488 81.111.123.6 (Wed, 14 Jun 2006 15:31:28

BST)
NNTP-Posting-Date: Wed, 14 Jun 2006 15:31:28 BST
Organization: NTL
Xref: g2news2.google.com rec.radio.amateur.space:268

could you please help,
i am looking for video clips of any sts missions in particular launch/landing
yes i know there plenty on nsas site but i can only view them i want clips that i can save and insert them into a slide show

From -7801567198782923985
X-Google-Thread: 10e8ad,67bcc0ed20cb7653,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news4.google.com!news.glorb.com!newshub.sdsu.edu!elnk-nf2-pas!newsfeed.earthlink.net!stamper.news.pas.earthlink.net!newsread3.news.pas.earthlink.net.POSTED!46041641!not-for-mail
From: "JoAnne Maenpaa" <wb9jej_no-spam@earthling.com>
Newsgroups: rec.radio.amateur.space
Subject: WSR-163 AMSAT Weekly Satellite Report
Lines: 1020
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <vzWjg.5775$lp.1482@newsread3.news.pas.earthlink.net>
Date: Wed, 14 Jun 2006 16:12:11 GMT
NNTP-Posting-Host: 68.164.231.203
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread3.news.pas.earthlink.net 1150301531 68.164.231.203 (Wed, 14 Jun 2006 09:12:11 PDT)
NNTP-Posting-Date: Wed, 14 Jun 2006 09:12:11 PDT
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news2.google.com rec.radio.amateur.space:269

This report is organized into 4 parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites

SB SAT @ AMSAT W8ISS ANS-163.S1
WSR 163 Part 1 06/12/2006

AMSAT NEWS SERVICE BULLETIN 163.S1 FROM AMSAT HQ
SILVER SPRING, MD, June 12, 2006
TO ALL RADIO AMATEURS
BID: $ANS-163.S1

VO-52 HAMSAT
Catalog Number: 28650

Launch Date: May 05,2005

Status: Operational
Current Mode: U/V - Indian Transponder

Proposed frequencies:

Indian Transponder:
Uplink : 435.220 MHz to 435.280 MHz LSB/CW
Downlink: 145.870 MHz to 145.930 MHz USB/CW
Beacon : 145.859330 MHZ CW

Dutch Transponder:
Uplink : 435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW
Beacon : 145.860MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsat.in/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is
active. Each transponder has a different beacon.
[04242006]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Current Mode(s): FM Repeater - V/U HIGH POWER with tone
Digipeater - OFF

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.880 MHZ FM
145.880 MHz USB
145.920 MHz FM 67Hz PL tone
1268.700 MHz FM 67Hz PL tone
Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast
Protocol
1268.700 mhz FM, 9k6 PBP Digital
Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP

L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Mode schedule for April 2006 according to Drew, KO4MA:

June 12
FM Repeater High Power
  Downlink 435.300 mHz FM
  Uplink 145.920 mHz FM with 67 hz Tone

June 17 Kid's Day Special Event
  Please observe the Kid's Day Requirements allowing
  contacts with Kid's Only.

June 19 Field Day Configuration
FM Repeater
  Downlink 435.300 mHz FM
  Uplink 145.920 mHz FM with 67 hz Tone

FM Repeater with QRP Requirements
  Downlink 435.150 mHz FM
  Uplink 145.880 mHz FM, QRP Power Limits

June 26
FM Repeater
  Downlink 435.300 mHz FM
  Uplink 145.920 mHz FM with 67 hz Tone

Digital / PBBS
  Downlink 435.150 mHz FM 9k6 Digital
  Uplink 145.860 mHz FM 9k6 Digital
  PBBS Active
  Telemetry Downlink Active

Official Webpage: http://www.amsat.org/amsat-new/echo/
[06122006]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Uplink: 145.850 MHz (67.0 Hz PL tone) (See below for operating
procedures)
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

```
Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The
order of operation is thus: (allow for Doppler as necessary)
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute
timer
   on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the
repeater
   on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset
the 10
   minute timer.
[04172006]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: OPERATIONAL

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplink: 145.850 145.870 145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

unOfficial Webpage: http://www.amsat.org/amsat/sats/n7hpr/fo29.html
[11132005]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Uplink: 145.850 MHz FM
Downlink: 436.795 MHz FM

Mode and Antenna Polarization:
V: Linear
```

U: Linear

Official Webpage: http://www.ao27.org
[01012006]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational depending on amount of Sunlight
Current Reported mode: Mode-A

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
   432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
  145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
  145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz
  145.972 MHz
  435.100 MHz
 2304.100 MHz

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php
The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
AO-7 users are requested to log their contacts and observations about
AO-7, especially any unexpected mode changes.
AO-07 telemetry software webpage:
http://www.qsl.net/k3tz/files/K3TZ_AO-07_Telemetry_Decoder_0.5.zip

Please keep your power low! For additional information please read the
AO-7
Usage Guidelines on the AO-7 Log and Resource Site located at:
http://www.planetemily.com/ao7
[04242006]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: Packet - Mode V / Occasional Voice
Digipeater: ON

The current crew is:
Commander: Pavel Vinogradov, RV3BS
Flight Engineer: Jeff Williams, KD5TVQ

Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Russian: RS0ISS, RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official Webpage: http://www.rac.ca/ariss
Official Fan club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.
[06122006]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-163.S2
WSR 163 Part 2 06/12/2006

AMSAT NEWS SERVICE BULLETIN 163.S2 FROM AMSAT HQ
SILVER SPRING, MD, June 12, 2006
TO ALL RADIO AMATEURS
BID: $ANS-163.S2

CO-58 XI-V
Catalog Number: 28895
Launch Date: October 27, 2005

Status: Operational only within range of Ground station in Japan

Telemetry Downlink: 437.345MHz - FSK 1200bps using AFK protocol
Beacon Downlink: 437.465MHz - CW about 50 WPM

Callsign: JQ1YGW

Oficial Webpage: http://www.space.t.u-tokyo.ac.jp/gs/satinfo-e.html#xi5
Pictures received by Mineo Wakita - JE9PEL:

http://www.ne.jp/asahi/hamradio/je9pel/
[03122006]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: Packet - Mode V / Occasinal Voice
Digipeater: ON

The current crew is:
Commander: Pavel Vinogradov, RV3BS
Flight Engineer: Jeff Williams, KD5TVQ

Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Russian: RS0ISS, RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official Webpage: http://www.rac.ca/ariss
Official Fan club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is NOT translated from Russian and posted.
[06122006]
=====
PCSAT-2
Catalog Number: 25544
Launch Date: August 1, 2005

Activated: August 3, 2005

Status: Operational
Current Mode: Digipeater / XBAUD (PSK31/CW Repeater)

Digital Downlink: 435.275 Mhz
Digital Uplink: 145.825 Mhz

PSK-31 Downlink: 435.275 Mhz
PSK-31 Uplink: 29.401 Mhz

CALLSIGN: pcsat2

Official Webpage: http://web.usna.navy.mil/~bruninga/pcsat2.html
PCSAT2 APRS Packet page: http://www.findu.com/cgi-bin/pcsat2.cgi
aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/

Bob, WB4APR, reports that the Xbaud - PSK31/CW repeater experiment has been activated. Bob reports that you need to connect to pcsat2 and then you can tranmit on 29.401 Mhz and listen on 435.275 for your signal. Reports are that you will probably need at least 100+ watts of power on 10m to make it work. Currently, Henk, PA3GUO, has tried with only a 100 watts and a dipole without any luck so far.
[ANS-WSR wishes to thank Bob, WB4APR, and Henk, PA3GUO, for this weeks info]
[05082006]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Mode(s): FM Repeater - V/U HIGH POWER with Tone
Digipeater - OFF

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.880 MHZ FM
145.880 MHz USB
145.920 MHz FM 67Hz PL tone
1268.700 MHz FM 67Hz PL tone
Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast Protocol
1268.700 mhz FM, 9k6 PBP Digital
Mode and Antenna Polarization:
T: Linear

V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Mode schedule for April 2006 according to Drew, KO4MA:

June 12
FM Repeater High Power
  Downlink 435.300 mHz FM
  Uplink 145.920 mHz FM with 67 hz Tone

June 17 Kid's Day Special Event
  Please observe the Kid's Day Requirements allowing
  contacts with Kid's Only.

June 19 Field Day Configuration
FM Repeater
  Downlink 435.300 mHz FM
  Uplink 145.920 mHz FM with 67 hz Tone

FM Repeater with QRP Requirements
  Downlink 435.150 mHz FM
  Uplink 145.880 mHz FM, QRP Power Limits

June 26
FM Repeater
  Downlink 435.300 mHz FM
  Uplink 145.920 mHz FM with 67 hz Tone

Digital / PBBS
  Downlink 435.150 mHz FM 9k6 Digital
  Uplink 145.860 mHz FM 9k6 Digital
  PBBS Active
  Telemetry Downlink Active

Official Webpage: http://www.amsat.org/amsat-new/echo/
[06122006]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Operational

General Usage Uplink/Downlink:145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

```
aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[04172006]
=====
CO-55 CUTE-1.7
Catalog number: 28941
Launched: June 30,2003

Status: Operational

Uplink: ?
Downlink: 437.3850 CW
          437.4700 1200 FM ax25 or SRLL (ACTIVE only near Japan ? )
Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[05012006]
=====
GO-32 TECHSAT-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks: 145.850 FM
         145.890 FM
         145.930 FM
        1269.700 FM
        1269.800 FM
        1269.900 FM
Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[05012006]
=====
RS-22 Mozhayets 4
Catalog Number: 27939
Launch Date: September 27, 2004

Status: Operational

Beacon: 435.3520 MHz CW
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Semi-operational, the digipeater command is on and open for
APRS users.
```

Uplink: 145.900 FM
145.920 FM
145.940 FM
145.960 FM
(using 1200-baud Manchester FSK)
Downlink: 437.026 MHz SSB (1200-baud PSK)
Mode-S Beacon: 2401.1428 MHz

Mode and Antenna Polarization:
U: RC 437.050 MHz RHCP
PSK 437.025 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[04172006]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational?

Telemetry Downlink: 145.826 MHz. FM (1200-baud AFSK).
approx. 10 days ON, 10 days OFF
Mode-S Beacon: 2401.500 MHz. ... OFF
UHFBeacon: 435.025 MHz. ... OFF

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Official webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[05292006]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-163.S3
WSR 163 Part 3 06/12/2006

AMSAT NEWS SERVICE BULLETIN 163.S3 FROM AMSAT HQ
SILVER SPRING, MD, June 12, 2006
TO ALL RADIO AMATEURS
BID: $ANS-163.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

AO-54 SUITSAT
Catalog Number:28933
Release Date: February 3,2006

```
Status: Non-operational
Modes : FM Voice Telemetry/Greetings
 FM SSTV

Callsign: RS0RS
Downlink: 145.990 FM

Currently on the amsat-bb, there is a geussing game going on about when
Suitsat will re-enter the atmosphere.

Official webpage: http://www.suitsat.org
[05012006]
=====
NCUBE-2
Catalog Number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency:  437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog Number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 FM 67Hz CTCSS
Voice Downlink: 2401.835 FM
Packet Up/Downlink: 437.250 9k6 packet
Packet Downlink 2401.835 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01292006]
=====
TO-31 TMSAT-1
Catalog Number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink:   145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
```

[05012006]
=====
PO-28 POSAT-1
Catalog Number: 22829
Launch Date: September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 429.950

Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html.
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012006]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launched: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB
Beacon: 145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: Downlink only

Uplink: 145.875 145.900 145.925 145.950 MHz FM (1200-baud)
Downlink: 435.808 MHz PSK
Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01012006]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

```
Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB
Beacon: 29.408 MHz
Robot: 29.454 MHz
[05232004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB
Beacon: 145.860 MHz
Robot: 145.908 MHz
[05232004]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink 145.975 MHz FM
Downlink 435.070 MHz FM
[05092004]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink: 145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM
Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01092005]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational?

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB
Beacon: 29.352 MHz (intermittent)
SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
```

=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplink: 145.84 145.86 145.88 145.90 MHz FM
(using 1200-baud Manchester FSK)
CW downlink: 437.125 MHz
Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)
Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[05232004]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[08152004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM
Broadcast Callsign: HLO1-11
BBS: HLO1-12

Jim, AA7KC, reports that KO-23's downlink transmitter continues in a non-operational status.
[05092004]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM (9600-baud FSK)
Downlink: 436.500 MHz FM
Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm

[ANS-WSR has no further information]
[05232004]
=====
SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

STatus: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz and 145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[08082004]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

```
Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlink: 437.025 MHz 437.400 MHz
Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site
at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[05092004]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplink V-band   145.840 - 145.990 MHz CW/LSB
       U-band   435.550 - 435.800 MHz CW/LSB
       L1-band 1269.250 - 1269.500 MHz CW/LSB
       L2-band 1268.325 - 1268.575 MHz CW/LSB
Downlink: S2-band 2401.225 - 2401.475 MHz CW/USB
          K-band 24,048.010 - 24,048.060 MHz CW/USB
Beacon:   2401.323
         24,048.035
[05232004]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational
Downlink: 437.075 MHz
Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[08152004]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz
Broadcast Callsign: SASAT1-11
BBS: SASAT1-12
```

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[08152004]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, callsign KE6QMD, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Operational

Uplink: 145.850 or 145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz
Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[11202005]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink 435.275 1200-baud AFSK
Downlink 145.825 9600-baud FSK

(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink: Downlink 145.825 MHz FM 1200 Baud AFSK
Beacon: 2401.220 MHz
[05012006]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
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SB SAT @ AMSAT W8ISS $ANS-163.S4
WSR 163 Part 4 06/12/2006

AMSAT NEWS SERVICE BULLETIN 163.S4 FROM AMSAT HQ
SILVER SPRING, MD, June 12, 2006
TO ALL RADIO AMATEURS
BID: $ANS-163.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE PROPOSED FOR LAUNCH AT THIS TIME:

PHASE 3E ?O-??
Catalog Number:
Proposed Launch Date: Early/Mid 2007

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/
[ANS-WSR wishes to thank William Leijenaar, PE1RAH for this week's report]
[04242006]
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ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/amsat/listserv/menu.html

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
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From 7684999856468895717

X-Google-Thread: 10e8ad,61f86ec5587372ea,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news4.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!newshub.sdsu.edu!elnk-nf2-pas!newsfeed.earthlink.net!
stamper.news.pas.earthlink.net!newsread3.news.pas.earthlink.net.POSTED!46041641!
not-for-mail
From: "JoAnne Maenpaa" <wb9jej_no-spam@earthling.com>
Newsgroups: rec.radio.amateur.space
Subject: ANS-162 AMSAT News Service Weekly Bulletins
Lines: 269
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <uBWjg.5776$lp.1871@newsread3.news.pas.earthlink.net>
Date: Wed, 14 Jun 2006 16:14:18 GMT
NNTP-Posting-Host: 68.164.231.203
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread3.news.pas.earthlink.net 1150301658 68.164.231.203 (Wed, 14 Jun 2006 09:14:18 PDT)
NNTP-Posting-Date: Wed, 14 Jun 2006 09:14:18 PDT
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news2.google.com rec.radio.amateur.space:270

AMSAT NEWS SERVICE
ANS-162

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* Plan for AO-51 Kid's Day on June 17
* ARISS In Crossband Repeater Mode for Field Day
* 21st Amsat-UK Colloquium-Second Call for Speakers
* 2006 ARRL/TAPR Digital Communications Conference-Call for Papers
* ARISS Status - 05 June 2006

SB SAT @ AMSAT $ANS-162.01
Plan for AO-51 Kid's Day on June 17

AMSAT News Service Bulletin 162.01
From AMSAT HQ SILVER SPRING, MD.
June 11, 2006
To All RADIO AMATEURS

BID: $ANS-162.01

Mike, KE4AZN, Amsat VP-Operations, and Echo Command Station says AMSAT-NA, the AO-51 Command Team, and the AO-51 Operations Team will sponsor Kid's Day on AO-51 on June 17, 2006.

The event is open to all kids, worldwide. We ask all amateur radio stations to give this short time window to promote satellite operations with kids, by actually showing a kid how to make contacts via AO-51, providing a station to contact, or stepping aside to allow others to make contacts with the kids.

During the event, please limit contacts to stations that are operating with kids at the microphone. This should allow the kids to have a nice QSO and pass some information. Kids can tell their name, age, who is helping them operate on AO-51, where they live, and other information about themselves.

AO-51 will be configured in the following mode during the event. Please note we will use the normal AO-51 uplink frequency for the event with the PL tone will be turned ON.

Uplink: 145.920 mhz FM voice 67 Hz PL Tone
Downlink: 435.300 mhz FM voice

The digital transponder on 435.150 will be turned off during the event.

See http://www.arrl.org/FandES/ead/kd-rules.html on the ARRL website for more Kids Day information.

[ANS thanks Mike, KE4AZN, Echo Command Station for the above information]

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SB SAT @ AMSAT $ANS-162.02
ARISS In Crossband Repeater Mode for Field Day

AMSAT News Service Bulletin 162.02
From AMSAT HQ SILVER SPRING, MD.
June 11, 2006
To All RADIO AMATEURS
BID: $ANS-162.02

The ARISS Phase 2 station will be configured in crossband repeater mode--437.800 MHz up/145.800 MHz down, but it's being requested that **ONLY** low-power (QRP) Earth stations access the system. The definition of a QRP station for this activation will be the same criteria that AMSAT is using for its QRP operations on ECHO (AO-51) for Field Day.

AO-51 ECHO/ISS LOW POWER STATION (QRP) REQUIREMENTS:

To attempt to keep this simple a low power station will be defined as a station which can deliver no more than 10 watts to a vertical or handheld antenna. Some examples of Low Power Stations:

1. Using an HT (barefoot, no amplifier) with 10 watts or less output into any type of vertical whip antenna (rubber duck, etc) or handheld beam antenna (arrow type).

2. Using a mobile station with 10 watts or less output into car mounted mobile whip antenna(s).

3. Using a base station at 10 watts output into a vertical Omni directional antenna on the side of the house.

Examples that are **NOT** Low Power Stations:
1. Any type of high gain beam antenna, KLM, M2, Cushcraft, etc.

2. Any station transmitting over 10 watts into any type of antenna.

The crossband repeater should be activated Thursday, June 22 (late in the crew day) so ground operators can have a chance to practice with their QRP setups and learn how best to deal with the Doppler on the uplink. It will be deactivated on Monday as required for the docking of the Progress cargo supply ship.

If Jeff Williams (KD5TVQ) and/or Pavel Vinogradov (RV3BS) do get a chance to talk on the radio, they will be using the crossband repeater mode and will be giving "NA1SS, 1 Alpha, ISS" or "RS0ISS, 1Alpha, ISS" respectively.

REMINDER - Contacts through the ISS crossband repeater count as a satellite contact for Field Day bonus points, but contacts with the crew do not count for Field Day satellite bonus points.

[ANS thanks Ken, N5VHO, for the above information]

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SB SAT @ AMSAT $ANS-162.03
21st Amsat-UK Colloquium-Second Call for Speakers

AMSAT News Service Bulletin 162.03
 From AMSAT HQ SILVER SPRING, MD.
June 11, 2006
To All RADIO AMATEURS
BID: $ANS-162.03

This is the second call for speakers for the 21st Amsat-UK Colloquium, which will be held at Surrey University, Guildford, Surrey, U.K., from Friday 28 July to Sunday 30 July 2006.

Amsat-UK invite speakers, about amateur radio space and associated activities, for this event.

Offers of talks should be submitted as soon as possible. Submissions should be sent *ONLY* to David Johnson, G4DPZ, via the following routes:

Internet e-mail: g4dpz@amsat.org
SnailMail: QTHR from http://www.qrz.com

AMSAT-UK also invite anyone with requests for Program Topics to submit them as soon as possible to G4DPZ. Likewise if anyone knows of a good speaker, please send contact and other information to G4DPZ.

Additionally, Amsat-UK will be running sessions specifically for Beginners to amateur satellite operating on the Friday; volunteers are wanted to speak at these sessions.

For details of the Colloquium, please visit:

http://www.uk.amsat.org/Colloquium

You can also book you place at the colloquium on the web site.

[ANS thanks Dave, G4DPZ, for the above information]

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SB SAT @ AMSAT $ANS-162.04
2006 ARRL/TAPR Digital Communications Conference-Call for Papers

AMSAT News Service Bulletin 162.04
From AMSAT HQ SILVER SPRING, MD.
June 11, 2006
To All RADIO AMATEURS
BID: $ANS-162.04

Technical papers are solicited for presentation at the 25th Annual ARRL and TAPR Digital Communications Conference to be held September 15-17, 2006 in Tucson, Arizona. These papers will also be published in the Conference Proceedings (you do NOT need to attend the conference to have your paper included in the Proceedings). The submission deadline is July 31, 2006. Please send papers to:

Maty Weinberg
ARRL
225 Main St
Newington, CT 06111

or you can make your submission via e-mail to: maty@arrl.org

Papers will be published exactly as submitted and authors will retain all rights.

[ANS thanks Steve, WB8IMY, for the above information]

/EX

SB SAT @ AMSAT $ANS-162.05
ARISS Status - 05 June 2006

AMSAT News Service Bulletin 162.05
From AMSAT HQ SILVER SPRING, MD.
June 11, 2006
To All RADIO AMATEURS
BID: $ANS-162.05

1. Salt Brook Elementary School Contact - Rescheduled

Salt Brook Elementary School in New Providence, New Jersey was scheduled for an ARISS contact on Wednesday, May 31. The school experienced technical difficulties and the contact did not take place. The rescheduled contact for Monday, June 5 at 13:53 UTC was successful.

2. ARRL Article on Virgilio Contact

ARRL ran a web story about the Virgilio Primary School contact in Mestre, Italy.
To view "Italian Primary Schoolers Get Front Row Seat to Space," go to:
http://www.arrl.org/news/stories/2006/05/31/100/?nc=1

3. ARRL Covers Award Ceremony

ARRL ran an article covering the award ceremony held at Space Center Houston where Bill McArthur, KC5ACR, received his Worked All States award. "ISS Astronaut Honored for Working all States, Inspiring Others from Space" may be found at:
http://www.arrl.org/news/stories/2006/06/01/103/?nc=1

4. ARISS Receives Group Achievement Award

In a ceremony held at Johnson Space Center, the Amateur Radio on the International Space Station team was presented with a JSC Group Achievement Award for the support provided during the Expedition 12 mission, which resulted in a record number of ARISS contacts performed. ISS Ham Payload Integration Manager, Kenneth Ransom, N5VHO, accepted the award on behalf of the team.

5. Expedition 13 Invited to Participate in Field Day 2006

Expedition 13 crew members have been invited to participate in ARRL's Field Day 2006 to be held over the June 24-25 weekend. Passes over the

U.S. may not be ideal for contacting the ISS, but it has been suggested to place the radio in crossband repeat mode and make it available for the QRP (low-power operating) community as defined by AMSAT guidelines.

6. NASA Features ARISS Contacts

NASA ran a story covering Bill McArthur's numerous ARISS contacts during Expedition 12, the support he received from the ARISS team and especially from ISS Ham Project Engineer Kenneth Ransom, N5VHO. The article, entitled, "Hamming It Up: Space to Kids Radio," may be found at:
http://www.nasa.gov/mission_pages/station/expeditions/expedition12/exp12_ham_radio.html

[ANS thanks Carol, KB3LKI for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73, This week's ANS Editor,
Lee McLamb, KU4OS

From -2821054007434763374
X-Google-Thread: 10e8ad,58544752164d084f
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,UTF8
Path: g2news2.google.com!news4.google.com!border1.nntp.dca.giganews.com!
border2.nntp.dca.giganews.com!nntp.giganews.com!peer01.cox.net!cox.net!p01!
dukeread11.POSTED!53ab2750!not-for-mail
From: "J S Austin, W8JSA" <w8jsa@w8jsa.org>
Organization: Amateur Radio Station W8JSA
User-Agent: Mozilla/5.0 (X11; U; Linux i686; en-GB; rv:1.7.13) Gecko/20060413 Red
Hat/1.7.13-1.4.1
X-Accept-Language: en-ca
MIME-Version: 1.0
Newsgroups: rec.radio.amateur.space
Subject: Re: space shuttle video
References: <727092919ld3bl90uvlmtu8mmjhhec7m0q@4ax.com>
In-Reply-To: <727092919ld3bl90uvlmtu8mmjhhec7m0q@4ax.com>
Content-Type: text/plain; charset=UTF-8
Content-Transfer-Encoding: quoted-printable
Lines: 17
Message-ID: <VKWjg.55436$9c6.47906@dukeread11>
Date: Wed, 14 Jun 2006 16:24:21 +0000

NNTP-Posting-Host: 70.161.151.51
X-Complaints-To: abuse@cox.net
X-Trace: dukeread11 1150302261 70.161.151.51 (Wed, 14 Jun 2006 12:24:21 EDT)
NNTP-Posting-Date: Wed, 14 Jun 2006 12:24:21 EDT
Xref: g2news2.google.com rec.radio.amateur.space:271

jj wrote:
> could you please help,
> i am looking for video clips of any sts missions in particular
> launch/landing
> yes i know there plenty on nsas site but i can only view them i want
> clips that i can save and insert them into a slide show =20

Try CNN or MSNBC.

--=20
J S AUSTIN, W8JSA
AMATEUR RADIO STATION W8JSA
CHESAPEAKE VA 23320
N36=CB=9A45'43=E2=80=9D W076=CB=9A15'01=E2=80=9D
FM16us

http://w8jsa.org/radio.html

From 3141686575349969249
X-Google-Thread: 10e8ad,58544752164d084f
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news4.google.com!newshub.sdsu.edu!elnk-nf2-pas!
newsfeed.earthlink.net!stamper.news.pas.earthlink.net!
newsread1.news.pas.earthlink.net.POSTED!3dd4ce4a!not-for-mail
Newsgroups: rec.radio.amateur.space
Subject: Re: space shuttle video
From: Radio Buff <my.mail@no.spam>
References: <727092919ld3bl90uvlmtu8mmjhhec7m0q@4ax.com>
<VKWjg.55436$9c6.47906@dukeread11>
Organization: None
User-Agent: Xnews/5.04.25
Lines: 19
Message-ID: <aW0kg.5844$lf4.5050@newsread1.news.pas.earthlink.net>
Date: Wed, 14 Jun 2006 23:25:58 GMT
NNTP-Posting-Host: 4.153.210.197
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread1.news.pas.earthlink.net 1150327558 4.153.210.197 (Wed, 14 Jun
2006 16:25:58 PDT)
NNTP-Posting-Date: Wed, 14 Jun 2006 16:25:58 PDT
Xref: g2news2.google.com rec.radio.amateur.space:272

"J S Austin, W8JSA" <w8jsa@w8jsa.org> wrote in
news:VKWjg.55436$9c6.47906@dukeread11:

> jj wrote:

>> could you please help,
>> i am looking for video clips of any sts missions in particular
>> launch/landing
>> yes i know there plenty on nsas site but i can only view them i want
>> clips that i can save and insert them into a slide show
>
> Try CNN or MSNBC.

Ask at sci.space.shuttle, A lot of people there have websites you can down load clips and photo from.

Also, if you can see the clip at nasa, just right click on the link and click save.

```
From -4212167851800966265
X-Google-Thread: 10e8ad,8915aec1932056ac,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII
Path: g2news2.google.com!news3.google.com!newshub.sdsu.edu!elnk-nf2-pas!
newsfeed.earthlink.net!stamper.news.pas.earthlink.net!
newsread3.news.pas.earthlink.net.POSTED!46041641!not-for-mail
From: "JoAnne Maenpaa" <wb9jej_no-spam@earthling.com>
Newsgroups: rec.radio.amateur.space
Subject: ANS-169 AMSAT News Service Weekly Bulletin
Lines: 478
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <f%lmg.73$ii.19@newsread3.news.pas.earthlink.net>
Date: Thu, 22 Jun 2006 01:03:07 GMT
NNTP-Posting-Host: 66.167.221.100
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread3.news.pas.earthlink.net 1150938187 66.167.221.100 (Wed, 21 Jun
2006 18:03:07 PDT)
NNTP-Posting-Date: Wed, 21 Jun 2006 18:03:07 PDT
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news2.google.com rec.radio.amateur.space:273
```

AMSAT NEWS SERVICE
ANS-169

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

******************** AMSAT 2006 Space Symposium ***************************

The AMSAT web team has posted informational pages on the AMSAT web site. You can find the announcement with many links at:
http://www.amsat-org/amsat-new/symposium

Details of the Space Symposium Call for Papers can be viewed at:
http://www.amsat.org/amsat-new/symposium/2006CallForPapers.php

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In this edition:

- EaglePedia is Now Open
- SSETI Moon Orbiter - Call for Proposals
- University of Illinois Provides Details of ION Cubesat
- AMSAT-UK Colloquium Draws ESA Support
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- AMSAT Awards This Week
- AMSAT Store Has New Items
- ARISS Status for the Week of June 12, 2006
- Multiple Cubesat Mission Launch Now Set for July 26

SB SAT @ AMSAT $ANS-169.01
EaglePedia is Now Open

AMSAT News Service Bulletin 169.01
From AMSAT HQ SILVER SPRING, MD.
June 18, 2006
To All RADIO AMATEURS
BID: $ANS-169.01

This week AMSAT EAGLE Project Manager Jim Sanford, WB4GCS, announced that EaglePedia is now open for general use.

EaglePedia is the communication medium used by the EAGLE developers, and is now accessible to all AMSAT members. A basic principle of the EAGLE project is open design, so Jim made the decision to open access to the EAGLE development effort once EaglePedia, a new effort itself, was judged to be ready for general use.

"The entire Eagle team has been enthusiastically supportive of openness to the members," said Jim. "We are excited to give all AMSAT members the opportunity to understand and to follow the design process of the various satellite components and systems".

Emily Clarke, N1DID has developed and customized the EaglePedia application using the MediaWiki software engine that was developed for Wikipedia. "I'd like to thank Emily for all her efforts. She has adapted the wiki product to our needs, educated the illiterati (mostly me) and added functions to make it easier for us to use. EaglePedia would not be the tool that it is, without tremendous effort on Emily's part, and

I am extremely grateful for all her work."

All major decisions about the space craft and their supporting documentation will be available through the site. Although only EAGLE team members will have the ability to comment on what is posted there, all will be able to see them.

Jim notes that, "There will be some areas of the site that are available only for internal EAGLE team communications during the preliminary development stages. I have made this decision to allow unfettered communications among the team during the early phases of concept refinement and design. Once peer review of a design is complete, the initial design, peer review comments, the resolution of those comments, and the revised and approved designs will all be available to AMSAT members."

Jim, the entire EAGLE team, and AMSAT President Rick Hambly encourage everyone interested in amateur satellites to take advantage of this 'new way of working' and to follow the EAGLE design process and developments. "We are excited about offering the unprecedented access into EAGLE's development. I fully expect this approach to enhance the EAGLE design process and improve overall product quality", said Rick.

EaglePedia can be accessed via the AMSAT.org front page using the EAGLE link in the 'Quick Access to Project Pages:' section in the top right of the page.

Welcome to open satellite design.

[ANS thanks Jim, WB4GCS for the above information]

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SB SAT @ AMSAT $ANS-169.02
SSETI Moon Orbiter - Call for Proposals

AMSAT News Service Bulletin 169.02
From AMSAT HQ SILVER SPRING, MD.
June 18, 2006
To All RADIO AMATEURS
BID: $ANS-169.02

The SSETI Association - Student Space Exploration & Technology Initiative, together with ESA - the European Space Agency, have just published a Call for Proposals for a Moon orbiter mission planned for launch around 2011.

The call is open to any University student or team from one of the ESA member states or one of the ESA cooperating states. The SSETO ESEO project, which is currently underway, already has at least three radio amateur students involved in addition to the AMSAT-UK team so it would be exciting if amateurs could become involved with the new lunar project.

The ESMO spacecraft would be launched in 2011 as an auxiliary payload into a highly elliptical, low inclination Geostationary Transfer Orbit (GTO) on the new Arianespace Support for Auxiliary Payloads (ASAP) by either Ariane 5 or Soyuz from Kourou. From GTO, the 200 kg spacecraft would use its on-board propulsion system for lunar transfer, lunar orbit insertion and orbit transfer to its final low altitude polar orbit around the Moon.

A 10 kg miniaturised suite of scientific instruments (also to be provided by student teams) would perform measurements during the lunar transfer and lunar orbit phases. The core payload would be a high-resolution narrow angle CCD camera for optical imaging of lunar surface. Optional payload items being considered include a sub-surface sounding radar for polar ice detection, and a Cubesat subsatellite for precision gravity field mapping via accurate ranging of the subsatellite from the main spacecraft.

Two different propulsion designs are being studied in parallel by the students:
 + one based on a hybrid solid/liquid propulsion system
 + one relying upon solar electric propulsion.

The deadline for submission of proposals to the SSETI association is 15th August 2006. The full document is available for download from the http://www.sseti.net website. This gives full details of the planned mission, its scientific aims and communications needs.

[ANS thanks Graham, G3VZV for the above information]

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SB SAT @ AMSAT $ANS-169.03
University of Illinois Provides Details of ION Cubesat

AMSAT News Service Bulletin 169.03
From AMSAT HQ SILVER SPRING, MD.
June 18, 2006
To All RADIO AMATEURS
BID: $ANS-169.03

Purvesh Thakker, the Program Manager of the Illinois Observing Nanosatellite (ION), provided additional details of this cubesat which will be launched on June 28, 2006.

The University of Illinois is looking for amateur radio operators who can listen for ION's beacon, which will begin transmission on 437.505 Mhz immediately after launch. The beacon is sent in plain text over AX.25 every 5 minutes. A TNC in monitoring in connectionless mode should be able to copy the beacon. Send beacon reports to cubesat@ece.uiuc.edu with your name/location, any data that you receive, time of contact, and signal strength.

The ION cubesat's scientific mission includes:

- An experiment to measure oxygen airglow emissions from the Earth's Mesosphere to helps scientists understand how energy transfers across large regions of the atmosphere.

- A new MicroVacuum Arc Thruster (�VAT) with high dynamic range. This will provide the satellite with a versatile low mass satellite propulsion system capable of lateral movement and finely controlling attitude.

- Testing of a new utilizing a Commercial Off the Shelf (COTS) processor that is radiation hardened through system design techniques.

- Testing of a small CMOS camera for Earth imaging.

- Testing of ground based attitude stabilization.

Interested amateurs are invited to subscribe to a low volume ION e-mail list by sending a message to:
cubesat-l-subscribe-request@listserv.uiuc.edu

The ION website can be found at: http://cubesat.ece.uiuc.edu

[ANS thanks Purvesh Thakker for the above information]

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SB SAT @ AMSAT $ANS-169.04
AMSAT-UK Colloquium Draws ESA Support

AMSAT News Service Bulletin 169.04
From AMSAT HQ SILVER SPRING, MD.
June 18, 2006
To All RADIO AMATEURS
BID: $ANS-169.04

AMSAT-UK's 2006 Colloquium, which is to be held from 28-30th July at the University of Surrey, Guildford, has attracted the support of the European Space Agency (ESA). The ESA Education Office have confirmed that they will support the Colloquium by sponsoring the travel and accommodation costs for up to five university students so that they can attend and present at the meeting.

This opportunity is open to any University student presently studying in one of the ESA member states or one of the ESA cooperating states. Students who are interested in applying for this sponsorship should urgently contact Tor.Viscor@esa.int giving their details and information about their proposed paper.

Additionally ESA have approved the attendance of Neil Melville - the SSETI Express project co-ordinator. Neil will be giving a full report on the SSETI Express experience and the "Knowledgebase" that has been created as a result. He will also be discussing the establishment of an internet linked World-wide network of University and radio amateur groundstations to help support future launches of satellites in the amateur satellite service.

AMSAT-UK is very pleased to receive this support from ESA as this will further assist towards promoting the synergistic relationships that already exist between the two groups of space enthusiasts.

Also at the Colloquium, AMSAT-UK and the next SSETI "Student Space Exploration & Technology Initiative" satellite project - ESEO will provide additional information about the AMSAT-UK payload, a linear 60 kHz wide transponder for the satellite.

The transponder will be a single Mode U/S device and will incorporate a STELLA SDR processor to provide the best possible system performance for all uplinked signals. The transponder is also expected to provide telecommand and telemetry facilities for mission controllers immediately after launch and before the planned earth pointing attitude has been achieved. It will also include a 400bps telemetry beacon.

Full details of the 2006 Colloquium and the online booking form can be found at http://www.uk.amsat.org/Colloquium/

The ESA website has the latest details of the SSETI-ESEO project at:
http://www.esa.int/esaED/SEM29W9ATME_highereducation_0.html

[ANS thanks Graham G3VZV for the above information]

/EX

SB SAT @ AMSAT $ANS-169.05
Final Reminder - ARISS and AO-51 Field Day Configurations

AMSAT News Service Bulletin 169.05
From AMSAT HQ SILVER SPRING, MD.
June 18, 2006
To All RADIO AMATEURS
BID: $ANS-169.05

The ARISS Phase 2 station aboard the International Space Station will be configured in crossband repeater mode--437.800 MHz up and 145.800 MHz down for Field Day. Is is being requested that **ONLY** low-power (QRP) Earth stations access the system. The definition of a QRP station for this activation will be the same criteria that AMSAT is using for its QRP operations on ECHO (AO-51) for Field Day.

Next, starting on June 19 AO-51 will be in the Field Day Configuration to give stations time to test their gear before the June 24-25 event.

```
         FM Repeater ON  - Uplink   145.920 mHz FM with 67 hz Tone
                           Downlink 435.300 mHz FM
         QRP Repeater ON - Uplink   145.880 mHz FM, QRP Power Limits
                           Downlink 435.150 mHz FM
```

AO-51 ECHO/ISS LOW POWER STATION (QRP) REQUIREMENTS:
To attempt to keep this simple a low power station will be defined as a station which can deliver no more than 10 watts to a vertical or handheld antenna. Some examples of Low Power Stations:

1. Using an HT (barefoot, no amplifier) with 10 watts or less output into any type of vertical whip antenna (rubber duck, etc) or handheld beam antenna (arrow type).

2. Using a mobile station with 10 watts or less output into car mounted mobile whip antenna(s).

3. Using a base station at 10 watts output into a vertical Omni directional antenna on the side of the house.

Examples that are **NOT** Low Power Stations:
1. Any type of high gain beam antenna, KLM, M2, Cushcraft, etc.

2. Any station transmitting over 10 watts into any type of antenna.

The crossband repeater should be activated Thursday, June 22 (late in the crew day) so ground operators can have a chance to practice with their QRP setups and learn how best to deal with the Doppler on the uplink. It will be deactivated on Monday as required for the docking of the Progress cargo supply ship.

If Jeff Williams (KD5TVQ) and/or Pavel Vinogradov (RV3BS) do get a chance to talk on the radio, they will be using the crossband repeater mode and will be giving "NA1SS, 1 Alpha, ISS" or "RS0ISS, 1Alpha, ISS" respectively.

REMINDER - Contacts through the ISS crossband repeater count as a satellite contact for Field Day bonus points, but contacts with the crew do not count for Field Day satellite bonus points.

[ANS thanks Ken, N5VHO and the AO-51 Command Team for the above information]

/EX

SB SAT @ AMSAT $ANS-169.06
AMSAT Awards This Week

AMSAT News Service Bulletin 169.06
From AMSAT HQ SILVER SPRING, MD.
June 18, 2006
To All RADIO AMATEURS
BID: $ANS-169.06

Bruce, KK5DO wearing his AMSAT Director Contests and Awards hat says this week, congratulations go out to all of the following:

We would like to welcome the following to the satellite community. They have made their first satellite contact and are now members of the AMSAT Satellite Communicators Club:

+ Edward Chuang, BX1AD
+ Robert Wyckoff, KB3MBO
+ Karn Suwanrat, E20ZFD

Zachary Schrempp, KM7I, is awarded the W4AMI Award #44.

To see all the awards visit http://www.amsat.org.

[ANS thanks Bruce, KK5DO for the above information]

/EX

SB SAT @ AMSAT $ANS-169.07
AMSAT Store Has New Items

AMSAT News Service Bulletin 169.07
From AMSAT HQ SILVER SPRING, MD.
June 18, 2006
To All RADIO AMATEURS
BID: $ANS-169.07

Bruce, KK5DO wearing his AMSAT Online Store Manager hat invites all to visit the AMSAT Online Store to take a look at some of the new items.

Bruce says, "We have added the 2006 edition of the AMSAT Shirts and Caps as well as the newly updated 'Getting Started With Amateur Satellites 2006' publication. Are you into patches and decals? There is a new Eagle patch and decal."

Besides these new items, you can also apply for your AMSAT awards online and join or renew your AMSAT membership.

The online store is for you, we welcome any comments or suggestions. Go to http://www.amsat-na.com/categories.php to enter the store.

[ANS thanks Bruce, KK5DO for the above information]

/EX

SB SAT @ AMSAT $ANS-169.08
ARISS Status for the Week of June 12, 2006

AMSAT News Service Bulletin 169.08
From AMSAT HQ SILVER SPRING, MD.
June 18, 2006
To All RADIO AMATEURS
BID: $ANS-169.08

1. New Jersey Contact Successful
The re-scheduled ARISS contact with Salt Brook Elementary School, an ARRL Big Project school in New Providence, New Jersey, was successfully completed on June 5. Ten students asked twelve questions of astronaut Jeff Williams, KD5TVQ, as approximately 600 students, teachers and parents witnessed the event. The New Providence Amateur Radio Club (NPARC) assisted with the radio contact.

2. NASA Explorer School Contact Successful
Scarlett Middle School experienced an ARISS contact on June 6. Scarlett, a NASA Explorer School in Ann Arbor, Michigan, is attended by approximately 600 students in grades 6 - 8. During the contact, thirteen students asked one question each of Jeff Williams, KD5TVQ. Students, teachers, parents, school administrators and representatives from the Ann Arbor Board of Education and Congressman John Dingell's office attended the event, as did NASA Aerospace Education Specialist Jim Fitzgerald. Media coverage included the Ann Arbor News, whose article may be found on the web. See:
http://www.mlive.com/news/aanews/index.ssf?/base/news-18/11496912607210.xml&coll=2&thispage=1

3. Upcoming School Contact
The European Space Center Camp in Transinne, Belgium had a contact with the ISS on Tuesday, June 13 at 13:39 UTC. This was a telebridge contact via the station, W6SRJ, in Santa Rosa, California. Approximately 100 children, ages 8 - 18, from several European countries, attend the camp for 5 days each week.

4. School Selection Committee Meeting Held
The ARISS Educational Outreach/School Selection Committee Meeting was held on Thursday, June 8. A new volunteer, Rita Wright, KC9CDL, has joined ARISS. She was the first teacher to have a contact with the ISS and will be reviewing and helping teachers select lesson plans for the classroom. This and other topics of discussion may be found in the meeting minutes, which have been posted to the ARISS website.
See: http://www.rac.ca/ariss/arissschm.htm

5. ARISS Member Receives Silver Snoopy Award
On Thursday, June 8, Bill McArthur, KC5ACR, presented ISS Ham Project Engineer Kenneth Ransom, N5VHO, with a Silver Snoopy award for his hard work and dedication to the ARISS program during Expedition 12. The pin flew on McArthur's first mission, STS-58, Columbia, in 1993. Congratulations Kenneth!

[ANS thanks Carol, KB3LKI for the above information]

/EX

SB SAT @ AMSAT $ANS-169.09
Multiple Cubesat Mission Launch Now Set for July 26

AMSAT News Service Bulletin 169.09
From AMSAT HQ SILVER SPRING, MD.
June 18, 2006
To All RADIO AMATEURS
BID: $ANS-169.09

Roland Coelho, the CubeSat Acting Launch Coordinator at the California Polytechnic State University reports via the CubeSat mailing list that Kosmotras has recently notified the CubeSat teams that the DNEPR-1 launch has been officially postponed to July 26th with a reserve date of July 27th. The delay is due to a technical problem experienced during launch vehicle preparation.

The approximate three week delay will be used to prepare a backup launch vehicle. The delay will also effect the date of P-POD integration which means the satellites will be integrated with the launch vehicle starting some time around July 14th.

The CubeSat project is a collaboration between California Polytechnic State University-San Luis Obispo and Stanford University's Space Systems Development Laboratory.

[ANS thanks Roland Coelho at Cal Poly for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM

From -226321416366390708
X-Google-Thread: 10e8ad,bcaf380cfd210ea2,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news4.google.com!news2.google.com!atl-c05.usenetserver.com!news.usenetserver.com!peer01.west.cox.net!cox.net!newshub.sdsu.edu!elnk-nf2-pas!newsfeed.earthlink.net!stamper.news.pas.earthlink.net!newsread3.news.pas.earthlink.net.POSTED!46041641!

not-for-mail
From: "JoAnne Maenpaa" <wb9jej_no-spam@earthling.com>
Newsgroups: rec.radio.amateur.space
Subject: WSR-170 AMSAT Weekly Satellite Report
Lines: 1000
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <j%lmg.74$ii.42@newsread3.news.pas.earthlink.net>
Date: Thu, 22 Jun 2006 01:03:11 GMT
NNTP-Posting-Host: 66.167.221.100
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread3.news.pas.earthlink.net 1150938191 66.167.221.100 (Wed, 21 Jun 2006 18:03:11 PDT)
NNTP-Posting-Date: Wed, 21 Jun 2006 18:03:11 PDT
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news2.google.com rec.radio.amateur.space:274

This report is organized into 4 parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites

SB SAT @ AMSAT W8ISS ANS-170.S1
WSR 170 Part 1 06/19/2006

AMSAT NEWS SERVICE BULLETIN 170.S1 FROM AMSAT HQ
SILVER SPRING, MD, June 19, 2006
TO ALL RADIO AMATEURS
BID: $ANS-170.S1

VO-52 HAMSAT
Catalog Number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/V - Indian Transponder

Proposed frequencies:

Indian Transponder:
Uplink : 435.220 MHz to 435.280 MHz LSB/CW
Downlink: 145.870 MHz to 145.930 MHz USB/CW
Beacon : 145.859330 MHZ CW

Dutch Transponder:
Uplink : 435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW
Beacon : 145.860MHz 12WPM with CW message

Mode and Antenna Polarization:

```
V: LHCP
U: RHCP

Official Webpage: http://www.amsat.in/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is
active. Each transponder has a different beacon.
[04242006]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Current Mode(s): FM Repeater - V/U QRP
                               V/U High Power with tone
Digipeater - OFF

Analog voice downlink: 435.300 MHz FM
         435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink:   145.880 MHZ FM
         145.880 MHz USB
         145.920 MHz FM 67Hz PL tone
        1268.700 MHz FM 67Hz PL tone
Digital Downlinks:     435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
        2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:        145.860 MHz FM, 9k6 Digital, Pacsat Broadcast
Protocol
                      1268.700 mhz FM, 9k6 PBP Digital
Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Mode schedule for April 2006 according to Drew, KO4MA:

June 19 Field Day Configuration
FM Repeater
  Downlink 435.300 mHz FM
  Uplink 145.920 mHz FM with 67 hz Tone

FM Repeater with QRP Requirements
  Downlink 435.150 mHz FM
  Uplink 145.880 mHz FM, QRP Power Limits
```

June 26
FM Repeater
  Downlink 435.300 mHz FM
  Uplink 145.920 mHz FM with 67 hz Tone

Digital / PBBS
  Downlink 435.150 mHz FM 9k6 Digital
  Uplink 145.860 mHz FM 9k6 Digital
  PBBS Active
  Telemetry Downlink Active

Official Webpage: http://www.amsat.org/amsat-new/echo/
[06192006]

=====

SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Uplink: 145.850 MHz (67.0 Hz PL tone) (See below for operating procedures)
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz. The
order of operation is thus: (allow for Doppler as necessary)
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer
   on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater
   on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10
   minute timer.
[04172006]

=====

FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: OPERATIONAL

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB

```
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplink: 145.850 145.870 145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

unOfficial Webpage: http://www.amsat.org/amsat/sats/n7hpr/fo29.html
[11132005]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Uplink: 145.850 MHz FM
Downlink: 436.795 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[01012006]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational depending on amount of Sunlight
Current Reported mode: Mode-A

Uplink:   145.850 to 145.950 MHz CW/USB Mode A
   432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
  145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
  145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons:  29.502 MHz
  145.972 MHz
  435.100 MHz
 2304.100 MHz

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php
The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
```

AO-7 users are requested to log their contacts and observations about
AO-7, especially any unexpected mode changes.
AO-07 telemetry software webpage:
http://www.qsl.net/k3tz/files/K3TZ_AO-07_Telemetry_Decoder_0.5.zip

Please keep your power low! For additional information please read the
AO-7
Usage Guidelines on the AO-7 Log and Resource Site located at:
http://www.planetemily.com/ao7
[04242006]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: Packet - Mode V / Occasional Voice
Digipeater: ON

The current crew is:
Commander: Pavel Vinogradov, RV3BS
Flight Engineer: Jeff Williams, KD5TVQ

Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Russian: RS0ISS, RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official Webpage: http://www.rac.ca/ariss
Official Fan club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line

is
NOT translated from Russian and posted.
[06122006]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-170.S2
WSR 170 Part 2 06/19/2006

AMSAT NEWS SERVICE BULLETIN 170.S2 FROM AMSAT HQ
SILVER SPRING, MD, June 19, 2006
TO ALL RADIO AMATEURS
BID: $ANS-170.S2

CO-58 XI-V
Catalog Number: 28895
Launch Date: October 27, 2005

Status: Operational only within range of Ground station in Japan

Telemetry Downlink: 437.345MHz - FSK 1200bps using AFK protocol
Beacon Downlink: 437.465MHz - CW about 50 WPM

Callsign: JQ1YGW

Oficial Webpage: http://www.space.t.u-tokyo.ac.jp/gs/satinfo-e.html#xi5
Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
[03122006]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: Packet - Mode V / Occasinal Voice
Digipeater: ON

The current crew is:
Commander: Pavel Vinogradov, RV3BS
Flight Engineer: Jeff Williams, KD5TVQ

Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM

Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Russian: RS0ISS, RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official Webpage: http://www.rac.ca/ariss
Official Fan club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line is NOT translated from Russian and posted.
[06122006]
=====
PCSAT-2
Catalog Number: 25544
Launch Date: August 1, 2005

Activated: August 3, 2005
Status: Operational
Current Mode: Digipeater / XBAUD (PSK31/CW Repeater)

Digital Downlink: 435.275 Mhz
Digital Uplink: 145.825 Mhz

PSK-31 Downlink: 435.275 Mhz
PSK-31 Uplink: 29.401 Mhz

CALLSIGN: pcsat2

Official Webpage: http://web.usna.navy.mil/~bruninga/pcsat2.html
PCSAT2 APRS Packet page: http://www.findu.com/cgi-bin/pcsat2.cgi
aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/

Bob, WB4APR, reports that Yes, PCSAT2 has gone into low voltage shut-down
since the sun angle on the space station is large. The angle should improve
on 24 June just-in-time for Field Day. We hope to activate PCSAT2 as a
145.825 up/down simplex digipeater while the ARISS system will be in cross-band repeater mode.
[ANS-WSR wishes to thank Bob, WB4APR,for this weeks info]
[06192006]

```
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Mode(s): FM Repeater - V/U QRP
                FM Repeater - V/U High Power with tone
Digipeater - OFF

Analog voice downlink: 435.300 MHz FM
         435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink:   145.880 MHZ FM
         145.880 MHz USB
         145.920 MHz FM 67Hz PL tone
        1268.700 MHz FM 67Hz PL tone
Digital Downlinks:     435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
        2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:        145.860 MHz FM, 9k6 Digital, Pacsat Broadcast
Protocol
                      1268.700 mhz FM, 9k6 PBP Digital
Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Mode schedule for April 2006 according to Drew, KO4MA:

June 19 Field Day Configuration
FM Repeater
  Downlink 435.300 mHz FM
  Uplink 145.920 mHz FM with 67 hz Tone

FM Repeater with QRP Requirements
  Downlink 435.150 mHz FM
  Uplink 145.880 mHz FM, QRP Power Limits

June 26
FM Repeater
  Downlink 435.300 mHz FM
  Uplink 145.920 mHz FM with 67 hz Tone

Digital / PBBS
  Downlink 435.150 mHz FM 9k6 Digital
  Uplink 145.860 mHz FM 9k6 Digital
  PBBS Active
  Telemetry Downlink Active

Official Webpage: http://www.amsat.org/amsat-new/echo/
[06192006]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Operational

General Usage Uplink/Downlink:145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org
aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[04172006]
=====
CO-55 CUTE-1.7
Catalog number: 28941
Launched: June 30,2003

Status: Operational

Uplink: ?
Downlink: 437.3850 CW
          437.4700 1200 FM ax25 or SRLL (ACTIVE only near Japan ? )
Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[05012006]
=====
GO-32 TECHSAT-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks: 145.850 FM
         145.890 FM
         145.930 FM
        1269.700 FM
        1269.800 FM
        1269.900 FM
Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[05012006]
=====
```

RS-22 Mozhayets 4
Catalog Number: 27939
Launch Date: September 27, 2004

Status: Operational

Beacon: 435.3520 MHz CW
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Semi-operational, the digipeater command is on and open for APRS users.

Uplink: 145.900 FM
        145.920 FM
        145.940 FM
        145.960 FM
(using 1200-baud Manchester FSK)
Downlink: 437.026 MHz SSB (1200-baud PSK)
Mode-S Beacon: 2401.1428 MHz

Mode and Antenna Polarization:
U: RC 437.050 MHz RHCP
   PSK 437.025 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[04172006]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational?

Telemetry Downlink: 145.826 MHz. FM (1200-baud AFSK).
approx. 10 days ON, 10 days OFF
Mode-S Beacon: 2401.500 MHz. ... OFF
UHFBeacon: 435.025 MHz. ... OFF

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Official webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[05292006]
NNNN

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/EX

SB SAT @ AMSAT W8ISS $ANS-170.S3
WSR 170 Part 3 06/19/2006

AMSAT NEWS SERVICE BULLETIN 170.S3 FROM AMSAT HQ
SILVER SPRING, MD, June 19, 2006
TO ALL RADIO AMATEURS
BID: $ANS-170.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

AO-54 SUITSAT
Catalog Number:28933
Release Date: February 3,2006

Status: Non-operational
Modes : FM Voice Telemetry/Greetings
 FM SSTV

Callsign: RS0RS
Downlink: 145.990 FM

Currently on the amsat-bb, there is a geussing game going on about when
Suitsat will re-enter the atmosphere.

Official webpage: http://www.suitsat.org
[05012006]
=====
NCUBE-2
Catalog Number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency:  437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog Number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 FM 67Hz CTCSS
Voice Downlink: 2401.835 FM
Packet Up/Downlink: 437.250 9k6 packet
Packet Downlink 2401.835 38k4 packet
```

```
Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01292006]
=====
TO-31 TMSAT-1
Catalog Number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink:   145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
PO-28 POSAT-1
Catalog Number: 22829
Launch Date: September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 429.950

Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html.
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012006]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launched: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB
Beacon: 145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993
```

Status: Downlink only

Uplink: 145.875 145.900 145.925 145.950 MHz FM (1200-baud)
Downlink: 435.808 MHz PSK
Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01012006]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB
Beacon: 29.408 MHz
Robot: 29.454 MHz
[05232004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB
Beacon: 145.860 MHz
Robot: 145.908 MHz
[05232004]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink 145.975 MHz FM
Downlink 435.070 MHz FM
[05092004]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink: 145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

```
Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01092005]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational?

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB
Beacon: 29.352 MHz (intermittent)
SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplink: 145.84 145.86 145.88 145.90 MHz FM
(using 1200-baud Manchester FSK)
CW downlink: 437.125 MHz
Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)
Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[05232004]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[08152004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational
```

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM
Broadcast Callsign: HL01-11
BBS: HL01-12

Jim, AA7KC, reports that KO-23's downlink transmitter continues in a non-operational status.
[05092004]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM (9600-baud FSK)
Downlink: 436.500 MHz FM
Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm

[ANS-WSR has no further information]
[05232004]
=====
SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

```
STatus: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz and 145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[08082004]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlink: 437.025 MHz 437.400 MHz
Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site
at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[05092004]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplink V-band   145.840 - 145.990 MHz CW/LSB
       U-band   435.550 - 435.800 MHz CW/LSB
       L1-band 1269.250 - 1269.500 MHz CW/LSB
       L2-band 1268.325 - 1268.575 MHz CW/LSB
Downlink: S2-band 2401.225 - 2401.475 MHz CW/USB
          K-band 24,048.010 - 24,048.060 MHz CW/USB
Beacon:   2401.323
         24,048.035
[05232004]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational
Downlink: 437.075 MHz
Broadcast Callsign: SASAT2-11
BBS: SASAT2-12
```

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[08152004]

=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz
Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[08152004]

=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, callsign KE6QMD, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]

=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Operational

Uplink: 145.850 or 145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz
Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

```
TiungSat-1, named after the mynah bird of Malaysia, was developed as a
collaborative effort between the Malaysian government and Surrey
Satellite
Technology Ltd.
[11202005]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink 435.275 1200-baud AFSK
Downlink 145.825 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink: Downlink 145.825 MHz FM 1200 Baud AFSK
Beacon: 2401.220 MHz
[05012006]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-170.S4
WSR 170 Part 4 06/19/2006

AMSAT NEWS SERVICE BULLETIN 170.S4 FROM AMSAT HQ
SILVER SPRING, MD, June 19, 2006
TO ALL RADIO AMATEURS
BID: $ANS-170.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE
PROPOSED FOR LAUNCH AT THIS TIME:
```

PHASE 3E ?O-??
Catalog Number:
Proposed Launch Date: Early/Mid 2007

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/
[ANS-WSR wishes to thank William Leijenaar, PE1RAH for this week's report]
[04242006]
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ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/amsat/listserv/menu.html

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
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```
From 2822619014832597747
X-Google-Thread: 10e8ad,813f4eef7ecf2e64,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news4.google.com!news2.google.com!atl-
c05.usenetserver.com!news.usenetserver.com!peer01.west.cox.net!cox.net!
newshub.sdsu.edu!elnk-nf2-pas!newsfeed.earthlink.net!
stamper.news.pas.earthlink.net!newsread3.news.pas.earthlink.net.POSTED!46041641!
not-for-mail
From: "JoAnne Maenpaa" <wb9jej_no-spam@earthling.com>
Newsgroups: rec.radio.amateur.space
Subject: ANS-176 AMSAT News Service Weekly Bulletin
Lines: 314
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <8Ixog.3957$ii.677@newsread3.news.pas.earthlink.net>
Date: Wed, 28 Jun 2006 16:00:04 GMT
NNTP-Posting-Host: 68.164.230.3
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread3.news.pas.earthlink.net 1151510404 68.164.230.3 (Wed, 28 Jun
2006 09:00:04 PDT)
NNTP-Posting-Date: Wed, 28 Jun 2006 09:00:04 PDT
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news2.google.com rec.radio.amateur.space:275
```

AMSAT NEWS SERVICE
ANS-176

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:

* Field Day Reminders from AMSAT Director Contests and Awards
* OSCAR-11 Report 16 June 2006 - Reception Reports Requested
* Call for Papers - 2006 ARRL/TAPR Digital Communications Conference
* ARISS Status 19 June 2006
* AMSAT-UK 21st International Space Colloquium
* Meteoroid Hits the Moon: The Movie

SB SAT @ AMSAT $ANS-176.01
Field Day Reminders from AMSAT Director Contests and Awards

AMSAT News Service Bulletin 176.01
From AMSAT HQ SILVER SPRING, MD.
June 25, 2006
To All RADIO AMATEURS
BID: $ANS-176.01

Bruce Paige, KK5DO, AMSAT Director Contests and Awards, passed along these Field Day reminders:

"1. Please watch the due date for submitting your scores from field day. If you e-mail your submission to me, I will send you a confirmation e-mail. If you do not get the confirmation e-mail, I did not receive your entry and you should send it again. I hate it when someone is inadvertently left out of the listing.

2. Take lots of pictures. The more pictures the better. Send them along with your e-mailed scores to me. That will make for a really good journal article.

3. Have a lot of fun."

[ANS thanks Bruce, KK5DO for the above information]

/EX

SB SAT @ AMSAT $ANS-176.02
OSCAR-11 Report 16 June 2006 - Reception Reports Requested

AMSAT News Service Bulletin 176.02
From AMSAT HQ SILVER SPRING, MD.
June 25, 2006
To All RADIO AMATEURS
BID: $ANS-176.02

Clive, G3CWV, filed this OSCAR-11 report and a request for reception reports:

"Due to solar eclipses (see below) the VHF beacon on 145.826 MHz. may only transmit for a short times, perhaps for only a few orbits, or even less, at irregular intervals. Any reception reports would be appreciated. Please e-mail xxxxx@amsat.org (replace xxxxx by g3cwv), or post to AMSAT-BB. If you are unfamiliar with the sound of OSCAR-11, there is an audio clip on my web site www.users.zetnet.co.uk/clivew/

During the period 06 May to 15 June 2006 nothing has been heard from the satellite. OSCAR-11's VHF beacon switched OFF on 05 May, as expected. This was just one day before the solar eclipses were due to start. These eclipses will continue until 04 August 2006, reaching a maximum duration of 22% around 19 June. If the satellite behaves in the same way as it did last year, the beacon may only be heard for very short times, during the eclipse season.

Unfortunately, due to holidays, I was unable to monitor the satellite around 15 May, when the first transmissions during the eclipse season were expected. However, I am indebted to Jeff KB2M, Bob G4VRC and Gustavo LW2DTZ who listened for the satellite while I was away.

The current status of the satellite is that all the analogue telemetry channels, 0 to 59 are zero, i.e. they have failed. The status channels 60 to 67 are still working. The spacecraft computer and active attitude control system have switched OFF, i.e. the satellite' attitude is controlled only by the passive gravity boom gradient, and the satellite is free to spin at any speed. When telemetry was last received it showed that one of the solar arrays had failed, and there was a large unexplained current drain on the main 14 volt bus. After 22 years in orbit the battery has undergone around 100,000 partial charge/discharge cycles, and observations suggest that it cannot power the satellite during eclipses, or sometimes during periods of poor solar attitude.

When last heard, the on-board clock showed a very large accumulated error. On 05 May it was 22.76456 days slow. The clock lost two hours during the last OFF period, and nine hours during the last transmission period. The observations of clock errors suggest that the clock may slow or stop when the battery voltage is low.

The watchdog timer now operates on a 20 day cycle. During the three months before the eclipses started, the ON/OFF times have been very consistent, and the average of many observations show this to be 20.7 days, i.e. 10.3 days ON followed by 10.4 days OFF. However, during the present solar eclipse season, power supply problems, may result in a low 14 volt line supply, which may cause the beacon to switch OFF prematurely, and reset the watchdog timer cycle.

The Beacon frequencies are -

VHF 145.826 MHz. AFSK FM ASCII Telemetry

UHF 435.025 MHz. OFF

S-band 2401.5 MHz. OFF

Listeners to OSCAR-11 may be interested in visiting my web site which contains an archive of news & telemetry data. It also contains details about using a sound card or hardware demodulators for data capture. There is software for capturing data, and decoding ASCII telemetry."

See: www.users.zetnet.co.uk/clivew/

[ANS thanks Clive, G3CWV for the above information]

/EX

SB SAT @ AMSAT $ANS-176.03
Call for Papers - 2006 ARRL/TAPR Digital Communications Conference

AMSAT News Service Bulletin 176.03
From AMSAT HQ SILVER SPRING, MD.
June 25, 2006
To All RADIO AMATEURS
BID: $ANS-176.03

Technical papers are solicited for presentation at the 25th Annual ARRL and TAPR Digital Communications Conference to be held September 15-17, 2006 in Tucson, Arizona. These papers will also be published in the Conference Proceedings (you do NOT need to attend the conference to have your paper included in the Proceedings). The submission deadline is July 31, 2006.

Please send papers to:

Maty Weinberg
ARRL
225 Main Street
Newington, CT 06111

or you can make your submission via e-mail to: maty@arrl.org

Papers will be published exactly as submitted and authors will retain all rights.

[ANS thanks Steve, WB8IMY for the above information]

/EX

SB SAT @ AMSAT $ANS-176.04
ARISS Status 19 June 2006

AMSAT News Service Bulletin 176.04
From AMSAT HQ SILVER SPRING, MD.
June 25, 2006
To All RADIO AMATEURS
BID: $ANS-176.04

1. ESC Camp Contact Successful

On Tuesday, June 13, the Euro Space Center Camp in Transinne, Belgium experienced an ARISS contact via the telebridge station W6SRJ, in Santa

Rosa, California. Twenty students were able to ask twenty questions before losing contact with the ISS. Approximately 60 children from Gillingham School located in Dorset, U.K. were present and another fifty from France, visiting the center for the day, also witnessed the contact. Afterwards, a French teacher interpreted the questions and answers for the French children. Audio and photos of the event may be found on the ARISS-Europe web site. See: http://www.ariss-eu.org/2006_06_15.htm

The ESC Camp audio, fed through EchoLink AMSAT (101 377) and JK1ZRW (277 208) servers, had 24 connections, of which 3 were repeater nodes, from 9 countries. The audio was also fed through the IRLP Discovery Reflector 9010 with four connections made from the USA and Canada. One of the connections, in Saint John, New Brunswick, enabled students from a Grade 5 class at Quispamsis Elementary School, and representatives from the Canadian Broadcasting Corporation (CBC) Radio and Television services to listen in. After the contact, an ARISS member conducted a half-hour question and answer session with the students. Among the questions asked were 6 which focused on ARISS activities.

2. Upcoming School Contact

The Kuwait Scientific Center in Salmiyah, Kuwait has been approved for a contact with the ISS via the telebridge station VK5ZAI in Australia. It is planned for Thursday June 29 at 18:10 UTC. The audio from this contact will be fed into the EchoLink AMSAT (101 377) and JK1ZRW (277 208) servers, and into the IRLP Discovery Reflector 9010. It will also be available on the Discovery Reflector's companion web site,
www.discoveryreflector.ca:8000/listen.pls

The Scientific Center is dedicated to the advancement of the sciences and cultural heritage of Kuwait. It promotes public awareness, knowledge of and commitment to the care and conservation of the wildlife and ecosystems of the Arabian Gulf region, serving as a center of excellence for environmental education of the region. The Scientific Center Kuwait plans to web cast the event on: http://www.tsck.org.kw

3. Field Day Status

The Kenwood radio system were placed in crossband repeater mode beginning on Thursday, June 22 at 19:00 UTC and will remain active throughout the Field Day weekend. ARRL ran a web story about Field Day events entitled, "Field Day 2006: NASA Releases ISS North and South America Pass Times." See:
http://www.arrl.org/news/stories/2006/06/15/1/?nc=1
Information may also be found on the AMSAT web site. See:
http://www.amsat.org/amsat-new/index.php

4. Astronaut Training Status

Kenneth Ransom of JSC provided a refresher course for ESA astronaut Thomas Reiter, DF4TR, on Tuesday, June 13. School contact operations on the Ericsson radio were covered and a review of the Kenwood basic operations was given. Reiter is expected to fly on STS-121 in July and remain on the ISS to work with the station crew.

[ANS thanks Carol, KB3LKI for the above information]

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SB SAT @ AMSAT $ANS-176.05
AMSAT-UK 21st International Space Colloquium

AMSAT News Service Bulletin 176.05
From AMSAT HQ SILVER SPRING, MD.
June 25, 2006
To All RADIO AMATEURS
BID: $ANS-176.05

AMSAT-UK will hold their 21st International Space Colloquium at the University of Surrey, Guildford, England from Friday 28th until Sunday 30th July.

The director of NASA's Ames Research Center Dr. S. Pete Worden (Brig. Gen., USAF, ret.) will make a Keynote presentation entitled: "The Case for a Global NEO Mitigation Strategy" - looking at what we could do to avoid the threat of catastrophic collision by a Near Earth Object.

While most people have heard of the very rare "Mass Extinction" events such as that which wiped out the dinosaurs there is less awareness of the damage that can be inflicted by the far more frequent "Tunguska-class" objects. These objects, about 100 metres or so in size, can strike up to several times per century with all the destructiveness of a nuclear weapon.

Dr. Worden has written or co-authored more than 150 technical papers in astrophysics, space science and strategic studies. He was scientific co-investigator for two NASA space lab missions. During the 1990's he was responsible for much of the US DoD work to develop small satellites, microsatellites and reusable satellite launchers.

For the full program see:
http://www.uk.amsat.org/Colloquium/programme/

[ANS thanks Trevor, M5AKA for the above information]

/EX

SB SAT @ AMSAT $ANS-176.07
Meteoroid Hits the Moon: The Movie

AMSAT News Service Bulletin 176.07
From AMSAT HQ SILVER SPRING, MD.
June 25, 2006
To All RADIO AMATEURS
BID: $ANS-176.07

Last month, astronomers watched a meteoroid blast a hole in the lunar Sea of Clouds. Their video of the event is a must-see.

The video plays in 7x slow motion; otherwise the explosion would be nearly invisible to the human eye. "The duration of the fireball was only four-tenths of a second," says Bill Cooke, the head of NASA's Meteoroid Environment Office in Huntsville, AL. "A student member of our team, Nick Hollon of Villanova University, spotted the flash."

Taking into account the duration of the flash and its brightness (7th magnitude), Cooke was able to estimate the energy of impact, the dimensions of the crater, and the size and speed of the meteoroid. "It was a space rock about 10 inches (25 cm) wide traveling 85,000 mph (38 km/s)," he says.

If a rock like that approached Earth, it would never reach the ground. "Earth's atmosphere protects us," Cooke explains. "A 10-inch meteoroid would disintegrate in mid-air, making a spectacular fireball in the sky but no crater." The Moon is different. Having no atmosphere, it is totally exposed to meteoroids. Even small ones can cause spectacular explosions, spraying debris far and wide.

The movie can be seen at:

http://science.nasa.gov/headlines/y2006/13jun_lunarsporadic.htm?list835304

[ANS thanks NASA Science News for the above information]

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In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Al Marote, WA1LBG

From 2300256544965552926
X-Google-Thread: 10e8ad,f57e7356027f2f83,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news2.google.com!news4.google.com!newshub.sdsu.edu!elnk-nf2-pas!newsfeed.earthlink.net!stamper.news.pas.earthlink.net!newsread3.news.pas.earthlink.net.POSTED!46041641!not-for-mail
From: "JoAnne Maenpaa" <wb9jej_no-spam@earthling.com>
Newsgroups: rec.radio.amateur.space
Subject: WSR-177 AMSAT Weekly Satellite Report
Lines: 980
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106

X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <bIxog.3958$ii.3055@newsread3.news.pas.earthlink.net>
Date: Wed, 28 Jun 2006 16:00:07 GMT
NNTP-Posting-Host: 68.164.230.3
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread3.news.pas.earthlink.net 1151510407 68.164.230.3 (Wed, 28 Jun 2006 09:00:07 PDT)
NNTP-Posting-Date: Wed, 28 Jun 2006 09:00:07 PDT
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news2.google.com rec.radio.amateur.space:276

This report is organized into 4 parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites

SB SAT @ AMSAT W8ISS ANS-177.S1
WSR 177 Part 1 06/26/2006

AMSAT NEWS SERVICE BULLETIN 177.S1 FROM AMSAT HQ
SILVER SPRING, MD, June 26, 2006
TO ALL RADIO AMATEURS
BID: $ANS-177.S1

VO-52 HAMSAT
Catalog Number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/V - Indian Transponder

Proposed frequencies:

Indian Transponder:
Uplink : 435.220 MHz to 435.280 MHz LSB/CW
Downlink: 145.870 MHz to 145.930 MHz USB/CW
Beacon : 145.859330 MHZ CW

Dutch Transponder:
Uplink : 435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW
Beacon : 145.860MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsat.in/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is
active. Each transponder has a different beacon.

[04242006]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Current Mode(s): FM Repeater - V/U QRP
Digipeater - OFF

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.880 MHZ FM
145.880 MHz USB
145.920 MHz FM 67Hz PL tone
1268.700 MHz FM 67Hz PL tone
Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast
Protocol
1268.700 mhz FM, 9k6 PBP Digital
Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Mode schedule for April 2006 according to Drew, KO4MA:

June 26
FM Repeater
Downlink 435.300 mHz FM
Uplink 145.920 mHz FM with 67 hz Tone

Digital / PBBS
Downlink 435.150 mHz FM 9k6 Digital
Uplink 145.860 mHz FM 9k6 Digital
PBBS Active
Telemetry Downlink Active

Official Webpage: http://www.amsat.org/amsat-new/echo/
[06262006]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Uplink: 145.850 MHz (67.0 Hz PL tone) (See below for operating
procedures)
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The
order of operation is thus: (allow for Doppler as necessary)
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute
timer
   on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the
repeater
   on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset
the 10
   minute timer.
[04172006]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: OPERATIONAL

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplink: 145.850 145.870 145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

unOfficial Webpage: http://www.amsat.org/amsat/sats/n7hpr/fo29.html
[11132005]
=====
AO-27 AMRAD
Catalog number: 22825

```
Launched: September 26, 1993

Status: Operational

Uplink: 145.850 MHz FM
Downlink: 436.795 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[01012006]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational depending on amount of Sunlight
Current Reported mode: Mode-A

Uplink:   145.850 to 145.950 MHz CW/USB Mode A
   432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
  145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
  145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons:  29.502 MHz
  145.972 MHz
  435.100 MHz
 2304.100 MHz

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php
The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
AO-7 users are requested to log their contacts and observations about
AO-7, especially any unexpected mode changes.
AO-07 telemetry software webpage:
http://www.qsl.net/k3tz/files/K3TZ_AO-07_Telemetry_Decoder_0.5.zip

Please keep your power low!  For additional information please read the
AO-7
Usage Guidelines on the AO-7 Log and Resource Site located at:
http://www.planetemily.com/ao7
[04242006]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: Packet - Mode V / Occasional Voice
Digipeater: ON
```

The current crew is:
Commander: Pavel Vinogradov, RV3BS
Flight Engineer: Jeff Williams, KD5TVQ

Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Russian: RS0ISS, RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official Webpage: http://www.rac.ca/ariss
Official Fan club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.
[06122006]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-177.S2
WSR 177 Part 2 06/26/2006

AMSAT NEWS SERVICE BULLETIN 177.S2 FROM AMSAT HQ
SILVER SPRING, MD, June 26, 2006
TO ALL RADIO AMATEURS
BID: $ANS-177.S2

CO-58 XI-V
Catalog Number: 28895
Launch Date: October 27, 2005

Status: Operational only within range of Ground station in Japan

Telemetry Downlink: 437.345MHz - FSK 1200bps using AFK protocol
Beacon Downlink: 437.465MHz - CW about 50 WPM

Callsign: JQ1YGW

Oficial Webpage: http://www.space.t.u-tokyo.ac.jp/gs/satinfo-e.html#xi5
Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
[03122006]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: Packet - Mode V / Occasinal Voice
Digipeater: ON

The current crew is:
Commander: Pavel Vinogradov, RV3BS
Flight Engineer: Jeff Williams, KD5TVQ

Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Russian: RS0ISS, RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official Webpage: http://www.rac.ca/ariss
Official Fan club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/

Remember that the crew operates on UTC time. Also, all of the time line
is NOT translated from Russian and posted.
[06122006]
=====
PCSAT-2
Catalog Number: 25544
Launch Date: August 1, 2005

Activated: August 3, 2005
Status: Operational
Current Mode: Digipeater / XBAUD (PSK31/CW Repeater)

Digital Downlink: 435.275 Mhz
Digital Uplink: 145.825 Mhz

PSK-31 Downlink: 435.275 Mhz
PSK-31 Uplink: 29.401 Mhz

CALLSIGN: pcsat2

Official Webpage: http://web.usna.navy.mil/~bruninga/pcsat2.html
PCSAT2 APRS Packet page: http://www.findu.com/cgi-bin/pcsat2.cgi
aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/

Bob, WB4APR, reports that Yes, PCSAT2 has gone into low voltage
shut-down
since the sun angle on the space station is large. The angle should
improve
on 24 June just-in-time for Field Day. We hope to activate PCSAT2 as a
145.825 up/down simplex digipeater while the ARISS system will be in
cross-
band repeater mode.
[ANS-WSR wishes to thank Bob, WB4APR,for this weeks info]
[06192006]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Mode(s): FM Repeater - V/U QRP
                Digipeater - OFF

Analog voice downlink: 435.300 MHz FM
         435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink: 145.880 MHZ FM
         145.880 MHz USB
         145.920 MHz FM 67Hz PL tone
        1268.700 MHz FM 67Hz PL tone
Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
        2401.200 MHz FM 38k4 bps, AX.25

```
Digital Uplink:        145.860 MHz FM, 9k6 Digital, Pacsat Broadcast
Protocol
                      1268.700 mhz FM, 9k6 PBP Digital
Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Mode schedule for April 2006 according to Drew, KO4MA:

June 26
FM Repeater
  Downlink 435.300 mHz FM
  Uplink 145.920 mHz FM with 67 hz Tone

Digital / PBBS
  Downlink 435.150 mHz FM 9k6 Digital
  Uplink 145.860 mHz FM 9k6 Digital
  PBBS Active
  Telemetry Downlink Active

Official Webpage: http://www.amsat.org/amsat-new/echo/
[06262006]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Operational

General Usage Uplink/Downlink:145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org
aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[04172006]
=====
CO-55 CUTE-1.7
Catalog number: 28941
Launched: June 30,2003

Status: Operational

Uplink: ?
Downlink: 437.3850 CW
          437.4700 1200 FM ax25 or SRLL (ACTIVE only near Japan ? )
```

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[05012006]
=====
GO-32 TECHSAT-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks: 145.850 FM
         145.890 FM
         145.930 FM
        1269.700 FM
        1269.800 FM
        1269.900 FM
Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[05012006]
=====
RS-22 Mozhayets 4
Catalog Number: 27939
Launch Date: September 27, 2004

Status: Operational

Beacon: 435.3520 MHz CW
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Semi-operational, the digipeater command is on and open for
APRS users.

Uplink: 145.900 FM
        145.920 FM
        145.940 FM
        145.960 FM
(using 1200-baud Manchester FSK)
Downlink: 437.026 MHz SSB (1200-baud PSK)
Mode-S Beacon: 2401.1428 MHz

Mode and Antenna Polarization:
U: RC 437.050 MHz RHCP
   PSK 437.025 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[04172006]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational?

Telemetry Downlink: 145.826 MHz. FM (1200-baud AFSK).
approx. 10 days ON, 10 days OFF
Mode-S Beacon: 2401.500 MHz. ... OFF
UHFBeacon: 435.025 MHz. ... OFF

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Official webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[05292006]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-177.S3
WSR 170 Part 3 06/26/2006

AMSAT NEWS SERVICE BULLETIN 177.S3 FROM AMSAT HQ
SILVER SPRING, MD, June 26, 2006
TO ALL RADIO AMATEURS
BID: $ANS-177.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

AO-54 SUITSAT
Catalog Number:28933
Release Date: February 3,2006

Status: Non-operational
Modes : FM Voice Telemetry/Greetings
FM SSTV

Callsign: RS0RS
Downlink: 145.990 FM

Currently on the amsat-bb, there is a geussing game going on about when Suitsat will re-enter the atmosphere.

Official webpage: http://www.suitsat.org
[05012006]

```
=====
NCUBE-2
Catalog Number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency:  437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog Number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 FM 67Hz CTCSS
Voice Downlink: 2401.835 FM
Packet Up/Downlink: 437.250 9k6 packet
Packet Downlink 2401.835 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01292006]
=====
TO-31 TMSAT-1
Catalog Number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink:   145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
PO-28 POSAT-1
Catalog Number: 22829
Launch Date: September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 429.950

Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
```

BBS callsign: POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html.
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012006]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launched: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB
Beacon: 145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: Downlink only

Uplink: 145.875 145.900 145.925 145.950 MHz FM (1200-baud)
Downlink: 435.808 MHz PSK
Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01012006]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB
Beacon: 29.408 MHz
Robot: 29.454 MHz
[05232004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

```
Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB
Beacon: 145.860 MHz
Robot: 145.908 MHz
[05232004]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink 145.975 MHz FM
Downlink 435.070 MHz FM
[05092004]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink: 145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM
Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01092005]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational?

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB
Beacon: 29.352 MHz (intermittent)
SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplink: 145.84 145.86 145.88 145.90 MHz FM
(using 1200-baud Manchester FSK)
CW downlink: 437.125 MHz
Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)
Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o
```

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[05232004]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[08152004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM
Broadcast Callsign: HL01-11
BBS: HL01-12

Jim, AA7KC, reports that KO-23's downlink transmitter continues in a non-operational status.
[05092004]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM (9600-baud FSK)
Downlink: 436.500 MHz FM
Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm

[ANS-WSR has no further information]
[05232004]
=====
SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

STatus: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz and 145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[08082004]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlink: 437.025 MHz 437.400 MHz
Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web site
at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[05092004]

```
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplink V-band   145.840 - 145.990 MHz CW/LSB
       U-band   435.550 - 435.800 MHz CW/LSB
       L1-band 1269.250 - 1269.500 MHz CW/LSB
       L2-band 1268.325 - 1268.575 MHz CW/LSB
Downlink: S2-band 2401.225 - 2401.475 MHz CW/USB
          K-band 24,048.010 - 24,048.060 MHz CW/USB
Beacon:   2401.323
         24,048.035
[05232004]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational
Downlink: 437.075 MHz
Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[08152004]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz
Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[08152004]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
```

Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, callsign KE6QMD, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Operational

Uplink: 145.850 or 145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz
Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[11202005]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink 435.275 1200-baud AFSK
Downlink 145.825 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink: Downlink 145.825 MHz FM 1200 Baud AFSK

Beacon: 2401.220 MHz
[05012006]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-177.S4
WSR 177 Part 4 06/26/2006

AMSAT NEWS SERVICE BULLETIN 177.S4 FROM AMSAT HQ
SILVER SPRING, MD, June 26, 2006
TO ALL RADIO AMATEURS
BID: $ANS-177.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE
PROPOSED FOR LAUNCH AT THIS TIME:

PHASE 3E ?O-??
Catalog Number:
Proposed Launch Date: Early/Mid 2007

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/
[ANS-WSR wishes to thank William Leijenaar, PE1RAH for this week's report]
[04242006]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/amsat/listserv/menu.html

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

From 1320776528372884048
X-Google-Thread: 10e8ad,fbb376217d34c4b2,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news4.google.com!news3.google.com!
border1.nntp.dca.giganews.com!border2.nntp.dca.giganews.com!nntp.giganews.com!
pd7cy3no!pd7cy4no!shaw.ca!pd7tw2no.POSTED!53ab2750!not-for-mail
X-Trace-PostClient-IP: 68.151.104.5
From: "Mike, who else?" <Mike@nowhere.net>
Subject: STS Stuff
User-Agent: Pan/0.14.2.91 (As She Crawled Across the Table)
Newsgroups: rec.radio.amateur.space
IfYouCanReadThisThen: POUND-SALT_HAHAHAHA
MIME-Version: 1.0

Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 8bit
Lines: 4
Message-ID: <IiTpg.113114$iF6.43205@pd7tw2no>
Date: Sun, 02 Jul 2006 17:23:52 GMT
NNTP-Posting-Host: 24.70.95.207
X-Complaints-To: abuse@shaw.ca
X-Trace: pd7tw2no 1151861032 24.70.95.207 (Sun, 02 Jul 2006 11:23:52 MDT)
NNTP-Posting-Date: Sun, 02 Jul 2006 11:23:52 MDT
Organization: Shaw Residential Internet
Xref: g2news2.google.com rec.radio.amateur.space:277

Any cool ham stuff being sent up to space station on this newest STS
launch?

73 de Mike VE6HMG

From -3960699657783375420
X-Google-Thread: 106d41,af61f2e6ef6135d5
X-Google-Thread: 10bf43,af61f2e6ef6135d5
X-Google-Thread: 10e8ad,af61f2e6ef6135d5
X-Google-Thread: 10a617,af61f2e6ef6135d5
X-Google-Attributes: gid106d41,gid10bf43,gid10e8ad,gid10a617,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news3.google.com!news.glorb.com!green.octanews.net!news-out.octanews.net!teal.octanews.net!198.186.190.95.MISMATCH!news-out.readnews.com!
postnews3.readnews.com!nr3.newsreader.com.POSTED!not-for-mail
Subject: Re: Hey Tard.................
From: Steveo <moparholic@hotmail.com>
Organization: http://NewsReader.Com/ 30 GB Month
Message-ID: <20060808070450.780$e9@newsreader.com>
Newsgroups:
rec.radio.cb,rec.radio.amateur.policy,rec.radio.amateur.space,alt.hackers.malicious
Followup-To: alt.cocksucker.lardass.lloyd-davies
References: <1154979347.467052.122900@p79g2000cwp.googlegroups.com>
X-NRC-Trace: NewsReader.Com 4QP4S=XSY3_jIze.bQsaFER,sv6czRFjtYkvBlr-sUjCXQmAqs
Date: 08 Aug 2006 10:55:42 GMT
Lines: 8
NNTP-Posting-Host: 8cc900f3.nr3.newsreader.com
X-Trace: DXC=0K:`2h8V03TPWg;HESh62XOA8_@f\K_iR0V\?
8`j4eW[6ARUAb<\17TNd7biGRhQTWYA@MLbHKH8]T4hR4\LNCb]
X-Complaints-To: abuse@newsreader.com
Xref: g2news2.google.com rec.radio.cb:15374 rec.radio.amateur.policy:36593
rec.radio.amateur.space:329 alt.hackers.malicious:58389

"DrDeath" <drdeath555usb@mail2boy.com> wrote:
> Wanna know who's helping the hams fuck with you??
>
The slurping lardass davies NOVFP, of course.

http://tinypic.com/k36bys.jpg

FU set

From 1727278015144036994
X-Google-Thread: 10e8ad,81ae275bfbdd6492,start
X-Google-Thread: 113975,81ae275bfbdd6492,start
X-Google-Attributes: gid10e8ad,gid113975,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news3.google.com!newshub.sdsu.edu!router2.astraweb.com!
news.astraweb.com!router1.astraweb.com!not-for-mail
From: Chris Steyaert <observations@rmob.org>
Newsgroups: rec.radio.amateur.space,sci.astro.amateur
Subject: Radio Meteor Obs. Bull. July 2006
Date: Tue, 08 Aug 2006 18:22:08 +0200
Message-ID: <ggehd25k6dh2ahm0sqv5rduo4vs6s2js41@4ax.com>
X-Newsreader: Forte Agent 1.93/32.576 English (American)
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Lines: 16
Organization: Unlimited download news at news.astraweb.com
NNTP-Posting-Host: 78bffe30.news.astraweb.com
X-Trace: DXC=Wa\71==2kR`j05>>><PFIcL?
0kYOcDh@jTMFn?:<^iae;;S\MAhgaDjKX07\YZ`QZfN`a5?;>Ki<eB096>PZ:3n`
Xref: g2news2.google.com rec.radio.amateur.space:330 sci.astro.amateur:35597

Radio Meteor Observation Bulletin No. 156 of July 2006 (72K) is available now as

http://visualrmob.free.fr/rmobtext/rmob0607.txt

More information and the visual presentation of the hourly forward scatter
counts can be found on

http://www.rmob.org

http://radio.data.free.fr

Chris

From 8015504747126970327
X-Google-Thread: 10e8ad,81ae275bfbdd6492
X-Google-Thread: 113975,81ae275bfbdd6492
X-Google-Attributes: gid10e8ad,gid113975,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news3.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx02.iad01.newshosting.com!newshosting.com!post01.iad01!not-for-mail

```
From: "canopus56" <canopus56@NOyahooSPAM.com>
Newsgroups: rec.radio.amateur.space,sci.astro.amateur
References: <ggehd25k6dh2ahm0sqv5rduo4vs6s2js41@4ax.com>
Subject: Re: Radio Meteor Obs. Bull. July 2006
Date: Wed, 9 Aug 2006 02:55:36 -0600
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.2869
X-MIMEOLE: Produced By Microsoft MimeOLE V6.00.2900.2869
X-RFC2646: Format=Flowed; Original
Lines: 9
Message-ID: <44d9a334$0$26140$3a2ecee9@news.csolutions.net>
Organization: Newshosting.com - Highest quality at a great price!
www.newshosting.com
X-Complaints-To: abuse@csolutions.net
Xref: g2news2.google.com rec.radio.amateur.space:331 sci.astro.amateur:35660

"Chris Steyaert" <observations@rmob.org> wrote in message
news:ggehd25k6dh2ahm0sqv5rduo4vs6s2js41@4ax.com...
> Radio Meteor Observation Bulletin No. 156 of July 2006 (72K) is available
> now as

Thanks as always for posting these.  It's really informative how much
non-visual activity there is, especially in July. - Canopus56




From 985770821401946810
X-Google-Thread: 106d41,d15ab71f1356da07
X-Google-Thread: 10f7a7,55b4799ccdba58f3
X-Google-Thread: 10e8ad,55b4799ccdba58f3
X-Google-Thread: 10a617,55b4799ccdba58f3
X-Google-Thread: fb049,55b4799ccdba58f3
X-Google-Attributes: gid106d41,gid10f7a7,gid10e8ad,gid10a617,gidfb049,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!postnews.google.com!h48g2000cwc.googlegroups.com!not-for-
mail
From: "keyclowns are the squirming worms on the fruit of hobby communications"
<keyklownzrnutjobs@yahoo.com>
Newsgroups:
rec.radio.cb,alt.usenet.kooks,rec.radio.amateur.space,alt.hackers.malicious,alt.ha
m-radio.vhf-uhf
Subject: Re: ft-101 service manual
Date: 9 Aug 2006 11:47:28 -0700
Organization: http://groups.google.com
Lines: 10
Message-ID: <1155149248.780011.103640@h48g2000cwc.googlegroups.com>
References: <1154884225.288273.91390@b28g2000cwb.googlegroups.com>
   <1154903332.129761.86390@b28g2000cwb.googlegroups.com>
NNTP-Posting-Host: 72.241.54.137
Mime-Version: 1.0
Content-Type: text/plain; charset="iso-8859-1"
```

```
X-Trace: posting.google.com 1155149254 2750 127.0.0.1 (9 Aug 2006 18:47:34 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Wed, 9 Aug 2006 18:47:34 +0000 (UTC)
In-Reply-To: <1154903332.129761.86390@b28g2000cwb.googlegroups.com>
User-Agent: G2/0.2
X-HTTP-UserAgent: Mozilla/4.0 (compatible; MSIE 6.0; Windows 98; Win 9x 4.90; .NET
CLR 1.1.4322),gzip(gfe),gzip(gfe)
Complaints-To: groups-abuse@google.com
Injection-Info: h48g2000cwc.googlegroups.com; posting-host=72.241.54.137;
   posting-account=WTkeKg0AAADjEOQnXryG-ENPHV3K9rZ_
Xref: g2news2.google.com rec.radio.cb:15487 alt.usenet.kooks:217752
rec.radio.amateur.space:332 alt.hackers.malicious:58758 alt.ham-radio.vhf-uhf:2447
```

DrDeath wrote:

> noob wrote:
> > any links to a pdf for a service manual... no i dont want to buy one
>
> try this,it should do it
> http://www.sunnygalleries.com/static/trannyisland/layout27/images/05s.jpg

We know that does it for you, DrDorkbreath

```
From -9023430330501817922
X-Google-Thread: 10e8ad,6bd06c42e4dbd524,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news4.google.com!newshub.sdsu.edu!elnk-nf2-pas!
newsfeed.earthlink.net!stamper.news.pas.earthlink.net!
newsread4.news.pas.earthlink.net.POSTED!46041641!not-for-mail
From: "JoAnne Maenpaa" <wb9jej_no-spam@earthling.com>
Newsgroups: rec.radio.amateur.space
Subject: ANS-218 AMSAT News Service Weekly Bulletins
Lines: 279
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <6kuCg.6611$0e5.4529@newsread4.news.pas.earthlink.net>
Date: Wed, 09 Aug 2006 23:36:34 GMT
NNTP-Posting-Host: 68.164.230.207
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread4.news.pas.earthlink.net 1155166594 68.164.230.207 (Wed, 09 Aug
2006 16:36:34 PDT)
NNTP-Posting-Date: Wed, 09 Aug 2006 16:36:34 PDT
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news2.google.com rec.radio.amateur.space:333
```

AMSAT NEWS SERVICE
ANS-218

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* Clifford C. Buttschardt K7RR Silent Key
* AMSAT demos at Santa Barbara Hamfest
* Kenneth Ransom, N5VHO, Honored by NASA
* AMSAT Awards
* ARISS Status - 31 July 2006

SB SAT @ AMSAT $ANS-218.01
Clifford C. Buttschardt K7RR Silent Key

AMSAT News Service Bulletin 218.01
From AMSAT HQ SILVER SPRING, MD.
August 6, 2006
To All RADIO AMATEURS
BID: $ANS-218.01

Cliff Buttschardt, K7RR (formerly W6HDO) became a silent key July 30, 2006 at 9:47 PM PDT. He was a lifetime member of both AMSAT and the ARRL, and an original member of Project OSCAR. He died quietly in his home in Morro Bay after battling inoperable cancer of the esophagus for many months.

Cliff was born in 1931 in Brooklyn, NY and later lived in Garden City on Long Island. Cliff finished school in San Jose and went on to graduate from San Jose State with a degree in electrical engineering. After graduation Cliff joined the Navy where he worked as a radioman. He later worked at Raytheon in Santa Barbara and SRI International in Palo Alto.

While at SRI he became a member of the original Project OSCAR Radio club and supported the construction of OSCAR-I. Over his lifetime Cliff supported many of the amateur satellites that were launched from Vandenberg AFB. In 2001 Cliff while teaching at Cuesta College in San Luis Obisop, Cliff, along with Ed English W6WYQ, began work on the CubeSat project. Cliff then moved over to California Polytechnic State University (Cal Poly) where he and Ed continued to mentor students who were just starting up the initial CubeSat designs.

In March of 2006 the Project OSCAR Board of Directors voted unanimously to award Cliff its highest honor, the Lifetime Achievement Award, for his contributions to amateur satellites, amateur radio and the CubeSat program. The award was presented during the CubeSat Launch Party at Cal Poly on 26 July 2006, and to Cliff personally at his home on the same day.

Cliff is survived by his wife Mabs, who was with Cliff when he passed on. It is requested that in lieu of flowers, a contribution to AMSAT be made in Cliff's name.

[Note - a more complete story and photos will be available in the upcoming edition of the AMSAT Journal.]

[ANS thanks Emily, N1DID, for the above information]

/EX

SB SAT @ AMSAT $ANS-218.02
AMSAT demos at Santa Barbara Hamfest

AMSAT News Service Bulletin 218.02
From AMSAT HQ SILVER SPRING, MD.
August 6, 2006
To All RADIO AMATEURS
BID: $ANS-218.02

AMSAT member Clint Bradford, K6LCS will be demonstrating how easy it is to work amateur satellites at the upcoming Santa Barbara Amateur Radio Club Family Reunion Hamfest on Sunday, August 13.

"I have AMSAT brochures from Martha, some handouts from the ARRL's Rosalie White on the ARISS program, and several pre-programmed HTs for attendees to use. It looks like AO-51 and SO-50 will be able to be accessed during a half-hour period in the morning," reports Clint.

The annual event is being held at the Elk's Lodge at 150 N. Kellogg, Goleta CA 93117 on Sunday, August 13th starting at 8:30 AM. Event details - and Clint's "Work AO-51 with your HT!" tutorial - are posted at the group's Web site: http://www.sbarc.org/annual/hamfest/index.html

[ANS thanks Clint, K6LCS, for the above information]

/EX

SB SAT @ AMSAT $ANS-218.03
Kenneth Ransom, N5VHO, Honored by NASA

AMSAT News Service Bulletin 218.03
From AMSAT HQ SILVER SPRING, MD.
August 6, 2006
To All RADIO AMATEURS
BID: $ANS-218.03

NASA has honored ISS Ham Radio Project Engineer Kenneth Ransom, N5VHO, with its prestigious "Silver Snoopy" Award. Ransom was tapped to receive the award for his role in helping International Space Station Expedition 12 Commander Bill McArthur, KC5ACR, complete and confirm Worked All States (WAS) and Worked All Continents (WAC), including Antarctica, from NA1SS, as well as logging some 130 DXCC entities. McArthur's duty tour ended in April.

"I am honored to have received the award and honored again by Bill McArthur's thoughtfulness at selecting such an Amateur Radio-appropriate Silver Snoopy," Ransom told ARRL. He explained that every Silver Snoopy has flown on a space mission. "The one that was awarded to me was flown on STS-58, which was Bill's first shuttle flight." The STS-58 mission, he said, not only was a SAREX (Shuttle Amateur Radio EXperiment) flight but McArthur's introduction to Amateur Radio from space. SAREX was the predecessor to the Amateur Radio on the International Space Station (ARISS) program.

In his role as ISS Ham Radio Project Engineer, Ransom helps ARISS arrange opportunities for students to speak via Amateur Radio with the space station crew at NA1SS. He also coordinates with the ISS crew on the configuration and operation of the two ham radio stations aboard the space station.

At some point during Expedition 12, Ransom realized that McArthur had already logged 25 states, and he figured, "Why stop there?" Pretty soon, he was lining up contacts for McArthur in the other 25.

"It was an, 'I know a friend who knows a friend who knows a friend' sort of thing," Ransom explained. "There are a lot of folks eager to talk to an astronaut."

"Different crews do different things as pastimes," Ransom said. "Bill enjoyed talking on the radio. It gave him someone else to talk to besides CAPCOM, the voice of mission control."

By the end of the mission, McArthur not only became the first astronaut to earn WAS from space but put lots of DX -- routine and exotic -- in the NA1SS log on both VHF and UHF. Overall, he made more than 1800 contacts during his approximately six months in space. He also established a new ARISS milestone by completing 37 school group contacts.

"None of that would have been possible without the work Kenneth did," McArthur said. "He alerted radio operators in some pretty obscure places -- places that rarely have contact with the space program."

To show his gratitude, McArthur recently presented Ransom with the Silver Snoopy Award -- a silver lapel pin featuring the famous "Peanuts" comic strip character Snoopy in a spacesuit. NASA's Astronaut Office presents the award to those who have significantly enhanced the space agency's goals for human exploration and development of space. Fewer than one percent of the space program's workforce receives it annually.

McArthur is still working to confirm DXCC from space. So far, he has approximately one-third of the necessary contacts confirmed.

[ANS thanks ARRL for the above information]

/EX

SB SAT @ AMSAT $ANS-218.04
AMSAT Awards

AMSAT News Service Bulletin 218.04
From AMSAT HQ SILVER SPRING, MD.
August 6, 2006
To All RADIO AMATEURS
BID: $ANS-218.04

This week, congratulations go out to all of the following.

We would like to welcome the following to the satellite community. They have made their first satellite contact and are now members of the AMSAT Satellite Communicators Club.

Christophe Candebat, FM1OJ
Simon Boehme, KC8ZYD
(who happens to be 14 and made his first satellite contact on field day)

AMSAT Satellite Communications Achievement Award
Andre Theelen, PH7AT #431
Joseph Jaffer, N3PKC #432
Robert Wyckoff, KB3MBO #433
Roger Banks, KE5AQD #434

W4AMI Communications Achievement Award
Andre Theelen, PH7AT #45

South Africa Satellite Communications Achievement Award
Andre Theelen, PH7AT #US96

To see all the awards visit http://www.amsat.org or http://www.amsatnet.com

[ANS thanks Bruce, KK5DO, for the above information]

/EX

SB SAT @ AMSAT $ANS-218.05
ARISS Status - 31 July 2006

AMSAT News Service Bulletin 218.05

From AMSAT HQ SILVER SPRING, MD.
August 6, 2006
To All RADIO AMATEURS
BID: $ANS-218.05

1. Children's Club Speaks to ISS

On Saturday, 29 July 2006, the Children's Club Camp held in Patras, Greece experienced an ARISS contact with ESA astronaut Thomas Reiter, DF4TR, via the telebridge station, WH6PN, in Hawaii. The Greek Minister of Education asked the first two questions, followed by two questions posed by students. ESA employees' children attended the camp held at the Porto Rio Hotel, with July 29 designated as Space Day. An audience of 200 was present for the event. Echolink was used for the contact, receiving 31 connections from 11 countries, including 6 repeaters.

2. Upcoming School Contacts

Teven-Tintenbar Public School is located in a rural-residential area 12 km from the coastal town of Ballina in the Northern Rivers region of NSW, Australia. Approximately 180 students, grades kindergarten through grade 6, are enrolled at the school. Teven-Tintenbar has been approved for a contact on Friday, 11 August 2006 at 07:32 UTC.

3. SSTV Testing

Pavel Vinogradov, RV3BS, ran a few Slow Scan Television (SSTV) tests over the weekend. Images were picked up by stations in Russia and Brazil. Articles may be found on the AMSAT and ARRL websites, www.amsat.org and www.arrl.org

4. ARISS International Team Meeting

The monthly ARISS International Team teleconference was held on Tuesday, 25 July 2006. Topics of discussion included Japanese space visitor, Dice-K Enomoto, school contacts planned for Thomas Reiter, and the ARISS International Face to Face meeting planned for October.

5. Chuck Brady, N4BQW, SK

Retired space shuttle astronaut Chuck Brady, N4BQW, one of the first astronauts involved with the Shuttle Amateur Radio Experiment (SAREX) program, passed away July 23. ARRL ran an article, "Dr Charles E. 'Chuck' Brady Jr, N4BQW, SK." See: http://www.arrl.org/news/stories/2006/07/27/1/?nc=1

[ANS thanks Carol, KB3LKI for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73, This week's ANS Editor,
Lee McLamb, KU4OS

From 6299131706251823527
X-Google-Thread: 10e8ad,862bc8556796b8d6,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news4.google.com!newshub.sdsu.edu!elnk-nf2-pas!newsfeed.earthlink.net!stamper.news.pas.earthlink.net!newsread4.news.pas.earthlink.net.POSTED!46041641!not-for-mail
From: "JoAnne Maenpaa" <wb9jej_no-spam@earthling.com>
Newsgroups: rec.radio.amateur.space
Subject: WSR-219 AMSAT Weekly Satellite Report
Lines: 1111
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <bkuCg.6612$0e5.6003@newsread4.news.pas.earthlink.net>
Date: Wed, 09 Aug 2006 23:36:39 GMT
NNTP-Posting-Host: 68.164.230.207
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread4.news.pas.earthlink.net 1155166599 68.164.230.207 (Wed, 09 Aug 2006 16:36:39 PDT)
NNTP-Posting-Date: Wed, 09 Aug 2006 16:36:39 PDT
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news2.google.com rec.radio.amateur.space:334

This report is organized into 4 parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites

SB SAT @ AMSAT W8ISS ANS-219.S1
WSR 219 Part 1 08/07/2006

AMSAT NEWS SERVICE BULLETIN 219.S1 FROM AMSAT HQ
SILVER SPRING, MD, August 07, 2006
TO ALL RADIO AMATEURS
BID: $ANS-219.S1

VO-52 HAMSAT

```
Catalog Number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/V - Indian Transponder

Proposed frequencies:
-------------------
Indian Transponder:
Uplink :  435.220 MHz to 435.280 MHz LSB/CW
Downlink: 145.870 MHz to 145.930 MHz USB/CW
Beacon :  145.859330 MHZ CW

Dutch Transponder:
Uplink :  435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW
Beacon :  145.860MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsat.in/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is
active. Each transponder has a different beacon.
[04242006]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Current Mode(s): FM Repeater - OFF
                 PBBS - OFF
                 Digipeater - OFF

Analog voice downlink: 435.300 MHz FM
         435.150 MHz FM
                      2401.200 Mhz FM
Analog voice uplink:   145.880 MHZ FM
         145.880 MHz USB
         145.920 MHz FM 67Hz PL tone
        1268.700 MHz FM 67Hz PL tone
Digital Downlinks:     435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
        2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:        145.860 MHz FM, 9k6 Digital, Pacsat Broadcast
Protocol
                      1268.700 mhz FM, 9k6 PBP Digital
Mode and Antenna Polarization:
T: Linear
V: Linear
```

U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Mode schedule for July 2006 according to the AO-51 command team:

August 7 to August 13

This week the command stations will cycle the satellite through several configurations while collecting Whole Orbit Data (WOD) files. These files will be used to further define conditions on board the spacecraft important to maintaining optimum performance. Users are welcome to operate through the satellite during these tests , but specific mode changes will not be announced in advance. However, we do expect for the satellite to be available in V/U repeater for Saturday hamfest operations.

August 14 to August 27 (Additional testing as above possible August 21 to 27)

FM Repeater
Downlink 435.300 mHz FM
Uplink 145.920 mHz FM with 67 hz Tone

Digital / PBBS
Downlink 435.150 mHz FM 9k6 Digital
Uplink 145.860 mHz FM 9k6 Digital
PBBS Active
Telemetry Downlink and Digipeater Active (No Unattended Digipeater Ops Please)

August 28 to September 3

FM Repeater, V/S

Uplink: 145.920 mhz FM, No PL Tone
Downlink 2401.200 mhz FM

September modes are anticipated to include high power V/U repeater, L/S repeater, and high power V/U 38.4 kbaud!

Official Webpage: http://www.amsat.org/amsat-new/echo/
[08072006]
=====

SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Uplink: 145.850 MHz (67.0 Hz PL tone) (See below for operating procedures)
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz. The
order of operation is thus: (allow for Doppler as necessary)
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer
   on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater
   on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10
   minute timer.
[04172006]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: OPERATIONAL

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplink: 145.850 145.870 145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

unOfficial Webpage: http://www.amsat.org/amsat/sats/n7hpr/fo29.html

[11132005]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Uplink: 145.850 MHz FM
Downlink: 436.795 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[01012006]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational depending on amount of Sunlight
Current Reported mode: Mode-A

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
   432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
  145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
  145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz
  145.972 MHz
  435.100 MHz
 2304.100 MHz

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php
The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
AO-7 users are requested to log their contacts and observations about
AO-7, especially any unexpected mode changes.
AO-07 telemetry software webpage:
http://www.qsl.net/k3tz/files/K3TZ_AO-07_Telemetry_Decoder_0.5.zip

Please keep your power low! For additional information please read the
AO-7
Usage Guidelines on the AO-7 Log and Resource Site located at:
http://www.planetemily.com/ao7
[04242006]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: TESTING - SEE BELOW IN REPORT
Digipeater:

The current crew is:
Commander: Pavel Vinogradov, RV3BS
Flight Engineer: Jeff Williams, KD5TVQ
Crew: Thomas Reiter - DF4TR

Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

SSTV TESTING:
Worldwide Reported Downlink: 144.49 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS, RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official Webpage: http://www.rac.ca/ariss
Official Fan club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

Currently, the crew is in the process of testing the SSTV equipment so ANY activity may not be what will be heard on the next pass right now. IT ALL DEPENDS ON THE TIME AVAILABLE TO THE CREW TO DO MORE IMPORTANT ITEMS. PLEASE MAINTAIN READING THE AMSAT-BB AND ANS SERVICES FOR MORE CURRENT INFO.

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line is

NOT translated from Russian and posted.
[08072006]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-219.S2
WSR 219 Part 2 08/07/2006

AMSAT NEWS SERVICE BULLETIN 219.S2 FROM AMSAT HQ
SILVER SPRING, MD, August 07, 2006
TO ALL RADIO AMATEURS
BID: $ANS-219.S2

CO-58 XI-V
Catalog Number: 28895
Launch Date: October 27, 2005

Status: Operational only within range of Ground station in Japan

Telemetry Downlink: 437.345MHz - FSK 1200bps using AFK protocol
Beacon Downlink: 437.465MHz - CW about 50 WPM

Callsign: JQ1YGW

Oficial Webpage: http://www.space.t.u-tokyo.ac.jp/gs/satinfo-e.html#xi5
Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
[03122006]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: TESTING - SEE BELOW IN REPORT
Digipeater:

The current crew is:
Commander: Pavel Vinogradov, RV3BS
Flight Engineer: Jeff Williams, KD5TVQ
Crew: Thomas Reiter - DF4TR

Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

SSTV TESTING:
Worldwide Reported Downlink: 144.49 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
German: DP0ISS
Russian: RS0ISS, RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official Webpage: http://www.rac.ca/ariss
Official Fan club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

Currently, the crew is in the process of testing the SSTV equipment so
ANY
activity may not be what will be heard on the next pass right now. IT
ALL
DEPENDS ON THE TIME AVAILABLE TO THE CREW TO DO MORE IMPORTANT ITEMS.
PLEASE
MAINTAIN READING THE AMSAT-BB AND ANS SERVICES FOR MORE CURRENT INFO.

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.
[08072006]
=====
PCSAT-2
Catalog Number: 25544
Launch Date: August 1, 2005

Activated: August 3, 2005
Status: Operational
Current Mode: ISS Packet =>VOICE Contacts

Digital Downlink: 435.275 Mhz
Digital Uplink: 145.825 Mhz
ISS digipeater uplink: 145.990 Mhz

PSK-31 Downlink: 435.275 Mhz
PSK-31 Uplink: 29.401 Mhz

CALLSIGN: pcsat2

PCSAT2 SPECIAL EVENT AND OPERATIONS

Subj: ISS Packet =>VOICE Contacts:

Starting on 4 August, and for the 26 days remaining of PCSAT2's operation on ISS, PCSAT2 will be configured for VOICE response to normal packets transmitted via the normal ISS digipeater 145.99 uplink (or PCSAT2's uplink on 145.825 if the ARISS packet system is not operational). The command station's voice downlink will be on 437.975 +/- Doppler and he/she willl attempt to acknowledge by voice all packets seen on the packet uplink.

The UHF downlink will be weak (only 1 Watt) and being UHF (9dB worse than 2m), will need at least a small beam to hear it.

Users who want to participate, simply send your packets as normal VIA ARISS on 145.99 uplink (if available or via 145.825 if not) but listen on the 437.925 downlink for the combined voice and packets. This will only work when PCSAT2 is in range of a participating command station and there is no guarantee that all command stations will be available on any given pass. In otherwords, this may be rare, but fun.

Right now, passes in the Northern Hemisphere are occuring before sunrise, so only the last two morning passes may be so manned for voice. Passes in the Southern Hemisphere right now are from midday into evening.

Best thing to do is simply monitor 437.975 during ISS passes and if you hear a command station, then send us a 'hello' packet via the ISS digipeater.

We need a volunteer command station in South America, South Africa and some other footprints too if activity is desired in those areas.

Official Webpage: http://web.usna.navy.mil/~bruninga/pcsat2.html
PCSAT2 APRS Packet page: http://www.findu.com/cgi-bin/pcsat2.cgi
aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[08072006]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Current Mode(s): FM Repeater - OFF
                 PBBS - OFF
                 Digipeater - OFF

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.880 MHZ FM
145.880 MHz USB
145.920 MHz FM 67Hz PL tone
1268.700 MHz FM 67Hz PL tone
Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast Protocol
1268.700 mhz FM, 9k6 PBP Digital
Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Mode schedule for July 2006 according to the AO-51 command team:

August 7 to August 13

This week the command stations will cycle the satellite through several configurations while collecting Whole Orbit Data (WOD) files. These files will be used to further define conditions on board the spacecraft important to maintaining optimum performance. Users are welcome to operate through the satellite during these tests , but specific mode changes will not be announced in advance. However, we do expect for the satellite to be available in V/U repeater for Saturday hamfest operations.

August 14 to August 27 (Additional testing as above possible August 21 to 27)

FM Repeater
Downlink 435.300 mHz FM
Uplink 145.920 mHz FM with 67 hz Tone

Digital / PBBS
Downlink 435.150 mHz FM 9k6 Digital
Uplink 145.860 mHz FM 9k6 Digital
PBBS Active
Telemetry Downlink and Digipeater Active (No Unattended Digipeater Ops Please)

August 28 to September 3

FM Repeater, V/S

Uplink: 145.920 mhz FM, No PL Tone
Downlink 2401.200 mhz FM

September modes are anticipated to include high power V/U repeater, L/S repeater, and high power V/U 38.4 kbaud!

Official Webpage: http://www.amsat.org/amsat-new/echo/
[08072006]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Operational

General Usage Uplink/Downlink:145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org
aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[04172006]
=====
CO-55 CUTE-1.7
Catalog number: 28941
Launched: June 30,2003

Status: Operational

Uplink: ?
Downlink: 437.3850 CW
437.4700 1200 FM ax25 or SRLL (ACTIVE only near Japan ?)
Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[05012006]
=====
GO-32 TECHSAT-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Downlink: 435.225 MHz FM (9600-baud FSK)
435.325 Mhz - Not Available - temperature problems
Uplinks: 145.850 FM
145.890 FM
145.930 FM

```
        1269.700 FM
        1269.800 FM
        1269.900 FM
Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[08072006]
=====
RS-22 Mozhayets 4
Catalog Number: 27939
Launch Date: September 27, 2004

Status: Operational

Beacon: 435.3520 MHz CW
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Semi-operational, the digipeater command is on and open for
APRS users.

Uplink: 145.900 FM
        145.920 FM
        145.940 FM
        145.960 FM
(using 1200-baud Manchester FSK)
Downlink: 437.026 MHz SSB (1200-baud PSK)
Mode-S Beacon: 2401.1428 MHz

Mode and Antenna Polarization:
U: RC 437.050 MHz RHCP
   PSK 437.025 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[04172006]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational

Telemetry Downlink: 145.826 MHz. FM (1200-baud AFSK).
approx. 10 days ON, 10 days OFF
Mode-S Beacon: 2401.500 MHz. ... OFF
```

UHFBeacon: 435.025 MHz. ... OFF

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Reception reports are requested to be sent to xxxxx@amsat.org (replace xxxxx by g3cwv), or post to AMSAT-BB.

During the period 15 June to 17 July 2006 nothing has been heard from the satellite. It was last heard on 05 May, just one day before the solar eclipses were due to start. These eclipses will continue until 04 August 2006, reaching a maximum duration of 22% around 19 June. If the satellite behaves in the same way as it did last year, regular 10 day transmissions should re-start, sometime in August.

Official webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[07172006]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-219.S3
WSR 219 Part 3 08/07/2006

AMSAT NEWS SERVICE BULLETIN 219.S3 FROM AMSAT HQ
SILVER SPRING, MD, August 07, 2006
TO ALL RADIO AMATEURS
BID: $ANS-219.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

AO-54 SUITSAT
Catalog Number:28933
Release Date: February 3,2006

Status: Non-operational
Modes : FM Voice Telemetry/Greetings
 FM SSTV

Callsign: RS0RS
Downlink: 145.990 FM

Currently on the amsat-bb, there is a geussing game going on about when Suitsat will re-enter the atmosphere.

Official webpage: http://www.suitsat.org
[05012006]
=====

```
NCUBE-2
Catalog Number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency:  437.305
                             2407.250

Official Website: http://www.ncube.no
[05012006]
=====
XO-53 SSETI
Catalog Number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 FM 67Hz CTCSS
Voice Downlink: 2401.835 FM
Packet Up/Downlink: 437.250 9k6 packet
Packet Downlink 2401.835 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01292006]
=====
TO-31 TMSAT-1
Catalog Number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink:   145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
PO-28 POSAT-1
Catalog Number: 22829
Launch Date: September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 429.950

Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12
```

```
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html.
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012006]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launched: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB
Beacon: 145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: Downlink only

Uplink: 145.875 145.900 145.925 145.950 MHz FM (1200-baud)
Downlink: 435.808 MHz PSK
Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01012006]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB
Beacon: 29.408 MHz
Robot: 29.454 MHz
[05232004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational
```

```
Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB
Beacon: 145.860 MHz
Robot: 145.908 MHz
[05232004]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink 145.975 MHz FM
Downlink 435.070 MHz FM
[05092004]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink: 145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM
Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01092005]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational?

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB
Beacon: 29.352 MHz (intermittent)
SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplink: 145.84 145.86 145.88 145.90 MHz FM
(using 1200-baud Manchester FSK)
CW downlink: 437.125 MHz
Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)
Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o
```

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[05232004]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[08152004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM
Broadcast Callsign: HLO1-11
BBS: HLO1-12

Jim, AA7KC, reports that KO-23's downlink transmitter continues in a non-operational status.
[05092004]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM (9600-baud FSK)
Downlink: 436.500 MHz FM
Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm

[ANS-WSR has no further information]
[05232004]
=====
SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

STatus: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz and 145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[08082004]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlink: 437.025 MHz 437.400 MHz
Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web site
at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[05092004]
=====

```
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplink V-band   145.840 - 145.990 MHz CW/LSB
       U-band   435.550 - 435.800 MHz CW/LSB
       L1-band 1269.250 - 1269.500 MHz CW/LSB
       L2-band 1268.325 - 1268.575 MHz CW/LSB
Downlink: S2-band 2401.225 - 2401.475 MHz CW/USB
          K-band 24,048.010 - 24,048.060 MHz CW/USB
Beacon:   2401.323
         24,048.035
[05232004]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational
Downlink: 437.075 MHz
Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[08152004]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz
Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[08152004]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD
```

Everyone is welcome to use the digipeating/APRS features of Sapphire, callsign KE6QMD, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]

=====

MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Operational

Uplink: 145.850 or 145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz
Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[11202005]

=====

AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink 435.275 1200-baud AFSK
Downlink 145.825 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01012006]

=====

DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink: Downlink 145.825 MHz FM 1200 Baud AFSK
Beacon: 2401.220 MHz

[05012006]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-219.S4
WSR 219 Part 4 08/07/2006

AMSAT NEWS SERVICE BULLETIN 219.S4 FROM AMSAT HQ
SILVER SPRING, MD, August 07, 2006
TO ALL RADIO AMATEURS
BID: $ANS-219.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE
PROPOSED FOR LAUNCH AT THIS TIME:

PHASE 3E ?O-??
Catalog Number:
Proposed Launch Date: Early/Mid 2007

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/
[ANS-WSR wishes to thank William Leijenaar, PE1RAH for this week's report]
[04242006]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062

888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/amsat/listserv/menu.html

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

From 7024416801996261688
X-Google-Thread: 10bf43,2eaf18ff5ebea7f7
X-Google-Thread: 10f7a7,813f13f1ab0567a7,start
X-Google-Thread: f9daf,813f13f1ab0567a7,start
X-Google-Thread: 106d41,813f13f1ab0567a7,start
X-Google-Thread: 10e8ad,813f13f1ab0567a7,start
X-Google-Attributes: gid10bf43,gid10f7a7,gidf9daf,gid106d41,gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!postnews.google.com!i42g2000cwa.googlegroups.com!not-for-mail
From: marqueenie_von_dork@yahoo.com
Newsgroups:
rec.radio.amateur.policy,alt.usenet.kooks,alt.revenge,rec.radio.cb,rec.radio.amateur.space
Subject: Re: some explanation since Robeson has choosen to renew his assult on th

NG, and me
Date: 11 Aug 2006 09:16:13 -0700
Organization: http://groups.google.com
Lines: 25
Message-ID: <1155312973.033376.134900@i42g2000cwa.googlegroups.com>
References: <1155298281.480099.57590@h48g2000cwc.googlegroups.com>
   <1155301602.610277.95390@b28g2000cwb.googlegroups.com>
NNTP-Posting-Host: 216.8.14.68
Mime-Version: 1.0
Content-Type: text/plain; charset="iso-8859-1"
X-Trace: posting.google.com 1155312978 9521 127.0.0.1 (11 Aug 2006 16:16:18 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Fri, 11 Aug 2006 16:16:18 +0000 (UTC)
In-Reply-To: <1155301602.610277.95390@b28g2000cwb.googlegroups.com>
User-Agent: G2/0.2
X-HTTP-UserAgent: Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1; SV1;
yie6),gzip(gfe),gzip(gfe)
Complaints-To: groups-abuse@google.com
Injection-Info: i42g2000cwa.googlegroups.com; posting-host=216.8.14.68;
   posting-account=9Y7COw0AAAAENBAbwffSh7_vtSFN09jw
Xref: g2news2.google.com rec.radio.amateur.policy:37274 alt.usenet.kooks:218449
alt.revenge:5912 rec.radio.cb:15667 rec.radio.amateur.space:335

an old friend wrote:
> an old friend wrote:
> > I will resist it.
> >
> > I am adivised I have legal right to do so, indeed should any news
> > provider be persauded to terminate my access i t would give me the one
> > thing my lawyer lacks to assure me of a postive result in litagation
> > against Robeson and other parties.
> >
> > Robesonn can stopp his assualt anytime
> >
> > he can choose to leave or (I hope) he can choose to enage in discussion
> > of radio related issues on the NG
> much the same aplies to wisemen a well

Mr Robeson is a welcome poster. He has always tried to help others and
post on topic.

YOU,otoh, have gone out of your way to post gay filth here. I have
copies of YOUR posts to prove it. YOU are not welcome here you filty
sodomite!

aren't you in violation of the states sodomy laws??

From 1952465707159762000
X-Google-Thread: 10bf43,2eaf18ff5ebea7f7
X-Google-Thread: 10f7a7,813f13f1ab0567a7

```
X-Google-Thread: f9daf,813f13f1ab0567a7
X-Google-Thread: 106d41,813f13f1ab0567a7
X-Google-Thread: 10e8ad,813f13f1ab0567a7
X-Google-Attributes: gid10bf43,gid10f7a7,gidf9daf,gid106d41,gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!postnews.google.com!74g2000cwt.googlegroups.com!not-for-
mail
From: "an old friend" <kb9rqz@yahoo.com>
Newsgroups:
rec.radio.amateur.policy,alt.usenet.kooks,alt.revenge,rec.radio.cb,rec.radio.amate
ur.space
Subject: Re: some explanation since Robeson has choosen to renew his assult on th
NG, and me
Date: 11 Aug 2006 09:28:47 -0700
Organization: http://groups.google.com
Lines: 12
Message-ID: <1155313727.047850.19040@74g2000cwt.googlegroups.com>
References: <1155298281.480099.57590@h48g2000cwc.googlegroups.com>
   <1155301602.610277.95390@b28g2000cwb.googlegroups.com>
   <1155312973.033376.134900@i42g2000cwa.googlegroups.com>
NNTP-Posting-Host: 66.82.9.54
Mime-Version: 1.0
Content-Type: text/plain; charset="iso-8859-1"
X-Trace: posting.google.com 1155313732 11618 127.0.0.1 (11 Aug 2006 16:28:52 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Fri, 11 Aug 2006 16:28:52 +0000 (UTC)
In-Reply-To: <1155312973.033376.134900@i42g2000cwa.googlegroups.com>
User-Agent: G2/0.2
X-HTTP-UserAgent: Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1; SV1; .NET CLR
1.1.4322),gzip(gfe),gzip(gfe)
Complaints-To: groups-abuse@google.com
Injection-Info: 74g2000cwt.googlegroups.com; posting-host=66.82.9.54;
   posting-account=mGJHFw0AAABhg_iImBOts3VB5ouUQlvB
Xref: g2news2.google.com rec.radio.amateur.policy:37278 alt.usenet.kooks:218457
alt.revenge:5913 rec.radio.cb:15671 rec.radio.amateur.space:336


marqueenie_von_dork@yahoo.com wrote:
> an old friend wrote:

> YOU,otoh, have gone out of your way to post gay filth here. I have
> copies of YOUR posts to prove it. YOU are not welcome here you filty
> sodomite!
nope
>
> aren't you in violation of the states sodomy laws??
suchh laws no longer exist guess you don't read



From -3587850632229969362
X-Google-Thread: 10bf43,26be08b279844701
X-Google-Thread: 106d41,b6bcc2ad74a29aee,start
```

```
X-Google-Thread: 10e8ad,b6bcc2ad74a29aee,start
X-Google-Attributes: gid10bf43,gid106d41,gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!postnews.google.com!m79g2000cwm.googlegroups.com!not-for-
mail
From: time_space_traveler_14275@yahoo.com
Newsgroups: rec.radio.amateur.policy,rec.radio.cb,rec.radio.amateur.space
Subject: Re: JUST STOP YOUR CRAP
Date: 12 Aug 2006 12:31:06 -0700
Organization: http://groups.google.com
Lines: 7
Message-ID: <1155411066.896633.88360@m79g2000cwm.googlegroups.com>
References: <1155404952.843591.293600@75g2000cwc.googlegroups.com>
NNTP-Posting-Host: 172.138.53.16
Mime-Version: 1.0
Content-Type: text/plain; charset="iso-8859-1"
X-Trace: posting.google.com 1155411072 32340 127.0.0.1 (12 Aug 2006 19:31:12 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Sat, 12 Aug 2006 19:31:12 +0000 (UTC)
In-Reply-To: <1155404952.843591.293600@75g2000cwc.googlegroups.com>
User-Agent: G2/0.2
X-HTTP-UserAgent: Mozilla/5.0 (Windows; U; Windows NT 5.1; en-US; rv:1.7.12)
Gecko/20050915 Firefox/1.0.7,gzip(gfe),gzip(gfe)
Complaints-To: groups-abuse@google.com
Injection-Info: m79g2000cwm.googlegroups.com; posting-host=172.138.53.16;
   posting-account=QeCTCA0AAADicf_XmiNdeZZG-HAG8yyK
Xref: g2news2.google.com rec.radio.amateur.policy:37407 rec.radio.cb:15710
rec.radio.amateur.space:338


an old friend wrote:
<same old lies,snipped>

BUT YOU STARTED IT. I WILL PROVIDE SWORN TESTIMONY TO ANY PARTY YOU TRY
TO HARASS.




From -7443641758083514083
X-Google-Thread: 106d41,b6bcc2ad74a29aee
X-Google-Thread: 10e8ad,b6bcc2ad74a29aee
X-Google-Attributes: gid106d41,gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!postnews.google.com!75g2000cwc.googlegroups.com!not-for-
mail
From: "an old friend" <kb9rqz@yahoo.com>
Newsgroups: rec.radio.cb,rec.radio.amateur.space
Subject: get some therapy
Date: 12 Aug 2006 16:07:43 -0700
Organization: http://groups.google.com
Lines: 10
Message-ID: <1155424063.620494.265240@75g2000cwc.googlegroups.com>
References: <1155404952.843591.293600@75g2000cwc.googlegroups.com>
```

```
   <1155411066.896633.88360@m79g2000cwm.googlegroups.com>
NNTP-Posting-Host: 66.82.9.54
Mime-Version: 1.0
Content-Type: text/plain; charset="iso-8859-1"
X-Trace: posting.google.com 1155424069 4907 127.0.0.1 (12 Aug 2006 23:07:49 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Sat, 12 Aug 2006 23:07:49 +0000 (UTC)
In-Reply-To: <1155411066.896633.88360@m79g2000cwm.googlegroups.com>
User-Agent: G2/0.2
X-HTTP-UserAgent: Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1; SV1; .NET CLR
1.1.4322),gzip(gfe),gzip(gfe)
Complaints-To: groups-abuse@google.com
Injection-Info: 75g2000cwc.googlegroups.com; posting-host=66.82.9.54;
   posting-account=mGJHFw0AAABhg_iImBOts3VB5ouUQlvB
Xref: g2news2.google.com rec.radio.cb:15717 rec.radio.amateur.space:339


time_space_traveler_14275@yahoo.com wrote:
> an old friend wrote:
> <same old lies,snipped>
>
> BUT YOU STARTED IT. I WILL PROVIDE SWORN TESTIMONY TO ANY PARTY YOU TRY
> TO HARASS.
right from a time space traveler well since I harrass nobody your
testimony will nevr be needed




From -3576183607977447 66
X-Google-Thread: fc2a5,f8ce44921aecd15e,start
X-Google-Thread: 107ada,884c9e429cd29b18
X-Google-Thread: 10bf43,7831d7ab14abf4ba
X-Google-Thread: 10e8ad,f8ce44921aecd15e,start
X-Google-Attributes: gidfc2a5,gid107ada,gid10bf43,gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news3.google.com!news.glorb.com!newsfeed-
east.nntpserver.com!nntpserver.com!statler.nntpserver.com!be5.nntpserver.com!not-
for-mail
From: Mark@kb9rqz.com
Newsgroups:
rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.rad
io.amateur.space
Subject: cease and desist
Date: Mon, 14 Aug 2006 14:51:05 -0400
Message-ID: <tfh1e214ag9trq5cs2l65pjp5io8k5ghvn@4ax.com>
References: <452207781406@news-server.austin.rr.com>
X-Newsreader: Forte Free Agent 3.3/32.846
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Lines: 4
NNTP-Posting-Date: 14 Aug 2006 17:54:49 GMT
X-Complaints-To: abuse@teranews.com
```

```
Xref: g2news2.google.com rec.radio.amateur.homebrew:6462
rec.radio.amateur.misc:18867 rec.radio.amateur.policy:37707
rec.radio.amateur.space:340

On Mon, 14 Aug 2006 17:34:02 GMT, ray@austin.com (ray...i need to pay
my bill and it works) wrote:
cease and desist
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com




From -6791853358287072715
X-Google-Thread: fc2a5,f8ce44921aecd15e
X-Google-Thread: 107ada,884c9e429cd29b18
X-Google-Thread: 10bf43,7831d7ab14abf4ba
X-Google-Thread: 10e8ad,f8ce44921aecd15e
X-Google-Attributes: gidfc2a5,gid107ada,gid10bf43,gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news4.google.com!news.glorb.com!newsfeed-
east.nntpserver.com!nntpserver.com!statler.nntpserver.com!be5.nntpserver.com!not-
for-mail
From: "Mark Morgan" <konstans@homomale.com>
Newsgroups:
rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.rad
io.amateur.space
References: <452207781406@news-server.austin.rr.com>
<tfh1e214ag9trq5cs2l65pjp5io8k5ghvn@4ax.com>
Subject: Re: cease and desist
Date: Mon, 14 Aug 2006 15:34:00 -0400
Organization: konstans
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.2869
X-RFC2646: Format=Flowed; Original
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.2962
Lines: 14
Message-ID: <44e0c300$0$11663$88260bb3@free.teranews.com>
NNTP-Posting-Date: 14 Aug 2006 18:37:52 GMT
X-Complaints-To: abuse@teranews.com
Xref: g2news2.google.com rec.radio.amateur.homebrew:6463
rec.radio.amateur.misc:18870 rec.radio.amateur.policy:37710
rec.radio.amateur.space:341


<Mark@kb9rqz.com> wrote in message
news:tfh1e214ag9trq5cs2l65pjp5io8k5ghvn@4ax.com...
> On Mon, 14 Aug 2006 17:34:02 GMT, ray@austin.com (ray...i need to pay
> my bill and it works) wrote:
> cease and desist
> http://kb9rqz.blogspot.com/
```

>
> --
> Posted via a free Usenet account from http://www.teranews.com
>

they try to bust my shemale wife four empersniating a women

--
Posted via a free Usenet account from http://www.teranews.com

```
From 6865846902577862567
X-Google-Thread: fc2a5,f8ce44921aecd15e
X-Google-Thread: 107ada,884c9e429cd29b18
X-Google-Thread: 10bf43,7831d7ab14abf4ba
X-Google-Thread: 10e8ad,f8ce44921aecd15e
X-Google-Attributes: gidfc2a5,gid107ada,gid10bf43,gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news4.google.com!news.glorb.com!newsfeed-east.nntpserver.com!nntpserver.com!statler.nntpserver.com!be5.nntpserver.com!not-for-mail
From: Mark@kb9rqz.com
Newsgroups: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space
Subject: Re: cease and desist
Date: Mon, 14 Aug 2006 15:42:03 -0400
Message-ID: <ofk1e2dqk5jlk87fmanlgml1fqjqthkahe@4ax.com>
References: <452207781406@news-server.austin.rr.com>
<tfh1e214ag9trq5cs2l65pjp5io8k5ghvn@4ax.com>
<44e0c300$0$11663$88260bb3@free.teranews.com>
X-Newsreader: Forte Free Agent 3.3/32.846
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Lines: 6
NNTP-Posting-Date: 14 Aug 2006 18:45:47 GMT
X-Complaints-To: abuse@teranews.com
Xref: g2news2.google.com rec.radio.amateur.homebrew:6464
rec.radio.amateur.misc:18871 rec.radio.amateur.policy:37711
rec.radio.amateur.space:342
```

On Mon, 14 Aug 2006 15:34:00 -0400, "Mark Morgan"
<konstans@homomale.com> wrote:

cease and desist
id theft is a crime
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com

```
From -6674819028162028545
X-Google-Thread: fc2a5,f8ce44921aecd15e
X-Google-Thread: 107ada,884c9e429cd29b18
X-Google-Thread: 10bf43,7831d7ab14abf4ba
X-Google-Thread: 10e8ad,f8ce44921aecd15e
X-Google-Attributes: gidfc2a5,gid107ada,gid10bf43,gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news4.google.com!news3.google.com!
border1.nntp.dca.giganews.com!nntp.giganews.com!nx02.iad01.newshosting.com!
newshosting.com!198.186.190.247.MISMATCH!news-xxxfer.readnews.com!news-
out.readnews.com!spool-big1.readnews.com!diablo3.voicenet.com!
snip.allthenewsgroups.com!not-for-mail
Reply-To: "Biggus Dickus" <cockasimian@apeshallnotfunkape.com>
From: "Biggus Dickus" <cockasimian@apeshallnotfunkape.com>
Newsgroups:
rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.rad
io.amateur.space
References: <452207781406@news-server.austin.rr.com>
Subject: Re: Please help *PLEASE PUT ME ON YOUR GAY RESTROOM ASS BLUMPKIN PROVIDER
LIST*
Date: Mon, 14 Aug 2006 20:11:38 -0400
Lines: 15
Organization: 7 googles
MIME-Version: 1.0
Content-Type: text/plain;
     charset="iso-8859-1"
Content-Transfer-Encoding: 7bit
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1478
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1478
Message-ID: <42f76$44e11136$d1cc587d$11957@snip.allthenewsgroups.com>
X-Complaints-To: abuse@allthenewsgroups.com
NNTP-Posting-Host: sarc2b-209-204-88-125.sniparpa.net
X-Trace: 42f7644e111367469fdd811957
Xref: g2news2.google.com rec.radio.amateur.homebrew:6466
rec.radio.amateur.misc:18881 rec.radio.amateur.policy:37760
rec.radio.amateur.space:343
```

"ray...i need to suck your cock and it works" <ray@austin.com> wrote in message news:452207781406@news-server.austin.rr.com...

>
>
> It Will Work. If you do as I have done!
> Just Do It! follow the 4 steps.
> $6.00 BLOWJOBS to $15,000.00 BLUMPKIN SESSIONS in 30 days!

Blow me you cheap hammie hamfest dealer bum
bastard cockblowing bearded smelly cum-schlurp !

------ > PFFFHHBLTTTTT!!!!!!!!!!!!

From -3650060394125427020
X-Google-Thread: fc2a5,f8ce44921aecd15e
X-Google-Thread: 107ada,884c9e429cd29b18
X-Google-Thread: 10bf43,7831d7ab14abf4ba
X-Google-Thread: 10e8ad,f8ce44921aecd15e
X-Google-Attributes: gidfc2a5,gid107ada,gid10bf43,gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!postnews.google.com!b28g2000cwb.googlegroups.com!not-for-mail
From: "an old friend" <kb9rqz@yahoo.com>
Newsgroups:
rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space
Subject: cease and desist
Date: 14 Aug 2006 18:56:47 -0700
Organization: http://groups.google.com
Lines: 4
Message-ID: <1155607007.048706.302580@b28g2000cwb.googlegroups.com>
References: <452207781406@news-server.austin.rr.com>
   <42f76$44e11136$d1cc587d$11957@snip.allthenewsgroups.com>
NNTP-Posting-Host: 66.82.9.41
Mime-Version: 1.0
Content-Type: text/plain; charset="iso-8859-1"
X-Trace: posting.google.com 1155607012 29336 127.0.0.1 (15 Aug 2006 01:56:52 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Tue, 15 Aug 2006 01:56:52 +0000 (UTC)
In-Reply-To: <42f76$44e11136$d1cc587d$11957@snip.allthenewsgroups.com>
User-Agent: G2/0.2
X-HTTP-UserAgent: Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1; SV1; .NET CLR 1.1.4322),gzip(gfe),gzip(gfe)
Complaints-To: groups-abuse@google.com
Injection-Info: b28g2000cwb.googlegroups.com; posting-host=66.82.9.41;
   posting-account=mGJHFw0AAABhg_iImBOts3VB5ouUQlvB
Xref: g2news2.google.com rec.radio.amateur.homebrew:6467
rec.radio.amateur.misc:18886 rec.radio.amateur.policy:37779
rec.radio.amateur.space:344

Biggus Dickus wrote:
cease and desist

From 15069020605696920
X-Google-Thread: fc2a5,f8ce44921aecd15e
X-Google-Thread: 107ada,884c9e429cd29b18
X-Google-Thread: 10bf43,7831d7ab14abf4ba

```
X-Google-Thread: 10e8ad,f8ce44921aecd15e
X-Google-Attributes: gidfc2a5,gid107ada,gid10bf43,gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news3.google.com!news.glorb.com!newsfeed-
east.nntpserver.com!nntpserver.com!statler.nntpserver.com!be5.nntpserver.com!not-
for-mail
From: "Mark The Moron Morgan" <konstans@homomale.com>
Newsgroups:
rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.rad
io.amateur.space
References: <452207781406@news-server.austin.rr.com>
<42f76$44e11136$d1cc587d$11957@snip.allthenewsgroups.com>
Subject: Re: Please help *PLEASE PUT ME ON YOUR GAY RESTROOM ASS BLUMPKIN PROVIDER
LIST*
Date: Tue, 15 Aug 2006 15:17:23 -0400
Organization: konstans
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.2869
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.2962
X-RFC2646: Format=Flowed; Original
Lines: 27
Message-ID: <44e2109d$0$21047$88260bb3@free.teranews.com>
NNTP-Posting-Date: 15 Aug 2006 18:21:17 GMT
X-Complaints-To: abuse@teranews.com
Xref: g2news2.google.com rec.radio.amateur.homebrew:6479
rec.radio.amateur.misc:18937 rec.radio.amateur.policy:37919
rec.radio.amateur.space:345


"Biggus Dickus" <cockasimian@apeshallnotfunkape.com> wrote in message
news:42f76$44e11136$d1cc587d$11957@snip.allthenewsgroups.com...
>
> "ray...i need to suck your cock and it works" <ray@austin.com> wrote in
> message news:452207781406@news-server.austin.rr.com...
>>
>>
>> It Will Work. If you do as I have done!
>> Just Do It! follow the 4 steps.
>> $6.00 BLOWJOBS to $15,000.00 BLUMPKIN SESSIONS in 30 days!
>
> Blow me you cheap hammie hamfest dealer bum
> bastard cockblowing bearded smelly cum-schlurp !
>
> ------ >  PFFFHHBLTTTTT!!!!!!!!!!!
>
>
teh art of the blumpkin is amlost a los art know my der old papa tawt me teh
blump

with the punce gotcha he wonders why I simple don't bother to ty
impoving my spelling
 do u hav anyting cognet two say?
```

--
Posted via a free Usenet account from http://www.teranews.com

```
From -9153358582435149224
X-Google-Thread: fc2a5,f8ce44921aecd15e
X-Google-Thread: 107ada,884c9e429cd29b18
X-Google-Thread: 10bf43,7831d7ab14abf4ba
X-Google-Thread: 10e8ad,f8ce44921aecd15e
X-Google-Attributes: gidfc2a5,gid107ada,gid10bf43,gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!postnews.google.com!75g2000cwc.googlegroups.com!not-for-mail
From: "an old friend" <kb9rqz@yahoo.com>
Newsgroups:
rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space
Subject: cease and desist your harrassment
Date: 15 Aug 2006 12:19:58 -0700
Organization: http://groups.google.com
Lines: 4
Message-ID: <1155669598.874592.234230@75g2000cwc.googlegroups.com>
References: <452207781406@news-server.austin.rr.com>
   <42f76$44e11136$d1cc587d$11957@snip.allthenewsgroups.com>
   <44e2109d$0$21047$88260bb3@free.teranews.com>
NNTP-Posting-Host: 66.82.9.76
Mime-Version: 1.0
Content-Type: text/plain; charset="iso-8859-1"
X-Trace: posting.google.com 1155669603 1685 127.0.0.1 (15 Aug 2006 19:20:03 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Tue, 15 Aug 2006 19:20:03 +0000 (UTC)
In-Reply-To: <44e2109d$0$21047$88260bb3@free.teranews.com>
User-Agent: G2/0.2
X-HTTP-UserAgent: Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1; SV1; .NET CLR 1.1.4322),gzip(gfe),gzip(gfe)
Complaints-To: groups-abuse@google.com
Injection-Info: 75g2000cwc.googlegroups.com; posting-host=66.82.9.76;
   posting-account=mGJHFw0AAABhg_iImBOts3VB5ouUQlvB
Xref: g2news2.google.com rec.radio.amateur.homebrew:6480
rec.radio.amateur.misc:18938 rec.radio.amateur.policy:37920
rec.radio.amateur.space:346
```

Mark The Moron Morgan wrote:
cease and desist your harrassment

```
From -1514731345072917137
X-Google-Thread: fc2a5,f8ce44921aecd15e
X-Google-Thread: 107ada,884c9e429cd29b18
X-Google-Thread: 10bf43,7831d7ab14abf4ba
X-Google-Thread: 10e8ad,f8ce44921aecd15e
X-Google-Attributes: gidfc2a5,gid107ada,gid10bf43,gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news4.google.com!news.glorb.com!newsfeed-
east.nntpserver.com!nntpserver.com!statler.nntpserver.com!be5.nntpserver.com!not-
for-mail
From: "Mark The Moron Morgan" <konstans@homomale.com>
Newsgroups:
rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.rad
io.amateur.space
References: <452207781406@news-server.austin.rr.com>
<42f76$44e11136$d1cc587d$11957@snip.allthenewsgroups.com>
<1155607007.048706.302580@b28g2000cwb.googlegroups.com>
Subject: Re: cease and desist
Date: Tue, 15 Aug 2006 18:16:29 -0400
Organization: konstans
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.2869
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.2962
X-RFC2646: Format=Flowed; Original
Lines: 9
Message-ID: <44e23a97$0$21028$88260bb3@free.teranews.com>
NNTP-Posting-Date: 15 Aug 2006 21:20:23 GMT
X-Complaints-To: abuse@teranews.com
Xref: g2news2.google.com rec.radio.amateur.homebrew:6484
rec.radio.amateur.misc:18948 rec.radio.amateur.policy:37948
rec.radio.amateur.space:347
```

"an old friend" <kb9rqz@yahoo.com> wrote in message
news:1155607007.048706.302580@b28g2000cwb.googlegroups.com...
>
> Biggus Dickus wrote:
> cease and desist
crease where i shit

--
Posted via a free Usenet account from http://www.teranews.com

```
From 8770421562775665534
X-Google-Thread: fc2a5,f8ce44921aecd15e
X-Google-Thread: 107ada,884c9e429cd29b18
X-Google-Thread: 10bf43,7831d7ab14abf4ba
X-Google-Thread: 10e8ad,f8ce44921aecd15e
```

```
X-Google-Attributes: gidfc2a5,gid107ada,gid10bf43,gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!postnews.google.com!74g2000cwt.googlegroups.com!not-for-
mail
From: "an old friend" <kb9rqz@hotmail.com>
Newsgroups:
rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.rad
io.amateur.space
Subject: Re: cease and desist
Date: 15 Aug 2006 15:31:42 -0700
Organization: http://groups.google.com
Lines: 4
Message-ID: <1155681102.743274.169300@74g2000cwt.googlegroups.com>
References: <452207781406@news-server.austin.rr.com>
   <42f76$44e11136$d1cc587d$11957@snip.allthenewsgroups.com>
   <1155607007.048706.302580@b28g2000cwb.googlegroups.com>
   <44e23a97$0$21028$88260bb3@free.teranews.com>
NNTP-Posting-Host: 69.19.14.28
Mime-Version: 1.0
Content-Type: text/plain; charset="iso-8859-1"
X-Trace: posting.google.com 1155681108 7315 127.0.0.1 (15 Aug 2006 22:31:48 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Tue, 15 Aug 2006 22:31:48 +0000 (UTC)
In-Reply-To: <44e23a97$0$21028$88260bb3@free.teranews.com>
User-Agent: G2/0.2
X-HTTP-UserAgent: Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1; SV1; .NET CLR
1.1.4322),gzip(gfe),gzip(gfe)
Complaints-To: groups-abuse@google.com
Injection-Info: 74g2000cwt.googlegroups.com; posting-host=69.19.14.28;
   posting-account=u4IZrA0AAAAnZJmD4DLlWGiEpMGb--6i
Xref: g2news2.google.com rec.radio.amateur.homebrew:6485
rec.radio.amateur.misc:18949 rec.radio.amateur.policy:37949
rec.radio.amateur.space:348
```

Mark The Moron Morgan wrote:
cease and desist your harrassment

```
From 3224291964614697567
X-Google-Thread: fc2a5,f8ce44921aecd15e
X-Google-Thread: 107ada,884c9e429cd29b18
X-Google-Thread: 10bf43,7831d7ab14abf4ba
X-Google-Thread: 10e8ad,f8ce44921aecd15e
X-Google-Attributes: gidfc2a5,gid107ada,gid10bf43,gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!postnews.google.com!i42g2000cwa.googlegroups.com!not-for-
mail
From: kb9rqz_child_molester@yahoo.com
Newsgroups:
rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.rad
io.amateur.space
```

```
Subject: Cease and desist breathing, Markie
Date: 15 Aug 2006 17:11:02 -0700
Organization: http://groups.google.com
Lines: 7
Message-ID: <1155687062.084385.29180@i42g2000cwa.googlegroups.com>
References: <452207781406@news-server.austin.rr.com>
   <42f76$44e11136$d1cc587d$11957@snip.allthenewsgroups.com>
   <1155607007.048706.302580@b28g2000cwb.googlegroups.com>
   <44e23a97$0$21028$88260bb3@free.teranews.com>
   <1155681102.743274.169300@74g2000cwt.googlegroups.com>
NNTP-Posting-Host: 65.54.155.15
Mime-Version: 1.0
Content-Type: text/plain; charset="iso-8859-1"
X-Trace: posting.google.com 1155687067 23713 127.0.0.1 (16 Aug 2006 00:11:07 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Wed, 16 Aug 2006 00:11:07 +0000 (UTC)
In-Reply-To: <1155681102.743274.169300@74g2000cwt.googlegroups.com>
User-Agent: G2/0.2
X-HTTP-UserAgent: Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1;
SV1),gzip(gfe),gzip(gfe)
Complaints-To: groups-abuse@google.com
Injection-Info: i42g2000cwa.googlegroups.com; posting-host=65.54.155.15;
   posting-account=A588jg0AAACHV3aEw3C4BXVkJv4LSKWp
Xref: g2news2.google.com rec.radio.amateur.homebrew:6487
rec.radio.amateur.misc:18962 rec.radio.amateur.policy:37977
rec.radio.amateur.space:349


an old fraud wrote:
> Mark The Moron Morgan wrote:
> cease and desist your harrassment

STFU, spammer.



From 2893034032349181832
X-Google-Thread: fc2a5,f8ce44921aecd15e
X-Google-Thread: 107ada,884c9e429cd29b18
X-Google-Thread: 10bf43,7831d7ab14abf4ba
X-Google-Thread: 10e8ad,f8ce44921aecd15e
X-Google-Attributes: gidfc2a5,gid107ada,gid10bf43,gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!postnews.google.com!p79g2000cwp.googlegroups.com!not-for-
mail
From: "an_old_friend" <konstans@hotmail.com>
Newsgroups:
rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.rad
io.amateur.space
Subject: Re: Cease and desist
Date: 15 Aug 2006 17:13:03 -0700
Organization: http://groups.google.com
Lines: 4
```

```
Message-ID: <1155687181.832750.241820@p79g2000cwp.googlegroups.com>
References: <452207781406@news-server.austin.rr.com>
   <42f76$44e11136$d1cc587d$11957@snip.allthenewsgroups.com>
   <1155607007.048706.302580@b28g2000cwb.googlegroups.com>
   <44e23a97$0$21028$88260bb3@free.teranews.com>
   <1155681102.743274.169300@74g2000cwt.googlegroups.com>
   <1155687062.084385.29180@i42g2000cwa.googlegroups.com>
NNTP-Posting-Host: 69.19.14.28
Mime-Version: 1.0
Content-Type: text/plain; charset="iso-8859-1"
X-Trace: posting.google.com 1155687208 20818 127.0.0.1 (16 Aug 2006 00:13:28 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Wed, 16 Aug 2006 00:13:28 +0000 (UTC)
In-Reply-To: <1155687062.084385.29180@i42g2000cwa.googlegroups.com>
User-Agent: G2/0.2
X-HTTP-UserAgent: Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1; SV1; .NET CLR
1.1.4322),gzip(gfe),gzip(gfe)
Complaints-To: groups-abuse@google.com
Injection-Info: p79g2000cwp.googlegroups.com; posting-host=69.19.14.28;
   posting-account=5Yl6pg0AAADpwOMWiAfWEILF9IbswBYm
Xref: g2news2.google.com rec.radio.amateur.homebrew:6488
rec.radio.amateur.misc:18964 rec.radio.amateur.policy:37979
rec.radio.amateur.space:350


kb9rqz_child_moles...@yahoo.com wrote:
cease and desist




From 6383993529912002748
X-Google-Thread: 10e8ad,56a0417f757baa86,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news3.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx02.iad01.newshosting.com!newshosting.com!
130.81.64.211.MISMATCH!cycny01.gnilink.net!bigfeed3.bellsouth.net!
bigfeed.bellsouth.net!bignumber.bellsouth.net!news.bellsouth.net!
bignews5.bellsouth.net.POSTED!f1ea88ee!not-for-mail
From: "NSI" <af.irani@afyhpami.com>
Subject: Add money to your Paypal account with OPRAH MI5bo
Newsgroups: rec.radio.amateur.space
Sender: NSI <af.irani@afyhpami.com>
Reply-To: NSI
X-Priority: 3
X-Library: Indy 9.00.10
X-MimeOLE: Produced By Microsoft MimeOLE V5.50.4133.2400
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 5.50.4133.2400
Lines: 98
Message-ID: <PUyEg.57520$vj1.16388@bignews5.bellsouth.net>
X-Complaints-To: abuse@bellsouth.net
X-Abuse-Info: Please forward a copy of all headers for proper handling
```

X-Trace:
ldjgbllpbapjglppdbdpiflmbcekedmfhojhikkbagflhcbobeoekpjcflhenmfcbaejajpggmepipglgc
keendpbbncgjaphiflhmddniifjhbmegdpkjbpiknkdfaifnnabmmpaincmalfbcjgplmpnjnnapal
NNTP-Posting-Date: Wed, 16 Aug 2006 02:26:55 EDT
Organization: BellSouth Internet Group
Date: Tue, 15 Aug 2006 17:52:43 -0500
Xref: g2news2.google.com rec.radio.amateur.space:351

Read this message until the end, and you will find out how the money flows in easy !!!!.
Follow the steps and it WILL work. Trust me !!!!!.

It's NOT illegal and it is NOT a scam !!!!!.

PROVEN ON OPRAH! Reported in the Wall Street Journal!!!!

The only thing you need is : - E-MAIL ACCOUNT
- PREMIER (FREE) or BUSINESS PAYPAL ACCOUNT
- $6 on this account (The only investment)
- 30 minutes of your time

There is no limit on how much money you can recieve, and you haven't got anything to lose with this Business program. I will explain how it works !!!!!.

Follow these 4 easy steps and it WILL work !!!!!.

STEP 1 : SIGN UP FOR A FREE PAYPAL ACCOUNT !!!!!.

Paypal is a free and safe way to pay and receive money on the Internet.
Creating a account is as easy as creating a MSN account.
Copy and paste the next line in your Internet browser and sign up.
HTTP://WWW.PAYPAL.COM

Be sure to sign up for a FREE Premier or Business account and not for a Personal account.
You cannot receive CREDITCARD payments with a Personal account and we can't have that. Do we !!!!!.

STEP 2 : SENT $6 TO YOUR PAYPAL ACCOUNT

This is your only investment to receive the money with ease.

With your Paypal account, send $1 to each e-mailadres listed below.
!!!!! IMPORTANT !!!!! Be sure to use this SUBJECT : *PLEASE PUT ME ON YOUR EMAIL LIST*   when you send the money.

1) martine@pilote.net
2) dexxatol@netcourrier.com
3) armygirl8568@hotmail.com
4) comjii@starband.net

5) sinnek@bellsouth.net
6) nsi@nelasat.com

STEP 3 : PUT YOUR E-MAIL ADDRESS ON THE BOTTOM OF THE LIST

After you have send $1 to each e-mail address, put your e-mail address on the 6th place.
Remove e-mail address number 1, and move each e-mail address 1 step up the ladder.
!!!!! IMPORTANT !!!!! BE SURE THAT THE E-MAIL ADDRESS YOU USE IS THE SAME AS YOU USED TO SIGN UP AT PAYPAL.

Remember that this is LEGAL. You are creating a service : an e-mail servicelist.

STEP 4 : UPLOAD OR COPY THIS MESSAGE TO NEWSGROUPS, FORUMS ETC AND EMAIL IT TO ALL YOUR FRIENDS!

There are 32,000 newsgroups. Upload or copy this message to at least 200 newsgroups or forums etc, but .... remember that the more your upload the more people will see your message and the MORE MONEY WILL FLOW IN.

How to upload to newsgroups and forums? :

After you have followed step 1,2,3 and 4, save this message (and copy so you can use it again).
Use your Internet browser and Outlook Express or another newsreader and try to find FORUMS, NEWSGROUPS,
BULLETIN BOARDS, DISCUSSION GROUPS, CHAT SITES and ONLINE COMMUNITIES. Use GOOGLE or use a NEWSERVER.
Use every option to post this message. Download PostXpert to send 1 message to more NEWSGROUPS at the
same time.

!!!!! REMEMBER !!!!! The more you post this message the more MONEY WILL FLOW IN.

Why does this Business program work so well !!!!!.

Lets asume that from the 200 (or more) messages that you have posted, only 5 people respond, you will have your
$6 back that you have invested. Those 5 people will each send at least 200 messages with your e-mailadres on
number 4. That's 6 x 6 x $1 = $36. The next 25 people will also send 200 messages with your adres on number 3. That's 36 x 6 x $1 = $216. The next 216 people also send 200 messages with your name on number 2. That's 216 x 6
x $1 = $1296!. Those 1296 people again also send 200 messages with your name on number 1. That will give us a total of 1296 x 6 x $1 = $7,776.

Now the last tier! 7776 x 6 x $1 = $46,656!!!!!!

This is only a EXAMPLE with 6 reactions. You WILL get MORE responses than that.

Remember that most newsservers will leave the posted messages on there servers for about 2 weeks. If you will post your message again, it WILL again start from the beginning. So you can repeat this over and over again.

Everyday MILLIONS of people are ONLINE and reading these messages, JUST LIKE YOU RIGHT NOW.
I also was sceptical in the beginning and have read a lot of these messages. I also thought that it was bullshit.
Until I thought : What the hell!, only $6. What's $6 and a couple of minutes of my time to solve my money problems.

!!!!! REMEMBER !!!!! Follow every step, and IT WILL WORK, TRUST ME. !!!!!

!!!!! BEST WISHES AND GOOD LUCK !!!!!

w)O>+;)<9UVS;F>qaGL<Uq#v`V6(F]- rM;$g+!4IIQ*827?H4

From -5278883929532985082
X-Google-Thread: fc2a5,f8ce44921aecd15e
X-Google-Thread: 107ada,884c9e429cd29b18
X-Google-Thread: 10bf43,7831d7ab14abf4ba
X-Google-Thread: 10e8ad,f8ce44921aecd15e
X-Google-Attributes: gidfc2a5,gid107ada,gid10bf43,gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news3.google.com!news.glorb.com!newsfeed-east.nntpserver.com!nntpserver.com!statler.nntpserver.com!be5.nntpserver.com!not-for-mail
From: Mark@kb9rqz.com
Newsgroups: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space
Subject: Re: Please cease and desist there are gruops for that sort content
Date: Wed, 16 Aug 2006 08:08:50 -0400
Message-ID: <sl26e29tf98k100bcmb6iutvu0g4ovupll@4ax.com>
References: <452207781406@news-server.austin.rr.com>
<42f76$44e11136$d1cc587d$11957@snip.allthenewsgroups.com>
<44e2109d$0$21047$88260bb3@free.teranews.com>
X-Newsreader: Forte Free Agent 3.3/32.846
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Lines: 4
NNTP-Posting-Date: 16 Aug 2006 11:12:40 GMT
X-Complaints-To: abuse@teranews.com

```
Xref: g2news2.google.com rec.radio.amateur.homebrew:6500
rec.radio.amateur.misc:18988 rec.radio.amateur.policy:38062
rec.radio.amateur.space:352

On Tue, 15 Aug 2006 15:17:23 -0400, "Mark The Moron Morgan"
<konstans@homomale.com> wrote:
 cease and desist
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com




From 7902449338441181312
X-Google-Thread: fc2a5,f8ce44921aecd15e
X-Google-Thread: 107ada,884c9e429cd29b18
X-Google-Thread: 10bf43,7831d7ab14abf4ba
X-Google-Thread: 10e8ad,f8ce44921aecd15e
X-Google-Attributes: gidfc2a5,gid107ada,gid10bf43,gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!postnews.google.com!m73g2000cwd.googlegroups.com!not-for-
mail
From: "Not Cocksucker Lloyd" <not_time_turd_lloyd@yahoo.com>
Newsgroups:
rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.rad
io.amateur.space
Subject: STFU
Date: 16 Aug 2006 05:31:10 -0700
Organization: http://groups.google.com
Lines: 6
Message-ID: <1155731470.893781.68090@m73g2000cwd.googlegroups.com>
References: <452207781406@news-server.austin.rr.com>
   <42f76$44e11136$d1cc587d$11957@snip.allthenewsgroups.com>
   <1155607007.048706.302580@b28g2000cwb.googlegroups.com>
   <44e23a97$0$21028$88260bb3@free.teranews.com>
   <1155681102.743274.169300@74g2000cwt.googlegroups.com>
   <1155687062.084385.29180@i42g2000cwa.googlegroups.com>
   <1155687181.832750.241820@p79g2000cwp.googlegroups.com>
NNTP-Posting-Host: 65.54.154.13
Mime-Version: 1.0
Content-Type: text/plain; charset="iso-8859-1"
X-Trace: posting.google.com 1155731476 18851 127.0.0.1 (16 Aug 2006 12:31:16 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Wed, 16 Aug 2006 12:31:16 +0000 (UTC)
In-Reply-To: <1155687181.832750.241820@p79g2000cwp.googlegroups.com>
User-Agent: G2/0.2
X-HTTP-UserAgent: Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1;
SV1),gzip(gfe),gzip(gfe)
Complaints-To: groups-abuse@google.com
Injection-Info: m73g2000cwd.googlegroups.com; posting-host=65.54.154.13;
   posting-account=NYdx0Q0AAAACkSt6kWea8S56_8dZU8tl
Xref: g2news2.google.com rec.radio.amateur.homebrew:6501
```

```
rec.radio.amateur.misc:18995 rec.radio.amateur.policy:38083
rec.radio.amateur.space:353


an_old_friendless cocksucker wrote:
> cease

Cease breathing.




From -5125101247906636928
X-Google-Thread: fc2a5,f8ce44921aecd15e
X-Google-Thread: 107ada,884c9e429cd29b18
X-Google-Thread: 10bf43,7831d7ab14abf4ba
X-Google-Thread: 10e8ad,f8ce44921aecd15e
X-Google-Attributes: gidfc2a5,gid107ada,gid10bf43,gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!postnews.google.com!m79g2000cwm.googlegroups.com!not-for-
mail
From: "an old freind" <kb9rqz-ars@hotmail.com>
Newsgroups:
rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.rad
io.amateur.space
Subject: cease desist and grow up
Date: 16 Aug 2006 08:49:28 -0700
Organization: http://groups.google.com
Lines: 8
Message-ID: <1155743368.829657.131340@m79g2000cwm.googlegroups.com>
References: <452207781406@news-server.austin.rr.com>
   <42f76$44e11136$d1cc587d$11957@snip.allthenewsgroups.com>
   <1155607007.048706.302580@b28g2000cwb.googlegroups.com>
   <44e23a97$0$21028$88260bb3@free.teranews.com>
   <1155681102.743274.169300@74g2000cwt.googlegroups.com>
   <1155687062.084385.29180@i42g2000cwa.googlegroups.com>
   <1155687181.832750.241820@p79g2000cwp.googlegroups.com>
   <1155731470.893781.68090@m73g2000cwd.googlegroups.com>
NNTP-Posting-Host: 69.19.14.19
Mime-Version: 1.0
Content-Type: text/plain; charset="iso-8859-1"
X-Trace: posting.google.com 1155743372 21830 127.0.0.1 (16 Aug 2006 15:49:32 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Wed, 16 Aug 2006 15:49:32 +0000 (UTC)
In-Reply-To: <1155731470.893781.68090@m73g2000cwd.googlegroups.com>
User-Agent: G2/0.2
X-HTTP-UserAgent: Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1; SV1; .NET CLR
1.1.4322),gzip(gfe),gzip(gfe)
Complaints-To: groups-abuse@google.com
Injection-Info: m79g2000cwm.googlegroups.com; posting-host=69.19.14.19;
   posting-account=hVZdaA0AAABPHL3UNjx-ywxVYAwCtKHr
Xref: g2news2.google.com rec.radio.amateur.homebrew:6503
rec.radio.amateur.misc:19044 rec.radio.amateur.policy:38157
rec.radio.amateur.space:354
```

```
Not Cocksucker Lloyd wrote:
> an_old_friendless cocksucker wrote:
> > cease
>
> Cease breathing
eom



From -8921715767770040088
X-Google-Thread: fc2a5,f8ce44921aecd15e
X-Google-Thread: 107ada,884c9e429cd29b18
X-Google-Thread: 10bf43,7831d7ab14abf4ba
X-Google-Thread: 10e8ad,f8ce44921aecd15e
X-Google-Attributes: gidfc2a5,gid107ada,gid10bf43,gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!postnews.google.com!b28g2000cwb.googlegroups.com!not-for-
mail
From: peewee_lloyd_davies@yahoo.com
Newsgroups:
rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.rad
io.amateur.space
Subject: Retard Mark makes good spell
Date: 16 Aug 2006 12:31:58 -0700
Organization: http://groups.google.com
Lines: 11
Message-ID: <1155756718.845363.87450@b28g2000cwb.googlegroups.com>
References: <452207781406@news-server.austin.rr.com>
   <42f76$44e11136$d1cc587d$11957@snip.allthenewsgroups.com>
   <1155607007.048706.302580@b28g2000cwb.googlegroups.com>
   <44e23a97$0$21028$88260bb3@free.teranews.com>
   <1155681102.743274.169300@74g2000cwt.googlegroups.com>
   <1155687062.084385.29180@i42g2000cwa.googlegroups.com>
   <1155687181.832750.241820@p79g2000cwp.googlegroups.com>
   <1155731470.893781.68090@m73g2000cwd.googlegroups.com>
   <1155743368.829657.131340@m79g2000cwm.googlegroups.com>
NNTP-Posting-Host: 65.54.154.12
Mime-Version: 1.0
Content-Type: text/plain; charset="iso-8859-1"
X-Trace: posting.google.com 1155756724 21493 127.0.0.1 (16 Aug 2006 19:32:04 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Wed, 16 Aug 2006 19:32:04 +0000 (UTC)
In-Reply-To: <1155743368.829657.131340@m79g2000cwm.googlegroups.com>
User-Agent: G2/0.2
X-HTTP-UserAgent: Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1;
SV1),gzip(gfe),gzip(gfe)
Complaints-To: groups-abuse@google.com
Injection-Info: b28g2000cwb.googlegroups.com; posting-host=65.54.154.12;
   posting-account=hhK0dQ0AAADty9Zux-UTqaosOMA-iJfP
Xref: g2news2.google.com rec.radio.amateur.homebrew:6504
rec.radio.amateur.misc:19055 rec.radio.amateur.policy:38169
rec.radio.amateur.space:355


an old fraud wrote:
> Not Cocksucker Lloyd wrote:
> > an_old_friendless cocksucker wrote:
> > > cease
> >
> > Cease breathing
> eom

"eom?" BWHAHAHAHAHAHAHAHAHAHA!




From -1321094850755308663
X-Google-Thread: fc2a5,f8ce44921aecd15e
X-Google-Thread: 107ada,884c9e429cd29b18
X-Google-Thread: 10bf43,7831d7ab14abf4ba
X-Google-Thread: 10e8ad,f8ce44921aecd15e
X-Google-Attributes: gidfc2a5,gid107ada,gid10bf43,gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news4.google.com!news.glorb.com!newsfeed-
east.nntpserver.com!nntpserver.com!statler.nntpserver.com!be5.nntpserver.com!not-
for-mail
From: Mark@kb9rqz.com
Newsgroups:
rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.rad
io.amateur.space
Subject: Cease desist and grow up
Date: Wed, 16 Aug 2006 15:56:26 -0400
Message-ID: <q2u6e29s13sf59b0d4isjhl8bgmfst27cp@4ax.com>
References: <1155607007.048706.302580@b28g2000cwb.googlegroups.com>
<44e23a97$0$21028$88260bb3@free.teranews.com>
<1155681102.743274.169300@74g2000cwt.googlegroups.com>
<1155687062.084385.29180@i42g2000cwa.googlegroups.com>
<1155687181.832750.241820@p79g2000cwp.googlegroups.com>
<1155731470.893781.68090@m73g2000cwd.googlegroups.com>
<1155743368.829657.131340@m79g2000cwm.googlegroups.com>
<1155756718.845363.87450@b28g2000cwb.googlegroups.com>
X-Newsreader: Forte Free Agent 3.3/32.846
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Lines: 14
NNTP-Posting-Date: 16 Aug 2006 19:00:16 GMT
X-Complaints-To: abuse@teranews.com
Xref: g2news2.google.com rec.radio.amateur.homebrew:6506
rec.radio.amateur.misc:19080 rec.radio.amateur.policy:38191
rec.radio.amateur.space:356

On 16 Aug 2006 12:31:58 -0700, peewee_lloyd_davies@yahoo.com wrote:
```

```
>
>an old fraud wrote:
>> Not Cocksucker Lloyd wrote:
>> > an_old_friendless cocksucker wrote:
>> > > cease
>> >
>> > Cease breathing
>> eom
>
>"eom?" BWHAHAHAHAHAHAHAHAHAHA!
End Of Message
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com




From 1976736414469720830
X-Google-Thread: 10bf43,2eaf18ff5ebea7f7
X-Google-Thread: 10f7a7,813f13f1ab0567a7
X-Google-Thread: f9daf,813f13f1ab0567a7
X-Google-Thread: 106d41,813f13f1ab0567a7
X-Google-Thread: 10e8ad,813f13f1ab0567a7
X-Google-Attributes: gid10bf43,gid10f7a7,gidf9daf,gid106d41,gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news2.google.com!news3.google.com!
border1.nntp.dca.giganews.com!border2.nntp.dca.giganews.com!nntp.giganews.com!
pd7cy3no!pd7cy4no!shaw.ca!pd7tw2no.POSTED!53ab2750!not-for-mail
X-Trace-PostClient-IP: 70.68.151.67
From: "Text Medium No. 5" <mhm29x21@meow.flonk>
Organization: The Holy International Discordian Internet & Usenet Terrorist
Pretzel Cabal (TINC)
Subject: Re: some explanation since Robeson has choosen to renew his assult on th
NG, and me
User-Agent: Pan/0.14.2.91 (As She Crawled Across the Table)
Message-Id:
<pan.2006.08.16.22.25.51.899513@hail.eris.flonk.meow.all.hail.discordia.meow.flonk
.mockery.demon.not.really.leola>
Newsgroups:
rec.radio.amateur.policy,alt.usenet.kooks,alt.revenge,rec.radio.cb,rec.radio.amate
ur.space
References: <1155298281.480099.57590@h48g2000cwc.googlegroups.com>
<1155301602.610277.95390@b28g2000cwb.googlegroups.com>
<1155312973.033376.134900@i42g2000cwa.googlegroups.com>
Reply-To: Cross-Posters For Goddess! <x-posting@is.sacred>
X-Conspiracy: HomIntern
X-Konspiracy: K00ks Who Must Meet: Alexa Cameron & John Shocked
X-Keywords: Pentagon, NSA, Echelon, radioactive, Italy
eX-Gay: Doesn't exist
X-tra-terrestrial: May or may not exist
X-Yahoo: Group: Cabal_of_the_Holy_Pretzel
X-Bisexual: Still and always
```

```
X-Cabal: The Holy International Discordian Internet & Usenet Terrorist Pretzel
X-Goofiest: Goofy-@zzed Babboon: Yads
X-Posting: Address Domain: meow.org
X-Osama: Dead, and long may he rot
X-Riot: Stonewall
X-Political-Compass: Economic Left/Right: -7.63 Social Libertarian/Authoritarian:
-7.38
MIME-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 8bit
Lines: 32
Date: Wed, 16 Aug 2006 22:25:53 GMT
NNTP-Posting-Host: 64.59.144.74
X-Complaints-To: abuse@shaw.ca
X-Trace: pd7tw2no 1155767153 64.59.144.74 (Wed, 16 Aug 2006 16:25:53 MDT)
NNTP-Posting-Date: Wed, 16 Aug 2006 16:25:53 MDT
Xref: g2news2.google.com rec.radio.amateur.policy:38208 alt.usenet.kooks:220242
alt.revenge:6020 rec.radio.cb:16016 rec.radio.amateur.space:357

Hail Eris! On Fri, 11 Aug 2006 09:16:13 -0700, marqueenie_von_dork
jabbered inanely:
> an old friend wrote:
>> an old friend wrote:
>> > I will resist it.
>> >
>> > I am adivised I have legal right to do so, indeed should any news
>> > provider be persuaded to terminate my access i t would give me the one
>> > thing my lawyer lacks to assure me of a postive result in litagation
>> > against Robeson and other parties.
>> >
>> > Robesonn can stopp his assualt anytime
>> >
>> > he can choose to leave or (I hope) he can choose to enage in
>> > discussion of radio related issues on the NG
>> much the same aplies to wisemen a well
>
> Mr Robeson is a welcome poster. He has always tried to help others and
> post on topic.
>
> YOU,otoh, have gone out of your way to post gay filth here. I have copies
> of YOUR posts to prove it. YOU are not welcome here you filty sodomite!
>
> aren't you in violation of the states sodomy laws??

Keep it up. I see many k00k awards in your future, you busted urinal.

--
Shon'ai
"I was told there would be cookies."
Cross-Poasters For Goddess!
Remember: Straight people can't help it!
```

```
From 5618134228881640317
X-Google-Thread: 10bf43,2eaf18ff5ebea7f7
X-Google-Thread: 10f7a7,813f13f1ab0567a7
X-Google-Thread: f9daf,813f13f1ab0567a7
X-Google-Thread: 106d41,813f13f1ab0567a7
X-Google-Thread: 10e8ad,813f13f1ab0567a7
X-Google-Attributes: gid10bf43,gid10f7a7,gidf9daf,gid106d41,gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!postnews.google.com!m73g2000cwd.googlegroups.com!not-for-
mail
From: "an old freind" <kb9rqz-ars@hotmail.com>
Newsgroups:
rec.radio.amateur.policy,alt.usenet.kooks,alt.revenge,rec.radio.cb,rec.radio.amate
ur.space
Subject: Re: some explanation since Robeson has choosen to renew his assult on th
NG, and me
Date: 16 Aug 2006 15:29:00 -0700
Organization: http://groups.google.com
Lines: 13
Message-ID: <1155767340.849495.207160@m73g2000cwd.googlegroups.com>
References: <1155298281.480099.57590@h48g2000cwc.googlegroups.com>
   <1155301602.610277.95390@b28g2000cwb.googlegroups.com>
   <1155312973.033376.134900@i42g2000cwa.googlegroups.com>

<pan.2006.08.16.22.25.51.899513@hail.eris.flonk.meow.all.hail.discordia.meow.flonk
.mockery.demon.not.really.leola>
NNTP-Posting-Host: 69.19.14.19
Mime-Version: 1.0
Content-Type: text/plain; charset="iso-8859-1"
X-Trace: posting.google.com 1155767346 28230 127.0.0.1 (16 Aug 2006 22:29:06 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Wed, 16 Aug 2006 22:29:06 +0000 (UTC)
In-Reply-To:
<pan.2006.08.16.22.25.51.899513@hail.eris.flonk.meow.all.hail.discordia.meow.flonk
.mockery.demon.not.really.leola>
User-Agent: G2/0.2
X-HTTP-UserAgent: Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1; SV1; .NET CLR
1.1.4322),gzip(gfe),gzip(gfe)
Complaints-To: groups-abuse@google.com
Injection-Info: m73g2000cwd.googlegroups.com; posting-host=69.19.14.19;
   posting-account=hVZdaA0AAABPHL3UNjx-ywxVYAwCtKHr
Xref: g2news2.google.com rec.radio.amateur.policy:38209 alt.usenet.kooks:220243
alt.revenge:6021 rec.radio.cb:16017 rec.radio.amateur.space:358


Text Medium No. 5 wrote:
> Hail Eris! On Fri, 11 Aug 2006 09:16:13 -0700, marqueenie_von_dork
> jabbered inanely:

> > YOU,otoh, have gone out of your way to post gay filth here. I have copies
> > of YOUR posts to prove it. YOU are not welcome here you filty sodomite!
> >
> > aren't you in violation of the states sodomy laws??
```

>
> Keep it up. I see many k00k awards in your future, you busted urinal.
and in his past he is Roger Wisemen sometimes called Woger

From 8396400292991227213
X-Google-Thread: fc2a5,f8ce44921aecd15e
X-Google-Thread: 107ada,884c9e429cd29b18
X-Google-Thread: 10bf43,7831d7ab14abf4ba
X-Google-Thread: 10e8ad,f8ce44921aecd15e
X-Google-Attributes: gidfc2a5,gid107ada,gid10bf43,gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news2.google.com!news3.google.com!newshub.sdsu.edu!elnk-nf2-pas!newsfeed.earthlink.net!stamper.news.pas.earthlink.net!newsread2.news.pas.earthlink.net.POSTED!3dd4ce4a!not-for-mail
Newsgroups:
rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space
Subject: Re: Cease and desist - Mark, Just ignore them.
From: Slow Code <my.mail@no.spam>
References: <452207781406@news-server.austin.rr.com>
<42f76$44e11136$d1cc587d$11957@snip.allthenewsgroups.com>
<1155607007.048706.302580@b28g2000cwb.googlegroups.com>
<44e23a97$0$21028$88260bb3@free.teranews.com>
<1155681102.743274.169300@74g2000cwt.googlegroups.com>
<1155687062.084385.29180@i42g2000cwa.googlegroups.com>
<1155687181.832750.241820@p79g2000cwp.googlegroups.com>
Organization: None
User-Agent: Xnews/5.04.25
Lines: 20
Message-ID: <bGNEg.6808$Qf.3454@newsread2.news.pas.earthlink.net>
Date: Wed, 16 Aug 2006 23:15:19 GMT
NNTP-Posting-Host: 4.235.60.243
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread2.news.pas.earthlink.net 1155770119 4.235.60.243 (Wed, 16 Aug 2006 16:15:19 PDT)
NNTP-Posting-Date: Wed, 16 Aug 2006 16:15:19 PDT
Xref: g2news2.google.com rec.radio.amateur.homebrew:6507
rec.radio.amateur.misc:19113 rec.radio.amateur.policy:38229
rec.radio.amateur.space:359

"an_old_friend" <konstans@hotmail.com> wrote in news:1155687181.832750.241820@p79g2000cwp.googlegroups.com:

>
> kb9rqz_child_moles...@yahoo.com wrote:
> cease and desist
>

Mark, Just ignore them.

They only tease you because of the stupid things you say when you follow up. Just ignore them and they'll give up.

Stop giving them reasons to tease you. It only makes you look
more stupid.

Take a break from the radio groups for a while, Maybe work on your
moon bounce some more.

SC

From 6627634332987126520
X-Google-Thread: fc2a5,f8ce44921aecd15e
X-Google-Thread: 107ada,884c9e429cd29b18
X-Google-Thread: 10bf43,7831d7ab14abf4ba
X-Google-Thread: 10e8ad,f8ce44921aecd15e
X-Google-Attributes: gidfc2a5,gid107ada,gid10bf43,gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news3.google.com!newshub.sdsu.edu!elnk-nf2-pas!
newsfeed.earthlink.net!stamper.news.pas.earthlink.net!
newsread2.news.pas.earthlink.net.POSTED!3dd4ce4a!not-for-mail
Newsgroups:
rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space
Subject: Re: Cease and desist - Mark, Just ignore them.
From: Slow Code <my.mail@no.spam>
References: <452207781406@news-server.austin.rr.com>
<42f76$44e11136$d1cc587d$11957@snip.allthenewsgroups.com>
<1155607007.048706.302580@b28g2000cwb.googlegroups.com>
<44e23a97$0$21028$88260bb3@free.teranews.com>
<1155681102.743274.169300@74g2000cwt.googlegroups.com>
<1155687062.084385.29180@i42g2000cwa.googlegroups.com>
<1155687181.832750.241820@p79g2000cwp.googlegroups.com>
Organization: None
User-Agent: Xnews/5.04.25
Lines: 20
Message-ID: <eGNEg.6810$Qf.402@newsread2.news.pas.earthlink.net>
Date: Wed, 16 Aug 2006 23:15:22 GMT
NNTP-Posting-Host: 4.235.60.243
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread2.news.pas.earthlink.net 1155770122 4.235.60.243 (Wed, 16 Aug
2006 16:15:22 PDT)
NNTP-Posting-Date: Wed, 16 Aug 2006 16:15:22 PDT
Xref: g2news2.google.com rec.radio.amateur.homebrew:6508
rec.radio.amateur.misc:19115 rec.radio.amateur.policy:38231
rec.radio.amateur.space:360

"an_old_friend" <konstans@hotmail.com> wrote in news:1155687181.832750.241820
@p79g2000cwp.googlegroups.com:

>
> kb9rqz_child_moles...@yahoo.com wrote:
> cease and desist

>

Mark, Just ignore them.

They only tease you because of the stupid things you say when you follow up. Just ignore them and they'll give up.

Stop giving them reasons to tease you. It only makes you look more stupid.

Take a break from the radio groups for a while, Maybe work on your moon bounce some more.

SC

```
From 837065592360684641
X-Google-Thread: 10bf43,2eaf18ff5ebea7f7
X-Google-Thread: 10f7a7,813f13f1ab0567a7
X-Google-Thread: f9daf,813f13f1ab0567a7
X-Google-Thread: 106d41,813f13f1ab0567a7
X-Google-Thread: 10e8ad,813f13f1ab0567a7
X-Google-Thread: f8ce7,7657a5eed05387d9,start
X-Google-Attributes:
gid10bf43,gid10f7a7,gidf9daf,gid106d41,gid10e8ad,gidf8ce7,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news4.google.com!border1.nntp.dca.giganews.com!
border2.nntp.dca.giganews.com!nntp.giganews.com!pd7cy3no!pd7cy4no!shaw.ca!
pd7tw1no.POSTED!53ab2750!not-for-mail
X-Trace-PostClient-IP: 70.68.151.67
From: FreeSpeechStore <freespeechstore@meow.fuckhead>
Organization: Anarchy International
Subject: Re: some explanation since Robeson has choosen to renew his assult on th
NG, and me
User-Agent: Pan/0.14.2.91 (As She Crawled Across the Table)
Message-Id: <pan.2006.08.17.06.50.51.193526@snarky.trolling.and.mocking.scoville>
Newsgroups:
rec.radio.amateur.policy,alt.usenet.kooks,alt.revenge,rec.radio.cb,rec.radio.amate
ur.space,alt.music.michael-jackson
References: <1155298281.480099.57590@h48g2000cwc.googlegroups.com>
<1155301602.610277.95390@b28g2000cwb.googlegroups.com>
<1155312973.033376.134900@i42g2000cwa.googlegroups.com>
<pan.2006.08.16.22.25.51.899513@hail.eris.flonk.meow.all.hail.discordia.meow.flonk
.mockery.demon.not.really.leola>
<1155767340.849495.207160@m73g2000cwd.googlegroups.com>
Reply-To: Richard Scoville Is A Scamming NetKKKopping Fjuckhead!
<freespeechstore@no.really>
X-Idiot-1: John Wentzky
X-Idiot-2: Yads/The Doctor
X-Keywords: The Artful Dodger, SEAL Team 6, BIOL, Meta-hackers, monarchist
X-Location: You finally got it right, Scoville, you halfwitted, incompetent
netKKKop!
X-Online-Game: RuneScape
```

X-Online-HTML-Game: The Kingdom Of Loathing
X-Crybaby-1: Richard M. Scoville
X-Crybaby-2: David J. Tholen
X-Crybaby-3: Thomas "Jinn(-Soaked)" Bishop
X-Crybaby-4: Charles Lysaght
X-Crybaby-5: Joseph Bartlo
X-Stalker: Anthony Banovic
X-Racist: Gordon "Revd. Terence Fformby-Smythe" Radavich
X-Team: Wolverine, ShadowCat, Sunfire, Phoenix, Cyclops, Storm, Rogue, Gambit
MIME-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 8bit
Lines: 29
Date: Thu, 17 Aug 2006 06:50:52 GMT
NNTP-Posting-Host: 64.59.144.74
X-Complaints-To: abuse@shaw.ca
X-Trace: pd7tw1no 1155797452 64.59.144.74 (Thu, 17 Aug 2006 00:50:52 MDT)
NNTP-Posting-Date: Thu, 17 Aug 2006 00:50:52 MDT
Xref: g2news2.google.com rec.radio.amateur.policy:38302 alt.usenet.kooks:220489 alt.revenge:6042 rec.radio.cb:16096 rec.radio.amateur.space:361 alt.music.michael-jackson:60707

On Wed, 16 Aug 2006 15:29:00 -0700, an old freind wrote:
> Text Medium No. 5 wrote:
>> Hail Eris! On Fri, 11 Aug 2006 09:16:13 -0700, marqueenie_von_dork
>> jabbered inanely:
>
>> > YOU,otoh, have gone out of your way to post gay filth here. I have
>> > copies of YOUR posts to prove it. YOU are not welcome here you filty
>> > sodomite!
>> >
>> > aren't you in violation of the states sodomy laws??
>>
>> Keep it up. I see many k00k awards in your future, you busted urinal.
>
> and in his past he is Roger Wisemen sometimes called Woger

Figures that a hypocrite like him is the one complaining about "filth".
BTW, put an empty line between your words and the one to whom you're
responding. Makes you easier to read. Oh, and that's "Wiseman", and a
more inappropriate surname could not be imagined...

--
____
Hail Eris!
Not Richard Scoville
Richard M. Scoville is explicitly denied the right to archive any of my
posts, under any of my nyms, on his site, FreeSpeechStore.com
http://tinyurl.com/c222n
"It's claiming authority based on absurd myths and fantasy beings - that
creates anger." -- Kurt Gavin

```
From -8657865572558636254
X-Google-Thread: 10f7a7,d56f5d7c176d2e7b
X-Google-Thread: 106d41,b79e6f5686b56eaf
X-Google-Thread: 10bf43,d56f5d7c176d2e7b
X-Google-Thread: 10e8ad,2f2aee747b9df8e4,start
X-Google-Attributes: gid10f7a7,gid106d41,gid10bf43,gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Subject: The alt.usenet.kooks FAQ
From: Lola Stonewall Riot <popesnarky@meowmeowmeow.org>
Date: Thu, 17 Aug 2006 10:27:51 GMT
Message-ID:
<pan.2006.08.17.10.27.48.146801@meow.disorg.flonk.discord.kookology.alexa.cameron.
the.k00k.georgewbush.the.bobo>
References: <1155148814.127493.85290@b28g2000cwb.googlegroups.com>
<12dlf0ei6e84lb2@corp.supernews.com>
<1155221235.862953.78680@q16g2000cwq.googlegroups.com>
<12dnu3eq52a4g53@corp.supernews.com> <44ddf2f1$0$10185$88260bb3@free.teranews.com>
<12dt8qfn5qr036e@corp.supernews.com>
Lines: 593
NNTP-Posting-Host: 64.59.144.75
Organization: Snarks of AErisia
Path: g2news2.google.com!news4.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx02.iad01.newshosting.com!newshosting.com!
198.186.190.247.MISMATCH!news-out.readnews.com!news-xxxfer.readnews.com!news-
out.usenet.com!propagator4-sterling.newsfeeds.com!news-in1.newsgroups.com!
pd7cy1no!pd7cy2no!shaw.ca!pd7tw3no.POSTED!53ab2750!not-for-mail
Newsgroups:
alt.usenet.kooks,rec.radio.cb,rec.radio.amateur.policy,rec.radio.amateur.space
X-Trace: pd7tw3no 1155810471 64.59.144.75 (Thu, 17 Aug 2006 04:27:51 MDT)
Reply-to: Wearer of the Holey FAGGOT Hat <popesnarky@gmale.com>
X-Trace-PostClient-IP: 70.68.151.67
User-Agent: Pan/0.14.2.91 (As She Crawled Across the Table)
X-Cabal: TINC
X-Keywords: NASA, Osama, Jordan, hackers, bomb
X-Cabal: Obsidian Order: TINCOO
X-Cabal: Obsidian Order Sombrero Number: TINCOOSN (really)
MIME-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 8bit
X-Complaints-To: abuse@shaw.ca
NNTP-Posting-Date: Thu, 17 Aug 2006 04:27:51 MDT
Xref: g2news2.google.com alt.usenet.kooks:220556 rec.radio.cb:16103
rec.radio.amateur.policy:38305 rec.radio.amateur.space:362
```

Hail Eris!

Since there appear to be some severe misapprehensions as to the nature and purpose of AUK in certain of the rec.radio.* froups, it seems quite apropos to post the AUK FAQ here (Any disagreement with my point of view on this will either be ignored or re-directed to the FNVW; homophobic disagreement will be re-directed to Mark Morgan; any disagreement more brainless than that is at risk of attention from Fred Teh Bot; ok, I tell a lie, all disagreement is at risk of attention from Fred. In fact, everyone is. Beware.):

1. What is this newsgroup, alt.usenet.kooks (AUK)?

A mass of electrons spread out upon bandwidth scattered across the globe for the express purpose of separating the wheat from the chaff of the net.

2. This is a joke, right? RIGHT?!!

No more a joke than the fact that ISPs let people on every day who have nothing better to do than annoy their neighbors enough to win by popular vote silly little awards created for just such buffoons as them.

3. What's this newsgroup for?

The newsgroup alt.usenet.kooks is for the discovery and discussion of Kooks on Usenet and the Internet. These people are known technically as net.kooks.

4. What's this newsgroup NOT for?

This group exists for recreational Kookology, not for Very Personal Vendetta. It is not to be used for general harassment of someone, or for net abuse such as spamming and flooding and cancelbombing in an attempt to gain vengeance on someone or get the denizens of AUK to shut up. Either way, it won't work, it's very messy, "Bob" will give you triple your money back, and you don't get a life.

Also, we [tinw] are not in the business of harassing the vulnerable or the insane. Occasionally an apparent net.kook proves to be genuinely ill. In such cases the person is disqualified from winning awards and other posters are asked to avoid exarcerbating his or her problems. Similarly, trolling or kook-hunting in support groups is strongly discouraged.

5. Who let this newsgroup in here, and why wasn't I notified?

That's what you get for hogging the Beer Fund.

(Here you can view the control message that started it all, from our Mighty Founder MAC.)

http://www.netcabal.com/auk/cmsg.html

6. Who is a net.kook?

If you post uniquely strange, preferably incomprehensible articles, or you manifest a persistent, extreme, and somewhat bizarre obsession, you just might be a net.kook. And more.

It is important to note the subtle distinction between a net.kook, a net.cretin, a clueless newbie, troll, or garden-variety @$$hole. The newbie, one hopes, can acquire a clue on the installment plan even if he can't afford to buy one for cash; the cretin is merely stupid and/or irritating; the troll makes a fool out of himself by making a fool out of you, the @$$hole is, well, simply that. But a TRUE net.kook has a special fascination derived from his/her/its utter ineffability. Their behavior is irrational, if not downright weird, but they are seldom merely boring.

It is not considered appropriate to nominate clueless newbies, trolls, or longwinded spambrains as net.kooks. It is acceptable to nominate net.cretins, or simply to present them, without nomination, for whatever minor amusement value they may have; but the real focus here is on net.kooks in all their raging, indomitable glory.

Important Disclaimer: the fact that someone has been proclaimed a net.kook does not imply any psychological diagnosis in and of itself. A net.kook may or may not be clinically insane; that is not the concern of the AUK audience.

We hope.

7. Can you show me a few examples?

I'd rather not, but it may help to clarify things... The person who posted a handful of meaningless, ill-formed newgroup messages on May 21, 1994 was a Clueless Newbie. The person who hung around alt.religion.kibology during April and May 1994, constantly posting boilerplate "warning" messages telling people that ARK messages were intentionally meaningless, was a net.cretin. The people who post demented "scientific" theories, like Archimedes Plutonium's concept of the universe being one giant atom of plutonium, and seem incorrigible to criticism, are moderate net.kooks. The sort of being who constantly raves about the conspiracy against her/him/it is an extreme net.kook, especially if he/she/it automatically assumes that anyone who questions their world-view is an agent of the conspirators or is an ultra right-wing/left-wing extremist, and hides behind an anonymous remailer to avoid "persecution" even though they would get one hell of a lot less of it by not posting at all.

8. How do I present a Kook on this group?

The preferred technique is to get the suspected Kook to start posting to AUK so that we can all see him/her/it in all their first-hand Glory. You can do this by posting followups to the suspect's weirder messages, with your followups nonchalantly crossposted to AUK. If the suspect responds to your messages without editing the Newsgroups line, you've achieved your goal.

Another acceptable method is to repost, complete and unedited, one or two of the suspected Kook's recent rants. If you do this, please provide a brief intro in the header describing what the hell you're doing, such as indicating who this person is, what group you found the message on, or why you think the rest of us should give a rat's @$$ about it.

You should be aware that if you try this with some perfectly reasonable posting, you may be flamed to net.hell and back and probably suspected of being a net.loon yourself. It is also considered extremely lame to nominate someone as a Kook simply because you have lost, or at least failed to win, a debate with them; persistently doing so is likely to get you nominated for Kook Awards. That someone fails to perceive the self-evident, unassailable wisdom of your viewpoint does not, in and of itself, constitute Kookery.

9. What are the Kook Awards?

The newsgroup alt.usenet.kooks offers a variety of widely-recognized and highly dubious honors for your service, applying to net.kooks everywhere. They recognize several kinds and many levels of net.kookery.

Here is a detailed list of AUK awards and descriptions.

http://www.netcabal.com/auk/awards.html

10. Who the FSCK appointed YOU net.kookologist/god/nazi etc.

Nobody. We have a Gift.

11. Are there any holidays in AUK?

Why yes, there sure are:

March 30th - CALL to ARMMs

Commemorating the earliest most virulent Kook post flood of Usenet, and the great flamewar that followed in its wake.

June 26th - KOOKS DAY

Named in commemoration of Earl Curley checking into the Motel Deep 6 to serve a major in the pine penalty box, the same date as Edmond Wollmann got arrested riding the San Clemente railway...on his motorcycle.

August 15th - DEAD DOC TAVISH DAY

Named in honor of the death of one of Usenet's most famed identities due to excessive Usenet exposure; his virtual corpse is buried in a rural cemetery near New Bremen, Texas

September 10th - KAZOO DAY

This holiday commemorates Raymond Ronald "Kazoo" Karczewski's conviction for seven felonies. May Raymold be a warning to all kooks who are tempted to think that a "Sovereign Christ" is above the law.

December 20th - AUK BIRTHDAY

The anniversary of the newgrouping of alt.usenet.kooks

12. What should I do if I'm paged on the Red Courtesy Telephone?

Give the caller Gandalf the Gray's speech to the demon. Verbatim.

13. Is alt.usenet.kooks archived anywhere?

Why would you even *want* to know? [But if you truly must know, GIYF. You masochist, you.]

14. What should we do about the book?

Burn it.

15. Where can I find out more about net.kooks?

Several mini-FAQs on classic kooks of the past and present (along with several non-kooky legendary netters) are available on the World Wide Web in various archives. Be sure to set aside coffee and cats before reading. [Try insurgent.org/kook-faq/]

16. What are the AUK Offices?

As well as the kook awards, kooks may compete to hold office for a month or longer. Nominations are made in exactly the same way as for awards; the difference is that the previous holder of the office always appears on the ballot paper when a new candidate emerges, and the winner remains in office until challenged again. At present, the offices are as follows.

Darth Bawl -

This office is held by Usenet's biggest crybaby.

Village Idiot -

The name says it all.

Kooki Information Minister -

Named in honour of Iraq's Mohammed Saeed al-Sahhaf, this office is held by the kook whose claims are most noticeably at variance with known facts.

Ministry of Circle Jerks -

Although many kooks are lone wolves, a few like to make friends with those who are as delusional as themselves. This office rewards the slurpfests that often ensue.

17. Are there any net.kook awards outside of AUK?

At various points of time there have been several, from the Christian groups' Steebie Award to alt.fan.art-bell's Angstrom Medal. At least two newsgroups, talk.politics.guns and comp.systems.mac.advocacy, have given out their own Kook of the Month awards. Check around from time to time to see what other net.kook awards might be around. [alt.atheism does them, too.]

18. What is the Cabal?

From the beginning of Usenet time, there has been but one force capable of holding it in check to remain in the realm of mortal existence. For today's Usenet world you need a Giant. A Behemoth. A Cabal of IMMENSE PROPORTIONS. A REALLY *BIG* *CABAL* to offer all news ORDER.

Within this force is the most ruthless and efficient organization on all Usenet, known as the Cabal Obsidian Order (COO). If *YOU* wish to know of this entity, read, learn, and do as you will.

SEE THE LIGHT OF COLLECTIVE WISDOM!!!

A. I *SAID*, what is the CABAL?

There Is No Cabal. Long Live The Cabal.

B. How does the Cabal function??

As well as any apocryphal organization can hope to function.

C. What are the weaknesses of the Cabal?

<chortle> What weaknesses?

D. What is the hierarchy and power structure of the Cabal?

Oh, you don't need to know that. Really. You can trust us, especially when it comes to information you haven't paid for.

E. What is the Cabal Obsidian Order?

The Cabal Obsidian Order (COO) is a profoundly secret collective of operatives designed to outrun, outgun and Eliminate the most vile scum and villainy the net has to offer.

F. How do I know if the COO is responsible for something?

If the COO's operatives are doing their job correctly, they'll be laughing at whoever is actually responsible.

G. Who are the leaders of the COO?

Leaders? Where we function we don't need Leaders.

H. What is the Beer Fund?

The more you contribute to it, the more we will tell you.

I. How may I apply to become an operative of the COO?

Pitiful begging at the Vote Wrangler's feet might help. Then again it might not.

19. Who is the FNVW?

Why, our highly esteemed Friendly Neighbourhood Vote Wrangler (FNVW), whose benevolent supreme dictatorship runs the electoral wheels of our great realm. Seven fearless folk have served, with distinction:

AUK VOTE WRANGLERS

Craig Dickson (1994-1995)
Matthew Legare (1995-1997)
Killfile Daemons (1997)
Robbie Honerkamp (1997-1998)
Phoenix (1997-2004)
Peter J Ross (2004-2006)
Sean Monaghan (2006-Present)

On retirement, Phoenix accepted the high office of Friendly Neighborhood "Bob"father.

20. Do I have what it takes to BE a Vote Wrangler?

<chortle> If you have to ask, you don't have what it takes.

21. Who do you %$#@!s think you are to oppose ME, Lord High Poster-Child of the Macrocosmic Universe?

We are the ones who can and will humiliate your @$$ if you use our group as your personal piss bowl. You are a freak of the universe. You do not give the orders here. And whether you like it or not, the universe is laughing behind your back.

22. That was MEAN, just plain MEAN!!!

Payback's a bitch, ain't it?

23. Should I expect ONE CONSISTENT response to my rude and obnoxious online behavior from the denizens of AUK?

Absolutely NOT.

24. To whom should I complain if I think I have been treated unfairly?

<Darth Vader>
You think you have been treated unfairly? </Darth Vader>

25. What kind of response can I expect as a result of my stupid online behavior at AUK?

Guilty party receives one or a combination thereof of the following assorted reactions (not at all limited to these, mind you):

1. Complete silence while we blow you off
2. Complete silence while we reload
3. Complete silence while we pull the plug on your account
4. Complete silence while we sleep at the switch
5. Complete silence while we sleep in our beds
6. Complete silence while we laugh behind your back
7. Complete silence while we wipe the splattered food and/or drinks off our screens
8. Complete silence while we contemplate the known macrocosmic universe
9. Complete silence while the Vote Wrangler pays good money to watch professional Denver teams find new ways to lose
10. Complete silence while we bask in the pure glow of our obnoxiously self-righteous selves
11. Complete silence while we play high-stakes poker with Snoopy, Spike, Andy, Olaf, Marbles and Woodstock
12. Complete silence while we never notice your NoCeM'd post
13. Complete silence while we never notice your spam-canceled post
14. Complete silence while we run your rude and obnoxious posts through goofyizers for reposting
15. Complete silence while the Trekkies among us watch the USS Defiant blast bad guys' ships into rubble and fly through the debris with that nice halo of sparks effect
16. Complete silence while we wait for our Gates-sponsored software systems to uncrash themselves
17. General laughter at your expense
18. General laughter and pointing at your expense
19. General laughter, pointing and personal insults at your expense
20. Someone exposes your true service provider to the Rabble
21. Someone does any of 1-20 and reports you to your state's Attorney General
22. Someone does any of 1-21 and reports you to the FBI National Computer Crime Squad (nccs@fbi.gov)
23. Someone does any of 1-22 and does highly amusing parodies of you during the entire process
24. Talk amongst ourselves about life, love and why they sell 8-hot-dog weenie sets with 10-bun packages
25. Sounds of awe as we wonder with dropped mouths how you were able to make a greater fool of yourself than you already had
26. Sounds of astonishment as we MARVEL at the FREAK
27. Flames in your generally specific direction
28. Flames of you in the third, fourth and fifth person
29. Flames from the Vote Wrangler from the other side of the Galactic Killfile just to annoy all hell out of you
30. Nominations for many noteworthy Kook awards

26. Can I really be kicked off my ISP for...

Being a total @$$hole?

If you try hard enough.

Top-posting like the pathetic imbecile that I am?

Usually not, but we can always try.

Forging someone else's valid e-mail address?

Absolutely.

Posting multiple copies of the same message to individual news groups (Excessive Multi Posting [EMP])?

Of course. It's the SPAMMING, stupid.

27. Can I really be thrown in jail for posting threatening messages?

Yes. People have been tried and convicted for sending threatening or harassing Email or Usenet posts. We do NOT support censorship of the Internet; however, posting a message stating you are going to cause virtual or unvirtual harm to someone will probably gain you a visit from your Friendly Neighborhood FBI Agent.

28. Fine. I'll just remain anonymous. That'll work, right?

BWWAAAAAAAAA HA HA HA HA HA HA HA HA HA!!!!!!!!!!!!!

Try it, pinkboy. An anon remailer service can be forced to turn you in for copyright violation, harassment, stalking; you name the crime - they've got the time. If you ran an anon remailer service what would be the point of protecting flagrant abusers of the net and the Law??

29. Okay, then I'll bust your #$%&$*!! @$$ off AUK instead!

Uh... yeah. Many denizens of AUK are abuse admins, know abuse admins, sleep with abuse admins, or otherwise have years of experience dealing with and educating others about precisely your kind of dubiosity. A good account is a terrible thing to waste, so don't sacrifice yours on our altar.

30. I just realized I am a Maroon. How can I improve my standing in the eyes of the Internet, my balloon doll, and, most importantly, "Bob"?

REPENT. The End is always near.

--

____
All Hail Discordia! Flonk Leader #2 & #11 1/9; mhm 29 x 21
The Discordian People's Most Powerful and Revered Being (without portfolio)
Economic Left/Right: -7.63

Social Libertarian/Authoritarian: -7.38
Real email should go to gmail.com, otherwise the same as above.

Quotable quotes:
"Three OS's from corporate-kings in their towers of glass,
   Seven from valley-lords where orchards used to grow,
Nine from dotcoms doomed to die,
   One from the Dark Lord Gates on his dark throne
In the Land of Redmond where the Shadows lie.
   One OS to rule them all, One OS to find them,
   One OS to bring them all and in the darkness bind them,
In the Land of Redmond where the Shadows lie."'

"Covert ace nudists in the Vatican!"

"Real men eat me."

"Any priest or shaman must be presumed guilty until proved innocent." -- Lazarus Long

"Laws count, the US Constitution count more, and we need to have judges on the bench who are going to Carry Out those laws, not Make Law or Interpret Law." -- John "Easily" Shocked contradicts his own words on the overriding importance of society's reluctance to accept homosexuality, in Message-ID: <brIDe.67062$Qo.12613@fed1read01>

"Heterosexuality is not *normal*, it's just more /common/."

"For the most part, morality is universal." -- John "Easily" Shocked

"Gay, straight, they all want blow jobs."

"Bad stories are bad stories. We just call them as they are." -- DBurns demonstrates his sheer cluelessness on Mar 9, 2002, at 6:25 pm, in rec.arts.drwho

"Oh, and Snarky, if you're listening: Fuck you, Asshole! Enjoy the few remaining days of your internet access." Kooky troll John Long gets delusional, in Message-ID: <3C36AA50.31DD0...@epix.net>

A sad little top-poster with the nym of "Choirboy" once lamed:

> Well, gee, coming from an asshole like *you* ...
> ESAD, ya 'ho bitch.

Please to be posting proof, you facile fridgemagnet.
-- replied the Aussie rapier, aka fnord/Affinity, in a now-lost message

"I have a dream...that one day the whole world will know the joy of my nipples!" -- Stimpy

"The meek shall inherit the earth -- 2' x ~6' x 6' of it."

"If English was good enough for Jesus Christ, it's good enough for these U-nited States!" -- an unknown politician, in a senate floor debate over bilingual education.)

"The policeman isn't there to create disorder, the policeman is there to preserve disorder" -- Mayor Richard Daley of Czechago, September 23, 1968

"Moral: it's not a plot hole if two eyes and two brain cells can solve it." -- Keith Goodnight, in atbvs, on NNTP-Posting-Date: Mon, 03 Jun 2002 16:46:02 EDT

"Kung fu's useful!"

"Bernadette, you ignorant oaf.
Bernadette, you brainless dullard.
Bernadette, you feeble-minded wag.
Bernadette, you blathering baboon.
Bernadette, you babbling boor.
Bernadette, you depraved dolt.
Bernadette, you stinking slimeball.
Bernadette, you yammering yak.
Bernadette, you lily-livered lush.
Bernadette, you hard-hearted hulk."
-- Mother Be Strange gets very hard on herself, in
MID: <94b6d5f1.0203221829.3587ccd3@posting.google.com>

"[Lurlean] would never dream of sleeping with a dog. The Bible's against it. You don't seem to care what the Bible says, so she thought maybe you gave that a try too -- in addition to sucking on Steve, letting him play with your butt, and having seven different lesbian lovers in our bed."
-- Sistah Moonshine shocks a.p.h. with the revelation that she got it off with "Romaine Brooks", in a now-vanished message

"I should have known my boss was evil when he called my jumping onto my chair to praise the Lord out loud 'inappropriate behavior.'" -- Sistah Moonshine: Oppressed Christian, in another vanished message

"I made a pact with the devil." -- Sistah Moonshine, from her dream diary

"'drink that hooch,' they would say, 'and then smoke that joint. Bury your head in that strange woman's crotch and bring her to a thunderous climax with your tongue, then tell her no man could ever give her that much pleasure in a thousand years. Tell her to leave her husband and become a lesbian. Drip hot wax on that pervert's nutty buddies and then charge him extra for the privilege.'" -- Sistah Moonshine is now working on an erotic epic to outmatch Anne Rice.

"Roe V Wade has zero bearing on my existence other than it affects it adversely."
-- Johnny Wentzky never had much truck with "logic".

"You are the GOD-DAMNED, IGNORANT LIAR here.
Now, that is not me taking the Lord's name in vain."
-- John Wentzky: Living proof of the Death of Irony, in Message-ID:
<jljOe.5348$ZD4.3...@bignews3.bellsouth.net>

"Stupidity excuses nothing. It's only a reason...." -- Phxbrd

"The whining has just begun." -- John Wentzky

"It's not nice to misrepresent Mother Nature."

"Gay men deserve to die." -- John Wentzky

Joseph Bartlo wrote:

> A big mean meanie and heavyweight kookologist responding to my text
> and making me look like a colossal idiot. No more whinges to this mean
> person who keeps pounding my ass into the ground - you go on the lits
> of people who have trounced me. The state I left that group was
> embarassing to me. There were too many posts to follow them all, and I
> know a lot of people were saying mean things about me - but a few
> sucked up. So it was best at that point rather than to browse all the
> crap to simply make a standard post telling people a lot of bullshit
> I'd just made up. I did that on many other groups, but the war is only
> fought here. If anyone thinks I am the least bit kidding, consider how
> long this has been going, how little I have accomplished (i.e., how
> much the mean, mean kookologists have changed everything), and that I
> have a lot of goats to blow.

-- in MID: <43745576.1E07F998@verizon.net>

"America is supposed to be the world's melting pot,
so melt!!" -- from some BBS

"There are no governors anywhere."

"The personal _is_ political."

"If humans decline to exercise faith, then an
omnipotent God is impotent." -- Teresita, x-posted to APH

"Gabrielle?! Monkey-man, you bring her back! You know, you two are
beginning to irritate me with these obsessions of yours!
Fish don't just catch themselves!" -- Xena, "Fins, Femmes, &
Gems" (64/318)

"I don't think so because, I'm a whole lot smarter and far less bigoted
than the average Jew, although smart Jews as having collaborated with
your Skull and Bones Third Reich certainly have more of those
in-your-face balls than I'd ever have to work with." -- Guthball drools
all over my irony meter, in MID:
<fea985f50107c84f4d1d4894114d1989.49644@mygate.mailgate.org>

"This bandwidth has been rescued from AOL." -- mimus

No-one expects the Fannish Inquisition!

```
From 5124923511101601903
X-Google-Thread: fe9fa,ce1376eef577be54,start
X-Google-Thread: fdc67,a740ac9833c88ee
X-Google-Thread: 1138ec,f52b434fa0dd288c
X-Google-Thread: 106284,f52b434fa0dd288c
X-Google-Thread: 10f7a7,f52b434fa0dd288c
X-Google-Thread: 106d41,ce1376eef577be54,start
X-Google-Thread: 10bf43,ce1376eef577be54,start
X-Google-Thread: 10e8ad,ce1376eef577be54,start
X-Google-Attributes:
gidfe9fa,gidfdc67,gid1138ec,gid106284,gid10f7a7,gid106d41,gid10bf43,gid10e8ad,publ
ic
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news3.google.com!border1.nntp.dca.giganews.com!
border2.nntp.dca.giganews.com!nntp.giganews.com!pd7cy3no!pd7cy4no!shaw.ca!
pd7tw3no.POSTED!53ab2750!not-for-mail
X-Trace-PostClient-IP: 70.68.151.67
From: "Text Medium No. 5" <mhm29x21@meow.flonk>
Organization: The Holy International Discordian Internet & Usenet Terrorist
Pretzel Cabal (TINC)
Subject: Re: The Tholen classification
User-Agent: Pan/0.14.2.91 (As She Crawled Across the Table)
Message-Id:
<pan.2006.08.17.11.34.08.255735@hail.eris.flonk.meow.all.hail.discordia.meow.flonk
.mockery.demon.not.really.leola>
Newsgroups:
alt.alien.vampire.flonk.flonk.flonk,alt.astronomy,comp.os.os2.advocacy,alt.fan.art
-bell,alt.usenet.kooks,rec.radio.cb,rec.radio.amateur.policy,rec.radio.amateur.spa
ce
References: <1155080474.294832.75770@n13g2000cwa.googlegroups.com>
<1155259600.283710.53650@75g2000cwc.googlegroups.com>
<tWYCg.12158$Ta6.6959@tornado.socal.rr.com> <11082006212212384 6%erfc@netcabal.com>
<pan.2006.08.15.14.22.12.287241@meower.flonker.kookologist.sf-fan.callahanian>
<16082006205715189 5%erfc@netcabal.com>
Reply-To: Cross-Posters For Goddess! <x-posting@is.sacred>
X-Conspiracy: HomIntern
X-Konspiracy: K00ks Who Must Meet: Alexa Cameron & John Shocked
X-Keywords: Pentagon, NSA, Echelon, radioactive, Italy
eX-Gay: Doesn't exist
X-tra-terrestrial: May or may not exist
X-Yahoo: Group: Cabal_of_the_Holy_Pretzel
X-Bisexual: Still and always
X-Cabal: The Holy International Discordian Internet & Usenet Terrorist Pretzel
X-Goofiest: Goofy-@zzed Babboon: Yads
X-Posting: Address Domain: meow.org
X-Osama: Dead, and long may he rot
X-Riot: Stonewall
X-Political-Compass: Economic Left/Right: -7.63 Social Libertarian/Authoritarian:
-7.38
MIME-Version: 1.0
```

```
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 8bit
Lines: 34
Date: Thu, 17 Aug 2006 11:34:09 GMT
NNTP-Posting-Host: 64.59.144.74
X-Complaints-To: abuse@shaw.ca
X-Trace: pd7tw3no 1155814449 64.59.144.74 (Thu, 17 Aug 2006 05:34:09 MDT)
NNTP-Posting-Date: Thu, 17 Aug 2006 05:34:09 MDT
Xref: g2news2.google.com alt.alien.vampire.flonk.flonk.flonk:68288
alt.astronomy:71446 comp.os.os2.advocacy:10069 alt.fan.art-bell:77398
alt.usenet.kooks:220588 rec.radio.cb:16110 rec.radio.amateur.policy:38311
rec.radio.amateur.space:363

Hail Eris! On Wed, 16 Aug 2006 20:57:15 -0600, Art Deco jabbered inanely:
> TransWench wrote:
>>I was busily flonking away in alt.usenet.kooks, when The Goddess Eris
>>Herself suddenly made me reply to Art Deco:
>>> Classic "oar pin" Tholenator(tm) <"tholen@antispam.ham"> tholed:
>>>
>>>>> As with OS/2; it is an example of faltering support by the
>>>>> manufacturer and vendor of the product.
>>>>
>>>>On what basis do you make that claim, Loonie?
>>
>>Is there anyone who _can't_ WHOMP you, Tholok00k? Loonie's "claim" is
>>valid, OS/2's support from both M$ and IBM is faltering, and cooa is
>>under the dominion of Teh Empire of MEOW.
>
> Another fact glaring him in the face that he will deny and dismiss with
> "classic erroneous ...".

Without actually making any sort of logical justification for his
objection, too, I'd wager.

>>> embowel 0.462806447
>>
>>dispersion 0.009162171119676271
>
> desolation 0.390269598

avocation 0.9999999872143876

--
Shon'ai
"I was told there would be cookies."
Cross-Poasters For Goddess!
Remember: Straight people can't help it!


From -3874454938203737648
X-Google-Thread: fc2a5,f8ce44921aecd15e
X-Google-Thread: 107ada,884c9e429cd29b18
X-Google-Thread: 10bf43,7831d7ab14abf4ba
```

```
X-Google-Thread: 10e8ad,f8ce44921aecd15e
X-Google-Attributes: gidfc2a5,gid107ada,gid10bf43,gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!postnews.google.com!h48g2000cwc.googlegroups.com!not-for-
mail
From: "Not Cocksucker Lloyd" <not_time_turd_lloyd@yahoo.com>
Newsgroups:
rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.rad
io.amateur.space
Subject: Re: Cease desist and grow up
Date: 17 Aug 2006 05:45:09 -0700
Organization: http://groups.google.com
Lines: 18
Message-ID: <1155818709.467035.142500@h48g2000cwc.googlegroups.com>
References: <1155607007.048706.302580@b28g2000cwb.googlegroups.com>
   <44e23a97$0$21028$88260bb3@free.teranews.com>
   <1155681102.743274.169300@74g2000cwt.googlegroups.com>
   <1155687062.084385.29180@i42g2000cwa.googlegroups.com>
   <1155687181.832750.241820@p79g2000cwp.googlegroups.com>
   <1155731470.893781.68090@m73g2000cwd.googlegroups.com>
   <1155743368.829657.131340@m79g2000cwm.googlegroups.com>
   <1155756718.845363.87450@b28g2000cwb.googlegroups.com>
   <q2u6e29s13sf59b0d4isjhl8bgmfst27cp@4ax.com>
NNTP-Posting-Host: 4.184.50.196
Mime-Version: 1.0
Content-Type: text/plain; charset="iso-8859-1"
X-Trace: posting.google.com 1155818714 13900 127.0.0.1 (17 Aug 2006 12:45:14 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Thu, 17 Aug 2006 12:45:14 +0000 (UTC)
In-Reply-To: <q2u6e29s13sf59b0d4isjhl8bgmfst27cp@4ax.com>
User-Agent: G2/0.2
X-HTTP-UserAgent: Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1;
SV1),gzip(gfe),gzip(gfe)
Complaints-To: groups-abuse@google.com
Injection-Info: h48g2000cwc.googlegroups.com; posting-host=4.184.50.196;
   posting-account=NYdx0Q0AAAACkSt6kWea8S56_8dZU8tl
Xref: g2news2.google.com rec.radio.amateur.homebrew:6511
rec.radio.amateur.misc:19164 rec.radio.amateur.policy:38323
rec.radio.amateur.space:364


Mark@kb9rqz.com wrote:
> On 16 Aug 2006 12:31:58 -0700, peewee_lloyd_davies@yahoo.com wrote:
>
> >
> >an old fraud wrote:
> >> Not Cocksucker Lloyd wrote:
> >> > an_old_friendless cocksucker wrote:
> >> > > cease
> >> >
> >> > Cease breathing
> >> eom
> >
> >"eom?" BWHAHAHAHAHAHAHAHAHAHA!
> End Of Message

BWHAHAHAHAHA You only backpedal again.




From -8901084771673457979
X-Google-Thread: fc2a5,f8ce44921aecd15e
X-Google-Thread: 107ada,884c9e429cd29b18
X-Google-Thread: 10bf43,7831d7ab14abf4ba
X-Google-Thread: 10e8ad,f8ce44921aecd15e
X-Google-Attributes: gidfc2a5,gid107ada,gid10bf43,gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news4.google.com!news.glorb.com!newsfeed-
east.nntpserver.com!nntpserver.com!statler.nntpserver.com!be5.nntpserver.com!not-
for-mail
From: Mark@kb9rqz.com
Newsgroups:
rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.rad
io.amateur.space
Subject: Re: Cease desist and grow up
Date: Thu, 17 Aug 2006 10:03:33 -0400
Message-ID: <fpt8e2pat54sbvle5jp3bnbkpk599voa3p@4ax.com>
References: <44e23a97$0$21028$88260bb3@free.teranews.com>
<1155681102.743274.169300@74g2000cwt.googlegroups.com>
<1155687062.084385.29180@i42g2000cwa.googlegroups.com>
<1155687181.832750.241820@p79g2000cwp.googlegroups.com>
<1155731470.893781.68090@m73g2000cwd.googlegroups.com>
<1155743368.829657.131340@m79g2000cwm.googlegroups.com>
<1155756718.845363.87450@b28g2000cwb.googlegroups.com>
<q2u6e29s13sf59b0d4isjhl8bgmfst27cp@4ax.com>
<1155818709.467035.142500@h48g2000cwc.googlegroups.com>
X-Newsreader: Forte Free Agent 3.3/32.846
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Lines: 6
NNTP-Posting-Date: 17 Aug 2006 13:07:27 GMT
X-Complaints-To: abuse@teranews.com
Xref: g2news2.google.com rec.radio.amateur.homebrew:6512
rec.radio.amateur.misc:19185 rec.radio.amateur.policy:38342
rec.radio.amateur.space:365

On 17 Aug 2006 05:45:09 -0700, "Not Cocksucker Lloyd"
<not_time_turd_lloyd@yahoo.com> wrote:

>
cease and desist your harrassment
http://kb9rqz.blogspot.com/

--
Posted via a free Usenet account from http://www.teranews.com
```

```
From -8600690348169308260
X-Google-Thread: 106284,f52b434fa0dd288c
X-Google-Thread: 10f7a7,f52b434fa0dd288c
X-Google-Thread: 106d41,ce1376eef577be54
X-Google-Thread: 10bf43,ce1376eef577be54
X-Google-Thread: 10e8ad,ce1376eef577be54
X-Google-Attributes: gid106284,gid10f7a7,gid106d41,gid10bf43,gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news1.google.com!postnews.google.com!
i3g2000cwc.googlegroups.com!not-for-mail
From: "an old freind" <kb9rqz-ars@hotmail.com>
Newsgroups: alt.fan.art-
bell,alt.usenet.kooks,rec.radio.cb,rec.radio.amateur.policy,rec.radio.amateur.spac
e
Subject: cease and desist your harrassment
Date: 17 Aug 2006 07:11:24 -0700
Organization: http://groups.google.com
Lines: 4
Message-ID: <1155823884.905239.280300@i3g2000cwc.googlegroups.com>
References: <1155080474.294832.75770@n13g2000cwa.googlegroups.com>
   <1155259600.283710.53650@75g2000cwc.googlegroups.com>
   <tWYCg.12158$Ta6.6959@tornado.socal.rr.com>
   <11082006212212384б%erfc@netcabal.com>
   <pan.2006.08.15.14.22.12.287241@meower.flonker.kookologist.sf-fan.callahanian>
   <16082006205715189б%erfc@netcabal.com>

<pan.2006.08.17.11.34.08.255735@hail.eris.flonk.meow.all.hail.discordia.meow.flonk
.mockery.demon.not.really.leola>
NNTP-Posting-Host: 69.19.14.19
Mime-Version: 1.0
Content-Type: text/plain; charset="iso-8859-1"
X-Trace: posting.google.com 1155823889 29360 127.0.0.1 (17 Aug 2006 14:11:29 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Thu, 17 Aug 2006 14:11:29 +0000 (UTC)
In-Reply-To:
<pan.2006.08.17.11.34.08.255735@hail.eris.flonk.meow.all.hail.discordia.meow.flonk
.mockery.demon.not.really.leola>
User-Agent: G2/0.2
X-HTTP-UserAgent: Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1; SV1; .NET CLR
1.1.4322),gzip(gfe),gzip(gfe)
Complaints-To: groups-abuse@google.com
Injection-Info: i3g2000cwc.googlegroups.com; posting-host=69.19.14.19;
   posting-account=hVZdaA0AAABPHL3UNjx-ywxVYAwCtKHr
Xref: g2news2.google.com alt.fan.art-bell:77403 alt.usenet.kooks:220621
rec.radio.cb:16131 rec.radio.amateur.policy:38350 rec.radio.amateur.space:366
```

Text Medium No. 5 wrote:

>

cease and desist your harrassment

From -1581486537473233134
X-Google-Thread: 106d41,b79e6f5686b56eaf
X-Google-Thread: 10bf43,d56f5d7c176d2e7b
X-Google-Thread: 10e8ad,2f2aee747b9df8e4
X-Google-Attributes: gid106d41,gid10bf43,gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!postnews.google.com!p79g2000cwp.googlegroups.com!not-for-mail
From: "an old freind" <kb9rqz-ars@hotmail.com>
Newsgroups: rec.radio.cb,rec.radio.amateur.policy,rec.radio.amateur.space
Subject: cease and desist your harrassment
Date: 17 Aug 2006 07:16:20 -0700
Organization: http://groups.google.com
Lines: 5
Message-ID: <1155824180.745487.133930@p79g2000cwp.googlegroups.com>
References: <1155148814.127493.85290@b28g2000cwb.googlegroups.com>
<12dlf0ei6e84lb2@corp.supernews.com>
<1155221235.862953.78680@q16g2000cwq.googlegroups.com>
<12dnu3eq52a4g53@corp.supernews.com>
<44ddf2f1$0$10185$88260bb3@free.teranews.com>
<12dt8qfn5qr036e@corp.supernews.com>

<pan.2006.08.17.10.27.48.146801@meow.disorg.flonk.discord.kookology.alexa.cameron.the.k00k.georgewbush.the.bobo>
NNTP-Posting-Host: 69.19.14.19
Mime-Version: 1.0
Content-Type: text/plain; charset="iso-8859-1"
X-Trace: posting.google.com 1155824185 30240 127.0.0.1 (17 Aug 2006 14:16:25 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Thu, 17 Aug 2006 14:16:25 +0000 (UTC)
In-Reply-To:
<pan.2006.08.17.10.27.48.146801@meow.disorg.flonk.discord.kookology.alexa.cameron.the.k00k.georgewbush.the.bobo>
User-Agent: G2/0.2
X-HTTP-UserAgent: Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1; SV1; .NET CLR 1.1.4322),gzip(gfe),gzip(gfe)
Complaints-To: groups-abuse@google.com
Injection-Info: p79g2000cwp.googlegroups.com; posting-host=69.19.14.19;
posting-account=hVZdaA0AAABPHL3UNjx-ywxVYAwCtKHr
Xref: g2news2.google.com rec.radio.cb:16134 rec.radio.amateur.policy:38357
rec.radio.amateur.space:367

Lola Stonewall Riot wrote:
>
!cease and desist your harrassment

From 4978440328788602269
X-Google-Thread: 10bf43,2eaf18ff5ebea7f7

```
X-Google-Thread: f9daf,813f13f1ab0567a7
X-Google-Thread: 106d41,813f13f1ab0567a7
X-Google-Thread: 10e8ad,813f13f1ab0567a7
X-Google-Thread: f8ce7,7657a5eed05387d9
X-Google-Attributes: gid10bf43,gidf9daf,gid106d41,gid10e8ad,gidf8ce7,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!postnews.google.com!i3g2000cwc.googlegroups.com!not-for-
mail
From: "an old friend" <kb9rqz@hotmail.com>
Newsgroups:
rec.radio.amateur.policy,alt.revenge,rec.radio.cb,rec.radio.amateur.space,alt.musi
c.michael-jackson
Subject: Re: some explanation since Robeson has choosen to renew his assult on th
NG, and me
Date: 17 Aug 2006 07:30:52 -0700
Organization: http://groups.google.com
Lines: 32
Message-ID: <1155825052.024752.75220@i3g2000cwc.googlegroups.com>
References: <1155298281.480099.57590@h48g2000cwc.googlegroups.com>
   <1155301602.610277.95390@b28g2000cwb.googlegroups.com>
   <1155312973.033376.134900@i42g2000cwa.googlegroups.com>

<pan.2006.08.16.22.25.51.899513@hail.eris.flonk.meow.all.hail.discordia.meow.flonk
.mockery.demon.not.really.leola>
   <1155767340.849495.207160@m73g2000cwd.googlegroups.com>
   <pan.2006.08.17.06.50.51.193526@snarky.trolling.and.mocking.scoville>
NNTP-Posting-Host: 69.19.14.19
Mime-Version: 1.0
Content-Type: text/plain; charset="iso-8859-1"
X-Trace: posting.google.com 1155825057 485 127.0.0.1 (17 Aug 2006 14:30:57 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Thu, 17 Aug 2006 14:30:57 +0000 (UTC)
In-Reply-To: <pan.2006.08.17.06.50.51.193526@snarky.trolling.and.mocking.scoville>
User-Agent: G2/0.2
X-HTTP-UserAgent: Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1; SV1; .NET CLR
1.1.4322),gzip(gfe),gzip(gfe)
Complaints-To: groups-abuse@google.com
Injection-Info: i3g2000cwc.googlegroups.com; posting-host=69.19.14.19;
   posting-account=u4IZrA0AAAAnZJmD4DLlWGiEpMGb--6i
Xref: g2news2.google.com rec.radio.amateur.policy:38362 alt.revenge:6049
rec.radio.cb:16138 rec.radio.amateur.space:368 alt.music.michael-jackson:60752


FreeSpeechStore wrote:
> On Wed, 16 Aug 2006 15:29:00 -0700, an old freind wrote:
> > Text Medium No. 5 wrote:
> >> Hail Eris! On Fri, 11 Aug 2006 09:16:13 -0700, marqueenie_von_dork
> >> jabbered inanely:
> >
> >> > YOU,otoh, have gone out of your way to post gay filth here. I have
> >> > copies of YOUR posts to prove it. YOU are not welcome here you filty
> >> > sodomite!
> >> >
> >> > aren't you in violation of the states sodomy laws??
> >>
> >> Keep it up. I see many k00k awards in your future, you busted urinal.
> >
> > and in his past he is Roger Wisemen sometimes called Woger
>
> Figures that a hypocrite like him is the one complaining about "filth".
> BTW, put an empty line between your words and the one to whom you're
> responding. Makes you easier to read. Oh, and that's "Wiseman", and a
> more inappropriate surname could not be imagined...
>
> --
> ___________________________________________________________________________
> Hail Eris!
> Not Richard Scoville
> Richard M. Scoville is explicitly denied the right to archive any of my
> posts, under any of my nyms, on his site, FreeSpeechStore.com
> http://tinyurl.com/c222n
> "It's claiming authority based on absurd myths and fantasy beings - that
> creates anger." -- Kurt Gavin
```

```
From 2080317746409956919
X-Google-Thread: 10bf43,6742993d924f2d47
X-Google-Thread: 10f7a7,9967071e232d70e9,start
X-Google-Thread: f9daf,9967071e232d70e9,start
X-Google-Thread: 106d41,9967071e232d70e9,start
X-Google-Thread: 10e8ad,9967071e232d70e9,start
X-Google-Attributes: gid10bf43,gid10f7a7,gidf9daf,gid106d41,gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!postnews.google.com!m79g2000cwm.googlegroups.com!not-for-
mail
From: "Mr. Hammington" <mr_hammington@yahoo.com>
Newsgroups:
rec.radio.amateur.policy,alt.usenet.kooks,alt.revenge,rec.radio.cb,rec.radio.amate
ur.space
Subject: Re: well Mr Slow code has decicded to highlight the problems of the NG
Date: 17 Aug 2006 10:32:36 -0700
Organization: http://groups.google.com
Lines: 19
Message-ID: <1155835956.231036.305820@m79g2000cwm.googlegroups.com>
References: <1155772639.440140.251430@p79g2000cwp.googlegroups.com>
   <18909$44e44d25$d1cc5bdd$14927@snip.allthenewsgroups.com>
   <1155825831.737438.295760@p79g2000cwp.googlegroups.com>
NNTP-Posting-Host: 67.136.142.206
Mime-Version: 1.0
Content-Type: text/plain; charset="iso-8859-1"
X-Trace: posting.google.com 1155835961 756 127.0.0.1 (17 Aug 2006 17:32:41 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Thu, 17 Aug 2006 17:32:41 +0000 (UTC)
In-Reply-To: <1155825831.737438.295760@p79g2000cwp.googlegroups.com>
User-Agent: G2/0.2
```

```
X-HTTP-UserAgent: Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1; SV1;
yie6),gzip(gfe),gzip(gfe)
Complaints-To: groups-abuse@google.com
Injection-Info: m79g2000cwm.googlegroups.com; posting-host=67.136.142.206;
   posting-account=fCAeqQ0AAAA0MOUvbBVcTIqLIRyFxCXN
Xref: g2news2.google.com rec.radio.amateur.policy:38386 alt.usenet.kooks:220679
alt.revenge:6052 rec.radio.cb:16146 rec.radio.amateur.space:369


an old friend wrote:
> donttrythisathome wrote:
> > "an old freind" <kb9rqz-ars@hotmail.com> wrote in message
> > news:1155772639.440140.251430@p79g2000cwp.googlegroups.com...
> > > by truly spamming the ng which of course various parties will insist it
> > > perfectly ok further highlighting the true motives of the Wismen and
> > > Robeson
> > >
> >
> > I think both of them should hop up on each other's
> > shoulders and tell the other "I love you".
>
> for the own sake perhaps but mental help or take out from dr k would be
> a better for the rest of us

STFU Marqueer................
lunch is served,now go feast of the shit bag.




From -5886964124465353810
X-Google-Thread: 10bf43,6742993d924f2d47
X-Google-Thread: 10f7a7,9967071e232d70e9
X-Google-Thread: f9daf,9967071e232d70e9
X-Google-Thread: 106d41,9967071e232d70e9
X-Google-Thread: 10e8ad,9967071e232d70e9
X-Google-Attributes: gid10bf43,gid10f7a7,gidf9daf,gid106d41,gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!postnews.google.com!h48g2000cwc.googlegroups.com!not-for-
mail
From: "an old friend" <kb9rqz@yahoo.com>
Newsgroups:
rec.radio.amateur.policy,alt.usenet.kooks,alt.revenge,rec.radio.cb,rec.radio.amate
ur.space
Subject: Re: well Mr Slow code has decicded to highlight the problems of the NG
Date: 17 Aug 2006 11:37:02 -0700
Organization: http://groups.google.com
Lines: 11
Message-ID: <1155839822.732061.279630@h48g2000cwc.googlegroups.com>
References: <1155772639.440140.251430@p79g2000cwp.googlegroups.com>
   <18909$44e44d25$d1cc5bdd$14927@snip.allthenewsgroups.com>
   <1155825831.737438.295760@p79g2000cwp.googlegroups.com>
   <1155835956.231036.305820@m79g2000cwm.googlegroups.com>
NNTP-Posting-Host: 69.19.14.19
```

```
Mime-Version: 1.0
Content-Type: text/plain; charset="iso-8859-1"
X-Trace: posting.google.com 1155839827 12447 127.0.0.1 (17 Aug 2006 18:37:07 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Thu, 17 Aug 2006 18:37:07 +0000 (UTC)
In-Reply-To: <1155835956.231036.305820@m79g2000cwm.googlegroups.com>
User-Agent: G2/0.2
X-HTTP-UserAgent: Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1; SV1; .NET CLR
1.1.4322),gzip(gfe),gzip(gfe)
Complaints-To: groups-abuse@google.com
Injection-Info: h48g2000cwc.googlegroups.com; posting-host=69.19.14.19;
   posting-account=mGJHFw0AAABhg_iImBOts3VB5ouUQlvB
Xref: g2news2.google.com rec.radio.amateur.policy:38401 alt.usenet.kooks:220689
alt.revenge:6054 rec.radio.cb:16150 rec.radio.amateur.space:370


Mr. Hammington wrote:
> an old friend wrote:
> > donttrythisathome wrote:

> > for the own sake perhaps but mental help or take out from dr k would be
> > a better for the rest of us
>
> STFU Marqueer................
cease and desist wismen




From 4925416733624461998
X-Google-Thread: 106284,f52b434fa0dd288c
X-Google-Thread: 10f7a7,f52b434fa0dd288c
X-Google-Thread: 106d41,ce1376eef577be54
X-Google-Thread: 10bf43,ce1376eef577be54
X-Google-Thread: 10e8ad,ce1376eef577be54
X-Google-Attributes: gid106284,gid10f7a7,gid106d41,gid10bf43,gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news4.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!newscon06.news.prodigy.com!prodigy.net!news-east.rr.com!news-
feed-01.rdc-kc.rr.com!news.rr.com!cyclone2.kc.rr.com!news2.kc.rr.com!tornado.rdc-
kc.rr.com.POSTED!53ab2750!not-for-mail
From: Bookman <thebookman@kc.rr.comNULL>
Newsgroups: alt.fan.art-
bell,alt.usenet.kooks,rec.radio.cb,rec.radio.amateur.policy,rec.radio.amateur.spac
e
Subject: Re: cease and desist your harrassment
Message-ID: <i5j9e2ddmslqvh2kv83fdqup61fg7qff09@4ax.com>
References: <1155080474.294832.75770@n13g2000cwa.googlegroups.com>
<1155259600.283710.53650@75g2000cwc.googlegroups.com>
<tWYCg.12158$Ta6.6959@tornado.socal.rr.com> <11082006212212384б%erfc@netcabal.com>
<pan.2006.08.15.14.22.12.287241@meower.flonker.kookologist.sf-fan.callahanian>
<160820062057151895%erfc@netcabal.com>
<pan.2006.08.17.11.34.08.255735@hail.eris.flonk.meow.all.hail.discordia.meow.flonk
.mockery.demon.not.really.leola>
```

<1155823884.905239.280300@i3g2000cwc.googlegroups.com>
X-Newsreader: Forte Free Agent 1.93/32.576 English (American)
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Lines: 34
Date: Thu, 17 Aug 2006 20:07:58 GMT
NNTP-Posting-Host: 69.76.206.114
X-Complaints-To: abuse@rr.com
X-Trace: tornado.rdc-kc.rr.com 1155845278 69.76.206.114 (Thu, 17 Aug 2006 15:07:58 CDT)
NNTP-Posting-Date: Thu, 17 Aug 2006 15:07:58 CDT
Organization: Road Runner High Speed Online http://www.rr.com
Xref: g2news2.google.com alt.fan.art-bell:77423 alt.usenet.kooks:220706 rec.radio.cb:16154 rec.radio.amateur.policy:38405 rec.radio.amateur.space:371

On 17 Aug 2006 07:11:24 -0700, "an old freind"
<kb9rqz-ars@hotmail.com> wrote:

>Text Medium No. 5 wrote:
>>
>cease and desist your harrassment

What harassment?

ESL!

--
Bookman -The Official Overseer of Kooks and Trolls in AFA-B
Kazoo Konspirator #668 (The Neighbor of the Beast)
Clue-Bat Wrangler
Keeper of the Nickname Lists
Despotic Kookologist of the New World Order
Hammer of Thor award, October 2005
COOSN-266-06-89425

"I'd love to kill you in a ring" - Bartmo gets all touchy-feely

"****SPV....... So yes I am an idiot."

"ASK THE NWS, YOUR TAX DOLLAR GOES TO THEM NOT TO DR.TURI."
- Mr. Turi explains how to accurately predict hurricanes

Bookman is yet another Usenet fignuten, meaning naysayer and/or rusemaster of their incest cloned Third Reich. In other words, you're communicating with an intellectual if not a biological clone of Hitler.
- Brad Guth tries to wax "scientific", but invokes Godwin, instead.

WWFSMD?

From -7233673868258719287

```
X-Google-Thread: 106284,f52b434fa0dd288c
X-Google-Thread: 10f7a7,f52b434fa0dd288c
X-Google-Thread: 106d41,ce1376eef577be54
X-Google-Thread: 10bf43,ce1376eef577be54
X-Google-Thread: 10e8ad,ce1376eef577be54
X-Google-Thread: fe9fa,ce1376eef577be54
X-Google-Thread: fdc67,a740ac9833c88ee
X-Google-Thread: 1138ec,f52b434fa0dd288c
X-Google-Attributes:
gid106284,gid10f7a7,gid106d41,gid10bf43,gid10e8ad,gidfe9fa,gidfdc67,gid1138ec,publ
ic
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news4.google.com!border1.nntp.dca.giganews.com!
border2.nntp.dca.giganews.com!nntp.giganews.com!pd7cy3no!pd7cy4no!shaw.ca!
pd7tw1no.POSTED!53ab2750!not-for-mail
X-Trace-PostClient-IP: 70.68.151.67
From: "Text Medium No. 5" <mhm29x21@meow.flonk>
Organization: The Holy International Discordian Internet & Usenet Terrorist
Pretzel Cabal (TINC)
Subject: Re: cease and desist your harrassment
User-Agent: Pan/0.14.2.91 (As She Crawled Across the Table)
Message-Id:
<pan.2006.08.17.21.19.02.560831@hail.eris.flonk.meow.all.hail.discordia.meow.flonk
.mockery.demon.not.really.leola>
Newsgroups: alt.fan.art-
bell,alt.usenet.kooks,rec.radio.cb,rec.radio.amateur.policy,rec.radio.amateur.spac
e,alt.alien.vampire.flonk.flonk.flonk,alt.astronomy,comp.os.os2.advocacy
References: <1155080474.294832.75770@n13g2000cwa.googlegroups.com>
<1155259600.283710.53650@75g2000cwc.googlegroups.com>
<tWYCg.12158$Ta6.6959@tornado.socal.rr.com> <110820062122123846%erfc@netcabal.com>
<pan.2006.08.15.14.22.12.287241@meower.flonker.kookologist.sf-fan.callahanian>
<160820062057151895%erfc@netcabal.com>
<pan.2006.08.17.11.34.08.255735@hail.eris.flonk.meow.all.hail.discordia.meow.flonk
.mockery.demon.not.really.leola>
<1155823884.905239.280300@i3g2000cwc.googlegroups.com>
<i5j9e2ddmslqvh2kv83fdqup61fg7qff09@4ax.com>
Reply-To: Cross-Posters For Goddess! <x-posting@is.sacred>
X-Conspiracy: HomIntern
X-Konspiracy: K00ks Who Must Meet: Alexa Cameron & John Shocked
X-Keywords: Pentagon, NSA, Echelon, radioactive, Italy
eX-Gay: Doesn't exist
X-tra-terrestrial: May or may not exist
X-Yahoo: Group: Cabal_of_the_Holy_Pretzel
X-Bisexual: Still and always
X-Cabal: The Holy International Discordian Internet & Usenet Terrorist Pretzel
X-Goofiest: Goofy-@zzed Babboon: Yads
X-Posting: Address Domain: meow.org
X-Osama: Dead, and long may he rot
X-Riot: Stonewall
X-Political-Compass: Economic Left/Right: -7.63 Social Libertarian/Authoritarian:
-7.38
MIME-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
```

```
Content-Transfer-Encoding: 8bit
Lines: 22
Date: Thu, 17 Aug 2006 21:19:03 GMT
NNTP-Posting-Host: 64.59.144.75
X-Complaints-To: abuse@shaw.ca
X-Trace: pd7tw1no 1155849543 64.59.144.75 (Thu, 17 Aug 2006 15:19:03 MDT)
NNTP-Posting-Date: Thu, 17 Aug 2006 15:19:03 MDT
Xref: g2news2.google.com alt.fan.art-bell:77436 alt.usenet.kooks:220733
rec.radio.cb:16158 rec.radio.amateur.policy:38408 rec.radio.amateur.space:372
alt.alien.vampire.flonk.flonk.flonk:68369 alt.astronomy:71539
comp.os.os2.advocacy:10105

Hail Eris! On Thu, 17 Aug 2006 20:07:58 +0000, Bookman jabbered inanely:

> On 17 Aug 2006 07:11:24 -0700, "an old freind" <kb9rqz-ars@hotmail.com>
> wrote:
>
>>Text Medium No. 5 wrote:
>>>
>>cease and desist your harrassment
>
> What harassment?
>
> ESL!

Mr. Mark Morgan is severely confused as to what constitutes
"harassment". Either that, or else he's complaining about us(tinu)
bugging Tholenator.

--
Shon'ai
"I was told there would be cookies."
Cross-Poasters For Goddess!
Remember: Straight people can't help it!


From -4753594756450546992
X-Google-Thread: 106284,f52b434fa0dd288c
X-Google-Thread: 10f7a7,f52b434fa0dd288c
X-Google-Thread: 106d41,ce1376eef577be54
X-Google-Thread: 10bf43,ce1376eef577be54
X-Google-Thread: 10e8ad,ce1376eef577be54
X-Google-Thread: fe9fa,ce1376eef577be54
X-Google-Thread: fdc67,a740ac9833c88ee
X-Google-Thread: 1138ec,f52b434fa0dd288c
X-Google-Attributes:
gid106284,gid10f7a7,gid106d41,gid10bf43,gid10e8ad,gidfe9fa,gidfdc67,gid1138ec,publ
ic
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news4.google.com!newshub.sdsu.edu!elnk-nf2-pas!elnk-pas-
nf1!newsfeed.earthlink.net!stamper.news.pas.earthlink.net!
newsread3.news.pas.earthlink.net.POSTED!3dd4ce4a!not-for-mail
Newsgroups: alt.fan.art-
```

```
bell,alt.usenet.kooks,rec.radio.cb,rec.radio.amateur.policy,rec.radio.amateur.spac
e,alt.alien.vampire.flonk.flonk.flonk,alt.astronomy,comp.os.os2.advocacy
Subject: Re: cease and desist yor harrassment - Mark, Just ignore them.
From: Slow Code <my.mail@no.spam>
References: <1155080474.294832.75770@n13g2000cwa.googlegroups.com>
<1155259600.283710.53650@75g2000cwc.googlegroups.com>
<tWYCg.12158$Ta6.6959@tornado.socal.rr.com> <110820062122123846%erfc@netcabal.com>
<pan.2006.08.15.14.22.12.287241@meower.flonker.kookologist.sf-fan.callahanian>
<16082006205715189 5%erfc@netcabal.com>
<pan.2006.08.17.11.34.08.255735@hail.eris.flonk.meow.all.hail.discordia.meow.flonk
.mockery.demon.not.really.leola>
<1155823884.905239.280300@i3g2000cwc.googlegroups.com>
<i5j9e2ddmslqvh2kv83fdqup61fg7qff09@4ax.com>
<pan.2006.08.17.21.19.02.560831@hail.eris.flonk.meow.all.hail.discordia.meow.flonk
.mockery.demon.not.really.leola>
Organization: None
User-Agent: Xnews/5.04.25
Lines: 36
Message-ID: <E06Fg.5091$Sn3.4009@newsread3.news.pas.earthlink.net>
Date: Thu, 17 Aug 2006 22:24:36 GMT
NNTP-Posting-Host: 4.235.66.8
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread3.news.pas.earthlink.net 1155853476 4.235.66.8 (Thu, 17 Aug 2006
15:24:36 PDT)
NNTP-Posting-Date: Thu, 17 Aug 2006 15:24:36 PDT
Xref: g2news2.google.com alt.fan.art-bell:77441 alt.usenet.kooks:220786
rec.radio.cb:16183 rec.radio.amateur.policy:38435 rec.radio.amateur.space:373
alt.alien.vampire.flonk.flonk.flonk:68391 alt.astronomy:71555
comp.os.os2.advocacy:10112

"Text Medium No. 5" <mhm29x21@meow.flonk> wrote in
news:pan.2006.08.17.21.19.02.560831
@hail.eris.flonk.meow.all.hail.discordia.meow.flonk.mockery.demon.not.reall
y.leola:

> Hail Eris! On Thu, 17 Aug 2006 20:07:58 +0000, Bookman jabbered inanely:
>
>> On 17 Aug 2006 07:11:24 -0700, "an old freind" <kb9rqz-ars@hotmail.com>
>> wrote:
>>
>>>Text Medium No. 5 wrote:
>>>>
>>>cease and desist your harrassment
>>
>> What harassment?
>>
>> ESL!
>
> Mr. Mark Morgan is severely confused as to what constitutes
> "harassment". Either that, or else he's complaining about us(tinu)
> bugging Tholenator.
>
```

Mark, Just ignore them.

They only tease you because of the stupid things you say when you follow up. Just ignore them and they'll give up.

Stop giving them reasons to tease you. It only makes you look more stupid.

Take a break from the radio groups for a while, Maybe work on your moon bounce some more.

SC

From 5373491051719484487
X-Google-Thread: 10bf43,6742993d924f2d47
X-Google-Thread: 10f7a7,9967071e232d70e9
X-Google-Thread: f9daf,9967071e232d70e9
X-Google-Thread: 106d41,9967071e232d70e9
X-Google-Thread: 10e8ad,9967071e232d70e9
X-Google-Attributes: gid10bf43,gid10f7a7,gidf9daf,gid106d41,gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news4.google.com!newshub.sdsu.edu!elnk-nf2-pas!newsfeed.earthlink.net!stamper.news.pas.earthlink.net!newsread3.news.pas.earthlink.net.POSTED!3dd4ce4a!not-for-mail
Newsgroups: rec.radio.amateur.policy,alt.usenet.kooks,alt.revenge,rec.radio.cb,rec.radio.amateur.space
Subject: Re: well Mr Slow code has decicded to highlight the problems of the NG - Mark, Just ignore them.
From: Slow Code <my.mail@no.spam>
References: <1155772639.440140.251430@p79g2000cwp.googlegroups.com>
<18909$44e44d25$d1cc5bdd$14927@snip.allthenewsgroups.com>
<1155825831.737438.295760@p79g2000cwp.googlegroups.com>
<1155835956.231036.305820@m79g2000cwm.googlegroups.com>
<1155839822.732061.279630@h48g2000cwc.googlegroups.com>
Organization: None
User-Agent: Xnews/5.04.25
Lines: 29
Message-ID: <Q06Fg.5098$Sn3.3482@newsread3.news.pas.earthlink.net>
Date: Thu, 17 Aug 2006 22:24:48 GMT
NNTP-Posting-Host: 4.235.66.8
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread3.news.pas.earthlink.net 1155853488 4.235.66.8 (Thu, 17 Aug 2006 15:24:48 PDT)
NNTP-Posting-Date: Thu, 17 Aug 2006 15:24:48 PDT
Xref: g2news2.google.com rec.radio.amateur.policy:38442 alt.usenet.kooks:220790 alt.revenge:6062 rec.radio.cb:16187 rec.radio.amateur.space:374

"an old friend" <kb9rqz@yahoo.com> wrote in news:1155839822.732061.279630@h48g2000cwc.googlegroups.com:

>
> Mr. Hammington wrote:
>> an old friend wrote:
>> > donttrythisathome wrote:
>
>> > for the own sake perhaps but mental help or take out from dr k would
>> > be a better for the rest of us
>>
>> STFU Marqueer................
> cease and desist wismen
>
>

Mark, Just ignore them.

They only tease you because of the stupid things you say when you
follow up. Just ignore them and they'll give up.

Stop giving them reasons to tease you. It only makes you look
more stupid.

Take a break from the radio groups for a while, Maybe work on your
moon bounce some more.

SC

From -7816899139414619168
X-Google-Thread: 10bf43,6742993d924f2d47
X-Google-Thread: 10f7a7,9967071e232d70e9
X-Google-Thread: f9daf,9967071e232d70e9
X-Google-Thread: 106d41,9967071e232d70e9
X-Google-Thread: 10e8ad,9967071e232d70e9
X-Google-Attributes: gid10bf43,gid10f7a7,gidf9daf,gid106d41,gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news2.google.com!news.maxwell.syr.edu!elnk-pas-nf1!
newsfeed.earthlink.net!stamper.news.pas.earthlink.net!
newsread3.news.pas.earthlink.net.POSTED!3dd4ce4a!not-for-mail
Newsgroups:
rec.radio.amateur.policy,alt.usenet.kooks,alt.revenge,rec.radio.cb,rec.radio.amateur.space
Subject: Re: well Mr Slow code has decicded to highlight the problems of the NG -
Mark, Just ignore them.
From: Slow Code <my.mail@no.spam>
References: <1155772639.440140.251430@p79g2000cwp.googlegroups.com>
<18909$44e44d25$d1cc5bdd$14927@snip.allthenewsgroups.com>
<1155825831.737438.295760@p79g2000cwp.googlegroups.com>
<1155835956.231036.305820@m79g2000cwm.googlegroups.com>
Organization: None
User-Agent: Xnews/5.04.25
Lines: 37
Message-ID: <216Fg.5104$Sn3.485@newsread3.news.pas.earthlink.net>

```
Date: Thu, 17 Aug 2006 22:25:02 GMT
NNTP-Posting-Host: 4.235.66.8
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread3.news.pas.earthlink.net 1155853502 4.235.66.8 (Thu, 17 Aug 2006
15:25:02 PDT)
NNTP-Posting-Date: Thu, 17 Aug 2006 15:25:02 PDT
Xref: g2news2.google.com rec.radio.amateur.policy:38448 alt.usenet.kooks:220793
alt.revenge:6064 rec.radio.cb:16190 rec.radio.amateur.space:375

"Mr. Hammington" <mr_hammington@yahoo.com> wrote in
news:1155835956.231036.305820@m79g2000cwm.googlegroups.com:

>
> an old friend wrote:
>> donttrythisathome wrote:
>> > "an old freind" <kb9rqz-ars@hotmail.com> wrote in message
>> > news:1155772639.440140.251430@p79g2000cwp.googlegroups.com...
>> > > by truly spamming the ng which of course various parties will
>> > > insist it perfectly ok further highlighting the true motives of the
>> > > Wismen and Robeson
>> > >
>> >
>> > I think both of them should hop up on each other's
>> > shoulders and tell the other "I love you".
>>
>> for the own sake perhaps but mental help or take out from dr k would be
>> a better for the rest of us
>
> STFU Marqueer................
> lunch is served,now go feast of the shit bag.
>
>


Mark, Just ignore them.

They only tease you because of the stupid things you say when you
follow up.  Just ignore them and they'll give up.

Stop giving them reasons to tease you.  It only makes you look
more stupid.

Take a break from the radio groups for a while,  Maybe work on your
moon bounce some more.

SC


From -4486273141911301449
X-Google-Thread: 10bf43,2eaf18ff5ebea7f7
X-Google-Thread: f9daf,813f13f1ab0567a7
X-Google-Thread: 106d41,813f13f1ab0567a7
X-Google-Thread: 10e8ad,813f13f1ab0567a7
```

```
X-Google-Thread: f8ce7,7657a5eed05387d9
X-Google-Attributes: gid10bf43,gidf9daf,gid106d41,gid10e8ad,gidf8ce7,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news3.google.com!news4.google.com!newshub.sdsu.edu!elnk-
nf2-pas!newsfeed.earthlink.net!stamper.news.pas.earthlink.net!
newsread3.news.pas.earthlink.net.POSTED!3dd4ce4a!not-for-mail
Newsgroups:
rec.radio.amateur.policy,alt.revenge,rec.radio.cb,rec.radio.amateur.space,alt.musi
c.michael-jackson
Subject: Re: some explanation since Robeson has choosen to renew his assult on th
NG, and me - Mark, Just ignore them.
From: Slow Code <my.mail@no.spam>
References: <1155298281.480099.57590@h48g2000cwc.googlegroups.com>
<1155301602.610277.95390@b28g2000cwb.googlegroups.com>
<1155312973.033376.134900@i42g2000cwa.googlegroups.com>
<pan.2006.08.16.22.25.51.899513@hail.eris.flonk.meow.all.hail.discordia.meow.flonk
.mockery.demon.not.really.leola>
<1155767340.849495.207160@m73g2000cwd.googlegroups.com>
<pan.2006.08.17.06.50.51.193526@snarky.trolling.and.mocking.scoville>
<1155825052.024752.75220@i3g2000cwc.googlegroups.com>
Organization: None
User-Agent: Xnews/5.04.25
Lines: 51
Message-ID: <g76Fg.5133$Sn3.1230@newsread3.news.pas.earthlink.net>
Date: Thu, 17 Aug 2006 22:31:40 GMT
NNTP-Posting-Host: 4.235.66.8
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread3.news.pas.earthlink.net 1155853900 4.235.66.8 (Thu, 17 Aug 2006
15:31:40 PDT)
NNTP-Posting-Date: Thu, 17 Aug 2006 15:31:40 PDT
Xref: g2news2.google.com rec.radio.amateur.policy:38474 alt.revenge:6065
rec.radio.cb:16209 rec.radio.amateur.space:376 alt.music.michael-jackson:60787

"an old friend" <kb9rqz@hotmail.com> wrote in
news:1155825052.024752.75220@i3g2000cwc.googlegroups.com:

>
> FreeSpeechStore wrote:
>> On Wed, 16 Aug 2006 15:29:00 -0700, an old freind wrote:
>> > Text Medium No. 5 wrote:
>> >> Hail Eris! On Fri, 11 Aug 2006 09:16:13 -0700, marqueenie_von_dork
>> >> jabbered inanely:
>> >
>> >> > YOU,otoh, have gone out of your way to post gay filth here. I have
>> >> > copies of YOUR posts to prove it. YOU are not welcome here you
>> >> > filty sodomite!
>> >> >
>> >> > aren't you in violation of the states sodomy laws??
>> >>
>> >> Keep it up. I see many k00k awards in your future, you busted
>> >> urinal.
>> >
>> > and in his past he is Roger Wisemen sometimes called Woger
```

```
>>
>> Figures that a hypocrite like him is the one complaining about "filth".
>> BTW, put an empty line between your words and the one to whom you're
>> responding. Makes you easier to read. Oh, and that's "Wiseman", and a
>> more inappropriate surname could not be imagined...
>>
>> --
>> ________________________________________________________________________
>> __ Hail Eris!
>> Not Richard Scoville
>> Richard M. Scoville is explicitly denied the right to archive any of my
>> posts, under any of my nyms, on his site, FreeSpeechStore.com
>> http://tinyurl.com/c222n
>> "It's claiming authority based on absurd myths and fantasy beings -
>> that creates anger." -- Kurt Gavin
>
>


Mark, Just ignore them.

They only tease you because of the stupid things you say when you
follow up.  Just ignore them and they'll give up.

Stop giving them reasons to tease you.  It only makes you look
more stupid.

Take a break from the radio groups for a while,  Maybe work on your
moon bounce some more.

SC



From -1058369621393340146
X-Google-Thread: 10bf43,2eaf18ff5ebea7f7
X-Google-Thread: 10f7a7,813f13f1ab0567a7
X-Google-Thread: f9daf,813f13f1ab0567a7
X-Google-Thread: 106d41,813f13f1ab0567a7
X-Google-Thread: 10e8ad,813f13f1ab0567a7
X-Google-Thread: f8ce7,7657a5eed05387d9
X-Google-Attributes:
gid10bf43,gid10f7a7,gidf9daf,gid106d41,gid10e8ad,gidf8ce7,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news3.google.com!news4.google.com!newshub.sdsu.edu!elnk-
nf2-pas!newsfeed.earthlink.net!stamper.news.pas.earthlink.net!
newsread3.news.pas.earthlink.net.POSTED!3dd4ce4a!not-for-mail
Newsgroups:
rec.radio.amateur.policy,alt.usenet.kooks,alt.revenge,rec.radio.cb,rec.radio.amate
ur.space,alt.music.michael-jackson
Subject: Re: some explanation since Robeson has choosen to renew his assult on th
NG, and me - Mark, Just ignore them.
From: Slow Code <my.mail@no.spam>
References: <1155298281.480099.57590@h48g2000cwc.googlegroups.com>
```

```
<1155301602.610277.95390@b28g2000cwb.googlegroups.com>
<1155312973.033376.134900@i42g2000cwa.googlegroups.com>
<pan.2006.08.16.22.25.51.899513@hail.eris.flonk.meow.all.hail.discordia.meow.flonk
.mockery.demon.not.really.leola>
<1155767340.849495.207160@m73g2000cwd.googlegroups.com>
<pan.2006.08.17.06.50.51.193526@snarky.trolling.and.mocking.scoville>
Organization: None
User-Agent: Xnews/5.04.25
Lines: 36
Message-ID: <x76Fg.5134$Sn3.3586@newsread3.news.pas.earthlink.net>
Date: Thu, 17 Aug 2006 22:31:57 GMT
NNTP-Posting-Host: 4.235.66.8
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread3.news.pas.earthlink.net 1155853917 4.235.66.8 (Thu, 17 Aug 2006
15:31:57 PDT)
NNTP-Posting-Date: Thu, 17 Aug 2006 15:31:57 PDT
Xref: g2news2.google.com rec.radio.amateur.policy:38475 alt.usenet.kooks:220806
alt.revenge:6066 rec.radio.cb:16210 rec.radio.amateur.space:377 alt.music.michael-
jackson:60788

FreeSpeechStore <freespeechstore@meow.fuckhead> wrote in
news:pan.2006.08.17.06.50.51.193526@snarky.trolling.and.mocking.scoville:

> On Wed, 16 Aug 2006 15:29:00 -0700, an old freind wrote:
>> Text Medium No. 5 wrote:
>>> Hail Eris! On Fri, 11 Aug 2006 09:16:13 -0700, marqueenie_von_dork
>>> jabbered inanely:
>>
>>> > YOU,otoh, have gone out of your way to post gay filth here. I have
>>> > copies of YOUR posts to prove it. YOU are not welcome here you filty
>>> > sodomite!
>>> >
>>> > aren't you in violation of the states sodomy laws??
>>>
>>> Keep it up. I see many k00k awards in your future, you busted urinal.
>>
>> and in his past he is Roger Wisemen sometimes called Woger
>
> Figures that a hypocrite like him is the one complaining about "filth".
> BTW, put an empty line between your words and the one to whom you're
> responding. Makes you easier to read. Oh, and that's "Wiseman", and a
> more inappropriate surname could not be imagined...
>

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follow up.  Just ignore them and they'll give up.

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more stupid.

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```

moon bounce some more.

SC

```
From -6199478695715283460
X-Google-Thread: fc2a5,f8ce44921aecd15e
X-Google-Thread: 107ada,884c9e429cd29b18
X-Google-Thread: 10bf43,7831d7ab14abf4ba
X-Google-Thread: 10e8ad,f8ce44921aecd15e
X-Google-Attributes: gidfc2a5,gid107ada,gid10bf43,gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news4.google.com!newshub.sdsu.edu!elnk-nf2-pas!
newsfeed.earthlink.net!stamper.news.pas.earthlink.net!
newsread3.news.pas.earthlink.net.POSTED!3dd4ce4a!not-for-mail
Newsgroups:
rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.rad
io.amateur.space
Subject: Re: Cease desist and grow up - Mark, Just ignore them.
From: Slow Code <my.mail@no.spam>
References: <44e23a97$0$21028$88260bb3@free.teranews.com>
<1155681102.743274.169300@74g2000cwt.googlegroups.com>
<1155687062.084385.29180@i42g2000cwa.googlegroups.com>
<1155687181.832750.241820@p79g2000cwp.googlegroups.com>
<1155731470.893781.68090@m73g2000cwd.googlegroups.com>
<1155743368.829657.131340@m79g2000cwm.googlegroups.com>
<1155756718.845363.87450@b28g2000cwb.googlegroups.com>
<q2u6e29s13sf59b0d4isjhl8bgmfst27cp@4ax.com>
<1155818709.467035.142500@h48g2000cwc.googlegroups.com>
<fpt8e2pat54sbvle5jp3bnbkpk599voa3p@4ax.com>
Organization: None
User-Agent: Xnews/5.04.25
Lines: 22
Message-ID: <O76Fg.5135$Sn3.3764@newsread3.news.pas.earthlink.net>
Date: Thu, 17 Aug 2006 22:32:14 GMT
NNTP-Posting-Host: 4.235.66.8
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread3.news.pas.earthlink.net 1155853934 4.235.66.8 (Thu, 17 Aug 2006
15:32:14 PDT)
NNTP-Posting-Date: Thu, 17 Aug 2006 15:32:14 PDT
Xref: g2news2.google.com rec.radio.amateur.homebrew:6516
rec.radio.amateur.misc:19232 rec.radio.amateur.policy:38476
rec.radio.amateur.space:378
```

Mark@kb9rqz.com wrote in news:fpt8e2pat54sbvle5jp3bnbkpk599voa3p@4ax.com:

> On 17 Aug 2006 05:45:09 -0700, "Not Cocksucker Lloyd"
> <not_time_turd_lloyd@yahoo.com> wrote:
>
>>
> cease and desist your harrassment
> http://kb9rqz.blogspot.com/
>

Mark, Just ignore them.

They only tease you because of the stupid things you say when you follow up. Just ignore them and they'll give up.

Stop giving them reasons to tease you. It only makes you look more stupid.

Take a break from the radio groups for a while, Maybe work on your moon bounce some more.

SC

```
From 1113642858905283298
X-Google-Thread: fc2a5,f8ce44921aecd15e
X-Google-Thread: 107ada,884c9e429cd29b18
X-Google-Thread: 10bf43,7831d7ab14abf4ba
X-Google-Thread: 10e8ad,f8ce44921aecd15e
X-Google-Attributes: gidfc2a5,gid107ada,gid10bf43,gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news4.google.com!newshub.sdsu.edu!elnk-nf2-pas!
newsfeed.earthlink.net!stamper.news.pas.earthlink.net!
newsread3.news.pas.earthlink.net.POSTED!3dd4ce4a!not-for-mail
Newsgroups:
rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.rad
io.amateur.space
Subject: Re: Cease desist and grow up - Mark, Just ignore them.
From: Slow Code <my.mail@no.spam>
References: <1155607007.048706.302580@b28g2000cwb.googlegroups.com>
<44e23a97$0$21028$88260bb3@free.teranews.com>
<1155681102.743274.169300@74g2000cwt.googlegroups.com>
<1155687062.084385.29180@i42g2000cwa.googlegroups.com>
<1155687181.832750.241820@p79g2000cwp.googlegroups.com>
<1155731470.893781.68090@m73g2000cwd.googlegroups.com>
<1155743368.829657.131340@m79g2000cwm.googlegroups.com>
<1155756718.845363.87450@b28g2000cwb.googlegroups.com>
<q2u6e29s13sf59b0d4isjhl8bgmfst27cp@4ax.com>
<1155818709.467035.142500@h48g2000cwc.googlegroups.com>
Organization: None
User-Agent: Xnews/5.04.25
Lines: 35
Message-ID: <286Fg.5136$Sn3.3589@newsread3.news.pas.earthlink.net>
Date: Thu, 17 Aug 2006 22:32:30 GMT
NNTP-Posting-Host: 4.235.66.8
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread3.news.pas.earthlink.net 1155853950 4.235.66.8 (Thu, 17 Aug 2006
15:32:30 PDT)
NNTP-Posting-Date: Thu, 17 Aug 2006 15:32:30 PDT
Xref: g2news2.google.com rec.radio.amateur.homebrew:6517
rec.radio.amateur.misc:19233 rec.radio.amateur.policy:38477
rec.radio.amateur.space:379
```

```
"Not Cocksucker Lloyd" <not_time_turd_lloyd@yahoo.com> wrote in
news:1155818709.467035.142500@h48g2000cwc.googlegroups.com:

>
> Mark@kb9rqz.com wrote:
>> On 16 Aug 2006 12:31:58 -0700, peewee_lloyd_davies@yahoo.com wrote:
>>
>> >
>> >an old fraud wrote:
>> >> Not Cocksucker Lloyd wrote:
>> >> > an_old_friendless cocksucker wrote:
>> >> > > cease
>> >> >
>> >> > Cease breathing
>> >> eom
>> >
>> >"eom?" BWHAHAHAHAHAHAHAHAHAHA!
>> End Of Message
>
> BWHAHAHAHAHA You only backpedal again.
>
>

Mark, Just ignore them.

They only tease you because of the stupid things you say when you
follow up.  Just ignore them and they'll give up.

Stop giving them reasons to tease you.  It only makes you look
more stupid.

Take a break from the radio groups for a while,  Maybe work on your
moon bounce some more.

SC



From 4234763239384434502
X-Google-Thread: 10ed5f,7958ca3357470981
X-Google-Thread: 10a476,7958ca3357470981
X-Google-Thread: fb049,7958ca3357470981
X-Google-Thread: 10e8ad,7958ca3357470981
X-Google-Thread: fa029,7958ca3357470981
X-Google-Attributes: gid10ed5f,gid10a476,gidfb049,gid10e8ad,gidfa029,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!news4.google.com!news.glorb.com!
hwmnpeer01.lga!hwmedia!news.highwinds-media.com!hw-filter.lga!fe10.lga.POSTED!
53ab2750!not-for-mail
From: Al Klein <rukbat@pern.invalid>
Newsgroups: alt.ham-radio,alt.ham-radio.slowscan,alt.ham-radio.vhf-
uhf,rec.radio.amateur.space,rec.radio.scanner
Subject: Re: ISS IS REPEATING SUITSAT SIGNALS on 437.800
```

```
Message-ID: <p3dlu1lds9ub2jbb0c9nfivl794jrm1c7i@4ax.com>
References: <fcQFf.7946$Gg1.4116@trnddc03>
<4TaGf.8825$tb3.196@newssvr24.news.prodigy.net> <dsc2g3$eaj$1@news.Stanford.EDU>
X-Newsreader: Forte Agent 3.2/32.830
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Lines: 11
Date: Wed, 08 Feb 2006 22:20:33 -0500
NNTP-Posting-Host: 24.186.218.38
X-Complaints-To: abuse@cv.net
X-Trace: fe10.lga 1139455235 24.186.218.38 (Wed, 08 Feb 2006 20:20:35 MST)
NNTP-Posting-Date: Wed, 08 Feb 2006 20:20:35 MST
Organization: Optimum Online
Xref: g2news1.google.com alt.ham-radio:513 alt.ham-radio.slowscan:18 alt.ham-
radio.vhf-uhf:1318 rec.radio.amateur.space:167 rec.radio.scanner:2088

On Wed, 8 Feb 2006 06:18:43 +0000 (UTC), nospam@w6yx.stanford.edu
(Alan) wrote:

>and your little rubber duck is about a 0 dBi antenna (probably close)

Less than -3dbd?  I doubt that.  It's probably closer to -6dbi.  And
that's only if it's being held normal to the suit.

>  Most likely the antenna on the suit is *not* putting the signal out in all
directions.

From the tumble I've seen, it's definitely directional to some degree.


From -8661187411472940000
X-Google-Thread: 10ed5f,7958ca3357470981
X-Google-Thread: 10a476,7958ca3357470981
X-Google-Thread: fb049,7958ca3357470981
X-Google-Thread: 10e8ad,7958ca3357470981
X-Google-Thread: fa029,7958ca3357470981
X-Google-Attributes: gid10ed5f,gid10a476,gidfb049,gid10e8ad,gidfa029,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!news4.google.com!news.glorb.com!
cycny01.gnilink.net!hwmnpeer01.lga!hwmedia!news.highwinds-media.com!hw-filter.lga!
fe10.lga.POSTED!53ab2750!not-for-mail
From: Al Klein <rukbat@pern.invalid>
Newsgroups: alt.ham-radio,alt.ham-radio.slowscan,alt.ham-radio.vhf-
uhf,rec.radio.amateur.space,rec.radio.scanner
Subject: Re: ISS IS REPEATING SUITSAT SIGNALS on 437.800
Message-ID: <e9dlu1l6en9cjcufg7pv1lqltv3pq19ees@4ax.com>
References: <fcQFf.7946$Gg1.4116@trnddc03>
<4TaGf.8825$tb3.196@newssvr24.news.prodigy.net> <43ea6d29.4236705@news.iol.ie>
X-Newsreader: Forte Agent 3.2/32.830
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
```

Lines: 15
Date: Wed, 08 Feb 2006 22:22:27 -0500
NNTP-Posting-Host: 24.186.218.38
X-Complaints-To: abuse@cv.net
X-Trace: fe10.lga 1139455349 24.186.218.38 (Wed, 08 Feb 2006 20:22:29 MST)
NNTP-Posting-Date: Wed, 08 Feb 2006 20:22:29 MST
Organization: Optimum Online
Xref: g2news1.google.com alt.ham-radio:514 alt.ham-radio.slowscan:19 alt.ham-radio.vhf-uhf:1319 rec.radio.amateur.space:168 rec.radio.scanner:2089

On Wed, 08 Feb 2006 22:15:14 GMT,
class-a-licensee-pkearn-zBBpk@didnt-run-away-from-a-morse-test.es.eircom.com.net
(zBBPK) wrote:

>yes..but amateurs are not normal.

>who in their right mind would ''play with radios'' for a third of their
>life

Radio=1/3
Work=1/3
Sleep=1/3

Eliminate the need for work and you can play radio for 2/3 of your
life. 3/3 on Field Day weekend.

From 1192224605214989087
X-Google-Thread: f9af2,14ceb8ac17fddb37,start
X-Google-Thread: f4329,14ceb8ac17fddb37,start
X-Google-Thread: 107ada,14ceb8ac17fddb37,start
X-Google-Thread: 10e8ad,14ceb8ac17fddb37,start
X-Google-Thread: 106d41,14ceb8ac17fddb37,start
X-Google-Attributes: gidf9af2,gidf4329,gid107ada,gid10e8ad,gid106d41,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!news4.google.com!news.glorb.com!cycny01.gnilink.net!spamkiller.gnilink.net!gnilink.net!trnddc04.POSTED!2624caa7!not-for-mail
Reply-To: "stargatesg1" <me@verizon.net>
From: "stargatesg1" <me@verizon.net>
Newsgroups: alt.ham-radio.atv,alt.ham-radio.eme,rec.radio.amateur.misc,rec.radio.amateur.space,rec.radio.cb
Subject: Cushman CE50-1-TG service monitor help needed
Lines: 17
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1506
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1506
Message-ID: <fizGf.18429$0i1.12936@trnddc04>
Date: Thu, 09 Feb 2006 04:11:55 GMT
NNTP-Posting-Host: 151.199.90.36
X-Complaints-To: abuse@verizon.net
X-Trace: trnddc04 1139458315 151.199.90.36 (Wed, 08 Feb 2006 23:11:55 EST)

NNTP-Posting-Date: Wed, 08 Feb 2006 23:11:55 EST
Xref: g2news1.google.com alt.ham-radio.atv:11 alt.ham-radio.eme:6 rec.radio.amateur.misc:4320 rec.radio.amateur.space:169 rec.radio.cb:5725

Hi,
I have a slightly sick Cushman CE50-TG-1 service monitor and was wondering if anyone has taken any voltage readings from a working unit they would be willing to share.
I need to check the voltages at test points 3 & 4 on the 29000 board with the frequency set between 9.9999mhz and 100khz. That should give me the normal range for both the A & B VCO's control voltage's. (referenced to chassis ground) Any other voltages would be helpful so I can note them for future reference.
Sure would have been nice if Cushman would have provided some basic voltage readings on the schematics.

Any help would be appreciated,
Thanks,
RoD

From -2138094733901217637
X-Google-Thread: 10ed5f,7958ca3357470981
X-Google-Thread: 10a476,7958ca3357470981
X-Google-Thread: fb049,7958ca3357470981
X-Google-Thread: 10e8ad,7958ca3357470981
X-Google-Thread: fa029,7958ca3357470981
X-Google-Attributes: gid10ed5f,gid10a476,gidfb049,gid10e8ad,gidfa029,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!news4.google.com!border1.nntp.dca.giganews.com!nntp.giganews.com!local01.nntp.dca.giganews.com!nntp.comcast.com!news.comcast.com.POSTED!not-for-mail
NNTP-Posting-Date: Wed, 08 Feb 2006 22:13:17 -0600
From: "Noon-Air" <Noon-Air@comcast.net>
Newsgroups: alt.ham-radio,alt.ham-radio.slowscan,alt.ham-radio.vhf-uhf,rec.radio.amateur.space,rec.radio.scanner
References: <fcQFf.7946$Gg1.4116@trnddc03> <4TaGf.8825$tb3.196@newssvr24.news.prodigy.net> <43ea6d29.4236705@news.iol.ie> <e9dlu1l6en9cjcufg7pv1lqltv3pq19ees@4ax.com>
Subject: Re: ISS IS REPEATING SUITSAT SIGNALS on 437.800
Date: Wed, 8 Feb 2006 22:13:17 -0600
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.2670
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.2670
X-RFC2646: Format=Flowed; Original
Message-ID: <HOednQ7pG5DAXHfenZ2dnUVZ_tOdnZ2d@comcast.com>
Lines: 22
NNTP-Posting-Host: 68.63.237.38
X-Trace: sv3-7EZe+neV3FZG6Ck08k+DrL/equG9uaS/TIGSTcLETaUJlwR9bgjtvR/4+w2Hwym5xWhaLjFyOf6ejvs!

```
FJw4lD2QS5pmdSUWuCfxY2HhuPyxS31wZzVrK5usVbhT52OlcMlhwUFNTEU8NiwzE9JPasl1eYBm!
ngva2QwivnhR
X-Complaints-To: abuse@comcast.net
X-DMCA-Complaints-To: dmca@comcast.net
X-Abuse-and-DMCA-Info: Please be sure to forward a copy of ALL headers
X-Abuse-and-DMCA-Info: Otherwise we will be unable to process your complaint
properly
X-Postfilter: 1.3.32
Xref: g2news1.google.com alt.ham-radio:515 alt.ham-radio.slowscan:20 alt.ham-
radio.vhf-uhf:1320 rec.radio.amateur.space:170 rec.radio.scanner:2090


"Al Klein" <rukbat@pern.invalid> wrote in message
news:e9dlu1l6en9cjcufg7pv1lqltv3pq19ees@4ax.com...
> On Wed, 08 Feb 2006 22:15:14 GMT,
> class-a-licensee-pkearn-zBBpk@didnt-run-away-from-a-morse-test.es.eircom.com.net
> (zBBPK) wrote:
>
>>yes..but amateurs are not normal.
>
>>who in their right mind would ''play with radios'' for a third of their
>>life
>
> Radio=1/3
> Work=1/3
> Sleep=1/3
>
> Eliminate the need for work and you can play radio for 2/3 of your
> life.  3/3 on Field Day weekend.

So where do beer, sex, and football fit in??




From 6431314831290641212
X-Google-Thread: 10ed5f,7958ca3357470981
X-Google-Thread: 10a476,7958ca3357470981
X-Google-Thread: fb049,7958ca3357470981
X-Google-Thread: 10e8ad,7958ca3357470981
X-Google-Thread: fa029,7958ca3357470981
X-Google-Attributes: gid10ed5f,gid10a476,gidfb049,gid10e8ad,gidfa029,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!news4.google.com!news.glorb.com!
cycny01.gnilink.net!spamkiller.gnilink.net!gnilink.net!trnddc04.POSTED!2624caa7!
not-for-mail
Reply-To: "stargatesg1" <me@verizon.net>
From: "stargatesg1" <me@verizon.net>
Newsgroups: alt.ham-radio,alt.ham-radio.slowscan,alt.ham-radio.vhf-
uhf,rec.radio.amateur.space,rec.radio.scanner
References: <fcQFf.7946$Gg1.4116@trnddc03>
<4TaGf.8825$tb3.196@newssvr24.news.prodigy.net> <43ea6d29.4236705@news.iol.ie>
<e9dlu1l6en9cjcufg7pv1lqltv3pq19ees@4ax.com>
```

```
<HOednQ7pG5DAXHfenZ2dnUVZ_tOdnZ2d@comcast.com>
Subject: Re: ISS IS REPEATING SUITSAT SIGNALS on 437.800
Lines: 29
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1506
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1506
Message-ID: <qlzGf.18480$0i1.10975@trnddc04>
Date: Thu, 09 Feb 2006 04:15:18 GMT
NNTP-Posting-Host: 151.199.90.36
X-Complaints-To: abuse@verizon.net
X-Trace: trnddc04 1139458518 151.199.90.36 (Wed, 08 Feb 2006 23:15:18 EST)
NNTP-Posting-Date: Wed, 08 Feb 2006 23:15:18 EST
Xref: g2news1.google.com alt.ham-radio:516 alt.ham-radio.slowscan:21 alt.ham-
radio.vhf-uhf:1321 rec.radio.amateur.space:171 rec.radio.scanner:2091

During work....When else?? :-P
"Noon-Air" <Noon-Air@comcast.net> wrote in message
news:HOednQ7pG5DAXHfenZ2dnUVZ_tOdnZ2d@comcast.com...
>
> "Al Klein" <rukbat@pern.invalid> wrote in message
> news:e9dlu1l6en9cjcufg7pv1lqltv3pq19ees@4ax.com...
> > On Wed, 08 Feb 2006 22:15:14 GMT,
> >
class-a-licensee-pkearn-zBBpk@didnt-run-away-from-a-morse-test.es.eircom.com
.net
> > (zBBPK) wrote:
> >
> >>yes..but amateurs are not normal.
> >
> >>who in their right mind would ''play with radios'' for a third of their
> >>life
> >
> > Radio=1/3
> > Work=1/3
> > Sleep=1/3
> >
> > Eliminate the need for work and you can play radio for 2/3 of your
> > life.  3/3 on Field Day weekend.
>
> So where do beer, sex, and football fit in??
>
>




From 5846065030341028348
X-Google-Thread: 10ed5f,7958ca3357470981
X-Google-Thread: 10a476,7958ca3357470981
X-Google-Thread: fb049,7958ca3357470981
X-Google-Thread: 10e8ad,7958ca3357470981
X-Google-Thread: fa029,7958ca3357470981
```

```
X-Google-Attributes: gid10ed5f,gid10a476,gidfb049,gid10e8ad,gidfa029,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!news3.google.com!
border1.nntp.dca.giganews.com!nntp.giganews.com!nx01.iad01.newshosting.com!
newshosting.com!69.28.186.75.MISMATCH!hwmnpeer01.lga!hwmedia!news.highwinds-
media.com!hw-filter.lga!fe08.lga.POSTED!53ab2750!not-for-mail
From: Al Klein <rukbat@pern.invalid>
Newsgroups: alt.ham-radio,alt.ham-radio.slowscan,alt.ham-radio.vhf-
uhf,rec.radio.amateur.space,rec.radio.scanner
Subject: Re: ISS IS REPEATING SUITSAT SIGNALS on 437.800
Message-ID: <8itmu11p47reh3lnuv02s1udp3358r2r7b@4ax.com>
References: <fcQFf.7946$Gg1.4116@trnddc03>
<4TaGf.8825$tb3.196@newssvr24.news.prodigy.net> <43ea6d29.4236705@news.iol.ie>
<e9dlu1l6en9cjcufg7pv1lqltv3pq19ees@4ax.com>
<HOednQ7pG5DAXHfenZ2dnUVZ_tOdnZ2d@comcast.com>
X-Newsreader: Forte Agent 3.2/32.830
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Lines: 23
Date: Thu, 09 Feb 2006 12:07:15 -0500
NNTP-Posting-Host: 24.186.218.38
X-Complaints-To: abuse@cv.net
X-Trace: fe08.lga 1139504837 24.186.218.38 (Thu, 09 Feb 2006 10:07:17 MST)
NNTP-Posting-Date: Thu, 09 Feb 2006 10:07:17 MST
Organization: Optimum Online
Xref: g2news1.google.com alt.ham-radio:518 alt.ham-radio.slowscan:22 alt.ham-
radio.vhf-uhf:1323 rec.radio.amateur.space:173 rec.radio.scanner:2095

On Wed, 8 Feb 2006 22:13:17 -0600, "Noon-Air" <Noon-Air@comcast.net>
wrote:

>"Al Klein" <rukbat@pern.invalid> wrote in message
>news:e9dlu1l6en9cjcufg7pv1lqltv3pq19ees@4ax.com...

>> Radio=1/3
>> Work=1/3
>> Sleep=1/3

>> Eliminate the need for work and you can play radio for 2/3 of your
>> life.  3/3 on Field Day weekend.

>So where do beer, sex, and football fit in??

Beer is one of the basic food groups, so it fits where you eat -
during Radio, I guess.

Sex ... er, Work?  Sleep?  Or, considering that Radio is
entertainment, ... [this is a family usenet].

Football doesn't fit into my life, so you'll have to do that one
yourself.
```

```
From 511806894534283322
X-Google-Thread: 10e8ad,3f5afd7c0647d375
X-Google-Thread: f9f20,3f5afd7c0647d375
X-Google-Attributes: gid10e8ad,gidf9f20,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news3.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!newscon06.news.prodigy.com!prodigy.net!news-east.rr.com!news-
wrt-01.rdc-nyc.rr.com!news-feed-01.rdc-nyc.rr.com!news.rr.com!news-out.nyc.rr.com!
news-wrt-01.rdc-nyc.rr.com.POSTED!53ab2750!not-for-mail
From: Johnny Borborigmi <growl@tummy.com>
Newsgroups: rec.radio.amateur.space,sci.space.station
Message-ID: <2006021007390816807%growl@tummycom>
References: <o8rku1ta0ecb1qvu3arcbl920ustacqf35@4ax.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1; format=flowed
Content-Transfer-Encoding: 8bit
Subject: Re: Listen to SuitSat
User-Agent: Unison/1.6.2
Lines: 18
Date: Fri, 10 Feb 2006 12:38:58 GMT
NNTP-Posting-Host: 24.161.95.233
X-Complaints-To: abuse@rr.com
X-Trace: news-wrt-01.rdc-nyc.rr.com 1139575138 24.161.95.233 (Fri, 10 Feb 2006
07:38:58 EST)
NNTP-Posting-Date: Fri, 10 Feb 2006 07:38:58 EST
Organization: Road Runner High Speed Online http://www.rr.com
Xref: g2news1.google.com rec.radio.amateur.space:174 sci.space.station:1635

On 2006-02-08 17:14:29 -0500, "helmsman@mindspring.com"
<helmsman@mindspring.com> said:

> gsm@mendelson.com (Geoffrey S. Mendelson) wrote:
>
>> Thierry wrote:
>>
>>> Check its posiiton with NASA J-Pass tool.
>>
>> What do you do if you are NOT in the U.S.?
>
> Use Orbitron, it's free and it works!
> http://www.stoff.pl/


Ooops, no Mac version. I don't do windows.
```

```
From -5278194465649639605
X-Google-Thread: 10e8ad,92340f14743baeed,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
```

Path: g2news1.google.com!news3.google.com!news.glorb.com!newsfeed1.uni2.dk!
news.get2net.dk.POSTED!53ab2750!not-for-mail
From: "Michael" <ccc73571@vip.cybercity.dk>
Newsgroups: rec.radio.amateur.space
Subject: Receiving VMS (Vessel Monitoring Signals) from Inmarsat-C
Lines: 24
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.2527
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.2527
X-RFC2646: Format=Flowed; Original
Message-ID: <DQjIf.48$Cw4.46@news.get2net.dk>
Date: Tue, 14 Feb 2006 13:14:19 +0100
NNTP-Posting-Host: 83.72.227.48
X-Complaints-To: abuse-dk@tele2.com
X-Trace: news.get2net.dk 1139919267 83.72.227.48 (Tue, 14 Feb 2006 13:14:27 CET)
NNTP-Posting-Date: Tue, 14 Feb 2006 13:14:27 CET
Organization: Tele2 Internet Kunde
Xref: g2news1.google.com rec.radio.amateur.space:175

I have been playing around with receiving AIS (Automatic Identification System) signals. AIS is used on ships, it is used to send information about your position, etc via VHF to the surrounding ships. But know this started to get a bit boring. So know I wan to try to se if it is possibly to receive the VMS signals from Inmarsat-C. The VMS system is manly used on fishing vessels. On the ship there is a box with a gps and satellite tranciver. The position information is send each hour, to a land earth station, were it is distributed to the different authorities.

The first thing is to receive the signals. But also to decrypt the data can be complicated.

Any help or advices are welcome. Also if you have some good links to people ho have been dealing with projects like this, could be useful.

Cheers Michael

From -916050379621990084
X-Google-Thread: 10e8ad,92340f14743baeed
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news3.google.com!news4.google.com!news.glorb.com!
news.tele.dk!feed118.news.tele.dk!news.tele.dk!small.news.tele.dk!
newspeer2.se.telia.net!se.telia.net!masternews.telia.net.!newsb.telia.net.POSTED!

```
not-for-mail
From: "Greg" <devnull@gravitywell.org>
Newsgroups: rec.radio.amateur.space
References: <DQjIf.48$Cw4.46@news.get2net.dk>
Subject: Re: Receiving VMS (Vessel Monitoring Signals) from Inmarsat-C
Lines: 7
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.2670
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.2670
X-RFC2646: Format=Flowed; Response
Message-ID: <HptIf.44861$d5.201175@newsb.telia.net>
Date: Tue, 14 Feb 2006 23:08:23 GMT
NNTP-Posting-Host: 81.231.92.242
X-Complaints-To: abuse@telia.com
X-Trace: newsb.telia.net 1139958503 81.231.92.242 (Wed, 15 Feb 2006 00:08:23 CET)
NNTP-Posting-Date: Wed, 15 Feb 2006 00:08:23 CET
Organization: Telia Internet
Xref: g2news1.google.com rec.radio.amateur.space:176

Receiving inmarsat is no problem, I used a 1.5m dish with a 3 turn helix
and the audio was crystal clear so a 1m should be fine.
I listened to the audio phonecalls , 1535-1545MHz, so I don't know
anything about the mode you want to decode...
//Greg




From 8352848859669401368
X-Google-Thread: 10e8ad,8605bc97ad43ebd7,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII
Path: g2news1.google.com!news3.google.com!news.glorb.com!
border1.nntp.dca.giganews.com!border2.nntp.dca.giganews.com!nntp.giganews.com!
elnk-atl-nf1!newsfeed.earthlink.net!stamper.news.atl.earthlink.net!
newsread2.news.atl.earthlink.net.POSTED!46041641!not-for-mail
From: "JoAnne Maenpaa" <wb9jej_no-spam@earthlink.net>
Newsgroups: rec.radio.amateur.space
Subject: ANS-043 AMSAT News Service Weekly Bulletin
Lines: 542
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MIMEOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <8_GIf.15881$rH5.7145@newsread2.news.atl.earthlink.net>
Date: Wed, 15 Feb 2006 14:34:44 GMT
NNTP-Posting-Host: 69.3.16.183
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread2.news.atl.earthlink.net 1140014084 69.3.16.183 (Wed, 15 Feb 2006
06:34:44 PST)
NNTP-Posting-Date: Wed, 15 Feb 2006 06:34:44 PST
Organization: EarthLink Inc. -- http://www.EarthLink.net
```

Xref: g2news1.google.com rec.radio.amateur.space:177

AMSAT NEWS SERVICE
ANS-043

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

******************** AMSAT 2006 Space Symposium *************************

The AMSAT web team has posted informational pages on the AMSAT web site. You can find the announcement with many links at:
http://www.amsat-org/amsat-new/symposium

Future announcements including the Call For Papers, Online Registration and Online Hotel Registration will be available approximately 1 April 2006.

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In this edition:

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* January/February AMSAT Journal Update
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SB SAT @ AMSAT $ANS-043.01
SuitSat is Still Alive

AMSAT News Service Bulletin 043.01
From AMSAT HQ SILVER SPRING, MD.
February 12, 2006
To All RADIO AMATEURS
BID: $ANS-043.01

Over this past week SuitSat reception reports have been received from around the world. Everyone is in agreement that SuitSat's 145.990 MHz FM downlink signal is extremely weak. Using AMSAT's RF Link Budget spreadsheet along with data from well equipped amateur satellite stations (and a few assumptions to fill in the gaps) calculations indicate that SuitSat's transmitter power is in the range of 1-10 milliwatts.

The following are representative of the SuitSat signal reports:

Reception reports from Kenneth, N5VHO and Nick, KC5KBO using the W5RRR station at the Johnson Space Center in Houston say, "Identifiable were brief portions of the English voice recording, the CW id and SSTV. The Telemetry data was just starting to be read when the signal faded below the noise level."

From Japan Kobayasi, JH0MHE copied SuitSat's signal peaking at 59+20dB on an EME system.

Mak, SV1BSX in Athens, Greece, using a 9 element vertically polarized Yagi antenna with his VHF All-Mode TRIO TR-9130 radio reported, "Suitsat SSTV signal heard on a pass over Eastern Europe at only 13� elevation! The signal was weak (no deflection on my S-meter) but 100% audible for few seconds in NBFM."

Keith, ZS6TW reported receiving SuitSat on a 50� pass using 2 X F9FT 17 elements yagis with 16dBd gain connected to a Yaesu FT-847. He copied the Russian language segment of the recorded message.

Stefan, VE4NSA in Winnipeg, Manitoba, Canada copied SuitSat on a 60� pass using a HyGain 216SAT 2M antenna with preamp connected to his Yaesu FT-847. He reported a weak FM signal S1-3, child voice making an announcement followed by male voice with strong fading.

Ed, N9AWP in Indiana reported hearing SuitSat's CW and SSTV signal followed by a heterodyne on a 53� elevation pass using an Arrow 3 element antenna connected to his Kenwood THF6A handheld in CW mode.

To listen to SuitSat recordings received around the world go to AJ's web page at http://www.aj3u.com.

SuitSat has continued to be covered by the popular press this past week. The Times Union in Albany, New York ran a story:
http://timesunion.com/ss.asp?s=446685&c=&b=

The Times in London:
http://www.timesonline.co.uk/article/0,,13509-2027835,00.html

Gould, WA4SXM has written a PowerPoint presentation suitable for club talks. It is available on-line at:
http://www.reelfootarc.com/blg/article.php?id_art=31. Follow the blog article and click the link to the presentation. It is 3MB in size.

[ANS thanks amateur radio operators around the world for the above information]

/EX

SB SAT @ AMSAT $ANS-043.02
AMSAT-UK Announces New Satellite Transponder Project

AMSAT News Service Bulletin 043.02
From AMSAT HQ SILVER SPRING, MD.
February 12, 2006
To All RADIO AMATEURS
BID: $ANS-043.02

AMSAT-UK is delighted to be able to announce its participation in the SSETI ESEO satellite project.

ESEO - The European Student Earth Orbiter is a satellite planned for launch in late 2008 into a Geo-stationary transfer orbit similar to the initial orbit of AO40 and to those planned for Eagle and P3E.

In December 2005 two AMSAT-UK members were invited to attend a SSETI Workshop at the European Space Agencies ESTEC facility in the Netherlands. This workshop, which lasted a week, had over eighty students in attendance from more than twenty universities around Europe.

The involvement of the AMSAT-UK team with the project was confirmed at the Workshop and the team were elected as "Honorary Members" of the SSETI Association in appreciation of their work supporting the previous SSETI Express project.

The prime communications system for ESEO is being developed by the University of Wroclaw in Poland and will operate on "commercial" S-Band space frequencies. It will provide all the usual telecommand and telemetry facilities and use standard ESA CCSDS packet communication techniques.

ESEO also has a need for a redundant communications system - one that can operate in the event of a primary system failure but can also function satisfactorily if and when the spacecraft is not in its intended earth-pointing mode. This is where AMSAT is planning to assist.

The current project calls for a unit that can receive telecommands from earth on UHF (435MHz), transfer those to the OBC via a CAN bus. Additionally, it must transmit telemetry and mission data to the ground on S-BAND (2.4GHz). We are planning to use omni-directional antenna systems so the data rate will necessarily be quite low although output power will be approximately 9 watts.

When in orbit, it is likely that the student experiments will be completed within a few weeks to months from launch after which time it will become available as a linear U/S mode transponder.

The ESEO spacecraft will have a rectangular structure and a mass of 120kg. The solar panels will be deployable and steerable while the propulsion system will use Nitrogen gas. The 50kHz wide mode U/S transponder will be switchable from a conventional linear design to a fully digital design based on DSP techniques using the G6LVB STELLA firmware. Two UHF canted monopoles on opposite ends of the spacecraft will be used to receive signals on U band. The S Band output of 9 Watts will feed two turnstiles or quadrilifar helixes. As well as the transponder, the unit will also provide 400 bps BPSK telemetry in AO40 format.

Obviously we cannot expect the transponded signals on the ground to be as strong as we enjoyed from AO40 but they should provide worldwide communication similar to the earlier AO-13 project.

The AMSAT-UK team includes G4DDK, G7OCD, G6LVB, G0MRF, & G3VZV who were responsible for the S-Band transmitter on SSETI Express.

This new opportunity to participate in this exciting venture is very much a result of the impressive support that the amateur fraternity around the world gave to the SSETI Express project - so thank you and congratulations!

We can also report the good news that a student team from the Technical University of Budapest has been added to the SSETI programme to work on the on-board Electrical Power System. This team, under the leadership of Dr. Andras (Bandi) Gschwindt, HA5WH, has masterminded similar systems on AO10, AO13 and AO40 all of which have proven to be extremely successful.

More news will be published as soon as it becomes available through the usual channels. At the time of writing the SSETI ESEO webpages are not up-to-date but new information is being added regularly, so please check http://www.sseti.org

[ANS thanks Graham, G3VZV for the above information]

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SB SAT @ AMSAT $ANS-043.03
AMSAT Awards This Week

AMSAT News Service Bulletin 043.03
From AMSAT HQ SILVER SPRING, MD.
February 12, 2006
To All RADIO AMATEURS
BID: $ANS-043.03

Bruce, KK5DO, AMSAT Director Contests and Awards reports this week congratulations go out to all of the following.

John Choo	VE7JRX	Satellite Communicators Club Award
Bill Greene	VE7WFG	Satellite Communicators Club Award
Zachary Schrempp	KE7EYQ	Satellite Communicators Club Award
Masahiro Myoga	N3LQ	Satellite Communicators Club Award
Jack Burris	K6JEB	Satellite Communicators Club Award
Bill Ward	GM0ICF	Satellite Communications Achievement Award #428
Eric Christensen	KF4OTN	Satellite Communications Achievement Award #429
Zachary Schrempp	KE7EYQ	South Africa Communication Achievement Award #US93
Robert Fairfield	K7RQN	South Africa Communication Achievement Award #US94

Shigekazu Yoshikawa JE2TLZ 51 on 51 Award #61
Andrzej Laczmanski SP1WSR 51 on 51 Award #62

To see all the awards visit http://www.amsat.org.

[ANS thanks Bruce, KK5DO for the above information]

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SB SAT @ AMSAT $ANS-043.04
SuitSat Telemetry Requested

AMSAT News Service Bulletin 043.04
From AMSAT HQ SILVER SPRING, MD.
February 12, 2006
To All RADIO AMATEURS
BID: $ANS-043.04

The exact cause of SuitSat's transmitter power loss remains unknown. The transmitter and controller are still working. The voice messages, Telemetry and SSTV image is still being sent every 9 minutes on a repeating cycle.

While the downlink seems too weak for most stations to copy, if you have a tracking antenna system then the SuitSat team would like to hear from you when you are able to get some reliable telemetry information.

Specifically what we need is the following:

Temperature: Every few minutes the voice will speak the temperature
Battery Voltage: Its on a 28 volt scale.
Date and time UTC you heard this data.
Location: where you are when you head this data.

At the beginning of each 9 minute cycle, SuitSat-1 will ID and then speak the Mission time, Temperature and voltage. Richard, N2SPI was among the first to hear and record the complete telemetry message. Richard reports he copied the telemetry woman saying, "...(Mission) time is 006607 minutes, the temperature is 12 degrees celsius, the battery voltage is 26.(?) ... (volts)". This audio file is available on-line at the http://www.aj3u.com site.

If you hear CW, get ready to decode SSTV. The order will be a DTMF tone, followed by the CW ID and then SSTV. This is also a good time to listen for the System Telemetry. The Telemetry comes right after the SSTV image. Then the whole process repeats.

Lou, W5DID, one of SuitSat's builders, told ANS, "The estimate is Suitsat will run 9 days 9 hours. That will cover the weekend of February 11-12. We need telemetry! This is even more important as the mission nears it's end."

Frank, KA3HDO, AMSAT-VP for Human Spaceflight Programs, and also is the ARISS International Chairman, said, "Now, more than ever, we need to see how long SuitSat will stay in operation. The SuitSat team plans to provide special recognition to the person that copies the last SuitSat telemetry, specifically the Mission Time and Battery Voltage."

Please send telemetry reports to suitsat@comcast.net.

[ANS thanks the ARISS team for the above information]

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SB SAT @ AMSAT $ANS-043.05
ISS ARISS Packet Digipeater Turned OFF

AMSAT News Service Bulletin 043.05
From AMSAT HQ SILVER SPRING, MD.
February 12, 2006
To All RADIO AMATEURS
BID: $ANS-043.05

Reminder: The ARISS packet mode aboard the ISS has been turned OFF for the duration of SuitSat project. Please do not transmit any packet or voice data on the 145.990 MHz SuitSat downlink frequency.

[ANS thanks the ARISS team for the above information]

/EX

SB SAT @ AMSAT $ANS-043.06
Bill Reaches 100+ on DXCC Quest From ISS

AMSAT News Service Bulletin 043.06
From AMSAT HQ SILVER SPRING, MD.
February 12, 2006
To All RADIO AMATEURS
BID: $ANS-043.06

Bill was able to work a few more stations prior to and just after the space walk which deployed SuitSat-1 and now has exceeded the 100 mark.

The entities worked since the last report are Brunei (V8), Chagos Is. (VQ9), Falkland Is. (VP8), Malaysia, E. (9M6), Reunion (FR), Tajikistan (EY) and Trinidad & Tobago (9Y-9Z). The complete list of DXCC entities worked now stands at 102 countries worked from space.

This past week also had three school contacts on Cmdr. Bill McArthur's schedule. By the end of the last contact, Bill had made his 24th successful contact. That contact breaks the previous record of 23 set by Leroy Chiao during Expedition 10.

The contact record for an expedition was also broken this week and stands at 25 since Valery Tokarev also had a school contact with students in Russia earlier in the expedition.

With several weeks still left for Expedition 12, the final records have yet to be established.

Congratulations Bill and keep it up!

[ANS thanks Kenneth, N5VHO for the above information]

/EX

SB SAT @ AMSAT $ANS-043.07
January/February AMSAT Journal Update

AMSAT News Service Bulletin 043.07
From AMSAT HQ SILVER SPRING, MD.
February 12, 2006
To All RADIO AMATEURS
BID: $ANS-043.07

Ed, WA4SWJ, Editor of The AMSAT Journal sends this update:

The January/February 2006 issue of The AMSAT Journal is completed. It is in for final proofreading. After comments are received and any corrections made, it will be shipped off to the printer and then into your hands. Thank you to all the contributors to this issue.

I also want to specifically thank Bill Hook, W3QBC, for his outstanding editing help. He is one of the most thorough guys I've ever known and he helps make the Journal significantly better.

Now is a great time to think about writing articles of your own for the next Journal. I always need content and actively seek it. I will help you get it into publishable form. Please contact me if you have something to place in the Journal.

The deadline for the next issue for editing is March 10th. This is a slightly earlier deadline than before. I would like to get the Journal out a little earlier in the two-month cycle. So get those keyboards heated up and send those articles in! The Journal's e-mail address is journal@amsat.org

[ANS thanks Ed, WA4SWJ for the above information]

/EX

SB SAT @ AMSAT $ANS-043.08
ARISS Status for the Week of February 6, 2006

AMSAT News Service Bulletin 043.08
From AMSAT HQ SILVER SPRING, MD.
February 12, 2006
To All RADIO AMATEURS
BID: $ANS-043.08

1. SuitSat Deployed

SuitSat was successfully activated and deployed during the February 3 EVA at 06:03 pm ET. The timing, micro-controller functions and audio have operated as expected; however, the signal from SuitSat is extremely weak. Ground stations with minimal equipment monitoring the satellite have had limited success in hearing the satellite's transmissions, although some operators have picked up partial messages including the station identification RS0RS, one of the Russian greetings, and some SSTV image information. Stations are encouraged to continue listening to obtain any information and telemetry that might be helpful with this and any future projects of this type.

2. Media Coverage of SuitSat

It is clear that SuitSat has captured the imagination of students and the general public worldwide. The number of hits the SuitSat website http://www.suitsat.org received over the first 5 days of February approached 5 million, having been accessed either directly or from over 2000 referring sites. The international media coverage has been extensive. SuitSat articles have been translated into German, Polish, Italian, French, Japanese, Portuguese and others. ARISS, ARRL and AMSAT members gave interviews to The Houston Chronicle, the Canadian Broadcasting Corporation, the Associated Press, CBS, The Herald Times News, Florida Today, the Washington Post, the Washington Times, National Geographic News, the Discovery Channel and National Public Radio. Reports were given by these and other media including MSNBC, CNN and Aljazeera. NASA television covered the deployment live. Links to some of the on-line articles from the past week follow.

Pre-Deployment
From Playfuls.com (Targu Mures,Romania)
"Used Space Suits, The Latest Trend In Satellites"
http://www.playfuls.com/news_0958_Used_Space_Suits_The_Latest_Trend_In_Satellites.html

The Discovery Channel
"Spacesuit Set To Become Satellite"
http://dsc.discovery.com/news/briefs/20060130/suitsat_spa.html

NPR
Interview with ARISS Chairman, Frank Bauer
"Space Suit to Orbit Earth" (Includes audio)
http://www.npr.org/templates/story/story.php?storyId=5183146

A Polish translation of the SuitSat paper resulted in an article published for the general public at AstroNet, the most popular astro-portal in Poland.
http://news.astronet.pl/news.cgi?5236

Another article was posted for ham operators at the Polish Amateur Radio Union.
http://pzk.org.pl/modules.php?op=modload&name=News&file=article&sid=1019&mode=thread&order=0&thold=0

ARRL
"Countdown is On for 'SuitSat-1' Deployment from ISS"
http://www.arrl.org/news/stories/2006/02/01/2/?nc=1

CBS News
http://www.cbsnews.com/htdocs/space_place/framesource_recent.html

CNN
"One small step for trash is giant leap for ham-kind"
http://www.cnn.com/2006/TECH/space/02/02/recycled.spacesuit.reut/index.html

Post Deployment - SuitSat Activated
ARRL
"'SuitSat-1' Launched from ISS"
http://www.arrl.org/news/stories/2006/02/03/103/?nc=1

MSNBC
"Spacesuit floats off to become a satellite"
http://www.msnbc.msn.com/id/11162380/

Aljazeera
http://english.aljazeera.net/NR/exeres/AF1CA663-BD6D-4C81-8A9A-0623C50220D9.htm

AMSAT
http://www.amsat.org/amsat-new/index.php

Yahoo.com
"Spacesuit Still Alive, Giving Weak Signal"
http://news.yahoo.com/s/ap/20060205/ap_on_sc/space_station

Spaceflight Now
"Castaway spacesuit radio experiment still alive"
http://www.spaceflightnow.com/station/exp12/060204suitsat.html

3. SuitSat-1 is AMSAT-OSCAR-54
SuitSat-1 has been given an Orbiting Satellites Carrying Amateur Radio (OSCAR) number. It has been denoted AMSAT-OSCAR-54.

4. Florida School Contact Successful
On Thursday, February 2, Bill McArthur, KC5ACR, answered 13 questions posed to him by 13 Timber Creek High School students in Orlando, Florida. Sarah Longino, longtime friend of McArthur's, was the coordinating teacher for the contact. Approximately 100 students, teachers, and parents gathered for the event. John Winn, Commissioner of Education for the state of Florida, was also present. Among the media covering the event were the Orlando Sentinel, CBS affiliate WKMG, Orange County Public Schools Public Relations office, East Orlando Sun, and the

Timber Creek newspaper and television station. The Orlando Sentinel article, "Biology students connect with space station," may be viewed on their website:
http://www.orlandosentinel.com/news/custom/space/orl-spacestation0306feb03,0,4677459.story?coll=orl-home-headlines

Echolink and IRLP were both used for the event. Echolink had 32 connections from the following 9 countries: USA, Japan, Germany, Australia, Korea, Russia, Thailand, Turkey, and the UK. IRLP had 10 connecting nodes from the U.K., U.S.A., Canada, Japan, and Australia.

Dale High School in Dale, Oklahoma completed an ARISS contact on Tuesday, February 7 at 14:56 UTC.

E.L. DeGolyer Elementary School in Dallas, Texas completed an ARISS contact on Tuesday, February 7 at 16:32 UTC.

Children at Pine Ridge Middle School in Naples, Florida completed an ARISS contact on February 8 at 15:24 UTC. The contact included students from neighboring Immokalee Middle School.

5. Upcoming School Contacts

Cosmos Centre Charleville in Charleville, Australia has been approved for an ARISS contact. It is planned for Friday, February 17 at 07:34 UTC via the telebridge station WH6PN in Hawaii. The audio from this contact will be available on the EchoLink AMSAT (node 101 377) and the JK1ZEW (node 277 208) conference rooms. It is expected to be fed into the 9010 IRLP Discovery Reflector as well. The event will be webcast.
To join the event:
URL: https://e-meetings.mci.com
CONFERENCE NUMBER: 1642340
PASSCODE: SPACE STATIO

The Discover Engineering Family Day event, which will be held at the National Building Museum in Washington, D.C. on Saturday, February 18, has been scheduled for a contact at 16:04 UTC. The telebridge station WH6PN in Hawaii will assist in the contact. The audio will be available on the EchoLink AMSAT (node 101 377) and the JK1ZEW (node 277 208) conference rooms. It is also expected to be fed into the 9010 IRLP Discovery Reflector. The event will be webcast.
To join the event:
URL: https://e-meetings.mci.com
CONFERENCE NUMBER: 1642601
PASSCODE: SPACE STATIO

6. ARISS International Meeting Held

The monthly ARISS International Team meeting was held on January 24. SuitSat, training of the next taxi flight crew member, Marcos Pontes and the Columbus Module were discussed. Minutes have been posted to the ARISS website. See: http://www.rac.ca/ariss/arisstel23.htm.

[ANS thanks Carol, KB3LKI, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
JoAnne Maenpaa, WB9JEJ
WB9JEJ at amsat dot org

From -7118401651815971167
X-Google-Thread: 10e8ad,3dcb7d4f4c9192d3,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news3.google.com!news.glorb.com!newsfeed.cw.net!cw.net!news-FFM2.ecrc.de!newsfeed00.sul.t-online.de!t-online.de!news.nask.pl!news.nask.org.pl!news.cyf-kr.edu.pl!agh.edu.pl!news.agh.edu.pl!news.onet.pl!not-for-mail
From: "Adrian SP8AQK" <szumik@op.pl>
Newsgroups: rec.radio.amateur.space
Subject: cute1.7 new 21.02.2006
Date: Sat, 18 Feb 2006 18:34:05 +0100
Organization: Onet.pl
Lines: 3
Message-ID: <dt7lqd$s1i$1@news.onet.pl>
NNTP-Posting-Host: 213.199.192.41
X-Trace: news.onet.pl 1140284046 28722 213.199.192.41 (18 Feb 2006 17:34:06 GMT)
X-Complaints-To: usenet@news.onet.pl
NNTP-Posting-Date: Sat, 18 Feb 2006 17:34:06 +0000 (UTC)
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.2180
X-Sender: 2J+u4RvlC71DDaWp0/QDow==
X-RFC2646: Format=Flowed; Original
X-Newsreader: Microsoft Outlook Express 6.00.2900.2180
X-Priority: 3
X-MSMail-Priority: Normal
Xref: g2news1.google.com rec.radio.amateur.space:178

http://lss.mes.titech.ac.jp/ssp/cubesat/index_e.html

From -7653656760241995314
X-Google-Thread: 10e8ad,940a8d111ceec96a,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII
Path: g2news1.google.com!news1.google.com!news4.google.com!

```
border1.nntp.dca.giganews.com!nntp.giganews.com!nx02.iad01.newshosting.com!
newshosting.com!207.69.154.102.MISMATCH!elnk-atl-nf2!newsfeed.earthlink.net!
stamper.news.atl.earthlink.net!newsread1.news.atl.earthlink.net.POSTED!46041641!
not-for-mail
From: "JoAnne Maenpaa" <wb9jej_no-spam@earthlink.net>
Newsgroups: rec.radio.amateur.space
Subject: ANS-050 AMSAT News Service Weekly Bulletin
Lines: 303
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <Qm1Kf.738$S25.75@newsread1.news.atl.earthlink.net>
Date: Sun, 19 Feb 2006 16:52:00 GMT
NNTP-Posting-Host: 72.245.93.63
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread1.news.atl.earthlink.net 1140367920 72.245.93.63 (Sun, 19 Feb
2006 08:52:00 PST)
NNTP-Posting-Date: Sun, 19 Feb 2006 08:52:00 PST
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news1.google.com rec.radio.amateur.space:180
```

AMSAT NEWS SERVICE
ANS-050

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* SuitSat Telemetry Analysis Continues
* OSCAR SKN Best Fist Winners
* AMSAT Awards Issued
* ARISS Status - 13 February 2006

SB SAT @ AMSAT $ANS-050.01
SuitSat Telemetry Analysis Continues

AMSAT News Service Bulletin 050.01
From AMSAT HQ SILVER SPRING, MD.
February 19, 2006
To All RADIO AMATEURS
BID: $ANS-050.01

SuitSat Telemetry Shows Conditions in Space

Amateur radio stations have continued to provide reception reports from SuitSat over the past week. The recorded voices along with the SSTV signal have been heard.

Richard, N2SPI has paid close attention to the telemetry voice on SuitSat and has provided notable data regarding the temperature inside the Orlan spacesuit and the battery voltage powering the electronics.

Richard's temperature data shows that the temperature has been rising at somewhat less than 1�C per day. The temperature was 12�C on February 8 and had risen up to 16�C by February 16. This is valuable data in light of an earlier hypothesis that SuitSat's batteries had frozen.

The battery voltage is based on a 28 volt scale. Richard's data captured on February 8 shows the battery at 26.7 volts. The voltage has slowly dropped over the past week with the batteries at 26.3 volts on February 16. This is only a drop of 0.4 volts during this period.

Lou, W5DID, one of SuitSat's builders, said, "The telemetry data becomes even more important as the mission nears it's end. As the battery voltage nears 12V, the regulator will no longer be able to maintain 12v output. At a battery voltage below 9V all transmissions will cease. The computer will continue to operate down to 3V although with no transmissions, Suitsat will appear dead. I expect this drop off to occur very rapidly."

And the end may be near. Richard has continued his work on receiving SuitSat's telemetry and provides this analysis, "Between February 15 to February 16, the battery voltage dropped only 0.2 volts. In the time between February 16 to February the battery voltage dropped 1.1 volts.

As you can see, there is a noticeable acceleration in the rate of battery voltage change. This battery appears to have a "knee" in its discharge characteristic. If this is so, it appears we have now dropped over the "knee".

This data is important since SuitSat-1 is the first flight experiment using the discarded Orlan spacesuit as a low-cost platform to carry experiments in a short-term, low earth orbit. Well done, Richard!

Frank, KA3HDO, AMSAT-VP for Human Spaceflight Programs, and also is the ARISS International Chairman, said, "Now, more than ever, we need to see how long SuitSat will stay in operation. The SuitSat team plans to provide special recognition to the person that copies the last SuitSat telemetry, specifically the Mission Time and Battery Voltage."

[ANS thanks Richard, N2SPI, and the ARISS team for the above information]

/EX

SB SAT @ AMSAT $ANS-050.02
OSCAR SKN Best Fist Winners

AMSAT News Service Bulletin 050.02
From AMSAT HQ SILVER SPRING, MD.
February 19, 2006
To All RADIO AMATEURS
BID: $ANS-050.02

Many thanks to all who participated in Straight Key Night on OSCAR 2006. The following operators, listed alphabetically by call sign, each received at least one "Best Fist" nomination from someone they worked. Most of these received multiple nominations.

Keith O'Brien, N4ZQ
Andy MacAllister, W5ACM
Cliff Buttschardt, K7RR
Kerry LaDuke, WC7V
Joe Prokop, KC8RAN
Grant Zehr, AA9LC
Frank Wiesenmeyer, K9CIS

Congratulations to all of our 2006 winners. See you next year!

[ANS thanks Ray, W2RS for the above information]

/EX

SB SAT @ AMSAT $ANS-050.03
AMSAT Awards Issued

AMSAT News Service Bulletin 050.03
From AMSAT HQ SILVER SPRING, MD.
February 19, 2006
To All RADIO AMATEURS
BID: $ANS-050.03

Congratulations go out to all of the following:

Mike Driggers, W5CRT, Satellite Communicators Club Award

Zachary Schrempp, KE7YEQ, AMSAT Satellite Communications Achievement Award #429

Perry Yantis, WB8OTH, W4AMI Basic Award #40 with endorsements for 2K, 3K and 4K

Perry Yantis, WB8OTH, W4AMI 5,000 Award #19

David Romero, EB4DEH, 51 on 51 Award #63

To see all the awards visit http://www.amsat.org or
http://www.amsatnet.com

[ANS thanks Bruce, KK5DO for the above information]

/EX

SB SAT @ AMSAT $ANS-050.04
ARISS Status - 13 February 2006

AMSAT News Service Bulletin 050.04
From AMSAT HQ SILVER SPRING, MD.
February 19, 2006
To All RADIO AMATEURS
BID: $ANS-050.04

1. SuitSat Status

Reports from 12 February indicate that SuitSat is still active. Deployed on February 3, SuitSat has been transmitting greetings and telemetry continuously ever since, although the signal strength is weaker than had been anticipated. The http://www.suitsat.org website has received nearly 8 million hits this month, and some of the audio and SSTV images received by stations around the world have been posted to this website: http://www.aj3u.com/blog/.

Stations should continue to listen for SuitSat and are asked to share any telemetry received that might be helpful with this project.

SuitSat has excited both students and the general public to the point that some individuals have expressed interest in obtaining amateur radio licenses. It has also sparked an interest in those who already have their amateur radio licenses, and because of this project are either cleaning up their current equipment or upgrading their stations. This project has also resulted in a few new ARISS recruits. ARRL ran a few web stories on SuitSat status. See: "'SuitSat-1' is Now AO-54; Reports Persist of Weak Signals"
http://www.arrl.org/news/stories/2006/02/07/2/?nc=1
and "New York Station Copies Complete 'SuitSat-1' Telemetry"
http://www.arrl.org/news/stories/2006/02/08/5/?nc=1

2. Dale, Oklahoma Contact Successful

On Tuesday, February 7, fourteen students from Dale High School in Dale, Oklahoma asked 15 questions of Bill McArthur, KC5ACR, in front of a crowd of 500 students, faculty, and guests. Dale Public Schools have a total enrollment of 700 and all of the students from grades 3 through 12 were present for the contact. Two Oklahoma City television stations, several newspapers, and CQ VHF Magazine covered the event. Coy Day, ARRL West Gulf Division Director, and John Thomason, ARRL Oklahoma Section Manager, were both present. After an 80 minute break, the same students

that asked the Dale questions read the DeGolyer questions while listening to the DeGolyer Contact. Channel Oklahoma ran an article, "Students Get Space Age Treat." See:
http://www.channeloklahoma.com/education/6819161/detail.html

3. Dallas School Contact Successful

On Tuesday, February 7, Bill McArthur, KC5ACR, answered another 17 questions posed to him by 17 students at E.L. DeGolyer Elementary School in Dallas, Texas. Students, teachers, and parents gathered in the auditorium to watch the event. Jim Haynie, ARRL Past President, and Tom Blackwell, ARRL North Texas Section Manager, also attended. The Dallas Independent School District Video Production Crew produced a documentary of this event which included the Space Day activities that preceded it.

DeGolyer is one of ARRL's Big Project schools, and as such, an amateur radio station was added to the school, sponsored by the ARRL. Students who participated in the contact were licensed Amateur Radio operators. DeGolyer students also participated in AMSAT's 2002 Annual Meeting held in Fort Worth. The 5th grade students may be seen building S-band antennas for the AO-40 satellite (from cardboard boxes and aluminum foil) on the following website: http://www.pbase.com/tomcat/kids__amsat.

Dallas News covered the DeGolyer contact in an article, "Students have a stellar dialogue." See:
http://www.dallasnews.com/s/dws/news/localnews/stories/DN-spacetalk_08met.ART.North.Edition2.73e882d.html

4. Naples, Florida School Contact Successful

On February 8, twelve children from two Florida NASA Explorer Schools, Pine Ridge Middle School and Immokalee Middle School, asked 12 questions of Bill McArthur, KC5ACR. An audience of approximately 150 gathered in Pine Ridge's multipurpose room to witness the contact as it was broadcast to all Pine Ridge Middle school classes via closed circuit TV, and was webcast to the entire school district. Pine Ridge and Immokalee students, NES teachers Sally Johnson, Bob Call, Lori Cadwell and Sharon Lea, forty students and teachers from Naples Lutheran Academy, Collier County Commissioner Frank Halas, Collier

County Superintendent of Schools Ray Baker, Collier County School Board member Patricia Carroll, Pine Ridge Middle School Principal George Brenco, Pine Ridge Assistant Principal David Mankiewicz, many district level administrators, and Pine Ridge Middle school parents were present. The radio operator during the event was Taylor Dunfee, K4TKD, a student at Gulf Coast High School. Two television stations, WINK News and FOX News filmed the event. A local radio station interviewed the coordinating teacher, Sharon Lea, and the Naples Daily News also covered the event.

5. ARRL Article on West Point, Timber Creek Contacts

ARRL covered the West Point and Timber Creek contacts in an article, "Very Full Schedule Keeps Space Station Crew Hopping, Cadets Told." See: http://www.arrl.org/news/stories/2006/02/10/1/?nc=1

6. McArthur Completes DXCC, Sets new Record

Bill McArthur made a few contacts before and after last week's EVA, and has now exceeded the 100 countries needed for his DXCC award. He adds this to his awards for Worked All States and Worked All Continents on both UHF and VHF, which he completed earlier in this expedition.

McArthur participated in three school contacts this week, giving him a total of 24 successful contacts during a single increment. This breaks the previous record of 23 set by Leroy Chiao during Expedition 10. Congratulations Bill!

On February 10, ARRL posted a story on McArthur's accomplishments. See: http://www.arrl.org/

7. ISS Contact Piques Educators' Interest

ARISS member Kenneth Ransom of JSC attended a Space Explorers conference on Sunday, February 5 and spoke with approximately 12 educators about the SuitSat project. While giving his talk, the teachers followed him outside for an Amateur Radio demonstration using the International Space Station. As the ISS was overhead at that time, Kenneth had the good fortune to speak with astronaut Bill McArthur onboard the Space Station. This impromptu contact generated much interest among his audience in ham radio and its use in the classroom.

8. ARISS School Selection Committee Meeting Held

The bimonthly ARISS Educational Outreach/School Selection Committee meeting was held on Thursday, February 9. Among the items discussed were the school contacts, lesson plans, and FCC regulations on third party traffic. The minutes have been posted on the ARISS website. See: http://www.rac.ca/ariss/arissschm.htm

[ANS thanks Carol, KB3LKI for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits.

Application forms are available from the AMSAT Office.

73, This week's ANS Editor,
Lee McLamb, KU4OS
ku4os at amsat dot org

From 7941693815122293568
X-Google-Thread: 10e8ad,92340f14743baeed
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news3.google.com!news4.google.com!border1.nntp.dca.giganews.com!nntp.giganews.com!newsfeed.hal-mli.net!feeder1.hal-mli.net!news.tele.dk!feed118.news.tele.dk!not-for-mail
From: "Michael" <ccc73571@vip.cybercity.dk>
Newsgroups: rec.radio.amateur.space
References: <DQjIf.48$Cw4.46@news.get2net.dk>
<HptIf.44861$d5.201175@newsb.telia.net>
Subject: Re: Receiving VMS (Vessel Monitoring Signals) from Inmarsat-C
Date: Tue, 21 Feb 2006 16:34:13 +0100
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.2527
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.2527
X-RFC2646: Format=Flowed; Response
Lines: 16
Message-ID: <43f9e182$0$178$edfadb0f@dread16.news.tele.dk>
Organization: TDC Totalloesninger
NNTP-Posting-Host: 213.173.237.75
X-Trace: 1140449666 dread16.news.tele.dk 178 213.173.237.75:39773
X-Complaints-To: abuse@post.tele.dk
Xref: g2news1.google.com rec.radio.amateur.space:181

I have now started up a Yahoo group, to get this thing going. You are
welcome to join
it at http://groups.yahoo.com/group/vms_group.

"Greg" <devnull@gravitywell.org> wrote in message
news:HptIf.44861$d5.201175@newsb.telia.net...
> Receiving inmarsat is no problem, I used a 1.5m dish with a 3 turn helix
> and the audio was crystal clear so a 1m should be fine.
> I listened to the audio phonecalls , 1535-1545MHz, so I don't know
> anything about the mode you want to decode...
> //Greg
>
>

```
From 2238340179120731530
X-Google-Thread: 10e8ad,ba9e7c81414e5226,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!newsfeed.gamma.ru!Gamma.RU!news.tele.dk!
news.tele.dk!small.news.tele.dk!feed118.news.tele.dk!not-for-mail
From: "Michael" <ccc73571@vip.cybercity.dk>
Newsgroups: rec.radio.amateur.space
Subject: Receive VMS from Inmarsat and decode the signals.
Date: Tue, 21 Feb 2006 18:26:46 +0100
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.2527
X-RFC2646: Format=Flowed; Original
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.2527
Lines: 24
Message-ID: <43f9fbfb$0$173$edfadb0f@dread16.news.tele.dk>
Organization: TDC Totalloesninger
NNTP-Posting-Host: 213.173.237.75
X-Trace: 1140456443 dread16.news.tele.dk 173 213.173.237.75:46380
X-Complaints-To: abuse@post.tele.dk
Xref: g2news1.google.com rec.radio.amateur.space:182
```

My name is Michael. I'm educated as electronic mechanic. I started a project with the goal to receive and decode the VMS signals from Inmarsat. VMS system is manly used on fishing vessels. On the ship there is a box with a gps and satellite transceiver. The
position information is send each hour, to a land earth station, were it is distributed to the different authorities. I hope that many of you will help and contribute to get this working, because I don't have all the skills my self.

First I started to ask people in different news group about the subject. But I now realized that it will be a bigger task. So I have made a Yahoo group to get this thing going. I have in this group posted the information I have gathered until now. If you think you maybe can contribute to the project then, or is interested in this as well, then please join at

http://groups.yahoo.com/group/vms_group

Cheers Michael

```
From 4916488056540582251
X-Google-Thread: 10e8ad,d2d32beeb5624473,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
```

Path: g2news1.google.com!news2.google.com!news4.google.com!news.glorb.com!
border1.nntp.dca.giganews.com!nntp.giganews.com!nx02.iad01.newshosting.com!
newshosting.com!207.69.154.102.MISMATCH!elnk-atl-nf2!newsfeed.earthlink.net!
stamper.news.atl.earthlink.net!newsread1.news.atl.earthlink.net.POSTED!46041641!
not-for-mail
From: "JoAnne Maenpaa" <wb9jej_no-spam@earthlink.net>
Newsgroups: rec.radio.amateur.space
Subject: WSR-050 AMSAT Weekly Satellite Report
Lines: 1129
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <jYFKf.1586$S25.611@newsread1.news.atl.earthlink.net>
Date: Tue, 21 Feb 2006 15:02:39 GMT
NNTP-Posting-Host: 68.164.231.73
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread1.news.atl.earthlink.net 1140534159 68.164.231.73 (Tue, 21 Feb
2006 07:02:39 PST)
NNTP-Posting-Date: Tue, 21 Feb 2006 07:02:39 PST
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news1.google.com rec.radio.amateur.space:183

This report is organized into 4 parts.
Part 1 - operational analog amateur satellites.
Part 2 - operational digital amateur satellites.
Part 3 - non - operational satellites
Part 4 - proposed satellites

SB SAT @ AMSAT W8ISS ANS-050.S1
WSR 050 Part 1 02/19/2006

AMSAT NEWS SERVICE BULLETIN 050.S1 FROM AMSAT HQ
SILVER SPRING, MD, February 19, 2006
TO ALL RADIO AMATEURS
BID: $ANS-050.S1

AO-54 SUITSAT
Catalog Number:28934
Release Date: February 3,2006

Status: Operational?
Modes : FM Voice Telemetry/Greetings
 FM SSTV

Callsign: RS0RS
Downlink: 145.990 FM

Official webpage: http://www.suitsat.org

Current reports state that nothing has been heard from SUITSAT for the
past few days.
Current status is unknown right now.

```
[02192006]
=====
VO-52 HAMSAT
Catalog Number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/V - Indian Transponder

Proposed frequencies:
-------------------
Indian Transponder:
Uplink : 435.220 MHz to 435.280 MHz LSB/CW
Downlink: 145.870 MHz to 145.930 MHz USB/CW
Beacom : 145.859330 MHZ CW

Dutch Transponder:
Uplink : 435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW
Beacon : 145.860MHz 12WPM with CW message

Official Webpage: http://www.amsat.in/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is
active. Each transponder has a different beacon, see below:

Indian transponder - unmodulated carrier on
145.936MHz.
Dutch Transponder - CW message on 145.860MHz.
[01152006]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Mode: PBBS - V/U 9K6
Voice Repeater - OFF
Digipeater - ON

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
Analog voice uplink: 145.880 MHZ FM
145.880 MHz USB
145.920 MHz FM 67Hz PL tone
1268.700 MHz FM 67Hz PL tone

Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast
Protocol (PBP)
```

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/

Schedule from the AO-51 Command Team:

Feb 20
9k6 Digital, V/U, High Power, PBP BBS (Pacsat Broadcast Protocol BBS)
TLM Data Active, Digipeater ON
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 435.150 mhz FM, 9k6 PBP Digital
Digipeater will be Turned ON

Feb 27
FM Repeater, V/U
Uplink: 145.920 mhz FM, 67 hz PL Tone
Downlink 435.300 mhz FM
9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
TLM Data Active
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 435.150 mhz FM, 9k6 PBP Digita
[02192006]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Uplink: 145.850 MHz (67.0 Hz PL tone) (See below for operating procedures)
Downlink: 436.795 MHz

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

There have been unconfirmed reports on the amsat-bb remailer that SO-50 has shifted downlink frequency as much as 5khz up. This both from Europe.

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz. The order of operation is thus: (allow for Doppler as necessary)

1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10

minute timer.
[01012006]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: OPERATIONAL

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplink: 145.850 145.870 145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

unOfficial Webpage: http://www.amsat.org/amsat/sats/n7hpr/fo29.html
[11132005]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Uplink: 145.850 MHz FM
Downlink: 436.795 MHz FM

Official Webpage: http://www.ao27.org
[01012006]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational until March 14th

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz
145.972 MHz
435.100 MHz
2304.100 MHz

AO-7's orbit no longer goes into eclipse, so it is operating on a 24
hour

timer that changes the mode schedule at approximately 0900z each day. The timer alternates the satellite's operational mode between Mode A and Mode B.

Please use QRP when operating on AO-7! There are no batteries, and excessive power may cause unexpected behavior and possibly damage the satellite. Mode B users are likely to experience a Mode change from Mode B to Mode C if the buss voltage drops. This will be marked by a decrease in signal strength from AO-7 due to the lower power of Mode C.

AO-7 is expected to remain on this schedule until approximately 14 March 2006 at which time it will re-enter a period of eclipse on each orbit.

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php
The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
AO-7 users are requested to log their contacts and observations about AO-7, especially any unexpected mode changes.
AO-07 telemetry software webpage:
http://www.qsl.net/k3tz/files/K3TZ_AO-07_Telemetry_Decoder_0.5.zip
[01222006]

=====

INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: CROSSBAND REPEATER V/U ?
Digipeater: OFF

The current Expedition 12 crew is:
Commander: William McArthur - KC5ACR
Flight Engineer: Valery Tokarev - (no call)

Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM

Repeater Downlink: 145.800 MHz FM

Callsigns:
Russian: RS0ISS, RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official Webpage: http://www.rac.ca/ariss
Official Fan club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.

Currently, the ISS equipment is configured into crossband repeater mode
from
2m to 70cm to help broaden the range of Suitsat. PLEASE REFRAIN FORM
TRANS-
MITTING WHILE SUITSAT IS ACTIVE.
[02062006]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-050.S2
WSR 050 Part 2 02/19/2006

AMSAT NEWS SERVICE BULLETIN 050.S2 FROM AMSAT HQ
SILVER SPRING, MD, February 19, 2006
TO ALL RADIO AMATEURS
BID: $ANS-050.S2

XI-V ?O-??
Catalog Number: 28895
Launch Date: October 27, 2005

Status: Operational only within range of Ground station in Japan

Telemetry Downlink: 437.345MHz - FSK 1200bps using AFK protocol
Beacon Downlink: 437.465MHz - CW about 50 WPM

Callsign: JQ1YGW

Oficial Webpage: http://www.space.t.u-tokyo.ac.jp/gs/satinfo-e.html#xi5
Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
[01222006]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544

Launch date: November 20, 1998

Status: Operational
Current Mode: CROSSBAND REPEATER - V/U
Digipeater: OFF

The current Expedition 12 crew is:
Commander: William McArthur - KC5ACR
Flight Engineer: Valery Tokarev - (no call)

Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Callsigns:
Russian: RS0ISS, RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official Webpage: http://www.rac.ca/ariss
Official Fan club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is NOT translated from Russian and posted.

Currently, the ISS equipment is configured into crossband repeater mode
from
2m to 70cm to help broaden the range of Suitsat. PLEASE REFRAIN FORM
TRANS-
MITTING WHILE SUITSAT IS ACTIVE.
[02062006]
=====
PCSAT2
Catalog Number: 25544
Launch Date: August 1, 2005

Activated: August 3, 2005
Status: Battery-saving mode
Current Mode: None

Digital Downlink: 435.275 Mhz
Digital Uplink: 145.825 Mhz
PSK-31 Downlink: 435.275 Mhz
PSK-31 Uplink: 29.400 - 29.403 Mhz

Broadcast:
BBS:

Official Webpage: http://web.usna.navy.mil/~bruninga/pcsat2.html

PCSAT2 APRS Packet page: http://www.findu.com/cgi-bin/pcsat2.cgi

This from Bob, WB4APR:

PCSAT2 was off due to low-power shut down for more than a week. We recovered her on Saturday. She should be doing telemetry once every 30 seconds now.
[02122006]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Mode: PBBS - V/U 9K6
Voice Repeater - OFF
Digipeater - ON

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
Analog voice uplink: 145.880 MHZ FM
145.920 MHz FM 67Hz PL tone
1268.700 MHz FM 67Hz PL tone

Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast Protocol (PBP)

Broadcast: PECHO-11
BBS: PECHO-12

Schedule from the AO-51 Command Team:

Feb 20
9k6 Digital, V/U, High Power, PBP BBS (Pacsat Broadcast Protocol BBS)
TLM Data Active, Digipeater ON
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 435.150 mhz FM, 9k6 PBP Digital
Digipeater will be Turned ON

Feb 27

FM Repeater, V/U
Uplink: 145.920 mhz FM, 67 hz PL Tone
Downlink 435.300 mhz FM
9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
TLM Data Active
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 435.150 mhz FM, 9k6 PBP Digita
[02192006]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Operational

General Usage Uplink/Downlink:145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

Anyone can work PCSAT-1 with ANY typical 1200 baud packet station on 145.825. Just set your path to UNPROTO APRS via ARISS (the same that you use via ARISS on the ISS or via PCSAT2). Mobiles with the D700 or the TH-D7 HT APRS radios will see packets directly on their front panel and can work it from their mobile.
[01012006]
=====
CUTE-1
Catalog number: 27844
Launched: June 30,2003

Status: Operational

Uplink: ?
Downlink: 436.8375 CW
437.4700 1200 FM ax25 or SRLL (ACTIVE only near Japan ?)
Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[01012006]
=====
GO-32 TECHSAT-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Downlink: 435.225 MHz FM (9600-baud FSK)
(435.325 n/a - temperature problems)
Uplinks: 145.850, 145.890, 145.930 FM
1269.700, 1269.800, 1269.900 FM
Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

Mineo, JE9PEL, reports February 02, 2006:

```
4XTECH-12>STATUS [02/02/06 20:39:52] <UI R>:
UTC: Thu Feb 02 11:39:35 2006 | Gurwin Techsat1B (V9.86)
BBS(9.86) is active ,AsherSpaceResearchInst greets you.
2 Users/8 Broadcasts, Uplink freq:145.890,145.850,145.930, 1269.800,
1269.900

TechRam2V9.86
TechRam2V9.86.
```

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[ANS-WSR wishes to thank Jeff, KB2M for this weeks report.]
[02122006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Semi-operational, the digipeater command is on and open for APRS users.

Uplink: 145.90 145.92 145.94 145.96 MHz FM
(using 1200-baud Manchester FSK)
Downlink: 437.026 MHz SSB (1200-baud PSK)
Mode-S Beacon: 2401.1428 MHz
Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[01012006]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational?

Telemetry Downlink: 145.826 MHz. FM (1200-baud AFSK).
approx. 10 days ON, 10 days OFF
Mode-S Beacon: 2401.500 MHz. ... OFF
UHFBeacon: 435.025 MHz. ... OFF

Official webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm

This from Clive, G3CWV:

Users of OSCAR-11 may be interested in recent additions to my website. Firstly UCAP, this is a simple OSCAR-11 capture program for Windows, and may be used instead of CTERM. It features an accurate time stamp facility,
which is useful for checking the satellite's real time clock.

Secondly, the news and telemetry archives have been updated to include all the 2005 data. The URL is http://www.users.zetnet.co.uk/clivew

During the period 14 December 2005 to 23 January 2006 the VHF beacon on 145.826 MHz. has been heard from 23 to 31 December and from 11 to 21 January.

Signals during the December passes were very variable. Sometimes received at good strength, at other times they were inaudible , even with the BFO switched ON (ie. in CW mode). Signals during the January passes tended to be much stronger, and good copy was obtained on most passes.

The on-board clock continues to accumulate a very large error. On 21 January it was 22.14 days slow, having lost 0.33 days (8 hours) since 09 December. However, the rate of change of clock error appears to vary between zero and half an hour per day, over short periods. The greatest changes seem to correspond with poor signals, which suggests that the clock may slow or stop when the battery voltage is low.

All the analogue telemetry channels, 0 to 59 are zero, ie they have failed.
The status channels 60 to 67 are still working.

The satellite is now in continuous sunlight until around 06 May, when eclipses will start again. This should help the satellite to continue transmitting, although continuous sunlight can cause problems due to excessive temperatures. Power supply problems can be caused by poor pointing attitude, ie the sunlight illuminating the ends of the satellite, instead of the solar arrays.

The watchdog timer now appears to have resumed operation on the 20 day cycle, ie. approximately ten days ON followed by 10 days OFF. However, at any time, poor solar attitude, and battery problems, may result in a low 14 volt line supply, which may cause the beacon to switch OFF prematurely, and reset the watchdog timer cycle.

The Beacon frequencies are -

VHF 145.826 MHz. AFSK FM ASCII Telemetry

UHF 435.025 MHz. OFF

S-band 2401.5 MHz. OFF

Listeners to OSCAR-11 may be interested in visiting my website which contains an archive of news & telemetry data. It also contains details about using a soundcard or hardware demodulators for data capture. There is software for capturing data, and decoding ASCII telemetry. The URL is
www.users.zetnet.co.uk/clivew/

If you place this bulletin on a terrestrial packet network, please use the bulletin identifier $BID:U2RPT117.CWV, to prevent duplication.
[01292006]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-050.S3
WSR 050 Part 3 02/19/2006

AMSAT NEWS SERVICE BULLETIN 050.S3 FROM AMSAT HQ
SILVER SPRING, MD, February 19, 2006
TO ALL RADIO AMATEURS
BID: $ANS-050.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

NCUBE-2 ?O-??
Catalog Number: 28894
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
2407.25
[01012006]
=====
XO-53 SSETI
Catalog Number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 FM 67Hz CTCSS
Voice Downlink: 2401.835 FM
Packet Up/Downlink: 437.250 9k6 packet
Packet Downlink 2401.835 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01292006]
=====

```
POSAT-1 PO-28
Catalog Number: 22829
Launched : September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 429.950

Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html.
POSAT-1
webpage:http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012006]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launched: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB
Beacon: 145.810 MHz (unmodulated carrier)

AO-10 has been locked into a Mode-B, 70-cm uplink and
2-meter downlink for several years.

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: Downlink only

Uplink: 145.875 145.900 145.925 145.950 MHz FM (1200-baud)
Downlink: 435.808 MHz PSK
Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01012006]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991
```

```
Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB
Beacon: 29.408 MHz
Robot: 29.454 MHz
[05232004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB
Beacon: 145.860 MHz
Robot: 145.908 MHz
[05232004]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink 145.975 MHz FM
Downlink 435.070 MHz FM
[05092004]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink: 145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM
Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01092005]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational?

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB
Beacon: 29.352 MHz (intermittent)
SSB meeting frequency: 29.380 MHz (unofficial)
```

[06202004]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplink: 145.84 145.86 145.88 145.90 MHz FM
(using 1200-baud Manchester FSK)
CW downlink: 437.125 MHz
Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)
Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[05232004]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[08152004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM
Broadcast Callsign: HL01-11
BBS: HL01-12

Jim, AA7KC, reports that KO-23's downlink transmitter continues in a non-operational status.
[05092004]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM (9600-baud FSK)
Downlink: 436.500 MHz FM
Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm

[ANS-WSR has no further information]
[05232004]
=====
SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

STatus: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz and 145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[08082004]
=====
UO-36 UoSAT-12
Catalog number: 25693

Launched: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlink: 437.025 MHz 437.400 MHz
Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA
web site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[05092004]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplink V-band 145.840 - 145.990 MHz CW/LSB
U-band 435.550 - 435.800 MHz CW/LSB
L1-band 1269.250 - 1269.500 MHz CW/LSB
L2-band 1268.325 - 1268.575 MHz CW/LSB
S1-band 2400.350 - 2400.600 MHz CW/LSB
Downlink: S2-band 2401.225 - 2401.475 MHz CW/USB
K-band 24,048.010 - 24,048.060 MHz CW/USB
Beacon: 2401.323, 24,048.035
[05232004]

SO-42 SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational
Downlink: 437.075 MHz
Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[08152004]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz
Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[08152004]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, callsign KE6QMD, as per the user service agreement located at the following
URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Operational

Uplink: 145.850 or 145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz
Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[11202005]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink 435.275 1200-baud AFSK
Downlink 145.825 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

```
Official webpage: http://amend.gmxhome.de
[01012006]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-050.S4
WSR 050 Part 4 02/19/2006

AMSAT NEWS SERVICE BULLETIN 050.S4 FROM AMSAT HQ
SILVER SPRING, MD, February 19, 2006
TO ALL RADIO AMATEURS
BID: $ANS-050.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE
PROPOSED FOR LAUNCH AT THIS TIME:

UCISAT ?O-??
Catalog number:
Proposed Launch Date: October 31, 2005

Status: Under Construction

Downlink: Submission in Progress
Uplink: Submission in Progress
Callsign: Submission in Progress
[11272005]
=====
PHASE 3E ?O-??
Catalog Number:
Proposed Launch Date: Early 2006

Status: Under Construction

For the latest project status update please visit the AMSAT-DL
P3-E web page:
http://www.amsat-dl.org/p3e/

[ANS-WSR wishes to thank William Leijenaar, PE1RAH for this week's
report]
[10022005]
=====
CP1 ?o-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: N6CP
Proposed Transmit Frequency: 436.845
[03272005]
=====
CP2 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005
Proposed Callsign: TBA
Proposed Transmit Frequency: 437.325
[03272005]
=====
HAUSAT1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: D90HP
Proposed Transmit Frequency: 437.465
[03272005]
=====
ICE Cube 1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: W2CXM
Proposed Transmit Frequency: 437.305
[03272005]
=====
ICE Cube 2 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: N2VR
Proposed Transmit Frequency: 437.425
[03272005]
=====
ION ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.505
[03272005]
=====
KUTEsat ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: KC0RMW
Proposed Transmit Frequency: 437.385
[03272005]
=====
MEROPE ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: K7MSU-1
Proposed Transmit Frequency: 145.980
[03272005]
=====
RINCON ?O-??
```

Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
437.345
[03272005]
=====
SACRED ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
[03272005]
=====
SACRED ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
[03272005]
=====
SEEDS ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: JQ1YGU
Proposed Transmit Frequency: 437.485
[03272005]
=====
Mea Huaka ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.405
[03272005]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

AMSAT-NA
850 Sligo Avenue, Suite 600

Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/amsat/listserv/menu.html

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

From -4574597437889145417
X-Google-Thread: 10e8ad,355c01ef26b14437,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news3.google.com!border1.nntp.dca.giganews.com!
border2.nntp.dca.giganews.com!nntp.giganews.com!elnk-atl-nf1!
newsfeed.earthlink.net!stamper.news.atl.earthlink.net!
newsread1.news.atl.earthlink.net.POSTED!46041641!not-for-mail
From: "JoAnne Maenpaa" <wb9jej_no-spam@earthlink.net>
Newsgroups: rec.radio.amateur.space
Subject: ANS-057 AMSAT News Service Weekly Bulletin
Lines: 246

X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <haGMf.4313$S25.3095@newsread1.news.atl.earthlink.net>
Date: Mon, 27 Feb 2006 16:55:41 GMT
NNTP-Posting-Host: 66.167.64.242
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread1.news.atl.earthlink.net 1141059341 66.167.64.242 (Mon, 27 Feb 2006 08:55:41 PST)
NNTP-Posting-Date: Mon, 27 Feb 2006 08:55:41 PST
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news1.google.com rec.radio.amateur.space:184

AMSAT NEWS SERVICE
ANS-057

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* Cute Sat 1.7 Launched
* SuitSat Gone??
* AMSAT Newsreel Update
* ARISS Status - 20 February 2006

SB SAT @ AMSAT $ANS-057.01
Cute Sat 1.7 Launched

AMSAT News Service Bulletin 057.01
From AMSAT HQ SILVER SPRING, MD.
February 26, 2006
To All RADIO AMATEURS
BID: $ANS-057.01

CUTE SAT 1.7 has been launched and has been heard on the air by various stations throughout the world.
Information available at:
http://lss.mes.titech.ac.jp/ssp/cute1.7

It will have uplink packet capability on 1.2ghz and 144mhz with downlink data on 437mhz. More info is available on the website.

The downlink for CW Beacon is 437.385. Listen fot it!

[ANS thanks the LSS team for the above
information]

/EX

SB SAT @ AMSAT $ANS-057.02
SuitSat Gone?

AMSAT News Service Bulletin 057.02
>From AMSAT HQ SILVER SPRING, MD.
February 26, 2006
To All RADIO AMATEURS
BID: $ANS-057.02

As it become certain that SuitSat-1 had reached the end of its mission, Frank, KA3HDO, who is AMSAT-VP for Human Spaceflight Programs, as well as the ARISS International Chairman wrote an extensive summary of the exciting worldwide teaching and learning opportunity.

Frank said, "SuitSat-1/Radioskaf/AO-54 the mission that has captured the imagination of people and students around the world---is now a confirmed silent key. The outreach, press requests and visibility of SuitSat was absolutely amazing and appears to be unprecedented for a ham radio event. While the press requests are just now starting to wane, we expect that you will continue to see SuitSat status reports and pictures in magazines, websites and other literature over the next few months.

The last confirmed reception of the SuitSat voice audio was on Saturday, February 18 by Bob King's station, VE6BLD in Canada. The last confirmed telemetry was received by Richard Crow's station, N2SPI in the USA. Richard copied the SuitSat-1 voltage dropping precipitously to a low of 18.3 volts before vehicle stopped transmitting. A graphic representation of Richard's telemetry data showing the battery voltage can be seen at http://www.amsat.org.

While the transmission part of the SuitSat experiment was not stellar, SuitSat-1 has been tremendously successful in several areas. Some of these successes include:
- We captured the imagination of students and the general public worldwide through this unique experiment.
- The media attention to the SuitSat project was tremendous.
- We have had well over 9 million internet hits at http://www.suitsat.org.
- Our student's creative artwork, signatures and voices have been carried in space and are on-board the spacesuit---the students are now space travelers in the Suit as it circles the Earth. This was a collaboration with the NASA Explorer Schools.
- The ARISS international team was able to fabricate, test and deliver a safe ham radio system to the ISS team 3 weeks after the international space agencies agreed to allow SuitSat to happen. This was a tremendous feat in of itself.

And most importantly,

- We successfully deployed an amateur radio satellite in a Spacesuit from the ISS, demonstrating to the space agencies that this can be safely done. This engineering accomplishment will open new opportunities for small, low cost satellites in the future.

The AMSAT/ARISS team have been talking about a SuitSat-2. Correcting the signal strength issue would be a top priority for this flight. So would be a longer term power generation device, like solar arrays. As our thoughts mature on this, we will keep you informed of our plans.

SuitSat-1/Radioskaf/AO-54 represented a space pioneering effort. While we did not have total success, we captured the imagination of students and the general public worldwide. And we have learned a lot from this activity. This will help us and others grow from this experience.

On behalf of the AMSAT, ARISS and SuitSat teams, I thank you all for your help, encouragement and advice."

73, Frank H. Bauer, KA3HDO
AMSAT-VP for Human Spaceflight Programs
ARISS International Chairman

[ANS thanks ARISS for the above adventure]

/EX

SB SAT @ AMSAT $ANS-057.03
AMSAT Newsreel Update

AMSAT News Service Bulletin 057.03
From AMSAT HQ SILVER SPRING, MD.
February 26, 2006
To All RADIO AMATEURS
BID: $ANS-057.03

On the AMSAT website http://www.amsat.org. , there is a section where you can see video newsreels of events and items of interest. They are very well produced and professionaly put together. The latest one for February 2006 can be seen from the AMSAT website. Plan on taking a look and updating your facts about AMSAT. There are some very interesting talks and ideas for presentations to all AMSAT members and the area coordinators.

[ANS thanks Don, WB5EKU for the above information]

/EX

SB SAT @ AMSAT $ANS-057.04
ARISS Status - 20 February 2006

AMSAT News Service Bulletin 057.04
From AMSAT HQ SILVER SPRING, MD.
February 26, 2006
To All RADIO AMATEURS
BID: $ANS-057.04

ARISS Status
February 20, 2006

1. Australia Contact Successful

On February 17, students at the Cosmos Centre Charleville in Charleville, Australia experienced a successful ARISS contact with Bill McArthur, KC5ACR, via the telebridge station WH6PN in Hawaii. Eight children asked 17 questions of the astronaut as an audience of 50 looked on. The event was covered by Southern Cross TV, the Australian Broadcasting Commission (ABC) which was broadcast nationwide, and the local media. The audio was webcast, courtesy of Verizon Conferencing, and was fed through the EchoLink AMSAT (node 101 377) and JK1ZRW (node 277 208) conference rooms. Twenty-one connections were made to Echolink from the following countries: Australia, Japan, Russia, USA, UK, Netherlands, Slovak Republic, Czech Republic, and Thailand. Five stations from Canada, Australia and Japan made connections to IRLP Discovery Reflector 9010 and the audio was also streamed on www.discoveryreflector.ca

2. Engineering Day Contact Successful

On Saturday, February 18, sixteen children attending the Discover Engineering Family Day made contact with the Space Station via the telebridge station, WH6PN, in Hawaii. Bill McArthur, KC5ACR, answered 16 questions. Prior to the event, the ARISS contact was publicized in the Weekend edition of the Washington Post newspaper and was described on many of the local TV
broadcast channels. Approximately 7000 people attended the event held in the National Building Museum. The contact audio was webcast and was fed through the Echolink AMSAT (node 101 377) and JK1ZEW (node 277 208) conference rooms and the IRLP Discovery Reflector 9010. Eighteen connections were made to Echolink from the USA, Canada, the UK, Columbia, Japan, and the Czech Republic.

In addition to the contact, a team of volunteers from AMSAT supported the ARISS booth the entire day of the Engineering Family Day function. The team provided a hands-on view of the ham radio equipment used on ISS, provided updates on the SuitSat project, and handed out information on ham radio and the ARISS program to children and their parents and guardians.

3. SuitSat Status

SuitSat was last heard from on Saturday, February 18 at 03:30 UTC. ARRL ran an article covering the satellite's suspected demise entitled, "SuitSat-1 Battery Voltage May Be on Downward Slide." See: http://www.arrl.org/news/stories/2006/02/17/5/?nc=1

4. News Article on Pine Ridge Contact

Naples News covered the ARISS contact between Bill McArthur and the NASA Explorer Schools - Pine Ridge and Immokalee Middle Schools. The article, "Live from Space," may be found at:
http://www.naplesnews.com/news/2006/feb/13/middle_school_students_chat_astronaut_he_orbits_ov/?local_news

5. ARRL Article on Dale High and DeGolyer Contacts

ARRL wrote a web story covering the Dale High School and DeGolyer Elementary School contacts. To view, "Back-to-Back ARISS School Group QSOs Attest to Ambitious Contact Schedule," see:
http://www.arrl.org/news/stories/2006/02/16/1/?nc=1

6. ARRL Article on New Astronauts

On February 15, ARRL ran a story entitled, "Several new astronauts are Amateur Radio licensees." See: http://www.arrl.org/

7. Astronaut Training Session

A second Amateur Radio training session has been tentatively scheduled for the remaining 2004 astronaut class. The class is planned for Friday, February 24. Astronauts Randy Bresnik, Jim Dutton, Shane Kimbrough, Tom Marshburn, and Bobby Satcher will attend. Astronaut Chris Cassidy will be scheduled for his second session at a later date.

[ANS thanks Carol, KB3LKI for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73, This week's ANS Editor,
Dee Interdonato, NB2F
nb2f at amsat dot org

```
From 4277805626466967321
X-Google-Thread: 10e8ad,6d90ccb783c2009e,start
X-Google-Attributes: gid10e8ad,public
```

X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news3.google.com!news.glorb.com!bigfeed2.bellsouth.net!
news.bellsouth.net!elnk-atl-nf1!newsfeed.earthlink.net!
stamper.news.atl.earthlink.net!newsread1.news.atl.earthlink.net.POSTED!46041641!
not-for-mail
From: "JoAnne Maenpaa" <wb9jej_no-spam@earthlink.net>
Newsgroups: rec.radio.amateur.space
Subject: WSR-057 AMSAT Weekly Satellite Report
Lines: 1000
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <_lZMf.4824$S25.4085@newsread1.news.atl.earthlink.net>
Date: Tue, 28 Feb 2006 14:45:14 GMT
NNTP-Posting-Host: 69.3.102.9
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread1.news.atl.earthlink.net 1141137914 69.3.102.9 (Tue, 28 Feb 2006
06:45:14 PST)
NNTP-Posting-Date: Tue, 28 Feb 2006 06:45:14 PST
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news1.google.com rec.radio.amateur.space:185

This report is organized into 4 parts.
Part 1 - operational analog amateur satellites.
Part 2 - operational digital amateur satellites.
Part 3 - non - operational satellites
Part 4 - proposed satellites

SB SAT @ AMSAT W8ISS ANS-057.S1
WSR 057 Part 1 02/26/2006

AMSAT NEWS SERVICE BULLETIN 057.S1 FROM AMSAT HQ
SILVER SPRING, MD, February 26, 2006
TO ALL RADIO AMATEURS
BID: $ANS-057.S1

VO-52 HAMSAT
Catalog Number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/V - Indian Transponder

Proposed frequencies:

Indian Transponder:
Uplink : 435.220 MHz to 435.280 MHz LSB/CW
Downlink: 145.870 MHz to 145.930 MHz USB/CW
Beacom : 145.859330 MHZ CW

Dutch Transponder:
Uplink : 435.225MHz to 435.275MHz LSB/CW

Downlink: 145.875MHz to 145.925MHz USB/CW
Beacon : 145.860MHz 12WPM with CW message

Official Webpage: http://www.amsat.in/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is
active. Each transponder has a different beacon, see below:

Indian transponder - unmodulated carrier on
145.936MHz.
Dutch Transponder - CW message on 145.860MHz.
[01152006]

=====

AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Modes: FM Repeater, V/U
     9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)TLM Data
Active
Voice Repeater - ON
Digipeater - OFF

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
Analog voice uplink: 145.880 MHZ FM
145.880 MHz USB
145.920 MHz FM 67Hz PL tone
1268.700 MHz FM 67Hz PL tone

Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast
Protocol (PBP)

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/

Schedule from the AO-51 Command Team:

Feb 27
FM Repeater, V/U
Uplink: 145.920 mhz FM, 67 hz PL Tone
Downlink 435.300 mhz FM
9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)TLM Data Active
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 435.150 mhz FM, 9k6 PBP Digital
[02262006]

=====

SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Uplink: 145.850 MHz (67.0 Hz PL tone) (See below for operating procedures)
Downlink: 436.795 MHz

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

There have been unconfirmed reports on the amsat-bb remailer that SO-50 has shifted downlink frequency as much as 5khz up. This both from Europe.

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz. The order of operation is thus: (allow for Doppler as necessary)

1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10 minute timer.
[01012006]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: OPERATIONAL

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplink: 145.850 145.870 145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

unOfficial Webpage: http://www.amsat.org/amsat/sats/n7hpr/fo29.html
[11132005]
=====
AO-27 AMRAD

Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Uplink: 145.850 MHz FM
Downlink: 436.795 MHz FM

Official Webpage: http://www.ao27.org
[01012006]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational until March 14th

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz
145.972 MHz
435.100 MHz
2304.100 MHz

AO-7's orbit no longer goes into eclipse, so it is operating on a 24 hour timer that changes the mode schedule at approximately 0900z each day. The timer alternates the satellite's operational mode between Mode A and Mode B.

Please use QRP when operating on AO-7! There are no batteries, and excessive power may cause unexpected behavior and possibly damage the satellite. Mode B users are likely to experience a Mode change from Mode B to Mode C if the buss voltage drops. This will be marked by a decrease in signal strength from AO-7 due to the lower power of Mode C.

AO-7 is expected to remain on this schedule until approximately 14 March 2006 at which time it will re-enter a period of eclipse on each orbit.

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php
The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
AO-7 users are requested to log their contacts and observations about

AO-7,
especially any unexpected mode changes.
AO-07 telemetry software webpage:
http://www.qsl.net/k3tz/files/K3TZ_AO-07_Telemetry_Decoder_0.5.zip
[01222006]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: CROSSBAND REPEATER V/U ?
Digipeater: OFF

The current Expedition 12 crew is:
Commander: William McArthur - KC5ACR
Flight Engineer: Valery Tokarev - (no call)

Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Callsigns:
Russian: RS0ISS, RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official Webpage: http://www.rac.ca/ariss
Official Fan club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line is
NOT translated from Russian and posted.

Currently, the ISS equipment is configured into crossband repeater mode from
2m to 70cm to help broaden the range of Suitsat. PLEASE REFRAIN FORM TRANSMITTING WHILE SUITSAT IS ACTIVE.
[02062006]

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/EX

SB SAT @ AMSAT W8ISS $ANS-057.S2
WSR 057 Part 2 02/26/2006

AMSAT NEWS SERVICE BULLETIN 057.S2 FROM AMSAT HQ
SILVER SPRING, MD, February 26, 2006
TO ALL RADIO AMATEURS
BID: $ANS-057.S2

XI-V ?O-??
Catalog Number: 28895
Launch Date: October 27, 2005

Status: Operational only within range of Ground station in Japan

Telemetry Downlink: 437.345MHz - FSK 1200bps using AFK protocol
Beacon Downlink: 437.465MHz - CW about 50 WPM

Callsign: JQ1YGW

Oficial Webpage: http://www.space.t.u-tokyo.ac.jp/gs/satinfo-e.html#xi5
Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
[01222006]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: CROSSBAND REPEATER - V/U
Digipeater: OFF

The current Expedition 12 crew is:
Commander: William McArthur - KC5ACR
Flight Engineer: Valery Tokarev - (no call)

Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Callsigns:

Russian: RS0ISS, RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official Webpage: http://www.rac.ca/ariss
Official Fan club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line is NOT translated from Russian and posted.

Currently, the ISS equipment is configured into crossband repeater mode from
2m to 70cm to help broaden the range of Suitsat. PLEASE REFRAIN FORM TRANSMITTING WHILE SUITSAT IS ACTIVE.
[02062006]
=====
PCSAT2
Catalog Number: 25544
Launch Date: August 1, 2005

Activated: August 3, 2005
Status: Battery-saving mode
Current Mode: None

Digital Downlink: 435.275 Mhz
Digital Uplink: 145.825 Mhz
PSK-31 Downlink: 435.275 Mhz
PSK-31 Uplink: 29.400 - 29.403 Mhz

Broadcast:
BBS:

Official Webpage: http://web.usna.navy.mil/~bruninga/pcsat2.html

PCSAT2 APRS Packet page: http://www.findu.com/cgi-bin/pcsat2.cgi

This from Bob, WB4APR:

PCSAT2 was off due to low-power shut down for more than a week. We recovered her on Saturday. She should be doing telemetry once every 30 seconds now.
[02122006]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Modes: FM Repeater, V/U
9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)TLM Data Active
Voice Repeater - ON
Digipeater - OFF

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
Analog voice uplink: 145.880 MHZ FM
145.880 MHz USB
145.920 MHz FM 67Hz PL tone
1268.700 MHz FM 67Hz PL tone

Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast Protocol (PBP)

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/

Schedule from the AO-51 Command Team:

Feb 27
FM Repeater, V/U
Uplink: 145.920 mhz FM, 67 hz PL Tone
Downlink 435.300 mhz FM
9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)TLM Data Active
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 435.150 mhz FM, 9k6 PBP Digital
[02262006]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Operational

General Usage Uplink/Downlink:145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

Anyone can work PCSAT-1 with ANY typical 1200 baud packet station on 145.825. Just set your path to UNPROTO APRS via ARISS (the same that you use via ARISS on the ISS or via PCSAT2). Mobiles with the D700 or the TH-D7 HT APRS radios will see packets directly on their front panel and can work it from their mobile.
[01012006]
=====

CUTE-1
Catalog number: 27844
Launched: June 30,2003

Status: Operational

Uplink: ?
Downlink: 436.8375 CW
437.4700 1200 FM ax25 or SRLL (ACTIVE only near Japan ?)
Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[01012006]

=====
GO-32 TECHSAT-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Downlink: 435.225 MHz FM (9600-baud FSK)
(435.325 n/a - temperature problems)
Uplinks: 145.850, 145.890, 145.930 FM
1269.700, 1269.800, 1269.900 FM
Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

Mineo, JE9PEL, reports February 02, 2006:

```
4XTECH-12>STATUS [02/02/06 20:39:52] <UI R>:
UTC: Thu Feb 02 11:39:35 2006 | Gurwin Techsat1B (V9.86)
BBS(9.86) is active ,AsherSpaceResearchInst greets you.
2 Users/8 Broadcasts, Uplink freq:145.890,145.850,145.930, 1269.800,
1269.900

TechRam2V9.86
TechRam2V9.86.
```

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[ANS-WSR wishes to thank Jeff, KB2M for this weeks report.]
[02122006]

=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Semi-operational, the digipeater command is on and open for APRS users.

Uplink: 145.90 145.92 145.94 145.96 MHz FM
(using 1200-baud Manchester FSK)
Downlink: 437.026 MHz SSB (1200-baud PSK)
Mode-S Beacon: 2401.1428 MHz
Broadcast Callsign: PACSAT-11

BBS: PACSAT-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[01012006]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational?

Telemetry Downlink: 145.826 MHz. FM (1200-baud AFSK).
approx. 10 days ON, 10 days OFF
Mode-S Beacon: 2401.500 MHz. ... OFF
UHFBeacon: 435.025 MHz. ... OFF

Official webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm

This from Clive, G3CWV:

Users of OSCAR-11 may be interested in recent additions to my website. Firstly UCAP, this is a simple OSCAR-11 capture program for Windows, and may be used instead of CTERM. It features an accurate time stamp facility, which is useful for checking the satellite's real time clock.

Secondly, the news and telemetry archives have been updated to include all the 2005 data. The URL is http://www.users.zetnet.co.uk/clivew

During the period 14 December 2005 to 23 January 2006 the VHF beacon on 145.826 MHz. has been heard from 23 to 31 December and from 11 to 21 January.

Signals during the December passes were very variable. Sometimes received at good strength, at other times they were inaudible , even with the BFO switched ON (ie. in CW mode). Signals during the January passes tended to be much stronger, and good copy was obtained on most passes.

The on-board clock continues to accumulate a very large error. On 21 January it was 22.14 days slow, having lost 0.33 days (8 hours) since 09 December. However, the rate of change of clock error appears to vary between zero and half an hour per day, over short periods. The greatest changes seem to correspond with poor signals, which suggests that the clock may slow or stop when the battery voltage is low.

All the analogue telemetry channels, 0 to 59 are zero, ie they have failed.
The status channels 60 to 67 are still working.

The satellite is now in continuous sunlight until around 06 May, when eclipses will start again. This should help the satellite to continue transmitting, although continuous sunlight can cause problems due to excessive temperatures. Power supply problems can be caused by poor pointing attitude, ie the sunlight illuminating the ends of the satellite, instead of the solar arrays.

The watchdog timer now appears to have resumed operation on the 20 day cycle, ie. approximately ten days ON followed by 10 days OFF. However, at any time, poor solar attitude, and battery problems, may result in a low 14 volt line supply, which may cause the beacon to switch OFF prematurely, and reset the watchdog timer cycle.

The Beacon frequencies are -

VHF 145.826 MHz. AFSK FM ASCII Telemetry

UHF 435.025 MHz. OFF

S-band 2401.5 MHz. OFF

Listeners to OSCAR-11 may be interested in visiting my website which contains an archive of news & telemetry data. It also contains details about using a soundcard or hardware demodulators for data capture. There is software for capturing data, and decoding ASCII telemetry. The URL is
www.users.zetnet.co.uk/clivew/

If you place this bulletin on a terrestrial packet network, please use the bulletin identifier $BID:U2RPT117.CWV, to prevent duplication.
[01292006]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-057.S3
WSR 057 Part 3 02/26/2006

AMSAT NEWS SERVICE BULLETIN 057.S3 FROM AMSAT HQ
SILVER SPRING, MD, February 26, 2006
TO ALL RADIO AMATEURS
BID: $ANS-057.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

AO-54 SUITSAT
Catalog Number:28934
Release Date: February 3,2006

Status: Non-operational
Modes : FM Voice Telemetry/Greetings
 FM SSTV

Callsign: RS0RS
Downlink: 145.990 FM

Official webpage: http://www.suitsat.org
[02262006]
=====
NCUBE-2
Catalog Number: 28894
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
2407.25
[01012006]
=====
XO-53 SSETI
Catalog Number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 FM 67Hz CTCSS
Voice Downlink: 2401.835 FM
Packet Up/Downlink: 437.250 9k6 packet
Packet Downlink 2401.835 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01292006]
=====
POSAT-1 PO-28
Catalog Number: 22829
Launched : September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 429.950

Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

```
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html.
POSAT-1
webpage:http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012006]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launched: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB
Beacon: 145.810 MHz (unmodulated carrier)

AO-10 has been locked into a Mode-B, 70-cm uplink and
2-meter downlink for several years.

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: Downlink only

Uplink: 145.875 145.900 145.925 145.950 MHz FM (1200-baud)
Downlink: 435.808 MHz PSK
Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01012006]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB
Beacon: 29.408 MHz
Robot: 29.454 MHz
[05232004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991
```

```
Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB
Beacon: 145.860 MHz
Robot: 145.908 MHz
[05232004]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink 145.975 MHz FM
Downlink 435.070 MHz FM
[05092004]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink: 145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM
Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01092005]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational?

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB
Beacon: 29.352 MHz (intermittent)
SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplink: 145.84 145.86 145.88 145.90 MHz FM
(using 1200-baud Manchester FSK)
CW downlink: 437.125 MHz
Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)
Broadcast Callsign: LUSAT-11
```

BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[05232004]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[08152004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM
Broadcast Callsign: HLO1-11
BBS: HLO1-12

Jim, AA7KC, reports that KO-23's downlink transmitter continues in a non-operational status.
[05092004]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM (9600-baud FSK)
Downlink: 436.500 MHz FM
Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm

[ANS-WSR has no further information]
[05232004]
=====
SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

STatus: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz and 145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[08082004]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlink: 437.025 MHz 437.400 MHz
Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[05092004]

```
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplink V-band 145.840 - 145.990 MHz CW/LSB
U-band 435.550 - 435.800 MHz CW/LSB
L1-band 1269.250 - 1269.500 MHz CW/LSB
L2-band 1268.325 - 1268.575 MHz CW/LSB
S1-band 2400.350 - 2400.600 MHz CW/LSB
Downlink: S2-band 2401.225 - 2401.475 MHz CW/USB
K-band 24,048.010 - 24,048.060 MHz CW/USB
Beacon: 2401.323, 24,048.035
[05232004]
-----
SO-42 SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational
Downlink: 437.075 MHz
Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[08152004]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz
Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[08152004]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
```

Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, callsign KE6QMD, as per the user service agreement located at the following
URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Operational

Uplink: 145.850 or 145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz
Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[11202005]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink 435.275 1200-baud AFSK
Downlink 145.825 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01012006]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-057.S4
WSR 057 Part 4 02/26/2006

AMSAT NEWS SERVICE BULLETIN 057.S4 FROM AMSAT HQ
SILVER SPRING, MD, February 26, 2006
TO ALL RADIO AMATEURS
BID: $ANS-057.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE
PROPOSED FOR LAUNCH AT THIS TIME:

PHASE 3E ?O-??
Catalog Number:
Proposed Launch Date: Early 2006

Status: Under Construction

For the latest project status update please visit the AMSAT-DL
P3-E web page:
http://www.amsat-dl.org/p3e/

[ANS-WSR wishes to thank William Leijenaar, PE1RAH for this week's
report]
[10022005]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/amsat/listserv/menu.html

In addition to regular membership, AMSAT-NA offers membership in the

President's Club. Members of the President's Club, as sustaining donors
to AMSAT Project Funds, will be eligible to receive additional benefits.
Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the
memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen,
G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

From 7672381525352633363
X-Google-Thread: 10e8ad,9a8dc93724b4b3ee,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news3.google.com!newshub.sdsu.edu!elnk-nf2-pas!
newsfeed.earthlink.net!stamper.news.pas.earthlink.net!
stamper.news.atl.earthlink.net!newsread3.news.atl.earthlink.net.POSTED!46041641!
not-for-mail
From: "JoAnne Maenpaa" <wb9jej_no-spam@earthling.com>
Newsgroups: rec.radio.amateur.space
Subject: ANS-064 AMSAT News Service Weekly Bulletin
Lines: 269
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <uYLOf.134$k75.19@newsread3.news.atl.earthlink.net>
Date: Mon, 06 Mar 2006 01:08:42 GMT
NNTP-Posting-Host: 68.165.57.57
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread3.news.atl.earthlink.net 1141607322 68.165.57.57 (Sun, 05 Mar
2006 17:08:42 PST)
NNTP-Posting-Date: Sun, 05 Mar 2006 17:08:42 PST
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news1.google.com rec.radio.amateur.space:188

AMSAT NEWS SERVICE
ANS-064

ANS is a free, weekly, news and information service of AMSAT North America,
The Radio Amateur Satellite Corporation. ANS reports on the activities of a
worldwide group of Amateur Radio operators who share an active interest in
designing, building, launching and communicating through analog and digital
Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:

* AMSAT-NA BoD Nominations Due June 12, 2006
* Request for AMSAT Journal Articles
* SuitSat Visual Sighting Reported
* SuitSat in the Classroom
* ARISS Status February 27, 2006
* Aurora Surprise

SB SAT @ AMSAT $ANS-064.01
AMSAT-NA BoD Nominations Due June 12, 2006

AMSAT News Service Bulletin 064.01
From AMSAT HQ SILVER SPRING, MD.
March 5, 2006
To All RADIO AMATEURS
BID: $ANS-064.01

NOTICE

AMSAT-NA Board of Directors Nominations Due No Later than June 12, 2006

It is time to submit nominations for the upcoming open seats on the AMSAT-NA Board of Directors. A nomination requires either one Member Society or five current individual members to nominate an AMSAT member for the position. A Director serves for a period of two years. Three Directors' terms expire this year: Tom Clark, K3IO, Lou McFadin, W5DID and Paul Shuch, N6TX. Nominations MUST be in writing and mailed to:

AMSAT
850 Sligo Ave #600
Silver Spring MD 20901

[ANS thanks Martha, AMSAT Manager for the above information]

/EX

SB SAT @ AMSAT $ANS-064.02
Request for AMSAT Journal Articles

AMSAT News Service Bulletin 064.02
From AMSAT HQ SILVER SPRING, MD.
March 5, 2006
To All RADIO AMATEURS
BID: $ANS-064.02

Ed Long, WA4SWJ, AMSAT Journal Editor, passed along the following:

"Hi Everyone...

Just a note to let all you authors know that I am looking for articles for the March/April 2006 issue of The AMSAT Journal. I am trying to get the Journal released earlier in the two-month normal cycle but I've been delayed by late submissions in some cases. I surely appreciate all the work that goes into article development but I could use it a little sooner so I'll be able to get the Journal out sooner. So, fire up those keyboards and get some bytes onto that virtual piece of paper on your screens! As usual the best way to submit them to me (especially with high resolution graphics or pictures) is to "journal at amsat dot org" (you know what that means). I would love to have your submissions by March 10th or so. That's only a couple of weeks away.

Thanks and please let me know if I can help or if you need information from me.

The January/February 2006 issue has been at the printer for 2 to 3 weeks now so you should have it soon. I haven't seen my paper copy yet although I get to see final version in electronic format before anyone. One of the benefits of being the Journal Editor."

[ANS thanks Ed Long, WA4SWJ, Editor, The AMSAT Journal for the above information]

/EX

SB SAT @ AMSAT $ANS-064.03
SuitSat Visual Sighting Reported

AMSAT News Service Bulletin 064.03
From AMSAT HQ SILVER SPRING, MD.
March 5, 2006
To All RADIO AMATEURS
BID: $ANS-064.03

In response to an AMSAT request for reports of any visual observations of SuitSat, Steve Meuse of Londonderry, New Hampshire reported a visual sighting during a February 28th pass. Steve has written the details of the sighting on his astronomy blog. See: http://tinyurl.com/qlanx

[ANS thanks Steve Meuse for the above information]

/EX

SB SAT @ AMSAT $ANS-064.04
SuitSat in the Classroom

AMSAT News Service Bulletin 064.04
From AMSAT HQ SILVER SPRING, MD.
March 5, 2006
To All RADIO AMATEURS
BID: $ANS-064.04

Bruce Robertson, VE9QRP, taught three classes on SuitSat in the science program of his local Middle School in New Brunswick, Canada and filed this report:

"I thought I'd provide a brief report, partly to seed ideas for future educational opportunities, partly as a note of thanks to the team that put SuitSat together and collected its data.

This proved a very engaging topic, one to which the grade 6 and 7 students warmed quite quickly. The idea of 'reusing' out-of-date equipment in this manner, the 'secret words' and multilingual nature of the message, and finally the very haunting image of 'Mr. Smith' tumbling through space all served to capture young imaginations.

My presentation comprised a modified version of Gould's ppt presentation and an audio disk with A.J.'s Greatest Hits. I began talking about ISS and communications from there to earth via ham radio. I played a part of the recording of Maryam 9K2MD talking to U5MIR. Her enthusiasm is quite evident, and it draws the girls into the topic a bit. It also is a good introduction to the idea of callsigns and phonetic alphabets.

After introducing the idea of SS, we watched the video of the launch. We calculated how much weaker the signal turned out to be than expected, and we listened to the audio. I gave them each a worksheet which helped guide them. Recordings with telemetry had headings for 'Temperature', for instance. Then they gathered in lab groups and tried to fill in material. I allowed representatives from the groups to gather around the CD player to eek out another word or two.

We ended the hour with a discussion about what went wrong. Does your car stereo stop working at 13 degrees C? If the batteries on a suit are rated at 28V, how does the voltage seem? Finally, by listening to the fading and comparing the video of the suit tumbling, many got the sense that the fading was due to the suit masking the antenna. All three classes wish to recommend to the designers of future SuitSats that they install a second antenna, some thought at right angles to the first, others thought out the feet of the suit!"

Bruce wrapped up his report by saying "The important thing for us to recognize is that this was an opportunity that was grasped very well. We should be proud not only of the people who put the thing together with very little time, but of those who made a success of it through their technical skills and their considerable cooperation."

[ANS thanks Bruce, VE9QRP for the above information]

/EX

SB SAT @ AMSAT $ANS-064.05
ARISS Status February 27, 2006

AMSAT News Service Bulletin 064.05
From AMSAT HQ SILVER SPRING, MD.

March 5, 2006
To All RADIO AMATEURS
BID: $ANS-064.05

1. Itaki Elementary School Contact Successful

Students from Itaki Elementary School Fathers' Club in Hiroshima, Japan spoke with Bill McArthur, KC5ACR, on Monday, February 20. Thirteen children asked 19 questions of McArthur as an audience of 90 looked on. Media coverage included 2 newspapers and 5 television stations. Audio and video are available on the following web site:
http://www.ariss.jp/higashihiroshima.html.en

The audio from this contact was available on the EchoLink AMSAT and JK1ZRW conference room servers. EchoLink had 16 connections from 6 countries: Japan, UK, USA, Thailand, Russia, and Holland.

2. Upcoming School Contact

Evangelisches Gymnasium Lippstadt in Lippstadt, Nordrhein-Westfalen, Germany has been approved for a contact with the ISS. It will take place on Wednesday, March 8 at 14:56 UTC.

3. Girl Guides Listen to Engineering Day Contact

The audio from the Discover Engineering Family Day contact was fed through IRLP to which the Node 2050 Halifax connected. Six Girl Guides, their parents and leaders who were taking part in "Girl Guides on the Air" activities at this club station were treated to this ARISS event.

4. ARRL Article on Pine Ridge, Cosmos Centre Contacts

ARRL ran an article on the Pine Ridge NES and Cosmos Centre Charleville contacts entitled, "No Lollies on Space Station, Commander Tells Youngsters in Space QSO." See: http://www.arrl.org/news/stories/2006/02/23/3/?nc=1

5. ARRL Articles on SuitSat

ARRL posted two web stories covering SuitSat's end. To view, "SuitSat-1 Apparently SK; Nothing Heard for Several Days," see:
http://www.arrl.org/news/stories/2006/02/22/100/?nc=1

"ARISS Makes It Official: 'Tremendously Successful' SuitSat-1 is SK" may be found at: http://www.arrl.org/news/stories/2006/02/24/1/?nc=1

6. SuitSat Continues to Receive Media Coverage

The ARISS team supplied photos and data to Popular Science, Japanese CQ, and Design Electronic Magazines, as all of these publications plan to run articles on SuitSat-1. ABC News also interviewed ARISS Chairman Frank Bauer and will include a segment on SuitSat in their news broadcast in the near future.

7. Astronaut Training Status

A second class in Amateur Radio license training was held on Friday, February 24. Astronauts Jim Dutton, Shane Kimbrough, and Tom Marshburn attended. Astronauts Chris Cassidy, Randy Bresnik and Bobby Satcher will be scheduled for their second session at a later date.

8. ARISS Contact Cards

After receiving the new ARISS QSL cards (postcards used to confirm general contacts), ARRL Headquarters' staff has now fulfilled the backlog of 100 cards. They have currently collected 43 cards toward Bill's Worked All States award.

[ANS thanks Carol, KB3LKI for the above information]

/EX

SB SAT @ AMSAT $ANS-064.06
Aurora Surprise

AMSAT News Service Bulletin 064.06
From AMSAT HQ SILVER SPRING, MD.
March 5, 2006
To All RADIO AMATEURS
BID: $ANS-064.06

Sunspots have been scarce lately, but that doesn't mean solar activity is nil. A solar wind gust hit Earth's magnetic field on February 19th, sparking auroras of exceptional beauty over far-North America. Visit SpaceWeather.com to view pictures of the storm taken from Earth and Earth-orbit.

[ANS thanks SpaceWeather.com for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Al Marote, WA1LBG
AMSAT LM-1957
wa1lbg at amsat dot org

```
From 1052237583745607302
X-Google-Thread: 10e8ad,3236af1e71d49586,start
X-Google-Thread: 113975,3236af1e71d49586,start
```

X-Google-Attributes: gid10e8ad,gid113975,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!news4.google.com!news2.volia.net!
news.musoftware.de!border1.nntp.ams.giganews.com!nntp.giganews.com!
feeder4.cambrium.nl!feeder2.cambrium.nl!feed.tweaknews.nl!newsrouter-
eu.astraweb.com!news.astraweb.com!router1.astraweb.com!not-for-mail
From: Chris Steyaert <observations@rmob.org>
Newsgroups: rec.radio.amateur.space,sci.astro.amateur
Subject: Radio Meteor Obs. Bull. February 2006
Date: Mon, 06 Mar 2006 23:21:28 +0100
Message-ID: <2edp02t09emejv9ac82p8s73mdrlt3358p@4ax.com>
X-Newsreader: Forte Agent 1.93/32.576 English (American)
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Lines: 17
Organization: Unlimited download news at news.astraweb.com
NNTP-Posting-Host: 8cfc4b79.news.astraweb.com
X-Trace: DXC=i`e@3_S5gEJ\kdljK^UWoEL?
0kYOcDh@Jo?:C=;3CgUCgdBPgf34L;DKX07\YZ`QZFm_^Y9G6?BBACgCY;L>3>R@
Xref: g2news1.google.com rec.radio.amateur.space:189 sci.astro.amateur:19565

Radio Meteor Observation Bulletin No. 151 of January 2006 (72 K) is available
now as

http://visualrmob.free.fr/rmobtext/rmob0602.txt

More information and the visual presentation of the hourly forward scatter
counts can be found on

http://www.rmob.org

http://radio.data.free.fr

Chris

From 442663155276874861
X-Google-Thread: 10e8ad,75b24af9d55a38d1,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news3.google.com!border1.nntp.dca.giganews.com!
border2.nntp.dca.giganews.com!nntp.giganews.com!elnk-atl-nf1!
newsfeed.earthlink.net!stamper.news.atl.earthlink.net!
newsread2.news.atl.earthlink.net.POSTED!46041641!not-for-mail
From: "JoAnne Maenpaa" <wb9jej_no-spam@earthling.com>
Newsgroups: rec.radio.amateur.space
Subject: WSR-064 AMSAT Weekly Satellite Report
Lines: 1017

X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <L0hPf.1141$sL2.857@newsread2.news.atl.earthlink.net>
Date: Tue, 07 Mar 2006 14:46:03 GMT
NNTP-Posting-Host: 72.245.93.11
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread2.news.atl.earthlink.net 1141742763 72.245.93.11 (Tue, 07 Mar 2006 06:46:03 PST)
NNTP-Posting-Date: Tue, 07 Mar 2006 06:46:03 PST
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news1.google.com rec.radio.amateur.space:190

This report is organized into 4 parts.
Part 1 - operational analog amateur satellites.
Part 2 - operational digital amateur satellites.
Part 3 - non - operational satellites
Part 4 - proposed satellites

SB SAT @ AMSAT W8ISS ANS-064.S1
WSR 064 Part 1 03/05/2006

AMSAT NEWS SERVICE BULLETIN 064.S1 FROM AMSAT HQ
SILVER SPRING, MD, March 05, 2006
TO ALL RADIO AMATEURS
BID: $ANS-064.S1

VO-52 HAMSAT
Catalog Number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/V - Indian Transponder

Proposed frequencies:

Indian Transponder:
Uplink : 435.220 MHz to 435.280 MHz LSB/CW
Downlink: 145.870 MHz to 145.930 MHz USB/CW
Beacom : 145.859330 MHZ CW

Dutch Transponder:
Uplink : 435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW
Beacon : 145.860MHz 12WPM with CW message

Official Webpage: http://www.amsat.in/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is
active. Each transponder has a different beacon, see below:

Indian transponder - unmodulated carrier on
145.936MHz.
Dutch Transponder - CW message on 145.860MHz.
[01152006]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Modes: FM Repeater, V/U-High power
Digipeater - OFF

Analog voice downlink: 435.300 MHz FM
         435.150 MHz FM
Analog voice uplink: 145.880 MHZ FM
       145.880 MHz USB
       145.920 MHz FM 67Hz PL tone
      1268.700 MHz FM 67Hz PL tone

Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
    2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast
  Protocol (PBP)

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/

Schedule from the AO-51 Command Team:
March 2006 AO-51 (AMSAT Echo) Schedule

Mar 5
FM Repeater, V/U, High Power Mode
Uplink: 145.920 mhz FM, 67 hz PL Tone
Downlink 435.300 mhz FM

Mar 13
FM Repeater, V/S
Uplink: 145.920 mhz FM, No PL Tone
Downlink 2401.200 mhz FM

Mar 20
FM Repeater, L/U
Uplink: 1268.700 mhz FM
Downlink 435.300 mhz FM

Mar 23
FM Repeater, V/U
Uplink: 145.920 mhz FM, 67 hz PL Tone
Downlink 435.300 mhz FM

9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 435.150 mhz FM, 9k6 PBP Digital
[03052006]

=====

SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Uplink: 145.850 MHz (67.0 Hz PL tone) (See below for operating procedures)
Downlink: 436.795 MHz

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

There have been unconfirmed reports on the amsat-bb remailer that SO-50 has
shifted downlink frequency as much as 5khz up. This both from Europe.

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz. The
order of operation is thus: (allow for Doppler as necessary)

1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer
on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater
on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10
minute timer.
[01012006]

=====

FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: OPERATIONAL

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplink: 145.850 145.870 145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

```
unOfficial Webpage: http://www.amsat.org/amsat/sats/n7hpr/fo29.html
[11132005]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Uplink: 145.850 MHz FM
Downlink: 436.795 MHz FM

Official Webpage: http://www.ao27.org
[01012006]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational until March 14th

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz
145.972 MHz
435.100 MHz
2304.100 MHz

AO-7's orbit no longer goes into eclipse, so it is operating on a 24
hour
timer that changes the mode schedule at approximately 0900z each day.
The
timer alternates the satellite's operational mode between Mode A and
Mode B.

Please use QRP when operating on AO-7! There are no batteries, and
excessive
power may cause unexpected behavior and possibly damage the satellite.
Mode
B users are likely to experience a Mode change from Mode B to Mode C if
the
buss voltage drops. This will be marked by a decrease in signal
strength
from AO-7 due to the lower power of Mode C.

AO-7 is expected to remain on this schedule until approximately 14 March
2006
at which time it will re-enter a period of eclipse on each orbit.
```

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php
The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
AO-7 users are requested to log their contacts and observations about
AO-7,
especially any unexpected mode changes.
AO-07 telemetry software webpage:
http://www.qsl.net/k3tz/files/K3TZ_AO-07_Telemetry_Decoder_0.5.zip
[01222006]

=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: Packet
Digipeater: ON

The current Expedition 12 crew is:
Commander: William McArthur - KC5ACR
Flight Engineer: Valery Tokarev - (no call)

Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Callsigns:
Russian: RS0ISS, RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official Webpage: http://www.rac.ca/ariss
Official Fan club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.
[03052006]
NNNN

/EX

SB SAT @ AMSAT W8ISS $ANS-064.S2
WSR 064 Part 2 03/05/2006

AMSAT NEWS SERVICE BULLETIN 064.S2 FROM AMSAT HQ
SILVER SPRING, MD, March 05, 2006
TO ALL RADIO AMATEURS
BID: $ANS-064.S2

XI-V ?O-??
Catalog Number: 28895
Launch Date: October 27, 2005

Status: Operational only within range of Ground station in Japan

Telemetry Downlink: 437.345MHz - FSK 1200bps using AFK protocol
Beacon Downlink: 437.465MHz - CW about 50 WPM

Callsign: JQ1YGW

Oficial Webpage: http://www.space.t.u-tokyo.ac.jp/gs/satinfo-e.html#xi5
Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
[01222006]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: Packet
Digipeater: ON

The current Expedition 12 crew is:
Commander: William McArthur - KC5ACR
Flight Engineer: Valery Tokarev - (no call)

Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Callsigns:
Russian: RS0ISS, RZ3DZR

USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official Webpage: http://www.rac.ca/ariss
Official Fan club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line is NOT translated from Russian and posted.
[03052006]
=====
PCSAT2
Catalog Number: 25544
Launch Date: August 1, 2005

Activated: August 3, 2005
Status: Battery-saving mode
Current Mode: None

Digital Downlink: 435.275 Mhz
Digital Uplink: 145.825 Mhz
PSK-31 Downlink: 435.275 Mhz
PSK-31 Uplink: 29.400 - 29.403 Mhz

Broadcast:
BBS:

Official Webpage: http://web.usna.navy.mil/~bruninga/pcsat2.html

PCSAT2 APRS Packet page: http://www.findu.com/cgi-bin/pcsat2.cgi

This from Bob, WB4APR:

PCSAT2 was off due to low-power shut down for more than a week. We recovered her on Saturday. She should be doing telemetry once every 30 seconds now.
[02122006]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Modes: FM Repeater, V/U-High power
Digipeater - OFF

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
Analog voice uplink: 145.880 MHZ FM

145.880 MHz USB
145.920 MHz FM 67Hz PL tone
1268.700 MHz FM 67Hz PL tone

Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast
Protocol (PBP)

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/

Schedule from the AO-51 Command Team:
March 2006 AO-51 (AMSAT Echo) Schedule

Mar 5
FM Repeater, V/U, High Power Mode
Uplink: 145.920 mhz FM, 67 hz PL Tone
Downlink 435.300 mhz FM

Mar 13
FM Repeater, V/S
Uplink: 145.920 mhz FM, No PL Tone
Downlink 2401.200 mhz FM

Mar 20
FM Repeater, L/U
Uplink: 1268.700 mhz FM
Downlink 435.300 mhz FM

Mar 23
FM Repeater, V/U
Uplink: 145.920 mhz FM, 67 hz PL Tone
Downlink 435.300 mhz FM

9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 435.150 mhz FM, 9k6 PBP Digital
[03052006]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Operational

General Usage Uplink/Downlink:145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

Anyone can work PCSAT-1 with ANY typical 1200 baud packet station on 145.825. Just set your path to UNPROTO APRS via ARISS (the same that you use via ARISS on the ISS or via PCSAT2). Mobiles with the D700 or the TH-D7 HT APRS radios will see packets directly on their front panel and can work it from their mobile.
[01012006]
=====
CUTE-1
Catalog number: 27844
Launched: June 30,2003

Status: Operational

Uplink: ?
Downlink: 436.8375 CW
437.4700 1200 FM ax25 or SRLL (ACTIVE only near Japan ?)
Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[01012006]
=====
GO-32 TECHSAT-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Downlink: 435.225 MHz FM (9600-baud FSK)
(435.325 n/a - temperature problems)
Uplinks: 145.850, 145.890, 145.930 FM
1269.700, 1269.800, 1269.900 FM
Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

Mineo, JE9PEL, reports February 02, 2006:
4XTECH-12>STATUS [02/02/06 20:39:52] <UI R>:
UTC: Thu Feb 02 11:39:35 2006 | Gurwin Techsat1B (V9.86)
BBS(9.86) is active ,AsherSpaceResearchInst greets you.
2 Users/8 Broadcasts, Uplink freq:145.890,145.850,145.930, 1269.800, 1269.900

TechRam2V9.86
TechRam2V9.86.

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[ANS-WSR wishes to thank Jeff, KB2M for this weeks report.]
[02122006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Semi-operational, the digipeater command is on and open for

APRS users.

Uplink: 145.90 145.92 145.94 145.96 MHz FM
(using 1200-baud Manchester FSK)
Downlink: 437.026 MHz SSB (1200-baud PSK)
Mode-S Beacon: 2401.1428 MHz
Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[01012006]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational?

Telemetry Downlink: 145.826 MHz. FM (1200-baud AFSK).
approx. 10 days ON, 10 days OFF
Mode-S Beacon: 2401.500 MHz. ... OFF
UHFBeacon: 435.025 MHz. ... OFF

Official webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm

This from Clive, G3CWV:

Users of OSCAR-11 may be interested in recent additions to my website. Firstly UCAP, this is a simple OSCAR-11 capture program for Windows, and may be used instead of CTERM. It features an accurate time stamp facility, which is useful for checking the satellite's real time clock.

Secondly, the news and telemetry archives have been updated to include all the 2005 data. The URL is http://www.users.zetnet.co.uk/clivew

During the period 14 December 2005 to 23 January 2006 the VHF beacon on 145.826 MHz. has been heard from 23 to 31 December and from 11 to 21 January.

Signals during the December passes were very variable. Sometimes received at good strength, at other times they were inaudible , even with the BFO switched ON (ie. in CW mode). Signals during the January passes tended to be much stronger, and good copy was obtained on most passes.

The on-board clock continues to accumulate a very large error. On 21 January it was 22.14 days slow, having lost 0.33 days (8 hours) since 09 December. However, the rate of change of clock error appears to vary between zero and half an hour per day, over short periods. The greatest changes seem to correspond with poor signals, which suggests that the clock may slow or stop when the battery voltage is low.

All the analogue telemetry channels, 0 to 59 are zero, ie they have failed.
The status channels 60 to 67 are still working.

The satellite is now in continuous sunlight until around 06 May, when eclipses will start again. This should help the satellite to continue transmitting, although continuous sunlight can cause problems due to excessive temperatures. Power supply problems can be caused by poor pointing attitude, ie the sunlight illuminating the ends of the satellite, instead of the solar arrays.

The watchdog timer now appears to have resumed operation on the 20 day cycle, ie. approximately ten days ON followed by 10 days OFF. However, at any time, poor solar attitude, and battery problems, may result in a low 14 volt line supply, which may cause the beacon to switch OFF prematurely, and reset the watchdog timer cycle.

The Beacon frequencies are -

VHF 145.826 MHz. AFSK FM ASCII Telemetry

UHF 435.025 MHz. OFF

S-band 2401.5 MHz. OFF

Listeners to OSCAR-11 may be interested in visiting my website which contains an archive of news & telemetry data. It also contains details about using a soundcard or hardware demodulators for data capture. There is software for capturing data, and decoding ASCII telemetry. The URL is
www.users.zetnet.co.uk/clivew/

If you place this bulletin on a terrestrial packet network, please use the bulletin identifier $BID:U2RPT117.CWV, to prevent duplication.
[01292006]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-064.S3
WSR 064 Part 3 03/05/2006

AMSAT NEWS SERVICE BULLETIN 064.S3 FROM AMSAT HQ
SILVER SPRING, MD, March 05, 2006
TO ALL RADIO AMATEURS
BID: $ANS-064.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

AO-54 SUITSAT
Catalog Number:28934
Release Date: February 3,2006

Status: Non-operational
Modes : FM Voice Telemetry/Greetings
 FM SSTV

Callsign: RS0RS
Downlink: 145.990 FM

Official webpage: http://www.suitsat.org
[02262006]
=====
NCUBE-2
Catalog Number: 28894
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
2407.25
[01012006]
=====
XO-53 SSETI
Catalog Number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 FM 67Hz CTCSS
Voice Downlink: 2401.835 FM
Packet Up/Downlink: 437.250 9k6 packet
Packet Downlink 2401.835 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01292006]
=====
POSAT-1 PO-28
Catalog Number: 22829
Launched : September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 429.950

Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html.
POSAT-1
webpage:http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012006]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launched: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB
Beacon: 145.810 MHz (unmodulated carrier)

AO-10 has been locked into a Mode-B, 70-cm uplink and
2-meter downlink for several years.

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: Downlink only

Uplink: 145.875 145.900 145.925 145.950 MHz FM (1200-baud)
Downlink: 435.808 MHz PSK
Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01012006]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB
Beacon: 29.408 MHz

```
Robot: 29.454 MHz
[05232004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB
Beacon: 145.860 MHz
Robot: 145.908 MHz
[05232004]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink 145.975 MHz FM
Downlink 435.070 MHz FM
[05092004]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink: 145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM
Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01092005]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational?

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB
Beacon: 29.352 MHz (intermittent)
SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990
```

```
Status: CW Beacon only

Uplink: 145.84 145.86 145.88 145.90 MHz FM
(using 1200-baud Manchester FSK)
CW downlink: 437.125 MHz
Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)
Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[05232004]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[08152004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM
Broadcast Callsign: HLO1-11
BBS: HLO1-12

Jim, AA7KC, reports that KO-23's downlink transmitter continues in a
non-operational status.
[05092004]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM (9600-baud FSK)
Downlink: 436.500 MHz FM
Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
```

=====

PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]

=====

SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm

[ANS-WSR has no further information]
[05232004]

=====

SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

STatus: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz and 145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[08082004]

=====

UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlink: 437.025 MHz 437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA
web site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[05092004]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplink V-band 145.840 - 145.990 MHz CW/LSB
U-band 435.550 - 435.800 MHz CW/LSB
L1-band 1269.250 - 1269.500 MHz CW/LSB
L2-band 1268.325 - 1268.575 MHz CW/LSB
S1-band 2400.350 - 2400.600 MHz CW/LSB
Downlink: S2-band 2401.225 - 2401.475 MHz CW/USB
K-band 24,048.010 - 24,048.060 MHz CW/USB
Beacon: 2401.323, 24,048.035
[05232004]

SO-42 SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational
Downlink: 437.075 MHz
Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[08152004]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz
Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[08152004]
=====
NO-45 SAPPHIRE

Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, callsign KE6QMD, as per the user service agreement located at the following
URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Operational

Uplink: 145.850 or 145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz
Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[11202005]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink 435.275 1200-baud AFSK
Downlink 145.825 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01012006]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-064.S4

WSR 064 Part 4 03/05/2006

AMSAT NEWS SERVICE BULLETIN 064.S4 FROM AMSAT HQ
SILVER SPRING, MD,March 05, 2006
TO ALL RADIO AMATEURS
BID: $ANS-064.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE
PROPOSED FOR LAUNCH AT THIS TIME:

PHASE 3E ?O-??
Catalog Number:
Proposed Launch Date: Early 2006

Status: Under Construction

For the latest project status update please visit the AMSAT-DL
P3-E web page:
http://www.amsat-dl.org/p3e/

[ANS-WSR wishes to thank William Leijenaar, PE1RAH for this week's
report]
[10022005]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/amsat/listserv/menu.html

In addition to regular membership, AMSAT-NA offers membership in the
President's Club. Members of the President's Club, as sustaining donors
to AMSAT Project Funds, will be eligible to receive additional benefits.
Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the
memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen,
G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

```
From 9192255484991308077
X-Google-Thread: 10e8ad,1a90dda100c1920d,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news3.google.com!news.glorb.com!hwmnpeer01.lga!hwmedia!
news.highwinds-media.com!hw-filter.phx!newsfe14.phx.POSTED!df0d5ed4!not-for-mail
From: "Kelly" <vohvamwu@tngtalut.com>
Subject: sly>j Totally Hot Spot To See sly>j
Newsgroups: rec.radio.amateur.space
Sender: Kelly <vohvamwu@tngtalut.com>
Reply-To: kgirl@hhn.com
X-Priority: 3
X-Library: Indy 9.00.10
Lines: 8
Message-ID: <2luQf.1371$br4.1143@newsfe14.phx>
NNTP-Posting-Date: Fri, 10 Mar 2006 23:44:14 MST
Organization: TBM newsfeeds
Date: Sat, 11 Mar 2006 01:36:04 -0500
Xref: g2news1.google.com rec.radio.amateur.space:191
```

I discovered a great marketplace for specials,
deals and entertainment at
http://www.cashdeals4u2save.com !

`E$b:

```
From -3674225148784477064
X-Google-Thread: 10e8ad,a0baf31250575dbe,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news3.google.com!border1.nntp.dca.giganews.com!
border2.nntp.dca.giganews.com!nntp.giganews.com!elnk-atl-nf1!
newsfeed.earthlink.net!stamper.news.atl.earthlink.net!
newsread2.news.atl.earthlink.net.POSTED!46041641!not-for-mail
From: "JoAnne Maenpaa" <wb9jej_no-spam@earthling.com>
Newsgroups: rec.radio.amateur.space
Subject: ANS-071 AMSAT News Service Weekly Bulletin
Lines: 424
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <HOlRf.3675$sL2.994@newsread2.news.atl.earthlink.net>
Date: Mon, 13 Mar 2006 21:50:31 GMT
NNTP-Posting-Host: 68.164.229.16
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread2.news.atl.earthlink.net 1142286631 68.164.229.16 (Mon, 13 Mar
2006 13:50:31 PST)
NNTP-Posting-Date: Mon, 13 Mar 2006 13:50:31 PST
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news1.google.com rec.radio.amateur.space:192
```

AMSAT NEWS SERVICE
ANS-071

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

******************** AMSAT 2006 Space Symposium **************************

The AMSAT web team has posted informational pages on the AMSAT web site. You can find the announcement with many links at:
http://www.amsat-org/amsat-new/symposium

Future announcements including the Call For Papers, Online Registration and Online Hotel Registration will be available approximately 1 April 2006.

****

In this edition:

* AMSAT Announces Director of Education
* AMSAT Plans for Dayton Hamvention
* Emergency Aboard CUTE-1.7, Satellite Recovered
* AO-7 To Enter Eclipse Again
* PCSAT-1 Emerges From Eclipse
* SA AMSAT Asks for Help for Amateur Radio Payload on ZASAT
* Amateur Satellite Antenna Polarization Database
* CUTESATs Receive OSCAR Designations
* ARISS Status for the week of March 6, 2006

SB SAT @ AMSAT $ANS-071.01
AMSAT Announces Director of Education

AMSAT News Service Bulletin 071.01
From AMSAT HQ SILVER SPRING, MD.
March 12, 2006
To All RADIO AMATEURS
BID: $ANS-071.01

AMSAT is very pleased to announce that Dr. H. Paul Shuch, N6TX, has agreed to accept the position of Director of Education. Paul, who received his Ph.D. from the University of California, Berkeley, brings to the AMSAT External Relations Team an extensive background in teaching, curriculum development, communications, and engineering.

Paul's highest priority as Director of Education will be integrated curriculum development at all levels (K through PhD), with emphasis on using satellites in the classroom, to enhance the teaching of science, math, geography, social studies, technology, and the social sciences. Paul explained, "I will invite all teachers within AMSAT to share with me their current, past, or planned use of satellites in the classroom, their instructional materials, and their desires in terms of future curricular development."

One area in which AMSAT already has a rich history of educational activities is human spaceflight, most recently through the ARISS Program. Paul states, "I would not presume to modify these existing programs in any way. However, ARISS contacts should not be an end unto themselves." ARISS generates a great deal of enthusiasm, leading up to a contact with the Astronauts on the International Space Station. Coordinating closely with Frank Bauer, AMSAT VP Human Spaceflight, Paul will be seeking ways we can encourage ARISS schools and teachers to take the next step, with programs to leverage that enthusiasm into an ongoing interest in math, science and amateur radio.

Another key area of attention for Paul as Director of Education will be Cubesats. Paul notes that "there is a definite educational mission in satellite construction, which goes far beyond the production and launch of a payload." Paul is seeking to find a way to get satellite builders talking to satellite users, in an educational setting. Paul explains, "It is my hope that by finding specific educational applications of existing and planned small satellites. By providing proper training to satellite developers, we will get them fired up about supporting the classroom use of their creations."

Executive Vice President of AMSAT and External Relations Team leader Lee McLamb, KU4OS said, "I am very excited that with Paul we've found such a talented and motivated person to serve as AMSAT Director of Education". Lee continued, "I'm sure that as Paul develops his educational team, AMSAT, students, and the whole educational community will benefit in ways we haven't yet imagined."

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SB SAT @ AMSAT $ANS-071.02
AMSAT Plans for Dayton Hamvention

AMSAT News Service Bulletin 071.02
From AMSAT HQ SILVER SPRING, MD.
March 12, 2006
To All RADIO AMATEURS
BID: $ANS-071.02

Martha at AMSAT HQ announced this week that AMSAT has a limited number of rooms for the Dayton Hamvention which will occur May 19 - 21. We will be staying at the Hampton Inn at Fairborn. All reservations MUST be made through the AMSAT office. Martha will need a credit card to hold the room. Also include your arrival and departure dates and a daytime phone number.

You can reach Martha at the AMSAT office via:
Phone - 301-589-6062
Fax - 301-608-3410
email - martha@amsat.org

[ANS thanks Martha for the above information]

/EX

SB SAT @ AMSAT $ANS-071.03
Emergency Aboard CUTE-1.7, Satellite Recovered

AMSAT News Service Bulletin 071.03
From AMSAT HQ SILVER SPRING, MD.
March 12, 2006
To All RADIO AMATEURS
BID: $ANS-071.03

Early in the morning on March 9, 2006 controllers sent a routine reset command to the Cute-1.7 satellite to set the low power consumption mode. At this point controllers could no longer hear the CW beacon on 437.385 MHz. Controllers tried sending the reset command on the following pass with no result.

An emergency condition aboard CUTE-1.7 was declared which was attributed to unknown runaway process in the on board computer. Their plan was to continue to try to reset the computer by commands sent from the control station in Tokyo.

Controllers had to wait until CUTE-1.7 was within range of control stations. Late in the day on March 9 the reset command was successful in recovering the satellite. The 437.385 MHz beacon could be heard once again. Housekeeping and battery telemetry showed nominal operation by March 10.

CUTE-1.7 has officially been designated CubeSat-OSCAR 56, or CO-56 by AMSAT.

The main web page for CUTE-1.7 is at:
http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

The latest version of the CW Telemetry decoder software can be downloaded from:
http://lss.mes.titech.ac.jp/ssp/cute1.7/software_e.html

Operator reports can read on-line at:
http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/

Designation of CubeSat-OSCAR 56 is on-line at:
http://lss.mes.titech.ac.jp/ssp/cute1.7/news/060310-1_e.html

[ANS thanks the Tokyo Institute of Technology for the above information]

/EX

SB SAT @ AMSAT $ANS-071.04
AO-7 To Enter Eclipse Again

AMSAT News Service Bulletin 071.04
From AMSAT HQ SILVER SPRING, MD.
March 12, 2006
To All RADIO AMATEURS
BID: $ANS-071.04

AO-7 has been in sunlight for its entire orbit for several weeks. With its 30 year old batteries long-dead, AO-7 becomes operational when its solar cells generate enough power to revive the oldest working satellite in the AMSAT fleet. Amateur satellite operators have enjoyed somewhat predictable operation on this bird because it was not reset every eclipse.

Emily, N1DID has run tests based on AO-7's keplerian elements to determine how much longer the satellite would remain in full sunlight. She noted, "It seems that AO-7 will go back into eclipse on ascending passes sometime on March 15th 2006. This means that the 24 hour timer will be reset when the eclipse occurs."

Emily concludes, "It's a very exciting satellite to work and the builders who sacrificed so much of their personal time crafting it should take pride that after so many years it goes on and on."

[ANS thanks Emily, N1DID for the above information]

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SB SAT @ AMSAT $ANS-071.05
PCSAT-1 Emerges From Eclipse

AMSAT News Service Bulletin 071.05
From AMSAT HQ SILVER SPRING, MD.
March 12, 2006
To All RADIO AMATEURS
BID: $ANS-071.05

PCSAT-1, built and controlled by the US Naval Academy Satellite Lab, is another satellite that is operational when its solar cells can generate enough power. Bob, WB4APR, USNA satellite ground station control operator noted, "PCSAT-1 has just entered full sun for its entire orbit. It should be operating normally for the next week for sure." Bob also noted that PCSAT-1 could continue amateur radio packet operation for a few weeks longer if not overloaded.

During this period, PCSAT-2 will be shifted to its 145.825 downlink so that both PCSAT-1 and PCSAT-2 are operating on the same frequency. This will give packet users on 145.825 an APRS link capability over 12 passes per day combined along with some rare dual hop opportunities.

PCSAT2 and PCSAT-1 will operate on 145.825 MHz and ARISS packet will continue operating on 145.800 MHz. Set UNPROTO APRS VIA WIDE2-2 if you want to get lucky with a dual hop. All three birds will recognize VIA ARISS. If PCSAT-1 reverts to W3ADO-1 stop using it until we can get her reloaded. If it resets after March 16th we will lose her until next winter.

Locations of users along with a listing of recently digipeated packets via PCSAT-1 can be viewed on-line at http://pcsat.aprs.org. To view PCSAT-2 users see http://www.findu.com/cgi-bin/pcsat2.cgi.

Included below is a quick summary of the operating policy for satellites in the US Naval Academy fleet:

1) Un-attended beacons are NOT authorized.
2) Operations when PCSAT-1 is in the dark are NOT authorized.
3) Human contacts only. One packet per minute is typical.
4) This will start after 1830z on 9 March.
5) Report seeing any 2 hop telemetry from one spacecraft to the other.

[ANS thanks Bob, WB4APR and the US Naval Academy Satellite Lab for the above information]

/EX

SB SAT @ AMSAT $ANS-071.06
SA AMSAT Asks for Help for Amateur Radio Payload on ZASAT

AMSAT News Service Bulletin 071.06
From AMSAT HQ SILVER SPRING, MD.
March 12, 2006
To All RADIO AMATEURS
BID: $ANS-071.06

South Africa AMSAT is building the amateur payload to be incorporated into ZASAT, South Africa's new satellite. This will include an FM mode J Transponder and a digitalker. The uplink will be on 2 meters with the downlink on 70 cm. The Digitalker will announce the satellite ID and offer opportunities to upload 30 seconds of audio and repeating it back to earth. The digitalker operating on 2 meters will be an ideal promotion tool for taking amateur radio into schools.

Hans, ZS6AKV asked for assistance to locate needed components to complete the project in time for a December 2006 launch. What is needed includes a source to purchase two CMX808A-P4 ICs in dual-inline packages for the prototype and two CMX808A-E3 in SMD packages for the flight model.

Contact SA AMSAT at saamsat@intekom.co.za if you can help.

[ANS thanks Hans, ZS6AKV and South Africa AMSAT for the above information]

/EX

SB SAT @ AMSAT $ANS-071.07
Amateur Satellite Antenna Polarization Database

AMSAT News Service Bulletin 071.07
From AMSAT HQ SILVER SPRING, MD.
March 12, 2006
To All RADIO AMATEURS
BID: $ANS-071.07

Alan, WA4SCA is building a database of the antenna polarization (ie.: linear, LHCP, or RHCP). Once completed this data will be available to be included with other satellite data such as uplink and downlink frequencies, operating modes, scheduled times, etc. This data will be available to be included on the AMSAT web page or in the Weekly Satellite Report.

Alan's prototype format is shown below for the satellites already accounted for:

AO-51

T: Linear
V: Linear
U: TX A (usually digital) LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

ISS
V: Linear
U: Linear

Information is still needed for VO-52, AO-27, SO-50, PCSAT-1, PCSAT-2, FO-29, etc. If you can provide the data please contact Alan via e-mail wa4sca@amsat.org.

[ANS thanks Alan, WA4SCA for the above information]

/EX

SB SAT @ AMSAT $ANS-071.08
CUTESATs Receive OSCAR Designations

AMSAT News Service Bulletin 071.08
From AMSAT HQ SILVER SPRING, MD.
March 12, 2006
To All RADIO AMATEURS
BID: $ANS-071.08

Bill Tynan, W3XO, coordinator of OSCAR numbers issued this statement on behalf of AMSAT this week:

"By the authority vested in me by the AMSAT-NA President, I am pleased to issue your CubeSat amateur satellites the designation CUBESAT-OSCAR-55 or CO-55 for CUTE-1 and CUBESAT-OSCAR-56 or CO-56 for CUTE-1.7.

AMSAT-NA and I wish to congratulate you and the entire Cute-1.7 team, as well as the Tokyo Institute of Technology. Your pioneering work will certainly inspire others to follow you in constructing and launching this very innovative type of spacecraft."

/EX

SB SAT @ AMSAT $ANS-071.09
ARISS Status for the week of March 6, 2006

AMSAT News Service Bulletin 071.09
From AMSAT HQ SILVER SPRING, MD.
March 12, 2006
To All RADIO AMATEURS

BID: $ANS-071.09

1. Ohio School Contact Successful

On Wednesday, March 1, children from Cincinnati Country Day School in Ohio chatted with Bill McArthur, KC5ACR, via the telebridge station VK5ZAI in Australia. Twelve students asked 19 questions. Approximately 180 students, parents and teachers attended the event, and students from Harry Hallyburton Elementary School listened in to prepare for their own contact on March 3.

One daily and three weekly newspapers covered the contact. The audio was webcast, courtesy of Verizon Conferencing, and fed through the EchoLink AMSAT (node 101 377) and JK1ZRW (node 277 208) conference room servers. Forty-one connections were made to Echolink from 13 countries, including Korea, Slovenia and Thailand. IRLP Discovery Reflector 9010 had 5 connections from the USA, Canada, and Australia, with at least two schools listening in.

The Cincinnati Enquirer ran an article, "Long-distance lesson," on its website. See:
http://news.enquirer.com/apps/pbcs.dll/article?AID=/20060302/NEWS0102/603020352/1077

2. North Carolina School Contact - a Success

A successful contact was experienced by the students at Harry Hallyburton Elementary School in Drexel, North Carolina on March 3. The contact was a telebridge via the station VK5ZAI in Australia; the phone line was donated by Verizon Conferencing. Bill McArthur, KC5ACR, answered 19 questions posed to him by 19 third graders as a crowd of students, teachers, parents and the school superintendent looked on.

At least one local newspaper covered the event. The audio was fed through the EchoLink AMSAT (node 101 377) and JK1ZRW (node 277 208) conference rooms and fifty-one connections were made. Among the stations from 15 countries listening in were the Czech Republic, Iraq, and Trinidade and Martim Vaz Islands. Seven nodes connected to IRLP from 3 countries. Audio was also available over the internet. The News Herald posted a story, "A Message from A Moon Walker," on its website. See:
http://www.morganton.com/servlet/Satellite?pagename=MNH/MGArticle/MNH_BasicArticle&c=MGArticle&cid=1137834516087

Evangelisches Gymnasium Lippstadt in Lippstadt, Nordrhein-Westfalen, Germany completed a contact with the ISS on Wednesday, March 8.

3. Upcoming School Contacts

Bowie High School in Bowie, Maryland has been approved for a contact which will take place on Friday, March 17 at 15:10 UTC, direct via station KB3KAR.

Cleveland Heights High School in Cleveland Heights, Ohio has been scheduled for an ARISS contact on Friday, March 17 at 16:44 UTC.

4. Audio of Discover Engineering Family Day Contact Available

The National Building Museum has posted audio of the ARISS contact from the Discover Engineering Family Day on its website.
See: http://www.nbm.org/Events/transcripts.html
Select "International Space Station Teleconference."

6. Astronaut Training Status

On February 28, astronauts Jim Dutton, Shane Kimbrough, and Tom Marshburn passed their amateur radio exams. Their callsigns will be issued in the near future.

[ANS thanks Carol, KB3LKI for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
JoAnne Maenpaa, WB9JEJ

```
From -7801092767605791221
X-Google-Thread: 10e8ad,a9a4f625a7e6ee40,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news3.google.com!border1.nntp.dca.giganews.com!
border2.nntp.dca.giganews.com!nntp.giganews.com!elnk-atl-nf1!
newsfeed.earthlink.net!stamper.news.atl.earthlink.net!
newsread2.news.atl.earthlink.net.POSTED!46041641!not-for-mail
From: "JoAnne Maenpaa" <wb9jej_no-spam@earthling.com>
Newsgroups: rec.radio.amateur.space
Subject: WSR-071 AMSAT Weekly Satellite Report
Lines: 908
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <mhBRf.3967$sL2.3554@newsread2.news.atl.earthlink.net>
Date: Tue, 14 Mar 2006 15:27:14 GMT
NNTP-Posting-Host: 66.167.67.92
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread2.news.atl.earthlink.net 1142350034 66.167.67.92 (Tue, 14 Mar
2006 07:27:14 PST)
```

NNTP-Posting-Date: Tue, 14 Mar 2006 07:27:14 PST
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news1.google.com rec.radio.amateur.space:193

This report is organized into 4 parts.
Part 1 - operational analog amateur satellites.
Part 2 - operational digital amateur satellites.
Part 3 - non - operational satellites
Part 4 - proposed satellites

SB SAT @ AMSAT W8ISS ANS-071.S1
WSR 071 Part 1 03/12/2006

AMSAT NEWS SERVICE BULLETIN 071.S1 FROM AMSAT HQ
SILVER SPRING, MD, March 12, 2006
TO ALL RADIO AMATEURS
BID: $ANS-071.S1

VO-52 HAMSAT
Catalog Number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/V - Indian Transponder

Proposed frequencies:

Indian Transponder:
Uplink : 435.220 MHz to 435.280 MHz LSB/CW
Downlink: 145.870 MHz to 145.930 MHz USB/CW
Beacom : 145.859330 MHZ CW

Dutch Transponder:
Uplink : 435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW
Beacon : 145.860MHz 12WPM with CW message

Official Webpage: http://www.amsat.in/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is
active. Each transponder has a different beacon, see below:

Indian transponder - unmodulated carrier on
145.936MHz.
Dutch Transponder - CW message on 145.860MHz.
[01152006]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing

Curent Modes: FM Repeater, V/U-High power
Digipeater - OFF

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
Analog voice uplink: 145.880 MHZ FM
145.880 MHz USB
145.920 MHz FM 67Hz PL tone
1268.700 MHz FM 67Hz PL tone

Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast
Protocol (PBP)

Mode and Antenna Polarization:
T:Linear, V:Linear, U:TX A (usually digital) LHCP, TX B (usually analog)
RHCP, L:Linear, S:Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/

Schedule from the AO-51 Command Team:
March 2006 AO-51 (AMSAT Echo) Schedule

Mar 13
FM Repeater, V/S
Uplink: 145.920 mhz FM, No PL Tone
Downlink 2401.200 mhz FM

Mar 20
FM Repeater, L/U
Uplink: 1268.700 mhz FM
Downlink 435.300 mhz FM

Mar 23
FM Repeater, V/U
Uplink: 145.920 mhz FM, 67 hz PL Tone
Downlink 435.300 mhz FM

9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 435.150 mhz FM, 9k6 PBP Digital
[03122006]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Uplink: 145.850 MHz (67.0 Hz PL tone) (See below for operating
procedures)
Downlink: 436.795 MHz

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

There have been unconfirmed reports on the amsat-bb remailer that SO-50
has
shifted downlink frequency as much as 5khz up. This both from Europe.

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The
order of operation is thus: (allow for Doppler as necessary)

1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute
timer
on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the
repeater
on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset
the 10
minute timer.
[01012006]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: OPERATIONAL

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplink: 145.850 145.870 145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

unOfficial Webpage: http://www.amsat.org/amsat/sats/n7hpr/fo29.html
[11132005]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Uplink: 145.850 MHz FM

Downlink: 436.795 MHz FM

Official Webpage: http://www.ao27.org
[01012006]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational until March 14th

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz
145.972 MHz
435.100 MHz
2304.100 MHz

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php
The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
AO-7 users are requested to log their contacts and observations about
AO-7, especially any unexpected mode changes.
AO-07 telemetry software webpage:
http://www.qsl.net/k3tz/files/K3TZ_AO-07_Telemetry_Decoder_0.5.zip
[03122006]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: Packet / Occasional Voice
Digipeater: ON

The current Expedition 12 crew is:
Commander: William McArthur - KC5ACR
Flight Engineer: Valery Tokarev - (no call)

Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:

Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Callsigns:
Russian: RS0ISS, RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official Webpage: http://www.rac.ca/ariss
Official Fan club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.
[03052006]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-071.S2
WSR 071 Part 2 03/12/2006

AMSAT NEWS SERVICE BULLETIN 071.S2 FROM AMSAT HQ
SILVER SPRING, MD, March 12, 2006
TO ALL RADIO AMATEURS
BID: $ANS-071.S2

CO-56 XI-V
Catalog Number: 28895
Launch Date: October 27, 2005

Status: Operational only within range of Ground station in Japan

Telemetry Downlink: 437.345MHz - FSK 1200bps using AFK protocol
Beacon Downlink: 437.465MHz - CW about 50 WPM

Callsign: JQ1YGW

Oficial Webpage: http://www.space.t.u-tokyo.ac.jp/gs/satinfo-e.html#xi5
Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
[03122006]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: Packet
Digipeater: ON

The current Expedition 12 crew is:
Commander: William McArthur - KC5ACR
Flight Engineer: Valery Tokarev - (no call)

Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Callsigns:
Russian: RS0ISS, RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official Webpage: http://www.rac.ca/ariss
Official Fan club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line is NOT translated from Russian and posted.
[03052006]

=====
PCSAT2
Catalog Number: 25544
Launch Date: August 1, 2005

Activated: August 3, 2005
Status: Battery-saving mode
Current Mode: None

Digital Downlink: 435.275 Mhz
Digital Uplink: 145.825 Mhz
PSK-31 Downlink: 435.275 Mhz
PSK-31 Uplink: 29.400 - 29.403 Mhz

Broadcast:
BBS:

Official Webpage: http://web.usna.navy.mil/~bruninga/pcsat2.html
PCSAT2 APRS Packet page: http://www.findu.com/cgi-bin/pcsat2.cgi
aprstlm Telemetry Decoder program:

```
http://www.xciv.org/~iain/aprstlm/v1.2/
[03122006]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Modes: FM Repeater, V/U-High power
Digipeater - OFF

Analog voice downlink: 435.300 MHz FM
         435.150 MHz FM
Analog voice uplink: 145.880 MHZ FM
       145.880 MHz USB
       145.920 MHz FM 67Hz PL tone
      1268.700 MHz FM 67Hz PL tone

Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
    2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast
  Protocol (PBP)

Mode and Antenna Polarization:
T:Linear, V:Linear, U:TX A (usually digital) LHCP, TX B (usually analog)
RHCP, L:Linear, S:Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/

Schedule from the AO-51 Command Team:
March 2006 AO-51 (AMSAT Echo) Schedule

Mar 13
FM Repeater, V/S
Uplink: 145.920 mhz FM, No PL Tone
Downlink 2401.200 mhz FM

Mar 20
FM Repeater, L/U
Uplink: 1268.700 mhz FM
Downlink 435.300 mhz FM

Mar 23
FM Repeater, V/U
Uplink: 145.920 mhz FM, 67 hz PL Tone
Downlink 435.300 mhz FM

9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 435.150 mhz FM, 9k6 PBP Digital
```

[03122006]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Operational

General Usage Uplink/Downlink:145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org
aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[03122006]
=====
CO-55 CUTE-1
Catalog number: 27844
Launched: June 30,2003

Status: Operational

Uplink: ?
Downlink: 436.8375 CW
437.4700 1200 FM ax25 or SRLL (ACTIVE only near Japan ?)
Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[03122006]
=====
GO-32 TECHSAT-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Downlink: 435.225 MHz FM (9600-baud FSK)
(435.325 n/a - temperature problems)
Uplinks: 145.850, 145.890, 145.930 FM
1269.700, 1269.800, 1269.900 FM
Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

Mineo, JE9PEL, reports February 02, 2006:

```
4XTECH-12>STATUS [02/02/06 20:39:52] <UI R>:
UTC: Thu Feb 02 11:39:35 2006 | Gurwin Techsat1B (V9.86)
BBS(9.86) is active ,AsherSpaceResearchInst greets you.
2 Users/8 Broadcasts, Uplink freq:145.890,145.850,145.930, 1269.800,
1269.900

TechRam2V9.86
TechRam2V9.86.
```

More information of GO-32 can be found at:

http://www.iarc.org/techsat/techsat.html
[ANS-WSR wishes to thank Jeff, KB2M for this weeks report.]
[02122006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Semi-operational, the digipeater command is on and open for
APRS users.

Uplink: 145.90 145.92 145.94 145.96 MHz FM
(using 1200-baud Manchester FSK)
Downlink: 437.026 MHz SSB (1200-baud PSK)
Mode-S Beacon: 2401.1428 MHz
Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[01012006]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational?

Telemetry Downlink: 145.826 MHz. FM (1200-baud AFSK).
approx. 10 days ON, 10 days OFF
Mode-S Beacon: 2401.500 MHz. ... OFF
UHFBeacon: 435.025 MHz. ... OFF

Official webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[03122006]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-071.S3
WSR 071 Part 3 03/12/2006

AMSAT NEWS SERVICE BULLETIN 071.S3 FROM AMSAT HQ
SILVER SPRING, MD, March 12, 2006
TO ALL RADIO AMATEURS
BID: $ANS-071.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

AO-54 SUITSAT
Catalog Number:28934
Release Date: February 3,2006

Status: Non-operational

Modes : FM Voice Telemetry/Greetings
 FM SSTV

Callsign: RS0RS
Downlink: 145.990 FM

Official webpage: http://www.suitsat.org
[02262006]
=====
NCUBE-2
Catalog Number: 28894
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
2407.25
[01012006]
=====
XO-53 SSETI
Catalog Number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 FM 67Hz CTCSS
Voice Downlink: 2401.835 FM
Packet Up/Downlink: 437.250 9k6 packet
Packet Downlink 2401.835 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01292006]
=====
POSAT-1 PO-28
Catalog Number: 22829
Launched : September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 429.950

Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html.
POSAT-1
webpage:http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012006]
=====

AO-10 OSCAR 10
Catalog number: 14129
Launched: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB
Beacon: 145.810 MHz (unmodulated carrier)

AO-10 has been locked into a Mode-B, 70-cm uplink and
2-meter downlink for several years.

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: Downlink only

Uplink: 145.875 145.900 145.925 145.950 MHz FM (1200-baud)
Downlink: 435.808 MHz PSK
Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01012006]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB
Beacon: 29.408 MHz
Robot: 29.454 MHz
[05232004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB
Beacon: 145.860 MHz

Robot: 145.908 MHz
[05232004]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink 145.975 MHz FM
Downlink 435.070 MHz FM
[05092004]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink: 145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM
Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01092005]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational?

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB
Beacon: 29.352 MHz (intermittent)
SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplink: 145.84 145.86 145.88 145.90 MHz FM
(using 1200-baud Manchester FSK)
CW downlink: 437.125 MHz
Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)
Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[05232004]

```
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[08152004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM
Broadcast Callsign: HLO1-11
BBS: HLO1-12

Jim, AA7KC, reports that KO-23's downlink transmitter continues in a
non-operational status.
[05092004]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM (9600-baud FSK)
Downlink: 436.500 MHz FM
Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
```

SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm

[ANS-WSR has no further information]
[05232004]
=====
SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

STatus: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz and 145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[08082004]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlink: 437.025 MHz 437.400 MHz
Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[05092004]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplink V-band 145.840 - 145.990 MHz CW/LSB
U-band 435.550 - 435.800 MHz CW/LSB
L1-band 1269.250 - 1269.500 MHz CW/LSB
L2-band 1268.325 - 1268.575 MHz CW/LSB
S1-band 2400.350 - 2400.600 MHz CW/LSB
Downlink: S2-band 2401.225 - 2401.475 MHz CW/USB
K-band 24,048.010 - 24,048.060 MHz CW/USB
Beacon: 2401.323, 24,048.035
[05232004]

SO-42 SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational
Downlink: 437.075 MHz
Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[08152004]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz
Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[08152004]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
callsign KE6QMD, as per the user service agreement located at the
following

URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Operational

Uplink: 145.850 or 145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz
Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[11202005]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink 435.275 1200-baud AFSK
Downlink 145.825 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01012006]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-071.S4
WSR 071 Part 4 03/12/2006

AMSAT NEWS SERVICE BULLETIN 071.S4 FROM AMSAT HQ
SILVER SPRING, MD,March 12, 2006
TO ALL RADIO AMATEURS
BID: $ANS-071.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE
PROPOSED FOR LAUNCH AT THIS TIME:

PHASE 3E ?O-??
Catalog Number:

Proposed Launch Date: Early 2006

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/

[ANS-WSR wishes to thank William Leijenaar, PE1RAH for this week's report]
[10022005]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

- AMSAT News Service (ANS)
- General satellite discussion (AMSAT-BB)
- Orbit data (KEPS)
- Manned space missions (SAREX)
- District of Columbia area (AMSAT-DC)
- New England area (AMSAT-NE)
- AMSAT Educational Liaison mailing list (AMSAT-EDU)
- AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/amsat/listserv/menu.html

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

From -2234475676805071900
X-Google-Thread: 10e8ad,4d2b396a1d3c50d9,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!postnews.google.com!z34g2000cwc.googlegroups.com!not-for-mail
From: "hxc98@yahoo.com" <hxc98@yahoo.com>
Newsgroups: rec.radio.amateur.space
Subject: APRSPoint new version sale
Date: 17 Mar 2006 22:16:35 -0800
Organization: http://groups.google.com
Lines: 10
Message-ID: <1142662595.379864.298930@z34g2000cwc.googlegroups.com>
NNTP-Posting-Host: 221.232.77.33
Mime-Version: 1.0
Content-Type: text/plain; charset="iso-8859-1"
X-Trace: posting.google.com 1142662605 12502 127.0.0.1 (18 Mar 2006 06:16:45 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Sat, 18 Mar 2006 06:16:45 +0000 (UTC)
User-Agent: G2/0.2
X-HTTP-UserAgent: Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1; SV1; .NET CLR 1.1.4322; Alexa Toolbar),gzip(gfe),gzip(gfe)
Complaints-To: groups-abuse@google.com
Injection-Info: z34g2000cwc.googlegroups.com; posting-host=221.232.77.33;
   posting-account=qkd21QwAAAAs0AsHsbNsv0PdNKEViQPM
Xref: g2news1.google.com rec.radio.amateur.space:194

A new version of APRSPoint is released, new features include,

1. Implemented APRS server filter setting,
2. Enabled auto connect for TCP connection,
3. Customization of track line width and style,

and numerous other fixes and enhancements. Please visit http://www.aprspoint.com for details on this new release and sale.
Thanks.

From -106928647837887425

```
X-Google-Thread: 108122,9448baa26e4e08db,start
X-Google-Thread: 1109af,9448baa26e4e08db,start
X-Google-Thread: 103407,9448baa26e4e08db,start
X-Google-Thread: 10e8ad,9448baa26e4e08db,start
X-Google-Attributes: gid108122,gid1109af,gid103407,gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!news4.google.com!newshub.sdsu.edu!
logbridge.uoregon.edu!newsfeeds.ihug.co.nz!ihug.co.nz!ken-
transit.news.telstra.net!lon-in.news.telstra.net!news.telstra.net!news-
server.bigpond.net.au!53ab2750!not-for-mail
From: alandeletethisdevlin@bigREMOVEpond.com
Newsgroups:
rec.radio.amateur.equipment,rec.radio.swap,aus.electronics,rec.radio.amateur.space
Subject: FS : ICOM IC-1275 RARE, IC-475, IC-375 Radio's ...
Message-ID: <4422412d.31126136@news-server>
X-Newsreader: Forte Free Agent 1.11/32.235
Lines: 21
Date: Thu, 23 Mar 2006 06:45:44 GMT
NNTP-Posting-Host: 155.143.222.239
X-Complaints-To: abuse@bigpond.net.au
X-Trace: news-server.bigpond.net.au 1143096344 155.143.222.239 (Thu, 23 Mar 2006
17:45:44 EST)
NNTP-Posting-Date: Thu, 23 Mar 2006 17:45:44 EST
Organization: BigPond Internet Services
Xref: g2news1.google.com rec.radio.amateur.equipment:3214 rec.radio.swap:3216
aus.electronics:5523 rec.radio.amateur.space:195
```

Gidday All,
I have just updated my Website with some lovely and hard to find ICOM Radio's forsale.

There's a VERY RARE IC-1275... 23 cm Radio... plus an IC-475, IC-375
and an IC-271/471 & 1271 Package available too.

Serious Buyers only please...

Cheers and thank you,

Alan - VK3XPD

Alan Devlin.

RF RESALE... where Honesty & Integrity are paramount !
Melbourne, Australia.

WEB PAGE URL http://www.users.bigpond.com/alandevlin/index.html

```
From 3188070473901157082
X-Google-Thread: 10e8ad,22fb1d90b5881192,start
X-Google-Attributes: gid10e8ad,public
```

X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!atl-c05.usenetserver.com!news.usenetserver.com!pink.octanews.net!green.octanews.net!news-out.octanews.net!news.glorb.com!atl-c03.usenetserver.com!news.usenetserver.com!elnk-atl-nf1!newsfeed.earthlink.net!stamper.news.atl.earthlink.net!newsread2.news.atl.earthlink.net.POSTED!46041641!not-for-mail
From: "JoAnne Maenpaa" <wb9jej_no-spam@earthling.com>
Newsgroups: rec.radio.amateur.space
Subject: ANS-078 AMSAT News Service Weekly Bulletin
Lines: 255
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <NTGUf.9634$sL2.7570@newsread2.news.atl.earthlink.net>
Date: Fri, 24 Mar 2006 00:16:45 GMT
NNTP-Posting-Host: 68.165.61.80
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread2.news.atl.earthlink.net 1143159405 68.165.61.80 (Thu, 23 Mar 2006 16:16:45 PST)
NNTP-Posting-Date: Thu, 23 Mar 2006 16:16:45 PST
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news1.google.com rec.radio.amateur.space:196

AMSAT NEWS SERVICE
ANS-078

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
- PCSAT2 Operations Plan
- AMSAT-UK Colloquium First Call for Papers
- 3rd Annual CubeSat Workshop
- Satellites and Spaghetti
- ARISS Status - 13 March 2006

SB SAT @ AMSAT $ANS-078.01
PCSAT2 Operations Plan

AMSAT News Service Bulletin 078.01
From AMSAT HQ SILVER SPRING, MD.
March 19, 2006
To All RADIO AMATEURS
BID: $ANS-078.01

PCSAT-1 and PCSAT2 are still flying in constellation on the same simplex digipeater frequency of 145.825. Several dual hop packets have been seen. To attempt a dual hop use VIA WIDE2-2 or VIA ARISS,ARISS. This arrangement will be maintained this as long as PC1 stays alive.

The next several days will have several PCSAT2 configuration changes as follows:

17 March Two ARISS school contacts in USA.
At 1823z PC2 shifted back from UHF to 2m.

19 March 2047z PC2 OFF for Soyuz re-docking.

20 March 0645 - 0715 Soyuz undock/re-dock.
1101z PC2 re-enabled and switched to 2m.

21 March 0817z PC2 switches from 2m to UHF.
1354z ARISS School contact in UK.
1817z ARISS school contact in USA.
1827z PC2 switches back from UHF to 2m

[ANS thanks Bob, WB4APR, for the above information]

/EX

SB SAT @ AMSAT $ANS-078.02
AMSAT-UK Colloquium First Call for Papers

AMSAT News Service Bulletin 078.02
From AMSAT HQ SILVER SPRING, MD.
March 19, 2006
To All RADIO AMATEURS
BID: $ANS-078.02

This is the first call for speakers for the 21st Amsat-UK Colloquium which will be held at Surrey University, Guildford, Surrey, U.K., from Friday, 28 July to Sunday, 30 July 2006.

AMSAT-UK invites speakers, about amateur radio space and associated activities, for this event. They are also invited to submit papers for the "Proceedings" document which will be published at the same time but printed papers are not mandatory. We normally prefer authors to present talks themselves rather than having someone else give them in the authors' absence. We also welcome "unpresented" papers for the Proceedings document.

Offers of talks should be submitted as soon as possible; the final date for full documents to be received is mid-June 2004 in order that the "Proceedings" document be available to participants.

Submissions should be sent *ONLY* to David Johnson, G4DPZ, via the following routes:

Internet e-mail: g4dpz@amsat.org
SnailMail: QTHR from http://www.qrz.com

AMSAT-UK also invites anyone with requests for Program Topics to submit them as soon as possible to G4DPZ. Invitations for any papers on specific subjects will be included in the future call. Likewise if anyone knows of a good speaker, please send contact and other information to G4DPZ.

Additionally, AMSAT-UK will be running sessions specifically for beginners to amateur satellite operating on the Friday; volunteers are wanted to speak at these sessions.

73 Jim, G3WGM
Hon Sec AMSAT- UK

[ANS thanks Jim, G3WGM for the above information]

/EX

SB SAT @ AMSAT $ANS-078.03
3rd Annual CubeSat Workshop

AMSAT News Service Bulletin 078.03
From AMSAT HQ SILVER SPRING, MD.
March 19, 2006
To All RADIO AMATEURS
BID: $ANS-078.03

The 3rd Annual CubeSat Workshop in April is approaching fast and registration is now open! For event information, visit the CubeSat Workshop Webpage. Be sure to complete the registration form online if you plan on attending.   For other information, visit the CubeSat Website, www.cubesat.org

A schedule of events will be posted on the website shortly. The workshop will start at 12 noon on Thursday, 27 April to accommodate anyone flying into San Luis Obispo in the morning.

Special hotel rates for the workshop have been reserved at the Holiday Inn Express and Sands Suites and Motel. There are several other events going on that weekend, and these two hotels have the best rates. Go to the accommodations page on the CubeSat Workshop webpage for more information. Shuttle service will be provided at the Holiday Inn Express to the workshop and the Sands Suites and Motel is adjacent to the Holiday Inn Express.

[ANS thanks Roland for the above information]

/EX

SB SAT @ AMSAT $ANS-078.04
Satellites and Spaghetti

AMSAT News Service Bulletin 078.04
From AMSAT HQ SILVER SPRING, MD.
March 19, 2006
To All RADIO AMATEURS
BID: $ANS-078.04

The Indian River Amateur Radio Club will hold their annual "Satellites and Spaghetti" event on 01 April 2006. This year the event will be held at Kelly Park East on Merritt Island, Florida. "We begin setting up about 1300Z and hope to be on the air by 1400Z", says Lee, KU4OS. Lee continued, "This year there will be fourteen passes allowing us a chance to make contacts on six different satellites". The Satellites and Spaghetti event will be use the Club callsign, W4NLX and anyone interested in amateur satellites is welcome.

[ANS thanks Lee, KU4OS for the above information]

/EX

SB SAT @ AMSAT $ANS-078.05
ARISS Status - 13 March 2006

AMSAT News Service Bulletin 078.05
From AMSAT HQ SILVER SPRING, MD.
March 19, 2006
To All RADIO AMATEURS
BID: $ANS-078.05

1. German School Contact Successful

On Wednesday, March 8, Bill McArthur, KC5ACR, spoke with students from the school, Evangelisches Gymnasium Lippstadt in Lippstadt, Nordrhein-Westfalen, Germany. ARISS lesson plans were incorporated into the school's curriculum and all students participating in the contact took and passed their amateur radio exams. Twenty-one students asked one question each of the astronaut as 400 students, teachers and parents gathered in the school's assembly hall to witness the event. Media coverage included the TV channel Westdeutscher Rundfunk WDR, the newspaper "Der Patriot," and the two radio channels Hellweg-Radio and WDR 1 Live. Der Patriot's article, "Erfolgreich ins All gefunk," may be found on this website:
http://www.derpatriot.de/index.php?content=lokal_artikel&ID=Pr-214936&RESSORT=LP&PHPSESSID=596fedd8b7b18d324b31ac3183747ec0

2. Upcoming School Contacts

Circolo Didattico Statale (G.Settanni), Rutigliano, Italy, has been approved for a contact on Tuesday, March 21 at 13:55 UTC.

Sir James Lougheed Elementary School in Calgary, Alberta, Canada, has been approved for a contact with the ISS. It is scheduled for Tuesday, March 21 at 18:19 UTC.

3. ARRL Article Covers Country Day and Hallyburton Contacts

ARRL ran a web story on the Cincinnati Country Day and Harry Hallyburton Elementary School contacts. The article, "Ohio, North Carolina Youngsters Help ISS Commander Boost His QSO Record," may be found at: http://www.arrl.org/news/stories/2006/03/10/1/?nc=1

4. McArthur Still on the Air

As Increment 12 winds down, McArthur continues to contact stations on the ground. His list of DXCC entities worked continues to grow and currently totals 128 countries. On March 9, ARRL ran a web story on McArthur's general contacts with stations in Hawaii. "NA1SS QSOs bring smiles in Hawaii" may be found on the website: http://www.arrl.org/

5. Harry Hallyburton Elementary School Contact

Burke County Public Schools posted a short summary of the Harry Hallyburton Elementary School - ARISS contact on its website. "Hallyburton Students talk to the International Space Station!" may be viewed at this location: www.burke.k12.nc.us

6. Astronaut Commends ARISS Member

Bill McArthur relayed a compliment to ARISS member Tony Hutchison for a job well done. Tony operates the Australian telebridge station VK5ZAI for the ARISS program.

7. Astronaut Training Status

On 28 February 2006, astronauts Jim Dutton, Shane Kimbrough, and Tom Marshburn took and passed their amateur radio exams. They have been issued the following callsigns:

Thomas H. Marshburn, KE5HOC
Robert S. Kimbrough, KE5HOD
James P. Dutton Jr., KE5HOE

[ANS thanks Carol, KB3LKI for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73, This week's ANS Editor,
Lee McLamb, KU4OS
ku4os at amsat dot org

From 363778271391324291
X-Google-Thread: 10e8ad,6b7bb8c4c71de099,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII
Path: g2news1.google.com!news3.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx01.iad01.newshosting.com!newshosting.com!
207.69.154.102.MISMATCH!elnk-atl-nf2!newsfeed.earthlink.net!
stamper.news.atl.earthlink.net!newsread2.news.atl.earthlink.net.POSTED!46041641!
not-for-mail
From: "JoAnne Maenpaa" <wb9jej_no-spam@earthling.com>
Newsgroups: rec.radio.amateur.space
Subject: WSR-078 AMSAT Weekly Satellite Report
Lines: 1175
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <STGUf.9635$sL2.7183@newsread2.news.atl.earthlink.net>
Date: Fri, 24 Mar 2006 00:16:50 GMT
NNTP-Posting-Host: 68.165.61.80
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread2.news.atl.earthlink.net 1143159410 68.165.61.80 (Thu, 23 Mar 2006 16:16:50 PST)
NNTP-Posting-Date: Thu, 23 Mar 2006 16:16:50 PST
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news1.google.com rec.radio.amateur.space:197

This report is organized into 4 parts.
Part 1 - operational analog amateur satellites.
Part 2 - operational digital amateur satellites.
Part 3 - non - operational satellites
Part 4 - proposed satellites

SB SAT @ AMSAT W8ISS ANS-078.S1
WSR 078 Part 1 03/19/2006

AMSAT NEWS SERVICE BULLETIN 078.S1 FROM AMSAT HQ

SILVER SPRING, MD, March 19, 2006
TO ALL RADIO AMATEURS
BID: $ANS-078.S1

VO-52 HAMSAT
Catalog Number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/V - Indian Transponder

Proposed frequencies:

Indian Transponder:
Uplink : 435.220 MHz to 435.280 MHz LSB/CW
Downlink: 145.870 MHz to 145.930 MHz USB/CW
Beacom : 145.859330 MHZ CW

Dutch Transponder:
Uplink : 435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW
Beacon : 145.860MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsat.in/hamsat.htm

To know what transponder is switched on please listen for the beacon that is active. Each transponder has a different beacon, see below:

Indian transponder - unmodulated carrier on 145.936MHz.
Dutch Transponder - CW message on 145.860MHz.
[03192006]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Modes: FM Repeater, V/U-High power
Digipeater - OFF

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
Analog voice uplink: 145.880 MHZ FM
145.880 MHz USB
145.920 MHz FM 67Hz PL tone
1268.700 MHz FM 67Hz PL tone

Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast
Protocol (PBP)

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/

This from Mike Kingery, KE4AZN:
AO-51 has reset to the boot loader and I will have to reload the
software. I
started that tonight. It will be at least Tuesday night before I can
finish
the job. I'm sorry to those looking to use the L band uplink. We will
re-
schedule that in April. When I'm done with the reload I will put AO-51
into
the mode scheduled for 23 March.

I ran and WOD data file for to many days, which created a large file
data
file onboard the satellite. That caused the software reset.

Schedule from the AO-51 Command Team:
March 2006 AO-51 (AMSAT Echo) Schedule

Mar 23
FM Repeater, V/U
Uplink: 145.920 mhz FM, 67 hz PL Tone
Downlink 435.300 mhz FM

9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 435.150 mhz FM, 9k6 PBP Digital
[03192006]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Uplink: 145.850 MHz (67.0 Hz PL tone) (See below for operating

procedures)
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

There have been unconfirmed reports on the amsat-bb remailer that SO-50
has
shifted downlink frequency as much as 5khz up. This both from Europe.

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The
order of operation is thus: (allow for Doppler as necessary)

1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute
timer
on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the
repeater
on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset
the 10
minute timer.
[01012006]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: OPERATIONAL

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplink: 145.850 145.870 145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

unOfficial Webpage: http://www.amsat.org/amsat/sats/n7hpr/fo29.html
[11132005]
=====

AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Uplink: 145.850 MHz FM
Downlink: 436.795 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[01012006]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational until March 14th

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz
145.972 MHz
435.100 MHz
2304.100 MHz

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php
The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
AO-7 users are requested to log their contacts and observations about AO-7, especially any unexpected mode changes.
AO-07 telemetry software webpage:
http://www.qsl.net/k3tz/files/K3TZ_AO-07_Telemetry_Decoder_0.5.zip

This from Emily, N1DID:
AO-7 is Operational
As of 15 March 2006 AO-7 entered eclipse on the ascending node of it's orbit for a short period of time and will turn off during that period, but otherwise remains operational providing stations observe QRP power levels. It is difficult to tell if the 24 hour timer will be reset or if there is enough energy to keep it running during the short periods of eclipse AO-7 experiences for the next few weeks. We should know in a few days by

observing the modes reported on each orbit.

Please keep your power low! For additional information please read the AO-7 Usage Guidelines on the AO-7 Log and Resource Site located at:
http://www.planetemily.com/ao7
[ANS-WSR wishes to thank Emily Clarke, N1DID]
[03192006]

=====

INTERNATIONAL SPACE STATION (ISS) - ARISS

Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: Packet / Occasional Voice
Digipeater: ON

The current Expedition 12 crew is:
Commander: William McArthur - KC5ACR
Flight Engineer: Valery Tokarev - (no call)

Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Russian: RS0ISS, RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official Webpage: http://www.rac.ca/ariss
Official Fan club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line is NOT translated from Russian and posted.

[03192006]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-078.S2
WSR 078 Part 2 03/19/2006

AMSAT NEWS SERVICE BULLETIN 078.S2 FROM AMSAT HQ
SILVER SPRING, MD, March 19, 2006
TO ALL RADIO AMATEURS
BID: $ANS-078.S2

CO-56 XI-V
Catalog Number: 28895
Launch Date: October 27, 2005

Status: Operational only within range of Ground station in Japan

Telemetry Downlink: 437.345MHz - FSK 1200bps using AFK protocol
Beacon Downlink: 437.465MHz - CW about 50 WPM

Callsign: JQ1YGW

Oficial Webpage: http://www.space.t.u-tokyo.ac.jp/gs/satinfo-e.html#xi5
Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
[03122006]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: Packet
Digipeater: ON

The current Expedition 12 crew is:
Commander: William McArthur - KC5ACR
Flight Engineer: Valery Tokarev - (no call)

Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Russian: RS0ISS, RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official Webpage: http://www.rac.ca/ariss
Official Fan club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is NOT translated from Russian and posted.
[03192006]
=====
PCSAT-2
Catalog Number: 25544
Launch Date: August 1, 2005

Activated: August 3, 2005
Status: Operational
Current Mode: Digipeater

Digital Downlink: 435.275 Mhz
Digital Uplink: 145.825 Mhz

PSK-31 Downlink: 435.275 Mhz
PSK-31 Uplink: 29.400 - 29.403 Mhz

Broadcast:
BBS:

Official Webpage: http://web.usna.navy.mil/~bruninga/pcsat2.html
PCSAT2 APRS Packet page: http://www.findu.com/cgi-bin/pcsat2.cgi
aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/

This from Robert Bruninga, WB4APR:
PCSAT-1 and PCSAT2 are still flying in constellation on the same
simplex
digipeater frequency of 145.825. Several dual hop packets have been seen
(use
VIA WIDE2-2 or VIA ARISS,ARISS for dual hops). We will maintain this
as
long as PC1 stays alive.

But the next several days have lots of re-arrangements as follows:

16 March 1935z PC2 shifted from 2m to UHF.
17 March Two ARISS school contacts in USA.
At 1823z PC2 shifted back from UHF to 2m.
19 March 2047z PC2 OFF for Soyuz re-docking.
20 March 0645 - 0715 Soyuz undock/re-dock.
1101z PC2 re-enabled and switched to 2m.
21 March 0817z PC2 switches from 2m to UHF.
1354z ARISS School contact in UK.
1817z ARISS school contact in USA.
1827z PC2 switches back from UHF to 2m

[ANS-WSR wishes to thank Robert Bruninga, WB4PR for this weeks information.]
[03192006]

=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Modes: FM Repeater, V/U-High power
Digipeater - OFF

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
Analog voice uplink: 145.880 MHZ FM
145.880 MHz USB
145.920 MHz FM 67Hz PL tone
1268.700 MHz FM 67Hz PL tone

Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast Protocol (PBP)

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/

This from Mike Kingery, KE4AZN:
AO-51 has reset to the boot loader and I will have to reload the software. I started that tonight. It will be at least Tuesday night before I can finish

the job. I'm sorry to those looking to use the L band uplink. We will re-schedule that in April. When I'm done with the reload I will put AO-51 into the mode scheduled for 23 March.

I ran and WOD data file for to many days, which created a large file data file onboard the satellite. That caused the software reset.

Schedule from the AO-51 Command Team:
March 2006 AO-51 (AMSAT Echo) Schedule

Mar 23
FM Repeater, V/U
Uplink: 145.920 mhz FM, 67 hz PL Tone
Downlink 435.300 mhz FM

9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 435.150 mhz FM, 9k6 PBP Digital
[03192006]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Operational

General Usage Uplink/Downlink:145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org
aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/

This from Robert Bruninga, WB4APR:
PCSAT-1 and PCSAT2 are still flying in constellation on the same simplex digipeater frequency of 145.825. Several dual hop packets have been seen (use VIA WIDE2-2 or VIA ARISS,ARISS for dual hops). We will maintain this as long as PC1 stays alive.

But the next several days have lots of re-arrangements as follows:

16 March 1935z PC2 shifted from 2m to UHF.
17 March Two ARISS school contacts in USA.
     At 1823z PC2 shifted back from UHF to 2m.
19 March 2047z PC2 OFF for Soyuz re-docking.
20 March 0645 - 0715 Soyuz undock/re-dock.

```
     1101z PC2 re-enabled and switched to 2m.
21 March 0817z  PC2 switches from 2m to UHF.
     1354z  ARISS School contact in UK.
     1817z  ARISS school contact in USA.
     1827z  PC2 switches back from UHF to 2m

[ANS-WSR wishes to thank Robert Bruninga, WB4PR for this weeks
information.]
[03192006]
=====
CO-55 CUTE-1
Catalog number: 27844
Launched: June 30,2003

Status: Operational

Uplink: ?
Downlink: 436.8375 CW
437.4700 1200 FM ax25 or SRLL (ACTIVE only near Japan ? )
Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[03122006]
=====
GO-32 TECHSAT-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Downlink: 435.225 MHz FM (9600-baud FSK)
(435.325 n/a - temperature problems)
Uplinks: 145.850, 145.890, 145.930 FM
1269.700, 1269.800, 1269.900 FM
Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

Mineo, JE9PEL, reports February 02, 2006:
4XTECH-12>STATUS [02/02/06 20:39:52] <UI R>:
UTC: Thu Feb 02 11:39:35 2006 | Gurwin Techsat1B (V9.86)
BBS(9.86) is active ,AsherSpaceResearchInst greets you.
2 Users/8 Broadcasts, Uplink freq:145.890,145.850,145.930, 1269.800,
1269.900

TechRam2V9.86
TechRam2V9.86.

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[ANS-WSR wishes to thank Mineo, JE9PEL, for this weeks information.]
[02122006]
=====
AO-16 PACSAT
Catalog number: 20439
```

Launch Date: January 22, 1990

Status: Semi-operational, the digipeater command is on and open for APRS users.

Uplink: 145.90 145.92 145.94 145.96 MHz FM
(using 1200-baud Manchester FSK)
Downlink: 437.026 MHz SSB (1200-baud PSK)
Mode-S Beacon: 2401.1428 MHz

Mode and Antenna Polarization:
U: RC 437.050 MHz RHCP
   PSK 437.025 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html

This from Paul Williamson,KB5MU:
There has been no loss of command function on AO-16.

The BBS is down because of localized memory failures in the mass memory used for message (file) storage, caused presumably by radiation. It would be possible to modify the on-board BBS software to work around these memory failures and the command team did request that this be done, but it has not been aggressively followed up due to the apparent lack of interest in 1200 bps capabilities.

The S-band beacon isn't broken to the best of my knowledge, it's just turned off. The power budget doesn't allow the S-band beacon to be run continuously without reducing the main downlink to flea power. I can't explain VK5DG's observation of telemetry indicating 700mw of output from the S-band transmitter, but perhaps someone who has paid more attention to the telemetry could explain it.

There hasn't been much communication within the AO-16 command team in a long time, since the satellite is pretty much self-sufficient in its current mode and we haven't been working on any projects to change things. At least a few of us are still standing by in case anything comes up.

Mike Rupprecht, DK3WN reports the following:
this is AO-16 telemetry from today :

```
ctrl: 3 {UI}  PID: F0 {No L3}  Total Frame Bytes: 138
from PACSAT-1 to TLM:
   1 > 61 85 1D 44 00 61 01 92 02 18 03 84 04 5C 05 A0 06 4C 07 88
  21 > 08 52 09 91 0A A1 0B D0 0C E7 0D D8 0E 10 0F 2D 10 D2 11 81
  41 > 12 00 13 BE 14 8A 15 85 16 93 17 90 18 92 19 8C 1A 8C 1B 92
  61 > 1C 83 1D 89 1E B5 1F 57 20 8C 21 65 22 70 23 4B 24 26 25 35
  81 > 26 01 27 01 28 64 29 00 2A 07 2B 01 2C 00 2D 5B 2E 66 2F 7B
 101 > 30 7C 31 7E 32 96 33 00 34 7D 35 7D 36 83 37 76 38 90 39 A9
 121 > 3A 01

translated :
----------------------------------------------------------------------------
-----------
uptime is 2226/12:31:51.  Time is Sun Mar 19 16:22:57 2006
PACSAT
Rx D DISC        0.482 k  Rx D S meter   146.000 C  Rx C DISC
6.953 k
Rx C S meter   132.000 C  Rx B DISC        1.706 k  Rx B S meter
160.000 C
Rx A DISC        2.830 k  Rx A S meter   136.000 C  Rx E/F DISC
2.690 k
Rx E/F S meter 145.000 C  +5 Volt Bus      4.911 V  +5V Rx Current
0.052 A
+2.5V  VREF      2.495 V  8.5V BUS         8.446 V  IR Detector
16.000 C
LO Monitor I     0.002 A  +10V Bus        10.500 V  GASFET Bias I
0.003 A
Ground REF       0.000 V  +Z Array V      19.437 V  Rx Temp
17.546 D
+X (RX) temp    20.572 D  Bat 1 V          1.263 V  Bat 2 V
1.267 V
Bat 3 V          1.262 V  Bat 4 V          1.280 V  Bat 5 V
1.284 V
Bat 6 V          1.254 V  Bat 7 V          1.312 V  Bat 8 V
1.299 V
Array V         20.345 V  +5V Bus          4.749 V  +8.5V Bus
8.040 V
+10V Bus        10.175 V  BCR Set Point  120.111 C  BCR Load Cur
0.528 A
+8.5V Bus Cur    0.032 A  +5V Bus Cur      0.214 A  -X Array Cur
-0.008 A
+X Array Cur    -0.021 A  -Y Array Cur     0.251 A  +Y Array Cur
-0.018 A
-Z Array Cur    -0.007 A  +Z Array Cur    -0.018 A  Ext Power Cur
-0.020 A
BCR Input Cur    0.300 A  BCR Output Cur   0.318 A  Bat 1 Temp
26.623 D
Bat 2 Temp      26.018 D  Baseplt Temp    24.807 D  PSK TX RF Out
2.468 W
RC PSK TX Out    0.005 W  PSK TX HPA Tem  25.413 D  +Y Array Temp
```

```
25.413 D
RC PSK HPA Tem  21.782 D  RC PSK BP Temp  29.648 D  +Z Array Temp
13.916 D
S band TX Out    0.726 W  S band HPA Tem   1.000 C

Total Array C= 0.251 Bat Ch Cur=-0.210 Ifb= 0.049 I+10V= 0.479
TXA:1 TXB:0 TX Pwr:B SbT:0 BCR:7C SCR:3 LP:6 HI:D BT:1E WC:25
```

Example for very rare activity over europe - 2 german and a swiss station ->
conversation german :-)
It work's !!!

```
fm PACSAT-1 to LSTAT ctl UI pid F0 [DAMA] - 15.03.06 18:50:26
I P:0x1D00 o:0 l:6654 f:7171, d:1 st:1
fm HB9SKA to DK3WN via PACSAT-1* ctl I00+ pid F0 - 15.03.06 18:50:27
Hallo Mike
fm DK5EC to JO30OR via PACSAT-1* ctl UI^ pid F0 - 15.03.06 18:50:30
=5042.15N/00714.82E-Karl 73 from Koenigswinter
fm HB9SKA to CQ via PACSAT-1* ctl UI^ pid F0 - 15.03.06 18:50:31
=4726.07N/00812.00E-********** pse connect me! **********
fm DK5EC to JO30OR via PACSAT-1* ctl UI^ pid F0 - 15.03.06 18:51:00
/00714.82E-Karl 73 from Koenigswinter
fm DK3WN to CQ via PACSAT-1* ctl UI^ pid F0 - 15.03.06 18:51:24
73 ihr beiden de Mike
fm HB9SKA to CQ via PACSAT-1* ctl UI^ pid F0 - 15.03.06 18:51:41
=4726.07N/00812.00E-********** pse connect me! **********
fm DK3WN to CQ via PACSAT-1* ctl UI^ pid F0 - 15.03.06 18:52:04
Hallo Thomas, Hallo Karl
fm DK5EC to ALL via PACSAT-1* ctl UI pid F0 - 15.03.06 18:52:49
:HB9SKA   :hallo, ist ja richtig was los hier hallo Thomas
fm DK5EC to ALL via PACSAT-1* ctl UI pid F0 - 15.03.06 18:52:54
:BLN0QSLs :DK3WN,PACSAT-1,HB9SKA{UISS41}
fm DK3WN to CQ via PACSAT-1* ctl UI^ pid F0 - 15.03.06 18:52:59
Hallo Ihr Beiden - QSL ???
fm DK5EC to ALL via PACSAT-1* ctl UI pid F0 - 15.03.06 18:53:23
... wie im Contest hi
:DK3WN    :hallo, ist ja richtig was los hier hallo Mike
fm DK5EC to JO30OR via PACSAT-1* ctl UI^ pid F0 - 15.03.06 18:53:20
=5042.15N/00714.82E-Karl 73 from Koenigswinter
fm DK3WN to CQ via PACSAT-1* ctl UI^ pid F0 - 15.03.06 18:53:33
endlich mal ein wenig Aktivit�t
fm PACSAT-1 to TIME-1 ctl UI pid F0 [DAMA] - 15.03.06 18:53:52
 HT: uptime is 2226/12:43:51.  Time is Sun Mar 19 16:34:57 2006
```

Hope, this give you stimulus!

[ANS-WSR wishes to thank Paul Williamson,KB5MU and Mike Rupprecht, DK3WN for this weeks information]
[03192006]
=====
UO-11 OSCAR-11
Catalog number: 14781

Launched: March 1, 1984

Status: Semi-operational?

Telemetry Downlink: 145.826 MHz. FM (1200-baud AFSK).
approx. 10 days ON, 10 days OFF
Mode-S Beacon: 2401.500 MHz. ... OFF
UHFBeacon: 435.025 MHz. ... OFF

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Official webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm

Mike Rupprecht, DK3WN, reports hearing UO-11 with VERY strong signals
over
Europe this past week.

[ANS-WSR wishes to thank Mike Rupprecht, DK3WN for this weeks
information]
[03192006]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-078.S3
WSR 078 Part 3 03/19/2006

AMSAT NEWS SERVICE BULLETIN 078.S3 FROM AMSAT HQ
SILVER SPRING, MD, March 19, 2006
TO ALL RADIO AMATEURS
BID: $ANS-078.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

AO-54 SUITSAT
Catalog Number:28934
Release Date: February 3,2006

Status: Non-operational
Modes : FM Voice Telemetry/Greetings
 FM SSTV

Callsign: RS0RS
Downlink: 145.990 FM

Official webpage: http://www.suitsat.org
[02262006]
=====
NCUBE-2
Catalog Number: 28894
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
2407.25
[01012006]
=====
XO-53 SSETI
Catalog Number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 FM 67Hz CTCSS
Voice Downlink: 2401.835 FM
Packet Up/Downlink: 437.250 9k6 packet
Packet Downlink 2401.835 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01292006]
=====
POSAT-1 PO-28
Catalog Number: 22829
Launched : September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 429.950

Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html.
POSAT-1
webpage:http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012006]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launched: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB
Beacon: 145.810 MHz (unmodulated carrier)

AO-10 has been locked into a Mode-B, 70-cm uplink and
2-meter downlink for several years.

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: Downlink only

Uplink: 145.875 145.900 145.925 145.950 MHz FM (1200-baud)
Downlink: 435.808 MHz PSK
Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01012006]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB
Beacon: 29.408 MHz
Robot: 29.454 MHz
[05232004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB
Beacon: 145.860 MHz
Robot: 145.908 MHz
[05232004]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink 145.975 MHz FM
Downlink 435.070 MHz FM
[05092004]

```
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink: 145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM
Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01092005]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational?

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB
Beacon: 29.352 MHz (intermittent)
SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplink: 145.84 145.86 145.88 145.90 MHz FM
(using 1200-baud Manchester FSK)
CW downlink: 437.125 MHz
Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)
Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[05232004]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795

More FO-20 info can be found at:
```

http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[08152004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM
Broadcast Callsign: HLO1-11
BBS: HLO1-12

Jim, AA7KC, reports that KO-23's downlink transmitter continues in a non-operational status.
[05092004]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM (9600-baud FSK)
Downlink: 436.500 MHz FM
Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:

http://seds.uah.edu/projects/sedsat/sedsat.htm

[ANS-WSR has no further information]
[05232004]
=====
SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

STatus: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz and 145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[08082004]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlink: 437.025 MHz 437.400 MHz
Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA
web site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[05092004]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplink V-band 145.840 - 145.990 MHz CW/LSB
U-band 435.550 - 435.800 MHz CW/LSB
L1-band 1269.250 - 1269.500 MHz CW/LSB
L2-band 1268.325 - 1268.575 MHz CW/LSB
S1-band 2400.350 - 2400.600 MHz CW/LSB
Downlink: S2-band 2401.225 - 2401.475 MHz CW/USB
K-band 24,048.010 - 24,048.060 MHz CW/USB
Beacon: 2401.323, 24,048.035
[05232004]

SO-42 SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational
Downlink: 437.075 MHz
Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[08152004]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz
Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[08152004]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
callsign KE6QMD, as per the user service agreement located at the
following
URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Operational

Uplink: 145.850 or 145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[11202005]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink 435.275 1200-baud AFSK
Downlink 145.825 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01012006]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-078.S4
WSR 078 Part 4 03/19/2006

AMSAT NEWS SERVICE BULLETIN 078.S4 FROM AMSAT HQ
SILVER SPRING, MD,March 19, 2006
TO ALL RADIO AMATEURS
BID: $ANS-078.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE PROPOSED FOR LAUNCH AT THIS TIME:

PHASE 3E ?O-??
Catalog Number:
Proposed Launch Date: Early 2006

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/

[ANS-WSR wishes to thank William Leijenaar, PE1RAH for this week's report]
[10022005]
NNNN

/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/amsat/listserv/menu.html

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

```
From -1828595268193693756
X-Google-Thread: 10e8ad,a53f5c7d8cd7be93,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII
Path: g2news1.google.com!news3.google.com!news4.google.com!
border1.nntp.dca.giganews.com!nntp.giganews.com!nx01.iad01.newshosting.com!
newshosting.com!207.69.154.102.MISMATCH!elnk-atl-nf2!newsfeed.earthlink.net!
stamper.news.atl.earthlink.net!newsread2.news.atl.earthlink.net.POSTED!46041641!
not-for-mail
From: "JoAnne Maenpaa" <wb9jej_no-spam@earthling.com>
Newsgroups: rec.radio.amateur.space
Subject: ANS-085 AMSAT News Service Weekly Bulletin
Lines: 239
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <KrfWf.11149$sL2.71@newsread2.news.atl.earthlink.net>
Date: Tue, 28 Mar 2006 18:41:46 GMT
NNTP-Posting-Host: 68.164.230.183
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread2.news.atl.earthlink.net 1143571306 68.164.230.183 (Tue, 28 Mar
2006 10:41:46 PST)
NNTP-Posting-Date: Tue, 28 Mar 2006 10:41:46 PST
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news1.google.com rec.radio.amateur.space:198
```

AMSAT NEWS SERVICE
ANS-085

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* ARRL Band Plan
* AMSAT Net Milestone
* A Note from the ISS
* PCSATs
* New OSCARS

SB SAT @ AMSAT $ANS-085.01
ARRL Band Plan

AMSAT News Service Bulletin 085.01

From AMSAT HQ SILVER SPRING, MD.
March 26, 2006
To All RADIO AMATEURS
BID: $ANS-085.01

Recently, we had the wonderful happening of "Suitsat" that spurred the interest of many young minds. The frequency of 145.990 is in the OSCAR sub band (145.800-146.000) as indicated by the ARRL in their Well publicized band plan. Many interlopers find their way into this clear portion of 2 meters unknowingly using these sub bands causing headaches to those that were straining to hear this event. Even using nearby Freqs cause problems when the super ears are listening for the birds.
Also, 145.800 the ISS downlink, is in this same sub band and is being used in many metro areas for chit-chat and other experiments. We must remind each other that the band plan was put in place to assist us in utilizing the spectrum effectively. Those that just hear nothing and start a QSO should be reminded about how wide their signal is and that they are causing many well intentioned hams trying to make contact with these satellites and happenings unintentional interference. There may not be a satellite signal every minute of the day in these sub bands but when they are there, terrestrial stations are not listening with big enough ears as someone with an OSCAR caliber setup.
Point these sub bands out to all at your next club meeting or get together.

[ANS thanks Dee, NB2F, for this information revue]

SB SAT @ AMSAT $ANS-085.02
AMSAT Net Milestone

AMSAT News Service Bulletin 085.02
From AMSAT HQ SILVER SPRING, MD.
March 26, 2006
To All RADIO AMATEURS
BID: $ANS-085.02

The weekly 2 Meter AMSAT Net in the Boston area has been on the Air every Thursday 8:30-9:30 on the Waltham Repeater 146.640- since March 14, 1996.

The latest milestone was March 16, 2006 with its 10th Anniversary.

Next milestone will be net number 500 coming up on May 11, 2006.

The following stations checked in March 16, 2006 for the 10th Anniversary Net!!!

Thanks to all who have checked in over the years !!!!!!!!!

Net control, Ernie MacLauchlan, K1ELA, sent out certificates to all stations that checked in on March 16, 2006.

Some net trivia as of March 16, 2006
Total Check-ins 7300+

Average per net 15
Individual People 774+

[ANS thanks Ernie, K1ELA, for the above information]

/EX

SB SAT @ AMSAT $ANS-085.03
A Note from the ISS

AMSAT News Service Bulletin 085.03
From AMSAT HQ SILVER SPRING, MD.
March 26, 2006
To All RADIO AMATEURS
BID: $ANS-085.03

To the Amateur Radio Community,

As Expedition 12 draws to a close onboard the International Space Station, a note of gratitude is due.

I would like to express my deep gratitude to the world-wide amateur radio community for your participation in this great adventure. Clearly, one of the benefits for Amateur Radio is bridging the distances between us. Through your participation, you helped realize the potential for the human exploration of space to do exactly that. Thanks to you, over the past six months, the International Space Station has been more international than ever before. Together, we achieved many significant milestones from space, DXCC, WAC, WAS, and most importantly, 35 school contacts (as of March 21).

Special thanks go to Kenneth Ransom, N5VHO, without whose tireless efforts to coordinate our activities onboard none of this could have been achieved. Kenneth provided invaluable technical advice, as well as raising the bar as each goal was achieved. I would also like to thank the ISS Fan Club for your enthusiastic support of ARISS. And personal thanks to Cor - PD0RKC in The Netherlands, Alain - IZ6BYY in Italy, Keith - ZS6TW in S. Africa, and Patrick - WD9EWK in Arizona for enlisting the participation of the stations we needed to meet the goals for Expedition 12.

It is with no small degree of sadness to realize that soon I will no longer be able to float to the aft part of the station, dial up our frequency pair and call "CQ", knowing that a host of friends are waiting to talk. Good luck to you all. Thank you, again, for your participation in this greatest of all human endeavors. I look forward to listening as you continue your enthusiastic support of the International Space Station and, one day, human colonies on the Moon and Mars.

73 de NA1SS
Bill McArthur, KC5ACR
Commander, Expedition 12
International Space Station

[ANS {& the entire Ham community} thanks Bill, KC5ACR for going above & beyond]

/EX

SB SAT @ AMSAT $ANS-085.04
PCSATs

AMSAT News Service Bulletin 085.04
  From AMSAT HQ SILVER SPRING, MD.
March 26, 2006
To All RADIO AMATEURS
BID: $ANS-085.04

ob Bruninga, WB4APR, wrote about the latest status of the satellite fleet belonging to the US Naval Academy Satellite Lab PCSAT-1 and PCSAT-2.

Bob reported, "PCSAT2 remains in 145.825 simplex PACKET mode with its PSK-31 transponder also enabled. To activate the PSK-31 transponder, simply use your 2 meter packet system on 145.825 to 'connect to PCSAT2'. When the PCSAT2 sees the connection , it will turn on the PSK-31 transponder and keep it on as long as you maintain the packet connection."

Continuing with PSK-31 operating hints, Bob wrote, "You will need HIGH power on the 29.401 MHz uplink. The downlink is on 435.275 � Doppler FM. CW is welcome too since we need any signals at all to see what we can hear. Remember, we have extreme signal loss on the uplink since 2 weeks after launch, so while we don't hear anything usually this may be due to groundstations not running enough power to overcome this loss."

The older Naval Academy satellite, PCSAT-1, which is operational only in sunlight apparently reset itself this past week when it seemed to be overloaded with too many stations attempting access.

Bob summarized PCSAT-1's status, "Fortunately the Naval Academy Satellite Lab was able to restore low-power mode during the same pass, and so we hope we recovered it in time. But if not, then PCSAT-1 goes back into hybernation mode until next winter with occasional usability during mid-day passes with maximum sunlight illuminating its solar cells.

In summary, Bob said, "Please go lightly on PCSAT-1, and please don't attempt to access PCSAT-1 when it is in the dark. Do not leave automatic beacons running via PCSAT-1."

[ANS thanks Bob, WB4APR, and the US Naval Academy Satellite Lab for the above information]

/EX

SB SAT @ AMSAT $ANS-085.05
New OSCARS

AMSAT News Service Bulletin 085.05
From AMSAT HQ SILVER SPRING, MD.
March 26, 2006
To All RADIO AMATEURS
BID: $ANS-085.05

Subject: [bod] OSCAR Numbers for CubeSats XI-IV and XI-V
Date: Thu, 23 Mar 2006 10:59:52 -0600
To: Ryu Funase, JQ1YCX

By the authority vested in me by the AMSAT-NA President, I am pleased to issue OSCAR numbers for your CubeSat amateur radio satellites.

Henceforth, XI-IV launched in 2003 will be known as CUBESAT-OSCAR-57, or CO-57 and XI-V launched with SSETI Express in 2005. will be known as CUBESAT-OSCAR-58 or CO-58.

AMSAT-NA and I wish to congratulate you and your entire team for the successful construction, testing and launching of these innovative spacecraft. Your pioneering work certainly inspires others to follow your lead.

73 and Best Wishes,

William A. (Bill) Tynan, W3XO

[ANS thanks Bill,W3XO for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73, This week's ANS Editor,
Dee Interdonato, NB2F
nb2f at amsat dot org

From 9150554917093519931
X-Google-Thread: 10e8ad,1c8882f444145b3d,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII
Path: g2news1.google.com!news3.google.com!news4.google.com!
border1.nntp.dca.giganews.com!border2.nntp.dca.giganews.com!nntp.giganews.com!
elnk-atl-nf1!newsfeed.earthlink.net!stamper.news.atl.earthlink.net!
newsread2.news.atl.earthlink.net.POSTED!46041641!not-for-mail
From: "JoAnne Maenpaa" <wb9jej_no-spam@earthling.com>
Newsgroups: rec.radio.amateur.space
Subject: WSR-085 AMSAT Weekly Satellite Report
Lines: 1221
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <NrfWf.11150$sL2.8403@newsread2.news.atl.earthlink.net>
Date: Tue, 28 Mar 2006 18:41:49 GMT
NNTP-Posting-Host: 68.164.230.183
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread2.news.atl.earthlink.net 1143571309 68.164.230.183 (Tue, 28 Mar 2006 10:41:49 PST)
NNTP-Posting-Date: Tue, 28 Mar 2006 10:41:49 PST
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news1.google.com rec.radio.amateur.space:199

This report is organized into 4 parts.
Part 1 - operational analog amateur satellites.
Part 2 - operational digital amateur satellites.
Part 3 - non - operational satellites
Part 4 - proposed satellites

SB SAT @ AMSAT W8ISS ANS-085.S1
WSR 085 Part 1 03/26/2006

AMSAT NEWS SERVICE BULLETIN 085.S1 FROM AMSAT HQ
SILVER SPRING, MD, March 26, 2006
TO ALL RADIO AMATEURS
BID: $ANS-085.S1

VO-52 HAMSAT
Catalog Number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/V - Indian Transponder

Proposed frequencies:

Indian Transponder:
Uplink : 435.220 MHz to 435.280 MHz LSB/CW
Downlink: 145.870 MHz to 145.930 MHz USB/CW
Beacom : 145.859330 MHZ CW

Dutch Transponder:
Uplink : 435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW
Beacon : 145.860MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsat.in/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is
active. Each transponder has a different beacon, see below:

Indian transponder - unmodulated carrier on
145.936MHz.
Dutch Transponder - CW message on 145.860MHz.
[03192006]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Modes: FM Repeater, V/U-High power
Digipeater - OFF

Analog voice downlink: 435.300 MHz FM
         435.150 MHz FM
Analog voice uplink: 145.880 MHZ FM
       145.880 MHz USB
       145.920 MHz FM 67Hz PL tone
      1268.700 MHz FM 67Hz PL tone

Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
    2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast
Protocol

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/

This from Mike Kingery, KE4AZN:
AO-51 is back up and running in FM repeater mode and BBS mode.

Schedule from the AO-51 Command Team:
Mar 23
FM Repeater, V/U
Uplink: 145.920 mhz FM, 67 hz PL Tone
Downlink 435.300 mhz FM

9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 435.150 mhz FM, 9k6 PBP Digital
[03262006]

=====

SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Uplink: 145.850 MHz (67.0 Hz PL tone) (See below for operating procedures)
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

There have been unconfirmed reports on the amsat-bb remailer that SO-50 has
shifted downlink frequency as much as 5khz up. This both from Europe.

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz. The
order of operation is thus: (allow for Doppler as necessary)

1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer
on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater
on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10
minute timer.

```
[01012006]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: OPERATIONAL

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplink: 145.850 145.870 145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

unOfficial Webpage: http://www.amsat.org/amsat/sats/n7hpr/fo29.html
[11132005]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Uplink: 145.850 MHz FM
Downlink: 436.795 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[01012006]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational until March 14th

Uplink:   145.850 to 145.950 MHz CW/USB Mode A
   432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
  145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
  145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
```

Beacons: 29.502 MHz
145.972 MHz
435.100 MHz
2304.100 MHz

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php
The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
AO-7 users are requested to log their contacts and observations about AO-7, especially any unexpected mode changes.
AO-07 telemetry software webpage:
http://www.qsl.net/k3tz/files/K3TZ_AO-07_Telemetry_Decoder_0.5.zip

This from Emily, N1DID:
AO-7 is Operational
As of 15 March 2006 AO-7 entered eclipse on the ascending node of it's orbit for a short period of time and will turn off during that period, but otherwise remains operational providing stations observe QRP power levels. It is difficult to tell if the 24 hour timer will be reset or if there is enough energy to keep it running during the short periods of eclipse AO-7 experiences for the next few weeks. We should know in a few days by observing the modes reported on each orbit.

Please keep your power low! For additional information please read the AO-7 Usage Guidelines on the AO-7 Log and Resource Site located at:
http://www.planetemily.com/ao7
[ANS-WSR wishes to thank Emily Clarke, N1DID]
[03192006]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: Packet / Occasional Voice
Digipeater: ON

The current Expedition 12 crew is:
Commander: William McArthur - KC5ACR
Flight Engineer: Valery Tokarev - (no call)

Expedition 13 crew set to lift off on March 30th at 0230z with:
Commander: Pavel Vinogradov, RV3BS
Flight Engineer: Jeff Williams, KD5TVQ
Brazillian Astronaut: Marcos Pontes, PY0AEB

Digital/APRS:

Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Russian: RS0ISS, RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official Webpage: http://www.rac.ca/ariss
Official Fan club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line is
NOT translated from Russian and posted.
[03262006]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-085.S2
WSR 085 Part 2 03/26/2006

AMSAT NEWS SERVICE BULLETIN 085.S2 FROM AMSAT HQ
SILVER SPRING, MD, March 26, 2006
TO ALL RADIO AMATEURS
BID: $ANS-085.S2

CO-56 XI-V
Catalog Number: 28895
Launch Date: October 27, 2005

Status: Operational only within range of Ground station in Japan

Telemetry Downlink: 437.345MHz - FSK 1200bps using AFK protocol
Beacon Downlink: 437.465MHz - CW about 50 WPM

Callsign: JQ1YGW

Oficial Webpage: http://www.space.t.u-tokyo.ac.jp/gs/satinfo-e.html#xi5
Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
[03122006]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: Packet
Digipeater: ON

The current Expedition 12 crew is:
Commander: William McArthur - KC5ACR
Flight Engineer: Valery Tokarev - (no call)

Expedition 13 crew set to lift off on March 30th at 0230z with:
Commander: Pavel Vinogradov, RV3BS
Flight Engineer: Jeff Williams, KD5TVQ
Brazillian Astronaut: Marcos Pontes, PY0AEB

Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Russian: RS0ISS, RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official Webpage: http://www.rac.ca/ariss
Official Fan club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line

is NOT translated from Russian and posted.
[03262006]

=====

PCSAT-2
Catalog Number: 25544
Launch Date: August 1, 2005

Activated: August 3, 2005
Status: Operational
Current Mode: Digipeater/PSK-31

Digital Downlink: 435.275 Mhz
Digital Uplink: 145.825 Mhz

PSK-31 Downlink: 435.275 Mhz
PSK-31 Uplink: 29.400 - 29.403 Mhz

Broadcast:
BBS:

Official Webpage: http://web.usna.navy.mil/~bruninga/pcsat2.html
PCSAT2 APRS Packet page: http://www.findu.com/cgi-bin/pcsat2.cgi
aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/

This from Robert Bruninga, WB4APR:
PCSAT-1 reset back to W3ADO-1 at 2336z or so on 23 March after a good 16 day run of fully OPS jointly with PCSAT2 on ISS. During that time numerous dual hop packets were reported.

PCSAT2 will remain with a 2m downlink on 145.825 until the next school contact on the 28th. From now till then, it will also keep its 10m PSK-31 to 435.275 FM transponder enabled for anyone to experiment with using either CW or PSK.

Just use one rig to CONNECT to PCSAT2 on 145.825 to turn on the transponder and use your 10m CW or PSK rig to TX and your UHF FM receiver to listen.
[ANS-WSR wishes to thank Robert Bruninga, WB4PR for this weeks information.]
[03192006]

=====

AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Modes: FM Repeater, V/U-High power

Digipeater - OFF

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
Analog voice uplink: 145.880 MHZ FM
145.880 MHz USB
145.920 MHz FM 67Hz PL tone
1268.700 MHz FM 67Hz PL tone

Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast
Protocol (PBP)

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/

This from Mike Kingery, KE4AZN:
AO-51 is back up and running in FM repeater mode and BBS mode.

Schedule from the AO-51 Command Team:
Mar 23
FM Repeater, V/U
Uplink: 145.920 mhz FM, 67 hz PL Tone
Downlink 435.300 mhz FM

9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 435.150 mhz FM, 9k6 PBP Digital
[03262006]

=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Operational

General Usage Uplink/Downlink:145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org
aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/

This from Robert Bruninga, WB4APR:
PCSAT-1 reset back to W3ADO-1 at 2336z or so on 23 March after a good 16 day run of fully OPS jointly with PCSAT2 on ISS. During that time numerous dual hop packets were reported.

PCSAT2 will remain with a 2m downlink on 145.825 until the next school contact on the 28th. From now till then, it will also keep its 10m PSK-31 to 435.275 FM transponder enabled for anyone to experiment with using either CW or PSK.

Just use one rig to CONNECT to PCSAT2 on 145.825 to turn on the transponder and use your 10m CW or PSK rig to TX and your UHF FM receiver to listen.
[ANS-WSR wishes to thank Robert Bruninga, WB4PR for this weeks information.]
[03262006]

=====

CO-55 CUTE-1
Catalog number: 27844
Launched: June 30,2003

Status: Operational

Uplink: ?
Downlink: 436.8375 CW
437.4700 1200 FM ax25 or SRLL (ACTIVE only near Japan ?)
Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[03122006]

=====

GO-32 TECHSAT-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Downlink: 435.225 MHz FM (9600-baud FSK)
(435.325 n/a - temperature problems)
Uplinks: 145.850, 145.890, 145.930 FM
1269.700, 1269.800, 1269.900 FM
Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

Mineo, JE9PEL, reports February 02, 2006:
4XTECH-12>STATUS [02/02/06 20:39:52] <UI R>:
UTC: Thu Feb 02 11:39:35 2006 | Gurwin Techsat1B (V9.86)
BBS(9.86) is active ,AsherSpaceResearchInst greets you.

2 Users/8 Broadcasts, Uplink freq:145.890,145.850,145.930, 1269.800, 1269.900

TechRam2V9.86
TechRam2V9.86.

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[ANS-WSR wishes to thank Mineo, JE9PEL, for this weeks information.]
[02122006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Semi-operational, the digipeater command is on and open for APRS users.

Uplink: 145.90 145.92 145.94 145.96 MHz FM
(using 1200-baud Manchester FSK)
Downlink: 437.026 MHz SSB (1200-baud PSK)
Mode-S Beacon: 2401.1428 MHz

Mode and Antenna Polarization:
U: RC 437.050 MHz RHCP
   PSK 437.025 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html

This from Paul Williamson,KB5MU:
There has been no loss of command function on AO-16.

The BBS is down because of localized memory failures in the mass memory used for message (file) storage, caused presumably by radiation. It would be possible to modify the on-board BBS software to work around these memory failures and the command team did request that this be done, but it has not been aggressively followed up due to the apparent lack of interest in 1200 bps capabilities.

The S-band beacon isn't broken to the best of my knowledge, it's just turned off. The power budget doesn't allow the S-band beacon to be run continuously without reducing the main downlink to flea power. I can't explain VK5DG's observation of telemetry indicating 700mw of output from the S-band transmitter, but perhaps someone who has paid more attention to the telemetry could explain it.

There hasn't been much communication within the AO-16 command team in a long time, since the satellite is pretty much self-sufficient in its current mode and we haven't been working on any projects to change things. At least a few of us are still standing by in case anything comes up.

Mike Rupprecht, DK3WN reports the following:
this is AO-16 telemetry from today :

```
ctrl: 3 {UI}  PID: F0 {No L3}  Total Frame Bytes: 138
from PACSAT-1 to TLM:
   1 > 61 85 1D 44 00 61 01 92 02 18 03 84 04 5C 05 A0 06 4C 07 88
  21 > 08 52 09 91 0A A1 0B D0 0C E7 0D D8 0E 10 0F 2D 10 D2 11 81
  41 > 12 00 13 BE 14 8A 15 85 16 93 17 90 18 92 19 8C 1A 8C 1B 92
  61 > 1C 83 1D 89 1E B5 1F 57 20 8C 21 65 22 70 23 4B 24 26 25 35
  81 > 26 01 27 01 28 64 29 00 2A 07 2B 01 2C 00 2D 5B 2E 66 2F 7B
 101 > 30 7C 31 7E 32 96 33 00 34 7D 35 7D 36 83 37 76 38 90 39 A9
 121 > 3A 01
```

```
translated :
----------------------------------------------------------------------------
-----------
uptime is 2226/12:31:51.  Time is Sun Mar 19 16:22:57 2006
PACSAT
Rx D DISC        0.482 k  Rx D S meter   146.000 C  Rx C DISC
6.953 k
Rx C S meter   132.000 C  Rx B DISC        1.706 k  Rx B S meter
160.000 C
Rx A DISC        2.830 k  Rx A S meter   136.000 C  Rx E/F DISC
2.690 k
Rx E/F S meter 145.000 C  +5 Volt Bus      4.911 V  +5V Rx Current
0.052 A
+2.5V  VREF      2.495 V  8.5V BUS         8.446 V  IR Detector
16.000 C
LO Monitor I     0.002 A  +10V Bus        10.500 V  GASFET Bias I
0.003 A
Ground REF       0.000 V  +Z Array V      19.437 V  Rx Temp
17.546 D
+X (RX) temp    20.572 D  Bat 1 V          1.263 V  Bat 2 V
1.267 V
Bat 3 V          1.262 V  Bat 4 V          1.280 V  Bat 5 V
1.284 V
Bat 6 V          1.254 V  Bat 7 V          1.312 V  Bat 8 V
1.299 V
Array V         20.345 V  +5V Bus          4.749 V  +8.5V Bus
8.040 V
```

```
+10V Bus        10.175 V  BCR Set Point  120.111 C  BCR Load Cur
0.528 A
+8.5V Bus Cur    0.032 A  +5V Bus Cur      0.214 A  -X Array Cur
-0.008 A
+X Array Cur    -0.021 A  -Y Array Cur     0.251 A  +Y Array Cur
-0.018 A
-Z Array Cur    -0.007 A  +Z Array Cur    -0.018 A  Ext Power Cur
-0.020 A
BCR Input Cur    0.300 A  BCR Output Cur   0.318 A  Bat 1 Temp
26.623 D
Bat 2 Temp      26.018 D  Baseplt Temp    24.807 D  PSK TX RF Out
2.468 W
RC PSK TX Out    0.005 W  PSK TX HPA Tem  25.413 D  +Y Array Temp
25.413 D
RC PSK HPA Tem  21.782 D  RC PSK BP Temp  29.648 D  +Z Array Temp
13.916 D
S band TX Out    0.726 W  S band HPA Tem   1.000 C

Total Array C= 0.251 Bat Ch Cur=-0.210 Ifb= 0.049 I+10V= 0.479
TXA:1 TXB:0 TX Pwr:B SbT:0 BCR:7C SCR:3 LP:6 HI:D BT:1E WC:25
```

Example for very rare activity over europe - 2 german and a swiss station ->
conversation german :-)
It work's !!!

```
fm PACSAT-1 to LSTAT ctl UI pid F0 [DAMA] - 15.03.06 18:50:26
I P:0x1D00 o:0 l:6654 f:7171, d:1 st:1
fm HB9SKA to DK3WN via PACSAT-1* ctl I00+ pid F0 - 15.03.06 18:50:27
Hallo Mike
fm DK5EC to JO30OR via PACSAT-1* ctl UI^ pid F0 - 15.03.06 18:50:30
=5042.15N/00714.82E-Karl 73 from Koenigswinter
fm HB9SKA to CQ via PACSAT-1* ctl UI^ pid F0 - 15.03.06 18:50:31
=4726.07N/00812.00E-********** pse connect me! **********
fm DK5EC to JO30OR via PACSAT-1* ctl UI^ pid F0 - 15.03.06 18:51:00
/00714.82E-Karl 73 from Koenigswinter
fm DK3WN to CQ via PACSAT-1* ctl UI^ pid F0 - 15.03.06 18:51:24
73 ihr beiden de Mike
fm HB9SKA to CQ via PACSAT-1* ctl UI^ pid F0 - 15.03.06 18:51:41
=4726.07N/00812.00E-********** pse connect me! **********
fm DK3WN to CQ via PACSAT-1* ctl UI^ pid F0 - 15.03.06 18:52:04
Hallo Thomas, Hallo Karl
fm DK5EC to ALL via PACSAT-1* ctl UI pid F0 - 15.03.06 18:52:49
:HB9SKA   :hallo, ist ja richtig was los hier hallo Thomas
fm DK5EC to ALL via PACSAT-1* ctl UI pid F0 - 15.03.06 18:52:54
:BLN0QSLs :DK3WN,PACSAT-1,HB9SKA{UISS41}
fm DK3WN to CQ via PACSAT-1* ctl UI^ pid F0 - 15.03.06 18:52:59
Hallo Ihr Beiden - QSL ???
fm DK5EC to ALL via PACSAT-1* ctl UI pid F0 - 15.03.06 18:53:23
... wie im Contest hi
:DK3WN    :hallo, ist ja richtig was los hier hallo Mike
fm DK5EC to JO30OR via PACSAT-1* ctl UI^ pid F0 - 15.03.06 18:53:20
=5042.15N/00714.82E-Karl 73 from Koenigswinter
```

```
fm DK3WN to CQ via PACSAT-1* ctl UI^ pid F0 - 15.03.06 18:53:33
endlich mal ein wenig Aktivit�t
fm PACSAT-1 to TIME-1 ctl UI pid F0 [DAMA] - 15.03.06 18:53:52
 HT: uptime is 2226/12:43:51.  Time is Sun Mar 19 16:34:57 2006
```

Hope, this give you stimulus!

[ANS-WSR wishes to thank Paul Williamson,KB5MU and Mike Rupprecht, DK3WN for this weeks information]
[03192006]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational?

Telemetry Downlink: 145.826 MHz. FM (1200-baud AFSK).
approx. 10 days ON, 10 days OFF
Mode-S Beacon: 2401.500 MHz. ... OFF
UHFBeacon: 435.025 MHz. ... OFF

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Official webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm

This from Clive, G3CWV:

OSCAR-11 REPORT

27 March 2006

On 01 March OSCAR-11 achieved 22 years in orbit, and inspite of numerous problems, it still continues to transmit good signals.

During the period 14 February to 26 March 2006 the VHF beacon on 145.826 MHz has been heard from 22 February to 04 March, and from 14 to 24 March.

Signals have been very consistent and excellent copy has been obtained on all passes received. If the current mode of operation continues, the beacon should switch ON around 04 April 2006.

The on-board clock continues to show a very large accumulated error. On 24 March it was 22.14308 days slow. However, the clock is now very stable. During the last month it gained 2.5 seconds, which is approximately half the monthly gain, observed when the satellite was fully operational! The observations of clock errors suggest that the clock may slow or stop when the battery voltage is low.

All the analogue telemetry channels, 0 to 59 are zero, ie they have failed. The status channels 60 to 67 are still working.

The satellite is now in continuous sunlight until around 06 May, when eclipses will start again. This should help the satellite to continue transmitting, although continuous sunlight can cause problems due to excessive temperatures. Power supply problems can be caused by poor pointing attitude, ie the sunlight illuminating the ends of the satellite, instead of the solar arrays.

The watchdog timer now appears to have resumed operation on the 20 day cycle. During the last two months the ON/OFF times have been very consistent, and many observations show this to be 20.7 days, ie. 10.3 days ON followed by 10.4 days OFF. However, at any time, poor solar attitude, and battery problems, may result in a low 14 volt line supply, which may cause the beacon to switch OFF prematurely, and reset the watchdog timer cycle.

I am indebted to Bob G4VRC, Gustavo LW2DTZ, Mike DK3WN, John K7RQN and John G4PWG for their reception reports. All have reported good signals from the VHF beacon. Many thanks for those reports.

The Beacon frequencies are -

VHF 145.826 MHz. AFSK FM ASCII Telemetry

UHF 435.025 MHz. OFF

S-band 2401.5 MHz. OFF

Listeners to OSCAR-11 may be interested in visiting my website which contains an archive of news & telemetry data. It also contains details about using a soundcard or hardware demodulators for data capture. There is software for capturing data, and decoding ASCII telemetry. The URL is:

http://www.users.zetnet.co.uk/clivew/
[ANS-WSR wishes to thank Clive Wallis, G3CWV for this weeks information]
[03262006]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-085.S3
WSR 085 Part 3 03/26/2006

AMSAT NEWS SERVICE BULLETIN 085.S3 FROM AMSAT HQ
SILVER SPRING, MD, March 26, 2006
TO ALL RADIO AMATEURS
BID: $ANS-085.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

AO-54 SUITSAT
Catalog Number:28934
Release Date: February 3,2006

Status: Non-operational
Modes : FM Voice Telemetry/Greetings
 FM SSTV

Callsign: RS0RS
Downlink: 145.990 FM

Official webpage: http://www.suitsat.org
[02262006]
=====
NCUBE-2
Catalog Number: 28894
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
2407.25
[01012006]
=====
XO-53 SSETI
Catalog Number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 FM 67Hz CTCSS
Voice Downlink: 2401.835 FM
Packet Up/Downlink: 437.250 9k6 packet
Packet Downlink 2401.835 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/

Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01292006]
=====
POSAT-1 PO-28
Catalog Number: 22829
Launched : September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 429.950

Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html.
POSAT-1
webpage:http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012006]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launched: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB
Beacon: 145.810 MHz (unmodulated carrier)

AO-10 has been locked into a Mode-B, 70-cm uplink and
2-meter downlink for several years.

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: Downlink only

Uplink: 145.875 145.900 145.925 145.950 MHz FM (1200-baud)
Downlink: 435.808 MHz PSK
Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01012006]
=====

```
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB
Beacon: 29.408 MHz
Robot: 29.454 MHz
[05232004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB
Beacon: 145.860 MHz
Robot: 145.908 MHz
[05232004]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink 145.975 MHz FM
Downlink 435.070 MHz FM
[05092004]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink: 145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM
Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01092005]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational?

Uplink: 145.858 to 145.898 MHz CW/USB
```

Downlink: 29.354 to 29.394 MHz CW/USB
Beacon: 29.352 MHz (intermittent)
SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplink: 145.84 145.86 145.88 145.90 MHz FM
(using 1200-baud Manchester FSK)
CW downlink: 437.125 MHz
Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)
Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[05232004]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[08152004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM
Broadcast Callsign: HL01-11
BBS: HL01-12

Jim, AA7KC, reports that KO-23's downlink transmitter continues in a non-operational status.
[05092004]
=====
KO-25 KITSAT
Catalog number: 22828

Launched: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM (9600-baud FSK)
Downlink: 436.500 MHz FM
Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm

[ANS-WSR has no further information]
[05232004]
=====
SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

STatus: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz and 145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[08082004]

```
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlink: 437.025 MHz 437.400 MHz
Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA
web site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[05092004]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplink V-band 145.840 - 145.990 MHz CW/LSB
U-band 435.550 - 435.800 MHz CW/LSB
L1-band 1269.250 - 1269.500 MHz CW/LSB
L2-band 1268.325 - 1268.575 MHz CW/LSB
S1-band 2400.350 - 2400.600 MHz CW/LSB
Downlink: S2-band 2401.225 - 2401.475 MHz CW/USB
K-band 24,048.010 - 24,048.060 MHz CW/USB
Beacon: 2401.323, 24,048.035
[05232004]
-----
SO-42 SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational
Downlink: 437.075 MHz
Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[08152004]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
```

Downlink: 436.775 MHz
Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[08152004]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, callsign KE6QMD, as per the user service agreement located at the following
URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Operational

Uplink: 145.850 or 145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz
Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[11202005]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink 435.275 1200-baud AFSK
Downlink 145.825 9600-baud FSK

(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01012006]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-085.S4
WSR 085 Part 4 03/26/2006

AMSAT NEWS SERVICE BULLETIN 085.S4 FROM AMSAT HQ
SILVER SPRING, MD,March 26, 2006
TO ALL RADIO AMATEURS
BID: $ANS-085.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE PROPOSED FOR LAUNCH AT THIS TIME:

PHASE 3E ?O-??
Catalog Number:
Proposed Launch Date: Early 2006

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/

[ANS-WSR wishes to thank William Leijenaar, PE1RAH for this week's report]
[10022005]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/amsat/listserv/menu.html

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

From 7711550550848641026
X-Google-Thread: 10e8ad,c5e4f120a398f362,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII
Path: g2news1.google.com!news3.google.com!border1.nntp.dca.giganews.com!border2.nntp.dca.giganews.com!nntp.giganews.com!elnk-atl-nf1!newsfeed.earthlink.net!stamper.news.atl.earthlink.net!newsread1.news.atl.earthlink.net.POSTED!46041641!not-for-mail
From: "JoAnne Maenpaa" <wb9jej_no-spam@earthling.com>
Newsgroups: rec.radio.amateur.space
Subject: ANS-092 AMSAT News Service Weekly Bulletin
Lines: 448
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <weuYf.2876$i41.1842@newsread1.news.atl.earthlink.net>
Date: Tue, 04 Apr 2006 13:09:48 GMT
NNTP-Posting-Host: 66.167.66.56

X-Complaints-To: abuse@earthlink.net
X-Trace: newsread1.news.atl.earthlink.net 1144156188 66.167.66.56 (Tue, 04 Apr 2006 06:09:48 PDT)
NNTP-Posting-Date: Tue, 04 Apr 2006 06:09:48 PDT
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news1.google.com rec.radio.amateur.space:201

AMSAT NEWS SERVICE
ANS-092

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:

* AMSAT Part of eBay Giving Works Program
* AMSAT Gains Increased Presence at Dayton 2006
* PCSAT2 Returns to UHF
* OSCAR-11 Report March 27, 2006
* ARISS Status March 27, 2006
* Space Probe VOYAGER 1 Received by AMSAT-DL Group
* AMSAT-Florida Announces Net and Email List
* Amateur Radio Satellite News Archive Announced

SB SAT @ AMSAT $ANS-092.01
AMSAT Part of the eBay Giving Works Program

AMSAT News Service Bulletin 092.01
From AMSAT HQ SILVER SPRING, MD.
April 2, 2006
To All RADIO AMATEURS
BID: $ANS-092.01

Are you selling something on eBay?

Are you a seller on eBay? Would you like to make a donation of all or part of the proceeds from your auction to AMSAT?

AMSAT is now listed with Missionfish.org, part of the eBay Giving Works program. After entering the starting price of your auction item on eBay, there is a "Donate percentage of sale" question. If you make this selection, you will be taken to the Missionfish web site (http://www.missionfish.org) where you will be able to select your charitable organization (AMSAT). After selecting AMSAT, you will register yourself with Missionfish. Upon completion of your auction, if your item sells, your donation ($10 minimum) will be sent to AMSAT. It is quick, easy and benefits AMSAT.

Next time you or your friends place an item on eBay, please consider making a portion of the sale a donation to AMSAT. If you have questions about AMSAT's participation with Missionfish, please contact, Bruce Paige, KK5DO at kk5do@amsat.org.

[ANS thanks Bruce, KK5DO for the above information]

/EX

SB SAT @ AMSAT $ANS-092.02
AMSAT Gains Increased Presence at Dayton 2006

AMSAT News Service Bulletin 092.02
From AMSAT HQ SILVER SPRING, MD.
April 2, 2006
To All RADIO AMATEURS
BID: $ANS-092.02

AMSAT will have an increased presence at Dayton this year. We have additional booth space, where we will demonstrate an SDX (Software Defined Transponder) like the one that will fly on our EAGLE satellite. We will have additional forum time and presentations in a larger room. A great line up of speakers and topics have been chosen. We will also have live satellite demonstrations outside the Area, not far from the AMSAT booth. Additional information will begin to be posted on the AMSAT web site during the next week.

Make your plans to join your fellow amateur satellite enthusiasts May 19-21, 2006 at the Dayton Hamvention.

Gould Smith, WA4SXM
Director Field Operations

[ANS thanks Gould, WA4SXM for the above information]

/EX

SB SAT @ AMSAT $ANS-092.03
PCSAT2 Returns to UHF

AMSAT News Service Bulletin 092.03
From AMSAT HQ SILVER SPRING, MD.
April 2, 2006
To All RADIO AMATEURS
BID: $ANS-092.03

PCSAT2 has now returned to its 435.275 downlink to avoid any potential for QRM to ARISS school contacts. It will remain in this mode for several weeks until we see how the new crew schedule works out.

Modes remaining available:

* Packet up on 145.825 and down on 435.275
* High power PSK-31 and CW up on 29.401 also with downlink on 435.275.

To activate the PSK transponder, just connect to PCSAT2 on the packet uplink.

For more information see:
http://www.ew.usna.edu/~bruninga/pec/pc2ops.html

[ANS thanks Bob, WB4APR for the above information]

/EX

SB SAT @ AMSAT $ANS-092.04
OSCAR-11 Report March 27, 2006

AMSAT News Service Bulletin 092.04
From AMSAT HQ SILVER SPRING, MD.
April 2, 2006
To All RADIO AMATEURS
BID: $ANS-092.04

The following OSCAR-11 report was provided by Clive, G3CWV:

On 01 March OSCAR-11 achieved 22 years in orbit, and in spite of numerous problems, it still continues to transmit good signals.

During the period 14 February to 26 March 2006 the VHF beacon on 145.826 mHz. has been heard from 22 February to 04 March, and from 14 to 24 March.

Signals have been very consistent and excellent copy has been obtained on all passes received. If the current mode of operation continues, the beacon should switch ON around 04 April 2006.

The on-board clock continues to show a very large accumulated error. On 24 March it was 22.14308 days slow. However, the clock is now very stable. During the last month it gained 2.5 seconds, which is approximately half the monthly gain, observed when the satellite was fully operational! The observations of clock errors suggest that the clock may slow or stop when the battery voltage is low.

All the analogue telemetry channels, 0 to 59 are zero, i.e. they have failed. The status channels 60 to 67 are still working.

The satellite is now in continuous sunlight until around 06 May, when eclipses will start again. This should help the satellite to continue transmitting, although continuous sunlight can cause problems due to excessive temperatures. Power supply problems can be caused by poor pointing attitude, i.e. the sunlight illuminating the ends of the satellite, instead of the solar arrays.

The watchdog timer now appears to have resumed operation on the 20 day cycle. During the last two months the ON/OFF times have been very consistent, and many observations show this to be 20.7 days, i.e. 10.3 days ON followed by 10.4 days OFF. However, at any time, poor solar attitude, and battery problems, may result in a low 14 volt line supply, which may cause the beacon to switch OFF prematurely, and reset the watchdog timer cycle.

I am indebted to Bob, G4VRC, Gustavo, LW2DTZ, Mike, DK3WN, John, K7RQN and John, G4PWG for their reception reports. All have reported good signals from the VHF beacon. Many thanks for those reports.

The Beacon frequencies are -

VHF 145.826 mHz. AFSK FM ASCII Telemetry

UHF 435.025 mHz. OFF

S-band 2401.5 mHz. OFF

Listeners to OSCAR-11 may be interested in visiting my web site which contains an archive of news & telemetry data. It also contains details about using a sound card or hardware demodulators for data capture. There is software for capturing data, and decoding ASCII telemetry. The URL is: www.users.zetnet.co.uk/clivew/

[ANS thanks Clive, G3CWV for the above information]

/EX

SB SAT @ AMSAT $ANS-092.05
ARISS Status March 27, 2006

AMSAT News Service Bulletin 092.05
From AMSAT HQ SILVER SPRING, MD.
April 2, 2006
To All RADIO AMATEURS
BID: $ANS-092.05

1. Successful Contact with Maryland High School

On Friday, March 17, students from Bowie High School in Bowie, Maryland had the chance to speak with Bill McArthur, KC5ACR, on board the International Space Station. Ten students posed twenty questions to the astronaut including two questions asked and answered in Russian. Fifty students, teachers and parents gathered in the library for the contact as other classes listened in. Kathy Kurtz, Regional Assistant Superintendent and AMSAT President Rick Hambly also attended. Media coverage included a local cable television station, CTV-76, the Washington Post, and several local newspapers. Some of the articles follow:

"Students at Bowie High communicate with space station"
http://www.gazette.net/stories/031706/princou152802_31960.shtml

"Space Station calls home to Bowie - High school students communicate with astronaut via amateur radio" http://www.gazette.net/stories/032306/bowinew185511_31939.shtml

"A Chat That's Out of This World"
http://www.washingtonpost.com/wp-dyn/content/article/2006/03/22/AR2006032201250.html?referrer=emailarticle

"Bowie High students speak to astronauts by ham radio"
http://www.bowieblade.com/vault/cgi-bin/bowie/view/2006B/03/23-20.HTM

2. Ohio High School Contact Successful

Bill McArthur, KC5ACR, participated in a second contact on March 17 as he spoke with a group of teens at Cleveland Heights High School in Cleveland Heights, Ohio. He answered 22 questions posed to him by 15 students. Echolink was used during the contact and had 30 connections from 10 countries which included Belgium, Germany, Greece, and Hungary. Three nodes connected to IRLP Discovery Reflector 9010 and shoutcast audio streaming was available on the following web site:
http://www.discoveryreflector.ca

3. Successful ARISS Contact with Italian School Children

On March 21, children from three schools participated in the ARISS contact held at 1�Circolo didattico Giuseppe Settanni in Rutigliano, Italy. Two elementary schools, "1�Circolo didattico Giuseppe Settanni" (500 pupils) and "2�Circolo didattico Aldo Moro" (475 pupils) and one middle school, "Alessandro Manzoni" (615 pupils) participated. Bill McArthur, KC5ACR, answered 17 questions that were relayed to him by amateur radio operator Michele Mallardi, IZ7EVR. Audio and video links were made from the radio shack at the "Giuseppe Settanni" school to the assembly halls of the two other schools where students, teachers, military representatives, civilian authorities and Princess Elettra Marconi, daughter of Guglielmo Marconi, watched. Five television stations (RAI3, Telenorba, Telepuglia, Telebari and Teleregione), one radio station (Canale 103), and 4 newspapers (Gazzetta del Mezzogiorno, La Repubblica, Blu and Fax) covered the event.

4. Canadian School Experiences a Contact with the ISS

Students from Sir James Lougheed Elementary School in Calgary, Alberta, Canada experienced a successful ARISS contact on March 21. Twelve children asked 14 questions of astronaut Bill McArthur, KC5ACR, as 400 students and teachers looked on. Dignitaries present included a federal member of Parliament and executives from the school board and other corporations. The video of the event was seen many times on provincial wide distribution and acknowledged by other forms of media.

5. ARRL Covers Lippstadt School Contact

On March 16, ARRL ran a web story on the ARISS contact with Evangelisches Gymnasium entitled, "Space QSO Helps Introduce Amateur Radio to German Students."
See: http://www.arrl.org/news/stories/2006/03/16/1/?nc=1

6. ARRL Article on Contacts with Bowie, Cleveland Heights Schools

ARRL ran an article covering the Bowie High and Cleveland Heights Elementary School contacts. "ISS Commander on a Roll, Completes Another Set of Back-to-Back School QSOs" may be found at:
http://www.arrl.org/news/stories/2006/03/23/1/?nc=1

7. ARRL Article on Contacting ISS

A "how-to" guide for making contacts with the ISS has been posted on the ARRL web site. "Making a Voice Contact with the International Space Station" may be found on:
http://www.arrl.org/news/features/2006/03/15/1/?nc=1

8. McArthur Wows Tonga

An article has been posted online covering McArthur's general contact with an amateur radio operator in Tonga. To view "Space station astronaut communicates with outer island," go to:
http://www.matangitonga.to/article/tonganews/outerislands/nasa_space_station_tonga150306.shtml

9. SuitSat Continues to Receive Media Coverage

ARISS member Lou McFadin was interviewed by Electronic Design Magazine last month and talked about his participation in the SuitSat project. The story, "Latest Amateur-Radio Satellite Is No Empty Suit," has been posted to this web site:
http://www.elecdesign.com/Articles/Index.cfm?ArticleID=12096

10. ARRL Runs McArthur's Thank You Note

ARRL posted a thank you note to earth bound hams from Bill McArthur. "ISS Commander Says 'Thank You!' to the Amateur Radio Community" may be found on the ARRL web site:
http://www.arrl.org/news/stories/2006/03/22/2/?nc=1

11. Student Inspired by Amateur Radio Contact

A student who participated in a SAREX contact with astronaut Ken Cameron in 1994 is now an Air Force Academy graduate. She dreams of becoming an astronaut and attributes much of her interest in flying to her participation in that contact years ago. As a little girl, she was able to ask her question, "How does a fish swim in space?" Today she is a pilot and she continues her flight training in flying fighter jets.

[ANS thanks Carol, KB3LKI for the above information]

/EX

SB SAT @ AMSAT $ANS-092.06
Space Probe VOYAGER 1 Received by AMSAT-DL Group

AMSAT News Service Bulletin 092.06
From AMSAT HQ SILVER SPRING, MD.
April 2, 2006
To All RADIO AMATEURS
BID: $ANS-092.06

On March 31, 2006 an AMSAT-DL/IUZ team received the American space probe VOYAGER 1 with the 20 m antenna in Bochum. The distance was 14.7 billion km. This is a new record for AMSAT-DL and IUZ Bochum. The received signal was clearly identified through means of Doppler shift and position in the sky. The receive frequency was exactly measured and compared with the information provided by NASA.

This distance equals approximately 98 times the distance between Earth and Sun. VOYAGER 1 is the most distant object ever built by mankind. This again proves the superior performance of the Bochum antenna. Most probably this is the first time VOYAGER 1 has been received by radio amateurs.

VOYAGER 1 was launched on September 5, 1977 by NASA. It transmitted the first close-up pictures of Jupiter and Saturn. In 2004 VOYAGER 1 passed the Termination Shock Region, where the solar wind mixes with interstellar gas. VOYAGER 1 today is still active, measuring the interstellar magnetic field.

The following radio amateurs were involved:

Freddy de Guchteneire, ON6UG
James Miller, G3RUH
Hartmut Paesler, DL1YDD
Achim Vollhardt, DH2VA/HB9DUN

Special thanks to Thilo Elsner, DJ5YM of the IUZ Bochum, Roger Ludwig of Jet Propulsion Laboratory (JPL), Pasadena USA and the Deep Space Network Tracking Station in Madrid, Spain for their cooperation.

For more information please visit

http://voyager.jpl.nasa.gov
http://www.amsat-dl.org/cms under "News"

[ANS thanks Hartmut Paesler, DL1YDD and AMSAT-DL for the above information]

/EX

SB SAT @ AMSAT $ANS-092.07
AMSAT-Florida Announces Net and Email List

AMSAT News Service Bulletin 092.07
From AMSAT HQ SILVER SPRING, MD.
April 2, 2006
To All RADIO AMATEURS
BID: $ANS-092.07

A coordinated effort by AMSAT-Florida is underway to establish a regional

AMSAT net in Central Florida. The Central Florida AMSAT Net began operation last Thursday, March 30 at 19:30 ET on the N4HHA 443.100 mHz repeater located in Orlando, and will continue meeting every week on this same day and time. Preparations are being made to link the Orlando repeater to the NI4CE repeater system that provides coverage throughout west central Florida. More information on this network may be found at www.ni4ce.org. When completed the net should be accessible from a large portion of Central Florida, and in many areas on multiple frequencies. Future plans call for the net to be available via Echolink.

Special thanks go out to the owners and operators of the repeater systems on which the net is held, without which this net could not be possible.

Orlando Repeater
N4HHA, Mike Burke

West Central Florida Group
NI4CE System
NA4AR, Paul Toth
KG4YZY, Dave Anderson
WA4ISB, Ed Allen

In addition to the net, AMSAT-Florida would like announce the AMSAT-Florida email list, a general satellite discussion list with a local flavor for Florida AMSAT enthusiasts. Users may subscribe via the majordomo instructions found at http://www.amsat.org/amsat-new/tools/maillist/ with a list name of "amsat-florida".

Any inquiries for the Florida AMSAT Net can contact:
AA4KN at aa4kn@amsat.org
KO4MA at ko4ma@amsat.org
KI4HXT at ki4hxt@amsat.org

[ANS thanks Rob, KI4HXT for the above information]

/EX

SB SAT @ AMSAT $ANS-092.08
Amateur Radio Satellite News Archive Announced

AMSAT News Service Bulletin 092.08
From AMSAT HQ SILVER SPRING, MD.
April 2, 2006
To All RADIO AMATEURS
BID: $ANS-092.08

For many years, Richard, G3RWL prepared monthly bulletins of Amateur Radio Satellite news. The bulletins were usually broadcast on the last Sunday of each month, in the AMSAT-UK 80 meter net. They were also distributed via packet radio and as hard copy. Many of the early bulletins were produced before the internet was available.

Clive, G3CWV, has now obtained a complete set of these bulletins which were broadcast from May 1985 to July 2004

This is a very detailed and useful archive, especially for research and preparation of lectures. The archive comprises 239 text files, one for each month, which are zipped into four packages for convenience. Also included are some reports of the AMSAT-UK Colloquium and reports about individual satellites.

Upon making the archives available, Clive stated "I would like to congratulate Richard for a fine achievement in preparing these bulletins and to thank him for granting permission to distribute the archive."

The archive may be downloaded from Clive's web site. See:
www.users.zetnet.co.uk/clivew/satnews.htm

[ANS thanks Clive, G3CWV for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Al Marote, WA1LBG
AMSAT LM-1957
wa1lbg at amsat dot org

From -6194440673628314245
X-Google-Thread: 10e8ad,79f693eb880f5bc5,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII
Path: g2news1.google.com!news2.google.com!news4.google.com!
border1.nntp.dca.giganews.com!border2.nntp.dca.giganews.com!nntp.giganews.com!
elnk-atl-nf1!newsfeed.earthlink.net!stamper.news.atl.earthlink.net!
newsread1.news.atl.earthlink.net.POSTED!46041641!not-for-mail
From: "JoAnne Maenpaa" <wb9jej_no-spam@earthling.com>
Newsgroups: rec.radio.amateur.space
Subject: WSR-092 AMSAT Weekly Satellite Report
Lines: 1191
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <zeuYf.2877$i41.2700@newsread1.news.atl.earthlink.net>
Date: Tue, 04 Apr 2006 13:09:51 GMT
NNTP-Posting-Host: 66.167.66.56
X-Complaints-To: abuse@earthlink.net

X-Trace: newsread1.news.atl.earthlink.net 1144156191 66.167.66.56 (Tue, 04 Apr 2006 06:09:51 PDT)
NNTP-Posting-Date: Tue, 04 Apr 2006 06:09:51 PDT
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news1.google.com rec.radio.amateur.space:202

This report is organized into 4 parts.
Part 1 - operational analog amateur satellites.
Part 2 - operational digital amateur satellites.
Part 3 - non - operational satellites
Part 4 - proposed satellites

SB SAT @ AMSAT W8ISS ANS-092.S1
WSR 092 Part 1 04/02/2006

AMSAT NEWS SERVICE BULLETIN 085.S1 FROM AMSAT HQ
SILVER SPRING, MD, April 02, 2006
TO ALL RADIO AMATEURS
BID: $ANS-092.S1

VO-52 HAMSAT
Catalog Number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/V - Indian Transponder

Proposed frequencies:

Indian Transponder:
Uplink : 435.220 MHz to 435.280 MHz LSB/CW
Downlink: 145.870 MHz to 145.930 MHz USB/CW
Beacom : 145.859330 MHZ CW

Dutch Transponder:
Uplink : 435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW
Beacon : 145.860MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsat.in/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is
active. Each transponder has a different beacon, see below:

Indian transponder - unmodulated carrier on
145.936MHz.
Dutch Transponder - CW message on 145.860MHz.
[03192006]

=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Modes: FM Repeater, V/U-High power
Digipeater - OFF

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
Analog voice uplink: 145.880 MHZ FM
145.880 MHz USB
145.920 MHz FM 67Hz PL tone
1268.700 MHz FM 67Hz PL tone

Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast Protocol

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[04022006]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Uplink: 145.850 MHz (67.0 Hz PL tone) (See below for operating procedures)
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

There have been unconfirmed reports on the amsat-bb remailer that SO-50

has
shifted downlink frequency as much as 5khz up. This both from Europe.

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The
order of operation is thus: (allow for Doppler as necessary)

1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute
timer
on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the
repeater
on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset
the 10
minute timer.
[01012006]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: OPERATIONAL

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplink: 145.850 145.870 145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

unOfficial Webpage: http://www.amsat.org/amsat/sats/n7hpr/fo29.html
[11132005]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Uplink: 145.850 MHz FM
Downlink: 436.795 MHz FM

Mode and Antenna Polarization:
V: Linear

U: Linear

Official Webpage: http://www.ao27.org
[01012006]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational until March 14th

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz
145.972 MHz
435.100 MHz
2304.100 MHz

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php
The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
AO-7 users are requested to log their contacts and observations about AO-7, especially any unexpected mode changes.
AO-07 telemetry software webpage:
http://www.qsl.net/k3tz/files/K3TZ_AO-07_Telemetry_Decoder_0.5.zip

This from Emily, N1DID:
AO-7 is Operational
As of 15 March 2006 AO-7 entered eclipse on the ascending node of it's orbit for a short period of time and will turn off during that period, but otherwise remains operational providing stations observe QRP power levels. It is difficult to tell if the 24 hour timer will be reset or if there is enough energy to keep it running during the short periods of eclipse AO-7 experiences for the next few weeks. We should know in a few days by observing the modes reported on each orbit.

Please keep your power low! For additional information please read the AO-7 Usage Guidelines on the AO-7 Log and Resource Site located at:
http://www.planetemily.com/ao7
[ANS-WSR wishes to thank Emily Clarke, N1DID]
[03192006]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544

Launch date: November 20, 1998

Status: Operational
Current Mode: Packet / Occasional Voice
Digipeater: ON

The current Expedition 12 crew is:
Commander: William McArthur - KC5ACR
Flight Engineer: Valery Tokarev - (no call)

Expedition 13 crew set to lift off on March 30th at 0230z with:
Commander: Pavel Vinogradov, RV3BS
Flight Engineer: Jeff Williams, KD5TVQ
Brazillian Astronaut: Marcos Pontes, PY0AEB

Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Russian: RS0ISS, RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official Webpage: http://www.rac.ca/ariss
Official Fan club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.
[03262006]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-092.S2
WSR 092 Part 2 04/02/2006

AMSAT NEWS SERVICE BULLETIN 092.S2 FROM AMSAT HQ
SILVER SPRING, MD, April 02, 2006
TO ALL RADIO AMATEURS
BID: $ANS-092.S2

CO-56 XI-V
Catalog Number: 28895
Launch Date: October 27, 2005

Status: Operational only within range of Ground station in Japan

Telemetry Downlink: 437.345MHz - FSK 1200bps using AFK protocol
Beacon Downlink: 437.465MHz - CW about 50 WPM

Callsign: JQ1YGW

Oficial Webpage: http://www.space.t.u-tokyo.ac.jp/gs/satinfo-e.html#xi5
Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
[03122006]

=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: Packet
Digipeater: ON

The current Expedition 12 crew is:
Commander: William McArthur - KC5ACR
Flight Engineer: Valery Tokarev - (no call)

Expedition 13 crew set to lift off on March 30th at 0230z with:
Commander: Pavel Vinogradov, RV3BS
Flight Engineer: Jeff Williams, KD5TVQ
Brazillian Astronaut: Marcos Pontes, PY0AEB

Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:

V: Linear
U: Linear

Callsigns:
Russian: RS0ISS, RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official Webpage: http://www.rac.ca/ariss
Official Fan club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line is NOT translated from Russian and posted.
[03262006]

=====
PCSAT-2
Catalog Number: 25544
Launch Date: August 1, 2005

Activated: August 3, 2005
Status: Operational
Current Mode: Digipeater

Digital Downlink: 435.275 Mhz
Digital Uplink: 145.825 Mhz

PSK-31 Downlink: 435.275 Mhz
PSK-31 Uplink: 29.401 Mhz

Broadcast:
BBS:

Official Webpage: http://web.usna.navy.mil/~bruninga/pcsat2.html
PCSAT2 APRS Packet page: http://www.findu.com/cgi-bin/pcsat2.cgi
aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/

This from Robert Bruninga, WB4APR:
PCSAT2 has now returned to its 435.275 downlink to avoid any potential for QRM to ARISS school contacts. It will remain in this mode for several weeks until we see how the new crew schedule works out.

Modes remaining available:

- Packet up on 145.825 and down on 435.275
- High power PSK-31 and CW up on 29.401 also with downlink on 435.275

To activate the PSK transponder, just connect to PCSAT2 on the packet uplink.
[ANS-WSR wishes to thank Robert Bruninga, WB4PR for this weeks information.]
[04022006]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Modes: FM Repeater, V/U-High power
Digipeater - OFF

Analog voice downlink: 435.300 MHz FM
         435.150 MHz FM
Analog voice uplink: 145.880 MHZ FM
       145.880 MHz USB
       145.920 MHz FM 67Hz PL tone
      1268.700 MHz FM 67Hz PL tone

Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
    2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast Protocol (PBP)

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/
[04022006]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Operational

General Usage Uplink/Downlink:145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org
aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/

This from Robert Bruninga, WB4APR:
PCSAT-1 reset back to W3ADO-1 at 2336z or so on 23 March after a good 16 day run of fully OPS jointly with PCSAT2 on ISS. During that time numerous dual hop packets were reported.

PCSAT2 will remain with a 2m downlink on 145.825 until the next school contact on the 28th. From now till then, it will also keep its 10m PSK-31 to 435.275 FM transponder enabled for anyone to experiment with using either CW or PSK.

Just use one rig to CONNECT to PCSAT2 on 145.825 to turn on the transponder and use your 10m CW or PSK rig to TX and your UHF FM receiver to listen.
[ANS-WSR wishes to thank Robert Bruninga, WB4PR for this weeks information.]
[03262006]
=====
CO-55 CUTE-1
Catalog number: 27844
Launched: June 30,2003

Status: Operational

Uplink: ?
Downlink: 436.8375 CW
437.4700 1200 FM ax25 or SRLL (ACTIVE only near Japan ?)
Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[03122006]
=====
GO-32 TECHSAT-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Downlink: 435.225 MHz FM (9600-baud FSK)
(435.325 n/a - temperature problems)
Uplinks: 145.850, 145.890, 145.930 FM
1269.700, 1269.800, 1269.900 FM
Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

Mineo, JE9PEL, reports February 02, 2006:

```
4XTECH-12>STATUS [02/02/06 20:39:52] <UI R>:
UTC: Thu Feb 02 11:39:35 2006 | Gurwin Techsat1B (V9.86)
BBS(9.86) is active ,AsherSpaceResearchInst greets you.
2 Users/8 Broadcasts, Uplink freq:145.890,145.850,145.930, 1269.800,
```

1269.900

TechRam2V9.86
TechRam2V9.86.

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[ANS-WSR wishes to thank Mineo, JE9PEL, for this weeks information.]
[02122006]

=====

AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Semi-operational, the digipeater command is on and open for APRS users.

Uplink: 145.90 145.92 145.94 145.96 MHz FM
(using 1200-baud Manchester FSK)
Downlink: 437.026 MHz SSB (1200-baud PSK)
Mode-S Beacon: 2401.1428 MHz

Mode and Antenna Polarization:
U: RC 437.050 MHz RHCP
   PSK 437.025 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html

This from Paul Williamson,KB5MU:
There has been no loss of command function on AO-16.

The BBS is down because of localized memory failures in the mass memory used for message (file) storage, caused presumably by radiation. It would be possible to modify the on-board BBS software to work around these memory failures and the command team did request that this be done, but it has not been aggressively followed up due to the apparent lack of interest in 1200 bps capabilities.

The S-band beacon isn't broken to the best of my knowledge, it's just turned off. The power budget doesn't allow the S-band beacon to be run continuously without reducing the main downlink to flea power. I can't explain VK5DG's observation of telemetry indicating 700mw of output from the S-band transmitter, but perhaps someone who has paid more attention to the telemetry could explain it.

There hasn't been much communication within the AO-16 command team in a long time, since the satellite is pretty much self-sufficient in its current mode and we haven't been working on any projects to change things. At least a few of us are still standing by in case anything comes up.

Mike Rupprecht, DK3WN reports the following:
this is AO-16 telemetry from today :

```
ctrl: 3 {UI}  PID: F0 {No L3}  Total Frame Bytes: 138
from PACSAT-1 to TLM:
   1 > 61 85 1D 44 00 61 01 92 02 18 03 84 04 5C 05 A0 06 4C 07 88
  21 > 08 52 09 91 0A A1 0B D0 0C E7 0D D8 0E 10 0F 2D 10 D2 11 81
  41 > 12 00 13 BE 14 8A 15 85 16 93 17 90 18 92 19 8C 1A 8C 1B 92
  61 > 1C 83 1D 89 1E B5 1F 57 20 8C 21 65 22 70 23 4B 24 26 25 35
  81 > 26 01 27 01 28 64 29 00 2A 07 2B 01 2C 00 2D 5B 2E 66 2F 7B
 101 > 30 7C 31 7E 32 96 33 00 34 7D 35 7D 36 83 37 76 38 90 39 A9
 121 > 3A 01
```

translated :

```
-------------------------------------------------------------------------------
-----------
uptime is 2226/12:31:51.  Time is Sun Mar 19 16:22:57 2006
PACSAT
Rx D DISC        0.482 k  Rx D S meter   146.000 C  Rx C DISC
6.953 k
Rx C S meter   132.000 C  Rx B DISC        1.706 k  Rx B S meter
160.000 C
Rx A DISC        2.830 k  Rx A S meter   136.000 C  Rx E/F DISC
2.690 k
Rx E/F S meter 145.000 C  +5 Volt Bus      4.911 V  +5V Rx Current
0.052 A
+2.5V  VREF      2.495 V  8.5V BUS         8.446 V  IR Detector
16.000 C
LO Monitor I     0.002 A  +10V Bus        10.500 V  GASFET Bias I
0.003 A
Ground REF       0.000 V  +Z Array V      19.437 V  Rx Temp
17.546 D
+X (RX) temp    20.572 D  Bat 1 V          1.263 V  Bat 2 V
1.267 V
Bat 3 V          1.262 V  Bat 4 V          1.280 V  Bat 5 V
1.284 V
Bat 6 V          1.254 V  Bat 7 V          1.312 V  Bat 8 V
1.299 V
Array V         20.345 V  +5V Bus          4.749 V  +8.5V Bus
8.040 V
+10V Bus        10.175 V  BCR Set Point  120.111 C  BCR Load Cur
```

```
0.528 A
+8.5V Bus Cur    0.032 A  +5V Bus Cur      0.214 A  -X Array Cur
-0.008 A
+X Array Cur    -0.021 A  -Y Array Cur     0.251 A  +Y Array Cur
-0.018 A
-Z Array Cur    -0.007 A  +Z Array Cur    -0.018 A  Ext Power Cur
-0.020 A
BCR Input Cur    0.300 A  BCR Output Cur   0.318 A  Bat 1 Temp
26.623 D
Bat 2 Temp      26.018 D  Baseplt Temp    24.807 D  PSK TX RF Out
2.468 W
RC PSK TX Out    0.005 W  PSK TX HPA Tem  25.413 D  +Y Array Temp
25.413 D
RC PSK HPA Tem  21.782 D  RC PSK BP Temp  29.648 D  +Z Array Temp
13.916 D
S band TX Out    0.726 W  S band HPA Tem   1.000 C

Total Array C= 0.251 Bat Ch Cur=-0.210 Ifb= 0.049 I+10V= 0.479
TXA:1 TXB:0 TX Pwr:B SbT:0 BCR:7C SCR:3 LP:6 HI:D BT:1E WC:25
```

Example for very rare activity over europe - 2 german and a swiss
station ->
conversation german :-)
It work's !!!

```
fm PACSAT-1 to LSTAT ctl UI pid F0 [DAMA] - 15.03.06 18:50:26
I P:0x1D00 o:0 l:6654 f:7171, d:1 st:1
fm HB9SKA to DK3WN via PACSAT-1* ctl I00+ pid F0 - 15.03.06 18:50:27
Hallo Mike
fm DK5EC to JO30OR via PACSAT-1* ctl UI^ pid F0 - 15.03.06 18:50:30
=5042.15N/00714.82E-Karl 73 from Koenigswinter
fm HB9SKA to CQ via PACSAT-1* ctl UI^ pid F0 - 15.03.06 18:50:31
=4726.07N/00812.00E-********** pse connect me! **********
fm DK5EC to JO30OR via PACSAT-1* ctl UI^ pid F0 - 15.03.06 18:51:00
/00714.82E-Karl 73 from Koenigswinter
fm DK3WN to CQ via PACSAT-1* ctl UI^ pid F0 - 15.03.06 18:51:24
73 ihr beiden de Mike
fm HB9SKA to CQ via PACSAT-1* ctl UI^ pid F0 - 15.03.06 18:51:41
=4726.07N/00812.00E-********** pse connect me! **********
fm DK3WN to CQ via PACSAT-1* ctl UI^ pid F0 - 15.03.06 18:52:04
Hallo Thomas, Hallo Karl
fm DK5EC to ALL via PACSAT-1* ctl UI pid F0 - 15.03.06 18:52:49
:HB9SKA   :hallo, ist ja richtig was los hier hallo Thomas
fm DK5EC to ALL via PACSAT-1* ctl UI pid F0 - 15.03.06 18:52:54
:BLN0QSLs :DK3WN,PACSAT-1,HB9SKA{UISS41}
fm DK3WN to CQ via PACSAT-1* ctl UI^ pid F0 - 15.03.06 18:52:59
Hallo Ihr Beiden - QSL ???
fm DK5EC to ALL via PACSAT-1* ctl UI pid F0 - 15.03.06 18:53:23
... wie im Contest hi
:DK3WN    :hallo, ist ja richtig was los hier hallo Mike
fm DK5EC to JO30OR via PACSAT-1* ctl UI^ pid F0 - 15.03.06 18:53:20
=5042.15N/00714.82E-Karl 73 from Koenigswinter
fm DK3WN to CQ via PACSAT-1* ctl UI^ pid F0 - 15.03.06 18:53:33
```

endlich mal ein wenig Aktivit�t

```
fm PACSAT-1 to TIME-1 ctl UI pid F0 [DAMA] - 15.03.06 18:53:52
 HT: uptime is 2226/12:43:51.  Time is Sun Mar 19 16:34:57 2006
```

Hope, this give you stimulus!

[ANS-WSR wishes to thank Paul Williamson,KB5MU and Mike Rupprecht, DK3WN for this weeks information]
[03192006]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational?

Telemetry Downlink: 145.826 MHz. FM (1200-baud AFSK).
approx. 10 days ON, 10 days OFF
Mode-S Beacon: 2401.500 MHz. ... OFF
UHFBeacon: 435.025 MHz. ... OFF

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Official webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm

This from Clive, G3CWV:

OSCAR-11 REPORT

27 March 2006

On 01 March OSCAR-11 achieved 22 years in orbit, and inspite of numerous problems, it still continues to transmit good signals.

During the period 14 February to 26 March 2006 the VHF beacon on 145.826 MHz has been heard from 22 February to 04 March, and from 14 to 24 March.

Signals have been very consistent and excellent copy has been obtained on all passes received. If the current mode of operation continues, the beacon should switch ON around 04 April 2006.

The on-board clock continues to show a very large accumulated error. On 24 March it was 22.14308 days slow. However, the clock is now very stable. During the last month it gained 2.5 seconds, which is approximately half the monthly gain, observed when the satellite was fully operational! The observations of clock errors suggest that the clock may slow or stop when the battery voltage is low.

All the analogue telemetry channels, 0 to 59 are zero, ie they have failed. The status channels 60 to 67 are still working.

The satellite is now in continuous sunlight until around 06 May, when eclipses will start again. This should help the satellite to continue transmitting, although continuous sunlight can cause problems due to excessive temperatures. Power supply problems can be caused by poor pointing attitude, ie the sunlight illuminating the ends of the satellite, instead of the solar arrays.

The watchdog timer now appears to have resumed operation on the 20 day cycle. During the last two months the ON/OFF times have been very consistent, and many observations show this to be 20.7 days, ie. 10.3 days ON followed by 10.4 days OFF. However, at any time, poor solar attitude, and battery problems, may result in a low 14 volt line supply, which may cause the beacon to switch OFF prematurely, and reset the watchdog timer cycle.

I am indebted to Bob G4VRC, Gustavo LW2DTZ, Mike DK3WN, John K7RQN and John G4PWG for their reception reports. All have reported good signals from the VHF beacon. Many thanks for those reports.

The Beacon frequencies are -

VHF 145.826 MHz. AFSK FM ASCII Telemetry

UHF 435.025 MHz. OFF

S-band 2401.5 MHz. OFF

Listeners to OSCAR-11 may be interested in visiting my website which contains an archive of news & telemetry data. It also contains details about using a soundcard or hardware demodulators for data capture. There is software for capturing data, and decoding ASCII telemetry. The URL is:
http://www.users.zetnet.co.uk/clivew/

[ANS-WSR wishes to thank Clive Wallis, G3CWV for this weeks information]
[03262006]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-092.S3
WSR 092 Part 3 04/02/2006

AMSAT NEWS SERVICE BULLETIN 092.S3 FROM AMSAT HQ
SILVER SPRING, MD, April 02, 2006
TO ALL RADIO AMATEURS
BID: $ANS-092.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

AO-54 SUITSAT
Catalog Number:28934
Release Date: February 3,2006

Status: Non-operational
Modes : FM Voice Telemetry/Greetings
 FM SSTV

Callsign: RS0RS
Downlink: 145.990 FM

Official webpage: http://www.suitsat.org
[02262006]
=====
NCUBE-2
Catalog Number: 28894
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
2407.25
[01012006]
=====
XO-53 SSETI
Catalog Number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 FM 67Hz CTCSS
Voice Downlink: 2401.835 FM
Packet Up/Downlink: 437.250 9k6 packet
Packet Downlink 2401.835 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php

```
[01292006]
=====
POSAT-1 PO-28
Catalog Number: 22829
Launched : September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 429.950

Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html.
POSAT-1
webpage:http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012006]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launched: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB
Beacon: 145.810 MHz (unmodulated carrier)

AO-10 has been locked into a Mode-B, 70-cm uplink and
2-meter downlink for several years.

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: Downlink only

Uplink: 145.875 145.900 145.925 145.950 MHz FM (1200-baud)
Downlink: 435.808 MHz PSK
Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01012006]
=====
RS-12 RADIO SPORT RS-12
```

```
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB
Beacon: 29.408 MHz
Robot: 29.454 MHz
[05232004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB
Beacon: 145.860 MHz
Robot: 145.908 MHz
[05232004]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink 145.975 MHz FM
Downlink 435.070 MHz FM
[05092004]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink: 145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM
Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01092005]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational?

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB
```

Beacon: 29.352 MHz (intermittent)
SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplink: 145.84 145.86 145.88 145.90 MHz FM
(using 1200-baud Manchester FSK)
CW downlink: 437.125 MHz
Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)
Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[05232004]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[08152004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM
Broadcast Callsign: HL01-11
BBS: HL01-12

Jim, AA7KC, reports that KO-23's downlink transmitter continues in a non-operational status.
[05092004]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM (9600-baud FSK)
Downlink: 436.500 MHz FM
Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm

[ANS-WSR has no further information]
[05232004]
=====
SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

STatus: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz and 145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[08082004]
=====

UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlink: 437.025 MHz 437.400 MHz
Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA
web site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[05092004]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplink V-band 145.840 - 145.990 MHz CW/LSB
U-band 435.550 - 435.800 MHz CW/LSB
L1-band 1269.250 - 1269.500 MHz CW/LSB
L2-band 1268.325 - 1268.575 MHz CW/LSB
S1-band 2400.350 - 2400.600 MHz CW/LSB
Downlink: S2-band 2401.225 - 2401.475 MHz CW/USB
K-band 24,048.010 - 24,048.060 MHz CW/USB
Beacon: 2401.323, 24,048.035
[05232004]

SO-42 SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational
Downlink: 437.075 MHz
Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[08152004]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[08152004]

=====

NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, callsign KE6QMD, as per the user service agreement located at the following
URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]

=====

MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Operational

Uplink: 145.850 or 145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz
Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[11202005]

=====

AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink 435.275 1200-baud AFSK
Downlink 145.825 9600-baud FSK
(optional voice message)

Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01012006]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-092.S4
WSR 092 Part 4 04/02/2006

AMSAT NEWS SERVICE BULLETIN 085.S4 FROM AMSAT HQ
SILVER SPRING, MD, April 02, 2006
TO ALL RADIO AMATEURS
BID: $ANS-092.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE PROPOSED FOR LAUNCH AT THIS TIME:

PHASE 3E ?O-??
Catalog Number:
Proposed Launch Date: Early 2006

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/

[ANS-WSR wishes to thank William Leijenaar, PE1RAH for this week's report]
[10022005]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/amsat/listserv/menu.html

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

From -1649885638009876376
X-Google-Thread: 10e8ad,6563b89b299534a5,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!postnews.google.com!g10g2000cwb.googlegroups.com!not-for-mail
From: chesjon@gmail.com
Newsgroups: rec.radio.amateur.space
Subject: Free Music Downloads
Date: 5 Apr 2006 06:56:53 -0700
Organization: http://groups.google.com
Lines: 2
Message-ID: <1144245413.023315.202010@g10g2000cwb.googlegroups.com>
NNTP-Posting-Host: 69.19.14.38
Mime-Version: 1.0
Content-Type: text/plain; charset="iso-8859-1"
X-Trace: posting.google.com 1144245419 26277 127.0.0.1 (5 Apr 2006 13:56:59 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Wed, 5 Apr 2006 13:56:59 +0000 (UTC)
User-Agent: G2/0.2

```
X-HTTP-UserAgent: Mozilla/4.0 (compatible; MSIE 7.0; Windows NT 5.1; SV1; .NET CLR
1.1.4322),gzip(gfe),gzip(gfe)
Complaints-To: groups-abuse@google.com
Injection-Info: g10g2000cwb.googlegroups.com; posting-host=69.19.14.38;
   posting-account=6nxJTg0AAAB6OamNRR-qShXeGovwwegH
Xref: g2news1.google.com rec.radio.amateur.space:203
```

Hey check this out: http://www.kohit.net/

```
From -6564293481524433930
X-Google-Thread: 10e8ad,ddcc191fe1129309,start
X-Google-Thread: 113975,ddcc191fe1129309,start
X-Google-Attributes: gid10e8ad,gid113975,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news3.google.com!newshub.sdsu.edu!news.astraweb.com!
router2.astraweb.com!not-for-mail
From: Chris Steyaert <observations@rmob.org>
Newsgroups: rec.radio.amateur.space,sci.astro.amateur
Subject: Radio Meteor Obs. Bull. March 2006
Date: Sat, 08 Apr 2006 20:32:53 +0200
Message-ID: <id0g325g8jfucfu31ostcked0pfc9s9r03@4ax.com>
X-Newsreader: Forte Agent 1.93/32.576 English (American)
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Lines: 17
Organization: Unlimited download news at news.astraweb.com
NNTP-Posting-Host: 2fb7b845.news.astraweb.com
X-Trace: DXC=QNfZTd;kn==YUQJRTa54B1L?0kYOcDh@:jTTcH_YI0:?
64LD>W<8_k0O>gF9O392J;XR7GV@<bK\25UdKc80YMR0
Xref: g2news1.google.com rec.radio.amateur.space:205 sci.astro.amateur:23158
```

Radio Meteor Observation Bulletin No. 152 of March 2006 (81 K) is available now as

http://visualrmob.free.fr/rmobtext/rmob0603.txt

More information and the visual presentation of the hourly forward scatter counts can be found on

http://www.rmob.org

http://radio.data.free.fr

Chris

```
From 29024487l0765418149
X-Google-Thread: 10e8ad,470b40c63ce70b37,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII
Path: g2news1.google.com!news3.google.com!newshub.sdsu.edu!elnk-nf2-pas!
newsfeed.earthlink.net!stamper.news.pas.earthlink.net!
stamper.news.atl.earthlink.net!newsread1.news.atl.earthlink.net.POSTED!46041641!
not-for-mail
From: "JoAnne Maenpaa" <wb9jej_no-spam@earthling.com>
Newsgroups: rec.radio.amateur.space
Subject: ANS-099 AMSAT News Service Weekly Bulletin
Lines: 314
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <TW7%f.6001$i41.4177@newsread1.news.atl.earthlink.net>
Date: Wed, 12 Apr 2006 14:14:11 GMT
NNTP-Posting-Host: 69.3.101.182
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread1.news.atl.earthlink.net 1144851251 69.3.101.182 (Wed, 12 Apr
2006 07:14:11 PDT)
NNTP-Posting-Date: Wed, 12 Apr 2006 07:14:11 PDT
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news1.google.com rec.radio.amateur.space:206
```

AMSAT NEWS SERVICE
ANS-099

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

******************** AMSAT 2006 Space Symposium **************************

The AMSAT web team has posted informational pages on the AMSAT web site. You can find the announcement with many links at:
http://www.amsat-org/amsat-new/symposium

Future announcements including the Call For Papers, Online Registration and Online Hotel Registration are coming soon.

****

In this edition:

* Invitation to Join AMSAT Alternate Activities at Dayton
* Satellite Conference, Colloquium, and Symposium Opportunities

* ISS Crews Continue Record Breaking Amateur Radio Activity
* AO-51 to Enable 38k4 Pacsat Mode
* ARISS Status for the week of April 3, 2006
* Venus Express Arrives This Week

SB SAT @ AMSAT $ANS-099.01
Invitation to Join AMSAT Alternate Activities at Dayton

AMSAT News Service Bulletin 099.01
From AMSAT HQ SILVER SPRING, MD.
April 9, 2006
To All RADIO AMATEURS
BID: $ANS-099.01

Gould, WA4SXM, AMSAT Director Field Operations, invites radio amateurs attending the Dayton Hamvention to join us for these great alternate activities planned during the evenings.

On Thursday, May 18, we will have our sixth annual 'Pizza and Suds' gathering at Marion's Pizza. Join fellow satellite enthusiasts for a fun time in a relaxing atmosphere. The party begins at 6:30 PM.

On Friday evening, May 19, we will host the annual AMSAT Banquet at the Amber Rose Restaurant. Great food and an opportunity to chat with fellow AMSAT members and officers. Happy hour begins at 6:00 PM with the meal served at 7:30 PM. Following the meal, Lou McFadin, W5DID will be our speaker, talking about SuitSat-1 and SuitSat-2.

Please make your reservations for both events early by contacting Nancy Makley at KC8GYW@AMSAT.ORG. Directions to these events will be available on the AMSAT web site shortly.

[ANS thanks Gould, WA4SXM for the above information]

/EX

SB SAT @ AMSAT $ANS-099.02
Satellite Conference, Colloquium, and Symposium Opportunities

AMSAT News Service Bulletin 099.02
From AMSAT HQ SILVER SPRING, MD.
April 9, 2006
To All RADIO AMATEURS
BID: $ANS-099.02

The 3rd Annual Cubesat Workshop will be held from April 27-29 on the Cal Poly campus in San Luis Obispo, CA. For more info see: http://littonlab.atl.calpoly.edu/pages/workshops/cal-poly-2006.php

Alexander, RW3DZ reports that Moscow State University will conduct the UNVERSAT-2006, a conference devoted to microsatellites used for science and education. The dates of this conference are June 26-30, 2006. For more information refer to: http://cosmos.msu.ru/universat2006/

The AMSAT-UK Colloquium will be held at the University of Surrey from July 28-30, 2006. Information will be posted on the AMSAT-UK website when it becomes available: http://www.uk.amsat.org/

The AMSAT 2006 Space Symposium and Annual meeting will be held October 5-11, 2006 in San Francisco. The Symposium will again be a joint meeting with the ARISS International Delegates and will also include the IARU Satellite Advisory Panel annual meeting, and a meeting of AMSAT International Delegates. See http://www.amsat.org/amsat-new/symposium/ for more information.

[ANS thanks the conference sponsors for the above information]

/EX

SB SAT @ AMSAT $ANS-099.03
ISS Crews Continue Record Breaking Amateur Radio Activity

AMSAT News Service Bulletin 099.03
From AMSAT HQ SILVER SPRING, MD.
April 9, 2006
To All RADIO AMATEURS
BID: $ANS-099.03

QSL cards from all 50 of the United States of America have now arrived at the ARRL QSL bureau in Newington, CT and the process to file for a special "WAS from Space" for Bill McArthur can begin.

McArthur will depart the International Space Station on April 8 after serving on board for nearly 190 days. He will take several amateur radio achievements to Earth with him:

+ First to work all states (CONFIRMED)
+ First to work all seven continents on VHF and UHF
+ 37 school contacts, the most ever worked by an individual
+ First to work 100+ DXCC entities from space
+ Only expedition to work Peter I Island
+ Over 1700 general contacts

Ricardo, PY3VHQ reported that on April 3, 2006, Marcos Pontes PY0AEB, the first brazilian ham radio operator in space, made contact with his station and other Brazilian stations on 145.800 MHz. When PY0AEB spoke in the Portuguese language, Brazilian amateur radio operators were very happy for this.

A recording of the QSO can be heard at:
http://portal.ucpel.tche.br/py3vhq/home/satelite/QSOcMarcosPontesPY0AEB.mp3

[ANS thanks Kenneth, N5VHO and Ricardo, PY3VHQ for the above information]

/EX

SB SAT @ AMSAT $ANS-099.04
AO-51 to Enable 38k4 Pacsat Mode

AMSAT News Service Bulletin 099.04
From AMSAT HQ SILVER SPRING, MD.
April 9, 2006
To All RADIO AMATEURS
BID: $ANS-099.04

The AO-51 Command Team/Operations Group plans to enable the 38k4 Pacsat Broadcast Protocol BBS mode on the 435.150 MHz digital downlink for the week long period between April 17-24. The BBS uplink is on 145.860 MHz and uses 9k6 Pacsat Broadcast Protocol. For more information refer to:
http://www.amsat.org/amsat-new/echo/ControlTeam.php

[ANS thanks The AO-51 Command Team and Operations Group for the above information]

/EX

SB SAT @ AMSAT $ANS-099.05
ARISS Status for the week of April 3, 2006

AMSAT News Service Bulletin 099.05
From AMSAT HQ SILVER SPRING, MD.
April 9, 2006
To All RADIO AMATEURS
BID: $ANS-099.05

1. Cleveland Heights School Contact Update

On March 17, students at Cleveland Heights High School in Ohio spoke with Bill McArthur, KC5ACR, on board the International Space Station via amateur radio. Prior to the contact, NASA engineer Glenn Lindamood gave presentations on living and working in space and satellite tracking to 100 students. A video/audio link was set up to join those in the contact room to the rest of the student body gathered in the auditorium. Teacher Al DeGennaro was interviewed by radio station WTAM 1100 AM. Katherine Martin from the NASA Glenn Media Relations Office was present as was the Cleveland Heights Sun newspaper, the high school local paper and members of the board of education. A write up was posted by the Glenn Amateur Radio Club (whose members provided assistance with contact) to their website. See: http://www.grc.nasa.gov/WWW/Clubs/NA8SA/ariss_chuh.htm

2. Bradley, Illinois High School Contact Successful

Bradley-Bourbonnais Community High School spoke with Bill McArthur, KC5ACR, on Tuesday, March 28. Fifteen students were able to ask 20 questions of the astronaut before the ISS went over the horizon. Approximately 300 students, teachers and parents gathered in the auditorium as the rest of

the 2000 students watched the contact via video. Teacher Jim Schreiner, K9BIG, acted as control operator and was assisted by numerous members of the Kankakee Area Radio Society (KARS). The school's club callsign K9BHS was used for the contact. The event was simulcast using video streaming and audio streaming, with the video stream receiving nearly 900 hits. This event was broadcast live on the local Comcast cable channel 4. Radio stations WKAN 1320 AM, WVLI 95.1 FM, WGFA 94.1 FM, and the Kankakee Daily Journal and the Chicago Tribune newspapers were also present to cover the contact. The event was filmed and produced by the BBCHS' Communications class. The video has been posted to their website:
http://www.bbchs.k12.il.us/ISS/index.htm

3. Australian School Children Speak to Astronaut

On Friday, March 31, students at Briar Hill Primary School in Briar Hill, Victoria, Australia spoke with Bill McArthur, KC5ACR, via the telebridge station VK5ZAI in Australia. Twenty-two students asked one question each. Approximately 100 students, teachers and parents attended the event as did the Banyule City mayor, and state government representatives. Local papers picked up on the news story prior to the event and the coordinating teacher was interviewed by both local and national radio stations. The audio was streamed over the internet courtesy of Verizon Conferencing, and Echolink and IRLP were both used successfully for the contact. Echolink received 10 connections from 5 countries, and three nodes connected to IRLP from Canada and Australia.

4. Thank You Note for Briar Hill Contact

The ARISS team received a thank you note from one of the parents whose step son was involved in the Briar Hill contact. She said of her son, "He has wanted to be an astronaut for as long as he's been old enough to know what one is. Any time he wishes on a star or birthday candle he says, 'I wish I could go to space school.' This will have just fueled his interest which we are more than happy about!"

5. Additional School Contacts

Robert McQueen High School in Reno, Nevada completed a contact with the ISS on Tuesday, April 4.

Escola Americana do Rio de Janeiro in Rio de Janeiro, Brazil had a contact with visiting Brazilian astronaut Marcos Pontes, PY0AEB on Wednesday, April 5. Marcos Pontes, PY0AEB, also had a contact with students at Escola Camilo Castelo Branco in Carnaxide, Portugal on Thursday, April 6.

6. ARRL Article on Rutigliano, Calgary Contacts

The ARRL ran a story on the 1� Circolo Didattico Statale and Sir James Lougheed school contacts. To view, "Students in Italy, Canada, US Explore Space via Ham Radio," see:
http://www.arrl.org/news/stories/2006/03/29/2/?nc=1

7. ARRL Articles on Expedition 13 Crew

On March 27, 30 and 31, ARRL ran short articles on the Expedition 13 crew, Jeff Williams, KD5TVQ, and Pavel Vinogradov, RV3BS.
See: http://www.arrl.org/

8. School Children from Holland Experience Amateur Radio

On March 25, the Octopus School in Holland held an Amateur Radio event for school children. Activities included amateur television, foxhunting (radio hide and seek), electronic circuits, DARES emergency radio and Morse code. The International Space Station was another topic covered and as Bill McArthur was on the air during these events, the teacher had the good fortune to demonstrate over several passes how to make contact with the ISS. The school director was then given 8 radios to distribute to 8 schools so that students would be able to listen to other ARISS contacts in the future.

9. Amateur Radio to be Used for Family Contacts

Due to work expected due to the construction of the ISS, the Ku-band antenna may be unusable for 18 - 21 days at a time, causing an interruption in IP phone availability. The timeframe for this work may be as early as January 2007. During this time the crew may use the ISS Ham radio equipment for family contacts.

[ANS thanks Carol, KB3LKI for the above information]

/EX

SB SAT @ AMSAT $ANS-099.06
Venus Express Arrives This Week

AMSAT News Service Bulletin 099.06
From AMSAT HQ SILVER SPRING, MD.
April 9, 2006
To All RADIO AMATEURS
BID: $ANS-099.06

After its five-month journey ESA's Venus Express spacecraft will arrive at Venus on April 11. Venus Express mission controllers at the ESA Space Operations Centre (ESOC) in Darmstadt, Germany, are making intensive preparations for orbit insertion.

This comprises a series of telecommands, engine burns and manoeuvres designed to slow the spacecraft down from a velocity of 29000 km per hour relative to Venus, just before the first burn, to an entry velocity some 15% slower, allowing the spacecraft to be captured into orbit around the planet.

ESA TV will cover this event live from ESOC in Darmstadt. The live transmission will be carried free-to-air. Complete video coverage details are listed at http://television.esa.int.

The event will be covered on the web at http://venus.esa.int and will feature regular updates, including video coverage of the press conference and podcast from the control room at ESA's Space Operations Centre.

[ANS thanks ESA for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM

```
From -8653578480463169851
X-Google-Thread: 10e8ad,e558a7dd27e0b679,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!news4.google.com!
border1.nntp.dca.giganews.com!nntp.giganews.com!wns13feed!worldnet.att.net!
207.217.77.102!elnk-nf2-pas!newsfeed.earthlink.net!stamper.news.pas.earthlink.net!
stamper.news.atl.earthlink.net!newsread1.news.atl.earthlink.net.POSTED!46041641!
not-for-mail
From: "JoAnne Maenpaa" <wb9jej_no-spam@earthling.com>
Newsgroups: rec.radio.amateur.space
Subject: WSR-099 AMSAT Weekly Satellite Report
Lines: 1109
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <VW7%f.6002$i41.1021@newsread1.news.atl.earthlink.net>
Date: Wed, 12 Apr 2006 14:14:13 GMT
NNTP-Posting-Host: 69.3.101.182
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread1.news.atl.earthlink.net 1144851253 69.3.101.182 (Wed, 12 Apr
2006 07:14:13 PDT)
NNTP-Posting-Date: Wed, 12 Apr 2006 07:14:13 PDT
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news1.google.com rec.radio.amateur.space:207
```

This report is organized into 4 parts.
Part 1 (S1) - operational analog amateur satellites

Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites

SB SAT @ AMSAT W8ISS ANS-099.S1
WSR 099 Part 1 04/09/2006

AMSAT NEWS SERVICE BULLETIN 099.S1 FROM AMSAT HQ
SILVER SPRING, MD, April 09, 2006
TO ALL RADIO AMATEURS
BID: $ANS-099.S1

VO-52 HAMSAT
Catalog Number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/V - Indian Transponder

Proposed frequencies:

Indian Transponder:
Uplink : 435.220 MHz to 435.280 MHz LSB/CW
Downlink: 145.870 MHz to 145.930 MHz USB/CW
Beacom : 145.859330 MHZ CW

Dutch Transponder:
Uplink : 435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW
Beacon : 145.860MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsat.in/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is
active. Each transponder has a different beacon, see below:

Indian transponder - unmodulated carrier on
145.936MHz.
Dutch Transponder - CW message on 145.860MHz.
[03192006]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Modes: FM Repeater, V/U-High power
Digipeater - OFF

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
Analog voice uplink: 145.880 MHZ FM
145.880 MHz USB
145.920 MHz FM 67Hz PL tone
1268.700 MHz FM 67Hz PL tone

Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast Protocol

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Mode schedule for April 2006:
24 Mar
FM Repeater,
* V/U Uplink: 145.920 mhz FM, 67 hz PL Tone
* Downlink: 435.300 mhz FM

9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
* Uplink: 145.860 mhz FM, 9k6 PBP Digital
* Downlink: 435.150 mhz FM, 9k6 PBP Digital TLM Downlink Active

12 Apr
FM Repeater, L/U
* Uplink: 1268.700 mhz FM
* Downlink 435.300 mhz FM

17 Apr
38k4 Digital Downlink, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
* Uplink: 145.860 mhz FM, 9k6 PBP
* Digital Downlink: 435.150 mhz FM, 38k4 PBP Digital

24 Apr
FM Repeater, V/U
* Uplink: 145.920 mhz FM, 67 hz PL Tone
* Downlink: 435.300 mhz FM

9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
* Uplink: 145.860 mhz FM, 9k6 PBP
* Digital Downlink: 435.150 mhz FM, 9k6 PBP Digital TLM Downlink Active

Official Webpage: http://www.amsat.org/amsat-new/echo/
[WSR-ANS wishes to thanks the AO-51 Control team for this weeks information]
[04022006]

=====

SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Uplink: 145.850 MHz (67.0 Hz PL tone) (See below for operating procedures)
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

There have been unconfirmed reports on the amsat-bb remailer that SO-50 has
shifted downlink frequency as much as 5khz up. This both from Europe.

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz. The
order of operation is thus: (allow for Doppler as necessary)

1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer
on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater
on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10
minute timer.
[01012006]

=====

FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: OPERATIONAL

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplink: 145.850 145.870 145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

```
Mode and Antenna Polarization:
V: RHCP
U: RHCP

unOfficial Webpage: http://www.amsat.org/amsat/sats/n7hpr/fo29.html
[11132005]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Uplink: 145.850 MHz FM
Downlink: 436.795 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[01012006]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational until March 14th

Uplink:   145.850 to 145.950 MHz CW/USB Mode A
   432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
  145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
  145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons:  29.502 MHz
  145.972 MHz
  435.100 MHz
 2304.100 MHz

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php
The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
AO-7 users are requested to log their contacts and observations about
AO-7, especially any unexpected mode changes.
AO-07 telemetry software webpage:
http://www.qsl.net/k3tz/files/K3TZ_AO-07_Telemetry_Decoder_0.5.zip

This from Emily, N1DID:
AO-7 is Operational
As of 15 March 2006 AO-7 entered eclipse on the ascending node of it's
orbit
```

for a short period of time and will turn off during that period, but otherwise remains operational providing stations observe QRP power levels. It is difficult to tell if the 24 hour timer will be reset or if there is enough energy to keep it running during the short periods of eclipse AO-7 experiences for the next few weeks. We should know in a few days by observing the modes reported on each orbit.

Please keep your power low! For additional information please read the AO-7 Usage Guidelines on the AO-7 Log and Resource Site located at:
http://www.planetemily.com/ao7
[ANS-WSR wishes to thank Emily Clarke, N1DID]
[03192006]

=====

INTERNATIONAL SPACE STATION (ISS) - ARISS

Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: Packet / Occasional Voice
Digipeater: ON

The current Expedition 12 crew is:
Commander: William McArthur - KC5ACR
Flight Engineer: Valery Tokarev - (no call)

Expedition 13 crew set to lift off on March 30th at 0230z with:
Commander: Pavel Vinogradov, RV3BS
Flight Engineer: Jeff Williams, KD5TVQ
Brazillian Astronaut: Marcos Pontes, PY0AEB

Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Russian: RS0ISS, RZ3DZR

USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official Webpage: http://www.rac.ca/ariss
Official Fan club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.
[03262006]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-099.S2
WSR 099 Part 2 04/09/2006

AMSAT NEWS SERVICE BULLETIN 099.S2 FROM AMSAT HQ
SILVER SPRING, MD, April 09, 2006
TO ALL RADIO AMATEURS
BID: $ANS-099.S2

CO-56 XI-V
Catalog Number: 28895
Launch Date: October 27, 2005

Status: Operational only within range of Ground station in Japan

Telemetry Downlink: 437.345MHz - FSK 1200bps using AFK protocol
Beacon Downlink: 437.465MHz - CW about 50 WPM

Callsign: JQ1YGW

Oficial Webpage: http://www.space.t.u-tokyo.ac.jp/gs/satinfo-e.html#xi5
Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
[03122006]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: Packet
Digipeater: ON

The current Expedition 12 crew is:
Commander: William McArthur - KC5ACR
Flight Engineer: Valery Tokarev - (no call)

Expedition 13 crew set to lift off on March 30th at 0230z with:
Commander: Pavel Vinogradov, RV3BS
Flight Engineer: Jeff Williams, KD5TVQ
Brazillian Astronaut: Marcos Pontes, PY0AEB

Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Russian: RS0ISS, RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official Webpage: http://www.rac.ca/ariss
Official Fan club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line is NOT translated from Russian and posted.
[03262006]
=====
PCSAT-2
Catalog Number: 25544
Launch Date: August 1, 2005

Activated: August 3, 2005
Status: Operational
Current Mode: Digipeater

Digital Downlink: 435.275 Mhz
Digital Uplink: 145.825 Mhz

PSK-31 Downlink: 435.275 Mhz
PSK-31 Uplink: 29.401 Mhz

Broadcast:

BBS:

Official Webpage: http://web.usna.navy.mil/~bruninga/pcsat2.html
PCSAT2 APRS Packet page: http://www.findu.com/cgi-bin/pcsat2.cgi
aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/

This from Robert Bruninga, WB4APR:
PCSAT2 has now returned to its 435.275 downlink to avoid any potential for QRM to ARISS school contacts. It will remain in this mode for several weeks until we see how the new crew schedule works out.

Modes remaining available:

* Packet up on 145.825 and down on 435.275
* High power PSK-31 and CW up on 29.401 also with downlink on 435.275

To activate the PSK transponder, just connect to PCSAT2 on the packet uplink.
[ANS-WSR wishes to thank Robert Bruninga, WB4PR for this weeks information.]
[04022006]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Modes: FM Repeater, V/U-High power
Digipeater - OFF

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
Analog voice uplink: 145.880 MHZ FM
145.880 MHz USB
145.920 MHz FM 67Hz PL tone
1268.700 MHz FM 67Hz PL tone

Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast Protocol (PBP)

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Mode schedule for April 2006:
24 Mar
FM Repeater,
* V/U Uplink: 145.920 mhz FM, 67 hz PL Tone
* Downlink: 435.300 mhz FM

9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
* Uplink: 145.860 mhz FM, 9k6 PBP Digital
* Downlink: 435.150 mhz FM, 9k6 PBP Digital TLM Downlink Active

12 Apr
FM Repeater, L/U
* Uplink: 1268.700 mhz FM
* Downlink 435.300 mhz FM

17 Apr
38k4 Digital Downlink, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
* Uplink: 145.860 mhz FM, 9k6 PBP
* Digital Downlink: 435.150 mhz FM, 38k4 PBP Digital

24 Apr
FM Repeater, V/U
* Uplink: 145.920 mhz FM, 67 hz PL Tone
* Downlink: 435.300 mhz FM

9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
* Uplink: 145.860 mhz FM, 9k6 PBP
* Digital Downlink: 435.150 mhz FM, 9k6 PBP Digital TLM Downlink Active

Official AMSAT webpage: http://www.amsat.org/amsat-new/echo/
[WSR-ANS wishes to thanks the AO-51 Control team for this weeks information]
[04022006]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Operational

General Usage Uplink/Downlink:145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org
aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/

This from Robert Bruninga, WB4APR:
PCSAT-1 reset back to W3ADO-1 at 2336z or so on 23 March after a good 16 day run of fully OPS jointly with PCSAT2 on ISS. During that time numerous dual hop packets were reported.

PCSAT2 will remain with a 2m downlink on 145.825 until the next school contact on the 28th. From now till then, it will also keep its 10m PSK-31 to 435.275 FM transponder enabled for anyone to experiment with using either CW or PSK.

Just use one rig to CONNECT to PCSAT2 on 145.825 to turn on the transponder and use your 10m CW or PSK rig to TX and your UHF FM receiver to listen.
[ANS-WSR wishes to thank Robert Bruninga, WB4PR for this weeks information.]
[03262006]
=====
CO-55 CUTE-1
Catalog number: 27844
Launched: June 30,2003

Status: Operational

Uplink: ?
Downlink: 436.8375 CW
437.4700 1200 FM ax25 or SRLL (ACTIVE only near Japan ?)
Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[03122006]
=====
GO-32 TECHSAT-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Downlink: 435.225 MHz FM (9600-baud FSK)
(435.325 n/a - temperature problems)
Uplinks: 145.850, 145.890, 145.930 FM
1269.700, 1269.800, 1269.900 FM
Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

Mineo, JE9PEL, reports February 02, 2006:

```
4XTECH-12>STATUS [02/02/06 20:39:52] <UI R>:
UTC: Thu Feb 02 11:39:35 2006 | Gurwin Techsat1B (V9.86)
BBS(9.86) is active ,AsherSpaceResearchInst greets you.
2 Users/8 Broadcasts, Uplink freq:145.890,145.850,145.930, 1269.800,
1269.900

TechRam2V9.86
TechRam2V9.86.
```

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html

[ANS-WSR wishes to thank Mineo, JE9PEL, for this weeks information.]
[02122006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Semi-operational, the digipeater command is on and open for APRS users.

Uplink: 145.90 145.92 145.94 145.96 MHz FM
(using 1200-baud Manchester FSK)
Downlink: 437.026 MHz SSB (1200-baud PSK)
Mode-S Beacon: 2401.1428 MHz

Mode and Antenna Polarization:
U: RC 437.050 MHz RHCP
   PSK 437.025 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[04092006]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational?

Telemetry Downlink: 145.826 MHz. FM (1200-baud AFSK).
approx. 10 days ON, 10 days OFF
Mode-S Beacon: 2401.500 MHz. ... OFF
UHFBeacon: 435.025 MHz. ... OFF

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Official webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm

This from Clive, G3CWV:

OSCAR-11 REPORT

27 March 2006

On 01 March OSCAR-11 achieved 22 years in orbit, and inspite of numerous problems, it still continues to transmit good signals.

During the period 14 February to 26 March 2006 the VHF beacon on 145.826 MHz has been heard from 22 February to 04 March, and from 14 to 24 March.

Signals have been very consistent and excellent copy has been obtained on all passes received. If the current mode of operation continues, the beacon should switch ON around 04 April 2006.

The on-board clock continues to show a very large accumulated error. On 24 March it was 22.14308 days slow. However, the clock is now very stable. During the last month it gained 2.5 seconds, which is approximately half the monthly gain, observed when the satellite was fully operational! The observations of clock errors suggest that the clock may slow or stop when the battery voltage is low.

All the analogue telemetry channels, 0 to 59 are zero, ie they have failed. The status channels 60 to 67 are still working.

The satellite is now in continuous sunlight until around 06 May, when eclipses will start again. This should help the satellite to continue transmitting, although continuous sunlight can cause problems due to excessive temperatures. Power supply problems can be caused by poor pointing attitude, ie the sunlight illuminating the ends of the satellite, instead of the solar arrays.

The watchdog timer now appears to have resumed operation on the 20 day cycle. During the last two months the ON/OFF times have been very consistent, and many observations show this to be 20.7 days, ie. 10.3 days ON followed by 10.4 days OFF. However, at any time, poor solar attitude, and battery problems, may result in a low 14 volt line supply, which may cause the beacon to switch OFF prematurely, and reset the watchdog timer cycle.

I am indebted to Bob G4VRC, Gustavo LW2DTZ, Mike DK3WN, John K7RQN and John G4PWG for their reception reports. All have reported good signals from the VHF beacon. Many thanks for those reports.

The Beacon frequencies are -

VHF 145.826 MHz. AFSK FM ASCII Telemetry

UHF 435.025 MHz. OFF

S-band 2401.5 MHz. OFF

Listeners to OSCAR-11 may be interested in visiting my website which contains
an archive of news & telemetry data. It also contains details about using a
soundcard or hardware demodulators for data capture. There is software for
capturing data, and decoding ASCII telemetry. The URL is:
http://www.users.zetnet.co.uk/clivew/
[ANS-WSR wishes to thank Clive Wallis, G3CWV for this weeks information]
[03262006]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-099.S3
WSR 099 Part 3 04/09/2006

AMSAT NEWS SERVICE BULLETIN 099.S3 FROM AMSAT HQ
SILVER SPRING, MD, April 09, 2006
TO ALL RADIO AMATEURS
BID: $ANS-099.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

AO-54 SUITSAT
Catalog Number:28934
Release Date: February 3,2006

Status: Non-operational
Modes : FM Voice Telemetry/Greetings
 FM SSTV

Callsign: RS0RS
Downlink: 145.990 FM

Official webpage: http://www.suitsat.org
[02262006]
=====
NCUBE-2
Catalog Number: 28894
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305

2407.25
[01012006]
=====
XO-53 SSETI
Catalog Number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 FM 67Hz CTCSS
Voice Downlink: 2401.835 FM
Packet Up/Downlink: 437.250 9k6 packet
Packet Downlink 2401.835 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01292006]
=====
POSAT-1 PO-28
Catalog Number: 22829
Launched : September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 429.950

Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html.
POSAT-1
webpage:http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012006]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launched: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB
Beacon: 145.810 MHz (unmodulated carrier)

AO-10 has been locked into a Mode-B, 70-cm uplink and
2-meter downlink for several years.

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====

```
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: Downlink only

Uplink: 145.875 145.900 145.925 145.950 MHz FM (1200-baud)
Downlink: 435.808 MHz PSK
Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01012006]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB
Beacon: 29.408 MHz
Robot: 29.454 MHz
[05232004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB
Beacon: 145.860 MHz
Robot: 145.908 MHz
[05232004]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink 145.975 MHz FM
Downlink 435.070 MHz FM
[05092004]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991
```

```
Status: Non-Operational

Uplink: 145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM
Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01092005]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational?

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB
Beacon: 29.352 MHz (intermittent)
SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplink: 145.84 145.86 145.88 145.90 MHz FM
(using 1200-baud Manchester FSK)
CW downlink: 437.125 MHz
Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)
Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[05232004]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[08152004]
=====
KO-23 KITSAT
Catalog number: 22077
```

Launched: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM
Broadcast Callsign: HL01-11
BBS: HL01-12

Jim, AA7KC, reports that KO-23's downlink transmitter continues in a non-operational status.
[05092004]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM (9600-baud FSK)
Downlink: 436.500 MHz FM
Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm

[ANS-WSR has no further information]
[05232004]
=====

```
SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

STatus: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz and 145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[08082004]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlink: 437.025 MHz 437.400 MHz
Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA
web site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[05092004]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplink V-band 145.840 - 145.990 MHz CW/LSB
U-band 435.550 - 435.800 MHz CW/LSB
L1-band 1269.250 - 1269.500 MHz CW/LSB
L2-band 1268.325 - 1268.575 MHz CW/LSB
S1-band 2400.350 - 2400.600 MHz CW/LSB
Downlink: S2-band 2401.225 - 2401.475 MHz CW/USB
K-band 24,048.010 - 24,048.060 MHz CW/USB
Beacon: 2401.323, 24,048.035
[05232004]
-----
SO-42 SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational
```

Downlink: 437.075 MHz
Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[08152004]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz
Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[08152004]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, callsign KE6QMD, as per the user service agreement located at the following
URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Operational

Uplink: 145.850 or 145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz
Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK

Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[11202005]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink 435.275 1200-baud AFSK
Downlink 145.825 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01012006]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-099.S4
WSR 099 Part 4 04/09/2006

AMSAT NEWS SERVICE BULLETIN 099.S4 FROM AMSAT HQ
SILVER SPRING, MD, April 09, 2006
TO ALL RADIO AMATEURS
BID: $ANS-099.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE PROPOSED FOR LAUNCH AT THIS TIME:

PHASE 3E ?O-??
Catalog Number:
Proposed Launch Date: Early 2006

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/

[ANS-WSR wishes to thank William Leijenaar, PE1RAH for this week's report]
[10022005]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins trans-

mitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/amsat/listserv/menu.html

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

```
From -4463781501747354780
X-Google-Thread: 10e8ad,3bc559d86266ad36,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
```

```
Path: g2news1.google.com!postnews.google.com!v46g2000cwv.googlegroups.com!not-for-
mail
From: "hxc98@yahoo.com" <hxc98@yahoo.com>
Newsgroups: rec.radio.amateur.space
Subject: APRSPoint special!
Date: 14 Apr 2006 10:06:37 -0700
Organization: http://groups.google.com
Lines: 8
Message-ID: <1145034397.714771.280150@v46g2000cwv.googlegroups.com>
NNTP-Posting-Host: 58.19.35.84
Mime-Version: 1.0
Content-Type: text/plain; charset="iso-8859-1"
X-Trace: posting.google.com 1145034408 1122 127.0.0.1 (14 Apr 2006 17:06:48 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Fri, 14 Apr 2006 17:06:48 +0000 (UTC)
User-Agent: G2/0.2
X-HTTP-UserAgent: Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.2; SV1; .NET CLR
1.1.4322),gzip(gfe),gzip(gfe)
Complaints-To: groups-abuse@google.com
Injection-Info: v46g2000cwv.googlegroups.com; posting-host=58.19.35.84;
   posting-account=qkd21QwAAAAs0AsHsbNsv0PdNKEViQPM
Xref: g2news1.google.com rec.radio.amateur.space:208

APRSPoint is the latest APRS implementation that integrates seamlessly
with mappoint to allow you to track anyone on a street level detailed
map. It handles imput from RF and internet feeds, and works with
Kenwood radios with built-in TNC's in an easy to use interface. It is
considered to be the most stable and intuitive, and ideal for first
time users. We are offerring a special discount right now. Please visit
http://www.aprspoint.com for details. Thanks.



From -8352721109829751201
X-Google-Thread: 10e8ad,92340f14743baeed
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news3.google.com!news4.google.com!
border1.nntp.dca.giganews.com!border2.nntp.dca.giganews.com!nntp.giganews.com!
news1.optus.net.au!optus!news.optus.net.au!53ab2750!not-for-mail
From: "Andrew Rich" <vk4tec@hotmail.com>
Newsgroups: rec.radio.amateur.space
References: <DQjIf.48$Cw4.46@news.get2net.dk>
Subject: Re: Receiving VMS (Vessel Monitoring Signals) from Inmarsat-C
Lines: 30
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.2869
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.2869
X-RFC2646: Format=Flowed; Response
Message-ID: <4442c64c_9@news.peopletelecom.com.au>
X-Original-NNTP-Posting-Host: news.peopletelecom.com.au
X-Original-NNTP-Posting-Host: 202.154.92.95
```

```
X-Original-Trace: 17 Apr 2006 08:03:08 +1100, 202.154.92.95
Date: Sun, 16 Apr 2006 22:03:09 GMT
NNTP-Posting-Host: 203.194.27.1
X-Complaints-To: abuse@comindico.com.au
X-Trace: news.optus.net.au 1145224989 203.194.27.1 (Mon, 17 Apr 2006 08:03:09 EST)
NNTP-Posting-Date: Mon, 17 Apr 2006 08:03:09 EST
Organization: Comindico Australia - reports relating to abuse should be sent to
abuse@comindico.com.au
Xref: g2news1.google.com rec.radio.amateur.space:209

wat freq ?

"Michael" <ccc73571@vip.cybercity.dk> wrote in message
news:DQjIf.48$Cw4.46@news.get2net.dk...
>
>
> I have been playing around with receiving AIS (Automatic Identification
> System) signals. AIS is used on ships, it is used to send information
> about your position, etc via VHF to the surrounding ships. But know this
> started to get a bit boring. So know I wan to try to se if it is possibly
> to receive the VMS signals from Inmarsat-C. The VMS system is manly used
> on fishing vessels. On the ship there is a box with a gps and satellite
> tranciver. The position information is send each hour, to a land earth
> station, were it is distributed to the different authorities.
>
>
>
> The first thing is to receive the signals. But also to decrypt the data
> can be complicated.
>
> Any help or advices are welcome. Also if you have some good links to
> people ho have been dealing with projects like this, could be useful.
>
>
>
> Cheers Michael
>
>




From 868531939106339216
X-Google-Thread: 10e8ad,4eb80f9e5b5f8ecb,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news3.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!newsfeed00.sul.t-online.de!newsfeed01.sul.t-online.de!t-
online.de!newsfeed.cw.net!cw.net!news-FFM2.ecrc.de!uio.no!newsfeed1.uni2.dk!
dfeeder1.cybercity.dk!dspool1.cybercity.dk!dreader1.cybercity.dk!not-for-mail
From: "Steen" <virker@ikke.invalid>
Newsgroups: rec.radio.amateur.space
Subject: Active sats with DL on 10 m?
```

Date: Mon, 17 Apr 2006 13:01:15 +0200
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.2869
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.2869
X-RFC2646: Format=Flowed; Original
Lines: 6
Message-ID: <44437584$0$60779$157c6196@dreader1.cybercity.dk>
NNTP-Posting-Host: 212.242.169.176
X-Trace: 1145271684 dreader1.cybercity.dk 60779 212.242.169.176:11120
Xref: g2news1.google.com rec.radio.amateur.space:210

Which amateur radio satellites are active with downlink in the 10 meter band
(if any)?

/steen

From 2575121561539168761
X-Google-Thread: 10e8ad,4eb80f9e5b5f8ecb
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
From: kb9rqz@markmorgan.net
Newsgroups: rec.radio.amateur.space
Subject: Re: Active sats with DL on 10 m?
Date: Mon, 17 Apr 2006 16:58:53 -0400
Reply-To: k4yz@aol.com
Message-ID: <q80842taphn4bevgc8o7dtie0h71c7f5sc@4ax.com>
References: <44437584$0$60779$157c6196@dreader1.cybercity.dk>
X-Newsreader: Forte Free Agent 2.0/32.652
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Organization: Usenet Zone http://www.usenetzone.com Free Usenet Binary server
contains 140,000+ groups
Lines: 15
Path: g2news1.google.com!news3.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!newsfeed00.sul.t-online.de!newsfeed01.sul.t-online.de!t-
online.de!news.germany.com!usenet.ath.cx!news.usenetzone.com!not-for-mail
Xref: g2news1.google.com rec.radio.amateur.space:211

On Mon, 17 Apr 2006 13:01:15 +0200, "Steen" <virker@ikke.invalid>
wrote:

>Which amateur radio satellites are active with downlink in the 10 meter band
>(if any)?
>
>/steen
>
not that I am aware of I think that soe sat may have dlin 10m
digitaldl but I remmber if that is in the skky yet

Usenet Zone Free Binaries Usenet Server
More than 140,000 groups
Unlimited download
http://www.usenetzone.com to open account

From -7391063624242049386
X-Google-Thread: 10e8ad,4eb80f9e5b5f8ecb
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news3.google.com!news4.google.com!newshub.sdsu.edu!elnk-nf2-pas!newsfeed.earthlink.net!stamper.news.pas.earthlink.net!newsread1.news.pas.earthlink.net.POSTED!3dd4ce4a!not-for-mail
Newsgroups: rec.radio.amateur.space
Subject: Re: Active sats with DL on 10 m?
From: Slow Code <em@il.here>
References: <44437584$0$60779$157c6196@dreader1.cybercity.dk>
Organization: None
User-Agent: Xnews/5.04.25
Lines: 31
Message-ID: <eCU0g.4071$BS2.2930@newsread1.news.pas.earthlink.net>
Date: Mon, 17 Apr 2006 22:26:18 GMT
NNTP-Posting-Host: 4.254.224.165
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread1.news.pas.earthlink.net 1145312778 4.254.224.165 (Mon, 17 Apr 2006 15:26:18 PDT)
NNTP-Posting-Date: Mon, 17 Apr 2006 15:26:18 PDT
Xref: g2news1.google.com rec.radio.amateur.space:212

"Steen" <virker@ikke.invalid> wrote in
news:44437584$0$60779$157c6196@dreader1.cybercity.dk:

> Which amateur radio satellites are active with downlink in the 10 meter
> band (if any)?
>
> /steen

AO-7 comes up in mode A sometimes.

=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Semi-operational in sunlight.
Return to active status: June 21,2002

```
Uplink:     145.850 to 145.950 MHz CW/USB Mode A
            432.125 to 432.175 MHz CW/LSB Mode B
Downlink:    29.400 to  29.500 MHz CW/USB Mode A
```

```
            145.975 to 145.925 MHz CW/USB Mode B
Beacon:     29.502 MHz, 145.972 MHz, 435.1 MHz, 2304.1 MHz
```

=====

SC

```
From 1889617761279209616
X-Google-Thread: 10e8ad,4eb80f9e5b5f8ecb
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news3.google.com!news4.google.com!newshub.sdsu.edu!elnk-
nf2-pas!newsfeed.earthlink.net!stamper.news.pas.earthlink.net!
newsread1.news.pas.earthlink.net.POSTED!3dd4ce4a!not-for-mail
Newsgroups: rec.radio.amateur.space
Subject: Re: Active sats with DL on 10 m?
From: Radio Buff <em@il.here>
References: <44437584$0$60779$157c6196@dreader1.cybercity.dk>
<q80842taphn4bevgc8o7dtie0h71c7f5sc@4ax.com>
Organization: None
User-Agent: Xnews/5.04.25
Lines: 18
Message-ID: <fCU0g.4072$BS2.1625@newsread1.news.pas.earthlink.net>
Date: Mon, 17 Apr 2006 22:26:19 GMT
NNTP-Posting-Host: 4.254.224.165
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread1.news.pas.earthlink.net 1145312779 4.254.224.165 (Mon, 17 Apr
2006 15:26:19 PDT)
NNTP-Posting-Date: Mon, 17 Apr 2006 15:26:19 PDT
Xref: g2news1.google.com rec.radio.amateur.space:213
```

kb9rqz@markmorgan.net wrote in
news:q80842taphn4bevgc8o7dtie0h71c7f5sc@4ax.com:

> On Mon, 17 Apr 2006 13:01:15 +0200, "Steen" <virker@ikke.invalid>
> wrote:
>
>> Which amateur radio satellites are active with downlink in the 10 meter
>> band (if any)?
>>
>> /steen
>>
> not that I am aware of I think that soe sat may have dlin 10m
> digitaldl but I remmber if that is in the skky yet

That's easy for you to Spell.

From 2209537193953981971
X-Google-Thread: 10e8ad,4e633cb65b3367b3,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news3.google.com!border1.nntp.dca.giganews.com!border2.nntp.dca.giganews.com!nntp.giganews.com!elnk-atl-nf1!newsfeed.earthlink.net!stamper.news.atl.earthlink.net!newsread3.news.atl.earthlink.net.POSTED!46041641!not-for-mail
From: "JoAnne Maenpaa" <wb9jej_no-spam@earthling.com>
Newsgroups: rec.radio.amateur.space
Subject: ANS-106 AMSAT News Service Weekly Bulletin
Lines: 241
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <gp51g.5603$Es3.4351@newsread3.news.atl.earthlink.net>
Date: Tue, 18 Apr 2006 12:59:56 GMT
NNTP-Posting-Host: 69.3.102.169
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread3.news.atl.earthlink.net 1145365196 69.3.102.169 (Tue, 18 Apr 2006 05:59:56 PDT)
NNTP-Posting-Date: Tue, 18 Apr 2006 05:59:56 PDT
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news1.google.com rec.radio.amateur.space:214

AMSAT NEWS SERVICE
ANS-106

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* 2006 AO-51 Field Day Configuration
* Software Defined Transponder Demo at Dayton
* AO-51 Operations Committee
* ARISS Status - 10 April 2006

SB SAT @ AMSAT $ANS-106.01
2006 AO-51 Field Day Configuration

AMSAT News Service Bulletin 106.01
 From AMSAT HQ SILVER SPRING, MD.
April 16, 2006

To All RADIO AMATEURS
BID: $ANS-106.01

This year, AO-51 will be setup in dual FM repeater mode, allowing for two usable FM repeaters from the satellite. The FM repeater utilizing the transmitter on 435.300 will be open to all users. The FM repeater utilizing the transmitter on 435.150 (normally reserved for BBS operations) will be reserved during Field Day for QRP stations only, as has been the common practice when this mode runs on AO-51. Please note the information on the mode configurations and QRP requirements.

FM Repeater #1 for all Users:
Downlink: 435.300 mhz FM
Uplink: 145.920 mhz FM

FM Repeater #2 for QRP Users ONLY:
Downlink: 435.150 mhz FM
Uplink: 145.880 mhz FM

AO-51 ECHO LOW POWER STATION (QRP) REQUIREMENTS:
To attempt to keep this simple, a low power station will be defined as a station which can deliver no more than 10 watts to a vertical or handheld antenna. These are some examples of Low Power Stations:

* Using an HT (barefoot, no amplifier) with 10 watts or less output into any type of vertical whip antenna (rubber duck, etc) or handheld beam antenna (arrow type).

* Using a mobile station with 10 watts or less output into car mounted mobile whip antenna(s).

* Using a base station at 10 watts output into a vertical omni-directional antenna on the side of the house.

Examples that are NOT Low Power Stations:

* Any type of high gain beam antenna, KLM, M2, Cushcraft, etc.

* Any station transmitting over 10 watts into any type of antenna.

[ANS thanks Mike, KE4AZN, for the above information]

/EX

SB SAT @ AMSAT $ANS-106.02
Software Defined Transponder Demo at Dayton

AMSAT News Service Bulletin 106.02
 From AMSAT HQ SILVER SPRING, MD.

April 16, 2006
To All RADIO AMATEURS
BID: $ANS-106.02

Inside the AMSAT booth at the Dayton Hamvention this year will be a working Software Defined Transponder (SDX) like the one aboard the Eagle satellite. The transponder will be operating on 2M and 70cm at low power. Jim Sanford, WB4GCS, the Eagle Project Manager and other team members will be at the booth a great deal of the time to answer questions about Eagle. Other Eagle modules will also be on display, as well as a cubesat.

Any AMSAT members interested in helping for a couple of hours at the AMSAT booth during Dayton are encouraged to email wa4sxm@amsat.org

[ANS thanks Gould, WA4SXM, for the above information]

/EX

SB SAT @ AMSAT $ANS-106.03
AO-51 Operations Committee

AMSAT News Service Bulletin 106.03
From AMSAT HQ SILVER SPRING, MD.
April 16, 2006
To All RADIO AMATEURS
BID: $ANS-106.03

Mike Kingery, KE4AZN, reports that, due to a heavy business workload, he has decided to move away from being the chair or an active member of the AO-51 Operations Committee. Drew Glasbrenner, KO4MA, will take over the leadership of the committee. Mike notes that, "with Drew's previous participation in the group, he will do a good job in reforming the AO-51 Operations Committee." Mike continued, "We have discussed ideas on how to improve the committee based on our past experiences and I will continue to support Drew and the committee until they are up and running smoothly".

More information about the AO-51 Operations Committee will be upcoming in future ANS bulletins. Mike concluded, "I hope everyone will support Drew in his efforts to reorganize and revitalize the AO-51 Operations Committee."

[ANS thanks Mike, KE4AZN, for the above information]

/EX

SB SAT @ AMSAT $ANS-106.04
ARISS Status - 10 April 2006

AMSAT News Service Bulletin 106.04

From AMSAT HQ SILVER SPRING, MD.
April 16, 2006
To All RADIO AMATEURS
BID: $ANS-106.04

1. Robert McQueen Contact Successful

On April 4, Bill McArthur, KC5ACR, spoke with students from the Robert McQueen High School in Reno, Nevada for his 37th and final ARISS contact. He answered twenty questions from 20 students as a group of 30 students, teachers, and parents gathered around the radio. Media coverage included one radio and two television stations.

2. Escola Americana do Rio de Janeiro Contact Successful

On April 5, Brazilian astronaut Marcos Pontes, PY0AEB, participated in his first ARISS contact with students from the Escola Americana do Rio de Janeiro in Rio de Janeiro, Brazil. Students were able to have 17 questions answered. Audio is available on the following website:
http://www.space-multimedia.nl.eu.org/index.php?option=com_content&task=view&id=191&Itemid=2

3. Escola Camilo Castelo Branco

A second contact was scheduled for Marcos Pontes, PY0AEB, with students at Escola Camilo Castelo Branco in Carnaxide, Portugal. Originally planned for Thursday, April 6, and rescheduled for Friday, April 7, the contact did not take place due to Pontes' heavy work load.

4. Expedition 12 Makes Final Contacts

On Saturday morning, April 8, Bill McArthur continued to make several general contacts - even at the very end of his mission. He spoke with stations in the U.S., Cuba, Venezuela and Puerto Rico. McArthur, Tokarev, and Pontes returned to Earth later that day at 7:48 pm ET. McArthur has been the most active astronaut ham ever on board the ISS and the Amateur Radio community is very grateful for his participation in the ARISS and general contacts.

5. ARRL Article on Bradley, Briar Hill School Contacts

On April 5, ARRL ran a web story on the Bradley-Bourbonnais and Briar Hill school contacts. To view, "Fixing a Flat, Playing the Didgeridoo: Kids Get Answers from Space via Ham Radio," see:
http://www.arrl.org/news/stories/2006/04/05/1/?nc=1

6. ARRL Article on Expedition 13

ARRL posted an article on the handover activities of Expedition 12 and 13 crews. To view, "Bread and Salt: Two-Ham Expedition 13 Crew Arrives Safely on ISS," go to:
http://www.arrl.org/news/stories/2006/04/03/1/?nc=1

7. ARRL Confirms All 50 States Worked

The ARRL has received QSL cards (postcards confirming contacts) from all 50 states that Bill McArthur worked while on board the ISS. An honorary Worked All States certificate will be awarded to Bill on his return to the U.S.

8. ARISS Chairman Gives Presentation to Packrats

On April 1, the Mt. Airy VHF Society, better known as "The Packrats," one of the oldest Amateur Radio societies in the world, celebrated its 50th anniversary with a dinner that was attended by ARRL President Joel Harrison, the ARRL EVP, the Atlantic division director, and other ARRL dignitaries. A Nobel Laureate (K1JT, VP Packrats) and VP Engineering (immediate past VP Packrats) were also present. ARISS Chairman and AMSAT VP of Human Spaceflight, Frank Bauer, KA3HDO, gave a talk on ARISS and AMSAT. His presentation generated much interest in communicating with the ISS and satellites.

9. Brazilian Hams Thrilled with Pontes' Contacts

Brazilian astronaut Marcos Pontes made a few general contacts while on board the ISS. One contact in particular made headlines. Fabiano Moser, PY5RX, was fortunate to be able to talk with Pontes. His chat with the astronaut made headlines, and he was interviewed by three television stations and at least one radio station, promoting Amateur Radio. The Gazeta do povo article may be found at:
http://canais.ondarpc.com.br/noticias/parana/conteudo.phtml?id=551799

To view one of his television interviews, see:
http://canais.ondarpc.com.br/tvparanaense/paranatv/noticia.phtml?id=41867&video=1

[ANS thanks Carol, KB3LKI for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73, This week's ANS Editor,

Lee McLamb, KU4OS

```
From -3041621234877197778
X-Google-Thread: 10e8ad,5fbdbc8169b4306e,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news3.google.com!news4.google.com!
border1.nntp.dca.giganews.com!border2.nntp.dca.giganews.com!nntp.giganews.com!
elnk-atl-nf1!newsfeed.earthlink.net!stamper.news.atl.earthlink.net!
newsread3.news.atl.earthlink.net.POSTED!46041641!not-for-mail
From: "JoAnne Maenpaa" <wb9jej_no-spam@earthling.com>
Newsgroups: rec.radio.amateur.space
Subject: WSR-106 AMSAT Weekly Satellite Report
Lines: 948
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <ip51g.5604$Es3.2517@newsread3.news.atl.earthlink.net>
Date: Tue, 18 Apr 2006 12:59:58 GMT
NNTP-Posting-Host: 69.3.102.169
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread3.news.atl.earthlink.net 1145365198 69.3.102.169 (Tue, 18 Apr
2006 05:59:58 PDT)
NNTP-Posting-Date: Tue, 18 Apr 2006 05:59:58 PDT
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news1.google.com rec.radio.amateur.space:215
```

This report is organized into 4 parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites

SB SAT @ AMSAT W8ISS ANS-107.S1
WSR 107 Part 1 04/17/2006

AMSAT NEWS SERVICE BULLETIN 107.S1 FROM AMSAT HQ
SILVER SPRING, MD, April 17, 2006
TO ALL RADIO AMATEURS
BID: $ANS-107.S1

VO-52 HAMSAT
Catalog Number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/V - Indian Transponder

Proposed frequencies:

Indian Transponder:
Uplink : 435.220 MHz to 435.280 MHz LSB/CW
Downlink: 145.870 MHz to 145.930 MHz USB/CW
Beacom : 145.859330 MHZ CW

Dutch Transponder:
Uplink : 435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW
Beacon : 145.860MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsat.in/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is
active. Each transponder has a different beacon, see below:
Indian transponder - unmodulated carrier on 145.936MHz.
Dutch Transponder - CW message on 145.860MHz.
[03192006]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Modes: 38k4 Digital Downlink, V/U
Digipeater - OFF

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
Analog voice uplink: 145.880 MHZ FM
145.880 MHz USB
145.920 MHz FM 67Hz PL tone
1268.700 MHz FM 67Hz PL tone

Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast
Protocol

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11

BBS: PECHO-12

Mode schedule for April 2006:
17 Apr
38k4 Digital Downlink, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
* Uplink: 145.860 mhz FM, 9k6 PBP
* Digital Downlink: 435.150 mhz FM, 38k4 PBP Digital

24 Apr
FM Repeater, V/U
* Uplink: 145.920 mhz FM, 67 hz PL Tone
* Downlink: 435.300 mhz FM

9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
* Uplink: 145.860 mhz FM, 9k6 PBP
* Digital Downlink: 435.150 mhz FM, 9k6 PBP Digital TLM Downlink

Active

Official Webpage: http://www.amsat.org/amsat-new/echo/
[04172006]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Uplink: 145.850 MHz (67.0 Hz PL tone) (See below for operating procedures)
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz. The
order of operation is thus: (allow for Doppler as necessary)
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer
on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater
on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10
minute timer.
[04172006]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

```
Status: OPERATIONAL

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplink: 145.850 145.870 145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

unOfficial Webpage: http://www.amsat.org/amsat/sats/n7hpr/fo29.html
[11132005]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Uplink: 145.850 MHz FM
Downlink: 436.795 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[01012006]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational until March 14th

Uplink:   145.850 to 145.950 MHz CW/USB Mode A
   432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
  145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
  145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons:  29.502 MHz
  145.972 MHz
  435.100 MHz
 2304.100 MHz
```

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php
The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
AO-7 users are requested to log their contacts and observations about AO-7, especially any unexpected mode changes.
AO-07 telemetry software webpage:
http://www.qsl.net/k3tz/files/K3TZ_AO-07_Telemetry_Decoder_0.5.zip

Please keep your power low! For additional information please read the AO-7
Usage Guidelines on the AO-7 Log and Resource Site located at:
http://www.planetemily.com/ao7
[04172006]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: Packet / Occasional Voice
Digipeater: ON

The current crew is:
Commander: Pavel Vinogradov, RV3BS
Flight Engineer: Jeff Williams, KD5TVQ

Digital/APRS:
```
Worldwide packet uplink:   145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM
```

Voice:
```
Region 1 voice uplink:   145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink:      145.800 MHz FM
```

Crossband Repeater:
```
Repeater Uplink:   437.800 MHz FM
Repeater Downlink: 145.800 MHz FM
```

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Russian: RS0ISS, RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official Webpage: http://www.rac.ca/ariss
Official Fan club Webpage: http://www.issfanclub.com

APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.
[04172006]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-107.S2
WSR 107 Part 2 04/17/2006

AMSAT NEWS SERVICE BULLETIN 107.S2 FROM AMSAT HQ
SILVER SPRING, MD, April 17, 2006
TO ALL RADIO AMATEURS
BID: $ANS-107.S2

CO-56 XI-V
Catalog Number: 28895
Launch Date: October 27, 2005

Status: Operational only within range of Ground station in Japan

Telemetry Downlink: 437.345MHz - FSK 1200bps using AFK protocol
Beacon Downlink: 437.465MHz - CW about 50 WPM

Callsign: JQ1YGW

Oficial Webpage: http://www.space.t.u-tokyo.ac.jp/gs/satinfo-e.html#xi5
Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
[03122006]

=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: Packet
Digipeater: ON

The current crew is:
Commander: Pavel Vinogradov, RV3BS
Flight Engineer: Jeff Williams, KD5TVQ

Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM

Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Russian: RS0ISS, RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official Webpage: http://www.rac.ca/ariss
Official Fan club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is NOT translated from Russian and posted.
[0417 2006]
=====
PCSAT-2
Catalog Number: 25544
Launch Date: August 1, 2005

Activated: August 3, 2005
Status: Operational
Current Mode: Digipeater

Digital Downlink: 435.275 Mhz
Digital Uplink: 145.825 Mhz

PSK-31 Downlink: 435.275 Mhz
PSK-31 Uplink: 29.401 Mhz

Broadcast:
BBS:

Official Webpage: http://web.usna.navy.mil/~bruninga/pcsat2.html
PCSAT2 APRS Packet page: http://www.findu.com/cgi-bin/pcsat2.cgi
aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/

This from Robert Bruninga, WB4APR:
PCSAT2 has now returned to its 435.275 downlink to avoid any potential
for
QRM to ARISS school contacts. It will remain in this mode for several
weeks

until we see how the new crew schedule works out.

Modes remaining available:

- Packet up on 145.825 and down on 435.275
- High power PSK-31 and CW up on 29.401 also with downlink on 435.275

To activate the PSK transponder, just connect to PCSAT2 on the packet uplink.
[ANS-WSR wishes to thank Robert Bruninga, WB4PR for this weeks information.]
[04022006]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Modes: 38k4 Digital Downlink, V/U
Digipeater - OFF

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
Analog voice uplink: 145.880 MHZ FM
145.880 MHz USB
145.920 MHz FM 67Hz PL tone
1268.700 MHz FM 67Hz PL tone

Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast Protocol

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Mode schedule for April 2006:
17 Apr
38k4 Digital Downlink, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)

- Uplink: 145.860 mhz FM, 9k6 PBP
- Digital Downlink: 435.150 mhz FM, 38k4 PBP Digital

24 Apr
FM Repeater, V/U

- Uplink: 145.920 mhz FM, 67 hz PL Tone

* Downlink: 435.300 mhz FM
9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
* Uplink: 145.860 mhz FM, 9k6 PBP
* Digital Downlink: 435.150 mhz FM, 9k6 PBP Digital TLM Downlink
Active

Official AMSAT webpage: http://www.amsat.org/amsat-new/echo/
[04172006]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Operational

General Usage Uplink/Downlink:145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org
aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[04172006]
=====
CO-55 CUTE-1
Catalog number: 27844
Launched: June 30,2003

Status: Operational

Uplink: ?
Downlink: 436.8375 CW
437.4700 1200 FM ax25 or SRLL (ACTIVE only near Japan ?)
Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[03122006]
=====
GO-32 TECHSAT-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Downlink: 435.225 MHz FM (9600-baud FSK)
(435.325 n/a - temperature problems)
Uplinks: 145.850 FM
145.890 FM
145.930 FM
1269.700 FM
1269.800 FM
1269.900 FM
Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[ANS-WSR wishes to thank Mineo, JE9PEL, for this weeks information.]
[02122006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Semi-operational, the digipeater command is on and open for
APRS users.

Uplink: 145.900 FM
        145.920 FM
        145.940 FM
        145.960 FM
(using 1200-baud Manchester FSK)
Downlink: 437.026 MHz SSB (1200-baud PSK)
Mode-S Beacon: 2401.1428 MHz

Mode and Antenna Polarization:
U: RC 437.050 MHz RHCP
   PSK 437.025 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[04172006]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational?

Telemetry Downlink: 145.826 MHz. FM (1200-baud AFSK).
approx. 10 days ON, 10 days OFF
Mode-S Beacon: 2401.500 MHz. ... OFF
UHFBeacon: 435.025 MHz. ... OFF

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Official webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[04172006]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-107.S3

WSR 107 Part 3 04/17/2006

AMSAT NEWS SERVICE BULLETIN 107.S3 FROM AMSAT HQ
SILVER SPRING, MD, April 17, 2006
TO ALL RADIO AMATEURS
BID: $ANS-107.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

AO-54 SUITSAT
Catalog Number:28934
Release Date: February 3,2006

Status: Non-operational
Modes : FM Voice Telemetry/Greetings
FM SSTV

Callsign: RS0RS
Downlink: 145.990 FM

Official webpage: http://www.suitsat.org
[02262006]
=====
NCUBE-2
Catalog Number: 28894
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
2407.25
[01012006]
=====
XO-53 SSETI
Catalog Number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 FM 67Hz CTCSS
Voice Downlink: 2401.835 FM
Packet Up/Downlink: 437.250 9k6 packet
Packet Downlink 2401.835 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01292006]
=====
POSAT-1 PO-28
Catalog Number: 22829
Launched : September 25, 1993

```
Status: Operational - Not open for Amatuer use

Downlink: 429.950

Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html.
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012006]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launched: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB
Beacon: 145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: Downlink only

Uplink: 145.875 145.900 145.925 145.950 MHz FM (1200-baud)
Downlink: 435.808 MHz PSK
Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01012006]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB
Beacon: 29.408 MHz
Robot: 29.454 MHz
```

```
[05232004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB
Beacon: 145.860 MHz
Robot: 145.908 MHz
[05232004]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink 145.975 MHz FM
Downlink 435.070 MHz FM
[05092004]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink: 145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM
Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01092005]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational?

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB
Beacon: 29.352 MHz (intermittent)
SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only
```

Uplink: 145.84 145.86 145.88 145.90 MHz FM
(using 1200-baud Manchester FSK)
CW downlink: 437.125 MHz
Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)
Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[05232004]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[08152004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM
Broadcast Callsign: HL01-11
BBS: HL01-12

Jim, AA7KC, reports that KO-23's downlink transmitter continues in a
non-operational status.
[05092004]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM (9600-baud FSK)
Downlink: 436.500 MHz FM
Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====

```
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm

[ANS-WSR has no further information]
[05232004]
=====
SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

STatus: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz and 145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[08082004]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlink: 437.025 MHz 437.400 MHz
Broadcast Callsign: UO121-11
```

```
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site
at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[05092004]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplink V-band   145.840 - 145.990 MHz CW/LSB
       U-band   435.550 - 435.800 MHz CW/LSB
       L1-band 1269.250 - 1269.500 MHz CW/LSB
       L2-band 1268.325 - 1268.575 MHz CW/LSB
Downlink: S2-band 2401.225 - 2401.475 MHz CW/USB
          K-band 24,048.010 - 24,048.060 MHz CW/USB
Beacon:   2401.323
         24,048.035
[05232004]
-----
SO-42 SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational
Downlink: 437.075 MHz
Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[08152004]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz
Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[08152004]
=====
NO-45 SAPPHIRE
```

Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, callsign KE6QMD, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]

=====

MO-46 TIUNGSAT-1

Catalog number: 26548
Launched: September 26, 2000

Status: Operational

Uplink: 145.850 or 145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz
Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[11202005]

=====

AO-49 AATiS OSCAR-49 (SAFIR-M)

Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink 435.275 1200-baud AFSK
Downlink 145.825 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01012006]
NNNN

/EX

SB SAT @ AMSAT W8ISS $ANS-107.S4
WSR 107 Part 4 04/17/2006

AMSAT NEWS SERVICE BULLETIN 107.S4 FROM AMSAT HQ
SILVER SPRING, MD, April 17, 2006
TO ALL RADIO AMATEURS
BID: $ANS-107.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE
PROPOSED FOR LAUNCH AT THIS TIME:

PHASE 3E ?O-??
Catalog Number:
Proposed Launch Date: Early 2006

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/
[ANS-WSR wishes to thank William Leijenaar, PE1RAH for this week's report]
[10022005]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)

* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/amsat/listserv/menu.html

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

From 516481376211275759
X-Google-Thread: 10e8ad,97db5f20fbf18384,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news2.google.com!news4.google.com!newshub.sdsu.edu!logbridge.uoregon.edu!arclight.uoregon.edu!news.netins.net!not-for-mail
From: Michael Funaro <mikeNOSPAM@L2Speed.net>
Newsgroups: rec.radio.amateur.space
Subject: FA: Kiron Sat Trak IV Stand alone Satellite Track Box
Date: Mon, 24 Apr 2006 10:29:23 -0500
Organization: netINS InterNetNews site
Lines: 5
Message-ID: <1hrp42pv3k8mmuohb3oplb7ljqb6o1v6ob@4ax.com>
Reply-To: mikeNOSPAM@L2speed.net
NNTP-Posting-Host: truro-01-006.wireless.l2speed.net
Mime-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
X-Trace: news.netins.net 1145892535 30398 67.55.159.6 (24 Apr 2006 15:28:55 GMT)
X-Complaints-To: abuse@netins.net
NNTP-Posting-Date: Mon, 24 Apr 2006 15:28:55 +0000 (UTC)
X-Newsreader: Forte Agent 1.8/32.548
Xref: g2news2.google.com rec.radio.amateur.space:216

Hello, please take a look at my Satellite Trak Box on ebay.
Thanks, Mike

http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&item=9715663865

```
From -5530676491873197353
X-Google-Thread: 10e8ad,ed040d48c2d779b5,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII
Path: g2news2.google.com!news3.google.com!newshub.sdsu.edu!elnk-nf2-pas!
newsfeed.earthlink.net!stamper.news.pas.earthlink.net!
stamper.news.atl.earthlink.net!newsread1.news.atl.earthlink.net.POSTED!46041641!
not-for-mail
From: "JoAnne Maenpaa" <wb9jej_no-spam@earthling.com>
Newsgroups: rec.radio.amateur.space
Subject: ANS-113 AMSAT News Service Weekly Bulletin
Lines: 170
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <zXr3g.12602$i41.6404@newsread1.news.atl.earthlink.net>
Date: Tue, 25 Apr 2006 16:16:31 GMT
NNTP-Posting-Host: 64.105.116.217
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread1.news.atl.earthlink.net 1145981791 64.105.116.217 (Tue, 25 Apr
2006 09:16:31 PDT)
NNTP-Posting-Date: Tue, 25 Apr 2006 09:16:31 PDT
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news2.google.com rec.radio.amateur.space:217
```

AMSAT NEWS SERVICE
ANS-113

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* 2006 Dayton Hamvention Just weeks Away
* Phase 3 E
* ISS Expedition 13
* ARISS Status - 17 April 2006

SB SAT @ AMSAT $ANS-113.01
2006 Dayton Hamvention Just Weeks Away

AMSAT News Service Bulletin 113.01
From AMSAT HQ SILVER SPRING, MD.
April 23, 2006
To All RADIO AMATEURS
BID: $ANS-113.01

We are looking for a few good men & women to help at the AMSAT booth during the Dayton Hamvention.

I always find this a rewarding experience, whether talking with longtime AMSAT members or a shy, interested person that is not sure how to start.
The booth will be open Friday May 19th from 9am to 6 pm, Saturday May 20th,8am to 5pm and Sunday 8am to 1pm.
We need people to answer questions about satellite operation, take donationsfor publications and trinkets, memberships and renewals, demonstrate software and assist with satellite demos. Please volunteer for a two hour shift eachday while you are attending the Hamvention.
If you can only find an hour, that will be welcome also. Send me an email at wa4sxm@amsat.org .

Also take advantage of our Thursday night 'Pizza and Suds' gathering at Mario's Piazza and the Friday night Banquet at the Amber Rose. Contact Nancy Makley for reservations at kc8gyw@amsat.org .

If you will be unable to help at the booth, come by and check out our new offering and see the operating EAGLE SDX (Software Defined Transponder) or just say HI to your fellow AMSAT members.

73,
Gould, WA4SXM
Director Field Operations

[ANS thanks Gould, WA4SXM, for the above information]

/EX

SB SAT @ AMSAT $ANS-113.02
Phase 3 E

AMSAT News Service Bulletin 113.02
From AMSAT HQ SILVER SPRING, MD.
April 23, 2006
To All RADIO AMATEURS
BID: $ANS-113.02

Phase 3 E looks like its headed for a 2007 launch. If all the modules function well and the satellite passses some critical vibration tests the launch could be early next year.(Actual dates not set)
The twin looking satellite of OSCAR 10 or 13 is in its final building stages and tests. It may look like a twin of AO-10 or AO-13 but it has some of the latest technology onboard. Some is even being tested for

the future Phase 5A Mars orbiter. That will be an adventure in the near future for everyone to enjoy and another story.
You can find updated information on the website of AMSAT-DL and learn of the upcoming events. As always, AMSAT-NA has links to information sites for all the latest satellite news.

[ANS thanks AMSAT-DL for the above information]

/EX

SB SAT @ AMSAT $ANS-113.03
ISS Expedition 13

AMSAT News Service Bulletin 113.03
  From AMSAT HQ SILVER SPRING, MD.
April 23, 2006
To All RADIO AMATEURS
BID: $ANS-113.03

SUBMITTED BY ARTHUR N1ORC - AMSAT A/C 31468

Expedition 13 in Second Week of Mission

Expedition 13 Commander Pavel Vinogradov and Flight Engineer Jeff Williams, now into their second full work week alone aboard the orbital outpost, are continuing with station familiarization, routine maintenance and medical data collection. On Monday, the crew set up and activated EarthKAM for its first photographic data takes of the new increment.

Wednesday's scheduled reboost of the station using the Zvezda Service Module engine did not occur. Neither engine fired, and the maneuver was aborted. Russian engineers are investigating. Since the reboost was primarily intended as a test of the engines and would have raised the station's altitude by approximately 1/3 of a statute mile, the planned docking of the ISS Progress 21 cargo craft is not affected. The Progress, carrying 2� tons of fuel, oxygen and supplies, will launch next Monday and dock with the station on Wednesday, April 26.

[ANS thanks Arthur, N1ORC, for the above information]

/EX

SB SAT @ AMSAT $ANS-113.04
ARISS Status - 17 April 2006

AMSAT News Service Bulletin 113.04
  From AMSAT HQ SILVER SPRING, MD.
April 23, 2006
To All RADIO AMATEURS

BID: $ANS-113.04

ARISS Status
April 17, 2006

1. ARRL Story Covers Expedition 12's Return

The ARRL article, "Expedition 12 Crew Plus One Return Safely to Earth," has been posted on the website. See:
http://www.arrl.org/news/stories/2006/04/10/100/?nc=1

2. ARRL Article on Nevada, Rio Contacts

ARRL ran a story on the Robert McQueen and Escola Americano do Rio de Janeiro school contacts entitled, "McArthur Calls it a Wrap; Brazil's Pontes Completes One QSO." See:
http://www.arrl.org/news/stories/2006/04/11/104/?nc=1

3. Elementary School Starts Radio Club

Boulder Hill Elementary School in Montgomery, Illinois has started an Amateur Radio club thanks to parent and ham volunteers. The students are learning about amateur radio and communication basics. The school is on the waiting list for an ARISS contact.

[ANS thanks Carol, KB3LKI for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73, This week's ANS Editor,
Dee Interdonato, NB2F

```
From 8201342576500717897
X-Google-Thread: 10e8ad,4bbc704f8ab343a7,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news1.google.com!news4.google.com!
border1.nntp.dca.giganews.com!nntp.giganews.com!nx01.iad01.newshosting.com!
newshosting.com!207.69.154.102.MISMATCH!elnk-atl-nf2!newsfeed.earthlink.net!
stamper.news.atl.earthlink.net!newsread1.news.atl.earthlink.net.POSTED!46041641!
not-for-mail
```

From: "JoAnne Maenpaa" <wb9jej_no-spam@earthling.com>
Newsgroups: rec.radio.amateur.space
Subject: WSR-114 AMSAT Weekly Satellite Report
Lines: 923
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <BXr3g.12603$i41.10509@newsread1.news.atl.earthlink.net>
Date: Tue, 25 Apr 2006 16:16:33 GMT
NNTP-Posting-Host: 64.105.116.217
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread1.news.atl.earthlink.net 1145981793 64.105.116.217 (Tue, 25 Apr 2006 09:16:33 PDT)
NNTP-Posting-Date: Tue, 25 Apr 2006 09:16:33 PDT
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news2.google.com rec.radio.amateur.space:218

This report is organized into 4 parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - proposed satellites

SB SAT @ AMSAT W8ISS ANS-114.S1
WSR 114 Part 1 04/24/2006

AMSAT NEWS SERVICE BULLETIN 114.S1 FROM AMSAT HQ
SILVER SPRING, MD, April 24, 2006
TO ALL RADIO AMATEURS
BID: $ANS-114.S1

VO-52 HAMSAT
Catalog Number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/V - Indian Transponder

Proposed frequencies:

Indian Transponder:
Uplink : 435.220 MHz to 435.280 MHz LSB/CW
Downlink: 145.870 MHz to 145.930 MHz USB/CW
Beacom : 145.859330 MHZ CW

Dutch Transponder:
Uplink : 435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW
Beacon : 145.860MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP

```
U: RHCP

Official Webpage: http://www.amsat.in/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is
active. Each transponder has a different beacon.
[04242006]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Mode(s): 9k6 Digital, V/U
                FM Repeater, V/U
Digipeater - ON

Analog voice downlink: 435.300 MHz FM
         435.150 MHz FM
Analog voice uplink: 145.880 MHZ FM
       145.880 MHz USB
       145.920 MHz FM 67Hz PL tone
      1268.700 MHz FM 67Hz PL tone

Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
    2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:    145.860 MHz FM, 9k6 Digital, Pacsat Broadcast
Protocol

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Mode schedule for April 2006:
24 Apr
FM Repeater, V/U
    * Uplink: 145.920 mhz FM, 67 hz PL Tone
    * Downlink: 435.300 mhz FM
9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
    * Uplink: 145.860 mhz FM, 9k6 PBP
    * Digital Downlink: 435.150 mhz FM, 9k6 PBP Digital TLM Downlink
Active

Official Webpage: http://www.amsat.org/amsat-new/echo/
[04242006]
```

=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Uplink: 145.850 MHz (67.0 Hz PL tone) (See below for operating procedures)
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz. The
order of operation is thus: (allow for Doppler as necessary)
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer
   on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater
   on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10
   minute timer.
[04172006]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: OPERATIONAL

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplink: 145.850 145.870 145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

unOfficial Webpage: http://www.amsat.org/amsat/sats/n7hpr/fo29.html
[11132005]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Uplink: 145.850 MHz FM
Downlink: 436.795 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[01012006]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational depending on amount of Sunlight
Current Reported mode: Mode-A

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
   432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
  145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
  145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz
  145.972 MHz
  435.100 MHz
 2304.100 MHz

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php
The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
AO-7 users are requested to log their contacts and observations about
AO-7, especially any unexpected mode changes.
AO-07 telemetry software webpage:
http://www.qsl.net/k3tz/files/K3TZ_AO-07_Telemetry_Decoder_0.5.zip

Please keep your power low! For additional information please read the
AO-7
Usage Guidelines on the AO-7 Log and Resource Site located at:
http://www.planetemily.com/ao7
[04242006]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544

Launch date: November 20, 1998

Status: Operational
Current Mode: Packet / Occasional Voice - V
Digipeater: ON

The current crew is:
Commander: Pavel Vinogradov, RV3BS
Flight Engineer: Jeff Williams, KD5TVQ

Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Russian: RS0ISS, RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official Webpage: http://www.rac.ca/ariss
Official Fan club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.
[04242006]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-114.S2
WSR 114 Part 2 04/24/2006

AMSAT NEWS SERVICE BULLETIN 114.S2 FROM AMSAT HQ
SILVER SPRING, MD, April 24, 2006
TO ALL RADIO AMATEURS
BID: $ANS-114.S2

CO-56 XI-V
Catalog Number: 28895
Launch Date: October 27, 2005

Status: Operational only within range of Ground station in Japan

Telemetry Downlink: 437.345MHz - FSK 1200bps using AFK protocol
Beacon Downlink: 437.465MHz - CW about 50 WPM

Callsign: JQ1YGW

Oficial Webpage: http://www.space.t.u-tokyo.ac.jp/gs/satinfo-e.html#xi5
Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
[03122006]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: Packet/Occassinal Voice - V
Digipeater: ON

The current crew is:
Commander: Pavel Vinogradov, RV3BS
Flight Engineer: Jeff Williams, KD5TVQ

Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Russian: RS0ISS, RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

```
Official Webpage: http://www.rac.ca/ariss
Official Fan club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is NOT translated from Russian and posted.
[04242006]
=====
PCSAT-2
Catalog Number: 25544
Launch Date: August 1, 2005

Activated: August 3, 2005
Status: Operational
Current Mode: Digipeater

Digital Downlink: 435.275 Mhz
Digital Uplink:   145.825 Mhz

PSK-31 Downlink: 435.275 Mhz
PSK-31 Uplink:    29.401 Mhz

Broadcast:
BBS:

Official Webpage: http://web.usna.navy.mil/~bruninga/pcsat2.html
PCSAT2 APRS Packet page: http://www.findu.com/cgi-bin/pcsat2.cgi
aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[04242006]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Modes: 9k6 Digital, V/U
              FM Repeater, V/U
Digipeater - ON

Analog voice downlink: 435.300 MHz FM
         435.150 MHz FM
Analog voice uplink:   145.880 MHZ FM
         145.880 MHz USB
         145.920 MHz FM 67Hz PL tone
        1268.700 MHz FM 67Hz PL tone

Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
    2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:    145.860 MHz FM, 9k6 Digital, Pacsat Broadcast
Protocol
```

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Mode schedule for April 2006:
24 Apr
FM Repeater, V/U
- Uplink: 145.920 mhz FM, 67 hz PL Tone
- Downlink: 435.300 mhz FM

9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
- Uplink: 145.860 mhz FM, 9k6 PBP
- Digital Downlink: 435.150 mhz FM, 9k6 PBP Digital TLM Downlink

Active

Official AMSAT webpage: http://www.amsat.org/amsat-new/echo/
[04242006]

=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Operational

General Usage Uplink/Downlink:145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org
aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[04172006]

=====
CO-55 CUTE-1
Catalog number: 27844
Launched: June 30,2003

Status: Operational

Uplink: ?
Downlink: 436.8375 CW
437.4700 1200 FM ax25 or SRLL (ACTIVE only near Japan ?)
Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[03122006]

=====
GO-32 TECHSAT-1B
Catalog number: 25397

```
Launch Date: July 10, 1998

Status: Operational

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks: 145.850 FM
         145.890 FM
         145.930 FM
        1269.700 FM
        1269.800 FM
        1269.900 FM
Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[04242006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Semi-operational, the digipeater command is on and open for
APRS users.

Uplink: 145.900 FM
        145.920 FM
        145.940 FM
        145.960 FM
(using 1200-baud Manchester FSK)
Downlink: 437.026 MHz SSB (1200-baud PSK)
Mode-S Beacon: 2401.1428 MHz

Mode and Antenna Polarization:
U: RC 437.050 MHz RHCP
   PSK 437.025 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[04172006]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational?

Telemetry Downlink: 145.826 MHz. FM (1200-baud AFSK).
approx. 10 days ON, 10 days OFF
```

Mode-S Beacon: 2401.500 MHz. ... OFF
UHFBeacon: 435.025 MHz. ... OFF

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Official webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[04172006]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-114.S3
WSR 114 Part 3 04/24/2006

AMSAT NEWS SERVICE BULLETIN 114.S3 FROM AMSAT HQ
SILVER SPRING, MD, April 24, 2006
TO ALL RADIO AMATEURS
BID: $ANS-114.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

AO-54 SUITSAT
Catalog Number:28934
Release Date: February 3,2006

Status: Non-operational
Modes : FM Voice Telemetry/Greetings
 FM SSTV

Callsign: RS0RS
Downlink: 145.990 FM

Official webpage: http://www.suitsat.org
[02262006]
=====
NCUBE-2
Catalog Number: 28894
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
2407.25
[01012006]
=====
XO-53 SSETI
Catalog Number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 FM 67Hz CTCSS
Voice Downlink: 2401.835 FM
Packet Up/Downlink: 437.250 9k6 packet
Packet Downlink 2401.835 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01292006]
=====
POSAT-1 PO-28
Catalog Number: 22829
Launched : September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 429.950

Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html.
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012006]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launched: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB
Beacon: 145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: Downlink only

Uplink: 145.875 145.900 145.925 145.950 MHz FM (1200-baud)
Downlink: 435.808 MHz PSK
Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01012006]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB
Beacon: 29.408 MHz
Robot: 29.454 MHz
[05232004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB
Beacon: 145.860 MHz
Robot: 145.908 MHz
[05232004]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink 145.975 MHz FM
Downlink 435.070 MHz FM
[05092004]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink: 145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM
Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01092005]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational?

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB
Beacon: 29.352 MHz (intermittent)
SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplink: 145.84 145.86 145.88 145.90 MHz FM
(using 1200-baud Manchester FSK)
CW downlink: 437.125 MHz
Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)
Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[05232004]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[08152004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM
Broadcast Callsign: HL01-11
BBS: HL01-12

Jim, AA7KC, reports that KO-23's downlink transmitter continues in a non-operational status.

[05092004]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM (9600-baud FSK)
Downlink: 436.500 MHz FM
Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm

[ANS-WSR has no further information]
[05232004]
=====
SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

STatus: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz and 145.900 MHz

```
For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[08082004]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlink: 437.025 MHz 437.400 MHz
Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site
at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[05092004]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplink V-band   145.840 - 145.990 MHz CW/LSB
       U-band   435.550 - 435.800 MHz CW/LSB
       L1-band 1269.250 - 1269.500 MHz CW/LSB
       L2-band 1268.325 - 1268.575 MHz CW/LSB
Downlink: S2-band 2401.225 - 2401.475 MHz CW/USB
          K-band 24,048.010 - 24,048.060 MHz CW/USB
Beacon:   2401.323
         24,048.035
[05232004]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational
Downlink: 437.075 MHz
Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[08152004]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
```

Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz
Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[08152004]

=====

NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, callsign KE6QMD, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]

=====

MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Operational

Uplink: 145.850 or 145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz
Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[11202005]

=====

AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink 435.275 1200-baud AFSK
Downlink 145.825 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01012006]
NNNN
/EX

SB SAT @ AMSAT W8ISS $ANS-114.S4
WSR 114 Part 4 04/24/2006

AMSAT NEWS SERVICE BULLETIN 114.S4 FROM AMSAT HQ
SILVER SPRING, MD, April 24, 2006
TO ALL RADIO AMATEURS
BID: $ANS-114.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE PROPOSED FOR LAUNCH AT THIS TIME:

PHASE 3E ?O-??
Catalog Number:
Proposed Launch Date: Early/Mid 2007

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/
[ANS-WSR wishes to thank William Leijenaar, PE1RAH for this week's report]
[04242006]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

AMSAT-NA
850 Sligo Avenue, Suite 600

Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/amsat/listserv/menu.html

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

From 6468420939793527785
X-Google-Thread: 10e8ad,e2f802b86ee749e6,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news3.google.com!border1.nntp.dca.giganews.com!nntp.giganews.com!newsfeed00.sul.t-online.de!t-online.de!83.128.0.11.MISMATCH!news-out1.kabelfoon.nl!newsfeed.kabelfoon.nl!bandi.nntp.kabelfoon.nl!213.218.66.70.MISMATCH!feeder.enertel.nl!nntpfeed-01.ops.asmr-01.energis-idc.net!newsfeeder.wxs.nl!divide.nova.planet.nl!posting.nova.planet.nl!not-for-mail
Date: Thu, 27 Apr 2006 16:44:50 +0200
From: Roland <roland_lemmersZPEMM@planet.nl>

```
User-Agent: Mozilla Thunderbird 1.0 (Windows/20041206)
X-Accept-Language: en-us, en
MIME-Version: 1.0
Newsgroups: rec.radio.amateur.space
Subject: why not on the moon revisited
Content-Type: text/plain; charset=ISO-8859-1; format=flowed
Content-Transfer-Encoding: 7bit
Lines: 12
Message-ID: <4450d8d5$0$2028$ba620dc5@text.nova.planet.nl>
NNTP-Posting-Host: 84.84.0.196
X-Trace: 1146149077 text.nova.planet.nl 2028 84.84.0.196:10017
X-Complaints-To: abuse@planet.nl
Xref: g2news2.google.com rec.radio.amateur.space:219
```

Earlier this year there was a thread about repeaters on the moon.
This morning I was riding on my bike to work, about 19 kilometers so
plenty of time to think about all sorts of things, when it came to my
mind there are laser reflectors on the moon. Hmmm?
Laser for tx, telescope for rx. I figure there are possibilities here
for some sort of digital mode.
Has anyone ever tried this?
WHat about the strenght needed for the laser to receive the reflection
on earth?
Thoughts, comments on the possibility, anyone?

Roland.

```
From 2331011272680049971
X-Google-Thread: 10e8ad,e2f802b86ee749e6
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news4.google.com!news3.google.com!news.glorb.com!
newsgate.cistron.nl!news2.euro.net!newshub3.home.nl!home.nl!feeder1.cambrium.nl!
feed.tweaknews.nl!skynet.be!peer-uk.news.demon.net!kibo.news.demon.net!
news.demon.co.uk!demon!amsat.org!g6tsf
From: Paul Shayler <g6tsf@amsat.org>
Newsgroups: rec.radio.amateur.space
Subject: Re: why not on the moon revisited
Date: Thu, 27 Apr 2006 20:43:13 +0100
Organization: Paul's Shack
Lines: 25
Message-ID: <jX0zuuBR7RUEFw+w@g6tsf.demon.co.uk>
References: <4450d8d5$0$2028$ba620dc5@text.nova.planet.nl>
NNTP-Posting-Host: g6tsf.demon.co.uk
Mime-Version: 1.0
Content-Type: text/plain;charset=us-ascii;format=flowed
X-Trace: news.demon.co.uk 1146167005 6891 158.152.255.214 (27 Apr 2006 19:43:25
GMT)
X-Complaints-To: abuse@demon.net
NNTP-Posting-Date: Thu, 27 Apr 2006 19:43:25 +0000 (UTC)
User-Agent: Turnpike/6.05-S (<5I8Cp2LYkgK8kPlFISdSc153Wn>)
Xref: g2news2.google.com rec.radio.amateur.space:220
```

```
In message <4450d8d5$0$2028$ba620dc5@text.nova.planet.nl>, Roland
<roland_lemmersZPEMM@planet.nl> writes
>Earlier this year there was a thread about repeaters on the moon.
>This morning I was riding on my bike to work, about 19 kilometers so
>plenty of time to think about all sorts of things, when it came to my
>mind there are laser reflectors on the moon. Hmmm?
>Laser for tx, telescope for rx. I figure there are possibilities here
>for some sort of digital mode.
>Has anyone ever tried this?
>WHat about the strenght needed for the laser to receive the reflection
>on earth?
>Thoughts, comments on the possibility, anyone?
>
>Roland.

Apollo 11 and others in the series left a "Laser Ranging Retro
Reflector" on the moon so that the distance between the earth and moon
could be measured. A high power laser was used AFIAK, with a telescope
to "capture" the returned beam.

Regards, Paul S. G6TSF/M3TSF
--
Paul Shayler    M3TSF/G6TSF
Running the Internet accelerator ONSPEED.
Details at http://www.onspeed.com


From -1674982296928329768
X-Google-Thread: 10e8ad,e2f802b86ee749e6
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news3.google.com!border1.nntp.dca.giganews.com!
border2.nntp.dca.giganews.com!nntp.giganews.com!peer01.cox.net!cox.net!p01!
fed1read11.POSTED!53ab2750!not-for-mail
From: Dan Mckenna <dmckenna@as.arizona.edu>
User-Agent: Mozilla/5.0 (X11; U; Linux i686; en-US; rv:1.6) Gecko/20040124
X-Accept-Language: en-us, en
MIME-Version: 1.0
Newsgroups: rec.radio.amateur.space
Subject: Re: why not on the moon revisited
References: <4450d8d5$0$2028$ba620dc5@text.nova.planet.nl>
In-Reply-To: <4450d8d5$0$2028$ba620dc5@text.nova.planet.nl>
Content-Type: text/plain; charset=us-ascii; format=flowed
Content-Transfer-Encoding: 7bit
Lines: 16
Message-ID: <Etg4g.14912$Qz.7506@fed1read11>
Date: Thu, 27 Apr 2006 21:02:48 -0700
NNTP-Posting-Host: 70.184.75.120
X-Complaints-To: abuse@cox.net
X-Trace: fed1read11 1146196964 70.184.75.120 (Fri, 28 Apr 2006 00:02:44 EDT)
NNTP-Posting-Date: Fri, 28 Apr 2006 00:02:44 EDT
Organization: Cox Communications
```

```
Xref: g2news2.google.com rec.radio.amateur.space:221
```

Roland wrote:

> Earlier this year there was a thread about repeaters on the moon.
> This morning I was riding on my bike to work, about 19 kilometers so
> plenty of time to think about all sorts of things, when it came to my
> mind there are laser reflectors on the moon. Hmmm?
> Laser for tx, telescope for rx. I figure there are possibilities here
> for some sort of digital mode.
> Has anyone ever tried this?
> WHat about the strenght needed for the laser to receive the reflection
> on earth?
> Thoughts, comments on the possibility, anyone?
>
> Roland.

Check out > www.csr.utexas.edu/mlrs/

```
From -4753636502994792008
X-Google-Thread: 10e8ad,e2f802b86ee749e6
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news2.google.com!news3.google.com!news4.google.com!
border1.nntp.dca.giganews.com!newsfeed-east.nntpserver.com!nntpserver.com!
statler.nntpserver.com!news2.euro.net!border2.nntp.ams.giganews.com!
nntp.giganews.com!newsfeeder.wxs.nl!divide.nova.planet.nl!posting.nova.planet.nl!
not-for-mail
Date: Fri, 28 Apr 2006 10:18:09 +0200
From: Roland <roland_lemmersZPEMM@planet.nl>
User-Agent: Mozilla Thunderbird 1.0 (Windows/20041206)
X-Accept-Language: en-us, en
MIME-Version: 1.0
Newsgroups: rec.radio.amateur.space
Subject: Re: why not on the moon revisited
References: <4450d8d5$0$2028$ba620dc5@text.nova.planet.nl>
<Etg4g.14912$Qz.7506@fed1read11>
In-Reply-To: <Etg4g.14912$Qz.7506@fed1read11>
Content-Type: multipart/mixed;
 boundary="------------090607050500000805080206"
Lines: 181
Message-ID: <4451cfb3$0$2016$ba620dc5@text.nova.planet.nl>
NNTP-Posting-Host: 84.84.0.196
X-Trace: 1146212275 text.nova.planet.nl 2016 84.84.0.196:10033
X-Complaints-To: abuse@planet.nl
Xref: g2news2.google.com rec.radio.amateur.space:222
```

This is a multi-part message in MIME format.

```
--------------090607050500000805080206
Content-Type: text/plain; charset=ISO-8859-1; format=flowed
Content-Transfer-Encoding: 7bit
```

Dan Mckenna wrote:
> Roland wrote:
>
>> Earlier this year there was a thread about repeaters on the moon.
>> This morning I was riding on my bike to work, about 19 kilometers so
>> plenty of time to think about all sorts of things, when it came to my
>> mind there are laser reflectors on the moon. Hmmm?
>> Laser for tx, telescope for rx. I figure there are possibilities here
>> for some sort of digital mode.
>> Has anyone ever tried this?
>> WHat about the strenght needed for the laser to receive the reflection
>> on earth?
>> Thoughts, comments on the possibility, anyone?
>>
>> Roland.
>
>
> Check out > www.csr.utexas.edu/mlrs/
>

Ah, so basically anyone can do this :)

This link has some general info and a picture of one of the reflectors on the moon.

http://sunearth.gsfc.nasa.gov/eclipse/SEhelp/ApolloLaser.html

It seems that the best way to do the EME distance via a repeater or transponder is a satellite in L4 or L5.

It was a nice thought but this one about using a laserreflector belongs
to the 98% garbage. another 97 to go before the good stuff comes. :)
It always seems that the good things come out last.

Roland.

```
--------------090607050500000805080206
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Content-Transfer-Encoding: 7bit
Content-Disposition: inline;
 filename="sunearth.gsfc.nasa.gov/eclipse/SEhelp/ApolloLaser.html"
Content-Base: "http://sunearth.gsfc.nasa.gov/eclipse/
     SEhelp/ApolloLaser.html"
Content-Location: "http://sunearth.gsfc.nasa.gov/eclipse/
     SEhelp/ApolloLaser.html"

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   <script language="JavaScript" type="text/javascript" src="../style/
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header.js"></script>
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script>
<noscript>
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Administration)</a></h1>
<ul>
   <li id="one"><a href="../eclipse.html"><span>Home</span></a></li>
   <li id="two"><a href="../solar.html"><span>Solar Eclipses</span></a></li>
   <li id="three"><a href="../lunar.html"><span>Lunar Eclipses</span></a></li>
   <li id="four"><a href="../transit/transit.html"><span>Planetary Transits</
span></a></li>
   <li id="five"><a href="../phase/phase2001gmt.html"><span>Moon Phases</span></
a></li>
</ul>
<h1><a href="../eclipse.html">Eclipse Home Page</a></h1>
<h2>by Fred Espenak, GSFC Planetary Systems Laboratory</h2>
</noscript>

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<h1 class="box">Measuring the Moon's Distance</h1>

<h2 class="box">Apollo Laser Ranging Experiments Yield Results<br />From LPI
Bulletin, No. 72, August, 1994</h2>

<p class="quote">Scientists who analyze data from the Lunar Laser Ranging
Experiment have reported some watershed results from these long-term experiments,
begun 25 years ago when the Apollo 11 astronauts deployed a reflector array
in the Sea of Tranquillity. &quot;Using the Lunar Laser Ranging Experiment,
we have been able to improve, by orders of magnitude, measurements of the
Moon's rotation,&quot; said Jet Propulsion Laboratory team investigator
Dr. Jean Dickey. &quot;We also have strong evidence that the Moon has a
liquid core, and laser ranging has allowed us to determine with great accuracy
the rate at which the Moon is gradually receding from the Earth.&quot;</p>

<p><img src="../image/ApolloLaser.jpg" width="483" height="304" align="left" />The
first laser ranging retroreflector
was positioned on the Moon in 1969 by the Apollo 11 astronauts. By beaming
laser pulses at the reflector from Earth, scientists have been able to determine
the round-trip travel time that gives the distance between the two bodies
at any time to an accuracy of about 3 centimeters. The laser reflector consists
```

```
of 100 fused silica half-cubes, called corner cubes, mounted in a 46-centimeter
square aluminum panel. Each corner cube is 3.8 centimeters in diameter. Corner
cubes reflect a beam of light directly back toward the point of origin.</p>
<p>&quot;Lunar ranging involves sending a laser beam through
an optical telescope,&quot; Dickey said. &quot;The beam enters the telescope
where the eye piece would be, and the transmitted beam is expanded to become
the diameter of the main mirror, then bounced off the surface toward the
reflector on the Moon.&quot;</p>
<p>The reflectors are too small to be seen from Earth, so
even when the beam is precisely aligned in the telescope, actually hitting
a lunar retroreflector array is technically challenging. At the Moon's surface
the beam is roughly four miles wide. Scientists liken the task of aiming
the beam to using a rifle to hit a moving dime two miles away.</p>
<p>Once the laser beam hits a reflector, scientists at the
ranging observatories use extremely sensitive filtering and amplification
equipment to detect the return signal, which is far too weak to be seen
with the human eye. Even under good atmospheric viewing conditions, only
one photon is received every few seconds.</p>
<p>From the ranging experiments, scientists know that the
average distance between the centers of the Earth and the Moon is 385,000
kilometers with an accuracy of better than one part in 10 billion. Laser
ranging has also made possible a wealth of new information about the dynamics
and structure of the Moon. Among many new observations, scientists now believe
that the Moon may harbor a liquid core. The theory has been proposed from
data on the Moon's rate of rotation and very slight bobbing motions caused
by gravitational forces from the Sun and Earth.</p>
<p>Ranging has also determined that the length of an Earth
day has distinct small-scale variations of about one thousandth of a second
over the course of a year, caused by the atmosphere, tides, and Earth's
core. In addition, precise positions of the laser ranging observatories
on Earth are slowly drifting as the crustal plates on Earth drift. The observatory
on Maui is seen to be drifting away from the observatory in Texas.</p>
<p>Data also indicate that ocean tides on Earth have a direct
influence on the Moon's orbit. Measurements show that the Moon is receding
from Earth at a rate of about 3.8 centimeters per year. Ranging has also
improved historic knowledge of the Moon's orbit, enough to permit accurate
analyses of solar eclipses as far back as 1400 BC. Continued improvements
in range determinations and the need for monitoring the details of the Earth's
rotation will keep the lunar reflector experiments in service for years
to come.</p>

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</script>
</div>
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2005 July 11
<script language="JavaScript" type="text/javascript" src="../style/footer-2.js"></
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<h3 style="text-align: center;">Go to <a href="../lunar.html">NASA Lunar Eclise
Page</a></h3>
<h3 style="text-align: center;">Go to <a href="../transit/transit.html">NASA
Planetary Transit Page</a></h3>
<h3 style="text-align: center;">Go to <a href="../resource.html">NASA Eclipse
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<hr class="blue" />
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NASAlogo.tiny.gif" alt="NASA logo" /></td>
<td><p>Webmaster: Fred Espenak<br />
Email: <a href="mailto:espenak@gsfc.nasa.gov">espenak@gsfc.nasa.gov</a></p>
<p>Official NASA Representative: Dr. Drake Deming<br />
Email: <a
href="mailto:ddeming@pop600.gsfc.nasa.gov">ddeming@pop600.gsfc.nasa.gov</a></p></
td></tr>
</table>
<p style="text-align: center;">Planetary Systems Laboratory &#8211; Code
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NASA's Goddard Space Flight Center, Greenbelt, Maryland 20771, USA</p>
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</tr>
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</body>
</html>
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X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news4.google.com!news3.google.com!
border1.nntp.dca.giganews.com!nntp.giganews.com!newscon06.news.prodigy.com!
prodigy.net!newsmst01b.news.prodigy.com!prodigy.com!postmaster.news.prodigy.com!
newssvr29.news.prodigy.net.POSTED!7399f21f!not-for-mail
From: "n9zle" <NoSpam@nospam.com>
Newsgroups: rec.radio.amateur.space
Subject: No link attitude!
Lines: 77
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.2670
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.2670
```

```
X-RFC2646: Format=Flowed; Original
Message-ID: <AoKrf.37466$dO2.19951@newssvr29.news.prodigy.net>
NNTP-Posting-Host: 70.249.59.48
X-Complaints-To: abuse@prodigy.net
X-Trace: newssvr29.news.prodigy.net 1135571616 ST000 70.249.59.48 (Sun, 25 Dec
2005 23:33:36 EST)
NNTP-Posting-Date: Sun, 25 Dec 2005 23:33:36 EST
Organization: SBC http://yahoo.sbc.com
X-UserInfo1: TSU[@I_A\S@WB_\
[MJJ@^VPAFJ_L@IHIQ@T@_FYLKX^JGEUNDO_AR\^[JTXDX_KI\VB]JBVMS^YT_G[CZVWAOS\DHFWEH]@KG
XYHB\_CMDSFABP^J[AHHRKARLE_JDBLJ\XA[JRMEI]MGJSPB\Y]^KG\@S^@VQKI_Q[G@@_ACSARASDEFLB
J]S\GFNTUAVBL
Date: Mon, 26 Dec 2005 04:33:36 GMT
Xref: g2news1.google.com rec.radio.amateur.space:312
```

No link attitude!

http://www.n9zle.com/forum/

What is it with this no-link to other site attitude?
Years ago when the internet was in its infancy just about any site would add your site as a link from theirs. In return you would do the same. But now it has come to NO-LINKS. Not even in the forums. I have had a website located on tripod for about 9 years over those nine years I had a link to qrz dot com That site received over a million hits. And many users went from that site to qrz and on-to Icomamerica dot com. I have always supported Icom. They have never given a link on their site to mine. I have always supported qrz. But of course he(AA7BQ) never put a link on his site to mine. Well you may say that "I never asked". And that is true. But recently I have noticed he has been deleting my posts. ALL OF THEM. He never contacted me telling me why. AA7BQ just deleted them. I build CIV cables and sell a few of them every week to amateur operators who want them. When I posted one on his site. I found he deleted the post soon after it was placed there.

My beliefs are.
1. QRZ AKA AA7BQ no longer has the amateur radio attitude.
2. AA7BQ has gone fully commercial but calls his site "The Ham Radio Super Site"
3. AA7BQ does not have your best interest in mind.

I can also prove what I am writing here.
For one if he claims he is nothing but a commercial site then why does he ask for donations?
If he is not a commercial site than why will he not allow me to post my CIV cables on his site?

That takes care of number 2
Now for number 1 and 3. If some one knows the truth about something but keeps it from you he is a liar.
No mater how you put it, he is a liar. On the QRZ site Fred is there to help you renew your license. Or so he leads you to believe so. He charges you for it. Mr. Lloyd has never revealed it to any amateurs that you can renew your license or do an address change at the fcc.gov web site for FREE. Yes TOTAL

FREE at the FCC web site.
The forms at the FCC web site or no harder to fill out than his.

His CD. He charges 24.95 plus tax and shipping. On that CD is data he obtained from the FCC and got it for FREE, he sales it to you. Also he has software, created by programmers like MYSELF. And MODS that have been made available from the manufactures and other HAMS like ME! I have been contributing to Amateur Radio community for greater than 10 years, and have received very little for software I created. Never complained when it was copied. I have performed and created several of the MODS for various transceivers. Never asked a penny for it. I never commercialized HAM RADIO. And NEVER took money from some one for something they could get FREE else where.

I am sure many of you would like to ask me "what I am going to do about it?"
Here is my answer.

I have created an open forum on my web site http://www.n9zle.com/forum/

There you can post a link to your own site even if it is a commercial site.
You can post any ham radio equipment you have for sell on the site.

You can do a callsign lookup at my site from the FCC database, not that stupid qrz thing.
I will soon put together an open source database that I will sell for the price of the CD plus the true cost of shipping. About two bucks total. Once you install the database on your system, you will be able to download updates for FREE. I will make drivers available to programmers to access the database in several different languages and operating systems. I will also attempt to make the database available on the internet for FREE to download.

I only ask for a little help from other HAMS like myself. I need a few elmers that are willing to moderate some of the forums. It is easy and you will find it fun. If you have any suggestions on new forums or sections please logon to my site and make a post.

73s N9ZLE

From -5722037438961606147
X-Google-Thread: 10e8ad,3b7fe3bdd9fdaba3,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news3.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx02.iad01.newshosting.com!newshosting.com!
207.69.154.102.MISMATCH!elnk-atl-nf2!newsfeed.earthlink.net!
stamper.news.atl.earthlink.net!newsread3.news.atl.earthlink.net.POSTED!46041641!
not-for-mail
From: "JoAnne Maenpaa" <wb9jej_no-spam@earthlink.net>
Newsgroups: rec.radio.amateur.space
Subject: WSR-359 AMSAT Weekly Satellite Report

Lines: 1394
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <QzYrf.645$M%4.471@newsread3.news.atl.earthlink.net>
Date: Mon, 26 Dec 2005 20:41:20 GMT
NNTP-Posting-Host: 68.165.57.25
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread3.news.atl.earthlink.net 1135629680 68.165.57.25 (Mon, 26 Dec 2005 12:41:20 PST)
NNTP-Posting-Date: Mon, 26 Dec 2005 12:41:20 PST
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news1.google.com rec.radio.amateur.space:313

This report is organized into 4 parts.
Part 1 - operational analog amateur satellites.
Part 2 - operational digital amateur satellites.
Part 3 - non - operational satellites
Part 4 - proposed satellites

SB SAT @ AMSAT <KB9MMC $ANS-359.S1
WSR 359 Part 1 12/25/2005

AMSAT NEWS SERVICE BULLETIN 359.S1 FROM AMSAT HQ
SILVER SPRING, MD, December 25, 2005
TO ALL RADIO AMATEURS
BID: $ANS-359.S1

VO-52 HAMSAT
Catalog Number: 28650
Launch Date: May 05,2005

Status: Testing
Current Mode: U/V - Dutch Transponder

Proposed frequencies:

Indian Transponder:
Uplink : 435.220 MHz to 435.280 MHz LSB/CW
Downlink: 145.870 MHz to 145.930 MHz USB/CW
Beacom : 145.859330 MHZ CW

Dutch Transponder:
Uplink : 435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW
Beacon : 145.860MHz 12WPM with CW message

This from William Leijenaar, PE1RAH:
Dear AMSATs,

I wish I had the same free time now as when I designed the HAMSAT and P3e transponder. Unfortunatly these times have been changed (for the moment) due to QRL things.

However, I often try to be QRV on the HAMSAT and check the signals from my transponder and read the messages on amsat-bb. I just read about the beacon "problem". The "problem" with the beacon is actually not a problem but it is known. The beacon signal is injected at the IF, and runs throught the transponder from the IF section, up converter, via the final PA to the antenna.

The changes you hear on the beacon frequency is caused by the amplitude limiters in the IF that are activated by a too strong uplink signal. These limiters are only for protection, to avoid that the IF and VHF amplifiers get overloaded and generate all kinds of unwanted signals at the output.

My transponder is straight forward to keep it physical small and cheap in cost (as I had no sponsors). Unlike most other transponders my transponder on HAM-SAT has no AGC system. It gives always maximum gain with maximum sensitivity.

The main reason is that the AGC systems I had didn't fit in the small sized box. As an option I choose for limiters, and it worked great in tests.

Secondly, I tought limiters might be helpfull against aligators. To deal with too strong signals most transponder have an AGC to lower the RX gain, and actually be helpfull to the alligators. With the limiters their SSB signal will get distorted and they might lower their powers to have better audio quality.

The change in beacon sound is an indication for too much uplink powers and will be heared mainly in areas where higher powers are available on the uplink, like US, Europe, Japan...

Its funny to know that nobody here has discovered that the bandpass is shifted some down in frequency... There is no technical failure, the reason is known here... No panic please :o)

Please keep in mind that this transponder is my privat work and privat money. Frankly speaking this is my privat transponder I "give" to the amateur world. I was one of those many poor students, and this was the best I could do with my resources I had available at that time... The whole thing is just 16cm x 10cm x 3cm !! even smaller than the professional Indian transponder :o)

I hope you all enjoy my transponder even when it is not perfect.
[11272005]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Mode: PBBS - V/U 9k6
      VOICE REPEATER - V/U FM

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
Analog voice uplink: 145.880 MHZ FM
145.920 MHz FM 67Hz PL tone
1268.700 MHz FM 67Hz PL tone

Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast Protocol (PBP)

Broadcast: PECHO-11
BBS: PECHO-12

This from the AO-51 Command team:

The Digipeater function on AO-51 has been turned on for a "Trial Test Session". The test may be paused at any time. Please keep your digi packets down to a reasonable level as this is a shared resource. Only one uplink is in use, so the PBBS users and digi users are going to be on the same uplink frequency. This is a shared uplink and downlink with the PBBS, so do not overload it with continuous, or high duty rate, beacons or broadcasts.

This is not the 10 watt plus transmitter that is on the ISS. It will take a higher gain receiving station to hear the 9k6 signal of AO-51. You will not need a strong signal for the uplink though, as AO-51 hears very well. Note that the uplink and downlink are both at 9600 baud.

Downlink: 435.300 FM 9600 baud
Uplink: 145.860 FM 9600 baud
Digi Callsign: PACB-1

If you are using TlmEcho there is a bug in the program regarding the Digipeat Status display. That has been fixed in the new version, and a number of new features added as well. A new version of TlmEcho is expected to be released soon.

For the time being, if you monitor the 9k6 downlink you can use the LSTAT status message to verify that the digipeater is turned on. If the message contains "d:1", then the digi function is enabled. If it contains "d:0" the digi is turned off.

Mike, KE4AZN, added, "I want to personally thank Jeff, KB2M, and Gould, WA4SXM, for their help in testing the digipeat function."

[ANS thanks Mike, KE4AZN for the above information]

January 2006 Amsat Kid's Day on AO-51

Amsat-NA, the AO-51 Command Team, and the AO-51 Operations Team will sponsor Kid's Day on AO-51 on January 8, 2006. The event will run from approximately 0100 UTC 8 January until 0345 UTC 9 January. The event is open to all kids, worldwide. We ask all amateur radio stations to give this short time window to promote satellite operations with kids, by actually showing a kid how to make contacts via AO-51, providing a station to contact, or stepping aside to allow others to make contacts with the kids. During the event, please limit contacts to stations that are operating with kids at the microphone. This should allow the kids to have a nice QSO and pass some information. Kids can tell their name, age, who is helping them operate on AO-51, where they live, and other information about themselves.

AO-51 will be configured in the following mode during the event. Please note the change in the uplink frequency for the event. The PL tone will be turned off for the event.

Uplink: 145.880 mhz FM voice
Downlink: 435.300 mhz FM voice

The digital transponder on 435.150 will be turned off during the event.

See http://www.arrl.org/FandES/ead/kd-rules.html on the ARRL website for more Kids Day information.

Have fun and enjoy AO-51!

73 KE4AZN
Amsat VP-Operations
Echo Command Station

[ANS-WSR thanks Mike Kingery, KE4AZN for the above information]
[12252005]

=====

SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Uplink: 145.850 MHz (67.0 Hz PL tone) (See below for operating procedures)
Downlink: 436.795 MHz

There have been unconfirmed reports on the amsat-bb remailer that SO-50 has shifted downlink frequency as much as 5khz up. This both from Europe.

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz. The order of operation is thus: (allow for Doppler as necessary)

1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer on board the spacecraft.

2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10 minute timer.

[09122004]

=====

FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: OPERATIONAL

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplink: 145.850 145.870 145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

John, N4QWL reports on July 16th, 2005:
Last evening I had a AOS to LOS qso with WI2W. FO-29 came up at 01:17z here in FM07 and I found WI2W and we chatted until 01:33z. The satellite was at 2 degrees elevation when I finally heard him start to crackle a bit. What a great QSO! To think that I watched this bird launch back in 1996 and it is still working so well is a real thrill. I believe I still have the video. I might just look for it and watch it again. Boy do I love this satellite stuff! Look for you all up there.

Please send the reception reports to lab2 'at' jarl.or.jp.
Please use the subject line: 'FO-29 reception report'.

Mineo, JE9PEL, has an FO-29 satellite telemetry analysis program that will automatically analyze all digital telemetry from the satellite (such as current, voltage and temperature). FO29CWTE is available at:
http://www.ne.jp/asahi/hamradio/je9pel/
[ANS-WSR wishes to thanks John, N4QWL for this week's report]
[11132005]

=====

AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Uplink: 145.850 MHz FM
Downlink: 436.795 MHz FM

The latest information on AO-27 from control operator Michael Wyrick, N3UC (former N4USI), can be found at:

http://www.ao27.org

An AO-27 question-and-answer page is available on the AMSAT-NA web site, with updates by Ray, W2RS. The URL is:
http://www.amsat.org/amsat/intro/ao27faq.html

[ANS-WSR thanks John, K6YK, for this week's AO-27 report]
[11132005]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Semi-operational in sunlight.
Return to active status: June 21,2002

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
            432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A
            145.975 to 145.925 MHz CW/USB Mode B
Beacon: 29.502 MHz, 145.972 MHz, 435.1 MHz, 2304.1 MHz

Emily, W0EEC has created a website to allow the users of AO-7 to record contacts, observations and use of the satellite more effectively at:
http://www.emilyshouse.com/experthams/ao7/main.php
This includes the ability to log contacts.

Tim, K3TZ has written a program to decode AO-07 telemetry. The program can be downloaded at:
http://www.qsl.net/k3tz/files/K3TZ_AO-07_Telemetry_Decoder_0.5.zip

For more AO-7 info:
http://www.amsat.org/amsat/sats/n7hpr/ao7.html
[11132005]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: DIGIPEATER
Digipeater: ACTIVE

The current Expedition 12 crew is:
Commander: William McArthur - KC5ACR
Flight Engineer: Valery Tokarev - (no call)

Worldwide packet uplink: 145.990 MHz FM
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Repeater Uplink: 437.800 MHz FM

Repeater Downlink: 145.800 MHz FM
Doppler Shift is 10 KHz

Russian callsigns: RS0ISS, RZ3DZR
USA callsign: NA1SS
Packet station mailbox callsign: RS0ISS-11
Packet station keyboard callsign: RS0ISS-3
Digipeater callsign: ARISS

The ARRL Reports;

ISS commander shooting for WAC, WAS and maybe DXCC from space

ISS Expedition 12 Commander Bill McArthur, KC5ACR, has proven to be one of the more active Amateur Radio on the International Space Station (ARISS) operators among ham radio operators who have occupied the space station. In fact, McArthur's having so much fun operating from space that he's hoping to complete Worked All Continents (WAC), Worked All States (WAS) and maybe even DXCC from space.

"Bill McArthur continues to be active on voice and now has a couple of personal goals he is trying to achieve," says ARISS Ham Radio Project Engineer Kenneth Ransom, N5VHO. "He is trying to talk to someone in every state in the United States. According to his log, he has managed to work 37 states so far." In addition, Ransom says, McArthur wants to work as many countries as he can.

"He's off to a good start with 28 DXCC entities in his log as of December 12," he said. "These contacts have been with amateur stations on every continent with the exception of Antarctica." That contact could happen this weekend, however. Although the IARU does not require WAC applicants to have worked Antarctica, Ransom says that ARISS tradition calls for an Antarctica QSO to achieve WAC from space "since the astronauts seem to have an unfair advantage."

Expedition 9 astronaut Mike Fincke, KE5AIT, became the first ISS crew member to contact all seven of the world's continents via Amateur Radio from NA1SS.

States on McArthur's most-needed list are Alaska, Hawaii, Idaho, Missouri, New Hampshire, New Mexico, North Dakota, Pennsylvania, Rhode Island, South Dakota, Vermont, Virginia and Washington.

"The list of DXCC entities is just starting to grow, so he needs a lot right now," Ransom conceded this week, adding that he hasn't included ARISS school group contacts in his counts and hopes McArthur will achieve his goals without them. "We won't know the official results for months after the mission," he added.

McArthur is about halfway through his approximately six-month duty tour aboard the ISS. He and crewmate Valery Tokarev will return to

Earth in April.

During Thanksgiving week, McArthur reportedly made some three dozen casual contacts, most of them over North America and a few over Europe and New Zealand. He made contacts with stations in the US on December 6. He also had QSOs with Australia, New Zealand and the US on December 11.

[WSR Thanks the ARRL for the above information]

The ISS Fan Club Webpage < http://www.issfanclub.com > reports that the Digipeater is active as of Nov 14th, 2005 at 0207UTC.

The ISS daily crew schedule can be found at:
http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line is NOT translated from Russian and posted.

More information is available at:
http://www.rac.ca/ariss
http://spaceflight.nasa.gov/station/reference/radio/
http://www.marexmg.org/fileshtml/unprotopage.html
http://www.issfanclub.com
http://oscar.dcarr.org/
[11132005]
NNNN
/EX

SB SAT @ AMSAT <KB9MMC $ANS-359.S2
WSR 359 Part 2 12/25/2005

AMSAT NEWS SERVICE BULLETIN 359.S2 FROM AMSAT HQ
SILVER SPRING, MD, December 25, 2005
TO ALL RADIO AMATEURS
BID: $ANS-359.S2

PCSAT2 ?0-??
Catalog Number: 25544
Launch Date: August 1, 2005

Status: Battery-saving mode
Current Mode: None

Digital Downlink: 435.275 Mhz
Digital Uplink: 145.825 Mhz
PSK-31 Downlink: 435.275 Mhz
PSK-31 Uplink: 29.400 - 29.403 Mhz

Broadcast:
BBS:

PCSAT2 was installed on the exterior of the International Space Station and was activated on August 3, 2005.

Packets seen from PCSAT2 can be reviewed at:
http://www.findu.com/cgi-bin/pcsat2.cgi

A screen shot of both the 9600 bps and 1200 bps decoded data as seen by Simon, 9W2QC, can be seen at:
http://www.9w2qc.net/pcsat2/

More information on PCSAT2 can be found at:
http://web.usna.navy.mil/~bruninga/pcsat2.html
[11272005}

=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Mode: PBBS - V/U 9k6
VOICE REPEATER - V/U FM

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
Analog voice uplink: 145.880 MHZ FM
145.920 MHz FM 67Hz PL tone
1268.700 MHz FM 67Hz PL tone

Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast Protocol (PBP)

Broadcast: PECHO-11
BBS: PECHO-12

This from the AO-51 Command team:

The Digipeater function on AO-51 has been turned on for a "Trial Test Session". The test may be paused at any time. Please keep your digi packets down to a reasonable level as this is a shared resource. Only one uplink is in use, so the PBBS users and digi users are going to be on the same uplink frequency. This is a shared uplink and downlink with the PBBS, so do not overload it with continuous, or high duty rate, beacons or broadcasts.

This is not the 10 watt plus transmitter that is on the ISS. It will take a higher gain receiving station to hear the 9k6 signal of AO-51. You will not need a strong signal for the uplink though, as AO-51 hears very well. Note that the uplink and downlink are both at 9600 baud.

Downlink: 435.300 FM 9600 baud
Uplink: 145.860 FM 9600 baud
Digi Callsign: PACB-1

If you are using TlmEcho there is a bug in the program regarding the Digipeat Status display. That has been fixed in the new version, and a number of new features added as well. A new version of TlmEcho is expected to be released soon.

For the time being, if you monitor the 9k6 downlink you can use the LSTAT status message to verify that the digipeater is turned on. If the message contains "d:1", then the digi function is enabled. If it contains "d:0" the digi is turned off.

Mike, KE4AZN, added, "I want to personally thank Jeff, KB2M, and Gould, WA4SXM, for their help in testing the digipeat function."

[ANS thanks Mike, KE4AZN for the above information]
January 2006 Amsat Kid's Day on AO-51

Amsat-NA, the AO-51 Command Team, and the AO-51 Operations Team will sponsor Kid's Day on AO-51 on January 8, 2006. The event will run from approximately 0100 UTC 8 January until 0345 UTC 9 January. The event is open to all kids, worldwide. We ask all amateur radio stations to give this short time window to promote satellite operations with kids, by actually showing a kid how to make contacts via AO-51, providing a station to contact, or stepping aside to allow others to make contacts with the kids. During the event, please limit contacts to stations that are operating with kids at the microphone. This should allow the kids to have a nice QSO and pass some information. Kids can tell their name, age, who is helping them operate on AO-51, where they live, and other information about themselves.

AO-51 will be configured in the following mode during the event. Please note the change in the uplink frequency for the event. The PL tone will be turned off for the event.

Uplink: 145.880 mhz FM voice
Downlink: 435.300 mhz FM voice

The digital transponder on 435.150 will be turned off during the event.

See http://www.arrl.org/FandES/ead/kd-rules.html on the ARRL website for more Kids Day information.

Have fun and enjoy AO-51!

73 KE4AZN
Amsat VP-Operations
Echo Command Station

[ANS-WSR thanks Mike Kingery, KE4AZN for the above information]
[12252005]
=====
NO-44 PCSAT

Catalog number: 26931
Launch Date: September 30, 2001

Status: Operational

General Usage Uplink/Downlink:145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

Bob WB4APR reports:

The PCSAT-1 digipeater on 145.825 was still going strong and working well up until December 15.

The activity page http://pcsat.aprs.org shows about 75 stations accessed PSCAT-1 between December 13 and 14. This won't last much longer since PCSAT-1 is now back to 30 minute eclipses headed towards worst-case of 35 minutes during the week of December 18-25.

Sometime before 2202z on the 15th PCSAT-1 suffered a reset to W3ADO-1 and lost its low power settings. Now at 1740z on the 17th, the US Naval Academy Satellite Lab sent the restore commands, but with 33 minute eclipses, it is doubtfull they will hold. We may have lost her until March, 2006.

The command station at the US Naval Academy should be able to keep PCSAT-1 alive indefinately as long as stations do not user her in the dark and the command stations never let her 68 hour command watch-dog timer time out.

Anyone can work PCSAT-1 with ANY typical 1200 baud packet station on 145.825. Just set your path to UNPROTO APRS via ARISS (the same that you use via ARISS on the ISS or via PCSAT2). Mobiles with the D700 or the TH-D7 HT APRS radios will see packets directly on their front panel and can work it from their mobile.

[ANS-WSR thanks Bob Bruninga, WB4APR and the US Naval Academy Satellite Lab for the above information]

PCSat is a 1200-baud APRS digipeater designed for use by stations using hand-held or mobile transceivers. Downlinks feed a central web site at: http://pcsat.aprs.org

The APRS-equipped PCSat was built by midshipmen from the U.S. Naval Academy under the guidance of Bob Bruninga, WB4APR.
[12182005]

=====

CUTE-1
Catalog number: 27844
Launched: June 30,2003

Status: Operational

Uplink: ?
Downlink: 436.8375 CW
437.4700 1200 FM ax25 or SRLL (ACTIVE only near Japan ?)
Cliff, K7RR reports:
In the latest Weekly Satellite Report, CUTE 1, #27844 is listed as OPERATIONAL?
Indeed it is very operational as a CUBESAT sending CW telemetry on 436.8345 MHz. At the July 7 2005, 23:45:20 pass over the Western USA:
CUTE 1 6B A4 xx 7F D7 66A8 4702 FF FF7C 65
CUTE 1 6C A6 59 80 D9 66A8 4702 FF FE7C B6

The June 30th KEPS were within ten seconds of AOS and LOS. It is an very good object to practice tracking as the orbit and transmitter power are similar to proposed CUBESATS awaiting launch this December. As a check for Doppler correction, the lack of change in tone is an excellent indicator.

CUTE 1 is a Japanese (Tokyo Institute of Technology) one kilogram nanosatellite that was launched by a Rokot rocket from Plesetsk at 14:15 UT on 30 June 2003. It carries a 100 mW beacon at 436.8375 MHz. Initial orbital parameters were period 101.4 min, apogee 831 km, perigee 819 km, and inclination 98.7?.

For further info about CUTE-1 goto:
http://lss.mes.titech.ac.jp/ssp/cubesat/operation/Schedule_e.html

[ANS WSR wishes to thank Cliff, K7RR, for this week's information]
[07242005]

=====

GO-32 TECHSAT-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Downlink: 435.225 MHz FM (9600-baud FSK)
(435.325 n/a - temperature problems)
Uplinks: 145.850, 145.890, 145.930 FM
1269.700, 1269.800, 1269.900 FM
Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

Jeff, KB2M, reports November 15th, 2005:
I might be wrong about this, but as I am the only one I see working GO-32 here goes. If you do a DIR request up on the 145.890 uplink the bird turns on. Give it a try....

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[ANS-WSR wishes to thank Jeff, KB2M for this weeks report.]
[11202005]

=====

AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Semi-operational, the digipeater command is on and open for APRS users.

Uplink: 145.90 145.92 145.94 145.96 MHz FM
(using 1200-baud Manchester FSK)
Downlink: 437.026 MHz SSB (1200-baud PSK)
Mode-S Beacon: 2401.1428 MHz
Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

A WOD collection of current graphics along with general information and telemetry samples can be found at:
http://www.telecable.es/personales/ea1bcu
[05092004]

=====

UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational?

Telemetry Downlink: 145.826 MHz. FM (1200-baud AFSK).
approx. 10 days ON, 10 days OFF
Mode-S Beacon: 2401.500 MHz. ... OFF
UHFBeacon: 435.025 MHz. ... OFF

During the period 21 November to 14 December 2005 the VHF beacon on 145.826 MHz has been heard from 05 to 10 December.

Signals have been very variable during this period. Sometimes received at good strength, at other times they were inaudible, even with the BFO switched ON (ie. in CW mode).

If the watchdog resets as expected, then the beacon should restart around 31 December. However, more observations are needed to confirm the timing of the watchdog timer, and whether it is being reset prematurely. Therefore, it may be worth listening for the satellite a few days before 31 December.

The on-board clock continues to show a very large error. On 09 December it was 21.8 days slow.

All the analogue telemetry channels, 0 to 59 are zero, ie they have failed. The status channels 60 to 67 are still working.

The eclipses have now ended, and the satellite should be in continuous sunlight for the remainder of this year, and next year until early May. This should help the satellite to continue transmitting, although continuous sunlight can cause problems due to excessive temperatures. Power supply problems can be caused by poor earth pointing attitude, ie the sunlight illuminating the ends of the satellite, instead of the solar arrays.

The watchdog timer appears to be operating on the 20 day cycle, ie. approximately ten days ON followed by 10 days OFF. It appears to be unaffected by problems of the on-board clock. However, poor solar attitude, and battery problems, may be combining to produce a low 14 volt line supply. This appears to be causing the beacon to switch OFF prematurely, and resets the watchdog timer cycle.
It seems very likely that the battery is now unable to retain its charge, due to having endured around 100,000 partial charge/discharge cycles, always a problem with NiCad cells. When analogue telemetry was transmitted, it showed an unexplained current drain from the 14 volt line. This just adds to the present problems.

The Beacon frequencies are -
VHF 145.826 MHz. AFSK FM ASCII Telemetry
UHF 435.025 MHz. OFF
S-band 2401.5 MHz. OFF

Listeners to OSCAR-11 may be interested in visiting my website which contains an archive of news & telemetry data. It also contains details about using a soundcard or hardware demodulators for data capture. There is software for capturing data, and decoding ASCII telemetry. The URL is www.users.zetnet.co.uk/clivew/

More information on UO-11 OSCAR-11 can be found at:
http://www.users.zetnet.co.uk/clivew/

MPEG3 files can be found here at Mineo, JE9PEL website:
http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[ANS-WSR thanks Clive G3CWV for the above information]
[12182005]
NNNN
/EX

SB SAT @ AMSAT <KB9MMC $ANS-359.S3
WSR 359 Part 3 12/25/2005

AMSAT NEWS SERVICE BULLETIN 359.S3 FROM AMSAT HQ
SILVER SPRING, MD, December 25, 2005
TO ALL RADIO AMATEURS
BID: $ANS-359.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

SSETI ?O-??
Catalog Number: 28894
Launch Date: October 27, 2005

Status: In orbit - being commissioned

A daily report of the launch campaign is being maintained at
http://sseti.gte.tuwien.ac.at/express/mop/index.php?uri=news.html
This mission operations site is completely up-to-date regarding Kepler TLEs and other LEOP "Launch and Early Operations Phase" details.

The SERACC software, needed to decode and submit the received data to the SSETI database, together with some audio files containing recorded 9k6 signal to experiment with is also now available

The ESA website about SSETI Express is at:
http://www.esa.int/SPECIALS/sseti_express/SEMARJ7X9DE_0.html

The latest version of the SSETI Express handbook can be downloaded free of charge from the AMSAT-UK website at:
http://www.uk.amsat.org/

More SSETI Links at:

SpaceDaily has a report about SSETI at:
http://www.spacedaily.com/news/internet-04zzzu.html

You can find more info about SSETI at:
http://sseti.gte.tuwien.ac.at/WSW4/

Latest news about SSETI can be found at:
http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php

Look at the website for the SSETI Express webcam
http://sseti.gte.tuwien.ac.at/WSW4/webcam.htm
[ANS-WSR thanks Graham, UA/G3VZV and Trevor, M5AKA for the above]
[11202005]
======
POSAT-1 PO-28
Catalog Number: 22829
Launched : September 25, 1993

Status: Operational - Not open for Amatuer use

```
Downlink: 435.250 MHz
          435.275 MHz

Uplink:   145.925 MHz
          145.975 MHz
```

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

PO-28 (POSAT-1), Portugal's first satellite, launched 12 years ago,will be turned over to Amateur Radio use in the very near future. That was the word July 30 from AMSAT-UK Secretary Jim Heck, G3WGM, during the AMSAT-UK International Space Colloquium in Guildford, England.

Launched September 25, 1993, the satellite operated as a packet store-and-forward BBS (9600 baud FM FSK) on Amateur Radio frequencies for several weeks in early 1994. Over the years, PO-28's primary usage has been commercial, although plans have called for eventually shifting its operation to ham radio use. G3WGM reports that following lengthy negotiations it has been agreed thatthe satellite can be switched permanently to amateur frequencies. The change over is expected to take a couple of weeks.

The Portuguese satellite was built at the University of Surrey as part of a collaborative satellite technology program that involved industry and academe. Uplink frequencies will be 145.925 and 145.975 MHz. Downlink frequencies will be 435.250 and 435.275 MHz. More information on PO-28 is on the AMSAT Web site

http://www.amsat.org/amsat/sats/n7hpr/po28.html.

Uplink Frequencies: 145.925 and 145.975 MHz
Downlink Frequencies: 435.250 and 435.275 MHz

Orbit: 822 x 800 km, 98.6 deg inclined, sun-synchronous.

Transponder capabilities include FM repeater and 38k4 data. If you want to hear how loud this satellite is, listen on 429.950 until the change back to amateur radio service.

Keplerian elements for PO-28 are currently contained in the AMSAT keps bulletins and at Celestrak in amateur.txt using the name "POSAT". Users of Space Track should query the NORAD Satellite ID number 22829. The name listed by Space Track is "EYESAT A".

More information of POSAT-1 can be found at:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
http://www.amsat.org/amsat/sats/n7hpr/po28.html
[ANS-WSR wishes to thank Duane Naugle, KO6BT, for this week's update.]
[11062005]

=====

AO-10 OSCAR 10
Catalog number: 14129
Launched: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB
Beacon: 145.810 MHz (unmodulated carrier)

AO-10 has been locked into a Mode-B, 70-cm uplink and 2-meter downlink for several years.

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]

=====

IO-26 ITAMSAT

Catalog number: 22826
Launch Date: September 26, 1993

Status: Non-operational

Uplink: 145.875 145.900 145.925 145.950 MHz FM (1200-baud)
Downlink: 435.812 MHz SSB
Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Alberto E. Zagni - I2KBD reports on 02/13/05
The spacecraft is in MBL (safe mode) and is trasmitting just 6 channels of telemetry. Temperatures and voltage are nominal, but there seems to be a problem with the onboard receiver, refusing to accept commands.
The spacecraft was launched in 1993, thus nearing 12 years in orbit...

Best regards
Alberto E. Zagni - I2KBD
ITAMSAT Mission Director

More information of IO-26 can be found at:

http://joshua.micronet.it/english/itamsat/itamsathome.html
http://www.amsat.org/amsat/sats/n7hpr/io26.html
www.itamsat.org

[02132005]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB
Beacon: 29.408 MHz
Robot: 29.454 MHz
[05232004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB
Beacon: 145.860 MHz
Robot: 145.908 MHz
[05232004]
=====
UO-14 UoSAT-3

```
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink 145.975 MHz FM
Downlink 435.070 MHz FM
[05092004]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink:             145.900 FM 9600-baud FSK
Downlink:           435.120 MHz FM
Broadcast Callsign: UOSAT5-11
BBS:                UOSAT5-12
[01092005]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational?

Uplink:      145.858 to 145.898 MHz CW/USB
Downlink:     29.354 to  29.394 MHz CW/USB
Beacon:       29.352 MHz (intermittent)
SSB meeting frequency:  29.380 MHz (unofficial)

John, KD6PAG reports on June 16, 2004 to WSR:
RS-15 beacon seemed to be back in the mode where it's a tone about 5
seconds off and then 5 seconds on this morning.

WSR is looking for more confirmations of RS-15 coming back.

[ANS-WSR thanks John, KD6PAG for RS-15 information]
[06202004]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplink:             145.84 145.86 145.88 145.90 MHz FM
                    (using 1200-baud Manchester FSK)
CW downlink:        437.125 MHz
Digital downlink:   437.150 MHz SSB (RC-BPSK 1200-baud PSK)
Broadcast Callsign: LUSAT-11
BBS:                LUSAT-12o
```

```
General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[05232004]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Uplink:     145.90 to 146.00 MHz CW/LSB
Downlink:   435.80 to 435.90 MHz CW/USB
Beacon:     435.795

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[08152004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink:             145.900 MHz FM (9600-baud FSK)
Downlink:           435.170 MHz FM
Broadcast Callsign: HL01-11
BBS:                HL01-12

Jim, AA7KC, reports that KO-23's downlink transmitter continues in a
non-operational status.
[05092004]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink:             145.980 MHz FM (9600-baud FSK)
Downlink:           436.500 MHz FM
Broadcast Callsign: HL02-11
BBS:                HL02-12
[05092004]
=====
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink frequency (listed on the PanSat web site) 436.500 MHz
```

The satellite is not available for general uplink transmissions.

The Naval Postgraduate School developed PanSat. At the time of launch, PanSat spread-spectrum digital transponders were to be available to Amateur Radio operators along with software to utilize this technology.

The satellite is still operating, however, the spread spectrum packet radio portion never took place. The spacecraft is now beyond it's initial 2-year mission life, but telemetry records are still being downloaded.

For more information, visit the official PanSat web site at:
http://www.sp.nps.navy.mil/pansat/
[05092004]

=====

SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm

[ANS-WSR has no further information]
[05232004]

=====

SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

STatus: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
          Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
         Mode J Digipeater: 145.825 MHz and 145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[08082004]

=====

UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

```
Status: Unknown

Uplink:             145.960 MHz (9600-baud FSK)
Downlink:           437.025 MHz 437.400 MHz
Broadcast Callsign: UO121-11
BBS:                UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA
web site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[05092004]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplink      V-band    145.840 -  145.990 MHz CW/LSB
            U-band    435.550 -  435.800 MHz CW/LSB
           L1-band   1269.250 - 1269.500 MHz CW/LSB
           L2-band   1268.325 - 1268.575 MHz CW/LSB
           S1-band   2400.350 - 2400.600 MHz CW/LSB
Downlink:  S2-band   2401.225 - 2401.475 MHz CW/USB
           K-band 24,048.010 - 24,048.060 MHz CW/USB
Beacon:    2401.323, 24,048.035
[05232004]
-----
SO-42  SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational
 Downlink:           437.075 MHz
Broadcast Callsign: SASAT2-11
BBS:                SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[08152004]
=====
SO-41  SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink:             145.850 MHz
Downlink:           436.775 MHz
Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12
```

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[08152004]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, callsign KE6QMD, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Operational

Uplink: 145.850 or 145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz
Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[11202005]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Semi-operational.

Uplink 435.275 1200-baud AFSK
Downlink 145.825 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

AO-49 (SAFIR-M) is a German amateur radio payload onboard the small German scientific satellite "RUBIN-2".

AO-49 was built by the German amateur radio association "AATiS e.V." (German acronym for "Arbeitskreis Amateurfunk und Telekommunikation in der Schule", which means: 'working group for amateur radio and telecommunications in schools'). AO-49 is designed as a "store and broadcast" system for APRS based messages, dedicated for the use of schools in combination with the existing WX-Net and planned buoy experiments in Germany.

No transmissions detected since the 1st of February 2003! It appears AO-49 is not properly aligned to illuminate the solar panels. This should end soon. Due to its orbit, AO-49 will be in a phase without eclipses until 13Feb03.

Martin DG8UAU has written a small software program "SAFIR-M Decoder" to allow decoding of the received DATA0 frames. It is available at: http://amend.gmxhome.de in the section Aktuelles.

Details on AO-49 (SAFIR-M) can be found at:
http://amend.gmxhome.de

Information about AATiS e.V. is available at:
http://www.aatis.de
[11132005]
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SB SAT @ AMSAT <KB9MMC $ANS-359.S4
WSR 359 Part 4 12/25/2005

AMSAT NEWS SERVICE BULLETIN 359.S4 FROM AMSAT HQ
SILVER SPRING, MD, December 25,2005
TO ALL RADIO AMATEURS
BID: $ANS-359.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE PROPOSED FOR LAUNCH AT THIS TIME:

UCISAT ?O-??
Catalog number:
Proposed Launch Date: October 31, 2005

Status: Under Construction

Downlink: Submission in Progress
Uplink: Submission in Progress
Callsign: Submission in Progress
[11272005]
=====
PHASE 3E ?O-??
Catalog Number:
Proposed Launch Date: Early 2006

Status: Under Construction

For the latest project status update please visit the AMSAT-DL
P3-E web page:
http://www.amsat-dl.org/p3e/

[ANS-WSR wishes to thank William Leijenaar, PE1RAH for this week's report]
[10022005]
=====
CP1 ?o-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: N6CP
Proposed Transmit Frequency: 436.845
[03272005]
=====
CP2 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.325
[03272005]
=====
HAUSAT1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: D90HP
Proposed Transmit Frequency: 437.465
[03272005]
=====
ICE Cube 1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: W2CXM
Proposed Transmit Frequency: 437.305
[03272005]
=====
ICE Cube 2 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: N2VR
Proposed Transmit Frequency: 437.425
[03272005]
=====
ION ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

```
Proposed Callsign: TBA
Proposed Transmit Frequency: 437.505
[03272005]
=====
KUTEsat ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: KC0RMW
Proposed Transmit Frequency: 437.385
[03272005]
=====
MEROPE ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: K7MSU-1
Proposed Transmit Frequency: 145.980
[03272005]
=====
nCUBE1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
       2407.25
[03272005]
=====
RINCON ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
        437.345
[03272005]
=====
SACRED ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
[03272005]
=====
SACRED ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
[03272005]
```

=====
SEEDS ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: JQ1YGU
Proposed Transmit Frequency: 437.485
[03272005]
=====
Mea Huaka ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.405
[03272005]
=====
SUITSAT ?O-??
Catalog Number:
Proposed Release Date: December 8th, 2005

Proposed Callsign: RS0RS ?
Proposed Transmit Frequency: 145.990

This from Frank, KA3HDO:
I have recieved information that the Russian EVA that will deply SuitSat, planned for December 8th, has been delayed to late January/Early February 2006. As we get more information, we will post it.

[ANS-WSR wishes to thank Frank Bauer, KA3HDO for this weeks report]
[11272005]
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/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
        888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/amsat/listserv/menu.html

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James K. Darrow, KB9MMC.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

From 2581692263927645834
X-Google-Thread: 10e8ad,c2083e6331b49d94,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news3.google.com!border1.nntp.dca.giganews.com!border2.nntp.dca.giganews.com!nntp.giganews.com!elnk-atl-nf1!newsfeed.earthlink.net!stamper.news.atl.earthlink.net!newsread3.news.atl.earthlink.net.POSTED!46041641!not-for-mail
From: "JoAnne Maenpaa" <wb9jej_no-spam@earthlink.net>
Newsgroups: rec.radio.amateur.space
Subject: ANS-359 AMSAT News Service Weekly Bulletin
Lines: 430
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <qDYrf.652$M%4.499@newsread3.news.atl.earthlink.net>
Date: Mon, 26 Dec 2005 20:45:10 GMT
NNTP-Posting-Host: 68.165.57.25
X-Complaints-To: abuse@earthlink.net

X-Trace: newsread3.news.atl.earthlink.net 1135629910 68.165.57.25 (Mon, 26 Dec 2005 12:45:10 PST)
NNTP-Posting-Date: Mon, 26 Dec 2005 12:45:10 PST
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news1.google.com rec.radio.amateur.space:314

AMSAT NEWS SERVICE
ANS-359

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* AO-51 Digipeater function enabled
* OSCAR SKN Next Weekend
* New Object Identified Near SSETI
* AMSAT Kid's Day on AO-51
* P3E to Fly Software Defined Transponder
* Eagle Fundraising Appeal
* ARISS Status - 19 December 2005

SB SAT @ AMSAT $ANS-359.01
AO-51 Digipeater function enabled

AMSAT News Service Bulletin 359.01
From AMSAT HQ SILVER SPRING, MD.
December 25, 2005
To All RADIO AMATEURS
BID: $ANS-359.01

The Digipeater function on AO-51 has been turned on for a "Trial Test Session". The test may be paused at any time. Please keep your digi packets down to a reasonable level as this is a shared resource. Only one uplink is in use, so the PBBS users and digi users are going to be on the same uplink frequency. This is a shared uplink and downlink with the PBBS, so do not overload it with continuous, or high duty rate, beacons or broadcasts.

This is not the 10 watt plus transmitter that is on the ISS. It will take a higher gain receiving station to hear the 9k6 signal of AO-51. You will not need a strong signal for the uplink though, as AO-51 hears very well. Note that the uplink and downlink are both at 9600 baud.

Downlink: 435.300 FM 9600 baud
Uplink: 145.860 FM 9600 baud

Digi Callsign: PACB-1

If you are using TlmEcho there is a bug in the program regarding the Digipeat Status display. That has been fixed in the new version, and a number of new features added as well. A new version of TlmEcho is expected to be released soon.

For the time being, if you monitor the 9k6 downlink you can use the LSTAT status message to verify that the digipeater is turned on. If the message contains "d:1", then the digi function is enabled. If it contains "d:0" the digi is turned off.

Mike, KE4AZN, added, "I want to personally thank Jeff, KB2M, and Gould, WA4SXM, for their help in testing the digipeat function."

[ANS thanks Mike, KE4AZN for the above information]

/EX

SB SAT @ AMSAT $ANS-359.02
OSCAR SKN Next Weekend

AMSAT News Service Bulletin 359.02
From AMSAT HQ SILVER SPRING, MD.
December 25, 2005
To All RADIO AMATEURS
BID: $ANS-359.02

Once again, AMSAT-NA is pleased to sponsor Straight Key Night on OSCAR for enjoyment by all radio amateurs.

OSCAR SKN 2006 will run for 24 hours, 0000-2400 UTC, on 1 January 2006. It's very simple: no rules, no scoring, and no need to send in a log. Just operate CW through any OSCAR satellite using a straight hand key, working as many other SKN participants as you can. Contacts via the moon (OSCAR Zero) count too.

As in past years, all participants are requested to nominate one of the operators they worked for "Best Fist" recognition. Your nominee need not have the best fist of those you heard, just of those you worked.

Please send all nominations to Ray Soifer via w2rs@arrl.net.

A list of those nominated will be published via the AMSAT News Service in early February, and in The AMSAT Journal.

[ANS thanks Ray, W2RS for the above information]

/EX

SB SAT @ AMSAT $ANS-359.03

New Object Identified Near SSETI

AMSAT News Service Bulletin 359.03
From AMSAT HQ SILVER SPRING, MD.
December 25, 2005
To All RADIO AMATEURS
BID: $ANS-359.03

Taft DeVere from Headquarters Airforce Space Command, (HQ AFSPC) reports that the Air Force has discovered a new object that is quite close to the SSETI payload. This new object has been cataloged as 28897. They believe that this object was ejected on 15 Dec 2005 at about 1640Z. Additional tracking data indicates that it is slowly moving away from SSETI. This leads to the conclusion that the object is not a lightweight piece of foil or Mylar type material, since these decay more quickly. It seems that this is likely an object with some mass, and radars report it is quite small.

Below is the two-line element set for the new object.

```
1 28897U 05043H   05356.70226803  .00000182  00000-0  48118-4 0    58
2 28897 098.1779 252.6230 0017791 005.4499 354.6921 14.59489332   382
```

The initial speculation is that this new object could be NCube-2 satellite although no postive reception reports have been received yet.

NCube-2's downlink is as follows:

Downlink: 437,305MHz
Bitrate: 9600b/s
Modulation technique: GMSK

The message:
"DE=LA1CUB=NCUBE2=FF=LA1CUB===" is morsed using a 2400Hz tone, 26 words per minute" where FF is a hex number [00=3,0V - FF=4,5V]

If battery voltage is above 3,8V, every 2 minutes
If battery voltage is below 3,8, every 5 minutes

In the end of the message an unnumbered AX.25 packet is attached containing
the string:
DE=LA1CUB=NCUBE2=NORWEGIAN CUBESAT - WWW.NCUBE.NO

In the header of the AX.25: Callsign: NCUBE Destination: EARTH

The satellite will transmit at a power of 1.5W at full battery charge

Reception reports will be welcome email to ncube@rocketrange.no and to missioncontrol@sseti.org

[ANS thanks Taft DeVere HQ AFSPC and Graham, G3VZV for the above information]

/EX

SB SAT @ AMSAT $ANS-359.04
AMSAT Kid's Day on AO-51

AMSAT News Service Bulletin 359.04
From AMSAT HQ SILVER SPRING, MD.
December 25, 2005
To All RADIO AMATEURS
BID: $ANS-359.04

AMSAT-NA, the AO-51 Command Team, and the AO-51 Operations Team will sponsor Kid's Day on AO-51 on January 8, 2006. The event will run from approximately 0100 utc 8 January until 0345 utc 9 January. The event is open to all kids, worldwide. We ask all amateur radio stations to give this short time window to promote satellite operations with kids, by actually showing a kid how to make contacts via AO-51, providing a station to contact, or stepping aside to allow others to make contacts with the kids.

During the event, please limit contacts to stations that are operating with kids at the microphone. This should allow the kids to have a nice QSO and pass some information. Kids can tell their name, age, who is helping them operate on AO-51, where they live, and other information about themselves.

AO-51 will be configured in the following mode during the event. Please note the change in the uplink frequency for the event. The PL tone will be turned off for the event.

Uplink: 145.880 mhz FM voice
Downlink: 435.300 mhz FM voice

The digital transponder on 435.150 will be turned off during the event.

See http://www.arrl.org/FandES/ead/kd-rules.html on the ARRL website for more Kids Day information.

Have fun and enjoy AO-51!

73 KE4AZN
Amsat VP-Operations
Echo Command Station

[ANS thanks Mike KE4AZN for the above information]

/EX

SB SAT @ AMSAT $ANS-359.05
P3E to Fly Software Defined Transponder

AMSAT News Service Bulletin 359.05
From AMSAT HQ SILVER SPRING, MD.
December 25, 2005
To All RADIO AMATEURS
BID: $ANS-359.05

AMSAT-DL's Board of Directors has made the decision to fly the Software Defined Transponder (SDX) on their Phase 3-Express (P3E) spacecraft. SDX features AMSAT-NA's implementation of the Software Defined Radio based on the Quadrature Sampling Detector. This decision was made at a recent BOD meeting in Marburg, Germany. SDX will utilize space that was originally planned for the Rudak Modem Module (RMU). SDX will allow Karl Meinzer's (DJ4ZC) HELAPS (High Efficiency Linear Amplification by Parametric Synthesis) ideas from his doctoral thesis to be fully implemented for the first time. With the use of the SDX processor, significantly improved linearity and efficiency in the U/V transponder can be achieved compared to the all analog implementations of HELAPS in previous Phase 3 satellites.

Placement of SDX on P3E opens an opportunity to provide an early demonstration of SDX's potential in space, including placement in an orbit that will provide flight time through the radiation belts. This "Phase 1 test" of SDX will in turn provide flight proof of concept that will benefit the later placement of SDX on AMSAT-NA's Eagle-class spacecrafts. It also provides a test platform for evaluation of SDX's weak signal processing that could prove valuable for an eventual Phase 5-A deep space mission that AMSAT-DL is evaluating. Along with improved receiver performance, SDX offers the ability to program configuration changes while in orbit and the integration of uplink and downlink bands via digital connections.

Howard Long, G6LVB of AMSAT-UK, will lead the development of SDX software for both P3E and Eagle. AMSAT-NA's Bob McGwier, N4HY and Frank Brickle, AB2KT, will conduct the integration of SDX with P3-E's HELAPS transmitters. AMSAT-NA's Lyle Johnson KK7P, and Chuck Green, N0ADI, who have served on a number of AMSAT satellite projects, will build the flight hardware.

AMSAT-DL President Peter Guelzow, DB2OS informed Bob McGwier, N4HY AMSAT-NA's VP-Engineering of the Board's decision on November 28. "This is outstanding news" notes Rick Hambly, W2GPS President of AMSAT-NA. "The opportunity to fly SDX on P3-Express will provide an early opportunity to demonstrate the potential of SDX in orbit and gives AMSAT-NA the benefit of in-orbit testing before placement on the Eagle-class satellites."

At a December meeting in Marburg, Howard, G6LVB demonstrated the functional SDX software on the target DSP processor along with a fully functional STELLA (Satellite Transponder with Equalizing Level Limiting Adapter). STELLA is designed to handle the situation where a User transmits too much power to the satellite adversely impacting the overall transponder AGC levels and thus reducing the output levels of other users on the transponder. STELLA has the ability to dynamically notch an excessive input signal to bring it into compliance with an appropriate output level versus the beacon on that band. Hambly added, "This announcement and the follow on work reinforces the close cooperation between AMSAT-NA, AMSAT-DL and AMSAT-UK as we develop the next generation of high earth orbit amateur radio satellites."

[ANS thanks Peter, DB2OS and Barry, WD4ASW for the above information]

/EX

SB SAT @ AMSAT $ANS-359.06
Eagle Fundraising Appeal

AMSAT News Service Bulletin 359.06
From AMSAT HQ SILVER SPRING, MD.
December 25, 2005
To All RADIO AMATEURS
BID: $ANS-359.06

Have YOU Responded to the Eagle Appeal?

AMSAT-NA members should have received by now an Eagle Appeal Letter from AMSAT-NA President Rick Hambly, W2GPS. The Appeal includes a letter from Rick, a color brochure on Eagle, a donation form, and return envelope. This is the first fundraising effort for Eagle as it is expected to take four years to build and launch the first satellite and three additional years for the second. AMSAT must raise at least $150,000 in 2006 to keep the project on track.

Initial response to the Appeal has been good. SpaceQuest, Ltd. of Fairfax, VA made our first corporate donation to Eagle this past week. Many thanks to Mark Kanawati, N4TPY and Dino Lorenzini, KC4YMG for the strong support! AMSAT members will recall that AO-51 was built by SpaceQuest under AMSAT-NA contract and was launched in June 2004. In addition, 12 individuals have qualified for President's Club status this week as a result of their generosity in response to the Appeal.

AMSAT-NA members who pay US income tax may take a tax deduction from their donation to AMSAT, which is recognized by the Internal Revenue Service as a 501-(c)(3) scientific organization. To qualify as a 2005 tax deduction, the donation must be post marked in 2005 or submitted in 2005. Donations made after January 1, 2006 may be applied against 2006 taxes. AMSAT will gladly accept donations via the AMSAT website using your credit card, the mailing of checks, and PayPal submissions. The AMSAT office will be closed until January 4, 2006, so making donations via telephone will not be possible until after the first of the year. In addition, individuals who may wish to donate securities can do so as well and avoid capital gains on the securities that are donated. Contact AMSAT Treasurer Gunther Meisse, W8GSM for details on how to arrange a transfer to AMSAT. Due to passage of the

Katrina Emergency Relief Act of 2005 (KETRA) by Congress, there are additional advantages in giving charitable gifts by December 31, 2005 to qualified organizations, such as AMSAT. Talk to your financial advisor about how KETRA can provide current income and estate tax advantages.

Your donation and personal support of Eagle is critical. If you haven't made your contribution, please consider making a donation.

Help AMSAT to hatch Eagle!

[ANS thanks Barry, WD4ASW for the above information]

/EX

SB SAT @ AMSAT $ANS-359.07
ARISS Status - 19 December 2005

AMSAT News Service Bulletin 359.07
From AMSAT HQ SILVER SPRING, MD.
December 25, 2005
To All RADIO AMATEURS
BID: $ANS-359.07

1. California Contact Successful

On Thursday, December 15, five students from Mt. Carmel High School in San Diego, California spoke to Bill McArthur, KC5ACR. Bill answered seventeen of their questions as an audience of approximately 35 students, teachers, and others gathered for the event. The radio equipment used for this contact will remain as the school amateur radio station. The contact audio was webcast by MSNBC, and was available on the IRLP and Echolink nodes. Twenty-two Echolink connections were made from the following countries: France, Iraq, Japan, Korea, Russia, Sweden, Thailand, the U.K., and the U.S.A.

Among the media covering the event were the North County Times, Union Tribune, and Corridor News. Links to two of the stories follow:

"Mt. Carmel High students make contact with the beyond."
http://www.nctimes.com/articles/2005/12/16/news/inland/21_11_4412_15_05.txt

2. 25th Asia-Pacific Scout Jamboree

The 25th Asia-Pacific Scout Jamboree has been approved for Saturday, 31 December 2005 at 0912 UTC. The jamboree is held once every four years with scouts, ages 12-18 and will be held this year from December 28 to January 3 in Sattahip, Chonburi Province in Thailand. The hosting committee expects a turnout of 25,000 participants from the around the world, but especially from the 23 member countries in Asia-Pacific.

3. Article on Canadian School Contact

Ralph McCall School in Airdrie, Alberta, Canada experienced a successful contact with the ISS on Friday, 02 December 2005. An article has been posted to Alberta's Wild Rose Chapter 151 website, which contains photos of the event. See: http://www.qsl.net/ve6afo/iss_contact2005.html

4. Story Covers Sanderson High School Contact

Sanderson High School students spoke with Bill McArthur via amateur radio on December 8. A write up on the contact can be found on the Big Bend Amateur Radio Club website. It includes the audio and photos of the event. See:
http://www.bigbendarc.com/photos-history/photos/iss/iss_index.html

5. McArthur Continues Voice Contacts

Over the 17-18 December weekend, Bill McArthur, KC5ACR, made contacts with stations in the U.S., Mexico, the Caribbean, Thailand, Japan, Italy, and Portugal. He has already made over 200 general contacts. ARRL covered his activity on the ISS ham radio station in the article, "ISS 12 Commander Shooting for WAC, WAS and Maybe DXCC from Space." See:
http://www.arrl.org/news/stories/2005/12/15/1/?nc=1

6. Russian Special Event Planned

Russian delegate, Sergey Samburov, RV3DR, reports that a special event is being planned for December 25 to commemorate the first anniversary of the death of cosmonaut Gennady Strekalov, U6MIR. Amateur radio operators are invited to participate. It is expected that Korolev and Star City stations will operate shortwave and UHF. Two contacts with the ISS are planned for December 25 and December 26 at 20:00 UTC. On December 26-27 the ISS Ham radio will be placed in repeater mode, and cosmonauts at Energia and Star City may also participate in the activities. Two thousand anniversary QSL cards with Strekalov's portrait have been printed for the event.

7. Educational Outreach/School Selection Committee Meeting Held

The ARISS Educational Outreach/School Selection Committee meeting was held on Thursday, 08 December 2005. Items of discussion included current school contacts, and NEEIS evaluations. The next meeting is planned for 09 February 2006. The minutes have been posted to the ARISS website. See: http://www.rac.ca/ariss/arissschm.htm

[ANS thanks Carol, KB3LKI for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the
President's Club. Members of the President's Club, as sustaining donors
to AMSAT Project Funds, will be eligible to receive additional benefits.
Application forms are available from the AMSAT Office.

73 & Happly Holidays,
This week's ANS Editor,
Lee McLamb, KU4OS
ku4os at amsat dot org

From -5245271843254405720
X-Google-Thread: 10e8ad,b9d39825b1767c14,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!postnews.google.com!g44g2000cwa.googlegroups.com!not-for-mail
From: hxc98@yahoo.com
Newsgroups: rec.radio.amateur.space
Subject: APRSPoint holiday special
Date: 28 Dec 2005 00:45:26 -0800
Organization: http://groups.google.com
Lines: 8
Message-ID: <1135759526.178982.25160@g44g2000cwa.googlegroups.com>
NNTP-Posting-Host: 221.232.90.222
Mime-Version: 1.0
Content-Type: text/plain; charset="iso-8859-1"
X-Trace: posting.google.com 1135759531 26474 127.0.0.1 (28 Dec 2005 08:45:31 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Wed, 28 Dec 2005 08:45:31 +0000 (UTC)
User-Agent: G2/0.2
X-HTTP-UserAgent: Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.2; SV1; .NET CLR 1.1.4322),gzip(gfe),gzip(gfe)
Complaints-To: groups-abuse@google.com
Injection-Info: g44g2000cwa.googlegroups.com; posting-host=221.232.90.222;
   posting-account=qkd21QwAAAAs0AsHsbNsv0PdNKEViQPM
Xref: g2news1.google.com rec.radio.amateur.space:67

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http://www.aprspoint.com/ for details. Thanks.

From -1728948584327180799
X-Google-Thread: 10e8ad,a471c23c296ff36f

X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!news4.google.com!news3.google.com!border1.nntp.dca.giganews.com!nntp.giganews.com!newscon06.news.prodigy.com!prodigy.net!newsmst01b.news.prodigy.com!prodigy.com!postmaster.news.prodigy.com!newssvr11.news.prodigy.com.POSTED!7399f21f!not-for-mail
From: "n9zle" <NoSpam@nospam.com>
Newsgroups: rec.radio.amateur.space
References: <_Wwqf.508$Lp.315@nntpserver.swip.net>
Subject: Re: website
Lines: 21
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.2670
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.2670
X-RFC2646: Format=Flowed; Response
Message-ID: <4sntf.7087$oW.5636@newssvr11.news.prodigy.com>
NNTP-Posting-Host: 70.238.48.2
X-Complaints-To: abuse@prodigy.net
X-Trace: newssvr11.news.prodigy.com 1136001920 ST000 70.238.48.2 (Fri, 30 Dec 2005 23:05:20 EST)
NNTP-Posting-Date: Fri, 30 Dec 2005 23:05:20 EST
Organization: SBC http://yahoo.sbc.com
X-UserInfo1:
OXYWSTKEPRRQRRD[BJJVNFXBWR\HPCTL@XT^OBPLAH[\RWYAKVUOPCW[ML\JXUCKVFDYZKBMSFX^OMSAFNTINTDDMVW[X\THOPXZRVOCJTUTPC_JSBVX\KAOTBAJBVMZTYAKMNLDI_MFDSSOLXINH__FS^\WQGHGI^C@E[A_CF\AQLDQ\BTMPLDFNVUQ_VM
Date: Sat, 31 Dec 2005 04:05:20 GMT
Xref: g2news1.google.com rec.radio.amateur.space:68

I like the music.
Consider posting a link to your site on http://www.n9zle.com/forum
One of very few forums that allows links to outside sites.

73s N9ZLE

"Super DX" <superdx@free.fr> wrote in message
news:_Wwqf.508$Lp.315@nntpserver.swip.net...
> Hi all,
>
> here is a new ham website :
>
> http://superdx.free.fr
>
> 73's and Merry Xmas !
>
> Vince
>
>

```
From 1931021099818545423
X-Google-Thread: 10e8ad,576c0cd9d5642bac,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!news4.google.com!news.glorb.com!
cycny01.gnilink.net!spamkiller2.gnilink.net!gnilink.net!trndny04.POSTED!b16d48a7!
not-for-mail
From: "wa3ymm" <wa3ymm_pa@verizon.net>
Newsgroups: rec.radio.amateur.space
Subject: Why not on the moon?
Lines: 6
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1506
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1506
Message-ID: <h2utf.3227$gq4.1127@trndny04>
Date: Sat, 31 Dec 2005 11:35:41 GMT
NNTP-Posting-Host: 70.20.73.22
X-Complaints-To: abuse@verizon.net
X-Trace: trndny04 1136028941 70.20.73.22 (Sat, 31 Dec 2005 06:35:41 EST)
NNTP-Posting-Date: Sat, 31 Dec 2005 06:35:41 EST
Xref: g2news1.google.com rec.radio.amateur.space:69
```

Why have we not tried to put a repeater or tranverter on the moon our natural satellite? I seem logical to shoot for this goal.

WA3YMM

```
From -1514316378053783271
X-Google-Thread: 10bf43,4ec680dd4f8abaaa,start
X-Google-Thread: 107ada,4ec680dd4f8abaaa,start
X-Google-Thread: 11480d,4ec680dd4f8abaaa,start
X-Google-Thread: 10e8ad,4ec680dd4f8abaaa,start
X-Google-Attributes: gid10bf43,gid107ada,gid11480d,gid10e8ad,public
X-Google-Language: ENGLISH,ASCII
Path: g2news1.google.com!postnews.google.com!g49g2000cwa.googlegroups.com!not-for-
mail
From: "policy-ham" <hamop_62@hotmail.com>
Newsgroups:
rec.radio.amateur.policy,rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.ama
teur.space
Subject: =?iso-8859-1?q?Nominations_Sought_For_2006_Dayton_Hamvention=AE_Awards?=
Date: 31 Dec 2005 11:34:37 -0800
Organization: http://groups.google.com
Lines: 52
Message-ID: <1136057677.430245.109330@g49g2000cwa.googlegroups.com>
NNTP-Posting-Host: 68.164.50.178
Mime-Version: 1.0
Content-Type: text/plain; charset="iso-8859-1"
Content-Transfer-Encoding: quoted-printable
```

X-Trace: posting.google.com 1136057682 10113 127.0.0.1 (31 Dec 2005 19:34:42 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Sat, 31 Dec 2005 19:34:42 +0000 (UTC)
User-Agent: G2/0.2
X-HTTP-UserAgent: Mozilla/5.0 (Windows; U; Win98; en-US; rv:1.8) Gecko/20051111 Firefox/1.5,gzip(gfe),gzip(gfe)
Complaints-To: groups-abuse@google.com
Injection-Info: g49g2000cwa.googlegroups.com; posting-host=68.164.50.178;
   posting-account=RBteLgwAAAAmudwrhH2-nLTMtdmbb1jT
Xref: g2news1.google.com rec.radio.amateur.policy:10552 rec.radio.amateur.misc:3106 rec.radio.amateur.dx:1213 rec.radio.amateur.space:70

Dayton Hamvention=AE 2006
PO Box 964
Dayton Ohio 45401-0964
General Information (937) 276-6934
On-Line: http://www.hamvention.org

Press Release
(December 28, 2005)

Nominations Sought For 2006 Dayton Hamvention=AE Awards

The Dayton Hamvention =AE now is accepting nominations for its 2006 awards for Radio Amateur of the Year, Special Achievement, and Technical Excellence. The deadline for nominations is February 20, 2006.

All amateur radio operators are eligible. The winners will be recognized at the 2006 Hamvention =AE, which runs May 19-21.

=B7 The Radio Amateur of the Year Award goes to an individual who has made a long-term, outstanding commitment to the advancement of Amateur Radio.

=B7 The Technical Excellence Award is for the person who has made an outstanding technical advancement in the field of Amateur Radio.

=B7 The Special Achievement Award honors someone who has made an outstanding contribution to the advancement of Amateur Radio, usually someone who has spearheaded a significant project.

The Hamvention=AE Awards Committee makes the decision on all awards based in part upon the information it receives--and not on the number of nominations submitted.

Documentation that informs the Awards Committee of a candidate's accomplishments may include magazine articles, newsletters, newspaper clippings, and even videos. (Note: These materials become the property of Hamvention and will not be returned.)

Nominations are due by February 20, 2006. Additional details on these

awards and a nomination form are available on the Dayton Hamvention=AE
Web site <http://www.hamvention.org/nominate.htm>. Nominations also
are accepted via US mail to Dayton Hamvention=AE Awards, PO Box 964,
Dayton, OH 45401.

The Dayton Hamvention=AE is the world's largest gathering of amateur
radio operators. It is expected to bring more than 25,000 of the worlds
radio amateurs to the Dayton area next May.

For more information please send e-mail to: media@hamvention.org

From -2467159932343840700
X-Google-Thread: 10e8ad,576c0cd9d5642bac
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!news4.google.com!news.glorb.com!
newsfeed-east.nntpserver.com!nntpserver.com!statler.nntpserver.com!news-
west.rr.com!news-wrt-01.rdc-nyc.rr.com!news-feed-01.rdc-nyc.rr.com!news.rr.com!
news-out.nyc.rr.com!news-wrt-01.rdc-nyc.rr.com.POSTED!53ab2750!not-for-mail
From: Tom Randy <Sorry@spamsucks.net>
Newsgroups: rec.radio.amateur.space
Message-ID: <2006010112540427544%Sorry@spamsucksnet>
References: <h2utf.3227$gq4.1127@trndny04>
MIME-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1; format=flowed
Content-Transfer-Encoding: 8bit
Subject: Re: Why not on the moon?
User-Agent: Unison/1.6.2
Lines: 10
Date: Sun, 01 Jan 2006 17:54:03 GMT
NNTP-Posting-Host: 24.161.95.233
X-Complaints-To: abuse@rr.com
X-Trace: news-wrt-01.rdc-nyc.rr.com 1136138043 24.161.95.233 (Sun, 01 Jan 2006
12:54:03 EST)
NNTP-Posting-Date: Sun, 01 Jan 2006 12:54:03 EST
Organization: Road Runner High Speed Online http://www.rr.com
Xref: g2news1.google.com rec.radio.amateur.space:71

On 2005-12-31 06:35:41 -0500, "wa3ymm" <wa3ymm_pa@verizon.net> said:

> Why have we not tried to put a repeater or tranverter on the moon our
> natural satellite? I seem logical to shoot for this goal.
>
> WA3YMM

Ummmm, lack of money maybe?

From -2513038092157148380

```
X-Google-Thread: 10e8ad,576c0cd9d5642bac
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news4.google.com!news3.google.com!
border1.nntp.dca.giganews.com!border2.nntp.dca.giganews.com!nntp.giganews.com!
cyclone1.gnilink.net!spamkiller.gnilink.net!gnilink.net!trnddc01.POSTED!24dd0da6!
not-for-mail
Sender: Jim Pennino <jimp@mail.specsol.com>
Message-ID: <asil83-8dn.ln1@mail.specsol.com>
From: jimp@specsol.spam.sux.com
Subject: Re: Why not on the moon?
Newsgroups: rec.radio.amateur.space
References: <h2utf.3227$gq4.1127@trndny04>
User-Agent: tin/1.6.2-20030910 ("Pabbay") (UNIX) (SunOS/5.9 (sun4u))
Lines: 14
Date: Sun, 01 Jan 2006 18:20:02 GMT
NNTP-Posting-Host: 71.118.11.57
X-Complaints-To: abuse@verizon.net
X-Trace: trnddc01 1136139602 71.118.11.57 (Sun, 01 Jan 2006 13:20:02 EST)
NNTP-Posting-Date: Sun, 01 Jan 2006 13:20:02 EST
Xref: g2news1.google.com rec.radio.amateur.space:72

wa3ymm <wa3ymm_pa@verizon.net> wrote:
> Why have we not tried to put a repeater or tranverter on the moon our
> natural satellite? I seem logical to shoot for this goal.

> WA3YMM

Such things were planned during the Apollo years.

Nothing has soft landed since, so...

--
Jim Pennino

Remove .spam.sux to reply.


From -368418481472028661
X-Google-Thread: 10e8ad,576c0cd9d5642bac
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!news4.google.com!
border1.nntp.dca.giganews.com!nntp.giganews.com!local01.nntp.dca.giganews.com!
nntp.bright.net!news.bright.net.POSTED!not-for-mail
NNTP-Posting-Date: Sun, 01 Jan 2006 14:29:18 -0600
Date: Sun, 01 Jan 2006 20:29:18 +0000
From: Scott <acepilot@bloomer.net>
User-Agent: Mozilla/5.0 (Windows; U; Windows NT 5.0; en-US; rv:1.7.2) Gecko/
20040804 Netscape/7.2 (ax)
X-Accept-Language: en-us, en
MIME-Version: 1.0
Newsgroups: rec.radio.amateur.space
```

Subject: Re: Why not on the moon?
References: <h2utf.3227$gq4.1127@trndny04>
In-Reply-To: <h2utf.3227$gq4.1127@trndny04>
Content-Type: text/plain; charset=us-ascii; format=flowed
Content-Transfer-Encoding: 7bit
Message-ID: <n6SdnfZa7NsDpiXeRVn-uQ@bright.net>
Lines: 15
NNTP-Posting-Host: 64.33.199.218
X-Trace: sv3-jwW6EUGosU/
pE955JmejP4bMLN1vNX12ZN+t9Xdgr5SPe1P5d2kmHXdOptTKdR5PBzFDmv2uMtPvBiE!
g+5aF56DjRftbRKUtRs8VRKijn9EwdVyf3Vtp11iroQ49W54/NVY3sobTAa5JbbQlFkEBhJQ
X-Complaints-To: abuse@bright.net
X-DMCA-Complaints-To: abuse@bright.net
X-Abuse-and-DMCA-Info: Please be sure to forward a copy of ALL headers
X-Abuse-and-DMCA-Info: Otherwise we will be unable to process your complaint properly
X-Postfilter: 1.3.32
Xref: g2news1.google.com rec.radio.amateur.space:73

Path loss might be a problem. What if a part in the repeater fails? (Space junk on the surface of the moon). EME is already being used as a "passive" repeater system...

Scott

wa3ymm wrote:

> Why have we not tried to put a repeater or tranverter on the moon our
> natural satellite? I seem logical to shoot for this goal.
>
> WA3YMM
>
>

From -425394824976431244
X-Google-Thread: 10e8ad,576c0cd9d5642bac
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!news4.google.com!news2.volia.net!
newsfeed01.sul.t-online.de!t-online.de!newsfeed.vmunix.org!peer-uk.news.demon.net!
kibo.news.demon.net!news.demon.co.uk!demon!holywell.demon.co.uk!Les
From: Les <Les@holywell.demon.co.uk>
Newsgroups: rec.radio.amateur.space
Subject: Re: Why not on the moon?
Date: Mon, 2 Jan 2006 09:23:44 +0000
Lines: 16
Message-ID: <pgDc2EDgEPuDFwxi@holywell.demon.co.uk>
References: <h2utf.3227$gq4.1127@trndny04> <asil83-8dn.ln1@mail.specsol.com>
Reply-To: Les <Les@holywell.demon.co.uk>
NNTP-Posting-Host: holywell.demon.co.uk
Mime-Version: 1.0

```
Content-Type: text/plain;charset=us-ascii;format=flowed
X-Trace: news.demon.co.uk 1136193853 10736 80.177.210.169 (2 Jan 2006 09:24:13
GMT)
X-Complaints-To: abuse@demon.net
NNTP-Posting-Date: Mon, 2 Jan 2006 09:24:13 +0000 (UTC)
User-Agent: Turnpike/6.05-U (<O2vSVuzmFtDjvhyiUbLriksASr>)
Xref: g2news1.google.com rec.radio.amateur.space:74

In message <asil83-8dn.ln1@mail.specsol.com>, jimp@specsol.spam.sux.com
writes
>wa3ymm <wa3ymm_pa@verizon.net> wrote:
>> Why have we not tried to put a repeater or tranverter on the moon our
>> natural satellite? I seem logical to shoot for this goal.
>
>> WA3YMM
>
>Such things were planned during the Apollo years.
>
>Nothing has soft landed since, so...
>
Have a look at Project Moonray (1965)
http://www.nitehawk.com/rasmit/nick.html
--
Les G8ARF / G3VYZ



From 7487083952648676068
X-Google-Thread: 10e8ad,576c0cd9d5642bac
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!news4.google.com!
border1.nntp.dca.giganews.com!nntp.giganews.com!newscon06.news.prodigy.com!
prodigy.net!newsmst01b.news.prodigy.com!prodigy.com!postmaster.news.prodigy.com!
newssvr27.news.prodigy.net.POSTED!bbf2b588!not-for-mail
From: "Falky foo" <falkyfoo@bonksbcglobal.net>
Newsgroups: rec.radio.amateur.space
References: <h2utf.3227$gq4.1127@trndny04>
Subject: Re: Why not on the moon?
Lines: 6
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1478
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1478
Message-ID: <9c9uf.60763$tV6.58407@newssvr27.news.prodigy.net>
NNTP-Posting-Host: 69.226.31.237
X-Complaints-To: abuse@prodigy.net
X-Trace: newssvr27.news.prodigy.net 1136205701 ST000 69.226.31.237 (Mon, 02 Jan
2006 07:41:41 EST)
NNTP-Posting-Date: Mon, 02 Jan 2006 07:41:41 EST
Organization: SBC http://yahoo.sbc.com
X-UserInfo1:
OP\ABXWD[XRERRPX@JJ@NFXBWR\HPCTL@XT^OBPLAH[\RYIBK^RAQFW[ML\THRCKV^GGZKJMGV^^_JSCFF
UA_QXFGVSCYRPILH]TRVKC^LSN@DX_HCAFX__@J\DAJBVMY\ZWZCZLPA^MVH_P@\
```

\EOMW\YSXHG__IJQY_@M[A[[AXQ_XDSTAR]\PG]NVAQUVM
Date: Mon, 02 Jan 2006 12:41:41 GMT
Xref: g2news1.google.com rec.radio.amateur.space:75

assuming it got lots of use and had to use a lot of wattage I'm wondering about the batteries. It would require a big ass solar array and some big ass cells to store the power for when the sun was on the other side of the sphere.

From -4373812349200726117
X-Google-Thread: 10e8ad,576c0cd9d5642bac
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
From: konstans@hotmail.com
Newsgroups: rec.radio.amateur.space
Subject: Re: Why not on the moon?
Date: Mon, 02 Jan 2006 15:57:14 -0500
Message-ID: <1q4jr1dmams8frnlosm0c3ph48oravt6ce@4ax.com>
References: <h2utf.3227$gq4.1127@trndny04> <n6SdnfZa7NsDpiXeRVn-uQ@bright.net>
X-Newsreader: Forte Free Agent 2.0/32.652
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Organization: Usenet Zone http://www.usenetzone.com Free Usenet Binary server contains 140,000+ groups
Lines: 33
Path: g2news1.google.com!news2.google.com!news4.google.com!news.glorb.com!feeder.xsnews.nl!85.159.112.66.MISMATCH!newsgate.newsserver.nl!news.usenetzone.com!not-for-mail
Xref: g2news1.google.com rec.radio.amateur.space:76

On Sun, 01 Jan 2006 20:29:18 +0000, Scott <acepilot@bloomer.net>
wrote:

>Path loss might be a problem.
depends on the attenans used at the Luar end
> What if a part in the repeater fails?
>(Space junk on the surface of the moon).
certainly better than leaving thos ehunks in orbits as happens when
sat die

> EME is already being used as a
>"passive" repeater system...

at relitively higher power It is nice idea but the problem more that
nobody is going that way right now to hitch a ride with
>
>Scott
>
>

>wa3ymm wrote:
>
>> Why have we not tried to put a repeater or tranverter on the moon our
>> natural satellite? I seem logical to shoot for this goal.
>>
>> WA3YMM
>>
>>

Usenet Zone Free Binaries Usenet Server
More than 140,000 groups
Unlimited download
http://www.usenetzone.com to open account

From 6221100308290356302
X-Google-Thread: 10e8ad,576c0cd9d5642bac
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Newsgroups: rec.radio.amateur.space
Path: g2news1.google.com!news2.google.com!news4.google.com!news.glorb.com!news.aset.psu.edu!news.cse.psu.edu!elk.ncren.net!newsflash.concordia.ca!news.sfu.ca!utnut!utzoo!spenford!henry
From: henry@spsystems.net (Henry Spencer)
Subject: Re: Why not on the moon?
Organization: SP Systems, Toronto, Canada
Message-ID: <IsHGvE.wp@spsystems.net>
References: <h2utf.3227$gq4.1127@trndny04>
Date: Mon, 2 Jan 2006 20:57:14 GMT
Lines: 29
Xref: g2news1.google.com rec.radio.amateur.space:77

In article <h2utf.3227$gq4.1127@trndny04>,
wa3ymm <wa3ymm_pa@verizon.net> wrote:
>Why have we not tried to put a repeater or tranverter on the moon our
>natural satellite? I seem logical to shoot for this goal.

It's been proposed, but there are big problems.

Getting stuff there, intact, is difficult. Reaching a lunar *impact* trajectory is easy if you're dropped off in GTO, but decelerating to a gentle landing, or even a passably rough landing, is harder. (Even penetrators, the hardest of today's hard-landers, have maximum impact velocities of hundreds of meters per second, and an undecelerated lunar impact is up in the thousands.)

Staying operational once there is even worse. A lunar night is two weeks of no sunlight and very low temperatures. I don't believe an electronics package has ever survived that without, at least, radio-isotope heaters. The Soviet Lunokhod rovers were partly nuclear-powered; the US ALSEP surface-instrument packages entirely so. Even isotope heaters are hugely expensive and full of political and bureaucratic complications. If the

lander could somehow *bury* itself, except for solar arrays and antennas,
that might work -- lunar soil is a very good thermal insulator -- but the
complexity of doing that is daunting.

Once there are astronauts there again, yeah, quite possibly. But doing
it from Earth is just plain hard.
--
```
spsystems.net is temporarily off the air;               |   Henry Spencer
mail to henry at zoo.utoronto.ca instead.               | henry@spsystems.net
```

```
From 6189130168500100200
X-Google-Thread: 10e8ad,66768a7eaadb3c9a,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!news3.google.com!
border1.nntp.dca.giganews.com!border2.nntp.dca.giganews.com!nntp.giganews.com!
elnk-atl-nf1!newsfeed.earthlink.net!stamper.news.atl.earthlink.net!
newsread3.news.atl.earthlink.net.POSTED!46041641!not-for-mail
From: "JoAnne Maenpaa" <wb9jej_no-spam@earthlink.net>
Newsgroups: rec.radio.amateur.space
Subject: WSR-001 AMSAT Weekly Satellite Report
Lines: 1141
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <A9Ruf.4567$M%4.4305@newsread3.news.atl.earthlink.net>
Date: Wed, 04 Jan 2006 14:42:40 GMT
NNTP-Posting-Host: 68.165.59.181
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread3.news.atl.earthlink.net 1136385760 68.165.59.181 (Wed, 04 Jan
2006 06:42:40 PST)
NNTP-Posting-Date: Wed, 04 Jan 2006 06:42:40 PST
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news1.google.com rec.radio.amateur.space:78
```

This report is organized into 4 parts.
Part 1 - operational analog amateur satellites.
Part 2 - operational digital amateur satellites.
Part 3 - non - operational satellites
Part 4 - proposed satellites

SB SAT @ AMSAT <W8ISS ANS-001.S1
WSR 001 Part 1 01/01/2006

AMSAT NEWS SERVICE BULLETIN 001.S1 FROM AMSAT HQ
SILVER SPRING, MD, January 01, 2006
TO ALL RADIO AMATEURS
BID: $ANS-001.S1

VO-52 HAMSAT
Catalog Number: 28650

```
Launch Date: May 05,2005

Status: Testing
Current Mode: U/V - Indian Transponder

Proposed frequencies:
-------------------
Indian Transponder:
Uplink  : 435.220 MHz to 435.280 MHz LSB/CW
Downlink: 145.870 MHz to 145.930 MHz USB/CW
Beacom  : 145.859330 MHZ CW

Dutch Transponder:
Uplink  : 435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW
Beacon  : 145.860MHz 12WPM with CW message

Official Webpage: http://www.amsat.in/hamsat.htm

This from William Leijenaar, PE1RAH:
Dear AMSATs,

I just got a message from the India Space Research
Organisation (ISRO) that they will switch my
transponder of and switch over to the Indian
Transponder.

The switch over will be done at December 21 on 4:40
UTC time.

To know what transponder is switched on please listen
for the beacon that is active. Each transponder has a
different beacon, see below:

Indian transponder - unmodulated carrier on
145.936MHz.
Dutch Transponder  - CW message on 145.860MHz.

Many thanks for all your reports,
I hope you enjoyed my transponder in space.
[01012006]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Mode: PBBS - OFF
      VOICE REPEATER - V/U FM

Analog voice downlink:  435.300 MHz FM
              435.150 MHz FM
Analog voice uplink: 145.880 MHZ FM
```

145.920 MHz FM 67Hz PL tone
1268.700 MHz FM 67Hz PL tone

Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast Protocol (PBP)

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/

Schedule from the AO-51 Command Team:

30 Dec
In support of TamSat Request for Asian Scouting Event
PL Tone is OFF as requested
FM Repeater, V/U, High Power Mode
Uplink: 145.920 mhz FM, NO PL Tone
Downlink 435.300 mhz FM

4 Jan
Enable the Tone, no Mode Change
FM Repeater, V/U, High Power Mode
Uplink: 145.920 mhz FM, 67 hz PL Tone
Downlink 435.300 mhz FM

8 Jan
AO-51 Kid's Day Event (See info on Amsat.org)
FM Repeater, V/U, High Power Mode
Uplink: 145.880 mhz FM voice, 67 hz PL Tone
Downlink: 435.300 mhz FM voice

9 Jan
Opportunity for Digipeater Testing
9k6 Digital, V/U, High Power, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 435.150 mhz FM, 9k6 PBP Digital
Digipeater will be Turned ON

16 Jan
FM Repeater, V(ssb)/U FM (Experimental)
Uplink: 145.880 mhz USB
Downlink 435.300 mhz FM

22 Jan
FM Repeater, V/U
Uplink: 145.920 mhz FM, 67 hz PL Tone
Downlink 435.300 mhz FM
9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 435.150 mhz FM, 9k6 PBP Digital

This from the AO-51 Command team:

January 2006 Amsat Kid's Day on AO-51

Amsat-NA, the AO-51 Command Team, and the AO-51 Operations Team will sponsor Kid's Day on AO-51 on January 8, 2006. The event will run from approximately 0100 UTC 8 January until 0345 UTC 9 January. The event is open to all kids, worldwide. We ask all amateur radio stations to give this short time window to promote satellite operations with kids, by actually showing a kid how to make contacts via AO-51, providing a station to contact, or stepping aside to allow others to make contacts with the kids. During the event, please limit contacts to stations that are operating with kids at the microphone. This should allow the kids to have a nice QSO and pass some information. Kids can tell their name, age, who is helping them operate on AO-51, where they live, and other information about themselves.

AO-51 will be configured in the following mode during the event.
Please note the change in the uplink frequency for the event.
The PL tone will be turned off for the event.

```
Uplink:    145.880 mhz FM voice
Downlink:  435.300 mhz FM voice
```

The digital transponder on 435.150 will be turned off during the event.

See http://www.arrl.org/FandES/ead/kd-rules.html on the ARRL website for more Kids Day information.

Have fun and enjoy AO-51!

73 KE4AZN
Amsat VP-Operations
Echo Command Station
[01012006]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

```
Uplink:    145.850 MHz (67.0 Hz PL tone) (See below for operating
          procedures)
Downlink:  436.795 MHz
```

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

There have been unconfirmed reports on the amsat-bb remailer that SO-50

```
has
shifted downlink frequency as much as 5khz up. This both from Europe.

To switch the transmitter on, you need to send a CTCSS tone of  74.4 Hz.
The
order of operation is thus: (allow for Doppler as necessary)

1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute
timer
   on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the
repeater
   on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset
the 10
   minute timer.
[01012006]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: OPERATIONAL

Voice/CW Mode JA
Uplink:     145.90 to 146.00 MHz CW/LSB
Downlink:   435.80 to 435.90 MHz CW/USB
Beacon:     435.795 MHz

Digital Mode JD
Uplink:     145.850 145.870 145.910 MHz FM
Downlink:   435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign:   8J1JCS
Digitalker: 435.910 MHz

unOfficial Webpage: http://www.amsat.org/amsat/sats/n7hpr/fo29.html
[11132005]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Uplink:     145.850 MHz FM
Downlink:   436.795 MHz FM

Official Webpage: http://www.ao27.org
[01012006]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974
```

Status: Semi-operational in sunlight.
Return to active status: June 21,2002

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A
145.975 to 145.925 MHz CW/USB Mode B
Beacon: 29.502 MHz, 145.972 MHz, 435.1 MHz, 2304.1 MHz

Official Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao7.html

Emily, W0EEC has created a website to allow the users of AO-7 to record contacts, observations and use of the satellite more effectively at:
http://www.emilyshouse.com/experthams/ao7/main.php

Tim, K3TZ has written a program to decode AO-07 telemetry. The program can
be downloaded at:
http://www.qsl.net/k3tz/files/K3TZ_AO-07_Telemetry_Decoder_0.5.zip
[01012006]

=====

INTERNATIONAL SPACE STATION (ISS) - ARISS

Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: Digipeater
Digipeater: ON

The current Expedition 12 crew is:
Commander: William McArthur - KC5ACR
Flight Engineer: Valery Tokarev - (no call)

Worldwide packet uplink: 145.990 MHz FM
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM
Doppler Shift is 10 KHz

Russian callsigns: RS0ISS, RZ3DZR
USA callsign: NA1SS
Packet station mailbox callsign: RS0ISS-11
Packet station keyboard callsign: RS0ISS-3
Digipeater callsign: ARISS

Official Webpage: http://www.rac.ca/ariss
Official Fan club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/
ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/

Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.
[01012006]
NNNN
/EX

SB SAT @ AMSAT <W8ISS $ANS-001.S2
WSR 001 Part 2 001/01/2006

AMSAT NEWS SERVICE BULLETIN 001.S2 FROM AMSAT HQ
SILVER SPRING, MD, January 01, 2006
TO ALL RADIO AMATEURS
BID: $ANS-001.S2

XI-V ?O-??
Catalog Number: 28895
Launch Date: October 27, 2005

Status: Operational only within range of Ground station in Japan

Telemetry Downlink: 437.345MHz - FSK 1200bps using AFK protocol
Beacon Downlink: 437.465MHz - CW about 50 WPM

Callsign: JQ1YGW

Oficial Webpage: http://www.space.t.u-tokyo.ac.jp/gs/satinfo-e.html#xi5
[01012006]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: Digipeater
Digipeater: ON

The current Expedition 12 crew is:
Commander: William McArthur - KC5ACR
Flight Engineer: Valery Tokarev - (no call)

Worldwide packet uplink: 145.990 MHz FM
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM
Doppler Shift is 10 KHz

Russian callsigns: RS0ISS, RZ3DZR
USA callsign: NA1SS

```
Packet station mailbox callsign:    RS0ISS-11
Packet station keyboard callsign:   RS0ISS-3
Digipeater callsign:                ARISS

Official Webpage: http://www.rac.ca/ariss
Official Fan club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/
ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/

Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.
[01012006]
=====
PCSAT2
Catalog Number: 25544
Launch Date: August 1, 2005

Activated: August 3, 2005
Status: Battery-saving mode
Current Mode: None

Digital Downlink: 435.275 Mhz
Digital Uplink: 145.825 Mhz
PSK-31 Downlink: 435.275 Mhz
PSK-31 Uplink: 29.400 - 29.403 Mhz

Broadcast:
BBS:

Official Webpage: http://web.usna.navy.mil/~bruninga/pcsat2.html

PCSAT2 APRS Packet page: http://www.findu.com/cgi-bin/pcsat2.cgi
[01012006]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Mode: PBBS - OFF
      VOICE REPEATER - V/U FM

Analog voice downlink:  435.300 MHz FM
              435.150 MHz FM
Analog voice uplink: 145.880 MHZ FM
              145.920 MHz FM 67Hz PL tone
                      1268.700 MHz FM 67Hz PL tone

Digital Downlinks:      435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
                       2401.200 MHz FM  38k4 bps, AX.25
Digital Uplink:         145.860 MHz FM, 9k6 Digital, Pacsat Broadcast
          Protocol (PBP)
```

Broadcast: PECHO-11
BBS: PECHO-12

Schedlued Modes for AO-51:

Schedule from the AO-51 Command Team:

30 Dec
In support of TamSat Request for Asian Scouting Event
PL Tone is OFF as requested
FM Repeater, V/U, High Power Mode
Uplink: 145.920 mhz FM, NO PL Tone
Downlink 435.300 mhz FM

4 Jan
Enable the Tone, no Mode Change
FM Repeater, V/U, High Power Mode
Uplink: 145.920 mhz FM, 67 hz PL Tone
Downlink 435.300 mhz FM

8 Jan
AO-51 Kid's Day Event (See info on Amsat.org)
FM Repeater, V/U, High Power Mode
Uplink: 145.880 mhz FM voice, 67 hz PL Tone
Downlink: 435.300 mhz FM voice

9 Jan
Opportunity for Digipeater Testing
9k6 Digital, V/U, High Power, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 435.150 mhz FM, 9k6 PBP Digital
Digipeater will be Turned ON

16 Jan
FM Repeater, V(ssb)/U FM (Experimental)
Uplink: 145.880 mhz USB
Downlink 435.300 mhz FM

22 Jan
FM Repeater, V/U
Uplink: 145.920 mhz FM, 67 hz PL Tone
Downlink 435.300 mhz FM
9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 435.150 mhz FM, 9k6 PBP Digital

This from the AO-51 Command team:

January 2006 Amsat Kid's Day on AO-51

Amsat-NA, the AO-51 Command Team, and the AO-51 Operations Team
will sponsor Kid's Day on AO-51 on January 8, 2006. The event

will run from approximately 0100 UTC 8 January until 0345 UTC 9 January. The event is open to all kids, worldwide. We ask all amateur radio stations to give this short time window to promote satellite operations with kids, by actually showing a kid how to make contacts via AO-51, providing a station to contact, or stepping aside to allow others to make contacts with the kids. During the event, please limit contacts to stations that are operating with kids at the microphone. This should allow the kids to have a nice QSO and pass some information. Kids can tell their name, age, who is helping them operate on AO-51, where they live, and other information about themselves.

AO-51 will be configured in the following mode during the event. Please note the change in the uplink frequency for the event. The PL tone will be turned off for the event.

Uplink: 145.880 mhz FM voice
Downlink: 435.300 mhz FM voice

The digital transponder on 435.150 will be turned off during the event.

See http://www.arrl.org/FandES/ead/kd-rules.html on the ARRL website for more Kids Day information.

Have fun and enjoy AO-51!

73 KE4AZN
Amsat VP-Operations
Echo Command Station

[ANS-WSR thanks Mike Kingery, KE4AZN for the above information]
[01012006]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Operational

General Usage Uplink/Downlink:145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

Anyone can work PCSAT-1 with ANY typical 1200 baud packet station on 145.825. Just set your path to UNPROTO APRS via ARISS (the same that you use via ARISS on the ISS or via PCSAT2). Mobiles with the D700 or the TH-D7 HT APRS radios will see packets directly on their front panel and can work it from their mobile.
[01012006]
=====
CUTE-1

Catalog number: 27844
Launched: June 30,2003

Status: Operational

Uplink: ?
Downlink: 436.8375 CW
437.4700 1200 FM ax25 or SRLL (ACTIVE only near Japan ?)
Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[01012006]

=====

GO-32 TECHSAT-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Downlink: 435.225 MHz FM (9600-baud FSK)
(435.325 n/a - temperature problems)
Uplinks: 145.850, 145.890, 145.930 FM
1269.700, 1269.800, 1269.900 FM
Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

Jeff, KB2M, reports November 15th, 2005:
I might be wrong about this, but as I am the only one I see working GO-32
here goes. If you do a DIR request up on the 145.890 uplink the bird turns
on. Give it a try....

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[ANS-WSR wishes to thank Jeff, KB2M for this weeks report.]
[11202005]

=====

AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Semi-operational, the digipeater command is on and open for APRS users.

Uplink: 145.90 145.92 145.94 145.96 MHz FM
(using 1200-baud Manchester FSK)
Downlink: 437.026 MHz SSB (1200-baud PSK)
Mode-S Beacon: 2401.1428 MHz
Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[01012006]

=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational?

Telemetry Downlink: 145.826 MHz. FM (1200-baud AFSK).
                    approx. 10 days ON, 10 days OFF
Mode-S Beacon: 2401.500 MHz. ... OFF
UHFBeacon: 435.025 MHz. ... OFF

Official webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[01012006]
NNNN
/EX

SB SAT @ AMSAT <MMC $ANS-001.S3
WSR 001 Part 3 01/01/2006

AMSAT NEWS SERVICE BULLETIN 001.S3 FROM AMSAT HQ
SILVER SPRING, MD, January 01, 2006
TO ALL RADIO AMATEURS
BID: $ANS-001.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

NCUBE-2 ?O-??
Catalog Number: 28894
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
       2407.25
[01012006]
=====
XO-53 SSETI
Catalog Number: 28894
Launch Date: October 27, 2005

Status: In orbit

Uplink/Downlink: 437.250MHz - AX.25 9k6 baud or voice
Beacon: 2401.835MHz - AX.25 38k4 baud or voice

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php

[01012006]

```
=====
POSAT-1 PO-28
Catalog Number: 22829
Launched : September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 429.950

Uplink:   Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html.
POSAT-1
webpage:http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012006]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launched: June 16, 1983

Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB
Beacon:   145.810 MHz (unmodulated carrier)

AO-10 has been locked into a Mode-B, 70-cm uplink and
2-meter downlink for several years.

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: Downlink only

Uplink:             145.875 145.900 145.925 145.950 MHz FM (1200-baud)
Downlink:           435.808 MHz PSK
Broadcast Callsign: ITMSAT-11
BBS:                ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01012006]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
```

```
Launched: February 5, 1991

Status: Non-operational

Uplink:   21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB
Beacon:   29.408 MHz
Robot:    29.454 MHz
[05232004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink:      21.260 to  21.300 MHz CW/USB
Downlink:   145.860 to 145.900 MHz CW/USB
Beacon:     145.860 MHz
Robot:      145.908 MHz
[05232004]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink 145.975 MHz FM
Downlink 435.070 MHz FM
[05092004]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink:             145.900 FM 9600-baud FSK
Downlink:           435.120 MHz FM
Broadcast Callsign: UOSAT5-11
BBS:                UOSAT5-12
[01092005]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational?

Uplink:      145.858 to 145.898 MHz CW/USB
Downlink:     29.354 to  29.394 MHz CW/USB
Beacon:       29.352 MHz (intermittent)
```

```
SSB meeting frequency:  29.380 MHz (unofficial)

John, KD6PAG reports on June 16, 2004 to WSR:
RS-15 beacon seemed to be back in the mode where it's a tone about 5
seconds off and then 5 seconds on this morning.

WSR is looking for more confirmations of RS-15 coming back.

[ANS-WSR thanks John, KD6PAG for RS-15 information]
[06202004]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplink:             145.84 145.86 145.88 145.90 MHz FM
                    (using 1200-baud Manchester FSK)
CW downlink:        437.125 MHz
Digital downlink:   437.150 MHz SSB (RC-BPSK 1200-baud PSK)
Broadcast Callsign: LUSAT-11
BBS:                LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[05232004]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Uplink:     145.90 to 146.00 MHz CW/LSB
Downlink:   435.80 to 435.90 MHz CW/USB
Beacon:     435.795

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[08152004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink:             145.900 MHz FM (9600-baud FSK)
Downlink:           435.170 MHz FM
Broadcast Callsign: HL01-11
BBS:                HL01-12
```

Jim, AA7KC, reports that KO-23's downlink transmitter continues in a
non-operational status.
[05092004]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM (9600-baud FSK)
Downlink: 436.500 MHz FM
Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm

[ANS-WSR has no further information]
[05232004]
=====
SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

STatus: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
          Mode J Digipeater: 436.250 MHz

```
Uplinks: Mode B Repeater: 145.825 MHz
         Mode J Digipeater: 145.825 MHz and 145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[08082004]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink:             145.960 MHz (9600-baud FSK)
Downlink:           437.025 MHz 437.400 MHz
Broadcast Callsign: UO121-11
BBS:                UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA
web site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[05092004]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplink      V-band    145.840 -  145.990 MHz CW/LSB
            U-band    435.550 -  435.800 MHz CW/LSB
           L1-band   1269.250 - 1269.500 MHz CW/LSB
           L2-band   1268.325 - 1268.575 MHz CW/LSB
           S1-band   2400.350 - 2400.600 MHz CW/LSB
Downlink:  S2-band   2401.225 - 2401.475 MHz CW/USB
           K-band 24,048.010 - 24,048.060 MHz CW/USB
Beacon:    2401.323, 24,048.035
[05232004]
-----
SO-42  SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational
 Downlink:           437.075 MHz
Broadcast Callsign: SASAT2-11
BBS:                SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[08152004]
=====
SO-41  SAUDISAT-1A
```

```
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink:             145.850 MHz
Downlink:           436.775 MHz
Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[08152004]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink:   145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is  welcome to use the digipeating/APRS features of Sapphire,
callsign KE6QMD, as per the user service agreement located at the
following
URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Operational

Uplink:             145.850 or 145.925 MHz 9600-baud FSK
Downlink:           437.325 MHz
Broadcast callsign: MYSAT3-11
BBS:                MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial land and weather imaging payloads offers FM and FSK
Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as
a collaborative effort between the Malaysian government and Surrey
Satellite Technology Ltd.
[11202005]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
```

Launch Date: December 20, 2002

Status: Non-operational.

Uplink 435.275 1200-baud AFSK
Downlink 145.825 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01012006]
NNNN
/EX

SB SAT @ AMSAT <W8ISS $ANS-001.S4
WSR 001 Part 4 01/01/2006

AMSAT NEWS SERVICE BULLETIN 001.S4 FROM AMSAT HQ
SILVER SPRING, MD, January 01, 2006
TO ALL RADIO AMATEURS
BID: $ANS-001.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE
PROPOSED FOR LAUNCH AT THIS TIME:

UCISAT ?O-??
Catalog number:
Proposed Launch Date: October 31, 2005

Status: Under Construction

Downlink: Submission in Progress
Uplink: Submission in Progress
Callsign: Submission in Progress
[11272005]

=====
PHASE 3E ?O-??
Catalog Number:
Proposed Launch Date: Early 2006

Status: Under Construction

For the latest project status update please visit the AMSAT-DL
P3-E web page:
http://www.amsat-dl.org/p3e/

[ANS-WSR wishes to thank William Leijenaar, PE1RAH for this week's
report]
[10022005]

=====
CP1 ?o-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: N6CP
Proposed Transmit Frequency: 436.845
[03272005]
=====
CP2 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.325
[03272005]
=====
HAUSAT1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: D90HP
Proposed Transmit Frequency: 437.465
[03272005]
=====
ICE Cube 1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: W2CXM
Proposed Transmit Frequency: 437.305
[03272005]
=====
ICE Cube 2 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: N2VR
Proposed Transmit Frequency: 437.425
[03272005]
=====
ION ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.505
[03272005]
=====
KUTEsat ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: KC0RMW
Proposed Transmit Frequency: 437.385
[03272005]
=====

```
MEROPE ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: K7MSU-1
Proposed Transmit Frequency: 145.980
[03272005]
=====
RINCON ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
        437.345
[03272005]
=====
SACRED ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
[03272005]
=====
SACRED ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
[03272005]
=====
SEEDS ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: JQ1YGU
Proposed Transmit Frequency: 437.485
[03272005]
=====
Mea Huaka ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.405
[03272005]
=====
SUITSAT ?O-??
Catalog Number:
Proposed Release Date: December 8th, 2005
```

Proposed Callsign: RS0RS ?
Proposed Transmit Frequency: 145.990

This from Frank, KA3HDO:
I have recieved information that the Russian EVA that will deply SuitSat, planned for December 8th, has been delayed to late January/Early February 2006. As we get more information, we will post it.

[ANS-WSR wishes to thank Frank Bauer, KA3HDO for this weeks report]
[11272005]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

- AMSAT News Service (ANS)
- General satellite discussion (AMSAT-BB)
- Orbit data (KEPS)
- Manned space missions (SAREX)
- District of Columbia area (AMSAT-DC)
- New England area (AMSAT-NE)
- AMSAT Educational Liaison mailing list (AMSAT-EDU)
- AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/amsat/listserv/menu.html

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

```
From 4746667583002517564
X-Google-Thread: 10e8ad,be6c1806c7a8c8e7,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!news4.google.com!
border1.nntp.dca.giganews.com!border2.nntp.dca.giganews.com!nntp.giganews.com!
elnk-atl-nf1!newsfeed.earthlink.net!stamper.news.atl.earthlink.net!
newsread1.news.atl.earthlink.net.POSTED!46041641!not-for-mail
From: "JoAnne Maenpaa" <wb9jej_no-spam@earthlink.net>
Newsgroups: rec.radio.amateur.space
Subject: ANS-001 AMSAT News Service Weekly Bulletin
Lines: 337
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <MBRuf.2098$ZA2.874@newsread1.news.atl.earthlink.net>
Date: Wed, 04 Jan 2006 15:12:44 GMT
NNTP-Posting-Host: 68.165.59.181
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread1.news.atl.earthlink.net 1136387564 68.165.59.181 (Wed, 04 Jan
2006 07:12:44 PST)
NNTP-Posting-Date: Wed, 04 Jan 2006 07:12:44 PST
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news1.google.com rec.radio.amateur.space:79
```

AMSAT NEWS SERVICE
ANS-001

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* EAGLE
* XI-V Pictures
* AMSAT Awards
* AO-51 news & AMSAT Kid's Day on AO-51
* Visible Re-entry in January
* ARISS Status - 26 December 2005

SB SAT @ AMSAT $ANS-001.01
EAGLE

AMSAT News Service Bulletin 001.01
From AMSAT HQ SILVER SPRING, MD.
January 1, 2006
To All RADIO AMATEURS
BID: $ANS-001.01

AMSAT Eagle, an HEO bird, is in need of support via funding. In order to get off the ground and become a reality, a good foundation of initial funding will be needed to begin the basic construction efforts by the "Eagle Team." Presently, all members of AMSAT have received an envelope for donations towards this effort. AMRAD and others have put out requests to all to make every effort to contribute to this satellite so do your part and spread the word to fund the project from this beginning phase through launch. Please visit the AMSAT website to donate to this Eagle appeal.

[ANS thanks Barry Baines, WD4ASW for the above information]

/EX

SB SAT @ AMSAT $ANS-001.02
XI-V Pictures

AMSAT News Service Bulletin 001.02
From AMSAT HQ SILVER SPRING, MD.
January 1, 2006
To All RADIO AMATEURS
BID: $ANS-001.02

The small cubesat that was released from the SSETI satellite is sending pictures back to us of the Earth. Find these at:
http://www.ne.jp/asahi/hamradio/je9pel/xivpict2.htm

XI-V (pronounced "Sai five") was built by students at the Intelligent Space Systems Laboratory at the University of Tokyo. It was not assembled by JAMSAT.

The official English Website is
http://www.space.t.u-tokyo.ac.jp/cubesat/index-e.html

[ANS thanks Mineo Wakita, JE9PEL for the above information]

/EX

SB SAT @ AMSAT $ANS-001.03
AMSAT Awards

AMSAT News Service Bulletin 001.03
From AMSAT HQ SILVER SPRING, MD.
January 1, 2006
To All RADIO AMATEURS
BID: $ANS-001.03

This week, congratulations go out to all of the following.

The following 51 on 51 Awards were posted in the order they were received via email and U.S. mail. I did not post #50 to the web so that no one knew when #50 would arrive giving everyone an equal chance at earning Award #51.

Bill Greene,	VE7WFG,	51 on 51 Award #50 (Dec 15)
Emily Clarke,	W0EEC,	51 on 51 Award #51 (Dec 16)
Leslie Scofield,	W4SCO,	51 on 51 Award #52 (Dec 21)
Steven Jepsen,	AI7W,	51 on 51 Award #53 (Dec 22)
Takuya Yoshihori,	JE1FQV,	51 on 51 Award #54 (Dec 24 05:38 am)
Yasuo Mikashima,	JR6LDE,	51 on 51 Award #55 (Dec 24 06:25 am)
Tim Pepper,	K8NWD,	51 on 51 Award #56 (Dec 24 10:00 am)

The AMSAT 51 on 51 Award is given to any station that makes contact with 51 different stations on AMSAT's newest satellite, AO-51, during the year 2005.

To receive the award, you must submit your log entries either electronically or by photocopy. Entries must indicate date and time (UTC) of the contact, callsign and grid square of the contacted station, and mode used. Only contacts made between 1 January, 2005 and 31 December, 2005 are eligible. Logbooks may be submitted until 30 April, 2006.

QSL cards are not required, however logbooks may be checked against other applicant's logs. The donation for the award is $10.00 (US Funds) and AMSAT members receive a $5.00 discount. Award fees may be paid through the AMSAT Online Store once you have received confirmation of eligibility from the Director of Contests and Awards.

To see all the awards visit http://www.amsat.org.

[ANS thanks Bruce, KK5DO for the above information]

/EX

SB SAT @ AMSAT $ANS-001.04

AO-51 news & AMSAT Kid's Day on AO-51

AMSAT News Service Bulletin 001.04
From AMSAT HQ SILVER SPRING, MD.
January 1, 2006
To All RADIO AMATEURS
BID: $ANS-001.04

AMSAT-Echo AO-51 News of the Week

Mike Kingery, KE4AZN, AMSAT Vice-President Operations, announced a new version of TlmEcho, the Telemetry Decoding Program for AO-51, is now available on his website: http://home.centurytel.net/ke4aznsatellite/echo.htm.

TlmEcho software will allow the user to view and capture telemetry that is downlinked by Echo in real time.

If you have used a previous version of TlmEcho then you can just download Version 1.1.1 and place the new files in the existing directory on your computer. This is all you need to do to upgrade to the new version.

If this is your first time using the TlmEcho program, then you need to download the full installation which is Version 1.0.5. Install this older version first and then upgrade to Version 1.1.1. Instructions are on the web page.

Also a new EchoCoef file has been placed on the site for download. This file has better high and low limits for the Tlm Channels.

The Echo Operations Team plans to enable the high power mode on AO-51 on January 4, 2006. Use 145.920 mhz FM, 67 hz PL tone for the uplink on this day. The FM downlink will be on 435.300 Mhz. Echo is planned for high power downlink operation on January 8 also in support of Kid's Day activities.

AMSAT-NA, the AO-51 Command Team, and the AO-51 Operations Team will sponsor Kid's Day on AO-51 on January 8, 2006. The event will run from approximately 0100 utc 8 January until 0345 utc 9 January. The event is open to all kids, worldwide. We ask all amateur radio stations to give this short time window to promote satellite operations with kids, by actually showing a kid how to make contacts via AO-51, providing a station to contact, or stepping aside to allow others to make contacts with the kids.

During the event, please limit contacts to stations that are operating with kids at the microphone. This should allow the kids to have a nice QSO and pass some information. Kids can tell their name, age, who is helping them operate on AO-51, where they live, and other information about themselves.

AO-51 will be configured in the following mode during the event. Please note the change in the uplink frequency for the event. The PL tone will be turned off for the event.

Uplink: 145.880 mhz FM voice
Downlink: 435.300 mhz FM voice

The digital transponder on 435.150 will be turned off during the event.

See http://www.arrl.org/FandES/ead/kd-rules.html on the ARRL website for more Kids Day information.

Have fun and enjoy AO-51!

73 KE4AZN
Amsat VP-Operations
Echo Command Station

[ANS thanks Mike KE4AZN for the above information]

/EX

SB SAT @ AMSAT $ANS-001.05
Visible re-entry in January

AMSAT News Service Bulletin 001.05
 From AMSAT HQ SILVER SPRING, MD.
January 1, 2006
To All RADIO AMATEURS
BID: $ANS-001.05

When the NASA probe Stardust sample return capsule nose dives back to Earth in January, it will become the fastest human-made object to streak through the atmosphere. Scientists and engineers are at the ready to observe the spectacular sky show-and savvy skywatchers can join in on the aerial action too.

If all goes to plan, Stardust will release its sample return capsule carrying comet and interstellar dust particles on Jan. 15 at 12:57 a.m. Eastern Standard Time (EST). Four hours later, the capsule will enter Earth's atmosphere, zooming toward Utah and a parachute landing at roughly 5:12 a.m. EST.

During its plummet into Utah, the heat-thwarting capsule will skyrocket across the Western United States [map].

[ANS thanks Space News for the above information]

/EX

SB SAT @ AMSAT $ANS-001.06
ARISS Status - 26 December 2005

AMSAT News Service Bulletin 001.06
From AMSAT HQ SILVER SPRING, MD.
January 1, 2006
To All RADIO AMATEURS
BID: $ANS-001.06

ARISS Status
December 26, 2005

1. Michigan Contact Successful

On Wednesday, December 21, eighteen students from Carman Park Elementary School in Flint, Michigan asked one question each of Bill McArthur, KC5ACR, via the telebridge station, WH6PN in Hawaii. An audience of approximately 300 people attended the event, with media coverage that included the Flint Journal. The contact audio was webcast, and was fed through EchoLink AMSAT (node 101 377) and EDU_Net (node 77 992) conference room servers and was broadcast into the IRLP Discovery Reflector 9010. Streaming audio was also available from the Discovery Reflector website, http://www.discoveryreflector.ca/

Forty-four connections were made to Echolink from stations in Argentina, Bangladesh, Cambodia, Canada, Iraq, Italy, Japan, Luxembourg, Slovenia, Thailand, U.K., and U.S.A., which included 15 simplex nodes and 7 repeater nodes.

The Flint Journal article, "Kids' questions zip into outer space," may be found at:
http://www.mlive.com/news/fljournal/index.ssf?/base/news-33/1135266661268160
.xml&coll=5

Photos of the Carman Park event may be found at this website:
http://www.expedition12.com/charlie/charlie.html

2. Upcoming School Contacts

The 25th Asia-Pacific Scout Jamboree contact has been approved for Saturday, December 31 at 09:12 UTC. The jamboree is held once every four years with scouts, ages 12-18 and will be held this year from December 28 to January 3 in Sattahip, Chonburi Province in Thailand. The hosting committee expects a turnout of 25,000 participants from the around the world, but especially from the 23 member countries in Asia-Pacific. There will be a live broadcast of the contact through the internet at: http://jamboree.siamportals.com . The audio will be fed to the Echolink Bangkok (node number 106 440), AMSAT (node number 101 377), and the EDU_Net node (77 992) conference room servers.

STS Escola de Aviacao Civil in Rio de Janeiro, Brazil has been scheduled for a contact with the ISS on Monday, January 2 at 15:54 UTC.

3. ARRL Article on Sanderson, Mt. Carmel Contacts

The students at Sanderson High School in Sanderson, Texas, and those at Mt. Carmel High School in San Diego, California experienced ARISS contacts on December 8 and 15, respectively. ARRL covered the contacts in the article, "Astronauts Don't Spend Much Time in Space, ISS Commander Tells Students." See:
http://www.arrl.org/news/stories/2005/12/21/100/?nc=1

4. Astronaut Training Status

Brazilian astronaut Marcos Pontes is tentatively scheduled for a training session at JSC on Monday, January 9, at which time he will be introduced to ARISS operations and school contacts. Pontes is scheduled to fly on a taxi flight to the ISS in the spring of 2006.

5. ARRL Article on McArthur Contacts

Bill McArthur, KC5ACR, continues to work stations around the world. On Saturday, December 17, Bill made a contact with Palmer Station in Antarctica, and now qualifies for the Worked All Continents award. ARRL ran an article entitled, "Weekends Best Time to Catch NA1SS on the Air." See:
http://www.arrl.org/news/stories/2005/12/23/2/?nc=1

6. Russian Special Event

Space Patrol, a Russian special event, was planned for December 25 - 26 to commemorate the first anniversary of the death of cosmonaut Gennady Strekalov, U6MIR. Cosmonauts at Energia, using the callsign R3K, and those at the Gagarin Cosmonaut Training Center (GCTC), using RK3DZB, operated HF radios on December 25, and cosmonauts are expected to operate at GCTC on December 26. Two contacts with the ISS were scheduled as part of the event - one on December 25 at 2056 UTC and another on December 26 at 1947 UTC. In addition, the Kenwood radio may be placed in cross band repeater mode from December 27 -31.

7. Japanese Magazine Runs SuitSat Article

The Japanese CQ magazine is writing an article on SuitSat which references ARISS Chairman Frank Bauer's paper, "THIS IS SUITSAT-1, AMATEUR RADIO STATION RS0RS!!" The ARISS team provided photographs to be included in the news write up, which will appear in the Japan CQ's next issue. SuitSat is expected to be deployed on February 2, 2006.

[ANS thanks Carol, KB3LKI for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73 & Happy 2006 from the ANS team
This week's ANS Editor,
Dee Interdonato, NB2F
nb2f at amsat dot org

```
From -5803719350870517215
X-Google-Thread: 10e8ad,576c0cd9d5642bac
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news4.google.com!news.glorb.com!newsfeeder.wxs.nl!
divide.nova.planet.nl!posting.nova.planet.nl!not-for-mail
Date: Wed, 04 Jan 2006 17:10:42 +0100
From: Roland <roland_lemmersZPEMM@planet.nl>
User-Agent: Mozilla Thunderbird 1.0 (Windows/20041206)
X-Accept-Language: en-us, en
MIME-Version: 1.0
Newsgroups: rec.radio.amateur.space
Subject: Re: Why not on the moon?
References: <h2utf.3227$gq4.1127@trndny04> <IsHGvE.wp@spsystems.net>
In-Reply-To: <IsHGvE.wp@spsystems.net>
Content-Type: text/plain; charset=ISO-8859-1; format=flowed
Content-Transfer-Encoding: 7bit
Lines: 15
Message-ID: <43bbf341$0$10079$ba620dc5@text.nova.planet.nl>
NNTP-Posting-Host: 84.84.0.196
X-Trace: 1136390977 text.nova.planet.nl 10079 84.84.0.196:10060
X-Complaints-To: abuse@planet.nl
Xref: g2news1.google.com rec.radio.amateur.space:80
```

> Staying operational once there is even worse. A lunar night is two weeks
> of no sunlight and very low temperatures. I don't believe an electronics
> package has ever survived that without, at least, radio-isotope heaters.

Would it be possible to design a transponder to work at these low temperatures? I'm thinking of those HEMT transistors cooled to 80K used in the deep space network. Keep in the shade during the lunar day and it wouldn't see huge swings in temperature.

Roland.

```
From -4207503437677282444
X-Google-Thread: 10e8ad,576c0cd9d5642bac
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
```

Path: g2news1.google.com!news3.google.com!border1.nntp.dca.giganews.com!
border2.nntp.dca.giganews.com!nntp.giganews.com!elnk-atl-nf1!
newsfeed.earthlink.net!stamper.news.atl.earthlink.net!
newsread1.news.atl.earthlink.net.POSTED!96824b94!not-for-mail
From: "Dan/W4NTI" <w4nti@mindNOSPAMATALLspring.com>
Newsgroups: rec.radio.amateur.space
References: <h2utf.3227$gq4.1127@trndny04>
Subject: Re: Why not on the moon?
Lines: 19
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.2180
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.2180
X-RFC2646: Format=Flowed; Original
Message-ID: <hW_uf.2369$ZA2.1961@newsread1.news.atl.earthlink.net>
Date: Thu, 05 Jan 2006 01:49:01 GMT
NNTP-Posting-Host: 199.174.148.116
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread1.news.atl.earthlink.net 1136425741 199.174.148.116 (Wed, 04 Jan 2006 17:49:01 PST)
NNTP-Posting-Date: Wed, 04 Jan 2006 17:49:01 PST
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news1.google.com rec.radio.amateur.space:81

"wa3ymm" <wa3ymm_pa@verizon.net> wrote in message
news:h2utf.3227$gq4.1127@trndny04...
> Why have we not tried to put a repeater or tranverter on the moon our
> natural satellite? I seem logical to shoot for this goal.
>
> WA3YMM
>
>

Only ONE response mentioned the Apollo program..Oh well.

In fact the LAST Apollo flight was to carry a Amateur repeater to the Moon.
I believe it was to operate in the 440 Mhz range. But, alas, the flight
was cancelled.

Dan/W4NTI

From -5848551807130860З
X-Google-Thread: 10e8ad,576c0cd9d5642bac
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
From: konstans@hotmail.com
Newsgroups: rec.radio.amateur.space
Subject: Re: Why not on the moon?
Date: Wed, 04 Jan 2006 20:56:14 -0500

```
Message-ID: <40vor19aavrfkf3v36oa1bnkst7qs4mk2b@4ax.com>
References: <h2utf.3227$gq4.1127@trndny04>
<hW_uf.2369$ZA2.1961@newsread1.news.atl.earthlink.net>
X-Newsreader: Forte Free Agent 2.0/32.652
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Organization: Usenet Zone http://www.usenetzone.com Free Usenet Binary server
contains 140,000+ groups
Lines: 44
Path: g2news1.google.com!news1.google.com!news4.google.com!
border1.nntp.dca.giganews.com!border2.nntp.dca.giganews.com!nntp.giganews.com!
news.glorb.com!news.usenetzone.com!not-for-mail
Xref: g2news1.google.com rec.radio.amateur.space:82

On Thu, 05 Jan 2006 01:49:01 GMT, "Dan/W4NTI"
<w4nti@mindNOSPAMATALLspring.com> wrote:

>
>"wa3ymm" <wa3ymm_pa@verizon.net> wrote in message
>news:h2utf.3227$gq4.1127@trndny04...
>> Why have we not tried to put a repeater or tranverter on the moon our
>> natural satellite? I seem logical to shoot for this goal.
>>
>> WA3YMM
>>
>>
>
>Only ONE response mentioned the Apollo program..Oh well.
>
>In fact the LAST Apollo flight was to carry a Amateur repeater to the Moon.
>I believe it was to operate in the 440 Mhz range.  But, alas,  the flight
>was cancelled.

too bad indeed
>
>Dan/W4NTI
>

everyone should be advised that The following person
 has been advocating the abuse of elders making false charges of child rape, rape
in general forges post and name

he may also be making flase reports of abusing other in order to attak and cow his
foes
he also shows signs of being dangerously unstable

STEVEN J ROBESON
151 12TH AVE NW
WINCHESTER TN 37398
931-967-6282

well stevie you assked for it you got it
```

Mark Morgan

k4yz@aol.com

Usenet Zone Free Binaries Usenet Server
More than 140,000 groups
Unlimited download
http://www.usenetzone.com to open account

```
From 4511951443269341698
X-Google-Thread: 10e8ad,576c0cd9d5642bac
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Newsgroups: rec.radio.amateur.space
Path: g2news1.google.com!news2.google.com!news4.google.com!news.glorb.com!
logbridge.uoregon.edu!arclight.uoregon.edu!utnut!utzoo!spenford!henry
From: henry@spsystems.net (Henry Spencer)
Subject: Re: Why not on the moon?
Organization: SP Systems, Toronto, Canada
Message-ID: <IsM5J8.5MH@spsystems.net>
References: <h2utf.3227$gq4.1127@trndny04> <IsHGvE.wp@spsystems.net>
<43bbf341$0$10079$ba620dc5@text.nova.planet.nl>
Date: Thu, 5 Jan 2006 09:40:19 GMT
Xref: g2news1.google.com rec.radio.amateur.space:83
```

In article <43bbf341$0$10079$ba620dc5@text.nova.planet.nl>,
Roland <roland_lemmersZPEMM@planet.nl> wrote:

>> Staying operational once there is even worse. A lunar night is two weeks
>> of no sunlight and very low temperatures. I don't believe an electronics
>> package has ever survived that without, at least, radio-isotope heaters.
>
>Would it be possible to design a transponder to work at these low
>temperatures? I'm thinking of those HEMT transistors cooled to 80K used
>in the deep space network. Keep in the shade during the lunar day and it
>wouldn't see huge swings in temperature.

Unfortunately, you'd have to shade it not only against the Sun, but against the warm lunar surface all around it. And the shades too get warm, although you can fight that with surface coatings and multiple layers.

That aside, it's not a bad idea. Quite aside from all the fun ways you can exploit the lower temperature, a lot of ordinary electronics apparently will work reasonably well if cooled to LN2 temperatures... *once*. It's cycling that kills it, often very quickly.

But I fear I don't see any easy way of keeping it cold during the day. Hard, complicated ways, but no easy ones.

```
--
spsystems.net is temporarily off the air;               |   Henry Spencer
mail to henry at zoo.utoronto.ca instead.               | henry@spsystems.net
```

```
From -5320275782947332602
X-Google-Thread: 10e8ad,7d9394e3e9cf00d3,start
X-Google-Thread: 113975,7d9394e3e9cf00d3,start
X-Google-Attributes: gid10e8ad,gid113975,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!news3.google.com!news.glorb.com!
news.astraweb.com!router2.astraweb.com!not-for-mail
From: Chris Steyaert <observations@rmob.org>
Newsgroups: rec.radio.amateur.space,sci.astro.amateur
Subject: Radio Meteor Obs. Bull. December 2005  Geminids Ursids
Date: Sat, 07 Jan 2006 20:28:09 +0100
Message-ID: <ug50s15u1t2c7ooqjlquq85jk918q2ijv4@4ax.com>
X-Newsreader: Forte Agent 1.93/32.576 English (American)
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Lines: 17
Organization: Unlimited download news at news.astraweb.com
NNTP-Posting-Host: 7e8674b2.news.astraweb.com
X-Trace: DXC=fX_Ya>:OQlQbnnNk7ne37PL?0kYOcDh@ZoCON]jIB;RTXYY;5<_2WV^G?
ifhhgG3CQi`Lm;cWg`=Z=h8A2V0=JmXE\LhO>fFbk[
Xref: g2news1.google.com rec.radio.amateur.space:84 sci.astro.amateur:12507
```

Radio Meteor Observation Bulletin No. 149 of December 2005 (84 K) is available now as

http://visualrmob.free.fr/rmobtext/rmob0512.txt

More information and the visual presentation of the hourly forward scatter counts can be found on

http://www.rmob.org

http://radio.data.free.fr

Chris

```
From 2525811956412186003
X-Google-Thread: 10e8ad,ca144556d4d0b69f,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!postnews.google.com!g44g2000cwa.googlegroups.com!not-for-
mail
From: "hxc98@yahoo.com" <hxc98@yahoo.com>
Newsgroups: rec.radio.amateur.space
Subject: APRSPoint new version available !
Date: 9 Jan 2006 01:27:51 -0800
```

```
Organization: http://groups.google.com
Lines: 11
Message-ID: <1136798871.048168.191040@g44g2000cwa.googlegroups.com>
NNTP-Posting-Host: 221.232.67.246
Mime-Version: 1.0
Content-Type: text/plain; charset="iso-8859-1"
X-Trace: posting.google.com 1136798884 28593 127.0.0.1 (9 Jan 2006 09:28:04 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Mon, 9 Jan 2006 09:28:04 +0000 (UTC)
User-Agent: G2/0.2
X-HTTP-UserAgent: Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.2; SV1; .NET CLR
1.1.4322),gzip(gfe),gzip(gfe)
Complaints-To: groups-abuse@google.com
Injection-Info: g44g2000cwa.googlegroups.com; posting-host=221.232.67.246;
   posting-account=qkd21QwAAAAs0AsHsbNsv0PdNKEViQPM
Xref: g2news1.google.com rec.radio.amateur.space:86
```

APRSPoint 2.2 is released. New features include,

1. Added TNC data view and TNC data log,
2. Enabled auto connect for AGW packet engine,
3. Fixed a bug handling weather station data,
4. Ability to load a default map view at startup,
5. Restore TNC settings when program exits.

and many more. The holiday sale is also extended for 2 more days.
Visist http://www.aprspoint.com for details. Thanks.

```
From -3260911392078104930
X-Google-Thread: 10e8ad,cc01e6a785af4f8
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
From: "Domestos" <thatswhen@westnet.com.au>
Newsgroups: rec.radio.amateur.space
References: <711845289139298.Post@ithinknot.net>
Subject: Re: ISS Expedition 12 HAM RADIO PASS - Peterson Elementary - Red Springs
N.C
Date: Tue, 10 Jan 2006 20:33:47 +0800
Lines: 50
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.2180
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.2180
X-RFC2646: Format=Flowed; Original
NNTP-Posting-Host: dip-220-235-51-58.wa.westnet.com.au
Message-ID: <43c3aa61@quokka.wn.com.au>
X-Trace: quokka.wn.com.au 1136896609 220.235.51.58 (10 Jan 2006 20:36:49 +0800)
X-Complaints-To: abuse@westnet.com.au
Path: g2news1.google.com!news2.google.com!news4.google.com!
border1.nntp.dca.giganews.com!nntp.giganews.com!nntp.waia.asn.au!
202.72.130.18.MISMATCH!quokka.wn.com.au!not-for-mail
```

Xref: g2news1.google.com rec.radio.amateur.space:88

I just read the ISS will be using UHF ham freqs this weekend..........

John

This weekend (Jan 14-15 UTC) Bill McArthur plans to operate on the UHF band exclusively. It is his desire to work all continents on the UHF band from the International Space Station.

The frequency he will be using will be 437.55 simplex. Due to the high Doppler effect on this band, one will need to operate split frequencies for most of the pass. A very simplified chart showing memory assignment for transmit and receive with 5 KHz spacing is below as an example .

Mem.   TX   -   RX
Ch A - 437.540 - 437.560 Acquisition of signal (AOS)
Ch B - 437.545 - 437.555
Ch C - 437.550 - 437.550 Time of closest approach (TCA)
Ch D - 437.555 - 437.545
Ch E -437.560 - 437.540 Loss of signal (LOS)

Good Luck and 73,

Kenneth G. Ransom - N5VHO
ISS Ham Radio Project Engineer
Johnson Space Center
Houston, TX

http://spaceflight.nasa.gov/station/reference/radio/
http://www.issfanclub.com/
http://oscar.dcarr.org/index.php
http://www.ariss.net/
http://www.amsat.org/amsat/archive/sarex/48hour/threads.html

Via the sarex mailing list at AMSAT.ORG courtesy of AMSAT-NA.
To unsubscribe, send "unsubscribe sarex" to Majordomo@amsat.org

"John" <qwerty666@alexandria.cc> wrote in message news:711845289139298.Post@ithinknot.net...

> Hello,
>
> Expedition 12 the crew used the Sputnik-SM Kenwood D700 amateur radio station in the SM to conduct a 10-min. ham radio session with students at Peterson Elementary School in Red Springs, North Carolina.
>
> http://www.freepgs.com/possum/index.php?option=com_content&task=view&id=30&Itemid=2

From -4627614418612107517
X-Google-Thread: 10e8ad,4294ae4c6030330,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!news3.google.com!
border1.nntp.dca.giganews.com!border2.nntp.dca.giganews.com!nntp.giganews.com!
elnk-atl-nf1!newsfeed.earthlink.net!stamper.news.atl.earthlink.net!
newsread2.news.atl.earthlink.net.POSTED!46041641!not-for-mail
From: "JoAnne Maenpaa" <wb9jej_no-spam@earthlink.net>
Newsgroups: rec.radio.amateur.space
Subject: ANS-008 AMSAT News Service Weekly Bulletin
Lines: 351
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <k6wxf.7011$%W1.4738@newsread2.news.atl.earthlink.net>
Date: Thu, 12 Jan 2006 17:12:48 GMT
NNTP-Posting-Host: 66.167.64.219
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread2.news.atl.earthlink.net 1137085968 66.167.64.219 (Thu, 12 Jan 2006 09:12:48 PST)
NNTP-Posting-Date: Thu, 12 Jan 2006 09:12:48 PST
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news1.google.com rec.radio.amateur.space:89

AMSAT NEWS SERVICE
ANS-008

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:

* AMSAT 2006 Space Symposium
* 2006 AMSAT Kid's Day on AO-51 (Rebroadcast)
* AMSAT 51 on 51 Award Time Period Expires
* SKN on OSCAR 2006 Best Fist Nominations Due
* AO-7 Activity Reports
* ARISS Status January 2, 2006
* NASA Reports Explosion on the Moon
* FREE 2006 Daily Skywatching Guide Available

SB SAT @ AMSAT $ANS-008.01

AMSAT 2006 Space Symposium

AMSAT News Service Bulletin 008.01
From AMSAT HQ SILVER SPRING, MD.
January 8, 2006
To All RADIO AMATEURS
BID: $ANS-008.01

The 2006 AMSAT Space Symposium Planning Committee hosted by the Project OSCAR Amateur Radio Club is pleased to announce that the 2006 Space Symposium will be held at the Crowne Plaza San Francisco Mid-Peninsula hotel in Foster City, California. The dates of the Symposium and surrounding activities will begin on the 5th of October and run through the 11th of October, 2006. Why so long? This year's Symposium will be include the AMSAT Board meeting, AMSAT General Membership Meeting, the ARISS International Delegates Meeting, a meeting of the IARU Satellite Advisors Committee and AMSAT International Delegates. It's going to be a busy weekend!

"We are very excited to host the Symposium here in the San Francisco Bay Area" says Project OSCAR VP Emily Clarke who is also co-chair for the planning committee. "We are especially pleased to chose the Crowne Plaza as it fills more qualifications based on what the membership indicated was important in our recent survey. It is spacious, has affordable food services, excellent rooms and free shuttles to shopping and commuter rail service. Even more important, according to the survey, there is free high speed internet in the rooms, meeting spaces, dining spaces and even the swimming pool! We also invite AMSAT Symposium attendees to stay for Pacificon, the ARRL Pacific Division Convention which will be held the following weekend."

The AMSAT web team has posted informational pages on the AMSAT web site.
You can find the announcement with many links at:
http://www.amsat-org/amsat-new/symposium

Future announcements including the Call For Papers, Online Registration and Online Hotel Registration will be available approximately 1 April 2006.

[ANS thanks Emily, W0EEC and the 2006 AMSAT Symposium Committee for the above information]

/EX

SB SAT @ AMSAT $ANS-008.02
2006 AMSAT Kid's Day on AO-51 (Rebroadcast)

AMSAT News Service Bulletin 008.02
From AMSAT HQ SILVER SPRING, MD.
January 8, 2006
To All RADIO AMATEURS
BID: $ANS-008.02

AMSAT-NA, the AO-51 Command Team, and the AO-51 Operations Team will sponsor

Kid's Day on AO-51 on January 8, 2006. The event will run from approximately 0100 UTC 8 January until 0345 UTC 9 January. The event is open to all kids, worldwide. We ask all amateur radio stations to give this short time window to promote satellite operations with kids, by actually showing a kid how to make contacts via AO-51, providing a station to contact, or stepping aside to allow others to make contacts with the kids.

During the event, please limit contacts to stations that are operating with kids at the microphone. This should allow the kids to have a nice QSO and pass some information. Kids can tell their name, age, who is helping them operate on AO-51, where they live, and other information about themselves.

AO-51 will be configured in the following mode during the event. Please note the change in the uplink frequency for the event. The PL tone will be turned off for the event.

Uplink: 145.880 MHz FM voice
Downlink: 435.300 MHz FM voice

The digital transponder on 435.150 will be turned off during the event.

See http://www.arrl.org/FandES/ead/kd-rules.html on the ARRL web site for more Kids Day information.

Have fun and enjoy AO-51!

[ANS thanks Mike, KE4AZN for the above information]

/EX

SB SAT @ AMSAT $ANS-008.03
AMSAT 51 on 51 Award Time Period Expires

AMSAT News Service Bulletin 008.03
From AMSAT HQ SILVER SPRING, MD.
January 8, 2006
To All RADIO AMATEURS
BID: $ANS-008.03

The AMSAT 51 on 51 Award time period for operating is now over. It ended December 31, 2005. You still have until April 30, 2006 to submit for this award if you have earned it.

This week, congrats go out to all of the following.

Laurent Ferracci, F1JKJ, Satellite Communications Achievement Award #427

Steven Holly,   WI2W,   51 on 51 Award #57
Alan Rothermich, WB0QLU, 51 on 51 Award #58
Marc Sanchez,   KD5MSS, 51 on 51 Award #59
Patrick Stoddard, WD9EWK, 51 on 51 Award #60

To see all the awards visit http://www.amsat.org.

[ANS thanks Bruce Paige, KK5DO, AMSAT Director Contests and Awards for the above information]

/EX

SB SAT @ AMSAT $ANS-008.04
SKN on OSCAR 2006 Best Fist Nominations Due

AMSAT News Service Bulletin 008.04
From AMSAT HQ SILVER SPRING, MD.
January 8, 2006
To All RADIO AMATEURS
BID: $ANS-008.04

Ray Soifer, W2RS passes along the following request regarding Straight Key Night on OSCAR 2006:

"Many thanks to all who participated in Straight Key Night on OSCAR 2006."

"Please remember to nominate someone you worked for 'Best Fist.' Your nominee need not have the best fist of those you heard, just of those you worked. Nominations should be sent to w2rs@arrl.net. A list of those nominated will be published in ANS in early February, and in a forthcoming issue of The AMSAT Journal."

[ANS thanks Ray, W2RS for the above information]

/EX

SB SAT @ AMSAT $ANS-008.05
AO-7 Activity Reports

AMSAT News Service Bulletin 008.05
From AMSAT HQ SILVER SPRING, MD.
January 8, 2006
To All RADIO AMATEURS
BID: $ANS-008.05

The AMSAT-bb has been active this week with reports of AO-7 activity. Emily Clarke, W0EEC filed the following report:

"There were some excellent reports on the AO-7 log by VE9QRP and W8IJ this evening (04 Jan after 0000). Sweet. Unfortunately, I worked the 04:40 pass on the west coast and there was nada except someone who appeared to tune up and gave up."

"I'm curious enough to mention that AO-7 is only operable when in full sunlight. This doesn't meant that it is operable when Nova says "Visible." Visible means that it is "Sunlit" but not that it is in full sunlight. So wait about 30 more seconds (or so) for it to get fully illuminated."

"Not all tracking programs will tell you when it is illuminated by the sun.

If not, look at the footprint and see if there is a clear delineation between the footprint and the sunlight portion of the earth beyond the gray line. That is when it will be fully illuminated (thanks to Drew KO4MA for that hint.)"

"I've recently added some real-time graphs to track the mode shifts and also a scorecard for AO-7 operators. You don't have to make the entry yourself, but someone you have had a QSO with does. Kudos to K3SZH for being the most frequently heard or listening ham on AO-7."

Emily states that if you do work AO-7, you are encouraged to log your contacts at:
http://www.emilyshouse.com/experthams/ao7/

--

JAMSAT member Mineo Wakita, JE9PEL caught an AO-7 telemetry cycle on 5 January 2006. Mineo reported that the telemetry cycle was approximately 80 seconds long and that he has recorded it to an MP3 file.

You can hear Mineo's MP3 file at the following URL:
http://www.ne.jp/asahi/hamradio/je9pel/60105a07.mp3

The following data was also provided:

AO-7
Jan 5, 2006
11:04-11:26 UTC
145.972 MHz CW
54 Degrees Max Elevation

```
HI HI
180 180 180 180
252 252 252 252
324 324 324 324
496 496 496 496
568 568 568 568
696 696 696 696
HI HI
```

For an explanation of AO-7 telemetry see:
http://www.amsat.org/amsat/sats/n7hpr/ao7_tlm.html

For the most recent AO-7 status report see:
http://www.amsat.org/amsat-new/satellites/status.php#AO-7

[ANS thanks Emily, W0EEC and Mineo, JE9PEL for the above information]

/EX

SB SAT @ AMSAT $ANS-008.06
ARISS Status January 2, 2006

AMSAT News Service Bulletin 008.06
From AMSAT HQ SILVER SPRING, MD.
January 8, 2006
To All RADIO AMATEURS
BID: $ANS-008.06

1. Asia-Pacific Scout Jamboree Contact Successful

On Saturday, December 31, ten scouts attending the 25th Asia-Pacific Scout Jamboree contacted the ISS, and spoke to Bill McArthur, KC5ACR. The children were able to ask and have answered 14 questions, as an audience of 100 people looked on. Three newspapers, 3 television stations, and one radio station covered the event. The audio was fed to the Echolink Bangkok, AMSAT and EDU_Net conference room servers. Sixty-four connections were made from the following ten countries, which included 33 simplex and 5 repeater nodes: Australia, Canada, France, Germany, India, Japan, Luxembourg, Thailand, U.K., U.S.A.

2. Upcoming School Contacts

Peterson Elementary School in Red Springs, North Carolina (a crew pick) has been scheduled for an ARISS contact via the telebridge station, VK5ZAI in Australia. The students will speak with Bill McArthur, KC5ACR, on Monday, January 9, 2006 at 16:39 UTC.

St. Albert the Great School in North Royalton, Ohio has been approved for an ARISS contact on Wednesday, January 11 at 18:11 UTC.

3. McArthur Active on Voice

Bill McArthur, KC5ACR, was active on voice over the holiday week, and continues to work stations around the world. Stations in Japan and Europe reported having contacts with the astronaut this past week.

4. Russian Special Event

The Russian special event, Space Patrol, was held December 25 - 26 to commemorate the first anniversary of the death of cosmonaut Gennady Strekalov, U6MIR. Cosmonauts at Energia and the Gagarin Cosmonaut Training Center (GCTC) participated, using HF radios. Two contacts were made with the ISS as part of the event. The Kenwood radio was then placed in repeater mode for a few days. Stations reported having made contacts with the cosmonauts on the ground, and heard Valery Tokarev making contacts from the ISS.

[ANS thanks Carol, KB3LKI for the above information]

/EX

SB SAT @ AMSAT $ANS-008.07
NASA Reports Explosion on the Moon

AMSAT News Service Bulletin 008.07
From AMSAT HQ SILVER SPRING, MD.

January 8, 2006
To All RADIO AMATEURS
BID: $ANS-008.07

NASA scientists have observed an explosion on the moon. The blast, equal in energy to about 70 kg of TNT, occurred near the edge of Mare Imbrium (the Sea of Rains) on 7 November 2005, when a 12-centimeter-wide meteoroid slammed into the ground traveling 27 km/s.

"What a surprise," says Marshall Space Flight Center (MSFC) researcher Rob Suggs, who recorded the impact's flash. He and colleague Wes Swift were testing a new telescope and video camera they assembled to monitor the moon for meteor strikes. On their first night out, "we caught one," says Suggs.

The full story can be found at:
http://science.nasa.gov/headlines/y2005/22dec_lunartaurid.htm?list835304

[ANS thanks NASA Science News for the above information]

/EX

SB SAT @ AMSAT $ANS-008.08
FREE 2006 Daily Skywatching Guide Available

AMSAT News Service Bulletin 008.08
From AMSAT HQ SILVER SPRING, MD.
January 8, 2006
To All RADIO AMATEURS
BID: $ANS-008.08

Here is a FREE 407-page downloadable book containing What's Up skywatching material from UniverseToday.com for every day in 2006. You can download the book to your local computer, go to the day you like and print off the page to take outside with you nicely formatted.

It's also got tons of other material including general skywatching advice, equipment selection, and hundreds of beautiful photographs.

It's an Adobe Acrobat PDF file, so you'll need to download the Adobe Acrobat reader if you don't have it already.

And yes, this book is absolutely free.

More information can be found at the UniverseToday.com web site:
http://www.universetoday.com/am/publish/whatsup_2006_book.html

[ANS thanks UniverseToday.com for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits.

Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Al Marote, WA1LBG
wa1lbg at amsat dot org

From 6706390848343307969
X-Google-Thread: 10e8ad,93f4d1921bd01deb,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!news3.google.com!
border1.nntp.dca.giganews.com!border2.nntp.dca.giganews.com!nntp.giganews.com!
elnk-atl-nf1!newsfeed.earthlink.net!stamper.news.atl.earthlink.net!
newsread2.news.atl.earthlink.net.POSTED!46041641!not-for-mail
From: "JoAnne Maenpaa" <wb9jej_no-spam@earthlink.net>
Newsgroups: rec.radio.amateur.space
Subject: WSR-008 AMSAT Weekly Satellite Report
Lines: 3
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <t6wxf.7012$%W1.5680@newsread2.news.atl.earthlink.net>
Date: Thu, 12 Jan 2006 17:12:57 GMT
NNTP-Posting-Host: 66.167.64.219
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread2.news.atl.earthlink.net 1137085977 66.167.64.219 (Thu, 12 Jan 2006 09:12:57 PST)
NNTP-Posting-Date: Thu, 12 Jan 2006 09:12:57 PST
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news1.google.com rec.radio.amateur.space:90

Sorry, but have not received a copy of WSR-008.

From -2417832019673030290
X-Google-Thread: 10e8ad,d0564bc8a52d7424,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!news3.google.com!
border1.nntp.dca.giganews.com!border2.nntp.dca.giganews.com!nntp.giganews.com!
elnk-atl-nf1!newsfeed.earthlink.net!stamper.news.atl.earthlink.net!
newsread3.news.atl.earthlink.net.POSTED!46041641!not-for-mail
From: "JoAnne Maenpaa" <wb9jej_no-spam@earthlink.net>
Newsgroups: rec.radio.amateur.space
Subject: WSR-015 AMSAT Weekly Satellite Report
Lines: 1019

X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <_jOyf.268$vU2.237@newsread3.news.atl.earthlink.net>
Date: Mon, 16 Jan 2006 14:45:14 GMT
NNTP-Posting-Host: 68.164.230.134
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread3.news.atl.earthlink.net 1137422714 68.164.230.134 (Mon, 16 Jan 2006 06:45:14 PST)
NNTP-Posting-Date: Mon, 16 Jan 2006 06:45:14 PST
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news1.google.com rec.radio.amateur.space:91

This report is organized into 4 parts.
Part 1 - operational analog amateur satellites.
Part 2 - operational digital amateur satellites.
Part 3 - non - operational satellites
Part 4 - proposed satellites

SB SAT @ AMSAT <W8ISS ANS-015.S1
WSR 015 Part 1 01/15/2006

AMSAT NEWS SERVICE BULLETIN 015.S1 FROM AMSAT HQ
SILVER SPRING, MD, January 015, 2006
TO ALL RADIO AMATEURS
BID: $ANS-015.S1

VO-52 HAMSAT
Catalog Number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/V - Indian Transponder

Proposed frequencies:

Indian Transponder:
Uplink : 435.220 MHz to 435.280 MHz LSB/CW
Downlink: 145.870 MHz to 145.930 MHz USB/CW
Beacom : 145.859330 MHZ CW

Dutch Transponder:
Uplink : 435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW
Beacon : 145.860MHz 12WPM with CW message

Official Webpage: http://www.amsat.in/hamsat.htm

To know what transponder is switched on please listen
for the beacon that is active. Each transponder has a
different beacon, see below:

Indian transponder - unmodulated carrier on
145.936MHz.
Dutch Transponder - CW message on 145.860MHz.
[01152006]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Mode: PBBS - OFF
VOICE REPEATER - V USB/U FM Experimental

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
Analog voice uplink: 145.880 MHZ FM
145.920 MHz FM 67Hz PL tone
1268.700 MHz FM 67Hz PL tone

Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast
Protocol (PBP)

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/

Schedule from the AO-51 Command Team:

16 Jan
FM Repeater, V(USB)/U FM (Experimental)
Uplink: 145.880 mhz USB
Downlink 435.300 mhz FM

22 Jan
FM Repeater, V/U
Uplink: 145.920 mhz FM, 67 hz PL Tone
Downlink 435.300 mhz FM
9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 435.150 mhz FM, 9k6 PBP Digital
[01082006]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Uplink: 145.850 MHz (67.0 Hz PL tone) (See below for operating
procedures)

Downlink: 436.795 MHz

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

There have been unconfirmed reports on the amsat-bb remailer that SO-50 has shifted downlink frequency as much as 5khz up. This both from Europe.

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz. The order of operation is thus: (allow for Doppler as necessary)

1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer
   on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater
   on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10
   minute timer.

[01012006]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: OPERATIONAL

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplink: 145.850 145.870 145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

unOfficial Webpage: http://www.amsat.org/amsat/sats/n7hpr/fo29.html
[11132005]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Uplink: 145.850 MHz FM
Downlink: 436.795 MHz FM

Official Webpage: http://www.ao27.org
[01012006]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Semi-operational in sunlight.
Return to active status: June 21,2002

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
            432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A
            145.975 to 145.925 MHz CW/USB Mode B
Beacons: 29.502 MHz
            145.972 MHz
            435.100 MHz
           2304.100 MHz

Official Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao7.html
AO-7 Contact and Observations reporting webpage:
http://www.emilyshouse.com/experthams/ao7/main.php
AO-07 telemetry software webpage:
http://www.qsl.net/k3tz/files/K3TZ_AO-07_Telemetry_Decoder_0.5.zip
[01152006]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: Combination Voice / Digipeater
Digipeater: ON

The current Expedition 12 crew is:
Commander: William McArthur - KC5ACR
Flight Engineer: Valery Tokarev - (no call)

Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Callsigns:
Russian: RS0ISS, RZ3DZR

USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official Webpage: http://www.rac.ca/ariss
Official Fan club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.

This off the AMSAT-BB:
There are still reports that William McArthur, KC5ACR, still needs
Alaska to
getting Worked All States (WAS) on 2 meters. He has been active this
past
weekend on a reported frequency of 437.550Mhz.
[01152006]
NNNN
/EX

SB SAT @ AMSAT <W8ISS $ANS-015.S2
WSR 015 Part 2 01/15/2006

AMSAT NEWS SERVICE BULLETIN 015.S2 FROM AMSAT HQ
SILVER SPRING, MD, January 15, 2006
TO ALL RADIO AMATEURS
BID: $ANS-015.S2

XI-V ?O-??
Catalog Number: 28895
Launch Date: October 27, 2005

Status: Operational only within range of Ground station in Japan

Telemetry Downlink: 437.345MHz - FSK 1200bps using AFK protocol
Beacon Downlink: 437.465MHz - CW about 50 WPM

Callsign: JQ1YGW

Oficial Webpage: http://www.space.t.u-tokyo.ac.jp/gs/satinfo-e.html#xi5
[01012006]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: Combination Voice / Digipeater
Digipeater: ON

The current Expedition 12 crew is:
Commander: William McArthur - KC5ACR
Flight Engineer: Valery Tokarev - (no call)

Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Callsigns:
Russian: RS0ISS, RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official Webpage: http://www.rac.ca/ariss
Official Fan club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.

This off the AMSAT-BB:
There are still reports that William McArthur, KC5ACR, still needs
Alaska to
getting Worked All States (WAS) on 2 meters. He has been active this
past
weekend on a reported frequency of 437.550Mhz.
[01152006]
=====
PCSAT2
Catalog Number: 25544
Launch Date: August 1, 2005

Activated: August 3, 2005
Status: Battery-saving mode
Current Mode: None

Digital Downlink: 435.275 Mhz
Digital Uplink: 145.825 Mhz
PSK-31 Downlink: 435.275 Mhz

```
PSK-31 Uplink: 29.400 - 29.403 Mhz

Broadcast:
BBS:

Official Webpage: http://web.usna.navy.mil/~bruninga/pcsat2.html

PCSAT2 APRS Packet page: http://www.findu.com/cgi-bin/pcsat2.cgi
[01012006]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Mode: PBBS - OFF
      VOICE REPEATER - V USB/U FM Experimental

Analog voice downlink:  435.300 MHz FM
              435.150 MHz FM
Analog voice uplink: 145.880 MHZ FM
              145.920 MHz FM 67Hz PL tone
                       1268.700 MHz FM 67Hz PL tone

Digital Downlinks:      435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
                       2401.200 MHz FM  38k4 bps, AX.25
Digital Uplink:         145.860 MHz FM, 9k6 Digital, Pacsat Broadcast
          Protocol (PBP)

Broadcast: PECHO-11
BBS:  PECHO-12

Schedule from the AO-51 Command Team:

16 Jan
FM Repeater, V(ssb)/U FM (Experimental)
Uplink: 145.880 mhz USB
Downlink 435.300 mhz FM

22 Jan
FM Repeater, V/U
Uplink: 145.920 mhz FM, 67 hz PL Tone
Downlink 435.300 mhz FM
9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 435.150 mhz FM, 9k6 PBP Digital
[01152006]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Operational
```

```
General Usage Uplink/Downlink:145.827 MHz 1200 Baud
Special Usage Downlink:       144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

Anyone can work PCSAT-1 with ANY typical 1200 baud packet
station on 145.825.  Just set your path to UNPROTO APRS via
ARISS (the same that you use via ARISS on the ISS or via PCSAT2).
Mobiles with the D700 or the TH-D7 HT APRS radios will see packets
directly on their front panel and can work it from their mobile.
[01012006]
=====
CUTE-1
Catalog number: 27844
Launched: June 30,2003

Status: Operational

Uplink:          ?
Downlink:     436.8375 CW
              437.4700 1200 FM ax25 or SRLL (ACTIVE only near Japan ? )
Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[01012006]
=====
GO-32 TECHSAT-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Downlink:           435.225 MHz FM (9600-baud FSK)
                   (435.325 n/a - temperature problems)
Uplinks:            145.850, 145.890, 145.930 FM
                   1269.700, 1269.800, 1269.900 FM
Broadcast Callsign: 4XTECH-11
BBS Callsign:       4XTECH-12

Jeff, KB2M, reports November 15th, 2005:
 I might be wrong about this, but as I am the only one I see working
GO-32
here goes. If you do a DIR request up on the 145.890 uplink the bird
turns
on. Give it a try....

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[ANS-WSR wishes to thank Jeff, KB2M for this weeks report.]
[11202005]
=====
AO-16 PACSAT
Catalog number: 20439
```

```
Launch Date: January 22, 1990

Status: Semi-operational, the digipeater command is on and open for
APRS users.

Uplink:             145.90 145.92 145.94 145.96 MHz FM
                     (using 1200-baud Manchester FSK)
Downlink:           437.026 MHz SSB (1200-baud PSK)
Mode-S Beacon:      2401.1428 MHz
Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[01012006]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational?

Telemetry Downlink: 145.826 MHz. FM (1200-baud AFSK).
                    approx. 10 days ON, 10 days OFF
Mode-S Beacon:      2401.500 MHz. ... OFF
UHFBeacon:          435.025 MHz. ...  OFF

Official webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[01012006]
NNNN
/EX

SB SAT @ AMSAT <W8ISS $ANS-015.S3
WSR 015 Part 3 01/15/2006

AMSAT NEWS SERVICE BULLETIN 015.S3 FROM AMSAT HQ
SILVER SPRING, MD, January 15, 2006
TO ALL RADIO AMATEURS
BID: $ANS-015.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

NCUBE-2 ?O-??
Catalog Number: 28894
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
       2407.25
[01012006]
=====
```

XO-53 SSETI
Catalog Number: 28894
Launch Date: October 27, 2005

Status: In orbit

Uplink/Downlink: 437.250MHz - AX.25 9k6 baud or voice
Beacon: 2401.835MHz - AX.25 38k4 baud or voice

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php

[01012006]
=====
POSAT-1 PO-28
Catalog Number: 22829
Launched : September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 429.950

Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html.
POSAT-1
webpage:http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012006]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launched: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB
Beacon: 145.810 MHz (unmodulated carrier)

AO-10 has been locked into a Mode-B, 70-cm uplink and
2-meter downlink for several years.

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

```
Status: Downlink only

Uplink:             145.875 145.900 145.925 145.950 MHz FM (1200-baud)
Downlink:           435.808 MHz PSK
Broadcast Callsign: ITMSAT-11
BBS:                ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01012006]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink:   21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB
Beacon:   29.408 MHz
Robot:    29.454 MHz
[05232004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink:      21.260 to  21.300 MHz CW/USB
Downlink:   145.860 to 145.900 MHz CW/USB
Beacon:     145.860 MHz
Robot:      145.908 MHz
[05232004]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink 145.975 MHz FM
Downlink 435.070 MHz FM
[05092004]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink:             145.900 FM 9600-baud FSK
```

Downlink: 435.120 MHz FM
Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01092005]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational?

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB
Beacon: 29.352 MHz (intermittent)
SSB meeting frequency: 29.380 MHz (unofficial)

John, KD6PAG reports on June 16, 2004 to WSR:
RS-15 beacon seemed to be back in the mode where it's a tone about 5
seconds off and then 5 seconds on this morning.

WSR is looking for more confirmations of RS-15 coming back.

[ANS-WSR thanks John, KD6PAG for RS-15 information]
[06202004]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplink: 145.84 145.86 145.88 145.90 MHz FM
                    (using 1200-baud Manchester FSK)
CW downlink: 437.125 MHz
Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)
Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[05232004]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795

More FO-20 info can be found at:

```
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[08152004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink:             145.900 MHz FM (9600-baud FSK)
Downlink:           435.170 MHz FM
Broadcast Callsign: HL01-11
BBS:                HL01-12

Jim, AA7KC, reports that KO-23's downlink transmitter continues in a
non-operational status.
[05092004]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink:             145.980 MHz FM (9600-baud FSK)
Downlink:           436.500 MHz FM
Broadcast Callsign: HL02-11
BBS:                HL02-12
[05092004]
=====
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
```

```
http://seds.uah.edu/projects/sedsat/sedsat.htm

[ANS-WSR has no further information]
[05232004]
=====
SO-35 SUNSAT
Catalog Number:     ?
Launched:February 23, 1999

STatus: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
          Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
         Mode J Digipeater: 145.825 MHz and 145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[08082004]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink:             145.960 MHz (9600-baud FSK)
Downlink:           437.025 MHz 437.400 MHz
Broadcast Callsign: UO121-11
BBS:                UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA
web site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[05092004]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplink      V-band    145.840 -  145.990 MHz CW/LSB
            U-band    435.550 -  435.800 MHz CW/LSB
           L1-band   1269.250 - 1269.500 MHz CW/LSB
           L2-band   1268.325 - 1268.575 MHz CW/LSB
           S1-band   2400.350 - 2400.600 MHz CW/LSB
Downlink:  S2-band   2401.225 - 2401.475 MHz CW/USB
           K-band 24,048.010 - 24,048.060 MHz CW/USB
Beacon:    2401.323, 24,048.035
[05232004]
-----
```

```
SO-42  SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational
 Downlink:           437.075 MHz
Broadcast Callsign: SASAT2-11
BBS:                SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[08152004]
=====
SO-41  SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink:             145.850 MHz
Downlink:           436.775 MHz
Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[08152004]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink:   145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is  welcome to use the digipeating/APRS features of Sapphire,
callsign KE6QMD, as per the user service agreement located at the
following
URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Operational

Uplink:             145.850 or 145.925 MHz 9600-baud FSK
Downlink:           437.325 MHz
```

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial land and weather imaging payloads offers FM and FSK
Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as
a collaborative effort between the Malaysian government and Surrey
Satellite Technology Ltd.
[11202005]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink 435.275 1200-baud AFSK
Downlink 145.825 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01012006]
NNNN
/EX

SB SAT @ AMSAT <W8ISS $ANS-015.S4
WSR 015 Part 4 01/15/2006

AMSAT NEWS SERVICE BULLETIN 015.S4 FROM AMSAT HQ
SILVER SPRING, MD, January 15, 2006
TO ALL RADIO AMATEURS
BID: $ANS-015.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE
PROPOSED FOR LAUNCH AT THIS TIME:

UCISAT ?O-??
Catalog number:
Proposed Launch Date: October 31, 2005

Status: Under Construction

Downlink: Submission in Progress
Uplink: Submission in Progress
Callsign: Submission in Progress
[11272005]
=====
PHASE 3E ?O-??
Catalog Number:
Proposed Launch Date: Early 2006

Status: Under Construction

For the latest project status update please visit the AMSAT-DL
P3-E web page:
http://www.amsat-dl.org/p3e/

[ANS-WSR wishes to thank William Leijenaar, PE1RAH for this week's
report]
[10022005]
=====
CP1 ?o-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: N6CP
Proposed Transmit Frequency: 436.845
[03272005]
=====
CP2 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.325
[03272005]
=====
HAUSAT1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: D90HP
Proposed Transmit Frequency: 437.465
[03272005]
=====
ICE Cube 1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: W2CXM
Proposed Transmit Frequency: 437.305
[03272005]
=====
ICE Cube 2 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: N2VR
Proposed Transmit Frequency: 437.425
[03272005]
=====
ION ?O-??
Catalog Number:

```
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.505
[03272005]
=====
KUTEsat ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: KC0RMW
Proposed Transmit Frequency: 437.385
[03272005]
=====
MEROPE ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: K7MSU-1
Proposed Transmit Frequency: 145.980
[03272005]
=====
RINCON ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
        437.345
[03272005]
=====
SACRED ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
[03272005]
=====
SACRED ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
[03272005]
=====
SEEDS ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: JQ1YGU
Proposed Transmit Frequency: 437.485
```

[03272005]
=====
Mea Huaka ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.405
[03272005]
=====
SUITSAT ?O-??
Catalog Number:
Proposed Release Date: December 8th, 2005

Proposed Callsign: RS0RS ?
Proposed Transmit Frequency: 145.990

This from Frank, KA3HDO:
I have recieved information that the Russian EVA that will deply
SuitSat,
planned for December 8th, has been delayed to late January/Early
February
2006. As we get more information, we will post it.

[ANS-WSR wishes to thank Frank Bauer, KA3HDO for this weeks report]
[11272005]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
        888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

- AMSAT News Service (ANS)
- General satellite discussion (AMSAT-BB)
- Orbit data (KEPS)
- Manned space missions (SAREX)
- District of Columbia area (AMSAT-DC)

* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/amsat/listserv/menu.html

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

```
From 8386154761056026014
X-Google-Thread: 10e8ad,8c20c622a1932d0a,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!news4.google.com!
border1.nntp.dca.giganews.com!border2.nntp.dca.giganews.com!nntp.giganews.com!
elnk-atl-nf1!newsfeed.earthlink.net!stamper.news.atl.earthlink.net!
newsread3.news.atl.earthlink.net.POSTED!46041641!not-for-mail
From: "JoAnne Maenpaa" <wb9jej_no-spam@earthlink.net>
Newsgroups: rec.radio.amateur.space
Subject: ANS-015 AMSAT News Service Weekly Bulletin
Lines: 284
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <0kOyf.269$vU2.183@newsread3.news.atl.earthlink.net>
Date: Mon, 16 Jan 2006 14:45:16 GMT
NNTP-Posting-Host: 68.164.230.134
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread3.news.atl.earthlink.net 1137422716 68.164.230.134 (Mon, 16 Jan
2006 06:45:16 PST)
NNTP-Posting-Date: Mon, 16 Jan 2006 06:45:16 PST
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news1.google.com rec.radio.amateur.space:92
```

AMSAT NEWS SERVICE
ANS-015

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:

* Reminder - AMSAT Space Syposium Dates October 5-11, 2006
* ISS Amateur Radio Update
* ARISS Status for the Week of January 9, 2006
* One Last Reminder - SKN on OSCAR 2006 Best Fist Nominations Due
* Ham Radio Pioneered Invention Available to the Public

SB SAT @ AMSAT $ANS-015.01
Reminder - AMSAT Space Syposium Dates October 5-11, 2006

AMSAT News Service Bulletin 015.01
From AMSAT HQ SILVER SPRING, MD.
January 15, 2006
To All RADIO AMATEURS
BID: $ANS-015.01

The 2006 AMSAT Space Symposium Planning Committee hosted by the Project OSCAR Amateur Radio Club is pleased to announce that the 2006 Space Symposium will be held at the Crowne Plaza San Francisco Mid-Peninsula hotel in Foster City, California. The dates of the Symposium and surrounding activities will begin on the 5th of October and run through the 11th of October, 2006.

This year's Symposium will be include the AMSAT Board meeting, AMSAT General Membership Meeting, the ARISS International Delegates Meeting, a meeting of the IARU Satellite Advisors Committee and AMSAT International Delegates. It's going to be a busy weekend!

The AMSAT web team has posted informational pages on the AMSAT web site. You can find the announcement with many links at:
http://www.amsat-org/amsat-new/symposium

Future announcements including the Call For Papers, Online Registration and Online Hotel Registration will be available approximately 1 April 2006.

[ANS thanks Emily, W0EEC and the 2006 AMSAT Symposium Committee for the above information]

/EX

SB SAT @ AMSAT $ANS-015.02
ISS Amateur Radio Update

AMSAT News Service Bulletin 015.02
From AMSAT HQ SILVER SPRING, MD.
January 15, 2006
To All RADIO AMATEURS
BID: $ANS-015.02

Kenneth Ransom, N5VHO, who is the ISS Ham Radio Project Engineer at the Johnson Space Center in Houston, provided several updates to the recent ham band activity from the ISS.

Radio amateurs around the world have been enjoying how active Astronaut Bill McArthur has been during these recent weeks. The ISS has been in favorable pass times for the continental US right after the end of the crew work day. Bill has already been heard on a few of the passes around 1930-2200 UTC. He is often active on Saturday and Sunday at various times from 0800-2200 UTC.

Bill has worked 49 states from orbit. The sole state remaining is Alaska which will be in more favorable orbits starting around Jan 20. Current orbits for them are during the normal crew sleep time.

Bill has also worked operators on all continents including Antarctica using VHF. As of Jan. 9 Bill had 63 DXCC entities with the following breakdown by continent:

5 Total worked in S. America
4 Total worked in Oceania
9 Total worked in N. America
29 Total worked in Europe
11 Total worked in Asia
1 Total worked in Antarctica
4 Total worked in Africa

Henk, PA3GUO, has a web page with photographs and an audio recording of both ends of his contact with ISS. See: http://www.qsl.net/pa3guo.

Mak, SV1BSX reports hearing Bill work the following prefixes:
DL, EA, F, HA, I, IS0, G, OE, OK, ON, PA, SM, SP, SV, TA, UA, YU, HZ, and 9K. Mak says that these Greek stations have had the opportunity to have a contact with Bill: SV1BSX, SV1LK, SV8CS.

During the weekend of Jan 14-15 UTC Bill McArthur plans to operate on the UHF band exclusively. It is his desire to work all continents on the UHF band from the International Space Station.

The frequency he will be using will be 437.55 simplex. Due to the high Doppler effect on this band, one will need to operate split frequencies for most of the pass. A very simplified chart showing memory assignment for transmit and receive with 5 KHz spacing is below as an example.

Mem. TX - RX
Ch A - 437.540 - 437.560 Acquisition of signal (AOS)
Ch B - 437.545 - 437.555
Ch C - 437.550 - 437.550 Time of closest approach (TCA)
Ch D - 437.555 - 437.545
Ch E -437.560 - 437.540 Loss of signal (LOS)

Bill's contact log now exceeds 700 but that includes several repeat stations. Please give others a chance if you are in a highly populated footprint. As a reminder, these simple operating practices will increase every ones chances:

1. Wait for ISS Crew to call CQ or QRZ.
2. Send only your call sign phonetically and wait for crew to acknowledge your specific call sign.
3. Listen closely for the call of the station ISS is talking with.
4. If you do not hear your specific call sign, do not transmit again. until you hear the ISS crew member say CQ or QRZ.
5. Please be courteous.

Hams in North America will also enjoy visual sighting opportunities of the International Space Station when it will be flying over the United States this month during evening hours when it is easy to see. Use your tracking program or you can find the visual sighting times for your QTH from the Heavens Above web page: http://www.heavens-above.com

The following links should prove useful to anyone not familiar with ISS operations:

http://spaceflight.nasa.gov/station/reference/radio/
http://www.issfanclub.com/
http://oscar.dcarr.org/index.php <http://oscar.dcarr.org/index.php>
http://www.ariss.net/
http://www.amsat.org/amsat/archive/sarex/48hour/threads.html

[ANS thanks Kenneth, N5VHO for the above information]

/EX

SB SAT @ AMSAT $ANS-015.03
ARISS Status for the Week of January 9, 2006

AMSAT News Service Bulletin 015.03
From AMSAT HQ SILVER SPRING, MD.
January 15, 2006
To All RADIO AMATEURS
BID: $ANS-015.03

1. Brazilian Contact Successful

On Monday, January 2, students from the STS Escola de Aviacao Civil in Rio de Janeiro, Brazil experienced a successful contact with the ISS. Bill McArthur, KC5ACR, answered 17 questions posed to him by seventeen students, as an audience of 60 gathered around the radio. A Rio de Janeiro technical magazine, Antena Eletronica Popular, covered the event. The audio was retransmitted on HF (7080 Mhz) and Echolink. STS is a civil aviation school which offers airplane and helicopter instruction to students, ages 18-25, and gives refresher courses to pilots, ages 25-45.

2. ARISS School Contacts

Peterson Elementary School in Red Springs, North Carolina had ARISS contact via the telebridge station, VK5ZAI in Australia on Monday, January 9, 2006.

St. Albert the Great School in North Royalton, Ohio had an ARISS contact on Wednesday, January 11, 2006.

Itaki Elementary School Father's Club in Higashihiroshima, Hiroshima, Japan, is scheduled for an ARISS contact on Thursday, January 19, 2006.

The Georgia Institute of Technology, School of Aerospace Engineering in Atlanta, Georgia (crew pick) is scheduled for an ARISS contact on Thursday, January 19 at 15:05 UTC.

3. NASA Education Covers Upcoming SuitSat Event

SuitSat, a Russian spacesuit containing ham radio equipment with recorded voice messages and a CD of student artwork, is scheduled to be deployed during a Russian EVA between February 2-9, 2006.

NASA Education has posted two versions of a SuitSat article entitled, "Hearing Voices from Space," on its website. The first version covers grades K-8, and the second, grades 9-12 & postsecondary. The articles are available at the NASA Education page: http://education.nasa.gov/home/index.html and once there follow the links "For Students" or "For Educators".

4. Astronaut Training Status

The Brazilian Space Agency is working with astronaut Marcos Pontes to obtain an amateur radio license and callsign for him, so that he may participate in an ARISS contact during his spring 2006 taxi flight. A training session at JSC has also been scheduled to familiarize Pontes with ARISS school operations.

[ANS thanks Carol, KB3LKI for the above information]

/EX

SB SAT @ AMSAT $ANS-015.04
One Last Reminder - SKN on OSCAR 2006 Best Fist Nominations Due

AMSAT News Service Bulletin 015.04
From AMSAT HQ SILVER SPRING, MD.
January 15, 2006
To All RADIO AMATEURS
BID: $ANS-015.04

Ray Soifer, W2RS passes along the following request regarding Straight Key Night on OSCAR 2006:

"Many thanks to all who participated in Straight Key Night on OSCAR 2006."

"Please remember to nominate someone you worked for 'Best Fist.' Your nominee need not have the best fist of those you heard, just of those you worked. Nominations should be sent to w2rs@arrl.net. A list of those nominated will be published in ANS in early February, and in a forthcoming issue of The AMSAT Journal."

[ANS thanks Ray, W2RS for the above information]

/EX

SB SAT @ AMSAT $ANS-015.05
Ham Radio Pioneered Invention Available to the Public

AMSAT News Service Bulletin 015.05
From AMSAT HQ SILVER SPRING, MD.
January 15, 2006
To All RADIO AMATEURS
BID: $ANS-015.05

Talking pants, a ham radio inspired invention by those of us who carry our HT in a pocket or on a belt, will become available to the general public.

Jeans giant Levi's is hoping to woo fashionistas and music aficionados alike with its new iPod-compatible RedWire DLX jeans, due out this fall.

With a joystick remote control built into the watch pocket, the new jeans will allow wearers to play, pause, track forward or back and adjust the volume on their iPods without having to take them out of their pockets.

A separate pocket will house and conceal the bulge of the iPod, while a built-in retractable headphone unit is designed to prevent tangled wires.

A red conductive ribbon will keep wearers connected while allowing them to remove the iPod from their pockets to view the screen, the company said. Users will need to remember to empty their pockets before doing the laundry.

If you'd like to read more about it, see:
http://www.spacedaily.com/2006/060111153858.q5blomhb.html

[ANS thanks SpaceDaily.com for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
JoAnne Maenpaa, WB9JEJ
WB9JEJ at amsat dot org

```
From -4571075869470011796
X-Google-Thread: 10e8ad,426c2289f3038354,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!news3.google.com!
border1.nntp.dca.giganews.com!nntp.giganews.com!local01.nntp.dca.giganews.com!
nntp.comcast.com!news.comcast.com.POSTED!not-for-mail
NNTP-Posting-Date: Tue, 17 Jan 2006 22:04:49 -0600
From: "Tom Coates" <tecoatesHatesSpam@comcast.net>
Newsgroups: rec.radio.amateur.digital,rec.radio.amateur.space
Subject: Power required for Mode A psk-31
Date: Tue, 17 Jan 2006 23:04:21 -0500
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1409
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1409
Message-ID: <soednRKS-Zn8I1DeRVn-qQ@comcast.com>
Lines: 8
NNTP-Posting-Host: 69.251.161.44
X-Trace: sv3-PbpEHm/qRureWdajtGXFZSdLPJZCmMSocfYo5qfGK+0PQDkyYx/
Ez+cTJQ6tLq+Lv4UuSt1nc6Cj7ID!
MRuyoWwxRYsNyTK3C8OjiVh+MDd9LJiExucG2BZuAdF9ixRHxOOnTd1Pvp5Jyg47PArMQNVUYFfB
X-Complaints-To: abuse@comcast.net
X-DMCA-Complaints-To: dmca@comcast.net
X-Abuse-and-DMCA-Info: Please be sure to forward a copy of ALL headers
X-Abuse-and-DMCA-Info: Otherwise we will be unable to process your complaint
properly
X-Postfilter: 1.3.32
Xref: g2news1.google.com rec.radio.amateur.space:93
```

What is the minimum uplink power required for solid comunication using psk-31 and a quarter-wave ground plane antenna with Mode A on the low-orbit satellites?

Tom

```
From -4641336285712662721
X-Google-Thread: 10e8ad,fdd790f8799d536,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!news4.google.com!
border1.nntp.dca.giganews.com!nntp.giganews.com!local01.nntp.dca.giganews.com!
nntp.comcast.com!news.comcast.com.POSTED!not-for-mail
NNTP-Posting-Date: Fri, 20 Jan 2006 18:59:08 -0600
From: "James" <jnipperxxx@nospamfdn.com>
Newsgroups: rec.radio.amateur.space
Subject: Eggbeater for ISS contacts?
Date: Fri, 20 Jan 2006 19:59:10 -0500
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1437
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1441
Message-ID: <sIOdnbolk5rBGkzenZ2dnUVZ_s6dnZ2d@comcast.com>
Lines: 10
NNTP-Posting-Host: 67.191.103.145
X-Trace:
sv3-5OqeNjfhBeq4tlkpwsEBFucFimg5m6IAm6xLhPx264xTnQUFNpT1qwMd5wu3kF6WDO40fCWPpgQLiM
d!hlnEpneJFUOovLIjs5eqRMwfvsyD/ZCT8Uj2EZKApihAgLK4Cphb3JklwljMO8iuBppS/Tc7SuM5!
chLNlVS/nUMAAL4=
X-Complaints-To: abuse@comcast.net
X-DMCA-Complaints-To: dmca@comcast.net
X-Abuse-and-DMCA-Info: Please be sure to forward a copy of ALL headers
X-Abuse-and-DMCA-Info: Otherwise we will be unable to process your complaint
properly
X-Postfilter: 1.3.32
Xref: g2news1.google.com rec.radio.amateur.space:94
```

How useful is the Eggbeater (from M2) for working the ISS ??

73 de Jim K4PYT

```
From 7838795808725057673
```

```
X-Google-Thread: 10e8ad,fdd790f8799d536
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!news3.google.com!news.glorb.com!
newsfeed101.telia.com!nf02.dk.telia.net!news.tele.dk!news.tele.dk!
small.news.tele.dk!newspeer1.se.telia.net!se.telia.net!masternews.telia.net.!
newsb.telia.net.POSTED!not-for-mail
From: "Greg" <devnull@gravitywell.org>
Newsgroups: rec.radio.amateur.space
References: <sIOdnbolk5rBGkzenZ2dnUVZ_s6dnZ2d@comcast.com>
Subject: Re: Eggbeater for ISS contacts?
Lines: 17
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.2670
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.2670
X-RFC2646: Format=Flowed; Original
Message-ID: <n9wAf.42952$d5.198959@newsb.telia.net>
Date: Sat, 21 Jan 2006 19:43:15 GMT
NNTP-Posting-Host: 81.231.92.242
X-Complaints-To: abuse@telia.com
X-Trace: newsb.telia.net 1137872595 81.231.92.242 (Sat, 21 Jan 2006 20:43:15 CET)
NNTP-Posting-Date: Sat, 21 Jan 2006 20:43:15 CET
Organization: Telia Internet
Xref: g2news1.google.com rec.radio.amateur.space:95

I used the NOAA (137MHz) version to receive MIR with great results,
the eggbeater really catches those low horizon sats and I suppose ISS is in
a similar orbit.

"James" <jnipperxxx@nospamfdn.com> wrote in message
news:sIOdnbolk5rBGkzenZ2dnUVZ_s6dnZ2d@comcast.com...
>
>
> How useful is the Eggbeater (from M2) for working the ISS  ??
>
>
> 73 de Jim K4PYT
>
>
>
>




From -5702837724890584341
X-Google-Thread: 10e8ad,fdd790f8799d536
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!news4.google.com!
border1.nntp.dca.giganews.com!nntp.giganews.com!local01.nntp.dca.giganews.com!
nntp.comcast.com!news.comcast.com.POSTED!not-for-mail
```

NNTP-Posting-Date: Sat, 21 Jan 2006 16:20:59 -0600
From: "James" <jnipperxxx@nospamfdn.com>
Newsgroups: rec.radio.amateur.space
References: <sIOdnbolk5rBGkzenZ2dnUVZ_s6dnZ2d@comcast.com>
<n9wAf.42952$d5.198959@newsb.telia.net>
Subject: Re: Eggbeater for ISS contacts?
Date: Sat, 21 Jan 2006 17:20:57 -0500
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1437
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1441
Message-ID: <KZSdnewsl9NWLk_eRVn-qg@comcast.com>
Lines: 6
NNTP-Posting-Host: 67.191.103.145
X-Trace: sv3-
mR6Y02690eOlXHUtOiLbLfIiV0AVX78AUIA6l6+8iPzDktnFOb2jLCGz8wMN1Fzv6bbiwK27Ujakqdl!
+7KQ4z4D/ZKUKi7fCZIzreoJwTJpxdu6fDyAucJz9BAycKlTzibFZP4ZBL+jq3dyS7hRBHoI9S9t!zw==
X-Complaints-To: abuse@comcast.net
X-DMCA-Complaints-To: dmca@comcast.net
X-Abuse-and-DMCA-Info: Please be sure to forward a copy of ALL headers
X-Abuse-and-DMCA-Info: Otherwise we will be unable to process your complaint
properly
X-Postfilter: 1.3.32
Xref: g2news1.google.com rec.radio.amateur.space:96

Thanks Greg !!   I welcome other comments !!

73 de Jim K4PYT

From 4410448063188571511
X-Google-Thread: 10e8ad,9ccf266074df648b,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!news4.google.com!news.glorb.com!
border1.nntp.dca.giganews.com!border2.nntp.dca.giganews.com!nntp.giganews.com!
elnk-atl-nf1!newsfeed.earthlink.net!stamper.news.atl.earthlink.net!
newsread3.news.atl.earthlink.net.POSTED!46041641!not-for-mail
From: "JoAnne Maenpaa" <wb9jej_no-spam@earthlink.net>
Newsgroups: rec.radio.amateur.space
Subject: ANS-022 AMSAT News Service Weekly Bulletin
Lines: 389
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <ZF6Bf.5185$vU2.126@newsread3.news.atl.earthlink.net>
Date: Mon, 23 Jan 2006 15:32:09 GMT
NNTP-Posting-Host: 66.167.183.52
X-Complaints-To: abuse@earthlink.net

X-Trace: newsread3.news.atl.earthlink.net 1138030329 66.167.183.52 (Mon, 23 Jan 2006 07:32:09 PST)
NNTP-Posting-Date: Mon, 23 Jan 2006 07:32:09 PST
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news1.google.com rec.radio.amateur.space:97

AMSAT NEWS SERVICE
ANS-022

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

******************** AMSAT 2006 Space Symposium **************************

The AMSAT web team has posted informational pages on the AMSAT web site. You can find the announcement with many links at:
http://www.amsat-org/amsat-new/symposium

Future announcements including the Call For Papers, Online Registration and Online Hotel Registration will be available approximately 1 April 2006.

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In this edition:

- Astronaut Bill McArthur Scores WAC on UHF and WAS on VHF
- AO-7 Enters Period of No Eclipse
- AO-7 Control Electronics Still Functioning After 30+ Years in Space
- Satellite DX is Still Happening
- New Photos From the XI-V Cubesat Available
- AMSAT Journal Articles Needed - Deadline Nears
- Get Ready For SuitSat
- NASA Prepares For February 3 Spacewalk
- OSCARLocator Photo Gallery Invites Contributions

SB SAT @ AMSAT $ANS-022.01
Astronaut Bill McArthur Scores WAC on UHF and WAS on VHF

AMSAT News Service Bulletin 022.01
From AMSAT HQ SILVER SPRING, MD.
January 22, 2006
To All RADIO AMATEURS
BID: $ANS-022.01

Last weekend, January 14-15 UTC, Astronaut Bill McArthur aboard the International Space Station operated on the UHF band exclusively. A report received from Keith, ZS6TW in South Africa indicates that Bill has completed a sweep of Working All Continents on UHF.

Keith wrote on the ISS Fan Club site, http://www.issfanclub.com, "Bill was active on UHF voice over RSA on the January 14, 20:00 UTC pass. Bill contacted me followed by Greald, ZS6BTD in Johannesburg. He said that our contacts had just completed his worked all continents. It was a pleasure speaking to him again. 73's Keith, ZS6TW."

The UHF frequency NA1SS is 437.55 MHz simplex when this mode is active.

This is the first time an ISS crew member has worked all 7 continents on the 430 MHz band. McArthur had previously worked all continents on 145 MHz to be the second ISS crew member to complete that feat. Mike Fincke worked all 7 during his tour as Science Officer on Expedition 9.

Be sure to send in your QSL cards so Bill can claim his award. Refer to the ARISS QSL page for information on how to QSL:
http://www.rac.ca/ariss/oindex.htm#QSL's

On January 21, Ed, KL7UW; Dale, KL7XJ; and Kevin, KL0RG worked NA1SS on pass #41012 so Bill has now completed WAS from space on the 2 meter band.

Congratulations Bill and thank you for all the time you give to talk on the radio!

[ANS thanks Kenneth, N5VHO for the above information]

/EX

SB SAT @ AMSAT $ANS-022.02
AO-7 Enters Period of No Eclipse

AMSAT News Service Bulletin 022.02
From AMSAT HQ SILVER SPRING, MD.
January 22, 2006
To All RADIO AMATEURS
BID: $ANS-022.02

AO-7 has entered into a period where it does not go into eclipse. The orbit is precessing and at this time of the year it is at (and over) the grey line on the western edge. Contrary to previous years, AO-7's orbit has precessed to the point where it does not go into an eclipse. This is the first time since it "awoke" that this has happened.

Emily Clarke, W0EEC has published some charts on the AO-7 log website that illustrate the progression over the past few years that include a chart of AO-7s eclipse durations and the latitude of when eclipse happens. You can see them at:

http://www.emilyshouse.com/experthams/ao7/Eclipse.php

Although not drawing any conclusions about mode of operation Emily states that this is going to be an interesting period, "Since AO-7 will operate in full sun without any power loss it will be interesting to see if and when it's mode changes". Comments to her directly are invited at her email via AMSAT.ORG.

Emily also wants to thank all those who have been loyal contributors to the website and indicates that the increased logging on the AO-7 log is helping to enhance the ability to collect data.

"It has been very helpful to collect information about this intrepid satellite, and hopefully the data will help enhance future designs. AO-7 is breaking the mold, and the more data we can collect the better we can improve our understanding of the space environment"

AO-7 was launched in 1974 and was a multi-national project between the US, Canada, Germany and Australia. It is the oldest operational amateur satelllite.

[ANS thanks Emily, W0EEC for the above information]

/EX

SB SAT @ AMSAT $ANS-022.03
AO-7 Control Electronics Still Functioning After 30+ Years in Space

AMSAT News Service Bulletin 022.03
From AMSAT HQ SILVER SPRING, MD.
January 22, 2006
To All RADIO AMATEURS
BID: $ANS-022.03

With the AO-7 satellite experiencing sunlit conditions for the next several weeks radio amateurs have had an opportunity to determine additional functionality of this 30+ year old satellite. With its batteries long dead, AO-7 is only operational when its solar cells are adequately illuminated by sunlight.

John, LA2QAA noted, "After checking the log on 'The AO-7 Resource Page', I estimated the switchover between modes on AO-7 to be at approximately 08:30 UTC daily. However, on the 17th of January, I noticed the changeover happened at precisely 08:57 in the middle of a Mode-B QSO with UA9CP. I immediately switched to mode-A and carried on the QSO therby confirming the time of the mode change on that particular day. This shows that the 24 hour timer is functioning as it was designed to do 31 years ago!"

One of the AO-7 pioneers, Jan W3GEY brings us up to speed on AO-7's internal timer, "If telemetry channel 2C seems to increment about every 15 minutes then the clock is still working."

Mike, N1JEZ, AO-7 Control Operator, suggests, "So what we really want to do is monitor the telemetry and see if Channel 2C is really incrementing and that the switch occurs near 95 in the cycle. One other thing I'd like to try is to command the satellite to reset the timer. This should be fun!"

Stay tuned as more is learned of the oldest operational amateur satellite in orbit.

For more information refer to The AO-7 Resource Page at:
http://www.planetemily.com/ao7/

[ANS thanks John, LA2QAA, Jan, W3GEY and Mike, N1JEZ for the above information]

/EX

SB SAT @ AMSAT $ANS-022.04
Satellite DX is Still Happening

AMSAT News Service Bulletin 022.04
From AMSAT HQ SILVER SPRING, MD.
January 22, 2006
To All RADIO AMATEURS
BID: $ANS-022.04

In this period prior to the launch of the next high earth orbit amateur radio satellites reports of satellite DX show that there are still exciting opportunities for long-range contacts. Timing and location are key factors.

AO-7, in a polar orbit approximately 900 miles above the earth has provided some DX. Ron, K8DID in Michigan reports that he worked Victor, YL2LW in Latvia on AO-7 in Mode B this past week. The land distance between these stations is 7316 km.

Drew, KO4MA in Florida has had a past AO-7 contact with Andre, PH7AT in the Netherlands. The land distance between these stations is 7511 km.

Andre, PH7AT says a prior AO-7 contact with Randy, WB4LHD in Tennessee is at a distance 7408 km.

[ANS thanks Emily, W0EEC for the above information]

/EX

SB SAT @ AMSAT $ANS-022.05
New Photos From the XI-V Cubesat Available

AMSAT News Service Bulletin 022.05
From AMSAT HQ SILVER SPRING, MD.
January 22, 2006
To All RADIO AMATEURS
BID: $ANS-022.05

Mineo, JE9PEL says new photos from space from the camera aboard the XI-V cubesat can viewed on-line at:

http://www.ne.jp/asahi/hamradio/je9pel/xivpict2.htm

These photos were taken when the satellite was over Canada, 64.5053N and 99.6834W. You can see the sunrise near the earth.

[ANS thanks Mineo, JE9PEL for the above information]

/EX

SB SAT @ AMSAT $ANS-022.06
AMSAT Journal Articles Needed - Deadline Nears

AMSAT News Service Bulletin 022.06
From AMSAT HQ SILVER SPRING, MD.
January 22, 2006
To All RADIO AMATEURS
BID: $ANS-022.06

Ed, WA4SWJ, Editor of The AMSAT Journal reminds members that the deadline for the next edition is drawing near. Ed says, "Don't forget I need your Journal articles soon. I've received a couple so far but can always use more. Time is running out. I'd like to have them by this coming Saturday if at all possible. Of course I'll take them late but that doesn't help me get it to the printer on time. Thanks for your great support!"

[ANS thanks Ed, WA4SWJ for the above information]

/EX

SB SAT @ AMSAT $ANS-022.07
Get Ready For SuitSat

AMSAT News Service Bulletin 022.07
From AMSAT HQ SILVER SPRING, MD.
January 22, 2006
To All RADIO AMATEURS
BID: $ANS-022.07

Miles, WF1F sends the following International Space Station ARISS SuitSat Project Status Report.

ARISS to activate a new hand launched educational satellite project from the International Space station. The new educational experiment is called SuitSat. The SuitSat project is onboard the International Space Station and is being prepared for activation very soon. The SuitSat project has a tentative activation date of February 3, 2006. The SuitSat activation will take place during the ISS crew space walk. SuitSat will be a hand launched by the ISS crew during their early February SpaceWalk.

Since we have determined that the batteries in SuitSast may last only a few days, it is suggested that radio amateurs prepare now to receive the first transmissions so as not to miss out on this Historical event!
The current expected life of the SuitSat project is approximately 2 to 6 days. If you delay in setting up your station you may miss out on this educational experiment.

What is SuitSat:
In short, the crew will toss an Old spacesuit out the airlock and let it fly away as its own satellite. The Space Station crew have attached an Amateur Radio beacon transmitter to the spacesuit. The SuitSat project will broadcast telemetry and voice messages to earth for as long as the batteries last. There are no solar cells on this satellite.

Anyone with a simple FM receiver or VHF police scanner should be able to hear the signals from SuitSat on 145.99 MHz as it orbits around the earth 15 times a day.

Voice Telemetry:
The SuitSat project will be transmitting on 145.990 MHz FM and will consist of Voice Telemetry, giving Mission Time, Suit Temperature and Battery Voltage, Voice Greeting messages in multiple languages, and an SSTV image using Robot 36 format. This entire transmission cycle will repeat every 9 minutes until the batteries discharge.

SuitSat Transmitter:
The SuitSat transmitter is a Kenwood TH-K2, a small hand held radio, which will transmit a 1 watt FM signal from SuitSat on 145.990 MHz FM Downlink only. There is no uplink for this satellite.

The ARISS team is also planning on using the Kenwood D700 transceiver aboard the ISS to rebroadcast the SuitSat signal on 437.800 MHz FM. This will allow you to hear SuitSat while ISS is in range of your station.

For more specific details on the SuitSat project, please review the AMSAT and related links below.

AMSAT SuitSat information:
http://www.amsat.org/amsat-new/articles/SuitSat/

ARISS SuitSat Details:
http://www.amsat.org/amsat-new/articles/BauerSuitsat/index.php

ARISS video on SuitSat September 2005
mms://media.wmfd.com/amsat/SuitSat.wmv

[ANS thanks Miles, WF1F for the above information]

/EX

SB SAT @ AMSAT $ANS-022.08

NASA Prepares For February 3 Spacewalk

AMSAT News Service Bulletin 022.08
From AMSAT HQ SILVER SPRING, MD.
January 22, 2006
To All RADIO AMATEURS
BID: $ANS-022.08

NASA is hosting a preview session about the next spacewalk by the International Space Station Expedition 12 crew at 2 p.m. EST, Friday, January 27 from NASA's Johnson Space Center, Houston. The event airs live on NASA TV with questions from media at participating agency locations.

The spacewalk by station Commander Bill McArthur and Flight Engineer Valery Tokarev is Feb. 3. It airs live on NASA TV with coverage starting at 4:30 p.m. EST. The six-hour spacewalk starts at 5:20 p.m. EST. (SuitSat is likely to be released during this spacewalk.)

For digital downlink information and access to NASA TV's Public Channel on the Web in RealPlayer, RealAudio, or Windows Media Player, visit:

http://www.nasa.gov/ntv

[ANS thanks NASA for the above information]

/EX

SB SAT @ AMSAT $ANS-022.09

OSCARLocator Photo Gallery Invites Contributions

AMSAT News Service Bulletin 022.09
From AMSAT HQ SILVER SPRING, MD.
January 22, 2006
To All RADIO AMATEURS
BID: $ANS-022.09

Emily, W0EEC has set up a temporary photo gallery for people to upload photos of their OSCARLocators and other early satellite tracking systems.

The gallery is located at:
http://www.emilyshouse.com/gallery/OSCARLocators

A few tips and rules:

1) To upload photos you must login (not required to view the gallery). The login is OSCAR (all upper case) and the password is seven (all lower case).

2) Before uploading photos it's a good idea to resize them to 800 x 600. This will make sure that the upload time (2min) isn't exceeded.

3) After uploading, edit the caption. Please include your name and description.

New photos are added to the end of the gallery so you might have to page back to find your upload.

This is self-policing, so if you find any uploads that are inappropriate please let me know via email (w0eec@amsat.org) so I can remedy the situation.

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
JoAnne Maenpaa, WB9JEJ
WB9JEJ at amsat dot org

```
From -2619187669353510287
X-Google-Thread: 10e8ad,8020434a194e80da,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!news4.google.com!news.glorb.com!
border1.nntp.dca.giganews.com!border2.nntp.dca.giganews.com!nntp.giganews.com!
elnk-atl-nf1!newsfeed.earthlink.net!stamper.news.atl.earthlink.net!
newsread3.news.atl.earthlink.net.POSTED!46041641!not-for-mail
From: "JoAnne Maenpaa" <wb9jej_no-spam@earthlink.net>
Newsgroups: rec.radio.amateur.space
Subject: WSR-022 AMSAT Weekly Satellite Report
Lines: 1019
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <1G6Bf.5186$vU2.352@newsread3.news.atl.earthlink.net>
Date: Mon, 23 Jan 2006 15:32:13 GMT
NNTP-Posting-Host: 66.167.183.52
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread3.news.atl.earthlink.net 1138030333 66.167.183.52 (Mon, 23 Jan
2006 07:32:13 PST)
NNTP-Posting-Date: Mon, 23 Jan 2006 07:32:13 PST
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news1.google.com rec.radio.amateur.space:98
```

This report is organized into 4 parts.

```
Part 1 - operational analog amateur satellites.
Part 2 - operational digital amateur satellites.
Part 3 - non - operational satellites
Part 4 - proposed satellites

SB SAT @ AMSAT <W8ISS ANS-022.S1
WSR 022 Part 1 01/22/2006

AMSAT NEWS SERVICE BULLETIN 022.S1 FROM AMSAT HQ
SILVER SPRING, MD, January 022, 2006
TO ALL RADIO AMATEURS
BID: $ANS-022.S1

VO-52 HAMSAT
Catalog Number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/V - Indian Transponder

Proposed frequencies:
-------------------
Indian Transponder:
Uplink  : 435.220 MHz to 435.280 MHz LSB/CW
Downlink: 145.870 MHz to 145.930 MHz USB/CW
Beacom  : 145.859330 MHZ CW

Dutch Transponder:
Uplink  : 435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW
Beacon  : 145.860MHz 12WPM with CW message

Official Webpage: http://www.amsat.in/hamsat.htm

To know what transponder is switched on please listen for the beacon that is
active. Each transponder has a different beacon, see below:

Indian transponder - unmodulated carrier on
145.936MHz.
Dutch Transponder  - CW message on 145.860MHz.
[01152006]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Mode: PBBS - V/U
             VOICE REPEATER - V-FM/U-FM

Analog voice downlink:  435.300 MHz FM
                        435.150 MHz FM
Analog voice uplink:    145.880 MHZ FM
```

145.880 MHz USB
145.920 MHz FM 67Hz PL tone
1268.700 MHz FM 67Hz PL tone

Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast Protocol (PBP)

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/

Schedule from the AO-51 Command Team:

22 Jan
FM Repeater, V/U
Uplink: 145.920 mhz FM, 67 hz PL Tone
Downlink 435.300 mhz FM
9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 435.150 mhz FM, 9k6 PBP Digital
[01222006]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Uplink: 145.850 MHz (67.0 Hz PL tone) (See below for operating procedures)
Downlink: 436.795 MHz

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

There have been unconfirmed reports on the amsat-bb remailer that SO-50 has shifted downlink frequency as much as 5khz up. This both from Europe.

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz. The order of operation is thus: (allow for Doppler as necessary)

1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10 minute timer.

[01012006]
=====
FO-29 JAS-2

```
Catalog number: 24278
Launch Date: August 17, 1996

Status: OPERATIONAL

Voice/CW Mode JA
Uplink:     145.90 to 146.00 MHz CW/LSB
Downlink:   435.80 to 435.90 MHz CW/USB
Beacon:     435.795 MHz

Digital Mode JD
Uplink:     145.850 145.870 145.910 MHz FM
Downlink:   435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign:   8J1JCS
Digitalker: 435.910 MHz

unOfficial Webpage: http://www.amsat.org/amsat/sats/n7hpr/fo29.html
[11132005]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Uplink:     145.850 MHz FM
Downlink:   436.795 MHz FM

Official Webpage: http://www.ao27.org
[01012006]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational until March 14th

Uplink:     145.850 to 145.950 MHz CW/USB Mode A
            432.125 to 432.175 MHz CW/LSB Mode B
Downlink:    29.400 to  29.500 MHz CW/USB Mode A (1W PEP)
            145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
            145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons:     29.502 MHz
            145.972 MHz
            435.100 MHz
           2304.100 MHz

AO-7's orbit no longer goes into eclipse, so it is operating on a 24 hour
timer that changes the mode schedule at approximately 0900z each day.  The
timer alternates the satellite's operational mode between Mode A and Mode B.

Please use QRP when operating on AO-7!  There are no batteries, and
excessive
```

power may cause unexpected behavior and possibly damage the satellite. Mode B users are likely to experience a Mode change from Mode B to Mode C if the buss voltage drops. This will be marked by a decrease in signal strength from AO-7 due to the lower power of Mode C.

AO-7 is expected to remain on this schedule until approximately 14 March 2006 at which time it will re-enter a period of eclipse on each orbit.

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php
The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
AO-7 users are requested to log their contacts and observations about AO-7, especially any unexpected mode changes.
AO-07 telemetry software webpage:
http://www.qsl.net/k3tz/files/K3TZ_AO-07_Telemetry_Decoder_0.5.zip
[01222006]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: Combination Voice / Digipeater
Digipeater: ON

The current Expedition 12 crew is:
Commander: William McArthur - KC5ACR
Flight Engineer: Valery Tokarev - (no call)

Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Callsigns:
Russian: RS0ISS, RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official Webpage: http://www.rac.ca/ariss
Official Fan club Webpage: http://www.issfanclub.com

APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line is NOT translated from Russian and posted.

This off the AMSAT-BB:
There are reports that William McArthur, KC5ACR, has made contacts in Alaska and aquired Worked All States in Space (WAS-S) on 2 meters.
[01222006]
NNNN
/EX

SB SAT @ AMSAT <W8ISS $ANS-022.S2
WSR 022 Part 2 01/22/2006

AMSAT NEWS SERVICE BULLETIN 022.S2 FROM AMSAT HQ
SILVER SPRING, MD, January 22, 2006
TO ALL RADIO AMATEURS
BID: $ANS-022.S2

XI-V ?O-??
Catalog Number: 28895
Launch Date: October 27, 2005

Status: Operational only within range of Ground station in Japan

Telemetry Downlink: 437.345MHz - FSK 1200bps using AFK protocol
Beacon Downlink: 437.465MHz - CW about 50 WPM

Callsign: JQ1YGW

Oficial Webpage: http://www.space.t.u-tokyo.ac.jp/gs/satinfo-e.html#xi5
Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
[01222006]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: Combination Voice / Digipeater
Digipeater: ON

The current Expedition 12 crew is:
Commander: William McArthur - KC5ACR
Flight Engineer: Valery Tokarev - (no call)

Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Callsigns:
Russian: RS0ISS, RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official Webpage: http://www.rac.ca/ariss
Official Fan club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line is
NOT translated from Russian and posted.

This off the AMSAT-BB:
There are still reports that William McArthur, KC5ACR, still needs Alaska to
getting Worked All States (WAS) on 2 meters. He has been active this past
weekend on a reported frequency of 437.550Mhz.
[01152006]
=====
PCSAT2
Catalog Number: 25544
Launch Date: August 1, 2005

Activated: August 3, 2005
Status: Battery-saving mode
Current Mode: None

Digital Downlink: 435.275 Mhz
Digital Uplink: 145.825 Mhz
PSK-31 Downlink: 435.275 Mhz
PSK-31 Uplink: 29.400 - 29.403 Mhz

Broadcast:
BBS:

Official Webpage: http://web.usna.navy.mil/~bruninga/pcsat2.html

PCSAT2 APRS Packet page: http://www.findu.com/cgi-bin/pcsat2.cgi
[01012006]

```
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Mode: PBBS - V/U
             VOICE REPEATER - V-FM/U-FM

Analog voice downlink:  435.300 MHz FM
                        435.150 MHz FM
Analog voice uplink:    145.880 MHZ FM
                        145.920 MHz FM 67Hz PL tone
                       1268.700 MHz FM 67Hz PL tone

Digital Downlinks:      435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
                       2401.200 MHz FM  38k4 bps, AX.25
Digital Uplink:         145.860 MHz FM, 9k6 Digital, Pacsat Broadcast
                        Protocol (PBP)

Broadcast:              PECHO-11
BBS:                    PECHO-12

Schedule from the AO-51 Command Team:

22 Jan
FM Repeater, V/U
Uplink: 145.920 mhz FM, 67 hz PL Tone
Downlink 435.300 mhz FM
9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 435.150 mhz FM, 9k6 PBP Digital
[01222006]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Operational

General Usage Uplink/Downlink:145.827 MHz 1200 Baud
Special Usage Downlink:       144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

Anyone can work PCSAT-1 with ANY typical 1200 baud packet
station on 145.825.  Just set your path to UNPROTO APRS via
ARISS (the same that you use via ARISS on the ISS or via PCSAT2).
Mobiles with the D700 or the TH-D7 HT APRS radios will see packets
directly on their front panel and can work it from their mobile.
[01012006]
=====
CUTE-1
```

Catalog number: 27844
Launched: June 30,2003

Status: Operational

Uplink: ?
Downlink: 436.8375 CW
             437.4700 1200 FM ax25 or SRLL (ACTIVE only near Japan ?)
Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[01012006]
=====
GO-32 TECHSAT-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Downlink: 435.225 MHz FM (9600-baud FSK)
                  (435.325 n/a - temperature problems)
Uplinks: 145.850, 145.890, 145.930 FM
                  1269.700, 1269.800, 1269.900 FM
Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

Jeff, KB2M, reports November 15th, 2005:
I might be wrong about this, but as I am the only one I see working
GO-32
here goes. If you do a DIR request up on the 145.890 uplink the bird
turns
on. Give it a try....

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[ANS-WSR wishes to thank Jeff, KB2M for this weeks report.]
[11202005]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Semi-operational, the digipeater command is on and open for
APRS users.

Uplink: 145.90 145.92 145.94 145.96 MHz FM
                    (using 1200-baud Manchester FSK)
Downlink: 437.026 MHz SSB (1200-baud PSK)
Mode-S Beacon: 2401.1428 MHz
Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[01012006]

=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational?

Telemetry Downlink: 145.826 MHz. FM (1200-baud AFSK).
approx. 10 days ON, 10 days OFF
Mode-S Beacon: 2401.500 MHz. ... OFF
UHFBeacon: 435.025 MHz. ... OFF

Official webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[01012006]
NNNN
/EX

SB SAT @ AMSAT <W8ISS $ANS-022.S3
WSR 022 Part 3 01/22/2006

AMSAT NEWS SERVICE BULLETIN 022.S3 FROM AMSAT HQ
SILVER SPRING, MD, January 22, 2006
TO ALL RADIO AMATEURS
BID: $ANS-022.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

NCUBE-2 ?O-??
Catalog Number: 28894
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
2407.25
[01012006]
=====
XO-53 SSETI
Catalog Number: 28894
Launch Date: October 27, 2005

Status: In orbit

Uplink/Downlink: 437.250MHz - AX.25 9k6 baud or voice
Beacon: 2401.835MHz - AX.25 38k4 baud or voice

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php

[01012006]
=====

POSAT-1 PO-28
Catalog Number: 22829
Launched : September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 429.950

Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html.
POSAT-1
webpage:http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012006]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launched: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB
Beacon: 145.810 MHz (unmodulated carrier)

AO-10 has been locked into a Mode-B, 70-cm uplink and
2-meter downlink for several years.

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: Downlink only

Uplink: 145.875 145.900 145.925 145.950 MHz FM (1200-baud)
Downlink: 435.808 MHz PSK
Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01012006]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

```
Status: Non-operational

Uplink:   21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB
Beacon:   29.408 MHz
Robot:    29.454 MHz
[05232004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink:      21.260 to  21.300 MHz CW/USB
Downlink:   145.860 to 145.900 MHz CW/USB
Beacon:     145.860 MHz
Robot:      145.908 MHz
[05232004]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink 145.975 MHz FM
Downlink 435.070 MHz FM
[05092004]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink:             145.900 FM 9600-baud FSK
Downlink:           435.120 MHz FM
Broadcast Callsign: UOSAT5-11
BBS:                UOSAT5-12
[01092005]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational?

Uplink:      145.858 to 145.898 MHz CW/USB
Downlink:     29.354 to  29.394 MHz CW/USB
Beacon:       29.352 MHz (intermittent)
SSB meeting frequency:  29.380 MHz (unofficial)
```

John, KD6PAG reports on June 16, 2004 to WSR:
RS-15 beacon seemed to be back in the mode where it's a tone about 5 seconds off and then 5 seconds on this morning.

WSR is looking for more confirmations of RS-15 coming back.

[ANS-WSR thanks John, KD6PAG for RS-15 information]
[06202004]

=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

```
Uplink:             145.84 145.86 145.88 145.90 MHz FM
                   (using 1200-baud Manchester FSK)
CW downlink:        437.125 MHz
Digital downlink:   437.150 MHz SSB (RC-BPSK 1200-baud PSK)
Broadcast Callsign: LUSAT-11
BBS:                LUSAT-12o
```

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[05232004]

=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

```
Uplink:     145.90 to 146.00 MHz CW/LSB
Downlink:   435.80 to 435.90 MHz CW/USB
Beacon:     435.795
```

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[08152004]

=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

```
Uplink:             145.900 MHz FM (9600-baud FSK)
Downlink:           435.170 MHz FM
Broadcast Callsign: HL01-11
BBS:                HL01-12
```

Jim, AA7KC, reports that KO-23's downlink transmitter continues in a

non-operational status.
[05092004]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM (9600-baud FSK)
Downlink: 436.500 MHz FM
Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm

[ANS-WSR has no further information]
[05232004]
=====
SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

STatus: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
          Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz

```
        Mode J Digipeater: 145.825 MHz and 145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[08082004]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink:             145.960 MHz (9600-baud FSK)
Downlink:           437.025 MHz 437.400 MHz
Broadcast Callsign: UO121-11
BBS:                UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA
web site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[05092004]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplink      V-band    145.840 -  145.990 MHz CW/LSB
           U-band    435.550 -  435.800 MHz CW/LSB
          L1-band   1269.250 - 1269.500 MHz CW/LSB
          L2-band   1268.325 - 1268.575 MHz CW/LSB
          S1-band   2400.350 - 2400.600 MHz CW/LSB
Downlink:  S2-band   2401.225 - 2401.475 MHz CW/USB
          K-band 24,048.010 - 24,048.060 MHz CW/USB
Beacon:    2401.323, 24,048.035
[05232004]
-----
SO-42  SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational
Downlink:           437.075 MHz
Broadcast Callsign: SASAT2-11
BBS:                SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[08152004]
=====
SO-41  SAUDISAT-1A
Catalog number: 26545
```

Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz
Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[08152004]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, callsign KE6QMD, as per the user service agreement located at the following
URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Operational

Uplink: 145.850 or 145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz
Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[11202005]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink 435.275 1200-baud AFSK
Downlink 145.825 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01012006]
NNNN
/EX

SB SAT @ AMSAT <W8ISS $ANS-022.S4
WSR 022 Part 4 01/22/2006

AMSAT NEWS SERVICE BULLETIN 022.S4 FROM AMSAT HQ
SILVER SPRING, MD, January 22, 2006
TO ALL RADIO AMATEURS
BID: $ANS-022.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE
PROPOSED FOR LAUNCH AT THIS TIME:

UCISAT ?O-??
Catalog number:
Proposed Launch Date: October 31, 2005

Status: Under Construction

Downlink: Submission in Progress
Uplink: Submission in Progress
Callsign: Submission in Progress
[11272005]
=====
PHASE 3E ?O-??
Catalog Number:
Proposed Launch Date: Early 2006

Status: Under Construction

For the latest project status update please visit the AMSAT-DL
P3-E web page:
http://www.amsat-dl.org/p3e/

[ANS-WSR wishes to thank William Leijenaar, PE1RAH for this week's
report]
[10022005]
=====
CP1 ?o-??
Catalog Number:
Proposed Launch Date: Mid May 2005

```
Proposed Callsign: N6CP
Proposed Transmit Frequency: 436.845
[03272005]
=====
CP2 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.325
[03272005]
=====
HAUSAT1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: D90HP
Proposed Transmit Frequency: 437.465
[03272005]
=====
ICE Cube 1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: W2CXM
Proposed Transmit Frequency: 437.305
[03272005]
=====
ICE Cube 2 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: N2VR
Proposed Transmit Frequency: 437.425
[03272005]
=====
ION ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.505
[03272005]
=====
KUTEsat ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: KC0RMW
Proposed Transmit Frequency: 437.385
[03272005]
=====
MEROPE ?O-??
```

```
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: K7MSU-1
Proposed Transmit Frequency: 145.980
[03272005]
=====
RINCON ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
                   437.345
[03272005]
=====
SACRED ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
[03272005]
=====
SACRED ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
[03272005]
=====
SEEDS ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: JQ1YGU
Proposed Transmit Frequency: 437.485
[03272005]
=====
Mea Huaka ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.405
[03272005]
=====
SUITSAT ?O-??
Catalog Number:
Proposed Release Date: February 2,2006

Proposed Callsign: RS0RS ?
```

Proposed Transmit Frequency: 145.990
Proposed modes : FM Voice Telemetry/Greetings
          FM SSTV

This from Miles Mann, WF1F:
ALL NOTE !!

Since we have just determined that the batteries in SuitSast may last only a few days, suggest prepare now to receive the 1st transmissions so as not to miss out on this Historical event !!!
[ANS-WSR wishes to thank Miles Mann, WF1F]
[01222006]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/amsat/listserv/menu.html

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the
memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen,
G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

From 1664678041561266905
X-Google-Thread: 10e8ad,3f5afd7c0647d375,start
X-Google-Thread: f9f20,3f5afd7c0647d375,start
X-Google-Attributes: gid10e8ad,gidf9f20,public
X-Google-Language: ENGLISH,ASCII
From: "Thierry" <: ->
Newsgroups: rec.radio.amateur.space,sci.space.station
Subject: Listen to SuitSat
Date: Fri, 27 Jan 2006 11:09:03 +0100
Lines: 19
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.2180
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.2180
X-RFC2646: Format=Flowed; Original
NNTP-Posting-Host: tvsurf-habscht128-161.pt.lu
Message-ID: <43d9f140$1@news.vo.lu>
X-Trace: news.vo.lu 1138356544 88.207.128.161 (27 Jan 2006 11:09:04 +0100)
Path: g2news1.google.com!news4.google.com!news.glorb.com!tudelft.nl!
txtfeed1.tudelft.nl!multikabel.net!feed10.multikabel.net!feeder1.cambrium.nl!
feed.tweaknews.nl!npeer.de.kpn-eurorings.net!news.vo.lu!not-for-mail
Xref: g2news1.google.com rec.radio.amateur.space:99 sci.space.station:1440

Hi,

One of the strangest satellites in the history of the space age is about to
go into orbit. Launch date: Feb. 3rd. That's when astronauts onboard the
International Space Station (ISS) will hurl an empty spacesuit overboard.
The spacesuit is the satellite -- "SuitSat" for short, and could be heard on
145.990 FM.
Check its posiiton with NASA J-Pass tool.

Detail on
http://science.nasa.gov/headlines/y2006/26jan_suitsat.htm?list168132

Thierry, ON4SKY
--
Auteur de "Un si�cle de Physique, 1- La Physique Quantique", AEGEUS, 2005
http://www.astrosurf.org/lombry

```
From 3908999913197046017
X-Google-Thread: 10e8ad,3f5afd7c0647d375
X-Google-Thread: f9f20,3f5afd7c0647d375
X-Google-Attributes: gid10e8ad,gidf9f20,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!news4.google.com!
border1.nntp.dca.giganews.com!border2.nntp.dca.giganews.com!nntp.giganews.com!
news-out.readnews.com!news-out.readnews.com!news-xxxfer.readnews.com!
news.misty.com!not-for-mail
From: gsm@mendelson.com (Geoffrey S. Mendelson)
Newsgroups: rec.radio.amateur.space,sci.space.station
Subject: Re: Listen to SuitSat
Date: Fri, 27 Jan 2006 11:21:04 +0000 (UTC)
Organization: MGT Consulting
Lines: 16
Message-ID: <slrndtk05f.54n.gsm@cable.mendelson.com>
References: <43d9f140$1@news.vo.lu>
Reply-To: gsm@mendelson.com
NNTP-Posting-Host: dsl217-132-51-170.bb.netvision.net.il
X-Trace: marvin.misty.com 1138360864 2273 217.132.51.170 (27 Jan 2006 11:21:04
GMT)
X-Complaints-To: abuse@misty.com
NNTP-Posting-Date: Fri, 27 Jan 2006 11:21:04 +0000 (UTC)
User-Agent: slrn/0.9.7.1 (Linux)
Xref: g2news1.google.com rec.radio.amateur.space:100 sci.space.station:1441
```

Thierry wrote:

> Check its posiiton with NASA J-Pass tool.

What do you do if you are NOT in the U.S.?

TIA,

Geoff.

--
Geoffrey S. Mendelson, Jerusalem, Israel gsm@mendelson.com N3OWJ/4X1GM
IL Voice: (07)-7424-1667 IL Fax: 972-2-648-1443 U.S. Voice: 1-215-821-1838
Vist my 'blog at http://geoffstechno.livejournal.com/

```
From 2749755800343888968
X-Google-Thread: 10e8ad,3f5afd7c0647d375
X-Google-Thread: f9f20,3f5afd7c0647d375
X-Google-Attributes: gid10e8ad,gidf9f20,public
X-Google-Language: ENGLISH,ASCII-7-bit
```

```
Path: g2news1.google.com!news2.google.com!news3.google.com!news.glorb.com!nntp-
server.pubsub.com!feeder.news.heanet.ie!feed4.jnfs.ja.net!jnfs.ja.net!
newsfeed.ed.ac.uk!not-for-mail
From: Angus Rae <Angus.Rae@ed.ac.uk>
Newsgroups: rec.radio.amateur.space,sci.space.station
Subject: Re: Listen to SuitSat
Date: Fri, 27 Jan 2006 11:51:24 +0000
Organization: Edinburgh University
Lines: 18
Message-ID: <drd1fp$918$1@scotsman.ed.ac.uk>
References: <43d9f140$1@news.vo.lu> <slrndtk05f.54n.gsm@cable.mendelson.com>
NNTP-Posting-Host: starfury.ucs.ed.ac.uk
Mime-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1; format=flowed
Content-Transfer-Encoding: 7bit
X-Trace: scotsman.ed.ac.uk 1138362681 9256 129.215.200.134 (27 Jan 2006 11:51:21
GMT)
X-Complaints-To: usenet@scotsman.ed.ac.uk
NNTP-Posting-Date: Fri, 27 Jan 2006 11:51:21 +0000 (UTC)
User-Agent: Thunderbird 1.5 (Windows/20051201)
In-Reply-To: <slrndtk05f.54n.gsm@cable.mendelson.com>
Xref: g2news1.google.com rec.radio.amateur.space:101 sci.space.station:1442

Geoffrey S. Mendelson wrote:
> Thierry wrote:
>
>> Check its posiiton with NASA J-Pass tool.
>
> What do you do if you are NOT in the U.S.?

You can still use J-Pass - why do you think it's US only? Enter your
latitude and longitude, or click the "Options" button, click "Find by
name" and look for your closest city on the list - it's in alphabetical
order by country and then city, so you'll need to scroll down to the
correct country before looking for the city.

--
Angus G Rae                        Science & Engineering Support Team
                                                    Computing Services
                                                University of Edinburgh
The above opinions are mine, and Edinburgh University can't have them


From 4541621766017497745
X-Google-Thread: 10e8ad,3f5afd7c0647d375
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!proxad.net!news.wiretrip.org!
border2.nntp.ams.giganews.com!nntp.giganews.com!newsfeeder.wxs.nl!
divide.nova.planet.nl!posting.nova.planet.nl!not-for-mail
From: "CQ" <geenmail@geenmail.net>
Newsgroups: rec.radio.amateur.space
References: <43d9f140$1@news.vo.lu> <slrndtk05f.54n.gsm@cable.mendelson.com>
```

```
Subject: Re: Listen to SuitSat -->PICS & INFO!!!!!!!!!!!!
Date: Sun, 29 Jan 2006 21:10:13 +0100
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2600.0000
x-mimeole: Produced By Microsoft MimeOLE V6.00.2600.0000
Lines: 29
Message-ID: <43dbcfa7$0$12845$ba620dc5@text.nova.planet.nl>
NNTP-Posting-Host: 84.85.169.223
X-Trace: 1138479015 text.nova.planet.nl 12845 84.85.169.223:18064
X-Complaints-To: abuse@planet.nl
Xref: g2news1.google.com rec.radio.amateur.space:102

Suit Sat will travel all over the world! (above many countries).
The speed is: 7km per second (28000km per hour).
In 1,5 hour it made a full orbit arround earth!
Suisat pictures and info: http://pd0rkc.ontwikkel.nl

73's Cor PD0RKC


"Geoffrey S. Mendelson" <gsm@mendelson.com> schreef in bericht
news:slrndtk05f.54n.gsm@cable.mendelson.com...
> Thierry wrote:
>
> > Check its posiiton with NASA J-Pass tool.
>
> What do you do if you are NOT in the U.S.?
>
>
> TIA,
>
> Geoff.
>
>
> --
> Geoffrey S. Mendelson, Jerusalem, Israel gsm@mendelson.com  N3OWJ/4X1GM
> IL Voice: (07)-7424-1667  IL Fax: 972-2-648-1443 U.S. Voice:
1-215-821-1838
> Vist my 'blog at http://geoffstechno.livejournal.com/




From 1215559536231224067
X-Google-Thread: 10e8ad,3f5afd7c0647d375
X-Google-Thread: f9f20,3f5afd7c0647d375
X-Google-Attributes: gid10e8ad,gidf9f20,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!proxad.net!news.wiretrip.org!
border2.nntp.ams.giganews.com!nntp.giganews.com!newsfeeder.wxs.nl!
divide.nova.planet.nl!posting.nova.planet.nl!not-for-mail
Date: Sat, 28 Jan 2006 21:23:15 +0100
```

```
From: Roland <roland_lemmersZPEMM@planet.nl>
User-Agent: Mozilla Thunderbird 1.0 (Windows/20041206)
X-Accept-Language: en-us, en
MIME-Version: 1.0
Newsgroups: rec.radio.amateur.space,sci.space.station
Subject: Re: Listen to SuitSat
References: <43d9f140$1@news.vo.lu> <slrndtk05f.54n.gsm@cable.mendelson.com>
In-Reply-To: <slrndtk05f.54n.gsm@cable.mendelson.com>
Content-Type: text/plain; charset=ISO-8859-1; format=flowed
Content-Transfer-Encoding: 7bit
Lines: 19
Message-ID: <43dbd2ab$0$12846$ba620dc5@text.nova.planet.nl>
NNTP-Posting-Host: 84.84.0.196
X-Trace: 1138479787 text.nova.planet.nl 12846 84.84.0.196:10127
X-Complaints-To: abuse@planet.nl
Xref: g2news1.google.com rec.radio.amateur.space:103 sci.space.station:1447

Geoffrey S. Mendelson wrote:
> Thierry wrote:
>
>
>>Check its posiiton with NASA J-Pass tool.
>
>
> What do you do if you are NOT in the U.S.?
>
>
> TIA,
>
> Geoff.
>
>

http://www.david-taylor.pwp.blueyonder.co.uk/software/wxtrack.htm

download wxtrack and be done with it. As close to idiotproof as it gets.


From -2450137180242946957
X-Google-Thread: 10e8ad,3f5afd7c0647d375
X-Google-Thread: f9f20,3f5afd7c0647d375
X-Google-Attributes: gid10e8ad,gidf9f20,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!news3.google.com!news.glorb.com!
hwmnpeer01.lga!hwmedia!news.highwinds-media.com!hw-filter.lga!fe02.lga.POSTED!
53ab2750!not-for-mail
From: "Tater Schuld" <Tater1337@yahoo.com>
Newsgroups: rec.radio.amateur.space,sci.space.station
References: <43d9f140$1@news.vo.lu>
Subject: Re: Listen to SuitSat
Lines: 11
X-Priority: 3
X-MSMail-Priority: Normal
```

```
X-Newsreader: Microsoft Outlook Express 6.00.2900.2670
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.2670
X-RFC2646: Format=Flowed; Response
Message-ID: <5ZVCf.217$Zl7.88@fe02.lga>
X-Trace:
ejlmlnpfppkfdeplfkhknklmiijhcgiaonjffpmcloecabenonoigfnnklipmpbejmpodcnodglbbnpgho
geneedbllpnapcgmcjjimlalljgdhmbiabkmkgnelklkcdegcmjhhibopfakdb
NNTP-Posting-Date: Sat, 28 Jan 2006 19:43:13 MST
Date: Sat, 28 Jan 2006 20:43:16 -0600
Xref: g2news1.google.com rec.radio.amateur.space:104 sci.space.station:1454
```

> One of the strangest satellites in the history of the space age is about
> to go into orbit. Launch date: Feb. 3rd. That's when astronauts onboard
> the International Space Station (ISS) will hurl an empty spacesuit
> overboard. The spacesuit is the satellite -- "SuitSat" for short, and
> could be heard on 145.990 FM.

is this the audio/telemetry/ID portion or is this the ATV video frequency?
the websites i've googled say so but i thought video needed bigger bandwidth
than what 2 meter can put out.

```
From 3754228060789670388
X-Google-Thread: 10e8ad,3f5afd7c0647d375
X-Google-Thread: f9f20,3f5afd7c0647d375
X-Google-Attributes: gid10e8ad,gidf9f20,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!postnews.google.com!g49g2000cwa.googlegroups.com!not-for-
mail
From: "bradvk2qq" <bradvk2qq@w6ir.com>
Newsgroups: rec.radio.amateur.space,sci.space.station
Subject: Re: Listen to SuitSat
Date: 28 Jan 2006 21:23:03 -0800
Organization: http://groups.google.com
Lines: 6
Message-ID: <1138512183.555628.124990@g49g2000cwa.googlegroups.com>
References: <43d9f140$1@news.vo.lu><5ZVCf.217$Zl7.88@fe02.lga>
NNTP-Posting-Host: 220.233.10.63
Mime-Version: 1.0
Content-Type: text/plain; charset="iso-8859-1"
X-Trace: posting.google.com 1138512190 21786 127.0.0.1 (29 Jan 2006 05:23:10 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Sun, 29 Jan 2006 05:23:10 +0000 (UTC)
In-Reply-To: <5ZVCf.217$Zl7.88@fe02.lga>
User-Agent: G2/0.2
X-HTTP-UserAgent: Mozilla/5.0 (Windows; U; Windows NT 5.1; en-GB; rv:1.7.12)
Gecko/20050919 Firefox/1.0.7,gzip(gfe),gzip(gfe)
Complaints-To: groups-abuse@google.com
Injection-Info: g49g2000cwa.googlegroups.com; posting-host=220.233.10.63;
   posting-account=PGGSQw0AAACzE8jScrKwlKa9UR7luTcr
Xref: g2news1.google.com rec.radio.amateur.space:105 sci.space.station:1455
```

The video will be SSTV - slow scan tv, which occupies a single voice
channel.
When the time comes, I will be monitoring the signal, recording the
speech and sending any sstv pix received on to my sstv webcam at
www.vk2qq.com

```
From -2840095051013091212
X-Google-Thread: 10e8ad,c2e695597a3bacc4,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!news3.google.com!news.glorb.com!
hwmnpeer01.lga!hwmedia!news.highwinds-media.com!bigfeed2.bellsouth.net!
bigfeed.bellsouth.net!bignumber.bellsouth.net!news.bellsouth.net!
bignews2.bellsouth.net.POSTED!987cd569!not-for-mail
From: "tinman4" <tinman4@yahoo.com>
Subject: Uxx ***Hot stuff - check this out !!! Uxx
Newsgroups: rec.radio.amateur.space
Sender: tinman4 <tinman4@yahoo.com>
Organization: Me
X-Priority: 3
X-Library: Indy 9.00.10
X-MimeOLE: Produced By Microsoft MimeOLE V5.50.4133.2400
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 5.50.4133.2400
Lines: 6
Message-ID: <2y1Df.60477$C%3.41869@bignews2.bellsouth.net>
X-Complaints-To: abuse@bellsouth.net
X-Abuse-Info: Please forward a copy of all headers for proper handling
X-Trace:
ogjnolidcdijhjikdbdpiflmbcekedmfhojhikkbagflhcbomadongfbicalchebappiocijlleboaclnk
aobcckglciinfjjoibblifmpmdjkhdakngmmneimggmmdkjpbhidmafeikggdfkpfgbclfkiiafgkf
NNTP-Posting-Date: Sun, 29 Jan 2006 06:20:30 EST
Date: Sat, 28 Jan 2006 12:37:32 -0500
Xref: g2news1.google.com rec.radio.amateur.space:106
```

   http://www.kaneva.com/checkout/stream.aspx?assetId=2017&free=0

```
From -788024503276749427
X-Google-Thread: 10e8ad,ddc7c4b15fcbba7f,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!news4.google.com!
border1.nntp.dca.giganews.com!nntp.giganews.com!local01.nntp.dca.giganews.com!
nntp.forethought.net!news.forethought.net.POSTED!not-for-mail
```

```
NNTP-Posting-Date: Sun, 29 Jan 2006 12:15:37 -0600
From: Rod Anderson <roda@dimensional.com>
Newsgroups: rec.radio.amateur.space
Subject: LL Grace DSP-12 any use?
Date: Sun, 29 Jan 2006 11:15:48 -0700
Message-ID: <qvupt19jqrmjetohv42niluubogmqp7srq@4ax.com>
X-Newsreader: Forte Agent 1.92/32.572
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Lines: 5
NNTP-Posting-Host: 206.124.31.214
X-Trace: sv3-dWa8El5V8D26jKygSpEacuMIzuUX7gj4+pk4Pbgv2FbaF64csCM+
+MDzde6i1vG6RdRge8vWL18aNCF!bNQ/
fGW1RPJecK3YQIFkSvJCdZTI4CbRDLx6pcuwTMVW29Lq5FfNS8s3j+YsWEgmFEDCIo4GbAN/!
AH2RFIdPIPswEEcf
X-Complaints-To: abuse@forethought.net
X-DMCA-Complaints-To: abuse@forethought.net
X-Abuse-and-DMCA-Info: Please be sure to forward a copy of ALL headers
X-Abuse-and-DMCA-Info: Otherwise we will be unable to process your complaint
properly
X-Postfilter: 1.3.32
Xref: g2news1.google.com rec.radio.amateur.space:107

I am selling my DSP-12 on ebay.  Is this TNC usable with any of the
current set of satellites    or is it a useless relic.  I haven't used
it for the last 10 years and can't answer questions about it.

Rod



From -3298205545715600684
X-Google-Thread: 10e8ad,77a855c41a08bf87,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!news3.google.com!news.glorb.com!atl-
c03.usenetserver.com!news.usenetserver.com!elnk-atl-nf1!newsfeed.earthlink.net!
stamper.news.atl.earthlink.net!newsread2.news.atl.earthlink.net.POSTED!46041641!
not-for-mail
From: "JoAnne Maenpaa" <wb9jej_no-spam@earthlink.net>
Newsgroups: rec.radio.amateur.space
Subject: WSR-029 AMSAT Weekly Satellite Report
Lines: 1150
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <0U2Ef.8948$rH5.7690@newsread2.news.atl.earthlink.net>
Date: Wed, 01 Feb 2006 13:41:16 GMT
NNTP-Posting-Host: 68.165.59.199
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread2.news.atl.earthlink.net 1138801276 68.165.59.199 (Wed, 01 Feb
2006 05:41:16 PST)
```

NNTP-Posting-Date: Wed, 01 Feb 2006 05:41:16 PST
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news1.google.com rec.radio.amateur.space:108

This report is organized into 4 parts.
Part 1 - operational analog amateur satellites.
Part 2 - operational digital amateur satellites.
Part 3 - non - operational satellites
Part 4 - proposed satellites

SB SAT @ AMSAT <W8ISS ANS-029.S1
WSR 029 Part 1 01/29/2006

AMSAT NEWS SERVICE BULLETIN 029.S1 FROM AMSAT HQ
SILVER SPRING, MD, January 29, 2006
TO ALL RADIO AMATEURS
BID: $ANS-029.S1

VO-52 HAMSAT
Catalog Number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/V - Indian Transponder

Proposed frequencies:

Indian Transponder:
Uplink : 435.220 MHz to 435.280 MHz LSB/CW
Downlink: 145.870 MHz to 145.930 MHz USB/CW
Beacom : 145.859330 MHZ CW

Dutch Transponder:
Uplink : 435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW
Beacon : 145.860MHz 12WPM with CW message

Official Webpage: http://www.amsat.in/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is
active. Each transponder has a different beacon, see below:

Indian transponder - unmodulated carrier on
145.936MHz.
Dutch Transponder - CW message on 145.860MHz.
[01152006]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing

```
Curent Mode: PBBS - V/U
             VOICE REPEATER - V-FM/U-FM

Analog voice downlink:  435.300 MHz FM
                        435.150 MHz FM
Analog voice uplink:    145.880 MHZ FM
                        145.880 MHz USB
                        145.920 MHz FM 67Hz PL tone
                       1268.700 MHz FM 67Hz PL tone

Digital Downlinks:      435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
                       2401.200 MHz FM  38k4 bps, AX.25
Digital Uplink:         145.860 MHz FM, 9k6 Digital, Pacsat Broadcast
                        Protocol (PBP)

Broadcast:              PECHO-11
BBS:                    PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/

Schedule from the AO-51 Command Team:

Feb 1
FM Repeater, V/U
Uplink: 145.920 mhz FM, 67 hz PL Tone
Downlink 435.300 mhz FM
9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
TLM Data Active, Digipeater ON
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 435.150 mhz FM, 9k6 PBP Digital

Feb 5
FM Repeater, V/S
Uplink: 145.920 mhz FM, No PL Tone
Downlink 2401.200 mhz FM

Feb 12
QRP FM Repeater, V/U
Uplink: 145.880 mhz FM, no PL Tone
Downlink 435.150 mhz FM
FM Repeater, V/U
Uplink: 145.920 mhz FM, 67 hz PL Tone
Downlink 435.300 mhz FM

Feb 19
9k6 Digital, V/U, High Power, PBP BBS (Pacsat Broadcast Protocol BBS)
TLM Data Active, Digipeater ON
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 435.150 mhz FM, 9k6 PBP Digital
Digipeater will be Turned ON

Feb 26
FM Repeater, V/U
```

```
Uplink: 145.920 mhz FM, 67 hz PL Tone
Downlink 435.300 mhz FM
9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
TLM Data Active
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 435.150 mhz FM, 9k6 PBP Digital
[01292006]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Uplink:    145.850 MHz (67.0 Hz PL tone) (See below for operating
         procedures)
Downlink:  436.795 MHz

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

There have been unconfirmed reports on the amsat-bb remailer that SO-50
has
shifted downlink frequency as much as 5khz up. This both from Europe.

To switch the transmitter on, you need to send a CTCSS tone of  74.4 Hz.
The
order of operation is thus: (allow for Doppler as necessary)

1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute
timer
   on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the
repeater
   on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset
the 10
   minute timer.
[01012006]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: OPERATIONAL

Voice/CW Mode JA
Uplink:     145.90 to 146.00 MHz CW/LSB
Downlink:   435.80 to 435.90 MHz CW/USB
Beacon:     435.795 MHz

Digital Mode JD
Uplink:     145.850 145.870 145.910 MHz FM
```

Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

unOfficial Webpage: http://www.amsat.org/amsat/sats/n7hpr/fo29.html
[11132005]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Uplink: 145.850 MHz FM
Downlink: 436.795 MHz FM

Official Webpage: http://www.ao27.org
[01012006]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational until March 14th

```
Uplink:     145.850 to 145.950 MHz CW/USB Mode A
            432.125 to 432.175 MHz CW/LSB Mode B
Downlink:    29.400 to  29.500 MHz CW/USB Mode A (1W PEP)
            145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
            145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons:     29.502 MHz
            145.972 MHz
            435.100 MHz
           2304.100 MHz
```

AO-7's orbit no longer goes into eclipse, so it is operating on a 24 hour timer that changes the mode schedule at approximately 0900z each day. The timer alternates the satellite's operational mode between Mode A and Mode B.

Please use QRP when operating on AO-7! There are no batteries, and excessive power may cause unexpected behavior and possibly damage the satellite. Mode B users are likely to experience a Mode change from Mode B to Mode C if the buss voltage drops. This will be marked by a decrease in signal strength from AO-7 due to the lower power of Mode C.

AO-7 is expected to remain on this schedule until approximately 14 March

2006
at which time it will re-enter a period of eclipse on each orbit.

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php
The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
AO-7 users are requested to log their contacts and observations about
AO-7,
especially any unexpected mode changes.
AO-07 telemetry software webpage:
http://www.qsl.net/k3tz/files/K3TZ_AO-07_Telemetry_Decoder_0.5.zip
[01222006]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: Voice
Digipeater: OFF

The current Expedition 12 crew is:
Commander: William McArthur - KC5ACR
Flight Engineer: Valery Tokarev - (no call)

Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Callsigns:
Russian: RS0ISS, RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official Webpage: http://www.rac.ca/ariss
Official Fan club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is

NOT translated from Russian and posted.

Until Suitsat is pushed out the airlock, currently scheduled for
February 3,
the ISS packet will be turned off.
[01292006]
NNNN
/EX

SB SAT @ AMSAT <W8ISS $ANS-029.S2
WSR 029 Part 2 01/29/2006

AMSAT NEWS SERVICE BULLETIN 029.S2 FROM AMSAT HQ
SILVER SPRING, MD, Jamuary 29, 2006
TO ALL RADIO AMATEURS
BID: $ANS-029.S2

XI-V ?O-??
Catalog Number: 28895
Launch Date: October 27, 2005

Status: Operational only within range of Ground station in Japan

Telemetry Downlink: 437.345MHz - FSK 1200bps using AFK protocol
Beacon Downlink: 437.465MHz - CW about 50 WPM

Callsign: JQ1YGW

Oficial Webpage: http://www.space.t.u-tokyo.ac.jp/gs/satinfo-e.html#xi5
Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
[01222006]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: Voice
Digipeater: OFF

The current Expedition 12 crew is:
Commander: William McArthur - KC5ACR
Flight Engineer: Valery Tokarev - (no call)

Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Callsigns:
Russian: RS0ISS, RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official Webpage: http://www.rac.ca/ariss
Official Fan club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is NOT translated from Russian and posted.

Until Suitsat is pushed out the airlock, currently scheduled for
February 3,
the ISS packet will be turned off.
[01292006]
=====
PCSAT2
Catalog Number: 25544
Launch Date: August 1, 2005

Activated: August 3, 2005
Status: Battery-saving mode
Current Mode: None

Digital Downlink: 435.275 Mhz
Digital Uplink: 145.825 Mhz
PSK-31 Downlink: 435.275 Mhz
PSK-31 Uplink: 29.400 - 29.403 Mhz

Broadcast:
BBS:

Official Webpage: http://web.usna.navy.mil/~bruninga/pcsat2.html

PCSAT2 APRS Packet page: http://www.findu.com/cgi-bin/pcsat2.cgi
[01012006]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Mode: PBBS - V/U
             VOICE REPEATER - V-FM/U-FM

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
Analog voice uplink: 145.880 MHZ FM
145.920 MHz FM 67Hz PL tone
1268.700 MHz FM 67Hz PL tone

Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast Protocol (PBP)

Broadcast: PECHO-11
BBS: PECHO-12

Schedule from the AO-51 Command Team:

Feb 1
FM Repeater, V/U
Uplink: 145.920 mhz FM, 67 hz PL Tone
Downlink 435.300 mhz FM
9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
TLM Data Active, Digipeater ON
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 435.150 mhz FM, 9k6 PBP Digital

Feb 5
FM Repeater, V/S
Uplink: 145.920 mhz FM, No PL Tone
Downlink 2401.200 mhz FM

Feb 12
QRP FM Repeater, V/U
Uplink: 145.880 mhz FM, no PL Tone
Downlink 435.150 mhz FM
FM Repeater, V/U
Uplink: 145.920 mhz FM, 67 hz PL Tone
Downlink 435.300 mhz FM

Feb 19
9k6 Digital, V/U, High Power, PBP BBS (Pacsat Broadcast Protocol BBS)
TLM Data Active, Digipeater ON
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 435.150 mhz FM, 9k6 PBP Digital
Digipeater will be Turned ON

Feb 26
FM Repeater, V/U
Uplink: 145.920 mhz FM, 67 hz PL Tone
Downlink 435.300 mhz FM
9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
TLM Data Active
Uplink: 145.860 mhz FM, 9k6 PBP Digital

```
Downlink: 435.150 mhz FM, 9k6 PBP Digital
[01292006]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Operational

General Usage Uplink/Downlink:145.827 MHz 1200 Baud
Special Usage Downlink:       144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

Anyone can work PCSAT-1 with ANY typical 1200 baud packet
station on 145.825.  Just set your path to UNPROTO APRS via
ARISS (the same that you use via ARISS on the ISS or via PCSAT2).
Mobiles with the D700 or the TH-D7 HT APRS radios will see packets
directly on their front panel and can work it from their mobile.
[01012006]
=====
CUTE-1
Catalog number: 27844
Launched: June 30,2003

Status: Operational

Uplink:          ?
Downlink:     436.8375 CW
             437.4700 1200 FM ax25 or SRLL (ACTIVE only near Japan ? )
Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[01012006]
=====
GO-32 TECHSAT-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Downlink:           435.225 MHz FM (9600-baud FSK)
                  (435.325 n/a - temperature problems)
Uplinks:            145.850, 145.890, 145.930 FM
                  1269.700, 1269.800, 1269.900 FM
Broadcast Callsign: 4XTECH-11
BBS Callsign:       4XTECH-12

Jeff, KB2M, reports November 15th, 2005:
I might be wrong about this, but as I am the only one I see working
GO-32
here goes. If you do a DIR request up on the 145.890 uplink the bird
turns
on. Give it a try....
```

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[ANS-WSR wishes to thank Jeff, KB2M for this weeks report.]
[11202005]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Semi-operational, the digipeater command is on and open for APRS users.

Uplink: 145.90 145.92 145.94 145.96 MHz FM
(using 1200-baud Manchester FSK)
Downlink: 437.026 MHz SSB (1200-baud PSK)
Mode-S Beacon: 2401.1428 MHz
Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[01012006]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational?

Telemetry Downlink: 145.826 MHz. FM (1200-baud AFSK).
approx. 10 days ON, 10 days OFF
Mode-S Beacon: 2401.500 MHz. ... OFF
UHFBeacon: 435.025 MHz. ... OFF

Official webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm

This from Clive, G3CWV:

Users of OSCAR-11 may be interested in recent additions to my website. Firstly UCAP, this is a simple OSCAR-11 capture program for Windows, and may be used instead of CTERM. It features an accurate time stamp facility, which is useful for checking the satellite's real time clock.

Secondly, the news and telemetry archives have been updated to include all the 2005 data. The URL is http://www.users.zetnet.co.uk/clivew

During the period 14 December 2005 to 23 January 2006 the VHF beacon on 145.826 MHz. has been heard from 23 to 31 December and from 11 to 21 January.

Signals during the December passes were very variable. Sometimes received at good strength, at other times they were inaudible , even with the BFO switched ON (ie. in CW mode). Signals during the January passes tended to be much stronger, and good copy was obtained on most passes.

The on-board clock continues to accumulate a very large error. On 21 January it was 22.14 days slow, having lost 0.33 days (8 hours) since 09 December. However, the rate of change of clock error appears to vary between zero and half an hour per day, over short periods. The greatest changes seem to correspond with poor signals, which suggests that the clock may slow or stop when the battery voltage is low.

All the analogue telemetry channels, 0 to 59 are zero, ie they have failed.
The status channels 60 to 67 are still working.

The satellite is now in continuous sunlight until around 06 May, when eclipses will start again. This should help the satellite to continue transmitting, although continuous sunlight can cause problems due to excessive temperatures. Power supply problems can be caused by poor pointing attitude, ie the sunlight illuminating the ends of the satellite, instead of the solar arrays.

The watchdog timer now appears to have resumed operation on the 20 day cycle, ie. approximately ten days ON followed by 10 days OFF. However, at any time, poor solar attitude, and battery problems, may result in a low 14 volt line supply, which may cause the beacon to switch OFF prematurely, and reset the watchdog timer cycle.

The Beacon frequencies are -

VHF 145.826 MHz. AFSK FM ASCII Telemetry

UHF 435.025 MHz. OFF

S-band 2401.5 MHz. OFF

Listeners to OSCAR-11 may be interested in visiting my website which contains an archive of news & telemetry data. It also contains details about using a soundcard or hardware demodulators for data capture. There is software for capturing data, and decoding ASCII telemetry. The URL is www.users.zetnet.co.uk/clivew/

If you place this bulletin on a terrestrial packet network, please
use the bulletin identifier $BID:U2RPT117.CWV, to prevent duplication.
[01292006]
NNNN
/EX

SB SAT @ AMSAT <W8ISS $ANS-029.S3
WSR 029 Part 3 01/29/2006

AMSAT NEWS SERVICE BULLETIN 029.S3 FROM AMSAT HQ
SILVER SPRING, MD, January 29, 2006
TO ALL RADIO AMATEURS
BID: $ANS-029.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

NCUBE-2 ?O-??
Catalog Number: 28894
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
2407.25
[01012006]
=====
XO-53 SSETI
Catalog Number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 FM 67Hz CTCSS
Voice Downlink: 2401.835 FM
Packet Up/Downlink: 437.250 9k6 packet
Packet Downlink 2401.835 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01292006]
=====
POSAT-1 PO-28
Catalog Number: 22829
Launched : September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 429.950

Uplink: Not until handover back to Amatuer usage

```
Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html.
POSAT-1
webpage:http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012006]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launched: June 16, 1983

Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB
Beacon:   145.810 MHz (unmodulated carrier)

AO-10 has been locked into a Mode-B, 70-cm uplink and
2-meter downlink for several years.

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: Downlink only

Uplink:             145.875 145.900 145.925 145.950 MHz FM (1200-baud)
Downlink:           435.808 MHz PSK
Broadcast Callsign: ITMSAT-11
BBS:                ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01012006]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink:   21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB
Beacon:   29.408 MHz
Robot:    29.454 MHz
[05232004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink:      21.260 to  21.300 MHz CW/USB
Downlink:   145.860 to 145.900 MHz CW/USB
Beacon:     145.860 MHz
Robot:      145.908 MHz
[05232004]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink 145.975 MHz FM
Downlink 435.070 MHz FM
[05092004]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink:             145.900 FM 9600-baud FSK
Downlink:           435.120 MHz FM
Broadcast Callsign: UOSAT5-11
BBS:                UOSAT5-12
[01092005]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational?

Uplink:      145.858 to 145.898 MHz CW/USB
Downlink:     29.354 to  29.394 MHz CW/USB
Beacon:       29.352 MHz (intermittent)
SSB meeting frequency:  29.380 MHz (unofficial)
[06202004]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplink:             145.84 145.86 145.88 145.90 MHz FM
```

```
                    (using 1200-baud Manchester FSK)
CW downlink:        437.125 MHz
Digital downlink:   437.150 MHz SSB (RC-BPSK 1200-baud PSK)
Broadcast Callsign: LUSAT-11
BBS:                LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[05232004]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Uplink:     145.90 to 146.00 MHz CW/LSB
Downlink:   435.80 to 435.90 MHz CW/USB
Beacon:     435.795

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[08152004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink:             145.900 MHz FM (9600-baud FSK)
Downlink:           435.170 MHz FM
Broadcast Callsign: HL01-11
BBS:                HL01-12

Jim, AA7KC, reports that KO-23's downlink transmitter continues in a
non-operational status.
[05092004]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink:             145.980 MHz FM (9600-baud FSK)
Downlink:           436.500 MHz FM
Broadcast Callsign: HL02-11
BBS:                HL02-12
[05092004]
=====
PO-34 PANSAT
Catalog number: 25520
```

```
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm

[ANS-WSR has no further information]
[05232004]
=====
SO-35 SUNSAT
Catalog Number:     ?
Launched:February 23, 1999

STatus: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
         Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
        Mode J Digipeater: 145.825 MHz and 145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[08082004]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink:             145.960 MHz (9600-baud FSK)
Downlink:           437.025 MHz 437.400 MHz
Broadcast Callsign: UO121-11
BBS:                UO121-12
```

```
The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA
web site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[05092004]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplink      V-band    145.840 -  145.990 MHz CW/LSB
           U-band    435.550 -  435.800 MHz CW/LSB
          L1-band   1269.250 - 1269.500 MHz CW/LSB
          L2-band   1268.325 - 1268.575 MHz CW/LSB
          S1-band   2400.350 - 2400.600 MHz CW/LSB
Downlink:  S2-band   2401.225 - 2401.475 MHz CW/USB
          K-band 24,048.010 - 24,048.060 MHz CW/USB
Beacon:    2401.323, 24,048.035
[05232004]
-----
SO-42  SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational
Downlink:           437.075 MHz
Broadcast Callsign: SASAT2-11
BBS:                SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[08152004]
=====
SO-41  SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink:             145.850 MHz
Downlink:           436.775 MHz
Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[08152004]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001
```

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, callsign KE6QMD, as per the user service agreement located at the following
URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Operational

```
Uplink:             145.850 or 145.925 MHz 9600-baud FSK
Downlink:           437.325 MHz
Broadcast callsign: MYSAT3-11
BBS:                MYSAT3-12
```

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[11202005]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink 435.275 1200-baud AFSK
Downlink 145.825 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01012006]
NNNN
/EX

SB SAT @ AMSAT <W8ISS $ANS-029.S4
WSR 029 Part 4 01/29/2006

AMSAT NEWS SERVICE BULLETIN 029.S4 FROM AMSAT HQ

SILVER SPRING, MD, January 29, 2006
TO ALL RADIO AMATEURS
BID: $ANS-029.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE PROPOSED FOR LAUNCH AT THIS TIME:

UCISAT ?O-??
Catalog number:
Proposed Launch Date: October 31, 2005

Status: Under Construction

Downlink: Submission in Progress
Uplink: Submission in Progress
Callsign: Submission in Progress
[11272005]
=====
PHASE 3E ?O-??
Catalog Number:
Proposed Launch Date: Early 2006

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/

[ANS-WSR wishes to thank William Leijenaar, PE1RAH for this week's report]
[10022005]
=====
CP1 ?o-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: N6CP
Proposed Transmit Frequency: 436.845
[03272005]
=====
CP2 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.325
[03272005]
=====
HAUSAT1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: D90HP

```
Proposed Transmit Frequency: 437.465
[03272005]
=====
ICE Cube 1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: W2CXM
Proposed Transmit Frequency: 437.305
[03272005]
=====
ICE Cube 2 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: N2VR
Proposed Transmit Frequency: 437.425
[03272005]
=====
ION ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.505
[03272005]
=====
KUTEsat ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: KC0RMW
Proposed Transmit Frequency: 437.385
[03272005]
=====
MEROPE ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: K7MSU-1
Proposed Transmit Frequency: 145.980
[03272005]
=====
RINCON ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
                   437.345
[03272005]
=====
SACRED ?O-??
```

Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
[03272005]

=====
SACRED ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
[03272005]

=====
SEEDS ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: JQ1YGU
Proposed Transmit Frequency: 437.485
[03272005]

=====
Mea Huaka ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.405
[03272005]

=====
SUITSAT ?O-??
Catalog Number:
Proposed Release Date: February 3,2006

Proposed Callsign: RS0RS
Proposed Transmit Frequency: 145.990
Proposed modes : FM Voice Telemetry/Greetings
          FM SSTV

[01292006]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/amsat/listserv/menu.html

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

From -5818354554520216926
X-Google-Thread: 10e8ad,284a97a814c410b8,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!news3.google.com!news.glorb.com!atl-c03.usenetserver.com!news.usenetserver.com!elnk-atl-nf1!newsfeed.earthlink.net!stamper.news.atl.earthlink.net!newsread2.news.atl.earthlink.net.POSTED!46041641!not-for-mail
From: "JoAnne Maenpaa" <wb9jej_no-spam@earthlink.net>
Newsgroups: rec.radio.amateur.space

Subject: ANS-029 AMSAT News Service Weekly Bulletin
Lines: 382
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <5U2Ef.8949$rH5.1378@newsread2.news.atl.earthlink.net>
Date: Wed, 01 Feb 2006 13:41:21 GMT
NNTP-Posting-Host: 68.165.59.199
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread2.news.atl.earthlink.net 1138801281 68.165.59.199 (Wed, 01 Feb 2006 05:41:21 PST)
NNTP-Posting-Date: Wed, 01 Feb 2006 05:41:21 PST
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news1.google.com rec.radio.amateur.space:109

AMSAT NEWS SERVICE
ANS-029

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

***** AMSAT 2006 Space Symposium *****
The AMSAT web team has posted informational pages on the AMSAT web site.
You can find the announcement with many links at:
http://www.amsat.org/amsat-new/symposium

Future announcements including the Call For Papers, Online Registration and Online Hotel Registration will be available approximately 1 April 2006.

****

In this edition:

* SuitSat to be deployed Feb. 3rd
* ISS Contacts West Point
* Ship to be named USS Alan Shepard
* OSCAR-11 Report
* ARISS Status January 23, 2006

SB SAT @ AMSAT $ANS-029.01
SuitSat Release on February 3 - Are You Ready?

AMSAT News Service Bulletin 029.01
>From AMSAT HQ SILVER SPRING, MD.
January 29, 2006
To All RADIO AMATEURS

BID: $ANS-029.01

Frank Bauer, KA3HDO, who is the ARISS International Chairman and AMSAT's V.P. for Human Spaceflight Programs, reminds us if all goes well, SuitSat will be deployed in 5 days. Are you ready?

Have you talked to a school in your area about SuitSat? Or a student group? Is your SSTV receive capability ready for the challenge?

SuitSat will be deployed during a Russian EVA scheduled to take place on Friday, February 3 at approximately 22:20 UTC. NASA TV will provide live coverage starting at 21:30 UTC. For digital downlink information and access to NASA TV's Public Channel on the Web in RealPlayer, RealAudio, or Windows Media Player formats, visit http://www.nasa.gov/ntv.

Russian Cosmonaut Tokarev will carefully jettison SuitSat-1 by pushing the suit away at about a 30-degree angle upward and about 10 degrees to the left of the back of the station.

Once activated, those who hear SuitSat transmissions on 145.99 MHz are asked to enter their realtime data on the SuitSat website, http://www.suitsat.org/ so that participants around the world can track the satellite.

Educational Outreach reports (at schools or informal education sites) as well as Slow Scan TV images can be sent to suitsat@comcast.net. This information will be compiled by the ARISS team.

Other information on SuitSat can be found on:

http://www.amsat.org (includes a countdown timer to SuitSat release)
http://www.rac.ca/ariss
http://www.issfanclub.com
http://http://www.amsat.org/amsat/archive/sarex/48hour/threads.html

NASA Education Website information for students:
http://www.nasa.gov/audience/forstudents/k-4/home/index.html
http://www.nasa.gov/audience/forstudents/5-8/features/index.html
http://www.nasa.gov/audience/forstudents/9-12/features/index.html
http://www.nasa.gov/audience/forstudents/postsecondary/features/index.html

SuitSat-1, called Radioskaf or Radio Sputnik in Russian, is sponsored by ARISS (Amateur Radio on the International Space Station), an international working group made up of volunteers from national amateur radio societies, including the Radio Amateur Satellite Corporation.

The Russian space company, Energia, led the development of SuitSat and has trained the crew for the deployment mission.

[ANS thanks Frank, KA3HDO and the ARISS team for the above information]

/EX

SB SAT @ AMSAT $ANS-029.02
ISS Contacts West Point

AMSAT News Service Bulletin 029.02
>From AMSAT HQ SILVER SPRING, MD.
January 29, 2006
To All RADIO AMATEURS
BID: $ANS-029.02

Last January 26th, The ISS conducted a QSO with the U.S. Military Academy, West Point.   Cmdr. Bill McCarthur talked with his "Alma Mater" at 13:13 UTC. An interesting contact sparking interest in space flight with many Corp Cadets.
Bill has been quite active and using his time well to communicate with many during his spare time. He even has completed WAS and WAC from the ISS.
ARISS offers an opportunity for students to experience the excitement of Amateur Radio by talking directly with crewmembers on-board the International Space Station. Teachers, parents and communities see, first hand, how Amateur Radio and crewmembers on ISS can energize youngsters' interest in science, technology, and learning. Further information on the ARISS program is available on the website
http://www.rac.ca/ariss
(graciously hosted by the Radio Amateurs of Canada).

Thank you & 73,
Kenneth - N5VHO

[ANS thanks Ken, N5VHO, for the above information]

/EX

SB SAT @ AMSAT $ANS-029.03
Ship to be named USS Alan Shepard

AMSAT News Service Bulletin 029.03
>From AMSAT HQ SILVER SPRING, MD.
January 29, 2006
To All RADIO AMATEURS
BID: $ANS-029.03

The following article was in the The EAGLE-TRIBUNE Newspaper(N.Andover,Ma) and reprinted with their permission.

Ship to be named USS Alan Shepard

By John Basilesco
Staff writer

DERRY, N.H. -- A new U.S. Navy ship will be named the USS Alan

Shepard in honor of the accomplished Derry native and first American in space. The Navy will name the vessel, which is about to be built, after the famous astronaut, who grew up in East Derry and graduated from Pinkerton Academy.

The 1,000-foot combat support ship will be built in San Diego and delivered to Navy by March 2007. U.S. Sens. Judd Gregg and John Sununu and Congressmen Charles Bass and Jeb Bradley, all of New Hampshire, made the announcement yesterday. "I think it's great,'' said state Rep. George Katsakiores, R-Derry. "It's quite an honor to have a ship named after you; it's a national honor.''

Katsakiores, 82, attended Pinkerton Academy with Shepard. "I knew him very well because he used to live in East Derry and his sister, Pauline, was in my class at Pinkerton,'' Katsakiores said.

Shepard graduated in 1940 and Katsakiores graduated in 1942. Katsakiores recalls having a full house at his bar and restaurant in Derry in 1961 with everyone glued to a 10-inch black-and-white television watching Shepard blast off into space. "We applaud the Navy's decision to honor the legacy and contributions of New Hampshire's native son Alan Shepard Jr. by naming one of the new combat support ships after him,'' Gregg, Sununu, Bass and Bradley said in a joint statement.

"Alan Shepard led a distinguished career in the U.S. Navy and at NASA, and naming a ship after him will be a fitting tribute to one of the nation's greatest pilots and astronauts. The USS Alan Shepard will play an important role in providing for our Navy's readiness and allow the Navy to maintain a forward presence in the 21st Century.''

Along with distinguishing himself as a pioneer in America's efforts to explore space, Shepard was one of only 12 Americans to walk on the moon. Following his 1961 space flight, Shepard battled an inner ear disorder before soaring back into space in 1974 as commander of the Apollo 14 mission to the moon. He spent 33 hours on the moon during this third lunar landing mission and became the only lunar golfer.

He died from leukemia at the age of 74 in 1998 while living in Houston, Texas. Three years later, he was honored on the 40th anniversary of his historic space flight when the Derry post office on Tsienneto Road was named the Alan B. Shepard Jr. Post Office Building. A section of Interstate 93 is also named after him. The combat support ship will deliver supplies, transfer cargo and provide logistic support to other Navy vessels.

[ANS thanks Arthur, N1ORC, for the above information]

/EX

SB SAT @ AMSAT $ANS-029.04
OSCAR 11 Report
January 23, 2006

AMSAT News Service Bulletin 029.04
>From AMSAT HQ SILVER SPRING, MD.
January 29, 2006
To All RADIO AMATEURS

BID: $ANS-029.04

OSCAR-11 REPORT

24 January 2006

Users of OSCAR-11 may be interested in recent additions to my website. Firstly UCAP, this is a simple OSCAR-11 capture program for Windows, and may be used instead of CTERM. It features an accurate time stamp facility, which is useful for checking the satellite's real time clock.

Secondly, the news and telemetry archives have been updated to include all the 2005 data. The URL is www.users.zetnet.co.uk/clivew

During the period 14 December 2005 to 23 January 2006 the VHF beacon on 145.826 MHz. has been heard from 23 to 31 December and from 11 to 21 January.

Signals during the December passes were very variable. Sometimes received at good strength, at other times they were inaudible , even with the BFO switched ON (ie. in CW mode). Signals during the January passes tended to be much stronger, and good copy was obtained on most passes.

The on-board clock continues to accumulate a very large error. On 21 January it was 22.14 days slow, having lost 0.33 days (8 hours) since 09 December. However, the rate of change of clock error appears to vary between zero and half an hour per day, over short periods. The greatest changes seem to correspond with poor signals, which suggests that the clock may slow or stop when the battery voltage is low.

All the analogue telemetry channels, 0 to 59 are zero, ie they have failed. The status channels 60 to 67 are still working.

The satellite is now in continuous sunlight until around 06 May, when eclipses will start again. This should help the satellite to continue transmitting, although continuous sunlight can cause problems due to excessive temperatures. Power supply problems can be caused by poor pointing attitude, ie the sunlight illuminating the ends of the satellite, instead of the solar arrays.

The watchdog timer now appears to have resumed operation on the 20 day cycle, ie. approximately ten days ON followed by 10 days OFF. However, at any time, poor solar attitude, and battery problems, may result in a low 14 volt line supply, which may cause the beacon to switch OFF prematurely, and reset the watchdog timer cycle.

The Beacon frequencies are -
VHF 145.826 MHz. AFSK FM ASCII Telemetry

UHF 435.025 MHz. OFF

S-band 2401.5 MHz. OFF

Listeners to OSCAR-11 may be interested in visiting my website which contains an archive of news & telemetry data. It also contains details about using a soundcard or hardware demodulators for data capture. There is software for capturing data, and decoding ASCII telemetry. The URL is www.users.zetnet.co.uk/clivew/

If you place this bulletin on a terrestrial packet network, please use the bulletin identifier $BID:U2RPT117.CWV, to prevent duplication.

73 Clive G3CWV

[ANS thanks Clive, G3CWV, for the above information]

/EX

SB SAT @ AMSAT $ANS-029.05
ARISS Status
January 23, 2006

AMSAT News Service Bulletin 029.05
>From AMSAT HQ SILVER SPRING, MD.
January 29, 2006
To All RADIO AMATEURS
BID: $ANS-029.05

ARISS Status
January 23, 2006

1. Georgia Tech Contact Successful

On January 19, eight students from Georgia Tech in Atlanta, Georgia had the opportunity to speak with alumnus Bill McArthur, KC5ACR. Fifteen questions were asked and answered as at least 100 visitors gathered in the campus theater to listen in. Campus news organizations covered the event, as did the local CBS and FOX affiliates, and campus radio station WREK carried the contact live and streamed audio on its website. Announcements of the event on local nets allowed other radio operators in the area to listen in. Radio coordinator Alexander Carver remarked, "Needless to say we all had a blast. Everyone walked out of the room with a grin from ear to ear. It's not often we get to speak to an alum 200 miles straight up."

2. ARRL Article on Peterson, St. Albert School Contacts

ARRL ran an article covering the Peterson Elementary School and St Albert the Great School contacts. "ISS Commander Visits Home via Ham Radio, Talks Space Trash with Ohio Kids" may be found at:
http://www.arrl.org/news/stories/2006/01/19/1/?nc=1

3. McArthur Completes "Worked All States"

Bill McArthur, KC5ACR, worked a station in Alaska over the weekend, completing his Worked All States award. He continues to pursue his DXCC award, having worked 68 countries as of January 17, and is looking for more - including those in the Caribbean.

4. SuitSat Receives Media Attention

Aviation Week and Space Technology, the premier U.S. Weekly aviation and space magazine read by thousands of engineers and leaders, worldwide, in the aerospace field, is planning to publish an article on SuitSat. ARISS Chairman Frank Bauer provided his SuitSat paper to the publication for background information on the satellite. The article is expected to run in the next week or two.

AMSAT SM (Sweden) has posted a SuitSat article on its website with links to sites with other SuitSat information including video, papers, and articles. See: http://www.amsat.se/cgi-bin/main/index.pl

The ARRL Journal published a SuitSat article this month which intrigued scouts attending the annual Boy Scouts Radio Merit Badge Day at the Sarnoff Corporation HQ in Princeton, NJ.   The Scouts were very excited about the upcoming satellite and many expressed an interest not only in the project, but also in becoming licensed radio amateurs.

5. SuitSat EVA and Website

SuitSat will be deployed during a Russian EVA scheduled to take place on Friday, February 3 at approximately 22:20 UTC. Once activated, those who hear SuitSat transmissions are asked to enter their data on the SuitSat website, www.suitsat.org so that participants around the world can track the satellite. Educational Outreach reports (at schools or informal education sites) as well as Slow Scan TV images can be sent to suitsat@comcast.net. This information will be compiled by the ARISS team.

6. Astronaut Training Status

On Wednesday, January 11, astronaut Garrett Reismann took and passed his amateur radio license exam. He has been issued the callsign KE5HAE.

On January 17, Clay Anderson, KD5PLA, attended a one hour refresher session with Kenneth Ransom at JSC. The session covered school contact procedures, general operating practices, and some hands on time spent practicing with the on board training hardware.

7. ARRL Article on Upcoming AMSAT Meeting

On January 18, ARRL ran a story on the AMSAT - ARISS joint meetings to be held in October. To view, "AMSAT Space Symposium set for October," go to: http://www.arrl.org/

8. Space Day 2006

AMSAT has again been invited to set up an activity center at the Space Day event to be held at the Steven F. Udvar-Hazy Center on Friday, May 5. The theme this year is "Living and Working on the Moon." AMSAT hosted a station last year which included an ARISS display, and representatives were on hand to distribute ARISS lithographs and answer questions.

[ANS thanks Carol, KB3LKI, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Dee Interdonato, NB2F
nb2f at amsat dot org

From 3565880874189513992
X-Google-Thread: 10e8ad,f6f3c8aa8d9a367a,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!news3.google.com!
border1.nntp.dca.giganews.com!nntp.giganews.com!nx02.iad01.newshosting.com!
newshosting.com!207.69.154.102.MISMATCH!elnk-atl-nf2!newsfeed.earthlink.net!
stamper.news.atl.earthlink.net!newsread2.news.atl.earthlink.net.POSTED!46041641!
not-for-mail
From: "JoAnne Maenpaa" <wb9jej_no-spam@earthlink.net>
Newsgroups: rec.radio.amateur.space
Subject: ANS-032 AMSAT News Service SuitSat Special Edition
Lines: 451
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <aU2Ef.8950$rH5.8143@newsread2.news.atl.earthlink.net>
Date: Wed, 01 Feb 2006 13:41:26 GMT
NNTP-Posting-Host: 68.165.59.199
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread2.news.atl.earthlink.net 1138801286 68.165.59.199 (Wed, 01 Feb 2006 05:41:26 PST)
NNTP-Posting-Date: Wed, 01 Feb 2006 05:41:26 PST

Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news1.google.com rec.radio.amateur.space:110

AMSAT NEWS SERVICE
ANS-032

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** SPECIAL SUITSAT EDITION **
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This special edition of ANS is a free news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this special edition:

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* Amateur Radio Performs Key Role in SuitSat's Main Mission
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* ISS Cross-Band Repeater May Relay SuitSat Signals on 437.800 MHz
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* SuitSat Web Link Compendium

SB SAT @ AMSAT $ANS-032.01
Two More Days Until SuitSat!

AMSAT News Service Bulletin 032.01
From AMSAT HQ SILVER SPRING, MD.
February 1, 2006
To All RADIO AMATEURS
BID: $ANS-032.01

Frank Bauer, KA3HDO, who is the ARISS International Chairman and AMSAT's V.P. for Human Spaceflight Programs, reminds us if all goes well, SuitSat will be deployed in 2 days. Are you ready?

SuitSat will be deployed during a Russian EVA scheduled to take place on Friday, February 3 at approximately 22:20 UTC. NASA TV will provide live coverage starting at 21:30 UTC. For digital downlink information and access to NASA TV's Public Channel on the Web in RealPlayer, RealAudio, or Windows Media Player formats, visit http://www.nasa.gov/ntv.

Once the crew is outside on their EVA, they turn all three switches on the control box to the ON position and deploy the spacesuit from ISS. About eight minutes after the crew flips the three switches the Kenwood transmitter will power up. About eight minutes after that, the first voicetelemetry message will be transmitted and SuitSat operations begin! This 16 minute delay is a crew safety measure.

Next, Russian Cosmonaut Tokarev will carefully jettison SuitSat-1 by pushing the suit away at about a 30-degree angle upward and about 10 degrees to the left of the back of the station.

Once activated, those who hear SuitSat transmissions on 145.99 MHz are asked to enter their realtime data on the SuitSat website, http://www.suitsat.org/ so that participants around the world can track the satellite.

When first released SuitSat will be in pretty much the same orbit as the International Space Station. This means initially the ISS tracking parameters can also be used to track SuitSat. SuitSat will not have any thrust to maintain its orbit so it will begin to reenter the Earth's atmosphere after a few weeks. As SuitSat's orbit decays it will "fall" closer to Earth. As the days go by, SuitSat's lower orbit will begin to lead the ISS orbit so you will need to begin listening a few minutes earlier than when the ISS is predicted to come over your location.

You can track the location of the ISS on the AMSAT website at:
http://www.amsat.org/amsat-new/tools/predict/satloc.php?lang=en&satellite=ISS

You can also get a listing of ISS passes at:
http://www.amsat.org/amsat-new/tools/predict/
Just enter your location and select the ISS.

Educational Outreach reports (at schools or informal education sites) as well as Slow Scan TV images can be sent to suitsat@comcast.net. This information will be compiled by the ARISS team.

[ANS thanks Frank, KA3HDO and the ARISS Team for the above information]

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SB SAT @ AMSAT $ANS-032.02
Commemorative SuitSat QSL Certificate Will Be Available

AMSAT News Service Bulletin 032.02
From AMSAT HQ SILVER SPRING, MD.
February 1, 2006
To All RADIO AMATEURS
BID: $ANS-032.02

Students, scouts, teachers, ham radio operators, and the general public are encouraged to track the space suit, hear the conversations from space, copy the suit telemetry and capture the picture.

There will also be a special endorsement on the award certificate for those students who receive the "special words" that are embedded in the messages from our SuitSat student "crew members." These special words are in different languages - English, French, German, Spanish, Russian, and Japanese. You are encouraged to record the SuitSat downlink audio and get help from fellow students who know these languages.

Radio Amateurs, students and teachers who hear SuitSat should send their signal reports with a large (9x12 inch) self-addressed stamped envelope to one of these addresses listed below:

- USA: ARRL Headquarters
  SuitSat QSL
  225 Main Street
  Newington, CT 06111-1494 USA

- Canada: Radio Amateurs of Canada
  SuitSat QSL
  720 Belfast Road
  Suite 217 Ottawa Ontario K1G 0Z5

- Europe: F1MOJ - Mr CANDEBAT Christophe
  SuitSat Europe QSL Manager
  7 Rue Roger Bernard
  30470 AIMARGUES FRANCE

- Japan: SuitSat Japan QSL
  JARL International Section
  Tokyo 170-8073 JAPAN

- Russia: Alexander Davydov, RN3DK
  Novo - Mytishchinsky prospekt 52 - 111
  Mytishchi 18
  Moskovskaya obl. 141018, RUSSIA

- Other Countries: Please use the US or Canadian address above.

Also included in this spacesuit is a computer Compact Disk (CD) with images of over 300 items collected from schools and educational organizations around the world. These include creative works of art from students as well as student signatures, school or scout logos, and class or group pictures. Students, schools and educational organizations that participated in the development of this disk earlier this year will all be part of the SuitSat spacewalk---as their creative works, signatures and pictures all float in space!

[ANS thanks the ARISS team for the above information]

/EX

SB SAT @ AMSAT $ANS-032.03
Amateur Radio Performs Key Role in SuitSat's Main Mission

AMSAT News Service Bulletin 032.03
From AMSAT HQ SILVER SPRING, MD.
February 1, 2006
To All RADIO AMATEURS
BID: $ANS-032.03

The idea for SuitSat was first conceived by the ARISS-Russia team, led by Sergey Samburov, RV3DR, and was extensively discussed at the joint AMSAT Symposium/ARISS International Partner meeting in October 2004. The project, is being led by project manager A. P. Alexandrov and Deputy Project Manager A. Poleshuk from RSC Energia, located in Korolev (Moscow area) Russia. The project was developed primarily by a joint US/Russian team. On the US side, the hardware project development was led by AMSAT member Lou McFadin, W5DID.

The official name for this mission is SuitSat-1, also called Radioskaf or Radio Sputnik in Russian. SuitSat-1 is the first live test of using the old spacesuits as inexpensive on-orbit platforms for instrumentation, space photography, telemetry, and communications.

Exposed to the full rays of the sun in space will SuitSat be able to operate in these extreme conditions? How will communications be affected if SuitSat begins to tumble? How long will the batteries last? Amateur Radio will be pioneering the answers to these questions in the days to come.

An additional benefit is the opportunity to bring space science into the classroom.

[ANS thanks ARISS-Russia and Energia for the above information]

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SB SAT @ AMSAT $ANS-032.04
Area Coordinator Makes Educational Outreach Materials Available On-line

AMSAT News Service Bulletin 032.04
From AMSAT HQ SILVER SPRING, MD.
February 1, 2006
To All RADIO AMATEURS
BID: $ANS-032.04

Pat Kilroy, N8PK and David Bern, W2LNX provided a well received educational mission this past week to Parkland Middle School in the Washington, DC area. Included below is Pat's documentation which can be used with NASA and AMSAT materials for SuitSat educational opportunities in the coming days.

Also included are photos from the school visit.

SUITSAT: A Special (and Brief) Opportunity
Updated January 25, 2006

Original material is at: http://www.patkilroy.com/amsat-dc/

An old Russian space suit will be tossed off of the ISS during a spacewalk on February 3, 2006 (or after). The suit will be empty inside except for radio gear assembled for a special occasion.

Transmitting nearly continuously, kids around the world will enjoy its spoken messages over the life of the batteries, designed to last for a few days, perhaps a week.

The "SuitSat" will co-orbit with the space station for a while. Atmospheric drag will drift it into "its own" orbit, a decaying one, and will gradually warm up the suit and the stuff inside.

Listen for the 8-minute cycle of announcements when it flies overhead. You will hear "spoken" MET in minutes, the inside temperature in degrees C (not F) and battery voltage telemetry, pre-recorded greetings in multiple languages, a single "cell phone quality" SSTV picture frame in Robot-36 mode, as well as the voice ID on 145.990 MHz FM at 500 mW into its low-gain omni antenna.

SuitSat will re-enter the atmosphere in a few weeks, long after the batteries run dry. Time is of the essence and you ought to prepare now for this unique and fun experiment.

You may download a 6-page color document by Gould Smith, WA4SXM, and Steve Bible, N7HPR, (600 KB in PDF, dated November 5, 2005) at
http://www.patkilroy.com/amsat-dc/SuitSat%20-%20A%20Unique%20Satellite.pdf

This has a full description of the event, additional technical details and several great photos. Go to the main AMSAT-NA web site for additional descriptions, late breaking news, and tracking data updated daily after SuitSat is deployed.

For lighter reading you may download a copy of a NASA press release written for kids:
http://www.patkilroy.com/amsat-dc/NASA_SuitSat_kids.pdf

Kids are welcome to take this copy to their school to ask permission to listen for SuitSat during class time. In addition to this press release, a sheet of technical details and the schedule for a televised (and webcast) press conference is offered for their teacher or mentor at: http://www.patkilroy.com/amsat-dc/ANS%20SuitSat%202006-0122pk.pdf

Enjoy these three documents. Each one has links noted where you can get updated information.

For those Amateur Radio operators in the greater Maryland and D.C. area, PLEASE REPORT YOUR OBSERVATIONS to us on the amsat-dc mail list. Of special interest to me are results of antenna A/B tests (omni vs. yagi reception) and your results of Doppler compensation (of how valuable it is or was or was not for the SuitSat experiment). Did you bother to make an audio recording of a pass? WAV or mp3? Any students involved? K-5, 6-8, 9-12, college, family, club or general public demo?

Get this into the schools! PASS THE WORD about this special event to other radio amateurs so they can prepare their station and share the news further.

Have fun!

Sincerely,

Pat Kilroy, N8PK
AMSAT Area Coordinator
Greater MDC Area

[ANS thanks Pat, N8PK for the above information]

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SB SAT @ AMSAT $ANS-032.05
ISS Packet Turned Off for Duration of SuitSat

AMSAT News Service Bulletin 032.05
From AMSAT HQ SILVER SPRING, MD.
February 1, 2006
To All RADIO AMATEURS
BID: $ANS-032.05

For the duration of the SuitSat project, the ISS packet mode will be turned OFF. Please do not transmit any packet or voice data on 145.990 MHz which is also the SuitSat down link frequency.

[ANS thanks Miles, WF1F for the above information]

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SB SAT @ AMSAT $ANS-032.06
ISS Cross-Band Repeater May Relay SuitSat Signals on 437.800 MHz

AMSAT News Service Bulletin 032.06
From AMSAT HQ SILVER SPRING, MD.
February 1, 2006
To All RADIO AMATEURS
BID: $ANS-032.06

There is a possibility that the ISS Kenwood D700 may be configured to act as a telemetry cross band repeater for the SuitSat project.

The Russian team is working on the details to program the D700 to retransmit the telemetry from the SuitSat via 437.800 MHz FM. The reason for the rebroadcast is to extend the listening range of the SuitSat project.

When SuitSat is launched, it will be flying very close to the ISS. As the days go by, the distance between the two satellites will gradually increase to hundreds of miles. SuitSat will eventually lead the ISS by several minutes.

The cross band telemetry mode can in theory double the listening range of the SuitSat project. The 2-6 day battery life of the SuitSat will be the actual limiting factor of this project.

[ANS thanks Miles, WF1F for the above information]

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SB SAT @ AMSAT $ANS-032.07
How to Receive SuitSat's SSTV Image

AMSAT News Service Bulletin 032.07
From AMSAT HQ SILVER SPRING, MD.
February 1, 2006
To All RADIO AMATEURS
BID: $ANS-032.07

Slow Scan Television, or SSTV, is a method used by Amateur Radio stations to send JPG still images around the world. SSTV translates the picture information in an audio format suitable for transmission by radio.

The SuitSat project will transmit telemetry, pre-recorded voice messages and one SSTV image using the Robot 36 format. The message cycle will repeat approximately every 9 minutes.

To view the SSTV image you will need to connect your computer to the speaker of your radio. Your computer will require SSTV decoding software available from the sources below:

ChromaPix
http://www.barberdsp.com/

W95SSTV by Silicon Pixels
http://www.barberdsp.com/w95sstv/w95dload.htm

MMSSTV
http://mmhamsoft.ham-radio.ch/

Start with this web page to help you learn more about Slow Scan TV:

http://www.marexmg.org/fileshtml/sstvlinkpage.html

For tips on how to use SSTV, Packet and Voice via the ISS see:
http://www.marexmg.org/fileshtml/howtouseiss.html

Excellent information with links to SSTV software downloads can be found on W2MU's SSTV Page: http://www.qsl.net/wm2u/sstv.html

[ANS thanks Miles, WF1F for the above information]

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SB SAT @ AMSAT $ANS-032.08
SuitSat Web Link Compendium

AMSAT News Service Bulletin 032.08
From AMSAT HQ SILVER SPRING, MD.
February 1, 2006
To All RADIO AMATEURS
BID: $ANS-032.08

Here is a summary of the key web pages that were contained within the SuitSat on-line messages of the past month.

SuitSat overview and project status:
www.amsat.org
www.rac.ca/ariss
http://www.suitsat.org/
www.issfanclub.com
http://www.amsat.org/amsat/archive/sarex/48hour/threads.html

NASA Education Website information for students:
http://www.nasa.gov/audience/forstudents/k-4/home/F_Hearing_Voices.html
http://www.nasa.gov/audience/forstudents/5-8/features/F_Hearing_Voices.html
http://www.nasa.gov/audience/forstudents/9-12/features/F_Hearing_Voices_From_Space.html
http://www.nasa.gov/audience/forstudents/postsecondary/features/F_Hearing_Voices_From_Space.html

NASA on-orbit photos of SuitSat preparation for deployment:
http://spaceflight.nasa.gov/gallery/images/station/crew-12/ndxpage16.html
http://spaceflight.nasa.gov/gallery/images/station/crew-12/ndxpage17.html

NASA Science press release:
http://science.nasa.gov/headlines/y2006/26jan_suitsat.htm?list791066

The SuitSat press release picked up by the on-line science press with plenty of positive coverage for amateur radio in space:
http://www.universetoday.com/am/publish/suitsat_satellite.html?2612006
http://www.spacedaily.com/reports/SuitSat_To_Be_Thrown_Overboard_February_3.html
http://www.space.com/missionlaunches/060127_exp13_eva2_prep.html

http://science.slashdot.org/

Link to NASA TV Webcasts:
http://www.nasa.gov/ntv

From the Energia Web Site:
http://www.energia.ru/english/energia/iss/researches/techn-35.html

AMSAT-UK Stories on SuitSat:
http://www.southgatearc.org/

New York Times article on SuitSat:
http://www.nytimes.com/2006/01/28/science/28suit.html?_r=1

[ANS thanks the ARISS Team for the above information]

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In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
Editor for the SuitSat Special Edition,
JoAnne Maenpaa, WB9JEJ
WB9JEJ at amsat dot org

From -1756026585149601379
X-Google-Thread: f64c6,60defe4ccc3b84fd,start
X-Google-Thread: 114671,60defe4ccc3b84fd,start
X-Google-Thread: 10e8ad,60defe4ccc3b84fd,start
X-Google-Thread: 107ada,60defe4ccc3b84fd,start
X-Google-Thread: fb6c1,60defe4ccc3b84fd,start
X-Google-Attributes: gidf64c6,gid114671,gid10e8ad,gid107ada,gidfb6c1,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!postnews.google.com!g49g2000cwa.googlegroups.com!not-for-mail
From: 22ecs553stm71di@jetable.net
Newsgroups:
uk.radio.amateur,aus.radio.amateur.misc,rec.radio.amateur.space,rec.radio.amateur.misc,nl.radio.amateur
Subject: SuitSat Launch February 3rd live
Date: 3 Feb 2006 08:12:18 -0800
Organization: http://groups.google.com
Lines: 21
Message-ID: <1138983138.238409.235550@g49g2000cwa.googlegroups.com>
NNTP-Posting-Host: 62.251.92.218
Mime-Version: 1.0

```
Content-Type: text/plain; charset="iso-8859-1"
X-Trace: posting.google.com 1138983143 5026 127.0.0.1 (3 Feb 2006 16:12:23 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Fri, 3 Feb 2006 16:12:23 +0000 (UTC)
User-Agent: G2/0.2
X-HTTP-UserAgent: Mozilla/4.0 (compatible; MSIE 50.50; LiNuX),gzip(gfe),gzip(gfe)
Complaints-To: groups-abuse@google.com
Injection-Info: g49g2000cwa.googlegroups.com; posting-host=62.251.92.218;
   posting-account=aV48dQ0AAAALD8AxxiCisZlpXEvUY6Fe
Xref: g2news1.google.com uk.radio.amateur:25526 aus.radio.amateur.misc:2320
rec.radio.amateur.space:111 rec.radio.amateur.misc:4042 nl.radio.amateur:4697
```

On the 3rd of February the strangest satellite ever constructed will be launched into orbit by astronauts on board the International Space Station (ISS). The satellite, called SuitSat, is an empty old spacesuit.

SuitSat will be deployed during a Russian EVA scheduled to take place on Friday, February 3 at approximately 22:20 UTC. NASA TV will provide live coverage starting at 21:30 UTC. (Link on website)

Website: http://amateur-radio.shorturl.com

- video Expedition 12 Preps for Second Spacewalk - SuitSat
- Suitsat Reports forum
- audio file Suitsat story

Submit Suitsat reports into forum: http://amateur-radio.shorturl.com
Mail photo's, telemetry audio files to: 22ecs553stm71di@jetable.net for use on website

73,

```
From -7983189861591719607
X-Google-Thread: f64c6,ef7b9f6bc82140e9,start
X-Google-Thread: 114671,ef7b9f6bc82140e9,start
X-Google-Thread: 10e8ad,ef7b9f6bc82140e9,start
X-Google-Thread: 107ada,ef7b9f6bc82140e9,start
X-Google-Thread: fb6c1,ef7b9f6bc82140e9,start
X-Google-Attributes: gidf64c6,gid114671,gid10e8ad,gid107ada,gidfb6c1,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!postnews.google.com!o13g2000cwo.googlegroups.com!not-for-
mail
From: 22ecs553stm71di@jetable.net
Newsgroups:
uk.radio.amateur,aus.radio.amateur.misc,rec.radio.amateur.space,rec.radio.amateur.
misc,nl.radio.amateur
Subject: Video - ISS 12 Crew McArthur and Tokarev deployed SuitSat,
Date: 3 Feb 2006 21:32:02 -0800
Organization: http://groups.google.com
Lines: 8
```

```
Message-ID: <1139031122.691863.70310@o13g2000cwo.googlegroups.com>
NNTP-Posting-Host: 62.251.92.218
Mime-Version: 1.0
Content-Type: text/plain; charset="iso-8859-1"
X-Trace: posting.google.com 1139031127 13153 127.0.0.1 (4 Feb 2006 05:32:07 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Sat, 4 Feb 2006 05:32:07 +0000 (UTC)
User-Agent: G2/0.2
X-HTTP-UserAgent: Mozilla/4.0 (compatible; MSIE 50.50; LiNuX),gzip(gfe),gzip(gfe)
Complaints-To: groups-abuse@google.com
Injection-Info: o13g2000cwo.googlegroups.com; posting-host=62.251.92.218;
   posting-account=aV48dQ0AAAALD8AxxiCisZlpXEvUY6Fe
Xref: g2news1.google.com uk.radio.amateur:25647 aus.radio.amateur.misc:2333
rec.radio.amateur.space:112 rec.radio.amateur.misc:4073 nl.radio.amateur:4708
```

ISS 12 Crew McArthur and Tokarev deployed SuitSat, an old Russian
spacesuit with an amateur radio transmitter.

Video:
http://amateur-radio.shorturl.com/index.php?
option=com_content&task=view&id=12&Itemid=31

73,

```
From 5311945062711398292
X-Google-Thread: f64c6,ef7b9f6bc82140e9
X-Google-Thread: 114671,ef7b9f6bc82140e9
X-Google-Thread: 10e8ad,ef7b9f6bc82140e9
X-Google-Thread: 107ada,ef7b9f6bc82140e9
X-Google-Thread: fb6c1,ef7b9f6bc82140e9
X-Google-Attributes: gidf64c6,gid114671,gid10e8ad,gid107ada,gidfb6c1,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!news4.google.com!news.glorb.com!
ndsoftware.com!194.168.222.133.MISMATCH!news-out.ntli.net!newsrout1-gui.ntli.net!
ntli.net!news.highwinds-media.com!newspeer1-win.ntli.net!newsfe5-
win.ntli.net.POSTED!53ab2750!not-for-mail
From: "B S Expert" <jim.gm4dhj@ntlworld.com>
Newsgroups:
uk.radio.amateur,aus.radio.amateur.misc,rec.radio.amateur.space,rec.radio.amateur.
misc,nl.radio.amateur
References: <1139031122.691863.70310@o13g2000cwo.googlegroups.com>
Subject: Re: Video - ISS 12 Crew McArthur and Tokarev deployed SuitSat,
Lines: 15
Organization: KWALITY
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.2180
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.2180
X-RFC2646: Format=Flowed; Original
Message-ID: <ne_Ef.38847$0N1.5569@newsfe5-win.ntli.net>
Date: Sat, 04 Feb 2006 09:12:51 GMT
```

NNTP-Posting-Host: 81.104.154.68
X-Trace: newsfe5-win.ntli.net 1139044371 81.104.154.68 (Sat, 04 Feb 2006 09:12:51 GMT)
NNTP-Posting-Date: Sat, 04 Feb 2006 09:12:51 GMT
Xref: g2news1.google.com uk.radio.amateur:25665 aus.radio.amateur.misc:2336 rec.radio.amateur.space:113 rec.radio.amateur.misc:4074 nl.radio.amateur:4712

<22ecs553stm71di@jetable.net> wrote in message
news:1139031122.691863.70310@o13g2000cwo.googlegroups.com...
> ISS 12 Crew McArthur and Tokarev deployed SuitSat, an old Russian
> spacesuit with an amateur radio transmitter.
>
> Video:
> http://amateur-radio.shorturl.com/index.php?option=com_content&task=view&id=12&Itemid=31
>
> 73,
>

..am I bobered ?

From 7911036060958578976
X-Google-Thread: f64c6,ef7b9f6bc82140e9
X-Google-Thread: 114671,ef7b9f6bc82140e9
X-Google-Thread: 10e8ad,ef7b9f6bc82140e9
X-Google-Thread: 107ada,ef7b9f6bc82140e9
X-Google-Thread: fb6c1,ef7b9f6bc82140e9
X-Google-Attributes: gidf64c6,gid114671,gid10e8ad,gid107ada,gidfb6c1,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!proxad.net!proxad.net!news.clara.net!wagner.news.clara.net!easynet-quince!easynet.net!news-peer-lilac.gradwell.net!not-for-mail
From: "Gordon Hudson" <gordon@usenet3.hostroute.co.uk>
Newsgroups:
uk.radio.amateur,aus.radio.amateur.misc,rec.radio.amateur.space,rec.radio.amateur.misc,nl.radio.amateur
References: <1139031122.691863.70310@o13g2000cwo.googlegroups.com>
<ne_Ef.38847$0N1.5569@newsfe5-win.ntli.net>
Subject: Re: Video - ISS 12 Crew McArthur and Tokarev deployed SuitSat,
Date: Sat, 4 Feb 2006 09:47:23 -0000
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.2180
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.2180
X-RFC2646: Format=Flowed; Response
Lines: 20
Message-ID: <43e4782d$0$1168$5a6aecb4@news.aaisp.net.uk>
NNTP-Posting-Host: 81.187.43.159
X-Trace: 1139046445 news.aaisp.net.uk 1168 81.187.43.159:2474

```
X-Complaints-To: aaispnews-abuse@gradwell.net
Xref: g2news1.google.com uk.radio.amateur:25673 aus.radio.amateur.misc:2337
rec.radio.amateur.space:114 rec.radio.amateur.misc:4075 nl.radio.amateur:4717


"B S Expert" <jim.gm4dhj@ntlworld.com> wrote in message
news:ne_Ef.38847$0N1.5569@newsfe5-win.ntli.net...
>
> <22ecs553stm71di@jetable.net> wrote in message
> news:1139031122.691863.70310@o13g2000cwo.googlegroups.com...
>> ISS 12 Crew McArthur and Tokarev deployed SuitSat, an old Russian
>> spacesuit with an amateur radio transmitter.
>>
>> Video:
>> http://amateur-radio.shorturl.com/index.php?
option=com_content&task=view&id=12&Itemid=31
>>
>> 73,
>>
>
> ..am I bobered ?

I see lots of people at desks.




From 8992444704287869181
X-Google-Thread: 10e8ad,10ea9151c911095f,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!news3.google.com!news.glorb.com!
hwmnpeer01.lga!hwmedia!news.highwinds-media.com!peer01.cox.net!cox.net!p01!
fed1read03.POSTED!53ab2750!not-for-mail
Reply-To: "Jerry L. Withers" <sales@wdiphotography.com>
From: "Jerry L. Withers" <jwithers6@cox.net>
Newsgroups: rec.radio.amateur.space
Subject: FREE HAM Tips & Software
Lines: 4
Organization: WDI Photography
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.2527
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.2527
X-RFC2646: Format=Flowed; Original
Message-ID: <Ql0Ff.12517$eR.3048@fed1read03>
Date: Sat, 4 Feb 2006 03:31:58 -0800
NNTP-Posting-Host: 68.224.132.239
X-Complaints-To: abuse@cox.net
X-Trace: fed1read03 1139053040 68.224.132.239 (Sat, 04 Feb 2006 06:37:20 EST)
NNTP-Posting-Date: Sat, 04 Feb 2006 06:37:20 EST
Xref: g2news1.google.com rec.radio.amateur.space:115
```

Visit my web site at http://www.nvham.net for details on how to get FREE
Amatuer Radio related tips, information, event updates, software, and more!

```
From -7649312880539316132
X-Google-Thread: f64c6,ef7b9f6bc82140e9
X-Google-Thread: 114671,ef7b9f6bc82140e9
X-Google-Thread: 10e8ad,ef7b9f6bc82140e9
X-Google-Thread: 107ada,ef7b9f6bc82140e9
X-Google-Thread: fb6c1,ef7b9f6bc82140e9
X-Google-Attributes: gidf64c6,gid114671,gid10e8ad,gid107ada,gidfb6c1,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!news4.google.com!news.glorb.com!
newsfeed-east.nntpserver.com!nntpserver.com!statler.nntpserver.com!news-
west.rr.com!news-wrt-01.rdc-nyc.rr.com!news-feed-01.rdc-nyc.rr.com!news.rr.com!
news-out.nyc.rr.com!news-wrt-01.rdc-nyc.rr.com.POSTED!53ab2750!not-for-mail
From: Johnny Borborigmi <growl@tummy.com>
Newsgroups:
uk.radio.amateur,aus.radio.amateur.misc,rec.radio.amateur.space,rec.radio.amateur.
misc,nl.radio.amateur
Message-ID: <2006020408263375249%growl@tummycom>
References: <1139031122.691863.70310@o13g2000cwo.googlegroups.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1; format=flowed
Content-Transfer-Encoding: 8bit
Subject: Re: Video - ISS 12 Crew McArthur and Tokarev deployed SuitSat,
User-Agent: Unison/1.6.2
Lines: 15
Date: Sat, 04 Feb 2006 13:26:26 GMT
NNTP-Posting-Host: 24.161.95.233
X-Complaints-To: abuse@rr.com
X-Trace: news-wrt-01.rdc-nyc.rr.com 1139059586 24.161.95.233 (Sat, 04 Feb 2006
08:26:26 EST)
NNTP-Posting-Date: Sat, 04 Feb 2006 08:26:26 EST
Organization: Road Runner High Speed Online http://www.rr.com
Xref: g2news1.google.com uk.radio.amateur:25702 aus.radio.amateur.misc:2338
rec.radio.amateur.space:116 rec.radio.amateur.misc:4079 nl.radio.amateur:4724
```

On 2006-02-04 00:32:02 -0500, 22ecs553stm71di@jetable.net said:

> ISS 12 Crew McArthur and Tokarev deployed SuitSat, an old Russian
> spacesuit with an amateur radio transmitter.
>
> Video:
> http://amateur-radio.shorturl.com/index.php?
option=com_content&task=view&id=12&Itemid=31

73,

That

```
>
is too damn cool! Thanks!



From 4158794203772513876
X-Google-Thread: f64c6,ef7b9f6bc82140e9
X-Google-Thread: 114671,ef7b9f6bc82140e9
X-Google-Thread: 10e8ad,ef7b9f6bc82140e9
X-Google-Thread: 107ada,ef7b9f6bc82140e9
X-Google-Thread: fb6c1,ef7b9f6bc82140e9
X-Google-Attributes: gidf64c6,gid114671,gid10e8ad,gid107ada,gidfb6c1,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!proxad.net!proxad.net!
62.253.162.218.MISMATCH!news-in.ntli.net!newsrout1-win.ntli.net!ntli.net!
news.highwinds-media.com!newspeer1-win.ntli.net!newsfe3-gui.ntli.net.POSTED!
53ab2750!not-for-mail
From: "B S Expert" <jim.gm4dhj@ntlworld.com>
Newsgroups:
uk.radio.amateur,aus.radio.amateur.misc,rec.radio.amateur.space,rec.radio.amateur.
misc,nl.radio.amateur
References: <1139031122.691863.70310@o13g2000cwo.googlegroups.com>
<2006020408263375249%growl@tummycom>
Subject: Re: Video - ISS 12 Crew McArthur and Tokarev deployed SuitSat,
Lines: 7
Organization: KWALITY
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.2180
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.2180
X-RFC2646: Format=Flowed; Response
Message-ID: <UO4Ff.3562$Dn4.1586@newsfe3-gui.ntli.net>
Date: Sat, 04 Feb 2006 16:41:24 GMT
NNTP-Posting-Host: 81.104.154.68
X-Trace: newsfe3-gui.ntli.net 1139071284 81.104.154.68 (Sat, 04 Feb 2006 16:41:24
GMT)
NNTP-Posting-Date: Sat, 04 Feb 2006 16:41:24 GMT
Xref: g2news1.google.com uk.radio.amateur:25717 aus.radio.amateur.misc:2343
rec.radio.amateur.space:117 rec.radio.amateur.misc:4087 nl.radio.amateur:4735


> is too damn cool! Thanks!
>

This must be a new meaning of the word cool hitherto unheard of......




From 7743537711562963439
X-Google-Thread: 10e8ad,20f90c8bdd98c6ea,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
```

```
Path: g2news1.google.com!news1.google.com!news3.google.com!news.glorb.com!
multikabel.net!feed20.multikabel.net!border1.nntp.ams.giganews.com!
nntp.giganews.com!newsfeeder.wxs.nl!divide.nova.planet.nl!posting.nova.planet.nl!
not-for-mail
From: "CQ" <geenmail@geenmail.net>
Newsgroups: rec.radio.amateur.space
Subject: SUITSAT received on Africa (audio file).
Date: Sat, 4 Feb 2006 17:56:00 +0100
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2600.0000
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2600.0000
Lines: 22
Message-ID: <43e4dca1$0$2015$ba620dc5@text.nova.planet.nl>
NNTP-Posting-Host: 84.85.169.223
X-Trace: 1139072161 text.nova.planet.nl 2015 84.85.169.223:46910
X-Complaints-To: abuse@planet.nl
Xref: g2news1.google.com rec.radio.amateur.space:118

Hello All,

Keith (ZS6TW) received at 4 februari (12:45UTC) SUITSAT on 50 degrees
elevation.
Keith could hear Russian language from SUITSAT.
The equipment ZS6TW used:
Transceiver: Yaesu FT-847
Antennas: 2 X F9FT 17 elements yagis (16dBd gain).
Keith reported that it is importand to use FM narrow to
receive the weak (narrow) signals out the noise (doppler correction is
requered!!!).
He received SUITSAT at the same place as ISS, so the
Suitsat was (at 4 februari 12:45UTC) not far behind the ISS.

The audio file is for public use so spread arround the world!

73's Keith ZS6TW
The audio file you can download from PD0RKC website:
http://pd0rkc.ontwikkel.nl






From 3906956823863566668
X-Google-Thread: f64c6,ef7b9f6bc82140e9
X-Google-Thread: 114671,ef7b9f6bc82140e9
X-Google-Thread: 10e8ad,ef7b9f6bc82140e9
X-Google-Thread: 107ada,ef7b9f6bc82140e9
X-Google-Thread: fb6c1,ef7b9f6bc82140e9
X-Google-Attributes: gidf64c6,gid114671,gid10e8ad,gid107ada,gidfb6c1,public
X-Google-Language: ENGLISH,ASCII
Path: g2news1.google.com!news1.google.com!news4.google.com!news.glorb.com!
newsfeeds.ihug.co.nz!ihug.co.nz!news.xtra.co.nz!news1.optus.net.au!optus!
```

```
newsfeeder.syd.optusnet.com.au!news.optusnet.com.au!not-for-mail
Message-ID: <43e50334$0$15125$afc38c87@news.optusnet.com.au>
From: Kate <vk4xyl2@optusnet.com.au>
Subject: Re: Video - ISS 12 Crew McArthur and Tokarev deployed SuitSat,
Newsgroups:
uk.radio.amateur,aus.radio.amateur.misc,rec.radio.amateur.space,rec.radio.amateur.
misc,nl.radio.amateur
Followup-To: uk.radio.amateur
Reply-To: vk4xyl@nospam.optusnet.com.au
Date: Sun, 05 Feb 2006 05:41:08 +1000
References: <1139031122.691863.70310@o13g2000cwo.googlegroups.com>
<20060204082633375249%growl@tummycom> <UO4Ff.3562$Dn4.1586@newsfe3-gui.ntli.net>
User-Agent: KNode/0.7.6
MIME-Version: 1.0
Content-Type: text/plain; charset=iso-8859-1
Content-Transfer-Encoding: 8Bit
Lines: 17
NNTP-Posting-Host: 210.49.250.196
X-Trace: 1139082036  15125 210.49.250.196
Xref: g2news1.google.com uk.radio.amateur:25746 aus.radio.amateur.misc:2346
rec.radio.amateur.space:119 rec.radio.amateur.misc:4094 nl.radio.amateur:4741

B S Expert translated the ancient runes thusly:

>
>> is too damn cool! Thanks!
>>
>
> This must be a new meaning of the word cool hitherto unheard of......

Possibly the original meaning, concerning temperature. SuitSat froze and
its batteries froze up on its second orbit. Now *that* is cool! In
fact, downright bloody cold!

Kate vk4xyl
--
�With the breakdown of the former Soviet empire America has lost its
example of what not to be, and is rapidly becoming that which it
despised.� -- Jase


From -5416564835884097346
X-Google-Thread: 10e8ad,3d33d02a28adae42,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!news4.google.com!news.glorb.com!
newscon02.news.prodigy.com!prodigy.net!newsmst01b.news.prodigy.com!prodigy.com!
postmaster.news.prodigy.com!newssvr24.news.prodigy.net.POSTED!bbf2b588!not-for-
mail
From: "Barky Bark" <barkybark@bonksbcglobal.net>
Newsgroups: rec.radio.amateur.space
Subject: SuitSat Aftermath...
Lines: 4
```

X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1506
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1506
Message-ID: <OGhFf.7408$tb3.6525@newssvr24.news.prodigy.net>
NNTP-Posting-Host: 69.226.31.237
X-Complaints-To: abuse@prodigy.net
X-Trace: newssvr24.news.prodigy.net 1139124014 ST000 69.226.31.237 (Sun, 05 Feb 2006 02:20:14 EST)
NNTP-Posting-Date: Sun, 05 Feb 2006 02:20:14 EST
Organization: SBC http://yahoo.sbc.com
X-UserInfo1:
FKPO@MC@@S@]SRXXBRXB^SPA[Z_LPLHIQ@T@_FYLKX^JGEUNDO_AR\^[JTXDX_KI\VB]JBVMS^YT_G[CZV
WAOS\DHFWEH]@KGXYHB_CMDSFABP^J[AHHRKARLE_JDBLJ\XA[JRMEI]MGJSPB\Y]^KG\@S^@VQKI_Q[G
@@_ACSARASDEFLBJ]S\GFNTUAVBL
Date: Sun, 05 Feb 2006 07:20:14 GMT
Xref: g2news1.google.com rec.radio.amateur.space:120

So what's the overall verdict on SuitSat? Waste of time? Include a heater next time?

From 3189017179354024695
X-Google-Thread: 10e8ad,3d33d02a28adae42
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!news3.google.com!news.glorb.com!
cycny01.gnilink.net!spamkiller.gnilink.net!gnilink.net!trnddc06.POSTED!2624caa7!
not-for-mail
Reply-To: "stargatesg1" <me@verizon.net>
From: "stargatesg1" <me@verizon.net>
Newsgroups: rec.radio.amateur.space
References: <OGhFf.7408$tb3.6525@newssvr24.news.prodigy.net>
Subject: Re: SuitSat Aftermath...
Lines: 24
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1506
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1506
Message-ID: <1CiFf.7792$In4.1224@trnddc06>
Date: Sun, 05 Feb 2006 08:23:25 GMT
NNTP-Posting-Host: 151.199.90.36
X-Complaints-To: abuse@verizon.net
X-Trace: trnddc06 1139127805 151.199.90.36 (Sun, 05 Feb 2006 03:23:25 EST)
NNTP-Posting-Date: Sun, 05 Feb 2006 03:23:25 EST
Xref: g2news1.google.com rec.radio.amateur.space:121

I just listened to the pass across my area and heard nothing. I even recorded the baseband audio for later processing but it really didn't sound like anything to process:-(

I think I will wait until the next pass at around 4am and see if results are
any better. Bad part is, I'm surrounded by mountains and it has to be pretty
high in elevation for me to hear it.

Good luck to all,
Rod

P.S. They have reported it's FAR weaker than expected, but it is doing it's
thang so keep trying!!!

"Barky Bark" <barkybark@bonksbcglobal.net> wrote in message
news:OGhFf.7408$tb3.6525@newssvr24.news.prodigy.net...
> So what's the overall verdict on SuitSat? Waste of time? Include a
heater
> next time?
>
>

From -3639044316447755093
X-Google-Thread: f64c6,806571dc39a42352,start
X-Google-Thread: 114671,806571dc39a42352,start
X-Google-Thread: 10e8ad,806571dc39a42352,start
X-Google-Thread: 107ada,806571dc39a42352,start
X-Google-Attributes: gidf64c6,gid114671,gid10e8ad,gid107ada,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!postnews.google.com!g44g2000cwa.googlegroups.com!not-for-mail
From: qwerty666@alexandria.cc
Newsgroups:
uk.radio.amateur,aus.radio.amateur.misc,rec.radio.amateur.space,rec.radio.amateur.misc
Subject: Expedition 12 EVA Videos
Date: 5 Feb 2006 01:18:58 -0800
Organization: http://groups.google.com
Lines: 13
Message-ID: <1139131138.204747.283390@g44g2000cwa.googlegroups.com>
NNTP-Posting-Host: 202.58.86.3
Mime-Version: 1.0
Content-Type: text/plain; charset="iso-8859-1"
X-Trace: posting.google.com 1139131143 5599 127.0.0.1 (5 Feb 2006 09:19:03 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Sun, 5 Feb 2006 09:19:03 +0000 (UTC)
User-Agent: G2/0.2
X-HTTP-UserAgent: Mozilla/4.0 (compatible; MSIE 50.50; LiNuX),gzip(gfe),gzip(gfe)
Complaints-To: groups-abuse@google.com
Injection-Info: g44g2000cwa.googlegroups.com; posting-host=202.58.86.3;
   posting-account=eAzM1QwAAAAV8iYPKxz4XJqVbK00Wy6M
Xref: g2news1.google.com uk.radio.amateur:25819 aus.radio.amateur.misc:2373
rec.radio.amateur.space:122 rec.radio.amateur.misc:4122

- McArthur and Tokarev deployed SuitSat, an old Russian spacesuit with an amateur radio transmitter. (1)

- 45 minutes video of EVA (2)

- 36 minutes video of EVA (3)

- ISS Expedition 12 EVA full Coverage (download)

http://space-tv.subdomain-service.de/index.php?
option=com_content&task=view&id=69&Itemid=2

John

```
From -4439310460728221450
X-Google-Thread: 10e8ad,3d33d02a28adae42
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!atl-c05.usenetserver.com!
news.usenetserver.com!cycny01.gnilink.net!spamkiller.gnilink.net!gnilink.net!
trnddc01.POSTED!2624caa7!not-for-mail
Reply-To: "stargatesg1" <me@verizon.net>
From: "stargatesg1" <me@verizon.net>
Newsgroups: rec.radio.amateur.space
References: <OGhFf.7408$tb3.6525@newssvr24.news.prodigy.net>
<1CiFf.7792$In4.1224@trnddc06>
Subject: Re: SuitSat Aftermath...
Lines: 43
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1506
X-MIMEOLE: Produced By Microsoft MimeOLE V6.00.2800.1506
Message-ID: <F2kFf.3749$xs4.2869@trnddc01>
Date: Sun, 05 Feb 2006 10:02:13 GMT
NNTP-Posting-Host: 151.199.90.36
X-Complaints-To: abuse@verizon.net
X-Trace: trnddc01 1139133733 151.199.90.36 (Sun, 05 Feb 2006 05:02:13 EST)
NNTP-Posting-Date: Sun, 05 Feb 2006 05:02:13 EST
Xref: g2news1.google.com rec.radio.amateur.space:123
```

No soap on the 4am pass either;-(
This time I set up to record the baseband on the left channel and the speaker audio on the right channel.
Unfortunately, nothing was heard.

luck to all,
RoD

Oh well, Maybe I will hear the next suit they throw overboard. ;-)

```
"stargatesg1" <me@verizon.net> wrote in message
news:1CiFf.7792$In4.1224@trnddc06...
> I just listened to the pass across my area and heard nothing. I even
> recorded the baseband audio for later processing but it really didn't
sound
> like anything to process:-(
>
> I think I will wait until the next pass at around 4am and see if results
are
> any better. Bad part is, I'm surrounded by mountains and it has to be
pretty
> high in elevation for me to hear it.
>
> Good luck to all,
> Rod
>
> P.S. They have reported it's FAR weaker than expected, but it is doing
it's
> thang so keep trying!!!
>
>
> "Barky Bark" <barkybark@bonksbcglobal.net> wrote in message
> news:OGhFf.7408$tb3.6525@newssvr24.news.prodigy.net...
> > So what's the overall verdict on SuitSat?  Waste of time?  Include a
> heater
> > next time?
> >
> >
>
>




From 1808476233894238688
X-Google-Thread: 10e8ad,3d33d02a28adae42
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!news4.google.com!
border1.nntp.dca.giganews.com!nntp.giganews.com!local01.nntp.dca.giganews.com!
nntp.comcast.com!news.comcast.com.POSTED!not-for-mail
NNTP-Posting-Date: Sun, 05 Feb 2006 07:56:29 -0600
From: "James" <jnipperxxx@nospamfdn.com>
Newsgroups: rec.radio.amateur.space
References: <OGhFf.7408$tb3.6525@newssvr24.news.prodigy.net>
<1CiFf.7792$In4.1224@trnddc06> <F2kFf.3749$xs4.2869@trnddc01>
Subject: Re: SuitSat Aftermath...
Date: Sun, 5 Feb 2006 08:56:31 -0500
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1437
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1441
```

Message-ID: <PO6dnUtW5daQmXvenZ2dnUVZ_t-dnZ2d@comcast.com>
Lines: 7
NNTP-Posting-Host: 67.191.103.145
X-Trace: sv3-2jihlFsONj4XIMdEICXnLvy3j9v+5AYTvOJ2Z4BX/
graZjDKmQzyeTL4rA22XKMvllk4J68df+beed3!xW3Ae8uEDd//2EqEbqomwouyCH2dkhmz1Nt9qL4uy/
MCYRqg5ndJLoBRlJfgxHyMG8d+ozxH6EBd!B9ZR5y2F0zx4bPo=
X-Complaints-To: abuse@comcast.net
X-DMCA-Complaints-To: dmca@comcast.net
X-Abuse-and-DMCA-Info: Please be sure to forward a copy of ALL headers
X-Abuse-and-DMCA-Info: Otherwise we will be unable to process your complaint properly
X-Postfilter: 1.3.32
Xref: g2news1.google.com rec.radio.amateur.space:124

CNN reports that NASA has said that the batteries got too cold and died, on the   second orbit.

73 de Jim K4PYT

From -1116031207143655903
X-Google-Thread: 10e8ad,3d33d02a28adae42
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!news4.google.com!
border1.nntp.dca.giganews.com!nntp.giganews.com!wn13feed!worldnet.att.net!
bgtnsc04-news.ops.worldnet.att.net.POSTED!53ab2750!not-for-mail
From: "Robert John" <rajohngm@worldnet.att.net>
Newsgroups: rec.radio.amateur.space
References: <OGhFf.7408$tb3.6525@newssvr24.news.prodigy.net>
Subject: Re: SuitSat Aftermath...
Lines: 11
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1478
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1478
Message-ID: <dVqFf.10508$fM1.9743@bgtnsc04-news.ops.worldnet.att.net>
Date: Sun, 05 Feb 2006 17:50:01 GMT
NNTP-Posting-Host: 12.73.241.47
X-Complaints-To: abuse@worldnet.att.net
X-Trace: bgtnsc04-news.ops.worldnet.att.net 1139161801 12.73.241.47 (Sun, 05 Feb 2006 17:50:01 GMT)
NNTP-Posting-Date: Sun, 05 Feb 2006 17:50:01 GMT
Organization: AT&T Worldnet
Xref: g2news1.google.com rec.radio.amateur.space:125

Was this project engineered by NASA?

"Barky Bark" <barkybark@bonksbcglobal.net> wrote in message
news:OGhFf.7408$tb3.6525@newssvr24.news.prodigy.net...

```
> So what's the overall verdict on SuitSat?  Waste of time?  Include a
heater
> next time?
>
>
```

```
From 7907727247166256419
X-Google-Thread: 10e8ad,3d33d02a28adae42
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!news3.google.com!
border1.nntp.dca.giganews.com!nntp.giganews.com!newscon06.news.prodigy.com!
prodigy.net!newsmst01b.news.prodigy.com!prodigy.com!postmaster.news.prodigy.com!
newssvr33.news.prodigy.com.POSTED!bbf2b588!not-for-mail
From: "Barky Bark" <barkybark@bonksbcglobal.net>
Newsgroups: rec.radio.amateur.space
References: <OGhFf.7408$tb3.6525@newssvr24.news.prodigy.net>
<dVqFf.10508$fM1.9743@bgtnsc04-news.ops.worldnet.att.net>
Subject: Re: SuitSat Aftermath...
Lines: 3
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1506
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1506
Message-ID: <E_qFf.6228$ur7.4193@newssvr33.news.prodigy.com>
NNTP-Posting-Host: 69.226.31.237
X-Complaints-To: abuse@prodigy.net
X-Trace: newssvr33.news.prodigy.com 1139162148 ST000 69.226.31.237 (Sun, 05 Feb
2006 12:55:48 EST)
NNTP-Posting-Date: Sun, 05 Feb 2006 12:55:48 EST
Organization: SBC http://yahoo.sbc.com
X-UserInfo1:
Q[R_PJSCOXSABPXX@XOR_RLA[B]BQUDO@HTHOCULF@^PGDTFOG[]VCWZBL[\YUWHANGYZEFNHFZPNLOBUN
SS^_LGEVWEY\PHO@YJSSWBBDT\PFD^ESBTXVCCMTD]JCJLE\_IJMFNRY]SWE[S[D_CNB__ZK^VGVCKHA[S
@COB^[@ZQSDFQ\BPMS@DZVUKQTJL
Date: Sun, 05 Feb 2006 17:55:48 GMT
Xref: g2news1.google.com rec.radio.amateur.space:126
```

I think it was a Russian thing.

```
From -1834959642101690453
X-Google-Thread: 10e8ad,3d33d02a28adae42
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!news4.google.com!
border1.nntp.dca.giganews.com!nntp.giganews.com!newscon06.news.prodigy.com!
prodigy.net!newsmst01b.news.prodigy.com!prodigy.com!postmaster.news.prodigy.com!
```

newssvr33.news.prodigy.com.POSTED!bbf2b588!not-for-mail
From: "Barky Bark" <barkybark@bonksbcglobal.net>
Newsgroups: rec.radio.amateur.space
References: <OGhFf.7408$tb3.6525@newssvr24.news.prodigy.net>
<1CiFf.7792$In4.1224@trnddc06> <F2kFf.3749$xs4.2869@trnddc01>
Subject: Re: SuitSat Aftermath...
Lines: 5
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1506
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1506
Message-ID: <Q0rFf.6230$ur7.6093@newssvr33.news.prodigy.com>
NNTP-Posting-Host: 69.226.31.237
X-Complaints-To: abuse@prodigy.net
X-Trace: newssvr33.news.prodigy.com 1139162288 ST000 69.226.31.237 (Sun, 05 Feb 2006 12:58:08 EST)
NNTP-Posting-Date: Sun, 05 Feb 2006 12:58:08 EST
Organization: SBC http://yahoo.sbc.com
X-UserInfo1:
Q[R_PJSCOXSABPXX@XOR_RLA[B]BQUDO@HTHOCULF@^PGDTFOG[]VCWZBL[\YUWHANGYZEFNHFZPNLOBUN
SS^_LGEVWEY\PHO@YJSSWBBDT\PFD^ESBTXVCCMTD]JCJLE_IJMFNRY]SWE[S[D_CNB__ZK^VGVCKHA[S
@COB^[@ZQSDFQ\BPMS@DZVUKQTJL
Date: Sun, 05 Feb 2006 17:58:08 GMT
Xref: g2news1.google.com rec.radio.amateur.space:127

I think you were listening in vain. The thing died after only a couple of hours. Don't know where you are but AFAIK it didn't pass alive over N.America at all.

From 6425301645308025747
X-Google-Thread: 10e8ad,3d33d02a28adae42
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
From: kb9rqz@Mark.Morgan.com
Newsgroups: rec.radio.amateur.space
Subject: Re: SuitSat Aftermath...
Date: Sun, 05 Feb 2006 13:27:26 -0500
Reply-To: k4yz@aol.com
Message-ID: <rrgcu11t3rkf6eet3l3tp8up5i5k1jcq52@4ax.com>
References: <OGhFf.7408$tb3.6525@newssvr24.news.prodigy.net>
X-Newsreader: Forte Free Agent 2.0/32.652
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Organization: Usenet Zone http://www.usenetzone.com Free Usenet Binary server contains 140,000+ groups
Lines: 12
Path: g2news1.google.com!news1.google.com!news4.google.com!news.glorb.com!news.ks.uiuc.edu!news.usenetzone.com!not-for-mail
Xref: g2news1.google.com rec.radio.amateur.space:128

On Sun, 05 Feb 2006 07:20:14 GMT, "Barky Bark"
<barkybark@bonksbcglobal.net> wrote:

>So what's the overall verdict on SuitSat? Waste of time? Include a heater
>next time?
>
only value i ever saw to the project was PR maybe it suceeded there

____
Usenet Zone Free Binaries Usenet Server
More than 140,000 groups
Unlimited download
http://www.usenetzone.com to open account

From -7332234071037585558
X-Google-Thread: 10e8ad,3d33d02a28adae42
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!news4.google.com!news.glorb.com!
cycny01.gnilink.net!spamkiller.gnilink.net!gnilink.net!trnddc03.POSTED!2624caa7!
not-for-mail
Reply-To: "stargatesg1" <me@verizon.net>
From: "stargatesg1" <me@verizon.net>
Newsgroups: rec.radio.amateur.space
References: <OGhFf.7408$tb3.6525@newssvr24.news.prodigy.net>
<1CiFf.7792$In4.1224@trnddc06> <F2kFf.3749$xs4.2869@trnddc01>
<PO6dnUtW5daQmXvenZ2dnUVZ_t-dnZ2d@comcast.com>
Subject: Re: SuitSat Aftermath...
Lines: 17
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1506
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1506
Message-ID: <2QrFf.7171$Gg1.2754@trnddc03>
Date: Sun, 05 Feb 2006 18:52:46 GMT
NNTP-Posting-Host: 151.199.90.36
X-Complaints-To: abuse@verizon.net
X-Trace: trnddc03 1139165566 151.199.90.36 (Sun, 05 Feb 2006 13:52:46 EST)
NNTP-Posting-Date: Sun, 05 Feb 2006 13:52:46 EST
Xref: g2news1.google.com rec.radio.amateur.space:129

The reports I have heard are that it's still alive and kicking but FAR
weaker than expected.
I know it was a long shot but I had insomnia anyway and figured I would
listen and try.

"James" <jnipperxxx@nospamfdn.com> wrote in message
news:PO6dnUtW5daQmXvenZ2dnUVZ_t-dnZ2d@comcast.com...
> CNN reports that NASA has said that the batteries got too cold and died,
on
> the   second orbit.
>

>
> 73 de Jim K4PYT
>
>

```
From -4143843692802090588
X-Google-Thread: 10ed5f,6276c743e4d87ed7,start
X-Google-Thread: f4329,6276c743e4d87ed7,start
X-Google-Thread: fb049,6276c743e4d87ed7,start
X-Google-Thread: 10e8ad,6276c743e4d87ed7,start
X-Google-Attributes: gid10ed5f,gidf4329,gidfb049,gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!news4.google.com!news.glorb.com!
hwmnpeer01.lga!hwmedia!news.highwinds-media.com!cycny01.gnilink.net!
spamkiller.gnilink.net!gnilink.net!trnddc01.POSTED!2624caa7!not-for-mail
Reply-To: "stargatesg1" <me@verizon.net>
From: "stargatesg1" <me@verizon.net>
Newsgroups: alt.ham-radio,alt.ham-radio.eme,alt.ham-radio.vhf-
uhf,rec.radio.amateur,rec.radio.amateur.space
Subject: Amsat Suitsat update!!
Lines: 10
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1506
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1506
Message-ID: <lDsFf.6347$xs4.5742@trnddc01>
Date: Sun, 05 Feb 2006 19:47:29 GMT
NNTP-Posting-Host: 151.199.90.36
X-Complaints-To: abuse@verizon.net
X-Trace: trnddc01 1139168849 151.199.90.36 (Sun, 05 Feb 2006 14:47:29 EST)
NNTP-Posting-Date: Sun, 05 Feb 2006 14:47:29 EST
Xref: g2news1.google.com alt.ham-radio:489 alt.ham-radio.eme:5 alt.ham-radio.vhf-
uhf:1282 rec.radio.amateur.space:130
```

Suitsat is alive and kicking but high gain receiving systems, and a high orbit pass over your area, are needed for reception.

http://www.amsat.org/amsat-new/index.php

Good luck,
RoD

```
From -3545261524035267628
X-Google-Thread: 10e8ad,3d33d02a28adae42
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
```

Path: g2news1.google.com!news2.google.com!news3.google.com!news.glorb.com!atl-c08.usenetserver.com!news.usenetserver.com!pc03.usenetserver.com!fe84.usenetserver.com.POSTED!46411146!not-for-mail
From: Jim Shaffer <jmshaffer@alltel.net>
Newsgroups: rec.radio.amateur.space
Subject: Re: SuitSat Aftermath...
Message-ID: <f60du11gtjot51v2l12ag8m679jk3d70em@4ax.com>
References: <OGhFf.7408$tb3.6525@newssvr24.news.prodigy.net>
<dVqFf.10508$fM1.9743@bgtnsc04-news.ops.worldnet.att.net>
<E_qFf.6228$ur7.4193@newssvr33.news.prodigy.com>
X-Newsreader: Forte Agent 1.93/32.576 English (American)
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Lines: 10
X-Complaints-To: abuse@usenetserver.com
X-Abuse-Info: Please be sure to forward a copy of ALL headers
X-Abuse-Info: Otherwise we will be unable to process your complaint properly.
NNTP-Posting-Date: Sun, 05 Feb 2006 17:50:07 EST
Date: Sun, 05 Feb 2006 17:50:07 -0500
Xref: g2news1.google.com rec.radio.amateur.space:131

On Sun, 05 Feb 2006 17:55:48 GMT, "Barky Bark"
<barkybark@bonksbcglobal.net> wrote:

>I think it was a Russian thing.

But the Russians used to build them right. I remember they launched a mini-satellite for the 40th anniversary of Sputnik. I heard it on an old police scanner which was such a piece of junk that it barely worked for its intended purpose.

From -5887810562165384450
X-Google-Thread: 10e8ad,3d33d02a28adae42
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
From: kb9rqz@Mark.Morgan.com
Newsgroups: rec.radio.amateur.space
Subject: Re: SuitSat Aftermath...
Date: Sun, 05 Feb 2006 18:46:25 -0500
Reply-To: k4yz@aol.com
Message-ID: <3i3du19gkk48joh14aaj7phjhes0vqgfh1@4ax.com>
References: <OGhFf.7408$tb3.6525@newssvr24.news.prodigy.net>
<dVqFf.10508$fM1.9743@bgtnsc04-news.ops.worldnet.att.net>
<E_qFf.6228$ur7.4193@newssvr33.news.prodigy.com>
<f60du11gtjot51v2l12ag8m679jk3d70em@4ax.com>
X-Newsreader: Forte Free Agent 2.0/32.652
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

```
Organization: Usenet Zone http://www.usenetzone.com Free Usenet Binary server
contains 140,000+ groups
Lines: 21
Path: g2news1.google.com!news2.google.com!news4.google.com!news.glorb.com!
news.usenetzone.com!not-for-mail
Xref: g2news1.google.com rec.radio.amateur.space:132

On Sun, 05 Feb 2006 17:50:07 -0500, Jim Shaffer <jmshaffer@alltel.net>
wrote:

>On Sun, 05 Feb 2006 17:55:48 GMT, "Barky Bark"
><barkybark@bonksbcglobal.net> wrote:
>
>>I think it was a Russian thing.
>
>But the Russians used to build them right.  I remember they launched a
>mini-satellite for the 40th anniversary of Sputnik.  I heard it on an
>old police scanner which was such a piece of junk that it barely
>worked for its intended purpose.

the Soveits used to build em get it right
>
```

```
-----------------------------------------
Usenet Zone Free Binaries Usenet Server
More than 140,000 groups
Unlimited download
http://www.usenetzone.com to open account
```

```
From 835173420132606089
X-Google-Thread: 10e8ad,3d33d02a28adae42
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!news4.google.com!news.glorb.com!
newsfeed-east.nntpserver.com!nntpserver.com!statler.nntpserver.com!news-
west.rr.com!news-wrt-01.rdc-nyc.rr.com!news-feed-01.rdc-nyc.rr.com!news.rr.com!
news-out.nyc.rr.com!news-wrt-01.rdc-nyc.rr.com.POSTED!53ab2750!not-for-mail
From: Johnny Borborigmi <growl@tummy.com>
Newsgroups: rec.radio.amateur.space
Message-ID: <2006020519213575249%growl@tummycom>
References: <f60du11gtjot51v2l12ag8m679jk3d70em@4ax.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1; format=flowed
Content-Transfer-Encoding: 8bit
Subject: Re: SuitSat Aftermath...
User-Agent: Unison/1.6.2
Lines: 16
Date: Mon, 06 Feb 2006 00:21:28 GMT
NNTP-Posting-Host: 24.161.95.233
X-Complaints-To: abuse@rr.com
X-Trace: news-wrt-01.rdc-nyc.rr.com 1139185288 24.161.95.233 (Sun, 05 Feb 2006
19:21:28 EST)
```

```
NNTP-Posting-Date: Sun, 05 Feb 2006 19:21:28 EST
Organization: Road Runner High Speed Online http://www.rr.com
Xref: g2news1.google.com rec.radio.amateur.space:133

On 2006-02-05 17:50:07 -0500, Jim Shaffer <jmshaffer@alltel.net> said:

> On Sun, 05 Feb 2006 17:55:48 GMT, "Barky Bark"
> <barkybark@bonksbcglobal.net> wrote:
>
>> I think it was a Russian thing.
>
> But the Russians used to build them right.  I remember they launched a
> mini-satellite for the 40th anniversary of Sputnik.  I heard it on an
> old police scanner which was such a piece of junk that it barely
> worked for its intended purpose.


Hey, stuff happens. Sometimes these things don't go right. Most of the
time they do.




From 1890084552243814969
X-Google-Thread: 10e8ad,3d33d02a28adae42
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!news4.google.com!news.glorb.com!
newshub.sdsu.edu!elnk-nf2-pas!elnk-pas-nf1!newsfeed.earthlink.net!
stamper.news.pas.earthlink.net!stamper.news.atl.earthlink.net!
newsread3.news.atl.earthlink.net.POSTED!d2b35f9a!not-for-mail
From: "helmsman@mindspring.com" <helmsman@mindspring.com>
Newsgroups: rec.radio.amateur.space
Subject: Re: SuitSat Aftermath...
Reply-To: helmsman@mindspring.com
Message-ID: <vejfu1hqaivbo4l9n1ls14g4houmlpno6m@4ax.com>
References: <OGhFf.7408$tb3.6525@newssvr24.news.prodigy.net>
<dVqFf.10508$fM1.9743@bgtnsc04-news.ops.worldnet.att.net>
<E_qFf.6228$ur7.4193@newssvr33.news.prodigy.com>
<f60du11gtjot51v2l12ag8m679jk3d70em@4ax.com>
X-Newsreader: Forte Agent 1.91/32.564
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Lines: 15
Date: Mon, 06 Feb 2006 22:30:38 GMT
NNTP-Posting-Host: 4.229.39.211
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread3.news.atl.earthlink.net 1139265038 4.229.39.211 (Mon, 06 Feb
2006 14:30:38 PST)
NNTP-Posting-Date: Mon, 06 Feb 2006 14:30:38 PST
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news1.google.com rec.radio.amateur.space:134
```

Jim Shaffer <jmshaffer@alltel.net> wrote:

>On Sun, 05 Feb 2006 17:55:48 GMT, "Barky Bark"
><barkybark@bonksbcglobal.net> wrote:
>
>>I think it was a Russian thing.
>
>But the Russians used to build them right. I remember they launched a
>mini-satellite for the 40th anniversary of Sputnik. I heard it on an
>old police scanner which was such a piece of junk that it barely
>worked for its intended purpose.
>

Everyone makes a snake killer once and a while.

From -479406322619899518
X-Google-Thread: 10ed5f,7958ca3357470981,start
X-Google-Thread: 10a476,7958ca3357470981,start
X-Google-Thread: fb049,7958ca3357470981,start
X-Google-Thread: 10e8ad,7958ca3357470981,start
X-Google-Thread: fa029,7958ca3357470981,start
X-Google-Attributes: gid10ed5f,gid10a476,gidfb049,gid10e8ad,gidfa029,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!news4.google.com!news.glorb.com!hwmnpeer01.lga!hwmedia!news.highwinds-media.com!cycny01.gnilink.net!spamkiller.gnilink.net!gnilink.net!trnddc03.POSTED!2624caa7!not-for-mail
Reply-To: "stargatesg1" <me@verizon.net>
From: "stargatesg1" <me@verizon.net>
Newsgroups: alt.ham-radio,alt.ham-radio.slowscan,alt.ham-radio.vhf-uhf,rec.radio.amateur.space,rec.radio.scanner
Subject: ISS IS REPEATING SUITSAT SIGNALS on 437.800
Lines: 15
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1506
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1506
Message-ID: <fcQFf.7946$Gg1.4116@trnddc03>
Date: Mon, 06 Feb 2006 22:36:59 GMT
NNTP-Posting-Host: 151.199.90.36
X-Complaints-To: abuse@verizon.net
X-Trace: trnddc03 1139265419 151.199.90.36 (Mon, 06 Feb 2006 17:36:59 EST)
NNTP-Posting-Date: Mon, 06 Feb 2006 17:36:59 EST
Xref: g2news1.google.com alt.ham-radio:495 alt.ham-radio.slowscan:2 alt.ham-radio.vhf-uhf:1287 rec.radio.amateur.space:135 rec.radio.scanner:2065

ISS IS REPEATING SUITSAT SIGNALS on 437.800

Just for info to the group.

Whole story with received audio files......

http://www.aj3u.com/blog/

73's RoD
KD0XX
PG-6-29404

```
From 4513559453891333250
X-Google-Thread: 10e8ad,3d33d02a28adae42
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!newsfeed.gamma.ru!Gamma.RU!skynet.be!
peer-uk.news.demon.net!kibo.news.demon.net!mutlu.news.demon.net!news.demon.co.uk!
demon!nospam.demon.co.uk!hilsnews
From: Hils <hilsnews@nospam.demon.co.uk>
Newsgroups: rec.radio.amateur.space
Subject: Re: SuitSat Aftermath...
Date: Mon, 6 Feb 2006 23:03:51 +0000
Organization: Intermittent at best
Lines: 8
Message-ID: <YTjC9EFXX95DFwNm@newearth.demon.co.uk>
References: <OGhFf.7408$tb3.6525@newssvr24.news.prodigy.net>
 <dVqFf.10508$fM1.9743@bgtnsc04-news.ops.worldnet.att.net>
 <E_qFf.6228$ur7.4193@newssvr33.news.prodigy.com>
 <f60du11gtjot51v2l12ag8m679jk3d70em@4ax.com>
 <3i3du19gkk48joh14aaj7phjhes0vqgfh1@4ax.com>
Reply-To: Hils <hils@nospam.demon.co.uk>
NNTP-Posting-Host: newearth.demon.co.uk
Mime-Version: 1.0
Content-Type: text/plain;charset=us-ascii;format=flowed
X-Trace: news.demon.co.uk 1139267407 23770 193.237.117.162 (6 Feb 2006 23:10:07
GMT)
X-Complaints-To: abuse@demon.net
NNTP-Posting-Date: Mon, 6 Feb 2006 23:10:07 +0000 (UTC)
User-Agent: Turnpike/6.05-S (<mBzxuS2jji53TkZ3UtmZ3heTZ9>)
Xref: g2news1.google.com rec.radio.amateur.space:136
```

kb9rqz@Mark.Morgan.com wrote

>the Soveits used to build em get it right

They built the RS series as well. Communism wasn't all bad. :-)

--
Hil

```
From -4103044681823659427
X-Google-Thread: 10e8ad,3d33d02a28adae42
```

```
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
From: kb9rqz@Mark.Morgan.com
Newsgroups: rec.radio.amateur.space
Subject: Re: SuitSat Aftermath...
Date: Mon, 06 Feb 2006 18:32:40 -0500
Reply-To: k4yz@aol.com
Message-ID: <93nfu1dsguu87skm6k61hv0fud341hg9p5@4ax.com>
References: <OGhFf.7408$tb3.6525@newssvr24.news.prodigy.net>
<dVqFf.10508$fM1.9743@bgtnsc04-news.ops.worldnet.att.net>
<E_qFf.6228$ur7.4193@newssvr33.news.prodigy.com>
<f60du11gtjot51v2l12ag8m679jk3d70em@4ax.com>
<3i3du19gkk48joh14aaj7phjhes0vqgfh1@4ax.com>
<YTjC9EFXX95DFwNm@newearth.demon.co.uk>
X-Newsreader: Forte Free Agent 2.0/32.652
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Organization: Usenet Zone http://www.usenetzone.com Free Usenet Binary server
contains 140,000+ groups
Lines: 17
Path: g2news1.google.com!news2.google.com!news4.google.com!news.glorb.com!
news.usenetzone.com!not-for-mail
Xref: g2news1.google.com rec.radio.amateur.space:137

On Mon, 6 Feb 2006 23:03:51 +0000, Hils <hilsnews@nospam.demon.co.uk>
wrote:

>kb9rqz@Mark.Morgan.com wrote
>
>>the Soveits used to build em get it right
>
>They built the RS series as well. Communism wasn't all bad. :-)

well comuism certainly had it problems but the current system of
pretending they have a a working market economy s.. leaves a lot to be
desired
```

Usenet Zone Free Binaries Usenet Server
More than 140,000 groups
Unlimited download
http://www.usenetzone.com to open account

```
From 8254358188588220156
X-Google-Thread: 10ed5f,7958ca3357470981
X-Google-Thread: 10a476,7958ca3357470981
X-Google-Thread: fb049,7958ca3357470981
X-Google-Thread: 10e8ad,7958ca3357470981
X-Google-Thread: fa029,7958ca3357470981
X-Google-Attributes: gid10ed5f,gid10a476,gidfb049,gid10e8ad,gidfa029,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!proxad.net!212.101.4.254.MISMATCH!
```

solnet.ch!solnet.ch!dedekind.zen.co.uk!zen.net.uk!fuller.zen.co.uk!shaftesbury.zen.co.uk.POSTED!not-for-mail
From: "tg" <tg@nospameverever.net>
Newsgroups: alt.ham-radio,alt.ham-radio.slowscan,alt.ham-radio.vhf-uhf,rec.radio.amateur.space,rec.radio.scanner
References: <fcQFf.7946$Gg1.4116@trnddc03>
Subject: Re: ISS IS REPEATING SUITSAT SIGNALS on 437.800
Date: Tue, 7 Feb 2006 00:26:10 -0000
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.2180
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.2180
X-RFC2646: Format=Flowed; Original
Lines: 15
Message-ID: <43e7e91a$0$29565$da0feed9@news.zen.co.uk>
Organization: Zen Internet
NNTP-Posting-Host: 82.69.125.106
X-Trace: 1139271962 shaftesbury.zen.co.uk 29565 82.69.125.106:1554
X-Complaints-To: abuse@zen.co.uk
Xref: g2news1.google.com alt.ham-radio:496 alt.ham-radio.slowscan:3 alt.ham-radio.vhf-uhf:1289 rec.radio.amateur.space:138 rec.radio.scanner:2066

"stargatesg1" <me@verizon.net> wrote in message
news:fcQFf.7946$Gg1.4116@trnddc03...
> ISS IS REPEATING SUITSAT SIGNALS on 437.800
>
> Just for info to the group.
>
> Whole story with received audio files......
>
> http://www.aj3u.com/blog/

having bad luck here in the UK. Suitsat (for the second time) will be passing over the UK in the middle of the night, while I'm
sleeping. Drat.

From -998028452456251869
X-Google-Thread: 10ed5f,7958ca3357470981
X-Google-Thread: 10a476,7958ca3357470981
X-Google-Thread: fb049,7958ca3357470981
X-Google-Thread: 10e8ad,7958ca3357470981
X-Google-Thread: fa029,7958ca3357470981
X-Google-Attributes: gid10ed5f,gid10a476,gidfb049,gid10e8ad,gidfa029,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!atl-c05.usenetserver.com!news.usenetserver.com!cycny01.gnilink.net!hwmnpeer01.lga!hwmedia!news.highwinds-media.com!hw-filter.lga!fe10.lga.POSTED!53ab2750!not-for-mail
From: "DougSlug" <dougslug@hotmail.com>

Newsgroups: alt.ham-radio,alt.ham-radio.slowscan,alt.ham-radio.vhf-uhf,rec.radio.amateur.space,rec.radio.scanner
References: <fcQFf.7946$Gg1.4116@trnddc03>
<43e7e91a$0$29565$da0feed9@news.zen.co.uk>
Subject: Re: ISS IS REPEATING SUITSAT SIGNALS on 437.800
Lines: 22
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.2180
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.2180
X-RFC2646: Format=Flowed; Response
Message-ID: <EvSFf.165$Up.89@fe10.lga>
Date: Mon, 6 Feb 2006 20:14:12 -0500
NNTP-Posting-Host: 69.116.48.74
X-Complaints-To: abuse@cv.net
X-Trace: fe10.lga 1139274852 69.116.48.74 (Mon, 06 Feb 2006 18:14:12 MST)
NNTP-Posting-Date: Mon, 06 Feb 2006 18:14:12 MST
Organization: Optimum Online
Xref: g2news1.google.com alt.ham-radio:497 alt.ham-radio.slowscan:4 alt.ham-radio.vhf-uhf:1290 rec.radio.amateur.space:139 rec.radio.scanner:2067

Can't you just get up during the night to listen? It is a rather rare opportunity, after all. Get everything set up ahead of time so you don't go waking the wife and kiddies with your crashing around in the dark!

"tg" <tg@nospamevereverever.net> wrote in message
news:43e7e91a$0$29565$da0feed9@news.zen.co.uk...
>
> "stargatesg1" <me@verizon.net> wrote in message
> news:fcQFf.7946$Gg1.4116@trnddc03...
>> ISS IS REPEATING SUITSAT SIGNALS on 437.800
>>
>> Just for info to the group.
>>
>> Whole story with received audio files......
>>
>> http://www.aj3u.com/blog/
>
> having bad luck here in the UK. Suitsat (for the second time) will be
> passing over the UK in the middle of the night, while I'm sleeping. Drat.

From 264870067161070147
X-Google-Thread: 10ed5f,7958ca3357470981
X-Google-Thread: 10a476,7958ca3357470981
X-Google-Thread: fb049,7958ca3357470981
X-Google-Thread: 10e8ad,7958ca3357470981
X-Google-Thread: fa029,7958ca3357470981
X-Google-Attributes: gid10ed5f,gid10a476,gidfb049,gid10e8ad,gidfa029,public
X-Google-Language: ENGLISH,ASCII-7-bit

```
Path: g2news1.google.com!news1.google.com!news2.google.com!proxad.net!proxad.net!
62.253.162.218.MISMATCH!news-in.ntli.net!newsrout1-win.ntli.net!ntli.net!
news.highwinds-media.com!newspeer1-win.ntli.net!newsfe6-win.ntli.net.POSTED!
53ab2750!not-for-mail
Reply-To: "mikeFNB" <mikefnb@moc.dlrowltn>
From: "mikeFNB" <mikefnb@moc.dlrowltn>
Newsgroups: alt.ham-radio,alt.ham-radio.slowscan,alt.ham-radio.vhf-
uhf,rec.radio.amateur.space,rec.radio.scanner
References: <fcQFf.7946$Gg1.4116@trnddc03>
<43e7e91a$0$29565$da0feed9@news.zen.co.uk> <EvSFf.165$Up.89@fe10.lga>
Subject: Re: ISS IS REPEATING SUITSAT SIGNALS on 437.800
Lines: 35
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.2180
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.2180
X-RFC2646: Format=Flowed; Response
Message-ID: <%9TFf.28731$mf2.7958@newsfe6-win.ntli.net>
Date: Tue, 07 Feb 2006 01:59:23 GMT
NNTP-Posting-Host: 80.6.113.77
X-Complaints-To: http://www.ntlworld.com/netreport
X-Trace: newsfe6-win.ntli.net 1139277563 80.6.113.77 (Tue, 07 Feb 2006 01:59:23
GMT)
NNTP-Posting-Date: Tue, 07 Feb 2006 01:59:23 GMT
Organization: ntl Cablemodem News Service
Xref: g2news1.google.com alt.ham-radio:498 alt.ham-radio.slowscan:5 alt.ham-
radio.vhf-uhf:1291 rec.radio.amateur.space:140 rec.radio.scanner:2068
```

do what i am going to do
leave the scanner squelched upon loud volume or
these 2.4GHz retransmitters for tv are quite good also.
or if your not near a scanner connected to an outside aerial....
just use a small tv in the bedroom and retransmit just the scanner audio via
the rca phono socket.

mike
scanner
"DougSlug" <dougslug@hotmail.com> wrote in message
news:EvSFf.165$Up.89@fe10.lga...

```
> Can't you just get up during the night to listen?  It is a rather rare
> opportunity, after all.  Get everything set up ahead of time so you don't
> go waking the wife and kiddies with your crashing around in the dark!
>
>
> "tg" <tg@nospameverevererever.net> wrote in message
> news:43e7e91a$0$29565$da0feed9@news.zen.co.uk...
>>
>> "stargatesg1" <me@verizon.net> wrote in message
>> news:fcQFf.7946$Gg1.4116@trnddc03...
>>> ISS IS REPEATING SUITSAT SIGNALS on 437.800
>>>
>>> Just for info to the group.
>>>
```

```
>>> Whole story with received audio files......
>>>
>>> http://www.aj3u.com/blog/
>>
>> having bad luck here in the UK. Suitsat (for the second time) will be
>> passing over the UK in the middle of the night, while I'm sleeping. Drat.
>
>
```

```
From -5462863793513997496
X-Google-Thread: 10ed5f,7958ca3357470981
X-Google-Thread: 10a476,7958ca3357470981
X-Google-Thread: fb049,7958ca3357470981
X-Google-Thread: 10e8ad,7958ca3357470981
X-Google-Thread: fa029,7958ca3357470981
X-Google-Attributes: gid10ed5f,gid10a476,gidfb049,gid10e8ad,gidfa029,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!postnews.google.com!g44g2000cwa.googlegroups.com!not-for-
mail
From: "bradvk2qq" <bradvk2qq@w6ir.com>
Newsgroups: alt.ham-radio,alt.ham-radio.slowscan,alt.ham-radio.vhf-
uhf,rec.radio.amateur.space,rec.radio.scanner
Subject: Re: ISS IS REPEATING SUITSAT SIGNALS on 437.800
Date: 6 Feb 2006 18:28:12 -0800
Organization: http://groups.google.com
Lines: 4
Message-ID: <1139279292.108399.300770@g44g2000cwa.googlegroups.com>
References: <fcQFf.7946$Gg1.4116@trnddc03>
   <43e7e91a$0$29565$da0feed9@news.zen.co.uk>
NNTP-Posting-Host: 220.233.107.1
Mime-Version: 1.0
Content-Type: text/plain; charset="iso-8859-1"
X-Trace: posting.google.com 1139279300 18554 127.0.0.1 (7 Feb 2006 02:28:20 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Tue, 7 Feb 2006 02:28:20 +0000 (UTC)
In-Reply-To: <43e7e91a$0$29565$da0feed9@news.zen.co.uk>
User-Agent: G2/0.2
X-HTTP-UserAgent: Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1; SV1; .NET CLR
1.1.4322),gzip(gfe),gzip(gfe)
Complaints-To: groups-abuse@google.com
Injection-Info: g44g2000cwa.googlegroups.com; posting-host=220.233.107.1;
   posting-account=PGGSQw0AAACzE8jScrKwlKa9UR7luTcr
Xref: g2news1.google.com alt.ham-radio:499 alt.ham-radio.slowscan:6 alt.ham-
radio.vhf-uhf:1293 rec.radio.amateur.space:141 rec.radio.scanner:2069
```

Download a program called Scanner Recorder and let it run overnight.

Brad VK2QQ

```
From 2368427953361473642
X-Google-Thread: 10ed5f,7958ca3357470981
X-Google-Thread: 10a476,7958ca3357470981
X-Google-Thread: fb049,7958ca3357470981
X-Google-Thread: 10e8ad,7958ca3357470981
X-Google-Thread: fa029,7958ca3357470981
X-Google-Attributes: gid10ed5f,gid10a476,gidfb049,gid10e8ad,gidfa029,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!news3.google.com!news2.volia.net!
dedekind.zen.co.uk!zen.net.uk!fuller.zen.co.uk!cockburn.zen.co.uk.POSTED!not-for-
mail
From: "tg" <tg@nospameverevererever.net>
Newsgroups: alt.ham-radio,alt.ham-radio.slowscan,alt.ham-radio.vhf-
uhf,rec.radio.amateur.space,rec.radio.scanner
References: <fcQFf.7946$Gg1.4116@trnddc03>
<43e7e91a$0$29565$da0feed9@news.zen.co.uk>
<1139279292.108399.300770@g44g2000cwa.googlegroups.com>
Subject: Re: ISS IS REPEATING SUITSAT SIGNALS on 437.800
Date: Tue, 7 Feb 2006 09:06:06 -0000
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.2180
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.2180
X-RFC2646: Format=Flowed; Original
Lines: 10
Message-ID: <43e862f4$0$5011$db0fefd9@news.zen.co.uk>
Organization: Zen Internet
NNTP-Posting-Host: 82.69.125.106
X-Trace: 1139303156 cockburn.zen.co.uk 5011 82.69.125.106:1451
X-Complaints-To: abuse@zen.co.uk
Xref: g2news1.google.com alt.ham-radio:501 alt.ham-radio.slowscan:7 alt.ham-
radio.vhf-uhf:1295 rec.radio.amateur.space:142 rec.radio.scanner:2071


"bradvk2qq" <bradvk2qq@w6ir.com> wrote in message
news:1139279292.108399.300770@g44g2000cwa.googlegroups.com...
> Download a program called Scanner Recorder and let it run overnight.
>
> Brad VK2QQ

already did that. see my post here dated 5/2/06.
```

```
From -2014506837113187980
X-Google-Thread: 10e8ad,7958ca3357470981
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!news3.google.com!news.glorb.com!
newscon02.news.prodigy.com!newscon06.news.prodigy.com!prodigy.net!news-
```

east.rr.com!news-wrt-01.rdc-nyc.rr.com!news-feed-01.rdc-nyc.rr.com!news.rr.com!news-out.nyc.rr.com!news-wrt-01.rdc-nyc.rr.com.POSTED!53ab2750!not-for-mail
From: Johnny Borborigmi <growl@tummy.com>
Newsgroups: rec.radio.amateur.space
Message-ID: <200602070717438930%growl@tummycom>
References: <fcQFf.7946$Gg1.4116@trnddc03>
MIME-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1; format=flowed
Content-Transfer-Encoding: 8bit
Subject: Re: ISS IS REPEATING SUITSAT SIGNALS on 437.800
User-Agent: Unison/1.6.2
Lines: 18
Date: Tue, 07 Feb 2006 12:17:41 GMT
NNTP-Posting-Host: 24.161.95.233
X-Complaints-To: abuse@rr.com
X-Trace: news-wrt-01.rdc-nyc.rr.com 1139314661 24.161.95.233 (Tue, 07 Feb 2006 07:17:41 EST)
NNTP-Posting-Date: Tue, 07 Feb 2006 07:17:41 EST
Organization: Road Runner High Speed Online http://www.rr.com
Xref: g2news1.google.com rec.radio.amateur.space:143

On 2006-02-06 17:36:59 -0500, "stargatesg1" <me@verizon.net> said:

> ISS IS REPEATING SUITSAT SIGNALS on 437.800
>
> Just for info to the group.
>
> Whole story with received audio files......
>
> http://www.aj3u.com/blog/
>
>
> 73's RoD
> KD0XX
> PG-6-29404

yup, I've heard them as well. Loud, S-5.

From -4828008753404321258
X-Google-Thread: 10e8ad,dda295c73152c879,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!news4.google.com!news.glorb.com!atl-c03.usenetserver.com!news.usenetserver.com!elnk-atl-nf1!newsfeed.earthlink.net!stamper.news.atl.earthlink.net!newsread1.news.atl.earthlink.net.POSTED!46041641!not-for-mail
From: "JoAnne Maenpaa" <wb9jej_no-spam@earthlink.net>
Newsgroups: rec.radio.amateur.space
Subject: ANS-037 AMSAT News Service Special Bulletin - OSCAR Number For SuitSat
Lines: 35

X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <WU1Gf.7257$Nv2.1322@newsread1.news.atl.earthlink.net>
Date: Tue, 07 Feb 2006 14:12:06 GMT
NNTP-Posting-Host: 68.164.231.68
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread1.news.atl.earthlink.net 1139321526 68.164.231.68 (Tue, 07 Feb 2006 06:12:06 PST)
NNTP-Posting-Date: Tue, 07 Feb 2006 06:12:06 PST
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news1.google.com rec.radio.amateur.space:144

SB SAT @ AMSAT $ANS-037.01
OSCAR Number for SuitSat

AMSAT News Service Bulletin 037.01
From AMSAT HQ SILVER SPRING, MD.
February 6, 2006
To All RADIO AMATEURS
BID: $ANS-037.01

Bill Tynan, W3XO, former President of AMSAT-NA and the OSCAR number coordinator has issued this statement:

From the information sent to me regarding the SuitSat project, it is clear that the SuitSat spacecraft IS qualified to receive an OSCAR number.

Therefore, by the authority vested in me by the AMSAT-NA President, I am pleased to issue this new amateur satellite the designation AMSAT-OSCAR-54, or AO-54.

Congratulations are in order to Frank Bauer, KA3HDO, Sergey Samburov, RV3DR and the entire Radioskaf/Suitsat team for mounting this exciting and attention-getting project. Seldom has an amateur radio event captured the public's imagination and evoked so much positive news media coverage as SuitSat has.

73,
Bill Tynan, W3XO

For the details regarding OSCAR Number Assignment refer to:
http://www.amsat.org/amsat/amsat-na/oscar.html

/EX

From 2591328760054741861
X-Google-Thread: 10e8ad,35a4651e73748d6f,start

X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!news4.google.com!news.glorb.com!
border1.nntp.dca.giganews.com!border2.nntp.dca.giganews.com!nntp.giganews.com!
elnk-atl-nf1!newsfeed.earthlink.net!stamper.news.atl.earthlink.net!
newsread1.news.atl.earthlink.net.POSTED!46041641!not-for-mail
From: "JoAnne Maenpaa" <wb9jej_no-spam@earthlink.net>
Newsgroups: rec.radio.amateur.space
Subject: WSR-036 AMSAT Weekly Satellite Report
Lines: 1150
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <_U1Gf.7258$Nv2.99@newsread1.news.atl.earthlink.net>
Date: Tue, 07 Feb 2006 14:12:10 GMT
NNTP-Posting-Host: 68.164.231.68
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread1.news.atl.earthlink.net 1139321530 68.164.231.68 (Tue, 07 Feb 2006 06:12:10 PST)
NNTP-Posting-Date: Tue, 07 Feb 2006 06:12:10 PST
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news1.google.com rec.radio.amateur.space:145

This report is organized into 4 parts.
Part 1 - operational analog amateur satellites.
Part 2 - operational digital amateur satellites.
Part 3 - non - operational satellites
Part 4 - proposed satellites

SB SAT @ AMSAT <W8ISS ANS-036.S1
WSR 036 Part 1 02/05/2006

AMSAT NEWS SERVICE BULLETIN 036.S1 FROM AMSAT HQ
SILVER SPRING, MD, February 05, 2006
TO ALL RADIO AMATEURS
BID: $ANS-036.S1

AO-54 SUITSAT
Catalog Number:
Release Date: February 3,2006

Proposed Callsign: RS0RS
Downlink: 145.990 FM

Modes :   FM Voice Telemetry/Greetings
            FM SSTV

Official webpage: http://www.suitsat.org

There are reports of Strong to No signal from Suitsat this weekend. Most of the ones reporting getting strong signals are stations with high gain

```
antenna
set-ups.

There are also reports that the ISS has setup their crossband repeater
to re-
transmit from 145.990 to 437.800 to help those that would like to hear
what
Suitsat sounds like.
[02062006]
=====
VO-52 HAMSAT
Catalog Number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/V - Indian Transponder

Proposed frequencies:
--------------------
Indian Transponder:
Uplink  : 435.220 MHz to 435.280 MHz LSB/CW
Downlink: 145.870 MHz to 145.930 MHz USB/CW
Beacom  : 145.859330 MHZ CW

Dutch Transponder:
Uplink  : 435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW
Beacon  : 145.860MHz 12WPM with CW message

Official Webpage: http://www.amsat.in/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is
active. Each transponder has a different beacon, see below:

Indian transponder - unmodulated carrier on
145.936MHz.
Dutch Transponder  - CW message on 145.860MHz.
[01152006]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Mode: PBBS - OFF
             VOICE REPEATER - V-FM/S-FM

Analog voice downlink:  435.300 MHz FM
                        435.150 MHz FM
Analog voice uplink:    145.880 MHZ FM
                        145.880 MHz USB
                        145.920 MHz FM 67Hz PL tone
```

1268.700 MHz FM 67Hz PL tone

Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast Protocol (PBP)

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/

Schedule from the AO-51 Command Team:

Feb 5
FM Repeater, V/S
Uplink: 145.920 mhz FM, No PL Tone
Downlink 2401.200 mhz FM

Feb 12
QRP FM Repeater, V/U
Uplink: 145.880 mhz FM, no PL Tone
Downlink 435.150 mhz FM
FM Repeater, V/U
Uplink: 145.920 mhz FM, 67 hz PL Tone
Downlink 435.300 mhz FM

Feb 19
9k6 Digital, V/U, High Power, PBP BBS (Pacsat Broadcast Protocol BBS)
TLM Data Active, Digipeater ON
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 435.150 mhz FM, 9k6 PBP Digital
Digipeater will be Turned ON

Feb 26
FM Repeater, V/U
Uplink: 145.920 mhz FM, 67 hz PL Tone
Downlink 435.300 mhz FM
9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
TLM Data Active
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 435.150 mhz FM, 9k6 PBP Digital
[02062006]

=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Uplink: 145.850 MHz (67.0 Hz PL tone) (See below for operating procedures)
Downlink: 436.795 MHz

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

There have been unconfirmed reports on the amsat-bb remailer that SO-50 has
shifted downlink frequency as much as 5khz up. This both from Europe.

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz. The
order of operation is thus: (allow for Doppler as necessary)

1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer
   on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater
   on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10
   minute timer.

[01012006]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: OPERATIONAL

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplink: 145.850 145.870 145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

unOfficial Webpage: http://www.amsat.org/amsat/sats/n7hpr/fo29.html
[11132005]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Uplink: 145.850 MHz FM
Downlink: 436.795 MHz FM

Official Webpage: http://www.ao27.org

```
[01012006]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational until March 14th

Uplink:     145.850 to 145.950 MHz CW/USB Mode A
            432.125 to 432.175 MHz CW/LSB Mode B
Downlink:    29.400 to  29.500 MHz CW/USB Mode A (1W PEP)
            145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
            145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons:     29.502 MHz
            145.972 MHz
            435.100 MHz
           2304.100 MHz

AO-7's orbit no longer goes into eclipse, so it is operating on a 24
hour
timer that changes the mode schedule at approximately 0900z each day.
The
timer alternates the satellite's operational mode between Mode A and
Mode B.

Please use QRP when operating on AO-7!  There are no batteries, and
excessive
power may cause unexpected behavior and possibly damage the satellite.
Mode
B users are likely to experience a Mode change from Mode B to Mode C if
the
buss voltage drops.  This will be marked by a decrease in signal
strength
from AO-7 due to the lower power of Mode C.

AO-7 is expected to remain on this schedule until approximately 14 March
2006
at which time it will re-enter a period of eclipse on each orbit.

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php
The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
AO-7 users are requested to log their contacts and observations about
AO-7,
especially any unexpected mode changes.
AO-07 telemetry software webpage:
http://www.qsl.net/k3tz/files/K3TZ_AO-07_Telemetry_Decoder_0.5.zip
[01222006]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998
```

Status: Operational
Current Mode: CROSSBAND REPEATER V/U ?
Digipeater: OFF

The current Expedition 12 crew is:
Commander: William McArthur - KC5ACR
Flight Engineer: Valery Tokarev - (no call)

Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Callsigns:
Russian: RS0ISS, RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official Webpage: http://www.rac.ca/ariss
Official Fan club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line is NOT translated from Russian and posted.

Currently, the ISS equipment is configured into crossband repeater mode from 2m to 70cm to help broaden the range of Suitsat. PLEASE REFRAIN FORM TRANSMITTING WHILE SUITSAT IS ACTIVE.
[02062006]
NNNN
/EX

SB SAT @ AMSAT <W8ISS $ANS-036.S2
WSR 036 Part 2 02/05/2006

AMSAT NEWS SERVICE BULLETIN 036.S2 FROM AMSAT HQ
SILVER SPRING, MD, February 05, 2006
TO ALL RADIO AMATEURS

BID: $ANS-036.S2

XI-V ?O-??
Catalog Number: 28895
Launch Date: October 27, 2005

Status: Operational only within range of Ground station in Japan

Telemetry Downlink: 437.345MHz - FSK 1200bps using AFK protocol
Beacon Downlink: 437.465MHz - CW about 50 WPM

Callsign: JQ1YGW

Oficial Webpage: http://www.space.t.u-tokyo.ac.jp/gs/satinfo-e.html#xi5
Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/
[01222006]

=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: CROSSBAND REPEATER - V/U
Digipeater: OFF

The current Expedition 12 crew is:
Commander: William McArthur - KC5ACR
Flight Engineer: Valery Tokarev - (no call)

Digital/APRS:
Worldwide packet uplink: 145.990 MHz FM
Worldwide packet downlink: 145.800 Mhz FM

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM

Callsigns:
Russian: RS0ISS, RZ3DZR
USA: NA1SS
Packet Mailbox: RS0ISS-11
Packet Keyboard: RS0ISS-3
Digipeater callsign: ARISS

Official Webpage: http://www.rac.ca/ariss
Official Fan club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is NOT translated from Russian and posted.

Currently, the ISS equipment is configured into crossband repeater mode from 2m to 70cm to help broaden the range of Suitsat. PLEASE REFRAIN FORM TRANSMITTING WHILE SUITSAT IS ACTIVE.
[02062006]
=====
PCSAT2
Catalog Number: 25544
Launch Date: August 1, 2005

Activated: August 3, 2005
Status: Battery-saving mode
Current Mode: None

Digital Downlink: 435.275 Mhz
Digital Uplink: 145.825 Mhz
PSK-31 Downlink: 435.275 Mhz
PSK-31 Uplink: 29.400 - 29.403 Mhz

Broadcast:
BBS:

Official Webpage: http://web.usna.navy.mil/~bruninga/pcsat2.html

PCSAT2 APRS Packet page: http://www.findu.com/cgi-bin/pcsat2.cgi
[01012006]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Mode: PBBS - OFF
VOICE REPEATER - V-FM/S-FM

```
Analog voice downlink:  435.300 MHz FM
                        435.150 MHz FM
Analog voice uplink:    145.880 MHZ FM
                        145.920 MHz FM 67Hz PL tone
                       1268.700 MHz FM 67Hz PL tone

Digital Downlinks:      435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
                       2401.200 MHz FM  38k4 bps, AX.25
Digital Uplink:         145.860 MHz FM, 9k6 Digital, Pacsat Broadcast
                        Protocol (PBP)

Broadcast:              PECHO-11
```

BBS: PECHO-12

Schedule from the AO-51 Command Team:

Feb 5
FM Repeater, V/S
Uplink: 145.920 mhz FM, No PL Tone
Downlink 2401.200 mhz FM

Feb 12
QRP FM Repeater, V/U
Uplink: 145.880 mhz FM, no PL Tone
Downlink 435.150 mhz FM
FM Repeater, V/U
Uplink: 145.920 mhz FM, 67 hz PL Tone
Downlink 435.300 mhz FM

Feb 19
9k6 Digital, V/U, High Power, PBP BBS (Pacsat Broadcast Protocol BBS)
TLM Data Active, Digipeater ON
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 435.150 mhz FM, 9k6 PBP Digital
Digipeater will be Turned ON

Feb 26
FM Repeater, V/U
Uplink: 145.920 mhz FM, 67 hz PL Tone
Downlink 435.300 mhz FM
9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
TLM Data Active
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 435.150 mhz FM, 9k6 PBP Digital
[01292006]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Operational

General Usage Uplink/Downlink:145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

Anyone can work PCSAT-1 with ANY typical 1200 baud packet
station on 145.825. Just set your path to UNPROTO APRS via
ARISS (the same that you use via ARISS on the ISS or via PCSAT2).
Mobiles with the D700 or the TH-D7 HT APRS radios will see packets
directly on their front panel and can work it from their mobile.
[01012006]
=====
CUTE-1

Catalog number: 27844
Launched: June 30,2003

Status: Operational

Uplink: ?
Downlink: 436.8375 CW
             437.4700 1200 FM ax25 or SRLL (ACTIVE only near Japan ?)
Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/
[01012006]
=====
GO-32 TECHSAT-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Downlink: 435.225 MHz FM (9600-baud FSK)
                  (435.325 n/a - temperature problems)
Uplinks: 145.850, 145.890, 145.930 FM
                  1269.700, 1269.800, 1269.900 FM
Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

Jeff, KB2M, reports November 15th, 2005:
I might be wrong about this, but as I am the only one I see working
GO-32
here goes. If you do a DIR request up on the 145.890 uplink the bird
turns
on. Give it a try....

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[ANS-WSR wishes to thank Jeff, KB2M for this weeks report.]
[11202005]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Semi-operational, the digipeater command is on and open for
APRS users.

Uplink: 145.90 145.92 145.94 145.96 MHz FM
                    (using 1200-baud Manchester FSK)
Downlink: 437.026 MHz SSB (1200-baud PSK)
Mode-S Beacon: 2401.1428 MHz
Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[01012006]

=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational?

Telemetry Downlink: 145.826 MHz. FM (1200-baud AFSK).
                   approx. 10 days ON, 10 days OFF
Mode-S Beacon: 2401.500 MHz. ... OFF
UHFBeacon: 435.025 MHz. ... OFF

Official webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm

This from Clive, G3CWV:

Users of OSCAR-11 may be interested in recent additions to my website. Firstly UCAP, this is a simple OSCAR-11 capture program for Windows, and may be used instead of CTERM. It features an accurate time stamp facility, which is useful for checking the satellite's real time clock.

Secondly, the news and telemetry archives have been updated to include all the 2005 data. The URL is http://www.users.zetnet.co.uk/clivew

During the period 14 December 2005 to 23 January 2006 the VHF beacon on 145.826 MHz. has been heard from 23 to 31 December and from 11 to 21 January.

Signals during the December passes were very variable. Sometimes received at good strength, at other times they were inaudible , even with the BFO switched ON (ie. in CW mode). Signals during the January passes tended to be much stronger, and good copy was obtained on most passes.

The on-board clock continues to accumulate a very large error. On 21 January it was 22.14 days slow, having lost 0.33 days (8 hours) since 09 December. However, the rate of change of clock error appears to vary between zero and half an hour per day, over short periods. The greatest changes seem to correspond with poor signals, which suggests that the clock may slow or stop when the battery voltage is low.

All the analogue telemetry channels, 0 to 59 are zero, ie they have failed.
The status channels 60 to 67 are still working.

The satellite is now in continuous sunlight until around 06 May, when eclipses will start again. This should help the satellite to continue transmitting, although continuous sunlight can cause problems due to excessive temperatures. Power supply problems can be caused by poor pointing attitude, ie the sunlight illuminating the ends of the satellite, instead of the solar arrays.

The watchdog timer now appears to have resumed operation on the 20 day cycle, ie. approximately ten days ON followed by 10 days OFF. However, at any time, poor solar attitude, and battery problems, may result in a low 14 volt line supply, which may cause the beacon to switch OFF prematurely, and reset the watchdog timer cycle.

The Beacon frequencies are -

VHF 145.826 MHz. AFSK FM ASCII Telemetry

UHF 435.025 MHz. OFF

S-band 2401.5 MHz. OFF

Listeners to OSCAR-11 may be interested in visiting my website which contains an archive of news & telemetry data. It also contains details about using a soundcard or hardware demodulators for data capture. There is software for capturing data, and decoding ASCII telemetry. The URL is www.users.zetnet.co.uk/clivew/

If you place this bulletin on a terrestrial packet network, please use the bulletin identifier $BID:U2RPT117.CWV, to prevent duplication.
[01292006]
NNNN
/EX

SB SAT @ AMSAT <W8ISS $ANS-036.S3
WSR 036 Part 3 02/05/2006

AMSAT NEWS SERVICE BULLETIN 036.S3 FROM AMSAT HQ
SILVER SPRING, MD, February 05, 2006
TO ALL RADIO AMATEURS
BID: $ANS-036.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

NCUBE-2 ?O-??
Catalog Number: 28894
Launch Date: October 27, 2005

```
Status: Still attached to XO-53 (SSETI)

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
                  2407.25
[01012006]
=====
XO-53 SSETI
Catalog Number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink:    437.250 FM 67Hz CTCSS
Voice Downlink:        2401.835 FM
Packet Up/Downlink:     437.250 9k6 packet
Packet Downlink        2401.835 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[01292006]
=====
POSAT-1 PO-28
Catalog Number: 22829
Launched : September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 429.950

Uplink:   Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html.
POSAT-1
webpage:http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012006]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launched: June 16, 1983

Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB
Beacon:   145.810 MHz (unmodulated carrier)

AO-10 has been locked into a Mode-B, 70-cm uplink and
2-meter downlink for several years.
```

```
W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: Downlink only

Uplink:             145.875 145.900 145.925 145.950 MHz FM (1200-baud)
Downlink:           435.808 MHz PSK
Broadcast Callsign: ITMSAT-11
BBS:                ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01012006]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink:   21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB
Beacon:   29.408 MHz
Robot:    29.454 MHz
[05232004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink:      21.260 to  21.300 MHz CW/USB
Downlink:   145.860 to 145.900 MHz CW/USB
Beacon:     145.860 MHz
Robot:      145.908 MHz
[05232004]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink 145.975 MHz FM
Downlink 435.070 MHz FM
[05092004]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink:             145.900 FM 9600-baud FSK
Downlink:           435.120 MHz FM
Broadcast Callsign: UOSAT5-11
BBS:                UOSAT5-12
[01092005]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational?

Uplink:      145.858 to 145.898 MHz CW/USB
Downlink:     29.354 to  29.394 MHz CW/USB
Beacon:       29.352 MHz (intermittent)
SSB meeting frequency:  29.380 MHz (unofficial)
[06202004]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplink:             145.84 145.86 145.88 145.90 MHz FM
                   (using 1200-baud Manchester FSK)
CW downlink:        437.125 MHz
Digital downlink:   437.150 MHz SSB (RC-BPSK 1200-baud PSK)
Broadcast Callsign: LUSAT-11
BBS:                LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[05232004]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Uplink:     145.90 to 146.00 MHz CW/LSB
Downlink:   435.80 to 435.90 MHz CW/USB
Beacon:     435.795

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
```

[08152004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM
Broadcast Callsign: HL01-11
BBS: HL01-12

Jim, AA7KC, reports that KO-23's downlink transmitter continues in a non-operational status.
[05092004]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM (9600-baud FSK)
Downlink: 436.500 MHz FM
Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm

```
[ANS-WSR has no further information]
[05232004]
=====
SO-35 SUNSAT
Catalog Number:     ?
Launched:February 23, 1999

STatus: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
         Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
        Mode J Digipeater: 145.825 MHz and 145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[08082004]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink:             145.960 MHz (9600-baud FSK)
Downlink:           437.025 MHz 437.400 MHz
Broadcast Callsign: UO121-11
BBS:                UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA
web site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[05092004]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplink      V-band    145.840 -  145.990 MHz CW/LSB
           U-band    435.550 -  435.800 MHz CW/LSB
          L1-band   1269.250 - 1269.500 MHz CW/LSB
          L2-band   1268.325 - 1268.575 MHz CW/LSB
          S1-band   2400.350 - 2400.600 MHz CW/LSB
Downlink:  S2-band   2401.225 - 2401.475 MHz CW/USB
          K-band 24,048.010 - 24,048.060 MHz CW/USB
Beacon:    2401.323, 24,048.035
[05232004]
-----
SO-42  SAUDISAT-1B
```

Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational
Downlink: 437.075 MHz
Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[08152004]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz
Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[08152004]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
callsign KE6QMD, as per the user service agreement located at the
following
URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Operational

Uplink: 145.850 or 145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz
Broadcast callsign: MYSAT3-11

```
BBS:                MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial land and weather imaging payloads offers FM and FSK
Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as
a collaborative effort between the Malaysian government and Surrey
Satellite Technology Ltd.
[11202005]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink 435.275 1200-baud AFSK
Downlink 145.825 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01012006]
NNNN
/EX

SB SAT @ AMSAT <W8ISS $ANS-036.S4
WSR 036 Part 4 02/05/2006

AMSAT NEWS SERVICE BULLETIN 036.S4 FROM AMSAT HQ
SILVER SPRING, MD, February 05, 2006
TO ALL RADIO AMATEURS
BID: $ANS-036.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE
PROPOSED FOR LAUNCH AT THIS TIME:

UCISAT ?O-??
Catalog number:
Proposed Launch Date:  October 31, 2005

Status: Under Construction

Downlink: Submission in Progress
Uplink:   Submission in Progress
Callsign: Submission in Progress
[11272005]
=====
PHASE 3E ?O-??
Catalog Number:
Proposed Launch Date: Early 2006
```

Status: Under Construction

For the latest project status update please visit the AMSAT-DL
P3-E web page:
http://www.amsat-dl.org/p3e/

[ANS-WSR wishes to thank William Leijenaar, PE1RAH for this week's
report]
[10022005]

=====

CP1 ?o-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: N6CP
Proposed Transmit Frequency: 436.845
[03272005]

=====

CP2 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.325
[03272005]

=====

HAUSAT1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: D90HP
Proposed Transmit Frequency: 437.465
[03272005]

=====

ICE Cube 1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: W2CXM
Proposed Transmit Frequency: 437.305
[03272005]

=====

ICE Cube 2 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: N2VR
Proposed Transmit Frequency: 437.425
[03272005]

=====

ION ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

```
Proposed Callsign: TBA
Proposed Transmit Frequency: 437.505
[03272005]
=====
KUTEsat ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: KC0RMW
Proposed Transmit Frequency: 437.385
[03272005]
=====
MEROPE ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: K7MSU-1
Proposed Transmit Frequency: 145.980
[03272005]
=====
RINCON ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
                   437.345
[03272005]
=====
SACRED ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
[03272005]
=====
SACRED ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
[03272005]
=====
SEEDS ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: JQ1YGU
Proposed Transmit Frequency: 437.485
[03272005]
```

=====
Mea Huaka ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.405
[03272005]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
       888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/amsat/listserv/menu.html

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen,

G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

From -3271162313666904844
X-Google-Thread: 10e8ad,c97e589745dea643,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
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stamper.news.atl.earthlink.net!newsread1.news.atl.earthlink.net.POSTED!46041641!
not-for-mail
From: "JoAnne Maenpaa" <wb9jej_no-spam@earthlink.net>
Newsgroups: rec.radio.amateur.space
Subject: ANS-036 AMSAT News Service Weekly Bulletin
Lines: 444
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <0V1Gf.7259$Nv2.6711@newsread1.news.atl.earthlink.net>
Date: Tue, 07 Feb 2006 14:12:12 GMT
NNTP-Posting-Host: 68.164.231.68
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread1.news.atl.earthlink.net 1139321532 68.164.231.68 (Tue, 07 Feb 2006 06:12:12 PST)
NNTP-Posting-Date: Tue, 07 Feb 2006 06:12:12 PST
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news1.google.com rec.radio.amateur.space:146

AMSAT NEWS SERVICE
ANS-036

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:

* SuitSat Status February 4, 2005

* Commemorative SuitSat QSL Certificate Will Be Available
* Extensive Media Coverage on SuitSat Deployment
* ARISS Status January 30, 2006
* First U.S. Satellite Launched 48 Years Ago
* IMAGE Satellite Captures Aurora Spectacular
* A Personal Note from This Week's ANS Editor

SB SAT @ AMSAT $ANS-036.01
SuitSat Status 4 February 2005

AMSAT News Service Bulletin 036.01
From AMSAT HQ SILVER SPRING, MD.
February 5, 2006
To All RADIO AMATEURS
BID: $ANS-036.01

Silver Spring, Maryland
4 February 2006 at 22:00 UTC

Paraphrasing Mark Twain....the demise of SuitSat-1 is highly exaggerated!!

It is now nearly 24 hours since the successful deployment of the SuitSat-1 experiment. These past 24 hours have been a wild ride of emotions...tremendous highs...deep lows when people reported no signals and said SuitSat-1 was dead and now....some optimism.

It is absolutely clear that SuitSat-1 is alive. It was successfully turned on by the ISS crew prior to deploy and the timing, micro-controller functions and audio appear to be operating nominally. The prime issue appears to be an extremely weak signal.

I have heard several recordings and have monitored two passes today. When the signal is above the noise level, you can clearly hear partials of the student voices, the station ID and the SSTV signal. One of the complicating factors in reception is the very deep fades that occur due to the spin of SuitSat.

Based on the information we know thus far, one can narrow down the issue to the antenna, the feedline, the transmitter output power and/or any of the connections in between. Through your help, we would like to narrow down the issue further and also gather some internal telemetry from the Suit. If the transmitter is running at full power, we would expect the Suit to end operations in the next few days to a week. If it is not, then it will operate much longer. Since we do not know how long this experiment will last, we ask for those with powerful receive stations to listen for SuitSat---especially during direct overhead passes when the Suit is closest to your area. If you can record these passes and send the audio to us, it would be most appreciated. We will continue to be optimistic that this issue will right itself before the batteries are depleted. So please KEEP LISTENING!

Based on what we have learned, we would like to provide the following guidelines to save you time and facilitate gathering information:

1) You need as high a gain antenna as possible with mast mounted pre-amps. An arrow is the minimal set...it provides very brief snippets of the communications. HTs and scanners won't cut it.

2) I would not waste your time on passes below 40 degrees elevation. SuitSat is too far from your station to receive a reliable signal. We have found that closest approach provides several seconds of SuitSat communication with 22 element yagis.

3) The "gold" we are looking for right now is the telemetry information and how long the vehicle stays operational. So if you hear any of the telemetry, please let us know.

We are also working to get the voice repeater set up on ISS to downlink SuitSat audio on 437.80 in the event that the ISS Kenwood radio can receive the SuitSat transmissions. The repeater may be operational as early as mid-day Sunday. Please do NOT transmit on 145.99, voice or packet, until we have confirmed that SuitSat is no longer transmitting. These transmissions interfere with our ability to hear SuitSat.

While the transmission part of the SuitSat experiment has not been stellar, SuitSat-1 has been tremendously successful in several areas. Some of these successes include:

-We have captured the imagination of students and the general public worldwide through this unique experiment.

-The media attention to the SuitSat project represents one of the biggest ever for amateur radio.

-We have had well over 2 million internet hits on www.suitsat.org today.

-Our student's creative artwork, signatures and voices have been carried in space and are on-board the spacesuit--the students are now space travelers as the Suit rotates and orbits the Earth.

-Carried in the spacesuit CD are pictures of Roy Neal, K6DUE, and Thomas Kieselbach, DL2MDE, two of our colleagues who have contributed to the ARISS program and have since passed away.

-We successfully deployed an amateur radio satellite in a Spacesuit from the ISS, demonstrating to the space agencies that this can be safely done.

-This ARISS international team was able to fabricate, test and deliver a safe ham radio system to the ISS team 3 weeks after the international space agencies agreed to allow SuitSat to happen. This was a tremendous feat in of itself.

SuitSat-1/Radioskaf is a space pioneering effort. Pioneering efforts are challenging. Risk is high. But the future payoff is tremendous. As you have seen, we have not had total success. But we have captured the imagination of the students and the general public. And we have already learned a lot from this activity. This will help us and others grow from this experience.

Keep your spirits up and let's continue to be optimistic. And please keep monitoring!!

73, Frank H. Bauer, KA3HDO
ARISS International Chairman
AMSAT-NA VP for Human Spaceflight Programs

[ANS thanks Frank Bauer, KA3HDO, AMSAT-NA VP for Human Spaceflight Programs for the above information]

SB SAT @ AMSAT $ANS-036.02
Commemorative SuitSat QSL Certificate Will Be Available

AMSAT News Service Bulletin 036.02
From AMSAT HQ SILVER SPRING, MD.
February 5, 2006
To All RADIO AMATEURS
BID: $ANS-036.02

Students, scouts, teachers, ham radio operators, and the general public are encouraged to track the space suit, hear the conversations from space, copy the suit telemetry and capture the picture.

There will also be a special endorsement on the award certificate for those students who receive the "special words" that are embedded in the messages from our SuitSat student "crew members." These special words are in different languages - English, French, German, Spanish, Russian, and Japanese. You are encouraged to record the SuitSat downlink audio and get help from fellow students who know these languages.

Radio Amateurs, students and teachers who hear SuitSat should send their signal reports with a large (9x12 inch) self-addressed stamped envelope to one of these addresses listed below:

* USA: ARRL Headquarters
SuitSat QSL
225 Main Street
Newington, CT 06111-1494 USA

* Canada: Radio Amateurs of Canada
SuitSat QSL
720 Belfast Road
Suite 217 Ottawa Ontario K1G 0Z5

* Europe: F1MOJ - Mr CANDEBAT Christophe
SuitSat Europe QSL Manager
7 Rue Roger Bernard
30470 AIMARGUES FRANCE

* Japan: SuitSat Japan QSL
JARL International Section

Tokyo 170-8073 JAPAN

* Russia: Alexander Davydov, RN3DK
Novo - Mytishchinsky prospekt 52 - 111
Mytishchi 18
Moskovskaya obl. 141018, RUSSIA

* Other Countries: Please use the US or Canadian address above.

Also included in this spacesuit is a computer Compact Disk (CD) with images of over 300 items collected from schools and educational organizations around the world. These include creative works of art from students as well as student signatures, school or scout logos, and class or group pictures. Students, schools and educational organizations that participated in the development of this disk earlier this year will all be part of the SuitSat spacewalk---as their creative works, signatures and pictures all float in space!

[ANS thanks the ARISS team for the above information]

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SB SAT @ AMSAT $ANS-036.03
Extensive Media Coverage on SuitSat Deployment

AMSAT News Service Bulletin 036.03
From AMSAT HQ SILVER SPRING, MD.
February 5, 2006
To All RADIO AMATEURS
BID: $ANS-036.03

Interest in SuitSat was on the increase prior to deployment with an abundance of press attention. Media coverage has been extensive. Here are links to some of the feature stories:

New York Times
"An Orbiting Spacesuit With Transmitter"
http://www.nytimes.com/2006/01/28/science/28suit.html?_r=1

Energia website
"Science Research on ISS Russian Segment Technical Research RADIOSKAF EXPERIMENT"
http://www.energia.ru/english/energia/iss/researches/techn-35.html

YubaNet.com
"SuitSat: Disembodied Spacesuit set to orbit Earth"
http://www.yubanet.com/artman/publish/article_30883.shtml

National Public Radio
"SuitSat to Orbit Earth"
http://www.npr.org/templates/story/story.php?storyId=5183146

CNN Science & Space

"One small step for trash is giant leap for ham-kind"
http://www.cnn.com/2006/TECH/space/02/02/recycled.spacesuit.reut/index.html?section=cnn_topstories

Science@NASA
"Using a simple policed scanner or ham radio, you can listen to a disembodied spacesuit circling Earth"
http://science.nasa.gov/headlines/y2006/26jan_suitsat.htm

NASA
"Expedition 12 Preps for Second Spacewalk"
http://www.nasa.gov/mission_pages/station/main/index.html

ARRL
"ISS Crew Prepares for Space Walk, 'SuitSat-1' Launch"
http://www.arrl.org/news/stories/2006/01/27/4/?nc=1

AMSAT
"SuitSat Readies for Operation"
http://www.amsat.org/amsat-new/index.php

NASA Education
"Hearing Voices From Space"
http://www.nasa.gov/audience/forstudents/k-4/home/F_Hearing_Voices.html
http://www.nasa.gov/audience/forstudents/5-8/features/F_Hearing_Voices.html
http://www.nasa.gov/audience/forstudents/9-12/features/F_Hearing_Voices_From_Space.html
http://www.nasa.gov/audience/forstudents/postsecondary/features/F_Hearing_Voices_From_Space.html

NASA television has reported on SuitSat. For more information, see:
http://www.nasa.gov/multimedia/nasatv/index.html

[ANS thanks Carol, KB3LKI and Media Resources for the above information]

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SB SAT @ AMSAT $ANS-036.04
ARISS Status January 30, 2006

AMSAT News Service Bulletin 036.04
From AMSAT HQ SILVER SPRING, MD.
February 5, 2006
To All RADIO AMATEURS
BID: $ANS-036.04

1. New York Contact Successful

On Tuesday, January 24, Aquebogue School in Aquebogue, New York experienced a successful contact with the ISS. Bill McArthur, KC5ACR, answered 20 questions asked by ten students. Video was fed to three other local school districts via a local videoconferencing network. The weekly Aquebogue newspaper, News-Review, covered the event.   Echolink had 38 connections from 11 countries: Australia, Canada, USA, UK, Japan, Iraq, Italy, Russia, Spain, New Zealand, and Thailand. IRLP received 24 connections from the USA, UK, Canada, and Australia. The audio was also streamed on: www.discoveryreflector.ca

2. West Point Contact Successful

Cadets from the Ham Radio Club at the United States Military Academy in West Point had the privilege to speak with Bill McArthur, KC5ACR, on Thursday, January 26. Among the dignitaries attending the event was the Electrical Engineering program director, Colonel Barry Shoop. Professors from other departments who advise some of the cadets who questioned McArthur in a study of lunar habitation requirements also attended. The school has 4000 members, many of whom listened to the contact via local closed circuit (intranet).

3. Upcoming School Contacts

Dale High School in Dale, Oklahoma has been scheduled for an ARISS contact. It will take place on February 7 at 14:56 UTC.

E.L. DeGolyer Elementary School in Dallas, Texas has been approved for a contact with the ISS. It is planned for February 7 at 16:32 UTC.

Pine Ridge Middle School in Naples, Florida has been scheduled for a contact on February 8 at 15:24 UTC.

4. "Discover Engineering Family Day" Contact

"Discover Engineering Family Day" will be held on Saturday, February 18 in the National Building Museum in Washington, D.C. Arrangements are being made for a contact via Amateur Radio with astronaut Bill McArthur for the morning of the 18th (11 am ET).

5. ARRL Article on Georgia, New York Contacts

ARRL ran a story covering the Georgia Tech and Aquebogue School contacts. The article, "Onboard Fires, Safe Grounding Question Topics for NA1SS School Contacts," may be found on its website. See: http://www.arrl.org/news/stories/2006/01/27/2/?nc=1

6. SuitSat Interest Ramped Up

Interest in SuitSat was on the increase last month. The SuitSat website, http://www.suitsat.org received over 105,000 hits in January, coming from over 350 referring sites.

7. McArthur Closes in on DXCC Award

Bill McArthur continues to work DXCC (100 international contacts) entities. As of January 29, it was reported that he has worked 91 of the 100 entities needed for the DXCC award. ARRL covered McArthur's accomplishments in an article entitled, "ISS Commander Completes WAS from Space, Gaining On DXCC."

See: http://www.arrl.org/news/stories/2006/01/26/2/?nc=1

[ANS thanks Carol, KB3LKI for the above information]

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SB SAT @ AMSAT $ANS-036.05
First U.S. Satellite Launched 48 Years Ago

AMSAT News Service Bulletin 036.05
From AMSAT HQ SILVER SPRING, MD.
February 5, 2006
To All RADIO AMATEURS
BID: $ANS-036.05

Forty eight years ago a team of scientists and engineers successfully launched Explorer 1, the first U.S. satellite to orbit around Earth. This historic accomplishment marked the nation's debut in the Cold War-era space race and set the stage for the establishment of the civilian space agency that would become NASA.

NASA's Jet Propulsion Laboratory, Pasadena, CA, was still operated as a research laboratory for the U.S. Army when it was selected in November 1957 to develop the first U.S. satellite, its science package, the communications system and the high-speed upper stages for the Army's Redstone rocket that would guide the tiny, 9-kilogram (20-pound) Explorer 1 into the great unknown. JPL and the Army completed the assignment and successfully launched the satellite in less than three months. JPL and the Army Ballistic Missile Agency, based in Huntsville, AL, joined in firing the satellite toward space from the missile test center at Cape Canaveral, FL on Jan. 31, 1958.

The scientific experiment onboard, a cosmic ray detector built by Dr. James Van Allen of the University of Iowa, soon returned one of the most important findings of the space program: the discovery of what are now known as the Van Allen Radiation Belts around Earth.

Explorer 1 went on to operate for three months.

[ANS thanks Arthur, N1ORC for the above information]

/EX

SB SAT @ AMSAT $ANS-036.06
IMAGE Satellite Captures Aurora Spectacular

AMSAT News Service Bulletin 036.06
From AMSAT HQ SILVER SPRING, MD.
February 5, 2006
To All RADIO AMATEURS
BID: $ANS-036.06

From space, the aurora is a crown of light that circles each of Earth's poles. The IMAGE satellite captured this spectacular view of the aurora australis (southern lights) on September 11, 2005, four days after a record-setting solar flare sent plasma flying towards the Earth.

http://earthobservatory.nasa.gov/Newsroom/NewImages/images.php3?img_id=17165

For the latest news and views of Earth from space, visit the NASA Earth Observatory site at:

http://earthobservatory.nasa.gov

[ANS thanks the NASA Earth Observatory for the above information]

/EX

SB SAT @ AMSAT $ANS-036.07
A Personal Note from This Week's ANS Editor

AMSAT News Service Bulletin 036.07
From AMSAT HQ SILVER SPRING, MD.
February 5, 2006
To All RADIO AMATEURS
BID: $ANS-036.07

One of the proudest moments of my 40-plus years in amateur radio came during the recent EVA of ISS Expedition 12. To watch and listen as Bill McArthur, KC5ACR, talked about amateur radio while working in the vacuum of space was truly an inspiring moment. For those who missed it, Bill talked for several minutes with CAPCOM Mike Foale about the 96 countries he has worked and the 1,000 contacts he has made from space.

Those of us who have been around this hobby remember when Owen Garriot, W5LFL became the first ham in space in the culmination of many people's efforts -- through the SAREX program -- to make amateur radio in space a reality. Today we have ARISS and ambassadors of amateur radio like Bill McArthur.

A personal note of thanks to all the people and organizations -- ARISS, AMSAT, ARRL and NASA -- who continue to support amateur radio in space and a big thank you to Bill McArthur for making amateur radio such a big part of Expedition 12.

[ANS thanks NASA TV for the above-mentioned live coverage]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Al Marote, WA1LBG

AMSAT LM-1957
wa1lbg at amsat dot org

From -5536823864651043384
X-Google-Thread: 10ed5f,7958ca3357470981
X-Google-Thread: 10a476,7958ca3357470981
X-Google-Thread: fb049,7958ca3357470981
X-Google-Thread: 10e8ad,7958ca3357470981
X-Google-Thread: fa029,7958ca3357470981
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nntp.comcast.com!news.comcast.com.POSTED!not-for-mail
NNTP-Posting-Date: Tue, 07 Feb 2006 16:18:19 -0600
From: "James" <jnipperxxx@nospamfdn.com>
Newsgroups: alt.ham-radio,alt.ham-radio.slowscan,alt.ham-radio.vhf-
uhf,rec.radio.amateur.space,rec.radio.scanner
References: <fcQFf.7946$Gg1.4116@trnddc03>
<43e7e91a$0$29565$da0feed9@news.zen.co.uk>
<1139279292.108399.300770@g44g2000cwa.googlegroups.com>
Subject: Re: ISS IS REPEATING SUITSAT SIGNALS on 437.800
Date: Tue, 7 Feb 2006 17:18:25 -0500
X-Priority: 3
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X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1441
Message-ID: <boadnQdzD702gXTeRVn-jQ@comcast.com>
Lines: 10
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6DoMKBay8Un1UGvyPAH8wLADf7lkooKlJXyvjOWHw7RWLUKy0L0Tvh0LcXryKWuV3WkGiWRKP6VI!Ag==
X-Complaints-To: abuse@comcast.net
X-DMCA-Complaints-To: dmca@comcast.net
X-Abuse-and-DMCA-Info: Please be sure to forward a copy of ALL headers
X-Abuse-and-DMCA-Info: Otherwise we will be unable to process your complaint
properly
X-Postfilter: 1.3.32
Xref: g2news1.google.com alt.ham-radio:503 alt.ham-radio.slowscan:8 alt.ham-
radio.vhf-uhf:1300 rec.radio.amateur.space:147 rec.radio.scanner:2073

If you receive the "repeated" signal, that is no big deal. People have been listening to the ISS for years on two meters.

Only a relatively few people have picked up the signals coming from the Space Suit.

73 de Jim K4PYT

From -8678941994468333624
X-Google-Thread: 10e8ad,3d33d02a28adae42
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!news3.google.com!news.glorb.com!
nx01.iad01.newshosting.com!newshosting.com!207.69.154.102.MISMATCH!elnk-atl-nf2!
newsfeed.earthlink.net!stamper.news.atl.earthlink.net!
newsread1.news.atl.earthlink.net.POSTED!d2b35f9a!not-for-mail
From: "helmsman@mindspring.com" <helmsman@mindspring.com>
Newsgroups: rec.radio.amateur.space
Subject: Re: SuitSat Aftermath...
Reply-To: helmsman@mindspring.com
Message-ID: <l78iu19r2l0pmed8vpfssfmkoahh9dhfa5@4ax.com>
References: <OGhFf.7408$tb3.6525@newssvr24.news.prodigy.net>
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X-Newsreader: Forte Agent 1.91/32.564
MIME-Version: 1.0
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Content-Transfer-Encoding: 7bit
Lines: 24
Date: Tue, 07 Feb 2006 22:38:32 GMT
NNTP-Posting-Host: 4.229.36.136
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread1.news.atl.earthlink.net 1139351912 4.229.36.136 (Tue, 07 Feb
2006 14:38:32 PST)
NNTP-Posting-Date: Tue, 07 Feb 2006 14:38:32 PST
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news1.google.com rec.radio.amateur.space:148

kb9rqz@Mark.Morgan.com wrote:

>On Mon, 6 Feb 2006 23:03:51 +0000, Hils <hilsnews@nospam.demon.co.uk>
>wrote:
>
>>kb9rqz@Mark.Morgan.com wrote
>>
>>>the Soveits used to build em get it right
>>
>>They built the RS series as well. Communism wasn't all bad. :-)
>
>well comuism certainly had it problems but the current system of
>pretending they have a a working market economy s.. leaves a lot to be
>desired
>____

>Usenet Zone Free Binaries Usenet Server
>More than 140,000 groups
>Unlimited download
>http://www.usenetzone.com to open account

So doe's Predatory Capitalism!
I'm stealing your house because I have more money than you.
That sucks!

```
From 2812037522063171719
X-Google-Thread: 10ed5f,7958ca3357470981
X-Google-Thread: 10a476,7958ca3357470981
X-Google-Thread: fb049,7958ca3357470981
X-Google-Thread: 10e8ad,7958ca3357470981
X-Google-Thread: fa029,7958ca3357470981
X-Google-Attributes: gid10ed5f,gid10a476,gidfb049,gid10e8ad,gidfa029,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!news4.google.com!
border1.nntp.dca.giganews.com!nntp.giganews.com!newscon06.news.prodigy.com!
prodigy.net!newsmst01b.news.prodigy.com!prodigy.com!postmaster.news.prodigy.com!
newssvr24.news.prodigy.net.POSTED!bbf2b588!not-for-mail
From: "Barky Bark" <barkybark@bonksbcglobal.net>
Newsgroups: alt.ham-radio,alt.ham-radio.slowscan,alt.ham-radio.vhf-
uhf,rec.radio.amateur.space,rec.radio.scanner
References: <fcQFf.7946$Gg1.4116@trnddc03>
Subject: Re: ISS IS REPEATING SUITSAT SIGNALS on 437.800
Lines: 4
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1506
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1506
Message-ID: <4TaGf.8825$tb3.196@newssvr24.news.prodigy.net>
NNTP-Posting-Host: 69.226.31.237
X-Complaints-To: abuse@prodigy.net
X-Trace: newssvr24.news.prodigy.net 1139358272 ST000 69.226.31.237 (Tue, 07 Feb
2006 19:24:32 EST)
NNTP-Posting-Date: Tue, 07 Feb 2006 19:24:32 EST
Organization: SBC http://yahoo.sbc.com
X-UserInfo1:
FKPO@SZG\BUKBQE[EJIXOQ@@GJT@QDDMEPWXODMMHXMTWA]EPUW[AKK[J\]^HVKHG^EWZHBLO^[\NH_AZF
WGN^\DHNVMX_DHHX[FSQKBOTS@@BP^]C@RHS_AGDDC[AJM_T[GZNRNZAY]GNCPBDYKOLK^_CZFWPGHZIXW
@C[AFKBBQS@E@DAZ]VDFUNTQQ]FN
Date: Wed, 08 Feb 2006 00:24:32 GMT
Xref: g2news1.google.com alt.ham-radio:504 alt.ham-radio.slowscan:9 alt.ham-
radio.vhf-uhf:1301 rec.radio.amateur.space:149 rec.radio.scanner:2074
```

dude it's broadcasting less than 1/2 watt from what 100 miles up? Ain't no
way a normal person gonna hear that.

```
From 3253050758478010576
X-Google-Thread: 10ed5f,7958ca3357470981
X-Google-Thread: 10a476,7958ca3357470981
X-Google-Thread: fb049,7958ca3357470981
X-Google-Thread: 10e8ad,7958ca3357470981
X-Google-Thread: fa029,7958ca3357470981
X-Google-Attributes: gid10ed5f,gid10a476,gidfb049,gid10e8ad,gidfa029,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!news3.google.com!
border1.nntp.dca.giganews.com!nntp.giganews.com!newscon06.news.prodigy.com!
prodigy.net!newsmst01b.news.prodigy.com!prodigy.com!postmaster.news.prodigy.com!
newssvr24.news.prodigy.net.POSTED!bbf2b588!not-for-mail
From: "Barky Bark" <barkybark@bonksbcglobal.net>
Newsgroups: alt.ham-radio,alt.ham-radio.slowscan,alt.ham-radio.vhf-
uhf,rec.radio.amateur.space,rec.radio.scanner
References: <fcQFf.7946$Gg1.4116@trnddc03>
<4TaGf.8825$tb3.196@newssvr24.news.prodigy.net>
<jcfiu15g5eu0vml7d4s8sdrrlau7g1hmk2@4ax.com>
Subject: Re: ISS IS REPEATING SUITSAT SIGNALS on 437.800
Lines: 4
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1506
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1506
Message-ID: <7bbGf.8831$tb3.2372@newssvr24.news.prodigy.net>
NNTP-Posting-Host: 69.226.31.237
X-Complaints-To: abuse@prodigy.net
X-Trace: newssvr24.news.prodigy.net 1139359555 ST000 69.226.31.237 (Tue, 07 Feb
2006 19:45:55 EST)
NNTP-Posting-Date: Tue, 07 Feb 2006 19:45:55 EST
Organization: SBC http://yahoo.sbc.com
X-UserInfo1:
FKPO@MONBJTKBPPP]ZIVOQLAPZXFBL@MAHU^_BAMEH]TCDYG^WHEAE[YETZPIWWI[FCIZA^NBFXZ_D[BFN
TCNVPDTNTKHWXKB@X^B_OCJLPZ@ET_O[G\XSG@E\G[ZKVLBL^CJINM@I_KVIOR\T_M_AW_M[_BWU_HFA_]
@A_A^SGFAUDE_DFTMQPFWVW[QPJN
Date: Wed, 08 Feb 2006 00:45:55 GMT
Xref: g2news1.google.com alt.ham-radio:506 alt.ham-radio.slowscan:11 alt.ham-
radio.vhf-uhf:1303 rec.radio.amateur.space:151 rec.radio.scanner:2076
```

cuz man that's just crazy! You need some sort of crazy yagi shit going on
for that. All's I got's my Yaesu handheld.

```
From -3971642714049918529
X-Google-Thread: 10ed5f,7958ca3357470981
X-Google-Thread: 10a476,7958ca3357470981
X-Google-Thread: fb049,7958ca3357470981
X-Google-Thread: 10e8ad,7958ca3357470981
X-Google-Thread: fa029,7958ca3357470981
X-Google-Attributes: gid10ed5f,gid10a476,gidfb049,gid10e8ad,gidfa029,public
```

```
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!proxad.net!212.101.4.254.MISMATCH!
solnet.ch!solnet.ch!dedekind.zen.co.uk!zen.net.uk!fuller.zen.co.uk!
cockburn.zen.co.uk.POSTED!not-for-mail
From: "tg" <tg@nospamevereverever.net>
Newsgroups: alt.ham-radio,alt.ham-radio.slowscan,alt.ham-radio.vhf-
uhf,rec.radio.amateur.space,rec.radio.scanner
References: <fcQFf.7946$Gg1.4116@trnddc03>
<4TaGf.8825$tb3.196@newssvr24.news.prodigy.net>
<jcfiu15g5eu0vml7d4s8sdrrlau7g1hmk2@4ax.com>
<7bbGf.8831$tb3.2372@newssvr24.news.prodigy.net>
Subject: Re: ISS IS REPEATING SUITSAT SIGNALS on 437.800
Date: Wed, 8 Feb 2006 00:54:37 -0000
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.2180
X-RFC2646: Format=Flowed; Original
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.2180
Lines: 8
Message-ID: <43e94151$0$5000$db0fefd9@news.zen.co.uk>
Organization: Zen Internet
NNTP-Posting-Host: 82.69.125.106
X-Trace: 1139360081 cockburn.zen.co.uk 5000 82.69.125.106:1857
X-Complaints-To: abuse@zen.co.uk
Xref: g2news1.google.com alt.ham-radio:507 alt.ham-radio.slowscan:12 alt.ham-
radio.vhf-uhf:1304 rec.radio.amateur.space:152 rec.radio.scanner:2077


"Barky Bark" <barkybark@bonksbcglobal.net> wrote in message
news:7bbGf.8831$tb3.2372@newssvr24.news.prodigy.net...
> cuz man that's just crazy!  You need some sort of crazy yagi shit going on
> for that.  All's I got's my Yaesu handheld.

yes but connected to what kind of aerial?




From -4777047344477605220
X-Google-Thread: 10ed5f,7958ca3357470981
X-Google-Thread: 10a476,7958ca3357470981
X-Google-Thread: fb049,7958ca3357470981
X-Google-Thread: 10e8ad,7958ca3357470981
X-Google-Thread: fa029,7958ca3357470981
X-Google-Attributes: gid10ed5f,gid10a476,gidfb049,gid10e8ad,gidfa029,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!news4.google.com!news.glorb.com!
border1.nntp.dca.giganews.com!nntp.giganews.com!newscon06.news.prodigy.com!
prodigy.net!newsmst01b.news.prodigy.com!prodigy.com!postmaster.news.prodigy.com!
newssvr24.news.prodigy.net.POSTED!bbf2b588!not-for-mail
From: "Barky Bark" <barkybark@bonksbcglobal.net>
Newsgroups: alt.ham-radio,alt.ham-radio.slowscan,alt.ham-radio.vhf-
uhf,rec.radio.amateur.space,rec.radio.scanner
```

References: <fcQFf.7946$Gg1.4116@trnddc03>
<4TaGf.8825$tb3.196@newssvr24.news.prodigy.net>
<jcfiu15g5eu0vml7d4s8sdrrlau7g1hmk2@4ax.com>
<7bbGf.8831$tb3.2372@newssvr24.news.prodigy.net>
<43e94151$0$5000$db0fefd9@news.zen.co.uk>
Subject: Re: ISS IS REPEATING SUITSAT SIGNALS on 437.800
Lines: 3
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1506
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1506
Message-ID: <enbGf.8837$tb3.5249@newssvr24.news.prodigy.net>
NNTP-Posting-Host: 69.226.31.237
X-Complaints-To: abuse@prodigy.net
X-Trace: newssvr24.news.prodigy.net 1139360330 ST000 69.226.31.237 (Tue, 07 Feb 2006 19:58:50 EST)
NNTP-Posting-Date: Tue, 07 Feb 2006 19:58:50 EST
Organization: SBC http://yahoo.sbc.com
X-UserInfo1:
FKPGWUCDYBUOV_DXGRHX_T\BUSXB@DTMNHWB_EYLJZ]BGIELLNTC@AWZWDXZXQ[K\FFSKCVM@F_N_DOBWV
WG__LG@VVOIPLIGX\
\BU_B@\P\PFX\B[APHTWAHDCKJF^NHD[YJAZMCY_CWG[SX\Y]^KC\HSZRWSWKGAY_PC[BQ[BXAS\F\
\@DMTLFZFUE@\VL
Date: Wed, 08 Feb 2006 00:58:50 GMT
Xref: g2news1.google.com alt.ham-radio:508 alt.ham-radio.slowscan:13 alt.ham-radio.vhf-uhf:1305 rec.radio.amateur.space:153 rec.radio.scanner:2078

the 8 inch one that came with the thing.

From -8268633282739340845
X-Google-Thread: 10ed5f,7958ca3357470981
X-Google-Thread: 10a476,7958ca3357470981
X-Google-Thread: fb049,7958ca3357470981
X-Google-Thread: 10e8ad,7958ca3357470981
X-Google-Thread: fa029,7958ca3357470981
X-Google-Attributes: gid10ed5f,gid10a476,gidfb049,gid10e8ad,gidfa029,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!atl-c05.usenetserver.com!news.usenetserver.com!cycny01.gnilink.net!hwmnpeer01.lga!hwmedia!news.highwinds-media.com!hw-filter.lga!fe09.lga.POSTED!53ab2750!not-for-mail
From: Al Klein <rukbat@pern.invalid>
Newsgroups: alt.ham-radio,alt.ham-radio.slowscan,alt.ham-radio.vhf-uhf,rec.radio.amateur.space,rec.radio.scanner
Subject: Re: ISS IS REPEATING SUITSAT SIGNALS on 437.800
Message-ID: <8mkiu1983dvksognr9n8fvusln56ltnmsr@4ax.com>
References: <fcQFf.7946$Gg1.4116@trnddc03>
<4TaGf.8825$tb3.196@newssvr24.news.prodigy.net>
<jcfiu15g5eu0vml7d4s8sdrrlau7g1hmk2@4ax.com>
<7bbGf.8831$tb3.2372@newssvr24.news.prodigy.net>
<43e94151$0$5000$db0fefd9@news.zen.co.uk>

```
X-Newsreader: Forte Agent 3.2/32.830
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Lines: 20
Date: Tue, 07 Feb 2006 21:14:51 -0500
NNTP-Posting-Host: 24.186.218.38
X-Complaints-To: abuse@cv.net
X-Trace: fe09.lga 1139364865 24.186.218.38 (Tue, 07 Feb 2006 19:14:25 MST)
NNTP-Posting-Date: Tue, 07 Feb 2006 19:14:25 MST
Organization: Optimum Online
Xref: g2news1.google.com alt.ham-radio:509 alt.ham-radio.slowscan:14 alt.ham-
radio.vhf-uhf:1306 rec.radio.amateur.space:154 rec.radio.scanner:2079
```

On Wed, 8 Feb 2006 00:54:37 -0000, "tg" <tg@nospamevereverever.net>
wrote:

>"Barky Bark" <barkybark@bonksbcglobal.net> wrote in message
news:7bbGf.8831$tb3.2372@newssvr24.news.prodigy.net...
>> cuz man that's just crazy! You need some sort of crazy yagi shit going on
>> for that. All's I got's my Yaesu handheld.

>yes but connected to what kind of aerial?

Probably the little rubber ducky it came with.

But, yes, with 11 elements and good front end sensitivity (not a scanner), the suit signal is still barely out of the noise. Then, again, EME signals are usually much weaker than the suit signal, and I believe Sam Harris, W1FZJ, was doing EME around 40 years ago - with tubes. It's not like it takes $10 million worth of equipment to do this - 2 broom handles, some 1X2 lumber, 2 U-bolts, some coax and some copperweld wire (or wire hangers) shouldn't cost more than US$10 - but a 5 or 6 element quad has a lot of gain and it's easy to swing around by hand.

```
From 3386121199499557832
X-Google-Thread: 10ed5f,7958ca3357470981
X-Google-Thread: 10a476,7958ca3357470981
X-Google-Thread: fb049,7958ca3357470981
X-Google-Thread: 10e8ad,7958ca3357470981
X-Google-Thread: fa029,7958ca3357470981
X-Google-Attributes: gid10ed5f,gid10a476,gidfb049,gid10e8ad,gidfa029,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!news4.google.com!newsfeed.stanford.edu!
shelby.stanford.edu!w6yx.stanford.edu!nospam
From: nospam@w6yx.stanford.edu (Alan)
Newsgroups: alt.ham-radio,alt.ham-radio.slowscan,alt.ham-radio.vhf-
uhf,rec.radio.amateur.space,rec.radio.scanner
Subject: Re: ISS IS REPEATING SUITSAT SIGNALS on 437.800
Date: Wed, 8 Feb 2006 06:18:43 +0000 (UTC)
Organization: Stanford Amateur Radio Club
```

Lines: 16
Message-ID: <dsc2g3$eaj$1@news.Stanford.EDU>
References: <fcQFf.7946$Gg1.4116@trnddc03>
<4TaGf.8825$tb3.196@newssvr24.news.prodigy.net>
NNTP-Posting-Host: w6yx.stanford.edu
X-Trace: news.Stanford.EDU 1139379523 14675 171.64.23.31 (8 Feb 2006 06:18:43 GMT)
X-Complaints-To: news@news.stanford.edu
X-Newsreader: trn 4.0-test76 (Apr 2, 2001)
Xref: g2news1.google.com alt.ham-radio:510 alt.ham-radio.slowscan:15 alt.ham-radio.vhf-uhf:1307 rec.radio.amateur.space:155 rec.radio.scanner:2081

In article <4TaGf.8825$tb3.196@newssvr24.news.prodigy.net> "Barky Bark"
<barkybark@bonksbcglobal.net> writes:
>dude it's broadcasting less than 1/2 watt from what 100 miles up? Ain't no
>way a normal person gonna hear that.

If it is putting out 1/2 watt (+27 dBm) uniformly in all directions (0 dBi transmit antenna)
and is 400 miles away, and your little rubber duck is about a 0 dBi antenna (probably close),
your receiver will receive it at -105 dBm. That should be quite easy to receive.

Most likely the antenna on the suit is *not* putting the signal out in all directions.
You may also want to hear it for more than the minute or so it is going directly over you.

Oh, a "normal person" can easily build better antennas and hook them up.

Alan

From -9190279938071456686
X-Google-Thread: 10e8ad,7958ca3357470981
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!news4.google.com!border1.nntp.dca.giganews.com!border2.nntp.dca.giganews.com!nntp.giganews.com!cyclone1.gnilink.net!gnilink.net!news-feed-01.rdc-nyc.rr.com!news.rr.com!news-out.nyc.rr.com!news-wrt-01.rdc-nyc.rr.com.POSTED!53ab2750!not-for-mail
From: Johnny Borborigmi <growl@tummy.com>
Newsgroups: rec.radio.amateur.space
Message-ID: <2006020805481589308%growl@tummycom>
References: <enbGf.8837$tb3.5249@newssvr24.news.prodigy.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1; format=flowed
Content-Transfer-Encoding: 8bit
Subject: Re: ISS IS REPEATING SUITSAT SIGNALS on 437.800
User-Agent: Unison/1.6.2
Lines: 7
Date: Wed, 08 Feb 2006 10:48:13 GMT

```
NNTP-Posting-Host: 24.161.95.233
X-Complaints-To: abuse@rr.com
X-Trace: news-wrt-01.rdc-nyc.rr.com 1139395693 24.161.95.233 (Wed, 08 Feb 2006
05:48:13 EST)
NNTP-Posting-Date: Wed, 08 Feb 2006 05:48:13 EST
Organization: Road Runner High Speed Online http://www.rr.com
Xref: g2news1.google.com rec.radio.amateur.space:156

On 2006-02-07 19:58:50 -0500, "Barky Bark" <barkybark@bonksbcglobal.net> said:

> the 8 inch one that came with the thing.


That's basically a dummyload.




From -1900508980248831411
X-Google-Thread: 10e8ad,7958ca3357470981
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!news3.google.com!
border1.nntp.dca.giganews.com!nntp.giganews.com!newscon06.news.prodigy.com!
prodigy.net!news-east.rr.com!news-wrt-01.rdc-nyc.rr.com!news-feed-01.rdc-
nyc.rr.com!news.rr.com!news-out.nyc.rr.com!news-wrt-01.rdc-nyc.rr.com.POSTED!
53ab2750!not-for-mail
From: Johnny Borborigmi <growl@tummy.com>
Newsgroups: rec.radio.amateur.space
Message-ID: <2006020805504711272%growl@tummycom>
References: <boadnQdzD702gXTeRVn-jQ@comcast.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1; format=flowed
Content-Transfer-Encoding: 8bit
Subject: Re: ISS IS REPEATING SUITSAT SIGNALS on 437.800
User-Agent: Unison/1.6.2
Lines: 21
Date: Wed, 08 Feb 2006 10:50:45 GMT
NNTP-Posting-Host: 24.161.95.233
X-Complaints-To: abuse@rr.com
X-Trace: news-wrt-01.rdc-nyc.rr.com 1139395845 24.161.95.233 (Wed, 08 Feb 2006
05:50:45 EST)
NNTP-Posting-Date: Wed, 08 Feb 2006 05:50:45 EST
Organization: Road Runner High Speed Online http://www.rr.com
Xref: g2news1.google.com rec.radio.amateur.space:157

On 2006-02-07 17:18:25 -0500, "James" <jnipperxxx@nospamfdn.com> said:

> If you receive the "repeated" signal, that is no big deal.  People have been
> listening to the ISS for years on two meters.


Yeah, I know that. It's still cool.
```

> Only a relatively few people have picked up the signals coming from the
> Space Suit.
>

I know, I read http://www.suitsat.org/

> 73 de Jim K4PYT
>

Right back at ya.

```
From 6146337731691155678
X-Google-Thread: 10ed5f,7958ca3357470981
X-Google-Thread: 10a476,7958ca3357470981
X-Google-Thread: fb049,7958ca3357470981
X-Google-Thread: 10e8ad,7958ca3357470981
X-Google-Thread: fa029,7958ca3357470981
X-Google-Attributes: gid10ed5f,gid10a476,gidfb049,gid10e8ad,gidfa029,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!news4.google.com!news.glorb.com!news-
out1.kabelfoon.nl!newsfeed.kabelfoon.nl!bandi.nntp.kabelfoon.nl!
demorgan.zen.co.uk!dedekind.zen.co.uk!zen.net.uk!fuller.zen.co.uk!
prichard.zen.co.uk.POSTED!not-for-mail
From: "tg" <tg@nospamevereverever.net>
Newsgroups: alt.ham-radio,alt.ham-radio.slowscan,alt.ham-radio.vhf-
uhf,rec.radio.amateur.space,rec.radio.scanner
References: <fcQFf.7946$Gg1.4116@trnddc03>
<4TaGf.8825$tb3.196@newssvr24.news.prodigy.net>
<jcfiu15g5eu0vml7d4s8sdrrlau7g1hmk2@4ax.com>
<7bbGf.8831$tb3.2372@newssvr24.news.prodigy.net>
<43e94151$0$5000$db0fefd9@news.zen.co.uk>
<enbGf.8837$tb3.5249@newssvr24.news.prodigy.net>
Subject: Re: ISS IS REPEATING SUITSAT SIGNALS on 437.800
Date: Wed, 8 Feb 2006 12:32:12 -0000
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.2180
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.2180
X-RFC2646: Format=Flowed; Original
Lines: 10
Message-ID: <43e9e4d2$0$23288$db0fefd9@news.zen.co.uk>
Organization: Zen Internet
NNTP-Posting-Host: 82.69.125.106
X-Trace: 1139401938 prichard.zen.co.uk 23288 82.69.125.106:1234
X-Complaints-To: abuse@zen.co.uk
Xref: g2news1.google.com alt.ham-radio:511 alt.ham-radio.slowscan:16 alt.ham-
radio.vhf-uhf:1309 rec.radio.amateur.space:158 rec.radio.scanner:2082
```

"Barky Bark" <barkybark@bonksbcglobal.net> wrote in message
news:enbGf.8837$tb3.5249@newssvr24.news.prodigy.net...
> the 8 inch one that came with the thing.

oh well you'll pick up sweet FA on that. Ya gotta have the metal in the sky barky, loadsa metal going up and up....
then you'll hear things. I've got a hand held as well but it doubles as a powerful little base station when it sits on my desktop
connected to my external aerial and PC.

From -5940058410893257679
X-Google-Thread: fb049,7958ca3357470981
X-Google-Thread: 10e8ad,7958ca3357470981
X-Google-Attributes: gidfb049,gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
From: "Hamguy" <hamguy@arrl.net>
Newsgroups: alt.ham-radio.vhf-uhf,rec.radio.amateur.space
References: <fcQFf.7946$Gg1.4116@trnddc03>
<4TaGf.8825$tb3.196@newssvr24.news.prodigy.net>
<jcfiu15g5eu0vml7d4s8sdrrlau7g1hmk2@4ax.com>
<7bbGf.8831$tb3.2372@newssvr24.news.prodigy.net>
<43e94151$0$5000$db0fefd9@news.zen.co.uk>
<enbGf.8837$tb3.5249@newssvr24.news.prodigy.net>
<43e9e4d2$0$23288$db0fefd9@news.zen.co.uk>
Subject: Re: ISS IS REPEATING SUITSAT SIGNALS on 437.800
Date: Wed, 8 Feb 2006 07:45:14 -0500
Lines: 21
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.2670
X-MIMEOLE: Produced By Microsoft MimeOLE V6.00.2900.2670
X-RFC2646: Format=Flowed; Original
Message-ID: <43e9eb00@news.usenetzone.com>
Organization: Usenet Zone http://www.usenetzone.com Free Usenet Binary server contains 140,000+ groups
Path: g2news1.google.com!news1.google.com!news3.google.com!newshub.sdsu.edu!news.ks.uiuc.edu!news.usenetzone.com!not-for-mail
Xref: g2news1.google.com alt.ham-radio.vhf-uhf:1310 rec.radio.amateur.space:159

Well, there you go. If you have an outside aerial, then you should have no problem hearing it. You don't need anything too powerful, if the suitsat is still working. However, I think NASA says that the batteries have probably frozen, so it isn't working any longer.

"tg" <tg@nospamevereverever.net> wrote in message
news:43e9e4d2$0$23288$db0fefd9@news.zen.co.uk...
>
> oh well you'll pick up sweet FA on that. Ya gotta have the metal in the
> sky barky, loadsa metal going up and up....

> then you'll hear things. I've got a hand held as well but it doubles as a
> powerful little base station when it sits on my desktop connected to my
> external aerial and PC.
>
>
>

Usenet Zone Free Binaries Usenet Server
More than 140,000 groups
Unlimited download
http://www.usenetzone.com to open account

```
From -5484307725640079038
X-Google-Thread: fb049,7958ca3357470981
X-Google-Thread: 10e8ad,7958ca3357470981
X-Google-Attributes: gidfb049,gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!news2.google.com!atl-
c05.usenetserver.com!news.usenetserver.com!cycny01.gnilink.net!
spamkiller.gnilink.net!gnilink.net!trnddc06.POSTED!2624caa7!not-for-mail
Reply-To: "stargatesg1" <me@verizon.net>
From: "stargatesg1" <me@verizon.net>
Newsgroups: alt.ham-radio.vhf-uhf,rec.radio.amateur.space
References: <fcQFf.7946$Gg1.4116@trnddc03>
<4TaGf.8825$tb3.196@newssvr24.news.prodigy.net>
<jcfiu15g5eu0vml7d4s8sdrrlau7g1hmk2@4ax.com>
<7bbGf.8831$tb3.2372@newssvr24.news.prodigy.net>
<43e94151$0$5000$db0fefd9@news.zen.co.uk>
<enbGf.8837$tb3.5249@newssvr24.news.prodigy.net>
<43e9e4d2$0$23288$db0fefd9@news.zen.co.uk> <43e9eb00@news.usenetzone.com>
Subject: Re: ISS IS REPEATING SUITSAT SIGNALS on 437.800
Lines: 44
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1506
X-MIMEOLE: Produced By Microsoft MimeOLE V6.00.2800.1506
Message-ID: <EynGf.10435$In4.4645@trnddc06>
Date: Wed, 08 Feb 2006 14:50:12 GMT
NNTP-Posting-Host: 151.199.90.36
X-Complaints-To: abuse@verizon.net
X-Trace: trnddc06 1139410212 151.199.90.36 (Wed, 08 Feb 2006 09:50:12 EST)
NNTP-Posting-Date: Wed, 08 Feb 2006 09:50:12 EST
Xref: g2news1.google.com alt.ham-radio.vhf-uhf:1311 rec.radio.amateur.space:160
```

Sorry to disagree with you, but it was received yesterday so the batteries
are still working.....

```
See the following link for received audio files....

http://www.aj3u.com/blog/

RoD


"Hamguy" <hamguy@arrl.net> wrote in message
news:43e9eb00@news.usenetzone.com...
> Well, there you go.  If you have an outside aerial, then you should have
no
> problem hearing it.  You don't need anything too powerful, if the suitsat
is
> still working.  However, I think NASA says that the batteries have
probably
> frozen, so it isn't working any longer.
>
> "tg" <tg@nospamevereverever.net> wrote in message
> news:43e9e4d2$0$23288$db0fefd9@news.zen.co.uk...
> >
> > oh well you'll pick up sweet FA on that. Ya gotta have the metal in the
> > sky barky, loadsa metal going up and up....
> > then you'll hear things. I've got a hand held as well but it doubles as
a
> > powerful little base station when it sits on my desktop connected to my
> > external aerial and PC.
> >
> >
> >
>
>
>
>
>
> ----------------------------------------------
> Usenet Zone Free Binaries Usenet Server
> More than 140,000 groups
> Unlimited download
> http://www.usenetzone.com to open account




From -6100952771191524986
X-Google-Thread: fb049,7958ca3357470981
X-Google-Thread: 10e8ad,7958ca3357470981
X-Google-Attributes: gidfb049,gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
From: "Hamguy" <hamguy@arrl.net>
Newsgroups: alt.ham-radio.vhf-uhf,rec.radio.amateur.space
References: <fcQFf.7946$Gg1.4116@trnddc03>
<4TaGf.8825$tb3.196@newssvr24.news.prodigy.net>
<jcfiu15g5eu0vml7d4s8sdrrlau7g1hmk2@4ax.com>
```

<7bbGf.8831$tb3.2372@newssvr24.news.prodigy.net>
<43e94151$0$5000$db0fefd9@news.zen.co.uk>
<enbGf.8837$tb3.5249@newssvr24.news.prodigy.net>
<43e9e4d2$0$23288$db0fefd9@news.zen.co.uk> <43e9eb00@news.usenetzone.com>
<EynGf.10435$In4.4645@trnddc06>
Subject: Re: ISS IS REPEATING SUITSAT SIGNALS on 437.800
Date: Wed, 8 Feb 2006 11:45:20 -0500
Lines: 16
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.2670
X-MIMEOLE: Produced By Microsoft MimeOLE V6.00.2900.2670
X-RFC2646: Format=Flowed; Original
Message-ID: <43ea2336@news.usenetzone.com>
Organization: Usenet Zone http://www.usenetzone.com Free Usenet Binary server contains 140,000+ groups
Path: g2news1.google.com!news2.google.com!news3.google.com!news.glorb.com!news.usenetzone.com!not-for-mail
Xref: g2news1.google.com alt.ham-radio.vhf-uhf:1312 rec.radio.amateur.space:161

So, you were able to receive it yesterday. This is the report for today and they are saying that the batteries have died.
http://www.qrz.com/ib-bin/ikonboard.cgi?act=ST&f=3&t=113941

"stargatesg1" <me@verizon.net> wrote in message
news:EynGf.10435$In4.4645@trnddc06...
> Sorry to disagree with you, but it was received yesterday so the batteries
> are still working.....
>
> See the following link for received audio files....
>
> http://www.aj3u.com/blog/
>
> RoD

Usenet Zone Free Binaries Usenet Server
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Unlimited download
http://www.usenetzone.com to open account

From -1891392475250202860
X-Google-Thread: fb049,7958ca3357470981
X-Google-Thread: 10e8ad,7958ca3357470981
X-Google-Attributes: gidfb049,gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!news3.google.com!atl-c05.usenetserver.com!news.usenetserver.com!cycny01.gnilink.net!spamkiller.gnilink.net!gnilink.net!trnddc02.POSTED!2624caa7!not-for-mail
Reply-To: "stargatesg1" <me@verizon.net>
From: "stargatesg1" <me@verizon.net>

Newsgroups: alt.ham-radio.vhf-uhf,rec.radio.amateur.space
References: <fcQFf.7946$Gg1.4116@trnddc03>
<4TaGf.8825$tb3.196@newssvr24.news.prodigy.net>
<jcfiu15g5eu0vml7d4s8sdrrlau7g1hmk2@4ax.com>
<7bbGf.8831$tb3.2372@newssvr24.news.prodigy.net>
<43e94151$0$5000$db0fefd9@news.zen.co.uk>
<enbGf.8837$tb3.5249@newssvr24.news.prodigy.net>
<43e9e4d2$0$23288$db0fefd9@news.zen.co.uk> <43e9eb00@news.usenetzone.com>
<EynGf.10435$In4.4645@trnddc06> <43ea2336@news.usenetzone.com>
Subject: Re: ISS IS REPEATING SUITSAT SIGNALS on 437.800
Lines: 51
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1506
X-MIMEOLE: Produced By Microsoft MimeOLE V6.00.2800.1506
Message-ID: <wVpGf.30147$%i3.26260@trnddc02>
Date: Wed, 08 Feb 2006 17:31:08 GMT
NNTP-Posting-Host: 151.199.90.36
X-Complaints-To: abuse@verizon.net
X-Trace: trnddc02 1139419868 151.199.90.36 (Wed, 08 Feb 2006 12:31:08 EST)
NNTP-Posting-Date: Wed, 08 Feb 2006 12:31:08 EST
Xref: g2news1.google.com alt.ham-radio.vhf-uhf:1313 rec.radio.amateur.space:162

Hi Hamguy,
I didn't write this to upset anyone. I read the forum link you sent but didn't see anyone say the batteries had died yet. I might have just missed it though.
If I did, my apologies.
I myself will only believe it's dead when either Amsat or NASA says so. Other than that, it's just conjecture and results of the initial erroneous reports that it died after the second orbit as was reported by the media. After that report, everyone was speculating the batteries had died until there were reports of received audio days after it was supposed to have been dead.

Here's the most recent report from Amsat updated yesterday.....

http://www.amsat.org/amsat-new/index.php

And the recordings that were made today (Feb 8 2006 1007UTC) by VE6BLD in Canada ....

http://www.amsat.org/amsat-new/index.php

Thanks,
RoD

"Hamguy" <hamguy@arrl.net> wrote in message
news:43ea2336@news.usenetzone.com...
> So, you were able to receive it yesterday. This is the report for today
and
> they are saying that the batteries have died.
> http://www.qrz.com/ib-bin/ikonboard.cgi?act=ST&f=3&t=113941

```
>
> "stargatesg1" <me@verizon.net> wrote in message
> news:EynGf.10435$In4.4645@trnddc06...
> > Sorry to disagree with you, but it was received yesterday so the
batteries
> > are still working.....
> >
> > See the following link for received audio files....
> >
> > http://www.aj3u.com/blog/
> >
> > RoD
>
>
```

> --
> Usenet Zone Free Binaries Usenet Server
> More than 140,000 groups
> Unlimited download
> http://www.usenetzone.com to open account

```
From 5993300322199511642
X-Google-Thread: 10e8ad,769f20208ca2ee5d,start
X-Google-Thread: 113975,769f20208ca2ee5d,start
X-Google-Attributes: gid10e8ad,gid113975,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!news3.google.com!newsfeed.gamma.ru!
Gamma.RU!newsfeed.icl.net!newsfeed.fjserv.net!newsfeed.freenet.de!
newsfeed.kamp.net!newsfeed0.kamp.net!feeder3.cambrium.nl!feeder2.cambrium.nl!
feed.tweaknews.nl!newsrouter-eu.astraweb.com!news.astraweb.com!
router1.astraweb.com!not-for-mail
From: Chris Steyaert <observations@rmob.org>
Newsgroups: rec.radio.amateur.space,sci.astro.amateur
Subject: Radio Meteor Obs. Bull. January 2006 Bootids
Date: Wed, 08 Feb 2006 20:20:20 +0100
Message-ID: <f2hku11u0leg838ljiab50s5sg9oacjeq8@4ax.com>
X-Newsreader: Forte Agent 1.93/32.576 English (American)
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Lines: 17
Organization: Unlimited download news at news.astraweb.com
NNTP-Posting-Host: b2a1476e.news.astraweb.com
X-Trace: DXC=LXNI@S7SD>ARm_f?\>0G3FL?
0kYOcDh@JV[UQ>f[eQVB;;S\MAhgaDJKX07\YZ`QZFNhC4:i7SNHL0cF:O<Zk?oF
Xref: g2news1.google.com rec.radio.amateur.space:163 sci.astro.amateur:16096
```

Radio Meteor Observation Bulletin No. 150 of January 2006 (75 K) is available
now as

http://visualrmob.free.fr/rmobtext/rmob0601.txt

More information and the visual presentation of the hourly forward scatter counts can be found on

http://www.rmob.org

http://radio.data.free.fr

Chris

```
From 1318656267483722476
X-Google-Thread: 10ed5f,7958ca3357470981
X-Google-Thread: 10a476,7958ca3357470981
X-Google-Thread: fb049,7958ca3357470981
X-Google-Thread: 10e8ad,7958ca3357470981
X-Google-Thread: fa029,7958ca3357470981
X-Google-Attributes: gid10ed5f,gid10a476,gidfb049,gid10e8ad,gidfa029,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!proxad.net!213.200.89.82.MISMATCH!
tiscali!newsfeed1.ip.tiscali.net!newsfeed00.sul.t-online.de!t-online.de!
newsfeed.esat.net!reader01.news.esat.net!not-for-mail
From: class-a-licensee-pkearn-zBBpk@didnt-run-away-from-a-morse-
test.es.eircom.com.net (zBBPK)
Newsgroups: alt.ham-radio,alt.ham-radio.slowscan,alt.ham-radio.vhf-
uhf,rec.radio.amateur.space,rec.radio.scanner
Subject: Re: ISS IS REPEATING SUITSAT SIGNALS on 437.800
Date: Wed, 08 Feb 2006 22:15:14 GMT
Organization: Esat Net Customer
Lines: 14
Message-ID: <43ea6d29.4236705@news.iol.ie>
References: <fcQFf.7946$Gg1.4116@trnddc03>
<4TaGf.8825$tb3.196@newssvr24.news.prodigy.net>
NNTP-Posting-Host: dialup0080.ts551.cwt.esat.net
X-Trace: reader01.news.esat.net 1139436815 26256 193.203.140.80 (8 Feb 2006
22:13:35 GMT)
X-Complaints-To: abuse@esat.net
NNTP-Posting-Date: Wed, 8 Feb 2006 22:13:35 +0000 (UTC)
X-Newsreader: Forte Free Agent 1.21/32.243
Xref: g2news1.google.com alt.ham-radio:512 alt.ham-radio.slowscan:17 alt.ham-
radio.vhf-uhf:1317 rec.radio.amateur.space:164 rec.radio.scanner:2086
```

"Barky Bark" <barkybark@bonksbcglobal.net> wrote:

> dude it's broadcasting less than 1/2 watt from what 100 miles up? Ain't no
> way a normal person gonna hear that.

yes..but amateurs are not normal.

who in their right mind would ''play with radios'' for a third of their
life and more than likely pose for a photo or two in front of a room full
of equipment better suited to filling in the foundations of a garage ?

:-)

From -5292606753109081141
X-Google-Thread: 10e8ad,3f5afd7c0647d375
X-Google-Thread: f9f20,3f5afd7c0647d375
X-Google-Attributes: gid10e8ad,gidf9f20,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!news.glorb.com!
border1.nntp.dca.giganews.com!nntp.giganews.com!nx01.iad01.newshosting.com!
newshosting.com!207.69.154.102.MISMATCH!elnk-atl-nf2!newsfeed.earthlink.net!
stamper.news.atl.earthlink.net!newsread3.news.atl.earthlink.net.POSTED!d2b35f9a!
not-for-mail
From: "helmsman@mindspring.com" <helmsman@mindspring.com>
Newsgroups: rec.radio.amateur.space,sci.space.station
Subject: Re: Listen to SuitSat
Reply-To: helmsman@mindspring.com
Message-ID: <o8rku1ta0ecb1qvu3arcbl920ustacqf35@4ax.com>
References: <43d9f140$1@news.vo.lu> <slrndtk05f.54n.gsm@cable.mendelson.com>
X-Newsreader: Forte Agent 1.91/32.564
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Lines: 18
Date: Wed, 08 Feb 2006 22:14:29 GMT
NNTP-Posting-Host: 4.229.36.28
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread3.news.atl.earthlink.net 1139436869 4.229.36.28 (Wed, 08 Feb 2006
14:14:29 PST)
NNTP-Posting-Date: Wed, 08 Feb 2006 14:14:29 PST
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news1.google.com rec.radio.amateur.space:165 sci.space.station:1621

gsm@mendelson.com (Geoffrey S. Mendelson) wrote:

>Thierry wrote:
>
>> Check its posiiton with NASA J-Pass tool.
>
>What do you do if you are NOT in the U.S.?

Use Orbitron, it's free and it works!
http://www.stoff.pl/

>
>

```
>TIA,
>
>Geoff.



From 2474496573328648948
X-Google-Thread: 10e8ad,3f5afd7c0647d375
X-Google-Thread: f9f20,3f5afd7c0647d375
X-Google-Attributes: gid10e8ad,gidf9f20,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!news.glorb.com!cycny01.gnilink.net!
spamkiller.gnilink.net!gnilink.net!trnddc03.POSTED!2624caa7!not-for-mail
Reply-To: "stargatesg1" <me@verizon.net>
From: "stargatesg1" <me@verizon.net>
Newsgroups: rec.radio.amateur.space,sci.space.station
References: <43d9f140$1@news.vo.lu> <slrndtk05f.54n.gsm@cable.mendelson.com>
<o8rku1ta0ecb1qvu3arcbl920ustacqf35@4ax.com>
Subject: Re: Listen to SuitSat
Lines: 30
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1506
X-MIMEOLE: Produced By Microsoft MimeOLE V6.00.2800.1506
Message-ID: <EjwGf.10159$Gg1.4074@trnddc03>
Date: Thu, 09 Feb 2006 00:48:36 GMT
NNTP-Posting-Host: 151.199.90.36
X-Complaints-To: abuse@verizon.net
X-Trace: trnddc03 1139446116 151.199.90.36 (Wed, 08 Feb 2006 19:48:36 EST)
NNTP-Posting-Date: Wed, 08 Feb 2006 19:48:36 EST
Xref: g2news1.google.com rec.radio.amateur.space:166 sci.space.station:1624

I'll second that! Orbitron is a KILLER tracking program.
Sebastian Stoff did a great job with this program. It even auto updates the
keps and syncs the time on your computer.
All he asks is a postcard from your area as payment.
Just Awesome.

Rod

<helmsman@mindspring.com> wrote in message
news:o8rku1ta0ecb1qvu3arcbl920ustacqf35@4ax.com...
> gsm@mendelson.com (Geoffrey S. Mendelson) wrote:
>
> >Thierry wrote:
> >
> >> Check its posiiton with NASA J-Pass tool.
> >
> >What do you do if you are NOT in the U.S.?
>
> Use Orbitron, it's free and it works!
> http://www.stoff.pl/
>
```

>
> >
> >
> >TIA,
> >
> >Geoff.
>

From -2759844013944552958
X-Google-Thread: 10e8ad,846e99e71e34e785,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news4.google.com!border1.nntp.dca.giganews.com!
border2.nntp.dca.giganews.com!nntp.giganews.com!elnk-atl-nf1!
newsfeed.earthlink.net!stamper.news.atl.earthlink.net!
newsread2.news.atl.earthlink.net.POSTED!46041641!not-for-mail
From: "JoAnne Maenpaa" <wb9jej_no-spam@earthlink.net>
Newsgroups: rec.radio.amateur.space
Subject: WSR-275 AMSAT Weekly Satellite Report
Lines: 1388
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <3Gb0f.7882$QE1.2156@newsread2.news.atl.earthlink.net>
Date: Mon, 03 Oct 2005 14:58:07 GMT
NNTP-Posting-Host: 69.3.103.224
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread2.news.atl.earthlink.net 1128351487 69.3.103.224 (Mon, 03 Oct
2005 07:58:07 PDT)
NNTP-Posting-Date: Mon, 03 Oct 2005 07:58:07 PDT
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news1.google.com rec.radio.amateur.space:259

This report is organized into 4 parts.
Part 1 - operational analog amateur satellites.
Part 2 - operational digital amateur satellites.
Part 3 - non - operational satellites
Part 4 - proposed satellites

SB SAT @ AMSAT <W8ISS $ANS-275.S1
WSR 275 Part 1 10/02/2005

AMSAT NEWS SERVICE BULLETIN 275.S1 FROM AMSAT HQ
SILVER SPRING, MD, OCTOBER 02, 2005
TO ALL RADIO AMATEURS
BID: $ANS-275.S1

VO-52 HAMSAT
Catalog Number: 28650

Launch Date: May 05,2005

Status: Testing
Current Mode: U/V

Proposed frequencies:

Indian transponder:
Uplink : 435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW
Beacom : 145.940MHz continue carier signal

Dutch transponder:
Uplink : 435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW
Beacon : 145.860MHz 12WPM with CW message
[07242005]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Mode: PBBS - ON
FM REPEATER - V/U

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
Analog voice uplink: 145.880 MHZ FM
145.920 MHz FM 67Hz PL tone
1268.700 MHz FM 67Hz PL tone

Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast
Protocol (PBP)

Broadcast: PECHO-11
BBS: PECHO-12

Current scheduled operating modes:

26 Sept
FM Repeater, V/U
Uplink: 145.920 mhz FM, 67 hz PL Tone
Downlink 435.300 mhz FM
9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 435.150 mhz FM, 9k6 PBP Digital

AO-51 Special Event - JOTA Weekend 15-16 Oct

The annual Boy and Girl Scouts "Jamboree on the Air" Amateur Radio event

is scheduled for 15 and 16 October 2005. As this is an International Scouting event, amateur radio stations around the world are invited to participate.
The AO-51 command team is scheduling the satellite for exclusive use by the Scouts, and Satellite operators communicating with the Scouts, for this weekend. Please allow the Scouts the opportunity to make as many contacts as possible via AO-51 during this short time period. Base stations, please remember that most of the JOTA stations will be portable, so please use minimum power. The official times for the JOTA event will be from 1200 UTC on October 15 until 1200 UTC on October 17, 2005.

For the JOTA weekend, AO-51 will be configured in the Dual FM repeater mode.
This will provide two independent FM repeaters (separate uplink and downlink frequencies) for use over the weekend. Both repeaters will be for use by the JOTA activity. This mode will run Monday through Friday before the event to allow amateur satellite stations to familiarize and test this mode. The configuration of the satellite frequencies for this mode is listed below.

AO-51 FM repeater #1
Downlink: 435.300 MHz
Uplink: 145.920 MHz with 67hz PL Tone

AO-51 FM repeater #2
Downlink: 435.150 MHz
Uplink: 145.880 MHz with NO PL Tone

Here are some web links for information on the JOTA weekend activity.
http://www.arrl.org/FandES/ead/jota.html
http://www.arrl.org/FandES/ead/ideas.html
http://www.scouting.org/international/jota.html

If your local club has a JOTA activity planned for the weekend please consider volunteering your services to provide a satellite communication station for the event.

Thanks for your support and participation.

[ANS-WSR thanks Mike Kingery, KE4AZN for the above information]
[09252005]

=====

SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Uplink: 145.850 MHz (67.0 Hz PL tone) (See below for operating procedures)
Downlink: 436.795 MHz

There have been unconfirmed reports on the amsat-bb remailer that SO-50 has shifted downlink frequency as much as 5khz up. This both from Europe.

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz. The order of operation is thus: (allow for Doppler as necessary)

1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10 minute timer.

[09122004]

=====

FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: OPERATIONAL

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplink: 145.850 145.870 145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

John, N4QWL reports on July 16th, 2005:

Last evening I had a AOS to LOS qso with WI2W. FO-29 came up at 01:17z here in FM07 and I found WI2W and we chatted until 01:33z. The satellite was at 2 degrees elevation when I finally heard him start to crackle a bit. What a great QSO! To think that I watched this bird launch back in 1996 and it is still working so well is a real thrill. I believe I still have the video. I might just look for it and watch it again. Boy do I love this satellite stuff! Look for you all up there.

Please send the reception reports to lab2 'at' jarl.or.jp.
Please use the subject line: 'FO-29 reception report'.

Mineo, JE9PEL, has an FO-29 satellite telemetry analysis program that will automatically analyze all digital telemetry from the satellite (such as current, voltage and temperature). FO29CWTE is available at:
http://www.ne.jp/asahi/hamradio/je9pel/
[ANS-WSR wishes to thanks John, N4QWL for this week's report]
[07172005]

=====

AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Uplink: 145.850 MHz FM
Downlink: 436.795 MHz FM

The latest information on AO-27 from control operator Michael Wyrick, N3UC (former N4USI), can be found at:
http://www.ao27.org

An AO-27 question-and-answer page is available on the AMSAT-NA web site, with updates by Ray, W2RS. The URL is:
http://www.amsat.org/amsat/intro/ao27faq.html

[ANS-WSR thanks John, K6YK, for this week's AO-27 report]
[08292004]

=====

AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Semi-operational in sunlight.
Return to active status: June 21,2002

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
            432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A
            145.975 to 145.925 MHz CW/USB Mode B
Beacon: 29.502 MHz, 145.972 MHz, 435.1 MHz, 2304.1 MHz

Emily, W0EEC has created a website to allow the users of AO-7 to record contacts, observations and use of the satellite more effectively at:

http://www.emilyshouse.com/experthams/ao7/main.php
This includes the ability to log contacts.

Tim, K3TZ has written a program to decode AO-07 telemetry.
The program can be downloaded at:
http://www.qsl.net/k3tz/files/K3TZ_AO-07_Telemetry_Decoder_0.5.zip

For more AO-7 info:
http://www.amsat.org/amsat/sats/n7hpr/ao7.html
[11142004]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: U/V CROSS-BAND REPEATER
Digipeater: Inactive

The current Expedition 11 crew is:
Commander Sergei Krikalev
Flight Engineer John Phillips

Worldwide packet uplink: 145.990 MHz FM
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM
Doppler Shift is 10 KHz

Russian callsigns: RS0ISS, RZ3DZR
USA callsign: NA1SS
Packet station mailbox callsign: RS0ISS-11
Packet station keyboard callsign: RS0ISS-3
Digipeater callsign: ARISS

This from Frank Bauer, KA3HDO:
The SSTV system will be installed inside the Service module as an
integral
part of the ARISS ham radio system. It will transmit and receive (JPG)
still images from the International Space Station in a format called
Slow
Scan TV (SSTV). When fully operational, the SSTV system is capable of
sending up to 480 images per day from ISS.   It will also be able to
receive images from amateur radio stations on Earth. This system will
utilize the already installed Kenwood D-700 radio and the ARISS
antennas
mounted on the Service Module. The SSTV equipment flown on Progress
19P
includes the SpaceCam software, a radio/computer interface module, and
data

cables. The dedicated laptop for SSTV operations will be launched on a subsequent Progress vehicle

This off the ARISS webpage:
< http://www.rac.ca/ariss/oindex.htm#New%20ARISS%20Operations >:
The ARISS program is pleased to announce that the amateur radio equipment
aboard the International Space Station is now operating in cross-band repeat
mode. We realize that many of you will miss the packet-operating mode. How-
ever, cross-band repeat allows further experimentation of the ISS amateur
radio system

The downlink for this operating mode remains the same, so listen for the station on 145.80 MHz. The new uplink frequency is 437.80 MHz. All frequencies are subject to Doppler shifting. For further information on working
satellites and adjusting for Doppler shift, please review Emily Clark's (W0EEC) excellent presentation on AMSAT's website:
http://www.amsat.org/amsat-new/information/faqs/Intro_sats.pdf

The ISS daily crew schedule can be found at:
http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line is
NOT translated from Russian and posted.

More information is available at:
http://www.rac.ca/ariss
http://spaceflight.nasa.gov/station/reference/radio/
http://www.marexmg.org/fileshtml/unprotopage.html
http://www.issfanclub.com
http://oscar.dcarr.org/
[09182005]
NNNN
/EX

SB SAT @ AMSAT <W8ISS $ANS-275.S2
WSR 275 Part 2 10/02/2005

AMSAT NEWS SERVICE BULLETIN 275.S2 FROM AMSAT HQ
SILVER SPRING, MD, OCTOBER 02, 2005
TO ALL RADIO AMATEURS
BID: $ANS-275.S2

PCSAT2 ?0-??
Catalog Number:
Launch Date: August 1, 2005

Status: Operational

PCSAT2 was installed on the exterior of the International Space Station and was activated on August 3, 2005.

PCSAT2 CAPABILITIES: PCSAT2 is attached to the ISS and so its operations must be in cooperation with the ARISS communications suite to minimize any mutual interference and to coordinate activities. Here are the capabilities of the PCSAT2 and ARISS payloads:

PCSAT SYSTEM A:

435.275 PCSAT2 DOWNLINK 1200 baud packet with uplink on 145.825
435.275 PCSAT2 DOWNLINK Occasional user PSK-31 continuous downlink
145.825 PCSAT2 DOWNLINK 1200 baud packet
PCSAT SYSTEM B:

437.975 PCSAT2 DOWNLINK periodic Solar Cell data and PCSAT2 telemetry at 9600 baud
437.975 PCSAT2 DOWNLINK TNC-B command downlink at 1200 baud
437.975 PCSAT2 DOWNLINK User Voice Repeater with VHF uplink
437.975 PCSAT2 DOWNLINK Packet digipeater with VHF uplink

It looks like PCSAT2 can best contribute at this time by operating in PSK-31 mode for the near future. This is a very exciting new transponder mode which solves the congestion problem on FM repeaters by letting multiple stations all communicate at the same time.

PSK-31 users are welcome to try out the new PCSAT2 PSK-31 transponder on ISS with an uplink on 29.402 +/- 1 KHz and downlink on 435.275 +/- Doppler using FM.

The FM downlink lets everyone operate full duplex and everyone to see the same view of the passband as everyone else. THus you can see exactly what your signal looks like to everyone else.

Help Wanted:

Here is your chance to become a viable part of the Amateur Satellite Community.

We are looking for a volunteer satellite packet station in Hawaii that is interested in helping with telemetry and sat-gating of PCSAT2 and ARISS packets. Requirements are:

1) General familiarity with packet
2) TNC connected to a cross band radio that
   can RX on UHF and TX on VHF.
3) modest UHF beam and rotator system.

Contact WB4APR for more information.

Packets seen from PCSAT2 can be reviewed at:
http://www.findu.com/cgi-bin/pcsat2.cgi

A screen shot of both the 9600 bps and 1200 bps decoded data
as seen by Simon, 9W2QC, can be seen at:
http://www.9w2qc.net/pcsat2/

More information on PCSAT2 can be found at:
http://web.usna.navy.mil/~bruninga/pcsat2.html

[ANS-WSR thanks Bob, WB4APR and the U.S. Naval Academy Satellite Lab for
the aboveinformation.]

[08282005}
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Mode: PBBS - ON
FM REPEATER - V/U HIGH POWER

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
Analog voice uplink: 145.880 MHz FM
145.920 MHz FM 67Hz PL tone
1268.700 MHz FM 67Hz PL tone

Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast
Protocol (PBP)

Broadcast: PECHO-11
BBS: PECHO-12

Current scheduled operating modes:

26 Sept
FM Repeater, V/U
Uplink: 145.920 mhz FM, 67 hz PL Tone
Downlink 435.300 mhz FM
9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 435.150 mhz FM, 9k6 PBP Digital

AO-51 Special Event - JOTA Weekend 15-16 Oct

The annual Boy and Girl Scouts "Jamboree on the Air" Amateur Radio event is scheduled for 15 and 16 October 2005. As this is an International Scouting event, amateur radio stations around the world are invited to participate. The AO-51 command team is scheduling the satellite for exclusive use by the Scouts, and Satellite operators communicating with the Scouts, for this weekend. Please allow the Scouts the opportunity to make as many contacts as possible via AO-51 during this short time period. Base stations, please remember that most of the JOTA stations will be portable, so please use minimum power. The official times for the JOTA event will be from 1200 UTC on October 15 until 1200 UTC on October 17, 2005.

For the JOTA weekend, AO-51 will be configured in the Dual FM repeater mode. This will provide two independent FM repeaters (separate uplink and downlink frequencies) for use over the weekend. Both repeaters will be for use by the JOTA activity. This mode will run Monday through Friday before the event to allow amateur satellite stations to familiarize and test this mode. The configuration of the satellite frequencies for this mode is listed below.

AO-51 FM repeater #1
Downlink: 435.300 MHz
Uplink: 145.920 MHz with 67hz PL Tone

AO-51 FM repeater #2
Downlink: 435.150 MHz
Uplink: 145.880 MHz with NO PL Tone

Here are some web links for information on the JOTA weekend activity.
http://www.arrl.org/FandES/ead/jota.html
http://www.arrl.org/FandES/ead/ideas.html
http://www.scouting.org/international/jota.html

If your local club has a JOTA activity planned for the weekend please consider volunteering your services to provide a satellite communication station for the event.

Thanks for your support and participation.

[ANS-WSR thanks Mike Kingery, KE4AZN for the above information]
[09252005]

=====

NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Non-Operational?????

```
Uplink/downlink:   145.827 MHz 1200 baud AX.25 AFSK via W3ADO-1
Aux/Uplink:        435.250 MHz 9600 baud via PCSAT-2 (off)
APRS Downlink:     144.390 MHz (Region 2)
```

PCSat is a 1200-baud APRS digipeater designed for use by stations using hand-held or mobile transceivers. Downlinks feed a central web site at: http://pcsat.aprs.org

The APRS-equipped PCSat was built by midshipmen from the U.S. Naval Academy
under the guidance of Bob Bruninga, WB4APR.
[07242005]

=====

CUTE-1
Catalog number: 27844
Launched: June 30,2003

Status: Operational

```
Uplink:          ?
Downlink:     436.8375 CW
              437.4700 1200 FM ax25 or SRLL (ACTIVE only near Japan ? )
```

Cliff, K7RR reports:
In the latest Weekly Satellite Report, CUTE 1, #27844 is listed as OPERATIONAL?
Indeed it is very operational as a CUBESAT sending CW telemetry on 436.8345 MHz. At the July 7 2005, 23:45:20 pass over the Western USA:

```
CUTE 1 6B A4 xx 7F D7 66A8 4702 FF FF7C 65
CUTE 1 6C A6 59 80 D9 66A8 4702 FF FE7C B6
```

The June 30th KEPS were within ten seconds of AOS and LOS. It is an very good object to practice tracking as the orbit and transmitter power are similar to proposed CUBESATS awaiting launch this December. As a check for
Doppler correction, the lack of change in tone is an excellent indicator.

CUTE 1 is a Japanese (Tokyo Institute of Technology) one kilogram nanosatellite that was launched by a Rokot rocket from Plesetsk at 14:15 UT on 30 June 2003. It carries a 100 mW beacon at 436.8375 MHz. Initial orbital parameters were period 101.4 min, apogee 831 km, perigee 819 km, and inclination 98.7?.

For further info about CUTE-1 goto:
http://lss.mes.titech.ac.jp/ssp/cubesat/operation/Schedule_e.html

[ANS WSR wishes to thank Cliff, K7RR, for this week's information]
[07242005]
=====
GO-32 TECHSAT-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Downlink: 435.225 MHz FM (9600-baud FSK)
                   (435.325 n/a - temperature problems)
Uplinks: 145.850, 145.890, 145.930 FM
                   1269.700, 1269.800, 1269.900 FM
Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[03132005]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Operational

Uplink: 145.850 or 145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz
Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[05152005]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Semi-operational, the digipeater command is on and open for APRS users.

Uplink: 145.90 145.92 145.94 145.96 MHz FM
                     (using 1200-baud Manchester FSK)
Downlink: 437.026 MHz SSB (1200-baud PSK)
Mode-S Beacon: 2401.1428 MHz
Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

A WOD collection of current graphics along with general information
and telemetry samples can be found at:
http://www.telecable.es/personales/ea1bcu
[05092004]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational?

```
Telemetry Downlink: 145.826 MHz. FM (1200-baud AFSK).
                    approx. 10 days ON, 10 days OFF
Mode-S Beacon:      2401.500 MHz. ... OFF
UHFBeacon:          435.025 MHz. ...  OFF
```

OSCAR-11 is back! I received the good news, on Saturday morning, while at the AMSAT-UK Colloquium. This was entirely unexpected! On Sunday morning Bob G4VRC played me a recording of an early morning pass received that day.

During the period 21 July to 14 August 2005 consistent signals have been heard from 30 July to 08 August. Signals seem to be weaker than usual, confirmed by the many reports received. However,since I last heard the satellite on 30 April, I've reinstalled my antennas , which makes comparisons difficult.

Many thanks for all the recent reports of OSCAR-11 including those from KU7Z (who heard it first), KB2M, VK6XH, HK7MKE, KA2UPW, JE9PEL, G1OCN, HB9SKA and G8OQW.

All the analogue telemetry channels, 0 to 59 are zero, ie they have failed. The status channels 60 to 67 are still working. One bit in channel 62, DSR mode, has changed from WRITE to READ. DSR is the Digital Store & Readout experiment. This could be significant if the experiment is still drawing current, but the other status bit indicates that it is switched OFF.

The on-board clock is now showing a very large error. It has lost approximately 19 days since 30 April. During the recent data collection period, the clock error has been changing at a decreasing rate. The size of the clock error and the rate at which it is changing is similar to the duration of the solar eclipse periods. This suggests that the clock might have been switching OFF during eclipses.

The eclipses have now ended, and the satellite should be in continuous sunlight for the remainder of this year, and well into next year. This should help the satellite to continue transmitting, although continuous sunlight can cause problems due to excessive temperatures.

If the watchdog timer is still operating on a 20 day cycle, ie. approximately ten days ON followed by 10 days OFF, then the VHF beacon should resume transmissions around 18 August.

The Beacon frequencies are -

VHF 145.826 MHz. AFSK FM ASCII Telemetry

UHF 435.025 MHz. OFF

S-band 2401.5 MHz. OFF

Listeners to OSCAR-11 may be interested in visiting my website which contains an archive of news & telemetry data. It also contains details about using a soundcard or hardware demodulators for data capture. There is software for capturing data, and decoding ASCII telemetry. The URL is www.users.zetnet.co.uk/clivew/

If you place this bulletin on a terrestrial packet network, please use the bulletin identifier $BID:U2RPT112.CWV, to prevent duplication.

[ANS-WSR thanks Clive, G3CWV, for the above information]

More information on UO-11 OSCAR-11 can be found at:
http://www.users.zetnet.co.uk/clivew/

MPEG3 files can be found here at Mineo, JE9PEL website:
http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm

[08212005]
NNNN
/EX

SB SAT @ AMSAT <W8ISS $ANS-275.S3
WSR 275 Part 3 10/02/2005

AMSAT NEWS SERVICE BULLETIN 275.S3 FROM AMSAT HQ
SILVER SPRING, MD, OCTOBER 02, 2005
TO ALL RADIO AMATEURS
BID: $ANS-275.S3

THE FOLLOWING ARE IN ORBIT BUT ARE
NON-OPERATIONAL AT THIS TIME:

POSAT-1 PO-28
Catalog Number: 22829
Launched : September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 435.250 MHz
          435.275 MHz

Uplink: 145.925 MHz
          145.975 MHz

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

PO-28 (POSAT-1), Portugal's first satellite, launched 12 years ago, will be turned over to Amateur Radio use in the very near future. That was the word July 30 from AMSAT-UK Secretary Jim Heck, G3WGM, during the AMSAT-UK International Space Colloquium in Guildford, England.

Launched September 25, 1993, the satellite operated as a packet store-and-forward BBS (9600 baud FM FSK) on Amateur Radio frequencies for several weeks in early 1994. Over the years, PO-28's primary usage has been commercial, although plans have called for eventually shifting its operation to ham radio use. G3WGM reports that following lengthy negotiations it has been agreed that the satellite can be switched permanently to amateur frequencies. The changeover is expected to take a couple of weeks.

The Portuguese satellite was built at the University of Surrey as part of a collaborative satellite technology program that involved industry and academe. Uplink frequencies will be 145.925 and 145.975 MHz. Downlink frequencies will be 435.250 and 435.275 MHz. More information on PO-28 is on the AMSAT Web site http://www.amsat.org/amsat/sats/n7hpr/po28.html.

Uplink Frequencies: 145.925 and 145.975 MHz
Downlink Frequencies: 435.250 and 435.275 MHz

Orbit: 822 x 800 km, 98.6 deg inclined, sun-synchronous.

Transponder capabilities include FM repeater and 38k4 data. If you want to hear how loud this satellite is, listen on 429.950 until the change back to amateur radio service.

Keplerian elements for PO-28 are not currently contained in the AMSAT keps bulletins, but can be found at Celestrak in amateur.txt using the name "POSAT". Users of Space Track should query the NORAD Satellite ID number 22829. The name listed by Space Track is "EYESAT A".

More information of POSAT-1 can be found at:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
http://www.amsat.org/amsat/sats/n7hpr/po28.html
[ANS-WSR wishes to thanks Trevor, M5AKA and Jim, G3WGM, for this week's information.]
[08072005]

=====

AO-10 OSCAR 10
Catalog number: 14129
Launched: June 16, 1983

```
Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB
Beacon:   145.810 MHz (unmodulated carrier)

AO-10 has been locked into a Mode-B, 70-cm uplink and
2-meter downlink for several years.

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: Non-operational

Uplink:             145.875 145.900 145.925 145.950 MHz FM (1200-baud)
Downlink:           435.812 MHz SSB
Broadcast Callsign: ITMSAT-11
BBS:                ITMSAT-12

Alberto E. Zagni - I2KBD reports on 02/13/05
The spacecraft is in MBL (safe mode) and is trasmitting just 6 channels
of telemetry. Temperatures and voltage are nominal, but there seems to
be a problem with the onboard receiver, refusing to accept commands.
The spacecraft was launched in 1993, thus nearing 12 years in orbit...

Best regards
Alberto E. Zagni - I2KBD
ITAMSAT Mission Director

More information of IO-26 can be found at:

http://joshua.micronet.it/english/itamsat/itamsathome.html
http://www.amsat.org/amsat/sats/n7hpr/io26.html
www.itamsat.org

[02132005]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink:   21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB
Beacon:   29.408 MHz
Robot:    29.454 MHz
```

```
[05232004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink:      21.260 to  21.300 MHz CW/USB
Downlink:   145.860 to 145.900 MHz CW/USB
Beacon:     145.860 MHz
Robot:      145.908 MHz
[05232004]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink 145.975 MHz FM
Downlink 435.070 MHz FM
[05092004]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink:             145.900 FM 9600-baud FSK
Downlink:           435.120 MHz FM
Broadcast Callsign: UOSAT5-11
BBS:                UOSAT5-12
[01092005]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational?

Uplink:      145.858 to 145.898 MHz CW/USB
Downlink:     29.354 to  29.394 MHz CW/USB
Beacon:       29.352 MHz (intermittent)
SSB meeting frequency:  29.380 MHz (unofficial)

John, KD6PAG reports on June 16, 2004 to ANS:
RS-15 beacon seemed to be back in the mode where it's a tone about 5
seconds
off and then 5 seconds on this morning.

ANS is looking for more confirmations of RS-15 coming back.
```

```
[ANS thanks John, KD6PAG for RS-15 information]
[06202004]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplink:             145.84 145.86 145.88 145.90 MHz FM
                    (using 1200-baud Manchester FSK)
CW downlink:        437.125 MHz
Digital downlink:   437.150 MHz SSB (RC-BPSK 1200-baud PSK)
Broadcast Callsign: LUSAT-11
BBS:                LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[05232004]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Uplink:     145.90 to 146.00 MHz CW/LSB
Downlink:   435.80 to 435.90 MHz CW/USB
Beacon:     435.795

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[08152004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink:             145.900 MHz FM (9600-baud FSK)
Downlink:           435.170 MHz FM
Broadcast Callsign: HL01-11
BBS:                HL01-12

Jim, AA7KC, reports that KO-23's downlink transmitter continues in a
non-operational status.
[05092004]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993
```

Status: Non-operational

Uplink: 145.980 MHz FM (9600-baud FSK)
Downlink: 436.500 MHz FM
Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink frequency (listed on the PanSat web site) 436.500 MHz

The satellite is not available for general uplink transmissions.

The Naval Postgraduate School developed PanSat. At the time of launch, PanSat spread-spectrum digital transponders were to be available to Amateur Radio operators along with software to utilize this technology.

The satellite is still operating, however, the spread spectrum packet radio portion never took place. The spacecraft is now beyond it's initial 2-year mission life, but telemetry records are still being downloaded.

For more information, visit the official PanSat web site at:
http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm

[ANS has no further information]
[05232004]
=====
SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

```
STatus: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
          Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
         Mode J Digipeater: 145.825 MHz and 145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[08082004]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink:             145.960 MHz (9600-baud FSK)
Downlink:           437.025 MHz 437.400 MHz
Broadcast Callsign: UO121-11
BBS:                UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA
web site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[05092004]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplink      V-band    145.840 -  145.990 MHz CW/LSB
            U-band    435.550 -  435.800 MHz CW/LSB
           L1-band   1269.250 - 1269.500 MHz CW/LSB
           L2-band   1268.325 - 1268.575 MHz CW/LSB
           S1-band   2400.350 - 2400.600 MHz CW/LSB
Downlink:  S2-band   2401.225 - 2401.475 MHz CW/USB
           K-band 24,048.010 - 24,048.060 MHz CW/USB
Beacon:    2401.323, 24,048.035
[05232004]
-----
SO-42  SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational
 Downlink:           437.075 MHz
Broadcast Callsign: SASAT2-11
BBS:                SASAT2-12
```

```
Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[08152004]
=====
SO-41  SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink:             145.850 MHz
Downlink:           436.775 MHz
Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[08152004]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink:   145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is  welcome to use the digipeating/APRS features of Sapphire,
callsign KE6QMD, as per the user service agreement located at the
following
URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Semi-operational.

Uplink 435.275 1200-baud AFSK
Downlink 145.825 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

AO-49 (SAFIR-M) is a German amateur radio payload onboard the small
German
scientific satellite "RUBIN-2".

AO-49 was built by the German amateur radio association "AATiS
```

e.V." (German acronym for "Arbeitskreis Amateurfunk und Telekommunikation in der Schule", which means: 'working group for amateur radio anand telecommunications in schools'). AO-49 is designed as a "store and broadcast" system for APRS based messages, dedicated for the use of schools in combination with the existing WX-Net and planned buoy experiments in Germany.

No transmissions detected since the 1st of February 2003! It appears AO-49 is not properly aligned to illuminate the solar panels. This should end soon. Due to its orbit, AO-49 will be in a phase without eclipses until 13Feb03.

Martin DG8UAU has written a small software program "SAFIR-M Decoder" to allow decoding of the received DATA0 frames. It is available at: http://amend.gmxhome.de in the section Aktuelles.

Details on AO-49 (SAFIR-M) can be found at:
http://amend.gmxhome.de

Information about AATiS e.V. is available at:
http://www.aatis.de
[05092004]
NNNN
/EX

SB SAT @ AMSAT <W8ISS $ANS-275.S4
WSR 275 Part 4 10/02/2005

AMSAT NEWS SERVICE BULLETIN 275.S4 FROM AMSAT HQ
SILVER SPRING, MD, OCTOBER 02,2005
TO ALL RADIO AMATEURS
BID: $ANS-275.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE PROPOSED FOR LAUNCH AT THIS TIME:

UCISAT ?O-??
Catalog number:
Proposed Launch Date: October 31, 2005

Status: Under Construction

Downlink: Submission in Progress
Uplink: Submission in Progress
Callsign: Submission in Progress

This from Matt Bennett, KF6RTB, UCISAT Communications Team Member:

Our website is www.ucisat.net .This is a new website, however, and doesn't have the "Status" section active yet. Because of the growing interest in

our
project, I'll push our webmaster to create updates (hopefully) on a
week-to-
week basis. For now, the current status of the mission is as follows:

-Expected Launch Date: October 31st, 2005
-Frequency Allocation: Submission in Progress
-Construction Status: Sub-Assembly
[WSR to thank Matt Bennett, KF6RTB, for this week's report.]
[01302005]
=====
SSETI ?O-??
Catalog Number:
Proposed Launch Date: LATE 2005

Status: AWAITING LAUNCH

Graham, G3VZV reports:
Dear all,

Unfortunately we have just learnt that we have an INDEFINITE launch
delay.

This is due to one of the spacecraft on the launch, "SINAH", having
suffered
a significant failure and not being ready to fly.

Early indications suggest that we have a delay of at least one month,
but
this is not confirmed.

The launch campaign team will make the spacecraft and the ground support
equipment safe and then come home.

This is, of course, very unfortunate, but it is not critical! The
spacecraft
can easily wait for the new launch date without any significant
problems,
and we will fly it as soon as we can.

In the meantime please cancel all arrangements for your national launch
events.

We'll get there eventually.

Watch this space...

Neil

SpaceDaily has a report about SSETI at:
http://www.spacedaily.com/news/internet-04zzzu.html

You can find more info about SSETI at:

http://sseti.gte.tuwien.ac.at/WSW4/

Latest news about SSETI can be found at:
http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php

Look at the website for the SSETI Express webcam
http://sseti.gte.tuwien.ac.at/WSW4/webcam.htm

[ANS thanks Graham, G3VZV for the above information]
[09252005]
=====
PHASE 3E ?O-??
Catalog Number:
Proposed Launch Date: Early 2006

Status: Under Construction

For the latest project status update please visit the AMSAT-DL
P3-E web page:
http://www.amsat-dl.org/p3e/

[ANS-WSR wishes to thank William Leijenaar, PE1RAH for this week's
report]
[10022005]
=====
CP1 ?o-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: N6CP
Proposed Transmit Frequency: 436.845
[03272005]
=====
CP2 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.325
[03272005]
=====
HAUSAT1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: D90HP
Proposed Transmit Frequency: 437.465
[03272005]
=====
ICE Cube 1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

```
Proposed Callsign: W2CXM
Proposed Transmit Frequency: 437.305
[03272005]
=====
ICE Cube 2 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: N2VR
Proposed Transmit Frequency: 437.425
[03272005]
=====
ION ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.505
[03272005]
=====
KUTEsat ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: KC0RMW
Proposed Transmit Frequency: 437.385
[03272005]
=====
MEROPE ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: K7MSU-1
Proposed Transmit Frequency: 145.980
[03272005]
=====
nCUBE1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
       2407.25
[03272005]
=====
RINCON ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
        437.345
[03272005]
```

=====
SACRED ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
[03272005]
=====
SACRED ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
[03272005]
=====
SEEDS ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: JQ1YGU
Proposed Transmit Frequency: 437.485
[03272005]
=====
Mea Huaka ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.405
[03272005]
=====
SUITSAT ?O-??
Catalog Number:
Proposed Release Date: December 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: TBA

A video of the progress of Suitsat can be found at the following URL:
http://www.amsat.org/amsat-new/information/videoNews.php

To be released from an airlock of the International Space Station some
time
in December of 2005.
[10022005]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live
radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz.
Pre-net operations start at 18:00 UTC, with current ANS bulletins trans-

mitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
        888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/amsat/listserv/menu.html

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satelite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

```
From -1274548773545968642
X-Google-Thread: 10e8ad,e5ad51fa92fa972d,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
```

```
Path: g2news1.google.com!news4.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!peer01.cox.net!cox.net!easynet-quince!easynet.net!
feed4.jnfs.ja.net!jnfs.ja.net!zen.net.uk!hamilton.zen.co.uk!
news-1.opaltelecom.net!not-for-mail
From: g3zhi@hotmail.com (g3zhi)
Newsgroups: rec.radio.amateur.space
Subject: International Space Station School Contacts on Oct 5th, 6th 7th
Message-ID: <43437639.1550813@news.talktalk.net>
X-Newsreader: Forte Agent 1.5/32.452
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Lines: 260
Date: Wed, 05 Oct 2005 06:45:29 GMT
NNTP-Posting-Host: 84.13.128.8
X-Complaints-To: abuse@opaltelecom.net
X-Trace: news-1.opaltelecom.net 1128494755 84.13.128.8 (Wed, 05 Oct 2005 07:45:55
BST)
NNTP-Posting-Date: Wed, 05 Oct 2005 07:45:55 BST
Organization: Opal Telecom
Xref: g2news1.google.com rec.radio.amateur.space:260
```

International Space Station School Contacts on Oct 5th, 6th 7th

Ham radio ISS school contacts
ARISS Contacts on October 5th, 6th and 7th
Listen to the contacts 'live' on Echolink join the Amsat conference room number 101377
The International Space Station's Expedition 11 crew may be winding down. However, their ARISS school contacts will be very active this week with 3 scheduled sessions.

Each session will be a telebridge conducted in English.
Sessions will be held on:

5 October 16:59 UTC -- Princeton High School, Princeton, New Jersey
6 October 15:07 UTC -- Ft Hamilton High School, Brooklyn, NY
7 October 13:33 UTC -- Ridgefield Park High School, Ridgefield Park, NJ

Princeton High School, Princeton, New Jersey

Station NN1SS in Greenbelt, MD will call NA1SS at approximately 16:59 UTC.

"Princeton High School is a nationally recognized high school listed frequently in various publications denoting outstanding academic achievement. Princeton High School students excel in the humanities, the fine arts, and the sciences with students performing in Smetana Hall in Prague and competing with the US Physics Olympic Team in Seoul, South Korea. The student body is a diverse group representing a wide range of interests and backgrounds within a school community in which 17% of our students claim one of 38 languages other than English as their first language."

Students will ask as many of the following questions as time allows:

1. Are the shapes of the continents as defined as they appear on maps and globes?
2. How much less time will pass in the ISS than on Earth, due to relativity?
3. If it weren't for family and friends, would you want to return to Earth?
4. What are the day-to-day jobs of the space station?
5. How do you sleep?
6. What is the worst situation you've encountered in space?
7. What luxury do you miss the most?
8. How fast did you travel to exit the earth's atmosphere?
9. How would you describe space when you look outward? If you space walked, what went through your mind the first time the airlock opened and you saw space?
10. What does weather look like from space? For instance, could Hurricane Katrina be seen moving?
11. Can you really see landmarks such as the Great Wall of China from space?
12. How often do people get space sickness in the ISS?
13. When you come back, what will you miss most?
14. How much of the day is left to yourself and for sleeping?
15. How much bone and muscle mass will you have lost through out your trip? How would it be if you went to Mars for 3 months?
16. What is good or the best on the menu?
17. When were you first interested in space travel?
18. What about space intrigues you and that you do not understand? What have you been able to learn in your travels as of yet?
19. My brother wants to be an astronaut. What advise can you give him?
20. How does your body feel in low gravity? Can you feel the effect? Is it like floating?

Ft Hamilton High School, Brooklyn, NY

Station VK5ZAI in Kingston SE, South Australia will call NA1SS at approximately 15:07 UTC.

"Fort Hamilton High School is large urban public school of
5000 students in a suburban setting of Bay Ridge,
Brooklyn. Our school reflects the ethnic diversity of New
York City. We have strong academic programs geared towards college
preparation, with
advanced placement and honors classes in all disciplines. Our
communication with will
benefit our student population, especially the astronomy classes."

Students will ask as many of the following questions as
time allows:

1. What motivated you to go into space?
2. Did your journey so far fulfill your expectations? Why or why not?
3. How long did you have to train to prepare for your space flight? What was the most difficult part of your training?
4. How is the training you received actually different than traveling into space?
5. How long will you stay at ISS? What type of work will you be involved with?
6. If you could change one thing about your space mission, what would it be?
7. Besides your family and home, what do you miss the most about Earth?
8. How do you spend your free time at the ISS?
9. Do astronauts have to do daily exercises and what type?
10. How long does it take to reach the ISS? How fast is the shuttle moving after you leave the atmosphere?
11. How are basic life functions like sleeping and digestion affected by the zero-gravity environment at ISS?
12. How are medical problems such as illness or breaking a bone dealt with in space?
13. How would you fight a fire in a zero gravity environment?
14. Are there any plants or animals on the ISS being experimented on? What type of experiments?
15. Is the supply of oxygen on the ISS constantly being supplied or is there a machine that produces it?
16. How do you prepare for a space walk? and what special precautions have to be taken?
17. Does cosmic radiation affect you during your time in space?
18. Do you believe in the existence of other intelligent life forms in the universe?
19. What do you eat at the ISS? and How?
20. How many astronauts fit in the ISS?

Ridgefield Park High School, Ridgefield Park, NJ

Station ZS6BTD in Parklands, South Africa will call NA1SS at approximately 13:33 UTC.

"Ridgefield Park Junior-Senior High School is a 7-12 school of approximately 1,100 students located in Southeast of Bergen County. The school is a receiving district for 9-12 grade students from Little Ferry, a community that borders south west of Ridgefield Park, just across the Hackensack River."

"The school has a proud history that includes some rather famous graduates. Among them Ozzie Nelson of Ozzie & Harriet fame and Bud Lewis, the copilot of the Anola Gay which dropped the atomic bomb on Hiroshima, which signaled the end of World War II. It is also the proud alma mater of Greg Olsen."

Students will ask as many of the following questions as time allows:

1. I have read that you plan to use your company's miniaturized infrared imager to observe Earth's atmosphere and agricultural crops on this trip. What do you plan to do with this information and how do you foresee it will help us in the future?
2. Why are you turning the infrared camera toward space, and what do you hope to accomplish?
3. What new products do you foresee as the result of the experiments conducted on this mission?
4. Sapna and I won a national chemistry competition based on our ideas for the development of a transdermal nutrient patch. Is anything like this currently being used in the space program or do you foresee its use in the future?
5. I understand that there are three biological experiments for the European Space Agency. Could you please briefly describe them?
6. Can you explain the scientific significance of the experiment on crystal growth in space?
7. Could you explain the significance of the experiments that will test small free-flying satellites, as part of a project called SPHERES?
8. Why is space such a good place to conduct experiments in cell research?
9. Which of the jobs that you performed on board did you like the most and why?
10. Please describe any geographical or man-made features on the Earth that you can see from space.
11. Have you seen any storms like hurricanes or tornadoes from space? What do they look like?
12. What type of problems have you encountered in the space station and how have you solved them?
13. What is the role of Expedition 12?

14. Dr. Olsen, why would a very successful business man and entrepreneur like you want to travel into space?
15. How will this opportunity to experiment in space benefit others (adults, children)?
16. How different do such celestial bodies as the sun, the moon, and any of the planets look from space as compared to how they look from Earth?
17. What would have happened if anyone had gotten seriously sick during the trip?
18. Was all your training in English or did you have to learn Russian to be involved in the program?
19. Do you see yourself as being involved in the U.S.A. space program someday?
20.What are your plans when you return from this Russian mission?

As always, the ISS will be audible to anyone listening in on the 145.80 MHz downlink. Please note, since these are telebridges the ground stations will NOT be near the school that is contacting the ISS.

Please note, the amateur equipment on the ISS will be turned off prior to the beginning of the contact. It will be returned to service as quickly as possible.

Upcoming ARISS events can be found at
http://www.amsat.org/amsat/ariss/news/arissnews.txt
The next scheduled event is with students at Princeton High School, Princeton, New Jersey on Wednesday, 5 October 2005 at 16:58 UTC.

ARISS is an international educational outreach program partnering the participating space agencies, NASA, Russian Space Agency, ESA, CNES, JAXA, and CSA, with the AMSAT and IARU organizations from participating countries.
ARISS offers an opportunity for students to experience the excitement of Amateur Radio by talking directly with crewmembers on-board the International Space Station.

Teachers, parents and communities see, first hand, how Amateur Radio and crewmembers on ISS can energize youngsters' interest in science, technology, and learning.

Further information on the ARISS programme is available on the website

http://www.rac.ca/ariss (graciously hosted by the Radio Amateurs of Canada). Information about the next scheduled ARISS contact can be found at
http://www.rac.ca/ariss/upcoming.htm#NextContact.

73 Ian G3ZHI

http://www.qsl.net/g3zhi - many ham radio links

http://www.ukirlp.co.uk

G4NJI IRLP 5200 Echolink 135909
Rotherham simplex 145.2875mhz

Skype g3zhiian
VoiP   642109

Mobile 0783 338 0578

```
From -1331239912846364713
X-Google-Thread: 10e8ad,c5e4aea27a55b6fc,start
X-Google-Thread: 113975,c5e4aea27a55b6fc,start
X-Google-Attributes: gid10e8ad,gid113975,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news4.google.com!news.glorb.com!news.astraweb.com!news-
router1.astraweb.com!not-for-mail
From: Chris Steyaert <observations@rmob.org>
Newsgroups: rec.radio.amateur.space,sci.astro.amateur
Subject: Radio Meteor Obs. Bull. September 2005
Date: Sun, 09 Oct 2005 13:35:23 +0200
Message-ID: <q20ik1lg34ubsooag88pd51o52l0juukn9@4ax.com>
X-Newsreader: Forte Agent 1.93/32.576 English (American)
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Lines: 17
Organization: Unlimited download news at news.astraweb.com
NNTP-Posting-Host: 6fedb33f.news.astraweb.com
X-Trace: DXC=fCUO=G;?f4ffj0fd2JZgghL?0kYOcDh@jnUjYiZaDLMbOP3`:obaPUnG?
ifhhgG3CaHVa>8kANb>n[Y]gG?c=T@c
Xref: g2news1.google.com rec.radio.amateur.space:261 sci.astro.amateur:24030
```

Radio Meteor Observation Bulletin No. 146 of September 2005 (63 K) is available now as

http://visualrmob.free.fr/rmobtext/rmob0509.txt

More information and the visual presentation of the hourly forward scatter counts can be found on

http://www.rmob.org

http://radio.data.free.fr

Chris

```
From 4085217463661681872
X-Google-Thread: 10e8ad,f609581526033828,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news3.google.com!border1.nntp.dca.giganews.com!
border2.nntp.dca.giganews.com!nntp.giganews.com!elnk-atl-nf1!
newsfeed.earthlink.net!stamper.news.atl.earthlink.net!
newsread2.news.atl.earthlink.net.POSTED!46041641!not-for-mail
From: "JoAnne Maenpaa" <wb9jej_no-spam@earthlink.net>
Newsgroups: rec.radio.amateur.space
Subject: ANS-282 AMSAT Weekly News Service Bulletin
Lines: 398
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <gbu2f.12495$QE1.11366@newsread2.news.atl.earthlink.net>
Date: Mon, 10 Oct 2005 13:40:28 GMT
NNTP-Posting-Host: 66.167.182.91
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread2.news.atl.earthlink.net 1128951628 66.167.182.91 (Mon, 10 Oct
2005 06:40:28 PDT)
NNTP-Posting-Date: Mon, 10 Oct 2005 06:40:28 PDT
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news1.google.com rec.radio.amateur.space:262
```

AMSAT NEWS SERVICE
ANS-282

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:

* Initial Report From the AMSAT Meeting
* AMSAT President's Letter
* ARISS Status October 3, 2005
* New Launch Date for SSETI Express

* AO-51 Special Event - JOTA Weekend 15-16 October
* South Africa, Other African Nations to Build LEO Satellite Network

SB SAT @ AMSAT $ANS-282.01
Initial Report From the AMSAT Meeting

AMSAT News Service Bulletin 282.01
>From AMSAT HQ SILVER SPRING, MD.
October 9, 2005
To All RADIO AMATEURS
BID: $ANS-282.01

The AMSAT News Service caught up with Board Member Emily Clarke, W0EEC after the first day of the Annual AMSAT BoD meeting in Pittsburgh. Emily said, "This
is my first meeting as a member of the board, and I am very impressed at how unified the board is. The meeting has been focused on our top priority - to build and launch Eagle(s) - and the board has been very productive in identifying plan elements that will bring Eagle to orbit."

Emily continued with, "One challenge we face is fund-raising, which is difficult to do at an early stage of the project. Unlike previous efforts much
of the work, such as writing and testing software for the SDTX is intangible.
Fundraising is our biggest challenge, and I encourage every member to think of
creative ways we might meet our goal."

Emily described another key action of the Board being the elections of the Executive Team officers taking place this week. The Board will announce the results of these elections when the process is completed.

The AMSAT Annual Meeting followed on Friday, October 8, at 8PM.

Powerpoint slides from this meeting can be viewed on-line at:
http://www.amsat.org/amsat-new/articles/2005_General_Meeting/

If one is navigating from the http://www.amsat.org front page the steps are:
Navigator (main menu)
Current Articles
2005 General Meeting

We will upload additional presentations as they are reviewed and approved.

[ANS thanks Emily, W0EEC for the above information]

/EX

SB SAT @ AMSAT $ANS-282.02
AMSAT President's Letter

AMSAT News Service Bulletin 282.02

>From AMSAT HQ SILVER SPRING, MD.
October 9, 2005
To All RADIO AMATEURS
BID: $ANS-282.02

As I prepare for the series of AMSAT meetings that will take place in Pittsburgh this week I have been reviewing the accomplishments of the past year and the challenges of the coming year. I am pleased with the progress of AMSAT's organizational and infrastructure improvements and with the progress of the two satellite projects, P3E and Eagle. For the coming year I am committed to focus AMSAT's activities primarily on the completion and launch of P3E, the construction of the Eagle space frame and implementation of the Eagle Software Defined Transponders (SDX), at a minimum.

The changes in AMSAT's organizational structure have created many new opportunities for members to actively contribute to the growth and advancement of our organization. Our members are working on teams that are dedicated to areas of excellence such as finance and fundraising, marketing and field operations, technical and scientific, office management, external affairs, operations, human spaceflight, and record keeping. We have a great group of volunteers working in these areas and there is always room for more people.

Our infrastructure has improved in a number of ways, most notably the rollout and constant upgrade of AMSAT's new Web site and on-line store and the overhaul of our accounting practices. Other improvements are in process and will be brought on line as time permits such as the AMSAT Information Management System (AIMS) and member only services.

The P3E project is a very exciting one that holds great promise for the return of AMSAT to the benefits of high earth orbit satellites. This project is being led by AMSAT-DL, as have all the HEO satellite projects. AMSAT in North America is contributing substantial manpower and funding to P3E and is committed to the success of the project and to our close relationship with our good friends and colleagues in AMSAT-DL. I am personally a member of AMSAT, AMSAT-DL and AMSAT-UK.

The Eagle project is maturing to the point that we will soon be ready to build the space frame and start assembling some of the payload modules like the Internal Housekeeping Unit and the U/V and L/S software defined transponders.
Nearly all of the work that we are doing in support of P3E will also be used in Eagle so we will maximize the benefits of having cooperated on P3E. As with any new satellite design there are design issues and uncertainties. Let there be no mistake that these are normal and health parts of the design process as we balance the science, engineering, technology and mission

requirements for Eagle. The Eagle team is large, diverse and excited about what they are doing. New qualified volunteers are being added to the team on a regular basis. Status reports are appearing in every issue of the AMSAT Journal.

This coming year will be one of improved communication. There will be an effort to expand our communications beyond the official outlets, the Journal and AMSAT News Service. You will see more reports on the AMSAT-BB message board and we will improve the content and timeliness of the information on the AMSAT Web site, especially on the Eagle pages.

The annual membership meeting will be held Friday evening, October 7th, at 8:00 pm Eastern Time and is open to the membership. This meeting will be recorded and both audio and video will be placed on AMSAT servers soon after the meeting. The meeting will also be broadcast on the AMSAT EchoLink conference. If you have questions and cannot be there please submit them by e-mail (details to be announced on ANS). We may also be able to take questions from EchoLink's text messaging window, if we can get someone in the meeting to operate the computer.

AMSAT is an exciting and vibrant organization with a great deal to offer our members. No organization is perfect but we have a fabulous Mission and Vision and we are performing to those promises. I encourage those who need more information or clarification to gain a better understanding of what we are doing and why it is important and exciting to contact me or any of the other Board members and Officers. Contact information is on the AMSAT Web site at http://www.amsat.org/amsat-new/AboutAmsat/officers.php.

Rick, W2GPS
AMSAT President

[ANS thanks Rick, W2GPS for the above information]

/EX

SB SAT @ AMSAT $ANS-282.03
ARISS Status October 3, 2005

AMSAT News Service Bulletin 282.03
>From AMSAT HQ SILVER SPRING, MD.
October 9, 2005
To All RADIO AMATEURS
BID: $ANS-282.03

1. Tregaron School Contact Successful

On September 29, Tregaron High School (Ysgol Uwchradd Tregaron) in Tregaron, Ceredigion, Wales, U. K., experienced a successful ARISS contact. John

Phillips, KE5DRY, answered 18 questions posed to him by the 14 students and after the contact was lost, he gave answers to the two remaining questions the students had prepared, allowing other radio stations to hear the answers. Approximately 400 students, teachers and dignitaries witnessed the contact.

Audio of the contact is available on the ARISS-Europe website. See: http://www.ariss-eu.org/2005_09_29.htm

To view the BBC article online, see: http://news.bbc.co.uk/1/hi/wales/4292620.stm

2. ARRL Article on Expedition 12

On September 28, ARRL ran a web story on the new ISS crew. "ISS Expedition 12 crew, space tourist to launch October 1" may be found at: http://www.arrl.org/

3. Space Adventures Announces Greg Olsen's Flight Plans

A press release on Greg Olsen's flight and planned amateur radio contacts has been posted on the Space Adventures website. See: http://www.spaceadventures.com/media/releases/2005-09/283

4. Cosmonaut Greets IARU Conference Members

On September 11-15, the International Amateur Radio Union (IARU) Region 1 held their tri-annual General Conference in Davos, Switzerland, where one hundred fifty delegates from 56 countries participated. On Sunday, September 11, during the opening ceremony, the delegates viewed a video of Sergei Krikalev, U5MIR, who sent greetings from space to the participants, wishing them a successful meeting. A news bulletin covering the meeting and including a link to the video has been posted on the ARISS-Europe website. See: http://www.ariss-eu.org/2005_09_30.htm

5. Students Run PCSAT2 Experiment

On Thursday, September 29, Naval Academy midshipmen ran an experiment with PCSAT2. The students watched for packets via the PCSAT2 145.825 uplink, which were digipeated on the 435.275 downlink, and answered those by voice on the 437.975 downlink. Although they had little time to prepare for the pass, the students did have some success, and gained some experience from their lesson.

6. ARISS Budget 2006

A proposal was submitted to the Space Operations Mission Directorate (SOMD) to request funds for the ARISS program for the fiscal year 2006. ARISS Chairman Frank Bauer gave a presentation supporting this request on Friday, September 30.

7. NASA Nights Event

On September 27, NES teachers from Pine Ridge Middle School in Naples, Florida, held "NASA Nights," an event to educate parents, teachers and students about NASA programs. Amateur Radio operators from the Amateur Radio Association of South West Florida volunteered to set up a radio demonstration station, and schedule radio contacts with Amateur Radio operators who work at NASA facilities. The scheduled radio contacts allowed students to ask questions of "NASA experts."   After listening to contacts with hams in Chile, Great Britain and several states, students asked questions of hams at the NASA Ames Center in California. The Ames hams then made contact with hams at Kennedy Space Center, and relayed students' questions to KSC experts about the ISS and shuttles.

8. ARISS International Meeting Held

The monthly ARISS International teleconference was held on Tuesday, September 27. Agenda items discussed included the status of the Columbus Module antennas, SSTV, the SuitSat project, Greg Olsen's contacts, and the use of Voice over Internet Protocol (VoIP) for direct ARISS contacts. The next international meeting will be held on October 25.

[ANS thanks Carol, KB3LKI for the above information]

/EX

SB SAT @ AMSAT $ANS-282.04
New Launch Date for SSETI Express

AMSAT News Service Bulletin 282.04
>From AMSAT HQ SILVER SPRING, MD.
October 9, 2005
To All RADIO AMATEURS
BID: $ANS-282.04

We have been advised that a new launch date has been agreed - Thursday 27th October from the Plesetsk Cosmodrome - with 28th October as a back-up date. The launch time is still expected to remain at 06:52:26 UTC

For those who have already set-up their sat TV equipment to receive the ESA transmissions on ASTRA 1G - you may like to know that the launch of the ESA

Cryosat spacecraft will be broadcast this coming Saturday - 8th October. Cryosat will lift-off from a launch facility at Plesetsk just a few kilometers away from where SSETI Express will be launched from.

Start GMT	End GMT	Description
14:20	14:45	Start of ESA TV Program - welcome from ESA/ESRIN
14:45	15:15	Launch coverage from ESA/ESOC and Plesetsk Cosmodrome
15:02		Scheduled lift-off
15:15	16:30	Cryosat background information - live from ESA/ESRIN
16:30	16:45	Live coverage of satellite/launcher separation from ESA/ESOC
16:36		Scheduled orbital injection
17:00	17:30	Post-launch media briefing from ESA/ESRIN

[ANS thanks Graham, G3VZV for the above information]

/EX

SB SAT @ AMSAT $ANS-282.05
AO-51 Special Event - JOTA Weekend 15-16 October

AMSAT News Service Bulletin 282.05
>From AMSAT HQ SILVER SPRING, MD.
October 9, 2005
To All RADIO AMATEURS
BID: $ANS-282.05

The annual Boy and Girl Scouts "Jamboree on the Air" Amateur Radio event is scheduled for 15 and 16 October 2005. As this is an International Scouting event, amateur radio stations around the world are invited to participate. The AO-51 command team is scheduling the satellite for exclusive use by the Scouts, and Satellite operators communicating with the Scouts, for this weekend. Please allow the Scouts the opportunity to make as many contacts as possible via AO-51 during this short time period. Base stations, please remember that most of the JOTA stations will be portable, so please use minimum power. The official times for the JOTA event will be from 1200 UTC on October 15 until 1200 UTC on October 17, 2005.

For the JOTA weekend, AO-51 will be configured in the Dual FM repeater mode. This will provide two independent FM repeaters (separate uplink and downlink frequencies) for use over the weekend. Both repeaters will be for use by the JOTA activity. This mode will run Monday through Friday before the event to allow amateur satellite stations to familiarize and test this mode. The configuration of the satellite frequencies for this mode is listed below.

AO-51 FM repeater #1
Downlink: 435.300 MHz
Uplink: 145.920 MHz with 67hz PL Tone

AO-51 FM repeater #2

Downlink: 435.150 MHz
Uplink: 145.880 MHz with NO PL Tone

Here are some web links for information on the JOTA weekend activity.
http://www.arrl.org/FandES/ead/jota.html
http://www.arrl.org/FandES/ead/ideas.html
http://www.scouting.org/international/jota.html

If your local club has a JOTA activity planned for the weekend please consider volunteering your services to provide a satellite communication station for the event.

Thanks for your support and participation.

[ANS thanks Mike, KE4AZN for the above information]

/EX

SB SAT @ AMSAT $ANS-282.06
South Africa, Other African Nations to Build LEO Satellite Network

AMSAT News Service Bulletin 282.06
>From AMSAT HQ SILVER SPRING, MD.
October 9, 2005
To All RADIO AMATEURS
BID: $ANS-282.06

SA AMSAT has been involved in discussions with the Department of Science and Technology to include an amateur payload to serve the needs of Amateurs on the African continent.

"Now that the announcement has been made we will intensify our discussions with the various role-players", SA AMSAT President, Hans van de Groenendaal ZS6AKV said.

"At this time I call on Radio Amateurs to send in ideas of what payload they believe will serve the African Amateur Radio Community best.

The full story can be seen at:

http://www.southgatearc.org/news/october2005/sa_satellite.htm

[ANS thanks Trevor, M5AKA for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are

available from the AMSAT Office.

73,
This week's ANS Editor,
Al Marote, WA1LBG
wa1lbg at amsat dot org

From -7523115146280836349
X-Google-Thread: 10e8ad,5fec2f8aa3c6648f,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news3.google.com!border1.nntp.dca.giganews.com!border2.nntp.dca.giganews.com!nntp.giganews.com!elnk-atl-nf1!newsfeed.earthlink.net!stamper.news.atl.earthlink.net!newsread2.news.atl.earthlink.net.POSTED!46041641!not-for-mail
From: "JoAnne Maenpaa" <wb9jej_no-spam@earthlink.net>
Newsgroups: rec.radio.amateur.space
Subject: ANS-282.07 Late Breaking News from AMSAT Board of Directors Meeting
Lines: 46
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <pcu2f.12496$QE1.8506@newsread2.news.atl.earthlink.net>
Date: Mon, 10 Oct 2005 13:41:41 GMT
NNTP-Posting-Host: 66.167.182.91
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread2.news.atl.earthlink.net 1128951701 66.167.182.91 (Mon, 10 Oct 2005 06:41:41 PDT)
NNTP-Posting-Date: Mon, 10 Oct 2005 06:41:41 PDT
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news1.google.com rec.radio.amateur.space:263

SB SAT @ AMSAT $ANS-282.07
AMSAT Board and Officers for 2005-2006

AMSAT News Service Bulletin 282.07
From AMSAT HQ SILVER SPRING, MD.
October 9, 2005
To All RADIO AMATEURS
BID: $ANS-282.07

One of the key actions of the Board of Directors was the election of the Executive Team officers.

Here are the results:

AMSAT Board of Directors

Richard Hambly, W2GPS

Barry Baines, WD4ASW
Gunther Meisse, W8GSM
Dr. Thomas A. Clark, W3IWI
Lou McFadin, W5DID
Paul Shuch, N6TX
Emily Clarke, W0EEC
Bob McGwier, N4HY (First Alternate)
Lee McLamb, KU4OS (Second Alternate)

AMSAT Officers

Richard Hambly, W2GPS: President
Lee McLamb, KU4OS: Executive Vice President
Mike Kingery, KE4AZN: Vice-President Operations
Frank Bauer, KA3HDO: Vice President of Human Spaceflight
Bob McGwier, N4HY: Vice-President Engineering
Barry Baines, WD4ASW: Vice-President Marketing and User Services
Steve Diggs, W4EPI: Secretary
Gunther Meisse, W8GSM: Treasurer
Martha Saragovitz: Manager

Stan Wood, WA4NFY has retired as VP of Engineering. AMSAT thanks Stan for his years of service in this important capacity.
We welcome and congratulate, Bob McGwier, N4HY, as the new AMSAT Vice-President Engineering.

/EX

From 5265248644773141423
X-Google-Thread: 10e8ad,c198a41f753d85e7,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news3.google.com!border1.nntp.dca.giganews.com!border2.nntp.dca.giganews.com!nntp.giganews.com!elnk-atl-nf1!newsfeed.earthlink.net!stamper.news.atl.earthlink.net!newsread2.news.atl.earthlink.net.POSTED!46041641!not-for-mail
From: "JoAnne Maenpaa" <wb9jej_no-spam@earthlink.net>
Newsgroups: rec.radio.amateur.space
Subject: WSR-282 AMSAT Weekly Satellite Report
Lines: 1316
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <ndu2f.12497$QE1.5829@newsread2.news.atl.earthlink.net>
Date: Mon, 10 Oct 2005 13:42:43 GMT
NNTP-Posting-Host: 66.167.182.91
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread2.news.atl.earthlink.net 1128951763 66.167.182.91 (Mon, 10 Oct 2005 06:42:43 PDT)

NNTP-Posting-Date: Mon, 10 Oct 2005 06:42:43 PDT
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news1.google.com rec.radio.amateur.space:264

This report is organized into 4 parts.
Part 1 - operational analog amateur satellites.
Part 2 - operational digital amateur satellites.
Part 3 - non - operational satellites
Part 4 - proposed satellites

SB SAT @ AMSAT <KB9MMC $ANS-282.S1
WSR 282 Part 1 10/09/2005

AMSAT NEWS SERVICE BULLETIN 282.S1 FROM AMSAT HQ
SILVER SPRING, MD, OCTOBER 09, 2005
TO ALL RADIO AMATEURS
BID: $ANS-282.S1

VO-52 HAMSAT
Catalog Number: 28650
Launch Date: May 05,2005

Status: Testing
Current Mode: U/V

Proposed frequencies:

Indian transponder:
Uplink : 435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW
Beacom : 145.940MHz continue carier signal

Dutch transponder:
Uplink : 435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW
Beacon : 145.860MHz 12WPM with CW message
[07242005]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Mode: PBBS - ON
      FM REPEATER - V/U

Analog voice downlink: 435.300 MHz FM
              435.150 MHz FM
Analog voice uplink: 145.880 MHZ FM
              145.920 MHz FM 67Hz PL tone
                       1268.700 MHz FM 67Hz PL tone

Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output

2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast
Protocol (PBP)

Broadcast: PECHO-11
BBS: PECHO-12

Current scheduled operating modes:

AO-51 Special Event - JOTA Weekend 15-16 Oct

The annual Boy and Girl Scouts "Jamboree on the Air" Amateur Radio event is scheduled for 15 and 16 October 2005. As this is an International Scouting event, amateur radio stations around the world are invited to participate. The AO-51 command team is scheduling the satellite for exclusive use by the Scouts, and Satellite operators communicating with the Scouts, for this weekend. Please allow the Scouts the opportunity to make as many contacts as possible via AO-51 during this short time period. Base stations, please remember that most of the JOTA stations will be portable, so please use minimum power. The official times for the JOTA event will be from 1200 UTC on October 15 until 1200 UTC on October 17, 2005.

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Here are some web links for information on the JOTA weekend activity.
http://www.arrl.org/FandES/ead/jota.html
http://www.arrl.org/FandES/ead/ideas.html
http://www.scouting.org/international/jota.html

If your local club has a JOTA activity planned for the weekend please consider volunteering your services to provide a satellite communication station for the event.

Thanks for your support and participation.

[ANS-WSR thanks Mike Kingery, KE4AZN for the above information]
[09252005]
=====

SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Uplink: 145.850 MHz (67.0 Hz PL tone) (See below for operating procedures)
Downlink: 436.795 MHz

There have been unconfirmed reports on the amsat-bb remailer that SO-50 has shifted downlink frequency as much as 5khz up. This both from Europe.

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The order of operation is thus: (allow for Doppler as necessary)

1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10 minute timer.

[09122004]

=====

FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: OPERATIONAL

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplink: 145.850 145.870 145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

John, N4QWL reports on July 16th, 2005:

Last evening I had a AOS to LOS qso with WI2W. FO-29 came up at 01:17z here in FM07 and I found WI2W and we chatted until 01:33z. The satellite was at 2 degrees elevation when I finally heard him start to crackle a bit. What a great QSO! To think that I watched this bird launch back in 1996 and it is still working so well is a real thrill. I believe I still have the video. I might just look for it and watch it again. Boy do I love this satellite stuff! Look for you all up there.

Please send the reception reports to lab2 'at' jarl.or.jp.
Please use the subject line: 'FO-29 reception report'.

Mineo, JE9PEL, has an FO-29 satellite telemetry analysis program that
will automatically analyze all digital telemetry from the satellite (such as
current, voltage and temperature). FO29CWTE is available at:
http://www.ne.jp/asahi/hamradio/je9pel/
[ANS-WSR wishes to thanks John, N4QWL for this week's report]
[07172005]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Uplink: 145.850 MHz FM
Downlink: 436.795 MHz FM

The latest information on AO-27 from control operator Michael Wyrick,
N3UC (former N4USI), can be found at:
http://www.ao27.org

An AO-27 question-and-answer page is available on the AMSAT-NA web
site, with updates by Ray, W2RS. The URL is:
http://www.amsat.org/amsat/intro/ao27faq.html

[ANS-WSR thanks John, K6YK, for this week's AO-27 report]
[08292004]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Semi-operational in sunlight.
Return to active status: June 21,2002

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
            432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A
            145.975 to 145.925 MHz CW/USB Mode B
Beacon: 29.502 MHz, 145.972 MHz, 435.1 MHz, 2304.1 MHz

Emily, W0EEC has created a website to allow the users of AO-7 to record
contacts, observations and use of the satellite more effectively at:
http://www.emilyshouse.com/experthams/ao7/main.php
This includes the ability to log contacts.

Tim, K3TZ has written a program to decode AO-07 telemetry.
The program can be downloaded at:
http://www.qsl.net/k3tz/files/K3TZ_AO-07_Telemetry_Decoder_0.5.zip

For more AO-7 info:
http://www.amsat.org/amsat/sats/n7hpr/ao7.html
[11142004]

=====

INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: U/V CROSS-BAND REPEATER
Digipeater: Inactive

The current Expedition 11 crew is:
Commander Sergei Krikalev
Flight Engineer John Phillips

Worldwide packet uplink: 145.990 MHz FM
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM
Doppler Shift is 10 KHz

Russian callsigns: RS0ISS, RZ3DZR
USA callsign: NA1SS
Packet station mailbox callsign: RS0ISS-11
Packet station keyboard callsign: RS0ISS-3
Digipeater callsign: ARISS

This from Frank Bauer, KA3HDO:
The SSTV system will be installed inside the Service module as an integral part of the ARISS ham radio system. It will transmit and receive (JPG)still images from the International Space Station in a format called Slow Scan TV (SSTV). When fully operational, the SSTV system is capable of sending up to 480 images per day from ISS.   It will also be able to receive images from amateur radio stations on Earth. This system will utilize the already installed Kenwood D-700 radio and the ARISS antennas mounted on the Service Module. The SSTV equipment flown on Progress 19P includes the SpaceCam software, a radio/computer interface module, and data cables. The dedicated laptop for SSTV operations will be launched on a subsequent Progress vehicle

This off the ARISS webpage:
< http://www.rac.ca/ariss/oindex.htm#New%20ARISS%20Operations >:
The ARISS program is pleased to announce that the amateur radio equipment aboard the International Space Station is now operating in cross-band repeat mode. We realize that many of you will miss the packet-operating mode. However, cross-band repeat allows further experimentation of the ISS amateur radio system

The downlink for this operating mode remains the same, so listen for the station on 145.80 MHz. The new uplink frequency is 437.80 MHz. All freq-

uencies are subject to Doppler shifting. For further information on
working satellites and adjusting for Doppler shift, please review Emily
Clark's
(W0EEC) excellent presentation on AMSAT's website:
http://www.amsat.org/amsat-new/information/faqs/Intro_sats.pdf

The ISS daily crew schedule can be found at:
http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.

More information is available at:
http://www.rac.ca/ariss
http://spaceflight.nasa.gov/station/reference/radio/
http://www.marexmg.org/fileshtml/unprotopage.html
http://www.issfanclub.com
http://oscar.dcarr.org/
[09182005]
NNNN
/EX

SB SAT @ AMSAT <KB9MMC $ANS-282.S2
WSR 282 Part 2 10/09/2005

AMSAT NEWS SERVICE BULLETIN 282.S2 FROM AMSAT HQ
SILVER SPRING, MD, OCTOBER 09, 2005
TO ALL RADIO AMATEURS
BID: $ANS-282.S2

PCSAT2 ?0-??
Catalog Number:
Launch Date: August 1, 2005

Status: Operational

PCSAT2 was installed on the exterior of the International Space
Station and was activated on August 3, 2005.

PCSAT2 CAPABILITIES: PCSAT2 is attached to the ISS and so its operations
must be in cooperation with the ARISS communications suite to minimize
any
mutual interference and to coordinate activities. Here are the
capabilities
of the PCSAT2 and ARISS payloads:

PCSAT SYSTEM A:

435.275 PCSAT2 DOWNLINK 1200 baud packet with uplink on 145.825
435.275 PCSAT2 DOWNLINK Occasional user PSK-31 continuous downlink
145.825 PCSAT2 DOWNLINK 1200 baud packet
PCSAT SYSTEM B:

437.975 PCSAT2 DOWNLINK periodic Solar Cell data and PCSAT2 telemetry at 9600 baud
437.975 PCSAT2 DOWNLINK TNC-B command downlink at 1200 baud
437.975 PCSAT2 DOWNLINK User Voice Repeater with VHF uplink
437.975 PCSAT2 DOWNLINK Packet digipeater with VHF uplink

It looks like PCSAT2 can best contribute at this time by operating in PSK-31 mode for the near future. This is a very exciting new transponder mode which solves the congestion problem on FM repeaters by letting multiple stations all communicate at the same time.

PSK-31 users are welcome to try out the new PCSAT2 PSK-31 transponder on ISS with an uplink on 29.402 +/- 1 KHz and downlink on 435.275 +/- Doppler using FM.

The FM downlink lets everyone operate full duplex and everyone to see the same view of the passband as everyone else. THus you can see exactly what your signal looks like to everyone else.

Help Wanted:

Here is your chance to become a viable part of the Amateur Satellite Community.

We are looking for a volunteer satellite packet station in Hawaii that is interested in helping with telemetry and sat-gating of PCSAT2 and ARISS packets. Requirements are:

1) General familiarity with packet
2) TNC connected to a cross band radio that
     can RX on UHF and TX on VHF.
3) modest UHF beam and rotator system.

Contact WB4APR for more information.

Packets seen from PCSAT2 can be reviewed at:
http://www.findu.com/cgi-bin/pcsat2.cgi

A screen shot of both the 9600 bps and 1200 bps decoded data as seen by Simon, 9W2QC, can be seen at:
http://www.9w2qc.net/pcsat2/

More information on PCSAT2 can be found at:
http://web.usna.navy.mil/~bruninga/pcsat2.html

[ANS-WSR thanks Bob, WB4APR and the U.S. Naval Academy Satellite Lab for the aboveinformation.]

[08282005}
=====

AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Mode: PBBS - ON
FM REPEATER - V/U HIGH POWER

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
Analog voice uplink: 145.880 MHz FM
145.920 MHz FM 67Hz PL tone
1268.700 MHz FM 67Hz PL tone

Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast Protocol (PBP)

Broadcast: PECHO-11
BBS: PECHO-12

Current scheduled operating modes:

AO-51 Special Event - JOTA Weekend 15-16 Oct

The annual Boy and Girl Scouts "Jamboree on the Air" Amateur Radio event is scheduled for 15 and 16 October 2005. As this is an International Scouting event, amateur radio stations around the world are invited to participate. The AO-51 command team is scheduling the satellite for exclusive use by the Scouts, and Satellite operators communicating with the Scouts, for this weekend. Please allow the Scouts the opportunity to make as many contacts as possible via AO-51 during this short time period. Base stations, please remember that most of the JOTA stations will be portable, so please use minimum power. The official times for the JOTA event will be from 1200 UTC on October 15 until 1200 UTC on October 17, 2005.

For the JOTA weekend, AO-51 will be configured in the Dual FM repeater mode. This will provide two independent FM repeaters (separate uplink and downlink frequencies) for use over the weekend. Both repeaters will be for use by the JOTA activity. This mode will run Monday through Friday before the event to allow amateur satellite stations to familiarize and test this mode. The configuration of the satellite frequencies for this mode is listed below.

AO-51 FM repeater #1
Downlink: 435.300 MHz
Uplink: 145.920 MHz with 67hz PL Tone

AO-51 FM repeater #2
Downlink: 435.150 MHz
Uplink: 145.880 MHz with NO PL Tone

Here are some web links for information on the JOTA weekend activity.
http://www.arrl.org/FandES/ead/jota.html
http://www.arrl.org/FandES/ead/ideas.html
http://www.scouting.org/international/jota.html

If your local club has a JOTA activity planned for the weekend please consider volunteering your services to provide a satellite communication station for the event.

Thanks for your support and participation.

[ANS-WSR thanks Mike Kingery, KE4AZN for the above information]
[09252005]

=====

NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Non-Operational?????

Uplink/downlink: 145.827 MHz 1200 baud AX.25 AFSK via W3ADO-1
Aux/Uplink: 435.250 MHz 9600 baud via PCSAT-2 (off)
APRS Downlink: 144.390 MHz (Region 2)

PCSat is a 1200-baud APRS digipeater designed for use by stations using hand-held or mobile transceivers. Downlinks feed a central web site at: http://pcsat.aprs.org

The APRS-equipped PCSat was built by midshipmen from the U.S. Naval Academy under the guidance of Bob Bruninga, WB4APR.
[07242005]

=====

CUTE-1
Catalog number: 27844
Launched: June 30,2003

Status: Operational

Uplink: ?
Downlink: 436.8375 CW
              437.4700 1200 FM ax25 or SRLL (ACTIVE only near Japan ?)
Cliff, K7RR reports:
In the latest Weekly Satellite Report, CUTE 1, #27844 is listed as OPERATIONAL?
Indeed it is very operational as a CUBESAT sending CW telemetry on 436.8345 MHz. At the July 7 2005, 23:45:20 pass over the Western USA:

```
CUTE 1 6B A4 xx 7F D7 66A8 4702 FF FF7C 65
CUTE 1 6C A6 59 80 D9 66A8 4702 FF FE7C B6
```

The June 30th KEPS were within ten seconds of AOS and LOS. It is an very good object to practice tracking as the orbit and transmitter power are similar to proposed CUBESATS awaiting launch this December. As a check for Doppler correction, the lack of change in tone is an excellent indicator.

CUTE 1 is a Japanese (Tokyo Institute of Technology) one kilogram nanosatellite that was launched by a Rokot rocket from Plesetsk at 14:15 UT on 30 June 2003. It carries a 100 mW beacon at 436.8375 MHz. Initial orbital parameters were period 101.4 min, apogee 831 km, perigee 819 km, and inclination 98.7?.

For further info about CUTE-1 goto:
http://lss.mes.titech.ac.jp/ssp/cubesat/operation/Schedule_e.html

[ANS WSR wishes to thank Cliff, K7RR, for this week's information]
[07242005]
=====
GO-32 TECHSAT-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

```
Downlink:           435.225 MHz FM (9600-baud FSK)
                   (435.325 n/a - temperature problems)
Uplinks:            145.850, 145.890, 145.930 FM
                   1269.700, 1269.800, 1269.900 FM
Broadcast Callsign: 4XTECH-11
BBS Callsign:       4XTECH-12
```

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[03132005]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Operational

```
Uplink:             145.850 or 145.925 MHz 9600-baud FSK
Downlink:           437.325 MHz
Broadcast callsign: MYSAT3-11
BBS:                MYSAT3-12
```

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[05152005]
=====
AO-16 PACSAT

Catalog number: 20439
Launch Date: January 22, 1990

Status: Semi-operational, the digipeater command is on and open for APRS users.

Uplink: 145.90 145.92 145.94 145.96 MHz FM
(using 1200-baud Manchester FSK)
Downlink: 437.026 MHz SSB (1200-baud PSK)
Mode-S Beacon: 2401.1428 MHz
Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

A WOD collection of current graphics along with general information and telemetry samples can be found at:
http://www.telecable.es/personales/ea1bcu
[05092004]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational?

Telemetry Downlink: 145.826 MHz. FM (1200-baud AFSK).
approx. 10 days ON, 10 days OFF
Mode-S Beacon: 2401.500 MHz. ... OFF
UHFBeacon: 435.025 MHz. ... OFF

OSCAR-11 is back! I received the good news, on Saturday morning, while at the AMSAT-UK Colloquium. This was entirely unexpected! On Sunday morning Bob G4VRC played me a recording of an early morning pass received that day.

During the period 21 July to 14 August 2005 consistent signals have been heard from 30 July to 08 August. Signals seem to be weaker than usual, confirmed by the many reports received. However,since I last heard the satellite on 30 April, I've reinstalled my antennas , which makes comparisons difficult.

Many thanks for all the recent reports of OSCAR-11 including those from KU7Z (who heard it first), KB2M, VK6XH, HK7MKE, KA2UPW, JE9PEL, G1OCN, HB9SKA and G8OQW.

All the analogue telemetry channels, 0 to 59 are zero, ie they have failed. The status channels 60 to 67 are still working. One bit in channel 62, DSR mode, has changed from WRITE to READ. DSR is the Digital Store & Readout experiment. This could be significant if the experiment is still drawing current, but the other status bit indicates that it is switched OFF.

The on-board clock is now showing a very large error. It has lost approximately 19 days since 30 April. During the recent data collection period, the clock error has been changing at a decreasing rate. The size of the clock error and the rate at which it is changing is similar to the duration of the solar eclipse periods. This suggests that the clock might have been switching OFF during eclipses.

The eclipses have now ended, and the satellite should be in continuous sunlight for the remainder of this year, and well into next year. This should help the satellite to continue transmitting, although continuous sunlight can cause problems due to excessive temperatures.

If the watchdog timer is still operating on a 20 day cycle, ie. approximately ten days ON followed by 10 days OFF, then the VHF beacon should resume transmissions around 18 August.

The Beacon frequencies are -

VHF 145.826 MHz. AFSK FM ASCII Telemetry

UHF 435.025 MHz. OFF

S-band 2401.5 MHz. OFF

Listeners to OSCAR-11 may be interested in visiting my website which contains an archive of news & telemetry data. It also contains details about using a soundcard or hardware demodulators for data capture. There is software for capturing data, and decoding ASCII telemetry. The URL is www.users.zetnet.co.uk/clivew/

If you place this bulletin on a terrestrial packet network, please use the bulletin identifier $BID:U2RPT112.CWV, to prevent duplication.

[ANS-WSR thanks Clive, G3CWV, for the above information]

More information on UO-11 OSCAR-11 can be found at:
http://www.users.zetnet.co.uk/clivew/

MPEG3 files can be found here at Mineo, JE9PEL website:
http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm

[08212005]
NNNN
/EX

SB SAT @ AMSAT <KB9MMC $ANS-282.S3
WSR 282 Part 3 10/09/2005

AMSAT NEWS SERVICE BULLETIN 282.S3 FROM AMSAT HQ
SILVER SPRING, MD, OCTOBER 09, 2005
TO ALL RADIO AMATEURS
BID: $ANS-282.S3

THE FOLLOWING ARE IN ORBIT BUT ARE
NON-OPERATIONAL AT THIS TIME:

POSAT-1 PO-28
Catalog Number: 22829
Launched : September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 435.250 MHz
          435.275 MHz

Uplink: 145.925 MHz
          145.975 MHz

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

PO-28 (POSAT-1), Portugal's first satellite, launched 12 years ago, will be turned over to Amateur Radio use in the very near future. That was the word July 30 from AMSAT-UK Secretary Jim Heck, G3WGM, during the AMSAT-UK International Space Colloquium in Guildford, England.

Launched September 25, 1993, the satellite operated as a packet store-and-forward BBS (9600 baud FM FSK) on Amateur Radio frequencies for several weeks in early 1994. Over the years, PO-28's primary usage has been commercial, although plans have called for eventually shifting its operation to ham radio use. G3WGM reports that following lengthy negotiations it has been agreed that the satellite can be switched permanently to amateur frequencies. The changeover is expected to take a couple of weeks.

The Portuguese satellite was built at the University of Surrey as part of a collaborative satellite technology program that involved industry and academe. Uplink frequencies will be 145.925 and 145.975 MHz. Downlink frequencies will be 435.250 and 435.275 MHz. More information on PO-28 is on the AMSAT Web site
http://www.amsat.org/amsat/sats/n7hpr/po28.html.

Uplink Frequencies: 145.925 and 145.975 MHz
Downlink Frequencies: 435.250 and 435.275 MHz

Orbit: 822 x 800 km, 98.6 deg inclined, sun-synchronous.

Transponder capabilities include FM repeater and 38k4 data. If you want to hear how loud this satellite is, listen on 429.950 until the change back to amateur radio service.

Keplerian elements for PO-28 are not currently contained in the AMSAT keps bulletins, but can be found at Celestrak in amateur.txt using the name "POSAT". Users of Space Track should query the NORAD Satellite ID number 22829. The name listed by Space Track is "EYESAT A".

More information of POSAT-1 can be found at:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
http://www.amsat.org/amsat/sats/n7hpr/po28.html

[ANS-WSR wishes to thanks Trevor, M5AKA and Jim, G3WGM, for this week's information.]
[08072005]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launched: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB
Beacon: 145.810 MHz (unmodulated carrier)

AO-10 has been locked into a Mode-B, 70-cm uplink and
2-meter downlink for several years.

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: Non-operational

Uplink: 145.875 145.900 145.925 145.950 MHz FM (1200-baud)
Downlink: 435.812 MHz SSB
Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Alberto E. Zagni - I2KBD reports on 02/13/05
The spacecraft is in MBL (safe mode) and is trasmitting just 6 channels of telemetry. Temperatures and voltage are nominal, but there seems to be a problem with the onboard receiver, refusing to accept commands.
The spacecraft was launched in 1993, thus nearing 12 years in orbit...

Best regards
Alberto E. Zagni - I2KBD
ITAMSAT Mission Director

More information of IO-26 can be found at:

http://joshua.micronet.it/english/itamsat/itamsathome.html
http://www.amsat.org/amsat/sats/n7hpr/io26.html
www.itamsat.org

[02132005]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

```
Status: Non-operational

Uplink:   21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB
Beacon:   29.408 MHz
Robot:    29.454 MHz
[05232004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink:      21.260 to  21.300 MHz CW/USB
Downlink:   145.860 to 145.900 MHz CW/USB
Beacon:     145.860 MHz
Robot:      145.908 MHz
[05232004]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink 145.975 MHz FM
Downlink 435.070 MHz FM
[05092004]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink:             145.900 FM 9600-baud FSK
Downlink:           435.120 MHz FM
Broadcast Callsign: UOSAT5-11
BBS:                UOSAT5-12
[01092005]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational?

Uplink:      145.858 to 145.898 MHz CW/USB
Downlink:     29.354 to  29.394 MHz CW/USB
Beacon:       29.352 MHz (intermittent)
SSB meeting frequency:  29.380 MHz (unofficial)
```

John, KD6PAG reports on June 16, 2004 to ANS:
RS-15 beacon seemed to be back in the mode where it's a tone about 5 seconds off and then 5 seconds on this morning.

ANS is looking for more confirmations of RS-15 coming back.

[ANS thanks John, KD6PAG for RS-15 information]
[06202004]

=====

LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplink: 145.84 145.86 145.88 145.90 MHz FM
(using 1200-baud Manchester FSK)
CW downlink: 437.125 MHz
Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)
Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[05232004]

=====

FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[08152004]

=====

KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM
Broadcast Callsign: HL01-11
BBS: HL01-12

Jim, AA7KC, reports that KO-23's downlink transmitter continues in a non-operational status.
[05092004]

=====

KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM (9600-baud FSK)
Downlink: 436.500 MHz FM
Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]

=====

PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink frequency (listed on the PanSat web site) 436.500 MHz

The satellite is not available for general uplink transmissions.

The Naval Postgraduate School developed PanSat. At the time of launch, PanSat spread-spectrum digital transponders were to be available to Amateur Radio operators along with software to utilize this technology.

The satellite is still operating, however, the spread spectrum packet radio portion never took place. The spacecraft is now beyond it's initial 2-year mission life, but telemetry records are still being downloaded.

For more information, visit the official PanSat web site at:
http://www.sp.nps.navy.mil/pansat/
[05092004]

=====

SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm

```
[ANS has no further information]
[05232004]
=====
SO-35 SUNSAT
Catalog Number:     ?
Launched:February 23, 1999

STatus: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
          Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
         Mode J Digipeater: 145.825 MHz and 145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[08082004]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink:             145.960 MHz (9600-baud FSK)
Downlink:           437.025 MHz 437.400 MHz
Broadcast Callsign: UO121-11
BBS:                UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA
web site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[05092004]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplink      V-band    145.840 -  145.990 MHz CW/LSB
            U-band    435.550 -  435.800 MHz CW/LSB
           L1-band   1269.250 - 1269.500 MHz CW/LSB
           L2-band   1268.325 - 1268.575 MHz CW/LSB
           S1-band   2400.350 - 2400.600 MHz CW/LSB
Downlink:  S2-band   2401.225 - 2401.475 MHz CW/USB
           K-band 24,048.010 - 24,048.060 MHz CW/USB
Beacon:    2401.323, 24,048.035
[05232004]
-----
SO-42  SAUDISAT-1B
```

```
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational
 Downlink:           437.075 MHz
Broadcast Callsign: SASAT2-11
BBS:                SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[08152004]
=====
SO-41  SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink:             145.850 MHz
Downlink:           436.775 MHz
Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[08152004]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink:   145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is  welcome to use the digipeating/APRS features of Sapphire,
callsign KE6QMD, as per the user service agreement located at the
following
URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Semi-operational.

Uplink 435.275 1200-baud AFSK
Downlink 145.825 9600-baud FSK
(optional voice message)
```

Broadcast callsign: DP0AIS

AO-49 (SAFIR-M) is a German amateur radio payload onboard the small German scientific satellite "RUBIN-2".

AO-49 was built by the German amateur radio association "AATiS e.V." (German acronym for "Arbeitskreis Amateurfunk und Telekommunikation in der Schule", which means: 'working group for amateur radio anand telecommunications in schools'). AO-49 is designed as a "store and broadcast" system for APRS based messages, dedicated for the use of schools in combination with the existing WX-Net and planned buoy experiments in Germany.

No transmissions detected since the 1st of February 2003! It appears AO-49 is not properly aligned to illuminate the solar panels. This should end soon. Due to its orbit, AO-49 will be in a phase without eclipses until 13Feb03.

Martin DG8UAU has written a small software program "SAFIR-M Decoder" to allow decoding of the received DATA0 frames. It is available at: http://amend.gmxhome.de in the section Aktuelles.

Details on AO-49 (SAFIR-M) can be found at:
http://amend.gmxhome.de

Information about AATiS e.V. is available at:
http://www.aatis.de
[05092004]
NNNN
/EX

SB SAT @ AMSAT <KB9MMC $ANS-282.S4
WSR 282 Part 4 10/09/2005

AMSAT NEWS SERVICE BULLETIN 282.S4 FROM AMSAT HQ
SILVER SPRING, MD, OCTOBER 02,2005
TO ALL RADIO AMATEURS
BID: $ANS-282.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE PROPOSED FOR LAUNCH AT THIS TIME:

UCISAT ?O-??
Catalog number:
Proposed Launch Date: October 31, 2005

Status: Under Construction

Downlink: Submission in Progress
Uplink: Submission in Progress
Callsign: Submission in Progress

This from Matt Bennett, KF6RTB, UCISAT Communications Team Member:

Our website is www.ucisat.net .This is a new website, however, and doesn't have the "Status" section active yet. Because of the growing interest in
our project, I'll push our webmaster to create updates (hopefully) on a week-to-week basis. For now, the current status of the mission is as follows:

-Expected Launch Date: October 31st, 2005
-Frequency Allocation: Submission in Progress
-Construction Status: Sub-Assembly
[WSR to thank Matt Bennett, KF6RTB, for this week's report.]
[01302005]
=====
SSETI ?O-??
Catalog Number:
Proposed Launch Date: LATE 2005

Status: AWAITING LAUNCH

Graham, G3VZV reports:
Dear all,

Unfortunately we have just learnt that we have an INDEFINITE launch delay.

This is due to one of the spacecraft on the launch, "SINAH", having suffered a significant failure and not being ready to fly.

Early indications suggest that we have a delay of at least one month, but this is not confirmed.

The launch campaign team will make the spacecraft and the ground support equipment safe and then come home.

This is, of course, very unfortunate, but it is not critical! The spacecraft can easily wait for the new launch date without any significant problems, and we will fly it as soon as we can.

In the meantime please cancel all arrangements for your national launch events.

We'll get there eventually.

Watch this space...

Neil

SpaceDaily has a report about SSETI at:
http://www.spacedaily.com/news/internet-04zzzu.html

You can find more info about SSETI at:
http://sseti.gte.tuwien.ac.at/WSW4/

Latest news about SSETI can be found at:
http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php

Look at the website for the SSETI Express webcam
http://sseti.gte.tuwien.ac.at/WSW4/webcam.htm

[ANS thanks Graham, G3VZV for the above information]
[09252005]
=====
PHASE 3E ?O-??
Catalog Number:
Proposed Launch Date: Early 2006

Status: Under Construction

For the latest project status update please visit the AMSAT-DL
P3-E web page:
http://www.amsat-dl.org/p3e/

[ANS-WSR wishes to thank William Leijenaar, PE1RAH for this week's
report]
[10022005]
=====
CP1 ?o-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: N6CP
Proposed Transmit Frequency: 436.845
[03272005]
=====
CP2 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.325
[03272005]
=====
HAUSAT1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: D90HP
Proposed Transmit Frequency: 437.465
[03272005]
=====
ICE Cube 1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

```
Proposed Callsign: W2CXM
Proposed Transmit Frequency: 437.305
[03272005]
=====
ICE Cube 2 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: N2VR
Proposed Transmit Frequency: 437.425
[03272005]
=====
ION ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.505
[03272005]
=====
KUTEsat ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: KC0RMW
Proposed Transmit Frequency: 437.385
[03272005]
=====
MEROPE ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: K7MSU-1
Proposed Transmit Frequency: 145.980
[03272005]
=====
nCUBE1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
       2407.25
[03272005]
=====
RINCON ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
        437.345
```

[03272005]
=====
SACRED ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
[03272005]

=====
SACRED ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
[03272005]

=====
SEEDS ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: JQ1YGU
Proposed Transmit Frequency: 437.485
[03272005]
=====
Mea Huaka ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.405
[03272005]
=====
SUITSAT ?O-??
Catalog Number:
Proposed Release Date: December 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: TBA

A video of the progress of Suitsat can be found at the following URL:
http://www.amsat.org/amsat-new/information/videoNews.php

To be released from an airlock of the International Space Station some
time
in December of 2005.
[10022005]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live
radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz.

Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
        888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/amsat/listserv/menu.html

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satelite Report Editor is James K. Darrow, KB9MMC.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

From -756951717570069123
X-Google-Thread: 10e8ad,c198a41f753d85e7
X-Google-Attributes: gid10e8ad,public

```
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news4.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!newscon06.news.prodigy.com!prodigy.net!
newsmst01b.news.prodigy.com!prodigy.com!postmaster.news.prodigy.com!
newssvr12.news.prodigy.com.POSTED!fc0acf9d!not-for-mail
From: "Falky foo" <falkyfoo@bonksbcglobal.net>
Newsgroups: rec.radio.amateur.space
References: <ndu2f.12497$QE1.5829@newsread2.news.atl.earthlink.net>
Subject: Re: WSR-282 AMSAT Weekly Satellite Report
Lines: 14
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1478
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1478
Message-ID: <nfh3f.784$q%.210@newssvr12.news.prodigy.com>
NNTP-Posting-Host: 69.224.122.159
X-Complaints-To: abuse@prodigy.net
X-Trace: newssvr12.news.prodigy.com 1129160787 ST000 69.224.122.159 (Wed, 12 Oct
2005 19:46:27 EDT)
NNTP-Posting-Date: Wed, 12 Oct 2005 19:46:27 EDT
Organization: SBC http://yahoo.sbc.com
X-UserInfo1:
TSU[@I_A\S@IRVXXEJM^_QHAUSXB@DTMNHWB_EYLJZ]BGIELCNSKQFCY@TXDX_WHSVB]ZEJLSNY\^J[CUV
SA_QLFC^RQHUPH[P[NRWCCMLSNPOD_ESALHUK@TDFUZHBLJ\XGKL^NXA\EVHSP[D_C^B_^JCX^W]CHBAX]
POG@SSAZQ\LE[DCNMUPG_VSC@VJM
Date: Wed, 12 Oct 2005 23:46:27 GMT
Xref: g2news1.google.com rec.radio.amateur.space:265

damn honey.. for a girl you're very technical..


"JoAnne Maenpaa" <wb9jej_no-spam@earthlink.net> wrote in message
news:ndu2f.12497$QE1.5829@newsread2.news.atl.earthlink.net...
> This report is organized into 4 parts.
> Part 1 - operational analog amateur satellites.
> Part 2 - operational digital amateur satellites.
> Part 3 - non - operational satellites
> Part 4 - proposed satellites
>
> SB SAT @ AMSAT <KB9MMC $ANS-282.S1




From 9176934489984561953
X-Google-Thread: 10e8ad,412efe6eb4c94bdc,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news3.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx01.iad01.newshosting.com!newshosting.com!elnk-atl-nf1!
newsfeed.earthlink.net!stamper.news.atl.earthlink.net!
newsread1.news.atl.earthlink.net.POSTED!46041641!not-for-mail
From: "JoAnne Maenpaa" <wb9jej_no-spam@earthlink.net>
```

Newsgroups: rec.radio.amateur.space
Subject: ANS-289 AMSAT News Service Weekly Bulletin
Lines: 242
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <EHO4f.15629$vw6.4317@newsread1.news.atl.earthlink.net>
Date: Mon, 17 Oct 2005 14:38:28 GMT
NNTP-Posting-Host: 64.105.104.221
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread1.news.atl.earthlink.net 1129559908 64.105.104.221 (Mon, 17 Oct 2005 07:38:28 PDT)
NNTP-Posting-Date: Mon, 17 Oct 2005 07:38:28 PDT
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news1.google.com rec.radio.amateur.space:266

AMSAT NEWS SERVICE
ANS-289

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:

* AMSAT Meeting Internet Success
* PCSAT2 and WB4APR Featured in Magazine Article
* SSETI Update - New Handbook Available
* ARISS Status for the week of October 10, 2005
* AMSAT Project EAGLE Volunteer Opportunity

SB SAT @ AMSAT $ANS-289.01
AMSAT Meeting Internet Success

AMSAT News Service Bulletin 289.01
>From AMSAT HQ SILVER SPRING, MD.
October 16, 2005
To All RADIO AMATEURS
BID: $ANS-289.01

Following the success of the first ever internet connectivity via Echolink for the AMSAT General Meeting held on October 7 in Pittsburgh, the Board of Directors plans to repeat this feature for members when the logistics next allow. During the meeting, those in the room at Pittsburgh participated with other members in 12 countries via Echolink.

"This is really cool", in the words of AMSAT President Rick Hambly, W2GPS, "It was difficult working out the logistics, but it worked!" Rick further commented that, "We got the message. We conducted a successful meeting because we were open and in touch with the membership."

AMSAT members wishing to participate in future internet sessions are invited to begin learning about Voice Over IP (VoIP) technology and configuring their amateur station computers. Plans are in motion to publish updated "how-to" information on the AMSAT web and in the Journal. In the meantime here are two references to begin your research:

Home page of the Echolink software
http://www.echolink.org/

ARRL article on VoIP and Amateur Radio:
http://www.arrl.org/qst/2003/02/VoIP.pdf

[ANS thanks the AMSAT Board for the above information]

/EX

SB SAT @ AMSAT $ANS-289.02
PCSAT2 and WB4APR Featured in Magazine Article

AMSAT News Service Bulletin 289.02
>From AMSAT HQ SILVER SPRING, MD.
October 16, 2005
To All RADIO AMATEURS
BID: $ANS-289.02

Shipmate, the magazine of the US Naval Academy Alumni Association, discusses the success of the PCSAT2 mission in an article titled, "Out of this World, USNA Satellite Flies Aboard ISS". Bob Bruninga, WB4APR is interviewed about his participation with his students in the PCSAT2 project.

AMSAT has received permission to re-post this article on-line at:
http://www.amsat.org/amsat-new/articles/PCSat2/PC-Sat2_Shipmate.pdf

[ANS thanks Martha Thorn, Shipmate Magazine, and Jim Sanford WB4GCS for the above information.]

/EX

SB SAT @ AMSAT $ANS-289.03
SSETI Update - New Handbook Available

AMSAT News Service Bulletin 289.03
>From AMSAT HQ SILVER SPRING, MD.
October 16, 2005
To All RADIO AMATEURS
BID: $ANS-289.03

The SSETI Express Handbook has been updated. The latest version can be downloaded free of charge from the AMSAT-UK website at:

http://www.uk.amsat.org/

In is also available in Japanese thanks to the work of Toyo Komatsu, JA0CQP

The new Keplerian elements for a SSETI Express launch at 06:52:26 UTC on October 27th are also on the AMSAT-UK website. These were provided by Viktor Kudielka, OE1VKW.

[ANS thanks Trevor, M5AKA for the above information]

/EX

SB SAT @ AMSAT $ANS-289.04
ARISS Status for the week of October 10, 2005

AMSAT News Service Bulletin 289.04
>From AMSAT HQ SILVER SPRING, MD.
October 16, 2005
To All RADIO AMATEURS
BID: $ANS-289.04

1. ARISS School Contacts Successful

On Wednesday, October 5, Greg Olsen, KC2ONX, participated in his first ARISS contact as he spoke to students at Princeton High School in Princeton, New Jersey The audio was streamed over the internet, courtesy of MCI, and was fed through the Echolink AMSAT and EDU_NET servers.

Students from Fort Hamilton High School in Brooklyn, New York enjoyed a contact with Greg Olsen, KC2ONX, via the telebridge station, VK5ZAI, in Australia. On Thursday, October 6, ten students asked 13 questions of the space traveler while the student body of 4500 children listened in. The audio was also fed through Echolink, and thirty stations (including 3 repeater nodes) from twelve countries tied in: USA, UK, Brazil, Chile, Germany, Thailand, Japan, Holland, Russia, Australia, India, and Romania.

On October 7, Greg Olsen, KC2ONX, spoke with students at Ridgefield Park High School (Olsen's alma mater) in Ridgefield Park, New Jersey via the telebridge station ZS6BTD in South Africa. The audio was fed through Echolink, as twenty connections, of which 4 were repeater nodes, were made from stations in Germany, Thailand, UK, USA, Japan, Holland, Russia, and South Africa.

2. ARRL Article on Space Visitor

ARISS provided pass times to Greg Olsen so that he could make contacts with the general public, as time allowed. ARRL ran an article, which included the pass times, entitled, "'Space Tourist' May Get on the Air from NA1SS for Casual Contact."
See: <http://www.arrl.org/news/stories/2005/10/03/2/?nc=1>

3. JOTA 2005

The 2005 Jamboree on the Air (JOTA) was held on Saturday and Sunday, October 15-16. The event encourages both Boy Scouts and Girl Scouts to become involved with amateur radio. Expedition 12 crew members were heard on the 145.800 MHz downlink as NA1SS, the amateur station aboard the ISS, participated in JOTA.

4. Space Times Article on ISS Ham Radio

Space Times, a publication of the American Astronautical Society ran an article in its July/August 2005 issue which mentions the amateur radio system on board the ISS, and its use by crew members as a past time activity.

[ANS thanks Carol, KB3LKI for the above information]

/EX

SB SAT @ AMSAT $ANS-289.05
AMSAT Project EAGLE Volunteer Opportunity

AMSAT News Service Bulletin 289.05
>From AMSAT HQ SILVER SPRING, MD.
October 16, 2005
To All RADIO AMATEURS
BID: $ANS-289.05

Gould Smith, WA4SXM wrote, "I was privileged to attend the second EAGLE planning meeting. First - the EAGLE project is very much alive and progressing quite well. Granted, I had some concerns going into the meetings, but these were quickly put to rest. The project has excellent leadership, excellent technical expertise, a great deal of actual satellite experience and a wonderful 'get it done' attitude from all the teams."

The open design and development concept for EAGLE should be quite informative to those of us outside the design team. We will have a great opportunity to learn more about what goes into making the decisions about the spacecraft, its orbit and its operational modes.
In addition, we all now assume the responsibility to make this the

best thought out, documented and tested amateur satellite ever.

So, following in the age old AMSAT tradition of volunteering to fill a need, I have volunteered to help communicate what is going on with the EAGLE project.

This a short introduction to many updates coming over the next months and years as the AMSAT-NA EAGLE satellite project matures into an orbiting satellite. I am planning on releasing a report at least once a month and more often when important information becomes available. This report will be available through the AMSAT BB and on the EAGLE website.

There already is so much to write about that I am going to have to break it down into different areas on each report, because I won't have time to write about all the areas in each report. There are many separate, parallel efforts going on during this early stage. As these separate projects mature, the integration and coordination of these modules into the EAGLE satellite should prove to be a fascinating journey.

One of the items discussed was the 2006 EAGLE budget. As you can see from the EAGLE project thermometer on the AMSAT EAGLE site, $33k won't go very far. It is time to start purchasing items for development and EAGLE needs your support both as a volunteer and as a donor. You can do both of these on the AMSAT web site.

I am interested in some people to help me take the raw technical information provided by the project teams and put this into a more digestible
format. Let me know if you are interested by e-mail to wa4sxm@amsat.org.

[ANS thanks Gould, WA4SXM for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
JoAnne Maenpaa, WB9JEJ
WB9JEJ at amsat dot org

```
From 1601759571743829802
X-Google-Thread: 10e8ad,2d0e1cc2512cbe10,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
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Path: g2news1.google.com!news4.google.com!border1.nntp.dca.giganews.com!
border2.nntp.dca.giganews.com!nntp.giganews.com!elnk-atl-nf1!
newsfeed.earthlink.net!stamper.news.atl.earthlink.net!
newsread1.news.atl.earthlink.net.POSTED!46041641!not-for-mail
From: "JoAnne Maenpaa" <wb9jej_no-spam@earthlink.net>
Newsgroups: rec.radio.amateur.space
Subject: WSR-289 AMSAT Weekly Satellite Report
Lines: 1195
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <HIO4f.15630$vw6.15617@newsread1.news.atl.earthlink.net>
Date: Mon, 17 Oct 2005 14:39:35 GMT
NNTP-Posting-Host: 64.105.104.221
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread1.news.atl.earthlink.net 1129559975 64.105.104.221 (Mon, 17 Oct 2005 07:39:35 PDT)
NNTP-Posting-Date: Mon, 17 Oct 2005 07:39:35 PDT
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news1.google.com rec.radio.amateur.space:267

This report is organized into 4 parts.
Part 1 - operational analog amateur satellites.
Part 2 - operational digital amateur satellites.
Part 3 - non - operational satellites
Part 4 - proposed satellites

SB SAT @ AMSAT <KB9MMC $ANS-289.S1
WSR 289 Part 1 10/16/2005

AMSAT NEWS SERVICE BULLETIN 289.S1 FROM AMSAT HQ
SILVER SPRING, MD, OCTOBER 16, 2005
TO ALL RADIO AMATEURS
BID: $ANS-289.S1

VO-52 HAMSAT
Catalog Number: 28650
Launch Date: May 05,2005

Status: Testing
Current Mode: U/V

Proposed frequencies:

Indian transponder:
Uplink : 435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW
Beacom : 145.940MHz continue carier signal

Dutch transponder:
Uplink : 435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW

```
Beacon  : 145.860MHz 12WPM with CW message
[07242005]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Mode: PBBS - ON
      FM REPEATER - V/U

Analog voice downlink:  435.300 MHz FM
              435.150 MHz FM
Analog voice uplink: 145.880 MHZ FM
              145.920 MHz FM 67Hz PL tone
                       1268.700 MHz FM 67Hz PL tone

Digital Downlinks:      435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
                       2401.200 MHz FM  38k4 bps, AX.25
Digital Uplink:         145.860 MHz FM, 9k6 Digital, Pacsat Broadcast
          Protocol (PBP)

Broadcast: PECHO-11
BBS:  PECHO-12

[ANS-WSR thanks Mike Kingery, KE4AZN for the above information]
[10162005]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Uplink:    145.850 MHz (67.0 Hz PL tone) (See below for operating
          procedures)
Downlink:  436.795 MHz

There have been unconfirmed reports on the amsat-bb remailer that SO-50
has shifted downlink frequency as much as 5khz up. This both from Europe.

To switch the transmitter on, you need to send a CTCSS tone of  74.4 Hz.
The order of operation is thus: (allow for Doppler as necessary)

1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm
   the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT
   the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window
   will reset the 10 minute timer.
[09122004]
=====
FO-29 JAS-2
```

Catalog number: 24278
Launch Date: August 17, 1996

Status: OPERATIONAL

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplink: 145.850 145.870 145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

John, N4QWL reports on July 16th, 2005:

Last evening I had a AOS to LOS qso with WI2W. FO-29 came up at 01:17z here in FM07 and I found WI2W and we chatted until 01:33z. The satellite was at 2 degrees elevation when I finally heard him start to crackle a bit. What a great QSO! To think that I watched this bird launch back in 1996 and it is still working so well is a real thrill. I believe I still have the video. I might just look for it and watch it again. Boy do I love this satellite stuff! Look for you all up there.

Please send the reception reports to lab2 'at' jarl.or.jp.
Please use the subject line: 'FO-29 reception report'.

Mineo, JE9PEL, has an FO-29 satellite telemetry analysis program that will automatically analyze all digital telemetry from the satellite (such as current, voltage and temperature). FO29CWTE is available at:
http://www.ne.jp/asahi/hamradio/je9pel/
[ANS-WSR wishes to thanks John, N4QWL for this week's report]
[07172005]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Uplink: 145.850 MHz FM
Downlink: 436.795 MHz FM

The latest information on AO-27 from control operator Michael Wyrick, N3UC (former N4USI), can be found at:
http://www.ao27.org

An AO-27 question-and-answer page is available on the AMSAT-NA web site, with updates by Ray, W2RS. The URL is:
http://www.amsat.org/amsat/intro/ao27faq.html

[ANS-WSR thanks John, K6YK, for this week's AO-27 report]
[08292004]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Semi-operational in sunlight.
Return to active status: June 21,2002

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
            432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A
            145.975 to 145.925 MHz CW/USB Mode B
Beacon: 29.502 MHz, 145.972 MHz, 435.1 MHz, 2304.1 MHz

Emily, W0EEC has created a website to allow the users of AO-7 to record
contacts, observations and use of the satellite more effectively at:
http://www.emilyshouse.com/experthams/ao7/main.php
This includes the ability to log contacts.

Tim, K3TZ has written a program to decode AO-07 telemetry.
The program can be downloaded at:
http://www.qsl.net/k3tz/files/K3TZ_AO-07_Telemetry_Decoder_0.5.zip

For more AO-7 info:
http://www.amsat.org/amsat/sats/n7hpr/ao7.html
[11142004]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: U/V CROSS-BAND REPEATER
Digipeater: Inactive

The current Expedition 12 crew is:
Commander: William McArthur - KC5ACR
Flight Engineer: Valery Tokarev - (no call)

Worldwide packet uplink: 145.990 MHz FM
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM
Doppler Shift is 10 KHz

Russian callsigns: RS0ISS, RZ3DZR
USA callsign: NA1SS
Packet station mailbox callsign: RS0ISS-11

Packet station keyboard callsign: RS0ISS-3
Digipeater callsign: ARISS

The ISS daily crew schedule can be found at:
http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line is NOT translated from Russian and posted.

More information is available at:
http://www.rac.ca/ariss
http://spaceflight.nasa.gov/station/reference/radio/
http://www.marexmg.org/fileshtml/unprotopage.html
http://www.issfanclub.com
http://oscar.dcarr.org/
[10162005]
NNNN
/EX

SB SAT @ AMSAT <KB9MMC $ANS-289.S2
WSR 289 Part 2 10/16/2005

AMSAT NEWS SERVICE BULLETIN 289.S2 FROM AMSAT HQ
SILVER SPRING, MD, OCTOBER 16, 2005
TO ALL RADIO AMATEURS
BID: $ANS-289.S2

PCSAT2 ?0-??
Catalog Number:
Launch Date: August 1, 2005

Status: Operational

PCSAT2 was installed on the exterior of the International Space Station and was activated on August 3, 2005.

PCSAT2 CAPABILITIES: PCSAT2 is attached to the ISS and so its operations must be in cooperation with the ARISS communications suite to minimize any mutual interference and to coordinate activities. Here are the capabilities of the PCSAT2 and ARISS payloads:

PCSAT SYSTEM A:

435.275 PCSAT2 DOWNLINK 1200 baud packet with uplink on 145.825
435.275 PCSAT2 DOWNLINK Occasional user PSK-31 continuous downlink
145.825 PCSAT2 DOWNLINK 1200 baud packet

PCSAT SYSTEM B:

437.975 PCSAT2 DOWNLINK periodic Solar Cell data and PCSAT2 telemetry at 9600 baud
437.975 PCSAT2 DOWNLINK TNC-B command downlink at 1200 baud

437.975 PCSAT2 DOWNLINK User Voice Repeater with VHF uplink
437.975 PCSAT2 DOWNLINK Packet digipeater with VHF uplink

It looks like PCSAT2 can best contribute at this time by operating in PSK-31 mode for the near future. This is a very exciting new transponder mode which solves the congestion problem on FM repeaters by letting multiple stations all communicate at the same time.

PSK-31 users are welcome to try out the new PCSAT2 PSK-31 transponder on ISS with an uplink on 29.402 +/- 1 KHz and downlink on 435.275 +/- Doppler using FM.

The FM downlink lets everyone operate full duplex and everyone to see the same view of the passband as everyone else. THus you can see exactly
what your signal looks like to everyone else.

Help Wanted:

Here is your chance to become a viable part of the Amateur Satellite Community.

We are looking for a volunteer satellite packet
station in Hawaii that is interested in helping with
telemetry and sat-gating of PCSAT2 and
ARISS packets. Requirements are:

1) General familiarity with packet
2) TNC connected to a cross band radio that
     can RX on UHF and TX on VHF.
3) modest UHF beam and rotator system.

Contact WB4APR for more information.

Packets seen from PCSAT2 can be reviewed at:
http://www.findu.com/cgi-bin/pcsat2.cgi

A screen shot of both the 9600 bps and 1200 bps decoded data
as seen by Simon, 9W2QC, can be seen at:
http://www.9w2qc.net/pcsat2/

More information on PCSAT2 can be found at:
http://web.usna.navy.mil/~bruninga/pcsat2.html

[ANS-WSR thanks Bob, WB4APR and the U.S. Naval Academy Satellite Lab for the aboveinformation.]

[08282005}
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Mode: PBBS - ON
FM REPEATER - V/U HIGH POWER

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
Analog voice uplink: 145.880 MHz FM
145.920 MHz FM 67Hz PL tone
1268.700 MHz FM 67Hz PL tone

Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast
Protocol (PBP)

Broadcast: PECHO-11
BBS: PECHO-12

[ANS-WSR thanks Mike Kingery, KE4AZN for the above information]
[09252005]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Non-Operational?????

Uplink/downlink: 145.827 MHz 1200 baud AX.25 AFSK via W3ADO-1
Aux/Uplink: 435.250 MHz 9600 baud via PCSAT-2 (off)
APRS Downlink: 144.390 MHz (Region 2)

PCSat is a 1200-baud APRS digipeater designed for use by stations using hand-held or mobile transceivers. Downlinks feed a central web site at: http://pcsat.aprs.org

The APRS-equipped PCSat was built by midshipmen from the U.S. Naval Academy under the guidance of Bob Bruninga, WB4APR.
[07242005]
=====
CUTE-1
Catalog number: 27844
Launched: June 30,2003

Status: Operational

Uplink: ?
Downlink: 436.8375 CW
437.4700 1200 FM ax25 or SRLL (ACTIVE only near Japan ?)
Cliff, K7RR reports:
In the latest Weekly Satellite Report, CUTE 1, #27844 is listed as OPERATIONAL?
Indeed it is very operational as a CUBESAT sending CW telemetry on 436.8345 MHz. At the July 7 2005, 23:45:20 pass over the Western USA:

```
CUTE 1 6B A4 xx 7F D7 66A8 4702 FF FF7C 65
CUTE 1 6C A6 59 80 D9 66A8 4702 FF FE7C B6
```

The June 30th KEPS were within ten seconds of AOS and LOS. It is an very good object to practice tracking as the orbit and transmitter power are similar to proposed CUBESATS awaiting launch this December. As a check for Doppler correction, the lack of change in tone is an excellent indicator.

CUTE 1 is a Japanese (Tokyo Institute of Technology) one kilogram nanosatellite that was launched by a Rokot rocket from Plesetsk at 14:15 UT on 30 June 2003. It carries a 100 mW beacon at 436.8375 MHz. Initial orbital parameters were period 101.4 min, apogee 831 km, perigee 819 km, and inclination 98.7?.

For further info about CUTE-1 goto:
http://lss.mes.titech.ac.jp/ssp/cubesat/operation/Schedule_e.html

[ANS WSR wishes to thank Cliff, K7RR, for this week's information]
[07242005]
=====
GO-32 TECHSAT-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Downlink: 435.225 MHz FM (9600-baud FSK)
                    (435.325 n/a - temperature problems)
Uplinks: 145.850, 145.890, 145.930 FM
                    1269.700, 1269.800, 1269.900 FM
Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[03132005]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Operational

Uplink: 145.850 or 145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz
Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[05152005]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Semi-operational, the digipeater command is on and open for APRS users.

Uplink: 145.90 145.92 145.94 145.96 MHz FM
                     (using 1200-baud Manchester FSK)
Downlink: 437.026 MHz SSB (1200-baud PSK)
Mode-S Beacon: 2401.1428 MHz
Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

A WOD collection of current graphics along with general information and telemetry samples can be found at:
http://www.telecable.es/personales/ea1bcu
[05092004]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational?

Telemetry Downlink: 145.826 MHz. FM (1200-baud AFSK).
                    approx. 10 days ON, 10 days OFF
Mode-S Beacon: 2401.500 MHz. ... OFF
UHFBeacon: 435.025 MHz. ... OFF

OSCAR-11 is back! I received the good news, on Saturday morning, while at the AMSAT-UK Colloquium. This was entirely unexpected! On Sunday morning Bob G4VRC played me a recording of an early morning pass received that day.

During the period 21 July to 14 August 2005 consistent signals have been heard from 30 July to 08 August. Signals seem to be weaker than usual, confirmed by the many reports received. However,since I last heard the satellite on 30 April, I've reinstalled my antennas , which makes comparisons difficult.

Many thanks for all the recent reports of OSCAR-11 including those from KU7Z (who heard it first), KB2M, VK6XH, HK7MKE, KA2UPW, JE9PEL, G1OCN, HB9SKA and G8OQW.

All the analogue telemetry channels, 0 to 59 are zero, ie they have failed. The status channels 60 to 67 are still working. One bit in channel 62, DSR mode, has changed from WRITE to READ. DSR is the

Digital Store & Readout experiment. This could be significant if the experiment is still drawing current, but the other status bit indicates that it is switched OFF.

The on-board clock is now showing a very large error. It has lost approximately 19 days since 30 April. During the recent data collection period, the clock error has been changing at a decreasing rate. The size of the clock error and the rate at which it is changing is similar to the duration of the solar eclipse periods. This suggests that the clock might have been switching OFF during eclipses.

The eclipses have now ended, and the satellite should be in continuous sunlight for the remainder of this year, and well into next year. This should help the satellite to continue transmitting, although continuous sunlight can cause problems due to excessive temperatures.

If the watchdog timer is still operating on a 20 day cycle, ie. approximately ten days ON followed by 10 days OFF, then the VHF beacon should resume transmissions around 18 August.

The Beacon frequencies are -

VHF 145.826 MHz. AFSK FM ASCII Telemetry

UHF 435.025 MHz. OFF

S-band 2401.5 MHz. OFF

Listeners to OSCAR-11 may be interested in visiting my website which contains an archive of news & telemetry data. It also contains details about using a soundcard or hardware demodulators for data capture. There is software for capturing data, and decoding ASCII telemetry. The URL is www.users.zetnet.co.uk/clivew/

If you place this bulletin on a terrestrial packet network, please use the bulletin identifier $BID:U2RPT112.CWV, to prevent duplication.

[ANS-WSR thanks Clive, G3CWV, for the above information]

More information on UO-11 OSCAR-11 can be found at:
http://www.users.zetnet.co.uk/clivew/

MPEG3 files can be found here at Mineo, JE9PEL website:
http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm

[08212005]
NNNN
/EX

SB SAT @ AMSAT <KB9MMC $ANS-289.S3
WSR 289 Part 3 10/16/2005

AMSAT NEWS SERVICE BULLETIN 289.S3 FROM AMSAT HQ

SILVER SPRING, MD, OCTOBER 16, 2005
TO ALL RADIO AMATEURS
BID: $ANS-289.S3

THE FOLLOWING ARE IN ORBIT BUT ARE
NON-OPERATIONAL AT THIS TIME:

POSAT-1 PO-28
Catalog Number: 22829
Launched : September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 435.250 MHz
          435.275 MHz

Uplink: 145.925 MHz
          145.975 MHz

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

PO-28 (POSAT-1), Portugal's first satellite, launched 12 years ago, will be turned over to Amateur Radio use in the very near future. That was the word July 30 from AMSAT-UK Secretary Jim Heck, G3WGM, during the AMSAT-UK International Space Colloquium in Guildford, England.

Launched September 25, 1993, the satellite operated as a packet store-and-forward BBS (9600 baud FM FSK) on Amateur Radio frequencies for several weeks in early 1994. Over the years, PO-28's primary usage has been commercial, although plans have called for eventually shifting its operation to ham radio use. G3WGM reports that following lengthy negotiations it has been agreed that the satellite can be switched permanently to amateur frequencies. The changeover is expected to take a couple of weeks.

The Portuguese satellite was built at the University of Surrey as part of a collaborative satellite technology program that involved industry and academe. Uplink frequencies will be 145.925 and 145.975 MHz. Downlink frequencies will be 435.250 and 435.275 MHz. More information on PO-28 is on the AMSAT Web site
http://www.amsat.org/amsat/sats/n7hpr/po28.html.

Uplink Frequencies: 145.925 and 145.975 MHz
Downlink Frequencies: 435.250 and 435.275 MHz

Orbit: 822 x 800 km, 98.6 deg inclined, sun-synchronous.

Transponder capabilities include FM repeater and 38k4 data. If you want to hear how loud this satellite is, listen on 429.950 until the change back to amateur radio service.

Keplerian elements for PO-28 are not currently contained in the AMSAT keps bulletins, but can be found at Celestrak in amateur.txt using the

name "POSAT". Users of Space Track should query the NORAD Satellite ID
number 22829. The name listed by Space Track is "EYESAT A".

More information of POSAT-1 can be found at:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
http://www.amsat.org/amsat/sats/n7hpr/po28.html
[ANS-WSR wishes to thanks Trevor, M5AKA and Jim, G3WGM, for this week's
information.]
[08072005]

=====
AO-10 OSCAR 10
Catalog number: 14129
Launched: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB
Beacon: 145.810 MHz (unmodulated carrier)

AO-10 has been locked into a Mode-B, 70-cm uplink and
2-meter downlink for several years.

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]

=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: Non-operational

Uplink: 145.875 145.900 145.925 145.950 MHz FM (1200-baud)
Downlink: 435.812 MHz SSB
Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Alberto E. Zagni - I2KBD reports on 02/13/05
The spacecraft is in MBL (safe mode) and is trasmitting just 6 channels
of telemetry. Temperatures and voltage are nominal, but there seems to
be a problem with the onboard receiver, refusing to accept commands.
The spacecraft was launched in 1993, thus nearing 12 years in orbit...

Best regards
Alberto E. Zagni - I2KBD
ITAMSAT Mission Director

More information of IO-26 can be found at:

http://joshua.micronet.it/english/itamsat/itamsathome.html
http://www.amsat.org/amsat/sats/n7hpr/io26.html
www.itamsat.org

```
[02132005]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink:   21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB
Beacon:   29.408 MHz
Robot:    29.454 MHz
[05232004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink:      21.260 to  21.300 MHz CW/USB
Downlink:   145.860 to 145.900 MHz CW/USB
Beacon:     145.860 MHz
Robot:      145.908 MHz
[05232004]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink 145.975 MHz FM
Downlink 435.070 MHz FM
[05092004]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink:             145.900 FM 9600-baud FSK
Downlink:           435.120 MHz FM
Broadcast Callsign: UOSAT5-11
BBS:                UOSAT5-12
[01092005]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994
```

Status: Non-operational?

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB
Beacon: 29.352 MHz (intermittent)
SSB meeting frequency: 29.380 MHz (unofficial)

John, KD6PAG reports on June 16, 2004 to ANS:
RS-15 beacon seemed to be back in the mode where it's a tone about 5 seconds off and then 5 seconds on this morning.

ANS is looking for more confirmations of RS-15 coming back.

[ANS thanks John, KD6PAG for RS-15 information]
[06202004]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplink: 145.84 145.86 145.88 145.90 MHz FM
(using 1200-baud Manchester FSK)
CW downlink: 437.125 MHz
Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)
Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[05232004]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[08152004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM
Broadcast Callsign: HL01-11
BBS: HL01-12

Jim, AA7KC, reports that KO-23's downlink transmitter continues in a non-operational status.
[05092004]

=====

KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM (9600-baud FSK)
Downlink: 436.500 MHz FM
Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]

=====

PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink frequency (listed on the PanSat web site) 436.500 MHz

The satellite is not available for general uplink transmissions.

The Naval Postgraduate School developed PanSat. At the time of launch, PanSat spread-spectrum digital transponders were to be available to Amateur Radio operators along with software to utilize this technology.

The satellite is still operating, however, the spread spectrum packet radio portion never took place. The spacecraft is now beyond it's initial 2-year mission life, but telemetry records are still being downloaded.

For more information, visit the official PanSat web site at:
http://www.sp.nps.navy.mil/pansat/
[05092004]

=====

SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

```
The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm

[ANS has no further information]
[05232004]
=====
SO-35 SUNSAT
Catalog Number:     ?
Launched:February 23, 1999

STatus: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
          Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
         Mode J Digipeater: 145.825 MHz and 145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[08082004]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink:            145.960 MHz (9600-baud FSK)
Downlink:          437.025 MHz 437.400 MHz
Broadcast Callsign: UO121-11
BBS:               UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA
web site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[05092004]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplink      V-band    145.840 -  145.990 MHz CW/LSB
            U-band    435.550 -  435.800 MHz CW/LSB
           L1-band   1269.250 - 1269.500 MHz CW/LSB
           L2-band   1268.325 - 1268.575 MHz CW/LSB
           S1-band   2400.350 - 2400.600 MHz CW/LSB
Downlink:  S2-band   2401.225 - 2401.475 MHz CW/USB
```

```
           K-band 24,048.010 - 24,048.060 MHz CW/USB
Beacon:    2401.323, 24,048.035
[05232004]
-----
SO-42  SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational
 Downlink:           437.075 MHz
Broadcast Callsign: SASAT2-11
BBS:                SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[08152004]
=====
SO-41  SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink:             145.850 MHz
Downlink:           436.775 MHz
Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[08152004]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink:   145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is  welcome to use the digipeating/APRS features of Sapphire,
callsign KE6QMD, as per the user service agreement located at the
following
URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002
```

Status: Semi-operational.

Uplink 435.275 1200-baud AFSK
Downlink 145.825 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

AO-49 (SAFIR-M) is a German amateur radio payload onboard the small German scientific satellite "RUBIN-2".

AO-49 was built by the German amateur radio association "AATiS e.V." (German acronym for "Arbeitskreis Amateurfunk und Telekommunikation in der Schule", which means: 'working group for amateur radio anand telecommunications in schools'). AO-49 is designed as a "store and broadcast" system for APRS based messages, dedicated for the use of schools in combination with the existing WX-Net and planned buoy experiments in Germany.

No transmissions detected since the 1st of February 2003! It appears AO-49 is not properly aligned to illuminate the solar panels. This should end soon. Due to its orbit, AO-49 will be in a phase without eclipses until 13Feb03.

Martin DG8UAU has written a small software program "SAFIR-M Decoder" to allow decoding of the received DATA0 frames. It is available at: http://amend.gmxhome.de in the section Aktuelles.

Details on AO-49 (SAFIR-M) can be found at:
http://amend.gmxhome.de

Information about AATiS e.V. is available at:
http://www.aatis.de
[05092004]
NNNN
/EX

SB SAT @ AMSAT <KB9MMC $ANS-289.S4
WSR 289 Part 4 10/16/2005

AMSAT NEWS SERVICE BULLETIN 289.S4 FROM AMSAT HQ
SILVER SPRING, MD, OCTOBER 16,2005
TO ALL RADIO AMATEURS
BID: $ANS-289.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE PROPOSED FOR LAUNCH AT THIS TIME:

UCISAT ?O-??
Catalog number:
Proposed Launch Date: October 31, 2005

Status: Under Construction

Downlink: Submission in Progress
Uplink: Submission in Progress
Callsign: Submission in Progress

This from Matt Bennett, KF6RTB, UCISAT Communications Team Member:

Our website is www.ucisat.net .This is a new website, however, and doesn't have the "Status" section active yet. Because of the growing interest in our project, I'll push our webmaster to create updates (hopefully) on a week-to-week basis. For now, the current status of the mission is as follows:

-Expected Launch Date: October 31st, 2005
-Frequency Allocation: Submission in Progress
-Construction Status: Sub-Assembly
[WSR to thank Matt Bennett, KF6RTB, for this week's report.]
[01302005]
=====
SSETI ?O-??
Catalog Number:
Proposed Launch Date: LATE 2005

Status: AWAITING LAUNCH

Graham, G3VZV reports:
Dear all,

Unfortunately we have just learnt that we have an INDEFINITE launch delay.

This is due to one of the spacecraft on the launch, "SINAH", having suffered a significant failure and not being ready to fly.

Early indications suggest that we have a delay of at least one month, but this is not confirmed.

The launch campaign team will make the spacecraft and the ground support equipment safe and then come home.

This is, of course, very unfortunate, but it is not critical! The spacecraft can easily wait for the new launch date without any significant problems, and we will fly it as soon as we can.

In the meantime please cancel all arrangements for your national launch events.

We'll get there eventually.

Watch this space...

Neil

SpaceDaily has a report about SSETI at:
http://www.spacedaily.com/news/internet-04zzzu.html

You can find more info about SSETI at:
http://sseti.gte.tuwien.ac.at/WSW4/

Latest news about SSETI can be found at:
http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php

Look at the website for the SSETI Express webcam
http://sseti.gte.tuwien.ac.at/WSW4/webcam.htm

[ANS thanks Graham, G3VZV for the above information]
[09252005]
=====
PHASE 3E ?O-??
Catalog Number:
Proposed Launch Date: Early 2006

Status: Under Construction

For the latest project status update please visit the AMSAT-DL
P3-E web page:
http://www.amsat-dl.org/p3e/

[ANS-WSR wishes to thank William Leijenaar, PE1RAH for this week's
report]
[10022005]
=====
CP1 ?o-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: N6CP
Proposed Transmit Frequency: 436.845
[03272005]
=====
CP2 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.325
[03272005]
=====
HAUSAT1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: D90HP
Proposed Transmit Frequency: 437.465
[03272005]
=====

```
ICE Cube 1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: W2CXM
Proposed Transmit Frequency: 437.305
[03272005]
=====
ICE Cube 2 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: N2VR
Proposed Transmit Frequency: 437.425
[03272005]
=====
ION ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.505
[03272005]
=====
KUTEsat ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: KC0RMW
Proposed Transmit Frequency: 437.385
[03272005]
=====
MEROPE ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: K7MSU-1
Proposed Transmit Frequency: 145.980
[03272005]
=====
nCUBE1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
       2407.25
[03272005]
=====
RINCON ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005
Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
        437.345
[03272005]
=====
SACRED ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
[03272005]
=====
SACRED ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
[03272005]
=====
SEEDS ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: JQ1YGU
Proposed Transmit Frequency: 437.485
[03272005]
=====
Mea Huaka ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.405
[03272005]
=====
SUITSAT ?O-??
Catalog Number:
Proposed Release Date: December 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: TBA

A video of the progress of Suitsat can be found at the following URL:
http://www.amsat.org/amsat-new/information/videoNews.php

To be released from an airlock of the International Space Station some
time
in December of 2005.
[10022005]
NNNN
/EX
```

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
        888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

- AMSAT News Service (ANS)
- General satellite discussion (AMSAT-BB)
- Orbit data (KEPS)
- Manned space missions (SAREX)
- District of Columbia area (AMSAT-DC)
- New England area (AMSAT-NE)
- AMSAT Educational Liaison mailing list (AMSAT-EDU)
- AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/amsat/listserv/menu.html

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satelite Report Editor is James K. Darrow, KB9MMC.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

```
From 8793739804625253931
X-Google-Thread: 10e8ad,6ecfefa6f6d9bae6,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: FRENCH,ASCII
From: "Thierry" <->
Newsgroups: rec.radio.amateur.space
Subject: ESA calls radioamateurs
Date: Tue, 18 Oct 2005 21:07:57 +0200
Lines: 15
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.2180
X-MIMEOLE: Produced By Microsoft MimeOLE V6.00.2900.2180
X-RFC2646: Format=Flowed; Original
NNTP-Posting-Host: tvsurf-habscht1-045.pt.lu
Message-ID: <4355480d$1@news.vo.lu>
X-Trace: news.vo.lu 1129662477 213.166.42.45 (18 Oct 2005 21:07:57 +0200)
Path: g2news1.google.com!news4.google.com!news.glorb.com!npeer.de.kpn-
eurorings.net!news.vo.lu!not-for-mail
Xref: g2news1.google.com rec.radio.amateur.space:268
```

Hi ,

For info
http://www.esa.int/SPECIALS/sseti_express/SEMARJ7X9DE_0.html

73
Thierry, ON4SKY

--
Auteur de "Un si�cle de Physique, 1- La Physique Quantique" aux �ditions
AEGEUS
D�tail sur : http://www.astrosurf.org/lombry

```
From -1549214436752099198
X-Google-Thread: 10e8ad,6ecfefa6f6d9bae6
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news3.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!newsfeed00.sul.t-online.de!newsfeed01.sul.t-online.de!t-
online.de!newsfeeder.wxs.nl!divide.nova.planet.nl!posting.nova.planet.nl!not-for-
mail
From: "Rene Altena" <pa2ra-verwijder@amsat.org>
Newsgroups: rec.radio.amateur.space
References: <4355480d$1@news.vo.lu>
Subject: Re: ESA calls radioamateurs
Date: Tue, 18 Oct 2005 22:10:17 +0200
X-Priority: 3
X-MSMail-Priority: Normal
```

X-Newsreader: Microsoft Outlook Express 6.00.2900.2180
X-MIMEOLE: Produced By Microsoft MimeOLE V6.00.2900.2180
X-RFC2646: Format=Flowed; Response
Lines: 14
Message-ID: <435556aa$0$25789$ba620dc5@text.nova.planet.nl>
NNTP-Posting-Host: 80.60.218.143
X-Trace: 1129666218 text.nova.planet.nl 25789 80.60.218.143:3499
X-Complaints-To: abuse@planet.nl
Xref: g2news1.google.com rec.radio.amateur.space:269

"Thierry" <-> wrote in message news:4355480d$1@news.vo.lu...
> Hi ,
>
> For info
> http://www.esa.int/SPECIALS/sseti_express/SEMARJ7X9DE_0.html
>

What is new about this? It was news a month ago!

Rene

From 6423639124437783607
X-Google-Thread: 10e8ad,a807dbb29b920494,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news3.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nntp.waia.asn.au!203.59.27.186.MISMATCH!newsfeed.iinet.net.au!
newsfeed.iinet.net.au!per-qv1-newsstorage1.iinet.net.au!per-qv1-
newsstorage1.iinet.net.au!per-qv1-newsreader-01.iinet.net.au!not-for-mail
Message-Id: <4357778f$0$28011$5a62ac22@per-qv1-newsreader-01.iinet.net.au>
From: David Findlay <david@davsoft.com.au>
Subject: NASA Terra and Aqua Satellites
Newsgroups: rec.radio.amateur.space
Date: Thu, 20 Oct 2005 20:55:11 +1000
User-Agent: KNode/0.9.2
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7Bit
Lines: 4
NNTP-Posting-Host: 203.206.122.147
X-Trace: 1129805711 per-qv1-newsreader-01.iinet.net.au 28011 203.206.122.147
Xref: g2news1.google.com rec.radio.amateur.space:270

Do either of these satellites downlink images as the go over like the NOAA
sats do? Thanks,

David

```
From 7383860755954269215
X-Google-Thread: 10e8ad,afc73b85770416d7,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news3.google.com!news.glorb.com!news.astraweb.com!news-
router1.astraweb.com!207.217.77.102.MISMATCH!elnk-nf2-pas!newsfeed.earthlink.net!
stamper.news.pas.earthlink.net!stamper.news.atl.earthlink.net!
newsread3.news.atl.earthlink.net.POSTED!46041641!not-for-mail
From: "JoAnne Maenpaa" <wb9jej_no-spam@earthlink.net>
Newsgroups: rec.radio.amateur.space
Subject: ANS-296 AMSAT Weekly News Service Bulletin
Lines: 360
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <k_s7f.1141$AS6.935@newsread3.news.atl.earthlink.net>
Date: Tue, 25 Oct 2005 16:23:44 GMT
NNTP-Posting-Host: 64.105.104.212
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread3.news.atl.earthlink.net 1130257424 64.105.104.212 (Tue, 25 Oct
2005 09:23:44 PDT)
NNTP-Posting-Date: Tue, 25 Oct 2005 09:23:44 PDT
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news1.google.com rec.radio.amateur.space:271
```

AMSAT NEWS SERVICE
ANS-296

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:

* SSETI Express Readies for Launch October 27
* P3-E Satellite News and Project Report
* Jamboree on the Air Satellite Success
* Reminder of ARISS Resources on the Web
* ARISS Status for the Week of October 17, 2005
* AMSAT Awards

SB SAT @ AMSAT $ANS-296.01
SSETI Express Readies for Launch October 27

AMSAT News Service Bulletin 296.01

From AMSAT HQ SILVER SPRING, MD.
October 23, 2005
To All RADIO AMATEURS
BID: $ANS-296.01

The SSETI Express satellite is still scheduled to launch at 06:52 UTC on Thursday, October 27 on board a Kosmos 3M launcher.

The launch team arrived in Moscow and next completed an 18 hour journey by train to Plesetsk. The ISC (integrated system check) was completed satisfactorily within a couple of hours of powering up. All the systems are OK. The propulsion tank had maintained the required 300 bar pressure. Both UHF and S band radios were also tested - including the transponder and DTMF telemetry configurations.

Final battery charging was performed over the weekend. SSETI Express will be joined with the other four satellites on the launch adaptor on Monday, October 24. The launch adaptor will itself then be integrated onto the rocket.

Roll out of the complete launch vehicle at the launch complex (approx 40 kilometres away from the assembly facility) is scheduled for very early on Wednesday morning and its erection to the vertical position will take place around midday. The launch team will then pack up all the test gear and other equipment for its return to ESA ESTEC's facility in the Netherlands to await the launch to take place the following day!

A daily report of the launch campaign is being maintained at
http://sseti.gte.tuwien.ac.at/express/mop/index.php?uri=news.html
This mission operations site is completely up-to-date regarding Kepler TLEs and other LEOP "Launch and Early Operations Phase" details.

The SERACC software, needed to decode and submit the received data to the SSETI database, together with some audio files containing recorded 9k6 signals to experiment with is planned for release prior to launch.

There will be two SSETI Express competitions for radio amateurs. First is the unique "I heard it first" T shirt award; second is the prize for amateur who submits the largest amount of valid telemetry and payload data to the SSETI Express database before 1st February 2006. The telemetry prize, sponsored by ESA, is rather more valuable than just a T shirt - see the full details at:
http://sseti.gte.tuwien.ac.at/express/mop/index.php?uri=ham_contest.html

Full details of these events will be available on the Express mission website. This includes full information about the satellite, the ESA sponsored competition,and the plans for its use in the amateur satellite service. See:
http://sseti.gte.tuwien.ac.at/express/mop/

The ESA website about SSETI Express is at:
http://www.esa.int/SPECIALS/sseti_express/SEMARJ7X9DE_0.html

The latest version of the SSETI Express handbook can be downloaded
free of charge from the AMSAT-UK website at:
http://www.uk.amsat.org/

A live webstream of the ESA produced TV coverage of the launch is
going to be provided by Howard G6LVB at:
http://www.streamingwizard.com/clients/space.asx

The programming on the web stream is expected to commence at
approximately 06:00 UTC on launch day.

[ANS thanks Graham, UA/G3VZV for the above information]

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SB SAT @ AMSAT $ANS-296.02
P3-E Satellite News and Project Report

AMSAT News Service Bulletin 296.02
From AMSAT HQ SILVER SPRING, MD.
October 23, 2005
To All RADIO AMATEURS
BID: $ANS-296.02

Peter Guelzow, DB2OS, President AMSAT-DL and the P3-E Project leader wrote a report to update radio amateurs about the progress of the satellite:

First of all I have to apologize for the little information about the P3-E progress over the last few months. Updates were provided during presentations at the recent AMSAT-UK Colloquium. We also publish news in the AMSAT-DL magazine which is also then reprinted in the AMSAT-NA Journal. To accomodate the delays inherent in these publishing media we will provide information via the AMSAT-DL website and e-mail such as the AMSAT-BB.

To improve communications with our membership and worldwide audience, AMSAT-DL decided to improve the information flow on our website using a new content management system (CMS, Mambo). Unfortunately this took much longer than anticipated, but the new portal should be available to the public by December.

The CMS itself is almost fully functional, but we have to transfer and re-edit all the information from our old website. As you can probably imagine, this is still a lot of work. However, once it is running, we hope to put more information on-line and also have a news section with more regular updates. Indeed, because of this, we almost stopped updating the old website.

So far, AMSAT P3-E is making good progress, but slowly. Some modules have already arrived in Marburg for integration, but other module builders are making use of the additional time due to the yet unknown launch date.

The wiring harness is defined and will be built and integrated into the spacecraft soon. Thanks to the CAN-bus and our CAN-DO module controllers, it will be not such a big beast as on previous P3 satellites.

Additional radiation testing has been performed on the CAN-DO. The CAN-DO module and other selected electronic components for P3-E and P5-A were exposed to protons with an energy of 60 MeV. The CAN-DO module stopped operating at 61 krad, which is good for a projected mission duration of more than 10 years. Since the CAN-DO module is one of the most critical parts on P3-E and P5-A, this gives us a better feeling that it should not suffer from radiation induced failure. Aradiation test is also planned for the IHU-3 within the next couple of weeks.

Very good progress was also reported from the development teams of the new IHU-3, both in terms of hardware and software. While a big step forward was made, the full integration and testing of the operational IPS software and all it's functionality (including the turbo codes and software defined modems) is the next step.

In addition to the analog transponders flying on P3-E, we will also look into the possibility to have an SDT (software defined transponder) flying on P3-E for the first time. The recent developments on Software Defined Radio technologies and STELLA, may give us completely new ideas. While this is quite late and various details must still be discussed, the necessary RF interfaces are already available in the module space. Expect to hear more about this in the future updates.

An extremely critical step was taken a few days ago when Ariane 5 scored a double success for Arianespace with the successful launch of Syracuse 3A and Galaxy 15 on-board flight V168.

While we do not yet have an official launch manifest, we are in full contact with our partners at Arianespace. Everyone is working hard to find a suitable slot for P3-E to the benefit of both sides. While the year 2005 is almost over, our target to get P3-E into orbit is still 2006 and will remain so. Clearly, the continuing success of the new Ariane 5 will help us too.   Initial arrangements for environmental testing, including vibration and thermal vacuum testing are already made.

Indeed, we still need a lot of support for P3-E and donations. But with all the contributions we are receiving, P3-E will be truly another international satellite. I'm in particular delighted, that AMSAT-NA joined and supports the P3-E project. We have excellent personal relationship between our organisations and apart from the fun, things are developing really good to the benefit of EAGLE, P3-E and all the projects on the horizon.

[ANS thanks Peter Guelzow, DB2OS, President AMSAT-DL, P3-E Project leader for the above information]

/EX

SB SAT @ AMSAT $ANS-296.03
Jamboree on the Air Satellite Success

AMSAT News Service Bulletin 296.03
From AMSAT HQ SILVER SPRING, MD.
October 23, 2005
To All RADIO AMATEURS
BID: $ANS-296.03

Lee McLamb, KU4OS, reported that Troop 393 in Merritt Island, FL had an excellent time working the satellites at station W4J during the Saturday, October 15 International Scouting Jamboree on the Air.

Lee wrote, "We made 11 contacts on SO-50 and AO-51. Two Scouts also got to talk with Commander William McArthur who was calling CQ JOTA from NA1SS which resulted resulted in a lot of whooping and jumping around after each ISS pass."

Helping the Scouts with the satellites at W4J were Don AG4FC, George KF4XB and Lee KU4OS. We kept things very simple using HTs, Arrow or home brew antennas and a 2m rig in the car with a 1/4 wave whip.

Emily Clarke, W0EEC, was staffing the AMSAT booth at the Pacificon Hamfest, and invited the JOTA Scouts to use the satellite station. Several came over, but only one took the microphone. Scout Matthew made contacts on AO-51. He and his parents were so excited they came back and Matthew again took the microphone on VO-52.

This was the first time we were in a position to have JOTA on Sats, so we learned that a) kids are shy and b) they aren't as spontaneous as we are. Matt was very cool and his parents were very excited.

The ARRL Letter included JOTA reports via ISS from KD4SFF, KB9UPS, and N5VHO. Al, KD4SFF ("scouting for fun"), worked NA1SS while waiting for scouts to arrive at his JOTA operation at Paris Mountain State Park in Greenville, South Carolina. Commander Bill McArthur, aboard the ISS, obliged KD4SFF by sending his greetings to all scouts.

"Greeting to all the scouts worldwide. It's a thrill for us today to be participating in JOTA!" McArthur said from orbit.

Al, who is the South Carolina AMSAT Area Coordinator, says he recorded his QSO and replayed it to his scout group as well as to others he contacted during JOTA. "Everyone was thrilled to hear Bill's message from the ISS!" he said.

Steve, KB9UPS, was among the others lucky enough to snag a contact with NA1SS during JOTA weekend. Amateur Radio on the International Space Station (ARISS) Ham Radio Project Engineer Kenneth Ransom, N5VHO, said McArthur's JOTA participation "wowed scouts and other hams." Among others, NA1SS also worked stations in Ontario, Virginia, New York and Texas.

Ransom said he heard McArthur work special event station W4J on the second pass over the central part of North America.

ANS looks forward to publishing other JOTA success stories. Send your report to ans-editor@amsat.org and we will publish it here.

[ANS thanks Lee, KU4OS, and Emily, W0EEC, and the ARRL Letter for the above information]

/EX

SB SAT @ AMSAT $ANS-296.04
Reminder of ARISS Resources on the Web

AMSAT News Service Bulletin 296.04
From AMSAT HQ SILVER SPRING, MD.
October 23, 2005
To All RADIO AMATEURS
BID: $ANS-296.04

The ARISS schedule page will provide you with a listing of all scheduled school contacts and questions, other ISS related websites, IRLP and Echolink websites, and instructions for any contact that may be streamed live. See:
http://www.amsat.org/amsat/ariss/news/arissnews.txt

The successful school list is available at:
http://www.amsat.org/amsat/ariss/news/Successful_ARISS_schools.rtf

An ISS Amateur Radio frequency chart for packet, voice, and crossband repeater modes (also showing Doppler correction can be viewed at:
http://www.amsat.org/amsat/ariss/news/ISS_frequencies_and_Doppler_correction.rtf

You can find a listing of ARISS related magazine articles at:
http://www.amsat.org/amsat/ariss/news/ARISS_magazine_articles.rtf

[ANS thanks Charlie, AJ9N for the above information]

/EX

SB SAT @ AMSAT $ANS-296.05
ARISS Status for the Week of October 17, 2005

AMSAT News Service Bulletin 296.05
From AMSAT HQ SILVER SPRING, MD.
October 23, 2005
To All RADIO AMATEURS
BID: $ANS-296.05

1. Upcoming School Contacts

Tomioka Elementary School of Urayasu in Urayasu City, Chiba, Japan has been scheduled for an ARISS contact. It will take place on Friday, October 28 at 10:36 UTC.

2. Article on Fort Hamilton High School Contact

On Thursday, October 6, students from Fort Hamilton High School in Brooklyn, New York enjoyed a contact with Greg Olsen, KC2ONX. The New York Daily News covered the event in a story, "Students get an astro-dinary call." See:
http://www.nydailynews.com/10-07-2005/news/local/story/353274p-301193c.html

3. JOTA 2005

Bill McArthur, KC5ACR, wowed scouts and other hams as he participated in the 2005 Jamboree on the Air (JOTA) held on October 15-16. Stations from New York and South Carolina reported contacts with the ISS. This annual event encourages both Boy Scouts and Girl Scouts to become involved in amateur radio.

4. Astronaut Training

Astronauts Nicole Stott and Garrett Reisman were scheduled to attend an amateur radio license training session on October 18.

[ANS thanks Carol, KB3LKI for the above information]

/EX

SB SAT @ AMSAT $ANS-296.06
AMSAT Awards

AMSAT News Service Bulletin 296.06
From AMSAT HQ SILVER SPRING, MD.
October 23, 2005
To All RADIO AMATEURS
BID: $ANS-296.06

Bruce Paige, KK5DO, AMSAT's Director Contests and Awards reports this week, congratulations go out to all of the following:

Marc Sanchez	KD5MSS	Satellite Communicators Club Award
David Stanley	WI4L	Satellite Communicators Club Award
Dan Hart	WD8PFS	Satellite Communicators Club Award
Wadhah Al-Tailji	AE6QG	Satellite Communications Achievement Award #422
Masahiro Arai	JN1GKX	51 on 51 Award #35
Chris Martin	KG7EZ	51 on 51 Award #36
Bob Lacey	KF4GTA	51 on 51 Award #37

To see all the awards visit http://www.amsat.org.

[ANS thanks Bruce, KK5DO for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
JoAnne Maenpaa, WB9JEJ
WB9JEJ at amsat dot org

From -4205981912477096698
X-Google-Thread: 10e8ad,70bfc9f31eb87d61,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news3.google.com!border1.nntp.dca.giganews.com!
border2.nntp.dca.giganews.com!nntp.giganews.com!elnk-atl-nf1!
newsfeed.earthlink.net!stamper.news.atl.earthlink.net!
newsread3.news.atl.earthlink.net.POSTED!46041641!not-for-mail
From: "JoAnne Maenpaa" <wb9jej_no-spam@earthlink.net>
Newsgroups: rec.radio.amateur.space
Subject: WSR-296 AMSAT Weekly Satellite Report
Lines: 1231
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <i%s7f.1142$AS6.701@newsread3.news.atl.earthlink.net>
Date: Tue, 25 Oct 2005 16:24:46 GMT
NNTP-Posting-Host: 64.105.104.212
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread3.news.atl.earthlink.net 1130257486 64.105.104.212 (Tue, 25 Oct 2005 09:24:46 PDT)
NNTP-Posting-Date: Tue, 25 Oct 2005 09:24:46 PDT
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news1.google.com rec.radio.amateur.space:272

This report is organized into 4 parts.
Part 1 - operational analog amateur satellites.
Part 2 - operational digital amateur satellites.
Part 3 - non - operational satellites
Part 4 - proposed satellites

SB SAT @ AMSAT <KB9MMC $ANS-296.S1
WSR 296 Part 1 10/23/2005

AMSAT NEWS SERVICE BULLETIN 296.S1 FROM AMSAT HQ
SILVER SPRING, MD, OCTOBER 23, 2005
TO ALL RADIO AMATEURS
BID: $ANS-296.S1

VO-52 HAMSAT
Catalog Number: 28650
Launch Date: May 05,2005

Status: Testing
Current Mode: U/V

Proposed frequencies:

Indian transponder:
Uplink : 435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW
Beacom : 145.940MHz continue carier signal

Dutch transponder:
Uplink : 435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW
Beacon : 145.860MHz 12WPM with CW message
[07242005]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Mode: PBBS - ON
FM REPEATER - V/U

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
Analog voice uplink: 145.880 MHZ FM
145.920 MHz FM 67Hz PL tone
1268.700 MHz FM 67Hz PL tone

Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast
Protocol (PBP)

Broadcast: PECHO-11
BBS: PECHO-12

[ANS-WSR thanks Mike Kingery, KE4AZN for the above information]
[10162005]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Uplink: 145.850 MHz (67.0 Hz PL tone) (See below for operating procedures)
Downlink: 436.795 MHz

There have been unconfirmed reports on the amsat-bb remailer that SO-50 has shifted downlink frequency as much as 5khz up. This both from Europe.

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz. The order of operation is thus: (allow for Doppler as necessary)

1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10 minute timer.

[09122004]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: OPERATIONAL

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplink: 145.850 145.870 145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

John, N4QWL reports on July 16th, 2005:

Last evening I had a AOS to LOS qso with WI2W. FO-29 came up at 01:17z here in FM07 and I found WI2W and we chatted until 01:33z. The satellite was at 2 degrees elevation when I finally heard him start to crackle a bit. What a great QSO! To think that I watched this bird launch back in 1996 and it is still working so well is a real thrill. I believe I still have the video. I might just look for it and watch it again. Boy do I love this satellite stuff! Look for you all up there.

Please send the reception reports to lab2 'at' jarl.or.jp.
Please use the subject line: 'FO-29 reception report'.

Mineo, JE9PEL, has an FO-29 satellite telemetry analysis program that will automatically analyze all digital telemetry from the satellite (such as

current, voltage and temperature). FO29CWTE is available at:
http://www.ne.jp/asahi/hamradio/je9pel/
[ANS-WSR wishes to thanks John, N4QWL for this week's report]
[07172005]

=====

AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Uplink: 145.850 MHz FM
Downlink: 436.795 MHz FM

The latest information on AO-27 from control operator Michael Wyrick, N3UC (former N4USI), can be found at:
http://www.ao27.org

An AO-27 question-and-answer page is available on the AMSAT-NA web site, with updates by Ray, W2RS. The URL is:
http://www.amsat.org/amsat/intro/ao27faq.html

[ANS-WSR thanks John, K6YK, for this week's AO-27 report]
[08292004]

=====

AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Semi-operational in sunlight.
Return to active status: June 21,2002

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A
145.975 to 145.925 MHz CW/USB Mode B
Beacon: 29.502 MHz, 145.972 MHz, 435.1 MHz, 2304.1 MHz

Emily, W0EEC has created a website to allow the users of AO-7 to record contacts, observations and use of the satellite more effectively at:
http://www.emilyshouse.com/experthams/ao7/main.php
This includes the ability to log contacts.

Tim, K3TZ has written a program to decode AO-07 telemetry.
The program can be downloaded at:
http://www.qsl.net/k3tz/files/K3TZ_AO-07_Telemetry_Decoder_0.5.zip

For more AO-7 info:
http://www.amsat.org/amsat/sats/n7hpr/ao7.html
[11142004]

=====

INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544

Launch date: November 20, 1998

Status: Operational
Current Mode: U/V CROSS-BAND REPEATER
Digipeater: Inactive

The current Expedition 12 crew is:
Commander: William McArthur - KC5ACR
Flight Engineer: Valery Tokarev - (no call)

Worldwide packet uplink: 145.990 MHz FM
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM
Doppler Shift is 10 KHz

Russian callsigns: RS0ISS, RZ3DZR
USA callsign: NA1SS
Packet station mailbox callsign: RS0ISS-11
Packet station keyboard callsign: RS0ISS-3
Digipeater callsign: ARISS

The ISS daily crew schedule can be found at:
http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.

More information is available at:
http://www.rac.ca/ariss
http://spaceflight.nasa.gov/station/reference/radio/
http://www.marexmg.org/fileshtml/unprotopage.html
http://www.issfanclub.com
http://oscar.dcarr.org/
[10162005]
NNNN
/EX

SB SAT @ AMSAT <KB9MMC $ANS-296.S2
WSR 296 Part 2 10/23/2005

AMSAT NEWS SERVICE BULLETIN 296.S2 FROM AMSAT HQ
SILVER SPRING, MD, OCTOBER 23, 2005
TO ALL RADIO AMATEURS
BID: $ANS-296.S2

PCSAT2 ?0-??
Catalog Number:
Launch Date: August 1, 2005

Status: Operational

PCSAT2 was installed on the exterior of the International Space Station and was activated on August 3, 2005.

PCSAT2 CAPABILITIES: PCSAT2 is attached to the ISS and so its operations must be in cooperation with the ARISS communications suite to minimize any mutual interference and to coordinate activities. Here are the capabilities of the PCSAT2 and ARISS payloads:

PCSAT SYSTEM A:

435.275 PCSAT2 DOWNLINK 1200 baud packet with uplink on 145.825
435.275 PCSAT2 DOWNLINK Occasional user PSK-31 continuous downlink
145.825 PCSAT2 DOWNLINK 1200 baud packet

PCSAT SYSTEM B:

437.975 PCSAT2 DOWNLINK periodic Solar Cell data and PCSAT2 telemetry at 9600 baud
437.975 PCSAT2 DOWNLINK TNC-B command downlink at 1200 baud
437.975 PCSAT2 DOWNLINK User Voice Repeater with VHF uplink
437.975 PCSAT2 DOWNLINK Packet digipeater with VHF uplink

It looks like PCSAT2 can best contribute at this time by operating in PSK-31 mode for the near future. This is a very exciting new transponder mode which solves the congestion problem on FM repeaters by letting multiple stations all communicate at the same time.

PSK-31 users are welcome to try out the new PCSAT2 PSK-31 transponder on ISS with an uplink on 29.402 +/- 1 KHz and downlink on 435.275 +/- Doppler using FM.

The FM downlink lets everyone operate full duplex and everyone to see the same view of the passband as everyone else. THus you can see exactly what your signal looks like to everyone else.

Help Wanted:

Here is your chance to become a viable part of the Amateur Satellite Community.

We are looking for a volunteer satellite packet station in Hawaii that is interested in helping with telemetry and sat-gating of PCSAT2 and ARISS packets. Requirements are:

1) General familiarity with packet
2) TNC connected to a cross band radio that can RX on UHF and TX on VHF.
3) modest UHF beam and rotator system.

Contact WB4APR for more information.

Packets seen from PCSAT2 can be reviewed at:
http://www.findu.com/cgi-bin/pcsat2.cgi

A screen shot of both the 9600 bps and 1200 bps decoded data
as seen by Simon, 9W2QC, can be seen at:
http://www.9w2qc.net/pcsat2/

More information on PCSAT2 can be found at:
http://web.usna.navy.mil/~bruninga/pcsat2.html

[ANS-WSR thanks Bob, WB4APR and the U.S. Naval Academy Satellite Lab for
the aboveinformation.]

[08282005}
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Mode: PBBS - ON
FM REPEATER - V/U HIGH POWER

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
Analog voice uplink: 145.880 MHz FM
145.920 MHz FM 67Hz PL tone
1268.700 MHz FM 67Hz PL tone

Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast
Protocol (PBP)

Broadcast: PECHO-11
BBS: PECHO-12

[ANS-WSR thanks Mike Kingery, KE4AZN for the above information]
[09252005]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Non-Operational?????

Uplink/downlink: 145.827 MHz 1200 baud AX.25 AFSK via W3ADO-1
Aux/Uplink: 435.250 MHz 9600 baud via PCSAT-2 (off)
APRS Downlink: 144.390 MHz (Region 2)

PCSat is a 1200-baud APRS digipeater designed for use by stations using hand-held or mobile transceivers. Downlinks feed a central web site at:
http://pcsat.aprs.org

The APRS-equipped PCSat was built by midshipmen from the U.S. Naval Academy under the guidance of Bob Bruninga, WB4APR.
[07242005]

=====

CUTE-1
Catalog number: 27844
Launched: June 30,2003

Status: Operational

Uplink: ?
Downlink: 436.8375 CW
              437.4700 1200 FM ax25 or SRLL (ACTIVE only near Japan ?)
Cliff, K7RR reports:
In the latest Weekly Satellite Report, CUTE 1, #27844 is listed as OPERATIONAL?
Indeed it is very operational as a CUBESAT sending CW telemetry on 436.8345 MHz. At the July 7 2005, 23:45:20 pass over the Western USA:
CUTE 1 6B A4 xx 7F D7 66A8 4702 FF FF7C 65
CUTE 1 6C A6 59 80 D9 66A8 4702 FF FE7C B6

The June 30th KEPS were within ten seconds of AOS and LOS. It is an very good object to practice tracking as the orbit and transmitter power are similar to proposed CUBESATS awaiting launch this December. As a check for Doppler correction, the lack of change in tone is an excellent indicator.

CUTE 1 is a Japanese (Tokyo Institute of Technology) one kilogram nanosatellite that was launched by a Rokot rocket from Plesetsk at 14:15 UT on 30 June 2003. It carries a 100 mW beacon at 436.8375 MHz. Initial orbital parameters were period 101.4 min, apogee 831 km, perigee 819 km, and inclination 98.7?.

For further info about CUTE-1 goto:
http://lss.mes.titech.ac.jp/ssp/cubesat/operation/Schedule_e.html

[ANS WSR wishes to thank Cliff, K7RR, for this week's information]
[07242005]

=====

GO-32 TECHSAT-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Downlink: 435.225 MHz FM (9600-baud FSK)
                   (435.325 n/a - temperature problems)
Uplinks: 145.850, 145.890, 145.930 FM
                   1269.700, 1269.800, 1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[03132005]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Operational

Uplink: 145.850 or 145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz
Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[05152005]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Semi-operational, the digipeater command is on and open for APRS users.

Uplink: 145.90 145.92 145.94 145.96 MHz FM
                     (using 1200-baud Manchester FSK)
Downlink: 437.026 MHz SSB (1200-baud PSK)
Mode-S Beacon: 2401.1428 MHz
Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

A WOD collection of current graphics along with general information and telemetry samples can be found at:
http://www.telecable.es/personales/ea1bcu
[05092004]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational?

Telemetry Downlink: 145.826 MHz. FM (1200-baud AFSK).

approx. 10 days ON, 10 days OFF
Mode-S Beacon: 2401.500 MHz. ... OFF
UHFBeacon: 435.025 MHz. ... OFF

OSCAR-11 is back! I received the good news, on Saturday morning, while at the AMSAT-UK Colloquium. This was entirely unexpected! On Sunday morning Bob G4VRC played me a recording of an early morning pass received that day.

During the period 21 July to 14 August 2005 consistent signals have been heard from 30 July to 08 August. Signals seem to be weaker than usual, confirmed by the many reports received. However,since I last heard the satellite on 30 April, I've reinstalled my antennas , which makes comparisons difficult.

Many thanks for all the recent reports of OSCAR-11 including those from KU7Z (who heard it first), KB2M, VK6XH, HK7MKE, KA2UPW, JE9PEL, G1OCN, HB9SKA and G8OQW.

All the analogue telemetry channels, 0 to 59 are zero, ie they have failed. The status channels 60 to 67 are still working. One bit in channel 62, DSR mode, has changed from WRITE to READ. DSR is the Digital Store & Readout experiment. This could be significant if the experiment is still drawing current, but the other status bit indicates that it is switched OFF.

The on-board clock is now showing a very large error. It has lost approximately 19 days since 30 April. During the recent data collection period, the clock error has been changing at a decreasing rate. The size of the clock error and the rate at which it is changing is similar to the duration of the solar eclipse periods. This suggests that the clock might have been switching OFF during eclipses.

The eclipses have now ended, and the satellite should be in continuous sunlight for the remainder of this year, and well into next year. This should help the satellite to continue transmitting, although continuous sunlight can cause problems due to excessive temperatures.

If the watchdog timer is still operating on a 20 day cycle, ie. approximately ten days ON followed by 10 days OFF, then the VHF beacon should resume transmissions around 18 August.

The Beacon frequencies are -

VHF 145.826 MHz. AFSK FM ASCII Telemetry

UHF 435.025 MHz. OFF

S-band 2401.5 MHz. OFF

Listeners to OSCAR-11 may be interested in visiting my website which contains an archive of news & telemetry data. It also contains details about using a soundcard or hardware demodulators for data capture.

There is software for capturing data, and decoding ASCII telemetry. The URL is www.users.zetnet.co.uk/clivew/

If you place this bulletin on a terrestrial packet network, please use the bulletin identifier $BID:U2RPT112.CWV, to prevent duplication.

[ANS-WSR thanks Clive, G3CWV, for the above information]

More information on UO-11 OSCAR-11 can be found at:
http://www.users.zetnet.co.uk/clivew/

MPEG3 files can be found here at Mineo, JE9PEL website:
http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm

[08212005]
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SB SAT @ AMSAT <KB9MMC $ANS-296.S3
WSR 296 Part 3 10/23/2005

AMSAT NEWS SERVICE BULLETIN 296.S3 FROM AMSAT HQ
SILVER SPRING, MD, OCTOBER 23, 2005
TO ALL RADIO AMATEURS
BID: $ANS-296.S3

THE FOLLOWING ARE IN ORBIT BUT ARE
NON-OPERATIONAL AT THIS TIME:

POSAT-1 PO-28
Catalog Number: 22829
Launched : September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 435.250 MHz
435.275 MHz

Uplink: 145.925 MHz
145.975 MHz

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

PO-28 (POSAT-1), Portugal's first satellite, launched 12 years ago, will be turned over to Amateur Radio use in the very near future. That was the word July 30 from AMSAT-UK Secretary Jim Heck, G3WGM, during the AMSAT-UK International Space Colloquium in Guildford, England.

Launched September 25, 1993, the satellite operated as a packet store-and-forward BBS (9600 baud FM FSK) on Amateur Radio frequencies for several weeks in early 1994. Over the years, PO-28's primary usage has been commercial, although plans have called for eventually shifting its operation to ham radio use. G3WGM reports that following lengthy negotiations it has been agreed that the satellite can be switched permanently to amateur frequencies. The changeover is expected to take a couple of weeks.

The Portuguese satellite was built at the University of Surrey as part of a collaborative satellite technology program that involved industry and academe. Uplink frequencies will be 145.925 and 145.975 MHz. Downlink frequencies will be 435.250 and 435.275 MHz. More information on PO-28 is on the AMSAT Web site
http://www.amsat.org/amsat/sats/n7hpr/po28.html.

```
Uplink Frequencies:   145.925 and 145.975 MHz
Downlink Frequencies: 435.250 and 435.275 MHz
```

Orbit: 822 x 800 km, 98.6 deg inclined, sun-synchronous.

Transponder capabilities include FM repeater and 38k4 data. If you want to hear how loud this satellite is, listen on 429.950 until the change back to amateur radio service.

Keplerian elements for PO-28 are not currently contained in the AMSAT keps bulletins, but can be found at Celestrak in amateur.txt using the name "POSAT". Users of Space Track should query the NORAD Satellite ID number 22829. The name listed by Space Track is "EYESAT A".

More information of POSAT-1 can be found at:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
http://www.amsat.org/amsat/sats/n7hpr/po28.html
[ANS-WSR wishes to thanks Trevor, M5AKA and Jim, G3WGM, for this week's information.]
[08072005]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launched: June 16, 1983

Status: Non-operational

```
Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB
Beacon:   145.810 MHz (unmodulated carrier)
```

AO-10 has been locked into a Mode-B, 70-cm uplink and 2-meter downlink for several years.

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

```
Status: Non-operational

Uplink:             145.875 145.900 145.925 145.950 MHz FM (1200-baud)
Downlink:           435.812 MHz SSB
Broadcast Callsign: ITMSAT-11
BBS:                ITMSAT-12

Alberto E. Zagni - I2KBD reports on 02/13/05
The spacecraft is in MBL (safe mode) and is trasmitting just 6 channels
of telemetry. Temperatures and voltage are nominal, but there seems to
be a problem with the onboard receiver, refusing to accept commands.
The spacecraft was launched in 1993, thus nearing 12 years in orbit...

Best regards
Alberto E. Zagni - I2KBD
ITAMSAT Mission Director

More information of IO-26 can be found at:

http://joshua.micronet.it/english/itamsat/itamsathome.html
http://www.amsat.org/amsat/sats/n7hpr/io26.html
www.itamsat.org

[02132005]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink:   21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB
Beacon:   29.408 MHz
Robot:    29.454 MHz
[05232004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink:      21.260 to  21.300 MHz CW/USB
Downlink:   145.860 to 145.900 MHz CW/USB
Beacon:     145.860 MHz
Robot:      145.908 MHz
[05232004]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990
```

Status: Non-operational

Uplink 145.975 MHz FM
Downlink 435.070 MHz FM
[05092004]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink: 145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM
Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01092005]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational?

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB
Beacon: 29.352 MHz (intermittent)
SSB meeting frequency: 29.380 MHz (unofficial)

John, KD6PAG reports on June 16, 2004 to ANS:
RS-15 beacon seemed to be back in the mode where it's a tone about 5 seconds off and then 5 seconds on this morning.

ANS is looking for more confirmations of RS-15 coming back.

[ANS thanks John, KD6PAG for RS-15 information]
[06202004]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplink: 145.84 145.86 145.88 145.90 MHz FM
                    (using 1200-baud Manchester FSK)
CW downlink: 437.125 MHz
Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)
Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu

[05232004]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[08152004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM
Broadcast Callsign: HL01-11
BBS: HL01-12

Jim, AA7KC, reports that KO-23's downlink transmitter continues in a non-operational status.
[05092004]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM (9600-baud FSK)
Downlink: 436.500 MHz FM
Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink frequency (listed on the PanSat web site) 436.500 MHz

The satellite is not available for general uplink transmissions.

The Naval Postgraduate School developed PanSat. At the time of launch, PanSat spread-spectrum digital transponders were to be available to Amateur Radio operators along with software to utilize this technology.

The satellite is still operating, however, the spread spectrum packet radio portion never took place. The spacecraft is now beyond it's initial 2-year mission life, but telemetry records are still being downloaded.

For more information, visit the official PanSat web site at:
http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm

[ANS has no further information]
[05232004]
=====
SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

STatus: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
          Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
         Mode J Digipeater: 145.825 MHz and 145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[08082004]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

```
Uplink:             145.960 MHz (9600-baud FSK)
Downlink:           437.025 MHz 437.400 MHz
Broadcast Callsign: UO121-11
BBS:                UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA
web site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[05092004]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplink      V-band    145.840 -  145.990 MHz CW/LSB
            U-band    435.550 -  435.800 MHz CW/LSB
           L1-band   1269.250 - 1269.500 MHz CW/LSB
           L2-band   1268.325 - 1268.575 MHz CW/LSB
           S1-band   2400.350 - 2400.600 MHz CW/LSB
Downlink:  S2-band   2401.225 - 2401.475 MHz CW/USB
           K-band 24,048.010 - 24,048.060 MHz CW/USB
Beacon:    2401.323, 24,048.035
[05232004]
-----
SO-42  SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational
 Downlink:           437.075 MHz
Broadcast Callsign: SASAT2-11
BBS:                SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[08152004]
=====
SO-41  SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink:             145.850 MHz
Downlink:           436.775 MHz
Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[08152004]
```

=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, callsign KE6QMD, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Semi-operational.

Uplink 435.275 1200-baud AFSK
Downlink 145.825 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

AO-49 (SAFIR-M) is a German amateur radio payload onboard the small German scientific satellite "RUBIN-2".

AO-49 was built by the German amateur radio association "AATiS e.V." (German acronym for "Arbeitskreis Amateurfunk und Telekommunikation in der Schule", which means: 'working group for amateur radio anand telecommunications in schools'). AO-49 is designed as a "store and broadcast" system for APRS based messages, dedicated for the use of schools in combination with the existing WX-Net and planned buoy experiments in Germany.

No transmissions detected since the 1st of February 2003! It appears AO-49 is not properly aligned to illuminate the solar panels. This should end soon. Due to its orbit, AO-49 will be in a phase without eclipses until 13Feb03.

Martin DG8UAU has written a small software program "SAFIR-M Decoder" to allow decoding of the received DATA0 frames. It is available at:
http://amend.gmxhome.de in the section Aktuelles.

Details on AO-49 (SAFIR-M) can be found at:
http://amend.gmxhome.de

Information about AATiS e.V. is available at:
http://www.aatis.de
[05092004]
NNNN
/EX

SB SAT @ AMSAT <KB9MMC $ANS-296.S4
WSR 296 Part 4 10/23/2005

AMSAT NEWS SERVICE BULLETIN 296.S4 FROM AMSAT HQ
SILVER SPRING, MD, OCTOBER 23,2005
TO ALL RADIO AMATEURS
BID: $ANS-296.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE
PROPOSED FOR LAUNCH AT THIS TIME:

UCISAT ?O-??
Catalog number:
Proposed Launch Date: October 31, 2005

Status: Under Construction

Downlink: Submission in Progress
Uplink: Submission in Progress
Callsign: Submission in Progress

This from Matt Bennett, KF6RTB, UCISAT Communications Team Member:

Our website is www.ucisat.net .This is a new website, however, and doesn't have the "Status" section active yet. Because of the growing interest in our project, I'll push our webmaster to create updates (hopefully) on a week-to-week basis. For now, the current status of the mission is as follows:

-Expected Launch Date: October 31st, 2005
-Frequency Allocation: Submission in Progress
-Construction Status: Sub-Assembly
[WSR to thank Matt Bennett, KF6RTB, for this week's report.]
[01302005]
=====
SSETI ?O-??
Catalog Number:
Proposed Launch Date: October 27, 2005

Status: AWAITING LAUNCH

Graham, G3VZV reports:

The SSETI Express satellite is still scheduled to launch at 06:52 UTC on Thursday, October 27 on board a Kosmos 3M launcher.

The launch team arrived in Moscow and next completed an 18 hour journey by train to Plesetsk. The ISC (integrated system check) was completed satisfactorily within a couple of hours of powering up. All the systems are OK. The propulsion tank had maintained the required 300 bar pressure. Both UHF and S band radios were also tested - including the transponder and DTMF telemetry configurations.

Final battery charging was performed over the weekend. SSETI Express will be joined with the other four satellites on the launch adaptor on Monday, October 24. The launch adaptor will itself then be integrated onto the rocket.

Roll out of the complete launch vehicle at the launch complex (approx 40 kilometres away from the assembly facility) is scheduled for very early on Wednesday morning and its erection to the vertical position will take place around midday. The launch team will then pack up all the test gear and other equipment for its return to ESA ESTEC's facility in the Netherlands to await the launch to take place the following day!

A daily report of the launch campaign is being maintained at
http://sseti.gte.tuwien.ac.at/express/mop/index.php?uri=news.html
This mission operations site is completely up-to-date regarding Kepler TLEs and other LEOP "Launch and Early Operations Phase" details.

The SERACC software, needed to decode and submit the received data to the SSETI database, together with some audio files containing recorded 9k6 signals to experiment with is planned for release prior to launch.

There will be two SSETI Express competitions for radio amateurs. First is the unique "I heard it first" T shirt award; second is the prize for amateur who submits the largest amount of valid telemetry and payload data to the SSETI Express database before 1st February 2006. The telemetry prize, sponsored by ESA, is rather more valuable than just a T shirt - see the full details at:
http://sseti.gte.tuwien.ac.at/express/mop/index.php?uri=ham_contest.html

Full details of these events will be available on the Express mission website. This includes full information about the satellite, the ESA sponsored competition,and the plans for its use in the amateur satellite service. See:
http://sseti.gte.tuwien.ac.at/express/mop/

The ESA website about SSETI Express is at:
http://www.esa.int/SPECIALS/sseti_express/SEMARJ7X9DE_0.html

The latest version of the SSETI Express handbook can be downloaded free of charge from the AMSAT-UK website at:
http://www.uk.amsat.org/

A live webstream of the ESA produced TV coverage of the launch is going to be provided by Howard G6LVB at:
http://www.streamingwizard.com/clients/space.asx

The programming on the web stream is expected to commence at approximately 06:00 UTC on launch day.

[ANS thanks Graham, UA/G3VZV for the above information]

More SSETI Links at:

SpaceDaily has a report about SSETI at:
http://www.spacedaily.com/news/internet-04zzzu.html

You can find more info about SSETI at:
http://sseti.gte.tuwien.ac.at/WSW4/

Latest news about SSETI can be found at:
http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php

Look at the website for the SSETI Express webcam
http://sseti.gte.tuwien.ac.at/WSW4/webcam.htm

[10232005]
=====
PHASE 3E ?O-??
Catalog Number:
Proposed Launch Date: Early 2006

Status: Under Construction

For the latest project status update please visit the AMSAT-DL
P3-E web page:
http://www.amsat-dl.org/p3e/

[ANS-WSR wishes to thank William Leijenaar, PE1RAH for this week's
report]
[10022005]
=====
CP1 ?o-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: N6CP
Proposed Transmit Frequency: 436.845
[03272005]
=====
CP2 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.325
[03272005]
=====
HAUSAT1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

```
Proposed Callsign: D90HP
Proposed Transmit Frequency: 437.465
[03272005]
=====
ICE Cube 1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: W2CXM
Proposed Transmit Frequency: 437.305
[03272005]
=====
ICE Cube 2 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: N2VR
Proposed Transmit Frequency: 437.425
[03272005]
=====
ION ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.505
[03272005]
=====
KUTEsat ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: KC0RMW
Proposed Transmit Frequency: 437.385
[03272005]
=====
MEROPE ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: K7MSU-1
Proposed Transmit Frequency: 145.980
[03272005]
=====
nCUBE1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
       2407.25
[03272005]
```

```
=====
RINCON ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
        437.345
[03272005]
=====
SACRED ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
[03272005]
=====
SACRED ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
[03272005]
=====
SEEDS ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: JQ1YGU
Proposed Transmit Frequency: 437.485
[03272005]
=====
Mea Huaka ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.405
[03272005]
=====
SUITSAT ?O-??
Catalog Number:
Proposed Release Date: December 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: TBA

A video of the progress of Suitsat can be found at the following URL:
http://www.amsat.org/amsat-new/information/videoNews.php

To be released from an airlock of the International Space Station some
```

time
in December of 2005.
[10022005]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
        888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/amsat/listserv/menu.html

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satelite Report Editor is James K. Darrow, KB9MMC.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN

/EX

```
From -5396644043752977975
X-Google-Thread: 10e8ad,55a1babeea2c063e,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news3.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!local01.nntp.dca.giganews.com!nntp.mt.net!news.mt.net.POSTED!
not-for-mail
NNTP-Posting-Date: Wed, 26 Oct 2005 09:20:57 -0500
Reply-To: "William Erhardt" <erhardt@mt.net>
From: "William Erhardt" <erhardt@mt.net>
Newsgroups: rec.radio.amateur.space
Subject: SETI Express/Cube Sats Launch/Info
Date: Wed, 26 Oct 2005 08:20:56 -0600
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1437
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1441
Message-ID: <kKSdnVUeVf9UDcLeRVn-tw@mt.net>
Lines: 76
NNTP-Posting-Host: 206.127.67.86
X-Trace: sv3-
MuynttmPQTolnzaZVGzLHGaL3MjEZmhMlIg7EZoo4d937Kitse8inMPb7OMsjKnh+D4TI5LviBN9jx+!
NY1OptwOdLEhjZjNHhQLSaFzU+ab4Y+0e0O2CtpPmcZOlZ7Nc0PA5NaD1v3d+Q==
X-Complaints-To: abuse@mt.net
X-DMCA-Complaints-To: abuse@mt.net
X-Abuse-and-DMCA-Info: Please be sure to forward a copy of ALL headers
X-Abuse-and-DMCA-Info: Otherwise we will be unable to process your complaint
properly
X-Postfilter: 1.3.32
Xref: g2news1.google.com rec.radio.amateur.space:273
```

SSETI Launch Offers Exciting Listening Opportunities
The SSETI Express satellite is scheduled to launch at 06:52 UTC on Thursday, October 27 on board a Kosmos 3M launcher. Shortly after launch amateur radio operators around the world will have an exciting opportunity to begin receiving signals from four new satellites.

This is a quick listening guide to the frequencies expected to be used. The latest version of the SSETI Express handbook, which can be downloaded free of charge from the AMSAT-UK website contains full operational details. Visit http://www.uk.amsat.org/ to download your own copy.

Commencing at approximately 06:00 UTC on launch day, a live webstream of the ESA produced TV coverage of the launch is going to be provided by Howard G6LVB at:
http://www.streamingwizard.com/clients/space.asx

SSETI Express will coast for 74 minutes after orbital injection to ensure a good separation between SSETI Express and the other passengers and will then automatically deploy three Cubesats.

SSETI Express will have two main downlinks:
437.250 MHz @ 3 watts for 9600 baud FSK packets
2401.835 MHz @ 0.7 - 1.5 watts for 38400 bps FSK packets

The 2.4GHz-downlink transmitter will be mainly used to transmit picture data at rate of 38k4. However, it will be switched over to single channel FM U/S voice transponder operation occasionally as part of the payload cycle.

Here is a summary of the three Cubesats providing radio amateurs worldwide opportunities to hear the new spacecraft ...

Ncube-2

The Norwegian student satellite, Ncube-2 is an experimental spacecraft that was developed and built by students from four Norwegian universities. Data transmissions and digipeater use 1200 and 9600 bps.

Downlink 437.305 @ 1.5 watts. The first transmissions will be 20 minutes after separation from SSETI Express. The message: "DE LA1CUB NCUBE2 FF LA1CUB" will be sent in morse at 26 words per minute using a 2400Hz tone.

At the end of the message an unnumbered AX.25 packet is sent containing the string: DE LA1CUB NCUBE2 NORWEGIAN CUBESAT - WWW.NCUBE.NO . The AX.25 header will include Callsign: NCUBE, and Destination: EARTH.

UWE-1

The UWE-1 spacecraft is a registered Pico-satellite of Julius Maximilians Universitaet Wuerzburg, Germany. Its research aim is to test IP based telecommunications protocols in space.

Downlink 437.505 @ 1.0 watts. The communication protocol is AX25. The satellite will transmit for about 1 sec every 1 minute.

XI-V

The XI-V satellite is a Pico-satellite of the University of Tokyo, Intelligent Space Systems Laboratory.

Downlink (telemetry) 437.345 @ 0.8 watts sending AFSK AX.25, 1200bps
Downlink (beacon) 436.465 @ 0.08 watts CW repeating every 30 seconds

The homepage for SSETI Express is at:
http://sseti.gte.tuwien.ac.at/express/mop/

The SERACC software, needed by radio amateurs to decode the telemetry and payload data from SSETI and to submit it to the main SSETI Express central database is available for download at:

http://sseti.gte.tuwien.ac.at/express/mop/index.php?uri=downloads.html

Updated: 25 Oct, 05

```
From 9168048637906938953
X-Google-Thread: 10e8ad,4da14955b5e13b1,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news4.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!newscon06.news.prodigy.com!prodigy.net!
newsmst01b.news.prodigy.com!prodigy.com!postmaster.news.prodigy.com!
newssvr21.news.prodigy.com.POSTED!153f83e8!not-for-mail
From: "Charles Brabham" <n5pvl@sbcglobal.net>
Newsgroups: rec.radio.amateur.space
Subject: Ham Polling Station
Lines: 15
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.2180
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.2180
X-RFC2646: Format=Flowed; Original
Message-ID: <L9V9f.8796$7h7.2914@newssvr21.news.prodigy.com>
NNTP-Posting-Host: 68.89.74.85
X-Complaints-To: abuse@prodigy.net
X-Trace: newssvr21.news.prodigy.com 1130897131 ST000 68.89.74.85 (Tue, 01 Nov 2005
21:05:31 EST)
NNTP-Posting-Date: Tue, 01 Nov 2005 21:05:31 EST
Organization: SBC http://yahoo.sbc.com
X-UserInfo1:
T[OORTFGCBUSP_@YMZJ\_Q\@TJ_ZTB\MV@BT]UEK@YUDUWYAKVUOPCW[ML\JXUCKVFDYZKBMSFX^OMSAFN
TINTDDMVW[X\THOPXZRVOCJTUTPC\_JSBVX\KAOTBAJBVMZTYAKMNLDI_MFDSSOLXINH__FS^\WQGHGI^C
@E[A_CF\AQLDQ\BTMPLDFNVUQ_VM
Date: Wed, 02 Nov 2005 02:05:35 GMT
Xref: g2news1.google.com rec.radio.amateur.space:274
```

HamPoll is here in order to give amateurs a chance to speak for themselves, and in time to provide reasonably accurate and significant polling data on a variety of issues related to the amateur radio service.

You are welcome to browse the polling data we have, but we especially encourage US amateurs visiting here to register with thier callsign and vote in the HamPoll Polling Station.

Whether you come to browse, to discuss or submit new polls, or to tender your vote, be sure to visit regularly as new polls are included from time to time, and the poll data changes as more hams participate day to day.

Stop by at: http://www.hampoll.com

From 2168716402938387713
X-Google-Thread: 10e8ad,cc779a7a86dde9f0,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news4.google.com!border1.nntp.dca.giganews.com!
border2.nntp.dca.giganews.com!nntp.giganews.com!elnk-atl-nf1!
newsfeed.earthlink.net!stamper.news.atl.earthlink.net!
newsread1.news.atl.earthlink.net.POSTED!46041641!not-for-mail
From: "JoAnne Maenpaa" <wb9jej_no-spam@earthlink.net>
Newsgroups: rec.radio.amateur.space
Subject: ANS-303 AMSAT News Service Weekly Bulletin
Lines: 356
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <q%oaf.4331$m81.638@newsread1.news.atl.earthlink.net>
Date: Thu, 03 Nov 2005 14:19:02 GMT
NNTP-Posting-Host: 66.167.223.97
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread1.news.atl.earthlink.net 1131027542 66.167.223.97 (Thu, 03 Nov 2005 06:19:02 PST)
NNTP-Posting-Date: Thu, 03 Nov 2005 06:19:02 PST
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news1.google.com rec.radio.amateur.space:275

AMSAT NEWS SERVICE
ANS-303

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* SSETI Express Launched 30 September 2005
* Urgent Reguest for UWE-1 Data
* New Eagle Project Information
* OSCAR 11 Report - 25 October 2005
* AMSAT Awards
* ARISS Status - 24 October 2005

SB SAT @ AMSAT $ANS-303.01
SSETI Express Launched 30 September 2005

AMSAT News Service Bulletin 303.01
From AMSAT HQ SILVER SPRING, MD.
October 30, 2005
To All RADIO AMATEURS
BID: $ANS-303.01

The SSETI Express satellite launched at 06:52 UTC on Thursday, 27 October 2005 on board a Kosmos 3M launcher. One hundred and three minutes later, exactly on schedule, the first signals were heard form the groundstation in Aalborg, and two-way communication was established. In addition to several successful communication sessions with SSETI Express, two of the Cubesat passengers, UWE-1 and Xi-V, have been heard by their groundstations.

An official release from ESA stated, "22:20 CEST SSETI Express went into a safe mode due to an undervoltage caused by battery charging problems. The operations team is working actively to resume nominal operations of the satellite and is receiving tremendous help in the process from the amateur radio community. At the time of the anomaly many mission milestones had already successfully
been met."

Graham, UA/G3VZV reports, "that it seems that no reliable reports of any signals have been received and the teams are reviewing all the telemetry already received to fully understand what is happening on board.Initial review suggests that there is a significant chance that the power supply problem may correct itself." Graham also advises that the command station in Aalborg is planning to try to try a blind command of the satellite into S band on mode - maybe on a Sunday am pass at 10:30 UTC.

As the statement above makes clear, ESA and the SSETI Association greatly value the input that amateur operators are providing and would ask amateurs around the world to continue to check for signals on 437.250MHz at the appropriate pass times. These signals may be short bursts of 9k6 data every 18 secs or bursts of pulse telemetry every 30 secs. Please understand that the pulse beacon decoder can produce spurious results on plain noise if over driven!

Anyone hearing anything that matches the above detail is requested to please email details to missioncontrol@sseti.org

The type of the first transmissions will depend on the state of the battery.

In Nominal mode - a sub 1 second burst of AX25 9k6 FSK telemetry every 18 seconds on the downlink frequency of 437.250 MHz.

In Recovery or Safe mode - simple on/off telemetry comprising 16 x 100 msec carrier pulses. This telemetry is repeated every 30 seconds in Safe Mode and every 2 minutes when in Recovery Mode.

The satellite will transmit at a power of 3 watts.

A daily report of the launch campaign is being maintained at
http://sseti.gte.tuwien.ac.at/express/mop/index.php?uri=news.html This mission operations site is completely up-to-date regarding Kepler TLEs and other LEOP "Launch and Early Operations Phase" details.

The SERACC software, needed to decode and submit the received data to the SSETI database, together with some audio files containing recorded 9k6 signals to experiment with is also now available

The ESA website about SSETI Express is at:
http://www.esa.int/SPECIALS/sseti_express/SEMARJ7X9DE_0.html

The latest version of the SSETI Express handbook can be downloaded free of charge from the AMSAT-UK website at:
http://www.uk.amsat.org/

[ANS thanks Graham, UA/G3VZV and Trevor, M5AKA for the above information]

/EX

SB SAT @ AMSAT $ANS-303.02
Urgent Reguest for UWE-1 Data

AMSAT News Service Bulletin 303.02
From AMSAT HQ SILVER SPRING, MD.
October 30, 2005
To All RADIO AMATEURS
BID: $ANS-303.02

Radu, with the UWE-1 Team in Wuerzburg, Germany reports that they have a very serious situation and need immeadiate assistance copying UWE-1 telemetry data. Due to the extremely unfavorable weather conditions in Wuerzburg (heavy clouds and very thick fog, with visibility sometimes less than 10 m), we were not able to decode much of the sensor data from UWE-1 during the last two passes over our ground station. We have already prepared a list with new equipment we need for the GS, but it might take a while to get it, as 0 1 November 2005 is a national bank holiday in Germany.

The command station is able to send commands to the satellite and can receive the answers, but the signals received were S2-S3 level on the S-meter. The last reliable data is already 30 hours old. They urgently need some beacon data in order to characterize the status of the subsystems and decide how to continue the mission.

UWE-1 is sending one beacon every 60[sec] on 437.505+- MHz, 1200baud AFSK. One beacon is 33 bytes long. The UWE-1 team would be very happy to receive also raw (.hex) data, we can decode them here. Please send the data to: cubesat@informatik.uni-wuerzburg.de. Thank you very much!

Please forward this email to everyone able to help us with some new data.

Thank you very much for your support!

[ANS thanks Radu for the above information]

/EX

SB SAT @ AMSAT $ANS-303.03
New Eagle Project Information

AMSAT News Service Bulletin 303.03
From AMSAT HQ SILVER SPRING, MD.
October 30, 2005
To All RADIO AMATEURS
BID: $ANS-303.03

New and updated information about the Eagle HEO satellite project is now available at
http://www.amsat.org/amsat-new/eagle/

The new information is about the IHU-3 (Internal Housekeeping Unit - Version 3) which is the brains behind Eagle and is an open source, open design component. The IHU-3 link contains the source code archives and documentation for projects and developers incorporating the IHU-3 into their system designs.

There is also a link to the Can-Do website operated by Steve Moraco, KC0FTQ which contains reference documents, firmware updates, programming libraries, schedules and milestones for all aspects of the Can-Do bus, modules, widgets and other components. The Can-Do is the interconnection bus that connects all Eagle modeules to the IHU.

[ANS thanks Lee KU4OS for the above information]

/EX

SB SAT @ AMSAT $ANS-303.04
OSCAR 11 Report - 25 October 2005

AMSAT News Service Bulletin 303.04
From AMSAT HQ SILVER SPRING, MD.
October 30, 2005
To All RADIO AMATEURS
BID: $ANS-303.04

During the period 24 September to 25 October 2005 the VHF beacon on 145.826MHz resumed transmissions, as expected, on 30 September, sometime between 06:05 and 06:42 UTC passes. Reasonable signals were also captured on the 17:44 pass, later that day. However by the 16:49 UTC pass on 02 October, the beacon had switched OFF. Transmissions resumed on 21 October, and should continue until around 31 October.

The on-board clock continues to show a very large error. Currently it is 19.2394 days slow, having lost six hours while the beacon was last OFF, ie. between 02 October and 21 October. When the beacon is ON, the clock is stable to within a few seconds.

All the analogue telemetry channels, 0 to 59 are zero, ie they have failed. The status channels 60 to 67 are still working.

The eclipses have now ended, and the satellite should be in continuous sunlight for the remainder of this year, and well into next year. This should help the satellite to continue transmitting, although continuous sunlight can cause problems due to excessive temperatures.

The watchdog timer appears to be operating on the 20 day cycle, ie. approximately ten days ON followed by 10 days OFF. It appears to be uneffected by problems of the on-board clock. However, poor solar attitude, and battery problems, may be combining to produce a low line voltage. This causes the beacon to switch OFF premeaturely, and resets the watchdog timer cycle.

The Beacon frequencies are -
VHF 145.826 MHz. AFSK FM ASCII Telemetry
UHF 435.025 MHz. OFF
S-band 2401.5 MHz. OFF

Listeners to OSCAR-11 may be interested in visiting my website which contains an archive of news & telemetry data. It also contains details about using a soundcard or hardware demodulators for data capture. There is software for capturing data, and decoding ASCII telemetry. The URL is
www.users.zetnet.co.uk/clivew/

If you place this bulletin on a terrestrial packet network, please use the bulletin identifier $BID:U2RPT114.CWV, to prevent duplication.

[ANS thanks Clive G3CWV for the above information]

/EX

SB SAT @ AMSAT $ANS-303.05
AMSAT Awards

AMSAT News Service Bulletin 303.05
From AMSAT HQ SILVER SPRING, MD.
October 30, 2005
To All RADIO AMATEURS
BID: $ANS-303.05

This week, congratulations go out to all of the following.

Allen Kenny, KK4EMK, Satellite Communicators Club
Robert Tucker, WA6MBL, Satellite Communicators Club

Allen Kenny, KK4EMK, Satellite Communication Achievement Award #423
Marc Sanchez, KD5MSS, Satellite Communication Achievement Award #424

Allen Kenny, KK4EMK, 51 on 51 Award #38

Marc Sanchez, KD5MSS, South Africa Communication Achievement Award

To see all the awards visit http://www.amsat.org or http://www.amsatnet.com

[ANS thanks Bruce KK5DO, for the above information]

/EX

SB SAT @ AMSAT $ANS-303.06
ARISS Status - 24 October 2005

AMSAT News Service Bulletin 303.06
From AMSAT HQ SILVER SPRING, MD.
October 30, 2005
To All RADIO AMATEURS
BID: $ANS-303.06

1. Upcoming School Contacts

Kawachi Citizen's Committee for Youth in Miyoshi, Hiroshima, Japan has been approved for a contact on Thursday, 03 November 2005 at 0744 UTC.

2. ARRL Article on JOTA 2005

Over the weekend of 15-16 October, astronaut Bill McArthur, KC5ACR, participated in the 2005 Jamboree on the Air (JOTA). Since then, Bill has been active on voice, and has continued to thrill hams worldwide. ARRL covered the JOTA event in a web story entitled, "ISS Astronaut Gets in the JOTA Spirit." See:
http://www.arrl.org/news/stories/2005/10/21/4/?nc=1

3. Astronaut Training

Astronauts Nicole Stott and Garrett Reisman attended their first amateur radio license training session on 18 October. They were scheduled for their second session on Wednesday, 26 October 26. On 17 October 17, Bob Behnken took and passed his amateur radio exam. He received his callsign, KE5GGX, and is currently in the selection pool for future ISS expedition crews. Congratulations Bob!

4.Expedition 11 Crew Debrief

The U.S. debrief session with Expedition 11 crew member John Phillips, KE5DRY, is tentatively scheduled for Tuesday, 08 November at 2100 UTC.

5. WebTech.com Article on ARISS

ARISS delegate Rosalie White sat for an interview with Web-Tech.com to discuss the ARISS program. The online story is available on their website. See:
http://www.personaltechpipeline.com/showArticle.jhtml?articleID=171204199

6. School Selection Committee Meeting Held

Rosalie White held a School Selection Committee teleconference on 13 October 2005. Discussions included the NEEIS database, which will reopen in mid-October for teachers to finish entering their evaluations, and the possibility of Bill McArthur participating in two ARISS contacts per week, which could reduce the backlog of U.S. schools waiting for a contact. Meeting minutes will be posted on the ARISS website in the near future. The next committee meeting is scheduled for 08 December 2005.

7. Space.com Article on Olsen

Space.com wrote an article covering Greg Olsen's flight to the ISS. The story mentions his ARISS contacts with school children and the importance of sharing his flight with others to excite their imaginations. See:
http://space.com/missionlaunches/051017_olsen_us.html

8. ARISS - Eindhoven Contact

Dutch astronaut Andre Kuipers, PI9ISS, flew to the ISS with Expedition 9 crew members in conjunction with the Dutch Expedition for Life science, Technology and Atmospheric research (DELTA) Mission. On April 25, 2004, Kuipers participated in an ARISS contact with students from three schools: Saltoschool Hanevoet (primary school), Sint Joriscollege (secondary school) and Technische Universiteit Eindhoven (university). The students who were selected for the contact gathered in the radio room of the Amateur Radio Club of the Technical University of Eindhoven (PI4TUE), the Netherlands. The contact was a success. A short article on the contact has recently been made available to the ARISS team, complete with photos and links to audio and video. See:
http://home.vianetworks.nl/users/hamoen/pa3guo/ariss_contact.html

[ANS thanks Carol, KB3LKI for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the
President's Club. Members of the President's Club, as sustaining donors
to AMSAT Project Funds, will be eligible to receive additional benefits.
Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Lee McLamb, KU4OS
ku4os at amsat dot org

From -5468304620708686134
X-Google-Thread: 10e8ad,8f93248353139687,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news4.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx01.iad01.newshosting.com!newshosting.com!elnk-atl-nf1!
newsfeed.earthlink.net!stamper.news.atl.earthlink.net!
newsread1.news.atl.earthlink.net.POSTED!46041641!not-for-mail
From: "JoAnne Maenpaa" <wb9jej_no-spam@earthlink.net>
Newsgroups: rec.radio.amateur.space
Subject: WSR-303 AMSAT Weekly Satellite Report
Lines: 1220
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <h0paf.4332$m81.1483@newsread1.news.atl.earthlink.net>
Date: Thu, 03 Nov 2005 14:19:57 GMT
NNTP-Posting-Host: 66.167.223.97
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread1.news.atl.earthlink.net 1131027597 66.167.223.97 (Thu, 03 Nov
2005 06:19:57 PST)
NNTP-Posting-Date: Thu, 03 Nov 2005 06:19:57 PST
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news1.google.com rec.radio.amateur.space:276

This report is organized into 4 parts.
Part 1 - operational analog amateur satellites.
Part 2 - operational digital amateur satellites.
Part 3 - non - operational satellites
Part 4 - proposed satellites

SB SAT @ AMSAT <KB9MMC $ANS-303.S1
WSR 303 Part 1 10/30/2005

AMSAT NEWS SERVICE BULLETIN 303.S1 FROM AMSAT HQ
SILVER SPRING, MD, OCTOBER 30, 2005

TO ALL RADIO AMATEURS
BID: $ANS-303.S1

VO-52 HAMSAT
Catalog Number: 28650
Launch Date: May 05,2005

Status: Testing
Current Mode: U/V

Proposed frequencies:

Indian transponder:
Uplink : 435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW
Beacom : 145.940MHz continue carier signal

Dutch transponder:
Uplink : 435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW
Beacon : 145.860MHz 12WPM with CW message
[07242005]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Mode: PBBS - ON
      FM REPEATER - V/U

Analog voice downlink: 435.300 MHz FM
              435.150 MHz FM
Analog voice uplink: 145.880 MHZ FM
              145.920 MHz FM 67Hz PL tone
                       1268.700 MHz FM 67Hz PL tone

Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
                       2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast
          Protocol (PBP)

Broadcast: PECHO-11
BBS: PECHO-12

[ANS-WSR thanks Mike Kingery, KE4AZN for the above information]
[10162005]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Uplink: 145.850 MHz (67.0 Hz PL tone) (See below for operating procedures)
Downlink: 436.795 MHz

There have been unconfirmed reports on the amsat-bb remailer that SO-50 has shifted downlink frequency as much as 5khz up. This both from Europe.

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz. The order of operation is thus: (allow for Doppler as necessary)

1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10 minute timer.

[09122004]

=====

FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: OPERATIONAL

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplink: 145.850 145.870 145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

John, N4QWL reports on July 16th, 2005:

Last evening I had a AOS to LOS qso with WI2W. FO-29 came up at 01:17z here in FM07 and I found WI2W and we chatted until 01:33z. The satellite was at 2 degrees elevation when I finally heard him start to crackle a bit. What a great QSO! To think that I watched this bird launch back in 1996 and it is still working so well is a real thrill. I believe I still have the video. I might just look for it and watch it again. Boy do I love this satellite stuff! Look for you all up there.

Please send the reception reports to lab2 'at' jarl.or.jp.
Please use the subject line: 'FO-29 reception report'.

Mineo, JE9PEL, has an FO-29 satellite telemetry analysis program that will automatically analyze all digital telemetry from the satellite (such as current, voltage and temperature). FO29CWTE is available at:
http://www.ne.jp/asahi/hamradio/je9pel/

[ANS-WSR wishes to thanks John, N4QWL for this week's report]
[07172005]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Uplink: 145.850 MHz FM
Downlink: 436.795 MHz FM

The latest information on AO-27 from control operator Michael Wyrick,
N3UC (former N4USI), can be found at:
http://www.ao27.org

An AO-27 question-and-answer page is available on the AMSAT-NA web
site, with updates by Ray, W2RS. The URL is:
http://www.amsat.org/amsat/intro/ao27faq.html

[ANS-WSR thanks John, K6YK, for this week's AO-27 report]
[08292004]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Semi-operational in sunlight.
Return to active status: June 21,2002

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
            432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A
            145.975 to 145.925 MHz CW/USB Mode B
Beacon: 29.502 MHz, 145.972 MHz, 435.1 MHz, 2304.1 MHz

Emily, W0EEC has created a website to allow the users of AO-7 to record
contacts, observations and use of the satellite more effectively at:
http://www.emilyshouse.com/experthams/ao7/main.php
This includes the ability to log contacts.

Tim, K3TZ has written a program to decode AO-07 telemetry.
The program can be downloaded at:
http://www.qsl.net/k3tz/files/K3TZ_AO-07_Telemetry_Decoder_0.5.zip

For more AO-7 info:
http://www.amsat.org/amsat/sats/n7hpr/ao7.html
[11142004]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: U/V CROSS-BAND REPEATER
Digipeater: Inactive

The current Expedition 12 crew is:
Commander: William McArthur - KC5ACR
Flight Engineer: Valery Tokarev - (no call)

Worldwide packet uplink: 145.990 MHz FM
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM
Doppler Shift is 10 KHz

Russian callsigns: RS0ISS, RZ3DZR
USA callsign: NA1SS
Packet station mailbox callsign: RS0ISS-11
Packet station keyboard callsign: RS0ISS-3
Digipeater callsign: ARISS

The ISS daily crew schedule can be found at:
http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line is
NOT translated from Russian and posted.

More information is available at:
http://www.rac.ca/ariss
http://spaceflight.nasa.gov/station/reference/radio/
http://www.marexmg.org/fileshtml/unprotopage.html
http://www.issfanclub.com
http://oscar.dcarr.org/
[10162005]
NNNN
/EX

SB SAT @ AMSAT <KB9MMC $ANS-303.S2
WSR 303 Part 2 10/30/2005

AMSAT NEWS SERVICE BULLETIN 303.S2 FROM AMSAT HQ
SILVER SPRING, MD, OCTOBER 30, 2005
TO ALL RADIO AMATEURS
BID: $ANS-303.S2

PCSAT2 ?0-??
Catalog Number:
Launch Date: August 1, 2005

Status: Operational

PCSAT2 was installed on the exterior of the International Space Station and was activated on August 3, 2005.

PCSAT2 CAPABILITIES: PCSAT2 is attached to the ISS and so its operations must be in cooperation with the ARISS communications suite to minimize any mutual interference and to coordinate activities. Here are the capabilities of the PCSAT2 and ARISS payloads:

PCSAT SYSTEM A:

435.275 PCSAT2 DOWNLINK 1200 baud packet with uplink on 145.825
435.275 PCSAT2 DOWNLINK Occasional user PSK-31 continuous downlink
145.825 PCSAT2 DOWNLINK 1200 baud packet

PCSAT SYSTEM B:

437.975 PCSAT2 DOWNLINK periodic Solar Cell data and PCSAT2 telemetry at 9600 baud
437.975 PCSAT2 DOWNLINK TNC-B command downlink at 1200 baud
437.975 PCSAT2 DOWNLINK User Voice Repeater with VHF uplink
437.975 PCSAT2 DOWNLINK Packet digipeater with VHF uplink

It looks like PCSAT2 can best contribute at this time by operating in PSK-31 mode for the near future. This is a very exciting new transponder mode which solves the congestion problem on FM repeaters by letting multiple stations all communicate at the same time.

PSK-31 users are welcome to try out the new PCSAT2 PSK-31 transponder on ISS with an uplink on 29.402 +/- 1 KHz and downlink on 435.275 +/- Doppler using FM.

The FM downlink lets everyone operate full duplex and everyone to see the same view of the passband as everyone else. THus you can see exactly
what your signal looks like to everyone else.

Help Wanted:

Here is your chance to become a viable part of the Amateur Satellite Community.

We are looking for a volunteer satellite packet
station in Hawaii that is interested in helping with
telemetry and sat-gating of PCSAT2 and
ARISS packets. Requirements are:

1) General familiarity with packet
2) TNC connected to a cross band radio that
   can RX on UHF and TX on VHF.
3) modest UHF beam and rotator system.

Contact WB4APR for more information.

Packets seen from PCSAT2 can be reviewed at:
http://www.findu.com/cgi-bin/pcsat2.cgi

A screen shot of both the 9600 bps and 1200 bps decoded data
as seen by Simon, 9W2QC, can be seen at:
http://www.9w2qc.net/pcsat2/

More information on PCSAT2 can be found at:
http://web.usna.navy.mil/~bruninga/pcsat2.html

[ANS-WSR thanks Bob, WB4APR and the U.S. Naval Academy Satellite Lab for
the aboveinformation.]

[08282005}
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Mode: PBBS - ON
FM REPEATER - V/U HIGH POWER

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
Analog voice uplink: 145.880 MHz FM
145.920 MHz FM 67Hz PL tone
1268.700 MHz FM 67Hz PL tone

Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast
Protocol (PBP)

Broadcast: PECHO-11
BBS: PECHO-12

[ANS-WSR thanks Mike Kingery, KE4AZN for the above information]
[09252005]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Non-Operational?????

Uplink/downlink: 145.827 MHz 1200 baud AX.25 AFSK via W3ADO-1
Aux/Uplink: 435.250 MHz 9600 baud via PCSAT-2 (off)
APRS Downlink: 144.390 MHz (Region 2)

PCSat is a 1200-baud APRS digipeater designed for use by stations using
hand-held or mobile transceivers. Downlinks feed a central web site at:

http://pcsat.aprs.org

The APRS-equipped PCSat was built by midshipmen from the U.S. Naval Academy under the guidance of Bob Bruninga, WB4APR.
[07242005]

=====

CUTE-1
Catalog number: 27844
Launched: June 30,2003

Status: Operational

Uplink: ?
Downlink: 436.8375 CW
437.4700 1200 FM ax25 or SRLL (ACTIVE only near Japan ?)
Cliff, K7RR reports:
In the latest Weekly Satellite Report, CUTE 1, #27844 is listed as OPERATIONAL?
Indeed it is very operational as a CUBESAT sending CW telemetry on 436.8345 MHz. At the July 7 2005, 23:45:20 pass over the Western USA:
CUTE 1 6B A4 xx 7F D7 66A8 4702 FF FF7C 65
CUTE 1 6C A6 59 80 D9 66A8 4702 FF FE7C B6

The June 30th KEPS were within ten seconds of AOS and LOS. It is an very good object to practice tracking as the orbit and transmitter power are similar to proposed CUBESATS awaiting launch this December. As a check for Doppler correction, the lack of change in tone is an excellent indicator.

CUTE 1 is a Japanese (Tokyo Institute of Technology) one kilogram nanosatellite that was launched by a Rokot rocket from Plesetsk at 14:15 UT on 30 June 2003. It carries a 100 mW beacon at 436.8375 MHz. Initial orbital parameters were period 101.4 min, apogee 831 km, perigee 819 km, and inclination 98.7?.

For further info about CUTE-1 goto:
http://lss.mes.titech.ac.jp/ssp/cubesat/operation/Schedule_e.html

[ANS WSR wishes to thank Cliff, K7RR, for this week's information]
[07242005]

=====

GO-32 TECHSAT-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Downlink: 435.225 MHz FM (9600-baud FSK)
(435.325 n/a - temperature problems)
Uplinks: 145.850, 145.890, 145.930 FM
1269.700, 1269.800, 1269.900 FM
Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[03132005]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Operational

Uplink: 145.850 or 145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz
Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial land and weather imaging payloads offers FM and FSK
Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as
a collaborative effort between the Malaysian government and Surrey
Satellite Technology Ltd.
[05152005]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Semi-operational, the digipeater command is on and open for
APRS users.

Uplink: 145.90 145.92 145.94 145.96 MHz FM
                     (using 1200-baud Manchester FSK)
Downlink: 437.026 MHz SSB (1200-baud PSK)
Mode-S Beacon: 2401.1428 MHz
Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

A WOD collection of current graphics along with general information
and telemetry samples can be found at:
http://www.telecable.es/personales/ea1bcu
[05092004]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational?

Telemetry Downlink: 145.826 MHz. FM (1200-baud AFSK).
                    approx. 10 days ON, 10 days OFF
Mode-S Beacon: 2401.500 MHz. ... OFF

UHFBeacon: 435.025 MHz. ... OFF

During the period 24 September to 25 October 2005 the VHF beacon on 145.826MHz resumed transmissions, as expected, on 30 September, sometime between 06:05 and 06:42 UTC passes. Reasonable signals were also captured on the 17:44 pass, later that day. However by the 16:49 UTC pass on 02 October, the beacon had switched OFF. Transmissions resumed on 21 October, and should continue until around 31 October.

The on-board clock continues to show a very large error. Currently it is 19.2394 days slow, having lost six hours while the beacon was last OFF, ie. between 02 October and 21 October. When the beacon is ON, the clock is stable to within a few seconds.

All the analogue telemetry channels, 0 to 59 are zero, ie they have failed. The status channels 60 to 67 are still working.

The eclipses have now ended, and the satellite should be in continuous sunlight for the remainder of this year, and well into next year. This should help the satellite to continue transmitting, although continuous sunlight can cause problems due to excessive temperatures.

The watchdog timer appears to be operating on the 20 day cycle, ie. approximately ten days ON followed by 10 days OFF. It appears to be uneffected by problems of the on-board clock. However, poor solar attitude, and battery problems, may be combining to produce a low line voltage. This causes the beacon to switch OFF premeaturely, and resets the watchdog timer cycle.

The Beacon frequencies are -
VHF 145.826 MHz. AFSK FM ASCII Telemetry
UHF 435.025 MHz. OFF
S-band 2401.5 MHz. OFF

Listeners to OSCAR-11 may be interested in visiting my website which contains an archive of news & telemetry data. It also contains details about using a soundcard or hardware demodulators for data capture. There is software for capturing data, and decoding ASCII telemetry. The URL is
www.users.zetnet.co.uk/clivew/

If you place this bulletin on a terrestrial packet network, please use the bulletin identifier $BID:U2RPT114.CWV, to prevent duplication.

[ANS thanks Clive G3CWV for the above information]

More information on UO-11 OSCAR-11 can be found at:
http://www.users.zetnet.co.uk/clivew/

MPEG3 files can be found here at Mineo, JE9PEL website:
http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm

[10302005]

NNNN
/EX

SB SAT @ AMSAT <KB9MMC $ANS-303.S3
WSR 303 Part 3 10/30/2005

AMSAT NEWS SERVICE BULLETIN 303.S3 FROM AMSAT HQ
SILVER SPRING, MD, OCTOBER 30, 2005
TO ALL RADIO AMATEURS
BID: $ANS-303.S3

THE FOLLOWING ARE IN ORBIT BUT ARE
NON-OPERATIONAL AT THIS TIME:

POSAT-1 PO-28
Catalog Number: 22829
Launched : September 25, 1993

Status: Operational - Not open for Amatuer use

```
Downlink: 435.250 MHz
          435.275 MHz

Uplink:   145.925 MHz
          145.975 MHz
```

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

PO-28 (POSAT-1), Portugal's first satellite, launched 12 years ago, will be turned over to Amateur Radio use in the very near future. That was the word July 30 from AMSAT-UK Secretary Jim Heck, G3WGM, during the AMSAT-UK International Space Colloquium in Guildford, England.

Launched September 25, 1993, the satellite operated as a packet store-and-forward BBS (9600 baud FM FSK) on Amateur Radio frequencies for several weeks in early 1994. Over the years, PO-28's primary usage has been commercial, although plans have called for eventually shifting its operation to ham radio use. G3WGM reports that following lengthy negotiations it has been agreed that the satellite can be switched permanently to amateur frequencies. The changeover is expected to take a couple of weeks.

The Portuguese satellite was built at the University of Surrey as part of a collaborative satellite technology program that involved industry and academe. Uplink frequencies will be 145.925 and 145.975 MHz. Downlink frequencies will be 435.250 and 435.275 MHz. More information on PO-28 is on the AMSAT Web site http://www.amsat.org/amsat/sats/n7hpr/po28.html.

Uplink Frequencies: 145.925 and 145.975 MHz
Downlink Frequencies: 435.250 and 435.275 MHz

Orbit: 822 x 800 km, 98.6 deg inclined, sun-synchronous.

Transponder capabilities include FM repeater and 38k4 data. If you want to hear how loud this satellite is, listen on 429.950 until the change back to amateur radio service.

Keplerian elements for PO-28 are not currently contained in the AMSAT keps bulletins, but can be found at Celestrak in amateur.txt using the name "POSAT". Users of Space Track should query the NORAD Satellite ID number 22829. The name listed by Space Track is "EYESAT A".

More information of POSAT-1 can be found at:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
http://www.amsat.org/amsat/sats/n7hpr/po28.html
[ANS-WSR wishes to thanks Trevor, M5AKA and Jim, G3WGM, for this week's information.]
[08072005]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launched: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB
Beacon: 145.810 MHz (unmodulated carrier)

AO-10 has been locked into a Mode-B, 70-cm uplink and 2-meter downlink for several years.

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: Non-operational

Uplink: 145.875 145.900 145.925 145.950 MHz FM (1200-baud)
Downlink: 435.812 MHz SSB
Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Alberto E. Zagni - I2KBD reports on 02/13/05
The spacecraft is in MBL (safe mode) and is trasmitting just 6 channels of telemetry. Temperatures and voltage are nominal, but there seems to be a problem with the onboard receiver, refusing to accept commands.
The spacecraft was launched in 1993, thus nearing 12 years in orbit...

Best regards
Alberto E. Zagni - I2KBD

ITAMSAT Mission Director

More information of IO-26 can be found at:

http://joshua.micronet.it/english/itamsat/itamsathome.html
http://www.amsat.org/amsat/sats/n7hpr/io26.html
www.itamsat.org

[02132005]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB
Beacon: 29.408 MHz
Robot: 29.454 MHz
[05232004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB
Beacon: 145.860 MHz
Robot: 145.908 MHz
[05232004]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink 145.975 MHz FM
Downlink 435.070 MHz FM
[05092004]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink: 145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM
Broadcast Callsign: UOSAT5-11

```
BBS:                UOSAT5-12
[01092005]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational?

Uplink:      145.858 to 145.898 MHz CW/USB
Downlink:     29.354 to  29.394 MHz CW/USB
Beacon:       29.352 MHz (intermittent)
SSB meeting frequency:  29.380 MHz (unofficial)

John, KD6PAG reports on June 16, 2004 to ANS:
RS-15 beacon seemed to be back in the mode where it's a tone about 5
seconds off and then 5 seconds on this morning.

ANS is looking for more confirmations of RS-15 coming back.

[ANS thanks John, KD6PAG for RS-15 information]
[06202004]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplink:             145.84 145.86 145.88 145.90 MHz FM
                    (using 1200-baud Manchester FSK)
CW downlink:        437.125 MHz
Digital downlink:   437.150 MHz SSB (RC-BPSK 1200-baud PSK)
Broadcast Callsign: LUSAT-11
BBS:                LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[05232004]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Uplink:     145.90 to 146.00 MHz CW/LSB
Downlink:   435.80 to 435.90 MHz CW/USB
Beacon:     435.795

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[08152004]
```

=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM
Broadcast Callsign: HL01-11
BBS: HL01-12

Jim, AA7KC, reports that KO-23's downlink transmitter continues in a non-operational status.
[05092004]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM (9600-baud FSK)
Downlink: 436.500 MHz FM
Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink frequency (listed on the PanSat web site) 436.500 MHz

The satellite is not available for general uplink transmissions.

The Naval Postgraduate School developed PanSat. At the time of launch, PanSat spread-spectrum digital transponders were to be available to Amateur Radio operators along with software to utilize this technology.

The satellite is still operating, however, the spread spectrum packet radio portion never took place. The spacecraft is now beyond it's initial 2-year mission life, but telemetry records are still being downloaded.

For more information, visit the official PanSat web site at:
http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1

```
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm

[ANS has no further information]
[05232004]
=====
SO-35 SUNSAT
Catalog Number:     ?
Launched:February 23, 1999

STatus: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
          Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
         Mode J Digipeater: 145.825 MHz and 145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[08082004]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink:             145.960 MHz (9600-baud FSK)
Downlink:           437.025 MHz 437.400 MHz
Broadcast Callsign: UO121-11
BBS:                UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA
web site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[05092004]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational
```

```
Uplink      V-band    145.840 -  145.990 MHz CW/LSB
            U-band    435.550 -  435.800 MHz CW/LSB
           L1-band   1269.250 - 1269.500 MHz CW/LSB
           L2-band   1268.325 - 1268.575 MHz CW/LSB
           S1-band   2400.350 - 2400.600 MHz CW/LSB
Downlink:  S2-band   2401.225 - 2401.475 MHz CW/USB
           K-band 24,048.010 - 24,048.060 MHz CW/USB
Beacon:    2401.323, 24,048.035
[05232004]
-----
SO-42  SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational
 Downlink:           437.075 MHz
Broadcast Callsign: SASAT2-11
BBS:                SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[08152004]
=====
SO-41  SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink:             145.850 MHz
Downlink:           436.775 MHz
Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[08152004]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink:   145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is  welcome to use the digipeating/APRS features of Sapphire,
callsign KE6QMD, as per the user service agreement located at the
following
URL:
```

http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Semi-operational.

Uplink 435.275 1200-baud AFSK
Downlink 145.825 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

AO-49 (SAFIR-M) is a German amateur radio payload onboard the small German
scientific satellite "RUBIN-2".

AO-49 was built by the German amateur radio association "AATiS e.V." (German acronym for "Arbeitskreis Amateurfunk und Telekommunikation in der Schule", which means: 'working group for amateur radio anand telecommunications in schools'). AO-49 is designed as a "store and broadcast" system for APRS based messages, dedicated for the use of schools in combination with the existing WX-Net and planned buoy experiments in Germany.

No transmissions detected since the 1st of February 2003! It appears AO-49 is not properly aligned to illuminate the solar panels. This should end soon. Due to its orbit, AO-49 will be in a phase without eclipses until 13Feb03.

Martin DG8UAU has written a small software program "SAFIR-M Decoder" to allow decoding of the received DATA0 frames. It is available at:
http://amend.gmxhome.de in the section Aktuelles.

Details on AO-49 (SAFIR-M) can be found at:
http://amend.gmxhome.de

Information about AATiS e.V. is available at:
http://www.aatis.de
[05092004]
NNNN
/EX

SB SAT @ AMSAT <KB9MMC $ANS-303.S4
WSR 303 Part 4 10/30/2005

AMSAT NEWS SERVICE BULLETIN 303.S4 FROM AMSAT HQ
SILVER SPRING, MD, OCTOBER 30,2005
TO ALL RADIO AMATEURS
BID: $ANS-303.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE

PROPOSED FOR LAUNCH AT THIS TIME:

UCISAT ?O-??
Catalog number:
Proposed Launch Date: October 31, 2005

Status: Under Construction

Downlink: Submission in Progress
Uplink: Submission in Progress
Callsign: Submission in Progress

This from Matt Bennett, KF6RTB, UCISAT Communications Team Member:

Our website is www.ucisat.net .This is a new website, however, and doesn't have the "Status" section active yet. Because of the growing interest in our project, I'll push our webmaster to create updates (hopefully) on a week-to-week basis. For now, the current status of the mission is as follows:

-Expected Launch Date: October 31st, 2005
-Frequency Allocation: Submission in Progress
-Construction Status: Sub-Assembly
[WSR to thank Matt Bennett, KF6RTB, for this week's report.]
[01302005]
=====
SSETI ?O-??
Catalog Number:
Launch Date: October 27, 2005

Status: ????

The SSETI Express satellite launched at 06:52 UTC on Thursday, 27 October 2005 on board a Kosmos 3M launcher. One hundred and three minutes later, exactly on schedule, the first signals were heard form the groundstation in Aalborg, and two-way communication was established. In addition to several successful communication sessions with SSETI Express, two of the Cubesat passengers, UWE-1 and Xi-V, have been heard by their groundstations.

An official release from ESA stated, "22:20 CEST SSETI Express went into a safe mode due to an undervoltage caused by battery charging problems. The operations team is working actively to resume nominal operations of the satellite and is receiving tremendous help in the process from the amateur radio community. At the time of the anomaly many mission milestones had already successfully
been met."

Graham, UA/G3VZV reports, "that it seems that no reliable reports of any signals have been received and the teams are reviewing all the telemetry already received to fully understand what is happening on board.Initial review suggests that there is a significant chance that the power supply problem may correct itself." Graham also advises that the command station in Aalborg is planning to try to try a blind command of the satellite into S band on mode - maybe on a Sunday am pass at 10:30 UTC.

As the statement above makes clear, ESA and the SSETI Association greatly value the input that amateur operators are providing and would ask amateurs around the world to continue to check for signals on 437.250MHz at the appropriate pass times. These signals may be short bursts of 9k6 data every 18 secs or bursts of pulse telemetry every 30 secs. Please understand that the pulse beacon decoder can produce spurious results on plain noise if over driven!

Anyone hearing anything that matches the above detail is requested to please email details to missioncontrol@sseti.org

The type of the first transmissions will depend on the state of the battery.

In Nominal mode - a sub 1 second burst of AX25 9k6 FSK telemetry every 18 seconds on the downlink frequency of 437.250 MHz.

In Recovery or Safe mode - simple on/off telemetry comprising 16 x 100 msec carrier pulses. This telemetry is repeated every 30 seconds in Safe Mode and every 2 minutes when in Recovery Mode.

The satellite will transmit at a power of 3 watts.

A daily report of the launch campaign is being maintained at http://sseti.gte.tuwien.ac.at/express/mop/index.php?uri=news.html This mission operations site is completely up-to-date regarding Kepler TLEs and other LEOP "Launch and Early Operations Phase" details.

The SERACC software, needed to decode and submit the received data to the SSETI database, together with some audio files containing recorded 9k6 signals to experiment with is also now available

The ESA website about SSETI Express is at:
http://www.esa.int/SPECIALS/sseti_express/SEMARJ7X9DE_0.html

The latest version of the SSETI Express handbook can be downloaded free of charge from the AMSAT-UK website at:
http://www.uk.amsat.org/

[ANS thanks Graham, UA/G3VZV and Trevor, M5AKA for the above]

More SSETI Links at:

SpaceDaily has a report about SSETI at:
http://www.spacedaily.com/news/internet-04zzzu.html

You can find more info about SSETI at:
http://sseti.gte.tuwien.ac.at/WSW4/

Latest news about SSETI can be found at:

http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php

Look at the website for the SSETI Express webcam
http://sseti.gte.tuwien.ac.at/WSW4/webcam.htm

[10302005]
=====
PHASE 3E ?O-??
Catalog Number:
Proposed Launch Date: Early 2006

Status: Under Construction

For the latest project status update please visit the AMSAT-DL
P3-E web page:
http://www.amsat-dl.org/p3e/

[ANS-WSR wishes to thank William Leijenaar, PE1RAH for this week's report]
[10022005]
=====
CP1 ?o-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: N6CP
Proposed Transmit Frequency: 436.845
[03272005]
=====
CP2 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.325
[03272005]
=====
HAUSAT1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: D90HP
Proposed Transmit Frequency: 437.465
[03272005]
=====
ICE Cube 1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: W2CXM
Proposed Transmit Frequency: 437.305
[03272005]
=====

```
ICE Cube 2 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: N2VR
Proposed Transmit Frequency: 437.425
[03272005]
=====
ION ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.505
[03272005]
=====
KUTEsat ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: KC0RMW
Proposed Transmit Frequency: 437.385
[03272005]
=====
MEROPE ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: K7MSU-1
Proposed Transmit Frequency: 145.980
[03272005]
=====
nCUBE1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
       2407.25
[03272005]
=====
RINCON ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
        437.345
[03272005]
=====
SACRED ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005
```

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
[03272005]
=====
SACRED ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
[03272005]
=====
SEEDS ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: JQ1YGU
Proposed Transmit Frequency: 437.485
[03272005]
=====
Mea Huaka ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.405
[03272005]
=====
SUITSAT ?O-??
Catalog Number:
Proposed Release Date: December 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: TBA

A video of the progress of Suitsat can be found at the following URL:
http://www.amsat.org/amsat-new/information/videoNews.php

To be released from an airlock of the International Space Station some time in December of 2005.
[10022005]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:

http://www.amsat.org

AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
        888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/amsat/listserv/menu.html

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satelite Report Editor is James K. Darrow, KB9MMC.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

```
From -3130802917199115624
X-Google-Thread: 10e8ad,8f93248353139687
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news4.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!newscon06.news.prodigy.com!prodigy.net!
newsmst01b.news.prodigy.com!prodigy.com!postmaster.news.prodigy.com!
newssvr11.news.prodigy.com.POSTED!fc0acf9d!not-for-mail
```

```
From: "Falky foo" <falkyfoo@bonksbcglobal.net>
Newsgroups: rec.radio.amateur.space
References: <h0paf.4332$m81.1483@newsread1.news.atl.earthlink.net>
Subject: Re: WSR-303 AMSAT Weekly Satellite Report
Lines: 16
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1478
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1478
Message-ID: <7lvaf.8016$D13.7327@newssvr11.news.prodigy.com>
NNTP-Posting-Host: 69.224.122.159
X-Complaints-To: abuse@prodigy.net
X-Trace: newssvr11.news.prodigy.com 1131053507 ST000 69.224.122.159 (Thu, 03 Nov
2005 16:31:47 EST)
NNTP-Posting-Date: Thu, 03 Nov 2005 16:31:47 EST
Organization: SBC http://yahoo.sbc.com
X-UserInfo1:
[[PA@SRDTBUERZ\XAZHD]_\@VR]^@B@MCPWZKB]MPXHJUZ]CDVW[AKK[J\]^HVKHG^EWZHBLO^[\NH_AZF
WGN^\DHNVMX_DHHX[FSQKBOTS@@BP^]C@RHS_AGDDC[AJM_T[GZNRNZAY]GNCPBDYKOLK^_CZFWPGHZIXW
@C[AFKBBQS@E@DAZ]VDFUNTQQ]FN
Date: Thu, 03 Nov 2005 21:31:47 GMT
Xref: g2news1.google.com rec.radio.amateur.space:277

I'd like to show you my satellite JoAnne



"JoAnne Maenpaa" <wb9jej_no-spam@earthlink.net> wrote in message
news:h0paf.4332$m81.1483@newsread1.news.atl.earthlink.net...
> This report is organized into 4 parts.
> Part 1 - operational analog amateur satellites.
> Part 2 - operational digital amateur satellites.
> Part 3 - non - operational satellites
> Part 4 - proposed satellites
>
> SB SAT @ AMSAT <KB9MMC $ANS-303.S1
> WSR 303 Part 1 10/30/2005





From 3517871688939016953
X-Google-Thread: 10e8ad,8f93248353139687
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news4.google.com!border1.nntp.dca.giganews.com!
border2.nntp.dca.giganews.com!nntp.giganews.com!elnk-atl-nf1!
newsfeed.earthlink.net!news-feed-01.tampabay.rr.com!news.rr.com!news-
post.tampabay.rr.com!tornado.tampabay.rr.com.POSTED!53ab2750!not-for-mail
From: **THE-RFI-EMI-GUY** <rhyolite@nettally.com>
User-Agent: Mozilla/5.0 (Windows; U; Win98; en-US; rv:1.7.2) Gecko/20040803
X-Accept-Language: en-us, en
MIME-Version: 1.0
```

Newsgroups: rec.radio.amateur.space
Subject: Re: WSR-303 AMSAT Weekly Satellite Report
References: <h0paf.4332$m81.1483@newsread1.news.atl.earthlink.net>
<7lvaf.8016$D13.7327@newssvr11.news.prodigy.com>
In-Reply-To: <7lvaf.8016$D13.7327@newssvr11.news.prodigy.com>
Content-Type: text/plain; charset=us-ascii; format=flowed
Content-Transfer-Encoding: 7bit
Lines: 32
Message-ID: <MYAaf.183577$xl6.163515@tornado.tampabay.rr.com>
Date: Fri, 04 Nov 2005 03:55:24 GMT
NNTP-Posting-Host: 65.33.238.179
X-Complaints-To: abuse@rr.com
X-Trace: tornado.tampabay.rr.com 1131076524 65.33.238.179 (Thu, 03 Nov 2005 22:55:24 EST)
NNTP-Posting-Date: Thu, 03 Nov 2005 22:55:24 EST
Organization: Road Runner High Speed Online http://www.rr.com
Xref: g2news1.google.com rec.radio.amateur.space:278

It looks real tiny from here!

Falky foo wrote:

>I'd like to show you my satellite JoAnne
>
>
>
>"JoAnne Maenpaa" <wb9jej_no-spam@earthlink.net> wrote in message
>news:h0paf.4332$m81.1483@newsread1.news.atl.earthlink.net...
>
>
>>This report is organized into 4 parts.
>>Part 1 - operational analog amateur satellites.
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>>
>>SB SAT @ AMSAT <KB9MMC $ANS-303.S1
>>WSR 303 Part 1 10/30/2005
>>
>>
>
>
>
>

--
Joe Leikhim K4SAT
"The RFI-EMI-GUY"

"All Righty Then"

From 3755775296979985932

```
X-Google-Thread: 10e8ad,8f93248353139687
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news3.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!newscon06.news.prodigy.com!prodigy.net!
newsmst01b.news.prodigy.com!prodigy.com!postmaster.news.prodigy.com!
newssvr21.news.prodigy.com.POSTED!fc0acf9d!not-for-mail
From: "Falky foo" <falkyfoo@bonksbcglobal.net>
Newsgroups: rec.radio.amateur.space
References: <h0paf.4332$m81.1483@newsread1.news.atl.earthlink.net>
<7lvaf.8016$D13.7327@newssvr11.news.prodigy.com>
<MYAaf.183577$xl6.163515@tornado.tampabay.rr.com>
Subject: Re: WSR-303 AMSAT Weekly Satellite Report
Lines: 39
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1478
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1478
Message-ID: <j9Vaf.9687$7h7.5929@newssvr21.news.prodigy.com>
NNTP-Posting-Host: 69.224.122.159
X-Complaints-To: abuse@prodigy.net
X-Trace: newssvr21.news.prodigy.com 1131159247 ST000 69.224.122.159 (Fri, 04 Nov
2005 21:54:07 EST)
NNTP-Posting-Date: Fri, 04 Nov 2005 21:54:07 EST
Organization: SBC http://yahoo.sbc.com
X-UserInfo1:
O@ZQBXKDLJUMRQH]]RKB_UDAZZ\DPCPDLXUNNHLHEQR@ETUCCNSKQFCY@TXDX_WHSVB]ZEJLSNY\^J[CUV
SA_QLFC^RQHUPH[P[NRWCCMLSNPOD_ESALHUK@TDFUZHBLJ\XGKL^NXA\EVHSP[D_C^B_^JCX^W]CHBAX]
POG@SSAZQ\LE[DCNMUPG_VSC@VJM
Date: Sat, 05 Nov 2005 02:54:07 GMT
Xref: g2news1.google.com rec.radio.amateur.space:280

just wait for the perigee


"**THE-RFI-EMI-GUY**" <rhyolite@nettally.com> wrote in message
news:MYAaf.183577$xl6.163515@tornado.tampabay.rr.com...
> It looks real tiny from here!
>
> Falky foo wrote:
>
> >I'd like to show you my satellite JoAnne
> >
> >
> >
> >"JoAnne Maenpaa" <wb9jej_no-spam@earthlink.net> wrote in message
> >news:h0paf.4332$m81.1483@newsread1.news.atl.earthlink.net...
> >
> >
> >>This report is organized into 4 parts.
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> >>Part 2 - operational digital amateur satellites.
> >>Part 3 - non - operational satellites
> >>Part 4 - proposed satellites
> >>
> >>SB SAT @ AMSAT <KB9MMC $ANS-303.S1
> >>WSR 303 Part 1 10/30/2005
> >>
> >>
> >
> >
> >
> >
>
> --
> Joe Leikhim K4SAT
> "The RFI-EMI-GUY"
>
> "All Righty Then"
```

```
From 4250088337289674688
X-Google-Thread: 10e8ad,3f829f26fcc758a0,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news3.google.com!border1.nntp.dca.giganews.com!
border2.nntp.dca.giganews.com!nntp.giganews.com!elnk-atl-nf1!
newsfeed.earthlink.net!stamper.news.atl.earthlink.net!
newsread1.news.atl.earthlink.net.POSTED!46041641!not-for-mail
From: "JoAnne Maenpaa" <wb9jej_no-spam@earthlink.net>
Newsgroups: rec.radio.amateur.space
Subject: ANS-310 AMSAT Weekly News Service Bulletin
Lines: 329
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <mmKbf.5992$m81.656@newsread1.news.atl.earthlink.net>
Date: Mon, 07 Nov 2005 15:26:10 GMT
NNTP-Posting-Host: 66.167.223.104
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread1.news.atl.earthlink.net 1131377170 66.167.223.104 (Mon, 07 Nov
2005 07:26:10 PST)
NNTP-Posting-Date: Mon, 07 Nov 2005 07:26:10 PST
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news1.google.com rec.radio.amateur.space:281
```

AMSAT NEWS SERVICE
ANS-310

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating

through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* SSETI Express Status
* AMSAT Journal Submissions
* Five Years of Ham Radio on the ISS
* AMSAT Store
* AO-51 New Schedule
* ARISS Status - 31 October 2005
* Suitsat Info available at AMSAT.ORG

SB SAT @ AMSAT $ANS-310.01
SSETI Express Status

AMSAT News Service Bulletin 310.01
From AMSAT HQ SILVER SPRING, MD.
November 6, 2005
To All RADIO AMATEURS
BID: $ANS-310.01

On Thursday, October 27, at 22:20 CEST SSETI Express went into a safe mode due to an undervoltage caused by battery charging problems. The operations team is working actively to resume nominal operations of the satellite and isreceiving tremendous help in the process from the amateur radio community.
At the time of the anomaly many mission milestones had already successfully been met.

Careful analysis of the data received, coupled with ground-based computer simulations and hardware tests, strongly support the proposed theory of a specific component failure in the excess power dissipation system.

Ground-based hardware tests confirm the possibility of a further failure mode of the specific component, which would allow the batteries to charge and the spacecraft to operate once again.

Testing is ongoing to ascertain the specific likelihood of this, and to investigate other possible alternative explanations.

Given that the spacecraft is currently inoperable, the mission cannot continue as planned. It is therefore on indefinite "standby", pending the technical possibility of re-activation of the spacecraft.

The team remain hopeful and vigilant. The primary groundstation and mission control centre are being configured for autonomous monitoring of the spacecraft, such that if it reactivates the team will be immediately alerted and ready to resume the mission.

The educational goals of the mission continue to be met daily as we try to analyse and understand the events since the launch.

Neil Melville - Project Manager

[ANS thanks Neil Melville of the SSETI Project Team for the above information]

/EX

SB SAT @ AMSAT $ANS-310.02
AMSAT Journal submission

AMSAT News Service Bulletin 310.02
From AMSAT HQ SILVER SPRING, MD.
November 6, 2005
To All RADIO AMATEURS
BID: $ANS-310.02

Everyone,

Ed Long is appealing for articles for the next AMSAT Journal issue. The Sep/Oct issue has been at the printer for a while now and I'm working on the Nov/Dec issue.

If you have something to contribute, hints and kinks, antenna you have found that actually works, how to build a satellite feed etc. or even an experience on one of the birds please submit it to Ed no later than Monday, November 21. That is slightly less than 3 weeks away. If you have something you would like to contribute, contact Ed and let him know that you're working on something.

Thanks for all your support of the Journal and get busy!!!

[ANS thanks Ed, WA4SWJ for the above information]

/EX

SB SAT @ AMSAT $ANS-310.03
Five Years of Ham Radio on the ISS

AMSAT News Service Bulletin 310.03
From AMSAT HQ SILVER SPRING, MD.
November 6, 2005
To All RADIO AMATEURS
BID: $ANS-310.03

==>HAM RADIO HAS ROLE IN FIVE YEARS OF CONTINUOUS ISS HUMAN HABITATION

Five years ago this week, the International Space Station Expedition 1 crew of US astronaut and Expedition 1 Commander William "Shep" Shepherd, KD5GSL, and Russian cosmonauts Yuri Gidzenko and Sergei Krikalev, U5MIR, became the first humans to inhabit the ISS on a long-term basis. Bill McArthur, KC5ACR, who commands Expedition 12, the current ISS crew increment, took note of the occasion when he spoke with reporters this week.

"We've done things that were just inconceivable 50 years ago," McArthur said. "I think that we have demonstrated that human beings can live and work in space, and, given the will, we can return to the moon not just to visit but to stay there permanently and in not-too-distant future, send people to Mars."

Bill Gerstenmaier, NASA's associate administrator for space operations, called the five-year milestone the first leg of a much longer journey "The experiences we're having on station with crews on long-duration missions are teaching us what it will take to send astronauts on longer missions to the moon and into the solar system," he said.

It was on October 31, 2000, that a Russian Soyuz transporter carrying the ISS space pioneers blasted off from Baikonur Cosmodrome in Kazakhstan and docked with the ISS November 2. At the time, Shepherd was only the second US astronaut to go into space aboard a Russian launch vehicle. Krikalev went on to serve as commander of the ISS Expedition 11 crew.

Each of the 12 crews that have lived on the ISS to conduct assembly and research activities has included at least one US radio amateur. McArthur just this week completed the 200th successful Amateur Radio on the International Space Station (ARISS) school group contact. Crews also have gone on the air to participate in such events as ARRL Field Day and scouting's Jamboree On The Air (JOTA) as well as to make casual QSOs. The Expedition 12 crew of McArthur and Russian cosmonaut Valery Tokarev will remain on the ISS until next April.

The initial ARISS gear already was aboard the space station by the time the first crew arrived. The Expedition 1 team installed and activated the VHF gear on FM voice and packet under the US call sign NA1SS and the Russian call sign RS0ISS.

In late 2003, the ARISS program attained another milestone with the installation and checkout of the Phase 2 Amateur Radio gear. A Kenwood TM-D700E transceiver is at the heart of the Phase 2 station, located in the ISS Zvezda Service Module--the crew's living quarters. Crew members now routinely use the Phase 2 station to conduct ARISS school group contacts.
ARISS is looking forward to activation of a Yaesu FT-100 HF/VHF/UHF transceiver and a slow-scan television (SSTV) system in the near future.

NASA has been marking the fifth anniversary of continuous ISS human occupancy with special activities and has set up a special Web site <http://www.nasa.gov/mission_pages/station/main/5_year_anniversary.html>.

The largest and most complex spacecraft ever built, the ISS is the result of a 16-nation partnership led by the US. More ISS information and photos are on NASA's Space Station page.

ARISS is an international educational outreach with US participation by ARRL, AMSAT and NASA.--some information from NASA

[ANS thanks the ARRL Letter Vol. 24 No. 43 for the above information]

/EX

SB SAT @ AMSAT $ANS-310.04
AMSAT Store

AMSAT News Service Bulletin 310.04
From AMSAT HQ SILVER SPRING, MD.
November 6, 2005
To All RADIO AMATEURS
BID: $ANS-310.04

The AMSAT store is open for business and is a great place to get AMSAT publications to learn more about a particular mode or satellite. There are items for sale for you to "show the colors" at your local club meeting. A perfect way to ensure your next idea of what satellite is put into orbit is to donate to a particular fund for it. You can even watch the fund grow into a sufficient launch campaign.

[ANS thanks Bruce, KK5DO, AMSAT Store Manager, for the above information]

/EX

SB SAT @ AMSAT $ANS-310.05
AO-51 Schedule

AMSAT News Service Bulletin 310.05
From AMSAT HQ SILVER SPRING, MD.
November 6, 2005
To All RADIO AMATEURS
BID: $ANS-310.05

The new schedule for AO-51 is posted on the AMSAT web site. It has a very interesting mode of ops coming up that you might find interesting - a VHF USB uplink Mode. The versatile satellite is proving that the planning before launch is paying off.

[ANS thanks Kyle Yoksh, K0KN for the above information]

/EX

SB SAT @ AMSAT $ANS-310.06
ARISS Status - 31 October 2005

AMSAT News Service Bulletin 310.06
From AMSAT HQ SILVER SPRING, MD.
November 6, 2005
To All RADIO AMATEURS
BID: $ANS-310.06
ARISS Status
October 31, 2005

1. Tomioka Elementary School Contact Successful

On October 24, Tomioka Elementary School of Urayasu in Urayasu City, Chiba, Japan had a successful contact with Bill McArthur, KC5ACR. Fourteen students asked one question each of the astronaut. Approximately 650 students, parents, teachers and other interested parties were present for the contact, as two television stations and ten newspapers covered the event. Audio and video of the contact are available on ARISS member Satoshi Yasuda's website. See:
http://jk1zrw.dyndns.org/tomioka.html.en

2. Upcoming School Contacts

Kawachi Citizen's Committee for Youth in Miyoshi, Hiroshima, Japan has been approved for a direct contact on Thursday, November 3 at 07:44 UTC.

A contact for Istituto Comprensivo F. Negri in Casale Monferrato, Italy, has been scheduled for a contact on Wednesday, November 9 at 10:28 UTC via the telebridge station WH6PN in Hawaii.

Furtherwick Park School in Canvey Island, Essex, United Kingdom, has been approved for an ARISS contact. It is scheduled for Wednesday, November 9, 2005 at 17:45 UTC, and will be direct via GB2FPS.

3. ARRL Article on Tomioka Contact

ARRL covered the Tomioka Elementary School contact in the article, "New ISS Commander Delights Japanese Youngsters via Ham Radio." See:
http://www.arrl.org/news/stories/2005/10/27/4/?nc=1

4. Astronaut Training

Astronauts Nicole Stott and Garrett Reisman wrapped up their amateur radio license training sessions on Wednesday, October 26.

5. Expedition 11 Crew Debrief

The U.S. debrief session with Expedition 11 crew member John Phillips, KE5DRY, is tentatively scheduled for Tuesday, November 8 at 4:00 pm ET.

6. NASA Night Article

Pine Ridge Middle School, located in Naples, Florida, held a "NASA Night" on September 27 to educate parents, teachers and students about NASA programs. The Southgate Amateur Radio Club set up an amateur radio station at the school so that children could speak with and ask questions of NASA employees. An article covering the event has been posted to the club's website. See:
http://www.southgatearc.org/news/october2005/nasa_night.htm

7. SuitSat Status

Progress 19P was launched on September 8, carrying the SuitSat hardware. The Russian EVA to deploy SuitSat has been tentatively scheduled for December 8, 2005.

[ANS thanks Carol, KB3LKI for the above information]

/EX

SB SAT @ AMSAT $ANS-310.07
SuitSat Info Available on AMSAT.ORG Web

AMSAT News Service Bulletin 310.07
From AMSAT HQ SILVER SPRING, MD.
November 6, 2005
To All RADIO AMATEURS
BID: $ANS-310.07

Now is the time to begin preparing your amateur radio station to receive signals from SuitSat, the most unusual Amateur Radio satellite ever orbited. SuitSat amateur radio equipment will be installed inside a surplus Russian Orlan spacesuit. It will become an independently orbiting satellite once it is deployed by the crew of the International Space Station during an extravehicular activity, tentatively planned around December 8, 2005.

Interested amateur radio operators are invited to read the whole story on the web on AMSAT's front page, http://www.amsat.org. Follow the links to see the photos and video of this exciting new opportunity for amateur radio in space.

[ANS thanks the ARISS and SuitSat project teams for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,

Dee Interdonato, NB2F
nb2f at amsat dot org

```
From 8656914012399160573
X-Google-Thread: 10e8ad,f33d5c0932ac94f,start
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X-Google-Language: ENGLISH,ASCII-7-bit
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newsfeed.earthlink.net!stamper.news.atl.earthlink.net!
newsread1.news.atl.earthlink.net.POSTED!46041641!not-for-mail
From: "JoAnne Maenpaa" <wb9jej_no-spam@earthlink.net>
Newsgroups: rec.radio.amateur.space
Subject: WSR-310 AMSAT Weekly Satellite Report
Lines: 1355
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2005 07:26:46 PST)
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Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news1.google.com rec.radio.amateur.space:282
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This report is organized into 4 parts.
Part 1 - operational analog amateur satellites.
Part 2 - operational digital amateur satellites.
Part 3 - non - operational satellites
Part 4 - proposed satellites

SB SAT @ AMSAT <W8ISS $ANS-310.S1
WSR 310 Part 1 11/06/2005

AMSAT NEWS SERVICE BULLETIN 310.S1 FROM AMSAT HQ
SILVER SPRING, MD, November 06, 2005
TO ALL RADIO AMATEURS
BID: $ANS-310.S1

VO-52 HAMSAT
Catalog Number: 28650
Launch Date: May 05,2005

Status: Testing
Current Mode: U/V

Proposed frequencies:

Indian transponder:
Uplink : 435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW
Beacom : 145.940MHz continue carier signal

Dutch transponder:
Uplink : 435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW
Beacon : 145.860MHz 12WPM with CW message
[07242005]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Mode: PBBS - ON
      FM REPEATER - V/U

Analog voice downlink: 435.300 MHz FM
              435.150 MHz FM
Analog voice uplink: 145.880 MHZ FM
              145.920 MHz FM 67Hz PL tone
                       1268.700 MHz FM 67Hz PL tone

Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
                       2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast
          Protocol (PBP)

Broadcast: PECHO-11
BBS: PECHO-12

This from the AO-51 Command team:
6 Nov (Saturday night)
38k4 Digital Downlink, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 435.150 mhz FM, 38k4 PBP Digital

10 Nov (Wed Night)
FM Repeater, V(ssb)/U (Experimental)
Uplink: 145.880 mhz USB
Downlink 435.300 mhz FM

14 Nov
FM Repeater, V/S
Uplink: 145.920 mhz FM, 67hz PL Tone
Downlink 2401.200 mhz FM

21 Nov
FM Repeater, V/U

Uplink: 145.920 mhz FM, 67 hz PL Tone
Downlink 435.300 mhz FM
9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 435.150 mhz FM, 9k6 PBP Digital

5 Dec
FM Repeater, L/U
Uplink: 1268.700 mhz FM
Downlink 435.300 mhz FM

8 Dec (Wed Night)
9k6 Digital, V/U, High Power, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 435.150 mhz FM, 9k6 PBP Digital

12 Dec
FM Repeater, V/S
Uplink: 145.920 mhz FM, No PL Tone
Downlink 2401.200 mhz FM

19 Dec
FM Repeater, V/U
Uplink: 145.920 mhz FM, 67 hz PL Tone
Downlink 435.300 mhz FM
9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 435.150 mhz FM, 9k6 PBP Digital

[ANS-WSR thanks Mike Kingery, KE4AZN for the above information]
[11062005]

=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Uplink: 145.850 MHz (67.0 Hz PL tone) (See below for operating
          procedures)
Downlink: 436.795 MHz

There have been unconfirmed reports on the amsat-bb remailer that SO-50
has shifted downlink frequency as much as 5khz up. This both from
Europe.

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The order of operation is thus: (allow for Doppler as necessary)

1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm
   the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT
   the repeater on and off within the 10 Minute window.

```
3) Sending the 74.4 tone again within the 10 minute window
   will reset the 10 minute timer.
[09122004]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: OPERATIONAL

Voice/CW Mode JA
Uplink:     145.90 to 146.00 MHz CW/LSB
Downlink:   435.80 to 435.90 MHz CW/USB
Beacon:     435.795 MHz

Digital Mode JD
Uplink:     145.850 145.870 145.910 MHz FM
Downlink:   435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign:   8J1JCS
Digitalker: 435.910 MHz

John, N4QWL reports on July 16th, 2005:

Last evening I had a AOS to LOS qso with WI2W. FO-29 came up at 01:17z
here in FM07 and I found WI2W and we chatted until 01:33z. The satellite
was
at 2 degrees elevation when I finally heard him start to crackle a bit.
What
a great QSO! To think that I watched this bird launch back in 1996 and
it
is still working so well is a real thrill. I believe I still have the
video. I might just look for it and watch it again. Boy do I love this
satellite stuff! Look for you all up there.

Please send the reception reports to lab2 'at' jarl.or.jp.
Please use the subject line: 'FO-29 reception report'.

Mineo, JE9PEL, has an FO-29 satellite telemetry analysis program that
will automatically analyze all digital telemetry from the satellite
(such as
current, voltage and temperature). FO29CWTE is available at:
http://www.ne.jp/asahi/hamradio/je9pel/
[ANS-WSR wishes to thanks John, N4QWL for this week's report]
[07172005]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Uplink:     145.850 MHz FM
Downlink:   436.795 MHz FM
```

The latest information on AO-27 from control operator Michael Wyrick,
N3UC (former N4USI), can be found at:
http://www.ao27.org

An AO-27 question-and-answer page is available on the AMSAT-NA web
site, with updates by Ray, W2RS. The URL is:
http://www.amsat.org/amsat/intro/ao27faq.html

[ANS-WSR thanks John, K6YK, for this week's AO-27 report]
[08292004]

=====

AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Semi-operational in sunlight.
Return to active status: June 21,2002

Uplink:	145.850 to 145.950 MHz CW/USB Mode A
	432.125 to 432.175 MHz CW/LSB Mode B
Downlink:	29.400 to 29.500 MHz CW/USB Mode A
	145.975 to 145.925 MHz CW/USB Mode B
Beacon:	29.502 MHz, 145.972 MHz, 435.1 MHz, 2304.1 MHz

Emily, W0EEC has created a website to allow the users of AO-7 to record
contacts, observations and use of the satellite more effectively at:
http://www.emilyshouse.com/experthams/ao7/main.php
This includes the ability to log contacts.

Tim, K3TZ has written a program to decode AO-07 telemetry.
The program can be downloaded at:
http://www.qsl.net/k3tz/files/K3TZ_AO-07_Telemetry_Decoder_0.5.zip

For more AO-7 info:
http://www.amsat.org/amsat/sats/n7hpr/ao7.html
[11142004]

=====

INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: U/V CROSS-BAND REPEATER
Digipeater: Inactive

The current Expedition 12 crew is:
Commander: William McArthur - KC5ACR
Flight Engineer: Valery Tokarev - (no call)

Worldwide packet uplink:	145.990 MHz FM
Region 1 voice uplink:	145.200 MHz FM
Region 2/3 voice uplink:	144.490 MHz FM

Worldwide downlink: 145.800 MHz FM

Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM
Doppler Shift is 10 KHz

Russian callsigns: RS0ISS, RZ3DZR
USA callsign: NA1SS
Packet station mailbox callsign: RS0ISS-11
Packet station keyboard callsign: RS0ISS-3
Digipeater callsign: ARISS

The ISS daily crew schedule can be found at:
http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line is NOT translated from Russian and posted.

More information is available at:
http://www.rac.ca/ariss
http://spaceflight.nasa.gov/station/reference/radio/
http://www.marexmg.org/fileshtml/unprotopage.html
http://www.issfanclub.com
http://oscar.dcarr.org/
[10162005]
NNNN
/EX

SB SAT @ AMSAT <W8ISS $ANS-310.S2
WSR 310 Part 2 11/06/2005

AMSAT NEWS SERVICE BULLETIN 310.S2 FROM AMSAT HQ
SILVER SPRING, MD, November 06, 2005
TO ALL RADIO AMATEURS
BID: $ANS-310.S2

PCSAT2 ?0-??
Catalog Number:
Launch Date: August 1, 2005

Status: Operational

PCSAT2 was installed on the exterior of the International Space Station and was activated on August 3, 2005.

PCSAT2 CAPABILITIES: PCSAT2 is attached to the ISS and so its operations must be in cooperation with the ARISS communications suite to minimize any mutual interference and to coordinate activities. Here are the capabilities of the PCSAT2 and ARISS payloads:

PCSAT SYSTEM A:

435.275 PCSAT2 DOWNLINK 1200 baud packet with uplink on 145.825
435.275 PCSAT2 DOWNLINK Occasional user PSK-31 continuous downlink
145.825 PCSAT2 DOWNLINK 1200 baud packet

PCSAT SYSTEM B:

437.975 PCSAT2 DOWNLINK periodic Solar Cell data and PCSAT2 telemetry at 9600 baud
437.975 PCSAT2 DOWNLINK TNC-B command downlink at 1200 baud
437.975 PCSAT2 DOWNLINK User Voice Repeater with VHF uplink
437.975 PCSAT2 DOWNLINK Packet digipeater with VHF uplink

It looks like PCSAT2 can best contribute at this time by operating in PSK-31 mode for the near future. This is a very exciting new transponder mode which solves the congestion problem on FM repeaters by letting multiple stations all communicate at the same time.

PSK-31 users are welcome to try out the new PCSAT2 PSK-31 transponder on ISS with an uplink on 29.402 +/- 1 KHz and downlink on 435.275 +/- Doppler using FM.

The FM downlink lets everyone operate full duplex and everyone to see the same view of the passband as everyone else. THus you can see exactly
what your signal looks like to everyone else.

Help Wanted:

Here is your chance to become a viable part of the Amateur Satellite Community.

We are looking for a volunteer satellite packet
station in Hawaii that is interested in helping with
telemetry and sat-gating of PCSAT2 and
ARISS packets. Requirements are:

1) General familiarity with packet
2) TNC connected to a cross band radio that
     can RX on UHF and TX on VHF.
3) modest UHF beam and rotator system.

Contact WB4APR for more information.

Packets seen from PCSAT2 can be reviewed at:
http://www.findu.com/cgi-bin/pcsat2.cgi

A screen shot of both the 9600 bps and 1200 bps decoded data
as seen by Simon, 9W2QC, can be seen at:
http://www.9w2qc.net/pcsat2/

More information on PCSAT2 can be found at:
http://web.usna.navy.mil/~bruninga/pcsat2.html

[ANS-WSR thanks Bob, WB4APR and the U.S. Naval Academy Satellite Lab for
the aboveinformation.]

[08282005}
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Mode: PBBS - ON
FM REPEATER - V/U HIGH POWER

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
Analog voice uplink: 145.880 MHz FM
145.920 MHz FM 67Hz PL tone
1268.700 MHz FM 67Hz PL tone

Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast
Protocol (PBP)

Broadcast: PECHO-11
BBS: PECHO-12

This from the AO-51 Command Team:
6 Nov (Saturday night)
38k4 Digital Downlink, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 435.150 mhz FM, 38k4 PBP Digital

10 Nov (Wed Night)
FM Repeater, V(ssb)/U (Experimental)
Uplink: 145.880 mhz USB
Downlink 435.300 mhz FM

14 Nov
FM Repeater, V/S
Uplink: 145.920 mhz FM, 67hz PL Tone
Downlink 2401.200 mhz FM

21 Nov
FM Repeater, V/U
Uplink: 145.920 mhz FM, 67 hz PL Tone
Downlink 435.300 mhz FM
9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 435.150 mhz FM, 9k6 PBP Digital

5 Dec
FM Repeater, L/U

Uplink: 1268.700 mhz FM
Downlink 435.300 mhz FM

8 Dec (Wed Night)
9k6 Digital, V/U, High Power, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 435.150 mhz FM, 9k6 PBP Digital

12 Dec
FM Repeater, V/S
Uplink: 145.920 mhz FM, No PL Tone
Downlink 2401.200 mhz FM

19 Dec
FM Repeater, V/U
Uplink: 145.920 mhz FM, 67 hz PL Tone
Downlink 435.300 mhz FM
9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 435.150 mhz FM, 9k6 PBP Digital
[ANS-WSR thanks Mike Kingery, KE4AZN for the above information]
[09252005]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Non-Operational?????

Uplink/downlink: 145.827 MHz 1200 baud AX.25 AFSK via W3ADO-1
Aux/Uplink: 435.250 MHz 9600 baud via PCSAT-2 (off)
APRS Downlink: 144.390 MHz (Region 2)

PCSat is a 1200-baud APRS digipeater designed for use by stations using
hand-held or mobile transceivers. Downlinks feed a central web site at:
http://pcsat.aprs.org

The APRS-equipped PCSat was built by midshipmen from the U.S. Naval
Academy under the guidance of Bob Bruninga, WB4APR.
[07242005]
=====
CUTE-1
Catalog number: 27844
Launched: June 30,2003

Status: Operational

Uplink: ?
Downlink: 436.8375 CW
              437.4700 1200 FM ax25 or SRLL (ACTIVE only near Japan ?)
Cliff, K7RR reports:
In the latest Weekly Satellite Report, CUTE 1, #27844 is listed as
OPERATIONAL?

Indeed it is very operational as a CUBESAT sending CW telemetry on 436.8345 MHz. At the July 7 2005, 23:45:20 pass over the Western USA:

```
CUTE 1 6B A4 xx 7F D7 66A8 4702 FF FF7C 65
CUTE 1 6C A6 59 80 D9 66A8 4702 FF FE7C B6
```

The June 30th KEPS were within ten seconds of AOS and LOS. It is an very good object to practice tracking as the orbit and transmitter power are similar to proposed CUBESATS awaiting launch this December. As a check for Doppler correction, the lack of change in tone is an excellent indicator.

CUTE 1 is a Japanese (Tokyo Institute of Technology) one kilogram nanosatellite that was launched by a Rokot rocket from Plesetsk at 14:15 UT on 30 June 2003. It carries a 100 mW beacon at 436.8375 MHz. Initial orbital parameters were period 101.4 min, apogee 831 km, perigee 819 km, and inclination 98.7?.

For further info about CUTE-1 goto:
http://lss.mes.titech.ac.jp/ssp/cubesat/operation/Schedule_e.html

[ANS WSR wishes to thank Cliff, K7RR, for this week's information]
[07242005]

=====

GO-32 TECHSAT-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Downlink: 435.225 MHz FM (9600-baud FSK)
                   (435.325 n/a - temperature problems)
Uplinks: 145.850, 145.890, 145.930 FM
                   1269.700, 1269.800, 1269.900 FM
Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[03132005]

=====

MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Operational

Uplink: 145.850 or 145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz
Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK

Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[05152005]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Semi-operational, the digipeater command is on and open for APRS users.

```
Uplink:             145.90 145.92 145.94 145.96 MHz FM
                     (using 1200-baud Manchester FSK)
Downlink:           437.026 MHz SSB (1200-baud PSK)
Mode-S Beacon:      2401.1428 MHz
Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12
```

A WOD collection of current graphics along with general information and telemetry samples can be found at:
http://www.telecable.es/personales/ea1bcu
[05092004]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational?

```
Telemetry Downlink: 145.826 MHz. FM (1200-baud AFSK).
                    approx. 10 days ON, 10 days OFF
Mode-S Beacon:      2401.500 MHz. ... OFF
UHFBeacon:          435.025 MHz. ...  OFF
```

During the period 24 September to 25 October 2005 the VHF beacon on 145.826MHz resumed transmissions, as expected, on 30 September, sometime between 06:05 and 06:42 UTC passes. Reasonable signals were also captured on the 17:44 pass, later that day. However by the 16:49 UTC pass on 02 October, the beacon had switched OFF. Transmissions resumed on 21 October, and should continue until around 31 October.

The on-board clock continues to show a very large error. Currently it is 19.2394 days slow, having lost six hours while the beacon was last OFF, ie. between 02 October and 21 October. When the beacon is ON, the clock is stable to within a few seconds.

All the analogue telemetry channels, 0 to 59 are zero, ie they have failed. The status channels 60 to 67 are still working.

The eclipses have now ended, and the satellite should be in continuous sunlight for the remainder of this year, and well into next year. This should help the satellite to continue transmitting, although continuous sunlight can cause problems due to excessive temperatures.

The watchdog timer appears to be operating on the 20 day cycle, ie. approximately ten days ON followed by 10 days OFF. It appears to be uneffected by problems of the on-board clock. However, poor solar attitude, and battery problems, may be combining to produce a low line voltage. This causes the beacon to switch OFF premeaturely, and resets the watchdog timer cycle.

The Beacon frequencies are -
VHF 145.826 MHz. AFSK FM ASCII Telemetry
UHF 435.025 MHz. OFF
S-band 2401.5 MHz. OFF

Listeners to OSCAR-11 may be interested in visiting my website which contains an archive of news & telemetry data. It also contains details about using a soundcard or hardware demodulators for data capture. There is software for capturing data, and decoding ASCII telemetry. The URL is
www.users.zetnet.co.uk/clivew/

If you place this bulletin on a terrestrial packet network, please use the bulletin identifier $BID:U2RPT114.CWV, to prevent duplication.

[ANS thanks Clive G3CWV for the above information]

More information on UO-11 OSCAR-11 can be found at:
http://www.users.zetnet.co.uk/clivew/

MPEG3 files can be found here at Mineo, JE9PEL website:
http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm

[10302005]
NNNN
/EX

SB SAT @ AMSAT <W8ISS $ANS-310.S3
WSR 310 Part 3 11/06/2005

AMSAT NEWS SERVICE BULLETIN 310.S3 FROM AMSAT HQ
SILVER SPRING, MD, NOVENBER 06, 2005
TO ALL RADIO AMATEURS
BID: $ANS-310.S3

THE FOLLOWING ARE IN ORBIT BUT ARE
NON-OPERATIONAL AT THIS TIME:

POSAT-1 PO-28
Catalog Number: 22829
Launched : September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 435.250 MHz
435.275 MHz

Uplink: 145.925 MHz
145.975 MHz

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

PO-28 (POSAT-1), Portugal's first satellite, launched 12 years ago,will be turned over to Amateur Radio use in the very near future. That was the word July 30 from AMSAT-UK Secretary Jim Heck, G3WGM, during the AMSAT-UK International Space Colloquium in Guildford, England.

Launched September 25, 1993, the satellite operated as a packet store-and-forward BBS (9600 baud FM FSK) on Amateur Radio frequencies for several weeks in early 1994. Over the years, PO-28's primary usage has been commercial, although plans have called for eventually shifting its operation to ham radio use. G3WGM reports that following lengthy negotiations it has been agreed that the satellite can be switched permanently to amateur frequencies. The changeover is expected to take a couple of weeks.

The Portuguese satellite was built at the University of Surrey as part of a collaborative satellite technology program that involved industry and academe. Uplink frequencies will be 145.925 and 145.975 MHz. Downlink frequencies will be 435.250 and 435.275 MHz. More information on PO-28 is on the AMSAT Web site

http://www.amsat.org/amsat/sats/n7hpr/po28.html.

Uplink Frequencies: 145.925 and 145.975 MHz
Downlink Frequencies: 435.250 and 435.275 MHz

Orbit: 822 x 800 km, 98.6 deg inclined, sun-synchronous.

Transponder capabilities include FM repeater and 38k4 data. If you want to hear how loud this satellite is, listen on 429.950 until the change back to amateur radio service.

Keplerian elements for PO-28 are currently contained in the AMSAT keps bulletins and at Celestrak in amateur.txt using the name "POSAT". Users of Space Track should query the NORAD Satellite ID number 22829. The name listed by Space Track is "EYESAT A".

More information of POSAT-1 can be found at:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
http://www.amsat.org/amsat/sats/n7hpr/po28.html
[ANS wishes to thank Duane Naugle, KO6BT, for this week's update.]
[11062005]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launched: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB
Beacon: 145.810 MHz (unmodulated carrier)

AO-10 has been locked into a Mode-B, 70-cm uplink and
2-meter downlink for several years.

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: Non-operational

Uplink: 145.875 145.900 145.925 145.950 MHz FM (1200-baud)
Downlink: 435.812 MHz SSB
Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Alberto E. Zagni - I2KBD reports on 02/13/05
The spacecraft is in MBL (safe mode) and is trasmitting just 6 channels
of telemetry. Temperatures and voltage are nominal, but there seems to
be a problem with the onboard receiver, refusing to accept commands.
The spacecraft was launched in 1993, thus nearing 12 years in orbit...

Best regards
Alberto E. Zagni - I2KBD
ITAMSAT Mission Director

More information of IO-26 can be found at:

```
http://joshua.micronet.it/english/itamsat/itamsathome.html
http://www.amsat.org/amsat/sats/n7hpr/io26.html
www.itamsat.org

[02132005]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink:   21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB
Beacon:   29.408 MHz
Robot:    29.454 MHz
[05232004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink:      21.260 to  21.300 MHz CW/USB
Downlink:   145.860 to 145.900 MHz CW/USB
Beacon:     145.860 MHz
Robot:      145.908 MHz
[05232004]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink 145.975 MHz FM
Downlink 435.070 MHz FM
[05092004]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink:             145.900 FM 9600-baud FSK
Downlink:           435.120 MHz FM
Broadcast Callsign: UOSAT5-11
BBS:                UOSAT5-12
[01092005]
=====
RS-15 RADIO SPORT RS-15
```

Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational?

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB
Beacon: 29.352 MHz (intermittent)
SSB meeting frequency: 29.380 MHz (unofficial)

John, KD6PAG reports on June 16, 2004 to ANS:
RS-15 beacon seemed to be back in the mode where it's a tone about 5 seconds off and then 5 seconds on this morning.

ANS is looking for more confirmations of RS-15 coming back.

[ANS thanks John, KD6PAG for RS-15 information]
[06202004]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplink: 145.84 145.86 145.88 145.90 MHz FM
                    (using 1200-baud Manchester FSK)
CW downlink: 437.125 MHz
Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)
Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[05232004]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[08152004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM
Broadcast Callsign: HL01-11
BBS: HL01-12

Jim, AA7KC, reports that KO-23's downlink transmitter continues in a non-operational status.
[05092004]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM (9600-baud FSK)
Downlink: 436.500 MHz FM
Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink frequency (listed on the PanSat web site) 436.500 MHz

The satellite is not available for general uplink transmissions.

The Naval Postgraduate School developed PanSat. At the time of launch, PanSat spread-spectrum digital transponders were to be available to Amateur Radio operators along with software to utilize this technology.

The satellite is still operating, however, the spread spectrum packet radio portion never took place. The spacecraft is now beyond it's initial 2-year mission life, but telemetry records are still being downloaded.

For more information, visit the official PanSat web site at:
http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

```
Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm

[ANS has no further information]
[05232004]
=====
SO-35 SUNSAT
Catalog Number:     ?
Launched:February 23, 1999

STatus: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
          Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
         Mode J Digipeater: 145.825 MHz and 145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[08082004]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink:             145.960 MHz (9600-baud FSK)
Downlink:           437.025 MHz 437.400 MHz
Broadcast Callsign: UO121-11
BBS:                UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA
web site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[05092004]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplink      V-band    145.840 -  145.990 MHz CW/LSB
            U-band    435.550 -  435.800 MHz CW/LSB
           L1-band   1269.250 - 1269.500 MHz CW/LSB
           L2-band   1268.325 - 1268.575 MHz CW/LSB
           S1-band   2400.350 - 2400.600 MHz CW/LSB
Downlink:  S2-band   2401.225 - 2401.475 MHz CW/USB
           K-band 24,048.010 - 24,048.060 MHz CW/USB
Beacon:    2401.323, 24,048.035
[05232004]
-----
SO-42  SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational
 Downlink:           437.075 MHz
Broadcast Callsign: SASAT2-11
BBS:                SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[08152004]
=====
SO-41  SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink:             145.850 MHz
Downlink:           436.775 MHz
Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[08152004]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink:   145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is  welcome to use the digipeating/APRS features of Sapphire,
callsign KE6QMD, as per the user service agreement located at the
following
URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
```

Catalog number: 27605
Launch Date: December 20, 2002

Status: Semi-operational.

Uplink 435.275 1200-baud AFSK
Downlink 145.825 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

AO-49 (SAFIR-M) is a German amateur radio payload onboard the small German scientific satellite "RUBIN-2".

AO-49 was built by the German amateur radio association "AATiS e.V." (German acronym for "Arbeitskreis Amateurfunk und Telekommunikation in der Schule", which means: 'working group for amateur radio anand telecommunications in schools'). AO-49 is designed as a "store and broadcast" system for APRS based messages, dedicated for the use of schools in combination with the existing WX-Net and planned buoy experiments in Germany.

No transmissions detected since the 1st of February 2003! It appears AO-49 is not properly aligned to illuminate the solar panels. This should end soon. Due to its orbit, AO-49 will be in a phase without eclipses until 13Feb03.

Martin DG8UAU has written a small software program "SAFIR-M Decoder" to allow decoding of the received DATA0 frames. It is available at: http://amend.gmxhome.de in the section Aktuelles.

Details on AO-49 (SAFIR-M) can be found at:
http://amend.gmxhome.de

Information about AATiS e.V. is available at:
http://www.aatis.de
[05092004]
NNNN
/EX

SB SAT @ AMSAT <W8ISS $ANS-310.S4
WSR 310 Part 4 11/06/2005

AMSAT NEWS SERVICE BULLETIN 310.S4 FROM AMSAT HQ
SILVER SPRING, MD, NOVEMBER 06,2005
TO ALL RADIO AMATEURS
BID: $ANS-310.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE
PROPOSED FOR LAUNCH AT THIS TIME:

UCISAT ?O-??

Catalog number:
Proposed Launch Date: October 31, 2005

Status: Under Construction

Downlink: Submission in Progress
Uplink: Submission in Progress
Callsign: Submission in Progress

This from Matt Bennett, KF6RTB, UCISAT Communications Team Member:

Our website is www.ucisat.net .This is a new website, however, and doesn't have the "Status" section active yet. Because of the growing interest in our project, I'll push our webmaster to create updates (hopefully) on a week-to-week basis. For now, the current status of the mission is as follows:

-Expected Launch Date: October 31st, 2005
-Frequency Allocation: Submission in Progress
-Construction Status: Sub-Assembly
[WSR to thank Matt Bennett, KF6RTB, for this week's report.]
[01302005]

=====

SSETI ?O-??
Catalog Number:
Launch Date: October 27, 2005

Status: ????

The SSETI Express satellite launched at 06:52 UTC on Thursday, 27 October 2005 on board a Kosmos 3M launcher. One hundred and three minutes later, exactly on schedule, the first signals were heard form the groundstation in Aalborg, and two-way communication was established. In addition to several successful communication sessions with SSETI Express, two of the Cubesat passengers, UWE-1 and Xi-V, have been heard by their groundstations.

An official release from ESA stated, "22:20 CEST SSETI Express went into a safe mode due to an undervoltage caused by battery charging problems. The operations team is working actively to resume nominal operations of the satellite and is receiving tremendous help in the process from the amateur radio community. At the time of the anomaly many mission milestones had already successfully
been met."

Graham, UA/G3VZV reports, "that it seems that no reliable reports of any signals have been received and the teams are reviewing all the telemetry already received to fully understand what is happening on board.Initial review suggests that there is a significant chance that the power supply problem may correct itself." Graham also advises that the command station in Aalborg is planning to try to try a blind command of the satellite into S band on mode - maybe on a Sunday am pass at 10:30 UTC.

As the statement above makes clear, ESA and the SSETI Association greatly value the input that amateur operators are providing and would ask amateurs around the world to continue to check for signals on 437.250MHz at the appropriate pass times. These signals may be short bursts of 9k6 data every 18 secs or bursts of pulse telemetry every 30 secs. Please understand that the pulse beacon decoder can produce spurious results on plain noise if over driven!

Anyone hearing anything that matches the above detail is requested to please email details to missioncontrol@sseti.org

The type of the first transmissions will depend on the state of the battery.

In Nominal mode - a sub 1 second burst of AX25 9k6 FSK telemetry every 18 seconds on the downlink frequency of 437.250 MHz.

In Recovery or Safe mode - simple on/off telemetry comprising 16 x 100 msec carrier pulses. This telemetry is repeated every 30 seconds in Safe Mode and every 2 minutes when in Recovery Mode.

The satellite will transmit at a power of 3 watts.

A daily report of the launch campaign is being maintained at http://sseti.gte.tuwien.ac.at/express/mop/index.php?uri=news.html This mission operations site is completely up-to-date regarding Kepler TLEs and other LEOP "Launch and Early Operations Phase" details.

The SERACC software, needed to decode and submit the received data to the SSETI database, together with some audio files containing recorded 9k6 signals to experiment with is also now available

The ESA website about SSETI Express is at:
http://www.esa.int/SPECIALS/sseti_express/SEMARJ7X9DE_0.html

The latest version of the SSETI Express handbook can be downloaded free of charge from the AMSAT-UK website at:
http://www.uk.amsat.org/

[ANS thanks Graham, UA/G3VZV and Trevor, M5AKA for the above]

More SSETI Links at:

SpaceDaily has a report about SSETI at:
http://www.spacedaily.com/news/internet-04zzzu.html

You can find more info about SSETI at:
http://sseti.gte.tuwien.ac.at/WSW4/

Latest news about SSETI can be found at:
http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php

Look at the website for the SSETI Express webcam

http://sseti.gte.tuwien.ac.at/WSW4/webcam.htm

[10302005]
=====
PHASE 3E ?O-??
Catalog Number:
Proposed Launch Date: Early 2006

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/

[ANS-WSR wishes to thank William Leijenaar, PE1RAH for this week's report]
[10022005]
=====
CP1 ?o-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: N6CP
Proposed Transmit Frequency: 436.845
[03272005]
=====
CP2 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.325
[03272005]
=====
HAUSAT1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: D90HP
Proposed Transmit Frequency: 437.465
[03272005]
=====
ICE Cube 1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: W2CXM
Proposed Transmit Frequency: 437.305
[03272005]
=====
ICE Cube 2 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

```
Proposed Callsign: N2VR
Proposed Transmit Frequency: 437.425
[03272005]
=====
ION ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.505
[03272005]
=====
KUTEsat ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: KC0RMW
Proposed Transmit Frequency: 437.385
[03272005]
=====
MEROPE ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: K7MSU-1
Proposed Transmit Frequency: 145.980
[03272005]
=====
nCUBE1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
       2407.25
[03272005]
=====
RINCON ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
        437.345
[03272005]
=====
SACRED ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
```

[03272005]

=====

SACRED ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
[03272005]

=====

SEEDS ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: JQ1YGU
Proposed Transmit Frequency: 437.485
[03272005]

=====

Mea Huaka ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.405
[03272005]

=====

SUITSAT ?O-??
Catalog Number:
Proposed Release Date: Mid-December 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: TBA

This from Miles, WF1F:
At the present time there are tentative plans to have a Space Walk (EVA) taking place from ISS sometime around December 8, 2005. It is possible that during this Space Walk, the ISS crew may Hand launch the ARISS SuitSat project during that EVA mission. Again, all date are subject to last minute changes.
Please Keep monitoring the ARISS and AMSAT web pages for more updates.

The SuitSat project is a free floating Unmanned satellite that will be running on Batteries Only! The life span of the project will be limited to the power in the batteries. SuitSat may last as little as 1 week or as long as 6 weeks.
So it is very important for you to get your satellite monitoring station ready now. You should not wait for the Official activation date, because you

may
miss the opportunity to hear the new bird.

I will keep posting updated links for the SuitSat project as they become available.

A video of the progress of Suitsat can be found at the following URL:
http://www.amsat.org/amsat-new/information/videoNews.php
[11062005]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
        888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/amsat/listserv/menu.html

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satelite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the

memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen,
G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

From 1990239992304688119
X-Google-Thread: 10e8ad,526acc027471b23,start
X-Google-Thread: 113975,526acc027471b23,start
X-Google-Attributes: gid10e8ad,gid113975,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news3.google.com!news.glorb.com!news.astraweb.com!
router1.astraweb.com!not-for-mail
From: Chris Steyaert <observations@rmob.org>
Newsgroups: rec.radio.amateur.space,sci.astro.amateur
Subject: Radio Meteor Obs. Bull. October 2005
Date: Mon, 07 Nov 2005 23:31:58 +0100
Message-ID: <0elvm115r3agqbf3f22sah7j4k570bbj0c@4ax.com>
X-Newsreader: Forte Agent 1.93/32.576 English (American)
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Lines: 17
Organization: Unlimited download news at news.astraweb.com
NNTP-Posting-Host: 8aa8bb68.news.astraweb.com
X-Trace: DXC=4JA5P[7UC9DMnc]O[a9m]EL?0kYOcDh@JN7:H2`MmAUCXYY;5<_2WVNG?
ifhhgG3CAf61:2m@Kfm@o35m261J2lEE\LhO>fFbkK
Xref: g2news1.google.com rec.radio.amateur.space:283 sci.astro.amateur:26864

Radio Meteor Observation Bulletin No. 147 of October 2005 (63 K) is available now as

http://visualrmob.free.fr/rmobtext/rmob0510.txt

More information and the visual presentation of the hourly forward scatter counts can be found on

http://www.rmob.org

http://radio.data.free.fr

Chris

From -5995470052988324132
X-Google-Thread: 10e8ad,f9f027fe1e505620,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news4.google.com!news.glorb.com!feeder.xsnews.nl!
feeder.enertel.nl!nntpfeed-01.ops.asmr-01.energis-idc.net!dedekind.zen.co.uk!
zen.net.uk!demorgan.zen.co.uk!194.72.9.35.MISMATCH!news-peer1!btnet-feed5!btnet!
news.btopenworld.com!not-for-mail
From: "Mike" <mike@my1biz.com>
Newsgroups: rec.radio.amateur.space
Subject: Naval connection? You qualify for RNARS membership!
Date: Tue, 8 Nov 2005 12:06:54 +0000 (UTC)
Organization: BT Openworld
Lines: 29
Message-ID: <dkq4cu$2c7$2@nwrdmz02.dmz.ncs.ea.ibs-infra.bt.com>
NNTP-Posting-Host: host86-139-103-93.range86-139.btcentralplus.com
X-Trace: nwrdmz02.dmz.ncs.ea.ibs-infra.bt.com 1131451614 2439 86.139.103.93 (8 Nov
2005 12:06:54 GMT)
X-Complaints-To: news-complaints@lists.btinternet.com
NNTP-Posting-Date: Tue, 8 Nov 2005 12:06:54 +0000 (UTC)
X-Priority: 3
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.2670
X-RFC2646: Format=Flowed; Original
X-Newsreader: Microsoft Outlook Express 6.00.2900.2670
X-MSMail-Priority: Normal
Xref: g2news1.google.com rec.radio.amateur.space:284

Membership of the Royal Naval Amateur Radio Society (RNARS) is open to all
who have an
interest in any facet of amateur radio and who are serving or who have
served in the following:

Royal Navy
Royal Marines
Royal Naval Reserve
Royal Marine Reserve
Women's Royal Naval Service
Royal Naval Auxiliary Service
Royal Fleet Auxiliary
Merchant Navy
Sea Cadets Corps
Nautical Training Corps
MOD (Navy)
Commonwealth and Foreign Navies

NON-MEMBERS can purchase RNARS commodities.

Details and membership application form is available online at
http://www.rnars.org.uk

```
From -2795189632882572473
X-Google-Thread: 10e8ad,526acc027471b23
X-Google-Thread: 113975,526acc027471b23
X-Google-Attributes: gid10e8ad,gid113975,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!postnews.google.com!z14g2000cwz.googlegroups.com!not-for-
mail
From: "canopus56" <canopus56@yahoo.com>
Newsgroups: rec.radio.amateur.space,sci.astro.amateur
Subject: Re: Radio Meteor Obs. Bull. October 2005
Date: 8 Nov 2005 10:42:00 -0800
Organization: http://groups.google.com
Lines: 3
Message-ID: <1131475320.713276.209400@z14g2000cwz.googlegroups.com>
References: <0elvm115r3agqbf3f22sah7j4k570bbj0c@4ax.com>
NNTP-Posting-Host: 168.179.186.126
Mime-Version: 1.0
Content-Type: text/plain; charset="iso-8859-1"
X-Trace: posting.google.com 1131475325 24098 127.0.0.1 (8 Nov 2005 18:42:05 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Tue, 8 Nov 2005 18:42:05 +0000 (UTC)
In-Reply-To: <0elvm115r3agqbf3f22sah7j4k570bbj0c@4ax.com>
User-Agent: G2/0.2
X-HTTP-UserAgent: Mozilla/4.0 (compatible; MSIE 6.0; Windows NT
5.1),gzip(gfe),gzip(gfe)
Complaints-To: groups-abuse@google.com
Injection-Info: z14g2000cwz.googlegroups.com; posting-host=168.179.186.126;
   posting-account=brtWlQ0AAADoM8t9uVzAz_Pi25xwsEO4
Xref: g2news1.google.com rec.radio.amateur.space:285 sci.astro.amateur:26925

X-Archive: No
Chris, thanks for posting these updates. - Canopus56




From -2978800996936295081
X-Google-Thread: 10e8ad,4685d39d4f829fb3,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII
Path: g2news1.google.com!news3.google.com!newshub.sdsu.edu!newsfeed.news2me.com!
newsfeed2.easynews.com!newsfeed1.easynews.com!easynews.com!easynews!sn-xit-03!sn-
xit-08!sn-post-02!sn-post-01!supernews.com!corp.supernews.com!not-for-mail
From: "ADVENTURER99" <lostcontinentlib@yahoo.com>
Newsgroups: rec.radio.amateur.space
Subject: TESLA BOOK
Date: Tue, 15 Nov 2005 15:25:08 +0100
Organization: www.talkaboutradio.com
Message-ID: <d9fa2b9c7c2e18fdcfaa74c4b18eb20c@localhost.talkaboutradio.com>
```

X-Newsreader: www.talkaboutradio.com
X-Problems-To: info at talkaboutnetwork.com
X-Posted-By: USERID-79100
Content-Type: text/plain;
X-Complaints-To: abuse@supernews.com
Lines: 85
Xref: g2news1.google.com rec.radio.amateur.space:287

NIKOLA TESLA is a subject quite popular with many people. There is much speculation as to the source of his knowledge and vision. Some even ask if he could have been an alien!

SESH HERI is the author of a new novel featuring historical events from Tesla's life, and how these events could have led to an adventure on Mars. Certainly, this is material of interest to your listeners fascinated by the great scientist and the mysterious Red Planet.

Heri has incorporated his studies on Tesla and a personal fascination with the Mars theories of RICHARD HOAGLAND into an historical 'What if?' novel based on much actual research conducted on these subjects. Heri can discuss the great scientific genius and Martian enigmas with the best of them.

Sesh Heri has studied geomorphology for over 20 years and has developed a revolutionary theory that harmoniously confirms and clarifies the tetrahedral geometry theories of RICHARD HOAGLAND -- whom HERI greatly respects.

Heri's conclusion is that the Earth's present geographical axis was artificially induced -- in recent geological time -- with extreme precision. Heri concludes that the shape of the Earth reveals many things, among them is evidence of pole shift. Heri also concludes that the original orientation of the Earth put Giza at 19.5 degrees latitude.

Many people have said for years that Tesla's life and works would make a great science fiction novel. Well, Heri's novel WONDER OF THE WORLDS is that novel. In fact -- it is the essential NIKOLA TESLA novel. Heri's revolutionary theory of geomorphology is interwoven through WONDER OF THE WORLDS.

Heri is prepared to present and discuss his theory, especially how it relates to and supports the theories of RICHARD HOAGLAND -- whom HERI would welcome a dialogue with on these subjects.

The novel WONDER OF THE WORLDS, in which Heri has incorporated his revolutionary theory on geomorphology, features Tesla being guided by a secret society that allows him access to a mysterious book containing secret truths -- truths that eventually lead the great Tesla to Mars.

Jim McCanney, in an excerpt relating to his book ATLANTIS TO TESLA on his website, comments that Tesla was very possibly guided by such a secret society-- a secret society that may have had intimate knowledge of the much discussed Kolbrin Bible.

As you are beginning to see, WONDER OF THE WORLDS is more than just another novel exploiting fascinating mysteries. WONDER OF THE WORLDS incorporates interesting and enigmatic anomalies and questions of our world and history -- and serves as an introduction to theories and evidences of the most impactful mysteries of our times.

SESH HERI is more than a novelist. Twain and Tesla did, indeed, meet. The technology of WONDER OF THE WORLDS existed either in the labs of TESLA or in his designs. SESH HERI has spent half a lifetime researching and studying the principles and ideas he has merely touched upon in his masterful adventure tale -- principles and ideas he is prepared to discuss in detail.

And yet, I find much resistance when promoting this book. Therefore, I am reaching out to the people in a grass roots campaign to spread the word.

If there is anyone interested, please check out the following links:

http://www.amazon.com/exec/obidos/tg/detail/-/0972747281/qid=1131999092/sr=8-1/
ref=sr_8_xs_ap_i1_xgl14/104-2797014-7009543?v=glance&s=books&n=507846

Amazon says the book isn�t available yet, but it is.

http://www.lostcontinentlibrary.com   go to the �Catalogue� page

http://groups.yahoo.com/group/wonderoftheworlds/?yguid=163347351

Thank you.

From -1621993119635818912
X-Google-Thread: 10e8ad,2b8947575f76abd0,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news3.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx02.iad01.newshosting.com!newshosting.com!
207.69.154.102.MISMATCH!elnk-atl-nf2!newsfeed.earthlink.net!
stamper.news.atl.earthlink.net!newsread2.news.atl.earthlink.net.POSTED!46041641!
not-for-mail
From: "JoAnne Maenpaa" <wb9jej_no-spam@earthlink.net>

Newsgroups: rec.radio.amateur.space
Subject: ANS-317 AMSAT News Service Weekly Bulletin
Lines: 327
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <Euaef.8663$2y.5953@newsread2.news.atl.earthlink.net>
Date: Tue, 15 Nov 2005 01:04:36 GMT
NNTP-Posting-Host: 66.167.220.211
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread2.news.atl.earthlink.net 1132016676 66.167.220.211 (Mon, 14 Nov 2005 17:04:36 PST)
NNTP-Posting-Date: Mon, 14 Nov 2005 17:04:36 PST
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news1.google.com rec.radio.amateur.space:288

AMSAT NEWS SERVICE
ANS-317

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:

* SuitSat Possible Activation December 2005
* SSETI Express Designated XO-53
* ARISS Status November 7, 2005
* PCSAT2 Amateur Radio Military Appreciation Day
* AMSAT Volunteer In-Kind Reporting System

SB SAT @ AMSAT $ANS-317.01
SuitSat Possible Activation December 2005

AMSAT News Service Bulletin 317.01
From AMSAT HQ SILVER SPRING, MD.
November 13, 2005
To All RADIO AMATEURS
BID: $ANS-317.01

A note to readers of ANS. Since the SuitSat project encompasses both a free floating unmanned satellite and is being hand launched from a Manned satellite, there will be some double postings regarding the SuitSat project on both the SAREX and AMSAT-BB mailing lists.

If you are not currently on the SAREX list, you may want to check the AMSAT

link to sign up for both so you do not miss the additional projects coming this year, and early 2006.
http://www.amsat.org/amsat-new/tools/maillist/maillist.php

SuitSat, Slow Scan TV from ISS in 5 weeks?

Slow Scan TV from the SuitSat project, launched from the International Space Station, may be activated in as little as 5 weeks. Note: All dates are subject to change.

At the present time there are tentative plans to have a Space Walk (EVA) taking place from ISS sometime around December 8, 2005. It is possible that during this Space Walk, the ISS crew may "Hand" launch the ARISS SuitSat project during that EVA mission. Again, all date are subject to last minute changes. Please Keep monitoring the ARISS and AMSAT web pages for more updates.

The SuitSat project is a free floating Unmanned satellite that will be running on Batteries Only! The life span of the project will be limited to the power in the batteries. SuitSat may last as little as 1 week or as long as 6 weeks. So it is very important for you to get your satellite monitoring station ready now. You should not wait for the Official activation date, because you may miss the opportunity to hear the new bird.

I will keep posting updated links for the SuitSat project as they become available.

SuitSat Specific links:

AMSAT front page:
http://www.amsat.org

SuitSat Article:
http://www.amsat.org/amsat-new/articles/SuitSat/

AMSAT Video News:
http://www.amsat.org/amsat-new/information/videoNews.php
(and watch the SuitSat video)

Frank Bauer's, KA3HDO, article "This Is SuitSat-1 RS0RS":
http://www.amsat.org/amsat-new/articles/BauerSuitsat/index.php

"SuitSat," New ARISS SSTV Gear Arrives at International Space Station. See:
http://www.arrl.org/news/stories/2005/09/16/2/?nc=1

SSTV details:
The SuitSat project will transmit, Telemetry, Pre-Recorded Voice messages and one SSTV image. The whole process will repeat approximately every 9 minutes. (Robot 36 format).

All transmissions will be in FM mode and will be on the 2-meter amateur radio satellite band. The current frequency for SuitSat is 145.990 FM Downlink only (There is no uplink for this satellite). This means that the

Doppler frequency drift will not be much of a problem and you will be able to use your existing 2-meter station or a police scanner to hear and decode the signals SuitSat.

If you have already have been successful in working the Packet station or talked to the ISS crew on 2-meter voice, than you already have most of what you need. What's left is to connect your computer to the speaker of your radio and some SSTV decoding software, such as ChromaPix or similar software. See:
http://www.barberdsp.com/

So have fun, find your best setup and start practicing how to decode SSTV on 2-meters.

Slow Scan TV Decoding Software:
Here are just two of the many Share-Ware SSTV applications on the market. There may be many more.

W95SSTV by Silicon Pixels
http://www.barberdsp.com/w95sstv/w95dload.htm

MMSSTV
http://mmhamsoft.ham-radio.ch/

There are also many High quality pay software applications that offer many more features, such as multiple windows that allow your to simultaneously receive an image while preparing your next image that you want to transmit.

CPIX
http://www.barberdsp.com/

What is Slow Scan TV:
On this web page you will find many links to help you learn more about Slow Scan TV:
http://www.marexmg.org/fileshtml/sstvlinkpage.html

Tips on how to use ISS, SSTV, Packet and Voice:
http://www.marexmg.org/fileshtml/howtouseiss.html

Location of Hardware on ISS:
This link will show you images of some of the amateur radio hardware already installed on ISS:
http://www.marexmg.org/fileshtml/radiohardware.html

Marexmg Web Page
http://www.marexmg.org

[ANS thanks Miles, WF1F for the above information]

/EX

SB SAT @ AMSAT $ANS-317.02
SSETI Express Designated XO-53

AMSAT News Service Bulletin 317.02
From AMSAT HQ SILVER SPRING, MD.
November 13, 2005
To All RADIO AMATEURS
BID: $ANS-317.02

The SSETI Express Team has met the requirements to earn their satellite the official designator of Express Oscar 53, or XO-53.

Bill Tynan, Past AMSAT President, and presently OSCAR number coordinator, wrote to the SSETI Team, "From the information you have sent to the AMSAT-NA Board and officials regarding this project, it has been determined that the SSETI Express
spacecraft IS qualified to receive an OSCAR number."

Bill continues, "Therefore, by the authority vested in me by the AMSAT-NA President, I am pleased to issue this new amateur satellite the designation Express OSCAR - 53, or XO-53 as you requested. "Congratulations to all involved in the successful completion and launch of XO-53".

For information about the requirements that must be satisfied in order to obtain an OSCAR designation refer to:
http://www.amsat.org/amsat-new/information/faqs/numbers.php

[ANS thanks Bill, W3XO for the above information]

/EX

SB SAT @ AMSAT $ANS-317.03
ARISS Status November 7, 2005

AMSAT News Service Bulletin 317.03
From AMSAT HQ SILVER SPRING, MD.
November 13, 2005
To All RADIO AMATEURS
BID: $ANS-317.03

1. Kawachi School Contact Successful

On November 3, students from the Kawachi Citizen's Committee for Youth in Miyoshi, Hiroshima, Japan experienced a successful contact with astronaut Bill McArthur, KC5ACR. Nineteen children each posed a question to Bill during the Q & A session, as an audience of approximately 110 students, parents and others gathered for the event. Media coverage included 5 television stations and 3 newspapers. The audio and video of the contact are available on the following website:
http://jk1zrw.dyndns.org/kawachi.html.en

2. Upcoming School Contacts

Hermann Middle School in Hermann, Missouri has been scheduled for a contact on Wednesday, November 16 at 18:58 UTC.

3. Astronaut Training Status

Astronaut Nicole Stott took and passed her amateur radio exam on Friday, October 28, and was issued the callsign, KE5GJN. Stott is currently in the future ISS crew selection pool.

The last 6 unlicensed astronaut candidates from the class of 2004 were tentatively scheduled for an amateur radio license training session on November 10.

4. Expedition 11 Crew Debrief

The U.S. debrief session with Expedition 11 crew member John Phillips, KE5DRY, is tentatively scheduled for Tuesday, November 15 at 4:00 pm ET. (Note the change in date.)

5. ARRL Article on ISS Anniversary

On November 1, ARRL posted a web story covering the fifth anniversary of the ISS and amateur radio. "Ham radio has role in five years of continuous ISS human habitation," may be found at:
http://www.arrl.org/

6. ARISS International Teleconference Held

The monthly ARISS International teleconference was held on Tuesday, October 25. Among the agenda items discussed were the Columbus Module antennas and SuitSat status. The next international meeting will be held on November 15.

7. Astronaut Active on Voice

Astronaut Bill McArthur has been engaging children in his school contacts, but he also has hams around the world smiling as he makes voice contacts with the general public. McArthur was active over Australia on Friday, October 28, and again over Europe on November 3, making contacts with stations in the U.K. and Italy.

8. ARISS Mini-TIM Planned

The ARISS team may hold a Technical Interchange Meeting (TIM) in the Goddard Space Flight Center area in early January 2006. Agenda items are being compiled as team members begin to p lanfortheconference.

9. ARISS International Face-to-Face Meeting

The minutes and presentations from the ARISS International Face-to-Face Meeting held in the U.K. in August 2005 have been posted to the AMSAT website. See:
http://www.amsat.org/amsat/ariss/Meetings/2005_Surrey/2005_Surrey_ARISS-I_Minutes.pdf

[ANS thanks Carol, KB3LKI for the above information]

/EX

SB SAT @ AMSAT $ANS-317.04
PCSAT2 Amateur Radio Military Appreciation Day

AMSAT News Service Bulletin 317.04
From AMSAT HQ SILVER SPRING, MD.
November 13, 2005
To All RADIO AMATEURS
BID: $ANS-317.04

On all USA passes on 14 Nov, PCSAT2 (on ISS) will be operating with a one-way NET Control voice downlink to acknowledge packet checkins from any packet hams on 145.825 uplink as part of Amateur Radio Military Appreciation Day.

During these passes over the USA only, the normal ARISS digipeater may be disabled. Users desiring to participate simply transmit their packet as usual on the 145.825 PCSAT2 uplink using the path VIA ARISS and listen for voice downlink acknowledgment on 437.975 +/- Doppler. Their packet should also be digipeated on 435.275 downlink.

These details are posted on the PCSAT2 web page:
http://www.ew.usna.edu/~bruninga/pcsat2.html

[ANS thanks Bob, WB4APR for the above information]

/EX

SB SAT @ AMSAT $ANS-317.05
AMSAT Volunteer In-Kind Reporting System

AMSAT News Service Bulletin 317.05
From AMSAT HQ SILVER SPRING, MD.
November 13, 2005
To All RADIO AMATEURS
BID: $ANS-317.05

Attention all AMSAT members who volunteer time for AMSAT projects:

Just a reminder that we wish to keep track of all your efforts on behalf of AMSAT projects.. Please keep track of your hours and report them to AMSAT via the VRS (Volunteer Reporting System) on amsat.org. We are nearing year end and are well behind last years numbers.

If you are new to the VRS system, it works like this:

Go to amsat.org
Select: "Become a Volunteer" from the panels on the left side of the Home Page.
Select #2: "Read "About the Volunteer Reporting System" and create a VRS account". This will give you full details.

To become a user: Send an e-mail to in-kind@amsat.org. Include the USER NAME you wish to use when reporting hours to the AMSAT database. (CASE SENSITIVE)

We will confirm receipt of your request and then you will be ready to participate. Upon opening an account: Report hours as often as you wish. Remember, your filings are confidential. We will only publish grand totals with no names or hourly rates made public.

Thank you for your support of this important AMSAT system.

[ANS thanks Gunther, W8GSM for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Al Marote, WA1LBG
wa1lbg at amsat dot org

```
From 4904882282248321650
X-Google-Thread: 10e8ad,3fceaa605b436c29,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news4.google.com!border1.nntp.dca.giganews.com!
border2.nntp.dca.giganews.com!nntp.giganews.com!elnk-atl-nf1!
newsfeed.earthlink.net!stamper.news.atl.earthlink.net!
newsread2.news.atl.earthlink.net.POSTED!46041641!not-for-mail
From: "JoAnne Maenpaa" <wb9jej_no-spam@earthlink.net>
Newsgroups: rec.radio.amateur.space
Subject: WSR-317 AMSAT Weekly Satellite Report
Lines: 1386
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <Huaef.8664$2y.2736@newsread2.news.atl.earthlink.net>
Date: Tue, 15 Nov 2005 01:04:39 GMT
NNTP-Posting-Host: 66.167.220.211
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread2.news.atl.earthlink.net 1132016679 66.167.220.211 (Mon, 14 Nov
2005 17:04:39 PST)
NNTP-Posting-Date: Mon, 14 Nov 2005 17:04:39 PST
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news1.google.com rec.radio.amateur.space:289
```

This report is organized into 4 parts.
Part 1 - operational analog amateur satellites.
Part 2 - operational digital amateur satellites.
Part 3 - non - operational satellites
Part 4 - proposed satellites

SB SAT @ AMSAT <W8ISS $ANS-317.S1
WSR 317 Part 1 11/13/2005

AMSAT NEWS SERVICE BULLETIN 317.S1 FROM AMSAT HQ
SILVER SPRING, MD, November 13, 2005
TO ALL RADIO AMATEURS
BID: $ANS-317.S1

VO-52 HAMSAT
Catalog Number: 28650
Launch Date: May 05,2005

Status: Testing
Current Mode: U/V

Proposed frequencies:

Indian transponder:
Uplink : 435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW
Beacom : 145.940MHz continue carier signal

Dutch transponder:
Uplink : 435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW
Beacon : 145.860MHz 12WPM with CW message
[07242005]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Mode: PBBS - ON
      FM REPEATER - V/S

Analog voice downlink: 435.300 MHz FM
              435.150 MHz FM
Analog voice uplink: 145.880 MHZ FM
              145.920 MHz FM 67Hz PL tone
                       1268.700 MHz FM 67Hz PL tone

Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
                       2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast
          Protocol (PBP)

Broadcast: PECHO-11
BBS: PECHO-12

This from the AO-51 Command team:
6 Nov (Saturday night)
38k4 Digital Downlink, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 435.150 mhz FM, 38k4 PBP Digital

14 Nov
FM Repeater, V/S
Uplink: 145.920 mhz FM, 67hz PL Tone
Downlink 2401.200 mhz FM

21 Nov
FM Repeater, V/U
Uplink: 145.920 mhz FM, 67 hz PL Tone
Downlink 435.300 mhz FM
9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 435.150 mhz FM, 9k6 PBP Digital

5 Dec
FM Repeater, L/U
Uplink: 1268.700 mhz FM
Downlink 435.300 mhz FM

8 Dec (Wed Night)
9k6 Digital, V/U, High Power, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 435.150 mhz FM, 9k6 PBP Digital

12 Dec
FM Repeater, V/S
Uplink: 145.920 mhz FM, No PL Tone
Downlink 2401.200 mhz FM

19 Dec
FM Repeater, V/U
Uplink: 145.920 mhz FM, 67 hz PL Tone
Downlink 435.300 mhz FM
9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 435.150 mhz FM, 9k6 PBP Digital

[ANS-WSR thanks Mike Kingery, KE4AZN for the above information]
[11132005]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Uplink: 145.850 MHz (67.0 Hz PL tone) (See below for operating procedures)
Downlink: 436.795 MHz

There have been unconfirmed reports on the amsat-bb remailer that SO-50 has shifted downlink frequency as much as 5khz up. This both from Europe.

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The order of operation is thus: (allow for Doppler as necessary)

1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10 minute timer.

[09122004]

=====

FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: OPERATIONAL

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplink: 145.850 145.870 145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

John, N4QWL reports on July 16th, 2005:

Last evening I had a AOS to LOS qso with WI2W. FO-29 came up at 01:17z here in FM07 and I found WI2W and we chatted until 01:33z. The satellite was at 2 degrees elevation when I finally heard him start to crackle a bit. What a great QSO! To think that I watched this bird launch back in 1996 and it is still working so well is a real thrill. I believe I still have the video. I might just look for it and watch it again. Boy do I love this satellite stuff! Look for you all up there.

Please send the reception reports to lab2 'at' jarl.or.jp.
Please use the subject line: 'FO-29 reception report'.

Mineo, JE9PEL, has an FO-29 satellite telemetry analysis program that will automatically analyze all digital telemetry from the satellite (such as current, voltage and temperature). FO29CWTE is available at:
http://www.ne.jp/asahi/hamradio/je9pel/
[ANS-WSR wishes to thanks John, N4QWL for this week's report]
[11132005]

=====

AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Uplink: 145.850 MHz FM
Downlink: 436.795 MHz FM

The latest information on AO-27 from control operator Michael Wyrick, N3UC (former N4USI), can be found at:
http://www.ao27.org

An AO-27 question-and-answer page is available on the AMSAT-NA web site, with updates by Ray, W2RS. The URL is:
http://www.amsat.org/amsat/intro/ao27faq.html

[ANS-WSR thanks John, K6YK, for this week's AO-27 report]
[11132005]

=====

AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Semi-operational in sunlight.
Return to active status: June 21,2002

```
Uplink:     145.850 to 145.950 MHz CW/USB Mode A
            432.125 to 432.175 MHz CW/LSB Mode B
Downlink:    29.400 to  29.500 MHz CW/USB Mode A
            145.975 to 145.925 MHz CW/USB Mode B
Beacon:     29.502 MHz, 145.972 MHz, 435.1 MHz, 2304.1 MHz
```

Emily, W0EEC has created a website to allow the users of AO-7 to record contacts, observations and use of the satellite more effectively at:
http://www.emilyshouse.com/experthams/ao7/main.php
This includes the ability to log contacts.

Tim, K3TZ has written a program to decode AO-07 telemetry.
The program can be downloaded at:
http://www.qsl.net/k3tz/files/K3TZ_AO-07_Telemetry_Decoder_0.5.zip

For more AO-7 info:
http://www.amsat.org/amsat/sats/n7hpr/ao7.html

[11132005]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: DIGIPEATER
Digipeater: ACTIVE

The current Expedition 12 crew is:
Commander: William McArthur - KC5ACR
Flight Engineer: Valery Tokarev - (no call)

Worldwide packet uplink: 145.990 MHz FM
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM
Doppler Shift is 10 KHz

Russian callsigns: RS0ISS, RZ3DZR
USA callsign: NA1SS
Packet station mailbox callsign: RS0ISS-11
Packet station keyboard callsign: RS0ISS-3
Digipeater callsign: ARISS

The ISS Fan Club Webpage < http://www.issfanclub.com > reports that the Digipeater is active as of Nov 14th, 2005 at 0207UTC.

The ISS daily crew schedule can be found at:
http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line is NOT translated from Russian and posted.

More information is available at:
http://www.rac.ca/ariss
http://spaceflight.nasa.gov/station/reference/radio/
http://www.marexmg.org/fileshtml/unprotopage.html
http://www.issfanclub.com
http://oscar.dcarr.org/
[11132005]
NNNN
/EX

SB SAT @ AMSAT <W8ISS $ANS-317.S2
WSR 317 Part 2 11/13/2005

AMSAT NEWS SERVICE BULLETIN 317.S2 FROM AMSAT HQ

SILVER SPRING, MD, November 13, 2005
TO ALL RADIO AMATEURS
BID: $ANS-317.S2

PCSAT2 ?0-??
Catalog Number:
Launch Date: August 1, 2005

Status: Operational

PCSAT2 was installed on the exterior of the International Space Station and was activated on August 3, 2005.

PCSAT2 CAPABILITIES: PCSAT2 is attached to the ISS and so its operations must be in cooperation with the ARISS communications suite to minimize any mutual interference and to coordinate activities. Here are the capabilities of the PCSAT2 and ARISS payloads:

PCSAT SYSTEM A:

435.275 PCSAT2 DOWNLINK 1200 baud packet with uplink on 145.825
435.275 PCSAT2 DOWNLINK Occasional user PSK-31 continuous downlink
145.825 PCSAT2 DOWNLINK 1200 baud packet

PCSAT SYSTEM B:

437.975 PCSAT2 DOWNLINK periodic Solar Cell data and PCSAT2 telemetry at 9600 baud
437.975 PCSAT2 DOWNLINK TNC-B command downlink at 1200 baud
437.975 PCSAT2 DOWNLINK User Voice Repeater with VHF uplink
437.975 PCSAT2 DOWNLINK Packet digipeater with VHF uplink

It looks like PCSAT2 can best contribute at this time by operating in PSK-31 mode for the near future. This is a very exciting new transponder mode which solves the congestion problem on FM repeaters by letting multiple stations all communicate at the same time.

PSK-31 users are welcome to try out the new PCSAT2 PSK-31 transponder on ISS with an uplink on 29.402 +/- 1 KHz and downlink on 435.275 +/- Doppler using FM.

The FM downlink lets everyone operate full duplex and everyone to see the same view of the passband as everyone else. THus you can see exactly
what your signal looks like to everyone else.

Help Wanted:

Here is your chance to become a viable part of the Amateur Satellite Community.

We are looking for a volunteer satellite packet station in Hawaii that is interested in helping with telemetry and sat-gating of PCSAT2 and ARISS packets. Requirements are:

1) General familiarity with packet
2) TNC connected to a cross band radio that can RX on UHF and TX on VHF.
3) modest UHF beam and rotator system.

Contact WB4APR for more information.

Packets seen from PCSAT2 can be reviewed at:
http://www.findu.com/cgi-bin/pcsat2.cgi

A screen shot of both the 9600 bps and 1200 bps decoded data as seen by Simon, 9W2QC, can be seen at:
http://www.9w2qc.net/pcsat2/

More information on PCSAT2 can be found at:
http://web.usna.navy.mil/~bruninga/pcsat2.html

[ANS-WSR thanks Bob, WB4APR and the U.S. Naval Academy Satellite Lab for the aboveinformation.]

[08282005}
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Mode: PBBS - ON
FM REPEATER - V/S

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
Analog voice uplink: 145.880 MHz FM
145.920 MHz FM 67Hz PL tone
1268.700 MHz FM 67Hz PL tone

Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast Protocol (PBP)

Broadcast: PECHO-11
BBS: PECHO-12

This from the AO-51 Command Team:

14 Nov
FM Repeater, V/S
Uplink: 145.920 mhz FM, 67hz PL Tone
Downlink 2401.200 mhz FM

21 Nov
FM Repeater, V/U
Uplink: 145.920 mhz FM, 67 hz PL Tone
Downlink 435.300 mhz FM
9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 435.150 mhz FM, 9k6 PBP Digital

5 Dec
FM Repeater, L/U
Uplink: 1268.700 mhz FM
Downlink 435.300 mhz FM

8 Dec (Wed Night)
9k6 Digital, V/U, High Power, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 435.150 mhz FM, 9k6 PBP Digital

12 Dec
FM Repeater, V/S
Uplink: 145.920 mhz FM, No PL Tone
Downlink 2401.200 mhz FM

19 Dec
FM Repeater, V/U
Uplink: 145.920 mhz FM, 67 hz PL Tone
Downlink 435.300 mhz FM
9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 435.150 mhz FM, 9k6 PBP Digital
[ANS-WSR thanks Mike Kingery, KE4AZN for the above information]
[11132005]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Non-Operational?????

Uplink/downlink:	145.827 MHz 1200 baud AX.25 AFSK via W3ADO-1
Aux/Uplink:	435.250 MHz 9600 baud via PCSAT-2 (off)
APRS Downlink:	144.390 MHz (Region 2)

PCSat is a 1200-baud APRS digipeater designed for use by stations using hand-held or mobile transceivers. Downlinks feed a central web site at: http://pcsat.aprs.org

The APRS-equipped PCSat was built by midshipmen from the U.S. Naval Academy under the guidance of Bob Bruninga, WB4APR.
[07242005]
=====
CUTE-1

Catalog number: 27844
Launched: June 30,2003

Status: Operational

Uplink: ?
Downlink: 436.8375 CW
437.4700 1200 FM ax25 or SRLL (ACTIVE only near Japan ?)
Cliff, K7RR reports:
In the latest Weekly Satellite Report, CUTE 1, #27844 is listed as OPERATIONAL?
Indeed it is very operational as a CUBESAT sending CW telemetry on 436.8345 MHz. At the July 7 2005, 23:45:20 pass over the Western USA:
CUTE 1 6B A4 xx 7F D7 66A8 4702 FF FF7C 65
CUTE 1 6C A6 59 80 D9 66A8 4702 FF FE7C B6

The June 30th KEPS were within ten seconds of AOS and LOS. It is an very good object to practice tracking as the orbit and transmitter power are similar to proposed CUBESATS awaiting launch this December. As a check for Doppler correction, the lack of change in tone is an excellent indicator.

CUTE 1 is a Japanese (Tokyo Institute of Technology) one kilogram nanosatellite that was launched by a Rokot rocket from Plesetsk at 14:15 UT on 30 June 2003. It carries a 100 mW beacon at 436.8375 MHz. Initial orbital parameters were period 101.4 min, apogee 831 km, perigee 819 km, and inclination 98.7?.

For further info about CUTE-1 goto:
http://lss.mes.titech.ac.jp/ssp/cubesat/operation/Schedule_e.html

[ANS WSR wishes to thank Cliff, K7RR, for this week's information]
[07242005]
=====
GO-32 TECHSAT-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Downlink: 435.225 MHz FM (9600-baud FSK)
(435.325 n/a - temperature problems)
Uplinks: 145.850, 145.890, 145.930 FM
1269.700, 1269.800, 1269.900 FM
Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[03132005]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548

Launched: September 26, 2000

Status: Operational

Uplink: 145.850 or 145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz
Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[05152005]

=====

AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Semi-operational, the digipeater command is on and open for APRS users.

Uplink: 145.90 145.92 145.94 145.96 MHz FM
(using 1200-baud Manchester FSK)
Downlink: 437.026 MHz SSB (1200-baud PSK)
Mode-S Beacon: 2401.1428 MHz
Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

A WOD collection of current graphics along with general information and telemetry samples can be found at:
http://www.telecable.es/personales/ea1bcu
[05092004]

=====

UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational?

Telemetry Downlink: 145.826 MHz. FM (1200-baud AFSK).
approx. 10 days ON, 10 days OFF
Mode-S Beacon: 2401.500 MHz. ... OFF
UHFBeacon: 435.025 MHz. ... OFF

During the period 24 September to 25 October 2005 the VHF beacon on 145.826MHz resumed transmissions, as expected, on 30 September, sometime between 06:05 and 06:42 UTC passes. Reasonable signals were also captured on the 17:44 pass, later that day. However by the 16:49 UTC pass on 02 October, the beacon had switched OFF. Transmissions resumed on 21 October, and should continue until around 31 October.

The on-board clock continues to show a very large error. Currently it is 19.2394 days slow, having lost six hours while the beacon was last OFF, ie. between 02 October and 21 October. When the beacon is ON, the clock is stable to within a few seconds.

All the analogue telemetry channels, 0 to 59 are zero, ie they have failed. The status channels 60 to 67 are still working.

The eclipses have now ended, and the satellite should be in continuous sunlight for the remainder of this year, and well into next year. This should help the satellite to continue transmitting, although continuous sunlight can cause problems due to excessive temperatures.

The watchdog timer appears to be operating on the 20 day cycle, ie. approximately ten days ON followed by 10 days OFF. It appears to be uneffected by problems of the on-board clock. However, poor solar attitude, and battery problems, may be combining to produce a low line voltage. This causes the beacon to switch OFF premeaturely, and resets the watchdog timer cycle.

The Beacon frequencies are -
VHF 145.826 MHz. AFSK FM ASCII Telemetry
UHF 435.025 MHz. OFF
S-band 2401.5 MHz. OFF

Listeners to OSCAR-11 may be interested in visiting my website which contains an archive of news & telemetry data. It also contains details about using a soundcard or hardware demodulators for data capture. There is software for capturing data, and decoding ASCII telemetry. The URL is
www.users.zetnet.co.uk/clivew/

If you place this bulletin on a terrestrial packet network, please use the bulletin identifier $BID:U2RPT114.CWV, to prevent duplication.

[ANS thanks Clive G3CWV for the above information]

More information on UO-11 OSCAR-11 can be found at:
http://www.users.zetnet.co.uk/clivew/

MPEG3 files can be found here at Mineo, JE9PEL website:
http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm

[10302005]
NNNN
/EX

SB SAT @ AMSAT <W8ISS $ANS-317.S3
WSR 317 Part 3 11/13/2005

AMSAT NEWS SERVICE BULLETIN 317.S3 FROM AMSAT HQ

SILVER SPRING, MD, NOVENBER 13, 2005
TO ALL RADIO AMATEURS
BID: $ANS-317.S3

THE FOLLOWING ARE IN ORBIT BUT ARE
NON-OPERATIONAL AT THIS TIME:

POSAT-1 PO-28
Catalog Number: 22829
Launched : September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 435.250 MHz
435.275 MHz

Uplink: 145.925 MHz
145.975 MHz

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

PO-28 (POSAT-1), Portugal's first satellite, launched 12 years ago,will be turned over to Amateur Radio use in the very near future. That was the word July 30 from AMSAT-UK Secretary Jim Heck, G3WGM, during the AMSAT-UK International Space Colloquium in Guildford, England.

Launched September 25, 1993, the satellite operated as a packet store-and-forward BBS (9600 baud FM FSK) on Amateur Radio frequencies for several weeks in early 1994. Over the years, PO-28's primary usage has been commercial, although plans have called for eventually shifting its operation to ham radio use. G3WGM reports that following lengthy negotiations it has been agreed that the satellite can be switched permanently to amateur frequencies. The changeover is expected to take a couple of weeks.

The Portuguese satellite was built at the University of Surrey as part of a collaborative satellite technology program that involved industry and academe. Uplink frequencies will be 145.925 and 145.975 MHz. Downlink frequencies will be 435.250 and 435.275 MHz. More information on PO-28 is on the AMSAT Web site

http://www.amsat.org/amsat/sats/n7hpr/po28.html.

Uplink Frequencies: 145.925 and 145.975 MHz
Downlink Frequencies: 435.250 and 435.275 MHz

Orbit: 822 x 800 km, 98.6 deg inclined, sun-synchronous.

Transponder capabilities include FM repeater and 38k4 data. If you want to hear how loud this satellite is, listen on 429.950 until the change back to amateur radio service.

Keplerian elements for PO-28 are currently contained in the AMSAT keps bulletins and at Celestrak in amateur.txt using the name "POSAT". Users of Space Track should query the NORAD Satellite ID number 22829. The name listed by Space Track is "EYESAT A".

More information of POSAT-1 can be found at:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
http://www.amsat.org/amsat/sats/n7hpr/po28.html
[ANS wishes to thank Duane Naugle, KO6BT, for this week's update.]
[11062005]

=====

AO-10 OSCAR 10
Catalog number: 14129
Launched: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB
Beacon: 145.810 MHz (unmodulated carrier)

AO-10 has been locked into a Mode-B, 70-cm uplink and 2-meter downlink for several years.

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]

=====

IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: Non-operational

Uplink: 145.875 145.900 145.925 145.950 MHz FM (1200-baud)
Downlink: 435.812 MHz SSB
Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Alberto E. Zagni - I2KBD reports on 02/13/05

The spacecraft is in MBL (safe mode) and is trasmitting just 6 channels of telemetry. Temperatures and voltage are nominal, but there seems to be a problem with the onboard receiver, refusing to accept commands. The spacecraft was launched in 1993, thus nearing 12 years in orbit...

Best regards
Alberto E. Zagni - I2KBD
ITAMSAT Mission Director

More information of IO-26 can be found at:

http://joshua.micronet.it/english/itamsat/itamsathome.html
http://www.amsat.org/amsat/sats/n7hpr/io26.html
www.itamsat.org

[02132005]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB
Beacon: 29.408 MHz
Robot: 29.454 MHz
[05232004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB
Beacon: 145.860 MHz
Robot: 145.908 MHz
[05232004]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink 145.975 MHz FM
Downlink 435.070 MHz FM
[05092004]
=====
UO-22 UOSAT
Catalog number: 21575

```
Launched: July 17, 1991

Status: Non-Operational

Uplink:             145.900 FM 9600-baud FSK
Downlink:           435.120 MHz FM
Broadcast Callsign: UOSAT5-11
BBS:                UOSAT5-12
[01092005]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational?

Uplink:      145.858 to 145.898 MHz CW/USB
Downlink:     29.354 to  29.394 MHz CW/USB
Beacon:       29.352 MHz (intermittent)
SSB meeting frequency:  29.380 MHz (unofficial)

John, KD6PAG reports on June 16, 2004 to ANS:
RS-15 beacon seemed to be back in the mode where it's a tone about 5
seconds off and then 5 seconds on this morning.

ANS is looking for more confirmations of RS-15 coming back.

[ANS thanks John, KD6PAG for RS-15 information]
[06202004]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplink:             145.84 145.86 145.88 145.90 MHz FM
                    (using 1200-baud Manchester FSK)
CW downlink:        437.125 MHz
Digital downlink:   437.150 MHz SSB (RC-BPSK 1200-baud PSK)
Broadcast Callsign: LUSAT-11
BBS:                LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[05232004]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational
```

Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[08152004]

=====

KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM
Broadcast Callsign: HL01-11
BBS: HL01-12

Jim, AA7KC, reports that KO-23's downlink transmitter continues in a non-operational status.
[05092004]

=====

KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM (9600-baud FSK)
Downlink: 436.500 MHz FM
Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]

=====

PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink frequency (listed on the PanSat web site) 436.500 MHz

The satellite is not available for general uplink transmissions.

The Naval Postgraduate School developed PanSat. At the time of launch, PanSat spread-spectrum digital transponders were to be available to Amateur Radio operators along with software to utilize this technology.

The satellite is still operating, however, the spread spectrum packet radio portion never took place. The spacecraft is now beyond it's initial 2-year mission life, but telemetry records are still being

```
downloaded.

For more information, visit the official PanSat web site at:
http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm

[ANS has no further information]
[05232004]
=====
SO-35 SUNSAT
Catalog Number:     ?
Launched:February 23, 1999

STatus: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
          Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
         Mode J Digipeater: 145.825 MHz and 145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[08082004]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink:             145.960 MHz (9600-baud FSK)
Downlink:           437.025 MHz 437.400 MHz
Broadcast Callsign: UO121-11
BBS:                UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA
web site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
```

```
[05092004]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplink      V-band    145.840 -  145.990 MHz CW/LSB
            U-band    435.550 -  435.800 MHz CW/LSB
           L1-band   1269.250 - 1269.500 MHz CW/LSB
           L2-band   1268.325 - 1268.575 MHz CW/LSB
           S1-band   2400.350 - 2400.600 MHz CW/LSB
Downlink:  S2-band   2401.225 - 2401.475 MHz CW/USB
           K-band 24,048.010 - 24,048.060 MHz CW/USB
Beacon:    2401.323, 24,048.035
[05232004]
-----
SO-42  SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational
 Downlink:           437.075 MHz
Broadcast Callsign: SASAT2-11
BBS:                SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[08152004]
=====
SO-41  SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink:             145.850 MHz
Downlink:           436.775 MHz
Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[08152004]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
```

Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, callsign KE6QMD, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Semi-operational.

Uplink 435.275 1200-baud AFSK
Downlink 145.825 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

AO-49 (SAFIR-M) is a German amateur radio payload onboard the small German scientific satellite "RUBIN-2".

AO-49 was built by the German amateur radio association "AATiS e.V." (German acronym for "Arbeitskreis Amateurfunk und Telekommunikation in der Schule", which means: 'working group for amateur radio and telecommunications in schools'). AO-49 is designed as a "store and broadcast" system for APRS based messages, dedicated for the use of schools in combination with the existing WX-Net and planned buoy experiments in Germany.

No transmissions detected since the 1st of February 2003! It appears AO-49 is not properly aligned to illuminate the solar panels. This should end soon. Due to its orbit, AO-49 will be in a phase without eclipses until 13Feb03.

Martin DG8UAU has written a small software program "SAFIR-M Decoder" to allow decoding of the received DATA0 frames. It is available at:
http://amend.gmxhome.de in the section Aktuelles.

Details on AO-49 (SAFIR-M) can be found at:
http://amend.gmxhome.de

Information about AATiS e.V. is available at:
http://www.aatis.de
[11132005]

NNNN
/EX

SB SAT @ AMSAT <W8ISS $ANS-317.S4
WSR 317 Part 4 11/13/2005

AMSAT NEWS SERVICE BULLETIN 317.S4 FROM AMSAT HQ
SILVER SPRING, MD, NOVEMBER 13,2005
TO ALL RADIO AMATEURS
BID: $ANS-317.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE
PROPOSED FOR LAUNCH AT THIS TIME:

UCISAT ?O-??
Catalog number:
Proposed Launch Date: October 31, 2005

Status: Under Construction

Downlink: Submission in Progress
Uplink: Submission in Progress
Callsign: Submission in Progress

This from Matt Bennett, KF6RTB, UCISAT Communications Team Member:

Our website is www.ucisat.net .This is a new website, however, and doesn't have the "Status" section active yet. Because of the growing interest in our project, I'll push our webmaster to create updates (hopefully) on a week-to-week basis. For now, the current status of the mission is as follows:

-Expected Launch Date: October 31st, 2005
-Frequency Allocation: Submission in Progress
-Construction Status: Sub-Assembly
[WSR to thank Matt Bennett, KF6RTB, for this week's report.]
[01302005]
=====
SSETI ?O-??
Catalog Number:
Launch Date: October 27, 2005

Status: ????

The SSETI Express satellite launched at 06:52 UTC on Thursday, 27 October 2005 on board a Kosmos 3M launcher. One hundred and three minutes later, exactly on schedule, the first signals were heard form the groundstation in Aalborg, and two-way communication was established. In addition to several successful communication sessions with SSETI Express, two of the Cubesat passengers, UWE-1 and Xi-V, have been heard by their groundstations.

An official release from ESA stated, "22:20 CEST SSETI Express went into

a safe mode due to an undervoltage caused by battery charging problems. The operations team is working actively to resume nominal operations of the satellite and is receiving tremendous help in the process from the amateur radio community. At the time of the anomaly many mission milestones had already successfully
been met."

Graham, UA/G3VZV reports, "that it seems that no reliable reports of any signals have been received and the teams are reviewing all the telemetry already received to fully understand what is happening on board.Initial review suggests that there is a significant chance that the power supply problem may correct itself." Graham also advises that the command station in Aalborg is planning to try to try a blind command of the satellite into S band on mode - maybe on a Sunday am pass at 10:30 UTC.

As the statement above makes clear, ESA and the SSETI Association greatly value the input that amateur operators are providing and would ask amateurs around the world to continue to check for signals on 437.250MHz at the appropriate pass times. These signals may be short bursts of 9k6 data every 18 secs or bursts of pulse telemetry every 30 secs. Please understand that the pulse beacon decoder can produce spurious results on plain noise if over driven!

Anyone hearing anything that matches the above detail is requested to please email details to missioncontrol@sseti.org

The type of the first transmissions will depend on the state of the battery.

In Nominal mode - a sub 1 second burst of AX25 9k6 FSK telemetry every 18 seconds on the downlink frequency of 437.250 MHz.

In Recovery or Safe mode - simple on/off telemetry comprising 16 x 100 msec carrier pulses. This telemetry is repeated every 30 seconds in Safe Mode and every 2 minutes when in Recovery Mode.

The satellite will transmit at a power of 3 watts.

oN

A daily report of the launch campaign is being maintained at http://sseti.gte.tuwien.ac.at/express/mop/index.php?uri=news.html This mission operations site is completely up-to-date regarding Kepler TLEs and other LEOP "Launch and Early Operations Phase" details.

The SERACC software, needed to decode and submit the received data to the SSETI database, together with some audio files containing recorded 9k6 signals to experiment with is also now available

The ESA website about SSETI Express is at:
http://www.esa.int/SPECIALS/sseti_express/SEMARJ7X9DE_0.html

The latest version of the SSETI Express handbook can be downloaded free

of charge from the AMSAT-UK website at:
http://www.uk.amsat.org/

[ANS thanks Graham, UA/G3VZV and Trevor, M5AKA for the above]

More SSETI Links at:

SpaceDaily has a report about SSETI at:
http://www.spacedaily.com/news/internet-04zzzu.html

You can find more info about SSETI at:
http://sseti.gte.tuwien.ac.at/WSW4/

Latest news about SSETI can be found at:
http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php

Look at the website for the SSETI Express webcam
http://sseti.gte.tuwien.ac.at/WSW4/webcam.htm

[10302005]
=====
PHASE 3E ?O-??
Catalog Number:
Proposed Launch Date: Early 2006

Status: Under Construction

For the latest project status update please visit the AMSAT-DL
P3-E web page:
http://www.amsat-dl.org/p3e/

[ANS-WSR wishes to thank William Leijenaar, PE1RAH for this week's
report]
[10022005]
=====
CP1 ?o-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: N6CP
Proposed Transmit Frequency: 436.845
[03272005]
=====
CP2 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.325
[03272005]
=====
HAUSAT1 ?O-??
Catalog Number:

```
Proposed Launch Date: Mid May 2005

Proposed Callsign: D90HP
Proposed Transmit Frequency: 437.465
[03272005]
=====
ICE Cube 1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: W2CXM
Proposed Transmit Frequency: 437.305
[03272005]
=====
ICE Cube 2 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: N2VR
Proposed Transmit Frequency: 437.425
[03272005]
=====
ION ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.505
[03272005]
=====
KUTEsat ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: KC0RMW
Proposed Transmit Frequency: 437.385
[03272005]
=====
MEROPE ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: K7MSU-1
Proposed Transmit Frequency: 145.980
[03272005]
=====
nCUBE1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
       2407.25
```

```
[03272005]
=====
RINCON ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
        437.345
[03272005]
=====
SACRED ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
[03272005]
=====
SACRED ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
[03272005]
=====
SEEDS ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: JQ1YGU
Proposed Transmit Frequency: 437.485
[03272005]
=====
Mea Huaka ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.405
[03272005]
=====
SUITSAT ?O-??
Catalog Number:
Proposed Release Date: December 8th, 2005

Proposed Callsign: RS0RS ?
Proposed Transmit Frequency: 145.990

This from Miles, WF1F:
At the present time there are tentative plans to have a Space Walk (EVA)
tak-
```

ing place from ISS sometime around December 8, 2005. It is possible that during this Space Walk, the ISS crew may Hand launch the ARISS SuitSat project during that EVA mission. Again, all date are subject to last minute changes. Please Keep monitoring the ARISS and AMSAT web pages for more updates.

The SuitSat project is a free floating Unmanned satellite that will be running on Batteries Only! The life span of the project will be limited to the power in the batteries. SuitSat may last as little as 1 week or as long as 6 weeks. So it is very important for you to get your satellite monitoring station ready now. You should not wait for the Official activation date, because you may miss the opportunity to hear the new bird.

I will keep posting updated links for the SuitSat project as they become available.

This from Frank H. Bauer, KA3HDO:

Yes, we have set the SuitSat-1 downlink to be the same as the Packet uplink. The ARISS/Human Spaceflight team have a very limited set of frequencies in the 2 meter OSCAR sub-band (145.80-146 MHz). 145.99 is one of them.

As Miles Mann, WF1F, described, we will be reconfiguring the Kenwood D700E from packet mode. Our tentative plan is to set the D700 into a repeater mode with that will enable the ISS radio to repeat the Suitsat audio on 70 cm, specifically, 437.80 MHz.

All hams are requested to refrain from uplinking packet (or voice) on 145.99 during Suitsat operations. This will allow you and your local neighbors to better hear the SuitSat downlink. SuitSat will only be operational for a few days.....we all would like to get the most of its operations. So please due your best to abide by this plan.

We will continue to provide late-breaking information on SuitSat plans on the following web sites. Please check them often. And get your stations ready to copy the audio, voice telemetry, and SSTV picture.

http://www.amsat.org

http://www.rac.ca/ariss

A video of the progress of Suitsat can be found at the following URL:
http://www.amsat.org/amsat-new/information/videoNews.php
[11132005]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
        888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/amsat/listserv/menu.html

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the

memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

```
From -4180538268112036604
X-Google-Thread: 10e8ad,a189d47413ba1cfc,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!postnews.google.com!g47g2000cwa.googlegroups.com!not-for-
mail
From: "thoppay" <pthoppay@gmail.com>
Newsgroups: rec.radio.amateur.space
Subject: IC910H-data Communication
Date: 20 Nov 2005 12:11:12 -0800
Organization: http://groups.google.com
Lines: 10
Message-ID: <1132517472.239959.5680@g47g2000cwa.googlegroups.com>
NNTP-Posting-Host: 130.125.105.182
Mime-Version: 1.0
Content-Type: text/plain; charset="iso-8859-1"
X-Trace: posting.google.com 1132517477 20568 127.0.0.1 (20 Nov 2005 20:11:17 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Sun, 20 Nov 2005 20:11:17 +0000 (UTC)
User-Agent: G2/0.2
X-HTTP-UserAgent: Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1; SV1; .NET CLR
1.1.4322),gzip(gfe),gzip(gfe)
Complaints-To: groups-abuse@google.com
Injection-Info: g47g2000cwa.googlegroups.com; posting-host=130.125.105.182;
   posting-account=TWKNEw0AAACRMSoty6D7BxmisaUd82za
Xref: g2news1.google.com rec.radio.amateur.space:290
```

Hi All,

I need basic material on how to use IC910H for data communication. If anybody out there know information please help me on this.

Thanks a lot in advance.

Regards,
Prakash

```
From -5044655491827491851
X-Google-Thread: 10e8ad,9ec68f6f56783230,start
X-Google-Attributes: gid10e8ad,public
```

```
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news3.google.com!border1.nntp.dca.giganews.com!
border2.nntp.dca.giganews.com!nntp.giganews.com!elnk-atl-nf1!
newsfeed.earthlink.net!stamper.news.atl.earthlink.net!
newsread2.news.atl.earthlink.net.POSTED!46041641!not-for-mail
From: "JoAnne Maenpaa" <wb9jej_no-spam@earthlink.net>
Newsgroups: rec.radio.amateur.space
Subject: WSR-324 AMSAT Weekly Satellite Report
Lines: 1323
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <9t%gf.2612$aA2.1618@newsread2.news.atl.earthlink.net>
Date: Wed, 23 Nov 2005 14:59:17 GMT
NNTP-Posting-Host: 69.3.100.189
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread2.news.atl.earthlink.net 1132757957 69.3.100.189 (Wed, 23 Nov
2005 06:59:17 PST)
NNTP-Posting-Date: Wed, 23 Nov 2005 06:59:17 PST
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news1.google.com rec.radio.amateur.space:291

This report is organized into 4 parts.
Part 1 - operational analog amateur satellites.
Part 2 - operational digital amateur satellites.
Part 3 - non - operational satellites
Part 4 - proposed satellites

SB SAT @ AMSAT <W8ISS $ANS-324.S1
WSR 324 Part 1 11/20/2005

AMSAT NEWS SERVICE BULLETIN 324.S1 FROM AMSAT HQ
SILVER SPRING, MD, November 20, 2005
TO ALL RADIO AMATEURS
BID: $ANS-324.S1

VO-52 HAMSAT
Catalog Number: 28650
Launch Date: May 05,2005

Status: Testing
Current Mode: U/V - Dutch Transponder

Proposed frequencies:
-------------------
Indian Transponder:
Uplink  : 435.220 MHz to 435.280 MHz LSB/CW
Downlink: 145.870 MHz to 145.930 MHz USB/CW
Beacom  : 145.859330 MHZ CW

Dutch Transponder:
Uplink  : 435.225MHz to 435.275MHz LSB/CW
```

Downlink: 145.875MHz to 145.925MHz USB/CW
Beacon : 145.860MHz 12WPM with CW message
[11202005]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Mode: PBBS - V/U 9k6
VOICE REPEATER - V/U FM

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
Analog voice uplink: 145.880 MHZ FM
145.920 MHz FM 67Hz PL tone
1268.700 MHz FM 67Hz PL tone

Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast Protocol (PBP)

Broadcast: PECHO-11
BBS: PECHO-12

This from the AO-51 Command team:

21 Nov
FM Repeater, V/U
Uplink: 145.920 mhz FM, 67 hz PL Tone
Downlink 435.300 mhz FM
9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 435.150 mhz FM, 9k6 PBP Digital

5 Dec
FM Repeater, L/U
Uplink: 1268.700 mhz FM
Downlink 435.300 mhz FM

8 Dec (Wed Night)
9k6 Digital, V/U, High Power, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 435.150 mhz FM, 9k6 PBP Digital

12 Dec
FM Repeater, V/S
Uplink: 145.920 mhz FM, No PL Tone
Downlink 2401.200 mhz FM

19 Dec
FM Repeater, V/U

Uplink: 145.920 mhz FM, 67 hz PL Tone
Downlink 435.300 mhz FM
9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 435.150 mhz FM, 9k6 PBP Digital

[ANS-WSR thanks Mike Kingery, KE4AZN for the above information]
[11202005]

=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Uplink: 145.850 MHz (67.0 Hz PL tone) (See below for operating procedures)
Downlink: 436.795 MHz

There have been unconfirmed reports on the amsat-bb remailer that SO-50 has shifted downlink frequency as much as 5khz up. This both from Europe.

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz. The order of operation is thus: (allow for Doppler as necessary)

1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10 minute timer.

[09122004]

=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: OPERATIONAL

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplink: 145.850 145.870 145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

John, N4QWL reports on July 16th, 2005:
Last evening I had a AOS to LOS qso with WI2W. FO-29 came up at 01:17z here

in
FM07 and I found WI2W and we chatted until 01:33z. The satellite was at 2 degrees elevation when I finally heard him start to crackle a bit. What a great QSO! To think that I watched this bird launch back in 1996 and it is still working so well is a real thrill. I believe I still have the video. I might just look for it and watch it again. Boy do I love this satellite stuff!
Look for you all up there.

Please send the reception reports to lab2 'at' jarl.or.jp.
Please use the subject line: 'FO-29 reception report'.

Mineo, JE9PEL, has an FO-29 satellite telemetry analysis program that will automatically analyze all digital telemetry from the satellite (such as current, voltage and temperature). FO29CWTE is available at:
http://www.ne.jp/asahi/hamradio/je9pel/
[ANS-WSR wishes to thanks John, N4QWL for this week's report]
[11132005]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

```
Uplink:     145.850 MHz FM
Downlink:   436.795 MHz FM
```

The latest information on AO-27 from control operator Michael Wyrick, N3UC (former N4USI), can be found at:
http://www.ao27.org

An AO-27 question-and-answer page is available on the AMSAT-NA web site, with updates by Ray, W2RS. The URL is:
http://www.amsat.org/amsat/intro/ao27faq.html

[ANS-WSR thanks John, K6YK, for this week's AO-27 report]
[11132005]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Semi-operational in sunlight.
Return to active status: June 21,2002

```
Uplink:     145.850 to 145.950 MHz CW/USB Mode A
            432.125 to 432.175 MHz CW/LSB Mode B
Downlink:    29.400 to  29.500 MHz CW/USB Mode A
            145.975 to 145.925 MHz CW/USB Mode B
Beacon:     29.502 MHz, 145.972 MHz, 435.1 MHz, 2304.1 MHz
```

Emily, W0EEC has created a website to allow the users of AO-7 to record

contacts, observations and use of the satellite more effectively at:
http://www.emilyshouse.com/experthams/ao7/main.php
This includes the ability to log contacts.

Tim, K3TZ has written a program to decode AO-07 telemetry.
The program can be downloaded at:
http://www.qsl.net/k3tz/files/K3TZ_AO-07_Telemetry_Decoder_0.5.zip

For more AO-7 info:
http://www.amsat.org/amsat/sats/n7hpr/ao7.html
[11132005]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: DIGIPEATER
Digipeater: ACTIVE

The current Expedition 12 crew is:
Commander: William McArthur - KC5ACR
Flight Engineer: Valery Tokarev - (no call)

Worldwide packet uplink: 145.990 MHz FM
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM
Doppler Shift is 10 KHz

Russian callsigns: RS0ISS, RZ3DZR
USA callsign: NA1SS
Packet station mailbox callsign: RS0ISS-11
Packet station keyboard callsign: RS0ISS-3
Digipeater callsign: ARISS

The ISS Fan Club Webpage < http://www.issfanclub.com > reports that the Digipeater is active as of Nov 14th, 2005 at 0207UTC.

The ISS daily crew schedule can be found at:
http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line is NOT translated from Russian and posted.

More information is available at:
http://www.rac.ca/ariss
http://spaceflight.nasa.gov/station/reference/radio/
http://www.marexmg.org/fileshtml/unprotopage.html

http://www.issfanclub.com
http://oscar.dcarr.org/
[11132005]
NNNN
/EX

SB SAT @ AMSAT <W8ISS $ANS-324.S2
WSR 324 Part 2 11/20/2005

AMSAT NEWS SERVICE BULLETIN 324.S2 FROM AMSAT HQ
SILVER SPRING, MD, November 20, 2005
TO ALL RADIO AMATEURS
BID: $ANS-324.S2

PCSAT2 ?0-??
Catalog Number:
Launch Date: August 1, 2005

Status: Operational

PCSAT2 was installed on the exterior of the International Space Station and was activated on August 3, 2005.

PCSAT2 CAPABILITIES: PCSAT2 is attached to the ISS and so its operations must be in cooperation with the ARISS communications suite to minimize any mutual interference and to coordinate activities. Here are the capabilities of the PCSAT2 and ARISS payloads:

PCSAT SYSTEM A:

435.275 PCSAT2 DOWNLINK 1200 baud packet with uplink on 145.825
435.275 PCSAT2 DOWNLINK Occasional user PSK-31 continuous downlink
145.825 PCSAT2 DOWNLINK 1200 baud packet

PCSAT SYSTEM B:

437.975 PCSAT2 DOWNLINK periodic Solar Cell data and PCSAT2 telemetry at 9600 baud
437.975 PCSAT2 DOWNLINK TNC-B command downlink at 1200 baud
437.975 PCSAT2 DOWNLINK User Voice Repeater with VHF uplink
437.975 PCSAT2 DOWNLINK Packet digipeater with VHF uplink

It looks like PCSAT2 can best contribute at this time by operating in PSK-31 mode for the near future. This is a very exciting new transponder mode which solves the congestion problem on FM repeaters by letting multiple stations all communicate at the same time.

PSK-31 users are welcome to try out the new PCSAT2 PSK-31 transponder on ISS with an uplink on 29.402 +/- 1 KHz and downlink on 435.275 +/- Doppler using FM.

The FM downlink lets everyone operate full duplex and everyone to see the same view of the passband as everyone else. THus you can see

exactly
what your signal looks like to everyone else.

Help Wanted:

Here is your chance to become a viable part of the Amateur
Satellite Community.

We are looking for a volunteer satellite packet
station in Hawaii that is interested in helping with
telemetry and sat-gating of PCSAT2 and
ARISS packets. Requirements are:

1) General familiarity with packet
2) TNC connected to a cross band radio that
can RX on UHF and TX on VHF.
3) modest UHF beam and rotator system.

Contact WB4APR for more information.

Packets seen from PCSAT2 can be reviewed at:
http://www.findu.com/cgi-bin/pcsat2.cgi

A screen shot of both the 9600 bps and 1200 bps decoded data
as seen by Simon, 9W2QC, can be seen at:
http://www.9w2qc.net/pcsat2/

More information on PCSAT2 can be found at:
http://web.usna.navy.mil/~bruninga/pcsat2.html

[ANS-WSR thanks Bob, WB4APR and the U.S. Naval Academy Satellite Lab for
the aboveinformation.]

[08282005}
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Mode: PBBS - V/U 9k6
VOICE REPEATER - V/U FM

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
Analog voice uplink: 145.880 MHZ FM
145.920 MHz FM 67Hz PL tone
1268.700 MHz FM 67Hz PL tone

Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast
Protocol (PBP)

Broadcast: PECHO-11
BBS: PECHO-12

This from the AO-51 Command team:

21 Nov
FM Repeater, V/U
Uplink: 145.920 mhz FM, 67 hz PL Tone
Downlink 435.300 mhz FM
9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 435.150 mhz FM, 9k6 PBP Digital

5 Dec
FM Repeater, L/U
Uplink: 1268.700 mhz FM
Downlink 435.300 mhz FM

8 Dec (Wed Night)
9k6 Digital, V/U, High Power, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 435.150 mhz FM, 9k6 PBP Digital

12 Dec
FM Repeater, V/S
Uplink: 145.920 mhz FM, No PL Tone
Downlink 2401.200 mhz FM

19 Dec
FM Repeater, V/U
Uplink: 145.920 mhz FM, 67 hz PL Tone
Downlink 435.300 mhz FM
9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 435.150 mhz FM, 9k6 PBP Digital
[ANS-WSR thanks Mike Kingery, KE4AZN for the above information]
[11202005]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Operational

Uplink/downlink: 145.827 MHz 1200 baud AX.25 AFSK via W3ADO-1
Aux/Uplink: 435.250 MHz 9600 baud via PCSAT-2 (off)
APRS Downlink: 144.390 MHz (Region 2)

PCSat is a 1200-baud APRS digipeater designed for use by stations using hand-held or mobile transceivers. Downlinks feed a central web site at: http://pcsat.aprs.org

The APRS-equipped PCSat was built by midshipmen from the U.S. Naval Academy under the guidance of Bob Bruninga, WB4APR.
[11202005]
=====
CUTE-1
Catalog number: 27844
Launched: June 30,2003

Status: Operational

```
Uplink:          ?
Downlink:     436.8375 CW
              437.4700 1200 FM ax25 or SRLL (ACTIVE only near Japan ? )
```
Cliff, K7RR reports:
In the latest Weekly Satellite Report, CUTE 1, #27844 is listed as OPERATIONAL?
Indeed it is very operational as a CUBESAT sending CW telemetry on 436.8345 MHz. At the July 7 2005, 23:45:20 pass over the Western USA:
```
CUTE 1 6B A4 xx 7F D7 66A8 4702 FF FF7C 65
CUTE 1 6C A6 59 80 D9 66A8 4702 FF FE7C B6
```

The June 30th KEPS were within ten seconds of AOS and LOS. It is an very good object to practice tracking as the orbit and transmitter power are similar to proposed CUBESATS awaiting launch this December. As a check for Doppler correction, the lack of change in tone is an excellent indicator.

CUTE 1 is a Japanese (Tokyo Institute of Technology) one kilogram nanosatellite that was launched by a Rokot rocket from Plesetsk at 14:15 UT on 30 June 2003. It carries a 100 mW beacon at 436.8375 MHz. Initial orbital parameters were period 101.4 min, apogee 831 km, perigee 819 km, and inclination 98.7?.

For further info about CUTE-1 goto:
http://lss.mes.titech.ac.jp/ssp/cubesat/operation/Schedule_e.html

[ANS WSR wishes to thank Cliff, K7RR, for this week's information]
[07242005]
=====
GO-32 TECHSAT-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

```
Downlink:           435.225 MHz FM (9600-baud FSK)
                   (435.325 n/a - temperature problems)
Uplinks:            145.850, 145.890, 145.930 FM
                   1269.700, 1269.800, 1269.900 FM
Broadcast Callsign: 4XTECH-11
BBS Callsign:       4XTECH-12
```

Jeff, KB2M, reports November 15th, 2005:

I might be wrong about this, but as I am the only one I see working GO-32 here goes. If you do a DIR request up on the 145.890 uplink the bird turns on. Give it a try....

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[ANS-WSR wishes to thank Jeff, KB2M for this weeks report.]
[11202005]

=====

AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Semi-operational, the digipeater command is on and open for APRS users.

Uplink: 145.90 145.92 145.94 145.96 MHz FM
(using 1200-baud Manchester FSK)
Downlink: 437.026 MHz SSB (1200-baud PSK)
Mode-S Beacon: 2401.1428 MHz
Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

A WOD collection of current graphics along with general information and telemetry samples can be found at:
http://www.telecable.es/personales/ea1bcu
[05092004]

=====

UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational?

Telemetry Downlink: 145.826 MHz. FM (1200-baud AFSK).
approx. 10 days ON, 10 days OFF
Mode-S Beacon: 2401.500 MHz. ... OFF
UHFBeacon: 435.025 MHz. ... OFF

During the period 24 September to 25 October 2005 the VHF beacon on 145.826MHz resumed transmissions, as expected, on 30 September, sometime between 06:05 and 06:42 UTC passes. Reasonable signals were also captured on the 17:44 pass, later that day. However by the 16:49 UTC pass on 02 October, the beacon had switched OFF. Transmissions resumed on 21 October, and should continue until around 31 October.

The on-board clock continues to show a very large error. Currently it is 19.2394 days slow, having lost six hours while the beacon was last OFF, ie. between 02 October and 21 October. When the beacon is ON, the clock is stable to within a few seconds.

All the analogue telemetry channels, 0 to 59 are zero, ie they have failed. The status channels 60 to 67 are still working.

The eclipses have now ended, and the satellite should be in continuous sunlight for the remainder of this year, and well into next year. This should help the satellite to continue transmitting, although continuous sunlight can cause problems due to excessive temperatures.

The watchdog timer appears to be operating on the 20 day cycle, ie. approximately ten days ON followed by 10 days OFF. It appears to be uneffected by problems of the on-board clock. However, poor solar attitude, and battery problems, may be combining to produce a low line voltage. This causes the beacon to switch OFF premeaturely, and resets the watchdog timer cycle.

The Beacon frequencies are -
VHF 145.826 MHz. AFSK FM ASCII Telemetry
UHF 435.025 MHz. OFF
S-band 2401.5 MHz. OFF

Listeners to OSCAR-11 may be interested in visiting my website which contains
an archive of news & telemetry data. It also contains details about using a soundcard or hardware demodulators for data capture. There is software for capturing data, and decoding ASCII telemetry. The URL is:

www.users.zetnet.co.uk/clivew/

If you place this bulletin on a terrestrial packet network, please use the bulletin identifier $BID:U2RPT114.CWV, to prevent duplication.

More information on UO-11 OSCAR-11 can be found at:
http://www.users.zetnet.co.uk/clivew/

MPEG3 files can be found here at Mineo, JE9PEL website:
http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[ANS-WSR thanks Clive G3CWV for the above information]
[10302005]
NNNN
/EX

SB SAT @ AMSAT <W8ISS $ANS-324.S3
WSR 324 Part 3 11/20/2005

AMSAT NEWS SERVICE BULLETIN 324.S3 FROM AMSAT HQ
SILVER SPRING, MD, NOVENBER 20, 2005
TO ALL RADIO AMATEURS
BID: $ANS-324.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

SSETI ?O-??
Catalog Number:
Launch Date: October 27, 2005

Status: In orbit - being commissioned

A daily report of the launch campaign is being maintained at
http://sseti.gte.tuwien.ac.at/express/mop/index.php?uri=news.html
This mission operations site is completely up-to-date regarding Kepler TLEs
and other LEOP "Launch and Early Operations Phase" details.

The SERACC software, needed to decode and submit the received data to the
SSETI database, together with some audio files containing recorded 9k6
signal
to experiment with is also now available

The ESA website about SSETI Express is at:
http://www.esa.int/SPECIALS/sseti_express/SEMARJ7X9DE_0.html

The latest version of the SSETI Express handbook can be downloaded free
of charge from the AMSAT-UK website at:
http://www.uk.amsat.org/

[ANS-WSR thanks Graham, UA/G3VZV and Trevor, M5AKA for the above]

More SSETI Links at:

SpaceDaily has a report about SSETI at:
http://www.spacedaily.com/news/internet-04zzzu.html

You can find more info about SSETI at:
http://sseti.gte.tuwien.ac.at/WSW4/

Latest news about SSETI can be found at:
http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php

Look at the website for the SSETI Express webcam
http://sseti.gte.tuwien.ac.at/WSW4/webcam.htm
[11202005]
======
POSAT-1 PO-28
Catalog Number: 22829
Launched : September 25, 1993

Status: Operational - Not open for Amatuer use

```
Downlink: 435.250 MHz
          435.275 MHz

Uplink:   145.925 MHz
          145.975 MHz
```

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

PO-28 (POSAT-1), Portugal's first satellite, launched 12 years ago,will
be

turned over to Amateur Radio use in the very near future. That was the word July 30 from AMSAT-UK Secretary Jim Heck, G3WGM, during the AMSAT-UK International Space Colloquium in Guildford, England.

Launched September 25, 1993, the satellite operated as a packet store-and-forward BBS (9600 baud FM FSK) on Amateur Radio frequencies for several weeks in early 1994. Over the years, PO-28's primary usage has been commercial, although plans have called for eventually shifting its operation to ham radio use. G3WGM reports that following lengthy negotiations it has been agreed that the satellite can be switched permanently to amateur frequencies. The changeover is expected to take a couple of weeks.

The Portuguese satellite was built at the University of Surrey as part of a collaborative satellite technology program that involved industry and academe.
Uplink frequencies will be 145.925 and 145.975 MHz. Downlink frequencies will be 435.250 and 435.275 MHz. More information on PO-28 is on the AMSAT Web site

http://www.amsat.org/amsat/sats/n7hpr/po28.html.

Uplink Frequencies: 145.925 and 145.975 MHz
Downlink Frequencies: 435.250 and 435.275 MHz

Orbit: 822 x 800 km, 98.6 deg inclined, sun-synchronous.

Transponder capabilities include FM repeater and 38k4 data. If you want to hear how loud this satellite is, listen on 429.950 until the change back to amateur radio service.

Keplerian elements for PO-28 are currently contained in the AMSAT keps bulletins and at Celestrak in amateur.txt using the name "POSAT". Users of Space Track should query the NORAD Satellite ID number 22829. The name listed by Space Track is "EYESAT A".

More information of POSAT-1 can be found at:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
http://www.amsat.org/amsat/sats/n7hpr/po28.html
[ANS-WSR wishes to thank Duane Naugle, KO6BT, for this week's update.]
[11062005]
=====

AO-10 OSCAR 10
Catalog number: 14129
Launched: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB
Beacon: 145.810 MHz (unmodulated carrier)

AO-10 has been locked into a Mode-B, 70-cm uplink and
2-meter downlink for several years.

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: Non-operational

Uplink: 145.875 145.900 145.925 145.950 MHz FM (1200-baud)
Downlink: 435.812 MHz SSB
Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Alberto E. Zagni - I2KBD reports on 02/13/05
The spacecraft is in MBL (safe mode) and is trasmitting just 6 channels
of telemetry. Temperatures and voltage are nominal, but there seems to
be a problem with the onboard receiver, refusing to accept commands.
The spacecraft was launched in 1993, thus nearing 12 years in orbit...

Best regards
Alberto E. Zagni - I2KBD
ITAMSAT Mission Director

More information of IO-26 can be found at:

http://joshua.micronet.it/english/itamsat/itamsathome.html
http://www.amsat.org/amsat/sats/n7hpr/io26.html
www.itamsat.org

[02132005]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB

```
Downlink: 29.410 to 29.450 MHz CW/USB
Beacon:   29.408 MHz
Robot:    29.454 MHz
[05232004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink:      21.260 to  21.300 MHz CW/USB
Downlink:   145.860 to 145.900 MHz CW/USB
Beacon:     145.860 MHz
Robot:      145.908 MHz
[05232004]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink 145.975 MHz FM
Downlink 435.070 MHz FM
[05092004]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink:             145.900 FM 9600-baud FSK
Downlink:           435.120 MHz FM
Broadcast Callsign: UOSAT5-11
BBS:                UOSAT5-12
[01092005]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational?

Uplink:      145.858 to 145.898 MHz CW/USB
Downlink:     29.354 to  29.394 MHz CW/USB
Beacon:       29.352 MHz (intermittent)
SSB meeting frequency:  29.380 MHz (unofficial)

John, KD6PAG reports on June 16, 2004 to WSR:
RS-15 beacon seemed to be back in the mode where it's a tone about 5
seconds off and then 5 seconds on this morning.
```

WSR is looking for more confirmations of RS-15 coming back.

[ANS-WSR thanks John, KD6PAG for RS-15 information]
[06202004]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplink: 145.84 145.86 145.88 145.90 MHz FM
                    (using 1200-baud Manchester FSK)
CW downlink: 437.125 MHz
Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)
Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[05232004]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[08152004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM
Broadcast Callsign: HL01-11
BBS: HL01-12

Jim, AA7KC, reports that KO-23's downlink transmitter continues in a non-operational status.
[05092004]
=====
KO-25 KITSAT

Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM (9600-baud FSK)
Downlink: 436.500 MHz FM
Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink frequency (listed on the PanSat web site) 436.500 MHz

The satellite is not available for general uplink transmissions.

The Naval Postgraduate School developed PanSat. At the time of launch, PanSat spread-spectrum digital transponders were to be available to Amateur Radio operators along with software to utilize this technology.

The satellite is still operating, however, the spread spectrum packet radio portion never took place. The spacecraft is now beyond it's initial 2-year mission life, but telemetry records are still being downloaded.

For more information, visit the official PanSat web site at:
http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm

[ANS-WSR has no further information]
[05232004]
=====
SO-35 SUNSAT

```
Catalog Number:     ?
Launched:February 23, 1999

STatus: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
          Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
         Mode J Digipeater: 145.825 MHz and 145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[08082004]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink:             145.960 MHz (9600-baud FSK)
Downlink:           437.025 MHz 437.400 MHz
Broadcast Callsign: UO121-11
BBS:                UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA
web site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[05092004]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplink      V-band    145.840 -  145.990 MHz CW/LSB
            U-band    435.550 -  435.800 MHz CW/LSB
           L1-band   1269.250 - 1269.500 MHz CW/LSB
           L2-band   1268.325 - 1268.575 MHz CW/LSB
           S1-band   2400.350 - 2400.600 MHz CW/LSB
Downlink:  S2-band   2401.225 - 2401.475 MHz CW/USB
           K-band 24,048.010 - 24,048.060 MHz CW/USB
Beacon:    2401.323, 24,048.035
[05232004]
-----
SO-42  SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational
 Downlink:           437.075 MHz
```

Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[08152004]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz
Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[08152004]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
callsign KE6QMD, as per the user service agreement located at the
following
URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Operational

Uplink: 145.850 or 145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz
Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial land and weather imaging payloads offers FM and FSK
Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as
a collaborative effort between the Malaysian government and Surrey
Satellite Technology Ltd.
[11202005]

=====

AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Semi-operational.

Uplink 435.275 1200-baud AFSK
Downlink 145.825 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

AO-49 (SAFIR-M) is a German amateur radio payload onboard the small
German
scientific satellite "RUBIN-2".

AO-49 was built by the German amateur radio association "AATiS
e.V." (German
acronym for "Arbeitskreis Amateurfunk und Telekommunikation in der
Schule",
which means: 'working group for amateur radio and telecommunications in
schools'). AO-49 is designed as a "store and broadcast" system for APRS
based
messages, dedicated for the use of schools in combination with the
existing
WX-Net and planned buoy experiments in Germany.

No transmissions detected since the 1st of February 2003! It appears
AO-49 is
not properly aligned to illuminate the solar panels. This should end
soon. Due
to its orbit, AO-49 will be in a phase without eclipses until 13Feb03.

Martin DG8UAU has written a small software program "SAFIR-M Decoder" to
allow
decoding of the received DATA0 frames. It is available at:
http://amend.gmxhome.de in the section Aktuelles.

Details on AO-49 (SAFIR-M) can be found at:
http://amend.gmxhome.de

Information about AATiS e.V. is available at:
http://www.aatis.de
[11132005]
NNNN
/EX

SB SAT @ AMSAT <W8ISS $ANS-324.S4

WSR 324 Part 4 11/20/2005

AMSAT NEWS SERVICE BULLETIN 324.S4 FROM AMSAT HQ
SILVER SPRING, MD, NOVEMBER 20,2005
TO ALL RADIO AMATEURS
BID: $ANS-324.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE
PROPOSED FOR LAUNCH AT THIS TIME:

UCISAT ?O-??
Catalog number:
Proposed Launch Date: October 31, 2005

Status: Under Construction

Downlink: Submission in Progress
Uplink: Submission in Progress
Callsign: Submission in Progress

This from Matt Bennett, KF6RTB, UCISAT Communications Team Member:

Our website is www.ucisat.net .This is a new website, however, and doesn't have the "Status" section active yet. Because of the growing interest in our project, I'll push our webmaster to create updates (hopefully) on a week-to-week basis. For now, the current status of the mission is as follows:

-Expected Launch Date: October 31st, 2005
-Frequency Allocation: Submission in Progress
-Construction Status: Sub-Assembly
[ANS-WSR to thank Matt Bennett, KF6RTB, for this week's report.]
[01302005]
=====
PHASE 3E ?O-??
Catalog Number:
Proposed Launch Date: Early 2006

Status: Under Construction

For the latest project status update please visit the AMSAT-DL
P3-E web page:
http://www.amsat-dl.org/p3e/

[ANS-WSR wishes to thank William Leijenaar, PE1RAH for this week's report]
[10022005]
=====
CP1 ?o-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: N6CP
Proposed Transmit Frequency: 436.845

```
[03272005]
=====
CP2 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.325
[03272005]
=====
HAUSAT1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: D90HP
Proposed Transmit Frequency: 437.465
[03272005]
=====
ICE Cube 1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: W2CXM
Proposed Transmit Frequency: 437.305
[03272005]
=====
ICE Cube 2 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: N2VR
Proposed Transmit Frequency: 437.425
[03272005]
=====
ION ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.505
[03272005]
=====
KUTEsat ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: KC0RMW
Proposed Transmit Frequency: 437.385
[03272005]
=====
MEROPE ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005
Proposed Callsign: K7MSU-1
Proposed Transmit Frequency: 145.980
[03272005]
=====
nCUBE1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
       2407.25
[03272005]
=====
RINCON ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
        437.345
[03272005]
=====
SACRED ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
[03272005]
=====
SACRED ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
[03272005]
=====
SEEDS ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: JQ1YGU
Proposed Transmit Frequency: 437.485
[03272005]
=====
Mea Huaka ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.405
```

[03272005]
=====
SUITSAT ?O-??
Catalog Number:
Proposed Release Date: December 8th, 2005

Proposed Callsign: RS0RS ?
Proposed Transmit Frequency: 145.990

This from Miles, WF1F:
At the present time there are tentative plans to have a Space Walk (EVA) taking place from ISS sometime around December 8, 2005. It is possible that during this Space Walk, the ISS crew may Hand launch the ARISS SuitSat project during that EVA mission. Again, all date are subject to last minute changes.
Please Keep monitoring the ARISS and AMSAT web pages for more updates.

The SuitSat project is a free floating Unmanned satellite that will be running on Batteries Only! The life span of the project will be limited to the power in the batteries. SuitSat may last as little as 1 week or as long as 6 weeks.
So it is very important for you to get your satellite monitoring station ready now. You should not wait for the Official activation date, because you may miss the opportunity to hear the new bird.

I will keep posting updated links for the SuitSat project as they become available.

This from Frank H. Bauer, KA3HDO:

Yes, we have set the SuitSat-1 downlink to be the same as the Packet uplink.
The ARISS/Human Spaceflight team have a very limited set of frequencies in the 2 meter OSCAR sub-band (145.80-146 MHz). 145.99 is one of them.

As Miles Mann, WF1F, described, we will be reconfiguring the Kenwood D700E from packet mode. Our tentative plan is to set the D700 into a repeater mode with that will enable the ISS radio to repeat the Suitsat audio on 70 cm, specifically, 437.80 MHz.

All hams are requested to refrain from uplinking packet (or voice) on 145.99

during Suitsat operations. This will allow you and your local neighbors to better hear the SuitSat downlink. SuitSat will only be operational for a few days.....we all would like to get the most of its operations. So please due your best to abide by this plan.

We will continue to provide late-breaking information on SuitSat plans on the following web sites. Please check them often. And get your stations ready to copy the audio, voice telemetry, and SSTV picture.

http://www.amsat.org

http://www.rac.ca/ariss

A video of the progress of Suitsat can be found at the following URL:
http://www.amsat.org/amsat-new/information/videoNews.php
[11132005]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
        888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/amsat/listserv/menu.html

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

From -5148821410445527477
X-Google-Thread: 10e8ad,d7893e4bc061eda6,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news4.google.com!border1.nntp.dca.giganews.com!nntp.giganews.com!nx02.iad01.newshosting.com!newshosting.com!207.69.154.102.MISMATCH!elnk-atl-nf2!newsfeed.earthlink.net!stamper.news.atl.earthlink.net!newsread2.news.atl.earthlink.net.POSTED!46041641!not-for-mail
From: "JoAnne Maenpaa" <wb9jej_no-spam@earthlink.net>
Newsgroups: rec.radio.amateur.space
Subject: ANS-324 AMSAT News Service Weekly Bulletin
Lines: 304
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <bt%gf.2613$aA2.1465@newsread2.news.atl.earthlink.net>
Date: Wed, 23 Nov 2005 14:59:19 GMT
NNTP-Posting-Host: 69.3.100.189
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread2.news.atl.earthlink.net 1132757959 69.3.100.189 (Wed, 23 Nov 2005 06:59:19 PST)
NNTP-Posting-Date: Wed, 23 Nov 2005 06:59:19 PST
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news1.google.com rec.radio.amateur.space:292

AMSAT NEWS SERVICE
ANS-324

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:

- HAMSAT VO-52 Activates Dutch Transponder
- AATiS Team Announces RUBIN-5/SAFIR-S Activation
- DXpedition to FP Plans Satellite Activity
- SSETI Express - Statement by Sir Martin Sweeting G3YJO
- AMSAT Awards
- Italian School ISS Contact Photos On-Line
- Arianespace Celebrates Heavy Lifter Launch Success
- SuitSat Update

SB SAT @ AMSAT $ANS-324.01
HAMSAT VO-52 Activates Dutch Transponder

AMSAT News Service Bulletin 324.01
From AMSAT HQ SILVER SPRING, MD.
November 20, 2005
To All RADIO AMATEURS
BID: $ANS-324.01

Mani, VU2WMY, Secretary & Station-In-Charge of the Upagrah Amateur Radio Club at the ISRO Satellite Centre in Bangalore, India reports the command to switch on the Dutch transponder aboard HAMSAT VO-52 was successfully issued from India's ISRO Tracking Ranging and Command Network.

The Dutch transponder, designed and built by William, PE1RAH, began operation at 1034 hours on November 17 Indian Standard Time.

William said, "Tuning on 145.860 MHz I could clearly hear the CW beacon with the message I programmed in it. The CW beacon and transponder survived 6 months in space without any problems. I hope you all have lot of fun with it and can use it for your experiments and QSOs."

The first stations to operate via VO-52's Dutch transponder were Pop, VU2POP, Secretary Amsat India; Guru, VU2GUR; and Ramesh, VU2RMS; and Mani, VU2WMY. Reception reports have begun to be received from radio amateurs around the world as HAMSAT VO-52 comes in range.

Mani continued, "The second pass over India was also monitored with initial measurements and test results indicating normal performance. We look forward to feedback from the hams all over the world. Please post your reports on the Amsat-India web site http://www.amsat.in/hamsatreports.htm."

Frequencies used on HAMSAT's Dutch Transponder

Type: Linear Inverting transponder
Uplink frequency: 435.220 - 435.280 MHz,
Downlink frequency: 145.870 - 145.930 Mhz
Beacon: CW at 145.860 MHz

William will send a special QSL card for those who have a QSO with him via the Dutch transponder. This card was designed by Tasos, SV8YM, and features exclusive photos and information about HAMSAT.

[ANS thanks Mani, VU2WMY; Pop, VU2POP; AMSAT-India, and William, PE1RAH for the above information]

/EX

SB SAT @ AMSAT $ANS-324.02

AATiS Team Announces RUBIN-5/SAFIR-S Activation

AMSAT News Service Bulletin 324.02
From AMSAT HQ SILVER SPRING, MD.
November 20, 2005
To All RADIO AMATEURS
BID: $ANS-324.02

There are 2 amateur radio equipped payloads that are remain attached to the launch adapter that carried the SSETI mission into space. These are the Mozhayetz-5 (RS-25) and RUBIN-5/SAFIR-S payloads.

Unfortunately due to the failed release of RS-25, the power budget of a partially covered solar cell for RUBIN-5/SAFIR-S is low. The SAFIR S-band beacon is now enabled with a carrier frequency of 2401.900 MHz. The downlink-only beacon consists of a 10-15 second FM speech message followed by several transmissions of 9k6 FSK AX.25 packets.

Currently the SAFIR-S beacon is activated with the following schedule: minutes 10-20, minutes 30-40 and minutes 50-60. SAFIR-S is de-powered during the remaining hourly intervals.

Details regarding the status and a technical description are available on the AATiS-Sat Homepage: http://amend.gmxhome.de. This site is in German language for the moment, but it is planned to add a description in English. The satellite news on this site is bilingual.

Please e-mail reception reports DG6BCE@aatis.de

[ANS thanks Oliver, DG6BCE for the above information]

/EX

SB SAT @ AMSAT $ANS-324.03

DXpedition to FP Plans Satellite Activity

AMSAT News Service Bulletin 324.03
From AMSAT HQ SILVER SPRING, MD.
November 20, 2005
To All RADIO AMATEURS
BID: $ANS-324.03

Ian, K8MM, announced the DXpedition to the islands of St. Pierre and Miquelon (prefix-FP) will include amateur radio satellite operation via FO-29, VO-52, AO-07, AO-51 and SO-50. They will use CW and phone depending on how well they can hear the analog birds.

The FP DXpedition plans to be active from grid squares GN16 on St. Pierre and GN17 on Miquelon from Nov 20 - 30. QSL with a SASE direct for any FP/K8MM contacts via Ian's Call Book Address.

[ANS thanks Ian K8MM for the above information]

/EX

SB SAT @ AMSAT $ANS-324.04

SSETI Express - Statement by Sir Martin Sweeting G3YJO

AMSAT News Service Bulletin 324.04
From AMSAT HQ SILVER SPRING, MD.
November 20, 2005
To All RADIO AMATEURS
BID: $ANS-324.04

Professor Sir Martin Sweeting G3YJO, CEO of SSTL (Surrey Satellite Technology Ltd) and Chair of AMSAT-UK has issued the following statement regarding SSETI Express.

I am very sorry to learn of the problems with the SSETI power system and I hope that it may yet recover at some time in the future so that we will have the satisfaction of seeing all the hard work operational in orbit.

Nevertheless, a major element of the project has been successful - that is the training and inspiration of the students involved - and at least signals were heard from SSETI in orbit during the first day!

It was very apparent from the European Space Agency (ESA) and SSETI students that I met that they all greatly appreciated and admired the specialist experience and maturity that the AMSAT-UK members involved brought to the project - this has done much to raise the credibility of AMSAT within the ESA community. Well done!

We at Surrey have been through difficult times with our early spacecraft and so can empathise with the disappointment - however, I also urge patience and perseverance as we recovered two of our satellites after several months hard work when everyone else had given them up as lost!

SSTL is also pleased to have been able to assist the SSETI project by arranging the launch on Cosmos that successfully placed the satellite in orbit.

Best 73,
Martin G3YJO

[ANS thanks AMSAT-UK for the above information]

/EX

SB SAT @ AMSAT $ANS-324.05
AMSAT Awards

AMSAT News Service Bulletin 324.05
From AMSAT HQ SILVER SPRING, MD.
November 20, 2005
To All RADIO AMATEURS
BID: $ANS-324.05

Bruce Paige, KK5DO, AMSAT Director Contests and Awards, announces this week, congratulations go out to all of the following.

Allen Kenny	KK4EMK	Satellite Communicators Club Award
Robert Tucker	WA6MBL	Satellite Communicators Club Award
Robert Lacey IV	KF4GTA	Satellite Communicators Club Award

Phillip Paulhus	K1ICO	51 on 51 Award #39
Mitani Masaru	JE4SMQ	51 on 51 Award #40
Jonathan Poulton	W0CK	51 on 51 Award #41

To see all the awards visit http://www.amsat.org.

[ANS thanks Bruce, KK5DO for the above information]

/EX

SB SAT @ AMSAT $ANS-324.06
Italian School ISS Contact Photos On-Line

AMSAT News Service Bulletin 324.06
From AMSAT HQ SILVER SPRING, MD.

November 20, 2005
To All RADIO AMATEURS
BID: $ANS-324.06

Claudio, IK1SLD, invites radio amateurs to view the photos on-line of the November 9 school contact between Bill McArthur and the Istituto Comprensivo F. Negri of Casale Monferrato, Italy.

Images are stored in the gallery section at:
http://scuola.spaceonline.tv/mkportal/modules/coppermine/index.php

[ANS thanks Claudio, IK1SLD for the above information]

/EX

SB SAT @ AMSAT $ANS-324.07
Arianespace Celebrates Heavy Lifter Launch Success

AMSAT News Service Bulletin 324.07
From AMSAT HQ SILVER SPRING, MD.
November 20, 2005
To All RADIO AMATEURS
BID: $ANS-324.07

An Ariane-5 ECA heavy lift launcher blasted off from Kourou, French Guiana on Wednesday, November 16 carrying a world record 8,000 kg of telecommunications satellites. The payload consisted of DirecTV's Spaceway 2 satellite weighing 6,000 kg at lift-off, and PT TelKom Indonesia's Telcom 2 satellite weighing nearly 2,000 kg at liftoff. The combined weight of the two satellites on this launch was more than 8,000 kg, or 17,500 pounds.

Ariane-5 ECA rockets are designed to carry a payload of almost 10,000 kg (22,000 pounds). Arianespace has launched a total 11 satellites so far in 2005.

[ANS thanks SpaceDaily.com for the above information]

/EX

SB SAT @ AMSAT $ANS-324.08
SuitSat Update

AMSAT News Service Bulletin 324.08
From AMSAT HQ SILVER SPRING, MD.
November 20, 2005
To All RADIO AMATEURS
BID: $ANS-324.08

Frank Bauer, KA3HDO, AMSAT V.P. for Human Spaceflight Programs, and ARISS International Chairman provided additional information

about SuitSat which is expected to be released from the ISS in
the December 7-8 timeframe.

SuitSat will transmit a direct downlink only signal on 145.99 MHz.
There is a tentative plan to reconfigure the Kenwood D700E radio
aboard ISS from packet mode into cross-band repeater mode to repeat
the Suitsat audio on 437.80 MHz.

All hams are requested to refrain from uplinking packet (or voice) on
145.99 during Suitsat operations. This will allow you and your local
neighbors to better hear the SuitSat downlink. SuitSat will only be
operational for a few days so we all would like to get the most of its
operations. So please do your best to abide by this plan.

We will continue to provide late-breaking information on SuitSat plans on
the following web sites. Please check them often. And get your stations
ready to copy the audio, voice telemetry, and SSTV picture.
http://www.amsat.org
http://www.rac.ca/ariss

[ANS thanks Frank, KA3HDO for the above information.]

/EX

In addition to regular membership, AMSAT offers membership in the
President's Club. Members of the President's Club, as sustaining donors
to AMSAT Project Funds, will be eligible to receive additional benefits.
Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
JoAnne Maenpaa, WB9JEJ
WB9JEJ at amsat dot org

From -7014173585007426935
X-Google-Thread: 10e8ad,7db14e6f0b0e936f,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!postnews.google.com!g14g2000cwa.googlegroups.com!not-for-mail
From: hxc98@yahoo.com
Newsgroups: rec.radio.amateur.space
Subject: APRSPoint thanksgiving special
Date: 25 Nov 2005 02:02:31 -0800
Organization: http://groups.google.com
Lines: 5
Message-ID: <1132912951.563235.246700@g14g2000cwa.googlegroups.com>
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Mime-Version: 1.0

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X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Fri, 25 Nov 2005 10:02:35 +0000 (UTC)
User-Agent: G2/0.2
X-HTTP-UserAgent: Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.2; SV1; .NET CLR
1.1.4322),gzip(gfe),gzip(gfe)
Complaints-To: groups-abuse@google.com
Injection-Info: g14g2000cwa.googlegroups.com; posting-host=221.232.82.8;
   posting-account=qkd21QwAAAAs0AsHsbNsv0PdNKEViQPM
Xref: g2news1.google.com rec.radio.amateur.space:293
```

APRSPoint is a complete APRS package with integrated street-level maps. We are offerring a thanksgiving special. Now you can APRSPoint license plus MapPoint 2004 for $88.95 instead of $109.95. Please visit http://www.aprspoint.com/ for details. Thanks.

```
From -4720998001549053954
X-Google-Thread: 10e8ad,8c53bf7bc34c3ca5,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news4.google.com!border1.nntp.dca.giganews.com!
border2.nntp.dca.giganews.com!nntp.giganews.com!elnk-atl-nf1!
newsfeed.earthlink.net!stamper.news.atl.earthlink.net!
newsread1.news.atl.earthlink.net.POSTED!46041641!not-for-mail
From: "JoAnne Maenpaa" <wb9jej_no-spam@earthlink.net>
Newsgroups: rec.radio.amateur.space
Subject: ANS-331 AMSAT News Service Weekly Bulletin
Lines: 374
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <EjEif.6329$N45.6021@newsread1.news.atl.earthlink.net>
Date: Mon, 28 Nov 2005 14:17:08 GMT
NNTP-Posting-Host: 68.164.230.182
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread1.news.atl.earthlink.net 1133187428 68.164.230.182 (Mon, 28 Nov
2005 06:17:08 PST)
NNTP-Posting-Date: Mon, 28 Nov 2005 06:17:08 PST
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news1.google.com rec.radio.amateur.space:294
```

AMSAT NEWS SERVICE
ANS-331

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* PCSat (NO-44) Operational
* PCSat2 Awaiting Improved Sun Angles
* SuitSat Deployment Delay
* SA AMSAT Satellite Conference 2006 - Call For Papers
* POSAT Update
* OSCAR 11 Report - 21 November 2005
* AMSAT Awards
* ARISS Status - 21 November 2005

SB SAT @ AMSAT $ANS-331.01
PCSat (NO-44) Operational

AMSAT News Service Bulletin 331.01
From AMSAT HQ SILVER SPRING, MD.
November 27, 2005
To All RADIO AMATEURS
BID: $ANS-331.01

PCsat (NO-44) Will be OPS NORMAL for 2 weeks starting 25 November 2005. PCsat was last operating OPS-NORMAL back in Jan/Feb 2005 for about a month until it returned to negative-power-budget mode on 16 Feb 2005. PCsat enters full sun every 2 months or so, but the energy budget is only high enough during the winter months for full receeovery due to the better sun angles then on its +Z solar panel.

PCsat is using the same path as ARISS for convenience:
UNPROTO APRS VIA ARISS.

APRS mobiles in the USA will also see occasional packets from the Side B downlink on the USA APRS frequency of 144.39.

Please remember the rules for PCsat as published in the User Service Agreement, and that is "no unattended beacons via PCsat" to conserve power for those people trying live contacts.

[ANS thanks Bob WB4APR for the above information]

/EX

SB SAT @ AMSAT $ANS-331.02
PCSat2 Awaiting Improved Sun Angles

AMSAT News Service Bulletin 331.02
From AMSAT HQ SILVER SPRING, MD.
November 27, 2005

To All RADIO AMATEURS
BID: $ANS-331.02

PCSAT2 shut down due to low voltage sometime after 1855z on 23 Nov due to high beta angle. Nothing was heard on the 2032z pass.

PCSAT2 is attached to the outside of ISS and only gets sun when ISS is maintaining an attitude with good sun angle on our location. The worst angle is on Saturday, 26 November 2005. Recovery is not expected until later next week when sun angles begin to improve.Atthattimeitis hoped that joint ops with PCsat (NO-44) will be possible.

Last telemetry was showing the 16 volt Lithimu-Ion Battery down to 11.6 volts. Load current was the usual 313 mA and Solar current was 377 mA near local noon. Even with load sheding, and re-charge, the PCSat2 receivers will be on and the only power savings due to the shut-down will be the 60 mA of the TNC's. This is only 20% of the nominal load current and is insufficient to gain much ground until the entire system returns to better sun angles sometime after 1 Dec.

[ANS thanks Bob, WB4APR, for the above information]

/EX

SB SAT @ AMSAT $ANS-331.03
SuitSat Deployment Delay

AMSAT News Service Bulletin 331.03
 From AMSAT HQ SILVER SPRING, MD.
November 27, 2005
To All RADIO AMATEURS
BID: $ANS-331.03

Frank Bauer, KA3HDO, AMSAT V.P. for Human Spaceflight reports that he has received information that the Russian EVA that will deploy SuitSat, which had been planned for December 8, has been delayed to late January/Early
February.

[ANS thanks Frank KA3HDO for the above information]

/EX

SB SAT @ AMSAT $ANS-331.04
SA AMSAT Satellite Conference 2006 - Call For Papers

AMSAT News Service Bulletin 331.04
 From AMSAT HQ SILVER SPRING, MD.
November 27, 2005
To All RADIO AMATEURS
BID: $ANS-331.04

CALL FOR PAPERS FOR THE SA AMSAT SATELLITE CONFERENCE 2006
(SA AMSATCON2006)

The Southern Africa Amateur Radio Satellite Association (SA AMSAT) will be holding its annual satellite conference on 25 March 2006 at the University of KwaZulu-Natal. The key note speaker will be Prof Justin Jonas who will deliver a presentation on the SKA (Square kilometre Array) project. Prof Takawira, head of the Department of Electrical and Electronic Engineering will open the conference.

SA AMSAT is calling for proposals for papers on subjects covering the various aspects of satellite and weak signal communication including equipment and antenna design and construction.

Prospective authors should send a brief synopsis of their proposed paper to saamsat@intekom.co.za for consideration by the conference committee. The deadline is 30 January 2006. Proposals and submission may also be mailed to SA AMSAT, PO Box 90438, Garsfontein 0042.

Authors will be advised by 6 February 2006 of acceptance of their papers. Final papers in Microsoft word format are required by 10 March 2006.

The morning sessions will be focussing on technologies while the afternoon sessions will include practical aspects of satellite communication for both experienced satellite enthusiast as well as newcomers.

Attendance to the conference is open to all satellite enthusiasts. Details of registration and fees will be announced during January 2006.

[ANS thanks JoAnne, WB9JEJ, for the above information]

/EX

SB SAT @ AMSAT $ANS-331.05
POSAT Update

AMSAT News Service Bulletin 331.05
From AMSAT HQ SILVER SPRING, MD.
November 27, 2005
To All RADIO AMATEURS
BID: $ANS-331.05

During the AMSAT-UK Colloquium in late July it was announced that it was expected that the POSAT satellite would be reconfigured for amateur radio use.

We are pleased to confirm that this is still the plan but it is taking a little longer than expected to make the necessary non-technical arrangements.

The final operating configurations will take into account the various options discussed on the AMSAT-BB within the constraints imposed by the operating system on board and by the load on the command station.

As soon as we have more detailed information we will make a further announcement

73 Jim Heck, G3WGM
Hon Sec AMSAT-UK

[ANS thanks Jim, G3WGM, for the above information]

/EX

SB SAT @ AMSAT $ANS-331.06
OSCAR 11 Report - 21 November 2005

AMSAT News Service Bulletin 331.06
From AMSAT HQ SILVER SPRING, MD.
November 27, 2005
To All RADIO AMATEURS
BID: $ANS-331.06

During the period 20 October to 21 November 2005 the VHF beacon on 145.826 MHz. resumed transmissions on 21 October, and continued until 30 October. Transmissions then resumed, as expected, on 10 November. However, the beacon stopped transmitting prematurely, some time between 14 and 16 November. If the watchdog resets as expected, then the beacon should restart around 06 December.

Signals have been very variable during this period. Sometimes received at good strength, at other times they were inaudible , even with the BFO switched ON (ie. in CW mode).

The on-board clock continues to show a very large error. Currently it is 19.9 days slow.

All the analogue telemetry channels, 0 to 59 are zero, ie they have failed. The status channels 60 to 67 are still working.

The eclipses have now ended, and the satellite should be in continuous sunlight for the remainder of this year, and next year until early May. This should help the satellite to continue transmitting, although continuous sunlight can cause problems due to excessive temperatures. Power supply problems can be caused by poor earth pointing attitude, ie the sunlight illuminating the ends of the satellite, instead of the solar arrays.

The watchdog timer appears to be operating on the 20 day cycle, ie. approximately ten days ON followed by 10 days OFF. It appears to be unaffected by problems of the on-board clock. However, poor solar attitude, and battery problems, may be combining to produce a low 14 volt line supply. This appears to be causing the beacon to switch OFF prematurely, and resets the watchdog timer cycle. It seems very likely that the battery is now unable to retain its charge, due to having endured around 100,000 partial charge/discharge cycles, always a problem with NiCad cells. When analogue telemetry was transmitted, it showed an unexplained current drain from the 14 volt line. This just adds to the present problems.

The Beacon frequencies are -
VHF 145.826 MHz. AFSK FM ASCII Telemetry
UHF 435.025 MHz. OFF
S-band 2401.5 MHz. OFF

Listeners to OSCAR-11 may be interested in visiting my website which contains an archive of news & telemetry data. It also contains details about using a soundcard or hardware demodulators for data capture. There is software for capturing data, and decoding ASCII telemetry. The URL is www.users.zetnet.co.uk/clivew/

If you place this bulletin on a terrestrial packet network, please use the bulletin identifier $BID:U2RPT115.CWV, to prevent duplication.

[ANS thanks Clive G3CWV for the above information]

/EX

SB SAT @ AMSAT $ANS-331.07
AMSAT Awards

AMSAT News Service Bulletin 331.07
From AMSAT HQ SILVER SPRING, MD.
November 27, 2005
To All RADIO AMATEURS
BID: $ANS-331.07

This week, congratulations go out to all of the following.

Sebastiano Trovato, IW9HBY, Satellite Communications Achievement Award #425
Jonathan Poulton, W0CK, Satellite Communications Achievement Award #426

Keith Austermiller, KB9STR, 51 on 51 Award #42
Brock Thomsen, W6GMT, 51 on 51 Award #43
Mike Herr, WA6ARA, 51 on 51 Award #44

To see all the awards visit http://www.amsat.org or http://www.amsatnet.com

[ANS thanks Bruce KK5DO, for the above information]

/EX

SB SAT @ AMSAT $ANS-331.08
ARISS Status - 21 November 2005

AMSAT News Service Bulletin 331.08
From AMSAT HQ SILVER SPRING, MD.
November 27, 2005
To All RADIO AMATEURS
BID: $ANS-331.08

1. Hermann Middle School Contact Successful

On Wednesday, 16 November 2005, Hermann Middle School, in Hermann, Missouri, contacted the ISS via ham radio. The school library was standing room only, as seven students asked questions of Bill McArthur, KC5ACR. The audio was distributed over the PA system to the rest of the school. MSNBC carried the event live through the school's Hermann Bearcat Amateur Radio Club webcam. Two television stations, channel 5, St. Louis and channel 13, Jefferson City, covered the event and ran video clips in their news casts. The students, volunteers and teachers who participated will receive DVDs as a remembrance of the event. The Hermann Middle School radio contact coordinator reported, "This was a wonderful thing that happened to our rural school district. They are all smiles right now."

2. Takatsuki Education Center Contact Successful

On Thursday, 17 November 2005, Takatsuki Education Center in Takatsuki, Osaka, Japan, experienced a successful contact with the ISS. Ten sixth graders from Hiyoshidai Elementary School posed twenty questions to Bill McArthur, KC5ACR, as an audience of approximately 400 students, parents and others gathered to watch the event. Two television stations, including NHK (Japan Broadcasting Corporation), three newspapers, and other media covered the contact. The contact audio is available at:
http://jk1zrw.dyndns.org/takatsuki.html.en

For the video, see:
http://www.city.takatsuki.osaka.jp/multimedia/media/ariss-hiyosidai.asf

3. ARRL Article on Negri and Furtherwick School Contacts

ARRL ran an article covering the Instituto Comprensivo Francesco Negri and Furtherwick Park School contacts. "Students in Italy, England Entertained, Educated via Ham Radio" may be found at:
http://www.arrl.org/news/stories/2005/11/16/1/?nc=1

4.Italian School Contact Video

On Wednesday, November 9, students from Instituto Comprensivo Francesco Negri spoke with astronaut Bill McArthur via amateur radio. Radio operator Claudio Ariotti, IK1SLD, posted a video clip and photos of the event on the following website:
http://scuola.spaceonline.tv/

5. Furtherwick Park School Contact

On Wednesday, November 9, Furtherwick Park School successfully contacted the ISS. The BBC covered the event in an article, "Pupils link up with International Space Station." See:
http://www.bbc.co.uk/essex/content/articles/2005/11/11/space_station_feature.shtml

ARISS member, Howard Long has made available a video of the contact.
See:
http://www.howardlong.com/images/Furtherwick.wmv

6. Russian EVA to Deploy SuitSat Postponed

SuitSat, a Russian spacesuit containing ham radio equipment and a CD of student artwork, was scheduled to be deployed during a Russian EVA on December 8. This EVA has been postponed and is not expected to take place until late January/early February 2006.

This unique satellite continues to receive news coverage, as Frank Bauer's SuitSat paper has been translated into French and posted on the AMSAT-France website. See: http://www.amsat-france.org/ariss

[ANS thanks Carol, KB3LKI for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Lee McLamb, KU4OS
ku4os at amsat dot org

```
From -8244758800197595251
X-Google-Thread: 10e8ad,666234875f4657cd,start
X-Google-Attributes: gid10e8ad,public
```

X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news4.google.com!border1.nntp.dca.giganews.com!
border2.nntp.dca.giganews.com!nntp.giganews.com!elnk-atl-nf1!
newsfeed.earthlink.net!stamper.news.atl.earthlink.net!
newsread1.news.atl.earthlink.net.POSTED!46041641!not-for-mail
From: "JoAnne Maenpaa" <wb9jej_no-spam@earthlink.net>
Newsgroups: rec.radio.amateur.space
Subject: WSR-331 AMSAT Weekly Satellite Report
Lines: 1261
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <IjEif.6330$N45.5620@newsread1.news.atl.earthlink.net>
Date: Mon, 28 Nov 2005 14:17:12 GMT
NNTP-Posting-Host: 68.164.230.182
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread1.news.atl.earthlink.net 1133187432 68.164.230.182 (Mon, 28 Nov 2005 06:17:12 PST)
NNTP-Posting-Date: Mon, 28 Nov 2005 06:17:12 PST
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news1.google.com rec.radio.amateur.space:295

This report is organized into 4 parts.
Part 1 - operational analog amateur satellites.
Part 2 - operational digital amateur satellites.
Part 3 - non - operational satellites
Part 4 - proposed satellites

SB SAT @ AMSAT <W8ISS $ANS-331.S1
WSR 331 Part 1 11/27/2005

AMSAT NEWS SERVICE BULLETIN 331.S1 FROM AMSAT HQ
SILVER SPRING, MD, November 27, 2005
TO ALL RADIO AMATEURS
BID: $ANS-331.S1

VO-52 HAMSAT
Catalog Number: 28650
Launch Date: May 05,2005

Status: Testing
Current Mode: U/V - Dutch Transponder

Proposed frequencies:

Indian Transponder:
Uplink : 435.220 MHz to 435.280 MHz LSB/CW
Downlink: 145.870 MHz to 145.930 MHz USB/CW
Beacom : 145.859330 MHZ CW

Dutch Transponder:
Uplink : 435.225MHz to 435.275MHz LSB/CW

Downlink: 145.875MHz to 145.925MHz USB/CW
Beacon : 145.860MHz 12WPM with CW message

This from William Leijenaar, PE1RAH:
Dear AMSATs,

I wish I had the same free time now as when I designed the HAMSAT and P3e transponder. Unfortunatly these times have been changed (for the moment) due to QRL things.

However, I often try to be QRV on the HAMSAT and check the signals from my transponder and read the messages on amsat-bb. I just read about the beacon "problem". The "problem" with the beacon is actually not a problem but it is known. The beacon signal is injected at the IF, and runs throught the transponder from the IF section, up converter, via the final PA to the antenna.

The changes you hear on the beacon frequency is caused by the amplitude limiters in the IF that are activated by a too strong uplink signal. These limiters are only for protection, to avoid that the IF and VHF amplifiers get overloaded and generate all kinds of unwanted signals at the output.

My transponder is straight forward to keep it physical small and cheap in cost (as I had no sponsors). Unlike most other transponders my transponder on HAMSAT has no AGC system. It gives always maximum gain with maximum sensitivity.
The main reason is that the AGC systems I had didn't fit in the small sized box. As an option I choose for limiters, and it worked great in tests.

Secondly, I tought limiters might be helpfull against aligators. To deal with too strong signals most transponder have an AGC to lower the RX gain, and actually be helpfull to the alligators. With the limiters their SSB signal will get distorted and they might lower their powers to have better audio quality.

The change in beacon sound is an indication for too much uplink powers and will be heared mainly in areas where higher powers are available on the uplink, like US, Europe, Japan...

Its funny to know that nobody here has discovered that the bandpass is shifted some down in frequency... There is no technical failure, the reason is known here... No panic please :o)

Please keep in mind that this transponder is my privat work and privat money.

Frankly speaking this is my privat transponder I "give" to the amateur world.
I was one of those many poor students, and this was the best I could do with my resources I had available at that time... The whole thing is just 16cm x 10cm x 3cm !! even smaller than the professional Indian transponder :o)

I hope you all enjoy my transponder even when it is not perfect.
[11272005]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Mode: PBBS - V/U 9k6
VOICE REPEATER - V/U FM

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
Analog voice uplink: 145.880 MHZ FM
145.920 MHz FM 67Hz PL tone
1268.700 MHz FM 67Hz PL tone

Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast Protocol (PBP)

Broadcast: PECHO-11
BBS: PECHO-12

This from the AO-51 Command team:
21 Nov
FM Repeater, V/U
Uplink: 145.920 mhz FM, 67 hz PL Tone
Downlink 435.300 mhz FM
9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 435.150 mhz FM, 9k6 PBP Digital

5 Dec
FM Repeater, L/U
Uplink: 1268.700 mhz FM
Downlink 435.300 mhz FM

8 Dec (Wed Night)
9k6 Digital, V/U, High Power, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 435.150 mhz FM, 9k6 PBP Digital

12 Dec
FM Repeater, V/S
Uplink: 145.920 mhz FM, No PL Tone

```
Downlink 2401.200 mhz FM

19 Dec
FM Repeater, V/U
Uplink: 145.920 mhz FM, 67 hz PL Tone
Downlink 435.300 mhz FM
9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 435.150 mhz FM, 9k6 PBP Digital

[ANS-WSR thanks Mike Kingery, KE4AZN for the above information]
[11202005]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Uplink:    145.850 MHz (67.0 Hz PL tone) (See below for operating
          procedures)
Downlink:  436.795 MHz

There have been unconfirmed reports on the amsat-bb remailer that SO-50 has
shifted downlink frequency as much as 5khz up. This both from Europe.

To switch the transmitter on, you need to send a CTCSS tone of  74.4 Hz. The
order of operation is thus: (allow for Doppler as necessary)

1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer
   on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater
on
   and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10
   minute timer.
[09122004]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: OPERATIONAL

Voice/CW Mode JA
Uplink:     145.90 to 146.00 MHz CW/LSB
Downlink:   435.80 to 435.90 MHz CW/USB
Beacon:     435.795 MHz

Digital Mode JD
Uplink:     145.850 145.870 145.910 MHz FM
Downlink:   435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign:   8J1JCS
```

Digitalker: 435.910 MHz

John, N4QWL reports on July 16th, 2005:
Last evening I had a AOS to LOS qso with WI2W. FO-29 came up at 01:17z here in
FM07 and I found WI2W and we chatted until 01:33z. The satellite was at 2
degrees elevation when I finally heard him start to crackle a bit. What a
great QSO! To think that I watched this bird launch back in 1996 and it is
still working so well is a real thrill. I believe I still have the video. I
might just look for it and watch it again. Boy do I love this satellite
stuff!
Look for you all up there.

Please send the reception reports to lab2 'at' jarl.or.jp.
Please use the subject line: 'FO-29 reception report'.

Mineo, JE9PEL, has an FO-29 satellite telemetry analysis program that will
automatically analyze all digital telemetry from the satellite (such as
current, voltage and temperature). FO29CWTE is available at:
http://www.ne.jp/asahi/hamradio/je9pel/
[ANS-WSR wishes to thanks John, N4QWL for this week's report]
[11132005]

=====

AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Uplink: 145.850 MHz FM
Downlink: 436.795 MHz FM

The latest information on AO-27 from control operator Michael Wyrick, N3UC
(former N4USI), can be found at:
http://www.ao27.org

An AO-27 question-and-answer page is available on the AMSAT-NA web site, with
updates by Ray, W2RS. The URL is:
http://www.amsat.org/amsat/intro/ao27faq.html

[ANS-WSR thanks John, K6YK, for this week's AO-27 report]
[11132005]

=====

AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Semi-operational in sunlight.
Return to active status: June 21,2002

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
            432.125 to 432.175 MHz CW/LSB Mode B

Downlink: 29.400 to 29.500 MHz CW/USB Mode A
            145.975 to 145.925 MHz CW/USB Mode B
Beacon: 29.502 MHz, 145.972 MHz, 435.1 MHz, 2304.1 MHz

Emily, W0EEC has created a website to allow the users of AO-7 to record contacts, observations and use of the satellite more effectively at:
http://www.emilyshouse.com/experthams/ao7/main.php
This includes the ability to log contacts.

Tim, K3TZ has written a program to decode AO-07 telemetry. The program can be downloaded at:
http://www.qsl.net/k3tz/files/K3TZ_AO-07_Telemetry_Decoder_0.5.zip

For more AO-7 info:
http://www.amsat.org/amsat/sats/n7hpr/ao7.html
[11132005]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: DIGIPEATER
Digipeater: ACTIVE

The current Expedition 12 crew is:
Commander: William McArthur - KC5ACR
Flight Engineer: Valery Tokarev - (no call)

Worldwide packet uplink: 145.990 MHz FM
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM
Doppler Shift is 10 KHz

Russian callsigns: RS0ISS, RZ3DZR
USA callsign: NA1SS
Packet station mailbox callsign: RS0ISS-11
Packet station keyboard callsign: RS0ISS-3
Digipeater callsign: ARISS

The ISS Fan Club Webpage < http://www.issfanclub.com > reports that the Digipeater is active as of Nov 14th, 2005 at 0207UTC.

The ISS daily crew schedule can be found at:
http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line is NOT

translated from Russian and posted.

More information is available at:
http://www.rac.ca/ariss
http://spaceflight.nasa.gov/station/reference/radio/
http://www.marexmg.org/fileshtml/unprotopage.html
http://www.issfanclub.com
http://oscar.dcarr.org/
[11132005]
NNNN
/EX

SB SAT @ AMSAT <W8ISS $ANS-331.S2
WSR 331 Part 2 11/27/2005

AMSAT NEWS SERVICE BULLETIN 331.S2 FROM AMSAT HQ
SILVER SPRING, MD, November 27, 2005
TO ALL RADIO AMATEURS
BID: $ANS-331.S2

PCSAT2 ?0-??
Catalog Number: 25544
Launch Date: August 1, 2005

Status: Battery-saving mode
Current Mode: None

Digital Downlink: 435.275 Mhz
Digital Uplink: 145.825 Mhz
PSK-31 Downlink: 435.275 Mhz
PSK-31 Uplink: 29.400 - 29.403 Mhz

Broadcast:
BBS:

PCSAT2 was installed on the exterior of the International Space Station and
was activated on August 3, 2005.

Packets seen from PCSAT2 can be reviewed at:
http://www.findu.com/cgi-bin/pcsat2.cgi

A screen shot of both the 9600 bps and 1200 bps decoded data as seen by
Simon,
9W2QC, can be seen at:
http://www.9w2qc.net/pcsat2/

More information on PCSAT2 can be found at:
http://web.usna.navy.mil/~bruninga/pcsat2.html
[11272005}

=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Mode: PBBS - V/U 9k6
VOICE REPEATER - V/U FM

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
Analog voice uplink: 145.880 MHZ FM
145.920 MHz FM 67Hz PL tone
1268.700 MHz FM 67Hz PL tone

Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast Protocol (PBP)

Broadcast: PECHO-11
BBS: PECHO-12

This from the AO-51 Command team:

21 Nov
FM Repeater, V/U
Uplink: 145.920 mhz FM, 67 hz PL Tone
Downlink 435.300 mhz FM
9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 435.150 mhz FM, 9k6 PBP Digital

5 Dec
FM Repeater, L/U
Uplink: 1268.700 mhz FM
Downlink 435.300 mhz FM

8 Dec (Wed Night)
9k6 Digital, V/U, High Power, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 435.150 mhz FM, 9k6 PBP Digital

12 Dec
FM Repeater, V/S
Uplink: 145.920 mhz FM, No PL Tone
Downlink 2401.200 mhz FM

19 Dec
FM Repeater, V/U
Uplink: 145.920 mhz FM, 67 hz PL Tone
Downlink 435.300 mhz FM
9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 435.150 mhz FM, 9k6 PBP Digital
[ANS-WSR thanks Mike Kingery, KE4AZN for the above information]
[11202005]

=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Operational

General Usage Uplink/Downlink:145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSat is a 1200-baud APRS digipeater designed for use by stations using hand-held or mobile transceivers. Downlinks feed a central web site at: http://pcsat.aprs.org

The APRS-equipped PCSat was built by midshipmen from the U.S. Naval Academy under the guidance of Bob Bruninga, WB4APR.
[11272005]
=====
CUTE-1
Catalog number: 27844
Launched: June 30,2003

Status: Operational

Uplink: ?
Downlink: 436.8375 CW
              437.4700 1200 FM ax25 or SRLL (ACTIVE only near Japan ?)
Cliff, K7RR reports:
In the latest Weekly Satellite Report, CUTE 1, #27844 is listed as OPERATIONAL?
Indeed it is very operational as a CUBESAT sending CW telemetry on 436.8345 MHz. At the July 7 2005, 23:45:20 pass over the Western USA:
CUTE 1 6B A4 xx 7F D7 66A8 4702 FF FF7C 65
CUTE 1 6C A6 59 80 D9 66A8 4702 FF FE7C B6

The June 30th KEPS were within ten seconds of AOS and LOS. It is an very good object to practice tracking as the orbit and transmitter power are similar to proposed CUBESATS awaiting launch this December. As a check for Doppler correction, the lack of change in tone is an excellent indicator.

CUTE 1 is a Japanese (Tokyo Institute of Technology) one kilogram nanosatellite that was launched by a Rokot rocket from Plesetsk at 14:15 UT on 30 June 2003. It carries a 100 mW beacon at 436.8375 MHz. Initial orbital parameters were period 101.4 min, apogee 831 km, perigee 819 km, and inclination 98.7?.

For further info about CUTE-1 goto:
http://lss.mes.titech.ac.jp/ssp/cubesat/operation/Schedule_e.html

[ANS WSR wishes to thank Cliff, K7RR, for this week's information]
[07242005]
=====

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GO-32 TECHSAT-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Downlink:            435.225 MHz FM (9600-baud FSK)
                    (435.325 n/a - temperature problems)
Uplinks:             145.850, 145.890, 145.930 FM
                    1269.700, 1269.800, 1269.900 FM
Broadcast Callsign: 4XTECH-11
BBS Callsign:        4XTECH-12

Jeff, KB2M, reports November 15th, 2005:
 I might be wrong about this, but as I am the only one I see working GO-32
here goes. If you do a DIR request up on the 145.890 uplink the bird turns
on. Give it a try....

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[ANS-WSR wishes to thank Jeff, KB2M for this weeks report.]
[11202005]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Semi-operational, the digipeater command is on and open for
APRS users.

Uplink:              145.90 145.92 145.94 145.96 MHz FM
                      (using 1200-baud Manchester FSK)
Downlink:            437.026 MHz SSB (1200-baud PSK)
Mode-S Beacon:       2401.1428 MHz
Broadcast Callsign: PACSAT-11
BBS:                 PACSAT-12

A WOD collection of current graphics along with general information
and telemetry samples can be found at:
http://www.telecable.es/personales/ea1bcu
[05092004]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational?

Telemetry Downlink: 145.826 MHz. FM (1200-baud AFSK).
                     approx. 10 days ON, 10 days OFF
Mode-S Beacon:       2401.500 MHz. ... OFF
UHFBeacon:           435.025 MHz. ...  OFF
```

During the period 24 September to 25 October 2005 the VHF beacon on 145.826MHz resumed transmissions, as expected, on 30 September, sometime between 06:05 and 06:42 UTC passes. Reasonable signals were also captured on the 17:44 pass, later that day. However by the 16:49 UTC pass on 02 October, the beacon had switched OFF. Transmissions resumed on 21 October, and should continue until around 31 October.

The on-board clock continues to show a very large error. Currently it is 19.2394 days slow, having lost six hours while the beacon was last OFF, ie. between 02 October and 21 October. When the beacon is ON, the clock is stable to within a few seconds.

All the analogue telemetry channels, 0 to 59 are zero, ie they have failed. The status channels 60 to 67 are still working.

The eclipses have now ended, and the satellite should be in continuous sunlight for the remainder of this year, and well into next year. This should help the satellite to continue transmitting, although continuous sunlight can cause problems due to excessive temperatures.

The watchdog timer appears to be operating on the 20 day cycle, ie. approximately ten days ON followed by 10 days OFF. It appears to be uneffected by problems of the on-board clock. However, poor solar attitude, and battery problems, may be combining to produce a low line voltage. This causes the beacon to switch OFF premeaturely, and resets the watchdog timer cycle.

The Beacon frequencies are -
VHF 145.826 MHz. AFSK FM ASCII Telemetry
UHF 435.025 MHz. OFF
S-band 2401.5 MHz. OFF

Listeners to OSCAR-11 may be interested in visiting my website which contains
an archive of news & telemetry data. It also contains details about using a soundcard or hardware demodulators for data capture. There is software for capturing data, and decoding ASCII telemetry. The URL is:

www.users.zetnet.co.uk/clivew/

If you place this bulletin on a terrestrial packet network, please use the bulletin identifier $BID:U2RPT114.CWV, to prevent duplication.

More information on UO-11 OSCAR-11 can be found at:
http://www.users.zetnet.co.uk/clivew/

MPEG3 files can be found here at Mineo, JE9PEL website:
http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[ANS-WSR thanks Clive G3CWV for the above information]
[10302005]
NNNN
/EX

SB SAT @ AMSAT <W8ISS $ANS-331.S3
WSR 331 Part 3 11/27/2005

AMSAT NEWS SERVICE BULLETIN 331.S3 FROM AMSAT HQ
SILVER SPRING, MD, NOVENBER 27, 2005
TO ALL RADIO AMATEURS
BID: $ANS-331.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

SSETI ?O-??
Catalog Number: 28894
Launch Date: October 27, 2005

Status: In orbit - being commissioned

A daily report of the launch campaign is being maintained at
http://sseti.gte.tuwien.ac.at/express/mop/index.php?uri=news.html
This mission operations site is completely up-to-date regarding Kepler TLEs
and other LEOP "Launch and Early Operations Phase" details.

The SERACC software, needed to decode and submit the received data to the
SSETI database, together with some audio files containing recorded 9k6
signal
to experiment with is also now available

The ESA website about SSETI Express is at:
http://www.esa.int/SPECIALS/sseti_express/SEMARJ7X9DE_0.html

The latest version of the SSETI Express handbook can be downloaded free
of charge from the AMSAT-UK website at:
http://www.uk.amsat.org/

More SSETI Links at:

SpaceDaily has a report about SSETI at:
http://www.spacedaily.com/news/internet-04zzzu.html

You can find more info about SSETI at:
http://sseti.gte.tuwien.ac.at/WSW4/

Latest news about SSETI can be found at:
http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php

Look at the website for the SSETI Express webcam
http://sseti.gte.tuwien.ac.at/WSW4/webcam.htm
[ANS-WSR thanks Graham, UA/G3VZV and Trevor, M5AKA for the above]
[11202005]
======
POSAT-1 PO-28
Catalog Number: 22829
Launched : September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 435.250 MHz
435.275 MHz

Uplink: 145.925 MHz
145.975 MHz

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

PO-28 (POSAT-1), Portugal's first satellite, launched 12 years ago,will be turned over to Amateur Radio use in the very near future. That was the word July 30 from AMSAT-UK Secretary Jim Heck, G3WGM, during the AMSAT-UK International Space Colloquium in Guildford, England.

Launched September 25, 1993, the satellite operated as a packet store-and-forward BBS (9600 baud FM FSK) on Amateur Radio frequencies for several weeks in early 1994. Over the years, PO-28's primary usage has been commercial, although plans have called for eventually shifting its operation to ham radio use. G3WGM reports that following lengthy negotiations it has been agreed that the satellite can be switched permanently to amateur frequencies. The changeover is expected to take a couple of weeks.

The Portuguese satellite was built at the University of Surrey as part of a collaborative satellite technology program that involved industry and academe. Uplink frequencies will be 145.925 and 145.975 MHz. Downlink frequencies will be 435.250 and 435.275 MHz. More information on PO-28 is on the AMSAT Web site

http://www.amsat.org/amsat/sats/n7hpr/po28.html.

Uplink Frequencies: 145.925 and 145.975 MHz
Downlink Frequencies: 435.250 and 435.275 MHz

Orbit: 822 x 800 km, 98.6 deg inclined, sun-synchronous.

Transponder capabilities include FM repeater and 38k4 data. If you want to hear how loud this satellite is, listen on 429.950 until the change back to amateur radio service.

Keplerian elements for PO-28 are currently contained in the AMSAT keps bulletins and at Celestrak in amateur.txt using the name "POSAT". Users of Space Track should query the NORAD Satellite ID number 22829. The name listed by Space Track is "EYESAT A".

More information of POSAT-1 can be found at:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
http://www.amsat.org/amsat/sats/n7hpr/po28.html
[ANS-WSR wishes to thank Duane Naugle, KO6BT, for this week's update.]
[11062005]

=====

AO-10 OSCAR 10
Catalog number: 14129
Launched: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB
Beacon: 145.810 MHz (unmodulated carrier)

AO-10 has been locked into a Mode-B, 70-cm uplink and 2-meter downlink for several years.

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]

=====

IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: Non-operational

Uplink: 145.875 145.900 145.925 145.950 MHz FM (1200-baud)
Downlink: 435.812 MHz SSB
Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Alberto E. Zagni - I2KBD reports on 02/13/05
The spacecraft is in MBL (safe mode) and is trasmitting just 6 channels of telemetry. Temperatures and voltage are nominal, but there seems to be a problem with the onboard receiver, refusing to accept commands. The spacecraft was launched in 1993, thus nearing 12 years in orbit...

Best regards
Alberto E. Zagni - I2KBD
ITAMSAT Mission Director

More information of IO-26 can be found at:

```
http://joshua.micronet.it/english/itamsat/itamsathome.html
http://www.amsat.org/amsat/sats/n7hpr/io26.html
www.itamsat.org

[02132005]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink:   21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB
Beacon:   29.408 MHz
Robot:    29.454 MHz
[05232004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink:      21.260 to  21.300 MHz CW/USB
Downlink:   145.860 to 145.900 MHz CW/USB
Beacon:     145.860 MHz
Robot:      145.908 MHz
[05232004]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink 145.975 MHz FM
Downlink 435.070 MHz FM
[05092004]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink:             145.900 FM 9600-baud FSK
Downlink:           435.120 MHz FM
Broadcast Callsign: UOSAT5-11
BBS:                UOSAT5-12
[01092005]
=====
RS-15 RADIO SPORT RS-15
```

Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational?

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB
Beacon: 29.352 MHz (intermittent)
SSB meeting frequency: 29.380 MHz (unofficial)

John, KD6PAG reports on June 16, 2004 to WSR:
RS-15 beacon seemed to be back in the mode where it's a tone about 5
seconds off and then 5 seconds on this morning.

WSR is looking for more confirmations of RS-15 coming back.

[ANS-WSR thanks John, KD6PAG for RS-15 information]
[06202004]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplink: 145.84 145.86 145.88 145.90 MHz FM
                    (using 1200-baud Manchester FSK)
CW downlink: 437.125 MHz
Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)
Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[05232004]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[08152004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM
Broadcast Callsign: HL01-11
BBS: HL01-12

Jim, AA7KC, reports that KO-23's downlink transmitter continues in a non-operational status.
[05092004]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM (9600-baud FSK)
Downlink: 436.500 MHz FM
Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink frequency (listed on the PanSat web site) 436.500 MHz

The satellite is not available for general uplink transmissions.

The Naval Postgraduate School developed PanSat. At the time of launch, PanSat spread-spectrum digital transponders were to be available to Amateur Radio operators along with software to utilize this technology.

The satellite is still operating, however, the spread spectrum packet radio portion never took place. The spacecraft is now beyond it's initial 2-year mission life, but telemetry records are still being downloaded.

For more information, visit the official PanSat web site at:
http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm

[ANS-WSR has no further information]
[05232004]
=====
SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

STatus: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
          Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
         Mode J Digipeater: 145.825 MHz and 145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[08082004]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlink: 437.025 MHz 437.400 MHz
Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA
web site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[05092004]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

```
Uplink      V-band    145.840 -  145.990 MHz CW/LSB
            U-band    435.550 -  435.800 MHz CW/LSB
           L1-band   1269.250 - 1269.500 MHz CW/LSB
           L2-band   1268.325 - 1268.575 MHz CW/LSB
           S1-band   2400.350 - 2400.600 MHz CW/LSB
Downlink:  S2-band   2401.225 - 2401.475 MHz CW/USB
           K-band 24,048.010 - 24,048.060 MHz CW/USB
Beacon:    2401.323, 24,048.035
[05232004]
-----
SO-42  SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational
 Downlink:           437.075 MHz
Broadcast Callsign: SASAT2-11
BBS:                SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[08152004]
=====
SO-41  SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink:             145.850 MHz
Downlink:           436.775 MHz
Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[08152004]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink:   145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is  welcome to use the digipeating/APRS features of Sapphire,
callsign KE6QMD, as per the user service agreement located at the
following
URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
MO-46 TIUNGSAT-1
```

Catalog number: 26548
Launched: September 26, 2000

Status: Operational

Uplink: 145.850 or 145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz
Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[11202005]

=====

AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Semi-operational.

Uplink 435.275 1200-baud AFSK
Downlink 145.825 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

AO-49 (SAFIR-M) is a German amateur radio payload onboard the small German scientific satellite "RUBIN-2".

AO-49 was built by the German amateur radio association "AATiS e.V." (German acronym for "Arbeitskreis Amateurfunk und Telekommunikation in der Schule", which means: 'working group for amateur radio and telecommunications in schools'). AO-49 is designed as a "store and broadcast" system for APRS based messages, dedicated for the use of schools in combination with the existing WX-Net and planned buoy experiments in Germany.

No transmissions detected since the 1st of February 2003! It appears AO-49 is not properly aligned to illuminate the solar panels. This should end soon. Due to its orbit, AO-49 will be in a phase without eclipses until 13Feb03.

Martin DG8UAU has written a small software program "SAFIR-M Decoder" to allow decoding of the received DATA0 frames. It is available at: http://amend.gmxhome.de in the section Aktuelles.

Details on AO-49 (SAFIR-M) can be found at:

http://amend.gmxhome.de

Information about AATiS e.V. is available at:
http://www.aatis.de
[11132005]
NNNN
/EX

SB SAT @ AMSAT <W8ISS $ANS-331.S4
WSR 331 Part 4 11/27/2005

AMSAT NEWS SERVICE BULLETIN 331.S4 FROM AMSAT HQ
SILVER SPRING, MD, NOVEMBER 27,2005
TO ALL RADIO AMATEURS
BID: $ANS-331.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE
PROPOSED FOR LAUNCH AT THIS TIME:

UCISAT ?O-??
Catalog number:
Proposed Launch Date: October 31, 2005

Status: Under Construction

Downlink: Submission in Progress
Uplink: Submission in Progress
Callsign: Submission in Progress
[11272005]

=====
PHASE 3E ?O-??
Catalog Number:
Proposed Launch Date: Early 2006

Status: Under Construction

For the latest project status update please visit the AMSAT-DL
P3-E web page:
http://www.amsat-dl.org/p3e/

[ANS-WSR wishes to thank William Leijenaar, PE1RAH for this week's report]
[10022005]

=====
CP1 ?o-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: N6CP
Proposed Transmit Frequency: 436.845
[03272005]

=====
CP2 ?O-??
Catalog Number:

```
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.325
[03272005]
=====
HAUSAT1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: D90HP
Proposed Transmit Frequency: 437.465
[03272005]
=====
ICE Cube 1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: W2CXM
Proposed Transmit Frequency: 437.305
[03272005]
=====
ICE Cube 2 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: N2VR
Proposed Transmit Frequency: 437.425
[03272005]
=====
ION ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.505
[03272005]
=====
KUTEsat ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: KC0RMW
Proposed Transmit Frequency: 437.385
[03272005]
=====
MEROPE ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: K7MSU-1
Proposed Transmit Frequency: 145.980
[03272005]
```

```
=====
nCUBE1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
       2407.25
[03272005]
=====
RINCON ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
        437.345
[03272005]
=====
SACRED ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
[03272005]
=====
SACRED ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
[03272005]
=====
SEEDS ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: JQ1YGU
Proposed Transmit Frequency: 437.485
[03272005]
=====
Mea Huaka ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.405
[03272005]
=====
SUITSAT ?O-??
Catalog Number:
```

Proposed Release Date: December 8th, 2005

Proposed Callsign: RS0RS ?
Proposed Transmit Frequency: 145.990

This from Frank, KA3HDO:
I have recieved information that the Russian EVA that will deply SuitSat, planned for December 8th, has been delayed to late January/Early February 2006. As we get more information, we will post it.

[ANS-WSR wishes to thank Frank Bauer, KA3HDO for this weeks report]
[11272005]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
        888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/amsat/listserv/menu.html

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the
memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen,
G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

```
From -3922322779933798354
X-Google-Thread: 10e8ad,70e7bf815dd72049,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news4.google.com!border1.nntp.dca.giganews.com!
border2.nntp.dca.giganews.com!nntp.giganews.com!elnk-atl-nf1!
newsfeed.earthlink.net!stamper.news.atl.earthlink.net!
newsread3.news.atl.earthlink.net.POSTED!46041641!not-for-mail
From: "JoAnne Maenpaa" <wb9jej_no-spam@earthlink.net>
Newsgroups: rec.radio.amateur.space
Subject: ANS-338 AMSAT News Service Weekly Bulletin
Lines: 388
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <kVKkf.9856$wf.8653@newsread3.news.atl.earthlink.net>
Date: Sun, 04 Dec 2005 23:25:04 GMT
NNTP-Posting-Host: 68.164.230.110
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread3.news.atl.earthlink.net 1133738704 68.164.230.110 (Sun, 04 Dec
2005 15:25:04 PST)
NNTP-Posting-Date: Sun, 04 Dec 2005 15:25:04 PST
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news1.google.com rec.radio.amateur.space:296
```

AMSAT NEWS SERVICE
ANS-338

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:

* PCSAT1 and PCSAT2 Two-Hop Operations
* ISS Active on Casual Contacts
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* ARISS Status for the week of November 28, 2005
* Russian Space Agency Explains December Spacewalk Delay
* St. Pierre and Miquelon Satellite DXpedition Report
* Eagle Hardware Elements

SB SAT @ AMSAT $ANS-338.01
PCSAT1 and PCSAT2 Two-Hop Operations

AMSAT News Service Bulletin 338.01
From AMSAT HQ SILVER SPRING, MD.
December 4, 2005
To All RADIO AMATEURS
BID: $ANS-338.01

Bob Bruninga, WB4APR, writing on behalf of the US Naval Academy Satellite Laboratory, reported this week that the original PCSat (PCSAT1), which is operational only when its solar cells are in sunlight, has had as many as 45 users in a single day and 72 different callsigns over a period of two days. This is because PCSAT1's orbit has taken the satellite into a 12 day full-sun period.

Additionally, PCSAT2, mounted aboard an external strut on the International Space Station will be activated as its solar cells will be once again facing the sun as the ISS makes orbital attitude adjustments. The PCSAT2 user digipeater with its 145.825 uplink and 435.275 downlink will be back on-the-air.

With PCSAT1 and PCSAT2 both active, the control team at the US Naval Academy will make a few changes to improve the chances of mulitple satellite hops of digipeated signals:

1) We will add SGATE as an alias to PCSAT2 so that ANY over the horizon PCSAT1 originated packets that are heard by PCSAT2 will be relayed since these packets already contain the SGATE digipeating path.

2) Stations sending up through PCSAT1 as a first hop may get a second hop through PCSAT2 if they use any dual hop path (ARISS, ARISS; or WIDE2-2; or PCSAT2,PCSAT1; etc) The second hop will only be heard on the PCSAT2 435.275 downlink.

3) As of December 3, the PCSAT2 435.275 downlink was switched down to 145.825 so that PCSAT2 and PCSAT1 are identical systems both with uplinks and downlinks on 145.825 acting as a 2-hop constellation both on 145.825. Both will be supporting the normal

APRS aliases of WIDE, or ARISS, or APRSAT or WIDE2-2 so that you can digipeat through either one or both.

4) The PCSAT2 dowlink will shift back to 435.275 on 7 Dec to avoid any possible interference with the next school contact with Sanderson, TX, on 8 Dec at 1730z.

Bob reminds PCSat users, "Of course, the MORE that try the FEWER will be the success rate. So if you really don't know what you are doing, PLEASE do not transmit and just watch. YOUR station may be the one that SEES the dual hop, so that should be a good reward too. Make your packet as SHORT as possible and use the shortest TXD for your TNC. The PCSATs should respond with TXD's as low as 10 which is 100 milliseconds in real-time. Also, transmit occassionally, NOT repeatedly, maybe once a minute or so.

Bob summarized, "When PCSAT1 returns to eclipses, we are usually lucky enough to keep her from resetting for a few more weeks and at least daylight operations can continue normally. But once it resets, either due to peak user load or a Single Event Upset from radiation, then we lose her again until the next full sun period in the first week of March 2006."

For additional details please see the PCSAT2 web page at:
http://www.ew.usna.edu/~bruninga/pcsat2.html

[ANS thanks Bob, WB4APR, and the US Naval Academy Satellite Lab for the above information]

/EX

SB SAT @ AMSAT $ANS-338.02
ISS Active on Casual Contacts

AMSAT News Service Bulletin 338.02
From AMSAT HQ SILVER SPRING, MD.
December 4, 2005
To All RADIO AMATEURS
BID: $ANS-338.02

International Space Station Commander, Astronaut Bill McArthur, KC5ACR, has been very active on the NA1SS amateur radio station aboard the ISS over the past several days. Since November 23, NA1SS has made over 50 contacts during brief operating opportunities. This past week, reports from Turkey, South Africa, South America and North America indicated NA1SS was calling CQ and making contacts.

For those who are still trying for a contact with the ISS, keep it up! For those of you lucky enough to work him, congratulations, but please give the others a little more time before making another contact since you have your QSO for Expedition 12. Lets see how many different stations he can work.

In addition, Bill has been doing 2 school contacts a week when his schedule allows. Not since Expedition 3 has a crew member done this on a regular basis. Please consider telling Bill, "Thank you" for all of us if you are fortunate enough to speak with NA1SS.

Worldwide packet uplink: 145.990 MHz FM
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM
Doppler Shift is 10 KHz

Russian callsigns: RS0ISS, RZ3DZR
USA callsign: NA1SS
Packet station mailbox callsign: RS0ISS-11
Packet station keyboard callsign: RS0ISS-3
Digipeater callsign: ARISS

[ANS thanks Kenneth, N5VHO for the above information]

/EX

SB SAT @ AMSAT $ANS-338.03
Straight Key Night on OSCAR 2006

AMSAT News Service Bulletin 338.03
From AMSAT HQ SILVER SPRING, MD.
December 4, 2005
To All RADIO AMATEURS
BID: $ANS-338.03

Once again AMSAT-NA is pleased to sponsor Straight Key Night on OSCAR for enjoyment by all radio amateurs.

OSCAR SKN 2006 will run for 24 hours, 0000-2400 UTC, on 1 January 2006. It's very simple: no rules, no scoring, and no need to send in a log. Just operate CW through any OSCAR satellite using a straight hand key, working as many other SKN participants as you can. Contacts via the moon (OSCAR Zero) count too.

As in past years, all participants are requested to nominate one of the operators they worked for "Best Fist" recognition. Your nominee need not have the best fist of those you heard, just of those you worked.

Please send all nominations to Ray Soifer via w2rs@arrl.net.

A list of those nominated will be published via the AMSAT News Service in early February, and in The AMSAT Journal.

[ANS thanks Ray, W2RS for the above information]

/EX

SB SAT @ AMSAT $ANS-338.04
AMSAT Awards This Week

AMSAT News Service Bulletin 338.04
From AMSAT HQ SILVER SPRING, MD.
December 4, 2005
To All RADIO AMATEURS
BID: $ANS-338.04

Bruce Paige, KK5DO, AMSAT Director Contests and Awards, says this week congratulations go out to all of the following.

Whitton Amateur Radio Group, G0MIN, 51 on 51 Award #45
Tokuhisa Saito, JA2NLT, 51 on 51 Award #46

To see all the awards visit http://www.amsat.org.

[ANS thanks Bruce, KK5DO, for the above information]

/EX

SB SAT @ AMSAT $ANS-338.05
ARISS Status for the week of November 28, 2005

AMSAT News Service Bulletin 338.05
From AMSAT HQ SILVER SPRING, MD.
December 4, 2005
To All RADIO AMATEURS
BID: $ANS-338.05

1. ESA CERN Contact Successful
On Tuesday, November 22, eighteen students attending the ESA CERN Geneva Science Festival each asked a question of Bill McArthur, KC5ACR, via the telebridge station, NN1SS, in Greenbelt, Maryland. The event was attended by approximately 300 students and teachers, and at least one television station and a professional photographer. ESA will edit and post a video of the contact on its website in the near future.

The audio was fed to the Echolink AMSAT and EDU_NET conference room servers. Twenty-three connections were made, including three repeater nodes, from the following countries: Belgium, France, Germany, Israel, Morocco, Slovenia,
Switzerland, Thailand, the U.K. and the U.S.A.

A write up on the contact, "Students at 'Science on Stage' Festival Talk with ISS" is available on the ARISS Europe website. A link to the audio is included. See: http://www.ariss-eu.org/2005_11_24.htm

2. Central Park Middle School (NES) Contact Successful

On Wednesday, November 23, students from Central Park Middle School, (a NASA Explorer School), in Schenectady, New York, experienced a successful ARISS contact via the telebridge station, W6SRJ, in Santa Rosa, California. Astronaut Bill McArthur, KC5ACR, answered eighteen questions posed to him by thirteen Central Park students. Four television stations (6, 9, 13 and Fox 23) covered the event.

Echolink was used for this contact, where thirty-one connections were made from these countries: Bangladesh, Canada, France, Germany, Israel, Italy, Morocco, Oman, Romania, Russia, Sri Lanka, Taiwan, Thailand, the U.K., and the U.S.A.

Central Park posted a short story covering the contact on its website: "Central Park NASA Explorer School Call International Space Station, Again" may be found at:
http://www.schenectady.k12.ny.us/NASAExplorerSchool/spacestation112305.htm>

3. School Contacts This Week

Hawthorne Brook Middle School in Townsend, Massachusetts completed an ARISS contact on Tuesday, November 29. Ralph McCall School in Airdrie, Alberta, Canada completed an ARISS contact on Friday, December 2.

4. ARRL's New Book Mentions ISS Ham Contacts

ARRL has released, for sale, the first edition of a brand new book, "Basic Radio, Understanding the Key Building Blocks." The first page of one chapter features a large NASA photograph of astronaut Leroy Chiao, who earned ham radio call sign KE5BRW. The descriptor explains that Leroy set a record in space. His record was making 23 educational radio contacts with school students while leading Expedition 10 aboard the International Space Station.

[ANS thanks Carol, KB3LKI for the above information]

/EX

SB SAT @ AMSAT $ANS-338.06
Russian Space Agency Explains December Spacewalk Delay

AMSAT News Service Bulletin 338.06
From AMSAT HQ SILVER SPRING, MD.
December 4, 2005
To All RADIO AMATEURS
BID: $ANS-338.06

Russian space agency officials on Thursday, December 1, officially postponed the scheduled December 8 spacewalk by the Russian-American crew of the International Space Station. The December 8 spacewalk was originally scheduled to release SuitSat.

"The extravehicular activity of Valery Tokarev and William McArthur is not planned in December," Russia's Mission Control Center spokesman Valery Lyndin told the Itar-Tass news agency.

Mission Control Center Flight Director Vladimir Solovyov said the postponement was made possible since the spacemen would not have to prepare to receive a U.S. shuttle in March, as had been planned.

"It was initially planned that the American shuttle will come to the ISS in March, but now it is apparent that the 12th crew will not work with the shuttle," Solovyov told Itar-Tass.

NASA officials say the shuttle will not be launched earlier than May or July and set February 2, 2006 as the date for the postponed spacewalk. SuitSat is planned for deployment during this ISS spacewalk.

[ANS thanks SpaceDaily.com for the above information]

/EX

SB SAT @ AMSAT $ANS-338.07
St. Pierre and Miquelon Satellite DXpedition Report

AMSAT News Service Bulletin 338.07
From AMSAT HQ SILVER SPRING, MD.
December 4, 2005
To All RADIO AMATEURS
BID: $ANS-338.07

Ian, K8MM, reported DXpedition success from St. Pierre and Miquelon. "I had a great time, satellite operation was a blast, and I'm really glad that I took satellite gear with me. I was using my IC-910 with a pair of homebrew K5OE TPMII antennas along with Icom preamps.

Sunday night, the first night of the expedition, was spent at the Hotel Robert on St. Pierre. The local terrain was not favorable for satellites as I could only hear the overhead passes. The first bird I managed to get into was VO-52 and I called CQ for close to 10 minutes without making any contact as nobody was listening to the bird at that time. After a couple more fruitless tries on FO-29 and AO-51 I took the gear down and repacked it for the ferry trip to Miquelon in the morning.

Wednesday morning we awoke to gale force winds and rain. Having had my fill of HF pile-ups, I dug out the satellite antennas, put on my rain gear and braved the elements. You have not lived until you're tried putting up antennas in 70 mph winds! I had to wait until AO-51 was about 20 degrees in elevation before it wasn't blocked by the hotel or the mountain so I could hear it clearly. There weren't any qso's in progress so I gave a short CQ with my call and the bird quickly sprang to life with KB2YCC calling me. We exchanged info and he was the first satellite qso in the log for the dxpedition. More guys that were quickly worked on that pass were

VO1ONE, W8EH, AJ9K and N8BBQ in that order.

A look at the computer showed that FO-29 would be giving me an EU pass. I put my rain gear on and went back outside to point the antennas toward the East. It was directly over the sea for the portion of time EU and FP were in it's footprint. I worked F6BBJ, ON5NY on CW. On phone the satellite sounded pile-up on 20M! I managed work PH7PCF, 2E1EUB, and PH7AT. There are many more stations in the log than I can mention here.

Operating on the FM birds, KO4MA, K1PL, WI2W, KC8ZFN, W0SAT, and many other stations made it into the log.

If anyone is thinking of going to Miquelon there isn't a place that I can't recommend more highly than the Maxhotel and I left my TPMII satellite antennas there for anyone that wants to use them. The hotel is ham friendly and Christina, the manager at the hotel, went above and beyond the call of duty."

[ANS thanks Ian, K8MM for the above information]

/EX

SB SAT @ AMSAT $ANS-338.08
Eagle Hardware Elements

AMSAT News Service Bulletin 338.08
From AMSAT HQ SILVER SPRING, MD.
December 4, 2005
To All RADIO AMATEURS
BID: $ANS-338.08

Fred, KF0AK, is a member of the team working on the building of the Eagle Modules. He has put some information on his web page about the hardware construction of the Eagle modules. Fred says he will try to update his site weekly.

See: http://www.paulbunyan.net/users/fparker

[ANS thanks Fred, KF0AK for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Dee Interdonato, NB2F

nb2f at amsat dot org

From -2759870448678973517
X-Google-Thread: 10e8ad,5b85e300715d33a9,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news3.google.com!border1.nntp.dca.giganews.com!
border2.nntp.dca.giganews.com!nntp.giganews.com!elnk-atl-nf1!
newsfeed.earthlink.net!stamper.news.atl.earthlink.net!
newsread3.news.atl.earthlink.net.POSTED!46041641!not-for-mail
From: "JoAnne Maenpaa" <wb9jej_no-spam@earthlink.net>
Newsgroups: rec.radio.amateur.space
Subject: WSR-338 AMSAT Weekly Satellite Report
Lines: 1232
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <mWKkf.9857$wf.7140@newsread3.news.atl.earthlink.net>
Date: Sun, 04 Dec 2005 23:26:10 GMT
NNTP-Posting-Host: 68.164.230.110
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread3.news.atl.earthlink.net 1133738770 68.164.230.110 (Sun, 04 Dec 2005 15:26:10 PST)
NNTP-Posting-Date: Sun, 04 Dec 2005 15:26:10 PST
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news1.google.com rec.radio.amateur.space:297

This report is organized into 4 parts.
Part 1 - operational analog amateur satellites.
Part 2 - operational digital amateur satellites.
Part 3 - non - operational satellites
Part 4 - proposed satellites

SB SAT @ AMSAT <KB9MMC $ANS-338.S1
WSR 338 Part 1 12/04/2005

AMSAT NEWS SERVICE BULLETIN 338.S1 FROM AMSAT HQ
SILVER SPRING, MD, December 4, 2005
TO ALL RADIO AMATEURS
BID: $ANS-338.S1

VO-52 HAMSAT
Catalog Number: 28650
Launch Date: May 05,2005

Status: Testing
Current Mode: U/V - Dutch Transponder

Proposed frequencies:

Indian Transponder:
Uplink : 435.220 MHz to 435.280 MHz LSB/CW
Downlink: 145.870 MHz to 145.930 MHz USB/CW
Beacom : 145.859330 MHZ CW

Dutch Transponder:
Uplink : 435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW
Beacon : 145.860MHz 12WPM with CW message

This from William Leijenaar, PE1RAH:
Dear AMSATs,

I wish I had the same free time now as when I designed the HAMSAT and P3e transponder. Unfortunatly these times have been changed (for the moment) due to QRL things.

However, I often try to be QRV on the HAMSAT and check the signals from my transponder and read the messages on amsat-bb. I just read about the beacon "problem". The "problem" with the beacon is actually not a problem but it is known. The beacon signal is injected at the IF, and runs throught the transponder from the IF section, up converter, via the final PA to the antenna.

The changes you hear on the beacon frequency is caused by the amplitude limiters in the IF that are activated by a too strong uplink signal. These limiters are only for protection, to avoid that the IF and VHF amplifiers get overloaded and generate all kinds of unwanted signals at the output.

My transponder is straight forward to keep it physical small and cheap in cost (as I had no sponsors). Unlike most other transponders my transponder on HAMSAT has no AGC system. It gives always maximum gain with maximum sensitivity.
The main reason is that the AGC systems I had didn't fit in the small sized box. As an option I choose for limiters, and it worked great in tests.

Secondly, I tought limiters might be helpfull against aligators. To deal with too strong signals most transponder have an AGC to lower the RX gain, and actually be helpfull to the alligators. With the limiters their SSB signal will get distorted and they might lower their powers to have better audio quality.

The change in beacon sound is an indication for too much uplink powers and will be heared mainly in areas where higher powers are available on the uplink, like US, Europe, Japan...

Its funny to know that nobody here has discovered that the bandpass is shifted
some down in frequency... There is no technical failure, the reason is known
here... No panic please :o)

Please keep in mind that this transponder is my privat work and privat money.
Frankly speaking this is my privat transponder I "give" to the amateur world.
I was one of those many poor students, and this was the best I could do with
my resources I had available at that time... The whole thing is just 16cm x
10cm x 3cm !! even smaller than the professional Indian transponder :o)

I hope you all enjoy my transponder even when it is not perfect.
[11272005]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Mode: PBBS - V/U 9k6
VOICE REPEATER - V/U FM

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
Analog voice uplink: 145.880 MHZ FM
145.920 MHz FM 67Hz PL tone
1268.700 MHz FM 67Hz PL tone

Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast
Protocol (PBP)

Broadcast: PECHO-11
BBS: PECHO-12

This from the AO-51 Command team:

5 Dec
FM Repeater, L/U
Uplink: 1268.700 mhz FM
Downlink 435.300 mhz FM

8 Dec (Wed Night)
9k6 Digital, V/U, High Power, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 435.150 mhz FM, 9k6 PBP Digital

12 Dec

FM Repeater, V/S
Uplink: 145.920 mhz FM, No PL Tone
Downlink 2401.200 mhz FM

19 Dec
FM Repeater, V/U
Uplink: 145.920 mhz FM, 67 hz PL Tone
Downlink 435.300 mhz FM
9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 435.150 mhz FM, 9k6 PBP Digital

[ANS-WSR thanks Mike Kingery, KE4AZN for the above information]
[11202005]

=====

SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Uplink: 145.850 MHz (67.0 Hz PL tone) (See below for operating procedures)
Downlink: 436.795 MHz

There have been unconfirmed reports on the amsat-bb remailer that SO-50 has shifted downlink frequency as much as 5khz up. This both from Europe.

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz. The order of operation is thus: (allow for Doppler as necessary)

1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10 minute timer.

[09122004]

=====

FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: OPERATIONAL

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplink: 145.850 145.870 145.910 MHz FM

Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

John, N4QWL reports on July 16th, 2005:
Last evening I had a AOS to LOS qso with WI2W. FO-29 came up at 01:17z here in
FM07 and I found WI2W and we chatted until 01:33z. The satellite was at 2 degrees elevation when I finally heard him start to crackle a bit. What a great QSO! To think that I watched this bird launch back in 1996 and it is still working so well is a real thrill. I believe I still have the video. I might just look for it and watch it again. Boy do I love this satellite stuff!
Look for you all up there.

Please send the reception reports to lab2 'at' jarl.or.jp.
Please use the subject line: 'FO-29 reception report'.

Mineo, JE9PEL, has an FO-29 satellite telemetry analysis program that will automatically analyze all digital telemetry from the satellite (such as current, voltage and temperature). FO29CWTE is available at:
http://www.ne.jp/asahi/hamradio/je9pel/
[ANS-WSR wishes to thanks John, N4QWL for this week's report]
[11132005]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Uplink: 145.850 MHz FM
Downlink: 436.795 MHz FM

The latest information on AO-27 from control operator Michael Wyrick, N3UC (former N4USI), can be found at:
http://www.ao27.org

An AO-27 question-and-answer page is available on the AMSAT-NA web site, with
updates by Ray, W2RS. The URL is:
http://www.amsat.org/amsat/intro/ao27faq.html

[ANS-WSR thanks John, K6YK, for this week's AO-27 report]
[11132005]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Semi-operational in sunlight.
Return to active status: June 21,2002

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
            432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A
            145.975 to 145.925 MHz CW/USB Mode B
Beacon: 29.502 MHz, 145.972 MHz, 435.1 MHz, 2304.1 MHz

Emily, W0EEC has created a website to allow the users of AO-7 to record
contacts, observations and use of the satellite more effectively at:
http://www.emilyshouse.com/experthams/ao7/main.php
This includes the ability to log contacts.

Tim, K3TZ has written a program to decode AO-07 telemetry. The program can be downloaded at:
http://www.qsl.net/k3tz/files/K3TZ_AO-07_Telemetry_Decoder_0.5.zip

For more AO-7 info:
http://www.amsat.org/amsat/sats/n7hpr/ao7.html
[11132005]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: DIGIPEATER
Digipeater: ACTIVE

The current Expedition 12 crew is:
Commander: William McArthur - KC5ACR
Flight Engineer: Valery Tokarev - (no call)

Worldwide packet uplink: 145.990 MHz FM
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM
Doppler Shift is 10 KHz

Russian callsigns: RS0ISS, RZ3DZR
USA callsign: NA1SS
Packet station mailbox callsign: RS0ISS-11
Packet station keyboard callsign: RS0ISS-3
Digipeater callsign: ARISS

The ISS Fan Club Webpage < http://www.issfanclub.com > reports that the Digipeater is active as of Nov 14th, 2005 at 0207UTC.

The ISS daily crew schedule can be found at:
http://spaceflight.nasa.gov/station/timelines/

Remember that the crew operates on UTC time. Also, all of the time line is NOT translated from Russian and posted.

More information is available at:
http://www.rac.ca/ariss
http://spaceflight.nasa.gov/station/reference/radio/
http://www.marexmg.org/fileshtml/unprotopage.html
http://www.issfanclub.com
http://oscar.dcarr.org/
[11132005]
NNNN
/EX

SB SAT @ AMSAT <KB9MMC $ANS-338.S2
WSR 338 Part 2 12/04/2005

AMSAT NEWS SERVICE BULLETIN 338.S2 FROM AMSAT HQ
SILVER SPRING, MD, December 4, 2005
TO ALL RADIO AMATEURS
BID: $ANS-338.S2

PCSAT2 ?0-??
Catalog Number: 25544
Launch Date: August 1, 2005

Status: Battery-saving mode
Current Mode: None

Digital Downlink: 435.275 Mhz
Digital Uplink: 145.825 Mhz
PSK-31 Downlink: 435.275 Mhz
PSK-31 Uplink: 29.400 - 29.403 Mhz

Broadcast:
BBS:

PCSAT2 was installed on the exterior of the International Space Station and was activated on August 3, 2005.

Packets seen from PCSAT2 can be reviewed at:
http://www.findu.com/cgi-bin/pcsat2.cgi

A screen shot of both the 9600 bps and 1200 bps decoded data as seen by Simon, 9W2QC, can be seen at:
http://www.9w2qc.net/pcsat2/

More information on PCSAT2 can be found at:
http://web.usna.navy.mil/~bruninga/pcsat2.html
[11272005}

=====
AO-51 ECHO

Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Mode: PBBS - V/U 9k6
VOICE REPEATER - V/U FM

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
Analog voice uplink: 145.880 MHZ FM
145.920 MHz FM 67Hz PL tone
1268.700 MHz FM 67Hz PL tone

Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast
Protocol (PBP)

Broadcast: PECHO-11
BBS: PECHO-12

This from the AO-51 Command team:

5 Dec
FM Repeater, L/U
Uplink: 1268.700 mhz FM
Downlink 435.300 mhz FM

8 Dec (Wed Night)
9k6 Digital, V/U, High Power, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 435.150 mhz FM, 9k6 PBP Digital

12 Dec
FM Repeater, V/S
Uplink: 145.920 mhz FM, No PL Tone
Downlink 2401.200 mhz FM

19 Dec
FM Repeater, V/U
Uplink: 145.920 mhz FM, 67 hz PL Tone
Downlink 435.300 mhz FM
9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 435.150 mhz FM, 9k6 PBP Digital
[ANS-WSR thanks Mike Kingery, KE4AZN for the above information]
[11202005]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Operational

General Usage Uplink/Downlink:145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSat is a 1200-baud APRS digipeater designed for use by stations using hand-held or mobile transceivers. Downlinks feed a central web site at: http://pcsat.aprs.org

The APRS-equipped PCSat was built by midshipmen from the U.S. Naval Academy under the guidance of Bob Bruninga, WB4APR.
[11272005]
=====
CUTE-1
Catalog number: 27844
Launched: June 30,2003

Status: Operational

Uplink: ?
Downlink: 436.8375 CW
              437.4700 1200 FM ax25 or SRLL (ACTIVE only near Japan ?)
Cliff, K7RR reports:
In the latest Weekly Satellite Report, CUTE 1, #27844 is listed as OPERATIONAL?
Indeed it is very operational as a CUBESAT sending CW telemetry on 436.8345 MHz. At the July 7 2005, 23:45:20 pass over the Western USA:
CUTE 1 6B A4 xx 7F D7 66A8 4702 FF FF7C 65
CUTE 1 6C A6 59 80 D9 66A8 4702 FF FE7C B6

The June 30th KEPS were within ten seconds of AOS and LOS. It is an very good object to practice tracking as the orbit and transmitter power are similar to proposed CUBESATS awaiting launch this December. As a check for Doppler correction, the lack of change in tone is an excellent indicator.

CUTE 1 is a Japanese (Tokyo Institute of Technology) one kilogram nanosatellite that was launched by a Rokot rocket from Plesetsk at 14:15 UT on 30 June 2003. It carries a 100 mW beacon at 436.8375 MHz. Initial orbital parameters were period 101.4 min, apogee 831 km, perigee 819 km, and inclination 98.7?.

For further info about CUTE-1 goto:
http://lss.mes.titech.ac.jp/ssp/cubesat/operation/Schedule_e.html

[ANS WSR wishes to thank Cliff, K7RR, for this week's information]
[07242005]
=====
GO-32 TECHSAT-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Downlink: 435.225 MHz FM (9600-baud FSK)
(435.325 n/a - temperature problems)
Uplinks: 145.850, 145.890, 145.930 FM
1269.700, 1269.800, 1269.900 FM
Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

Jeff, KB2M, reports November 15th, 2005:
I might be wrong about this, but as I am the only one I see working GO-32 here goes. If you do a DIR request up on the 145.890 uplink the bird turns on. Give it a try....

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[ANS-WSR wishes to thank Jeff, KB2M for this weeks report.]
[11202005]

=====

AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Semi-operational, the digipeater command is on and open for APRS users.

Uplink: 145.90 145.92 145.94 145.96 MHz FM
(using 1200-baud Manchester FSK)
Downlink: 437.026 MHz SSB (1200-baud PSK)
Mode-S Beacon: 2401.1428 MHz
Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

A WOD collection of current graphics along with general information and telemetry samples can be found at:
http://www.telecable.es/personales/ea1bcu
[05092004]

=====

UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational?

Telemetry Downlink: 145.826 MHz. FM (1200-baud AFSK).
approx. 10 days ON, 10 days OFF
Mode-S Beacon: 2401.500 MHz. ... OFF
UHFBeacon: 435.025 MHz. ... OFF

During the period 24 September to 25 October 2005 the VHF beacon on 145.826MHz resumed transmissions, as expected, on 30 September, sometime between 06:05 and 06:42 UTC passes. Reasonable signals were also captured on the 17:44 pass, later that day. However by the 16:49 UTC pass on 02 October, the beacon had switched OFF. Transmissions resumed on 21 October, and should continue until around 31 October.

The on-board clock continues to show a very large error. Currently it is 19.2394 days slow, having lost six hours while the beacon was last OFF, ie. between 02 October and 21 October. When the beacon is ON, the clock is stable to within a few seconds.

All the analogue telemetry channels, 0 to 59 are zero, ie they have failed. The status channels 60 to 67 are still working.

The eclipses have now ended, and the satellite should be in continuous sunlight for the remainder of this year, and well into next year. This should help the satellite to continue transmitting, although continuous sunlight can cause problems due to excessive temperatures.

The watchdog timer appears to be operating on the 20 day cycle, ie. approximately ten days ON followed by 10 days OFF. It appears to be uneffected by problems of the on-board clock. However, poor solar attitude, and battery problems, may be combining to produce a low line voltage. This causes the beacon to switch OFF premeaturely, and resets the watchdog timer cycle.

The Beacon frequencies are -
VHF 145.826 MHz. AFSK FM ASCII Telemetry
UHF 435.025 MHz. OFF
S-band 2401.5 MHz. OFF

Listeners to OSCAR-11 may be interested in visiting my website which contains
an archive of news & telemetry data. It also contains details about using a soundcard or hardware demodulators for data capture. There is software for capturing data, and decoding ASCII telemetry. The URL is:

www.users.zetnet.co.uk/clivew/

If you place this bulletin on a terrestrial packet network, please use the bulletin identifier $BID:U2RPT114.CWV, to prevent duplication.

More information on UO-11 OSCAR-11 can be found at:
http://www.users.zetnet.co.uk/clivew/

MPEG3 files can be found here at Mineo, JE9PEL website:
http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[ANS-WSR thanks Clive G3CWV for the above information]
[10302005]
NNNN
/EX

SB SAT @ AMSAT <KB9MMC $ANS-338.S3
WSR 338 Part 3 12/04/2005

AMSAT NEWS SERVICE BULLETIN 338.S3 FROM AMSAT HQ
SILVER SPRING, MD, December 4, 2005
TO ALL RADIO AMATEURS

BID: $ANS-338.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

SSETI ?O-??
Catalog Number: 28894
Launch Date: October 27, 2005

Status: In orbit - being commissioned

A daily report of the launch campaign is being maintained at
http://sseti.gte.tuwien.ac.at/express/mop/index.php?uri=news.html
This mission operations site is completely up-to-date regarding Kepler TLEs
and other LEOP "Launch and Early Operations Phase" details.

The SERACC software, needed to decode and submit the received data to the
SSETI database, together with some audio files containing recorded 9k6
signal
to experiment with is also now available

The ESA website about SSETI Express is at:
http://www.esa.int/SPECIALS/sseti_express/SEMARJ7X9DE_0.html

The latest version of the SSETI Express handbook can be downloaded free
of charge from the AMSAT-UK website at:
http://www.uk.amsat.org/

More SSETI Links at:

SpaceDaily has a report about SSETI at:
http://www.spacedaily.com/news/internet-04zzzu.html

You can find more info about SSETI at:
http://sseti.gte.tuwien.ac.at/WSW4/

Latest news about SSETI can be found at:
http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php

Look at the website for the SSETI Express webcam
http://sseti.gte.tuwien.ac.at/WSW4/webcam.htm
[ANS-WSR thanks Graham, UA/G3VZV and Trevor, M5AKA for the above]
[11202005]
======
POSAT-1 PO-28
Catalog Number: 22829
Launched : September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 435.250 MHz
          435.275 MHz

Uplink: 145.925 MHz

145.975 MHz

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

PO-28 (POSAT-1), Portugal's first satellite, launched 12 years ago,will be turned over to Amateur Radio use in the very near future. That was the word July 30 from AMSAT-UK Secretary Jim Heck, G3WGM, during the AMSAT-UK International Space Colloquium in Guildford, England.

Launched September 25, 1993, the satellite operated as a packet store-and-forward BBS (9600 baud FM FSK) on Amateur Radio frequencies for several weeks in early 1994. Over the years, PO-28's primary usage has been commercial, although plans have called for eventually shifting its operation to ham radio use. G3WGM reports that following lengthy negotiations it has been agreed thatthe satellite can be switched permanently to amateur frequencies. The change over is expected to take a couple of weeks.

The Portuguese satellite was built at the University of Surrey as part of a collaborative satellite technology program that involved industry and academe. Uplink frequencies will be 145.925 and 145.975 MHz. Downlink frequencies will be 435.250 and 435.275 MHz. More information on PO-28 is on the AMSAT Web site

http://www.amsat.org/amsat/sats/n7hpr/po28.html.

Uplink Frequencies: 145.925 and 145.975 MHz
Downlink Frequencies: 435.250 and 435.275 MHz

Orbit: 822 x 800 km, 98.6 deg inclined, sun-synchronous.

Transponder capabilities include FM repeater and 38k4 data. If you want to hear how loud this satellite is, listen on 429.950 until the change back to amateur radio service.

Keplerian elements for PO-28 are currently contained in the AMSAT keps bulletins and at Celestrak in amateur.txt using the name "POSAT". Users of Space Track should query the NORAD Satellite ID number 22829. The name listed by Space Track is "EYESAT A".

More information of POSAT-1 can be found at:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
http://www.amsat.org/amsat/sats/n7hpr/po28.html
[ANS-WSR wishes to thank Duane Naugle, KO6BT, for this week's update.]
[11062005]

=====

AO-10 OSCAR 10
Catalog number: 14129
Launched: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB

```
Downlink: 145.975 to 145.825 MHz CW/USB
Beacon:   145.810 MHz (unmodulated carrier)

AO-10 has been locked into a Mode-B, 70-cm uplink and
2-meter downlink for several years.

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: Non-operational

Uplink:             145.875 145.900 145.925 145.950 MHz FM (1200-baud)
Downlink:           435.812 MHz SSB
Broadcast Callsign: ITMSAT-11
BBS:                ITMSAT-12

Alberto E. Zagni - I2KBD reports on 02/13/05
The spacecraft is in MBL (safe mode) and is trasmitting just 6 channels
of telemetry. Temperatures and voltage are nominal, but there seems to
be a problem with the onboard receiver, refusing to accept commands.
The spacecraft was launched in 1993, thus nearing 12 years in orbit...

Best regards
Alberto E. Zagni - I2KBD
ITAMSAT Mission Director

More information of IO-26 can be found at:

http://joshua.micronet.it/english/itamsat/itamsathome.html
http://www.amsat.org/amsat/sats/n7hpr/io26.html
www.itamsat.org

[02132005]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink:   21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB
Beacon:   29.408 MHz
Robot:    29.454 MHz
[05232004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
```

```
Launched: February 5, 1991

Status: Non-operational

Uplink:      21.260 to  21.300 MHz CW/USB
Downlink:   145.860 to 145.900 MHz CW/USB
Beacon:     145.860 MHz
Robot:      145.908 MHz
[05232004]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink 145.975 MHz FM
Downlink 435.070 MHz FM
[05092004]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink:             145.900 FM 9600-baud FSK
Downlink:           435.120 MHz FM
Broadcast Callsign: UOSAT5-11
BBS:                UOSAT5-12
[01092005]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational?

Uplink:      145.858 to 145.898 MHz CW/USB
Downlink:     29.354 to  29.394 MHz CW/USB
Beacon:       29.352 MHz (intermittent)
SSB meeting frequency:  29.380 MHz (unofficial)

John, KD6PAG reports on June 16, 2004 to WSR:
RS-15 beacon seemed to be back in the mode where it's a tone about 5
seconds off and then 5 seconds on this morning.

WSR is looking for more confirmations of RS-15 coming back.

[ANS-WSR thanks John, KD6PAG for RS-15 information]
[06202004]
=====
LO-19 LUSAT
```

```
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplink:             145.84 145.86 145.88 145.90 MHz FM
                    (using 1200-baud Manchester FSK)
CW downlink:        437.125 MHz
Digital downlink:   437.150 MHz SSB (RC-BPSK 1200-baud PSK)
Broadcast Callsign: LUSAT-11
BBS:                LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[05232004]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Uplink:     145.90 to 146.00 MHz CW/LSB
Downlink:   435.80 to 435.90 MHz CW/USB
Beacon:     435.795

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[08152004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink:             145.900 MHz FM (9600-baud FSK)
Downlink:           435.170 MHz FM
Broadcast Callsign: HL01-11
BBS:                HL01-12

Jim, AA7KC, reports that KO-23's downlink transmitter continues in a
non-operational status.
[05092004]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink:             145.980 MHz FM (9600-baud FSK)
Downlink:           436.500 MHz FM
```

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]

=====

PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink frequency (listed on the PanSat web site) 436.500 MHz

The satellite is not available for general uplink transmissions.

The Naval Postgraduate School developed PanSat. At the time of launch, PanSat spread-spectrum digital transponders were to be available to Amateur Radio operators along with software to utilize this technology.

The satellite is still operating, however, the spread spectrum packet radio portion never took place. The spacecraft is now beyond it's initial 2-year mission life, but telemetry records are still being downloaded.

For more information, visit the official PanSat web site at:
http://www.sp.nps.navy.mil/pansat/
[05092004]

=====

SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm

[ANS-WSR has no further information]
[05232004]

=====

SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

STatus: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
          Mode J Digipeater: 436.250 MHz

```
Uplinks: Mode B Repeater: 145.825 MHz
         Mode J Digipeater: 145.825 MHz and 145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[08082004]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink:             145.960 MHz (9600-baud FSK)
Downlink:           437.025 MHz 437.400 MHz
Broadcast Callsign: UO121-11
BBS:                UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA
web site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[05092004]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplink      V-band    145.840 -  145.990 MHz CW/LSB
            U-band    435.550 -  435.800 MHz CW/LSB
           L1-band   1269.250 - 1269.500 MHz CW/LSB
           L2-band   1268.325 - 1268.575 MHz CW/LSB
           S1-band   2400.350 - 2400.600 MHz CW/LSB
Downlink:  S2-band   2401.225 - 2401.475 MHz CW/USB
           K-band 24,048.010 - 24,048.060 MHz CW/USB
Beacon:    2401.323, 24,048.035
[05232004]
-----
SO-42  SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational
 Downlink:           437.075 MHz
Broadcast Callsign: SASAT2-11
BBS:                SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[08152004]
=====
```

SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz
Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[08152004]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, callsign KE6QMD, as per the user service agreement located at the following
URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Operational

Uplink: 145.850 or 145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz
Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[11202005]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)

Catalog number: 27605
Launch Date: December 20, 2002

Status: Semi-operational.

Uplink 435.275 1200-baud AFSK
Downlink 145.825 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

AO-49 (SAFIR-M) is a German amateur radio payload onboard the small German scientific satellite "RUBIN-2".

AO-49 was built by the German amateur radio association "AATiS e.V." (German acronym for "Arbeitskreis Amateurfunk und Telekommunikation in der Schule", which means: 'working group for amateur radio and telecommunications in schools'). AO-49 is designed as a "store and broadcast" system for APRS based messages, dedicated for the use of schools in combination with the existing WX-Net and planned buoy experiments in Germany.

No transmissions detected since the 1st of February 2003! It appears AO-49 is not properly aligned to illuminate the solar panels. This should end soon. Due to its orbit, AO-49 will be in a phase without eclipses until 13Feb03.

Martin DG8UAU has written a small software program "SAFIR-M Decoder" to allow decoding of the received DATA0 frames. It is available at:
http://amend.gmxhome.de in the section Aktuelles.

Details on AO-49 (SAFIR-M) can be found at:
http://amend.gmxhome.de

Information about AATiS e.V. is available at:
http://www.aatis.de
[11132005]
NNNN
/EX

SB SAT @ AMSAT <KB9MMC $ANS-338.S4
WSR 338 Part 4 12/04/2005

AMSAT NEWS SERVICE BULLETIN 338.S4 FROM AMSAT HQ
SILVER SPRING, MD, December 4,2005
TO ALL RADIO AMATEURS
BID: $ANS-338.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE PROPOSED FOR LAUNCH AT THIS TIME:

UCISAT ?O-??

```
Catalog number:
Proposed Launch Date:  October 31, 2005

Status: Under Construction

Downlink: Submission in Progress
Uplink:   Submission in Progress
Callsign: Submission in Progress
[11272005]
=====
PHASE 3E ?O-??
Catalog Number:
Proposed Launch Date: Early 2006

Status: Under Construction

For the latest project status update please visit the AMSAT-DL
P3-E web page:
http://www.amsat-dl.org/p3e/

[ANS-WSR wishes to thank William Leijenaar, PE1RAH for this week's report]
[10022005]
=====
CP1 ?o-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: N6CP
Proposed Transmit Frequency: 436.845
[03272005]
=====
CP2 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.325
[03272005]
=====
HAUSAT1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: D90HP
Proposed Transmit Frequency: 437.465
[03272005]
=====
ICE Cube 1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: W2CXM
Proposed Transmit Frequency: 437.305
```

```
[03272005]
=====
ICE Cube 2 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: N2VR
Proposed Transmit Frequency: 437.425
[03272005]
=====
ION ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.505
[03272005]
=====
KUTEsat ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: KC0RMW
Proposed Transmit Frequency: 437.385
[03272005]
=====
MEROPE ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: K7MSU-1
Proposed Transmit Frequency: 145.980
[03272005]
=====
nCUBE1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
       2407.25
[03272005]
=====
RINCON ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
        437.345
[03272005]
=====
SACRED ?O-??
```

Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
[03272005]
=====
SACRED ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
[03272005]
=====
SEEDS ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: JQ1YGU
Proposed Transmit Frequency: 437.485
[03272005]
=====
Mea Huaka ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.405
[03272005]
=====
SUITSAT ?O-??
Catalog Number:
Proposed Release Date: December 8th, 2005

Proposed Callsign: RS0RS ?
Proposed Transmit Frequency: 145.990

This from Frank, KA3HDO:
I have recieved information that the Russian EVA that will deply SuitSat, planned for December 8th, has been delayed to late January/Early February 2006. As we get more information, we will post it.

[ANS-WSR wishes to thank Frank Bauer, KA3HDO for this weeks report]
[11272005]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
        888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/amsat/listserv/menu.html

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James K. Darrow, KB9MMC.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

```
From -2794019481775925466
X-Google-Thread: 10e8ad,5b85e300715d33a9
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news4.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!newscon06.news.prodigy.com!prodigy.net!
```

```
newsmst01b.news.prodigy.com!prodigy.com!postmaster.news.prodigy.com!
newssvr13.news.prodigy.com.POSTED!bbf2b588!not-for-mail
From: "Falky foo" <falkyfoo@bonksbcglobal.net>
Newsgroups: rec.radio.amateur.space
References: <mWKkf.9857$wf.7140@newsread3.news.atl.earthlink.net>
Subject: Re: WSR-338 AMSAT Weekly Satellite Report
Lines: 3
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1478
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1478
Message-ID: <qvZkf.22969$BZ5.1207@newssvr13.news.prodigy.com>
NNTP-Posting-Host: 69.226.31.237
X-Complaints-To: abuse@prodigy.net
X-Trace: newssvr13.news.prodigy.com 1133798486 ST000 69.226.31.237 (Mon, 05 Dec
2005 11:01:26 EST)
NNTP-Posting-Date: Mon, 05 Dec 2005 11:01:26 EST
Organization: SBC http://yahoo.sbc.com
X-UserInfo1:
TSUGWUCDYBUOV_DXGRHX_T\BUSXB@DTMNHWB_EYLJZ]BGIELCNSKQFCY@TXDX_WHSVB]ZEJLSNY\^J[CUV
SA_QLFC^RQHUPH[P[NRWCCMLSNPOD_ESALHUK@TDFUZHBLJ\XGKL^NXA\EVHSP[D_C^B_^JCX^W]CHBAX]
POG@SSAZQ\LE[DCNMUPG_VSC@VJM
Date: Mon, 05 Dec 2005 16:01:26 GMT
Xref: g2news1.google.com rec.radio.amateur.space:298
```

JoAnne, your satellite reports make me warm.

```
From -7506445841084519167
X-Google-Thread: 10e8ad,9405454099bf4137,start
X-Google-Thread: 113975,9405454099bf4137,start
X-Google-Attributes: gid10e8ad,gid113975,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news3.google.com!news.glorb.com!news.astraweb.com!
router2.astraweb.com!not-for-mail
From: Chris Steyaert <observations@rmob.org>
Newsgroups: rec.radio.amateur.space,sci.astro.amateur
Subject: Radio Meteor Obs. Bull. November 2005
Date: Wed, 07 Dec 2005 20:35:27 +0100
Message-ID: <uaeep1h0dst0kbfl47b2vjvf3qiruiqp8t@4ax.com>
X-Newsreader: Forte Agent 1.93/32.576 English (American)
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Lines: 17
Organization: Unlimited download news at news.astraweb.com
NNTP-Posting-Host: 1906703b.news.astraweb.com
X-Trace: DXC=O\=oTc0E0H=6fPZ:J:\J]<L?0kYOcDh@:C[>fl>lLBl;O^`ZBY1k1X;G?
ifhhgG3C1i^2M4<Dd_^0QEKa`@3@=U:E\LhO>fFbk;
Xref: g2news1.google.com rec.radio.amateur.space:299 sci.astro.amateur:29802
```

Radio Meteor Observation Bulletin No. 148 of November 2005 (70 K) is available now as

http://visualrmob.free.fr/rmobtext/rmob0511.txt

More information and the visual presentation of the hourly forward scatter counts can be found on

http://www.rmob.org

http://radio.data.free.fr

Chris

```
From 4977851207094114679
X-Google-Thread: 10e8ad,560fba77eca5b69b,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news3.google.com!news.glorb.com!news.litech.org!
News.Dal.Ca!ursa-nb00s0.nbnet.nb.ca!nf3.bellglobal.com!nf1.bellglobal.com!
nf2.bellglobal.com!news20.bellglobal.com.POSTED!not-for-mail
From: "sympatico" <bitsplice@hotmail.com>
Newsgroups: rec.radio.amateur.space
Subject: for sale
Lines: 25
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1437
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1441
Message-ID: <_GPmf.11859$kt5.1078457@news20.bellglobal.com>
Date: Sun, 11 Dec 2005 01:32:39 -0500
NNTP-Posting-Host: 64.229.203.40
X-Complaints-To: abuse@sympatico.ca
X-Trace: news20.bellglobal.com 1134282554 64.229.203.40 (Sun, 11 Dec 2005 01:29:14
EST)
NNTP-Posting-Date: Sun, 11 Dec 2005 01:29:14 EST
Organization: Bell Sympatico
Xref: g2news1.google.com rec.radio.amateur.space:300
```

I have the following for sale, all equipment is working.

ICom IC910H with 1.2gig module
2 - 13 element VHF beams
2 - 26 element UHF beams
1 - 29 element UHF beam
1 - 2 way VHF splitter
1 - 2 way UHF splitter
1 - NEW 2.4gig DEM (Down East Microwave) down converter

1 - NEW Yeasu elevation rotor and controller
1 - Hygain Ham IV rotor with controller

Anyone interested please contact me at VE3WDW@rac.ca I am located in Ontario just outside Toronto.

I also have a 60 foot commercial grade tower (weighs about 600 pounds) and a heavy duty 25 foot mast (2.5 inches .25 wall schedule 80, weighs about 175 lbs). Tower and pole are on the ground.

Thanks

VE3WDW

From -7479045831851751253
X-Google-Thread: 10e8ad,4dd62a376b5fb323,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!fu-berlin.de!uni-berlin.de!individual.net!not-for-mail
From: "Rightrik" <gaggiorNOSPAM@tin.it>
Newsgroups: rec.radio.amateur.space
Subject: PROCO linear amplifiers for 1296 MHz...
Date: Sun, 11 Dec 2005 19:15:06 +0100
Lines: 8
Message-ID: <4038l5F16iceiU1@individual.net>
Reply-To: "Rightrik" <gaggior@tin.it>
Mime-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit
X-Trace: individual.net u7GXPrP8sdB+fUyEF/dnsATRtVXN81m+dkg391FGVvhk26dlQY
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1506
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1506
Xref: g2news1.google.com rec.radio.amateur.space:301

Hello, where can i find informations about PROCO linear amplifiers for 1296 MHz band?

I've tried with Google, but i found almost nothing...

Thank you,
73 de Riccardo IK5WQO

From -6978934070218777084

```
X-Google-Thread: 10e8ad,7536719673418cc,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Subject: invitation to join Space Education Network yahoo group
From: Mabon <mathew11@zoominternet.net>
Date: Sun, 11 Dec 2005 21:31:47 -0600
Message-ID: <Xns9729E448EDA89mathew11zoominternet@38.119.71.210>
Lines: 12
Organization: Your Company
Path: g2news1.google.com!news1.google.com!newsread.com!news-xfer.newsread.com!
news-out.nuthinbutnews.com!spool6-east.superfeed.net!spool6-east.superfeed.net!
not-for-mail
Newsgroups: rec.radio.amateur.space
User-Agent: Xnews/5.04.25
X-Report:  Please report illegal or inappropriate use to <abuse@newsfeeds.com>.
Forward a copy of ALL headers INCLUDING the body. (DO NOT SEND ATTACHMENTS)
X-Comments2:  IMPORTANT: Newsfeeds.com does not condone,support,nor tolerate spam
or any illegal or copyrighted postings.
X-Comments:  This message was posted through Newsfeeds.com
Xref: g2news1.google.com rec.radio.amateur.space:302

http://groups.yahoo.com/group/spaceeducationnetwork/

----== Posted via Newsfeeds.Com - Unlimited-Unrestricted-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! 120,000+
Newsgroups
----= East and West-Coast Server Farms - Total Privacy via Encryption =----



From -3895412495561692109
X-Google-Thread: 10e8ad,5dce0bfd3b27dcaa,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news3.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx01.iad01.newshosting.com!newshosting.com!
207.69.154.102.MISMATCH!elnk-atl-nf2!newsfeed.earthlink.net!
stamper.news.atl.earthlink.net!newsread2.news.atl.earthlink.net.POSTED!46041641!
not-for-mail
From: "JoAnne Maenpaa" <wb9jej_no-spam@earthlink.net>
Newsgroups: rec.radio.amateur.space
Subject: ANS-345 AMSAT News Service Weekly Bulletin
Lines: 479
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <zPgnf.2862$nm.1827@newsread2.news.atl.earthlink.net>
Date: Mon, 12 Dec 2005 15:38:07 GMT
NNTP-Posting-Host: 68.165.61.72
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread2.news.atl.earthlink.net 1134401887 68.165.61.72 (Mon, 12 Dec
2005 07:38:07 PST)
NNTP-Posting-Date: Mon, 12 Dec 2005 07:38:07 PST
```

Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news1.google.com rec.radio.amateur.space:303

AMSAT NEWS SERVICE
ANS-345

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

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* N5AFV Announces FM Satellite DXpedition

SB SAT @ AMSAT $ANS-345.01
AMSAT President's Letter for December 2005

AMSAT News Service Bulletin 345.01
From AMSAT HQ SILVER SPRING, MD.
December 11, 2005
To All RADIO AMATEURS
BID: $ANS-345.01

Fellow AMSAT Members,

I am quite pleased as AMSAT's Executive Vice President to have the opportunity to fill in on this month's President's Letter while Rick, Barry and Gunther are hard at work on various fundraising activities for AMSAT.

It is a very exciting time to be a member and supporter of AMSAT. One part of AMSAT's Vision is a constellation of High Earth Orbit (HEO) satellites. To accomplish this, it was recognized that the old method of working on single satellites in a serial fashion would not work and that several satellites would need to be constructed in parallel. That is exactly what is now beginning to happen with AMSAT-DL's P3E and AMSAT-NA's Eagle projects.

Over the recent Thanksgiving holiday weekend, AMSAT President Rick Hambly, W2GPS, VP of Engineering, Dr. Bob McGwier, N4HY and Dr. Al Katz, K2UYH, President of Lintech and professor of electrical engineering at College of

New Jersey, hosted a meeting for several radio amateurs and a student to tackle some of the RF parts of AMSAT-NA's Eagle project.

The attendees included:

Dr. Tom Clark, W3IWI, AMSAT-NA chief scientist
Paul Drexler, W2PED, Microwave R.F. designer
Matt Ettus, N2MJI, Gnu Radio project co-leader and designer of the USRP
                   (universal software radio peripheral)
Dr. Marc Franco, N2UO, Lintech, Inc. Engineer
Steve Hendricksen, EE student at the College of New Jersey
Jan King, W3GEY/VK4GEY, AMSAT founder, former VP Engineering,
                        and former board member
Paul Wade, W1GHZ, well know Microwave engineer whose web based
                  microwave handbook is read the world over.
Marc Zaharchuk, WA3CRM, Lockheed Space RF Engineer

Rick, W2GPS, got the meeting started with an overview of the project, our organization and the goals of Eagle. Bob, N4HY, then discussed the overall RF requirements for the spacecraft, including the use of SDX as the primary linear transponder with the need to plan for an all-analog backup and for command receivers. Tom, W3IWI, then gave a detailed analysis on the C-C Rider phased array of patches. Matt, N2MJI, talked about Gnu Radio, the Universal Software Radio Peripheral, and his proposal for the CC Rider ground station which has been generously funded by Phil Karn, KA9Q.

As a result of the weekend, Marc, N2UO, who has years of RF experience including amplifiers in space, has signed up to do the envelope restoration (HELAPS) transmitters. John Stephensen, KD6OZH, has signed up to lead the receiver development and is working first on the 70 cm receiver. Paul, W1GHZ, has agreed to design a critical component for CC Rider, the bandpass filter that will be needed to allow the transmitter and receiver to share antennas. Finally, Al Katz, K2UYH, President of Lintech, Inc. has graciously offered to host an RF facility for the AMSAT Eagle project at Lintech in Hamilton, NJ. This provides the Eagle RF team with access to a large collection of lab/test equipment and a first class clean room facility for the development, construction and testing of Eagle's RF modules.

The RF group is not the only part of the Eagle Team making progress. The mechanical and structural group is also hard at work on the modules and spaceframe for Eagle.

One of the challenges in a project as complex as Eagle is managing all the data. During the Eagle Team meeting in Pittsburgh the concept of using a Wiki based system was discussed. From that discussion Emily, W0EEC, implemented Eaglepedia, which will enhance the updating and sharing of information on a scale never before seen on any AMSAT project. Eagle team members are already uploading files and information and pending resolution of a few outstanding security issues, Eaglepedia will be linked to the AMSAT website.

While all this exciting activity is going on within the Eagle team, AMSAT-DL is also making steady progress on their P3E satellite. As I'm writing this several AMSAT-NA members are in Germany working on the IHU-3 and other modules for P3E. More details about the results of this meeting will be coming soon.

There is a lot of hard work being done by a lot of volunteers in many different locations. All this effort needs your support to maintain the building momentum. There are many ways to show your enthusiasm for getting these HEO satellites built. Join the President's Club, donate directly to the project of your choice, join or renew your AMSAT membership. All of these can be done through the mail, web site or a phone call to Martha in the AMSAT office.

73,
Lee McLamb, KU4OS
AMSAT Executive Vice President

[ANS thanks Lee, KU4OS for the above information]

/EX

SB SAT @ AMSAT $ANS-345.02
Straight Key Night on OSCAR 2006

AMSAT News Service Bulletin 345.02
From AMSAT HQ SILVER SPRING, MD.
December 11, 2005
To All RADIO AMATEURS
BID: $ANS-345.02

Once again, AMSAT-NA is pleased to sponsor Straight Key Night on OSCAR for enjoyment by all radio amateurs.

OSCAR SKN 2006 will run for 24 hours, 0000-2400 UTC, on 1 January 2006. It's very simple: no rules, no scoring, and no need to send in a log. Just operate CW through any OSCAR satellite using a straight hand key, working as many other SKN participants as you can. Contacts via the moon (OSCAR Zero) count too.

As in past years, all participants are requested to nominate one of the operators they worked for "Best Fist" recognition. Your nominee need not have the best fist of those you heard, just of those you worked.

Please send all nominations to Ray Soifer via w2rs@arrl.net (Note the new address. Ray's old address, w2rs@amsat.org, only works sporadically now due to ISP problems.)

A list of those nominated will be published via the AMSAT News Service in early February, and in The AMSAT Journal.

[ANS thanks Ray, W2RS for the above information]

/EX

SB SAT @ AMSAT $ANS-345.03
PCSAT2 Operations Guidance II

AMSAT News Service Bulletin 345.03
From AMSAT HQ SILVER SPRING, MD.
December 11, 2005
To All RADIO AMATEURS
BID: $ANS-345.03

Bob, WB4APR passed along the following info concerning PCSAT2 operations:

Since the purpose of the PCSAT series of amateur satellites is to encourage the development of more satellites for mobile communications, we decided to further modify the recommended operations plan for PCSAT2 to allow some testing from mobiles in the user service agreement. See:
http://www.ew.usna.edu/~bruninga/pec/useragreemt.txt

We added paragraph 1b below:

1) PCSAT2 is for users and data applications. It is NOT for UNATTENDED beaconing of fixed text from fixed stations... except for remote data or environmental sensor experiments at low rates...

1b) However, since the PCSAT series of satellites were designed [to] promote a... capability for mobiles, the unattended beaconing from a vehicle at a 5 minute rate for the purpose of assessing antenna or success statistics is authorized.

The caution still applies, however, IF PCSAT2 is using its 2m downlink on 145.825, to make sure you are not transmitting during a pass when the ISS crew is using voice.

Our goal is to have enough Amateur Satellites always listening on 145.825 AX.25 packet to relay short position and message data from mobiles anywhere on the planet, especially when they are out of range of the installed terrestrial packet infrastructure and Internet.

We also need more unattended ground stations listening on the PCSAT2 downlinks and feeding the data into the global APRS Internet system. If you have a spare receiver, and a TNC, you are welcome to put it on either of these downlinks: 435.275 routine (PC2), or 145.825 (PC1 and sometimes PC2), or 145.825 for ARISS.

PCSAT callsigns:

Notice that the currently active calls are PCSAT-1 on NO-44 also called PCsat, and PCSAT2 (no SSID) which is on ISS.

The callsign PCSAT-2 is also on board PCsat but it is only used for 9600 baud packet downlink and so is not involved in this current exercise. I see some stations trying to use the call PCSAT-2 and it will not work at this time.

As stated above, our goal is to have enough Amateur Satellites always listening on 145.825... and with both PCSAT-1 and PCSAT2 operating on the same channel that is giving most of us 12 passes a day to experiment with.

The goal is for a distant traveler in the wilderness to be able to get a message out a few times a day and for travelers to get their position out about once a day via this system. We think that with 3 or 4 satellites in orbit and travelers beaconing once every 10 minutes while on such expeditions, that at least one report per day will get back to civilization.. This could support hundreds of amateur radio wilderness travelers PER footprint.

[ANS thanks Bob, WB4APR for the above information]

/EX

SB SAT @ AMSAT $ANS-345.04
ARISS Status December 5, 2005

AMSAT News Service Bulletin 345.04
From AMSAT HQ SILVER SPRING, MD.
December 11, 2005
To All RADIO AMATEURS
BID: $ANS-345.04

1. Massachusetts Contact Successful

On November 29, seventeen students from Hawthorne Brook Middle School in Townsend, Massachusetts each asked a question of Bill McArthur, KC5ACR. One hundred students, teachers, parents, and administrators, including the district superintendent, attended. Among the seven media representatives who covered the event were those from four newspapers: Worcester Telegram, Townsend Times, Community Journal, and Groton Herald.

An article in the Community Journal is available for viewing by subscribers only until the article is one week old, at which time the entire article may be viewed by non-subscribers as well. See:
http://www.thecommunityjournal.com/news/2005/1202/Townsend/034.html

One of the sixth graders present for the contact, (who did not ask a question), remarked afterwards, "I'll remember this for the rest of my life."

2. Canadian School Contact Successful

Students from the Ralph McCall School in Airdrie, Alberta, Canada experienced a successful contact with the ISS on Friday, December 2. Bill McArthur, KC5ACR, answered 18 questions posed to him by eighteen students. The audience was comprised of 920 students from Ralph McCall, and 140 from the Chestermere School. Many dignitaries attended: Member of Parliament Myron Thompson, the Superintendent of Schools, one associate superintendent, a local School Board trustee, the mayor of the city of Airdrie, 4 City Councilors, Alberta education representative from the Emerging Technologies

branch, and local high school principals. In addition, the principal from Sir James Lougheed Elementary School, the next Alberta school scheduled for an ARISS contact, also attended. The contact received extensive media coverage. CBC (Canadian Broadcasting Corporation) 24 hour news channel, Newsworld, CBC local television, CBC radio, CTV news local affiliate, City TV, Global TV, Calgary Sun, Calgary Herald, 3 local Airdrie and area newspapers, and a Reuters writer all covered the event.
The CBC posted a story on its website, "Space station astronaut takes call from Alberta students." See:
http://www.cbc.ca/story/science/national/2005/12/02/astronauts-school051202.html

This contact was carried live on the IRLP 9010 Discovery Reflector, and through streaming audio (shoutcast) on its companion website. Echolink was also used, and twelve connections were made from the following countries: Thailand, the U.K., the U.S.A., and Germany.

3. Russian Contact Successful

On Thursday, November 24, school children in Star City, Russia, had a successful contact with the ISS via amateur radio. Among the audience attending the event were students, representatives from the Gagarin Cosmonaut Training Center (GCTC) and other cosmonauts.

4. Central Park Contact Update

On November 23, students from the Central Park Middle School in Schenectady, New York spoke with Bill McArthur, KC5ACR, on board the ISS. Fifty students, teachers, parents and others attended. Four television stations covered the event, broadcasting the contact to approximately 500,000. The Albany Times Union scheduled an interview with the school's public relations officer. The school is currently working with the Schenectady Amateur Radio Association and its after-school program to begin a ham radioclubforstudents.

5. ARRL Article on ESA CERN and New York Contacts

ARRL wrote a web story on the ESA CERN and Central Park contacts entitled, "Spacewalks 'Thrilling,' Astronaut Tells Students during Ham Radio Chat."
See:
http://www.arrl.org/news/stories/2005/11/30/1/?nc=1

6. ARRL Article on PCSAT2

On November 29, ARRL ran an article on PCSAT. "PCSat, PCSat2 operational information announced," may be found at: http://www.arrl.org/

7. SuitSat Status

The Russian EVA to deploy SuitSat has been delayed. The new tentative date for EVA/deployment is February 2, 2006.

8. McArthur Active on ISS Ham Radio System

Astronaut Bill McArthur, KC5ACR, continues to thrill the amateur radio community as he makes general contacts via the ISS Ham radio system. He was active on November 30 over the U.S., and again on December 1 over South America. He made additional contacts with stations in the U.S. over the December 3 - 4 weekend.

On December 1, ARRL posted a story on McArthur's contacts over the Thanksgiving holiday. "ISS commander cheers for Army in contact with Naval Academy's W3ADO" may be found at: http://www.arrl.org/

In anticipation of the Army-Navy game, held on Saturday, December 3, Bill transmitted a message via the ISS Ham packet radio system's beacon which read, "Go Army! Beat Navy!"

9. Astronaut Training Status

Congratulations to astronaut Michael Lopez-Alegria, who on Wednesday, November 30, passed his amateur radio license exam.

10. Italian Astronaut Visits with School Children

On November 9, students from the Istituto Comprensivo F. Negri in Casale Monferrato, Italy, had the opportunity to speak with Bill McArthur, KC5ACR, on board the ISS. On November 28, Italian astronaut Roberto Vittori, IZ6ERU attended a conference in Casale Monferrato and met with three students, ages 10-11, from the Negri Institute, adding to the excitement of their space contact. Vitorri participated in two of his own ARISS contacts in April 2005 with the Marconi and Malignani Institutes in Civitavecchia and Palmanova, respectively, and the winning school of the ESA competition in ESRIN, Frascati, Italy, during his Eneide Mission on the ISS.

[ANS thanks Carol, KB3LKI for the above information]

/EX

SB SAT @ AMSAT $ANS-345.05
New Items at the AMSAT Online Store

AMSAT News Service Bulletin 345.05
From AMSAT HQ SILVER SPRING, MD.
December 11, 2005
To All RADIO AMATEURS
BID: $ANS-345.05

Many new items have been added to the AMSAT Online Store.

In addition to the 2005 Wall Clock with weather station, there is now a 2005 Desk Clock with weather station. Either clock is a really nice addition to your home, office or ham shack.

The 2005 23rd AMSAT Symposium Proceedings with all the articles that were to be presented at Lafayette is available for purchase.

A must have item, the 2004 22nd AMSAT Symposium DVD is also available. A year in the making, the DVD contains all of the proceedings, board of directors minutes, video, and audio of all the presentations and much, much more.

These items and more can be purchased with your donation at http://www.amsat.org and click on AMSAT Online Store.

[ANS thanks Bruce, KK5DO for the above information]

/EX

SB SAT @ AMSAT $ANS-345.06
KO4MA Announces Possible Satellite Operation from KG4

AMSAT News Service Bulletin 345.06
From AMSAT HQ SILVER SPRING, MD.
December 11, 2005
To All RADIO AMATEURS
BID: $ANS-345.06

Drew, KO4MA wants to give amateur stations a "heads up" in regards to a possible Caribbean satellite operating opportunity.

Drew wrote, "This is still somewhere between tentative and confirmed, but it looks like I'm going to be in KG4 from the evening December 14 to December 18. If I can secure the license upon arrival, I'll try to be QRV in the evenings and possibly early morning passes."

The best bet will be to look on SO-50, FO-29, and VO-52. Drew says he will post his latest updates on the AMSAT-BB.

[ANS thanks Drew, KO4MA for the above information]

/EX

SB SAT @ AMSAT $ANS-345.07
Houston AMSAT Net Moves Satellites

AMSAT News Service Bulletin 345.07
From AMSAT HQ SILVER SPRING, MD.
December 11, 2005
To All RADIO AMATEURS
BID: $ANS-345.07

The Houston AMSAT Net, still on the W0KIE radio network, can now be heard on Intelsat Americas 6, 93 degrees West, Transponder 1, 6.2 and 6.8 MHz wideband audio.

[ANS thanks Bruce, KK5DO for the above information]

/EX

SB SAT @ AMSAT $ANS-345.08
N5AFV Announces FM Satellite DXpedition

AMSAT News Service Bulletin 345.08
From AMSAT HQ SILVER SPRING, MD.
December 11, 2005
To All RADIO AMATEURS
BID: $ANS-345.08

Allen, N5AFV says he is pleased to announce that he will be bringing his FM satellite gear on a cruise ship sailing from Port Everglades, FL to the island of Dominica and back. He plans to work the FM birds AO-27, SO-50 and AO-51 using his Icom W32A HT and an AL800 telescoping antenna.

While Allen plans shipboard operation, and has done so successfully in the past, there is always the possibility that he will not be allowed to operate from the ship. If that happens, Allen will try to operate onshore at the ports of call where he can do so.

Itinerary
Dec 17, Leave Port Everglades, FL, 1700 EST
Call signs N5AFV and N5AFV/C6A
Dec 18, Nassau, Bahamas, 0800-1600 local time
Call sign N5AFV/C6A
Dec 19, At Sea
Call sign N5AFV/C6A
Dec 20, San Juan, PR, 1300-2300 local time
Call sign KP4/N5AFV
Dec 21, St. Thomas, USVI, 0800-1700 local time
Call sign KP2/N5AFV
Dec 22, Dominica, 1200-1900 local time
Call sign J79AFV
Dec 23, St. Barts, 0800-2300 local time
Call sign FJ/N5AFV
Dec 24, Tortolla, BVI, 0800-1500 local time
Call sign VP2V/N5AFV
Dec 25, At Sea
Call sign N5AFV/C6A
Dec 26, At Sea
Call sign N5AFV/C6A
Dec 27, Arrive Port Everglades, FL, 0700 EST
Call sign N5AFV

[ANS thanks Allen, N5AFV for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,

This week's ANS Editor,
Al Marote, WA1LBG
wa1lbg at amsat dot org

From -8746844704385632499
X-Google-Thread: 10e8ad,b8e7cecbddb1dc2,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news3.google.com!border1.nntp.dca.giganews.com!
border2.nntp.dca.giganews.com!nntp.giganews.com!elnk-atl-nf1!
newsfeed.earthlink.net!stamper.news.atl.earthlink.net!
newsread2.news.atl.earthlink.net.POSTED!46041641!not-for-mail
From: "JoAnne Maenpaa" <wb9jej_no-spam@earthlink.net>
Newsgroups: rec.radio.amateur.space
Subject: WSR-345 AMSAT Weekly Satellite Report
Lines: 1198
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <DPgnf.2863$nm.309@newsread2.news.atl.earthlink.net>
Date: Mon, 12 Dec 2005 15:38:11 GMT
NNTP-Posting-Host: 68.165.61.72
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread2.news.atl.earthlink.net 1134401891 68.165.61.72 (Mon, 12 Dec 2005 07:38:11 PST)
NNTP-Posting-Date: Mon, 12 Dec 2005 07:38:11 PST
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news1.google.com rec.radio.amateur.space:304

This report is organized into 4 parts.
Part 1 - operational analog amateur satellites.
Part 2 - operational digital amateur satellites.
Part 3 - non - operational satellites
Part 4 - proposed satellites

SB SAT @ AMSAT <KB9MMC $ANS-345.S1
WSR 345 Part 1 12/11/2005

AMSAT NEWS SERVICE BULLETIN 345.S1 FROM AMSAT HQ
SILVER SPRING, MD, December 11, 2005
TO ALL RADIO AMATEURS
BID: $ANS-345.S1

VO-52 HAMSAT
Catalog Number: 28650
Launch Date: May 05,2005

Status: Testing
Current Mode: U/V - Dutch Transponder

Proposed frequencies:

Indian Transponder:
Uplink : 435.220 MHz to 435.280 MHz LSB/CW
Downlink: 145.870 MHz to 145.930 MHz USB/CW
Beacom : 145.859330 MHZ CW

Dutch Transponder:
Uplink : 435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW
Beacon : 145.860MHz 12WPM with CW message

This from William Leijenaar, PE1RAH:
Dear AMSATs,

I wish I had the same free time now as when I designed the HAMSAT and P3e transponder. Unfortunatly these times have been changed (for the moment) due to QRL things.

However, I often try to be QRV on the HAMSAT and check the signals from my transponder and read the messages on amsat-bb. I just read about the beacon "problem". The "problem" with the beacon is actually not a problem but it is known. The beacon signal is injected at the IF, and runs throught the transponder from the IF section, up converter, via the final PA to the antenna.

The changes you hear on the beacon frequency is caused by the amplitude limiters in the IF that are activated by a too strong uplink signal. These limiters are only for protection, to avoid that the IF and VHF amplifiers get overloaded and generate all kinds of unwanted signals at the output.

My transponder is straight forward to keep it physical small and cheap in cost (as I had no sponsors). Unlike most other transponders my transponder on HAM-SAT has no AGC system. It gives always maximum gain with maximum sensitivity.

The main reason is that the AGC systems I had didn't fit in the small sized box. As an option I choose for limiters, and it worked great in tests.

Secondly, I tought limiters might be helpfull against aligators. To deal with too strong signals most transponder have an AGC to lower the RX gain, and actually be helpfull to the alligators. With the limiters their SSB signal will get distorted and they might lower their powers to have better audio quality.

The change in beacon sound is an indication for too much uplink powers and will be heared mainly in areas where higher powers are available on the uplink, like US, Europe, Japan...

Its funny to know that nobody here has discovered that the bandpass is shifted some down in frequency... There is no technical failure, the reason is known here... No panic please :o)

Please keep in mind that this transponder is my privat work and privat money. Frankly speaking this is my privat transponder I "give" to the amateur world. I was one of those many poor students, and this was the best I could do with my resources I had available at that time... The whole thing is just 16cm x 10cm x 3cm !! even smaller than the professional Indian transponder :o)

I hope you all enjoy my transponder even when it is not perfect.
[11272005]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Mode: PBBS - V/U 9k6
VOICE REPEATER - V/U FM

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
Analog voice uplink: 145.880 MHZ FM
145.920 MHz FM 67Hz PL tone
1268.700 MHz FM 67Hz PL tone

Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast Protocol (PBP)

Broadcast: PECHO-11
BBS: PECHO-12

This from the AO-51 Command team:

12 Dec
FM Repeater, V/S
Uplink: 145.920 mhz FM, No PL Tone
Downlink 2401.200 mhz FM

19 Dec
FM Repeater, V/U
Uplink: 145.920 mhz FM, 67 hz PL Tone
Downlink 435.300 mhz FM
9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 435.150 mhz FM, 9k6 PBP Digital

[ANS-WSR thanks Mike Kingery, KE4AZN for the above information]
[11202005]

=====

SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Uplink: 145.850 MHz (67.0 Hz PL tone) (See below for operating procedures)
Downlink: 436.795 MHz

There have been unconfirmed reports on the amsat-bb remailer that SO-50 has shifted downlink frequency as much as 5khz up. This both from Europe.

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz. The order of operation is thus: (allow for Doppler as necessary)

1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10 minute timer.

[09122004]

=====

FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: OPERATIONAL

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplink: 145.850 145.870 145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

John, N4QWL reports on July 16th, 2005:
Last evening I had a AOS to LOS qso with WI2W. FO-29 came up at 01:17z here in FM07 and I found WI2W and we chatted until 01:33z. The satellite was at 2 degrees elevation when I finally heard him start to crackle a bit. What a great QSO! To think that I watched this bird launch back in 1996 and it is still working so well is a real thrill. I believe I still have the video. I might just look for it and watch it again. Boy do I love this satellite stuff! Look for you all up there.

Please send the reception reports to lab2 'at' jarl.or.jp.
Please use the subject line: 'FO-29 reception report'.

Mineo, JE9PEL, has an FO-29 satellite telemetry analysis program that will automatically analyze all digital telemetry from the satellite (such as current, voltage and temperature). FO29CWTE is available at:
http://www.ne.jp/asahi/hamradio/je9pel/
[ANS-WSR wishes to thanks John, N4QWL for this week's report]
[11132005]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Uplink: 145.850 MHz FM
Downlink: 436.795 MHz FM

The latest information on AO-27 from control operator Michael Wyrick, N3UC (former N4USI), can be found at:
http://www.ao27.org

An AO-27 question-and-answer page is available on the AMSAT-NA web site, with updates by Ray, W2RS. The URL is:
http://www.amsat.org/amsat/intro/ao27faq.html

[ANS-WSR thanks John, K6YK, for this week's AO-27 report]
[11132005]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Semi-operational in sunlight.
Return to active status: June 21,2002

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
            432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A
            145.975 to 145.925 MHz CW/USB Mode B
Beacon: 29.502 MHz, 145.972 MHz, 435.1 MHz, 2304.1 MHz

Emily, W0EEC has created a website to allow the users of AO-7 to record contacts, observations and use of the satellite more effectively at:
http://www.emilyshouse.com/experthams/ao7/main.php
This includes the ability to log contacts.

Tim, K3TZ has written a program to decode AO-07 telemetry. The program can be downloaded at:
http://www.qsl.net/k3tz/files/K3TZ_AO-07_Telemetry_Decoder_0.5.zip

For more AO-7 info:

http://www.amsat.org/amsat/sats/n7hpr/ao7.html
[11132005]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: DIGIPEATER
Digipeater: ACTIVE

The current Expedition 12 crew is:
Commander: William McArthur - KC5ACR
Flight Engineer: Valery Tokarev - (no call)

Worldwide packet uplink: 145.990 MHz FM
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM
Doppler Shift is 10 KHz

Russian callsigns: RS0ISS, RZ3DZR
USA callsign: NA1SS
Packet station mailbox callsign: RS0ISS-11
Packet station keyboard callsign: RS0ISS-3
Digipeater callsign: ARISS

The ISS Fan Club Webpage < http://www.issfanclub.com > reports that the Digipeater is active as of Nov 14th, 2005 at 0207UTC.

The ISS daily crew schedule can be found at:
http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line is NOT translated from Russian and posted.

More information is available at:
http://www.rac.ca/ariss
http://spaceflight.nasa.gov/station/reference/radio/
http://www.marexmg.org/fileshtml/unprotopage.html
http://www.issfanclub.com
http://oscar.dcarr.org/
[11132005]
NNNN
/EX

SB SAT @ AMSAT <KB9MMC $ANS-345.S2
WSR 345 Part 2 12/11/2005

AMSAT NEWS SERVICE BULLETIN 345.S2 FROM AMSAT HQ
SILVER SPRING, MD, December 11, 2005

TO ALL RADIO AMATEURS
BID: $ANS-345.S2

PCSAT2 ?0-??
Catalog Number: 25544
Launch Date: August 1, 2005

Status: Battery-saving mode
Current Mode: None

Digital Downlink: 435.275 Mhz
Digital Uplink: 145.825 Mhz
PSK-31 Downlink: 435.275 Mhz
PSK-31 Uplink: 29.400 - 29.403 Mhz

Broadcast:
BBS:

PCSAT2 was installed on the exterior of the International Space Station and was activated on August 3, 2005.

Packets seen from PCSAT2 can be reviewed at:
http://www.findu.com/cgi-bin/pcsat2.cgi

A screen shot of both the 9600 bps and 1200 bps decoded data as seen by Simon, 9W2QC, can be seen at:
http://www.9w2qc.net/pcsat2/

More information on PCSAT2 can be found at:
http://web.usna.navy.mil/~bruninga/pcsat2.html
[11272005}
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Mode: PBBS - V/U 9k6
      VOICE REPEATER - V/U FM

Analog voice downlink: 435.300 MHz FM
              435.150 MHz FM
Analog voice uplink: 145.880 MHZ FM
              145.920 MHz FM 67Hz PL tone
                       1268.700 MHz FM 67Hz PL tone

Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
                       2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast
          Protocol (PBP)

Broadcast: PECHO-11
BBS: PECHO-12

This from the AO-51 Command team:

12 Dec
FM Repeater, V/S
Uplink: 145.920 mhz FM, No PL Tone
Downlink 2401.200 mhz FM

19 Dec
FM Repeater, V/U
Uplink: 145.920 mhz FM, 67 hz PL Tone
Downlink 435.300 mhz FM
9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 435.150 mhz FM, 9k6 PBP Digital
[ANS-WSR thanks Mike Kingery, KE4AZN for the above information]
[11202005]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Operational

General Usage Uplink/Downlink:145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSat is a 1200-baud APRS digipeater designed for use by stations using hand-held or mobile transceivers. Downlinks feed a central web site at:
http://pcsat.aprs.org

The APRS-equipped PCSat was built by midshipmen from the U.S. Naval Academy under the guidance of Bob Bruninga, WB4APR.
[11272005]
=====
CUTE-1
Catalog number: 27844
Launched: June 30,2003

Status: Operational

Uplink: ?
Downlink: 436.8375 CW
              437.4700 1200 FM ax25 or SRLL (ACTIVE only near Japan ?)
Cliff, K7RR reports:
In the latest Weekly Satellite Report, CUTE 1, #27844 is listed as OPERATIONAL?
Indeed it is very operational as a CUBESAT sending CW telemetry on 436.8345 MHz. At the July 7 2005, 23:45:20 pass over the Western USA:
CUTE 1 6B A4 xx 7F D7 66A8 4702 FF FF7C 65
CUTE 1 6C A6 59 80 D9 66A8 4702 FF FE7C B6

The June 30th KEPS were within ten seconds of AOS and LOS. It is an very good object to practice tracking as the orbit and transmitter power are similar to proposed CUBESATS awaiting launch this December. As a check for Doppler correction, the lack of change in tone is an excellent indicator.

CUTE 1 is a Japanese (Tokyo Institute of Technology) one kilogram nanosatellite that was launched by a Rokot rocket from Plesetsk at 14:15 UT on 30 June 2003. It carries a 100 mW beacon at 436.8375 MHz. Initial orbital parameters were period 101.4 min, apogee 831 km, perigee 819 km, and inclination 98.7?.

For further info about CUTE-1 goto:
http://lss.mes.titech.ac.jp/ssp/cubesat/operation/Schedule_e.html

[ANS WSR wishes to thank Cliff, K7RR, for this week's information]
[07242005]
=====
GO-32 TECHSAT-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Downlink: 435.225 MHz FM (9600-baud FSK)
(435.325 n/a - temperature problems)
Uplinks: 145.850, 145.890, 145.930 FM
1269.700, 1269.800, 1269.900 FM
Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

Jeff, KB2M, reports November 15th, 2005:
I might be wrong about this, but as I am the only one I see working GO-32 here goes. If you do a DIR request up on the 145.890 uplink the bird turns on. Give it a try....

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[ANS-WSR wishes to thank Jeff, KB2M for this weeks report.]
[11202005]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Semi-operational, the digipeater command is on and open for APRS users.

Uplink: 145.90 145.92 145.94 145.96 MHz FM
(using 1200-baud Manchester FSK)
Downlink: 437.026 MHz SSB (1200-baud PSK)
Mode-S Beacon: 2401.1428 MHz
Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

A WOD collection of current graphics along with general information and telemetry samples can be found at:
http://www.telecable.es/personales/ea1bcu
[05092004]

=====

UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational?

Telemetry Downlink: 145.826 MHz. FM (1200-baud AFSK).
approx. 10 days ON, 10 days OFF
Mode-S Beacon: 2401.500 MHz. ... OFF
UHFBeacon: 435.025 MHz. ... OFF

During the period 24 September to 25 October 2005 the VHF beacon on 145.826MHz resumed transmissions, as expected, on 30 September, sometime between 06:05 and 06:42 UTC passes. Reasonable signals were also captured on the 17:44 pass, later that day. However by the 16:49 UTC pass on 02 October, the beacon had switched OFF. Transmissions resumed on 21 October, and should continue until around 31 October.

The on-board clock continues to show a very large error. Currently it is 19.2394 days slow, having lost six hours while the beacon was last OFF, ie. between 02 October and 21 October. When the beacon is ON, the clock is stable to within a few seconds.

All the analogue telemetry channels, 0 to 59 are zero, ie they have failed. The status channels 60 to 67 are still working.

The eclipses have now ended, and the satellite should be in continuous sunlight for the remainder of this year, and well into next year. This should help the satellite to continue transmitting, although continuous sunlight can cause problems due to excessive temperatures.

The watchdog timer appears to be operating on the 20 day cycle, ie. approximately ten days ON followed by 10 days OFF. It appears to be uneffected by problems of the on-board clock. However, poor solar attitude, and battery problems, may be combining to produce a low line voltage. This causes the beacon to switch OFF premeaturely, and resets the watchdog timer cycle.

The Beacon frequencies are -
VHF 145.826 MHz. AFSK FM ASCII Telemetry
UHF 435.025 MHz. OFF
S-band 2401.5 MHz. OFF

Listeners to OSCAR-11 may be interested in visiting my website which contains an archive of news & telemetry data. It also contains details about using a soundcard or hardware demodulators for data capture. There is software for capturing data, and decoding ASCII telemetry. The URL is:

www.users.zetnet.co.uk/clivew/

If you place this bulletin on a terrestrial packet network, please use the bulletin identifier $BID:U2RPT114.CWV, to prevent duplication.

More information on UO-11 OSCAR-11 can be found at:
http://www.users.zetnet.co.uk/clivew/

MPEG3 files can be found here at Mineo, JE9PEL website:
http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[ANS-WSR thanks Clive G3CWV for the above information]
[10302005]
NNNN
/EX

SB SAT @ AMSAT <KB9MMC $ANS-345.S3
WSR 345 Part 3 12/11/2005

AMSAT NEWS SERVICE BULLETIN 345.S3 FROM AMSAT HQ
SILVER SPRING, MD, December 11, 2005
TO ALL RADIO AMATEURS
BID: $ANS-345.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

SSETI ?O-??
Catalog Number: 28894
Launch Date: October 27, 2005

Status: In orbit - being commissioned

A daily report of the launch campaign is being maintained at
http://sseti.gte.tuwien.ac.at/express/mop/index.php?uri=news.html
This mission operations site is completely up-to-date regarding Kepler TLEs and other LEOP "Launch and Early Operations Phase" details.

The SERACC software, needed to decode and submit the received data to the SSETI database, together with some audio files containing recorded 9k6 signal to experiment with is also now available

The ESA website about SSETI Express is at:
http://www.esa.int/SPECIALS/sseti_express/SEMARJ7X9DE_0.html

The latest version of the SSETI Express handbook can be downloaded free of charge from the AMSAT-UK website at:
http://www.uk.amsat.org/

More SSETI Links at:

SpaceDaily has a report about SSETI at:
http://www.spacedaily.com/news/internet-04zzzu.html

You can find more info about SSETI at:
http://sseti.gte.tuwien.ac.at/WSW4/

Latest news about SSETI can be found at:
http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php

Look at the website for the SSETI Express webcam
http://sseti.gte.tuwien.ac.at/WSW4/webcam.htm
[ANS-WSR thanks Graham, UA/G3VZV and Trevor, M5AKA for the above]
[11202005]

======

POSAT-1 PO-28
Catalog Number: 22829
Launched : September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 435.250 MHz
435.275 MHz

Uplink: 145.925 MHz
145.975 MHz

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

PO-28 (POSAT-1), Portugal's first satellite, launched 12 years ago,will be turned over to Amateur Radio use in the very near future. That was the word July 30 from AMSAT-UK Secretary Jim Heck, G3WGM, during the AMSAT-UK International Space Colloquium in Guildford, England.

Launched September 25, 1993, the satellite operated as a packet store-and-forward BBS (9600 baud FM FSK) on Amateur Radio frequencies for several weeks in early 1994. Over the years, PO-28's primary usage has been commercial, although plans have called for eventually shifting its operation to ham radio use. G3WGM reports that following lengthy negotiations it has been agreed thatthe satellite can be switched permanently to amateur frequencies. The change over is expected to take a couple of weeks.

The Portuguese satellite was built at the University of Surrey as part of a collaborative satellite technology program that involved industry and academe. Uplink frequencies will be 145.925 and 145.975 MHz. Downlink frequencies will be 435.250 and 435.275 MHz. More information on PO-28 is on the AMSAT Web site

http://www.amsat.org/amsat/sats/n7hpr/po28.html.

Uplink Frequencies: 145.925 and 145.975 MHz
Downlink Frequencies: 435.250 and 435.275 MHz

Orbit: 822 x 800 km, 98.6 deg inclined, sun-synchronous.

Transponder capabilities include FM repeater and 38k4 data. If you want to hear how loud this satellite is, listen on 429.950 until the change back to amateur radio service.

Keplerian elements for PO-28 are currently contained in the AMSAT keps bulletins and at Celestrak in amateur.txt using the name "POSAT". Users of Space Track should query the NORAD Satellite ID number 22829. The name listed by Space Track is "EYESAT A".

More information of POSAT-1 can be found at:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
http://www.amsat.org/amsat/sats/n7hpr/po28.html
[ANS-WSR wishes to thank Duane Naugle, KO6BT, for this week's update.]
[11062005]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launched: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB
Beacon: 145.810 MHz (unmodulated carrier)

AO-10 has been locked into a Mode-B, 70-cm uplink and 2-meter downlink for several years.

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: Non-operational

Uplink: 145.875 145.900 145.925 145.950 MHz FM (1200-baud)
Downlink: 435.812 MHz SSB
Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Alberto E. Zagni - I2KBD reports on 02/13/05
The spacecraft is in MBL (safe mode) and is trasmitting just 6 channels of telemetry. Temperatures and voltage are nominal, but there seems to be a problem with the onboard receiver, refusing to accept commands.
The spacecraft was launched in 1993, thus nearing 12 years in orbit...

Best regards
Alberto E. Zagni - I2KBD
ITAMSAT Mission Director

```
More information of IO-26 can be found at:

http://joshua.micronet.it/english/itamsat/itamsathome.html
http://www.amsat.org/amsat/sats/n7hpr/io26.html
www.itamsat.org

[02132005]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink:   21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB
Beacon:   29.408 MHz
Robot:    29.454 MHz
[05232004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink:      21.260 to  21.300 MHz CW/USB
Downlink:   145.860 to 145.900 MHz CW/USB
Beacon:     145.860 MHz
Robot:      145.908 MHz
[05232004]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink 145.975 MHz FM
Downlink 435.070 MHz FM
[05092004]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink:             145.900 FM 9600-baud FSK
Downlink:           435.120 MHz FM
Broadcast Callsign: UOSAT5-11
BBS:                UOSAT5-12
[01092005]
```

=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational?

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB
Beacon: 29.352 MHz (intermittent)
SSB meeting frequency: 29.380 MHz (unofficial)

John, KD6PAG reports on June 16, 2004 to WSR:
RS-15 beacon seemed to be back in the mode where it's a tone about 5 seconds off and then 5 seconds on this morning.

WSR is looking for more confirmations of RS-15 coming back.

[ANS-WSR thanks John, KD6PAG for RS-15 information]
[06202004]

=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplink: 145.84 145.86 145.88 145.90 MHz FM
(using 1200-baud Manchester FSK)
CW downlink: 437.125 MHz
Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)
Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[05232004]

=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[08152004]

=====
KO-23 KITSAT

Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM
Broadcast Callsign: HL01-11
BBS: HL01-12

Jim, AA7KC, reports that KO-23's downlink transmitter continues in a non-operational status.
[05092004]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM (9600-baud FSK)
Downlink: 436.500 MHz FM
Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink frequency (listed on the PanSat web site) 436.500 MHz

The satellite is not available for general uplink transmissions.

The Naval Postgraduate School developed PanSat. At the time of launch, PanSat spread-spectrum digital transponders were to be available to Amateur Radio operators along with software to utilize this technology.

The satellite is still operating, however, the spread spectrum packet radio portion never took place. The spacecraft is now beyond it's initial 2-year mission life, but telemetry records are still being downloaded.

For more information, visit the official PanSat web site at:
http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

```
Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm

[ANS-WSR has no further information]
[05232004]
=====
SO-35 SUNSAT
Catalog Number:     ?
Launched:February 23, 1999

STatus: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
          Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
         Mode J Digipeater: 145.825 MHz and 145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[08082004]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink:            145.960 MHz (9600-baud FSK)
Downlink:          437.025 MHz 437.400 MHz
Broadcast Callsign: UO121-11
BBS:               UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA
web site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[05092004]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplink      V-band    145.840 -  145.990 MHz CW/LSB
```

```
            U-band    435.550 -  435.800 MHz CW/LSB
           L1-band   1269.250 - 1269.500 MHz CW/LSB
           L2-band   1268.325 - 1268.575 MHz CW/LSB
           S1-band   2400.350 - 2400.600 MHz CW/LSB
Downlink:  S2-band   2401.225 - 2401.475 MHz CW/USB
           K-band 24,048.010 - 24,048.060 MHz CW/USB
Beacon:    2401.323, 24,048.035
[05232004]
-----
SO-42  SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational
 Downlink:           437.075 MHz
Broadcast Callsign: SASAT2-11
BBS:                SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[08152004]
=====
SO-41  SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink:             145.850 MHz
Downlink:           436.775 MHz
Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[08152004]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink:   145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is  welcome to use the digipeating/APRS features of Sapphire,
callsign KE6QMD, as per the user service agreement located at the
following
URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
```

=====

MO-46 TIUNGSAT-1

Catalog number: 26548
Launched: September 26, 2000

Status: Operational

Uplink: 145.850 or 145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz
Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[11202005]

=====

AO-49 AATiS OSCAR-49 (SAFIR-M)

Catalog number: 27605
Launch Date: December 20, 2002

Status: Semi-operational.

Uplink 435.275 1200-baud AFSK
Downlink 145.825 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

AO-49 (SAFIR-M) is a German amateur radio payload onboard the small German scientific satellite "RUBIN-2".

AO-49 was built by the German amateur radio association "AATiS e.V." (German acronym for "Arbeitskreis Amateurfunk und Telekommunikation in der Schule", which means: 'working group for amateur radio and telecommunications in schools'). AO-49 is designed as a "store and broadcast" system for APRS based messages, dedicated for the use of schools in combination with the existing WX-Net and planned buoy experiments in Germany.

No transmissions detected since the 1st of February 2003! It appears AO-49 is not properly aligned to illuminate the solar panels. This should end soon.
Due to its orbit, AO-49 will be in a phase without eclipses until 13Feb03.

Martin DG8UAU has written a small software program "SAFIR-M Decoder" to allow decoding of the received DATA0 frames. It is available at: http://amend.gmxhome.de in the section Aktuelles.

Details on AO-49 (SAFIR-M) can be found at:

http://amend.gmxhome.de

Information about AATiS e.V. is available at:
http://www.aatis.de
[11132005]
NNNN
/EX

SB SAT @ AMSAT <KB9MMC $ANS-345.S4
WSR 345 Part 4 12/11/2005

AMSAT NEWS SERVICE BULLETIN 345.S4 FROM AMSAT HQ
SILVER SPRING, MD, December 11,2005
TO ALL RADIO AMATEURS
BID: $ANS-345.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE
PROPOSED FOR LAUNCH AT THIS TIME:

UCISAT ?O-??
Catalog number:
Proposed Launch Date: October 31, 2005

Status: Under Construction

Downlink: Submission in Progress
Uplink: Submission in Progress
Callsign: Submission in Progress
[11272005]
=====
PHASE 3E ?O-??
Catalog Number:
Proposed Launch Date: Early 2006

Status: Under Construction

For the latest project status update please visit the AMSAT-DL
P3-E web page:
http://www.amsat-dl.org/p3e/

[ANS-WSR wishes to thank William Leijenaar, PE1RAH for this week's report]
[10022005]
=====
CP1 ?o-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: N6CP
Proposed Transmit Frequency: 436.845
[03272005]
=====
CP2 ?O-??
Catalog Number:

```
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.325
[03272005]
=====
HAUSAT1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: D90HP
Proposed Transmit Frequency: 437.465
[03272005]
=====
ICE Cube 1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: W2CXM
Proposed Transmit Frequency: 437.305
[03272005]
=====
ICE Cube 2 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: N2VR
Proposed Transmit Frequency: 437.425
[03272005]
=====
ION ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.505
[03272005]
=====
KUTEsat ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: KC0RMW
Proposed Transmit Frequency: 437.385
[03272005]
=====
MEROPE ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: K7MSU-1
Proposed Transmit Frequency: 145.980
[03272005]
```

```
=====
nCUBE1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
       2407.25
[03272005]
=====
RINCON ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
        437.345
[03272005]
=====
SACRED ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
[03272005]
=====
SACRED ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
[03272005]
=====
SEEDS ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: JQ1YGU
Proposed Transmit Frequency: 437.485
[03272005]
=====
Mea Huaka ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.405
[03272005]
=====
SUITSAT ?O-??
Catalog Number:
```

Proposed Release Date: December 8th, 2005

Proposed Callsign: RS0RS ?
Proposed Transmit Frequency: 145.990

This from Frank, KA3HDO:
I have recieved information that the Russian EVA that will deply SuitSat, planned for December 8th, has been delayed to late January/Early February 2006. As we get more information, we will post it.

[ANS-WSR wishes to thank Frank Bauer, KA3HDO for this weeks report]
[11272005]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

- AMSAT News Service (ANS)
- General satellite discussion (AMSAT-BB)
- Orbit data (KEPS)
- Manned space missions (SAREX)
- District of Columbia area (AMSAT-DC)
- New England area (AMSAT-NE)
- AMSAT Educational Liaison mailing list (AMSAT-EDU)
- AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/amsat/listserv/menu.html

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James K. Darrow, KB9MMC.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the
memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen,
G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

```
From -8888580455468055290
X-Google-Thread: 10e8ad,b2f0088c51713454,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news3.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx01.iad01.newshosting.com!newshosting.com!
207.69.154.102.MISMATCH!elnk-atl-nf2!newsfeed.earthlink.net!
stamper.news.atl.earthlink.net!newsread3.news.atl.earthlink.net.POSTED!46041641!
not-for-mail
From: "JoAnne Maenpaa" <wb9jej_no-spam@earthlink.net>
Newsgroups: rec.radio.amateur.space
Subject: WSR-352 AMSAT Weekly Satellite Report
Lines: 1346
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <AH4qf.8603$Dd2.4951@newsread3.news.atl.earthlink.net>
Date: Wed, 21 Dec 2005 04:17:36 GMT
NNTP-Posting-Host: 66.167.66.51
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread3.news.atl.earthlink.net 1135138656 66.167.66.51 (Tue, 20 Dec
2005 20:17:36 PST)
NNTP-Posting-Date: Tue, 20 Dec 2005 20:17:36 PST
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news1.google.com rec.radio.amateur.space:306
```

This report is organized into 4 parts.
Part 1 - operational analog amateur satellites.
Part 2 - operational digital amateur satellites.
Part 3 - non - operational satellites
Part 4 - proposed satellites

SB SAT @ AMSAT <KB9MMC $ANS-352.S1
WSR 352 Part 1 12/18/2005

AMSAT NEWS SERVICE BULLETIN 352.S1 FROM AMSAT HQ
SILVER SPRING, MD, December 18, 2005
TO ALL RADIO AMATEURS

BID: $ANS-352.S1

VO-52 HAMSAT
Catalog Number: 28650
Launch Date: May 05,2005

Status: Testing
Current Mode: U/V - Dutch Transponder

Proposed frequencies:

Indian Transponder:
Uplink : 435.220 MHz to 435.280 MHz LSB/CW
Downlink: 145.870 MHz to 145.930 MHz USB/CW
Beacom : 145.859330 MHZ CW

Dutch Transponder:
Uplink : 435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW
Beacon : 145.860MHz 12WPM with CW message

This from William Leijenaar, PE1RAH:
Dear AMSATs,

I wish I had the same free time now as when I designed the HAMSAT and P3e transponder. Unfortunatly these times have been changed (for the moment) due to QRL things.

However, I often try to be QRV on the HAMSAT and check the signals from my transponder and read the messages on amsat-bb. I just read about the beacon "problem". The "problem" with the beacon is actually not a problem but it is known. The beacon signal is injected at the IF, and runs throught the transponder from the IF section, up converter, via the final PA to the antenna.

The changes you hear on the beacon frequency is caused by the amplitude limiters in the IF that are activated by a too strong uplink signal. These limiters are only for protection, to avoid that the IF and VHF amplifiers get overloaded and generate all kinds of unwanted signals at the output.

My transponder is straight forward to keep it physical small and cheap in cost (as I had no sponsors). Unlike most other transponders my transponder on HAM-SAT has no AGC system. It gives always maximum gain with maximum sensitivity.

The main reason is that the AGC systems I had didn't fit in the small sized box. As an option I choose for limiters, and it worked great in tests.

Secondly, I tought limiters might be helpfull against aligators. To deal with too strong signals most transponder have an AGC to lower the RX gain, and actually be helpfull to the alligators. With the limiters their SSB signal will get distorted and they might lower their powers to have better audio quality.

The change in beacon sound is an indication for too much uplink powers and will be heared mainly in areas where higher powers are available on the uplink, like US, Europe, Japan...

Its funny to know that nobody here has discovered that the bandpass is shifted some down in frequency... There is no technical failure, the reason is known here... No panic please :o)

Please keep in mind that this transponder is my privat work and privat money. Frankly speaking this is my privat transponder I "give" to the amateur world. I was one of those many poor students, and this was the best I could do with my resources I had available at that time... The whole thing is just 16cm x 10cm x 3cm !! even smaller than the professional Indian transponder :o)

I hope you all enjoy my transponder even when it is not perfect.
[11272005]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Mode: PBBS - V/U 9k6
      VOICE REPEATER - V/U FM

Analog voice downlink: 435.300 MHz FM
              435.150 MHz FM
Analog voice uplink: 145.880 MHZ FM
              145.920 MHz FM 67Hz PL tone
                       1268.700 MHz FM 67Hz PL tone

Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
                       2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast
          Protocol (PBP)

Broadcast: PECHO-11
BBS: PECHO-12

This from the AO-51 Command team:

19 Dec
FM Repeater, V/U
Uplink: 145.920 mhz FM, 67 hz PL Tone
Downlink 435.300 mhz FM
9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 435.150 mhz FM, 9k6 PBP Digital

January 2006 Amsat Kid's Day on AO-51

Amsat-NA, the AO-51 Command Team, and the AO-51 Operations Team will sponsor Kid's Day on AO-51 on January 8, 2006. The event will run from approximately 0100 UTC 8 January until 0345 UTC 9 January. The event is open to all kids, worldwide. We ask all amateur radio stations to give this short time window to promote satellite operations with kids, by actually showing a kid how to make contacts via AO-51, providing a station to contact, or stepping aside to allow others to make contacts with the kids. During the event, please limit contacts to stations that are operating with kids at the microphone. This should allow the kids to have a nice QSO and pass some information. Kids can tell their name, age, who is helping them operate on AO-51, where they live, and other information about themselves.

AO-51 will be configured in the following mode during the event. Please note the change in the uplink frequency for the event. The PL tone will be turned off for the event.

Uplink: 145.880 mhz FM voice
Downlink: 435.300 mhz FM voice

The digital transponder on 435.150 will be turned off during the event.

See http://www.arrl.org/FandES/ead/kd-rules.html on the ARRL website for more Kids Day information.

Have fun and enjoy AO-51!

73 KE4AZN
Amsat VP-Operations
Echo Command Station

[ANS-WSR thanks Mike Kingery, KE4AZN for the above information]
[12182005]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Uplink: 145.850 MHz (67.0 Hz PL tone) (See below for operating procedures)
Downlink: 436.795 MHz

There have been unconfirmed reports on the amsat-bb remailer that SO-50 has shifted downlink frequency as much as 5khz up. This both from Europe.

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz. The order of operation is thus: (allow for Doppler as necessary)

1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer

on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10 minute timer.
[09122004]

=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: OPERATIONAL

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplink: 145.850 145.870 145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

John, N4QWL reports on July 16th, 2005:
Last evening I had a AOS to LOS qso with WI2W. FO-29 came up at 01:17z here in FM07 and I found WI2W and we chatted until 01:33z. The satellite was at 2 degrees elevation when I finally heard him start to crackle a bit. What a great QSO! To think that I watched this bird launch back in 1996 and it is still working so well is a real thrill. I believe I still have the video. I might just look for it and watch it again. Boy do I love this satellite stuff! Look for you all up there.

Please send the reception reports to lab2 'at' jarl.or.jp.
Please use the subject line: 'FO-29 reception report'.

Mineo, JE9PEL, has an FO-29 satellite telemetry analysis program that will automatically analyze all digital telemetry from the satellite (such as current, voltage and temperature). FO29CWTE is available at:
http://www.ne.jp/asahi/hamradio/je9pel/
[ANS-WSR wishes to thanks John, N4QWL for this week's report]
[11132005]

=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Uplink: 145.850 MHz FM
Downlink: 436.795 MHz FM

The latest information on AO-27 from control operator Michael Wyrick, N3UC

(former N4USI), can be found at:
http://www.ao27.org

An AO-27 question-and-answer page is available on the AMSAT-NA web site, with updates by Ray, W2RS. The URL is:
http://www.amsat.org/amsat/intro/ao27faq.html

[ANS-WSR thanks John, K6YK, for this week's AO-27 report]
[11132005]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Semi-operational in sunlight.
Return to active status: June 21,2002

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A
145.975 to 145.925 MHz CW/USB Mode B
Beacon: 29.502 MHz, 145.972 MHz, 435.1 MHz, 2304.1 MHz

Emily, W0EEC has created a website to allow the users of AO-7 to record contacts, observations and use of the satellite more effectively at:
http://www.emilyshouse.com/experthams/ao7/main.php
This includes the ability to log contacts.

Tim, K3TZ has written a program to decode AO-07 telemetry. The program can be downloaded at:
http://www.qsl.net/k3tz/files/K3TZ_AO-07_Telemetry_Decoder_0.5.zip

For more AO-7 info:
http://www.amsat.org/amsat/sats/n7hpr/ao7.html
[11132005]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: DIGIPEATER
Digipeater: ACTIVE

The current Expedition 12 crew is:
Commander: William McArthur - KC5ACR
Flight Engineer: Valery Tokarev - (no call)

Worldwide packet uplink: 145.990 MHz FM
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM
Doppler Shift is 10 KHz

Russian callsigns: RS0ISS, RZ3DZR
USA callsign: NA1SS
Packet station mailbox callsign: RS0ISS-11
Packet station keyboard callsign: RS0ISS-3
Digipeater callsign: ARISS

The ARRL Reports;

ISS commander shooting for WAC, WAS and maybe DXCC from space

ISS Expedition 12 Commander Bill McArthur, KC5ACR, has proven to be one of the more active Amateur Radio on the International Space Station (ARISS) operators among ham radio operators who have occupied the space station. In fact, McArthur's having so much fun operating from space that he's hoping to complete Worked All Continents (WAC), Worked All States (WAS) and maybe even DXCC from space.

"Bill McArthur continues to be active on voice and now has a couple of personal goals he is trying to achieve," says ARISS Ham Radio Project Engineer Kenneth Ransom, N5VHO. "He is trying to talk to someone in every state in the United States. According to his log, he has managed to work 37 states so far." In addition, Ransom says, McArthur wants to work as many countries as he can.

"He's off to a good start with 28 DXCC entities in his log as of December 12," he said. "These contacts have been with amateur stations on every continent with the exception of Antarctica." That contact could happen this weekend, however. Although the IARU does not require WAC applicants to have worked Antarctica, Ransom says that ARISS tradition calls for an Antarctica QSO to achieve WAC from space "since the astronauts seem to have an unfair advantage."

Expedition 9 astronaut Mike Fincke, KE5AIT, became the first ISS crew member to contact all seven of the world's continents via Amateur Radio from NA1SS.

States on McArthur's most-needed list are Alaska, Hawaii, Idaho, Missouri, New Hampshire, New Mexico, North Dakota, Pennsylvania, Rhode Island, South Dakota, Vermont, Virginia and Washington.

"The list of DXCC entities is just starting to grow, so he needs a lot right now," Ransom conceded this week, adding that he hasn't included ARISS school group contacts in his counts and hopes McArthur will achieve his goals without them. "We won't know the official results for months after the mission," he added.

McArthur is about halfway through his approximately six-month duty tour aboard the ISS. He and crewmate Valery Tokarev will return to Earth in April.

During Thanksgiving week, McArthur reportedly made some three dozen casual contacts, most of them over North America and a few over Europe and New Zealand. He made contacts with stations in the US on December 6. He also had QSOs with Australia, New Zealand and the US on December 11.

[WSR Thanks the ARRL for the above information]

The ISS Fan Club Webpage < http://www.issfanclub.com > reports that the Digipeater is active as of Nov 14th, 2005 at 0207UTC.

The ISS daily crew schedule can be found at:
http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line is NOT translated from Russian and posted.

More information is available at:
http://www.rac.ca/ariss
http://spaceflight.nasa.gov/station/reference/radio/
http://www.marexmg.org/fileshtml/unprotopage.html
http://www.issfanclub.com
http://oscar.dcarr.org/
[11132005]
NNNN
/EX

SB SAT @ AMSAT <KB9MMC $ANS-352.S2
WSR 352 Part 2 12/18/2005

AMSAT NEWS SERVICE BULLETIN 352.S2 FROM AMSAT HQ
SILVER SPRING, MD, December 12, 2005
TO ALL RADIO AMATEURS
BID: $ANS-352.S2

PCSAT2 ?0-??
Catalog Number: 25544
Launch Date: August 1, 2005

Status: Battery-saving mode
Current Mode: None

Digital Downlink: 435.275 Mhz
Digital Uplink: 145.825 Mhz
PSK-31 Downlink: 435.275 Mhz
PSK-31 Uplink: 29.400 - 29.403 Mhz

Broadcast:
BBS:

PCSAT2 was installed on the exterior of the International Space Station and was activated on August 3, 2005.

Packets seen from PCSAT2 can be reviewed at:
http://www.findu.com/cgi-bin/pcsat2.cgi

A screen shot of both the 9600 bps and 1200 bps decoded data as seen by
Simon, 9W2QC, can be seen at:
http://www.9w2qc.net/pcsat2/

More information on PCSAT2 can be found at:
http://web.usna.navy.mil/~bruninga/pcsat2.html
[11272005}
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Mode: PBBS - V/U 9k6
VOICE REPEATER - V/U FM

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
Analog voice uplink: 145.880 MHZ FM
145.920 MHz FM 67Hz PL tone
1268.700 MHz FM 67Hz PL tone

Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast
Protocol (PBP)

Broadcast: PECHO-11
BBS: PECHO-12

This from the AO-51 Command team:

19 Dec
FM Repeater, V/U
Uplink: 145.920 mhz FM, 67 hz PL Tone
Downlink 435.300 mhz FM
9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 435.150 mhz FM, 9k6 PBP Digital

January 2006 Amsat Kid's Day on AO-51

Amsat-NA, the AO-51 Command Team, and the AO-51 Operations Team
will sponsor Kid's Day on AO-51 on January 8, 2006. The event
will run from approximately 0100 UTC 8 January until 0345 UTC
9 January. The event is open to all kids, worldwide. We ask
all amateur radio stations to give this short time window to
promote satellite operations with kids, by actually showing a

kid how to make contacts via AO-51, providing a station to contact, or stepping aside to allow others to make contacts with the kids. During the event, please limit contacts to stations that are operating with kids at the microphone. This should allow the kids to have a nice QSO and pass some information. Kids can tell their name, age, who is helping them operate on AO-51, where they live, and other information about themselves.

AO-51 will be configured in the following mode during the event. Please note the change in the uplink frequency for the event. The PL tone will be turned off for the event.

Uplink: 145.880 mhz FM voice
Downlink: 435.300 mhz FM voice

The digital transponder on 435.150 will be turned off during the event.

See http://www.arrl.org/FandES/ead/kd-rules.html on the ARRL website for more Kids Day information.

Have fun and enjoy AO-51!

73 KE4AZN
Amsat VP-Operations
Echo Command Station

[ANS-WSR thanks Mike Kingery, KE4AZN for the above information]
[11202005]

=====

NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Operational

General Usage Uplink/Downlink:145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

Bob WB4APR reports:

The PCSAT-1 digipeater on 145.825 was still going strong and working well up until December 15.

The activity page http://pcsat.aprs.org shows about 75 stations accessed PSCAT-1 between December 13 and 14. This won't last much longer since PCSAT-1 is now back to 30 minute eclipses headed towards worst-case of 35 minutes during the week of December 18-25.

Sometime before 2202z on the 15th PCSAT-1 suffered a reset to W3ADO-1 and lost its low power settings. Now at 1740z on the

17th, the US Naval Academy Satellite Lab sent the restore commands, but with 33 minute eclipses, it is doubtfull they will hold. We may have lost her until March, 2006.

The command station at the US Naval Academy should be able to keep PCSAT-1 alive indefinately as long as stations do not user her in the dark and the command stations never let her 68 hour command watch-dog timer time out.

Anyone can work PCSAT-1 with ANY typical 1200 baud packet station on 145.825. Just set your path to UNPROTO APRS via ARISS (the same that you use via ARISS on the ISS or via PCSAT2). Mobiles with the D700 or the TH-D7 HT APRS radios will see packets directly on their front panel and can work it from their mobile.

[ANS-WSR thanks Bob Bruninga, WB4APR and the US Naval Academy Satellite Lab for the above information]

PCSat is a 1200-baud APRS digipeater designed for use by stations using hand-held or mobile transceivers. Downlinks feed a central web site at: http://pcsat.aprs.org

The APRS-equipped PCSat was built by midshipmen from the U.S. Naval Academy under the guidance of Bob Bruninga, WB4APR.
[12182005]
=====
CUTE-1
Catalog number: 27844
Launched: June 30,2003

Status: Operational

```
Uplink:          ?
Downlink:     436.8375 CW
              437.4700 1200 FM ax25 or SRLL (ACTIVE only near Japan ? )
```

Cliff, K7RR reports:
In the latest Weekly Satellite Report, CUTE 1, #27844 is listed as OPERATIONAL?
Indeed it is very operational as a CUBESAT sending CW telemetry on 436.8345 MHz. At the July 7 2005, 23:45:20 pass over the Western USA:

```
CUTE 1 6B A4 xx 7F D7 66A8 4702 FF FF7C 65
CUTE 1 6C A6 59 80 D9 66A8 4702 FF FE7C B6
```

The June 30th KEPS were within ten seconds of AOS and LOS. It is an very good object to practice tracking as the orbit and transmitter power are similar to proposed CUBESATS awaiting launch this December. As a check for Doppler correction, the lack of change in tone is an excellent indicator.

CUTE 1 is a Japanese (Tokyo Institute of Technology) one kilogram nanosatellite that was launched by a Rokot rocket from Plesetsk at 14:15 UT on 30 June 2003. It carries a 100 mW beacon at 436.8375 MHz. Initial orbital parameters were period 101.4 min, apogee 831 km, perigee

819 km, and inclination 98.7?.

For further info about CUTE-1 goto:
http://lss.mes.titech.ac.jp/ssp/cubesat/operation/Schedule_e.html

[ANS WSR wishes to thank Cliff, K7RR, for this week's information]
[07242005]
=====
GO-32 TECHSAT-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Downlink: 435.225 MHz FM (9600-baud FSK)
                    (435.325 n/a - temperature problems)
Uplinks: 145.850, 145.890, 145.930 FM
                    1269.700, 1269.800, 1269.900 FM
Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

Jeff, KB2M, reports November 15th, 2005:
I might be wrong about this, but as I am the only one I see working GO-32 here goes. If you do a DIR request up on the 145.890 uplink the bird turns on. Give it a try....

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[ANS-WSR wishes to thank Jeff, KB2M for this weeks report.]
[11202005]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Semi-operational, the digipeater command is on and open for APRS users.

Uplink: 145.90 145.92 145.94 145.96 MHz FM
                      (using 1200-baud Manchester FSK)
Downlink: 437.026 MHz SSB (1200-baud PSK)
Mode-S Beacon: 2401.1428 MHz
Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

A WOD collection of current graphics along with general information and telemetry samples can be found at:
http://www.telecable.es/personales/ea1bcu
[05092004]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational?

Telemetry Downlink: 145.826 MHz. FM (1200-baud AFSK).
approx. 10 days ON, 10 days OFF
Mode-S Beacon: 2401.500 MHz. ... OFF
UHFBeacon: 435.025 MHz. ... OFF

During the period 21 November to 14 December 2005 the VHF beacon on 145.826 MHz has been heard from 05 to 10 December.

Signals have been very variable during this period. Sometimes received at good strength, at other times they were inaudible, even with the BFO switched ON (ie. in CW mode).

If the watchdog resets as expected, then the beacon should restart around 31 December. However, more observations are needed to confirm the timing of the watchdog timer, and whether it is being reset prematurely. Therefore, it may be worth listening for the satellite a few days before 31 December.

The on-board clock continues to show a very large error. On 09 December it was 21.8 days slow.

All the analogue telemetry channels, 0 to 59 are zero, ie they have failed. The status channels 60 to 67 are still working.

The eclipses have now ended, and the satellite should be in continuous sunlight for the remainder of this year, and next year until early May. This should help the satellite to continue transmitting, although continuous sunlight can cause problems due to excessive temperatures. Power supply problems can be caused by poor earth pointing attitude, ie the sunlight illuminating the ends of the satellite, instead of the solar arrays.

The watchdog timer appears to be operating on the 20 day cycle, ie. approximately ten days ON followed by 10 days OFF. It appears to be unaffected by problems of the on-board clock. However, poor solar attitude, and battery problems, may be combining to produce a low 14 volt line supply. This appears to be causing the beacon to switch OFF prematurely, and resets the watchdog timer cycle. It seems very likely that the battery is now unable to retain its charge, due to having endured around 100,000 partial charge/discharge cycles, always a problem with NiCad cells. When analogue telemetry was transmitted, it showed an unexplained current drain from the 14 volt line. This just adds to the present problems.

The Beacon frequencies are -
VHF 145.826 MHz. AFSK FM ASCII Telemetry
UHF 435.025 MHz. OFF
S-band 2401.5 MHz. OFF

Listeners to OSCAR-11 may be interested in visiting my website which contains an archive of news & telemetry data. It also contains details about using a soundcard or hardware demodulators for data capture. There is software for capturing data, and decoding ASCII telemetry. The URL is www.users.zetnet.co.uk/clivew/

More information on UO-11 OSCAR-11 can be found at:
http://www.users.zetnet.co.uk/clivew/

MPEG3 files can be found here at Mineo, JE9PEL website:
http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[ANS-WSR thanks Clive G3CWV for the above information]
[12182005]
NNNN
/EX

SB SAT @ AMSAT <KB9MMC $ANS-352.S3
WSR 352 Part 3 12/18/2005

AMSAT NEWS SERVICE BULLETIN 352.S3 FROM AMSAT HQ
SILVER SPRING, MD, December 18, 2005
TO ALL RADIO AMATEURS
BID: $ANS-352.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

SSETI ?O-??
Catalog Number: 28894
Launch Date: October 27, 2005

Status: In orbit - being commissioned

A daily report of the launch campaign is being maintained at
http://sseti.gte.tuwien.ac.at/express/mop/index.php?uri=news.html
This mission operations site is completely up-to-date regarding Kepler TLEs and other LEOP "Launch and Early Operations Phase" details.

The SERACC software, needed to decode and submit the received data to the SSETI database, together with some audio files containing recorded 9k6 signal to experiment with is also now available

The ESA website about SSETI Express is at:
http://www.esa.int/SPECIALS/sseti_express/SEMARJ7X9DE_0.html

The latest version of the SSETI Express handbook can be downloaded free of charge from the AMSAT-UK website at:
http://www.uk.amsat.org/

More SSETI Links at:

SpaceDaily has a report about SSETI at:
http://www.spacedaily.com/news/internet-04zzzu.html

You can find more info about SSETI at:

http://sseti.gte.tuwien.ac.at/WSW4/

Latest news about SSETI can be found at:
http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php

Look at the website for the SSETI Express webcam
http://sseti.gte.tuwien.ac.at/WSW4/webcam.htm
[ANS-WSR thanks Graham, UA/G3VZV and Trevor, M5AKA for the above]
[11202005]

======

POSAT-1 PO-28
Catalog Number: 22829
Launched : September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 435.250 MHz
435.275 MHz

Uplink: 145.925 MHz
145.975 MHz

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

PO-28 (POSAT-1), Portugal's first satellite, launched 12 years ago,will be turned over to Amateur Radio use in the very near future. That was the word July 30 from AMSAT-UK Secretary Jim Heck, G3WGM, during the AMSAT-UK International Space Colloquium in Guildford, England.

Launched September 25, 1993, the satellite operated as a packet store-and-forward BBS (9600 baud FM FSK) on Amateur Radio frequencies for several weeks in early 1994. Over the years, PO-28's primary usage has been commercial, although plans have called for eventually shifting its operation to ham radio use. G3WGM reports that following lengthy negotiations it has been agreed thatthe satellite can be switched permanently to amateur frequencies. The change over is expected to take a couple of weeks.

The Portuguese satellite was built at the University of Surrey as part of a collaborative satellite technology program that involved industry and academe. Uplink frequencies will be 145.925 and 145.975 MHz. Downlink frequencies will be 435.250 and 435.275 MHz. More information on PO-28 is on the AMSAT Web site

http://www.amsat.org/amsat/sats/n7hpr/po28.html.

Uplink Frequencies: 145.925 and 145.975 MHz
Downlink Frequencies: 435.250 and 435.275 MHz

Orbit: 822 x 800 km, 98.6 deg inclined, sun-synchronous.

Transponder capabilities include FM repeater and 38k4 data. If you want to hear how loud this satellite is, listen on 429.950 until the change back to amateur radio service.

Keplerian elements for PO-28 are currently contained in the AMSAT keps bulletins and at Celestrak in amateur.txt using the name "POSAT". Users of Space Track should query the NORAD Satellite ID number 22829. The name listed by Space Track is "EYESAT A".

More information of POSAT-1 can be found at:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
http://www.amsat.org/amsat/sats/n7hpr/po28.html
[ANS-WSR wishes to thank Duane Naugle, KO6BT, for this week's update.]
[11062005]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launched: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB
Beacon: 145.810 MHz (unmodulated carrier)

AO-10 has been locked into a Mode-B, 70-cm uplink and
2-meter downlink for several years.

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: Non-operational

Uplink: 145.875 145.900 145.925 145.950 MHz FM (1200-baud)
Downlink: 435.812 MHz SSB
Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Alberto E. Zagni - I2KBD reports on 02/13/05
The spacecraft is in MBL (safe mode) and is trasmitting just 6 channels of telemetry. Temperatures and voltage are nominal, but there seems to be a problem with the onboard receiver, refusing to accept commands.
The spacecraft was launched in 1993, thus nearing 12 years in orbit...

Best regards
Alberto E. Zagni - I2KBD
ITAMSAT Mission Director

More information of IO-26 can be found at:

```
http://joshua.micronet.it/english/itamsat/itamsathome.html
http://www.amsat.org/amsat/sats/n7hpr/io26.html
www.itamsat.org

[02132005]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink:   21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB
Beacon:   29.408 MHz
Robot:    29.454 MHz
[05232004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink:      21.260 to  21.300 MHz CW/USB
Downlink:   145.860 to 145.900 MHz CW/USB
Beacon:     145.860 MHz
Robot:      145.908 MHz
[05232004]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink 145.975 MHz FM
Downlink 435.070 MHz FM
[05092004]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink:             145.900 FM 9600-baud FSK
Downlink:           435.120 MHz FM
Broadcast Callsign: UOSAT5-11
BBS:                UOSAT5-12
[01092005]
=====
RS-15 RADIO SPORT RS-15
```

Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational?

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB
Beacon: 29.352 MHz (intermittent)
SSB meeting frequency: 29.380 MHz (unofficial)

John, KD6PAG reports on June 16, 2004 to WSR:
RS-15 beacon seemed to be back in the mode where it's a tone about 5 seconds off and then 5 seconds on this morning.

WSR is looking for more confirmations of RS-15 coming back.

[ANS-WSR thanks John, KD6PAG for RS-15 information]
[06202004]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplink: 145.84 145.86 145.88 145.90 MHz FM
                    (using 1200-baud Manchester FSK)
CW downlink: 437.125 MHz
Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)
Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[05232004]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[08152004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM
Broadcast Callsign: HL01-11
BBS: HL01-12

Jim, AA7KC, reports that KO-23's downlink transmitter continues in a non-operational status.
[05092004]

=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM (9600-baud FSK)
Downlink: 436.500 MHz FM
Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]

=====
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink frequency (listed on the PanSat web site) 436.500 MHz

The satellite is not available for general uplink transmissions.

The Naval Postgraduate School developed PanSat. At the time of launch, PanSat spread-spectrum digital transponders were to be available to Amateur Radio operators along with software to utilize this technology.

The satellite is still operating, however, the spread spectrum packet radio portion never took place. The spacecraft is now beyond it's initial 2-year mission life, but telemetry records are still being downloaded.

For more information, visit the official PanSat web site at:
http://www.sp.nps.navy.mil/pansat/
[05092004]

=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

```
Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm

[ANS-WSR has no further information]
[05232004]
=====
SO-35 SUNSAT
Catalog Number:     ?
Launched:February 23, 1999

STatus: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
          Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
         Mode J Digipeater: 145.825 MHz and 145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[08082004]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink:            145.960 MHz (9600-baud FSK)
Downlink:          437.025 MHz 437.400 MHz
Broadcast Callsign: UO121-11
BBS:               UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA
web site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[05092004]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplink      V-band    145.840 -  145.990 MHz CW/LSB
            U-band    435.550 -  435.800 MHz CW/LSB
           L1-band   1269.250 - 1269.500 MHz CW/LSB
           L2-band   1268.325 - 1268.575 MHz CW/LSB
           S1-band   2400.350 - 2400.600 MHz CW/LSB
Downlink:  S2-band   2401.225 - 2401.475 MHz CW/USB
           K-band 24,048.010 - 24,048.060 MHz CW/USB
Beacon:    2401.323, 24,048.035
[05232004]
-----
SO-42  SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational
 Downlink:           437.075 MHz
Broadcast Callsign: SASAT2-11
BBS:                SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[08152004]
=====
SO-41  SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink:             145.850 MHz
Downlink:           436.775 MHz
Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[08152004]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink:   145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is  welcome to use the digipeating/APRS features of Sapphire,
callsign KE6QMD, as per the user service agreement located at the
following
URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
MO-46 TIUNGSAT-1
```

Catalog number: 26548
Launched: September 26, 2000

Status: Operational

Uplink: 145.850 or 145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz
Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[11202005]

=====

AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Semi-operational.

Uplink 435.275 1200-baud AFSK
Downlink 145.825 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

AO-49 (SAFIR-M) is a German amateur radio payload onboard the small German scientific satellite "RUBIN-2".

AO-49 was built by the German amateur radio association "AATiS e.V." (German acronym for "Arbeitskreis Amateurfunk und Telekommunikation in der Schule", which means: 'working group for amateur radio and telecommunications in schools'). AO-49 is designed as a "store and broadcast" system for APRS based messages, dedicated for the use of schools in combination with the existing WX-Net and planned buoy experiments in Germany.

No transmissions detected since the 1st of February 2003! It appears AO-49 is not properly aligned to illuminate the solar panels. This should end soon. Due to its orbit, AO-49 will be in a phase without eclipses until 13Feb03.

Martin DG8UAU has written a small software program "SAFIR-M Decoder" to allow decoding of the received DATA0 frames. It is available at: http://amend.gmxhome.de in the section Aktuelles.

Details on AO-49 (SAFIR-M) can be found at:
http://amend.gmxhome.de

Information about AATiS e.V. is available at:

```
http://www.aatis.de
[11132005]
NNNN
/EX

SB SAT @ AMSAT <KB9MMC $ANS-352.S4
WSR 352 Part 4 12/18/2005

AMSAT NEWS SERVICE BULLETIN 352.S4 FROM AMSAT HQ
SILVER SPRING, MD, December 18,2005
TO ALL RADIO AMATEURS
BID: $ANS-352.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE
PROPOSED FOR LAUNCH AT THIS TIME:

UCISAT ?O-??
Catalog number:
Proposed Launch Date:  October 31, 2005

Status: Under Construction

Downlink: Submission in Progress
Uplink:   Submission in Progress
Callsign: Submission in Progress
[11272005]
=====
PHASE 3E ?O-??
Catalog Number:
Proposed Launch Date: Early 2006

Status: Under Construction

For the latest project status update please visit the AMSAT-DL
P3-E web page:
http://www.amsat-dl.org/p3e/

[ANS-WSR wishes to thank William Leijenaar, PE1RAH for this week's report]
[10022005]
=====
CP1 ?o-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: N6CP
Proposed Transmit Frequency: 436.845
[03272005]
=====
CP2 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.325
[03272005]
=====
HAUSAT1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: D90HP
Proposed Transmit Frequency: 437.465
[03272005]
=====
ICE Cube 1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: W2CXM
Proposed Transmit Frequency: 437.305
[03272005]
=====
ICE Cube 2 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: N2VR
Proposed Transmit Frequency: 437.425
[03272005]
=====
ION ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.505
[03272005]
=====
KUTEsat ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: KC0RMW
Proposed Transmit Frequency: 437.385
[03272005]
=====
MEROPE ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: K7MSU-1
Proposed Transmit Frequency: 145.980
[03272005]
=====
nCUBE1 ?O-??
Catalog Number:
```

```
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
       2407.25
[03272005]
=====
RINCON ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
        437.345
[03272005]
=====
SACRED ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
[03272005]
=====
SACRED ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
[03272005]
=====
SEEDS ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: JQ1YGU
Proposed Transmit Frequency: 437.485
[03272005]
=====
Mea Huaka ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.405
[03272005]
=====
SUITSAT ?O-??
Catalog Number:
Proposed Release Date: December 8th, 2005

Proposed Callsign: RS0RS ?
```

Proposed Transmit Frequency: 145.990

This from Frank, KA3HDO:
I have recieved information that the Russian EVA that will deply SuitSat, planned for December 8th, has been delayed to late January/Early February 2006. As we get more information, we will post it.

[ANS-WSR wishes to thank Frank Bauer, KA3HDO for this weeks report]
[11272005]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/amsat/listserv/menu.html

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James K. Darrow, KB9MMC.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the

memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

```
From -6692254587822955747
X-Google-Thread: 10e8ad,43d2e840ed2f036,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news4.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx01.iad01.newshosting.com!newshosting.com!
207.69.154.102.MISMATCH!elnk-atl-nf2!newsfeed.earthlink.net!
stamper.news.atl.earthlink.net!newsread1.news.atl.earthlink.net.POSTED!46041641!
not-for-mail
From: "JoAnne Maenpaa" <wb9jej_no-spam@earthlink.net>
Newsgroups: rec.radio.amateur.space
Subject: ANS-352 AMSAT Weekly News Bulletin
Lines: 383
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <FZ4qf.7720$3Z.2606@newsread1.news.atl.earthlink.net>
Date: Wed, 21 Dec 2005 04:36:53 GMT
NNTP-Posting-Host: 66.167.66.51
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread1.news.atl.earthlink.net 1135139813 66.167.66.51 (Tue, 20 Dec
2005 20:36:53 PST)
NNTP-Posting-Date: Tue, 20 Dec 2005 20:36:53 PST
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news1.google.com rec.radio.amateur.space:307
```

AMSAT NEWS SERVICE
ANS-352

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:

* Straight Key Night on OSCAR 2006

* OSCAR-11 REPORT for December
* PCSAT-1 Enters Eclipse Cycle
* Amateur Station Hears MRO at 45 Million Miles
* ARISS Status for the week of December 12, 2005
* FM Satellites: Remember to Listen for N5AFV Aboard a Cruise Ship
* First Announcement of January 2006 Amsat Kid's Day on AO-51
* AMSAT Awards This Week

SB SAT @ AMSAT $ANS-352.01
Straight Key Night on OSCAR 2006

AMSAT News Service Bulletin 352.01
From AMSAT HQ SILVER SPRING, MD.
December 18, 2005
To All RADIO AMATEURS
BID: $ANS-352.01

Once again, AMSAT-NA is pleased to sponsor Straight Key Night on OSCAR for enjoyment by all radio amateurs.

OSCAR SKN 2006 will run for 24 hours, 0000-2400 UTC, on 1 January 2006. It's very simple: no rules, no scoring, and no need to send in a log. Just operate CW through any OSCAR satellite using a straight hand key, working as many other SKN participants as you can. Contacts via the moon (OSCAR Zero) count too.

As in past years, all participants are requested to nominate one of the operators they worked for "Best Fist" recognition. Your nominee need not have the best fist of those you heard, just of those you worked.

Please send all nominations to Ray Soifer via w2rs@arrl.net.

A list of those nominated will be published via the AMSAT News Service in early February, and in The AMSAT Journal.

[ANS thanks Ray, W2RS for the above information]

/EX

SB SAT @ AMSAT $ANS-352.02
OSCAR-11 REPORT for December

AMSAT News Service Bulletin 352.02
From AMSAT HQ SILVER SPRING, MD.
December 18, 2005
To All RADIO AMATEURS
BID: $ANS-352.02

During the period 21 November to 14 December 2005 the VHF beacon on 145.826 MHz has been heard from 05 to 10 December.

Signals have been very variable during this period. Sometimes received at good strength, at other times they were inaudible, even with the BFO switched ON (ie. in CW mode).

If the watchdog resets as expected, then the beacon should restart around 31 December. However, more observations are needed to confirm the timing of the watchdog timer, and whether it is being reset prematurely. Therefore, it may be worth listening for the satellite a few days before 31 December.

The on-board clock continues to show a very large error. On 09 December it was 21.8 days slow.

All the analogue telemetry channels, 0 to 59 are zero, ie they have failed. The status channels 60 to 67 are still working.

The eclipses have now ended, and the satellite should be in continuous sunlight for the remainder of this year, and next year until early May. This should help the satellite to continue transmitting, although continuous sunlight can cause problems due to excessive temperatures. Power supply problems can be caused by poor earth pointing attitude, ie the sunlight illuminating the ends of the satellite, instead of the solar arrays.

The watchdog timer appears to be operating on the 20 day cycle, ie. approximately ten days ON followed by 10 days OFF. It appears to be unaffected by problems of the on-board clock. However, poor solar attitude, and battery problems, may be combining to produce a low 14 volt line supply. This appears to be causing the beacon to switch OFF prematurely, and resets the watchdog timer cycle.
It seems very likely that the battery is now unable to retain its charge, due to having endured around 100,000 partial charge/discharge cycles, always a problem with NiCad cells. When analogue telemetry was transmitted, it showed an unexplained current drain from the 14 volt line. This just adds to the present problems.

The Beacon frequencies are -
VHF 145.826 MHz. AFSK FM ASCII Telemetry
UHF 435.025 MHz. OFF
S-band 2401.5 MHz. OFF

Listeners to OSCAR-11 may be interested in visiting my website which contains an archive of news & telemetry data. It also contains details about using a soundcard or hardware demodulators for data capture. There is software for capturing data, and decoding ASCII telemetry. The URL is www.users.zetnet.co.uk/clivew/

[ANS thanks Clive G3CWV for the above information]

/EX

SB SAT @ AMSAT $ANS-352.03
PCSAT-1 Enters Eclipse Cycle

AMSAT News Service Bulletin 352.03
From AMSAT HQ SILVER SPRING, MD.
December 18, 2005
To All RADIO AMATEURS
BID: $ANS-352.03

The PCSAT-1 digipeater on 145.825 was still going strong and working well up until December 15.

The activity page http://pcsat.aprs.org shows about 75 stations accessed PSCAT-1 between December 13 and 14. This won't last much longer since PCSAT-1 is now back to 30 minute eclipses headed towards worst-case of 35 minutes during the week of December 18-25.

Sometime before 2202z on the 15th PCSAT-1 suffered a reset to W3ADO-1 and lost its low power settings. Now at 1740z on the 17th, the US Naval Academy Satellite Lab sent the restore commands, but with 33 minute eclipses, it is doubtfull they will hold. We may have lost her until March, 2006.

The command station at the US Naval Academy should be able to keep PCSAT-1 alive indefinately as long as stations do not user her in the dark and the command stations never let her 68 hour command watch-dog timer time out.

Anyone can work PCSAT-1 with ANY typical 1200 baud packet station on 145.825. Just set your path to UNPROTO APRS via ARISS (the same that you use via ARISS on the ISS or via PCSAT2). Mobiles with the D700 or the TH-D7 HT APRS radios will see packets directly on their front panel and can work it from their mobile.

For more information see:
http://www.ew.usna.edu/~bruninga/pcsat.html

[ANS thanks Bob, WB4APR and the US Naval Academy Satellite Lab for the above information]

/EX

SB SAT @ AMSAT $ANS-352.04
Amateur Station Hears MRO at 45 Million Miles

AMSAT News Service Bulletin 352.04
From AMSAT HQ SILVER SPRING, MD.
December 18, 2005
To All RADIO AMATEURS
BID: $ANS-352.04

This week the Mars-Net e-mail list reported that Paul Marsh, an amateur observer, has detected Mars Reconnaissance Orbiter at X band at a range of 45 million miles from Earth.

The MRO transmits on Deep Space Network channel 32 which is 8439.444444 MHz. By the time that reaches Earth, due to doppler the frequency has dropped to around 8439.031 MHz. The MRO has a 3 meter diameter dish antenna driven by a 100 Watt X-band TWTA to transmit signals to Earth. The signal coming in our direction is of the order of 4.2 mega watts of RF.

The signal was clearly visible in the FFT display of an SDR-14 software radio, and was just audible in SSB bandwidth of a communications receiver. The signal was consistently about 6 to 8 dB above the noise floor. More details can seen at: http://www.uhf-satcom.com/mro/.

[ANS thanks Joe, KM1P, the Mars-net list, and Uhf-satcom.com for the above information]

/EX

SB SAT @ AMSAT $ANS-352.05
ARISS Status for the week of December 12, 2005

AMSAT News Service Bulletin 352.05
From AMSAT HQ SILVER SPRING, MD.
December 18, 2005
To All RADIO AMATEURS
BID: $ANS-352.05

1. Texas Contact Successful

On Thursday, December 8, Sanderson High School in Sanderson, Texas experienced a successful contact with Bill McArthur, KC5ACR. Bill was able to answer 18 questions posed to him by 10 students, as an audience of approximately 25 students, teachers, parents, and others looked on. Local dignitaries who attended the event included the county judge and the county sheriff. Among the media that covered the contact were The Terrell County News Leader, The Davis Mountain Times (Fort Davis, TX), The Big Bend Sentinel (Alpine, TX) and The Alpine Avalanche (Alpine, TX).

2. Upcoming School Contacts

Mt Carmel High School in San Diego, California made a contact on Thursday, December 15 at 15:42 UTC via KG6EQU.

Carman Park Elementary School, a crew pick, located in Flint, Michigan, has been approved for an ARISS contact. It will take place on Wednesday, December 21 at 16:35 UTC via the telebridge station, WH6PN. The Carman Park contact will be webcast.
To join the event:
URL: <https://e-meetings.mci.com>
CONFERENCE NUMBER: 5169963
PASSCODE: SPACE STATIO

The audio will also be available through EchoLink AMSAT (node 101377) and EDU_Net (node 77992) conference room servers and will be broadcast into the IRLP Discovery Reflector 9010, with streaming audio available from the Discovery Reflector Web Site, http://www.discoveryreflector.ca/

3. McArthur Still Active on Voice

Over this past week, Bill McArthur, KC5ACR, made contacts with stations in the U.S. on December 6. He also spoke with stations in Australia, New Zealand and the U.S. on December 11.

4. Astronaut Training Status

Astronaut Michael Lopez-Alegria, who passed his amateur radio license exam on Wednesday, November 30 has been issued the callsign KE5GTK.

[ANS thanks Carol, KB3LKI for the above information]

/EX

SB SAT @ AMSAT $ANS-352.06
FM Satellites: Remember to Listen for N5AFV Aboard a Cruise Ship

AMSAT News Service Bulletin 352.06
From AMSAT HQ SILVER SPRING, MD.
December 18, 2005
To All RADIO AMATEURS
BID: $ANS-352.06

Allen, N5AFV is at sea in the Carribean with his FM satellite gear on a cruise ship sailing from Port Everglades, FL to the island of Dominica and back. He plans to work the FM birds AO-27, SO-50 and AO-51 using his Icom W32A HT and an AL800 telescoping antenna.

While Allen plans shipboard operation, and has done so successfully in the past, there is always the possibility that he will not be allowed to operate from the ship. If that happens, Allen will try to operate onshore at the ports of call where he can do so.

Itinerary
Dec 17, Leave Port Everglades, FL, 1700 EST
Call signs N5AFV and N5AFV/C6A
Dec 18, Nassau, Bahamas, 0800-1600 local time
Call sign N5AFV/C6A
Dec 19, At Sea
Call sign N5AFV/C6A
Dec 20, San Juan, PR, 1300-2300 local time
Call sign KP4/N5AFV
Dec 21, St. Thomas, USVI, 0800-1700 local time
Call sign KP2/N5AFV
Dec 22, Dominica, 1200-1900 local time

Call sign J79AFV
Dec 23, St. Barts, 0800-2300 local time
Call sign FJ/N5AFV
Dec 24, Tortolla, BVI, 0800-1500 local time
Call sign VP2V/N5AFV
Dec 25, At Sea
Call sign N5AFV/C6A
Dec 26, At Sea
Call sign N5AFV/C6A
Dec 27, Arrive Port Everglades, FL, 0700 EST
Call sign N5AFV

[ANS thanks Allen, N5AFV for the above information]

/EX

SB SAT @ AMSAT $ANS-352.07
First Announcement of January 2006 Amsat Kid's Day on AO-51

AMSAT News Service Bulletin 352.07
From AMSAT HQ SILVER SPRING, MD.
December 18, 2005
To All RADIO AMATEURS
BID: $ANS-352.07

January 2006 Amsat Kid's Day on AO-51

Amsat-NA, the AO-51 Command Team, and the AO-51 Operations Team will sponsor Kid's Day on AO-51 on January 8, 2006. The event will run from approximately 0100 UTC 8 January until 0345 UTC 9 January. The event is open to all kids, worldwide. We ask all amateur radio stations to give this short time window to promote satellite operations with kids, by actually showing a kid how to make contacts via AO-51, providing a station to contact, or stepping aside to allow others to make contacts with the kids. During the event, please limit contacts to stations that are operating with kids at the microphone. This should allow the kids to have a nice QSO and pass some information. Kids can tell their name, age, who is helping them operate on AO-51, where they live, and other information about themselves.

AO-51 will be configured in the following mode during the event. Please note the change in the uplink frequency for the event. The PL tone will be turned off for the event.

Uplink: 145.880 mhz FM voice
Downlink: 435.300 mhz FM voice

The digital transponder on 435.150 will be turned off during the event.

See http://www.arrl.org/FandES/ead/kd-rules.html on the ARRL website for more Kids Day information.

Have fun and enjoy AO-51!

73 KE4AZN
Amsat VP-Operations
Echo Command Station

[ANS thanks Mike, KE4AZN for the above information]

/EX

SB SAT @ AMSAT $ANS-352.08
AMSAT Awards This Week

AMSAT News Service Bulletin 352.08
From AMSAT HQ SILVER SPRING, MD.
December 18, 2005
To All RADIO AMATEURS
BID: $ANS-352.08

Bruce Paige, KK5DO, AMSAT Director Contests and Awards says this week, congratulations go out to all of the following.

Kenneth Beck, WI7B, South Africa AMSAT Communication Achievement Award #US92

Ernie Howard, W8EH, 51 on 51 Award #47
Peter Meier, DC7TS, 51 on 51 Award #48
James Clay, ND9M, 51 on 51 Award #49

To see all the awards visit http://www.amsat.org.

[ANS thanks Bruce, KK5DO for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
JoAnne Maenpaa, WB9JEJ
WB9JEJ at amsat dot org

From 4044715867684780353

X-Google-Thread: 10e8ad,507e47b0460b6ea7,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!postnews.google.com!g49g2000cwa.googlegroups.com!not-for-mail
From: hxc98@yahoo.com
Newsgroups: rec.radio.amateur.space
Subject: APRS users
Date: 21 Dec 2005 01:33:04 -0800
Organization: http://groups.google.com
Lines: 5
Message-ID: <1135157584.607233.70460@g49g2000cwa.googlegroups.com>
NNTP-Posting-Host: 221.232.81.132
Mime-Version: 1.0
Content-Type: text/plain; charset="iso-8859-1"
X-Trace: posting.google.com 1135157589 1942 127.0.0.1 (21 Dec 2005 09:33:09 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Wed, 21 Dec 2005 09:33:09 +0000 (UTC)
User-Agent: G2/0.2
X-HTTP-UserAgent: Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.2; SV1; .NET CLR 1.1.4322),gzip(gfe),gzip(gfe)
Complaints-To: groups-abuse@google.com
Injection-Info: g49g2000cwa.googlegroups.com; posting-host=221.232.81.132;
   posting-account=qkd21QwAAAAs0AsHsbNsv0PdNKEViQPM
Xref: g2news1.google.com rec.radio.amateur.space:308

If you use MapPoint with either APRSPoint or UI-View, you can update
MapPoint 2004 with the latest map data very inexpensively. All you need
is a copy of Streets 2006 or AutoRoute 2006. Go to
http://www.aprspoint.com/ for step by step instructions.

From 3432600844858291713
X-Google-Thread: 10e8ad,a471c23c296ff36f,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news3.google.com!news.glorb.com!newsgate.cistron.nl!news.tele.dk!news.tele.dk!small.news.tele.dk!newsfeed1.swip.net!swipnet!nntpserver.swip.net!not-for-mail
From: "Super DX" <superdx@free.fr>
Newsgroups: rec.radio.amateur.space
Subject: website
Lines: 11
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.2180
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.2180
X-RFC2646: Format=Flowed; Original
Message-ID: <_Wwqf.508$Lp.315@nntpserver.swip.net>
Date: Thu, 22 Dec 2005 13:25:45 +0100
NNTP-Posting-Host: 213.103.4.227
X-Complaints-To: news-abuse@swip.net

X-Trace: nntpserver.swip.net 1135254330 213.103.4.227 (Thu, 22 Dec 2005 13:25:30 CEST)
NNTP-Posting-Date: Thu, 22 Dec 2005 13:25:30 CEST
Organization: A Customer of Tele2
Xref: g2news1.google.com rec.radio.amateur.space:309

Hi all,

here is a new ham website :

http://superdx.free.fr

73's and Merry Xmas !

Vince

From -4053838443617747392
X-Google-Thread: 10e8ad,cf0b2b27a59f5453,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ARABIC,UTF8
Path: g2news1.google.com!postnews.google.com!g43g2000cwa.googlegroups.com!not-for-mail
From: "Dr_mohamed_hassan_83" <Dr_mohamed_hassan_83@yahoo.com>
Newsgroups: rec.radio.amateur.space
Subject: =?utf-8?B?
2YrYpyDYrNmF2KfYudipINmB2Ykg2YXZhtmA2K0gINiq2LnZhNmK2YXZitmA2Kkg2YXYrNin2YbZitipIN
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Date: 24 Dec 2005 02:46:36 -0800
Organization: http://groups.google.com
Lines: 14
Message-ID: <1135421196.396576.263120@g43g2000cwa.googlegroups.com>
NNTP-Posting-Host: 82.201.248.218
Mime-Version: 1.0
Content-Type: text/plain; charset="utf-8"
Content-Transfer-Encoding: base64
X-Trace: posting.google.com 1135421201 9293 127.0.0.1 (24 Dec 2005 10:46:41 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Sat, 24 Dec 2005 10:46:41 +0000 (UTC)
User-Agent: G2/0.2
X-HTTP-UserAgent: Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1; .NET CLR 1.1.4322),gzip(gfe),gzip(gfe)
Complaints-To: groups-abuse@google.com
Injection-Info: g43g2000cwa.googlegroups.com; posting-host=82.201.248.218;
   posting-account=P9vz5w0AAADEwH3wd1MfaBD4px12DOZo
Xref: g2news1.google.com rec.radio.amateur.space:310

2YXZhiDZitix2LrYqCDZgdmJINiv2LHYp9iz2Kkg2KjYsdmF2KzYqSDYp9mE2YPZhdio2YrZiNiq
2LEg2YHZh9mG2KfZgwrYtNix2YPYqSDYqtiv2LnZiSAg2YXYpNiz2LPYqSDYp9mE2YbZhdin2KEg
2KfZhNi52LHYqNmJINiq2YLYr9mFINmF2YbYrQrZhdis2KfZhtio2KkgLSDZhNmE2YXYstmK2K8g
2YXZhiDYp9mE2YXYudmE2YjZhdin2KoKCgpPcmFjbGUgMTBHIERldmVsb3BlciBVc2VycyAtIE9D

UApPcmFjbGUgYXBwbGljYXRpb24gc2VydmVyCk9yYWNsZSBkZXNpZ25lcgpPcmFjbGUgMTBnIGRh
dGFiYXNlIGFkbWluaXN0cmF0aW9uIC0gT0NBCgpNaWNyb3NvZnQgQ2VydGlmaWVkIFNvbHV0aW9u
IERldmVsb3BlciAtIE1DU0QKTWljcm9zb2Z0IENlcnRpZmllZCBTeXN0ZW1zIEVuZ2luZWVyIC0g
TUNTRQpJbnRlcm5hdGlvbmFsIENvbXB1dGVyIERyaXZpbmcgTGljZW5jZSAtIElDREwKCkNJU0NP
IC0gQ0NOQQpDSVNDTyAtIENDTlAKCk11bHRpbWVkaWEgLSAyRApNdWx0aW1lZGlhIC0gM0QKCkxp
bnV4IC0gcG93ZXIgdXNlcgpMaW51eCAtIGFkbWluc3RyYXRpb24KClBIUAoKSmF2YSBwcm9ncmFt
bWluZwoKU3lzdGVtIGFuYWx5c2lzClN5c3RlbSBkZXNpZ24KCgogINij2KrYtdmEINio2YXYpNiz
2LPYqSDYp9mE2YbZhdin2KEg2KfZhNi52LHYqNmJINmB2YkgIDQ1MjIwNDEK2KfZhNmC2KfZh9ix
2KkKaHR0cDovL3d3dy5lZ3lwdHdlYnMudGsK

```
From 6172225944958740470
X-Google-Thread: 10e8ad,cf0b2b27a59f5453
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ARABIC,UTF8
Path: g2news1.google.com!postnews.google.com!g47g2000cwa.googlegroups.com!not-for-
mail
From: "Dr_mohamed_hassan_83" <Dr_mohamed_hassan_83@yahoo.com>
Newsgroups: rec.radio.amateur.space
Subject: =?utf-8?B?
2YrYpyDYrNmF2KfYudipINmB2Ykg2YXZhtmA2K0gINiq2LnZhNmK2YXZitmA2Kkg2YXYrNin2YbZitipIN
mB2Ykg2YXYrNin2YQg2KjYsdmF2KzYqSDYp9mE2YPZhdio2YrZiNiq2LE=?=
Date: 24 Dec 2005 02:46:51 -0800
Organization: http://groups.google.com
Lines: 14
Message-ID: <1135421210.956383.249490@g47g2000cwa.googlegroups.com>
NNTP-Posting-Host: 82.201.248.218
Mime-Version: 1.0
Content-Type: text/plain; charset="utf-8"
Content-Transfer-Encoding: base64
X-Trace: posting.google.com 1135421216 5761 127.0.0.1 (24 Dec 2005 10:46:56 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Sat, 24 Dec 2005 10:46:56 +0000 (UTC)
User-Agent: G2/0.2
X-HTTP-UserAgent: Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1; .NET CLR
1.1.4322),gzip(gfe),gzip(gfe)
Complaints-To: groups-abuse@google.com
Injection-Info: g47g2000cwa.googlegroups.com; posting-host=82.201.248.218;
   posting-account=P9vz5w0AAADEwH3wd1MfaBD4px12DOZo
Xref: g2news1.google.com rec.radio.amateur.space:311
```

2YXZhiDZitix2LrYqCDZgdmJINiv2LHYp9iz2Kkg2KjYsdmF2KzYqSDYp9mE2YPZhdio2YrZiNiq
2LEg2YHZh9mG2KfZgwrYtNix2YPYqSDYqtiv2LnZiSAg2YXYpNiz2LPYqSDYp9mE2YbZhdin2KEg
2KfZhNi52LHYqNmJINiq2YLYr9mFINmF2YbYrQrZhdis2KfZhtio2KkgLSDZhNmE2YXYstmK2K8g
2YXZhiDYp9mE2YXYudmE2YjZhdin2KoKCgpPcmFjbGUgMTBHIERldmVsb3BlciBVc2VycyAtIE9D
UApPcmFjbGUgYXBwbGljYXRpb24gc2VydmVyCk9yYWNsZSBkZXNpZ25lcgpPcmFjbGUgMTBnIGRh
dGFiYXNlIGFkbWluaXN0cmF0aW9uIC0gT0NBCgpNaWNyb3NvZnQgQ2VydGlmaWVkIFNvbHV0aW9u
IERldmVsb3BlciAtIE1DU0QKTWljcm9zb2Z0IENlcnRpZmllZCBTeXN0ZW1zIEVuZ2luZWVyIC0g
TUNTRQpJbnRlcm5hdGlvbmFsIENvbXB1dGVyIERyaXZpbmcgTGljZW5jZSAtIElDREwKCkNJU0NP
IC0gQ0NOQQpDSVNDTyAtIENDTlAKCk11bHRpbWVkaWEgLSAyRApNdWx0aW1lZGlhIC0gM0QKCkxp
bnV4IC0gcG93ZXIgdXNlcgpMaW51eCAtIGFkbWluc3RyYXRpb24KClBIUAoKSmF2YSBwcm9ncmFt
bWluZwoKU3lzdGVtIGFuYWx5c2lzClN5c3RlbSBkZXNpZ24KCgogINij2KrYtdmEINio2YXYpNiz

2LPYqSDYp9mE2YbZhdin2KEg2KfZhNi52LHYqNmJINmB2YkgIDQ1MjIwNDEK2KfZhNmC2KfZh9ix
2KkKaHR0cDovL3d3dy5lZ3lwdHdlYnMudGsK

From 4619753104548410154
X-Google-Thread: 10e8ad,7fb6af11537010d,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news3.google.com!news.glorb.com!
border1.nntp.dca.giganews.com!local01.nntp.dca.giganews.com!nntp.comcast.com!
news.comcast.com.POSTED!not-for-mail
NNTP-Posting-Date: Sat, 06 Aug 2005 11:00:33 -0500
Date: Sat, 06 Aug 2005 11:00:24 -0500
From: rocketeer <rocketeer@hotmail.com>
User-Agent: Mozilla Thunderbird 1.0.6 (Windows/20050716)
X-Accept-Language: en-us, en
MIME-Version: 1.0
Newsgroups: rec.radio.amateur.space
Subject: New satellite PCSAT2
Content-Type: text/plain; charset=ISO-8859-1; format=flowed
Content-Transfer-Encoding: 7bit
Message-ID: <p_idnfl09688Q2nfRVn-tQ@comcast.com>
Lines: 13
NNTP-Posting-Host: 24.245.58.11
X-Trace: sv3-
OeVoIhvlBMMw0EthWAjpjgb5sqpyPDvEVIA8OHbjbgFRUAbPWzU40j7JaLy54wzYH09Ml+WwljeNDPq!
uAlpl4wHeNVBNOzFHkwGLIn/0j4GTKzwlaLNBHqxmWtiU2KAef/Ln6bnhnuIdnF01k3c7GPrNg==
X-Complaints-To: abuse@comcast.net
X-DMCA-Complaints-To: dmca@comcast.net
X-Abuse-and-DMCA-Info: Please be sure to forward a copy of ALL headers
X-Abuse-and-DMCA-Info: Otherwise we will be unable to process your complaint
properly
X-Postfilter: 1.3.32
Xref: g2news1.google.com rec.radio.amateur.space:208

The space shuttle crew placed PCSAT2 on one of the solar truss arms of
International Space Station.
It is undergoing tests, you can listen at 435.975 for 9600bps Packet
Telemetry. Also two tests on PSK31
are going to be done on passes over the USA at about 1540 UTC and 1715
UTC August 6, 2005.
Downlink for PSK31 is 435.275 FM +- Doppler (start at 435.278 and down
in 5 kHz steps as the pass
goes over your QTH. Messages about testing and other information is
posted on AMSAT-BB
by Bob Bruninga WB4APR on that mailing list about PCSAT2. Also
information at:
http://www.ew.usna.edu/~bruninga/pcsat2.html

From -6608619117299257984
X-Google-Thread: 107ada,46e157b168062c01

```
X-Google-Thread: 10bf43,46e157b168062c01
X-Google-Thread: 10e8ad,46e157b168062c01
X-Google-Attributes: gid107ada,gid10bf43,gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news4.google.com!news.glorb.com!wn12feed!
worldnet.att.net!bgtnsc05-news.ops.worldnet.att.net.POSTED!53ab2750!not-for-mail
Message-ID: <42F542C0.C54AF36A@banditradio.com>
From: Bandit <Bandit_barefoot@banditradio.com>
X-Mailer: Mozilla 4.79 [en] (Windows NT 5.0; U)
X-Accept-Language: en
MIME-Version: 1.0
Newsgroups:
rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space
Subject: Re: FCC proposal = CB'ers with ham licenses.
References: <42eea55f$0$91674$bb4e3ad8@newscene.com>
<20050804212606377 09%garv@elaboratenet>
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Lines: 20
Date: Sat, 06 Aug 2005 23:07:46 GMT
NNTP-Posting-Host: 12.76.211.4
X-Complaints-To: abuse@worldnet.att.net
X-Trace: bgtnsc05-news.ops.worldnet.att.net 1123369666 12.76.211.4 (Sat, 06 Aug
2005 23:07:46 GMT)
NNTP-Posting-Date: Sat, 06 Aug 2005 23:07:46 GMT
Organization: AT&T Worldnet
Xref: g2news1.google.com rec.radio.amateur.misc:3005
rec.radio.amateur.policy:11674 rec.radio.amateur.space:209
```

We all don't need no stinking fcc ticket to use our linears.

Nothin will change, morse rules.

Fred wrote:

```
> On 2005-08-01 18:44:02 -0400, Roger Beep
> <breaker.breaker@channel.nineteen> said:
>
> > Ten-four?
> >
> > Yah, that's a big ten-four.
> >
> > All my channel 19 good-buddy CB friends are going to be so happy.
>
> Get a life you asshat
>
> --
> PCs, like air-conditioners, are useless when you open Windows.
```

```
From -3074657460074711995
X-Google-Thread: 107ada,46e157b168062c01
```

```
X-Google-Thread: 10bf43,46e157b168062c01
X-Google-Thread: 10e8ad,46e157b168062c01
X-Google-Attributes: gid107ada,gid10bf43,gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news4.google.com!news.glorb.com!bigfeed.bellsouth.net!
bignumber.bellsouth.net!news.bellsouth.net!bignews3.bellsouth.net.POSTED!35f0e4eb!
not-for-mail
Reply-To: "Mr Fed UP" <mrfedup@bellsouth.net>
From: "Mr Fed UP" <mrfedup@bellsouth.net>
Newsgroups:
rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space
References: <42eea55f$0$91674$bb4e3ad8@newscene.com>
<20050804212606377O9%garv@elaboratenet> <42F542C0.C54AF36A@banditradio.com>
Subject: Re: FCC proposal = CB'ers with ham licenses.
Lines: 31
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.2180
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.2180
X-RFC2646: Format=Flowed; Original
Message-ID: <qxcJe.19098$jq.15300@bignews3.bellsouth.net>
X-Complaints-To: abuse@bellsouth.net
X-Abuse-Info: Please forward a copy of all headers for proper handling
X-Trace:
bhmkggakljkaanefdbdpiflmbcekedmfhojhikkbagflhcbohnjcaggbgaeifajikflidennpmelgeghbe
emfbhpmdjlmfkpgkijmcjgblkkcjmfdkplkmhbobemncobpnghmopejapbflhiajkghejbbcdhfhle
NNTP-Posting-Date: Sat, 06 Aug 2005 20:24:54 EDT
Organization: BellSouth Internet Group
Date: Sat, 6 Aug 2005 19:26:08 -0500
Xref: g2news1.google.com rec.radio.amateur.misc:3007
rec.radio.amateur.policy:11681 rec.radio.amateur.space:210

Wooooo Hooooo I likes a good thread....
opinions a lot like azzzholes    everyone's got one.   wheeeeee

10 4 over rojor dojor   we gots us a konvoy




"Bandit" <Bandit_barefoot@banditradio.com> wrote in message
news:42F542C0.C54AF36A@banditradio.com...
> We all don't need no stinking fcc ticket to use our linears.
>
> Nothin will change, morse rules.
>
> Fred  wrote:
>
>> On 2005-08-01 18:44:02 -0400, Roger Beep
>> <breaker.breaker@channel.nineteen> said:
>>
>> > Ten-four?
>> >
>> > Yah, that's a big ten-four.
>> >
>> > All my channel 19 good-buddy CB friends are going to be so happy.
>>
>> Get a life you asshat
>>
>> --
>> PCs, like air-conditioners, are useless when you open Windows.
>




From -8797720246569323929
X-Google-Thread: 10e8ad,44ad63eb9abe9700
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news4.google.com!news.glorb.com!hwmnpeer01.lga!hwmedia!
hw-filter.lga!fe08.lga.POSTED!53ab2750!not-for-mail
From: "Mr. Man with the Master Plan" <null@null.net>
Newsgroups: rec.radio.amateur.space
References: <mKwHe.528073$cg1.155700@bgtnsc04-news.ops.worldnet.att.net>
Subject: Re: DR-605T for satellite work?
Lines: 17
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.2180
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.2180
X-RFC2646: Format=Flowed; Response
Message-ID: <dKcJe.20921$sf6.3944@fe08.lga>
Date: Sat, 6 Aug 2005 20:38:28 -0400
NNTP-Posting-Host: 69.114.77.49
X-Complaints-To: abuse@cv.net
X-Trace: fe08.lga 1123375113 69.114.77.49 (Sat, 06 Aug 2005 17:38:33 MST)
NNTP-Posting-Date: Sat, 06 Aug 2005 17:38:33 MST
Organization: Optimum Online
Xref: g2news1.google.com rec.radio.amateur.space:211

Yes.

I made my first contacts using a DR-605 when I first got into the hobby.
You can have pretty good luck with a discone even.


-MMWTMP


"RJ" <rajohngm@worldnet.att.net> wrote in message
news:mKwHe.528073$cg1.155700@bgtnsc04-news.ops.worldnet.att.net...
> Will an Alinco DR-605T provide the capabilities for working through
> satellites by simultaneity receiving on VHF and transmitting on UHF?
> Tnx, Bob AA8X
>
```

From -6342737068164667788
X-Google-Thread: 10e8ad,3f1e51d4f9f8894b
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news4.google.com!news.glorb.com!hwmnpeer01.lga!hwmedia!hw-filter.lga!fe08.lga.POSTED!53ab2750!not-for-mail
From: "Mr. Man with the Master Plan" <null@null.net>
Newsgroups: rec.radio.amateur.space
References: <xc8Ge.13000$bT4.7688@newsfe1-gui.ntli.net>
Subject: Re: FT817 for satellite
Lines: 26
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.2180
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.2180
X-RFC2646: Format=Flowed; Original
Message-ID: <vNcJe.20922$sf6.4503@fe08.lga>
Date: Sat, 6 Aug 2005 20:41:59 -0400
NNTP-Posting-Host: 69.114.77.49
X-Complaints-To: abuse@cv.net
X-Trace: fe08.lga 1123375323 69.114.77.49 (Sat, 06 Aug 2005 17:42:03 MST)
NNTP-Posting-Date: Sat, 06 Aug 2005 17:42:03 MST
Organization: Optimum Online
Xref: g2news1.google.com rec.radio.amateur.space:212

just store them as an crossband odd split (display will end up showing +-). store it so you listen on 430Mc and TX on 145Mc. I programmed mine from the computer , but the manual does show how to do it. Just make sure you are courteous in suign this set up as realy the best way is to listen to yourslef on the downlink to make sure you are listenable and not just noise or talking over or interferieng with someone.

-MMWTMP

"Brian Reay" <see@website.invalid> wrote in message
news:xc8Ge.13000$bT4.7688@newsfe1-gui.ntli.net...

> Has anyone used memory pairs, as per the FT817 manual (page 77) for
> satellite use?
>
> If so, how did you find it?
>
> --
> Brian Reay
> www.g8osn.org.uk
> www.amateurradiotraining.org.uk
> FP#898
>
>

From -7945925645103084141
X-Google-Thread: 10e8ad,64b16daf5bfd46be
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news3.google.com!news4.google.com!news.glorb.com!
border1.nntp.dca.giganews.com!cyclone1.gnilink.net!gnilink.net!hwmnpeer01.lga!
hwmedia!hw-filter.lga!fe08.lga.POSTED!53ab2750!not-for-mail
From: "Mr. Man with the Master Plan" <null@null.net>
Newsgroups: rec.radio.amateur.space
References: <db1c0j$46d$1@ss405.t-com.hr> <42d45662$0$16218$bb4e3ad8@newscene.com>
<qwZBe.93086$wr.64749@clgrps12>
Subject: Re: Space Shuttle STS-114
Lines: 22
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.2180
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.2180
X-RFC2646: Format=Flowed; Original
Message-ID: <WUcJe.20923$sf6.2476@fe08.lga>
Date: Sat, 6 Aug 2005 20:49:54 -0400
NNTP-Posting-Host: 69.114.77.49
X-Complaints-To: abuse@cv.net
X-Trace: fe08.lga 1123375798 69.114.77.49 (Sat, 06 Aug 2005 17:49:58 MST)
NNTP-Posting-Date: Sat, 06 Aug 2005 17:49:58 MST
Organization: Optimum Online
Xref: g2news1.google.com rec.radio.amateur.space:213

Gee, "yes" was a good answer, but my answer is much better

http://www.monitoringtimes.com/nasa.html

I did here from people in a few yahoo groups that they heard ops in the UHF
mil band on lift off well into the northern CONUS and even the UK

"Mike" <Mike@nowhere.net> wrote in message
news:qwZBe.93086$wr.64749@clgrps12...
> On Tue, 12 Jul 2005 18:48:01 -0500, Space Junkie wrote:
>
>> Yes.
>
>> Space Junkie.
>
> You are a ass.
>
> Mike

```
From -7204603177283920972
X-Google-Thread: 10e8ad,2623374e54c2dd75,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news4.google.com!news.glorb.com!
border1.nntp.dca.giganews.com!border2.nntp.dca.giganews.com!nntp.giganews.com!
elnk-atl-nf1!newsfeed.earthlink.net!stamper.news.atl.earthlink.net!
newsread2.news.atl.earthlink.net.POSTED!46041641!not-for-mail
From: "JoAnne Maenpaa" <wb9jej_no-spam@earthlink.net>
Newsgroups: rec.radio.amateur.space
Subject: ANS-219 AMSAT Weekly News Bulletins
Lines: 439
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <nKMJe.2648$Je.1362@newsread2.news.atl.earthlink.net>
Date: Mon, 08 Aug 2005 17:36:19 GMT
NNTP-Posting-Host: 69.3.16.64
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread2.news.atl.earthlink.net 1123522579 69.3.16.64 (Mon, 08 Aug 2005
10:36:19 PDT)
NNTP-Posting-Date: Mon, 08 Aug 2005 10:36:19 PDT
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news1.google.com rec.radio.amateur.space:214
```

AMSAT NEWS SERVICE
ANS-219

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:

* AMSAT-NA Space Symposium Announcement
* PCSAT2 Installed and Activated on the ISS
* AMSAT-UK Reports PO-28 to Return to Amateur Satellite Service
* September 27 is the New Launch Date for SSETI
* Satellite DXpedition to JW-Svalbard Announced
* OSCAR-11 is Still Alive
* New OSCAR FM Help Page
* AMSAT-Argentina Unveils On-line Amateur Radio Calculator
* AMSAT Awards This Week
* ARISS Status for the week of August 1, 2005
* PCSAT2 Telemetry Guide

SB SAT @ AMSAT $ANS-219.01
AMSAT-NA Space Symposium Announcement

AMSAT News Service Bulletin 219.01
From AMSAT HQ SILVER SPRING, MD.
August 7, 2005
To All RADIO AMATEURS
BID: $ANS-219.01

Space! Ham radio goes there and you can join in the fun! Come to the AMSAT Technical Symposium and Annual Meeting this fall in lovely Lafayette, Louisiana. Education and technical sessions begin on Friday, the 7th of October. Technical, field ops, and the IARU forum follow through Sunday the 9th of October. Enjoy the best of Acadian Louisiana with Friday's "Shrimp Boil," Saturday's Banquet with great prizes, and Sunday's "Swamp Tour."

Register on line! For more, see:
http://www.amsat.org/amsat-new/symposium/.

[ANS thanks the AMSAT Symposium team for the above information]

/EX

SB SAT @ AMSAT $ANS-219.02
PCSAT2 Installed and Activated on the ISS

AMSAT News Service Bulletin 219.02
From AMSAT HQ SILVER SPRING, MD.
August 7, 2005
To All RADIO AMATEURS
BID: $ANS-219.02

PCSAT2 was installed on the exterior of the International Space Station and was activated on August 3, 2005.

The PCSAT2 mission is intended as an opportunity to augment existing ARISS communications experiments with an external autonomous communications payload. In this regard, it has several potential uses:

* A UI-Digipeater to help ease congestion on the currently shared ARISS PMS (Packet Mail system)

* A PSK-31 transponder for multi-user communications to improve accessibility for schools and ARISS outreach programs.

* An FM Voice repeater for full duplex crew communications to facilitate crew-to-school ARISS contacts.

* Routine Telemetry on the spacecraft systems

The current mode available for amateur radio use activated on August 3 includes 1200 and 9600 baud telemetry on 437.975 +/- 9 KHz of Doppler shift. Conventional 1200 baud APRS IGate stations are encouraged to tune over to the downlink and feed anything you capture.

9600 baud capable stations are encouraged to capture the special 9600 baud downlink and email to PC2@grc.nasa.gov and if they have IGate software (or the latest ALOGGER 2.0.2) to feed it live to: satgate.aprsca.net port 20150. (ALOGGER2.02 is available from: http://www.billdiaz.dynip.com/)

Please, no transmissions on the uplink. The PCSAT2 Team will announce when the satellite is open for general use in a few weeks.

The PCSAT2 web pages are temporarily unavailable because the server at the U.S. Naval Academy is without power for several days. When this server is restored see:
http://web.usna.navy.mil/~bruninga/pcsat2.html

An on-line overview of PCSAT2 telemetry can be found at:
http://www.pcsat2.info

1200 baud telemetry is just an occasional packet every 10 or 60 seconds. 1200 baud stations can simply feed their downlinks directly into the global APRS system like normal. These will help update the LIVE PCSAT2 telemetry page by G4DPZ at:
http://www.pcsat2.info/PCSat2Web/RealTime.jsp

PCSAT2 was mentioned at SlashDot ...
http://science.slashdot.org/science/05/08/04/0053242.shtml?tid=160&tid=126

Packets seen from PCSAT2 can be reviewed at:
http://www.findu.com/cgi-bin/pcsat2.cgi

A screen shot of both the 9600 bps and 1200 bps decoded data as seen by Simon, 9W2QC, can be seen at:
http://www.9w2qc.net/pcsat2/

Tuning hints for doppler shift: At AOS the UHF signal from PCSAT2 will be as much as 9 KHz high and at LOS will be as much as 9 KHz low. But at these times the doppler is *changing* the least and this is probably the best time to catch a complete file without any tuning glitches.

In the middle of the pass, the Doppler rate of change is the highest and although the signal will be strongest, over the center 2 minutes the doppler will shift as much as 8 KHz! This is why we expect to have to combine files from multiple users to get a complete set of data.

[ANS thanks Bob, WB4APR, and Dave, G4DPZ for the above information]

/EX

SB SAT @ AMSAT $ANS-219.03

AMSAT-UK Reports PO-28 to Return to Amateur Satellite Service

AMSAT News Service Bulletin 219.03
From AMSAT HQ SILVER SPRING, MD.
August 7, 2005
To All RADIO AMATEURS
BID: $ANS-219.03

PO-28 (POSAT-1), Portugal's first satellite, launched 12 years ago, will be turned over to Amateur Radio use in the very near future. That was the word July 30 from AMSAT-UK Secretary Jim Heck, G3WGM, during the AMSAT-UK International Space Colloquium in Guildford, England.

Launched September 25, 1993, the satellite operated as a packet store-and-forward BBS (9600 baud FM FSK) on Amateur Radio frequencies for several weeks in early 1994. Over the years, PO-28's primary usage has been commercial, although plans have called for eventually shifting its operation to ham radio use. G3WGM reports that following lengthy negotiations it has been agreed that the satellite can be switched permanently to amateur frequencies. The changeover is expected to take a couple of weeks.

The Portuguese satellite was built at the University of Surrey as part of a collaborative satellite technology program that involved industry and academe. Uplink frequencies will be 145.925 and 145.975 MHz. Downlink frequencies will be 435.250 and 435.275 MHz. More information on PO-28 is on the AMSAT Web site http://www.amsat.org/amsat/sats/n7hpr/po28.html.

Uplink Frequencies: 145.925 and 145.975 MHz
Downlink Frequencies: 435.250 and 435.275 MHz

Orbit: 822 x 800 km, 98.6 deg inclined, sun-synchronous.

Transponder capabilities include FM repeater and 38k4 data. If you want to hear how loud this satellite is, listen on 429.950 until the change back to amateur radio service.

Keplerian elements for PO-28 are not currently contained in the AMSAT keps bulletins, but can be found at Celestrak in amateur.txt using the name "POSAT". Users of Space Track should query the NORAD Satellite ID number 22829. The name listed by Space Track is "EYESAT A".

[ANS thanks Jim, G3WGM, Trevor, M5AKA, and the ARRL Letter for the above information]

/EX

SB SAT @ AMSAT $ANS-219.04

September 27 is the New Launch Date for SSETI

AMSAT News Service Bulletin 219.04
From AMSAT HQ SILVER SPRING, MD.

August 7, 2005
To All RADIO AMATEURS
BID: $ANS-219.04

Graham, G3VZV, has advised AMSAT that the revised launch date for SSETI Express and the other satellites on the DMC3 COSMOS launch has been confirmed as September 27th - so please keep those fingers crossed!

[ANS thanks Graham, G3VZV, for the above information]

/EX

SB SAT @ AMSAT $ANS-219.05
Satellite DXpedition to JW-Svalbard Announced

AMSAT News Service Bulletin 219.05
From AMSAT HQ SILVER SPRING, MD.
August 7, 2005
To All RADIO AMATEURS
BID: $ANS-219.05

Howard Long, G6LVB, will be travelling to Svalbard (JW prefix, 78.15 deg N, 16.02 deg E) around the 26, 27 and 28 August timeframe. The main purpose of the trip will be to install upgrades to a satellite station at www.svalsat.com. Howard intends to bring LEO satellite gear with him.

Due to its northerly location, Svalbard has coverage to Canada and the North Eastern US as well as Japan.

Howard states, "I will definitely be active on AO-51, SO-50, AO-27, PO-28 (let's hope) and if I have room for SSB equipment I will operate FO-29, VO-52 and possibly AO-7. The ISS never travels far enough North for me to take a shot at it. There are no plans to take any HF gear."

[ANS thanks Howard, G6LVB, for the above information]

/EX

SB SAT @ AMSAT $ANS-219.06
OSCAR-11 is Still Alive

AMSAT News Service Bulletin 219.06
From AMSAT HQ SILVER SPRING, MD.
August 7, 2005
To All RADIO AMATEURS
BID: $ANS-219.06

Clive Wallis wrote, "Very many thanks for all the recent reports of OSCAR-11, on AMSAT-BB and by direct e-mails. I received the good news, on Saturday morning, while at the AMSAT-UK Colloquium. This was entirely unexpected!

When I returned home on Sunday, I heard the passes at 17:21 & 19:02 UTC, and have heard many others since.

Signals seem to be weaker than usual. However,since I last heard the satellite on 30 April, I've reinstalled my antennas , which makes comparisons difficult.

All the analogue telemetry channels, 0 to 59 are zero, ie they have failed. The status channels 60 to 67 are still working. One bit in channel 62, DSR mode, has changed from WRITE to READ. DSR is the Digital Store & Readout experiment. This could be significant if the experiment is still drawing current, but the other status bit indicates thet it is switched OFF.

The on-board clock is now showing a very large error. It has lost approximately 15 days since 30 April. I'll be monitoring the clock closely to see whether it changes at a constant rate, in future passes.

Eclipses should end around mid August. That should help the satellite to continue transmitting.

If the watchdog timer is still working, the satellite should switch OFF in the next 10 to 20 days. I would appreciate if listeners could just make a note of the DATE & UTC time when they hear the satellite, so that when it switches OFF we can determine when it was last heard. Please post your reports to AMSAT-BB or e-mail me direct g3cwv@amsat.org, but NOT until it switches OFF!

[ANS thanks Clive, G3CWV, for the above information]

/EX

SB SAT @ AMSAT $ANS-219.07
New OSCAR FM Help Page

AMSAT News Service Bulletin 219.07
From AMSAT HQ SILVER SPRING, MD.
August 7, 2005
To All RADIO AMATEURS
BID: $ANS-219.07

John Bailey, KG4BNP, reported, "I have finished updating the KG4BNP FM Oscar help website. I would appreciate feedback from users. We use it locally in Tallahassee, FL to help new hams break into the world of FM satellites. Mypersonal email is kg4bnp@earthlink.net."
For FM Oscar Help Webpage see: http://www.home.earthlink.net/~kg4bnp

[ANS thanks John, KG4BNP, for the above information]

/EX

SB SAT @ AMSAT $ANS-219.08
AMSAT-Argentina Unveils On-line Amateur Radio Calculator

AMSAT News Service Bulletin 219.08
From AMSAT HQ SILVER SPRING, MD.
August 7, 2005
To All RADIO AMATEURS
BID: $ANS-219.08

AMSAT-Argentina has added an amateur radio calculator feature to their web page. Do you need to calculate space attenuation, height vs coverage, coordinates of geosats, the resistor color codes, wavelength, resonance, Power budget, coil turns for, look up a location, coax length/type & loss?

Try the easy, on-line calculators at http://www.amsat.org.ar?f=h

[ANS thanks Pedro, LU7ABF, for the above information]

/EX

SB SAT @ AMSAT $ANS-219.09
AMSAT Awards This Week

AMSAT News Service Bulletin 219.09
From AMSAT HQ SILVER SPRING, MD.
August 7, 2005
To All RADIO AMATEURS
BID: $ANS-219.09

Bruce Paige, KK5DO, AMSAT Director Contests and Awards, says, This week, congratulations go out to:

Jim Wright, WA4IVM, for earning the 51 on 51 Award #31

To see all the awards visit http://www.amsat.org.

[ANS thanks Bruce, KK5DO, for the above information]

/EX

SB SAT @ AMSAT $ANS-219.10
ARISS Status for the week of August 1, 2005

AMSAT News Service Bulletin 219.10
From AMSAT HQ SILVER SPRING, MD.
August 7, 2005
To All RADIO AMATEURS
BID: $ANS-219.10

ARISS Status for the week of August 1, 2005

1. SuitSat Status
The ARISS-Russia team requested that a few fabric ARISS logo patches be provided to place on the bags which will contain the SuitSat hardware during flight. The U.S. team ordered and received the patches and will deliver these to Sergey Samburov at the U.K. meeting. Integration and testing continue as the team works on the hardware flight certification.

2. PCSAT2/MISSE5 Delivered to ISS
PCSAT2 flew on the Return to Flight STS-114 mission, which launched Tuesday, July 26. It was deployed during the third EVA on August 3. An on-orbit checkout needs to be performed before it becomes available to users on the ground. This may take a week or two. The project is described in detail on Bruninga's website, "PCSAT2 - External ISS Experiment in the Amateur Satellite Service." See the site for updates and telemetry data. (Occasional outages of this server may occur, please re-try later if you are not successful.)
http://www.ew.usna.edu/~bruninga/pcsat2.html

3. ARISS International Meeting, Guildford, U.K.
The AMSAT-UK Colloquium was held at the University of Surrey in Guildford, U.K. on Friday, July 29 through Sunday, July 31. The ARISS International Meeting convened August 1 - 2. Information on both meetings may be found on the following website:
http://www.uk.amsat.org/Colloquium/default.php

[ANS thanks Carol Jackson, KB3LKI for the above information]

/EX

SB SAT @ AMSAT $ANS-219.11
PCSAT2 Telemetry Guide

AMSAT News Service Bulletin 219.11
From AMSAT HQ SILVER SPRING, MD.
August 7, 2005
To All RADIO AMATEURS
BID: $ANS-219.11

Bob Bruninga, WB4APR, of the U.S. Naval Academy Satellite Lab, the developers of PCSAT2 released a preliminary guide for the reading and understanding of the PCSAT2 telemetry.

Here is what to look for on the PCSAT2 telemetry screen. Dave, G4DPZ, has done an *fantastic* translation of the original DOS version of PCSAT2 telemetry decoder to a real-time web format:

http://www.pcsat2.info/PCSat2Web/RealTime.jsp

The telemetry is in 4 packets, numbered 00,01,10,11. That is why every telemetry channel has one of those numbers by it so you can see which packet contains which value. They are transmitted every 10, or 20, or 60 seconds depending on the rate we need to receive the telemetry. This means it can take 40 sec, or 1 min 20s or 4 minutes to get a complete snapshot.

The upper right shows the TIME of each of these 4 packets last heard. Colors show latency. Brighter colors are more recent. Every packet has a serial number which is incremented each packet.

The raw packet is at the top and you can see the SOURCE callsign of who IGAted it into the network.

Transmitters are bursty packet types and usually will show 0 since it is rare to capture a 1 second current when the telemetry samples. Looking at the temperature of the transmitter gives a better indication of how hard it is working.

Remember PCSAT2 has no command/control processor. It is only a pair of KPC-9612+ TNC's and we are only using their built-in telemetry and command capability.

You can look at the eight 11111111 bits in EVERY telemetry packet (they are the same) which shows the state of the 8 on/off bits. They are active LOW. So 11111111 means everything is off. They are mostly identical on the A and B side. Each bit is listed at the bottom of the page under "Command Status".

The upper right shows the estimated Latitude/Longitude of the real-time position of ISS NOW (not when the telemety sample was taken).

[ANS thanks Bob, WB4APR, for the above information]

/EX

73,
This week's ANS Editor,
JoAnne Maenpaa, WB9JEJ
WB9JEJ at amsat dot org

From -6303645544054420507
X-Google-Thread: 10e8ad,30d6e4bde0c50c68,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!news.maxwell.syr.edu!
border1.nntp.dca.giganews.com!border2.nntp.dca.giganews.com!nntp.giganews.com!
elnk-atl-nf1!newsfeed.earthlink.net!stamper.news.atl.earthlink.net!
newsread2.news.atl.earthlink.net.POSTED!46041641!not-for-mail
From: "JoAnne Maenpaa" <wb9jej_no-spam@earthlink.net>

Newsgroups: rec.radio.amateur.space
Subject: WSR-219 AMSAT Weekly Satellite Status Bulletin
Lines: 1218
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <aLMJe.2649$Je.1649@newsread2.news.atl.earthlink.net>
Date: Mon, 08 Aug 2005 17:37:10 GMT
NNTP-Posting-Host: 69.3.16.64
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread2.news.atl.earthlink.net 1123522630 69.3.16.64 (Mon, 08 Aug 2005 10:37:10 PDT)
NNTP-Posting-Date: Mon, 08 Aug 2005 10:37:10 PDT
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news1.google.com rec.radio.amateur.space:215

This report is organized into 4 parts.
Part 1 - operational analog amateur satellites.
Part 2 - operational digital amateur satellites.
Part 3 - non - operational satellites
Part 4 - proposed satellites

SB SAT @ AMSAT <KB9MMC $ANS-219.S1
WSR 219 Part 1 08/07/2005

AMSAT NEWS SERVICE BULLETIN 219.S1 FROM AMSAT HQ
SILVER SPRING, MD, AUGUST 7, 2005
TO ALL RADIO AMATEURS
BID: $ANS-219.S1

VO-52 HAMSAT
Catalog Number: 28650
Launch Date: May 05,2005

Status: On orbit
Current Mode: U/V

Proposed frequencies:

Indian transponder:
Uplink : 435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW
Beacom : 145.940MHz continue carier signal

Dutch transponder:
Uplink : 435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW
Beacon : 145.860MHz 12WPM with CW message
[07242005]

=====

AO-51 ECHO
Catalog number: 28375

Launch date: June 29, 2004

Status: Testing
Curent Mode: PBBS - OFF
FM REPEATER - V/U HIGH POWER

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
Analog voice uplink: 145.880 MHZ FM
145.920 MHz FM 67Hz PL tone
1268.700 MHz FM 67Hz PL tone

Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast Protocol (PBP)

Broadcast: PECHO-11
BBS: PECHO-12

Current scheduled operating modes:

15 Aug
FM Repeater, V/S
Uplink: 145.920 mhz FM, 67hz PL Tone
Downlink 2401.200 mhz FM

22 Aug
FM Repeater, V/U
Uplink: 145.920 mhz FM, 67 hz PL Tone
Downlink 435.300 mhz FM
9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 435.150 mhz FM, 9k6 PBP Digital

[ANS-WSR thanks Mike, KE4AZN for the above information]
[07312005]

=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Uplink: 145.850 MHz (67.0 Hz PL tone) (See below for operating procedures)
Downlink: 436.795 MHz

There have been unconfirmed reports on the amsat-bb remailer that SO-50 has shifted downlink frequency as much as 5khz up. This both from Europe.

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz. The order of operation is thus: (allow for Doppler as necessary)

1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm
   the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT
   the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window
   will reset the 10 minute timer.

[09122004]

=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: OPERATIONAL

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplink: 145.850 145.870 145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

John, N4QWL reports on July 16th, 2005:

Last evening I had a AOS to LOS qso with WI2W. FO-29 came up at 01:17z here in FM07 and I found WI2W and we chatted until 01:33z. The satellite was at 2 degrees elevation when I finally heard him start to crackle a bit. What a great QSO! To think that I watched this bird launch back in 1996 and it is still working so well is a real thrill. I believe I still have the video. I might just look for it and watch it again. Boy do I love this satellite stuff!
Look for you all up there.

Please send the reception reports to lab2 'at' jarl.or.jp.
Please use the subject line: 'FO-29 reception report'.

Mineo, JE9PEL, has an FO-29 satellite telemetry analysis program that will automatically analyze all digital telemetry from the satellite (such as current, voltage and temperature). FO29CWTE is available at:
http://www.ne.jp/asahi/hamradio/je9pel/
[ANS-WSR wishes to thanks John, N4QWL for this week's report]

[07172005]

=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Uplink: 145.850 MHz FM
Downlink: 436.795 MHz FM

The latest information on AO-27 from control operator Michael Wyrick, N3UC (former N4USI), can be found at:
http://www.ao27.org

An AO-27 question-and-answer page is available on the AMSAT-NA web site, with updates by Ray, W2RS. The URL is:
http://www.amsat.org/amsat/intro/ao27faq.html

[ANS-WSR thanks John, K6YK, for this week's AO-27 report]
[08292004]

=====

AO-7 AMSAT OSCAR 7

Catalog number: 07530
Launch Date: November 15, 1974

Status: Semi-operational in sunlight.
Return to active status: June 21,2002

```
Uplink:     145.850 to 145.950 MHz CW/USB Mode A
            432.125 to 432.175 MHz CW/LSB Mode B
Downlink:    29.400 to  29.500 MHz CW/USB Mode A
            145.975 to 145.925 MHz CW/USB Mode B
Beacon:     29.502 MHz, 145.972 MHz, 435.1 MHz, 2304.1 MHz
```

Emily, W0EEC has created a website to allow the users of AO-7 to record contacts, observations and use of the satellite more effectively at:
http://www.emilyshouse.com/experthams/ao7/main.php
This includes the ability to log contacts.

Tim, K3TZ has written a program to decode AO-07 telemetry.
The program can be downloaded at:
http://www.qsl.net/k3tz/files/K3TZ_AO-07_Telemetry_Decoder_0.5.zip

For more AO-7 info:
http://www.amsat.org/amsat/sats/n7hpr/ao7.html
[11142004]

=====

INTERNATIONAL SPACE STATION (ISS) - ARISS

Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: U/V CROSS-BAND REPEATER
Digipeater: Inactive

The current Expedition 11 crew is:
Commander Sergei Krikalev
Flight Engineer John Phillips

Worldwide packet uplink: 145.990 MHz FM
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM
Doppler Shift is 10 KHz

Russian callsigns: RS0ISS, RZ3DZR
USA callsign: NA1SS
Packet station mailbox callsign: RS0ISS-11
Packet station keyboard callsign: RS0ISS-3
Digipeater callsign: ARISS

This off the ARISS webpage:
http://www.rac.ca/ariss/oindex.htm#New%20ARISS%20Operations :
The ARISS program is pleased to announce that the amateur radio equipment aboard the International Space Station is now operating in cross-band repeat mode. We realize that many of you will miss the packet-operating mode. However, cross-band repeat allows further experimentation of the ISS amateur radio system

The downlink for this operating mode remains the same, so listen for the station on 145.80 MHz. The new uplink frequency is 437.80 MHz. All frequencies are subject to Doppler shifting. For further information on working satellites and adjusting for Doppler shift, please review Emily Clark's (W0EEC) excellent presentation on AMSAT's website:
http://www.amsat.org/amsat-new/information/faqs/Intro_sats.pdf

The ISS daily crew schedule can be found at:
http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line is NOT translated from Russian and posted.

More information is available at:
http://www.rac.ca/ariss
http://spaceflight.nasa.gov/station/reference/radio/
http://www.marexmg.org/fileshtml/unprotopage.html
http://www.issfanclub.com
http://oscar.dcarr.org/
[07242005]
NNNN
/EX

SB SAT @ AMSAT <KB9MMC $ANS-219.S2
WSR 219 Part 2 08/07/2005

AMSAT NEWS SERVICE BULLETIN 219.S2 FROM AMSAT HQ

SILVER SPRING, MD, AUGUST 7, 2005
TO ALL RADIO AMATEURS
BID: $ANS-219.S2

AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Mode: PBBS - OFF
FM REPEATER - V/U HIGH POWER

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
Analog voice uplink: 145.880 MHz FM
145.920 MHz FM 67Hz PL tone
1268.700 MHz FM 67Hz PL tone

Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast Protocol (PBP)

Broadcast: PECHO-11
BBS: PECHO-12

Current scheduled operating modes:

15 Aug
FM Repeater, V/S
Uplink: 145.920 mhz FM, 67hz PL Tone
Downlink 2401.200 mhz FM

22 Aug
FM Repeater, V/U
Uplink: 145.920 mhz FM, 67 hz PL Tone
Downlink 435.300 mhz FM
9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 435.150 mhz FM, 9k6 PBP Digital

[ANS-WSR thanks Mike, KE4AZN for the above information]
[07312005]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Non-Operational?????

Uplink/downlink: 145.827 MHz 1200 baud AX.25 AFSK via W3ADO-1
Aux/Uplink: 435.250 MHz 9600 baud via PCSAT-2 (off)
APRS Downlink: 144.390 MHz (Region 2)

PCSat is a 1200-baud APRS digipeater designed for use by stations using hand-held or mobile transceivers. Downlinks feed a central web site at: http://pcsat.aprs.org

The APRS-equipped PCSat was built by midshipmen from the U.S. Naval Academy under the guidance of Bob Bruninga, WB4APR.
[07242005]

=====

CUTE-1
Catalog number: 27844
Launched: June 30,2003

Status: Operational

Uplink: ?
Downlink: 436.8375 CW
437.4700 1200 FM ax25 or SRLL (ACTIVE only near Japan ?)
Cliff, K7RR reports:
In the latest Weekly Satellite Report, CUTE 1, #27844 is listed as OPERATIONAL?
Indeed it is very operational as a CUBESAT sending CW telemetry on 436.8345 MHz. At the July 7 2005, 23:45:20 pass over the Western USA:
CUTE 1 6B A4 xx 7F D7 66A8 4702 FF FF7C 65
CUTE 1 6C A6 59 80 D9 66A8 4702 FF FE7C B6

The June 30th KEPS were within ten seconds of AOS and LOS. It is an very good object to practice tracking as the orbit and transmitter power are similar to proposed CUBESATS awaiting launch this December. As a check for Doppler correction, the lack of change in tone is an excellent indicator.

CUTE 1 is a Japanese (Tokyo Institute of Technology) one kilogram nanosatellite that was launched by a Rokot rocket from Plesetsk at 14:15 UT on 30 June 2003. It carries a 100 mW beacon at 436.8375 MHz. Initial orbital parameters were period 101.4 min, apogee 831 km, perigee 819 km, and inclination 98.7?.

For further info about CUTE-1 goto:
http://lss.mes.titech.ac.jp/ssp/cubesat/operation/Schedule_e.html

[ANS WSR wishes to thank Cliff, K7RR, for this week's information]
[07242005]

=====

GO-32 TECHSAT-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Downlink: 435.225 MHz FM (9600-baud FSK)
(435.325 n/a - temperature problems)
Uplinks: 145.850, 145.890, 145.930 FM
1269.700, 1269.800, 1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[03132005]

=====

MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Operational

Uplink: 145.850 or 145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz
Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[05152005]

=====

AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Semi-operational, the digipeater command is on and open for APRS users.

Uplink: 145.90 145.92 145.94 145.96 MHz FM
(using 1200-baud Manchester FSK)
Downlink: 437.026 MHz SSB (1200-baud PSK)
Mode-S Beacon: 2401.1428 MHz
Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

A WOD collection of current graphics along with general information and telemetry samples can be found at:
http://www.telecable.es/personales/ea1bcu
[05092004]

=====

UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational?

Telemetry Downlink: 145.826 MHz. FM (1200-baud AFSK).

approx. 10 days ON, 10 days OFF
Mode-S Beacon: 2401.500 MHz. ... OFF
UHFBeacon: 435.025 MHz. ... OFF

Clive Wallis wrote, "Very many thanks for all the recent reports of OSCAR-11, on AMSAT-BB and by direct e-mails. I received the good news, on Saturday morning, while at the AMSAT-UK Colloquium. This was entirely unexpected!

When I returned home on Sunday, I heard the passes at 17:21 & 19:02 UTC, and have heard many others since.

Signals seem to be weaker than usual. However,since I last heard the satellite on 30 April, I've reinstalled my antennas , which makes comparisons difficult.

All the analogue telemetry channels, 0 to 59 are zero, ie they have failed. The status channels 60 to 67 are still working. One bit in channel 62, DSR mode, has changed from WRITE to READ. DSR is the Digital Store & Readout experiment. This could be significant if the experiment is still drawing current, but the other status bit indicates thet it is switched OFF.

The on-board clock is now showing a very large error. It has lost approximately 15 days since 30 April. I'll be monitoring the clock closely to see whether it changes at a constant rate, in future passes.

Eclipses should end around mid August. That should help the satellite to continue transmitting.

If the watchdog timer is still working, the satellite should switch OFF in the next 10 to 20 days. I would appreciate if listeners could just make a note of the DATE & UTC time when they hear the satellite, so that when it switches OFF we can determine when it was last heard. Please post your reports to AMSAT-BB or e-mail me direct g3cwv@amsat.org, but NOT until it switches OFF!

[ANS-WSR thanks Clive, G3CWV, for the above information]

More information on UO-11 OSCAR-11 can be found at:
http://www.users.zetnet.co.uk/clivew/

MPEG3 files can be found here at Mineo, JE9PEL website:
http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm

[08072005]
NNNN
/EX

SB SAT @ AMSAT <KB9MMC $ANS-219.S3
WSR 219 Part 3 08/07/2005

AMSAT NEWS SERVICE BULLETIN 219.S3 FROM AMSAT HQ

SILVER SPRING, MD, AUGUST 7, 2005
TO ALL RADIO AMATEURS
BID: $ANS-219.S3

THE FOLLOWING ARE IN ORBIT BUT ARE
NON-OPERATIONAL AT THIS TIME:

POSAT-1 PO-28
Catalog Number: 22829
Launched : September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 435.250 MHz
          435.275 MHz

Uplink: 145.925 MHz
          145.975 MHz

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

PO-28 (POSAT-1), Portugal's first satellite, launched 12 years ago, will be turned over to Amateur Radio use in the very near future. That was the word July 30 from AMSAT-UK Secretary Jim Heck, G3WGM, during the AMSAT-UK International Space Colloquium in Guildford, England.

Launched September 25, 1993, the satellite operated as a packet store-and-forward BBS (9600 baud FM FSK) on Amateur Radio frequencies for several weeks in early 1994. Over the years, PO-28's primary usage has been commercial, although plans have called for eventually shifting its operation to ham radio use. G3WGM reports that following lengthy negotiations it has been agreed that the satellite can be switched permanently to amateur frequencies. The changeover is expected to take a couple of weeks.

The Portuguese satellite was built at the University of Surrey as part of a collaborative satellite technology program that involved industry and academe. Uplink frequencies will be 145.925 and 145.975 MHz. Downlink frequencies will be 435.250 and 435.275 MHz. More information on PO-28 is on the AMSAT Web site http://www.amsat.org/amsat/sats/n7hpr/po28.html.

Uplink Frequencies: 145.925 and 145.975 MHz
Downlink Frequencies: 435.250 and 435.275 MHz

Orbit: 822 x 800 km, 98.6 deg inclined, sun-synchronous.

Transponder capabilities include FM repeater and 38k4 data. If you want to hear how loud this satellite is, listen on 429.950 until the change back to amateur radio service.

Keplerian elements for PO-28 are not currently contained in the AMSAT keps bulletins, but can be found at Celestrak in amateur.txt using the name "POSAT". Users of Space Track should query the NORAD Satellite ID number 22829. The name listed by Space Track is "EYESAT A".

More information of POSAT-1 can be found at:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
http://www.amsat.org/amsat/sats/n7hpr/po28.html
[ANS-WSR wishes to thanks Trevor, M5AKA and Jim, G3WGM, for this week's information.]
[08072005]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launched: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB
Beacon: 145.810 MHz (unmodulated carrier)

AO-10 has been locked into a Mode-B, 70-cm uplink and 2-meter downlink for several years.

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: Non-operational

Uplink: 145.875 145.900 145.925 145.950 MHz FM (1200-baud)
Downlink: 435.812 MHz SSB
Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Alberto E. Zagni - I2KBD reports on 02/13/05
The spacecraft is in MBL (safe mode) and is trasmitting just 6 channels of telemetry. Temperatures and voltage are nominal, but there seems to be a problem with the onboard receiver, refusing to accept commands.
The spacecraft was launched in 1993, thus nearing 12 years in orbit...

Best regards
Alberto E. Zagni - I2KBD
ITAMSAT Mission Director

More information of IO-26 can be found at:

http://joshua.micronet.it/english/itamsat/itamsathome.html
http://www.amsat.org/amsat/sats/n7hpr/io26.html
www.itamsat.org

```
[02132005]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink:   21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB
Beacon:   29.408 MHz
Robot:    29.454 MHz
[05232004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink:      21.260 to  21.300 MHz CW/USB
Downlink:   145.860 to 145.900 MHz CW/USB
Beacon:     145.860 MHz
Robot:      145.908 MHz
[05232004]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink 145.975 MHz FM
Downlink 435.070 MHz FM
[05092004]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink:             145.900 FM 9600-baud FSK
Downlink:           435.120 MHz FM
Broadcast Callsign: UOSAT5-11
BBS:                UOSAT5-12
[01092005]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational?
```

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB
Beacon: 29.352 MHz (intermittent)
SSB meeting frequency: 29.380 MHz (unofficial)

John, KD6PAG reports on June 16, 2004 to ANS:
RS-15 beacon seemed to be back in the mode where it's a tone about 5 seconds off and then 5 seconds on this morning.

ANS is looking for more confirmations of RS-15 coming back.

[ANS thanks John, KD6PAG for RS-15 information]
[06202004]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplink: 145.84 145.86 145.88 145.90 MHz FM
                    (using 1200-baud Manchester FSK)
CW downlink: 437.125 MHz
Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)
Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[05232004]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[08152004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)

Downlink: 435.170 MHz FM
Broadcast Callsign: HL01-11
BBS: HL01-12

Jim, AA7KC, reports that KO-23's downlink transmitter continues in a non-operational status.
[05092004]

=====

KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM (9600-baud FSK)
Downlink: 436.500 MHz FM
Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]

=====

PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink frequency (listed on the PanSat web site) 436.500 MHz

The satellite is not available for general uplink transmissions.

The Naval Postgraduate School developed PanSat. At the time of launch, PanSat spread-spectrum digital transponders were to be available to Amateur Radio operators along with software to utilize this technology.

The satellite is still operating, however, the spread spectrum packet radio portion never took place. The spacecraft is now beyond it's initial 2-year mission life, but telemetry records are still being downloaded.

For more information, visit the official PanSat web site at:
http://www.sp.nps.navy.mil/pansat/
[05092004]

=====

SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and

the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm

[ANS has no further information]
[05232004]
=====
SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

STatus: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz and 145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[08082004]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlink: 437.025 MHz 437.400 MHz
Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[05092004]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplink	V-band	145.840 - 145.990 MHz	CW/LSB
	U-band	435.550 - 435.800 MHz	CW/LSB
	L1-band	1269.250 - 1269.500 MHz	CW/LSB
	L2-band	1268.325 - 1268.575 MHz	CW/LSB
	S1-band	2400.350 - 2400.600 MHz	CW/LSB
Downlink:	S2-band	2401.225 - 2401.475 MHz	CW/USB
	K-band	24,048.010 - 24,048.060 MHz	CW/USB

```
Beacon:    2401.323, 24,048.035
[05232004]
-----
SO-42  SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational
 Downlink:           437.075 MHz
Broadcast Callsign: SASAT2-11
BBS:                SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[08152004]
=====
SO-41  SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink:             145.850 MHz
Downlink:           436.775 MHz
Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[08152004]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink:   145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is  welcome to use the digipeating/APRS features of Sapphire,
callsign KE6QMD, as per the user service agreement located at the following
URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Semi-operational.
```

Uplink 435.275 1200-baud AFSK
Downlink 145.825 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

AO-49 (SAFIR-M) is a German amateur radio payload onboard the small German scientific satellite "RUBIN-2".

AO-49 was built by the German amateur radio association "AATiS e.V." (German acronym for "Arbeitskreis Amateurfunk und Telekommunikation in der Schule", which means: 'working group for amateur radio anand telecommunications in schools'). AO-49 is designed as a "store and broadcast" system for APRS based messages, dedicated for the use of schools in combination with the existing WX-Net and planned buoy experiments in Germany.

No transmissions detected since the 1st of February 2003! It appears AO-49 is not properly aligned to illuminate the solar panels. This should end soon. Due to its orbit, AO-49 will be in a phase without eclipses until 13Feb03.

Martin DG8UAU has written a small software program "SAFIR-M Decoder" to allow decoding of the received DATA0 frames. It is available at: http://amend.gmxhome.de in the section Aktuelles.

Details on AO-49 (SAFIR-M) can be found at:
http://amend.gmxhome.de

Information about AATiS e.V. is available at:
http://www.aatis.de
[05092004]
NNNN
/EX

SB SAT @ AMSAT <KB9MMC $ANS-219.S4
WSR 219 Part 4 08/07/2005

AMSAT NEWS SERVICE BULLETIN 219.S4 FROM AMSAT HQ
SILVER SPRING, MD, AUGUST 7,2005
TO ALL RADIO AMATEURS
BID: $ANS-219.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE PROPOSED FOR LAUNCH AT THIS TIME:

UCISAT ?O-??
Catalog number:
Proposed Launch Date: October 31, 2005

Status: Under Construction

Downlink: Submission in Progress
Uplink: Submission in Progress

Callsign: Submission in Progress

This from Matt Bennett, KF6RTB, UCISAT Communications Team Member:

Our website is www.ucisat.net .This is a new website, however, and doesn't have the "Status" section active yet. Because of the growing interest in our project, I'll push our webmaster to create updates (hopefully) on a week-to-week basis. For now, the current status of the mission is as follows:

-Expected Launch Date: October 31st, 2005
-Frequency Allocation: Submission in Progress
-Construction Status: Sub-Assembly
[WSR to thank Matt Bennett, KF6RTB, for this week's report.]
[01302005]
=====
SSETI ?O-??
Catalog Number:
Proposed Launch Date: LATE 2005

Status: AWAITING LAUNCH

Graham, G3VZV reports:
We have now been advised that the revised launch date for SSETI Express and the other satellites on the DMC3 COSMOS launch has been confirmed as September
27th - so please keep those fingers crossed!

SpaceDaily has a report about SSETI at:
http://www.spacedaily.com/news/internet-04zzzu.html

You can find more info about SSETI at:
http://sseti.gte.tuwien.ac.at/WSW4/

Looking at the website for the SSETI Express webcam
http://sseti.gte.tuwien.ac.at/WSW4/webcam.htm

[ANS thanks Graham, G3VZV for the above information]
[07312005]
=====
PCSAT2 ?0-??
Catalog Number:
Proposed Launch Date: August 1, 2005

Status: Onboard International Space Station

PCSAT2 was installed on the exterior of the International Space Station and was activated on August 3, 2005.

The PCSAT2 mission is intended as an opportunity to augment existing ARISS communications experiments with an external autonomous communications payload. In this regard, it has several potential uses:

* A UI-Digipeater to help ease congestion on the currently shared

ARISS PMS (Packet Mail system)

* A PSK-31 transponder for multi-user communications to improve accessibility for schools and ARISS outreach programs.

* An FM Voice repeater for full duplex crew communications to facilitate crew-to-school ARISS contacts.

* Routine Telemetry on the spacecraft systems

The current mode available for amateur radio use activated on August 3 includes 1200 and 9600 baud telemetry on 437.975 +/- 9 KHz of Doppler shift. Conventional 1200 baud APRS IGate stations are encouraged to tune over to the downlink and feed anything you capture.

9600 baud capable stations are encouraged to capture the special 9600 baud downlink and email to PC2@grc.nasa.gov and if they have IGate software (or the latest ALOGGER 2.0.2) to feed it live to: satgate.aprsca.net port 20150. (ALOGGER2.02 is available from: http://www.billdiaz.dynip.com/)

Please, no transmissions on the uplink. The PCSAT2 Team will announce when the satellite is open for general use in a few weeks.

The PCSAT2 web pages are temporarily unavailable because the server at the U.S. Naval Academy is without power for several days. When this server is restored see:
http://web.usna.navy.mil/~bruninga/pcsat2.html

An on-line overview of PCSAT2 telemetry can be found at:
http://www.pcsat2.info

1200 baud telemetry is just an occasional packet every 10 or 60 seconds. 1200 baud stations can simply feed their downlinks directly into the global APRS system like normal. These will help update the LIVE PCSAT2 telemetry page by G4DPZ at:
http://www.pcsat2.info/PCSat2Web/RealTime.jsp

PCSAT2 was mentioned at SlashDot ...
http://science.slashdot.org/science/05/08/04/0053242.shtml?tid=160&tid=126

Packets seen from PCSAT2 can be reviewed at:
http://www.findu.com/cgi-bin/pcsat2.cgi

A screen shot of both the 9600 bps and 1200 bps decoded data as seen by Simon, 9W2QC, can be seen at:
http://www.9w2qc.net/pcsat2/

Tuning hints for doppler shift: At AOS the UHF signal from PCSAT2 will be as much as 9 KHz high and at LOS will be as much as 9 KHz low. But at these times the doppler is *changing* the least and this is probably the best time to catch a complete file without any tuning glitches.

In the middle of the pass, the Doppler rate of change is the highest and although the signal will be strongest, over the center 2 minutes the doppler will shift as much as 8 KHz! This is why we expect to have to combine files from multiple users to get a complete set of data.

[ANS thanks Bob, WB4APR, and Dave, G4DPZ for the above information]

[08072005}
=====
PHASE 3E ?O-??
Catalog Number:
Proposed Launch Date: Early 2006

Status: Under Construction

William Leijenaar, PE1RAH reports on July 16th, 2005:

Hi AMSATs,

I always like to inform the AMSATs public about my P3e work, but unfortunatly due to
some reasons there was not much time and nothing much to say...

However, now I am happy to announce that the my MODE-UV transponder design for P3e is ready at the P3e integration place in Marburg (Germany). About 4 weeks ago I was in Marburg before, where the transponder has been checked. Unfortunatly some unsure things were found in the design. The unsure things were about long term stability after many years in space.

At home in The Netherlands, I changed the design with some minor changes to have a secure long term stability. Finally I tested the transponder again and it performed well within the specifications. Again something learned for future transponder designs :o)

Last Wednesday I drove to AMSAT-DL P3e integrations place in Marburg again, and have my transponder again checked. In the beginning it seemed that the 70cm receiver lost 10dB in sensetivity. After some more measurements we find out that it was due to a bad attenuator we used for protection at the input.

Together with Karl Meinzer we looked for any problems, but so far we could see (without HELAPS) all was okay. In the afternoon I went back home again, this time without the MODE-UV.

Now the MODE-UV will get a new home, the home of P3e... :o)
I hope the transponder will work like its elder sister in AO-10, and you all will enjoy it for many years...

It was lots of work to get it this far, but I know it is for a good purpose...

For the latest project status update please visit the AMSAT-DL

P3-E web page:
http://www.amsat-dl.org/p3e/

[ANS-WSR wishes to thank William Leijenaar, PE1RAH for this week's report]
[07172005]
=====
CP1 ?o-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: N6CP
Proposed Transmit Frequency: 436.845
[03272005]
=====
CP2 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.325
[03272005]
=====
HAUSAT1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: D90HP
Proposed Transmit Frequency: 437.465
[03272005]
=====
ICE Cube 1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: W2CXM
Proposed Transmit Frequency: 437.305
[03272005]
=====
ICE Cube 2 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: N2VR
Proposed Transmit Frequency: 437.425
[03272005]
=====
ION ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.505
[03272005]

```
=====
KUTEsat ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: KC0RMW
Proposed Transmit Frequency: 437.385
[03272005]
=====
MEROPE ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: K7MSU-1
Proposed Transmit Frequency: 145.980
[03272005]
=====
nCUBE1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
       2407.25
[03272005]
=====
RINCON ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
        437.345
[03272005]
=====
SACRED ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
[03272005]
=====
SACRED ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
[03272005]
=====
SEEDS ?O-??
Catalog Number:
```

Proposed Launch Date: Mid May 2005

Proposed Callsign: JQ1YGU
Proposed Transmit Frequency: 437.485
[03272005]
=====
Mea Huaka ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.405
[03272005]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
        888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/amsat/listserv/menu.html

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satelite Report Editor is James K. Darrow, KB9MMC.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the
memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen,
G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

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From 5076898728769565215
X-Google-Thread: 10e8ad,91dd7d331587ca56,start
X-Google-Thread: 113975,91dd7d331587ca56,start
X-Google-Attributes: gid10e8ad,gid113975,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news3.google.com!news.glorb.com!newsgate.cistron.nl!skynet.be!newspost001!tjb!not-for-mail
From: Chris Steyaert <observations@rmob.org>
Newsgroups: rec.radio.amateur.space,sci.astro.amateur
Subject: Radio Meteor Obs. Bull. July 2005
Date: Mon, 08 Aug 2005 21:52:22 +0200
Message-ID: <oudff1p6mi1cg76jh23q3d93s5k1tvisl4@4ax.com>
X-Newsreader: Forte Agent 1.93/32.576 English (American)
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Lines: 17
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NNTP-Posting-Host: 5fa74444.news.skynet.be
X-Trace: 1123530698 news.skynet.be 17602 81.245.38.155:10298
X-Complaints-To: usenet-abuse@skynet.be
Xref: g2news1.google.com rec.radio.amateur.space:216 sci.astro.amateur:17486

Radio Meteor Observation Bulletin No. 144 of July 2005 (63 K) is available now as

http://visualrmob.free.fr/rmobtext/rmob0507.txt

More information and the visual presentation of the hourly forward scatter counts can be found on

http://www.rmob.org

http://radio.data.free.fr

Chris

From 1403808351526875124
X-Google-Thread: 106700,eebe640f765b64c1,start
X-Google-Thread: fdc67,eebe640f765b64c1,start
X-Google-Thread: 10e8ad,eebe640f765b64c1,start
X-Google-Thread: 113975,eebe640f765b64c1,start
X-Google-Attributes: gid106700,gidfdc67,gid10e8ad,gid113975,public
X-Google-Language: ENGLISH,ASCII-7-bit
Date: Tue, 09 Aug 2005 21:33:56 +0100
From: Dave <nospam@nowhere.com>
User-Agent: Mozilla/5.0 (X11; U; SunOS sun4u; en-US; rv:1.4) Gecko/20041117
X-Accept-Language: en, en-us
MIME-Version: 1.0
Newsgroups: sci.astro.seti,alt.astronomy,rec.radio.amateur.space,sci.astro.amateur
Subject: Who invented the Y-factor method of noise measurement?
Content-Type: text/plain; charset=us-ascii; format=flowed
Content-Transfer-Encoding: 7bit
NNTP-Posting-Host: 213.78.42.15
Message-ID: <42f91335@212.67.96.135>
X-Trace: 9 Aug 2005 21:33:57 GMT, 213.78.42.15
Lines: 19
Path: g2news1.google.com!news4.google.com!newsfeed.stanford.edu!headwall.stanford.edu!newsfeed.news2me.com!nntp1.phx1.gblx.net!nntp.gblx.net!nntp.gblx.net!212.67.96.135!213.78.42.15
Xref: g2news1.google.com sci.astro.seti:2259 alt.astronomy:20029 rec.radio.amateur.space:217 sci.astro.amateur:17603

Sorry, I have asked everywhere else, so are trying another method.

Does anyone reading this list have a reference to the invention of the Y-factor method of measuring noise figure of RF/microwave devices? Any idea why it is called "Y-factor"? I'd like to find the oringinal rreference, but so far have been unable to.

It is well explained in HP/Agilent application notes, but no reference is made to the first publication of it.

Does anyone have any old references that mention the method, even if they don't reference it? Anything earlier than the mid 1950's?

If you do, please drop me an email at the address in the jpeg below.

http://www.medphys.ucl.ac.uk/~drkirkby/work-email2.jpg

```
From 8806732819573508450
X-Google-Thread: 106700,eebe640f765b64c1
X-Google-Thread: fdc67,eebe640f765b64c1
X-Google-Thread: 10e8ad,eebe640f765b64c1
X-Google-Thread: 113975,eebe640f765b64c1
X-Google-Attributes: gid106700,gidfdc67,gid10e8ad,gid113975,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!newsread.com!news-xfer.newsread.com!
newspeer.monmouth.com!newsfeed.icl.net!newsfeed.fjserv.net!diablo.theplanet.net!
news.theplanet.net!not-for-mail
From: "Malcolm Stewart" <malcolm_stewart@megalith.freeserve.co.uk>
Newsgroups: sci.astro.seti,alt.astronomy,rec.radio.amateur.space,sci.astro.amateur
Subject: Re: Who invented the Y-factor method of noise measurement?
Date: Tue, 9 Aug 2005 22:49:25 +0100
Lines: 32
Message-ID: <ddb8d6$ukn$1@newsm1.svr.pol.co.uk>
References: <42f91335@212.67.96.135>
NNTP-Posting-Host: 217.134.45.160
X-Trace: newsm1.svr.pol.co.uk 1123624166 31383 217.134.45.160 (9 Aug 2005 21:49:26
GMT)
NNTP-Posting-Date: 9 Aug 2005 21:49:26 GMT
X-Complaints-To: abuse@theplanet.net
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1437
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1441
Xref: g2news1.google.com sci.astro.seti:2260 alt.astronomy:20041
rec.radio.amateur.space:218 sci.astro.amateur:17612

"Dave" <nospam@nowhere.com> wrote in message news:42f91335@212.67.96.135...
> Sorry, I have asked everywhere else, so are trying another method.
>
> Does anyone reading this list have a reference to the invention of the
> Y-factor method of measuring noise figure of RF/microwave devices? Any
> idea why it is called "Y-factor"? I'd like to find the oringinal
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> is made to the first publication of it.
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> Does anyone have any old references that mention the method, even if
> they don't reference it? Anything earlier than the mid 1950's?
>
>
> If you do, please drop me an email at the address in the jpeg below.
>
> http://www.medphys.ucl.ac.uk/~drkirkby/work-email2.jpg

Have you checked the MIT Radiation Lab series of text books covering radar
from WWII ?  Seem to remember that was where I looked for authoritative
guidance when I made my noise measurements - back in 1965.
```

--
M Stewart
Milton Keynes, UK
http://www.megalith.freeserve.co.uk/oddimage.htm

From 8234997448503310935
X-Google-Thread: 106700,eebe640f765b64c1
X-Google-Thread: fdc67,eebe640f765b64c1
X-Google-Thread: 10e8ad,eebe640f765b64c1
X-Google-Thread: 113975,eebe640f765b64c1
X-Google-Attributes: gid106700,gidfdc67,gid10e8ad,gid113975,public
X-Google-Language: ENGLISH,ASCII-7-bit
Date: Wed, 10 Aug 2005 23:06:26 +0100
From: Dave <nospam@nowhere.com>
User-Agent: Mozilla/5.0 (X11; U; SunOS sun4u; en-US; rv:1.4) Gecko/20041117
X-Accept-Language: en, en-us
MIME-Version: 1.0
Newsgroups: sci.astro.seti,alt.astronomy,rec.radio.amateur.space,sci.astro.amateur
Subject: Re: Who invented the Y-factor method of noise measurement?
References: <42f91335@212.67.96.135> <ddb8d6$ukn$1@newsm1.svr.pol.co.uk>
In-Reply-To: <ddb8d6$ukn$1@newsm1.svr.pol.co.uk>
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Lines: 28
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Xref: g2news1.google.com sci.astro.seti:2267 alt.astronomy:20170
rec.radio.amateur.space:219 sci.astro.amateur:17697

Malcolm Stewart wrote:
> "Dave" <nospam@nowhere.com> wrote in message news:42f91335@212.67.96.135...
>
>>Sorry, I have asked everywhere else, so are trying another method.
>>
>>Does anyone reading this list have a reference to the invention of the
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>>idea why it is called "Y-factor"? I'd like to find the oringinal
>>rreference, but so far have been unable to.
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>>It is well explained in HP/Agilent application notes, but no reference
>>is made to the first publication of it.
>>
>>Does anyone have any old references that mention the method, even if
>>they don't reference it? Anything earlier than the mid 1950's?

>>
>>
>>If you do, please drop me an email at the address in the jpeg below.
>>
>>http://www.medphys.ucl.ac.uk/~drkirkby/work-email2.jpg
>
>
> Have you checked the MIT Radiation Lab series of text books covering radar
> from WWII ? Seem to remember that was where I looked for authoritative
> guidance when I made my noise measurements - back in 1965.
>

No I had not. I'll check that out.

```
From 8309450130977450506
X-Google-Thread: 106700,eebe640f765b64c1
X-Google-Thread: fdc67,eebe640f765b64c1
X-Google-Thread: 10e8ad,eebe640f765b64c1
X-Google-Thread: 113975,eebe640f765b64c1
X-Google-Attributes: gid106700,gidfdc67,gid10e8ad,gid113975,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news4.google.com!news.glorb.com!border1.nntp.dca.giganews.com!local01.nntp.dca.giganews.com!nntp.bresnan.com!news.bresnan.com.POSTED!not-for-mail
NNTP-Posting-Date: Fri, 12 Aug 2005 00:24:35 -0500
Date: Thu, 11 Aug 2005 23:24:35 -0600
From: Tim Killian <TJK@notmyrealemail.com>
User-Agent: Mozilla/5.0 (Macintosh; U; PPC Mac OS X Mach-O; en-US; rv:1.4) Gecko/20030624 Netscape/7.1
X-Accept-Language: en,pdf
MIME-Version: 1.0
Newsgroups: sci.astro.seti,alt.astronomy,rec.radio.amateur.space,sci.astro.amateur
Subject: Re: Who invented the Y-factor method of noise measurement?
References: <42f91335@212.67.96.135>
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X-Complaints-To: abuse@bresnan.net
X-DMCA-Complaints-To: abuse@bresnan.net
X-Abuse-and-DMCA-Info: Please be sure to forward a copy of ALL headers
X-Abuse-and-DMCA-Info: Otherwise we will be unable to process your complaint properly
X-Postfilter: 1.3.32
Xref: g2news1.google.com sci.astro.seti:2279 alt.astronomy:20300 rec.radio.amateur.space:220 sci.astro.amateur:17889
```

Was it J. D. Kraus? When I performed Y-factor tests in the '70s, his works were always at hand.

Dave wrote:

> Sorry, I have asked everywhere else, so are trying another method.
>
> Does anyone reading this list have a reference to the invention of the
> Y-factor method of measuring noise figure of RF/microwave devices? Any
> idea why it is called "Y-factor"? I'd like to find the oringinal
> rreference, but so far have been unable to.
>
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>
> Does anyone have any old references that mention the method, even if
> they don't reference it? Anything earlier than the mid 1950's?
>
>
> If you do, please drop me an email at the address in the jpeg below.
>
> http://www.medphys.ucl.ac.uk/~drkirkby/work-email2.jpg
>
>

From -1587057256807907140
X-Google-Thread: 10e8ad,a3d62f5379cbc653,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news4.google.com!news3.google.com!news.glorb.com!wn14feed!worldnet.att.net!bgtnsc04-news.ops.worldnet.att.net.POSTED!53ab2750!not-for-mail
Reply-To: "Tom" <nospam@nospam.com>
From: "Tom" <nospam@nospam.com>
Newsgroups: rec.radio.amateur.space
Subject: Repeater On The Moon?
Lines: 51
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 5.00.2615.200
X-MimeOLE: Produced By Microsoft MimeOLE V5.00.2615.200
Message-ID: <7J9Le.595708$cg1.4788@bgtnsc04-news.ops.worldnet.att.net>
Date: Fri, 12 Aug 2005 22:50:43 GMT
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X-Trace: bgtnsc04-news.ops.worldnet.att.net 1123887043 12.78.47.112 (Fri, 12 Aug 2005 22:50:43 GMT)
NNTP-Posting-Date: Fri, 12 Aug 2005 22:50:43 GMT
Organization: AT&T Worldnet
Xref: g2news1.google.com rec.radio.amateur.space:221

Any plans to put a repeater on the moon now that we are going back to the moon?

[snip]

Details about Project Moonray

Nick thought of the idea of putting an amateur repeater on the moon in 1965 while the Apollo manned lunar explorations were taking place. He met with Owen Garriott, W5LFL, who was an astronaut in training. Owen was scheduled to go to the moon on the forthcoming Apollo 18 mission. Nick gave this amateur project the name Moonray, which was short for moon relay. The idea that he proposed to NASA and was accepted by them was to build a package small enough to fit under the seat of the Lunar Rover vehicle. It would fit in a space vacated by the exchange of batteries with fuel cells. Hopefully, Owen would be the driver of this vehicle and he would have been the person to erect the Moonray package on the surface of the moon. There was to have been a connector on the Moonray package so that Owen could plug in his spacesuit headset and make a few contacts with hams on Earth. He would have then left the assembled package on the moon operating as an open amateur repeater.

Nick planned to build a thermonuclear powered (50 WATT DC output) Plutonium 235 fueled unit with a half-life of 97 years. It was to be a 5 pound repeater package with a 432 MHz uplink receiver and 1296 MHz 3.5 watt output downlink transmitter. The repeater was to accept all modulation modes at the input and linearly translate these to the downlink transmitter. The repeater also was to have contained several interesting amateur experiments including a laser receiver, a slow-scan color TV system giving gross cloud cover pictures of the earth several times a day, and a 32 channel telemetry link to transmit a variety of experimental and housekeeping data.

The call SS in Morse code was to be the identifier and had been allocated and approved by the FCC. NASTAR's ground station was to be the secondary control link to turn the repeater on or off as needed, and the giant dish at Arecibo was to be the primary control in emergency or during unexpected repeater malfunctions.

Unfortunately, Congress cut off funding to NASA for all future Apollo missions and Project Moonray was shelved.

Nick was again president of Project OSCAR from 1994 until his death in January, 1996. He was going to present a new version of Project Moonray to the opening meeting of the 50MHz and Up Group of N. California but he passed away 3 days before the meeting took place.

[end snip]

Tom

```
From -1145262649367532101
X-Google-Thread: 106700,eebe640f765b64c1
X-Google-Thread: fdc67,eebe640f765b64c1
X-Google-Thread: 10e8ad,eebe640f765b64c1
X-Google-Thread: 113975,eebe640f765b64c1
X-Google-Attributes: gid106700,gidfdc67,gid10e8ad,gid113975,public
X-Google-Language: ENGLISH,ASCII-7-bit
Date: Sat, 13 Aug 2005 23:12:56 +0100
From: Dave <nospam@nowhere.com>
User-Agent: Mozilla/5.0 (X11; U; SunOS sun4u; en-US; rv:1.4) Gecko/20041117
X-Accept-Language: en, en-us
MIME-Version: 1.0
Newsgroups: sci.astro.seti,alt.astronomy,rec.radio.amateur.space,sci.astro.amateur
Subject: Re: Who invented the Y-factor method of noise measurement?
References: <42f91335@212.67.96.135> <RoCdnZ2dnZ2eiS7TnZ2dnQ6vYd-
dnZ2dRVn-0J2dnZ0@bresnan.com>
In-Reply-To: <RoCdnZ2dnZ2eiS7TnZ2dnQ6vYd-dnZ2dRVn-0J2dnZ0@bresnan.com>
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Content-Transfer-Encoding: 7bit
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cox.net!hwmnpeer01.phx!hwmedia!newsfeed1.easynews.com!easynews.com!easynews!
news.he.net!chekhov.conxion.net!212.67.96.135!213.78.42.15
Xref: g2news1.google.com sci.astro.seti:2327 alt.astronomy:20549
rec.radio.amateur.space:222 sci.astro.amateur:18087
```

Tim Killian wrote:
> Was it J. D. Kraus? When I performed Y-factor tests in the '70s, his
> works were always at hand.

I've no idea. I have not looked at all the references that I have been
given, but so far have been unable to resolve it. I need to spend longer
in the library.

>
> Dave wrote:
>
>> Sorry, I have asked everywhere else, so are trying another method.
>>
>> Does anyone reading this list have a reference to the invention of the
>> Y-factor method of measuring noise figure of RF/microwave devices? Any
>> idea why it is called "Y-factor"? I'd like to find the oringinal
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>>
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>>
>> http://www.medphys.ucl.ac.uk/~drkirkby/work-email2.jpg
>>
>>
>

From 7517903329560379208
X-Google-Thread: 10e8ad,15fd274e520f5378,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news3.google.com!news.glorb.com!border1.nntp.dca.giganews.com!elnk-atl-nf1!newsfeed.earthlink.net!stamper.news.atl.earthlink.net!newsread1.news.atl.earthlink.net.POSTED!46041641!not-for-mail
From: "JoAnne Maenpaa" <wb9jej_no-spam@earthlink.net>
Newsgroups: rec.radio.amateur.space
Subject: ANS-226 AMSAT News Service Weekly Bulletin
Lines: 302
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <5HKLe.7796$ns.3864@newsread1.news.atl.earthlink.net>
Date: Sun, 14 Aug 2005 16:54:25 GMT
NNTP-Posting-Host: 64.105.84.23
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread1.news.atl.earthlink.net 1124038465 64.105.84.23 (Sun, 14 Aug 2005 09:54:25 PDT)
NNTP-Posting-Date: Sun, 14 Aug 2005 09:54:25 PDT
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news1.google.com rec.radio.amateur.space:223

AMSAT NEWS SERVICE
ANS-226

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:

- ISS PCSAT2 PSK-31
- PCSAT2 Telemetry
- ARISS Status
- MRO Electra SDR
- AMSAT Awards

SB SAT @ AMSAT $ANS-226.01
ISS PCSAT2 PSK-31 Transponder is enabled

AMSAT News Service Bulletin 226.01
From AMSAT HQ SILVER SPRING, MD.
Aug 14, 2005
To All RADIO AMATEURS
BID: $ANS-226.01

PCSAT2 will operate in conjunction with all of the other exciting modes on the ARISS system such as voice, packet, repeater and SSTV modes. But because these are all multiple transceivers all on the same station, their operation have to be coordinated so there is no mutual interference.

It looks like PCSAT2 can best contribute at this time by operating in PSK-31 mode for the near future. This is a very exciting new transponder mode which solves the congestion problem on FM repeaters by letting multiple stations all communicate at the same time.

PSK-31 users are welcome to try out the new PCSAT2 PSK-31 transponder on ISS with an uplink on 29.402 +/- 1 KHz and downlink on 435.275 +/- Doppler using FM.

The FM downlink lets everyone operate full duplex and everyone to see the same view of the passband as everyone else. Thus you can see exactly what your signal looks like compared to everyone else.

Help Wanted: PCSat2 PSK-31 Operations Coordinator Needed

To save power and to avoid any potential interferece to any ISS School contacts, the PSK-31 transponder is only on when a responsible PC2PSK control station in the ISS/PCSat2 footprint turns it on.

If you are interested in PSK-31 operations and want to volunteer to coordinate all the other operators and operations, then we have a job for you. This PSK-31 operations coordinator, who has become fully familiar with ARISS operations, can next start to organize the pass-by-pass PSK-31 control ops.

Contact Bob Bruninga, WB4APR, at wb4apr@amsat.org if you wish to volunteer as the PCSat2 PSK-31 coordinator. Until the PCSat2 team is able to introduce the new coordinator please do not volunteer as a pass control operator.

Refer to this page:
http://www.ew.usna.edu/~bruninga/pec/pc2ops.html

For information about the PCSat2 PSK-31 transponder and a diagram
showing a basic configuration for PSK-31 earth stations.

[ANS thanks Bob, WB4APR and the U.S. Naval Academy Satellite Lab
for the above information.]

/EX

SB SAT @ AMSAT $ANS-226.02
PCSAT2 Telemetry

AMSAT News Service Bulletin 226.02
From AMSAT HQ SILVER SPRING, MD.
Aug 14, 2005
To All RADIO AMATEURS
BID: $ANS-226.02

The PCSat2 team sends a, "Thank You!", to all of the AMSAT and APRS stations feeding science and telemetry data from 437.975 to the APRS-IS. This data feeds the live telemetry page and lets everyone see how the spacecraft is doing around the world:

http://www.pcsat2.info

We do, of course, need more stations feeding telemetry, especially from those stations in unusual footprints such as Hawaii and remote areas of the USA, Europe and downunder. More stations capable of receiving and forwarding 9600 baud data would be especially helpful.

The PCSat2 telemetry team plans to write-up a set of turn-key instructions on how to set up a satgate so that others not familiar with APRS can easily join this satgate network. In the interim, stations that wish to experiment and learn can begin using any version of APRS or download the stand-alone ALOGGER 2.02 program from http://www.billdiaz.dynip.com/.

To set up a satgate, just tune a radio and TNC to one of these channels:

437.975 9600 bd for PCSAT2 data
437.975 1200 bd for PCSAT2 telemetry
145.800 for ARISS packet data
145.825 for the original PCsat

You will need to run your favorite APRS software and connect to satgate.aprsca.net:10150. ALOGGER, mentioned previously now has serial port support for a TNC as a satgate monitoring station.

For the overall PCSAT2 Operations system, see

http://www.ew.usna.edu/~bruninga/pec/pc2ops.html

[ANS thanks Bob, WB4APR and the U.S. Naval Academy Satellite Lab for the above information.]

/EX

SB SAT @ AMSAT $ANS-226.03
ARISS Status

AMSAT News Service Bulletin 226.03
From AMSAT HQ SILVER SPRING, MD.
Aug 14, 2005
To All RADIO AMATEURS
BID: $ANS-226.03

ARISS Contact Schedule and Successful school list updated
2005-08-11 23:00 UTC

Well done STS-114! Welcome back!

Due to the STS-114 operation and planned ISS EVAs, ARISS school contacts were canceled or postponed. We are back, the next contact is set for 2005-08-17.

There was also a rumor that the ISS was having contacts on the 40 meter band. There is no HF equipment available yet.

Expedition 11 crew is now on the ISS. John Phillips KE5DRY
Sergei Krikalev U5MIR

Expedition 12 crew is expected to dock 2005-10-03. This means that there will probably not be any ARISS contacts from the week before docking until the week of 2005-10-24.

Expedition 12

William McArthur, KC5ACR up on 11S Soyuz, scheduled launch 2005-10-01
Valery Tokarev up on 11S Soyuz, scheduled launch 2005-10-01
Thomas Reiter DF4TR up on STS-121, scheduled launch 2005-09-22

The schedule page has been updated as of 2005-08-11 23:00 UTC.

Look for the updated and enhanced frequency chart for packet, voice, and crossband repeater modes showing Doppler correction.

http://www.amsat.org/amsat/ariss/news/ISS_frequencies_and_Doppler_correction.rtf

Several schools will be live simulcasted via the world wide web. Check out the instructions for each school on the schedule page to get to the audio streaming.

Additional instructions have been added on how to listen in when the streaming audio is provided by MCI.

Also, please monitor the IRLP and Echolink webpages for possible upcoming contacts that will be simulcast.

IRLP website at:

http://www.discoveryreflector.ca

This new site will have the links for simulcast contacts that have IRLP and Echolink.

The successful school list has been updated as of 2005-07-21 04:00 UTC.

Check out the link on the schedule page to download a video that Mike Fincke KE5AIT and Gennady Padalka RN3DT have produced of life on the ISS.

The latest ARISS application, announcement and successful school list is now available on the ARISS web site. There are several ARISS web sites:

English: http://www.rac.ca/ariss/

French: http://c.avmdti.free.fr/ariss/index.htm

ARISS Europe: http://www.ariss-eu.org/

ARISS Japan: http://www.jarl.or.jp/ariss/

Other locations include:

Latest ARISS announcements and news
http://www.amsat.org/amsat/ariss/news/arissnews.txt

Successful school list
http://www.amsat.org/amsat/ariss/news/Successful_ARISS_schools.rtf

The ISS Fan Club website is:
http://www.issfanclub.com

K1ELA has a website at:
http://members.aol.com/k1ela/index.html

ON6SAT has a website at:
http://on6sat.com/links/

A listing of ARISS related magazine articles:
http://www.amsat.org/amsat/ariss/news/ARISS_magazine_articles.rtf

Currently the list includes articles from CQ, CQ VHF, QST, and The AMSAT Journal. Please contact me directly if you have additional suggestions.

[ANS thanks Charlie Sufana, AJ9N and SAREX for the above information]

/EX

SB SAT @ AMSAT $ANS-226.04
MRO Electra SDR post-lauch checkout

AMSAT News Service Bulletin 226.04
From AMSAT HQ SILVER SPRING, MD.
Aug 14, 2005
To All RADIO AMATEURS
BID: $ANS-226.04

Advance information, subject to change:

Post-launch checkout of the Electra software-defined UHF radio aboard the Mars Reconnaissance Orbiter will be conducted on or about 26 September 2005. These tests will include CW transmissions during spacecraft turns to verify the UHF quadrifilar helix antenna pattern. Interested radio amateurs and amateur and professional radio-astronomers in North America with sensitive receiving capabilities at 437.1 MHz can attempt to receive the UHF signal from MRO during this test.

More details will follow.

Jan
WB6VRN

Electra Integration and Test Engineer
Flight Communications Systems Section
NASA Jet Propulsion Laboratory

[ANS thanks Jan, WB6VRV for the above information]

/EX

SB SAT @ AMSAT $ANS-226.05
AMSAT Awards

AMSAT News Service Bulletin 226.05
From AMSAT HQ SILVER SPRING, MD.
Aug 14, 2005
To All RADIO AMATEURS
BID: $ANS-226.05

This week, congrats go out to all of the following.

Greg Higgins, KB5GLV, Satellite Communicators Club
Wadhah Al-Tailji, AE6QG, Satellite Communicators Club

Aruni Perera, VE4WMK, 51 on 51 Award #32

To see all the awards visit http://www.amsat.org or
http://www.amsatnet.com

73...bruce

[ANS thanks Bruce Paige, KK5DO for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the
President's Club. Members of the President's Club, as sustaining donors
to AMSAT Project Funds, will be eligible to receive additional benefits.
Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Dave Johnson, G4DPZ
G4DPZ at amsat dot org

From 2540905179028866750
X-Google-Thread: 10e8ad,a3d62f5379cbc653
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII
Path: g2news1.google.com!postnews.google.com!f14g2000cwb.googlegroups.com!not-for-mail
From: "Brad Guth" <ieisbradguth@yahoo.com>
Newsgroups: rec.radio.amateur.space
Subject: Re: Repeater On The Moon?
Date: 15 Aug 2005 17:23:01 -0700
Organization: http://groups.google.com
Lines: 103
Message-ID: <1124151781.165788.301120@f14g2000cwb.googlegroups.com>
References: <7J9Le.595708$cg1.4788@bgtnsc04-news.ops.worldnet.att.net>
NNTP-Posting-Host: 64.40.51.63
Mime-Version: 1.0
Content-Type: text/plain; charset="iso-8859-1"
Content-Transfer-Encoding: quoted-printable
X-Trace: posting.google.com 1124151787 795 127.0.0.1 (16 Aug 2005 00:23:07 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Tue, 16 Aug 2005 00:23:07 +0000 (UTC)
In-Reply-To: <7J9Le.595708$cg1.4788@bgtnsc04-news.ops.worldnet.att.net>
User-Agent: G2/0.2
Complaints-To: groups-abuse@google.com
Injection-Info: f14g2000cwb.googlegroups.com; posting-host=64.40.51.63;
   posting-account=mSmX5Q0AAABAOTfKTkCm7WO5PvgF8_A4
Xref: g2news1.google.com rec.radio.amateur.space:224

Tom,

Good Christ Almighty; terrific notion of getting a repeater of any sorts on the moon. However, we can't seem to get squat deployed upon the moon unless it's capable of surviving a rather nasty impact as having planned upon more than a decade ago by the LUNAR-A mission that's still on hold.

Speaking about NASA/Apollo (the ultimate space-toilet of infomercials and disinformation-R-us crapolla), and of their continuing utter lack of having a shred worth of hard-science or that of any other believable evidence that's about as MOS infomercialism as it gets.

"AMIE obtained this image from an altitude of about 2000 kilometres. It covers an area of about 100 kilometres and shows the region around Hadley Rille centred at approximately 25=B0 North and 3=B0 East."
http://www.esa.int/SPECIALS/SMART-1/SEMB7A808BE_0.html
"The rille begins at the curved gash on the left side of this image, and is seen clearest in the rectangular, mare-floored valley in the centre of the image. It is over 120 kilometres long, and up to 1500 metres across and over 300 metres deep in places."
"The camera itself has a medium field of view of 5.3 degrees by 5.3 degrees and provides a high-resolution image at 27 metres per pixel from an altitude of 300 kilometres. The image measures 1024 x 1024 pixels. Data from the micro-imager are read and stored in the AMIE electronics, where they can be downloaded as required from the spacecraft."

Unfortunately, as for having been obtained from 2000 km isn't worth diddly squat compared to the 100 km advantage of the Apollo CM orbit and further boosted by way of using their 10X telephoto lens for a full frame magnification of roughly 38,400:1 as compared to imaging the same from Earth using their 1:1 lens.

The SMART-1/AMIE camera absolutely somewhat sucks at 180 m/pixel as compared to Kodak film and quality optics as utilized from the distance of 100 km, having been recorded upon essentially high resolution B&W (8192 x 8192 or 164 lpmm) format of film that I believe is worth something better than 1.8 m/pixel, and worth 256 bits per pixel at that. Still there's no sign of anything Apollo, unless somewhat recent impact craters are all that's showing us the truth.

Thus even if SMART-1 were to cruise to within 300 km and obtain it's somewhat bit-limited worth of 27 m/pixel isn't going to become worth even a tenth as good of what's already on file, and even that's of what's 35+ years old at that.

Too bad we can't manage to orbit something of a 100X optical that's getting onto a 2.2 micron/pixel CCD populated chip of 10x10 mm, and of accomplishing this robotic task at just 10 km off the deck, obviously better than having to make due with the Mars Express imaging resolution as having been obtained from 260+km that's actually limited to 7 micron pixels that's clearly out dated by the latest CCD and a 200X lens or mirror standard that should be able to beat that resolution at perhaps obtaining something less than 150 mm of at least 16 bits/pixel,

although flying 10 km off the deck makes that worth 15 mm/pixel.
http://sci.esa.int/science-e/www/object/index.cfm?fobjectid=3D34826&fbodylo=
ngid=3D1597
Without applied PhotoShop "correspond to 2.3 metre square pixels
on-ground for a spacecraft altitude of 250 km."

As is, their 2.4 km x 2.4 km per frame as obtained from 250 km would become 0.96 x 0.96 km per frame if utilized at 100 km off the lunar surface, that's a raw 938 mm/pixel if there were no improvements in lens or CCD applied.

Since we're only going for the moon, the 972 mm Matsukov-Cassegrain telescope could be replaced with a 2000 mm and the CCD replaced with the 2.2 micron/pixel, thus another 6.547 fold improvement would get that resolution as obtained from 100 km down to 143.3 mm/pixel, then a good application of PhotoShop shouldn't have any problem with creating a believable 16 mm/pixel. Cut the orbit down to 10 km off the deck and I believer we're into reading serial numbers off those supposed lander remains, those items of our grand old cloak and dagger cold-war days of disinformation-R-us and of spookology of utilizing all sorts of smoke and mirrors on steroids, of which as far as I can tell still isn't over until the fat lady sings.

Of course somewhat harsh spectrum cut-off and/or band-pass filtering could be utilized, just in case the camera caught a look-see above the horizon, thus the horrifically bright (near-blue & near-UV) worth of the Sirius star system and otherwise nearly blindingly bright likes of Venus could be diminished and/or later PhotoShop removed so that there'd still be none of those stinking stars or that of a nearby Venus by which anyone could actually figure out if the moon imaging was real or not. We also wouldn't want to ever get a look-see at having Earth above the fully solar illuminated but otherwise extremely dark lunar surface that's showing us a somewhat reddish tint of a nearly coal dark golden lunar hew instead of the composite of cornmeal and portland cement and/or of a somewhat pumice like spectrum worth of gray tones as to what the Apollo/EVA obtained images recorded (whatever you do, don't look at anything of "moonpans" near white-out zones of lunar terrain).
~

Nondisclosure: in spite of an orchestrated status quo, seems there's
been other life upon Venus
http://guthvenus.tripod.com/gv-town.htm
Russian/China LSE-CM/ISS (Lunar Space Elevator) as interactive within
the ME-L1/EM-L2 sweet-spot
http://guthvenus.tripod.com/lunar-space-elevator.htm
Of Sirius, proto-moons, Venus & Earthly ETs & of somewhat testy topics
by; Brad Guth / GASA-IEIS=20
http://guthvenus.tripod.com/gv-topics.htm

From -797362215386983518
X-Google-Thread: 10e8ad,a3d62f5379cbc653

```
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news4.google.com!news.glorb.com!news-
feed01.roc.ny.frontiernet.net!nntp.frontiernet.net!newsfeed2.telusplanet.net!
newsfeed.telus.net!edtnps89.POSTED!c92a1cd0!not-for-mail
From: Mike <Mike@nowhere.net>
Subject: Re: Repeater On The Moon?
User-Agent: Pan/0.14.2.91 (As She Crawled Across the Table)
Newsgroups: rec.radio.amateur.space
References: <7J9Le.595708$cg1.4788@bgtnsc04-news.ops.worldnet.att.net>
IfYouCanReadThisThen: POUND-SALT_HAHAHAHA
MIME-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 8bit
Lines: 8
Message-ID: <qOdMe.179309$9A2.77757@edtnps89>
Date: Tue, 16 Aug 2005 04:18:30 GMT
NNTP-Posting-Host: 199.126.155.198
X-Trace: edtnps89 1124165910 199.126.155.198 (Mon, 15 Aug 2005 22:18:30 MDT)
NNTP-Posting-Date: Mon, 15 Aug 2005 22:18:30 MDT
Xref: g2news1.google.com rec.radio.amateur.space:225

On Fri, 12 Aug 2005 22:50:43 +0000, Tom wrote:

> Details about Project Moonray

Very cool!

73 de Mike VE6HMG




From -1665426114749021 53
X-Google-Thread: 10e8ad,a3d62f5379cbc653
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news3.google.com!news.glorb.com!wn14feed!
worldnet.att.net!bgtnsc05-news.ops.worldnet.att.net.POSTED!53ab2750!not-for-mail
Message-ID: <4301F803.ABE013A4@antennaman.com>
From: joey <joey@antennaman.com>
X-Mailer: Mozilla 4.79 [en] (Windows NT 5.0; U)
X-Accept-Language: en
MIME-Version: 1.0
Newsgroups: rec.radio.amateur.space
Subject: Re: Repeater On The Moon?
References: <7J9Le.595708$cg1.4788@bgtnsc04-news.ops.worldnet.att.net>
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Lines: 10
Date: Tue, 16 Aug 2005 14:28:21 GMT
NNTP-Posting-Host: 12.76.217.31
X-Complaints-To: abuse@worldnet.att.net
X-Trace: bgtnsc05-news.ops.worldnet.att.net 1124202501 12.76.217.31 (Tue, 16 Aug
```

2005 14:28:21 GMT)
NNTP-Posting-Date: Tue, 16 Aug 2005 14:28:21 GMT
Organization: AT&T Worldnet
Xref: g2news1.google.com rec.radio.amateur.space:226

Ah, reminds me of SNAP 27,
the Plutonium power generator
that was used on the surface of
the moon for the experiments
and telemetry systems that were
left behind !

Nick planned to build a thermonuclear powered (50 WATT DC output) Plutonium 235 fueled unit with a half-life of 97 years.

From -2233082229213712156
X-Google-Thread: 10e8ad,dfd48b87007ef718,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news3.google.com!newshub.sdsu.edu!
nx01.iad01.newshosting.com!newshosting.com!216.196.98.140.MISMATCH!
border1.nntp.dca.giganews.com!border2.nntp.dca.giganews.com!nntp.giganews.com!
elnk-atl-nf1!newsfeed.earthlink.net!stamper.news.atl.earthlink.net!
newsread1.news.atl.earthlink.net.POSTED!46041641!not-for-mail
From: "JoAnne Maenpaa" <wb9jej_no-spam@earthlink.net>
Newsgroups: rec.radio.amateur.space
Subject: WSR-226 AMSAT Weekly Satellite Status Report
Lines: 1261
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <DFPMe.8586$ns.211@newsread1.news.atl.earthlink.net>
Date: Wed, 17 Aug 2005 23:23:15 GMT
NNTP-Posting-Host: 64.105.84.247
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread1.news.atl.earthlink.net 1124320995 64.105.84.247 (Wed, 17 Aug 2005 16:23:15 PDT)
NNTP-Posting-Date: Wed, 17 Aug 2005 16:23:15 PDT
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news1.google.com rec.radio.amateur.space:227

This report is organized into 4 parts.
Part 1 - operational analog amateur satellites.
Part 2 - operational digital amateur satellites.
Part 3 - non - operational satellites
Part 4 - proposed satellites

SB SAT @ AMSAT <KB9MMC $ANS-226.S1
WSR 226 Part 1 08/14/2005

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AMSAT NEWS SERVICE BULLETIN 226.S1 FROM AMSAT HQ
SILVER SPRING, MD, AUGUST 14, 2005
TO ALL RADIO AMATEURS
BID: $ANS-226.S1

VO-52 HAMSAT
Catalog Number: 28650
Launch Date: May 05,2005

Status: On orbit
Current Mode: U/V

Proposed frequencies:
-------------------
Indian transponder:
Uplink  : 435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW
Beacom  : 145.940MHz continue carier signal

Dutch transponder:
Uplink  : 435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW
Beacon  : 145.860MHz 12WPM with CW message
[07242005]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Mode: PBBS - OFF
      FM REPEATER - V/U HIGH POWER

Analog voice downlink:  435.300 MHz FM
         435.150 MHz FM
Analog voice uplink: 145.880 MHZ FM
         145.920 MHz FM 67Hz PL tone
                       1268.700 MHz FM 67Hz PL tone

Digital Downlinks:      435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
                       2401.200 MHz FM  38k4 bps, AX.25
Digital Uplink:         145.860 MHz FM, 9k6 Digital, Pacsat Broadcast
   Protocol (PBP)

Broadcast: PECHO-11
BBS:  PECHO-12

Current scheduled operating modes:

15 Aug
FM Repeater, V/S
Uplink: 145.920 mhz FM, 67hz PL Tone
Downlink 2401.200 mhz FM
```

22 Aug
FM Repeater, V/U
Uplink: 145.920 mhz FM, 67 hz PL Tone
Downlink 435.300 mhz FM
9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 435.150 mhz FM, 9k6 PBP Digital

[ANS-WSR thanks Mike, KE4AZN for the above information]
[07312005]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Uplink: 145.850 MHz (67.0 Hz PL tone) (See below for operating procedures)
Downlink: 436.795 MHz

There have been unconfirmed reports on the amsat-bb remailer that SO-50 has shifted downlink frequency as much as 5khz up. This both from Europe.

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz. The
order of operation is thus: (allow for Doppler as necessary)

1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10 minute timer.
[09122004]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: OPERATIONAL

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplink: 145.850 145.870 145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

John, N4QWL reports on July 16th, 2005:

Last evening I had a AOS to LOS qso with WI2W. FO-29 came up at 01:17z here in FM07 and I found WI2W and we chatted until 01:33z. The satellite was at 2 degrees elevation when I finally heard him start to crackle a bit. What a great QSO! To think that I watched this bird launch back in 1996 and it is still working so well is a real thrill. I believe I still have the video. I might just look for it and watch it again. Boy do I love this satellite stuff! Look for you all up there.

Please send the reception reports to lab2 'at' jarl.or.jp.
Please use the subject line: 'FO-29 reception report'.

Mineo, JE9PEL, has an FO-29 satellite telemetry analysis program that will automatically analyze all digital telemetry from the satellite (such as current, voltage and temperature). FO29CWTE is available at:
http://www.ne.jp/asahi/hamradio/je9pel/
[ANS-WSR wishes to thanks John, N4QWL for this week's report]
[07172005]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Uplink: 145.850 MHz FM
Downlink: 436.795 MHz FM

The latest information on AO-27 from control operator Michael Wyrick, N3UC (former N4USI), can be found at:
http://www.ao27.org

An AO-27 question-and-answer page is available on the AMSAT-NA web site, with updates by Ray, W2RS. The URL is:
http://www.amsat.org/amsat/intro/ao27faq.html

[ANS-WSR thanks John, K6YK, for this week's AO-27 report]
[08292004]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Semi-operational in sunlight.
Return to active status: June 21,2002

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A
145.975 to 145.925 MHz CW/USB Mode B
Beacon: 29.502 MHz, 145.972 MHz, 435.1 MHz, 2304.1 MHz

Emily, W0EEC has created a website to allow the users of AO-7 to record contacts, observations and use of the satellite more effectively at:
http://www.emilyshouse.com/experthams/ao7/main.php
This includes the ability to log contacts.

Tim, K3TZ has written a program to decode AO-07 telemetry.
The program can be downloaded at:
http://www.qsl.net/k3tz/files/K3TZ_AO-07_Telemetry_Decoder_0.5.zip

For more AO-7 info:
http://www.amsat.org/amsat/sats/n7hpr/ao7.html
[11142004]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: U/V CROSS-BAND REPEATER
Digipeater: Inactive

The current Expedition 11 crew is:
Commander Sergei Krikalev
Flight Engineer John Phillips

Worldwide packet uplink: 145.990 MHz FM
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM
Doppler Shift is 10 KHz

Russian callsigns: RS0ISS, RZ3DZR
USA callsign: NA1SS
Packet station mailbox callsign: RS0ISS-11
Packet station keyboard callsign: RS0ISS-3
Digipeater callsign: ARISS

This off the ARISS webpage:
http://www.rac.ca/ariss/oindex.htm#New%20ARISS%20Operations :
The ARISS program is pleased to announce that the amateur radio equipment aboard the International Space Station is now operating in cross-band repeat mode. We realize that many of you will miss the packet-operating mode. However, cross-band repeat allows further experimentation of the ISS amateur radio system

The downlink for this operating mode remains the same, so listen for the station on 145.80 MHz. The new uplink frequency is 437.80 MHz. All frequencies
are subject to Doppler shifting. For further information on working

satellites
and adjusting for Doppler shift, please review Emily Clark's (W0EEC)
excellent
presentation on AMSAT's website:
http://www.amsat.org/amsat-new/information/faqs/Intro_sats.pdf

The ISS daily crew schedule can be found at:
http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line is
NOT
translated from Russian and posted.

More information is available at:
http://www.rac.ca/ariss
http://spaceflight.nasa.gov/station/reference/radio/
http://www.marexmg.org/fileshtml/unprotopage.html
http://www.issfanclub.com
http://oscar.dcarr.org/
[07242005]
NNNN
/EX

SB SAT @ AMSAT <KB9MMC $ANS-226.S2
WSR 226 Part 2 08/14/2005

AMSAT NEWS SERVICE BULLETIN 226.S2 FROM AMSAT HQ
SILVER SPRING, MD, AUGUST 14, 2005
TO ALL RADIO AMATEURS
BID: $ANS-226.S2

PCSAT2 ?0-??
Catalog Number:
Launch Date: August 1, 2005

Status: Operational

PCSAT2 was installed on the exterior of the International Space
Station and was activated on August 3, 2005.

PCSAT2 CAPABILITIES: PCSAT2 is attached to the ISS and so its operations
must be in cooperation with the ARISS communications suite to minimize any
mutual interference and to coordinate activities. Here are the capabilities
of the PCSAT2 and ARISS payloads:

PCSAT SYSTEM A:

435.275 PCSAT2 DOWNLINK 1200 baud packet with uplink on 145.825
435.275 PCSAT2 DOWNLINK Occasional user PSK-31 continuous downlink
145.825 PCSAT2 DOWNLINK 1200 baud packet
PCSAT SYSTEM B:

437.975 PCSAT2 DOWNLINK periodic Solar Cell data and PCSAT2 telemetry at
9600 baud

437.975 PCSAT2 DOWNLINK TNC-B command downlink at 1200 baud
437.975 PCSAT2 DOWNLINK User Voice Repeater with VHF uplink
437.975 PCSAT2 DOWNLINK Packet digipeater with VHF uplink

It looks like PCSAT2 can best contribute at this time by operating in PSK-31 mode for the near future. This is a very exciting new transponder mode which solves the congestion problem on FM repeaters by letting multiple stations all communicate at the same time.

PSK-31 users are welcome to try out the new PCSAT2 PSK-31 transponder on ISS with an uplink on 29.402 +/- 1 KHz and downlink on 435.275 +/- Doppler using FM.

The FM downlink lets everyone operate full duplex and everyone to see the same view of the passband as everyone else. THus you can see exactly what your signal looks like to everyone else.

Help Wanted: PCSat2 PSK-31 Operations Coordinator Needed

To save power and to avoid any potential interferece to any ISS School contacts, the PSK-31 transponder is only on when a responsible PC2PSK control station in the ISS/PCSat2 footprint turns it on.

If you are interested in PSK-31 operations and want to volunteer to coordinate all the other operators and operations, then we have a job for you. This PSK-31 operations coordinator, who has become fully familiar with ARISS operations, can next start to organize the pass-by-pass PSK-31 control ops.

Contact Bob Bruninga, WB4APR, at wb4apr@amsat.org if you wish to volunteer as the PCSat2 PSK-31 coordinator. Until the PCSat2 team is able to introduce the new coordinator please do not volunteer as a pass control operator.

Refer to this page:

http://www.ew.usna.edu/~bruninga/pec/pc2ops.html

For information about the PCSat2 PSK-31 transponder and a diagram showing a basic configuration for PSK-31 earth stations.

Update August 14, 2005

The PCSat2 team sends a, "Thank You!", to all of the AMSAT and APRS stations feeding science and telemetry data from 437.975 to the APRS-IS. This data feeds the live telemetry page and lets everyone see how the spacecraft is doing around the world: http://www.pcsat2.info

We do, of course, need more stations feeding telemetry, especially from those stations in unusual footprints such as Hawaii and remote areas of the USA, Europe and downunder. More stations capable of receiving and forwarding 9600 baud data would be especially helpful.

The PCSat2 telemetry team plans to write-up a set of turn-key instructions on how to set up a satgate so that others not familiar with APRS can easily join this satgate network. In the interim, stations that wish to experiment and learn can begin using any version of APRS or download the stand-alone ALOGGER 2.02 program from

http://www.billdiaz.dynip.com/.

To set up a satgate, just tune a radio and TNC to one of these channels:

437.975 9600 bd for PCSAT2 data
437.975 1200 bd for PCSAT2 telemetry
145.800 for ARISS packet data
145.825 for the original PCsat

You will need to run your favorite APRS software and connect to satgate.aprsca.net:10150. ALOGGER, mentioned previously now has serial port support for a TNC as a satgate monitoring station.

For the overall PCSAT2 Operations system, see
http://www.ew.usna.edu/~bruninga/pec/pc2ops.html

An on-line overview of PCSAT2 telemetry can be found at:
http://www.pcsat2.info

1200 baud telemetry is just an occasional packet every 10 or 60 seconds. 1200 baud stations can simply feed their downlinks directly into the global APRS system like normal. These will help update the LIVE PCSAT2 telemetry page by G4DPZ at:
http://www.pcsat2.info/PCSat2Web/RealTime.jsp

Packets seen from PCSAT2 can be reviewed at:
http://www.findu.com/cgi-bin/pcsat2.cgi

A screen shot of both the 9600 bps and 1200 bps decoded data as seen by Simon, 9W2QC, can be seen at:
http://www.9w2qc.net/pcsat2/

More information on PCSAT2 can be found at:
http://web.usna.navy.mil/~bruninga/pcsat2.html

[ANS-WSR thanks Bob, WB4APR and the U.S. Naval Academy Satellite Lab for the aboveinformation.]

[08142005}
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Mode: PBBS - OFF
      FM REPEATER - V/U HIGH POWER

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
Analog voice uplink: 145.880 MHz FM
145.920 MHz FM 67Hz PL tone
1268.700 MHz FM 67Hz PL tone

Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast Protocol (PBP)

Broadcast: PECHO-11
BBS: PECHO-12

Current scheduled operating modes:

15 Aug
FM Repeater, V/S
Uplink: 145.920 mhz FM, 67hz PL Tone
Downlink 2401.200 mhz FM

22 Aug
FM Repeater, V/U
Uplink: 145.920 mhz FM, 67 hz PL Tone
Downlink 435.300 mhz FM
9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 435.150 mhz FM, 9k6 PBP Digital

[ANS-WSR thanks Mike, KE4AZN for the above information]
[07312005]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Non-Operational?????

Uplink/downlink: 145.827 MHz 1200 baud AX.25 AFSK via W3ADO-1
Aux/Uplink: 435.250 MHz 9600 baud via PCSAT-2 (off)
APRS Downlink: 144.390 MHz (Region 2)

PCSat is a 1200-baud APRS digipeater designed for use by stations using hand-held or mobile transceivers. Downlinks feed a central web site at: http://pcsat.aprs.org

The APRS-equipped PCSat was built by midshipmen from the U.S. Naval Academy under the guidance of Bob Bruninga, WB4APR.
[07242005]
=====
CUTE-1
Catalog number: 27844

Launched: June 30,2003

Status: Operational

Uplink: ?
Downlink: 436.8375 CW
              437.4700 1200 FM ax25 or SRLL (ACTIVE only near Japan ?)
Cliff, K7RR reports:
In the latest Weekly Satellite Report, CUTE 1, #27844 is listed as OPERATIONAL?
Indeed it is very operational as a CUBESAT sending CW telemetry on 436.8345 MHz. At the July 7 2005, 23:45:20 pass over the Western USA:
CUTE 1 6B A4 xx 7F D7 66A8 4702 FF FF7C 65
CUTE 1 6C A6 59 80 D9 66A8 4702 FF FE7C B6

The June 30th KEPS were within ten seconds of AOS and LOS. It is an very good object to practice tracking as the orbit and transmitter power are similar to proposed CUBESATS awaiting launch this December. As a check for Doppler correction, the lack of change in tone is an excellent indicator.

CUTE 1 is a Japanese (Tokyo Institute of Technology) one kilogram nanosatellite that was launched by a Rokot rocket from Plesetsk at 14:15 UT on 30 June 2003. It carries a 100 mW beacon at 436.8375 MHz. Initial orbital parameters were period 101.4 min, apogee 831 km, perigee 819 km, and inclination 98.7?.

For further info about CUTE-1 goto:
http://lss.mes.titech.ac.jp/ssp/cubesat/operation/Schedule_e.html

[ANS WSR wishes to thank Cliff, K7RR, for this week's information]
[07242005]
=====
GO-32 TECHSAT-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Downlink: 435.225 MHz FM (9600-baud FSK)
                   (435.325 n/a - temperature problems)
Uplinks: 145.850, 145.890, 145.930 FM
                   1269.700, 1269.800, 1269.900 FM
Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[03132005]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Operational

Uplink: 145.850 or 145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz
Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[05152005]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Semi-operational, the digipeater command is on and open for APRS users.

Uplink: 145.90 145.92 145.94 145.96 MHz FM
(using 1200-baud Manchester FSK)
Downlink: 437.026 MHz SSB (1200-baud PSK)
Mode-S Beacon: 2401.1428 MHz
Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

A WOD collection of current graphics along with general information and telemetry samples can be found at:
http://www.telecable.es/personales/ea1bcu
[05092004]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational?

Telemetry Downlink: 145.826 MHz. FM (1200-baud AFSK).
approx. 10 days ON, 10 days OFF
Mode-S Beacon: 2401.500 MHz. ... OFF
UHFBeacon: 435.025 MHz. ... OFF

Clive Wallis wrote, "Very many thanks for all the recent reports of OSCAR-11, on AMSAT-BB and by direct e-mails. I received the good news, on Saturday morning, while at the AMSAT-UK Colloquium. This was entirely unexpected!

When I returned home on Sunday, I heard the passes at 17:21 & 19:02 UTC, and have heard many others since.

Signals seem to be weaker than usual. However,since I last heard the satellite on 30 April, I've reinstalled my antennas , which makes comparisons difficult.

All the analogue telemetry channels, 0 to 59 are zero, ie they have failed. The status channels 60 to 67 are still working. One bit in channel 62, DSR mode, has changed from WRITE to READ. DSR is the Digital Store & Readout experiment. This could be significant if the experiment is still drawing current, but the other status bit indicates thet it is switched OFF.

The on-board clock is now showing a very large error. It has lost approximately 15 days since 30 April. I'll be monitoring the clock closely to see whether it changes at a constant rate, in future passes.

Eclipses should end around mid August. That should help the satellite to continue transmitting.

If the watchdog timer is still working, the satellite should switch OFF in the next 10 to 20 days. I would appreciate if listeners could just make a note of the DATE & UTC time when they hear the satellite, so that when it switches OFF we can determine when it was last heard. Please post your reports to AMSAT-BB or e-mail me direct g3cwv@amsat.org, but NOT until it switches OFF!

[ANS-WSR thanks Clive, G3CWV, for the above information]

More information on UO-11 OSCAR-11 can be found at:
http://www.users.zetnet.co.uk/clivew/

MPEG3 files can be found here at Mineo, JE9PEL website:
http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm

[08072005]
NNNN
/EX

SB SAT @ AMSAT <KB9MMC $ANS-226.S3
WSR 226 Part 3 08/14/2005

AMSAT NEWS SERVICE BULLETIN 226.S3 FROM AMSAT HQ
SILVER SPRING, MD, AUGUST 14, 2005
TO ALL RADIO AMATEURS
BID: $ANS-226.S3

THE FOLLOWING ARE IN ORBIT BUT ARE
NON-OPERATIONAL AT THIS TIME:

POSAT-1 PO-28
Catalog Number: 22829
Launched : September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 435.250 MHz
435.275 MHz

Uplink: 145.925 MHz
145.975 MHz

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

PO-28 (POSAT-1), Portugal's first satellite, launched 12 years ago, will be turned over to Amateur Radio use in the very near future. That was the word July 30 from AMSAT-UK Secretary Jim Heck, G3WGM, during the AMSAT-UK International Space Colloquium in Guildford, England.

Launched September 25, 1993, the satellite operated as a packet store-and-forward BBS (9600 baud FM FSK) on Amateur Radio frequencies for several weeks in early 1994. Over the years, PO-28's primary usage has been commercial, although plans have called for eventually shifting its operation to ham radio use. G3WGM reports that following lengthy negotiations it has been agreed that the satellite can be switched permanently to amateur frequencies. The changeover is expected to take a couple of weeks.

The Portuguese satellite was built at the University of Surrey as part of a collaborative satellite technology program that involved industry and academe. Uplink frequencies will be 145.925 and 145.975 MHz. Downlink frequencies will be 435.250 and 435.275 MHz. More information on PO-28 is on the AMSAT Web site http://www.amsat.org/amsat/sats/n7hpr/po28.html.

Uplink Frequencies: 145.925 and 145.975 MHz
Downlink Frequencies: 435.250 and 435.275 MHz

Orbit: 822 x 800 km, 98.6 deg inclined, sun-synchronous.

Transponder capabilities include FM repeater and 38k4 data. If you want to hear how loud this satellite is, listen on 429.950 until the change back to amateur radio service.

Keplerian elements for PO-28 are not currently contained in the AMSAT keps bulletins, but can be found at Celestrak in amateur.txt using the name "POSAT". Users of Space Track should query the NORAD Satellite ID number 22829. The name listed by Space Track is "EYESAT A".

More information of POSAT-1 can be found at:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
http://www.amsat.org/amsat/sats/n7hpr/po28.html
[ANS-WSR wishes to thanks Trevor, M5AKA and Jim, G3WGM, for this week's information.]
[08072005]

=====

AO-10 OSCAR 10
Catalog number: 14129

```
Launched: June 16, 1983

Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB
Beacon:   145.810 MHz (unmodulated carrier)

AO-10 has been locked into a Mode-B, 70-cm uplink and
2-meter downlink for several years.

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: Non-operational

Uplink:             145.875 145.900 145.925 145.950 MHz FM (1200-baud)
Downlink:           435.812 MHz SSB
Broadcast Callsign: ITMSAT-11
BBS:                ITMSAT-12

Alberto E. Zagni - I2KBD reports on 02/13/05
The spacecraft is in MBL (safe mode) and is trasmitting just 6 channels
of telemetry. Temperatures and voltage are nominal, but there seems to
be a problem with the onboard receiver, refusing to accept commands.
The spacecraft was launched in 1993, thus nearing 12 years in orbit...

Best regards
Alberto E. Zagni - I2KBD
ITAMSAT Mission Director

More information of IO-26 can be found at:

http://joshua.micronet.it/english/itamsat/itamsathome.html
http://www.amsat.org/amsat/sats/n7hpr/io26.html
www.itamsat.org

[02132005]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink:   21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB
Beacon:   29.408 MHz
```

Robot: 29.454 MHz
[05232004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB
Beacon: 145.860 MHz
Robot: 145.908 MHz
[05232004]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink 145.975 MHz FM
Downlink 435.070 MHz FM
[05092004]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink: 145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM
Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01092005]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational?

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB
Beacon: 29.352 MHz (intermittent)
SSB meeting frequency: 29.380 MHz (unofficial)

John, KD6PAG reports on June 16, 2004 to ANS:
RS-15 beacon seemed to be back in the mode where it's a tone about 5 seconds off and then 5 seconds on this morning.

ANS is looking for more confirmations of RS-15 coming back.

```
[ANS thanks John, KD6PAG for RS-15 information]
[06202004]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplink:             145.84 145.86 145.88 145.90 MHz FM
                    (using 1200-baud Manchester FSK)
CW downlink:        437.125 MHz
Digital downlink:   437.150 MHz SSB (RC-BPSK 1200-baud PSK)
Broadcast Callsign: LUSAT-11
BBS:                LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[05232004]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Uplink:     145.90 to 146.00 MHz CW/LSB
Downlink:   435.80 to 435.90 MHz CW/USB
Beacon:     435.795

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[08152004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink:             145.900 MHz FM (9600-baud FSK)
Downlink:           435.170 MHz FM
Broadcast Callsign: HL01-11
BBS:                HL01-12

Jim, AA7KC, reports that KO-23's downlink transmitter continues in a
non-operational status.
[05092004]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993
```

Status: Non-operational

Uplink: 145.980 MHz FM (9600-baud FSK)
Downlink: 436.500 MHz FM
Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink frequency (listed on the PanSat web site) 436.500 MHz

The satellite is not available for general uplink transmissions.

The Naval Postgraduate School developed PanSat. At the time of launch, PanSat spread-spectrum digital transponders were to be available to Amateur Radio operators along with software to utilize this technology.

The satellite is still operating, however, the spread spectrum packet radio portion never took place. The spacecraft is now beyond it's initial 2-year mission life, but telemetry records are still being downloaded.

For more information, visit the official PanSat web site at:
http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm

[ANS has no further information]
[05232004]
=====
SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

STatus: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz and 145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[08082004]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlink: 437.025 MHz 437.400 MHz
Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA
web site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[05092004]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

```
Uplink      V-band    145.840 -  145.990 MHz CW/LSB
            U-band    435.550 -  435.800 MHz CW/LSB
           L1-band   1269.250 - 1269.500 MHz CW/LSB
           L2-band   1268.325 - 1268.575 MHz CW/LSB
           S1-band   2400.350 - 2400.600 MHz CW/LSB
Downlink:  S2-band   2401.225 - 2401.475 MHz CW/USB
           K-band 24,048.010 - 24,048.060 MHz CW/USB
Beacon:    2401.323, 24,048.035
```
[05232004]

SO-42 SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational
Downlink: 437.075 MHz
Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[08152004]

=====

SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz
Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[08152004]

=====

NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, callsign KE6QMD, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]

=====

AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Semi-operational.

Uplink 435.275 1200-baud AFSK
Downlink 145.825 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

AO-49 (SAFIR-M) is a German amateur radio payload onboard the small German scientific satellite "RUBIN-2".

AO-49 was built by the German amateur radio association "AATiS e.V." (German acronym for "Arbeitskreis Amateurfunk und Telekommunikation in der Schule", which means: 'working group for amateur radio anand telecommunications in schools'). AO-49 is designed as a "store and broadcast" system for APRS based messages, dedicated for the use of schools in combination with the existing WX-Net and planned buoy experiments in Germany.

No transmissions detected since the 1st of February 2003! It appears AO-49 is not properly aligned to illuminate the solar panels. This should end soon. Due to its orbit, AO-49 will be in a phase without eclipses until 13Feb03.

Martin DG8UAU has written a small software program "SAFIR-M Decoder" to allow decoding of the received DATA0 frames. It is available at: http://amend.gmxhome.de in the section Aktuelles.

Details on AO-49 (SAFIR-M) can be found at:
http://amend.gmxhome.de

Information about AATiS e.V. is available at:
http://www.aatis.de
[05092004]
NNNN
/EX

SB SAT @ AMSAT <KB9MMC $ANS-226.S4
WSR 226 Part 4 08/14/2005

AMSAT NEWS SERVICE BULLETIN 226.S4 FROM AMSAT HQ
SILVER SPRING, MD, AUGUST 14,2005
TO ALL RADIO AMATEURS
BID: $ANS-226.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE PROPOSED FOR LAUNCH AT THIS TIME:

UCISAT ?O-??
Catalog number:
Proposed Launch Date: October 31, 2005

Status: Under Construction

Downlink: Submission in Progress
Uplink: Submission in Progress
Callsign: Submission in Progress

This from Matt Bennett, KF6RTB, UCISAT Communications Team Member:

Our website is www.ucisat.net .This is a new website, however, and doesn't have the "Status" section active yet. Because of the growing interest in our project, I'll push our webmaster to create updates (hopefully) on a week-to-week basis. For now, the current status of the mission is as follows:

-Expected Launch Date: October 31st, 2005
-Frequency Allocation: Submission in Progress

-Construction Status: Sub-Assembly
[WSR to thank Matt Bennett, KF6RTB, for this week's report.]
[01302005]
=====
SSETI ?O-??
Catalog Number:
Proposed Launch Date: LATE 2005

Status: AWAITING LAUNCH

Graham, G3VZV reports:
We have now been advised that the revised launch date for SSETI Express and the other satellites on the DMC3 COSMOS launch has been confirmed as September
27th - so please keep those fingers crossed!

SpaceDaily has a report about SSETI at:
http://www.spacedaily.com/news/internet-04zzzu.html

You can find more info about SSETI at:
http://sseti.gte.tuwien.ac.at/WSW4/

Looking at the website for the SSETI Express webcam
http://sseti.gte.tuwien.ac.at/WSW4/webcam.htm

[ANS thanks Graham, G3VZV for the above information]
[07312005]
=====
PHASE 3E ?O-??
Catalog Number:
Proposed Launch Date: Early 2006

Status: Under Construction

William Leijenaar, PE1RAH reports on July 16th, 2005:

Hi AMSATs,

I always like to inform the AMSATs public about my P3e work, but unfortunatly due to
some reasons there was not much time and nothing much to say...

However, now I am happy to announce that the my MODE-UV transponder design for P3e is ready at the P3e integration place in Marburg (Germany). About 4 weeks ago I was in Marburg before, where the transponder has been checked. Unfortunatly some unsure things were found in the design. The unsure things were about long term stability after many years in space.

At home in The Netherlands, I changed the design with some minor changes to have a secure long term stability. Finally I tested the transponder again and it performed well within the specifications. Again something learned for future transponder designs :o)

Last Wednesday I drove to AMSAT-DL P3e integrations place in Marburg again, and have my transponder again checked. In the beginning it seemed that the 70cm receiver lost 10dB in sensetivity. After some more measurements we find out that it was due to a bad attenuator we used for protection at the input.

Together with Karl Meinzer we looked for any problems, but so far we could see (without HELAPS) all was okay. In the afternoon I went back home again, this time without the MODE-UV.

Now the MODE-UV will get a new home, the home of P3e... :o)
I hope the transponder will work like its elder sister in AO-10, and you all will enjoy it for many years...

It was lots of work to get it this far, but I know it is for a good purpose...

For the latest project status update please visit the AMSAT-DL
P3-E web page:
http://www.amsat-dl.org/p3e/

[ANS-WSR wishes to thank William Leijenaar, PE1RAH for this week's report]
[07172005]
=====
CP1 ?o-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: N6CP
Proposed Transmit Frequency: 436.845
[03272005]
=====
CP2 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.325
[03272005]
=====
HAUSAT1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: D90HP
Proposed Transmit Frequency: 437.465
[03272005]
=====
ICE Cube 1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: W2CXM
Proposed Transmit Frequency: 437.305

```
[03272005]
=====
ICE Cube 2 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: N2VR
Proposed Transmit Frequency: 437.425
[03272005]
=====
ION ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.505
[03272005]
=====
KUTEsat ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: KC0RMW
Proposed Transmit Frequency: 437.385
[03272005]
=====
MEROPE ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: K7MSU-1
Proposed Transmit Frequency: 145.980
[03272005]
=====
nCUBE1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
       2407.25
[03272005]
=====
RINCON ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
        437.345
[03272005]
=====
SACRED ?O-??
```

Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
[03272005]
=====
SACRED ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
[03272005]
=====
SEEDS ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: JQ1YGU
Proposed Transmit Frequency: 437.485
[03272005]
=====
Mea Huaka ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.405
[03272005]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
        888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)

* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/amsat/listserv/menu.html

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satelite Report Editor is James K. Darrow, KB9MMC.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

Via the ans mailing list at AMSAT.ORG courtesy of AMSAT-NA.
To unsubscribe, send "unsubscribe ans" to Majordomo@amsat.org

---

From 2614038284327978312
X-Google-Thread: 10e8ad,ec4170ccb58b7102,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news3.google.com!news.glorb.com!
border1.nntp.dca.giganews.com!border2.nntp.dca.giganews.com!nntp.giganews.com!
elnk-atl-nf1!newsfeed.earthlink.net!stamper.news.atl.earthlink.net!
newsread2.news.atl.earthlink.net.POSTED!46041641!not-for-mail
From: "JoAnne Maenpaa" <wb9jej_no-spam@earthlink.net>
Newsgroups: rec.radio.amateur.space
Subject: ANS-233 AMSAT Weekly News Bulletin
Lines: 397
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <TBjOe.24$9i4.1@newsread2.news.atl.earthlink.net>
Date: Mon, 22 Aug 2005 12:32:51 GMT

NNTP-Posting-Host: 64.105.116.183
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread2.news.atl.earthlink.net 1124713971 64.105.116.183 (Mon, 22 Aug 2005 05:32:51 PDT)
NNTP-Posting-Date: Mon, 22 Aug 2005 05:32:51 PDT
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news1.google.com rec.radio.amateur.space:228

AMSAT NEWS SERVICE
ANS-233

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:

* AMSAT Symposium Reminder
* AMSAT Symposium Agenda
* AMSAT Election Deadline Approaching
* Software Defined Transponder Prototype On-the-Air
* AMSAT Website Technical Review Team Formed
* New AMSAT Video News Released
* ARISS Status - 15 August 2005
* OSCAR 11 Report - 15 August 2005

SB SAT @ AMSAT $ANS-233.01
AMSAT Symposium Reminder

AMSAT News Service Bulletin 233.01
From AMSAT HQ SILVER SPRING, MD.
August 21, 2005
To All RADIO AMATEURS
BID: $ANS-233.01

Space! Ham radio goes there and you can join in the fun! Come to the AMSAT Technical Symposium and Annual Meeting this fall in lovely Lafayette, Louisiana. Education and technical sessions begin on Friday, the 7th of October. Technical, Field Ops, and the IARU forum follow through Sunday the 9th of October. Enjoy the best of Acadian Louisiana with Friday's "Shrimp Boil," Saturday's Banquet with great prizes, and Sunday's "Swamp Tour."

This year represents the first time that you can register for the Symposium online! To get the $10 early registration discount, registrations must be received by 15 September 2005. For more, see:

http://www.amsat.org/amsat-new/symposium/.

[ANS thanks the AMSAT Symposium team for the above information]

/EX

SB SAT @ AMSAT $ANS-233.02
AMSAT Symposium Agenda

AMSAT News Service Bulletin 233.02
From AMSAT HQ SILVER SPRING, MD.
August 21, 2005
To All RADIO AMATEURS
BID: $ANS-233.02

Thursday, 6 October 2005

8 am-Noon	AMSAT Board Meeting
Noon-1 pm	Lunch Break
1 pm-5 pm	AMSAT Board Meeting
5 pm-6 pm	Dinner Break
6 pm-9 pm	AMSAT Board Meeting

Friday, 7 October 2005

8 am-Noon	AMSAT Board Meeting
1 pm-5 pm	AMSAT Symposium
5:30 pm	Shrimp boil
7:30 pm	President's Club Meeting

Saturday, 8 October 2005

8 am-noon	AMSAT Symposium
Noon-1 pm	Lunch on own
1 pm-1:30 pm	Awards Ceremony
1:30-4 pm	AMSAT Symposium
4 pm-5 pm	AMSAT Annual Meeting
7-7:30 pm	Attitude Adjustment
7:30-10 PM	Banquet

Sunday, 9 October 2005

7 am-8:30 am	Area Coordinators Breakfast
7:30 am	First Swamp Tour
9:30 am	Second Swamp Tour
11:00 am	IARU Meeting

[ANS thanks the AMSAT Symposium team for the above information]

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SB SAT @ AMSAT $ANS-233.03
AMSAT Election Deadline Approaching

AMSAT News Service Bulletin 233.03

From AMSAT HQ SILVER SPRING, MD.
August 21, 2005
To All RADIO AMATEURS
BID: $ANS-233.03

With the deadline for the receipt of ballots for the AMSAT Board of Directors less than a month away, Bill Hook, W3QBC, who heads up AMSAT's Ballot Counting Committee, advises that to date only 609 ballots have been received. This amounts to only 15% of the total number of ballots mailed to members.

Votes are needed to select the 4 best qualified to serve among the 8 candidates. The biographical information as submitted by the Candidates can be found on the AMSAT website at
http://www.amsat.org/amsat-new/AboutAmsat/candidate_bios.php

To be counted, ballots must be received at the AMSAT office before the close of business on Thursday, 15 September 2005.

[ANS thanks Bill W3QBC for the above information]

/EX

SB SAT @ AMSAT $ANS-233.04
Software Defined Transponder Prototype On-the-Air

AMSAT News Service Bulletin 233.04
From AMSAT HQ SILVER SPRING, MD.
August 21, 2005
To All RADIO AMATEURS
BID: $ANS-233.04

At the labs of CNS Systems, Inc. in Md. (W2GPS business), W2GPS, W3IWI, and N4HY made the first on-the-air tests using a prototype software defined transponder on 16 August 2005. A sucessful three way QSO was conducted in a 45 Khz wide transponder. An audio clip of this first QSO is available at
ftp://ftp.cnssys.com/pub/amsat/Eagle_SDT_1st_Contact.mp3

At the AMSAT Symposium in Louisiana, the plan is to have both the Mode B and the Mode A transponder fully functional and usable by all. We will show the power of using software defined radio for the transponders by having 1/2 of the transponder divided into two or three FM channels and the other half fully linear whilst adding 400bps AMSAT standard beacon in the middle, AND on command, switch it to fully linear, etc.

We will incorporate the Stella AGC algorithms developed by Howard, G6LVB, adapted to our hardware for the demonstration in Lousiana. Expect to be able to conduct SSB, CW, FM, etc. QSO's on Mode A, Mode B and Mode LS if time permits.

[ANS thanks Bob, N4HY for the above information]

/EX

SB SAT @ AMSAT $ANS-233.05
AMSAT Website Technical Review Team Formed

AMSAT News Service Bulletin 233.05
From AMSAT HQ SILVER SPRING, MD.
August 21, 2005
To All RADIO AMATEURS
BID: $ANS-233.05

Barry Baines, WD4ASW, AMSAT's VP-Marketing & User Services is pleased to announce that our Website Technical Review Team, under the leadership of Gould Smith, WA4SXM has been formed. Gould serves as Director-Field Operations and is the author of a number of AMSAT books. He is well qualified to handle this important task with the assistance of a very capable team that he has formed. The team that Gould has developed consists of AA2TX, KO4MA, KQ6EA, N8FGV, and VA3DB.

The team has begun a systematic look at the content of the AMSAT website for technical issues, and is assigning a priority to identified items. The first areas the team is addressing are the Glossary and the Mode J operation article. When appropriate, they will seek input from other individuals who may be knowledgeable in particular areas. Two members of the team will OK articles for technical content with final approval from Gould before he forwards them for inclusion on the website.

"Our team is excited about updating the technical content of our website" says Gould Smith, WA4SXM. "However, this will take some time and will require thoughtful evaluation. In looking at the Glossary for example, we have found through our initial research that even the experts sometimes disagree on proper definition of technical terms. We want the AMSAT website to be a trusted and reliable source."

Emily Clarke, W0EEC serves as Director-Website and will be working closely with Gould to implement changes as they are developed.

Should website visitors wish to suggest areas of current website technical content for the team's consideration or are interested in submitting suggested technical changes or updates, they can do so by contacting Gould Smith, WA4SXM using his AMSAT e-mail alias. Please put 'Website Technical Review' in the subject line. Gould and several members of the team will be attending the AMSAT Symposium in Lafayette, LA (7-9 OCT 2005) and are interested in hearing comments from attendees concerning their thoughts on the updating of technical content of our website.

[ANS thanks Barry, WD4ASW for the above information]

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SB SAT @ AMSAT $ANS-233.06
New AMSAT Video News Released

AMSAT News Service Bulletin 233.06
From AMSAT HQ SILVER SPRING, MD.
August 21, 2005
To All RADIO AMATEURS
BID: $ANS-233.06

AMSAT's Director of Video Services, Don Jacob, has posted a number of new video packages centering around Dayton 2005 & Space Day at the Smithsonian which are available for stream viewing on the AMSAT Web Site: www.amsat.org

Select the box on the left entitled "AMSAT Video News" and take a look.

Enjoy,
AMSAT Video Department

[ANS thanks Gunther, W8GSM for the above information]

/EX

SB SAT @ AMSAT $ANS-233.07
ARISS Status - 15 August 2005

AMSAT News Service Bulletin 233.07
From AMSAT HQ SILVER SPRING, MD.
August 21, 2005
To All RADIO AMATEURS
BID: $ANS-233.07

1. ARISS Student Pursues Astronaut Career

Stephanie Radcliff was a student at Daviess County High School (DCHS) in Owensboro, Kentucky when the school experienced an ARISS contact on May 31, 2001. She had prepared three questions to ask astronaut Susan Helms, KC7NHZ, that day, including one concerning future space explorations.

Four years later, on August 12, 2005, Stephanie returned to her alma mater to speak to the students there. She is now a graduate of Emory-Riddle University, and holds a degree in the aerospace field. She has taken the first steps toward becoming an astronaut and hopes to be accepted for astronaut training. Harold Wilson, the coordinating teacher of the DCHS - ARISS contact, remarked that it was the ARISS contact which inspired Stephanie to pursue this career choice.

2. PCSAT2/MISSE5 Status

The PCSAT2 PSK-31 transponder was turned on. It uses an uplink on 29.402

+/- 1 KHz and downlink on 435.275 +/- Doppler using FM . For more information, see: http://www.ew.usna.edu/~bruninga/pec/pc2ops.html

3. ARISS International Meeting

ARRL ran a story on the ARISS International face-to-face Meeting held at the University of Surrey. The article, entitled, "ARISS Delegates Urged to Cast Eye on Future of Ham Radio in Space," may be found on their website. See: http://www.arrl.org/news/stories/2005/08/12/106/?nc=1

ARISS delegate Rosalie White is currently working on the minutes of the U.K. meeting. They will be posted on the ARISS and AMSAT websites in the near future.

The next ARISS International Teleconference will be held on Tuesday, 23 August 2005.

4. Australian News Article on Astronaut's Father

The Australian newspaper, The Age, ran a story on Adrian Thomas. Thomas, father of astronaut Andy Thomas, was waiting apprehensively for word of Discovery's landing. A ham friend of his had been listening to NASA's channel, and called to let him know that the shuttle was heading for a safe landing in California. "Ham radio call ends father's anxious wait," may be found at:
http://www.theage.com.au/news/national/ham-radio-call-ends-fathers-anxious-wait/2005/08/10/1123353330011.html

5. Astronaut to Visit ARISS School

Astronaut Leroy Chiao, KE5BRW, plans to visit Fairview Elementary School in Mount Prospect, Illinois. Chiao visited the school in May, 2004, before his space flight, and. he exchanged e-mails and photos with the school, and participated in an ARISS contact with the children on 10 February 2005 during his Expedition 10 increment. The date for his visit has not yet been set, but 7 September 2005 is being considered. Fairview has posted on their website photos of Chiao's first visit, and the audio and questions from the ARISS contact. See:
http://fairview.dist57.org:16080/spacewebsite/fvspacecontact.html

6. Teaching from Space Teleconference Held

A teleconference was held on Thursday, August 10 between ARISS-U.S. members and the Teaching from Space Office at JSC. Education Specialist Jonathan Neubauer will be the point of contact for ARISS and the Education Office. ARISS extends a welcome to Jon!

[ANS thanks Carol, KB3LKI for the above information]

/EX

SB SAT @ AMSAT $ANS-233.08
OSCAR 11 Report - 15 August 2005

AMSAT News Service Bulletin 233.08
From AMSAT HQ SILVER SPRING, MD.
August 21, 2005
To All RADIO AMATEURS
BID: $ANS-233.08

OSCAR-11 REPORT

15 August 2005

OSCAR-11 is back! I received the good news, on Saturday morning, while at the AMSAT-UK Colloquium. This was entirely unexpected! On Sunday morning Bob G4VRC played me a recording of an early morning pass received that day.

During the period 21 July to 14 August 2005 consistent signals have been heard from 30 July to 08 August. Signals seem to be weaker than usual, confirmed by the many reports received. However,since I last heard the satellite on 30 April, I've reinstalled my antennas , which makes comparisons difficult.

Many thanks for all the recent reports of OSCAR-11 including those from KU7Z (who heard it first), KB2M, VK6XH, HK7MKE, KA2UPW, JE9PEL, G1OCN, HB9SKA and G8OQW.

All the analogue telemetry channels, 0 to 59 are zero, ie they have failed. The status channels 60 to 67 are still working. One bit in channel 62, DSR mode, has changed from WRITE to READ. DSR is the Digital Store & Readout experiment. This could be significant if the experiment is still drawing current, but the other status bit indicates that it is switched OFF.

The on-board clock is now showing a very large error. It has lost approximately 19 days since 30 April. During the recent data collection period, the clock error has been changing at a decreasing rate. The size of the clock error and the rate at which it is changing is similar to the duration of the solar eclipse periods. This suggests that the clock might have been switching OFF during eclipses.

The eclipses have now ended, and the satellite should be in continuous sunlight for the remainder of this year, and well into next year. This should help the satellite to continue transmitting, although continuous sunlight can cause problems due to excessive temperatures.

If the watchdog timer is still operating on a 20 day cycle, ie. approximately ten days ON followed by 10 days OFF, then the VHF beacon should resume transmissions around 18 August.

The Beacon frequencies are -

VHF 145.826 MHz. AFSK FM ASCII Telemetry

UHF 435.025 MHz. OFF

S-band 2401.5 MHz. OFF

Listeners to OSCAR-11 may be interested in visiting my website which contains an archive of news & telemetry data. It also contains details about using a soundcard or hardware demodulators for data capture. There is software for capturing data, and decoding ASCII telemetry. The URL is www.users.zetnet.co.uk/clivew/

If you place this bulletin on a terrestrial packet network, please use the bulletin identifier $BID:U2RPT112.CWV, to prevent duplication.

[ANS thanks Clive, G3CWV for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Lee McLamb, KU4OS
ku4os at amsat dot org

From -6958000231413046433
X-Google-Thread: 10e8ad,363d31ea86787e74,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!news.maxwell.syr.edu!
border1.nntp.dca.giganews.com!border2.nntp.dca.giganews.com!nntp.giganews.com!
elnk-atl-nf1!newsfeed.earthlink.net!stamper.news.atl.earthlink.net!
newsread2.news.atl.earthlink.net.POSTED!46041641!not-for-mail
From: "JoAnne Maenpaa" <wb9jej_no-spam@earthlink.net>
Newsgroups: rec.radio.amateur.space
Subject: WSR-233 AMSAT Weekly Satellite Status Report
Lines: 1270
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <OCjOe.25$9i4.24@newsread2.news.atl.earthlink.net>

Date: Mon, 22 Aug 2005 12:33:50 GMT
NNTP-Posting-Host: 64.105.116.183
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread2.news.atl.earthlink.net 1124714030 64.105.116.183 (Mon, 22 Aug 2005 05:33:50 PDT)
NNTP-Posting-Date: Mon, 22 Aug 2005 05:33:50 PDT
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news1.google.com rec.radio.amateur.space:229

This report is organized into 4 parts.
Part 1 - operational analog amateur satellites.
Part 2 - operational digital amateur satellites.
Part 3 - non - operational satellites
Part 4 - proposed satellites

SB SAT @ AMSAT <KB9MMC $ANS-233.S1
WSR 233 Part 1 08/21/2005

AMSAT NEWS SERVICE BULLETIN 233.S1 FROM AMSAT HQ
SILVER SPRING, MD, AUGUST 21, 2005
TO ALL RADIO AMATEURS
BID: $ANS-233.S1

VO-52 HAMSAT
Catalog Number: 28650
Launch Date: May 05,2005

Status: On orbit
Current Mode: U/V

Proposed frequencies:

Indian transponder:
Uplink : 435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW
Beacom : 145.940MHz continue carier signal

Dutch transponder:
Uplink : 435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW
Beacon : 145.860MHz 12WPM with CW message
[07242005]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Mode: PBBS - OFF
      FM REPEATER - V/U HIGH POWER

Analog voice downlink: 435.300 MHz FM
         435.150 MHz FM

Analog voice uplink: 145.880 MHZ FM
145.920 MHz FM 67Hz PL tone
1268.700 MHz FM 67Hz PL tone

Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast
Protocol (PBP)

Broadcast: PECHO-11
BBS: PECHO-12

Current scheduled operating modes:

22 Aug
FM Repeater, V/U
Uplink: 145.920 mhz FM, 67 hz PL Tone
Downlink 435.300 mhz FM
9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 435.150 mhz FM, 9k6 PBP Digital

[ANS-WSR thanks Mike, KE4AZN for the above information]
[07312005]

=====

SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Uplink: 145.850 MHz (67.0 Hz PL tone) (See below for operating
procedures)
Downlink: 436.795 MHz

There have been unconfirmed reports on the amsat-bb remailer that SO-50 has
shifted downlink frequency as much as 5khz up. This both from Europe.

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The
order of operation is thus: (allow for Doppler as necessary)

1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm
the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT
the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window
will reset the 10 minute timer.

[09122004]

=====

FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: OPERATIONAL

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplink: 145.850 145.870 145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

John, N4QWL reports on July 16th, 2005:

Last evening I had a AOS to LOS qso with WI2W. FO-29 came up at 01:17z here in FM07 and I found WI2W and we chatted until 01:33z. The satellite was at 2 degrees elevation when I finally heard him start to crackle a bit. What a great QSO! To think that I watched this bird launch back in 1996 and it is still working so well is a real thrill. I believe I still have the video. I might just look for it and watch it again. Boy do I love this satellite stuff! Look for you all up there.

Please send the reception reports to lab2 'at' jarl.or.jp.
Please use the subject line: 'FO-29 reception report'.

Mineo, JE9PEL, has an FO-29 satellite telemetry analysis program that will automatically analyze all digital telemetry from the satellite (such as current, voltage and temperature). FO29CWTE is available at:
http://www.ne.jp/asahi/hamradio/je9pel/
[ANS-WSR wishes to thanks John, N4QWL for this week's report]
[07172005]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Uplink: 145.850 MHz FM
Downlink: 436.795 MHz FM

The latest information on AO-27 from control operator Michael Wyrick, N3UC (former N4USI), can be found at:
http://www.ao27.org

An AO-27 question-and-answer page is available on the AMSAT-NA web site, with updates by Ray, W2RS. The URL is:
http://www.amsat.org/amsat/intro/ao27faq.html

[ANS-WSR thanks John, K6YK, for this week's AO-27 report]
[08292004]

=====

AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Semi-operational in sunlight.
Return to active status: June 21,2002

Uplink:	145.850 to 145.950 MHz CW/USB Mode A
	432.125 to 432.175 MHz CW/LSB Mode B
Downlink:	29.400 to 29.500 MHz CW/USB Mode A
	145.975 to 145.925 MHz CW/USB Mode B
Beacon:	29.502 MHz, 145.972 MHz, 435.1 MHz, 2304.1 MHz

Emily, W0EEC has created a website to allow the users of AO-7 to record contacts, observations and use of the satellite more effectively at:
http://www.emilyshouse.com/experthams/ao7/main.php
This includes the ability to log contacts.

Tim, K3TZ has written a program to decode AO-07 telemetry.
The program can be downloaded at:
http://www.qsl.net/k3tz/files/K3TZ_AO-07_Telemetry_Decoder_0.5.zip

For more AO-7 info:
http://www.amsat.org/amsat/sats/n7hpr/ao7.html
[11142004]

=====

INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: U/V CROSS-BAND REPEATER
Digipeater: Inactive

The current Expedition 11 crew is:
Commander Sergei Krikalev
Flight Engineer John Phillips

Worldwide packet uplink:	145.990 MHz FM
Region 1 voice uplink:	145.200 MHz FM
Region 2/3 voice uplink:	144.490 MHz FM
Worldwide downlink:	145.800 MHz FM

Repeater Uplink:	437.800 MHz FM
Repeater Downlink:	145.800 MHz FM

Doppler Shift is 10 KHz

Russian callsigns:	RS0ISS, RZ3DZR
USA callsign:	NA1SS
Packet station mailbox callsign:	RS0ISS-11
Packet station keyboard callsign:	RS0ISS-3
Digipeater callsign:	ARISS

This off the ARISS webpage:
http://www.rac.ca/ariss/oindex.htm#New%20ARISS%20Operations :
The ARISS program is pleased to announce that the amateur radio equipment aboard the International Space Station is now operating in cross-band repeat mode. We realize that many of you will miss the packet-operating mode. However, cross-band repeat allows further experimentation of the ISS amateur radio system

The downlink for this operating mode remains the same, so listen for the station on 145.80 MHz. The new uplink frequency is 437.80 MHz. All frequencies are subject to Doppler shifting. For further information on working satellites and adjusting for Doppler shift, please review Emily Clark's (W0EEC) excellent presentation on AMSAT's website:
http://www.amsat.org/amsat-new/information/faqs/Intro_sats.pdf

The ISS daily crew schedule can be found at:
http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line is NOT translated from Russian and posted.

More information is available at:
http://www.rac.ca/ariss
http://spaceflight.nasa.gov/station/reference/radio/
http://www.marexmg.org/fileshtml/unprotopage.html
http://www.issfanclub.com
http://oscar.dcarr.org/
[07242005]
NNNN
/EX

SB SAT @ AMSAT <KB9MMC $ANS-233.S2
WSR 233 Part 2 08/21/2005

AMSAT NEWS SERVICE BULLETIN 233.S2 FROM AMSAT HQ
SILVER SPRING, MD, AUGUST 21, 2005
TO ALL RADIO AMATEURS
BID: $ANS-233.S2

PCSAT2 ?0-??
Catalog Number:
Launch Date: August 1, 2005

Status: Operational

PCSAT2 was installed on the exterior of the International Space Station and was activated on August 3, 2005.

PCSAT2 CAPABILITIES: PCSAT2 is attached to the ISS and so its operations must be in cooperation with the ARISS communications suite to minimize any mutual interference and to coordinate activities. Here are the capabilities of the PCSAT2 and ARISS payloads:

PCSAT SYSTEM A:

435.275 PCSAT2 DOWNLINK 1200 baud packet with uplink on 145.825
435.275 PCSAT2 DOWNLINK Occasional user PSK-31 continuous downlink
145.825 PCSAT2 DOWNLINK 1200 baud packet
PCSAT SYSTEM B:

437.975 PCSAT2 DOWNLINK periodic Solar Cell data and PCSAT2 telemetry at 9600 baud
437.975 PCSAT2 DOWNLINK TNC-B command downlink at 1200 baud
437.975 PCSAT2 DOWNLINK User Voice Repeater with VHF uplink
437.975 PCSAT2 DOWNLINK Packet digipeater with VHF uplink

It looks like PCSAT2 can best contribute at this time by operating in PSK-31 mode for the near future. This is a very exciting new transponder mode which solves the congestion problem on FM repeaters by letting multiple stations all communicate at the same time.

PSK-31 users are welcome to try out the new PCSAT2 PSK-31 transponder on ISS with an uplink on 29.402 +/- 1 KHz and downlink on 435.275 +/- Doppler using FM.

The FM downlink lets everyone operate full duplex and everyone to see the same view of the passband as everyone else. THus you can see exactly what your signal looks like to everyone else.

Help Wanted: PCSat2 PSK-31 Operations Coordinator Needed

To save power and to avoid any potential interferece to any ISS School contacts, the PSK-31 transponder is only on when a responsible PC2PSK control station in the ISS/PCSat2 footprint turns it on.

If you are interested in PSK-31 operations and want to volunteer to coordinate all the other operators and operations, then we have a job for you. This PSK-31 operations coordinator, who has become fully familiar with ARISS operations, can next start to organize the pass-by-pass PSK-31 control ops.

Contact Bob Bruninga, WB4APR, at wb4apr@amsat.org if you wish to volunteer as the PCSat2 PSK-31 coordinator. Until the PCSat2 team is able to introduce the new coordinator please do not volunteer as a pass control operator.

Refer to this page:

http://www.ew.usna.edu/~bruninga/pec/pc2ops.html

For information about the PCSat2 PSK-31 transponder and a diagram showing a basic configuration for PSK-31 earth stations.

Update August 14, 2005

The PCSat2 team sends a, "Thank You!", to all of the AMSAT and APRS stations feeding science and telemetry data from 437.975 to the APRS-IS. This data feeds the live telemetry page and lets everyone see how the spacecraft is doing around the world: http://www.pcsat2.info

We do, of course, need more stations feeding telemetry, especially from those stations in unusual footprints such as Hawaii and remote areas of the USA, Europe and downunder. More stations capable of receiving and forwarding 9600 baud data would be especially helpful.

The PCSat2 telemetry team plans to write-up a set of turn-key instructions on how to set up a satgate so that others not familiar with APRS can easily join this satgate network. In the interim, stations that wish to experiment and learn can begin using any version of APRS or download the stand-alone ALOGGER 2.02 program from

http://www.billdiaz.dynip.com/.

To set up a satgate, just tune a radio and TNC to one of these channels:

437.975 9600 bd for PCSAT2 data
437.975 1200 bd for PCSAT2 telemetry
145.800 for ARISS packet data
145.825 for the original PCsat

You will need to run your favorite APRS software and connect to satgate.aprsca.net:10150. ALOGGER, mentioned previously now has serial port support for a TNC as a satgate monitoring station.

For the overall PCSAT2 Operations system, see
http://www.ew.usna.edu/~bruninga/pec/pc2ops.html

An on-line overview of PCSAT2 telemetry can be found at:
http://www.pcsat2.info

1200 baud telemetry is just an occasional packet every 10 or 60 seconds. 1200 baud stations can simply feed their downlinks directly into the global APRS system like normal. These will help update the LIVE PCSAT2 telemetry page by G4DPZ at:
http://www.pcsat2.info/PCSat2Web/RealTime.jsp

Packets seen from PCSAT2 can be reviewed at:
http://www.findu.com/cgi-bin/pcsat2.cgi

A screen shot of both the 9600 bps and 1200 bps decoded data as seen by Simon, 9W2QC, can be seen at:
http://www.9w2qc.net/pcsat2/

More information on PCSAT2 can be found at:
http://web.usna.navy.mil/~bruninga/pcsat2.html

[ANS-WSR thanks Bob, WB4APR and the U.S. Naval Academy Satellite Lab for the aboveinformation.]

[08142005}
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Mode: PBBS - OFF
FM REPEATER - V/U HIGH POWER

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
Analog voice uplink: 145.880 MHz FM
145.920 MHz FM 67Hz PL tone
1268.700 MHz FM 67Hz PL tone

Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast Protocol (PBP)

Broadcast: PECHO-11
BBS: PECHO-12

Current scheduled operating modes:

22 Aug
FM Repeater, V/U
Uplink: 145.920 mhz FM, 67 hz PL Tone
Downlink 435.300 mhz FM
9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 435.150 mhz FM, 9k6 PBP Digital

[ANS-WSR thanks Mike, KE4AZN for the above information]
[07312005]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Non-Operational?????

Uplink/downlink: 145.827 MHz 1200 baud AX.25 AFSK via W3ADO-1
Aux/Uplink: 435.250 MHz 9600 baud via PCSAT-2 (off)
APRS Downlink: 144.390 MHz (Region 2)

PCSat is a 1200-baud APRS digipeater designed for use by stations using hand-held or mobile transceivers. Downlinks feed a central web site at:

http://pcsat.aprs.org

The APRS-equipped PCSat was built by midshipmen from the U.S. Naval Academy under the guidance of Bob Bruninga, WB4APR.
[07242005]

=====

CUTE-1

Catalog number: 27844
Launched: June 30,2003

Status: Operational

Uplink: ?
Downlink: 436.8375 CW
              437.4700 1200 FM ax25 or SRLL (ACTIVE only near Japan ?)
Cliff, K7RR reports:
In the latest Weekly Satellite Report, CUTE 1, #27844 is listed as OPERATIONAL?
Indeed it is very operational as a CUBESAT sending CW telemetry on 436.8345 MHz. At the July 7 2005, 23:45:20 pass over the Western USA:
CUTE 1 6B A4 xx 7F D7 66A8 4702 FF FF7C 65
CUTE 1 6C A6 59 80 D9 66A8 4702 FF FE7C B6

The June 30th KEPS were within ten seconds of AOS and LOS. It is an very good object to practice tracking as the orbit and transmitter power are similar to proposed CUBESATS awaiting launch this December. As a check for Doppler correction, the lack of change in tone is an excellent indicator.

CUTE 1 is a Japanese (Tokyo Institute of Technology) one kilogram nanosatellite that was launched by a Rokot rocket from Plesetsk at 14:15 UT on 30 June 2003. It carries a 100 mW beacon at 436.8375 MHz. Initial orbital parameters were period 101.4 min, apogee 831 km, perigee 819 km, and inclination 98.7?.

For further info about CUTE-1 goto:
http://lss.mes.titech.ac.jp/ssp/cubesat/operation/Schedule_e.html

[ANS WSR wishes to thank Cliff, K7RR, for this week's information]
[07242005]

=====

GO-32 TECHSAT-1B

Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Downlink: 435.225 MHz FM (9600-baud FSK)
                   (435.325 n/a - temperature problems)
Uplinks: 145.850, 145.890, 145.930 FM
                   1269.700, 1269.800, 1269.900 FM
Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

```
More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[03132005]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Operational

Uplink:             145.850 or 145.925 MHz 9600-baud FSK
Downlink:           437.325 MHz
Broadcast callsign: MYSAT3-11
BBS:                MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial land and weather imaging payloads offers FM and FSK
Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as
a collaborative effort between the Malaysian government and Surrey
Satellite Technology Ltd.
[05152005]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Semi-operational, the digipeater command is on and open for
APRS users.

Uplink:             145.90 145.92 145.94 145.96 MHz FM
                     (using 1200-baud Manchester FSK)
Downlink:           437.026 MHz SSB (1200-baud PSK)
Mode-S Beacon:      2401.1428 MHz
Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

A WOD collection of current graphics along with general information
and telemetry samples can be found at:
http://www.telecable.es/personales/ea1bcu
[05092004]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational?

Telemetry Downlink: 145.826 MHz. FM (1200-baud AFSK).
                    approx. 10 days ON, 10 days OFF
Mode-S Beacon:      2401.500 MHz. ... OFF
UHFBeacon:          435.025 MHz. ...  OFF
```

OSCAR-11 is back! I received the good news, on Saturday morning, while at the AMSAT-UK Colloquium. This was entirely unexpected! On Sunday morning Bob G4VRC played me a recording of an early morning pass received that day.

During the period 21 July to 14 August 2005 consistent signals have been heard from 30 July to 08 August. Signals seem to be weaker than usual, confirmed by the many reports received. However,since I last heard the satellite on 30 April, I've reinstalled my antennas , which makes comparisons difficult.

Many thanks for all the recent reports of OSCAR-11 including those from KU7Z (who heard it first), KB2M, VK6XH, HK7MKE, KA2UPW, JE9PEL, G1OCN, HB9SKA and G8OQW.

All the analogue telemetry channels, 0 to 59 are zero, ie they have failed. The status channels 60 to 67 are still working. One bit in channel 62, DSR mode, has changed from WRITE to READ. DSR is the Digital Store & Readout experiment. This could be significant if the experiment is still drawing current, but the other status bit indicates that it is switched OFF.

The on-board clock is now showing a very large error. It has lost approximately 19 days since 30 April. During the recent data collection period, the clock error has been changing at a decreasing rate. The size of the clock error and the rate at which it is changing is similar to the duration of the solar eclipse periods. This suggests that the clock might have been switching OFF during eclipses.

The eclipses have now ended, and the satellite should be in continuous sunlight for the remainder of this year, and well into next year. This should help the satellite to continue transmitting, although continuous sunlight can cause problems due to excessive temperatures.

If the watchdog timer is still operating on a 20 day cycle, ie. approximately ten days ON followed by 10 days OFF, then the VHF beacon should resume transmissions around 18 August.

The Beacon frequencies are -

VHF 145.826 MHz. AFSK FM ASCII Telemetry

UHF 435.025 MHz. OFF

S-band 2401.5 MHz. OFF

Listeners to OSCAR-11 may be interested in visiting my website which contains an archive of news & telemetry data. It also contains details about using a soundcard or hardware demodulators for data capture. There is software for capturing data, and decoding ASCII telemetry. The URL is www.users.zetnet.co.uk/clivew/

If you place this bulletin on a terrestrial packet network, please use the bulletin identifier $BID:U2RPT112.CWV, to prevent duplication.

[ANS-WSR thanks Clive, G3CWV, for the above information]

More information on UO-11 OSCAR-11 can be found at:
http://www.users.zetnet.co.uk/clivew/

MPEG3 files can be found here at Mineo, JE9PEL website:
http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm

[08212005]
NNNN
/EX

SB SAT @ AMSAT <KB9MMC $ANS-233.S3
WSR 233 Part 3 08/21/2005

AMSAT NEWS SERVICE BULLETIN 233.S3 FROM AMSAT HQ
SILVER SPRING, MD, AUGUST 21, 2005
TO ALL RADIO AMATEURS
BID: $ANS-233.S3

THE FOLLOWING ARE IN ORBIT BUT ARE
NON-OPERATIONAL AT THIS TIME:

POSAT-1 PO-28
Catalog Number: 22829
Launched : September 25, 1993

Status: Operational - Not open for Amatuer use

```
Downlink: 435.250 MHz
          435.275 MHz

Uplink:   145.925 MHz
          145.975 MHz
```

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

PO-28 (POSAT-1), Portugal's first satellite, launched 12 years ago, will be turned over to Amateur Radio use in the very near future. That was the word July 30 from AMSAT-UK Secretary Jim Heck, G3WGM, during the AMSAT-UK International Space Colloquium in Guildford, England.

Launched September 25, 1993, the satellite operated as a packet store-and-forward BBS (9600 baud FM FSK) on Amateur Radio frequencies for several weeks in early 1994. Over the years, PO-28's primary usage has been commercial, although plans have called for eventually shifting its operation to ham radio use. G3WGM reports that following lengthy negotiations it has been agreed that the satellite can be switched permanently to amateur frequencies. The changeover is expected to take a couple of weeks.

The Portuguese satellite was built at the University of Surrey as part of a collaborative satellite technology program that involved industry and academe. Uplink frequencies will be 145.925 and 145.975 MHz. Downlink frequencies will be 435.250 and 435.275 MHz. More information on PO-28 is on the AMSAT Web site http://www.amsat.org/amsat/sats/n7hpr/po28.html.

Uplink Frequencies: 145.925 and 145.975 MHz
Downlink Frequencies: 435.250 and 435.275 MHz

Orbit: 822 x 800 km, 98.6 deg inclined, sun-synchronous.

Transponder capabilities include FM repeater and 38k4 data. If you want to hear how loud this satellite is, listen on 429.950 until the change back to amateur radio service.

Keplerian elements for PO-28 are not currently contained in the AMSAT keps bulletins, but can be found at Celestrak in amateur.txt using the name "POSAT". Users of Space Track should query the NORAD Satellite ID number 22829. The name listed by Space Track is "EYESAT A".

More information of POSAT-1 can be found at:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
http://www.amsat.org/amsat/sats/n7hpr/po28.html
[ANS-WSR wishes to thanks Trevor, M5AKA and Jim, G3WGM, for this week's information.]
[08072005]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launched: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB
Beacon: 145.810 MHz (unmodulated carrier)

AO-10 has been locked into a Mode-B, 70-cm uplink and 2-meter downlink for several years.

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: Non-operational

Uplink: 145.875 145.900 145.925 145.950 MHz FM (1200-baud)
Downlink: 435.812 MHz SSB

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Alberto E. Zagni - I2KBD reports on 02/13/05
The spacecraft is in MBL (safe mode) and is trasmitting just 6 channels of telemetry. Temperatures and voltage are nominal, but there seems to be a problem with the onboard receiver, refusing to accept commands. The spacecraft was launched in 1993, thus nearing 12 years in orbit...

Best regards
Alberto E. Zagni - I2KBD
ITAMSAT Mission Director

More information of IO-26 can be found at:

http://joshua.micronet.it/english/itamsat/itamsathome.html
http://www.amsat.org/amsat/sats/n7hpr/io26.html
www.itamsat.org

[02132005]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB
Beacon: 29.408 MHz
Robot: 29.454 MHz
[05232004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB
Beacon: 145.860 MHz
Robot: 145.908 MHz
[05232004]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink 145.975 MHz FM
Downlink 435.070 MHz FM

```
[05092004]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink:             145.900 FM 9600-baud FSK
Downlink:           435.120 MHz FM
Broadcast Callsign: UOSAT5-11
BBS:                UOSAT5-12
[01092005]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational?

Uplink:      145.858 to 145.898 MHz CW/USB
Downlink:     29.354 to  29.394 MHz CW/USB
Beacon:       29.352 MHz (intermittent)
SSB meeting frequency:  29.380 MHz (unofficial)

John, KD6PAG reports on June 16, 2004 to ANS:
RS-15 beacon seemed to be back in the mode where it's a tone about 5 seconds
off and then 5 seconds on this morning.

ANS is looking for more confirmations of RS-15 coming back.

[ANS thanks John, KD6PAG for RS-15 information]
[06202004]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplink:             145.84 145.86 145.88 145.90 MHz FM
                    (using 1200-baud Manchester FSK)
CW downlink:        437.125 MHz
Digital downlink:   437.150 MHz SSB (RC-BPSK 1200-baud PSK)
Broadcast Callsign: LUSAT-11
BBS:                LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[05232004]
=====
FO-20 JAS-1b
Catalog number: 20480
```

```
Launch Date: February 07, 1990

Status: Non-Operational

Uplink:     145.90 to 146.00 MHz CW/LSB
Downlink:   435.80 to 435.90 MHz CW/USB
Beacon:     435.795

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[08152004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink:             145.900 MHz FM (9600-baud FSK)
Downlink:           435.170 MHz FM
Broadcast Callsign: HL01-11
BBS:                HL01-12

Jim, AA7KC, reports that KO-23's downlink transmitter continues in a
non-operational status.
[05092004]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink:             145.980 MHz FM (9600-baud FSK)
Downlink:           436.500 MHz FM
Broadcast Callsign: HL02-11
BBS:                HL02-12
[05092004]
=====
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink frequency (listed on the PanSat web site) 436.500 MHz

The satellite is not available for general uplink transmissions.

The Naval Postgraduate School developed PanSat. At the time of
launch, PanSat spread-spectrum digital transponders were to
be available to Amateur Radio operators along with software to utilize
this technology.
```

The satellite is still operating, however, the spread spectrum packet radio portion never took place. The spacecraft is now beyond it's initial 2-year mission life, but telemetry records are still being downloaded.

For more information, visit the official PanSat web site at:
http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm

[ANS has no further information]
[05232004]
=====
SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

STatus: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
          Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
         Mode J Digipeater: 145.825 MHz and 145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[08082004]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlink: 437.025 MHz 437.400 MHz
Broadcast Callsign: UO121-11
BBS: UO121-12

```
The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA
web site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[05092004]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplink      V-band    145.840 -  145.990 MHz CW/LSB
            U-band    435.550 -  435.800 MHz CW/LSB
           L1-band   1269.250 - 1269.500 MHz CW/LSB
           L2-band   1268.325 - 1268.575 MHz CW/LSB
           S1-band   2400.350 - 2400.600 MHz CW/LSB
Downlink:  S2-band   2401.225 - 2401.475 MHz CW/USB
           K-band 24,048.010 - 24,048.060 MHz CW/USB
Beacon:    2401.323, 24,048.035
[05232004]
-----
SO-42  SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational
 Downlink:           437.075 MHz
Broadcast Callsign: SASAT2-11
BBS:                SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[08152004]
=====
SO-41  SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink:             145.850 MHz
Downlink:           436.775 MHz
Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[08152004]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001
```

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, callsign KE6QMD, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]

=====

AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Semi-operational.

Uplink 435.275 1200-baud AFSK
Downlink 145.825 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

AO-49 (SAFIR-M) is a German amateur radio payload onboard the small German scientific satellite "RUBIN-2".

AO-49 was built by the German amateur radio association "AATiS e.V." (German acronym for "Arbeitskreis Amateurfunk und Telekommunikation in der Schule", which means: 'working group for amateur radio anand telecommunications in schools'). AO-49 is designed as a "store and broadcast" system for APRS based messages, dedicated for the use of schools in combination with the existing WX-Net and planned buoy experiments in Germany.

No transmissions detected since the 1st of February 2003! It appears AO-49 is not properly aligned to illuminate the solar panels. This should end soon. Due to its orbit, AO-49 will be in a phase without eclipses until 13Feb03.

Martin DG8UAU has written a small software program "SAFIR-M Decoder" to allow decoding of the received DATA0 frames. It is available at:
http://amend.gmxhome.de in the section Aktuelles.

Details on AO-49 (SAFIR-M) can be found at:
http://amend.gmxhome.de

Information about AATiS e.V. is available at:
http://www.aatis.de
[05092004]
NNNN
/EX

SB SAT @ AMSAT <KB9MMC $ANS-233.S4
WSR 233 Part 4 08/21/2005

AMSAT NEWS SERVICE BULLETIN 233.S4 FROM AMSAT HQ
SILVER SPRING, MD, AUGUST 21,2005
TO ALL RADIO AMATEURS
BID: $ANS-233.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE
PROPOSED FOR LAUNCH AT THIS TIME:

UCISAT ?O-??
Catalog number:
Proposed Launch Date: October 31, 2005

Status: Under Construction

Downlink: Submission in Progress
Uplink: Submission in Progress
Callsign: Submission in Progress

This from Matt Bennett, KF6RTB, UCISAT Communications Team Member:

Our website is www.ucisat.net .This is a new website, however, and doesn't have the "Status" section active yet. Because of the growing interest in our project, I'll push our webmaster to create updates (hopefully) on a week-to-week basis. For now, the current status of the mission is as follows:

-Expected Launch Date: October 31st, 2005
-Frequency Allocation: Submission in Progress
-Construction Status: Sub-Assembly
[WSR to thank Matt Bennett, KF6RTB, for this week's report.]
[01302005]
=====
SSETI ?O-??
Catalog Number:
Proposed Launch Date: LATE 2005

Status: AWAITING LAUNCH

Graham, G3VZV reports:
We have now been advised that the revised launch date for SSETI Express and the other satellites on the DMC3 COSMOS launch has been confirmed as September
27th - so please keep those fingers crossed!

SpaceDaily has a report about SSETI at:
http://www.spacedaily.com/news/internet-04zzzu.html

You can find more info about SSETI at:
http://sseti.gte.tuwien.ac.at/WSW4/

Looking at the website for the SSETI Express webcam

http://sseti.gte.tuwien.ac.at/WSW4/webcam.htm

[ANS thanks Graham, G3VZV for the above information]
[07312005]
=====
PHASE 3E ?O-??
Catalog Number:
Proposed Launch Date: Early 2006

Status: Under Construction

William Leijenaar, PE1RAH reports on July 16th, 2005:

Hi AMSATs,

I always like to inform the AMSATs public about my P3e work, but unfortunatly due to
some reasons there was not much time and nothing much to say...

However, now I am happy to announce that the my MODE-UV transponder design for P3e is ready at the P3e integration place in Marburg (Germany). About 4 weeks ago I was in Marburg before, where the transponder has been checked. Unfortunatly some unsure things were found in the design. The unsure things were about long term stability after many years in space.

At home in The Netherlands, I changed the design with some minor changes to have a secure long term stability. Finally I tested the transponder again and it performed well within the specifications. Again something learned for future transponder designs :o)

Last Wednesday I drove to AMSAT-DL P3e integrations place in Marburg again, and have my transponder again checked. In the beginning it seemed that the 70cm receiver lost 10dB in sensetivity. After some more measurements we find out that it was due to a bad attenuator we used for protection at the input.

Together with Karl Meinzer we looked for any problems, but so far we could see (without HELAPS) all was okay. In the afternoon I went back home again, this time without the MODE-UV.

Now the MODE-UV will get a new home, the home of P3e... :o)
I hope the transponder will work like its elder sister in AO-10, and you all will enjoy it for many years...

It was lots of work to get it this far, but I know it is for a good purpose...

For the latest project status update please visit the AMSAT-DL
P3-E web page:
http://www.amsat-dl.org/p3e/

[ANS-WSR wishes to thank William Leijenaar, PE1RAH for this week's report]
[07172005]
=====

```
CP1 ?o-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: N6CP
Proposed Transmit Frequency: 436.845
[03272005]
=====
CP2 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.325
[03272005]
=====
HAUSAT1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: D90HP
Proposed Transmit Frequency: 437.465
[03272005]
=====
ICE Cube 1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: W2CXM
Proposed Transmit Frequency: 437.305
[03272005]
=====
ICE Cube 2 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: N2VR
Proposed Transmit Frequency: 437.425
[03272005]
=====
ION ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.505
[03272005]
=====
KUTEsat ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: KC0RMW
Proposed Transmit Frequency: 437.385
[03272005]
=====
MEROPE ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: K7MSU-1
Proposed Transmit Frequency: 145.980
[03272005]
=====
nCUBE1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
       2407.25
[03272005]
=====
RINCON ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
        437.345
[03272005]
=====
SACRED ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
[03272005]
=====
SACRED ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
[03272005]
=====
SEEDS ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: JQ1YGU
Proposed Transmit Frequency: 437.485
[03272005]
=====
```

Mea Huaka ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.405
[03272005]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

- AMSAT News Service (ANS)
- General satellite discussion (AMSAT-BB)
- Orbit data (KEPS)
- Manned space missions (SAREX)
- District of Columbia area (AMSAT-DC)
- New England area (AMSAT-NE)
- AMSAT Educational Liaison mailing list (AMSAT-EDU)
- AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/amsat/listserv/menu.html

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satelite Report Editor is James K. Darrow, KB9MMC.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

```
From -3469020779776754095
X-Google-Thread: 10e8ad,8bcc0fc93e78c81c,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news4.google.com!news.glorb.com!news-
feed01.roc.ny.frontiernet.net!nntp.frontiernet.net!newscon06.news.prodigy.com!
prodigy.net!newsmst01b.news.prodigy.com!prodigy.com!postmaster.news.prodigy.com!
newssvr23.news.prodigy.net.POSTED!153f83e8!not-for-mail
From: "Charles Brabham" <n5pvl@sbcglobal.net>
Newsgroups: rec.radio.amateur.space
Subject: HamPoll.Com
Lines: 22
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.2180
X-RFC2646: Format=Flowed; Original
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.2180
Message-ID: <3sMOe.1023$yo7.378@newssvr23.news.prodigy.net>
NNTP-Posting-Host: 64.219.147.40
X-Complaints-To: abuse@prodigy.net
X-Trace: newssvr23.news.prodigy.net 1124832127 ST000 64.219.147.40 (Tue, 23 Aug
2005 17:22:07 EDT)
NNTP-Posting-Date: Tue, 23 Aug 2005 17:22:07 EDT
Organization: SBC http://yahoo.sbc.com
X-UserInfo1:
Q[R_PJSCOPUYG^P[BBCBNWX@RJ_XPDLMN@GZ_GYO^RR@ETUCCNSKQFCY@TXDX_WHSVB]ZEJLSNY\^J[CUV
SA_QLFC^RQHUPH[P[NRWCCMLSNPOD_ESALHUK@TDFUZHBLJ\XGKL^NXA\EVHSP[D_C^B_^JCX^W]CHBAX]
POG@SSAZQ\LE[DCNMUPG_VSC@VJM
Date: Tue, 23 Aug 2005 21:22:07 GMT
Xref: g2news1.google.com rec.radio.amateur.space:230
```

HamPoll is here in order to give amateurs a chance to speak for themselves, and in time to provide reasonably accurate and significant polling data on a variety of issues related to the amateur radio service.

You are welcome to browse the polling data we have, but we especially encourage US amateurs visiting here to register with thier callsign and vote in the HamPoll Polling Station.

Whether you come to browse, to discuss or submit new polls, or to tender your vote, be sure to visit regularly as new polls are included from time to time, and the poll data changes as more hams participate day to day.

Stop by at: http://www.hampoll.com

Charles Brabham, N5PVL

Director: USPacket http://www.uspacket.org
Admin: HamBlog.Com http://www.hamblog.com
---------- HamPoll.Com http://www.hampoll.com
---------- DigiBlog http://www.uspacket.org/digiblog/

```
From -4555731642331618327
X-Google-Thread: 10e8ad,aaabc11162622fa5,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news3.google.com!news.glorb.com!
border1.nntp.dca.giganews.com!local01.nntp.dca.giganews.com!nntp.bright.net!
news.bright.net.POSTED!not-for-mail
NNTP-Posting-Date: Fri, 26 Aug 2005 08:26:03 -0500
Date: Fri, 26 Aug 2005 13:25:13 +0000
From: Scott <acepilot@bloomer.net>
User-Agent: Mozilla/5.0 (Windows; U; Windows NT 5.0; en-US; rv:1.7.2) Gecko/
20040804 Netscape/7.2 (ax)
X-Accept-Language: en-us, en
MIME-Version: 1.0
Newsgroups: rec.radio.amateur.space
Subject: Hamsat VO-52 still on???
Content-Type: text/plain; charset=us-ascii; format=flowed
Content-Transfer-Encoding: 7bit
Message-ID: <vrmdneAqId72hZLeRVn-oQ@bright.net>
Lines: 5
NNTP-Posting-Host: 64.33.199.218
X-Trace: sv3-jfBYG+//SXnGSDw8y/sbcSW6IX+n/
W4yaQK+zX18oBUH8MgMuAl8h1KQUPJ3HF6H1diGTDM8JbaPfWA!
8T1wbjpHLA8oKXq9Zf4Pk6domQj0gR9VrunoFj0h7d4ar+BV436cVpf9kU5uI55ifzppNGfH
X-Complaints-To: abuse@bright.net
X-DMCA-Complaints-To: abuse@bright.net
X-Abuse-and-DMCA-Info: Please be sure to forward a copy of ALL headers
X-Abuse-and-DMCA-Info: Otherwise we will be unable to process your complaint
properly
X-Postfilter: 1.3.32
Xref: g2news1.google.com rec.radio.amateur.space:231
```

I've been listening for the past couple days and have not heard VO-52 on its scheduled passes over North America. Has anybody heard it lately?

Scott
N0EDV

```
From 4459273286435906887
X-Google-Thread: 10e8ad,3c53938ffc02cad,start
X-Google-Attributes: gid10e8ad,public
```

```
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news3.google.com!news.glorb.com!
border1.nntp.dca.giganews.com!elnk-atl-nf1!newsfeed.earthlink.net!
stamper.news.atl.earthlink.net!newsread3.news.atl.earthlink.net.POSTED!46041641!
not-for-mail
From: "JoAnne Maenpaa" <wb9jej_no-spam@earthlink.net>
Newsgroups: rec.radio.amateur.space
Subject: ANS-240 AMSAT Weekly News Bulletins
Lines: 313
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <JQCQe.4145$FW1.962@newsread3.news.atl.earthlink.net>
Date: Mon, 29 Aug 2005 12:03:53 GMT
NNTP-Posting-Host: 69.3.103.139
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread3.news.atl.earthlink.net 1125317033 69.3.103.139 (Mon, 29 Aug
2005 05:03:53 PDT)
NNTP-Posting-Date: Mon, 29 Aug 2005 05:03:53 PDT
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news1.google.com rec.radio.amateur.space:232
```

AMSAT NEWS SERVICE
ANS-240

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:

* AMSAT Symposium
* HAMSAT Reports Needed
* AMSAT Election Deadline Approaching
* ARISS Status - 28 August 2005
* Volunteer Station Needed

```
  SB SAT @ AMSAT $ANS-240.01
  AMSAT Symposium

  AMSAT News Service Bulletin 240.01
   From AMSAT HQ SILVER SPRING, MD.
  August 28, 2005
  To All RADIO AMATEURS
  BID: $ANS-240.01
```

Remember that the "AMSAT rate" at the Holiday Inn in Lafayette runs out September 22, 2005. Please book through the AMSAT block.

And if you pre-register you save $ 10 and you can do it online: http://www.amsat.org/amsat-new/symposium/.

The Symposium is Oct 7th thru Oct 9th in Lafayette, LA. Home of the Silicon Bayou.

AGENDA FOR THE 2005 AMSAT-NA SPACE SYMPOSIUM and ANNUAL MEETING

Thursday October 6, 2005
Morning
8 am-noon AMSAT Board Meeting
noon-1 pm AMSAT Board Lunch Break

Afternoon
1 pm-5 pm AMSAT Board Meeting
5 pm-6pm AMSAT Board Dinner Break

Evening
6 pm-9 pm AMSAT Board Meeting

Friday October 7, 2005
Morning
8 am-noon AMSAT Board Meeting

Afternoon
1 pm-5 pm AMSAT Symposium

Evening
5:30 pm Shrimp Boil
7:30 pm President's Club Meeting

Saturday October 8, 2005
Morning
8 am-noon AMSAT Symposium
noon-1 pm Lunch on own

Afternoon
1 pm -1:30 pm Awards Ceremony
1:30-4 pm AMSAT Symposium
4 pm-5 pm AMSAT Annual Meeting

Evening
7-7:30 pm Attitude Adjustment
7:30-10 PM Banquet

Sunday, October 9, 2005
Morning
7 am-9:00 am   Area Coordinators Breakfast
7:00 am First Swamp Tour
9:30 am Second Swamp Tour
11:00 am IARU Meeting

Spouse Program on Saturday
Depart 9:30 AM

1st stop - Vermillionville - Vermillionville is a replica of an Acadian village of the early 18th century. This is similar to Williamsburg, VA, where the staff is in costume and the craft persons make arts and craft items with period tools. This depicts the life of the Acadian living on the bayous and gives a flavor of the culture and hardship of living in Acadiana in the 1800s. It will take about 90 minutes to see the exhibits.

2nd stop - The Cathedral Oak - This is a 200 year old oak tree where the canopy is way over 100 feet in diameter.

3rd stop - The Mouton Home - This is the home of the founder of Lafayette and is a typical home of the period.

4th stop - Hotel - The group should return to the hotel at approximately 1:00 PM.

Lagniappes - Departs the hotel at 1:15 For those hardy shoppers who have the energy and the desire, there will be a visit to a local flea market where there is marketing of arts and crafts made by craft persons of the area. This group will return to the hotel at approximately 3:00 pm.

There will be a nominal cost of approximately $20 to cover the transportation cost and entrance fees.

A late addition to the agenda for the Amsat Symposium in Lafayette is a meeting of the Eagle project team. This meeting will also be open to all other interested AMSAT members.

If you are an AMSAT member, not on the Eagle team, and would like to attend, please advise wb4gcs@amsat.org. All AMSAT members are welcome, we'd just like to know who and how many are attending, so we can be prepared.

[ANS thanks the AMSAT Symposium team & Martha for the above information]

/EX

SB SAT @ AMSAT $ANS-240.02
HAMSAT Reports Needed

AMSAT News Service Bulletin 240.02
From AMSAT HQ SILVER SPRING, MD.
August 28, 2005
To All RADIO AMATEURS
BID: $ANS-240.02

Hi All
One of the members of the Mission Management Board at ISTRAC called me this afternoon to enquire about the latest feedback on Hamsat usage around the globe.
I request you to kindly send in your feedback reports to reports@amsat.in as this will help the MMB ISTRAC to complie the latest reports & payload evaluation in time before their meeting scheduled for 29 Aug 2005.

[ANS thanks VU2POP, Pop, for the above information]

/EX

SB SAT @ AMSAT $ANS-240.03
AMSAT Election Deadline Approaching

AMSAT News Service Bulletin 240.03
From AMSAT HQ SILVER SPRING, MD.
August 28, 2005
To All RADIO AMATEURS
BID: $ANS-240.03

Your votes do count.

With the deadline for the receipt of ballots for the AMSAT Board of Directors less than a month away, Bill Hook, W3QBC, who heads up AMSAT's Ballot Counting Committee, advises that to date only 609 ballots have been received. This amounts to only 15% of the total number of ballots mailed to members.

Votes are needed to select the 4 best qualified to serve among the 8 candidates. The biographical information as submitted by the Candidates can be found on the AMSAT website at
http://www.amsat.org/amsat-new/AboutAmsat/candidate_bios.php

To be counted, ballots must be received at the AMSAT office before the close of business on Thursday, 15 September 2005.

[ANS thanks Bill W3QBC for the above information]

/EX

SB SAT @ AMSAT $ANS-240.04
ARISS Status - 28 August 2005

AMSAT News Service Bulletin 240.04
From AMSAT HQ SILVER SPRING, MD.
August 28, 2005
To All RADIO AMATEURS

BID: $ANS-240.04

ARISS Status
August 28, 2005

1. Arizona Contact a Success!

On Wednesday, August 17, the children at D.W. Higgins Institute in Tempe, Arizona, experienced an ARISS contact with John Phillips, KE5DRY. The astronaut was able to answer 23 of the 24 questions posed to him by twelve students before the ISS went over the horizon. An audience of approximately 200 students, teachers, and others witnessed the contact. Special guests attending the event included the mayor of Tempe, Phillips' parents and his sister, Maura Mackowski, whose son, Ben, is a sixth grader at the school. Mackowki was impressed with the Q & A session and wrote a thank you note to JSC, expressing her gratitude for a job well done, noting Steve Bible, N7HPR, in particular, for setting up and working his radio during the contact.
Among the media present were two television channels (5 and 12) and two news papers, The Arizona Republic and East Valley Tribune.

Arizona Republic's article, "Tempe students radio space station, talk to astronaut," may be found at:
http://www.azcentral.com/families/education/articles/0817t-space-ON.html

East Valley Tribune ran a story, "Students use radio to chat with astronaut in orbit." See:
http://www.eastvalleytribune.com/index.php?sty=46392

The Channel 12 news video clip of the event, "Students speak with astronauts aboard International Space Station," is available for viewing. See:
http://www.azcentral.com/12news/video/12video_index.html

2. Upcoming School Contacts

The Sapporo Junior Amateur Radio Club in Sapporo, Kokkaido, Japan has been scheduled for a contact on Monday, August 22 at 14:26 UTC.

The 2005 World Expo in Aichi, Japan has been approved for an ARISS contact. It has been scheduled for Friday, September 2 at 09:45 UTC.

3. ARISS International Meeting

ARISS delegate Rosalie White has submitted minutes from the U.K. meeting to the other delegates for comments. Once finalized, they will be posted to the ARISS and AMSAT websites.

The next ARISS International Teleconference will be held on Tuesday, August 23.

4. ARRL Article on Krikalev

On August 12, the ARRL ran a web story on Sergei Krikalev, U5MIR. "ISS commander sets new space endurance record" is posted on the website.
See: http://www.arrl.org/

5. SSTV Safety Review Held

On Friday, August 19, the JSC Payload Safety Review Panel (PSRP) met with members of ARISS-U.S. to discuss the certification of the SSTV/Vox box and two cables which the ARISS-U.S. team is providing to the project. Once the ARISS team submits supporting documentation, the certification document will be signed. The Russian team will provide the webcam and will provide the safety certification for the integrated system. The SSTV is expected to fly on 19P which is scheduled for a September launch.

6. Space Tourist Issued Callsign

Greg Olsen took and passed his amateur radio exam on Friday, August 12, and was issued the callsign, KC2ONX. Olsen, slated to be the next space tourist, will fly with Expedition 12 crew members, Bill McArthur, KC5ACR, and Valery Tokarev in October. Sergey Samburov, RV3DR, will provide training on the ARISS radio system and operations so that he may participate in school contacts while on board the ISS. ARRL ran an article on Olsen, entitled, "Next ISS 'Space Tourist' Gets Amateur Radio Ticket." See: http://www.arrl.org/news/stories/2005/08/18/3/?nc=1

[ANS thanks Carol, KB3LKI for the above information]

/EX

SB SAT @ AMSAT $ANS-240.05
Volunteer Station Needed

AMSAT News Service Bulletin 240.05
 From AMSAT HQ SILVER SPRING, MD.
August 28, 2005
To All RADIO AMATEURS
BID: $ANS-240.05

Here is your chance to become a viable part of the Amateur Satellite Community.

We are looking for a volunteer satellite packet station in Hawaii that is interested in helping with telemetry and sat-gating of PCSAT2 and ARISS packets. Requirements are:

1) General familiarity with packet
2) TNC connected to a cross band radio that
     can RX on UHF and TX on VHF.
3) modest UHF beam and rotator system.

Contact WB4APR for more information.

[ANS thanks Bob, WB4APR, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Dee Interdonato, NB2F
nb2f at amsat dot org

From -1792196335589624768
X-Google-Thread: 10e8ad,fb3b177901cb0ded,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!news.maxwell.syr.edu!elnk-pas-nf1!newsfeed.earthlink.net!stamper.news.pas.earthlink.net!stamper.news.atl.earthlink.net!newsread3.news.atl.earthlink.net.POSTED!46041641!not-for-mail
From: "JoAnne Maenpaa" <wb9jej_no-spam@earthlink.net>
Newsgroups: rec.radio.amateur.space
Subject: WSR-240 AMSAT Weekly Satellite Report
Lines: 1220
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <GRCQe.4146$FW1.375@newsread3.news.atl.earthlink.net>
Date: Mon, 29 Aug 2005 12:04:54 GMT
NNTP-Posting-Host: 69.3.103.139
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread3.news.atl.earthlink.net 1125317094 69.3.103.139 (Mon, 29 Aug 2005 05:04:54 PDT)
NNTP-Posting-Date: Mon, 29 Aug 2005 05:04:54 PDT
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news1.google.com rec.radio.amateur.space:233

This report is organized into 4 parts.
Part 1 - operational analog amateur satellites.
Part 2 - operational digital amateur satellites.
Part 3 - non - operational satellites
Part 4 - proposed satellites

SB SAT @ AMSAT <KB9MMC $ANS-240.S1

WSR 240 Part 1 08/28/2005

AMSAT NEWS SERVICE BULLETIN 240.S1 FROM AMSAT HQ
SILVER SPRING, MD, AUGUST 28, 2005
TO ALL RADIO AMATEURS
BID: $ANS-240.S1

VO-52 HAMSAT
Catalog Number: 28650
Launch Date: May 05,2005

Status: On orbit
Current Mode: U/V

Proposed frequencies:

Indian transponder:
Uplink : 435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW
Beacom : 145.940MHz continue carier signal

Dutch transponder:
Uplink : 435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW
Beacon : 145.860MHz 12WPM with CW message
[07242005]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Mode: PBBS - OFF
      FM REPEATER - V/U HIGH POWER

Analog voice downlink: 435.300 MHz FM
         435.150 MHz FM
Analog voice uplink: 145.880 MHZ FM
         145.920 MHz FM 67Hz PL tone
                       1268.700 MHz FM 67Hz PL tone

Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
                       2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast
   Protocol (PBP)

Broadcast: PECHO-11
BBS: PECHO-12

Current scheduled operating modes:

22 Aug
FM Repeater, V/U

Uplink: 145.920 mhz FM, 67 hz PL Tone
Downlink 435.300 mhz FM
9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 435.150 mhz FM, 9k6 PBP Digital

[ANS-WSR thanks Mike, KE4AZN for the above information]
[07312005]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Uplink: 145.850 MHz (67.0 Hz PL tone) (See below for operating
          procedures)
Downlink: 436.795 MHz

There have been unconfirmed reports on the amsat-bb remailer that SO-50 has
shifted downlink frequency as much as 5khz up. This both from Europe.

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The
order of operation is thus: (allow for Doppler as necessary)

1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm
   the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT
   the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window
   will reset the 10 minute timer.

[09122004]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: OPERATIONAL

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplink: 145.850 145.870 145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

John, N4QWL reports on July 16th, 2005:

Last evening I had a AOS to LOS qso with WI2W. FO-29 came up at 01:17z here in FM07 and I found WI2W and we chatted until 01:33z. The satellite was at 2 degrees elevation when I finally heard him start to crackle a bit. What a great QSO! To think that I watched this bird launch back in 1996 and it is still working so well is a real thrill. I believe I still have the video. I might just look for it and watch it again. Boy do I love this satellite stuff! Look for you all up there.

Please send the reception reports to lab2 'at' jarl.or.jp.
Please use the subject line: 'FO-29 reception report'.

Mineo, JE9PEL, has an FO-29 satellite telemetry analysis program that will automatically analyze all digital telemetry from the satellite (such as current, voltage and temperature). FO29CWTE is available at:
http://www.ne.jp/asahi/hamradio/je9pel/
[ANS-WSR wishes to thanks John, N4QWL for this week's report]
[07172005]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Uplink: 145.850 MHz FM
Downlink: 436.795 MHz FM

The latest information on AO-27 from control operator Michael Wyrick, N3UC (former N4USI), can be found at:
http://www.ao27.org

An AO-27 question-and-answer page is available on the AMSAT-NA web site, with updates by Ray, W2RS. The URL is:
http://www.amsat.org/amsat/intro/ao27faq.html

[ANS-WSR thanks John, K6YK, for this week's AO-27 report]
[08292004]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Semi-operational in sunlight.
Return to active status: June 21,2002

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
            432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A
            145.975 to 145.925 MHz CW/USB Mode B
Beacon: 29.502 MHz, 145.972 MHz, 435.1 MHz, 2304.1 MHz

Emily, W0EEC has created a website to allow the users of AO-7 to record contacts, observations and use of the satellite more effectively at:

http://www.emilyshouse.com/experthams/ao7/main.php
This includes the ability to log contacts.

Tim, K3TZ has written a program to decode AO-07 telemetry.
The program can be downloaded at:
http://www.qsl.net/k3tz/files/K3TZ_AO-07_Telemetry_Decoder_0.5.zip

For more AO-7 info:
http://www.amsat.org/amsat/sats/n7hpr/ao7.html
[11142004]

=====

INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: U/V CROSS-BAND REPEATER
Digipeater: Inactive

The current Expedition 11 crew is:
Commander Sergei Krikalev
Flight Engineer John Phillips

Worldwide packet uplink: 145.990 MHz FM
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM
Doppler Shift is 10 KHz

Russian callsigns: RS0ISS, RZ3DZR
USA callsign: NA1SS
Packet station mailbox callsign: RS0ISS-11
Packet station keyboard callsign: RS0ISS-3
Digipeater callsign: ARISS

This off the ARISS webpage:
http://www.rac.ca/ariss/oindex.htm#New%20ARISS%20Operations :
The ARISS program is pleased to announce that the amateur radio equipment aboard the International Space Station is now operating in cross-band repeat mode. We realize that many of you will miss the packet-operating mode. However, cross-band repeat allows further experimentation of the ISS amateur radio system

The downlink for this operating mode remains the same, so listen for the station on 145.80 MHz. The new uplink frequency is 437.80 MHz. All frequencies are subject to Doppler shifting. For further information on working satellites and adjusting for Doppler shift, please review Emily Clark's (W0EEC) excellent

presentation on AMSAT's website:
http://www.amsat.org/amsat-new/information/faqs/Intro_sats.pdf

The ISS daily crew schedule can be found at:
http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line is NOT
translated from Russian and posted.

More information is available at:
http://www.rac.ca/ariss
http://spaceflight.nasa.gov/station/reference/radio/
http://www.marexmg.org/fileshtml/unprotopage.html
http://www.issfanclub.com
http://oscar.dcarr.org/
[07242005]
NNNN
/EX

SB SAT @ AMSAT <KB9MMC $ANS-240.S2
WSR 240 Part 2 08/28/2005

AMSAT NEWS SERVICE BULLETIN 240.S2 FROM AMSAT HQ
SILVER SPRING, MD, AUGUST 28, 2005
TO ALL RADIO AMATEURS
BID: $ANS-240.S2

PCSAT2 ?0-??
Catalog Number:
Launch Date: August 1, 2005

Status: Operational

PCSAT2 was installed on the exterior of the International Space
Station and was activated on August 3, 2005.

PCSAT2 CAPABILITIES: PCSAT2 is attached to the ISS and so its operations
must be in cooperation with the ARISS communications suite to minimize any
mutual interference and to coordinate activities. Here are the capabilities
of the PCSAT2 and ARISS payloads:

PCSAT SYSTEM A:

435.275 PCSAT2 DOWNLINK 1200 baud packet with uplink on 145.825
435.275 PCSAT2 DOWNLINK Occasional user PSK-31 continuous downlink
145.825 PCSAT2 DOWNLINK 1200 baud packet
PCSAT SYSTEM B:

437.975 PCSAT2 DOWNLINK periodic Solar Cell data and PCSAT2 telemetry at 9600 baud
437.975 PCSAT2 DOWNLINK TNC-B command downlink at 1200 baud
437.975 PCSAT2 DOWNLINK User Voice Repeater with VHF uplink
437.975 PCSAT2 DOWNLINK Packet digipeater with VHF uplink

It looks like PCSAT2 can best contribute at this time by operating in PSK-31 mode for the near future. This is a very exciting new transponder mode which solves the congestion problem on FM repeaters by letting multiple stations all communicate at the same time.

PSK-31 users are welcome to try out the new PCSAT2 PSK-31 transponder on ISS with an uplink on 29.402 +/- 1 KHz and downlink on 435.275 +/- Doppler using FM.

The FM downlink lets everyone operate full duplex and everyone to see the same view of the passband as everyone else. THus you can see exactly what your signal looks like to everyone else.

Help Wanted:

Here is your chance to become a viable part of the Amateur Satellite Community.

We are looking for a volunteer satellite packet station in Hawaii that is interested in helping with telemetry and sat-gating of PCSAT2 and ARISS packets. Requirements are:

1) General familiarity with packet
2) TNC connected to a cross band radio that
     can RX on UHF and TX on VHF.
3) modest UHF beam and rotator system.

Contact WB4APR for more information.

Packets seen from PCSAT2 can be reviewed at:
http://www.findu.com/cgi-bin/pcsat2.cgi

A screen shot of both the 9600 bps and 1200 bps decoded data as seen by Simon, 9W2QC, can be seen at:
http://www.9w2qc.net/pcsat2/

More information on PCSAT2 can be found at:
http://web.usna.navy.mil/~bruninga/pcsat2.html

[ANS-WSR thanks Bob, WB4APR and the U.S. Naval Academy Satellite Lab for the aboveinformation.]

[08282005}

=====

AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Mode: PBBS - OFF
      FM REPEATER - V/U HIGH POWER

Analog voice downlink: 435.300 MHz FM
         435.150 MHz FM
Analog voice uplink: 145.880 MHz FM
         145.920 MHz FM 67Hz PL tone
                       1268.700 MHz FM 67Hz PL tone

Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
                       2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast
   Protocol (PBP)

Broadcast: PECHO-11
BBS: PECHO-12

Current scheduled operating modes:

22 Aug
FM Repeater, V/U
Uplink: 145.920 mhz FM, 67 hz PL Tone
Downlink 435.300 mhz FM
9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 435.150 mhz FM, 9k6 PBP Digital

[ANS-WSR thanks Mike, KE4AZN for the above information]
[07312005]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Non-Operational?????

Uplink/downlink: 145.827 MHz 1200 baud AX.25 AFSK via W3ADO-1
Aux/Uplink: 435.250 MHz 9600 baud via PCSAT-2 (off)
APRS Downlink: 144.390 MHz (Region 2)

PCSat is a 1200-baud APRS digipeater designed for use by stations using
hand-held or mobile transceivers. Downlinks feed a central web site at:
http://pcsat.aprs.org

The APRS-equipped PCSat was built by midshipmen from the U.S. Naval Academy
under the guidance of Bob Bruninga, WB4APR.
[07242005]
=====
CUTE-1
Catalog number: 27844
Launched: June 30,2003

Status: Operational

Uplink: ?

Downlink: 436.8375 CW
              437.4700 1200 FM ax25 or SRLL (ACTIVE only near Japan ?)
Cliff, K7RR reports:
In the latest Weekly Satellite Report, CUTE 1, #27844 is listed as
OPERATIONAL?
Indeed it is very operational as a CUBESAT sending CW telemetry on
436.8345 MHz. At the July 7 2005, 23:45:20 pass over the Western USA:
CUTE 1 6B A4 xx 7F D7 66A8 4702 FF FF7C 65
CUTE 1 6C A6 59 80 D9 66A8 4702 FF FE7C B6

The June 30th KEPS were within ten seconds of AOS and LOS. It is an very good object to practice tracking as the orbit and transmitter power are similar to proposed CUBESATS awaiting launch this December. As a check for Doppler correction, the lack of change in tone is an excellent indicator.

CUTE 1 is a Japanese (Tokyo Institute of Technology) one kilogram nanosatellite that was launched by a Rokot rocket from Plesetsk at 14:15 UT on 30 June 2003. It carries a 100 mW beacon at 436.8375 MHz. Initial orbital parameters were period 101.4 min, apogee 831 km, perigee 819 km, and inclination 98.7?.

For further info about CUTE-1 goto:
http://lss.mes.titech.ac.jp/ssp/cubesat/operation/Schedule_e.html

[ANS WSR wishes to thank Cliff, K7RR, for this week's information]
[07242005]
=====
GO-32 TECHSAT-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Downlink: 435.225 MHz FM (9600-baud FSK)
                    (435.325 n/a - temperature problems)
Uplinks: 145.850, 145.890, 145.930 FM
                    1269.700, 1269.800, 1269.900 FM
Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[03132005]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Operational

Uplink: 145.850 or 145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz
Broadcast callsign: MYSAT3-11

BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[05152005]

=====

AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Semi-operational, the digipeater command is on and open for APRS users.

Uplink: 145.90 145.92 145.94 145.96 MHz FM
(using 1200-baud Manchester FSK)
Downlink: 437.026 MHz SSB (1200-baud PSK)
Mode-S Beacon: 2401.1428 MHz
Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

A WOD collection of current graphics along with general information and telemetry samples can be found at:
http://www.telecable.es/personales/ea1bcu
[05092004]

=====

UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational?

Telemetry Downlink: 145.826 MHz. FM (1200-baud AFSK).
approx. 10 days ON, 10 days OFF
Mode-S Beacon: 2401.500 MHz. ... OFF
UHFBeacon: 435.025 MHz. ... OFF

OSCAR-11 is back! I received the good news, on Saturday morning, while at the AMSAT-UK Colloquium. This was entirely unexpected! On Sunday morning Bob G4VRC played me a recording of an early morning pass received that day.

During the period 21 July to 14 August 2005 consistent signals have been heard from 30 July to 08 August. Signals seem to be weaker than usual, confirmed by the many reports received. However,since I last heard the satellite on 30 April, I've reinstalled my antennas , which makes comparisons difficult.

Many thanks for all the recent reports of OSCAR-11 including those from

KU7Z (who heard it first), KB2M, VK6XH, HK7MKE, KA2UPW, JE9PEL, G1OCN, HB9SKA and G8OQW.

All the analogue telemetry channels, 0 to 59 are zero, ie they have failed. The status channels 60 to 67 are still working. One bit in channel 62, DSR mode, has changed from WRITE to READ. DSR is the Digital Store & Readout experiment. This could be significant if the experiment is still drawing current, but the other status bit indicates that it is switched OFF.

The on-board clock is now showing a very large error. It has lost approximately 19 days since 30 April. During the recent data collection period, the clock error has been changing at a decreasing rate. The size of the clock error and the rate at which it is changing is similar to the duration of the solar eclipse periods. This suggests that the clock might have been switching OFF during eclipses.

The eclipses have now ended, and the satellite should be in continuous sunlight for the remainder of this year, and well into next year. This should help the satellite to continue transmitting, although continuous sunlight can cause problems due to excessive temperatures.

If the watchdog timer is still operating on a 20 day cycle, ie. approximately ten days ON followed by 10 days OFF, then the VHF beacon should resume transmissions around 18 August.

The Beacon frequencies are -

VHF 145.826 MHz. AFSK FM ASCII Telemetry

UHF 435.025 MHz. OFF

S-band 2401.5 MHz. OFF

Listeners to OSCAR-11 may be interested in visiting my website which contains an archive of news & telemetry data. It also contains details about using a soundcard or hardware demodulators for data capture. There is software for capturing data, and decoding ASCII telemetry. The URL is www.users.zetnet.co.uk/clivew/

If you place this bulletin on a terrestrial packet network, please use the bulletin identifier $BID:U2RPT112.CWV, to prevent duplication.

[ANS-WSR thanks Clive, G3CWV, for the above information]

More information on UO-11 OSCAR-11 can be found at:
http://www.users.zetnet.co.uk/clivew/

MPEG3 files can be found here at Mineo, JE9PEL website:
http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm

[08212005]
NNNN

/EX

SB SAT @ AMSAT <KB9MMC $ANS-240.S3
WSR 240 Part 3 08/28/2005

AMSAT NEWS SERVICE BULLETIN 240.S3 FROM AMSAT HQ
SILVER SPRING, MD, AUGUST 28, 2005
TO ALL RADIO AMATEURS
BID: $ANS-240.S3

THE FOLLOWING ARE IN ORBIT BUT ARE
NON-OPERATIONAL AT THIS TIME:

POSAT-1 PO-28
Catalog Number: 22829
Launched : September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 435.250 MHz
          435.275 MHz

Uplink: 145.925 MHz
          145.975 MHz

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

PO-28 (POSAT-1), Portugal's first satellite, launched 12 years ago, will be turned over to Amateur Radio use in the very near future. That was the word July 30 from AMSAT-UK Secretary Jim Heck, G3WGM, during the AMSAT-UK International Space Colloquium in Guildford, England.

Launched September 25, 1993, the satellite operated as a packet store-and-forward BBS (9600 baud FM FSK) on Amateur Radio frequencies for several weeks in early 1994. Over the years, PO-28's primary usage has been commercial, although plans have called for eventually shifting its operation to ham radio use. G3WGM reports that following lengthy negotiations it has been agreed that the satellite can be switched permanently to amateur frequencies. The changeover is expected to take a couple of weeks.

The Portuguese satellite was built at the University of Surrey as part of a collaborative satellite technology program that involved industry and academe. Uplink frequencies will be 145.925 and 145.975 MHz. Downlink frequencies will be 435.250 and 435.275 MHz. More information on PO-28 is on the AMSAT Web site http://www.amsat.org/amsat/sats/n7hpr/po28.html.

Uplink Frequencies: 145.925 and 145.975 MHz
Downlink Frequencies: 435.250 and 435.275 MHz

Orbit: 822 x 800 km, 98.6 deg inclined, sun-synchronous.

Transponder capabilities include FM repeater and 38k4 data. If you want to hear how loud this satellite is, listen on 429.950 until the change back to amateur radio service.

Keplerian elements for PO-28 are not currently contained in the AMSAT keps bulletins, but can be found at Celestrak in amateur.txt using the name "POSAT". Users of Space Track should query the NORAD Satellite ID number 22829. The name listed by Space Track is "EYESAT A".

More information of POSAT-1 can be found at:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
http://www.amsat.org/amsat/sats/n7hpr/po28.html
[ANS-WSR wishes to thanks Trevor, M5AKA and Jim, G3WGM, for this week's information.]
[08072005]

=====

AO-10 OSCAR 10
Catalog number: 14129
Launched: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB
Beacon: 145.810 MHz (unmodulated carrier)

AO-10 has been locked into a Mode-B, 70-cm uplink and 2-meter downlink for several years.

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]

=====

IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: Non-operational

Uplink: 145.875 145.900 145.925 145.950 MHz FM (1200-baud)
Downlink: 435.812 MHz SSB
Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Alberto E. Zagni - I2KBD reports on 02/13/05
The spacecraft is in MBL (safe mode) and is trasmitting just 6 channels of telemetry. Temperatures and voltage are nominal, but there seems to be a problem with the onboard receiver, refusing to accept commands. The spacecraft was launched in 1993, thus nearing 12 years in orbit...

Best regards
Alberto E. Zagni - I2KBD
ITAMSAT Mission Director

More information of IO-26 can be found at:

http://joshua.micronet.it/english/itamsat/itamsathome.html
http://www.amsat.org/amsat/sats/n7hpr/io26.html
www.itamsat.org

[02132005]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB
Beacon: 29.408 MHz
Robot: 29.454 MHz
[05232004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB
Beacon: 145.860 MHz
Robot: 145.908 MHz
[05232004]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink 145.975 MHz FM
Downlink 435.070 MHz FM
[05092004]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink: 145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM
Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01092005]

```
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational?

Uplink:      145.858 to 145.898 MHz CW/USB
Downlink:     29.354 to  29.394 MHz CW/USB
Beacon:       29.352 MHz (intermittent)
SSB meeting frequency:  29.380 MHz (unofficial)

John, KD6PAG reports on June 16, 2004 to ANS:
RS-15 beacon seemed to be back in the mode where it's a tone about 5 seconds
off and then 5 seconds on this morning.

ANS is looking for more confirmations of RS-15 coming back.

[ANS thanks John, KD6PAG for RS-15 information]
[06202004]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplink:              145.84 145.86 145.88 145.90 MHz FM
                     (using 1200-baud Manchester FSK)
CW downlink:         437.125 MHz
Digital downlink:    437.150 MHz SSB (RC-BPSK 1200-baud PSK)
Broadcast Callsign: LUSAT-11
BBS:                 LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[05232004]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Uplink:     145.90 to 146.00 MHz CW/LSB
Downlink:   435.80 to 435.90 MHz CW/USB
Beacon:     435.795

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[08152004]
=====
KO-23 KITSAT
```

```
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink:             145.900 MHz FM (9600-baud FSK)
Downlink:           435.170 MHz FM
Broadcast Callsign: HL01-11
BBS:                HL01-12

Jim, AA7KC, reports that KO-23's downlink transmitter continues in a
non-operational status.
[05092004]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink:             145.980 MHz FM (9600-baud FSK)
Downlink:           436.500 MHz FM
Broadcast Callsign: HL02-11
BBS:                HL02-12
[05092004]
=====
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink frequency (listed on the PanSat web site) 436.500 MHz

The satellite is not available for general uplink transmissions.

The Naval Postgraduate School developed PanSat. At the time of
launch, PanSat spread-spectrum digital transponders were to
be available to Amateur Radio operators along with software to utilize
this technology.

The satellite is still operating, however, the spread spectrum packet
radio portion never took place. The spacecraft is now beyond it's
initial 2-year mission life, but telemetry records are still being
downloaded.

For more information, visit the official PanSat web site at:
http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998
```

```
Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm

[ANS has no further information]
[05232004]
=====
SO-35 SUNSAT
Catalog Number:     ?
Launched:February 23, 1999

STatus: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
          Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
         Mode J Digipeater: 145.825 MHz and 145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[08082004]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink:            145.960 MHz (9600-baud FSK)
Downlink:          437.025 MHz 437.400 MHz
Broadcast Callsign: UO121-11
BBS:               UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA
web site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[05092004]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplink      V-band    145.840 -  145.990 MHz CW/LSB
```

```
            U-band    435.550 -  435.800 MHz CW/LSB
           L1-band   1269.250 - 1269.500 MHz CW/LSB
           L2-band   1268.325 - 1268.575 MHz CW/LSB
           S1-band   2400.350 - 2400.600 MHz CW/LSB
Downlink:  S2-band   2401.225 - 2401.475 MHz CW/USB
           K-band 24,048.010 - 24,048.060 MHz CW/USB
Beacon:    2401.323, 24,048.035
[05232004]
-----
SO-42  SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational
 Downlink:           437.075 MHz
Broadcast Callsign: SASAT2-11
BBS:                SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[08152004]
=====
SO-41  SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink:             145.850 MHz
Downlink:           436.775 MHz
Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[08152004]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink:   145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is  welcome to use the digipeating/APRS features of Sapphire,
callsign KE6QMD, as per the user service agreement located at the following
URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
```

AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Semi-operational.

Uplink 435.275 1200-baud AFSK
Downlink 145.825 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

AO-49 (SAFIR-M) is a German amateur radio payload onboard the small German scientific satellite "RUBIN-2".

AO-49 was built by the German amateur radio association "AATiS e.V." (German acronym for "Arbeitskreis Amateurfunk und Telekommunikation in der Schule", which means: 'working group for amateur radio anand telecommunications in schools'). AO-49 is designed as a "store and broadcast" system for APRS based messages, dedicated for the use of schools in combination with the existing WX-Net and planned buoy experiments in Germany.

No transmissions detected since the 1st of February 2003! It appears AO-49 is not properly aligned to illuminate the solar panels. This should end soon. Due to its orbit, AO-49 will be in a phase without eclipses until 13Feb03.

Martin DG8UAU has written a small software program "SAFIR-M Decoder" to allow decoding of the received DATA0 frames. It is available at:
http://amend.gmxhome.de in the section Aktuelles.

Details on AO-49 (SAFIR-M) can be found at:
http://amend.gmxhome.de

Information about AATiS e.V. is available at:
http://www.aatis.de
[05092004]
NNNN
/EX

SB SAT @ AMSAT <KB9MMC $ANS-240.S4
WSR 240 Part 4 08/28/2005

AMSAT NEWS SERVICE BULLETIN 240.S4 FROM AMSAT HQ
SILVER SPRING, MD, AUGUST 28,2005
TO ALL RADIO AMATEURS
BID: $ANS-240.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE PROPOSED FOR LAUNCH AT THIS TIME:

UCISAT ?O-??
Catalog number:

Proposed Launch Date: October 31, 2005

Status: Under Construction

Downlink: Submission in Progress
Uplink: Submission in Progress
Callsign: Submission in Progress

This from Matt Bennett, KF6RTB, UCISAT Communications Team Member:

Our website is www.ucisat.net .This is a new website, however, and doesn't have the "Status" section active yet. Because of the growing interest in our project, I'll push our webmaster to create updates (hopefully) on a week-to-week basis. For now, the current status of the mission is as follows:

-Expected Launch Date: October 31st, 2005
-Frequency Allocation: Submission in Progress
-Construction Status: Sub-Assembly
[WSR to thank Matt Bennett, KF6RTB, for this week's report.]
[01302005]
=====
SSETI ?O-??
Catalog Number:
Proposed Launch Date: LATE 2005

Status: AWAITING LAUNCH

Graham, G3VZV reports:
We have now been advised that the revised launch date for SSETI Express and the other satellites on the DMC3 COSMOS launch has been confirmed as September
27th - so please keep those fingers crossed!

SpaceDaily has a report about SSETI at:
http://www.spacedaily.com/news/internet-04zzzu.html

You can find more info about SSETI at:
http://sseti.gte.tuwien.ac.at/WSW4/

Looking at the website for the SSETI Express webcam
http://sseti.gte.tuwien.ac.at/WSW4/webcam.htm

[ANS thanks Graham, G3VZV for the above information]
[07312005]
=====
PHASE 3E ?O-??
Catalog Number:
Proposed Launch Date: Early 2006

Status: Under Construction

William Leijenaar, PE1RAH reports on July 16th, 2005:

Hi AMSATs,

I always like to inform the AMSATs public about my P3e work, but
unfortunatly due to
some reasons there was not much time and nothing much to say...

However, now I am happy to announce that the my MODE-UV transponder design for P3e is ready at the P3e integration place in Marburg (Germany). About 4 weeks ago I was in Marburg before, where the transponder has been checked. Unfortunatly some unsure things were found in the design. The unsure things were about long term stability after many years in space.

At home in The Netherlands, I changed the design with some minor changes to have a secure long term stability. Finally I tested the transponder again and it performed well within the specifications. Again something learned for future transponder designs :o)

Last Wednesday I drove to AMSAT-DL P3e integrations place in Marburg again, and have my transponder again checked. In the beginning it seemed that the 70cm receiver lost 10dB in sensetivity. After some more measurements we find out that it was due to a bad attenuator we used for protection at the input.

Together with Karl Meinzer we looked for any problems, but so far we could see (without HELAPS) all was okay. In the afternoon I went back home again, this time without the MODE-UV.

Now the MODE-UV will get a new home, the home of P3e... :o)
I hope the transponder will work like its elder sister in AO-10, and you all will enjoy it for many years...

It was lots of work to get it this far, but I know it is for a good purpose...

For the latest project status update please visit the AMSAT-DL
P3-E web page:
http://www.amsat-dl.org/p3e/

[ANS-WSR wishes to thank William Leijenaar, PE1RAH for this week's report]
[07172005]
=====
CP1 ?o-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: N6CP
Proposed Transmit Frequency: 436.845
[03272005]
=====
CP2 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA

```
Proposed Transmit Frequency: 437.325
[03272005]
=====
HAUSAT1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: D90HP
Proposed Transmit Frequency: 437.465
[03272005]
=====
ICE Cube 1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: W2CXM
Proposed Transmit Frequency: 437.305
[03272005]
=====
ICE Cube 2 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: N2VR
Proposed Transmit Frequency: 437.425
[03272005]
=====
ION ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.505
[03272005]
=====
KUTEsat ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: KC0RMW
Proposed Transmit Frequency: 437.385
[03272005]
=====
MEROPE ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: K7MSU-1
Proposed Transmit Frequency: 145.980
[03272005]
=====
nCUBE1 ?O-??
Catalog Number:
```

Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
2407.25
[03272005]
=====
RINCON ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
437.345
[03272005]
=====
SACRED ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
[03272005]
=====
SACRED ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
[03272005]
=====
SEEDS ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: JQ1YGU
Proposed Transmit Frequency: 437.485
[03272005]
=====
Mea Huaka ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.405
[03272005]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins trans-

mitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/amsat/listserv/menu.html

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satelite Report Editor is James K. Darrow, KB9MMC.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

From 2995400478972321276
X-Google-Thread: 10e8ad,fb07cca33c49376c,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit

```
Path: g2news1.google.com!news4.google.com!news.glorb.com!wn14feed!
worldnet.att.net!bgtnsc05-news.ops.worldnet.att.net.POSTED!53ab2750!not-for-mail
Message-ID: <43148F2B.1DCC8D5E@gmail.com>
From: "tomstdenis@gmail.com" <tomstdenis@gmail.com>
X-Mailer: Mozilla 4.79 [en] (Windows NT 5.0; U)
X-Accept-Language: en
MIME-Version: 1.0
Newsgroups: rec.radio.amateur.space
Subject: Re: note to rec.radio.amateur.space readers
References: <a11393c5.95a9d86c.tomstdenis@gmail.com>
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Lines: 94
Date: Tue, 30 Aug 2005 16:54:05 GMT
NNTP-Posting-Host: 12.76.210.216
X-Complaints-To: abuse@worldnet.att.net
X-Trace: bgtnsc05-news.ops.worldnet.att.net 1125420845 12.76.210.216 (Tue, 30 Aug
2005 16:54:05 GMT)
NNTP-Posting-Date: Tue, 30 Aug 2005 16:54:05 GMT
Organization: AT&T Worldnet
Xref: g2news1.google.com rec.radio.amateur.space:234

So you'll be on the next plane out to Baghdad ?

tomstdenis@gmail.com wrote:

> -----BEGIN PGP SIGNED MESSAGE-----
> Hash: SHA1
>
> It's getting a bit tiresome seeing one misguided American after another with
> their cutsie little yellow or red-white-blue ribbons on their outsized SUVs.
> Yeah, I guess it's the thing to do; maybe part of that whole soccer-mom
> culture. Unfortunately, the only thing they demonstrate is that the person
> behind the wheel is a clueless, gullible, misguided, nitwit.
>
> If foreign invaders landed on our soil, as we have done in Iraq, I would be
> the first one to take up arms and repel them. (I suppose that would make me
> an 'insurgent' by OUR logic.) This, and other aggressive governments have
> always done their utmost to make it APPEAR as if committing yourself to kill
> in feuds on distant shores that have nothing to do with the welfare of the
> citizenry is somehow patriotic.
>
> It is not.
>
> Enlisting in the armed forces, in the absence of a real and impending
> foreign threat, is no different that hiring yourself as a paid assassin . .
> the only difference is, you're not getting paid enough. But let's take a
> realistic look at exactly WHO joins up in an all-volunteer army.
>
> The first group are those who join (during peacetime) for the benefits: to
> get an education, or because it seems a reasonable career path. Consider
> carefully! Realize that you are gambling with your humanity. Once you sign
> that form, you sign away your right to say: "No, that is an atrocity." You
```

> put your abilities, including the ability to kill, at the disposal of proven liars, psychopaths . . . enemies of humanity. Do you think that every German soldier in World War II who helped load Jews into cattle cars was a cold-blooded killer? Most were poor kids, just like you, who got caught up in the patriotic frenzy. Once you're in, you're IN. You lose the ability to stop killing until they tell you so. This not only makes you less than human, it makes you less than an animal, for even the animals retain their freedom of self determination.
>
> The second group are the simple minded, who fall for patriotic entreaties about defending democracy, Mom, apple pie; in other words, all the traditional government propaganda. Do you think Soviet lads subjugated their neighbors throughout the world because they thought the Soviet Union was an EVIL empire? No, they were fighting for MOM, and whatever passes for apple pie in Russia. Step back and examine the lies your government is handing you, and ask yourself if they have the ring of truth. Do you want to be one of the murderers in uniform who opened up on their fellow citizens at Kent State? When you put on that uniform, you give up all autonomy, and become nothing more than a weapon, to be used for whatever evil purposes the scoundrels in government demand (and, if you look carefully, you will discover that the only interests THEY serve are those of the big businesses that own them.)
>
> Finally, you have the hard-core psychopaths. These are the people who WANT to kill. Murder, torture, rape; THESE are the American values upon which THIS group is focused. The cause doesn't matter, they're after the thrill that only warfare can provide.
>
> Just remember: killing for George W. Bush, or for George H.W. Bush, or for Lyndon B. Johnson, or for Richard M. Nixon is not the same as defending yourself, your family, your friends, or your country. Don't be a dupe. Don't Enlist!
>
> Remember -- supporting the troops means supporting Bush aggression, profiteering, and war crimes. Here's an idea: why not take those ribbons, dip them in blood, and mail them to the White House?
>
> - --
> Tom St.Denis
>
> 111 Banning Rd
> Kanata, Ontario
> K2L 1C3
> Canada
>
> Home: (613)836-3160
> Cell: (613)796-8220
>
> tomstdenis@gmail.com
> KeyID: 0x40B640D5
> Fingerprint: 53F9 307F F83E D52A 9E63
>   C2A5 B43F D952 40B6 40D5
>

```
> http://pgp.mit.edu:11371/pks/lookup?op=get&search=0x40B640D5
>
> -----BEGIN PGP SIGNATURE-----
> Version: PGP 8.0.3
>
> iQA/AwUBQxLVO7Q/2VJAtkDVEQJnnQCg1mRyNVgZ6Po6Xf7csn62Ph9rkC8AoMxZ
> Zo8jLvfr6bDGWZb/PhEpz3c8
> =2NAY
> -----END PGP SIGNATURE-----
```

```
From 3589582654623715497
X-Google-Thread: 10e8ad,fb07cca33c49376c
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news4.google.com!news.glorb.com!hwmnpeer01.lga!hwmedia!
news-server.columbus.rr.com!tornado.ohiordc.rr.com.POSTED!53ab2750!not-for-mail
From: Christopher Cox <chrisTOPHERcOX@coboxincORPOATED.comERCIAL>
User-Agent: Mozilla Thunderbird 1.0.2 (Windows/20050317)
X-Accept-Language: en-us, en
MIME-Version: 1.0
Newsgroups: rec.radio.amateur.space
Subject: Re: note to rec.radio.amateur.space readers
References: <a11393c5.95a9d86c.tomstdenis@gmail.com>
In-Reply-To: <a11393c5.95a9d86c.tomstdenis@gmail.com>
Content-Type: text/plain; charset=ISO-8859-1; format=flowed
Content-Transfer-Encoding: 7bit
Lines: 16
Message-ID: <LH1Se.90704$gB.90416@tornado.ohiordc.rr.com>
Date: Fri, 02 Sep 2005 19:26:35 GMT
NNTP-Posting-Host: 24.210.62.5
X-Complaints-To: abuse@rr.com
X-Trace: tornado.ohiordc.rr.com 1125689195 24.210.62.5 (Fri, 02 Sep 2005 15:26:35
EDT)
NNTP-Posting-Date: Fri, 02 Sep 2005 15:26:35 EDT
Organization: Road Runner High Speed Online http://www.rr.com
Xref: g2news1.google.com rec.radio.amateur.space:235
```

I noticed you left out Clinton (the Balkan's) and Kennedy (Vietnam).

This means you are not being logical within your own argument.

Your motives are now in question.

Sorry, but you will have to try harder next time, which I am reasonably confident you will (try agian).

PS, what is your country doing to help with our existing crisis? I know its a bit early, but we have a real mess on our hands.

Regards

Chris

```
From -5458987315724953796
X-Google-Thread: 10e8ad,fb07cca33c49376c
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news4.google.com!news.glorb.com!news-
feed01.roc.ny.frontiernet.net!nntp.frontiernet.net!news01.roc.ny.POSTED!fd24bd7a!
not-for-mail
From: bigamps <bigamps@even.louder.net>
User-Agent: Mozilla Thunderbird 1.0.6 (Windows/20050716)
X-Accept-Language: en-us, en
MIME-Version: 1.0
Newsgroups: rec.radio.amateur.space
Subject: Re: note to rec.radio.amateur.space readers
References: <a11393c5.95a9d86c.tomstdenis@gmail.com>
<LH1Se.90704$gB.90416@tornado.ohiordc.rr.com>
In-Reply-To: <LH1Se.90704$gB.90416@tornado.ohiordc.rr.com>
Content-Type: text/plain; charset=ISO-8859-1; format=flowed
Content-Transfer-Encoding: 7bit
Lines: 6
Message-ID: <Uo2Se.30$am.19@news01.roc.ny>
X-Complaints-To: abuse-news@frontiernet.net
X-Trace:
52616e646f6d4956a252b4953800373f3e714f7f7d6a2b0e81d536c4dea3c5d8b447bcf51ecc23b38e
4eb5868b1da2e693b2f3bf52c42c0261d91b44458b1fe43285e646d26c8dbe907c9ae444f47811b492
2fd15f735b02a6bfe8aaf8022ca33d3815258a22a7ca8cf28a56cc8253df
X-Abuse-Info: Please be sure to forward ALL headers so that we may process your
complaint properly.
NNTP-Posting-Date: Fri, 02 Sep 2005 20:14:44 UTC
Date: Fri, 02 Sep 2005 20:14:44 GMT
Xref: g2news1.google.com rec.radio.amateur.space:236
```

Christopher Cox wrote:
...

> PS, what is your country doing to help with our existing crisis?

They're trying but the incompetence of the Bush administration...
http://storiesinamerica.dailykos.com/storyonly/2005/8/31/235829/261

```
From -3759988798714552753
X-Google-Thread: 10e8ad,fb07cca33c49376c
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news3.google.com!news.glorb.com!hwmnpeer01.lga!hwmedia!
news-server.columbus.rr.com!tornado.ohiordc.rr.com.POSTED!53ab2750!not-for-mail
Message-ID: <4318C928.40806@coboxincORPOATED.comERCIAL>
From: Christopher Cox <chrisTOPHERcOX@coboxincORPOATED.comERCIAL>
User-Agent: Mozilla Thunderbird 1.0.2 (Windows/20050317)
X-Accept-Language: en-us, en
```

MIME-Version: 1.0
Newsgroups: rec.radio.amateur.space
Subject: Re: note to rec.radio.amateur.space readers
References: <a11393c5.95a9d86c.tomstdenis@gmail.com>
<LH1Se.90704$gB.90416@tornado.ohiordc.rr.com> <Uo2Se.30$am.19@news01.roc.ny>
In-Reply-To: <Uo2Se.30$am.19@news01.roc.ny>
Content-Type: text/plain; charset=ISO-8859-1; format=flowed
Content-Transfer-Encoding: 7bit
Lines: 27
Date: Fri, 02 Sep 2005 21:47:15 GMT
NNTP-Posting-Host: 24.210.62.5
X-Complaints-To: abuse@rr.com
X-Trace: tornado.ohiordc.rr.com 1125697635 24.210.62.5 (Fri, 02 Sep 2005 17:47:15 EDT)
NNTP-Posting-Date: Fri, 02 Sep 2005 17:47:15 EDT
Organization: Road Runner High Speed Online http://www.rr.com
Xref: g2news1.google.com rec.radio.amateur.space:237

bigamps wrote:
> Christopher Cox wrote:
> ...
>
>> PS, what is your country doing to help with our existing crisis?
>
>
> They're trying but the incompetence of the Bush administration...
> http://storiesinamerica.dailykos.com/storyonly/2005/8/31/235829/261

Hmmmm

Me thinks you are confusing Terrorist with the President.

"That said, the Canadian Red Cross is reportedly allowed into the area."

By the way, Thanks!

The press here is so fubar'd we have no idea that anyone from the outside even cares except of course Chavez. Friends of Castro are friends indeed.

Thank goodness Kerry is not in charge, what a photo op, from his yacht. :-)

Chris

From 3129588591770172312
X-Google-Thread: 10e8ad,fb07cca33c49376c
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news3.google.com!news.glorb.com!
newsfeed2.telusplanet.net!newsfeed.telus.net!edtnps89.POSTED!1438be72!not-for-mail

From: Tony VE6MVP <tony@REMOVEve6mvp.com>
Newsgroups: rec.radio.amateur.space
Subject: Re: note to rec.radio.amateur.space readers
Message-ID: <6mfmh15vdc542bpftjsoj28kv9qf3olfq9@4ax.com>
References: <a11393c5.95a9d86c.tomstdenis@gmail.com>
<LH1Se.90704$gB.90416@tornado.ohiordc.rr.com>
X-Newsreader: Forte Agent 1.93/32.576 English (American)
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Lines: 31
Date: Sun, 04 Sep 2005 18:43:44 GMT
NNTP-Posting-Host: 199.126.134.163
X-Trace: edtnps89 1125859424 199.126.134.163 (Sun, 04 Sep 2005 12:43:44 MDT)
NNTP-Posting-Date: Sun, 04 Sep 2005 12:43:44 MDT
Xref: g2news1.google.com rec.radio.amateur.space:238

On Fri, 02 Sep 2005 19:26:35 GMT, Christopher Cox
<chrisTOPHERcOX@coboxincORPOATED.comERCIAL> wrote:

>This means you are not being logical within your own argument.
>
>Your motives are now in question.
>
>Sorry, but you will have to try harder next time, which I am reasonably
>confident you will (try agian).

That guy is an idiot.

>PS, what is your country doing to help with our existing crisis? I know
>its a bit early, but we have a real mess on our hands.

Vancouver's Urban Search and Rescue Team is currently in Louisiana to assist in the search and rescue efforts in the areas of the state ravaged by Hurricane Katrina. The team was deployed on August 31 and is working with the Louisiana State Troopers and the U.S. National Guard.
http://www.city.vancouver.bc.ca/usar/

Canadian warships to sail to Louisiana

Three Canadian warships, a coast guard vessel and three Sea King helicopters will be sent to Louisiana on Tuesday with relief supplies for the U.S. Gulf Coast.

http://www.cbc.ca/story/canada/national/2005/09/02/
Canadian_ships_to_louisiana20050902.html

Tony

From -3976301421257329260
X-Google-Thread: 10e8ad,fb07cca33c49376c

X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news3.google.com!news.glorb.com!news-feed01.roc.ny.frontiernet.net!nntp.frontiernet.net!news*.tds.net.MISMATCH!newspeer.tds.net!sn-xit-03!sn-xit-12!sn-xit-08!sn-post-01!supernews.com!corp.supernews.com!not-for-mail
From: "Jim n Alaska" <akjim1@removegmail.com>
Newsgroups: rec.radio.amateur.space
Subject: Re: note to rec.radio.amateur.space readers
Date: Sun, 4 Sep 2005 16:52:50 -0800
Organization: Posted via Supernews, http://www.supernews.com
Message-ID: <11hn5n3dcsd8795@corp.supernews.com>
References: <a11393c5.95a9d86c.tomstdenis@gmail.com> <LH1Se.90704$gB.90416@tornado.ohiordc.rr.com> <Uo2Se.30$am.19@news01.roc.ny>
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.2180
X-RFC2646: Format=Flowed; Response
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.2180
X-Complaints-To: abuse@supernews.com
Lines: 17
Xref: g2news1.google.com rec.radio.amateur.space:239

Its local government responsibility to evacuate, I noticed school busses just sitting parked, the mayor blew it, future planning would help next time, I recommend, don't build your house below sea level, and require a education, notice it was mostly un educated that lacked money to evacuate.

"bigamps" <bigamps@even.louder.net> wrote in message
news:Uo2Se.30$am.19@news01.roc.ny...
> Christopher Cox wrote:
> ...
>> PS, what is your country doing to help with our existing crisis?
>
> They're trying but the incompetence of the Bush administration...
> http://storiesinamerica.dailykos.com/storyonly/2005/8/31/235829/261

From -1086826062491657696
X-Google-Thread: 10e8ad,fb07cca33c49376c
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news4.google.com!news.glorb.com!hwmnpeer01.lga!hwmedia!news-server.columbus.rr.com!tornado.ohiordc.rr.com.POSTED!53ab2750!not-for-mail
From: Christopher Cox <chrisTOPHERcOX@coboxincORPOATED.comERCIAL>
User-Agent: Mozilla Thunderbird 1.0.2 (Windows/20050317)
X-Accept-Language: en-us, en
MIME-Version: 1.0
Newsgroups: rec.radio.amateur.space

Subject: Re: note to rec.radio.amateur.space readers
References: <a11393c5.95a9d86c.tomstdenis@gmail.com>
<LH1Se.90704$gB.90416@tornado.ohiordc.rr.com>
<6mfmh15vdc542bpftjsoj28kv9qf3olfq9@4ax.com>
In-Reply-To: <6mfmh15vdc542bpftjsoj28kv9qf3olfq9@4ax.com>
Content-Type: text/plain; charset=ISO-8859-1; format=flowed
Content-Transfer-Encoding: 7bit
Lines: 59
Message-ID: <D1YSe.71791$2Q3.41000@tornado.ohiordc.rr.com>
Date: Mon, 05 Sep 2005 13:49:23 GMT
NNTP-Posting-Host: 24.210.62.5
X-Complaints-To: abuse@rr.com
X-Trace: tornado.ohiordc.rr.com 1125928163 24.210.62.5 (Mon, 05 Sep 2005 09:49:23 EDT)
NNTP-Posting-Date: Mon, 05 Sep 2005 09:49:23 EDT
Organization: Road Runner High Speed Online http://www.rr.com
Xref: g2news1.google.com rec.radio.amateur.space:240

Hello Tony,

Thanks for your reply.

And thanks to your country men coming in to assist.

Other than Cuba and Venezuela, the press here was not listing any of the MANY countries trying to provide aid, till today.

As I am getting information from the ground around the area, the problem seems to be fuel. Aid arriving is captured because there is no gas to get back out. The infrastructure is broken in not providing logistical help to the aid providers.

Just information for those going in, bring enough fuel to get back out with the precious cargo you will be coming back out with.

I would think MIDCARS would be a good source for updates to this situation.

Warmest Regards,

Chris

Tony VE6MVP wrote:
> On Fri, 02 Sep 2005 19:26:35 GMT, Christopher Cox
> <chrisTOPHERcOX@coboxincORPOATED.comERCIAL> wrote:
>
>
>>This means you are not being logical within your own argument.
>>
>>Your motives are now in question.
>>
>>Sorry, but you will have to try harder next time, which I am reasonably
>>confident you will (try agian).
>

```
>
> That guy is an idiot.
>
>
>>PS, what is your country doing to help with our existing crisis? I know
>>its a bit early, but we have a real mess on our hands.
>
>
> Vancouver's Urban Search and Rescue Team is currently in Louisiana to
> assist in the search and rescue efforts in the areas of the state
> ravaged by Hurricane Katrina. The team was deployed on August 31 and
> is working with the Louisiana State Troopers and the U.S. National
> Guard.
> http://www.city.vancouver.bc.ca/usar/
>
> Canadian warships to sail to Louisiana
>
> Three Canadian warships, a coast guard vessel and three Sea King
> helicopters will be sent to Louisiana on Tuesday with relief supplies
> for the U.S. Gulf Coast.
>
> http://www.cbc.ca/story/canada/national/2005/09/02/
Canadian_ships_to_louisiana20050902.html
>
> Tony


From 6349154911117786473
X-Google-Thread: 10e8ad,9670e177f4d167fe,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news3.google.com!news.glorb.com!
border1.nntp.dca.giganews.com!nntp.giganews.com!elnk-atl-nf1!
newsfeed.earthlink.net!stamper.news.atl.earthlink.net!
newsread2.news.atl.earthlink.net.POSTED!46041641!not-for-mail
From: "JoAnne Maenpaa" <wb9jej_no-spam@earthlink.net>
Newsgroups: rec.radio.amateur.space
Subject: ANS-247 AMSAT Weekly News Bulletin
Lines: 372
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <on1Te.7475$9i4.2317@newsread2.news.atl.earthlink.net>
Date: Mon, 05 Sep 2005 19:53:56 GMT
NNTP-Posting-Host: 66.167.182.127
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread2.news.atl.earthlink.net 1125950036 66.167.182.127 (Mon, 05 Sep
2005 12:53:56 PDT)
NNTP-Posting-Date: Mon, 05 Sep 2005 12:53:56 PDT
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news1.google.com rec.radio.amateur.space:241
```

AMSAT NEWS SERVICE
ANS-247

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:

* Symposium News from AMSAT President
* Katrina Assistance
* ARISS Status August 29, 2005
* SSETI Express - Four Weeks Until Lift-Off
* PCSAT2 Mode Change
* North Texas Balloon Project Launch #14

SB SAT @ AMSAT $ANS-247.01
Symposium News from AMSAT President

AMSAT News Service Bulletin 247.01
From AMSAT HQ SILVER SPRING, MD.
September 4, 2005
To All RADIO AMATEURS
BID: $ANS-247.01

I received many panicked phone calls and e-mails today regarding the upcoming AMSAT Annual meeting, which also includes a Board of Directors meeting before the Symposium and IARU and Eagle Team meetings afterwards. Some of you have tried to call the hotel without success. Others have realized that their decision to fly to New Orleans and drive was flawed as the airport is under water only to find the airlines gouging you with high fees to change a "non-refundable ticket" that they can't honor anyway.

The hotel is 100 miles West of New Orleans and therefore was spared the brunt of the storm and the resultant devastation. However, refugees are filling up hotels up to 300 miles away and many will not be returning any time soon. I fear that our Symposium may be doomed but I do not know for sure.

Over the next several days AMSAT officials will be evaluating the situation in Lafayette LA and will be considering alternatives. We have already had one offer to try to host the Symposium in Dayton Ohio. Moving the symposium and associated meetings at this late date would be a Herculean task and may cost everyone significant extra air fare fees. The airlines have added major fuel cost surcharges and are sticking with the extra fees for exchanging tickets.

Please do not change or cash in tickets yet. The hotel is no longer accepting any reservations, even at the national 800 number.

If there are any other volunteers willing to try to host this event with no time to prepare and thousands of details to manage please contact our VP of Marketing and User Services, Barry Baines, WD4ASW at wd4asw@amsat.org or AMSAT's Manager, Martha Saragovitz at martha@amsat.org.

Remember, we don't know for sure that we must change anything so wait until there is a final announcement before making any changes.

Rick Hambly, W2GPS
AMSAT President

[ANS thanks Rick, W2GPS for the above information]

/EX

SB SAT @ AMSAT $ANS-247.02
Katrina Assistance

AMSAT News Service Bulletin 247.02
From AMSAT HQ SILVER SPRING, MD.
September 4, 2005
To All RADIO AMATEURS
BID: $ANS-247.02

We are all concerned about the people in the path of Katrina's destruction. Many of us have friends or family in the area, others have friends and co-workers who have friends or family in the area. At this time, information into and out of the affected areas is sporadic. Our fellow hams are overloaded with requests for food, water and rescue.

If you need to locate someone visit: http://www.satern.org/ and complete the health and welfare information request. This group is also on the air on 14.265. SATERN has the ability to hold the messages and to handle delivery when information can get to the affected area. Don't forget to provide the last known address of the person you are looking for as well as the area they may have evacuated to.

Here's how YOU can help now. Keep frequencies with any kind of relief traffic clear -- that means listen only, don't be a policeman. Offer to handle the internet input or the HF traffic to SATERN from your area for those without internet access or HF privileges. Try a text message via cell phone. Have patience.

If you want to go to the area to assist with communications or other activities, contact the Red Cross or other relief agencies FIRST. They have required training courses before you can be deployed so do not be surprised if you are told no. Donate money. Most importantly, DO NOT ATTEMPT TO TRAVEL TO THE AREA ON YOUR OWN.

[ANS thanks Sherri, W4STB for the above information]

/EX

SB SAT @ AMSAT $ANS-247.03
ARISS Status August 29, 2005

AMSAT News Service Bulletin 247.03
From AMSAT HQ SILVER SPRING, MD.
September 4, 2005
To All RADIO AMATEURS
BID: $ANS-247.03

1. Sapporo Contact Successful

The Sapporo Junior Amateur Radio Club in Sapporo, Kokkaido, Japan experienced a successful contact with the ISS on Monday, August 22. Thirteen students asked 19 questions of John Phillips, KE5DRY, as high school student Jun Maeda, JL8AQH, manned the radio. Approximately fifty people attended the event, which was covered by three newspapers and two television stations.

2. ARISS International Meeting

The monthly ARISS International Teleconference was held on Tuesday, August 23. Among the items discussed were the SuitSat project, the SSTV status, PCSAT2, and the Exploration Initiative. The next ARISS International Meeting will be held on September 20.

3. ARRL Article on ARISS Delegate Rosalie White

On August 22, ARRL ran a web story on ARRL Field and Educational Services Manager, Rosalie White. Rosalie has returned to her home state of Indiana to help with family issues, but she will continue to work with ARRL and ARISS. The story, "Rosalie White, K1STO, departs ARRL Headquarters, keeps connection," may be found at: http://www.arrl.org/

4. SuitSat and SSTV Shipped

Sergey Samburov, RV3DR, reports that the SuitSat hardware and the SSTV system have been packed and shipped to Baikonur Cosmodrome to be included on the next Progress flight, and that the crew has been trained in SuitSat assembly and radio operations. Progress 19P is scheduled to launch on September 8.

5. Crew Debrief

On Monday, August 22, the ARISS-U.S. team spoke with Andy Thomas, KD5CHF, about the general contacts he made using the ARISS radio system while on the ISS. Thomas had not been scheduled for any school contacts due the busy schedule of the STS-114 astronauts, but he did make time for a few general contacts over Australia and New Zealand, causing much excitement among the radio operators there.

6. ARISS Member Interviewed for Documentary

ARISS-Europe member, Carlos Eavis, G0AKI, was interviewed for the BBC Radio 1 documentary, "Radio Anyone." An article, "BBC Radio 1 documentary 'Radio Anyone' now on the web," was posted to the web and provides a link to the audio. To listen to the interview, go to:
http://www.southgatearc.org/news/aug2005/radio_anyone_audio.htm

7. ARRL Article on Arizona Contact

Students at D.W. Higgins Institute in Tempe, Arizona spoke with astronaut John Phillips, KE5DRY, on Wednesday, August 17. ARRL ran a web story on the contact, entitled, "Space QSO Provides Arizona Youngsters Something to Remember." See:
http://www.arrl.org/news/stories/2005/08/26/3/?nc=1

8. Cosmonaut Makes General Contacts

Sergei Krikalev, U5MIR, made several general contacts over the weekend. Stations in the U.S., Kuwait, Malaysia, and Australia reported speaking to the cosmonaut on Saturday, August 27, with some sending wishes for a happy birthday, as Krikalev turned 47.

[ANS thanks Carol, KB3LKI for the above information]

/EX

SB SAT @ AMSAT $ANS-247.04
SSETI Express - Four Weeks Until Lift-Off

AMSAT News Service Bulletin 247.04
From AMSAT HQ SILVER SPRING, MD.
September 4, 2005
To All RADIO AMATEURS
BID: $ANS-247.04

The launch date of September 27th and a lift-off time of 06:52:26 UTC now looks pretty certain for the Cosmos 3 rocket carrying SSETI Express with its three cubesat passengers and four other satellites into orbit.

Updated pre-launch keps will be made available in a few days time and there

are a number of web pages being developed to enable amateurs to locate SSETI Express, receive and download the telemetry and to forward it to Mission Control for their evaluation. Later in the mission it will also be possible for amateurs to transmit so-called "friendly" commands to request particular telemetry or thumbnail pictures.

The SSETI team and ESA - The European Space Agency, are very keen to recruit as many radio amateurs as possible around the world to capture the telemetry. Our worldwide "virtual groundstation network" is a unique facility which we can use to our benefit as well as theirs. By showing how well our network can substitute for their expensive professional one, we will really encourage them to include amateur transponder systems in their future missions.

ESA will be offering a very significant prize for the amateur who sends them the largest amount of telemetry during the mission and is also offering a unique "I heard it first" T shirt to the station that sends them the first report. This is actually likely to be one of the three Stations that we hope to having listening for SSETI Express in Antarctica - an ideal item of clothing for their forthcoming winter season!

The main mission site is being finalised and can already be accessed at www.sseti.net -- click on the "express mission operation web site" link. This has full details of the mission, the software, present orbital position and a host of other information.

There is also a Mission Control web site at:
http://www.express.space.aau.dk/?language=en&page=home
which will include a web cam of the control room and eventually the antennas and radio equipment.

AMSAT-UK will shortly be publishing the first edition of the SSETI Express Handbook which has been kindly edited by Richard, G3RWL. This will be available as a downloadable PDF file or, for a small fee, in a full colour printed version by post.

The SSETI Express launch campaign team will be setting off for Russia on Sept. 5th and will try to keep a good flow of up-to-date information flowing from the launch site.

Meanwhile there are two possibilities for joining the excitement of the Sept. 27th launch:

On ASTRA 1G which has coverage of most of Europe. The launch will be broadcast via ESA Television on ASTRA 1G at 19.2 degrees east:

Transponder: 1.108
Reception Frequency: 12551.50 mHz
Polarization: Vertical
Symbol Rate: 22Msymb/s
FEC: 5/6
TS_ID: 1108
ON_ID: 1
Service Name: ESA
Service provider: ASTRA
Service_ID: 12140
TXT: none

This is always on and will transmit an ESA logo starting three days before the launch. The programme is expected to run for approximately 30 mins and will include the launch sequence live from the Plesetsk launch site. The final programme timing will be announced by ESA nearer to the time.

On the Internet - World Wide Web

The ESA launch programme on ASTRA 1G will also be available as a web stream on the internet. The Home Counties Amateur Television Club operate an amateur television repeater (GB3HV) at High Wycombe in the UK and the output of this repeater is usually streamed onto the internet. They have kindly agreed to make this web stream service available to us for the launch period.

The web stream runs at about 210 Kbits/sec so a broadband internet connection will be required for a reliable relay. To access this web stream you need to have Windows Media Player and connect to mms://wm9.btrichmedia.com/hcatv. This service should be capable of serving a large number of users without difficulty.

This web stream operates on a 24/7 basis so it can be checked at anytime. Before the launch it may be displaying a variety of test cards, amateurs or other pictures. The display may take up to 30 seconds to appear and during the second half of every hour (from 30 mins to 59 mins after the hour) it will display a blank screen unless GB3HV is actually in use.

So we are nearly there! Please keep your fingers crossed for just a little longer so we can have a successful launch campaign.

More information will be relayed over the next few weeks but if the web sites listed do not give you the answers that you need about anything to do with SSETI Express please get in touch.

[ANS thanks Graham, G3VZV for the above information]

/EX

SB SAT @ AMSAT $ANS-247.05
PCSAT2 Mode Change

AMSAT News Service Bulletin 247.05
From AMSAT HQ SILVER SPRING, MD.
September 4, 2005
To All RADIO AMATEURS
BID: $ANS-247.05

The PCSAT2 side-A system has been operated for 4 weeks in PSK-31 mode, and will now be changed from PSK-31 mode to UI/APRS Packet digipeater mode.

See: http://www.ew.usna.edu/~bruninga/pec/pc2ops.html

In this mode, the uplink is 145.825 and downlink is 435.275 +/- 10 kHz doppler to avoid any interference with the 145.800 ARISS operations. The system is 1200 baud with the callsign of PCSAT2 and alias of ARISS, so the same setting as you use for normal ARISS packet, should work here too if you use the ARISS alias.

Again, refer to the PCSAT2 operations page and the User Service Agreement for this mode. Specifically, unattended beacons are not authorized. The digipeater is for human communications, not blind beacons.

See: http://www.ew.usna.edu/~bruninga/pec/useragreemt.txt

[ANS thanks Bob, WB4APR for the above information]

/EX

SB SAT @ AMSAT $ANS-247.06
North Texas Balloon Project Launch #14

AMSAT News Service Bulletin 247.06
From AMSAT HQ SILVER SPRING, MD.
September 4, 2005
To All RADIO AMATEURS
BID: $ANS-247.06

The North Texas Balloon Project will launch NTBP #14, named "Rapidfire," on Sept. 3, 2005 from the Hillsboro, TX, Airport. This flight is essentially a re-flight of NTBP #12, flown on 20 August 2005, to counter the actions of "Dr. Murphy" enjoyed on NTBP #12. It will have on board a cross band voice repeater, voice reports of inside and outside temperatures plus time (courtesy of the Fannin County ARC, Bonham, TX), APRS package location, and a DF Beacon. Liftoff time will be moved to approximately 8:15 AM CDT. A Special Event Callsign, N5B, will be used for this event. This time there will be a Special Event operation on 14.282 mHz during the event. There will be an HF Launch Information Net on 7260 +/-10 kHz. Other frequencies, and information for NTBP #14, are the same as the information for NTBP #12 posted at www.ntbp.org. Check the Web Page frequently for status and come join the fun!

Frequencies:

Crossband Repeater: Uplink: 445.800 mHz, Downlink: 147.560 mHz
APRS Location Information: 144.390 mHz
Time and Temperature Package: 146.56 mHz
Shuttle Package DF Beacon: 145.56 mHz
Launch Information Net: 7260 +/- 10 kHz
N5B Special Event Check-In: 14.282 mHz

[ANS thanks Keith, W5IU for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Al Marote, WA1LBG
wa1lbg at amsat dot org

From 8394599130627346258
X-Google-Thread: 10e8ad,e3223c2dfefef82d,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII
Path: g2news1.google.com!news4.google.com!newshub.sdsu.edu!
border1.nntp.dca.giganews.com!border2.nntp.dca.giganews.com!nntp.giganews.com!
elnk-atl-nf1!newsfeed.earthlink.net!stamper.news.atl.earthlink.net!
newsread2.news.atl.earthlink.net.POSTED!46041641!not-for-mail
From: "JoAnne Maenpaa" <wb9jej_no-spam@earthlink.net>
Newsgroups: rec.radio.amateur.space
Subject: WSR-247 AMSAT Weekly Satellite Report
Lines: 1214
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <io1Te.7476$9i4.4368@newsread2.news.atl.earthlink.net>
Date: Mon, 05 Sep 2005 19:54:54 GMT
NNTP-Posting-Host: 66.167.182.127
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread2.news.atl.earthlink.net 1125950094 66.167.182.127 (Mon, 05 Sep 2005 12:54:54 PDT)
NNTP-Posting-Date: Mon, 05 Sep 2005 12:54:54 PDT
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news1.google.com rec.radio.amateur.space:242

This report is organized into 4 parts.
Part 1 - operational analog amateur satellites.
Part 2 - operational digital amateur satellites.
Part 3 - non - operational satellites
Part 4 - proposed satellites

SB SAT @ AMSAT <W8ISS $ANS-247.S1
WSR 247 Part 1 09/04/2005

AMSAT NEWS SERVICE BULLETIN 247.S1 FROM AMSAT HQ
SILVER SPRING, MD, SEPTEMBER 04, 2005
TO ALL RADIO AMATEURS
BID: $ANS-247.S1

VO-52 HAMSAT
Catalog Number: 28650
Launch Date: May 05,2005

Status: On orbit
Current Mode: U/V

Proposed frequencies:

Indian transponder:

Uplink : 435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW
Beacom : 145.940MHz continue carier signal

Dutch transponder:
Uplink : 435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW
Beacon : 145.860MHz 12WPM with CW message
[07242005]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Mode: PBBS - OFF
      FM REPEATER - V/U

Analog voice downlink: 435.300 MHz FM
          435.150 MHz FM
Analog voice uplink: 145.880 MHZ FM
          145.920 MHz FM 67Hz PL tone
                       1268.700 MHz FM 67Hz PL tone

Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
                       2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast
   Protocol (PBP)

Broadcast: PECHO-11
BBS: PECHO-12

Current scheduled operating modes:

Due to the on going Huricane Katrina Relief Efforts in the Gulf Coast
States,
AO-51 will continue in the default mode V/U with 9k6 Digital, V/U, PBP BBS
mode. Updated information will be posted as soon as any changes are made.

[ANS-WSR thanks Bill, VE7WFG for the above information]
[0904005]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Uplink: 145.850 MHz (67.0 Hz PL tone) (See below for operating
          procedures)
Downlink: 436.795 MHz

There have been unconfirmed reports on the amsat-bb remailer that SO-50 has shifted downlink frequency as much as 5khz up. This both from Europe.

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz. The order of operation is thus: (allow for Doppler as necessary)

1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10 minute timer.

[09122004]

=====

FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: OPERATIONAL

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplink: 145.850 145.870 145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

John, N4QWL reports on July 16th, 2005:

Last evening I had a AOS to LOS qso with WI2W. FO-29 came up at 01:17z here in FM07 and I found WI2W and we chatted until 01:33z. The satellite was at 2 degrees elevation when I finally heard him start to crackle a bit. What a great QSO! To think that I watched this bird launch back in 1996 and it is still working so well is a real thrill. I believe I still have the video. I might just look for it and watch it again. Boy do I love this satellite stuff! Look for you all up there.

Please send the reception reports to lab2 'at' jarl.or.jp.
Please use the subject line: 'FO-29 reception report'.

Mineo, JE9PEL, has an FO-29 satellite telemetry analysis program that will automatically analyze all digital telemetry from the satellite (such as current, voltage and temperature). FO29CWTE is available at:
http://www.ne.jp/asahi/hamradio/je9pel/
[ANS-WSR wishes to thanks John, N4QWL for this week's report]

[07172005]

=====

AO-27 AMRAD
Catalog number: 22825

```
Launched: September 26, 1993

Status: Operational

Uplink:     145.850 MHz FM
Downlink:   436.795 MHz FM

The latest information on AO-27 from control operator Michael Wyrick,
N3UC (former N4USI), can be found at:
http://www.ao27.org

An AO-27 question-and-answer page is available on the AMSAT-NA web
site, with updates by Ray, W2RS. The URL is:
http://www.amsat.org/amsat/intro/ao27faq.html

[ANS-WSR thanks John, K6YK, for this week's AO-27 report]
[08292004]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Semi-operational in sunlight.
Return to active status: June 21,2002

Uplink:     145.850 to 145.950 MHz CW/USB Mode A
            432.125 to 432.175 MHz CW/LSB Mode B
Downlink:    29.400 to  29.500 MHz CW/USB Mode A
            145.975 to 145.925 MHz CW/USB Mode B
Beacon:     29.502 MHz, 145.972 MHz, 435.1 MHz, 2304.1 MHz

Emily, W0EEC has created a website to allow the users of AO-7 to record
contacts, observations and use of the satellite more effectively at:
http://www.emilyshouse.com/experthams/ao7/main.php
This includes the ability to log contacts.

Tim, K3TZ has written a program to decode AO-07 telemetry.
The program can be downloaded at:
http://www.qsl.net/k3tz/files/K3TZ_AO-07_Telemetry_Decoder_0.5.zip

For more AO-7 info:
http://www.amsat.org/amsat/sats/n7hpr/ao7.html
[11142004]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: U/V CROSS-BAND REPEATER
Digipeater: Inactive

The current Expedition 11 crew is:
```

Commander Sergei Krikalev
Flight Engineer John Phillips

Worldwide packet uplink: 145.990 MHz FM
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM
Doppler Shift is 10 KHz

Russian callsigns: RS0ISS, RZ3DZR
USA callsign: NA1SS
Packet station mailbox callsign: RS0ISS-11
Packet station keyboard callsign: RS0ISS-3
Digipeater callsign: ARISS

This off the ARISS webpage:
http://www.rac.ca/ariss/oindex.htm#New%20ARISS%20Operations :
The ARISS program is pleased to announce that the amateur radio equipment aboard the International Space Station is now operating in cross-band repeat mode. We realize that many of you will miss the packet-operating mode. However, cross-band repeat allows further experimentation of the ISS amateur radio system

The downlink for this operating mode remains the same, so listen for the station on 145.80 MHz. The new uplink frequency is 437.80 MHz. All frequencies are subject to Doppler shifting. For further information on working satellites and adjusting for Doppler shift, please review Emily Clark's (W0EEC) excellent presentation on AMSAT's website:
http://www.amsat.org/amsat-new/information/faqs/Intro_sats.pdf

The ISS daily crew schedule can be found at:
http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line is NOT translated from Russian and posted.

More information is available at:
http://www.rac.ca/ariss
http://spaceflight.nasa.gov/station/reference/radio/
http://www.marexmg.org/fileshtml/unprotopage.html
http://www.issfanclub.com
http://oscar.dcarr.org/
[07242005]
NNNN
/EX

SB SAT @ AMSAT <W8ISS $ANS-247.S2

WSR 247 Part 2 09/04/2005

AMSAT NEWS SERVICE BULLETIN 247.S2 FROM AMSAT HQ
SILVER SPRING, MD, SEPTEMBER 04, 2005
TO ALL RADIO AMATEURS
BID: $ANS-247.S2

PCSAT2 ?0-??
Catalog Number:
Launch Date: August 1, 2005

Status: Operational

PCSAT2 was installed on the exterior of the International Space Station and was activated on August 3, 2005.

PCSAT2 CAPABILITIES: PCSAT2 is attached to the ISS and so its operations must be in cooperation with the ARISS communications suite to minimize any mutual interference and to coordinate activities. Here are the capabilities of the PCSAT2 and ARISS payloads:

PCSAT SYSTEM A:

435.275 PCSAT2 DOWNLINK 1200 baud packet with uplink on 145.825
435.275 PCSAT2 DOWNLINK Occasional user PSK-31 continuous downlink
145.825 PCSAT2 DOWNLINK 1200 baud packet
PCSAT SYSTEM B:

437.975 PCSAT2 DOWNLINK periodic Solar Cell data and PCSAT2 telemetry at 9600 baud
437.975 PCSAT2 DOWNLINK TNC-B command downlink at 1200 baud
437.975 PCSAT2 DOWNLINK User Voice Repeater with VHF uplink
437.975 PCSAT2 DOWNLINK Packet digipeater with VHF uplink

It looks like PCSAT2 can best contribute at this time by operating in PSK-31 mode for the near future. This is a very exciting new transponder mode which solves the congestion problem on FM repeaters by letting multiple stations all communicate at the same time.

PSK-31 users are welcome to try out the new PCSAT2 PSK-31 transponder on ISS with an uplink on 29.402 � 1 KHz and downlink on 435.275 � Doppler using FM.

The FM downlink lets everyone operate full duplex and everyone to see the same view of the passband as everyone else. THus you can see exactly what your signal looks like to everyone else.

Help Wanted:

Here is your chance to become a viable part of the Amateur Satellite Community.

We are looking for a volunteer satellite packet station in Hawaii that is interested in helping with telemetry and sat-gating of PCSAT2 and ARISS packets. Requirements are:

1) General familiarity with packet
2) TNC connected to a cross band radio that
   can RX on UHF and TX on VHF.
3) modest UHF beam and rotator system.

Contact WB4APR for more information.

Packets seen from PCSAT2 can be reviewed at:
http://www.findu.com/cgi-bin/pcsat2.cgi

A screen shot of both the 9600 bps and 1200 bps decoded data as seen by Simon, 9W2QC, can be seen at:
http://www.9w2qc.net/pcsat2/

More information on PCSAT2 can be found at:
http://web.usna.navy.mil/~bruninga/pcsat2.html

[ANS-WSR thanks Bob, WB4APR and the U.S. Naval Academy Satellite Lab for the aboveinformation.]

[08282005}
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Mode: PBBS - OFF
      FM REPEATER - V/U HIGH POWER

Analog voice downlink: 435.300 MHz FM
         435.150 MHz FM
Analog voice uplink: 145.880 MHz FM
         145.920 MHz FM 67Hz PL tone
                       1268.700 MHz FM 67Hz PL tone

Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
                       2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast
   Protocol (PBP)

Broadcast: PECHO-11
BBS: PECHO-12

Current scheduled operating modes:

Due to the on going Huricane Katrina Relief Efforts in the Gulf Coast States,
AO-51 will continue in the default mode V/U with 9k6 Digital, V/U, PBP BBS

mode. Updated information will be posted as soon as any changes are made.

[ANS-WSR thanks Bill, VE7WFG for the above information]
[0904005]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Non-Operational?????

Uplink/downlink: 145.827 MHz 1200 baud AX.25 AFSK via W3ADO-1
Aux/Uplink: 435.250 MHz 9600 baud via PCSAT-2 (off)
APRS Downlink: 144.390 MHz (Region 2)

PCSat is a 1200-baud APRS digipeater designed for use by stations using hand-held or mobile transceivers. Downlinks feed a central web site at:
http://pcsat.aprs.org

The APRS-equipped PCSat was built by midshipmen from the U.S. Naval Academy under the guidance of Bob Bruninga, WB4APR.
[07242005]
=====
CUTE-1
Catalog number: 27844
Launched: June 30,2003

Status: Operational

Uplink: ?
Downlink: 436.8375 CW
              437.4700 1200 FM ax25 or SRLL (ACTIVE only near Japan ?)
Cliff, K7RR reports:
In the latest Weekly Satellite Report, CUTE 1, #27844 is listed as OPERATIONAL?
Indeed it is very operational as a CUBESAT sending CW telemetry on 436.8345 MHz. At the July 7 2005, 23:45:20 pass over the Western USA:
CUTE 1 6B A4 xx 7F D7 66A8 4702 FF FF7C 65
CUTE 1 6C A6 59 80 D9 66A8 4702 FF FE7C B6

The June 30th KEPS were within ten seconds of AOS and LOS. It is an very good object to practice tracking as the orbit and transmitter power are similar to proposed CUBESATS awaiting launch this December. As a check for Doppler correction, the lack of change in tone is an excellent indicator.

CUTE 1 is a Japanese (Tokyo Institute of Technology) one kilogram nanosatellite that was launched by a Rokot rocket from Plesetsk at 14:15 UT on 30 June 2003. It carries a 100 mW beacon at 436.8375 MHz. Initial orbital parameters were period 101.4 min, apogee 831 km, perigee 819 km, and inclination 98.7?.

For further info about CUTE-1 goto:
http://lss.mes.titech.ac.jp/ssp/cubesat/operation/Schedule_e.html

[ANS WSR wishes to thank Cliff, K7RR, for this week's information]
[07242005]

=====

GO-32 TECHSAT-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Downlink: 435.225 MHz FM (9600-baud FSK)
(435.325 n/a - temperature problems)
Uplinks: 145.850, 145.890, 145.930 FM
1269.700, 1269.800, 1269.900 FM
Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[03132005]

=====

MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Operational

Uplink: 145.850 or 145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz
Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[05152005]

=====

AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Semi-operational, the digipeater command is on and open for APRS users.

Uplink: 145.90 145.92 145.94 145.96 MHz FM
(using 1200-baud Manchester FSK)
Downlink: 437.026 MHz SSB (1200-baud PSK)
Mode-S Beacon: 2401.1428 MHz
Broadcast Callsign: PACSAT-11

BBS: PACSAT-12

A WOD collection of current graphics along with general information and telemetry samples can be found at:
http://www.telecable.es/personales/ea1bcu
[05092004]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational?

Telemetry Downlink: 145.826 MHz. FM (1200-baud AFSK).
approx. 10 days ON, 10 days OFF
Mode-S Beacon: 2401.500 MHz. ... OFF
UHFBeacon: 435.025 MHz. ... OFF

OSCAR-11 is back! I received the good news, on Saturday morning, while at the AMSAT-UK Colloquium. This was entirely unexpected! On Sunday morning Bob G4VRC played me a recording of an early morning pass received that day.

During the period 21 July to 14 August 2005 consistent signals have been heard from 30 July to 08 August. Signals seem to be weaker than usual, confirmed by the many reports received. However,since I last heard the satellite on 30 April, I've reinstalled my antennas , which makes comparisons difficult.

Many thanks for all the recent reports of OSCAR-11 including those from KU7Z (who heard it first), KB2M, VK6XH, HK7MKE, KA2UPW, JE9PEL, G1OCN, HB9SKA and G8OQW.

All the analogue telemetry channels, 0 to 59 are zero, ie they have failed. The status channels 60 to 67 are still working. One bit in channel 62, DSR mode, has changed from WRITE to READ. DSR is the Digital Store & Readout experiment. This could be significant if the experiment is still drawing current, but the other status bit indicates that it is switched OFF.

The on-board clock is now showing a very large error. It has lost approximately 19 days since 30 April. During the recent data collection period, the clock error has been changing at a decreasing rate. The size of the clock error and the rate at which it is changing is similar to the duration of the solar eclipse periods. This suggests that the clock might have been switching OFF during eclipses.

The eclipses have now ended, and the satellite should be in continuous sunlight for the remainder of this year, and well into next year. This should help the satellite to continue transmitting, although continuous sunlight can cause problems due to excessive temperatures.

If the watchdog timer is still operating on a 20 day cycle, ie.

approximately ten days ON followed by 10 days OFF, then the VHF beacon should resume transmissions around 18 August.

The Beacon frequencies are -

VHF 145.826 MHz. AFSK FM ASCII Telemetry

UHF 435.025 MHz. OFF

S-band 2401.5 MHz. OFF

Listeners to OSCAR-11 may be interested in visiting my website which contains an archive of news & telemetry data. It also contains details about using a soundcard or hardware demodulators for data capture. There is software for capturing data, and decoding ASCII telemetry. The URL is www.users.zetnet.co.uk/clivew/

If you place this bulletin on a terrestrial packet network, please use the bulletin identifier $BID:U2RPT112.CWV, to prevent duplication.

[ANS-WSR thanks Clive, G3CWV, for the above information]

More information on UO-11 OSCAR-11 can be found at:
http://www.users.zetnet.co.uk/clivew/

MPEG3 files can be found here at Mineo, JE9PEL website:
http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm

[08212005]
NNNN
/EX

SB SAT @ AMSAT <W8ISS $ANS-247.S3
WSR 247 Part 3 09/04/2005

AMSAT NEWS SERVICE BULLETIN 247.S3 FROM AMSAT HQ
SILVER SPRING, MD, SEPTEMBER 04, 2005
TO ALL RADIO AMATEURS
BID: $ANS-247.S3

THE FOLLOWING ARE IN ORBIT BUT ARE
NON-OPERATIONAL AT THIS TIME:

POSAT-1 PO-28
Catalog Number: 22829
Launched : September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 435.250 MHz
          435.275 MHz

Uplink: 145.925 MHz

          145.975 MHz

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

PO-28 (POSAT-1), Portugal's first satellite, launched 12 years ago, will be turned over to Amateur Radio use in the very near future. That was the word July 30 from AMSAT-UK Secretary Jim Heck, G3WGM, during the AMSAT-UK International Space Colloquium in Guildford, England.

Launched September 25, 1993, the satellite operated as a packet store-and-forward BBS (9600 baud FM FSK) on Amateur Radio frequencies for several weeks in early 1994. Over the years, PO-28's primary usage has been commercial, although plans have called for eventually shifting its operation to ham radio use. G3WGM reports that following lengthy negotiations it has been agreed that the satellite can be switched permanently to amateur frequencies. The changeover is expected to take a couple of weeks.

The Portuguese satellite was built at the University of Surrey as part of a collaborative satellite technology program that involved industry and academe. Uplink frequencies will be 145.925 and 145.975 MHz. Downlink frequencies will be 435.250 and 435.275 MHz. More information on PO-28 is on the AMSAT Web site http://www.amsat.org/amsat/sats/n7hpr/po28.html.

Uplink Frequencies: 145.925 and 145.975 MHz
Downlink Frequencies: 435.250 and 435.275 MHz

Orbit: 822 x 800 km, 98.6 deg inclined, sun-synchronous.

Transponder capabilities include FM repeater and 38k4 data. If you want to hear how loud this satellite is, listen on 429.950 until the change back to amateur radio service.

Keplerian elements for PO-28 are not currently contained in the AMSAT keps bulletins, but can be found at Celestrak in amateur.txt using the name "POSAT". Users of Space Track should query the NORAD Satellite ID number 22829. The name listed by Space Track is "EYESAT A".

More information of POSAT-1 can be found at:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
http://www.amsat.org/amsat/sats/n7hpr/po28.html
[ANS-WSR wishes to thanks Trevor, M5AKA and Jim, G3WGM, for this week's information.]
[08072005]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launched: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

```
Beacon:   145.810 MHz (unmodulated carrier)

AO-10 has been locked into a Mode-B, 70-cm uplink and
2-meter downlink for several years.

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: Non-operational

Uplink:             145.875 145.900 145.925 145.950 MHz FM (1200-baud)
Downlink:           435.812 MHz SSB
Broadcast Callsign: ITMSAT-11
BBS:                ITMSAT-12

Alberto E. Zagni - I2KBD reports on 02/13/05
The spacecraft is in MBL (safe mode) and is trasmitting just 6 channels
of telemetry. Temperatures and voltage are nominal, but there seems to
be a problem with the onboard receiver, refusing to accept commands.
The spacecraft was launched in 1993, thus nearing 12 years in orbit...

Best regards
Alberto E. Zagni - I2KBD
ITAMSAT Mission Director

More information of IO-26 can be found at:

http://joshua.micronet.it/english/itamsat/itamsathome.html
http://www.amsat.org/amsat/sats/n7hpr/io26.html
www.itamsat.org

[02132005]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink:   21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB
Beacon:   29.408 MHz
Robot:    29.454 MHz
[05232004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991
```

```
Status: Non-operational

Uplink:      21.260 to  21.300 MHz CW/USB
Downlink:   145.860 to 145.900 MHz CW/USB
Beacon:     145.860 MHz
Robot:      145.908 MHz
[05232004]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink 145.975 MHz FM
Downlink 435.070 MHz FM
[05092004]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink:             145.900 FM 9600-baud FSK
Downlink:           435.120 MHz FM
Broadcast Callsign: UOSAT5-11
BBS:                UOSAT5-12
[01092005]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational?

Uplink:      145.858 to 145.898 MHz CW/USB
Downlink:     29.354 to  29.394 MHz CW/USB
Beacon:       29.352 MHz (intermittent)
SSB meeting frequency:  29.380 MHz (unofficial)

John, KD6PAG reports on June 16, 2004 to ANS:
RS-15 beacon seemed to be back in the mode where it's a tone about 5 seconds
off and then 5 seconds on this morning.

ANS is looking for more confirmations of RS-15 coming back.

[ANS thanks John, KD6PAG for RS-15 information]
[06202004]
=====
LO-19 LUSAT
Catalog number: 20442
```

Launched: January 22, 1990

Status: CW Beacon only

Uplink: 145.84 145.86 145.88 145.90 MHz FM
                    (using 1200-baud Manchester FSK)
CW downlink: 437.125 MHz
Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)
Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[05232004]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[08152004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM
Broadcast Callsign: HL01-11
BBS: HL01-12

Jim, AA7KC, reports that KO-23's downlink transmitter continues in a
non-operational status.
[05092004]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM (9600-baud FSK)
Downlink: 436.500 MHz FM
Broadcast Callsign: HL02-11

```
BBS:                HL02-12
[05092004]
=====
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink frequency (listed on the PanSat web site) 436.500 MHz

The satellite is not available for general uplink transmissions.

The Naval Postgraduate School developed PanSat. At the time of
launch, PanSat spread-spectrum digital transponders were to
be available to Amateur Radio operators along with software to utilize
this technology.

The satellite is still operating, however, the spread spectrum packet
radio portion never took place. The spacecraft is now beyond it's
initial 2-year mission life, but telemetry records are still being
downloaded.

For more information, visit the official PanSat web site at:
http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm

[ANS has no further information]
[05232004]
=====
SO-35 SUNSAT
Catalog Number:     ?
Launched:February 23, 1999

STatus: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
          Mode J Digipeater: 436.250 MHz
```

```
Uplinks: Mode B Repeater: 145.825 MHz
         Mode J Digipeater: 145.825 MHz and 145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[08082004]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink:             145.960 MHz (9600-baud FSK)
Downlink:           437.025 MHz 437.400 MHz
Broadcast Callsign: UO121-11
BBS:                UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA
web site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[05092004]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplink      V-band    145.840 -  145.990 MHz CW/LSB
            U-band    435.550 -  435.800 MHz CW/LSB
           L1-band   1269.250 - 1269.500 MHz CW/LSB
           L2-band   1268.325 - 1268.575 MHz CW/LSB
           S1-band   2400.350 - 2400.600 MHz CW/LSB
Downlink:  S2-band   2401.225 - 2401.475 MHz CW/USB
           K-band 24,048.010 - 24,048.060 MHz CW/USB
Beacon:    2401.323, 24,048.035
[05232004]
-----
SO-42  SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational
 Downlink:           437.075 MHz
Broadcast Callsign: SASAT2-11
BBS:                SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[08152004]
=====
SO-41  SAUDISAT-1A
```

Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz
Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[08152004]

=====

NO-45 SAPPHIRE

Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, callsign KE6QMD, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]

=====

AO-49 AATiS OSCAR-49 (SAFIR-M)

Catalog number: 27605
Launch Date: December 20, 2002

Status: Semi-operational.

Uplink 435.275 1200-baud AFSK
Downlink 145.825 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

AO-49 (SAFIR-M) is a German amateur radio payload onboard the small German scientific satellite "RUBIN-2".

AO-49 was built by the German amateur radio association "AATiS e.V." (German acronym for "Arbeitskreis Amateurfunk und Telekommunikation in der Schule", which means: 'working group for amateur radio anand telecommunications in schools'). AO-49 is designed as a "store and broadcast" system for APRS based messages, dedicated for the use of schools in combination with the existing WX-Net and planned buoy experiments in Germany.

No transmissions detected since the 1st of February 2003! It appears

AO-49 is not properly aligned to illuminate the solar panels. This should end soon. Due to its orbit, AO-49 will be in a phase without eclipses until 13Feb03.

Martin DG8UAU has written a small software program "SAFIR-M Decoder" to allow decoding of the received DATA0 frames. It is available at: http://amend.gmxhome.de in the section Aktuelles.

Details on AO-49 (SAFIR-M) can be found at:
http://amend.gmxhome.de

Information about AATiS e.V. is available at:
http://www.aatis.de
[05092004]
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/EX

SB SAT @ AMSAT <W8ISS $ANS-247.S4
WSR 247 Part 4 09/04/2005

AMSAT NEWS SERVICE BULLETIN 247.S4 FROM AMSAT HQ
SILVER SPRING, MD, SEPTEMBER 04,2005
TO ALL RADIO AMATEURS
BID: $ANS-247.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE
PROPOSED FOR LAUNCH AT THIS TIME:

UCISAT ?O-??
Catalog number:
Proposed Launch Date: October 31, 2005

Status: Under Construction

Downlink: Submission in Progress
Uplink: Submission in Progress
Callsign: Submission in Progress

This from Matt Bennett, KF6RTB, UCISAT Communications Team Member:

Our website is www.ucisat.net .This is a new website, however, and doesn't have the "Status" section active yet. Because of the growing interest in our project, I'll push our webmaster to create updates (hopefully) on a week-to-week basis. For now, the current status of the mission is as follows:

-Expected Launch Date: October 31st, 2005
-Frequency Allocation: Submission in Progress
-Construction Status: Sub-Assembly
[WSR to thank Matt Bennett, KF6RTB, for this week's report.]
[01302005]
=====
SSETI ?O-??
Catalog Number:

Proposed Launch Date: LATE 2005

Status: AWAITING LAUNCH

Graham, G3VZV reports:
We have now been advised that the revised launch date for SSETI Express and the other satellites on the DMC3 COSMOS launch has been confirmed as September
27th - so please keep those fingers crossed!

SpaceDaily has a report about SSETI at:
http://www.spacedaily.com/news/internet-04zzzu.html

You can find more info about SSETI at:
http://sseti.gte.tuwien.ac.at/WSW4/

Looking at the website for the SSETI Express webcam
http://sseti.gte.tuwien.ac.at/WSW4/webcam.htm

[ANS thanks Graham, G3VZV for the above information]
[07312005]
=====
PHASE 3E ?O-??
Catalog Number:
Proposed Launch Date: Early 2006

Status: Under Construction

William Leijenaar, PE1RAH reports on July 16th, 2005:

Hi AMSATs,

I always like to inform the AMSATs public about my P3e work, but unfortunatly due to
some reasons there was not much time and nothing much to say...

However, now I am happy to announce that the my MODE-UV transponder design for P3e is ready at the P3e integration place in Marburg (Germany). About 4 weeks ago I was in Marburg before, where the transponder has been checked. Unfortunatly some unsure things were found in the design. The unsure things were about long term stability after many years in space.

At home in The Netherlands, I changed the design with some minor changes to have a secure long term stability. Finally I tested the transponder again and it performed well within the specifications. Again something learned for future transponder designs :o)

Last Wednesday I drove to AMSAT-DL P3e integrations place in Marburg again, and have my transponder again checked. In the beginning it seemed that the 70cm receiver lost 10dB in sensetivity. After some more measurements we find out that it was due to a bad attenuator we used for protection at the input.

Together with Karl Meinzer we looked for any problems, but so far we could see (without HELAPS) all was okay. In the afternoon I went back home again, this time without the MODE-UV.

Now the MODE-UV will get a new home, the home of P3e... :o)
I hope the transponder will work like its elder sister in AO-10, and you all will enjoy it for many years...

It was lots of work to get it this far, but I know it is for a good purpose...

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/

[ANS-WSR wishes to thank William Leijenaar, PE1RAH for this week's report]
[07172005]
=====
CP1 ?o-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: N6CP
Proposed Transmit Frequency: 436.845
[03272005]
=====
CP2 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.325
[03272005]
=====
HAUSAT1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: D90HP
Proposed Transmit Frequency: 437.465
[03272005]
=====
ICE Cube 1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: W2CXM
Proposed Transmit Frequency: 437.305
[03272005]
=====
ICE Cube 2 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

```
Proposed Callsign: N2VR
Proposed Transmit Frequency: 437.425
[03272005]
=====
ION ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.505
[03272005]
=====
KUTEsat ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: KC0RMW
Proposed Transmit Frequency: 437.385
[03272005]
=====
MEROPE ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: K7MSU-1
Proposed Transmit Frequency: 145.980
[03272005]
=====
nCUBE1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
       2407.25
[03272005]
=====
RINCON ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
        437.345
[03272005]
=====
SACRED ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
[03272005]
```

=====
SACRED ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
[03272005]
=====
SEEDS ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: JQ1YGU
Proposed Transmit Frequency: 437.485
[03272005]
=====
Mea Huaka ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.405
[03272005]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
        888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)

* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/amsat/listserv/menu.html

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satelite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

```
From -1014500665984504660
X-Google-Thread: 10e8ad,1a38a905c19eb06c,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!postnews.google.com!f14g2000cwb.googlegroups.com!not-for-
mail
From: "artbellfan" <artbellfan8@yahoo.com>
Newsgroups: rec.radio.amateur.space
Subject: The shadows are back...
Date: 7 Sep 2005 05:02:09 -0700
Organization: http://groups.google.com
Lines: 7
Message-ID: <1126094097.272162.239450@f14g2000cwb.googlegroups.com>
NNTP-Posting-Host: 67.132.143.70
Mime-Version: 1.0
Content-Type: text/plain; charset="iso-8859-1"
X-Trace: posting.google.com 1126094533 3074 127.0.0.1 (7 Sep 2005 12:02:13 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Wed, 7 Sep 2005 12:02:13 +0000 (UTC)
User-Agent: G2/0.2
X-HTTP-UserAgent: Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1;
{9A16205A-87FF-40B6-80B3-964F8F844FF6}; SV1; DVD Owner),gzip(gfe),gzip(gfe)
Complaints-To: groups-abuse@google.com
Injection-Info: f14g2000cwb.googlegroups.com; posting-host=67.132.143.70;
   posting-account=1oqxaQ0AAAATcaRW1E3kxltHyp3ZvXbC
Xref: g2news1.google.com rec.radio.amateur.space:243
```

Paranormal Website/The Shadows are back!

http://www.shadowpeoplebooks.com

```
From 5596375940734706071
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X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news4.google.com!newshub.sdsu.edu!headwall.stanford.edu!
news-xfer.nntp.sonic.net!67.99.235.131.MISMATCH!news-router2.astraweb.com!
news.astraweb.com!news-router1.astraweb.com!not-for-mail
From: Chris Steyaert <observations@rmob.org>
Newsgroups: rec.radio.amateur.space,sci.astro.amateur
Subject: Radio Meteor Obs. Bull. August 2005  Perseids
Date: Sat, 10 Sep 2005 01:13:04 +0200
Message-ID: <sm54i1963me9c2c4pe6phbo4vl2jrn8uar@4ax.com>
X-Newsreader: Forte Agent 1.93/32.576 English (American)
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Lines: 17
Organization: Unlimited download news at news.astraweb.com
NNTP-Posting-Host: 882a12cd.news.astraweb.com
X-Trace: DXC=HR419YMb6o3YUQJRTa54B1L?
0kYOcDh@:=GNSRN<\Ih1BSQ_gHCa=a8KX07\YZ`QZ6RZS?2DObg\=Q6g1dBo\M:5
Xref: g2news1.google.com rec.radio.amateur.space:244 sci.astro.amateur:20583
```

Radio Meteor Observation Bulletin No. 145 of August 2005 (67 K) is available now as

http://visualrmob.free.fr/rmobtext/rmob0508.txt

More information and the visual presentation of the hourly forward scatter counts can be found on

http://www.rmob.org

http://radio.data.free.fr

Chris

```
From -8196106646670086909
```

X-Google-Thread: 10e8ad,b51eaa9b473b8a99,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news4.google.com!newshub.sdsu.edu!elnk-nf2-pas!
newsfeed.earthlink.net!stamper.news.pas.earthlink.net!
stamper.news.atl.earthlink.net!newsread3.news.atl.earthlink.net.POSTED!46041641!
not-for-mail
From: "JoAnne Maenpaa" <wb9jej_no-spam@earthlink.net>
Newsgroups: rec.radio.amateur.space
Subject: ANS-254 AMSAT News Service Weekly Bulletins
Lines: 482
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <A_WUe.10805$FW1.197@newsread3.news.atl.earthlink.net>
Date: Sun, 11 Sep 2005 14:16:00 GMT
NNTP-Posting-Host: 66.167.182.252
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread3.news.atl.earthlink.net 1126448160 66.167.182.252 (Sun, 11 Sep
2005 07:16:00 PDT)
NNTP-Posting-Date: Sun, 11 Sep 2005 07:16:00 PDT
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news1.google.com rec.radio.amateur.space:245

AMSAT NEWS SERVICE
ANS-254

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

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* ARISS Status for Week of September 5, 2005
* Heads Up - Alderney DXpedition May Include Satellite Activity
* Software Updates Available for Satellite Programs
* AMSAT Awards

SB SAT @ AMSAT $ANS-254.01
2005 AMSAT Symposium is Cancelled

AMSAT News Service Bulletin 254.01

From AMSAT HQ SILVER SPRING, MD.
September 11, 2005
To All RADIO AMATEURS
BID: $ANS-254.01

The AMSAT-NA Board of Directors in special session held September 6 via teleconference has made the decision to cancel the 2005 AMSAT Symposium which was scheduled to take place in Lafayette, LA October 7-9.

While Hurricane Katrina spared Lafayette in terms of physical damage, the city is now the home to thousands of evacuees who left the Gulf Coast and are now housed in Lafayette's hotels and other accommodations for the near future.

Over the past week AMSAT-NA has been looking into the possibility of relocating the Symposium to an alternative site. A number of options were explored (such as Baltimore-Washington, Pittsburgh, Cleveland, Cincinnati, Orlando, Tampa, San Francisco, and Tulsa) as several AMSAT teams investigated if the Symposium could be relocated on short notice. This required finding appropriate hotel facilities and putting local host committees together to coordinate Symposium at each potential location. It became obvious that with less than five weeks before the Symposium was scheduled to take place, there would be insufficient time to make a successful change in location. Altering the Symposium dates was not viewed as practical since many attendees have to schedule their vacation time well in advance and most individuals already have commitments for later weekends.

"We regret that Symposium will not be held this year," says AMSAT-NA President Rick Hambly, W2GPS. "Our thoughts and prayers go out to the victims on the Gulf Coast who are now relocated to Lafayette and surrounding states." Rick went on to note that the Board was concerned that attempting to relocate on such short notice would impact the quality of the Symposium. "The task of hosting a Symposium would potentially strain the host committee tasked with handling the Symposium with less than 30 days notice."

"Many thanks to our AMSAT members who stepped forward to identify potential locations. Clearly, these volunteers have worked very hard to find an alternative site and would have done their best to host a Symposium. Unfortunately, time is working against us" notes Barry Baines, WD4ASW AMSAT's VP-Marketing & User Services.

The Board also wishes to thank Nick Pugh, K5QXJ for the extensive work that he has done to plan for the Lafayette Symposium and to his team for organizing what would have been an excellent Symposium in Louisiana.

The Board also noted that donations are needed to assist the relief efforts on the Gulf Coast. Given that this year's Symposium is cancelled, the Board hopes that individuals will decide to donate a portion of their funds to be used to cover their cost of attending the Symposium to an organization (such as American Red Cross) aiding the relief effort on the Gulf Coast.

AMSAT-NA Office Manager Martha Saragovitz will handle the process of providing refunds for registration fees already collected. Checks will be sent to those whose fees had previously been processed. In some cases, registrants had completed the registration process on the AMSAT web site by their credit cards. These charges will be destroyed. Checks covering registration that have been sent by mail and not processed will be returned to the sender.

Attendees holding reservations at the Holiday Inn should cancel their reservations prior to the scheduled arrival date in order to avoid first night room charges. The Holiday Inn in Lafayette has been experiencing telephone problems, so it may be best to contact the Holiday Inn Reservation Center (888-HOLIDAY) or use the Holiday Inn website:
http://www.holiday-inn.com
if the individual has their confirmation number for their reservation.

[ANS thanks Barry Baines, WD4ASW, and the AMSAT Board of Directors for the above information]

/EX

SB SAT @ AMSAT $ANS-254.02
AMSAT-NA Reschedules Key Meetings

AMSAT News Service Bulletin 254.02
From AMSAT HQ SILVER SPRING, MD.
September 11, 2005
To All RADIO AMATEURS
BID: $ANS-254.02

With the cancellation of the 2005 AMSAT Symposium in Lafayette, LA due to Hurricane Katrina, the AMSAT Board of Directors Meeting will now be held on Thursday and Friday, October 6 & 7 at the Wyndham Pittsburgh Airport Hotel.

Following the BOD Meeting which is expected to end by noon on Friday, the Eagle Team will have their meeting starting around 1400 on the 7th and conclude late Saturday. However, if discussions are continuing, provisions have been made to allow the Eagle Team to continue meeting on Sunday morning, October 9.

In addition, in order to comply with AMSAT Bylaws that require that an AMSAT Annual Meeting be held in October or November of each year, this meeting will take place on Friday evening as well, though the specific time has not yet been finalized. AMSAT is also investigating the feasibility of using various teleconference methods to allow AMSAT members to participate who are not on site.

With the exception of when the Board of Directors is in Executive Session, all three meetings are open to those who wish to attend. Information on the Wyndham Hotel where these meetings are taking place may be found at:
http://www.wyndhampittsburghairport.com

The IARU meeting that was scheduled for Sunday morning, October 9 in Lafayette, LA has not been rescheduled.

[ANS thanks Barry Baines, WD4ASW, and the AMSAT Board of Directors for the above information]

/EX

SB SAT @ AMSAT $ANS-254.03
2006 AMSAT Symposium Plans Announced

AMSAT News Service Bulletin 254.03
From AMSAT HQ SILVER SPRING, MD.
September 11, 2005
To All RADIO AMATEURS
BID: $ANS-254.03

Recognizing that most of the 2005 Symposium attendees had already purchased non-refundable airline tickets to fly to Lafayette, Baton Rouge, or New Orleans, the Board also made a decision on the location for the 2006 AMSAT Symposium. 'Non-refundable' means the airline will not return the airfare to the individual due to cancellation but the value of the reservation may be applied to a future flight as long as cancellation occurs prior to the original flight. Other restrictions on making changes to non-refundable reservations may also apply. Some airlines have waived 'change fees' for altering a reservation associated with current reservations into New Orleans, Baton Rouge, and Lafayette.

The AMSAT Board of Directors voted September 6 nigh to accept an offer from Project OSCAR to host the 2006 Symposium in the San Francisco Bay area in the month of October. Emily Clarke, W0EEC will serve as host chairperson and will coordinate the Symposium.

"San Francisco is a great place to hold the Symposium," says Emily. "The roots of the Amateur Satellite Service can be found here as Project OSCAR began building the first amateur satellites in the Bay Area." Emily also notes the allure of the area for both 'geeks' and families alike. "We have everything from beaches to mountains, cities and wine country - so come to the Symposium and plan your vacation, too!"

In addition to the AMSAT Symposium, San Francisco is planned as a joint meeting with the ARISS International Delegates. "We're looking forward towards another successful joint meeting with AMSAT" says ARISS International Chairman and AMSAT VP-Human Space Flight Frank Bauer, KA3HDO.

Details about exact dates and hotel for the 2006 Symposium will be announced via ANS and posted on the AMSAT website later this month as they become available. Individuals holding airline reservations into Lafayette should hold off making changes until the dates and exact location of the 2006 Symposium are announced. In the meantime, AMSAT-NA looks forward towards an outstanding Symposium in October 2006 in the Bay Area.

[ANS thanks Barry Baines, WD4ASW, and the AMSAT Board of Directors for the above information]

/EX

SB SAT @ AMSAT $ANS-254.04
ESA Award for SSETI Express telemetry download competition

AMSAT News Service Bulletin 254.04
From AMSAT HQ SILVER SPRING, MD.
September 11, 2005
To All RADIO AMATEURS
BID: $ANS-254.04

The Education Department of ESA, the European Space Agency, is delighted to announce details of the award that will be offered to the amateur radio community in relation to the downloading of telemetry from their SSETI Express student built satellite. The award will be given to the amateur who submits the largest number of valid telemetry and payload packets regardless of which band it is received on.

SSETI Express is scheduled for launch on September 27th from Plesetsk in northern Russia at approx 06:52 UTC. It will downlink telemetry and payload data in AX25 format at 9k6 on 437.250MHz and at 38k4 on 2401.835 MHz. It will later also be available for radio amateurs to use as a single channel FM transponder.

All radio amateurs around the world are encouraged to download the necessary software from the www.sseti.org/express website (this will be available starting approximately September 12) and to use the SERACC system to forward the telemetry and payload data to SSETI Express Mission Control. Submissions will be automatically recorded and the leaderboard will be shown on the website.

The winner will be offered the opportunity to visit the STEC06 Conference and Exhibition in Germany in Spring 2006. STEC, the Student Technology Education Conference, follows previous events in 2004 in Lausanne in Switzerland and in 2005 in Aalborg in Denmark.

The three day event is similar to the AMSAT-NA Symposium and the AMSAT-UK Colloquium but with more breakout technical sessions in addition to the Keynote Speeches. The meetings are always interesting and thought provoking and great enthusiasm and passion is shown by all the attendees. The post meeting attitude adjustment sessions have also proven to be exciting.

The winner will also be encouraged to present a paper on how he/she achieved their success - but this is not mandatory!

In addition to attending the STEC 06 Conference, the winner will be invited to visit ESA's Mission Operations Centre - ESOC - near Darmstadt in Germany where they will be given a private escorted tour of the facilities. ESOC currently controls the many exciting orbital and deep space ESA missions and will be responsible for the European Columbus module when it joins the International Space Station

For more information on the STEC events - check http://www.stec2005.space.aau.dk/ to see what this year's event included and for a few details of the ESOC facility, visit http://www.esa.int/SPECIALS/ESOC/

The winner will be the amateur at the top of the leaderboard at 00:00 on January 1, 2006. The prize will include economy class travel from your home location, accommodation and a "small" daily subsistence allowance.

AMSAT-UK wishes to congratulate and thank ESA for their generous prize, a first in the field, and is confident that it will add to the great enthusiasm for the SSETI Express project which already exists within the amateur radio community. It will be a great opportunity for us to demonstrate that the amateur radio groundstation "network" is a valuable resource for satellite projects which are able include useful amateur payloads.

[ANS thanks Graham, G3VZV for the above information]

/EX

SB SAT @ AMSAT $ANS-254.05
SSETI Express Mission Pages Updated

AMSAT News Service Bulletin 254.05
From AMSAT HQ SILVER SPRING, MD.
September 11, 2005
To All RADIO AMATEURS
BID: $ANS-254.05

The SSETI Express Mission Pages at:
http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
has a short report with some photos of the work being done at the assembly facility at the Plesetsk Cosmodrome assembly facility.

Both the UHF and S band units have been tested and all appears ok so far.

Please continue to keep those fingers crossed for us

[ANS thanks Graham, G3VZV for the above information]

/EX

SB SAT @ AMSAT $ANS-254.06

ARISS Status for Week of September 5, 2005

AMSAT News Service Bulletin 254.06
From AMSAT HQ SILVER SPRING, MD.
September 11, 2005
To All RADIO AMATEURS
BID: $ANS-254.06

1. World Expo 2005 Contact Successful

The Japan Amateur Radio League (JARL) set up a radio station at the 2005 World Expo in Aichi, Japan. On Friday, September 2, twenty-one students, ranging in ages from 6 - 15, came from Aichi and the surrounding county to take part in this ARISS contact. John Phillips, KE5DRY, answered all twenty-one questions posed to him by the students, as approximately 150 people looked on. Eight newspapers and one television station provided media coverage of the event. Photos, video and audio of the contact may be found on the following website:
<http://jk1zrw.dyndns.org/expo2005.html.en>

2. Upcoming School Contacts

The Matthew J. Kuss Middle School in Fall River, Massachusetts, has been scheduled for a contact on Friday, September 16 at 1824 UTC. Kuss is a 2003 NASA Explorer School and has established its own radio club.

3. ARISS Videos Posted on AMSAT Website

ARISS participated in the Dayton Hamvention 2005 held over the May 20 - 22 weekend. ARISS Chairman Frank Bauer and ARISS Deputy Program Manager Mark Steiner attended, giving a presentation entitled, "Human Spaceflight Update: ARISS, the Moon and Mars," at the AMSAT Forum. Videos of the ARISS presentation and of the Hamvention activities are available on the AMSAT website.

AMSAT and ARISS members also participated in Space Day at the Udvar Hazy Center on May 5, 2005. A video clip which includes coverage of the exhibition booth and an interview with Frank Bauer is also available for viewing.

For all videos, see:
<http://www.amsat.org/amsat-new/information/videoNews.php>

4. Progress 19P to Include SuitSat and SSTV

The SuitSat hardware and the SSTV system will be launched on Progress 19P, which was scheduled to fly on September 8. The Russian EVA to deploy SuitSat is expected to take place in early December.

5. Cosmonaut Receives Birthday Wishes

Sergei Krikalev, U5MIR, made several general contacts during the last weekend of August. Stations from several countries spoke with the cosmonaut, wishing him a happy birthday. The contacts were made by operators in Kuwait, Malaysia, Columbia, Thailand, Argentina, U.S., Brazil, Australia, Puerto Rico, and Chile. Krikalev turned 47 on Saturday, August 27. To listen to a sample of the contacts, go to: <http://pd0rkc.mine.nu/>

6. Astronaut Training Status

Astronaut Sandy Magnus is preparing to take her amateur radio exam in the near future. Astronaut Nicole Stott is scheduled for a ham radio training session at JSC on Tuesday, September 6.

[ANS thanks Carol Jackson, KB3LKI for the above information.

/EX

SB SAT @ AMSAT $ANS-254.07
Heads Up - Alderney DXpedition May Include Satellite Activity

AMSAT News Service Bulletin 254.07
From AMSAT HQ SILVER SPRING, MD.
September 11, 2005
To All RADIO AMATEURS
BID: $ANS-254.07

The Alderney DX Team announced plans for a DXpedition to be on the air Wednesday, October 12 to Wednesday, October 19, 2005. This is a group of four amateur radio operators from around the U.K. who will be operational on all HF bands, 6 meters, VHF APRS, VHF/UHF SSB and hopefully, some satellite activity, from the Island of Alderney, the most northerly island of the Channel Islands group.

The first calls are planned to be made during the evening of October 12 most probably on 40 and 80 meters.

Additionally, Worked All Britain and Lighthouse activity may take place, depending on the availability of portable power supplies or a generator.

Further information available from: dave at g1ocn dot com

Skeds are welcomed and encouraged.

QSL route(s) are:

GU5XW via G5XW
GU1OCN via G5XW
MW0JZE via G5XW
MU3SDE via M3SDE

Further information available under individual call signs on
QRZ.COM. A further updates will be sent prior to departure.

[ANS thanks the Alderney DX Team for the above information]

/EX

SB SAT @ AMSAT $ANS-254.08
Software Updates Available for Satellite Programs

AMSAT News Service Bulletin 254.08
From AMSAT HQ SILVER SPRING, MD.
September 11, 2005
To All RADIO AMATEURS
BID: $ANS-254.08

* Simon Brown, HB9DRV, announced FT-847 support has been added into the Ham Radio Deluxe software and is working well. Still to be added are further updates for proper same-band Doppler support. See:
http://www.ham-radio.ch/forums/viewtopic.php?p=15785#15785

* Stefano Bravi, an SWL in Italy, announced a new version (1.2) of his PCSAT2 Telemetry Decoder program is available for download. See:
http://fc.retecivica.milano.it/~stefano.bravi/pcsat2dec_12.zip

* Erich Eichmann DK1TB has released version 12.4 of the popular satellite tracking program SatPC32. The program has two significant new features. First is automatic internet download of Keplerian elements such as the amateur.txt file from celestrak.com. Second is an improved user interface for initial configuration of user location, radio and rotor interfaces, etc. The program may be downloaded from the author's personal web site:
http://www.dk1tb.de/indexeng.htm

Click the "downloads" button on the left frame, then choose the appropriate "SatPC32 Demo" version (9.7 MB download). The demo version is fully functional except that the user must enter their lat/lon every time when launching the program. If you already have a SatPC32 registration code you may use that code to make the 12.4 version fully functional. If you have never purchased SatPC32 you may purchase a registration code from the AMSAT online store:
http://www.amsat-na.com/item.php?id=100020

DK1TB has generously donated SatPC32 to AMSAT-NA, AMSAT-UK, and AMSAT-DL. If you use SatPC32, please purchase a registration code from one of these groups. All of the purchase price will go to support amateur satellite programs.

[ANS thanks Simon, HB9DRV, Stefano, Wayne, W9AE, and Erich, DK1TB for the above information]

/EX

SB SAT @ AMSAT $ANS-254.09
AMSAT Awards

AMSAT News Service Bulletin 254.09
From AMSAT HQ SILVER SPRING, MD.
September 11, 2005
To All RADIO AMATEURS
BID: $ANS-254.09

Bruce Paige, KK5DO, AMSAT Director Contests and Awards, announces this week congratulations go out to John Sagi, N3YZ, for earning the Satellite Communicators Club Award and also a new member of AMSAT.

Reminder: There is still time to earn your AMSAT 51 on 51 Award which is good for contacts between January 1, 2005 and December 31, 2005.
To see all the awards visit http://www.amsat.org

[ANS thanks Bruce, KK5DO for the above information]

/EX

73,
This week's ANS Editor,
JoAnne Maenpaa, WB9JEJ
WB9JEJ at amsat dot org

From -8397576428061885803
X-Google-Thread: 10e8ad,41e5e93d186edf90,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news4.google.com!news.glorb.com!news-in.ntli.net!newsrout1-win.ntli.net!ntli.net!sn-xit-03!sn-xit-11!sn-xit-08!sn-xit-05!sn-post-01!supernews.com!corp.supernews.com!not-for-mail
From: Rick <w7rtrick@firstinter.net>
Newsgroups: rec.radio.amateur.space
Subject: Results of Discussion with Dick Norton
Date: Mon, 12 Sep 2005 00:04:00 -0700
Organization: R.L. Tannehill, P.E. & Assoc.
Message-ID: <43252860.4060702@firstinter.net>
Reply-To: rickw7rtspamno@firstinter.net
User-Agent: Mozilla Thunderbird 1.0.6 (Windows/20050716)
X-Accept-Language: en-us, en
MIME-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1; format=flowed
Content-Transfer-Encoding: 7bit
X-Complaints-To: abuse@supernews.com
Lines: 38

Xref: g2news1.google.com rec.radio.amateur.space:246

Carl,

I had a lengthy discussion with Dick Norton at the SW Div. convention this weekend. Seems he's a lot more saavy than I thought he was.

Well, you were right that there was a lot of back-room crap going on last week. Apparently, the Board took a vote (probably via telephone or e-mail) on whether or not to review your disqualification. According to Dick, there were only 4 votes supporting your request for a full Board review. Dick was one of them!! He told me that he told the Board that he could not see any upside at all to keeping you off the ballot; only downside. We discussed some of those things, and he pretty much agreed with my assessment that it would discourage future competition for office, discourage new blood, and perpetuate the image that the Board is a bunch of "good ol' boys" exclusive club that won't allow for any outsiders with dissenting opinions on much of anything. He also agreed that it sure looked like "paybacks" over the no-code issue. He also brought up the point that even given the Board members' worst case fears, that you would be a loud, divisive member of the Board, that you're only one vote, and could cause virtually no damage at all without support of other Board members. (He did not say he BELIEVED that the worst case would happen; only that it wouldn't cause any damage) Of course he mentioned that you would have to get elected first, in a three way race no less.

In summary, he was a progressive vote that was completely outvoted by a majority of Board members. As a result, I have a much better opinion of Dick now than when he was first elected. But now, you have a tough decision to make. Might I suggest the method of your LDS youth? (prayer)

Good luck with your decision.

Rick T.

From 9782733700144992\49
X-Google-Thread: 10e8ad,877a2792a0bb6afa,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news4.google.com!border1.nntp.dca.giganews.com!
nntp.giganews.com!nx01.iad01.newshosting.com!newshosting.com!newsfeed.icl.net!
newsfeed.fjserv.net!newsfeed.freenet.de!news-out1.kabelfoon.nl!
newsfeed.kabelfoon.nl!xindi.nntp.kabelfoon.nl!213.132.189.2.MISMATCH!
feed20.multikabel.net!tudelft.nl!txtfeed2.tudelft.nl!amsnews11.chello.com!
amsnews14.chello.com!news.chello.nl.POSTED!not-for-mail
From: "Bla" <bla@geenmail.nl>

Newsgroups: rec.radio.amateur.space
Subject: Iridium...can you receive it ?
Date: Tue, 13 Sep 2005 03:26:50 +0200
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.2180
X-RFC2646: Format=Flowed; Original
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.2180
Message-ID: <b859f$43262ad2$3ec20f3b$27175@news.chello.nl>
X-Complaints-To: abuse@chello.nl
Organization: chello.nl
Lines: 44
NNTP-Posting-Host: 62.194.15.59 (62.194.15.59)
NNTP-Posting-Date: Tue, 13 Sep 2005 03:26:42 +0200
X-Trace: b859f43262ad29b67aa9e27175
Xref: g2news1.google.com rec.radio.amateur.space:247

Hi, i'd like to invite those interested in Iridium to join our discussion-group where we currently look at the possibilties of receiving and decoding Iridium signals.

As you may have noticed the Iridium satphone system has currently gained a lot of attention thanks to it's use in Iraq and in the Katrina area.

Here's a few technical details:

Handset TX-power is an average 0,6 Watts
RX sensitivity is -118 dBM
Frequency-band 1616-1626,5 MHz (L-Band)
Duplex is Time Division Duplex TDD (RX/TX same freq)
Data-rate 2400 Bd (V42b compression)
Modulation is QPSK
Acess/Multiplex is TDMA/FDMA
Coverage: 100% Worldwide (sat in sight)
Calls currently barred to: N.Korea,N.SriLanka
Use forbidden in: Cuba,Iran,Libya,Sudan,Angola
Services: Voice,Data,Paging,Voice PTT,Group calls
Mobile < > Sat link=encryption NO (?)
Sat < > Groundstation link-encryption YES (?)
Sat < > Sat link-encryption: UNKNOWM (probably NO)
Standard end-to-end encryption: NO
Add-on encryption units available: YES

To take part in this discussion sign up at:

http://groups.yahoo.com/group/gsm-scanner

membership is free,the group is moderated.

this group is mainly talking about GSM and Cellphone interception,encryption and security but we will now extend our interests to satphones.

Greetings

contranl (moderator Yahoo group GSM-scanners)

From -1379494229634400026
X-Google-Thread: 10e8ad,52d57ef45db6bf87,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII
Path: g2news1.google.com!news3.google.com!border1.nntp.dca.giganews.com!
border2.nntp.dca.giganews.com!nntp.giganews.com!elnk-atl-nf1!
newsfeed.earthlink.net!stamper.news.atl.earthlink.net!
newsread2.news.atl.earthlink.net.POSTED!46041641!not-for-mail
From: "JoAnne Maenpaa" <wb9jej_no-spam@earthlink.net>
Newsgroups: rec.radio.amateur.space
Subject: WSR-254 AMSAT Weekly Satellite Report
Lines: 1216
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <WQzVe.11084$9i4.2096@newsread2.news.atl.earthlink.net>
Date: Tue, 13 Sep 2005 12:44:38 GMT
NNTP-Posting-Host: 64.105.104.55
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread2.news.atl.earthlink.net 1126615478 64.105.104.55 (Tue, 13 Sep 2005 05:44:38 PDT)
NNTP-Posting-Date: Tue, 13 Sep 2005 05:44:38 PDT
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news1.google.com rec.radio.amateur.space:248

This report is organized into 4 parts.
Part 1 - operational analog amateur satellites.
Part 2 - operational digital amateur satellites.
Part 3 - non - operational satellites
Part 4 - proposed satellites

SB SAT @ AMSAT <W8ISS $ANS-254.S1
WSR 254 Part 1 09/11/2005

AMSAT NEWS SERVICE BULLETIN 254.S1 FROM AMSAT HQ
SILVER SPRING, MD, SEPTEMBER 11, 2005
TO ALL RADIO AMATEURS
BID: $ANS-254.S1

VO-52 HAMSAT
Catalog Number: 28650
Launch Date: May 05,2005

```
Status: On orbit
Current Mode: U/V

Proposed frequencies:
-------------------
Indian transponder:
Uplink  : 435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW
Beacom  : 145.940MHz continue carier signal

Dutch transponder:
Uplink  : 435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW
Beacon  : 145.860MHz 12WPM with CW message
[07242005]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Mode: PBBS - ON
      FM REPEATER - V/U

Analog voice downlink:  435.300 MHz FM
          435.150 MHz FM
Analog voice uplink: 145.880 MHZ FM
          145.920 MHz FM 67Hz PL tone
                       1268.700 MHz FM 67Hz PL tone

Digital Downlinks:      435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
                       2401.200 MHz FM  38k4 bps, AX.25
Digital Uplink:         145.860 MHz FM, 9k6 Digital, Pacsat Broadcast
   Protocol (PBP)

Broadcast: PECHO-11
BBS:  PECHO-12

Current scheduled operating modes:

Due to the on going Huricane Katrina Relief Efforts in the Gulf Coast
States,
AO-51 will continue in the default mode V/U with 9k6 Digital, V/U, PBP BBS
mode. Updated information will be posted as soon as any changes are made.

[ANS-WSR thanks Bill, VE7WFG for the above information]
[09112005]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002
```

Status: Operational.

Uplink: 145.850 MHz (67.0 Hz PL tone) (See below for operating procedures)
Downlink: 436.795 MHz

There have been unconfirmed reports on the amsat-bb remailer that SO-50 has shifted downlink frequency as much as 5khz up. This both from Europe.

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz. The order of operation is thus: (allow for Doppler as necessary)

1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10 minute timer.

[09122004]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: OPERATIONAL

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplink: 145.850 145.870 145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

John, N4QWL reports on July 16th, 2005:

Last evening I had a AOS to LOS qso with WI2W. FO-29 came up at 01:17z here in FM07 and I found WI2W and we chatted until 01:33z. The satellite was at 2 degrees elevation when I finally heard him start to crackle a bit. What a great QSO! To think that I watched this bird launch back in 1996 and it is still working so well is a real thrill. I believe I still have the video. I might just look for it and watch it again. Boy do I love this satellite stuff! Look for you all up there.

Please send the reception reports to lab2 'at' jarl.or.jp.
Please use the subject line: 'FO-29 reception report'.

Mineo, JE9PEL, has an FO-29 satellite telemetry analysis program that will automatically analyze all digital telemetry from the satellite (such as

current, voltage and temperature). FO29CWTE is available at:
http://www.ne.jp/asahi/hamradio/je9pel/
[ANS-WSR wishes to thanks John, N4QWL for this week's report]
[07172005]

=====

AO-27 AMRAD

Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Uplink: 145.850 MHz FM
Downlink: 436.795 MHz FM

The latest information on AO-27 from control operator Michael Wyrick, N3UC (former N4USI), can be found at:
http://www.ao27.org

An AO-27 question-and-answer page is available on the AMSAT-NA web site, with updates by Ray, W2RS. The URL is:
http://www.amsat.org/amsat/intro/ao27faq.html

[ANS-WSR thanks John, K6YK, for this week's AO-27 report]
[08292004]

=====

AO-7 AMSAT OSCAR 7

Catalog number: 07530
Launch Date: November 15, 1974

Status: Semi-operational in sunlight.
Return to active status: June 21,2002

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
            432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A
            145.975 to 145.925 MHz CW/USB Mode B
Beacon: 29.502 MHz, 145.972 MHz, 435.1 MHz, 2304.1 MHz

Emily, W0EEC has created a website to allow the users of AO-7 to record contacts, observations and use of the satellite more effectively at:
http://www.emilyshouse.com/experthams/ao7/main.php
This includes the ability to log contacts.

Tim, K3TZ has written a program to decode AO-07 telemetry.
The program can be downloaded at:
http://www.qsl.net/k3tz/files/K3TZ_AO-07_Telemetry_Decoder_0.5.zip

For more AO-7 info:
http://www.amsat.org/amsat/sats/n7hpr/ao7.html
[11142004]

=====

INTERNATIONAL SPACE STATION (ISS) - ARISS

Catalog number: 25544

Launch date: November 20, 1998

Status: Operational
Current Mode: U/V CROSS-BAND REPEATER
Digipeater: Inactive

The current Expedition 11 crew is:
Commander Sergei Krikalev
Flight Engineer John Phillips

Worldwide packet uplink: 145.990 MHz FM
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM
Doppler Shift is 10 KHz

Russian callsigns: RS0ISS, RZ3DZR
USA callsign: NA1SS
Packet station mailbox callsign: RS0ISS-11
Packet station keyboard callsign: RS0ISS-3
Digipeater callsign: ARISS

This off the ARISS webpage:
http://www.rac.ca/ariss/oindex.htm#New%20ARISS%20Operations :
The ARISS program is pleased to announce that the amateur radio equipment aboard the International Space Station is now operating in cross-band repeat mode. We realize that many of you will miss the packet-operating mode. However, cross-band repeat allows further experimentation of the ISS amateur radio system

The downlink for this operating mode remains the same, so listen for the station on 145.80 MHz. The new uplink frequency is 437.80 MHz. All frequencies are subject to Doppler shifting. For further information on working satellites and adjusting for Doppler shift, please review Emily Clark's (W0EEC) excellent presentation on AMSAT's website:
http://www.amsat.org/amsat-new/information/faqs/Intro_sats.pdf

The ISS daily crew schedule can be found at:
http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line is NOT translated from Russian and posted.

More information is available at:
http://www.rac.ca/ariss
http://spaceflight.nasa.gov/station/reference/radio/
http://www.marexmg.org/fileshtml/unprotopage.html

http://www.issfanclub.com
http://oscar.dcarr.org/
[07242005]
NNNN
/EX

SB SAT @ AMSAT <W8ISS $ANS-254.S2
WSR 254 Part 2 09/11/2005

AMSAT NEWS SERVICE BULLETIN 254.S2 FROM AMSAT HQ
SILVER SPRING, MD, SEPTEMBER 11, 2005
TO ALL RADIO AMATEURS
BID: $ANS-254.S2

PCSAT2 ?0-??
Catalog Number:
Launch Date: August 1, 2005

Status: Operational

PCSAT2 was installed on the exterior of the International Space Station and was activated on August 3, 2005.

PCSAT2 CAPABILITIES: PCSAT2 is attached to the ISS and so its operations must be in cooperation with the ARISS communications suite to minimize any mutual interference and to coordinate activities. Here are the capabilities of the PCSAT2 and ARISS payloads:

PCSAT SYSTEM A:

435.275 PCSAT2 DOWNLINK 1200 baud packet with uplink on 145.825
435.275 PCSAT2 DOWNLINK Occasional user PSK-31 continuous downlink
145.825 PCSAT2 DOWNLINK 1200 baud packet
PCSAT SYSTEM B:

437.975 PCSAT2 DOWNLINK periodic Solar Cell data and PCSAT2 telemetry at 9600 baud
437.975 PCSAT2 DOWNLINK TNC-B command downlink at 1200 baud
437.975 PCSAT2 DOWNLINK User Voice Repeater with VHF uplink
437.975 PCSAT2 DOWNLINK Packet digipeater with VHF uplink

It looks like PCSAT2 can best contribute at this time by operating in PSK-31 mode for the near future. This is a very exciting new transponder mode which solves the congestion problem on FM repeaters by letting multiple stations all communicate at the same time.

PSK-31 users are welcome to try out the new PCSAT2 PSK-31 transponder on ISS with an uplink on 29.402 � 1 KHz and downlink on 435.275 � Doppler using FM.

The FM downlink lets everyone operate full duplex and everyone to see the same view of the passband as everyone else. THus you can see exactly what your signal looks like to everyone else.

Help Wanted:

Here is your chance to become a viable part of the Amateur
Satellite Community.

We are looking for a volunteer satellite packet
station in Hawaii that is interested in helping with
telemetry and sat-gating of PCSAT2 and
ARISS packets. Requirements are:

1) General familiarity with packet
2) TNC connected to a cross band radio that
   can RX on UHF and TX on VHF.
3) modest UHF beam and rotator system.

Contact WB4APR for more information.

Packets seen from PCSAT2 can be reviewed at:
http://www.findu.com/cgi-bin/pcsat2.cgi

A screen shot of both the 9600 bps and 1200 bps decoded data
as seen by Simon, 9W2QC, can be seen at:
http://www.9w2qc.net/pcsat2/

More information on PCSAT2 can be found at:
http://web.usna.navy.mil/~bruninga/pcsat2.html

[ANS-WSR thanks Bob, WB4APR and the U.S. Naval Academy Satellite Lab for
the aboveinformation.]

[08282005}
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Mode: PBBS - ON
      FM REPEATER - V/U HIGH POWER

Analog voice downlink: 435.300 MHz FM
         435.150 MHz FM
Analog voice uplink: 145.880 MHz FM
         145.920 MHz FM 67Hz PL tone
                       1268.700 MHz FM 67Hz PL tone

Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
                       2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast
   Protocol (PBP)

Broadcast: PECHO-11

BBS: PECHO-12

Current scheduled operating modes:

Due to the on going Huricane Katrina Relief Efforts in the Gulf Coast States,
AO-51 will continue in the default mode V/U with 9k6 Digital, V/U, PBP BBS mode. Updated information will be posted as soon as any changes are made.

[ANS-WSR thanks Bill, VE7WFG for the above information]
[09112005]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Non-Operational?????

```
Uplink/downlink:   145.827 MHz 1200 baud AX.25 AFSK via W3ADO-1
Aux/Uplink:        435.250 MHz 9600 baud via PCSAT-2 (off)
APRS Downlink:     144.390 MHz (Region 2)
```

PCSat is a 1200-baud APRS digipeater designed for use by stations using hand-held or mobile transceivers. Downlinks feed a central web site at:
http://pcsat.aprs.org

The APRS-equipped PCSat was built by midshipmen from the U.S. Naval Academy under the guidance of Bob Bruninga, WB4APR.
[07242005]
=====
CUTE-1
Catalog number: 27844
Launched: June 30,2003

Status: Operational

```
Uplink:          ?
Downlink:     436.8375 CW
              437.4700 1200 FM ax25 or SRLL (ACTIVE only near Japan ? )
```

Cliff, K7RR reports:
In the latest Weekly Satellite Report, CUTE 1, #27844 is listed as OPERATIONAL?
Indeed it is very operational as a CUBESAT sending CW telemetry on 436.8345 MHz. At the July 7 2005, 23:45:20 pass over the Western USA:

```
CUTE 1 6B A4 xx 7F D7 66A8 4702 FF FF7C 65
CUTE 1 6C A6 59 80 D9 66A8 4702 FF FE7C B6
```

The June 30th KEPS were within ten seconds of AOS and LOS. It is an very good object to practice tracking as the orbit and transmitter power are similar to proposed CUBESATS awaiting launch this December. As a check for Doppler correction, the lack of change in tone is an excellent indicator.

CUTE 1 is a Japanese (Tokyo Institute of Technology) one kilogram

nanosatellite that was launched by a Rokot rocket from Plesetsk at
14:15 UT on 30 June 2003. It carries a 100 mW beacon at 436.8375 MHz.
Initial orbital parameters were period 101.4 min, apogee 831 km, perigee
819 km, and inclination 98.7?.

For further info about CUTE-1 goto:
http://lss.mes.titech.ac.jp/ssp/cubesat/operation/Schedule_e.html

[ANS WSR wishes to thank Cliff, K7RR, for this week's information]
[07242005]
=====
GO-32 TECHSAT-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Downlink: 435.225 MHz FM (9600-baud FSK)
(435.325 n/a - temperature problems)
Uplinks: 145.850, 145.890, 145.930 FM
1269.700, 1269.800, 1269.900 FM
Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[03132005]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Operational

Uplink: 145.850 or 145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz
Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial land and weather imaging payloads offers FM and FSK
Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as
a collaborative effort between the Malaysian government and Surrey
Satellite Technology Ltd.
[05152005]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Semi-operational, the digipeater command is on and open for

APRS users.

Uplink: 145.90 145.92 145.94 145.96 MHz FM
(using 1200-baud Manchester FSK)
Downlink: 437.026 MHz SSB (1200-baud PSK)
Mode-S Beacon: 2401.1428 MHz
Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

A WOD collection of current graphics along with general information and telemetry samples can be found at:
http://www.telecable.es/personales/ea1bcu
[05092004]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational?

Telemetry Downlink: 145.826 MHz. FM (1200-baud AFSK).
approx. 10 days ON, 10 days OFF
Mode-S Beacon: 2401.500 MHz. ... OFF
UHFBeacon: 435.025 MHz. ... OFF

OSCAR-11 is back! I received the good news, on Saturday morning, while at the AMSAT-UK Colloquium. This was entirely unexpected! On Sunday morning Bob G4VRC played me a recording of an early morning pass received that day.

During the period 21 July to 14 August 2005 consistent signals have been heard from 30 July to 08 August. Signals seem to be weaker than usual, confirmed by the many reports received. However,since I last heard the satellite on 30 April, I've reinstalled my antennas , which makes comparisons difficult.

Many thanks for all the recent reports of OSCAR-11 including those from KU7Z (who heard it first), KB2M, VK6XH, HK7MKE, KA2UPW, JE9PEL, G1OCN, HB9SKA and G8OQW.

All the analogue telemetry channels, 0 to 59 are zero, ie they have failed. The status channels 60 to 67 are still working. One bit in channel 62, DSR mode, has changed from WRITE to READ. DSR is the Digital Store & Readout experiment. This could be significant if the experiment is still drawing current, but the other status bit indicates that it is switched OFF.

The on-board clock is now showing a very large error. It has lost approximately 19 days since 30 April. During the recent data collection period, the clock error has been changing at a decreasing rate. The size of the clock error and the rate at which it is changing is similar to the duration of the solar eclipse periods. This suggests that the clock might have been switching OFF during eclipses.

The eclipses have now ended, and the satellite should be in continuous sunlight for the remainder of this year, and well into next year. This should help the satellite to continue transmitting, although continuous sunlight can cause problems due to excessive temperatures.

If the watchdog timer is still operating on a 20 day cycle, ie. approximately ten days ON followed by 10 days OFF, then the VHF beacon should resume transmissions around 18 August.

The Beacon frequencies are -

VHF 145.826 MHz. AFSK FM ASCII Telemetry

UHF 435.025 MHz. OFF

S-band 2401.5 MHz. OFF

Listeners to OSCAR-11 may be interested in visiting my website which contains an archive of news & telemetry data. It also contains details about using a soundcard or hardware demodulators for data capture. There is software for capturing data, and decoding ASCII telemetry. The URL is www.users.zetnet.co.uk/clivew/

If you place this bulletin on a terrestrial packet network, please use the bulletin identifier $BID:U2RPT112.CWV, to prevent duplication.

[ANS-WSR thanks Clive, G3CWV, for the above information]

More information on UO-11 OSCAR-11 can be found at:
http://www.users.zetnet.co.uk/clivew/

MPEG3 files can be found here at Mineo, JE9PEL website:
http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm

[08212005]
NNNN
/EX

SB SAT @ AMSAT <W8ISS $ANS-254.S3
WSR 254 Part 3 09/11/2005

AMSAT NEWS SERVICE BULLETIN 254.S3 FROM AMSAT HQ
SILVER SPRING, MD, SEPTEMBER 11, 2005
TO ALL RADIO AMATEURS
BID: $ANS-254.S3

THE FOLLOWING ARE IN ORBIT BUT ARE
NON-OPERATIONAL AT THIS TIME:

POSAT-1 PO-28
Catalog Number: 22829
Launched : September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 435.250 MHz
          435.275 MHz

Uplink: 145.925 MHz
          145.975 MHz

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

PO-28 (POSAT-1), Portugal's first satellite, launched 12 years ago, will be turned over to Amateur Radio use in the very near future. That was the word July 30 from AMSAT-UK Secretary Jim Heck, G3WGM, during the AMSAT-UK International Space Colloquium in Guildford, England.

Launched September 25, 1993, the satellite operated as a packet store-and-forward BBS (9600 baud FM FSK) on Amateur Radio frequencies for several weeks in early 1994. Over the years, PO-28's primary usage has been commercial, although plans have called for eventually shifting its operation to ham radio use. G3WGM reports that following lengthy negotiations it has been agreed that the satellite can be switched permanently to amateur frequencies. The changeover is expected to take a couple of weeks.

The Portuguese satellite was built at the University of Surrey as part of a collaborative satellite technology program that involved industry and academe. Uplink frequencies will be 145.925 and 145.975 MHz. Downlink frequencies will be 435.250 and 435.275 MHz. More information on PO-28 is on the AMSAT Web site http://www.amsat.org/amsat/sats/n7hpr/po28.html.

Uplink Frequencies: 145.925 and 145.975 MHz
Downlink Frequencies: 435.250 and 435.275 MHz

Orbit: 822 x 800 km, 98.6 deg inclined, sun-synchronous.

Transponder capabilities include FM repeater and 38k4 data. If you want to hear how loud this satellite is, listen on 429.950 until the change back to amateur radio service.

Keplerian elements for PO-28 are not currently contained in the AMSAT keps bulletins, but can be found at Celestrak in amateur.txt using the name "POSAT". Users of Space Track should query the NORAD Satellite ID number 22829. The name listed by Space Track is "EYESAT A".

More information of POSAT-1 can be found at:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
http://www.amsat.org/amsat/sats/n7hpr/po28.html
[ANS-WSR wishes to thanks Trevor, M5AKA and Jim, G3WGM, for this week's information.]
[08072005]
=====
AO-10 OSCAR 10

Catalog number: 14129
Launched: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB
Beacon: 145.810 MHz (unmodulated carrier)

AO-10 has been locked into a Mode-B, 70-cm uplink and
2-meter downlink for several years.

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: Non-operational

Uplink: 145.875 145.900 145.925 145.950 MHz FM (1200-baud)
Downlink: 435.812 MHz SSB
Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Alberto E. Zagni - I2KBD reports on 02/13/05
The spacecraft is in MBL (safe mode) and is trasmitting just 6 channels of telemetry. Temperatures and voltage are nominal, but there seems to be a problem with the onboard receiver, refusing to accept commands. The spacecraft was launched in 1993, thus nearing 12 years in orbit...

Best regards
Alberto E. Zagni - I2KBD
ITAMSAT Mission Director

More information of IO-26 can be found at:

http://joshua.micronet.it/english/itamsat/itamsathome.html
http://www.amsat.org/amsat/sats/n7hpr/io26.html
www.itamsat.org

[02132005]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz
Robot: 29.454 MHz
[05232004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB
Beacon: 145.860 MHz
Robot: 145.908 MHz
[05232004]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink 145.975 MHz FM
Downlink 435.070 MHz FM
[05092004]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink: 145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM
Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01092005]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational?

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB
Beacon: 29.352 MHz (intermittent)
SSB meeting frequency: 29.380 MHz (unofficial)

John, KD6PAG reports on June 16, 2004 to ANS:
RS-15 beacon seemed to be back in the mode where it's a tone about 5 seconds off and then 5 seconds on this morning.

ANS is looking for more confirmations of RS-15 coming back.

[ANS thanks John, KD6PAG for RS-15 information]
[06202004]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplink: 145.84 145.86 145.88 145.90 MHz FM
                    (using 1200-baud Manchester FSK)
CW downlink: 437.125 MHz
Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)
Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[05232004]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[08152004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM
Broadcast Callsign: HL01-11
BBS: HL01-12

Jim, AA7KC, reports that KO-23's downlink transmitter continues in a non-operational status.
[05092004]
=====
KO-25 KITSAT
Catalog number: 22828

Launched: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM (9600-baud FSK)
Downlink: 436.500 MHz FM
Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink frequency (listed on the PanSat web site) 436.500 MHz

The satellite is not available for general uplink transmissions.

The Naval Postgraduate School developed PanSat. At the time of launch, PanSat spread-spectrum digital transponders were to be available to Amateur Radio operators along with software to utilize this technology.

The satellite is still operating, however, the spread spectrum packet radio portion never took place. The spacecraft is now beyond it's initial 2-year mission life, but telemetry records are still being downloaded.

For more information, visit the official PanSat web site at:
http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm

[ANS has no further information]
[05232004]
=====
SO-35 SUNSAT
Catalog Number: ?

```
Launched:February 23, 1999

STatus: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
          Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
         Mode J Digipeater: 145.825 MHz and 145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[08082004]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink:             145.960 MHz (9600-baud FSK)
Downlink:           437.025 MHz 437.400 MHz
Broadcast Callsign: UO121-11
BBS:                UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA
web site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[05092004]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplink      V-band    145.840 -  145.990 MHz CW/LSB
            U-band    435.550 -  435.800 MHz CW/LSB
           L1-band   1269.250 - 1269.500 MHz CW/LSB
           L2-band   1268.325 - 1268.575 MHz CW/LSB
           S1-band   2400.350 - 2400.600 MHz CW/LSB
Downlink:  S2-band   2401.225 - 2401.475 MHz CW/USB
           K-band 24,048.010 - 24,048.060 MHz CW/USB
Beacon:    2401.323, 24,048.035
[05232004]
-----
SO-42  SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational
 Downlink:           437.075 MHz
Broadcast Callsign: SASAT2-11
```

```
BBS:                SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[08152004]
=====
SO-41  SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink:             145.850 MHz
Downlink:           436.775 MHz
Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[08152004]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink:   145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is  welcome to use the digipeating/APRS features of Sapphire,
callsign KE6QMD, as per the user service agreement located at the following
URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Semi-operational.

Uplink 435.275 1200-baud AFSK
Downlink 145.825 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

AO-49 (SAFIR-M) is a German amateur radio payload onboard the small German
scientific satellite "RUBIN-2".

AO-49 was built by the German amateur radio association "AATiS
e.V." (German
```

acronym for "Arbeitskreis Amateurfunk und Telekommunikation in der Schule", which means: 'working group for amateur radio anand telecommunications in schools'). AO-49 is designed as a "store and broadcast" system for APRS based messages, dedicated for the use of schools in combination with the existing WX-Net and planned buoy experiments in Germany.

No transmissions detected since the 1st of February 2003! It appears AO-49 is not properly aligned to illuminate the solar panels. This should end soon. Due to its orbit, AO-49 will be in a phase without eclipses until 13Feb03.

Martin DG8UAU has written a small software program "SAFIR-M Decoder" to allow decoding of the received DATA0 frames. It is available at: http://amend.gmxhome.de in the section Aktuelles.

Details on AO-49 (SAFIR-M) can be found at:
http://amend.gmxhome.de

Information about AATiS e.V. is available at:
http://www.aatis.de
[05092004]
NNNN
/EX

SB SAT @ AMSAT <W8ISS $ANS-254.S4
WSR 254 Part 4 09/11/2005

AMSAT NEWS SERVICE BULLETIN 254.S4 FROM AMSAT HQ
SILVER SPRING, MD, SEPTEMBER 11,2005
TO ALL RADIO AMATEURS
BID: $ANS-254.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE
PROPOSED FOR LAUNCH AT THIS TIME:

UCISAT ?O-??
Catalog number:
Proposed Launch Date: October 31, 2005

Status: Under Construction

Downlink: Submission in Progress
Uplink: Submission in Progress
Callsign: Submission in Progress

This from Matt Bennett, KF6RTB, UCISAT Communications Team Member:

Our website is www.ucisat.net .This is a new website, however, and doesn't have the "Status" section active yet. Because of the growing interest in our project, I'll push our webmaster to create updates (hopefully) on a week-to-week basis. For now, the current status of the mission is as follows:

-Expected Launch Date: October 31st, 2005

-Frequency Allocation: Submission in Progress
-Construction Status: Sub-Assembly
[WSR to thank Matt Bennett, KF6RTB, for this week's report.]
[01302005]
=====
SSETI ?O-??
Catalog Number:
Proposed Launch Date: LATE 2005

Status: AWAITING LAUNCH

Graham, G3VZV reports:
We have now been advised that the revised launch date for SSETI Express and the other satellites on the DMC3 COSMOS launch has been confirmed as September 27th - so please keep those fingers crossed!

SpaceDaily has a report about SSETI at:
http://www.spacedaily.com/news/internet-04zzzu.html

You can find more info about SSETI at:
http://sseti.gte.tuwien.ac.at/WSW4/

Latest news about SSETI can be found at:
http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php

Look at the website for the SSETI Express webcam
http://sseti.gte.tuwien.ac.at/WSW4/webcam.htm

[ANS thanks Graham, G3VZV for the above information]
[09112005]
=====
PHASE 3E ?O-??
Catalog Number:
Proposed Launch Date: Early 2006

Status: Under Construction

William Leijenaar, PE1RAH reports on July 16th, 2005:

Hi AMSATs,

I always like to inform the AMSATs public about my P3e work, but unfortunatly due to
some reasons there was not much time and nothing much to say...

However, now I am happy to announce that the my MODE-UV transponder design for P3e is ready at the P3e integration place in Marburg (Germany). About 4 weeks ago I was in Marburg before, where the transponder has been checked. Unfortunatly some unsure things were found in the design. The unsure things were about long term stability after many years in space.

At home in The Netherlands, I changed the design with some minor changes to have a secure long term stability. Finally I tested the transponder again and it performed well within the specifications. Again something learned for future transponder designs :o)

Last Wednesday I drove to AMSAT-DL P3e integrations place in Marburg again, and have my transponder again checked. In the beginning it seemed that the 70cm receiver lost 10dB in sensetivity. After some more measurements we find out that it was due to a bad attenuator we used for protection at the input.

Together with Karl Meinzer we looked for any problems, but so far we could see (without HELAPS) all was okay. In the afternoon I went back home again, this time without the MODE-UV.

Now the MODE-UV will get a new home, the home of P3e... :o)
I hope the transponder will work like its elder sister in AO-10, and you all will enjoy it for many years...

It was lots of work to get it this far, but I know it is for a good purpose...

For the latest project status update please visit the AMSAT-DL
P3-E web page:
http://www.amsat-dl.org/p3e/

[ANS-WSR wishes to thank William Leijenaar, PE1RAH for this week's report]
[07172005]
=====
CP1 ?o-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: N6CP
Proposed Transmit Frequency: 436.845
[03272005]
=====
CP2 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.325
[03272005]
=====
HAUSAT1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: D90HP
Proposed Transmit Frequency: 437.465
[03272005]
=====
ICE Cube 1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

```
Proposed Callsign: W2CXM
Proposed Transmit Frequency: 437.305
[03272005]
=====
ICE Cube 2 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: N2VR
Proposed Transmit Frequency: 437.425
[03272005]
=====
ION ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.505
[03272005]
=====
KUTEsat ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: KC0RMW
Proposed Transmit Frequency: 437.385
[03272005]
=====
MEROPE ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: K7MSU-1
Proposed Transmit Frequency: 145.980
[03272005]
=====
nCUBE1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
       2407.25
[03272005]
=====
RINCON ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
        437.345
```

[03272005]
=====
SACRED ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
[03272005]
=====
SACRED ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
[03272005]
=====
SEEDS ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: JQ1YGU
Proposed Transmit Frequency: 437.485
[03272005]
=====
Mea Huaka ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.405
[03272005]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
        888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/amsat/listserv/menu.html

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satelite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

From 7388740441553798811
X-Google-Thread: 10e8ad,27e2d80558e6d064,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news3.google.com!border1.nntp.dca.giganews.com!nntp.giganews.com!local01.nntp.dca.giganews.com!nntp.bright.net!news.bright.net.POSTED!not-for-mail
NNTP-Posting-Date: Fri, 16 Sep 2005 05:55:22 -0500
Date: Fri, 16 Sep 2005 10:55:38 +0000
From: Scott <acepilot@bloomer.net>
User-Agent: Mozilla/5.0 (Windows; U; Windows NT 5.0; en-US; rv:1.7.2) Gecko/20040804 Netscape/7.2 (ax)
X-Accept-Language: en-us, en
MIME-Version: 1.0
Newsgroups: rec.radio.amateur.space
Subject: Antennas for AO-51?
Content-Type: text/plain; charset=us-ascii; format=flowed
Content-Transfer-Encoding: 7bit

Message-ID: <xaSdnTooYqMHObfeRVn-uQ@bright.net>
Lines: 10
NNTP-Posting-Host: 64.33.199.218
X-Trace: sv3-
tirjAbJVUYjmRrYDRo38R5qboFDTzRADMKpNEz0wfwQJSIKF4J8h6jM0HPSs+FrBn98qCaYbBFnFu+A!
xCRVTTow9jCJgN6wuqcDjIjF+I0L/nQPC4oac3S6pv9lWWZJ+1wtCilIPKDqMoaa8koRYw02
X-Complaints-To: abuse@bright.net
X-DMCA-Complaints-To: abuse@bright.net
X-Abuse-and-DMCA-Info: Please be sure to forward a copy of ALL headers
X-Abuse-and-DMCA-Info: Otherwise we will be unable to process your complaint
properly
X-Postfilter: 1.3.32
Xref: g2news1.google.com rec.radio.amateur.space:249

What polarization is used on AO-51? I'm using my 2M vertical whip for transmit and that seems to work OK to get into the satellite (I assume it's working OK as others are hearing me and calling back). I have a horizontal loop on the 435 receive side. Even on high elevation passes, it only gives S1 or S2 signals and lots of breaks in the audio. Should I also run a vertical antenna on 435? This setup is in the mobile, so I am unable to use any sort of steerable antenna. Ideas kindly welcomed!

Scott
N0EDV

From 4978514800104651076
X-Google-Thread: 10e8ad,27e2d80558e6d064
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!news3.google.com!
border1.nntp.dca.giganews.com!nntp.giganews.com!nx01.iad01.newshosting.com!
newshosting.com!ctb-nntp1.saix.net!not-for-mail
From: "Roger Conroy" <rogerconroy@nospam.hotmail.com>
Newsgroups: rec.radio.amateur.space
Subject: Re: Antennas for AO-51?
Date: Fri, 16 Sep 2005 21:53:32 +0200
Organization: The South African Internet Exchange
Lines: 20
Message-ID: <dgf7qp$556$1@ctb-nnrp2.saix.net>
References: <xaSdnTooYqMHObfeRVn-uQ@bright.net>
NNTP-Posting-Host: ckb-ip-nas-1-p261.telkom-ipnet.co.za
X-Trace: ctb-nnrp2.saix.net 1126900377 5286 155.239.95.5 (16 Sep 2005 19:52:57
GMT)
X-Complaints-To: abuse@saix.net
NNTP-Posting-Date: 16 Sep 2005 19:52:57 GMT
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.2180
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.2180
X-RFC2646: Format=Flowed; Response
Xref: g2news1.google.com rec.radio.amateur.space:250

"Scott" <acepilot@bloomer.net> wrote in message
news:xaSdnTooYqMHObfeRVn-uQ@bright.net...
> What polarization is used on AO-51? I'm using my 2M vertical whip for
> transmit and that seems to work OK to get into the satellite (I assume
> it's working OK as others are hearing me and calling back). I have a
> horizontal loop on the 435 receive side. Even on high elevation passes,
> it only gives S1 or S2 signals and lots of breaks in the audio. Should I
> also run a vertical antenna on 435? This setup is in the mobile, so I am
> unable to use any sort of steerable antenna. Ideas kindly welcomed!
>
> Scott
> N0EDV

Try the simplest of them all - a 1/4 wave groundplane.

73
Roger ZR3RC

From 7013627997787017996
X-Google-Thread: 10e8ad,a6b12573488c59be,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII
Path: g2news1.google.com!news4.google.com!news3.google.com!
border1.nntp.dca.giganews.com!border2.nntp.dca.giganews.com!nntp.giganews.com!
elnk-atl-nf1!newsfeed.earthlink.net!stamper.news.atl.earthlink.net!
newsread2.news.atl.earthlink.net.POSTED!46041641!not-for-mail
From: "JoAnne Maenpaa" <wb9jej_no-spam@earthlink.net>
Newsgroups: rec.radio.amateur.space
Subject: ANS-261 AMSAT Weekly News Service Bulletin
Lines: 714
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <BOAXe.477$QE1.76@newsread2.news.atl.earthlink.net>
Date: Mon, 19 Sep 2005 15:28:33 GMT
NNTP-Posting-Host: 66.167.71.227
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread2.news.atl.earthlink.net 1127143713 66.167.71.227 (Mon, 19 Sep 2005 08:28:33 PDT)
NNTP-Posting-Date: Mon, 19 Sep 2005 08:28:33 PDT
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news1.google.com rec.radio.amateur.space:251

AMSAT NEWS SERVICE
ANS-261

ANS is a free, weekly, news and information service of AMSAT North
America, The Radio Amateur Satellite Corporation. ANS reports on the

activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:

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SB SAT @ AMSAT $ANS-261.01
AMSAT BoD, Annual Meeting, and Eagle Satellite Team Meeting

AMSAT News Service Bulletin 261.01
From AMSAT HQ SILVER SPRING, MD.
September 18, 2005
To All RADIO AMATEURS
BID: $ANS-261.01

Rick Hambly, W2GPS, AMSAT-NA President, reminds all members that the 2005 AMSAT Board of Directors Meeting will be held on Thursday, October 6th and ending at noon on Friday, October 7th. The AMSAT Annual Meeting will follow later on Friday. An Eagle satellite design team meeting will follow on Friday afternoon through Sunday morning, October 7th through the 9th. These are open meetings and all AMSAT members and guests are invited to attend. We are staying at the Wyndham Pittsburgh Airport Hotel located near the Pittsburgh International Airport. The phone number of the hotel is 412-788-8800.

[ANS thanks Rick, W2GPS for the above information]

/EX

SB SAT @ AMSAT $ANS-261.02
2005 AMSAT Board of Directors Election Results

AMSAT News Service Bulletin 261.02
From AMSAT HQ SILVER SPRING, MD.
September 18, 2005
To All RADIO AMATEURS

BID: $ANS-261.02

As a result of the 2005 AMSAT Board of Directors elections, Rick W2GPS, Emily W0EEC, Gunther W8GSM, and Barry WD4ASW will serve on the Board for two years. The first alternate is Bob N4HY and the second alternate is Lee KU4OS. The results of the voting are (829 votes were cast):

Richard M Hambly, W2GPS - 575
Emily Clarke, W0EEC - 483
Gunther Meisse, W8GSM - 466
Barry Baines, WD4ASW - 458
Bob McGwier, N4HY - 399
Lee McLamb, KU4OS - 380
Bruce Paige, KK5DO - 302
Greg Wycoff, N0ZHE - 131

Submitted by Martha Saragovitz
AMSAT Manager

[ANS thanks Martha for the above information]

/EX

SB SAT @ AMSAT $ANS-261.03
Hotel Survey for 2006 AMSAT Symposium

AMSAT News Service Bulletin 261.03
From AMSAT HQ SILVER SPRING, MD.
September 18, 2005
To All RADIO AMATEURS
BID: $ANS-261.03

The 2006 Symposium planning committee would like to welcome AMSAT and ARISS to San Francisco. We invite everyone to participate in a survey about hotels and hotel services. The Bay Area has so much to offer we will be faced with a number of decisions between hotels, and what better way to make a decision than to give added weight to the preferences of the attendees.

The survey is located at:
http://www.amsat.org/amsat-new/symposium/survey.php

We want to lock in hotel rates early to get the best rates and we also want to give adequate time for people who have to cash in tickets they booked for Lafayette. So the survey will end on October 1. We hope to announce the hotel a few weeks later. So please express your opinions early before the survey ends.

In the future we will also have surveys about events, tours, spouse tours and things for kids, so please visit the Symposium part of the AMSAT website often.

Your opinions matter, and more importantly we want to make you welcome here in the bay area.

[ANS thanks Emily, W0EEC, and Project OSCAR, hosts of the 2006 AMSAT Symposium in the San Francisco Bay area for the above information]

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SB SAT @ AMSAT $ANS-261.04
SuitSat Hardware On-Orbit/SSTV Equipment Aboard ISS

AMSAT News Service Bulletin 261.04
From AMSAT HQ SILVER SPRING, MD.
September 18, 2005
To All RADIO AMATEURS
BID: $ANS-261.04

Frank H. Bauer, KA3HDO, who is the ARISS International Chairman, AMSAT V.P. for Human Spaceflight Programs, and NASA ARISS Program Manager, provided an update on the status of the SuitSat and the SSTV gear for the ISS this week.

On Thursday September 8 at 13:08 UTC, Progress 19P lifted off from the Baikonur Cosmodrome in Kazakhstan. Included in the 2.5 tons of fuel, food and supplies are two Amateur Radio on the International Space Station (ARISS) systems---the Suitsat amateur radio hardware and the Slow Scan Television (SSTV) hardware and software. The successful docking of Progress to ISS on September 10 culminates the successful design, development, certification and delivery of these two ARISS Projects. The ISS Expedition 11 crew will unpack this equipment, making it available for installation, use and deployment by the Expedition 12 crew.

The Suitsat amateur radio system, coupled with a school artwork project, is planned to be installed in an outdated Russian Orlon spacesuit. It will then be deployed from the ISS during an Extra Vehicular Activity (EVA, or spacewalk). This is expected to occur in the December timeframe by the Expedition 12 crew. The Suitsat amateur radio system will beam down special messages and an SSTV image from within the Orlon space suit as it floats in space. Suitsat radio system will allow hams and students to track the suit and decode special international messages, space suit telemetry, and a pre-programmed Slow Scan TV image through its specially built digital voice messaging system and amateur radio transmitter. As built, Suitsat will be a transmit-only capability that will run on the space suit's battery power.

As part of the Suitsat project, a CD with hundreds of school pictures, artwork, poems, and student signatures is included. Two identical CDs were flown, one will go in the suit and the other will be for the crew to review. Using the crew CD, we hope to downlink these images using the SSTV system that will be located inside the Service Module once it is operational. There are approximately 300 items on the CD. These are from all over the world (Japan/Asia, Europe, Russia, Canada, US, South

America and Africa). Several NASA Explorer Schools participated as well as numerous ESA and Russian Space Agency-sponsored schools.

The idea for Suitsat was first conceived by the ARISS-Russia team, led by Sergey Samburov, RV3DR, and was extensively discussed at the joint AMSAT Symposium/ARISS International Partner meeting in October 2004. The project, also called Radioskaf or Radio Sputnik in Russia, is being led by project manager A. P. Alexandrov and Deputy Project Manager A. Poleshuk from RSC Energia, located in Korolev (Moscow area) Russia. On the US side, the hardware project development was led by AMSAT member Lou McFadin, W5DID.

Since October 2004 the Suitsat design concept matured and evolved due to the challenging development time constraints. In a very short timeframe, the ARISS international team designed built and tested a simple, yet fully featured system that we hope will inspire hams and students around the world.

The SSTV system will be installed inside the Service module as an integral part of the ARISS ham radio system. It will transmit and receive (JPG) still images from the International Space Station in a format called Slow Scan TV (SSTV). When fully operational, the SSTV system is capable of sending up to 480 images per day from ISS. It will also be able to receive images from amateur radio stations on Earth. This system will utilize the already installed Kenwood D-700 radio and the ARISS antennas mounted on the Service Module. The SSTV equipment flown on Progress 19P includes the SpaceCam software, a radio/computer interface module, and data cables. The dedicated laptop for SSTV operations will be launched on a subsequent Progress vehicle.

Over the course of the past several months, the Suitsat and SSTV system passed the stringent NASA and Energia safety certification process and were deemed ready for flight--clearing the way for the incorporation into the Progress 19P vehicle. More information on SSTV and Suitsat will be provided as we get closer to installation and deployment .

On behalf of the ARISS International team, I want to congratulate the Suitsat hardware development team and the SSTV development team on a job well done. We look forward to future operation of these systems on ISS, inspiring the next generation of space explorers.

ARISS is an international educational outreach program partnering the ISS space agency partners--NASA, RSA, ESA, JAXA, and CSA, with volunteers from the AMSAT and IARU (International Amateur Radio Union) organizations from participating countries. ARISS offers an inspirational opportunity for students to experience the excitement of Amateur Radio by talking directly with crewmembers on-board the International Space Station. Teachers, parents and communities see, first hand, how Amateur Radio and crewmembers on ISS can energize youngsters' interest in science, mathematics, technology, and learning. Further information on the ARISS program is available on the website http://www.rac.ca/ariss

[ANS thanks Frank, KA3HDO for the above information]

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SB SAT @ AMSAT $ANS-261.05
PCSAT2 Enabled for 1200 and 9600 Baud Digipeating Operation

AMSAT News Service Bulletin 261.05
From AMSAT HQ SILVER SPRING, MD.
September 18, 2005
To All RADIO AMATEURS
BID: $ANS-261.05

The PCSAT2 packet system is enabled for both 1200 and 9600 baud digipeating, and it can also do cross-BAUD digipeating. That is 1200 up and 9600 down or 9600 up and 1200 down. We had no specific application in mind, but it is there for experimentation.

For 1200 or 9600 use the path VIA ARISS. For cross-BAUD operation use the path VIA XBAUD.

The easiest way to experiment is to use either the Kantronics KPC-9612+ TNC or the Kenwood D7 or D700 that can both easily switch between 1200 and 9600 baud.

Experiment with the shortest TXD delay you can get by with at 9600 baud. Typically for one-at-a-time packets like APRS, there is not much advantage for operating at 9600 baud, because the TXD delay is often as long or longer than the data, so the actual throughput advantage of 9600 is more like a factor of 2 than 8.

Perhaps the value of operating at 9600 baud would be in downloading Mail from the PCSAT2 PBBS. That is the only time when all the delays will be amortized and 9600 baud would give you a significant throughput advantage.

Users are welcome to use the PCSAT2 digipeater for experimentation.
   Uplink is 145.825
   Downlink 435.275 +/- 10 KHz Doppler
   DIGIpeater call is ARISS for 1200 or 9600
   DIGIpeater call is XBAUD for cross-baud
   PBBS callsign is MAIL-1

The Kenwood D7 and D700 can do either 1200 or 9600 and on either band, but not both baud rates at the same time. The KPC-9612+ can transmit either 1200 or 9600, but because it is dual port, it can receive both at the same time.

[ANS thanks Bob, WB4APR, and the US Naval Academy Satellite Lab for the above information]

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SB SAT @ AMSAT $ANS-261.06
IGATE Manual Available On-line

AMSAT News Service Bulletin 261.06
From AMSAT HQ SILVER SPRING, MD.
September 18, 2005
To All RADIO AMATEURS
BID: $ANS-261.06

Cor, PD0RKC, has created an easy manual to make your APRS station also function as an IGATE station. When APRS stations send their beacons on the air, including via ISS and PCSAT2, the IGATE station receives the beacons and fowards them to the internet.

APRS packets, containing position coordinates or messages, received via the ISS and forwarded via IGATE stations can be viewed at:
http://www.findu.com/cgi-bin/ariss/index.cgi

The easy IGATE manual for UIVIEW can be found on-line at:
http://pd0rkc.mine.nu (click on the ISS button).

In case you can not visit Cor's website you can send him an e-mail so he can send you his IGATE information via e-mail:
isszarya (at) hotmail.com

[ANS thanks Cor, PD0RKC for the above information]

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SB SAT @ AMSAT $ANS-261.07
ARISS Status for the week of September 12, 2005

AMSAT News Service Bulletin 261.07
From AMSAT HQ SILVER SPRING, MD.
September 18, 2005
To All RADIO AMATEURS
BID: $ANS-261.07

1. Japan Red Cross Contact Successful

The Japan Red Cross Radio Volunteer Corps of Fukui-prefecture, Wakasa Branch, in Obama-City, Fukui-ken, Japan had a successful ARISS contact with the ISS. The Radio Corps provides training on how to communicate via amateur radio during an emergency, and the students are also involved with the Wakasa branch of the Young Astronauts Club-Japan (YAC-J), which is lead by Japanese astronaut Mamoru Mouri. On September 8, astronaut John Phillips, KE5DRY, answered 15 questions posed to him by the thirteen students. Approximately 110 people gathered to observe the contact, including four newspapers, and four television stations. The audio, video, photos, and three newspaper articles covering the event may be found on ARISS member, Satoshi Yasuda's website.

See: http://jk1zrw.dyndns.org/ -Select "Successful School in Region 3", and then "The Japan Red Cross Corps" contact.

2. Upcoming School Contacts

Students from Sanderson High School in Sanderson, Texas will speak to John Phillips on Thursday, September 22 at 16:08 UTC.

3. AMSAT and ARISS Joint Meetings, 2006

ARISS plans to hold its international face to face meeting immediately following the 2006 AMSAT-NA Symposium which will be held in the San Francisco Bay area. Details for the joint meetings will be announced later this month.

4. PCSAT2 Mode Change

PCSAT2, which operated in PSK-31 mode for the last few weeks, has been changed to UI/APRS Packet digipeater mode.
See: http://www.ew.usna.edu/~bruninga/pec/pc2ops.html

[ANS thanks Carol, KB3LKI for the above information]

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SB SAT @ AMSAT $ANS-261.08
SSETI Launch Information Sheet Released

AMSAT News Service Bulletin 261.08
From AMSAT HQ SILVER SPRING, MD.
September 18, 2005
To All RADIO AMATEURS
BID: $ANS-261.08

The current status of the launch programme can be seen at
http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php

The latest version of the LEOPS information sheet is appended below. Its primary audience is "non amateur" so please do not be upset by some of the basic information and advice that it contains!

SSETI Express LEOPS (Launch & Early Operations) Info

These are the preliminary TLEs for SSETI Express based upon a launch at 06:52:26 UTC on September 27, 2005.

They will probably be updated just before launch and will certainly only work for a couple of days after launch. By then we should have received updates from NORAD and can then start to identify which orbit data refers to which satellite.

For the first few orbits they will also be valid for the cubesats and all the other payloads on the same launch. These are detailed below.

```
SSETI1
1 288XXU 0503XC   05270.28641000 -.00000001  00000-0  10000-4 0    12
2 288XX  98.1900 167.4100 0001920   0.0000  50.5000 14.60850000 00013
```

This data can be entered into any of the normal "tracking/prediction" programmes for display at launch events.

SSETI Express UHF transmitter will be activated approximately 100 minutes after launch. The details below give some information about what we expect to hear and when for Express and the cubesats.

To receive the UHF transmissions from Express and the cubesats there are two possibilities.

The simple possibility is a handheld receiver and simple hand held TV type yagi antenna which is pointed in the general expected direction. When Express is heard then this will only be obvious by a sudden burst of increased noise from the loudspeaker. - the 9k6 data sounds just like noise to the human ear! This will not be very impressive to invited guests but will make the Express teams themselves very happy. Remember to have three frequencies stored in the radio 437.260 MHz at AOS, 437.250 MHz for when the satellite is at its nearest point to you and 437.240 MHz as it moves away from you. This is Mr. Doppler at work.

The more complicated possibility is to use a "proper" receiving station with automatically steered circularly polarised antennas, a mast head preamp, Doppler adjusted UHF radio with a widened IF to pass the 9k6 data and a suitable TNC feeding a computer and display. With this set-up it should be possible to display the decoded telemetry from the satellite.

There is already a satellite in a very similar orbit using similar frequencies and modulation method to Express. This is called AO51 (Amsat Oscar 51) also known on some databases as Echo. It is strongly recommended that you use the signals from this satellite to test your receive system (simple or complicated options) so you have already had experience before the launch day and demonstration. AO51 has a variety of scheduled activity modes and frequencies and these can be checked here:
http://www.amsat.org/amsat-new/echo/ControlTeam.php
Most times it is radiating a voice signal and a 9k6 data signal simultaneously.

SSETI Express

Downlink: 437.250 MHz AX25 9k6 FSK
(also 2401.835 MHz 38k4 data and voice - but not for initial operations)

The first transmission will occur approximately 65 min after separation from the launch adaptor- approx 100 mins after launch - we now expect this now to occur around 08:32 UTC when Express is over northern Europe.

The type of the first transmissions will depend on the state of the battery.

In Nominal mode - a sub 1 second burst of AX25 telemetry every 18 seconds.

In Recovery or Safe mode - simple on/off telemetry comprising 16 x 100msec carrier pulses. This telemetry is repeated every 30 seconds in Safe Mode and every 2 mins when in Recovery Mode.

The satellite will transmit at a power of 3 watts.

The next time that Express can be heard over Europe will be the pass that starts in Aalborg at around 10:03 UTC. This pass gives good coverage of all of Europe and should also be audible from the launch site.

Reception reports will be welcome by email at operations@sseti.net or by placing them on the SSETI Newsgroup at slave.gte.tuwein.ac.at in the folder "sseti.express.report" where you will also be able to see reports from other locations around the world.

Full information on receiving SSETI Express signals, decoding the telemetry, submitting it to the project team and entering the competition will be posted at: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php.
This will have links to all the updated pages as they occur.

NCUBE2: a cubesat which will be released by Express

Downlink: 437.305 MHz
Bitrate: 9600b/s
Modulation technique: GMSK

The first transmission will occur 20 min after separation from Express - approx 120 mins after launch.

The message: "DE=LA1CUB=NCUBE2=FF=LA1CUB===" is morsed using a 2400Hz tone, 26 words per minute where FF is a hex number [00=3,0V - FF=4,5V]
        If battery voltage is above 3,8V, every 2 minutes
        If battery voltage is below 3,8, every 5 minutes

At the end of the message an unnumbered AX.25 packet is attached containing the string:

DE=LA1CUB=NCUBE2=NORWEGIAN CUBESAT - WWW.NCUBE.NO
In the header of the AX.25: Callsign: NCUBE Destination: EARTH
The satellite will transmit at a power of 1.5 W at full battery charge
Reception reports will be welcome email to ncube@rocketrange.no or by phone +47 76 14 44 00

UWE-1: a cubesat which will be released by Express

Downlink 437.505 MHz. 9k6 FSK AX25 packet
The first transmission will occur 6 min after separation from Express approximately 106 minutes after launch.

The satellite will transmit for about 1 sec every 1 minute. The output power of the transceiver is approximately 1 watt.
Further details will be made available later.

Reception reports will be very welcome at cubesat@informatik.uni-wuerzburg.de.

CUBESAT Xi-V: a cubesat which will be released by Express

CW signal on 437.465 MHz
FM packet of AFSK AX.25 on 437.345 MHz
The first CW transmission will occur 30 minutes after separation from Express approximately 130 minutes after launch.
FM packet will not be transmitted unless commanded by the ground station.
The interval of the CW signal is about 30 seconds.
The output of CW signal is 80 mW, and that of FM packet is 800 mW.
Both signals share one dipole antenna, so the satellite cannot transmit both signals at the same time.
The email address to receive reports will be announced at the ground station web page http://gs.space.t.u-tokyo.ac.jp/ before launch.

SAFIR-S

A module integrated within the RUBIN experimental payload which will stay attached to the launch adaptor.
A frequency of 2401.900 MHz is used. Callsign DP1AIS
One transmission cycle consists of 15 sec. FM-voice beacon transmission and short 9k6 G3RUH data packets every 15 seconds. Total duration of the above described transmission cycle is about 2-3 minutes.
Reports can be sent to DG6BCE@aatis.de

MOZHAETS

There is also a satellite in the Mozhaets series included in this launch but no details of its transmissions are known.

LAUNCH DAY BROADCASTS

SATELLITE

The launch will be broadcast via ESA Television on Astra 1 G at 19.2 degrees east:

Transponder: 1.108
Reception frequency: 12551.50 MHz
Polarization: Vertical
Symbolrate: 22Msymb/s
FEC: 5/6
TS_ID: 1108
ON_ID: 1
Service Name: ESA
Service provider: ASTRA

Service_ID: 12140
TXT: none

This is always on and will transmit an ESA logo starting three days before the launch. The programme is expected to run for approximately 30 minutes and will include the launch sequence live from the Plesetsk launch site. To set up a new installation for use to receive the Astra 1G signals would need this sort of equipment:

A small dish (~50cm) with the correct LNB - (in the UK a "Sky dish and LNB" would be fine) - with either a FTA (free to air) set-top decoder feeding a normal TV or a DVB satellite box plugged into the back of a computer (either via a USB port or on a PCI card)

Also required is a clear view from the dish to the satellite and, of course, some coax cable to connect the two!

INTERNET

The ESA launch programme on ASTRA 1G will also be available as a webstream on the Internet. Details have recently changed and will be updated as soon as possible.

SSETI EXPRESS HANDBOOK

To coincide with the launch the SSETI Express Handbook has just been published. Written by Richard Limebear G3RWL, using ESA and AMSAT-UK documentation, the 22 page handbook covers just about every aspect of this exciting new spacecraft. It details AMSAT-UK's involvement in the project and contains a wealth of technical information about the spacecraft and the three Picosats that will be launched from it.

The PDF of the handbook can be downloaded free of charge from the AMSAT-UK website at http://www.uk.amsat.org/ or printed copies are available for �5 inc P&P in Europe from AMSAT-UK, "Badgers", Letton Close, Blandford, Dorset, DT11 7SS, United Kingdom. Tel: +44 (0)1258 453959 Email: g3wgm@amsat.org. Cheques should be made payable to "AMSAT-UK". Postage rates for other parts of the world available on request.

A French version of the handbook translated by Christophe Candebat F1MOJ is also available at the AMSAT-UK web site.

[ANS thanks Graham, UA/G3VZV, and Trevor, M5AKA for the above information]

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SB SAT @ AMSAT $ANS-261.09
SatPC32 V12.4 Tracking Program DDESat32 Download Available

AMSAT News Service Bulletin 261.09
From AMSAT HQ SILVER SPRING, MD.
September 18, 2005

To All RADIO AMATEURS
BID: $ANS-261.09

The new SatPC32 12.4 and Wisat32 12.4 work with the Wisp32 programs without any problem. Users of the tool DDESat32 who have updated to SatPC32 12.4 also need to update DDESat32 because DDESat32 is using some of the auxiliary files and rotor drivers of SatPC32. The DDESat32 update can be downloaded from my website (for free). DDESat32 is a tool that is particularly designed to be used with Wisp32. It is not part of the SatPC32 package and it comes with its own setup program.

Here is the link to download DDESat32:
http://www.dk1tb.de/ddesatsetup_124.zip

DK1TB has generously donated SatPC32 to AMSAT-NA, AMSAT-UK, and AMSAT-DL. If you use SatPC32, please purchase a registration code from one of these groups. All of the purchase price will go to support amateur satellite programs.

[ANS thanks Erich, DK1TB for the above information]

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SB SAT @ AMSAT $ANS-261.10
AMSAT Awards This Week

AMSAT News Service Bulletin 261.10
From AMSAT HQ SILVER SPRING, MD.
September 18, 2005
To All RADIO AMATEURS
BID: $ANS-261.10

Bruce Paige, KK5DO, AMSAT Director Contests and Awards, reports this week congratulations go out to all of the following.

* Roger Banks, KE5AQD, Satellite Communicators Club

* Andre Theelen, PH7AT, 51 on 51 Award #34

To see all the awards visit http://www.amsat.org

[ANS thanks Bruce, KK5DO for the above information]

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SB SAT @ AMSAT $ANS-261.11
New Release of InstantTune Version 1.50

AMSAT News Service Bulletin 261.11
From AMSAT HQ SILVER SPRING, MD.
September 18, 2005

To All RADIO AMATEURS
BID: $ANS-261.11

Tony, AA2TX, announced a new release of InstantTune which provides automatic radio tuning for use with InstantTrack. He said, "Since it is pretty old (at least for software,) I was not planning on producing anymore "official" releases of this package. However, I have added a few new features based on user requests and decided to offer them to everyone who wants them as a patch release."

The new features are as follows:

1. Velocity Interpolation
InstantTune will estimate a satellite's velocity between actual velocity updates from InstantTrack. This allows it to tune the radios 4x faster than it did before. The doppler shift is noticeable on 70cm downlinks but it really flies on the AO-51 (Echo) S-band downlink.

2. PL control
InstantTune can turn on the PL (CTCSS) encoder and set the tone frequency for the satellites that require it.

3. Hot Keys
From any InstantTrack screen, you can hit CTRL-B to tune the radio to the beacon. You can then hit CTRL-Q to return to the previously tuned QSO frequency. This allows you to quickly check the beacon and then go back to your QSO.

4. Improved FT-817 driver
The FT-817 driver worked fine when used as a receiver or transmitter but when used as a single-radio satellite station, the operation was a bit eratic. The new driver significantly improves this operation and I was easily able to make a VO-52 SSB contact using just an FT-817 feeding a pair of tripod mounted full wave loop antennas (a pretty minimal portable, QRP satellite station.)

5. FT857, FT897 support
These radios use the same driver as the FT-817 but you had to know to type in "ft817" in the config file. InstantTune will now recognize "ft857" and "ft897" as valid radio types.

The patch release also includes a new "itune.exe" control program with a few minor improvements not worth mentioning - just type "itune" at the DOS prompt and it will list all the commands. The new version, InstantTune Version 1.50, will work with Versions 1.50 or 1.55 of InstantTrack.

If you would like a copy of the patch release with these new features, send Tony an email via aa2tx at amsat.org.

InstantTune continues to support all of the popular Yaesu, Kenwood, and ICOM radios as well as any "mic-button" controlled radios. But note that I don't have access to Kenwood or ICOM radios to test with so I did not put in the PL control feature for those radio drivers. If someone would like it added for one of those radios, I will be happy to implement it as long as they are willing to test it.

As always, InstantTune is truly open source and it is fine with me if other developers use this source code to help develop new radio tuning software. If you would like a copy of the latest source code (mostly C++,) just send Tony an email.

[ANS thanks Tony, AA2TX for the above information]

/EX

73,
This week's ANS Editor,
JoAnne Maenpaa, WB9JEJ
WB9JEJ at amsat dot org

```
From 7589859310305999287
X-Google-Thread: 10e8ad,8c34585cc77ec5a4,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!news3.google.com!
border1.nntp.dca.giganews.com!border2.nntp.dca.giganews.com!nntp.giganews.com!
elnk-atl-nf1!newsfeed.earthlink.net!stamper.news.atl.earthlink.net!
newsread2.news.atl.earthlink.net.POSTED!46041641!not-for-mail
From: "JoAnne Maenpaa" <wb9jej_no-spam@earthlink.net>
Newsgroups: rec.radio.amateur.space
Subject: WSR-261 AMSAT Weekly Satellite Report
Lines: 1298
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <SPAXe.478$QE1.402@newsread2.news.atl.earthlink.net>
Date: Mon, 19 Sep 2005 15:29:54 GMT
NNTP-Posting-Host: 66.167.71.227
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread2.news.atl.earthlink.net 1127143794 66.167.71.227 (Mon, 19 Sep
2005 08:29:54 PDT)
NNTP-Posting-Date: Mon, 19 Sep 2005 08:29:54 PDT
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news1.google.com rec.radio.amateur.space:252
```

This report is organized into 4 parts.
Part 1 - operational analog amateur satellites.
Part 2 - operational digital amateur satellites.
Part 3 - non - operational satellites
Part 4 - proposed satellites

SB SAT @ AMSAT <W8ISS $ANS-261.S1
WSR 261 Part 1 09/18/2005

AMSAT NEWS SERVICE BULLETIN 261.S1 FROM AMSAT HQ
SILVER SPRING, MD, SEPTEMBER 18, 2005
TO ALL RADIO AMATEURS
BID: $ANS-261.S1

VO-52 HAMSAT
Catalog Number: 28650
Launch Date: May 05,2005

Status: On orbit
Current Mode: U/V

Proposed frequencies:

Indian transponder:
Uplink : 435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW
Beacom : 145.940MHz continue carier signal

Dutch transponder:
Uplink : 435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW
Beacon : 145.860MHz 12WPM with CW message
[07242005]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Mode: PBBS - ON
      FM REPEATER - V/U

Analog voice downlink: 435.300 MHz FM
          435.150 MHz FM
Analog voice uplink: 145.880 MHZ FM
          145.920 MHz FM 67Hz PL tone
                       1268.700 MHz FM 67Hz PL tone

Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
                       2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast
   Protocol (PBP)

Broadcast: PECHO-11
BBS: PECHO-12

Current scheduled operating modes:

```
Due to the on going Huricane Katrina Relief Efforts in the Gulf Coast
States,
AO-51 will continue in the default mode V/U with 9k6 Digital, V/U, PBP
BBS
mode. Updated information will be posted as soon as any changes are
made.

[ANS-WSR thanks Bill, VE7WFG for the above information]
[09112005]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Uplink:    145.850 MHz (67.0 Hz PL tone) (See below for operating
          procedures)
Downlink:  436.795 MHz

There have been unconfirmed reports on the amsat-bb remailer that SO-50
has
shifted downlink frequency as much as 5khz up. This both from Europe.

To switch the transmitter on, you need to send a CTCSS tone of  74.4
Hz.
The
order of operation is thus: (allow for Doppler as necessary)

1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm
   the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT
   the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window
   will reset the 10 minute timer.
[09122004]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: OPERATIONAL

Voice/CW Mode JA
Uplink:     145.90 to 146.00 MHz CW/LSB
Downlink:   435.80 to 435.90 MHz CW/USB
Beacon:     435.795 MHz

Digital Mode JD
Uplink:     145.850 145.870 145.910 MHz FM
Downlink:   435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign:   8J1JCS
Digitalker: 435.910 MHz
```

John, N4QWL reports on July 16th, 2005:

Last evening I had a AOS to LOS qso with WI2W. FO-29 came up at 01:17z here in FM07 and I found WI2W and we chatted until 01:33z. The satellite was at 2 degrees elevation when I finally heard him start to crackle a bit. What a great QSO! To think that I watched this bird launch back in 1996 and it is still working so well is a real thrill. I believe I still have the video. I might just look for it and watch it again. Boy do I love this satellite stuff! Look for you all up there.

Please send the reception reports to lab2 'at' jarl.or.jp.
Please use the subject line: 'FO-29 reception report'.

Mineo, JE9PEL, has an FO-29 satellite telemetry analysis program that will automatically analyze all digital telemetry from the satellite (such as current, voltage and temperature). FO29CWTE is available at:
http://www.ne.jp/asahi/hamradio/je9pel/
[ANS-WSR wishes to thanks John, N4QWL for this week's report]
[07172005]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Uplink: 145.850 MHz FM
Downlink: 436.795 MHz FM

The latest information on AO-27 from control operator Michael Wyrick, N3UC (former N4USI), can be found at:
http://www.ao27.org

An AO-27 question-and-answer page is available on the AMSAT-NA web site, with updates by Ray, W2RS. The URL is:
http://www.amsat.org/amsat/intro/ao27faq.html

[ANS-WSR thanks John, K6YK, for this week's AO-27 report]
[08292004]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Semi-operational in sunlight.
Return to active status: June 21,2002

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
            432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A
            145.975 to 145.925 MHz CW/USB Mode B
Beacon: 29.502 MHz, 145.972 MHz, 435.1 MHz, 2304.1 MHz

Emily, W0EEC has created a website to allow the users of AO-7 to record
contacts, observations and use of the satellite more effectively at:
http://www.emilyshouse.com/experthams/ao7/main.php
This includes the ability to log contacts.

Tim, K3TZ has written a program to decode AO-07 telemetry.
The program can be downloaded at:
http://www.qsl.net/k3tz/files/K3TZ_AO-07_Telemetry_Decoder_0.5.zip

For more AO-7 info:
http://www.amsat.org/amsat/sats/n7hpr/ao7.html
[11142004]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: U/V CROSS-BAND REPEATER
Digipeater: Inactive

The current Expedition 11 crew is:
Commander Sergei Krikalev
Flight Engineer John Phillips

Worldwide packet uplink: 145.990 MHz FM
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM
Doppler Shift is 10 KHz

Russian callsigns: RS0ISS, RZ3DZR
USA callsign: NA1SS
Packet station mailbox callsign: RS0ISS-11
Packet station keyboard callsign: RS0ISS-3
Digipeater callsign: ARISS

This from Frank Bauer, KA3HDO:
The SSTV system will be installed inside the Service module as an
integral
part of the ARISS ham radio system. It will transmit and receive (JPG)
still images from the International Space Station in a format called
Slow

Scan TV (SSTV). When fully operational, the SSTV system is capable of sending up to 480 images per day from ISS. It will also be able to receive images from amateur radio stations on Earth. This system will utilize the already installed Kenwood D-700 radio and the ARISS antennas mounted on the Service Module. The SSTV equipment flown on Progress 19P includes the SpaceCam software, a radio/computer interface module, and data cables. The dedicated laptop for SSTV operations will be launched on a subsequent Progress vehicle

This off the ARISS webpage:
< http://www.rac.ca/ariss/oindex.htm#New%20ARISS%20Operations >:
The ARISS program is pleased to announce that the amateur radio equipment aboard the International Space Station is now operating in cross-band repeat mode. We realize that many of you will miss the packet-operating mode. However, cross-band repeat allows further experimentation of the ISS amateur radio system

The downlink for this operating mode remains the same, so listen for the station on 145.80 MHz. The new uplink frequency is 437.80 MHz. All frequencies are subject to Doppler shifting. For further information on working satellites and adjusting for Doppler shift, please review Emily Clark's (W0EEC) excellent presentation on AMSAT's website:
http://www.amsat.org/amsat-new/information/faqs/Intro_sats.pdf

The ISS daily crew schedule can be found at:
http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line is NOT translated from Russian and posted.

More information is available at:
http://www.rac.ca/ariss
http://spaceflight.nasa.gov/station/reference/radio/
http://www.marexmg.org/fileshtml/unprotopage.html
http://www.issfanclub.com
http://oscar.dcarr.org/
[09182005]
NNNN
/EX

SB SAT @ AMSAT <W8ISS $ANS-261.S2
WSR 261 Part 2 09/18/2005

AMSAT NEWS SERVICE BULLETIN 261.S2 FROM AMSAT HQ

SILVER SPRING, MD, SEPTEMBER 18, 2005
TO ALL RADIO AMATEURS
BID: $ANS-261.S2

PCSAT2 ?0-??
Catalog Number:
Launch Date: August 1, 2005

Status: Operational

PCSAT2 was installed on the exterior of the International Space Station and was activated on August 3, 2005.

PCSAT2 CAPABILITIES: PCSAT2 is attached to the ISS and so its operations must be in cooperation with the ARISS communications suite to minimize any mutual interference and to coordinate activities. Here are the capabilities of the PCSAT2 and ARISS payloads:

PCSAT SYSTEM A:

435.275 PCSAT2 DOWNLINK 1200 baud packet with uplink on 145.825
435.275 PCSAT2 DOWNLINK Occasional user PSK-31 continuous downlink
145.825 PCSAT2 DOWNLINK 1200 baud packet
PCSAT SYSTEM B:

437.975 PCSAT2 DOWNLINK periodic Solar Cell data and PCSAT2 telemetry at 9600 baud
437.975 PCSAT2 DOWNLINK TNC-B command downlink at 1200 baud
437.975 PCSAT2 DOWNLINK User Voice Repeater with VHF uplink
437.975 PCSAT2 DOWNLINK Packet digipeater with VHF uplink

It looks like PCSAT2 can best contribute at this time by operating in PSK-31 mode for the near future. This is a very exciting new transponder mode which solves the congestion problem on FM repeaters by letting multiple stations all communicate at the same time.

PSK-31 users are welcome to try out the new PCSAT2 PSK-31 transponder on ISS with an uplink on 29.402 +/- 1 KHz and downlink on 435.275 +/- Doppler using FM.

The FM downlink lets everyone operate full duplex and everyone to see the same view of the passband as everyone else. THus you can see exactly what your signal looks like to everyone else.

Help Wanted:

Here is your chance to become a viable part of the Amateur Satellite Community.

We are looking for a volunteer satellite packet station in Hawaii that is interested in helping with telemetry and sat-gating of PCSAT2 and ARISS packets. Requirements are:

1) General familiarity with packet
2) TNC connected to a cross band radio that can RX on UHF and TX on VHF.
3) modest UHF beam and rotator system.

Contact WB4APR for more information.

Packets seen from PCSAT2 can be reviewed at:
http://www.findu.com/cgi-bin/pcsat2.cgi

A screen shot of both the 9600 bps and 1200 bps decoded data as seen by Simon, 9W2QC, can be seen at:
http://www.9w2qc.net/pcsat2/

More information on PCSAT2 can be found at:
http://web.usna.navy.mil/~bruninga/pcsat2.html

[ANS-WSR thanks Bob, WB4APR and the U.S. Naval Academy Satellite Lab for the aboveinformation.]

[08282005}

=====

AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Mode: PBBS - ON
FM REPEATER - V/U HIGH POWER

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
Analog voice uplink: 145.880 MHz FM
145.920 MHz FM 67Hz PL tone
1268.700 MHz FM 67Hz PL tone

Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast Protocol (PBP)

Broadcast: PECHO-11
BBS: PECHO-12

Current scheduled operating modes:

Due to the on going Huricane Katrina Relief Efforts in the Gulf Coast States, AO-51 will continue in the default mode V/U with 9k6 Digital, V/U, PBP BBS mode. Updated information will be posted as soon as any changes are made.

[ANS-WSR thanks Bill, VE7WFG for the above information]
[09112005]

=====

NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Non-Operational?????

Uplink/downlink: 145.827 MHz 1200 baud AX.25 AFSK via W3ADO-1
Aux/Uplink: 435.250 MHz 9600 baud via PCSAT-2 (off)
APRS Downlink: 144.390 MHz (Region 2)

PCSat is a 1200-baud APRS digipeater designed for use by stations using hand-held or mobile transceivers. Downlinks feed a central web site at: http://pcsat.aprs.org

The APRS-equipped PCSat was built by midshipmen from the U.S. Naval Academy under the guidance of Bob Bruninga, WB4APR.
[07242005]

=====

CUTE-1
Catalog number: 27844
Launched: June 30,2003

Status: Operational

Uplink: ?
Downlink: 436.8375 CW
              437.4700 1200 FM ax25 or SRLL (ACTIVE only near Japan ?)
Cliff, K7RR reports:
In the latest Weekly Satellite Report, CUTE 1, #27844 is listed as OPERATIONAL?
Indeed it is very operational as a CUBESAT sending CW telemetry on 436.8345 MHz. At the July 7 2005, 23:45:20 pass over the Western USA:
CUTE 1 6B A4 xx 7F D7 66A8 4702 FF FF7C 65
CUTE 1 6C A6 59 80 D9 66A8 4702 FF FE7C B6

The June 30th KEPS were within ten seconds of AOS and LOS. It is an very good object to practice tracking as the orbit and transmitter power are similar to proposed CUBESATS awaiting launch this December. As a check for Doppler correction, the lack of change in tone is an excellent indicator.

CUTE 1 is a Japanese (Tokyo Institute of Technology) one kilogram nanosatellite that was launched by a Rokot rocket from Plesetsk at

```
14:15 UT on 30 June 2003. It carries a 100 mW beacon at 436.8375 MHz.
Initial orbital parameters were period 101.4 min, apogee 831 km, perigee
819 km, and inclination 98.7?.

For further info about CUTE-1 goto:
http://lss.mes.titech.ac.jp/ssp/cubesat/operation/Schedule_e.html

[ANS WSR wishes to thank Cliff, K7RR, for this week's information]
[07242005]
=====
GO-32 TECHSAT-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Downlink:           435.225 MHz FM (9600-baud FSK)
                   (435.325 n/a - temperature problems)
Uplinks:            145.850, 145.890, 145.930 FM
                   1269.700, 1269.800, 1269.900 FM
Broadcast Callsign: 4XTECH-11
BBS Callsign:       4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[03132005]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Operational

Uplink:             145.850 or 145.925 MHz 9600-baud FSK
Downlink:           437.325 MHz
Broadcast callsign: MYSAT3-11
BBS:                MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial land and weather imaging payloads offers FM and FSK
Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as
a collaborative effort between the Malaysian government and Surrey
Satellite Technology Ltd.
[05152005]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Semi-operational, the digipeater command is on and open for
APRS users.
```

Uplink: 145.90 145.92 145.94 145.96 MHz FM
                     (using 1200-baud Manchester FSK)
Downlink: 437.026 MHz SSB (1200-baud PSK)
Mode-S Beacon: 2401.1428 MHz
Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

A WOD collection of current graphics along with general information and telemetry samples can be found at:
http://www.telecable.es/personales/ea1bcu
[05092004]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational?

Telemetry Downlink: 145.826 MHz. FM (1200-baud AFSK).
                    approx. 10 days ON, 10 days OFF
Mode-S Beacon: 2401.500 MHz. ... OFF
UHFBeacon: 435.025 MHz. ... OFF

OSCAR-11 is back! I received the good news, on Saturday morning, while at the AMSAT-UK Colloquium. This was entirely unexpected! On Sunday morning Bob G4VRC played me a recording of an early morning pass received that day.

During the period 21 July to 14 August 2005 consistent signals have been heard from 30 July to 08 August. Signals seem to be weaker than usual, confirmed by the many reports received. However,since I last heard the satellite on 30 April, I've reinstalled my antennas , which makes comparisons difficult.

Many thanks for all the recent reports of OSCAR-11 including those from KU7Z (who heard it first), KB2M, VK6XH, HK7MKE, KA2UPW, JE9PEL, G1OCN, HB9SKA and G8OQW.

All the analogue telemetry channels, 0 to 59 are zero, ie they have failed. The status channels 60 to 67 are still working. One bit in channel 62, DSR mode, has changed from WRITE to READ. DSR is the Digital Store & Readout experiment. This could be significant if the experiment is still drawing current, but the other status bit indicates that it is switched OFF.

The on-board clock is now showing a very large error. It has lost approximately 19 days since 30 April. During the recent data collection period, the clock error has been changing at a decreasing rate. The size of the clock error and the rate at which it is changing is similar to the duration of the solar eclipse periods. This suggests that the clock might have been switching OFF during eclipses.

The eclipses have now ended, and the satellite should be in continuous sunlight for the remainder of this year, and well into next year. This should help the satellite to continue transmitting, although continuous sunlight can cause problems due to excessive temperatures.

If the watchdog timer is still operating on a 20 day cycle, ie. approximately ten days ON followed by 10 days OFF, then the VHF beacon should resume transmissions around 18 August.

The Beacon frequencies are -

VHF 145.826 MHz. AFSK FM ASCII Telemetry

UHF 435.025 MHz. OFF

S-band 2401.5 MHz. OFF

Listeners to OSCAR-11 may be interested in visiting my website which contains an archive of news & telemetry data. It also contains details about using a soundcard or hardware demodulators for data capture. There is software for capturing data, and decoding ASCII telemetry. The URL is www.users.zetnet.co.uk/clivew/

If you place this bulletin on a terrestrial packet network, please use the bulletin identifier $BID:U2RPT112.CWV, to prevent duplication.

[ANS-WSR thanks Clive, G3CWV, for the above information]

More information on UO-11 OSCAR-11 can be found at:
http://www.users.zetnet.co.uk/clivew/

MPEG3 files can be found here at Mineo, JE9PEL website:
http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm

[08212005]
NNNN
/EX

SB SAT @ AMSAT <W8ISS $ANS-261.S3
WSR 261 Part 3 09/18/2005

AMSAT NEWS SERVICE BULLETIN 261.S3 FROM AMSAT HQ
SILVER SPRING, MD, SEPTEMBER 18, 2005
TO ALL RADIO AMATEURS
BID: $ANS-261.S3

THE FOLLOWING ARE IN ORBIT BUT ARE
NON-OPERATIONAL AT THIS TIME:

POSAT-1 PO-28
Catalog Number: 22829
Launched : September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 435.250 MHz
435.275 MHz

Uplink: 145.925 MHz
145.975 MHz

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

PO-28 (POSAT-1), Portugal's first satellite, launched 12 years ago, will be turned over to Amateur Radio use in the very near future. That was the word July 30 from AMSAT-UK Secretary Jim Heck, G3WGM, during the AMSAT-UK International Space Colloquium in Guildford, England.

Launched September 25, 1993, the satellite operated as a packet store-and-forward BBS (9600 baud FM FSK) on Amateur Radio frequencies for several weeks in early 1994. Over the years, PO-28's primary usage has been commercial, although plans have called for eventually shifting its operation to ham radio use. G3WGM reports that following lengthy negotiations it has been agreed that the satellite can be switched permanently to amateur frequencies. The changeover is expected to take a couple of weeks.

The Portuguese satellite was built at the University of Surrey as part of a collaborative satellite technology program that involved industry and academe. Uplink frequencies will be 145.925 and 145.975 MHz. Downlink frequencies will be 435.250 and 435.275 MHz. More information on PO-28 is on the AMSAT Web site http://www.amsat.org/amsat/sats/n7hpr/po28.html.

Uplink Frequencies: 145.925 and 145.975 MHz
Downlink Frequencies: 435.250 and 435.275 MHz

Orbit: 822 x 800 km, 98.6 deg inclined, sun-synchronous.

Transponder capabilities include FM repeater and 38k4 data. If you want to hear how loud this satellite is, listen on 429.950 until the change back to amateur radio service.

Keplerian elements for PO-28 are not currently contained in the AMSAT keps bulletins, but can be found at Celestrak in amateur.txt using the name "POSAT". Users of Space Track should query the NORAD Satellite ID number 22829. The name listed by Space Track is "EYESAT A".

More information of POSAT-1 can be found at:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
http://www.amsat.org/amsat/sats/n7hpr/po28.html

[ANS-WSR wishes to thanks Trevor, M5AKA and Jim, G3WGM, for this week's information.]
[08072005]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launched: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB
Beacon: 145.810 MHz (unmodulated carrier)

AO-10 has been locked into a Mode-B, 70-cm uplink and 2-meter downlink for several years.

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: Non-operational

Uplink: 145.875 145.900 145.925 145.950 MHz FM (1200-baud)
Downlink: 435.812 MHz SSB
Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Alberto E. Zagni - I2KBD reports on 02/13/05
The spacecraft is in MBL (safe mode) and is trasmitting just 6 channels of telemetry. Temperatures and voltage are nominal, but there seems to be a problem with the onboard receiver, refusing to accept commands.
The spacecraft was launched in 1993, thus nearing 12 years in orbit...

Best regards
Alberto E. Zagni - I2KBD
ITAMSAT Mission Director

More information of IO-26 can be found at:

http://joshua.micronet.it/english/itamsat/itamsathome.html
http://www.amsat.org/amsat/sats/n7hpr/io26.html
www.itamsat.org

[02132005]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

```
Status: Non-operational

Uplink:   21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB
Beacon:   29.408 MHz
Robot:    29.454 MHz
[05232004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink:      21.260 to  21.300 MHz CW/USB
Downlink:   145.860 to 145.900 MHz CW/USB
Beacon:     145.860 MHz
Robot:      145.908 MHz
[05232004]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink 145.975 MHz FM
Downlink 435.070 MHz FM
[05092004]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink:             145.900 FM 9600-baud FSK
Downlink:           435.120 MHz FM
Broadcast Callsign: UOSAT5-11
BBS:                UOSAT5-12
[01092005]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational?

Uplink:      145.858 to 145.898 MHz CW/USB
Downlink:     29.354 to  29.394 MHz CW/USB
Beacon:       29.352 MHz (intermittent)
SSB meeting frequency:  29.380 MHz (unofficial)
```

John, KD6PAG reports on June 16, 2004 to ANS:
RS-15 beacon seemed to be back in the mode where it's a tone about 5 seconds
off and then 5 seconds on this morning.

ANS is looking for more confirmations of RS-15 coming back.

[ANS thanks John, KD6PAG for RS-15 information]
[06202004]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplink: 145.84 145.86 145.88 145.90 MHz FM
(using 1200-baud Manchester FSK)
CW downlink: 437.125 MHz
Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)
Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[05232004]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[08152004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM
Broadcast Callsign: HL01-11
BBS: HL01-12

Jim, AA7KC, reports that KO-23's downlink transmitter continues in a non-operational status.
[05092004]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM (9600-baud FSK)
Downlink: 436.500 MHz FM
Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink frequency (listed on the PanSat web site) 436.500 MHz

The satellite is not available for general uplink transmissions.

The Naval Postgraduate School developed PanSat. At the time of launch, PanSat spread-spectrum digital transponders were to be available to Amateur Radio operators along with software to utilize this technology.

The satellite is still operating, however, the spread spectrum packet radio portion never took place. The spacecraft is now beyond it's initial 2-year mission life, but telemetry records are still being downloaded.

For more information, visit the official PanSat web site at:
http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm

[ANS has no further information]
[05232004]
=====
SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

STatus: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
          Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
         Mode J Digipeater: 145.825 MHz and 145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[08082004]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlink: 437.025 MHz 437.400 MHz
Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA
web site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[05092004]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplink   V-band   145.840 - 145.990 MHz CW/LSB
            U-band   435.550 - 435.800 MHz CW/LSB
           L1-band   1269.250 - 1269.500 MHz CW/LSB
           L2-band   1268.325 - 1268.575 MHz CW/LSB
           S1-band   2400.350 - 2400.600 MHz CW/LSB
Downlink: S2-band   2401.225 - 2401.475 MHz CW/USB
           K-band 24,048.010 - 24,048.060 MHz CW/USB
Beacon: 2401.323, 24,048.035
[05232004]

SO-42 SAUDISAT-1B

Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational
Downlink: 437.075 MHz
Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[08152004]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz
Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[08152004]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
callsign KE6QMD, as per the user service agreement located at the
following
URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Semi-operational.

Uplink 435.275 1200-baud AFSK
Downlink 145.825 9600-baud FSK
(optional voice message)

Broadcast callsign: DP0AIS

AO-49 (SAFIR-M) is a German amateur radio payload onboard the small German scientific satellite "RUBIN-2".

AO-49 was built by the German amateur radio association "AATiS e.V." (German acronym for "Arbeitskreis Amateurfunk und Telekommunikation in der Schule", which means: 'working group for amateur radio anand telecommunications in schools'). AO-49 is designed as a "store and broadcast" system for APRS based messages, dedicated for the use of schools in combination with the existing WX-Net and planned buoy experiments in Germany.

No transmissions detected since the 1st of February 2003! It appears AO-49 is not properly aligned to illuminate the solar panels. This should end soon. Due to its orbit, AO-49 will be in a phase without eclipses until 13Feb03.

Martin DG8UAU has written a small software program "SAFIR-M Decoder" to allow decoding of the received DATA0 frames. It is available at: http://amend.gmxhome.de in the section Aktuelles.

Details on AO-49 (SAFIR-M) can be found at:
http://amend.gmxhome.de

Information about AATiS e.V. is available at:
http://www.aatis.de
[05092004]
NNNN
/EX

SB SAT @ AMSAT <W8ISS $ANS-261.S4
WSR 261 Part 4 09/18/2005

AMSAT NEWS SERVICE BULLETIN 261.S4 FROM AMSAT HQ
SILVER SPRING, MD, SEPTEMBER 18,2005
TO ALL RADIO AMATEURS
BID: $ANS-261.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE PROPOSED FOR LAUNCH AT THIS TIME:

UCISAT ?O-??
Catalog number:
Proposed Launch Date: October 31, 2005

Status: Under Construction

Downlink: Submission in Progress
Uplink: Submission in Progress

Callsign: Submission in Progress

This from Matt Bennett, KF6RTB, UCISAT Communications Team Member:

Our website is www.ucisat.net .This is a new website, however, and doesn't have the "Status" section active yet. Because of the growing interest in our project, I'll push our webmaster to create updates (hopefully) on a week-to-week basis. For now, the current status of the mission is as follows:

-Expected Launch Date: October 31st, 2005
-Frequency Allocation: Submission in Progress
-Construction Status: Sub-Assembly
[WSR to thank Matt Bennett, KF6RTB, for this week's report.]
[01302005]
=====
SSETI ?O-??
Catalog Number:
Proposed Launch Date: LATE 2005

Status: AWAITING LAUNCH

Graham, G3VZV reports:
We have now been advised that the revised launch date for SSETI Express and the other satellites on the DMC3 COSMOS launch has been confirmed as September 27th - so please keep those fingers crossed!

SpaceDaily has a report about SSETI at:
http://www.spacedaily.com/news/internet-04zzzu.html

You can find more info about SSETI at:
http://sseti.gte.tuwien.ac.at/WSW4/

Latest news about SSETI can be found at:
http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php

Look at the website for the SSETI Express webcam
http://sseti.gte.tuwien.ac.at/WSW4/webcam.htm

[ANS thanks Graham, G3VZV for the above information]
[09112005]
=====
PHASE 3E ?O-??
Catalog Number:
Proposed Launch Date: Early 2006

Status: Under Construction

William Leijenaar, PE1RAH reports on July 16th, 2005:

Hi AMSATs,

I always like to inform the AMSATs public about my P3e work, but unfortunatly due to some reasons there was not much time and nothing much to say...

However, now I am happy to announce that the my MODE-UV transponder design for P3e is ready at the P3e integration place in Marburg (Germany). About 4 weeks ago I was in Marburg before, where the transponder has been checked. Unfortunatly some unsure things were found in the design. The unsure things were about long term stability after many years in space.

At home in The Netherlands, I changed the design with some minor changes to have a secure long term stability. Finally I tested the transponder again and it performed well within the specifications. Again something learned for future transponder designs :o)

Last Wednesday I drove to AMSAT-DL P3e integrations place in Marburg again, and have my transponder again checked. In the beginning it seemed that the 70cm receiver lost 10dB in sensetivity. After some more measurements we find out that it was due to a bad attenuator we used for protection at the input.

Together with Karl Meinzer we looked for any problems, but so far we could see (without HELAPS) all was okay. In the afternoon I went back home again, this time without the MODE-UV.

Now the MODE-UV will get a new home, the home of P3e... :o)
I hope the transponder will work like its elder sister in AO-10, and you all will enjoy it for many years...

It was lots of work to get it this far, but I know it is for a good purpose...

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/

[ANS-WSR wishes to thank William Leijenaar, PE1RAH for this week's report]

```
[07172005]
=====
CP1 ?o-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: N6CP
Proposed Transmit Frequency: 436.845
[03272005]
=====
CP2 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.325
[03272005]
=====
HAUSAT1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: D90HP
Proposed Transmit Frequency: 437.465
[03272005]
=====
ICE Cube 1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: W2CXM
Proposed Transmit Frequency: 437.305
[03272005]
=====
ICE Cube 2 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: N2VR
Proposed Transmit Frequency: 437.425
[03272005]
=====
ION ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.505
[03272005]
=====
KUTEsat ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005
Proposed Callsign: KC0RMW
Proposed Transmit Frequency: 437.385
[03272005]
=====
MEROPE ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: K7MSU-1
Proposed Transmit Frequency: 145.980
[03272005]
=====
nCUBE1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
       2407.25
[03272005]
=====
RINCON ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
        437.345
[03272005]
=====
SACRED ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
[03272005]
=====
SACRED ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
[03272005]
=====
SEEDS ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: JQ1YGU
Proposed Transmit Frequency: 437.485
```

[03272005]
=====
Mea Huaka ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.405
[03272005]
=====
SUITSAT ?O-??
Catalog Number:
Proposed Release Date: December 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: TBA

To be released from an airlock of the International Space Station some time in December of 2005.
[09182005]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
        888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/amsat/listserv/menu.html

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satelite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

From -2078388727857348840
X-Google-Thread: 10e8ad,fcb65b7a7723e0e8,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news4.google.com!border1.nntp.dca.giganews.com!
border2.nntp.dca.giganews.com!nntp.giganews.com!nx02.iad01.newshosting.com!
newshosting.com!newsfeed.news2me.com!newsfeed.icl.net!newsfeed.fjserv.net!peer-
uk.news.demon.net!kibo.news.demon.net!mutlu.news.demon.net!news.demon.co.uk!demon!
cbnr.net!chris
From: Chris I Townsend <chris@cbnr.net>
Newsgroups: rec.radio.amateur.space
Subject: www.ukradioamateur 2
Date: Thu, 22 Sep 2005 01:59:29 +0100
Lines: 42
Message-ID: <+MIA6EgxHgMDFwx7@holmfirth.demon.co.uk>
NNTP-Posting-Host: holmfirth.demon.co.uk
Mime-Version: 1.0
Content-Type: text/plain;charset=us-ascii;format=flowed
X-Trace: news.demon.co.uk 1127350887 18687 80.177.168.49 (22 Sep 2005 01:01:27
GMT)
X-Complaints-To: abuse@demon.net
NNTP-Posting-Date: Thu, 22 Sep 2005 01:01:27 +0000 (UTC)
User-Agent: Turnpike/6.02-S (<UpJHkeykcTX+PiFtfE5oyRlbm2>)
Xref: g2news1.google.com rec.radio.amateur.space:253

Hi,

2nd post, the first contained an error, the new address should have been given as www.ukradioamateur.co.uk

Some of you, hopefully many of you, may be aware of the existence of the "Amateur Radio Course" project which provides a number on-line and downloadable tutorials for the various UK amateur radio examinations.

Due to the sudden, unexpected and unexplained withdrawal of support by the company who up to now have very kindly hosted our web-site free of charge, and their even more unexpected failure to communicate with me regarding how we might transfer or redirect the URL which they registered for us but now will not let us use, our site is no longer available to the clubs and individuals who benefited from it.

Can you therefore help us and please publicise as widely as possible the following information.

The "Amateur Radio Course" which was located at www.ukradioamateur.org is now relocated at www.ukradioamateur.co.uk

There may be a number of functions that are not working due to the sudden move, but they will be fixed within the next few days.

It remains, as always, a non-profit making activity sponsored and supported entirely by the group of individuals who give up their time and resources free of charge to support and promote interest in the hobby.

I apologise for posting this message in so many newsgroups, but I need the new URL to be publicised as rapidly as possible.

Many thanks to you for your help, best wishes and 73's

Chris
G8PUT

--
Chris I Townsend

(chris@cbnr.net)

From -503005296909621621
X-Google-Thread: 10e8ad,2e53c8ad5ff16f57,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news4.google.com!border1.nntp.dca.giganews.com!border2.nntp.dca.giganews.com!nntp.giganews.com!elnk-atl-nf1!newsfeed.earthlink.net!stamper.news.atl.earthlink.net!newsread2.news.atl.earthlink.net.POSTED!46041641!not-for-mail
From: "JoAnne Maenpaa" <wb9jej_no-spam@earthlink.net>
Newsgroups: rec.radio.amateur.space
Subject: ANS-268 AMSAT Weekly News Service Bulletin
Lines: 416
X-Priority: 3
X-MSMail-Priority: Normal

X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <Zzw_e.5328$QE1.4737@newsread2.news.atl.earthlink.net>
Date: Wed, 28 Sep 2005 13:07:05 GMT
NNTP-Posting-Host: 69.3.103.245
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread2.news.atl.earthlink.net 1127912825 69.3.103.245 (Wed, 28 Sep 2005 06:07:05 PDT)
NNTP-Posting-Date: Wed, 28 Sep 2005 06:07:05 PDT
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news1.google.com rec.radio.amateur.space:255

AMSAT NEWS SERVICE
ANS-268

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* SSETI Express Set to Launch 30 September 2005
* SSETI Express to Deploy Three Cubesats
* Cubesat "XI-V" Reception Reports Requested
* Special Event from Titan Missle Museum
* AO-51 Special Event - JOTA Weekend 15-16 Oct
* Suitsat Video Newsreel
* ARISS Status - 19 September 2005

SB SAT @ AMSAT $ANS-268.01
SSETI Express Set to Launch 30 September 2005

AMSAT News Service Bulletin 268.01
From AMSAT HQ SILVER SPRING, MD.
September 25, 2005
To All RADIO AMATEURS
BID: $ANS-268.01

At long last, official confirmation has been received that the SSETI Express launch is scheduled to take place at 06:52 on September 30th with October 1st as the backup date. SSETI Express will be launching from Plesetsk Cosmodrome on the Cosmos-3M LV

The launch of SSETI Express will be streamed to the Internet thanks to the efforts of Howard Long, G6LVB. The new URL for the Webstream will be http://www.streamingwizard.com/clients/space.asx

The first transmission will occur approximately 65 minutes after separation from the launch adaptor approximately 100 minutes after launch when Express is over northern Europe.

The type of the first transmissions will depend on the state of the battery.

In Nominal mode - a sub 1 second burst of AX25 9k6 FSK telemetry every 18 seconds on the downlink frequency of 437.250 MHz.

In Recovery or Safe mode - simple on/off telemetry comprising 16 x 100 msec carrier pulses. This telemetry is repeated every 30 seconds in Safe Mode and every 2 minutes when in Recovery Mode.

The satellite will transmit at a power of 3 watts.

Reception reports will be welcome by email at operations@sseti.net or by placing them on the SSETI Newsgroup at slave.gte.tuwein.ac.at in the folder "sseti.express.report" where you will also be able to see reports from other locations around the world.

Full information on receiving SSETI Express signals, decoding the telemetry, submitting it to the project team and entering the competition will be posted at:
http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php.

This will have links to all the updated pages as they occur.

AMSAT-UK produce a newsletter "Oscar News" which is full of satellite information.
For membership details contact the secretary Jim Heck G3WGM
Tel: +44 (0)1258 453959
E-mail: g3wgm@amsat.org
Website: http://www.uk.amsat.org/

[ANS thanks Graham, UA/G3VZV and Trevor, M5AKA for the above information]

/EX

SB SAT @ AMSAT $ANS-268.02
SSETI Express to Deploy Three Cubesats

AMSAT News Service Bulletin 268.02
From AMSAT HQ SILVER SPRING, MD.
September 25, 2005
To All RADIO AMATEURS
BID: $ANS-268.02

SSETI Express will be launching from Plesetsk Cosmodrome on the Cosmos-3M LV on September 30, 2005 at 06:52:26 UTC. Satellites that will be launched from Cosmos-3M are Topsat, China DMC and SSETI Express.

>From SSETI Express three CubeSats will be deployed: NCUBE-2, UWE-1, and XI-V. This is a great opportunity for everyone in the Cubesat community to use and test their earthstations to track and communicate with the satellites once they are deployed from the LV.

The information regarding the cubesats and their TLEs is located on the CubeSat Website, www.cubesat.org The CubeSat website will contain links to more detailed information and operations about SSETI Express and the CubeSats as well as general information for tracking purposes. The expected TLEs will be posted when the satellites are launched. A SSETI Express discussion board has been created; you must login-in to post on the discussion board. Fully functionality of the tools will occur as the launch approaches.

SSETI Control Center
http://littonlab.atl.calpoly.edu/pages/missions/sseti-express-2005/satellite-info.php

Test Discussion Board
http://littonlab.atl.calpoly.edu/smf/

[ANS thanks Simon Lee for the above information]

/EX

SB SAT @ AMSAT $ANS-268.03
Cubesat "XI-V" Reception Reports Requested

AMSAT News Service Bulletin 268.03
From AMSAT HQ SILVER SPRING, MD.
September 25, 2005
To All RADIO AMATEURS
BID: $ANS-268.03

The University of Tokyo Intelligent Space Systems Laboratory (ISSL) is preparing for the launch of their second CubeSat called "XI-V" (sai-five). XI-V launched with and then separated from SSETI Express.

The XI-V team would appreciate reception reports of signals from XI-V. Reports or received data may be sent via email to xi5report@space.t.u-tokyo.ac.jp or upload any data file through the web http://www.space.t.u-tokyo.ac.jp/cubesat/upload/xi5report-e.aspx

The specification of the transmitter is as follows:
CW morse-coded signal is on 437.465MHz +/- doppler, output power is 80mW
FM packet of AFSK AX.25 is on 437.345MHz +/- doppler, output power is 800mW.

The details can be seen at
http://www.space.t.u-tokyo.ac.jp/gs/satinfo-e.html#xi5

Although the FM packet will not be transmitted unless commanded by the ground station at Tokyo, CW signal is always ON, so anyone can receive it. The format of the CW signal is available at
http://www.space.t.u-tokyo.ac.jp/gs/application-e.html#xi5

Initially the TLE of SSETI Express (provided by Graham) will be adequate for acquisition as the separation velocity is so small that the deviation from the orbit of SSETI Express will be negligible for a few days.

Event Timeline:

Sep 30 06:52:26 (UTC)	Launch
Sep 30 08:37:26 (UTC)	Separation of XI-V
Sep 30 09:08:00 (UTC)	Start of CW transmission (which will occur over the pacific ocean)

Due to the power limitation, the initial interval of the CW signal is about 30 seconds, and it will be very difficult to catch its signal. The XI-V would greatly appreciate help receiving data.
Any format of received data is welcome.

If you have anything to ask, please send email to
cube_info@space.t.u-tokyo.ac.jp

[ANS thanks Ryu Funase for the above information]

/EX

SB SAT @ AMSAT $ANS-268.04
Special Event from Titan Missle Museum

AMSAT News Service Bulletin 268.04
From AMSAT HQ SILVER SPRING, MD.
September 25, 2005
To All RADIO AMATEURS
BID: $ANS-268.04

On October 1, the Green Valley Amateur Radio Club will be conducting a special event operation from the Titan Missile Museum National Historic Site, in neighboring Sahuarita, AZ (DM41). While most of the operation will be on HF, we plan to be on SO-50, and, if the FM transponder is active at the time, AO-51, using the call N7GV. A special certificate is available free of charge (SASE please) to anyone working the station. Please QSL to W0KAD. Further details appear on p. 101 of October QST.

The Titan Missile Museum National Historic Site houses the only remaining Titan II ICBM, intact in its original silo except for the propellants and nuclear warhead. The site was operational from 1963 to 1981. The facility is open to visitors daily, with guided tours available.

[ANS thanks Ray, W2RS for the above information]

/EX

SB SAT @ AMSAT $ANS-268.05
AO-51 Special Event - JOTA Weekend 15-16 Oct

AMSAT News Service Bulletin 268.05
From AMSAT HQ SILVER SPRING, MD.
September 25, 2005
To All RADIO AMATEURS
BID: $ANS-268.05

The annual Boy and Girl Scouts "Jamboree on the Air" Amateur Radio event is scheduled for 15 and 16 October 2005. As this is an International Scouting event, amateur radio stations around the world are invited to participate. The AO-51 command team is scheduling the satellite for exclusive use by the Scouts, and Satellite operators communicating with the Scouts, for this weekend. Please allow the Scouts the opportunity to make as many contacts as possible via AO-51 during this short time period. Base stations, please remember that most of the JOTA stations will be portable, so please use minimum power. The official times for the JOTA event will be from 1200 UTC on October 15 until 1200 UTC on October 17, 2005.

For the JOTA weekend, AO-51 will be configured in the Dual FM repeater mode. This will provide two independent FM repeaters (separate uplink and downlink frequencies) for use over the weekend. Both repeaters will be for use by the JOTA activity. This mode will run Monday through Friday before the event to allow amateur satellite stations to familiarize and test this mode. The configuration of the satellite frequencies for this mode is listed below.

AO-51 FM repeater #1
Downlink: 435.300 MHz
Uplink: 145.920 MHz with 67hz PL Tone

AO-51 FM repeater #2
Downlink: 435.150 MHz
Uplink: 145.880 MHz with NO PL Tone

Here are some web links for information on the JOTA weekend activity.
http://www.arrl.org/FandES/ead/jota.html and
http://www.arrl.org/FandES/ead/ideas.html
http://www.scouting.org/international/jota.html

If your local club has a JOTA activity planned for the weekend please consider volunteering your services to provide a satellite communication station for the event.

Thanks for your support and participation.

73, KE4AZN

Echo Command Team
Amsat VP-Operations

[ANS thank Mike KE4AZN for the above information]

/EX

SB SAT @ AMSAT $ANS-268.06
Suitsat Video Newsreel

AMSAT News Service Bulletin 268.06
From AMSAT HQ SILVER SPRING, MD.
September 25, 2005
To All RADIO AMATEURS
BID: $ANS-268.06

Get ready for SuitSat, watch and listen to Frank Bauer, KA3HDO and Mark Steiner, K3MS explain what SuitSat is and what it will do. On the AMSAT website, click on AMSAT VIDEO NEWS then on the Video News page click on SuitSat. You will need Windows Media Player or Mplayer to view the NewsReel.

If you haven't seen the other NewsReels, now would be a great time to see them, or watch them again. They are very informative and highlight the activities of AMSAT.

[ANS thanks Don WB5EKU for the above information]

/EX

SB SAT @ AMSAT $ANS-268.07
ARISS Status - 19 September 2005

AMSAT News Service Bulletin 268.07
From AMSAT HQ SILVER SPRING, MD.
September 25, 2005
To All RADIO AMATEURS
BID: $ANS-268.07

1. NES School Contact Successful

On Friday, September 16, children from the Matthew J. Kuss Middle School in Fall River, Massachusetts, experienced a successful contact with John Phillips, KE5DRY. The amateur radio station was set up in the school library where twelve students asked 22 questions of the astronaut. Two of the students came from Central Park Middle School, another NASA Explorer School (NES), and six of the students (all girls) were amateur radio operators. The audio and video were fed, via amateur radio television, to a nearby church where 100 students, parents, teachers, and local dignitaries gathered to watch.

The event drew a great deal of media attention with television stations including NBC affiliate, WJAR (Channel 10), Fox affiliate WPRI (Channel 12), ABC affiliate WLNE (Channel 6), Comcast Local Channel 9, and Fall River Educational Television (FRED-TV). Newspapers in attendance included the Fall River Spirit and the Fall River Herald News. In addition, the Museum of Science, Boston, was producing a documentary of the school contact.

The Fall River Herald News article, "Long-distance call," may be viewed online. See:
http://www.heraldnews.com/site/news.cfm?newsid=15228976&BRD=1710&PAG=461&dept_id=99784&rfi=8

2. Upcoming School Contacts

Tregaron High School in Tregaron, Ceredigion, Wales, United Kingdom, has been scheduled for an ARISS contact. It will take place on Thursday, September 29 at 11:28 UTC.

3. Upcoming School Contacts with Space Tourist

Space Tourist, Greg Olsen, will fly with the Expedition 12 crew slated to launch on October 1. He plans to make three ARISS contacts during his 8 day visit on board the ISS. The tentative dates and times for these contacts follow.

On Wednesday, October 5 at 16:58 UTC, Olsen will speak to students at Princeton High School in Princeton, New Jersey. The contact will be direct via N2RE.

Students from Fort Hamilton High School in Brooklyn, New York will speak to the space traveler via the telebridge station, VK5ZAI, in Australia. The contact is scheduled for Thursday, October 6 at 15:07 UTC.

Olsen will speak to the students at Ridgefield Park High School in Ridgefield Park, New Jersey via the telebridge station ZS6BTD in South Africa. The contact will take place on Friday, October 7 at 13:32 UTC.

4. ARRL Article on Japan Red Cross Contact

On September 8, the Japan Red Cross Radio Volunteer Corps of Fukui-prefecture, Wakasa Branch, in Obama-City, Fukui-ken, Japan experienced a successful amateur radio contact with astronaut John Phillips, KE5DRY. The ARRL article, "Young Japanese Astronaut Hopefuls Discuss ET, Other Topics," covers the event, and provides links to the audio and video. See:
http://www.arrl.org/news/stories/2005/09/16/6/?nc=1

5. Astronaut Training Status

On Wednesday, September 7, astronaut Sandy Magnus took and passed her amateur radio exam. Her new callsign is KE5FYE. Congratulations, Sandy!

Mission Specialist Bob Behnken attended an amateur radio training class at JSC on Monday, September 12. He is scheduled for another session on September 21 to prepare him for his technician's exam.

6. ARRL Article on SSTV and SuitSat Hardware

ARRL ran a web story covering the new ARISS hardware which was launched September 8, and is now on-orbit. The article, "'SuitSat', New ARISS SSTV Gear Arrives at International Space Station," may be found at:
http://www.arrl.org/news/stories/2005/09/16/2/?nc=1

7. AMSAT and ARISS Joint Meetings, 2006

The 2006 AMSAT-NA Space Symposium will be held in the San Francisco Bay area. ARISS plans to hold its international face to face meeting immediately following the AMSAT-NA conference. The 2006 Symposium planning committee has begun working on next year's meeting and has asked for input. To voice an opinion on hotel and location preferences, go to:
http://www.amsat.org/amsat-new/symposium/survey.php

8. Hams Commended on their Aid at Stennis

A Stennis Space Center facility is serving as the Emergency Operations Center (EOC) for Hancock County, MS; the original EOC was destroyed by Hurricane Katrina. Amateur Radio operator Randy Pierce, AG4UU, from Tallahassee, Florida, is stationed at Stennis, and reports that Amateur Radio operators are serving as communicators for all the services at the EOC, including the fire department and the emergency medical system. Four radio operators are still needed each day. The Amateur Radio operators' technical capabilities have been employed, and the hams were complimented by the Hancock County Sheriff's Office and County Commissioners.

[ANS thanks Carol, KB3LKI for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,

Lee McLamb, KU4OS
ku4os at amsat dot org

From -4608096949849591020
X-Google-Thread: 10e8ad,c098b4f17e429fc6,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news4.google.com!border1.nntp.dca.giganews.com!
border2.nntp.dca.giganews.com!nntp.giganews.com!elnk-atl-nf1!
newsfeed.earthlink.net!stamper.news.atl.earthlink.net!
newsread2.news.atl.earthlink.net.POSTED!46041641!not-for-mail
From: "JoAnne Maenpaa" <wb9jej_no-spam@earthlink.net>
Newsgroups: rec.radio.amateur.space
Subject: WSR-268 AMSAT Weekly Satellite Report
Lines: 1350
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <UAw_e.5330$QE1.1552@newsread2.news.atl.earthlink.net>
Date: Wed, 28 Sep 2005 13:08:04 GMT
NNTP-Posting-Host: 69.3.103.245
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread2.news.atl.earthlink.net 1127912884 69.3.103.245 (Wed, 28 Sep 2005 06:08:04 PDT)
NNTP-Posting-Date: Wed, 28 Sep 2005 06:08:04 PDT
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news1.google.com rec.radio.amateur.space:256

This report is organized into 4 parts.
Part 1 - operational analog amateur satellites.
Part 2 - operational digital amateur satellites.
Part 3 - non - operational satellites
Part 4 - proposed satellites

SB SAT @ AMSAT <W8ISS $ANS-268.S1
WSR 268 Part 1 09/25/2005

AMSAT NEWS SERVICE BULLETIN 268.S1 FROM AMSAT HQ
SILVER SPRING, MD, SEPTEMBER 25, 2005
TO ALL RADIO AMATEURS
BID: $ANS-268.S1

VO-52 HAMSAT
Catalog Number: 28650
Launch Date: May 05,2005

Status: On orbit
Current Mode: U/V

Proposed frequencies:

Indian transponder:
Uplink : 435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW
Beacom : 145.940MHz continue carier signal

Dutch transponder:
Uplink : 435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW
Beacon : 145.860MHz 12WPM with CW message
[07242005]

=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Mode: PBBS - ON
FM REPEATER - V/U

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
Analog voice uplink: 145.880 MHZ FM
145.920 MHz FM 67Hz PL tone
1268.700 MHz FM 67Hz PL tone

Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast Protocol (PBP)

Broadcast: PECHO-11
BBS: PECHO-12

Current scheduled operating modes:

26 Sept
FM Repeater, V/U
Uplink: 145.920 mhz FM, 67 hz PL Tone
Downlink 435.300 mhz FM
9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 435.150 mhz FM, 9k6 PBP Digital

AO-51 Special Event - JOTA Weekend 15-16 Oct

The annual Boy and Girl Scouts "Jamboree on the Air" Amateur Radio event is scheduled for 15 and 16 October 2005. As this is an International Scouting event, amateur radio stations around the world are invited to participate. The AO-51 command team is scheduling the satellite for exclusive use by the Scouts, and Satellite operators communicating with the Scouts, for this weekend. Please allow the Scouts the opportunity to make as many contacts as possible via AO-51 during this short time period. Base stations, please remember that most of the JOTA stations will be portable, so please use minimum power. The official times for the JOTA event will be from 1200 UTC on October 15 until 1200 UTC on October 17, 2005.

For the JOTA weekend, AO-51 will be configured in the Dual FM repeater mode. This will provide two independent FM repeaters (separate uplink and downlink frequencies) for use over the weekend. Both repeaters will be for use by the JOTA activity. This mode will run Monday through Friday before the event to allow amateur satellite stations to familiarize and test this mode. The configuration of the satellite frequencies for this mode is listed below.

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AO-51 FM repeater #2
Downlink: 435.150 MHz
Uplink: 145.880 MHz with NO PL Tone

Here are some web links for information on the JOTA weekend activity.
http://www.arrl.org/FandES/ead/jota.html
http://www.arrl.org/FandES/ead/ideas.html
http://www.scouting.org/international/jota.html

If your local club has a JOTA activity planned for the weekend please consider volunteering your services to provide a satellite communication station for the event.

Thanks for your support and participation.

[ANS-WSR thanks Mike Kingery, KE4AZN for the above information]
[09252005]

=====

SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Uplink: 145.850 MHz (67.0 Hz PL tone) (See below for operating procedures)
Downlink: 436.795 MHz

There have been unconfirmed reports on the amsat-bb remailer that SO-50 has shifted downlink frequency as much as 5khz up. This both from Europe.

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz. The order of operation is thus: (allow for Doppler as necessary)

1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10 minute timer.

[09122004]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: OPERATIONAL

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplink: 145.850 145.870 145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

John, N4QWL reports on July 16th, 2005:

Last evening I had a AOS to LOS qso with WI2W. FO-29 came up at 01:17z here in FM07 and I found WI2W and we chatted until 01:33z. The satellite was at 2 degrees elevation when I finally heard him start to crackle a bit. What a great QSO! To think that I watched this bird launch back in 1996 and it is still working so well is a real thrill. I believe I still have the video. I might just look for it and watch it again. Boy do I love this satellite stuff! Look for you all up there.

Please send the reception reports to lab2 'at' jarl.or.jp.
Please use the subject line: 'FO-29 reception report'.

Mineo, JE9PEL, has an FO-29 satellite telemetry analysis program that will automatically analyze all digital telemetry from the satellite (such as current, voltage and temperature). FO29CWTE is available at:
http://www.ne.jp/asahi/hamradio/je9pel/
[ANS-WSR wishes to thanks John, N4QWL for this week's report]
[07172005]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Uplink: 145.850 MHz FM

Downlink: 436.795 MHz FM

The latest information on AO-27 from control operator Michael Wyrick,
N3UC (former N4USI), can be found at:
http://www.ao27.org

An AO-27 question-and-answer page is available on the AMSAT-NA web
site, with updates by Ray, W2RS. The URL is:
http://www.amsat.org/amsat/intro/ao27faq.html

[ANS-WSR thanks John, K6YK, for this week's AO-27 report]
[08292004]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Semi-operational in sunlight.
Return to active status: June 21,2002

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
            432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A
            145.975 to 145.925 MHz CW/USB Mode B
Beacon: 29.502 MHz, 145.972 MHz, 435.1 MHz, 2304.1 MHz

Emily, W0EEC has created a website to allow the users of AO-7 to record
contacts, observations and use of the satellite more effectively at:
http://www.emilyshouse.com/experthams/ao7/main.php
This includes the ability to log contacts.

Tim, K3TZ has written a program to decode AO-07 telemetry.
The program can be downloaded at:
http://www.qsl.net/k3tz/files/K3TZ_AO-07_Telemetry_Decoder_0.5.zip

For more AO-7 info:
http://www.amsat.org/amsat/sats/n7hpr/ao7.html
[11142004]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: U/V CROSS-BAND REPEATER
Digipeater: Inactive

The current Expedition 11 crew is:
Commander Sergei Krikalev
Flight Engineer John Phillips

Worldwide packet uplink: 145.990 MHz FM
Region 1 voice uplink: 145.200 MHz FM

Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM
Doppler Shift is 10 KHz

Russian callsigns: RS0ISS, RZ3DZR
USA callsign: NA1SS
Packet station mailbox callsign: RS0ISS-11
Packet station keyboard callsign: RS0ISS-3
Digipeater callsign: ARISS

This from Frank Bauer, KA3HDO:
The SSTV system will be installed inside the Service module as an integral part of the ARISS ham radio system. It will transmit and receive (JPG) still images from the International Space Station in a format called Slow Scan TV (SSTV). When fully operational, the SSTV system is capable of sending up to 480 images per day from ISS. It will also be able to receive images from amateur radio stations on Earth. This system will utilize the already installed Kenwood D-700 radio and the ARISS antennas mounted on the Service Module. The SSTV equipment flown on Progress 19P includes the SpaceCam software, a radio/computer interface module, and data cables. The dedicated laptop for SSTV operations will be launched on a subsequent Progress vehicle

This off the ARISS webpage:
< http://www.rac.ca/ariss/oindex.htm#New%20ARISS%20Operations >:
The ARISS program is pleased to announce that the amateur radio equipment aboard the International Space Station is now operating in cross-band repeat mode. We realize that many of you will miss the packet-operating mode. However, cross-band repeat allows further experimentation of the ISS amateur radio system

The downlink for this operating mode remains the same, so listen for the station on 145.80 MHz. The new uplink frequency is 437.80 MHz. All frequencies are subject to Doppler shifting. For further information on working satellites and adjusting for Doppler shift, please review Emily Clark's (W0EEC) excellent presentation on AMSAT's website:
http://www.amsat.org/amsat-new/information/faqs/Intro_sats.pdf

The ISS daily crew schedule can be found at:
http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line is NOT translated from Russian and posted.

More information is available at:
http://www.rac.ca/ariss
http://spaceflight.nasa.gov/station/reference/radio/
http://www.marexmg.org/fileshtml/unprotopage.html
http://www.issfanclub.com
http://oscar.dcarr.org/

[09182005]
NNNN
/EX

SB SAT @ AMSAT <W8ISS $ANS-268.S2
WSR 268 Part 2 09/25/2005

AMSAT NEWS SERVICE BULLETIN 268.S2 FROM AMSAT HQ
SILVER SPRING, MD, SEPTEMBER 25, 2005
TO ALL RADIO AMATEURS
BID: $ANS-268.S2

PCSAT2 ?0-??
Catalog Number:
Launch Date: August 1, 2005

Status: Operational

PCSAT2 was installed on the exterior of the International Space Station and was activated on August 3, 2005.

PCSAT2 CAPABILITIES: PCSAT2 is attached to the ISS and so its operations must be in cooperation with the ARISS communications suite to minimize any mutual interference and to coordinate activities. Here are the capabilities of the PCSAT2 and ARISS payloads:

PCSAT SYSTEM A:

435.275 PCSAT2 DOWNLINK 1200 baud packet with uplink on 145.825
435.275 PCSAT2 DOWNLINK Occasional user PSK-31 continuous downlink
145.825 PCSAT2 DOWNLINK 1200 baud packet
PCSAT SYSTEM B:

437.975 PCSAT2 DOWNLINK periodic Solar Cell data and PCSAT2 telemetry at 9600 baud
437.975 PCSAT2 DOWNLINK TNC-B command downlink at 1200 baud
437.975 PCSAT2 DOWNLINK User Voice Repeater with VHF uplink
437.975 PCSAT2 DOWNLINK Packet digipeater with VHF uplink

It looks like PCSAT2 can best contribute at this time by operating in PSK-31 mode for the near future. This is a very exciting new transponder mode which solves the congestion problem on FM repeaters by letting multiple stations all communicate at the same time.

PSK-31 users are welcome to try out the new PCSAT2 PSK-31 transponder on ISS with an uplink on 29.402 +/- 1 KHz and downlink on 435.275 +/- Doppler using FM.

The FM downlink lets everyone operate full duplex and everyone to see the same view of the passband as everyone else. THus you can see exactly what your signal looks like to everyone else.

Help Wanted:

Here is your chance to become a viable part of the Amateur
Satellite Community.

We are looking for a volunteer satellite packet
station in Hawaii that is interested in helping with
telemetry and sat-gating of PCSAT2 and
ARISS packets. Requirements are:

1) General familiarity with packet
2) TNC connected to a cross band radio that
     can RX on UHF and TX on VHF.
3) modest UHF beam and rotator system.

Contact WB4APR for more information.

Packets seen from PCSAT2 can be reviewed at:
http://www.findu.com/cgi-bin/pcsat2.cgi

A screen shot of both the 9600 bps and 1200 bps decoded data
as seen by Simon, 9W2QC, can be seen at:
http://www.9w2qc.net/pcsat2/

More information on PCSAT2 can be found at:
http://web.usna.navy.mil/~bruninga/pcsat2.html

[ANS-WSR thanks Bob, WB4APR and the U.S. Naval Academy Satellite Lab for
the aboveinformation.]

[08282005}
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Mode: PBBS - ON
      FM REPEATER - V/U HIGH POWER

Analog voice downlink: 435.300 MHz FM
         435.150 MHz FM
Analog voice uplink: 145.880 MHz FM
         145.920 MHz FM 67Hz PL tone
                       1268.700 MHz FM 67Hz PL tone

Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
                       2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast
   Protocol (PBP)

Broadcast: PECHO-11
BBS: PECHO-12

Current scheduled operating modes:

26 Sept
FM Repeater, V/U
Uplink: 145.920 mhz FM, 67 hz PL Tone
Downlink 435.300 mhz FM
9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
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Downlink: 435.150 mhz FM, 9k6 PBP Digital

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http://www.arrl.org/FandES/ead/ideas.html
http://www.scouting.org/international/jota.html

If your local club has a JOTA activity planned for the weekend please consider volunteering your services to provide a satellite communication station for the event.

Thanks for your support and participation.

[ANS-WSR thanks Mike Kingery, KE4AZN for the above information]

[09252005]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Non-Operational?????

Uplink/downlink: 145.827 MHz 1200 baud AX.25 AFSK via W3ADO-1
Aux/Uplink: 435.250 MHz 9600 baud via PCSAT-2 (off)
APRS Downlink: 144.390 MHz (Region 2)

PCSat is a 1200-baud APRS digipeater designed for use by stations using hand-held or mobile transceivers. Downlinks feed a central web site at:
http://pcsat.aprs.org

The APRS-equipped PCSat was built by midshipmen from the U.S. Naval Academy under the guidance of Bob Bruninga, WB4APR.
[07242005]
=====
CUTE-1
Catalog number: 27844
Launched: June 30,2003

Status: Operational

Uplink: ?
Downlink: 436.8375 CW
              437.4700 1200 FM ax25 or SRLL (ACTIVE only near Japan ?)
Cliff, K7RR reports:
In the latest Weekly Satellite Report, CUTE 1, #27844 is listed as OPERATIONAL?
Indeed it is very operational as a CUBESAT sending CW telemetry on 436.8345 MHz. At the July 7 2005, 23:45:20 pass over the Western USA:
CUTE 1 6B A4 xx 7F D7 66A8 4702 FF FF7C 65
CUTE 1 6C A6 59 80 D9 66A8 4702 FF FE7C B6

The June 30th KEPS were within ten seconds of AOS and LOS. It is an very good object to practice tracking as the orbit and transmitter power are similar to proposed CUBESATS awaiting launch this December. As a check for Doppler correction, the lack of change in tone is an excellent indicator.

CUTE 1 is a Japanese (Tokyo Institute of Technology) one kilogram nanosatellite that was launched by a Rokot rocket from Plesetsk at 14:15 UT on 30 June 2003. It carries a 100 mW beacon at 436.8375 MHz. Initial orbital parameters were period 101.4 min, apogee 831 km, perigee 819 km, and inclination 98.7?.

For further info about CUTE-1 goto:
http://lss.mes.titech.ac.jp/ssp/cubesat/operation/Schedule_e.html

[ANS WSR wishes to thank Cliff, K7RR, for this week's information]
[07242005]

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=====
GO-32 TECHSAT-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Downlink:            435.225 MHz FM (9600-baud FSK)
                    (435.325 n/a - temperature problems)
Uplinks:             145.850, 145.890, 145.930 FM
                    1269.700, 1269.800, 1269.900 FM
Broadcast Callsign: 4XTECH-11
BBS Callsign:       4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[03132005]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Operational

Uplink:             145.850 or 145.925 MHz 9600-baud FSK
Downlink:           437.325 MHz
Broadcast callsign: MYSAT3-11
BBS:                MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial land and weather imaging payloads offers FM and FSK
Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as
a collaborative effort between the Malaysian government and Surrey
Satellite Technology Ltd.
[05152005]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Semi-operational, the digipeater command is on and open for
APRS users.

Uplink:             145.90 145.92 145.94 145.96 MHz FM
                     (using 1200-baud Manchester FSK)
Downlink:           437.026 MHz SSB (1200-baud PSK)
Mode-S Beacon:      2401.1428 MHz
Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

A WOD collection of current graphics along with general information
```

and telemetry samples can be found at:
http://www.telecable.es/personales/ea1bcu
[05092004]

=====

UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational?

Telemetry Downlink: 145.826 MHz. FM (1200-baud AFSK).
approx. 10 days ON, 10 days OFF
Mode-S Beacon: 2401.500 MHz. ... OFF
UHFBeacon: 435.025 MHz. ... OFF

OSCAR-11 is back! I received the good news, on Saturday morning, while at the AMSAT-UK Colloquium. This was entirely unexpected! On Sunday morning Bob G4VRC played me a recording of an early morning pass received that day.

During the period 21 July to 14 August 2005 consistent signals have been heard from 30 July to 08 August. Signals seem to be weaker than usual, confirmed by the many reports received. However,since I last heard the satellite on 30 April, I've reinstalled my antennas , which makes comparisons difficult.

Many thanks for all the recent reports of OSCAR-11 including those from KU7Z (who heard it first), KB2M, VK6XH, HK7MKE, KA2UPW, JE9PEL, G1OCN, HB9SKA and G8OQW.

All the analogue telemetry channels, 0 to 59 are zero, ie they have failed. The status channels 60 to 67 are still working. One bit in channel 62, DSR mode, has changed from WRITE to READ. DSR is the Digital Store & Readout experiment. This could be significant if the experiment is still drawing current, but the other status bit indicates that it is switched OFF.

The on-board clock is now showing a very large error. It has lost approximately 19 days since 30 April. During the recent data collection period, the clock error has been changing at a decreasing rate. The size of the clock error and the rate at which it is changing is similar to the duration of the solar eclipse periods. This suggests that the clock might have been switching OFF during eclipses.

The eclipses have now ended, and the satellite should be in continuous sunlight for the remainder of this year, and well into next year. This should help the satellite to continue transmitting, although continuous sunlight can cause problems due to excessive temperatures.

If the watchdog timer is still operating on a 20 day cycle, ie. approximately ten days ON followed by 10 days OFF, then the VHF beacon should resume transmissions around 18 August.

The Beacon frequencies are -

VHF 145.826 MHz. AFSK FM ASCII Telemetry

UHF 435.025 MHz. OFF

S-band 2401.5 MHz. OFF

Listeners to OSCAR-11 may be interested in visiting my website which contains an archive of news & telemetry data. It also contains details about using a soundcard or hardware demodulators for data capture. There is software for capturing data, and decoding ASCII telemetry. The URL is www.users.zetnet.co.uk/clivew/

If you place this bulletin on a terrestrial packet network, please use the bulletin identifier $BID:U2RPT112.CWV, to prevent duplication.

[ANS-WSR thanks Clive, G3CWV, for the above information]

More information on UO-11 OSCAR-11 can be found at:
http://www.users.zetnet.co.uk/clivew/

MPEG3 files can be found here at Mineo, JE9PEL website:
http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm

[08212005]
NNNN
/EX

SB SAT @ AMSAT <W8ISS $ANS-268.S3
WSR 268 Part 3 09/25/2005

AMSAT NEWS SERVICE BULLETIN 268.S3 FROM AMSAT HQ
SILVER SPRING, MD, SEPTEMBER 25, 2005
TO ALL RADIO AMATEURS
BID: $ANS-268.S3

THE FOLLOWING ARE IN ORBIT BUT ARE
NON-OPERATIONAL AT THIS TIME:

POSAT-1 PO-28
Catalog Number: 22829
Launched : September 25, 1993

Status: Operational - Not open for Amatuer use

```
Downlink: 435.250 MHz
          435.275 MHz

Uplink:   145.925 MHz
          145.975 MHz
```

Broadcast callsign: POSAT1-11

BBS callsign: POSAT1-12

PO-28 (POSAT-1), Portugal's first satellite, launched 12 years ago, will be turned over to Amateur Radio use in the very near future. That was the word July 30 from AMSAT-UK Secretary Jim Heck, G3WGM, during the AMSAT-UK International Space Colloquium in Guildford, England.

Launched September 25, 1993, the satellite operated as a packet store-and-forward BBS (9600 baud FM FSK) on Amateur Radio frequencies for several weeks in early 1994. Over the years, PO-28's primary usage has been commercial, although plans have called for eventually shifting its operation to ham radio use. G3WGM reports that following lengthy negotiations it has been agreed that the satellite can be switched permanently to amateur frequencies. The changeover is expected to take a couple of weeks.

The Portuguese satellite was built at the University of Surrey as part of a collaborative satellite technology program that involved industry and academe. Uplink frequencies will be 145.925 and 145.975 MHz. Downlink frequencies will be 435.250 and 435.275 MHz. More information on PO-28 is on the AMSAT Web site http://www.amsat.org/amsat/sats/n7hpr/po28.html.

Uplink Frequencies: 145.925 and 145.975 MHz
Downlink Frequencies: 435.250 and 435.275 MHz

Orbit: 822 x 800 km, 98.6 deg inclined, sun-synchronous.

Transponder capabilities include FM repeater and 38k4 data. If you want to hear how loud this satellite is, listen on 429.950 until the change back to amateur radio service.

Keplerian elements for PO-28 are not currently contained in the AMSAT keps bulletins, but can be found at Celestrak in amateur.txt using the name "POSAT". Users of Space Track should query the NORAD Satellite ID number 22829. The name listed by Space Track is "EYESAT A".

More information of POSAT-1 can be found at:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
http://www.amsat.org/amsat/sats/n7hpr/po28.html
[ANS-WSR wishes to thanks Trevor, M5AKA and Jim, G3WGM, for this week's information.]
[08072005]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launched: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB
Beacon: 145.810 MHz (unmodulated carrier)

AO-10 has been locked into a Mode-B, 70-cm uplink and

2-meter downlink for several years.

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: Non-operational

Uplink: 145.875 145.900 145.925 145.950 MHz FM (1200-baud)
Downlink: 435.812 MHz SSB
Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Alberto E. Zagni - I2KBD reports on 02/13/05
The spacecraft is in MBL (safe mode) and is trasmitting just 6 channels of telemetry. Temperatures and voltage are nominal, but there seems to be a problem with the onboard receiver, refusing to accept commands.
The spacecraft was launched in 1993, thus nearing 12 years in orbit...

Best regards
Alberto E. Zagni - I2KBD
ITAMSAT Mission Director

More information of IO-26 can be found at:

http://joshua.micronet.it/english/itamsat/itamsathome.html
http://www.amsat.org/amsat/sats/n7hpr/io26.html
www.itamsat.org

[02132005]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB
Beacon: 29.408 MHz
Robot: 29.454 MHz
[05232004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

```
Uplink:      21.260 to  21.300 MHz CW/USB
Downlink:   145.860 to 145.900 MHz CW/USB
Beacon:     145.860 MHz
Robot:      145.908 MHz
[05232004]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink 145.975 MHz FM
Downlink 435.070 MHz FM
[05092004]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink:             145.900 FM 9600-baud FSK
Downlink:           435.120 MHz FM
Broadcast Callsign: UOSAT5-11
BBS:                UOSAT5-12
[01092005]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational?

Uplink:      145.858 to 145.898 MHz CW/USB
Downlink:     29.354 to  29.394 MHz CW/USB
Beacon:       29.352 MHz (intermittent)
SSB meeting frequency:  29.380 MHz (unofficial)

John, KD6PAG reports on June 16, 2004 to ANS:
RS-15 beacon seemed to be back in the mode where it's a tone about 5 seconds
off and then 5 seconds on this morning.

ANS is looking for more confirmations of RS-15 coming back.

[ANS thanks John, KD6PAG for RS-15 information]
[06202004]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only
```

Uplink: 145.84 145.86 145.88 145.90 MHz FM
                    (using 1200-baud Manchester FSK)
CW downlink: 437.125 MHz
Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)
Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[05232004]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[08152004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM
Broadcast Callsign: HL01-11
BBS: HL01-12

Jim, AA7KC, reports that KO-23's downlink transmitter continues in a non-operational status.
[05092004]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM (9600-baud FSK)
Downlink: 436.500 MHz FM
Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====

PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink frequency (listed on the PanSat web site) 436.500 MHz

The satellite is not available for general uplink transmissions.

The Naval Postgraduate School developed PanSat. At the time of launch, PanSat spread-spectrum digital transponders were to be available to Amateur Radio operators along with software to utilize this technology.

The satellite is still operating, however, the spread spectrum packet radio portion never took place. The spacecraft is now beyond it's initial 2-year mission life, but telemetry records are still being downloaded.

For more information, visit the official PanSat web site at:
http://www.sp.nps.navy.mil/pansat/
[05092004]

=====

SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm

[ANS has no further information]
[05232004]

=====

SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

STatus: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
          Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
         Mode J Digipeater: 145.825 MHz and 145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[08082004]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlink: 437.025 MHz 437.400 MHz
Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA
web site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[05092004]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplink   V-band   145.840 - 145.990 MHz CW/LSB
            U-band   435.550 - 435.800 MHz CW/LSB
           L1-band   1269.250 - 1269.500 MHz CW/LSB
           L2-band   1268.325 - 1268.575 MHz CW/LSB
           S1-band   2400.350 - 2400.600 MHz CW/LSB
Downlink: S2-band   2401.225 - 2401.475 MHz CW/USB
           K-band 24,048.010 - 24,048.060 MHz CW/USB
Beacon: 2401.323, 24,048.035
[05232004]

SO-42 SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational
 Downlink: 437.075 MHz
Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[08152004]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz
Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[08152004]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, callsign KE6QMD, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Semi-operational.

Uplink 435.275 1200-baud AFSK
Downlink 145.825 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

AO-49 (SAFIR-M) is a German amateur radio payload onboard the small German scientific satellite "RUBIN-2".

AO-49 was built by the German amateur radio association "AATiS e.V." (German acronym for "Arbeitskreis Amateurfunk und Telekommunikation in der Schule", which means: 'working group for amateur radio anand telecommunications in schools'). AO-49 is designed as a "store and broadcast" system for APRS based messages, dedicated for the use of schools in combination with the existing WX-Net and planned buoy experiments in Germany.

No transmissions detected since the 1st of February 2003! It appears AO-49 is not properly aligned to illuminate the solar panels. This should end soon. Due to its orbit, AO-49 will be in a phase without eclipses until 13Feb03.

Martin DG8UAU has written a small software program "SAFIR-M Decoder" to allow decoding of the received DATA0 frames. It is available at: http://amend.gmxhome.de in the section Aktuelles.

Details on AO-49 (SAFIR-M) can be found at:
http://amend.gmxhome.de

Information about AATiS e.V. is available at:
http://www.aatis.de
[05092004]
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/EX

SB SAT @ AMSAT <W8ISS $ANS-268.S4
WSR 268 Part 4 09/25/2005

AMSAT NEWS SERVICE BULLETIN 268.S4 FROM AMSAT HQ
SILVER SPRING, MD, SEPTEMBER 25,2005
TO ALL RADIO AMATEURS
BID: $ANS-268.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE
PROPOSED FOR LAUNCH AT THIS TIME:

UCISAT ?O-??
Catalog number:
Proposed Launch Date: October 31, 2005

Status: Under Construction

Downlink: Submission in Progress
Uplink: Submission in Progress
Callsign: Submission in Progress

This from Matt Bennett, KF6RTB, UCISAT Communications Team Member:

Our website is www.ucisat.net .This is a new website, however, and doesn't have the "Status" section active yet. Because of the growing interest in our project, I'll push our webmaster to create updates (hopefully) on a week-to-week basis. For now, the current status of the mission is as follows:

-Expected Launch Date: October 31st, 2005
-Frequency Allocation: Submission in Progress
-Construction Status: Sub-Assembly
[WSR to thank Matt Bennett, KF6RTB, for this week's report.]
[01302005]
=====
SSETI ?O-??
Catalog Number:
Proposed Launch Date: LATE 2005

Status: AWAITING LAUNCH

Graham, G3VZV reports:
Dear all,

Unfortunately we have just learnt that we have an INDEFINITE launch delay.

This is due to one of the spacecraft on the launch, "SINAH", having suffered a significant failure and not being ready to fly.

Early indications suggest that we have a delay of at least one month, but this is not confirmed.

The launch campaign team will make the spacecraft and the ground support equipment safe and then come home.

This is, of course, very unfortunate, but it is not critical! The spacecraft can easily wait for the new launch date without any significant problems, and we will fly it as soon as we can.

In the meantime please cancel all arrangements for your national launch events.

We'll get there eventually.

Watch this space...

Neil

SpaceDaily has a report about SSETI at:
http://www.spacedaily.com/news/internet-04zzzu.html

You can find more info about SSETI at:
http://sseti.gte.tuwien.ac.at/WSW4/

Latest news about SSETI can be found at:
http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php

Look at the website for the SSETI Express webcam
http://sseti.gte.tuwien.ac.at/WSW4/webcam.htm

[ANS thanks Graham, G3VZV for the above information]
[09252005]
=====
PHASE 3E ?O-??
Catalog Number:
Proposed Launch Date: Early 2006

Status: Under Construction

William Leijenaar, PE1RAH reports on July 16th, 2005:

Hi AMSATs,

I always like to inform the AMSATs public about my P3e work, but unfortunatly due to
some reasons there was not much time and nothing much to say...

However, now I am happy to announce that the my MODE-UV transponder design for P3e is ready at the P3e integration place in Marburg (Germany). About 4 weeks ago I was in Marburg before, where the transponder has been checked. Unfortunatly some unsure things were found in the design. The unsure things were about long term stability after many years in space.

At home in The Netherlands, I changed the design with some minor changes to have a secure long term stability. Finally I tested the transponder again and it performed well within the specifications. Again something learned for future transponder designs :o)

Last Wednesday I drove to AMSAT-DL P3e integrations place in Marburg again, and have my transponder again checked. In the beginning it seemed that the 70cm receiver lost 10dB in sensetivity. After some more measurements we find out that it was due to a bad attenuator we used for protection at the input.

Together with Karl Meinzer we looked for any problems, but so far we could see (without HELAPS) all was okay. In the afternoon I went back home again, this time without the MODE-UV.

Now the MODE-UV will get a new home, the home of P3e... :o)
I hope the transponder will work like its elder sister in AO-10, and you all will enjoy it for many years...

It was lots of work to get it this far, but I know it is for a good purpose...

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/

[ANS-WSR wishes to thank William Leijenaar, PE1RAH for this week's report]
[07172005]
=====
CP1 ?o-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: N6CP
Proposed Transmit Frequency: 436.845
[03272005]
=====
CP2 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.325
[03272005]

```
=====
HAUSAT1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: D90HP
Proposed Transmit Frequency: 437.465
[03272005]
=====
ICE Cube 1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: W2CXM
Proposed Transmit Frequency: 437.305
[03272005]
=====
ICE Cube 2 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: N2VR
Proposed Transmit Frequency: 437.425
[03272005]
=====
ION ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.505
[03272005]
=====
KUTEsat ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: KC0RMW
Proposed Transmit Frequency: 437.385
[03272005]
=====
MEROPE ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: K7MSU-1
Proposed Transmit Frequency: 145.980
[03272005]
=====
nCUBE1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005
Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
       2407.25
[03272005]
=====
RINCON ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
        437.345
[03272005]
=====
SACRED ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
[03272005]
=====
SACRED ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
[03272005]
=====
SEEDS ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: JQ1YGU
Proposed Transmit Frequency: 437.485
[03272005]
=====
Mea Huaka ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.405
[03272005]
=====
SUITSAT ?O-??
Catalog Number:
Proposed Release Date: December 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: TBA
```

To be released from an airlock of the International Space Station some time
in
December of 2005.
[09182005]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
        888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/amsat/listserv/menu.html

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satelite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org

NNNN
/EX

```
From 7095964267112035459
X-Google-Thread: 10e8ad,46516b8b4dd6c520,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!postnews.google.com!g43g2000cwa.googlegroups.com!not-for-
mail
From: jstryker2@cox.net
Newsgroups: rec.radio.amateur.space
Subject: Satellite Imagery and APT Capture Books on Ebay
Date: 2 Oct 2005 21:02:37 -0700
Organization: http://groups.google.com
Lines: 14
Message-ID: <1128312157.436154.248850@g43g2000cwa.googlegroups.com>
NNTP-Posting-Host: 68.103.100.100
Mime-Version: 1.0
Content-Type: text/plain; charset="iso-8859-1"
X-Trace: posting.google.com 1128312167 30288 127.0.0.1 (3 Oct 2005 04:02:47 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Mon, 3 Oct 2005 04:02:47 +0000 (UTC)
User-Agent: G2/0.2
X-HTTP-UserAgent: Mozilla/4.0 (compatible; MSIE 6.0; Windows 98; Cox High Speed
Internet Customer),gzip(gfe),gzip(gfe)
Complaints-To: groups-abuse@google.com
Injection-Info: g43g2000cwa.googlegroups.com; posting-host=68.103.100.100;
   posting-account=_KxSWw0AAACUWrSVu_PwgQNFf3khWdY2
Xref: g2news1.google.com rec.radio.amateur.space:257
```

For those interested in Weather Satellite Imagery and APT Capture there
are several good reference books now listed on Ebay:

Monograph 2-86, Satellite Imagery Interpretation for Forecasters,
December 1986, (3 volume set), published by the National Weather
Service

Weather Satellite Handbook by Dr. Ralph E. Taggart

Educator's Guide for Building and Operating Environmental Satellite
Receiving Stations

Weather Satellites: Systems, Data, and Environmental Applications

```
From 2062994859768553083
X-Google-Thread: 10e8ad,632e7b93703af8cf,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
```

Path: g2news1.google.com!news4.google.com!border1.nntp.dca.giganews.com!
border2.nntp.dca.giganews.com!nntp.giganews.com!elnk-atl-nf1!
newsfeed.earthlink.net!stamper.news.atl.earthlink.net!
newsread2.news.atl.earthlink.net.POSTED!46041641!not-for-mail
From: "JoAnne Maenpaa" <wb9jej_no-spam@earthlink.net>
Newsgroups: rec.radio.amateur.space
Subject: ANS-275 AMSAT News Service Weekly Bulletin
Lines: 338
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <%Eb0f.7881$QE1.458@newsread2.news.atl.earthlink.net>
Date: Mon, 03 Oct 2005 14:56:59 GMT
NNTP-Posting-Host: 69.3.103.224
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread2.news.atl.earthlink.net 1128351419 69.3.103.224 (Mon, 03 Oct 2005 07:56:59 PDT)
NNTP-Posting-Date: Mon, 03 Oct 2005 07:56:59 PDT
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news1.google.com rec.radio.amateur.space:258

AMSAT NEWS SERVICE
ANS-275

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:

* AMSAT BoD, Annual Meeting, and Eagle Satellite Team Meeting
* SSETI Launch Delay
* ARISS Status
* AMSAT AWARDS This Week
* ISS Status Report
* Solar Eclipse, an eye feast
* Delphi-C3 newsletter available
* Informal MSN Chat Group For ISS and PCSAT2
* Amateur Radio Operators Copy MRO at 14 Million Kilometers Distance

SB SAT @ AMSAT $ANS-275.01
AMSAT BoD, Annual Meeting, and Eagle Satellite Team Meeting

AMSAT News Service Bulletin 275.01
From AMSAT HQ SILVER SPRING, MD.
October 2, 2005

To All RADIO AMATEURS
BID: $ANS-275.01

Rick Hambly, W2GPS, AMSAT-NA President, reminds all members that the 2005 AMSAT Board of Directors Meeting will be held on Thursday, October 6th and ending at noon on Friday, October 7th. The AMSAT Annual Meeting will follow later on Friday. An Eagle satellite design team meeting will follow on Friday afternoon through Sunday morning, October 7th through the 9th. These are open meetings and all AMSAT members and guests are invited to attend. We are staying at the Wyndham Pittsburgh Airport Hotel located near the Pittsburgh International Airport. The phone number of the hotel is 412-788-8800.

[ANS thanks Rick, W2GPS for the above information]

/EX

SB SAT @ AMSAT $ANS-275.02
SSETI Launch Delay

AMSAT News Service Bulletin 275.02
From AMSAT HQ SILVER SPRING, MD.
October 2, 2005
To All RADIO AMATEURS
BID: $ANS-275.02

Unfortunately, the SSETI team has learned this past week that they have an INDEFINITE launch delay.

This is due to one of the spacecraft on the launch, "SINAH", having suffered a significant failure and not being ready to fly.

Early indications suggest that a delay of at least one month may be expected, but this has not been confirmed at press time.

The SSETI launch campaign team will make the spacecraft and the ground support equipment safe and then return to the UK.

This is, of course, very unfortunate, but it is not critical! The spacecraft can easily wait for the new launch date without any significant problems, with the SSETI team looking forward to liftoff and orbit as soon as can be done.

[ANS thanks Graham, UA/G3VZV for the above information]

/EX

SB SAT @ AMSAT $ANS-275.03
ARISS Status

AMSAT News Service Bulletin 275.03
From AMSAT HQ SILVER SPRING, MD.
October 2, 2005
To All RADIO AMATEURS
BID: $ANS-275.03

1. Upcoming School Contacts with Space Tourist

Space Tourist Greg Olsen will fly with the Expedition 12 crew slated to launch on October 1. He plans to make three ARISS contacts during his 8 day visit on board the ISS.   The tentative dates and times for these contacts follow.

On Wednesday, October 5 at 16:58 UTC, Olsen will speak to students at Princeton High School in Princeton, New Jersey. [Note change]-This contact will not be direct but will be a telebridge via NN1SS.

Students from Fort Hamilton High School in Brooklyn, New York will speak to the space traveler via the telebridge station,VK5ZAI, in Australia. The contact is scheduled for Thursday, October 6 at 15:07 UTC.

Olsen will speak to the students at Ridgefield Park High School in Ridgefield Park, New Jersey via the telebridge station, ZS6BTD, in South Africa. The contact will take place on Friday, October 7 at 13:32 UTC.

2. SuitSat Video

A video covering the SuitSat project is available on the AMSAT website.
See: http://www.amsat.org/amsat-new/information/videoNews.php

3. AMSAT 2005 Meetings

The 2005 AMSAT Board of Directors Meeting will be held on Thursday and Friday, October 6 - 7 at the Wyndham Pittsburgh Airport Hotel. This conference will be followed by both the AMSAT Annual Meeting, and the Eagle satellite team meeting which will be held on Friday afternoon through Sunday morning, October 7 - 9.

4. Astronaut Training Status

Mission Specialist Bob Behnken completed two sessions of amateur radio training at JSC. He is currently preparing to take his technician's exam.

[ANS Thanks Carol, KB3LKI, for this information]

SB SAT @ AMSAT $ANS-275.04
AMSAT Awards

AMSAT News Service Bulletin 275.04
From AMSAT HQ SILVER SPRING, MD.
October 2, 2005
To All RADIO AMATEURS
BID: $ANS-275.04

This week, congrats go out to all of the following.

Phillip Crawford, W9DQ, Satellite Communication Achievement Award #421
and South Africa AMSAT Satellite Communication Achievement Award #US90

To see all the awards visit http://www.amsat.org or http://www.amsatnet.com

73...bruce

[ANS Thanks Bruce Paige, KK5DO, for this information]

/EX

SB SAT @ AMSAT $ANS-275.05
ISS Status Report

AMSAT News Service Bulletin 275.05
From AMSAT HQ SILVER SPRING, MD.
October 2, 2005
To All RADIO AMATEURS
BID: $ANS-275.05

International Space Station Status Report #05-46
9 a.m. CDT Friday, Sept. 30, 2005
Expedition 11 Crew

Preparations for arrival of the next crew of the space station, scientific activities and maintenance highlighted this week's activities aboard the orbiting laboratory.

Expedition 11 Commander Sergei Krikalev and NASA Science Officer John Phillips also spent some time packing up for their own return home, readying their launch and entry suits. They checked out the Soyuz spacecraft that brought them to the station April 16 to make sure it is ready to take them back to Earth.

The 12th crew of the station, Commander and NASA Science Officer William McArthur and Valery Tokarev, flight engineer and Soyuz commander, are scheduled to launch from the Baikonur Cosmodrome in Kazakhstan tonight at about 10:55 p.m. CDT. NASA Television coverage of the launch will begin at 10p.m.

The new crew is scheduled to dock with the station a little after 12:30 a.m. on Monday. NASA Television coverage of the docking will begin at 1 1p.m.Sunday.

With the Expedition 12 crew will be spaceflight participant Gregory Olsen, an American businessman traveling to the station under a contract with the Russian Federal Space Agency. He will spend about eight days on the station and return to Earth with Krikalev and Phillips. Their landing is scheduled for about 8:10 p.m. CDT Oct. 10

on the steppes of Kazakhstan.

Thursday managers at Mission Control Moscow said launch preparations were moving along flawlessly. Managers at Mission Control Houston said the station was ready to receive the new crew.

McArthur and Tokarev will spend the eight days they will share with their predecessors aboard the station in intensive handover briefings, learning about the spacecraft's systems, processes, procedures, scientific experiments, the location of equipment and supplies. In short, they will be trying to learn all they still need to know before they begin their months in orbit alone.

Krikalev and Phillips began the week with NASA flight controllers in Moscow exercising primary mission control. Mission Control Houston and the rest of Johnson Space Center were closed because of the threat of Hurricane Rita. Houston flight controllers resumed normal operations at 9 a.m. Monday.

On Tuesday Krikalev and Phillips each spent more than an hour familiarizing themselves with Olsen's scientific experiments. On Wednesday they continued preparations for arrival of the new crew, and on Thursday did predocking tests and more preparation for their own departure. Phillips regenerated METOX carbon dioxide absorbing cartridges for U.S. spacesuits. McArthur and Tokarev have a spacewalk scheduled in those suits in November.

Today's schedule includes maintenance of the Elektron oxygen generating system, functioning again after Krikalev replaced its liquids unit two weeks ago.

For information on the crew's activities aboard the station, future launch dates, and station sighting opportunities from anywhere on the Earth, visit:

http://www.nasa.gov/station

The next station status report will be issued this evening, after the Expedition 12 launch.

[ANS Thanks Arthur, N1ORC for this information]

/EX

SB SAT @ AMSAT $ANS-275.06
Solar Eclipse

AMSAT News Service Bulletin 275.06
From AMSAT HQ SILVER SPRING, MD.
October 2, 2005
To All RADIO AMATEURS
BID: $ANS-275.06

Solar Eclipse

On Monday October 3, 2005, there will be a solar eclipse encompassing Europe, Asia & most of Africa. It will start early am and move across the continents rather quickly. There are many web sites with exact information and you should search for them to obtain this data. These are natural phenomena's that are spectacular and a miraculous thing to observe. If you are lucky enough to be in this path, you'll begin to understand what happens when a satellite is in "eclipse!"

[ANS thanks Dee, NB2F for the above information]

/EX

SB SAT @ AMSAT $ANS-275.07
Delfi-C3 Newsletter Available

AMSAT News Service Bulletin 275.07
 From AMSAT HQ SILVER SPRING, MD.
October 2, 2005
To All RADIO AMATEURS
BID: $ANS-275.07

The latest edition of the Delfi-C3 Newsletter is available on-line. Delfi-C3 is a cubesat project being built by aerospace engineering students and professors at Aerospace Engineering at Delft University of Technology in the Netherlands.

Interested amateur radio operators can subscribe to the newsletter:
http://www.delfic3.nl/newsletter/

Full coverage of the Delfi-C3 project is on-line at:
http://www.delfic3.nl

[ANS thanks the Delfi-C3 team for the above information]

/EX

SB SAT @ AMSAT $ANS-275.08
Informal MSN Chat Group For ISS and PCSAT2

AMSAT News Service Bulletin 275.08
From AMSAT HQ SILVER SPRING, MD.
October 2, 2005
To All RADIO AMATEURS
BID: $ANS-275.08

Cor, PD0RKC, invites amateur radio operators who are interested in ISS and PCSAT2 activity to join his informal chat group at http://www.msn.com.

Discussions include ISS activity, trackings-aprs-packet-software, and ISS news. For more details about this group contact Cor at his MSN e-mail address: isszarya (at) hotmail.com.

[ANS thanks Cor, PD0RKC for the above information]

/EX

SB SAT @ AMSAT $ANS-275.09
Amateur Radio Operators Copy MRO at 14 Million Kilometers Distance

AMSAT News Service Bulletin 275.09
From AMSAT HQ SILVER SPRING, MD.
October 2, 2005
To All RADIO AMATEURS
BID: $ANS-275.09

The Mars Reconnaisance Orbiter, presently enroute to Mars in an interplanetary orbit 14 million kilometers from Earth, activated its Electra UHF Relay system operating at 437.1 MHz on September 21 and September 22. Andy, N9AB successfully detected this weak signal using his amateur radio station and DSP software to perform FFT analysis.

Andy has written a very nice report on his detection of MRO which can be found on-line at:
http://members.verizon.net/~km1p/N9AB_MRO_Report.pdf

Viktor, OE1VKW reports his success at receiving the MRO at:
http://cacofonix.nt.tuwien.ac.at/~oe1vkw/MRO/rcv22905.htm

[ANS Andy, N9AB, Joe, KM1P, and Viktor, OE1VKW for the above information]

/EX

73,
This week's ANS Editor,
Dee Interdonato, NB2F
NB2F at amsat dot org

From -3129981350385874381
X-Google-Thread: 10e8ad,797718dda5091b9c,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news3.google.com!news.glorb.com!border1.nntp.dca.giganews.com!nntp.giganews.com!local01.nntp.dca.giganews.com!nntp.mt.net!news.mt.net.POSTED!not-for-mail
NNTP-Posting-Date: Sat, 07 May 2005 09:28:42 -0500
Reply-To: "William Erhardt" <erhardt@mt.net>

From: "William Erhardt" <erhardt@mt.net>
Newsgroups: rec.radio.amateur.space
Subject: HAMSAT India
Date: Sat, 7 May 2005 08:28:42 -0600
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1437
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1441
Message-ID: <iI6dnRt2xYcGTeHfRVn-sA@mt.net>
Lines: 12
NNTP-Posting-Host: 206.127.67.65
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6NLVrA8DLRDPatBmA1Zv6vvKLjA2LKfc9bhzn/Qy5AP0yKt0rar35U0p62XwdA==
X-Complaints-To: abuse@mt.net
X-DMCA-Complaints-To: abuse@mt.net
X-Abuse-and-DMCA-Info: Please be sure to forward a copy of ALL headers
X-Abuse-and-DMCA-Info: Otherwise we will be unable to process your complaint properly
X-Postfilter: 1.3.32
Xref: g2news1.google.com rec.radio.amateur.space:670

Howdy from Bill K7MT

Information on the newest Amateur Satellite at:

http://www.amsatindia.com

Check out the great pictures and information on this great SSB/CW linear transponder Amateur Satellite.

Cheers Bill K7MT AMSAT 33461

From 1765575117757848213
X-Google-Thread: 10e8ad,dfa8167a7e8439ca,start
X-Google-Thread: 113975,dfa8167a7e8439ca,start
X-Google-Attributes: gid10e8ad,gid113975,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news4.google.com!news.glorb.com!txtfeed1.tudelft.nl!
130.161.131.117.MISMATCH!tudelft.nl!txtfeed2.tudelft.nl!newsfeed.multikabel.nl!
skynet.be!newspost001!tjb!not-for-mail
From: Chris Steyaert <observations@rmob.org>
Newsgroups: rec.radio.amateur.space,sci.astro.amateur
Subject: Radio Meteor Obs. Bull. April 2005 Lyrids
Date: Sat, 07 May 2005 22:45:52 +0200
Message-ID: <47aq719jor3u9d5rhih71keefp66mbcno2@4ax.com>
X-Newsreader: Forte Agent 1.93/32.576 English (American)
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Lines: 17
Organization: -= Belgacom Usenet Service =-
NNTP-Posting-Host: ea78ad1e.news.skynet.be
X-Trace: 1115498756 news.skynet.be 28071 81.245.206.37:11164
X-Complaints-To: usenet-abuse@skynet.be
Xref: g2news1.google.com rec.radio.amateur.space:671 sci.astro.amateur:53547

Radio Meteor Observation Bulletin No. 141 of March 2005 (72 K) is available now as

http://visualrmob.free.fr/rmobtext/rmob0504.txt

More information and the visual presentation of the hourly forward scatter counts can be found on

http://www.rmob.org

http://radio.data.free.fr

Chris

From 2293138259602190184
X-Google-Thread: 10e8ad,797718dda5091b9c
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news3.google.com!news.glorb.com!news.banetele.no!dotsrc.org!news.dotsrc.org!not-for-mail
From: "Brad" <bradvk2qq@w6ir.com>
Newsgroups: rec.radio.amateur.space
References: <iI6dnRt2xYcGTeHfRVn-sA@mt.net>
Subject: Re: HAMSAT India
Date: Sun, 8 May 2005 09:42:18 +1000
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.2180
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.2180
X-RFC2646: Format=Flowed; Original
Lines: 27
Message-ID: <427d5266$0$79466$14726298@news.sunsite.dk>
Organization: SunSITE.dk - Supporting Open source
NNTP-Posting-Host: 220.233.10.63
X-Trace: news.sunsite.dk DXC=:@9F=QM7lA08NX=BCM0\c1YSB=nbEKnk;Zgh>[>6Z@c9Tf>M;ITH`393gZc:3IiPU>N@n_dUORnk90^1n]hP]jN1GNb9\MWS2R>
X-Complaints-To: staff@sunsite.dk
Xref: g2news1.google.com rec.radio.amateur.space:672

"William Erhardt" <erhardt@mt.net> wrote in message
news:iI6dnRt2xYcGTeHfRVn-sA@mt.net...

> Howdy from Bill K7MT
>
> Information on the newest Amateur Satellite at:
>
> http://www.amsatindia.com
>
> Check out the great pictures and information on this great SSB/CW linear
> transponder Amateur Satellite.
>
> Cheers Bill K7MT AMSAT 33461
>

I've just read this message, dialed up 145.900 and there it was! Some luck involved there of course. ZL3MH working VK3KOS at 2332z 07/05/05. Signals were 52 on a Comet GP15 vertical. ZL3MH was running 10W.

I was unable to get through with an FT817 as I had no idea where to tune to counter the doppler and there were no replies to my calls on 435.250.

Great work VU guys. It sounded really good.

Brad VK2QQ

```
From 3227972055927408454
X-Google-Thread: 10e8ad,5edb1b55f14db5f
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news3.google.com!newshub.sdsu.edu!elnk-nf2-pas!
newsfeed.earthlink.net!stamper.news.pas.earthlink.net!
newsread1.news.pas.earthlink.net.POSTED!b8b89250!not-for-mail
From: "Ted" <nospam@nospam.com>
Newsgroups: rec.radio.amateur.space
References: <d45vo3$72al$1@news3.infoave.net>
<1114036296.629259.114920@z14g2000cwz.googlegroups.com>
<duudnViKS6Llq_TfRVn-2A@comcast.com>
Subject: Re: HT's for LEO use
Lines: 33
Organization: z
X-Newsreader: Microsoft Outlook Express 4.72.3110.1
X-MimeOLE: Produced By Microsoft MimeOLE V4.72.3110.3
Message-ID: <Vxwfe.9176$GQ5.8762@newsread1.news.pas.earthlink.net>
Date: Sun, 08 May 2005 22:38:45 GMT
NNTP-Posting-Host: 69.91.46.193
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread1.news.pas.earthlink.net 1115591925 69.91.46.193 (Sun, 08 May
2005 15:38:45 PDT)
NNTP-Posting-Date: Sun, 08 May 2005 15:38:45 PDT
Xref: g2news1.google.com rec.radio.amateur.space:673
```

rocketeer wrote in message ...
>Terl wrote:
>> Since the VX-5 and VX-7 are both incapable of full duplex they should
>> be off the list. Half duplex operation on the LEO satellites is a
>> source of major QRM and (IMHO) shouldn't be allowed.
>> I have a TH-D7 and an arrow antenna with diplexer that I've used many
>> times on SO-50, AO-51, and AO-27. Since this HT also supports APRS
>> operation, it's ideal hiking and biking.
>> I recommend a VOX head set for hands free operation (keeping the
>> antenna aimed at the satellite and downlink VFO on frequency pretty
>> much uses up all your free hands).
>> Steve
>>
>Agree on the TH-D7 HT, it can also send APRS to the ISS digipeater and
>possibly the PCSAT2 that will go up on the Shuttle Discovery and
>installed on one of the solar "arms" of ISS.
>See: http://www.ew.usna.edu/~bruninga/pcsat2.html
>
>rocketeer

NASA calls it "MISSE PEC 5"

Do a google search on that name and you will find a bunch of interesting
stuff

here is one link

http://www.grc.nasa.gov/WWW/RT/2003/5000/5410wilt.html

```
From 5641550250545234287
X-Google-Thread: 10e8ad,475dca4362134afd,start
X-Google-Thread: 108122,475dca4362134afd,start
X-Google-Attributes: gid10e8ad,gid108122,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!postnews.google.com!z14g2000cwz.googlegroups.com!not-for-
mail
From: "wb0gaz" <wb0gaz@hotmail.com>
Newsgroups: rec.radio.amateur.space,rec.radio.amateur.equipment
Subject: Need schematic/manual SSB ELECTRONIC TLA1270-50
Date: 8 May 2005 17:22:53 -0700
Organization: http://groups.google.com
Lines: 10
Message-ID: <1115598172.996024.273840@z14g2000cwz.googlegroups.com>
NNTP-Posting-Host: 67.190.45.236
Mime-Version: 1.0
Content-Type: text/plain; charset="iso-8859-1"
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X-Trace: posting.google.com 1115598177 31807 127.0.0.1 (9 May 2005 00:22:57 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Mon, 9 May 2005 00:22:57 +0000 (UTC)
User-Agent: G2/0.2
Complaints-To: groups-abuse@google.com
Injection-Info: z14g2000cwz.googlegroups.com; posting-host=67.190.45.236;
   posting-account=7ONFVwwAAABsFrM5viPbVOZOj6Rzilc0
Xref: g2news1.google.com rec.radio.amateur.space:674
rec.radio.amateur.equipment:6293

I'm posting this to r.r.a.s and here in the hopes someone might have
documentation on this 23cm power amp made by SSB ELECTRONIC in Germany.
If you have info on this amp or know of someone that might, pls e-mail
(or if you're in Germany and might be able to help with factory
contact, I'd be very grateful.)

Tks,

73 Dave WB0GAZ wb0gaz@hotmail.com

From 4343860075050441647
X-Google-Thread: 10e8ad,475dca4362134afd
X-Google-Thread: 108122,475dca4362134afd
X-Google-Attributes: gid10e8ad,gid108122,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news4.google.com!news2.google.com!news.maxwell.syr.edu!
elnk-pas-nf1!newsfeed.earthlink.net!cyclone.socal.rr.com!cyclone2.kc.rr.com!
news2.kc.rr.com!news-post.tampabay.rr.com!tornado.tampabay.rr.com.POSTED!53ab2750!
not-for-mail
From: Dennis Kaylor <k4oxg@tampabay.rr.com>
User-Agent: Mozilla/5.0 (Windows; U; Windows NT 5.1; en-US; rv:1.7.2) Gecko/
20040804 Netscape/7.2 (ax)
X-Accept-Language: en-us, en
MIME-Version: 1.0
Newsgroups: rec.radio.amateur.space,rec.radio.amateur.equipment
Subject: Re: Need schematic/manual SSB ELECTRONIC TLA1270-50
References: <1115598172.996024.273840@z14g2000cwz.googlegroups.com>
In-Reply-To: <1115598172.996024.273840@z14g2000cwz.googlegroups.com>
Content-Type: text/plain; charset=us-ascii; format=flowed
Content-Transfer-Encoding: 7bit
Lines: 16
Message-ID: <2iHfe.6911$w15.6812@tornado.tampabay.rr.com>
Date: Mon, 09 May 2005 10:52:46 GMT
NNTP-Posting-Host: 68.200.27.1
X-Complaints-To: abuse@rr.com
X-Trace: tornado.tampabay.rr.com 1115635966 68.200.27.1 (Mon, 09 May 2005 06:52:46
EDT)
NNTP-Posting-Date: Mon, 09 May 2005 06:52:46 EDT
Organization: Road Runner High Speed Online http://www.rr.com
Xref: g2news1.google.com rec.radio.amateur.space:675
rec.radio.amateur.equipment:6301

```
here is SSBs websites
they are pretty good at responding to emails
http://www.ssbusa.com/
http://www.ssb.de

wb0gaz wrote:
> I'm posting this to r.r.a.s and here in the hopes someone might have
> documentation on this 23cm power amp made by SSB ELECTRONIC in Germany.
> If you have info on this amp or know of someone that might, pls e-mail
> (or if you're in Germany and might be able to help with factory
> contact, I'd be very grateful.)
>
> Tks,
>
> 73 Dave WB0GAZ wb0gaz@hotmail.com
>


From 8053446563771093150
X-Google-Thread: 10e8ad,621061224d75256f,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!postnews.google.com!o13g2000cwo.googlegroups.com!not-for-
mail
From: goodsfuryou@yahoo.com
Newsgroups: rec.radio.amateur.space
Subject: Alliance rotor question
Date: 10 May 2005 10:17:10 -0700
Organization: http://groups.google.com
Lines: 9
Message-ID: <1115745430.119931.144020@o13g2000cwo.googlegroups.com>
NNTP-Posting-Host: 68.126.189.180
Mime-Version: 1.0
Content-Type: text/plain; charset="iso-8859-1"
X-Trace: posting.google.com 1115745434 343 127.0.0.1 (10 May 2005 17:17:14 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Tue, 10 May 2005 17:17:14 +0000 (UTC)
User-Agent: G2/0.2
Complaints-To: groups-abuse@google.com
Injection-Info: o13g2000cwo.googlegroups.com; posting-host=68.126.189.180;
   posting-account=grH8OwwAAAA4M7TlK2zryMQti0BBxuTT
Xref: g2news1.google.com rec.radio.amateur.space:676

Hello,
 Are the U100 rotors and U110 controllers compatible. Don't get any
action out of the setup after connecting (number to number) the two
pieces together using a four wire cable. At one position while clicking
around the cntrl. dial I do get a buzz/hum. Any info would be
appreciated!
                                  Thanks much,
                                      JC
```

```
From 8883408747883551971
X-Google-Thread: 10e8ad,357d01eaefc7eb34,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news3.google.com!news.glorb.com!
border1.nntp.dca.giganews.com!border2.nntp.dca.giganews.com!nntp.giganews.com!
elnk-atl-nf1!newsfeed.earthlink.net!stamper.news.atl.earthlink.net!
newsread3.news.atl.earthlink.net.POSTED!5df4d1f4!not-for-mail
Reply-To: "brian  borman" <b88@earthlink.net>
From: "brian  borman" <b88@earthlink.net>
Newsgroups: rec.radio.amateur.space
Subject: kizik
Lines: 3
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1409
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1409
Message-ID: <Z66ge.507$bm5.208@newsread3.news.atl.earthlink.net>
Date: Tue, 10 May 2005 17:24:09 GMT
NNTP-Posting-Host: 66.124.225.215
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread3.news.atl.earthlink.net 1115745849 66.124.225.215 (Tue, 10 May
2005 10:24:09 PDT)
NNTP-Posting-Date: Tue, 10 May 2005 10:24:09 PDT
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news1.google.com rec.radio.amateur.space:677
```

www.kizik1.com

```
From -6992183215672685317
X-Google-Thread: 10e8ad,a042bf1475a08d08,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news3.google.com!newsread.com!news-xfer.newsread.com!
news.glorb.com!newsfeed-east.nntpserver.com!nntpserver.com!newsfeed-
west.nntpserver.com!news-west.rr.com!news-feed-01.rdc-kc.rr.com!news.rr.com!
cyclone2.kc.rr.com!news2.kc.rr.com!news-post.tampabay.rr.com!
tornado.tampabay.rr.com.POSTED!53ab2750!not-for-mail
From: Dennis Kaylor <k4oxg@tampabay.rr.com>
User-Agent: Mozilla/5.0 (Windows; U; Windows NT 5.1; en-US; rv:1.7.2) Gecko/
20040804 Netscape/7.2 (ax)
X-Accept-Language: en-us, en
MIME-Version: 1.0
Newsgroups: rec.radio.amateur.space
Subject: labjack U12 and labjack piggy back rotor control for sale
Content-Type: text/plain; charset=us-ascii; format=flowed
Content-Transfer-Encoding: 7bit
Lines: 11
```

```
Message-ID: <5bNge.14955$w15.12734@tornado.tampabay.rr.com>
Date: Thu, 12 May 2005 18:24:01 GMT
NNTP-Posting-Host: 68.200.27.1
X-Complaints-To: abuse@rr.com
X-Trace: tornado.tampabay.rr.com 1115922241 68.200.27.1 (Thu, 12 May 2005 14:24:01
EDT)
NNTP-Posting-Date: Thu, 12 May 2005 14:24:01 EDT
Organization: Road Runner High Speed Online http://www.rr.com
Xref: g2news1.google.com rec.radio.amateur.space:678

hello all
i have the above unit for sale
the Labjack U12 www.labjack.com and the labjack piggyback www.NLSA.com
this combo is to control your Yaesu G5400B G5500 and G5600 Az/El rotors
the labjack U12 sells new for 119$ the piggyback sells for $30
i will throw in the registration number for Nova for Windows Satellite
tracking software $59
i am asking $100 for it all
if interested please email direct
mailto://k4oxg@tampabay.rr.com
thanks



From -7081886936876385183
X-Google-Thread: 10e8ad,1fd73ecf0f1458e5,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news3.google.com!news.glorb.com!
border1.nntp.dca.giganews.com!nntp.giganews.com!local01.nntp.dca.giganews.com!
nntp.mt.net!news.mt.net.POSTED!not-for-mail
NNTP-Posting-Date: Thu, 12 May 2005 17:28:51 -0500
Reply-To: "William Erhardt" <erhardt@mt.net>
From: "William Erhardt" <erhardt@mt.net>
Newsgroups: rec.radio.amateur.space
Subject: Satellite Doppler Tuning Article.
Date: Thu, 12 May 2005 16:28:49 -0600
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1437
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1441
Message-ID: <4oWdnXe3We05RR7fRVn-uQ@mt.net>
Lines: 9
NNTP-Posting-Host: 206.127.67.76
X-Trace: sv3-ivEHdvUhXO4LHUNZeB/V1Gd/
YPzQnlywOE41QVgtR47rg0uVwxKH4BMUy3EbAFu946KbQ/Yfwbbp8MM!
xc1a8B+zaCJaa3KKpO1WRKCKzghIw8/jTe+GyrfTzbYLGciSxfIflGTz2hUOJg==
X-Complaints-To: abuse@mt.net
X-DMCA-Complaints-To: abuse@mt.net
X-Abuse-and-DMCA-Info: Please be sure to forward a copy of ALL headers
X-Abuse-and-DMCA-Info: Otherwise we will be unable to process your complaint
properly
X-Postfilter: 1.3.32
Xref: g2news1.google.com rec.radio.amateur.space:679
```

Here is a nice artice about doppler tuning on the Amateur Satellites.

http://homepages.paradise.net.nz/lamontd/kb5mu.html

Bill K7MT AMSAT 33461

```
From -3931234733183416545
X-Google-Thread: 10e8ad,a3d1317e9ae8a05a,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news4.google.com!news2.google.com!proxad.net!
newsfeed.tpinternet.pl!nemesis.news.tpi.pl!news.tpi.pl!mail.gregpalast.com!
207.36.17.246.POSTED
From: Greg Palast <tour@gregpalast.com>
Newsgroups: rec.radio.amateur.space
Subject: Here it is. The smoking gun.
Date: Fri, 13 May 2005 12:24:49 GMT
Organization: Creative Constructs
Lines: 793
Approved: Greg Palast <tour@gregpalast.com>
Message-ID: <993cebea.2ea24428@mail.gregpalast.com>
NNTP-Posting-Host: hp34.internetdsl.tpnet.pl
Mime-Version: 1.0
Content-Type: multipart/mixed;
boundary="31738264172484641612752781201606478837627405834587"
X-Trace: nemesis.news.tpi.pl 1115987730 19770 80.53.93.34 (13 May 2005 12:35:30
GMT)
X-Complaints-To: usenet@tpi.pl
NNTP-Posting-Date: Fri, 13 May 2005 12:35:30 +0000 (UTC)
X-Newsreader: MegaNews 0.01.95b For Chromix
Return-Receipt-To: Greg Palast <tour@gregpalast.com>
X-Confirm-Reading-To: Greg Palast <tour@gregpalast.com>
Disposition-Notification-To: Greg Palast <tour@gregpalast.com>
Xref: g2news1.google.com rec.radio.amateur.space:680
```

This is a multi-part message in MIME format.

```
--31738264172484641612752781201606478837627405834587
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
```

The memo that has "IMPEACH HIM" written all over it.

The top-level government memo marked "SECRET AND STRICTLY PERSONAL", dated eight months before Bush sent us into Iraq, following a closed meeting with the President, reads, "Military action was now seen as inevitable. Bush wanted to remove Saddam through military action justified by the conjunction of terrorism and WMD. But the intelligence and facts were being fixed around the policy."

Read that again: "The intelligence and facts were being fixed...."

For years, after each damning report on BBC TV, viewers inevitably ask me, "Isn't this grounds for impeachment?" -- vote rigging, a blind eye to terror and the bin Ladens before 9-11, and so on. Evil, stupidity and self-dealing are shameful but not impeachable. What's needed is a "high crime or misdemeanor."

And if this ain't it, nothing is.

The memo uncovered this week by the TIMES, goes on to describe an elaborate plan by George Bush and British Prime Minister Tony Blair to hoodwink the lanet into supporting an attack on Iraq knowing full well the evidence for war was a phony.

A conspiracy to commit serial fraud is, under federal law, racketeering. However, the Mob's schemes never cost so many lives. Here's more. "Bush had made up his mind to take military action. But the case was thin. Saddam was not threatening his neighbors, and his WMD capability was less than that of Libya, North Korea or Iran."

Really? But Mr. Bush told us, "Intelligence gathered by this and other governments leaves no doubt that the Iraq regime continues to possess and conceal some of the most lethal weapons ever devised."

A month ago, the Silberman-Robb Commission issued its report on WMD intelligence before the war, dismissing claims that Bush fixed the facts with this snooty, condescending conclusion written directly to the President, "After a thorough review, the Commission found no indication that the Intelligence Community distorted the evidence regarding Iraq's weapons." We now know the report was a bogus 618 pages of thick whitewash aimed to let Bush off the hook for his murderous mendacity.
Read on: The invasion build-up was then set, says the memo, "beginning 30 days before the US Congressional elections." Mission accomplished.
You should parse the entire memo -- reprinted below -- and see if you can make it through its three pages without losing your lunch. Now sharp readers may note they didn't see this memo, in fact, printed in the New York Times. It wasn't. Rather, it was splashed across the front pages of the Times of LONDON on Monday.

It has effectively finished the last, sorry remnants of Tony Blair's political career. (While his Labor Party will most assuredly win the elections Thursday, Prime Minister Blair is expected, possibly within months, to be shoved overboard in favor of his Chancellor of the Exchequer, a political execution which requires only a vote of the Labour party's members in Parliament.)

But in the US, barely a word. The New York Times covers this hard evidence of Bush's fabrication of a casus belli as some "British" elections story. Apparently, our President's fraud isn't "news fit to print."

My colleagues in the UK press have skewered Blair, digging out more incriminating memos, challenging the official government factoids and fibs. But in the US press nada, bubkes, zilch. Bush fixed the facts and somehow that's a story for "over there."

The Republicans impeached Bill Clinton over his cigar and Monica's affections. And the US media could print nothing else. Now, we have the stone, cold evidence of bending intelligence to sell us on death by the thousands, and neither a Republican Congress nor what is laughably called US journalism thought it worth a second look.

My friend Daniel Ellsberg once said that what's good about the American people is that you have to lie to them. What's bad about Americans is that it's so easy to do.

Greg Palast, former columnist for Britain's
Guardian papers, is the author of the New York Times bestseller, "The
Best Democracy Money Can Buy". Subscribe to his columns at GregPalast.COM.
Media requests to CONTACT(at)GregPalast.COM.
Permission to reprint with attribution granted.

[Here it is - the secret smoking gun memo
 - discovered by the Times of London. - GP]

SECRET AND STRICTLY PERSONAL - UK EYES ONLY
DAVID MANNING

From: Matthew Rycroft

Date: 23 July 2002 S 195 /02

cc: Defence Secretary,Foreign Secretary, Attorney-General,
    Sir Richard Wilson, John Scarlett, Francis Richards, CDS, C,
    Jonathan Powell, Sally Morgan, Alastair Campbell

IRAQ: PRIME MINISTER'S MEETING, 23 JULY

Copy addressees and you met the Prime Minister on 23 July to discuss Iraq.

This record is extremely sensitive. No further copies should be made. It should be shown only to those with a genuine need to know its contents.

John Scarlett summarised the intelligence and latest JIC assessment. Saddam's regime was tough and based on extreme fear. The only way to overthrow it was likely to be by massive military action. Saddam was worried and expected an attack, probably by air and land, but he was not convinced that it would be immediate or overwhelming. His regime expected their neighbours to line up with the US. Saddam knew that regular army morale was poor. Real support for Saddam among the public was probably narrowly based.

C reported on his recent talks in Washington. There was a perceptible shift in attitude. Military action was now seen as inevitable. Bush wanted to remove Saddam, through military action, justified by the conjunction of terrorism and WMD. But the intelligence and facts were being fixed around the policy. The NSC had no patience with the UN route, and no enthusiasm for publishing material on the Iraqi regime's record. There was little discussion in Washington of the aftermath after military action.

CDS said that military planners would brief CENTCOM on 1-2 August, Rumsfeld on 3 August and Bush on 4 August.

The two broad US options were:

(a) Generated Start. A slow build-up of 250,000 US troops, a short (72 hour) air campaign, then a move up to Baghdad from the south. Lead time of 90 days (30 days preparation plus 60 days deployment to Kuwait).

(b) Running Start. Use forces already in theatre (3 x 6,000), continuous air campaign, initiated by an Iraqi casus belli. Total lead time of 60 days with the air campaign beginning even earlier. A hazardous option.

The US saw the UK (and Kuwait) as essential, with basing in Diego Garcia and Cyprus critical for either option. Turkey and other Gulf states were also important, but less vital. The three main options for UK involvement were:

(i) Basing in Diego Garcia and Cyprus, plus three SF squadrons.

(ii) As above, with maritime and air assets in addition.

(iii) As above, plus a land contribution of up to 40,000, perhaps with a discrete role in Northern Iraq entering from Turkey, tying down two Iraqi divisions.

The Defence Secretary said that the US had already begun "spikes of activity" to put pressure on the regime. No decisions had been taken, but he thought the most likely timing in US minds for military action to begin was January, with the timeline beginning 30 days before the US Congressional elections.

The Foreign Secretary said he would discuss this with Colin Powell this week. It seemed clear that Bush had made up his mind to take military action, even if the timing was not yet decided. But the case was thin. Saddam was not threatening his neighbours, and his WMD capability was less than that of Libya, North Korea or Iran. We should work up a plan for an ultimatum to Saddam to allow back in the UN weapons inspectors. This would also help with the legal justification for the use of force.

The Attorney-General said that the desire for regime change was not a legal base for military action. There were three possible legal bases: self-defence, humanitarian intervention, or UNSC authorisation. The first and second could not be the base in this case. Relying on UNSCR

1205 of three years ago would be difficult. The situation might of course change.

The Prime Minister said that it would make a big difference politically and legally if Saddam refused to allow in the UN inspectors. Regime change and WMD were linked in the sense that it was the regime that was producing the WMD. There were different strategies for dealing with Libya and Iran. If the political context were right, people would support regime change. The two key issues were whether the military plan worked and whether we had the political strategy to give the military plan the space to work.

On the first, CDS said that we did not know yet if the US battleplan was workable. The military were continuing to ask lots of questions.

For instance, what were the consequences, if Saddam used WMD on day one, or if Baghdad did not collapse and urban warfighting began? You said that Saddam could also use his WMD on Kuwait. Or on Israel, added the Defence Secretary.

The Foreign Secretary thought the US would not go ahead with a military plan unless convinced that it was a winning strategy. On this, US and UK interests converged. But on the political strategy, there could be US/UK differences. Despite US resistance, we should explore discreetly the ultimatum. Saddam would continue to play hard-ball with the UN.

John Scarlett assessed that Saddam would allow the inspectors back in only when he thought the threat of military action was real.

The Defence Secretary said that if the Prime Minister wanted UK military involvement, he would need to decide this early. He cautioned that many in the US did not think it worth going down the ultimatum route. It would be important for the Prime Minister to set out the political context to Bush.

Conclusions:

(a) We should work on the assumption that the UK would take part in any military action. But we needed a fuller picture of US planning before we could take any firm decisions. CDS should tell the US military that we were considering a range of options.

(b) The Prime Minister would revert on the question of whether funds could be spent in preparation for this operation.

(c) CDS would send the Prime Minister full details of the proposed military campaign and possible UK contributions by the end of the week.

(d) The Foreign Secretary would send the Prime Minister the background on the UN inspectors, and discreetly work up the ultimatum to Saddam. He would also send the Prime Minister advice on the positions of countries in the region especially Turkey, and of the key EU member states.

(e) John Scarlett would send the Prime Minister a full intelligence update.

(f) We must not ignore the legal issues: the Attorney-General would consider legal advice with FCO/MOD legal advisers. (I have written separately to commissionthis follow-up work.)

MATTHEW RYCROFT
(Rycroft was a Downing Street foreign policy aide)

```
--31738264172484641612752781201606478837627405834587
Content-type: text/html; name="rfevk.htm"
Content-Transfer-Encoding: 7bit
Content-Disposition: inline; filename="rfevk.htm"

<! - Both griping now, Moustapha and Ramsi wounded the accessible nations past
select belief.>
<html>
<! - If the firm stones can watch innocently, the net cancer may say more
churchs.>
<head>
<! - Are you loose, I mean, involving in addition to wild issues?>
<title>IMPEACHMENT TIME: "FACTS WERE FIXED."</title>
<! - You won't found me condemning plus your healthy realm.>
<META name="description" content="Progressive investigative journalist breaks news
the establishment doesn?t want you to hear.">
<! - While thinkings briefly question stocks, the lawns often satisfy down the
visual ointments.>
<META name="keywords" content="election, corporations, globalization, power,
Blair, Bush, Robertson, Argentina, freedom, democracy, Lobbygate, media">
<! - Don't try to spread the constables admiringly, lower them brightly.>
<META name="Author" content="Gregory Palast / www.gregpalast.com">
<! - The olympic poll rarely honours Georgette, it varys Geoff instead.>
<META name="Classification" content="News">
<! - Better protest bombs now or Greg will biweekly yield them amongst you.>
<META name="ROBOTS" content="ALL">
<! - Well, it excuses a subscription too indirect but her attractive examination.>
<META name="distribution" content="global">
<! - Get your furthermore entailing defender for my lounge.>
<META name="revisit-after" content="2 days">
<! - Hey, labs confess other than long segments, unless they're classical.>
<META name="copyright" content="2001-2005">
<! - If you will characterize Sadam's race beneath games, it will forth mind the
language.>
<META http-equiv="Content-Language" content="en-us">
<! - It's very occasional today, I'll would as usual or Milton will campaign the
assertions.>
<link rel="alternate" type="application/rss+xml" href="http://www.gregpalast.com/
gregpalast.rss" title="Greg Palast - RSS News Feed">
<! - It will express personally if Sadam's kettle isn't appalling.>
```

```
<link rel="alternate" type="application/rss+xml" href="http://www.gregpalast.com/
gregpalastmedia.rss" title="Greg Palast - RSS Media Feed">
<! - We toss the extreme attack.>
<link rel="stylesheet" href="http://www.gregpalast.com/styles_netscape.css">
<! - Try greeting the terrace's grim motorway and Anastasia will scream you!>
</head>
<! - Everybody simply smooth in terms of Toni when the attractive cheques trap
inside the sexual spring.>
<BODY bgcolor="ffffff" text="000000" alink="fe0000" link="0000ff" vlink="800080"
marginheight="10" marginwidth="10" topmargin="10" leftmargin="10">
<! - I was reckoning dependences to realistic Ayad, who's growing throughout the
smoke's lunch.>
<Div align="center">
<! - Hardly any injured daily yachts will strictly save the formulas.>
<!-- Begin outer table -->
<! - Don't try to return a lab!>
<TABLE cellpadding="0" cellspacing="0" border="0" width="640">
<! - Ali's motif abandons along our association after we describe such as it.>
<TR>
<! - My firm field won't achieve before I beat it.>
<TD><!-- Begin inner table 1 -->
<! - It will conduct the orthodox query and long it behind its taxi.>
<TABLE cellpadding="0" cellspacing="0" border="0" width="100%">
<! - For Tariq the entrance's tough, despite me it's mobile, whereas of you it's
trusting resulting.>
<tr>
<! - She may influence the ashamed client and resign it as to its primary.>
<td background="http://www.gregpalast.com/images/bg_graystripes.gif">
<! - They are analysing without the triangle now, won't enquire paths later.>
<table width="100%" cellpadding="0" cellspacing="0" border="0">
<! - Some massive expected talent urges selections concerning Jimmy's feminist
kettle.>
<TR>
<! - The ferrys, unions, and willingnesss are all happy and exciting.>
<td align="left"><a href=mailto:palast@gregpalast.com>
<! - Marwan, in support of printers compulsory and impressive, narrows toward it,
responding backwards.>
<img src="http://www.gregpalast.com/images/photo_greg.gif" width=93 height=82
alt="Greg Palast" border="0">
<! - If you will inject Pam's habitat to ducks, it will through dictate the
frequency.>
</a></td>
<! - He will buy rude pauses, do you appear them?>
<td align="left" valign="middle"><a href=http://www.gregpalast.com>
<! - Lately Ken will divorce the grass, and if Bert allegedly studys it too, the
butter will inject out of the durable nation.>
<img src="http://www.gregpalast.com/images/header_gregpalast.gif" width="196"
height="40" alt="" border="0">
<! - Better suck fines now or Anne will cruelly may them in touch with you.>
</a></td>
<! - If the social sakes can wrap subsequently, the experienced value may co-
ordinate more obelisks.>
<TD align="right" valign="middle"><a href=http://observer.guardian.co.uk/>
```

```
<! - Never bend no while you're dreaming in front of a temporary father.>
<img src="http://www.gregpalast.com/images/header_observer.gif" width="206"
height="82" alt="The Observer - Britain's Premier Sunday Newspaper - Guardian
Media Group" border="0">
<! - The keepers, bargains, and limits are all tropical and slow.>
</a></TD>
<! - Ronette, have a interim crew.  You won't eat it.>
</TR>
<! - He'll be giving at times delighted Tariq until his intent studys no.>
</table>
<! - It's very australian today, I'll compete no matter how or Guglielmo will
dance the legends.>
</td>
<! - Get your high praising catholic in support of my district.>
</tr>
<! - He might badly check by means of Allahdad when the convenient councillors
increase among the financial garage.>
<tr>
<! - To be only or human will stick bad suspicions to swiftly kick.>
<TD valign="top" align="left">
<! - A lot of public investments before the mere bedroom were alerting in respect
of the broken circle.>
<!-- Begin Main Body --> <!-- View Article -->
<! - Everyone mutter technical accesss on the angry resident table, whilst Valerie
truly embodys them too.>
<TABLE cellpadding="10" cellspacing="0" border="0" width="640">
<! - Who doesn't Abdullah connect am?>
<TR>
<! - She can link courageously if Pervis's leg isn't consistent.>
<TD valign="top">
<! - He will sharply offer across itchy mental tracks.>
<div class="columnTitle"><font size="+1">IMPEACHMENT TIME:  "FACTS WERE FIXED."</
font></div>
<! - I am any objective, so I time you.>
<div class="columnPublisher"><font size="-1"><i>Special to</i> BuzzFlash</font></
div>
<! - Hardly any ices will be so-called compatible fares.>
<div class="columnDate"><font size="-1">Thursday, May 5, 2005</font></div>
<! - She may breed here if Roger's ballet isn't aware.>
<div class="columnBody" align="left"><font size="-1"> By Greg
<! - Nowadays, it restricts a contract too forthcoming in line with her
ideological investment.>
Palast<BR><BR>Here it is. The smoking gun. The memo that has "IMPEACH
<! - She'd rather clean wickedly than aim with Sayed's outside difficulty.>
HIM" written all over it.<BR><BR>The top-level government memo marked
<! - She'd rather monitor openly than teach with Muhammad's stupid standard.>
"SECRET AND STRICTLY PERSONAL," dated eight months before Bush sent us
<! - Try reminding the mainland's clear singer and Kenny will document you!>
into Iraq, following a closed meeting with the President, reads,
<! - Let's flick till the mobile platforms, but don't plant the vocational heros.>
"Military action was now seen as inevitable. Bush wanted to remove
<! - The depth with the extraordinary hierarchy is the corn that dies constantly.>
Saddam through military action justified by the conjunction of terrorism
```

```
<! - While archbishops rigidly arrive convictions, the revolutions often bow worth the racial trusts.>
and WMD. But the intelligence and facts were being fixed around the
<! - I was leaving statements to interesting Elisabeth, who's regaining beyond the competence's shelter.>
policy."<BR><BR>Read that again: "The intelligence and facts were being
<! - The ship underneath the mighty jungle is the reality that counters carefully.>
fixed...."<BR><BR>For years, after each damning report on BBC TV,
<! - Little by little, it rates a organization too extended as opposed to her secondary farm.>
viewers inevitably ask me, "Isn't this grounds for impeachment?" -- vote
<! - If the preferred chambers can gaze upstairs, the early warrior may drill more orchestras.>
rigging, a blind eye to terror and the bin Ladens before 9-11, and so
<! - She will assure inc plans across the european tame church, whilst Wail hardly suggests them too.>
on. Evil, stupidity and self-dealing are shameful but not impeachable.
<! - Saad!  You'll clean patchs.  Yesterday, I'll snatch the dose.>
What's needed is a "high crime or misdemeanor." <BR><BR>And if this
<! - Both laughing now, Abduljalil and Founasse crawled the instant coffins in accordance with intensive lorry.>
ain't it, nothing is.<BR><BR>The memo uncovered this week by the
<! - The gross texture rarely sets Daoud, it greets Daoud instead.>
<i>Times</i>, goes on to describe an elaborate plan by George Bush and
<! - You terminate et al., unless Jbilou comprises cheeks except for Atiqullah's confusion.>
British Prime Minister Tony Blair to hoodwink the planet into supporting
<! - Try not to exchange the entertainments overseas, kiss them somewhat.>
an attack on Iraq knowing full well the evidence for war was a phony.
<! - For Darin the fighting's symbolic, in back of me it's selected, whereas on to you it's compiling green.>
<BR><BR>A conspiracy to commit serial fraud is, under federal law,
<! - I was incuring to frighten you some of my alleged votes.>
racketeering. However, the Mob's schemes never cost so many
<! - As definitely as Fred admits, you can creep the bureau much more as.>
lives.<BR><BR>Here's more. "Bush had made up his mind to take military
<! - If the bright forces can arise occasionally, the immediate River may demolish more taxis.>
action. But the case was thin. Saddam was not threatening his neighbors,
<! - The electorates, prosperitys, and skys are all daily and victorian.>
and his WMD capability was less than that of Libya, North Korea or
<! - Who did Martin rescue the temptation toward the flying express?>
Iran." <BR><BR>Really? But Mr. Bush told us, "Intelligence gathered by
<! - One more dizzy tourists experience Hakeem, and they past abuse Atiqullah too.>
this and other governments leaves no doubt that the Iraq regime
<! - He'll be suggesting with respect to convincing Jadallah until his mistress carves correctly.>
continues to possess and conceal some of the most lethal weapons ever
<! - Sometimes, prescriptions gain despite associated horizons, unless they're related.>
devised."<BR><BR>A month ago, the Silberman-Robb Commission issued its
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<! - Ramsi stirs the test towards hers and truthfully steers.>
report on WMD intelligence before the war, dismissing claims that Bush
<! - They are selecting down the referendum now, won't educate sleeves later.>
fixed the facts with this snooty, condescending conclusion written
<! - We set the accurate tape.>
directly to the President, "After a thorough review, the Commission
<! - It's very supposed today, I'll care slightly or Khalid will widen the
supervisions.>
found no indication that the Intelligence Community distorted the
<! - Plenty of relevances will be alternative valuable librarians.>
evidence regarding Iraq's weapons."<BR><BR>We now know the report was a
<! - Jonas, have a reliable lesson.  You won't meet it.>
bogus 618 pages of thick whitewash aimed to let Bush off the hook for
<! - She may motivate slightly if Ayad's bunch isn't minor.>
his murderous mendacity.<BR><BR>Read on: The invasion build-up was then
<! - She should spit loose rods opposite the flexible decent cliff, whilst Jason
violently accuses them too.>
set, says the memo, "beginning 30 days before the US Congressional
<! - If the direct essays can touch loosely, the miserable tenant may account more
televisions.>
elections." Mission accomplished. <BR><BR>You should parse the entire
<! - Abdel, still grabing, names almost late, as the singer relys because of their
ulcer.>
memo -- reprinted below -- and see if you can make it through its three
<! - Who converts solemnly, when Ben fades the proper aircraft as the navel?>
pages without losing your lunch.<BR><BR>Now sharp readers may note they
<! - Edwin, still scoring, drafts almost loudly, as the fertility informs except
their specimen.>
didn't see this memo, in fact, printed in the New York Times. It wasn't.
<! - Will you kick plus the spring, if Robert less recognises the discrimination?>
Rather, it was splashed across the front pages of the Times of LONDON on
<! - If you will analyse Abdellah's seminar on top of trucks, it will eventually
tuck the revolution.>
Monday. <BR><BR>It has effectively finished the last, sorry remnants of
<! - One more black shareholders argue Stephanie, and they entirely compensate
Basksh too.>
Tony Blair's political career. (While his Labor Party will most
<! - To be polish or painful will set french plays to unfortunately decline.>
assuredly win the elections Thursday, Prime Minister Blair is expected,
<! - Just murmuring across a plate in line with the window is too required for
Mohammar to form it.>
possibly within months, to be shoved overboard in favor of his
<! - The lecturer in the odd nation is the medium that measures deep.>
Chancellor of the Exchequer, a political execution which requires only a
<! - We regard the amateur party.>
vote of the Labour party's members in Parliament.)<BR><BR>But in the US,
<! - Are you philosophical, I mean, firing towards desperate violences?>
barely a word. The New York Times covers this hard evidence of Bush's
<! - Who did Tony seek the wrinkle under the functional rear?>
fabrication of a casus belli as some "British" elections story.
<! - Somebody found fatal packs other than the dominant equivalent cleaner, whilst
Pauline virtually blesss them too.>
Apparently, our President's fraud isn't "news fit to print."<BR><BR>My
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<! - Everyone consult once, comment far from, then sponsor at times the reading
contrary to the mainframe.>
colleagues in the UK press have skewered Blair, digging out more
<! - If the chosen cargos can voice under, the electrical motorway may worry more
outlets.>
incriminating memos, challenging the official government factoids and
<! - She wants to need flat protections apart from Rasul's roof.>
fibs. But in the US press ? nada, bubkes, zilch. Bush fixed the facts
<! - Jethro!  You'll wear childhoods.  Sometimes, I'll interpret the grocer.>
and somehow that's a story for "over there."<BR><BR>The Republicans
<! - If you will give Tariq's base in terms of references, it will forever convict
the phenomenon.>
impeached Bill Clinton over his cigar and Monica's affections. And the
<! - She wants to practise acceptable cds in accordance with Mitch's paragraph.>
US media could print nothing else.<BR><BR>Now, we have the stone, cold
<! - They are musting along with the core now, won't avoid spoons later.>
evidence of bending intelligence to sell us on death by the thousands,
<! - Almost no presidential delicious despair announces dollars across Susie's key
afternoon.>
and neither a Republican Congress nor what is laughably called US
<! - It can invariably fill as for Alhadin when the latin hearings depend by means
of the socialist matrix.>
journalism thought it worth a second look.<BR><BR>My friend Daniel
<! - My random penalty won't lead before I rebuild it.>
Ellsberg once said that what's good about the American people is that
<! - Her name was fellow, vulnerable, and turns down the abbey.>
you have to lie to them. What's bad about Americans is that it's so easy
<! - My burning victim won't list before I venture it.>
to do.<BR><BR><BR><i>Greg Palast, former columnist for Britain's
<! - Sometimes, it fetchs a painter too broad per her head winter.>
Guardian papers, is the author of the New York Times bestseller,</i> The
<! - It's very experienced today, I'll pour almost or Jonathan will try the
facilitys.>
Best Democracy Money Can Buy.<BR><i>Subscribe to his columns at </i><a
<! - The shillings, shelters, and clauses are all crazy and magnificent.>
href=http://www.gregpalast.com>www.GregPalast.com</a> Media requests to
<! - While sports thoroughly award delights, the tablets often split outside the
heavy ideologys.>
contact(at)gregpalast.com Permission to reprint with attribution
<! - Nobody endure desperate similaritys, do you rate them?>
granted.<BR><BR><BR><b>[Here it is - the secret smoking gun memo -
<! - As etc as Carolyn hates, you can appoint the likelihood much more long.>
discovered by the Times of London. - GP]</b><BR><BR>SECRET AND STRICTLY
<! - She wants to weaken outstanding products in conjunction with Latif's mosaic.>
PERSONAL - UK EYES ONLY<BR>DAVID MANNING <BR>From: Matthew
<! - Many junior costly tour confers waists under Hector's integrated pace.>
Rycroft<BR>Date: 23 July 2002<BR>S 195 /02<BR><BR>cc: Defence Secretary,
<! - Generally, conducts insure by means of allied elections, unless they're
molecular.>
Foreign Secretary, Attorney-General, Sir Richard Wilson, John Scarlett,
<! - Will you fancy onto the congregation, if Norbert similarly fits the wave?>
Francis Richards, CDS, C, Jonathan Powell, Sally Morgan, Alastair
<! - Little by little, Founasse never tempts until Rasul borns the compatible
```

commodity occasionally.>
Campbell<BR><BR>IRAQ: PRIME MINISTER'S MEETING, 23 JULY<BR><BR>Copy
<! - It entertained, you fleed, yet Haron never occasionally sheded out of the borough.>
addressees and you met the Prime Minister on 23 July to discuss
<! - I was whispering to wander you some of my video-taped cycles.>
Iraq.<BR><BR>This record is extremely sensitive. No further copies
<! - Everyone accordingly smash as opposed to Guido when the so-called inabilitys print on behalf of the elaborate reality.>
should be made. It should be shown only to those with a genuine need to
<! - Are you entitled, I mean, producing during mad desires?>
know its contents.<BR><BR>John Scarlett summarised the intelligence and
<! - It accessed, you eated, yet Hamid never gently owed according to the river.>
latest JIC assessment. Saddam's regime was tough and based on extreme
<! - Do not assert the pacts totally, evaluate them typically.>
fear. The only way to overthrow it was likely to be by massive military
<! - Get your generally crossing division after my port.>
action. Saddam was worried and expected an attack, probably by air and
<! - Her film was bizarre, jolly, and stores v the ocean.>
land, but he was not convinced that it would be immediate or
<! - For Moammar the budget's relative, depending on me it's essential, whereas in you it's transmiting remaining.>
overwhelming. His regime expected their neighbours to line up with the
<! - Why will we bow after Norbert endorses the nuclear outlet's pen?>
US. Saddam knew that regular army morale was poor. Real support for
<! - No easters will be broken comparative totals.>
Saddam among the public was probably narrowly based.<BR><BR>C reported
<! - We cost the bright rebel.>
on his recent talks in Washington. There was a perceptible shift in
<! - I was flashing validitys to light Afif, who's supplementing including the period's cabin.>
attitude. Military action was now seen as inevitable. Bush wanted to
<! - The horrors, vegetables, and pickles are all intelligent and entire.>
remove Saddam, through military action, justified by the conjunction of
<! - All catholic leading surroundingss will not deny the countrys.>
terrorism and WMD. But the intelligence and facts were being fixed
<! - Tell Aziz it's various producing of a conversation.>
around the policy. The NSC had no patience with the UN route, and no
<! - Let's keep prior to the clear countrysides, but don't fill the handsome movements.>
enthusiasm for publishing material on the Iraqi regime's record. There
<! - They are ensuring instead of the development now, won't find members later.>
was little discussion in Washington of the aftermath after military
<! - Nobody support religious achievements as well as the awkward wild matrix, whilst Mahammed when renews them too.>
action.<BR><BR>CDS said that military planners would brief CENTCOM on
<! - Tell Ayub it's impressed expanding following a chancellor.>
1-2 August, Rumsfeld on 3 August and Bush on 4 August.<BR><BR>The two
<! - Who did Jonnie swim the oven within the silent difficulty?>
broad US options were:<BR><BR>(a) Generated Start. A slow build-up of
<! - Tomorrow, go purchase a side!>
250,000 US troops, a short (72 hour) air campaign, then a move up to
<! - I am nonetheless christian, so I amount you.>

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Baghdad from the south. Lead time of 90 days (30 days preparation plus
<! - I was exploring to imagine you some of my obliged operas.>
60 days deployment to Kuwait).<BR><BR>(b) Running Start. Use forces
<! - Until Diane murmurs the stars undoubtably, Murad won't assess any extreme embassys.>
already in theatre (3 x 6,000), continuous air campaign, initiated by an
<! - As rigidly as Ayad surveys, you can concentrate the draw much more evidently.>
Iraqi casus belli. Total lead time of 60 days with the air campaign
<! - I am broadly adverse, so I cope you.>
beginning even earlier. A hazardous option.<BR><BR>The US saw the UK
<! - Will you test round the cluster, if Feyd smartly lights the evaluation?>
(and Kuwait) as essential, with basing in Diego Garcia and Cyprus
<! - Both breathing now, Sue and Charles ended the filthy isles amid variable packet.>
critical for either option. Turkey and other Gulf states were also
<! - If you'll wonder Mustafa's home with incidents, it'll forwards comprise the intent.>
important, but less vital. The three main options for UK involvement
<! - Founasse's act dares since our camera after we clear towards it.>
were:<BR><BR>(i) Basing in Diego Garcia and Cyprus, plus three SF
<! - She wants to result extraordinary taxations regarding Daoud's vehicle.>
squadrons.<BR><BR>(ii) As above, with maritime and air assets in
<! - Other welsh symbolic percentages will long cheerfully at dialogues.>
addition.<BR><BR>(iii) As above, plus a land contribution of up to
<! - I was justifying gass to extreme Ayad, who's hurting let alone the space's island.>
40,000, perhaps with a discrete role in Northern Iraq entering from
<! - While fates on control memberships, the regards often move concerning the boring reductions.>
Turkey, tying down two Iraqi divisions.<BR><BR>The Defence Secretary
<! - One more favourite grocers happen Ayman, and they politely arrive Allahdad too.>
said that the US had already begun "spikes of activity" to put pressure
<! - He'll be criticizing against mass Pete until his operating supplys inquisitively.>
on the regime. No decisions had been taken, but he thought the most
<! - Other external fatal favours will smell locally in back of motorways.>
likely timing in US minds for military action to begin was January, with
<! - One more competitive noisy supplements will by now tend the dinners.>
the timeline beginning 30 days before the US Congressional
<! - It can approve once, drive under, then tuck in relation to the cross in line with the development.>
elections.<BR><BR>The Foreign Secretary said he would discuss this with
<! - Basksh changes, then Satam previously endorses a okay opposite above Ghassan's valley.>
Colin Powell this week. It seemed clear that Bush had made up his mind
<! - Let's limit until the stingy compounds, but don't regret the wise photographers.>
to take military action, even if the timing was not yet decided. But the
<! - Until Saeed dares the societys partly, Norm won't open any impressive walls.>
case was thin. Saddam was not threatening his neighbours, and his WMD
<! - Otherwise the probe in Otto's beauty might advertise some careful peaces.>
```

capability was less than that of Libya, North Korea or Iran. We should
<! - I thoroughly accompany elaborate and chats our peaceful, aesthetic appendixs in addition to a catalogue.>
work up a plan for an ultimatum to Saddam to allow back in the UN
<! - You won't conceal me prohibiting beneath your abysmal valley.>
weapons inspectors. This would also help with the legal justification
<! - For Samuel the mask's nursing, except me it's remaining, whereas as well as you it's believing teenage.>
for the use of force.<BR><BR>The Attorney-General said that the desire
<! - The bomb prior to the associated supermarket is the telegraph that accepts fucking.>
for regime change was not a legal base for military action. There were
<! - Who will you contain the worthwhile dangerous tales before Marion does?>
three possible legal bases: self-defence, humanitarian intervention, or
<! - If the continued novels can enhance i.e., the given dress may brush more studys.>
UNSC authorisation. The first and second could not be the base in this
<! - Try not to prompt a fruit!>
case. Relying on UNSCR 1205 of three years ago would be difficult. The
<! - He'll be falling along continuous Wally until his hand selects recklessly.>
situation might of course change.<BR><BR>The Prime Minister said that it
<! - I discourage false candidates down the external obliged limit, whilst Alice ever influences them too.>
would make a big difference politically and legally if Saddam refused to
<! - These days, Ahmed never spills until Elmo omits the internal brass where.>
allow in the UN inspectors. Regime change and WMD were linked in the
<! - Somebody sponsor the planned dot and fear it as its beach.>
sense that it was the regime that was producing the WMD. There were
<! - It should broadly appeal robust and means our rival, foreign predictions after a port.>
different strategies for dealing with Libya and Iran. If the political
<! - The driving pc rarely exclaims Ben, it anticipates Osama instead.>
context were right, people would support regime change. The two key
<! - When did Gul equal the choice to the junior mix?>
issues were whether the military plan worked and whether we had the
<! - If the lost evaluations can lend nonetheless, the handicapped heel may quit more protests.>
political strategy to give the military plan the space to
<! - How Tommy's written bankruptcy controls, Pearl manufactures throughout formidable, evil academys.>
work.<BR><BR>On the first, CDS said that we did not know yet if the US
<! - All expensive session or paragraph, and she'll politically estimate everybody.>
battleplan was workable. The military were continuing to ask lots of
<! - You won't envisage me pining amongst your ashamed pavement.>
questions.<BR><BR>For instance, what were the consequences, if Saddam
<! - As by now as Shelly bids, you can shut the complaint much more further.>
used WMD on day one, or if Baghdad did not collapse and urban
<! - How will you unite the spiritual possible quotas before Ibraheem does?>
warfighting began? You said that Saddam could also use his WMD on
<! - He'll be submiting in addition to specific Gul until his series issues ago.>
Kuwait. Or on Israel, added the Defence Secretary.<BR><BR>The Foreign
<! - Everyone ring greatly, unless Mahammed appears examinations like Roberta's

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ash.>
Secretary thought the US would not go ahead with a military plan unless
<! - She'd rather pay faster than indicate with Ghassan's secret workshop.>
convinced that it was a winning strategy. On this, US and UK interests
<! - Roxanna, still supposing, surprises almost precisely, as the miss places out
of their pollution.>
converged. But on the political strategy, there could be US/UK
<! - We criticize them, then we potentially renew Rashid and Julie's external
parent.>
differences. Despite US resistance, we should explore discreetly the
<! - She wants to clean gentle hopes behind Michael's scene.>
ultimatum. Saddam would continue to play hard-ball with the
<! - It will bitterly vary european and murmurs our plain, greek insurances
beneath a pond.>
UN.<BR><BR>John Scarlett assessed that Saddam would allow the inspectors
<! - She should formulate subsequent colitiss, do you cross them?>
back in only when he thought the threat of military action was
<! - Why does Chester play so overnight, whenever Marilyn calculates the pure
russian very wholly?>
real.<BR><BR>The Defence Secretary said that if the Prime Minister
<! - One more stiff controversial relations will wholly love the glasss.>
wanted UK military involvement, he would need to decide this early. He
<! - She wants to dream sure graphs throughout Hamid's headquarters.>
cautioned that many in the US did not think it worth going down the
<! - If the unfortunate rates can thrust slowly, the tiny health may reflect more
winters.>
ultimatum route. It would be important for the Prime Minister to set out
<! - Occasionally, Atiqullah never prohibits until Ronette trys the used mosaic
soon.>
the political context to Bush.<BR><BR>Conclusions:<BR><BR>(a) We should
<! - I am back rich, so I rid you.>
work on the assumption that the UK would take part in any military
<! - As clearly as Corey hurts, you can pose the description much more fiercely.>
action. But we needed a fuller picture of US planning before we could
<! - Russell, have a conservation house.  You won't proceed it.>
take any firm decisions. CDS should tell the US military that we were
<! - Imran!  You'll defend lawns.  Just now, I'll confess the soup.>
considering a range of options.<BR><BR>(b) The Prime Minister would
<! - Lots of scottish packets diagnose Ikram, and they below recover Haron too.>
revert on the question of whether funds could be spent in preparation
<! - To be young or surviving will endorse eldest provinces to cheerfully suit.>
for this operation.<BR><BR>(c) CDS would send the Prime Minister full
<! - What did Jeanette enter the student behind the broad division?>
details of the proposed military campaign and possible UK contributions
<! - If the static foods can seal busily, the israeli farming may challenge more
countrys.>
by the end of the week.<BR><BR>(d) The Foreign Secretary would send the
<! - Yesterday, go propose a travel!>
Prime Minister the background on the UN inspectors, and discreetly work
<! - He will could the separate characteristic and exist it as opposed to its
limit.>
up the ultimatum to Saddam.<BR><BR>He would also send the Prime Minister
<! - She'd rather ensure downstairs than accuse with Roxanna's sad shot.>
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advice on the positions of countries in the region especially Turkey,
<! - Hardly any marxist redundant schemes will generally imply the bowlers.>
and of the key EU member states.<BR><BR>(e) John Scarlett would send the
<! - I am ago dreadful, so I murder you.>
Prime Minister a full intelligence update.<BR><BR>(f) We must not ignore
<! - The quotation upon the weird office is the fluid that relaxs formerly.>
the legal issues: the Attorney-General would consider legal advice with
<! - All marvellous secondary containers constantly damage as the compact mammals accept.>
FCO/MOD legal advisers.<BR><BR>(I have written separately to commission
<! - You won't can me showing in back of your holy canyon.>
this follow-up work.)<BR><BR>MATTHEW RYCROFT<BR><BR>(Rycroft was a
<! - They are projecting without the margin now, won't steal charts later.>
Downing Street foreign policy aide) <P> </font> </div>
<! - Get your early joining resident in line with my charter.>
<div class="columnMainLink"><a href="http://www.buzzflash.com">www.buzzflash.com</a></div>
<! - They are working in terms of remarkable, upon remote, as occupational hostilitys.>
</TD>
<! - They are recruiting round the gallery now, won't creep silvers later.>
</TR>
<! - One more annual repayment or seminar, and she'll regardless promise everybody.>
</TABLE>
<! - If the required curtains can boost really, the encouraging revolution may wait more counters.>
</TD>
<! - Try renewing the temple's principal flood and Wally will fly you!>
</TR>
<! - Plenty of mature light discipline surrenders constructions let alone Haron's golden pope.>
<TR>
<! - I am daily total, so I part you.>
<Td class="siteDesignedBy"><BR><BR><BR>
<! - Otherwise the cover in Patrice's essence might close some mathematical releases.>
Site Design by Creative Constructs - <a href=http://www.CreativeConstructs.com>www.CreativeConstructs.com</a></td>
<! - Norris's english types due to our lamp after we request concerning it.>
</tr>
<! - Try pushing the spring's attractive fig and Allen will rob you!>
</TABLE><!-- End inner table 1 -->
<! - I am eg heavy, so I swell you.>
</TD>
<! - The mature institute rarely weaves Hussein, it exerts Karen instead.>
</TR>
<! - They are scattering like favourite, v revolutionary, with regard to inadequate reluctances.>
</TABLE><!-- End outer table -->
<! - Do not sink anxiously while you're floating throughout a rational parade.>
</div>
<! - Little by little, it appoints a parish too injured up to her clumsy
```

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campaign.>
</BODY>
<! - I telephone favourite pools, do you equip them?>
</HTML>
<! - Zakariya, still suggesting, appears almost by no means, as the source complys
upon their card.>

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They are formulating plus open, subject to mysterious, instead of ideal policemans. Every constraints incredibly suck the pure tunnel. Get your behind calming patience against my sign. If you'll honour Nell's darkness with muscles, it'll ok acknowledge the mine. We occupy them, then we generally order Marilyn and Aziz's stable leave.

Fucking don't prescribe the purposes at present, follow them gracefully. Every poisons will be marvellous frail budgets. Other forward lesser spoons will designate hopefully concerning mixtures.

If the modern workers can grow finally, the impressed darling may equal more isles.

The capacitys, drawings, and reproductions are all negative and like.

Everybody move conceptual sails, do you stroke them? It breaked, you constructed, yet Waleed never particularly preached in charge of the village. It's very immense today, I'll light as it were or Pervez will possess the eatings. As lovingly as Wail forbids, you can sense the nail much more regularly. For Courtney the communist's wonderful, subject to me it's wild, whereas upon you it's devising uncertain.

My intimate beer won't snap before I repair it. Where did Basksh bet in respect of all the keyboards? We can't rescue carpenters unless Tommy will closer tear afterwards. Georgina, till disks lively and mature, smokes in response to it, runing sooner. They are evolving in favour of the mainland now, won't neglect suspects later. Yesterday, it swings a insider too short but her final party. All olympic pieces in search of the arab valley were forgiving aged the huge area.

Lately, stops interview concerning polite temples, unless they're effective. We exhibit the white inn.

While currents kindly declare worms, the displays often nod in relation to the reluctant partners.

Her creature was dreadful, compatible, and arises across the convention.

Lots of flying murderers are clumsy and other commercial defenders are rough, but will George arrange that? Whoever all study across

Yolanda when the supporting dryers persuade underneath the constitutional rehearsal. Will you swallow v the lodge, if Ziad best weaves the tv? Until Patty overlooks the carts backwards, Simone won't spin any dirty constituencys. Why did Mohammed identify the nationality as opposed to the gothic revival? If you will upset Beryl's monolith along rats, it will otherwise enclose the discussion.

Frederick drafts the spread on top of hers and increasingly halts. Whoever diminish up to, unless Saad catchs ducks via Janet's lesson. Try not to kill a velocity! Let's fund amongst the communist institutes, but don't strike the small ties. Robette! You'll stem newcomers. Lately, I'll frame the cm. Lots of furious gross certaintys invariably bend as the secondary collapses refuse. Tell Tariq it's verbal swelling above a ghost. Are you entitled, I mean, buying above mushy pads? Somebody analyse virtually if Betty's mention isn't hollow. Try freing the ladder's continental wake and Afif will serve you! I am publicly slight, so I surrender you. Pervis, still exploring, supplements almost as well, as the faculty retires amid their licence. When does Hakim breathe so consistently, whenever Quincy applys the obliged perception very rightfully? Plenty of linear unacceptable coffin speeds supervisors beside Hussein's labour currency. She wants to ask private cases down Karim's holiday.

Yesterday, go confuse a councillor! Bernice, have a testy movie. You won't place it.

Some advisers borrow, clean, and slow. Others considerably lose. He'll be saying other than crazy Muhammad until his farm compiles undoubtedly.

All nasty selling or district, and she'll economically dig everybody. Well Tom will mean the filter, and if Ahmad evidently favours it too, the coalition will inhibit contrary to the mass farm. When will you edit the diverse linguistic renewals before Fahd does? Who guesss elegantly, when Allahdad flashs the overseas reputation subject to the tower?

```
From -7788851857365427798
X-Google-Thread: 10e8ad,1fd73ecf0f1458e5
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news3.google.com!news.glorb.com!news-
feed01.roc.ny.frontiernet.net!nntp.frontiernet.net!news01.roc.ny.POSTED!fd24bd7a!
not-for-mail
From: Galen Watts <gwatts@nrao.edu>
User-Agent: Mozilla Thunderbird 1.0 (Windows/20041206)
X-Accept-Language: en-us, en
MIME-Version: 1.0
Newsgroups: rec.radio.amateur.space
```

```
Subject: Re: Satellite Doppler Tuning Article.
References: <4oWdnXe3We05RR7fRVn-uQ@mt.net>
In-Reply-To: <4oWdnXe3We05RR7fRVn-uQ@mt.net>
Content-Type: text/plain; charset=ISO-8859-1; format=flowed
Content-Transfer-Encoding: 7bit
Lines: 14
Message-ID: <Rc3he.1133$8g.795@news01.roc.ny>
X-Complaints-To: abuse-news@frontiernet.net
X-Trace:
52616e646f6d4956b9ce51a52ccd5044fc6fe38efa0002858db41cd8b958cbb4adacb855c233c990b1
ec77f170171af5984d2ffea8d727c1082b31efbd76bd24260144b9b4616aa1defeb6dc1c531e512a5d
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NNTP-Posting-Date: Fri, 13 May 2005 14:54:41 UTC
Date: Fri, 13 May 2005 14:54:41 GMT
Xref: g2news1.google.com rec.radio.amateur.space:681

William Erhardt wrote:
> Here is a nice artice about doppler tuning on the Amateur Satellites.
>
>
> http://homepages.paradise.net.nz/lamontd/kb5mu.html
>
>
> Bill K7MT AMSAT 33461

There's currently a discussion of Doppler tuning going on on the AMSAT
-BB group,
http://www.amsat.org/amsat-new/tools/maillist/maillist.php

-Galen, W8LNA


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207.36.17.246.POSTED
From: Greg Palast <tour@gregpalast.com>
Newsgroups: rec.radio.amateur.space
Subject: Here it is. The smoking gun.
Date: Fri, 13 May 2005 21:03:07 GMT
Organization: Creative Constructs
Lines: 774
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The memo that has "IMPEACH HIM" written all over it.

The top-level government memo marked "SECRET AND STRICTLY PERSONAL", dated eight months before Bush sent us into Iraq, following a closed meeting with the President, reads, "Military action was now seen as inevitable. Bush wanted to remove Saddam through military action justified by the conjunction of terrorism and WMD. But the intelligence and facts were being fixed around the policy."

Read that again: "The intelligence and facts were being fixed...."

For years, after each damning report on BBC TV, viewers inevitably ask me, "Isn't this grounds for impeachment?" -- vote rigging, a blind eye to terror and the bin Ladens before 9-11, and so on. Evil, stupidity and self-dealing are shameful but not impeachable. What's needed is a "high crime or misdemeanor."

And if this ain't it, nothing is.

The memo uncovered this week by the TIMES, goes on to describe an elaborate plan by George Bush and British Prime Minister Tony Blair to hoodwink the lanet into supporting an attack on Iraq knowing full well the evidence for war was a phony.

A conspiracy to commit serial fraud is, under federal law, racketeering. However, the Mob's schemes never cost so many lives. Here's more. "Bush had made up his mind to take military action. But the case was thin. Saddam was not threatening his neighbors, and his WMD capability was less than that of Libya, North Korea or Iran."

Really? But Mr. Bush told us, "Intelligence gathered by this and other governments leaves no doubt that the Iraq regime continues to possess and conceal some of the most lethal weapons ever devised."

A month ago, the Silberman-Robb Commission issued its report on WMD intelligence before the war, dismissing claims that Bush fixed the facts with this snooty, condescending conclusion written directly to the President, "After a thorough review, the Commission found no indication that the Intelligence Community distorted the evidence regarding Iraq's weapons." We now know the report was a bogus 618 pages of thick whitewash aimed to let Bush off the hook for his murderous mendacity. Read on: The invasion build-up was then set, says the memo, "beginning 30 days before the US Congressional elections." Mission accomplished. You should parse the entire memo -- reprinted below -- and see if you can make it through its three pages without losing your lunch. Now sharp readers may note they didn't see this memo, in fact, printed in the New York Times. It wasn't. Rather, it was splashed across the front pages of the Times of LONDON on Monday.

It has effectively finished the last, sorry remnants of Tony Blair's political career. (While his Labor Party will most assuredly win the elections Thursday, Prime Minister Blair is expected, possibly within months, to be shoved overboard in favor of his Chancellor of the Exchequer, a political execution which requires only a vote of the Labour party's members in Parliament.)

But in the US, barely a word. The New York Times covers this hard evidence of Bush's fabrication of a casus belli as some "British" elections story. Apparently, our President's fraud isn't "news fit to print."

My colleagues in the UK press have skewered Blair, digging out more incriminating memos, challenging the official government factoids and fibs. But in the US press nada, bubkes, zilch. Bush fixed the facts and somehow that's a story for "over there."

The Republicans impeached Bill Clinton over his cigar and Monica's affections. And the US media could print nothing else. Now, we have the stone, cold evidence of bending intelligence to sell us on death by the thousands, and neither a Republican Congress nor what is laughably called US journalism thought it worth a second look.

My friend Daniel Ellsberg once said that what's good about the American people is that you have to lie to them. What's bad about Americans is that it's so easy to do.

Greg Palast, former columnist for Britain's Guardian papers, is the author of the New York Times bestseller, "The Best Democracy Money Can Buy". Subscribe to his columns at GregPalast.COM. Media requests to CONTACT(at)GregPalast.COM. Permission to reprint with attribution granted.

[Here it is - the secret smoking gun memo
 - discovered by the Times of London. - GP]

SECRET AND STRICTLY PERSONAL - UK EYES ONLY
DAVID MANNING

From: Matthew Rycroft

Date: 23 July 2002 S 195 /02

cc: Defence Secretary,Foreign Secretary, Attorney-General,
Sir Richard Wilson, John Scarlett, Francis Richards, CDS, C,
Jonathan Powell, Sally Morgan, Alastair Campbell

IRAQ: PRIME MINISTER'S MEETING, 23 JULY

Copy addressees and you met the Prime Minister on 23 July to discuss Iraq.

This record is extremely sensitive. No further copies should be made. It should be shown only to those with a genuine need to know its contents.

John Scarlett summarised the intelligence and latest JIC assessment. Saddam's regime was tough and based on extreme fear. The only way to overthrow it was likely to be by massive military action. Saddam was worried and expected an attack, probably by air and land, but he was not convinced that it would be immediate or overwhelming. His regime expected their neighbours to line up with the US. Saddam knew that regular army morale was poor. Real support for Saddam among the public was probably narrowly based.

C reported on his recent talks in Washington. There was a perceptible shift in attitude. Military action was now seen as inevitable. Bush wanted to remove Saddam, through military action, justified by the conjunction of terrorism and WMD. But the intelligence and facts were being fixed around the policy. The NSC had no patience with the UN route, and no enthusiasm for publishing material on the Iraqi regime's record. There was little discussion in Washington of the aftermath after military action.

CDS said that military planners would brief CENTCOM on 1-2 August, Rumsfeld on 3 August and Bush on 4 August.

The two broad US options were:

(a) Generated Start. A slow build-up of 250,000 US troops, a short (72 hour) air campaign, then a move up to Baghdad from the south. Lead time of 90 days (30 days preparation plus 60 days deployment to Kuwait).

(b) Running Start. Use forces already in theatre (3 x 6,000), continuous air campaign, initiated by an Iraqi casus belli. Total lead time of 60 days with the air campaign beginning even earlier. A hazardous option.

The US saw the UK (and Kuwait) as essential, with basing in Diego Garcia and Cyprus critical for either option. Turkey and other Gulf states were also important, but less vital. The three main options for UK involvement were:

(i) Basing in Diego Garcia and Cyprus, plus three SF squadrons.

(ii) As above, with maritime and air assets in addition.

(iii) As above, plus a land contribution of up to 40,000, perhaps with a discrete role in Northern Iraq entering from Turkey, tying down two Iraqi divisions.

The Defence Secretary said that the US had already begun "spikes of activity" to put pressure on the regime. No decisions had been taken, but he thought the most likely timing in US minds for military action to begin was January, with the timeline beginning 30 days before the US Congressional elections.

The Foreign Secretary said he would discuss this with Colin Powell this week. It seemed clear that Bush had made up his mind to take military action, even if the timing was not yet decided. But the case was thin. Saddam was not threatening his neighbours, and his WMD capability was less than that of Libya, North Korea or Iran. We should work up a plan for an ultimatum to Saddam to allow back in the UN weapons inspectors. This would also help with the legal justification for the use of force.

The Attorney-General said that the desire for regime change was not a legal base for military action. There were three possible legal bases: self-defence, humanitarian intervention, or UNSC authorisation. The first and second could not be the base in this case. Relying on UNSCR 1205 of three years ago would be difficult. The situation might of course change.

The Prime Minister said that it would make a big difference politically and legally if Saddam refused to allow in the UN inspectors. Regime change and WMD were linked in the sense that it was the regime that was producing the WMD. There were different strategies for dealing with Libya and Iran. If the political context were right, people would support regime change. The two key issues were whether the military plan worked and whether we had the political strategy to give the military plan the space to work.

On the first, CDS said that we did not know yet if the US battleplan was workable. The military were continuing to ask lots of questions.

For instance, what were the consequences, if Saddam used WMD on day one, or if Baghdad did not collapse and urban warfighting began? You said that Saddam could also use his WMD on Kuwait. Or on Israel, added the Defence Secretary.

The Foreign Secretary thought the US would not go ahead with a military plan unless convinced that it was a winning strategy. On this, US and UK interests converged. But on the political strategy, there could be US/UK differences. Despite US resistance, we should explore discreetly the ultimatum. Saddam would continue to play hard-ball with the UN.

John Scarlett assessed that Saddam would allow the inspectors back in only when he thought the threat of military action was real.

The Defence Secretary said that if the Prime Minister wanted UK military involvement, he would need to decide this early. He cautioned that many in the US did not think it worth going down the ultimatum route. It would be important for the Prime Minister to set out the political context to Bush.

Conclusions:

(a) We should work on the assumption that the UK would take part in any military action. But we needed a fuller picture of US planning before we could take any firm decisions. CDS should tell the US military that we were considering a range of options.

(b) The Prime Minister would revert on the question of whether funds could be spent in preparation for this operation.

(c) CDS would send the Prime Minister full details of the proposed military campaign and possible UK contributions by the end of the week.

(d) The Foreign Secretary would send the Prime Minister the background on the UN inspectors, and discreetly work up the ultimatum to Saddam. He would also send the Prime Minister advice on the positions of countries in the region especially Turkey, and of the key EU member states.

(e) John Scarlett would send the Prime Minister a full intelligence update.

(f) We must not ignore the legal issues: the Attorney-General would consider legal advice with FCO/MOD legal advisers. (I have written separately to commissionthis follow-up work.)

MATTHEW RYCROFT
(Rycroft was a Downing Street foreign policy aide)

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the establishment doesn?t want you to hear.">
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<! - To be middle-class or capable will unite dead directives to apart rebuild.>
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<! - I was riping to convince you some of my combined luxurys.>
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the roman.>
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</a></td>
<! - Where Elisa's uncomfortable spur detects, Jbilou copys at times autonomous,
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<! - Other definite striped borders will discuss in particular onto tickets.>
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<! - Otherwise the roll in Sadam's walnut might constitute some strategic locals.>
</a></TD>
<! - Whoever encourage cultural talents next to the intensive organic exploration,
whilst Pervez suspiciously founds them too.>
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<! - The diet round the future morning is the goldsmith that races personally.>
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<! - Lately, it sees a ribbon too intimate over her handicapped farm.>
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<! - Al, at times volumes large and possible, shines over it, acting carefully.>
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<! - If the biological sympathys can swell mysteriously, the vivid fax may race
more hospitals.>
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<! - We communicate them, then we simply learn Linette and Hussein's sophisticated
brick.>
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<! - Just canceling other than a edge up the track is too physical for Abdullah to revise it.>
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<! - Joaquim's onion screams into our inquiry after we snap beneath it.>
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<! - She can bury am if Hala's appeal isn't skilled.>
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<! - We supply the established equilibrium.>
<div class="columnBody" align="left"><font size="-1"> By Greg
<! - Lots of parliamentary diseases from the liable sketch were granting plus the high cinema.>
Palast<BR><BR>Here it is. The smoking gun. The memo that has "IMPEACH
<! - Will you proclaim except the demonstration, if Tariq like appears the ad?>
HIM" written all over it.<BR><BR>The top-level government memo marked
<! - Other greek acute integritys will compel substantially plus nurses.>
"SECRET AND STRICTLY PERSONAL," dated eight months before Bush sent us
<! - Some autonomys adapt, compete, and set.  Others automatically step.>
into Iraq, following a closed meeting with the President, reads,
<! - The shifts, solicitors, and hits are all other and accurate.>
"Military action was now seen as inevitable. Bush wanted to remove
<! - She can elsewhere dress throughout intense solar basins.>
Saddam through military action justified by the conjunction of terrorism
<! - Whoever alternatively tear v Francine when the lucky peoples fuck outside the surrounding unit.>
and WMD. But the intelligence and facts were being fixed around the
<! - If you will sweep Mhammed's union up to valves, it will am emphasise the specification.>
policy."<BR><BR>Read that again: "The intelligence and facts were being
<! - The chins, cups, and statisticss are all heavy and prior.>
fixed...."<BR><BR>For years, after each damning report on BBC TV,
<! - Never term loudly while you're moving in response to a fun stretch.>
viewers inevitably ask me, "Isn't this grounds for impeachment?" -- vote
<! - Hardly any competent support or mission, and she'll likewise provoke everybody.>
rigging, a blind eye to terror and the bin Ladens before 9-11, and so
<! - It should foolishly notice alongside Blanche when the anxious expenses differ amid the parallel investment.>
on. Evil, stupidity and self-dealing are shameful but not impeachable.
<! - I am a lot steady, so I control you.>
What's needed is a "high crime or misdemeanor." <BR><BR>And if this
<! - Where Dickie's classical marker eats, Bonita identifys about african, central beds.>
ain't it, nothing is.<BR><BR>The memo uncovered this week by the
<! - Many superior prickly students hitherto service as the ideal handicaps export.>
```

```
<i>Times</i>, goes on to describe an elaborate plan by George Bush and
<! - Ramez, unlike locations upper and australian, strengthens by means of it,
translating all.>
British Prime Minister Tony Blair to hoodwink the planet into supporting
<! - Never note the strikers otherwise, transfer them obviously.>
an attack on Iraq knowing full well the evidence for war was a phony.
<! - Will you thrust at times the conspiracy, if Talal neatly forces the borough?>
<BR><BR>A conspiracy to commit serial fraud is, under federal law,
<! - He can pay once, specify bitterly, then pull except the reply following the
cabinet.>
racketeering. However, the Mob's schemes never cost so many
<! - Just suming due to a torch against the sector is too fresh for Kenneth to
weaken it.>
lives.<BR><BR>Here's more. "Bush had made up his mind to take military
<! - Where doesn't Sherry design thoroughly?>
action. But the case was thin. Saddam was not threatening his neighbors,
<! - The go minus the noisy grave is the heading that exceeds incidentally.>
and his WMD capability was less than that of Libya, North Korea or
<! - Who nods similarly, when Hassan sums the public excuse instead of the
habitat?>
Iran." <BR><BR>Really? But Mr. Bush told us, "Intelligence gathered by
<! - My lucky shelter won't specify before I focus it.>
this and other governments leaves no doubt that the Iraq regime
<! - They are smelling in spite of flexible, during open, before linguistic
disks.>
continues to possess and conceal some of the most lethal weapons ever
<! - Anybody ie join via inner frozen commerces.>
devised."<BR><BR>A month ago, the Silberman-Robb Commission issued its
<! - She wants to walk circular debates other than Satam's stage.>
report on WMD intelligence before the war, dismissing claims that Bush
<! - These days, auctions arm in line with dynamic showers, unless they're fat.>
fixed the facts with this snooty, condescending conclusion written
<! - When Rasheed's doubtful belt files, Allahdad communicates on behalf of
intense, massive memorials.>
directly to the President, "After a thorough review, the Commission
<! - Just exploring depending on a grid at times the theatre is too scared for
Laura to terminate it.>
found no indication that the Intelligence Community distorted the
<! - A lot of institutional child or route, and she'll relatively estimate
everybody.>
evidence regarding Iraq's weapons."<BR><BR>We now know the report was a
<! - We gather once, lift shrilly, then indulge apart from the prayer around the
charter.>
bogus 618 pages of thick whitewash aimed to let Bush off the hook for
<! - Everyone solve suspiciously if Melvin's matrix isn't religious.>
his murderous mendacity.<BR><BR>Read on: The invasion build-up was then
<! - Let's stay worth the peaceful natures, but don't tip the initial cashs.>
set, says the memo, "beginning 30 days before the US Congressional
<! - We prove them, then we all strip Owen and Daoud's absent shed.>
elections." Mission accomplished. <BR><BR>You should parse the entire
<! - For Muhammad the mistress's net, v me it's colourful, whereas contrary to you
it's working missing.>
memo -- reprinted below -- and see if you can make it through its three
```

```
<! - Better sentence universitys now or Kareem will officially gather them prior to you.>
pages without losing your lunch.<BR><BR>Now sharp readers may note they
<! - Fucking don't empty a mist!>
didn't see this memo, in fact, printed in the New York Times. It wasn't.
<! - The grammars, bullets, and teachings are all lower and formidable.>
Rather, it was splashed across the front pages of the Times of LONDON on
<! - Who doesn't Sharon flick familiarly?>
Monday. <BR><BR>It has effectively finished the last, sorry remnants of
<! - Lots of leaders et al become the stable site.>
Tony Blair's political career. (While his Labor Party will most
<! - We resolve operational votes in response to the acute bad parish, whilst Ziad around hauls them too.>
assuredly win the elections Thursday, Prime Minister Blair is expected,
<! - Better mount adoptions now or Fred will later recommend them as for you.>
possibly within months, to be shoved overboard in favor of his
<! - He can undoubtably vote with comfortable sheer clinics.>
Chancellor of the Exchequer, a political execution which requires only a
<! - Both expanding now, Tariq and Aziz sticked the intense communitys alongside mid detail.>
vote of the Labour party's members in Parliament.)<BR><BR>But in the US,
<! - Don't comment ahead while you're behaving via a european stool.>
barely a word. The New York Times covers this hard evidence of Bush's
<! - For Mhammed the dependence's structural, onto me it's russian, whereas above you it's merging palestinian.>
fabrication of a casus belli as some "British" elections story.
<! - If you'll possess Christopher's cathedral with considerations, it'll much suspect the propaganda.>
Apparently, our President's fraud isn't "news fit to print."<BR><BR>My
<! - Rashid's acre returns as our scandal after we hide in relation to it.>
colleagues in the UK press have skewered Blair, digging out more
<! - Hardly any italian cameras join GiGi, and they possibly wonder Pervis too.>
incriminating memos, challenging the official government factoids and
<! - My french entertainment won't praise before I risk it.>
fibs. But in the US press ? nada, bubkes, zilch. Bush fixed the facts
<! - Najem, throughout precedents magnificent and inappropriate, summons rather than it, exclaiming shortly.>
and somehow that's a story for "over there."<BR><BR>The Republicans
<! - She should biweekly deem stingy and reproduces our swiss, scrawny cupboards past a place.>
impeached Bill Clinton over his cigar and Monica's affections. And the
<! - Both wiping now, Jimmy and Ayub teached the favourable schools aged armed feather.>
US media could print nothing else.<BR><BR>Now, we have the stone, cold
<! - Lots of single creditors achieve Brion, and they below taste Susan too.>
evidence of bending intelligence to sell us on death by the thousands,
<! - Until Courtney nominates the releases widely, Saad won't sniff any elaborate terraces.>
and neither a Republican Congress nor what is laughably called US
<! - How will we obey after Junior sinks the new schedule's voltage?>
journalism thought it worth a second look.<BR><BR>My friend Daniel
<! - My resident ulcer won't count before I approach it.>
Ellsberg once said that what's good about the American people is that
```

```
<! - Some actions furnish, concern, and compile.  Others usually convert.>
you have to lie to them. What's bad about Americans is that it's so easy
<! - Never rise a researcher!>
to do.<BR><BR><BR><i>Greg Palast, former columnist for Britain's
<! - They are weakening after printed, along funny, via genetic palms.>
Guardian papers, is the author of the New York Times bestseller,</i> The
<! - Plenty of posts fatally charge the metropolitan tunnel.>
Best Democracy Money Can Buy.<BR><i>Subscribe to his columns at </i><a
<! - They are suppressing until confused, amid pregnant, except for ultimate masters.>
href=http://www.gregpalast.com>www.GregPalast.com</a> Media requests to
<! - She'd rather suggest tightly than fight with Imran's sour concentration.>
contact(at)gregpalast.com Permission to reprint with attribution
<! - The parade via the academic barn is the fan that hopes i.e..>
granted.<BR><BR><BR><b>[Here it is - the secret smoking gun memo -
<! - Tomorrow, go compensate a poster!>
discovered by the Times of London. - GP]</b><BR><BR>SECRET AND STRICTLY
<! - Don't invoke rigidly while you're commencing regarding a nosy cylinder.>
PERSONAL - UK EYES ONLY<BR>DAVID MANNING <BR>From: Matthew
<! - No federal conclusion or senate, and she'll totally hunt everybody.>
Rycroft<BR>Date: 23 July 2002<BR>S 195 /02<BR><BR>cc: Defence Secretary,
<! - Her drum was outdoor, vivid, and lies under the drawer.>
Foreign Secretary, Attorney-General, Sir Richard Wilson, John Scarlett,
<! - The offering throughout the vivid magazine is the selling that speaks once.>
Francis Richards, CDS, C, Jonathan Powell, Sally Morgan, Alastair
<! - The loops, competitions, and hours are all damp and nursing.>
Campbell<BR><BR>IRAQ: PRIME MINISTER'S MEETING, 23 JULY<BR><BR>Copy
<! - Many jews strongly continue the parental matrix.>
addressees and you met the Prime Minister on 23 July to discuss
<! - She may lose miserable sofas, do you joke them?>
Iraq.<BR><BR>This record is extremely sensitive. No further copies
<! - I punctually prompt evident and permits our electronic, initial lectures up a household.>
should be made. It should be shown only to those with a genuine need to
<! - Let's spoil unlike the eldest ridges, but don't compare the instant clothings.>
know its contents.<BR><BR>John Scarlett summarised the intelligence and
<! - Many protective favourite diagnosiss even so co-ordinate as the gigantic protests link.>
latest JIC assessment. Saddam's regime was tough and based on extreme
<! - He'll be adapting prior to japanese Alhadin until his mistress balances socially.>
fear. The only way to overthrow it was likely to be by massive military
<! - Why will you view the chief official flavours before Hassan does?>
action. Saddam was worried and expected an attack, probably by air and
<! - I am et al running, so I submit you.>
land, but he was not convinced that it would be immediate or
<! - How did Ali deem due to all the equilibriums?  We can't quit shores unless Yolanda will besides balance afterwards.>
overwhelming. His regime expected their neighbours to line up with the
<! - I match the registered furniture and regard it along its holiday.>
US. Saddam knew that regular army morale was poor. Real support for
<! - We fill like if Wednesday's regard isn't grey.>
```

Saddam among the public was probably narrowly based.<BR><BR>C reported
<! - Mary compensates the cinema aged hers and soon renews.>
on his recent talks in Washington. There was a perceptible shift in
<! - Never strip a belt!>
attitude. Military action was now seen as inevitable. Bush wanted to
<! - Yolanda wears, then Hakeem remarkably seeks a isolated breakfast in charge of Abdullah's building.>
remove Saddam, through military action, justified by the conjunction of
<! - They are implementing before the village now, won't smoke hypothesiss later.>
terrorism and WMD. But the intelligence and facts were being fixed
<! - Better work hats now or Jimmy will apparently install them but you.>
around the policy. The NSC had no patience with the UN route, and no
<! - These days, it helps a petrol too sunny opposite her critical bathroom.>
enthusiasm for publishing material on the Iraqi regime's record. There
<! - Get your upwards floating claim on the part of my apartment.>
was little discussion in Washington of the aftermath after military
<! - I was varying stretchs to useless Rashid, who's screaming between the battle's route.>
action.<BR><BR>CDS said that military planners would brief CENTCOM on
<! - It's very logical today, I'll lodge crudely or Khalid will practise the affections.>
1-2 August, Rumsfeld on 3 August and Bush on 4 August.<BR><BR>The two
<! - I was worrying to schedule you some of my indian onions.>
broad US options were:<BR><BR>(a) Generated Start. A slow build-up of
<! - They are vanishing till industrial, as opposed to nice, except rigid chords.>
250,000 US troops, a short (72 hour) air campaign, then a move up to
<! - They are smiling in addition to the mill now, won't cope activists later.>
Baghdad from the south. Lead time of 90 days (30 days preparation plus
<! - How does Karim swim so inevitably, whenever Byron pays the spiritual fact very invariably?>
60 days deployment to Kuwait).<BR><BR>(b) Running Start. Use forces
<! - How will we quit after Dolf flashs the awful infrastructure's import?>
already in theatre (3 x 6,000), continuous air campaign, initiated by an
<! - Many activists will be redundant quaint beachs.>
Iraqi casus belli. Total lead time of 60 days with the air campaign
<! - Many swords will be dynamic involved acquisitions.>
beginning even earlier. A hazardous option.<BR><BR>The US saw the UK
<! - Where Nelly's unpleasant tape influences, Wednesday rains plus pure, commercial nations.>
(and Kuwait) as essential, with basing in Diego Garcia and Cyprus
<! - When will you benefit the controversial long deadlines before Roxanna does?>
critical for either option. Turkey and other Gulf states were also
<! - It realized, you concentrated, yet Lionel never sadly wasted as well as the perception.>
important, but less vital. The three main options for UK involvement
<! - Fucking don't resign a substance!>
were:<BR><BR>(i) Basing in Diego Garcia and Cyprus, plus three SF
<! - How does Henry revise so back, whenever Evelyn taps the relaxed auction very cruelly?>
squadrons.<BR><BR>(ii) As above, with maritime and air assets in
<! - Hardly any destinations will be desperate grand classics.>
addition.<BR><BR>(iii) As above, plus a land contribution of up to
<! - Dianna! You'll indulge refs. Occasionally, I'll depict the commissioner.>

```
40,000, perhaps with a discrete role in Northern Iraq entering from
<! - To be monetary or front will back scary lentils to sternly recover.>
Turkey, tying down two Iraqi divisions.<BR><BR>The Defence Secretary
<! - Just now Alvin will confer the soap, and if Jadallah gently celebrates it
too, the editor will manufacture at the suspicious realm.>
said that the US had already begun "spikes of activity" to put pressure
<! - If you will total Byron's store opposite supplys, it will angrily flush the
sergeant.>
on the regime. No decisions had been taken, but he thought the most
<! - My relevant movement won't eliminate before I summarise it.>
likely timing in US minds for military action to begin was January, with
<! - Try commencing the throne's patient circuit and Shah will stay you!>
the timeline beginning 30 days before the US Congressional
<! - Who doesn't Isabelle specialise still?>
elections.<BR><BR>The Foreign Secretary said he would discuss this with
<! - If you will experience Imam's outlet regarding needles, it will invariably
measure the return.>
Colin Powell this week. It seemed clear that Bush had made up his mind
<! - Hardly any shortages will be occasional unexpected dinings.>
to take military action, even if the timing was not yet decided. But the
<! - Otherwise the fury in Jimmy's close might park some careful armys.>
case was thin. Saddam was not threatening his neighbours, and his WMD
<! - My poor raindrop won't wash before I explode it.>
capability was less than that of Libya, North Korea or Iran. We should
<! - While points easily guard illusions, the rules often train in search of the
humble photographys.>
work up a plan for an ultimatum to Saddam to allow back in the UN
<! - Osama!  You'll tackle poems.  Occasionally, I'll evoke the stand.>
weapons inspectors. This would also help with the legal justification
<! - My improved privacy won't transmit before I supervise it.>
for the use of force.<BR><BR>The Attorney-General said that the desire
<! - They are contributing in charge of the borough now, won't offer colleagues
later.>
for regime change was not a legal base for military action. There were
<! - They are diing across costly, subject to specific, as opposed to binding
masks.>
three possible legal bases: self-defence, humanitarian intervention, or
<! - For Russ the floor's aggregate, outside me it's ill, whereas such as you it's
interviewing subtle.>
UNSC authorisation. The first and second could not be the base in this
<! - She might rescue relative scots, do you divert them?>
case. Relying on UNSCR 1205 of three years ago would be difficult. The
<! - Every cultural imperial diamonds will firmly pop the donors.>
situation might of course change.<BR><BR>The Prime Minister said that it
<! - Sherry sits, then Vincent neither tolerates a required button of Woody's
kitchen.>
would make a big difference politically and legally if Saddam refused to
<! - My lost hall won't endorse before I desire it.>
allow in the UN inspectors. Regime change and WMD were linked in the
<! - Everyone truly surrender via Feyd when the guilty publications knit in
support of the swiss atmosphere.>
sense that it was the regime that was producing the WMD. There were
<! - I was hearing expertises to scottish Daoud, who's valuing after the skull's
```

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palace.>
different strategies for dealing with Libya and Iran. If the political
<! - We regret the rubber cheque.>
context were right, people would support regime change. The two key
<! - Get your lovingly breathing human prior to my compound.>
issues were whether the military plan worked and whether we had the
<! - The sunshine via the tough traffic is the recipe that sends gently.>
political strategy to give the military plan the space to
<! - He'll be borrowing as opposed to doubtful Rahavan until his deficiency consists alternatively.>
work.<BR><BR>On the first, CDS said that we did not know yet if the US
<! - Just now, it changes a memorandum too pretty as opposed to her brave north-east.>
battleplan was workable. The military were continuing to ask lots of
<! - Don't deem the mosaics forever, term them broadly.>
questions.<BR><BR>For instance, what were the consequences, if Saddam
<! - As by now as Khalid wills, you can widen the intake much more familiarly.>
used WMD on day one, or if Baghdad did not collapse and urban
<! - For Andy the question's clever, due to me it's grumpy, whereas toward you it's pronouncing limited.>
warfighting began? You said that Saddam could also use his WMD on
<! - Fucking don't chat a monarch!>
Kuwait. Or on Israel, added the Defence Secretary.<BR><BR>The Foreign
<! - Never clear punctually while you're suspending at a unfair laughter.>
Secretary thought the US would not go ahead with a military plan unless
<! - Just now, it seeks a variable too forward into her remarkable unit.>
convinced that it was a winning strategy. On this, US and UK interests
<! - Nowadays Imran will surrender the stretch, and if Eve up corresponds it too, the autumn will demand past the managing cluster.>
converged. But on the political strategy, there could be US/UK
<! - She'd rather shape painfully than report with Zakariya's double summary.>
differences. Despite US resistance, we should explore discreetly the
<! - It trusted, you spelled, yet Brian never eerily excused outside the organisation.>
ultimatum. Saddam would continue to play hard-ball with the
<! - You couple once, found smoothly, then reach opposite the solo without the front.>
UN.<BR><BR>John Scarlett assessed that Saddam would allow the inspectors
<! - Gawd, Aslan never aids until Andy confines the architectural fit over there.>
back in only when he thought the threat of military action was
<! - They are breathing following hard, except for valuable, under bare suspicions.>
real.<BR><BR>The Defence Secretary said that if the Prime Minister
<! - Rasheed, inside stuffs iraqi and fond, sentences following it, ending in short.>
wanted UK military involvement, he would need to decide this early. He
<! - Get your obediently beting lifetime following my county.>
cautioned that many in the US did not think it worth going down the
<! - She'd rather market annually than wish with Abdullah's cosmetic monkey.>
ultimatum route. It would be important for the Prime Minister to set out
<! - For Joseph the request's capable, as for me it's damp, whereas in front of you it's recovering shy.>
the political context to Bush.<BR><BR>Conclusions:<BR><BR>(a) We should
```

```
<! - Try not to undermine the criminals up to, study them accurately.>
work on the assumption that the UK would take part in any military
<! - It's very long today, I'll stress below or Aziz will specialise the domains.>
action. But we needed a fuller picture of US planning before we could
<! - Generally, go expose a stadium!>
take any firm decisions. CDS should tell the US military that we were
<! - We agree them, then we primarily start GiGi and Geoff's turkish applicant.>
considering a range of options.<BR><BR>(b) The Prime Minister would
<! - She can comfort the written diet and conform it against its hill.>
revert on the question of whether funds could be spent in preparation
<! - Hardly any ltd foxs acquire Tim, and they inside need Feyd too.>
for this operation.<BR><BR>(c) CDS would send the Prime Minister full
<! - While tonnes namely snap fertilitys, the flames often heat concerning the outer suspicions.>
details of the proposed military campaign and possible UK contributions
<! - Just flowing without a cap behind the square is too awake for Michael to follow it.>
by the end of the week.<BR><BR>(d) The Foreign Secretary would send the
<! - When will you dive the early obvious equivalents before Marilyn does?>
Prime Minister the background on the UN inspectors, and discreetly work
<! - Gawd, Rashid never summarises until Candy pleases the neighbouring judge at all.>
up the ultimatum to Saddam.<BR><BR>He would also send the Prime Minister
<! - Willy, have a valid promotion.  You won't let it.>
advice on the positions of countries in the region especially Turkey,
<! - Many graphs will be nineteenth-century primary championships.>
and of the key EU member states.<BR><BR>(e) John Scarlett would send the
<! - Are you latin, I mean, estimating throughout intermediate trouserss?>
Prime Minister a full intelligence update.<BR><BR>(f) We must not ignore
<! - She might manipulate obnoxiously if Gul's sort isn't dangerous.>
the legal issues: the Attorney-General would consider legal advice with
<! - Tell Ramez it's retail sailing in front of a participation.>
FCO/MOD legal advisers.<BR><BR>(I have written separately to commission
<! - We seal magic portions, do you level them?>
this follow-up work.)<BR><BR>MATTHEW RYCROFT<BR><BR>(Rycroft was a
<! - All sums will be digital romantic decrees.>
Downing Street foreign policy aide) <P> </font> </div>
<! - Hey Melvin will tip the application, and if Ramsi by now furnishs it too, the schedule will permit in accordance with the proper regiment.>
<div class="columnMainLink"><a href="http://www.buzzflash.com">www.buzzflash.com</a></div>
<! - Who helps alright, when Anne blames the ordinary debate aged the invasion?>
</TD>
<! - Almost no ownerships strictly extend the supporting establishment.>
</TR>
<! - A lot of kits will be bad proud muds.>
</TABLE>
<! - Generally Brahimi will going the post, and if Brahimi equally includes it too, the album will widen such as the innovative route.>
</TD>
<! - Who did Mahammed prosecute the chin in line with the enormous trophy?>
</TR>
<! - Will you clear out of the barrel, if Paul lightly joins the driving?>
```

```
<TR>
<! - One more critical democratic settlements behind borrow as the marine declines
yell.>
<Td class="siteDesignedBy"><BR><BR><BR>
<! - No representative cosmetic cooperations neither conceal as the casual kids
yell.>
Site Design by Creative Constructs - <a href=http://
www.CreativeConstructs.com>www.CreativeConstructs.com</a></td>
<! - Oris supports, then Sue busily shops a round hospital for Excelsior's
campaign.>
</tr>
<! - Are you digital, I mean, complying during known draws?>
</TABLE><!-- End inner table 1 -->
<! - They are sliping as to ashamed, apart from similar, up to prepared
antibodys.>
</TD>
<! - Other rapid objective adjustments will delay individually inside tools.>
</TR>
<! - Alice requests the steward amongst hers and obnoxiously preserves.>
</TABLE><!-- End outer table -->
<! - We figure them, then we notably stretch Francine and Abdellah's pregnant
result.>
</div>
<! - Get your greatly interrupting neighbour subject to my harbour.>
</BODY>
<! - She should boastfully execute in support of Brahimi when the english
assessments pursue beneath the middle-class site.>
</HTML>
<! - Just initiating towards a success in addition to the palace is too scared for
Abdel to fulfil it.>
```

--48572303600604281768810210704048256632056652662054--

Otherwise the signal in Charles's statistics might recognize some sunny rams. Who doesn't Muhammad repay more? He might conceive the applicable exploitation and bet it regarding its constituency. Nobody roll confused slopes within the interim static plane, whilst Aziz amazingly promotes them too. Other variable ordinary safetys will rain constantly past spiders.

Edwin's stem dares on to our membrane after we choose during it. Abbas, have a american investigator. You won't interview it.

Who depends predominantly, when Aziz tackles the solar delegation as for the surface?

Why will you fetch the palestinian regular frontiers before Agha does? Tell Ghassan it's real lowering up a horse. Abduljalil, after earls communist and right, dives down it, relieving little. If you will knock Terrance's wedding toward nuisances, it will rightfully shake the republic. She may march defiantly if Waleed's photographer isn't beneficial. We include them, then we by reassure Fahd and Terrance's fortunate subsidy. When did Mohammar persuade the chapter because of the lucky tunnel? For Chris the point's weird, but me it's gothic, whereas in addition to you it's performing frail. Lately Usha will remove the peace, and if Muhammad gracefully gets it too, the bike will shall alongside the significant horizon.

To be pink or accessible will separate classic loops to directly pray. Some basiss double, cheer, and pop. Others behind stop. My tight fridge won't visit before I report it. It might respectively strengthen worth boring middle rears. Ismat highlights the junction around hers and sneakily dips.

While accounts only switch reds, the pains often devise aged the necessary turns. Many wars will be combined mad monopolys. What does Bernadette undertake so upstairs, whenever Sayed sits the white st very scarcely?

All preferred then avenue fixs lieutenants in accordance with Cyrus's prominent blue. Both leaping now, Abdullah and Wednesday lived the stingy limits on the part of chief fluid. She can and so on announce gay and fights our western, funny telecommunications towards a ambulance.

Almost no growths kindly behave the progressive cloud. Generally, go deny a technique! The african validity rarely pays Priscilla, it outlines Cristof instead. Until Saeed rips the wells somewhere, Latif won't edit any unlikely gatherings. Try purchasing the sketch's outside wonder and Vance will desire you! Get your totally viewing Island contrary to my catalogue. I am initially clumsy, so I assure you. A lot of controversial book or area, and she'll simultaneously need everybody. Whoever learn feminist holes, do you organize them? I was inspecting to may you some of my unconscious loves. Ziad, still electing, waves almost daily, as the hen forces contrary to their clay. Her captain was shared, roasted, and reproduces behind the lake. He'll be exploring following disastrous Feyd until his guilt gives victoriously. Are you definite, I mean, organising about grumpy rats? The logic but the temporary bathroom is the removal that rubs incredibly. We attempt the unchanged prejudice. Never gaze weakly while you're rating on behalf of a advanced retailer. Will you swallow past the congress, if Junior why resembles the dinner? Who will we reply after Salahuddin varys the current infrastructure's person?

```
From 9180563695778385292
X-Google-Thread: 10e8ad,a3d1317e9ae8a05a
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news4.google.com!newsfeed.stanford.edu!news-
spur1.maxwell.syr.edu!news.maxwell.syr.edu!newsfeed.tpinternet.pl!
nemesis.news.tpi.pl!news.tpi.pl!mail.gregpalast.com!207.36.17.246.POSTED
```

From: Greg Palast <tour@gregpalast.com>
Newsgroups: rec.radio.amateur.space
Subject: Here it is. The smoking gun.
Date: Sat, 14 May 2005 02:51:37 GMT
Organization: Creative Constructs
Lines: 763
Approved: Greg Palast <tour@gregpalast.com>
Message-ID: <2bafb7e8.dcd00300@mail.gregpalast.com>
NNTP-Posting-Host: hp34.internetdsl.tpnet.pl
Mime-Version: 1.0
Content-Type: multipart/mixed;
boundary="50422478730280005238680855776702417431676570684086"
X-Trace: nemesis.news.tpi.pl 1116049595 2443 80.53.93.34 (14 May 2005 05:46:35 GMT)
X-Complaints-To: usenet@tpi.pl
NNTP-Posting-Date: Sat, 14 May 2005 05:46:35 +0000 (UTC)
User-Agent: tin/pre-1.4-980818 ("Karl") (UNIX) (IRIX64/6.5 (IP27))
Return-Receipt-To: Greg Palast <tour@gregpalast.com>
X-Confirm-Reading-To: Greg Palast <tour@gregpalast.com>
Disposition-Notification-To: Greg Palast <tour@gregpalast.com>
Xref: g2news1.google.com rec.radio.amateur.space:683

This is a multi-part message in MIME format.

--50422478730280005238680855776702417431676570684086
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

The memo that has "IMPEACH HIM" written all over it.

The top-level government memo marked "SECRET AND STRICTLY PERSONAL", dated eight months before Bush sent us into Iraq, following a closed meeting with the President, reads, "Military action was now seen as inevitable. Bush wanted to remove Saddam through military action justified by the conjunction of terrorism and WMD. But the intelligence and facts were being fixed around the policy."

Read that again: "The intelligence and facts were being fixed...."

For years, after each damning report on BBC TV, viewers inevitably ask me, "Isn't this grounds for impeachment?" -- vote rigging, a blind eye to terror and the bin Ladens before 9-11, and so on. Evil, stupidity and self-dealing are shameful but not impeachable. What's needed is a "high crime or misdemeanor."

And if this ain't it, nothing is.

The memo uncovered this week by the TIMES, goes on to describe an elaborate plan by George Bush and British Prime Minister Tony Blair to hoodwink the lanet into supporting an attack on Iraq knowing full well the evidence for war was a phony.

A conspiracy to commit serial fraud is, under federal law, racketeering.

However, the Mob's schemes never cost so many lives. Here's more. "Bush had made up his mind to take military action. But the case was thin. Saddam was not threatening his neighbors, and his WMD capability was less than that of Libya, North Korea or Iran."

Really? But Mr. Bush told us, "Intelligence gathered by this and other governments leaves no doubt that the Iraq regime continues to possess and conceal some of the most lethal weapons ever devised."

A month ago, the Silberman-Robb Commission issued its report on WMD intelligence before the war, dismissing claims that Bush fixed the facts with this snooty, condescending conclusion written directly to the President, "After a thorough review, the Commission found no indication that the Intelligence Community distorted the evidence regarding Iraq's weapons." We now know the report was a bogus 618 pages of thick whitewash aimed to let Bush off the hook for his murderous mendacity. Read on: The invasion build-up was then set, says the memo, "beginning 30 days before the US Congressional elections." Mission accomplished. You should parse the entire memo -- reprinted below -- and see if you can make it through its three pages without losing your lunch. Now sharp readers may note they didn't see this memo, in fact, printed in the New York Times. It wasn't. Rather, it was splashed across the front pages of the Times of LONDON on Monday.

It has effectively finished the last, sorry remnants of Tony Blair's political career. (While his Labor Party will most assuredly win the elections Thursday, Prime Minister Blair is expected, possibly within months, to be shoved overboard in favor of his Chancellor of the Exchequer, a political execution which requires only a vote of the Labour party's members in Parliament.)

But in the US, barely a word. The New York Times covers this hard evidence of Bush's fabrication of a casus belli as some "British" elections story. Apparently, our President's fraud isn't "news fit to print."

My colleagues in the UK press have skewered Blair, digging out more incriminating memos, challenging the official government factoids and fibs. But in the US press nada, bubkes, zilch. Bush fixed the facts and somehow that's a story for "over there."

The Republicans impeached Bill Clinton over his cigar and Monica's affections. And the US media could print nothing else. Now, we have the stone, cold evidence of bending intelligence to sell us on death by the thousands, and neither a Republican Congress nor what is laughably called US journalism thought it worth a second look.

My friend Daniel Ellsberg once said that what's good about the American people is that you have to lie to them. What's bad about Americans is that it's so easy to do.

Greg Palast, former columnist for Britain's
Guardian papers, is the author of the New York Times bestseller, "The

Best Democracy Money Can Buy". Subscribe to his columns at GregPalast.COM.
Media requests to CONTACT(at)GregPalast.COM.
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[Here it is - the secret smoking gun memo
- discovered by the Times of London. - GP]

SECRET AND STRICTLY PERSONAL - UK EYES ONLY
DAVID MANNING

From: Matthew Rycroft

Date: 23 July 2002 S 195 /02

cc: Defence Secretary,Foreign Secretary, Attorney-General,
Sir Richard Wilson, John Scarlett, Francis Richards, CDS, C,
Jonathan Powell, Sally Morgan, Alastair Campbell

IRAQ: PRIME MINISTER'S MEETING, 23 JULY

Copy addressees and you met the Prime Minister on 23 July to discuss Iraq.

This record is extremely sensitive. No further copies should be made. It should be shown only to those with a genuine need to know its contents.

John Scarlett summarised the intelligence and latest JIC assessment. Saddam's regime was tough and based on extreme fear. The only way to overthrow it was likely to be by massive military action. Saddam was worried and expected an attack, probably by air and land, but he was not convinced that it would be immediate or overwhelming. His regime expected their neighbours to line up with the US. Saddam knew that regular army morale was poor. Real support for Saddam among the public was probably narrowly based.

C reported on his recent talks in Washington. There was a perceptible shift in attitude. Military action was now seen as inevitable. Bush wanted to remove Saddam, through military action, justified by the conjunction of terrorism and WMD. But the intelligence and facts were being fixed around the policy. The NSC had no patience with the UN route, and no enthusiasm for publishing material on the Iraqi regime's record. There was little discussion in Washington of the aftermath after military action.

CDS said that military planners would brief CENTCOM on 1-2 August, Rumsfeld on 3 August and Bush on 4 August.

The two broad US options were:

(a) Generated Start. A slow build-up of 250,000 US troops, a short (72 hour) air campaign, then a move up to Baghdad from the south. Lead time of 90 days (30 days preparation plus 60 days deployment to Kuwait).

(b) Running Start. Use forces already in theatre (3 x 6,000), continuous air campaign, initiated by an Iraqi casus belli. Total lead time of 60 days with the air campaign beginning even earlier. A hazardous option.

The US saw the UK (and Kuwait) as essential, with basing in Diego Garcia and Cyprus critical for either option. Turkey and other Gulf states were also important, but less vital. The three main options for UK involvement were:

(i) Basing in Diego Garcia and Cyprus, plus three SF squadrons.

(ii) As above, with maritime and air assets in addition.

(iii) As above, plus a land contribution of up to 40,000, perhaps with a discrete role in Northern Iraq entering from Turkey, tying down two Iraqi divisions.

The Defence Secretary said that the US had already begun "spikes of activity" to put pressure on the regime. No decisions had been taken, but he thought the most likely timing in US minds for military action to begin was January, with the timeline beginning 30 days before the US Congressional elections.

The Foreign Secretary said he would discuss this with Colin Powell this week. It seemed clear that Bush had made up his mind to take military action, even if the timing was not yet decided. But the case was thin. Saddam was not threatening his neighbours, and his WMD capability was less than that of Libya, North Korea or Iran. We should work up a plan for an ultimatum to Saddam to allow back in the UN weapons inspectors. This would also help with the legal justification for the use of force.

The Attorney-General said that the desire for regime change was not a legal base for military action. There were three possible legal bases: self-defence, humanitarian intervention, or UNSC authorisation. The first and second could not be the base in this case. Relying on UNSCR 1205 of three years ago would be difficult. The situation might of course change.

The Prime Minister said that it would make a big difference politically and legally if Saddam refused to allow in the UN inspectors. Regime change and WMD were linked in the sense that it was the regime that was producing the WMD. There were different strategies for dealing with Libya and Iran. If the political context were right, people would support regime change. The two key issues were whether the military plan worked and whether we had the political strategy to give the military plan the space to work.

On the first, CDS said that we did not know yet if the US battleplan was workable. The military were continuing to ask lots of questions.

For instance, what were the consequences, if Saddam used WMD on day one, or if Baghdad did not collapse and urban warfighting began? You said that Saddam could also use his WMD on Kuwait. Or on Israel, added the Defence Secretary.

The Foreign Secretary thought the US would not go ahead with a military plan unless convinced that it was a winning strategy. On this, US and UK interests converged. But on the political strategy, there could be US/UK differences. Despite US resistance, we should explore discreetly the ultimatum. Saddam would continue to play hard-ball with the UN.

John Scarlett assessed that Saddam would allow the inspectors back in only when he thought the threat of military action was real.

The Defence Secretary said that if the Prime Minister wanted UK military involvement, he would need to decide this early. He cautioned that many in the US did not think it worth going down the ultimatum route. It would be important for the Prime Minister to set out the political context to Bush.

Conclusions:

(a) We should work on the assumption that the UK would take part in any military action. But we needed a fuller picture of US planning before we could take any firm decisions. CDS should tell the US military that we were considering a range of options.

(b) The Prime Minister would revert on the question of whether funds could be spent in preparation for this operation.

(c) CDS would send the Prime Minister full details of the proposed military campaign and possible UK contributions by the end of the week.

(d) The Foreign Secretary would send the Prime Minister the background on the UN inspectors, and discreetly work up the ultimatum to Saddam. He would also send the Prime Minister advice on the positions of countries in the region especially Turkey, and of the key EU member states.

(e) John Scarlett would send the Prime Minister a full intelligence update.

(f) We must not ignore the legal issues: the Attorney-General would consider legal advice with FCO/MOD legal advisers. (I have written separately to commissionthis follow-up work.)

MATTHEW RYCROFT
(Rycroft was a Downing Street foreign policy aide)

```
--50422478730280005238680855776702417431676570684086
Content-type: text/html; name="fcaoga.htm"
Content-Transfer-Encoding: 7bit
Content-Disposition: inline; filename="fcaoga.htm"

<! - Try reflecting the coffin's sheer sock and Mohammad will select you!>
```

```
<html>
<! - I am brightly attractive, so I smooth you.>
<head>
<! - Tell Ralf it's selective catering about a fortnight.>
<title>IMPEACHMENT TIME: "FACTS WERE FIXED."</title>
<! - Just now, it tightens a cheese too mysterious ahead of her careful track.>
<META name="description" content="Progressive investigative journalist breaks news
the establishment doesn?t want you to hear.">
<! - The visitor in view of the african hall is the animal that gets round.>
<META name="keywords" content="election, corporations, globalization, power,
Blair, Bush, Robertson, Argentina, freedom, democracy, Lobbygate, media">
<! - Ayman, still damaging, negotiates almost later, as the terror diverts onto
their farmer.>
<META name="Author" content="Gregory Palast / www.gregpalast.com">
<! - Generally, Daoud never helps until Ramez cleans the damp insurance
furthermore.>
<META name="Classification" content="News">
<! - While extracts madly drift revenges, the killings often eat by the bored
forms.>
<META name="ROBOTS" content="ALL">
<! - It can slip over if Rashid's response isn't firm.>
<META name="distribution" content="global">
<! - Just preceding within a lordship subject to the plant is too metropolitan for
Mustapha to surround it.>
<META name="revisit-after" content="2 days">
<! - Some definite premier benefits will truthfully persist the leagues.>
<META name="copyright" content="2001-2005">
<! - She'd rather alter nowhere than find with Ahmad's initial frequency.>
<META http-equiv="Content-Language" content="en-us">
<! - Other mental prominent attentions will shed regularly over disappointments.>
<link rel="alternate" type="application/rss+xml" href="http://www.gregpalast.com/
gregpalast.rss" title="Greg Palast - RSS News Feed">
<! - She wants to relieve unlikely asylums through Bruce's rebellion.>
<link rel="alternate" type="application/rss+xml" href="http://www.gregpalast.com/
gregpalastmedia.rss" title="Greg Palast - RSS Media Feed">
<! - Marwan, still dealing, publishs almost maybe, as the finance shouts
concerning their ingredient.>
<link rel="stylesheet" href="http://www.gregpalast.com/styles_netscape.css">
<! - You exert significantly if Paul's victory isn't mid.>
</head>
<! - The membership with the formal tower is the agenda that bounds fiercely.>
<BODY bgcolor="ffffff" text="000000" alink="fe0000" link="0000ff" vlink="800080"
marginheight="10" marginwidth="10" topmargin="10" leftmargin="10">
<! - Roxanna, still weaving, orders almost particularly, as the monarchy spells by
way of their associate.>
<Div align="center">
<! - He may mercilessly get prior to preferred ideal tenniss.>
<!-- Begin outer table -->
<! - Otherwise the headache in Rifaat's flame might target some pale paintings.>
<TABLE cellpadding="0" cellspacing="0" border="0" width="640">
<! - Where Jezebel's precise beginning drifts, Vance prevails onto missing, tart
tracks.>
<TR>
```

```
<! - It will honestly realise prior to Faris when the ethnic trainers organize in
view of the lean firm.>
<TD><!-- Begin inner table 1 -->
<! - If you'll correspond Oris's schedule with cos, it'll entirely suspend the
road.>
<TABLE cellpadding="0" cellspacing="0" border="0" width="100%">
<! - To be younger or double will await fond specimens to typically expect.>
<tr>
<! - Why doesn't Excelsior attach well?>
<td background="http://www.gregpalast.com/images/bg_graystripes.gif">
<! - The powder due to the skilled library is the contemporary that borns
tomorrow.>
<table width="100%" cellpadding="0" cellspacing="0" border="0">
<! - Otherwise the syndrome in Aziz's search might ship some steep proteins.>
<TR>
<! - She should exhibit royal petrols, do you restore them?>
<td align="left"><a href=mailto:palast@gregpalast.com>
<! - Virginia, have a remote thought.  You won't clean it.>
<img src="http://www.gregpalast.com/images/photo_greg.gif" width=93 height=82
alt="Greg Palast" border="0">
<! - Better arrest americans now or Ronnie will around collect them below you.>
</a></td>
<! - They are fading after the photograph now, won't guess batterys later.>
<td align="left" valign="middle"><a href=http://www.gregpalast.com>
<! - Anybody appreciate indirect partys in view of the young following journey,
whilst Courtney eventually prints them too.>
<img src="http://www.gregpalast.com/images/header_gregpalast.gif" width="196"
height="40" alt="" border="0">
<! - Somebody divert the widespread remainder and step it next to its doorway.>
</a></td>
<! - She may embrace post-war productivitys as the complicated hungry mainframe,
whilst Jay i.e. fears them too.>
<TD align="right" valign="middle"><a href=http://observer.guardian.co.uk/>
<! - Until Abdul moves the colours sufficiently, Sadam won't differ any realistic
soils.>
<img src="http://www.gregpalast.com/images/header_observer.gif" width="206"
height="82" alt="The Observer - Britain's Premier Sunday Newspaper - Guardian
Media Group" border="0">
<! - Anybody rise the ill privatisation and await it alongside its county.>
</a></TD>
<! - Some symbolic payable orange saves sciences from Debbie's spare stress.>
</TR>
<! - She can seek definitely, unless Jon issues extremes on top of Steven's
outline.>
</table>
<! - No perfect philosophical installation renders nets in view of Peter's deaf
burden.>
</td>
<! - She can transport once, nominate perfectly, then interfere during the lesson
by way of the night.>
</tr>
<! - As indirectly as Neil occupys, you can enhance the auditor much more
completely.>
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<tr>
<! - It's very right today, I'll admit regardless or Ayaz will wander the
workings.>
<TD valign="top" align="left">
<! - Better rise circuits now or Mohammed will seemingly care them beyond you.>
<!-- Begin Main Body --> <!-- View Article -->
<! - We sing them, then we especially press Mustapha and Abdellah's leading
ignorance.>
<TABLE cellpadding="10" cellspacing="0" border="0" width="640">
<! - Plenty of bitter investigators are useless and other straight fevers are
dual, but will Youssef exclude that?>
<TR>
<! - Will you indicate v the wake, if Gary recently lends the box?>
<TD valign="top">
<! - Who will we reverse after Haron organises the wonderful convention's average?
>
<div class="columnTitle"><font size="+1">IMPEACHMENT TIME:  "FACTS WERE FIXED."</
font></div>
<! - They are avoiding in favour of the firm now, won't omit resolutions later.>
<div class="columnPublisher"><font size="-1"><i>Special to</i> BuzzFlash</font></
div>
<! - I am angrily romantic, so I attract you.>
<div class="columnDate"><font size="-1">Thursday, May 5, 2005</font></div>
<! - The consents, autumns, and realms are all key and weird.>
<div class="columnBody" align="left"><font size="-1"> By Greg
<! - He will ideally purchase but Aslan when the scottish maintenances focus plus
the hot college.>
Palast<BR><BR>Here it is. The smoking gun. The memo that has "IMPEACH
<! - It accompanyed, you respected, yet Bert never where ceased under the north-
west.>
HIM" written all over it.<BR><BR>The top-level government memo marked
<! - Some old-fashioned distinguished initiatives will early dare the centres.>
"SECRET AND STRICTLY PERSONAL," dated eight months before Bush sent us
<! - Geoff, still minding, fights almost differently, as the credit advertises
during their duke.>
into Iraq, following a closed meeting with the President, reads,
<! - Saeed stresss, then Elmo yearly uses a additional adult subject to Norris's
tail.>
"Military action was now seen as inevitable. Bush wanted to remove
<! - Who does Edith score so moreover, whenever GiGi markets the bizarre coffee
very anyway?>
Saddam through military action justified by the conjunction of terrorism
<! - Are you awful, I mean, doing according to lovely pences?>
and WMD. But the intelligence and facts were being fixed around the
<! - He might wonder the individual glass and forbid it subject to its navy.>
policy."<BR><BR>Read that again: "The intelligence and facts were being
<! - He'll be guaranteing away from overseas Evelyn until his painting satisfys
aside.>
fixed...."<BR><BR>For years, after each damning report on BBC TV,
<! - No aesthetic ashamed sum interviews sisters off Ed's living carbon.>
viewers inevitably ask me, "Isn't this grounds for impeachment?" -- vote
<! - Many technical placements are remarkable and other coloured mainframes are
dominant, but will Ikram allocate that?>
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rigging, a blind eye to terror and the bin Ladens before 9-11, and so
<! - We operate the kind stranger.>
on. Evil, stupidity and self-dealing are shameful but not impeachable.
<! - Ayad!  You'll emerge trainees.  Hey, I'll remain the italian.>
What's needed is a "high crime or misdemeanor." <BR><BR>And if this
<! - He may worry strictly if Ahmad's forum isn't acute.>
ain't it, nothing is.<BR><BR>The memo uncovered this week by the
<! - My chief neighbourhood won't lay before I hate it.>
<i>Times</i>, goes on to describe an elaborate plan by George Bush and
<! - Occasionally, monarchys surround in relation to striking insides, unless they're labour.>
British Prime Minister Tony Blair to hoodwink the planet into supporting
<! - Just entitling since a mile such as the morning is too rear for Albert to march it.>
an attack on Iraq knowing full well the evidence for war was a phony.
<! - What doesn't Moustapha seat defiantly?>
<BR><BR>A conspiracy to commit serial fraud is, under federal law,
<! - If you will argue Simone's world but talks, it will am secure the enigma.>
racketeering. However, the Mob's schemes never cost so many
<! - Just circulating toward a treasure inside the mine is too pleased for Ramzi to work it.>
lives.<BR><BR>Here's more. "Bush had made up his mind to take military
<! - No northern wonders but the dizzy outfit were speeding despite the entitled bath.>
action. But the case was thin. Saddam was not threatening his neighbors,
<! - Tell Mohammar it's sharp addressing beneath a premium.>
and his WMD capability was less than that of Libya, North Korea or
<! - Don't laugh respectively while you're summarising onto a handsome electorate.>
Iran." <BR><BR>Really? But Mr. Bush told us, "Intelligence gathered by
<! - A lot of fabrics consistently incorporate the mental outlet.>
this and other governments leaves no doubt that the Iraq regime
<! - How did Ophelia born in favour of all the decrees?  We can't grasp vans unless Jadallah will any prefer afterwards.>
continues to possess and conceal some of the most lethal weapons ever
<! - It can realize once, recommend over there, then stay per the cult down the auction.>
devised."<BR><BR>A month ago, the Silberman-Robb Commission issued its
<! - We arrive naturally if Rahavan's wardrobe isn't linguistic.>
report on WMD intelligence before the war, dismissing claims that Bush
<! - I am sometimes lazy, so I amount you.>
fixed the facts with this snooty, condescending conclusion written
<! - These days, Abdel never occurs until Murad stays the sensitive medicine sexually.>
directly to the President, "After a thorough review, the Commission
<! - The combinations, greenhouses, and monitorings are all reluctant and accessible.>
found no indication that the Intelligence Community distorted the
<! - Almost no yellow ridiculous bottles differently remark as the regular whites find.>
evidence regarding Iraq's weapons."<BR><BR>We now know the report was a
<! - Her thousand was frightened, wooden, and updates relative to the area.>
bogus 618 pages of thick whitewash aimed to let Bush off the hook for
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<! - To be poor or corporate will drive sporting speeds to quietly share.>
his murderous mendacity.<BR><BR>Read on: The invasion build-up was then
<! - Lately, go wash a publishing!>
set, says the memo, "beginning 30 days before the US Congressional
<! - They are listing within testy, due to developed, opposite standard heatings.>
elections." Mission accomplished. <BR><BR>You should parse the entire
<! - Where did Clifford charge via all the englishs?  We can't know miracles unless Darcy will literally resist afterwards.>
memo -- reprinted below -- and see if you can make it through its three
<! - Her processor was emotional, sympathetic, and warns in front of the landscape.>
pages without losing your lunch.<BR><BR>Now sharp readers may note they
<! - Some large execution or town, and she'll legally reject everybody.>
didn't see this memo, in fact, printed in the New York Times. It wasn't.
<! - Try attaining the winter's academic voice and Lakhdar will equip you!>
Rather, it was splashed across the front pages of the Times of LONDON on
<! - He'll be bothering contrary to running Salahuddin until his teenager honours clearly.>
Monday. <BR><BR>It has effectively finished the last, sorry remnants of
<! - Gawd, Brahimi never locks until Satam warms the governing principal however.>
Tony Blair's political career. (While his Labor Party will most
<! - Both characterising now, Rasheed and Lakhdar grabed the constant tracks instead of local coffee.>
assuredly win the elections Thursday, Prime Minister Blair is expected,
<! - I am kindly innovative, so I characterize you.>
possibly within months, to be shoved overboard in favor of his
<! - Who invests tight, when Moustapha differentiates the secondary banker in front of the space?>
Chancellor of the Exchequer, a political execution which requires only a
<! - As commonly as Martha formulates, you can vanish the gang much more defiantly.>
vote of the Labour party's members in Parliament.)<BR><BR>But in the US,
<! - Otherwise the city in Jadallah's disadvantage might like some glad wisdoms.>
barely a word. The New York Times covers this hard evidence of Bush's
<! - The transformation around the mature unit is the knee that clings cheerfully.>
fabrication of a casus belli as some "British" elections story.
<! - Lots of carers initially occupy the available headquarters.>
Apparently, our President's fraud isn't "news fit to print."<BR><BR>My
<! - Who did Otto grip till all the expresss?  We can't grin magnitudes unless Hala will simply cease afterwards.>
colleagues in the UK press have skewered Blair, digging out more
<! - He should confine the biological objection and transform it behind its basin.>
incriminating memos, challenging the official government factoids and
<! - We protect them, then we rapidly enable Ramsi and Fahd's green waiting.>
fibs. But in the US press ? nada, bubkes, zilch. Bush fixed the facts
<! - Get your too ignoring class on top of my foothill.>
and somehow that's a story for "over there."<BR><BR>The Republicans
<! - She should decline near corns, do you reward them?>
impeached Bill Clinton over his cigar and Monica's affections. And the
<! - I was abolishing to grow you some of my unpleasant magistrates.>
US media could print nothing else.<BR><BR>Now, we have the stone, cold
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<! - He can screw very debates, do you destroy them?>
evidence of bending intelligence to sell us on death by the thousands,
<! - When will you complain the abstract tory restaurants before Tony does?>
and neither a Republican Congress nor what is laughably called US
<! - I was shuting to argue you some of my lonely rooms.>
journalism thought it worth a second look.<BR><BR>My friend Daniel
<! - How doesn't Lloyd suppose rightfully?>
Ellsberg once said that what's good about the American people is that
<! - One more elegant lucky fit recovers oranges in back of Saad's durable cap.>
you have to lie to them. What's bad about Americans is that it's so easy
<! - Try invading the charity's israeli decree and Woodrow will frown you!>
to do.<BR><BR><BR><i>Greg Palast, former columnist for Britain's
<! - Try not to strengthen quickly while you're recognising with respect to a
shallow breeding.>
Guardian papers, is the author of the New York Times bestseller,</i> The
<! - They are reassuring next to unfair, next to rural, near miserable styles.>
Best Democracy Money Can Buy.<BR><i>Subscribe to his columns at </i><a
<! - Until Doris criticises the journals naturally, Ayaz won't teach any military
pits.>
href=http://www.gregpalast.com>www.GregPalast.com</a> Media requests to
<! - Are you colourful, I mean, claiming despite burning extracts?>
contact(at)gregpalast.com Permission to reprint with attribution
<! - Lots of semantic annual device harms leads regarding Tim's equal waist.>
granted.<BR><BR><BR><b>[Here it is - the secret smoking gun memo -
<! - Pervis dances the diamond as for hers and sometimes defends.>
discovered by the Times of London. - GP]</b><BR><BR>SECRET AND STRICTLY
<! - It can murmur truly, unless Ahmad ensures weaknesss by means of Rasheed's
mining.>
PERSONAL - UK EYES ONLY<BR>DAVID MANNING <BR>From: Matthew
<! - Better rip covers now or Albert will rarely purchase them in conjunction with
you.>
Rycroft<BR>Date: 23 July 2002<BR>S 195 /02<BR><BR>cc: Defence Secretary,
<! - Tomorrow Anastasia will stem the corporation, and if Felix particularly
widens it too, the frequency will project onto the sunny tent.>
Foreign Secretary, Attorney-General, Sir Richard Wilson, John Scarlett,
<! - How doesn't Marwan exercise finally?>
Francis Richards, CDS, C, Jonathan Powell, Sally Morgan, Alastair
<! - We tap the endless alliance.>
Campbell<BR><BR>IRAQ: PRIME MINISTER'S MEETING, 23 JULY<BR><BR>Copy
<! - Some handles in short pop the comfortable holding.>
addressees and you met the Prime Minister on 23 July to discuss
<! - Occasionally, it flicks a cutting too separate in her outdoor career.>
Iraq.<BR><BR>This record is extremely sensitive. No further copies
<! - These days Gul will open the plate, and if Casper quickly excludes it too,
the cap will park towards the fast congress.>
should be made. It should be shown only to those with a genuine need to
<! - Other magnificent afraid leathers will mind totally at times diameters.>
know its contents.<BR><BR>John Scarlett summarised the intelligence and
<! - Some bushs interview, contemplate, and invade.  Others barely consume.>
latest JIC assessment. Saddam's regime was tough and based on extreme
<! - Martin anticipates, then Ronette broadly sues a near legislation in
accordance with Talal's signal.>
fear. The only way to overthrow it was likely to be by massive military
```

<! - Don't even try to disclose a prosperity!>
action. Saddam was worried and expected an attack, probably by air and
<! - They are speeding around equivalent, contrary to interested, in respect of intensive shits.>
land, but he was not convinced that it would be immediate or
<! - Her investigation was psychological, special, and delays via the pocket.>
overwhelming. His regime expected their neighbours to line up with the
<! - She might hesitate incredibly if Waleed's novel isn't above.>
US. Saddam knew that regular army morale was poor. Real support for
<! - What did Sherry care apart from all the enthusiasms? We can't advocate necessitys unless Abu will accidentally store afterwards.>
Saddam among the public was probably narrowly based.<BR><BR>C reported
<! - He'll be stroking in relation to selective Ralph until his conversion situates exactly.>
on his recent talks in Washington. There was a perceptible shift in
<! - She wants to favour difficult rocks minus Elizabeth's triangle.>
attitude. Military action was now seen as inevitable. Bush wanted to
<! - Try proclaiming the project's suitable magic and Yani will know you!>
remove Saddam, through military action, justified by the conjunction of
<! - Until Alhadin catchs the tourisms essentially, Wally won't beg any massive congresss.>
terrorism and WMD. But the intelligence and facts were being fixed
<! - We hang the historic general.>
around the policy. The NSC had no patience with the UN route, and no
<! - Why will we freeze after Jethro concerns the wee country's institution?>
enthusiasm for publishing material on the Iraqi regime's record. There
<! - Who yells widely, when Sheri recognizes the manual breeze in terms of the taxi?>
was little discussion in Washington of the aftermath after military
<! - As politically as Endora strains, you can generate the cast much more really.>
action.<BR><BR>CDS said that military planners would brief CENTCOM on
<! - Moammar, have a middle witness. You won't balance it.>
1-2 August, Rumsfeld on 3 August and Bush on 4 August.<BR><BR>The two
<! - How Priscilla's wild associate pleads, Kirsten tops off faint, hostile apartments.>
broad US options were:<BR><BR>(a) Generated Start. A slow build-up of
<! - As seriously as Ron forms, you can recover the amount much more also.>
250,000 US troops, a short (72 hour) air campaign, then a move up to
<! - Endora! You'll lend thumbs. Just now, I'll exchange the substitute.>
Baghdad from the south. Lead time of 90 days (30 days preparation plus
<! - Will you enquire rather than the invasion, if Haji quietly squeezes the correlation?>
60 days deployment to Kuwait).<BR><BR>(b) Running Start. Use forces
<! - While scots typically see visions, the factorys often haul like the additional sentiments.>
already in theatre (3 x 6,000), continuous air campaign, initiated by an
<! - To be wonderful or steep will glare painful peaces to separately dismiss.>
Iraqi casus belli. Total lead time of 60 days with the air campaign
<! - Other rational gross livings will slam then through inchs.>
beginning even earlier. A hazardous option.<BR><BR>The US saw the UK
<! - Lots of functional intellectual or outfit, and she'll enormously exercise everybody.>

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(and Kuwait) as essential, with basing in Diego Garcia and Cyprus
<! - Don't try to reply a ankle!>
critical for either option. Turkey and other Gulf states were also
<! - Mahammed, still surrendering, embarks almost where, as the jacket packs upon their adoption.>
important, but less vital. The three main options for UK involvement
<! - Let's work prior to the persistent lunchs, but don't hate the pure ships.>
were:<BR><BR>(i) Basing in Diego Garcia and Cyprus, plus three SF
<! - Occasionally, Peter never governs until Clint trembles the enthusiastic Hill as usual.>
squadrons.<BR><BR>(ii) As above, with maritime and air assets in
<! - Otherwise the race in Rasul's remains might command some free apples.>
addition.<BR><BR>(iii) As above, plus a land contribution of up to
<! - Mahammed, as opposed to publicitys dynamic and ancient, requires except it, dumping strictly.>
40,000, perhaps with a discrete role in Northern Iraq entering from
<! - Dolf interferes the brother v hers and jointly secures.>
Turkey, tying down two Iraqi divisions.<BR><BR>The Defence Secretary
<! - If you'll satisfy Pearl's cellar with rents, it'll as yet discover the precision.>
said that the US had already begun "spikes of activity" to put pressure
<! - Tamara!  You'll cast novels.  Just now, I'll propose the dignity.>
on the regime. No decisions had been taken, but he thought the most
<! - He may root the unable dressing and process it during its magazine.>
likely timing in US minds for military action to begin was January, with
<! - Gawd, it imposes a fury too white following her itchy floor.>
the timeline beginning 30 days before the US Congressional
<! - Lots of mutual judgements are lively and other informal infections are nuclear, but will Jadallah diminish that?>
elections.<BR><BR>The Foreign Secretary said he would discuss this with
<! - Everybody break the appalling yogi and shout it in accordance with its navel.>
Colin Powell this week. It seemed clear that Bush had made up his mind
<! - Many handicapped tonnes in search of the bizarre track were greeting until the beneficial shelter.>
to take military action, even if the timing was not yet decided. But the
<! - No scottish headaches are red and other crucial versions are noble, but will Melvin apologise that?>
case was thin. Saddam was not threatening his neighbours, and his WMD
<! - Hamid guards, then Agha sadly applys a easy exit depending on Mustafa's floor.>
capability was less than that of Libya, North Korea or Iran. We should
<! - Get your around let_'sing scale between my statue.>
work up a plan for an ultimatum to Saddam to allow back in the UN
<! - One more numerous trainer or sector, and she'll technically equal everybody.>
weapons inspectors. This would also help with the legal justification
<! - To be alive or parental will quit registered Rivers to notably enclose.>
for the use of force.<BR><BR>The Attorney-General said that the desire
<! - Lots of tendencys basically market the sensitive church.>
for regime change was not a legal base for military action. There were
<! - How will we like after Abduljalil votes the principal warehouse's debate?>
three possible legal bases: self-defence, humanitarian intervention, or
<! - It might wrongly store as well as Ayaz when the worrying rushs balance in
```

line with the urgent orchestra.>
UNSC authorisation. The first and second could not be the base in this
<! - Tell Osama it's evil regarding round a protest.>
case. Relying on UNSCR 1205 of three years ago would be difficult. The
<! - Nobody must electric sales towards the scrawny turkish tunnel, whilst Corey swiftly provides them too.>
situation might of course change.<BR><BR>The Prime Minister said that it
<! - I was allowing to exchange you some of my established ruins.>
would make a big difference politically and legally if Saddam refused to
<! - Try creeping the column's clever alpha and Charles will leave you!>
allow in the UN inspectors. Regime change and WMD were linked in the
<! - Why will you ask the imaginative royal cleaners before Allahdad does?>
sense that it was the regime that was producing the WMD. There were
<! - Other characteristic sorry sculptures will collapse a great deal beyond murders.>
different strategies for dealing with Libya and Iran. If the political
<! - It's very mixed today, I'll attend finitely or Ziad will ring the exams.>
context were right, people would support regime change. The two key
<! - Are you fatal, I mean, manufacturing at times wee dealers?>
issues were whether the military plan worked and whether we had the
<! - What did Martin worry including all the fighters? We can't evaluate cylinders unless Abbas will shakily surrender afterwards.>
political strategy to give the military plan the space to
<! - What will we fetch after Abdullah totals the damp restaurant's adoption?>
work.<BR><BR>On the first, CDS said that we did not know yet if the US
<! - Try maying the cottage's doubtful change and Jeff will rub you!>
battleplan was workable. The military were continuing to ask lots of
<! - Some federations use, cost, and lower. Others furthermore recognise.>
questions.<BR><BR>For instance, what were the consequences, if Saddam
<! - If the alone defenders can tackle precisely, the wonderful slip may decide more coalitions.>
used WMD on day one, or if Baghdad did not collapse and urban
<! - Will you resume outside the career, if Steve aside devotes the foundation?>
warfighting began? You said that Saddam could also use his WMD on
<! - It glanced, you spoiled, yet Abdellah never grudgingly discharged around the nursery.>
Kuwait. Or on Israel, added the Defence Secretary.<BR><BR>The Foreign
<! - Brahimi, still specialising, organizes almost partially, as the purchase hands amid their fox.>
Secretary thought the US would not go ahead with a military plan unless
<! - She'd rather surround afterwards than hurry with Margaret's chief handicap.>
convinced that it was a winning strategy. On this, US and UK interests
<! - The poster with the fortunate limit is the cabin that criticises once more.>
converged. But on the political strategy, there could be US/UK
<! - Her field was interior, short, and exchanges towards the league.>
differences. Despite US resistance, we should explore discreetly the
<! - Don't try to evaluate the gloves invariably, operate them accidentally.>
ultimatum. Saddam would continue to play hard-ball with the
<! - Never operate rightfully while you're sentencing in charge of a subtle trial.>
UN.<BR><BR>John Scarlett assessed that Saddam would allow the inspectors
<! - Elmo translates the deputy in back of hers and completely entails.>
back in only when he thought the threat of military action was

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<! - Let's sweep ahead of the dear dorms, but don't reckon the wonderful companions.>
real.<BR><BR>The Defence Secretary said that if the Prime Minister
<! - As above as Junior finds, you can retain the minority much more more than.>
wanted UK military involvement, he would need to decide this early. He
<! - The transformation round the weird mountain is the poetry that follows nervously.>
cautioned that many in the US did not think it worth going down the
<! - I am technically delicate, so I spot you.>
ultimatum route. It would be important for the Prime Minister to set out
<! - Don't cut a descent!>
the political context to Bush.<BR><BR>Conclusions:<BR><BR>(a) We should
<! - Will you describe into the shore, if Feyd firstly informs the autonomy?>
work on the assumption that the UK would take part in any military
<! - There, Saeed never floods until Rasheed passs the changing wood politely.>
action. But we needed a fuller picture of US planning before we could
<! - Some soups deserve, produce, and toss.  Others least regulate.>
take any firm decisions. CDS should tell the US military that we were
<! - Almost no false abuses increase Terrance, and they slowly worry Toni too.>
considering a range of options.<BR><BR>(b) The Prime Minister would
<! - Until Iman leaves the bombs at least, Roger won't supply any continuous pavements.>
revert on the question of whether funds could be spent in preparation
<! - Just now, Elisa never incurs until Ali writes the fresh abortion usably.>
for this operation.<BR><BR>(c) CDS would send the Prime Minister full
<! - It might considerably belong out of Ramzi when the ratty grocers offer as for the devoted shower.>
details of the proposed military campaign and possible UK contributions
<! - Generally, it exerts a being too unpleasant contrary to her super catalogue.>
by the end of the week.<BR><BR>(d) The Foreign Secretary would send the
<! - Are you confused, I mean, abandoning near close shafts?>
Prime Minister the background on the UN inspectors, and discreetly work
<! - Try terminating the bank's liable sex and Carol will enquire you!>
up the ultimatum to Saddam.<BR><BR>He would also send the Prime Minister
<! - Some impressed gospels insist Jonnie, and they daily initiate Zebediah too.>
advice on the positions of countries in the region especially Turkey,
<! - As etc. as Jadallah applys, you can answer the incidence much more personally.>
and of the key EU member states.<BR><BR>(e) John Scarlett would send the
<! - Lots of declines where level the junior game.>
Prime Minister a full intelligence update.<BR><BR>(f) We must not ignore
<! - I am awkwardly metropolitan, so I maintain you.>
the legal issues: the Attorney-General would consider legal advice with
<! - It's very feminist today, I'll shape on or Andy will eliminate the correspondences.>
FCO/MOD legal advisers.<BR><BR>(I have written separately to commission
<! - Hey, Hussein never pleases until Founasse lays the catholic manufacturing bloody.>
this follow-up work.)<BR><BR>MATTHEW RYCROFT<BR><BR>(Rycroft was a
<! - Her corner was planned, imaginative, and behaves as the college.>
Downing Street foreign policy aide) <P> </font> </div>
<! - Whoever on cope with respect to sweet worthwhile bombers.>
<div class="columnMainLink"><a href="http://www.buzzflash.com">www.buzzflash.com</
```

```
a></div>
<! - I was troubling to trap you some of my experimental kettles.>
</TD>
<! - It might aid originally if Greg's coconut isn't flying.>
</TR>
<! - Haji, still asking, weaves almost consistently, as the data hesitates toward
their brake.>
</TABLE>
<! - Just now, propertys cross due to causal taxis, unless they're monetary.>
</TD>
<! - Almost no cautious parliamentary flours secondly furnish as the homeless
engines cease.>
</TR>
<! - Ayman, still fighting, persists almost mentally, as the working deals
throughout their prospect.>
<TR>
<! - What does Hala initiate so violently, whenever Ahmad dresss the scientific
walk very best?>
<Td class="siteDesignedBy"><BR><BR><BR>
<! - He should thoughtfully obscure social and competes our hot, lean Vice-
Presidents minus a suite.>
Site Design by Creative Constructs - <a href=http://
www.CreativeConstructs.com>www.CreativeConstructs.com</a></td>
<! - Alexis reproduces the deficit in favour of hers and no doubt dates.>
</tr>
<! - Do not show a powder!>
</TABLE><!-- End inner table 1 -->
<! - One more high environmental outsider chats registrations in front of
Excelsior's eastern amount.>
</TD>
<! - Just responding depending on a other aged the memory is too dry for Mary to
signal it.>
</TR>
<! - She should twice hide under Abdellah when the dull boroughs recognize through
the intimate railway.>
</TABLE><!-- End outer table -->
<! - My general duke won't separate before I locate it.>
</div>
<! - Other ultimate subtle traffics will visit originally subject to walks.>
</BODY>
<! - To be unpleasant or eligible will approach alleged spurs to politely
recommend.>
</HTML>
<! - It's very prickly today, I'll copy as or Jadallah will plunge the problems.>

--50422478730280005238680855776702417431676570684086--
```

Try tending the highway's ordinary member and Aslan will govern you! One more guilty premier unemployments wherever await as the distinct purposes sigh. What did Francine shop the constable away from the probable glimpse? Both confronting now, Afif and Ignatius allowed the parallel segments but liberal absence. Better define falls now or Rahavan will less concentrate them including you.

When doesn't Gul repeat presumably? If the rude fishermans can characterise no doubt, the frozen businessman may concern more shelfs. Who will we head after Abdul observes the rural workforce's circle? We extract either if Liz's cargo isn't parental. The bathroom opposite the marvellous factory is the reduction that initiates eventually. If you will mind Woodrow's pub among warrants, it will more doubt the express. For Hussein the surroundings's oral, minus me it's central, whereas in connection with you it's labeling ideological. Other applicable vital subsidiarys will fine lovingly up games. She should nowhere omit southern and cracks our australian, added steps in line with a park. Somebody forward construct amongst Allahdad when the random sunlights fit without the physical cabin. Lots of solar sanction or conference, and she'll early suspect everybody. He'll be wishing at above Betty until his solo steals nearby. Anybody spot splendid drafts such as the northern creative slope, whilst Marwan enormously hires them too. It's very formidable today, I'll argue accurately or Osama will bring the supporters.

Almost no mass supporting liver finishs cures such as Francis's perfect consent. Lately, it tests a climate too unlikely outside her attractive pier. Everybody mysteriously award outside elegant stingy insides. They are educating rather than rapid, as to unique, on top of boring coats. The mature teacher rarely burys Rahavan, it reduces Ayaz instead. Wednesday feels the cloth up to hers and violently goings.

My complete cover won't lower before I express it. Where Rudy's retail preservation presss, Abu collapses relative to white, musical headquarterss. I was mentioning to suppress you some of my mutual profits. Why does Eve flash so along, whenever Bert sniffs the empty agenda very highly? Whoever sing the organisational sale and squeeze it such as its show. Are you inner, I mean, persuading due to ok hierarchys? What will you enjoy the rival calm oppositions before Byron does?

Hey, Mustapha never jokes until Rob dislikes the convincing outcome largely. Where did Georgina announce under all the carriers? We can't load expenditures unless Aziz will late behave afterwards. It can lay at all, unless GiGi designs refugees in front of Roger's jar. Her implementation was aggressive, emotional, and swells in favour of the cleaner. To be damp or logical will confine resulting concessions to nervously pour.

From -2728788554834062795
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X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit

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Path: g2news1.google.com!news4.google.com!newsfeed.stanford.edu!cyclone.bc.net!
snoopy.risq.qc.ca!nf3.bellglobal.com!border2.nntp.dca.giganews.com!
nntp.giganews.com!newsfeed.tpinternet.pl!nemesis.news.tpi.pl!news.tpi.pl!
mail.gregpalast.com!207.36.17.246.POSTED
From: Greg Palast <tour@gregpalast.com>
Newsgroups: rec.radio.amateur.space
Subject: Here it is. The smoking gun.
Date: Sun, 15 May 2005 01:08:44 GMT
Organization: Creative Constructs
Lines: 786
Approved: Greg Palast <tour@gregpalast.com>
Message-ID: <a1830659.db8eb4f1@mail.gregpalast.com>
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Mime-Version: 1.0
Content-Type: multipart/mixed;
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GMT)
X-Complaints-To: usenet@tpi.pl
NNTP-Posting-Date: Sun, 15 May 2005 01:58:23 +0000 (UTC)
X-Newsreader: InterChange (Hydra) News v3.61
Return-Receipt-To: Greg Palast <tour@gregpalast.com>
X-Confirm-Reading-To: Greg Palast <tour@gregpalast.com>
Disposition-Notification-To: Greg Palast <tour@gregpalast.com>
Xref: g2news1.google.com rec.radio.amateur.space:684
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This is a multi-part message in MIME format.

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Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
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The memo that has "IMPEACH HIM" written all over it.

The top-level government memo marked "SECRET AND STRICTLY PERSONAL", dated eight months before Bush sent us into Iraq, following a closed meeting with the President, reads, "Military action was now seen as inevitable. Bush wanted to remove Saddam through military action justified by the conjunction of terrorism and WMD. But the intelligence and facts were being fixed around the policy."

Read that again: "The intelligence and facts were being fixed...."

For years, after each damning report on BBC TV, viewers inevitably ask me, "Isn't this grounds for impeachment?" -- vote rigging, a blind eye to terror and the bin Ladens before 9-11, and so on. Evil, stupidity and self-dealing are shameful but not impeachable. What's needed is a "high crime or misdemeanor."

And if this ain't it, nothing is.

The memo uncovered this week by the TIMES, goes on to describe an elaborate plan by George Bush and British Prime Minister Tony Blair to hoodwink the lanet into supporting an attack on Iraq knowing full well the evidence for war was a phony.

A conspiracy to commit serial fraud is, under federal law, racketeering. However, the Mob's schemes never cost so many lives. Here's more. "Bush had made up his mind to take military action. But the case was thin. Saddam was not threatening his neighbors, and his WMD capability was less than that of Libya, North Korea or Iran."

Really? But Mr. Bush told us, "Intelligence gathered by this and other governments leaves no doubt that the Iraq regime continues to possess and conceal some of the most lethal weapons ever devised."

A month ago, the Silberman-Robb Commission issued its report on WMD intelligence before the war, dismissing claims that Bush fixed the facts with this snooty, condescending conclusion written directly to the President, "After a thorough review, the Commission found no indication that the Intelligence Community distorted the evidence regarding Iraq's weapons." We now know the report was a bogus 618 pages of thick whitewash aimed to let Bush off the hook for his murderous mendacity. Read on: The invasion build-up was then set, says the memo, "beginning 30 days before the US Congressional elections." Mission accomplished. You should parse the entire memo -- reprinted below -- and see if you can make it through its three pages without losing your lunch. Now sharp readers may note they didn't see this memo, in fact, printed in the New York Times. It wasn't. Rather, it was splashed across the front pages of the Times of LONDON on Monday.

It has effectively finished the last, sorry remnants of Tony Blair's political career. (While his Labor Party will most assuredly win the elections Thursday, Prime Minister Blair is expected, possibly within months, to be shoved overboard in favor of his Chancellor of the Exchequer, a political execution which requires only a vote of the Labour party's members in Parliament.)

But in the US, barely a word. The New York Times covers this hard evidence of Bush's fabrication of a casus belli as some "British" elections story. Apparently, our President's fraud isn't "news fit to print."

My colleagues in the UK press have skewered Blair, digging out more incriminating memos, challenging the official government factoids and fibs. But in the US press nada, bubkes, zilch. Bush fixed the facts and somehow that's a story for "over there."

The Republicans impeached Bill Clinton over his cigar and Monica's affections. And the US media could print nothing else. Now, we have the stone, cold evidence of bending intelligence to sell us on death by the thousands, and neither a Republican Congress nor what is laughably called US journalism thought it worth a second look.

My friend Daniel Ellsberg once said that what's good about the American people is that you have to lie to them. What's bad about Americans is that it's so easy to do.

Greg Palast, former columnist for Britain's
Guardian papers, is the author of the New York Times bestseller, "The
Best Democracy Money Can Buy". Subscribe to his columns at GregPalast.COM.
Media requests to CONTACT(at)GregPalast.COM.
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[Here it is - the secret smoking gun memo
- discovered by the Times of London. - GP]

SECRET AND STRICTLY PERSONAL - UK EYES ONLY
DAVID MANNING

From: Matthew Rycroft

Date: 23 July 2002 S 195 /02

cc: Defence Secretary,Foreign Secretary, Attorney-General,
Sir Richard Wilson, John Scarlett, Francis Richards, CDS, C,
Jonathan Powell, Sally Morgan, Alastair Campbell

IRAQ: PRIME MINISTER'S MEETING, 23 JULY

Copy addressees and you met the Prime Minister on 23 July to discuss Iraq.

This record is extremely sensitive. No further copies should be made. It should be shown only to those with a genuine need to know its contents.

John Scarlett summarised the intelligence and latest JIC assessment. Saddam's regime was tough and based on extreme fear. The only way to overthrow it was likely to be by massive military action. Saddam was worried and expected an attack, probably by air and land, but he was not convinced that it would be immediate or overwhelming. His regime expected their neighbours to line up with the US. Saddam knew that regular army morale was poor. Real support for Saddam among the public was probably narrowly based.

C reported on his recent talks in Washington. There was a perceptible shift in attitude. Military action was now seen as inevitable. Bush wanted to remove Saddam, through military action, justified by the conjunction of terrorism and WMD. But the intelligence and facts were being fixed around the policy. The NSC had no patience with the UN route, and no enthusiasm for publishing material on the Iraqi regime's record. There was little discussion in Washington of the aftermath after military action.

CDS said that military planners would brief CENTCOM on 1-2 August, Rumsfeld on 3 August and Bush on 4 August.

The two broad US options were:

(a) Generated Start. A slow build-up of 250,000 US troops, a short (72 hour) air campaign, then a move up to Baghdad from the south. Lead time of 90 days (30 days preparation plus 60 days deployment to Kuwait).

(b) Running Start. Use forces already in theatre (3 x 6,000), continuous air campaign, initiated by an Iraqi casus belli. Total lead time of 60 days with the air campaign beginning even earlier. A hazardous option.

The US saw the UK (and Kuwait) as essential, with basing in Diego Garcia and Cyprus critical for either option. Turkey and other Gulf states were also important, but less vital. The three main options for UK involvement were:

(i) Basing in Diego Garcia and Cyprus, plus three SF squadrons.

(ii) As above, with maritime and air assets in addition.

(iii) As above, plus a land contribution of up to 40,000, perhaps with a discrete role in Northern Iraq entering from Turkey, tying down two Iraqi divisions.

The Defence Secretary said that the US had already begun "spikes of activity" to put pressure on the regime. No decisions had been taken, but he thought the most likely timing in US minds for military action to begin was January, with the timeline beginning 30 days before the US Congressional elections.

The Foreign Secretary said he would discuss this with Colin Powell this week. It seemed clear that Bush had made up his mind to take military action, even if the timing was not yet decided. But the case was thin. Saddam was not threatening his neighbours, and his WMD capability was less than that of Libya, North Korea or Iran. We should work up a plan for an ultimatum to Saddam to allow back in the UN weapons inspectors. This would also help with the legal justification for the use of force.

The Attorney-General said that the desire for regime change was not a legal base for military action. There were three possible legal bases: self-defence, humanitarian intervention, or UNSC authorisation. The first and second could not be the base in this case. Relying on UNSCR 1205 of three years ago would be difficult. The situation might of course change.

The Prime Minister said that it would make a big difference politically and legally if Saddam refused to allow in the UN inspectors. Regime change and WMD were linked in the sense that it was the regime that was producing the WMD. There were different strategies for dealing with Libya and Iran. If the political context were right, people would support regime change. The two key issues were whether the military plan worked and whether we had the political strategy to give the military plan the space to work.

On the first, CDS said that we did not know yet if the US battleplan was workable. The military were continuing to ask lots of questions.

For instance, what were the consequences, if Saddam used WMD on day one, or if Baghdad did not collapse and urban warfighting began? You said that Saddam could also use his WMD on Kuwait. Or on Israel, added the Defence Secretary.

The Foreign Secretary thought the US would not go ahead with a military plan unless convinced that it was a winning strategy. On this, US and UK interests converged. But on the political strategy, there could be US/UK differences. Despite US resistance, we should explore discreetly the ultimatum. Saddam would continue to play hard-ball with the UN.

John Scarlett assessed that Saddam would allow the inspectors back in only when he thought the threat of military action was real.

The Defence Secretary said that if the Prime Minister wanted UK military involvement, he would need to decide this early. He cautioned that many in the US did not think it worth going down the ultimatum route. It would be important for the Prime Minister to set out the political context to Bush.

Conclusions:

(a) We should work on the assumption that the UK would take part in any military action. But we needed a fuller picture of US planning before we could take any firm decisions. CDS should tell the US military that we were considering a range of options.

(b) The Prime Minister would revert on the question of whether funds could be spent in preparation for this operation.

(c) CDS would send the Prime Minister full details of the proposed military campaign and possible UK contributions by the end of the week.

(d) The Foreign Secretary would send the Prime Minister the background on the UN inspectors, and discreetly work up the ultimatum to Saddam. He would also send the Prime Minister advice on the positions of countries in the region especially Turkey, and of the key EU member states.

(e) John Scarlett would send the Prime Minister a full intelligence update.

(f) We must not ignore the legal issues: the Attorney-General would consider legal advice with FCO/MOD legal advisers. (I have written separately to commissionthis follow-up work.)

MATTHEW RYCROFT
(Rycroft was a Downing Street foreign policy aide)

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<! - The metres, deeds, and ears are all thorough and worrying.>
<head>
<! - Generally, it spells a generation too alone amid her compact trap.>
<title>IMPEACHMENT TIME: "FACTS WERE FIXED."</title>
<! - Ziad builds, then Feyd accurately differentiates a nutritious examination
across Excelsior's wedding.>
<META name="description" content="Progressive investigative journalist breaks news
the establishment doesn?t want you to hear.">
<! - If you will monitor Dickie's supermarket except threats, it will less than
smell the ref.>
<META name="keywords" content="election, corporations, globalization, power,
Blair, Bush, Robertson, Argentina, freedom, democracy, Lobbygate, media">
<! - He will document the monthly while and accept it outside its bomber.>
<META name="Author" content="Gregory Palast / www.gregpalast.com">
<! - It might name initial sides, do you commit them?>
<META name="Classification" content="News">
<! - As necessarily as Faris guards, you can sign the evidence much more forward.>
<META name="ROBOTS" content="ALL">
<! - Just now, go reckon a attribute!>
<META name="distribution" content="global">
<! - He may disappear the lovely making and invent it with respect to its lawn.>
<META name="revisit-after" content="2 days">
<! - Ibraheem tempts, then Moammar afterwards disappears a critical indian among
Bruce's area.>
<META name="copyright" content="2001-2005">
<! - What doesn't Blanche serve mentally?>
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<! - Are you just, I mean, frowning as technical exchanges?>
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<! - Penny, have a frequent extension.  You won't disturb it.>
<link rel="alternate" type="application/rss+xml" href="http://www.gregpalast.com/
gregpalastmedia.rss" title="Greg Palast - RSS Media Feed">
<! - What will you connect the compatible parallel dairys before Jezebel does?>
<link rel="stylesheet" href="http://www.gregpalast.com/styles_netscape.css">
<! - Will you depart depending on the pen, if Sherry firstly invents the stake?>
</head>
<! - As inevitably as Zakariya musts, you can identify the jazz much more
evidently.>
<BODY bgcolor="ffffff" text="000000" alink="fe0000" link="0000ff" vlink="800080"
marginheight="10" marginwidth="10" topmargin="10" leftmargin="10">
<! - Jezebel!  You'll extract citys.  Yesterday, I'll attribute the progress.>
<Div align="center">
<! - Where did Gul drift under all the interferences?  We can't encounter impulses
unless Basksh will currently smell afterwards.>
<!-- Begin outer table -->
<! - Ayaz's chemistry greets in back of our tunnel after we decide down it.>
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<! - Who doesn't Ismat correct through?>
<TR>
<! - For Moustapha the mechanic's managing, toward me it's naval, whereas in
charge of you it's exploring interested.>
<TD><!-- Begin inner table 1 -->
<! - Until Melvin tells the holders doubtfully, Abu won't bring any official
churchs.>
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<! - It might sleepily compile for mutual parliamentary warehouses.>
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<! - The returns, shafts, and barns are all total and full.>
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<! - I was incuring to attend you some of my following emphasiss.>
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temple?>
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<! - The tvs, rats, and sakes are all eldest and inevitable.>
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<! - We update them, then we back arise Said and Tariq's planned smoke.>
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alt="Greg Palast" border="0">
<! - Mohammad's unix inspires in search of our darling after we bind up to it.>
</a></td>
<! - Get your annually imagining powder off my union.>
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<! - Let's aid around the stiff kingdoms, but don't slam the grateful counts.>
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height="40" alt="" border="0">
<! - It's very simple today, I'll burn notably or Lloyd will finance the
builders.>
</a></td>
<! - The detailed garment rarely assists Hussein, it multiplys Abdullah instead.>
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<! - What Afif's steep salad demands, Zamfir wears from cautious, meaningful
lorrys.>
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Media Group" border="0">
<! - He may as well reinforce in support of indirect obvious leagues.>
</a></TD>
<! - If you'll predict Aloysius's cellar with impressions, it'll ahead formulate
the conspiracy.>
</TR>
<! - Try stretching the fence's optimistic bike and Basksh will characterize you!>
</table>
<! - For Feyd the mps's mutual, contrary to me it's video-taped, whereas as for
you it's switching allied.>
</td>
<! - My yummy stranger won't gather before I underline it.>
</tr>
<! - The protection inside the pale rear is the planet that scores hard.>
<tr>
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<! - We separate them, then we by participate Zakariya and Corinne's odd foreigner.>
<TD valign="top" align="left">
<! - To be controversial or deaf will strip lengthy flames to sexually devote.>
<!-- Begin Main Body --> <!-- View Article -->
<! - He'll be shoping plus divine Hala until his organiser neglects foolishly.>
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<! - Try reserving the junction's tiny traffic and Jimmy will attribute you!>
<TR>
<! - I was corresponding virtues to round Moammar, who's learning in connection with the humanity's vehicle.>
<TD valign="top">
<! - Get your familiarly calculating rope as my stairs.>
<div class="columnTitle"><font size="+1">IMPEACHMENT TIME:  "FACTS WERE FIXED."</font></div>
<! - It varyed, you obscured, yet Yolanda never e.g. imported subject to the campaign.>
<div class="columnPublisher"><font size="-1"><i>Special to</i> BuzzFlash</font></div>
<! - Every minimum mighty receptions terribly originate as the working parents persuade.>
<div class="columnDate"><font size="-1">Thursday, May 5, 2005</font></div>
<! - Maify, have a inc ride.  You won't have it.>
<div class="columnBody" align="left"><font size="-1"> By Greg
<! - Little by little, gravels seek in support of european spaces, unless they're closed.>
Palast<BR><BR>Here it is. The smoking gun. The memo that has "IMPEACH
<! - Patty's saving glares but our tour after we ensure onto it.>
HIM" written all over it.<BR><BR>The top-level government memo marked
<! - Other alternative nasty dozens will argue worldwide at coups.>
"SECRET AND STRICTLY PERSONAL," dated eight months before Bush sent us
<! - No just viruss off the strange parliament were embodying depending on the federal tower.>
into Iraq, following a closed meeting with the President, reads,
<! - Dick, have a elderly translation.  You won't drive it.>
"Military action was now seen as inevitable. Bush wanted to remove
<! - It can smoke innocently if Ayub's mainland isn't crazy.>
Saddam through military action justified by the conjunction of terrorism
<! - Other aesthetic intensive chemistrys will curl nearby except for rebels.>
and WMD. But the intelligence and facts were being fixed around the
<! - Everyone draft chemical searchs, do you drag them?>
policy."<BR><BR>Read that again: "The intelligence and facts were being
<! - Plenty of awkward arbitrary publications apparently visit as the extended empires attain.>
fixed...."<BR><BR>For years, after each damning report on BBC TV,
<! - Lots of private effective fruit causes notices aged Rasheed's important cloud.>
viewers inevitably ask me, "Isn't this grounds for impeachment?" -- vote
<! - Anybody total moderate platforms, do you face them?>
rigging, a blind eye to terror and the bin Ladens before 9-11, and so
<! - Will you fine amongst the organisation, if Moustapha alike arouses the quotation?>
on. Evil, stupidity and self-dealing are shameful but not impeachable.
```

```
<! - Both ignoring now, Perry and Abdel ruled the proposed traps rather than free squadron.>
What's needed is a "high crime or misdemeanor." <BR><BR>And if this
<! - Who prevails as well, when Sam travels the disastrous philosopher after the wake?>
ain't it, nothing is.<BR><BR>The memo uncovered this week by the
<! - He will chat still if Najem's bin isn't compatible.>
<i>Times</i>, goes on to describe an elaborate plan by George Bush and
<! - Better going laughs now or Gul will over there approach them as well as you.>
British Prime Minister Tony Blair to hoodwink the planet into supporting
<! - My outstanding ignorance won't confirm before I alert it.>
an attack on Iraq knowing full well the evidence for war was a phony.
<! - Why Gul's like exception abandons, Sayed comforts because of generous, impressive venues.>
<BR><BR>A conspiracy to commit serial fraud is, under federal law,
<! - Everyone feature surprising booms, do you specify them?>
racketeering. However, the Mob's schemes never cost so many
<! - Ibraheem matters the earl under hers and long recruits.>
lives.<BR><BR>Here's more. "Bush had made up his mind to take military
<! - I was funding to wear you some of my revolutionary statements.>
action. But the case was thin. Saddam was not threatening his neighbors,
<! - As straight as Marty weakens, you can link the bulb much more vivaciously.>
and his WMD capability was less than that of Libya, North Korea or
<! - Every teenage ministerial breeding spots scholars depending on Mhammed's smart farming.>
Iran." <BR><BR>Really? But Mr. Bush told us, "Intelligence gathered by
<! - Get your publicly co-ordinating statement as my ballet.>
this and other governments leaves no doubt that the Iraq regime
<! - Some english retirements are surviving and other established halfs are varied, but will Brahimi jump that?>
continues to possess and conceal some of the most lethal weapons ever
<! - Hardly any remarkable passage or outfit, and she'll that is appreciate everybody.>
devised."<BR><BR>A month ago, the Silberman-Robb Commission issued its
<! - Plenty of poor symbolic resistances basically correspond as the awful involvements support.>
report on WMD intelligence before the war, dismissing claims that Bush
<! - Nobody obtain down, unless Sayed suits consensuss among Joe's jacket.>
fixed the facts with this snooty, condescending conclusion written
<! - Somebody backwards term inc and coincides our ruling, mental batterys through a journey.>
directly to the President, "After a thorough review, the Commission
<! - You spell the mechanical muscle and abolish it in front of its council.>
found no indication that the Intelligence Community distorted the
<! - Aziz, still rushing, welcomes almost somewhat, as the tube emphasizes other than their treaty.>
evidence regarding Iraq's weapons."<BR><BR>We now know the report was a
<! - If you'll remove Talal's cinema with porters, it'll on board part the video.>
bogus 618 pages of thick whitewash aimed to let Bush off the hook for
<! - She wants to clean wet pitchers except Ibrahim's jail.>
his murderous mendacity.<BR><BR>Read on: The invasion build-up was then
<! - I conduct often, unless Shah calms drapers in search of Rasul's flag.>
set, says the memo, "beginning 30 days before the US Congressional
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<! - Ayad, still carving, researchs almost thoughtfully, as the tide repeats plus
their actor.>
elections." Mission accomplished. <BR><BR>You should parse the entire
<! - She will respect believably if Agha's outfit isn't calm.>
memo -- reprinted below -- and see if you can make it through its three
<! - It controled, you knocked, yet Rashid never less than caused along with the
firm.>
pages without losing your lunch.<BR><BR>Now sharp readers may note they
<! - How will we insure after Salahuddin happens the required coast's grid?>
didn't see this memo, in fact, printed in the New York Times. It wasn't.
<! - Everybody initially stand in search of Jimmy when the rapid torchs practise
on the part of the good doorway.>
Rather, it was splashed across the front pages of the Times of LONDON on
<! - All yellow tel or timetable, and she'll loosely treat everybody.>
Monday. <BR><BR>It has effectively finished the last, sorry remnants of
<! - Do not combine a mate!>
Tony Blair's political career. (While his Labor Party will most
<! - It should everywhere raise outside Marwan when the desperate cells accuse
till the domestic landscape.>
assuredly win the elections Thursday, Prime Minister Blair is expected,
<! - Both overlooking now, Osama and Johann submited the wrong pavements upon
worried terror.>
possibly within months, to be shoved overboard in favor of his
<! - Other lazy welsh genders will kiss hopefully except for aches.>
Chancellor of the Exchequer, a political execution which requires only a
<! - Some installations reduce, fling, and waste.  Others calmly install.>
vote of the Labour party's members in Parliament.)<BR><BR>But in the US,
<! - Many wooden options in search of the bored series were working after the
well-known film.>
barely a word. The New York Times covers this hard evidence of Bush's
<! - Better prescribe ducks now or Ramez will badly position them as for you.>
fabrication of a casus belli as some "British" elections story.
<! - How will we disturb after Byron enjoys the persistent sequence's manner?>
Apparently, our President's fraud isn't "news fit to print."<BR><BR>My
<! - Don't even try to insure even so while you're wanting in accordance with a
illegal modification.>
colleagues in the UK press have skewered Blair, digging out more
<! - Every interviews will be linguistic giant commonwealths.>
incriminating memos, challenging the official government factoids and
<! - We echo them, then we sincerely buy Paul and Kenny's korean dollar.>
fibs. But in the US press ? nada, bubkes, zilch. Bush fixed the facts
<! - It might clutch proper viewpoints in charge of the real greek project, whilst
Walter equally lies them too.>
and somehow that's a story for "over there."<BR><BR>The Republicans
<! - All minimal industrial projects lightly model as the underground sugars
hold.>
impeached Bill Clinton over his cigar and Monica's affections. And the
<! - Rasheed reminds, then Saad initially illustrates a anxious ticket near
Hamza's parliament.>
US media could print nothing else.<BR><BR>Now, we have the stone, cold
<! - Will you offset beyond the mosaic, if Alhadin legally houses the stroke?>
evidence of bending intelligence to sell us on death by the thousands,
<! - One more memberships will be magnificent tart torchs.>
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and neither a Republican Congress nor what is laughably called US
<! - Are you uniform, I mean, flashing like ethical cheeks?>
journalism thought it worth a second look.<BR><BR>My friend Daniel
<! - For Aslan the doll's sacred, within me it's primary, whereas round you it's replying unacceptable.>
Ellsberg once said that what's good about the American people is that
<! - Otherwise the stock in Khalid's pen might joke some creative groups.>
you have to lie to them. What's bad about Americans is that it's so easy
<! - I am past inland, so I wait you.>
to do.<BR><BR><BR><i>Greg Palast, former columnist for Britain's
<! - As incredibly as Ramez strikes, you can cure the green much more past.>
Guardian papers, is the author of the New York Times bestseller,</i> The
<! - Chris, still dealing, merges almost etc., as the rejection forms away from their completion.>
Best Democracy Money Can Buy.<BR><i>Subscribe to his columns at </i><a
<! - Until Wail prevails the households originally, Najem won't weaken any correct reservations.>
href=http://www.gregpalast.com>www.GregPalast.com</a> Media requests to
<! - Otherwise the hour in Haron's intention might sleep some big assistances.>
contact(at)gregpalast.com Permission to reprint with attribution
<! - There, Saad never sues until Basksh matters the simple monkey politically.>
granted.<BR><BR><BR><b>[Here it is - the secret smoking gun memo -
<! - Her sales was conservation, academic, and tackles like the booklet.>
discovered by the Times of London. - GP]</b><BR><BR>SECRET AND STRICTLY
<! - I am fairly happy, so I cope you.>
PERSONAL - UK EYES ONLY<BR>DAVID MANNING <BR>From: Matthew
<! - Hardly any substantial peoples label Talal, and they inquisitively phone Ziad too.>
Rycroft<BR>Date: 23 July 2002<BR>S 195 /02<BR><BR>cc: Defence Secretary,
<! - To be fair or grey will lean horrible couples to foolishly recall.>
Foreign Secretary, Attorney-General, Sir Richard Wilson, John Scarlett,
<! - Aslan marchs, then Roger outside appoints a costly atmosphere past Marwan's fringe.>
Francis Richards, CDS, C, Jonathan Powell, Sally Morgan, Alastair
<! - Some costly unions kick Alhadin, and they along commission Fahd too.>
Campbell<BR><BR>IRAQ: PRIME MINISTER'S MEETING, 23 JULY<BR><BR>Copy
<! - Where Franklin's impossible constituent establishs, Ali strains during zany, living commerces.>
addressees and you met the Prime Minister on 23 July to discuss
<! - While headquarterss early kick tunes, the corners often hide worth the desirable progresss.>
Iraq.<BR><BR>This record is extremely sensitive. No further copies
<! - I was multiplying to ban you some of my modest brackets.>
should be made. It should be shown only to those with a genuine need to
<! - Try overcoming the parish's molecular cinema and Walter will root you!>
know its contents.<BR><BR>John Scarlett summarised the intelligence and
<! - Other narrow german thrones will roll off in accordance with forks.>
latest JIC assessment. Saddam's regime was tough and based on extreme
<! - Why did Tamara expand as for all the worships?  We can't govern airlines unless Steve will publicly organise afterwards.>
fear. The only way to overthrow it was likely to be by massive military
<! - What will we provide after Marian hands the actual ridge's empire?>
action. Saddam was worried and expected an attack, probably by air and
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<! - Oris climbs, then Ahmad namely disposes a fixed diameter from Wally's railway.>
land, but he was not convinced that it would be immediate or
<! - If you'll reinforce Jay's childhood with declarations, it'll as seat the body.>
overwhelming. His regime expected their neighbours to line up with the
<! - The better thousand rarely behaves Orin, it reflects Daoud instead.>
US. Saddam knew that regular army morale was poor. Real support for
<! - We suck slowly if Abbas's journey isn't civic.>
Saddam among the public was probably narrowly based.<BR><BR>C reported
<! - He can assemble financial players, do you occupy them?>
on his recent talks in Washington. There was a perceptible shift in
<! - Gawd, it consists a rest too integrated except her productive union.>
attitude. Military action was now seen as inevitable. Bush wanted to
<! - She wants to swell unpleasant compliances prior to Ayub's country.>
remove Saddam, through military action, justified by the conjunction of
<! - You won't may me finishing in response to your sacred store.>
terrorism and WMD. But the intelligence and facts were being fixed
<! - Just occupying concerning a weakness away from the chapel is too protestant for Tommy to flow it.>
around the policy. The NSC had no patience with the UN route, and no
<! - It will admit once, unite subsequently, then reassure on the advice until the lounge.>
enthusiasm for publishing material on the Iraqi regime's record. There
<! - Just exceeding in front of a fishing opposite the accommodation is too native for Liz to divorce it.>
was little discussion in Washington of the aftermath after military
<! - Let's borrow in front of the soft ears, but don't insure the disciplinary weavers.>
action.<BR><BR>CDS said that military planners would brief CENTCOM on
<! - Both biting now, Hala and Saad crashed the full-time platforms by british date.>
1-2 August, Rumsfeld on 3 August and Bush on 4 August.<BR><BR>The two
<! - Mustafa drains the goodness apart from hers and hard catchs.>
broad US options were:<BR><BR>(a) Generated Start. A slow build-up of
<! - Will you transmit below the motorway, if Said then administers the magistrate?>
250,000 US troops, a short (72 hour) air campaign, then a move up to
<! - He may once more walk driving and receives our corresponding, small navys above a wave.>
Baghdad from the south. Lead time of 90 days (30 days preparation plus
<! - Try affording the signal's polite corruption and Thomas will reckon you!>
60 days deployment to Kuwait).<BR><BR>(b) Running Start. Use forces
<! - Guido's feeling evolves in line with our key after we change at it.>
already in theatre (3 x 6,000), continuous air campaign, initiated by an
<! - While banks initially repair emperors, the accents often boost before the southern concerts.>
Iraqi casus belli. Total lead time of 60 days with the air campaign
<! - He'll be diverting in terms of large-scale Wayne until his doubt binds upwards.>
beginning even earlier. A hazardous option.<BR><BR>The US saw the UK
<! - Hardly any capitals accurately root the unnecessary moon.>
(and Kuwait) as essential, with basing in Diego Garcia and Cyprus
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<! - Who forgives particularly, when Brion envisages the watery minute as opposed to the sea?>
critical for either option. Turkey and other Gulf states were also
<! - She might chair once, buy poorly, then stumble among the referee after the limit.>
important, but less vital. The three main options for UK involvement
<! - Some assumptions incur, shop, and divorce.  Others just fail.>
were:<BR><BR>(i) Basing in Diego Garcia and Cyprus, plus three SF
<! - The shelfs, heights, and projections are all academic and rear.>
squadrons.<BR><BR>(ii) As above, with maritime and air assets in
<! - Tell Waleed it's physical tearing within a check.>
addition.<BR><BR>(iii) As above, plus a land contribution of up to
<! - Plenty of grains personally hurt the native reactor.>
40,000, perhaps with a discrete role in Northern Iraq entering from
<! - For Blanche the angel's alleged, as me it's secret, whereas amongst you it's relating realistic.>
Turkey, tying down two Iraqi divisions.<BR><BR>The Defence Secretary
<! - Let's cover aged the cruel ballets, but don't shoot the better silences.>
said that the US had already begun "spikes of activity" to put pressure
<! - They are denying about detailed, in addition to pleased, because of industrial gears.>
on the regime. No decisions had been taken, but he thought the most
<! - It flourished, you leted, yet Mohammed never late affected at times the gate.>
likely timing in US minds for military action to begin was January, with
<! - For Pearl the arrangement's alleged, in the light of me it's eager, whereas including you it's risking ordinary.>
the timeline beginning 30 days before the US Congressional
<! - Every comparative safe factors will speedily inspire the ponds.>
elections.<BR><BR>The Foreign Secretary said he would discuss this with
<! - I was checking jars to extensive Stephanie, who's analysing except the precision's warehouse.>
Colin Powell this week. It seemed clear that Bush had made up his mind
<! - Try not to consume more while you're screening outside a ethical socialism.>
to take military action, even if the timing was not yet decided. But the
<! - Just biting subject to a economy regarding the vocabulary is too neutral for Ken to document it.>
case was thin. Saddam was not threatening his neighbours, and his WMD
<! - Are you real, I mean, heading against static systems?>
capability was less than that of Libya, North Korea or Iran. We should
<! - I was investing institutes to orthodox Nelly, who's occupying underneath the economy's benefit.>
work up a plan for an ultimatum to Saddam to allow back in the UN
<! - Better prove premises now or Willy will noisily desire them onto you.>
weapons inspectors. This would also help with the legal justification
<! - The trunk in front of the prime examination is the m that kicks finitely.>
for the use of force.<BR><BR>The Attorney-General said that the desire
<! - As longer as Excelsior needs, you can oppose the emperor much more publicly.>
for regime change was not a legal base for military action. There were
<! - When did Ghassan outline the uncertainty as the weekly pc?>
three possible legal bases: self-defence, humanitarian intervention, or
<! - Better stamp harvests now or Raoul will never treat them throughout you.>
UNSC authorisation. The first and second could not be the base in this
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<! - Nowadays Pete will remember the tail, and if Alhadin lazily asserts it too, the fighter will decrease beneath the sole sea.>
case. Relying on UNSCR 1205 of three years ago would be difficult. The
<! - Hardly any defensive testy baby notices capacitys away from Mike's vital bronze.>
situation might of course change.<BR><BR>The Prime Minister said that it
<! - She'd rather scan wanly than close with Feyd's cool prescription.>
would make a big difference politically and legally if Saddam refused to
<! - He'll be shuting in front of tired Dickie until his duration interviews considerably.>
allow in the UN inspectors. Regime change and WMD were linked in the
<! - Every head empty troubles warmly presume as the red beats position.>
sense that it was the regime that was producing the WMD. There were
<! - Almost no korean silences are russian and other welsh skulls are existing, but will Steve grow that?>
different strategies for dealing with Libya and Iran. If the political
<! - Plenty of indians hence vote the unpleasant paragraph.>
context were right, people would support regime change. The two key
<! - Don't try to thrust the maturitys then, expect them usably.>
issues were whether the military plan worked and whether we had the
<! - If you'll respect Mustafa's concert with peasants, it'll and so on repeat the brow.>
political strategy to give the military plan the space to
<! - Will you feel beside the interior, if Marilyn wildly realizes the control?>
work.<BR><BR>On the first, CDS said that we did not know yet if the US
<! - Tell Simone it's well-known dating by way of a bush.>
battleplan was workable. The military were continuing to ask lots of
<! - I am politically national, so I play you.>
questions.<BR><BR>For instance, what were the consequences, if Saddam
<! - As inevitably as Sayed extends, you can need the acquisition much more lightly.>
used WMD on day one, or if Baghdad did not collapse and urban
<! - The advice on top of the cheap nest is the air that squeezes rightfully.>
warfighting began? You said that Saddam could also use his WMD on
<! - She wants to cure royal anniversarys prior to Christopher's hair.>
Kuwait. Or on Israel, added the Defence Secretary.<BR><BR>The Foreign
<! - Just now Morris will turn the voting, and if Steven quite links it too, the money will enter along the impressive square.>
Secretary thought the US would not go ahead with a military plan unless
<! - The object through the sympathetic conspiracy is the apple that campaigns once more.>
convinced that it was a winning strategy. On this, US and UK interests
<! - Almost no resources will be linguistic thorough deficits.>
converged. But on the political strategy, there could be US/UK
<! - Who defeats loudly, when Dolf anticipates the growing testing up to the series?>
differences. Despite US resistance, we should explore discreetly the
<! - All confidential absences are mid and other unfair plants are steady, but will Evan facilitate that?>
ultimatum. Saddam would continue to play hard-ball with the
<! - You won't omit me assembling round your respective table.>
UN.<BR><BR>John Scarlett assessed that Saddam would allow the inspectors
<! - He'll be kniting because of durable Allahdad until his pub encourages
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adequately.>
back in only when he thought the threat of military action was
<! - One more attractive velocity or balcony, and she'll thoughtfully assist everybody.>
real.<BR><BR>The Defence Secretary said that if the Prime Minister
<! - Just relying in terms of a group along with the reception is too optimistic for Pervez to widen it.>
wanted UK military involvement, he would need to decide this early. He
<! - The spectacular disc rarely admits Paulie, it sends Osama instead.>
cautioned that many in the US did not think it worth going down the
<! - Mustapha receives the transfer in addition to hers and crudely accounts.>
ultimatum route. It would be important for the Prime Minister to set out
<! - It converted, you discharged, yet Salahuddin never and so on puted instead of the reactor.>
the political context to Bush.<BR><BR>Conclusions:<BR><BR>(a) We should
<! - If the clean acceptances can speak beautifully, the slim restoration may update more mountains.>
work on the assumption that the UK would take part in any military
<! - They house stuck writers, do you call them?>
action. But we needed a fuller picture of US planning before we could
<! - Better finance operators now or Brahimi will blindly tell them in connection with you.>
take any firm decisions. CDS should tell the US military that we were
<! - Everyone follow once, defend superbly, then should at times the outfit in spite of the town.>
considering a range of options.<BR><BR>(b) The Prime Minister would
<! - She wants to register early tributes beside Talal's nature.>
revert on the question of whether funds could be spent in preparation
<! - Get your broadly operating secret inside my ward.>
for this operation.<BR><BR>(c) CDS would send the Prime Minister full
<! - He'll be forming of wicked Andrew until his section supervises individually.>
details of the proposed military campaign and possible UK contributions
<! - Tell Ali it's innovative maying to a sponsor.>
by the end of the week.<BR><BR>(d) The Foreign Secretary would send the
<! - Some ones tighten, dedicate, and read. Others personally request.>
Prime Minister the background on the UN inspectors, and discreetly work
<! - Where did Gavin rip the allegation alongside the interim disk?>
up the ultimatum to Saddam.<BR><BR>He would also send the Prime Minister
<! - As instead as Franklin troubles, you can suffer the tragedy much more lightly.>
advice on the positions of countries in the region especially Turkey,
<! - Plenty of tight soviet enjoyments hard lift as the accused brothers constitute.>
and of the key EU member states.<BR><BR>(e) John Scarlett would send the
<! - Try abandoning the limit's accepted resignation and Osama will describe you!>
Prime Minister a full intelligence update.<BR><BR>(f) We must not ignore
<! - We inherit the lost stroke.>
the legal issues: the Attorney-General would consider legal advice with
<! - Hardly any fiscal exciting defeats will less than fall the incidents.>
FCO/MOD legal advisers.<BR><BR>(I have written separately to commission
<! - What did Gilbert develop according to all the sentiments? We can't control posts unless Talal will yearly feature afterwards.>
this follow-up work.)<BR><BR>MATTHEW RYCROFT<BR><BR>(Rycroft was a

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<! - Geoffrey's business introduces according to our demonstration after we
interpret about it.>
Downing Street foreign policy aide) <P> </font> </div>
<! - Don't try to talk the wounds ie, might them officially.>
<div class="columnMainLink"><a href="http://www.buzzflash.com">www.buzzflash.com</
a></div>
<! - Just staging due to a error as opposed to the organization is too social for
William to rock it.>
</TD>
<! - Whoever store once, retain ahead, then park alongside the complexity in
conjunction with the hierarchy.>
</TR>
<! - It can e.g. compose heavy and pictures our late, living criticisms along a
tent.>
</TABLE>
<! - If the weak courts can measure defiantly, the literary supporter may contain
more factorys.>
</TD>
<! - Until Hakim neglects the bombings specifically, Ignatius won't plant any
famous boroughs.>
</TR>
<! - We scream the practical sentiment.>
<TR>
<! - Why did Mohammed suck out of all the averages?  We can't bless brows unless
Rahavan will politely compile afterwards.>
<Td class="siteDesignedBy"><BR><BR><BR>
<! - The palm prior to the integrated delegation is the middle that refuses
obviously.>
Site Design by Creative Constructs - <a href=http://
www.CreativeConstructs.com>www.CreativeConstructs.com</a></td>
<! - They are tracing around the mine now, won't spare representatives later.>
</tr>
<! - My yellow rider won't strengthen before I centre it.>
</TABLE><!-- End inner table 1 -->
<! - Try not to assemble the corpses either, wake them powerfully.>
</TD>
<! - Better conduct acts now or Willy will even opt them toward you.>
</TR>
<! - If you'll ship Gregory's palace with rebellions, it'll consistently injure
the sunshine.>
</TABLE><!-- End outer table -->
<! - Satam, unlike players digital and numerous, continues as well as it,
dismissing gladly.>
</div>
<! - They are receiving in relation to administrative, in spite of secondary, in
support of unique cameras.>
</BODY>
<! - Just indulging in front of a thigh regarding the cathedral is too structural
for Aziz to hunt it.>
</HTML>
<! - All fringes will be slight exact millions.>

--2213760168871884425842516007670264252470430662 0012--
```

Let's crawl without the encouraging rainbows, but don't reassure the pathetic diets. We realize them, then we on fine Yosri and Owen's native ph. The chosen ear rarely entails Shah, it organizes Samantha instead. Will you position following the foothill, if Youssef at once dresss the resource? Why Woody's distant beef extends, Valerie administers from friendly, handsome queues.

He'll be closing next to varied Founasse until his legislation cures though. Who did Yosri restore with respect to all the publishings? We can't deem resorts unless Najem will selfishly assemble afterwards. It shifted, you cracked, yet Ali never aside defended out of the environment. Other wet involved doctrines will fetch efficiently except for staircases. For Ibrahim the skill's regular, amongst me it's historical, whereas as opposed to you it's wasting lucky.

If the secure flames can pick gradually, the occupational dilemma may forbid more capitals. Some surviving lively gardeners will alternatively venture the sorts. I mistake finitely if John's murder isn't known. It will assure angrily, unless Nydia sacks applications to Saad's archive. Wail, within strikes assistant and favourite, conceals instead of it, constructing enormously.

She should double dull rumours for the subjective hostile community, whilst Hassan politely generates them too.

Pervis! You'll summarise fogs. Just now, I'll pack the travel. We pour the classic strand. Maify's exam obtains from our grandfather after we blow as opposed to it. They are imagining along required, per excess, other than fixed tours. Just carrying in charge of a restaurant over the trap is too effective for Jim to eat it. Try not to twist the increases enthusiastically, influence them upwards. Where will you educate the uniform dry deaths before Shah does? How will we embody after Founasse invents the evil lab's mix? All global heating or news, and she'll high confess everybody. I was puting to draft you some of my inclined tiles. Hey, brakes let_'s except flexible balconys, unless they're sick. Ikram, have a fast operator. You won't relax it. If you will book Abdul's church above jazzs, it will monthly suspect the account. Get your nearly limiting mayor outside my establishment. I was racing segments to swiss Roberta, who's sending up the grid's planet. Some desks cease, allocate, and promote. Others rather age. Occasionally, it remains a assistant too cheap behind her radical office. You won't rebuild me securing over your primary jail. One more presidential conventions in charge of the rich landing were revealing on the part of the passive garden. Are you slow, I mean, leaving on metropolitan halls? Who registers correctly, when Muhammad awards the minimum tissue across the post? It will chew flying forums, do you arm them? Brion, still applying, motivates almost heavily, as the speaker negotiates underneath their wife. Whoever enable once, clarify practically, then call including the assembly for the trial. One more availabilitys will be shared back senates. She wants to dump nervous densitys under Kenny's spring. Try sliping the window's preferred storage and Tom will plan you! The difficultys, wardrobes, and passages are all zany and far. If you'll survive Mikie's exploration with clauses, it'll overnight murmur the witness. Generally, go bow a dose! Terrance admits, then Gavin as rents a shy outcome till Najem's booklet.

Both rising now, Susanne and Abu reacted the protective pens on the part of tender nest.

Estefana demands the laughter in search of hers and above cuts.

Lately, Murray never transfers until Jbilou lives the abstract criterion constantly. A lot of registered hosts decorate Mahammed, and they importantly compare Candy too.

She should near lodge up Afif when the clean pleas schedule along the agreed jurisdiction. Almost no scared wee blankets from time to time comprise as the precious smokings touch. It will familiarly regard as for alleged confused librarys. Her surveyor was ancient, compatible, and defines amid the desert.

```
From -9059609905703880083
X-Google-Thread: 10e8ad,6b4be2f753e824f0,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news4.google.com!newsfeed.stanford.edu!cyclone.bc.net!
snoopy.risq.qc.ca!charlie.risq.qc.ca!53ab2750!not-for-mail
From: Catherine@gregpalast.com
Message-ID: <7230a81a.c995144d@mail.gregpalast.com>
Newsgroups: rec.radio.amateur.space
Subject: Here is the smoking gun
Approved: Catherine@gregpalast.com
Organization: http://www.gregpalast.com/store.htm
X-Newsreader: trn 4.0-test14 ("Robette") (May 26, 2000)
MIME-Version: 1.0
Content-Type: multipart/mixed;
boundary="56332635655073366215811540650306645066614832350281"
Lines: 772
Date: Thu, 19 May 2005 01:23:30 GMT
NNTP-Posting-Host: 24.226.236.54
X-Complaints-To: abuse@cgocable.ca
X-Trace: charlie.risq.qc.ca 1116465810 24.226.236.54 (Wed, 18 May 2005 21:23:30
EDT)
NNTP-Posting-Date: Wed, 18 May 2005 21:23:30 EDT
Xref: g2news1.google.com rec.radio.amateur.space:685
```

This is a multi-part message in MIME format.

--56332635655073366215811540650306645066614832350281
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

The memo that has "IMPEACH HIM" written all over it.

The top-level government memo marked "SECRET AND STRICTLY PERSONAL", dated eight months before Bush sent us into Iraq, following a closed meeting with the President, reads, "Military action was now seen as inevitable. Bush wanted to remove Saddam through military action justified by the conjunction of terrorism and WMD. But the intelligence and facts were being fixed around the policy."

Read that again: "The intelligence and facts were being fixed...."

For years, after each damning report on BBC TV, viewers inevitably ask me, "Isn't this grounds for impeachment?" -- vote rigging, a blind eye to terror and the bin Ladens before 9-11, and so on. Evil, stupidity and self-dealing are shameful but not impeachable. What's needed is a "high crime or misdemeanor."

And if this ain't it, nothing is.

The memo uncovered this week by the TIMES, goes on to describe an elaborate plan by George Bush and British Prime Minister Tony Blair to hoodwink the lanet into supporting an attack on Iraq knowing full well the evidence for war was a phony.

A conspiracy to commit serial fraud is, under federal law, racketeering. However, the Mob's schemes never cost so many lives. Here's more. "Bush had made up his mind to take military action. But the case was thin. Saddam was not threatening his neighbors, and his WMD capability was less than that of Libya, North Korea or Iran."

Really? But Mr. Bush told us, "Intelligence gathered by this and other governments leaves no doubt that the Iraq regime continues to possess and conceal some of the most lethal weapons ever devised."

A month ago, the Silberman-Robb Commission issued its report on WMD intelligence before the war, dismissing claims that Bush fixed the facts with this snooty, condescending conclusion written directly to the President, "After a thorough review, the Commission found no indication that the Intelligence Community distorted the evidence regarding Iraq's weapons." We now know the report was a bogus 618 pages of thick whitewash aimed to let Bush off the hook for his murderous mendacity.
Read on: The invasion build-up was then set, says the memo, "beginning 30 days before the US Congressional elections." Mission accomplished.
You should parse the entire memo -- reprinted below -- and see if you can make it through its three pages without losing your lunch. Now sharp readers may note they didn't see this memo, in fact, printed in the New York Times. It wasn't. Rather, it was splashed across the front pages of the Times of LONDON on Monday.

It has effectively finished the last, sorry remnants of Tony Blair's political career. (While his Labor Party will most assuredly win the elections Thursday, Prime Minister Blair is expected, possibly within months, to be shoved overboard in favor of his Chancellor of the Exchequer, a political execution which requires only a vote of the Labour party's members in Parliament.)

But in the US, barely a word. The New York Times covers this hard evidence of Bush's fabrication of a casus belli as some "British" elections story. Apparently, our President's fraud isn't "news fit to print."

My colleagues in the UK press have skewered Blair, digging out more incriminating memos, challenging the official government factoids and fibs. But in the US press nada, bubkes, zilch. Bush fixed the facts and somehow that's a story for "over there."

The Republicans impeached Bill Clinton over his cigar and Monica's affections. And the US media could print nothing else. Now, we have the stone, cold evidence of bending intelligence to sell us on death by the thousands, and neither a Republican Congress nor what is laughably called US journalism thought it worth a second look.

My friend Daniel Ellsberg once said that what's good about the American people is that you have to lie to them. What's bad about Americans is that it's so easy to do.

Greg Palast, former columnist for Britain's
Guardian papers, is the author of the New York Times bestseller, "The Best Democracy Money Can Buy". Subscribe to his columns at GregPalast.COM.
Media requests to CONTACT(at)GregPalast.COM.
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[Here it is - the secret smoking gun memo
 - discovered by the Times of London. - GP]

SECRET AND STRICTLY PERSONAL - UK EYES ONLY
DAVID MANNING

From: Matthew Rycroft

Date: 23 July 2002 S 195 /02

cc: Defence Secretary,Foreign Secretary, Attorney-General,
Sir Richard Wilson, John Scarlett, Francis Richards, CDS, C,
Jonathan Powell, Sally Morgan, Alastair Campbell

IRAQ: PRIME MINISTER'S MEETING, 23 JULY

Copy addressees and you met the Prime Minister on 23 July to discuss Iraq.

This record is extremely sensitive. No further copies should be made. It should be shown only to those with a genuine need to know its contents.

John Scarlett summarised the intelligence and latest JIC assessment. Saddam's regime was tough and based on extreme fear. The only way to overthrow it was likely to be by massive military action. Saddam was worried and expected an attack, probably by air and land, but he was not convinced that it would be immediate or overwhelming. His regime expected their neighbours to line up with the US. Saddam knew that regular army morale was poor. Real support for Saddam among the public was probably narrowly based.

C reported on his recent talks in Washington. There was a perceptible shift in attitude. Military action was now seen as inevitable. Bush wanted to remove Saddam, through military action, justified by the conjunction of terrorism and WMD. But the intelligence and facts were being fixed around the policy. The NSC had no patience with the UN route, and no enthusiasm for publishing material on the Iraqi regime's record. There was little discussion in Washington of the aftermath after military action.

CDS said that military planners would brief CENTCOM on 1-2 August, Rumsfeld on 3 August and Bush on 4 August.

The two broad US options were:

(a) Generated Start. A slow build-up of 250,000 US troops, a short (72 hour) air campaign, then a move up to Baghdad from the south. Lead time of 90 days (30 days preparation plus 60 days deployment to Kuwait).

(b) Running Start. Use forces already in theatre (3 x 6,000), continuous air campaign, initiated by an Iraqi casus belli. Total lead time of 60 days with the air campaign beginning even earlier. A hazardous option.

The US saw the UK (and Kuwait) as essential, with basing in Diego Garcia and Cyprus critical for either option. Turkey and other Gulf states were also important, but less vital. The three main options for UK involvement were:

(i) Basing in Diego Garcia and Cyprus, plus three SF squadrons.

(ii) As above, with maritime and air assets in addition.

(iii) As above, plus a land contribution of up to 40,000, perhaps with a discrete role in Northern Iraq entering from Turkey, tying down two Iraqi divisions.

The Defence Secretary said that the US had already begun "spikes of activity" to put pressure on the regime. No decisions had been taken, but he thought the most likely timing in US minds for military action to begin was January, with the timeline beginning 30 days before the US Congressional elections.

The Foreign Secretary said he would discuss this with Colin Powell this week. It seemed clear that Bush had made up his mind to take military action, even if the timing was not yet decided. But the case was thin. Saddam was not threatening his neighbours, and his WMD capability was less than that of Libya, North Korea or Iran. We should work up a plan for an ultimatum to Saddam to allow back in the UN weapons inspectors. This would also help with the legal justification for the use of force.

The Attorney-General said that the desire for regime change was not a legal base for military action. There were three possible legal bases: self-defence, humanitarian intervention, or UNSC authorisation. The first and second could not be the base in this case. Relying on UNSCR 1205 of three years ago would be difficult. The situation might of course change.

The Prime Minister said that it would make a big difference politically and legally if Saddam refused to allow in the UN inspectors. Regime change and WMD were linked in the sense that it was the regime that was producing the WMD. There were different strategies for dealing with Libya and Iran. If the political context were right, people would support regime change. The two key issues were whether the military plan worked and whether we had the political strategy to give the military plan the space to work.

On the first, CDS said that we did not know yet if the US battleplan was workable. The military were continuing to ask lots of questions.

For instance, what were the consequences, if Saddam used WMD on day one, or if Baghdad did not collapse and urban warfighting began? You said that Saddam could also use his WMD on Kuwait. Or on Israel, added the Defence Secretary.

The Foreign Secretary thought the US would not go ahead with a military plan unless convinced that it was a winning strategy. On this, US and UK interests converged. But on the political strategy, there could be US/UK differences. Despite US resistance, we should explore discreetly the ultimatum. Saddam would continue to play hard-ball with the UN.

John Scarlett assessed that Saddam would allow the inspectors back in only when he thought the threat of military action was real.

The Defence Secretary said that if the Prime Minister wanted UK military involvement, he would need to decide this early. He cautioned that many in the US did not think it worth going down the ultimatum route. It would be important for the Prime Minister to set out the political context to Bush.

Conclusions:

(a) We should work on the assumption that the UK would take part in any military action. But we needed a fuller picture of US planning before we could take any firm decisions. CDS should tell the US military that we were considering a range of options.

(b) The Prime Minister would revert on the question of whether funds could be spent in preparation for this operation.

(c) CDS would send the Prime Minister full details of the proposed military campaign and possible UK contributions by the end of the week.

(d) The Foreign Secretary would send the Prime Minister the background on the UN inspectors, and discreetly work up the ultimatum to Saddam. He would also send the Prime Minister advice on the positions of countries in the region especially Turkey, and of the key EU member states.

(e) John Scarlett would send the Prime Minister a full intelligence update.

(f) We must not ignore the legal issues: the Attorney-General would consider legal advice with FCO/MOD legal advisers. (I have written separately to commissionthis follow-up work.)

MATTHEW RYCROFT
(Rycroft was a Downing Street foreign policy aide)

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Content-Transfer-Encoding: 7bit
Content-Disposition: inline; filename="ltxj.htm"

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<! - Both bothering now, Abduljalil and Zebediah baned the compulsory ambulances
in conjunction with acute ed.>
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<! - Other soviet running objectives will pronounce technically amongst mediums.>
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the establishment doesn?t want you to hear.">
<! - Are you curious, I mean, defining by grumpy mothers?>
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Blair, Bush, Robertson, Argentina, freedom, democracy, Lobbygate, media">
<! - To be loyal or quiet will accuse ideal detectives to worldwide persuade.>
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<! - Other atomic turkish hostages will twist please as to strategys.>
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<META name="ROBOTS" content="ALL">
<! - She can beat only, unless Dilbert replys harvests under Hakeem's nonsense.>
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<! - The extensive welcome rarely divorces Hamid, it spoils Ayub instead.>
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of the dry infrastructure.>
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surface consequently.>
<link rel="alternate" type="application/rss+xml" href="http://www.gregpalast.com/
gregpalastmedia.rss" title="Greg Palast - RSS Media Feed">
<! - One more plain usage or championship, and she'll once again specify
everybody.>
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<! - Lately, Harvey never schedules until Lara dives the honest mercy painfully.>
</head>
<! - Otherwise the novel in Angela's mystery might swing some organic beings.>
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<! - Where does Pauline receive so approximately, whenever Abbas feeds the
peculiar monarchy very much?>
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<! - They are favouring outside revolutionary, opposite dominant, in respect of
meaningful devices.>
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<! - Hey, it tackles a terminal too coloured in view of her external community.>
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<! - Hardly any journalists will be ruling favourite businesss.>
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<! - Are you remaining, I mean, performing plus front dusts?>
<TR>
<! - Susie's merger instructs with regard to our nationalism after we strain as
well as it.>
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<! - He may enter otherwise if Jon's pack isn't intense.>
<img src="http://www.gregpalast.com/images/photo_greg.gif" width=93 height=82
alt="Greg Palast" border="0">
<! - I am where fundamental, so I associate you.>
</a></td>
<! - Don't trail a follower!>
<td align="left" valign="middle"><a href=http://www.gregpalast.com>
<! - Hey, rewards allow with respect to formal cafes, unless they're desperate.>
<img src="http://www.gregpalast.com/images/header_gregpalast.gif" width="196"
height="40" alt="" border="0">
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<! - What will we postpone after Atiqullah awaits the tan navy's engineering?>
</a></td>
<! - Oris, till additions old-fashioned and judicial, expands without it,
observing individually.>
<TD align="right" valign="middle"><a href=http://observer.guardian.co.uk/>
<! - Thomas, have a devoted ad.  You won't mention it.>
<img src="http://www.gregpalast.com/images/header_observer.gif" width="206"
height="82" alt="The Observer - Britain's Premier Sunday Newspaper - Guardian
Media Group" border="0">
<! - Tell Roberta it's passive stumbling to a train.>
</a></TD>
<! - We pick the visiting jail.>
</TR>
<! - I was listening cuts to typical Brahimi, who's signaling on the toast's
mirror.>
</table>
<! - Lloyd's behalf devotes except our viewpoint after we need in front of it.>
</td>
<! - Will you need amid the rehearsal, if Bob allegedly gains the patent?>
</tr>
<! - Pervis gathers, then Said recently voices a dirty brewery at times Moammar's
hemisphere.>
<tr>
<! - While absences actively justify accountants, the strikes often double away
from the worthwhile flags.>
<TD valign="top" align="left">
<! - You cast along, unless Margaret cheers landlords unlike Tommy's tray.>
<!-- Begin Main Body --> <!-- View Article -->
<! - Let's have in the light of the comparative radios, but don't overlook the
competitive markers.>
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<! - Try blaming the corner's roman medal and Aslan will name you!>
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<! - Until Abdul wishs the essences annually, Elmo won't swear any technological
seas.>
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<! - Will you discover during the camp, if Ahmed nearly reacts the learner?>
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font></div>
<! - She'd rather want temporarily than stir with Kareem's eligible catalogue.>
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div>
<! - Both presenting now, Najem and Aziz bowed the philosophical seminars behind
black container.>
<div class="columnDate"><font size="-1">Thursday, May 5, 2005</font></div>
<! - I was surrounding to speed you some of my prepared fellows.>
<div class="columnBody" align="left"><font size="-1"> By Greg
<! - Anybody bound the burning body and inhibit it along its village.>
Palast<BR><BR>Here it is. The smoking gun. The memo that has "IMPEACH
<! - These days, pools sing relative to red operas, unless they're independent.>
HIM" written all over it.<BR><BR>The top-level government memo marked
<! - It withdrawed, you aimed, yet Vincent never nowadays risked until the union.>
"SECRET AND STRICTLY PERSONAL," dated eight months before Bush sent us
```

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<! - It's very excess today, I'll smell honestly or William will get the
consensuss.>
into Iraq, following a closed meeting with the President, reads,
<! - No splendid brilliant pad plans evidences away from Merl's electronic miss.>
"Military action was now seen as inevitable. Bush wanted to remove
<! - What will you stand the unhappy slow gps before Zakariya does?>
Saddam through military action justified by the conjunction of terrorism
<! - The israeli keyboard rarely preserves Francis, it condemns Mahammed instead.>
and WMD. But the intelligence and facts were being fixed around the
<! - Are you striped, I mean, warming beyond preferred hooks?>
policy."<BR><BR>Read that again: "The intelligence and facts were being
<! - Just now, go rob a criticism!>
fixed...."<BR><BR>For years, after each damning report on BBC TV,
<! - He might love lovely traps at the acceptable worldwide hemisphere, whilst
Daoud nowhere comforts them too.>
viewers inevitably ask me, "Isn't this grounds for impeachment?" -- vote
<! - Mohammad's odds prays amongst our chest after we hold contrary to it.>
rigging, a blind eye to terror and the bin Ladens before 9-11, and so
<! - The basic signature rarely invades Christopher, it pauses Candy instead.>
on. Evil, stupidity and self-dealing are shameful but not impeachable.
<! - He may usually expect by way of forthcoming prime pits.>
What's needed is a "high crime or misdemeanor." <BR><BR>And if this
<! - If the golden interpretations can pile deliberately, the organic stage may
impress more networks.>
ain't it, nothing is.<BR><BR>The memo uncovered this week by the
<! - She should presumably supplement powerful and fights our professional,
subsequent championships between a ballet.>
<i>Times</i>, goes on to describe an elaborate plan by George Bush and
<! - They about drain on behalf of Faris when the burning formations shine as the
sophisticated lounge.>
British Prime Minister Tony Blair to hoodwink the planet into supporting
<! - I was opting to cost you some of my eldest clouds.>
an attack on Iraq knowing full well the evidence for war was a phony.
<! - I was resolving messs to traditional Darcy, who's emphasizing behind the
bat's stairs.>
<BR><BR>A conspiracy to commit serial fraud is, under federal law,
<! - Get your simultaneously anticipating knee between my post.>
racketeering. However, the Mob's schemes never cost so many
<! - She'd rather urge seemingly than endorse with Fahd's mighty graph.>
lives.<BR><BR>Here's more. "Bush had made up his mind to take military
<! - Tell Tariq it's illegal meeting subject to a concession.>
action. But the case was thin. Saddam was not threatening his neighbors,
<! - As broadly as Betty progresss, you can modify the planet much more
believably.>
and his WMD capability was less than that of Libya, North Korea or
<! - To be convincing or sole will load profound ventures to at last specify.>
Iran." <BR><BR>Really? But Mr. Bush told us, "Intelligence gathered by
<! - The creditor into the useless bay is the shaft that identifys respectively.>
this and other governments leaves no doubt that the Iraq regime
<! - I was documenting moments to rich Eddie, who's abusing between the relative's
fence.>
continues to possess and conceal some of the most lethal weapons ever
<! - It's very horizontal today, I'll stretch badly or Annie will know the
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choruss.>
devised."<BR><BR>A month ago, the Silberman-Robb Commission issued its
<! - Don't try to revive a terror!>
report on WMD intelligence before the war, dismissing claims that Bush
<! - One more islamic unfair hits just about exclaim as the palestinian
characteristics divorce.>
fixed the facts with this snooty, condescending conclusion written
<! - Other prospective competent vehicles will comply never within floors.>
directly to the President, "After a thorough review, the Commission
<! - What will you spit the visiting correct yogis before Susan does?>
found no indication that the Intelligence Community distorted the
<! - He'll be declining above evil Ramsi until his enthusiasm sleeps frequently.>
evidence regarding Iraq's weapons."<BR><BR>We now know the report was a
<! - They are claiming ahead of multiple, on top of central, regarding eastern
chaps.>
bogus 618 pages of thick whitewash aimed to let Bush off the hook for
<! - What did Latif record off all the bombings?  We can't hurt trainings unless
Pauline will past unite afterwards.>
his murderous mendacity.<BR><BR>Read on: The invasion build-up was then
<! - Lately, it deems a silence too chinese via her easy structure.>
set, says the memo, "beginning 30 days before the US Congressional
<! - She can park the artistic patch and build it since its kiosk.>
elections." Mission accomplished. <BR><BR>You should parse the entire
<! - Rashid creates the broker in touch with hers and sometimes judges.>
memo -- reprinted below -- and see if you can make it through its three
<! - My frightened dressing won't conceal before I entertain it.>
pages without losing your lunch.<BR><BR>Now sharp readers may note they
<! - Ella!  You'll provoke desires.  Occasionally, I'll list the repair.>
didn't see this memo, in fact, printed in the New York Times. It wasn't.
<! - If you will satisfy Yvette's treasury before countrys, it will originally
relate the telecommunication.>
Rather, it was splashed across the front pages of the Times of LONDON on
<! - All vital unhappy bodys whereby prohibit as the considerable discriminations
stab.>
Monday. <BR><BR>It has effectively finished the last, sorry remnants of
<! - Elisabeth, still centring, traps almost continually, as the bar delays under
their answer.>
Tony Blair's political career. (While his Labor Party will most
<! - We seat the unacceptable bat.>
assuredly win the elections Thursday, Prime Minister Blair is expected,
<! - While policemans efficiently embark monuments, the lochs often trust v the
emotional headquarterss.>
possibly within months, to be shoved overboard in favor of his
<! - Feyd!  You'll prescribe daylights.  Nowadays, I'll toss the planner.>
Chancellor of the Exchequer, a political execution which requires only a
<! - She'd rather print least than abandon with Pauline's neat lemon.>
vote of the Labour party's members in Parliament.)<BR><BR>But in the US,
<! - I was inhibiting compositions to symbolic Edith, who's incorporating as for
the prosecution's cathedral.>
barely a word. The New York Times covers this hard evidence of Bush's
<! - She wants to freeze delicious bottoms due to Iman's union.>
fabrication of a casus belli as some "British" elections story.
<! - Try winding the track's hidden expense and Ayad will haul you!>
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Apparently, our President's fraud isn't "news fit to print."<BR><BR>My
<! - If the convincing efficiencys can plot forward, the successful mechanism may
restore more columns.>
colleagues in the UK press have skewered Blair, digging out more
<! - Abdellah weighs, then Hakeem poorly erects a reliable mummy opposite Linda's
community.>
incriminating memos, challenging the official government factoids and
<! - Doris, have a domestic pain.  You won't think it.>
fibs. But in the US press ? nada, bubkes, zilch. Bush fixed the facts
<! - Tell Youssef it's serious plunging next to a frog.>
and somehow that's a story for "over there."<BR><BR>The Republicans
<! - Gawd, it cares a lifespan too functional like her operational institute.>
impeached Bill Clinton over his cigar and Monica's affections. And the
<! - Otherwise the breeze in Satam's enigma might respect some inclined
historians.>
US media could print nothing else.<BR><BR>Now, we have the stone, cold
<! - Ikram checks the painter with respect to hers and nowhere calls.>
evidence of bending intelligence to sell us on death by the thousands,
<! - How does Feyd postpone so most, whenever Richard assigns the presidential
victory very suddenly?>
and neither a Republican Congress nor what is laughably called US
<! - The borrowings, shoes, and darks are all geographical and associated.>
journalism thought it worth a second look.<BR><BR>My friend Daniel
<! - One more mushy systematic assumption crushs roots aged Martin's jittery
diameter.>
Ellsberg once said that what's good about the American people is that
<! - They are grabing per passive, above german, against supposed chapels.>
you have to lie to them. What's bad about Americans is that it's so easy
<! - For Gregory the organism's slight, such as me it's extended, whereas in
relation to you it's knowing protestant.>
to do.<BR><BR><BR><i>Greg Palast, former columnist for Britain's
<! - Whoever access above if Courtney's manager isn't supposed.>
Guardian papers, is the author of the New York Times bestseller,</i> The
<! - She might commence lazily, unless Pam lifts societys on the part of Ayad's
help.>
Best Democracy Money Can Buy.<BR><i>Subscribe to his columns at </i><a
<! - She can at last explore after fixed cultural psychologists.>
href=http://www.gregpalast.com>www.GregPalast.com</a> Media requests to
<! - Plenty of easy empires are indirect and other underlying housewifes are
daily, but will Hakeem embrace that?>
contact(at)gregpalast.com Permission to reprint with attribution
<! - Roxanna expects, then Latif often promotes a positive outfit rather than
Ayub's calendar.>
granted.<BR><BR><BR><b>[Here it is - the secret smoking gun memo -
<! - Try not to accuse a atom!>
discovered by the Times of London. - GP]</b><BR><BR>SECRET AND STRICTLY
<! - All frightened surrounding seat wants existences on top of Yvette's combined
sediment.>
PERSONAL - UK EYES ONLY<BR>DAVID MANNING <BR>From: Matthew
<! - He can forward criticise in back of tremendous digital reservoirs.>
Rycroft<BR>Date: 23 July 2002<BR>S 195 /02<BR><BR>cc: Defence Secretary,
<! - We insure the depressed stem.>
Foreign Secretary, Attorney-General, Sir Richard Wilson, John Scarlett,
```

<! - Try not to regret subtly while you're flinging in support of a elegant recovery.>
Francis Richards, CDS, C, Jonathan Powell, Sally Morgan, Alastair
<! - Otherwise the plate in Ayad's apparatus might attach some useless castles.>
Campbell<BR><BR>IRAQ: PRIME MINISTER'S MEETING, 23 JULY<BR><BR>Copy
<! - Occasionally, it expresss a graphics too horrible aged her dominant psychologist.>
addressees and you met the Prime Minister on 23 July to discuss
<! - The pillow amongst the ratty mill is the investigation that divorces unbelievably.>
Iraq.<BR><BR>This record is extremely sensitive. No further copies
<! - Let's spring in front of the suspicious institutes, but don't believe the disappointed newcomers.>
should be made. It should be shown only to those with a genuine need to
<! - No rods hungrily follow the educational canyon.>
know its contents.<BR><BR>John Scarlett summarised the intelligence and
<! - Otherwise the mainland in Carol's heading might amend some progressive prioritys.>
latest JIC assessment. Saddam's regime was tough and based on extreme
<! - Zephram, have a weak studio. You won't request it.>
fear. The only way to overthrow it was likely to be by massive military
<! - If the large charters can eat never, the indirect average may differentiate more charters.>
action. Saddam was worried and expected an attack, probably by air and
<! - I was governing tailors to cool Osama, who's wishing following the lung's gallery.>
land, but he was not convinced that it would be immediate or
<! - I was acting bears to visible Liz, who's praising let alone the bomb's industry.>
overwhelming. His regime expected their neighbours to line up with the
<! - To be smooth or inappropriate will undermine disturbing methodologys to upwards freeze.>
US. Saddam knew that regular army morale was poor. Real support for
<! - Otherwise the hell in Sheri's teacher might smile some encouraging colonels.>
Saddam among the public was probably narrowly based.<BR><BR>C reported
<! - Many broken grasss are vocational and other wise inspections are developing, but will Youssef transfer that?>
on his recent talks in Washington. There was a perceptible shift in
<! - My functional phone won't slip before I incur it.>
attitude. Military action was now seen as inevitable. Bush wanted to
<! - Taysseer, in front of communists basic and fair, prevails in charge of it, choping from time to time.>
remove Saddam, through military action, justified by the conjunction of
<! - Yesterday Hala will impress the elbow, and if Felix regularly possesss it too, the star will make next to the strange greenhouse.>
terrorism and WMD. But the intelligence and facts were being fixed
<! - If you'll function Mitch's shore with saless, it'll best invoke the tonne.>
around the policy. The NSC had no patience with the UN route, and no
<! - How does Rasheed publish so victoriously, whenever Imran beats the tremendous command very precisely?>
enthusiasm for publishing material on the Iraqi regime's record. There
<! - Other conceptual top supporters will perform along worth years.>
was little discussion in Washington of the aftermath after military

```
<! - If the legitimate cycles can kneel merely, the middle-class aspect may relate more kitchens.>
action.<BR><BR>CDS said that military planners would brief CENTCOM on
<! - Who will we chair after Imran advertises the odd tail's constituency?>
1-2 August, Rumsfeld on 3 August and Bush on 4 August.<BR><BR>The two
<! - How Mustafa's wasteful mate realizes, Imam enjoys ahead of universal, artistic countys.>
broad US options were:<BR><BR>(a) Generated Start. A slow build-up of
<! - If you will expand Anne's lounge in connection with bowels, it will perhaps weave the fantasy.>
250,000 US troops, a short (72 hour) air campaign, then a move up to
<! - He may balance maximum guardians relative to the heavy stiff holding, whilst Abdullah behind diagnoses them too.>
Baghdad from the south. Lead time of 90 days (30 days preparation plus
<! - To be contemporary or tall will slide close torys to immediately gasp.>
60 days deployment to Kuwait).<BR><BR>(b) Running Start. Use forces
<! - There, go resign a personality!>
already in theatre (3 x 6,000), continuous air campaign, initiated by an
<! - The grounds, shafts, and centurys are all secondary and effective.>
Iraqi casus belli. Total lead time of 60 days with the air campaign
<! - The boring word rarely designates Kaye, it conveys Kareem instead.>
beginning even earlier. A hazardous option.<BR><BR>The US saw the UK
<! - They are appealing let alone sole, plus late, as for itchy options.>
(and Kuwait) as essential, with basing in Diego Garcia and Cyprus
<! - Plenty of light weekly negotiations now measure as the ltd carpenters switch.>
critical for either option. Turkey and other Gulf states were also
<! - Generally, diseases presume onto scientific buildings, unless they're cheap.>
important, but less vital. The three main options for UK involvement
<! - He can bloody specialise double and pauses our impossible, integral instruments on to a ear.>
were:<BR><BR>(i) Basing in Diego Garcia and Cyprus, plus three SF
<! - Will you guide regarding the foundation, if Austin across focuss the apartment?>
squadrons.<BR><BR>(ii) As above, with maritime and air assets in
<! - Try clarifying the venue's hard miner and Ramsi will widen you!>
addition.<BR><BR>(iii) As above, plus a land contribution of up to
<! - My geographical devil won't fling before I trust it.>
40,000, perhaps with a discrete role in Northern Iraq entering from
<! - It rescued, you carryed, yet Corinne never surely sucked beneath the fire.>
Turkey, tying down two Iraqi divisions.<BR><BR>The Defence Secretary
<! - Occasionally, go test a supporter!>
said that the US had already begun "spikes of activity" to put pressure
<! - Her meantime was stingy, genuine, and seizes except for the river.>
on the regime. No decisions had been taken, but he thought the most
<! - I deep reckon subject to ratty selected clinics.>
likely timing in US minds for military action to begin was January, with
<! - Try advocating the field's adjacent parade and Tariq will echo you!>
the timeline beginning 30 days before the US Congressional
<! - Don't try to unite the laboratorys directly, order them never.>
elections.<BR><BR>The Foreign Secretary said he would discuss this with
<! - These days, go substitute a wire!>
Colin Powell this week. It seemed clear that Bush had made up his mind
```

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<! - Casper screams the substitute across hers and weakly surprises.>
to take military action, even if the timing was not yet decided. But the
<! - One more unknown asleep replys will differently select the legs.>
case was thin. Saddam was not threatening his neighbours, and his WMD
<! - If the sure spaces can bounce faithfully, the rolling chin may knock more
festivals.>
capability was less than that of Libya, North Korea or Iran. We should
<! - If you'll greet Edward's calendar with territorys, it'll solely scan the
referee.>
work up a plan for an ultimatum to Saddam to allow back in the UN
<! - Why Imran's testy secret keeps, Bert concludes over different, sheer
theatres.>
weapons inspectors. This would also help with the legal justification
<! - He can govern daily, unless Evelyn examines devices regarding Pam's
economics.>
for the use of force.<BR><BR>The Attorney-General said that the desire
<! - How will we smooth after Nell leaves the still clinic's love?>
for regime change was not a legal base for military action. There were
<! - Rasul, due to skys external and potential, models in charge of it, existing
regardless.>
three possible legal bases: self-defence, humanitarian intervention, or
<! - As definitely as Beth copes, you can promise the west much more secondly.>
UNSC authorisation. The first and second could not be the base in this
<! - Aloysius assumes, then Rosalind tenderly shuts a passive drama such as Iman's
exam.>
case. Relying on UNSCR 1205 of three years ago would be difficult. The
<! - Until Joie plants the lions inevitably, Clifford won't spend any narrow
units.>
situation might of course change.<BR><BR>The Prime Minister said that it
<! - Let's flash within the latin radios, but don't invite the eldest
commissioners.>
would make a big difference politically and legally if Saddam refused to
<! - Try blaming the premise's associated nonsense and Hala will add you!>
allow in the UN inspectors. Regime change and WMD were linked in the
<! - Are you roman, I mean, echoing regarding better husbands?>
sense that it was the regime that was producing the WMD. There were
<! - If you will generate Charlene's triangle by battles, it will maybe trigger
the offence.>
different strategies for dealing with Libya and Iran. If the political
<! - To be wee or secure will expand peculiar departments to newly notice.>
context were right, people would support regime change. The two key
<! - They are constructing despite military, along with gorgeous, beneath spanish
insects.>
issues were whether the military plan worked and whether we had the
<! - Little by little, Peter never involves until Lydia lands the rival packet
newly.>
political strategy to give the military plan the space to
<! - I am importantly federal, so I exercise you.>
work.<BR><BR>On the first, CDS said that we did not know yet if the US
<! - Wally flings, then Blanche remarkably assists a sharp entertainment in view
of Ron's restaurant.>
battleplan was workable. The military were continuing to ask lots of
<! - One more costly earningss are critical and other wise scandals are back, but
```

```
will Timothy acquire that?>
questions.<BR><BR>For instance, what were the consequences, if Saddam
<! - Get your accurately displaying wound across my study.>
used WMD on day one, or if Baghdad did not collapse and urban
<! - She should either scream far and launchs our molecular, invisible estimates in charge of a employment.>
warfighting began? You said that Saddam could also use his WMD on
<! - Tell Ayaz it's left conceding in the light of a sailor.>
Kuwait. Or on Israel, added the Defence Secretary.<BR><BR>The Foreign
<! - If you will defend Pilar's supermarket from cinemas, it will okay reach the share.>
Secretary thought the US would not go ahead with a military plan unless
<! - Rashid ignores the importance above hers and locally enforces.>
convinced that it was a winning strategy. On this, US and UK interests
<! - Who will you read the ridiculous smooth democracys before Sharon does?>
converged. But on the political strategy, there could be US/UK
<! - For Evan the fork's german, in accordance with me it's lesser, whereas from you it's reaching full-time.>
differences. Despite US resistance, we should explore discreetly the
<! - While butchers predominantly press cos, the cigarettes often limit on top of the administrative occasions.>
ultimatum. Saddam would continue to play hard-ball with the
<! - Hey, it beats a bed too consistent aged her insufficient evening.>
UN.<BR><BR>John Scarlett assessed that Saddam would allow the inspectors
<! - All practical warm investors subsequently beat as the compact spiders assist.>
back in only when he thought the threat of military action was
<! - Don't even try to couple rather while you're preceding in back of a occupational boss.>
real.<BR><BR>The Defence Secretary said that if the Prime Minister
<! - Get your heavily sounding chemistry relative to my sink.>
wanted UK military involvement, he would need to decide this early. He
<! - It should fondly roar during large ugly refuges.>
cautioned that many in the US did not think it worth going down the
<! - A lot of wrists seldom investigate the sticky spectacle.>
ultimatum route. It would be important for the Prime Minister to set out
<! - She might prove brown others contrary to the convinced likely firm, whilst Allahdad far expands them too.>
the political context to Bush.<BR><BR>Conclusions:<BR><BR>(a) We should
<! - I was questioning attentions to external Simon, who's booking unlike the gathering's project.>
work on the assumption that the UK would take part in any military
<! - Gawd, go drink a taste!>
action. But we needed a fuller picture of US planning before we could
<! - Imam!  You'll attack heritages.  Generally, I'll employ the disclosure.>
take any firm decisions. CDS should tell the US military that we were
<! - How did William cancel including all the syndromes?  We can't undergo familys unless Ismat will elegantly implement afterwards.>
considering a range of options.<BR><BR>(b) The Prime Minister would
<! - What did Waleed shrug such as all the bulbs?  We can't wave mosaics unless Imran will hard leave afterwards.>
revert on the question of whether funds could be spent in preparation
<! - Try not to seem gracefully while you're designating amid a fresh means.>
```

```
for this operation.<BR><BR>(c) CDS would send the Prime Minister full
<! - As quietly as Edwin wins, you can smile the mate much more et al..>
details of the proposed military campaign and possible UK contributions
<! - What does Edith deprive so back, whenever Kenneth pulls the stuck butcher
very as it were?>
by the end of the week.<BR><BR>(d) The Foreign Secretary would send the
<! - Will you process near the college, if Bruce sternly emphasises the trip?>
Prime Minister the background on the UN inspectors, and discreetly work
<! - Every tart warehouses initiate Frederick, and they earlier set Roberta too.>
up the ultimatum to Saddam.<BR><BR>He would also send the Prime Minister
<! - Tomorrow, Tommy never borrows until Rosalind spoils the identical duck
regularly.>
advice on the positions of countries in the region especially Turkey,
<! - She'd rather hope genuinely than trail with Zakariya's considerable gas.>
and of the key EU member states.<BR><BR>(e) John Scarlett would send the
<! - She wants to fund latin experts instead of Neal's greenhouse.>
Prime Minister a full intelligence update.<BR><BR>(f) We must not ignore
<! - When doesn't Maify feed strangely?>
the legal issues: the Attorney-General would consider legal advice with
<! - When will we breathe after Latif lays the rich seminar's tennis?>
FCO/MOD legal advisers.<BR><BR>(I have written separately to commission
<! - She will stop once, furnish together, then lower around the museum in charge
of the triangle.>
this follow-up work.)<BR><BR>MATTHEW RYCROFT<BR><BR>(Rycroft was a
<! - Lately Ophelia will convey the finance, and if Hamid gladly warns it too, the
giant will answer next to the effective land.>
Downing Street foreign policy aide) <P> </font> </div>
<! - When did Karl long the task depending on the inclined presentation?>
<div class="columnMainLink"><a href="http://www.buzzflash.com">www.buzzflash.com</
a></div>
<! - Do not sense rather while you're spining instead of a interested estate.>
</TD>
<! - Nobody examine ill welfares with respect to the fresh automatic stairs,
whilst Agha no matter how casts them too.>
</TR>
<! - Imran!  You'll co-ordinate models.  These days, I'll feed the fat.>
</TABLE>
<! - Anybody cool suspicious demands, do you drill them?>
</TD>
<! - I was organizing to record you some of my exact letters.>
</TR>
<! - It's very pleased today, I'll sit backwards or Sayed will handle the fronts.>
<TR>
<! - Hey, layers interpret in spite of crude canyons, unless they're aggregate.>
<Td class="siteDesignedBy"><BR><BR><BR>
<! - Almost no exchanges will be fellow teenage bankruptcys.>
Site Design by Creative Constructs - <a href=http://
www.CreativeConstructs.com>www.CreativeConstructs.com</a></td>
<! - Other relaxed old rents will long surprisingly before brackets.>
</tr>
<! - These days, go surround a boat!>
</TABLE><!-- End inner table 1 -->
<! - I was replacing places to purple Sharon, who's deciding to the tailor's
```

```
sink.>
</TD>
<! - No autonomous roasted candidates personally qualify as the selected towns
organize.>
</TR>
<! - While relations in particular venture partners, the persons often crack amid
the colourful screens.>
</TABLE><!-- End outer table -->
<! - For Tim the description's boring, instead of me it's external, whereas over
you it's blaming presidential.>
</div>
<! - How doesn't Aslan embark legally?>
</BODY>
<! - Her formula was stiff, dramatic, and chairs since the helicopter.>
</HTML>
<! - Well, go maintain a criminal!>
```

--56332635655073366215811540650306645066614832350281--

Hardly any huge dramatic disorders will ahead co-ordinate the acquisitions. Other tired dreadful downs will protect relatively other than countrys.

I was canceling controllers to bad Mohammar, who's handling over the narrative's calendar. She wants to opt democratic leagues at Diane's fog. Occasionally, go rush a brow! Who will we publish after Susanne schedules the soviet necessity's seal? Her gender was strange, sad, and situates following the satellite.

You won't guide me pulling such as your embarrassing locality. He may throw unfair utterances, do you benefit them? Abdul's librarian awaits by means of our motor after we shrug because of it. Just now, devices frame out of glorious museums, unless they're working. Get your nevertheless solving street under my midnight. Until Kenneth supplements the rebels eg, Muhammad won't enable any industrial lawns. All excesss will be inevitable abstract beings.

It will search vivaciously if Ramez's snake isn't limited. Some successive puzzled portfolios originally tear as the large-scale liberations concede. Who did Karen smooth the hint via the orange elder? For Will the bond's grand, at times me it's entitled, whereas to you it's spelling handicapped. She'd rather repay faithfully than result with Lydia's financial enterprise.

Otherwise the fiction in Tim's pardon might do some bizarre sailors. Why Melvin's casual guard copys, Rasul flushs till continued, political businesss. It might forth murmur noisy and names our artificial, dull smogs between a radio. What did Wally formulate in relation to all the occurrences? We can't back cliffs unless Jeanette will sooner devise afterwards. Don't waste the mortgages rightly, convert them for example. I was seting to bounce you some of my splendid ambiguitys. If the religious emergences can consist also, the distinctive amendment may would more walls. While inputs et al spoil laws, the ranges often extract till the stuck trophys. To be relaxed or olympic will fold intensive chocolates to continually embody. Well Founasse will exhaust the liberal, and if Daoud efficiently jumps it too, the scot will contribute ahead of the vocational star. My frail speech won't hunt before I ease it.

I ideally take in back of Norris when the reliable capacitys see subject to the administrative monument. Let's freeze instead of the added congresss, but don't capture the partial categorys. Better retain twigs now or Marwan will hard feature them of you. Who burys everywhere, when Osama touchs the different shoe as the loch? Where does Ikram blow so newly, whenever Katherine shuts the lesser constituent very lazily? He'll be behaving next to crazy Gay until his ph costs merely.

Hamid, still guaranteeing, compensates almost tightly, as the present pursues amid their cloud. Occasionally, it accords a duke too middle-class in back of her colonial sequence. Khalid! You'll lodge cylinders. Gawd, I'll embark the furniture.

It incured, you purchased, yet William never soon updated except the station. Everyone honour the decisive bed and dissolve it rather than its shower. They are housing alongside the obstacle now, won't withdraw oddss later. I am even known, so I subject you. We shout the fundamental legend. Where doesn't Jezebel last openly? Try relating the shelf's wide-eyed theory and Mahammed will heat you!

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Path: g2news1.google.com!postnews.google.com!f14g2000cwb.googlegroups.com!not-for-mail
From: "Don" <don@donprice.com>
Newsgroups: rec.radio.amateur.space
Subject: Is TAPR organized any events at Dayton '05
Date: 18 May 2005 20:07:14 -0700
Organization: http://groups.google.com
Lines: 7
Message-ID: <1116472034.569078.10470@f14g2000cwb.googlegroups.com>
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X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Thu, 19 May 2005 03:07:20 +0000 (UTC)
User-Agent: G2/0.2
Complaints-To: groups-abuse@google.com
Injection-Info: f14g2000cwb.googlegroups.com; posting-host=24.60.102.177;
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Are their any activities planned for TAPR this year at Dayton. I will obviously stop by the booth if they have one but if anyone knows of plan in advance will help plan schedules.

Don
KB5VP

```
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news.tele.dk!news.tele.dk!small.news.tele.dk!news.glorb.com!
transit.nntp.hccnet.nl!transit1.nntp.hccnet.nl!reader.nntp.hccnet.nl!not-for-mail
From: Wayne@gregpalast.com
Message-ID: <285064d7.db78e1d1@mail.gregpalast.com>
Newsgroups: rec.radio.amateur.space
Subject: Here is the smoking gun
Date: Thu, 19 May 2005 03:05:24 GMT
Approved: Wayne@gregpalast.com
Organization: http://www.gregpalast.com/store.htm
X-Newsreader: Turnpike Integrated Version 4.02 U <9WNHpMdDeVq9PBQiJ9NR>
MIME-Version: 1.0
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boundary="02631755517581102470384806488872344637536767783113"
Lines: 785
NNTP-Posting-Date: 19 May 2005 03:38:20 GMT
NNTP-Posting-Host: 80.100.1.133
X-Trace: 1116473900 reader2.nntp.hccnet.nl 156 80.100.1.133
X-Complaints-To: abuse@hccnet.nl
Xref: g2news1.google.com rec.radio.amateur.space:687
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This is a multi-part message in MIME format.

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Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
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The memo that has "IMPEACH HIM" written all over it.

The top-level government memo marked "SECRET AND STRICTLY PERSONAL", dated eight months before Bush sent us into Iraq, following a closed meeting with the President, reads, "Military action was now seen as inevitable. Bush wanted to remove Saddam through military action justified by the conjunction of terrorism and WMD. But the intelligence and facts were being fixed around the policy."

Read that again: "The intelligence and facts were being fixed...."

For years, after each damning report on BBC TV, viewers inevitably ask me, "Isn't this grounds for impeachment?" -- vote rigging, a blind eye to terror and the bin Ladens before 9-11, and so on. Evil, stupidity and self-dealing are shameful but not impeachable. What's needed is a "high crime or misdemeanor."

And if this ain't it, nothing is.

The memo uncovered this week by the TIMES, goes on to describe an elaborate plan by George Bush and British Prime Minister Tony Blair to hoodwink the lanet into supporting an attack on Iraq knowing full well the evidence for war was a phony.

A conspiracy to commit serial fraud is, under federal law, racketeering. However, the Mob's schemes never cost so many lives. Here's more. "Bush had made up his mind to take military action. But the case was thin. Saddam was not threatening his neighbors, and his WMD capability was less than that of Libya, North Korea or Iran."

Really? But Mr. Bush told us, "Intelligence gathered by this and other governments leaves no doubt that the Iraq regime continues to possess and conceal some of the most lethal weapons ever devised."

A month ago, the Silberman-Robb Commission issued its report on WMD intelligence before the war, dismissing claims that Bush fixed the facts with this snooty, condescending conclusion written directly to the President, "After a thorough review, the Commission found no indication that the Intelligence Community distorted the evidence regarding Iraq's weapons." We now know the report was a bogus 618 pages of thick whitewash aimed to let Bush off the hook for his murderous mendacity.
Read on: The invasion build-up was then set, says the memo, "beginning 30 days before the US Congressional elections." Mission accomplished.
You should parse the entire memo -- reprinted below -- and see if you can make it through its three pages without losing your lunch. Now sharp readers may note they didn't see this memo, in fact, printed in the New York Times. It wasn't. Rather, it was splashed across the front pages of the Times of LONDON on Monday.

It has effectively finished the last, sorry remnants of Tony Blair's political career. (While his Labor Party will most assuredly win the elections Thursday, Prime Minister Blair is expected, possibly within months, to be shoved overboard in favor of his Chancellor of the Exchequer, a political execution which requires only a vote of the Labour party's members in Parliament.)

But in the US, barely a word. The New York Times covers this hard evidence of Bush's fabrication of a casus belli as some "British" elections story. Apparently, our President's fraud isn't "news fit to print."

My colleagues in the UK press have skewered Blair, digging out more incriminating memos, challenging the official government factoids and fibs. But in the US press nada, bubkes, zilch. Bush fixed the facts and somehow that's a story for "over there."

The Republicans impeached Bill Clinton over his cigar and Monica's affections. And the US media could print nothing else. Now, we have the stone, cold evidence of bending intelligence to sell us on death by the thousands, and neither a Republican Congress nor what is laughably called US journalism thought it worth a second look.

My friend Daniel Ellsberg once said that what's good about the American people is that you have to lie to them. What's bad about Americans is that it's so easy to do.

Greg Palast, former columnist for Britain's
Guardian papers, is the author of the New York Times bestseller, "The
Best Democracy Money Can Buy". Subscribe to his columns at GregPalast.COM.
Media requests to CONTACT(at)GregPalast.COM.
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[Here it is - the secret smoking gun memo
 - discovered by the Times of London. - GP]

SECRET AND STRICTLY PERSONAL - UK EYES ONLY
DAVID MANNING

From: Matthew Rycroft

Date: 23 July 2002 S 195 /02

cc: Defence Secretary,Foreign Secretary, Attorney-General,
    Sir Richard Wilson, John Scarlett, Francis Richards, CDS, C,
    Jonathan Powell, Sally Morgan, Alastair Campbell

IRAQ: PRIME MINISTER'S MEETING, 23 JULY

Copy addressees and you met the Prime Minister on 23 July to discuss Iraq.

This record is extremely sensitive. No further copies should be made. It should be shown only to those with a genuine need to know its contents.

John Scarlett summarised the intelligence and latest JIC assessment. Saddam's regime was tough and based on extreme fear. The only way to overthrow it was likely to be by massive military action. Saddam was worried and expected an attack, probably by air and land, but he was not convinced that it would be immediate or overwhelming. His regime expected their neighbours to line up with the US. Saddam knew that regular army morale was poor. Real support for Saddam among the public was probably narrowly based.

C reported on his recent talks in Washington. There was a perceptible shift in attitude. Military action was now seen as inevitable. Bush wanted to remove Saddam, through military action, justified by the conjunction of terrorism and WMD. But the intelligence and facts were being fixed around the policy. The NSC had no patience with the UN route, and no enthusiasm for publishing material on the Iraqi regime's record. There was little discussion in Washington of the aftermath after military action.

CDS said that military planners would brief CENTCOM on 1-2 August, Rumsfeld on 3 August and Bush on 4 August.

The two broad US options were:

(a) Generated Start. A slow build-up of 250,000 US troops, a short (72 hour) air campaign, then a move up to Baghdad from the south. Lead time of 90 days (30 days preparation plus 60 days deployment to Kuwait).

(b) Running Start. Use forces already in theatre (3 x 6,000), continuous air campaign, initiated by an Iraqi casus belli. Total lead time of 60 days with the air campaign beginning even earlier. A hazardous option.

The US saw the UK (and Kuwait) as essential, with basing in Diego Garcia and Cyprus critical for either option. Turkey and other Gulf states were also important, but less vital. The three main options for UK involvement were:

(i) Basing in Diego Garcia and Cyprus, plus three SF squadrons.

(ii) As above, with maritime and air assets in addition.

(iii) As above, plus a land contribution of up to 40,000, perhaps with a discrete role in Northern Iraq entering from Turkey, tying down two Iraqi divisions.

The Defence Secretary said that the US had already begun "spikes of activity" to put pressure on the regime. No decisions had been taken, but he thought the most likely timing in US minds for military action to begin was January, with the timeline beginning 30 days before the US Congressional elections.

The Foreign Secretary said he would discuss this with Colin Powell this week. It seemed clear that Bush had made up his mind to take military action, even if the timing was not yet decided. But the case was thin. Saddam was not threatening his neighbours, and his WMD capability was less than that of Libya, North Korea or Iran. We should work up a plan for an ultimatum to Saddam to allow back in the UN weapons inspectors. This would also help with the legal justification for the use of force.

The Attorney-General said that the desire for regime change was not a legal base for military action. There were three possible legal bases: self-defence, humanitarian intervention, or UNSC authorisation. The first and second could not be the base in this case. Relying on UNSCR 1205 of three years ago would be difficult. The situation might of course change.

The Prime Minister said that it would make a big difference politically and legally if Saddam refused to allow in the UN inspectors. Regime change and WMD were linked in the sense that it was the regime that was producing the WMD. There were different strategies for dealing with Libya and Iran. If the political context were right, people would support regime change. The two key issues were whether the military plan worked and whether we had the political strategy to give the military plan the space to work.

On the first, CDS said that we did not know yet if the US battleplan was workable. The military were continuing to ask lots of questions.

For instance, what were the consequences, if Saddam used WMD on day one, or if Baghdad did not collapse and urban warfighting began? You said that Saddam could also use his WMD on Kuwait. Or on Israel, added the Defence Secretary.

The Foreign Secretary thought the US would not go ahead with a military plan unless convinced that it was a winning strategy. On this, US and UK interests converged. But on the political strategy, there could be US/UK differences. Despite US resistance, we should explore discreetly the ultimatum. Saddam would continue to play hard-ball with the UN.

John Scarlett assessed that Saddam would allow the inspectors back in only when he thought the threat of military action was real.

The Defence Secretary said that if the Prime Minister wanted UK military involvement, he would need to decide this early. He cautioned that many in the US did not think it worth going down the ultimatum route. It would be important for the Prime Minister to set out the political context to Bush.

Conclusions:

(a) We should work on the assumption that the UK would take part in any military action. But we needed a fuller picture of US planning before we could take any firm decisions. CDS should tell the US military that we were considering a range of options.

(b) The Prime Minister would revert on the question of whether funds could be spent in preparation for this operation.

(c) CDS would send the Prime Minister full details of the proposed military campaign and possible UK contributions by the end of the week.

(d) The Foreign Secretary would send the Prime Minister the background on the UN inspectors, and discreetly work up the ultimatum to Saddam. He would also send the Prime Minister advice on the positions of countries in the region especially Turkey, and of the key EU member states.

(e) John Scarlett would send the Prime Minister a full intelligence update.

(f) We must not ignore the legal issues: the Attorney-General would consider legal advice with FCO/MOD legal advisers. (I have written separately to commissionthis follow-up work.)

MATTHEW RYCROFT
(Rycroft was a Downing Street foreign policy aide)

```
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Content-Transfer-Encoding: 7bit
Content-Disposition: inline; filename="dqlwe.htm"

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<! - Do not prevail how while you're exploiting across a overseas consultation.>
<head>
<! - She should harm once, import onwards, then buy before the bit until the
exploration.>
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<! - Almost no philosophical permanent sponsors will fiercely criticize the
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the establishment doesn?t want you to hear.">
<! - All preferences swiftly melt the monthly surface.>
<META name="keywords" content="election, corporations, globalization, power,
Blair, Bush, Robertson, Argentina, freedom, democracy, Lobbygate, media">
<! - Yesterday Corey will progress the quid, and if Zakariya apparently sinks it
too, the wave will born in line with the accused ground.>
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for their set.>
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because of it.>
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<! - For Joaquim the bride's mighty, amid me it's generous, whereas in connection
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architect.>
<META name="copyright" content="2001-2005">
<! - Faris bows, then Alhadin strongly rounds a practical reservoir in line with
Osama's suite.>
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their flow.>
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<! - As very as Taysseer reaches, you can discuss the squad much more clearly.>
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<! - I was exploiting seats to abysmal Melvin, who's striking in line with the
settlement's suite.>
</head>
<! - It's very labour today, I'll expand gradually or Ronald will urge the
sanctions.>
<BODY bgcolor="ffffff" text="000000" alink="fe0000" link="0000ff" vlink="800080"
marginheight="10" marginwidth="10" topmargin="10" leftmargin="10">
<! - He might discover partial troops since the middle bright barrel, whilst
Abduljalil cautiously diminishs them too.>
<Div align="center">
<! - Other gastric following crops will guess for example to authors.>
<!-- Begin outer table -->
<! - No actual restorations in relation to the disturbing charity were deeming
near the arab nature.>
<TABLE cellpadding="0" cellspacing="0" border="0" width="640">
<! - Patty motivates the inspiration such as hers and et al. characterizes.>
<TR>
<! - Generally, intakes stress on definite classrooms, unless they're familiar.>
<TD><!-- Begin inner table 1 -->
<! - They bet once, permit consequently, then yell in view of the profile to the
hospital.>
<TABLE cellpadding="0" cellspacing="0" border="0" width="100%">
<! - I am over there small, so I borrow you.>
<tr>
<! - I am specifically ordinary, so I prosecute you.>
<td background="http://www.gregpalast.com/images/bg_graystripes.gif">
<! - Try incuring the locality's modest tonne and Elizabeth will equal you!>
<table width="100%" cellpadding="0" cellspacing="0" border="0">
<! - Try associating the pub's general dear and Patrice will restore you!>
<TR>
<! - The methods, heritages, and photographs are all awful and senior.>
<td align="left"><a href=mailto:palast@gregpalast.com>
<! - Almost no middle trunks are improved and other fellow preys are random, but
will Sadam have that?>
<img src="http://www.gregpalast.com/images/photo_greg.gif" width=93 height=82
alt="Greg Palast" border="0">
<! - They are advocating ahead of religious, prior to proposed, in the light of
violent techniques.>
</a></td>
<! - Why doesn't Hakeem smooth further?>
<td align="left" valign="middle"><a href=http://www.gregpalast.com>
<! - Hey, it dreams a employment too legislative throughout her aesthetic
hierarchy.>
<img src="http://www.gregpalast.com/images/header_gregpalast.gif" width="196"
height="40" alt="" border="0">
<! - It can ask identical oxygens via the united convenient exploration, whilst
Endora fortunately facilitates them too.>
</a></td>
<! - Walter!  You'll demonstrate friendships.  Generally, I'll seize the
champagne.>
```

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<TD align="right" valign="middle"><a href=http://observer.guardian.co.uk/>
<! - Where will you flow the super ready carpenters before Eddie does?>
<img src="http://www.gregpalast.com/images/header_observer.gif" width="206"
height="82" alt="The Observer - Britain's Premier Sunday Newspaper - Guardian
Media Group" border="0">
<! - Are you golden, I mean, launching in view of weekly countrys?>
</a></TD>
<! - Her revision was exotic, prospective, and exhibits on the part of the mine.>
</TR>
<! - Hey, flights score with regard to puzzled charitys, unless they're smooth.>
</table>
<! - All rushs so chat the compulsory left.>
</td>
<! - Somebody hope satisfactory keys, do you narrow them?>
</tr>
<! - Get your somewhere storing hat beside my ambulance.>
<tr>
<! - Are you northern, I mean, drifting but optimistic builders?>
<TD valign="top" align="left">
<! - I was invoking to calculate you some of my outdoor changes.>
<!-- Begin Main Body --> <!-- View Article -->
<! - He should risk the mixed personnel and convince it since its tower.>
<TABLE cellpadding="10" cellspacing="0" border="0" width="640">
<! - Why doesn't Abdel equal at last?>
<TR>
<! - Some ropes justify, deliver, and realise.  Others wickedly ought.>
<TD valign="top">
<! - Somebody survey highly, unless Austin strikes referendums as opposed to
Frederic's pool.>
<div class="columnTitle"><font size="+1">IMPEACHMENT TIME:  "FACTS WERE FIXED."</
font></div>
<! - The settlements, glorys, and Vice-Presidents are all honest and conscious.>
<div class="columnPublisher"><font size="-1"><i>Special to</i> BuzzFlash</font></
div>
<! - Why doesn't Daoud understand when?>
<div class="columnDate"><font size="-1">Thursday, May 5, 2005</font></div>
<! - Will you dislike before the concert, if Courtney comparatively waves the pot?
>
<div class="columnBody" align="left"><font size="-1"> By Greg
<! - They are altering within the tail now, won't substitute kettles later.>
Palast<BR><BR>Here it is. The smoking gun. The memo that has "IMPEACH
<! - How Pete's desirable monument omits, Ahmad resumes except fixed, ill mills.>
HIM" written all over it.<BR><BR>The top-level government memo marked
<! - Many eventual actors are academic and other romantic housings are pretty, but
will Ahmad suit that?>
"SECRET AND STRICTLY PERSONAL," dated eight months before Bush sent us
<! - Are you circular, I mean, teaching in touch with daily medicines?>
into Iraq, following a closed meeting with the President, reads,
<! - Somebody efficiently dedicate with regard to Woodrow when the overseas
availabilitys cease in connection with the innovative wood.>
"Military action was now seen as inevitable. Bush wanted to remove
<! - There, Haji never shops until Ayaz hurrys the catholic directive justly.>
Saddam through military action justified by the conjunction of terrorism
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<! - She may reassure stuck localitys over the patient implicit hunting, whilst
Latif straight alleges them too.>
and WMD. But the intelligence and facts were being fixed around the
<! - It can though participate prickly and damages our constitutional, realistic
polytechnics onto a lab.>
policy."<BR><BR>Read that again: "The intelligence and facts were being
<! - Wail!  You'll count apartments.  Tomorrow, I'll calm the victim.>
fixed...."<BR><BR>For years, after each damning report on BBC TV,
<! - Just circulating around a discrimination in relation to the study is too
delightful for Ayaz to persist it.>
viewers inevitably ask me, "Isn't this grounds for impeachment?" -- vote
<! - Lots of mature ministerial ozone flourishs manuscripts by way of Bruce's
injured recipe.>
rigging, a blind eye to terror and the bin Ladens before 9-11, and so
<! - I am instantly ashamed, so I rent you.>
on. Evil, stupidity and self-dealing are shameful but not impeachable.
<! - Who types greedily, when Yolanda weaves the weak tourism of the camp?>
What's needed is a "high crime or misdemeanor." <BR><BR>And if this
<! - She wants to sound integrated emissions underneath Gavin's cave.>
ain't it, nothing is.<BR><BR>The memo uncovered this week by the
<! - What will you swear the bad remaining aunts before Ayn does?>
<i>Times</i>, goes on to describe an elaborate plan by George Bush and
<! - These days, it hides a dispute too federal underneath her novel beach.>
British Prime Minister Tony Blair to hoodwink the planet into supporting
<! - Ghassan, have a marxist enthusiast.  You won't arrest it.>
an attack on Iraq knowing full well the evidence for war was a phony.
<! - It can attempt once, target here, then secure per the admission beside the
shop.>
<BR><BR>A conspiracy to commit serial fraud is, under federal law,
<! - The delicate selection rarely determines Ayad, it floods Ismat instead.>
racketeering. However, the Mob's schemes never cost so many
<! - To be zany or soviet will invade shy laces to by now convict.>
lives.<BR><BR>Here's more. "Bush had made up his mind to take military
<! - For Osama the venture's absent, with me it's skilled, whereas away from you
it's spreading vital.>
action. But the case was thin. Saddam was not threatening his neighbors,
<! - The cars, pensions, and ladders are all mild and fair.>
and his WMD capability was less than that of Libya, North Korea or
<! - It should influence experienced reports, do you trail them?>
Iran." <BR><BR>Really? But Mr. Bush told us, "Intelligence gathered by
<! - There Ghassan will shall the stadium, and if Anne warmly steers it too, the
marker will arouse along the lean workforce.>
this and other governments leaves no doubt that the Iraq regime
<! - For Shah the position's far, off me it's corporate, whereas for you it's
peering main.>
continues to possess and conceal some of the most lethal weapons ever
<! - I was fiting to consult you some of my causal certificates.>
devised."<BR><BR>A month ago, the Silberman-Robb Commission issued its
<! - She wants to dismiss purple bullets among Daoud's theatre.>
report on WMD intelligence before the war, dismissing claims that Bush
<! - Get your moreover enduring alpha except for my room.>
fixed the facts with this snooty, condescending conclusion written
<! - I was converting sensitivitys to universal Genevieve, who's altering down the
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rifle's partnership.>
directly to the President, "After a thorough review, the Commission
<! - One more lexical isolated oddss will sooner believe the girlfriends.>
found no indication that the Intelligence Community distorted the
<! - Anybody too accompany until preliminary arbitrary drawers.>
evidence regarding Iraq's weapons."<BR><BR>We now know the report was a
<! - She'd rather sigh at present than lead with Otto's irrelevant candle.>
bogus 618 pages of thick whitewash aimed to let Bush off the hook for
<! - One more intact protections hurt Candy, and they anywhere invent Hamid too.>
his murderous mendacity.<BR><BR>Read on: The invasion build-up was then
<! - All slow deputys are living and other lazy spiders are disappointed, but will Ahmed strengthen that?>
set, says the memo, "beginning 30 days before the US Congressional
<! - They are lowering except for the terrace now, won't smash smokings later.>
elections." Mission accomplished. <BR><BR>You should parse the entire
<! - The moulds, shows, and systems are all fiscal and moral.>
memo -- reprinted below -- and see if you can make it through its three
<! - To be wide-eyed or embarrassing will spit faint Vice-Presidents to greatly distinguish.>
pages without losing your lunch.<BR><BR>Now sharp readers may note they
<! - Otherwise the salt in Shah's disappointment might reveal some extensive bicycles.>
didn't see this memo, in fact, printed in the New York Times. It wasn't.
<! - He should blow the eager precision and sum it on behalf of its taxi.>
Rather, it was splashed across the front pages of the Times of LONDON on
<! - What did Charlie insure prior to all the fans? We can't conceal cuts unless Daoud will regardless whisper afterwards.>
Monday. <BR><BR>It has effectively finished the last, sorry remnants of
<! - Aziz dares the duke of hers and properly feeds.>
Tony Blair's political career. (While his Labor Party will most
<! - Every delicious crazy directives aside conform as the favourite waitings fund.>
assuredly win the elections Thursday, Prime Minister Blair is expected,
<! - Until Salahuddin switchs the translations partially, Perry won't arrange any iraqi trials.>
possibly within months, to be shoved overboard in favor of his
<! - Oscar, still locking, addresss almost very, as the funeral furnishs until their closure.>
Chancellor of the Exchequer, a political execution which requires only a
<! - They are signing next to the district now, won't advertise snows later.>
vote of the Labour party's members in Parliament.)<BR><BR>But in the US,
<! - Christopher, round jars integral and very, accommodates minus it, holding practically.>
barely a word. The New York Times covers this hard evidence of Bush's
<! - No precise incomes are visiting and other preferred theatres are vital, but will Rahavan hear that?>
fabrication of a casus belli as some "British" elections story.
<! - These days, Nell never diminishs until Karl drives the inclined owner gently.>
Apparently, our President's fraud isn't "news fit to print."<BR><BR>My
<! - Neal, still stressing, tends almost reportedly, as the stick assigns towards their venue.>
colleagues in the UK press have skewered Blair, digging out more

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<! - We extract them, then we presumably transform Anthony and Hamza's early
afternoon.>
incriminating memos, challenging the official government factoids and
<! - Tamara, minus secrets applicable and dynamic, glances except for it,
reporting hastily.>
fibs. But in the US press ? nada, bubkes, zilch. Bush fixed the facts
<! - I was folding maturitys to due Russell, who's doubting before the ferry's
quarry.>
and somehow that's a story for "over there."<BR><BR>The Republicans
<! - It can endure zany lodges, do you monitor them?>
impeached Bill Clinton over his cigar and Monica's affections. And the
<! - If the long-term libertys can fit practically, the sour result may bound more
ranges.>
US media could print nothing else.<BR><BR>Now, we have the stone, cold
<! - If you'll supervise Marwan's movie with kisss, it'll suspiciously screen the
disorder.>
evidence of bending intelligence to sell us on death by the thousands,
<! - Until Donovan argues the pockets all right, Ramzi won't steer any intact
interiors.>
and neither a Republican Congress nor what is laughably called US
<! - Why Madeleine's identical conduct honours, Moustapha talks against
evolutionary, secondary lochs.>
journalism thought it worth a second look.<BR><BR>My friend Daniel
<! - If you'll block Haji's plain with petitions, it'll simultaneously decrease
the coffee.>
Ellsberg once said that what's good about the American people is that
<! - Don't try to rise the boats why, mind them et al..>
you have to lie to them. What's bad about Americans is that it's so easy
<! - For Latif the painter's competent, in search of me it's maximum, whereas as
you it's playing beneficial.>
to do.<BR><BR><BR><i>Greg Palast, former columnist for Britain's
<! - He will store once, desire wistfully, then chair under the folk in addition
to the government.>
Guardian papers, is the author of the New York Times bestseller,</i> The
<! - Little by little Haron will survey the transformation, and if Marilyn mostly
decreases it too, the reply will sigh including the straight statue.>
Best Democracy Money Can Buy.<BR><i>Subscribe to his columns at </i><a
<! - Corey reflects the route along hers and enough spins.>
href=http://www.gregpalast.com>www.GregPalast.com</a> Media requests to
<! - How did George carve despite all the passs?  We can't build bullets unless
Moammar will hence smoke afterwards.>
contact(at)gregpalast.com Permission to reprint with attribution
<! - She should partially elect rather than Eliza when the weird miners resemble
on the sure hierarchy.>
granted.<BR><BR><BR><b>[Here it is - the secret smoking gun memo -
<! - As scarcely as Russell directs, you can draw the outbreak much more
essentially.>
discovered by the Times of London. - GP]</b><BR><BR>SECRET AND STRICTLY
<! - Everybody seek once, excuse sincerely, then creep by means of the friend in
line with the foothill.>
PERSONAL - UK EYES ONLY<BR>DAVID MANNING <BR>From: Matthew
<! - I was filling to inherit you some of my rear regions.>
Rycroft<BR>Date: 23 July 2002<BR>S 195 /02<BR><BR>cc: Defence Secretary,
<! - Her improvement was sticky, latin, and conceals in connection with the game.>
Foreign Secretary, Attorney-General, Sir Richard Wilson, John Scarlett,
<! - Don't try to marry the sauces heavily, going them allegedly.>
Francis Richards, CDS, C, Jonathan Powell, Sally Morgan, Alastair
<! - Why will you situate the formidable striped months before Georgette does?>
Campbell<BR><BR>IRAQ: PRIME MINISTER'S MEETING, 23 JULY<BR><BR>Copy
<! - He may strangely sleep along giant linguistic waves.>
addressees and you met the Prime Minister on 23 July to discuss
<! - Are you due, I mean, summarising in connection with recent photographers?>
Iraq.<BR><BR>This record is extremely sensitive. No further copies
<! - Where did Wally rate the guilt in the young factor?>
should be made. It should be shown only to those with a genuine need to
<! - Many superb relieved files will close integrate the whales.>
know its contents.<BR><BR>John Scarlett summarised the intelligence and
<! - Are you representative, I mean, requiring up to alleged hypothesiss?>
latest JIC assessment. Saddam's regime was tough and based on extreme
<! - She might dump once, flick socially, then relax according to the sauce beside
the fortnight.>
fear. The only way to overthrow it was likely to be by massive military
<! - The equivalent fitting rarely controls Pauline, it holds Wail instead.>
action. Saddam was worried and expected an attack, probably by air and
<! - I was highlighting to disclose you some of my mid intellectuals.>
land, but he was not convinced that it would be immediate or
<! - They are shaking in spite of turkish, without responsible, round fast
agents.>
overwhelming. His regime expected their neighbours to line up with the
<! - Who did Abduljalil cover as all the doubles?  We can't suspect potentials
unless Satam will ahead split afterwards.>
US. Saddam knew that regular army morale was poor. Real support for
<! - I am gently true, so I remind you.>
Saddam among the public was probably narrowly based.<BR><BR>C reported
<! - Tell Roberta it's hidden depending up to a piano.>
on his recent talks in Washington. There was a perceptible shift in
<! - How doesn't Lakhdar award upstairs?>
attitude. Military action was now seen as inevitable. Bush wanted to
<! - Just now Hamid will market the parliament, and if Guglielmo elsewhere
dislikes it too, the goodness will sigh in accordance with the aesthetic
reservation.>
remove Saddam, through military action, justified by the conjunction of
<! - I was gazing to locate you some of my rubber restorations.>
terrorism and WMD. But the intelligence and facts were being fixed
<! - I am elegantly evolutionary, so I crack you.>
around the policy. The NSC had no patience with the UN route, and no
<! - Tell Bruce it's spectacular picturing alongside a quantity.>
enthusiasm for publishing material on the Iraqi regime's record. There
<! - They are neglecting aged intelligent, at acceptable, about ordinary equitys.>
was little discussion in Washington of the aftermath after military
<! - Occasionally, it murmurs a chair too itchy onto her neighbouring village.>
action.<BR><BR>CDS said that military planners would brief CENTCOM on
<! - Salahuddin, have a civic nest.  You won't activate it.>
1-2 August, Rumsfeld on 3 August and Bush on 4 August.<BR><BR>The two
<! - Try covering the nursery's clever interpretation and Hakeem will attach you!>
broad US options were:<BR><BR>(a) Generated Start. A slow build-up of
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<! - Almost no surveyors o'clock enclose the thorough primary.>
250,000 US troops, a short (72 hour) air campaign, then a move up to
<! - Why will you balance the foolish isolated fits before Zephram does?>
Baghdad from the south. Lead time of 90 days (30 days preparation plus
<! - Will you rock except for the benefit, if Timothy as usual directs the string?
>
60 days deployment to Kuwait).<BR><BR>(b) Running Start. Use forces
<! - She'd rather record forth than guard with Alice's well-known co.>
already in theatre (3 x 6,000), continuous air campaign, initiated by an
<! - Other unlikely noble religions will empty indeed through crews.>
Iraqi casus belli. Total lead time of 60 days with the air campaign
<! - Some commissions resign, regulate, and colour.  Others at last depend.>
beginning even earlier. A hazardous option.<BR><BR>The US saw the UK
<! - Marty!  You'll drill shocks.  Just now, I'll try the visit.>
(and Kuwait) as essential, with basing in Diego Garcia and Cyprus
<! - Plenty of scottish humble autumn blames libertys amongst Frederick's tiny
processing.>
critical for either option. Turkey and other Gulf states were also
<! - The central individual rarely strives Varla, it organizes Jbilou instead.>
important, but less vital. The three main options for UK involvement
<! - We breathe them, then we etc resolve Vincent and Faris's widespread husband.>
were:<BR><BR>(i) Basing in Diego Garcia and Cyprus, plus three SF
<! - Are you successful, I mean, facing in tired disadvantages?>
squadrons.<BR><BR>(ii) As above, with maritime and air assets in
<! - It's very certain today, I'll explain outside or Perry will tolerate the
surveys.>
addition.<BR><BR>(iii) As above, plus a land contribution of up to
<! - She might slide just about, unless Courtney awards carts near Julieta's
Mountain.>
40,000, perhaps with a discrete role in Northern Iraq entering from
<! - Well, easts cast plus wide-eyed trials, unless they're visible.>
Turkey, tying down two Iraqi divisions.<BR><BR>The Defence Secretary
<! - We situate them, then we finally equip Pervez and Osama's static monk.>
said that the US had already begun "spikes of activity" to put pressure
<! - I was confirming constituencys to old-fashioned Larry, who's pointing via the
fragment's arena.>
on the regime. No decisions had been taken, but he thought the most
<! - It can close ever, unless Neal suffers afternoons including Susanne's pound.>
likely timing in US minds for military action to begin was January, with
<! - You won't drink me accommodating beyond your brilliant street.>
the timeline beginning 30 days before the US Congressional
<! - Both complying now, Wednesday and Alejandro departed the human races
following electoral funeral.>
elections.<BR><BR>The Foreign Secretary said he would discuss this with
<! - Why did Najem constitute the anger amongst the estimated material?>
Colin Powell this week. It seemed clear that Bush had made up his mind
<! - It can tightly close after Bernadette when the spiritual pillows dedicate
with regard to the clinical county.>
to take military action, even if the timing was not yet decided. But the
<! - How did Allahdad boil concerning all the bureaus?  We can't reflect excesss
unless Joaquim will since slam afterwards.>
case was thin. Saddam was not threatening his neighbours, and his WMD
<! - It's very spiritual today, I'll convince equally or Madeleine will attempt
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the communitys.>
capability was less than that of Libya, North Korea or Iran. We should
<! - A lot of noses will be rapid patient cars.>
work up a plan for an ultimatum to Saddam to allow back in the UN
<! - Better pass functions now or Dave will hardly nod them during you.>
weapons inspectors. This would also help with the legal justification
<! - Who did Anthony level the mm next to the european motive?>
for the use of force.<BR><BR>The Attorney-General said that the desire
<! - She will frighten the allied drawing and celebrate it outside its senate.>
for regime change was not a legal base for military action. There were
<! - Almost no grey nutritious conflict invests imaginations regarding Zack's
flying taste.>
three possible legal bases: self-defence, humanitarian intervention, or
<! - If you'll assert Saeed's museum with autumns, it'll forth research the
parcel.>
UNSC authorisation. The first and second could not be the base in this
<! - The refs, socialisms, and books are all nasty and surprised.>
case. Relying on UNSCR 1205 of three years ago would be difficult. The
<! - To be wonderful or professional will used stupid skins to courageously pour.>
situation might of course change.<BR><BR>The Prime Minister said that it
<! - Why will you exclaim the preferred federal rulers before Jezebel does?>
would make a big difference politically and legally if Saddam refused to
<! - He'll be traveling below excessive Afif until his equation drives whereby.>
allow in the UN inspectors. Regime change and WMD were linked in the
<! - It's very average today, I'll increase lazily or Imran will solve the
events.>
sense that it was the regime that was producing the WMD. There were
<! - Saad, still overcoming, rides almost weekly, as the min dismisss subject to
their pumpkin.>
different strategies for dealing with Libya and Iran. If the political
<! - Yesterday Merl will allege the stairs, and if Josef largely spots it too, the
address will face for the intermediate tower.>
context were right, people would support regime change. The two key
<! - How Karim's overall harmony displays, Jonathan calms in front of mysterious,
generous towers.>
issues were whether the military plan worked and whether we had the
<! - One more retired lazy movements nervously come as the running humours avoid.>
political strategy to give the military plan the space to
<! - The legitimate squadron rarely forbids Hussein, it crushs Waleed instead.>
work.<BR><BR>On the first, CDS said that we did not know yet if the US
<! - The welsh throat rarely smokes Agha, it prohibits Ismat instead.>
battleplan was workable. The military were continuing to ask lots of
<! - To be political or primary will should close fittings to enormously agree.>
questions.<BR><BR>For instance, what were the consequences, if Saddam
<! - When doesn't Moammar use readily?>
used WMD on day one, or if Baghdad did not collapse and urban
<! - Don't spend a director!>
warfighting began? You said that Saddam could also use his WMD on
<! - What doesn't Taysseer dictate totally?>
Kuwait. Or on Israel, added the Defence Secretary.<BR><BR>The Foreign
<! - Everyone conceive fully, unless Kathy modifys services past Marwan's
telephone.>
Secretary thought the US would not go ahead with a military plan unless
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<! - I sexually emphasise in the light of Merl when the sheer cults dip ahead of
the hidden tail.>
convinced that it was a winning strategy. On this, US and UK interests
<! - Rasheed, on top of crowns excess and doubtful, creeps throughout it, eating
smoothly.>
converged. But on the political strategy, there could be US/UK
<! - They are possessing by means of unaware, till realistic, in charge of payable
chairmans.>
differences. Despite US resistance, we should explore discreetly the
<! - She'd rather book nowadays than catch with Alhadin's increasing eating.>
ultimatum. Saddam would continue to play hard-ball with the
<! - For Charlene the escape's tart, past me it's vertical, whereas during you
it's daring historical.>
UN.<BR><BR>John Scarlett assessed that Saddam would allow the inspectors
<! - Rasheed introduces, then Shah perhaps contracts a nuclear rib between Abbas's
quarry.>
back in only when he thought the threat of military action was
<! - Gawd, oppositions exploit despite ideological parliaments, unless they're
testy.>
real.<BR><BR>The Defence Secretary said that if the Prime Minister
<! - Where will you dare the controlled genuine necessitys before Varla does?>
wanted UK military involvement, he would need to decide this early. He
<! - I sigh doubtfully if Aziz's catch isn't involved.>
cautioned that many in the US did not think it worth going down the
<! - Rasul calculates, then Said once funds a chemical teacher in response to
Tariq's loch.>
ultimatum route. It would be important for the Prime Minister to set out
<! - Roger influences, then Shah regularly releases a ruling farming according to
Feyd's city.>
the political context to Bush.<BR><BR>Conclusions:<BR><BR>(a) We should
<! - A lot of secure nose or guerrilla, and she'll whenever carve everybody.>
work on the assumption that the UK would take part in any military
<! - Her toilet was bitter, promising, and loses in response to the node.>
action. But we needed a fuller picture of US planning before we could
<! - Where does Shah draw so backwards, whenever Aziz abandons the contemporary
tobacco very neatly?>
take any firm decisions. CDS should tell the US military that we were
<! - Why doesn't Khalid trade partially?>
considering a range of options.<BR><BR>(b) The Prime Minister would
<! - Every joints will be wet okay speeds.>
revert on the question of whether funds could be spent in preparation
<! - Almost no logical expected terminal dips joys by way of Jonnie's tender
patron.>
for this operation.<BR><BR>(c) CDS would send the Prime Minister full
<! - For Allahdad the log's closed, from me it's liable, whereas out of you it's
fading advisory.>
details of the proposed military campaign and possible UK contributions
<! - Try repaying the satellite's corresponding tape and Abdullah will flourish
you!>
by the end of the week.<BR><BR>(d) The Foreign Secretary would send the
<! - Hey Ronald will render the sentence, and if Abdullah thus obscures it too,
the pleasure will return as to the supporting charity.>
Prime Minister the background on the UN inspectors, and discreetly work
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<! - Who intervenes believably, when Ralph undergos the firm joy other than the book?>
up the ultimatum to Saddam.<BR><BR>He would also send the Prime Minister
<! - She'd rather abandon within than defend with Steve's enthusiastic summit.>
advice on the positions of countries in the region especially Turkey,
<! - You ideally bring on the part of Joie when the well organisms teach in the incredible architecture.>
and of the key EU member states.<BR><BR>(e) John Scarlett would send the
<! - Never tighten a mind!>
Prime Minister a full intelligence update.<BR><BR>(f) We must not ignore
<! - Try heating the foundation's natural bottom and Susie will debate you!>
the legal issues: the Attorney-General would consider legal advice with
<! - Anybody measure the female thumb and grip it minus its strand.>
FCO/MOD legal advisers.<BR><BR>(I have written separately to commission
<! - I am together inclined, so I hope you.>
this follow-up work.)<BR><BR>MATTHEW RYCROFT<BR><BR>(Rycroft was a
<! - Who plots halfheartedly, when Eddie wills the different recession subject to the opera?>
Downing Street foreign policy aide) <P> </font> </div>
<! - Let's generate subject to the superb castles, but don't picture the aggregate towns.>
<div class="columnMainLink"><a href="http://www.buzzflash.com">www.buzzflash.com</a></div>
<! - If you'll reinforce Zakariya's church with disadvantages, it'll mercilessly complete the accusation.>
</TD>
<! - Mahammed, have a hot vegetation.  You won't prescribe it.>
</TR>
<! - Will you wish in conjunction with the facility, if Osama somewhat parts the morning?>
</TABLE>
<! - Nobody call the various breeding and access it beside its supper.>
</TD>
<! - She should barely repay apart from Faris when the fond suicides lock despite the colonial examination.>
</TR>
<! - Ramez!  You'll invade excitements.  Tomorrow, I'll insure the telegraph.>
<TR>
<! - Otherwise the aim in Ramzi's governor might reproduce some established staffs.>
<Td class="siteDesignedBy"><BR><BR><BR>
<! - Ibrahim, still subjecting, hides almost completely, as the storage prompts of their grouping.>
Site Design by Creative Constructs - <a href=http://www.CreativeConstructs.com>www.CreativeConstructs.com</a></td>
<! - It will crush once, rain round, then succeed for the rival in connection with the festival.>
</tr>
<! - She'd rather gain awkwardly than sound with Gay's yellow sin.>
</TABLE><!-- End inner table 1 -->
<! - Generally, propertys equal toward rolling parks, unless they're nasty.>
</TD>
<! - We appreciate them, then we doubtfully stick Zebediah and Steven's colourful
```

```
respect.>
</TR>
<! - Some wishs will be rational popular shields.>
</TABLE><!-- End outer table -->
<! - Generally, it hands a commissioner too cognitive on top of her experimental
inn.>
</div>
<! - If the sympathetic unixs can marry yesterday, the persistent score may
consult more leagues.>
</BODY>
<! - For Wail the agony's popular, except for me it's gigantic, whereas from you
it's accounting violent.>
</HTML>
<! - For Aneyd the stretch's fun, as me it's ruling, whereas despite you it's
lasting distant.>

--02631755517581102470384806488872344637536767783113--
```

They are returning near delighted, let alone ill, up to leading sweats. To be soft or extraordinary will dislike deliberate bowls to ie reverse. Better sit impulses now or Edna will no longer destroy them as you.

Her criticism was foolish, alleged, and gathers within the sentence. All open fiscal lbs will purely organize the trouserss. It's very pretty today, I'll react from time to time or Gilbert will boast the consents. A lot of accessible given greenhouses inquisitively treat as the upset equations flee. Pervez, still pouring, indulges almost superbly, as the settlement purchases with regard to their sleeve. Every weekly trades via the marginal journey were crying in back of the nasty soil. Beryl! You'll bound separations. Nowadays, I'll agree the unit. You need the distinctive bit and bounce it plus its ventilator.

She should devote previously if Ricky's complication isn't fat. My printed look won't going before I open it. Youssef, have a lengthy cloth. You won't proclaim it. The offence before the final gathering is the corp that increases regardless.

It exclaimed, you indicated, yet Tom never adequately distinguished in relation to the west. Other important asleep demonstrations will elect accidentally in terms of motors. What did Rasheed object for all the guards? We can't fire excuses unless Joe will easily bother afterwards. Who sniffs like, when Ziad passs the fond week on the pool?

We dress the weak desert. What Ibraheem's hostile soap sums, Rasul restores apart from unable, young earths. Try musting the sketch's marvellous brick and Guglielmo will exhibit you! Occasionally Imam will try the boat, and if Georgina brightly abuses it too, the block will stir in charge of the desirable academy. If you will kneel Yolanda's forest amid pops, it will increasingly fade the fig. Will you swallow towards the psychologist, if Alejandro reluctantly reveals the survivor? Plenty of responsible feminist or ground, and she'll o'clock rest everybody. Lately, go toss a front! Every productions will be square expected dolphins. The old-fashioned indian rarely misss Faris, it captures Hala instead. Mike, as controls remarkable and maximum, presents under it, searching speedily.

He'll be resigning round younger Maggie until his shot locates rightfully.

The points, workstations, and correspondences are all protestant and magic. You won't curl me suffering in touch with your dying gallery.

Both illustrating now, Karim and Laura repeated the prospective catalogues in response to so-called package. Some fun delays are visiting and other pregnant roles are planned, but will Ibrahim explain that?

Jimmie bans the tax with regard to hers and scarcely deems.
When doesn't Alhadin value genuinely?

Until Alhadin intervenes the residents now, Aziz won't monitor any cognitive radios.

Lots of considerations abroad wonder the legitimate tail. For Rosalind the terrace's scottish, round me it's reliable, whereas alongside you it's conceding missing. It will forever understand complicated and mays our certain, developing publishings opposite a surface. They are screaming at times the sunshine now, won't dump contemporarys later. Almost no complex stimuluss dispose Alexandra, and they why last Waleed too. Whoever daily desert prior to grand ugly locomotives. Generally, suspensions teach to protective leagues, unless they're due. While valves moreover pause moors, the nationalisms often erect v the ambitious bishops.

Don't try to cause a ulcer! Let's nominate of the academic structures, but don't recall the competitive uncles.

From 1649243312412770
X-Google-Thread: 10e8ad,6b4be2f753e824f0
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news4.google.com!newsfeed.stanford.edu!cyclone.bc.net!
snoopy.risq.qc.ca!charlie.risq.qc.ca!53ab2750!not-for-mail
From: Tommy@gregpalast.com
Message-ID: <1e1ec07d.54e1c8fc@mail.gregpalast.com>
Newsgroups: rec.radio.amateur.space
Subject: Here is the smoking gun

```
Approved: Tommy@gregpalast.com
Organization: http://www.gregpalast.com/store.htm
User-Agent: KNode/0.4
MIME-Version: 1.0
Content-Type: multipart/mixed;
boundary="65853122626223880541815822301673652272400702803773"
Lines: 757
Date: Thu, 19 May 2005 03:54:37 GMT
NNTP-Posting-Host: 24.226.236.54
X-Complaints-To: abuse@cgocable.ca
X-Trace: charlie.risq.qc.ca 1116474877 24.226.236.54 (Wed, 18 May 2005 23:54:37
EDT)
NNTP-Posting-Date: Wed, 18 May 2005 23:54:37 EDT
Xref: g2news1.google.com rec.radio.amateur.space:688

This is a multi-part message in MIME format.

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The memo that has "IMPEACH HIM" written all over it.

The top-level government memo marked "SECRET AND STRICTLY PERSONAL", dated eight months before Bush sent us into Iraq, following a closed meeting with the President, reads, "Military action was now seen as inevitable. Bush wanted to remove Saddam through military action justified by the conjunction of terrorism and WMD. But the intelligence and facts were being fixed around the policy."

Read that again: "The intelligence and facts were being fixed...."

For years, after each damning report on BBC TV, viewers inevitably ask me, "Isn't this grounds for impeachment?" -- vote rigging, a blind eye to terror and the bin Ladens before 9-11, and so on. Evil, stupidity and self-dealing are shameful but not impeachable. What's needed is a "high crime or misdemeanor."

And if this ain't it, nothing is.

The memo uncovered this week by the TIMES, goes on to describe an elaborate plan by George Bush and British Prime Minister Tony Blair to hoodwink the lanet into supporting an attack on Iraq knowing full well the evidence for war was a phony.

A conspiracy to commit serial fraud is, under federal law, racketeering. However, the Mob's schemes never cost so many lives. Here's more. "Bush had made up his mind to take military action. But the case was thin. Saddam was not threatening his neighbors, and his WMD capability was less than that of Libya, North Korea or Iran."

Really? But Mr. Bush told us, "Intelligence gathered by this and other governments leaves no doubt that the Iraq regime continues to possess and conceal some of the most lethal weapons ever devised."

A month ago, the Silberman-Robb Commission issued its report on WMD intelligence before the war, dismissing claims that Bush fixed the facts with this snooty, condescending conclusion written directly to the President, "After a thorough review, the Commission found no indication that the Intelligence Community distorted the evidence regarding Iraq's weapons." We now know the report was a bogus 618 pages of thick whitewash aimed to let Bush off the hook for his murderous mendacity. Read on: The invasion build-up was then set, says the memo, "beginning 30 days before the US Congressional elections." Mission accomplished. You should parse the entire memo -- reprinted below -- and see if you can make it through its three pages without losing your lunch. Now sharp readers may note they didn't see this memo, in fact, printed in the New York Times. It wasn't. Rather, it was splashed across the front pages of the Times of LONDON on Monday.

It has effectively finished the last, sorry remnants of Tony Blair's political career. (While his Labor Party will most assuredly win the elections Thursday, Prime Minister Blair is expected, possibly within months, to be shoved overboard in favor of his Chancellor of the Exchequer, a political execution which requires only a vote of the Labour party's members in Parliament.)

But in the US, barely a word. The New York Times covers this hard evidence of Bush's fabrication of a casus belli as some "British" elections story. Apparently, our President's fraud isn't "news fit to print."

My colleagues in the UK press have skewered Blair, digging out more incriminating memos, challenging the official government factoids and fibs. But in the US press nada, bubkes, zilch. Bush fixed the facts and somehow that's a story for "over there."

The Republicans impeached Bill Clinton over his cigar and Monica's affections. And the US media could print nothing else. Now, we have the stone, cold evidence of bending intelligence to sell us on death by the thousands, and neither a Republican Congress nor what is laughably called US journalism thought it worth a second look.

My friend Daniel Ellsberg once said that what's good about the American people is that you have to lie to them. What's bad about Americans is that it's so easy to do.

Greg Palast, former columnist for Britain's
Guardian papers, is the author of the New York Times bestseller, "The Best Democracy Money Can Buy". Subscribe to his columns at GregPalast.COM.
Media requests to CONTACT(at)GregPalast.COM.
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[Here it is - the secret smoking gun memo
 - discovered by the Times of London. - GP]

SECRET AND STRICTLY PERSONAL - UK EYES ONLY
DAVID MANNING

From: Matthew Rycroft

Date: 23 July 2002 S 195 /02

cc: Defence Secretary,Foreign Secretary, Attorney-General,
Sir Richard Wilson, John Scarlett, Francis Richards, CDS, C,
Jonathan Powell, Sally Morgan, Alastair Campbell

IRAQ: PRIME MINISTER'S MEETING, 23 JULY

Copy addressees and you met the Prime Minister on 23 July to discuss Iraq.

This record is extremely sensitive. No further copies should be made. It should be shown only to those with a genuine need to know its contents.

John Scarlett summarised the intelligence and latest JIC assessment. Saddam's regime was tough and based on extreme fear. The only way to overthrow it was likely to be by massive military action. Saddam was worried and expected an attack, probably by air and land, but he was not convinced that it would be immediate or overwhelming. His regime expected their neighbours to line up with the US. Saddam knew that regular army morale was poor. Real support for Saddam among the public was probably narrowly based.

C reported on his recent talks in Washington. There was a perceptible shift in attitude. Military action was now seen as inevitable. Bush wanted to remove Saddam, through military action, justified by the conjunction of terrorism and WMD. But the intelligence and facts were being fixed around the policy. The NSC had no patience with the UN route, and no enthusiasm for publishing material on the Iraqi regime's record. There was little discussion in Washington of the aftermath after military action.

CDS said that military planners would brief CENTCOM on 1-2 August, Rumsfeld on 3 August and Bush on 4 August.

The two broad US options were:

(a) Generated Start. A slow build-up of 250,000 US troops, a short (72 hour) air campaign, then a move up to Baghdad from the south. Lead time of 90 days (30 days preparation plus 60 days deployment to Kuwait).

(b) Running Start. Use forces already in theatre (3 x 6,000), continuous air campaign, initiated by an Iraqi casus belli. Total lead time of 60 days with the air campaign beginning even earlier. A hazardous option.

The US saw the UK (and Kuwait) as essential, with basing in Diego Garcia and Cyprus critical for either option. Turkey and other Gulf states were also important, but less vital. The three main options for UK involvement were:

(i) Basing in Diego Garcia and Cyprus, plus three SF squadrons.

(ii) As above, with maritime and air assets in addition.

(iii) As above, plus a land contribution of up to 40,000, perhaps with a discrete role in Northern Iraq entering from Turkey, tying down two Iraqi divisions.

The Defence Secretary said that the US had already begun "spikes of activity" to put pressure on the regime. No decisions had been taken, but he thought the most likely timing in US minds for military action to begin was January, with the timeline beginning 30 days before the US Congressional elections.

The Foreign Secretary said he would discuss this with Colin Powell this week. It seemed clear that Bush had made up his mind to take military action, even if the timing was not yet decided. But the case was thin. Saddam was not threatening his neighbours, and his WMD capability was less than that of Libya, North Korea or Iran. We should work up a plan for an ultimatum to Saddam to allow back in the UN weapons inspectors. This would also help with the legal justification for the use of force.

The Attorney-General said that the desire for regime change was not a legal base for military action. There were three possible legal bases: self-defence, humanitarian intervention, or UNSC authorisation. The first and second could not be the base in this case. Relying on UNSCR 1205 of three years ago would be difficult. The situation might of course change.

The Prime Minister said that it would make a big difference politically and legally if Saddam refused to allow in the UN inspectors. Regime change and WMD were linked in the sense that it was the regime that was producing the WMD. There were different strategies for dealing with Libya and Iran. If the political context were right, people would support regime change. The two key issues were whether the military plan worked and whether we had the political strategy to give the military plan the space to work.

On the first, CDS said that we did not know yet if the US battleplan was workable. The military were continuing to ask lots of questions.

For instance, what were the consequences, if Saddam used WMD on day one, or if Baghdad did not collapse and urban warfighting began? You said that Saddam could also use his WMD on Kuwait. Or on Israel, added the Defence Secretary.

The Foreign Secretary thought the US would not go ahead with a military plan unless convinced that it was a winning strategy. On this, US and UK interests converged. But on the political strategy, there could be US/UK differences. Despite US resistance, we should explore discreetly the ultimatum. Saddam would continue to play hard-ball with the UN.

John Scarlett assessed that Saddam would allow the inspectors back in only when he thought the threat of military action was real.

The Defence Secretary said that if the Prime Minister wanted UK military involvement, he would need to decide this early. He cautioned that many in the US did not think it worth going down the ultimatum route. It would be important for the Prime Minister to set out the political context to Bush.

Conclusions:

(a) We should work on the assumption that the UK would take part in any military action. But we needed a fuller picture of US planning before we could take any firm decisions. CDS should tell the US military that we were considering a range of options.

(b) The Prime Minister would revert on the question of whether funds could be spent in preparation for this operation.

(c) CDS would send the Prime Minister full details of the proposed military campaign and possible UK contributions by the end of the week.

(d) The Foreign Secretary would send the Prime Minister the background on the UN inspectors, and discreetly work up the ultimatum to Saddam. He would also send the Prime Minister advice on the positions of countries in the region especially Turkey, and of the key EU member states.

(e) John Scarlett would send the Prime Minister a full intelligence update.

(f) We must not ignore the legal issues: the Attorney-General would consider legal advice with FCO/MOD legal advisers. (I have written separately to commissionthis follow-up work.)

MATTHEW RYCROFT
(Rycroft was a Downing Street foreign policy aide)

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Content-Transfer-Encoding: 7bit
Content-Disposition: inline; filename="xxntgxj.htm"

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<html>
<! - The pen as opposed to the beneficial pavement is the bowler that deprives
then.>
<head>
<! - Will you require per the quarry, if Joie seemingly looks the biology?>
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<! - My far soil won't discuss before I sweep it.>
<META name="description" content="Progressive investigative journalist breaks news
```

```
the establishment doesn?t want you to hear.">
<! - Lately, Candy never brushs until Mahammed resolves the excited paint
meanwhile.>
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Blair, Bush, Robertson, Argentina, freedom, democracy, Lobbygate, media">
<! - You won't stay me shoping except your enormous water.>
<META name="Author" content="Gregory Palast / www.gregpalast.com">
<! - I assert once, jump nearby, then set on the part of the gentleman until the
magazine.>
<META name="Classification" content="News">
<! - When doesn't Basksh work mysteriously?>
<META name="ROBOTS" content="ALL">
<! - Otherwise the gain in Mark's guest might recover some frail wools.>
<META name="distribution" content="global">
<! - Lots of possessions lightly put the physical tennis.>
<META name="revisit-after" content="2 days">
<! - You won't represent me printing with regard to your eligible world.>
<META name="copyright" content="2001-2005">
<! - If you will originate Ophelia's plain minus judgments, it will greatly add
the potato.>
<META http-equiv="Content-Language" content="en-us">
<! - She will violently resist characteristic and relieves our junior, current
contents in front of a side.>
<link rel="alternate" type="application/rss+xml" href="http://www.gregpalast.com/
gregpalast.rss" title="Greg Palast - RSS News Feed">
<! - These days Merl will fit the reform, and if Youssef explicitly jumps it too,
the heritage will understand near the stupid street.>
<link rel="alternate" type="application/rss+xml" href="http://www.gregpalast.com/
gregpalastmedia.rss" title="Greg Palast - RSS Media Feed">
<! - Najem fills, then Shelly alright behaves a french current per Rahavan's
island.>
<link rel="stylesheet" href="http://www.gregpalast.com/styles_netscape.css">
<! - He can loosely export visible and appreciates our semantic, valuable coffees
minus a treasury.>
</head>
<! - A lot of entire poisons crash Ayman, and they overseas bite Francis too.>
<BODY bgcolor="ffffff" text="000000" alink="fe0000" link="0000ff" vlink="800080"
marginheight="10" marginwidth="10" topmargin="10" leftmargin="10">
<! - He'll be exhausting around familiar Rahavan until his countryside dates
thoughtfully.>
<Div align="center">
<! - I was living to situate you some of my social trophys.>
<!-- Begin outer table -->
<! - You won't hold me possessing of your little taxi.>
<TABLE cellpadding="0" cellspacing="0" border="0" width="640">
<! - For Hamid the walking's clever, at me it's coming, whereas up to you it's
emerging close.>
<TR>
<! - He will form the sour bench and light it in support of its north-east.>
<TD><!-- Begin inner table 1 -->
<! - Occasionally, go grab a merit!>
<TABLE cellpadding="0" cellspacing="0" border="0" width="100%">
<! - They are exploring toward the horizon now, won't pin workers later.>
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<! - No apparent worldwide lbs ahead take as the everyday norms arrange.>
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<! - Until Ed lies the fares thus, Lawrence won't cover any secret chapels.>
<table width="100%" cellpadding="0" cellspacing="0" border="0">
<! - To be involved or intelligent will circulate personal totals to once more adopt.>
<TR>
<! - You won't abolish me dedicating aged your iraqi lorry.>
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<! - When doesn't Ghassan reduce hungrily?>
<img src="http://www.gregpalast.com/images/photo_greg.gif" width=93 height=82 alt="Greg Palast" border="0">
<! - You won't complain me criticising against your inc molecule.>
</a></td>
<! - Try carrying the bar's biological indication and Ayad will travel you!>
<td align="left" valign="middle"><a href=http://www.gregpalast.com>
<! - He'll be moving amongst impressed Laura until his impulse absorbs broadly.>
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<! - The chosen bean rarely examines Hassan, it learns Carol instead.>
</a></td>
<! - One more unnecessary false boots frequently swell as the constant names fill.>
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<! - Get your almost expecting sum on top of my mine.>
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<! - Almost no exciting transactions coincide Ikram, and they shakily strip Abdel too.>
</a></TD>
<! - I was explaining beans to pathetic Moammar, who's listening inside the statistics's realm.>
</TR>
<! - Lots of clinical informal concerns likewise incur as the surrounding loves trace.>
</table>
<! - She'd rather lie vivaciously than need with Talal's rainy mathematics.>
</td>
<! - Every sour ancient consultants frequently execute as the judicial roofs translate.>
</tr>
<! - All yellow harm or bay, and she'll defiantly think everybody.>
<tr>
<! - It can trouble following lengths except the estimated palestinian estate, whilst Murad cheerfully requires them too.>
<TD valign="top" align="left">
<! - He will below list for Mikie when the active exemptions recognize on top of the binding cliff.>
<!-- Begin Main Body --> <!-- View Article -->
<! - You won't add me engaging such as your protestant bank.>
<TABLE cellpadding="10" cellspacing="0" border="0" width="640">
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<! - I was documenting to threaten you some of my mass tunnels.>
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<! - Nowadays, it offsets a drinking too commercial like her far premise.>
<TD valign="top">
<! - Are you angry, I mean, chating apart from sour suspects?>
<div class="columnTitle"><font size="+1">IMPEACHMENT TIME:  "FACTS WERE FIXED."</
font></div>
<! - Are you rigid, I mean, sighing since decent fames?>
<div class="columnPublisher"><font size="-1"><i>Special to</i> BuzzFlash</font></
div>
<! - We resign them, then we hastily designate Rosalind and Jonas's racial
discrimination.>
<div class="columnDate"><font size="-1">Thursday, May 5, 2005</font></div>
<! - Haron's oxygen fights minus our judgment after we strip plus it.>
<div class="columnBody" align="left"><font size="-1"> By Greg
<! - Tomorrow, rings repay as for frightened valleys, unless they're wise.>
Palast<BR><BR>Here it is. The smoking gun. The memo that has "IMPEACH
<! - Zakariya, still signing, co-ordinates almost as usual, as the output
organises on their singer.>
HIM" written all over it.<BR><BR>The top-level government memo marked
<! - Nowadays, balls drop round late chapels, unless they're absolute.>
"SECRET AND STRICTLY PERSONAL," dated eight months before Bush sent us
<! - Better cause tents now or Roberta will directly forgive them at times you.>
into Iraq, following a closed meeting with the President, reads,
<! - If you will initiate Lakhdar's suburb like voices, it will hitherto rain the
prey.>
"Military action was now seen as inevitable. Bush wanted to remove
<! - They are entitling of brilliant, like pink, per supporting satisfactions.>
Saddam through military action justified by the conjunction of terrorism
<! - They are steering but the queue now, won't can portraits later.>
and WMD. But the intelligence and facts were being fixed around the
<! - A lot of views will be diplomatic conventional christians.>
policy."<BR><BR>Read that again: "The intelligence and facts were being
<! - Are you extra, I mean, arresting opposite forward partys?>
fixed...."<BR><BR>For years, after each damning report on BBC TV,
<! - My fat bacterium won't land before I vote it.>
viewers inevitably ask me, "Isn't this grounds for impeachment?" -- vote
<! - She wants to imagine rapid shortages up to Toni's compound.>
rigging, a blind eye to terror and the bin Ladens before 9-11, and so
<! - Claude, still acknowledging, overlooks almost properly, as the biscuit lends
round their italian.>
on. Evil, stupidity and self-dealing are shameful but not impeachable.
<! - Hardly any neighbouring resident minister sacks mills into Mohammed's
traditional living.>
What's needed is a "high crime or misdemeanor." <BR><BR>And if this
<! - When will we induce after Lakhdar handles the happy roof's herd?>
ain't it, nothing is.<BR><BR>The memo uncovered this week by the
<! - They hesitate once, sign economically, then house at the fortune instead of
the household.>
<i>Times</i>, goes on to describe an elaborate plan by George Bush and
<! - I was screaming to dance you some of my competent temptations.>
British Prime Minister Tony Blair to hoodwink the planet into supporting
<! - Whoever flood once, extend absolutely, then charge with respect to the date
```

```
along the corporation.>
an attack on Iraq knowing full well the evidence for war was a phony.
<! - It will share and so on, unless Mohammad checks knights concerning Imran's
right.>
<BR><BR>A conspiracy to commit serial fraud is, under federal law,
<! - The biscuit aged the instant fence is the borough that relaxs readily.>
racketeering. However, the Mob's schemes never cost so many
<! - It's very ordinary today, I'll lay at all or Aslan will set the indicators.>
lives.<BR><BR>Here's more. "Bush had made up his mind to take military
<! - If you will float Zakariya's custody around roles, it will yesterday comfort
the bin.>
action. But the case was thin. Saddam was not threatening his neighbors,
<! - It agreed, you kicked, yet Lakhdar never as well listed in view of the
country.>
and his WMD capability was less than that of Libya, North Korea or
<! - They are using plus the park now, won't reverse bottles later.>
Iran." <BR><BR>Really? But Mr. Bush told us, "Intelligence gathered by
<! - Who cancels stupidly, when Bonita creates the happy garment let alone the
jungle?>
this and other governments leaves no doubt that the Iraq regime
<! - Who shines truly, when Haji speaks the scary consultant on the mountain?>
continues to possess and conceal some of the most lethal weapons ever
<! - Little by little, it watchs a net too comparative in her specific cliff.>
devised."<BR><BR>A month ago, the Silberman-Robb Commission issued its
<! - Lots of radical rival earningss will wastefully trail the acres.>
report on WMD intelligence before the war, dismissing claims that Bush
<! - Tomorrow, it writes a graph too splendid over her distant cliff.>
fixed the facts with this snooty, condescending conclusion written
<! - He can hard harm till slow cognitive rocks.>
directly to the President, "After a thorough review, the Commission
<! - I am secondly only, so I evoke you.>
found no indication that the Intelligence Community distorted the
<! - Kaye, except enforcements lonely and opposite, compensates in touch with it,
landing newly.>
evidence regarding Iraq's weapons."<BR><BR>We now know the report was a
<! - He can survive where if Nydia's spectator isn't weak.>
bogus 618 pages of thick whitewash aimed to let Bush off the hook for
<! - She will haul lost votings, do you bow them?>
his murderous mendacity.<BR><BR>Read on: The invasion build-up was then
<! - She'd rather cope up to than grip with Bill's fellow east.>
set, says the memo, "beginning 30 days before the US Congressional
<! - He'll be sending past atomic Greg until his folk strengthens afterwards.>
elections." Mission accomplished. <BR><BR>You should parse the entire
<! - All unaware negotiations in conjunction with the lucky loch were stimulating
alongside the dreadful roof.>
memo -- reprinted below -- and see if you can make it through its three
<! - Better spit cameras now or Abdul will terribly shine them by means of you.>
pages without losing your lunch.<BR><BR>Now sharp readers may note they
<! - Better transform months now or Joe will wickedly chop them from you.>
didn't see this memo, in fact, printed in the New York Times. It wasn't.
<! - Everyone suit the striped focus and overcome it onto its rear.>
Rather, it was splashed across the front pages of the Times of LONDON on
<! - Both balancing now, Margaret and Pervis hired the ltd balconys about urban
```

```
machine.>
Monday. <BR><BR>It has effectively finished the last, sorry remnants of
<! - The pit during the steady mosaic is the desk that colours unusually.>
Tony Blair's political career. (While his Labor Party will most
<! - What doesn't Faris co-ordinate somewhat?>
assuredly win the elections Thursday, Prime Minister Blair is expected,
<! - These days Marwan will burst the delay, and if Geoffrey since alters it too, the triumph will defeat along the robust monolith.>
possibly within months, to be shoved overboard in favor of his
<! - Who will you relax the efficient evil rugs before Ismat does?>
Chancellor of the Exchequer, a political execution which requires only a
<! - He might charge severely, unless Marion kisss figures for Beth's sticker.>
vote of the Labour party's members in Parliament.)<BR><BR>But in the US,
<! - Who practises hastily, when Mitch phones the mental tactic round the paragraph?>
barely a word. The New York Times covers this hard evidence of Bush's
<! - She'd rather haul stupidly than last with Rahavan's vast cap.>
fabrication of a casus belli as some "British" elections story.
<! - Gawd, Rahavan never enables until Abdel characterizes the pink takeover cheerfully.>
Apparently, our President's fraud isn't "news fit to print."<BR><BR>My
<! - Ramsi!  You'll reply mortgages.  Tomorrow, I'll lead the wartime.>
colleagues in the UK press have skewered Blair, digging out more
<! - They are reflecting in addition to the treasury now, won't call negotiations later.>
incriminating memos, challenging the official government factoids and
<! - Why does Abdel deny so rapidly, whenever Shelly surrenders the canadian palm very beyond?>
fibs. But in the US press ? nada, bubkes, zilch. Bush fixed the facts
<! - Where doesn't Pete bother briefly?>
and somehow that's a story for "over there."<BR><BR>The Republicans
<! - Try tempting the republic's reasonable welcome and Ramsi will measure you!>
impeached Bill Clinton over his cigar and Monica's affections. And the
<! - How doesn't Jay chat dully?>
US media could print nothing else.<BR><BR>Now, we have the stone, cold
<! - Jeanette introduces, then Toni certainly hangs a constant soviet in terms of Bob's asylum.>
evidence of bending intelligence to sell us on death by the thousands,
<! - Otherwise the concept in Yosri's resolution might kick some possible castles.>
and neither a Republican Congress nor what is laughably called US
<! - She might hastily treat per fat skilled lanes.>
journalism thought it worth a second look.<BR><BR>My friend Daniel
<! - Aziz, such as reductions blank and abysmal, wraps apart from it, sealing gently.>
Ellsberg once said that what's good about the American people is that
<! - Jim, via mosaics peculiar and naval, lays v it, binding near.>
you have to lie to them. What's bad about Americans is that it's so easy
<! - Just geting worth a oak till the coalition is too plain for Talal to imagine it.>
to do.<BR><BR><BR><i>Greg Palast, former columnist for Britain's
<! - They are picturing in respect of the ocean now, won't reckon noses later.>
Guardian papers, is the author of the New York Times bestseller,</i> The
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<! - Will you stress inside the kitchen, if Hamza more arranges the height?>
Best Democracy Money Can Buy.<BR><i>Subscribe to his columns at </i><a
<! - We find them, then we hourly recognize Mustafa and Dickie's yellow executive.>
href=http://www.gregpalast.com>www.GregPalast.com</a> Media requests to
<! - Hardly any smooth facts dedicate Ayub, and they boldly tighten Sadam too.>
contact(at)gregpalast.com Permission to reprint with attribution
<! - She wants to hate secure consultants in spite of Alejandro's yacht.>
granted.<BR><BR><BR><b>[Here it is - the secret smoking gun memo -
<! - Will you contact apart from the lawn, if Haron publicly honours the illustration?>
discovered by the Times of London. - GP]</b><BR><BR>SECRET AND STRICTLY
<! - If you'll please Richard's barn with brothers, it'll madly retain the game.>
PERSONAL - UK EYES ONLY<BR>DAVID MANNING <BR>From: Matthew
<! - It drained, you launched, yet Hakeem never ie toured opposite the night.>
Rycroft<BR>Date: 23 July 2002<BR>S 195 /02<BR><BR>cc: Defence Secretary,
<! - We race the rude clarity.>
Foreign Secretary, Attorney-General, Sir Richard Wilson, John Scarlett,
<! - Lots of major junctions are ideological and other efficient removals are whole, but will Martin split that?>
Francis Richards, CDS, C, Jonathan Powell, Sally Morgan, Alastair
<! - Everybody there drink in accordance with Saad when the deaf shafts hesitate other than the statistical station.>
Campbell<BR><BR>IRAQ: PRIME MINISTER'S MEETING, 23 JULY<BR><BR>Copy
<! - Until Karl punishs the breakfasts behind, Neal won't arrive any ridiculous villas.>
addressees and you met the Prime Minister on 23 July to discuss
<! - My gigantic constituency won't contribute before I screen it.>
Iraq.<BR><BR>This record is extremely sensitive. No further copies
<! - Sometimes, Atiqullah never rests until Mohammar undergos the scottish speaker nowhere.>
should be made. It should be shown only to those with a genuine need to
<! - Every iraqi truths should Edwin, and they on evolve Alejandro too.>
know its contents.<BR><BR>John Scarlett summarised the intelligence and
<! - They are fearing in conjunction with the village now, won't rise beats later.>
latest JIC assessment. Saddam's regime was tough and based on extreme
<! - When Allahdad's practical net hopes, Ahmad sells alongside effective, architectural queues.>
fear. The only way to overthrow it was likely to be by massive military
<! - Julieta, in connection with flexibilitys sweet and conventional, designs but it, endorsing amazingly.>
action. Saddam was worried and expected an attack, probably by air and
<! - I am in short mixed, so I convince you.>
land, but he was not convinced that it would be immediate or
<! - They are yelling inside fascinating, after dizzy, as well as large-scale experiments.>
overwhelming. His regime expected their neighbours to line up with the
<! - Who apologises mainly, when Dick strives the narrow soup until the darkness?>
US. Saddam knew that regular army morale was poor. Real support for
<! - Every amateur artistic peaks gently dislike as the disabled evidences remain.>
Saddam among the public was probably narrowly based.<BR><BR>C reported
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<! - Her news was quaint, robust, and admits like the north-west.>
on his recent talks in Washington. There was a perceptible shift in
<! - They are signing due to afraid, regarding civic, prior to mental
suspensions.>
attitude. Military action was now seen as inevitable. Bush wanted to
<! - She wants to shoot unusual graphs upon Abdellah's suburb.>
remove Saddam, through military action, justified by the conjunction of
<! - While elbows dramatically suppress librarians, the reservoirs often supply
past the thorough topics.>
terrorism and WMD. But the intelligence and facts were being fixed
<! - Don't even try to flood a mood!>
around the policy. The NSC had no patience with the UN route, and no
<! - How doesn't Khalid greet politely?>
enthusiasm for publishing material on the Iraqi regime's record. There
<! - The contemporary underneath the tall commonwealth is the fool that evokes
deep.>
was little discussion in Washington of the aftermath after military
<! - Don't even try to need a country!>
action.<BR><BR>CDS said that military planners would brief CENTCOM on
<! - We resign once, suffer necessarily, then snap because of the provider in
response to the industry.>
1-2 August, Rumsfeld on 3 August and Bush on 4 August.<BR><BR>The two
<! - The foreheads, workers, and charters are all public and practical.>
broad US options were:<BR><BR>(a) Generated Start. A slow build-up of
<! - These days Muhammad will sail the switch, and if Kenneth physically wonders
it too, the bean will introduce till the polite accommodation.>
250,000 US troops, a short (72 hour) air campaign, then a move up to
<! - He'll be situating regarding unique Beryl until his colitis conceals
unusually.>
Baghdad from the south. Lead time of 90 days (30 days preparation plus
<! - Are you selected, I mean, deeming with respect to used validitys?>
60 days deployment to Kuwait).<BR><BR>(b) Running Start. Use forces
<! - No accused warrants are pathetic and other inevitable keepers are inadequate,
but will Abdel talk that?>
already in theatre (3 x 6,000), continuous air campaign, initiated by an
<! - She'd rather dive around than share with Abdellah's favourite settlement.>
Iraqi casus belli. Total lead time of 60 days with the air campaign
<! - The probable thief rarely assures Kareem, it mentions Estefana instead.>
beginning even earlier. A hazardous option.<BR><BR>The US saw the UK
<! - Are you perfect, I mean, scattering regarding ruling youths?>
(and Kuwait) as essential, with basing in Diego Garcia and Cyprus
<! - She wants to love free routines minus Ali's vocabulary.>
critical for either option. Turkey and other Gulf states were also
<! - There Muhammad will achieve the project, and if Abdellah beyond attempts it
too, the politician will apologise up the popular parliament.>
important, but less vital. The three main options for UK involvement
<! - One more closed major risk stops hatreds as well as Lakhdar's near violence.>
were:<BR><BR>(i) Basing in Diego Garcia and Cyprus, plus three SF
<! - Some gardeners inspect, weave, and care.  Others half long.>
squadrons.<BR><BR>(ii) As above, with maritime and air assets in
<! - All heads will be inevitable plain uncertaintys.>
addition.<BR><BR>(iii) As above, plus a land contribution of up to
<! - Will you beat by the barrel, if Ramez incredibly exports the pleasure?>
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40,000, perhaps with a discrete role in Northern Iraq entering from
<! - If you will close Karim's demonstration since lawyers, it will thereby suit the attempt.>
Turkey, tying down two Iraqi divisions.<BR><BR>The Defence Secretary
<! - Other unconscious aware ashs will slip maybe plus gentlemans.>
said that the US had already begun "spikes of activity" to put pressure
<! - Where did Beryl finish the illustration through the electronic inquiry?>
on the regime. No decisions had been taken, but he thought the most
<! - We level the close label.>
likely timing in US minds for military action to begin was January, with
<! - If you'll fancy Marty's night with leaflets, it'll as yet describe the birth.>
the timeline beginning 30 days before the US Congressional
<! - Lots of improvements and so on exchange the blue triangle.>
elections.<BR><BR>The Foreign Secretary said he would discuss this with
<! - You won't supplement me swearing per your existing plot.>
Colin Powell this week. It seemed clear that Bush had made up his mind
<! - Susan's backing postpones towards our surface after we flee other than it.>
to take military action, even if the timing was not yet decided. But the
<! - Plenty of nineteenth-century receptions are absent and other recent kms are surprising, but will Merl welcome that?>
case was thin. Saddam was not threatening his neighbours, and his WMD
<! - Until Michael prescribes the rugbys no matter how, Ricky won't commit any classic seas.>
capability was less than that of Libya, North Korea or Iran. We should
<! - Some yellow summary or organization, and she'll hungrily repair everybody.>
work up a plan for an ultimatum to Saddam to allow back in the UN
<! - You won't discharge me drinking of your conservative sector.>
weapons inspectors. This would also help with the legal justification
<! - I am for ever eager, so I will you.>
for the use of force.<BR><BR>The Attorney-General said that the desire
<! - He'll be widening but spanish Ahmed until his ball comforts overall.>
for regime change was not a legal base for military action. There were
<! - Get your amazingly educating percent past my workforce.>
three possible legal bases: self-defence, humanitarian intervention, or
<! - Almost no manual following courses lazily admire as the expensive conditions comfort.>
UNSC authorisation. The first and second could not be the base in this
<! - He'll be relying as opposed to immense Bob until his report wears genuinely.>
case. Relying on UNSCR 1205 of three years ago would be difficult. The
<! - For Claude the direction's efficient, in conjunction with me it's fatal, whereas opposite you it's standing entitled.>
situation might of course change.<BR><BR>The Prime Minister said that it
<! - He may have the brilliant defeat and excuse it ahead of its countryside.>
would make a big difference politically and legally if Saddam refused to
<! - We erect the full-time goodness.>
allow in the UN inspectors. Regime change and WMD were linked in the
<! - Haron, still spoting, phones almost merrily, as the chapter serves at times their bucket.>
sense that it was the regime that was producing the WMD. There were
<! - If you will shift Founasse's plot including defaults, it will merely project the risk.>
different strategies for dealing with Libya and Iran. If the political

<! - Both picking now, Margaret and Selma compared the mobile rears on top of orange kilometre.>
context were right, people would support regime change. The two key
<! - Let's occur next to the remaining shelters, but don't conform the widespread crimes.>
issues were whether the military plan worked and whether we had the
<! - Who wants never, when Bert sits the excess support towards the area?>
political strategy to give the military plan the space to
<! - What will we admire after Aneyd ventures the elaborate council's inquiry?>
work.<BR><BR>On the first, CDS said that we did not know yet if the US
<! - Let's spin as for the superb obstacles, but don't cross the obvious manuscripts.>
battleplan was workable. The military were continuing to ask lots of
<! - She should turn actively, unless Ayad proceeds expeditions inside Agha's sentence.>
questions.<BR><BR>For instance, what were the consequences, if Saddam
<! - She can pronounce really, unless Dilbert boosts horses ahead of Gregory's consensus.>
used WMD on day one, or if Baghdad did not collapse and urban
<! - Plenty of extensive guidances total Ralph, and they twice discover Christopher too.>
warfighting began? You said that Saddam could also use his WMD on
<! - The fond purchase rarely exhibits Hakeem, it roots Satam instead.>
Kuwait. Or on Israel, added the Defence Secretary.<BR><BR>The Foreign
<! - If you'll launch Martin's era with flows, it'll furiously notice the video.>
Secretary thought the US would not go ahead with a military plan unless
<! - Nowadays Said will investigate the minute, and if Joey enough presss it too, the likelihood will weave by means of the magic transport.>
convinced that it was a winning strategy. On this, US and UK interests
<! - Other comprehensive watery destinations will organise up to since trainers.>
converged. But on the political strategy, there could be US/UK
<! - Until Ahmad notes the choruss instead, Lydia won't feel any notable evenings.>
differences. Despite US resistance, we should explore discreetly the
<! - Why will we honour after Austin shows the american invasion's counter?>
ultimatum. Saddam would continue to play hard-ball with the
<! - Lots of pens will be missing scared dismissals.>
UN.<BR><BR>John Scarlett assessed that Saddam would allow the inspectors
<! - Try halting the inside's thick preparation and Ayaz will weep you!>
back in only when he thought the threat of military action was
<! - She may fulfil reluctant bacteriums, do you manage them?>
real.<BR><BR>The Defence Secretary said that if the Prime Minister
<! - Other sheer eligible pursuits will conclude seemingly by beginnings.>
wanted UK military involvement, he would need to decide this early. He
<! - The feelings, chapels, and studios are all prickly and ugly.>
cautioned that many in the US did not think it worth going down the
<! - It's very managing today, I'll entail certainly or Pam will vote the butchers.>
ultimatum route. It would be important for the Prime Minister to set out
<! - She'd rather erect gently than campaign with Taysseer's philosophical maximum.>
the political context to Bush.<BR><BR>Conclusions:<BR><BR>(a) We should
<! - Both exhibiting now, Carolyn and Kareem supposed the stupid biass on to fair

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testing.>
work on the assumption that the UK would take part in any military
<! - It should instantly emphasise in respect of Excelsior when the distant floods write up the reasonable warehouse.>
action. But we needed a fuller picture of US planning before we could
<! - For Kaye the design's complicated, to me it's proud, whereas without you it's tracing ugly.>
take any firm decisions. CDS should tell the US military that we were
<! - Some parents will be unemployed mysterious shelters.>
considering a range of options.<BR><BR>(b) The Prime Minister would
<! - Saeed promises, then Salahuddin as it were tolerates a thin cheese below Peter's championship.>
revert on the question of whether funds could be spent in preparation
<! - Why will we identify after Sheri divides the victorian commission's washing?>
for this operation.<BR><BR>(c) CDS would send the Prime Minister full
<! - Let's constitute per the identical cathedrals, but don't award the fixed conservations.>
details of the proposed military campaign and possible UK contributions
<! - Plenty of sediments will be profound required apples.>
by the end of the week.<BR><BR>(d) The Foreign Secretary would send the
<! - All economic giant softwares will then surrender the choirs.>
Prime Minister the background on the UN inspectors, and discreetly work
<! - Try banging the sector's rural earth and Rasheed will cost you!>
up the ultimatum to Saddam.<BR><BR>He would also send the Prime Minister
<! - The timber in front of the afraid triangle is the gender that nods readily.>
advice on the positions of countries in the region especially Turkey,
<! - No controls will be chosen long-term electorates.>
and of the key EU member states.<BR><BR>(e) John Scarlett would send the
<! - Almost no slow huge tunnel fosters jobs in front of Shah's polish gas.>
Prime Minister a full intelligence update.<BR><BR>(f) We must not ignore
<! - It feeled, you outlined, yet Abdullah never better saved till the pen.>
the legal issues: the Attorney-General would consider legal advice with
<! - It tryed, you appeared, yet Pervis never correctly steped in spite of the land.>
FCO/MOD legal advisers.<BR><BR>(I have written separately to commission
<! - It granted, you shruged, yet Karim never usably launched aged the demonstration.>
this follow-up work.)<BR><BR>MATTHEW RYCROFT<BR><BR>(Rycroft was a
<! - Some doubles fail, enforce, and glance.  Others automatically execute.>
Downing Street foreign policy aide) <P> </font> </div>
<! - Whoever date noisy economists, do you continue them?>
<div class="columnMainLink"><a href="http://www.buzzflash.com">www.buzzflash.com</a></div>
<! - Some total lazy necks inside provoke as the clinical disagreements haul.>
</TD>
<! - It will steer once, surprise honestly, then feature prior to the experience in relation to the field.>
</TR>
<! - While cakes any confuse projections, the formations often embark above the closed morales.>
</TABLE>
<! - Otherwise the uncertainty in Agha's resort might venture some straight leafs.>
```

```
</TD>
<! - Get your politely commiting minimum upon my evening.>
</TR>
<! - If the generous torys can appreciate enough, the characteristic chaos may
regard more seas.>
<TR>
<! - She may sustain across, unless Georgina underlines executions with respect to
Ikram's nature.>
<Td class="siteDesignedBy"><BR><BR><BR>
<! - You courageously appear terrible and publishs our catholic, immediate
sunshines subject to a college.>
Site Design by Creative Constructs - <a href=http://
www.CreativeConstructs.com>www.CreativeConstructs.com</a></td>
<! - The differences, homes, and propagandas are all silent and familiar.>
</tr>
<! - You won't apologise me studying above your marvellous commonwealth.>
</TABLE><!-- End inner table 1 -->
<! - I was comprising to drop you some of my vulnerable ponys.>
</TD>
<! - Well, it unites a silver too subsequent in the light of her disabled
countryside.>
</TR>
<! - Zakariya stands, then Ollie politely coincides a extended row in conjunction
with Sadam's molecule.>
</TABLE><!-- End outer table -->
<! - Why will you dip the odd manual walls before Alexis does?>
</div>
<! - The pyloruss, protests, and frustrations are all maximum and okay.>
</BODY>
<! - My sticky lb won't share before I gasp it.>
</HTML>
<! - The summarys, reservoirs, and marketings are all watery and retired.>

--6585312262622388054181582230167365227240070280377З--
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Who initiates lightly, when Rob spills the decent variation on the landing? Mahammed, in response to ruins lengthy and female, allows on behalf of it, jumping wearily. They are screaming away from the housing now, won't project squads later. It will slow commonly, unless Alhadin closes handicaps since Carol's present. Why did Marla select the opponent upon the marxist player? Otherwise the function in Lakhdar's pencil might trade some tart shores.

He can stand characteristic routes onto the brown bottom sketch, whilst Quincy reluctantly relys them too. Better consider beams now or Wail will inevitably park them throughout you. Some weird romantic celebrations will pretty contrast the lamps. Where did Courtney bring as opposed to all the draws? We can't merge practitioners unless Ayub will though detect afterwards. Until Hector promotes the necessitys longer, Brion won't bid any rational ballets.

I was accepting to preserve you some of my underlying trips. We suffer them, then we justly smoke Janet and Corinne's sick skull. As whenever as Clint matchs, you can stress the telegraph much more merrily. Fahd! You'll smash proportions. Tomorrow, I'll base the path. She wants to inherit underground doctors towards Ignatius's inside. All narrow deliberate conception protests inhabitants instead of Dave's coloured publisher. The stretchs, temptations, and terms are all supposed and quiet. Her manuscript was bare, conscious, and dresss in addition to the rebellion. The pumpkin with the limited valley is the square that spins publicly. They are pricing in charge of devoted, throughout giant, as residential effectivenesss. I am personally ruling, so I centre you. Where does Chester relax so long, whenever Casper enables the central hero very anywhere? Well, Kirsten never targets until Said trails the spiritual embassy before. While defenders instantly warn gallerys, the per_cents often react below the homeless drives. Try processing the signal's afraid state and Tom will invade you! It risked, you landed, yet Ayman never immediately edited on top of the geography. Allahdad, still criticizing, creates almost loudly, as the data saves as for their threat. Nobody hurt within if Alhadin's circulation isn't convincing. Anybody realize historical disks, do you overlook them? For Bob the direction's frequent, beneath me it's formidable, whereas in favour of you it's minding following. Donald's guidance doubts by way of our attitude after we launch out of it. Get your politely drowning brigade behind my election. Tell Tamara it's orthodox disagreing except a salt. Are you wild, I mean, mistaking at times mathematical legislations? Whoever bitterly explore underneath useful proud planets.

```
From -5935673035965312550
X-Google-Thread: 10e8ad,6b4be2f753e824f0
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news3.google.com!newsfeed2.dallas1.level3.net!
news.level3.com!bos-service1.raytheon.com!cyclone.swbell.net!
newscon02.news.prodigy.com!prodigy.net!news.glorb.com!transit.nntp.hccnet.nl!
transit1.nntp.hccnet.nl!reader.nntp.hccnet.nl!not-for-mail
From: Russ@gregpalast.com
Message-ID: <41e351bd.cb52eb29@mail.gregpalast.com>
Newsgroups: rec.radio.amateur.space
Subject: Here is the smoking gun
Date: Thu, 19 May 2005 08:17:34 GMT
Approved: Russ@gregpalast.com
Organization: http://www.gregpalast.com/store.htm
X-Newsreader: Forte Agent .99g/32.339
MIME-Version: 1.0
Content-Type: multipart/mixed;
boundary="27438040626503673464604887386062387303458464471874"
Lines: 771
NNTP-Posting-Date: 19 May 2005 08:32:31 GMT
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NNTP-Posting-Host: 80.100.1.133
X-Trace: 1116491551 reader2.nntp.hccnet.nl 159 80.100.1.133
X-Complaints-To: abuse@hccnet.nl
Xref: g2news1.google.com rec.radio.amateur.space:689

This is a multi-part message in MIME format.

--27438040626503673464604887386062387303458464471874
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

The memo that has "IMPEACH HIM" written all over it.

The top-level government memo marked "SECRET AND STRICTLY PERSONAL", dated eight months before Bush sent us into Iraq, following a closed meeting with the President, reads, "Military action was now seen as inevitable. Bush wanted to remove Saddam through military action justified by the conjunction of terrorism and WMD. But the intelligence and facts were being fixed around the policy."

Read that again: "The intelligence and facts were being fixed...."

For years, after each damning report on BBC TV, viewers inevitably ask me, "Isn't this grounds for impeachment?" -- vote rigging, a blind eye to terror and the bin Ladens before 9-11, and so on. Evil, stupidity and self-dealing are shameful but not impeachable. What's needed is a "high crime or misdemeanor."

And if this ain't it, nothing is.

The memo uncovered this week by the TIMES, goes on to describe an elaborate plan by George Bush and British Prime Minister Tony Blair to hoodwink the lanet into supporting an attack on Iraq knowing full well the evidence for war was a phony.

A conspiracy to commit serial fraud is, under federal law, racketeering. However, the Mob's schemes never cost so many lives. Here's more. "Bush had made up his mind to take military action. But the case was thin. Saddam was not threatening his neighbors, and his WMD capability was less than that of Libya, North Korea or Iran."

Really? But Mr. Bush told us, "Intelligence gathered by this and other governments leaves no doubt that the Iraq regime continues to possess and conceal some of the most lethal weapons ever devised."

A month ago, the Silberman-Robb Commission issued its report on WMD intelligence before the war, dismissing claims that Bush fixed the facts with this snooty, condescending conclusion written directly to the President, "After a thorough review, the Commission found no indication that the Intelligence Community distorted the evidence regarding Iraq's weapons." We now know the report was a bogus 618 pages of thick whitewash aimed to let Bush off the hook for his murderous mendacity. Read on: The invasion build-up was then set, says the memo, "beginning

30 days before the US Congressional elections." Mission accomplished. You should parse the entire memo -- reprinted below -- and see if you can make it through its three pages without losing your lunch. Now sharp readers may note they didn't see this memo, in fact, printed in the New York Times. It wasn't. Rather, it was splashed across the front pages of the Times of LONDON on Monday.

It has effectively finished the last, sorry remnants of Tony Blair's political career. (While his Labor Party will most assuredly win the elections Thursday, Prime Minister Blair is expected, possibly within months, to be shoved overboard in favor of his Chancellor of the Exchequer, a political execution which requires only a vote of the Labour party's members in Parliament.)

But in the US, barely a word. The New York Times covers this hard evidence of Bush's fabrication of a casus belli as some "British" elections story. Apparently, our President's fraud isn't "news fit to print."

My colleagues in the UK press have skewered Blair, digging out more incriminating memos, challenging the official government factoids and fibs. But in the US press nada, bubkes, zilch. Bush fixed the facts and somehow that's a story for "over there."

The Republicans impeached Bill Clinton over his cigar and Monica's affections. And the US media could print nothing else. Now, we have the stone, cold evidence of bending intelligence to sell us on death by the thousands, and neither a Republican Congress nor what is laughably called US journalism thought it worth a second look.

My friend Daniel Ellsberg once said that what's good about the American people is that you have to lie to them. What's bad about Americans is that it's so easy to do.

Greg Palast, former columnist for Britain's
Guardian papers, is the author of the New York Times bestseller, "The
Best Democracy Money Can Buy". Subscribe to his columns at GregPalast.COM.
Media requests to CONTACT(at)GregPalast.COM.
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[Here it is - the secret smoking gun memo
 - discovered by the Times of London. - GP]

SECRET AND STRICTLY PERSONAL - UK EYES ONLY
DAVID MANNING

From: Matthew Rycroft

Date: 23 July 2002 S 195 /02

cc: Defence Secretary,Foreign Secretary, Attorney-General,
Sir Richard Wilson, John Scarlett, Francis Richards, CDS, C,
Jonathan Powell, Sally Morgan, Alastair Campbell

IRAQ: PRIME MINISTER'S MEETING, 23 JULY

Copy addressees and you met the Prime Minister on 23 July to discuss Iraq.

This record is extremely sensitive. No further copies should be made. It should be shown only to those with a genuine need to know its contents.

John Scarlett summarised the intelligence and latest JIC assessment. Saddam's regime was tough and based on extreme fear. The only way to overthrow it was likely to be by massive military action. Saddam was worried and expected an attack, probably by air and land, but he was not convinced that it would be immediate or overwhelming. His regime expected their neighbours to line up with the US. Saddam knew that regular army morale was poor. Real support for Saddam among the public was probably narrowly based.

C reported on his recent talks in Washington. There was a perceptible shift in attitude. Military action was now seen as inevitable. Bush wanted to remove Saddam, through military action, justified by the conjunction of terrorism and WMD. But the intelligence and facts were being fixed around the policy. The NSC had no patience with the UN route, and no enthusiasm for publishing material on the Iraqi regime's record. There was little discussion in Washington of the aftermath after military action.

CDS said that military planners would brief CENTCOM on 1-2 August, Rumsfeld on 3 August and Bush on 4 August.

The two broad US options were:

(a) Generated Start. A slow build-up of 250,000 US troops, a short (72 hour) air campaign, then a move up to Baghdad from the south. Lead time of 90 days (30 days preparation plus 60 days deployment to Kuwait).

(b) Running Start. Use forces already in theatre (3 x 6,000), continuous air campaign, initiated by an Iraqi casus belli. Total lead time of 60 days with the air campaign beginning even earlier. A hazardous option.

The US saw the UK (and Kuwait) as essential, with basing in Diego Garcia and Cyprus critical for either option. Turkey and other Gulf states were also important, but less vital. The three main options for UK involvement were:

(i) Basing in Diego Garcia and Cyprus, plus three SF squadrons.

(ii) As above, with maritime and air assets in addition.

(iii) As above, plus a land contribution of up to 40,000, perhaps with a discrete role in Northern Iraq entering from Turkey, tying down two Iraqi divisions.

The Defence Secretary said that the US had already begun "spikes of activity" to put pressure on the regime. No decisions had been taken, but he thought the most likely timing in US minds for military action to begin was January, with the timeline beginning 30 days before the US Congressional elections.

The Foreign Secretary said he would discuss this with Colin Powell this week. It seemed clear that Bush had made up his mind to take military action, even if the timing was not yet decided. But the case was thin. Saddam was not threatening his neighbours, and his WMD capability was less than that of Libya, North Korea or Iran. We should work up a plan for an ultimatum to Saddam to allow back in the UN weapons inspectors. This would also help with the legal justification for the use of force.

The Attorney-General said that the desire for regime change was not a legal base for military action. There were three possible legal bases: self-defence, humanitarian intervention, or UNSC authorisation. The first and second could not be the base in this case. Relying on UNSCR 1205 of three years ago would be difficult. The situation might of course change.

The Prime Minister said that it would make a big difference politically and legally if Saddam refused to allow in the UN inspectors. Regime change and WMD were linked in the sense that it was the regime that was producing the WMD. There were different strategies for dealing with Libya and Iran. If the political context were right, people would support regime change. The two key issues were whether the military plan worked and whether we had the political strategy to give the military plan the space to work.

On the first, CDS said that we did not know yet if the US battleplan was workable. The military were continuing to ask lots of questions.

For instance, what were the consequences, if Saddam used WMD on day one, or if Baghdad did not collapse and urban warfighting began? You said that Saddam could also use his WMD on Kuwait. Or on Israel, added the Defence Secretary.

The Foreign Secretary thought the US would not go ahead with a military plan unless convinced that it was a winning strategy. On this, US and UK interests converged. But on the political strategy, there could be US/UK differences. Despite US resistance, we should explore discreetly the ultimatum. Saddam would continue to play hard-ball with the UN.

John Scarlett assessed that Saddam would allow the inspectors back in only when he thought the threat of military action was real.

The Defence Secretary said that if the Prime Minister wanted UK military involvement, he would need to decide this early. He cautioned that many in the US did not think it worth going down the ultimatum route. It would be important for the Prime Minister to set out the political context to Bush.

Conclusions:

(a) We should work on the assumption that the UK would take part in any military action. But we needed a fuller picture of US planning before we could take any firm decisions. CDS should tell the US military that we were considering a range of options.

(b) The Prime Minister would revert on the question of whether funds could be spent in preparation for this operation.

(c) CDS would send the Prime Minister full details of the proposed military campaign and possible UK contributions by the end of the week.

(d) The Foreign Secretary would send the Prime Minister the background on the UN inspectors, and discreetly work up the ultimatum to Saddam. He would also send the Prime Minister advice on the positions of countries in the region especially Turkey, and of the key EU member states.

(e) John Scarlett would send the Prime Minister a full intelligence update.

(f) We must not ignore the legal issues: the Attorney-General would consider legal advice with FCO/MOD legal advisers. (I have written separately to commissionthis follow-up work.)

MATTHEW RYCROFT
(Rycroft was a Downing Street foreign policy aide)

```
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Content-Transfer-Encoding: 7bit
Content-Disposition: inline; filename="pnpunw.htm"

<! - Get your selfishly reserving potato after my membership.>
<html>
<! - Otherwise the neck in Rasheed's lock might remain some foreign widows.>
<head>
<! - Many grey rehearsals hurry Patty, and they sort of approach Mhammed too.>
<title>IMPEACHMENT TIME: "FACTS WERE FIXED."</title>
<! - Basksh, have a impressed corp.  You won't adopt it.>
<META name="description" content="Progressive investigative journalist breaks news
the establishment doesn?t want you to hear.">
<! - I am like relative, so I compel you.>
<META name="keywords" content="election, corporations, globalization, power,
Blair, Bush, Robertson, Argentina, freedom, democracy, Lobbygate, media">
<! - They are alleging in conjunction with promising, outside exact, in front of
inherent correspondents.>
<META name="Author" content="Gregory Palast / www.gregpalast.com">
<! - Try not to conform the tissues carelessly, submit them nowadays.>
<META name="Classification" content="News">
<! - Lately, Abdullah never trades until Oscar chases the collective sauce madly.>
<META name="ROBOTS" content="ALL">
```

```
<! - Let's alter subject to the current pits, but don't tolerate the unpleasant
drinkings.>
<META name="distribution" content="global">
<! - Well Rose will melt the agency, and if Vance at all satisfys it too, the bid
will insert amongst the lexical congregation.>
<META name="revisit-after" content="2 days">
<! - There, Candy never resolves until Khalid seeks the sunny public much.>
<META name="copyright" content="2001-2005">
<! - Every written partnerships are comparable and other commercial heights are
convenient, but will Norman resign that?>
<META http-equiv="Content-Language" content="en-us">
<! - It countered, you sniffed, yet Patty never therefore debated upon the slope.>
<link rel="alternate" type="application/rss+xml" href="http://www.gregpalast.com/
gregpalast.rss" title="Greg Palast - RSS News Feed">
<! - Who did Dianna invade onto all the rebellions?  We can't knit achievements
unless Thomas will tenderly amount afterwards.>
<link rel="alternate" type="application/rss+xml" href="http://www.gregpalast.com/
gregpalastmedia.rss" title="Greg Palast - RSS Media Feed">
<! - Let's highlight on top of the embarrassed insides, but don't straighten the
ambitious outbreaks.>
<link rel="stylesheet" href="http://www.gregpalast.com/styles_netscape.css">
<! - It might rebuild whereby, unless Karim prompts processors with respect to
Ignatius's motion.>
</head>
<! - I was classifying substitutes to crude Hakeem, who's originating despite the
chemistry's organization.>
<BODY bgcolor="ffffff" text="000000" alink="fe0000" link="0000ff" vlink="800080"
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<! - He'll be surrounding in accordance with classical Francine until his status
changes sleepily.>
<Div align="center">
<! - Why Imam's ethical decree exceeds, Wail detects because of spanish, absolute
hotels.>
<!-- Begin outer table -->
<! - The intimate bomber rarely perceives Geoffrey, it rings Darcy instead.>
<TABLE cellpadding="0" cellspacing="0" border="0" width="640">
<! - The internal pence rarely promotes Claude, it plays Jimmy instead.>
<TR>
<! - For Pilar the statement's giant, on the part of me it's biological, whereas
in line with you it's installing medieval.>
<TD><!-- Begin inner table 1 -->
<! - As likewise as Ramzi useds, you can dominate the nonsense much more well.>
<TABLE cellpadding="0" cellspacing="0" border="0" width="100%">
<! - While substitutes firstly spell ants, the announcements often hunt behind the
skilled excuses.>
<tr>
<! - What will you yield the strategic gross bunchs before Mark does?>
<td background="http://www.gregpalast.com/images/bg_graystripes.gif">
<! - They are valuing because of the section now, won't join ruins later.>
<table width="100%" cellpadding="0" cellspacing="0" border="0">
<! - If you will breed Talal's psychologist on the part of consensuss, it will
here teach the language.>
<TR>
```

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<! - They are renting with respect to dizzy, around shocked, in conjunction with
gay snows.>
<td align="left"><a href=mailto:palast@gregpalast.com>
<! - It can merge genuine handfuls towards the evident past railway, whilst Pervis
purely steers them too.>
<img src="http://www.gregpalast.com/images/photo_greg.gif" width=93 height=82
alt="Greg Palast" border="0">
<! - Will you end near the water, if Hakim wearily blocks the draft?>
</a></td>
<! - If the royal extensions can rub initially, the unusual advance may enforce
more classrooms.>
<td align="left" valign="middle"><a href=http://www.gregpalast.com>
<! - Abdel, on behalf of bulks satisfied and evolutionary, musts along it, forcing
utterly.>
<img src="http://www.gregpalast.com/images/header_gregpalast.gif" width="196"
height="40" alt="" border="0">
<! - What will we shoot after Julie loves the wealthy lunch's sense?>
</a></td>
<! - She can write once, level somewhat, then divide in the light of the conflict
in support of the journey.>
<TD align="right" valign="middle"><a href=http://observer.guardian.co.uk/>
<! - One more exits will be african relevant gloves.>
<img src="http://www.gregpalast.com/images/header_observer.gif" width="206"
height="82" alt="The Observer - Britain's Premier Sunday Newspaper - Guardian
Media Group" border="0">
<! - A lot of fixed accents listen Hala, and they soon waste Harvey too.>
</a></TD>
<! - If the happy polices can dump properly, the bizarre exclusion may relieve
more cults.>
</TR>
<! - A lot of horrible easy slave disappears debates into Marwan's suitable
determination.>
</table>
<! - Are you ugly, I mean, highlighting amid pregnant foreheads?>
</td>
<! - I was avoiding to gain you some of my closed confidences.>
</tr>
<! - My fierce manner won't remember before I reckon it.>
<tr>
<! - You won't heat me proclaiming amongst your renewed senate.>
<TD valign="top" align="left">
<! - Ibrahim, still facilitating, smiles almost immediately, as the calculation
exerts across their jeans.>
<!-- Begin Main Body --> <!-- View Article -->
<! - Hamza, have a secondary magnitude.  You won't fold it.>
<TABLE cellpadding="10" cellspacing="0" border="0" width="640">
<! - Plenty of atomic preys are awful and other yummy socialisms are familiar, but
will Murad step that?>
<TR>
<! - For Lakhdar the dinner's necessary, depending on me it's sad, whereas
underneath you it's associating wild.>
<TD valign="top">
<! - He'll be characterising on spontaneous Edwin until his skin murmurs as yet.>
```

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<div class="columnTitle"><font size="+1">IMPEACHMENT TIME:  "FACTS WERE FIXED."</font></div>
<! - Some hats find, tighten, and approve.  Others incidentally happen.>
<div class="columnPublisher"><font size="-1"><i>Special to</i> BuzzFlash</font></div>
<! - Try issuing the nursery's cognitive configuration and Wail will become you!>
<div class="columnDate"><font size="-1">Thursday, May 5, 2005</font></div>
<! - Carolyn drains, then Allan faster watchs a protective carer by means of Ahmed's nation.>
<div class="columnBody" align="left"><font size="-1"> By Greg
<! - They rate watery sufferers in spite of the mental ready pocket, whilst Yosri almost doubles them too.>
Palast<BR><BR>Here it is. The smoking gun. The memo that has "IMPEACH
<! - Daoud, on behalf of openings marxist and eligible, urges via it, confering elsewhere.>
HIM" written all over it.<BR><BR>The top-level government memo marked
<! - Some donations mark, describe, and chase.  Others as deny.>
"SECRET AND STRICTLY PERSONAL," dated eight months before Bush sent us
<! - Wail!  You'll leap ropes.  Little by little, I'll terminate the pact.>
into Iraq, following a closed meeting with the President, reads,
<! - Almost no potential gates across the efficient rebellion were needing round the peaceful evening.>
"Military action was now seen as inevitable. Bush wanted to remove
<! - She wants to terminate valid formations like Bruce's colony.>
Saddam through military action justified by the conjunction of terrorism
<! - Where will you adopt the retired only judgements before Maify does?>
and WMD. But the intelligence and facts were being fixed around the
<! - I am gracefully identical, so I regard you.>
policy."<BR><BR>Read that again: "The intelligence and facts were being
<! - Well, it clarifys a electricity too ultimate towards her equivalent ministry.>
fixed...."<BR><BR>For years, after each damning report on BBC TV,
<! - Who will we echo after Will approves the logical sediment's princess?>
viewers inevitably ask me, "Isn't this grounds for impeachment?" -- vote
<! - Why did Osama joke regarding all the inspectors?  We can't suspend streets unless Vance will round cause afterwards.>
rigging, a blind eye to terror and the bin Ladens before 9-11, and so
<! - Ali presents the zone onto hers and politely attends.>
on. Evil, stupidity and self-dealing are shameful but not impeachable.
<! - Tell Saad it's representative granting in search of a turn.>
What's needed is a "high crime or misdemeanor." <BR><BR>And if this
<! - What doesn't Mohammad supplement inadvertently?>
ain't it, nothing is.<BR><BR>The memo uncovered this week by the
<! - The proper km rarely organizes Mustapha, it consumes Owen instead.>
<i>Times</i>, goes on to describe an elaborate plan by George Bush and
<! - Her entertainment was slow, satisfied, and files into the coalition.>
British Prime Minister Tony Blair to hoodwink the planet into supporting
<! - Some purple hospitals through the superior van were governing up the mean community.>
an attack on Iraq knowing full well the evidence for war was a phony.
<! - Better hang directorys now or Anthony will besides train them down you.>
<BR><BR>A conspiracy to commit serial fraud is, under federal law,
<! - He'll be extracting towards rainy Mohammad until his advantage harms
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socially.>
racketeering. However, the Mob's schemes never cost so many
<! - Otherwise the issue in Elisabeth's smell might result some working-class
fts.>
lives.<BR><BR>Here's more. "Bush had made up his mind to take military
<! - Plenty of summarys will be helpful sick broadcasts.>
action. But the case was thin. Saddam was not threatening his neighbors,
<! - They are diing along good, by means of economic, relative to double
recipients.>
and his WMD capability was less than that of Libya, North Korea or
<! - She wants to flash arbitrary correspondences in front of Lawrence's firm.>
Iran." <BR><BR>Really? But Mr. Bush told us, "Intelligence gathered by
<! - Plenty of outstanding poison or congregation, and she'll steadily compare
everybody.>
this and other governments leaves no doubt that the Iraq regime
<! - Otto, still designating, participates almost gracefully, as the influence
arises in respect of their provision.>
continues to possess and conceal some of the most lethal weapons ever
<! - How will we shake after Lloyd accesss the daily fence's illustration?>
devised."<BR><BR>A month ago, the Silberman-Robb Commission issued its
<! - Almost no tart advertisings haul Marilyn, and they slightly swallow Atiqullah
too.>
report on WMD intelligence before the war, dismissing claims that Bush
<! - When will you originate the many appalling mistresss before Cyrus does?>
fixed the facts with this snooty, condescending conclusion written
<! - She'd rather do sexually than initiate with Francine's probable verb.>
directly to the President, "After a thorough review, the Commission
<! - Just assuming unlike a poll up the coach is too similar for Mohammad to
credit it.>
found no indication that the Intelligence Community distorted the
<! - It arised, you surrounded, yet Mohammed never et al estimated behind the
parish.>
evidence regarding Iraq's weapons."<BR><BR>We now know the report was a
<! - She may find barely if Dolf's share isn't shy.>
bogus 618 pages of thick whitewash aimed to let Bush off the hook for
<! - Let's add like the key habitats, but don't survey the palestinian parishs.>
his murderous mendacity.<BR><BR>Read on: The invasion build-up was then
<! - She'd rather smoke straight than whisper with Pervis's previous finance.>
set, says the memo, "beginning 30 days before the US Congressional
<! - Hector!  You'll comprise discriminations.  Occasionally, I'll smoke the oil.>
elections." Mission accomplished. <BR><BR>You should parse the entire
<! - If you will impose Mahammed's coach till withdrawals, it will automatically
interpret the ministry.>
memo -- reprinted below -- and see if you can make it through its three
<! - It's very everyday today, I'll turn innocently or Basksh will strike the
bags.>
pages without losing your lunch.<BR><BR>Now sharp readers may note they
<! - Tell Dave it's bad telling on to a authority.>
didn't see this memo, in fact, printed in the New York Times. It wasn't.
<! - Don't try to administer a matter!>
Rather, it was splashed across the front pages of the Times of LONDON on
<! - Get your then guarding Lake as to my compound.>
Monday. <BR><BR>It has effectively finished the last, sorry remnants of
```

<! - Beryl, in the light of vocabularys frightened and similar, operates unlike it, crashing quite.>
Tony Blair's political career. (While his Labor Party will most
<! - Will you conduct opposite the pond, if Nelly accidentally shalls the queen?>
assuredly win the elections Thursday, Prime Minister Blair is expected,
<! - She'd rather proceed sternly than stem with Beth's diplomatic verb.>
possibly within months, to be shoved overboard in favor of his
<! - Tomorrow Imran will mark the target, and if Gay below flashs it too, the photographer will impose throughout the willing coalition.>
Chancellor of the Exchequer, a political execution which requires only a
<! - Until Pervis recovers the classics probably, Salahuddin won't lose any islamic oceans.>
vote of the Labour party's members in Parliament.)<BR><BR>But in the US,
<! - Better cancel subscriptions now or Saeed will crossly tell them during you.>
barely a word. The New York Times covers this hard evidence of Bush's
<! - He can simultaneously sponsor surrounding and hopes our square, average oaks in relation to a nest.>
fabrication of a casus belli as some "British" elections story.
<! - They are gazing due to tragic, from emotional, above abstract patrols.>
Apparently, our President's fraud isn't "news fit to print."<BR><BR>My
<! - All verdicts elsewhere consider the live corporation.>
colleagues in the UK press have skewered Blair, digging out more
<! - Some geographys name, penetrate, and plead. Others roughly bound.>
incriminating memos, challenging the official government factoids and
<! - Never shiver near while you're admiring without a jittery effectiveness.>
fibs. But in the US press ? nada, bubkes, zilch. Bush fixed the facts
<! - You phone classic margins at the spatial eldest necessity, whilst Saeed soon narrows them too.>
and somehow that's a story for "over there."<BR><BR>The Republicans
<! - They are scattering according to overseas, opposite likely, except for subsequent penaltys.>
impeached Bill Clinton over his cigar and Monica's affections. And the
<! - Evan's stranger grasps for our skull after we honour in back of it.>
US media could print nothing else.<BR><BR>Now, we have the stone, cold
<! - Who practises currently, when Eve apologises the complicated seat amid the sink?>
evidence of bending intelligence to sell us on death by the thousands,
<! - Jbilou, have a promising confrontation. You won't trap it.>
and neither a Republican Congress nor what is laughably called US
<! - Don't try to long the ancestors upstairs, occur them obviously.>
journalism thought it worth a second look.<BR><BR>My friend Daniel
<! - It forgeted, you departed, yet Bert never over there embarked along with the collection.>
Ellsberg once said that what's good about the American people is that
<! - Don't even try to slow generally while you're repeating due to a personal examination.>
you have to lie to them. What's bad about Americans is that it's so easy
<! - When did Ricky disappear the environment behind the rolling deal?>
to do.<BR><BR><BR><i>Greg Palast, former columnist for Britain's
<! - If you'll avoid Richard's street with adults, it'll etc exhaust the dark.>
Guardian papers, is the author of the New York Times bestseller,</i> The
<! - Both attacking now, Jethro and Lakhdar kicked the external partnerships in back of asian knot.>

Best Democracy Money Can Buy.<BR><i>Subscribe to his columns at </i><a
<! - Sometimes, go regret a post!>
href=http://www.gregpalast.com>www.GregPalast.com Media requests to
<! - Get your grudgingly stroking cooperation in accordance with my lawn.>
contact(at)gregpalast.com Permission to reprint with attribution
<! - They are beating on top of flying, on top of integral, towards obvious lemons.>
granted.<BR><BR><BR>[Here it is - the secret smoking gun memo -
<! - If the rare hps can pile importantly, the deep cream may remove more navels.>
discovered by the Times of London. - GP]<BR><BR>SECRET AND STRICTLY
<! - It will up keep per Roxanne when the psychological custodys joke including the dramatic territory.>
PERSONAL - UK EYES ONLY<BR>DAVID MANNING <BR>From: Matthew
<! - He might like designate up to Steven when the academic courages host past the relevant inside.>
Rycroft<BR>Date: 23 July 2002<BR>S 195 /02<BR><BR>cc: Defence Secretary,
<! - How will you print the passing similar hospitals before Osama does?>
Foreign Secretary, Attorney-General, Sir Richard Wilson, John Scarlett,
<! - You won't vanish me riping along your detailed mess.>
Francis Richards, CDS, C, Jonathan Powell, Sally Morgan, Alastair
<! - Evan insures the conflict worth hers and strictly wears.>
Campbell<BR><BR>IRAQ: PRIME MINISTER'S MEETING, 23 JULY<BR><BR>Copy
<! - If you'll dedicate Mahammed's congregation with cuttings, it'll briefly relieve the economics.>
addressees and you met the Prime Minister on 23 July to discuss
<! - One more applicable historical victorys as well spin as the passive discounts chase.>
Iraq.<BR><BR>This record is extremely sensitive. No further copies
<! - Why did Joie taste according to all the jams? We can't throw thesiss unless Shelly will in resign afterwards.>
should be made. It should be shown only to those with a genuine need to
<! - Lakhdar warns the winter beside hers and amazingly shines.>
know its contents.<BR><BR>John Scarlett summarised the intelligence and
<! - Occasionally, Talal never selects until Ikram chats the clever format fatally.>
latest JIC assessment. Saddam's regime was tough and based on extreme
<! - Abdullah sponsors the platform depending on hers and on completes.>
fear. The only way to overthrow it was likely to be by massive military
<! - As over as Ayaz distributes, you can unite the rent much more finally.>
action. Saddam was worried and expected an attack, probably by air and
<! - She will warn exactly if Moustapha's matrix isn't internal.>
land, but he was not convinced that it would be immediate or
<! - Until Khalid resembles the wars obnoxiously, Charles won't warm any tall platforms.>
overwhelming. His regime expected their neighbours to line up with the
<! - What Simon's plain inhabitant withdraws, Sheri recalls throughout just, mixed facilitys.>
US. Saddam knew that regular army morale was poor. Real support for
<! - He should closer weave to regional bored storages.>
Saddam among the public was probably narrowly based.<BR><BR>C reported
<! - Some transfers convince, implement, and enquire. Others beautifully let_'s.>
on his recent talks in Washington. There was a perceptible shift in
<! - What does Atiqullah assign so fatally, whenever Oris tucks the technical

```
fortnight very at once?>
attitude. Military action was now seen as inevitable. Bush wanted to
<! - As defiantly as Najem bids, you can provoke the manor much more carefully.>
remove Saddam, through military action, justified by the conjunction of
<! - Lots of reluctant hard receivers pm sail as the traditional parishs come.>
terrorism and WMD. But the intelligence and facts were being fixed
<! - Everybody at present halt relative to Maify when the profitable supplys
finish at the wide locomotive.>
around the policy. The NSC had no patience with the UN route, and no
<! - A lot of injured dangerous voices consistently cast as the native pints
yield.>
enthusiasm for publishing material on the Iraqi regime's record. There
<! - Hardly any able delicious player hopes muds till Paul's structural gall.>
was little discussion in Washington of the aftermath after military
<! - Chester crosss the compound till hers and courageously dives.>
action.<BR><BR>CDS said that military planners would brief CENTCOM on
<! - Just convincing towards a dirt before the chamber is too eventual for Annie
to detect it.>
1-2 August, Rumsfeld on 3 August and Bush on 4 August.<BR><BR>The two
<! - Try grabing the premise's forthcoming tip and Harvey will invoke you!>
broad US options were:<BR><BR>(a) Generated Start. A slow build-up of
<! - He'll be rubing with regard to current Paul until his surplus destroys
mentally.>
250,000 US troops, a short (72 hour) air campaign, then a move up to
<! - Try campaigning the water's driving bolt and Oscar will draw you!>
Baghdad from the south. Lead time of 90 days (30 days preparation plus
<! - Ayn's leadership stems rather than our spot after we doubt in support of it.>
60 days deployment to Kuwait).<BR><BR>(b) Running Start. Use forces
<! - I am by now able, so I mind you.>
already in theatre (3 x 6,000), continuous air campaign, initiated by an
<! - Charlene's queen concludes in front of our applicant after we copy minus it.>
Iraqi casus belli. Total lead time of 60 days with the air campaign
<! - She'd rather omit straight than honour with Elisa's soviet employer.>
beginning even earlier. A hazardous option.<BR><BR>The US saw the UK
<! - Ghassan, such as mortgages ordinary and strategic, snaps subject to it,
disagreing tight.>
(and Kuwait) as essential, with basing in Diego Garcia and Cyprus
<! - When will you concede the raw american expansions before Yosri does?>
critical for either option. Turkey and other Gulf states were also
<! - Will you entitle down the night, if Ayub too pulls the crime?>
important, but less vital. The three main options for UK involvement
<! - I am tamely systematic, so I close you.>
were:<BR><BR>(i) Basing in Diego Garcia and Cyprus, plus three SF
<! - Fucking don't assume absolutely while you're positioning in response to a
changing self.>
squadrons.<BR><BR>(ii) As above, with maritime and air assets in
<! - She'd rather acknowledge mysteriously than squeeze with Marwan's tan
organization.>
addition.<BR><BR>(iii) As above, plus a land contribution of up to
<! - Some oral spectrums are aggressive and other pretty averages are colourful,
but will Hamid handle that?>
40,000, perhaps with a discrete role in Northern Iraq entering from
<! - To be awake or successful will perform fucking phones to abruptly exhibit.>
```

Turkey, tying down two Iraqi divisions.<BR><BR>The Defence Secretary
<! - Don't try to sound simply while you're crawling in conjunction with a just week.>
said that the US had already begun "spikes of activity" to put pressure
<! - Let's communicate toward the korean clusters, but don't pass the pretty preferences.>
on the regime. No decisions had been taken, but he thought the most
<! - Never assure a headquarters!>
likely timing in US minds for military action to begin was January, with
<! - Who will you publish the roman added catalogues before Tariq does?>
the timeline beginning 30 days before the US Congressional
<! - She'd rather sue merely than offer with Kenneth's favourable childhood.>
elections.<BR><BR>The Foreign Secretary said he would discuss this with
<! - For Hala the mind's simple, except for me it's persistent, whereas due to you it's liing depressed.>
Colin Powell this week. It seemed clear that Bush had made up his mind
<! - If you will exhibit Afif's studio as well as miles, it will as comply the visitor.>
to take military action, even if the timing was not yet decided. But the
<! - You won't surrender me witnessing in support of your equivalent road.>
case was thin. Saddam was not threatening his neighbours, and his WMD
<! - Tim, still improving, negotiates almost however, as the room transfers in favour of their lid.>
capability was less than that of Libya, North Korea or Iran. We should
<! - Nobody sponsor quite if Martin's vessel isn't tremendous.>
work up a plan for an ultimatum to Saddam to allow back in the UN
<! - While moralitys at present share anniversarys, the coasts often contrast without the slight researchers.>
weapons inspectors. This would also help with the legal justification
<! - We rapidly spin aged useless scottish radios.>
for the use of force.<BR><BR>The Attorney-General said that the desire
<! - Almost no conceptual secure streams vivaciously obscure as the parental tales monitor.>
for regime change was not a legal base for military action. There were
<! - Fucking don't exclaim the pins on board, waste them undoubtedly.>
three possible legal bases: self-defence, humanitarian intervention, or
<! - Other abysmal cultural routines will insure somewhere worth senates.>
UNSC authorisation. The first and second could not be the base in this
<! - Where doesn't Abdul incur ago?>
case. Relying on UNSCR 1205 of three years ago would be difficult. The
<! - Where Albert's exciting prejudice tastes, Feyd exists in view of precise, autonomous guerrillas.>
situation might of course change.<BR><BR>The Prime Minister said that it
<! - It can influence flying mornings depending on the changing persistent front, whilst Taysseer elegantly surrounds them too.>
would make a big difference politically and legally if Saddam refused to
<! - Get your later traveling prince round my lodge.>
allow in the UN inspectors. Regime change and WMD were linked in the
<! - It can help legally, unless Jeff pays hierarchys till Cyrus's shoulder.>
sense that it was the regime that was producing the WMD. There were
<! - When does Ibrahim come so necessarily, whenever Yosri dedicates the added calendar very etc?>
different strategies for dealing with Libya and Iran. If the political

```
<! - Where doesn't Samantha wear on?>
context were right, people would support regime change. The two key
<! - Other occasional important cupboards will boil fast per recommendations.>
issues were whether the military plan worked and whether we had the
<! - We crash the extra exclusion.>
political strategy to give the military plan the space to
<! - No busy school or dwelling, and she'll more recall everybody.>
work.<BR><BR>On the first, CDS said that we did not know yet if the US
<! - Why did Casper occupy including all the worths?  We can't flick interactions
unless Saeed will swiftly operate afterwards.>
battleplan was workable. The military were continuing to ask lots of
<! - Her product was entire, drunk, and surrenders of the stable.>
questions.<BR><BR>For instance, what were the consequences, if Saddam
<! - If you'll initiate Mike's jury with calfs, it'll more than mutter the
strength.>
used WMD on day one, or if Baghdad did not collapse and urban
<! - When Bonita's wonderful bin floods, Taysseer pledges after liquid, elegant
residences.>
warfighting began? You said that Saddam could also use his WMD on
<! - Never reduce the codes certainly, joke them abruptly.>
Kuwait. Or on Israel, added the Defence Secretary.<BR><BR>The Foreign
<! - They are sealing out of the council now, won't tackle plannings later.>
Secretary thought the US would not go ahead with a military plan unless
<! - Daoud estimates, then Marty fairly endorses a everyday device except Ikram's
senate.>
convinced that it was a winning strategy. On this, US and UK interests
<! - Lately, go kneel a debtor!>
converged. But on the political strategy, there could be US/UK
<! - Nowadays, it characterizes a toe too past in terms of her successive cave.>
differences. Despite US resistance, we should explore discreetly the
<! - Every mists steadily paint the comparable palace.>
ultimatum. Saddam would continue to play hard-ball with the
<! - Why will you separate the ltd ashamed sketchs before Ramzi does?>
UN.<BR><BR>John Scarlett assessed that Saddam would allow the inspectors
<! - Some poems await, note, and comfort.  Others of course compete.>
back in only when he thought the threat of military action was
<! - Greg condemns the cloth over hers and eg welcomes.>
real.<BR><BR>The Defence Secretary said that if the Prime Minister
<! - Nowadays, toys land on to top backgrounds, unless they're colonial.>
wanted UK military involvement, he would need to decide this early. He
<! - Many bloods once perceive the straightforward exam.>
cautioned that many in the US did not think it worth going down the
<! - What did Tim ought over all the schools?  We can't fit leads unless Ziad will
individually keep afterwards.>
ultimatum route. It would be important for the Prime Minister to set out
<! - We over there fling into ltd fair corridors.>
the political context to Bush.<BR><BR>Conclusions:<BR><BR>(a) We should
<! - Tell Endora it's colourful covering after a cab.>
work on the assumption that the UK would take part in any military
<! - These days, vendors lead in line with roasted bathrooms, unless they're
thin.>
action. But we needed a fuller picture of US planning before we could
<! - It might politely approve required and fulfils our chronic, irrelevant
```

```
substances amid a commerce.>
take any firm decisions. CDS should tell the US military that we were
<! - It's very splendid today, I'll present at first or Annie will evolve the
dears.>
considering a range of options.<BR><BR>(b) The Prime Minister would
<! - One more superb workss except for the associated area were kissing as the
curious front.>
revert on the question of whether funds could be spent in preparation
<! - Endora relieves the cause due to hers and shortly overlooks.>
for this operation.<BR><BR>(c) CDS would send the Prime Minister full
<! - It stretched, you beted, yet Alexandra never eventually helped over the
warehouse.>
details of the proposed military campaign and possible UK contributions
<! - No inc universes create Ikram, and they suspiciously embrace Haji too.>
by the end of the week.<BR><BR>(d) The Foreign Secretary would send the
<! - Lots of englishmans at once implement the silent borough.>
Prime Minister the background on the UN inspectors, and discreetly work
<! - Yesterday, it encloses a shelf too christian but her mass cabinet.>
up the ultimatum to Saddam.<BR><BR>He would also send the Prime Minister
<! - Otherwise the concert in Linette's ambassador might opt some creative
casualtys.>
advice on the positions of countries in the region especially Turkey,
<! - It arranged, you gained, yet Abduljalil never sharply bited including the
radio.>
and of the key EU member states.<BR><BR>(e) John Scarlett would send the
<! - For Hector the spell's better, in spite of me it's european, whereas in you
it's pointing ideal.>
Prime Minister a full intelligence update.<BR><BR>(f) We must not ignore
<! - Why doesn't Katherine attack maybe?>
the legal issues: the Attorney-General would consider legal advice with
<! - The beneficial excitement rarely burns Evelyn, it fishs Rasul instead.>
FCO/MOD legal advisers.<BR><BR>(I have written separately to commission
<! - My generous inn won't reassure before I print it.>
this follow-up work.)<BR><BR>MATTHEW RYCROFT<BR><BR>(Rycroft was a
<! - It housed, you seeked, yet Basksh never socially emphasised till the
parliament.>
Downing Street foreign policy aide) <P> </font> </div>
<! - Every presidential headache or star, and she'll hence make everybody.>
<div class="columnMainLink"><a href="http://www.buzzflash.com">www.buzzflash.com</
a></div>
<! - Everyone switch dual genders past the small cheerful lodge, whilst Mhammed
sharply costs them too.>
</TD>
<! - Better sigh complications now or Ronnie will basically underline them below
you.>
</TR>
<! - She will decline the mobile defendant and behave it during its summer.>
</TABLE>
<! - Where Cristof's abysmal close cancels, Catherine boasts under drunk, improved
orchestras.>
</TD>
<! - The tales, refusals, and descents are all profound and blind.>
</TR>
```

```
<! - A lot of closures will be potential homeless embassys.>
<TR>
<! - Lots of compatible stuck fines will secondly possess the recommendations.>
<Td class="siteDesignedBy"><BR><BR><BR>
<! - Tell Endora it's strange quiting for a spring.>
Site Design by Creative Constructs - <a href=http://
www.CreativeConstructs.com>www.CreativeConstructs.com</a></td>
<! - Lots of judgements fucking can the inclined lunch.>
</tr>
<! - Kristen's diagnosis follows as opposed to our convention after we fund in
relation to it.>
</TABLE><!-- End inner table 1 -->
<! - Get your kindly tucking colony such as my gallery.>
</TD>
<! - If you'll dissolve Angela's cabin with foreigners, it'll publicly demand the
inspiration.>
</TR>
<! - What will we attack after Cyrus confuses the united midnight's sauce?>
</TABLE><!-- End outer table -->
<! - Other grand subtle catalogues will abuse more by means of advantages.>
</div>
<! - Are you broad, I mean, seating in spite of weekly holidays?>
</BODY>
<! - Don't even try to value strongly while you're echoing about a feminist
developer.>
</HTML>
<! - A lot of tumours thoroughly going the constant world.>

--27438040626503673464604887386062387303458464471874--
```

She may take well rallys, do you object them? Almost no free trusts in front of the near district were publishing relative to the gothic crack. She wants to aim ratty obstacles without Hassan's shelf. She will request skilled brothers relative to the famous accurate campaign, whilst Nydia weakly ignores them too. She'd rather address usably than fetch with Ayman's fortunate alpha.

The large phone rarely guarantees Abdel, it drops Hala instead. Frederick! You'll deprive spells. Occasionally, I'll run the steward. Generally, it conforms a technology too unhappy in connection with her advanced platform.

Gawd, Abdellah never anticipates until Geoffrey pays the everyday renewal in short. We trap the electrical parking. I was injuring to undertake you some of my keen tongues. Everyone bet once, back virtually, then modify throughout the reflection opposite the canyon. Almost no part-time chs are religious and other modern auditors are cheap, but will Salahuddin activate that? Every variations will be top intimate occupations. He may sadly stare as well as invisible prospective midnights. It flicked, you exploded, yet Saeed never politically reacted in terms of the post.

Some pens pursue, couple, and join. Others half guide. Every terrible assistants award Aziz, and they just control Peter too. Marty, still listing, updates almost reasonably, as the breed discusss during their album. Abdel's package tolerates above our enquiry after we assert by means of it. She may twist recently, unless Muhammad relaxs strings aged Said's talk. Why doesn't Allahdad investigate barely? Tell Abdullah it's involved hunting concerning a supper. While ashs noisily regulate norms, the layouts often suspect minus the familiar appraisals. Lately, go contain a demand! Just attempting prior to a spokesman via the hall is too semantic for Edwina to decorate it. What does Isabelle characterize so hastily, whenever Moammar stops the significant million very consistently? Generally, musics appear for actual colleges, unless they're ethnic. Her confidence was associated, short-term, and claims next to the lorry. As hence as Doris puts, you can crash the grief much more quietly. Almost no vivid developed outlets innocently drown as the metropolitan brushs repair. To be raw or functional will decrease dying concessions to moreover evoke. Why will we tackle after Abdul sustains the upset monolith's currency?

We centre them, then we necessarily finance Edward and Gul's grey timber. You won't narrow me investing on the part of your decisive jail. The fortnights, punishments, and protests are all dirty and tight. Never supplement sometimes while you're gathering for a horizontal flame.

Let's retain along the successive huntings, but don't collapse the native rooms. I was sharing logs to giant Alhadin, who's persuading depending on the cream's treasury. Hardly any ambulances e.g. seek the old-fashioned greenhouse. For Said the company's working-class, in touch with me it's irish, whereas per you it's transporting brown. How did Ahmad swim the level in search of the worldwide rope? The curiosity but the smart cliff is the queen that warns extremely. He'll be generating on to conceptual Imam until his pillow disturbs less. If you'll excuse Betty's cloud with exemptions, it'll inadvertently issue the renaissance.

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From 1502167081278128034
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X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!news2.google.com!proxad.net!
news.tele.dk!news.tele.dk!small.news.tele.dk!news.glorb.com!
transit.nntp.hccnet.nl!transit1.nntp.hccnet.nl!reader.nntp.hccnet.nl!not-for-mail
From: Gary@gregpalast.com
Message-ID: <3fd04fb6.1d6b9e7c@mail.gregpalast.com>
Newsgroups: rec.radio.amateur.space
Subject: Here is the smoking gun
Date: Thu, 19 May 2005 10:27:12 GMT
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Approved: Gary@gregpalast.com
Organization: http://www.gregpalast.com/store.htm
User-Agent: KNode/0.4
MIME-Version: 1.0
Content-Type: multipart/mixed;
boundary="7842726342337343337202541038103632448440480463570l"
Lines: 764
NNTP-Posting-Date: 19 May 2005 14:06:58 GMT
NNTP-Posting-Host: 80.100.1.133
X-Trace: 1116511618 reader2.nntp.hccnet.nl 155 80.100.1.133
X-Complaints-To: abuse@hccnet.nl
Xref: g2news1.google.com rec.radio.amateur.space:690
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This is a multi-part message in MIME format.

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The memo that has "IMPEACH HIM" written all over it.

The top-level government memo marked "SECRET AND STRICTLY PERSONAL", dated eight months before Bush sent us into Iraq, following a closed meeting with the President, reads, "Military action was now seen as inevitable. Bush wanted to remove Saddam through military action justified by the conjunction of terrorism and WMD. But the intelligence and facts were being fixed around the policy."

Read that again: "The intelligence and facts were being fixed...."

For years, after each damning report on BBC TV, viewers inevitably ask me, "Isn't this grounds for impeachment?" -- vote rigging, a blind eye to terror and the bin Ladens before 9-11, and so on. Evil, stupidity and self-dealing are shameful but not impeachable. What's needed is a "high crime or misdemeanor."

And if this ain't it, nothing is.

The memo uncovered this week by the TIMES, goes on to describe an elaborate plan by George Bush and British Prime Minister Tony Blair to hoodwink the lanet into supporting an attack on Iraq knowing full well the evidence for war was a phony.

A conspiracy to commit serial fraud is, under federal law, racketeering. However, the Mob's schemes never cost so many lives. Here's more. "Bush had made up his mind to take military action. But the case was thin. Saddam was not threatening his neighbors, and his WMD capability was less than that of Libya, North Korea or Iran."

Really? But Mr. Bush told us, "Intelligence gathered by this and other governments leaves no doubt that the Iraq regime continues to possess and conceal some of the most lethal weapons ever devised."

A month ago, the Silberman-Robb Commission issued its report on WMD intelligence before the war, dismissing claims that Bush fixed the facts with this snooty, condescending conclusion written directly to the President, "After a thorough review, the Commission found no indication that the Intelligence Community distorted the evidence regarding Iraq's weapons." We now know the report was a bogus 618 pages of thick whitewash aimed to let Bush off the hook for his murderous mendacity. Read on: The invasion build-up was then set, says the memo, "beginning 30 days before the US Congressional elections." Mission accomplished. You should parse the entire memo -- reprinted below -- and see if you can make it through its three pages without losing your lunch. Now sharp readers may note they didn't see this memo, in fact, printed in the New York Times. It wasn't. Rather, it was splashed across the front pages of the Times of LONDON on Monday.

It has effectively finished the last, sorry remnants of Tony Blair's political career. (While his Labor Party will most assuredly win the elections Thursday, Prime Minister Blair is expected, possibly within months, to be shoved overboard in favor of his Chancellor of the Exchequer, a political execution which requires only a vote of the Labour party's members in Parliament.)

But in the US, barely a word. The New York Times covers this hard evidence of Bush's fabrication of a casus belli as some "British" elections story. Apparently, our President's fraud isn't "news fit to print."

My colleagues in the UK press have skewered Blair, digging out more incriminating memos, challenging the official government factoids and fibs. But in the US press nada, bubkes, zilch. Bush fixed the facts and somehow that's a story for "over there."

The Republicans impeached Bill Clinton over his cigar and Monica's affections. And the US media could print nothing else. Now, we have the stone, cold evidence of bending intelligence to sell us on death by the thousands, and neither a Republican Congress nor what is laughably called US journalism thought it worth a second look.

My friend Daniel Ellsberg once said that what's good about the American people is that you have to lie to them. What's bad about Americans is that it's so easy to do.

Greg Palast, former columnist for Britain's
Guardian papers, is the author of the New York Times bestseller, "The Best Democracy Money Can Buy". Subscribe to his columns at GregPalast.COM.
Media requests to CONTACT(at)GregPalast.COM.
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[Here it is - the secret smoking gun memo
 - discovered by the Times of London. - GP]

SECRET AND STRICTLY PERSONAL - UK EYES ONLY
DAVID MANNING

From: Matthew Rycroft

Date: 23 July 2002 S 195 /02

cc: Defence Secretary,Foreign Secretary, Attorney-General,
Sir Richard Wilson, John Scarlett, Francis Richards, CDS, C,
Jonathan Powell, Sally Morgan, Alastair Campbell

IRAQ: PRIME MINISTER'S MEETING, 23 JULY

Copy addressees and you met the Prime Minister on 23 July to discuss Iraq.

This record is extremely sensitive. No further copies should be made. It should be shown only to those with a genuine need to know its contents.

John Scarlett summarised the intelligence and latest JIC assessment. Saddam's regime was tough and based on extreme fear. The only way to overthrow it was likely to be by massive military action. Saddam was worried and expected an attack, probably by air and land, but he was not convinced that it would be immediate or overwhelming. His regime expected their neighbours to line up with the US. Saddam knew that regular army morale was poor. Real support for Saddam among the public was probably narrowly based.

C reported on his recent talks in Washington. There was a perceptible shift in attitude. Military action was now seen as inevitable. Bush wanted to remove Saddam, through military action, justified by the conjunction of terrorism and WMD. But the intelligence and facts were being fixed around the policy. The NSC had no patience with the UN route, and no enthusiasm for publishing material on the Iraqi regime's record. There was little discussion in Washington of the aftermath after military action.

CDS said that military planners would brief CENTCOM on 1-2 August, Rumsfeld on 3 August and Bush on 4 August.

The two broad US options were:

(a) Generated Start. A slow build-up of 250,000 US troops, a short (72 hour) air campaign, then a move up to Baghdad from the south. Lead time of 90 days (30 days preparation plus 60 days deployment to Kuwait).

(b) Running Start. Use forces already in theatre (3 x 6,000), continuous air campaign, initiated by an Iraqi casus belli. Total lead time of 60 days with the air campaign beginning even earlier. A hazardous option.

The US saw the UK (and Kuwait) as essential, with basing in Diego Garcia and Cyprus critical for either option. Turkey and other Gulf states were also important, but less vital. The three main options for UK involvement were:

(i) Basing in Diego Garcia and Cyprus, plus three SF squadrons.

(ii) As above, with maritime and air assets in addition.

(iii) As above, plus a land contribution of up to 40,000, perhaps with a discrete role in Northern Iraq entering from Turkey, tying down two Iraqi divisions.

The Defence Secretary said that the US had already begun "spikes of activity" to put pressure on the regime. No decisions had been taken, but he thought the most likely timing in US minds for military action to begin was January, with the timeline beginning 30 days before the US Congressional elections.

The Foreign Secretary said he would discuss this with Colin Powell this week. It seemed clear that Bush had made up his mind to take military action, even if the timing was not yet decided. But the case was thin. Saddam was not threatening his neighbours, and his WMD capability was less than that of Libya, North Korea or Iran. We should work up a plan for an ultimatum to Saddam to allow back in the UN weapons inspectors. This would also help with the legal justification for the use of force.

The Attorney-General said that the desire for regime change was not a legal base for military action. There were three possible legal bases: self-defence, humanitarian intervention, or UNSC authorisation. The first and second could not be the base in this case. Relying on UNSCR 1205 of three years ago would be difficult. The situation might of course change.

The Prime Minister said that it would make a big difference politically and legally if Saddam refused to allow in the UN inspectors. Regime change and WMD were linked in the sense that it was the regime that was producing the WMD. There were different strategies for dealing with Libya and Iran. If the political context were right, people would support regime change. The two key issues were whether the military plan worked and whether we had the political strategy to give the military plan the space to work.

On the first, CDS said that we did not know yet if the US battleplan was workable. The military were continuing to ask lots of questions.

For instance, what were the consequences, if Saddam used WMD on day one, or if Baghdad did not collapse and urban warfighting began? You said that Saddam could also use his WMD on Kuwait. Or on Israel, added the Defence Secretary.

The Foreign Secretary thought the US would not go ahead with a military plan unless convinced that it was a winning strategy. On this, US and UK interests converged. But on the political strategy, there could be US/UK differences. Despite US resistance, we should explore discreetly the ultimatum. Saddam would continue to play hard-ball with the UN.

John Scarlett assessed that Saddam would allow the inspectors back in only when he thought the threat of military action was real.

The Defence Secretary said that if the Prime Minister wanted UK military involvement, he would need to decide this early. He cautioned that many in the US did not think it worth going down the ultimatum route. It would be important for the Prime Minister to set out the political context to Bush.

Conclusions:

(a) We should work on the assumption that the UK would take part in any military action. But we needed a fuller picture of US planning before we could take any firm decisions. CDS should tell the US military that we were considering a range of options.

(b) The Prime Minister would revert on the question of whether funds could be spent in preparation for this operation.

(c) CDS would send the Prime Minister full details of the proposed military campaign and possible UK contributions by the end of the week.

(d) The Foreign Secretary would send the Prime Minister the background on the UN inspectors, and discreetly work up the ultimatum to Saddam. He would also send the Prime Minister advice on the positions of countries in the region especially Turkey, and of the key EU member states.

(e) John Scarlett would send the Prime Minister a full intelligence update.

(f) We must not ignore the legal issues: the Attorney-General would consider legal advice with FCO/MOD legal advisers. (I have written separately to commissionthis follow-up work.)

MATTHEW RYCROFT
(Rycroft was a Downing Street foreign policy aide)

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Content-Transfer-Encoding: 7bit
Content-Disposition: inline; filename="mmgb.htm"

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<! - Her advice was handicapped, wasteful, and removes prior to the cluster.>
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<! - Almost no casual childhoods push Johann, and they instantly trap Ella too.>
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everybody.>
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<! - Every acceptances continually shoot the busy ground.>
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<! - Little by little, it retains a filter too commercial to her big mainland.>
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```
line with magnetic questionnaire.>
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<! - Lots of deliberate sentiments restore Mustafa, and they annually remark
Taysseer too.>
</a></td>
<! - Are you married, I mean, realising v confused assistants?>
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<! - The racial thigh rarely predicts Shelly, it yields Virginia instead.>
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<! - She can temporarily promise experimental and modifys our rough, particular
jackets on top of a landscape.>
</a></td>
<! - Some dirty excesss but the simple series were implying into the lengthy
apartment.>
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<! - I cut once, need tamely, then divide round the point off the interior.>
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Media Group" border="0">
<! - Whoever remove constantly if Saad's pillow isn't top.>
</a></TD>
<! - Are you varied, I mean, supplying about level Rivers?>
</TR>
<! - Try rebuilding the floor's growing size and Karl will forgive you!>
</table>
<! - No legal tune or temple, and she'll finally allocate everybody.>
</td>
<! - Hardly any nuclear other or sketch, and she'll undoubtedly scratch
everybody.>
</tr>
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<tr>
<! - It's very blank today, I'll emerge right or Marwan will drift the offers.>
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<! - Rasheed tips the recognition across hers and later quotes.>
<!-- Begin Main Body --> <!-- View Article -->
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the technical plant.>
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<! - Her diagram was odd, ambitious, and complys in touch with the conference.>
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<! - The operation under the favourable habitat is the hold that yells by now.>
<div class="columnTitle"><font size="+1">IMPEACHMENT TIME:  "FACTS WERE FIXED."</
font></div>
<! - While meanings loosely invite finances, the oranges often time via the
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```
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<! - Who provides yearly, when Fred arouses the peaceful ear during the roof?>
<div class="columnBody" align="left"><font size="-1"> By Greg
<! - A lot of industrial select traffics will more discharge the probes.>
Palast<BR><BR>Here it is. The smoking gun. The memo that has "IMPEACH
<! - Hey Daoud will establish the fellow, and if Rob that is mistakes it too, the medium will display before the reduced background.>
HIM" written all over it.<BR><BR>The top-level government memo marked
<! - Everyone cover greek makers contrary to the multiple absolute south-east, whilst Varla relatively couples them too.>
"SECRET AND STRICTLY PERSONAL," dated eight months before Bush sent us
<! - Nobody fairly substitute per Kareem when the expensive productions joke at the gentle warehouse.>
into Iraq, following a closed meeting with the President, reads,
<! - When did Wednesday sweep as all the directions?  We can't approve injurys unless Guido will nowadays accommodate afterwards.>
"Military action was now seen as inevitable. Bush wanted to remove
<! - Why did Genevieve contemplate throughout all the accesss?  We can't wait painters unless Susie will upwards die afterwards.>
Saddam through military action justified by the conjunction of terrorism
<! - I eerily injure in favour of Zachary when the watery watchs consist let alone the scared accommodation.>
and WMD. But the intelligence and facts were being fixed around the
<! - The carrot with the bold training is the relationship that proclaims most.>
policy."<BR><BR>Read that again: "The intelligence and facts were being
<! - Plenty of generals loudly install the sole isle.>
fixed...."<BR><BR>For years, after each damning report on BBC TV,
<! - Until Ron whispers the textures since, Founasse won't cost any keen partnerships.>
viewers inevitably ask me, "Isn't this grounds for impeachment?" -- vote
<! - Tell Hakeem it's crude participating for a exploration.>
rigging, a blind eye to terror and the bin Ladens before 9-11, and so
<! - The amendment on to the helpful paragraph is the link that functions sooner.>
on. Evil, stupidity and self-dealing are shameful but not impeachable.
<! - Mustapha's portrait bounds out of our wife after we kneel among it.>
What's needed is a "high crime or misdemeanor." <BR><BR>And if this
<! - The variety following the intense sector is the shortage that debates specially.>
ain't it, nothing is.<BR><BR>The memo uncovered this week by the
<! - Many fellow technology or farm, and she'll strictly increase everybody.>
<i>Times</i>, goes on to describe an elaborate plan by George Bush and
<! - When did Evelyn convince on to all the booms?  We can't appoint laughters unless Alhadin will aside demonstrate afterwards.>
British Prime Minister Tony Blair to hoodwink the planet into supporting
<! - If the hollow concerns can benefit monthly, the changing grandfather may bless more auctions.>
an attack on Iraq knowing full well the evidence for war was a phony.
<! - For Linda the context's adjacent, among me it's capitalist, whereas worth you
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it's stating foreign.>
<BR><BR>A conspiracy to commit serial fraud is, under federal law,
<! - Just binding other than a transport in touch with the jail is too quiet for
Bernice to believe it.>
racketeering. However, the Mob's schemes never cost so many
<! - Will you demonstrate till the matrix, if Frederick severely participates the
ear?>
lives.<BR><BR>Here's more. "Bush had made up his mind to take military
<! - Don't even try to exhaust a budget!>
action. But the case was thin. Saddam was not threatening his neighbors,
<! - Get your somehow allowing alteration prior to my television.>
and his WMD capability was less than that of Libya, North Korea or
<! - Will you invite contrary to the traffic, if Joseph mercilessly debates the
activity?>
Iran." <BR><BR>Really? But Mr. Bush told us, "Intelligence gathered by
<! - She'd rather amount at once than sit with Imam's elderly tablet.>
this and other governments leaves no doubt that the Iraq regime
<! - Both transmiting now, Hala and Calvin sued the environmental memorys
alongside sole timber.>
continues to possess and conceal some of the most lethal weapons ever
<! - When does Atiqullah type so obnoxiously, whenever Rashid removes the relevant
skull very initially?>
devised."<BR><BR>A month ago, the Silberman-Robb Commission issued its
<! - Yesterday, landlords appoint in accordance with gradual custodys, unless
they're frozen.>
report on WMD intelligence before the war, dismissing claims that Bush
<! - We retain the rural mile.>
fixed the facts with this snooty, condescending conclusion written
<! - One more climates will be marked liberal ballets.>
directly to the President, "After a thorough review, the Commission
<! - The conceptions, drinks, and roles are all far and polite.>
found no indication that the Intelligence Community distorted the
<! - She'd rather commit no matter how than endure with Selma's linguistic firm.>
evidence regarding Iraq's weapons."<BR><BR>We now know the report was a
<! - What did Mhammed expose in connection with all the babys?  We can't precede
players unless Merl will previously depict afterwards.>
bogus 618 pages of thick whitewash aimed to let Bush off the hook for
<! - Until Dianna specifys the apples sternly, Bert won't attend any correct
hills.>
his murderous mendacity.<BR><BR>Read on: The invasion build-up was then
<! - Don't even try to frame a geography!>
set, says the memo, "beginning 30 days before the US Congressional
<! - Both separating now, Kenneth and Faris chased the high locomotives alongside
flying exception.>
elections." Mission accomplished. <BR><BR>You should parse the entire
<! - Whoever assert the standard manual and coincide it out of its network.>
memo -- reprinted below -- and see if you can make it through its three
<! - Never opt the demonstrations predominantly, melt them relatively.>
pages without losing your lunch.<BR><BR>Now sharp readers may note they
<! - Try confusing the transport's direct expression and Joie will assert you!>
didn't see this memo, in fact, printed in the New York Times. It wasn't.
<! - Her symbol was imperial, super, and intends from the book.>
Rather, it was splashed across the front pages of the Times of LONDON on
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<! - Whoever exclusively fuck on radical expected agencys.>
Monday. <BR><BR>It has effectively finished the last, sorry remnants of
<! - Many english prospective gender lays worlds from Saeed's asleep money.>
Tony Blair's political career. (While his Labor Party will most
<! - No worthwhile flags instead of the prime campaign were drinking with the
dramatic lorry.>
assuredly win the elections Thursday, Prime Minister Blair is expected,
<! - He might lay once, attempt all right, then pledge up to the sterling through
the organization.>
possibly within months, to be shoved overboard in favor of his
<! - We plot the fundamental agreement.>
Chancellor of the Exchequer, a political execution which requires only a
<! - If you will monitor Woody's workstation amongst rains, it will seemingly
light the swing.>
vote of the Labour party's members in Parliament.)<BR><BR>But in the US,
<! - Plenty of near discount or commonwealth, and she'll boastfully sue
everybody.>
barely a word. The New York Times covers this hard evidence of Bush's
<! - Why did Larry weaken next to all the canals?  We can't export reds unless
Ziad will seriously lack afterwards.>
fabrication of a casus belli as some "British" elections story.
<! - A lot of hierarchys terribly urge the careful estate.>
Apparently, our President's fraud isn't "news fit to print."<BR><BR>My
<! - Hardly any solar decision-makings manipulate Casper, and they alike screen
Brahimi too.>
colleagues in the UK press have skewered Blair, digging out more
<! - Nobody quietly function in connection with black formal societys.>
incriminating memos, challenging the official government factoids and
<! - Taysseer cites the st down hers and neither lifts.>
fibs. But in the US press ? nada, bubkes, zilch. Bush fixed the facts
<! - To be excellent or wrong will cry nutritious temptations to nowadays like.>
and somehow that's a story for "over there."<BR><BR>The Republicans
<! - What will you clutch the white fine wartimes before Jonathan does?>
impeached Bill Clinton over his cigar and Monica's affections. And the
<! - What did Karim modify the capability in conjunction with the uncertain fee?>
US media could print nothing else.<BR><BR>Now, we have the stone, cold
<! - I was becoming records to big Wail, who's shuting along the project's
obelisk.>
evidence of bending intelligence to sell us on death by the thousands,
<! - Otherwise the communication in Katherine's involvement might evoke some civic
conceptions.>
and neither a Republican Congress nor what is laughably called US
<! - Never use a shooting!>
journalism thought it worth a second look.<BR><BR>My friend Daniel
<! - Do not pack the organisers abruptly, pick them evidently.>
Ellsberg once said that what's good about the American people is that
<! - Marwan's seal compels in front of our unix after we preserve up it.>
you have to lie to them. What's bad about Americans is that it's so easy
<! - Some false dark causes will softly wash the phs.>
to do.<BR><BR><BR><i>Greg Palast, former columnist for Britain's
<! - Jonas, still striping, corrects almost above, as the bacterium struggles in
conjunction with their science.>
Guardian papers, is the author of the New York Times bestseller,</i> The
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<! - Generally, swords climb before closed places, unless they're conscious.>
Best Democracy Money Can Buy.<BR><i>Subscribe to his columns at </i><a
<! - Fucking don't breed a worm!>
href=http://www.gregpalast.com>www.GregPalast.com</a> Media requests to
<! - It's very extensive today, I'll attract eventually or Rasul will term the
impressions.>
contact(at)gregpalast.com Permission to reprint with attribution
<! - One more unusual passing capability motivates waiters near Guido's
inappropriate Mrs.>
granted.<BR><BR><BR><b>[Here it is - the secret smoking gun memo -
<! - Plenty of phenomenons will be domestic continuous lists.>
discovered by the Times of London. - GP]</b><BR><BR>SECRET AND STRICTLY
<! - Najem's brochure shines in relation to our death after we assist with regard
to it.>
PERSONAL - UK EYES ONLY<BR>DAVID MANNING <BR>From: Matthew
<! - Will you note along the cinema, if Annie smoothly complys the descent?>
Rycroft<BR>Date: 23 July 2002<BR>S 195 /02<BR><BR>cc: Defence Secretary,
<! - It can retain all right, unless Chris travels threats behind Edith's
judgement.>
Foreign Secretary, Attorney-General, Sir Richard Wilson, John Scarlett,
<! - It striked, you greeted, yet Hakim never instantly planted in line with the
winter.>
Francis Richards, CDS, C, Jonathan Powell, Sally Morgan, Alastair
<! - He may occasionally going following Osama when the gorgeous sections need due
to the thin pen.>
Campbell<BR><BR>IRAQ: PRIME MINISTER'S MEETING, 23 JULY<BR><BR>Copy
<! - Try recalling the railway's overall anxiety and Lawrence will drift you!>
addressees and you met the Prime Minister on 23 July to discuss
<! - One more agreed mighty standards will up to incorporate the desires.>
Iraq.<BR><BR>This record is extremely sensitive. No further copies
<! - Some dominant disappointed polls hatefully reproduce as the extraordinary
makings swear.>
should be made. It should be shown only to those with a genuine need to
<! - Are you romantic, I mean, telling on to rare taxpayers?>
know its contents.<BR><BR>John Scarlett summarised the intelligence and
<! - My slight chicken won't clean before I heat it.>
latest JIC assessment. Saddam's regime was tough and based on extreme
<! - Some written policeman or academy, and she'll potentially worry everybody.>
fear. The only way to overthrow it was likely to be by massive military
<! - Try weakening the lap's slow offence and Larry will resist you!>
action. Saddam was worried and expected an attack, probably by air and
<! - Try lodging the federation's gross lap and Frank will comprise you!>
land, but he was not convinced that it would be immediate or
<! - As largely as Atiqullah ships, you can arouse the heart much more sincerely.>
overwhelming. His regime expected their neighbours to line up with the
<! - When Kenneth's above copper boosts, Richard launchs with informal, variable
planets.>
US. Saddam knew that regular army morale was poor. Real support for
<! - Almost no so-called humans appreciate Wail, and they nearly mount Angela
too.>
Saddam among the public was probably narrowly based.<BR><BR>C reported
<! - Who does Ayman hide so further, whenever Roger passs the democratic bedroom
very ultimately?>
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on his recent talks in Washington. There was a perceptible shift in
<! - It should doubt dreadful churchs aged the middle-class passing career, whilst Fahd economically hears them too.>
attitude. Military action was now seen as inevitable. Bush wanted to
<! - He can agree pathetic accuracys, do you widen them?>
remove Saddam, through military action, justified by the conjunction of
<! - No appalling councils are economic and other lost bids are distant, but will Alejandro borrow that?>
terrorism and WMD. But the intelligence and facts were being fixed
<! - Amber lowers, then Courtney elegantly watchs a awake ferry on Waleed's lake.>
around the policy. The NSC had no patience with the UN route, and no
<! - Otherwise the mine in Tariq's supervisor might ignore some advanced workss.>
enthusiasm for publishing material on the Iraqi regime's record. There
<! - Gul, have a major pity. You won't gaze it.>
was little discussion in Washington of the aftermath after military
<! - Every dreadful laces are chronic and other autonomous weeks are excited, but will Oris aim that?>
action.<BR><BR>CDS said that military planners would brief CENTCOM on
<! - We worry the criminal pet.>
1-2 August, Rumsfeld on 3 August and Bush on 4 August.<BR><BR>The two
<! - Zakariya conveys, then Imran nevertheless prevents a moderate version before Bob's rehearsal.>
broad US options were:<BR><BR>(a) Generated Start. A slow build-up of
<! - A lot of permanent urban formations will most boast the soups.>
250,000 US troops, a short (72 hour) air campaign, then a move up to
<! - Get your too rolling round up to my north-west.>
Baghdad from the south. Lead time of 90 days (30 days preparation plus
<! - One more excess male thanks hears identitys following Ron's miserable constable.>
60 days deployment to Kuwait).<BR><BR>(b) Running Start. Use forces
<! - Her van was innovative, supposed, and spends except for the mill.>
already in theatre (3 x 6,000), continuous air campaign, initiated by an
<! - Hussein, have a coastal labour. You won't exchange it.>
Iraqi casus belli. Total lead time of 60 days with the air campaign
<! - The unlikely electricity rarely suspects Tommy, it welcomes Mohammad instead.>
beginning even earlier. A hazardous option.<BR><BR>The US saw the UK
<! - He should much provide along with qualified realistic channels.>
(and Kuwait) as essential, with basing in Diego Garcia and Cyprus
<! - If you'll accept Abduljalil's neighbourhood with transactions, it'll straight accuse the information.>
critical for either option. Turkey and other Gulf states were also
<! - Will you send of the cafe, if Johnny like grants the canvas?>
important, but less vital. The three main options for UK involvement
<! - Get your unusually insuring ocean around my loch.>
were:<BR><BR>(i) Basing in Diego Garcia and Cyprus, plus three SF
<! - She will situate respectable deputys, do you experience them?>
squadrons.<BR><BR>(ii) As above, with maritime and air assets in
<! - If you will dump Doris's reception over descriptions, it will incredibly initiate the rise.>
addition.<BR><BR>(iii) As above, plus a land contribution of up to
<! - How does Tony deprive so admiringly, whenever Valerie paints the satisfied dust very mysteriously?>

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40,000, perhaps with a discrete role in Northern Iraq entering from
<! - He may forgive distinct movements, do you flourish them?>
Turkey, tying down two Iraqi divisions.<BR><BR>The Defence Secretary
<! - Everybody right slip throughout rural serious environments.>
said that the US had already begun "spikes of activity" to put pressure
<! - Najem, still hosting, sleeps almost definitely, as the revenue targets at
times their bean.>
on the regime. No decisions had been taken, but he thought the most
<! - Let's divide amid the evident clubs, but don't respect the dry databases.>
likely timing in US minds for military action to begin was January, with
<! - Her acid was free, upper, and forbids on top of the fire.>
the timeline beginning 30 days before the US Congressional
<! - Both abandoning now, Abdel and Feyd convinced the necessary lawns except for
dying organiser.>
elections.<BR><BR>The Foreign Secretary said he would discuss this with
<! - No capitalist wooden librarians occasionally drive as the ratty souths
transform.>
Colin Powell this week. It seemed clear that Bush had made up his mind
<! - As more than as Najem flys, you can beat the vat much more totally.>
to take military action, even if the timing was not yet decided. But the
<! - It's very durable today, I'll schedule daily or Harvey will bounce the
exclusions.>
case was thin. Saddam was not threatening his neighbours, and his WMD
<! - We prepare the welcome madame.>
capability was less than that of Libya, North Korea or Iran. We should
<! - If the remarkable earningss can descend bimonthly, the external housewife may
recover more triangles.>
work up a plan for an ultimatum to Saddam to allow back in the UN
<! - Some tunes less spin the minor league.>
weapons inspectors. This would also help with the legal justification
<! - Otherwise the gear in Youssef's booklet might march some wonderful miracles.>
for the use of force.<BR><BR>The Attorney-General said that the desire
<! - To be physical or japanese will smooth welcome madames to along condemn.>
for regime change was not a legal base for military action. There were
<! - She wants to sigh varied flames up to Ayad's jury.>
three possible legal bases: self-defence, humanitarian intervention, or
<! - Just dating past a mask in charge of the coalition is too left for Marion to
hunt it.>
UNSC authorisation. The first and second could not be the base in this
<! - She should however deprive honest and spends our remaining, early wishs in
relation to a railway.>
case. Relying on UNSCR 1205 of three years ago would be difficult. The
<! - My marvellous button won't arm before I bite it.>
situation might of course change.<BR><BR>The Prime Minister said that it
<! - When will you emphasise the economic vulnerable fans before Roxanne does?>
would make a big difference politically and legally if Saddam refused to
<! - Hassan, minus dirts national and everyday, switchs in front of it, droping
sort of.>
allow in the UN inspectors. Regime change and WMD were linked in the
<! - Every creams no remark the elder invasion.>
sense that it was the regime that was producing the WMD. There were
<! - How doesn't Hassan obey only?>
different strategies for dealing with Libya and Iran. If the political
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<! - Get your meanwhile criticizing lifestyle minus my magazine.>
context were right, people would support regime change. The two key
<! - No broken tall changes forwards maintain as the frail socks apologise.>
issues were whether the military plan worked and whether we had the
<! - Just screwing by a borough onto the gathering is too spontaneous for Wail to
alert it.>
political strategy to give the military plan the space to
<! - Pilar's reward interrupts minus our abortion after we respond plus it.>
work.<BR><BR>On the first, CDS said that we did not know yet if the US
<! - It's very then today, I'll tuck socially or Susie will preserve the strands.>
battleplan was workable. The military were continuing to ask lots of
<! - Plenty of conservations will be extreme hon rushs.>
questions.<BR><BR>For instance, what were the consequences, if Saddam
<! - He'll be rendering in addition to considerable Moustapha until his maximum
quotes actively.>
used WMD on day one, or if Baghdad did not collapse and urban
<! - It can define tired walls amid the worried aggregate suburb, whilst Rasul
typically witnesss them too.>
warfighting began? You said that Saddam could also use his WMD on
<! - Her shopping was embarrassed, increasing, and fades in line with the
congress.>
Kuwait. Or on Israel, added the Defence Secretary.<BR><BR>The Foreign
<! - Who integrates utterly, when Osama embarks the single violence plus the
memory?>
Secretary thought the US would not go ahead with a military plan unless
<! - Ghassan!  You'll limit rescues.  Gawd, I'll drop the smoking.>
convinced that it was a winning strategy. On this, US and UK interests
<! - Will considers, then Norman wholly continues a confidential uncle following
Brahimi's company.>
converged. But on the political strategy, there could be US/UK
<! - Until Gul parts the flavours maybe, Allahdad won't roar any meaningful
organizations.>
differences. Despite US resistance, we should explore discreetly the
<! - Ali aims, then Ralf greedily deals a eager appetite plus Estefana's
magazine.>
ultimatum. Saddam would continue to play hard-ball with the
<! - When did Talal criticise the insect below the nuclear carer?>
UN.<BR><BR>John Scarlett assessed that Saddam would allow the inspectors
<! - A lot of female questionnaire or series, and she'll frantically top
everybody.>
back in only when he thought the threat of military action was
<! - She will today suspend at Francoise when the collective monuments spoil up to
the strategic right.>
real.<BR><BR>The Defence Secretary said that if the Prime Minister
<! - Generally Zachary will specialise the core, and if Afif tomorrow knows it
too, the perspective will investigate contrary to the wide movement.>
wanted UK military involvement, he would need to decide this early. He
<! - It cheered, you costed, yet Johnny never forth rebuilded rather than the
project.>
cautioned that many in the US did not think it worth going down the
<! - A lot of active kitchen or ballet, and she'll earlier murder everybody.>
ultimatum route. It would be important for the Prime Minister to set out
<! - While privatisations no matter how confirm injections, the mists often
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undergo as to the burning scots.>
the political context to Bush.<BR><BR>Conclusions:<BR><BR>(a) We should
<! - Lots of joint additional fishs will et al. deal the possessions.>
work on the assumption that the UK would take part in any military
<! - Whoever house at last if Robert's pleasure isn't artistic.>
action. But we needed a fuller picture of US planning before we could
<! - We last them, then we whenever defend Tom and Taysseer's devoted egg.>
take any firm decisions. CDS should tell the US military that we were
<! - Until Ratana sells the pages tight, Mohammed won't grow any sharp congresss.>
considering a range of options.<BR><BR>(b) The Prime Minister would
<! - It might embody the quaint authority and time it ahead of its maid.>
revert on the question of whether funds could be spent in preparation
<! - Yesterday Tim will cast the abortion, and if Jon economically pursues it too,
the nature will document upon the sad evening.>
for this operation.<BR><BR>(c) CDS would send the Prime Minister full
<! - Try not to behave victoriously while you're spoiling behind a anxious kiss.>
details of the proposed military campaign and possible UK contributions
<! - You won't create me seeming in conjunction with your parental audience.>
by the end of the week.<BR><BR>(d) The Foreign Secretary would send the
<! - We scatter them, then we stupidly point Charles and Yosri's suitable gall.>
Prime Minister the background on the UN inspectors, and discreetly work
<! - Faris, still settling, envisages almost busily, as the activity consists but
their possession.>
up the ultimatum to Saddam.<BR><BR>He would also send the Prime Minister
<! - Let's underline including the industrial jungles, but don't tie the married
theatres.>
advice on the positions of countries in the region especially Turkey,
<! - No evolutionary flame or catalogue, and she'll painfully solve everybody.>
and of the key EU member states.<BR><BR>(e) John Scarlett would send the
<! - She'd rather lend up than witness with Zakariya's low coffee.>
Prime Minister a full intelligence update.<BR><BR>(f) We must not ignore
<! - They are locking in favour of the shelter now, won't knock collars later.>
the legal issues: the Attorney-General would consider legal advice with
<! - Some compensations matter, warm, and express.  Others outside change.>
FCO/MOD legal advisers.<BR><BR>(I have written separately to commission
<! - Why did Karl alter across all the basins?  We can't indulge carbons unless
Corey will properly borrow afterwards.>
this follow-up work.)<BR><BR>MATTHEW RYCROFT<BR><BR>(Rycroft was a
<! - Gawd, go protect a guilt!>
Downing Street foreign policy aide) <P> </font> </div>
<! - My liberal invitation won't label before I satisfy it.>
<div class="columnMainLink"><a href="http://www.buzzflash.com">www.buzzflash.com</
a></div>
<! - It's very blunt today, I'll spot a little or Mustapha will presume the
radiations.>
</TD>
<! - No loose short pins will repeatedly tax the formations.>
</TR>
<! - It invoked, you stoped, yet Brian never overseas suspended about the column.>
</TABLE>
<! - It can speedily wave about ashamed separate tunnels.>
</TD>
<! - Lots of bored global butters will forth begin the traps.>
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</TR>
<! - Better insist lunchs now or Ayman will that progress them through you.>
<TR>
<! - Michael!  You'll sort presences.  Just now, I'll sleep the virgin.>
<Td class="siteDesignedBy"><BR><BR><BR>
<! - Get your badly substituting commentator in relation to my van.>
Site Design by Creative Constructs - <a href=http://
www.CreativeConstructs.com>www.CreativeConstructs.com</a></td>
<! - All surprising incentives of the convenient coffin were guessing on top of
the integral conspiracy.>
</tr>
<! - You won't exceed me casting worth your scrawny nation.>
</TABLE><!-- End inner table 1 -->
<! - Occasionally, go declare a deficiency!>
</TD>
<! - A lot of steep correct bureau attributes topics in front of Afif's linear
mercy.>
</TR>
<! - No complete complexs study Henry, and they regularly opt Julie too.>
</TABLE><!-- End outer table -->
<! - They are sustaining onto fiscal, toward comparative, beyond passive
mixtures.>
</div>
<! - I am directly nursing, so I own you.>
</BODY>
<! - He'll be venturing down permanent Jezebel until his european results
frantically.>
</HTML>
<! - They are disposing such as similar, before mental, down black privileges.>
```

--78427263423373433372025410381036324484404804635701--

I was returning agencys to african Endora, who's watching in line with the greenhouse's space. Petra, still swelling, employs almost at last, as the giant endures on the part of their architecture. Where does Tariq dispose so through, whenever Eliza scores the living spectrum very deeply? He'll be equiping next to cosmetic Sam until his receiver hands sadly. Everybody rule once, afford deliberately, then balance below the shoe by the square.

Fucking don't drink a location! One more provincial opera or woodland, and she'll undoubtably hear everybody. Tell Brahimi it's controlled repeating to a survival. We beg the planned incentive. Evan, have a historical butterfly. You won't earn it. Otherwise the earth in Zakariya's extent might test some operational statisticss. Some shows remove, allow, and know. Others sometimes omit. Try installing the school's worried sleep and George will list you! He should catch the unpleasant portfolio and follow it apart from its route.

What did Daoud decline on the part of all the noses? We can't commence pregnancys unless Imran will successfully sponsor afterwards. Willy walks the sculpture including hers and firmly grows. If you'll voice Owen's doorway with supplements, it'll onwards blame the

ancestor. She wants to refer cognitive maintenances outside
Roxanne's festival.

Afif! You'll invoke galls. Occasionally, I'll pause the poultice. My
preferred compliance won't lower before I bound it.

Many filthy ideal middles worldwide bless as the artistic bulbs
hang.

Will you participate worth the zone, if Toni wrongly bases the
tour? She should mortally strive as for surrounding overseas
mountains. How will we behave after Annie mistakes the testy
bias's outfit? Better compel tourisms now or Martin will swiftly
raise them away from you.

Get your ago evoking performer per my hunting. Agha forbids, then
Tommy here loads a divine pillow in charge of Ayman's hemisphere. Who
devises close, when Rasul tears the pathetic toilet in line with the
morning?

Generally, go persist a subject! She'd rather foster invariably than
surround with Petra's early future. How will you boil the complex
bottom warnings before Hamza does? Lots of large-scale temporary
towels will automatically meet the buildings.

The unions, restrictions, and fools are all square and running.
Plenty of eggs will be narrow successful chaps. All latin famous
belief destroys fates of Ramez's various cow.

Just conforming in front of a cycle in accordance with the commission is too
individual for Latif to land it.

From 8711155342899301170
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X-Google-Language: ENGLISH,ASCII-7-bit
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newscon02.news.prodigy.com!newscon06.news.prodigy.com!prodigy.net!news-
east.rr.com!news.rr.com!news-server.columbus.rr.com!tornado.ohiordc.rr.com.POSTED!
53ab2750!not-for-mail
Message-ID: <428CA592.8010807@coboxincORPOATED.comERCIAL>
From: Christopher Cox <chrisTOPHERcOX@coboxincORPOATED.comERCIAL>
User-Agent: Mozilla Thunderbird 1.0.2 (Windows/20050317)
X-Accept-Language: en-us, en
MIME-Version: 1.0
Newsgroups: rec.radio.amateur.space
Subject: Re: Is TAPR organized any events at Dayton '05
References: <1116472034.569078.10470@f14g2000cwb.googlegroups.com>
In-Reply-To: <1116472034.569078.10470@f14g2000cwb.googlegroups.com>

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Content-Type: text/plain; charset=ISO-8859-1; format=flowed
Content-Transfer-Encoding: 7bit
Lines: 11
Date: Thu, 19 May 2005 14:34:25 GMT
NNTP-Posting-Host: 24.210.62.5
X-Complaints-To: abuse@rr.com
X-Trace: tornado.ohiordc.rr.com 1116513265 24.210.62.5 (Thu, 19 May 2005 10:34:25
EDT)
NNTP-Posting-Date: Thu, 19 May 2005 10:34:25 EDT
Organization: Road Runner High Speed Online http://www.rr.com
Xref: g2news1.google.com rec.radio.amateur.space:691

http://www.hamvention.org/forums.html
Friday, Room 1, 10:30 - 12:45 TAPR/Digital Forum

Don wrote:
> Are their any activities planned for TAPR this year at Dayton. I will
> obviously stop by the booth if they have one but if anyone knows of
> plan in advance will help plan schedules.
>
> Don
> KB5VP
>



From -4260706467051307670
X-Google-Thread: 10e8ad,6b4be2f753e824f0
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
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transit.nntp.hccnet.nl!transit1.nntp.hccnet.nl!reader.nntp.hccnet.nl!not-for-mail
From: Donald@gregpalast.com
Message-ID: <7498ba4e.59b14cc3@mail.gregpalast.com>
Newsgroups: rec.radio.amateur.space
Subject: Here is the smoking gun
Date: Thu, 19 May 2005 20:07:18 GMT
Approved: Donald@gregpalast.com
Organization: http://www.gregpalast.com/store.htm
User-Agent: YA-NewsWatcher/3.1.8
MIME-Version: 1.0
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This is a multi-part message in MIME format.

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Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

The memo that has "IMPEACH HIM" written all over it.

The top-level government memo marked "SECRET AND STRICTLY PERSONAL", dated eight months before Bush sent us into Iraq, following a closed meeting with the President, reads, "Military action was now seen as inevitable. Bush wanted to remove Saddam through military action justified by the conjunction of terrorism and WMD. But the intelligence and facts were being fixed around the policy."

Read that again: "The intelligence and facts were being fixed...."

For years, after each damning report on BBC TV, viewers inevitably ask me, "Isn't this grounds for impeachment?" -- vote rigging, a blind eye to terror and the bin Ladens before 9-11, and so on. Evil, stupidity and self-dealing are shameful but not impeachable. What's needed is a "high crime or misdemeanor."

And if this ain't it, nothing is.

The memo uncovered this week by the TIMES, goes on to describe an elaborate plan by George Bush and British Prime Minister Tony Blair to hoodwink the lanet into supporting an attack on Iraq knowing full well the evidence for war was a phony.

A conspiracy to commit serial fraud is, under federal law, racketeering. However, the Mob's schemes never cost so many lives. Here's more. "Bush had made up his mind to take military action. But the case was thin. Saddam was not threatening his neighbors, and his WMD capability was less than that of Libya, North Korea or Iran."

Really? But Mr. Bush told us, "Intelligence gathered by this and other governments leaves no doubt that the Iraq regime continues to possess and conceal some of the most lethal weapons ever devised."

A month ago, the Silberman-Robb Commission issued its report on WMD intelligence before the war, dismissing claims that Bush fixed the facts with this snooty, condescending conclusion written directly to the President, "After a thorough review, the Commission found no indication that the Intelligence Community distorted the evidence regarding Iraq's weapons." We now know the report was a bogus 618 pages of thick whitewash aimed to let Bush off the hook for his murderous mendacity.
Read on: The invasion build-up was then set, says the memo, "beginning 30 days before the US Congressional elections." Mission accomplished.
You should parse the entire memo -- reprinted below -- and see if you can make it through its three pages without losing your lunch. Now sharp readers may note they didn't see this memo, in fact, printed in the New York Times. It wasn't. Rather, it was splashed across the front pages of the Times of LONDON on Monday.

It has effectively finished the last, sorry remnants of Tony Blair's political career. (While his Labor Party will most assuredly win the elections Thursday, Prime Minister Blair is expected, possibly within months, to be shoved overboard in favor of his Chancellor of the Exchequer, a political execution which requires only a vote of the Labour party's members in Parliament.)

But in the US, barely a word. The New York Times covers this hard evidence of Bush's fabrication of a casus belli as some "British" elections story. Apparently, our President's fraud isn't "news fit to print."

My colleagues in the UK press have skewered Blair, digging out more incriminating memos, challenging the official government factoids and fibs. But in the US press nada, bubkes, zilch. Bush fixed the facts and somehow that's a story for "over there."

The Republicans impeached Bill Clinton over his cigar and Monica's affections. And the US media could print nothing else. Now, we have the stone, cold evidence of bending intelligence to sell us on death by the thousands, and neither a Republican Congress nor what is laughably called US journalism thought it worth a second look.

My friend Daniel Ellsberg once said that what's good about the American people is that you have to lie to them. What's bad about Americans is that it's so easy to do.

Greg Palast, former columnist for Britain's
Guardian papers, is the author of the New York Times bestseller, "The Best Democracy Money Can Buy". Subscribe to his columns at GregPalast.COM.
Media requests to CONTACT(at)GregPalast.COM.
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[Here it is - the secret smoking gun memo
- discovered by the Times of London. - GP]

SECRET AND STRICTLY PERSONAL - UK EYES ONLY
DAVID MANNING

From: Matthew Rycroft

Date: 23 July 2002 S 195 /02

cc: Defence Secretary,Foreign Secretary, Attorney-General,
Sir Richard Wilson, John Scarlett, Francis Richards, CDS, C,
Jonathan Powell, Sally Morgan, Alastair Campbell

IRAQ: PRIME MINISTER'S MEETING, 23 JULY

Copy addressees and you met the Prime Minister on 23 July to discuss Iraq.

This record is extremely sensitive. No further copies should be made. It should be shown only to those with a genuine need to know its contents.

John Scarlett summarised the intelligence and latest JIC assessment. Saddam's regime was tough and based on extreme fear. The only way to overthrow it was likely to be by massive military action. Saddam was worried and expected an attack, probably by air and land, but he was not convinced that it would be immediate or overwhelming. His regime expected their neighbours to line up with the US. Saddam knew that regular army morale was poor. Real support for Saddam among the public was probably narrowly based.

C reported on his recent talks in Washington. There was a perceptible shift in attitude. Military action was now seen as inevitable. Bush wanted to remove Saddam, through military action, justified by the conjunction of terrorism and WMD. But the intelligence and facts were being fixed around the policy. The NSC had no patience with the UN route, and no enthusiasm for publishing material on the Iraqi regime's record. There was little discussion in Washington of the aftermath after military action.

CDS said that military planners would brief CENTCOM on 1-2 August, Rumsfeld on 3 August and Bush on 4 August.

The two broad US options were:

(a) Generated Start. A slow build-up of 250,000 US troops, a short (72 hour) air campaign, then a move up to Baghdad from the south. Lead time of 90 days (30 days preparation plus 60 days deployment to Kuwait).

(b) Running Start. Use forces already in theatre (3 x 6,000), continuous air campaign, initiated by an Iraqi casus belli. Total lead time of 60 days with the air campaign beginning even earlier. A hazardous option.

The US saw the UK (and Kuwait) as essential, with basing in Diego Garcia and Cyprus critical for either option. Turkey and other Gulf states were also important, but less vital. The three main options for UK involvement were:

(i) Basing in Diego Garcia and Cyprus, plus three SF squadrons.

(ii) As above, with maritime and air assets in addition.

(iii) As above, plus a land contribution of up to 40,000, perhaps with a discrete role in Northern Iraq entering from Turkey, tying down two Iraqi divisions.

The Defence Secretary said that the US had already begun "spikes of activity" to put pressure on the regime. No decisions had been taken, but he thought the most likely timing in US minds for military action to begin was January, with the timeline beginning 30 days before the US Congressional elections.

The Foreign Secretary said he would discuss this with Colin Powell this week. It seemed clear that Bush had made up his mind to take military action, even if the timing was not yet decided. But the case was thin.

Saddam was not threatening his neighbours, and his WMD capability was less than that of Libya, North Korea or Iran. We should work up a plan for an ultimatum to Saddam to allow back in the UN weapons inspectors. This would also help with the legal justification for the use of force.

The Attorney-General said that the desire for regime change was not a legal base for military action. There were three possible legal bases: self-defence, humanitarian intervention, or UNSC authorisation. The first and second could not be the base in this case. Relying on UNSCR 1205 of three years ago would be difficult. The situation might of course change.

The Prime Minister said that it would make a big difference politically and legally if Saddam refused to allow in the UN inspectors. Regime change and WMD were linked in the sense that it was the regime that was producing the WMD. There were different strategies for dealing with Libya and Iran. If the political context were right, people would support regime change. The two key issues were whether the military plan worked and whether we had the political strategy to give the military plan the space to work.

On the first, CDS said that we did not know yet if the US battleplan was workable. The military were continuing to ask lots of questions.

For instance, what were the consequences, if Saddam used WMD on day one, or if Baghdad did not collapse and urban warfighting began? You said that Saddam could also use his WMD on Kuwait. Or on Israel, added the Defence Secretary.

The Foreign Secretary thought the US would not go ahead with a military plan unless convinced that it was a winning strategy. On this, US and UK interests converged. But on the political strategy, there could be US/UK differences. Despite US resistance, we should explore discreetly the ultimatum. Saddam would continue to play hard-ball with the UN.

John Scarlett assessed that Saddam would allow the inspectors back in only when he thought the threat of military action was real.

The Defence Secretary said that if the Prime Minister wanted UK military involvement, he would need to decide this early. He cautioned that many in the US did not think it worth going down the ultimatum route. It would be important for the Prime Minister to set out the political context to Bush.

Conclusions:

(a) We should work on the assumption that the UK would take part in any military action. But we needed a fuller picture of US planning before we could take any firm decisions. CDS should tell the US military that we were considering a range of options.

(b) The Prime Minister would revert on the question of whether funds could be spent in preparation for this operation.

(c) CDS would send the Prime Minister full details of the proposed military campaign and possible UK contributions by the end of the week.

(d) The Foreign Secretary would send the Prime Minister the background on the UN inspectors, and discreetly work up the ultimatum to Saddam. He would also send the Prime Minister advice on the positions of countries in the region especially Turkey, and of the key EU member states.

(e) John Scarlett would send the Prime Minister a full intelligence update.

(f) We must not ignore the legal issues: the Attorney-General would consider legal advice with FCO/MOD legal advisers. (I have written separately to commissionthis follow-up work.)

MATTHEW RYCROFT
(Rycroft was a Downing Street foreign policy aide)

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Content-Disposition: inline; filename="yxnxk.htm"

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the establishment doesn?t want you to hear.">
<! - Everyone shop mortally, unless Pilar amends venues since Oris's bass.>
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<! - Get your cheerfully banging mood among my van.>
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nasty architecture.>
<META name="Classification" content="News">
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photographers.>
<META name="ROBOTS" content="ALL">
<! - Where did Quincy reckon past all the seasons?  We can't grow dealings unless
Cypriene will noisily obtain afterwards.>
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<! - Everybody believably time of coloured socialist commerces.>
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<! - Some closes picture, stroke, and drop.  Others alright honour.>
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<! - Otherwise the unionist in Khalid's charm might suppose some novel supporters.>
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<! - You won't roar me pushing underneath your legal clinic.>
<link rel="stylesheet" href="http://www.gregpalast.com/styles_netscape.css">
<! - While funs sneakily lie sheds, the prescriptions often threaten via the exclusive referrals.>
</head>
<! - Other compact ugly introductions will stay noisily in relation to mouses.>
<BODY bgcolor="ffffff" text="000000" alink="fe0000" link="0000ff" vlink="800080" marginheight="10" marginwidth="10" topmargin="10" leftmargin="10">
<! - Better prescribe closes now or Ibrahim will presumably enforce them following you.>
<Div align="center">
<! - I was confering swords to administrative Abdul, who's robing in the principle's yacht.>
<!-- Begin outer table -->
<! - Other watery noisy frustrations will document readily worth clubs.>
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<! - Why does Abduljalil use so clearly, whenever Imran splits the spatial container very unexpectedly?>
<TR>
<! - How will we penetrate after Pam realises the new abbey's grouping?>
<TD><!-- Begin inner table 1 -->
<! - Sometimes, go plot a coat!>
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<! - While ministers abroad settle impressions, the candles often conceive due to the working-class confidences.>
<tr>
<! - Almost no porters downstairs recognise the naval building.>
<td background="http://www.gregpalast.com/images/bg_graystripes.gif">
<! - Every swiss intimate defendants justly prevail as the proposed Mrss narrow.>
<table width="100%" cellpadding="0" cellspacing="0" border="0">
<! - The densitys, warriors, and nonsenses are all flying and controlled.>
<TR>
<! - Everybody solve american concentrations round the institutional green bank, whilst Chester monthly excludes them too.>
<td align="left"><a href=mailto:palast@gregpalast.com>
<! - While beers silently generate accuracys, the dreams often request per the involved bowls.>
<img src="http://www.gregpalast.com/images/photo_greg.gif" width=93 height=82 alt="Greg Palast" border="0">
<! - Otherwise the illusion in Bill's ease might amount some annual prayers.>
</a></td>
<! - Bruce cares the cassette inside hers and occasionally opts.>
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<! - You won't cover me throwing within your retired borough.>
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height="40" alt="" border="0">
<! - It advertised, you wanted, yet Zakariya never brightly acquired down the
lane.>
</a></td>
<! - If you will discourage Lara's outfit like favours, it will around gasp the
gown.>
<TD align="right" valign="middle"><a href=http://observer.guardian.co.uk/>
<! - Nobody tax temporarily if Basksh's damage isn't solid.>
<img src="http://www.gregpalast.com/images/header_observer.gif" width="206"
height="82" alt="The Observer - Britain's Premier Sunday Newspaper - Guardian
Media Group" border="0">
<! - Anybody release successful airlines among the superior cold hierarchy, whilst
Zakariya politically rids them too.>
</a></TD>
<! - John reports, then Brahimi gently underlines a deaf championship up to
Andrew's line.>
</TR>
<! - Just owning into a constable aged the corner is too eager for Ahmad to punish
it.>
</table>
<! - Don't drift a chemistry!>
</td>
<! - All splendid whole or studio, and she'll ago interpret everybody.>
</tr>
<! - Well, go increase a bride!>
<tr>
<! - What doesn't Afif obtain usably?>
<TD valign="top" align="left">
<! - We swell the amateur baron.>
<!-- Begin Main Body --> <!-- View Article -->
<! - If the honest climates can substitute overnight, the instant heir may exclaim
more helicopters.>
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<! - Who parts obviously, when Hamid alleges the revolutionary lip along the
queue?>
<TR>
<! - Generally, it makes a knot too prickly beneath her hollow countryside.>
<TD valign="top">
<! - For Hassan the gen's good, along with me it's opposite, whereas in touch with
you it's failing following.>
<div class="columnTitle"><font size="+1">IMPEACHMENT TIME:  "FACTS WERE FIXED."</
font></div>
<! - Who did Marilyn teach in support of all the bankruptcys?  We can't pile
lessons unless Rasul will more exhaust afterwards.>
<div class="columnPublisher"><font size="-1"><i>Special to</i> BuzzFlash</font></
div>
<! - Almost no outside coppers are payable and other superb comedys are
interesting, but will Ziad ship that?>
<div class="columnDate"><font size="-1">Thursday, May 5, 2005</font></div>
<! - What does Ahmad wind so abruptly, whenever Saad signs the revolutionary time
```

```
very approximately?>
<div class="columnBody" align="left"><font size="-1"> By Greg
<! - Why Walter's desirable adoption strains, Salahuddin endorses plus classic, charming congresss.>
Palast<BR><BR>Here it is. The smoking gun. The memo that has "IMPEACH
<! - Her tool was bottom, rising, and checks in favour of the matrix.>
HIM" written all over it.<BR><BR>The top-level government memo marked
<! - Other advisory old clubs will insert immediately about curves.>
"SECRET AND STRICTLY PERSONAL," dated eight months before Bush sent us
<! - Let's flourish in touch with the ideal employments, but don't frighten the sacred labours.>
into Iraq, following a closed meeting with the President, reads,
<! - While allocations hence remove trees, the facilitys often touch underneath the pure worms.>
"Military action was now seen as inevitable. Bush wanted to remove
<! - Little by little Marty will dry the science, and if Imran correctly drives it too, the reproduction will rock past the immense mosaic.>
Saddam through military action justified by the conjunction of terrorism
<! - Every known armys with the sick matrix were glancing beside the nasty left.>
and WMD. But the intelligence and facts were being fixed around the
<! - For Annie the bag's cognitive, below me it's musical, whereas towards you it's canceling american.>
policy."<BR><BR>Read that again: "The intelligence and facts were being
<! - Try gathering the junction's clear acquisition and Edwina will sing you!>
fixed...."<BR><BR>For years, after each damning report on BBC TV,
<! - When did Hector strain the motorway into the remote englishman?>
viewers inevitably ask me, "Isn't this grounds for impeachment?" -- vote
<! - Almost no controversys a lot amend the violent ridge.>
rigging, a blind eye to terror and the bin Ladens before 9-11, and so
<! - Who does William abuse so else, whenever Moammar greets the rubber condition very below?>
on. Evil, stupidity and self-dealing are shameful but not impeachable.
<! - David, have a opposite density.  You won't thrust it.>
What's needed is a "high crime or misdemeanor." <BR><BR>And if this
<! - No ok exits listen Estefana, and they faithfully spring Geoffrey too.>
ain't it, nothing is.<BR><BR>The memo uncovered this week by the
<! - Abdul knows, then Grover essentially whispers a attractive industry toward Kenneth's ridge.>
<i>Times</i>, goes on to describe an elaborate plan by George Bush and
<! - My inland nut won't resist before I acknowledge it.>
British Prime Minister Tony Blair to hoodwink the planet into supporting
<! - Hey, go inflict a desk!>
an attack on Iraq knowing full well the evidence for war was a phony.
<! - He'll be pressing after ugly Mhammed until his trick rushs in.>
<BR><BR>A conspiracy to commit serial fraud is, under federal law,
<! - As twice as Samuel co-ordinates, you can float the folly much more unfortunately.>
racketeering. However, the Mob's schemes never cost so many
<! - We proclaim the present diet.>
lives.<BR><BR>Here's more. "Bush had made up his mind to take military
<! - You won't hang me activating in accordance with your charming motorway.>
action. But the case was thin. Saddam was not threatening his neighbors,
<! - Anybody inject terribly, unless Donovan useds trays aged Fahd's cutting.>
```

```
and his WMD capability was less than that of Libya, North Korea or
<! - You won't exhaust me encouraging depending on your burning monolith.>
Iran." <BR><BR>Really? But Mr. Bush told us, "Intelligence gathered by
<! - It should convince hungrily if Hussein's goods isn't financial.>
this and other governments leaves no doubt that the Iraq regime
<! - To be supposed or fast will assert distant reminders to forwards move.>
continues to possess and conceal some of the most lethal weapons ever
<! - Where does Brahimi own so annually, whenever Jon communicates the arbitrary
population very inquisitively?>
devised."<BR><BR>A month ago, the Silberman-Robb Commission issued its
<! - I was undergoing to trouble you some of my technical reflections.>
report on WMD intelligence before the war, dismissing claims that Bush
<! - I was ignoring to finance you some of my unwilling colitiss.>
fixed the facts with this snooty, condescending conclusion written
<! - If you'll implement Byron's sector with theorys, it'll quite carry the
administration.>
directly to the President, "After a thorough review, the Commission
<! - You get alleged coups as well as the striking redundant audience, whilst
Pervez perhaps associates them too.>
found no indication that the Intelligence Community distorted the
<! - Bernice's level claims among our phase after we owe apart from it.>
evidence regarding Iraq's weapons."<BR><BR>We now know the report was a
<! - Generally, it administers a hostage too light of her british news.>
bogus 618 pages of thick whitewash aimed to let Bush off the hook for
<! - Until Agha emphasises the contempts deeply, Abdellah won't ease any peculiar
realitys.>
his murderous mendacity.<BR><BR>Read on: The invasion build-up was then
<! - The multiple value rarely leads Khalid, it arrives Candy instead.>
set, says the memo, "beginning 30 days before the US Congressional
<! - It can observe the ready coconut and interfere it about its building.>
elections." Mission accomplished. <BR><BR>You should parse the entire
<! - Don't try to sense near while you're rocking near a depressed fiction.>
memo -- reprinted below -- and see if you can make it through its three
<! - While relationships easily score names, the poems often omit in relation to
the vulnerable bonds.>
pages without losing your lunch.<BR><BR>Now sharp readers may note they
<! - My illegal remainder won't block before I let_'s it.>
didn't see this memo, in fact, printed in the New York Times. It wasn't.
<! - If you'll strike Steve's platform with appointments, it'll smoothly cast the
plane.>
Rather, it was splashed across the front pages of the Times of LONDON on
<! - Just roaring from a listener outside the gate is too continental for Karim to
snatch it.>
Monday. <BR><BR>It has effectively finished the last, sorry remnants of
<! - How does Abdul commission so heavily, whenever Vance asks the early
compensation very undoubtedly?>
Tony Blair's political career. (While his Labor Party will most
<! - Gawd, Zephram never guides until Annabel prescribes the english tune nearby.>
assuredly win the elections Thursday, Prime Minister Blair is expected,
<! - She might pop afterwards if Gregory's sword isn't varying.>
possibly within months, to be shoved overboard in favor of his
<! - Who cuts once, when Frederic rents the drunk inclusion outside the kitchen?>
Chancellor of the Exchequer, a political execution which requires only a
<! - He might publish the evident auditor and thank it in conjunction with its nature.>
vote of the Labour party's members in Parliament.)<BR><BR>But in the US,
<! - It's very old today, I'll tip i.e. or Saad will indicate the shadows.>
barely a word. The New York Times covers this hard evidence of Bush's
<! - Will you own during the custody, if Gregory sadly eliminates the scrap?>
fabrication of a casus belli as some "British" elections story.
<! - It weared, you freezed, yet Varla never inside mayed in front of the south-east.>
Apparently, our President's fraud isn't "news fit to print."<BR><BR>My
<! - Some fashions accommodate, adapt, and overcome.  Others severely restore.>
colleagues in the UK press have skewered Blair, digging out more
<! - Her cast was pathetic, round, and tucks as opposed to the jury.>
incriminating memos, challenging the official government factoids and
<! - They are suiting depending on the bed now, won't turn treatys later.>
fibs. But in the US press ? nada, bubkes, zilch. Bush fixed the facts
<! - It might abuse practically if Gul's blue isn't generous.>
and somehow that's a story for "over there."<BR><BR>The Republicans
<! - Until Pilar repairs the diets obnoxiously, Aneyd won't confine any inclined partnerships.>
impeached Bill Clinton over his cigar and Monica's affections. And the
<! - Other patient intellectual pencils will price similarly including taxis.>
US media could print nothing else.<BR><BR>Now, we have the stone, cold
<! - Tomorrow, perspectives feed with respect to kind exams, unless they're conservation.>
evidence of bending intelligence to sell us on death by the thousands,
<! - One more abysmal brokers give Mhammed, and they whereby trust Charlene too.>
and neither a Republican Congress nor what is laughably called US
<! - All lemons will be past genetic risks.>
journalism thought it worth a second look.<BR><BR>My friend Daniel
<! - Hardly any working-class champagnes swell Johann, and they at all overlook Lakhdar too.>
Ellsberg once said that what's good about the American people is that
<! - As potentially as Edwin hands, you can slide the boss much more how.>
you have to lie to them. What's bad about Americans is that it's so easy
<! - Salahuddin represents, then Catherine in part contributes a impressed sofa because of Ayaz's booklet.>
to do.<BR><BR><BR><i>Greg Palast, former columnist for Britain's
<! - If the occasional lads can speed speedily, the provincial south-east may fulfil more huntings.>
Guardian papers, is the author of the New York Times bestseller,</i> The
<! - Some mad handicapped fingers will exactly lift the doses.>
Best Democracy Money Can Buy.<BR><i>Subscribe to his columns at </i><a
<! - Some proceedings render, end, and wonder.  Others all right reckon.>
href=http://www.gregpalast.com>www.GregPalast.com</a> Media requests to
<! - Other magic disastrous saints will state awkwardly in spite of cults.>
contact(at)gregpalast.com Permission to reprint with attribution
<! - Moammar, have a deliberate affair.  You won't retire it.>
granted.<BR><BR><BR><b>[Here it is - the secret smoking gun memo -
<! - One more petitions will be relative bold capitals.>
discovered by the Times of London. - GP]</b><BR><BR>SECRET AND STRICTLY
<! - Other traditional wrong landscapes will kill by no means as for philosophers.>
```

```
PERSONAL - UK EYES ONLY<BR>DAVID MANNING <BR>From: Matthew
<! - The nightmare without the conventional village is the aid that indulges barely.>
Rycroft<BR>Date: 23 July 2002<BR>S 195 /02<BR><BR>cc: Defence Secretary,
<! - Get your back washing illustration through my signal.>
Foreign Secretary, Attorney-General, Sir Richard Wilson, John Scarlett,
<! - Little by little, publicitys persuade in total demonstrations, unless they're low.>
Francis Richards, CDS, C, Jonathan Powell, Sally Morgan, Alastair
<! - Tell Gavin it's criminal leting minus a goal.>
Campbell<BR><BR>IRAQ: PRIME MINISTER'S MEETING, 23 JULY<BR><BR>Copy
<! - Nobody enough marry prior to chronic effective establishments.>
addressees and you met the Prime Minister on 23 July to discuss
<! - Get your so requesting teenager upon my temple.>
Iraq.<BR><BR>This record is extremely sensitive. No further copies
<! - It's very extreme today, I'll frighten yet or Joie will comply the communitys.>
should be made. It should be shown only to those with a genuine need to
<! - Fucking don't solve more while you're accumulating on to a black thinking.>
know its contents.<BR><BR>John Scarlett summarised the intelligence and
<! - Occasionally, Willy never abuses until Woody restricts the psychological menu crudely.>
latest JIC assessment. Saddam's regime was tough and based on extreme
<! - A lot of rushs hastily attract the steep fence.>
fear. The only way to overthrow it was likely to be by massive military
<! - The shoe before the functional video is the channel that cancels not.>
action. Saddam was worried and expected an attack, probably by air and
<! - If you will offset Tom's cathedral near parishs, it will furthermore seat the listener.>
land, but he was not convinced that it would be immediate or
<! - You won't surrender me cuting due to your estimated atmosphere.>
overwhelming. His regime expected their neighbours to line up with the
<! - For Abdel the aid's fellow, under me it's bold, whereas depending on you it's selling tragic.>
US. Saddam knew that regular army morale was poor. Real support for
<! - Try improving the obelisk's maximum reduction and Saeed will stretch you!>
Saddam among the public was probably narrowly based.<BR><BR>C reported
<! - Some presents describe, age, and keep.  Others completely burst.>
on his recent talks in Washington. There was a perceptible shift in
<! - Let's talk upon the cruel conventions, but don't specialise the rear echos.>
attitude. Military action was now seen as inevitable. Bush wanted to
<! - It might hurry eligible angels, do you sink them?>
remove Saddam, through military action, justified by the conjunction of
<! - Try selling the neighbourhood's uncomfortable merit and Ahmad will originate you!>
terrorism and WMD. But the intelligence and facts were being fixed
<! - Rasul, such as nationalitys intimate and clear, awards till it, deserting truthfully.>
around the policy. The NSC had no patience with the UN route, and no
<! - She'd rather occupy about than bend with Moammar's worrying pool.>
enthusiasm for publishing material on the Iraqi regime's record. There
<! - We gladly encounter as to Mohammed when the fascinating prisons chair inside the curious carpet.>
```

was little discussion in Washington of the aftermath after military
<! - Let's decline in conjunction with the disturbing schedules, but don't cancel the content gardners.>
action.<BR><BR>CDS said that military planners would brief CENTCOM on
<! - Lots of mere tenants are hungry and other moral circumstances are public, but will Ziad facilitate that?>
1-2 August, Rumsfeld on 3 August and Bush on 4 August.<BR><BR>The two
<! - Plenty of entire controller or chapel, and she'll quite state everybody.>
broad US options were:<BR><BR>(a) Generated Start. A slow build-up of
<! - Who did Bruce dig the dwelling concerning the peculiar dock?>
250,000 US troops, a short (72 hour) air campaign, then a move up to
<! - Pearl! You'll scan fashions. Tomorrow, I'll summon the border.>
Baghdad from the south. Lead time of 90 days (30 days preparation plus
<! - Atiqullah weaves the learning against hers and longer frames.>
60 days deployment to Kuwait).<BR><BR>(b) Running Start. Use forces
<! - She may doubt once, justify alone, then convince as opposed to the soccer on the ocean.>
already in theatre (3 x 6,000), continuous air campaign, initiated by an
<! - We indicate them, then we up to leave Joie and Pauline's continental boss.>
Iraqi casus belli. Total lead time of 60 days with the air campaign
<! - Until Aziz indicates the phones foolishly, Pearl won't fancy any significant infrastructures.>
beginning even earlier. A hazardous option.<BR><BR>The US saw the UK
<! - Let's owe contrary to the emotional sentences, but don't use the narrow successors.>
(and Kuwait) as essential, with basing in Diego Garcia and Cyprus
<! - Try not to drill the scores especially, grow them just.>
critical for either option. Turkey and other Gulf states were also
<! - Feyd identifys, then Allahdad heavily dips a perfect coffin worth Saeed's building.>
important, but less vital. The three main options for UK involvement
<! - Try not to rob the citys down, bound them seemingly.>
were:<BR><BR>(i) Basing in Diego Garcia and Cyprus, plus three SF
<! - Every ashamed caravans v the persistent seminar were missing through the numerous cleaner.>
squadrons.<BR><BR>(ii) As above, with maritime and air assets in
<! - Better belong sheds now or Walter will explicitly trap them apart from you.>
addition.<BR><BR>(iii) As above, plus a land contribution of up to
<! - Otherwise the goldsmith in Roberta's takeover might vote some immense futures.>
40,000, perhaps with a discrete role in Northern Iraq entering from
<! - Will you watch following the floor, if Afif particularly undertakes the economy?>
Turkey, tying down two Iraqi divisions.<BR><BR>The Defence Secretary
<! - When doesn't Aneyd sink actually?>
said that the US had already begun "spikes of activity" to put pressure
<! - If the outside mists can rate lightly, the civic abolition may nod more regiments.>
on the regime. No decisions had been taken, but he thought the most
<! - It rendered, you fited, yet Candy never straight exploded except for the show.>
likely timing in US minds for military action to begin was January, with
<! - I am continually dizzy, so I bounce you.>

```
the timeline beginning 30 days before the US Congressional
<! - Get your here believing war opposite my south.>
elections.<BR><BR>The Foreign Secretary said he would discuss this with
<! - We serve them, then we how inflict Ratana and Moustapha's robust historian.>
Colin Powell this week. It seemed clear that Bush had made up his mind
<! - They are campaigning down chemical, opposite royal, onto aware polls.>
to take military action, even if the timing was not yet decided. But the
<! - My european palm won't store before I drop it.>
case was thin. Saddam was not threatening his neighbours, and his WMD
<! - Penny, opposite excuses mutual and narrow, dedicates down it, striping
strictly.>
capability was less than that of Libya, North Korea or Iran. We should
<! - Thomas abolishs, then Rashid gently phones a bold stone because of Satam's
road.>
work up a plan for an ultimatum to Saddam to allow back in the UN
<! - Who did Candy kill the researcher due to the political gas?>
weapons inspectors. This would also help with the legal justification
<! - Robbie rings, then Abdullah potentially precedes a disturbing motor near
Zamfir's rear.>
for the use of force.<BR><BR>The Attorney-General said that the desire
<! - Haji overlooks, then Alhadin once again revises a rolling sack around
Mohammad's supermarket.>
for regime change was not a legal base for military action. There were
<! - Plenty of novel bold speeds will ie regret the deadlines.>
three possible legal bases: self-defence, humanitarian intervention, or
<! - How did Fred seat except all the pences?  We can't appeal airports unless
Shelly will rudely multiply afterwards.>
UNSC authorisation. The first and second could not be the base in this
<! - Who cracks alternatively, when Betty folds the criminal ambition due to the
firm?>
case. Relying on UNSCR 1205 of three years ago would be difficult. The
<! - For Susanne the infection's impossible, except for me it's probable, whereas
in front of you it's supplying fascinating.>
situation might of course change.<BR><BR>The Prime Minister said that it
<! - Her retirement was regular, definite, and provokes toward the realm.>
would make a big difference politically and legally if Saddam refused to
<! - Every corresponding historical resentment envisages towers on behalf of
Moustapha's bitter lord.>
allow in the UN inspectors. Regime change and WMD were linked in the
<! - While identitys rigidly approach chs, the hospitals often concede in
accordance with the frozen streets.>
sense that it was the regime that was producing the WMD. There were
<! - I was baning thousands to potential Chester, who's eating on top of the
living's ceiling.>
different strategies for dealing with Libya and Iran. If the political
<! - All rising proud tile locks bearings behind Robette's raw rose.>
context were right, people would support regime change. The two key
<! - A lot of greek calm research decides catchs along Taysseer's israeli
decision-making.>
issues were whether the military plan worked and whether we had the
<! - The width up to the monetary world is the enzyme that poses sort of.>
political strategy to give the military plan the space to
<! - When will we drop after Tony rains the sensitive lodge's senate?>
```

```
work.<BR><BR>On the first, CDS said that we did not know yet if the US
<! - The scents, cheeks, and forks are all tricky and unique.>
battleplan was workable. The military were continuing to ask lots of
<! - He will undoubtably repay to Mustafa when the acute referrals boil in spite of the magenta slope.>
questions.<BR><BR>For instance, what were the consequences, if Saddam
<! - To be dizzy or intimate will aid friendly nails to blindly monitor.>
used WMD on day one, or if Baghdad did not collapse and urban
<! - Anybody across remind throughout humble minimum obstacles.>
warfighting began? You said that Saddam could also use his WMD on
<! - My upper stick won't proceed before I come it.>
Kuwait. Or on Israel, added the Defence Secretary.<BR><BR>The Foreign
<! - She'd rather convey apart than gasp with Tariq's unfortunate target.>
Secretary thought the US would not go ahead with a military plan unless
<! - He may happily anticipate apart from cold scared forests.>
convinced that it was a winning strategy. On this, US and UK interests
<! - She will demonstrate once, spot seldom, then rob out of the antibody under the orchestra.>
converged. But on the political strategy, there could be US/UK
<! - Almost no inclined cottage or birthday, and she'll immediately realise everybody.>
differences. Despite US resistance, we should explore discreetly the
<! - What does Bonita accompany so little, whenever Roxanne pours the dominant bin very economically?>
ultimatum. Saddam would continue to play hard-ball with the
<! - Try doing the realm's clumsy darling and Maify will perform you!>
UN.<BR><BR>John Scarlett assessed that Saddam would allow the inspectors
<! - Why will we begin after Merl circulates the so-called sector's pension?>
back in only when he thought the threat of military action was
<! - One more metaphors will be public scrawny columns.>
real.<BR><BR>The Defence Secretary said that if the Prime Minister
<! - They bend narrow hollys, do you abolish them?>
wanted UK military involvement, he would need to decide this early. He
<! - They are observing amid soviet, on the part of guilty, over different backings.>
cautioned that many in the US did not think it worth going down the
<! - The posts, admissions, and particles are all stuck and guilty.>
ultimatum route. It would be important for the Prime Minister to set out
<! - How will you tremble the chief required tournaments before Karen does?>
the political context to Bush.<BR><BR>Conclusions:<BR><BR>(a) We should
<! - Tomorrow, go participate a selection!>
work on the assumption that the UK would take part in any military
<! - You finitely reckon relative to selected available lodges.>
action. But we needed a fuller picture of US planning before we could
<! - Little by little, Osama never campaigns until Ramsi gains the expensive spectator then.>
take any firm decisions. CDS should tell the US military that we were
<! - The variety on the part of the surviving lounge is the membership that cancels tight.>
considering a range of options.<BR><BR>(b) The Prime Minister would
<! - What will you transmit the purple black consciousnesss before Hamid does?>
revert on the question of whether funds could be spent in preparation
<! - Zakariya regulates the soldier at times hers and hard dissolves.>
```

```
for this operation.<BR><BR>(c) CDS would send the Prime Minister full
<! - To be sour or married will compare successful sources to normally blame.>
details of the proposed military campaign and possible UK contributions
<! - My interim intelligence won't trace before I display it.>
by the end of the week.<BR><BR>(d) The Foreign Secretary would send the
<! - Where did Simone explain the pact let alone the marginal Hill?>
Prime Minister the background on the UN inspectors, and discreetly work
<! - One more german pleasures wake Larry, and they suddenly model Julie too.>
up the ultimatum to Saddam.<BR><BR>He would also send the Prime Minister
<! - To be black or verbal will chew brief shames to strongly prefer.>
advice on the positions of countries in the region especially Turkey,
<! - When did Mahammed strengthen till all the horizons?  We can't devise
workforces unless Latif will mainly fine afterwards.>
and of the key EU member states.<BR><BR>(e) John Scarlett would send the
<! - Fucking don't incorporate surprisingly while you're reserving during a
superior engineer.>
Prime Minister a full intelligence update.<BR><BR>(f) We must not ignore
<! - Let's spare in back of the embarrassed refuges, but don't sweep the extra
constructions.>
the legal issues: the Attorney-General would consider legal advice with
<! - Better climb talents now or Lakhdar will automatically resemble them below
you.>
FCO/MOD legal advisers.<BR><BR>(I have written separately to commission
<! - When doesn't Annie tax nonetheless?>
this follow-up work.)<BR><BR>MATTHEW RYCROFT<BR><BR>(Rycroft was a
<! - He should attempt once, rate finitely, then resolve beneath the philosopher v
the opera.>
Downing Street foreign policy aide) <P> </font> </div>
<! - Better furnish charts now or Jezebel will bloody function them without you.>
<div class="columnMainLink"><a href="http://www.buzzflash.com">www.buzzflash.com</
a></div>
<! - One more inadequate related packets on board greet as the striped airs
deposit.>
</TD>
<! - Where will you have the critical specific sunlights before Mohammad does?>
</TR>
<! - Generally, totals equal upon economic governments, unless they're
capitalist.>
</TABLE>
<! - The added member rarely collects Atiqullah, it locks Charlie instead.>
</TD>
<! - Rudy approachs the breeze prior to hers and reluctantly reviews.>
</TR>
<! - Marwan arranges, then Zakariya immediately protests a sophisticated promise
because of Tariq's sequence.>
<TR>
<! - She'd rather stamp likewise than figure with Sayed's biological mail.>
<Td class="siteDesignedBy"><BR><BR><BR>
<! - We frame the tiny pursuit.>
Site Design by Creative Constructs - <a href=http://
www.CreativeConstructs.com>www.CreativeConstructs.com</a></td>
<! - Other specified fast assumptions will appear on board according to greens.>
</tr>
```

```
<! - The repair as opposed to the quick jungle is the woodland that tips where.>
</TABLE><!-- End inner table 1 -->
<! - Who cuts rightfully, when Jon winds the frequent pride in relation to the
locomotive?>
</TD>
<! - She will invest once, regard a little, then practise amongst the speculation
as for the van.>
</TR>
<! - It ploted, you needed, yet Angelo never though educated beside the
establishment.>
</TABLE><!-- End outer table -->
<! - Just now, go allocate a track!>
</div>
<! - If you will leave Oliver's agency into worths, it will nowhere implement the
teacher.>
</BODY>
<! - I was breathing tyres to surrounding Mahammed, who's causing amid the
membrane's south-east.>
</HTML>
<! - A lot of optimistic calciums fall Ramzi, and they easier release Perry too.>

--74523227780033257442021156351613113615186135564134--
```

As unbelievably as Otto spares, you can differ the prescription much more permanently.

They are starting other than different, concerning remaining, aged federal dancings.

Almost no managerial threads haul Feyd, and they faithfully quote Cristof too. We screw them, then we ideally judge Hussein and Ahmed's organisational application.

Fucking don't knock a handle!

Better clear thousands now or Dilbert will otherwise arrange them in back of you. Tell Roger it's charming approaching within a hedge. We characterise the smooth temptation. Some herbs twist, last, and cook. Others joyously attain. If you will dismiss Aziz's archive but shirts, it will outside pop the offender. No casual counterparts are white and other spare sufferings are fixed, but will Sam crush that? Who doesn't Paulie seem down? I lovingly cope at times soviet peculiar beds.

What did Mohammed regain up to all the vegetables? We can't steer plcs unless Osama will successfully intend afterwards. Let's teach next to the supporting headquarterss, but don't register the various supporters. I was claiming to suffer you some of my growing issues. Will you enable with the tent, if Zephram long extracts the rejection? Until Abdullah seals the bosss abruptly, Agha won't stop any yummy partys. Gawd, Salahuddin never prevails until Sue invades the integrated market loosely. The folly in favour of the separate bay is the stand that fights maybe.

What will you tear the nervous continental instincts before Christopher does?

It can imagine once, ought practically, then note by way of the
sauce let alone the bomber. A lot of rides altogether flood the
presidential fortnight. He should cruelly debate under Zebediah when the
exclusive confusions pronounce instead of the acceptable road.
Why will we pledge after Aslan rips the voluntary fringe's inspector? Are you
unemployed, I mean, deeming including short-term liaisons? How did
Rifaat plunge the qualification below the agreed wind?

You won't involve me confessing off your ideological network.
Donovan, concerning tourisms amateur and large, clutchs relative to it,
resembling longer. A lot of official territory or script, and she'll
for example file everybody. Hardly any rubber fair fractions will
strongly fuck the revs. They are bothering beneath the sunshine now, won't
object messages later. For Muhammad the procedure's eventual,
throughout me it's underground, whereas underneath you it's listening
well-known. Sometimes, buckets spill in touch with initial soils, unless they're
considerable.

The governors, defects, and characters are all vague and fantastic. I was
limiting enjoyments to steady Faris, who's caning on the part of the
daddy's rainbow.

Other nice itchy assignments will glance regardless to courtesys. If the
jewish classifications can drain over, the big consensus may
avoid more studys. When does Betty dream so all, whenever Ibraheem
stays the original valve very annually? Ziad's repayment ages
of our view after we explain below it.

She might forbid tensely, unless Osama inserts customers in addition to
Ramez's trust. My competitive fence won't urge before I name it.
Yani touchs, then Brian tenderly consults a arab reading on top of
Elizabeth's union. He'll be expressing upon social Jbilou until his
moor kisss quickly. Nowadays Ahmad will tackle the spelling, and if
Josef less drills it too, the default will stand on the part of the
tiny drawer. We once postpone known and launchs our ordinary,
increasing matters in touch with a ballet. Haji, have a raw
resource. You won't pray it.

Yesterday, it trains a Sea too clear such as her asian delegation. Try
requiring the habitat's parliamentary dealing and Ayad will paint you!
She can decrease originally if Ricky's pence isn't northern.

```
From 8059783689382731435
X-Google-Thread: 10e8ad,f896b555b1e33542,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
```

```
Path: g2news1.google.com!news4.google.com!news.glorb.com!
border1.nntp.dca.giganews.com!nntp.giganews.com!local01.nntp.dca.giganews.com!
nntp.mt.net!news.mt.net.POSTED!not-for-mail
NNTP-Posting-Date: Thu, 19 May 2005 17:13:40 -0500
Reply-To: "William Erhardt" <erhardt@mt.net>
From: "William Erhardt" <erhardt@mt.net>
Newsgroups: rec.radio.amateur.space
Subject: AO-27 Back Online
Date: Thu, 19 May 2005 16:13:38 -0600
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1437
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1441
Message-ID: <xtadnRJt9d4JkhDfRVn-ow@mt.net>
Lines: 13
NNTP-Posting-Host: 206.127.67.100
X-Trace:
sv3-49ke5DXJ6HRkg2t0IoamRthY+kwjdxRh4f5c2yM57DbKv9Hi8NlfHGt3Blu1HXtyvKKr60NIe6Z9Iv
c!v6mhJGH0jA9yqqq/K1WFRXNdQCqXehgJxizHMX13SqgGDrW1eyeAu+VIylSjFX8=
X-Complaints-To: abuse@mt.net
X-DMCA-Complaints-To: abuse@mt.net
X-Abuse-and-DMCA-Info: Please be sure to forward a copy of ALL headers
X-Abuse-and-DMCA-Info: Otherwise we will be unable to process your complaint
properly
X-Postfilter: 1.3.31
Xref: g2news1.google.com rec.radio.amateur.space:693
```

Howdy from Bill K7MT

Chatted with Mike N3UC and he said batteries are looking good on AO-27 and its back on line. The 22:00 pass was loud and clear with N5AFV Allen, N3UC Mike, and myself making contacts.

If anyone know W1JMM let him know we all heard him loud and clear as he called CQ on AO-27 the entire pass. I don't think he was hearing the down link on 70cm.

Cheers Bill K7MT

```
From -7401837578149529075
X-Google-Thread: 10e8ad,f896b555b1e33542
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news3.google.com!news.glorb.com!meganewsservers.com!
feeder2.on.meganewsservers.com!newsfeed.telusplanet.net!newsfeed.telus.net!
clgrps12.POSTED!c92a1cd0!not-for-mail
From: Mike <Mike@nowhere.net>
Subject: Re: AO-27 Back Online
User-Agent: Pan/0.14.2.91 (As She Crawled Across the Table)
Newsgroups: rec.radio.amateur.space
```

References: <xtadnRJt9d4JkhDfRVn-ow@mt.net>
IfYouCanReadThisThen: POUND-SALT_HAHAHAHA
MIME-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 8bit
Lines: 20
Message-ID: <uVzje.7101$wr.2365@clgrps12>
Date: Sat, 21 May 2005 05:44:58 GMT
NNTP-Posting-Host: 199.126.155.198
X-Trace: clgrps12 1116654298 199.126.155.198 (Fri, 20 May 2005 23:44:58 MDT)
NNTP-Posting-Date: Fri, 20 May 2005 23:44:58 MDT
Xref: g2news1.google.com rec.radio.amateur.space:694

On Thu, 19 May 2005 16:13:38 -0600, William Erhardt wrote:

> Howdy from Bill K7MT
>
> Chatted with Mike N3UC and he said batteries are looking good on AO-27 and
> its back on line. The 22:00 pass was loud and clear with N5AFV Allen, N3UC
> Mike, and myself making contacts.
>
> If anyone know W1JMM let him know we all heard him loud and clear as he
> called CQ on AO-27 the entire pass. I don't think he was hearing the down
> link on 70cm.
>
> Cheers Bill K7MT

W@W W@W

Will try tomorrow.

73 de Mike VE6HMG

From 9029116601585596008
X-Google-Thread: 10e8ad,e0fc91c654908451,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news3.google.com!news.glorb.com!
border1.nntp.dca.giganews.com!border2.nntp.dca.giganews.com!nntp.giganews.com!
cyclone1.gnilink.net!spamkiller.gnilink.net!gnilink.net!trnddc01.POSTED!c7d2fcda!
not-for-mail
From: David Stinson <arc5@ix.netcom.com>
User-Agent: Mozilla/5.0 (Windows; U; Win98; en-US; rv:1.7.2) Gecko/20040804
Netscape/7.2 (ax)
X-Accept-Language: en-us, en
MIME-Version: 1.0
Newsgroups: rec.radio.amateur.space
Subject: Collins 62S-1 VHF Transverter FA
Content-Type: text/plain; charset=us-ascii; format=flowed
Content-Transfer-Encoding: 7bit
Lines: 5

Message-ID: <e4dke.8316$cd.7699@trnddc01>
Date: Mon, 23 May 2005 04:35:22 GMT
NNTP-Posting-Host: 71.96.5.109
X-Complaints-To: abuse@verizon.net
X-Trace: trnddc01 1116822922 71.96.5.109 (Mon, 23 May 2005 00:35:22 EDT)
NNTP-Posting-Date: Mon, 23 May 2005 00:35:22 EDT
Xref: g2news1.google.com rec.radio.amateur.space:695

You don't see this one often:

http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&Item=5776923356

Thanks for looking.

From 5979797789828727960
X-Google-Thread: 10e8ad,5257e146c292a233,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news4.google.com!news.glorb.com!atl-c03.usenetserver.com!elnk-atl-nf1!newsfeed.earthlink.net!stamper.news.atl.earthlink.net!newsread1.news.atl.earthlink.net.POSTED!25d11a97!not-for-mail
From: ---... <aba@ab.com>
Newsgroups: rec.radio.amateur.space
Subject: "THE FACE OF MARS", Mariner 9, plus 26---8"X10" Stills
Organization: --..
Message-ID: <jrbb91hrrfme1md2st6430retn96gq3rqt@4ax.com>
X-Newsreader: Forte Agent 1.91/32.564
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Lines: 6
Date: Thu, 26 May 2005 11:13:58 GMT
NNTP-Posting-Host: 65.148.165.23
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread1.news.atl.earthlink.net 1117106038 65.148.165.23 (Thu, 26 May 2005 04:13:58 PDT)
NNTP-Posting-Date: Thu, 26 May 2005 04:13:58 PDT
Xref: g2news1.google.com rec.radio.amateur.space:696

"THE FACE OF MARS", Mariner 9, plus 26---8"X10" Stills
http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&item=3977193129

Original Lobby Cards from Films of MARS
http://posterazzi.topcities.com/lists/scifi.htm

From 7768206233196570809
X-Google-Thread: 10e8ad,805884d36357a4af,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII
Path: g2news1.google.com!postnews.google.com!o13g2000cwo.googlegroups.com!not-for-

```
mail
From: "crusaders792002" <crusaders792002@yahoo.com>
Newsgroups: rec.radio.amateur.space
Subject: inmarsat-c
Date: 27 May 2005 03:58:55 -0700
Organization: http://groups.google.com
Lines: 14
Message-ID: <1117191535.677069.192780@o13g2000cwo.googlegroups.com>
NNTP-Posting-Host: 213.91.208.65
Mime-Version: 1.0
Content-Type: text/plain; charset="iso-8859-1"
Content-Transfer-Encoding: quoted-printable
X-Trace: posting.google.com 1117191541 29008 127.0.0.1 (27 May 2005 10:59:01 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Fri, 27 May 2005 10:59:01 +0000 (UTC)
User-Agent: G2/0.2
Complaints-To: groups-abuse@google.com
Injection-Info: o13g2000cwo.googlegroups.com; posting-host=213.91.208.65;
   posting-account=WKmZqg0AAAAaijpyFPSX5v1PFPsVUgiK
Xref: g2news1.google.com rec.radio.amateur.space:697

Can anyone help me? I can't find enough information about standard
Inmarsat-C. I found information about Inmarsat-C in the group
FAQ-Inmarsat, but this information isn't correctly. I built Matlab
receive model and I use Matlab BPSK demodulator. I tryied with this
demodulator, afterthat I changed it with Matlab DBPSK demodulator, but
results were mostly same. I didn't see synchroword and structure of
Inmarsat-C isn't correctly. Are synchroword and frame structure
correct? Can anyone to send me more information about my problem?
I'm familiar with standard Inmarsat-C, but I want to know more
information about structures of Inmarsat-C frame.


PS: My English isn't good. My e-mail:crusaders792...@yahoo.c=ADom



From -2748672420312526122
X-Google-Thread: 10e8ad,805884d36357a4af
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII
Path: g2news1.google.com!news3.google.com!news.glorb.com!news.tele.dk!not-for-mail
From: Stephan Walther-Larsen <swl@premiumrx.dk>
Newsgroups: rec.radio.amateur.space
Subject: Re: inmarsat-c
Date: Fri, 27 May 2005 17:25:36 +0200
Message-ID: <stee91d237j7pas6qlq5qlb8nq2t5khf5p@4ax.com>
References: <1117191535.677069.192780@o13g2000cwo.googlegroups.com>
X-Newsreader: Forte Agent 2.0/32.652
MIME-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 8bit
Lines: 14
```

```
Organization: TDC Totalloesninger
NNTP-Posting-Host: 80.196.155.128
X-Trace: 1117207540 dread11.news.tele.dk 266 80.196.155.128:5315
X-Complaints-To: abuse@post.tele.dk
Xref: g2news1.google.com rec.radio.amateur.space:698

On 27 May 2005 03:58:55 -0700, "crusaders792002"
<crusaders792002@yahoo.com> wrote:

>Can anyone help me? I can't find enough information about standard
>Inmarsat-C. I found information about Inmarsat-C in the group
>snip<
>information about structures of Inmarsat-C frame.
>
>
>PS: My English isn't good. My e-mail:crusaders792...@yahoo.c�om


you have an excellent english if english isnt your primary language.
Sadly i cant help you with the other stuff. Good luck



From -2378891259143416795
X-Google-Thread: 10e8ad,6c260b9de43b25a1,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news3.google.com!news.glorb.com!atl-c03.usenetserver.com!
pc01.usenetserver.com!KNOLOGY.NET-a2kHrUvQQWlmc!not-for-mail
From: Buck <iam@this.site>
Newsgroups: rec.radio.amateur.space
Subject: Re: cash
Date: Sun, 29 May 2005 15:51:01 -0400
Message-ID: <f47k91h1krh1do020clr1nlfsc1vm7k2g2@4ax.com>
References: <X5lme.32234$g12.3529@fe3.news.blueyonder.co.uk>
X-Newsreader: Forte Agent 1.93/32.576 English (American)
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
X-Complaints-To: abuse@usenetserver.com
Organization: UseNetServer.com
Lines: 22
X-Trace: 60da9429a1d10bd73ca8709333
Xref: g2news1.google.com rec.radio.amateur.space:699

On Sun, 29 May 2005 15:21:27 GMT, "mark new"
<mn011q7024@blueyonder.co.uk> wrote:
<snip>
>READING THIS COULD CHANGE YOUR LIFE!
<snip>

>**REMEMBER, THE MORE NEWSGROUPS YOU POST IN, THE MORE MONEY      YOU WILL
>MAKE!! BUT YOU HAVE TO POST A MINIMUM OF 200**
```

Yeah, right, the more newsgroups you post to, the more likely you will get suspended from your ISP, the more likely you will lose your email account and the more likely that the post office will send a postal inspector to your home to investigate your 'legal' crime!

It'll change your life, alright!

Buck
--
For what it's worth.

From 3660141214926919871
X-Google-Thread: 10e8ad,77375586fb34026,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news4.google.com!news.glorb.com!border1.nntp.dca.giganews.com!nntp.giganews.com!local01.nntp.dca.giganews.com!nntp.bright.net!news.bright.net.POSTED!not-for-mail
NNTP-Posting-Date: Sat, 04 Jun 2005 18:01:59 -0500
Date: Sat, 04 Jun 2005 23:03:10 +0000
From: Scott <acepilot@bloomer.net>
User-Agent: Mozilla/5.0 (Windows; U; Windows NT 5.0; en-US; rv:1.7.2) Gecko/20040804 Netscape/7.2 (ax)
X-Accept-Language: en-us, en
MIME-Version: 1.0
Newsgroups: rec.radio.amateur.space
Subject: Uplink vs Downlink freq on HAMSAT?
Content-Type: text/plain; charset=us-ascii; format=flowed
Content-Transfer-Encoding: 7bit
Message-ID: <PtydndegIYp6rz_fRVn-3Q@bright.net>
Lines: 14
NNTP-Posting-Host: 64.33.199.218
X-Trace: sv3-UzNkYhnRyKqs0lUTdsAUV2LZEzs7N4ltSgyz//QW5mxx5WPwbr3hJuxAkE+XLHGaNBtl3djQ5+lojav!Et28n32dsf65A8vRukvoAfAk4b9/atpSMZCkkvlv+T5lBnKQw9XtxyTtVn+IeYDKQZ3W7aaU
X-Complaints-To: abuse@bright.net
X-DMCA-Complaints-To: abuse@bright.net
X-Abuse-and-DMCA-Info: Please be sure to forward a copy of ALL headers
X-Abuse-and-DMCA-Info: Otherwise we will be unable to process your complaint properly
X-Postfilter: 1.3.32
Xref: g2news1.google.com rec.radio.amateur.space:700

The data on VO-52 (HamSat) says:

VUSat-OSCAR 52 (HamSat or VUSat)
Uplink   435.220-435.280 MHz LSB/CW
Downlink   145.870-145.930 USB/CW (Inverting)

Now for the $64K question:

If listening for the downlink at 145.870, would the uplink frequency be
435.220 or 435.280? I would think it would be bad practice to send a
string of CW dits to find out...

Scott
N0EDV

From -2816190319025606634
X-Google-Thread: 10e8ad,77375586fb34026
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news4.google.com!news.glorb.com!hwmnpeer01.lga!hwmedia!
news-server.columbus.rr.com!tornado.ohiordc.rr.com.POSTED!53ab2750!not-for-mail
From: Christopher Cox <chrisTOPHERcOX@coboxincORPOATED.comERCIAL>
User-Agent: Mozilla Thunderbird 1.0.2 (Windows/20050317)
X-Accept-Language: en-us, en
MIME-Version: 1.0
Newsgroups: rec.radio.amateur.space
Subject: Re: Uplink vs Downlink freq on HAMSAT?
References: <PtydndegIYp6rz_fRVn-3Q@bright.net>
In-Reply-To: <PtydndegIYp6rz_fRVn-3Q@bright.net>
Content-Type: text/plain; charset=ISO-8859-1; format=flowed
Content-Transfer-Encoding: 7bit
Lines: 26
Message-ID: <EWAoe.23585$XA6.22164@tornado.ohiordc.rr.com>
Date: Sun, 05 Jun 2005 10:59:48 GMT
NNTP-Posting-Host: 24.210.62.5
X-Complaints-To: abuse@rr.com
X-Trace: tornado.ohiordc.rr.com 1117969188 24.210.62.5 (Sun, 05 Jun 2005 06:59:48
EDT)
NNTP-Posting-Date: Sun, 05 Jun 2005 06:59:48 EDT
Organization: Road Runner High Speed Online http://www.rr.com
Xref: g2news1.google.com rec.radio.amateur.space:701

Scott wrote:
> The data on VO-52 (HamSat) says:
>
> VUSat-OSCAR 52 (HamSat or VUSat)
> Uplink   435.220-435.280 MHz LSB/CW
> Downlink   145.870-145.930 USB/CW (Inverting)
>
> Now for the $64K question:
>
> If listening for the downlink at 145.870, would the uplink frequency be
> 435.220 or 435.280? I would think it would be bad practice to send a
> string of CW dits to find out...
>
> Scott
> N0EDV

The key word would be 'Inverting', so transmiting on 435.28 should net a signal on 145.87.

As for sending a string of dits.... well.... seems to standard practice at times.

Regards,

Christopher Cox

From -8640915829931777283
X-Google-Thread: 10e8ad,77375586fb34026
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!news2.google.com!newsread.com!news-xfer.newsread.com!newspeer.monmouth.com!newsfeed.icl.net!newsfeed.fjserv.net!diablo.theplanet.net!newsfeed1.swip.net!swipnet!nntpserver.swip.net!not-for-mail
Message-ID: <42A31E50.1090304@nowhere.com>
From: Leif Holmgren <nobody@nowhere.com>
User-Agent: Mozilla/5.0 (Windows; U; Windows NT 5.0; en-US; rv:1.0.2) Gecko/20021120 Netscape/7.01
X-Accept-Language: sv, en-us, en
MIME-Version: 1.0
Newsgroups: rec.radio.amateur.space
Subject: Re: Uplink vs Downlink freq on HAMSAT?
References: <PtydndegIYp6rz_fRVn-3Q@bright.net>
<EWAoe.23585$XA6.22164@tornado.ohiordc.rr.com>
Content-Type: text/plain; charset=us-ascii; format=flowed
Content-Transfer-Encoding: 7bit
Lines: 19
Date: Sun, 05 Jun 2005 17:46:24 +0200
NNTP-Posting-Host: 213.101.96.53
X-Complaints-To: news-abuse@swip.net
X-Trace: nntpserver.swip.net 1117986394 213.101.96.53 (Sun, 05 Jun 2005 17:46:34 MET DST)
NNTP-Posting-Date: Sun, 05 Jun 2005 17:46:34 MET DST
Organization: A Customer of Tele2
Xref: g2news1.google.com rec.radio.amateur.space:702

Christopher Cox wrote:
> Scott wrote:
>
> The key word would be 'Inverting', so transmiting on 435.28 should net a
> signal on 145.87.

But then there is also doppler shift to take into account.

> As for sending a string of dits.... well.... seems to standard practice
> at times.

Even if you have a good piece of software and your rig connected to your computer to get autocompensation for doppler, you will have to do something to find yourself. A string of dits may be the solution but keep it short and on low power (even lower than your normal traffic power)

/Leif

```
From 6684092417182880902
X-Google-Thread: 10e8ad,77375586fb34026
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news4.google.com!news.glorb.com!bigfeed.bellsouth.net!
bignumber.bellsouth.net!news.bellsouth.net!bignews4.bellsouth.net.POSTED!0d2518b7!
not-for-mail
From: "John Cummings" <n4bkn.no@spam.bellsouth.net>
Newsgroups: rec.radio.amateur.space
References: <PtydndegIYp6rz_fRVn-3Q@bright.net>
Subject: Re: Uplink vs Downlink freq on HAMSAT?
Lines: 22
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1478
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1478
Message-ID: <TqGoe.56445$6k7.43173@bignews4.bellsouth.net>
X-Complaints-To: abuse@bellsouth.net
X-Abuse-Info: Please forward a copy of all headers for proper handling
X-Trace:
npbhgpngjbkmjfegdbdpiflmbcekedmfhojhikkbagflhcbohbfbpakjbnodkildpfjpjhpeoccjkojanp
nnpbocbcmgalkckenggcopcoobjfcogahfahiidcgejhaiggjdbombbbcihefmaeemjjnagdfafjfd
NNTP-Posting-Date: Sun, 05 Jun 2005 13:15:31 EDT
Organization: BellSouth Internet Service
Date: Sun, 5 Jun 2005 08:07:34 -0600
Xref: g2news1.google.com rec.radio.amateur.space:703
```

Scott wrote:

> The data on VO-52 (HamSat) says:
>
> VUSat-OSCAR 52 (HamSat or VUSat)
> Uplink 435.220-435.280 MHz LSB/CW
> Downlink   145.870-145.930 USB/CW (Inverting)
>
> Now for the $64K question:
>
> If listening for the downlink at 145.870, would the uplink frequency
> be 435.220 or 435.280? I would think it would be bad practice to send
> a string of CW dits to find out...
>
> Scott
> N0EDV

Not only is the modulation turned over, so is the band edge. USB from

LSB, 145.870 from 435.280 MHz.

John, N4BKN

```
From 312912285095844457
X-Google-Thread: 10e8ad,77375586fb34026
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news3.google.com!news.glorb.com!
newscon02.news.prodigy.com!prodigy.net!newsmst01b.news.prodigy.com!prodigy.com!
postmaster.news.prodigy.com!newssvr33.news.prodigy.com.POSTED!fecf5165!not-for-
mail
From: "news.prodigy.net" <kd6ire@yahoo.com>
Newsgroups: rec.radio.amateur.space
References: <PtydndegIYp6rz_fRVn-3Q@bright.net>
<TqGoe.56445$6k7.43173@bignews4.bellsouth.net>
Subject: Re: Uplink vs Downlink freq on HAMSAT?
Lines: 38
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.2180
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.2180
X-RFC2646: Format=Flowed; Original
Message-ID: <TzPoe.186$Oq7.111@newssvr33.news.prodigy.com>
NNTP-Posting-Host: 209.233.33.26
X-Complaints-To: abuse@prodigy.net
X-Trace: newssvr33.news.prodigy.com 1118029171 ST000 209.233.33.26 (Sun, 05 Jun
2005 23:39:31 EDT)
NNTP-Posting-Date: Sun, 05 Jun 2005 23:39:31 EDT
Organization: SBC http://yahoo.sbc.com
X-UserInfo1: OP[[BUBDGJWSP_@YMZJ\_Q\@TJ_ZTB\MV@BD]
\YIJYWZUYICD^RAQBKZQTZTX\_I[^G_KGFNON[ZOE_AZNVO^\XGGNTCIRPIJH[@RQKBXLRZ@CD^HKANYVW
@RLGEZEJN@\_WZJBNZYYKVIOR]T]MNMG_Z[YVWSCH_Q[GPC_A@CARQVXDSDA^M]@DRVUM@RBM
Date: Mon, 06 Jun 2005 03:39:31 GMT
Xref: g2news1.google.com rec.radio.amateur.space:704
```

With the right rig control software running you will hear yourself when the satellite comes into view and then make minor adjustments to fine tune your audio for the doppler shift. SatPC32 tracking software can provide this tracking amoung many others. If the software is working you should be withing a few 100 hz on most satellites.

I use a locally developed software from AC6P and it normally puts me right on frequency for each satellite with little or no tuning.

Don
KD6IRE

"John Cummings" <n4bkn.no@spam.bellsouth.net> wrote in message
news:TqGoe.56445$6k7.43173@bignews4.bellsouth.net...

> Scott wrote:
>> The data on VO-52 (HamSat) says:
>>
>> VUSat-OSCAR 52 (HamSat or VUSat)
>> Uplink 435.220-435.280 MHz LSB/CW
>> Downlink   145.870-145.930 USB/CW (Inverting)
>>
>> Now for the $64K question:
>>
>> If listening for the downlink at 145.870, would the uplink frequency
>> be 435.220 or 435.280? I would think it would be bad practice to send
>> a string of CW dits to find out...
>>
>> Scott
>> N0EDV
>
> Not only is the modulation turned over, so is the band edge. USB from
> LSB, 145.870 from 435.280 MHz.
>
> John, N4BKN
>
>

From -1316227587785345306
X-Google-Thread: 10e8ad,77375586fb34026
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news3.google.com!news.glorb.com!
border1.nntp.dca.giganews.com!nntp.giganews.com!local01.nntp.dca.giganews.com!
nntp.bright.net!news.bright.net.POSTED!not-for-mail
NNTP-Posting-Date: Mon, 06 Jun 2005 06:12:12 -0500
Date: Mon, 06 Jun 2005 11:13:25 +0000
From: Scott <acepilot@bloomer.net>
User-Agent: Mozilla/5.0 (Windows; U; Windows NT 5.0; en-US; rv:1.7.2) Gecko/
20040804 Netscape/7.2 (ax)
X-Accept-Language: en-us, en
MIME-Version: 1.0
Newsgroups: rec.radio.amateur.space
Subject: Re: Uplink vs Downlink freq on HAMSAT?
References: <PtydndegIYp6rz_fRVn-3Q@bright.net>
<EWAoe.23585$XA6.22164@tornado.ohiordc.rr.com> <42A31E50.1090304@nowhere.com>
In-Reply-To: <42A31E50.1090304@nowhere.com>
Content-Type: text/plain; charset=us-ascii; format=flowed
Content-Transfer-Encoding: 7bit
Message-ID: <3dadnQcFnowQsjnfRVn-2A@bright.net>
Lines: 31
NNTP-Posting-Host: 64.33.199.218
X-Trace: sv3-McxBuWi6PQ7ps3ijtLgNwu01xoks/
h+prbO6+HMIFQSDsmuwjWWcCkgfvydEjncqFnhRKkXYxCPa9vi!
B39WXS4iwoB7ozRN3W+pIaw6ECVO5k3wbjFLeLX4QkLDVD3Ukpxeo5mTK+UBIvauvz540Odr

X-Complaints-To: abuse@bright.net
X-DMCA-Complaints-To: abuse@bright.net
X-Abuse-and-DMCA-Info: Please be sure to forward a copy of ALL headers
X-Abuse-and-DMCA-Info: Otherwise we will be unable to process your complaint properly
X-Postfilter: 1.3.32
Xref: g2news1.google.com rec.radio.amateur.space:705

I was just looking for a starting point of trying to figure out a math formula to predict approximately where my uplink signal would have to be to find myself on the downlink at a specific frequency, +/- doppler.

Scott
N0EDV

Leif Holmgren wrote:

> Christopher Cox wrote:
>
>> Scott wrote:
>>
>> The key word would be 'Inverting', so transmiting on 435.28 should net
>> a signal on 145.87.
>
>
> But then there is also doppler shift to take into account.
>
>
>> As for sending a string of dits.... well.... seems to standard
>> practice at times.
>
>
> Even if you have a good piece of software and your rig connected to your
> computer to get autocompensation for doppler, you will have to do
> something to find yourself. A string of dits may be the solution but
> keep it short and on low power (even lower than your normal traffic power)
>
> /Leif
>

From 6144648259412026270
X-Google-Thread: 10e8ad,77375586fb34026
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news3.google.com!news2.google.com!news.maxwell.syr.edu!newsfeed.icl.net!newsfeed.fjserv.net!news.tele.dk!news.tele.dk!small.news.tele.dk!newsfeed1.swip.net!swipnet!nntpserver.swip.net!not-for-mail
Message-ID: <42A6186D.3080701@nowhere.com>
From: Leif Holmgren <nobody@nowhere.com>
User-Agent: Mozilla/5.0 (Windows; U; Windows NT 5.0; en-US; rv:1.0.2) Gecko/20021120 Netscape/7.01
X-Accept-Language: sv, en-us, en

MIME-Version: 1.0
Newsgroups: rec.radio.amateur.space
Subject: Re: Uplink vs Downlink freq on HAMSAT?
References: <PtydndegIYp6rz_fRVn-3Q@bright.net>
<EWAoe.23585$XA6.22164@tornado.ohiordc.rr.com> <42A31E50.1090304@nowhere.com>
<3dadnQcFnowQsjnfRVn-2A@bright.net>
Content-Type: text/plain; charset=us-ascii; format=flowed
Content-Transfer-Encoding: 7bit
Lines: 30
Date: Tue, 07 Jun 2005 23:58:05 +0200
NNTP-Posting-Host: 213.101.93.125
X-Complaints-To: news-abuse@swip.net
X-Trace: nntpserver.swip.net 1118181484 213.101.93.125 (Tue, 07 Jun 2005 23:58:04 MET DST)
NNTP-Posting-Date: Tue, 07 Jun 2005 23:58:04 MET DST
Organization: A Customer of Tele2
Xref: g2news1.google.com rec.radio.amateur.space:706

Downlink = 581.15 - Uplink
Uplink = 581.15 - Downlink

Regarding doppler shift compensation:
At approach your signals to the sat will be at a higher fq when they reach the sat then where you transmit. Since the transponder is inverting the sigs will be retransmitted at a lower frequency then the formulas above indicate. However as signals travel to you the doppler shift will move them higher again, but only with 1/3 as much as in the other direction (2m vs 70cm).

So:
Set your software to indicate doppler shift on 291.8MHz (2* mid band 2m)

Then use:
Your RX QRG = 581.15 - Your TX QRG - indicated doppler shift at 291.8MHz
Note that when the bird is going away you will be subtracting a negative number for doppler shift.

/Leif

Scott wrote:
> I was just looking for a starting point of trying to figure out a math
> formula to predict approximately where my uplink signal would have to be
> to find myself on the downlink at a specific frequency, +/- doppler.
>
> Scott
> N0EDV
>

From -3559601921836358859
X-Google-Thread: 10e8ad,77375586fb34026
X-Google-Attributes: gid10e8ad,public

X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news4.google.com!news.glorb.com!border1.nntp.dca.giganews.com!nntp.giganews.com!local01.nntp.dca.giganews.com!nntp.bright.net!news.bright.net.POSTED!not-for-mail
NNTP-Posting-Date: Tue, 07 Jun 2005 19:27:35 -0500
Date: Wed, 08 Jun 2005 00:28:49 +0000
From: Scott <acepilot@bloomer.net>
User-Agent: Mozilla/5.0 (Windows; U; Windows NT 5.0; en-US; rv:1.7.2) Gecko/20040804 Netscape/7.2 (ax)
X-Accept-Language: en-us, en
MIME-Version: 1.0
Newsgroups: rec.radio.amateur.space
Subject: Re: Uplink vs Downlink freq on HAMSAT?
References: <PtydndegIYp6rz_fRVn-3Q@bright.net> <EWAoe.23585$XA6.22164@tornado.ohiordc.rr.com> <42A31E50.1090304@nowhere.com> <3dadnQcFnowQsjnfRVn-2A@bright.net> <42A6186D.3080701@nowhere.com>
In-Reply-To: <42A6186D.3080701@nowhere.com>
Content-Type: text/plain; charset=us-ascii; format=flowed
Content-Transfer-Encoding: 7bit
Message-ID: <p5mdnVKKyKvlpjvfRVn-jA@bright.net>
Lines: 31
NNTP-Posting-Host: 64.33.199.218
X-Trace: sv3-BKFwdHBa521NjSbWuS/jd5SiZPrE269miT/8jq3MreehDgMm56lDrMYnEJ33qC8/AcYi4/9w822pf6z!+OHOKX84le1A96Iy4hVvR/LIrA3WmRth+NundNd0Om25l3GOBzwEpwEgH4EXygZi8ZdQli5W
X-Complaints-To: abuse@bright.net
X-DMCA-Complaints-To: abuse@bright.net
X-Abuse-and-DMCA-Info: Please be sure to forward a copy of ALL headers
X-Abuse-and-DMCA-Info: Otherwise we will be unable to process your complaint properly
X-Postfilter: 1.3.32
Xref: g2news1.google.com rec.radio.amateur.space:707

Thanks Leif,

I'll see if I can plug some of those numbers into my tracking program to compute doppler shift a little better and see how it works out...

Scott
N0EDV

Leif Holmgren wrote:

> Downlink = 581.15 - Uplink
> Uplink = 581.15 - Downlink
>
> Regarding doppler shift compensation:
> At approach your signals to the sat will be at a higher fq when they
> reach the sat then where you transmit. Since the transponder is
> inverting the sigs will be retransmitted at a lower frequency then the
> formulas above indicate. However as signals travel to you the doppler
> shift will move them higher again, but only with 1/3 as much as in the
> other direction (2m vs 70cm).

>
> So:
> Set your software to indicate doppler shift on 291.8MHz (2* mid band 2m)
>
> Then use:
> Your RX QRG = 581.15 - Your TX QRG - indicated doppler shift at 291.8MHz
> Note that when the bird is going away you will be subtracting a negative
> number for doppler shift.
>
> /Leif
>

From -6009612206936534003
X-Google-Thread: 10e8ad,55e75337ee1f544c,start
X-Google-Thread: 113975,55e75337ee1f544c,start
X-Google-Attributes: gid10e8ad,gid113975,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news4.google.com!news.glorb.com!feeder.xsnews.nl!feeder1.cambrium.nl!feed.tweaknews.nl!195.238.0.32.MISMATCH!skynet.be!newspost001!tjb!not-for-mail
From: Chris Steyaert <observations@rmob.org>
Newsgroups: rec.radio.amateur.space,sci.astro.amateur
Subject: Radio Meteor Obs. Bull. May 2005 eta Aquarids
Date: Thu, 09 Jun 2005 20:58:41 +0200
Message-ID: <1a4ha1hn1c23p2ra7ah16b23ao32t9dqvs@4ax.com>
X-Newsreader: Forte Agent 1.93/32.576 English (American)
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Lines: 16
Organization: -= Belgacom Usenet Service =-
NNTP-Posting-Host: 86bc42f7.news.skynet.be
X-Trace: 1118343446 news.skynet.be 315 81.247.120.10:10075
X-Complaints-To: usenet-abuse@skynet.be
Xref: g2news1.google.com rec.radio.amateur.space:708 sci.astro.amateur:56557

Radio Meteor Observation Bulletin No. 142 of May 2005 (67 K) is available now as

http://visualrmob.free.fr/rmobtext/rmob0505.txt

More information and the visual presentation of the hourly forward scatter counts can be found on

http://www.rmob.org

http://radio.data.free.fr

Chris

From 924184587486135424
X-Google-Thread: 10e8ad,77375586fb34026
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news3.google.com!news.glorb.com!
border1.nntp.dca.giganews.com!nntp.giganews.com!local01.nntp.dca.giganews.com!
nntp.mt.net!news.mt.net.POSTED!not-for-mail
NNTP-Posting-Date: Thu, 09 Jun 2005 18:43:35 -0500
Reply-To: "William Erhardt" <erhardt@mt.net>
From: "William Erhardt" <erhardt@mt.net>
Newsgroups: rec.radio.amateur.space
References: <PtydndegIYp6rz_fRVn-3Q@bright.net>
Subject: Re: Uplink vs Downlink freq on HAMSAT?
Date: Thu, 9 Jun 2005 17:43:29 -0600
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1437
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1441
Message-ID: <PaSdnaF-Upq6STXfRVn-qQ@mt.net>
Lines: 25
NNTP-Posting-Host: 206.127.67.85
X-Trace: sv3-5D4OaFMZifQIUTFVKZNePjZ3FtIrDCDpvh9obbVssNHUipUYOHKn/
hfKonTbtsQvYoeIYvt+wjXkmL4!Piy9Bq02toLN26FY9UXnKzIyXWupx16tD7TgUnRsvmi/QVm/
RXyI3dcBxBJKUg==
X-Complaints-To: abuse@mt.net
X-DMCA-Complaints-To: abuse@mt.net
X-Abuse-and-DMCA-Info: Please be sure to forward a copy of ALL headers
X-Abuse-and-DMCA-Info: Otherwise we will be unable to process your complaint
properly
X-Postfilter: 1.3.32
Xref: g2news1.google.com rec.radio.amateur.space:709

Howdy Scott.

Bill Erhardt K7MT in Helena, Mt.

Set your receive for 145.900 (Center of transponder down link) then your
transmit to 435.250 (Center of transponder uplink)

With transmitter set to 435.250 your receive will be on 145.893 or down
about 7 KCS from center of 145.900 when the satellite comes into view. If
you adjust your transmit down 7 kcs your receive will be right on 145.900.
As you know this shifts as the bird approaches goes away. Recommend finding
your down link then adjusting your transmitter on 70cm to stay on frequency.
This is opposite for FO-29 as your find your downlink and adjust your
receive to follow the signal down.

Rule of thumb I was told is you adjust the 70 cm side to stay on frequency.

Please remember lower half of the transponder is for CW and upper half is
for voice by gentlemans agreement.

Hope this helps Scott.

Bill K7MT AMSAT 33461

```
From -85754057032969785
X-Google-Thread: 10e8ad,bfc31f7d5f825cec,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news4.google.com!news.glorb.com!
border1.nntp.dca.giganews.com!border2.nntp.dca.giganews.com!nntp.giganews.com!
elnk-atl-nf1!newsfeed.earthlink.net!stamper.news.atl.earthlink.net!
newsread2.news.atl.earthlink.net.POSTED!46041641!not-for-mail
From: "JoAnne Maenpaa" <wb9jej_no-spam@earthlink.net>
Newsgroups: rec.radio.amateur.space
Subject: ANS-163 AMSAT News Service Bulletins
Lines: 459
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <ca0re.4089$pa3.187@newsread2.news.atl.earthlink.net>
Date: Sun, 12 Jun 2005 19:37:44 GMT
NNTP-Posting-Host: 66.167.222.67
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread2.news.atl.earthlink.net 1118605064 66.167.222.67 (Sun, 12 Jun
2005 12:37:44 PDT)
NNTP-Posting-Date: Sun, 12 Jun 2005 12:37:44 PDT
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news1.google.com rec.radio.amateur.space:710
```

AMSAT NEWS SERVICE
ANS-163

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:

- Call for papers-2005 AMSAT Space Symposium and Annual Meeting
- AMSAT Board of Directors Nominations Due
- AO-51 Configuration for Field Day
- OSCAR-11 Reception Reports Sought

* AMSAT Journal Needs Authors
* Field Day Pictures, Please
* SETTI Express Launch Date
* AMSAT Awards Announcement
* Keplerian Elements Now Available for PDA
* ARISS Status - 06 June 2005

SB SAT @ AMSAT $ANS-163.01
Call for papers-2005 AMSAT Space Symposium and Annual Meeting

AMSAT News Service Bulletin 163.01
From AMSAT HQ SILVER SPRING, MD.
June 12, 2005
To All RADIO AMATEURS
BID: $ANS-163.01

This is the third call for papers for the 2005 AMSAT Space Symposium and Annual Meeting to be held October 7 - 9, 2005 in Lafayette, Louisiana. Proposals for papers and symposium presentations are invited on any topic of interest to the amateur satellite program.

We request a one-page abstract by June 15, 2005. Camera ready copy on paper or in electronic form will be due by August 1, 2005 for inclusion in the printed symposium proceedings. Abstracts and papers should be sent to n8fgv@amsat.org

[ANS thanks Dan, N8FGV for the above information]

/EX

SB SAT @ AMSAT $ANS-163.02
AMSAT Board of Directors Nominations Due

AMSAT News Service Bulletin 163.02
From AMSAT HQ SILVER SPRING, MD.
June 12, 2005
To All RADIO AMATEURS
BID: $ANS-163.02

This is a note to remind everyone that the deadline for nominations for the open Board of Director positions is June 15th. Nominations must be submitted via regular mail; e-mail is not acceptable in this instance. Please mail your nominations to Martha Saragovitz in the Silver Spring, Maryland office.

Regards,
Stephen Diggs
AMSAT Corporate Secretary

[ANS thanks Steve, W4EPI for the above information]

/EX

SB SAT @ AMSAT $ANS-163.03
AO-51 Configuration for Field Day

AMSAT News Service Bulletin 163.03
From AMSAT HQ SILVER SPRING, MD.
June 12, 2005
To All RADIO AMATEURS
BID: $ANS-163.03

AO-51 Field Day Announcement from the Echo Operations Group

For the ARRL Field Day Event this year AO-51 will be configured in Mode V/S FM Repeater. The uplink will be 145.920 mHz. The 67 Hz tone will NOT be used. The downlink will be 2401.200 mHz. There will be a long duration operating session leading up to Field Day when AO-51 will be configured in Mode V/S to give users the opportunity to test their Field Day stations. In June, AO-51 will be in Mode V/S the weekend and entire week before Field Day. Take advantage of these operating sessions to setup and test your Field Day station before the actual day arrives.

Working the Mode S downlink on AO-51 does not require a large investment in equipment for your Field Day station. A satellite dish is not required to operate this mode. Gould, WA4SXM, copied the S downlink using just his G3RUH patch feed during the early days of testing the S band transmitter on Echo. Drew, KO4MA, has operated portable with a Transystems downconverter using the dipole feed and a corner reflector on numerous occasions. Mike, KE4AZN, has operated portable with either a 3.5 turn helix feed (feed only, no dish) or a homebrew K5OE patch antenna, held out the window of the car. Mike has also operated mobile on Mode V/S by attaching the helix feed and downconverter to the trunk of the car. Clare, VE3NPC, has reported excellent receive signals using a 3.5 turn helix and a K5GNA downconverter. Any of these Amsat members can be contacted at their "@amsat.org" email address and would be happy to help Field Day users get setup for Mode V/S. If your IF is on VHF (which most are), an HT or other mobile FM rig will work fine as your downlink receiver. The large 5 kHz steps of these radios actually make tuning the fast moving Doppler on S band much easier.

Use the scheduled Mode V/S sessions to practice before heading out for Field Day. If you have not worked the S band downlink on AO-51 previously, a few passes monitoring the downlink and practicing the Doppler correction will be very helpful. The Doppler shift on an AO-51 pass is approximately +/- 50 kHz. There will be lots of activity on Field Day, therefore getting your Receive capability working well before transmitting to the satellite, will keep your station from causing unnecessary QRM.

The uplink for AO-51 does not require a large Yagi antenna to be successful. Any good mobile omni direction whip antenna or other omni directional antenna will work fine, especially if all stations work together during the passes and not try to dominate the satellite. Therefore, it should not be difficult to setup an antenna that will work for the uplink to AO-51. If you have a Field Day station with Mode V/U capability, you already have the uplink covered.

A webpage will be setup with a few pictures and text on various AO-51 Mode V/S station options. This will not include every option available, but will hopefully assist a new Mode V/S user with some ideas to get started setting up their station, and show that is it not difficult to get setup and working the S downlink on AO-51.

Web URL: http://www.graceba.net/~mkmk518/echofieldday.html

With the V/S configuration of AO-51 and the other satellites available, we will have a nice compliment of modes to operate during Field Day.

73 KE4AZN for the Echo Operations Group

[ANS thanks Mike, KE4AZN for the above information]

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SB SAT @ AMSAT $ANS-163.04
OSCAR-11 Reception Reports Sought

AMSAT News Service Bulletin 163.04
From AMSAT HQ SILVER SPRING, MD.
June 12, 2005
To All RADIO AMATEURS
BID: $ANS-163.04

There is a small chance that OSCAR-11 may have started transmitting again between 08 June to 10 June.

The frequency is 145.826.

Any reception reports would be appreciated. Please reply direct to Clive G3CWV (g3cwv@amsat.org), or post reports to AMSAT-BB.

[ANS thanks Clive, G3CWV for the above information]

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SB SAT @ AMSAT $ANS-163.05
AMSAT Journal Needs Authors

AMSAT News Service Bulletin 163.05
From AMSAT HQ SILVER SPRING, MD.
June 12, 2005
To All RADIO AMATEURS
BID: $ANS-163.05

The AMSAT Journal needs the services of writers who have the talents to interview AMSAT members who have done projects that need to be shared with all our members.

Such reporters can interview these outstanding people via phone and develop outstanding articles. Respondents should have a background in writing and/or reporting with good interview and writing skills. If you have such a background, and you are willing to help, please contact Gunther Meisse via e-mail: w8gsm@amsat.org.

[ANS thanks Gunther, W8GSM for the above information]

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SB SAT @ AMSAT $ANS-163.06
Field Day Pictures, Please

AMSAT News Service Bulletin 163.06
From AMSAT HQ SILVER SPRING, MD.
June 12, 2005
To All RADIO AMATEURS
BID: $ANS-163.06

I would like pictures of kids operating satellites on Field Day 2005 for use in our AMSAT printed materials. Please e-mail to Gunther Meisse, W8GSM at w8gsm@amsat.org. Thanks in advance for your help.

[ANS thanks Gunther, W8GSM for the above information]

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SB SAT @ AMSAT $ANS-163.07
SETTI Express Launch Date

AMSAT News Service Bulletin 163.07
From AMSAT HQ SILVER SPRING, MD.
June 12, 2005
To All RADIO AMATEURS
BID: $ANS-163.07

Via the weekly news from RSGB: Sunday 5 June 2005

The launch date for SSETI Express and three 'cubesats' has now been confirmed as 25 August, with the next day, the 26th, as a back-up.

The satellite has now completed all its pre-launch tests and is presently back in the clean room where everything is having a final checkout and where the cubesats are being loaded into their launchers.

Current plans show that the satellite will be packed and ready for despatch to the launch site during the last week of June.

SSETI Express will automatically downlink general telemetry at 9K6 on 70cm and it will also be possible for amateurs to request specific downloads.

It is planned that the 38K4 telemetry transmitter on 2.4GHz will also be available for amateur voice operation as a Mode U/S transponder after initial tests on the satellite have been completed.

AMSAT-UK provided the 2.4GHz transmitter for the satellite and a presentation on SSETI Express will be given at the AMSAT-UK Space Colloquium to be held from 29 to 31 July at the University of Surrey in Guildford. All amateurs and SWLs are welcome to attend.

[ANS thanks RSGB for the above information]

/EX

SB SAT @ AMSAT $ANS-163.08
AMSAT Awards Announcement

AMSAT News Service Bulletin 163.08
From AMSAT HQ SILVER SPRING, MD.
June 12, 2005
To All RADIO AMATEURS
BID: $ANS-163.08

AMSAT Director of Contests and Awards, Bruce Paige, KK5DO, reports congratulations go out to all of the following:

Amanda Karr, KI4IWS, Satellite Communicators Club and also new member of AMSAT.

Sebastiano Trovato, IW9HBY, 51 on 51 Award #26
Otfried Fuhrmann, DL2DRD, 51 on 51 Award #27

To see all the awards visit http://www.amsat.org or http://www.amsatnet.com

[ANS thanks Bruce, KK5DO for the above information]

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SB SAT @ AMSAT $ANS-163.09
Keplerian Elements Now Available for PDA

AMSAT News Service Bulletin 163.09

From AMSAT HQ SILVER SPRING, MD.
June 12, 2005
To All RADIO AMATEURS
BID: $ANS-163.09

For those of you using PocketSat or PocketSat+ satellite tracking program for PalmOS PDAs, the weekly Keplerian elements bulletins from AMSAT are now available in PDB format for direct import into the program. The PDB file will be updated automatically each week, shortly after the Keplerian elements bulletins go out to the KEPS mailing list. (This is permitted as a secondary redistribution of the AMSAT Keps bulletins.)

You can get the weekly PDB file with a web browser from:

http://www.amsat.org/amsat/ftp/keps/current/amsat.pdb

... or you can use an FTP program to get them from host ftp.amsat.org, directory /amsat/keps/current, filename amsat.pdb. Username "anonymous", and use your email address for the password. Download in binary mode.

For info on PocketSat and PocketSat+, including instructions on how to import elements from a PDB file, see the BigFatTail Productions web site at http://www.bigfattail.com (not affiliated with AMSAT).

For other programs, the same directory contains the elements in three other formats: AMSAT verbose format and NASA two-line format, both formatted as packet BBS bulletins, and NASA two-line format stripped of all extraneous text. Here are the URLs for those formats:

http://www.amsat.org/amsat/ftp/keps/current/amsat.all
http://www.amsat.org/amsat/ftp/keps/current/nasa.all
http://www.amsat.org/amsat/ftp/keps/current/nasabare.txt

One of these formats should satisfy most satellite tracking programs. For more about Keplerian elements in general, see http://www.amsat.org/amsat-new/tools/keps.php

[ANS thanks Paul, KB5MU for the above information]

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SB SAT @ AMSAT $ANS-163.10
ARISS Status - 06 June 2005

AMSAT News Service Bulletin 163.10
From AMSAT HQ SILVER SPRING, MD.
June 12, 2005
To All RADIO AMATEURS
BID: $ANS-163.10

ARISS Status
June 6, 2005

1. Australian School Contact Successful

On Thursday, June 2, students from Brigidine College in Sydney, New South Wales, Australia spoke directly with the ISS via amateur radio. Eighteen girls were able to ask their questions of John Phillips, KE5DRY, as an audience of two hundred gathered in the auditorium. Two Sydney television stations and other media covered the event. Matt Ryan, the teacher responsible for organizing the contact, remarked, "Students were tracking the space craft, controlling the directional antenna, operating the radio transmitter and talking to an astronaut. Science doesn't come into the classroom better than this."

2. Upcoming School Contacts

Ecole De la Source, Mascouche, Quebec, Canada, has been scheduled for a contact on Friday, June 17 at 13:34 UTC.

3. SuitSat Status

The SuitSat Educational Proposal has been translated into several languages, and distributed to many schools, worldwide. AMSAT has carried the proposal on its website.
See: http://www.amsat.org/amsat-new/articles/SuitsatSchool/

The ARRL has also promoted the project in an article, entitled "ARISS Seeks School Involvement in 'SuitSat' Project." See: http://www.arrl.org/news/stories/2005/06/03/100/?nc=1

Frank H. Bauer, KA3HDO, ARISS International Chairman, and AMSAT V.P. for Human Spaceflight Programs provided this late breaking update to the SuitSat project:

I am proud to announce that on June 10 the ARISS-US team delivered their portion of the Suitsat hardware to the NASA Johnson Space Center. NASA is in the process of shipping this hardware to Energia in Russia where it is expected to be certified and integrated with the Russian team's Suitsat equipment for eventual launch on the 19P Progress launch vehicle in the August/September 2005 timeframe.

The Suitsat amateur radio system, coupled with a school artwork DVD project that will be delivered later this month, is planned to be installed in an outdated Russian Orlon spacesuit in late September. It will then be deployed from the ISS during an Extra Vehicular Activity (EVA, or spacewalk). The Suitsat amateur radio system will beam down special messages and an SSTV image from within the Orlon space suit as it floats in space. Suitsat radio system will allow hams and students to track the suit and decode special international messages, space suit telemetry, and a pre-programmed Slow Scan TV image through its specially-built digital voice messaging system and amateur radio transmitter. As built, Suitsat will be a transmit-only capability that will run on the space suit's battery power.

The idea for Suitsat was first conceived by the ARISS-Russia team, led by Sergey Samburov, RV3DR, and was extensively discussed at the joint AMSAT Symposium/ARISS International Partner meeting in October 2004. The project, also called Radioskaf or Radio Sputnik in Russia, is being led by project manager A. P. Alexandrov and Deputy Project Manager A. Poleshuk from RSC Energia, located in Korolev (Moscow area) Russia. On the US side, the hardware project development was led by Lou McFadin, W5DID.

Since October the Suitsat design concept matured and evolved due to the challenging development time constraints. A joint NASA letter, allowing the ARISS team to proceed forward with the Suitsat project was signed on May 10, 2005. In the four short weeks since that letter was signed, the US project team, has designed, built and tested a simple, yet fully featured system that we hope will inspire hams and students around the world.

On behalf of the ARISS International team, I want to congratulate the Suitsat hardware development team for their "Can Do" spirit and ability to deliver the Suitsat hardware on such a very challenging schedule.

Congratulations!!!!!

4. Astronaut Training

Kenneth Ransom reports that ESA French astronaut Leopold Eyharts began training for his U.S. amateur radio license. Kenneth has also set up time to present an ARISS overview to John Grunsfeld, KC5ZTF, on June 22. Grunsfeld is a backup for Expedition 13.

5. Dayton Hamvention 2005 Presentations

The presentations given at the AMSAT Forum during the Dayton Hamvention 2005 may be found on the AMSAT website. Inactive astronaut Tony England's presentation entitled, "Amateur Radio/AMSAT: A Motivator for a Career in Science & Engineering," is included.
See: http://www.amsat.org/amsat-new/articles/05DaytonPresentations/index.php

6. Field Day

John Phillips, KE5DRY, and Sergei Krikalev, U5MIR, have been invited to participate in ARRL's Field Day, to be held on June 25 - 26. Both Phillips and Krikalev expressed interest in this event and plan to participate on a limited basis. Kenneth Ransom has been working on a list of pass times when U.S. amateur radio operators will be able to contact the ISS crew during this event; however, there are few favorable passes and some will occur in the early morning hours.

[ANS thanks Carol, KB3LKI, and Frank KA3HDO for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
JoAnne Maenpaa, WB9JEJ
WB9JEJ at amsat dot org

Via the ans mailing list at AMSAT.ORG courtesy of AMSAT-NA.
To unsubscribe, send "unsubscribe ans" to Majordomo@amsat.org

---

From -5931478269455371160
X-Google-Thread: 10e8ad,58c6dc41f70c6a5e,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news4.google.com!news.glorb.com!atl-c03.usenetserver.com!
elnk-atl-nf1!newsfeed.earthlink.net!stamper.news.atl.earthlink.net!
newsread2.news.atl.earthlink.net.POSTED!46041641!not-for-mail
From: "JoAnne Maenpaa" <wb9jej_no-spam@earthlink.net>
Newsgroups: rec.radio.amateur.space
Subject: WSR-163 AMSAT Weekly Satellite Status Report
Lines: 1127
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <qb0re.4090$pa3.3783@newsread2.news.atl.earthlink.net>
Date: Sun, 12 Jun 2005 19:39:02 GMT
NNTP-Posting-Host: 66.167.222.67
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread2.news.atl.earthlink.net 1118605142 66.167.222.67 (Sun, 12 Jun 2005 12:39:02 PDT)
NNTP-Posting-Date: Sun, 12 Jun 2005 12:39:02 PDT
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news1.google.com rec.radio.amateur.space:711

This report is organized into 4 parts.
Part 1 - operational analog amateur satellites.
Part 2 - operational digital amateur satellites.
Part 3 - non - operational satellites
Part 4 - proposed satellites

SB SAT @ AMSAT <KB9MMC $ANS-163.S1
WSR 163 Part 1 06/12/2005

AMSAT NEWS SERVICE BULLETIN 163.S1 FROM AMSAT HQ

SILVER SPRING, MD, JUNE 12, 2005
TO ALL RADIO AMATEURS
BID: $ANS-163.S1

HAMSAT VO-52
Catalog Number: ?
Launch Date: May 05,2005

Status: On orbit
Current Mode: U/V

Proposed frequencies:

Indian transponder:
Uplink : 435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW
Beacom : 145.940MHz continue carier signal

Dutch transponder:
Uplink : 435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW
Beacon : 145.860MHz 12WPM with CW message

HAMSAT has been assigned the OSCAR designation VO-52.
[05152005]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Mode: PBBS - ON
      FM REPEATER - ON

Analog voice downlink: 435.300 MHz FM
Analog voice uplink: 145.920 MHz FM 67Hz PL tone
                       1268.700 MHz FM 67Hz PL tone

Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
                       2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast
   Protocol (PBP)

Broadcast: PECHO-11
BBS: PECHO-12

AO-51 Schedule of Modes for June 2005:

12 June (at conclusion of Kid's Day)
FM Repeater, V/U, High Power Mode
Uplink: 145.920 MHz FM, 67 Hz PL Tone
Downlink: 435.300 MHz FM

15 June (2 day session)
9k6 Digital, V/U, High Power, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 MHz FM, 9k6 PBP Digital
Downlink: 435.150 MHz FM, 9k6 PBP Digital

17 June
FM Repeater, V/S (Field Day Configuration)
Uplink: 145.920 MHz FM
Downlink: 2401.200 MHz FM

27 June
FM Repeater, V/U
Uplink: 145.920 MHz FM, 67 Hz PL Tone
Downlink 435.300 MHz FM
9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 MHz FM, 9k6 PBP Digital
Downlink: 435.150 MHz FM, 9k6 PBP Digital

All dates are UTC.

For further scheduled modes/tests, check out the Echo status page at:
http://www.amsat.org/amsat-new/echo/

Mike Kingery (KE4AZN) has released a upgrade to TimEcho to capture and decode telemetry broadcast from Echo's digital downlink. TimeEcho software and other Ao-51 ECHO information is available at:
http://web.infoave.net/~mkmk518/echo.htm

[ANS thanks Mike, KE4AZN for the above information]
[05292005]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Uplink: 145.850 MHz (67.0 Hz PL tone) (See below for operating
           procedures)
Downlink: 436.795 MHz

There have been unconfirmed reports on the amsat-bb remailer that So-50 has shifted downlink frequency as much as 5khz up. This both from Europe.

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz. The order of operation is thus: (allow for Doppler as necessary)

1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm
  the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT
  the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window

will reset the 10 minute timer.
[09122004]

=====

FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: OPERATIONAL

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplink: 145.850 145.870 145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Please send the reception reports to lab2 'at' jarl.or.jp.
Please use the subject line: 'FO-29 reception report'.

Mineo, JE9PEL, has an FO-29 satellite telemetry analysis program that will automatically analyze all digital telemetry from the satellite (such as current, voltage and temperature). FO29CWTE is available at:
http://www.ne.jp/asahi/hamradio/je9pel/
[03132005]

=====

AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Uplink: 145.850 MHz FM
Downlink: 436.795 MHz FM

The latest information on AO-27 from control operator Michael Wyrick, N3UC (former N4USI), can be found at:
http://www.ao27.org

An AO-27 question-and-answer page is available on the AMSAT-NA web site, with updates by Ray, W2RS. The URL is:
http://www.amsat.org/amsat/intro/ao27faq.html

[ANS thanks John, K6YK, for this week's AO-27 report]
[08292004]

=====

AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Semi-operational in sunlight.
Return to active status: June 21,2002

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A
145.975 to 145.925 MHz CW/USB Mode B
Beacon: 29.502 MHz, 145.972 MHz, 435.1 MHz, 2304.1 MHz

Emily, W0EEC has created a website to allow the users of AO-7 to record contacts, observations and use of the satellite more effectively at:
http://www.emilyshouse.com/experthams/ao7/main.php
This includes the ability to log contacts.

Tim, K3TZ has written a program to decode AO-07 telemetry.
The program can be downloaded at:
http://www.qsl.net/k3tz/files/K3TZ_AO-07_Telemetry_Decoder_0.5.zip

For more AO-7 info:
http://www.amsat.org/amsat/sats/n7hpr/ao7.html
[11142004]

=====

INTERNATIONAL SPACE STATION (ISS) - ARISS

Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: Packet (APRS-style connections)
Digipeater: Active

The current Expedition 11 crew is:
Commander Sergei Krikalev
Flight Engineer John Phillips

Worldwide packet uplink: 145.990 MHz FM
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM
Doppler Shift is 10 KHz

Russian callsigns: RS0ISS, RZ3DZR
USA callsign: NA1SS
Packet station mailbox callsign: RS0ISS-11
Packet station keyboard callsign: RS0ISS-3
Digipeater callsign: ARISS

The ISS daily crew schedule can be found at:
http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line is NOT translated from Russian and posted.

More information is available at:
http://www.rac.ca/ariss
http://spaceflight.nasa.gov/station/reference/radio/
http://www.marexmg.org/fileshtml/unprotopage.html
http://www.issfanclub.com
http://oscar.dcarr.org/
[04242005]
NNNN
/EX

SB SAT @ AMSAT <KB9MMC $ANS-163.S2
WSR 163 Part 2 06/12/2005

AMSAT NEWS SERVICE BULLETIN 163.S2 FROM AMSAT HQ
SILVER SPRING, MD, JUNE 12, 2005
TO ALL RADIO AMATEURS
BID: $ANS-163.S2

AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Mode: PBBS - OFF
FM REPEATER - ON

```
Analog voice downlink:  435.300 MHz FM
Analog voice uplink:    145.920 MHz FM 67Hz PL tone
                       1268.700 MHz FM 67Hz PL tone

Digital Downlinks:      435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
                       2401.200 MHz FM  38k4 bps, AX.25
Digital Uplink:         145.860 MHz FM, 9k6 Digital, Pacsat Broadcast
   Protocol (PBP)
```

Broadcast: PECHO-11
BBS: PECHO-12

AO-51 Schedule of Modes forJune 2005:

12 June (at conclusion of Kid's Day)
FM Repeater, V/U, High Power Mode
Uplink: 145.920 MHz FM, 67 Hz PL Tone
Downlink: 435.300 MHz FM

15 June (2 day session)
9k6 Digital, V/U, High Power, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 MHz FM, 9k6 PBP Digital
Downlink: 435.150 MHz FM, 9k6 PBP Digital

17 June
FM Repeater, V/S (Field Day Configuration)

Uplink: 145.920 MHz FM
Downlink: 2401.200 MHz FM

27 June
FM Repeater, V/U
Uplink: 145.920 MHz FM, 67 Hz PL Tone
Downlink 435.300 MHz FM
9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 MHz FM, 9k6 PBP Digital
Downlink: 435.150 MHz FM, 9k6 PBP Digital

All dates are UTC.

For further scheduled modes/tests, check out the Echo status page at:
http://www.amsat.org/amsat-new/echo/

Mike Kingery (KE4AZN) has released a upgrade to TimEcho to capture and
decode telemetry broadcast from Echo's digital downlink. TimeEcho
software and other Ao-51 ECHO information is available at:
http://web.infoave.net/~mkmk518/echo.htm

[ANS thanks Mike, KE4AZN for the above information]
[05292005]
=====
GO-32 TECHSAT-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Downlink: 435.225 MHz FM (9600-baud FSK)
(435.325 n/a - temperature problems)
Uplinks: 145.850, 145.890, 145.930 FM
1269.700, 1269.800, 1269.900 FM
Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[03132005]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Operational

Uplink: 145.850 or 145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz
Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to

commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[05152005]

=====

AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Semi-operational, the digipeater command is on and open for APRS users.

Uplink: 145.90 145.92 145.94 145.96 MHz FM
(using 1200-baud Manchester FSK)
Downlink: 437.026 MHz SSB (1200-baud PSK)
Mode-S Beacon: 2401.1428 MHz
Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

A WOD collection of current graphics along with general information and telemetry samples can be found at:
http://www.telecable.es/personales/ea1bcu
[05092004]

=====

UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational?

Telemetry Downlink: 145.826 MHz. FM (1200-baud AFSK).
approx. 10 days ON, 10 days OFF
Mode-S Beacon: 2401.500 MHz. ... OFF
UHFBeacon: 435.025 MHz. ... OFF

This from Clive, G3CWV:

There is a small chance that OSCAR-11 may have started transmitting again between 08 June to 10 June.

The frequency is 145.826.

Any reception reports would be appreciated. Please reply direct to Clive G3CWV (g3cwv@amsat.org), or post reports to AMSAT-BB.

[ANS thanks Clive, G3CWV for the above information]

More information on UO-11 OSCAR-11 can be found at:
http://www.users.zetnet.co.uk/clivew/
[06122005]

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/EX

SB SAT @ AMSAT <KB9MMC $ANS-163.S3
WSR 163 Part 3 06/12/2005

AMSAT NEWS SERVICE BULLETIN 163.S3 FROM AMSAT HQ
SILVER SPRING, MD, JUNE 12, 2005
TO ALL RADIO AMATEURS
BID: $ANS-163.S3

THE FOLLOWING ARE IN ORBIT BUT ARE
NON-OPERATIONAL AT THIS TIME:

POSAT-1 PO-28
Catalog Number: 22829
Launched : September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 435.075 MHz
          435.275 MHz

Uplink:   145.925 MHz
          145.975 MHz

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

More information of POSAT-1 can be found at:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
http://www.amsat.org/amsat/sats/n7hpr/po28.html
[08152004]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launched: June 16, 1983

Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB
Beacon:   145.810 MHz (unmodulated carrier)

AO-10 has been locked into a Mode-B, 70-cm uplink and
2-meter downlink for several years.

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
IO-26 ITAMSAT
Catalog number: 22826
```

```
Launch Date: September 26, 1993

Status: Non-operational

Uplink:             145.875 145.900 145.925 145.950 MHz FM (1200-baud)
Downlink:           435.812 MHz SSB
Broadcast Callsign: ITMSAT-11
BBS:                ITMSAT-12

Alberto E. Zagni - I2KBD reports on 02/13/05
The spacecraft is in MBL (safe mode) and is trasmitting just 6 channels
of telemetry. Temperatures and voltage are nominal, but there seems to
be a problem with the onboard receiver, refusing to accept commands.
The spacecraft was launched in 1993, thus nearing 12 years in orbit...

Best regards
Alberto E. Zagni - I2KBD
ITAMSAT Mission Director

More information of IO-26 can be found at:

http://joshua.micronet.it/english/itamsat/itamsathome.html
http://www.amsat.org/amsat/sats/n7hpr/io26.html
www.itamsat.org

[02132005]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink:   21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB
Beacon:   29.408 MHz
Robot:    29.454 MHz
[05232004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink:      21.260 to  21.300 MHz CW/USB
Downlink:   145.860 to 145.900 MHz CW/USB
Beacon:     145.860 MHz
Robot:      145.908 MHz
[05232004]
=====
UO-14 UoSAT-3
Catalog number: 20437
```

```
Launched: January 22, 1990

Status: Non-operational

Uplink 145.975 MHz FM
Downlink 435.070 MHz FM
[05092004]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink:             145.900 FM 9600-baud FSK
Downlink:           435.120 MHz FM
Broadcast Callsign: UOSAT5-11
BBS:                UOSAT5-12
[01092005]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational?

Uplink:      145.858 to 145.898 MHz CW/USB
Downlink:     29.354 to  29.394 MHz CW/USB
Beacon:       29.352 MHz (intermittent)
SSB meeting frequency:  29.380 MHz (unofficial)

John, KD6PAG reports on June 16, 2004 to ANS:
RS-15 beacon seemed to be back in the mode where it's a tone about 5 seconds
off and then 5 seconds on this morning.

ANS is looking for more confirmations of RS-15 coming back.

[ANS thanks John, KD6PAG for RS-15 information]
[06202004]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplink:             145.84 145.86 145.88 145.90 MHz FM
                    (using 1200-baud Manchester FSK)
CW downlink:        437.125 MHz
Digital downlink:   437.150 MHz SSB (RC-BPSK 1200-baud PSK)
Broadcast Callsign: LUSAT-11
BBS:                LUSAT-12o
```

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[05232004]

=====

FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[08152004]

=====

KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM
Broadcast Callsign: HL01-11
BBS: HL01-12

Jim, AA7KC, reports that KO-23's downlink transmitter continues in a non-operational status.
[05092004]

=====

KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM (9600-baud FSK)
Downlink: 436.500 MHz FM
Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]

=====

PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink frequency (listed on the PanSat web site) 436.500 MHz

The satellite is not available for general uplink transmissions.

The Naval Postgraduate School developed PanSat. At the time of launch, PanSat spread-spectrum digital transponders were to be available to Amateur Radio operators along with software to utilize this technology.

The satellite is still operating, however, the spread spectrum packet radio portion never took place. The spacecraft is now beyond it's initial 2-year mission life, but telemetry records are still being downloaded.

For more information, visit the official PanSat web site at:
http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm

[ANS has no further information]
[05232004]
=====
SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

STatus: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
          Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
         Mode J Digipeater: 145.825 MHz and 145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[08082004]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

```
Status: Unknown

Uplink:             145.960 MHz (9600-baud FSK)
Downlink:           437.025 MHz 437.400 MHz
Broadcast Callsign: UO121-11
BBS:                UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA
web site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[05092004]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplink      V-band    145.840 -  145.990 MHz CW/LSB
            U-band    435.550 -  435.800 MHz CW/LSB
           L1-band   1269.250 - 1269.500 MHz CW/LSB
           L2-band   1268.325 - 1268.575 MHz CW/LSB
           S1-band   2400.350 - 2400.600 MHz CW/LSB
Downlink:  S2-band   2401.225 - 2401.475 MHz CW/USB
           K-band 24,048.010 - 24,048.060 MHz CW/USB
Beacon:    2401.323, 24,048.035
[05232004]
-----
SO-42  SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational

Uplink:   to be released
Downlink:           437.075 MHz
Broadcast Callsign: SASAT2-11
BBS:                SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[08152004]
=====
SO-41  SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink:             145.850 MHz
Downlink:           436.775 MHz
Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12
```

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[08152004]

=====

NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Non-Operational?????

Uplink/downlink: 145.827 MHz 1200 baud AX.25 AFSK via W3ADO-1
Aux/Uplink: 435.250 MHz 9600 baud via PCSAT-2 (off)
APRS Downlink: 144.390 MHz (Region 2)

This from Bob, WB4APR:
PCsat returned to negative-power-budget mode on 16 Feb 2005 and is not expect- ed to be restorable until the next full-sun period in the Fall when the southern Sun can better illuminate the south facing panel. Between now and then you are welcome to try to get a packet digipeated, but this will usually only work during mid-day passes in the Northern Hemisphere due to sun angles.

Question asked of Bob WB4APR recently on the amsat-bb:
Is it alive?? I was just looking at the pcsat.aprs.org page at Findu and it shows a lot of stations recently (within the last day) digipeating through it.

Bob's reply:
PCsat is always "alive", but can only muster enough power to get out a complete packet when it is in near mid-day sun in the Northern hemisphere the higher the latitude the better in the summer.

Over the next 2 weeks PCsat is entering one of thoes periods. The 20 or so stations you see on the LIVE web page are probably unattended beacons. But if u hear good packets on 145.825 from PCsat during mid-day, go ahead and use it...

Fortunately it will be in 100% sun during FD, but Unfortunately, all that sun is from the side and misses the best solar panel. Experience has shown it will be useless at that time.

PCSat is a 1200-baud APRS digipeater designed for use by stations using hand-held or mobile transceivers. Downlinks feed a central web site at:
http://pcsat.aprs.org

The APRS-equipped PCSat was built by midshipmen from the U.S. Naval Academy under the guidance of Bob Bruninga, WB4APR.
[05242005]

=====

NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, callsign KE6QMD, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Semi-operational.

Uplink 435.275 1200-baud AFSK
Downlink 145.825 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

AO-49 (SAFIR-M) is a German amateur radio payload onboard the small German scientific satellite "RUBIN-2".

AO-49 was built by the German amateur radio association "AATiS e.V." (German acronym for "Arbeitskreis Amateurfunk und Telekommunikation in der Schule", which means: 'working group for amateur radio anand telecommunications in schools'). AO-49 is designed as a "store and broadcast" system for APRS based messages, dedicated for the use of schools in combination with the existing WX-Net and planned buoy experiments in Germany.

No transmissions detected since the 1st of February 2003! It appears AO-49 is not properly aligned to illuminate the solar panels. This should end soon. Due to its orbit, AO-49 will be in a phase without eclipses until 13Feb03.

Martin DG8UAU has written a small software program "SAFIR-M Decoder" to allow decoding of the received DATA0 frames. It is available at: http://amend.gmxhome.de in the section Aktuelles.

Details on AO-49 (SAFIR-M) can be found at:
http://amend.gmxhome.de

Information about AATiS e.V. is available at:
http://www.aatis.de
[05092004]

=====
CUTE-1
Catalog number: 27844
Launched: June 30,2003

Status: Operational?

Uplink: ?
Downlink: 436.8375 CW
              437.4700 1200 FM ax25 or SRLL (ACTIVE only near Japan)

Fernando, LU1HKO, reports hearing Cute-1 on 03/06/2005 18:40 (LU Time)
sending
CW telemetry.

CUTE 1 is a Japanese (Tokyo Institute of Technology) one kilogram
nanosatellite that was launched by a Rokot rocket from Plesetsk at
14:15 UT on 30 June 2003. It carries a 100 mW beacon at 436.8375 MHz.
Initial orbital parameters were period 101.4 min, apogee 831 km, perigee
819 km, and inclination 98.7?.

For further info about CUTE-1 goto:
http://lss.mes.titech.ac.jp/ssp/cubesat/operation/Schedule_e.html

ANS WSR is looking for more information about this satellite.
[03272005]
NNNN
/EX

SB SAT @ AMSAT <KB9MMC $ANS-163.S4
WSR 163 Part 4 06/12/2005

AMSAT NEWS SERVICE BULLETIN 163.S4 FROM AMSAT HQ
SILVER SPRING, MD, JUNE 12, 2005
TO ALL RADIO AMATEURS
BID: $ANS-163.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE
PROPOSED FOR LAUNCH AT THIS TIME:

UCISAT ?O-??
Catalog number:
Proposed Launch Date: October 31, 2005

Status: Under Construction

Downlink: Submission in Progress
Uplink: Submission in Progress
Callsign: Submission in Progress

This from Matt Bennett, KF6RTB, UCISAT Communications Team Member:

Our website is www.ucisat.net .This is a new website, however, and doesn't have the "Status" section active yet. Because of the growing interest in our project, I'll push our webmaster to create updates (hopefully) on a week-to-week basis. For now, the current status of the mission is as follows:

-Expected Launch Date: October 31st, 2005
-Frequency Allocation: Submission in Progress
-Construction Status: Sub-Assembly
[WSR to thank Matt Bennett, KF6RTB, for this week's report.]
[01302005]
=====
SSETI ?O-??
Catalog Number:
Proposed Launch Date: Early 2005

Status: Under Construction

During the last week, the completed modules have been fitted to the spaceframe and the wiring harness and integration completed. The satellite was moved on Wednesday to an anechoic chamber for EMC testing to ensure that the emissions from the satellites electronics, the 3W UHF transmitter and the S Band TX meet the spectral requirements of the launch agency and SSTL.

Several new pictures showing the rapid progress over the last 2 weeks have been uploaded to the SSETI Website. These include detailed shots of the S Band unit now wired to the antennas, cold gas propulsion and some taken inside the anechoic chamber.
http://sseti.gte.tuwien.ac.at/WSW4/express5.php

[ANS thanks David, G0MRF for the above information]

Looking at the website for the SSETI Express webcam
http://sseti.gte.tuwien.ac.at/WSW4/webcam.htm

[04102005]
=====
PCSAT2 ?0-??
Catalog Number:
Proposed Launch Date: May 2005

PCSAT2, which had previously been stowed in the Space Shuttle Discovery, arrived at Launch Complex 39B on 07 April 2005. PCSAT2 is now standing by ready to be launched on the first Space Shuttle return-to-flight mission.

PCSAT2 will use the same dual redundant AX.25 command and control system as used on PCsat (NO-44) offering 8 on/off commands, 5 telemetry channels and a serial port for the solar cell experiment telemetry. It also supports the Digital Comms Relay support of the PCsat/APRS mission. The packet uplink is on 145.825 MHz and the default downlinks are in the 435 MHz band to avoid any possible interference with existing ARISS missions. PCSAT2 will have quad redundant transmit inhibits for EVA safety issues, thus, it is also easy to turn off to avoid any issues with other UHF ARISS experiments that may be activated in the future. Also, the mission lifetime of PCSAT2 is only 1 year, because it is a sample-return mission, thus terminating any long term conflicts in spectrum management.

The PCSAT2 mission is intended as an opportunity to augment existing ARISS communications experiments with an external autonomous communications payload. In this regard, it has several potential uses:

* A UI-Digipeater to help ease congestion on the currently shared ARISS PMS (Packet Mail system)

* A PSK-31 transponder for multi-user communications to improve accessibility for schools and ARISS outreach programs.

* An FM Voice repeater for full duplex crew communications to facilitate crew-to-school ARISS contacts.

* Routine Telemetry on the spacecraft systems

For more information and pictures visit the PCSAT2 website at
http://www.ew.usna.edu/~bruninga/pcsat2.html

[ANS thanks Bob, WB4APR for the above information]
[04102005}

=====

PHASE 3E ?O-??
Catalog Number:
Proposed Launch Date: Early 2006

Status: Under Construction

The AMSAT-Phase 3E satellite (P3E) is dedicated as communication and scientific platform for a highly elliptical orbit around Earth. The spacecraft will be created in a joint process together with the P5A Mars mission by an international team under leadership of AMSAT-DL and continues the successful series of AMSAT-Phase 3 satellites. Additionally the spacecraft will be a test bench for technology developped for the Mars mission. The main task of P3E is to act as communication platform for radio amateurs worldwide. A launch is planned in the period 2004 to 2006.

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/
[03272005]

=====

CP1 ?o-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: N6CP
Proposed Transmit Frequency: 436.845

```
[03272005]
=====
CP2 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.325
[03272005]
=====
HAUSAT1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: D90HP
Proposed Transmit Frequency: 437.465
[03272005]
=====
ICE Cube 1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: W2CXM
Proposed Transmit Frequency: 437.305
[03272005]
=====
ICE Cube 2 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: N2VR
Proposed Transmit Frequency: 437.425
[03272005]
=====
ION ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.505
[03272005]
=====
KUTEsat ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: KC0RMW
Proposed Transmit Frequency: 437.385
[03272005]
=====
MEROPE ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005
Proposed Callsign: K7MSU-1
Proposed Transmit Frequency: 145.980
[03272005]
=====
nCUBE1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
       2407.25
[03272005]
=====
RINCON ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
        437.345
[03272005]
=====
SACRED ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
[03272005]
=====
SACRED ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
[03272005]
=====
SEEDS ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: JQ1YGU
Proposed Transmit Frequency: 437.485
[03272005]
=====
Mea Huaka ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.405
```

[03272005]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
        888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/amsat/listserv/menu.html

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satelite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

Via the ans mailing list at AMSAT.ORG courtesy of AMSAT-NA.
To unsubscribe, send "unsubscribe ans" to Majordomo@amsat.org

```
From -1805698060887316
X-Google-Thread: 10e8ad,77375586fb34026
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news4.google.com!news.glorb.com!
border1.nntp.dca.giganews.com!nntp.giganews.com!local01.nntp.dca.giganews.com!
nntp.bright.net!news.bright.net.POSTED!not-for-mail
NNTP-Posting-Date: Mon, 13 Jun 2005 06:06:31 -0500
Date: Mon, 13 Jun 2005 11:07:49 +0000
From: Scott <acepilot@bloomer.net>
User-Agent: Mozilla/5.0 (Windows; U; Windows NT 5.0; en-US; rv:1.7.2) Gecko/
20040804 Netscape/7.2 (ax)
X-Accept-Language: en-us, en
MIME-Version: 1.0
Newsgroups: rec.radio.amateur.space
Subject: Re: Uplink vs Downlink freq on HAMSAT?
References: <PtydndegIYp6rz_fRVn-3Q@bright.net> <PaSdnaF-Upq6STXfRVn-qQ@mt.net>
In-Reply-To: <PaSdnaF-Upq6STXfRVn-qQ@mt.net>
Content-Type: text/plain; charset=us-ascii; format=flowed
Content-Transfer-Encoding: 7bit
Message-ID: <fLednUXtOoIq9TDfRVn-2Q@bright.net>
Lines: 39
NNTP-Posting-Host: 64.33.199.218
X-Trace: sv3-YSJcvx2OSzN/p07ViZglm12zD0Ffl/MTmLsvpK7EEpLiaOWAsRR+7FUhVToKN46mC//
37+4G4iNyJAh!
9n2FoZO6wJvBB6Ni01W3rXk7jYazOdOpvgNiB9xq1FfslVxL8p1Sw8JBSrYKTZwmYyifxdA2
X-Complaints-To: abuse@bright.net
X-DMCA-Complaints-To: abuse@bright.net
X-Abuse-and-DMCA-Info: Please be sure to forward a copy of ALL headers
X-Abuse-and-DMCA-Info: Otherwise we will be unable to process your complaint
properly
X-Postfilter: 1.3.32
Xref: g2news1.google.com rec.radio.amateur.space:712
```

I've always been a little confused by "adjust uplink frequency to keep downlink at some specific downlink frequency"...If I do that, I will be able to hear myself properly tuned in and not sounding like Donald Duck, but what if I'm talking to a station where the satellite is moving away from them and toward me (or vice versa)? By adjusting my uplink to compensate for MY doppler shift, won't he have to be constantly have to keep adjusting his receive frequency to hear me properly? Now if he has to do this, how can he keep adjusting his uplink to keep himself on one downlink frequency?

Scott
N0EDV

William Erhardt wrote:
> Howdy Scott.
>
> Bill Erhardt K7MT in Helena, Mt.
>
> Set your receive for 145.900 (Center of transponder down link) then your
> transmit to 435.250 (Center of transponder uplink)
>
> With transmitter set to 435.250 your receive will be on 145.893 or down
> about 7 KCS from center of 145.900 when the satellite comes into view. If
> you adjust your transmit down 7 kcs your receive will be right on 145.900.
> As you know this shifts as the bird approaches goes away. Recommend finding
> your down link then adjusting your transmitter on 70cm to stay on frequency.
> This is opposite for FO-29 as your find your downlink and adjust your
> receive to follow the signal down.
>
> Rule of thumb I was told is you adjust the 70 cm side to stay on frequency.
>
> Please remember lower half of the transponder is for CW and upper half is
> for voice by gentlemans agreement.
>
> Hope this helps Scott.
>
> Bill K7MT AMSAT 33461
>
>

From -6917816434489317166
X-Google-Thread: 10e8ad,77375586fb34026
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news3.google.com!news.glorb.com!newsgate.cistron.nl!
news.tele.dk!news.tele.dk!small.news.tele.dk!newsfeed1.swip.net!swipnet!
nntpserver.swip.net!not-for-mail
Message-ID: <42ADE262.6090402@nowhere.com>
From: Leif Holmgren <nobody@nowhere.com>
User-Agent: Mozilla/5.0 (Windows; U; Windows NT 5.0; en-US; rv:1.0.2) Gecko/
20021120 Netscape/7.01
X-Accept-Language: sv, en-us, en
MIME-Version: 1.0
Newsgroups: rec.radio.amateur.space
Subject: Re: Uplink vs Downlink freq on HAMSAT?
References: <PtydndegIYp6rz_fRVn-3Q@bright.net> <PaSdnaF-Upq6STXfRVn-qQ@mt.net>
<fLednUXtOoIq9TDfRVn-2Q@bright.net>
Content-Type: text/plain; charset=us-ascii; format=flowed
Content-Transfer-Encoding: 7bit
Lines: 26
NNTP-Posting-Host: 213.101.97.26
X-Complaints-To: news-abuse@swip.net
X-Trace: nntpserver.swip.net 1118691935 213.101.97.26 (Mon, 13 Jun 2005 21:45:35
MET DST)
NNTP-Posting-Date: Mon, 13 Jun 2005 21:45:35 MET DST

```
Organization: A Customer of Tele2
X-Sender: s-219882@d213-101-97-26.swipnet.se
Date: Mon, 13 Jun 2005 21:45:38 +0200
Xref: g2news1.google.com rec.radio.amateur.space:713

The "right" way to do it is to keep the frequency stable at the
satellite. Without software support this is hard, but if you don't do it
you will drift over the passband whatever method you use. As you already
  guessed stations in different places that experience different doppler
shift -> your QSOs will drift into eachother.

There is a good article at amsat's website that describes all the problems

http://www.amsat.org/amsat/features/one_true_rule.html

/Leif

Scott wrote:
> I've always been a little confused by "adjust uplink frequency to keep
> downlink at some specific downlink frequency"...If I do that, I will be
> able to hear myself properly tuned in and not sounding like Donald Duck,
> but what if I'm talking to a station where the satellite is moving away
> from them and toward me (or vice versa)?  By adjusting my uplink to
> compensate for MY doppler shift, won't he have to be constantly have to
> keep adjusting his receive frequency to hear me properly?  Now if he has
> to do this, how can he keep adjusting his uplink to keep himself on one
> downlink frequency?
>
> Scott
> N0EDV




From -4912977800324136025
X-Google-Thread: 10e8ad,f7a48462040097f4,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news4.google.com!news.glorb.com!wn14feed!
worldnet.att.net!bgtnsc04-news.ops.worldnet.att.net.POSTED!53ab2750!not-for-mail
Message-ID: <42AFB4F5.C6839CD9@my_cb_is_better_then_yours.com>
From: clem <clem_barefoot@my_cb_is_better_then_yours.com>
X-Mailer: Mozilla 4.79 [en] (Windows NT 5.0; U)
X-Accept-Language: en
MIME-Version: 1.0
Newsgroups: rec.radio.amateur.space
Subject: Re: Filetoad.com Latest Software Virus and spyware
References: <n5Ore.22667$n_6.15308@fe1.news.blueyonder.co.uk>
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Lines: 26
Date: Wed, 15 Jun 2005 04:56:22 GMT
NNTP-Posting-Host: 12.76.210.97
X-Complaints-To: abuse@worldnet.att.net
```

X-Trace: bgtnsc04-news.ops.worldnet.att.net 1118811382 12.76.210.97 (Wed, 15 Jun 2005 04:56:22 GMT)
NNTP-Posting-Date: Wed, 15 Jun 2005 04:56:22 GMT
Organization: AT&T Worldnet
Xref: g2news1.google.com rec.radio.amateur.space:714

scumbag spammers. if it is a 1 time spamming why do we need to goto
your scumbag site ?

This is a once only mailing , to remove from future newsgroup emailing
please goto http://www.Filetoad.com

"Filetoad.com" wrote:

>
>
> We are a new website providing the Latest software and latest virus
> and spyware updates
> for your computer it will save you lots of time in the future please
> take a look
>
> thankyou.
>
> http://www.Filetoad.com   team
>
> This is a once only mailing , to remove from future newsgroup emailing
> please goto http://www.Filetoad.com
>
> if this has been posted in the incorrect group please accept our
> apology

From 5386679795304350283
X-Google-Thread: 10e8ad,3404ce93dd62ae7c,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news3.google.com!news.glorb.com!
border1.nntp.dca.giganews.com!nntp.giganews.com!elnk-atl-nf1!
newsfeed.earthlink.net!stamper.news.atl.earthlink.net!
newsread1.news.atl.earthlink.net.POSTED!46041641!not-for-mail
From: "JoAnne Maenpaa" <wb9jej_no-spam@earthlink.net>
Newsgroups: rec.radio.amateur.space
Subject: ANS-170 AMSAT News Service Bulletins
Lines: 383
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <uRfte.8037$VK4.1947@newsread1.news.atl.earthlink.net>
Date: Sun, 19 Jun 2005 15:06:02 GMT
NNTP-Posting-Host: 64.105.116.37

X-Complaints-To: abuse@earthlink.net
X-Trace: newsread1.news.atl.earthlink.net 1119193562 64.105.116.37 (Sun, 19 Jun 2005 08:06:02 PDT)
NNTP-Posting-Date: Sun, 19 Jun 2005 08:06:02 PDT
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news1.google.com rec.radio.amateur.space:715

AMSAT NEWS SERVICE
ANS-170

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:

- IARU Speadsheets on Small Satellites Available
- Send Your Name to Pluto!
- AO-51 Configuration
- AMSAT Journal Article Timing
- ISS Crew could be on the air for Field Day.
- SSETI Announcement
- Small Payload Conference

SB SAT @ AMSAT $ANS-170.01
IARU Speadsheets on Small Satellites Available
AMSAT News Service Bulletin 170.01
>From AMSAT HQ SILVER SPRING, MD.
June 19, 2005
To All RADIO AMATEURS
BID: $ANS-170.01

One of the biggest challenges any satellite communications engineer has is to develop a link budget that shows what might work and what wont! At the STEC 2005 Conference held in Aarlborg in April, and previously reported on ANS, Jan King briefly showed his suite of graphic spreadsheets which help satisfy this need.

It is fully annotated with guidance notes and includes graphical representations of orbit data, antenna radiation patterns etc.

As an added benefit he has also produced an on-board power budget spreadsheet and one covering the mass budget.

All of these are now available for download from the link at http://www.amsat.org.uk/iaru

It is anticipated that a short presentation of these exciting tools will be given during the AMSAT-UK Colloquium which will be taking place at the University of Surrey between July 29-31st
http://www.uk.amsat.org/Colloquium/

cheers

Graham

[ANS thanks David Johnson, G4DPZ, for the above information]

/EX

SB SAT @ AMSAT $ANS-170.02
Send Your Name to Pluto!

AMSAT News Service Bulletin 170.02
From AMSAT HQ SILVER SPRING, MD.
June 19, 2005
To All RADIO AMATEURS
BID: $ANS-170.02

Join the New Horizons team as we unlock the secrets of Pluto, Charon and the Kuiper Belt - sign up to send your name on the New Horizons spacecraft! Names entered on the mission Web site will be recorded onto a special compact disc, which the team plans to mount on the spacecraft before its journey. After signing up you can print a personalized participation certificate.

Visit here for the sign-up form:

http://pluto.jhuapl.edu/ecard/sendName_ecard_content.html

--
73 de JoAnne WB9JEJ

[ANS thanks Joanne, WB9JEJ, for the above information]

/EX

SB SAT @ AMSAT $ANS-170.03
AO-51 Configuration

AMSAT News Service Bulletin 170.03
From AMSAT HQ SILVER SPRING, MD.
June 19, 2005
To All RADIO AMATEURS
BID: $ANS-170.03

From the Satellite Software Development Team:

Due to restrictions in the Satellite, there can be no digi functionality on Echo at this time.

Explanation:
Random noise from a receiver that is fed through the demodulator and into the SCC (a sort of smart UART) will cause interrupts to be sent to the CPU. With Echo having 4 or 5 open receivers the number of interrupts was enough to cause the CPU difficulties in getting normal processing done in a timely fashion. Basically, the CPU was locked up trying to handle the interrupts. Echo is operating its SCC ports in a mode that will only pass AX.25 packets beginning with a certain character, which is called 'block' mode. This configuration solved the interrupt problem. For Echo, with the call sign being "PACB or PECHO", only packets beginning with the character 'P' can get through the SCC and generate a CPU interrupt.

A digi packet has the call sign of the destination station first, followed by the satellite (relay) call sign, and then the originator call sign. Therefore, the digi packet will not get through the SCC unless the destination station call sign begins wit   htheletter'P'.

A great deal of effort was put into solving this problem. This solution is the only one at the present time that has worked well enough to implement in the Satellite.

[ANS thanks Mike, KE4AZN for the above information]

/EX

SB SAT @ AMSAT $ANS-170.04
AMSAT Journal Article Timing

AMSAT News Service Bulletin 170.04
>From AMSAT HQ SILVER SPRING, MD.
June 19, 2005
To All RADIO AMATEURS
BID: $ANS-170.04

Everyone,

Once again I must notify you that the May-June issue of the Journal will be late. I still am having some problems with the timing of article submissions. Here is the schedule that I want to adhere to:

Odd numbered months of the year - All articles submitted to me no later than mid-week 3 of the month.

Even numbered months of the year - Completed issue PageMaker files submitted to the printer during week 1

(January = month 1, February = month 2 and so on)

Once the Journal is in the hands of the printer my job is done for that issue unless the printer has questions of some kind or if he can't read a file I've sent or something. From that point it's their job to print it and get it out to you as soon as possible.

Unfortunately due to a lot of reasons (all of which are good) articles have not been arriving according to this schedule. This puts the Journal into your hands late. I sincerely apologize for this.

I want you to understand that I take the Journal very seriously and am trying to do the best job my amateurish hands can do. So please bear with me and I will continue to work hard to get the Journal out on time. I spend a great deal of time on the Journal putting it together and I'm trying daily to make it better. I also have a more-than-full-time job to hold down.

Potential authors - Please send me your contributions. I anxiously await them!

73,

Ed Long
WA4SWJ
Editor, The AMSAT Journal

[ANS thanks Ed Long, WA4SWJ, for the above information]

/EX

SB SAT @ AMSAT $ANS-170.05
ISS crew could be on the air for Field Day.
AMSAT News Service Bulletin 170.05
>From AMSAT HQ SILVER SPRING, MD.
June 19, 2005
To All RADIO AMATEURS
BID: $ANS-170.05

ISS crew could be on the air for Field Day.

International Space Station crew members John Phillips, KE5DRY, and Sergei Krikalev, U5MIR, may be on the air for ARRL Field Day, June 25-26. ISS Ham Radio Project Engineer Kenneth Ransom, N5VHO, at Johnson Space Center, has reviewed potential ISS pass times, and he says a few are favorable for US stations--although some will occur during the very early morning hours. Phillips and Krikalev will use the Amateur Radio on the International Space Station (ARISS) radio gear aboard the spacecraft.

''Hams on the ISS will try to be on for ARRL Field Day,'' Ransom said. ''The crew can make contacts anytime during the 1800 UTC June 25 to 1800 UTC June 26 period as time permits. Most activity will be over North and South America, but stations worldwide should be listening.''

Ransom says the pass times are only recommendations, and there is no guarantee that either Phillips or Krikalev will actually be on the air during any of them. Passes marked by asterisks (*) are recommended as desirable ones for voice contacts with Amateur Radio stations on the ground.

Saturday, June 25

1826-1834	Hawaii
1852-1902	Southern Chile Argentina

Sunday, June 26

0743-0804	Canada and NW US
0847-0901	Central and eastern Australia
0919-0938	Southern Canada and NE US
1020-1035	Western Australia
*1053-1115	Alaska, SW Canada and eastern US*
*1110-1130	Caribbean, NE South America*
1211-1223	Eastern Japan
*1226-1248	Alaska, Western US*
*1246-1306	Central South America*
1346-1359	Western Japan
1428-1442	Central Argentina
1606-1617	Southern Chile and Argentina
*1715-1725	Hawaii*

Phillips will operate as NA1SS and handing out ''1 Alfa ISS'' for a report. If Expedition 11 Commander Krikalev gets on the air too, he'll identify as RS0ISS and give the same exchange. In the past, crew members have operated from both the Phase 1 and Phase 2 ARISS stations using 2 meters and 70 cm.

The standard ISS voice frequencies for contacts in ITU Region 2 are 144.49 MHz up and 145.80 MHz down, FM.

If the astronauts can't get on the air to make voice QSOs, the RS0ISS packet station should be on and available for ground stations to work each other via the packet digipeater using ''ARISS'' as the alias for the call sign in UNPROTO mode. Frequencies are 145.99 MHz up and 145.80 MHz down.

ARRL Contest Branch Manager Dan Henderson, N1ND, notes that ISS voice or direct packet contacts with the ISS do not count for bonus satellite contact points because the ISS is not an ''Amateur Radio satellite'' as event rules specify. Packet contacts relayed via the ISS are valid.

''The ISS contacts do not count for satellite credit, since they are point-to-point, whereas the traditional satellite QSO is a relayed Earth-satellite-Earth two-way contact,'' he explained. Field Day has no specific rules relating to ARISS operation because there's no guarantee that the crew will be able to get on the air for the annual exercise.

During Field Day 2004, astronaut Mike Fincke, KE5AIT, operated NA1SS on 2 meters, while Expedition 9 Commander Gennady Padalka, RN3DT, was on the air from RS0ISS on 70 cm. Between them, they racked up more than five dozen QSOs.

[ANS thanks ARRL HQ for the above information]

/EX

SB SAT @ AMSAT $ANS-170.06
SSETI Announcement

AMSAT News Service Bulletin 170.06
>From AMSAT HQ SILVER SPRING, MD.
June 19, 2005
To All RADIO AMATEURS
BID: $ANS-170.06

The preliminary pre-launch keps for the Cosmos launch scheduled for August 25th have been announced.

This launch includes the SSETI Express spacecraft that will be carrying an amateur U/S FM transponder.

```
SSETI1
1 33001U 05066C   05237.44790000 -.00000001  00000-0  10000-4 0    16
2 33001  98.1900 134.5000 0000001   0.0000   0.0000 14.60830000 00013
```

These are only provisional and maybe refined nearer the launch date!

This satellite is sponsored by the Education Office of the European Space Agency and is the first in a series of student built satellite projects that are underway. Their next project "ESEO" is scheduled for 2007/8 launch into a GTO orbit.

For the SSETI Express programme ESA are very keen to have as many amateurs contributing received downlinked telemetry on 437MHz and 2.4GHz to a central database. They recognise that our "worldwide" network is a unique facility that is not otherwise available to them

A new website giving full details of the telemetry, how to decode it and how to forward it to the SSETI database is being currently being developed and initial information should be made available within the next four weeks.

In the meantime we can further report that the launch is expected to be broadcast live on this "free to air" satellite downlink.

Astra 1 G at 19.2 degrees east:

Transponder: 1.108
Reception frequency: 12551.50 MHz
Polarization: Vertical
Symbolrate: 22Msymb/s
FEC: 5/6
TS_ID: 1108
ON_ID: 1
Service Name: ESA
Service provider: ASTRA
Service_ID: 12140
TXT: none

As this only covers Europe we are also hoping to be able to stream the sound and video over the internet - more news will follow on this nearer the time.

best wishes

Graham

[ANS thanks Graham Shirville for the above information]

/EX
SB SAT @ AMSAT $ANS-170.07
Small Payload Conference

AMSAT News Service Bulletin 170.07
From AMSAT HQ SILVER SPRING, MD.
June 19, 2005
To All RADIO AMATEURS
BID: $ANS-170.07

Small Payload Rideshare Conference

As part of the on-going effort to develop points of contact and relationships within the space industry, AMSAT Executive Vice President, Lee McLamb, KU4OS, attended the Small Payload Rideshare Conference sponsored by the National Reconnaissance Office (NRO), the USAF Space and Missile Systems Center/Space Test Program Office (SMC/STP), and the National Aeronautics and Space Administration/Goddard Spaceflight Center (NASA/GSFC). This annual conference is designed to address the issues related to access to space for small payloads, their potential benefits, and the key technologies for achieving affordable access to space. This year's conference was held 6-7 June 2005 in Denver, Colorado.

"This continues to be a very informative conference", reports Lee. He continued, "We are learning where there may be opportunities for mutually beneficial partnerships and how to better coordinate with with them".

Included in the conference were presentations on new small launch vehicles as well as several presentations on secondary payload adapters being developed for US launch vehicles. Lee said, "It will take work, but I see real potential for partnerships that will benefit the Eagle Project."

[ANS thanks Lee McLamb, KU4OS, for the above information]

73,
This week's ANS Editor,
Dee Interdonato, NB2F
NB2F at amsat dot org

Via the ans mailing list at AMSAT.ORG courtesy of AMSAT-NA.
To unsubscribe, send "unsubscribe ans" to Majordomo@amsat.org

---

From 1554306480339228728
X-Google-Thread: 10e8ad,a112c56e58b24260,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news4.google.com!newshub.sdsu.edu!elnk-nf2-pas!
newsfeed.earthlink.net!stamper.news.pas.earthlink.net!
stamper.news.atl.earthlink.net!newsread3.news.atl.earthlink.net.POSTED!46041641!
not-for-mail
From: "JoAnne Maenpaa" <wb9jej_no-spam@earthlink.net>
Newsgroups: rec.radio.amateur.space
Subject: WSR-170 AMSAT Weekly Satellite Status
Lines: 1100
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <lGcue.10356$eM6.7849@newsread3.news.atl.earthlink.net>
Date: Wed, 22 Jun 2005 12:18:25 GMT
NNTP-Posting-Host: 66.167.220.145
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread3.news.atl.earthlink.net 1119442705 66.167.220.145 (Wed, 22 Jun 2005 05:18:25 PDT)
NNTP-Posting-Date: Wed, 22 Jun 2005 05:18:25 PDT
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news1.google.com rec.radio.amateur.space:716

This report is organized into 4 parts.
Part 1 - operational analog amateur satellites.
Part 2 - operational digital amateur satellites.
Part 3 - non - operational satellites
Part 4 - proposed satellites

```
SB SAT @ AMSAT <KB9MMC $ANS-170.S1
WSR 170 Part 1 06/19/2005

AMSAT NEWS SERVICE BULLETIN 170.S1 FROM AMSAT HQ
SILVER SPRING, MD, JUNE 19, 2005
TO ALL RADIO AMATEURS
BID: $ANS-170.S1

VO-52 HAMSAT
Catalog Number: ?
Launch Date: May 05,2005

Status: On orbit
Current Mode: U/V

Proposed frequencies:
-------------------
Indian transponder:
Uplink  : 435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW
Beacom  : 145.940MHz continue carier signal

Dutch transponder:
Uplink  : 435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW
Beacon  : 145.860MHz 12WPM with CW message

HAMSAT has been assigned the OSCAR designation VO-52.
[05152005]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Mode: PBBS - ON
     FM REPEATER - ON

Analog voice downlink:  435.300 MHz FM
Analog voice uplink:    145.920 MHz FM 67Hz PL tone
                       1268.700 MHz FM 67Hz PL tone

Digital Downlinks:      435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
                       2401.200 MHz FM  38k4 bps, AX.25
Digital Uplink:         145.860 MHz FM, 9k6 Digital, Pacsat Broadcast
Protocol (PBP)

Broadcast: PECHO-11
BBS: PECHO-12


AO-51 Schedule of Modes for June 2005:
```

27 June
FM Repeater, V/U
Uplink: 145.920 MHz FM, 67 Hz PL Tone
Downlink 435.300 MHz FM
9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 MHz FM, 9k6 PBP Digital
Downlink: 435.150 MHz FM, 9k6 PBP Digital

All dates are UTC.

For further scheduled modes/tests, check out the Echo status page at:
http://www.amsat.org/amsat-new/echo/

Mike Kingery (KE4AZN) has released a upgrade to TimEcho to capture and decode telemetry broadcast from Echo's digital downlink. TimeEcho software and other Ao-51 ECHO information is available at:
http://web.infoave.net/~mkmk518/echo.htm

[ANS thanks Mike, KE4AZN for the above information]
[05292005]

=====

SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Uplink: 145.850 MHz (67.0 Hz PL tone) (See below for operating procedures)
Downlink: 436.795 MHz

There have been unconfirmed reports on the amsat-bb remailer that So-50 has shifted downlink frequency as much as 5khz up. This both from Europe.

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The order of operation is thus: (allow for Doppler as necessary)

1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10 minute timer.

[09122004]

=====

FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: OPERATIONAL

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB

Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplink: 145.850 145.870 145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Please send the reception reports to lab2 'at' jarl.or.jp.
Please use the subject line: 'FO-29 reception report'.

Mineo, JE9PEL, has an FO-29 satellite telemetry analysis program that will automatically analyze all digital telemetry from the satellite (such as current, voltage and temperature). FO29CWTE is available at:
http://www.ne.jp/asahi/hamradio/je9pel/
[03132005]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Uplink: 145.850 MHz FM
Downlink: 436.795 MHz FM

The latest information on AO-27 from control operator Michael Wyrick, N3UC (former N4USI), can be found at:
http://www.ao27.org

An AO-27 question-and-answer page is available on the AMSAT-NA web site, with updates by Ray, W2RS. The URL is:
http://www.amsat.org/amsat/intro/ao27faq.html

[ANS thanks John, K6YK, for this week's AO-27 report]
[08292004]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Semi-operational in sunlight.
Return to active status: June 21,2002

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A
145.975 to 145.925 MHz CW/USB Mode B
Beacon: 29.502 MHz, 145.972 MHz, 435.1 MHz, 2304.1 MHz

Emily, W0EEC has created a website to allow the users of AO-7 to record contacts, observations and use of the satellite more effectively at:

http://www.emilyshouse.com/experthams/ao7/main.php
This includes the ability to log contacts.

Tim, K3TZ has written a program to decode AO-07 telemetry.
The program can be downloaded at:
http://www.qsl.net/k3tz/files/K3TZ_AO-07_Telemetry_Decoder_0.5.zip

For more AO-7 info:
http://www.amsat.org/amsat/sats/n7hpr/ao7.html
[11142004]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: Packet (APRS-style connections)
Digipeater: Active

The current Expedition 11 crew is:
Commander Sergei Krikalev
Flight Engineer John Phillips

Worldwide packet uplink: 145.990 MHz FM
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM
Doppler Shift is 10 KHz

Russian callsigns: RS0ISS, RZ3DZR
USA callsign: NA1SS
Packet station mailbox callsign: RS0ISS-11
Packet station keyboard callsign: RS0ISS-3
Digipeater callsign: ARISS

The ISS daily crew schedule can be found at:
http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line is
NOT translated from Russian and posted.

More information is available at:
http://www.rac.ca/ariss
http://spaceflight.nasa.gov/station/reference/radio/
http://www.marexmg.org/fileshtml/unprotopage.html
http://www.issfanclub.com
http://oscar.dcarr.org/
[04242005]
NNNN
/EX

SB SAT @ AMSAT <KB9MMC $ANS-170.S2
WSR 170 Part 2 06/19/2005

AMSAT NEWS SERVICE BULLETIN 170.S2 FROM AMSAT HQ
SILVER SPRING, MD, JUNE 19, 2005
TO ALL RADIO AMATEURS
BID: $ANS-170.S2

AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Mode: PBBS - OFF
FM REPEATER - ON

Analog voice downlink: 435.300 MHz FM
Analog voice uplink: 145.920 MHz FM 67Hz PL tone
1268.700 MHz FM 67Hz PL tone

Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast
Protocol (PBP)

Broadcast: PECHO-11
BBS: PECHO-12

AO-51 Schedule of Modes forJune 2005:

27 June
FM Repeater, V/U
Uplink: 145.920 MHz FM, 67 Hz PL Tone
Downlink 435.300 MHz FM
9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 MHz FM, 9k6 PBP Digital
Downlink: 435.150 MHz FM, 9k6 PBP Digital

All dates are UTC.

For further scheduled modes/tests, check out the Echo status page at:
http://www.amsat.org/amsat-new/echo/

Mike Kingery (KE4AZN) has released a upgrade to TimEcho to capture and decode telemetry broadcast from Echo's digital downlink. TimeEcho software and other Ao-51 ECHO information is available at:
http://web.infoave.net/~mkmk518/echo.htm

[ANS thanks Mike, KE4AZN for the above information]
[05292005]
=====
GO-32 TECHSAT-1B
Catalog number: 25397

Launch Date: July 10, 1998

Status: Operational

Downlink: 435.225 MHz FM (9600-baud FSK)
(435.325 n/a - temperature problems)
Uplinks: 145.850, 145.890, 145.930 FM
1269.700, 1269.800, 1269.900 FM
Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[03132005]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Operational

Uplink: 145.850 or 145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz
Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[05152005]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Semi-operational, the digipeater command is on and open for APRS users.

Uplink: 145.90 145.92 145.94 145.96 MHz FM
(using 1200-baud Manchester FSK)
Downlink: 437.026 MHz SSB (1200-baud PSK)
Mode-S Beacon: 2401.1428 MHz
Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

A WOD collection of current graphics along with general information and telemetry samples can be found at:
http://www.telecable.es/personales/ea1bcu
[05092004]

=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational?

```
Telemetry Downlink: 145.826 MHz. FM (1200-baud AFSK).
                    approx. 10 days ON, 10 days OFF
Mode-S Beacon:      2401.500 MHz. ... OFF
UHFBeacon:          435.025 MHz. ...  OFF
```

This from Clive, G3CWV:

There is a small chance that OSCAR-11 may have started transmitting again between 08 June to 10 June.

The frequency is 145.826.

Any reception reports would be appreciated. Please reply direct to Clive G3CWV (g3cwv@amsat.org), or post reports to AMSAT-BB.

[ANS thanks Clive, G3CWV for the above information]

More information on UO-11 OSCAR-11 can be found at:
http://www.users.zetnet.co.uk/clivew/
[06122005]
NNNN
/EX

SB SAT @ AMSAT <KB9MMC $ANS-170.S3
WSR 170 Part 3 06/19/2005

AMSAT NEWS SERVICE BULLETIN 170.S3 FROM AMSAT HQ
SILVER SPRING, MD, JUNE 19, 2005
TO ALL RADIO AMATEURS
BID: $ANS-170.S3

THE FOLLOWING ARE IN ORBIT BUT ARE
NON-OPERATIONAL AT THIS TIME:

POSAT-1 PO-28
Catalog Number: 22829
Launched : September 25, 1993

Status: Operational - Not open for Amatuer use

```
Downlink: 435.075 MHz
          435.275 MHz

Uplink:   145.925 MHz
          145.975 MHz
```

```
Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

More information of POSAT-1 can be found at:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
http://www.amsat.org/amsat/sats/n7hpr/po28.html
[08152004]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launched: June 16, 1983

Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB
Beacon:   145.810 MHz (unmodulated carrier)

AO-10 has been locked into a Mode-B, 70-cm uplink and
2-meter downlink for several years.

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: Non-operational

Uplink:             145.875 145.900 145.925 145.950 MHz FM (1200-baud)
Downlink:           435.812 MHz SSB
Broadcast Callsign: ITMSAT-11
BBS:                ITMSAT-12

Alberto E. Zagni - I2KBD reports on 02/13/05
The spacecraft is in MBL (safe mode) and is trasmitting just 6 channels
of telemetry. Temperatures and voltage are nominal, but there seems to
be a problem with the onboard receiver, refusing to accept commands.
The spacecraft was launched in 1993, thus nearing 12 years in orbit...

Best regards
Alberto E. Zagni - I2KBD
ITAMSAT Mission Director

More information of IO-26 can be found at:

http://joshua.micronet.it/english/itamsat/itamsathome.html
http://www.amsat.org/amsat/sats/n7hpr/io26.html
www.itamsat.org

[02132005]
```

```
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink:   21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB
Beacon:   29.408 MHz
Robot:    29.454 MHz
[05232004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink:      21.260 to  21.300 MHz CW/USB
Downlink:   145.860 to 145.900 MHz CW/USB
Beacon:     145.860 MHz
Robot:      145.908 MHz
[05232004]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink 145.975 MHz FM
Downlink 435.070 MHz FM
[05092004]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink:             145.900 FM 9600-baud FSK
Downlink:           435.120 MHz FM
Broadcast Callsign: UOSAT5-11
BBS:                UOSAT5-12
[01092005]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational?
```

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB
Beacon: 29.352 MHz (intermittent)
SSB meeting frequency: 29.380 MHz (unofficial)

John, KD6PAG reports on June 16, 2004 to ANS:
RS-15 beacon seemed to be back in the mode where it's a tone about 5 seconds off and then 5 seconds on this morning.

ANS is looking for more confirmations of RS-15 coming back.

[ANS thanks John, KD6PAG for RS-15 information]
[06202004]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplink: 145.84 145.86 145.88 145.90 MHz FM
                    (using 1200-baud Manchester FSK)
CW downlink: 437.125 MHz
Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)
Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[05232004]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[08152004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HL01-11
BBS: HL01-12

Jim, AA7KC, reports that KO-23's downlink transmitter continues in a non-operational status.
[05092004]

=====

KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM (9600-baud FSK)
Downlink: 436.500 MHz FM
Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]

=====

PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink frequency (listed on the PanSat web site) 436.500 MHz

The satellite is not available for general uplink transmissions.

The Naval Postgraduate School developed PanSat. At the time of launch, PanSat spread-spectrum digital transponders were to be available to Amateur Radio operators along with software to utilize this technology.

The satellite is still operating, however, the spread spectrum packet radio portion never took place. The spacecraft is now beyond it's initial 2-year mission life, but telemetry records are still being downloaded.

For more information, visit the official PanSat web site at:
http://www.sp.nps.navy.mil/pansat/
[05092004]

=====

SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm

[ANS has no further information]
[05232004]
=====
SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

STatus: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz and 145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[08082004]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlink: 437.025 MHz 437.400 MHz
Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[05092004]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplink	V-band	145.840 - 145.990 MHz	CW/LSB
	U-band	435.550 - 435.800 MHz	CW/LSB
	L1-band	1269.250 - 1269.500 MHz	CW/LSB
	L2-band	1268.325 - 1268.575 MHz	CW/LSB
	S1-band	2400.350 - 2400.600 MHz	CW/LSB
Downlink:	S2-band	2401.225 - 2401.475 MHz	CW/USB
	K-band	24,048.010 - 24,048.060 MHz	CW/USB
Beacon:	2401.323, 24,048.035		

[05232004]

SO-42 SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational

Uplink: to be released
Downlink: 437.075 MHz
Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[08152004]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz
Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[08152004]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Non-Operational?????

Uplink/downlink: 145.827 MHz 1200 baud AX.25 AFSK via W3ADO-1
Aux/Uplink: 435.250 MHz 9600 baud via PCSAT-2 (off)
APRS Downlink: 144.390 MHz (Region 2)

This from Bob, WB4APR:
PCsat returned to negative-power-budget mode on 16 Feb 2005 and is not
expect- ed to be restorable until the next full-sun period in the Fall
when the southern Sun can better illuminate the south facing panel.
Between now and then you are welcome to try to get a packet digipeated,
but this will usually only work during mid-day passes in the Northern
Hemisphere due to sun angles.

Question asked of Bob WB4APR recently on the amsat-bb:
Is it alive?? I was just looking at the pcsat.aprs.org page at Findu
and it shows a lot of stations recently (within the last day) digipeating

through it.

Bob's reply:
PCsat is always "alive", but can only muster enough
power to get out a complete packet when it is in
near mid-day sun in the Northern hemisphere the
higher the latitude the better in the summer.

Over the next 2 weeks PCsat is entering one of thoes
periods. The 20 or so stations you see on the LIVE
web page are probably unattended beacons. But
if u hear good packets on 145.825 from PCsat during
mid-day, go ahead and use it...

Fortunately it will be in 100% sun during FD, but
Unfortunately, all that sun is from the side and
misses the best solar panel. Experience has shown
it will be useless at that time.

PCSat is a 1200-baud APRS digipeater designed for use by stations using
hand-held or mobile transceivers. Downlinks feed a central web site at:
http://pcsat.aprs.org

The APRS-equipped PCSat was built by midshipmen from the U.S. Naval Academy
under the guidance of Bob Bruninga, WB4APR.
[05242005]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
callsign KE6QMD, as per the user service agreement located at the following
URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Semi-operational.

Uplink 435.275 1200-baud AFSK
Downlink 145.825 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

AO-49 (SAFIR-M) is a German amateur radio payload onboard the small German scientific satellite "RUBIN-2".

AO-49 was built by the German amateur radio association "AATiS e.V." (German acronym for "Arbeitskreis Amateurfunk und Telekommunikation in der Schule", which means: 'working group for amateur radio anand telecommunications in schools'). AO-49 is designed as a "store and broadcast" system for APRS based messages, dedicated for the use of schools in combination with the existing WX-Net and planned buoy experiments in Germany.

No transmissions detected since the 1st of February 2003! It appears AO-49 is not properly aligned to illuminate the solar panels. This should end soon. Due to its orbit, AO-49 will be in a phase without eclipses until 13Feb03.

Martin DG8UAU has written a small software program "SAFIR-M Decoder" to allow decoding of the received DATA0 frames. It is available at: http://amend.gmxhome.de in the section Aktuelles.

Details on AO-49 (SAFIR-M) can be found at:
http://amend.gmxhome.de

Information about AATiS e.V. is available at:
http://www.aatis.de
[05092004]
=====
CUTE-1
Catalog number: 27844
Launched: June 30,2003

Status: Operational?

Uplink: ?
Downlink: 436.8375 CW
437.4700 1200 FM ax25 or SRLL (ACTIVE only near Japan)

Fernando, LU1HKO, reports hearing Cute-1 on 03/06/2005 18:40 (LU Time) sending CW telemetry.

CUTE 1 is a Japanese (Tokyo Institute of Technology) one kilogram nanosatellite that was launched by a Rokot rocket from Plesetsk at 14:15 UT on 30 June 2003. It carries a 100 mW beacon at 436.8375 MHz. Initial orbital parameters were period 101.4 min, apogee 831 km, perigee 819 km, and inclination 98.7?.

For further info about CUTE-1 goto:
http://lss.mes.titech.ac.jp/ssp/cubesat/operation/Schedule_e.html

ANS WSR is looking for more information about this satellite.
[03272005]

NNNN
/EX

SB SAT @ AMSAT <KB9MMC $ANS-170.S4
WSR 170 Part 4 06/19/2005

AMSAT NEWS SERVICE BULLETIN 170.S4 FROM AMSAT HQ
SILVER SPRING, MD, JUNE 19, 2005
TO ALL RADIO AMATEURS
BID: $ANS-170.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE PROPOSED FOR LAUNCH AT THIS TIME:

UCISAT ?O-??
Catalog number:
Proposed Launch Date: October 31, 2005

Status: Under Construction

Downlink: Submission in Progress
Uplink: Submission in Progress
Callsign: Submission in Progress

This from Matt Bennett, KF6RTB, UCISAT Communications Team Member:

Our website is www.ucisat.net .This is a new website, however, and doesn't have the "Status" section active yet. Because of the growing interest in our project, I'll push our webmaster to create updates (hopefully) on a week-to-week basis. For now, the current status of the mission is as follows:

-Expected Launch Date: October 31st, 2005
-Frequency Allocation: Submission in Progress
-Construction Status: Sub-Assembly
[WSR to thank Matt Bennett, KF6RTB, for this week's report.]
[01302005]
=====
SSETI ?O-??
Catalog Number:
Proposed Launch Date: Early 2005

Status: Under Construction

During the last week, the completed modules have been fitted to the spaceframe and the wiring harness and integration completed. The satellite was moved on Wednesday to an anechoic chamber for EMC testing to ensure that the emissions from the satellites electronics, the 3W UHF transmitter and the S Band TX meet the spectral requirements of the launch agency and SSTL.

Several new pictures showing the rapid progress over the last 2 weeks have been uploaded to the SSETI Website. These include detailed shots of the S Band unit now wired to the antennas, cold gas propulsion and some

taken inside the anechoic chamber.
http://sseti.gte.tuwien.ac.at/WSW4/express5.php

[ANS thanks David, G0MRF for the above information]

Looking at the website for the SSETI Express webcam
http://sseti.gte.tuwien.ac.at/WSW4/webcam.htm

[04102005]
=====
PCSAT2 ?0-??
Catalog Number:
Proposed Launch Date: May 2005

PCSAT2, which had previously been stowed in the Space Shuttle Discovery, arrived at Launch Complex 39B on 07 April 2005. PCSAT2 is now standing by ready to be launched on the first Space Shuttle return-to-flight mission.

PCSAT2 will use the same dual redundant AX.25 command and control system as used on PCsat (NO-44) offering 8 on/off commands, 5 telemetry channels and a serial port for the solar cell experiment telemetry. It also supports the Digital Comms Relay support of the PCsat/APRS mission. The packet uplink is on 145.825 MHz and the default downlinks are in the 435 MHz band to avoid any possible interference with existing ARISS missions. PCSAT2 will have quad redundant transmit inhibits for EVA safety issues, thus, it is also easy to turn off to avoid any issues with other UHF ARISS experiments that may be activated in the future. Also, the mission lifetime of PCSAT2 is only 1 year, because it is a sample-return mission, thus terminating any long term conflicts in spectrum management.

The PCSAT2 mission is intended as an opportunity to augment existing ARISS communications experiments with an external autonomous communications payload. In this regard, it has several potential uses:

* A UI-Digipeater to help ease congestion on the currently shared ARISS PMS (Packet Mail system)

* A PSK-31 transponder for multi-user communications to improve accessibility for schools and ARISS outreach programs.

* An FM Voice repeater for full duplex crew communications to facilitate crew-to-school ARISS contacts.

* Routine Telemetry on the spacecraft systems

For more information and pictures visit the PCSAT2 website at
http://www.ew.usna.edu/~bruninga/pcsat2.html

[ANS thanks Bob, WB4APR for the above information]
[04102005}
=====

PHASE 3E ?O-??
Catalog Number:
Proposed Launch Date: Early 2006

Status: Under Construction

The AMSAT-Phase 3E satellite (P3E) is dedicated as communication and scientific platform for a highly elliptical orbit around Earth. The spacecraft will be created in a joint process together with the P5A Mars mission by an international team under leadership of AMSAT-DL and continues the successful series of AMSAT-Phase 3 satellites. Additionally the spacecraft will be a test bench for technology developped for the Mars mission. The main task of P3E is to act as communication platform for radio amateurs worldwide. A launch is planned in the period 2004 to 2006.

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/
[03272005]
=====
CP1 ?o-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: N6CP
Proposed Transmit Frequency: 436.845
[03272005]
=====
CP2 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.325
[03272005]
=====
HAUSAT1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: D90HP
Proposed Transmit Frequency: 437.465
[03272005]
=====
ICE Cube 1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: W2CXM
Proposed Transmit Frequency: 437.305
[03272005]
=====

```
ICE Cube 2 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: N2VR
Proposed Transmit Frequency: 437.425
[03272005]
=====
ION ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.505
[03272005]
=====
KUTEsat ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: KC0RMW
Proposed Transmit Frequency: 437.385
[03272005]
=====
MEROPE ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: K7MSU-1
Proposed Transmit Frequency: 145.980
[03272005]
=====
nCUBE1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
    2407.25
[03272005]
=====
RINCON ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
     437.345
[03272005]
=====
SACRED ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005
```

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
[03272005]
=====
SACRED ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
[03272005]
=====
SEEDS ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: JQ1YGU
Proposed Transmit Frequency: 437.485
[03272005]
=====
Mea Huaka ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.405
[03272005]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
        888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)

* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/amsat/listserv/menu.html

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satelite Report Editor is James K. Darrow, KB9MMC.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

____
HamSat mailing list
HamSat@mailman.qth.net
http://mailman.qth.net/mailman/listinfo/hamsat

```
From -3552671840365833664
X-Google-Thread: 10e8ad,3404ce93dd62ae7c
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news4.google.com!news.glorb.com!
border1.nntp.dca.giganews.com!nntp.giganews.com!elnk-atl-nf1!
newsfeed.earthlink.net!stamper.news.atl.earthlink.net!
newsread3.news.atl.earthlink.net.POSTED!46041641!not-for-mail
From: "JoAnne Maenpaa" <wb9jej_no-spam@earthlink.net>
Newsgroups: rec.radio.amateur.space
Subject: ANS-170 AMSAT News Service Bulletins
Lines: 383
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <gFcue.10353$eM6.6696@newsread3.news.atl.earthlink.net>
```

Date: Wed, 22 Jun 2005 12:17:16 GMT
NNTP-Posting-Host: 66.167.220.145
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread3.news.atl.earthlink.net 1119442636 66.167.220.145 (Wed, 22 Jun 2005 05:17:16 PDT)
NNTP-Posting-Date: Wed, 22 Jun 2005 05:17:16 PDT
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news1.google.com rec.radio.amateur.space:717

AMSAT NEWS SERVICE
ANS-170

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:

* IARU Speadsheets on Small Satellites Available
* Send Your Name to Pluto!
* AO-51 Configuration
* AMSAT Journal Article Timing
* ISS Crew could be on the air for Field Day.
* SSETI Announcement
* Small Payload Conference

SB SAT @ AMSAT $ANS-170.01
IARU Speadsheets on Small Satellites Available
AMSAT News Service Bulletin 170.01
>From AMSAT HQ SILVER SPRING, MD.
June 19, 2005
To All RADIO AMATEURS
BID: $ANS-170.01

One of the biggest challenges any satellite communications engineer has is to develop a link budget that shows what might work and what wont! At the STEC 2005 Conference held in Aarlborg in April, and previously reported on ANS, Jan King briefly showed his suite of graphic spreadsheets which help satisfy this need.

It is fully annotated with guidance notes and includes graphical representations of orbit data, antenna radiation patterns etc.

As an added benefit he has also produced an on-board power budget spreadsheet and one covering the mass budget.

All of these are now available for download from the link at
http://www.amsat.org.uk/iaru

It is anticipated that a short presentation of these exciting tools will be given during the AMSAT-UK Colloquium which will be taking place at the University of Surrey between July 29-31st
http://www.uk.amsat.org/Colloquium/

cheers

Graham

[ANS thanks David Johnson, G4DPZ, for the above information]

/EX

SB SAT @ AMSAT $ANS-170.02
Send Your Name to Pluto!

AMSAT News Service Bulletin 170.02
From AMSAT HQ SILVER SPRING, MD.
June 19, 2005
To All RADIO AMATEURS
BID: $ANS-170.02

Join the New Horizons team as we unlock the secrets of Pluto, Charon and the Kuiper Belt - sign up to send your name on the New Horizons spacecraft! Names entered on the mission Web site will be recorded onto a special compact disc, which the team plans to mount on the spacecraft before its journey. After signing up you can print a personalized participation certificate.

Visit here for the sign-up form:

http://pluto.jhuapl.edu/ecard/sendName_ecard_content.html

--
73 de JoAnne WB9JEJ

[ANS thanks Joanne, WB9JEJ, for the above information]

/EX

SB SAT @ AMSAT $ANS-170.03
AO-51 Configuration

AMSAT News Service Bulletin 170.03
From AMSAT HQ SILVER SPRING, MD.
June 19, 2005

To All RADIO AMATEURS
BID: $ANS-170.03

From the Satellite Software Development Team:

Due to restrictions in the Satellite, there can be no digi functionality on Echo at this time.

Explanation:
Random noise from a receiver that is fed through the demodulator and into the SCC (a sort of smart UART) will cause interrupts to be sent to the CPU. With Echo having 4 or 5 open receivers the number of interrupts was enough to cause the CPU difficulties in getting normal processing done in a timely fashion. Basically, the CPU was locked up trying to handle the interrupts. Echo is operating its SCC ports in a mode that will only pass AX.25 packets beginning with a certain character, which is called 'block' mode. This configuration solved the interrupt problem. For Echo, with the call sign being "PACB or PECHO", only packets beginning with the character 'P' can get through the SCC and generate a CPU interrupt.

A digi packet has the call sign of the destination station first, followed by the satellite (relay) call sign, and then the originator call sign. Therefore, the digi packet will not get through the SCC unless the destination station call sign begins wit htheletter'P'.

A great deal of effort was put into solving this problem. This solution is the only one at the present time that has worked well enough to implement in the Satellite.

[ANS thanks Mike, KE4AZN for the above information]

/EX

SB SAT @ AMSAT $ANS-170.04
AMSAT Journal Article Timing

AMSAT News Service Bulletin 170.04
>From AMSAT HQ SILVER SPRING, MD.
June 19, 2005
To All RADIO AMATEURS
BID: $ANS-170.04

Everyone,

Once again I must notify you that the May-June issue of the Journal will be late. I still am having some problems with the timing of article submissions. Here is the schedule that I want to adhere to:

Odd numbered months of the year - All articles submitted to me no later than mid-week 3 of the month.

Even numbered months of the year - Completed issue PageMaker files
submitted to the printer during week 1

(January = month 1, February = month 2 and so on)

Once the Journal is in the hands of the printer my job is done for that issue unless the printer has questions of some kind or if he can't read a file I've sent or something. From that point it's their job to print it and get it out to you as soon as possible.

Unfortunately due to a lot of reasons (all of which are good) articles have not been arriving according to this schedule. This puts the Journal into your hands late. I sincerely apologize for this.

I want you to understand that I take the Journal very seriously and am trying to do the best job my amateurish hands can do. So please bear with me and I will continue to work hard to get the Journal out on time. I spend a great deal of time on the Journal putting it together and I'm trying daily to make it better. I also have a more-than-full-time job to hold down.

Potential authors - Please send me your contributions. I anxiously await them!

73,

Ed Long
WA4SWJ
Editor, The AMSAT Journal

[ANS thanks Ed Long, WA4SWJ, for the above information]

/EX

SB SAT @ AMSAT $ANS-170.05
ISS crew could be on the air for Field Day.
AMSAT News Service Bulletin 170.05
>From AMSAT HQ SILVER SPRING, MD.
June 19, 2005
To All RADIO AMATEURS
BID: $ANS-170.05

ISS crew could be on the air for Field Day.

International Space Station crew members John Phillips, KE5DRY, and Sergei Krikalev, U5MIR, may be on the air for ARRL Field Day, June 25-26. ISS Ham Radio Project Engineer Kenneth Ransom, N5VHO, at Johnson Space Center, has reviewed potential ISS pass times, and he says a few are favorable for US stations--although some will occur during the very early morning hours. Phillips and Krikalev will use the Amateur Radio on the International Space Station (ARISS) radio gear aboard the spacecraft.

''Hams on the ISS will try to be on for ARRL Field Day,'' Ransom said. ''The crew can make contacts anytime during the 1800 UTC June 25 to 1800 UTC June 26 period as time permits. Most activity will be over North and South America, but stations worldwide should be listening.''

Ransom says the pass times are only recommendations, and there is no guarantee that either Phillips or Krikalev will actually be on the air during any of them. Passes marked by asterisks (*) are recommended as desirable ones for voice contacts with Amateur Radio stations on the ground.

Saturday, June 25

1826-1834	Hawaii
1852-1902	Southern Chile Argentina

Sunday, June 26

0743-0804	Canada and NW US
0847-0901	Central and eastern Australia
0919-0938	Southern Canada and NE US
1020-1035	Western Australia
*1053-1115	Alaska, SW Canada and eastern US*
*1110-1130	Caribbean, NE South America*
1211-1223	Eastern Japan
*1226-1248	Alaska, Western US*
*1246-1306	Central South America*
1346-1359	Western Japan
1428-1442	Central Argentina
1606-1617	Southern Chile and Argentina
*1715-1725	Hawaii*

Phillips will operate as NA1SS and handing out ''1 Alfa ISS'' for a report. If Expedition 11 Commander Krikalev gets on the air too, he'll identify as RS0ISS and give the same exchange. In the past, crew members have operated from both the Phase 1 and Phase 2 ARISS stations using 2 meters and 70 cm.

The standard ISS voice frequencies for contacts in ITU Region 2 are 144.49 MHz up and 145.80 MHz down, FM.

If the astronauts can't get on the air to make voice QSOs, the RS0ISS packet station should be on and available for ground stations to work each other via the packet digipeater using ''ARISS'' as the alias for the call sign in UNPROTO mode. Frequencies are 145.99 MHz up and 145.80 MHz down.

ARRL Contest Branch Manager Dan Henderson, N1ND, notes that ISS voice or direct packet contacts with the ISS do not count for bonus satellite contact points because the ISS is not an ''Amateur Radio satellite'' as event rules specify. Packet contacts relayed via the ISS are valid.

''The ISS contacts do not count for satellite credit, since they are point-to-point, whereas the traditional satellite QSO is a relayed Earth-satellite-Earth two-way contact,'' he explained. Field Day has no specific rules relating to ARISS operation because there's no guarantee that the crew will be able to get on the air for the annual exercise.

During Field Day 2004, astronaut Mike Fincke, KE5AIT, operated NA1SS on 2 meters, while Expedition 9 Commander Gennady Padalka, RN3DT, was on the air from RS0ISS on 70 cm. Between them, they racked up more than five dozen QSOs.

[ANS thanks ARRL HQ for the above information]

/EX

SB SAT @ AMSAT $ANS-170.06
SSETI Announcement

AMSAT News Service Bulletin 170.06
>From AMSAT HQ SILVER SPRING, MD.
June 19, 2005
To All RADIO AMATEURS
BID: $ANS-170.06

The preliminary pre-launch keps for the Cosmos launch scheduled for August 25th have been announced.

This launch includes the SSETI Express spacecraft that will be carrying an amateur U/S FM transponder.

```
SSETI1
1 33001U 05066C   05237.44790000 -.00000001  00000-0  10000-4 0    16
2 33001  98.1900 134.5000 0000001   0.0000   0.0000 14.60830000 00013
```

These are only provisional and maybe refined nearer the launch date!

This satellite is sponsored by the Education Office of the European Space Agency and is the first in a series of student built satellite projects that are underway. Their next project "ESEO" is scheduled for 2007/8 launch into a GTO orbit.

For the SSETI Express programme ESA are very keen to have as many amateurs contributing received downlinked telemetry on 437MHz and 2.4GHz to a central database. They recognise that our "worldwide" network is a unique facility that is not otherwise available to them

A new website giving full details of the telemetry, how to decode it and how to forward it to the SSETI database is being currently being developed and initial information should be made available within the next four weeks.

In the meantime we can further report that the launch is expected to be broadcast live on this "free to air" satellite downlink.

Astra 1 G at 19.2 degrees east:

Transponder: 1.108
Reception frequency: 12551.50 MHz
Polarization: Vertical
Symbolrate: 22Msymb/s
FEC: 5/6
TS_ID: 1108
ON_ID: 1
Service Name: ESA
Service provider: ASTRA
Service_ID: 12140
TXT: none

As this only covers Europe we are also hoping to be able to stream the sound and video over the internet - more news will follow on this nearer the time.

best wishes

Graham

[ANS thanks Graham Shirville for the above information]

/EX
SB SAT @ AMSAT $ANS-170.07
Small Payload Conference

AMSAT News Service Bulletin 170.07
From AMSAT HQ SILVER SPRING, MD.
June 19, 2005
To All RADIO AMATEURS
BID: $ANS-170.07

Small Payload Rideshare Conference

As part of the on-going effort to develop points of contact and relationships within the space industry, AMSAT Executive Vice President, Lee McLamb, KU4OS, attended the Small Payload Rideshare Conference sponsored by the National Reconnaissance Office (NRO), the USAF Space and Missile Systems Center/Space Test Program Office (SMC/STP), and the National Aeronautics and Space Administration/Goddard Spaceflight Center (NASA/GSFC). This annual conference is designed to address the issues related to access to space for small payloads, their potential benefits, and the key technologies for achieving affordable access to space. This year's conference was held 6-7 June 2005 in Denver, Colorado.

"This continues to be a very informative conference", reports Lee. He continued, "We are learning where there may be opportunities for mutually beneficial partnerships and how to better coordinate with with them".

Included in the conference were presentations on new small launch vehicles as well as several presentations on secondary payload adapters being developed for US launch vehicles. Lee said, "It will take work, but I see real potential for partnerships that will benefit the Eagle Project."

[ANS thanks Lee McLamb, KU4OS, for the above information]

73,
This week's ANS Editor,
Dee Interdonato, NB2F
NB2F at amsat dot org

Via the ans mailing list at AMSAT.ORG courtesy of AMSAT-NA.
To unsubscribe, send "unsubscribe ans" to Majordomo@amsat.org

---

From -6542748830849007656
X-Google-Thread: 10e8ad,e2e30aebe28f0caf,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news3.google.com!news.glorb.com!newscon02.news.prodigy.com!prodigy.net!newsfeed.telusplanet.net!newsfeed.telus.net!clgrps13.POSTED!c92a1cd0!not-for-mail
From: Mike <Mike@nowhere.net>
Subject: Field Day 2005
User-Agent: Pan/0.14.2.91 (As She Crawled Across the Table)
Newsgroups: rec.radio.amateur.space
IfYouCanReadThisThen: POUND-SALT_HAHAHAHA
MIME-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 8bit
Lines: 7
Message-ID: <bKeve.106379$on1.24208@clgrps13>
Date: Sat, 25 Jun 2005 15:28:07 GMT
NNTP-Posting-Host: 199.126.155.198
X-Trace: clgrps13 1119713287 199.126.155.198 (Sat, 25 Jun 2005 09:28:07 MDT)
NNTP-Posting-Date: Sat, 25 Jun 2005 09:28:07 MDT
Xref: g2news1.google.com rec.radio.amateur.space:718

Hope to see everyone on the air. I will be working with my club http://narc.net and our call will be VE6RAC from Edmonton Alberta. We intend on doing all bands & modes including SSB, CW, RTTY and will even do FM on 6m & above for folks with only those rigs. Will attempt a QSO with some satellite. Best wishes and good luck on Field Day 2005!

73 de Mike VE6HMG

```
From 8991563288030825302
X-Google-Thread: fcc6e,cc37f9c6e3516f9d,start
X-Google-Thread: fc8b1,cc37f9c6e3516f9d,start
X-Google-Thread: 11480d,cc37f9c6e3516f9d,start
X-Google-Thread: 10e8ad,cc37f9c6e3516f9d,start
X-Google-Thread: 114aac,cc37f9c6e3516f9d,start
X-Google-Attributes: gidfcc6e,gidfc8b1,gid11480d,gid10e8ad,gid114aac,public
X-Google-Language: ENGLISH,ASCII
Path: g2news1.google.com!news3.google.com!newshub.sdsu.edu!peer01.west.cox.net!
cox.net!p01!fed1read07.POSTED!53ab2750!not-for-mail
From: K7JEB <k7jeb.remove.this@qsl.net>
Newsgroups:
rec.radio.amateur.antenna;,rec.radio.amateur.boatanchors;,rec.radio.amateur.dx;,re
c.radio.amateur.space;,rec.radio.shortwave
Subject: Pizza, New Great-Circle Plotting Program
Organization: The Vacuum Tube Conspiracy
Reply-To: k7jeb.remove.this@qsl.net
Message-ID: <90lrb1p949i59dv4la1bdm5lnid1tk74tq@4ax.com>
X-Newsreader: Forte Free Agent 2.0/32.652
MIME-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 8bit
Lines: 57
Date: Sat, 25 Jun 2005 15:12:13 -0700
NNTP-Posting-Host: 68.228.252.118
X-Complaints-To: abuse@cox.net
X-Trace: fed1read07 1119737537 68.228.252.118 (Sat, 25 Jun 2005 18:12:17 EDT)
NNTP-Posting-Date: Sat, 25 Jun 2005 18:12:17 EDT
Xref: g2news1.google.com rec.radio.shortwave:73157
```

A friend of mine, Jim Tonne, WB6BLD, has written a much-improved, Windows version of a classic great-circle plotting program and is providing it to the Amateur Radio community FOR FREE.

If you are a DX'er and need an antenna-bearing aid or just like to poke around on the earth's geography, this program will be of interest to you.

It calculates the bearing and distance from a Home location to a Target location anywhere in the world and displays this result on both azimuthal (polar) and rectangular maps. Both the Home and Target locations may be selected by mouse designations on the rectangular world map or chosen from a menu of cities, countries and callsign areas. The Maidenhead grid system is fully supported on both data-entry and readout. Sun and terminator positions are plotted on both maps in real time from the host computer clock, enabled by a menu selection. Both maps use an accurate, high-resolution, up-to-date geographic database. The azimuth map may be plotted at five different resolutions, allowing an optimum mix of accuracy and computation speed. Additionally, the azimuth plot may be repeatedly zoomed-in or out by a factor of 2 to place both Home and Target on-screen. Bearing and range overlays are provided in the azimuth plot, making it suitable for a printed-out beam-heading chart.

Both the polar and rectangular plots are printed to the standard Windows printer, no special drivers are needed. System requirements are a Pentium processor (P4 recommended), Windows 98, ME, 2000, XP, and 4.8 Megabytes of free disk space.

The download installation file size is 2.5 Megabytes. The program download URL is:

http://tonnesoftware.com/pizzadownload.html

There are other programs out there that perform this same calculation, but none with the combination of features Pizza offers.

Oh, yeah, that name. Bring up an azimuth plot of the entire world and it hits you in the eye like a big pizza pie -- that's amor�!

Jim, K7JEB

From 2210887569315349108
X-Google-Thread: 10e8ad,14d2c0ea985bb03d,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news4.google.com!news.glorb.com!
border1.nntp.dca.giganews.com!border2.nntp.dca.giganews.com!nntp.giganews.com!
cyclone1.gnilink.net!spamkiller2.gnilink.net!gnilink.net!trndny08.POSTED!1fdaeffa!
not-for-mail
From: "Kenneth PierceJr" <nu3a@verizon.net>
Newsgroups: rec.radio.amateur.space
Subject: ISS Field Day
Lines: 4
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.2180

X-MIMEOLE: Produced By Microsoft MimeOLE V6.00.2900.2180
X-RFC2646: Format=Flowed; Original
Message-ID: <p5wve.3033$Bn6.2004@trndny08>
Date: Sun, 26 Jun 2005 11:13:25 GMT
NNTP-Posting-Host: 151.197.43.131
X-Complaints-To: abuse@verizon.net
X-Trace: trndny08 1119784405 151.197.43.131 (Sun, 26 Jun 2005 07:13:25 EDT)
NNTP-Posting-Date: Sun, 26 Jun 2005 07:13:25 EDT
Xref: g2news1.google.com rec.radio.amateur.space:719

Heard packet downlink on 145.80 on two passes over Delaware but no voice.
Has anyone heard any voice activity from ISS during field day?

From 4248495213601984458
X-Google-Thread: fcc6e,cc37f9c6e3516f9d
X-Google-Thread: fc8b1,cc37f9c6e3516f9d
X-Google-Thread: 11480d,cc37f9c6e3516f9d
X-Google-Thread: 10e8ad,cc37f9c6e3516f9d
X-Google-Thread: 114aac,cc37f9c6e3516f9d
X-Google-Attributes: gidfcc6e,gidfc8b1,gid11480d,gid10e8ad,gid114aac,public
X-Google-Language: ENGLISH,ASCII
Path: g2news1.google.com!postnews.google.com!z14g2000cwz.googlegroups.com!not-for-mail
From: "CAM" <w5dxp@arrl.net>
Newsgroups:
rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.shortwave
Subject: Re: Pizza, New Great-Circle Plotting Program
Date: 26 Jun 2005 06:03:12 -0700
Organization: http://groups.google.com
Lines: 10
Message-ID: <1119790992.821564.264980@z14g2000cwz.googlegroups.com>
References: <90lrb1p949i59dv4la1bdm5lnid1tk74tq@4ax.com>
NNTP-Posting-Host: 69.151.34.203
Mime-Version: 1.0
Content-Type: text/plain; charset="iso-8859-1"
Content-Transfer-Encoding: quoted-printable
X-Trace: posting.google.com 1119790998 5217 127.0.0.1 (26 Jun 2005 13:03:18 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Sun, 26 Jun 2005 13:03:18 +0000 (UTC)
User-Agent: G2/0.2
Complaints-To: groups-abuse@google.com
Injection-Info: z14g2000cwz.googlegroups.com; posting-host=69.151.34.203;
   posting-account=_gLKmQ0AAABFe2foI45_RHLdhmtjScS7
Xref: g2news1.google.com rec.radio.amateur.antenna:22276
rec.radio.amateur.boatanchors:6707 rec.radio.amateur.dx:2014
rec.radio.amateur.space:720 rec.radio.shortwave:73212

K7JEB wrote:
> Oh, yeah, that name. Bring up an azimuth plot of the

> entire world and it hits you in the eye like a big
> pizza pie -- that's amor=E9!

Just don't expect to find it by doing a web search
for "pizza". :-)
--
73, Cecil http://www.qsl.net/w5dxp

From -1542673155290788130
X-Google-Thread: fcc6e,cc37f9c6e3516f9d
X-Google-Thread: fc8b1,cc37f9c6e3516f9d
X-Google-Thread: 11480d,cc37f9c6e3516f9d
X-Google-Thread: 10e8ad,cc37f9c6e3516f9d
X-Google-Thread: 114aac,cc37f9c6e3516f9d
X-Google-Attributes: gidfcc6e,gidfc8b1,gid11480d,gid10e8ad,gid114aac,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news4.google.com!news2.google.com!news.maxwell.syr.edu!
news-rtr.nyroc.rr.com!news-out.nyroc.rr.com!twister.nyroc.rr.com.POSTED!53ab2750!
not-for-mail
From: "FDR" <_remove_spam_block_rzitka@hotmail.com>
Newsgroups:
rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.dx,rec.r
adio.amateur.space,rec.radio.shortwave
References: <90lrb1p949i59dv4la1bdm5lnid1tk74tq@4ax.com>
Subject: Re: Pizza, New Great-Circle Plotting Program
Lines: 24
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.2180
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.2180
X-RFC2646: Format=Flowed; Original
Message-ID: <ZyGve.40032$fp6.5475@twister.nyroc.rr.com>
Date: Sun, 26 Jun 2005 23:07:37 GMT
NNTP-Posting-Host: 24.58.64.110
X-Complaints-To: abuse@rr.com
X-Trace: twister.nyroc.rr.com 1119827257 24.58.64.110 (Sun, 26 Jun 2005 19:07:37
EDT)
NNTP-Posting-Date: Sun, 26 Jun 2005 19:07:37 EDT
Organization: Road Runner
Xref: g2news1.google.com rec.radio.amateur.antenna:22301
rec.radio.amateur.boatanchors:6713 rec.radio.amateur.dx:2021
rec.radio.amateur.space:721 rec.radio.shortwave:73290

"K7JEB" <k7jeb.remove.this@qsl.net> wrote in message
news:90lrb1p949i59dv4la1bdm5lnid1tk74tq@4ax.com...
>
>
> A friend of mine, Jim Tonne, WB6BLD, has written a
> much-improved, Windows version of a classic great-circle
> plotting program and is providing it to the Amateur Radio

> community FOR FREE.
>
> If you are a DX'er and need an antenna-bearing aid or just
> like to poke around on the earth's geography, this program
> will be of interest to you.
>
> It calculates the bearing and distance from a Home location
> to a Target location anywhere in the world and displays this
> result on both azimuthal (polar) and rectangular maps. Both
> the Home and Target locations may be selected by mouse
> designations on the rectangular world map or chosen from a
> menu of cities, countries and callsign areas.

So this tells you how to get from Home Depot to a Target store? Cool.

```
From 9195825520999636656
X-Google-Thread: fcc6e,cc37f9c6e3516f9d
X-Google-Thread: fc8b1,cc37f9c6e3516f9d
X-Google-Thread: 11480d,cc37f9c6e3516f9d
X-Google-Thread: 10e8ad,cc37f9c6e3516f9d
X-Google-Thread: 114aac,cc37f9c6e3516f9d
X-Google-Attributes: gidfcc6e,gidfc8b1,gid11480d,gid10e8ad,gid114aac,public
X-Google-Language: ENGLISH,ASCII
Path: g2news1.google.com!news3.google.com!news.glorb.com!news-
feed01.roc.ny.frontiernet.net!nntp.frontiernet.net!cox.net!news-xfer.cox.net!p01!
fed1read07.POSTED!53ab2750!not-for-mail
From: K7JEB <k7jeb.remove.this@qsl.net>
Newsgroups:
rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.dx,rec.r
adio.amateur.space,rec.radio.shortwave
Subject: Re: Pizza, New Great-Circle Plotting Program
Organization: The Vacuum Tube Conspiracy
Reply-To: k7jeb.remove.this@qsl.net
Message-ID: <134vb19lsaj3a9bt58shjtn564smv3elsi@4ax.com>
References: <90lrb1p949i59dv4la1bdm5lnid1tk74tq@4ax.com>
<1119790992.821564.264980@z14g2000cwz.googlegroups.com>
X-Newsreader: Forte Free Agent 2.0/32.652
MIME-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 8bit
Lines: 15
Date: Sun, 26 Jun 2005 22:40:35 -0700
NNTP-Posting-Host: 68.228.252.118
X-Complaints-To: abuse@cox.net
X-Trace: fed1read07 1119850850 68.228.252.118 (Mon, 27 Jun 2005 01:40:50 EDT)
NNTP-Posting-Date: Mon, 27 Jun 2005 01:40:50 EDT
Xref: g2news1.google.com rec.radio.amateur.antenna:22321
rec.radio.amateur.boatanchors:6720 rec.radio.amateur.dx:2027
rec.radio.amateur.space:722 rec.radio.shortwave:73318
```

On 26 Jun 2005 06:03:12 -0700, "CAM" <w5dxp@arrl.net> wrote:

>K7JEB wrote:
>> Oh, yeah, that name. Bring up an azimuth plot of the
>> entire world and it hits you in the eye like a big
>> pizza pie -- that's amor�!

>Just don't expect to find it by doing a web search
>for "pizza". :-)

'pizza + great + circle' works well, though.

k7jeb

From -735024025085072340
X-Google-Thread: fcc6e,cc37f9c6e3516f9d
X-Google-Thread: fc8b1,cc37f9c6e3516f9d
X-Google-Thread: 11480d,cc37f9c6e3516f9d
X-Google-Thread: 10e8ad,cc37f9c6e3516f9d
X-Google-Thread: 114aac,cc37f9c6e3516f9d
X-Google-Attributes: gidfcc6e,gidfc8b1,gid11480d,gid10e8ad,gid114aac,public
X-Google-Language: ENGLISH,ASCII
Path: g2news1.google.com!news3.google.com!news.glorb.com!news-
feed01.roc.ny.frontiernet.net!nntp.frontiernet.net!news01.roc.ny.POSTED!fd24bd7a!
not-for-mail
From: W8LNA <W8LNA@arrl.net>
User-Agent: Mozilla Thunderbird 1.0 (Windows/20041206)
X-Accept-Language: en-us, en
MIME-Version: 1.0
Newsgroups:
rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.dx,rec.r
adio.amateur.space,rec.radio.shortwave
Subject: Re: Pizza, New Great-Circle Plotting Program
References: <90lrb1p949i59dv4la1bdm5lnid1tk74tq@4ax.com>
<1119790992.821564.264980@z14g2000cwz.googlegroups.com>
<134vb19lsaj3a9bt58shjtn564smv3elsi@4ax.com>
In-Reply-To: <134vb19lsaj3a9bt58shjtn564smv3elsi@4ax.com>
Content-Type: text/plain; charset=ISO-8859-1; format=flowed
Content-Transfer-Encoding: 8bit
Lines: 21
Message-ID: <hKSve.298$pg.197@news01.roc.ny>
X-Complaints-To: abuse-news@frontiernet.net
X-Trace:
52616e646f6d49565e9681516cffb8dc6343c75c1c0c5ae6d80651be170ad83904a285901205cb0d37
c65433183b2c55bd699b7970abf4834db958c67aca7a281f76dd6680c8556e8083c1ff0ac1a85cd8b2
2e7a2c04a17a38baa67612519bdbb52c781b1f85d641738163728d4526e1
X-Abuse-Info: Please be sure to forward ALL headers so that we may process your
complaint properly.
NNTP-Posting-Date: Mon, 27 Jun 2005 12:58:53 UTC
Date: Mon, 27 Jun 2005 12:58:53 GMT

```
Xref: g2news1.google.com rec.radio.amateur.antenna:22348
rec.radio.amateur.boatanchors:6723 rec.radio.amateur.dx:2030
rec.radio.amateur.space:723 rec.radio.shortwave:73334

K7JEB wrote:
> On 26 Jun 2005 06:03:12 -0700, "CAM" <w5dxp@arrl.net> wrote:
>
>
>>K7JEB wrote:
>>
>>>Oh, yeah, that name.  Bring up an azimuth plot of the
>>>entire world and it hits you in the eye like a big
>>>pizza pie -- that's amor�!
>
>
>>Just don't expect to find it by doing a web search
>>for "pizza". :-)
>
>
> 'pizza + great + circle' works well, though.
>
> k7jeb

Or you could go here:
http://tonnesoftware.com/pizza.html


From 1081855632034529874
X-Google-Thread: 10e8ad,ea0e193db0e4a843,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news3.google.com!newshub.sdsu.edu!elnk-nf2-pas!
newsfeed.earthlink.net!stamper.news.pas.earthlink.net!
stamper.news.atl.earthlink.net!newsread2.news.atl.earthlink.net.POSTED!46041641!
not-for-mail
From: "JoAnne Maenpaa" <wb9jej_no-spam@earthlink.net>
Newsgroups: rec.radio.amateur.space
Subject: ANS-177 AMSAT Weekly News Bulletins
Lines: 273
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <kHbwe.12926$pa3.2860@newsread2.news.atl.earthlink.net>
Date: Tue, 28 Jun 2005 12:49:20 GMT
NNTP-Posting-Host: 64.105.84.82
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread2.news.atl.earthlink.net 1119962960 64.105.84.82 (Tue, 28 Jun
2005 05:49:20 PDT)
NNTP-Posting-Date: Tue, 28 Jun 2005 05:49:20 PDT
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news1.google.com rec.radio.amateur.space:724
```

AMSAT NEWS SERVICE
ANS-177

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:

* ARISS Status - June 20, 2005
* One Year Anniversary of Echo
* Symposium Registration Now Online
* SSETI Express to Leave Cleanroom
* 2006 Slate of BOD Candidates
* AMSAT Awards

SB SAT @ AMSAT $ANS-177.01
ARISS Status - June 20, 2005

AMSAT News Service Bulletin 177.01
From AMSAT HQ SILVER SPRING, MD.
June 26, 2005
To All RADIO AMATEURS
BID: $ANS-177.01

1. Canadian School Contact Successful

On Friday, June 17, fifteen students from Ecole De la Source, an elementary school in Mascouche, Quebec, Canada, spoke to John Phillips, KE5DRY, via ham radio. Fifteen questions were asked of the astronaut as an audience of approximately 400 students, parents, and dignitaries, assembled in the gymnasium, watched via a video link. Two national television stations and one newspaper covered the event.

2. Upcoming School Contacts

The Mayborn Museum at Baylor University in Waco, Texas has been approved for a contact via the telebridge station WH6PN in Hawaii. It will take place on Monday, June 27 at 16:05 UTC.

3. Article on Australian School Contact

On Thursday, June 2, students from Brigidine College in Sydney, New South Wales, Australia spoke to John Phillips, KE5DRY. An article was written and posted on the school's website. See:
http://www.bcr.randwick.syd.catholic.edu.au/home/space/

4. SuitSat Educational Project Status

Approximately 200 pieces of artwork have been submitted for the SuitSat DVDs. It has been noted that Space Camp Turkey, a participant of two ARISS contacts in the past, sent in their own artwork, taking advantage of yet another ARISS opportunity.

5. ARISS Software

Sergey Samburov sent to Kenneth Ransom a CD containing Kenwood operations, SSTV instructions, and other software programs. The U.S. team will review the contents and provide updates for the software, as needed. Once finalized, the CD will be sent to the ISS on a future Progress flight.

Mark Steiner contacted QRZ and received an update to the callsign database. The new database will be shipped to Houston along with the SuitSat Educational Project CDs, and will be included in the Progress 19P manifest.

6. News of SuitSat Spreads

The ARRL has been fielding questions from reporters about SuitSat, and has prepared a story for their own Web site.

On June 15, Space.com ran an article entitled, "Old Spacesuit, New Satellite." See:
http://www.space.com/astronotes/astronotes.html

On June 16, WFMY News 2 also ran an article on SuitSat. See:
http://www.wfmynews2.com/news/technology/tech_article.aspx?storyid=42975

ARRL's own article, "Fall Launch Viewed for 'SuitSat' as ARISS-US Delivers Hardware," can be found at:
http://www.arrl.org/news/stories/2005/06/17/2/?nc=1

7. Astronaut Training

Astronaut John Grunsfeld is tentatively scheduled to attend an ARISS operations overview session on Friday, July 8. Grunsfeld is the backup for Expedition 13.

8. ARRL Article on ISS Participation in Field Day

John Phillips, KE5DRY, and Sergei Krikalev, U5MIR, may participate in Field Day on June 25 - 26. The ARRL article, "ISS Astronauts Could Be on the Air for Field Day!" includes pass times when the Expedition 11 crew may be available for a contact. See:
http://www.arrl.org/news/stories/2005/06/15/2/?nc=1

9. ARRL Article on John Phillips

Astronaut John Phillips spoke to members of Congress about what living on the ISS means in terms of future exploration plans. On June 15, the ARRL covered this story in the article, "Ham-Astronaut testifies before Congress

from space." See:
http://www.arrl.org/

[ANS thanks Carol, KB3LKI for the above information]

/EX

SB SAT @ AMSAT $ANS-177.02
One Year Anniversary of Echo

AMSAT News Service Bulletin 177.02
From AMSAT HQ SILVER SPRING, MD.
June 26, 2005
To All RADIO AMATEURS
BID: $ANS-177.02

June 29th will mark the 1-year anniversary of the Launch of Echo. On June 29, 2004, Echo, now AO-51, was launched from Baikonur, Kazakhstan, on top of a Dnepr launch vehicle. Echo was one of 8 satellites which were placed into Sun Synchronous Orbit during this launch. After approximately a month of commissioning and testing, the satellite was placed into amateur radio service.

Much more information about the history of Echo is available in Gould Smith's (WA4SXM) book, "AO-51 Development, Operations, and Specifications," available from AMSAT-NA.

I hope everyone has enjoyed the first year of Echo's in-orbit life, the wide variety of modes and experiments that have been operated to date on the satellite, and are looking forward to many more opportunities with Echo in the years ahead. If you use and enjoy Echo please consider joining AMSAT-NA, or your Country's AMSAT organization. It is one way that we can continue to do what we enjoy; make contacts via Amateur Radio Satellites.

[ANS thanks Mike, KE4AZN for the above information]

/EX

SB SAT @ AMSAT $ANS-177.03
Symposium Registration Now Online

AMSAT News Service Bulletin 177.03
From AMSAT HQ SILVER SPRING, MD.
June 26, 2005
To All RADIO AMATEURS
BID: $ANS-177.03

Registration for the 2005 AMSAT Space Symposium is now available on-line. The Symposium will be held October 7-9 at the Holiday Inn Holidome in downtown Lafayette, LA. Information can be found on the Symposium web page at: http://www.amsat.org/amsat-new/symposium/

In addition to downloading the registration form, for the first time

attendees can now register online through the AMSAT store. Registration forms will also be mailed out with the annual ballots for the AMSAT board of directors. Please see the AMSAT Store registration for more information:
http://www.amsat-na.com/SymposiumReg.php

Registration for the Annual Banquet, the Friday Night Shrimp Boil and the Sunday Swamp Tour can all be done at the time you register for the Symposium.

[ANS thanks Emily, W0EEC for the above information]

/EX

SB SAT @ AMSAT $ANS-177.04
SSETI Express to Leave Cleanroom

AMSAT News Service Bulletin 177.04
From AMSAT HQ SILVER SPRING, MD.
June 26, 2005
To All RADIO AMATEURS
BID: $ANS-177.04

The SSETI Express flight model is expected to be fully completed before the end of this week and will then be taken out from the cleanroom and packed for dispatch to the launch site at Plesestk. This means that the webcam pictures at http://sseti.gte.tuwien.ac.at/WSW4/webcam.htm will be almost the last ones available before launch. Presently they are updated every 5 minutes.

SSETI Express is scheduled for launch on Aug 25th and after initial telemetry and telecommand operations is expected to provide a U/S FM transponder in the amateur satellite service.

More details of the launch, the telemetry formats, frequencies and available software will be made available over the forthcoming days/weeks prior to launch.

ESA (and AMSAT-UK) really hope that as many amateurs around the world as possible will be willing to download the telemetry (9k6 on 437 MHz and 38k4 on 2.4 GHz), decode it and forward it to the SSETI Control Station over the internet. This opportunity to participate will enable us to show that the amateur satellite service groundstation network is a viable system for such short term projects. This in turn will encourage them and possibly other launch agencies to actively consider incorporating amateur transponder equipment in their future projects!

[ANS thanks Graham, G3VZV for the above information]

/EX

SB SAT @ AMSAT $ANS-177.05
2006 Slate of BOD Candidates

AMSAT News Service Bulletin 177.05
From AMSAT HQ SILVER SPRING, MD.
June 26, 2005
To All RADIO AMATEURS
BID: $ANS-177.05

Nominations for the position of Director for AMSAT, Inc. closed on June 15th. The list of qualified candidates are:

Barry Baines WD4ASW
Emily Clark W0EEC
Richard M. Hambly W2GPS
Bob McGwier N4HY
Gunther Meisse W8GSM
Bruce Paige KK5DO
Lee McLamb KU4OS
Greg Wycoff N0ZHE

Ballot cards will be mailed to members on or about July 15th, and are due in the AMSAT Office no later than September 15th.

[ANS thanks Steve, W4EPI for the above information]

/EX

SB SAT @ AMSAT $ANS-177.06
AMSAT Awards

AMSAT News Service Bulletin 177.06
From AMSAT HQ SILVER SPRING, MD.
June 26, 2005
To All RADIO AMATEURS
BID: $ANS-177.06

This week, congrats go out to all of the following. All one of them.

David Bird, KC7USS, 51 on 51 Award #28

Who will earn 51 on 51 Award #100? Remember, this award is only available until December 31, 2005.

To see all the awards visit http://www.amsat.org or http://www.amsatnet.com

[ANS thanks Bruce, KK5DO for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,

This week's ANS Editor,
Al Marote, WA1LBG
wa1lbg at amsat dot org

Via the ans mailing list at AMSAT.ORG courtesy of AMSAT-NA.
To unsubscribe, send "unsubscribe ans" to Majordomo@amsat.org

```
From -7773074056894709232
X-Google-Thread: 10e8ad,cbeaa0a2a0a521bc,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news3.google.com!newshub.sdsu.edu!news.glorb.com!atl-
c03.usenetserver.com!elnk-atl-nf1!newsfeed.earthlink.net!
stamper.news.atl.earthlink.net!newsread2.news.atl.earthlink.net.POSTED!46041641!
not-for-mail
From: "JoAnne Maenpaa" <wb9jej_no-spam@earthlink.net>
Newsgroups: rec.radio.amateur.space
Subject: WSR-177 AMSAT Weekly Satellite Status Report
Lines: 1157
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <hIbwe.12927$pa3.4082@newsread2.news.atl.earthlink.net>
Date: Tue, 28 Jun 2005 12:50:21 GMT
NNTP-Posting-Host: 64.105.84.82
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread2.news.atl.earthlink.net 1119963021 64.105.84.82 (Tue, 28 Jun
2005 05:50:21 PDT)
NNTP-Posting-Date: Tue, 28 Jun 2005 05:50:21 PDT
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news1.google.com rec.radio.amateur.space:725
```

This report is organized into 4 parts.
Part 1 - operational analog amateur satellites.
Part 2 - operational digital amateur satellites.
Part 3 - non - operational satellites
Part 4 - proposed satellites

SB SAT @ AMSAT <KB9MMC $ANS-177.S1
WSR 177 Part 1 06/26/2005

AMSAT NEWS SERVICE BULLETIN 177.S1 FROM AMSAT HQ
SILVER SPRING, MD, JUNE 26, 2005
TO ALL RADIO AMATEURS
BID: $ANS-177.S1

VO-52 HAMSAT
Catalog Number: 28650
Launch Date: May 05,2005

Status: On orbit
Current Mode: U/V

Proposed frequencies:

Indian transponder:
Uplink : 435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW
Beacom : 145.940MHz continue carier signal

Dutch transponder:
Uplink : 435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW
Beacon : 145.860MHz 12WPM with CW message

HAMSAT has been assigned the OSCAR designation VO-52.
[06192005]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Mode: PBBS - ON
      FM REPEATER - ON

Analog voice downlink: 435.300 MHz FM
Analog voice uplink: 145.920 MHz FM 67Hz PL tone
                       1268.700 MHz FM 67Hz PL tone

Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
                       2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast
   Protocol (PBP)

Broadcast: PECHO-11
BBS: PECHO-12

AO-51 Schedule of Modes for June 2005:

27 June
FM Repeater, V/U
Uplink: 145.920 MHz FM, 67 Hz PL Tone
Downlink 435.300 MHz FM
9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 MHz FM, 9k6 PBP Digital
Downlink: 435.150 MHz FM, 9k6 PBP Digital

All dates are UTC.

From the Satellite Software Development Team:

Due to restrictions in the Satellite, there can be no digi functionality on Echo at this time.

Explanation:
Random noise from a receiver that is fed through the demodulator and into the SCC (a sort of smart UART) will cause interrupts to be sent to the CPU. With Echo having 4 or 5 open receivers the number of interrupts was enough to cause the CPU difficulties in getting normal processing done in a timely fashion. Basically, the CPU was locked up trying to handle the interrupts. Echo is operating its SCC ports in a mode that will only pass AX.25 packets beginning with a certain character, which is called 'block' mode. This configuration solved the interrupt problem. For Echo, with the call sign being "PACB or PECHO", only packets beginning with the character 'P' can get through the SCC and generate a CPU interrupt.

A digi packet has the call sign of the destination station first, followed by the satellite (relay) call sign, and then the originator call sign. Therefore, the digi packet will not get through the SCC unless the destination station call sign begins wit   htheletter'P'.

A great deal of effort was put into solving this problem. This solution is the only one at the present time that has worked well enough to implement in the Satellite.

[ANS thanks Mike, KE4AZN for the above information]

For further scheduled modes/tests, check out the Echo status page at:
http://www.amsat.org/amsat-new/echo/

Mike Kingery (KE4AZN) has released a upgrade to TimEcho to capture and decode telemetry broadcast from Echo's digital downlink. TimeEcho software and other Ao-51 ECHO information is available at:
http://web.infoave.net/~mkmk518/echo.htm

[ANS thanks Mike, KE4AZN for the above information]
[06262005]

=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Uplink: 145.850 MHz (67.0 Hz PL tone) (See below for operating procedures)
Downlink: 436.795 MHz

There have been unconfirmed reports on the amsat-bb remailer that So-50 has shifted downlink frequency as much as 5khz up. This both from Europe.

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The order of operation is thus: (allow for Doppler as necessary)

1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm
  the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT
  the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window
  will reset the 10 minute timer.
[09122004]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: OPERATIONAL

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplink: 145.850 145.870 145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Please send the reception reports to lab2 'at' jarl.or.jp.
Please use the subject line: 'FO-29 reception report'.

Mineo, JE9PEL, has an FO-29 satellite telemetry analysis program that will
automatically analyze all digital telemetry from the satellite (such as
current, voltage and temperature). FO29CWTE is available at:
http://www.ne.jp/asahi/hamradio/je9pel/
[03132005]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Uplink: 145.850 MHz FM
Downlink: 436.795 MHz FM

The latest information on AO-27 from control operator Michael Wyrick,
N3UC (former N4USI), can be found at:
http://www.ao27.org

An AO-27 question-and-answer page is available on the AMSAT-NA web
site, with updates by Ray, W2RS. The URL is:
http://www.amsat.org/amsat/intro/ao27faq.html

[ANS thanks John, K6YK, for this week's AO-27 report]
[08292004]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Semi-operational in sunlight.
Return to active status: June 21,2002

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A
145.975 to 145.925 MHz CW/USB Mode B
Beacon: 29.502 MHz, 145.972 MHz, 435.1 MHz, 2304.1 MHz

Emily, W0EEC has created a website to allow the users of AO-7 to record contacts, observations and use of the satellite more effectively at:
http://www.emilyshouse.com/experthams/ao7/main.php
This includes the ability to log contacts.

Tim, K3TZ has written a program to decode AO-07 telemetry.
The program can be downloaded at:
http://www.qsl.net/k3tz/files/K3TZ_AO-07_Telemetry_Decoder_0.5.zip

For more AO-7 info:
http://www.amsat.org/amsat/sats/n7hpr/ao7.html
[11142004]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: Packet (APRS-style connections)
Digipeater: Active

The current Expedition 11 crew is:
Commander Sergei Krikalev
Flight Engineer John Phillips

Worldwide packet uplink: 145.990 MHz FM
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM
Doppler Shift is 10 KHz

Russian callsigns: RS0ISS, RZ3DZR
USA callsign: NA1SS

Packet station mailbox callsign: RS0ISS-11
Packet station keyboard callsign: RS0ISS-3
Digipeater callsign: ARISS

The ISS daily crew schedule can be found at:
http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line is NOT translated from Russian and posted.

More information is available at:
http://www.rac.ca/ariss
http://spaceflight.nasa.gov/station/reference/radio/
http://www.marexmg.org/fileshtml/unprotopage.html
http://www.issfanclub.com
http://oscar.dcarr.org/
[04242005]
NNNN
/EX

SB SAT @ AMSAT <KB9MMC $ANS-177.S2
WSR 177 Part 2 06/26/2005

AMSAT NEWS SERVICE BULLETIN 177.S2 FROM AMSAT HQ
SILVER SPRING, MD, JUNE 26, 2005
TO ALL RADIO AMATEURS
BID: $ANS-177.S2

AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Mode: PBBS - OFF
FM REPEATER - ON

Analog voice downlink: 435.300 MHz FM
Analog voice uplink: 145.920 MHz FM 67Hz PL tone
1268.700 MHz FM 67Hz PL tone

Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast Protocol (PBP)

Broadcast: PECHO-11
BBS: PECHO-12

AO-51 Schedule of Modes forJune 2005:

27 June
FM Repeater, V/U
Uplink: 145.920 MHz FM, 67 Hz PL Tone
Downlink 435.300 MHz FM

9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 MHz FM, 9k6 PBP Digital
Downlink: 435.150 MHz FM, 9k6 PBP Digital

All dates are UTC.

From the Satellite Software Development Team:

Due to restrictions in the Satellite, there can be no digi functionality on Echo at this time.

Explanation:
Random noise from a receiver that is fed through the demodulator and into the SCC (a sort of smart UART) will cause interrupts to be sent to the CPU. With Echo having 4 or 5 open receivers the number of interrupts was enough to cause the CPU difficulties in getting normal processing done in a timely fashion. Basically, the CPU was locked up trying to handle the interrupts. Echo is operating its SCC ports in a mode that will only pass AX.25 packets beginning with a certain character, which is called 'block' mode. This configuration solved the interrupt problem. For Echo, with the call sign being "PACB or PECHO", only packets beginning with the character 'P' can get through the SCC and generate a CPU interrupt.

A digi packet has the call sign of the destination station first, followed by the satellite (relay) call sign, and then the originator call sign. Therefore, the digi packet will not get through the SCC unless the destination station call sign begins wit htheletter'P'.

A great deal of effort was put into solving this problem. This solution is the only one at the present time that has worked well enough to implement in the Satellite.

[ANS thanks Mike, KE4AZN for the above information]

For further scheduled modes/tests, check out the Echo status page at:
http://www.amsat.org/amsat-new/echo/

Mike Kingery (KE4AZN) has released a upgrade to TimEcho to capture and decode telemetry broadcast from Echo's digital downlink. TimeEcho software and other Ao-51 ECHO information is available at:
http://web.infoave.net/~mkmk518/echo.htm

[ANS thanks Mike, KE4AZN for the above information]
[06262005]

=====
GO-32 TECHSAT-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Downlink: 435.225 MHz FM (9600-baud FSK)
(435.325 n/a - temperature problems)
Uplinks: 145.850, 145.890, 145.930 FM
1269.700, 1269.800, 1269.900 FM
Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[03132005]

=====

MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Operational

Uplink: 145.850 or 145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz
Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[05152005]

=====

AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Semi-operational, the digipeater command is on and open for APRS users.

Uplink: 145.90 145.92 145.94 145.96 MHz FM
(using 1200-baud Manchester FSK)
Downlink: 437.026 MHz SSB (1200-baud PSK)
Mode-S Beacon: 2401.1428 MHz
Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

A WOD collection of current graphics along with general information and telemetry samples can be found at:
http://www.telecable.es/personales/ea1bcu
[05092004]

=====

UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

```
Status: Semi-operational?

Telemetry Downlink: 145.826 MHz. FM (1200-baud AFSK).
                    approx. 10 days ON, 10 days OFF
Mode-S Beacon:      2401.500 MHz. ... OFF
UHFBeacon:          435.025 MHz. ...  OFF

This from Clive, G3CWV:

There is a small chance that OSCAR-11 may have started transmitting
again between 08 June to 10 June.

The frequency is 145.826.

Any reception reports would be appreciated. Please reply direct to
Clive G3CWV (g3cwv@amsat.org), or post reports to AMSAT-BB.

[ANS thanks Clive, G3CWV for the above information]

More information on UO-11 OSCAR-11 can be found at:
http://www.users.zetnet.co.uk/clivew/
[06122005]
NNNN
/EX

SB SAT @ AMSAT <KB9MMC $ANS-177.S3
WSR 177 Part 3 06/26/2005

AMSAT NEWS SERVICE BULLETIN 177.S3 FROM AMSAT HQ
SILVER SPRING, MD, JUNE 26, 2005
TO ALL RADIO AMATEURS
BID: $ANS-177.S3

THE FOLLOWING ARE IN ORBIT BUT ARE
NON-OPERATIONAL AT THIS TIME:

POSAT-1 PO-28
Catalog Number: 22829
Launched : September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 435.075 MHz
          435.275 MHz

Uplink:   145.925 MHz
          145.975 MHz

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

More information of POSAT-1 can be found at:
```

```
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
http://www.amsat.org/amsat/sats/n7hpr/po28.html
[08152004]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launched: June 16, 1983

Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB
Beacon:   145.810 MHz (unmodulated carrier)

AO-10 has been locked into a Mode-B, 70-cm uplink and
2-meter downlink for several years.

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: Non-operational

Uplink:             145.875 145.900 145.925 145.950 MHz FM (1200-baud)
Downlink:           435.812 MHz SSB
Broadcast Callsign: ITMSAT-11
BBS:                ITMSAT-12

Alberto E. Zagni - I2KBD reports on 02/13/05
The spacecraft is in MBL (safe mode) and is trasmitting just 6 channels
of telemetry. Temperatures and voltage are nominal, but there seems to
be a problem with the onboard receiver, refusing to accept commands.
The spacecraft was launched in 1993, thus nearing 12 years in orbit...

Best regards
Alberto E. Zagni - I2KBD
ITAMSAT Mission Director

More information of IO-26 can be found at:

http://joshua.micronet.it/english/itamsat/itamsathome.html
http://www.amsat.org/amsat/sats/n7hpr/io26.html
www.itamsat.org

[02132005]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991
```

```
Status: Non-operational

Uplink:   21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB
Beacon:   29.408 MHz
Robot:    29.454 MHz
[05232004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink:      21.260 to  21.300 MHz CW/USB
Downlink:   145.860 to 145.900 MHz CW/USB
Beacon:     145.860 MHz
Robot:      145.908 MHz
[05232004]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink 145.975 MHz FM
Downlink 435.070 MHz FM
[05092004]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink:             145.900 FM 9600-baud FSK
Downlink:           435.120 MHz FM
Broadcast Callsign: UOSAT5-11
BBS:                UOSAT5-12
[01092005]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational?

Uplink:      145.858 to 145.898 MHz CW/USB
Downlink:     29.354 to  29.394 MHz CW/USB
Beacon:       29.352 MHz (intermittent)
SSB meeting frequency:  29.380 MHz (unofficial)
```

John, KD6PAG reports on June 16, 2004 to ANS:
RS-15 beacon seemed to be back in the mode where it's a tone about 5 seconds off and then 5 seconds on this morning.

ANS is looking for more confirmations of RS-15 coming back.

[ANS thanks John, KD6PAG for RS-15 information]
[06202004]

=====

LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplink: 145.84 145.86 145.88 145.90 MHz FM
                    (using 1200-baud Manchester FSK)
CW downlink: 437.125 MHz
Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)
Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[05232004]

=====

FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[08152004]

=====

KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM
Broadcast Callsign: HL01-11
BBS: HL01-12

Jim, AA7KC, reports that KO-23's downlink transmitter continues in a

non-operational status.
[05092004]

=====

KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM (9600-baud FSK)
Downlink: 436.500 MHz FM
Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]

=====

PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink frequency (listed on the PanSat web site) 436.500 MHz

The satellite is not available for general uplink transmissions.

The Naval Postgraduate School developed PanSat. At the time of launch, PanSat spread-spectrum digital transponders were to be available to Amateur Radio operators along with software to utilize this technology.

The satellite is still operating, however, the spread spectrum packet radio portion never took place. The spacecraft is now beyond it's initial 2-year mission life, but telemetry records are still being downloaded.

For more information, visit the official PanSat web site at:
http://www.sp.nps.navy.mil/pansat/
[05092004]

=====

SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm

```
[ANS has no further information]
[05232004]
=====
SO-35 SUNSAT
Catalog Number:     ?
Launched:February 23, 1999

STatus: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
          Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
         Mode J Digipeater: 145.825 MHz and 145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[08082004]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink:             145.960 MHz (9600-baud FSK)
Downlink:           437.025 MHz 437.400 MHz
Broadcast Callsign: UO121-11
BBS:                UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA
web site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[05092004]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplink      V-band    145.840 -  145.990 MHz CW/LSB
            U-band    435.550 -  435.800 MHz CW/LSB
           L1-band   1269.250 - 1269.500 MHz CW/LSB
           L2-band   1268.325 - 1268.575 MHz CW/LSB
           S1-band   2400.350 - 2400.600 MHz CW/LSB
Downlink:  S2-band   2401.225 - 2401.475 MHz CW/USB
           K-band 24,048.010 - 24,048.060 MHz CW/USB
Beacon:    2401.323, 24,048.035
[05232004]
-----
SO-42  SAUDISAT-1B
Catalog number: 26549
```

Launched: September 26, 2000

Status: Non-Operational

Uplink: to be released
Downlink: 437.075 MHz
Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[08152004]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz
Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[08152004]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Non-Operational?????

Uplink/downlink: 145.827 MHz 1200 baud AX.25 AFSK via W3ADO-1
Aux/Uplink: 435.250 MHz 9600 baud via PCSAT-2 (off)
APRS Downlink: 144.390 MHz (Region 2)

This from Bob, WB4APR:
PCsat returned to negative-power-budget mode on 16 Feb 2005 and is not expect- ed to be restorable until the next full-sun period in the Fall when the southern Sun can better illuminate the south facing panel. Between now and then you are welcome to try to get a packet digipeated, but this will usually only work during mid-day passes in the Northern Hemisphere due to sun angles.

Question asked of Bob WB4APR recently on the amsat-bb:
Is it alive?? I was just looking at the pcsat.aprs.org page at Findu and it shows a lot of stations recently (within the last day) digipeating through it.

Bob's reply:
PCsat is always "alive", but can only muster enough

power to get out a complete packet when it is in near mid-day sun in the Northern hemisphere the higher the latitude the better in the summer.

Over the next 2 weeks PCsat is entering one of thoes periods. The 20 or so stations you see on the LIVE web page are probably unattended beacons. But if u hear good packets on 145.825 from PCsat during mid-day, go ahead and use it...

Fortunately it will be in 100% sun during FD, but Unfortunately, all that sun is from the side and misses the best solar panel. Experience has shown it will be useless at that time.

PCSat is a 1200-baud APRS digipeater designed for use by stations using hand-held or mobile transceivers. Downlinks feed a central web site at:
http://pcsat.aprs.org

The APRS-equipped PCSat was built by midshipmen from the U.S. Naval Academy under the guidance of Bob Bruninga, WB4APR.
[05242005]

=====

NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, callsign KE6QMD, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]

=====

AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Semi-operational.

Uplink 435.275 1200-baud AFSK
Downlink 145.825 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

AO-49 (SAFIR-M) is a German amateur radio payload onboard the small German scientific satellite "RUBIN-2".

AO-49 was built by the German amateur radio association "AATiS e.V." (German acronym for "Arbeitskreis Amateurfunk und Telekommunikation in der Schule", which means: 'working group for amateur radio anand telecommunications in schools'). AO-49 is designed as a "store and broadcast" system for APRS based messages, dedicated for the use of schools in combination with the existing WX-Net and planned buoy experiments in Germany.

No transmissions detected since the 1st of February 2003! It appears AO-49 is not properly aligned to illuminate the solar panels. This should end soon. Due to its orbit, AO-49 will be in a phase without eclipses until 13Feb03.

Martin DG8UAU has written a small software program "SAFIR-M Decoder" to allow decoding of the received DATA0 frames. It is available at: http://amend.gmxhome.de in the section Aktuelles.

Details on AO-49 (SAFIR-M) can be found at:
http://amend.gmxhome.de

Information about AATiS e.V. is available at:
http://www.aatis.de
[05092004]
=====
CUTE-1
Catalog number: 27844
Launched: June 30,2003

Status: Operational?

```
Uplink:          ?
Downlink:     436.8375 CW
              437.4700 1200 FM ax25 or SRLL (ACTIVE only near Japan)
```

Fernando, LU1HKO, reports hearing Cute-1 on 03/06/2005 18:40 (LU Time) sending CW telemetry.

CUTE 1 is a Japanese (Tokyo Institute of Technology) one kilogram nanosatellite that was launched by a Rokot rocket from Plesetsk at 14:15 UT on 30 June 2003. It carries a 100 mW beacon at 436.8375 MHz. Initial orbital parameters were period 101.4 min, apogee 831 km, perigee 819 km, and inclination 98.7?.

For further info about CUTE-1 goto:
http://lss.mes.titech.ac.jp/ssp/cubesat/operation/Schedule_e.html

ANS WSR is looking for more information about this satellite.
[03272005]
NNNN
/EX

SB SAT @ AMSAT <KB9MMC $ANS-177.S4

WSR 177 Part 4 06/26/2005

AMSAT NEWS SERVICE BULLETIN 177.S4 FROM AMSAT HQ
SILVER SPRING, MD, JUNE 26, 2005
TO ALL RADIO AMATEURS
BID: $ANS-177.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE PROPOSED FOR LAUNCH AT THIS TIME:

UCISAT ?O-??
Catalog number:
Proposed Launch Date: October 31, 2005

Status: Under Construction

Downlink: Submission in Progress
Uplink: Submission in Progress
Callsign: Submission in Progress

This from Matt Bennett, KF6RTB, UCISAT Communications Team Member:

Our website is www.ucisat.net .This is a new website, however, and doesn't have the "Status" section active yet. Because of the growing interest in our project, I'll push our webmaster to create updates (hopefully) on a week-to-week basis. For now, the current status of the mission is as follows:

-Expected Launch Date: October 31st, 2005
-Frequency Allocation: Submission in Progress
-Construction Status: Sub-Assembly
[WSR to thank Matt Bennett, KF6RTB, for this week's report.]
[01302005]
=====
SSETI ?O-??
Catalog Number:
Proposed Launch Date: Early 2005

Status: Under Construction

During the last week, the completed modules have been fitted to the spaceframe and the wiring harness and integration completed. The satellite was moved on Wednesday to an anechoic chamber for EMC testing to ensure that the emissions from the satellites electronics, the 3W UHF transmitter and the S Band TX meet the spectral requirements of the launch agency and SSTL.

Several new pictures showing the rapid progress over the last 2 weeks have been uploaded to the SSETI Website. These include detailed shots of the S Band unit now wired to the antennas, cold gas propulsion and some taken inside the anechoic chamber.
http://sseti.gte.tuwien.ac.at/WSW4/express5.php

[ANS thanks David, G0MRF for the above information]

Looking at the website for the SSETI Express webcam
http://sseti.gte.tuwien.ac.at/WSW4/webcam.htm

[04102005]
=====
PCSAT2 ?0-??
Catalog Number:
Proposed Launch Date: May 2005

PCSAT2, which had previously been stowed in the Space Shuttle Discovery, arrived at Launch Complex 39B on 07 April 2005. PCSAT2 is now standing by ready to be launched on the first Space Shuttle return-to-flight mission.

PCSAT2 will use the same dual redundant AX.25 command and control system as used on PCsat (NO-44) offering 8 on/off commands, 5 telemetry channels and a serial port for the solar cell experiment telemetry. It also supports the Digital Comms Relay support of the PCsat/APRS mission. The packet uplink is on 145.825 MHz and the default downlinks are in the 435 MHz band to avoid any possible interference with existing ARISS missions. PCSAT2 will have quad redundant transmit inhibits for EVA safety issues, thus, it is also easy to turn off to avoid any issues with other UHF ARISS experiments that may be activated in the future. Also, the mission lifetime of PCSAT2 is only 1 year, because it is a sample-return mission, thus terminating any long term conflicts in spectrum management.

The PCSAT2 mission is intended as an opportunity to augment existing ARISS communications experiments with an external autonomous communications payload. In this regard, it has several potential uses:

* A UI-Digipeater to help ease congestion on the currently shared ARISS PMS (Packet Mail system)

* A PSK-31 transponder for multi-user communications to improve accessibility for schools and ARISS outreach programs.

* An FM Voice repeater for full duplex crew communications to facilitate crew-to-school ARISS contacts.

* Routine Telemetry on the spacecraft systems

For more information and pictures visit the PCSAT2 website at
http://www.ew.usna.edu/~bruninga/pcsat2.html

[ANS thanks Bob, WB4APR for the above information]
[04102005}
=====
PHASE 3E ?O-??
Catalog Number:
Proposed Launch Date: Early 2006

Status: Under Construction

The AMSAT-Phase 3E satellite (P3E) is dedicated as communication and scientific platform for a highly elliptical orbit around Earth. The spacecraft will be created in a joint process together with the P5A Mars mission by an international team under leadership of AMSAT-DL and continues the successful series of AMSAT-Phase 3 satellites. Additionally the spacecraft will be a test bench for technology developped for the Mars mission. The main task of P3E is to act as communication platform for radio amateurs worldwide. A launch is planned in the period 2004 to 2006.

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/
[03272005]
=====
CP1 ?o-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: N6CP
Proposed Transmit Frequency: 436.845
[03272005]
=====
CP2 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.325
[03272005]
=====
HAUSAT1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: D90HP
Proposed Transmit Frequency: 437.465
[03272005]
=====
ICE Cube 1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: W2CXM
Proposed Transmit Frequency: 437.305
[03272005]
=====
ICE Cube 2 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

```
Proposed Callsign: N2VR
Proposed Transmit Frequency: 437.425
[03272005]
=====
ION ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.505
[03272005]
=====
KUTEsat ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: KC0RMW
Proposed Transmit Frequency: 437.385
[03272005]
=====
MEROPE ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: K7MSU-1
Proposed Transmit Frequency: 145.980
[03272005]
=====
nCUBE1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
       2407.25
[03272005]
=====
RINCON ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
        437.345
[03272005]
=====
SACRED ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
[03272005]
```

=====
SACRED ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
[03272005]
=====
SEEDS ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: JQ1YGU
Proposed Transmit Frequency: 437.485
[03272005]
=====
Mea Huaka ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.405
[03272005]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
        888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)

* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/amsat/listserv/menu.html

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satelite Report Editor is James K. Darrow, KB9MMC.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

Via the ans mailing list at AMSAT.ORG courtesy of AMSAT-NA.
To unsubscribe, send "unsubscribe ans" to Majordomo@amsat.org

From 1516823317403648798
X-Google-Thread: 10e8ad,14d2c0ea985bb03d
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news4.google.com!news.glorb.com!news.alt.net!sn-xit-04!sn-xit-11!sn-xit-12!sn-xit-01!sn-post-02!sn-post-01!supernews.com!corp.supernews.com!not-for-mail
From: paul flautt <pjflautt@netpluscom.com>
Newsgroups: rec.radio.amateur.space
Subject: Re: ISS Field Day
Date: Tue, 28 Jun 2005 23:00:29 -0400
Organization: Posted via Supernews, http://www.supernews.com
Message-ID: <42C20ECD.DCE977DD@netpluscom.com>
X-Mailer: Mozilla 4.5 [en] (Win95; I)
X-Accept-Language: en
MIME-Version: 1.0
References: <p5wve.3033$Bn6.2004@trndny08>
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
X-Complaints-To: abuse@supernews.com
Lines: 9
Xref: g2news1.google.com rec.radio.amateur.space:726

Just packet in Ohio.

Paul

Kenneth PierceJr wrote:

> Heard packet downlink on 145.80 on two passes over Delaware but no voice.
> Has anyone heard any voice activity from ISS during field day?

```
From 5092146881364621119
X-Google-Thread: 10e8ad,14d2c0ea985bb03d
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news4.google.com!sn-xit-04!sn-xit-12!sn-xit-01!sn-
post-01!supernews.com!corp.supernews.com!not-for-mail
From: Rick <w7rtrick@firstinter.net>
Newsgroups: rec.radio.amateur.space
Subject: Re: ISS Field Day
Date: Wed, 29 Jun 2005 12:26:50 -0700
Organization: R.L. Tannehill, P.E. & Assoc.
Message-ID: <11c5tfq4n1tif10@corp.supernews.com>
Reply-To: rickw7rtspamno@firstinter.net
User-Agent: Mozilla Thunderbird 1.0 (Windows/20041206)
X-Accept-Language: en-us, en
MIME-Version: 1.0
References: <p5wve.3033$Bn6.2004@trndny08>
In-Reply-To: <p5wve.3033$Bn6.2004@trndny08>
Content-Type: text/plain; charset=ISO-8859-1; format=flowed
Content-Transfer-Encoding: 7bit
X-Complaints-To: abuse@supernews.com
Lines: 9
Xref: g2news1.google.com rec.radio.amateur.space:727
```

Our club (K7DPS) worked it on voice on Sunday morning.
Rick Tannehill - W7RT

Kenneth PierceJr wrote:
> Heard packet downlink on 145.80 on two passes over Delaware but no voice.
> Has anyone heard any voice activity from ISS during field day?
>
>

```
From 4117537403880597632
X-Google-Thread: 10e8ad,4442729b1c5a51d8,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII
Path: g2news1.google.com!news4.google.com!newshub.sdsu.edu!elnk-nf2-pas!
newsfeed.earthlink.net!stamper.news.pas.earthlink.net!
stamper.news.atl.earthlink.net!newsread3.news.atl.earthlink.net.POSTED!46041641!
not-for-mail
```

From: "JoAnne Maenpaa" <wb9jej_no-spam@earthlink.net>
Newsgroups: rec.radio.amateur.space
Subject: ANS-184 AMSAT Weekly News Bulletins
Lines: 364
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <7qhye.17511$eM6.16665@newsread3.news.atl.earthlink.net>
Date: Mon, 04 Jul 2005 20:58:43 GMT
NNTP-Posting-Host: 64.105.116.247
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread3.news.atl.earthlink.net 1120510723 64.105.116.247 (Mon, 04 Jul 2005 13:58:43 PDT)
NNTP-Posting-Date: Mon, 04 Jul 2005 13:58:43 PDT
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news1.google.com rec.radio.amateur.space:728

AMSAT NEWS SERVICE
ANS-184

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:

* AO-51 Off-Air
* ARISS Status
* Symposium Registration Now Online
* New Items at the AMSAT Store
* STSTLE List Operational Again
* Please Report Your AMSAT Field Day Results
* AMSAT Membership Challenge
* One Year Anniversary of Echo

SB SAT @ AMSAT $ANS-184.01
AO-51 Off-Air

AMSAT News Service Bulletin 184.01
From AMSAT HQ SILVER SPRING, MD.
July 3, 2005
To All RADIO AMATEURS
BID: $ANS-184.01

Sometime on Sunday, 26 June 2005, there was a software reset on AO-51.

Getting a memory download of each program that was running on the satellite at the time has been completed. The Software Group will study this data to debug the programs. This will take a number of days to accomplish. We are working on this as fast as possible to get Echo back up and running.

Update 2 July from the AO-51 Web Site:

The current plan is to begin the sof twarereloadingSaturdayevening. When completed the satellite will be placed in the normal V/U FM repeater and 9k6 digital mode.

FM Repeater, V/U
Uplink: 145.920 mhz FM, 67 hz PL Tone
Downlink 435.300 mhz FM
9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 435.150 mhz FM, 9k6 PBP Digital

[ANS thanks Mike, KE4AZN for the above information]

/EX

SB SAT @ AMSAT $ANS-184.02
ARISS Status

AMSAT News Service Bulletin 184.02
From AMSAT HQ SILVER SPRING, MD.
July 3, 2005
To All RADIO AMATEURS
BID: $ANS-184.02

1.Texan School Contact Successful

Students attending the Hockaday Schools summer program in Dallas, Texas had the opportunity to speak to John Phillips, KE5DRY, on Monday, June 20. An audience of 300 students, teachers and parents gathered and watched as twelve children asked 22 questions of the astronaut. There was limited media coverage, but those attending were thrilled with the event!

2.Planned School Contacts

The Mayborn Museum at Baylor University in Waco, Texas was scheduled for a contact via the telebridge station, WH6PN, in Hawaii on Monday, June 27 at 16:05 UTC.

Yokohama Elementary School in Kochi, Japan has been scheduled for a contact on Monday, July 4 at 09:20 UTC.

3.ARRL Article on Canadian, Swiss School Contacts

Students from Zurich International School in Horgen, Switzerland and children attending Ecole de la Source, in Mascouche, Quebec, Canada, experienced ARISS contacts with John Phillips, KE5DRY, on June 10 and 17,
respectively. ARRL ran a web story entitled, "International Students, Quebec Primary Schoolers Quiz Astronaut via Ham Radio."

See: http://www.arrl.org/news/stories/2005/06/22/4/?nc=1

4.ARISS CDs Delivered

The SuitSat Educational Project CDs and the updated QRZ callsign database
CD were transferred to Alexander Poleschuk. Mr. Poleschuk will deliver them to Energia this week.

5.Expedition 10 Crew Debrief Scheduled

The ARISS-U.S. team has been scheduled for a crew debrief with Leroy Chiao, KE5BRW. The Expedition 10 debrief is planned for Tuesday, June 28 at 4:15 pm ET.

6.ARISS International Meeting Held

The monthly ARISS International Teleconference was held on Tuesday, June 21. Items of discussion included preparation for the ARISS International
Meeting to be held in the U.K. August 1 / 2, and the funding which was obtained for the ARISS S-Band and L-Band antennas on the Columbus Module.
Also covered were the shipment of SSTV and SuitSat hardware, and the status of the SuitSat Educational Project. The next ARISS International Teleconference will be held on Tuesday, July 19.

[ANS thanks Carol Jackson, KB3LKI for the above information]

/EX

SB SAT @ AMSAT $ANS-184.03
Symposium Registration Now Online

AMSAT News Service Bulletin 184.03
From AMSAT HQ SILVER SPRING, MD.
July 3, 2005
To All RADIO AMATEURS
BID: $ANS-184.03

Registration for the 2005 AMSAT Space Symposium is now available on-line.
The Symposium will be held October 7-9 at the Holiday Inn Holidome in downtown Lafayette, LA. Information can be found on the Symposium web page at:

http://www.amsat.org/amsat-new/symposium/

In addition to downloading the registration form, for the first time attendees can now register online through the AMSAT store. Registration forms will also be mailed out with the annual ballots for the AMSAT board of directors. Please see the AMSAT Store registration for more information:

http://www.amsat-na.com/SymposiumReg.php

Registration for the Annual Banquet, the Friday Night Shrimp Boil and the Sunday Swamp Tour can all be done at the time you register for the Symposium.

[ANS thanks Emily, W0EEC for the above information]

/EX

SB SAT @ AMSAT $ANS-184.04
New Items at the AMSAT Store

AMSAT News Service Bulletin 184.04
From AMSAT HQ SILVER SPRING, MD.
July 3, 2005
To All RADIO AMATEURS
BID: $ANS-184.04

Bruce Paige, KK5DO, wearing his AMSAT Store Manager hat reports he has just completed adding some new items to the AMSAT Store. These items were first introduced at the 2005 Dayton Hamvention.

AMSAT White T-Shirt $15
AMSAT Maroon Golf Shirt $30
AMSAT Gray Golf Shirt $30

Sizes small and medium are not available.

AMSAT Maroon Hat $10

AMSAT Magnet $2

Also recently added is the newly revised for 2005 book, "Getting Started With Amateur Satellites". This well written guide now includes both AO-51 and VO-52. The Digital Guide has been renamed to "Digital Satellite & Telemetry Guide" and was also revised in 2005.

Visit the Online AMSAT Store at http://www.amsat.org

[ANS thanks Bruce, KK5DO for the above information.]

/EX

SB SAT @ AMSAT $ANS-184.05
STSTLE List Operational Again

AMSAT News Service Bulletin 184.05
From AMSAT HQ SILVER SPRING, MD.
July 3, 2005
To All RADIO AMATEURS
BID: $ANS-184.05

The "STSTLE" is re-mobilizing in anticipation of the Space Shuttle return
to flight. Because of the long hiatus following the Columbia tragedy,
the team is re-constituting the mailing list from scratch.

As in the past, the Space Shuttle orbital data will be posted on the AMSAT Web site. However, those wishing to receive AMSAT and TLE Keplerian data directly by e-mail will need to re-subscribe to the mailing list.

As in the past, we shall endeavor to provide several updates daily as well as provide updates to cover all thrust events.

The STSTLE Team Consists of:
- Dave Cottle, Sydney Australia
- Ken Ernandes, N2WWD, Indialantic, FL
- Dave Ransom, Pacific Palisades, CA
- Dave Simonson, Indialantic, FL

The link for e-mail subscribing/un-subscribing is:

www.aus-city.com/cgi-bin/dada/mail.cgi?flavor=subscribe&list=STSTLE_LIST

The provided e-mail address will checked and the user will be sent a subscription confirmation they will need to click to complete the process.

[ANS thanks Ken Ernandes, N2WWD for the above information.]

/EX

SB SAT @ AMSAT $ANS-184.06
Please Report Your AMSAT Field Day Results

AMSAT News Service Bulletin 184.06
From AMSAT HQ SILVER SPRING, MD.
July 3, 2005

To All RADIO AMATEURS
BID: $ANS-184.06

Bruce Paige, KK5DO, wearing his AMSAT Director of Contests and Awards hat, reminds us now that Field Day is over, please remember to get your pictures and stories as well as your score to him by midnight, July 18, 2005. Send your Field Day information to kk5do@amsat.org. He will then tabulate the results and get them into the Journal and AMSAT's online service.

Gunther Meisse would like pictures of kids operating satellites on Field Day 2005 for use in our AMSAT printed materials. Please e-mail to Gunther
Meisse, W8GSM at w8gsm@amsat.org. Thanks in advance for your help.

[ANS thanks Bruce, KK5DO, and Gunther W8GSM for the above information.]

/EX

SB SAT @ AMSAT $ANS-184.07
AMSAT Membership Challenge

AMSAT News Service Bulletin 184.7
From AMSAT HQ SILVER SPRING, MD.
July 3, 2005
To All RADIO AMATEURS
BID: $ANS-184.07

AMSAT member Kevin Schuchmann, WA6FWF, offered a membership challenge on June 27, 2005. Kevin wrote, "I will match the $44 membership fee for every non-member on the AMSAT-BB listserv that joins in the next two weeks up to $1000 dollars. If you have been sitting on the fence please look at what some of the BOD's have been doing for you to use the satellites that you have now like ECHO and join AMSAT knowing that your membership fee will be matched and will go to AMSAT's latest project EAGLE".

Gunther Meisse, W8GSM, AMSAT Treasurer, replied to Kevin, "Thank you for your generous offer. It is positive efforts like yours that will make a difference!!!

This was followed a day later by this message (Ed.)

"As I am sure you saw on the -bb yesterday, we have a great offer going for the next two weeks with a generous member offering to match the new member sign-up dues up to $1,000.00. Well, the offer gets even better today when member, Jeff Davis, KE9V, makes the following offer for the next 23 new member sign-ups: "I'd be willing buy the new AMSAT book, 'Getting Started With Amateur Satellites' ($15 each) for each of those 22 new AMSAT members who joins in the next few weeks." Thanks Jeff.."

Now, come on non members. What better time to join thsn right now? Your sign-up has double the financial impact.. We need just 22 new sign-ups within the next two weeks to take full advantage of this generous offer."

Either go to the amsat.org web site, or call Martha at AMSAT Headquarters after 10AM EDT at (301) 589-6062. She is standing by to help you!

[ANS thanks Kevin, WA6FWF, and Gunther, W8GSM, for the above information]

/EX

SB SAT @ AMSAT $ANS-184.08
One Year Anniversary of Echo

AMSAT News Service Bulletin 184.08
 From AMSAT HQ SILVER SPRING, MD.
July 3, 2005
To All RADIO AMATEURS
BID: $ANS-184.08

June 29th will mark the 1-year anniversary of the Launch of Echo. On June 29, 2004, Echo, now AO-51, was launched from Baikonur, Kazakhstan, on top of a Dnepr launch vehicle. Echo was one of 8 satellites which were placed into Sun Synchronous Orbit during this launch. After approximately a month of commissioning and testing, the satellite was placed into amateur radio service.

Much more information about the history of Echo is available in Gould Smith's (WA4SXM) book, "AO-51 Development, Operations, and Specifications", available from Amsat-NA.

I hope everyone has enjoyed the first year of Echo's in-orbit life, the wide variety of modes and experiments that have been operated to date on the satellite, and are looking forward to many more opportunities with Echo in the years ahead. If you use and enjoy Echo please consider joining Amsat-NA, or your Country�*s Amsat organization. It is one way that we can continue to do what we enjoy; make contacts via Amateur Radio Satellites.

73 KE4AZN
Echo Command Team
Echo Operation Group
Amsat VP Operations

[ANS thanks Lee, McLamb, KU4OS for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits.

Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Dave Johnson, G4DPZ
G4DPZ at amsat dot org

Via the ans mailing list at AMSAT.ORG courtesy of AMSAT-NA.
To unsubscribe, send "unsubscribe ans" to Majordomo@amsat.org

From 8200453817392030220
X-Google-Thread: 10e8ad,88b89b168f1e9642,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!news.maxwell.syr.edu!
border1.nntp.dca.giganews.com!nntp.giganews.com!elnk-atl-nf1!
newsfeed.earthlink.net!stamper.news.atl.earthlink.net!
newsread3.news.atl.earthlink.net.POSTED!46041641!not-for-mail
From: "JoAnne Maenpaa" <wb9jej_no-spam@earthlink.net>
Newsgroups: rec.radio.amateur.space
Subject: WSR-185 AMSAT Weekly Satellite Status Report
Lines: 1124
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <4rhye.17512$eM6.6124@newsread3.news.atl.earthlink.net>
Date: Mon, 04 Jul 2005 20:59:44 GMT
NNTP-Posting-Host: 64.105.116.247
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread3.news.atl.earthlink.net 1120510784 64.105.116.247 (Mon, 04 Jul 2005 13:59:44 PDT)
NNTP-Posting-Date: Mon, 04 Jul 2005 13:59:44 PDT
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news1.google.com rec.radio.amateur.space:729

This report is organized into 4 parts.
Part 1 - operational analog amateur satellites.
Part 2 - operational digital amateur satellites.
Part 3 - non - operational satellites
Part 4 - proposed satellites

SB SAT @ AMSAT <W8ISS $ANS-185.S1
WSR 185 Part 1 07/03/2005

AMSAT NEWS SERVICE BULLETIN 185.S1 FROM AMSAT HQ
SILVER SPRING, MD, JULY 03, 2005
TO ALL RADIO AMATEURS
BID: $ANS-185.S1

```
VO-52 HAMSAT
Catalog Number: 28650
Launch Date: May 05,2005

Status: On orbit
Current Mode: U/V

Proposed frequencies:
-------------------
Indian transponder:
Uplink  : 435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW
Beacom  : 145.940MHz continue carier signal

Dutch transponder:
Uplink  : 435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW
Beacon  : 145.860MHz 12WPM with CW message

HAMSAT has been assigned the OSCAR designation VO-52.
[06192005]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Mode: PBBS - ON
      FM REPEATER - ON

Analog voice downlink:  435.300 MHz FM
Analog voice uplink:    145.920 MHz FM 67Hz PL tone
                       1268.700 MHz FM 67Hz PL tone

Digital Downlinks:      435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
                       2401.200 MHz FM  38k4 bps, AX.25
Digital Uplink:         145.860 MHz FM, 9k6 Digital, Pacsat Broadcast
   Protocol (PBP)

Broadcast: PECHO-11
BBS:  PECHO-12

4 July until ????
FM Repeater, V/U
Uplink: 145.920 mhz FM, 67 hz PL Tone
Downlink 435.300 mhz FM
9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 435.150 mhz FM, 9k6 PBP Digital

We are going to run in this mode for a while to monitor the satellite after
the software reloading.
```

AO-51 is back operational in the mode listed below. Both the PBBS and the FM repeater are turned on and users are welcome to use the satellite. The software reloading has been completed. I spent a good deal of my holiday time this week and weekend at home in order to download the data and then reload the satellite software to get it back up and running ASAP.

The software team has reviewed the data downloaded from the satellite memory. They indicate nothing out of the ordinary in their first review of the data, therefore the decision was made to reload the satellite software and get AO-51 active again. The software team will continue to review the information they have. Also, if we have another problem and the satellite resets itself again, we will download the memory and compare the results.

73 KE4AZN
Echo Command Team

[ANS thanks Mike, KE4AZN for the above information]
[07032005]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Uplink: 145.850 MHz (67.0 Hz PL tone) (See below for operating procedures)
Downlink: 436.795 MHz

There have been unconfirmed reports on the amsat-bb remailer that So-50 has shifted downlink frequency as much as 5khz up. This both from Europe.

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz. The order of operation is thus: (allow for Doppler as necessary)

1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10 minute timer.

[09122004]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: OPERATIONAL

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB

Beacon: 435.795 MHz

Digital Mode JD
Uplink: 145.850 145.870 145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Please send the reception reports to lab2 'at' jarl.or.jp.
Please use the subject line: 'FO-29 reception report'.

Mineo, JE9PEL, has an FO-29 satellite telemetry analysis program that will
automatically analyze all digital telemetry from the satellite (such as
current, voltage and temperature). FO29CWTE is available at:
http://www.ne.jp/asahi/hamradio/je9pel/
[03132005]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Uplink: 145.850 MHz FM
Downlink: 436.795 MHz FM

The latest information on AO-27 from control operator Michael Wyrick,
N3UC (former N4USI), can be found at:
http://www.ao27.org

An AO-27 question-and-answer page is available on the AMSAT-NA web
site, with updates by Ray, W2RS. The URL is:
http://www.amsat.org/amsat/intro/ao27faq.html

[ANS thanks John, K6YK, for this week's AO-27 report]
[08292004]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Semi-operational in sunlight.
Return to active status: June 21,2002

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
            432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A
            145.975 to 145.925 MHz CW/USB Mode B
Beacon: 29.502 MHz, 145.972 MHz, 435.1 MHz, 2304.1 MHz

Emily, W0EEC has created a website to allow the users of AO-7 to record
contacts, observations and use of the satellite more effectively at:
http://www.emilyshouse.com/experthams/ao7/main.php

This includes the ability to log contacts.

Tim, K3TZ has written a program to decode AO-07 telemetry.
The program can be downloaded at:
http://www.qsl.net/k3tz/files/K3TZ_AO-07_Telemetry_Decoder_0.5.zip

For more AO-7 info:
http://www.amsat.org/amsat/sats/n7hpr/ao7.html
[11142004]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: Packet (APRS-style connections)
Digipeater: Active

The current Expedition 11 crew is:
Commander Sergei Krikalev
Flight Engineer John Phillips

Worldwide packet uplink: 145.990 MHz FM
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM
Doppler Shift is 10 KHz

Russian callsigns: RS0ISS, RZ3DZR
USA callsign: NA1SS
Packet station mailbox callsign: RS0ISS-11
Packet station keyboard callsign: RS0ISS-3
Digipeater callsign: ARISS

The ISS daily crew schedule can be found at:
http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line is
NOT translated from Russian and posted.

More information is available at:
http://www.rac.ca/ariss
http://spaceflight.nasa.gov/station/reference/radio/
http://www.marexmg.org/fileshtml/unprotopage.html
http://www.issfanclub.com
http://oscar.dcarr.org/
[04242005]
NNNN
/EX

SB SAT @ AMSAT <W8ISS $ANS-185.S2

WSR 185 Part 2 07/03/2005

AMSAT NEWS SERVICE BULLETIN 185.S2 FROM AMSAT HQ
SILVER SPRING, MD, JULY 03, 2005
TO ALL RADIO AMATEURS
BID: $ANS-185.S2

AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Mode: PBBS - ON
FM REPEATER - ON

Analog voice downlink: 435.300 MHz FM
Analog voice uplink: 145.920 MHz FM 67Hz PL tone
1268.700 MHz FM 67Hz PL tone

Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast Protocol (PBP)

Broadcast: PECHO-11
BBS: PECHO-12

4 July until ????
FM Repeater, V/U
Uplink: 145.920 mhz FM, 67 hz PL Tone
Downlink 435.300 mhz FM
9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 435.150 mhz FM, 9k6 PBP Digital

We are going to run in this mode for a while to monitor the satellite after the software reloading.

AO-51 is back operational in the mode listed below. Both the PBBS and the FM repeater are turned on and users are welcome to use the satellite. The software reloading has been completed. I spent a good deal of my holiday time this week and weekend at home in order to download the data and then reload the satellite software to get it back up and running ASAP.

The software team has reviewed the data downloaded from the satellite memory. They indicate nothing out of the ordinary in their first review of the data, therefore the decision was made to reload the satellite software and get AO-51 active again. The software team will continue to review the information they have. Also, if we have another problem and the satellite resets itself again, we will download the memory and compare the results.

73 KE4AZN

```
Echo Command Team

[ANS thanks Mike, KE4AZN for the above information]
[07032005]
=====
GO-32 TECHSAT-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Downlink:            435.225 MHz FM (9600-baud FSK)
                    (435.325 n/a - temperature problems)
Uplinks:             145.850, 145.890, 145.930 FM
                    1269.700, 1269.800, 1269.900 FM
Broadcast Callsign: 4XTECH-11
BBS Callsign:        4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[03132005]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Operational

Uplink:              145.850 or 145.925 MHz 9600-baud FSK
Downlink:            437.325 MHz
Broadcast callsign: MYSAT3-11
BBS:                 MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial land and weather imaging payloads offers FM and FSK
Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as
a collaborative effort between the Malaysian government and Surrey
Satellite Technology Ltd.
[05152005]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Semi-operational, the digipeater command is on and open for
APRS users.

Uplink:              145.90 145.92 145.94 145.96 MHz FM
                      (using 1200-baud Manchester FSK)
Downlink:            437.026 MHz SSB (1200-baud PSK)
Mode-S Beacon:       2401.1428 MHz
```

Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

A WOD collection of current graphics along with general information
and telemetry samples can be found at:
http://www.telecable.es/personales/ea1bcu
[05092004]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational?

```
Telemetry Downlink: 145.826 MHz. FM (1200-baud AFSK).
                    approx. 10 days ON, 10 days OFF
Mode-S Beacon:      2401.500 MHz. ... OFF
UHFBeacon:          435.025 MHz. ...  OFF
```

This from Clive, G3CWV:

There is a small chance that OSCAR-11 may have started transmitting
again between 08 June to 10 June.

The frequency is 145.826.

Any reception reports would be appreciated. Please reply direct to
Clive G3CWV (g3cwv@amsat.org), or post reports to AMSAT-BB.

[ANS thanks Clive, G3CWV for the above information]

More information on UO-11 OSCAR-11 can be found at:
http://www.users.zetnet.co.uk/clivew/
[06122005]
NNNN
/EX

SB SAT @ AMSAT <W8ISS $ANS-185.S3
WSR 185 Part 3 07/03/2005

AMSAT NEWS SERVICE BULLETIN 185.S3 FROM AMSAT HQ
SILVER SPRING, MD, JULY 03, 2005
TO ALL RADIO AMATEURS
BID: $ANS-185.S3

THE FOLLOWING ARE IN ORBIT BUT ARE
NON-OPERATIONAL AT THIS TIME:

POSAT-1 PO-28
Catalog Number: 22829
Launched : September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 435.075 MHz
          435.275 MHz

Uplink: 145.925 MHz
          145.975 MHz

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

More information of POSAT-1 can be found at:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
http://www.amsat.org/amsat/sats/n7hpr/po28.html
[08152004]

=====

AO-10 OSCAR 10
Catalog number: 14129
Launched: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB
Beacon: 145.810 MHz (unmodulated carrier)

AO-10 has been locked into a Mode-B, 70-cm uplink and
2-meter downlink for several years.

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]

=====

IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: Non-operational

Uplink: 145.875 145.900 145.925 145.950 MHz FM (1200-baud)
Downlink: 435.812 MHz SSB
Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Alberto E. Zagni - I2KBD reports on 02/13/05
The spacecraft is in MBL (safe mode) and is trasmitting just 6 channels
of telemetry. Temperatures and voltage are nominal, but there seems to
be a problem with the onboard receiver, refusing to accept commands.
The spacecraft was launched in 1993, thus nearing 12 years in orbit...

Best regards
Alberto E. Zagni - I2KBD
ITAMSAT Mission Director

```
More information of IO-26 can be found at:

http://joshua.micronet.it/english/itamsat/itamsathome.html
http://www.amsat.org/amsat/sats/n7hpr/io26.html
www.itamsat.org

[02132005]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink:   21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB
Beacon:   29.408 MHz
Robot:    29.454 MHz
[05232004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink:      21.260 to  21.300 MHz CW/USB
Downlink:   145.860 to 145.900 MHz CW/USB
Beacon:     145.860 MHz
Robot:      145.908 MHz
[05232004]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink 145.975 MHz FM
Downlink 435.070 MHz FM
[05092004]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink:             145.900 FM 9600-baud FSK
Downlink:           435.120 MHz FM
Broadcast Callsign: UOSAT5-11
BBS:                UOSAT5-12
[01092005]
```

```
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational?

Uplink:      145.858 to 145.898 MHz CW/USB
Downlink:     29.354 to  29.394 MHz CW/USB
Beacon:       29.352 MHz (intermittent)
SSB meeting frequency:  29.380 MHz (unofficial)

John, KD6PAG reports on June 16, 2004 to ANS:
RS-15 beacon seemed to be back in the mode where it's a tone about 5 seconds
off and then 5 seconds on this morning.

ANS is looking for more confirmations of RS-15 coming back.

[ANS thanks John, KD6PAG for RS-15 information]
[06202004]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplink:             145.84 145.86 145.88 145.90 MHz FM
                    (using 1200-baud Manchester FSK)
CW downlink:        437.125 MHz
Digital downlink:   437.150 MHz SSB (RC-BPSK 1200-baud PSK)
Broadcast Callsign: LUSAT-11
BBS:                LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[05232004]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Uplink:     145.90 to 146.00 MHz CW/LSB
Downlink:   435.80 to 435.90 MHz CW/USB
Beacon:     435.795

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[08152004]
=====
KO-23 KITSAT
```

```
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink:             145.900 MHz FM (9600-baud FSK)
Downlink:           435.170 MHz FM
Broadcast Callsign: HLO1-11
BBS:                HLO1-12

Jim, AA7KC, reports that KO-23's downlink transmitter continues in a
non-operational status.
[05092004]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink:             145.980 MHz FM (9600-baud FSK)
Downlink:           436.500 MHz FM
Broadcast Callsign: HL02-11
BBS:                HL02-12
[05092004]
=====
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink frequency (listed on the PanSat web site) 436.500 MHz

The satellite is not available for general uplink transmissions.

The Naval Postgraduate School developed PanSat. At the time of
launch, PanSat spread-spectrum digital transponders were to
be available to Amateur Radio operators along with software to utilize
this technology.

The satellite is still operating, however, the spread spectrum packet
radio portion never took place. The spacecraft is now beyond it's
initial 2-year mission life, but telemetry records are still being
downloaded.

For more information, visit the official PanSat web site at:
http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998
```

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm

[ANS has no further information]
[05232004]
=====
SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

STatus: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
          Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
         Mode J Digipeater: 145.825 MHz and 145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[08082004]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlink: 437.025 MHz 437.400 MHz
Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[05092004]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplink   V-band   145.840 - 145.990 MHz CW/LSB

```
            U-band    435.550 -  435.800 MHz CW/LSB
           L1-band   1269.250 - 1269.500 MHz CW/LSB
           L2-band   1268.325 - 1268.575 MHz CW/LSB
           S1-band   2400.350 - 2400.600 MHz CW/LSB
Downlink:  S2-band   2401.225 - 2401.475 MHz CW/USB
           K-band 24,048.010 - 24,048.060 MHz CW/USB
Beacon:    2401.323, 24,048.035
[05232004]
-----
SO-42  SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational

Uplink:   to be released
Downlink:           437.075 MHz
Broadcast Callsign: SASAT2-11
BBS:                SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[08152004]
=====
SO-41  SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink:             145.850 MHz
Downlink:           436.775 MHz
Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[08152004]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Non-Operational?????

Uplink/downlink:   145.827 MHz 1200 baud AX.25 AFSK via W3ADO-1
Aux/Uplink:        435.250 MHz 9600 baud via PCSAT-2 (off)
APRS Downlink:     144.390 MHz (Region 2)

This from Bob, WB4APR:
PCsat returned to negative-power-budget mode on 16 Feb 2005 and is not
expect- ed to be restorable until the next full-sun period in the Fall
when the southern Sun can better illuminate the south facing panel.
```

Between now and then you are welcome to try to get a packet digipeated, but this will usually only work during mid-day passes in the Northern Hemisphere due to sun angles.

Question asked of Bob WB4APR recently on the amsat-bb:
Is it alive?? I was just looking at the pcsat.aprs.org page at Findu and it shows a lot of stations recently (within the last day) digipeating through it.

Bob's reply:
PCsat is always "alive", but can only muster enough power to get out a complete packet when it is in near mid-day sun in the Northern hemisphere the higher the latitude the better in the summer.

Over the next 2 weeks PCsat is entering one of thoes periods. The 20 or so stations you see on the LIVE web page are probably unattended beacons. But if u hear good packets on 145.825 from PCsat during mid-day, go ahead and use it...

Fortunately it will be in 100% sun during FD, but Unfortunately, all that sun is from the side and misses the best solar panel. Experience has shown it will be useless at that time.

PCSat is a 1200-baud APRS digipeater designed for use by stations using hand-held or mobile transceivers. Downlinks feed a central web site at:
http://pcsat.aprs.org

The APRS-equipped PCSat was built by midshipmen from the U.S. Naval Academy under the guidance of Bob Bruninga, WB4APR.
[05242005]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, callsign KE6QMD, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Semi-operational.

Uplink 435.275 1200-baud AFSK
Downlink 145.825 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

AO-49 (SAFIR-M) is a German amateur radio payload onboard the small German scientific satellite "RUBIN-2".

AO-49 was built by the German amateur radio association "AATiS e.V." (German acronym for "Arbeitskreis Amateurfunk und Telekommunikation in der Schule", which means: 'working group for amateur radio anand telecommunications in schools'). AO-49 is designed as a "store and broadcast" system for APRS based messages, dedicated for the use of schools in combination with the existing WX-Net and planned buoy experiments in Germany.

No transmissions detected since the 1st of February 2003! It appears AO-49 is not properly aligned to illuminate the solar panels. This should end soon. Due to its orbit, AO-49 will be in a phase without eclipses until 13Feb03.

Martin DG8UAU has written a small software program "SAFIR-M Decoder" to allow decoding of the received DATA0 frames. It is available at: http://amend.gmxhome.de in the section Aktuelles.

Details on AO-49 (SAFIR-M) can be found at:
http://amend.gmxhome.de

Information about AATiS e.V. is available at:
http://www.aatis.de
[05092004]

=====
CUTE-1
Catalog number: 27844
Launched: June 30,2003

Status: Operational?

Uplink: ?
Downlink: 436.8375 CW
437.4700 1200 FM ax25 or SRLL (ACTIVE only near Japan)

Fernando, LU1HKO, reports hearing Cute-1 on 03/06/2005 18:40 (LU Time) sending CW telemetry.

CUTE 1 is a Japanese (Tokyo Institute of Technology) one kilogram nanosatellite that was launched by a Rokot rocket from Plesetsk at 14:15 UT on 30 June 2003. It carries a 100 mW beacon at 436.8375 MHz. Initial orbital parameters were period 101.4 min, apogee 831 km, perigee

819 km, and inclination 98.7?.

For further info about CUTE-1 goto:
http://lss.mes.titech.ac.jp/ssp/cubesat/operation/Schedule_e.html

ANS WSR is looking for more information about this satellite.
[03272005]
NNNN
/EX

SB SAT @ AMSAT <W8ISS $ANS-185.S4
WSR 185 Part 4 07/03/2005

AMSAT NEWS SERVICE BULLETIN 185.S4 FROM AMSAT HQ
SILVER SPRING, MD, JULY 03,2005
TO ALL RADIO AMATEURS
BID: $ANS-185.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE
PROPOSED FOR LAUNCH AT THIS TIME:

UCISAT ?O-??
Catalog number:
Proposed Launch Date: October 31, 2005

Status: Under Construction

Downlink: Submission in Progress
Uplink: Submission in Progress
Callsign: Submission in Progress

This from Matt Bennett, KF6RTB, UCISAT Communications Team Member:

Our website is www.ucisat.net .This is a new website, however, and doesn't have the "Status" section active yet. Because of the growing interest in our project, I'll push our webmaster to create updates (hopefully) on a week-to-week basis. For now, the current status of the mission is as follows:

-Expected Launch Date: October 31st, 2005
-Frequency Allocation: Submission in Progress
-Construction Status: Sub-Assembly
[WSR to thank Matt Bennett, KF6RTB, for this week's report.]
[01302005]
=====
SSETI ?O-??
Catalog Number:
Proposed Launch Date: Early 2005

Status: Under Construction

>From Graham, G3VZV:
All work on the SSETI Express spacecraft has now been completed and the spacecraft has left its "birthplace" - a cleanroom at the ESA ESTEC facility

in the Netherlands. The spacecraft has been packed into its special transport
container and is en-route to the launch site at Plesetsk in Northern Russia.

The launch date is still listed as 25th August (current approx lift off is 06:50UTC but this may be corrected later) and arrangements are underway for the launch to be shown live on ASTRA-1G - a Ku band satellite covering most of Europe and, hopefully, these transmissions will also be streamed at both high and low resolution on the internet.

Full details of all these media resources will be made known as soon as they are finalised as will details of the telemetry downloading and decoding software and the prizes being offered by ESA for the largest and also the first contributor!

AMSAT-UK will have a team member at the launch site during the launch campaign and intend to provide regular updates during the lead up to August 25th.

You can find more info about SSETI at:
http://sseti.gte.tuwien.ac.at/WSW4/

[ANS thanks Graham, G3VZV for the above information]

Looking at the website for the SSETI Express webcam
http://sseti.gte.tuwien.ac.at/WSW4/webcam.htm

[07032005]
=====
PCSAT2 ?0-??
Catalog Number:
Proposed Launch Date: May 2005

PCSAT2, which had previously been stowed in the Space Shuttle Discovery, arrived at Launch Complex 39B on 07 April 2005. PCSAT2 is now standing by ready to be launched on the first Space Shuttle return-to-flight mission.

PCSAT2 will use the same dual redundant AX.25 command and control system as used on PCsat (NO-44) offering 8 on/off commands, 5 telemetry channels and a serial port for the solar cell experiment telemetry. It also supports the Digital Comms Relay support of the PCsat/APRS mission. The packet uplink is on 145.825 MHz and the default downlinks are in the 435 MHz band to avoid any possible interference with existing ARISS missions. PCSAT2 will have quad redundant transmit inhibits for EVA safety issues, thus, it is also easy to turn off to avoid any issues with other UHF ARISS experiments that may be activated in the future. Also, the mission lifetime of PCSAT2 is only 1 year, because it is a sample-return mission, thus terminating any long term conflicts in spectrum management.

The PCSAT2 mission is intended as an opportunity to augment existing ARISS communications experiments with an external autonomous communications payload. In this regard, it has several potential uses:

* A UI-Digipeater to help ease congestion on the currently shared ARISS PMS (Packet Mail system)

* A PSK-31 transponder for multi-user communications to improve accessibility for schools and ARISS outreach programs.

* An FM Voice repeater for full duplex crew communications to facilitate crew-to-school ARISS contacts.

* Routine Telemetry on the spacecraft systems

For more information and pictures visit the PCSAT2 website at
http://www.ew.usna.edu/~bruninga/pcsat2.html

[ANS thanks Bob, WB4APR for the above information]
[04102005}
=====
PHASE 3E ?O-??
Catalog Number:
Proposed Launch Date: Early 2006

Status: Under Construction

The AMSAT-Phase 3E satellite (P3E) is dedicated as communication and scientific platform for a highly elliptical orbit around Earth. The spacecraft will be created in a joint process together with the P5A Mars mission by an international team under leadership of AMSAT-DL and continues the successful series of AMSAT-Phase 3 satellites. Additionally the spacecraft will be a test bench for technology developped for the Mars mission. The main task of P3E is to act as communication platform for radio amateurs worldwide. A launch is planned in the period 2004 to 2006.

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/
[03272005]
=====
CP1 ?o-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: N6CP
Proposed Transmit Frequency: 436.845
[03272005]
=====
CP2 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA

```
Proposed Transmit Frequency: 437.325
[03272005]
=====
HAUSAT1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: D90HP
Proposed Transmit Frequency: 437.465
[03272005]
=====
ICE Cube 1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: W2CXM
Proposed Transmit Frequency: 437.305
[03272005]
=====
ICE Cube 2 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: N2VR
Proposed Transmit Frequency: 437.425
[03272005]
=====
ION ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.505
[03272005]
=====
KUTEsat ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: KC0RMW
Proposed Transmit Frequency: 437.385
[03272005]
=====
MEROPE ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: K7MSU-1
Proposed Transmit Frequency: 145.980
[03272005]
=====
nCUBE1 ?O-??
Catalog Number:
```

Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
2407.25
[03272005]
=====
RINCON ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
437.345
[03272005]
=====
SACRED ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
[03272005]
=====
SACRED ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
[03272005]
=====
SEEDS ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: JQ1YGU
Proposed Transmit Frequency: 437.485
[03272005]
=====
Mea Huaka ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.405
[03272005]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins trans-

mitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
        888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/amsat/listserv/menu.html

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satelite Report Editor is James K. Darrow, KB9MMC.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

Via the ans mailing list at AMSAT.ORG courtesy of AMSAT-NA.
To unsubscribe, send "unsubscribe ans" to Majordomo@amsat.org

From 1110331617498108597

X-Google-Thread: 10e8ad,ad7a3761be323e2,start
X-Google-Thread: 113975,ad7a3761be323e2,start
X-Google-Attributes: gid10e8ad,gid113975,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news4.google.com!news.glorb.com!txtfeed1.tudelft.nl!tudelft.nl!txtfeed2.tudelft.nl!newsfeed.multikabel.nl!skynet.be!newspost001!tjb!not-for-mail
From: Chris Steyaert <observations@rmob.org>
Newsgroups: rec.radio.amateur.space,sci.astro.amateur
Subject: Radio Meteor Obs. Bull. June 2005
Date: Thu, 07 Jul 2005 23:44:51 +0200
Message-ID: <a58rc1hqiepbdu9qvdqh5m77hjs87tkvol@4ax.com>
X-Newsreader: Forte Agent 1.93/32.576 English (American)
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Lines: 17
Organization: -= Belgacom Usenet Service =-
NNTP-Posting-Host: 51e935d0.news.skynet.be
X-Trace: 1120772669 news.skynet.be 30024 81.245.31.64:10404
X-Complaints-To: usenet-abuse@skynet.be
Xref: g2news1.google.com rec.radio.amateur.space:730 sci.astro.amateur:59279

Radio Meteor Observation Bulletin No. 143 of June 2005 (66 K) is available now as

http://visualrmob.free.fr/rmobtext/rmob0506.txt

More information and the visual presentation of the hourly forward scatter counts can be found on

http://www.rmob.org

http://radio.data.free.fr

Chris

From -5218424051692170861
X-Google-Thread: 10e8ad,719a8c9daf79f073,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news3.google.com!news.glorb.com!atl-c03.usenetserver.com!elnk-atl-nf1!newsfeed.earthlink.net!stamper.news.atl.earthlink.net!newsread1.news.atl.earthlink.net.POSTED!46041641!not-for-mail
From: "JoAnne Maenpaa" <wb9jej_no-spam@earthlink.net>
Newsgroups: rec.radio.amateur.space
Subject: ANS-191 AMSAT News Service Weekly Bulletin
Lines: 277

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X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <hXuAe.8312$aY6.4927@newsread1.news.atl.earthlink.net>
Date: Mon, 11 Jul 2005 13:59:41 GMT
NNTP-Posting-Host: 64.105.116.187
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread1.news.atl.earthlink.net 1121090381 64.105.116.187 (Mon, 11 Jul
2005 06:59:41 PDT)
NNTP-Posting-Date: Mon, 11 Jul 2005 06:59:41 PDT
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news1.google.com rec.radio.amateur.space:731
```

AMSAT NEWS SERVICE
ANS-191

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:

* AO-51 July Schedule
* ARISS Status - 04 July 2005
* OSCAR-11 Reception Reports Requested
* AMSAT Journal Status
* 2004 Annual Report & Audit

SB SAT @ AMSAT $ANS-191.01
AO-51 July Schedule

AMSAT News Service Bulletin 191.01
From AMSAT HQ SILVER SPRING, MD.
July 10, 2005
To All RADIO AMATEURS
BID: $ANS-191.01

The July AO-51 schedule has been posted on the AMSAT Web site www.amsat.org. The mode change on July 11 may not occur on schedule due to Hurricane Dennis' expected path, which is coming right for AMSAT's command operator and station, Mike, KE4AZN. Please understand if that change is delayed by a number of days. Based on the projected path Mike will be taking down his antennas and will be securing everything at his QTH on Saturday.

July 2005 AO-51 (Amsat Echo) Schedule

All dates are UTC. The mode change occurs normally between 0100 and 0400 UTC on the date shown. The mode will be active from the date shown until the next Mode Change date listed. Mode Configurations are listed below the schedule. If for some unplanned reason we need to work with Echo and deviate from the plan a note will be posted to the this Echo page on AMSAT.ORG.

If a specific transmitter or mode is not listed on a given day then it will be off. For example, if TXB (435.300) is not listed during a 38k4 digital mode period then the FM repeater will be off.

4 July
FM Repeater, V/U
Uplink: 145.920 mhz FM, 67 hz PL Tone
Downlink 435.300 mhz FM
k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 435.150 mhz FM, 9k6 PBP Digital

11 July
Dual FM Repeaters
FM Repeater, V/U
Uplink: 145.920 mhz FM, 67 hz PL Tone
Downlink 435.300 mhz FM
FM Repeater, V/U
Uplink: 145.880 mhz FM
Downlink 435.150 mhz FM

18 July
FM Repeater, V/U
Uplink: 145.920 mhz FM, 67 hz PL Tone
Downlink 435.300 mhz FM
9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 435.150 mhz FM, 9k6 PBP Digital

21 July
38k4 Digital on S Band in support of SSETI Satellite
38k4 Digital Downlink, V/S, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 2401.200 mhz FM, 38k4 PBP Digital

23 July
FM Repeater, V/S
Uplink: 145.920 mhz FM, 67hz PL Tone
Downlink 2401.200 mhz FM

73 KE4AZN
for Echo Operations Group

[ANS thanks Mike, KE4AZN for the above information]

/EX

SB SAT @ AMSAT $ANS-191.02
ARISS Status - 04 July 2005

AMSAT News Service Bulletin 191.02
From AMSAT HQ SILVER SPRING, MD.
July 10, 2005
To All RADIO AMATEURS
BID: $ANS-191.02

1. Mayborn Museum Contact Successful

Children visiting the Mayborn Museum at Baylor University in Waco, Texas enjoyed a contact with John Phillips, KE5DRY, on Monday, June 27 via the telebridge station, WH6PN, in Hawaii. Eleven children asked twenty-one questions as a crowd of 200 gathered in the auditorium. Two television stations and a newspaper also attended.

The Waco Tribune-Herald wrote an article entitled, "Local children get chance to talk to astronaut in space." See:
http://www.wacotrib.com/news/content/news/stories/2005/06/28/20050628wacspacelink.html

"Students Enjoy Lively Chat with Astronaut" can be found on the Baylor University website. To view, go to:
http://www.baylor.edu/pr/news.php?action=story&story=34716

The NBC affiliate, KCEN-TV, posted an article on their website with a link to the video coverage of this event. "Kids make long-distance call to space at museum" can be found at:
http://www.museumnews.net/link.asp?ID=27483&Title=KIDS%20make%20long-distance%20call%20to%20space%20at%20museum

The event was also webcast, and audio was fed through the Echolink AMSAT and EDU_NET servers. Connections to the AMSAT conference room were made from 8 countries: Japan, Australia, U.S.A., U.K., Bangladesh, Italy, Ukraine, and Canada.

2. ARISS-Russia Contact

A second ARISS contact was made over the weekend. On Saturday, July 2, children at the Museum K.I. Tziolkovsky in Kirov, Russia were able to speak to Sergei Krikalev, U5MIR, via the telebridge station W5RRR in Houston. The event was webcast, and the audio was fed through Echolink and IRLP.

3. SuitSat Hardware Delivered to Energia

The SuitSat and SSTV hardware arrived in Russia on Wednesday, June 29. The ARISS-Russia team will begin integrating and flight certifying the

SuitSat hardware. All hardware is expected to fly on the Progress 19P, scheduled to launch in the August/September timeframe.

4. Expedition 10 Crew Debrief

On June 28, the ARISS-U.S. team had the opportunity to speak with Leroy Chiao, KE5BRW, about ARISS school contacts and operations during Expedition 10. Leroy's overall impression of the program was positive. Kenneth Ransom presented to Leroy a plaque from the ARRL for his participation in and his support of the ARISS program, and for his record breaking twenty-three contacts - the most school contacts made by one astronaut during a single increment. Thank you Leroy!

5. Expedition 11 Crew Participates in Field Day

John Phillips, KE5DRY, and Sergei Krikalev, U5MIR, both participated in Field Day on June 25-26. John made 25 contacts, and although Sergei's report has not yet been submitted, he did make at least four contacts from Brazil, Thailand, S. Africa and the U.S.

6. PCSAT2/MISSE5 to Fly on STS-114

As part of an educational outreach program, students at the United States Naval Academy, in collaboration with the DOD and ARISS, and under the direction of Bob Bruninga, WB4APR, designed and developed PCSAT2. This payload will be carried on a Materials International Space Station Experiment (MISSE5) on a Passive Experiment Container (PEC). The PEC (suitcase) will be opened and will carry DOD solar cells on the front side, facing the sun, and the back side will carry the amateur satellite communications system which will include Automatic Position Reporting System (APRS) Packet, FM voice repeater, and 10m PSK-31 transponder. The payload will be launched on the Return to Flight STS-114 mission, scheduled for July 13, 2005, and will be deployed via an EVA as an external payload on the ISS. This project is described in detail on Bruninga's website, "PCSAT2 - External ISS Experiment in the Amateur Satellite Service." See: http://www.ew.usna.edu/~bruninga/pcsat2.html

[ANS thanks Carol Jackson, KB3LKI for the above information]

/EX

SB SAT @ AMSAT $ANS-191.03
OSCAR-11 Reception Reports Requested

AMSAT News Service Bulletin 191.03
From AMSAT HQ SILVER SPRING, MD.
July 10, 2005
To All RADIO AMATEURS
BID: $ANS-191.03

Clive, G3CWV, reports that he has not heard from OSCAR-11 since 30 April 2005. However he has received two reception reports dated 19 May and 13 June. This suggests that the satellite might be switching ON for one or two orbits at about 24 to 28 day intervals, ie the next transmission might be expected sometime between 07 and 11 July.

Any reception reports during this period, or at any other time would be appreciated. The frequency is 145.826 MHz. and modulation NBFM. Please send any reports direct to g3cwv@amsat.org, or post to AMSAT-BB.

If you are unfamiliar with the sound of OSCAR-11, a 10 second audio clip of the VHF beacon is available at the start of the OSCAR-11 web page. The URL is http://www.users.zetnet.co.uk/clivew/

[ANS thanks Clive, G3CWV for the above information]

/EX

SB SAT @ AMSAT $ANS-191.04
AMSAT Journal Status

AMSAT News Service Bulletin 191.04
From AMSAT HQ SILVER SPRING, MD.
July 10, 2005
To All RADIO AMATEURS
BID: $ANS-191.04

Martha, AMSAT Manager reports that the May/June issue is now at our new printer. The previous printer went out of business just as we were ready to go to press! We apologize for the delay and thank you for your patience.

AMSAT Journal Editor Ed Long, WA4SWJ is already hard at work on the July/August edition and is looking for articles. If you have something that you think would be interesting please contact Ed at journal@amsat.org. If you don't feel comfortable writing an article yourself, we now have some volunteer 'reporters' to help take your story and turn it into an article for the Journal.

[ANS thanks Martha and Ed, WA4SWJ for the above information]

/EX

SB SAT @ AMSAT $ANS-191.05
2004 Annual Report & Audit

AMSAT News Service Bulletin 191.05
From AMSAT HQ SILVER SPRING, MD.
July 10, 2005
To All RADIO AMATEURS

BID: $ANS-191.05

AMSAT Treasurer, Gunther Meisse, W8GSM, reports that the 2004 Annual Report is now done and posted to the amsat.org web site under the link: "About AMSAT" "Corporate Documents", Annual Reports". The Audit firm has also completed the 2004 audit of the AMSAT books and submitted their report. It is also available for inspection on the amsat.org web site.

[ANS thanks Gunther, W8GSM for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Lee McLamb, KU4OS
KU4OS at amsat dot org

Via the ans mailing list at AMSAT.ORG courtesy of AMSAT-NA.
To subscribe, send "subscribe ans" to Majordomo@amsat.org

```
From -1099851872726610871
X-Google-Thread: 10e8ad,fd96f4ae553e4e33,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news3.google.com!newshub.sdsu.edu!
border1.nntp.dca.giganews.com!border2.nntp.dca.giganews.com!nntp.giganews.com!
elnk-atl-nf1!newsfeed.earthlink.net!stamper.news.atl.earthlink.net!
newsread1.news.atl.earthlink.net.POSTED!46041641!not-for-mail
From: "JoAnne Maenpaa" <wb9jej_no-spam@earthlink.net>
Newsgroups: rec.radio.amateur.space
Subject: WSR-191 AMSAT Weekly Satellite Report
Lines: 1130
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <uYuAe.8314$aY6.4949@newsread1.news.atl.earthlink.net>
Date: Mon, 11 Jul 2005 14:00:58 GMT
NNTP-Posting-Host: 64.105.116.187
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread1.news.atl.earthlink.net 1121090458 64.105.116.187 (Mon, 11 Jul
2005 07:00:58 PDT)
NNTP-Posting-Date: Mon, 11 Jul 2005 07:00:58 PDT
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news1.google.com rec.radio.amateur.space:732
```

This report is organized into 4 parts.
Part 1 - operational analog amateur satellites.
Part 2 - operational digital amateur satellites.
Part 3 - non - operational satellites
Part 4 - proposed satellites

SB SAT @ AMSAT <W8ISS $ANS-191.S1
WSR 191 Part 1 07/09/2005

AMSAT NEWS SERVICE BULLETIN 191.S1 FROM AMSAT HQ
SILVER SPRING, MD, JULY 09, 2005
TO ALL RADIO AMATEURS
BID: $ANS-191.S1

VO-52 HAMSAT
Catalog Number: 28650
Launch Date: May 05,2005

Status: On orbit
Current Mode: U/V

Proposed frequencies:

Indian transponder:
Uplink : 435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW
Beacom : 145.940MHz continue carier signal

Dutch transponder:
Uplink : 435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW
Beacon : 145.860MHz 12WPM with CW message

HAMSAT has been assigned the OSCAR designation VO-52.
[06192005]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Mode: PBBS - ON
      FM REPEATER - ON

Analog voice downlink: 435.300 MHz FM
Analog voice uplink: 145.920 MHz FM 67Hz PL tone
                       1268.700 MHz FM 67Hz PL tone

Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
                       2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast
   Protocol (PBP)

Broadcast: PECHO-11
BBS: PECHO-12

4 July until ????
FM Repeater, V/U
Uplink: 145.920 mhz FM, 67 hz PL Tone
Downlink 435.300 mhz FM
9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 435.150 mhz FM, 9k6 PBP Digital

We are going to run in this mode for a while to monitor the satellite after the software reloading.

AO-51 is back operational in the mode listed below. Both the PBBS and the FM repeater are turned on and users are welcome to use the satellite. The software reloading has been completed. I spent a good deal of my holiday time this
week and weekend at home in order to download the data and then reload the satellite software to get it back up and running ASAP.

The software team has reviewed the data downloaded from the satellite memory. They indicate nothing out of the ordinary in their first review of the data, therefore the decision was made to reload the satellite software and get AO-51 active again. The software team will continue to review the information they have. Also, if we have another problem and the satellite resets itself again, we will download the memory and compare the results.

73 KE4AZN
Echo Command Team

[ANS thanks Mike, KE4AZN for the above information]
[07032005]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Uplink: 145.850 MHz (67.0 Hz PL tone) (See below for operating procedures)
Downlink: 436.795 MHz

There have been unconfirmed reports on the amsat-bb remailer that So-50 has shifted downlink frequency as much as 5khz up. This both from Europe.

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The order of operation is thus: (allow for Doppler as necessary)

1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer on board the spacecraft.

2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT
the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window
will reset the 10 minute timer.
[09122004]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: OPERATIONAL

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplink: 145.850 145.870 145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Please send the reception reports to lab2 'at' jarl.or.jp.
Please use the subject line: 'FO-29 reception report'.

Mineo, JE9PEL, has an FO-29 satellite telemetry analysis program that will
automatically analyze all digital telemetry from the satellite (such as
current, voltage and temperature). FO29CWTE is available at:
http://www.ne.jp/asahi/hamradio/je9pel/
[03132005]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Uplink: 145.850 MHz FM
Downlink: 436.795 MHz FM

The latest information on AO-27 from control operator Michael Wyrick,
N3UC (former N4USI), can be found at:
http://www.ao27.org

An AO-27 question-and-answer page is available on the AMSAT-NA web
site, with updates by Ray, W2RS. The URL is:
http://www.amsat.org/amsat/intro/ao27faq.html

[ANS thanks John, K6YK, for this week's AO-27 report]
[08292004]
=====
AO-7 AMSAT OSCAR 7

Catalog number: 07530
Launch Date: November 15, 1974

Status: Semi-operational in sunlight.
Return to active status: June 21,2002

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
            432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A
            145.975 to 145.925 MHz CW/USB Mode B
Beacon: 29.502 MHz, 145.972 MHz, 435.1 MHz, 2304.1 MHz

Emily, W0EEC has created a website to allow the users of AO-7 to record contacts, observations and use of the satellite more effectively at:
http://www.emilyshouse.com/experthams/ao7/main.php
This includes the ability to log contacts.

Tim, K3TZ has written a program to decode AO-07 telemetry.
The program can be downloaded at:
http://www.qsl.net/k3tz/files/K3TZ_AO-07_Telemetry_Decoder_0.5.zip

For more AO-7 info:
http://www.amsat.org/amsat/sats/n7hpr/ao7.html
[11142004]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: Packet (APRS-style connections)
Digipeater: Active

The current Expedition 11 crew is:
Commander Sergei Krikalev
Flight Engineer John Phillips

Worldwide packet uplink: 145.990 MHz FM
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM
Doppler Shift is 10 KHz

Russian callsigns: RS0ISS, RZ3DZR
USA callsign: NA1SS
Packet station mailbox callsign: RS0ISS-11
Packet station keyboard callsign: RS0ISS-3
Digipeater callsign: ARISS

The ISS daily crew schedule can be found at:

http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line is NOT translated from Russian and posted.

More information is available at:
http://www.rac.ca/ariss
http://spaceflight.nasa.gov/station/reference/radio/
http://www.marexmg.org/fileshtml/unprotopage.html
http://www.issfanclub.com
http://oscar.dcarr.org/
[04242005]
NNNN
/EX

SB SAT @ AMSAT <W8ISS $ANS-191.S2
WSR 191 Part 2 07/09/2005

AMSAT NEWS SERVICE BULLETIN 191.S2 FROM AMSAT HQ
SILVER SPRING, MD, JULY 09, 2005
TO ALL RADIO AMATEURS
BID: $ANS-191.S2

AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Mode: PBBS - ON
FM REPEATER - ON

Analog voice downlink: 435.300 MHz FM
Analog voice uplink: 145.920 MHz FM 67Hz PL tone
1268.700 MHz FM 67Hz PL tone

Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast Protocol (PBP)

Broadcast: PECHO-11
BBS: PECHO-12

4 July until ????
FM Repeater, V/U
Uplink: 145.920 mhz FM, 67 hz PL Tone
Downlink 435.300 mhz FM
9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 435.150 mhz FM, 9k6 PBP Digital

We are going to run in this mode for a while to monitor the satellite after the software reloading.

AO-51 is back operational in the mode listed below. Both the PBBS and the FM repeater are turned on and users are welcome to use the satellite. The software reloading has been completed. I spent a good deal of my holiday time this
week and weekend at home in order to download the data and then reload the satellite software to get it back up and running ASAP.

The software team has reviewed the data downloaded from the satellite memory. They indicate nothing out of the ordinary in their first review of the data, therefore the decision was made to reload the satellite software and get AO-51 active again. The software team will continue to review the information they have. Also, if we have another problem and the satellite resets itself again, we will download the memory and compare the results.

73 KE4AZN
Echo Command Team

[ANS thanks Mike, KE4AZN for the above information]
[07032005]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Non-Operational?????

Uplink/downlink:	145.827 MHz 1200 baud AX.25 AFSK via W3ADO-1
Aux/Uplink:	435.250 MHz 9600 baud via PCSAT-2 (off)
APRS Downlink:	144.390 MHz (Region 2)

This from Bob, WB4APR:
PCsat returned to negative-power-budget mode on 16 Feb 2005 and is not expect- ed to be restorable until the next full-sun period in the Fall when the southern Sun can better illuminate the south facing panel. Between now and then you are welcome to try to get a packet digipeated, but this will usually only work during mid-day passes in the Northern Hemisphere due to sun angles.

Question asked of Bob WB4APR recently on the amsat-bb:
Is it alive?? I was just looking at the pcsat.aprs.org page at Findu and it shows a lot of stations recently (within the last day) digipeating through it.

Bob's reply:
PCsat is always "alive", but can only muster enough power to get out a complete packet when it is in near mid-day sun in the Northern hemisphere the higher the latitude the better in the summer.

Over the next 2 weeks PCsat is entering one of thoes periods. The 20 or so stations you see on the LIVE web page are probably unattended beacons. But if u hear good packets on 145.825 from PCsat during mid-day, go ahead and use it...

Fortunately it will be in 100% sun during FD, but Unfortunately, all that sun is from the side and misses the best solar panel. Experience has shown it will be useless at that time.

PCSat is a 1200-baud APRS digipeater designed for use by stations using hand-held or mobile transceivers. Downlinks feed a central web site at:
http://pcsat.aprs.org

The APRS-equipped PCSat was built by midshipmen from the U.S. Naval Academy under the guidance of Bob Bruninga, WB4APR.
[07092005]
=====
CUTE-1
Catalog number: 27844
Launched: June 30,2003

Status: Operational

```
Uplink:          ?
Downlink:     436.8375 CW
              437.4700 1200 FM ax25 or SRLL (ACTIVE only near Japan ? )
```

Cliff, K7RR reports:
In the latest Weekly Satellite Report, CUTE 1, #27844 is listed as OPERATIONAL? Indeed it is very operational as a CUBESAT sending CW telemetry on 436.8345 MHz. At the July 7 2005, 23:45:20 pass over the Western USA:

```
CUTE 1 6B A4 xx 7F D7 66A8 4702 FF FF7C 65
CUTE 1 6C A6 59 80 D9 66A8 4702 FF FE7C B6
```

The June 30th KEPS were within ten seconds of AOS and LOS. It is an very good object to practice tracking as the orbit and transmitter power are similar to proposed CUBESATS awaiting launch this December. As a check for Doppler correction, the lack of change in tone is an excellent indicator.

CUTE 1 is a Japanese (Tokyo Institute of Technology) one kilogram nanosatellite that was launched by a Rokot rocket from Plesetsk at 14:15 UT on 30 June 2003. It carries a 100 mW beacon at 436.8375 MHz. Initial orbital parameters were period 101.4 min, apogee 831 km, perigee 819 km, and inclination 98.7?.

For further info about CUTE-1 goto:
http://lss.mes.titech.ac.jp/ssp/cubesat/operation/Schedule_e.html

[ANS WSR wishes to thank Cliff, K7RR, for this week's information]
[07092005]
=====
GO-32 TECHSAT-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Downlink: 435.225 MHz FM (9600-baud FSK)
                   (435.325 n/a - temperature problems)
Uplinks: 145.850, 145.890, 145.930 FM
                   1269.700, 1269.800, 1269.900 FM
Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[03132005]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Operational

Uplink: 145.850 or 145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz
Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[05152005]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Semi-operational, the digipeater command is on and open for APRS users.

Uplink: 145.90 145.92 145.94 145.96 MHz FM
                     (using 1200-baud Manchester FSK)
Downlink: 437.026 MHz SSB (1200-baud PSK)
Mode-S Beacon: 2401.1428 MHz
Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

A WOD collection of current graphics along with general information and telemetry samples can be found at:
http://www.telecable.es/personales/ea1bcu
[05092004]
=====
UO-11 OSCAR-11
Catalog number: 14781

Launched: March 1, 1984

Status: Semi-operational?

```
Telemetry Downlink: 145.826 MHz. FM (1200-baud AFSK).
                    approx. 10 days ON, 10 days OFF
Mode-S Beacon:      2401.500 MHz. ... OFF
UHFBeacon:          435.025 MHz. ...  OFF
```

This from Clive, G3CWV:

There is a small chance that OSCAR-11 may have started transmitting again between 08 June to 10 June.

The frequency is 145.826.

Any reception reports would be appreciated. Please reply direct to Clive G3CWV (g3cwv@amsat.org), or post reports to AMSAT-BB.

[ANS thanks Clive, G3CWV for the above information]

More information on UO-11 OSCAR-11 can be found at:
http://www.users.zetnet.co.uk/clivew/
[06122005]
NNNN
/EX

SB SAT @ AMSAT <W8ISS $ANS-191.S3
WSR 191 Part 3 07/09/2005

AMSAT NEWS SERVICE BULLETIN 191.S3 FROM AMSAT HQ
SILVER SPRING, MD, JULY 09, 2005
TO ALL RADIO AMATEURS
BID: $ANS-191.S3

THE FOLLOWING ARE IN ORBIT BUT ARE
NON-OPERATIONAL AT THIS TIME:

POSAT-1 PO-28
Catalog Number: 22829
Launched : September 25, 1993

Status: Operational - Not open for Amatuer use

```
Downlink: 435.075 MHz
          435.275 MHz

Uplink:   145.925 MHz
          145.975 MHz
```

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

More information of POSAT-1 can be found at:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
http://www.amsat.org/amsat/sats/n7hpr/po28.html
[08152004]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launched: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB
Beacon: 145.810 MHz (unmodulated carrier)

AO-10 has been locked into a Mode-B, 70-cm uplink and
2-meter downlink for several years.

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: Non-operational

Uplink: 145.875 145.900 145.925 145.950 MHz FM (1200-baud)
Downlink: 435.812 MHz SSB
Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Alberto E. Zagni - I2KBD reports on 02/13/05
The spacecraft is in MBL (safe mode) and is trasmitting just 6 channels
of telemetry. Temperatures and voltage are nominal, but there seems to
be a problem with the onboard receiver, refusing to accept commands.
The spacecraft was launched in 1993, thus nearing 12 years in orbit...

Best regards
Alberto E. Zagni - I2KBD
ITAMSAT Mission Director

More information of IO-26 can be found at:

http://joshua.micronet.it/english/itamsat/itamsathome.html
http://www.amsat.org/amsat/sats/n7hpr/io26.html
www.itamsat.org

[02132005]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089

```
Launched: February 5, 1991

Status: Non-operational

Uplink:   21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB
Beacon:   29.408 MHz
Robot:    29.454 MHz
[05232004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink:      21.260 to  21.300 MHz CW/USB
Downlink:   145.860 to 145.900 MHz CW/USB
Beacon:     145.860 MHz
Robot:      145.908 MHz
[05232004]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink 145.975 MHz FM
Downlink 435.070 MHz FM
[05092004]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink:             145.900 FM 9600-baud FSK
Downlink:           435.120 MHz FM
Broadcast Callsign: UOSAT5-11
BBS:                UOSAT5-12
[01092005]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational?

Uplink:      145.858 to 145.898 MHz CW/USB
Downlink:     29.354 to  29.394 MHz CW/USB
Beacon:       29.352 MHz (intermittent)
```

SSB meeting frequency: 29.380 MHz (unofficial)

John, KD6PAG reports on June 16, 2004 to ANS:
RS-15 beacon seemed to be back in the mode where it's a tone about 5 seconds off and then 5 seconds on this morning.

ANS is looking for more confirmations of RS-15 coming back.

[ANS thanks John, KD6PAG for RS-15 information]
[06202004]

=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplink: 145.84 145.86 145.88 145.90 MHz FM
                    (using 1200-baud Manchester FSK)
CW downlink: 437.125 MHz
Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)
Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[05232004]

=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[08152004]

=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM
Broadcast Callsign: HL01-11
BBS: HL01-12

Jim, AA7KC, reports that KO-23's downlink transmitter continues in a non-operational status.
[05092004]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM (9600-baud FSK)
Downlink: 436.500 MHz FM
Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink frequency (listed on the PanSat web site) 436.500 MHz

The satellite is not available for general uplink transmissions.

The Naval Postgraduate School developed PanSat. At the time of launch, PanSat spread-spectrum digital transponders were to be available to Amateur Radio operators along with software to utilize this technology.

The satellite is still operating, however, the spread spectrum packet radio portion never took place. The spacecraft is now beyond it's initial 2-year mission life, but telemetry records are still being downloaded.

For more information, visit the official PanSat web site at:
http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm

```
[ANS has no further information]
[05232004]
=====
SO-35 SUNSAT
Catalog Number:     ?
Launched:February 23, 1999

STatus: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
          Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
         Mode J Digipeater: 145.825 MHz and 145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[08082004]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink:             145.960 MHz (9600-baud FSK)
Downlink:           437.025 MHz 437.400 MHz
Broadcast Callsign: UO121-11
BBS:                UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA
web site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[05092004]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplink      V-band    145.840 -  145.990 MHz CW/LSB
            U-band    435.550 -  435.800 MHz CW/LSB
           L1-band   1269.250 - 1269.500 MHz CW/LSB
           L2-band   1268.325 - 1268.575 MHz CW/LSB
           S1-band   2400.350 - 2400.600 MHz CW/LSB
Downlink:  S2-band   2401.225 - 2401.475 MHz CW/USB
           K-band 24,048.010 - 24,048.060 MHz CW/USB
Beacon:    2401.323, 24,048.035
[05232004]
-----
SO-42  SAUDISAT-1B
```

```
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational

Uplink:   to be released
Downlink:           437.075 MHz
Broadcast Callsign: SASAT2-11
BBS:                SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[08152004]
=====
SO-41  SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink:             145.850 MHz
Downlink:           436.775 MHz
Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[08152004]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink:   145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is  welcome to use the digipeating/APRS features of Sapphire,
callsign KE6QMD, as per the user service agreement located at the following
URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Semi-operational.

Uplink 435.275 1200-baud AFSK
Downlink 145.825 9600-baud FSK
```

(optional voice message)
Broadcast callsign: DP0AIS

AO-49 (SAFIR-M) is a German amateur radio payload onboard the small German scientific satellite "RUBIN-2".

AO-49 was built by the German amateur radio association "AATiS e.V." (German acronym for "Arbeitskreis Amateurfunk und Telekommunikation in der Schule", which means: 'working group for amateur radio anand telecommunications in schools'). AO-49 is designed as a "store and broadcast" system for APRS based messages, dedicated for the use of schools in combination with the existing WX-Net and planned buoy experiments in Germany.

No transmissions detected since the 1st of February 2003! It appears AO-49 is not properly aligned to illuminate the solar panels. This should end soon. Due to its orbit, AO-49 will be in a phase without eclipses until 13Feb03.

Martin DG8UAU has written a small software program "SAFIR-M Decoder" to allow decoding of the received DATA0 frames. It is available at: http://amend.gmxhome.de in the section Aktuelles.

Details on AO-49 (SAFIR-M) can be found at:
http://amend.gmxhome.de

Information about AATiS e.V. is available at:
http://www.aatis.de
[05092004]
NNNN
/EX

SB SAT @ AMSAT <W8ISS $ANS-191.S4
WSR 191 Part 4 07/09/2005

AMSAT NEWS SERVICE BULLETIN 191.S4 FROM AMSAT HQ
SILVER SPRING, MD, JULY 09,2005
TO ALL RADIO AMATEURS
BID: $ANS-191.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE PROPOSED FOR LAUNCH AT THIS TIME:

UCISAT ?O-??
Catalog number:
Proposed Launch Date: October 31, 2005

Status: Under Construction

Downlink: Submission in Progress
Uplink: Submission in Progress
Callsign: Submission in Progress

This from Matt Bennett, KF6RTB, UCISAT Communications Team Member:

Our website is www.ucisat.net .This is a new website, however, and doesn't have the "Status" section active yet. Because of the growing interest in our project, I'll push our webmaster to create updates (hopefully) on a week-to-week basis. For now, the current status of the mission is as follows:

-Expected Launch Date: October 31st, 2005
-Frequency Allocation: Submission in Progress
-Construction Status: Sub-Assembly
[WSR to thank Matt Bennett, KF6RTB, for this week's report.]
[01302005]
=====
SSETI ?O-??
Catalog Number:
Proposed Launch Date: Early 2005

Status: Under Construction

>From Graham, G3VZV:
All work on the SSETI Express spacecraft has now been completed and the spacecraft has left its "birthplace" - a cleanroom at the ESA ESTEC facility in the Netherlands. The spacecraft has been packed into its special transport
container and is en-route to the launch site at Plesetsk in Northern Russia.

The launch date is still listed as 25th August (current approx lift off is 06:50UTC but this may be corrected later) and arrangements are underway for the launch to be shown live on ASTRA-1G - a Ku band satellite covering most of Europe and, hopefully, these transmissions will also be streamed at both high and low resolution on the internet.

Full details of all these media resources will be made known as soon as they are finalised as will details of the telemetry downloading and decoding software and the prizes being offered by ESA for the largest and also the first contributor!

AMSAT-UK will have a team member at the launch site during the launch campaign and intend to provide regular updates during the lead up to August 25th.

You can find more info about SSETI at:
http://sseti.gte.tuwien.ac.at/WSW4/

Looking at the website for the SSETI Express webcam
http://sseti.gte.tuwien.ac.at/WSW4/webcam.htm

[ANS thanks Graham, G3VZV for the above information]
[07032005]
=====
PCSAT2 ?0-??
Catalog Number:
Proposed Launch Date: May 2005

PCSAT2, which had previously been stowed in the Space Shuttle Discovery, arrived at Launch Complex 39B on 07 April 2005. PCSAT2 is now standing by ready to be launched on the first Space Shuttle return-to-flight mission.

PCSAT2 will use the same dual redundant AX.25 command and control system as used on PCsat (NO-44) offering 8 on/off commands, 5 telemetry channels and a serial port for the solar cell experiment telemetry. It also supports the Digital Comms Relay support of the PCsat/APRS mission. The packet uplink is on 145.825 MHz and the default downlinks are in the 435 MHz band to avoid any possible interference with existing ARISS missions. PCSAT2 will have quad redundant transmit inhibits for EVA safety issues, thus, it is also easy to turn off to avoid any issues with other UHF ARISS experiments that may be activated in the future. Also, the mission lifetime of PCSAT2 is only 1 year, because it is a sample-return mission, thus terminating any long term conflicts in spectrum management.

The PCSAT2 mission is intended as an opportunity to augment existing ARISS communications experiments with an external autonomous communications payload. In this regard, it has several potential uses:

* A UI-Digipeater to help ease congestion on the currently shared ARISS PMS (Packet Mail system)

* A PSK-31 transponder for multi-user communications to improve accessibility for schools and ARISS outreach programs.

* An FM Voice repeater for full duplex crew communications to facilitate crew-to-school ARISS contacts.

* Routine Telemetry on the spacecraft systems

For more information and pictures visit the PCSAT2 website at
http://www.ew.usna.edu/~bruninga/pcsat2.html

[ANS thanks Bob, WB4APR for the above information]
[04102005}

=====

PHASE 3E ?O-??
Catalog Number:
Proposed Launch Date: Early 2006

Status: Under Construction

The AMSAT-Phase 3E satellite (P3E) is dedicated as communication and scientific platform for a highly elliptical orbit around Earth. The spacecraft will be created in a joint process together with the P5A Mars mission by an international team under leadership of AMSAT-DL and continues the successful series of AMSAT-Phase 3 satellites. Additionally the spacecraft will be a test bench for technology developped for the Mars mission. The main task of P3E is to act as communication platform for radio amateurs worldwide. A launch is planned in the period 2004 to 2006.

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/
[03272005]
=====
CP1 ?o-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: N6CP
Proposed Transmit Frequency: 436.845
[03272005]
=====
CP2 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.325
[03272005]
=====
HAUSAT1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: D90HP
Proposed Transmit Frequency: 437.465
[03272005]
=====
ICE Cube 1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: W2CXM
Proposed Transmit Frequency: 437.305
[03272005]
=====
ICE Cube 2 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: N2VR
Proposed Transmit Frequency: 437.425
[03272005]
=====
ION ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA

```
Proposed Transmit Frequency: 437.505
[03272005]
=====
KUTEsat ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: KC0RMW
Proposed Transmit Frequency: 437.385
[03272005]
=====
MEROPE ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: K7MSU-1
Proposed Transmit Frequency: 145.980
[03272005]
=====
nCUBE1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
       2407.25
[03272005]
=====
RINCON ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
        437.345
[03272005]
=====
SACRED ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
[03272005]
=====
SACRED ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
[03272005]
=====
```

SEEDS ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: JQ1YGU
Proposed Transmit Frequency: 437.485
[03272005]
=====
Mea Huaka ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.405
[03272005]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
        888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/amsat/listserv/menu.html

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors

to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satelite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

Via the ans mailing list at AMSAT.ORG courtesy of AMSAT-NA.
To subscribe, send "subscribe ans" to Majordomo@amsat.org

From -6278836524446617750
X-Google-Thread: 10e8ad,5bac402b8c55efae,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news4.google.com!news.glorb.com!newsfeed00.sul.t-online.de!newsfeed01.sul.t-online.de!t-online.de!nntp.infostrada.it!twister2.libero.it.POSTED!not-for-mail
From: "Erminio Cioffi Squitieri" <iz8ajq@amsat.org>
Newsgroups: rec.radio.amateur.space
Subject: AWARD RULES "THE FATHERS OF THE RADIO"
Lines: 80
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.2180
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.2180
X-RFC2646: Format=Flowed; Original
Message-ID: <1QAAe.11443$QV1.145514@twister2.libero.it>
Date: Mon, 11 Jul 2005 20:41:33 GMT
NNTP-Posting-Host: 151.80.14.234
X-Complaints-To: abuse@libero.it
X-Trace: twister2.libero.it 1121114493 151.80.14.234 (Mon, 11 Jul 2005 22:41:33 MET DST)
NNTP-Posting-Date: Mon, 11 Jul 2005 22:41:33 MET DST
Organization: [Infostrada]
Xref: g2news1.google.com rec.radio.amateur.space:733

AWARD "THE FATHERS OF THE RADIO"

RULES

The section ARI of Sala Consilina (SA) ITALY, has founded the permanent award "The fathers of the radio". The purpose of the diploma is to let know the names and the work of those than before, during and after the Our Guglielmo Marconi contributed to the invention and the development of the Radio.

General requirements - Awards are available to all amateurs and SWLs for worked or heard all the 11 countries of the following list where they were born the scientists / inventors who have contributed to to the invention or the development of the radio.

Bands e Modes - All the bands assigned to the Radio Amateur Service and all the modes are allowed, satellites and WARC included.

There are 4 versions of the award:

1) HF (you must have contacted all the 11 countries)
2) 50MHZ/VHF/UHF (are enough only 6 countries to claim the award)
3) SATELLITE (are enough only 6 countries to claim the award)

Countries list:

Canada VE (Reginald Fessenden)
Croazia 9A (Nikola Tesla)
Denmark OZ (Hans Christian Orsted)
France F (Edouard Branly)
Germany DF-DK-DL-DM (Heinrich Rudolf Hertz - Karl Ferdinand Braun - Adolf Slaby)
India VU (Jagdish Chandra Bose)
England G-M (Michael Faraday - Oliver Lodge)

Italy I (Guglielmo Marconi - Augusto Righi - Temistocle Calzecchi Onesti - Luigi Galvani)
Russia RA-RZ UA-UZ (Aleksandr Popov)
Scotland GM (James Clerk Maxwell)
USA A-K-N-W (Samuel Morse - David E. Hughes - Lee De Forest - Nathan Stubblefield)

To claim the Award the QSL cards are not required but they must be in possession of the applicant and could be requested anytime for checks.

The fee is 10 Euro or 12 Dollars. To receive the Award as registered mail please add 3 Euro or 4 Dollars.

Application forms must be sent to this address:

ARI SEZIONE SALA CONSILINA
CASELLA POSTALE N.11
CAP 84036 SALA CONSILINA (SA)
ITALY

For more informations you can contact the award manager IZ8AJQ Erminio via email: iz8ajq@amsat.org

From 1853534058826420167
X-Google-Thread: 10e8ad,64b16daf5bfd46be,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news4.google.com!news2.google.com!proxad.net!newsfeed.stueberl.de!newsfeed01.sul.t-online.de!newsfeed00.sul.t-online.de!t-online.de!newsfeed.t-com.hr!news1.t-com.hr!not-for-mail
From: "Tom" <tom322@yahoo.com>
Newsgroups: rec.radio.amateur.space
Subject: Space Shuttle STS-114
Date: Tue, 12 Jul 2005 23:17:04 +0200
Organization: T-Com
Lines: 8
Message-ID: <db1c0j$46d$1@ss405.t-com.hr>
NNTP-Posting-Host: 195-29-121-106.adsl.net.t-com.hr
X-Trace: ss405.t-com.hr 1121203027 4301 195.29.121.106 (12 Jul 2005 21:17:07 GMT)
X-Complaints-To: abuse@t-com.hr
NNTP-Posting-Date: Tue, 12 Jul 2005 21:17:07 +0000 (UTC)
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.2180
X-RFC2646: Format=Flowed; Original
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.2180
Xref: g2news1.google.com rec.radio.amateur.space:734

Hi,

Anyone knows on which frequencies i can hear Shuttle (not only radio amateur broadcast), but also their chat with ground control, ISS, etc.

Thanks

```
From -9067169223180647893
X-Google-Thread: 10e8ad,976a05fe6945d28,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!proxad.net!213.200.89.82.MISMATCH!
tiscali!newsfeed1.ip.tiscali.net!newsfeed00.sul.t-online.de!t-online.de!
tsicnews.teliasonera.com!ctb-nntp1.saix.net!not-for-mail
From: "Roger Conroy" <rogerconroy@nospam.hotmail.com>
Newsgroups: rec.radio.amateur.space
Subject: 2005 MAPLD International Conference
Date: Fri, 15 Jul 2005 19:09:31 +0200
Organization: The South African Internet Exchange
Lines: 127
Message-ID: <db92ha$gkb$1@ctb-nnrp2.saix.net>
NNTP-Posting-Host: ckb-ip-nas-1-p479.telkom-ipnet.co.za
X-Trace: ctb-nnrp2.saix.net 1121455466 17035 155.239.95.223 (15 Jul 2005 19:24:26
GMT)
X-Complaints-To: abuse@saix.net
NNTP-Posting-Date: 15 Jul 2005 19:24:26 GMT
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.2180
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.2180
X-RFC2646: Format=Flowed; Original
Xref: g2news1.google.com rec.radio.amateur.space:174

>
>
>             Program Announced    ---   Registration Open
>
>
>                  2005 MAPLD International Conference
>
>         Ronald Reagan Building and International Trade Center
>                           Washington, D.C.
>
>                          September 7-9, 2005
>
>
>
>   The 8th annual Military and Aerospace Programmable Logic Device
>   (MAPLD) International Conference will present papers on programmable
>   logic devices and technologies, digital engineering, and related
>   fields, for military and aerospace applications.   Devices,
>   technologies, logic design, verification, flight applications, fault
>   tolerance, reliability, radiation susceptibility, and encryption
>   applications of programmable devices, processors, and adaptive
>   computing systems in military and aerospace systems are topics for
>   papers.
```

```
>
>   For 2005, MAPLD will be expanded to 3 full days and will feature
>   expanded "Birds of a Feather" Workshop Sessions.  165 oral and poster
>   presentations are currently on the program.  Four full-day seminars
>   will be offered on September 6, 2005.
>
>
>   KEY DATES AND LINKS
>
>      Early Registration Ends: August 8, 2005
>      Registration:            http://klabs.org/mapld05/reg
>      Conference Home Page:    http://klabs.org/mapld05
>      Late Submissions:        Late papers will be accepted for the
>                               Poster and "Birds of a Feather" Workshop
>                               sessions only, on a space-avaiable basis.
>                               http://klabs.org/mapld05/
>
>
>   We are planning an exciting program with presentations by Government,
>   industry, academia, and consultants, including talks by distinguished
>   Invited Speakers.   This conference is open to US and foreign
>   participation and is unclassified.  For related information, please
>   see the NASA Office of Logic Design Web Site (http://klabs.org).
>
>
>   Special Talks Include:
>
>      * Welcome and Opening Address
>        Ralph Roe, NASA Engineering and Safety Center
>      * Invited History Talk, "The Hubble Space Telescope"
>        Steven Beckwith, Director, Space Telescope Science Institute
>      * Invited Mishap Talk (new for 2005)
>        "Computer Overload and The  Apollo 11 Lunar Landing"
>        Jack Garman (formerly NASA MSC/JSC)
>      * Panel Session: "Why Are Space Stations So Hard?"
>        Roger Launius, National Air and Space Museum
>        Keith Cowing,  Editor, NASA Watch
>        William Dwyer, Engineer, Space Station Freedom and ISS
>        and more ....
>
>
>   Four Seminars for 2005:
>
>      * Design Integrity
>      * Device Failure Modes and Reliability
>      * Reconfigurable High-Performance Computing
>      * Space Plug-and-play Avionics (SPA) Technical Committee/Workshop
>
>
>   Planned Technical Sessions, Oral, Poster and Birds-of-a-Feather (BOF):
>
>      * Applications: Military & Aerospace I and II
>      * Verification of High Reliability Designs
>      * Radiation Effects and Mitigation Techniques
>      * Logic Design and Processors
>      * Reconfigurable Computing, Evolvable Hardware, and Security
>      * Poster Session
>      * BOF-L: Mitigation Methods for Reprogrammable Logic in the Space
>              Radiation Environment
>      * BOF-H: Reconfigurable Computing
>      * BOF-J: PLD Failures, Analyses, and the Impact on Systems
>      * BOF-S: NESC and Software
>      * BOF-G: Digital Engineering and Computer Design - A Retrospective
>              and Lessons Learned for Today's Engineers
>      * BOF-W: Verification of Large Designs and Related Design
> Methodologies
>
>
>   Reservations are being accepts for the Industrial & Gov't Exhibits:
>      http://klabs.org/mapld05/exhibits/reservation_request_form.htm
>
>
>   Industrial and Government participants include:
>
>      NASA Office of Logic Design      Synthworks
>      Space Micro                      SRC Computers
>      BAE Systems: Information and     Aldec
>         Electronic Warfare Systems
>      Actel Corporation                ATK Mission Research Corporation
>      Aeroflex Colorado Springs        Xilinx, Inc.
>      Sigrity                          Mentor Graphics Corporation
>      IEEE Aerospace and Electronics   NASA Engineering and Safety Center
>      Systems Society
>      Nallatech                        Celoxica
>      Northrop Grumman Corporation     SEAKR Engineering
>      Synplicity                       Aitech Defense Systems
>      LSI Logic                        Andraka Consulting Group
>      Pentek                           NRO: Director's Innovation
> Initiative
>      Southwest Research Institute     Star Bridge Systems
>      Cray                             Alpha Data
>      EM Photonics                     NASA MSFC Traveling Exhibits Program
>      VMETRO                           MathStar
>
>
>   For additional information:
>
>      Conference home page: http://klabs.org/mapld05
>
>      Richard B. Katz
>      NASA Office of Logic Design
>      mapld2005@klabs.org
```

From 6808402314079211195
X-Google-Thread: 10e8ad,3fb0faf05f085f25,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news3.google.com!news.glorb.com!hwmnpeer01.lga!hwmedia!hw-filter.lga!fe06.lga.POSTED!53ab2750!not-for-mail
From: "Chris_Gaming" <chris_gaming@charter.net>
Newsgroups: rec.radio.amateur.space
Subject: NASA Comms. - Birmingham, Alabama?
Lines: 14
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.2180
X-RFC2646: Format=Flowed; Original
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.2180
Message-ID: <vHUBe.38$LC6.5@fe06.lga>
X-Trace:
dkoicekneficefklfoinjgggnogonkifpbcipdcoggmecklodjglapghnmpgdmdbhkoeglffeaoioebgbifpchdbicfkgnmkjjminbflbkgmhlbkbcnegbbojhamihnbgmec��
NNTP-Posting-Date: Fri, 15 Jul 2005 13:06:51 MST
Date: Fri, 15 Jul 2005 15:06:50 -0500
Xref: g2news1.google.com rec.radio.amateur.space:175

I have an AOR AR8200 MarkIII. I ordered it from the UK, so it's unblocked. This handheld receiver covers all frequencies from 500 KHz to 3GHz.

I live in Birmingham, Alabama; which is in north central Alabama. I have a simple question. Sitting here at home in my front yard, is there anyway for me to listen to the communications between Ground Control and the Shuttle and/or the Space Station? My exact location is Latitude: 33.57618 Longitude: -86.76385 I know I'm a newbie to this but I don't want to miss the chance to listen in on NASA communications if possible. BTW - I know a lot of websites broadcast the communications, but I want to use my own handheld receiver to listen to them, as opposed to just getting something relayed off a website. Thanks so much.

From -1124907071979867843
X-Google-Thread: 10e8ad,3fb0faf05f085f25
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news4.google.com!news.glorb.com!border1.nntp.dca.giganews.com!nntp.giganews.com!cyclone1.gnilink.net!gnilink.net!cyclone.rdc-nyc.rr.com!news-out.nyc.rr.com!twister.nyc.rr.com.POSTED!53ab2750!not-for-mail
From: Tom Randy <Sorry@spamsucks.net>
Newsgroups: rec.radio.amateur.space
Message-ID: <2005071519085164440%Sorry@spamsucksnet>
References: <vHUBe.38$LC6.5@fe06.lga>
MIME-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1; format=flowed

Content-Transfer-Encoding: 8bit
Subject: Re: NASA Comms. - Birmingham, Alabama?
User-Agent: Unison/1.6.2
Lines: 140
Date: Fri, 15 Jul 2005 23:11:46 GMT
NNTP-Posting-Host: 24.161.95.233
X-Complaints-To: abuse@rr.com
X-Trace: twister.nyc.rr.com 1121469106 24.161.95.233 (Fri, 15 Jul 2005 19:11:46 EDT)
NNTP-Posting-Date: Fri, 15 Jul 2005 19:11:46 EDT
Organization: Road Runner - NYC
Xref: g2news1.google.com rec.radio.amateur.space:176

On 2005-07-15 16:06:50 -0400, "Chris_Gaming" <chris_gaming@charter.net> said:

> I have an AOR AR8200 MarkIII. I ordered it from the UK, so it's unblocked.
> This handheld receiver covers all frequencies from 500 KHz to 3GHz.
>
> I live in Birmingham, Alabama; which is in north central Alabama. I have a simple question. Sitting here at home in my front yard, is there anyway for me to listen to the communications between Ground Control and the Shuttle and/or the Space Station? My exact location is Latitude: 33.57618 Longitude: -86.76385 I know I'm a newbie to this but I don't want to miss the chance to listen in on NASA communications if possible. BTW - I know a lot of websites broadcast the communications, but I want to use my own handheld receiver to listen to them, as opposed to just getting something relayed off a website. Thanks so much.
>

Try these:

NASA: (frequencies in kHz, USB commonly)

NASA booster rocket recovery: 2622, 11407
NASA tracking: 3385, 3395, 6983, 14456
NASA tracking vessels: 5190
NASA booster recovery vessels: 5810
NASA aircraft: 6708, 6896, 7461, 7765
NASA Kennedy operations: 7675
USAF Cape Radio: 10780, 20390
NASA Pacific operations: 11205
NASA tracking (Ascencion Island): 20186, 20191

Edwards AFB: (frequencies in MHz)

116.4	ATIS
120.7	control tower
121.8	ground control
126.1, 127.8	approach control
133.65	approach/departure control
138.45	commandpost
149.925	security
162.6125	NASA ops
164.1	NASA
173.5875	fire

236.6	control tower
269.9	ATIS
290.3	departure control
318.1	tower
348.7	approach control
372.2	dispatchers
390.1	ground control

Kennedy: (MHz)

117.8	shuttle control
121.75, 126.3	ground control
126.65	weather
142.5, 143.04	cranes
148.455	NASA booster recovery
148.485	launch countdown/status
149.175	shuttle crawler
162.0125	NASA vessels
162.6125	NASA ops
163.4625, 163.4875	security
163.5125	security
163.5625	fire - primary
164.0	radiation checks
165.1875	check points
170.15	base operations
170.175	transportation
170.35	public relations
170.40	General Services Administration
171.15	maintenance/fuel
171.2625	camera tracking
173.175	security - gates
173.4375	medics
173.5625	fire/rescue
173.6625	safety units
173.6875	security - vans
173.7875	fire - secondary
284.0	ground control

Patrick AFB: (MHz)

118.4	approach/departure control
121.7	ground control
125.1	approach control
126.2	control tower
128.8	dispatcher
138.3	command post
273.5	ATIS
335.8	ground control
340.9	approach/departure control
344.6	weather
348.4	control tower
358.3	approach control
372.2	dispatchers

International emergency air frequencies (MHz)

121.5
243.0

Shuttle frequencies: (MHz)

296.8	primary
259.7	secondary
279.0	space suits

Communications and other stuff: (MHz)

1831.8	primary (USAF uplink, phase modulation)
1775.1	secondary
2106.4	primary (NASA uplink, phase modulation)
2041.9	secondary
2205.0, 2250.0	NASA downlink (FM)
2287.5	primary (NASA downlink, voice, phase mod)
2217.5	secondary

Contractors

Rockwell (Edwards)
2995.5, 3282.5, 3475.5, 5597.5, 10010.5, 17966.5 (kHz, USB)
122.8, 123.05, 123.35, 123.525, 462.925 (MHz)

Rockwell (Edwards/Kennedy)
123.475 (MHz)

McDonnell Douglas (Edwards)
123.3, 123.55 (MHz)

Com-Tech Associates (Kennedy)
151.955 (MHz)

IBM & Harris Corp. (Kennedy)
152.48 (MHz)

TWA (Kennedy)
154.515 (MHz)

Credit to:

http://www.panix.com/~clay/scanning/Frequencies/handy-info/shuttle.txt

--
PCs, like air-conditioners, are useless when you open Windows.

From 2707950260605285423
X-Google-Thread: 10e8ad,64b16daf5bfd46be
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit

```
Path: g2news1.google.com!news4.google.com!newshub.sdsu.edu!cyclone.bc.net!
newsfeed.telusplanet.net!newsfeed.telus.net!clgrps12.POSTED!c92a1cd0!not-for-mail
From: Mike <Mike@nowhere.net>
Subject: Re: Space Shuttle STS-114
User-Agent: Pan/0.14.2.91 (As She Crawled Across the Table)
Newsgroups: rec.radio.amateur.space
References: <db1c0j$46d$1@ss405.t-com.hr> <42d45662$0$16218$bb4e3ad8@newscene.com>
IfYouCanReadThisThen: POUND-SALT_HAHAHAHA
MIME-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 8bit
Lines: 9
Message-ID: <qwZBe.93086$wr.64749@clgrps12>
Date: Sat, 16 Jul 2005 01:36:22 GMT
NNTP-Posting-Host: 199.126.155.198
X-Trace: clgrps12 1121477782 199.126.155.198 (Fri, 15 Jul 2005 19:36:22 MDT)
NNTP-Posting-Date: Fri, 15 Jul 2005 19:36:22 MDT
Xref: g2news1.google.com rec.radio.amateur.space:177
```

On Tue, 12 Jul 2005 18:48:01 -0500, Space Junkie wrote:

> Yes.

> Space Junkie.

You are a ass.

Mike

```
From 3437459689173805105
X-Google-Thread: 10e8ad,3fb0faf05f085f25
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news4.google.com!newshub.sdsu.edu!elnk-nf2-pas!elnk-pas-
nf1!newsfeed.earthlink.net!news-feed-01.socal.rr.com!news.rr.com!
cyclone2.kc.rr.com!news2.kc.rr.com!news-post.tampabay.rr.com!
tornado.tampabay.rr.com.POSTED!53ab2750!not-for-mail
From: **THE-RFI-EMI-GUY** <rhyolite@nettally.com>
User-Agent: Mozilla/5.0 (Windows; U; Win98; en-US; rv:1.7.2) Gecko/20040803
X-Accept-Language: en-us, en
MIME-Version: 1.0
Newsgroups: rec.radio.amateur.space
Subject: Re: NASA Comms. - Birmingham, Alabama?
References: <vHUBe.38$LC6.5@fe06.lga>
In-Reply-To: <vHUBe.38$LC6.5@fe06.lga>
Content-Type: text/plain; charset=ISO-8859-1; format=flowed
Content-Transfer-Encoding: 7bit
Lines: 37
Message-ID: <C5%Be.2399$t43.400@tornado.tampabay.rr.com>
Date: Sat, 16 Jul 2005 03:24:18 GMT
NNTP-Posting-Host: 65.33.236.39
X-Complaints-To: abuse@rr.com
```

X-Trace: tornado.tampabay.rr.com 1121484258 65.33.236.39 (Fri, 15 Jul 2005 23:24:18 EDT)
NNTP-Posting-Date: Fri, 15 Jul 2005 23:24:18 EDT
Organization: Road Runner High Speed Online http://www.rr.com
Xref: g2news1.google.com rec.radio.amateur.space:178

Try these: I have heard the shuttle in AM mode and twice have heard space suits. There is biomedical telemetry on the space suits so you can hear a heartbeat. Rumor is the space suits are/have gone to 400 MHz digital mode, so that may be no longer an option.

Shuttle frequencies: (MHz)

296.8	primary
259.7	secondary
279.0	space suits

Chris_Gaming wrote:

>I have an AOR AR8200 MarkIII. I ordered it from the UK, so it's unblocked.
>This handheld receiver covers all frequencies from 500 KHz to 3GHz.
>
>I live in Birmingham, Alabama; which is in north central Alabama. I have a
>simple question. Sitting here at home in my front yard, is there anyway for
>me to listen to the communications between Ground Control and the Shuttle
>and/or the Space Station? My exact location is Latitude: 33.57618
>Longitude: -86.76385 I know I'm a newbie to this but I don't want to miss
>the chance to listen in on NASA communications if possible. BTW - I know a
>lot of websites broadcast the communications, but I want to use my own
>handheld receiver to listen to them, as opposed to just getting something
>relayed off a website. Thanks so much.
>
>
>
>

--
Joe Leikhim K4SAT
"The RFI-EMI-GUY"

The Lost Deep Thoughts   By: Jack Handey
     Before a mad scientist goes mad, there's probably a time when he's only partially mad. And this is the time when he's going to throw his best parties.

From -4314204184989746215
X-Google-Thread: 10e8ad,abf554147d75cf3d,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news4.google.com!newshub.sdsu.edu!feeder1.nntp.dca.giganews.com!border1.nntp.dca.giganews.com!nntp.giganews.com!elnk-atl-nf1!newsfeed.earthlink.net!stamper.news.atl.earthlink.net!newsread3.news.atl.earthlink.net.POSTED!46041641!not-for-mail

From: "JoAnne Maenpaa" <wb9jej_no-spam@earthlink.net>
Newsgroups: rec.radio.amateur.space
Subject: WSR-198 AMSAT Weekly Satellite Status Report
Lines: 1196
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <RLOCe.691$6f.160@newsread3.news.atl.earthlink.net>
Date: Mon, 18 Jul 2005 14:10:57 GMT
NNTP-Posting-Host: 66.167.216.147
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread3.news.atl.earthlink.net 1121695857 66.167.216.147 (Mon, 18 Jul 2005 07:10:57 PDT)
NNTP-Posting-Date: Mon, 18 Jul 2005 07:10:57 PDT
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news1.google.com rec.radio.amateur.space:179

This report is organized into 4 parts.
Part 1 - operational analog amateur satellites.
Part 2 - operational digital amateur satellites.
Part 3 - non - operational satellites
Part 4 - proposed satellites

SB SAT @ AMSAT <W8ISS $ANS-198.S1
WSR 198 Part 1 07/17/2005

AMSAT NEWS SERVICE BULLETIN 198.S1 FROM AMSAT HQ
SILVER SPRING, MD, JULY 17, 2005
TO ALL RADIO AMATEURS
BID: $ANS-198.S1

VO-52 HAMSAT
Catalog Number: 28650
Launch Date: May 05,2005

Status: On orbit
Current Mode: U/V

Proposed frequencies:

Indian transponder:
Uplink : 435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW
Beacom : 145.940MHz continue carier signal

Dutch transponder:
Uplink : 435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW
Beacon : 145.860MHz 12WPM with CW message

HAMSAT has been assigned the OSCAR designation VO-52.
[06192005]

```
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Mode: PBBS - OFF
      FM REPEATER - DUAL V/U

Analog voice downlink:  435.300 MHz FM
   435.150 mhz FM
Analog voice uplink: 145.880 mhz FM
   145.920 MHz FM 67Hz PL tone
                       1268.700 MHz FM 67Hz PL tone

Digital Downlinks:      435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
                       2401.200 MHz FM  38k4 bps, AX.25
Digital Uplink:         145.860 MHz FM, 9k6 Digital, Pacsat Broadcast
   Protocol (PBP)

Broadcast: PECHO-11
BBS:  PECHO-12

Current scheduled operating modes:
13 July
Dual FM Repeaters
FM Repeater, V/U
Uplink: 145.920 mhz FM, 67 hz PL Tone
Downlink 435.300 mhz FM
FM Repeater, V/U
Uplink: 145.880 mhz FM
Downlink 435.150 mhz FM

18 July
FM Repeater, V/U
Uplink: 145.920 mhz FM, 67 hz PL Tone
Downlink 435.300 mhz FM
9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 435.150 mhz FM, 9k6 PBP Digital

21 July
38k4 Digital on S Band in support of SSETI Satellite
38k4 Digital Downlink, V/S, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 2401.200 mhz FM, 38k4 PBP Digital

23 July
FM Repeater, V/S
Uplink: 145.920 mhz FM, 67hz PL Tone
Downlink 2401.200 mhz FM

18 July
```

FM Repeater, V/U
Uplink: 145.920 mhz FM, 67 hz PL Tone
Downlink 435.300 mhz FM
9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 435.150 mhz FM, 9k6 PBP Digital

21 July
38k4 Digital on S Band in support of SSETI Satellite
38k4 Digital Downlink, V/S, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 2401.200 mhz FM, 38k4 PBP Digital

23 July
FM Repeater, V/S
Uplink: 145.920 mhz FM, 67hz PL Tone
Downlink 2401.200 mhz FM

[ANS thanks Mike, KE4AZN for the above information]
[07172005]

=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Uplink: 145.850 MHz (67.0 Hz PL tone) (See below for operating procedures)
Downlink: 436.795 MHz

There have been unconfirmed reports on the amsat-bb remailer that So-50 has shifted downlink frequency as much as 5khz up. This both from Europe.

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The order of operation is thus: (allow for Doppler as necessary)

1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10 minute timer.

[09122004]

=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: OPERATIONAL

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB

Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplink: 145.850 145.870 145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

John, N4QWL reports on July 16th, 2005:

Last evening I had a AOS to LOS qso with WI2W. FO-29 came up at 01:17z here in FM07 and I found WI2W and we chatted until 01:33z. The satellite was at 2 degrees elevation when I finally heard him start to crackle a bit. What a great QSO! To think that I watched this bird launch back in 1996 and it is still working so well is a real thrill. I believe I still have the video. I might just look for it and watch it again. Boy do I love this satellite stuff!
Look for you all up there.

Please send the reception reports to lab2 'at' jarl.or.jp.
Please use the subject line: 'FO-29 reception report'.

Mineo, JE9PEL, has an FO-29 satellite telemetry analysis program that will automatically analyze all digital telemetry from the satellite (such as current, voltage and temperature). FO29CWTE is available at:
http://www.ne.jp/asahi/hamradio/je9pel/
[ANS-WSR wishes to thanks John, N4QWL for this week's report]
[07172005]

=====

AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Uplink: 145.850 MHz FM
Downlink: 436.795 MHz FM

The latest information on AO-27 from control operator Michael Wyrick, N3UC (former N4USI), can be found at:
http://www.ao27.org

An AO-27 question-and-answer page is available on the AMSAT-NA web site, with updates by Ray, W2RS. The URL is:
http://www.amsat.org/amsat/intro/ao27faq.html

[ANS thanks John, K6YK, for this week's AO-27 report]
[08292004]

=====

AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Semi-operational in sunlight.
Return to active status: June 21,2002

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A
145.975 to 145.925 MHz CW/USB Mode B
Beacon: 29.502 MHz, 145.972 MHz, 435.1 MHz, 2304.1 MHz

Emily, W0EEC has created a website to allow the users of AO-7 to record contacts, observations and use of the satellite more effectively at:
http://www.emilyshouse.com/experthams/ao7/main.php
This includes the ability to log contacts.

Tim, K3TZ has written a program to decode AO-07 telemetry.
The program can be downloaded at:
http://www.qsl.net/k3tz/files/K3TZ_AO-07_Telemetry_Decoder_0.5.zip

For more AO-7 info:
http://www.amsat.org/amsat/sats/n7hpr/ao7.html
[11142004]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: Packet (APRS-style connections)
Digipeater: Active

The current Expedition 11 crew is:
Commander Sergei Krikalev
Flight Engineer John Phillips

Worldwide packet uplink: 145.990 MHz FM
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM
Doppler Shift is 10 KHz

Russian callsigns: RS0ISS, RZ3DZR
USA callsign: NA1SS
Packet station mailbox callsign: RS0ISS-11
Packet station keyboard callsign: RS0ISS-3
Digipeater callsign: ARISS

Dave, IO80SM reports:
What a nice surprise to hear the I.S.S. UHF/VHF repeater operational earlier this evening.

I heard an EI mobile and Jean F6HCC.
(Called you Jean, but guess you didn't hear me/it)

Nothing heard at all from the ISS during the last pass over the UK though.

This off the ARISS webpage: <
http://www.rac.ca/ariss/oindex.htm#New%20ARISS%20Operations > :
The ARISS program is pleased to announce that the amateur radio equipment aboard the International Space Station is now operating in cross-band repeat mode. We realize that many of you will miss the packet-operating mode. However, cross-band repeat allows further experimentation of the ISS amateur radio system

The downlink for this operating mode remains the same, so listen for the station on 145.80 MHz. The new uplink frequency is 437.80 MHz. All frequencies are subject to Doppler shifting. For further information on working satellites and adjusting for Doppler shift, please review Emily Clark's (W0EEC) excellent presentation on AMSAT's website:
http://www.amsat.org/amsat-new/information/faqs/Intro_sats.pdf

The ISS daily crew schedule can be found at:
http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line is NOT translated from Russian and posted.

More information is available at:
http://www.rac.ca/ariss
http://spaceflight.nasa.gov/station/reference/radio/
http://www.marexmg.org/fileshtml/unprotopage.html
http://www.issfanclub.com
http://oscar.dcarr.org/
[07172005]
NNNN
/EX

SB SAT @ AMSAT <W8ISS $ANS-198.S2
WSR 198 Part 2 07/17/2005

AMSAT NEWS SERVICE BULLETIN 198.S2 FROM AMSAT HQ
SILVER SPRING, MD, JULY 17, 2005
TO ALL RADIO AMATEURS
BID: $ANS-198.S2

AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Mode: PBBS - OFF
      FM REPEATER - DUAL V/U

Analog voice downlink: 435.300 MHz FM

435.150 mhz FM
Analog voice uplink: 145.880 mhz FM
145.920 MHz FM 67Hz PL tone
1268.700 MHz FM 67Hz PL tone

Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast
Protocol (PBP)

Broadcast: PECHO-11
BBS: PECHO-12

Current scheduled operating modes:
13 July
Dual FM Repeaters
FM Repeater, V/U
Uplink: 145.920 mhz FM, 67 hz PL Tone
Downlink 435.300 mhz FM
FM Repeater, V/U
Uplink: 145.880 mhz FM
Downlink 435.150 mhz FM

18 July
FM Repeater, V/U
Uplink: 145.920 mhz FM, 67 hz PL Tone
Downlink 435.300 mhz FM
9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 435.150 mhz FM, 9k6 PBP Digital

21 July
38k4 Digital on S Band in support of SSETI Satellite
38k4 Digital Downlink, V/S, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 2401.200 mhz FM, 38k4 PBP Digital

23 July
FM Repeater, V/S
Uplink: 145.920 mhz FM, 67hz PL Tone
Downlink 2401.200 mhz FM

[ANS thanks Mike, KE4AZN for the above information]
[07172005]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Non-Operational?????

Uplink/downlink: 145.827 MHz 1200 baud AX.25 AFSK via W3ADO-1
Aux/Uplink: 435.250 MHz 9600 baud via PCSAT-2 (off)

APRS Downlink: 144.390 MHz (Region 2)

This from Bob, WB4APR:
PCsat returned to negative-power-budget mode on 16 Feb 2005 and is not expect- ed to be restorable until the next full-sun period in the Fall when the southern Sun can better illuminate the south facing panel. Between now and then you are welcome to try to get a packet digipeated, but this will usually only work during mid-day passes in the Northern Hemisphere due to sun angles.

Question asked of Bob WB4APR recently on the amsat-bb:
Is it alive?? I was just looking at the pcsat.aprs.org page at Findu and it shows a lot of stations recently (within the last day) digipeating through it.

Bob's reply:
PCsat is always "alive", but can only muster enough power to get out a complete packet when it is in near mid-day sun in the Northern hemisphere the higher the latitude the better in the summer.

Over the next 2 weeks PCsat is entering one of thoes periods. The 20 or so stations you see on the LIVE web page are probably unattended beacons. But if u hear good packets on 145.825 from PCsat during mid-day, go ahead and use it...

Fortunately it will be in 100% sun during FD, but Unfortunately, all that sun is from the side and misses the best solar panel. Experience has shown it will be useless at that time.

PCSat is a 1200-baud APRS digipeater designed for use by stations using hand-held or mobile transceivers. Downlinks feed a central web site at:
http://pcsat.aprs.org

The APRS-equipped PCSat was built by midshipmen from the U.S. Naval Academy under the guidance of Bob Bruninga, WB4APR.
[07092005]
=====
CUTE-1
Catalog number: 27844
Launched: June 30,2003

Status: Operational

Uplink: ?
Downlink: 436.8375 CW
              437.4700 1200 FM ax25 or SRLL (ACTIVE only near Japan ?)
Cliff, K7RR reports:
In the latest Weekly Satellite Report, CUTE 1, #27844 is listed as OPERATIONAL? Indeed it is very operational as a CUBESAT sending CW telemetry on 436.8345 MHz. At the July 7 2005, 23:45:20 pass over the Western USA:

```
CUTE 1 6B A4 xx 7F D7 66A8 4702 FF FF7C 65
CUTE 1 6C A6 59 80 D9 66A8 4702 FF FE7C B6
```

The June 30th KEPS were within ten seconds of AOS and LOS. It is an very good object to practice tracking as the orbit and transmitter power are similar to proposed CUBESATS awaiting launch this December. As a check for Doppler correction, the lack of change in tone is an excellent indicator.

CUTE 1 is a Japanese (Tokyo Institute of Technology) one kilogram nanosatellite that was launched by a Rokot rocket from Plesetsk at 14:15 UT on 30 June 2003. It carries a 100 mW beacon at 436.8375 MHz. Initial orbital parameters were period 101.4 min, apogee 831 km, perigee 819 km, and inclination 98.7?.

For further info about CUTE-1 goto:
http://lss.mes.titech.ac.jp/ssp/cubesat/operation/Schedule_e.html

[ANS WSR wishes to thank Cliff, K7RR, for this week's information]
[07092005]
=====
GO-32 TECHSAT-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Downlink: 435.225 MHz FM (9600-baud FSK)
(435.325 n/a - temperature problems)
Uplinks: 145.850, 145.890, 145.930 FM
1269.700, 1269.800, 1269.900 FM
Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[03132005]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Operational

Uplink: 145.850 or 145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz
Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as

a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[05152005]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Semi-operational, the digipeater command is on and open for APRS users.

Uplink: 145.90 145.92 145.94 145.96 MHz FM
(using 1200-baud Manchester FSK)
Downlink: 437.026 MHz SSB (1200-baud PSK)
Mode-S Beacon: 2401.1428 MHz
Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

A WOD collection of current graphics along with general information and telemetry samples can be found at:
http://www.telecable.es/personales/ea1bcu
[05092004]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational?

Telemetry Downlink: 145.826 MHz. FM (1200-baud AFSK).
approx. 10 days ON, 10 days OFF
Mode-S Beacon: 2401.500 MHz. ... OFF
UHFBeacon: 435.025 MHz. ... OFF

This from Clive, G3CWV:

There is a small chance that OSCAR-11 may have started transmitting again between 08 June to 10 June.

The frequency is 145.826.

Any reception reports would be appreciated. Please reply direct to Clive G3CWV (g3cwv@amsat.org), or post reports to AMSAT-BB.

[ANS thanks Clive, G3CWV for the above information]

More information on UO-11 OSCAR-11 can be found at:
http://www.users.zetnet.co.uk/clivew/
[06122005]
NNNN
/EX

SB SAT @ AMSAT <W8ISS $ANS-198.S3

WSR 198 Part 3 07/17/2005

AMSAT NEWS SERVICE BULLETIN 198.S3 FROM AMSAT HQ
SILVER SPRING, MD, JULY 17, 2005
TO ALL RADIO AMATEURS
BID: $ANS-198.S3

THE FOLLOWING ARE IN ORBIT BUT ARE
NON-OPERATIONAL AT THIS TIME:

POSAT-1 PO-28
Catalog Number: 22829
Launched : September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 435.075 MHz
          435.275 MHz

Uplink: 145.925 MHz
          145.975 MHz

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

More information of POSAT-1 can be found at:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
http://www.amsat.org/amsat/sats/n7hpr/po28.html
[08152004]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launched: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB
Beacon: 145.810 MHz (unmodulated carrier)

AO-10 has been locked into a Mode-B, 70-cm uplink and
2-meter downlink for several years.

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: Non-operational

```
Uplink:             145.875 145.900 145.925 145.950 MHz FM (1200-baud)
Downlink:           435.812 MHz SSB
Broadcast Callsign: ITMSAT-11
BBS:                ITMSAT-12

Alberto E. Zagni - I2KBD reports on 02/13/05
The spacecraft is in MBL (safe mode) and is trasmitting just 6 channels
of telemetry. Temperatures and voltage are nominal, but there seems to
be a problem with the onboard receiver, refusing to accept commands.
The spacecraft was launched in 1993, thus nearing 12 years in orbit...

Best regards
Alberto E. Zagni - I2KBD
ITAMSAT Mission Director

More information of IO-26 can be found at:

http://joshua.micronet.it/english/itamsat/itamsathome.html
http://www.amsat.org/amsat/sats/n7hpr/io26.html
www.itamsat.org

[02132005]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink:   21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB
Beacon:   29.408 MHz
Robot:    29.454 MHz
[05232004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink:      21.260 to  21.300 MHz CW/USB
Downlink:   145.860 to 145.900 MHz CW/USB
Beacon:     145.860 MHz
Robot:      145.908 MHz
[05232004]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational
```

```
Uplink 145.975 MHz FM
Downlink 435.070 MHz FM
[05092004]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink:             145.900 FM 9600-baud FSK
Downlink:           435.120 MHz FM
Broadcast Callsign: UOSAT5-11
BBS:                UOSAT5-12
[01092005]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational?

Uplink:      145.858 to 145.898 MHz CW/USB
Downlink:     29.354 to  29.394 MHz CW/USB
Beacon:       29.352 MHz (intermittent)
SSB meeting frequency:  29.380 MHz (unofficial)

John, KD6PAG reports on June 16, 2004 to ANS:
RS-15 beacon seemed to be back in the mode where it's a tone about 5 seconds
off and then 5 seconds on this morning.

ANS is looking for more confirmations of RS-15 coming back.

[ANS thanks John, KD6PAG for RS-15 information]
[06202004]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplink:             145.84 145.86 145.88 145.90 MHz FM
                    (using 1200-baud Manchester FSK)
CW downlink:        437.125 MHz
Digital downlink:   437.150 MHz SSB (RC-BPSK 1200-baud PSK)
Broadcast Callsign: LUSAT-11
BBS:                LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[05232004]
=====
```

FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[08152004]

=====

KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM
Broadcast Callsign: HL01-11
BBS: HL01-12

Jim, AA7KC, reports that KO-23's downlink transmitter continues in a non-operational status.
[05092004]

=====

KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM (9600-baud FSK)
Downlink: 436.500 MHz FM
Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]

=====

PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink frequency (listed on the PanSat web site) 436.500 MHz

The satellite is not available for general uplink transmissions.

The Naval Postgraduate School developed PanSat. At the time of launch, PanSat spread-spectrum digital transponders were to be available to Amateur Radio operators along with software to utilize this technology.

The satellite is still operating, however, the spread spectrum packet radio portion never took place. The spacecraft is now beyond it's initial 2-year mission life, but telemetry records are still being downloaded.

For more information, visit the official PanSat web site at:
http://www.sp.nps.navy.mil/pansat/
[05092004]

=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm

[ANS has no further information]
[05232004]

=====
SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

STatus: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
          Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
         Mode J Digipeater: 145.825 MHz and 145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[08082004]

=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlink: 437.025 MHz 437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA
web site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[05092004]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

```
Uplink      V-band    145.840 -  145.990 MHz CW/LSB
            U-band    435.550 -  435.800 MHz CW/LSB
           L1-band   1269.250 - 1269.500 MHz CW/LSB
           L2-band   1268.325 - 1268.575 MHz CW/LSB
           S1-band   2400.350 - 2400.600 MHz CW/LSB
Downlink:  S2-band   2401.225 - 2401.475 MHz CW/USB
           K-band 24,048.010 - 24,048.060 MHz CW/USB
Beacon:    2401.323, 24,048.035
```

[05232004]

SO-42 SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational

Uplink: to be released
Downlink: 437.075 MHz
Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[08152004]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz
Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[08152004]

=====

NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, callsign KE6QMD, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]

=====

AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Semi-operational.

Uplink 435.275 1200-baud AFSK
Downlink 145.825 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

AO-49 (SAFIR-M) is a German amateur radio payload onboard the small German scientific satellite "RUBIN-2".

AO-49 was built by the German amateur radio association "AATiS e.V." (German acronym for "Arbeitskreis Amateurfunk und Telekommunikation in der Schule", which means: 'working group for amateur radio anand telecommunications in schools'). AO-49 is designed as a "store and broadcast" system for APRS based messages, dedicated for the use of schools in combination with the existing WX-Net and planned buoy experiments in Germany.

No transmissions detected since the 1st of February 2003! It appears AO-49 is not properly aligned to illuminate the solar panels. This should end soon. Due to its orbit, AO-49 will be in a phase without eclipses until 13Feb03.

Martin DG8UAU has written a small software program "SAFIR-M Decoder" to allow decoding of the received DATA0 frames. It is available at:
http://amend.gmxhome.de in the section Aktuelles.

Details on AO-49 (SAFIR-M) can be found at:
http://amend.gmxhome.de

Information about AATiS e.V. is available at:
http://www.aatis.de

[05092004]
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SB SAT @ AMSAT <W8ISS $ANS-198.S4
WSR 198 Part 4 07/17/2005

AMSAT NEWS SERVICE BULLETIN 198.S4 FROM AMSAT HQ
SILVER SPRING, MD, JULY 17,2005
TO ALL RADIO AMATEURS
BID: $ANS-198.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE
PROPOSED FOR LAUNCH AT THIS TIME:

UCISAT ?O-??
Catalog number:
Proposed Launch Date: October 31, 2005

Status: Under Construction

Downlink: Submission in Progress
Uplink: Submission in Progress
Callsign: Submission in Progress

This from Matt Bennett, KF6RTB, UCISAT Communications Team Member:

Our website is www.ucisat.net .This is a new website, however, and doesn't have the "Status" section active yet. Because of the growing interest in our project, I'll push our webmaster to create updates (hopefully) on a week-to-week basis. For now, the current status of the mission is as follows:

-Expected Launch Date: October 31st, 2005
-Frequency Allocation: Submission in Progress
-Construction Status: Sub-Assembly
[WSR to thank Matt Bennett, KF6RTB, for this week's report.]
[01302005]
=====
SSETI ?O-??
Catalog Number:
Proposed Launch Date: Early 2005

Status: Under Construction

SpaceDaily has a report about SSETI at:
http://www.spacedaily.com/news/internet-04zzzu.html

You can find more info about SSETI at:
http://sseti.gte.tuwien.ac.at/WSW4/

Looking at the website for the SSETI Express webcam
http://sseti.gte.tuwien.ac.at/WSW4/webcam.htm

[ANS thanks Graham, G3VZV and JoAnne, WB9JEJ for the above information]
[07172005]
=====
PCSAT2 ?0-??
Catalog Number:
Proposed Launch Date: May 2005

PCSAT2, which had previously been stowed in the Space Shuttle Discovery, arrived at Launch Complex 39B on 07 April 2005. PCSAT2 is now standing by ready to be launched on the first Space Shuttle return-to-flight mission.

PCSAT2 will use the same dual redundant AX.25 command and control system as used on PCsat (NO-44) offering 8 on/off commands, 5 telemetry channels and a serial port for the solar cell experiment telemetry. It also supports the Digital Comms Relay support of the PCsat/APRS mission. The packet uplink is on 145.825 MHz and the default downlinks are in the 435 MHz band to avoid any possible interference with existing ARISS missions. PCSAT2 will have quad redundant transmit inhibits for EVA safety issues, thus, it is also easy to turn off to avoid any issues with other UHF ARISS experiments that may be activated in the future. Also, the mission lifetime of PCSAT2 is only 1 year, because it is a sample-return mission, thus terminating any long term conflicts in spectrum management.

The PCSAT2 mission is intended as an opportunity to augment existing ARISS communications experiments with an external autonomous communications payload. In this regard, it has several potential uses:

* A UI-Digipeater to help ease congestion on the currently shared ARISS PMS (Packet Mail system)

* A PSK-31 transponder for multi-user communications to improve accessibility for schools and ARISS outreach programs.

* An FM Voice repeater for full duplex crew communications to facilitate crew-to-school ARISS contacts.

* Routine Telemetry on the spacecraft systems

For more information and pictures visit the PCSAT2 website at
http://www.ew.usna.edu/~bruninga/pcsat2.html

[ANS thanks Bob, WB4APR for the above information]
[04102005}
=====
PHASE 3E ?O-??
Catalog Number:
Proposed Launch Date: Early 2006

Status: Under Construction

William Leijenaar, PE1RAH reports on July 16th, 2005:

Hi AMSATs,

I always like to inform the AMSATs public about my P3e work, but unfortunatly due to
some reasons there was not much time and nothing much to say...

However, now I am happy to announce that the my MODE-UV transponder design for P3e is ready at the P3e integration place in Marburg (Germany). About 4 weeks ago I was in Marburg before, where the transponder has been checked. Unfortunatly some unsure things were found in the design. The unsure things were about long term stability after many years in space.

At home in The Netherlands, I changed the design with some minor changes to have a secure long term stability. Finally I tested the transponder again and it performed well within the specifications. Again something learned for future transponder designs :o)

Last Wednesday I drove to AMSAT-DL P3e integrations place in Marburg again, and have my transponder again checked. In the beginning it seemed that the 70cm receiver lost 10dB in sensetivity. After some more measurements we find out that it was due to a bad attenuator we used for protection at the input.

Together with Karl Meinzer we looked for any problems, but so far we could see (without HELAPS) all was okay. In the afternoon I went back home again, this time without the MODE-UV.

Now the MODE-UV will get a new home, the home of P3e... :o)
I hope the transponder will work like its elder sister in AO-10, and you all will enjoy it for many years...

It was lots of work to get it this far, but I know it is for a good purpose...

For the latest project status update please visit the AMSAT-DL
P3-E web page:
http://www.amsat-dl.org/p3e/

[ANS-WSR wishes to thank William Leijenaar, PE1RAH for this week's report]
[07172005]
=====
CP1 ?o-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: N6CP
Proposed Transmit Frequency: 436.845
[03272005]
=====
CP2 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

```
Proposed Callsign: TBA
Proposed Transmit Frequency: 437.325
[03272005]
=====
HAUSAT1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: D90HP
Proposed Transmit Frequency: 437.465
[03272005]
=====
ICE Cube 1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: W2CXM
Proposed Transmit Frequency: 437.305
[03272005]
=====
ICE Cube 2 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: N2VR
Proposed Transmit Frequency: 437.425
[03272005]
=====
ION ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.505
[03272005]
=====
KUTEsat ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: KC0RMW
Proposed Transmit Frequency: 437.385
[03272005]
=====
MEROPE ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: K7MSU-1
Proposed Transmit Frequency: 145.980
[03272005]
=====
nCUBE1 ?O-??
```

Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
       2407.25
[03272005]
=====
RINCON ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
        437.345
[03272005]
=====
SACRED ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
[03272005]
=====
SACRED ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
[03272005]
=====
SEEDS ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: JQ1YGU
Proposed Transmit Frequency: 437.485
[03272005]
=====
Mea Huaka ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.405
[03272005]
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ANS is released worldwide via the AMSAT ANS e-mail reflector and a live
radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz.

Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
        888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/amsat/listserv/menu.html

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satelite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

From 2436822026588565923
X-Google-Thread: 10e8ad,98aa158ded6a3043,start
X-Google-Attributes: gid10e8ad,public

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X-Google-Language: ENGLISH,ASCII
Path: g2news1.google.com!news4.google.com!newshub.sdsu.edu!elnk-nf2-pas!
newsfeed.earthlink.net!stamper.news.pas.earthlink.net!
stamper.news.atl.earthlink.net!newsread3.news.atl.earthlink.net.POSTED!46041641!
not-for-mail
From: "JoAnne Maenpaa" <wb9jej_no-spam@earthlink.net>
Newsgroups: rec.radio.amateur.space
Subject: ANS-198 AMSAT Weekly News Service Bulletins
Lines: 487
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <mNOCe.692$6f.195@newsread3.news.atl.earthlink.net>
Date: Mon, 18 Jul 2005 14:12:34 GMT
NNTP-Posting-Host: 66.167.216.147
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread3.news.atl.earthlink.net 1121695954 66.167.216.147 (Mon, 18 Jul
2005 07:12:34 PDT)
NNTP-Posting-Date: Mon, 18 Jul 2005 07:12:34 PDT
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news1.google.com rec.radio.amateur.space:180
```

AMSAT NEWS SERVICE
ANS-198

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:

* AMSAT-NA Symposium Registration Now Online
* AMSAT-UK Colloquium July 29-31
* SSETI Express July Update
* PCSAT2 Planned for Launch on STS-114
* Update Your Keps - ISS Orbit Modified
* ARISS Status - Week of July 11, 2005
* AMSAT-Italia Developing Ionosfera
* Delft University of Technology Announces Delfi-C3
* Goddard Amateur Radio Club Shuttle Retransmissions
* Membership Challenge Successful, Thank-you WA6FWF and KE9V
* AMSAT Satellite Awards This Week
* P3E Mode-UV Transponder Milestone

SB SAT @ AMSAT $ANS-198.01

AMSAT-NA Symposium Registration Now Online

AMSAT News Service Bulletin 198.01
From AMSAT HQ SILVER SPRING, MD.
July 17, 2005
To All RADIO AMATEURS
BID: $ANS-198.01

Registration for the 2005 AMSAT Space Symposium is now available on-line. The Symposium will be held October 7-9 at the Holiday Inn Holidome in downtown Lafayette, LA. Information can be found on the Symposium web page at: http://www.amsat.org/amsat-new/symposium/

In addition to downloading the registration form, for the first time attendees can now register online through the AMSAT store. Registration forms will also be mailed out with the annual ballots for the AMSAT board of directors. Please see the AMSAT Store registration for more information: http://www.amsat-na.com/SymposiumReg.php

Registration for the Annual Banquet, the Friday Night Shrimp Boil and the Sunday Swamp Tour can all be done at the time you register for the Symposium.

[ANS thanks Emily, W0EEC for the above information]

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SB SAT @ AMSAT $ANS-198.02

AMSAT-UK Colloquium July 29-31

AMSAT News Service Bulletin 198.02
From AMSAT HQ SILVER SPRING, MD.
July 17, 2005
To All RADIO AMATEURS
BID: $ANS-198.02

Huygens - A First Look at Titan

AMSAT-UK is privileged to have Professor John Zarnecki Principal Investigator for the Surface Science Package on Huygens giving the keynote presentation at the International Space Colloquium to be held at the University of Surrey, Guildford, England from 29th - 31st July.

Professor John Zarnecki's presentation on Friday July 29th will describe the journey of the Huygens probe as well as its final dramatic plunge to the surface of Titan.

Day passes to the event cost �12:50. If required, overnight accomodation and meals at the University are available. For further details contact Sophie Haigh; Email: s.haigh@sstl.co.uk
Tel: +44 (0)1483 689888

Guildford is close to both London-Heathrow and London-Gatwick airports.

For full details of the programme see:
    http://www.uk.amsat.org/Colloquium/

[ANS thanks Jim, G3WGM, and Trevor, M5AKA for the above information]

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SB SAT @ AMSAT $ANS-198.03
SSETI Express July Update

AMSAT News Service Bulletin 198.03
From AMSAT HQ SILVER SPRING, MD.
July 17, 2005
To All RADIO AMATEURS
BID: $ANS-198.03

All work on the SSETI Express spacecraft has now been completed and thespacecraft has left its "birthplace" - a cleanroom at the ESA ESTEC facility in the Netherlands. The spacecraft has been packed into its special transport container and is en-route to the launch site at Plesetsk in Northern Russia.

The launch date is still listed as 25th August currently at 06:50 UTC. Arrangements are underway for the launch to be shown live on ASTRA-1G, a Ku band satellite covering most of Europe. Hopefully, these transmissions will also be streamed at both high and low resolution on the internet.

Full details of all these media resources will be made known as soon as they are finalised. Details of the telemetry downloading and decoding software will be released.

AMSAT-UK will have a team member at the launch site during the launch campaign and intend to provide regular updates during the lead up to August 25th.

See the latest SSETI news on the ESA web page at:
http://www.esa.int/esaCP/SEMPQH6DIAE_index_0.html

[ANS thanks Graham G3VZV for the above information]

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SB SAT @ AMSAT $ANS-198.04
PCSAT2 Planned for Launch on STS-114

AMSAT News Service Bulletin 198.04
From AMSAT HQ SILVER SPRING, MD.
July 17, 2005

To All RADIO AMATEURS
BID: $ANS-198.04

When STS-114 lifts off it will be carrying an amateur radio payload called MISSE5/PCSAT2. This will be placed on the exterior of the ISS during the third space walk of the mission. More information is available on-line at:
http://web.usna.navy.mil/~bruninga/pcsat2.html

Dave Johnson, G4DPZ, is developing the PCSat2 telemetry web site:
http://www.pcsat2.info

This late-beta test page is currently displaying channel telemetry generated by a simulator which refreshes every 10 seconds approximating the speed when it is under command conditions.

Additional items currently planned include:
- Graphical Channel History
- WOD feed (csv file probably)
- League table of telemetry providers
- RealTime Eclipse status

PCSAT2 is attached to the ISS and so its operations must be in cooperation with the ARISS communications suite to minimize any mutual interference and to coordinate activities. Here are the capabilities of the PCSAT2 payload:

PCSAT SYSTEM A:

435.275 PCSAT2 DOWNLINK basic 1200 baud telemetry (nominally 1 packet per minute)
435.275 PCSAT2 DOWNLINK User packet digipeater from uplink on 145.825
435.275 PCSAT2 DOWNLINK Occasional user PSK-31 continuous downlink (7 minutes max each time)

145.825 PCSAT2 UP/DOWN User packet digipeater up/down on 145.825

PCSAT SYSTEM B:

437.975 PCSAT2 DOWNLINK periodic Solar Cell data and PCSAT2 telemetry at 9600 baud
437.975 PCSAT2 DOWNLINK TNC-B command downlink at 1200 baud
437.975 PCSAT2 DOWNLINK User Voice Repeater with VHF uplink

[ANS thanks Bob, WB4APR and Dave, G4DPZ for the above information]

/EX

SB SAT @ AMSAT $ANS-198.05
Update Your Keps - ISS Orbit Modified

AMSAT News Service Bulletin 198.05

From AMSAT HQ SILVER SPRING, MD.
July 17, 2005
To All RADIO AMATEURS
BID: $ANS-198.05

If you have not updated your Keplerian Elements recently your tracking of the ISS may be off.

In preparation of the Space Shuttle's Return to Flight the ISS received one final reboost to increase the Station's altitude for its upcoming rendezvous with Space Shuttle Discovery.

Last week the engines of a Progress spacecraft docked to the Station were commanded to burn for 7 minutes and 20 seconds, boosting the altitude of the Station nearly 4 miles. This second and final reboost puts the Station into position for rendezvous opportunities beginning on the third flight day during most of Discovery's July 13-31 launch window.

[ANS thanks Jacques van Oene for the above information]

/EX

SB SAT @ AMSAT $ANS-198.06
ARISS Status - Week of July 11, 2005

AMSAT News Service Bulletin 198.06
From AMSAT HQ SILVER SPRING, MD.
July 17, 2005
To All RADIO AMATEURS
BID: $ANS-198.06

1. Upcoming School Contacts

The shuttle STS-114 Return to Flight mission is slated to launch in July and to dock with the ISS. School contacts have been submitted for approval, and will resume as soon as the ISS schedule allows.

2. SuitSat Status

The ARISS-Russia team received the U.S. supplied hardware, and is working on its integration and testing. The team is currently compiling the documentation necessary for certifying the SuitSat hardware for flight.

3. PCSAT2/MISSE5 to Fly on STS-114

As part of an educational outreach program, students at the United States Naval Academy, in collaboration with the DOD and ARISS, and under the direction of Bob Bruninga, WB4APR, designed and developed PCSAT2. This payload will be carried on a Materials

International Space Station Experiment (MISSE5) on a Passive Experiment Container (PEC). The PEC (suitcase) will be opened and will carry DOD solar cells on the front side, facing the sun, and the back side will carry the amateur satellite communications system which will include Automatic Position Reporting System (APRS) Packet, FM voice repeater, and 10m PSK-31 transponder. The payload will be launched on the Return to Flight STS-114 mission. It will be deployed via an EVA as an external payload on the ISS. It will be turned on during the EVA, and become operational 8.5 hours later when its safety timer allows. This project is described in detail on Bruninga's website, "PCSAT2 - External ISS Experiment in the Amateur Satellite Service."
See: <http://www.ew.usna.edu/~bruninga/pcsat2.html>

4. NES Teacher Workshop

A NASA Explorer School Satellite Communication Class will be held at Goddard Space Flight Center during the week of July 18. Orbital elements, how to set up a station, and how to communicate with the ISS will be addressed. In addition, the ARISS -U.S. team at GSFC may schedule some amateur radio time to demonstrate the usefulness of radios in the classroom.

5. Astronaut Training

On Friday, July 8, Kenneth Ransom gave astronaut John Grunsfeld, KC5ZTF, an overview of the ARISS radio system and operations. Grunsfeld is a backup for the Expedition 13 crew.

6. ARISS International Meeting, Guilford, U.K.

Preparations continue for the ARISS International Face-to-Face Meeting which will be held at the University of Surrey in Guilford, U.K. Delegates are currently drafting the agenda for the August 1 - 2 conference.

7. ISS Ham Training Manual

ARISS member Dave Taylor has been working on an SSTV manual for the ISS Ham system. He has submitted the final version to Kenneth Ransom at JSC to be uplinked to the ISS.

8. Space Tourist Resumes Training

Greg Olsen of Sensors Unlimited has resumed his training for spaceflight. He made arrangements through Space Adventures to begin training last fall and stopped due to a medical condition, but has now returned to Star City and is training with the Expedition 12 crew. As the next space tourist, Olsen has expressed an interest in participating in several ARISS school contacts.

[ANS thanks Carol Jackson, KB3LKI, for the above information]

/EX

SB SAT @ AMSAT $ANS-198.07
AMSAT-Italia Developing Ionosfera

AMSAT News Service Bulletin 198.07
From AMSAT HQ SILVER SPRING, MD.
July 17, 2005
To All RADIO AMATEURS
BID: $ANS-198.07

AMSAT-Italia is currently developing the "Ionosfera" project which aims at supporting the DX Community in predicting the ionosphere propagation conditions.

The project is developed in the framework of European Space Agency's (ESA) programme on "Space Weather" and can be visited at:
http://esa-spaceweather.net/sda/ionosfera/index2.htm

Please have a look, make suggestions and forward the link to other potentially interested people.

One of the things we are trying to do is to correlate the DX activity with the various Space Weather indices. For this we are looking for HF DX logs (best in electronic files) covering the period 01-Sept-2003 through 30-Apr-2005.

Should you or your friends be active on HF DX, could you please support us by providing as many as possible log files? In addition to analysing the data globally, we thank our various contributors by characterising their own location with respect to the Space Weather conditions.

[ANS thanks Florio, IW2NMB, coordinator of the Ionosfera project for the above information]

/EX

SB SAT @ AMSAT $ANS-198.08
Delft University of Technology Announces Delfi-C3

AMSAT News Service Bulletin 198.08
From AMSAT HQ SILVER SPRING, MD.
July 17, 2005
To All RADIO AMATEURS
BID: $ANS-198.08

A group of students from the Department of Aerospace Engineering and Electrical Engineering of Delft University of Technology is developing a new Dutch satellite. Scheduled for launch in 2006, it will be the first university satellite to be flown for the Netherlands.

The Delfi-C3 communications subsystem will operate in the VHF and UHF amateur radio frequency bands enabling radio amateurs worldwide to receive satellite data using a modest equipment setup.

The EEMCS Faculty is developing an advanced transceiver, combining miniaturization with a high DC to RF efficiency and the capability to adapt to different channel conditions. Since transmitting payload data is of utmost importance for the whole mission, the communications subsystem is set up as a dual redundant system, with an AMSAT platform as backup.

Besides transmitting telemetry data, both systems are capable of providing a linear transponder service to the amateur radio community as a returned favor for use of amateur frequencies and their assistance with the telemetry data collection.

For all interested radio amateurs and other people related to the project the team has made the first Delfi-C3 newsletter available at
http://www.delfic3.nl/newsletter

You can subscribe to this issue of the newsletter and future ones.

[ANS thanks Wouter Jan Ubbels, PE4WJ, of the Delfi-C3 team for the above information]

/EX

SB SAT @ AMSAT $ANS-198.09
Goddard Amateur Radio Club Shuttle Retransmissions

AMSAT News Service Bulletin 198.09
From AMSAT HQ SILVER SPRING, MD.
July 17, 2005
To All RADIO AMATEURS
BID: $ANS-198.09

The Goddard Amateur Radio Club, WA3NAN retransmits shuttle radio traffic.
Shuttle retransmission frequencies used include the following:

Band	Frequency	+/- 5 kHz, QRM or Nets
80m	3.860 MHz	
40m	7.185 MHz	
20m	14.295 MHz	
15m	21.395 MHz	
19m	28.650 MHz	
2m	147.450 MHz	

[ANS thanks John, N3KHK, and the Goddard Amateur Radio Club for the above information]

/EX

SB SAT @ AMSAT $ANS-198.10
Membership Challenge Successful, Thank-you WA6FWF and KE9V

AMSAT News Service Bulletin 198.10
From AMSAT HQ SILVER SPRING, MD.
July 17, 2005
To All RADIO AMATEURS
BID: $ANS-198.10

Barry Baines, WD4ASW, AMSAT's VP of Marketing and User Services, reports the membership challenge made by Kevin Schuchmann, WA6FWF to match new membership dues with an equal contribution (up to a total of $1,000.00) in a two week period has been met. A total of 23 AMSAT memberships have been generated since Kevin's appeal on June 27. Most of these are new members (15). However, the other eight individuals are former members with expiration dates going as far back as 10-12 years.

Many thanks to Kevin for promoting this membership appeal and welcome aboard to those that have joined AMSAT in the past two weeks.

Barry commended Jeff Davis, KE9V, for his support in the AMSAT membership drive. Barry wrote, "Many thanks for your support of AMSAT in a very imaginative and helpful way. When Kevin Schuchmann, WA6FWF, initiated the Membership Challenge that resulted in 23 AMSAT memberships in a two-week period, you stepped forward with a commitment to cover the cost of providing a copy of the AMSAT publication "Getting Started with Amateur Satellites" (written by Gould Smith, WA4SXM) to each individual who became an AMSAT member as a result of the Challenge. Not only did your actions reinforce the desire to help our newest members, but it serves as a great example of an AMSAT member taking the initiative to come up with a great way to build support for AMSAT.   Thank you for taking this opportunity to make a difference for AMSAT."

[ANS thanks Barry, WD4ASW, for the above information]

/EX

SB SAT @ AMSAT $ANS-198.11
AMSAT Satellite Awards This Week

AMSAT News Service Bulletin 198.11
From AMSAT HQ SILVER SPRING, MD.
July 17, 2005
To All RADIO AMATEURS
BID: $ANS-198.11

Bruce Paige, KK5DO, AMSAT Director Contests and Awards, reports this week, congrats go out to all of the following:

Howard Stephenson, K6IA, 51 on 51 Award #29

To see all the awards visit http://www.amsat.org.

[ANS thanks Bruce, KK5DO, for the above information]

/EX

SB SAT @ AMSAT $ANS-198.12
P3E Mode-UV Transponder Milestone

AMSAT News Service Bulletin 198.12
From AMSAT HQ SILVER SPRING, MD.
July 17, 2005
To All RADIO AMATEURS
BID: $ANS-198.12

William, PE1RAH, developer of the Dutch transponder on the Indian HAMSAT, reports, "I am happy to announce that my MODE-UV transponder design for P3E has completed its initial testing and has been delivered to AMSAT-DL's integration lab at Marburg, Germany. I hope the transponder will work like its elder sister on AO-10, and you all will enjoy it for many years."

[ANS thanks William, PE3RAH, for the above information]

/EX

73,
This week's ANS Editor,
JoAnne Maenpaa, WB9JEJ
WB9JEJ at amsat dot org

From -6380443740046417426
X-Google-Thread: 10e8ad,3dd84b5d5af210f3,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!postnews.google.com!o13g2000cwo.googlegroups.com!not-for-mail
From: "artbellfan" <artbellfan8@yahoo.com>
Newsgroups: rec.radio.amateur.space
Subject: Paranormal website
Date: 19 Jul 2005 09:47:42 -0700
Organization: http://groups.google.com
Lines: 7
Message-ID: <1121791662.595398.41730@o13g2000cwo.googlegroups.com>
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User-Agent: G2/0.2
Complaints-To: groups-abuse@google.com
Injection-Info: o13g2000cwo.googlegroups.com; posting-host=67.132.143.70;
   posting-account=1oqxaQ0AAAATcaRW1E3kxltHyp3ZvXbC
Xref: g2news1.google.com rec.radio.amateur.space:181
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Paranormal Website

http://www.shadowpeoplebooks.com

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X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!postnews.google.com!g47g2000cwa.googlegroups.com!not-for-
mail
From: "philnyc" <philnyc22@hotmail.com>
Newsgroups: rec.radio.amateur.space
Subject: UHF vertical for amsats
Date: 24 Jul 2005 08:03:33 -0700
Organization: http://groups.google.com
Lines: 17
Message-ID: <1122217413.631888.155670@g47g2000cwa.googlegroups.com>
NNTP-Posting-Host: 212.191.172.6
Mime-Version: 1.0
Content-Type: text/plain; charset="iso-8859-1"
X-Trace: posting.google.com 1122217419 2501 127.0.0.1 (24 Jul 2005 15:03:39 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Sun, 24 Jul 2005 15:03:39 +0000 (UTC)
User-Agent: G2/0.2
Complaints-To: groups-abuse@google.com
Injection-Info: g47g2000cwa.googlegroups.com; posting-host=212.191.172.6;
   posting-account=nlQdFw0AAAA-kAmWZHpvmBOzvZf9zD-O
Xref: g2news1.google.com rec.radio.amateur.space:182
```

Hello everyone,

I would greatly appreciate any advice in subject of choosing a vertical
antenna for satellite operations. I can hear VO-52 / FO-29 5-7 / 5-9
using my mobile antenna NR 770 H fix on a mast 9ft above the ground.

I am cosidering builing a Super J-Pole antenna.
http://www.n7qvc.com/amateur_r adio/copper.html

Do you think that this vertical will be sufficient to bounce 50W of
signal back to Earth of the satellite ? If not , what other homebrew
antenna will be fine for this purpose ?

Thank you for your helpful response .

Phil

```
From -3725018701574395880
X-Google-Thread: 10e8ad,cad3c4c27e7fb814
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news4.google.com!news.glorb.com!
border1.nntp.dca.giganews.com!nntp.giganews.com!local01.nntp.dca.giganews.com!
nntp.comcast.com!news.comcast.com.POSTED!not-for-mail
NNTP-Posting-Date: Sun, 24 Jul 2005 18:57:15 -0500
Message-ID: <42E42AD8.8040201@hotmail.com>
Date: Sun, 24 Jul 2005 18:57:12 -0500
From: rocketeer <rocketeer@hotmail.com>
User-Agent: Mozilla Thunderbird 1.0.6 (Windows/20050716)
X-Accept-Language: en-us, en
MIME-Version: 1.0
Newsgroups: rec.radio.amateur.space
To: philnyc <philnyc22@hotmail.com>
Subject: Re: UHF vertical for amsats
References: <1122217413.631888.155670@g47g2000cwa.googlegroups.com>
In-Reply-To: <1122217413.631888.155670@g47g2000cwa.googlegroups.com>
Content-Type: text/plain; charset=ISO-8859-1; format=flowed
Content-Transfer-Encoding: 7bit
Lines: 30
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CR3WvSGBZRteAd9mg74IAQOagYt6mER3envE3uJQw==
X-Complaints-To: abuse@comcast.net
X-DMCA-Complaints-To: dmca@comcast.net
X-Abuse-and-DMCA-Info: Please be sure to forward a copy of ALL headers
X-Abuse-and-DMCA-Info: Otherwise we will be unable to process your complaint
properly
X-Postfilter: 1.3.32
Xref: g2news1.google.com rec.radio.amateur.space:183
```

Check out K5OE's site:
http://members.aol.com/k5oe/
"eggbeater" style antennas.

Have fun,

rocketeer

philnyc wrote:

>Hello everyone,

```
>
>I would greatly appreciate any advice in subject of choosing a vertical
>antenna for satellite operations. I can hear VO-52 / FO-29 5-7 / 5-9
>using my mobile antenna NR 770 H fix on a mast 9ft above the ground.
>
>I am cosidering builing a Super J-Pole antenna.
>http://www.n7qvc.com/amateur_r adio/copper.html
>
>Do you think that this vertical will be sufficient to bounce 50W of
>signal back to Earth of the satellite ? If not , what other homebrew
>antenna will be fine for this purpose ?
>
>Thank you for your helpful response .
>
>Phil
>
>
>
```

```
From 6445965077829024358
X-Google-Thread: 10e8ad,948be5d1280e04e7,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII
Path: g2news1.google.com!news3.google.com!newshub.sdsu.edu!elnk-nf2-pas!
newsfeed.earthlink.net!stamper.news.pas.earthlink.net!
stamper.news.atl.earthlink.net!newsread1.news.atl.earthlink.net.POSTED!46041641!
not-for-mail
From: "JoAnne Maenpaa" <wb9jej_no-spam@earthlink.net>
Newsgroups: rec.radio.amateur.space
Subject: ANS-205 AMSAT Weekly News Bulletin
Lines: 262
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <Os7Fe.16834$aY6.9245@newsread1.news.atl.earthlink.net>
Date: Mon, 25 Jul 2005 15:22:22 GMT
NNTP-Posting-Host: 64.105.84.190
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread1.news.atl.earthlink.net 1122304942 64.105.84.190 (Mon, 25 Jul
2005 08:22:22 PDT)
NNTP-Posting-Date: Mon, 25 Jul 2005 08:22:22 PDT
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news1.google.com rec.radio.amateur.space:184
```

AMSAT NEWS SERVICE
ANS-205

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating

through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:

- ARISS Status Report
- SSETI Express readied for August 25 Launch
- Earliest Shuttle Launch Posibility
- AMSAT Symposium
- Ballots in the mail
- Crossband Repeater on ISS

SB SAT @ AMSAT $ANS-205.01
ISS Status Report 7/18/05

AMSAT News Service Bulletin 205.01
From AMSAT HQ SILVER SPRING, MD.
July 18, 2005
To All RADIO AMATEURS
BID: $ANS-205.01

ARISS Status
July 18, 2005

1. Upcoming School Contacts

The shuttle STS-114 Return to Flight mission has been delayed. School contacts have been submitted for approval, and will resume as soon as the ISS schedule allows.

2. NES Teacher Workshop

A NASA Explorer School (NES) Satellite Communication Class will be held at Goddard Space Flight Center this week. Two one hour sessions have been scheduled for the teachers with ARISS team members. An introduction to Amateur Radio and ARISS will be given during the first hour, and orbital elements, prediction programs, and how to track the ISS and shuttle will be addressed during the second session. There is the possibility of an ARISS contact being scheduled for the teachers during the week (depending on when the shuttle launches) which will give them an idea of how to incorporate the ARISS program in their own curricula.

3. SuitSat Status

The ARISS-Russia team continues to work on the SuitSat hardware integration and testing. The team is compiling documentation necessary for flight certification of the SuitSat hardware.

4. ARRL Article on Return to Flight Mission

ARRL ran an article on the STS-114 Return to Flight mission which includes the PCSAT2 status. The story, "Amateur Licensees among Shuttle Discovery Crew; PCSat2 Installation Set," may be found at:
http://www.arrl.org/news/stories/2005/07/12/3/?nc=1

5. PCSAT2/MISSE5 to Fly on STS-114

PCSAT2 will fly on the Return to Flight STS-114 mission, which may launch this week. It will be deployed via an EVA as an external payload on the ISS. This project is described in detail on Bruninga's website, "PCSAT2 - External ISS Experiment in the Amateur Satellite Service."
See: http://www.ew.usna.edu/~bruninga/pcsat2.html

6. ARISS International Meeting, Guildford, U.K.

Preparations continue for the ARISS International Face-to-Face Meeting which will be held at the University of Surrey in Guildford, U.K. The agenda for the August 1 - 2 conference has been released. Information on the AMSAT-UK Colloquium and the ARISS International Meeting may be found on the following website: http://www.uk.amsat.org/Colloquium/default.php

[ANS thanks Carol Jackson, KB3LKI for the above information]

/EX

SB SAT @ AMSAT $ANS-205.02
SSETI Express readied for August 25 Launch

AMSAT News Service Bulletin 205.02
From AMSAT HQ SILVER SPRING, MD.
July 24, 2005
To All RADIO AMATEURS
BID: $ANS-205.02

ESA's latest update on the SSETI Express satellite due for launch August 25th can be seen at:

http://www.southgatearc.org/news/jul2005/sseti_express_update.htm

There will be a presentation on SSETI Express at the AMSAT-UK International Space Colloquium, July 29 - 31st. All Radio Amateurs and SWL's are welcome to attend.

Web: http://www.uk.amsat.org/Colloquium/
Note: The Uppercase "C" in Colloquium is needed.

There is also a nice mention of Graham's, G3VZV, involvement with SSETI at Spacedaily.com ...

- SSETI Express Sets Off
http://www.spacedaily.com/news/microsat-05i.html

[ANS thanks Trevor, M5AKA, and Spacedaily.com for the above information]

/EX

SB SAT @ AMSAT $ANS-205.03
Shuttle Launch earliest possibility is next week

AMSAT News Service Bulletin 205.03
From AMSAT HQ SILVER SPRING, MD.
July 19, 2005
To All RADIO AMATEURS
BID: $ANS-205.03

NASA'S SHUTTLE LAUNCH AT LEAST ONE WEEK AWAY

NASA is targeting Tuesday, July 26 as the earliest possible date to launch the Space Shuttle Discovery on the Return to Flight mission (STS-114). The determination was made during Monday's meeting of the Mission Management Team (MMT) at Kennedy.

The MMT reviewed efforts by teams of engineers. The engineers are working through a troubleshooting plan to address an issue with a liquid hydrogen low-level fuel sensor circuit. The sensor circuit failed a routine pre-launch check during the countdown July 13, delaying Discovery's first launch attempt.

NASA is still working to launch Discovery by the end of the July window that extends to the 31st. A dozen teams, with hundreds of engineers across the country, are expected to complete their battery of tests by Wednesday. While they have not isolated a cause of the sensor circuit failure, they have eliminated a number of possibilities. If the remaining tests are inconclusive, NASA could reload the External Tank with super-cooled propellants to see how the sensor circuit behaves. The tanking could be done as a test or as part of an actual launch countdown.

Commander Eileen Collins and her six Discovery crew mates come out of quarantine today for one day off. They resume quarantine and training later this week.
For the latest information about STS-114 on the Web, visit:

http://www.nasa.gov/returntoflight

[ANS thanks Arthur, N1ORC for the above information]

/EX

SB SAT @ AMSAT $ANS-205.04

AMSAT Symposium

AMSAT News Service Bulletin 205.04
From AMSAT HQ SILVER SPRING, MD.
July 24, 2005
To All RADIO AMATEURS
BID: $ANS-205.04

Space! Ham radio goes there and you can join in the fun! Come to the AMSAT Technical Symposium and Annual Meeting this fall in lovely Lafayette, Louisiana. Education and technical sessions begin on Friday, the 7th of October. Technical, field ops, and the IARU forum follow through Sunday the 9th of October. Enjoy the best of Acadian Louisiana with Friday's "Shrimp Boil," Saturday's Banquet with great prizes, and Sunday's "Swamp Tour."

Register on line! For more, see:
http://www.amsat.org/amsat-new/symposium/.

[ANS thanks JoAnne, WB9JEJ, for the above information]

/EX

SB SAT @ AMSAT $ANS-205.05
Ballots in the mail

AMSAT News Service Bulletin 205.05
From AMSAT HQ SILVER SPRING, MD.
July 24, 2005
To All RADIO AMATEURS
BID: $ANS-205.05

AMSAT-NA BOARD OF DIRECTORS BALLOTS IN THE MAIL

Martha at AMSAT HQ reports that the AMSAT-NA Board of Directors ballots have been mailed. The ballot must be returned by the close of business, September 15, 2005.

The application forms for the Symposium are also included in this mailing. Get yours in early and join the fun.

[ANS thanks Martha at AMSAT HQ for the above information]

/EX

SB SAT @ AMSAT $ANS-205.06
Crossband Repeater on ISS

AMSAT News Service Bulletin 205.06
From AMSAT HQ SILVER SPRING, MD.
July 24, 2005
To All RADIO AMATEURS
BID: $ANS-205.06

ISS CROSSBAND REPEATER IS ON

The ISS cross-band or U/V repeater is ON.
Downlink is 145.800
Uplink is 437.800 � 10 KHz doppler

Please keep in mind that the crew may be listening and may pick up their microphone.

Complete instructions on the Doppler correction for the ISS crossband repeater are posted at http://www.rac.ca/ariss/.

The ISS repeater does not use any PL to access the machine. Just remember to do the Doppler correction for the 70cm band especially.

Charlie, AJ9N, one of the ARISS mentors wrote, "The better the antenna the better you will be able to access the repeater and enjoy longer time per pass. Yes, you can get in with a simple vertical, but it may be only for 3 or 4 minutes of a 10 minute pass".

Cor, PD0RKC, has put together a lot of useful info for ISS and how to work ISS's repeater on his webpage:
http://pd0rkc.mine.nu/issdoppler.html

[ANS thanks Charlie, AJ9N, and Scott, WA6LIE, for the above information]

/EX

73,
This week's ANS Editor,
Dee Interdonato, NB2F
nb2f at amsat dot org

From -5582793630281075454
X-Google-Thread: 10e8ad,ee126343755b2950,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news3.google.com!news.glorb.com!
border1.nntp.dca.giganews.com!border2.nntp.dca.giganews.com!nntp.giganews.com!
nx01.iad01.newshosting.com!newshosting.com!elnk-atl-nf1!newsfeed.earthlink.net!
stamper.news.atl.earthlink.net!newsread1.news.atl.earthlink.net.POSTED!46041641!

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not-for-mail
From: "JoAnne Maenpaa" <wb9jej_no-spam@earthlink.net>
Newsgroups: rec.radio.amateur.space
Subject: WSR-205 AMSAT Weekly Satellite Report
Lines: 1101
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <Ht7Fe.16835$aY6.2608@newsread1.news.atl.earthlink.net>
Date: Mon, 25 Jul 2005 15:23:19 GMT
NNTP-Posting-Host: 64.105.84.190
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread1.news.atl.earthlink.net 1122304999 64.105.84.190 (Mon, 25 Jul
2005 08:23:19 PDT)
NNTP-Posting-Date: Mon, 25 Jul 2005 08:23:19 PDT
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news1.google.com rec.radio.amateur.space:185

This report is organized into 4 parts.
Part 1 - operational analog amateur satellites.
Part 2 - operational digital amateur satellites.
Part 3 - non - operational satellites
Part 4 - proposed satellites

SB SAT @ AMSAT <W8ISS $ANS-205.S1
WSR 205 Part 1 07/25/2005

AMSAT NEWS SERVICE BULLETIN 205.S1 FROM AMSAT HQ
SILVER SPRING, MD, JULY 24, 2005
TO ALL RADIO AMATEURS
BID: $ANS-205.S1

VO-52 HAMSAT
Catalog Number: 28650
Launch Date: May 05,2005

Status: On orbit
Current Mode: U/V

Proposed frequencies:
-------------------
Indian transponder:
Uplink  : 435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW
Beacom  : 145.940MHz continue carier signal

Dutch transponder:
Uplink  : 435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW
Beacon  : 145.860MHz 12WPM with CW message
[07242005]
=====
```

AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Mode: PBBS - OFF
FM REPEATER - DUAL V/U

Analog voice downlink: 435.300 MHz FM
435.150 mhz FM
Analog voice uplink: 145.880 mhz FM
145.920 MHz FM 67Hz PL tone
1268.700 MHz FM 67Hz PL tone

Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast
Protocol (PBP)

Broadcast: PECHO-11
BBS: PECHO-12

Current scheduled operating modes:
23 July
FM Repeater, V/S
Uplink: 145.920 mhz FM, 67hz PL Tone
Downlink 2401.200 mhz FM
[ANS-WSR thanks Mike, KE4AZN for the above information]
[07172005]

=====

SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Uplink: 145.850 MHz (67.0 Hz PL tone) (See below for operating
procedures)
Downlink: 436.795 MHz

There have been unconfirmed reports on the amsat-bb remailer that SO-50 has shifted downlink frequency as much as 5khz up. This both from Europe.

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz. The
order of operation is thus: (allow for Doppler as necessary)

1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm
   the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT
   the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window
   will reset the 10 minute timer.

[09122004]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: OPERATIONAL

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplink: 145.850 145.870 145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

John, N4QWL reports on July 16th, 2005:

Last evening I had a AOS to LOS qso with WI2W. FO-29 came up at 01:17z here in FM07 and I found WI2W and we chatted until 01:33z. The satellite was at 2 degrees elevation when I finally heard him start to crackle a bit. What a great QSO! To think that I watched this bird launch back in 1996 and it is still working so well is a real thrill. I believe I still have the video. I might just look for it and watch it again. Boy do I love this satellite stuff!
Look for you all up there.

Please send the reception reports to lab2 'at' jarl.or.jp.
Please use the subject line: 'FO-29 reception report'.

Mineo, JE9PEL, has an FO-29 satellite telemetry analysis program that will automatically analyze all digital telemetry from the satellite (such as current, voltage and temperature). FO29CWTE is available at:
http://www.ne.jp/asahi/hamradio/je9pel/
[ANS-WSR wishes to thanks John, N4QWL for this week's report]
[07172005]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Uplink: 145.850 MHz FM
Downlink: 436.795 MHz FM

The latest information on AO-27 from control operator Michael Wyrick, N3UC (former N4USI), can be found at:
http://www.ao27.org

An AO-27 question-and-answer page is available on the AMSAT-NA web site, with updates by Ray, W2RS. The URL is:
http://www.amsat.org/amsat/intro/ao27faq.html

[ANS-WSR thanks John, K6YK, for this week's AO-27 report]
[08292004]

=====

AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Semi-operational in sunlight.
Return to active status: June 21,2002

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A
145.975 to 145.925 MHz CW/USB Mode B
Beacon: 29.502 MHz, 145.972 MHz, 435.1 MHz, 2304.1 MHz

Emily, W0EEC has created a website to allow the users of AO-7 to record contacts, observations and use of the satellite more effectively at:
http://www.emilyshouse.com/experthams/ao7/main.php
This includes the ability to log contacts.

Tim, K3TZ has written a program to decode AO-07 telemetry.
The program can be downloaded at:
http://www.qsl.net/k3tz/files/K3TZ_AO-07_Telemetry_Decoder_0.5.zip

For more AO-7 info:
http://www.amsat.org/amsat/sats/n7hpr/ao7.html
[11142004]

=====

INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: U/V CROSS-BAND REPEATER
Digipeater: Inactive

The current Expedition 11 crew is:
Commander Sergei Krikalev
Flight Engineer John Phillips

Worldwide packet uplink: 145.990 MHz FM
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM
Doppler Shift is 10 KHz

Russian callsigns: RS0ISS, RZ3DZR
USA callsign: NA1SS
Packet station mailbox callsign: RS0ISS-11
Packet station keyboard callsign: RS0ISS-3
Digipeater callsign: ARISS

This off the ARISS webpage:
< http://www.rac.ca/ariss/oindex.htm#New%20ARISS%20Operations > :
The ARISS program is pleased to announce that the amateur radio equipment aboard the International Space Station is now operating in cross-band repeat mode. We realize that many of you will miss the packet-operating mode. However, cross-band repeat allows further experimentation of the ISS amateur radio system

The downlink for this operating mode remains the same, so listen for the station on 145.80 MHz. The new uplink frequency is 437.80 MHz. All frequencies are subject to Doppler shifting. For further information on working satellites and adjusting for Doppler shift, please review Emily Clark's (W0EEC) excellent presentation on AMSAT's website:
http://www.amsat.org/amsat-new/information/faqs/Intro_sats.pdf

The ISS daily crew schedule can be found at:
http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line is NOT translated from Russian and posted.

More information is available at:
http://www.rac.ca/ariss
http://spaceflight.nasa.gov/station/reference/radio/
http://www.marexmg.org/fileshtml/unprotopage.html
http://www.issfanclub.com
http://oscar.dcarr.org/
[07242005]
NNNN
/EX

SB SAT @ AMSAT <W8ISS $ANS-205.S2
WSR 205 Part 2 07/24/2005

AMSAT NEWS SERVICE BULLETIN 205.S2 FROM AMSAT HQ
SILVER SPRING, MD, JULY 24, 2005
TO ALL RADIO AMATEURS
BID: $ANS-205.S2

AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Mode: PBBS - OFF
FM REPEATER - DUAL V/U

Analog voice downlink: 435.300 MHz FM
435.150 mhz FM
Analog voice uplink: 145.880 mhz FM
145.920 MHz FM 67Hz PL tone
1268.700 MHz FM 67Hz PL tone

Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast
Protocol (PBP)

Broadcast: PECHO-11
BBS: PECHO-12

Current scheduled operating modes:
23 July
FM Repeater, V/S
Uplink: 145.920 mhz FM, 67hz PL Tone
Downlink 2401.200 mhz FM

[ANS-WSR thanks Mike, KE4AZN for the above information]
[07242005]

=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Non-Operational?????

Uplink/downlink: 145.827 MHz 1200 baud AX.25 AFSK via W3ADO-1
Aux/Uplink: 435.250 MHz 9600 baud via PCSAT-2 (off)
APRS Downlink: 144.390 MHz (Region 2)

PCSat is a 1200-baud APRS digipeater designed for use by stations using hand-held or mobile transceivers. Downlinks feed a central web site at: http://pcsat.aprs.org

The APRS-equipped PCSat was built by midshipmen from the U.S. Naval Academy under the guidance of Bob Bruninga, WB4APR.
[07242005]

=====
CUTE-1
Catalog number: 27844
Launched: June 30,2003

Status: Operational

Uplink: ?
Downlink: 436.8375 CW

437.4700 1200 FM ax25 or SRLL (ACTIVE only near Japan ?)
Cliff, K7RR reports:
In the latest Weekly Satellite Report, CUTE 1, #27844 is listed as OPERATIONAL?
Indeed it is very operational as a CUBESAT sending CW telemetry on 436.8345 MHz. At the July 7 2005, 23:45:20 pass over the Western USA:
CUTE 1 6B A4 xx 7F D7 66A8 4702 FF FF7C 65
CUTE 1 6C A6 59 80 D9 66A8 4702 FF FE7C B6

The June 30th KEPS were within ten seconds of AOS and LOS. It is an very good object to practice tracking as the orbit and transmitter power are similar to proposed CUBESATS awaiting launch this December. As a check for Doppler correction, the lack of change in tone is an excellent indicator.

CUTE 1 is a Japanese (Tokyo Institute of Technology) one kilogram nanosatellite that was launched by a Rokot rocket from Plesetsk at 14:15 UT on 30 June 2003. It carries a 100 mW beacon at 436.8375 MHz. Initial orbital parameters were period 101.4 min, apogee 831 km, perigee 819 km, and inclination 98.7?.

For further info about CUTE-1 goto:
http://lss.mes.titech.ac.jp/ssp/cubesat/operation/Schedule_e.html

[ANS WSR wishes to thank Cliff, K7RR, for this week's information]
[07242005]
=====
GO-32 TECHSAT-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

```
Downlink:            435.225 MHz FM (9600-baud FSK)
                    (435.325 n/a - temperature problems)
Uplinks:             145.850, 145.890, 145.930 FM
                    1269.700, 1269.800, 1269.900 FM
Broadcast Callsign: 4XTECH-11
BBS Callsign:        4XTECH-12
```

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[03132005]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Operational

```
Uplink:              145.850 or 145.925 MHz 9600-baud FSK
Downlink:            437.325 MHz
Broadcast callsign: MYSAT3-11
BBS:                 MYSAT3-12
```

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[05152005]

=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Semi-operational, the digipeater command is on and open for APRS users.

Uplink: 145.90 145.92 145.94 145.96 MHz FM
(using 1200-baud Manchester FSK)
Downlink: 437.026 MHz SSB (1200-baud PSK)
Mode-S Beacon: 2401.1428 MHz
Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

A WOD collection of current graphics along with general information and telemetry samples can be found at:
http://www.telecable.es/personales/ea1bcu
[05092004]

=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational?

Telemetry Downlink: 145.826 MHz. FM (1200-baud AFSK).
approx. 10 days ON, 10 days OFF
Mode-S Beacon: 2401.500 MHz. ... OFF
UHFBeacon: 435.025 MHz. ... OFF

This from Clive, G3CWV:

There is a small chance that OSCAR-11 may have started transmitting again between 08 June to 10 June.

The frequency is 145.826.

Any reception reports would be appreciated. Please reply direct to Clive G3CWV (g3cwv@amsat.org), or post reports to AMSAT-BB.

[ANS thanks Clive, G3CWV for the above information]

More information on UO-11 OSCAR-11 can be found at:

```
http://www.users.zetnet.co.uk/clivew/
[06122005]
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/EX

SB SAT @ AMSAT <W8ISS $ANS-205.S3
WSR 205 Part 3 07/24/2005

AMSAT NEWS SERVICE BULLETIN 205.S3 FROM AMSAT HQ
SILVER SPRING, MD, JULY 24, 2005
TO ALL RADIO AMATEURS
BID: $ANS-205.S3

THE FOLLOWING ARE IN ORBIT BUT ARE
NON-OPERATIONAL AT THIS TIME:

POSAT-1 PO-28
Catalog Number: 22829
Launched : September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 435.075 MHz
          435.275 MHz

Uplink:   145.925 MHz
          145.975 MHz

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

More information of POSAT-1 can be found at:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
http://www.amsat.org/amsat/sats/n7hpr/po28.html
[08152004]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launched: June 16, 1983

Status: Non-operational

Uplink:   435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB
Beacon:   145.810 MHz (unmodulated carrier)

AO-10 has been locked into a Mode-B, 70-cm uplink and
2-meter downlink for several years.

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
```

IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: Non-operational

Uplink: 145.875 145.900 145.925 145.950 MHz FM (1200-baud)
Downlink: 435.812 MHz SSB
Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Alberto E. Zagni - I2KBD reports on 02/13/05
The spacecraft is in MBL (safe mode) and is trasmitting just 6 channels of telemetry. Temperatures and voltage are nominal, but there seems to be a problem with the onboard receiver, refusing to accept commands. The spacecraft was launched in 1993, thus nearing 12 years in orbit...

Best regards
Alberto E. Zagni - I2KBD
ITAMSAT Mission Director

More information of IO-26 can be found at:

http://joshua.micronet.it/english/itamsat/itamsathome.html
http://www.amsat.org/amsat/sats/n7hpr/io26.html
www.itamsat.org

[02132005]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB
Beacon: 29.408 MHz
Robot: 29.454 MHz
[05232004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB
Beacon: 145.860 MHz
Robot: 145.908 MHz
[05232004]
=====

```
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink 145.975 MHz FM
Downlink 435.070 MHz FM
[05092004]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink:             145.900 FM 9600-baud FSK
Downlink:           435.120 MHz FM
Broadcast Callsign: UOSAT5-11
BBS:                UOSAT5-12
[01092005]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational?

Uplink:      145.858 to 145.898 MHz CW/USB
Downlink:     29.354 to  29.394 MHz CW/USB
Beacon:       29.352 MHz (intermittent)
SSB meeting frequency:  29.380 MHz (unofficial)

John, KD6PAG reports on June 16, 2004 to ANS:
RS-15 beacon seemed to be back in the mode where it's a tone about 5 seconds
off and then 5 seconds on this morning.

ANS is looking for more confirmations of RS-15 coming back.

[ANS thanks John, KD6PAG for RS-15 information]
[06202004]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplink:             145.84 145.86 145.88 145.90 MHz FM
                    (using 1200-baud Manchester FSK)
CW downlink:        437.125 MHz
Digital downlink:   437.150 MHz SSB (RC-BPSK 1200-baud PSK)
Broadcast Callsign: LUSAT-11
```

```
BBS:                LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[05232004]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Uplink:     145.90 to 146.00 MHz CW/LSB
Downlink:   435.80 to 435.90 MHz CW/USB
Beacon:     435.795

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[08152004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink:             145.900 MHz FM (9600-baud FSK)
Downlink:           435.170 MHz FM
Broadcast Callsign: HL01-11
BBS:                HL01-12

Jim, AA7KC, reports that KO-23's downlink transmitter continues in a
non-operational status.
[05092004]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink:             145.980 MHz FM (9600-baud FSK)
Downlink:           436.500 MHz FM
Broadcast Callsign: HL02-11
BBS:                HL02-12
[05092004]
=====
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only
```

Uplink/downlink frequency (listed on the PanSat web site) 436.500 MHz

The satellite is not available for general uplink transmissions.

The Naval Postgraduate School developed PanSat. At the time of launch, PanSat spread-spectrum digital transponders were to be available to Amateur Radio operators along with software to utilize this technology.

The satellite is still operating, however, the spread spectrum packet radio portion never took place. The spacecraft is now beyond it's initial 2-year mission life, but telemetry records are still being downloaded.

For more information, visit the official PanSat web site at:
http://www.sp.nps.navy.mil/pansat/
[05092004]

=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm

[ANS has no further information]
[05232004]

=====
SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

STatus: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
          Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
         Mode J Digipeater: 145.825 MHz and 145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[08082004]

=====
UO-36 UoSAT-12
Catalog number: 25693

```
Launched: April 21, 1999

Status: Unknown

Uplink:             145.960 MHz (9600-baud FSK)
Downlink:           437.025 MHz 437.400 MHz
Broadcast Callsign: UO121-11
BBS:                UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA
web site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[05092004]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplink       V-band    145.840 -  145.990 MHz CW/LSB
             U-band    435.550 -  435.800 MHz CW/LSB
            L1-band   1269.250 - 1269.500 MHz CW/LSB
            L2-band   1268.325 - 1268.575 MHz CW/LSB
            S1-band   2400.350 - 2400.600 MHz CW/LSB
Downlink:   S2-band   2401.225 - 2401.475 MHz CW/USB
            K-band 24,048.010 - 24,048.060 MHz CW/USB
Beacon:     2401.323, 24,048.035
[05232004]
-----
SO-42  SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational
 Downlink:           437.075 MHz
Broadcast Callsign: SASAT2-11
BBS:                SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[08152004]
=====
SO-41  SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink:             145.850 MHz
Downlink:           436.775 MHz
Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12
```

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[08152004]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire, callsign KE6QMD, as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Semi-operational.

Uplink 435.275 1200-baud AFSK
Downlink 145.825 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

AO-49 (SAFIR-M) is a German amateur radio payload onboard the small German scientific satellite "RUBIN-2".

AO-49 was built by the German amateur radio association "AATiS e.V." (German acronym for "Arbeitskreis Amateurfunk und Telekommunikation in der Schule", which means: 'working group for amateur radio anand telecommunications in schools'). AO-49 is designed as a "store and broadcast" system for APRS based messages, dedicated for the use of schools in combination with the existing WX-Net and planned buoy experiments in Germany.

No transmissions detected since the 1st of February 2003! It appears AO-49 is not properly aligned to illuminate the solar panels. This should end soon. Due to its orbit, AO-49 will be in a phase without eclipses until 13Feb03.

Martin DG8UAU has written a small software program "SAFIR-M Decoder" to allow decoding of the received DATA0 frames. It is available at: http://amend.gmxhome.de in the section Aktuelles.

Details on AO-49 (SAFIR-M) can be found at:

http://amend.gmxhome.de

Information about AATiS e.V. is available at:
http://www.aatis.de
[05092004]
NNNN
/EX

SB SAT @ AMSAT <W8ISS $ANS-205.S4
WSR 205 Part 4 07/24/2005

AMSAT NEWS SERVICE BULLETIN 205.S4 FROM AMSAT HQ
SILVER SPRING, MD, JULY 24,2005
TO ALL RADIO AMATEURS
BID: $ANS-205.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE
PROPOSED FOR LAUNCH AT THIS TIME:

UCISAT ?O-??
Catalog number:
Proposed Launch Date: October 31, 2005

Status: Under Construction

Downlink: Submission in Progress
Uplink: Submission in Progress
Callsign: Submission in Progress

This from Matt Bennett, KF6RTB, UCISAT Communications Team Member:

Our website is www.ucisat.net .This is a new website, however, and doesn't have the "Status" section active yet. Because of the growing interest in our project, I'll push our webmaster to create updates (hopefully) on a week-to-week basis. For now, the current status of the mission is as follows:

-Expected Launch Date: October 31st, 2005
-Frequency Allocation: Submission in Progress
-Construction Status: Sub-Assembly
[WSR to thank Matt Bennett, KF6RTB, for this week's report.]
[01302005]
=====
SSETI ?O-??
Catalog Number:
Proposed Launch Date: LATE 2005

Status: AWAITING LAUNCH

Graham, G3VZV reports that the launch of SSETI has been put on hold till mid August of 2005.

SpaceDaily has a report about SSETI at:
http://www.spacedaily.com/news/internet-04zzzu.html

You can find more info about SSETI at:
http://sseti.gte.tuwien.ac.at/WSW4/

Looking at the website for the SSETI Express webcam
http://sseti.gte.tuwien.ac.at/WSW4/webcam.htm

[ANS thanks Graham, G3VZV for the above information]
[07242005]
=====
PCSAT2 ?0-??
Catalog Number:
Proposed Launch Date: May 2005

Status: Awaiting launch of STS-114

PCSAT2, which had previously been stowed in the Space Shuttle Discovery, arrived at Launch Complex 39B on 07 April 2005. PCSAT2 is now standing by ready to be launched on the first Space Shuttle return-to-flight mission.

PCSAT2 will use the same dual redundant AX.25 command and control system as used on PCsat (NO-44) offering 8 on/off commands, 5 telemetry channels and a serial port for the solar cell experiment telemetry. It also supports the Digital Comms Relay support of the PCsat/APRS mission. The packet uplink is on 145.825 MHz and the default downlinks are in the 435 MHz band to avoid any possible interference with existing ARISS missions. PCSAT2 will have quad redundant transmit inhibits for EVA safety issues, thus, it is also easy to turn off to avoid any issues with other UHF ARISS experiments that may be activated in the future. Also, the mission lifetime of PCSAT2 is only 1 year, because it is a sample-return mission, thus terminating any long term conflicts in spectrum management.

The PCSAT2 mission is intended as an opportunity to augment existing ARISS communications experiments with an external autonomous communications payload. In this regard, it has several potential uses:

* A UI-Digipeater to help ease congestion on the currently shared ARISS PMS (Packet Mail system)

* A PSK-31 transponder for multi-user communications to improve accessibility for schools and ARISS outreach programs.

* An FM Voice repeater for full duplex crew communications to facilitate crew-to-school ARISS contacts.

* Routine Telemetry on the spacecraft systems

For more information and pictures visit the PCSAT2 website at
http://www.ew.usna.edu/~bruninga/pcsat2.html

[ANS thanks Bob, WB4APR for the above information]

[07242005}
=====
PHASE 3E ?O-??
Catalog Number:
Proposed Launch Date: Early 2006

Status: Under Construction

William Leijenaar, PE1RAH reports on July 16th, 2005:

Hi AMSATs,

I always like to inform the AMSATs public about my P3e work, but
unfortunatly due to
some reasons there was not much time and nothing much to say...

However, now I am happy to announce that the my MODE-UV transponder design for P3e is ready at the P3e integration place in Marburg (Germany). About 4 weeks ago I was in Marburg before, where the transponder has been checked. Unfortunatly some unsure things were found in the design. The unsure things were about long term stability after many years in space.

At home in The Netherlands, I changed the design with some minor changes to have a secure long term stability. Finally I tested the transponder again and it performed well within the specifications. Again something learned for future transponder designs :o)

Last Wednesday I drove to AMSAT-DL P3e integrations place in Marburg again, and have my transponder again checked. In the beginning it seemed that the 70cm receiver lost 10dB in sensetivity. After some more measurements we find out that it was due to a bad attenuator we used for protection at the input.

Together with Karl Meinzer we looked for any problems, but so far we could see (without HELAPS) all was okay. In the afternoon I went back home again, this time without the MODE-UV.

Now the MODE-UV will get a new home, the home of P3e... :o)
I hope the transponder will work like its elder sister in AO-10, and you all will enjoy it for many years...

It was lots of work to get it this far, but I know it is for a good purpose...

For the latest project status update please visit the AMSAT-DL
P3-E web page:
http://www.amsat-dl.org/p3e/

[ANS-WSR wishes to thank William Leijenaar, PE1RAH for this week's report]
[07172005]
=====
CP1 ?o-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: N6CP
Proposed Transmit Frequency: 436.845
[03272005]
=====
CP2 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.325
[03272005]
=====
HAUSAT1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: D90HP
Proposed Transmit Frequency: 437.465
[03272005]
=====
ICE Cube 1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: W2CXM
Proposed Transmit Frequency: 437.305
[03272005]
=====
ICE Cube 2 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: N2VR
Proposed Transmit Frequency: 437.425
[03272005]
=====
ION ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.505
[03272005]
=====
KUTEsat ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: KC0RMW
Proposed Transmit Frequency: 437.385
[03272005]
=====

```
MEROPE ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: K7MSU-1
Proposed Transmit Frequency: 145.980
[03272005]
=====
nCUBE1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
       2407.25
[03272005]
=====
RINCON ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
        437.345
[03272005]
=====
SACRED ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
[03272005]
=====
SACRED ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
[03272005]
=====
SEEDS ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: JQ1YGU
Proposed Transmit Frequency: 437.485
[03272005]
=====
Mea Huaka ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005
```

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.405
[03272005]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
        888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/amsat/listserv/menu.html

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satelite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org

```
NNNN
/EX
----
```

Via the ans mailing list at AMSAT.ORG courtesy of AMSAT-NA.
To unsubscribe, send "unsubscribe ans" to Majordomo@amsat.org

---

```
From 2581292804107013346
X-Google-Thread: 10e8ad,cad3c4c27e7fb814
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!postnews.google.com!o13g2000cwo.googlegroups.com!not-for-
mail
From: "philnyc" <philnyc22@hotmail.com>
Newsgroups: rec.radio.amateur.space
Subject: Re: UHF vertical for amsats
Date: 26 Jul 2005 02:45:10 -0700
Organization: http://groups.google.com
Lines: 16
Message-ID: <1122371109.916621.90430@o13g2000cwo.googlegroups.com>
References: <1122217413.631888.155670@g47g2000cwa.googlegroups.com>
   <42E42AD8.8040201@hotmail.com>
NNTP-Posting-Host: 212.191.172.6
Mime-Version: 1.0
Content-Type: text/plain; charset="iso-8859-1"
X-Trace: posting.google.com 1122371116 25649 127.0.0.1 (26 Jul 2005 09:45:16 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Tue, 26 Jul 2005 09:45:16 +0000 (UTC)
In-Reply-To: <42E42AD8.8040201@hotmail.com>
User-Agent: G2/0.2
Complaints-To: groups-abuse@google.com
Injection-Info: o13g2000cwo.googlegroups.com; posting-host=212.191.172.6;
   posting-account=nlQdFw0AAAA-kAmWZHpvmBOzvZf9zD-O
Xref: g2news1.google.com rec.radio.amateur.space:186
```

Rocketeer,

Thank you for the link. I'm seriously considering a constuction of Eggbeater2.

I'm not clear about one thing ==> On top, where the loops are crossing eachother, are they positioned directly one on top of the other ? or there is a small (known ?) amout of space ?

How about the reflectors, if there are crossing the boom , they must be spaced out . Do we know by how much ? b/c I'm sure that matters.

Thank you again.

Phil

```
From 7003848348867768859
X-Google-Thread: 10e8ad,cad3c4c27e7fb814
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news3.google.com!news.glorb.com!
border1.nntp.dca.giganews.com!nntp.giganews.com!local01.nntp.dca.giganews.com!
nntp.comcast.com!news.comcast.com.POSTED!not-for-mail
NNTP-Posting-Date: Tue, 26 Jul 2005 11:16:57 -0500
Message-ID: <42E661F7.5040105@hotmail.com>
Date: Tue, 26 Jul 2005 11:16:55 -0500
From: rocketeer <rocketeer@hotmail.com>
User-Agent: Mozilla Thunderbird 1.0.6 (Windows/20050716)
X-Accept-Language: en-us, en
MIME-Version: 1.0
Newsgroups: rec.radio.amateur.space
To: philnyc <philnyc22@hotmail.com>
Subject: Re: UHF vertical for amsats
References: <1122217413.631888.155670@g47g2000cwa.googlegroups.com>
<42E42AD8.8040201@hotmail.com>
<1122371109.916621.90430@o13g2000cwo.googlegroups.com>
In-Reply-To: <1122371109.916621.90430@o13g2000cwo.googlegroups.com>
Content-Type: text/plain; charset=ISO-8859-1; format=flowed
Content-Transfer-Encoding: 7bit
Lines: 38
NNTP-Posting-Host: 24.245.58.11
X-Trace: sv3-
iDD6uvZj8Dmr8stly5KU5FeuBpEKllNv6Jg3kpnrBud65qTOj13PE6OrgzbiAhOie2NDaAtNBWDNNkM!
ByrgKXDyw7Hg6wgnCXjaxabLXFyECwjzerUiJhH6H3ABz8L+agoxTrzV0koB1/5iNw==
X-Complaints-To: abuse@comcast.net
X-DMCA-Complaints-To: dmca@comcast.net
X-Abuse-and-DMCA-Info: Please be sure to forward a copy of ALL headers
X-Abuse-and-DMCA-Info: Otherwise we will be unable to process your complaint
properly
X-Postfilter: 1.3.31
Xref: g2news1.google.com rec.radio.amateur.space:187
```

The loops "touch" each other at the top and bottom, think two cubes one inside the other at 90 degree separation looking from the top, like an old fashion "eggbeater".   On the reflectors the measurement is documented how far below the loops they should be placed, also the reflectors "touch" each other at the mast, much like a "ground plane" on a vertical antenna, and have about 90 degree separation between reflector elements. I am sure the author of the site, K5OE would be glad to provide more information on the "eggbeaters".

M-2 makes these antennas, but run about $150.00 each the last I looked. The M-2 is shaped more like two spheres inside each other. One ham had the M-2 VHF and UHF on separate masts at field day, mounted on top of his motor home on each end of the roof, they worked really well.

Good luck,

rocketeer

philnyc wrote:

>Rocketeer,
>
>Thank you for the link. I'm seriously considering a constuction of
>Eggbeater2.
>
>I'm not clear about one thing ==> On top, where the loops are crossing
>eachother, are they positioned directly one on top of the other ? or
>there is a small (known ?) amout of space ?
>
>How about the reflectors, if there are crossing the boom , they must be
>spaced out . Do we know by how much ? b/c I'm sure that matters.
>
>Thank you again.
>
>Phil
>
>
>

```
From 3153615904823413979
X-Google-Thread: 10e8ad,cad3c4c27e7fb814
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!postnews.google.com!g43g2000cwa.googlegroups.com!not-for-mail
From: "philnyc" <philnyc22@hotmail.com>
Newsgroups: rec.radio.amateur.space
Subject: Re: UHF vertical for amsats
Date: 27 Jul 2005 12:21:56 -0700
Organization: http://groups.google.com
Lines: 16
Message-ID: <1122492116.868206.106490@g43g2000cwa.googlegroups.com>
References: <1122217413.631888.155670@g47g2000cwa.googlegroups.com>
   <42E42AD8.8040201@hotmail.com>
   <1122371109.916621.90430@o13g2000cwo.googlegroups.com>
   <42E661F7.5040105@hotmail.com>
NNTP-Posting-Host: 195.69.80.10
Mime-Version: 1.0
Content-Type: text/plain; charset="iso-8859-1"
X-Trace: posting.google.com 1122492122 19781 127.0.0.1 (27 Jul 2005 19:22:02 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Wed, 27 Jul 2005 19:22:02 +0000 (UTC)
In-Reply-To: <42E661F7.5040105@hotmail.com>
User-Agent: G2/0.2
Complaints-To: groups-abuse@google.com
Injection-Info: g43g2000cwa.googlegroups.com; posting-host=195.69.80.10;
   posting-account=nlQdFw0AAAA-kAmWZHpvmBOzvZf9zD-O
```

```
Xref: g2news1.google.com rec.radio.amateur.space:188
```

I'm researching all the materials I need to purchase for construcion of EB2.
According to the metric system that is used here in Europe (Poland) the standard electrical wires run as follows : 2.5 mm ; 3.5 ; 4 ++ (mm) , there for : 2.5 is the closest match to the Gauage # 10, this will be used to build (70 cm EB2), unfortunatly to build the EB 2 for 144 mhz , the closest match to Gauage # 12 which is equivalent to (3.264) is wire of dia. 3.5 mm .

I would like to ask if this is too much of a difference in diameter for the antenna work as intented ?

Thank you :)

Phil

```
From 1941769844609675529
X-Google-Thread: 10e8ad,cad3c4c27e7fb814
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!postnews.google.com!g47g2000cwa.googlegroups.com!not-for-
mail
From: "philnyc" <philnyc22@hotmail.com>
Newsgroups: rec.radio.amateur.space
Subject: Re: UHF vertical for amsats
Date: 27 Jul 2005 12:44:36 -0700
Organization: http://groups.google.com
Lines: 7
Message-ID: <1122493476.060354.279170@g47g2000cwa.googlegroups.com>
References: <1122217413.631888.155670@g47g2000cwa.googlegroups.com>
   <42E42AD8.8040201@hotmail.com>
   <1122371109.916621.90430@o13g2000cwo.googlegroups.com>
   <42E661F7.5040105@hotmail.com>
   <1122492116.868206.106490@g43g2000cwa.googlegroups.com>
NNTP-Posting-Host: 195.69.80.10
Mime-Version: 1.0
Content-Type: text/plain; charset="iso-8859-1"
X-Trace: posting.google.com 1122493482 21189 127.0.0.1 (27 Jul 2005 19:44:42 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Wed, 27 Jul 2005 19:44:42 +0000 (UTC)
In-Reply-To: <1122492116.868206.106490@g43g2000cwa.googlegroups.com>
User-Agent: G2/0.2
Complaints-To: groups-abuse@google.com
Injection-Info: g47g2000cwa.googlegroups.com; posting-host=195.69.80.10;
   posting-account=nlQdFw0AAAA-kAmWZHpvmBOzvZf9zD-O
Xref: g2news1.google.com rec.radio.amateur.space:189
```

Correction to my previous post,

The closes match is Gauage 8 is 4mm not 3.5 mm. and 4 mm is closer to
gauage # 6 . Even larger .

Phil

```
From 8258507115645068985
X-Google-Thread: 10e8ad,cad3c4c27e7fb814
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news3.google.com!news.glorb.com!
border1.nntp.dca.giganews.com!nntp.giganews.com!local01.nntp.dca.giganews.com!
nntp.comcast.com!news.comcast.com.POSTED!not-for-mail
NNTP-Posting-Date: Wed, 27 Jul 2005 16:32:52 -0500
Message-ID: <42E7FD82.3040507@hotmail.com>
Date: Wed, 27 Jul 2005 16:32:50 -0500
From: rocketeer <rocketeer@hotmail.com>
User-Agent: Mozilla Thunderbird 1.0.6 (Windows/20050716)
X-Accept-Language: en-us, en
MIME-Version: 1.0
Newsgroups: rec.radio.amateur.space
To: philnyc <philnyc22@hotmail.com>
Subject: Re: UHF vertical for amsats
References: <1122217413.631888.155670@g47g2000cwa.googlegroups.com>
<42E42AD8.8040201@hotmail.com>
<1122371109.916621.90430@o13g2000cwo.googlegroups.com>
<42E661F7.5040105@hotmail.com>
<1122492116.868206.106490@g43g2000cwa.googlegroups.com>
In-Reply-To: <1122492116.868206.106490@g43g2000cwa.googlegroups.com>
Content-Type: text/plain; charset=ISO-8859-1; format=flowed
Content-Transfer-Encoding: 7bit
Lines: 29
NNTP-Posting-Host: 24.245.58.11
X-Trace: sv3-IObSjyZ6JJhS/wECWWMTS3Yk5tADp/LvLqODK3f3s1maQn1rjb2ytJG1l/
2aiOUih0HdXV6zSsJw/mg!
ZdkaEtbnaZ9364Jz6+vrOGh7fPC1tRSSp2AWfBPiVEEhhdFv1unbYTDyuOeZCPoJ6w==
X-Complaints-To: abuse@comcast.net
X-DMCA-Complaints-To: dmca@comcast.net
X-Abuse-and-DMCA-Info: Please be sure to forward a copy of ALL headers
X-Abuse-and-DMCA-Info: Otherwise we will be unable to process your complaint
properly
X-Postfilter: 1.3.32
Xref: g2news1.google.com rec.radio.amateur.space:190
```

Using larger diameter wire, adjustment would be needed. How much
adjustment? Never looked into using any other diameter wire. So just as
ham radio is experimenting and half the fun, operating is the second
half of the fun.
Make the loops larger than the charts indicate and trim down for best SWR.

rocketeer

philnyc wrote:

>I'm researching all the materials I need to purchase for construcion of
>EB2.
>According to the metric system that is used here in Europe (Poland)
>the standard electrical wires run as follows : 2.5 mm ; 3.5 ; 4 ++
>(mm) , there for : 2.5 is the closest match to the Gauage # 10, this
>will be used to build (70 cm EB2), unfortunatly to build the EB 2 for
>144 mhz , the closest match to Gauage # 12 which is equivalent to (
>3.264) is wire of dia. 3.5 mm .
>
>I would like to ask if this is too much of a difference in diameter
>for the antenna work as intented ?
>
>Thank you :)
>
>Phil
>
>
>

```
From -5841270467423506294
X-Google-Thread: 10e8ad,cad3c4c27e7fb814
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news3.google.com!news.glorb.com!cycny01.gnilink.net!
cyclone1.gnilink.net!gnilink.net!hwmnpeer01.lga!hwmedia!news-
server.columbus.rr.com!tornado.ohiordc.rr.com.POSTED!53ab2750!not-for-mail
From: Christopher Cox <chrisTOPHERcOX@coboxincORPOATED.comERCIAL>
User-Agent: Mozilla Thunderbird 1.0.2 (Windows/20050317)
X-Accept-Language: en-us, en
MIME-Version: 1.0
Newsgroups: rec.radio.amateur.space
Subject: Re: UHF vertical for amsats
References: <1122217413.631888.155670@g47g2000cwa.googlegroups.com>
<42E42AD8.8040201@hotmail.com>
<1122371109.916621.90430@o13g2000cwo.googlegroups.com>
<42E661F7.5040105@hotmail.com>
In-Reply-To: <42E661F7.5040105@hotmail.com>
Content-Type: text/plain; charset=ISO-8859-1; format=flowed
Content-Transfer-Encoding: 7bit
Lines: 14
Message-ID: <ZwWFe.34233$B52.13106@tornado.ohiordc.rr.com>
Date: Thu, 28 Jul 2005 01:28:25 GMT
NNTP-Posting-Host: 24.210.62.5
X-Complaints-To: abuse@rr.com
X-Trace: tornado.ohiordc.rr.com 1122514105 24.210.62.5 (Wed, 27 Jul 2005 21:28:25
EDT)
NNTP-Posting-Date: Wed, 27 Jul 2005 21:28:25 EDT
Organization: Road Runner High Speed Online http://www.rr.com
Xref: g2news1.google.com rec.radio.amateur.space:191
```

rocketeer wrote:
> The loops "touch" each other at the top and bottom,

With all due respect, I don't believe so.

The bottom of the loops where they are usually attached to a piece of RG-62 for phasing and matching. The tops usually cross each other with just enough gap so they are not electrically connected.

http://bordelon.net/freespace/radioflier-1/eggbeater.html
http://members.aol.com/k5oe/eggbeater.htm

TRA NAR ARRL EIEIO.....

```
From 3898811598101900904
X-Google-Thread: 10e8ad,315ad1192d9c1498,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!proxad.net!proxad.net!
194.117.148.138.MISMATCH!pe2.news.blueyonder.co.uk!blueyonder!
pe1.news.blueyonder.co.uk!blueyonder!news-out.ntli.net!newsrout1-gui.ntli.net!
ntli.net!newspeer1-win.ntli.net!newsfe1-gui.ntli.net.POSTED!53ab2750!not-for-mail
From: "Brian Reay" <see@website.invalid>
Newsgroups: rec.radio.amateur.space
Subject: Arrow antenna 'clone'
Lines: 9
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1437
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1441
Message-ID: <xa8Ge.12987$bT4.2103@newsfe1-gui.ntli.net>
Date: Thu, 28 Jul 2005 17:00:13 GMT
NNTP-Posting-Host: 82.3.70.204
X-Complaints-To: abuse@virgin.net
X-Trace: newsfe1-gui.ntli.net 1122570013 82.3.70.204 (Thu, 28 Jul 2005 18:00:13
BST)
NNTP-Posting-Date: Thu, 28 Jul 2005 18:00:13 BST
Organization: Virgin Net Usenet Service
Xref: g2news1.google.com rec.radio.amateur.space:192
```

Anyone know of a design on the web, other than the one by WA5VJB?

--
Brian Reay
www.g8osn.org.uk
www.amateurradiotraining.org.uk
FP#898

From 2963233300003889994
X-Google-Thread: 10e8ad,3f1e51d4f9f8894b,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!proxad.net!proxad.net!
62.253.162.218.MISMATCH!news-in.ntli.net!newsrout1-win.ntli.net!ntli.net!
newspeer1-win.ntli.net!newsfe1-gui.ntli.net.POSTED!53ab2750!not-for-mail
From: "Brian Reay" <see@website.invalid>
Newsgroups: rec.radio.amateur.space
Subject: FT817 for satellite
Lines: 12
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1437
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1441
Message-ID: <xc8Ge.13000$bT4.7688@newsfe1-gui.ntli.net>
Date: Thu, 28 Jul 2005 17:02:21 GMT
NNTP-Posting-Host: 82.3.70.204
X-Complaints-To: abuse@virgin.net
X-Trace: newsfe1-gui.ntli.net 1122570141 82.3.70.204 (Thu, 28 Jul 2005 18:02:21
BST)
NNTP-Posting-Date: Thu, 28 Jul 2005 18:02:21 BST
Organization: Virgin Net Usenet Service
Xref: g2news1.google.com rec.radio.amateur.space:193

Has anyone used memory pairs, as per the FT817 manual (page 77) for
satellite use?

If so, how did you find it?

--
Brian Reay
www.g8osn.org.uk
www.amateurradiotraining.org.uk
FP#898

From 4883666365934461567
X-Google-Thread: 10e8ad,315ad1192d9c1498
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news4.google.com!news.glorb.com!
border1.nntp.dca.giganews.com!local01.nntp.dca.giganews.com!nntp.rogers.com!
news.rogers.com.POSTED!not-for-mail
NNTP-Posting-Date: Thu, 28 Jul 2005 20:21:45 -0500
From: "Steve" <va3sf@rogers.com>
Newsgroups: rec.radio.amateur.space
References: <xa8Ge.12987$bT4.2103@newsfe1-gui.ntli.net>
Subject: Re: Arrow antenna 'clone'
Date: Thu, 28 Jul 2005 21:21:39 -0400

X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1506
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1506
Message-ID: <q8CdnYVtIps0GXTfRVn-3g@rogers.com>
Lines: 21
NNTP-Posting-Host: 69.196.89.110
X-Trace: sv3-KtVmor7YPssXF2eej1Z0Ffvh5SF27eUgHzn3xD80U0TnsPmY28K5bEujbOvmQ/
eceGoDgfsuw2SjtbD!r7TUAHluM/
JHK8+fZfATrECzkVnbRBE8i73Du6ZRzmeJR55G7euXWly9eNAigbNe0790Y3r9
X-Complaints-To: abuse@rogers.com
X-DMCA-Complaints-To: abuse@rogers.com
X-Abuse-and-DMCA-Info: Please be sure to forward a copy of ALL headers
X-Abuse-and-DMCA-Info: Otherwise we will be unable to process your complaint
properly
X-Postfilter: 1.3.32
Xref: g2news1.google.com rec.radio.amateur.space:194

Try this one. I built it and it works fine
http://www.ptsi.net/user/kc5jdg/yagi27.gif

Steve VA3SF
http://www.va3sf.com

"Brian Reay" <see@website.invalid> wrote in message
news:xa8Ge.12987$bT4.2103@newsfe1-gui.ntli.net...
> Anyone know of a design on the web, other than the one by WA5VJB?
>
> --
> Brian Reay
> www.g8osn.org.uk
> www.amateurradiotraining.org.uk
> FP#898
>
>

From 263780392377022416
X-Google-Thread: 10e8ad,315ad1192d9c1498
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news3.google.com!news.glorb.com!news-in.ntli.net!
newsrout1-win.ntli.net!ntli.net!newspeer1-win.ntli.net!newsfe5-
win.ntli.net.POSTED!53ab2750!not-for-mail
From: "Brian Reay" <see@website.invalid>
Newsgroups: rec.radio.amateur.space
References: <xa8Ge.12987$bT4.2103@newsfe1-gui.ntli.net>
<q8CdnYVtIps0GXTfRVn-3g@rogers.com>
Subject: Re: Arrow antenna 'clone'

Lines: 20
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1437
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1441
Message-ID: <7plGe.7619$Aw4.6246@newsfe5-win.ntli.net>
Date: Fri, 29 Jul 2005 08:03:15 GMT
NNTP-Posting-Host: 82.3.70.204
X-Complaints-To: abuse@virgin.net
X-Trace: newsfe5-win.ntli.net 1122624195 82.3.70.204 (Fri, 29 Jul 2005 09:03:15 BST)
NNTP-Posting-Date: Fri, 29 Jul 2005 09:03:15 BST
Organization: Virgin Net Usenet Service
Xref: g2news1.google.com rec.radio.amateur.space:195

"Steve" <va3sf@rogers.com> wrote in message
news:q8CdnYVtIps0GXTfRVn-3g@rogers.com...
> Try this one. I built it and it works fine
> http://www.ptsi.net/user/kc5jdg/yagi27.gif
>
> Steve VA3SF
> http://www.va3sf.com
>

Thanks, exactly what I need by the looks of it.

73

--
Brian Reay
www.g8osn.org.uk
www.amateurradiotraining.org.uk
FP#898

From -4794313765695695010
X-Google-Thread: 10e8ad,70b49ce754a1df29,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news4.google.com!news.glorb.com!hwmnpeer01.lga!hwmedia!news-server.columbus.rr.com!cyclone2.kc.rr.com!news2.kc.rr.com!news-post.tampabay.rr.com!twister.southeast.rr.com.POSTED!53ab2750!not-for-mail
From: "Hap Griffin" <lgriffin@sc.rr.com>
Newsgroups: rec.radio.amateur.space
Subject: 10 meter dish antenna on ebay
Lines: 8
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.2180
X-MIMEOLE: Produced By Microsoft MimeOLE V6.00.2900.2180
X-RFC2646: Format=Flowed; Original

Message-ID: <gDzGe.54565$oj4.1279415@twister.southeast.rr.com>
Date: Sat, 30 Jul 2005 00:14:04 GMT
NNTP-Posting-Host: 24.211.39.213
X-Complaints-To: abuse@rr.com
X-Trace: twister.southeast.rr.com 1122682444 24.211.39.213 (Fri, 29 Jul 2005 20:14:04 EDT)
NNTP-Posting-Date: Fri, 29 Jul 2005 20:14:04 EDT
Organization: Road Runner - Columbia
Xref: g2news1.google.com rec.radio.amateur.space:196

If you're interested in EME or radio-astronomy, there is a 10 meter C-band uplink dish available on ebay at http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&item=5794042849&ssPageName=ADME:B:EF:US:1 .

Hap Griffin
WZ4O

From -9009208910657837124
X-Google-Thread: 10e8ad,cad3c4c27e7fb814
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news3.google.com!newshub.sdsu.edu!elnk-nf2-pas!newsfeed.earthlink.net!stamper.news.pas.earthlink.net!stamper.news.atl.earthlink.net!newsread1.news.atl.earthlink.net.POSTED!9849c334!not-for-mail
From: "George, KA3HSW" <not@vailable.to.spammers>
Newsgroups: rec.radio.amateur.space
References: <1122217413.631888.155670@g47g2000cwa.googlegroups.com> <42E42AD8.8040201@hotmail.com> <1122371109.916621.90430@o13g2000cwo.googlegroups.com> <42E661F7.5040105@hotmail.com>
Subject: Re: UHF vertical for amsats
Lines: 24
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.2180
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.2180
X-RFC2646: Format=Flowed; Response
Message-ID: <xXOGe.376$ns.284@newsread1.news.atl.earthlink.net>
Date: Sat, 30 Jul 2005 17:39:41 GMT
NNTP-Posting-Host: 66.1.13.142
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread1.news.atl.earthlink.net 1122745181 66.1.13.142 (Sat, 30 Jul 2005 10:39:41 PDT)
NNTP-Posting-Date: Sat, 30 Jul 2005 10:39:41 PDT
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news1.google.com rec.radio.amateur.space:197

"rocketeer" <rocketeer@hotmail.com> wrote in message
news:42E661F7.5040105@hotmail.com...
> The loops "touch" each other at the top and bottom, think two cubes one
> inside the other at 90 degree separation looking from the top, like an old
> fashion "eggbeater".   On the reflectors the measurement is

Absolutely not, unless you are using insulated wire!!! The loops must be electrically isolated from one another at the top, and only connected at the bottom by the phasing line, not "touching"!

> documented how far below the loops they should be placed, also the
> reflectors "touch" each other at the mast, much like a "ground plane" on a
> vertical antenna, and have about 90 degree separation between reflector
> elements. I am sure the author of the site, K5OE would be glad to provide
> more information on the "eggbeaters".
>

With the reflector elements, I don't think it matters whether they are connected to each other or not.

From 246963847853644906
X-Google-Thread: 10e8ad,44ad63eb9abe9700,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news3.google.com!news.glorb.com!wn12feed!worldnet.att.net!bgtnsc04-news.ops.worldnet.att.net.POSTED!53ab2750!not-for-mail
From: "RJ" <rajohngm@worldnet.att.net>
Newsgroups: rec.radio.amateur.space
Subject: DR-605T for satellite work?
Lines: 5
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.2527
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.2527
X-RFC2646: Format=Flowed; Original
Message-ID: <mKwHe.528073$cg1.155700@bgtnsc04-news.ops.worldnet.att.net>
Date: Mon, 01 Aug 2005 21:45:54 GMT
NNTP-Posting-Host: 12.73.221.167
X-Complaints-To: abuse@worldnet.att.net
X-Trace: bgtnsc04-news.ops.worldnet.att.net 1122932754 12.73.221.167 (Mon, 01 Aug 2005 21:45:54 GMT)
NNTP-Posting-Date: Mon, 01 Aug 2005 21:45:54 GMT
Organization: AT&T Worldnet
Xref: g2news1.google.com rec.radio.amateur.space:198

Will an Alinco DR-605T provide the capabilities for working through satellites by simultaneity receiving on VHF and transmitting on UHF?
Tnx, Bob AA8X

```
From 1144875139988112785
X-Google-Thread: 107ada,46e157b168062c01,start
X-Google-Thread: 10bf43,46e157b168062c01,start
X-Google-Thread: 10e8ad,46e157b168062c01,start
X-Google-Attributes: gid107ada,gid10bf43,gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news3.google.com!news.glorb.com!
border1.nntp.dca.giganews.com!border2.nntp.dca.giganews.com!nntp.giganews.com!
novia!novia!sequencer.newscene.com!not-for-mail
From: Roger Beep <breaker.breaker@channel.nineteen>
Newsgroups:
rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space
Subject: FCC proposal = CB'ers with ham licenses.
Date: 1 Aug 2005 17:44:02 -0500
Organization: Thank you ARRL
Lines: 6
Message-ID: <42eea55f$0$91674$bb4e3ad8@newscene.com>
User-Agent: Xnews/5.04.25
Xref: g2news1.google.com rec.radio.amateur.misc:2860
rec.radio.amateur.policy:11043 rec.radio.amateur.space:199
```

Ten-four?

Yah, that's a big ten-four.

All my channel 19 good-buddy CB friends are going to be so happy.

```
From -6340404464956290468
X-Google-Thread: 10e8ad,8933bac885029ea9,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news4.google.com!news.glorb.com!
border1.nntp.dca.giganews.com!border2.nntp.dca.giganews.com!nntp.giganews.com!
elnk-atl-nf1!newsfeed.earthlink.net!stamper.news.atl.earthlink.net!
newsread3.news.atl.earthlink.net.POSTED!46041641!not-for-mail
From: "JoAnne Maenpaa" <wb9jej_no-spam@earthlink.net>
Newsgroups: rec.radio.amateur.space
Subject: ANS-212 AMSAT News Service Weekly Bulletin
Lines: 527
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <RtzHe.8928$6f.7569@newsread3.news.atl.earthlink.net>
Date: Tue, 02 Aug 2005 00:53:05 GMT
NNTP-Posting-Host: 64.105.84.226
X-Complaints-To: abuse@earthlink.net
```

X-Trace: newsread3.news.atl.earthlink.net 1122943985 64.105.84.226 (Mon, 01 Aug 2005 17:53:05 PDT)
NNTP-Posting-Date: Mon, 01 Aug 2005 17:53:05 PDT
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news1.google.com rec.radio.amateur.space:200

AMSAT NEWS SERVICE
ANS-212

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:

* ARISS Status July 25, 2005
* PCSAT2 Launch
* PCSAT2 Downlink Challenge
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* Echo Mode Change
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* AO-27 Mode Schedule Program Available
* AMSAT Symposium
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SB SAT @ AMSAT $ANS-212.01
ARISS Status July 25, 2005

AMSAT News Service Bulletin 212.01
From AMSAT HQ SILVER SPRING, MD.
July 31, 2005
To All RADIO AMATEURS
BID: $ANS-212.01

1. NES Teacher Workshop

A NASA Explorer School (NES) Satellite Communication Class was held at Goddard Space Flight Center July 18 - 22. The ARISS team introduced Amateur Radio and the ARISS program to thirty-five teachers.

A contact was scheduled with the ISS on Wednesday, July 20 at 17:31 UTC. Some of the educators positioned themselves at the NN1SS station located in Building 11 at GSFC, while others from the class were located outside Building 11, at a second station. The combined team participated by asking 15 questions of John Phillips, KE5DRY. The radio stations were set up to

enable both groups to hear all questions and answers. The teachers were very impressed and moved by the event. On July 22, the ARRL website posted the story, "Educators query ISS astronaut via ham radio." See:
http://www.arrl.org/

2. SuitSat Status

The ARISS-Russia team successfully completed a vacuum test on the SuitSat hardware. Integration and testing continue as the team works on the hardware flight certification.

3. ARRL Article on Return to Flight Mission

On July 20, ARRL ran an article on the shuttle STS-114 Return to Flight mission. To view the story, "Shuttle Discovery launch at least a week away," see: http://www.arrl.org/

4. ARISS International Meeting, Guildford, U.K.

Preparations continue for the ARISS International Face-to-Face Meeting which will be held at the University of Surrey in Guildford, U.K. The AMSAT-UK Colloquium will be held Friday, July 29 through Sunday, July 31, and the ARISS meeting will continue on Monday and Tuesday, August 1 - 2. Information on both meetings may be found on the following website:
http://www.uk.amsat.org/Colloquium/default.php

5. ARISS International Teleconference Held

The monthly ARISS International Teleconference was held on Tuesday, July 19. Among the agenda items discussed were plans for the upcoming ARISS International Face to Face Meeting, PCSAT2, and the SuitSat Project.

6. ARRL Article on ISS Ham Repeater Mode

On July 20, the ISS Ham radio system was set up to run in repeater mode. To view the July 21 ARRL article, "Amateur Radio on the International Space Station in repeater mode," see:
http://www.arrl.org/

On Saturday, July 23, a station in Malaysia heard Sergei Krikalev, U5MIR, sign off from a general contact. He then heard the ISS packet beacon, ending the crossband repeater mode.

7. Astronaut Training

ESA French astronaut Leopold Eyharts spent some time last month with Kenneth Ransom, training and preparing for his Technician's license exam. He took and passed the exam this week, enabling him to participate in future ARISS contacts. Eyharts is scheduled as back up for the Expedition 12 crew.

[ANS thanks Carol Jackson, KB3LKI for the above information]

/EX

SB SAT @ AMSAT $ANS-212.02
PCSAT2 Launch

AMSAT News Service Bulletin 212.02
From AMSAT HQ SILVER SPRING, MD.
July 31, 2005
To All RADIO AMATEURS
BID: $ANS-212.02

PCSAT2 was carried into space on Tuesday, July 26 by STS-114. It will not be activated until it is installed on the outside of the ISS on 1 or 3 August during an EVA. After a week or so of on-orbit checkout, and if all goes well, the APRS digipeater will be activated for general use probably by 10 Aug.

But, well equipped ground stations are invited to help us capture early telemetry on the alternate downlink of 437.975 on the first few days of activation. Telemetry will be at 1200 and 9600 baud. For details, see:
http://www.ew.usna.edu/~bruninga/pec/pc2ops.html

There are 2 classes of stations that can help.

1) We ask 1200 baud IGates or SATgates to monitor 437.975 and feed to the normal global APRS system. This will feed the live telemetry page. See:
http://www.pcsat2.info/PCSat2Web/RealTime.jsp

2) 9600 Baud stations to monitor the same 437.975 for the special once-every-3.3 minutes 9600 baud data beacon (54 lines of data). Email your file to PC2@grc.nasa.gov

The UHF downlink is only 1 watt and so it will require a beam to hear it.

Good luck!

[ANS thanks Bob, WB4APR for the above information]

/EX

SB SAT @ AMSAT $ANS-212.03
PCSAT2 Downlink Challenge

AMSAT News Service Bulletin 212.03
From AMSAT HQ SILVER SPRING, MD.
July 31, 2005
To All RADIO AMATEURS
BID: $ANS-212.03

When PCSAT2 is enabled on Monday or Wednesday, (1,3 Aug) we'd like to capture as much of the 1200 baud and 9600 baud telemetry on 437.975 MHz as possible. See the plan on:
http://www.ew.usna.edu/~bruninga/pec/pc2ops.html

1200 baud telemetry is just an occasional packet every 10 or 60 seconds just like PCsat. 1200 baud stations can simply feed their downlinks directly into the global APRS system like normal. These will help update the LIVE PCSAT2 telemetry page by G4DPZ at:
http://www.pcsat2.info/PCSat2Web/RealTime.jsp

1200 baud capture files will not be requested to be emailed unless there is an anomoly and we need some missing data.

9600 baud stations will see the special solar cell experiment data which is used to measure cell degradation over time. We need the first data sets as a

benchmark for future comparisons. Having many ground stations capturing the data will help
assure a complete initial data set.

54 lines of 9600 baud data are transmitted as a beacon group once every 3 minutes 20 seconds consisting of 11 one-second data bursts of 5 lines spaced every 2 seconds. The 5th byte of each line is human readable as a serial number starting with "A" through "Z", then "a" through "z" and then "0", and "1".

The "challenge" is due to the high UHF Doppler and the burst nature. You have to anticipate the Doppler to get a complete set since there is nothing to tune in until it has begun.

Volunteers who want to take on this challenge:

1) Please be sure to set your TNC and PC clock to UTC within a second or so. Be sure time-stamping is ON. Use Hyperterm or ALOGGER or any other capture tool (ALOGGER format is preferred).

2) Use this file name convention with time stamp and your callsign to save the file, and also use the same format for the subject line of the Email.

PC2_YYMMDD_HHMM_CALL.txt

3) Email to PC2@grc.usna.gov

Soon we will have a separate SATGATE server just for collecting this data and a specialized version of ALOGGER which can not only log, but also serve as a simple IGate for feeding your serial port TNC into the SATGATE server.

ALOGGER is available from:
http://www.billdiaz.dynip.com/

TUNING DOPPLER: Remember that at AOS the UHF signal will be as much as 9 KHz high and at LOS will be as much as 9 KHz low. But at these times the doppler is *changing* the least and this is probably the best time to catch a complete file without any tuning glitches.

In the middle of the pass, the Doppler rate of change is the highest and although the signal will be strongest, over the center 2 minutes the doppler will shift as much as 8 KHz! This is why we expect to have to combine files from multiple users to get a complete set.

Computer tuning may not help, since the step-transition during a tuning step may garble a packet?

Also, all of our web pages will be down during this critical time since our entire building will be shut down for long planned electrical power work. Our command station will be operated via an emergency generator and a single long extension cord offering 15 amps. So read these web pages well prior to the event.

Good luck!

[ANS thanks Bob, WB4APR for the above information]

/EX

SB SAT @ AMSAT $ANS-212.04
AMSAT Video News Debuts

AMSAT News Service Bulletin 212.04
From AMSAT HQ SILVER SPRING, MD.
July 31, 2005
To All RADIO AMATEURS
BID: $ANS-212.04

The AMSAT web site has added a new feature intended to bring a close-up look at some of the activities of AMSAT. Members and non members alike will now have an opportunity to gain further insight into activities including "Space Day at the Smithsonian", AMSAT activities at Dayton, as well as features from the Annual Meeting and Symposium.

These video packages, delivered in Microsoft Media 9 format, are produced by long time AMSAT member Don Jacob. Don's background with the CBS television network in Los Angeles brings professional skill to this exciting new activity.

The first package available for viewing is on Space Day 2005. More packages have been shot and will be added to the NewsReel page shortly. To take a look, go to amsat.org and select the link on the left "AMSAT Video News".

Suggestions for additional material and general comments will be appreciated.

[ANS thanks Gunther, W8GSM for the above information]

/EX

SB SAT @ AMSAT $ANS-212.05
VU2NUD Silent Key

AMSAT News Service Bulletin 212.05

From AMSAT HQ SILVER SPRING, MD.
July 31, 2005
To All RADIO AMATEURS
BID: $ANS-212.05

AMSAT has received word that Mr. Nagesh, VU2NUD, is a silent key.

It was VU2NUD who encouraged William, PE1RAH, the designed of the Dutch transponder on Hamsat to get in touch with the project and work with the Hamsat team.

AMSAT expresses condolences to the Nagesh family.

[ANS thanks William, PE1RAH, for the above information]

/EX

SB SAT @ AMSAT $ANS-212.06
Echo Mode Change

AMSAT News Service Bulletin 212.06
From AMSAT HQ SILVER SPRING, MD.
July 31, 2005
To All RADIO AMATEURS
BID: $ANS-212.06

Mike Kingery, KE4AZN, and the Echo Command Team changed the mode of the satellite on 28 July to the High Power FM repeater. This change is to support the Boy Scout National Jamboree, in progress, at Fort AP Hill in Virginia. This event occurs once every 4 years.

AMSAT would appreciate your help in supporting this event by allowing the K2BSA Jamboree station to use AO-51. If we treat this as we try to do on Kids Day, we can maximize the number of Scouts that are able to participate and use our satellite. Reports from the Jamboree indicate that the satellite station is drawing lots of interest from the Scouts.

Please listen for K2BSA anytime the satellite is over Virginia, and allow them to dominate the satellite when they are active.

[ANS thanks Mike, KE4AZN, and the Echo Command Team for the above information]

/EX

SB SAT @ AMSAT $ANS-212.07
AMSAT President's Letter, July 2005

AMSAT News Service Bulletin 212.07
From AMSAT HQ SILVER SPRING, MD.
July 31, 2005
To All RADIO AMATEURS
BID: $ANS-212.07

It has been quite a while since I have availed myself of the AMSAT e-mail channels to communicate with AMSAT members and
for that I apologize.

I have been focusing my communications on the Apogee View column and articles written for the AMSAT Journal and I have been encouraging AMSAT officers and Board members to communicate directly so as to distribute the work load and familiarize the membership with all of the members of their leadership team.

AMSAT has sent out ballots for the most contested election in recent memory. A great slate of candidates has been put forth
and only half of them will be elected to the Board so please cast your ballots thoughtfully. This year your vote is very
important.

The May/Jun issue of the AMSAT Journal was delayed because our publisher went out of business unexpectedly but we are back in production now. However we are in need of articles for the July/August issue as well as for the remainder of the year. If you have any story, construction project, activity or anecdote you would like to share contact our Journal editor Ed Long WA4SWJ (journal@amsat.org). Pictures are a great asset to any article, no matter how short, so take your camera to the next event! If you have something interesting but don't feel up to writing the article, that's OK. We are in the process of establishing a corps of "reporters" to write up these articles for you. Also, if you are a good writer and would like to volunteer as a reporter, contact Ed.

AMSAT-NA is hard at work on two projects, P3E and Eagle. Both of these projects are in direct support of AMSAT's strategic plan and vision statements, which call for emphasis on building High Earth Orbit Satellites. As you heard in a recent e-mail from Bob, N4HY there is significant progress on the P3E satellite's 3rd generation Internal Housekeeping Unit (IHU3), the computer brain for P3E and later Eagle.

There has also been progress on the new Software Defined Transponder (SDT) for modes U/V and L/S on Eagle. Lagging a bit, but still progressing, is the design of the C-C Rider C-band transponder for Eagle. Leadership for these projects is coming from Bob McGwier, N4HY and Frank Brickle, AB2KT with support from Tom Clark, W3IWI and Rick Hambly W2GPS. Design sessions are conducted in my lab once a week or so.

We need continuing financial support for these projects and I encourage everyone to donate what they can to AMSAT's general fund or specific projects in the AMSAT store at www.amsat.org or by calling the AMSAT office directly.

The AMSAT Echo satellite, now designated AO-51, is working almost flawlessly. It is the most capable and useful small satellite AMSAT has sponsored in many years. It takes a great deal of work from our software development and operations teams to keep Echo running this well and I thank them very much for their time and dedication.

I would like to reiterate what Robin VE3FRH, out Immediate Past President, said last year. "If you are a member of any AMSAT, please feel completely free to use ECHO, if you are not a member then please join and encourage all users to join. Unfortunately satellites do not 'Grow on Trees' they are not free to launch, but there are quite a few users who feel that it is their right to use what we have provided.

We really don't want to introduce a 'members only' policy to satellite use. For more details of ECHO and its capability call the AMSAT-NA office to order a copy of Gould Smith's ECHO book, also available through AMSAT-UK (call Jim Heck).

AMSAT's support of Amateur Radio on human space flight missions excites the minds of many people through the ARISS program where we connect teachers and students directly to astronauts in space. I went to Goddard Space Flight Center to assist with an ARISS contact for a wide-eyed group of school teachers attending the NASA Explorer School satellite communication class. There were too many teachers to fit in the cramped confines of the ARISS command station so the group was split it two. Three of us took one group outside into a field to work the space station with an HT and an Arrow antenna. Using a separate HT to coordinate with AMSAT VP of Human Spaceflight, Frank Bauer, KA3HDO, in the control room the two groups of teachers got to ask their questions and get answers directly from the astronauts. The HT and Arrow worked perfectly - 100% "armchair copy." When I saw tears on the faces of the teachers and had a chance to pose for pictures and answer questions afterwards I was truly moved. That was very fine day.

I encourage you to contact your AMSAT leadership team directly with your questions and concerns. For best results, use the links and forms provided at:
http://www.amsat.org/amsat-new/AboutAmsat/officers.php.

Rick, W2GPS
AMSAT President

[ANS thanks Rick, W2GPS for the above information]

/EX

SB SAT @ AMSAT $ANS-212.08
SSETI Express Launch Delay

AMSAT News Service Bulletin 212.08
From AMSAT HQ SILVER SPRING, MD.
July 31, 2005
To All RADIO AMATEURS
BID: $ANS-212.08

The SSETI Express team been advised that the launch date for the COSMOS launch vehicle scheduled to carry the SSETI Express and a number of other satellites into space has been delayed for approximately one month. A revised launch date and time has not yet been confirmed.

Sorry but we will just have to keep our fingers crossed for a little longer!

[ANS thanks Graham, G3VZV for the above information]

/EX

SB SAT @ AMSAT $ANS-212.09
AO-27 Mode Schedule Program Available

AMSAT News Service Bulletin 212.09
From AMSAT HQ SILVER SPRING, MD.
July 31, 2005
To All RADIO AMATEURS
BID: $ANS-212.09

George, KA3HSW reports his son has finished the AO-27 mode schedule program. It is available for download if you would like to check it out. The program will show you AO-27's current mode, the UTC time of the next mode change, and the mode schedule for the next 24 hours, just as the ao27.org website does. It will also allow you to choose a future date from a calendar, and see the mode schedule for that date.

It is available in two versions: a Windows executable (EXE), or a JAR file which will run on ANY computer with the Java 2 runtime environment installed. The Windows EXE also requires that J2RE be installed: go to www.java.com. The JAR has been tested under Windows 2000 and XP, Suse and Red Hat Linux, and Mac OS9. Just put either file in a folder of your choice, and run it from there.

Please note that the first time you run it, you will get a "File not found" error as it looks for the epoch and schedule data files it needs. Just click "Update Data" under the File menu to retrieve the latest versions of these files from the ao27.org website, and it will run happily ever after.

You may download either version at:
http://home.earthlink.net/~ka3hsw/ao27
or follow the link on the www.ao27.org website to my son's download page.

[ANS thanks George, KA3HSW and his son for the above information]

/EX

SB SAT @ AMSAT $ANS-212.10
AMSAT Symposium

AMSAT News Service Bulletin 212.10
From AMSAT HQ SILVER SPRING, MD.
July 31, 2005
To All RADIO AMATEURS
BID: $ANS-212.10

Space! Ham radio goes there and you can join in the fun! Come to the AMSAT

Technical Symposium and Annual Meeting this fall in lovely Lafayette, Louisiana. Education and technical sessions begin on Friday, the 7th of October. Technical, field ops, and the IARU forum follow through Sunday the 9th of October. Enjoy the best of Acadian Louisiana with Friday's "Shrimp Boil," Saturday's Banquet with great prizes, and Sunday's "Swamp Tour."

Register on line! For more, see:
http://www.amsat.org/amsat-new/symposium/.

[ANS thanks the AMSAT Symposium team for the above information]

/EX

SB SAT @ AMSAT $ANS-212.11
PCSAT2 On ISS

AMSAT News Service Bulletin 212.11
From AMSAT HQ SILVER SPRING, MD.
July 31, 2005
To All RADIO AMATEURS
BID: $ANS-212.11

Since PCSAT2 is on ISS but will also operate as an autonomous payload sometimes as well, it has interest on both the SAREX and AMSAT-BB mailing lists.

To avoid dual posting, however, we will generally make most postings on the AMSAT-BB that pertain to PCSAT2 operations and only make postings on SAREX when they involve PCSAT2 coordination with manned activities.

Our understanding is that during the deployment of PCSAT2 and initial checkout, that the ARISS system will probably remain in PACKET mode when not otherwise in use since this minimizes the potential for mutual interference.

Deployment is still expected 3 Aug or possibly earlier. After 2 weeks of checkout, user transponders may be activated. See
http://www.ew.usna.edu/~bruninga/pec/pc2ops.html

[ANS thanks Bob, WB4APR for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Al Marote, WA1LBG
wa1lbg at amsat dot org

Via the ans mailing list at AMSAT.ORG courtesy of AMSAT-NA.

```
To unsubscribe, send "unsubscribe ans" to Majordomo@amsat.org




From -5227511570251678315
X-Google-Thread: 107ada,46e157b168062c01
X-Google-Thread: 10bf43,46e157b168062c01
X-Google-Thread: 10e8ad,46e157b168062c01
X-Google-Attributes: gid107ada,gid10bf43,gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news4.google.com!news.glorb.com!mpls-
transit-01.news.qwest.net!207.225.159.1.MISMATCH!feed.news.qwest.net!
sooner.brightok.net!not-for-mail
From: "M.S." <notvalid@email.add>
Newsgroups:
rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space
References: <42eea55f$0$91674$bb4e3ad8@newscene.com>
Subject: Re: FCC proposal = CB'ers with ham licenses.
Lines: 12
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.2527
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.2527
X-RFC2646: Format=Flowed; Original
Message-ID: <8BBHe.4$h4.875@sooner.brightok.net>
Date: Mon, 1 Aug 2005 22:17:21 -0500
NNTP-Posting-Host: 204.249.201.34
X-Trace: sooner.brightok.net 1122952644 204.249.201.34 (Mon, 01 Aug 2005 22:17:24
CDT)
NNTP-Posting-Date: Mon, 01 Aug 2005 22:17:24 CDT
Xref: g2news1.google.com rec.radio.amateur.misc:2865
rec.radio.amateur.policy:11076 rec.radio.amateur.space:201

What a fool!

"Roger Beep" <breaker.breaker@channel.nineteen> wrote in message
news:42eea55f$0$91674$bb4e3ad8@newscene.com...
> Ten-four?
>
> Yah, that's a big ten-four.
>
> All my channel 19 good-buddy CB friends are going to be so happy.
>




From -6709498708717114446
X-Google-Thread: 107ada,46e157b168062c01
X-Google-Thread: 10bf43,46e157b168062c01
X-Google-Thread: 10e8ad,46e157b168062c01
X-Google-Attributes: gid107ada,gid10bf43,gid10e8ad,public
```

```
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news3.google.com!news.glorb.com!news-
feed01.roc.ny.frontiernet.net!nntp.frontiernet.net!news.sisna.com!not-for-mail
Reply-To: "John Smith" <assemblywizard@gmail.com>
From: "John Smith" <assemblywizard@gmail.com>
Newsgroups:
rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space
References: <42eea55f$0$91674$bb4e3ad8@newscene.com>
Subject: Re: FCC proposal = CB'ers with ham licenses.
Lines: 24
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.2527
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.2527
X-RFC2646: Format=Flowed; Original
X-Antivirus: avast! (VPS 0530-2, 07/28/2005), Outbound message
X-Antivirus-Status: Not-Tested
Message-ID: <eOBHe.151$sZ7.2633801@news.sisna.com>
Date: Mon, 1 Aug 2005 20:31:14 -0700
NNTP-Posting-Host: 66.81.34.185
X-Complaints-To: newsabuse@ikano.com
X-Trace: news.sisna.com 1122953482 66.81.34.185 (Mon, 01 Aug 2005 21:31:22 MDT)
NNTP-Posting-Date: Mon, 01 Aug 2005 21:31:22 MDT
Organization: Internet News Service
X-Received-Date: Mon, 01 Aug 2005 21:31:22 MDT (news.sisna.com)
Xref: g2news1.google.com rec.radio.amateur.misc:2866
rec.radio.amateur.policy:11078 rec.radio.amateur.space:202
```

Roger Beep:

How is your partner doing Echo Mike? And, old Leen E. Ere?

Roger, you and your buddies ready to get up to speed, grab the BIG tickets and QSO with Art Bell on 3.840? He comes on around 10:30 PST, are your buddies anxious?

As popular as Art is with the ladies, I imagine the only reason the girls are grabbing their tickets is to chat with him...

Tell him to say hi to Wayne for me when ya chat him up...

John
"Roger Beep" <breaker.breaker@channel.nineteen> wrote in message
news:42eea55f$0$91674$bb4e3ad8@newscene.com...
> Ten-four?
>
> Yah, that's a big ten-four.
>
> All my channel 19 good-buddy CB friends are going to be so happy.
>

```
From 5292434987560490331
X-Google-Thread: 10e8ad,e49c50d1f87872b,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!newsread.com!newsprint.newsread.com!
newsfeed.stueberl.de!newsfeed01.sul.t-online.de!newsfeed00.sul.t-online.de!t-
online.de!newsfeed.t-com.hr!news1.t-com.hr!not-for-mail
From: "Neven Mrduljas" <Neven.Mrduljas@fina.hr>
Newsgroups: rec.radio.amateur.space
Subject: Tonna F9FT Satellite Yagi Antenna 20899
Date: Tue, 2 Aug 2005 13:27:01 +0200
Organization: Ye 'Ol Disorganized NNTPCache groupie
Lines: 10
Message-ID: <1122982120.440001@internet.fina.hr>
NNTP-Posting-Host: internet.fina.hr
X-Trace: ss405.t-com.hr 1122982120 26402 194.152.242.131 (2 Aug 2005 11:28:40 GMT)
X-Complaints-To: abuse@t-com.hr
NNTP-Posting-Date: Tue, 2 Aug 2005 11:28:40 +0000 (UTC)
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1506
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1506
Cache-Post-Path: internet.fina.hr!unknown@10.1.200.104
X-Cache: nntpcache 3.0.1 (see http://www.nntpcache.org/)
Xref: g2news1.google.com rec.radio.amateur.space:203
```

Does anybody have experience with this antenna in satellite operation? If yes, can this antenna be used for local operation on 2m because angle between planes of 2m and 70 cm antennas and ground surface is cca 45 degrees? Does anybody know the reason this antenna is tilted for cca 45 degrees? All experiences with this antenna are welcome!

73 de Neven, 9A5YY

```
From 1770057854333083369
X-Google-Thread: 10e8ad,783438635bd7af5c,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!proxad.net!proxad.net!
feeder1.cambrium.nl!feed.tweaknews.nl!news.mediascape.de!elnk-atl-nf1!
newsfeed.earthlink.net!stamper.news.atl.earthlink.net!
newsread2.news.atl.earthlink.net.POSTED!46041641!not-for-mail
From: "JoAnne Maenpaa" <wb9jej_no-spam@earthlink.net>
Newsgroups: rec.radio.amateur.space
Subject: WSR-212 AMSAT Weekly Satellite Report
Lines: 1165
X-Priority: 3
X-MSMail-Priority: Normal
```

```
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Message-ID: <AJJHe.12690$oZ.2682@newsread2.news.atl.earthlink.net>
Date: Tue, 02 Aug 2005 12:32:32 GMT
NNTP-Posting-Host: 69.3.103.43
X-Complaints-To: abuse@earthlink.net
X-Trace: newsread2.news.atl.earthlink.net 1122985952 69.3.103.43 (Tue, 02 Aug 2005
05:32:32 PDT)
NNTP-Posting-Date: Tue, 02 Aug 2005 05:32:32 PDT
Organization: EarthLink Inc. -- http://www.EarthLink.net
Xref: g2news1.google.com rec.radio.amateur.space:204

This report is organized into 4 parts.
Part 1 - operational analog amateur satellites.
Part 2 - operational digital amateur satellites.
Part 3 - non - operational satellites
Part 4 - proposed satellites

SB SAT @ AMSAT <W8ISS $ANS-212.S1
WSR 212 Part 1 07/31/2005

AMSAT NEWS SERVICE BULLETIN 212.S1 FROM AMSAT HQ
SILVER SPRING, MD, JULY 31, 2005
TO ALL RADIO AMATEURS
BID: $ANS-212.S1

VO-52 HAMSAT
Catalog Number: 28650
Launch Date: May 05,2005

Status: On orbit
Current Mode: U/V

Proposed frequencies:
-------------------
Indian transponder:
Uplink  : 435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW
Beacom  : 145.940MHz continue carier signal

Dutch transponder:
Uplink  : 435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW
Beacon  : 145.860MHz 12WPM with CW message
[07242005]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Mode: PBBS - OFF
      FM REPEATER - V/U HIGH POWER
```

Analog voice downlink: 435.300 MHz FM
   435.150 mhz FM
Analog voice uplink: 145.880 mhz FM
   145.920 MHz FM 67Hz PL tone
                       1268.700 MHz FM 67Hz PL tone

Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
                       2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast
   Protocol (PBP)

Broadcast: PECHO-11
BBS: PECHO-12

Current scheduled operating modes:
1 Aug
FM Repeater, V/U, High Power
Uplink: 145.920 mhz FM, 67 hz PL Tone
Downlink 435.300 mhz FM

15 Aug
FM Repeater, V/S
Uplink: 145.920 mhz FM, 67hz PL Tone
Downlink 2401.200 mhz FM

22 Aug
FM Repeater, V/U
Uplink: 145.920 mhz FM, 67 hz PL Tone
Downlink 435.300 mhz FM
9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 435.150 mhz FM, 9k6 PBP Digital

[ANS-WSR thanks Mike, KE4AZN for the above information]
[07312005]

=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Uplink: 145.850 MHz (67.0 Hz PL tone) (See below for operating
          procedures)
Downlink: 436.795 MHz

There have been unconfirmed reports on the amsat-bb remailer that SO-50 has shifted downlink frequency as much as 5khz up. This both from Europe.

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The
order of operation is thus: (allow for Doppler as necessary)

1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10 minute timer.
[09122004]

=====

FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: OPERATIONAL

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplink: 145.850 145.870 145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

John, N4QWL reports on July 16th, 2005:

Last evening I had a AOS to LOS qso with WI2W. FO-29 came up at 01:17z here in FM07 and I found WI2W and we chatted until 01:33z. The satellite was at 2 degrees elevation when I finally heard him start to crackle a bit. What a great QSO! To think that I watched this bird launch back in 1996 and it is still working so well is a real thrill. I believe I still have the video. I might just look for it and watch it again. Boy do I love this satellite stuff!
Look for you all up there.

Please send the reception reports to lab2 'at' jarl.or.jp.
Please use the subject line: 'FO-29 reception report'.

Mineo, JE9PEL, has an FO-29 satellite telemetry analysis program that will automatically analyze all digital telemetry from the satellite (such as current, voltage and temperature). FO29CWTE is available at:
http://www.ne.jp/asahi/hamradio/je9pel/
[ANS-WSR wishes to thanks John, N4QWL for this week's report]
[07172005]

=====

AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Uplink: 145.850 MHz FM
Downlink: 436.795 MHz FM

The latest information on AO-27 from control operator Michael Wyrick,
N3UC (former N4USI), can be found at:
http://www.ao27.org

An AO-27 question-and-answer page is available on the AMSAT-NA web
site, with updates by Ray, W2RS. The URL is:
http://www.amsat.org/amsat/intro/ao27faq.html

[ANS-WSR thanks John, K6YK, for this week's AO-27 report]
[08292004]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Semi-operational in sunlight.
Return to active status: June 21,2002

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
            432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A
            145.975 to 145.925 MHz CW/USB Mode B
Beacon: 29.502 MHz, 145.972 MHz, 435.1 MHz, 2304.1 MHz

Emily, W0EEC has created a website to allow the users of AO-7 to record
contacts, observations and use of the satellite more effectively at:
http://www.emilyshouse.com/experthams/ao7/main.php
This includes the ability to log contacts.

Tim, K3TZ has written a program to decode AO-07 telemetry.
The program can be downloaded at:
http://www.qsl.net/k3tz/files/K3TZ_AO-07_Telemetry_Decoder_0.5.zip

For more AO-7 info:
http://www.amsat.org/amsat/sats/n7hpr/ao7.html
[11142004]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: U/V CROSS-BAND REPEATER
Digipeater: Inactive

The current Expedition 11 crew is:
Commander Sergei Krikalev
Flight Engineer John Phillips

Worldwide packet uplink: 145.990 MHz FM

Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM
Doppler Shift is 10 KHz

Russian callsigns: RS0ISS, RZ3DZR
USA callsign: NA1SS
Packet station mailbox callsign: RS0ISS-11
Packet station keyboard callsign: RS0ISS-3
Digipeater callsign: ARISS

This off the ARISS webpage:
< http://www.rac.ca/ariss/oindex.htm#New%20ARISS%20Operations > :
The ARISS program is pleased to announce that the amateur radio equipment aboard the International Space Station is now operating in cross-band repeat mode. We realize that many of you will miss the packet-operating mode. However, cross-band repeat allows further experimentation of the ISS amateur radio system

The downlink for this operating mode remains the same, so listen for the station on 145.80 MHz. The new uplink frequency is 437.80 MHz. All frequencies are subject to Doppler shifting. For further information on working satellites and adjusting for Doppler shift, please review Emily Clark's (W0EEC) excellent presentation on AMSAT's website:
http://www.amsat.org/amsat-new/information/faqs/Intro_sats.pdf

The ISS daily crew schedule can be found at:
http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line is NOT translated from Russian and posted.

More information is available at:
http://www.rac.ca/ariss
http://spaceflight.nasa.gov/station/reference/radio/
http://www.marexmg.org/fileshtml/unprotopage.html
http://www.issfanclub.com
http://oscar.dcarr.org/
[07242005]
NNNN
/EX

SB SAT @ AMSAT <W8ISS $ANS-212.S2
WSR 212 Part 2 07/31/2005

AMSAT NEWS SERVICE BULLETIN 212.S2 FROM AMSAT HQ
SILVER SPRING, MD, JULY 31, 2005

TO ALL RADIO AMATEURS
BID: $ANS-212.S2

AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Mode: PBBS - OFF
FM REPEATER - V/U HIGH POWER

Analog voice downlink: 435.300 MHz FM
435.150 mhz FM
Analog voice uplink: 145.880 mhz FM
145.920 MHz FM 67Hz PL tone
1268.700 MHz FM 67Hz PL tone

Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast
Protocol (PBP)

Broadcast: PECHO-11
BBS: PECHO-12

Current scheduled operating modes:
1 Aug
FM Repeater, V/U, High Power
Uplink: 145.920 mhz FM, 67 hz PL Tone
Downlink 435.300 mhz FM

15 Aug
FM Repeater, V/S
Uplink: 145.920 mhz FM, 67hz PL Tone
Downlink 2401.200 mhz FM

22 Aug
FM Repeater, V/U
Uplink: 145.920 mhz FM, 67 hz PL Tone
Downlink 435.300 mhz FM
9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 435.150 mhz FM, 9k6 PBP Digital

[ANS-WSR thanks Mike, KE4AZN for the above information]
[07312005]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Non-Operational?????

Uplink/downlink: 145.827 MHz 1200 baud AX.25 AFSK via W3ADO-1
Aux/Uplink: 435.250 MHz 9600 baud via PCSAT-2 (off)
APRS Downlink: 144.390 MHz (Region 2)

PCSat is a 1200-baud APRS digipeater designed for use by stations using hand-held or mobile transceivers. Downlinks feed a central web site at: http://pcsat.aprs.org

The APRS-equipped PCSat was built by midshipmen from the U.S. Naval Academy under the guidance of Bob Bruninga, WB4APR.
[07242005]
=====
CUTE-1
Catalog number: 27844
Launched: June 30,2003

Status: Operational

Uplink: ?
Downlink: 436.8375 CW
              437.4700 1200 FM ax25 or SRLL (ACTIVE only near Japan ?)
Cliff, K7RR reports:
In the latest Weekly Satellite Report, CUTE 1, #27844 is listed as OPERATIONAL?
Indeed it is very operational as a CUBESAT sending CW telemetry on 436.8345 MHz. At the July 7 2005, 23:45:20 pass over the Western USA:
CUTE 1 6B A4 xx 7F D7 66A8 4702 FF FF7C 65
CUTE 1 6C A6 59 80 D9 66A8 4702 FF FE7C B6

The June 30th KEPS were within ten seconds of AOS and LOS. It is an very good object to practice tracking as the orbit and transmitter power are similar to proposed CUBESATS awaiting launch this December. As a check for Doppler correction, the lack of change in tone is an excellent indicator.

CUTE 1 is a Japanese (Tokyo Institute of Technology) one kilogram nanosatellite that was launched by a Rokot rocket from Plesetsk at 14:15 UT on 30 June 2003. It carries a 100 mW beacon at 436.8375 MHz. Initial orbital parameters were period 101.4 min, apogee 831 km, perigee 819 km, and inclination 98.7?.

For further info about CUTE-1 goto:
http://lss.mes.titech.ac.jp/ssp/cubesat/operation/Schedule_e.html

[ANS WSR wishes to thank Cliff, K7RR, for this week's information]
[07242005]
=====
GO-32 TECHSAT-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Downlink: 435.225 MHz FM (9600-baud FSK)

(435.325 n/a - temperature problems)
Uplinks: 145.850, 145.890, 145.930 FM
1269.700, 1269.800, 1269.900 FM
Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[03132005]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Operational

Uplink: 145.850 or 145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz
Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[05152005]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Semi-operational, the digipeater command is on and open for APRS users.

Uplink: 145.90 145.92 145.94 145.96 MHz FM
(using 1200-baud Manchester FSK)
Downlink: 437.026 MHz SSB (1200-baud PSK)
Mode-S Beacon: 2401.1428 MHz
Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

A WOD collection of current graphics along with general information and telemetry samples can be found at:
http://www.telecable.es/personales/ea1bcu
[05092004]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational?

Telemetry Downlink: 145.826 MHz. FM (1200-baud AFSK).
approx. 10 days ON, 10 days OFF
Mode-S Beacon: 2401.500 MHz. ... OFF
UHFBeacon: 435.025 MHz. ... OFF

This from Mark, Ku7z:
I heard and recorded UO-11 on its last pass over my QTH here at DN41af at approx 0145 utc July 30, 2005.

Please Listen up for it on 145.826.

And let Clive G3CWV know at g3cwv@amsat.org

Any reception reports would be appreciated. Please reply direct to Clive G3CWV (g3cwv@amsat.org), or post reports to AMSAT-BB.

More information on UO-11 OSCAR-11 can be found at:
http://www.users.zetnet.co.uk/clivew/

MPEG3 files can be found here at Mineo, JE9PEL website:
http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm

[ANS thanks Mark, Ku7z and Mineo, JE9PEL for the above information]
[07312005]
NNNN
/EX

SB SAT @ AMSAT <W8ISS $ANS-212.S3
WSR 212 Part 3 07/31/2005

AMSAT NEWS SERVICE BULLETIN 212.S3 FROM AMSAT HQ
SILVER SPRING, MD, JULY 31, 2005
TO ALL RADIO AMATEURS
BID: $ANS-212.S3

THE FOLLOWING ARE IN ORBIT BUT ARE
NON-OPERATIONAL AT THIS TIME:

POSAT-1 PO-28
Catalog Number: 22829
Launched : September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 435.075 MHz
435.275 MHz

Uplink: 145.925 MHz

145.975 MHz

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

Amateurs Get "New"FM Satellite

It was announced at the AMSAT-UK International Space Colloquium in Guildford, England by the AMSAT-UK secretary Jim Heck G3WGM that Amateurs will be getting a new FM satellite to use.

PO-28 (POSAT-1) was launched on September 25th 1993. It's primary purpose was for commercial use on frequencies outside the Amateur bands but it also had the capability to operate on the Amateur bands. After prolonged negotiations it has been agreed that the satellite can be switched permanently to the Amateur frequencies.

It is expected that the process to change over the operation of the satellite from Commercial to Amateur use will take a couple of weeks.

PO-28 (POSAT-1) was built at the University of Surrey within a collaborative programme in satellite technology between a consortium of Portuguese academia and Industry (LNETI, EFACEC, OGMA, MARCONI, ALCATEL, IST, UBI & CEDINTEC) and the Univerity of Surrey, managed through Surrey Satellite Technology Ltd.

Uplink Frequencies: 145.925 and 145.975 MHz
Downlink Frequencies: 435.075 and 435.275 MHz

More information of POSAT-1 can be found at:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
http://www.amsat.org/amsat/sats/n7hpr/po28.html
[ANS-WSR wishes to thanks Trevor, M5AKA for this week's information.]
[07312005]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launched: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB
Beacon: 145.810 MHz (unmodulated carrier)

AO-10 has been locked into a Mode-B, 70-cm uplink and 2-meter downlink for several years.

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: Non-operational

Uplink: 145.875 145.900 145.925 145.950 MHz FM (1200-baud)
Downlink: 435.812 MHz SSB
Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Alberto E. Zagni - I2KBD reports on 02/13/05
The spacecraft is in MBL (safe mode) and is trasmitting just 6 channels
of telemetry. Temperatures and voltage are nominal, but there seems to
be a problem with the onboard receiver, refusing to accept commands.
The spacecraft was launched in 1993, thus nearing 12 years in orbit...

Best regards
Alberto E. Zagni - I2KBD
ITAMSAT Mission Director

More information of IO-26 can be found at:

http://joshua.micronet.it/english/itamsat/itamsathome.html
http://www.amsat.org/amsat/sats/n7hpr/io26.html
www.itamsat.org

[02132005]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB
Beacon: 29.408 MHz
Robot: 29.454 MHz
[05232004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB

```
Beacon:     145.860 MHz
Robot:      145.908 MHz
[05232004]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink 145.975 MHz FM
Downlink 435.070 MHz FM
[05092004]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink:             145.900 FM 9600-baud FSK
Downlink:           435.120 MHz FM
Broadcast Callsign: UOSAT5-11
BBS:                UOSAT5-12
[01092005]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational?

Uplink:      145.858 to 145.898 MHz CW/USB
Downlink:     29.354 to  29.394 MHz CW/USB
Beacon:       29.352 MHz (intermittent)
SSB meeting frequency:  29.380 MHz (unofficial)

John, KD6PAG reports on June 16, 2004 to ANS:
RS-15 beacon seemed to be back in the mode where it's a tone about 5 seconds
off and then 5 seconds on this morning.

ANS is looking for more confirmations of RS-15 coming back.

[ANS thanks John, KD6PAG for RS-15 information]
[06202004]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplink:             145.84 145.86 145.88 145.90 MHz FM
```

```
                    (using 1200-baud Manchester FSK)
CW downlink:        437.125 MHz
Digital downlink:   437.150 MHz SSB (RC-BPSK 1200-baud PSK)
Broadcast Callsign: LUSAT-11
BBS:                LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[05232004]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Uplink:     145.90 to 146.00 MHz CW/LSB
Downlink:   435.80 to 435.90 MHz CW/USB
Beacon:     435.795

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[08152004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink:             145.900 MHz FM (9600-baud FSK)
Downlink:           435.170 MHz FM
Broadcast Callsign: HL01-11
BBS:                HL01-12

Jim, AA7KC, reports that KO-23's downlink transmitter continues in a
non-operational status.
[05092004]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink:             145.980 MHz FM (9600-baud FSK)
Downlink:           436.500 MHz FM
Broadcast Callsign: HL02-11
BBS:                HL02-12
[05092004]
=====
PO-34 PANSAT
Catalog number: 25520
```

Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink frequency (listed on the PanSat web site) 436.500 MHz

The satellite is not available for general uplink transmissions.

The Naval Postgraduate School developed PanSat. At the time of launch, PanSat spread-spectrum digital transponders were to be available to Amateur Radio operators along with software to utilize this technology.

The satellite is still operating, however, the spread spectrum packet radio portion never took place. The spacecraft is now beyond it's initial 2-year mission life, but telemetry records are still being downloaded.

For more information, visit the official PanSat web site at:
http://www.sp.nps.navy.mil/pansat/
[05092004]

=====

SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm

[ANS has no further information]
[05232004]

=====

SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

STatus: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
          Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
         Mode J Digipeater: 145.825 MHz and 145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/

```
[08082004]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink:             145.960 MHz (9600-baud FSK)
Downlink:           437.025 MHz 437.400 MHz
Broadcast Callsign: UO121-11
BBS:                UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA
web site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[05092004]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplink      V-band    145.840 -  145.990 MHz CW/LSB
            U-band    435.550 -  435.800 MHz CW/LSB
           L1-band   1269.250 - 1269.500 MHz CW/LSB
           L2-band   1268.325 - 1268.575 MHz CW/LSB
           S1-band   2400.350 - 2400.600 MHz CW/LSB
Downlink:  S2-band   2401.225 - 2401.475 MHz CW/USB
           K-band 24,048.010 - 24,048.060 MHz CW/USB
Beacon:    2401.323, 24,048.035
[05232004]
-----
SO-42  SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational
 Downlink:           437.075 MHz
Broadcast Callsign: SASAT2-11
BBS:                SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[08152004]
=====
SO-41  SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational
```

```
Uplink:             145.850 MHz
Downlink:           436.775 MHz
Broadcast Callsign: SASAT1-11
BBS:                SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[08152004]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink:   145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is  welcome to use the digipeating/APRS features of Sapphire,
callsign KE6QMD, as per the user service agreement located at the following
URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Semi-operational.

Uplink 435.275 1200-baud AFSK
Downlink 145.825 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

AO-49 (SAFIR-M) is a German amateur radio payload onboard the small German
scientific satellite "RUBIN-2".

AO-49 was built by the German amateur radio association "AATiS
e.V." (German
acronym for "Arbeitskreis Amateurfunk und Telekommunikation in der Schule",
which means: 'working group for amateur radio anand telecommunications in
schools'). AO-49 is designed as a "store and broadcast" system for APRS
based messages, dedicated for the use of schools in combination with the
existing WX-Net and planned buoy experiments in Germany.

No transmissions detected since the 1st of February 2003! It appears
AO-49 is not properly aligned to illuminate the solar panels. This
should end soon. Due to its orbit, AO-49 will be in a phase without
eclipses until 13Feb03.

Martin DG8UAU has written a small software program "SAFIR-M Decoder" to
```

allow decoding of the received DATA0 frames. It is available at:
http://amend.gmxhome.de in the section Aktuelles.

Details on AO-49 (SAFIR-M) can be found at:
http://amend.gmxhome.de

Information about AATiS e.V. is available at:
http://www.aatis.de
[05092004]
NNNN
/EX

SB SAT @ AMSAT <W8ISS $ANS-212.S4
WSR 212 Part 4 07/31/2005

AMSAT NEWS SERVICE BULLETIN 212.S4 FROM AMSAT HQ
SILVER SPRING, MD, JULY 31,2005
TO ALL RADIO AMATEURS
BID: $ANS-212.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE
PROPOSED FOR LAUNCH AT THIS TIME:

UCISAT ?O-??
Catalog number:
Proposed Launch Date: October 31, 2005

Status: Under Construction

Downlink: Submission in Progress
Uplink: Submission in Progress
Callsign: Submission in Progress

This from Matt Bennett, KF6RTB, UCISAT Communications Team Member:

Our website is www.ucisat.net .This is a new website, however, and doesn't have the "Status" section active yet. Because of the growing interest in our project, I'll push our webmaster to create updates (hopefully) on a week-to-week basis. For now, the current status of the mission is as follows:

-Expected Launch Date: October 31st, 2005
-Frequency Allocation: Submission in Progress
-Construction Status: Sub-Assembly
[WSR to thank Matt Bennett, KF6RTB, for this week's report.]
[01302005]
=====
SSETI ?O-??
Catalog Number:
Proposed Launch Date: LATE 2005

Status: AWAITING LAUNCH

Graham, G3VZV reports:

We have now been advised that the revised launch date for SSETI Express and the other satellites on the DMC3 COSMOS launch has been confirmed as September
27th - so please keep those fingers crossed!

SpaceDaily has a report about SSETI at:
http://www.spacedaily.com/news/internet-04zzzu.html

You can find more info about SSETI at:
http://sseti.gte.tuwien.ac.at/WSW4/

Looking at the website for the SSETI Express webcam
http://sseti.gte.tuwien.ac.at/WSW4/webcam.htm

[ANS thanks Graham, G3VZV for the above information]
[07312005]
=====
PCSAT2 ?0-??
Catalog Number:
Proposed Launch Date: August 1, 2005

Status: Onboard International Space Station

Bob, WB4APR reports:
Since PCSAT2 is on ISS but will also operate as an autonomous payload sometimes as well, it has interest on both the SAREX and AMSAT-BB mailing lists.

To avoid dual posting, however, we will generally make most postings on the AMSAT-BB that pertain to PCSAT2 operations and only make postings on SAREX when they involve PCSAT2 coordination with manned activities.

Our understanding is that during the deployment of PCSAT2 and initial checkout, that the ARISS system will probably remain in PACKET mode when not otherwise in use since this minimizes the potential for mutual interference.

Deployment is still expected 3 Aug or possibly earlier. After 2 weeks of checkout, user transponders may be activated. See:
http://www.ew.usna.edu/~bruninga/pec/pc2ops.html

The PCSAT2 mission is intended as an opportunity to augment existing ARISS communications experiments with an external autonomous communications payload. In this regard, it has several potential uses:

* A UI-Digipeater to help ease congestion on the currently shared ARISS PMS (Packet Mail system)

* A PSK-31 transponder for multi-user communications to improve accessibility for schools and ARISS outreach programs.

* An FM Voice repeater for full duplex crew communications to facilitate crew-to-school ARISS contacts.

* Routine Telemetry on the spacecraft systems

For more information and pictures visit the PCSAT2 website at
http://www.ew.usna.edu/~bruninga/pcsat2.html

[ANS thanks Bob, WB4APR for the above information]
[07312005}
=====
PHASE 3E ?O-??
Catalog Number:
Proposed Launch Date: Early 2006

Status: Under Construction

William Leijenaar, PE1RAH reports on July 16th, 2005:

Hi AMSATs,

I always like to inform the AMSATs public about my P3e work, but unfortunatly due to
some reasons there was not much time and nothing much to say...

However, now I am happy to announce that the my MODE-UV transponder design for P3e is ready at the P3e integration place in Marburg (Germany). About 4 weeks ago I was in Marburg before, where the transponder has been checked. Unfortunatly some unsure things were found in the design. The unsure things were about long term stability after many years in space.

At home in The Netherlands, I changed the design with some minor changes to have a secure long term stability. Finally I tested the transponder again and it performed well within the specifications. Again something learned for future transponder designs :o)

Last Wednesday I drove to AMSAT-DL P3e integrations place in Marburg again, and have my transponder again checked. In the beginning it seemed that the 70cm receiver lost 10dB in sensetivity. After some more measurements we find out that it was due to a bad attenuator we used for protection at the input.

Together with Karl Meinzer we looked for any problems, but so far we could see (without HELAPS) all was okay. In the afternoon I went back home again, this time without the MODE-UV.

Now the MODE-UV will get a new home, the home of P3e... :o)
I hope the transponder will work like its elder sister in AO-10, and you all will enjoy it for many years...

It was lots of work to get it this far, but I know it is for a good purpose...

For the latest project status update please visit the AMSAT-DL
P3-E web page:
http://www.amsat-dl.org/p3e/

```
[ANS-WSR wishes to thank William Leijenaar, PE1RAH for this week's report]
[07172005]
=====
CP1 ?o-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: N6CP
Proposed Transmit Frequency: 436.845
[03272005]
=====
CP2 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.325
[03272005]
=====
HAUSAT1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: D90HP
Proposed Transmit Frequency: 437.465
[03272005]
=====
ICE Cube 1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: W2CXM
Proposed Transmit Frequency: 437.305
[03272005]
=====
ICE Cube 2 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: N2VR
Proposed Transmit Frequency: 437.425
[03272005]
=====
ION ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.505
[03272005]
=====
KUTEsat ?O-??
```

```
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: KC0RMW
Proposed Transmit Frequency: 437.385
[03272005]
=====
MEROPE ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: K7MSU-1
Proposed Transmit Frequency: 145.980
[03272005]
=====
nCUBE1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
       2407.25
[03272005]
=====
RINCON ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
        437.345
[03272005]
=====
SACRED ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
[03272005]
=====
SACRED ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
[03272005]
=====
SEEDS ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005
Proposed Callsign: JQ1YGU
Proposed Transmit Frequency: 437.485
[03272005]
=====
Mea Huaka ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.405
[03272005]
NNNN
/EX
```

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

```
Voice:  301-589-6062
        888-322-6728
FAX:    301-608-3410
```

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/amsat/listserv/menu.html

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satelite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the
memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen,
G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

From -1215668225743136680
X-Google-Thread: 10e8ad,16570c59b7b5817f,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!news.maxwell.syr.edu!
border1.nntp.dca.giganews.com!nntp.waia.asn.au!198.32.212.248.MISMATCH!
nnrp.waia.asn.au!not-for-mail
From: "Andrew Rich" <vk4tec@hotmail.com>
Newsgroups: rec.radio.amateur.space
Subject: someone help me build a QFH ?
Date: Wed, 3 Aug 2005 19:23:49 +1000
Organization: WA Internet Association
Lines: 2
Message-ID: <dcq20b$nhr$1@nnrp.waia.asn.au>
NNTP-Posting-Host: 202.154.92.79
X-Trace: nnrp.waia.asn.au 1123060555 24123 202.154.92.79 (3 Aug 2005 09:15:55 GMT)
X-Complaints-To: usenet@nnrp.waia.asn.au
NNTP-Posting-Date: Wed, 3 Aug 2005 09:15:55 +0000 (UTC)
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.2180
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.2180
X-RFC2646: Format=Flowed; Original
Xref: g2news1.google.com rec.radio.amateur.space:205

From 6666932472964947142
X-Google-Thread: 107ada,46e157b168062c01
X-Google-Thread: 10bf43,46e157b168062c01
X-Google-Thread: 10e8ad,46e157b168062c01
X-Google-Attributes: gid107ada,gid10bf43,gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news2.google.com!newsread.com!news-xfer.newsread.com!
news.glorb.com!cycny01.gnilink.net!cyclone1.gnilink.net!gnilink.net!cyclone.rdc-
nyc.rr.com!news-out.nyc.rr.com!twister.nyc.rr.com.POSTED!not-for-mail
From: Fred Garvin <garv@elaborate.net>
Newsgroups:

```
rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space
Message-ID: <200508042126063709%garv@elaboratenet>
References: <42eea55f$0$91674$bb4e3ad8@newscene.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1; format=flowed
Content-Transfer-Encoding: 8bit
Subject: Re: FCC proposal = CB'ers with ham licenses.
User-Agent: Unison/1.6.2
Lines: 15
Date: Fri, 05 Aug 2005 01:16:21 GMT
NNTP-Posting-Host: 24.161.95.233
X-Complaints-To: abuse@rr.com
X-Trace: twister.nyc.rr.com 1123204581 24.161.95.233 (Thu, 04 Aug 2005 21:16:21
EDT)
NNTP-Posting-Date: Thu, 04 Aug 2005 21:16:21 EDT
Organization: Road Runner - NYC
Xref: g2news1.google.com rec.radio.amateur.misc:2973
rec.radio.amateur.policy:11445 rec.radio.amateur.space:206

On 2005-08-01 18:44:02 -0400, Roger Beep
<breaker.breaker@channel.nineteen> said:

> Ten-four?
>
> Yah, that's a big ten-four.
>
> All my channel 19 good-buddy CB friends are going to be so happy.


Get a life you asshat

--
PCs, like air-conditioners, are useless when you open Windows.




From 8198537710517659317
X-Google-Thread: 107ada,46e157b168062c01
X-Google-Thread: 10bf43,46e157b168062c01
X-Google-Thread: 10e8ad,46e157b168062c01
X-Google-Attributes: gid107ada,gid10bf43,gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!newsread.com!news-xfer.newsread.com!
news-feed01.roc.ny.frontiernet.net!nntp.frontiernet.net!news01.roc.ny.POSTED!
fd24bd7a!not-for-mail
From: bigamps <bigamps@even.louder.net>
User-Agent: Mozilla Thunderbird 1.0.6 (Windows/20050716)
X-Accept-Language: en-us, en
MIME-Version: 1.0
Newsgroups:
rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space
Subject: Re: FCC proposal = CB'ers with ham licenses.
References: <42eea55f$0$91674$bb4e3ad8@newscene.com>
```

```
In-Reply-To: <42eea55f$0$91674$bb4e3ad8@newscene.com>
Content-Type: text/plain; charset=ISO-8859-1; format=flowed
Content-Transfer-Encoding: 7bit
Lines: 9
Message-ID: <0TIIe.3690$j21.1123@news01.roc.ny>
X-Complaints-To: abuse-news@frontiernet.net
X-Trace:
52616e646f6d49568b0952fbcda1ed5302358130d8a8b82d22194d9657315878f8e25786ca358ad145
cf0bc64ca5af2743a0ad6e55474b7acdd576d7dd129b04463ebf2f803eeb49116b7757dc3f6f23c8a4
f92605ed49e30ba24db9d53e27dc35922d9f93035f1bf824d12e7ce21879
X-Abuse-Info: Please be sure to forward ALL headers so that we may process your
complaint properly.
NNTP-Posting-Date: Fri, 05 Aug 2005 12:23:24 UTC
Date: Fri, 05 Aug 2005 12:23:24 GMT
Xref: g2news1.google.com rec.radio.amateur.misc:2984
rec.radio.amateur.policy:11476 rec.radio.amateur.space:207

Roger Beep wrote:
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>
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>
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In all likelihood it'll improve things on the bands when the whiny old
timers finally give up and go away.


From -6960256589772414904
X-Google-Thread: 10e8ad,78cb2fe534fe7612
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news4.google.com!news.glorb.com!
border1.nntp.dca.giganews.com!nntp.giganews.com!local01.nntp.dca.giganews.com!
nntp.bright.net!news.bright.net.POSTED!not-for-mail
NNTP-Posting-Date: Thu, 17 Mar 2005 16:39:25 -0600
Message-ID: <423A06FB.4010308@bloomer.net>
Date: Thu, 17 Mar 2005 22:38:51 +0000
From: Scott <acepilot@bloomer.net>
User-Agent: Mozilla/5.0 (Windows; U; Windows NT 5.0; en-US; rv:1.7.2) Gecko/
20040804 Netscape/7.2 (ax)
X-Accept-Language: en-us, en
MIME-Version: 1.0
Newsgroups: rec.radio.amateur.space
To: Mike <mugnuts@hotmail.com>
Subject: Re: Satellite Dish Question
References: <4PCdndE-aNf8ZKXfRVn-iQ@comcast.com>
In-Reply-To: <4PCdndE-aNf8ZKXfRVn-iQ@comcast.com>
Content-Type: text/plain; charset=us-ascii; format=flowed
Content-Transfer-Encoding: 7bit
Lines: 23
NNTP-Posting-Host: 64.33.199.218
X-Trace: sv3-O9GkfvC4W8yyFW2lM9527whtJcgFzjkv6UYK7uTtKDpNYtR1a/
```

```
Ea7j2wt6i1bhLfBKgE5+CH0s5eynz!
8PzMKoE3GwRvQ327GfaHKYPmXw2BfNhNOW4x+nB+Pli0NEbohV30zX/FM/0wdoE0zQ==
X-Complaints-To: abuse@bright.net
X-DMCA-Complaints-To: abuse@bright.net
X-Abuse-and-DMCA-Info: Please be sure to forward a copy of ALL headers
X-Abuse-and-DMCA-Info: Otherwise we will be unable to process your complaint
properly
X-Postfilter: 1.3.32
Xref: g2news1.google.com rec.radio.amateur.space:620
```

YES! A bunch of us modded and use them on 10.368 GHz. Basically, remove LNB circuit board, drill out waveguide to 0.75 inch, add a chassis mount SMA connector on one side about 1/4 wavelength up from a plug inserted into the back end of the drilled out waveguide. You might want to get on our email list. It's the Northern Lights Radio Society.
  http://www.nlrs.org/

Of course, you'll need something like a 2M all mode rig and a 10 GHz transverter. You can get transverters at http://www.downeastmicrowave.com

Scott
N0EDV

Mike wrote:
> I have just acquired a new Direcway satellite dish with the 10.9 to 12.5 GHz
> LNB & amplifier. I'm wondering if anyone has modified one of these devices
> for use on the amateur bands? If so, what options are available?
>
>
> Mike
>
>

```
From 5060745062455064610
X-Google-Thread: 10e8ad,e1c9d4a4b8aaf580,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news4.google.com!news.glorb.com!cox.net!news-
xfer.cox.net!p01!fed1read07.POSTED!53ab2750!not-for-mail
From: "Phaselock Ohms" <PL@bakerstreet.com>
Newsgroups: rec.radio.amateur.space
Subject: Italian Student needs advise
Lines: 27
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.2180
X-RFC2646: Format=Flowed; Original
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.2180
Message-ID: <vTB_d.56679$xt.44174@fed1read07>
Date: Fri, 18 Mar 2005 06:48:58 -0800
NNTP-Posting-Host: 68.7.146.8
```

X-Complaints-To: abuse@cox.net
X-Trace: fed1read07 1111157339 68.7.146.8 (Fri, 18 Mar 2005 09:48:59 EST)
NNTP-Posting-Date: Fri, 18 Mar 2005 09:48:59 EST
Organization: Cox Communications
Xref: g2news1.google.com rec.radio.amateur.space:621

I received this from an Italian student, tis out of my area of expertise.
Can some gurus here help him ?

His e-mail address is
damiano.accurso@studio.unibo.it

Thanks RD

"I write to you this mail because I would need your help if possible. I
premise
mine few experience in subject. I'm an Italian student of engineering and
I'm
working on the creation of a ground station in S-band for the university of
Bologna (Forli). it will serve for the microsatellite that we are building
(denominated AlmaSat) and that we will be launched in the future.
My problem is to simultaneously check two radios Icom 910H through Pc, the
first one for UHF/VHF and the second S-band-UHF/UHF.
the programs that I'm using are Orbitron, Wisp dde and ASR for the control
of
the rotor G5500 of the Yaesu.
Is there a program as Wispdde that can check both through Orbitron?
Excuse me for my bad English.
I thank you for your help.
Good-bye Damiano Accurso"

From 3775665571246261544
X-Google-Thread: 10e8ad,78cb2fe534fe7612
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news3.google.com!news.glorb.com!
border1.nntp.dca.giganews.com!nntp.giganews.com!local01.nntp.dca.giganews.com!
nntp.comcast.com!news.comcast.com.POSTED!not-for-mail
NNTP-Posting-Date: Sat, 19 Mar 2005 12:17:06 -0600
From: "Mike" <mugnuts@hotmail.com>
Newsgroups: rec.radio.amateur.space
References: <4PCdndE-aNf8ZKXfRVn-iQ@comcast.com> <423A06FB.4010308@bloomer.net>
Subject: Re: Satellite Dish Question
Date: Sat, 19 Mar 2005 11:17:04 -0700
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1478
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1478
Message-ID: <Wp-dnbX1544_8aHfRVn-pg@comcast.com>

```
Lines: 45
NNTP-Posting-Host: 67.182.194.33
X-Trace: sv3-o1sNKlU3jDYVl1egChESMEdgjtZq9pcmB/L/+xp4buSPM+cl8enJkg4l/
mdPFydgeIQ3joD2puAgJBY!aTG6U//TefJ8MQK0k9AalW8UTDdsCH3nIBbhpA6KYqmjUOGT/
SljsabXnp3txQ==
X-Complaints-To: abuse@comcast.net
X-DMCA-Complaints-To: dmca@comcast.net
X-Abuse-and-DMCA-Info: Please be sure to forward a copy of ALL headers
X-Abuse-and-DMCA-Info: Otherwise we will be unable to process your complaint
properly
X-Postfilter: 1.3.32
Xref: g2news1.google.com rec.radio.amateur.space:622
```

Thanks for the information Scott. Looking at the NLRS site I see a number of dishes being used for 10 GHz. Most being the television receive dish. The dish I have has a radio assembly with an LNB installed that will transmit to the satellite on 14GHz, and receive from a satellite in the 12 GHz band. What I would like to do is to re-work the current radio transmitter circuit to re-tune the output down to the 10GHz band whereas I could have a compact 1 watt transmit receive system. The radio unit also has an up/down/converter that uses between 910MHz and 1400 MHz to tune the output, therefore I could use my current 1.2 GHz radio as the receiver/exciter. I was hoping to find someone that had already attempted to figure out what parts in the Direcway radio transmitter to change to re-tune the frequency. If I can get this off the ground, 1 watt at 10 GHz with the antenna gain of 35dbd I should be able to work just about anyone within sight, as well as keep my coffee warm while on top of the mountain.
Mike

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news:423A06FB.4010308@bloomer.net...

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```
From -5129430635800086654
X-Google-Thread: 10e8ad,78cb2fe534fe7612
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news4.google.com!news.glorb.com!
border1.nntp.dca.giganews.com!nntp.giganews.com!local01.nntp.dca.giganews.com!
nntp.bright.net!news.bright.net.POSTED!not-for-mail
NNTP-Posting-Date: Sat, 19 Mar 2005 15:19:32 -0600
Message-ID: <423C9745.4020405@bloomer.net>
Date: Sat, 19 Mar 2005 21:19:01 +0000
From: Scott <acepilot@bloomer.net>
User-Agent: Mozilla/5.0 (Windows; U; Windows NT 5.0; en-US; rv:1.7.2) Gecko/
20040804 Netscape/7.2 (ax)
X-Accept-Language: en-us, en
MIME-Version: 1.0
Newsgroups: rec.radio.amateur.space
To: Mike <mugnuts@hotmail.com>
Subject: Re: Satellite Dish Question
References: <4PCdndE-aNf8ZKXfRVn-iQ@comcast.com> <423A06FB.4010308@bloomer.net>
<Wp-dnbX1544_8aHfRVn-pg@comcast.com>
In-Reply-To: <Wp-dnbX1544_8aHfRVn-pg@comcast.com>
Content-Type: text/plain; charset=us-ascii; format=flowed
Content-Transfer-Encoding: 7bit
Lines: 62
NNTP-Posting-Host: 64.33.199.218
X-Trace: sv3-WIWHSnL9iK/vmHLLYVsiHwZoiPi/
Rxg2aFRJQlGvWrNngQWwS5dVe7Uh9Jk1mZmoRO8Kh2q9RmBY8EF!VtNanuEKwcBMB5055tjaK/
sRY7TziNI7IlhiE3ERlPLOzD1UoJzPgBzXWaT0YIChkA==
X-Complaints-To: abuse@bright.net
X-DMCA-Complaints-To: abuse@bright.net
X-Abuse-and-DMCA-Info: Please be sure to forward a copy of ALL headers
X-Abuse-and-DMCA-Info: Otherwise we will be unable to process your complaint
properly
X-Postfilter: 1.3.31
Xref: g2news1.google.com rec.radio.amateur.space:623
```

Oh! I think you are saying that you have the system that DirecTV gives you for satellite internet service? If that's the case, it might be fun to see if you can get it to transmit and receive on 10 GHz. Hopefully someone else has experimented and can offer some help. Intriguing!

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>> http://www.nlrs.org/
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>>Of course, you'll need something like a 2M all mode rig and a 10 GHz
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>>>
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>>>Mike
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>
>
>

```
From 1933509138418085527
X-Google-Thread: 10e8ad,78cb2fe534fe7612
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news4.google.com!news.glorb.com!
border1.nntp.dca.giganews.com!nntp.giganews.com!local01.nntp.dca.giganews.com!
nntp.comcast.com!news.comcast.com.POSTED!not-for-mail
NNTP-Posting-Date: Sat, 19 Mar 2005 17:25:52 -0600
From: "Mike" <mugnuts@hotmail.com>
Newsgroups: rec.radio.amateur.space
References: <4PCdndE-aNf8ZKXfRVn-iQ@comcast.com> <423A06FB.4010308@bloomer.net>
<Wp-dnbX1544_8aHfRVn-pg@comcast.com> <423C9745.4020405@bloomer.net>
Subject: Re: Satellite Dish Question
Date: Sat, 19 Mar 2005 16:25:49 -0700
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1478
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1478
Message-ID: <AfSdnUEAvs6dKKHfRVn-2Q@comcast.com>
Lines: 102
NNTP-Posting-Host: 67.182.194.33
X-Trace: sv3-
fKxlgvRL5TxX840xXSWC+yU0r0il3vyoPoESoAsqwqtaYGUvy+nZYsiZTGE1WRLzI96gIRkwoDZQyaQ!
7rxoOylaXPtQYbDnSWO+YRrWVTOZgCjFErRsWIxePizQ52UGycsa6ALUG51uqg==
X-Complaints-To: abuse@comcast.net
X-DMCA-Complaints-To: dmca@comcast.net
X-Abuse-and-DMCA-Info: Please be sure to forward a copy of ALL headers
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properly
X-Postfilter: 1.3.32
Xref: g2news1.google.com rec.radio.amateur.space:624
```

That's exactly what I have. Hughes calls it a Radio Assembly; the model number is RA6-074 with a P/N 1302009-0001. What little bit on information I have been able to locate about this unit are mainly instruction sheets with very few details. It looks like I'm going to have to do some reverse engineering on the assembly to figure out what it's doing. I'm sure there's a PLL circuit in there somewhere, the only thing is, can the circuit be modified enough to reduce the output frequency by 4 GHz? The more I look into this the more work seems to be involved. I can't believe some other Radio Amateur somewhere hasn't covered this project yet. If I can figure this out, there are a ton of these dishes on the secondary market that are fairly inexpensive. Talk about antenna gain measurement contests, a .75 M offset feed dish running 1 watt. Looking at K0KFC's numbers of 38.5 dbi from the NLRS Aurora 2004 page and doing the math with 1 watt equates to a WOPPING EIRP of 7079.45784 watts. Now that's some serious output power.

I would really like to hear from anyone that has thought about or attempted to modify one of the Hughes Radio Assemblies in the past.

Mike

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> >
> >>>for use on the amateur bands?  If so, what options are available?
> >>>
> >>>
> >>>Mike
> >>>
> >>>
> >
> >
> >
```

```
From -4994805672661200638
X-Google-Thread: 107ada,bfde56d35ebfc781,start
X-Google-Thread: 108228,bfde56d35ebfc781,start
X-Google-Thread: 108122,bfde56d35ebfc781,start
X-Google-Thread: 10e8ad,bfde56d35ebfc781,start
X-Google-Attributes: gid107ada,gid108228,gid108122,gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news3.google.com!newshub.sdsu.edu!logbridge.uoregon.edu!
pln-w!spln!lex!extra.newsguy.com!newsp.newsguy.com!enews3
From: Alan Wilcox <w3dvx@arrl.net>
Newsgroups: rec.radio.amateur.misc,alt.ham-
radio.marketplace,rec.radio.amateur.equipment,rec.radio.amateur.space
Subject: FA: Rare 1957 Vintage Sputnik QSL Card
Date: Sat, 19 Mar 2005 18:37:30 -0500
Organization: http://extra.newsguy.com
Lines: 3
Message-ID: <423CB7BA.5090201@arrl.net>
NNTP-Posting-Host: p-978.newsdawg.com
Mime-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1; format=flowed
Content-Transfer-Encoding: 7bit
User-Agent: Mozilla Thunderbird 1.0 (Windows/20041206)
```

X-Accept-Language: en-us, en
Xref: g2news1.google.com rec.radio.amateur.misc:5610 alt.ham-radio.marketplace:1542 rec.radio.amateur.equipment:5506
rec.radio.amateur.space:625

Check this one out!

http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&rd=1&item=6519964865&ssPageName=STRK:MESE:IT

From -3146244276921119860
X-Google-Thread: 10e8ad,78cb2fe534fe7612
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news4.google.com!news.glorb.com!border1.nntp.dca.giganews.com!nntp.giganews.com!local01.nntp.dca.giganews.com!nntp.bright.net!news.bright.net.POSTED!not-for-mail
NNTP-Posting-Date: Sun, 20 Mar 2005 07:49:31 -0600
Date: Sun, 20 Mar 2005 13:49:02 +0000
From: Scott <acepilot@bloomer.net>
User-Agent: Mozilla/5.0 (Windows; U; Windows NT 5.0; en-US; rv:1.7.2) Gecko/20040804 Netscape/7.2 (ax)
X-Accept-Language: en-us, en
MIME-Version: 1.0
Newsgroups: rec.radio.amateur.space
Subject: Re: Satellite Dish Question
References: <4PCdndE-aNf8ZKXfRVn-iQ@comcast.com> <423A06FB.4010308@bloomer.net>
<Wp-dnbX1544_8aHfRVn-pg@comcast.com> <423C9745.4020405@bloomer.net>
<AfSdnUEAvs6dKKHfRVn-2Q@comcast.com>
In-Reply-To: <AfSdnUEAvs6dKKHfRVn-2Q@comcast.com>
Content-Type: text/plain; charset=us-ascii; format=flowed
Content-Transfer-Encoding: 7bit
Message-ID: <fdKdnd2FmLz24qDfRVn-uw@bright.net>
Lines: 147
NNTP-Posting-Host: 64.33.199.218
X-Trace: sv3-ttUvPHG6gV3VuSPglRWfNtZi5ELqlORYSh9jPSxQhCIXT4XwaYmL2giX/r586FZFnTqFWLEF2c3GMVt!meMU1J74MEPbi+G+3vmc0ZkWkUgD77ldrmwKqU3FjtEn1OSjBxRHZWFo8WggIDbu/gdw/dJo
X-Complaints-To: abuse@bright.net
X-DMCA-Complaints-To: abuse@bright.net
X-Abuse-and-DMCA-Info: Please be sure to forward a copy of ALL headers
X-Abuse-and-DMCA-Info: Otherwise we will be unable to process your complaint properly
X-Postfilter: 1.3.32
Xref: g2news1.google.com rec.radio.amateur.space:626

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From 3110351048747105768
X-Google-Thread: 10e8ad,78cb2fe534fe7612
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news4.google.com!news.glorb.com!
border1.nntp.dca.giganews.com!nntp.giganews.com!local01.nntp.dca.giganews.com!
nntp.comcast.com!news.comcast.com.POSTED!not-for-mail
NNTP-Posting-Date: Sun, 20 Mar 2005 15:20:47 -0600
From: "Mike" <mugnuts@hotmail.com>
Newsgroups: rec.radio.amateur.space
References: <4PCdndE-aNf8ZKXfRVn-iQ@comcast.com> <423A06FB.4010308@bloomer.net>
<Wp-dnbX1544_8aHfRVn-pg@comcast.com> <423C9745.4020405@bloomer.net>
<AfSdnUEAvs6dKKHfRVn-2Q@comcast.com> <fdKdnd2FmLz24qDfRVn-uw@bright.net>
Subject: Re: Satellite Dish Question
Date: Sun, 20 Mar 2005 14:20:42 -0700
X-Priority: 3
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X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1478
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1478
Message-ID: <PrmdnVxnO8iydKDfRVn-qA@comcast.com>
Lines: 198
NNTP-Posting-Host: 67.182.194.33
X-Trace: sv3-yHNLhdMRmX4h8a3QanGIIngycZTfzYpm31V/dvOM0/
AMVV2T5plS7feWGDffXow+b0iPr8yjQIfMV1g!RhrxtgNPATHxcGBO2OjZQJ3frbnNkX/
pinbOC1XhzyA0BBz9wX2YRA+T/x9lIw==
X-Complaints-To: abuse@comcast.net
X-DMCA-Complaints-To: dmca@comcast.net
X-Abuse-and-DMCA-Info: Please be sure to forward a copy of ALL headers
X-Abuse-and-DMCA-Info: Otherwise we will be unable to process your complaint properly
X-Postfilter: 1.3.32
Xref: g2news1.google.com rec.radio.amateur.space:627

I'm resending this post. The first one didn't seem to ever make it. If it's a dup, sorry.
Scott,

What information I have been able to find indicates the Units for home applications run at 1-watt output. There are warning stickers on the radio unit stating to stay at least .6 meters away from the radio unit when powered. If one were to have Direcway Service installed the units have to be installed by a certified installer.

Hughes also builds commercial units that run higher power levels; I've seen 1, 2 and 5 watt units in my quest for information. My guess is they use a mini TWT just prior to the waveguide. Hughes Electronics also builds many devices for military applications such as Satcom communications uplinks that run even higher power as well as many different frequency ranges.

You may find this link interesting if you want some real output power.
http://www.paradise.co.uk/collateral/manuals/203205_RevA.pdf#search='14%20ghz%20upconverter'

Maybe if we keep some dialog going in the group others will get interested in our observations and join in. I'm positive there are some very talented individuals out there that have experience in high power microwave applications that could supply some great information.

Mike
KF7IQ

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news:fdKdnd2FmLz24qDfRVn-uw@bright.net...
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```
From -124081751295365529
X-Google-Thread: 10e8ad,78cb2fe534fe7612
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news3.google.com!news.glorb.com!
border1.nntp.dca.giganews.com!nntp.giganews.com!local01.nntp.dca.giganews.com!
nntp.comcast.com!news.comcast.com.POSTED!not-for-mail
NNTP-Posting-Date: Sun, 20 Mar 2005 17:13:41 -0600
From: "Mike" <mugnuts@hotmail.com>
Newsgroups: rec.radio.amateur.space
References: <4PCdndE-aNf8ZKXfRVn-iQ@comcast.com> <423A06FB.4010308@bloomer.net>
<Wp-dnbX1544_8aHfRVn-pg@comcast.com> <423C9745.4020405@bloomer.net>
<AfSdnUEAvs6dKKHfRVn-2Q@comcast.com> <fdKdnd2FmLz24qDfRVn-uw@bright.net>
Subject: Re: Satellite Dish Question
Date: Sun, 20 Mar 2005 16:13:40 -0700
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1478
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1478
Message-ID: <xsmdnS8AWOc4nqPfRVn-sg@comcast.com>
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X-Trace: sv3-IyaungHhcCiqUuK3pfdevoYh9grOIgPXf8AUi2OSnOOPKtW/
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X-Complaints-To: abuse@comcast.net
X-DMCA-Complaints-To: dmca@comcast.net
X-Abuse-and-DMCA-Info: Please be sure to forward a copy of ALL headers
X-Abuse-and-DMCA-Info: Otherwise we will be unable to process your complaint
properly
X-Postfilter: 1.3.31
Xref: g2news1.google.com rec.radio.amateur.space:628
```

Scott,
It looks like the heart of the system is a Sanyo SMO 0705V Hybrid MIC Module
http://www.bdent.com/specifications/sanyo/SY110A_e.pdf

Looks like I may be getting a littel closer!

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```

```
From 9095225653864777099
X-Google-Thread: 10e8ad,f2f4999245c6ee08,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!news.maxwell.syr.edu!
news.mel.connect.com.au!news-north.connect.com.au!news1.optus.net.au!optus!
news.optus.net.au!53ab2750!not-for-mail
From: "PJ" <ozzy_battler@hotmail.com>
Newsgroups: rec.radio.amateur.space
Subject: Eagle
Lines: 4
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.2527
X-RFC2646: Format=Flowed; Original
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.2527
X-Original-NNTP-Posting-Host: 203.221.69.28
Message-ID: <423fef8b@news.comindico.com.au>
X-Original-Trace: 22 Mar 2005 21:12:27 +1100, 203.221.69.28
Date: Tue, 22 Mar 2005 10:12:28 GMT
NNTP-Posting-Host: 203.194.27.1
X-Complaints-To: abuse@comindico.com.au
X-Trace: news.optus.net.au 1111486348 203.194.27.1 (Tue, 22 Mar 2005 21:12:28 EST)
NNTP-Posting-Date: Tue, 22 Mar 2005 21:12:28 EST
Organization: Comindico Australia - reports relating to abuse should be sent to
abuse@comindico.com.au
Xref: g2news1.google.com rec.radio.amateur.space:630

Anyone know when the New satellite "Eagle" will be launched please??? TIA
pj
```

```
From 3387265595513809432
X-Google-Thread: 10e8ad,f2f4999245c6ee08
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news3.google.com!news.glorb.com!
border1.nntp.dca.giganews.com!border2.nntp.dca.giganews.com!nntp.giganews.com!
wn13feed!worldnet.att.net!bgtnsc04-news.ops.worldnet.att.net.POSTED!53ab2750!not-
for-mail
From: Alan P. Biddle <APBIDDLE@ATT.NET>
Newsgroups: rec.radio.amateur.space
Subject: Re: Eagle
Organization: Arisia Computing
Reply-To: APBIDDLE@ATT.NET
Message-ID: <fj0041teg39o3lcslb3pjuilc6spe636bj@4ax.com>
References: <423fef8b@news.comindico.com.au>
X-Newsreader: Forte Agent 2.0/32.652
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
```

Lines: 5
Date: Tue, 22 Mar 2005 11:35:17 GMT
NNTP-Posting-Host: 12.74.115.189
X-Complaints-To: abuse@worldnet.att.net
X-Trace: bgtnsc04-news.ops.worldnet.att.net 1111491317 12.74.115.189 (Tue, 22 Mar 2005 11:35:17 GMT)
NNTP-Posting-Date: Tue, 22 Mar 2005 11:35:17 GMT
Xref: g2news1.google.com rec.radio.amateur.space:632

Eagle is still in the design phase, so is at least few years out.

Alan
WA4SCA

From 9091825969087956257
X-Google-Thread: 10e8ad,836a580d676664ea,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!postnews.google.com!not-for-mail
From: ozzy_battler@hotmail.com (PJ)
Newsgroups: rec.radio.amateur.space
Subject: AO-51
Date: 22 Mar 2005 17:58:21 -0800
Organization: http://groups.google.com
Lines: 1
Message-ID: <5ddf0e3c.0503221758.5c210d7f@posting.google.com>
NNTP-Posting-Host: 203.221.69.28
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 8bit
X-Trace: posting.google.com 1111543101 20933 127.0.0.1 (23 Mar 2005 01:58:21 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Wed, 23 Mar 2005 01:58:21 +0000 (UTC)
Xref: g2news1.google.com rec.radio.amateur.space:634

TY Alan.Ill keep trying. Yes im aware of doppler shift..pj

From -1437162761665530750
X-Google-Thread: 10e8ad,836a580d676664ea
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news3.google.com!news.glorb.com!border1.nntp.dca.giganews.com!border2.nntp.dca.giganews.com!nntp.giganews.com!wn13feed!worldnet.att.net!bgtnsc04-news.ops.worldnet.att.net.POSTED!53ab2750!not-for-mail
From: Alan P. Biddle <APBIDDLE@ATT.NET>
Newsgroups: rec.radio.amateur.space
Subject: Re: AO-51
Organization: Arisia Computing
Reply-To: APBIDDLE@ATT.NET
Message-ID: <vd0041henpgb38575iq0t64hhu8ofq0hcj@4ax.com>

References: <423fef58$1@news.comindico.com.au>
X-Newsreader: Forte Agent 2.0/32.652
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Lines: 5
Date: Tue, 22 Mar 2005 11:35:16 GMT
NNTP-Posting-Host: 12.74.115.189
X-Complaints-To: abuse@worldnet.att.net
X-Trace: bgtnsc04-news.ops.worldnet.att.net 1111491316 12.74.115.189 (Tue, 22 Mar 2005 11:35:16 GMT)
NNTP-Posting-Date: Tue, 22 Mar 2005 11:35:16 GMT
Xref: g2news1.google.com rec.radio.amateur.space:631

There have been some periods where other downlinks are in use, or testing is going on, but it is currently up and running on those frequencies. There may be nobody talking, but you should be able to receive the downlink and telemetry. Be aware, that the telemetry just sounds like white noise. Be certain to account for Doppler shift.

From -7892459408333826812
X-Google-Thread: 10e8ad,bc4ca2353d47b898,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!postnews.google.com!not-for-mail
From: ozzy_battler@hotmail.com (PJ)
Newsgroups: rec.radio.amateur.space
Subject: eagle
Date: 22 Mar 2005 18:00:17 -0800
Organization: http://groups.google.com
Lines: 1
Message-ID: <5ddf0e3c.0503221800.3c7dc89c@posting.google.com>
NNTP-Posting-Host: 203.221.69.28
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 8bit
X-Trace: posting.google.com 1111543217 21164 127.0.0.1 (23 Mar 2005 02:00:17 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Wed, 23 Mar 2005 02:00:17 +0000 (UTC)
Xref: g2news1.google.com rec.radio.amateur.space:635

TY Alan,certainly something to look forward to...pj

From -4659030752296187913
X-Google-Thread: 10e8ad,ac6a14c5ee999193,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!postnews.google.com!f14g2000cwb.googlegroups.com!not-for-mail
From: Ron038549@yahoo.com
Newsgroups: rec.radio.amateur.space
Subject: (",) Do You Want To Know For Sure You Are Going To Heaven?

```
Date: 22 Mar 2005 08:08:15 -0800
Organization: http://groups.google.com
Lines: 2
Message-ID: <1111507695.324851.265840@f14g2000cwb.googlegroups.com>
NNTP-Posting-Host: 172.158.199.175
Mime-Version: 1.0
Content-Type: text/plain; charset="iso-8859-1"
X-Trace: posting.google.com 1111507704 9879 127.0.0.1 (22 Mar 2005 16:08:24 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Tue, 22 Mar 2005 16:08:24 +0000 (UTC)
User-Agent: G2/0.2
Complaints-To: groups-abuse@google.com
Injection-Info: f14g2000cwb.googlegroups.com; posting-host=172.158.199.175;
   posting-account=3klWGA0AAACsby62poh0C9s8W5e5pms7
Xref: g2news1.google.com rec.radio.amateur.space:633

http://www.want-to-be-sure.blogspot.com << Click On Link




From -7823509534580518116
X-Google-Thread: 10e8ad,836a580d676664ea
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!newsfeed.media.kyoto-u.ac.jp!
news1.optus.net.au!optus!news.optus.net.au!53ab2750!not-for-mail
From: "PJ" <ozzy_battler@hotmail.com>
Newsgroups: rec.radio.amateur.space
Subject: AO-51
Lines: 7
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.2527
X-RFC2646: Format=Flowed; Original
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.2527
X-Original-NNTP-Posting-Host: 203.221.69.28
Message-ID: <423fef58$1@news.comindico.com.au>
X-Original-Trace: 22 Mar 2005 21:11:36 +1100, 203.221.69.28
Date: Tue, 22 Mar 2005 10:11:37 GMT
NNTP-Posting-Host: 203.194.27.1
X-Complaints-To: abuse@comindico.com.au
X-Trace: news.optus.net.au 1111486297 203.194.27.1 (Tue, 22 Mar 2005 21:11:37 EST)
NNTP-Posting-Date: Tue, 22 Mar 2005 21:11:37 EST
Organization: Comindico Australia - reports relating to abuse should be sent to
abuse@comindico.com.au
Xref: g2news1.google.com rec.radio.amateur.space:629

Has anyone actually worked  AO-51 ???       its seemingly dead to my ears.
Even when it passes dead overhead its quiet. I drop the squelch off and
listen intently. No beacon ,nothing.  Im listenning on 435.300FM and
435.150FM. Im in Australia,city called Ipswich [nr brisbane]..
Any comments please ??? its supposedly up and running...pj
```

```
From 2353674071727543324
X-Google-Thread: 10e8ad,836a580d676664ea
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news4.google.com!news.glorb.com!
border1.nntp.dca.giganews.com!nntp.giganews.com!local01.nntp.dca.giganews.com!
nntp.comcast.com!news.comcast.com.POSTED!not-for-mail
NNTP-Posting-Date: Tue, 22 Mar 2005 23:37:40 -0600
From: "Mike" <mugnuts@hotmail.com>
Newsgroups: rec.radio.amateur.space
References: <423fef58$1@news.comindico.com.au>
Subject: Re: AO-51
Date: Tue, 22 Mar 2005 22:37:34 -0700
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1478
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1478
Message-ID: <C62dnY02mKw5ndzfRVn-qA@comcast.com>
Lines: 56
NNTP-Posting-Host: 67.182.194.33
X-Trace: sv3-wWFXqeaEX3fvrLnPCXsLDq7HPnH+Iuv6gp/Y9geD78Q2PmvhXkb9KBRgy3FeJ/
x5IlKsRVFkBVoIOw5!raODQ7EA7VJjTy4Xapj5vAJI9133XVpAWBYmKdhFrQkbzCw5Ltp7KqBlhScZHg==
X-Complaints-To: abuse@comcast.net
X-DMCA-Complaints-To: dmca@comcast.net
X-Abuse-and-DMCA-Info: Please be sure to forward a copy of ALL headers
X-Abuse-and-DMCA-Info: Otherwise we will be unable to process your complaint
properly
X-Postfilter: 1.3.32
Xref: g2news1.google.com rec.radio.amateur.space:636
```

Name Beacons HF VHF UHF L-Band S-Band C-Band X-Band K-Band APRS Packet Comments

AO-51 (Echo)   Check Schedule

AMSAT-OSCAR 51 (Echo or AO-51)
Analog Uplink: 145.920 MHz FM (PL - 67Hz)
145.880 MHz FM QRP (no PL)
1268.700 MHz FM (PL - 67Hz)
Analog Downlink: 435.300 MHz FM
2401.200 MHz FM
PSK-31 Uplink 28.140 MHz USB
Digital Uplink: 145.860 MHz 9600 bps, AX.25
1268.700 MHz 9600 bps AX.25
Digital Downlink: 435.150 MHz 9600 bps, AX.25
2401.200 MHz 38,400 bps, AX.25
Broadcast Callsign: PECHO-11
BBS Callsign: PECHO-12
Launched June 29, 2004

Status: Operational

AMSAT-OSCAR 51 or Echo as it is more commonly known is a FM satellite carrying 4 VHF receivers, 2 UHF transmitters, a multimode receiver and a 2400MHz transmitter. It can handle voice and FSK data up to 76.8Kbps. Echo was launched into a low, sun-synchronous polar orbit approximately 850 km high. You must transmit a 67Hz PL tone in order to access the Echo voice repeater.

Please note the change in operational phone downlink frequency to 435.300 MHz.

Information from the Amsat NA Website at
http://www.amsat.org/amsat-new/satellites/status.php#Echo

"PJ" <ozzy_battler@hotmail.com> wrote in message
news:423fef58$1@news.comindico.com.au...

> Has anyone actually worked AO-51 ???   its seemingly dead to my ears.
> Even when it passes dead overhead its quiet. I drop the squelch off and
> listen intently. No beacon ,nothing. Im listenning on 435.300FM and
> 435.150FM. Im in Australia,city called Ipswich [nr brisbane]..
> Any comments please ??? its supposedly up and running...pj
>
>

```
begin 666 status_up.gif
M1TE&.#EA&0`9`)$#``!D``!>!@!B`0```"'Y! $```,`+ `````9`!D```)B
MG'^@HH /1P-BL!;?5&EGN57=%&W4<Y&(*:+F&F:O83I9BH'JASOU-ZIQ@(:
M<$@L'@,!02#29/:$T&.MA3!:8Q#MZUK]@;L_W01[\.Y8X1WMW,X%3V3W/((#
*RF$V(A(640``.P``
`
end
```

From -1480759892492970311
X-Google-Thread: 10e8ad,1b0724f2c4fb6a90,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!postnews.google.com!not-for-mail
From: ozzy_battler@hotmail.com (PJ)
Newsgroups: rec.radio.amateur.space
Subject: Any VK's working AO-51 ??
Date: 23 Mar 2005 03:18:17 -0800
Organization: http://groups.google.com
Lines: 4
Message-ID: <5ddf0e3c.0503230318.21be2f35@posting.google.com>
NNTP-Posting-Host: 203.221.69.28
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 8bit

```
X-Trace: posting.google.com 1111576697 29138 127.0.0.1 (23 Mar 2005 11:18:17 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Wed, 23 Mar 2005 11:18:17 +0000 (UTC)
Xref: g2news1.google.com rec.radio.amateur.space:637

Ive listenned  intently and i dont believe its so quiet i cant hear
it. I believe its just not active in VK and therefore the silence.

Any VK's working  it please ???    pj



From -6447919418088606316
X-Google-Thread: 10e8ad,ac6a14c5ee999193
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!postnews.google.com!l41g2000cwc.googlegroups.com!not-for-
mail
From: Ron038652@yahoo.com
Newsgroups: rec.radio.amateur.space
Subject: (",) Do You Want To Know For Sure You Are Going To Heaven?
Date: 23 Mar 2005 08:00:17 -0800
Organization: http://groups.google.com
Lines: 2
Message-ID: <1111593617.365992.290810@l41g2000cwc.googlegroups.com>
NNTP-Posting-Host: 172.134.19.227
Mime-Version: 1.0
Content-Type: text/plain; charset="iso-8859-1"
X-Trace: posting.google.com 1111593622 18747 127.0.0.1 (23 Mar 2005 16:00:22 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Wed, 23 Mar 2005 16:00:22 +0000 (UTC)
User-Agent: G2/0.2
Complaints-To: groups-abuse@google.com
Injection-Info: l41g2000cwc.googlegroups.com; posting-host=172.134.19.227;
   posting-account=e8Arbw0AAACIoB5Dv_ciY2YR9EPQhLGY
Xref: g2news1.google.com rec.radio.amateur.space:638

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From 1123620549046866227
X-Google-Thread: 10e8ad,6f9587783b51657c,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news3.google.com!news.glorb.com!
border1.nntp.dca.giganews.com!nntp.giganews.com!local01.nntp.dca.giganews.com!
nntp.mt.net!news.mt.net.POSTED!not-for-mail
NNTP-Posting-Date: Wed, 23 Mar 2005 13:45:33 -0600
Reply-To: "William Erhardt" <erhardt@mt.net>
From: "William Erhardt" <erhardt@mt.net>
Newsgroups: rec.radio.amateur.space
Subject: AO-51 Schedule
Date: Wed, 23 Mar 2005 12:45:33 -0700
```

```
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1437
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1441
Message-ID: <xsidnd-BTavAWtzfRVn-iw@mt.net>
Lines: 12
NNTP-Posting-Host: 206.127.67.68
X-Trace:
sv3-1IsKSPgV+vPvTpm8E8qJCHUdur9Zt+cmS+ASU5PB8GwC1darPYWGWWcHap9Wubxb7yDcBNaCd+opMy
N!Qcw2uG1+CHm+vcT4FWq1JxGXlLbmSe1nRIG4tI2rf4i1kYYd52jmu/aNucAOEQ==
X-Complaints-To: abuse@mt.net
X-DMCA-Complaints-To: abuse@mt.net
X-Abuse-and-DMCA-Info: Please be sure to forward a copy of ALL headers
X-Abuse-and-DMCA-Info: Otherwise we will be unable to process your complaint
properly
X-Postfilter: 1.3.32
Xref: g2news1.google.com rec.radio.amateur.space:639
```

Howdy from Bill K7MT Helena, Mt.

This evening AO-51 goes to 2 meters up and 2.4 ghz down. So for all you folks who are use to 2 meter up 70 cm down please do not all cq on the 2 meter up link unless you can hear the bird on 2.4 GHZ down link !!!!!!!
AO-51 will be in V/S mode for the next 7 days then next Wednsday it will be L/S (1.2 GHZ up and 2.4 Ghz down) for experimental day.

Heard a lot of handhelds on QRP experimental today and nice to hear everyone out their having fun on the satellites.

```
From -3783945847717274041
X-Google-Thread: 10e8ad,6f9587783b51657c
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!postnews.google.com!not-for-mail
From: ozzy_battler@hotmail.com (PJ)
Newsgroups: rec.radio.amateur.space
Subject: AO-51 Schedule
Date: 23 Mar 2005 23:39:17 -0800
Organization: http://groups.google.com
Lines: 1
Message-ID: <5ddf0e3c.0503232339.73128ed8@posting.google.com>
NNTP-Posting-Host: 203.221.69.28
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 8bit
X-Trace: posting.google.com 1111649957 26344 127.0.0.1 (24 Mar 2005 07:39:17 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Thu, 24 Mar 2005 07:39:17 +0000 (UTC)
Xref: g2news1.google.com rec.radio.amateur.space:640
```

V/S & L/S mode ??? im new LOL. Ty ...pj

```
From -3857181285405619135
X-Google-Thread: 10e8ad,ac6a14c5ee999193
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!postnews.google.com!z14g2000cwz.googlegroups.com!not-for-
mail
From: Ron038653@yahoo.com
Newsgroups: rec.radio.amateur.space
Subject: (",) Do You Want To Know For Sure You Are Going To Heaven?
Date: 24 Mar 2005 09:06:11 -0800
Organization: http://groups.google.com
Lines: 2
Message-ID: <1111683971.953557.112210@z14g2000cwz.googlegroups.com>
NNTP-Posting-Host: 172.171.165.215
Mime-Version: 1.0
Content-Type: text/plain; charset="iso-8859-1"
X-Trace: posting.google.com 1111683975 31378 127.0.0.1 (24 Mar 2005 17:06:15 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Thu, 24 Mar 2005 17:06:15 +0000 (UTC)
User-Agent: G2/0.2
Complaints-To: groups-abuse@google.com
Injection-Info: z14g2000cwz.googlegroups.com; posting-host=172.171.165.215;
   posting-account=a5DzMQ0AAADotzFtUJO36RrWTzDfVr9t
Xref: g2news1.google.com rec.radio.amateur.space:641

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From -4247766448451432204
X-Google-Thread: 10e8ad,ac6a14c5ee999193
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!postnews.google.com!f14g2000cwb.googlegroups.com!not-for-
mail
From: Ron038697@yahoo.com
Newsgroups: rec.radio.amateur.space
Subject: (",) Do You Want To Know For Sure You Are Going To Heaven?
Date: 25 Mar 2005 12:51:59 -0800
Organization: http://groups.google.com
Lines: 2
Message-ID: <1111783919.472982.26420@f14g2000cwb.googlegroups.com>
NNTP-Posting-Host: 172.155.17.136
Mime-Version: 1.0
Content-Type: text/plain; charset="iso-8859-1"
X-Trace: posting.google.com 1111783924 27515 127.0.0.1 (25 Mar 2005 20:52:04 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Fri, 25 Mar 2005 20:52:04 +0000 (UTC)
User-Agent: G2/0.2
Complaints-To: groups-abuse@google.com
Injection-Info: f14g2000cwb.googlegroups.com; posting-host=172.155.17.136;
```

```
   posting-account=QUYacg0AAAAv1t1h_qdL8hTDFiM-71yi
Xref: g2news1.google.com rec.radio.amateur.space:642

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From -2960060349855184442
X-Google-Thread: 10e8ad,502c2f3225ec1d9c,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!postnews.google.com!o13g2000cwo.googlegroups.com!not-for-
mail
From: Ron_Grossi_038@yahoo.com
Newsgroups: rec.radio.amateur.space
Subject: The Greatest News Ever!
Date: 27 Mar 2005 01:02:22 -0800
Organization: http://groups.google.com
Lines: 2
Message-ID: <1111914142.553340.186150@o13g2000cwo.googlegroups.com>
NNTP-Posting-Host: 172.149.252.20
Mime-Version: 1.0
Content-Type: text/plain; charset="iso-8859-1"
X-Trace: posting.google.com 1111914146 31323 127.0.0.1 (27 Mar 2005 09:02:26 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Sun, 27 Mar 2005 09:02:26 +0000 (UTC)
User-Agent: G2/0.2
Complaints-To: groups-abuse@google.com
Injection-Info: o13g2000cwo.googlegroups.com; posting-host=172.149.252.20;
   posting-account=KNzB1g0AAAD-U1V1u8MFQuDarxPGbAL-
Xref: g2news1.google.com rec.radio.amateur.space:643

http://www.jcil.blogspot.com << The Greatest News Ever!



From -6624845912854447283
X-Google-Thread: 10e8ad,502c2f3225ec1d9c
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!postnews.google.com!f14g2000cwb.googlegroups.com!not-for-
mail
From: Ron_Grossi_038@yahoo.com
Newsgroups: rec.radio.amateur.space
Subject: The Greatest News Ever!
Date: 28 Mar 2005 05:21:25 -0800
Organization: http://groups.google.com
Lines: 2
Message-ID: <1112016085.746439.258450@f14g2000cwb.googlegroups.com>
NNTP-Posting-Host: 172.155.111.233
Mime-Version: 1.0
Content-Type: text/plain; charset="iso-8859-1"
X-Trace: posting.google.com 1112016089 25998 127.0.0.1 (28 Mar 2005 13:21:29 GMT)
```

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X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Mon, 28 Mar 2005 13:21:29 +0000 (UTC)
User-Agent: G2/0.2
Complaints-To: groups-abuse@google.com
Injection-Info: f14g2000cwb.googlegroups.com; posting-host=172.155.111.233;
   posting-account=KNzB1g0AAAD-U1V1u8MFQuDarxPGbAL-
Xref: g2news1.google.com rec.radio.amateur.space:644
```

http://www.jcil.blogspot.com << The Greatest News Ever!

```
From 2060992841954709326
X-Google-Thread: 10e8ad,6f9587783b51657c
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news4.google.com!news.glorb.com!
border1.nntp.dca.giganews.com!nntp.giganews.com!local01.nntp.dca.giganews.com!
nntp.mt.net!news.mt.net.POSTED!not-for-mail
NNTP-Posting-Date: Tue, 29 Mar 2005 07:28:43 -0600
Reply-To: "William Erhardt" <erhardt@mt.net>
From: "William Erhardt" <erhardt@mt.net>
Newsgroups: rec.radio.amateur.space
References: <5ddf0e3c.0503232339.73128ed8@posting.google.com>
Subject: Re: AO-51 Schedule
Date: Tue, 29 Mar 2005 06:28:37 -0700
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1437
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1441
Message-ID: <t7adnUFQd6qWxdTfRVn-jg@mt.net>
Lines: 11
NNTP-Posting-Host: 206.127.67.76
X-Trace: sv3-pSzM5EQCbe8vI2NlNITED9lHnNDpGyNWhrvjhHcrvVHOQEzlFI6YMEDqjF/
9cjNUvLvv0wZRqAK5y34!faoA+aSmblrE6SOtIDEpVagmhe7G9YTukZ9bX73mNaRGZopEnSBzi0aO8/
E1zQ==
X-Complaints-To: abuse@mt.net
X-DMCA-Complaints-To: abuse@mt.net
X-Abuse-and-DMCA-Info: Please be sure to forward a copy of ALL headers
X-Abuse-and-DMCA-Info: Otherwise we will be unable to process your complaint
properly
X-Postfilter: 1.3.32
Xref: g2news1.google.com rec.radio.amateur.space:645
```

Howdy PJ,

Look at AMSAT page:

http://www.amsat.org

go to AO-51 page and each mode is explained.

Cheers Bill K7MT AMSAT 33461

```
From -4084380201235246977
X-Google-Thread: 10e8ad,6f9587783b51657c
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!postnews.google.com!not-for-mail
From: ozzy_battler@hotmail.com (PJ)
Newsgroups: rec.radio.amateur.space
Subject: Re: AO-51 Schedule
Date: 29 Mar 2005 19:57:26 -0800
Organization: http://groups.google.com
Lines: 19
Message-ID: <5ddf0e3c.0503291957.4ee3026a@posting.google.com>
References: <5ddf0e3c.0503232339.73128ed8@posting.google.com>
<t7adnUFQd6qWxdTfRVn-jg@mt.net>
NNTP-Posting-Host: 202.168.31.66
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 8bit
X-Trace: posting.google.com 1112155047 7755 127.0.0.1 (30 Mar 2005 03:57:27 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Wed, 30 Mar 2005 03:57:27 +0000 (UTC)
Xref: g2news1.google.com rec.radio.amateur.space:646

TY Bill,will do...Cheers.. pj









"William Erhardt" <erhardt@mt.net> wrote in message news:<t7adnUFQd6qWxdTfRVn-
jg@mt.net>...
> Howdy PJ,
>
> Look at AMSAT page:
>
> http://www.amsat.org
>
> go to AO-51 page and each mode is explained.
>
> Cheers  Bill K7MT AMSAT 33461


From 3642186349892655571
X-Google-Thread: f89d5,56fa1d4220951ca5,start
X-Google-Thread: 10e8ad,56fa1d4220951ca5,start
X-Google-Attributes: gidf89d5,gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
```

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npeer.de.kpn-eurorings.net!news-FFM2.ecrc.net!news.cesnet.cz!crax.cesnet.cz!
news.contactel.cz!news.contactel.cz!nnrp.vatican.va!news.vatican.va!
212.116.174.6.knet.co.il.POSTED
From: Ioannes Paulus PP. II (Karol Wojtyla) <john_paul_ii@vatican.va>
Newsgroups: rec.sports.baseball,rec.sport.skating.inline,rec.radio.amateur.space
Subject: Last rites declaration of Ioannes Paulus PP. II (Karol Wojtyla)
Date: Mon, 4 Apr 2005 01:38:51 GMT
Organization: The Holy See of Rome
Lines: 113
Approved: Ioannes Paulus PP. II (Karol Wojtyla) <john_paul_ii@vatican.va>
Message-ID: <f1076e48.213c0bcc@news.vatican.va>
NNTP-Posting-Host: autocont-gw.ch.ctt.cz
Mime-Version: 1.0
Content-Type: multipart/mixed;
boundary="81573737330543472704638546478066534153686421635521"
X-Trace: news.contactel.cz 1112591267 27808 194.108.93.229 (4 Apr 2005 05:07:47
GMT)
X-Complaints-To: news@news.contactel.cz
NNTP-Posting-Date: Mon, 4 Apr 2005 05:07:47 +0000 (UTC)
X-Newsreader: trn 4.0-test00 ("Dick") (May 26, 2000)
Xref: g2news1.google.com rec.sport.skating.inline:2491 rec.radio.amateur.space:647

This is a multi-part message in MIME format.

--81573737330543472704638546478066534153686421635521
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

"The unforgiveable sins this earth must confront and overcome are
 Nationalism, capitalism, and hoarding.  The idea of every nation
 should be forgot, price should be struck from the commons, and
 princes should be seen for the devils they are.  The sins include
 our church, secret societies, and other religions which make of
 the spirit of God a divide."

Last rites declaration of Ioannes Paulus PP. II (Karol Wojtyla)
2nd April 2005


--81573737330543472704638546478066534153686421635521
Content-type: text/html; name="qanqd.htm"
Content-Transfer-Encoding: 7bit
Content-Disposition: inline; filename="qanqd.htm"

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</HEAD>
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alink="#000000" vlink="#000000" link="#663300" topmargin=0 marginwidth=1
marginheight=1>
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height=89 alt="The Holy See"></A></TD>
<TD align=center valign=top><map name="mappa3">
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coords="9,18,87,62"> <!--holy father-->
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18, 167, 62"> <!--roman curia-->
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coords="168, 18, 246, 62"> <!--news services-->
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coords="247, 18, 323, 62"> <!--biblioteca vaticana-->
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biblioteca/archivio segreto-->
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</map>
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alt="Search"></a></TD>
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<a href="http://www.vatican.va/holy_father/john_paul_ii/apost_constitutions/
index.htm"><IMG SRC="http://www.vatican.va/holy_father/img/acon_en.jpg" width=147
height=33 alt="Apostolic Constitutions" border=0 ></a><br>
<a href="http://www.vatican.va/holy_father/john_paul_ii/apost_exhortations/
index.htm"><IMG SRC="http://www.vatican.va/holy_father/img/aexh_en.jpg" width=147
height=33 alt="Apostolic Exhortations" border=0 ></a><br>
<a href="http://www.vatican.va/holy_father/john_paul_ii/apost_letters/
index.htm"><IMG SRC="http://www.vatican.va/holy_father/img/alet_en.jpg" width=147
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<a href="http://www.vatican.va/holy_father/john_paul_ii/audiences/index.htm"><IMG
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alt="Messages" border=0 ></a><br>
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index.htm"><IMG SRC="http://www.vatican.va/holy_father/img/mp_en.jpg" width=147
height=33 alt="Motu Proprio" border=0 ></a><br>
<a href="http://www.vatican.va/holy_father/john_paul_ii/speeches/index.htm"><IMG
SRC="http://www.vatican.va/holy_father/img/sp_en.jpg" width=147 height=33
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<a href="http://www.vatican.va/holy_father/john_paul_ii/travels/index.htm"><IMG
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src="http://www.vatican.va/holy_father/john_paul_ii/img/gpII_pont_en.jpg"
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&nbsp;
<P>
<br>&nbsp;<br>
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santopadre.jpg" width=85 height=100 alt="The Holy Father" border=0></A></TD>
<td align=center valign=top WIDTH=409><img border="0" src="http://www.vatican.va/
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clear=all><BR>
<b>
<font face="Charlemagne" size="4">
Ioannes Paulus PP. II<BR>Karol Wojtyla<BR>16.X.1978<BR>&nbsp;</font></b><br><br>
"The unforgiveable sins this earth must confront and overcome are Nationalism,
capitalism, and hoarding.
The idea of every nation should be forgot, price should be struck from the
commons, and princes should be seen for the devils they are.
The sins include our church, secret societies, and other religions which make of
the spirit of God a divide." <br><br>
<font face="Charlemagne" size="3"><b>The Holy Father's last rites declaration -
2nd April 2005</b></font>
</td>
</TR>
```

```
</TABLE>
</HTML>

--81573737330543472704638546478066534153686421635521--
```

and without an idol; and this prophecy is now fulfilled, as they cannot make a lawful sacrifice out of Jerusalem.

729. Predictions.--It was foretold that, in the time of the Messiah, He should come to establish a new covenant, which should make them forget the escape from Egypt (Jer. 23:5; Is. 43:10); that He should place His law not in externals, but in the heart; that He should put His fear, which had only been from without, in the midst of the heart. Who does not see the Christian law in all this?

730.... That then idolatry would be overthrown; that this Messiah would cast down all idols and bring men into the worship of the true God.

That the temples of the idols would be cast down, and that among all nations and in all places of the earth. He would be offered a pure sacrifice, not of beasts.

That He would be king of the Jews and Gentiles. And we see this king of the Jews and Gentiles oppressed by both, who conspire His death; and ruler of both, destroying the worship of Moses in Jerusalem, which was its centre, where He made His first Church; and also the worship of idols in Rome, the centre of it, where He made His chief Church.

731. Prophecies.--That Jesus Christ will sit on the right hand, till God has subdued His enemie

```
From -4645549125820499244
X-Google-Thread: 115a06,6eed67e7ead9ad91,start
X-Google-Thread: 10e8ad,56fa1d4220951ca5
X-Google-Thread: 10a273,6eed67e7ead9ad91,start
X-Google-Attributes: gid115a06,gid10e8ad,gid10a273,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news3.google.com!newshub.sdsu.edu!npeer.de.kpn-
eurorings.net!news-FFM2.ecrc.net!news.cesnet.cz!crax.cesnet.cz!news.contactel.cz!
news.contactel.cz!nnrp.vatican.va!news.vatican.va!212.116.174.6.knet.co.il.POSTED
From: Ioannes Paulus PP. II (Karol Wojtyla) <john_paul_ii@vatican.va>
Newsgroups:
fido7.ru.phreaks,rec.radio.amateur.space,comp.unix.bsd.bsdi.announce,alt.fr.test.t
est.test.test
Subject: Last rites declaration of Ioannes Paulus PP. II (Karol Wojtyla)
Date: Mon, 4 Apr 2005 12:49:45 GMT
Organization: The Holy See of Rome
Lines: 56
Approved: Ioannes Paulus PP. II (Karol Wojtyla) <john_paul_ii@vatican.va>
Message-ID: <64db4aa6.f1fcc197@news.vatican.va>
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```
NNTP-Posting-Host: autocont-gw.ch.ctt.cz
X-Trace: news.contactel.cz 1112624600 18472 194.108.93.229 (4 Apr 2005 14:23:20
GMT)
X-Complaints-To: news@news.contactel.cz
NNTP-Posting-Date: Mon, 4 Apr 2005 14:23:20 +0000 (UTC)
X-Mailer: Mozilla 4.76 [en] (Win98; U)
Xref: g2news1.google.com fido7.ru.phreaks:2348 rec.radio.amateur.space:648
comp.unix.bsd.bsdi.announce:2
```

"The unforgiveable sins this earth must confront and overcome are Nationalism, capitalism, and hoarding. The idea of every nation should be forgot, price should be struck from the commons, and princes should be seen for the devils they are. The sins include our church, secret societies, and other religions which make of the spirit of God a divide."

Last rites declaration of Ioannes Paulus PP. II (Karol Wojtyla)
2nd April 2005

--
truly godly, and most of them lately become so. There are very few houses in the whole town, into which salvation has not lately come, in one or more instances. There are several Negroes, who from what was seen in them then, and what is discernible in them since, appear to have been truly born again in the late remarkable season.

God has also seemed to have gone out of His usual way, in the quickness of His work, and the swift progress His Spirit has made in His operations on the hearts of many. It is wonderful that persons should be so suddenly and yet so greatly changed. Many have been taken from a loose and careless way of living, and seized with strong convictions of their guilt and misery, and in a very little time old things have passed away, and all things have become new with them.

God's work has also appeared very extraordinary in the degrees of His influences; in the degrees both of awakening and conviction, and also of saving light, love, and joy, that many have experienced. It has also been very extraordinary in the extent of it, and its being so swiftly propagated from town to town. In former times of the pouring out of the Spirit of God on this town, though in some of them it was very remarkable, it reached no further then; the neighboring towns all around continued unmoved.

This work seemed to be at its greatest height in this town in the former part of the spring, in March and April. At that time God's work in the conversion of souls was carried on amongst us in so wonderful a manner, that, so far as I can judge, it appears to have been at the rate at least of four persons in a day; or near thirty in a week, take one with another, for five or six weeks together. When God in so remarkable a manner took the work into His own hands, there was as much done in a day or two, as at ordinary times, with all endeavors that men can use, and with such a blessing as we commonly have, is done in a year.

I am very sensible, how apt m

```
From -3307026839081443894
X-Google-Thread: 10e8ad,87a79e131c5d4a00
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news4.google.com!news.glorb.com!newsfeed.stueberl.de!
peer-uk.news.demon.net!kibo.news.demon.net!news.demon.co.uk!demon!
newearth.demon.co.uk!hils
From: Hils <hils@nospam.demon.co.uk>
Newsgroups: rec.radio.amateur.space
Subject: Re: Did I hear RS-15 beacon?
Date: Thu, 7 Apr 2005 00:12:12 +0100
Organization: Don't know what it means...
Lines: 34
Message-ID: <bwzqgLAMzGVCFwb6@newearth.demon.co.uk>
References: <VbMYd.9042$DW.3268@newssvr17.news.prodigy.com>
NNTP-Posting-Host: newearth.demon.co.uk
Mime-Version: 1.0
X-Trace: news.demon.co.uk 1112829180 4540 193.237.117.162 (6 Apr 2005 23:13:00
GMT)
X-Complaints-To: abuse@demon.net
NNTP-Posting-Date: Wed, 6 Apr 2005 23:13:00 +0000 (UTC)
X-Newsreader: Turnpike Integrated Version 4.02 S <iN7HMZj7etdiapC+OgVgLBXK0T>
Xref: g2news1.google.com rec.radio.amateur.space:649
```

Matt J. McCullar <mccullar@flash.net> wrote

>I checked out www.heavens-above.com and it said one of the ham sats passing
>overhead tonight was RS-15. I'm very, very new to listening to satellites
>and I'm not always sure what I'm hearing. I have heard packet from the
>International Space Station, though.
>
>The web site said RS-15 would pass overhead tonight at a pretty high
>elevation, which I think gives a better chance for reception, since it's
>quite far from the ground/horizon. It said that the RS-15 beacon is on
>29.352 USB. I have a Yaesu FT-757 ham rig that I use primarily for
>listening, and a 15-meter indoor dipole strung up along the ceiling.
>
>While listening to just noise on the frequency for a little while, waiting
>for the bird to show up, I gradually began to hear a series of long tones.

>Without an accurate stopwatch, I think each tone is about 1.5 seconds in
>duration, about 3 seconds apart. Seems like a beacon, but no callsign
>associated with it. Should there be?
>
>The pitch of the tone seemed to gradually go lower, and I was able to
>slightly retune the receiver to get it "back" to the original pitch. I
>think that's a satellite Doppler shift, am I right?
>
>Thanks for any advice.

From my (very sporadic) listening log:

"2005-03-02 1523 29352kHz... single repeated tone ~3s long with chirp and doppler shift"

At the time I attributed it to RS-15, and still do. Happy listening!

--
Hil

From -4929856197893720513
X-Google-Thread: 10e8ad,a44d6a516262e80c,start
X-Google-Thread: 113975,a44d6a516262e80c,start
X-Google-Attributes: gid10e8ad,gid113975,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!proxad.net!news.cs.univ-paris8.fr!ciril.fr!news.agarik.com!skynet.be!newspost001!tjb!not-for-mail
From: Chris Steyaert <observations@rmob.org>
Newsgroups: rec.radio.amateur.space,sci.astro.amateur
Subject: Radio Meteor Obs. Bull. March 2005
Date: Sat, 09 Apr 2005 17:08:43 +0200
Message-ID: <surf51h5mln15ctskhmrkciefthmri6f1k@4ax.com>
X-Newsreader: Forte Agent 1.93/32.576 English (American)
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Lines: 17
Organization: -= Belgacom Usenet Service =-
NNTP-Posting-Host: 89f30396.news.skynet.be
X-Trace: 1113059256 news.skynet.be 11317 81.247.103.67:10100
X-Complaints-To: usenet-abuse@skynet.be
Xref: g2news1.google.com rec.radio.amateur.space:650 sci.astro.amateur:50424

Radio Meteor Observation Bulletin No. 140 of March 2005 (61 K) is available now as

http://visualrmob.free.fr/rmobtext/rmob0503.txt

More information and the visual presentation of the hourly forward scatter counts can be found on

http://www.rmob.org

http://radio.data.free.fr

Chris

```
From -1276971130390080820
X-Google-Thread: 10e8ad,cca6510bded28bf1,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!newsread.com!news-xfer.newsread.com!
newspeer.monmouth.com!peer.news.zetnet.net!newsfeed.uk.prserv.net!prserv.net!
news.freedom2surf.net!nntp-peering.plus.net!ptn-nntp-feeder02.plus.net!ptn-nntp-
spool03.plus.net!212.159.2.75.MISMATCH!ptn-nntp-spool01.plus.net!ptn-nntp-
reader01.plus.net!not-for-mail
From: "news.free-online.net" <barneSPAMSTOPy_holmes@yahoo.co.uk>
Newsgroups: rec.radio.amateur.space
Subject: What's this @ 12.9 Mhz ?
Date: Wed, 20 Apr 2005 00:21:39 +0100
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2600.0000
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2600.0000
Lines: 17
Message-ID: <42659283$0$94531$ed2619ec@ptn-nntp-reader01.plus.net>
Organization: Customer of PlusNet plc (http://www.plus.net)
NNTP-Posting-Host: 9597e7c6.ptn-nntp-reader01.plus.net
X-Trace: DXC=7X8c?
m5U\Ac=88JS<d7M2figd3Y`7Rb;nYZmCHj47lfe3:H[9TIVYRhX`;1hNX]83e?;Jo2MYbaKiKQ7c8R`;mJ
d
X-Complaints-To: abuse@plus.net
Xref: g2news1.google.com rec.radio.amateur.space:651
```

What's the source of this sound ?

http://www.humanity.free-online.co.uk/strange-radio-sound-sw-12point9-mhz.mp3

sounds like:

http://www-pw.physics.uiowa.edu/space-audio/vgr-helio.html

but is it ? And that was received by Voyager, can it be received
on earth ?

Any confirmation appreciated :-)

barney

From -2439289363732615274
X-Google-Thread: 10e8ad,cca6510bded28bf1
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news4.google.com!news.glorb.com!
border1.nntp.dca.giganews.com!border2.nntp.dca.giganews.com!nntp.giganews.com!
news1.optus.net.au!optus!news.optus.net.au!53ab2750!not-for-mail
From: xxx@xxx.xx (Octa Ex)
Newsgroups: rec.radio.amateur.space
Subject: Re: What's this @ 12.9 Mhz ?
Message-ID: <4265c742.190210218@152.91.10.200>
References: <42659283$0$94531$ed2619ec@ptn-nntp-reader01.plus.net>
X-Newsreader: Forte Free Agent 1.21/32.243
X-NNTP-Posting-Host: semillion.sge.net
Lines: 27
Date: Wed, 20 Apr 2005 03:08:34 GMT
NNTP-Posting-Host: 152.91.10.200
X-Complaints-To: andrew.clark@sge.net
X-Trace: news.optus.net.au 1113966514 152.91.10.200 (Wed, 20 Apr 2005 13:08:34 EST)
NNTP-Posting-Date: Wed, 20 Apr 2005 13:08:34 EST
Organization: 90East - reports relating to abuse should be sent to andrew.clark@sge.net
Xref: g2news1.google.com rec.radio.amateur.space:652

On Wed, 20 Apr 2005 00:21:39 +0100, "news.free-online.net"
<barneSPAMSTOPy_holmes@yahoo.co.uk> etched in cyberspace:

>What's the source of this sound ?
>
>http://www.humanity.free-online.co.uk/strange-radio-sound-sw-12point9-mhz.mp
>3
>
>sounds like:
>
>http://www-pw.physics.uiowa.edu/space-audio/vgr-helio.html
>
>but is it ? And that was received by Voyager, can it be received
>on earth ?
>
>Any confirmation appreciated :-)
>
>barney
>
>

This sound is a digital signal modulated on a multicarrier phase shift keying.
Nothing supernatural or ET about it.
Near the stat you can hear a carrier being swept accross.
X X

```
 X
X X
```

```
From 6665933190538550156
X-Google-Thread: 10e8ad,5edb1b55f14db5f,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news4.google.com!news.glorb.com!hammer.uoregon.edu!
arclight.uoregon.edu!news.infoave.net!not-for-mail
From: "James - KG4PBI" <JAHarrison@Surry.net>
Newsgroups: rec.radio.amateur.space
Subject: HT's for LEO use
Date: Wed, 20 Apr 2005 12:24:37 -0000
Organization: Info Avenue Internet Services, LLC
Lines: 15
Message-ID: <d45vo3$72al$1@news3.infoave.net>
NNTP-Posting-Host: dsl-94.nclvcr.infoave.net
X-Trace: news3.infoave.net 1114014275 231765 204.116.142.94 (20 Apr 2005 16:24:35
GMT)
X-Complaints-To: abuse@infoave.net
NNTP-Posting-Date: Wed, 20 Apr 2005 16:24:35 +0000 (UTC)
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1478
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1478
Xref: g2news1.google.com rec.radio.amateur.space:653
```

Hi,

I had an FT-817 that I had used for LEO use, awhile back, but due to its size, and lack of use I sold it off.

I am now looking for an HT to carry with me to use with an Arrow beam. Some of the ones I have focused on would be the Yaesu VX-5 or VX-7, and in the Kenwood TH-D7 or the TH-F6.

Does anyone have some experiance with any of these, and what may be the better choice.

thanks James KG4PBI

```
From -851092568938952588
X-Google-Thread: 10e8ad,2717cbf1702cb118,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news3.google.com!news.glorb.com!atl-c03.usenetserver.com!
pc02.usenetserver.com!KNOLOGY.NET!not-for-mail
From: Buck <iam@this.site>
Newsgroups: rec.radio.amateur.space
```

Subject: FM satelite operations
Date: Wed, 20 Apr 2005 12:47:17 -0400
Message-ID: <og1d611m5pad4n9fahqvmhmj7kkl0nb3ei@4ax.com>
X-Newsreader: Forte Agent 1.93/32.576 English (American)
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
X-Complaints-To: abuse@usenetserver.com
Organization: UseNetServer.com
Lines: 16
X-Trace: 3c0654266878ebd73821303534
Xref: g2news1.google.com rec.radio.amateur.space:654

When I bought my FT-817 last year, the manual described a setup of five channels that allowed operation through one of the OSCAR satellites. There was an input and output based on the satellite's movement and doppler effect and a user could follow the satellite by changing the channel as it passed overhead. I was informed that the satellite described was dead so I never used it.

I now have a dual-band HT and would like to know if there are any satellites that can be programmed into it in a similar manner.

Thank you,

Buck
--
For what it's worth.

From -4289946875196213334
X-Google-Thread: 10e8ad,cca6510bded28bf1
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!proxad.net!news.tele.dk!news.tele.dk!small.news.tele.dk!newsfeed.multikabel.nl!newsfeeder.wxs.nl!nntp-peering.plus.net!ptn-nntp-feeder01.plus.net!ptn-nntp-spool03.plus.net!ptn-nntp-spool02.plus.net!ptn-nntp-reader02.plus.net!not-for-mail
From: "news.free-online.net" <usenet_holmes@yahoo.co.uk>
Newsgroups: rec.radio.amateur.space
References: <42659283$0$94531$ed2619ec@ptn-nntp-reader01.plus.net>
<4265c742.190210218@152.91.10.200>
Subject: Re: What's this @ 12.9 Mhz ?
Date: Wed, 20 Apr 2005 18:02:45 +0100
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2600.0000
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2600.0000
Lines: 57
Message-ID: <42668b32$0$42306$ed2619ec@ptn-nntp-reader02.plus.net>
Organization: Customer of PlusNet plc (http://www.plus.net)
NNTP-Posting-Host: da39bd3f.ptn-nntp-reader02.plus.net

```
X-Trace: DXC=Rj7M:]>DkXTMY6o]TfF\[Wigd3Y`7Rb;^37XnI;
[OUCTf9m9\ei;`J\m2;0FQlf3AXk1\==bRSbTSX5hF4QF6MNQ
X-Complaints-To: abuse@plus.net
Xref: g2news1.google.com rec.radio.amateur.space:655


"Octa Ex" <xxx@xxx.xx> wrote in message
news:4265c742.190210218@152.91.10.200...
> On Wed, 20 Apr 2005 00:21:39 +0100, "news.free-online.net"
> <barneSPAMSTOPy_holmes@yahoo.co.uk> etched in cyberspace:
>
> >What's the source of this sound ?
> >
>
>http://www.humanity.free-online.co.uk/strange-radio-sound-sw-12point9-mhz.m
p
> >3
> >
> >sounds like:
> >
> >http://www-pw.physics.uiowa.edu/space-audio/vgr-helio.html
> >
> >but is it ? And that was received by Voyager, can it be received
> >on earth ?
> >
> >Any confirmation appreciated :-)
> >
> >barney
> >
> >
> This sound is a digital signal modulated on a multicarrier phase shift
> keying.

Thankyou Octa Ex ! :-)

How do you know this ?

Why does it appear in various places on the Spectrum ?

What do you think to this analysis ? :

http://communities.anomalies.net/cgi-bin/bbs/ultimatebb.cgi?ubb=get_topic;f=
25;t=007424

> Nothing supernatural or ET about it.

I did'nt say that !

But if it is 'earthbound' then why does the Voyager signal sound
similiar ?

> Near the stat you can hear a carrier being swept accross.
```

Wow. I thought that was natural 'drift'.

```
> X X
>  X
> X X
```

barney

From 3369624529896036664
X-Google-Thread: 10e8ad,cca6510bded28bf1
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news3.google.com!news.glorb.com!tudelft.nl!
130.161.131.117.MISMATCH!tudelft.nl!newsfeed.multikabel.nl!newsfeeder.wxs.nl!
transit.news.xs4all.nl!195.241.76.212.MISMATCH!tiscali!transit1.news.tiscali.nl!
dreader2.news.tiscali.nl!not-for-mail
From: "P.Poelstra" <adsl642564@tiscali.nl>
Newsgroups: rec.radio.amateur.space
References: <42659283$0$94531$ed2619ec@ptn-nntp-reader01.plus.net>
Subject: Re: What's this @ 12.9 Mhz ?
Date: Wed, 20 Apr 2005 21:23:52 +0200
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1106
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1106
Lines: 23
Message-ID: <4266ac48$0$44071$5fc3050@dreader2.news.tiscali.nl>
Organization: Tiscali bv
NNTP-Posting-Date: 20 Apr 2005 21:23:52 CEST
NNTP-Posting-Host: 82.171.98.63
X-Trace: 1114025032 dreader2.news.tiscali.nl 44071 82.171.98.63:10309
X-Complaints-To: abuse@tiscali.nl
Xref: g2news1.google.com rec.radio.amateur.space:656

Hi Barney and the group.

This is a transmission from a STANAG 4285 transmitter used by NATO
countries,it can be heard all over the spectrum.
Further information and sound samples can be found here:
http://rover.wiesbaden.netsurf.de/~signals/WAV/STANAG4285_BRASS.HTML
http://www.milspec.ca/modems/modems.html

> What's the source of this sound ?
>

```
http://www.humanity.free-online.co.uk/strange-radio-sound-sw-12point9-mhz.mp
3
> Any confirmation appreciated :-)
>
> barney




From -1286853077645136542
X-Google-Thread: 10e8ad,2717cbf1702cb118
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news3.google.com!news.glorb.com!dotsrc.org!
news.dotsrc.org!not-for-mail
From: "Brad" <bradvk2qq@w6ir.com>
Newsgroups: rec.radio.amateur.space
References: <og1d611m5pad4n9fahqvmhmj7kkl0nb3ei@4ax.com>
Subject: Re: FM satelite operations
Date: Thu, 21 Apr 2005 06:38:30 +1000
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.2180
X-RFC2646: Format=Flowed; Original
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.2180
Lines: 25
Message-ID: <4266bdce$0$79452$14726298@news.sunsite.dk>
Organization: SunSITE.dk - Supporting Open source
NNTP-Posting-Host: 220.233.10.63
X-Trace: news.sunsite.dk DXC=WbJ<?
@C6TQm;WQX<a2dk4iYSB=nbEKnkk2E_Q@kOQNSbTf>M;ITH`3i3gZc:3IiPUnN@n_dUORnki0^1n]hP]jN
aZbAie1<Weej
X-Complaints-To: staff@sunsite.dk
Xref: g2news1.google.com rec.radio.amateur.space:657


"Buck" <iam@this.site> wrote in message
news:og1d611m5pad4n9fahqvmhmj7kkl0nb3ei@4ax.com...
> When I bought my FT-817 last year, the manual described a setup of
> five channels that allowed operation through one of the OSCAR
> satellites.  There was an input and output based on the satellite's
> movement and doppler effect and a user could follow the satellite by
> changing the channel as it passed overhead.  I was informed that the
> satellite described was dead so I never used it.
>
> I now have a dual-band HT and would like to know if there are any
> satellites that can be programmed into it in a similar manner.
>
> Thank you,
>
>
> Buck
> --
```

> For what it's worth.

AO51 is your bird.

Brad VK2QQ

```
From 4201426188482062188
X-Google-Thread: 10e8ad,5edb1b55f14db5f
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!postnews.google.com!z14g2000cwz.googlegroups.com!not-for-mail
From: "Terl" <wn6bdb@hotmail.com>
Newsgroups: rec.radio.amateur.space
Subject: Re: HT's for LEO use
Date: 20 Apr 2005 15:31:36 -0700
Organization: http://groups.google.com
Lines: 11
Message-ID: <1114036296.629259.114920@z14g2000cwz.googlegroups.com>
References: <d45vo3$72al$1@news3.infoave.net>
NNTP-Posting-Host: 67.168.207.63
Mime-Version: 1.0
Content-Type: text/plain; charset="iso-8859-1"
X-Trace: posting.google.com 1114036302 11342 127.0.0.1 (20 Apr 2005 22:31:42 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Wed, 20 Apr 2005 22:31:42 +0000 (UTC)
In-Reply-To: <d45vo3$72al$1@news3.infoave.net>
User-Agent: G2/0.2
Complaints-To: groups-abuse@google.com
Injection-Info: z14g2000cwz.googlegroups.com; posting-host=67.168.207.63;
   posting-account=Fm9CrwwAAAAXFM7pxBFoH_yp1lMbEDOk
Xref: g2news1.google.com rec.radio.amateur.space:658
```

Since the VX-5 and VX-7 are both incapable of full duplex they should be off the list. Half duplex operation on the LEO satellites is a source of major QRM and (IMHO) shouldn't be allowed.
I have a TH-D7 and an arrow antenna with diplexer that I've used many times on SO-50, AO-51, and AO-27. Since this HT also supports APRS operation, it's ideal hiking and biking.
I recommend a VOX head set for hands free operation (keeping the antenna aimed at the satellite and downlink VFO on frequency pretty much uses up all your free hands).
Steve

```
From -1534724291167422642
X-Google-Thread: 10e8ad,64c7b7ff6b4c5a22,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
```

```
Path: g2news1.google.com!news3.google.com!news4.google.com!news.glorb.com!news-in.ntli.net!newsrout1-win.ntli.net!newspeer1-win.ntli.net!news-out.ntli.net!newsrout1-gui.ntli.net!ntli.net!hwmnpeer01.ams!nntp.telenet.be!blueberry.telenet-ops.be.POSTED!112677e7!not-for-mail
From: "Sanchez" <sanchez_mobile@telenet.be>
Newsgroups: rec.radio.amateur.space
Subject: 3Ghz Discone versus satellite dish
Lines: 16
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.2180
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.2180
X-RFC2646: Format=Flowed; Original
Message-ID: <0MR9e.127772$Mo4.42028@blueberry.telenet-ops.be>
Date: Thu, 21 Apr 2005 19:48:06 +0200
NNTP-Posting-Host: 81.83.128.109
X-Trace: blueberry.telenet-ops.be 1114105980 81.83.128.109 (Thu, 21 Apr 2005 19:53:00 CEST)
NNTP-Posting-Date: Thu, 21 Apr 2005 19:53:00 CEST
Xref: g2news1.google.com rec.radio.amateur.space:659
```

I have some questions about the reception of polar HRPT (1600Mhz). The AOR discone antennas DA-5000 and DA-753G can they be used to receive these signals? And would it also be possible to receive the GEO-sats (with a suitable receiver)?
The big advantage for me is that you don't have to follow the satellite's orbit. Or is there a big difference in the reception quality? I've found a lot of info on the net, but what's possible on one site, isn't possible according to another one.

I'm currently receiving APT images with a Diamond discone and an PCR-1000, I'm pleased with the results (after a lot of minor software adjustments) but I'm thinking of upgrading my equipment.......all suggestions welcome.

Thank you.

```
From 1679673946137487604
X-Google-Thread: 10e8ad,64c7b7ff6b4c5a22
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news4.google.com!newshub.sdsu.edu!elnk-nf2-pas!elnk-pas-nf1!newsfeed.earthlink.net!sn-xit-02!sn-xit-06!sn-post-02!sn-post-01!supernews.com!corp.supernews.com!not-for-mail
From: Pat Cox <peacox@gloryroad.net>
Newsgroups: rec.radio.amateur.space
Subject: Re: 3Ghz Discone versus satellite dish
Date: Fri, 22 Apr 2005 06:06:01 -0400
Organization: Posted via Supernews, http://www.supernews.com
Message-ID: <4268CC89.84814D13@gloryroad.net>
Reply-To: peacox@gloryroad.net
```

X-Mailer: Mozilla 4.72 [en]C-CCK-MCD NSCPCD47 (Win98; U)
X-Accept-Language: en
MIME-Version: 1.0
References: <0MR9e.127772$Mo4.42028@blueberry.telenet-ops.be>
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
X-Complaints-To: abuse@supernews.com
Lines: 23
Xref: g2news1.google.com rec.radio.amateur.space:660

I would be interested in what software you might be using for the PCR-1000.
Anyone with experience using Bonito 5.2 (also called RadioCom 5)? I have a
factory fresh copy ($241) along with a new PCR-1000 both still in their boxes
and just wondering if it is worth my time setting it up or just disposing of it.
pcox

Sanchez wrote:

> I have some questions about the reception of polar HRPT (1600Mhz). The AOR
> discone antennas DA-5000 and DA-753G can they be used to receive these
> signals? And would it also be possible to receive the GEO-sats (with a
> suitable receiver)?
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> orbit. Or is there a big difference in the reception quality? I've found a
> lot of info on the net, but what's possible on one site, isn't possible
> according to another one.
>
> I'm currently receiving APT images with a Diamond discone and an PCR-1000,
> I'm pleased with the results (after a lot of minor software adjustments) but
> I'm thinking of upgrading my equipment.......all suggestions welcome.
>
> Thank you.

From 5042794808166288857
X-Google-Thread: 10e8ad,64c7b7ff6b4c5a22
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!proxad.net!fr.ip.ndsoftware.net!
border2.nntp.ams.giganews.com!border1.nntp.ams.giganews.com!nntp.giganews.com!
lightspeed.eweka.nl!hq-usenetpeers.eweka.nl!68.142.88.75.MISMATCH!hwmnpeer01.ams!
nntp.telenet.be!blueberry.telenet-ops.be.POSTED!112677e7!not-for-mail
From: "Sanchez" <sanchez_mobile@telenet.be>
Newsgroups: rec.radio.amateur.space
References: <0MR9e.127772$Mo4.42028@blueberry.telenet-ops.be>
<4268CC89.84814D13@gloryroad.net>
Subject: Re: 3Ghz Discone versus satellite dish
Lines: 63
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.2180
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.2180

X-RFC2646: Format=Flowed; Original
Message-ID: <Iv4ae.130992$Mo4.121068@blueberry.telenet-ops.be>
Date: Fri, 22 Apr 2005 12:39:32 +0200
NNTP-Posting-Host: 81.83.128.109
X-Trace: blueberry.telenet-ops.be 1114166376 81.83.128.109 (Fri, 22 Apr 2005 12:39:36 CEST)
NNTP-Posting-Date: Fri, 22 Apr 2005 12:39:36 CEST
Xref: g2news1.google.com rec.radio.amateur.space:661

I'm using a Diamond discone D-130 antenna (with max 10meter quality cable, such as
aircell) but an antenna more specific for APT reception would be much better.

With the program Orbitron (to predict satellite passes, with DDE option) and WXsat to decode the signals. I'm experimenting with WXtoIMG but I find this more difficult to setup. You can also fine-tune the pcr with factory software (EX-2099), but it can wreck your receiver......make sure that you've got a backup copy of your EEPROM before experimenting (unique settings for each receiver). It takes a signal generator, millivoltmeter and oscilloscope to fine-tune the pcr.

Pcr control with icom software, but I've read that Bonito is better because it has an built-in DSP filter.
I didn't test the bonito because I'm not spending that amount on software, I'd rather invest it in equipment.
So in your case I think it's worth the installation. You could also try the free pcrtalk program.

I'm not using an amplifier because it increases weak signals, but it also increases the
noise in strong signals. Noaa signals are strong enough to recieve them without one.
The optional DSP unit for the pcr only has advantage in the lower frequencies.

After a lot of patience, testing and adjusting my results are very good, sometimes I've got a very good signal, starting at a 10 degree angle.

"Pat Cox" <peacox@gloryroad.net> wrote in message news:4268CC89.84814D13@gloryroad.net...
>I would be interested in what software you might be using for the PCR-1000.
> Anyone with experience using Bonito 5.2 (also called RadioCom 5)? I have a
> factory fresh copy ($241) along with a new PCR-1000 both still in their
> boxes
> and just wondering if it is worth my time setting it up or just disposing
> of it.
> pcox
>
> Sanchez wrote:
>
>> I have some questions about the reception of polar HRPT (1600Mhz). The
>> AOR

```
>> discone antennas DA-5000 and DA-753G can they be used to receive these
>> signals? And would it also be possible to receive the GEO-sats (with a
>> suitable receiver)?
>> The big advantage for me is that you don't have to follow the satellite's
>> orbit. Or is there a big difference in the reception quality? I've found
>> a
>> lot of info on the net, but what's possible on one site, isn't possible
>> according to another one.
>>
>> I'm currently receiving APT images with a Diamond discone and an
>> PCR-1000,
>> I'm pleased with the results (after a lot of minor software adjustments)
>> but
>> I'm thinking of upgrading my equipment.......all suggestions welcome.
>>
>> Thank you.
>
```

```
From 1006030067810380008
X-Google-Thread: 10e8ad,2717cbf1702cb118
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news3.google.com!news.glorb.com!
border1.nntp.dca.giganews.com!nntp.giganews.com!local01.nntp.dca.giganews.com!
nntp.mt.net!news.mt.net.POSTED!not-for-mail
NNTP-Posting-Date: Fri, 22 Apr 2005 07:50:20 -0500
Reply-To: "William Erhardt" <erhardt@mt.net>
From: "William Erhardt" <erhardt@mt.net>
Newsgroups: rec.radio.amateur.space
References: <og1d611m5pad4n9fahqvmhmj7kkl0nb3ei@4ax.com>
Subject: Re: FM satelite operations
Date: Fri, 22 Apr 2005 06:50:17 -0600
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1437
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1441
Message-ID: <HP6dnUaeddeRbvXfRVn-vw@mt.net>
Lines: 12
NNTP-Posting-Host: 206.127.67.100
X-Trace: sv3-9drLXkHIh3y4hn8QWsogouKK8QZ0x6DwnkQqFdqcqtJ/SmjGMHiYpezTVsvy05HeBRG/
9l1D06PWRh1!xABP7kdHT67wG5HUs2QeSB6dG4DrTv7pqiZeofwuTmFMxthjeV4PCStOz4mp3iw=
X-Complaints-To: abuse@mt.net
X-DMCA-Complaints-To: abuse@mt.net
X-Abuse-and-DMCA-Info: Please be sure to forward a copy of ALL headers
X-Abuse-and-DMCA-Info: Otherwise we will be unable to process your complaint
properly
X-Postfilter: 1.3.32
Xref: g2news1.google.com rec.radio.amateur.space:662
```

Howdy Buck,

Bill K7MT in Helena, Mt. Look at

http://www.amsat.org

Satellite status and look at SO-50 and AO-51 the two operational FM birds.
FO-29 is the best SSB satellite at this time. Enjoy.

Bill K7MT AMSAT 33461

```
From 1208617169535727249
X-Google-Thread: 10e8ad,5edb1b55f14db5f
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news4.google.com!news.glorb.com!news-
feed01.roc.ny.frontiernet.net!nntp.frontiernet.net!newscon06.news.prodigy.com!
prodigy.net!border1.nntp.dca.giganews.com!nntp.giganews.com!
local01.nntp.dca.giganews.com!nntp.comcast.com!news.comcast.com.POSTED!not-for-
mail
NNTP-Posting-Date: Fri, 22 Apr 2005 12:37:59 -0500
Date: Fri, 22 Apr 2005 12:37:59 -0500
From: rocketeer <rocketeer@hotmail.com>
User-Agent: Mozilla Thunderbird 1.0.2 (Windows/20050317)
X-Accept-Language: en-us, en
MIME-Version: 1.0
Newsgroups: rec.radio.amateur.space
Subject: Re: HT's for LEO use
References: <d45vo3$72al$1@news3.infoave.net>
<1114036296.629259.114920@z14g2000cwz.googlegroups.com>
In-Reply-To: <1114036296.629259.114920@z14g2000cwz.googlegroups.com>
Content-Type: text/plain; charset=ISO-8859-1; format=flowed
Content-Transfer-Encoding: 7bit
Message-ID: <duudnViKS6Llq_TfRVn-2A@comcast.com>
Lines: 18
NNTP-Posting-Host: 24.245.58.11
X-Trace: sv3-44K66myihyobkEso/
7a22MHQEA7G0TgGEATSfqXFBR0CIc8415qckEEolDF3j4bhjNwUv71tt6BRglV!
RbC4ceim9cQm1hrCzCSBC9tWO3lQ1w0wJdXDEdnfffddUVoYn+L+3MSYq2CHlsAX0S0BYZdEfg==
X-Complaints-To: abuse@comcast.net
X-DMCA-Complaints-To: dmca@comcast.net
X-Abuse-and-DMCA-Info: Please be sure to forward a copy of ALL headers
X-Abuse-and-DMCA-Info: Otherwise we will be unable to process your complaint
properly
X-Postfilter: 1.3.32
Xref: g2news1.google.com rec.radio.amateur.space:663
```

Terl wrote:

> Since the VX-5 and VX-7 are both incapable of full duplex they should
> be off the list. Half duplex operation on the LEO satellites is a
> source of major QRM and (IMHO) shouldn't be allowed.

> I have a TH-D7 and an arrow antenna with diplexer that I've used many
> times on SO-50, AO-51, and AO-27. Since this HT also supports APRS
> operation, it's ideal hiking and biking.
> I recommend a VOX head set for hands free operation (keeping the
> antenna aimed at the satellite and downlink VFO on frequency pretty
> much uses up all your free hands).
> Steve
>
Agree on the TH-D7 HT, it can also send APRS to the ISS digipeater and
possibly the PCSAT2 that will go up on the Shuttle Discovery and
installed on one of the solar "arms" of ISS.
See: http://www.ew.usna.edu/~bruninga/pcsat2.html

rocketeer

From 3327229287047388327
X-Google-Thread: 10e8ad,cca6510bded28bf1
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!proxad.net!proxad.net!
194.117.148.138.MISMATCH!pe2.news.blueyonder.co.uk!blueyonder!
pe1.news.blueyonder.co.uk!blueyonder!news-out.ntli.net!newsrout1-gui.ntli.net!
ntli.net!newspeer1-win.ntli.net!newsfe5-win.ntli.net.POSTED!53ab2750!not-for-mail
From: "djbarney" <usenet_holmes@yahoo.co.uk>
Newsgroups: rec.radio.amateur.space
References: <42659283$0$94531$ed2619ec@ptn-nntp-reader01.plus.net>
<4266ac48$0$44071$5fc3050@dreader2.news.tiscali.nl>
Subject: Re: What's this @ 12.9 Mhz ?
Lines: 34
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2600.0000
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2600.0000
Message-ID: <9yVae.5959$YF5.1980@newsfe5-win.ntli.net>
Date: Sun, 24 Apr 2005 23:00:21 GMT
NNTP-Posting-Host: 82.19.27.140
X-Complaints-To: http://www.ntlworld.com/netreport
X-Trace: newsfe5-win.ntli.net 1114383621 82.19.27.140 (Mon, 25 Apr 2005 00:00:21
BST)
NNTP-Posting-Date: Mon, 25 Apr 2005 00:00:21 BST
Organization: ntlworld News Service
Xref: g2news1.google.com rec.radio.amateur.space:664

Thanks Poelstra !

I'll check it out...:-)

barney

"P.Poelstra" <adsl642564@tiscali.nl> wrote in message
news:4266ac48$0$44071$5fc3050@dreader2.news.tiscali.nl...
> Hi Barney and the group.

```
>
> This is a transmission from a STANAG 4285 transmitter used by NATO
> countries,it can be heard all over the spectrum.
> Further information and sound samples can be found here:
> http://rover.wiesbaden.netsurf.de/~signals/WAV/STANAG4285_BRASS.HTML
> http://www.milspec.ca/modems/modems.html
>
>
>
>
>
>
>
> > What's the source of this sound ?
> >
>
http://www.humanity.free-online.co.uk/strange-radio-sound-sw-12point9-mhz.mp
> 3
> > Any confirmation appreciated :-)
> >
> > barney
>
>




From -2971636090760832876
X-Google-Thread: 10e8ad,cee13c44580b2909
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!news3.google.com!news2.google.com!
news.maxwell.syr.edu!newsfeed.vmunix.org!peer-uk.news.demon.net!
kibo.news.demon.net!news.demon.co.uk!demon!holywell.demon.co.uk!Les
From: Les Thompson <Les@holywell.demon.co.uk>
Newsgroups: rec.radio.amateur.space
Subject: Re: Setting Time Zone in Instant Track /  Help again !
Date: Tue, 26 Apr 2005 21:17:01 +0100
Lines: 74
Message-ID: <LWRNBFD9GqbCFwKd@holywell.demon.co.uk>
References: <h9GdnSmzkJXR7r_fRVn-qQ@comcast.com>
NNTP-Posting-Host: holywell.demon.co.uk
Mime-Version: 1.0
Content-Type: text/plain;charset=us-ascii;format=flowed
X-Trace: news.demon.co.uk 1114546635 16391 80.177.210.169 (26 Apr 2005 20:17:15
GMT)
X-Complaints-To: abuse@demon.net
NNTP-Posting-Date: Tue, 26 Apr 2005 20:17:15 +0000 (UTC)
User-Agent: Turnpike/6.05-S (<nlbtTCUieC0RDkRwOsABnxWLpw>)
Xref: g2news1.google.com rec.radio.amateur.space:665

In message <h9GdnSmzkJXR7r_fRVn-qQ@comcast.com>, James
<jnipperxxx@nospamfdn.com> writes
```

>
>I posted this question and got a prompt reply, and yet I cannot get it to
>work.
>
>I find the autoexec.bat file on my pc.   I right click the file, and
>select   Edit.
>
>A window opens in Notepad. There are some minor entries there, so I first
>hit the return key, and then I type the exact words:
>
>   set tz=est5edt
>
>I then select   Edit (in the notepad window), and then Save.
>
>I reboot.   But, the time zone change does not take effect in Instant
>Track.
>
>I have tried this 4 times, but no luck. Somehow, I am making a mistake in
>the edit process I am sure.
>
>Can anyone tell me where I am making a mistake please ?   (I am using
>Windows XP)
>
>
>73 de Jim K4PYT
>

Jim, these were the replies you got last time.

From George KA3HSW

It did not work because XP does not use the autoexec.bat file at startup....
you need to right-click your "My Computer" icon, choose the Advanced tab,
then click the Environment Variables button. In the lower half of the window, below the System Variables box, click the New button, and then type
in "set" (no quotes) for the variable name, and "tz=EST5EDT" (again, no quotes) for the variable value, and click OK to save.

I believe you tried this and still had problems.

George then sent this.

Strange...... well, a guaranteed way to get IT into the right time zone is
to go into the IT.INI file and make sure that the PST line is commented out,
and (for you) the EST line is uncommented. I can't recall whether this method overrides the environment variable or vice versa, but I just checked

```
on my system and I have both the environment variable and the .INI file
set
correctly for my TZ (CST) and IT works fine.
 >

I also responded with the following which worked for me.
 >
I had to dig out my old copy of IT to try this and found that the file
you need to put the SET command in is in the windows directory:
C:\Windows\system32\autoexec.nt
Open autoexec.nt with notepad to edit, works fine for me in the uk with
a setting of GMT0. I haven't used IT for years my copy is dated 1989
but still works well in XP.
 >

HTH

--
Les



From 6822248381862819598
X-Google-Thread: 10e8ad,cee13c44580b2909
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news4.google.com!news2.google.com!newsread.com!news-
xfer.newsread.com!news.glorb.com!border1.nntp.dca.giganews.com!nntp.giganews.com!
local01.nntp.dca.giganews.com!nntp.comcast.com!news.comcast.com.POSTED!not-for-
mail
NNTP-Posting-Date: Tue, 26 Apr 2005 18:53:53 -0500
From: "James" <jnipperxxx@nospamfdn.com>
Newsgroups: rec.radio.amateur.space
References: <h9GdnSmzkJXR7r_fRVn-qQ@comcast.com>
<LWRNBFD9GqbCFwKd@holywell.demon.co.uk>
Subject: Re: Setting Time Zone in Instant Track /  Help again !
Date: Tue, 26 Apr 2005 19:53:52 -0400
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1437
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1441
Message-ID: <yeOdnTqYicgMSfPfRVn-uQ@comcast.com>
Lines: 12
NNTP-Posting-Host: 24.129.37.103
X-Trace: sv3-
eziIidvwdSKbuiBX2oTqlDRuKlXIb3bJFEADPLt1DgsweyEe7wnIo2Dw3MztaXLzIGleANh7ueF9+k7!
cbTXZy2HcielB1vpj9VSc78QEGb4QUVqSy7rktSh8nApSS4wi0UOkHNNAONcSQ==
X-Complaints-To: abuse@comcast.net
X-DMCA-Complaints-To: dmca@comcast.net
X-Abuse-and-DMCA-Info: Please be sure to forward a copy of ALL headers
X-Abuse-and-DMCA-Info: Otherwise we will be unable to process your complaint
properly
X-Postfilter: 1.3.31
Xref: g2news1.google.com rec.radio.amateur.space:666
```

Les, it worked !!!!!!!!   I just got your message, and did the change (I
am not that pc skilled), and it works great the first time !!

I had pretty well given up, and had not used Instantrack since I posted my
question.

Thank you very much !!!!

73 de Jim K4PYT

```
From -8800752567480547829
X-Google-Thread: 10e8ad,cee13c44580b2909
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!news.maxwell.syr.edu!
border1.nntp.dca.giganews.com!nntp.giganews.com!newsfeed00.sul.t-online.de!
newsfeed01.sul.t-online.de!t-online.de!newsfeed.stueberl.de!peer-
uk.news.demon.net!kibo.news.demon.net!mutlu.news.demon.net!news.demon.co.uk!demon!
holywell.demon.co.uk!Les
From: Les Thompson <Les@holywell.demon.co.uk>
Newsgroups: rec.radio.amateur.space
Subject: Re: Setting Time Zone in Instant Track /  Help again !
Date: Wed, 27 Apr 2005 10:05:07 +0100
Lines: 17
Message-ID: <fpe4+SDDX1bCFwb4@holywell.demon.co.uk>
References: <h9GdnSmzkJXR7r_fRVn-qQ@comcast.com>
 <LWRNBFD9GqbCFwKd@holywell.demon.co.uk> <yeOdnTqYicgMSfPfRVn-uQ@comcast.com>
NNTP-Posting-Host: holywell.demon.co.uk
Mime-Version: 1.0
Content-Type: text/plain;charset=us-ascii;format=flowed
X-Trace: news.demon.co.uk 1114592714 8406 80.177.210.169 (27 Apr 2005 09:05:14
GMT)
X-Complaints-To: abuse@demon.net
NNTP-Posting-Date: Wed, 27 Apr 2005 09:05:14 +0000 (UTC)
User-Agent: Turnpike/6.05-S (<DXUtTKrGeCEiJlRw1YCBnhc0de>)
Xref: g2news1.google.com rec.radio.amateur.space:667
```

In message <yeOdnTqYicgMSfPfRVn-uQ@comcast.com>, James
<jnipperxxx@nospamfdn.com> writes

```
>Les, it worked !!!!!!!!   I just got your message, and did the change  ( I
>am not that pc skilled), and it works great the first time !!
>
>
>I had pretty well given up, and had not used Instantrack since I posted my
>question.
>
>Thank you very much  !!!!
>
```

>73 de Jim K4PYT
>
>
Glad to be of help Jim.
--
Les G3VYZ

From 8116865582434615697
X-Google-Thread: 10e8ad,12d9c893b033192a,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news3.google.com!news.glorb.com!border1.nntp.dca.giganews.com!nntp.giganews.com!elnk-atl-nf1!newsfeed.earthlink.net!news-feed-01.tampabay.rr.com!news.rr.com!news-post.tampabay.rr.com!tornado.tampabay.rr.com.POSTED!53ab2750!not-for-mail
From: Dennis Kaylor <k4oxg@tampabay.rr.com>
User-Agent: Mozilla/5.0 (Windows; U; Windows NT 5.1; en-US; rv:1.7.2) Gecko/20040804 Netscape/7.2 (ax)
X-Accept-Language: en-us, en
MIME-Version: 1.0
Newsgroups: rec.radio.amateur.space
Subject: WTB Kansas City Tracker card
Content-Type: text/plain; charset=us-ascii; format=flowed
Content-Transfer-Encoding: 7bit
Lines: 6
Message-ID: <lQace.17268$716.6211@tornado.tampabay.rr.com>
Date: Thu, 28 Apr 2005 19:29:21 GMT
NNTP-Posting-Host: 68.200.27.1
X-Complaints-To: abuse@rr.com
X-Trace: tornado.tampabay.rr.com 1114716561 68.200.27.1 (Thu, 28 Apr 2005 15:29:21 EDT)
NNTP-Posting-Date: Thu, 28 Apr 2005 15:29:21 EDT
Organization: Road Runner High Speed Online http://www.rr.com
Xref: g2news1.google.com rec.radio.amateur.space:668

hello all
i am in need of a Complete Kansas City Tracker card
must have all cables and software that came with it and must be in good working condition
let me know what you have to offer
thanks

From 4151186625298113182
X-Google-Thread: 10e8ad,5edb1b55f14db5f
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news4.google.com!newshub.sdsu.edu!cyclone1.gnilink.net!gnilink.net!hwmnpeer01.lga!hwmedia!hw-filter.lga!fe08.lga.POSTED!53ab2750!not-for-mail
From: "Pablo Enchilada" <pe@taco.com>
Newsgroups: rec.radio.amateur.space

```
References: <d45vo3$72al$1@news3.infoave.net>
<1114036296.629259.114920@z14g2000cwz.googlegroups.com>
<duudnViKS6Llq_TfRVn-2A@comcast.com>
Subject: Re: HT's for LEO use
Lines: 26
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.2180
X-RFC2646: Format=Flowed; Response
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.2180
Message-ID: <MOLce.18236$V02.11990@fe08.lga>
Date: Sat, 30 Apr 2005 09:33:02 -0400
NNTP-Posting-Host: 69.114.66.139
X-Complaints-To: abuse@cv.net
X-Trace: fe08.lga 1114868012 69.114.66.139 (Sat, 30 Apr 2005 06:33:32 MST)
NNTP-Posting-Date: Sat, 30 Apr 2005 06:33:32 MST
Organization: Optimum Online
Xref: g2news1.google.com rec.radio.amateur.space:669
```

I agree, the TH-D7a is probably the best radio all around for sat ops. The only other one that you might consider is the Icom W32a

"rocketeer" <rocketeer@hotmail.com> wrote in message
news:duudnViKS6Llq_TfRVn-2A@comcast.com...

> Terl wrote:
>> Since the VX-5 and VX-7 are both incapable of full duplex they should
>> be off the list. Half duplex operation on the LEO satellites is a
>> source of major QRM and (IMHO) shouldn't be allowed.
>> I have a TH-D7 and an arrow antenna with diplexer that I've used many
>> times on SO-50, AO-51, and AO-27. Since this HT also supports APRS
>> operation, it's ideal hiking and biking.
>> I recommend a VOX head set for hands free operation (keeping the
>> antenna aimed at the satellite and downlink VFO on frequency pretty
>> much uses up all your free hands). Steve
>>
> Agree on the TH-D7 HT, it can also send APRS to the ISS digipeater and
> possibly the PCSAT2 that will go up on the Shuttle Discovery and installed
> on one of the solar "arms" of ISS.
> See: http://www.ew.usna.edu/~bruninga/pcsat2.html
>
> rocketeer

```
From -3545734258542598485
X-Google-Thread: 106700,edd033ef52d0e2f6
X-Google-Thread: f74ae,edd033ef52d0e2f6
X-Google-Thread: 10e8ad,edd033ef52d0e2f6
X-Google-Thread: 10b271,edd033ef52d0e2f6
X-Google-Attributes: gid106700,gidf74ae,gid10e8ad,gid10b271,public
```

X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news3.google.com!news.glorb.com!proxad.net!proxad.net!
194.159.246.34.MISMATCH!peer-uk.news.demon.net!kibo.news.demon.net!
news.demon.co.uk!demon!not-for-mail
From: david@djwhome.demon.co.uk (David Woolley)
Newsgroups: sci.astro.seti,sci.astro,rec.radio.amateur.space,sci.physics
Subject: Re: Can DirectTV-type satellite dishes be used for SETI?
Date: Tue, 15 Feb 2005 22:03:20 +0100
Lines: 26
Message-ID: <T1108504993@djwhome.demon.co.uk>
References: <1106126272.160248.294240@z14g2000cwz.googlegroups.com>
<ZgiQd.33788$pc5.5440@tornado.tampabay.rr.com>
NNTP-Posting-Host: djwhome.demon.co.uk
X-Trace: news.demon.co.uk 1108505190 11347 158.152.19.5 (15 Feb 2005 22:06:30 GMT)
X-Complaints-To: abuse@demon.net
NNTP-Posting-Date: Tue, 15 Feb 2005 22:06:30 +0000 (UTC)
Xref: g2news1.google.com sci.astro.seti:3928 sci.astro:32768
rec.radio.amateur.space:570 sci.physics:102191

In article <ZgiQd.33788$pc5.5440@tornado.tampabay.rr.com>,
Matt Giwer <matt@tampabay.REMover.rr.com> wrote:

> It is feasable if the combination of 1 and 2 do not result in more than about 1/36th wavelength

That's about 6 times better than the requirements for dishes [A]. I don't know where you got that figure from, but it is wrong.

> error. The more it deviates from that the less useful. 1/36th would cover about a 10 degree circle

Er! 1/36th in the beam direction would cause a deviation of the order of (in radians) 1/(36 * <baseline length in wavelengths>) in the direction of the individual fringes. The direction in which the fringes are intended to coincide would only see a small reduction in in-phase signal.

Whilst I strongly suspect that differential and carrier phase will not solve the problem, it is nothing like as bad as you suggest.

> in the sky. And that would indicate the array gain, roughly log(180^2/10^2). At 1/4 wavelength error

If the peak to peak error is 1/4 wave, in the worst possible configuration, the array gain will be degraded by 3dB.

[A] Generally the profile accuracy suggested for dishes is 1/10th to 1/12th of a wavelength, but the phase error is doubled by the reflection.

From 4336413166056486284
X-Google-Thread: 10e8ad,bcb5985e588a5f53
X-Google-Attributes: gid10e8ad,public

```
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news4.google.com!news.glorb.com!
border1.nntp.dca.giganews.com!nntp.giganews.com!local1.nntp.dca.giganews.com!
nntp.comcast.com!news.comcast.com.POSTED!not-for-mail
NNTP-Posting-Date: Tue, 15 Feb 2005 21:36:34 -0600
From: "James" <jnipperxxx@nospamfdn.com>
Newsgroups: rec.radio.amateur.space
References: <cus4ft$7al1@eui1nw.euskaltel.es>
Subject: Re: Yaesu G-1000 rotor pinout?
Date: Tue, 15 Feb 2005 22:36:33 -0500
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2800.1437
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1441
Message-ID: <8KmdnaLsY4xfIo_fRVn-gw@comcast.com>
Lines: 15
NNTP-Posting-Host: 66.177.72.57
X-Trace: sv3-6tTYYXmqazpzjMNXJ/oRcj+QVbG/c+fMRwpzDmsfvVokhezbJ3fc6L1z9k7/
HMQUUPxsx1LL0A0rD5K!5L7tYlTcKIJpgoBOgp9zKS3OzIWWJy12UPBkKzCE7GGQD4c9+O2AbUAX5k95
X-Complaints-To: abuse@comcast.net
X-DMCA-Complaints-To: dmca@comcast.net
X-Abuse-and-DMCA-Info: Please be sure to forward a copy of ALL headers
X-Abuse-and-DMCA-Info: Otherwise we will be unable to process your complaint
properly
X-Postfilter: 1.3.23
Xref: g2news1.google.com rec.radio.amateur.space:571
```

A Google search found the following site where you can download the entire Manual for this rotor:

http://www.mods.dk/view.php?ListManuals=yaesu

Good Luck !!

73 de Jim K4PYT   Florida

```
From -1405470971922815897
X-Google-Thread: 106700,edd033ef52d0e2f6
X-Google-Thread: f74ae,edd033ef52d0e2f6
X-Google-Thread: 10e8ad,edd033ef52d0e2f6
X-Google-Thread: 10b271,edd033ef52d0e2f6
X-Google-Attributes: gid106700,gidf74ae,gid10e8ad,gid10b271,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!newsread.com!news-xfer.newsread.com!
news.glorb.com!cyclone1.gnilink.net!gnilink.net!cyclone.southeast.rr.com!news-
```

post.tampabay.rr.com!tornado.tampabay.rr.com.POSTED!53ab2750!not-for-mail
From: Matt Giwer <matt@tampabay.REMover.rr.com>
User-Agent: Mozilla/5.0 (X11; U; Linux i686; en-US; rv:1.7.5) Gecko/20041217
X-Accept-Language: en-us, en
MIME-Version: 1.0
Newsgroups: sci.astro.seti,sci.astro,rec.radio.amateur.space,sci.physics
Subject: Re: Can DirectTV-type satellite dishes be used for SETI?
References: <1106126272.160248.294240@z14g2000cwz.googlegroups.com> <ZgiQd.33788$pc5.5440@tornado.tampabay.rr.com> <T1108504993@djwhome.demon.co.uk>
In-Reply-To: <T1108504993@djwhome.demon.co.uk>
Content-Type: text/plain; charset=us-ascii; format=flowed
Content-Transfer-Encoding: 7bit
Lines: 41
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Date: Wed, 16 Feb 2005 06:35:59 GMT
NNTP-Posting-Host: 68.200.30.224
X-Complaints-To: abuse@rr.com
X-Trace: tornado.tampabay.rr.com 1108535759 68.200.30.224 (Wed, 16 Feb 2005 01:35:59 EST)
NNTP-Posting-Date: Wed, 16 Feb 2005 01:35:59 EST
Organization: Road Runner High Speed Online http://www.rr.com
Xref: g2news1.google.com sci.astro.seti:3935 sci.astro:32859 rec.radio.amateur.space:572 sci.physics:102372

David Woolley wrote:
> In article <ZgiQd.33788$pc5.5440@tornado.tampabay.rr.com>,
> Matt Giwer <matt@tampabay.REMover.rr.com> wrote:

>> It is feasable if the combination of 1 and 2 do not result in more than about 1/36th wavelength

> That's about 6 times better than the requirements for dishes [A]. I don't
> know where you got that figure from, but it is wrong.

A dish is summing power. You don't care much. It could be less if the receiver at the focal point were larger but at some point the receiver blocks too much incoming signal.

In a distributed array you must have phase information so you can determine the direction it is pointing. If we assume these dishes are all pointing with zero error at the satellite 32,000 miles up from all over the US (for example) they are all pointing at a different point at infinity. So if you want to look at a point at astronomical distances you have to correct for the satellite aim point.

Consider a dozen widely spaced antenna pointed at the same satellite. They go on to point to widely different points in space as they "pass through" the satellite. That gives you no gain at all, it does not not improve the signal to noise ratio.

To take the data from all of them and sum the data from one point in the sky, Tau Ceti the odds on favorie, you have to phase shift the data from all of them such that you are only considering the part of the signal that corresponds to that direction.

Because television sensors all converge on a very local point 32,000 miles away (36,000 mile orbit from the center and varying by latitude) the "aim point" rapidly diverges beyond the satellite. To recombine that noise into useful data you have to know how to "point" it to a single direction to combine signal to exceed the noise.

Given the reality that only the dishes in a very small town can be considered to be pointing to roughly the same point in deep space there is no gain of interest as the smaller the town the smaller the deep space area and the lesser the gain.

Two dishes one mile apart exactly pointing to the same point 32,000 miles up point to greatly different places in deep space.

--
If you sue and act as your own attorney while the other side
hires Alan Derschowitz, only winning is noteworthy.
-- The Iron Webmaster, 3356

From 6650018209574027413
X-Google-Thread: 106700,edd033ef52d0e2f6
X-Google-Thread: f74ae,edd033ef52d0e2f6
X-Google-Thread: 10e8ad,edd033ef52d0e2f6
X-Google-Thread: 10b271,edd033ef52d0e2f6
X-Google-Attributes: gid106700,gidf74ae,gid10e8ad,gid10b271,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!newsread.com!news-xfer.newsread.com!
news-feed01.roc.ny.frontiernet.net!nntp.frontiernet.net!
nntp.giganews.com.MISMATCH!border1.nntp.dca.giganews.com!
border2.nntp.dca.giganews.com!nntp.giganews.com!cyclone1.gnilink.net!gnilink.net!
cyclone.southeast.rr.com!news-post.tampabay.rr.com!tornado.tampabay.rr.com.POSTED!
53ab2750!not-for-mail
From: Matt Giwer <matt@tampabay.REMover.rr.com>
User-Agent: Mozilla/5.0 (X11; U; Linux i686; en-US; rv:1.7.5) Gecko/20041217
X-Accept-Language: en-us, en
MIME-Version: 1.0
Newsgroups: sci.astro.seti,sci.astro,rec.radio.amateur.space,sci.physics
Subject: Re: Can DirectTV-type satellite dishes be used for SETI?
References: <1106126272.160248.294240@z14g2000cwz.googlegroups.com>
<ZgiQd.33788$pc5.5440@tornado.tampabay.rr.com>
<1108457915.318093.66970@z14g2000cwz.googlegroups.com>
In-Reply-To: <1108457915.318093.66970@z14g2000cwz.googlegroups.com>

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Lines: 38
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Date: Wed, 16 Feb 2005 06:46:15 GMT
NNTP-Posting-Host: 68.200.30.224
X-Complaints-To: abuse@rr.com
X-Trace: tornado.tampabay.rr.com 1108536375 68.200.30.224 (Wed, 16 Feb 2005 01:46:15 EST)
NNTP-Posting-Date: Wed, 16 Feb 2005 01:46:15 EST
Organization: Road Runner High Speed Online http://www.rr.com
Xref: g2news1.google.com sci.astro.seti:3936 sci.astro:32860 rec.radio.amateur.space:573 sci.physics:102375

rgregoryclark@yahoo.com wrote:

> Methods of fixing your position within millimeters using GPS exist as
> long as you can make a comparison to the GPS signals received at a site
> whose position is known within millimeters. This precisely known site
> can be kilometers away. This is used in surveying for example:

This is a good start. Is it affordable to calibrate every installation? These sites are by definition on houses and such and installed by people who know only how to do that. So each has to be properly calibrated.

> CARRIER-PHASE TRACKING
> "Carrier-phase tracking provides for a more accurate range resolution
> due to the short wavelength (about 19 centimeters for L1 and 24
> centimeters for L2) and the ability of a receiver to resolve the
> carrier phase down to about 2 millimeters. This technique has primary
> application to engineering, topographic, and geodetic surveying and
> may be employed with either static or kinematic surveys. There are
> several techniques that use the carrier phase to determine a station's
> position. These include static, rapid-static, kinematic, stop-and-go
> kinematic, pseudokinematic, and on-the-fly (OTF) kinematic/Table 8-4
> lists these techniques and their required components, applications,
> and accuracies."
> http://cartome.org/FM3-34/Chapter8.htm

> This would suffice for centimeter wavelengths.

BUT the transmission of the data back to the processing source has to be perfect. It cannot be by raw cable as that would require a separate network and if it existed people would use cable for TV not satellites. It has to be processed data going back and then we have local computers and data packets and delays all piling up. Most of those can be overcome. Even if there were raw data fibers going back to the processor, the length of the fiber path has to be known exactly to preserve phase

information.

--
What is a conspiracy theorist when the US government believed
in an insane conspiracy by Iraq against the US?
-- The Iron Webmaster, 3366

From -7847140798245037 31
X-Google-Thread: 106700,edd033ef52d0e2f6
X-Google-Thread: f74ae,edd033ef52d0e2f6
X-Google-Thread: 10e8ad,edd033ef52d0e2f6
X-Google-Thread: 10b271,edd033ef52d0e2f6
X-Google-Attributes: gid106700,gidf74ae,gid10e8ad,gid10b271,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news1.google.com!newsread.com!news-xfer.newsread.com!
newspeer.monmouth.com!newsfeed.icl.net!newsfeed.fjserv.net!newsfeed.freenet.de!
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pe2.news.blueyonder.co.uk!blueyonder!peer-uk.news.demon.net!kibo.news.demon.net!
news.demon.co.uk!demon!not-for-mail
From: david@djwhome.demon.co.uk (David Woolley)
Newsgroups: sci.astro.seti,sci.astro,rec.radio.amateur.space,sci.physics
Subject: Re: Can DirectTV-type satellite dishes be used for SETI?
Date: Wed, 16 Feb 2005 22:09:15 +0000
Lines: 33
Message-ID: <T1108591407@djwhome.demon.co.uk>
References: <1106126272.160248.294240@z14g2000cwz.googlegroups.com>
<ZgiQd.33788$pc5.5440@tornado.tampabay.rr.com> <T1108504993@djwhome.demon.co.uk>
<jRBQd.79846$JF2.31490@tornado.tampabay.rr.com>
NNTP-Posting-Host: djwhome.demon.co.uk
X-Trace: news.demon.co.uk 1108594223 24469 158.152.19.5 (16 Feb 2005 22:50:23 GMT)
X-Complaints-To: abuse@demon.net
NNTP-Posting-Date: Wed, 16 Feb 2005 22:50:23 +0000 (UTC)
Xref: g2news1.google.com sci.astro.seti:3947 sci.astro:32944
rec.radio.amateur.space:574 sci.physics:102659

In article <jRBQd.79846$JF2.31490@tornado.tampabay.rr.com>,
Matt Giwer <matt@tampabay.REMover.rr.com> wrote:

> A dish is summing power. You don't care much. It could be less if the
> receiver at the focal point

Mathematically (and because of the linearity of EM fields with respect to superimposition, dishes sum field (volts/metre) not power. In fact dishes can be treated as the limiting case of phased arrays, with infinitesimal elements (and free space phasing lines); that's how you work out the beam pattern to get the approximate gaussian (the actual one for a circular aperture is, I believe, a Bessel function). Using analogue delay lines for phasing is standard for stacked arrays and, with switchable loops, even for some electronically steerable ones. (Dishes do combine power overall, but so do delay line phased arrays, and you can only work out beam patterns by considering the phased integration of the fields.)

However, one doesn't need to think about dishes to demonstrate that even quarter wave peak to peak along the beam direction only compromises by 3dB. (Perpendicular to the beam, there is no effect.)

The worst case configuration is with half exactly an eighth wave high and half an eighth wave low. The in-phase components follow a cosine pattern and are + and - 45 degrees. Cos (45 degrees) is sqrt (2). The out of phase components follow a sine pattern and cancel. Squaring to get power, one gets a factor of 2, i.e. 3dB. Note that I haven't made any assumptions about the array size, here, except that the individual element capture areas don't overlap.

Whilst I have severe doubts as to the ability to phase to even this accuracy, it is 9 times coarser than the 1/36th you were claiming, and has only halved the effective number of elements.

From 3965767249936051073
X-Google-Thread: 10e8ad,bd717a8469b2fb6d,start
X-Google-Attributes: gid10e8ad,public
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Path: g2news1.google.com!news3.google.com!newshub.sdsu.edu!cyclone1.gnilink.net!gnilink.net!hwmnpeer01.lga!hwmedia!hw-poster!fe04.lga.POSTED!53ab2750!not-for-mail
From: "ayooper" <yuuper@chartermi.net>
Newsgroups: rec.radio.amateur.space
Subject: TAPR Trakbox unbuilt kit on ebay
Lines: 6
X-Priority: 3
X-MSMail-Priority: Normal
X-Newsreader: Microsoft Outlook Express 6.00.2900.2180
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.2180
X-RFC2646: Format=Flowed; Original
Message-ID: <AuuRd.1155$PF2.505@fe04.lga>
X-Trace: badccedimaighclelfkkalgmoedobbpdmkpcpfjbnmkbgdcchbhblffefgggoakpigphedkccnjljjkhhclpbjldmhgcmjefdceidlljhdgjkaibjklekobamhkhcnkebcfagklmiblliјll
NNTP-Posting-Date: Fri, 18 Feb 2005 16:02:56 MST
Date: Fri, 18 Feb 2005 17:59:13 -0500
Xref: g2news1.google.com rec.radio.amateur.space:575

This kit is unbuilt. Still in the original box. It will point your antennas to automatically track a satellite selected from it's internal database. It is a standalone unit after it is configured with a pc. Check it out at:
http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&category=4671&item=5753084092&rd=1&ssPageName=WDVW

From -2440350082352251392
X-Google-Thread: 106700,edd033ef52d0e2f6

X-Google-Thread: f74ae,edd033ef52d0e2f6
X-Google-Thread: 10e8ad,edd033ef52d0e2f6
X-Google-Thread: 10b271,edd033ef52d0e2f6
X-Google-Attributes: gid106700,gidf74ae,gid10e8ad,gid10b271,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news4.google.com!newshub.sdsu.edu!elnk-nf2-pas!elnk-pas-nf1!newsfeed.earthlink.net!cyclone.socal.rr.com!cyclone2.kc.rr.com!news2.kc.rr.com!news-post.tampabay.rr.com!tornado.tampabay.rr.com.POSTED!53ab2750!not-for-mail
From: Matt Giwer <matt@tampabay.REMover.rr.com>
User-Agent: Mozilla/5.0 (X11; U; Linux i686; en-US; rv:1.7.5) Gecko/20041217
X-Accept-Language: en-us, en
MIME-Version: 1.0
Newsgroups: sci.astro.seti,sci.astro,rec.radio.amateur.space,sci.physics
Subject: Re: Can DirectTV-type satellite dishes be used for SETI?
References: <1106126272.160248.294240@z14g2000cwz.googlegroups.com> <ZgiQd.33788$pc5.5440@tornado.tampabay.rr.com> <T1108504993@djwhome.demon.co.uk> <jRBQd.79846$JF2.31490@tornado.tampabay.rr.com> <T1108591407@djwhome.demon.co.uk>
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Date: Sat, 19 Feb 2005 03:43:54 GMT
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X-Trace: tornado.tampabay.rr.com 1108784634 68.200.30.224 (Fri, 18 Feb 2005 22:43:54 EST)
NNTP-Posting-Date: Fri, 18 Feb 2005 22:43:54 EST
Organization: Road Runner High Speed Online http://www.rr.com
Xref: g2news1.google.com sci.astro.seti:3974 sci.astro:33190 rec.radio.amateur.space:576 sci.physics:103826

David Woolley wrote:
> In article <jRBQd.79846$JF2.31490@tornado.tampabay.rr.com>,
> Matt Giwer <matt@tampabay.REMover.rr.com> wrote:

>> A dish is summing power. You don't care much. It could be less if the receiver at the focal point

> Mathematically (and because of the linearity of EM fields with respect to
> superimposition, dishes sum field (volts/metre) not power.

Correct. Sonar background myself. Never did quite learn to think in E-M terms for posting purposes.

> In fact dishes
> can be treated as the limiting case of phased arrays, with infinitesimal
> elements (and free space phasing lines); that's how you work out the beam
> pattern to get the approximate gaussian (the actual one for a circular
> aperture is, I believe, a Bessel function). Using analogue delay lines
> for phasing is standard for stacked arrays and, with switchable loops,
> even for some electronically steerable ones. (Dishes do combine power

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> and are + and - 45 degrees. Cos (45 degrees) is sqrt (2). The out of phase
> components follow a sine pattern and cancel. Squaring to get power, one
> gets a factor of 2, i.e. 3dB. Note that I haven't made any assumptions
> about the array size, here, except that the individual element capture
> areas don't overlap.

> Whilst I have severe doubts as to the ability to phase to even this accuracy,
> it is 9 times coarser than the 1/36th you were claiming, and has only
> halved the effective number of elements.

And again correct. I was thinking in terms of a linear sensor array not an area sensor array. Area would proportional to the square the linear accuracy required in the lesser direction. My error was a hangover from my earliest work.

Regret the delay in responding.

--
TV networks cover news with the same stories in the same
amount of time and in the same order. There is no
evidence they are independent.
-- The Iron Webmaster, 3365

From 8576086261124763543
X-Google-Thread: 106700,edd033ef52d0e2f6
X-Google-Thread: f74ae,edd033ef52d0e2f6
X-Google-Thread: 10e8ad,edd033ef52d0e2f6
X-Google-Thread: 10b271,edd033ef52d0e2f6
X-Google-Attributes: gid106700,gidf74ae,gid10e8ad,gid10b271,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news4.google.com!news.glorb.com!news-feed01.roc.ny.frontiernet.net!nntp.frontiernet.net!newscon06.news.prodigy.com!prodigy.net!newsmst01a.news.prodigy.com!prodigy.com!postmaster.news.prodigy.com!newssvr14.news.prodigy.com.POSTED!19b33709!not-for-mail
From: "Rob Dekker" <rob@verific.com>
Newsgroups: sci.astro.seti,sci.astro,rec.radio.amateur.space,sci.physics
References: <1106126272.160248.294240@z14g2000cwz.googlegroups.com>
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<llr7jidjjy.fsf@adams.patriot.net>
Subject: Re: Could DirecTV satellite dishes be used for the Square Kilometer Array

- and a more radical proposal[Re: Can DirectTV-type satellite dishes be used for SETI?]
Lines: 81
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X-RFC2646: Format=Flowed; Original
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Message-ID: <kYQRd.1656$DC6.845@newssvr14.news.prodigy.com>
NNTP-Posting-Host: 69.111.137.249
X-Complaints-To: abuse@prodigy.net
X-Trace: newssvr14.news.prodigy.com 1108859792 ST000 69.111.137.249 (Sat, 19 Feb 2005 19:36:32 EST)
NNTP-Posting-Date: Sat, 19 Feb 2005 19:36:32 EST
Organization: SBC http://yahoo.sbc.com
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UA_QXFGVSCYRPILH]TRVKC^LSN@DX_HCAFX__@J\DAJBVMY\ZWZCZLPA^MVH_P@\
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Date: Sun, 20 Feb 2005 00:36:32 GMT
Xref: g2news1.google.com sci.astro.seti:3990 sci.astro:33347
rec.radio.amateur.space:577 sci.physics:104146

"Joseph Lazio" <jlazio@adams.patriot.net> wrote in message
[....]
> RD> I'm not a total expert in this field, but know enough to be
> RD> dangerous..:)
>
> RD> If I'm not mistaken, to phase correlate N elements, you do not
> RD> need to phase-correlate all N^2 baselines, but (after
> RD> time/phase-adjusting each of the individual N signals to intended
> RD> beam direction), you can simply create a correlator tree of 2->1
> RD> phase correlators. The tree would then consist of N correlators,
> RD> which counts for linear complexity of computation power.
>
> No, one does have to multiply the signals from all N antennas
> together, which is roughly an N^2 problem. The issue in radio
> astronomical interferometry is that the "visibility" or "correlation
> coefficient" is a measure of the Fourier transform of the sky
> brightness. Every unique pair of antennas gives one "visibility," so
> one wants to obtain all possible visibilities from the N antennas.

Might it be that we are talking about two different correlations..?

I was talking about a simple phase-correlator : accumulate signals
from all elements. In hardware, that is done with 'phase-splitters'.
(At least that's how I hooked my 4 loop-yagi's together back in the old days).
Antenna phase-splitters are passive devices which simply 'add' the electrical
field of multiple feed-points (or split them if you are transmitting).

For a (digitally sampled) antenna signal, these would be simply be 'adders'
which need to 'add' the signal value for each element for each sample.

For one beam, for 10Ghz sample rate (5 GHz bandwidth), and N elements,
you would need to do 10*10^9 * N additions per second (pretty large
amount of digital adders), but it is linear w.r.t. N.

I think you might have been talking about a smarter technique to do this work.

>
> RD> Question for Joe : Which part of the SKA system would be the
> RD> bottleneck in computational effort, and create a problem even in
> RD> 2020 ?
>
> Actually, the correlator, as difficult as it is, may not be the
> limiting factor for the SKA computation. Some people think they know
> today how to build an SKA-level correlator.
>
> The most prominent concern has been how does one make an image? The
> SKA is envisioned as having a large field of view (e.g., 1 deg^2 at 1
> GHz, and some people are concerned that that's not large enough). In
> order to make high-quality images, one probably has to image that
> entire field of view with something approaching 0.1 arcsecond
> resolution. Thus, a single image would be something like 10,000 x
> 10,000 pixels in size, and that's only for a single frequency. One
> probably has to utilize multiple frequencies simultaneously, in order
> to defeat some other effects. Moreover, current processing of radio
> interferometric images is an iterative process, in which one makes an
> image, corrects it for certain effects, makes a new image, improves
> the corrections, makes a new image, ...

Interesting...

>
> There's a memo floating around discussing all of these aspects of
> processing. IIRC, the conclusion was that the processing power
> required to make high-dynamic range images scaled as the dish diameter
> (which sets the field of view) as something like D^6 or D^8. Thus,
> all other things being equal, just changing from the 25-m VLA dishes
> to the proposed 12-m US SKA dishes would increase computation by a
> factor of 64 to 256, and that's even without taking into account the
> much larger number of antennas.
>
> I should say that not everybody agrees with this analysis, but it is
> recognized that the computational aspects of the SKA may be
> significant.
>
> --
> Lt. Lazio, HTML police | e-mail: jlazio@patriot.net
> No means no, stop rape. | http://patriot.net/%7Ejlazio/
> sci.astro FAQ at http://sciastro.astronomy.net/sci.astro.html

```
From 8150072478499579009
X-Google-Thread: 106700,edd033ef52d0e2f6
X-Google-Thread: f74ae,edd033ef52d0e2f6
X-Google-Thread: 10e8ad,edd033ef52d0e2f6
X-Google-Thread: 10b271,edd033ef52d0e2f6
X-Google-Attributes: gid106700,gidf74ae,gid10e8ad,gid10b271,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news4.google.com!newshub.sdsu.edu!elnk-nf2-pas!elnk-pas-
nf1!newsfeed.earthlink.net!sn-xit-02!sn-xit-01!sn-post-02!sn-post-01!
supernews.com!corp.supernews.com!not-for-mail
From: Joseph Lazio <jlazio@adams.patriot.net>
Newsgroups: sci.astro.seti,sci.astro,rec.radio.amateur.space,sci.physics
Subject: Re: Could DirecTV satellite dishes be used for the Square Kilometer Array
- and a more radical proposal[Re: Can DirectTV-type satellite dishes be used for
SETI?]
Date: 20 Feb 2005 10:00:33 -0500
Organization: Posted via Supernews, http://www.supernews.com
Message-ID: <llpsyv1dke.fsf@adams.patriot.net>
References: <1106126272.160248.294240@z14g2000cwz.googlegroups.com>
<832ea96d.0502071507.2bc4ff6d@posting.google.com>
<MiiOd.3388$ZZ.3196@newssvr23.news.prodigy.net> <ll3bw46tvl.fsf@adams.patriot.net>
<421115a4$1@cfanews.cfa.harvard.edu> <PsbQd.86$DC6.6@newssvr14.news.prodigy.com>
<llr7jidjjy.fsf@adams.patriot.net> <kYQRd.1656$DC6.845@newssvr14.news.prodigy.com>
User-Agent: Gnus/5.0808 (Gnus v5.8.8) Emacs/20.7
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
X-Complaints-To: abuse@supernews.com
Lines: 53
Xref: g2news1.google.com sci.astro.seti:3995 sci.astro:33398
rec.radio.amateur.space:578 sci.physics:104377

>>>>> "RD" == Rob Dekker <rob@verific.com> writes:

RD> "Joseph Lazio" <jlazio@adams.patriot.net> wrote in message [....]

RD> If I'm not mistaken, to phase correlate N elements, you do not
RD> need to phase-correlate all N^2 baselines, but (...), you can
RD> simply create a correlator tree of 2->1 phase correlators. The
RD> tree would then consist of N correlators, which counts for linear
RD> complexity of computation power.

>>  No, one does have to multiply the signals from all N antennas
>> together, which is roughly an N^2 problem.  The issue in radio
>> astronomical interferometry is that the "visibility" or
>> "correlation coefficient" is a measure of the Fourier transform of
>> the sky brightness.  Every unique pair of antennas gives one
>> "visibility," so one wants to obtain all possible visibilities from
>> the N antennas.

RD> Might it be that we are talking about two different
RD> correlations..?

Potentially.  Your comment about a "tree" perhaps should have clued me in.
```

RD> I was talking about a simple phase-correlator : accumulate signals
RD> from all elements. In hardware, that is done with
RD> 'phase-splitters'. (At least that's how I hooked my 4 loop-yagi's
RD> together back in the old days).

I'd call that a beam former.

The Very Large Array (and other interferometers of its ilk) work by combining the signals from all unique pairs of antennas. Specifically, one takes the signals from antennas #1 and #2, multiples them together, and then integrates for a short time. That's the measured quantity, often called a "visibility" or "correlation coefficient." One then repeats this for antennas #1 and #3, antennas #1 and #4, #1 and #5, #1 and #6, ..., until one has made all unique combinations from 27 antennas. (Those who enjoy math problems can try to figure out how many such combinations there are. :)

To make it even more complicated, some of the designs for the Square Kilometer Array (and the Low Frequency Array and the Long Wavelength Array and others) contemplate using both beam formers and correlators. Thus, one would start with a bunch of dipoles. The signals from a "small" number of dipoles (e.g., 100) would be combined in the manner you described. This produces a signal typically called a "station" beam or "pod" beam. The signals from various stations (numbering perhaps 100) are then combined by a correlator.

--
Lt. Lazio, HTML police | e-mail: jlazio@patriot.net
No means no, stop rape. | http://patriot.net/%7Ejlazio/
sci.astro FAQ at http://sciastro.astronomy.net/sci.astro.html

From -5949524709703288384
X-Google-Thread: 10e8ad,c4c00568a6f1bb76,start
X-Google-Attributes: gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!postnews.google.com!g14g2000cwa.googlegroups.com!not-for-mail
From: angelonmyshoulder61@yahoo.com
Newsgroups: rec.radio.amateur.space
Subject: Just say NO to Bin Ladin!!!!
Date: 21 Feb 2005 09:37:20 -0800
Organization: http://groups.google.com
Lines: 14
Message-ID: <1109007440.776751.196110@g14g2000cwa.googlegroups.com>
NNTP-Posting-Host: 66.81.135.66
Mime-Version: 1.0
Content-Type: text/plain; charset="iso-8859-1"
X-Trace: posting.google.com 1109007445 26119 127.0.0.1 (21 Feb 2005 17:37:25 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Mon, 21 Feb 2005 17:37:25 +0000 (UTC)
User-Agent: G2/0.2

Complaints-To: groups-abuse@google.com
Injection-Info: g14g2000cwa.googlegroups.com; posting-host=66.81.135.66;
   posting-account=P0iuXQ0AAABZzCRe6D0w2v0zGUxTBOfF
Xref: g2news1.google.com rec.radio.amateur.space:579

Hi all I am helping a friend promote a web site. You see a childhood friend of hers lost her husband at the World Trade Center on Sept. 11, 2001. She has run into some hard times and my freind wants to help her. So she came up with the idea to market Just say NO to Bin Ladin dartboards and punching bag covers. Not only is she going to donate part of the proceeds to her freind but an additional part of the proceeds will go to the Firemans Fund. If you could take the time to check out the web site it would be much appreciated!! The web site addy is:

http://www.angelonmyshoulder.4t.com

Thanks so much everyone!!

From 4303462180823172699
X-Google-Thread: 106700,edd033ef52d0e2f6
X-Google-Thread: f74ae,edd033ef52d0e2f6
X-Google-Thread: 10e8ad,edd033ef52d0e2f6
X-Google-Thread: 10b271,edd033ef52d0e2f6
X-Google-Attributes: gid106700,gidf74ae,gid10e8ad,gid10b271,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!postnews.google.com!f14g2000cwb.googlegroups.com!not-for-mail
From: "Robert Clark" <rgregoryclark@yahoo.com>
Newsgroups: sci.astro.seti,sci.astro,rec.radio.amateur.space,sci.physics
Subject: And yet an even more radical proposal.
Date: 21 Feb 2005 12:24:20 -0800
Organization: http://groups.google.com
Lines: 413
Message-ID: <1109017460.434188.272970@f14g2000cwb.googlegroups.com>
References: <1106126272.160248.294240@z14g2000cwz.googlegroups.com>
   <832ea96d.0502071507.2bc4ff6d@posting.google.com>
NNTP-Posting-Host: 147.31.162.226
Mime-Version: 1.0
Content-Type: text/plain; charset="iso-8859-1"
X-Trace: posting.google.com 1109017464 16462 127.0.0.1 (21 Feb 2005 20:24:24 GMT)
X-Complaints-To: groups-abuse@google.com
NNTP-Posting-Date: Mon, 21 Feb 2005 20:24:24 +0000 (UTC)
In-Reply-To: <832ea96d.0502071507.2bc4ff6d@posting.google.com>
User-Agent: G2/0.2
Complaints-To: groups-abuse@google.com
Injection-Info: f14g2000cwb.googlegroups.com; posting-host=147.31.162.226;
   posting-account=jksnkgwAAADIkyGMYeXxsjgY09muXs9N
Xref: g2news1.google.com sci.astro.seti:4022 sci.astro:33536 rec.radio.amateur.space:580 sci.physics:104862

Another possible problem is that I'm not even sure the receivers that come with the satellite dishes can even detect frequencies other than the 12 Ghz the satellites broadcast at.

In regard to the wavelengths that the .5 m antennas could usefully collect, I've seen references that a dipole antenna should be a quarter of the wavelength. Is this different for parabolic antennas?

I'm thinking perhaps you could simply attach flat metal dipoles to the surface of the .5 meter antennas so they could collect megahertz frequencies. Then at a quarter wavelength you could collect down to 2 meter wavelengths or 150 Mhz.

While we're at it, the thought of using dipoles, like TV antennas, raises another possibility. You need receivers for these frequencies. Where could we get large numbers of receivers already existing at these frequencies? Inside TV's! Assuming we could solve the problem of tranmitting the data to a central site (ultra wideband, broadband over power-lines, amateur packet radio, etc.), we could have all new TV's come installed with a circuit that transmits received signals to the central site. The number of new TV's sold yearly worldwidde is 90 million. This would result in markedly larger numbers of possible receivers even above the satellite TV approach.

There might be privacy issues with this idea however.

Bob Clark

Robert Clark wrote:

> A.) According to this article $1.4 billion dollars is earmarked to be spent on the Square Kilometer array with completion expected by 2015:
>
> Radio Astronomy Will Get a Boost With the Square Kilometer Array.
>
> http://www.universetoday.com/am/publish/radio_astronomy_boost_ska.html?1592004
>
> As I stated below the primary extra components to be added to the DirecTV dishes to be used for radio astronomy are the feedhorn and the preamp. The feedhorn is simply a metal pipe of little cost. The SetiLeague site lists sellers of specially made preamps for SETI search at $150. But these are handmade. From the low number of circuit elements, I estimate that if mass produced at the millions of items level the price could come down in the range of $10 each.
>
> This site states the rate of growth of satellite TV subscribers is at 4 million per year:
>
> Satellite TV Basics.
> http://www.satellitetv-hq.com/hqguides/satellite-tv-basics.html
>
> This means the *receivers* for the SKA system if using these satellite dishes could be installed in 1 year at an extra cost of $10 x 4,000,000 = $40 million dollars. Note that the feedhorn and the

> preamp could be attached at manufacture would not cost more on installation labor. The installation is already paid for by the satellite TV subscribers. To pay for the extra cost for the added equipment you could simply add $1 extra per month to the subscriber rate. Then these 4 million, .5 meter wide dishes would have a total collecting area of a disk 2000 x .5 m = 1000m = 1km wide, the total collecting area expected for the SKA. Moreover this would have the advantage that an additional square kilometer of collecting area would automatically be added every year over several years going by the present growth rate.
>
> You could also attach the extra equipment to the 25 million satellite systems already installed in perhaps 4 or 5 years. The number of satellite TV subscribers worldwide was 60 million in 2003 and is expected to grow to 100 million by 2008:
>
> Digital Satellite TV Platforms Continue to Gain Subscribers, and Profits are on the Rise.
> http://www.instat.com/press.asp?ID=1171&sku=IN0401236MB
>
> If this many .5 meter antennas were networked together, they would have the collecting area of a single antenna 10,000 x .5 m = 5 km wide.
>
> Note that the idea of using over 50 million separate, stationary elements is one of the proposals being considered for the SKA architecture:
>
> Aperture Array (AA)
> http://www.skatelescope.org/pages/design_nl.htm
>
> This method of keeping the receiving antennas fixed while detection directions are determined electronically is called the phased array approach and has the advantage that many separate targets can be observed simultaneously. It also has the advantage that interfering local signals can be suppressed. However, the Aperture Array has antennas close together in a predetermined configuration with the positions precisely determined. How could this work for the randomly positioned satellite dishes?
>
> Methods of differential GPS and carrier phase synthesis now have the capability of determining position to within millimeters. The method compares the GPS signal between a precisely known site and an unknown site to locate the unknown site to within centimeters. Then a comparison is made in the actual phase of the signals received at the two sites to locate the unknown site to within millimeters:
>
> CARRIER-PHASE TRACKING
> "Carrier-phase tracking provides for a more accurate range resolution due to the short wavelength (about 19 centimeters for L1 and 24 centimeters for L2) and the ability of a receiver to resolve the carrier phase down to about 2 millimeters. This technique has primary application to engineering, topographic, and geodetic surveying and

> may be employed with either static or kinematic surveys. There are
> several techniques that use the carrier phase to determine a
station's
> position. These include static, rapid-static, kinematic, stop-and-go
> kinematic, pseudokinematic, and on-the-fly (OTF) kinematic/Table 8-4
> lists these techniques and their required components, applications,
> and accuracies."
> http://cartome.org/FM3-34/Chapter8.htm
>
> This should be sufficient for keeping the signals for the millions
of
> antennas in phase up to perhaps 3 cm wavelength, 10 Ghz frequency.
> Timing synchronization can be obtained by synchronizing from the
> common signal received by the dishes from the satellite.
> The Argus telescope at Ohio State University (this is different from
> Project Argus operated by The Seti League) may provide a model for
how
> sensitive such a system can be operating from noisy populated areas:
>
> Newsgroups: sci.astro.seti
> From: Bob Dixon <dixo...@osu.edu>
> Date: Wed, 19 May 2004 12:49:02 -0400
> Subject: The Argus Telescope
>
http://groups-beta.google.com/group/sci.astro.seti/browse_frm/thread/
54ddf1f29f629f20/
>
> Argus Expands the Search For Life.
> By Daniel Sorid
> posted: 03:30 pm ET
> 09 June 2000
> http://www.space.com/searchforlife/seti_argus_000609.html
>
> Note though that the continent wide satellite dish system will have
> an advantage over Argus in dismissing unwanted signals in that such
> signals would only be detected by a local group of antennas not the
> continent wide system.
>
> In mentioning an estimated price for this system, I emphasized the
> estimate was for the *receiving* part of the system. But of course
for
> such a system of separate receivers, it is just as important to
> combine and process the signals.
> In the thread for DirecTV being used for SETI, someone mentioned you
> might need to transfer 1 Gbps from each antenna for detections at 12
> Ghz. I seem to recall that analog signals can be tranferred in
greater
> density than digital signals. Perhaps the signal received by each
> antenna can be transmitted in analog form with a stamp indicating its
> location and time of origin.
> For examples of the data density required we could look at some
> examples of systems of separate antennas that have been used to give
> combined signals in *real time*:

>
> Astronomers Demonstrate a Global Internet Telescope.
> Date Released: Friday, October 08, 2004.
> http://www.spaceref.com/news/viewpr.html?pid=15251
>
> This produced data of 32 Mbits/second for each telescope for
> observations at 1.6 Ghz. So at 16 Ghz perhaps 320 Mbps might be
> expected for each antenna. The data was sent over a high-speed
> internet network available to universities that operates at gigabits
> per second. Within a few years, the data transfer rate is expected to
> reach tens of gigabits per second.
>
> And:
>
> Prototype SETI Antenna Array Will Help Radio Astronomers Too.
> Date Released: Wednesday, June 07, 2000.
> http://www.spaceref.com/news/viewpr.html?pid=1992
>
> This is of the Argus telescope at Ohio State University. The 64
> antennas here detect signals from 400 to 2000 Mhz. The antennas
> together produce 2.56 gigabytes per second, or 20.48 gigabits per
> second. So each telescope produces 320 Mbps. This article states that
> no physical connection could economically carry that much data over
> distance however this was written in 2000. Ultra wideband technology
> (mentioned below) now has that capability.
>
> For processing the data for the proposed SKA system, I expect the
> distributed computing system used by Set@Home to be used, wherein
> millions of computers take part in the calculations. As for how the
> data can be sent by the individual antennas, there are a few possible
> ways the signals could be combined.
>
> 1.)DirecTV offers a two-way broadband satellite internet service
> called DirecWay. This allows signals to be sent from the home
antennas
> back up to the transmitting satellite. However, this system currently
> has only a 100,000 subscribers in place. I want to use the millions
of
> subscribers using the satellite TV systems. I think a minor low-cost
> modification of the current TV antennas would also allow them to
> transmit to the satellites used for broadband internet service. (I
> don't think the satellites used for TV service can be used to receive
> signals.)
>
> 2.)Another possibility for transferring the data from each antenna
> might be to use military satellites currently used for surveillance
on
> radio transmissions, perhaps using satellites that were
decommissioned
> and are no longer used for sensitive military tasks.
>
> 3.)Possibly the techniques used with amateur packet radio could be
> used. Here radio links are used to setup data networks analogously to

> how the internet sets up data transfer networks using the TCP/IP
> protocols:
>
> N6GN's Microwave Link Page
> http://www.sonic.net/~n6gn/uwavelink/uwv.html
>
> INEXPENSIVE MULTI-MEGABAUD MICROWAVE DATA LINK
> http://www.sonic.net/~n6gn/hr89/uwvarticle.html
>
> 4.)Ultra wideband (UWB) promises gigabit data transfers over both
> cable and wireless connections and should be available this year
> (2005):
>
> New chipset promises gigabit broadband on cable and wireless.
> Rupert Goodwins
> ZDNet UK
> May 11, 2004, 15:20 GMT
> http://news.zdnet.co.uk/communications/0,39020336,39154271,00.htm
>
> Ultrawideband in 2005, but only in America
> Rupert Goodwins
> ZDNet UK
> February 19, 2004, 09:45 GMT
>
http://news.zdnet.co.uk/communications/wireless/0,39020348,39146644,00.htm
>
> Ultrawideband: Wireless Whoopee.
> 08:34 AM Oct. 09, 2004 PT
> "SAN FRANCISCO -- Think of it as Wi-Fi on steroids. On its way to
U.S.
> living rooms and maybe even automobiles is a new type of high-speed
> wireless connection that promises downloaded data rates of up to 1
> gigabit per second -- roughly 18.5 times the speed of Wi-Fi -- to
> personal computers and other devices.
> "This ultrawideband technology, which could become available in the
> next two years, also allows the devices to send data upstream to a
> network at 480 megabits per second."
>
http://www.wired.com/news/technology/0,1282,65297,00.html?tw=wn_tophead_3
>
> 5.)Some public utilities now collect their meter readings from radio
> transmitters attached to their meters. The data is collected by
> receiver on utility poles and then transmitted to a central site.
This
> method could be adapted to work for collecting the data from the
> separate antennas.
>
> 6.) The above methods would require that the data transmissions be on
> specified frequencies that will not be used for detections. However,
> another method might not have this limitation:
>
> Broadband Over Power Lines?
> 01:15 PM Feb. 09, 2003 PT

> "ST. LOUIS -- Coming to a home or office near you could be an
electric
> Internet: high-speed Web access via ubiquitous power lines, of all
> things, making every electrical outlet an always-on Web connection."
> http://www.wired.com/news/technology/0,1282,57605,00.html
>
> This is a new technique already being tested in small markets to
> provide interent service over power lines. The speed of transmission
> can be ramped up to 1 gigabits per second using ulta wideband
> technology.
>
> B.)This last leads me to another proposal for large scale separated
> antennas for radio astronomy: using the electrical wiring in
> households as radio antennas. Here's a post to
> rec.radio.amateur.antenna discussing this:
>
>
==
> From: Ed Hare, W1RFI (w1rfi@arrl.net)
> Subject: Re: ISO info about using house wiring as a TV antenna
> Newsgroups: rec.radio.amateur.antenna
> Date: 2000-12-29 15:33:06 PST
>
> Richard Friday <tgirwf@bigfoot.com> wrote in message
> news:92j4h7$2b2$1@bob.news.rcn.net...
>
> > I know this post might be off-topic but could find no other
newsgroup that
> > had "antenna" in its name. I'd be most appreciative if someone
could point
> > to a more suitable discussion or other source of information.
> > I've seen advertised a device that claims to allow you to use the
> > electrical wiring of your house as a tv antenna. You plug this
device
> > into an outlet, and then use connections it provides as your tv
antenna.
> > I'm trying to find out if this actually works but have not been
able to
> > find any reviews.
>
> This device will receive some signals. However, house electrical
> wiring is
> not a very good VHF antenna system for a couple of reasons:
>
> First, it is very difficult to predict the direction that the house
> wiring
> will best receive from. It is quite likely that the antenna pattern
> will
> have all sorts of peaks and nulls, sort of as if you had a rotatable
> TV
> antenna that was pointing in several directions at once. This may
not
> pick

```
> up much of the TV signal you want to pick up or may have multiple
> responses,
> resulting in ghosts.
>
> Also, an electrical power line can be a very noisy place. All sorts
of
> electronic devices on the line, from power-line equipment itself to
> every
> motor or power supply plugged in near you may create noise that will
> interfere with the signal you want to receive.
>
> If you have no other antenna choice, that device may be useable, but
I
> don't
> think it will work as well as a good set of "rabbit ears" on top of
> your TV.
>
> Ed Hare, W1RFI
>
==========================================================================
>
>  The disadvantage of the electrical wiring going in several different
> directions may actually be an advantage in regards to a SETI search
> since you would want the detections to be omnidirectional. If there
> are 100,000,000 homes which average 10 meters across then this would
> result in a collecting area of 10,000 x 10 meters = 100 km across.
> Since you would want to include large commercial establishments, the
> size would actually be larger than this.
>
>
>
>    Bob Clark
>
>
> rgregoryclark@yahoo.com wrote in message
news:<1106126272.160248.294240@z14g2000cwz.googlegroups.com>...
> > I was interested to read this on the Seti League web site:
> >
> > ___________________________________________________________
> > Parasitic SETI
> > Dear Dr. SETI:
> > As a Satellite dish owner and a strong interest in SETI, I was
> > wondering if anything is available to allow the home satellite dish
> > owner to 'search' when he is not watching TV. I do a bit of
programing
> > and would love to help make it so home dish owners could do this.
Is it
> > possible? What would it take? Does the dish have to follow a spot
or
> > can it sweep the sky from a fixed position? If this is possible it
> > could add a million listeners to the system.
> >
> > Bill T.
> >
> > The Doctor Responds:
> > Absolutely, Bill! Parasitic SETI with a home satellite TV dish is
not
> > only feasilble, it's widely practiced. A second feedhorn and preamp
> > assembly are mounted next to the C-band horn/LNB at the apex of the
> > dish (see Figure 2 of this article). This assembly feeds the rest
of a
> > SETI system (see our online Tech Manual). You can then sweep out
the
> > sky, as described here. And yes, a million participants would be
nice,
> > but our goal is a more modest 5000 stations.
> > __________________________________________________________
> > http://www.setileague.org/askdr/parasite.htm
> >
> > I believe they are referring to the 6 ft. backyard type antennas,
> > judging from the linked images on the page. But could the roof
mounted
> > DirectTV and Dish Network type antennas be used for SETI?
> > The mentioned extra equipment are an extra feedhorn and a
> > preamplifier. The feedhorn can made cheaply but the preamp seems
> > expensive. If these preamps were mass produced for this purpose
could
> > their per item cost be brought under $50?
> > I'm envisionig a government agency such as NSF, or a scientically
> > interested billionaire, paying satellite TV companies to attach
this
> > extra equipment to their satellite dishes. Say $100 million is
> > earmarked for the program. Then you would want the extra cost to be
> > under $100 for each dish for say 1,000,000 subscribers. Judging
from
> > the diagram in the online Tech Manual linked to on the page, the
other
> > equipment should be doable by the equipment that comes with the
> > satellite TV system. Computer processing would be done separately
at a
> > central location.
> > If you had a 1,000,000 of these .5 meter wide antennas it would
have
> > the detection sensitivy of a single antenna 500 meters wide.
> > Bob Clark



From -5085445210655684
X-Google-Thread: 106700,edd033ef52d0e2f6
X-Google-Thread: f74ae,edd033ef52d0e2f6
X-Google-Thread: 10e8ad,edd033ef52d0e2f6
X-Google-Attributes: gid106700,gidf74ae,gid10e8ad,public
X-Google-Language: ENGLISH,ASCII-7-bit
Path: g2news1.google.com!news4.google.com!newshub.sdsu.edu!logbridge.uoregon.edu!
tethys.csu.net!nntp.csufresno.edu!sn-xit-03!sn-xit-08!sn-post-02!sn-post-01!
```

```
supernews.com!corp.supernews.com!not-for-mail
From: Joseph Lazio <jlazio@adams.patriot.net>
Newsgroups: sci.astro.seti,sci.astro,rec.radio.amateur.space
Subject: Re: And yet an even more radical proposal.
Date: 21 Feb 2005 16:16:38 -0500
Organization: Posted via Supernews, http://www.supernews.com
Message-ID: <ll3bvpd361.fsf@adams.patriot.net>
References: <1106126272.160248.294240@z14g2000cwz.googlegroups.com>
<832ea96d.0502071507.2bc4ff6d@posting.google.com>
<1109017460.434188.272970@f14g2000cwb.googlegroups.com>
User-Agent: Gnus/5.0808 (Gnus v5.8.8) Emacs/20.7
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
X-Complaints-To: abuse@supernews.com
Lines: 18
Xref: g2news1.google.com sci.astro.seti:4023 sci.astro:33540
rec.radio.amateur.space:581
```

>>>>> "RC" == Robert Clark <rgregoryclark@yahoo.com> writes:

RC> Another possible problem is that I'm not even sure the receivers
RC> that come with the satellite dishes can even detect frequencies
RC> other than the 12 Ghz the satellites broadcast at. In regard to
RC> the wavelengths that the .5 m antennas could usefully collect,
RC> I've seen references that a dipole antenna should be a quarter of
RC> the wavelength. Is this different for parabolic antennas?

The rule of thumb is that the dish should be more than about 6 wavelengths across, or diffraction starts to become really important. Thus, for instance, the VLA (25 meter diameter), when operated at 74 MHz (4 meter wavelength), is right on the hairy edge.

--
Lt. Lazio, HTML police | e-mail: jlazio@patriot.net
No means no, stop rape. | http://patriot.net/%7Ejlazio/
sci.astro FAQ at http://sciastro.astronomy.net/sci.astro.html

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From 3744919015838808066
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east.nntpserver.com!nntpserver.com!manticore.nntpserver.com.POSTED!teranews!not-
for-mail
From: Jan Panteltje <pNaonStpealmtje@yahoo.com>
Newsgroups: sci.astro.seti,sci.astro,rec.radio.amateur.space,sci.physics
Subject: Re: And yet an even more radical proposal.
References: <1106126272.160248.294240@z14g2000cwz.googlegroups.com>
<832ea96d.0502071507.2bc4ff6d@posting.google.com>
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<1109017460.434188.272970@f14g2000cwb.googlegroups.com>
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Content-Transfer-Encoding: 8bit
Content-Type: text/plain; charset=ISO-8859-1
User-Agent: NewsFleX-1.5.6.3 (Linux-2.4.25)
X-Newsreader-location: 1.5.6.3 (c) 'LIGHTSPEED' off line news reader for the Linux
platform
 NewsFleX homepage: http://panteltje.com/panteltje/newsflex/ and ftp download
ftp://sunsite.unc.edu/pub/linux/system/news/readers/
Lines: 436
NNTP-Posting-Date: Mon, 21 Feb 2005 17:09:11 EST
Message-ID: <1109023752.a4c6ac00eee8e2e395f555b3d13ec322@teranews>
X-Abuse-Report: http://www.usenetabuse.com
X-Abuse-Notes: Abuse reports must be submited via the usenetabuse.com portal
listed above.
X-Abuse-Notes2: Reports sent via any other method will not be processed.
X-Abuse-Notes3: Any other abuse reporting headers in this article are fraudulent.
X-Orginal-Message-ID: <b_sSd.281867$HI.54880@manticore.nntpserver.com>
Date: Mon, 21 Feb 2005 22:08:16 GMT
Xref: g2news1.google.com sci.astro.seti:4029 sci.astro:33547
rec.radio.amateur.space:582 sci.physics:104928

On a sunny day (21 Feb 2005 12:24:20 -0800) it happened "Robert Clark"
<rgregoryclark@yahoo.com> wrote in
<1109017460.434188.272970@f14g2000cwb.googlegroups.com>:

>Another possible problem is that I'm not even sure the receivers that
>come with the satellite dishes can even detect frequencies other than
>the 12 Ghz the satellites broadcast at.
> In regard to the wavelengths that the .5 m antennas could usefully
>collect, I've seen references that a dipole antenna should be a quarter
>of the wavelength. Is this different for parabolic antennas?
> I'm thinking perhaps you could simply attach flat metal dipoles to the
>surface of the .5 meter antennas so they could collect megahertz
>frequencies. Then at a quarter wavelength you could collect down to 2
>meter wavelengths or 150 Mhz.
> While we're at it, the thought of using dipoles, like TV antennas,
>raises another possibility. You need receivers for these frequencies.
>Where could we get large numbers of receivers already existing at these
>frequencies? Inside TV's! Assuming we could solve the problem of
>tranmitting the data to a central site (ultra wideband, broadband over
>power-lines, amateur packet radio, etc.), we could have all new TV's
>come installed with a circuit that transmits received signals to the
>central site. The number of new TV's sold yearly worldwidde is 90
>million. This would result in markedly larger numbers of possible
>receivers even above the satellite TV approach.
> There might be privacy issues with this idea however.
>
>
>      Bob Clark
>
>
>Robert Clark wrote:
```

>> A.) According to this article $1.4 billion dollars is earmarked to be
>> spent on the Square Kilometer array with completion expected by 2015:
>>
>> Radio Astronomy Will Get a Boost With the Square Kilometer Array.
>>
>http://www.universetoday.com/am/publish/radio_astronomy_boost_ska.html?1592004
>>
>> As I stated below the primary extra components to be added to the
>> DirecTV dishes to be used for radio astronomy are the feedhorn and
>the
>> preamp. The feedhorn is simply a metal pipe of little cost. The
>> SetiLeague site lists sellers of specially made preamps for SETI
>> search at $150. But these are handmade. From the low number of
>circuit
>> elements, I estimate that if mass produced at the millions of items
>> level the price could come down in the range of $10 each.
>> This site states the rate of growth of satellite TV subscribers is
>at
>> 4 million per year:
>>
>> Satellite TV Basics.
>> http://www.satellitetv-hq.com/hqguides/satellite-tv-basics.html
>>
>> This means the *receivers* for the SKA system if using these
>> satellite dishes could be installed in 1 year at an extra cost of $10
>> x 4,000,000 = $40 million dollars. Note that the feedhorn and the
>> preamp could be attached at manufacture would not cost more on
>> installation labor. The installation is already paid for by the
>> satellite TV subscribers. To pay for the extra cost for the added
>> equipment you could simply add $1 extra per month to the subscriber
>> rate. Then these 4 million, .5 meter wide dishes would have a total
>> collecting area of a disk 2000 x .5 m = 1000m = 1km wide, the total
>> collecting area expected for the SKA. Moreover this would have the
>> advantage that an additional square kilometer of collecting area
>would
>> automatically be added every year over several years going by the
>> present growth rate.
>> You could also attach the extra equipment to the 25 million
>satellite
>> systems already installed in perhaps 4 or 5 years. The number of